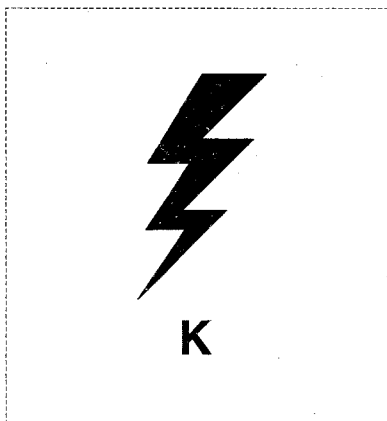




## Electrical system

*Trucknology Generation A (TG-A)*

2002

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Publication no.:

81.99198-5972

## Wiring diagrams

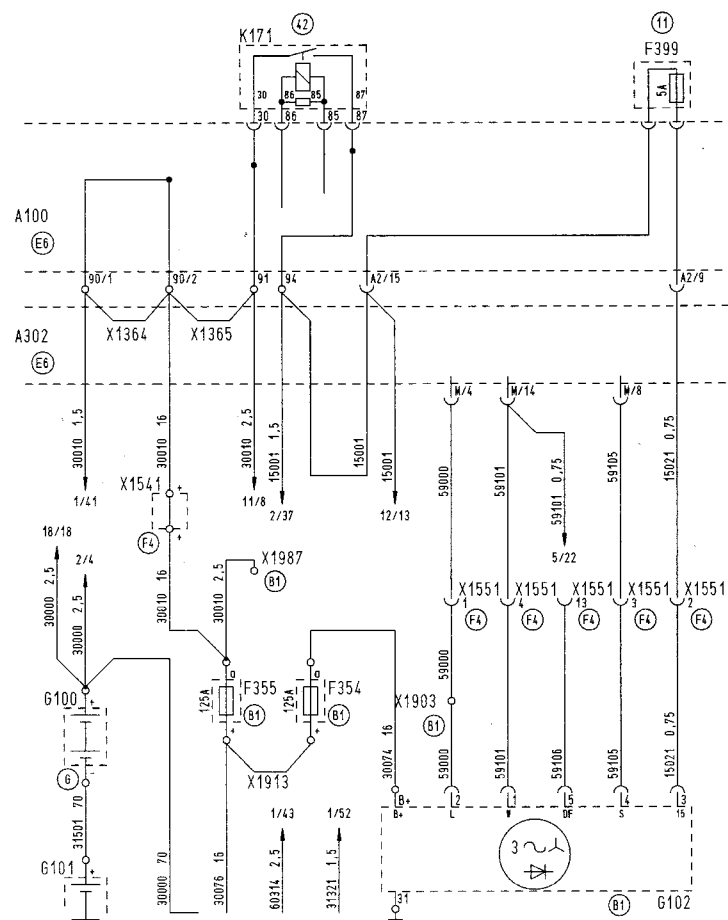
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## Trucknology Generation A (TG-A)



81.99198-5972

## ELECTRICAL SYSTEM

Subject to technical changes in the course of continuing development.

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VSWY / OB/AM 03.2002

Satz: emes GmbH  
Friedrichshafen

## **Preface**

All series and additional wiring diagrams are documented in the instructions for the "wiring diagrams".

The **series wiring diagrams** (Ch. 3.00) and the **additional wiring diagrams** (Ch. 4.00) are shown in detail to include legends and the names of the circuits.

The present manual is based on wiring diagrams that have been created with the help of a graphics program (CAD).

This allows the instructions to be updated at short notice.

This manual represents the series status of the vehicle on the copy deadline date.



**Contents**

|                                                  |          |
|--------------------------------------------------|----------|
| <b>Electrical system</b> .....                   | <b>0</b> |
| Preface .....                                    | 0.10 - 1 |
| Contents .....                                   | 0.11 - 1 |
| Abbreviations.....                               | 0.13 - 1 |
| <b>General remarks</b> .....                     | <b>1</b> |
| Safety notes .....                               | 1.20 - 1 |
| Instructions for the use of wiring diagrams..... | 1.60 - 1 |
| Search criteria .....                            | 1.99 - 1 |
| <b>Series wiring diagrams</b> .....              | <b>3</b> |
| Contents .....                                   | 3.00 - 1 |
| <b>Additional wiring diagrams</b> .....          | <b>4</b> |
| Contents .....                                   | 4.00 - 1 |

**Abbreviations**

As of: 11.01

|              |                                                              |
|--------------|--------------------------------------------------------------|
| <b>a</b>     | Acceleration                                                 |
| <b>ABE</b>   | General operating permit                                     |
| <b>ABS</b>   | Anti-lock brake system                                       |
| <b>ABV</b>   | Anti-skid system                                             |
| <b>AC</b>    | Air conditioning                                             |
| <b>ACC</b>   | Adaptive cruise control                                      |
| <b>ACK</b>   | Autocheck                                                    |
| <b>ADC</b>   | Analog-digital converter                                     |
| <b>ADR</b>   | International agreement for the transport of dangerous goods |
| <b>AGB</b>   | Automatic road speed limiter                                 |
| <b>AGND</b>  | Analog ground                                                |
| <b>AGR</b>   | Exhaust gas recirculation (EGR)                              |
| <b>AHK</b>   | Trailer coupling                                             |
| <b>AHV</b>   | Trailer brake valve                                          |
| <b>ALB</b>   | Automatic load-dependent brake                               |
| <b>AMA</b>   | Antenna mast system                                          |
| <b>ANH</b>   | Trailer/semitrailer                                          |
| <b>AS</b>    | Automated gearbox                                            |
| <b>ASD</b>   | Trailer socket                                               |
| <b>ASM</b>   | Trailer control module                                       |
| <b>ASR</b>   | Anti-spin regulator                                          |
| <b>ASV</b>   | Trailer control valve                                        |
| <b>ATC</b>   | Automatic temperature control                                |
| <b>ATF</b>   | Automatic transmission fluid                                 |
| <b>AU</b>    | Emission test                                                |
| <b>AV</b>    | Exhaust valve                                                |
| <b>AVS</b>   | Automatic gear preselection                                  |
| <b>BA</b>    | Operator's manual                                            |
| <b>BBA</b>   | Service brake system                                         |
| <b>BBV</b>   | Service brake valve                                          |
| <b>BKR</b>   | Brake power regulator                                        |
| <b>BUGH</b>  | Front heater                                                 |
| <b>BV</b>    | Back-up valve                                                |
| <b>BVA</b>   | Brake wear indicator                                         |
| <b>BVS</b>   | Brake wear sensor                                            |
| <b>BVV</b>   | Brake wear sensor supply                                     |
| <b>BW</b>    | German Army                                                  |
| <b>BWG</b>   | Brake value sensor                                           |
| <b>BZ</b>    | Brake cylinder                                               |
| <b>CAN</b>   | Controller area network                                      |
| <b>CAN-H</b> | CAN-high data line                                           |
| <b>CAN-L</b> | CAN-low data line                                            |
| <b>CATS</b>  | Computer-assisted testing and diagnostic system              |
| <b>CCVS</b>  | Cruise control vehicle speed                                 |
| <b>CKD</b>   | Completely knocked down                                      |
| <b>CNG</b>   | Compressed natural gas                                       |
| <b>CPU</b>   | Central processing unit                                      |
| <b>CRT</b>   | Continuously regenerating trap                               |
| <b>CS</b>    | Comfort shift                                                |
| <b>DAHL</b>  | Roof ventilator                                              |
| <b>DBR</b>   | Auxiliary brake relay                                        |
| <b>DECKE</b> | Cover (for doors)                                            |
| <b>DF</b>    | Speed sensor                                                 |
| <b>DFÜ</b>   | Data transmission                                            |
| <b>DIA</b>   | Diagnosis and information display                            |

## ELECTRICAL SYSTEM

### Abbreviations

|               |                                                                                   |
|---------------|-----------------------------------------------------------------------------------|
| <b>DIAK</b>   | Diagnosis, K-line (data line)                                                     |
| <b>DIAL</b>   | Diagnosis, L-line (interrogation line)                                            |
| <b>DIAR</b>   | Diagnosis, further interrogation                                                  |
| <b>DIN</b>    | German industrial standard                                                        |
| <b>DKE</b>    | Throttle valve increase (ASR control)                                             |
| <b>DKH</b>    | Roof duct heating                                                                 |
| <b>DKL</b>    | Roof flaps                                                                        |
| <b>DKR</b>    | Throttle valve reduction (reduction request from ASR to EDC/EMS)                  |
| <b>DKV</b>    | Throttle valve specification (load sensor signal from EDC/EMS pedal value sensor) |
| <b>DLB</b>    | Compressed air brake system                                                       |
| <b>DM</b>     | Diagnostic message                                                                |
| <b>DNR</b>    | Drive – Neutral – Reverse (selector switch for automatic gearbox)                 |
| <b>DPF</b>    | Diesel particulate filter                                                         |
| <b>DRM</b>    | Pressure control module                                                           |
| <b>DS</b>     | Pressure sensor                                                                   |
| <b>DSV</b>    | Pressure control valve                                                            |
| <b>DV</b>     | Throttle valve                                                                    |
| <b>DWA</b>    | Anti-theft protection system                                                      |
| <b>DZG</b>    | Rpm sensor                                                                        |
| <b>DZM</b>    | Rev counter                                                                       |
|               |                                                                                   |
| <b>EBS</b>    | Electronic brake system                                                           |
| <b>ECAM</b>   | Electronically controlled air management                                          |
| <b>ECAS</b>   | Electronically controlled air suspension                                          |
| <b>ECE</b>    | Emergency shut-off to ECE 36                                                      |
| <b>ECU</b>    | Electronic control unit                                                           |
| <b>EDC</b>    | Electronic diesel control                                                         |
| <b>EDM</b>    | Electronic diesel consumption meter                                               |
| <b>EDR</b>    | Maximum speed governor                                                            |
| <b>EEC</b>    | Electronic engine controller                                                      |
| <b>EEPROM</b> | Electrically erasable and programmable read-only memory                           |
| <b>EFR</b>    | Electronic shock absorber control (ESAC)                                          |
| <b>EFS</b>    | Electrical driver's seat                                                          |
| <b>EHAB</b>   | Electro-hydraulic shut-off device                                                 |
| <b>ELAB</b>   | Electrical shut-off device                                                        |
| <b>ELF</b>    | Electronic air suspension                                                         |
| <b>EMS</b>    | Electronic throttle control (ETC)                                                 |
| <b>EMV</b>    | Electromagnetic compatibility (EMC)                                               |
| <b>EOL</b>    | End-of-line (programming)                                                         |
| <b>EP</b>     | Injection pump                                                                    |
| <b>ER</b>     | Engine retarder (engine brake)                                                    |
| <b>ESAC</b>   | Electronic shock absorber control                                                 |
| <b>ESP</b>    | Electronic stability program                                                      |
| <b>ESR</b>    | Electric sun-blind                                                                |
| <b>EST</b>    | Electronic control unit                                                           |
| <b>EV</b>     | Intake valve                                                                      |
| <b>EVB</b>    | Exhaust valve brake                                                               |
|               |                                                                                   |
| <b>FAP</b>    | Driver's area                                                                     |
| <b>FAQ</b>    | Frequently asked questions                                                        |
| <b>FBA</b>    | Parking brake system                                                              |
| <b>FDR</b>    | Dynamic handling control                                                          |
| <b>FFR</b>    | Vehicle management computer (VMC)                                                 |
| <b>FGB</b>    | Road speed limiter (RSL)                                                          |
| <b>FGR</b>    | Road speed governor (RSG)                                                         |
| <b>FHS</b>    | Cab                                                                               |
| <b>FIN</b>    | Vehicle identification number (VIN)                                               |
| <b>FM</b>     | Vehicle management                                                                |
| <b>FMI</b>    | Failure mode identification                                                       |

**Abbreviations**

|              |                                                                     |
|--------------|---------------------------------------------------------------------|
| <b>FMR</b>   | Vehicle/engine management                                           |
| <b>FOC</b>   | Front omnibus chassis (bus/coach chassis with front-mounted engine) |
| <b>FSCH</b>  | Windscreen heater                                                   |
| <b>FSG</b>   | Ground reinforcement system                                         |
| <b>FSH</b>   | Window/mirror heating                                               |
| <b>FTW</b>   | Driver's partition                                                  |
| <b>FUNK</b>  | Radio communication unit                                            |
| <b>FZA</b>   | Destination system                                                  |
| <b>GDK</b>   | Controlled diesel catalytic converter                               |
| <b>GEN</b>   | Alternator                                                          |
| <b>GET</b>   | Gearbox                                                             |
| <b>GGVS</b>  | Regulations for the transport of hazardous goods                    |
| <b>GND</b>   | Ground                                                              |
| <b>GP</b>    | Gearbox planetary gear group (range-change box)                     |
| <b>GS</b>    | Gearbox control                                                     |
| <b>GV</b>    | Gearbox splitter gear group (splitter box)                          |
| <b>HA</b>    | Rear axle                                                           |
| <b>HBA</b>   | Auxiliary brake system                                              |
| <b>HGB</b>   | Maximum road speed limiter                                          |
| <b>HGS</b>   | Hydraulic gearshift                                                 |
| <b>HLUE</b>  | Hydrostatic fan                                                     |
| <b>HOC</b>   | Rear omnibus chassis (bus/coach chassis with rear-mounted engine)   |
| <b>HSS</b>   | Highside switch                                                     |
| <b>HST</b>   | Main control panel                                                  |
| <b>HU</b>    | Main inspection                                                     |
| <b>Hz</b>    | Hertz (number of cycles per second)                                 |
| <b>HZA</b>   | Bus stop indicator system                                           |
| <b>HZG</b>   | Auxiliary rpm sensor                                                |
| <b>IBEL</b>  | Interior lighting                                                   |
| <b>IBIS</b>  | Integrated on-board information system                              |
| <b>IC</b>    | Integrated circuit                                                  |
| <b>ID</b>    | Identification                                                      |
| <b>IMR</b>   | Integrated mechanical relay (starter control)                       |
| <b>INA</b>   | Information indicator (e.g. check lamp)                             |
| <b>IR</b>    | Individual control (ABS)                                            |
| <b>IRM</b>   | Modified individual control (ABS)                                   |
| <b>ISO</b>   | International Standards Organisation                                |
| <b>IWZ</b>   | Incremental angle/time measuring system                             |
| <b>KBZ</b>   | Combination brake cylinder                                          |
| <b>KFH</b>   | Fuel filter heater                                                  |
| <b>KITAS</b> | Kienzle intelligent tachograph sensor                               |
| <b>KLI</b>   | Air-conditioning system                                             |
| <b>KNEEL</b> | Kneeling                                                            |
| <b>KSM</b>   | Customer-specified control module                                   |
| <b>KSW</b>   | Customer's special request                                          |
| <b>KWP</b>   | Key word protocol (protocol for MAN-cats diagnosis)                 |
| <b>LBH</b>   | Air reservoir                                                       |
| <b>LCD</b>   | Liquid crystal display                                              |
| <b>LDA</b>   | Manifold-pressure compensator (boost control)                       |
| <b>LDF</b>   | Boost pressure sensor                                               |
| <b>LDS</b>   | Air spring/damper system                                            |
| <b>LED</b>   | Light emitting diode                                                |
| <b>LF</b>    | Air suspension                                                      |
| <b>LGS</b>   | Lane guard system                                                   |

## ELECTRICAL SYSTEM

### Abbreviations

|                 |                                                                                                      |
|-----------------|------------------------------------------------------------------------------------------------------|
| <b>LL</b>       | Idling speed                                                                                         |
| <b>LLA</b>      | Idling speed increase                                                                                |
| <b>LLR</b>      | Idling speed control                                                                                 |
| <b>LNG</b>      | Liquified natural gas                                                                                |
| <b>LOE</b>      | Steering oil monitor                                                                                 |
| <b>LPG</b>      | Liquified petroleum gas                                                                              |
| <b>LWR</b>      | Headlight beam regulator                                                                             |
| <b>M-TCO</b>    | Modular EU tachograph                                                                                |
| <b>MAB</b>      | Solenoid valve shut-off (engine shut-off by means of high-pressure solenoid valve in injection pump) |
| <b>MAN-cats</b> | MAN computer assisted testing and diagnostic system)                                                 |
| <b>MAR</b>      | Solenoid valve shut-off relay (redundant engine shut-off relay)                                      |
| <b>MDB</b>      | Engine speed range                                                                                   |
| <b>MES</b>      | Fuel metering control                                                                                |
| <b>ML</b>       | Midline                                                                                              |
| <b>MMI</b>      | Man-machine interface                                                                                |
| <b>MOTB</b>     | Engine brake                                                                                         |
| <b>MP</b>       | Engine power box (cable duct on engine block)                                                        |
| <b>MR</b>       | Engine governor – ASR                                                                                |
| <b>MSG</b>      | Engine control unit (EDC)                                                                            |
| <b>MV</b>       | Solenoid valve                                                                                       |
| <b>MZ</b>       | Diaphragm cylinder                                                                                   |
| <b>n</b>        | rpm                                                                                                  |
| <b>NA</b>       | Power take-off (PTO)                                                                                 |
| <b>NBF</b>      | Needle movement sensor                                                                               |
| <b>NES</b>      | New electronic structure                                                                             |
| <b>NFZ</b>      | Commercial vehicle                                                                                   |
| <b>NLA</b>      | Trailing axle                                                                                        |
| <b>NSL</b>      | Rear fog lamp                                                                                        |
| <b>NSW</b>      | Front fog lamp                                                                                       |
| <b>OBDU</b>     | On-board diagnostic unit                                                                             |
| <b>OC</b>       | Occurrence count (errors/faults)                                                                     |
| <b>OEAB</b>     | Oil separator                                                                                        |
| <b>OENF</b>     | Oil top-up                                                                                           |
| <b>p</b>        | Pressure                                                                                             |
| <b>PBM</b>      | Pulse breadth modulation (→ also see PWM)                                                            |
| <b>PLM</b>      | Programmable logic module                                                                            |
| <b>PSG</b>      | Pump control unit (EDC)                                                                              |
| <b>PTO</b>      | Power take-off                                                                                       |
| <b>PWM</b>      | Pulse width modulation (→ also see PBM)                                                              |
| <b>RA</b>       | Repair manual                                                                                        |
| <b>RAH</b>      | Interior heating                                                                                     |
| <b>RAM</b>      | Random access memory                                                                                 |
| <b>RAS</b>      | Rear axle steering                                                                                   |
| <b>RAS-EC</b>   | Rear axle steering with electronic control                                                           |
| <b>RDRA</b>     | Tyre pressure control system                                                                         |
| <b>RDS</b>      | Radio data system                                                                                    |
| <b>RET</b>      | Retarder                                                                                             |
| <b>RKL</b>      | Priority vehicle light                                                                               |
| <b>RLV</b>      | Relay valve                                                                                          |
| <b>RME</b>      | Rape seed oil methyl ester (biodiesel)                                                               |
| <b>ROM</b>      | Read only memory                                                                                     |

## Abbreviations

|                                 |                                        |
|---------------------------------|----------------------------------------|
| <b>SA</b>                       | Special equipment                      |
| <b>SAE</b>                      | Society of Automotive Engineers        |
| <b>SAMT</b>                     | Semi-automatic mechanical transmission |
| <b>SB</b>                       | Service outlet                         |
| <b>sec</b>                      | Second                                 |
| <b>SER</b>                      | Series (production)                    |
| <b>SG</b>                       | Control unit                           |
| <b>SH</b>                       | Select-high control (ABS)              |
| <b>SKD</b>                      | Semi-knocked down                      |
| <b>SL</b>                       | Select-low control (ABS)               |
| <b>SML</b>                      | Side marker light                      |
| <b>SPN</b>                      | Suspect parameter number               |
| <b>STA</b>                      | Engine start/stop                      |
| <b>SWR</b>                      | Headlight cleaning system              |
| <b>t</b>                        | Time                                   |
| <b>TC</b>                       | Traction control                       |
| <b>TCM</b>                      | Trailer control module                 |
| <b>TCO</b>                      | Tachograph                             |
| <b>TKU</b>                      | Technical customer document            |
| <b>TMC</b>                      | Traffic message channel                |
| <b>TRS</b>                      | Technical road transport directives    |
| <b>TSC</b>                      | Torque speed control (braking torque)  |
| <b>TUER</b>                     | Door control                           |
| <b>U<sub>Bat</sub></b>          | Battery voltage                        |
| <b>UDS</b>                      | Crash recorder                         |
| <b>v</b>                        | Velocity/vehicle speed                 |
| <b>VA</b>                       | Front axle                             |
| <b>VG</b>                       | Transfer case                          |
| <b>VLA</b>                      | Leading axle                           |
| <b>WA</b>                       | Maintenance manual                     |
| <b>WAB</b>                      | Water separator                        |
| <b>WLE</b>                      | Swap-body unit                         |
| <b>WR</b>                       | Warning relay                          |
| <b>WS</b>                       | Position sensor                        |
| <b>WSK</b>                      | Torque converter and clutch unit       |
| <b>z</b>                        | Braking rate/deceleration              |
| <b>ZBR</b>                      | Central on-board computer              |
| <b>ZBRO</b>                     | Central on-board bus computer          |
| <b>ZDR</b>                      | Intermediate speed governor (ISG)      |
| <b>ZE</b>                       | Central electrical system (CES)        |
| <b>ZR</b>                       | Central computer                       |
| <b>ZS</b>                       | Central lubrication                    |
| <b>ZUSH</b>                     | Auxiliary heater                       |
| <b>ZWS</b>                      | Time-based maintenance system          |
| <b><math>\lambda</math></b>     | Slip                                   |
| <b><math>\mu</math></b>         | Coefficient of friction                |
| <b><math>\mu\text{C}</math></b> | Microcontroller (microprocessor)       |

### Notes on safety

The following sections include summaries of important regulations listed according to major topics. The intention is to provide the knowledge needed to avoid accidents which could lead to injury, damage and environmental pollution.

Additional instructions are included in the Operator's Manual that is provided with the vehicle.

#### Important:

Accidents may happen in spite of all precautionary measures having been taken. In such an eventuality, **obtain immediate medical assistance from a doctor.** This is particularly important if the accident involves skin contact with corrosive acid, fuel penetration under the skin, scalding by hot oil, antifreeze spraying into eyes etc.

### Regulations for preventing accidents leading to injury to personnel.

**Only authorised technical personnel are allowed to perform inspection, adjustment and repair work.**

- Secure the vehicle to prevent it from rolling away.
- Support the frame when working on the pneumatic or spring suspension system.
- Secure units during their removal.
- Only authorised personnel are allowed to start and operate the engine.
- Do not approach moving parts of a running engine too closely. Do not wear baggy clothing.
- Do not touch the engine with your bare hands when it is at operating temperature: Risk of burns!
- Keep the area around the engine, ladders and steps free from oil and grease. Accidents caused by slipping can have serious consequences.
- Only use tools that are in perfect condition. Damaged or widened spanners can slip: Risk of injury!
- No-one is allowed to stand under an engine suspended from a crane hook. – Keep all lifting tackle in good condition –.
- Collect any brake fluid that emerges. Treat brake fluid as hazardous waste! Comply with the safety regulations for preventing environmental pollution.
- Brake fluid is toxic! Do not allow it to come into contact with food or open wounds.
- Do not open the coolant circuit until the engine has cooled down. If it does need to be opened whilst the engine is at operating temperature, follow the instructions in the "Maintenance and care" section in the Operator's Manual.
- Do not attempt to retighten or open pipe lines and hoses (lubricating oil circuit, coolant circuit and possible subsequent hydraulic oil circuit) whilst they are pressurised: Fluid spraying out represents an injury hazard!
- Do not hold your hands under the jet of fuel when checking the injector nozzles. Do not inhale fuel vapours.



## GENERAL INFORMATION

- Always disconnect the batteries before working on the vehicle electrical system.

**Important!** Oxyhydrogen gas may form in enclosed battery boxes. When the batteries are disconnected, this gas may be ignited by sparks produced by other continuously operating consumers, the tachograph etc. that cannot be shut down. Blow compressed air through the battery box before disconnecting the batteries!

- Only tow-start the vehicle if the batteries are connected (minimum charge 40%)! Do not use a boost-charger to jump-start the vehicle! Always disconnect the positive and negative leads before boost-charging batteries!
- Disconnect the batteries and recharge them every 4 weeks if the vehicle is not in use.

**Caution!** Battery acid is poisonous and corrosive. Battery gases are explosive.

- Follow the manufacturer's instructions for handling batteries.
- **Measure voltage** only using suitable measuring devices!  
The input resistance of a measuring device should be at least 10 MΩ.
- **The ignition must be switched off** before the wiring harness plugs of electronic control units are disconnected or connected up!

**When performing electrical welding work**, connect up the "ANTIZAP SERVICE MONITOR" (MAN item number 80.78010.0001) or the improved SES-1 version (MAN item number 80.78010.0002) in accordance with the instructions supplied with the device.

If this device is not available, disconnect the batteries and join the positive cable to the negative cable in order to make a conductive connection.

Always earth the welding equipment as close as possible to the welding area. Do not lay the cables to the welding equipment in parallel to electrical cables in the vehicle.

For further accident prevention measures, please refer to the "Leaflets for welders".

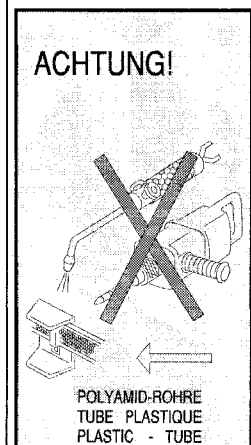
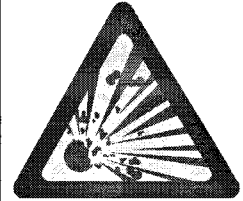
The frame is **not** intended for use as an earth return!

- If attachments are to be retrofitted to the vehicle – e.g. a taillift – **additional earth lines** with adequate cross-section must be fitted as well. Otherwise the earth connection may be created along wire cables, wiring harnesses, gearbox shafts, gears etc. Severe damage could result.
- **If painting work is to be carried out**, do not expose the electronic components to high temperatures (max. 95 °C) for more than brief periods; a time of up to around 2 hours is permissible at a maximum of 85 °C. Disconnect the batteries.

### Plastic tubes (polyamide)

**Important! – Risk of damage and fire!**

- The warning sign opposite can be found on the co-driver's door below the door lock. It warns you against welding or drilling near to plastic tubes.





### **Limited liability for accessories and parts**

In your own interests, you are recommended to use only accessories expressly approved by MAN and genuine MAN parts for your MAN vehicle. The reliability, safety and suitability of these parts and accessories have been determined specifically for MAN vehicles. Despite constant market observation, we cannot judge the aspects of other products, nor can we accept responsibility for them – even if they have been officially approved by the German TÜV technical inspection authorities or some other official body.

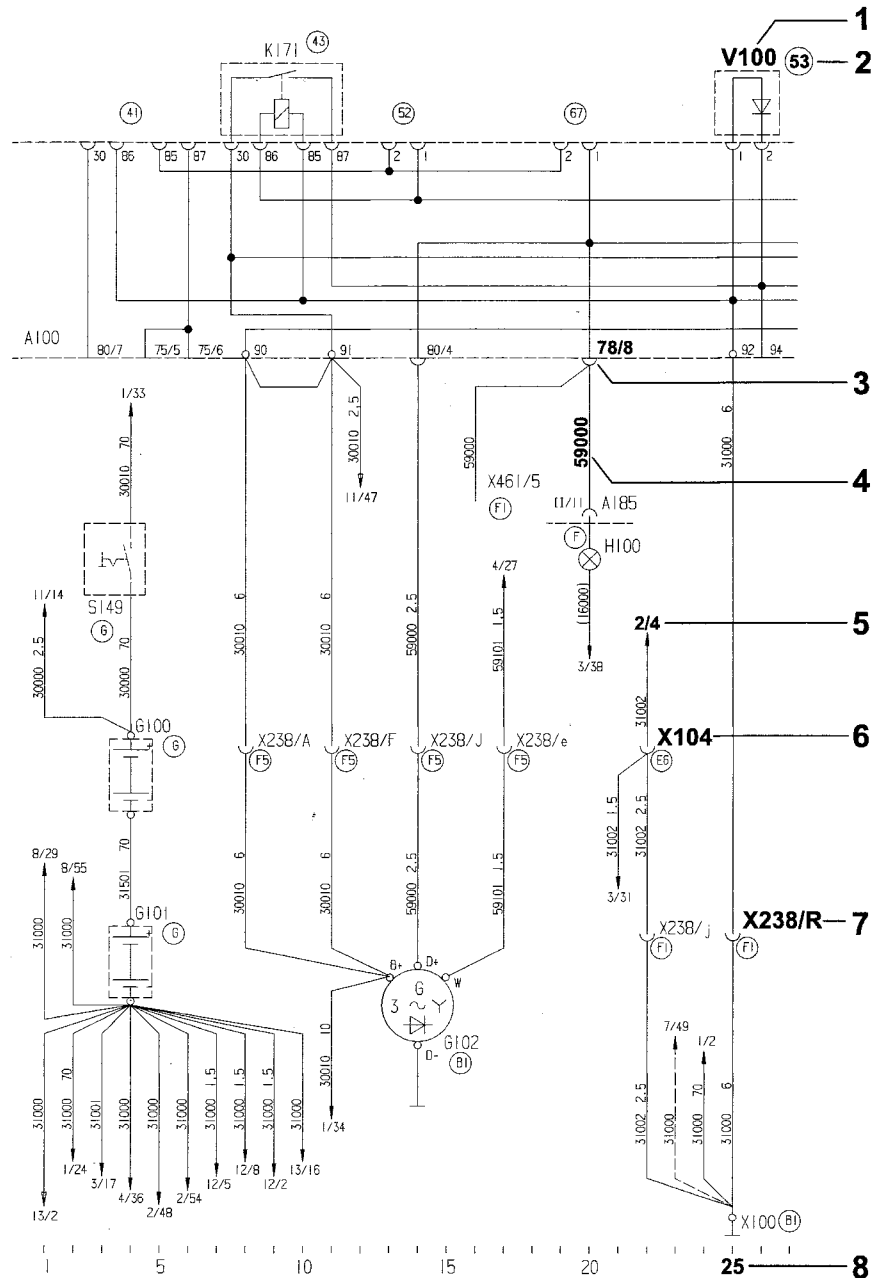
### **Bodies and special attachments**

Comply with the safety instructions and regulations issued by the bodymaker in question if bodies or special attachments are fitted.

### **Taking out of operation or putting into storage**

The special measures described in MAN Works Standard M 3069 Part 3 apply if buses or trucks are to be withdrawn from service or stored for a period longer than 3 months.

## Instructions for using wiring diagrams

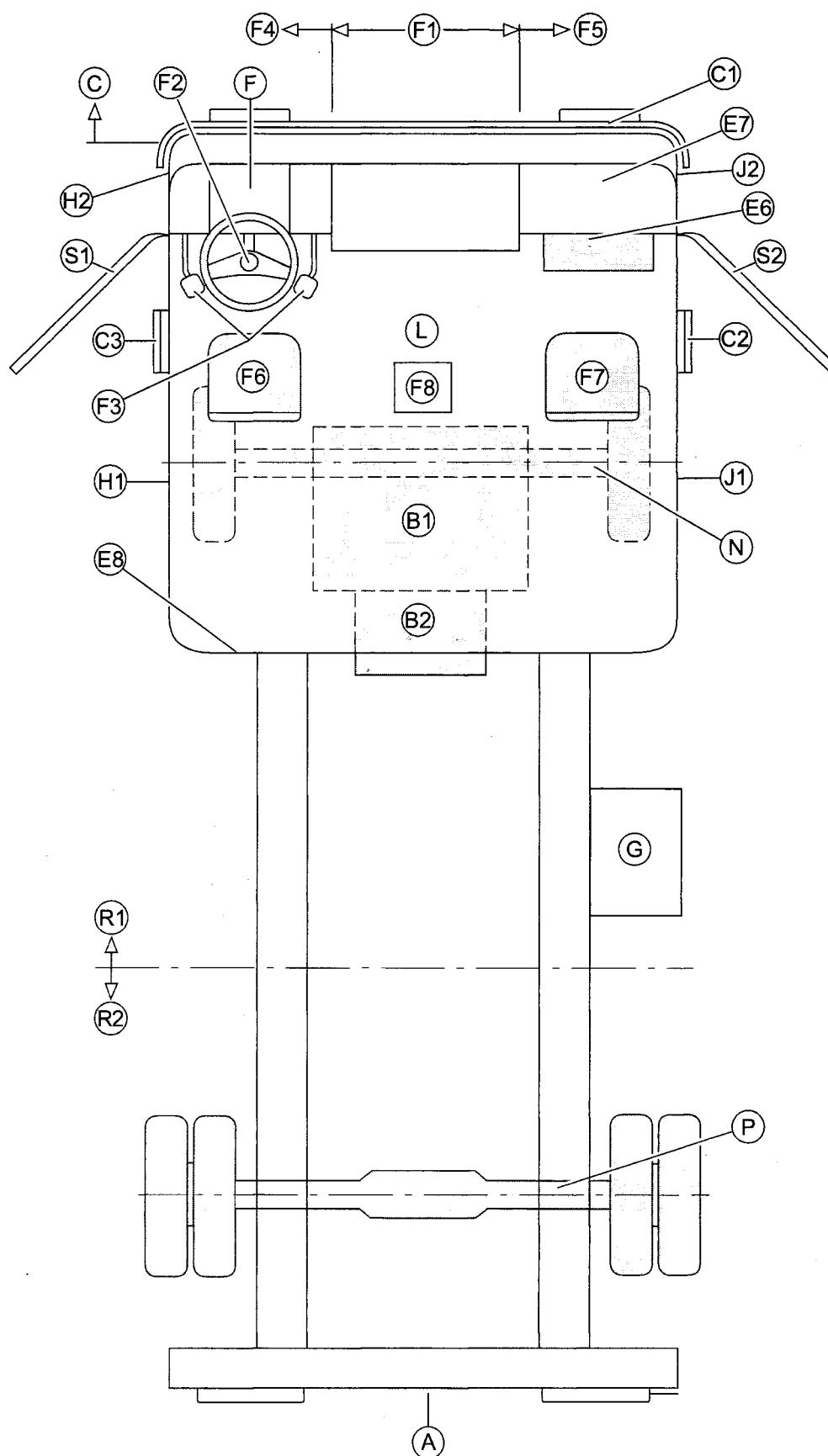


- 1 Name of component (here: diode V100 on the central fuse, relay and terminal box ("ZE"), position 53)
- 2 Mounting position on the front panel of the central fuse, relay and terminal box ("ZE") (here: engraved position number 53)
- 3 Plug connector on the rear of the central fuse, relay and terminal box ("ZE") (here: plug 78, connection 8)
- 4 Cable number; printed on the cable at short intervals (cross-section only if greater than 1<sup>2</sup>)
- 5 Sheet number (**not** page number) and circuit number  
Marking to show on which sheet and circuit the conductor continues  
(here: continuation of conductor 31002 on sheet 2 on circuit 4)
- 6 Plug connector (here: single-pin connector X104 in the ZE area)
- 7 Component mounting position (here: 21-pin connector X238 Pin R  
– wiring harness cab to engine – in central portion)
- 8 Circuit number (**please note:** sheets are numbered consecutively from 1 to 55)

**Important note on the use of the wiring diagram legends:** A three-digit number is shown in brackets after various item numbers. This number is the coded part number for this component!  
These part numbers can be found in the **T60** device list.

GENERAL REMARKS

Mounting positions for left-hand drive



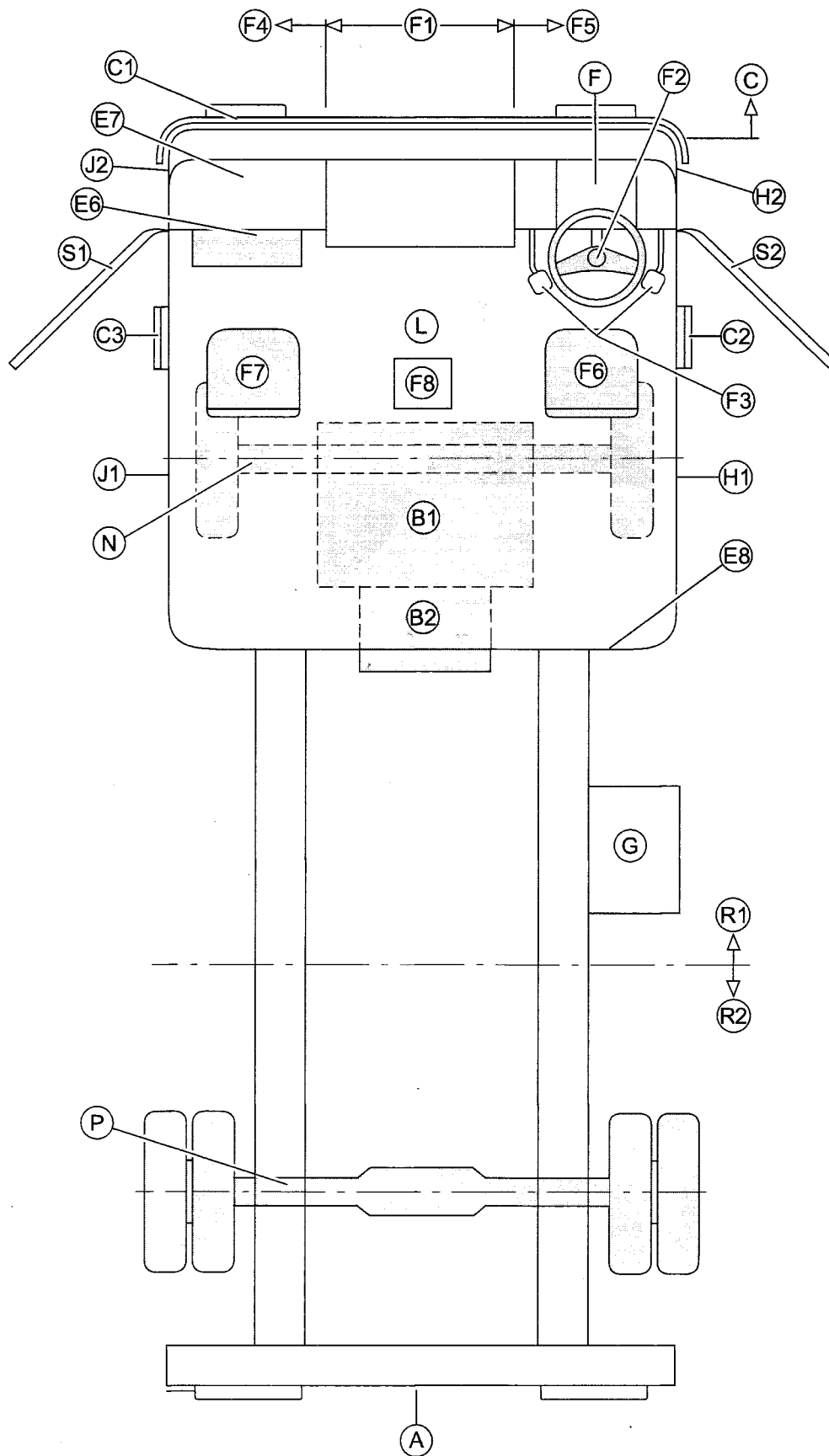
**Marks**

**Mounting position**

|      |       |                              |
|------|-------|------------------------------|
| (A)  | ..... | Tail                         |
| (B1) | ..... | Engine                       |
| (B2) | ..... | Gearbox                      |
| (C)  | ..... | Front                        |
| (C1) | ..... | Bumper                       |
| (C2) | ..... | Entrance right               |
| (C3) | ..... | Entrance left                |
| (E6) | ..... | Central electrics area       |
| (E7) | ..... | Control unit racks           |
| (E8) | ..... | Rear wall of cab             |
| (F)  | ..... | Instrument panel             |
| (F1) | ..... | Central part                 |
| (F2) | ..... | Steering wheel/column        |
| (F3) | ..... | Foot pedals                  |
| (F4) | ..... | Front wall, inside left      |
| (F5) | ..... | Front wall, inside right     |
| (F6) | ..... | Driving seat                 |
| (F7) | ..... | Passenger seat               |
| (F8) | ..... | Control panel                |
| (G)  | ..... | Battery box                  |
| (H1) | ..... | B-pillar on driver's side    |
| (H2) | ..... | A-pillar on driver's side    |
| (J1) | ..... | B-pillar on passenger's side |
| (J2) | ..... | A-pillar on passenger's side |
| (L)  | ..... | Ceiling/roof                 |
| (N)  | ..... | Front axle                   |
| (P)  | ..... | Rear axle                    |
| (R1) | ..... | Front parts of frame         |
| (R2) | ..... | Rear part of frame           |
| (S1) | ..... | Door left                    |
| (S2) | ..... | Door right                   |

GENERAL REMARKS

Mounting positions for right-hand drive



**GENERAL REMARKS**

**Marks**

**Mounting position**

|      |       |                              |
|------|-------|------------------------------|
| (A)  | ..... | Tail                         |
| (B1) | ..... | Engine                       |
| (B2) | ..... | Gearbox                      |
| (C)  | ..... | Front                        |
| (C1) | ..... | Bumper                       |
| (C2) | ..... | Entrance right               |
| (C3) | ..... | Entrance left                |
| (E6) | ..... | Central electrics area       |
| (E7) | ..... | Control unit racks           |
| (E8) | ..... | Rear wall of cab             |
| (F)  | ..... | Instrument panel             |
| (F1) | ..... | Central part                 |
| (F2) | ..... | Steering wheel/column        |
| (F3) | ..... | Foot pedals                  |
| (F4) | ..... | Front wall, inside left      |
| (F5) | ..... | Front wall, inside right     |
| (F6) | ..... | Driving seat                 |
| (F7) | ..... | Passenger seat               |
| (F8) | ..... | Control panel                |
| (G)  | ..... | Battery box                  |
| (H1) | ..... | B-pillar on driver's side    |
| (H2) | ..... | A-pillar on driver's side    |
| (J1) | ..... | B-pillar on passenger's side |
| (J2) | ..... | A-pillar on passenger's side |
| (L)  | ..... | Ceiling/roof                 |
| (N)  | ..... | Front axle                   |
| (P)  | ..... | Rear axle                    |
| (R1) | ..... | Front parts of frame         |
| (R2) | ..... | Rear part of frame           |
| (S1) | ..... | Door left                    |
| (S2) | ..... | Door right                   |

**Search criteria****Ascending according to wiring diagram title**

| <b>Name</b>                                                                                                    | <b>Wiring diagram no.</b> | <b>Page</b> |
|----------------------------------------------------------------------------------------------------------------|---------------------------|-------------|
| Additional headlight                                                                                           | 81.99192.2461             | 4.26 - 26   |
| Air conditioning unit                                                                                          | 81.99192.1380             | 4.11 - 4    |
| Airbag                                                                                                         | 81.99192.2572             | 4.01 - 2    |
| All-round marker light 1 on roof                                                                               | 81.99192.1412             | 4.18 - 72   |
| All-round marker light 2 on pedestal                                                                           | 81.99192.1414             | 4.18 - 76   |
| All-round marker light 2 on roof                                                                               | 81.99192.1413             | 4.18 - 74   |
| All-round marker light, left, on pedestal                                                                      | 81.99192.1416             | 4.18 - 78   |
| All-round marker light, right, on pedestal                                                                     | 81.99192.1415             | 4.18 - 80   |
| AS-TRONIC transmission (12-gear)                                                                               | 81.99192.2993             | 4.07 - 2    |
| AS-TRONIC transmission (16-gear)                                                                               | 81.99192.2992             | 4.07 - 6    |
| ASR traction control indicator light                                                                           | 81.99192.1358             | 4.01 - 26   |
| ASR traction control slip threshold control switch                                                             | 81.99192.1359             | 4.01 - 28   |
| ASR traction control/electronic stability program                                                              |                           |             |
| ASR/ESP indicator light                                                                                        | 81.99192.2862             | 4.01 - 30   |
| ASR traction control/electronic stability program                                                              |                           |             |
| ASR/ESP slip threshold control switch                                                                          | 81.99192.1360             | 4.01 - 32   |
| Bunk light, bottom (LL)                                                                                        | 81.99192.1397             | 4.19 - 18   |
| Bunk light, bottom (RL)                                                                                        | 81.99192.1398             | 4.19 - 20   |
| Bunk light, top                                                                                                | 81.99192.1396             | 4.19 - 16   |
| Cab tilt device, electrical                                                                                    | 81.99192.1370             | 4.06 - 4    |
| CAN databus driveline (T-CAN)                                                                                  | 81.99192.2359             | 4.03 - 4    |
| CAN databus driveline (T-CAN) with AS-TRONIC                                                                   | 81.99192.2522             | 4.03 - 6    |
| CAN databus driveline (T-CAN) with AS-TRONIC/special customer module                                           | 81.99192.2433             | 4.03 - 18   |
| CAN databus driveline (T-CAN) with ECAS/AS-TRONIC/RAS-EC                                                       | 81.99192.2783             | 4.03 - 26   |
| CAN databus driveline (T-CAN) with intarder or retarder                                                        | 81.99192.2521             | 4.03 - 10   |
| CAN databus driveline (T-CAN) with intarder or retarder/<br>AS-TRONIC/special customer module                  | 81.99192.2435             | 4.03 - 22   |
| CAN databus driveline (T-CAN) with intarder or retarder/<br>special customer module                            | 81.99192.2432             | 4.03 - 14   |
| CAN databus driveline (T-CAN) with intarder or retarder/AS-TRONIC                                              | 81.99192.2524             | 4.03 - 12   |
| CAN databus driveline (T-CAN) with special customer module                                                     | 81.99192.2428             | 4.03 - 8    |
| CAN databus driveline (T-CAN) without ECAM                                                                     | 81.99192.2811             | 4.03 - 30   |
| CAN databus driveline (T-CAN) without ECAM but with AS-TRONIC                                                  | 81.99192.2824             | 4.03 - 32   |
| CAN databus driveline (T-CAN) without ECAM but with AS-TRONIC/<br>special customer module                      | 81.99192.2819             | 4.03 - 38   |
| CAN databus driveline (T-CAN) without ECAM but with ECAS/<br>AS-TRONIC/RAS-EC                                  | 81.99192.2827             | 4.03 - 42   |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder                                       | 81.99192.2823             | 4.03 - 34   |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/<br>special customer module           | 81.99192.2818             | 4.03 - 46   |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/<br>AS-TRONIC                         | 81.99192.2826             | 4.03 - 50   |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/<br>AS-TRONIC/special customer module | 81.99192.2821             | 4.03 - 52   |
| CAN databus driveline (T-CAN) without ECAM but with special<br>customer module                                 | 81.99192.2814             | 4.03 - 36   |
| CAN databus instrumentation (I-CAN)/tachograph (FS-CAN)                                                        | 81.99192.2377             | 4.03 - 2    |
| Cargo area lighting                                                                                            | 81.99192.1384             | 4.12 - 4    |
| Central lubrication                                                                                            | 81.99192.1467             | 4.26 - 2    |
| Cool box                                                                                                       | 81.99192.1382             | 4.11 - 12   |
| Cullmann phone with radio 24V and CD changer MAN-Sound (LL)                                                    | 81.99192.1447             | 4.20 - 10   |
| Cullmann phone with radio 24V and CD changer MAN-Sound (RL)                                                    | 81.99192.2878             | 4.20 - 14   |
| Cullmann phone with radio 24V MAN-Sound (LL)                                                                   | 81.99192.2871             | 4.20 - 2    |
| Cullmann phone with radio 24V MAN-Sound (RL)                                                                   | 81.99192.2872             | 4.20 - 6    |
| Differential lock longitudinal and transverse 3-axle                                                           | 81.99192.1366             | 4.04 - 2    |
| Differential lock transverse, rear axle                                                                        | 81.99192.1365             | 4.04 - 4    |

**GENERAL REMARKS**

| <b>Name</b>                                                                                              | <b>Wiring<br/>diagram no.</b> | <b>Page</b> |
|----------------------------------------------------------------------------------------------------------|-------------------------------|-------------|
| Door module (LL)                                                                                         | 81.99192.2989                 | 4.20 - 34   |
| Door module (RL)                                                                                         | 81.99192.2990                 | 4.20 - 44   |
| Driving dynamics control                                                                                 | 81.99192.2843                 | 4.06 - 2    |
| EATON RTSO transmission (LL)                                                                             | 81.99192.2601                 | 4.07 - 10   |
| EATON RTSO transmission (RL)                                                                             | 81.99192.2417                 | 4.07 - 14   |
| EBS electronic braking system                                                                            | 81.99192.2987                 | 4.05 - 2    |
| ECAM electronically controlled compressed air device, fallback level                                     | 81.99192.2810                 | 4.05 - 8    |
| ECAS electronically controlled air suspension 4x2 FL (semitrailer)                                       | 81.99192.1336                 | 4.05 - 14   |
| ECAS electronically controlled air suspension 4x2 FL (truck)                                             | 81.99192.1337                 | 4.05 - 10   |
| ECAS electronically controlled air suspension 4x2 FLL                                                    | 81.99192.1338                 | 4.05 - 18   |
| ECAS electronically controlled air suspension 6x2 FNL                                                    | 81.99192.1339                 | 4.05 - 22   |
| ECAS electronically controlled air suspension 6x2 FNL (Nordland)                                         | 81.99192.1348                 | 4.05 - 26   |
| ECAS electronically controlled air suspension 6x2 FNLL                                                   | 81.99192.1340                 | 4.05 - 30   |
| ECAS electronically controlled air suspension 6x2 FNLL (Nordland)                                        | 81.99192.1349                 | 4.05 - 34   |
| ECAS electronically controlled air suspension 6x2 FVL                                                    | 81.99192.1341                 | 4.05 - 38   |
| ECAS electronically controlled air suspension, switch level 1/2                                          | 81.99192.1368                 | 4.05 - 42   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 4x2 FL (semitrailer) | 81.99192.1342                 | 4.05 - 44   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNL              | 81.99192.1345                 | 4.05 - 56   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNL (Nordland)   | 81.99192.1350                 | 4.05 - 60   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FVL              | 81.99192.1346                 | 4.05 - 64   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNLL             | 81.99192.1347                 | 4.05 - 68   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNLL (Nordland)  | 81.99192.1351                 | 4.05 - 72   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 4x2 FL (truck)       | 81.99192.1343                 | 4.05 - 48   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNL              | 81.99192.1344                 | 4.05 - 52   |
| EDC electronically controlled diesel injection EDC MS6.1 (EURO 2)                                        | 81.99192.2985                 | 4.05 - 76   |
| EDC electronically controlled diesel injection EDC MS6.1 with exhaust gas recirculation (EURO 3)         | 81.99192.2986                 | 4.05 - 82   |
| EDC electronically controlled diesel injection EDC7 Common Rail D0836LF                                  | 81.99192.2692                 | 4.05 - 88   |
| Emergency battery shutdown                                                                               | 81.99192.1362                 | 4.02 - 2    |
| Engine brake, automatic                                                                                  | 81.99192.1385                 | 4.13 - 2    |
| EVB electronically controlled engine brake, controlled                                                   | 81.99192.2832                 | 4.05 - 96   |
| Fuel filter heater                                                                                       | 81.99192.2487                 | 4.11 - 8    |
| Fuel filter heater, Separ                                                                                | 81.99192.2665                 | 4.11 - 10   |
| Headlight cleaning unit (LL)                                                                             | 81.99192.1392                 | 4.19 - 8    |
| Headlight cleaning unit (RL)                                                                             | 81.99192.1393                 | 4.19 - 10   |
| Headlight gas discharge with headlight levelling (LL)                                                    | 81.99192.2651                 | 4.19 - 2    |
| Headlight gas discharge with headlight levelling (RL)                                                    | 81.99192.2653                 | 4.19 - 4    |
| Headlight gas discharge without headlight levelling                                                      | 81.99192.2652                 | 4.19 - 6    |
| Headlight levelling (LL)                                                                                 | 81.99192.2477                 | 4.12 - 6    |
| Headlight levelling (RL)                                                                                 | 81.99192.2445                 | 4.12 - 8    |
| Heating for hydraulic gearshift (HGS) (LL)                                                               | 81.99192.2684                 | 4.08 - 4    |
| Heating for hydraulic gearshift (HGS) (RL)                                                               | 81.99192.2690                 | 4.08 - 6    |
| Horn switchover (LL)                                                                                     | 81.99192.1375                 | 4.08 - 8    |
| Horn switchover (RL)                                                                                     | 81.99192.1376                 | 4.08 - 10   |
| Intarder ZF-EST 48                                                                                       | 81.99192.1378                 | 4.09 - 4    |
| Interior lighting, roof (white/red)                                                                      | 81.99192.1377                 | 4.09 - 2    |
| Locker lighting, rear left (LL)                                                                          | 81.99192.2489                 | 4.19 - 42   |
| Locker lighting, rear left (RL)                                                                          | 81.99192.2411                 | 4.19 - 44   |
| Locker lighting, rear right (LL)                                                                         | 81.99192.2490                 | 4.19 - 46   |
| Locker lighting, rear right (RL)                                                                         | 81.99192.2412                 | 4.19 - 48   |
| Locker lighting, top (left, middle) (LL)                                                                 | 81.99192.1404                 | 4.19 - 50   |
| Locker lighting, top (left, middle) (RL)                                                                 | 81.99192.1405                 | 4.19 - 52   |



| Name                                                                | Wiring<br>diagram no. | Page      |
|---------------------------------------------------------------------|-----------------------|-----------|
| Locker lighting, top (left, middle, right) (LL)                     | 81.99192.1406         | 4.19 - 54 |
| Locker lighting, top (left, middle, right) (RL)                     | 81.99192.1407         | 4.19 - 56 |
| Main battery switch (electric)                                      | 81.99192.1361         | 4.02 - 6  |
| Main battery switch (mechanical)                                    | 81.99192.2495         | 4.02 - 8  |
| Nokia phone with radio 24V and CD changer MAN-Sound (LL)            | 81.99192.2875         | 4.20 - 26 |
| Nokia phone with radio 24V and CD changer MAN-Sound (RL)            | 81.99192.2876         | 4.20 - 30 |
| Nokia phone with radio 24V MAN-Sound (LL)                           | 81.99192.2873         | 4.20 - 18 |
| Nokia phone with radio 24V MAN-Sound (RL)                           | 81.99192.2874         | 4.20 - 22 |
| Power take-off 1                                                    | 81.99192.1388         | 4.14 - 2  |
| Power take-off 2                                                    | 81.99192.1389         | 4.14 - 4  |
| Preparation cooling superstructure (tractor vehicle)                | 81.99192.1469         | 4.22 - 2  |
| Preparation cooling superstructure (tractor vehicle, trailer)       | 81.99192.1468         | 4.22 - 6  |
| Preparation LSVA (performance-related heavy traffic levy)           | 81.99192.1464         | 4.22 - 12 |
| Preparation trailing axle control, semitrailer                      | 81.99192.1465         | 4.22 - 14 |
| Preparation, central lubrication                                    | 81.99192.1466         | 4.22 - 16 |
| Radio 12V                                                           | 81.99192.2475         | 4.18 - 2  |
| Radio 12V MAN-Sound (LL)                                            | 81.99192.2484         | 4.18 - 4  |
| Radio 12V MAN-Sound (RL)                                            | 81.99192.2444         | 4.18 - 6  |
| Radio 24V                                                           | 81.99192.2879         | 4.18 - 8  |
| Radio 24V MAN-Sound (LL)                                            | 81.99192.2855         | 4.18 - 10 |
| Radio 24V MAN-Sound (RL)                                            | 81.99192.2856         | 4.18 - 12 |
| Radio 24V with CD changer and MAN-Sound (LL)                        | 81.99192.2858         | 4.18 - 14 |
| Radio 24V with CD changer and MAN-Sound (RL)                        | 81.99192.2859         | 4.18 - 18 |
| Radio navigation system 12V (LL)                                    | 81.99192.1432         | 4.18 - 24 |
| Radio navigation system 12V (RL)                                    | 81.99192.1433         | 4.18 - 26 |
| Radio navigation system 12V with CD changer (LL)                    | 81.99192.1434         | 4.18 - 28 |
| Radio navigation system 12V with CD changer (RL)                    | 81.99192.1435         | 4.18 - 30 |
| Radio navigation system 12V with Cullmann phone (LL)                | 81.99192.1436         | 4.18 - 32 |
| Radio navigation system 12V with Cullmann phone (RL)                | 81.99192.1437         | 4.18 - 36 |
| Radio navigation system 12V with Cullmann phone and CD changer (LL) | 81.99192.1440         | 4.18 - 48 |
| Radio navigation system 12V with Cullmann phone and CD changer (RL) | 81.99192.1441         | 4.18 - 52 |
| Radio navigation system 12V with Nokia phone (LL)                   | 81.99192.1438         | 4.18 - 40 |
| Radio navigation system 12V with Nokia phone (RL)                   | 81.99192.1439         | 4.18 - 44 |
| Radio navigation system 12V with Nokia phone and CD changer (LL)    | 81.99192.1442         | 4.18 - 56 |
| Radio navigation system 12V with Nokia phone and CD changer (RL)    | 81.99192.1443         | 4.18 - 60 |
| Radio remote control (infrared)                                     | 81.99192.1371         | 4.18 - 22 |
| Retarder VOITH DIGIPROP (CAN)                                       | 81.99192.1410         | 4.18 - 66 |
| Retarder, hydroretarder (CAN)                                       | 81.99192.1411         | 4.18 - 68 |
| Retarder/intarder, automatic                                        | 81.99192.1372         | 4.18 - 64 |
| Reversing stop                                                      | 81.99192.1409         | 4.18 - 70 |
| Seat adjustment, electric (driver)                                  | 81.99192.1483         | 4.19 - 28 |
| Seat adjustment, electric (passenger)                               | 81.99192.1484         | 4.19 - 30 |
| Seat belt indicator, driver                                         | 81.99192.1374         | 4.07 - 26 |
| Seat heating, driver                                                | 81.99192.2494         | 4.19 - 24 |
| Seat heating, driver and passenger                                  | 81.99192.2493         | 4.19 - 26 |
| Side marker lights (LL)                                             | 81.99192.2592         | 4.19 - 22 |
| Socket 12V                                                          | 81.99192.2569         | 4.19 - 58 |
| Socket 24V                                                          | 81.99192.2570         | 4.19 - 60 |
| Socket 24V in wiring trough                                         | 81.99192.2796         | 4.19 - 62 |
| Socket, tanker                                                      | 81.99192.2655         | 4.19 - 64 |
| Special customised module                                           | 81.99192.1381         | 4.11 - 14 |
| START-STOP device at end of frame                                   | 81.99192.1402         | 4.19 - 38 |
| START-STOP device on engine                                         | 81.99192.1401         | 4.19 - 36 |
| START-STOP device on engine and end of frame                        | 81.99192.1403         | 4.19 - 40 |
| Sunblind, electric                                                  | 81.99192.1399         | 4.19 - 32 |
| Sunroof (INALFA) (LL)                                               | 81.99192.1394         | 4.19 - 12 |
| Sunroof (INALFA) (RL)                                               | 81.99192.1395         | 4.19 - 14 |
| Supplementary heating D1LCC/D3LCC with TRS                          | 81.99192.1472         | 4.26 - 4  |
| Supplementary heating D1LCC/D3LCC without TRS                       | 81.99192.1471         | 4.26 - 6  |

**GENERAL REMARKS**

| <b>Name</b>                                                        | <b>Wiring<br/>diagram no.</b> | <b>Page</b> |
|--------------------------------------------------------------------|-------------------------------|-------------|
| Supplementary heating D5W with TRS                                 | 81.99192.1478                 | 4.26 - 8    |
| Supplementary heating D5W without TRS                              | 81.99192.1477                 | 4.26 - 10   |
| Supplementary heating Thermo 50 with TRS                           | 81.99192.1476                 | 4.26 - 12   |
| Supplementary heating Thermo 50 without TRS                        | 81.99192.1475                 | 4.26 - 14   |
| Supplementary heating Truma E24-2 with TRS                         | 81.99192.1480                 | 4.26 - 18   |
| Supplementary heating Truma E24-2 without TRS                      | 81.99192.1479                 | 4.26 - 20   |
| Supplementary heating Webasto Airtop 2000 OEM and 3500 with TRS    | 81.99192.1473                 | 4.26 - 22   |
| Supplementary heating Webasto Airtop 2000 OEM and 3500 without TRS | 81.99192.1474                 | 4.26 - 24   |
| Supplementary heating, TRS shutdown                                | 81.99192.2621                 | 4.26 - 16   |
| Tailgate                                                           | 81.99192.1537                 | 4.12 - 2    |
| Tipper indicator                                                   | 81.99192.1379                 | 4.11 - 2    |
| Trailer charge 24V                                                 | 81.99192.2616                 | 4.08 - 2    |
| Trailer lighting socket 24V 15-pin                                 | 81.99192.2499                 | 4.01 - 10   |
| Trailer lighting socket 24V 15-pin + 12V 13-pin                    | 81.99192.2650                 | 4.01 - 22   |
| Trailer lighting socket 24V 7-pin                                  | 81.99192.2496                 | 4.01 - 4    |
| Trailer lighting socket 24V 7-pin + 12V 13-pin                     | 81.99192.2447                 | 4.01 - 12   |
| Trailer lighting socket 24V 7-pin/4-pin                            | 81.99192.2497                 | 4.01 - 6    |
| Trailer lighting socket 24V 7-pin/4-pin + 12V 13-pin               | 81.99192.2448                 | 4.01 - 14   |
| Trailer lighting socket 24V 7-pin/7-pin                            | 81.99192.2498                 | 4.01 - 8    |
| Trailer lighting socket 24V 7-pin/7-pin + 12V 13-pin               | 81.99192.2449                 | 4.01 - 18   |
| Vehicle immobiliser                                                | 81.99192.2476                 | 4.23 - 2    |
| Voltage limiter                                                    | 81.99192.2850                 | 4.19 - 34   |
| Windscreen heating                                                 | 81.99192.2571                 | 4.06 - 6    |
| Windscreen heating (wide cab)                                      | 81.99192.1373                 | 4.06 - 8    |
| Work spotlight on top of cab                                       | 81.99192.1356                 | 4.01 - 34   |
| Work spotlight, cab closure (left/right)                           | 81.99192.1355                 | 4.01 - 36   |
| Work spotlight, cab closure (right)                                | 81.99192.1357                 | 4.01 - 38   |
| ZF transmission 16S151/16S181 (LL)                                 | 81.99192.2579                 | 4.07 - 18   |
| ZF transmission 16S151/16S181 (RL)                                 | 81.99192.2835                 | 4.07 - 22   |

**Ascending according to wiring diagram title – part numbers**

| <b>Name</b>                                                                                              | <b>Wiring diagram no.</b> | <b>Page</b> |
|----------------------------------------------------------------------------------------------------------|---------------------------|-------------|
| ECAS electronically controlled air suspension 4x2 FL (semitrailer)                                       | 81.99192.1336             | 4.05 - 14   |
| ECAS electronically controlled air suspension 4x2 FL (truck)                                             | 81.99192.1337             | 4.05 - 10   |
| ECAS electronically controlled air suspension 4x2 FLL                                                    | 81.99192.1338             | 4.05 - 18   |
| ECAS electronically controlled air suspension 6x2 FNL                                                    | 81.99192.1339             | 4.05 - 22   |
| ECAS electronically controlled air suspension 6x2 FNLL                                                   | 81.99192.1340             | 4.05 - 30   |
| ECAS electronically controlled air suspension 6x2 FVL                                                    | 81.99192.1341             | 4.05 - 38   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 4x2 FL (semitrailer) | 81.99192.1342             | 4.05 - 44   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 4x2 FL (truck)       | 81.99192.1343             | 4.05 - 48   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNL              | 81.99192.1344             | 4.05 - 52   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNL              | 81.99192.1345             | 4.05 - 56   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FVL              | 81.99192.1346             | 4.05 - 64   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNLL             | 81.99192.1347             | 4.05 - 68   |
| ECAS electronically controlled air suspension 6x2 FNL (Nordland)                                         | 81.99192.1348             | 4.05 - 26   |
| ECAS electronically controlled air suspension 6x2 FNLL (Nordland)                                        | 81.99192.1349             | 4.05 - 34   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNL (Nordland)   | 81.99192.1350             | 4.05 - 60   |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNLL (Nordland)  | 81.99192.1351             | 4.05 - 72   |
| Work spotlight, cab closure (left/right)                                                                 | 81.99192.1355             | 4.01 - 36   |
| Work spotlight on top of cab                                                                             | 81.99192.1356             | 4.01 - 34   |
| Work spotlight, cab closure (right)                                                                      | 81.99192.1357             | 4.01 - 38   |
| ASR traction control indicator light                                                                     | 81.99192.1358             | 4.01 - 26   |
| ASR traction control slip threshold control switch                                                       | 81.99192.1359             | 4.01 - 28   |
| ASR traction control/electronic stability program                                                        |                           |             |
| ASR/ESP slip threshold control switch                                                                    | 81.99192.1360             | 4.01 - 32   |
| Main battery switch (electric)                                                                           | 81.99192.1361             | 4.02 - 6    |
| Emergency battery shutdown                                                                               | 81.99192.1362             | 4.02 - 2    |
| Differential lock transverse, rear axle                                                                  | 81.99192.1365             | 4.04 - 4    |
| Differential lock longitudinal and transverse 3-axle                                                     | 81.99192.1366             | 4.04 - 2    |
| ECAS electronically controlled air suspension, switch level 1/2                                          | 81.99192.1368             | 4.05 - 42   |
| Cab tilt device, electrical                                                                              | 81.99192.1370             | 4.06 - 4    |
| Radio remote control (infrared)                                                                          | 81.99192.1371             | 4.18 - 22   |
| Retarder/intarder, automatic                                                                             | 81.99192.1372             | 4.18 - 64   |
| Windscreen heating (wide cab)                                                                            | 81.99192.1373             | 4.06 - 8    |
| Seat belt indicator, driver                                                                              | 81.99192.1374             | 4.07 - 26   |
| Horn switchover (LL)                                                                                     | 81.99192.1375             | 4.08 - 8    |
| Horn switchover (RL)                                                                                     | 81.99192.1376             | 4.08 - 10   |
| Interior lighting, roof (white/red)                                                                      | 81.99192.1377             | 4.09 - 2    |
| Intarder ZF-EST 48                                                                                       | 81.99192.1378             | 4.09 - 4    |
| Tipper indicator                                                                                         | 81.99192.1379             | 4.11 - 2    |
| Air conditioning unit                                                                                    | 81.99192.1380             | 4.11 - 4    |
| Special customised module                                                                                | 81.99192.1381             | 4.11 - 14   |
| Cool box                                                                                                 | 81.99192.1382             | 4.11 - 12   |
| Cargo area lighting                                                                                      | 81.99192.1384             | 4.12 - 4    |
| Engine brake, automatic                                                                                  | 81.99192.1385             | 4.13 - 2    |
| Power take-off 1                                                                                         | 81.99192.1388             | 4.14 - 2    |
| Power take-off 2                                                                                         | 81.99192.1389             | 4.14 - 4    |
| Headlight cleaning unit (LL)                                                                             | 81.99192.1392             | 4.19 - 8    |
| Headlight cleaning unit (RL)                                                                             | 81.99192.1393             | 4.19 - 10   |
| Sunroof (INALFA) (LL)                                                                                    | 81.99192.1394             | 4.19 - 12   |

# GENERAL REMARKS

| Name                                                                            | Wiring diagram no. | Page      |
|---------------------------------------------------------------------------------|--------------------|-----------|
| Sunroof (INALFA) (RL)                                                           | 81.99192.1395      | 4.19 - 14 |
| Bunk light, top                                                                 | 81.99192.1396      | 4.19 - 16 |
| Bunk light, bottom (LL)                                                         | 81.99192.1397      | 4.19 - 18 |
| Bunk light, bottom (RL)                                                         | 81.99192.1398      | 4.19 - 20 |
| Sunblind, electric                                                              | 81.99192.1399      | 4.19 - 32 |
| START-STOP device on engine                                                     | 81.99192.1401      | 4.19 - 36 |
| START-STOP device at end of frame                                               | 81.99192.1402      | 4.19 - 38 |
| START-STOP device on engine and end of frame                                    | 81.99192.1403      | 4.19 - 40 |
| Locker lighting, top (left, middle) (LL)                                        | 81.99192.1404      | 4.19 - 50 |
| Locker lighting, top (left, middle) (RL)                                        | 81.99192.1405      | 4.19 - 52 |
| Locker lighting, top (left, middle, right) (LL)                                 | 81.99192.1406      | 4.19 - 54 |
| Locker lighting, top (left, middle, right) (RL)                                 | 81.99192.1407      | 4.19 - 56 |
| Reversing stop                                                                  | 81.99192.1409      | 4.18 - 70 |
| Retarder VOITH DIGIPROP (CAN)                                                   | 81.99192.1410      | 4.18 - 66 |
| Retarder, hydroretarder (CAN)                                                   | 81.99192.1411      | 4.18 - 68 |
| All-round marker light 1 on roof                                                | 81.99192.1412      | 4.18 - 72 |
| All-round marker light 2 on roof                                                | 81.99192.1413      | 4.18 - 74 |
| All-round marker light 2 on pedestal                                            | 81.99192.1414      | 4.18 - 76 |
| All-round marker light, right, on pedestal                                      | 81.99192.1415      | 4.18 - 80 |
| All-round marker light, left, on pedestal                                       | 81.99192.1416      | 4.18 - 78 |
| Radio navigation system 12V (LL)                                                | 81.99192.1432      | 4.18 - 24 |
| Radio navigation system 12V (RL)                                                | 81.99192.1433      | 4.18 - 26 |
| Radio navigation system 12V with CD changer (LL)                                | 81.99192.1434      | 4.18 - 28 |
| Radio navigation system 12V with CD changer (RL)                                | 81.99192.1435      | 4.18 - 30 |
| Radio navigation system 12V with Cullmann phone (LL)                            | 81.99192.1436      | 4.18 - 32 |
| Radio navigation system 12V with Cullmann phone (RL)                            | 81.99192.1437      | 4.18 - 36 |
| Radio navigation system 12V with Nokia phone (LL)                               | 81.99192.1438      | 4.18 - 40 |
| Radio navigation system 12V with Nokia phone (RL)                               | 81.99192.1439      | 4.18 - 44 |
| Radio navigation system 12V with Cullmann phone and CD changer (LL)             | 81.99192.1440      | 4.18 - 48 |
| Radio navigation system 12V with Cullmann phone and CD changer (RL)             | 81.99192.1441      | 4.18 - 52 |
| Radio navigation system 12V with Nokia phone and CD changer (LL)                | 81.99192.1442      | 4.18 - 56 |
| Radio navigation system 12V with Nokia phone and CD changer (RL)                | 81.99192.1443      | 4.18 - 60 |
| Cullmann phone with radio 24V and CD changer MAN-Sound (LL)                     | 81.99192.1447      | 4.20 - 10 |
| Preparation LSVA (performance-related heavy traffic levy)                       | 81.99192.1464      | 4.22 - 12 |
| Preparation trailing axle control, semitrailer                                  | 81.99192.1465      | 4.22 - 14 |
| Preparation, central lubrication                                                | 81.99192.1466      | 4.22 - 16 |
| Central lubrication                                                             | 81.99192.1467      | 4.26 - 2  |
| Preparation cooling superstructure (tractor vehicle, trailer)                   | 81.99192.1468      | 4.22 - 6  |
| Preparation cooling superstructure (tractor vehicle)                            | 81.99192.1469      | 4.22 - 2  |
| Supplementary heating D1LCC/D3LCC without TRS                                   | 81.99192.1471      | 4.26 - 6  |
| Supplementary heating D1LCC/D3LCC with TRS                                      | 81.99192.1472      | 4.26 - 4  |
| Supplementary heating Webasto Airtop 2000 OEM and 3500 with TRS                 | 81.99192.1473      | 4.26 - 22 |
| Supplementary heating Webasto Airtop 2000 OEM and 3500 without TRS              | 81.99192.1474      | 4.26 - 24 |
| Supplementary heating Thermo 50 without TRS                                     | 81.99192.1475      | 4.26 - 14 |
| Supplementary heating Thermo 50 with TRS                                        | 81.99192.1476      | 4.26 - 12 |
| Supplementary heating D5W without TRS                                           | 81.99192.1477      | 4.26 - 10 |
| Supplementary heating D5W with TRS                                              | 81.99192.1478      | 4.26 - 8  |
| Supplementary heating Truma E24-2 without TRS                                   | 81.99192.1479      | 4.26 - 20 |
| Supplementary heating Truma E24-2 with TRS                                      | 81.99192.1480      | 4.26 - 18 |
| Seat adjustment, electric (driver)                                              | 81.99192.1483      | 4.19 - 28 |
| Seat adjustment, electric (passenger)                                           | 81.99192.1484      | 4.19 - 30 |
| Tailgate                                                                        | 81.99192.1537      | 4.12 - 2  |
| CAN databus driveline (T-CAN)                                                   | 81.99192.2359      | 4.03 - 4  |
| CAN databus instrumentation (I-CAN)/tachograph (FS-CAN)                         | 81.99192.2377      | 4.03 - 2  |
| Locker lighting, rear left (RL)                                                 | 81.99192.2411      | 4.19 - 44 |
| Locker lighting, rear right (RL)                                                | 81.99192.2412      | 4.19 - 48 |
| EATON RTSO transmission (RL)                                                    | 81.99192.2417      | 4.07 - 14 |
| CAN databus driveline (T-CAN) with special customer module                      | 81.99192.2428      | 4.03 - 8  |
| CAN databus driveline (T-CAN) with intarder or retarder/special customer module | 81.99192.2432      | 4.03 - 14 |

| Name                                                                                                           | Wiring diagram no. | Page      |
|----------------------------------------------------------------------------------------------------------------|--------------------|-----------|
| CAN databus driveline (T-CAN) with AS-TRONIC/special customer module                                           | 81.99192.2433      | 4.03 - 18 |
| CAN databus driveline (T-CAN) with intarder or retarder/AS-TRONIC/<br>special customer module                  | 81.99192.2435      | 4.03 - 22 |
| Radio 12V MAN-Sound (RL)                                                                                       | 81.99192.2444      | 4.18 - 6  |
| Headlight levelling (RL)                                                                                       | 81.99192.2445      | 4.12 - 8  |
| Trailer lighting socket 24V 7-pin + 12V 13-pin                                                                 | 81.99192.2447      | 4.01 - 12 |
| Trailer lighting socket 24V 7-pin/4-pin + 12V 13-pin                                                           | 81.99192.2448      | 4.01 - 14 |
| Trailer lighting socket 24V 7-pin/7-pin + 12V 13-pin                                                           | 81.99192.2449      | 4.01 - 18 |
| Additional headlight                                                                                           | 81.99192.2461      | 4.26 - 26 |
| Radio 12V                                                                                                      | 81.99192.2475      | 4.18 - 2  |
| Vehicle immobiliser                                                                                            | 81.99192.2476      | 4.23 - 2  |
| Headlight levelling (LL)                                                                                       | 81.99192.2477      | 4.12 - 6  |
| Radio 12V MAN-Sound (LL)                                                                                       | 81.99192.2484      | 4.18 - 4  |
| Fuel filter heater                                                                                             | 81.99192.2487      | 4.11 - 8  |
| Locker lighting, rear left (LL)                                                                                | 81.99192.2489      | 4.19 - 42 |
| Locker lighting, rear right (LL)                                                                               | 81.99192.2490      | 4.19 - 46 |
| Seat heating, driver and passenger                                                                             | 81.99192.2493      | 4.19 - 26 |
| Seat heating, driver                                                                                           | 81.99192.2494      | 4.19 - 24 |
| Main battery switch (mechanical)                                                                               | 81.99192.2495      | 4.02 - 8  |
| Trailer lighting socket 24V 7-pin                                                                              | 81.99192.2496      | 4.01 - 4  |
| Trailer lighting socket 24V 7-pin/4-pin                                                                        | 81.99192.2497      | 4.01 - 6  |
| Trailer lighting socket 24V 7-pin/7-pin                                                                        | 81.99192.2498      | 4.01 - 8  |
| Trailer lighting socket 24V 15-pin                                                                             | 81.99192.2499      | 4.01 - 10 |
| CAN databus driveline (T-CAN) with intarder or retarder                                                        | 81.99192.2521      | 4.03 - 10 |
| CAN databus driveline (T-CAN) with AS-TRONIC                                                                   | 81.99192.2522      | 4.03 - 6  |
| CAN databus driveline (T-CAN) with intarder or retarder/AS-TRONIC                                              | 81.99192.2524      | 4.03 - 12 |
| Socket 12V                                                                                                     | 81.99192.2569      | 4.19 - 58 |
| Socket 24V                                                                                                     | 81.99192.2570      | 4.19 - 60 |
| Windscreen heating                                                                                             | 81.99192.2571      | 4.06 - 6  |
| Airbag                                                                                                         | 81.99192.2572      | 4.01 - 2  |
| ZF transmission 16S151/16S181 (LL)                                                                             | 81.99192.2579      | 4.07 - 18 |
| Side marker lights (LL)                                                                                        | 81.99192.2592      | 4.19 - 22 |
| EATON RTSO transmission (LL)                                                                                   | 81.99192.2601      | 4.07 - 10 |
| Trailer charge 24V                                                                                             | 81.99192.2616      | 4.08 - 2  |
| Supplementary heating, TRS shutdown                                                                            | 81.99192.2621      | 4.26 - 16 |
| Trailer lighting socket 24V 15-pin + 12V 13-pin                                                                | 81.99192.2650      | 4.01 - 22 |
| Headlight gas discharge with headlight levelling (LL)                                                          | 81.99192.2651      | 4.19 - 2  |
| Headlight gas discharge without headlight levelling                                                            | 81.99192.2652      | 4.19 - 6  |
| Headlight gas discharge with headlight levelling (RL)                                                          | 81.99192.2653      | 4.19 - 4  |
| Socket, tanker                                                                                                 | 81.99192.2655      | 4.19 - 64 |
| Fuel filter heater, Separ                                                                                      | 81.99192.2665      | 4.11 - 10 |
| Heating for hydraulic gearshift (HGS) (LL)                                                                     | 81.99192.2684      | 4.08 - 4  |
| Heating for hydraulic gearshift (HGS) (RL)                                                                     | 81.99192.2690      | 4.08 - 6  |
| EDC electronically controlled diesel injection EDC7 Common Rail D0836LF                                        | 81.99192.2692      | 4.05 - 88 |
| CAN databus driveline (T-CAN) with ECAS/AS-TRONIC/RAS-EC                                                       | 81.99192.2783      | 4.03 - 26 |
| Socket 24V in wiring trough                                                                                    | 81.99192.2796      | 4.19 - 62 |
| ECAM electronically controlled compressed air device, fallback level                                           | 81.99192.2810      | 4.05 - 8  |
| CAN databus driveline (T-CAN) without ECAM                                                                     | 81.99192.2811      | 4.03 - 30 |
| CAN databus driveline (T-CAN) without ECAM but with special<br>customer module                                 | 81.99192.2814      | 4.03 - 36 |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/<br>special customer module           | 81.99192.2818      | 4.03 - 46 |
| CAN databus driveline (T-CAN) without ECAM but with AS-TRONIC/<br>special customer module                      | 81.99192.2819      | 4.03 - 38 |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/<br>AS-TRONIC/special customer module | 81.99192.2821      | 4.03 - 52 |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder                                       | 81.99192.2823      | 4.03 - 34 |
| CAN databus driveline (T-CAN) without ECAM but with AS-TRONIC                                                  | 81.99192.2824      | 4.03 - 32 |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/<br>AS-TRONIC                         | 81.99192.2826      | 4.03 - 50 |

**GENERAL REMARKS**

| <b>Name</b>                                                                                         | <b>Wiring<br/>diagram no.</b> | <b>Page</b> |
|-----------------------------------------------------------------------------------------------------|-------------------------------|-------------|
| CAN databus driveline (T-CAN) without ECAM but with ECAS/<br>AS-TRONIC/RAS-EC                       | 81.99192.2827                 | 4.03 - 42   |
| EVB electronically controlled engine brake, controlled                                              | 81.99192.2832                 | 4.05 - 96   |
| ZF transmission 16S151/16S181 (RL)                                                                  | 81.99192.2835                 | 4.07 - 22   |
| Driving dynamics control                                                                            | 81.99192.2843                 | 4.06 - 2    |
| Voltage limiter                                                                                     | 81.99192.2850                 | 4.19 - 34   |
| Radio 24V MAN-Sound (LL)                                                                            | 81.99192.2855                 | 4.18 - 10   |
| Radio 24V MAN-Sound (RL)                                                                            | 81.99192.2856                 | 4.18 - 12   |
| Radio 24V with CD changer and MAN-Sound (LL)                                                        | 81.99192.2858                 | 4.18 - 14   |
| Radio 24V with CD changer and MAN-Sound (RL)                                                        | 81.99192.2859                 | 4.18 - 18   |
| ASR traction control/electronic stability program<br>ASR/ESP indicator light                        | 81.99192.2862                 | 4.01 - 30   |
| Cullmann phone with radio 24V MAN-Sound (LL)                                                        | 81.99192.2871                 | 4.20 - 2    |
| Cullmann phone with radio 24V MAN-Sound (RL)                                                        | 81.99192.2872                 | 4.20 - 6    |
| Nokia phone with radio 24V MAN-Sound (LL)                                                           | 81.99192.2873                 | 4.20 - 18   |
| Nokia phone with radio 24V MAN-Sound (RL)                                                           | 81.99192.2874                 | 4.20 - 22   |
| Nokia phone with radio 24V and CD changer MAN-Sound (LL)                                            | 81.99192.2875                 | 4.20 - 26   |
| Nokia phone with radio 24V and CD changer MAN-Sound (RL)                                            | 81.99192.2876                 | 4.20 - 30   |
| Cullmann phone with radio 24V and CD changer MAN-Sound (RL)                                         | 81.99192.2878                 | 4.20 - 14   |
| Radio 24V                                                                                           | 81.99192.2879                 | 4.18 - 8    |
| EDC electronically controlled diesel injection EDC MS6.1 (EURO 2)                                   | 81.99192.2985                 | 4.05 - 76   |
| EDC electronically controlled diesel injection EDC MS6.1 with<br>exhaust gas recirculation (EURO 3) | 81.99192.2986                 | 4.05 - 82   |
| EBS electronic braking system                                                                       | 81.99192.2987                 | 4.05 - 2    |
| Door module (LL)                                                                                    | 81.99192.2989                 | 4.20 - 34   |
| Door module (RL)                                                                                    | 81.99192.2990                 | 4.20 - 44   |
| AS-TRONIC transmission (16-gear)                                                                    | 81.99192.2992                 | 4.07 - 6    |
| AS-TRONIC transmission (12-gear)                                                                    | 81.99192.2993                 | 4.07 - 2    |

**LL SERIES WIRING DIAGRAMS**
**Contents**

| <b>Names of circuits</b>                                                                                                                 | <b>Wiring diagram no.</b> | <b>Chapter/Page</b> |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------|
| <b>Series wiring diagrams (LL)</b>                                                                                                       | <b>81.99192.2981</b>      | <b>3.01</b>         |
| Power supply, starting system                                                                                                            | Sheet 1                   | 3.01 - 2            |
| Power supply central vehicle computer, power supply intarder, EBS, ECAS, power supply retarder, power supply vehicle management computer | Sheet 2                   | 3.01 - 4            |
| Earth distributor                                                                                                                        | Sheet 3                   | 3.01 - 6            |
| Flame starting device, fan clutch, coolant temperature EDC, coolant level, reserve lines engine START-STOP                               | Sheet 4                   | 3.01 - 8            |
| Steering hydraulic fluid level, diagnosis, pressure pickup air filter                                                                    | Sheet 5                   | 3.01 - 10           |
| Clutch fluid level sensor, heating thermostat, ZDR interface (vehicle management computer). (MDB, HGB)                                   | Sheet 6                   | 3.01 - 12           |
| Cruise control, vehicle speed control/vehicle speed limiting, additional retarding brake, distributor line 60028                         | Sheet 7                   | 3.01 - 14           |
| ECAM, indicator light for cab locking, tank level indicator                                                                              | Sheet 8                   | 3.01 - 16           |
| Horn, oil level sensor, engine brake, retarding brake pushbutton switch, external temperature                                            | Sheet 9                   | 3.01 - 18           |
| Wiper and washer system, heater fan                                                                                                      | Sheet 10                  | 3.01 - 20           |
| Cigarette lighter, ash tray illumination, gear lever, diagnosis vehicle management computer, accelerator pedal unit                      | Sheet 11                  | 3.01 - 22           |
| Power supply +15V, instrumentation/tachograph                                                                                            | Sheet 12                  | 3.01 - 24           |
| Lighting learning session, light switches                                                                                                | Sheet 13                  | 3.01 - 26           |
| Parking lights left, parking lights right                                                                                                | Sheet 14                  | 3.01 - 28           |
| Headlamp flasher, dipped beam, main beam, headlight levelling                                                                            | Sheet 15                  | 3.01 - 30           |
| Rear fog lights, front fog light/rear fog light circuitry, front fog light/supplementary fog lights                                      | Sheet 16                  | 3.01 - 32           |
| Brake light, parking brake, reversing light                                                                                              | Sheet 17                  | 3.01 - 34           |
| Search lighting, power supply permanent consumers, entrance illumination/internal lighting                                               | Sheet 18                  | 3.01 - 36           |
| Light flashing unit                                                                                                                      | Sheet 19                  | 3.01 - 38           |
| Reserve lines, reserve lines for trailer lighting socket, periphery of retarder                                                          | Sheet 20                  | 3.01 - 40           |
| Intarder, retarder, transmission, power take-off                                                                                         | Sheet 21                  | 3.01 - 42           |

## Contents

| Names of circuits                                                                                                                        | Wiring diagram no.   | Chapter/Page |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------|
| <b>Series wiring diagrams (RL)</b>                                                                                                       | <b>81.99192.2982</b> | <b>3.02</b>  |
| Power supply, starting system                                                                                                            | Sheet 1              | 3.02 - 2     |
| Power supply central vehicle computer, power supply intarder, EBS, ECAS, power supply retarder, power supply vehicle management computer | Sheet 2              | 3.02 - 4     |
| Earth distributor                                                                                                                        | Sheet 3              | 3.02 - 6     |
| Flame starting device, fan clutch, coolant temperature EDC, coolant level, reserve lines engine START-STOP                               | Sheet 4              | 3.02 - 8     |
| Steering hydraulic fluid level, diagnosis, pressure pickup air filter                                                                    | Sheet 5              | 3.02 - 10    |
| Clutch fluid level sensor, heating thermostat, ZDR interface (vehicle management computer) (MDB, HGB)                                    | Sheet 6              | 3.02 - 12    |
| Cruise control, vehicle speed control/vehicle speed limiting, additional retarding brake, distributor line 60028                         | Sheet 7              | 3.02 - 14    |
| ECAM, indicator light for cab locking, tank level indicator                                                                              | Sheet 8              | 3.02 - 16    |
| Horn, oil level sensor, engine brake, retarding brake pushbutton switch, external temperature                                            | Sheet 9              | 3.02 - 18    |
| Wiper and washer system, heater fan                                                                                                      | Sheet 10             | 3.02 - 20    |
| Cigarette lighter, ash tray illumination, gear lever, diagnosis vehicle management computer, accelerator pedal unit                      | Sheet 11             | 3.02 - 22    |
| Power supply +15V, instrumentation/tachograph                                                                                            | Sheet 12             | 3.02 - 24    |
| Lighting learning session, light switches                                                                                                | Sheet 13             | 3.02 - 26    |
| Parking lights left, parking lights right                                                                                                | Sheet 14             | 3.02 - 28    |
| Headlamp flasher, dipped beam, main beam, headlight levelling                                                                            | Sheet 15             | 3.02 - 30    |
| Rear fog lights, front fog light/rear fog light circuitry, front fog light/supplementary fog light                                       | Sheet 16             | 3.02 - 32    |
| Brake light, parking brake, reversing light                                                                                              | Sheet 17             | 3.02 - 34    |
| Search lighting, power supply permanent consumers, entrance step illumination/internal lighting                                          | Sheet 18             | 3.02 - 36    |
| Light flashing unit                                                                                                                      | Sheet 19             | 3.02 - 38    |
| Reserve lines, reserve lines for trailer lighting socket, periphery of retarder                                                          | Sheet 20             | 3.02 - 40    |
| Intarder, retarder, transmission, power take-off                                                                                         | Sheet 21             | 3.02 - 42    |



**LL SERIES WIRING DIAGRAMS**

## Legend

Wiring diagram no. **81.99192.2981** Sheet 1 of 21

Change status: 03.01

### A = Supply voltage, starting system

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer  
**A435** (338) EDC control unit

**F354** (132) Main fuse (terminal 30-1)  
**F355** (132) Main fuse (terminal 30-2)  
**F399** (111) Generator fuse (terminal 15)

**G100** (113) Battery 1  
**G101** (113) Battery 2  
**G102** (114) Generator

**K171** (150) Relay consumer (terminal 15)  
**K755** (280) Relay for starter control

**M100** (144) Starting motor

**Q101** (110) Steering wheel lock

**X100** Earthing point, engine  
**X669** Stvd. start inhibitor  
**X1364** (176) Bridge, central fuse, relay and terminal box, central vehicle computer 90/1-90/2  
**X1365** (176) Bridge, central fuse, relay and terminal box, central vehicle computer 90/2-91  
**X1539** (188) Stvd. potential insulator -  
**X1541** (189) Stvd. potential insulator +  
**X1549** Stvd. engine/EDC/transmission I  
**X1551** Stvd. engine/EDC/transmission II  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1754** Soldered connector, line 59104  
**X1830** (221) Crimped connector, line 31002  
**X1903** Threaded bolt M6 (MP box)

## Marking of mounting positios

(A) Tail  
 (B1) Engine  
 (B2) Gearbox  
 (C) Front  
 (C1) Bumper  
 (C2) Entrance right  
 (C3) Entrance left  
 (E6) Central electrics area  
 (E7) Control unit racks  
 (E8) Rear wall of cab  
 (F) Instrument panel  
 (F1) Central part  
 (F2) Steering wheel/column  
 (F3) Foot pedals  
 (F4) Front wall, inside left  
 (F5) Front wall, inside right

(I) Signal, engine is running

**X1904** Threaded bolt l5 (MP box)  
**X1913** (199) Bridge, line 3000 (MP box)  
**X1966** Stvd. ignition lxx  
**X1988** Threaded bolt l5 (MP box)

(F6) Driving seat  
 (F7) Passenger seat  
 (F8) Control panel  
 (G) Battery box  
 (H1) B-pillar on driver's side  
 (H2) A-pillar on driver's side  
 (J1) B-pillar on passenger's side  
 (J2) A-pillar on passenger's side  
 (L) Ceiling/roof  
 (N) Front axle  
 (P) Rear axle  
 (R1) Front part of frame  
 (R2) Rear part of frame  
 (S1) Door left  
 (S2) Door right

## Legend

Wiring diagram no. **81.99192.2981** Sheet 1 of 21

Change status: 03.01

### A = Supply voltage, starting system

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer  
**A435** (338) EDC control unit

**F354** (132) Main fuse (terminal 30-1)  
**F355** (132) Main fuse (terminal 30-2)  
**F399** (111) Generator fuse (terminal 15)

**G100** (113) Battery 1  
**G101** (113) Battery 2  
**G102** (114) Generator

**K171** (150) Relay consumer (terminal 15)  
**K755** (280) Relay for starter control

**M100** (144) Starting motor

**Q101** (110) Steering wheel lock

**X100** Earthing point, engine  
**X669** Stvd. start inhibitor  
**X1364** (176) Bridge, central fuse, relay and terminal box, central vehicle computer 90/1-90/2  
**X1365** (176) Bridge, central fuse, relay and terminal box, central vehicle computer 90/2-91  
**X1539** (188) Stvd. potential insulator -  
**X1541** (189) Stvd. potential insulator +  
**X1549** Stvd. engine/EDC/transmission I  
**X1551** Stvd. engine/EDC/transmission II  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1754** Soldered connector, line 59104  
**X1830** (221) Crimped connector, line 31002  
**X1903** Threaded bolt M6 (MP box)

## Marking of mounting positions

(A) Tail  
 (B1) Engine  
 (B2) Gearbox  
 (C) Front  
 (C1) Bumper  
 (C2) Entrance right  
 (C3) Entrance left  
 (E6) Central electrics area  
 (E7) Control unit racks  
 (E8) Rear wall of cab  
 (F) Instrument panel  
 (F1) Central part  
 (F2) Steering wheel/column  
 (F3) Foot pedals  
 (F4) Front wall, inside left  
 (F5) Front wall, inside right

(I) Signal, engine is running

**X1904** Threaded bolt M6 (MP box)  
**X1913** (199) Bridge, line 30000 (MP box)  
**X1966** Stvd. ignition lock  
**X1988** Threaded bolt M5 (MP box)

(F6) Driving seat  
 (F7) Passenger seat  
 (F8) Control panel  
 (G) Battery box  
 (H1) B-pillar on driver's side  
 (H2) A-pillar on driver's side  
 (J1) B-pillar on passenger's side  
 (J2) A-pillar on passenger's side  
 (L) Ceiling/roof  
 (N) Front axle  
 (P) Rear axle  
 (R1) Front part of frame  
 (R2) Rear part of frame  
 (S1) Door left  
 (S2) Door right



**Legend**Wiring diagram no. **81.99192.2981** Sheet 2 of 21

Change status: 03.01

**A = Supply voltage, central vehicle computer****B = Power supply intarder, EBS, ECAS****C = Power supply retarder****D = Power supply vehicle management computer****A100** (255) Central fuse, relay and terminal block**A302** (352) Central computer 2**A403** (339) Vehicle management computer**F152** (101) Fuse retarder (terminal 15)**F160** (105) Fuse EBS/ABS power supply, trailer**F161** (103) Fuse EBS/ABS power supply  
pressure control valve**F162** (111) Fuse EBS/ABS control**F164** (101) Fuse ECAS (terminal 30)**F243** (105) Fuse central vehicle computer, permanent positive**F244** (105) Fuse central vehicle computer (terminal 30-1)**F245** (105) Fuse central vehicle computer (terminal 30-2)**F246** (101) Fuse central vehicle computer (terminal 15)**F371** (101) Fuse vehicle management computer (terminal 30)**F372** (116) Fuse vehicle management computer (terminal 15)**F374** (101) Fuse intarder/retarder (terminal 30)**F400** (101) Fuse steering wheel lock**F522** (105) Fuse, lead 30000**F523** (105) Fuse, lead 30000**X1064** (104) Bridge on central fuse, relay and terminal box 2 item 37  
(Pin 1-2)**X1557** Stvd. frame left**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block**Marking of mounting positions**

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓘ Intarder

Ⓙ Electronic braking system (EBS)

Ⓚ Electronically controlled air suspension (ECAS)

Ⓛ Retarder

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control-panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

[illegible]

## Legend

Wiring diagram no. **81.99192.2981** Sheet **3** of 21  
Change status: 03.01

### A = Earth distributor

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

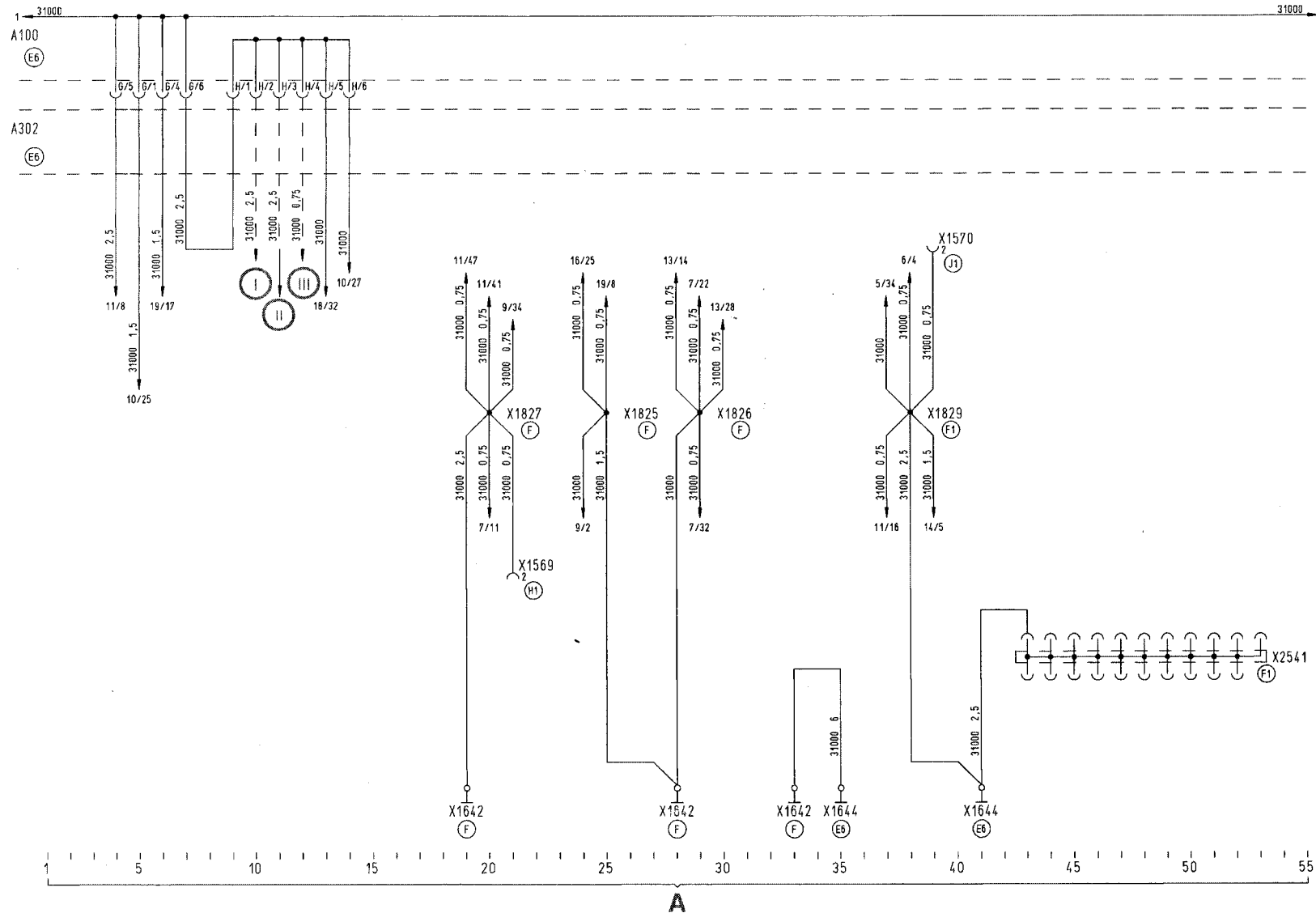
**X1569** Stvd. locker lighting  
**X1570** Stvd. locker lighting, right  
**X1642** Earthing point, cab, behind instrument panel  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1825** (221) Crimped connector, line 31000  
**X1826** (221) Crimped connector, line 31000  
**X1827** (221) Crimped connector, line 31000  
**X1829** (221) Crimped connector, line 31000  
**X2541** (246) Potential distributor 21-pin, line 31000

## Marking of mounting positions

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| (A) Tail                           | (F6) Driving seat                 |
| (B1) Engine                        | (F7) Passenger seat               |
| (B2) Gearbox                       | (F8) Control panel                |
| (C) Front                          | (G) Battery box                   |
| (C1) Bumper                        | (H1) B-pillar on driver's side    |
| (C2) Entrance right                | (H2) A-pillar on driver's side    |
| (C3) Entrance left                 | (J1) B-pillar on passenger's side |
| (E6) Central electrics area        | (J2) A-pillar on passenger's side |
| (E7) Control unit racks            | (L) Ceiling/roof                  |
| (E8) Rear wall of cab              | (N) Front axle                    |
| (F) Instrument panel               | (P) Rear axle                     |
| (F1) Central part                  | (R1) Front part of frame          |
| (F2) Steering wheel/column         | (R2) Rear part of frame           |
| (F3) Foot pedals                   | (S1) Door left                    |
| (F4) Front wall, inside left       | (S2) Door right                   |
| (F5) Front wall, inside right      |                                   |
| (I) Door module, driver's side     |                                   |
| (II) Door module, passenger's side |                                   |
| (III) Door module                  |                                   |

LL SERIES WIRING DIAGRAMS

Wiring diagram no. 81.99192.2981 Sheet 3 of 21





## LL SERIES WIRING DIAGRAMS

### Legend

Wiring diagram no. **81.99192.2981** Sheet **4** of 21

Change status: 03.01

**A = Flame start device**

**B = Fan clutch**

**C = Coolant temperature, EDC**

**D = Coolant level**

**E = Reserve lines, engine START-STOP**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A403** (339) Vehicle management computer

**A407** (342) Instrumentation

**A435** (338) EDC control unit

**B124** (265) Temperature sensor, coolant water (EDC)

**B139** (272) Coolant level sensor

**F106** (107) Fuse, flame start device

**H101** Indicator light flame start device

**K102** (150) Relay flame start device

**R100** (144) Flame glow plug 1

**R101** (144) Flame glow plug 2

**S580** Control switch, engine start (MP box)

**S581** Control switch, engine stop (MP box)

**X1549** Stvd. engine/EDC/transmission I

**X1551** Stvd. engine/EDC/transmission II

**X1904** Threaded bolt M6 (MP box)

**Y100** (189) Solenoid valve, flame start device

**Y273** (190) Solenoid valve, fan clutch

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

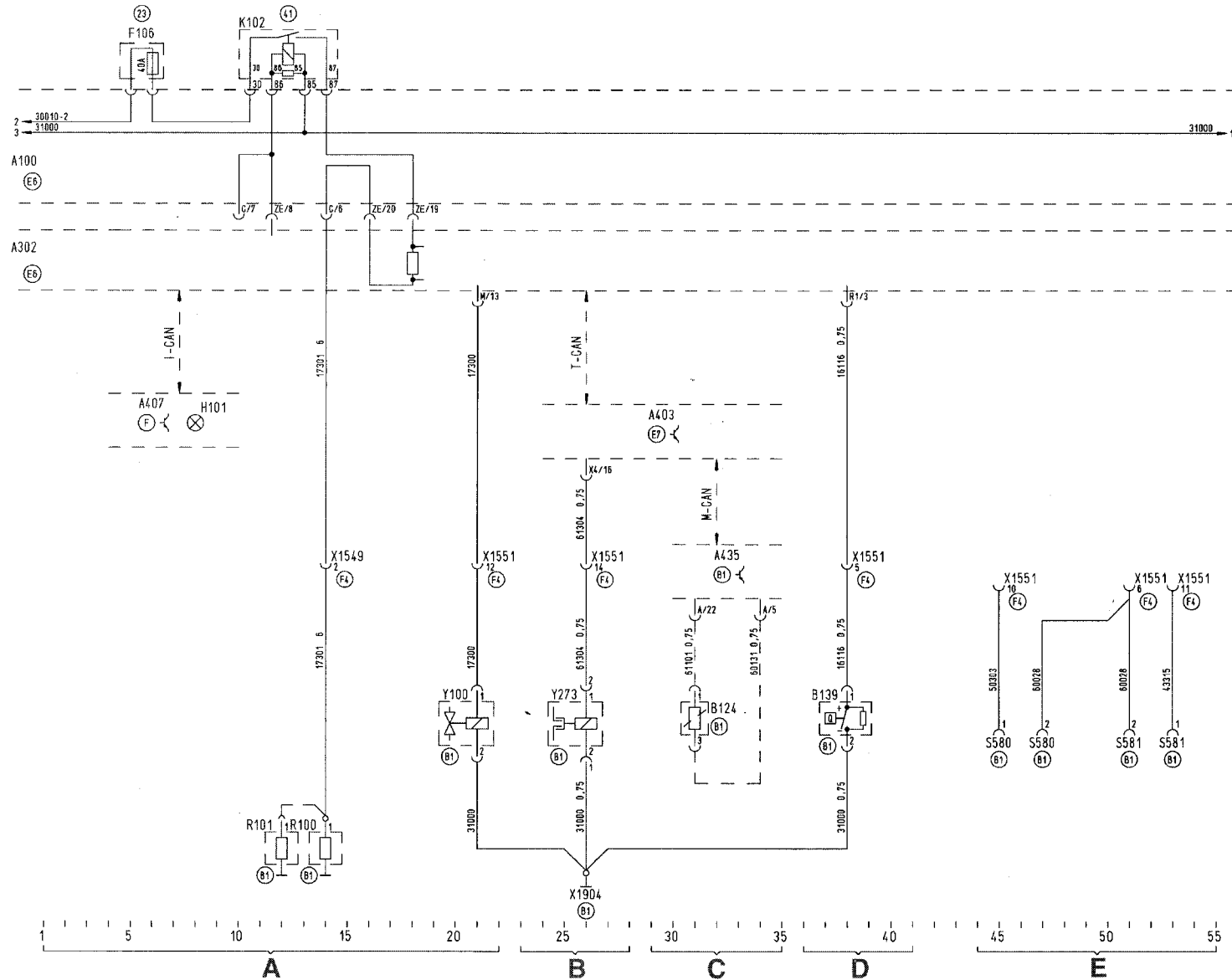
Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

LL SERIES WIRING DIAGRAMS

Wiring diagram no. 81.99192.2981 Sheet 4 of 21



### Legend

Wiring diagram no. **81.99192.2981** Sheet **5** of 21

Change status: 03.01

**A = Steering hydraulic fluid level**

**B = Diagnosis**

**C = Pressure pickup, air filter**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**B371** (318) Steering oil level switch

**B433** (273) Pressure pickup, air filter

**X200** (201) Plug, diagnostics

**X1549** Stvd. engine/EDC/transmission I

**X1847** Stvd. pressure pickup, air filter

**X1904** Threaded bolt M6 (MP box)

**X2544** (246) Potential distributor, 21-pin K-line

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

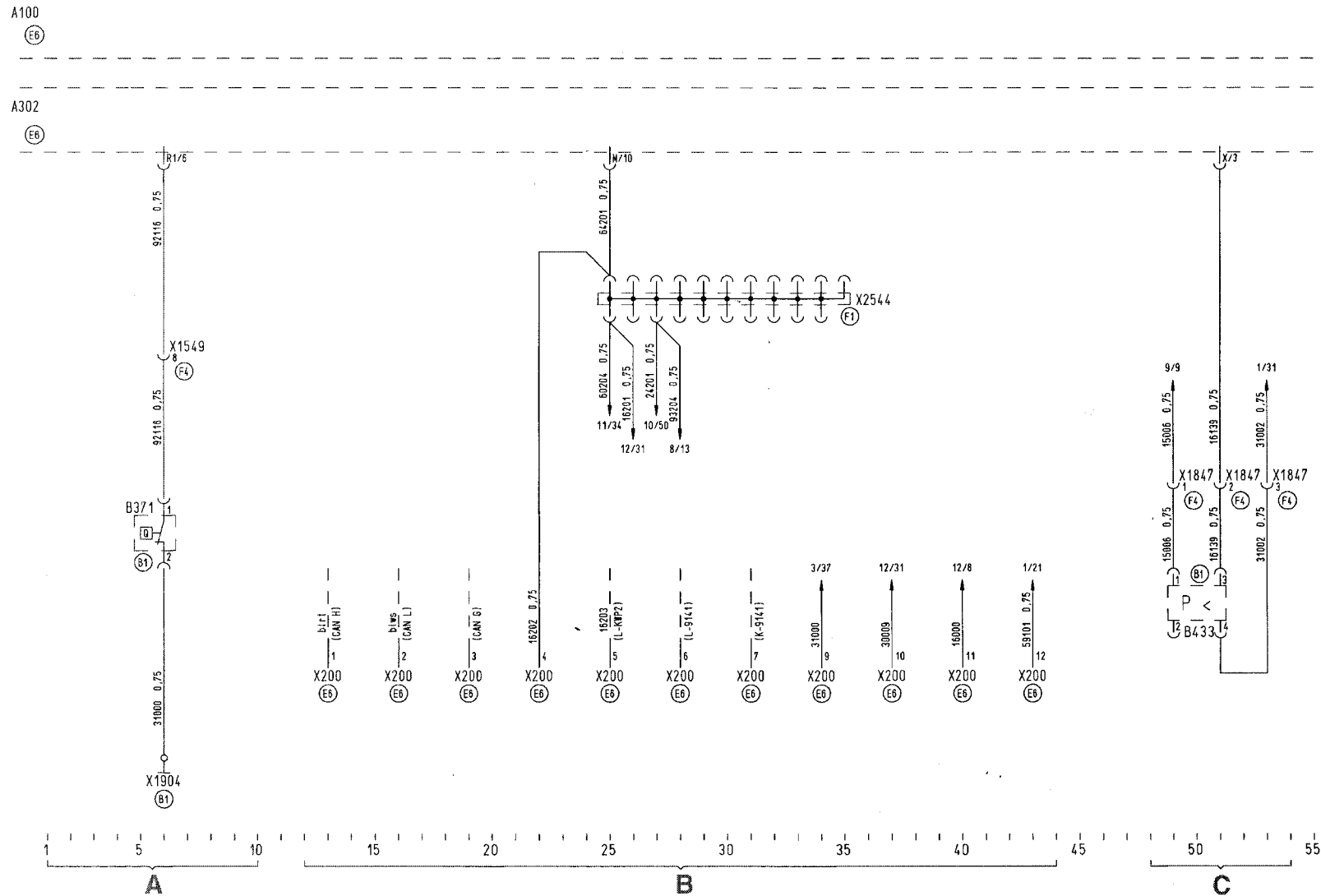
(R2) Rear part of frame

(S1) Door left

(S2) Door right

# LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **5** of 21



### Legend

Wiring diagram no. **81.99192.2981** Sheet 6 of 21

Change status: 03.01

**A = Clutch fluid level sensor**

**B = Heating thermostat**

**C = ZDR interface (vehicle management computer) (MDB, HGB)**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A403** (339) Vehicle management computer

**B434** (272) Clutch fluid level sensor

**F582** (117) Fuse, vehicle management computer (terminal 15)  
ZDR/interface

**R134** (146) EDC resistor group

**X1551** Stvd. engine/EDC/transmission II

**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block

**X1972** Stvd. pedals, external

**X1996** Stvd. intermediate speed control interface (FFR)

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Power take-off 1

Ⓙ Power take-off 2

Ⓜ Special customised module

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

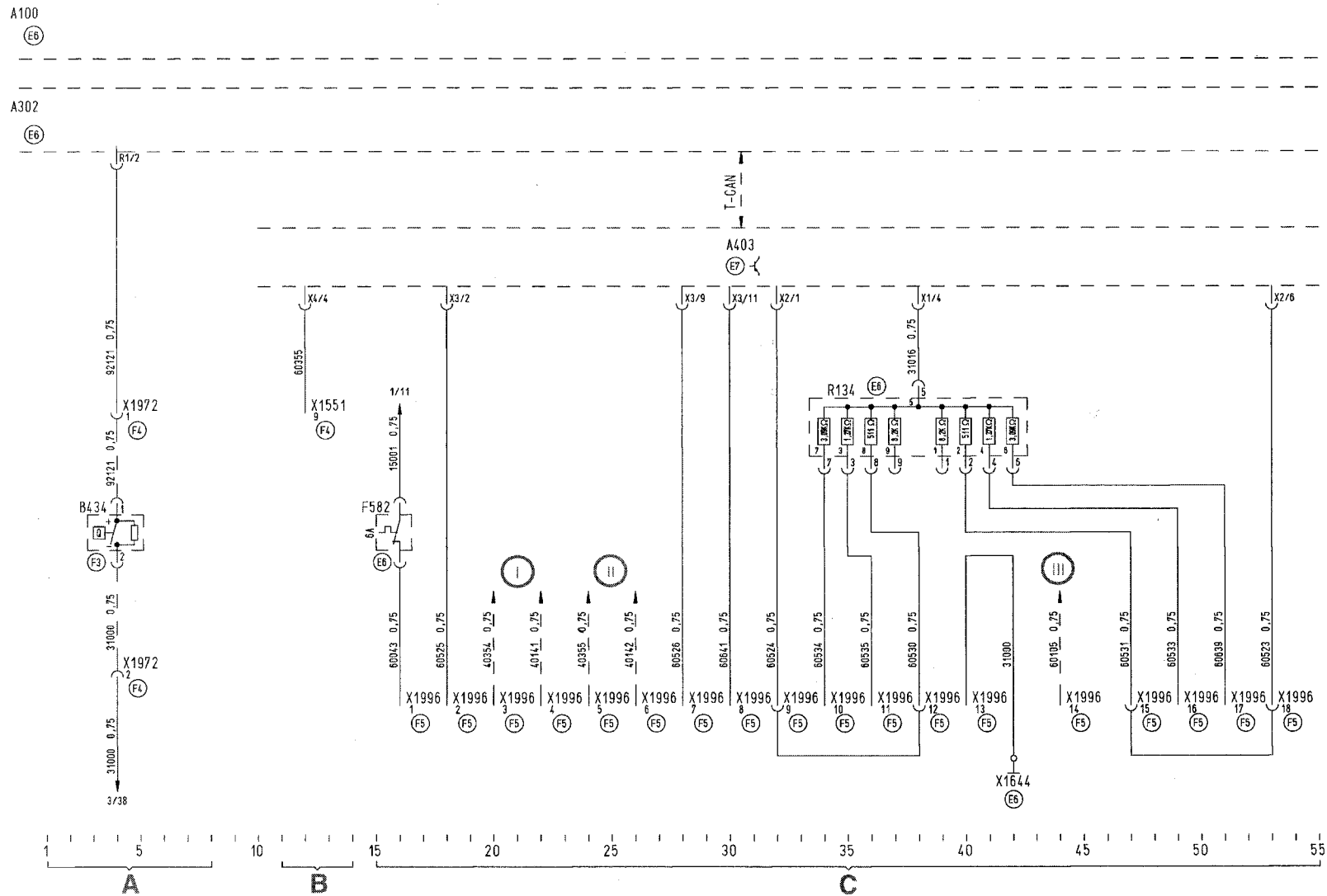
Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **6** of 21



## Legend

Wiring diagram no. **81.99192.2981** Sheet **7** of 21  
Change status: 03.01

**A = Cruise control**

**B = Vehicle speed control/vehicle speed limiting, additional retarding brake**

**C = Distributor line 60028**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer  
**A429** (405) Steering column switch, cruise control/transmission

**F583** (117) Fuse, FFR (term. 15) switch/sensors

**H378** (A405) Indicator light FGR/FGB (LED)

**S284** (489) Switch FGR/FGB

**S479** (476) Switch, additional retarding brake

**X1693** Crimped connector, line 60028  
**X1831** (221) Crimped connector, line 60028  
**X1832** (221) Crimped connector, line 60028  
**X1968** Stvd. cruise control switch

## Marking of mounting positions

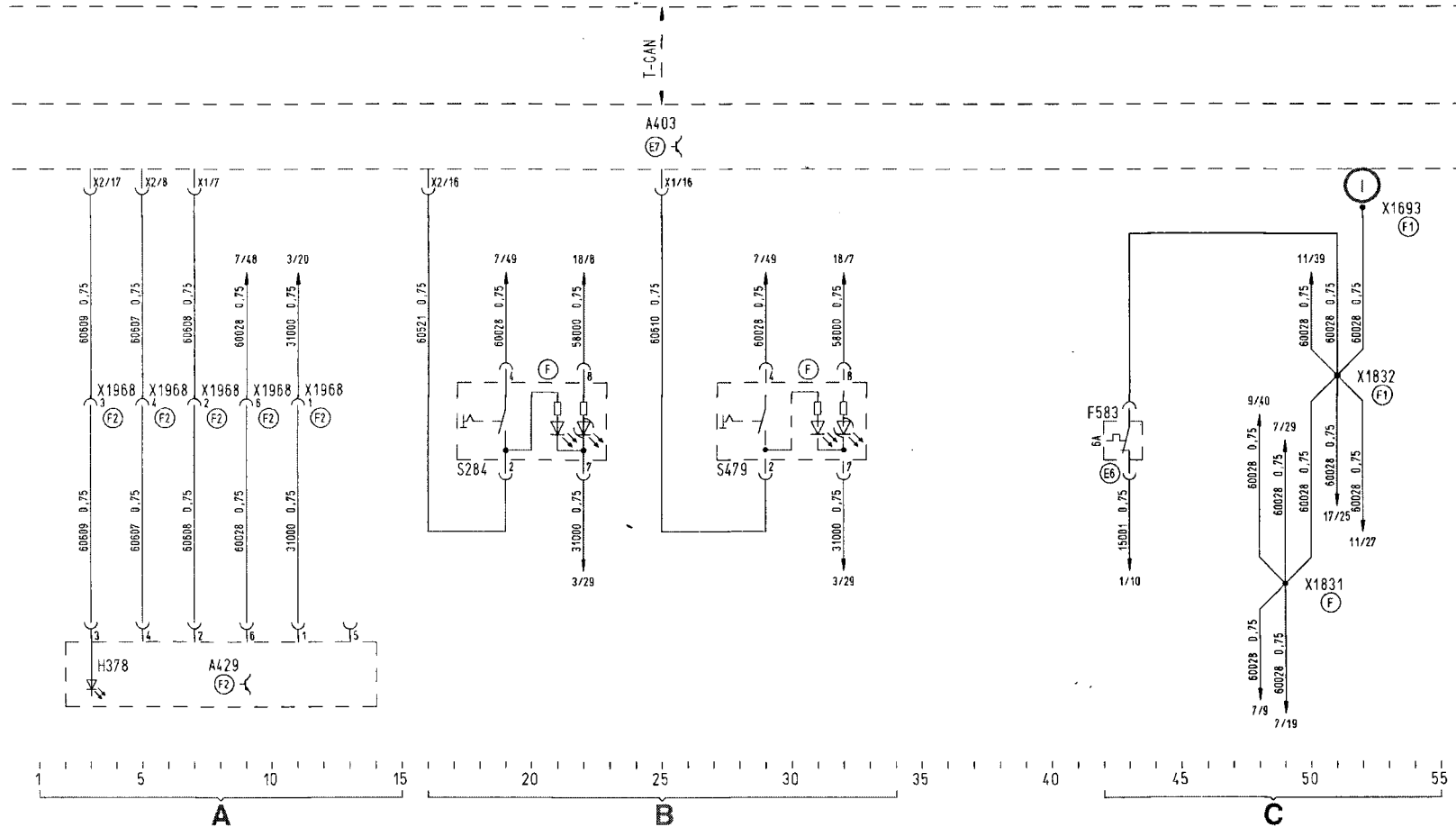
- |                                             |                                |
|---------------------------------------------|--------------------------------|
| Ⓐ Tail                                      | Ⓕ Driving seat                 |
| Ⓑ Engine                                    | Ⓖ Passenger seat               |
| Ⓑ Gearbox                                   | Ⓖ Control panel                |
| Ⓒ Front                                     | Ⓖ Battery box                  |
| Ⓒ Bumper                                    | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right                            | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left                             | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area                    | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks                        | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab                          | Ⓖ Front axle                   |
| Ⓖ Instrument panel                          | Ⓖ Rear axle                    |
| Ⓖ Central part                              | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column                     | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals                               | Ⓖ Door left                    |
| Ⓖ Front wall, inside left                   | Ⓖ Door right                   |
| Ⓖ Front wall, inside right                  |                                |
| Ⓖ Vehicle management computer (terminal 15) |                                |

LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet 7 of 21

A100  
(E6)

A302  
(E6)





## Legend

Wiring diagram no. **81.99192.2981** Sheet **8** of 21  
Change status: 03.01

**A = ECAM**

**B = Indicator light cab locking**

**C = Tank indicator**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation  
**A409** (353) ECAM control unit

**B103** (263) Tank sensor

**F366** (101) ECAM/ECAS fuse (terminal 15)

**G101** (113) Battery 2

**H108** Indicator light, reservoir pressure  
**H149** Indicator light, cab locking

**P102** Indicator instrument, reservoir pressure brake circuit 1  
**P103** Indicator instrument, reservoir pressure brake circuit 2  
**P104** Indicator instrument fuel in reserve

**S198** (538) Switch, cab locking right  
**S199** (538) Switch, cab locking left

**X1544** Stvd. frame III  
**X1557** Stvd. frame, left  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)

## Marking of mounting positions

(A) Tail  
(B1) Engine  
(B2) Gearbox  
(C) Front  
(C1) Bumper  
(C2) Entrance right  
(C3) Entrance left  
(E6) Central electrics area  
(E7) Control unit racks  
(E8) Rear wall of cab  
(F) Instrument panel  
(F1) Central part  
(F2) Steering wheel/column  
(F3) Foot pedals  
(F4) Front wall, inside left  
(F5) Front wall, inside right

(I) Reserve

(F6) Driving seat  
(F7) Passenger seat  
(F8) Control panel  
(G) Battery box  
(H1) B-pillar on driver's side  
(H2) A-pillar on driver's side  
(J1) B-pillar on passenger's side  
(J2) A-pillar on passenger's side  
(L) Ceiling/roof  
(N) Front axle  
(P) Rear axle  
(R1) Front part of frame  
(R2) Rear part of frame  
(S1) Door left  
(S2) Door right

The diagram is a schematic of a control system, divided into three main sections: A, B, and C. It features a power supply at the top with a 1500V line, a 10A fuse (F366), and a 100V transformer. Section A (left) shows a control circuit with a 100V motor (A100) and a 302V motor (A302). Section B (middle) shows a control circuit with a 100V motor (A100) and a 302V motor (A302). Section C (right) shows a control circuit with a 100V motor (A100) and a 302V motor (A302). The diagram includes various electrical symbols for switches, relays, and motors, along with numerical labels for components and wiring. A scale bar at the bottom indicates distances from 1 to 55 units.

### Legend

Wiring diagram no. **81.99192.2981** Sheet **9** of 21  
Change status: 03.01

**A = Horn**

**B = Oil level sensor**

**C = Engine brake**

**D = Additional retarding brake pushbutton switch**

**E = External temperature**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer  
**A407** (342) Instrumentation  
**A437** (398) Additional retarding brake pushbutton switch  
**A551** (533) Control unit, oil level sensor

**B269** (275) Temperature sensor, external air  
**B270** (338) Oil level sensor

**F375** (101) Fuse, cab outside (terminal 15)

**G101** (113) Battery 2

**H102** (142) Horn  
**H145** Indicator light, retarder  
**H169** (143) Horn (dual-tone)

**P113** Indicator device, external temperature

**S108** (472) Steering column switch (indicators, wipers and headlights)

**X1545** Stvd. front region, left  
**X1550** Stvd. front region, right  
**X1551** Stvd. engine/EDC/transmission II  
**X1557** Stvd. frame, left  
**X1559** Stvd. engine/EDC/transmission IV

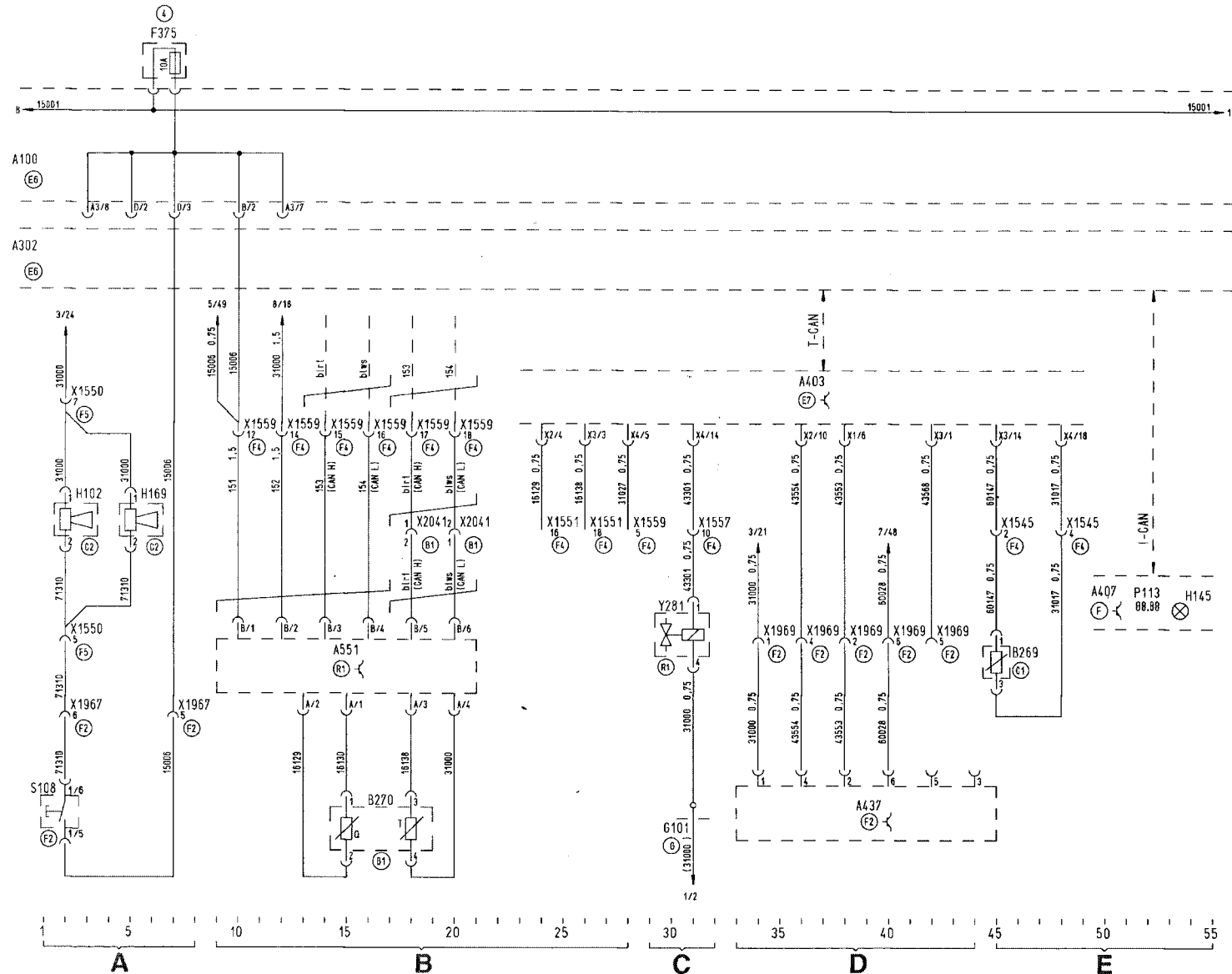
### Marking of mounting positions

(A) Tail  
(B1) Engine  
(B2) Gearbox  
(C) Front  
(C1) Bumper  
(C2) Entrance right  
(C3) Entrance left  
(E6) Central electrics area  
(E7) Control unit racks  
(E8) Rear wall of cab  
(F) Instrument panel  
(F1) Central part  
(F2) Steering wheel/column  
(F3) Foot pedals  
(F4) Front wall, inside left  
(F5) Front wall, inside right

(F6) Driving seat  
(F7) Passenger seat  
(F8) Control panel  
(G) Battery box  
(H1) B-pillar on driver's side  
(H2) A-pillar on driver's side  
(J1) B-pillar on passenger's side  
(J2) A-pillar on passenger's side  
(L) Ceiling/roof  
(N) Front axle  
(P) Rear axle  
(R1) Front part of frame  
(R2) Rear part of frame  
(S1) Door left  
(S2) Door right

**X1967** Stvd. 1 combination steering column switch  
**X1969** Stvd. engine brake switch  
**X2041** Stvd. adaptation AS-TRONIC  
**Y281** (188) Solenoid valve, engine brake

## LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **9** of 21

## LL SERIES WIRING DIAGRAMS

### Legend

Wiring diagram no. **81.99192.2981** Sheet **10** of 21

Change status: 03.01

**A = Wiper and washer system**

**B = Heater fan**

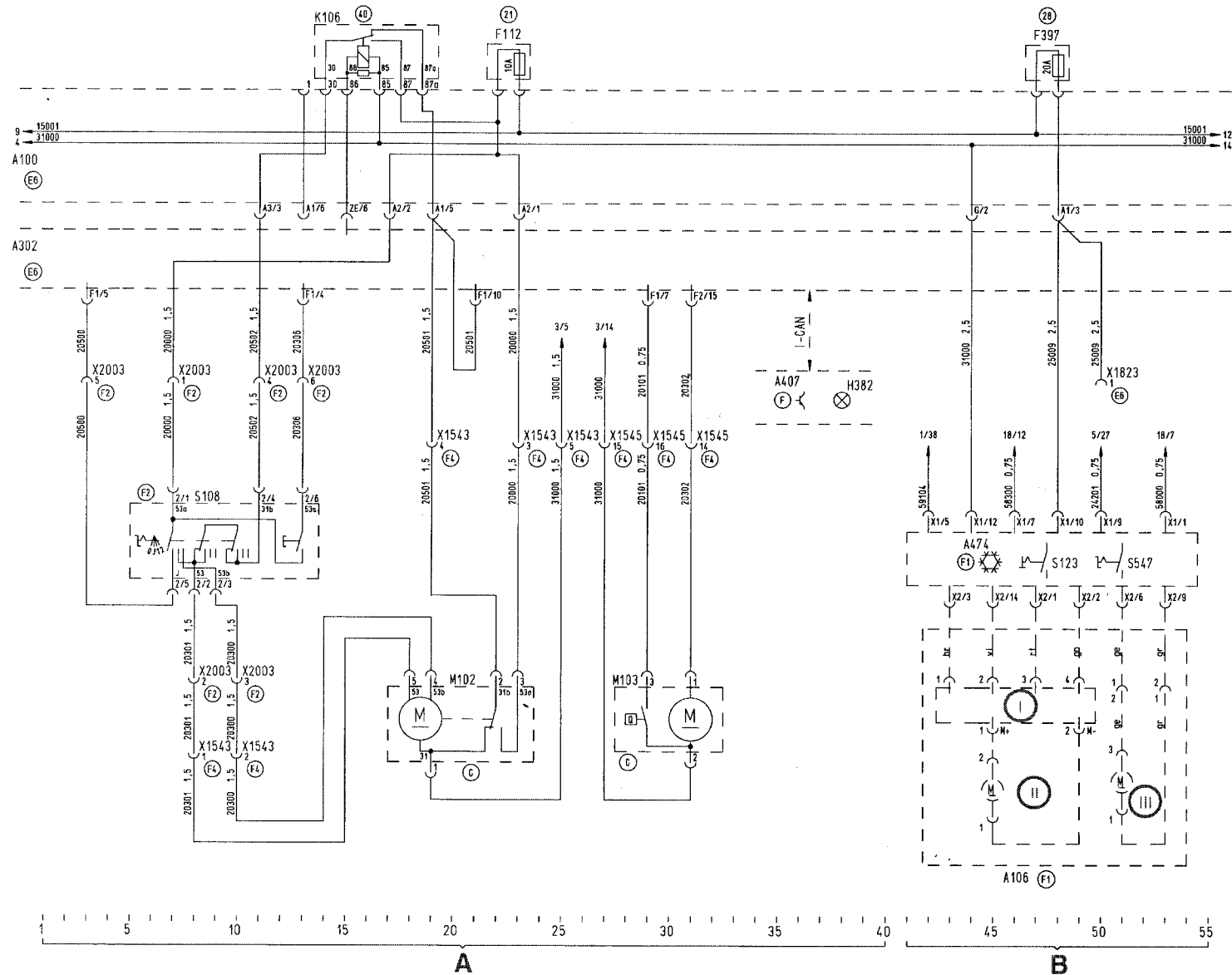
|              |        |                                                            |
|--------------|--------|------------------------------------------------------------|
| <b>A100</b>  | (255)  | Central fuse, relay and terminal block                     |
| <b>A106</b>  | (383)  | Front heater                                               |
| <b>A302</b>  | (352)  | Central computer 2                                         |
| <b>A407</b>  | (342)  | Instrumentation                                            |
| <b>A474</b>  | (375)  | Control device, cab heating with/without air-conditioning  |
| <b>F112</b>  | (101)  | Fuse, wiper and washer system                              |
| <b>F397</b>  | (104)  | Fuse, heater blower/air-conditioning unit                  |
| <b>H382</b>  |        | Indicator light, level of washing water                    |
| <b>K106</b>  | (244)  | Relay, wiper pulses                                        |
| <b>M102</b>  | (145)  | Screen wiper motor                                         |
| <b>M103</b>  | (146)  | Screen wash pump                                           |
| <b>S108</b>  | (472)  | Steering column switch (indicators, wipers and headlights) |
| <b>S123</b>  | (A375) | Switch, fresh air circulation vent                         |
| <b>S547</b>  | (A375) | Rotary control, blower                                     |
| <b>X1543</b> |        | Std. wiper motor                                           |
| <b>X1545</b> |        | Std. front region, left                                    |
| <b>X1823</b> |        | Std. air-conditioning, terminal 15                         |
| <b>X2003</b> |        | Std. 2 combination steering column switch                  |

### Marking of mounting positions

|       |                          |      |                              |
|-------|--------------------------|------|------------------------------|
| (A)   | Tail                     | (F6) | Driving seat                 |
| (B1)  | Engine                   | (F7) | Passenger seat               |
| (B2)  | Gearbox                  | (F8) | Control panel                |
| (C)   | Front                    | (G)  | Battery box                  |
| (C1)  | Bumper                   | (H1) | B-pillar on driver's side    |
| (C2)  | Entrance right           | (H2) | A-pillar on driver's side    |
| (C3)  | Entrance left            | (J1) | B-pillar on passenger's side |
| (E6)  | Central electrics area   | (J2) | A-pillar on passenger's side |
| (E7)  | Control unit racks       | (L)  | Ceiling/roof                 |
| (E8)  | Rear wall of cab         | (N)  | Front axle                   |
| (F)   | Instrument panel         | (P)  | Rear axle                    |
| (F1)  | Central part             | (R1) | Front part of frame          |
| (F2)  | Steering wheel/column    | (R2) | Rear part of frame           |
| (F3)  | Foot pedals              | (S1) | Door left                    |
| (F4)  | Front wall, inside left  | (S2) | Door right                   |
| (F5)  | Front wall, inside right |      |                              |
| (I)   | Clock-pulse regulator    |      |                              |
| (II)  | Blower                   |      |                              |
| (III) | Fresh/circulating air    |      |                              |

# LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **10** of 21



## Legend

Wiring diagram no. **81.99192.2981** Sheet **11** of 21  
Change status: 03.01

**A = Cigarette lighter**

**B = Illumination, ash tray**

**C = Gear lever**

**D = Diagnosis, vehicle management computer**

**E = Accelerator pedal unit**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer  
**A410** (404) Accelerator pedal unit

**E177** (176) Illumination, ash tray left  
**E178** (176) Illumination, ash tray right

**F158** (122) Fuse, cigarette lighter  
**F236** (111) Generator engine control (terminal 15)

**R108** (151) Cigarette lighter

**S477** Switch, gear lever

**X1559** Stvd. engine/EDC/transmission IV  
**X1604** Stvd. switch in operating button  
**X1642** Earthing point, cab, behind instrument panel  
**X1972** Stvd. pedals, external

## Marking of mounting positions

(A) Tail  
(B1) Engine  
(B2) Gearbox  
(C) Front  
(C1) Bumper  
(C2) Entrance right  
(C3) Entrance left  
(E6) Central electrics area  
(E7) Control unit racks  
(E8) Rear wall of cab  
(F) Instrument panel  
(F1) Central part  
(F2) Steering wheel/column  
(F3) Foot pedals  
(F4) Front wall, inside left  
(F5) Front wall, inside right  
  
(I) HGS (hydraulic gearshift) heating

(F6) Driving seat  
(F7) Passenger seat  
(F8) Control panel  
(G) Battery box  
(H1) B-pillar on driver's side  
(H2) A-pillar on driver's side  
(J1) B-pillar on passenger's side  
(J2) A-pillar on passenger's side  
(L) Ceiling/roof  
(N) Front axle  
(P) Rear axle  
(R1) Front part of frame  
(R2) Rear part of frame  
(S1) Door left  
(S2) Door right

**G DIA**

---



### Legend

Wiring diagram no. **81.99192.2981** Sheet **12** of 21

Change status: 03.01

**A = Supply voltage +15V**

**B = Instrumentation/tachograph**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**A408** (403) Tachograph

**B110** (271) Pulse generator, tachograph

**F376** (101) Fuse, cab interior (terminal 15)

**F398** (101) Fuse, tachograph, instrumentation (terminal 15)

**F412** (101) Fuse, tachograph, instrumentation (terminal 30)

**H111** Central warning light

**H162** Warning beep

**P101** Tachometer

**P106** Indicator for cooling water temperature

**P107** Clock

**P116** Charge air indicator

**P118** Speed indicator

**P119** Mileage indicator

**P120** Trip indicator

**X1535** Stvd. tachograph

**X1536** Stvd. tachograph

**X1537** Stvd. tachometer pickup

**X1639** Soldered connector, line 16000

**X1642** Earthing point, cab, behind instrument panel

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1757** Soldered connector, line 16006

**X1833** (221) Crimped connector, line 16000

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Differential lock

Ⓙ Supplementary heater

Ⓚ Door module

Ⓛ Terminal 15

Ⓜ Minus

Ⓝ Earth

Ⓞ See electronically controlled diesel injection

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓖ1 B-pillar on passenger's side

Ⓖ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓝ Front axle

Ⓜ Rear axle

Ⓡ1 Front part of frame

Ⓡ2 Rear part of frame

Ⓢ1 Door left

Ⓢ2 Door right

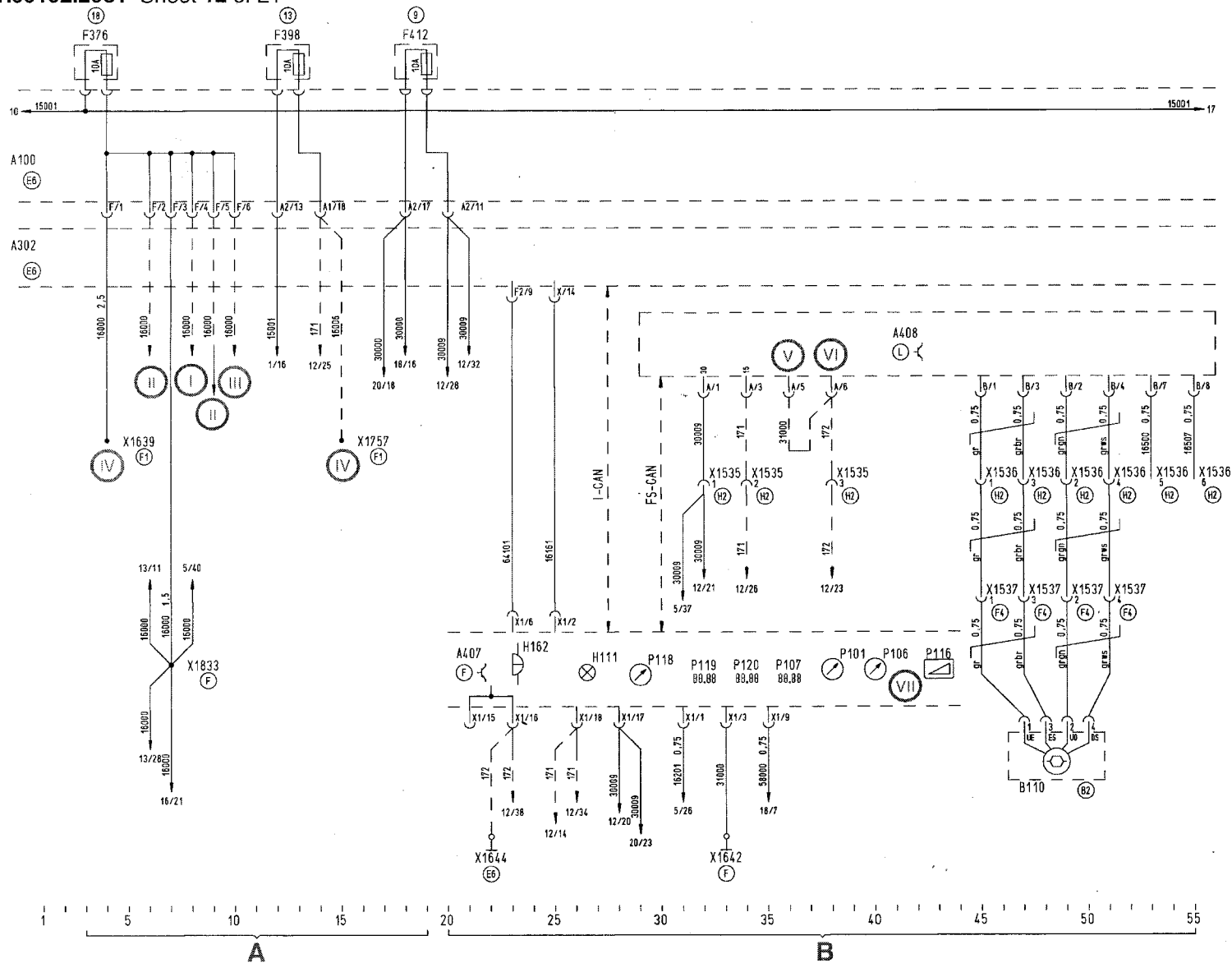
### Note:

**X1536/8** regarding soldering

**X1536/6** regarding soldering

LL SERIES WIRING DIAGRAMS

Wiring diagram no. 81.99192.2981 Sheet 12 of 21



### Legend

Wiring diagram no. **81.99192.2981** Sheet **13** of 21

Change status: 03.01

**A = Lighting learning run**

**B = Light circuits**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**F534** (117) Fuse, light switch

**S111** (482) Light switch

**S329** (473) Control switch, lighting learning run

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

LL SERIES WIRING DIAGRAMS

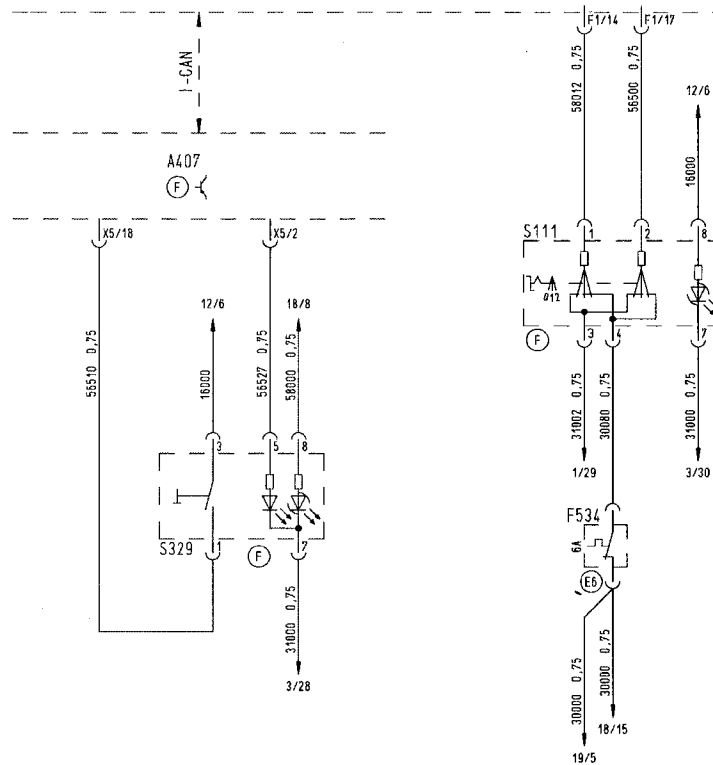
Wiring diagram no. 81.99192.2981 Sheet 13 of 21

A100

(E6)

A302

(E6)



## Legend

Wiring diagram no. **81.99192.2981** Sheet **14** of 21  
Change status: 03.01

**A = Parking lights, left**

**B = Parking lights, right**

**A100** (255) Central fuse, relay and terminal block  
**A187** (411) Headlights, left  
**A188** (412) Headlights, right  
**A189** (195) Tail light, left  
**A190** (195) Tail light, right  
**A302** (352) Central computer 2

**E108** Parking light, right  
**E109** Parking light, left  
**E114** (181) Outline marker light, front right  
**E115** (181) Outline marker light, front left  
**E116** Outline marker light, rear right  
**E117** Outline marker light, rear left  
**E118** Tail light, right  
**E119** Tail light, left

**F117** (101) Fuse, parking tail light, left  
**F118** (101) Fuse, parking tail light, right

**G101** (113) Battery 2

**K116** (187) Relay, parking tail light

**X395** Stvd. outline marker and interior light, left and right  
**X1540** Stvd. frame I  
**X1544** Stvd. frame III  
**X1545** Stvd. front region, left  
**X1550** Stvd. front region, right  
**X1557** Stvd. frame, left  
**X1586** Stvd. connection for trailer lighting socket 1  
**X2507** Stvd. adaptation parking light 1  
**X2508** Stvd. adaptation parking light 2

## Marking of mounting positions

Ⓐ Tail  
Ⓑ Engine  
Ⓑ1 Gearbox  
Ⓒ Front  
Ⓒ1 Bumper  
Ⓒ2 Entrance right  
Ⓒ3 Entrance left  
Ⓔ Central electrics area  
Ⓔ1 Control unit racks  
Ⓔ2 Rear wall of cab  
Ⓕ Instrument panel  
Ⓕ1 Central part  
Ⓕ2 Steering wheel/column  
Ⓖ Foot pedals  
Ⓖ1 Front wall, inside left  
Ⓖ2 Front wall, inside right

Ⓘ Side marking light, left

Ⓜ Side marker light, right

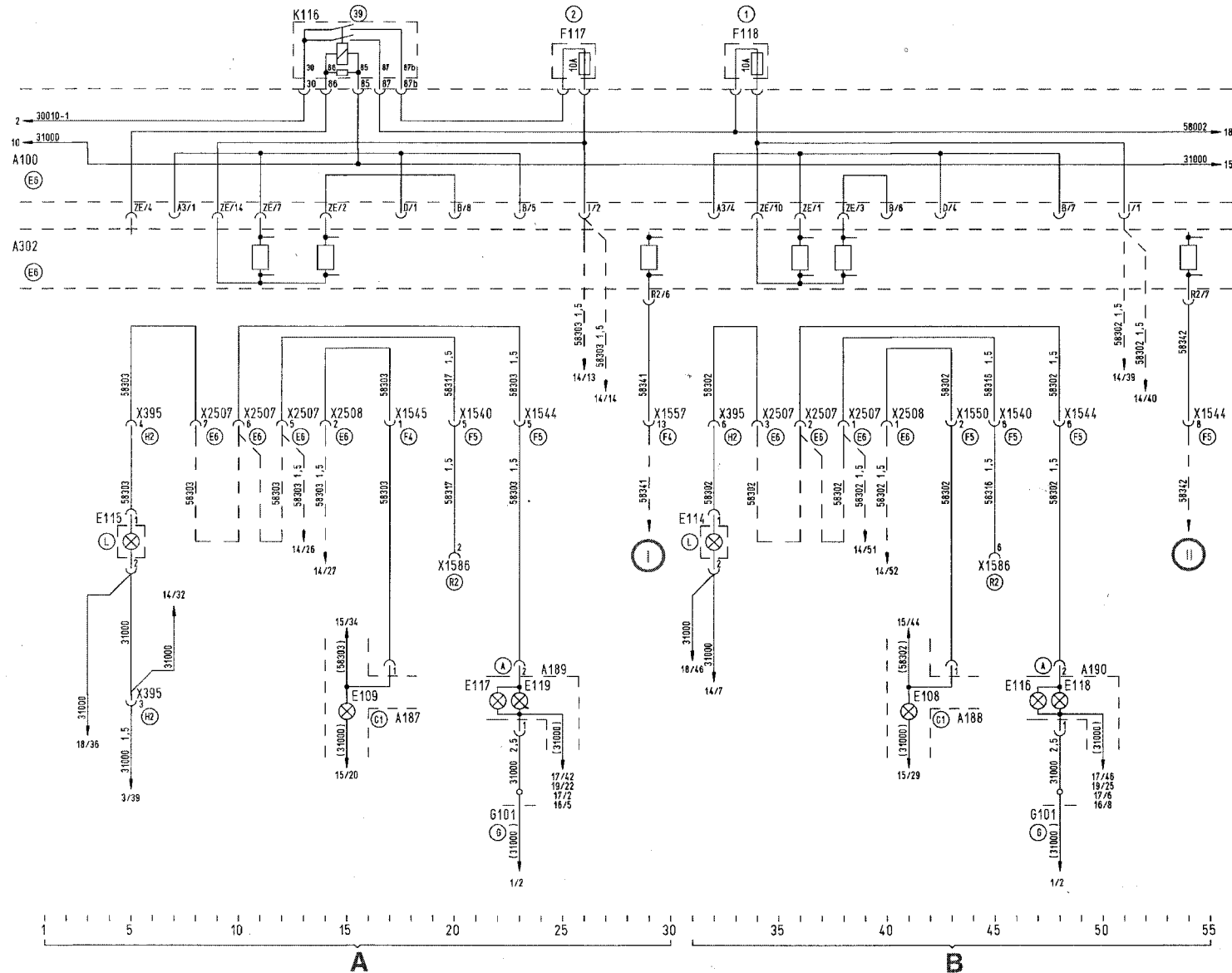
Ⓕ6 Driving seat  
Ⓕ7 Passenger seat  
Ⓕ8 Control panel  
Ⓖ Battery box  
Ⓕ1 B-pillar on driver's side  
Ⓕ2 A-pillar on driver's side  
Ⓖ1 B-pillar on passenger's side  
Ⓖ2 A-pillar on passenger's side  
Ⓖ Ceiling/roof  
Ⓖ Front axle  
Ⓖ Rear axle  
Ⓕ1 Front part of frame  
Ⓕ2 Rear part of frame  
Ⓖ1 Door left  
Ⓖ2 Door right

## Note:

Position for mounting **X1586** is E8 on semitrailers!

# LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **14** of 21



## LL SERIES WIRING DIAGRAMS

### Legend

Wiring diagram no. **81.99192.2981** Sheet **15** of 21

Change status: 03.01

**A = Headlamp flasher**

**B = Dipped beam, main beam**

**C = Headlight levelling**

**A100** (255) Central fuse, relay and terminal block

**A187** (411) Headlights, left

**A188** (412) Headlights, right

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**E110** Dipped beam, right

**E111** Dipped beam, left

**E112** Main beam, right

**E113** Main beam, left

**H129** Indicator light, main beam

**R109** (136) Positioning potentiometer, headlight levelling

**S108** (472) Steering column switch (indicators, wipers and headlights)

**X1545** Std. front region, left

**X1550** Std. front region, right

**X1642** Earthing point, cab, behind instrument panel

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1967** Std. 1 combination steering column switch

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓛ for D2R headlights

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

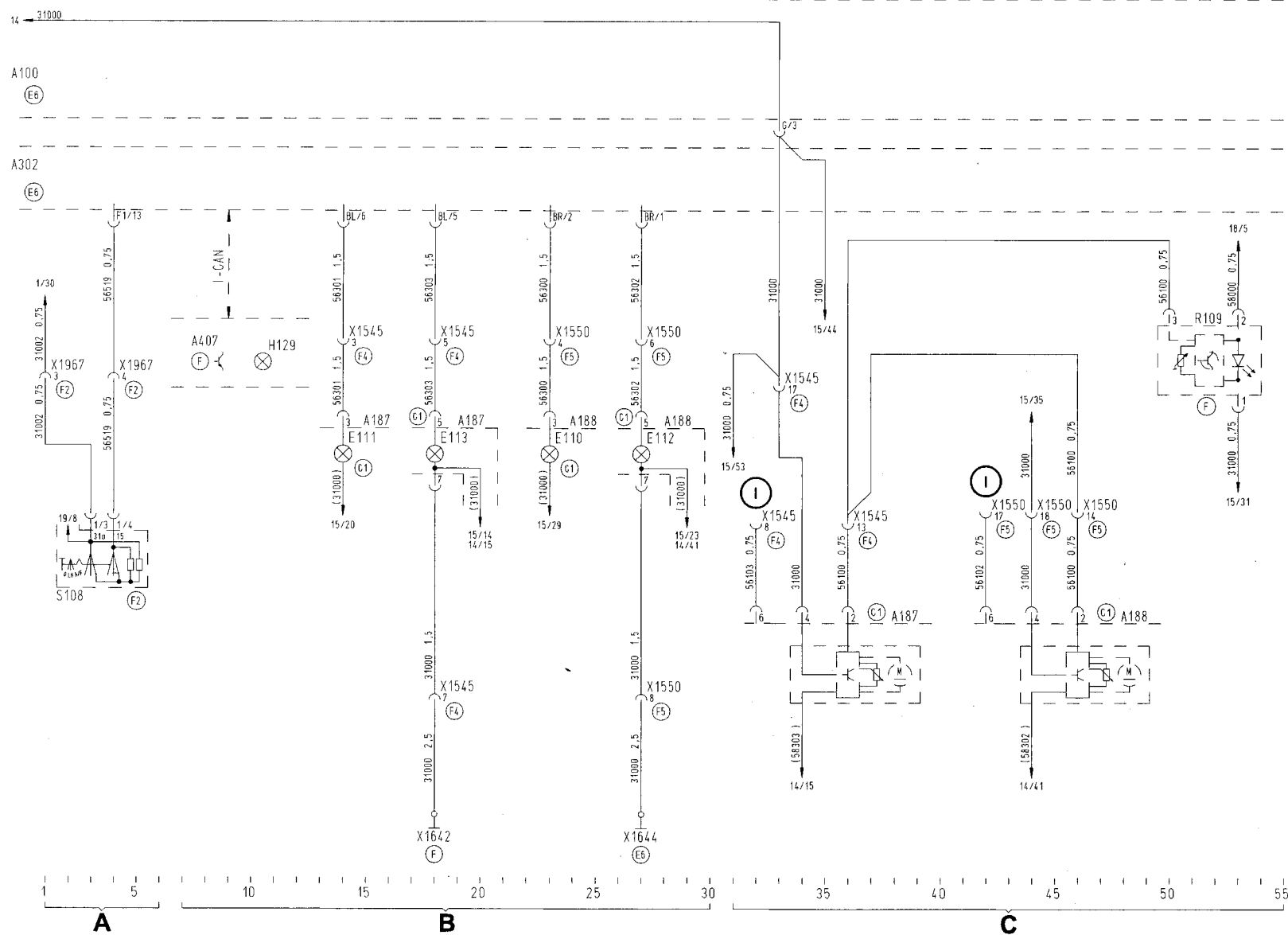
Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

LL SERIES WIRING DIAGRAMS

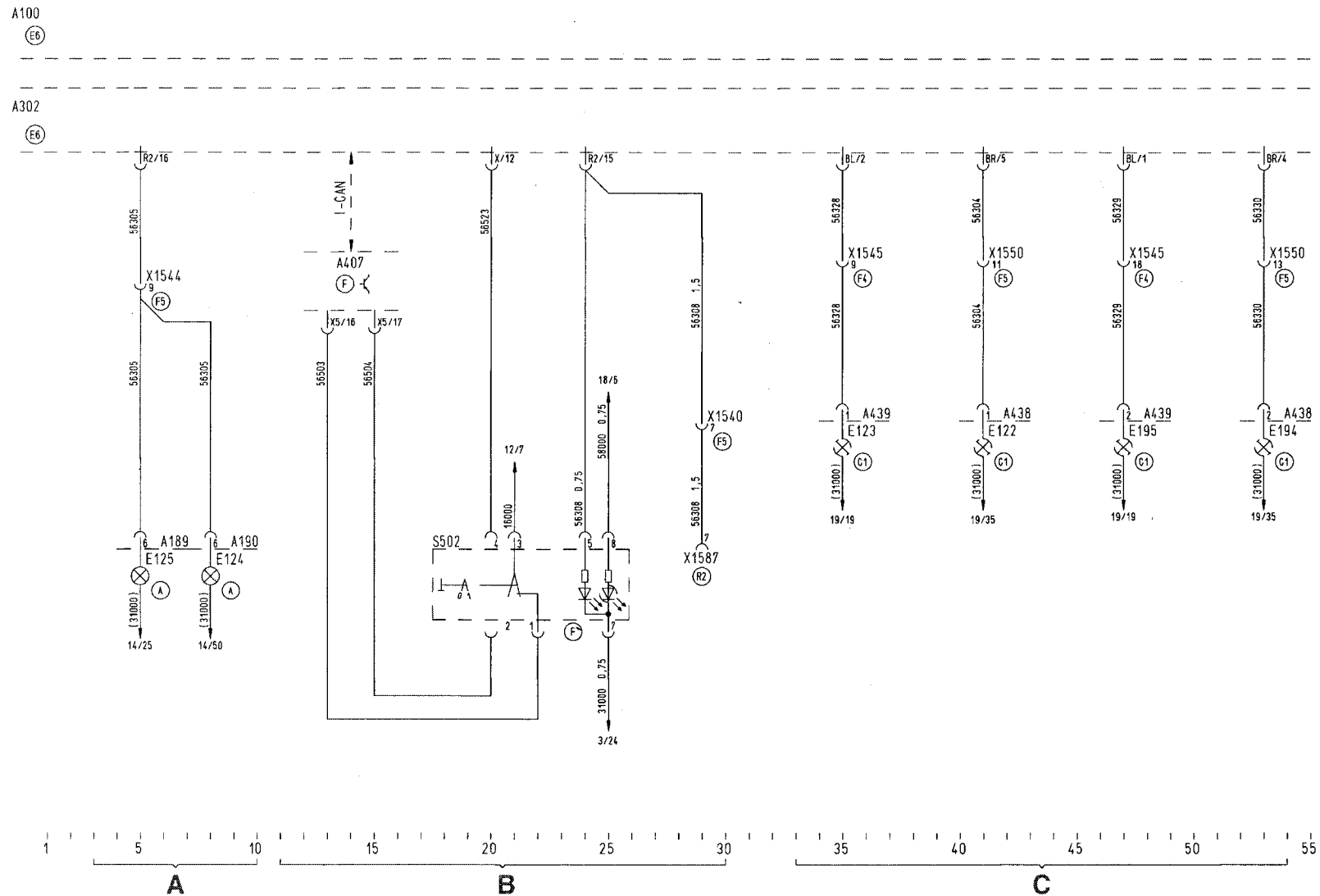
Wiring diagram no. **81.99192.2981** Sheet **15** of 21





# LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **16** of 21



### Legend

Wiring diagram no. **81.99192.2981** Sheet **17** of 21  
Change status: 03.01

**A = Brake light**

**B = Parking brake**

**C = Reversing light**

**A100** (255) Central fuse, relay and terminal block  
**A189** (195) Tail light, left  
**A190** (195) Tail light, right  
**A302** (352) Central computer 2  
**A402** (399) EBS control unit  
**A403** (339) Vehicle management computer  
**A407** (342) Instrumentation

**B337** (244) Brake sensor  
**B369** (276) Pressure switch, control lamp for parking brake

**E102** Reversing beam, right  
**E103** Reversing beam, left

**F314** (101) Fuse, reversing light

**G101** (113) Battery 2

**H112** Brake light, right  
**H113** Brake light, left  
**H117** Indicator lights, parking brake

**X1540** Stvd. frame I  
**X1544** Stvd. frame III  
**X1586** Stvd. connection for trailer lighting socket 1  
**X1587** Stvd. connection for trailer lighting socket 2  
**X1627** Stvd. reversing beam  
**X1834** (221) Crimped connector, line 71300

### Marking of mounting positions

(A) Tail  
(B1) Engine  
(B2) Gearbox  
(C) Front  
(C1) Bumper  
(C2) Entrance right  
(C3) Entrance left  
(E6) Central electrics area  
(E7) Control unit racks  
(E8) Rear wall of cab  
(F) Instrument panel  
(F1) Central part  
(F2) Steering wheel/column  
(F3) Foot pedals  
(F4) Front wall, inside left  
(F5) Front wall, inside right

(I) Switch, reverse gear

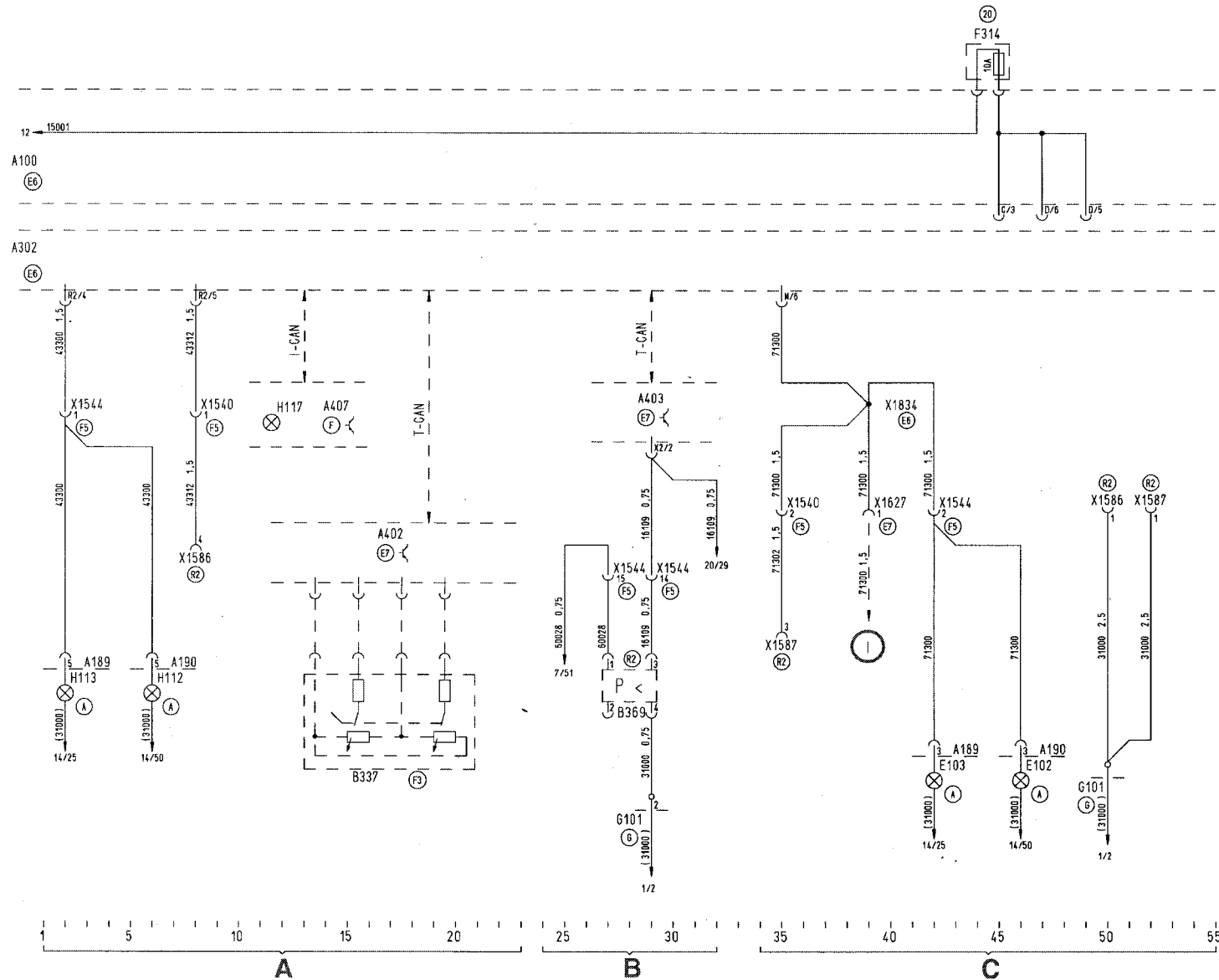
(F6) Driving seat  
(F7) Passenger seat  
(F8) Control panel  
(G) Battery box  
(H1) B-pillar on driver's side  
(H2) A-pillar on driver's side  
(J1) B-pillar on passenger's side  
(J2) A-pillar on passenger's side  
(L) Ceiling/roof  
(N) Front axle  
(P) Rear axle  
(R1) Front part of frame  
(R2) Rear part of frame  
(S1) Door left  
(S2) Door right

### Note:

- Position for mounting **X1586** and **X1587** is E8 on semitrailers!

LL SERIES WIRING DIAGRAMS

Wiring diagram no. 81.99192.2981 Sheet 17 of 21



### Legend

Wiring diagram no. **81.99192.2981** Sheet **18** of 21  
Change status: 03.01

**A = Search illumination**

**B = Power supply, permanent consumers**

**C = Entrance step illumination/interior lighting**

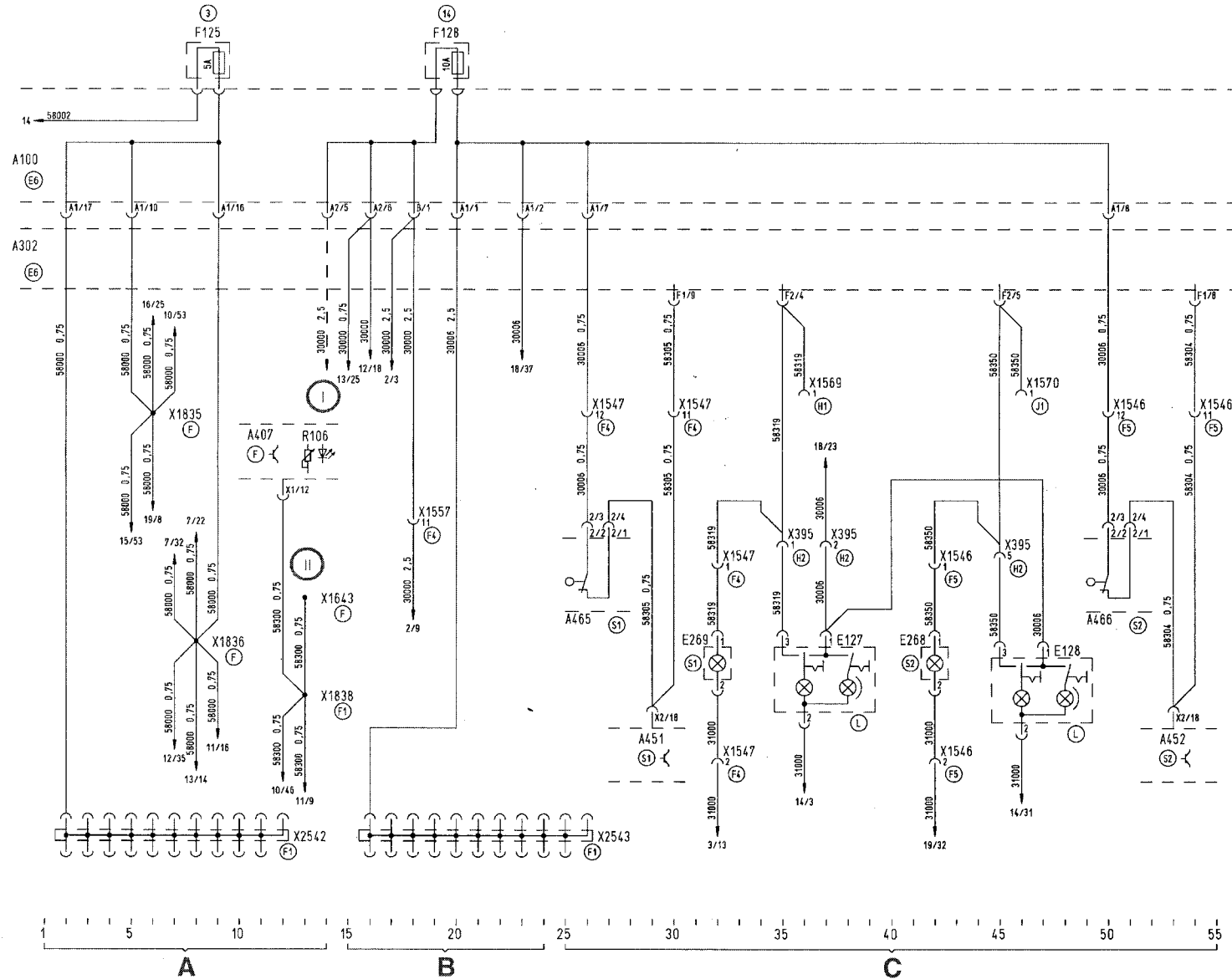
|              |                                                        |
|--------------|--------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block           |
| <b>A302</b>  | (352) Central computer 2                               |
| <b>A407</b>  | (342) Instrumentation                                  |
| <b>A451</b>  | (441) Door module (driver's side)                      |
| <b>A452</b>  | (440) Door module (passenger side)                     |
| <b>A465</b>  | (453) Door lock (driver's side)                        |
| <b>A466</b>  | (454) Door lock (passenger side)                       |
| <b>E127</b>  | (174) Interior light, left                             |
| <b>E128</b>  | (174) 1. interior light (right)                        |
| <b>E268</b>  | (170) Entrance illumination, passenger                 |
| <b>E269</b>  | (170) Entrance illumination, driver                    |
| <b>F125</b>  | (111) Fuse, search illumination                        |
| <b>F128</b>  | (101) Fuse, permanent consumer                         |
| <b>R106</b>  | Potentiometer, instrument illumination                 |
| <b>X395</b>  | Std. outline marker and interior light, left and right |
| <b>X1546</b> | Std. door, right                                       |
| <b>X1547</b> | Std. door, left                                        |
| <b>X1557</b> | Std. frame, left                                       |
| <b>X1569</b> | Std. locker lighting, left                             |
| <b>X1570</b> | Std. locker lighting, right                            |
| <b>X1643</b> | Soldered connector, line 58300                         |
| <b>X1835</b> | (221) Crimped connector, line 58000                    |
| <b>X1836</b> | (221) Crimped connector, line 58000                    |
| <b>X1838</b> | (221) Crimped connector, line 58300                    |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000         |
| <b>X2543</b> | (246) Potential distributor, 21-pin line 30006         |

### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |
| (I) Door module               |                                   |
| (II) Terminal 58, dimmed      |                                   |

LL SERIES WIRING DIAGRAMS

Wiring diagram no. 81.99192.2981 Sheet 18 of 21



## Legend

Wiring diagram no. **81.99192.2981** Sheet **19** of 21

Change status: 03.01

### A = Light flashing unit

**A100** (255) Central fuse, relay and terminal block  
**A189** (195) Tail light, left  
**A190** (195) Tail light, right  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation  
**A438** (410) Light strip, right  
**A439** (409) Light strip, left

**F535** (117) Fuse, warning indicator light switch

**H119** Indicator light, direction indicators, trailer  
**H120** Direction indicator, front right  
**H121** Direction indicator, front left  
**H122** Direction indicator, rear right  
**H123** Direction indicator, rear left  
**H124** (140) Direction indicator, side right  
**H125** (140) Direction indicator, side left  
**H380** Indicator light, direction indicators, tractor unit, right  
**H381** Indicator light, direction indicators, tractor unit, left

**S108** (472) Steering column switch (indicators, wipers and headlights)  
**S109** (461) Switch, hazard warning flasher

**X1540** Stvd. frame I  
**X1544** Stvd. frame III  
**X1545** Stvd. front region, left  
**X1550** Stvd. front region, right  
**X1586** Stvd. connection for trailer lighting socket 1  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1967** Stvd. 1 combination steering column switch

## Marking of mounting positions

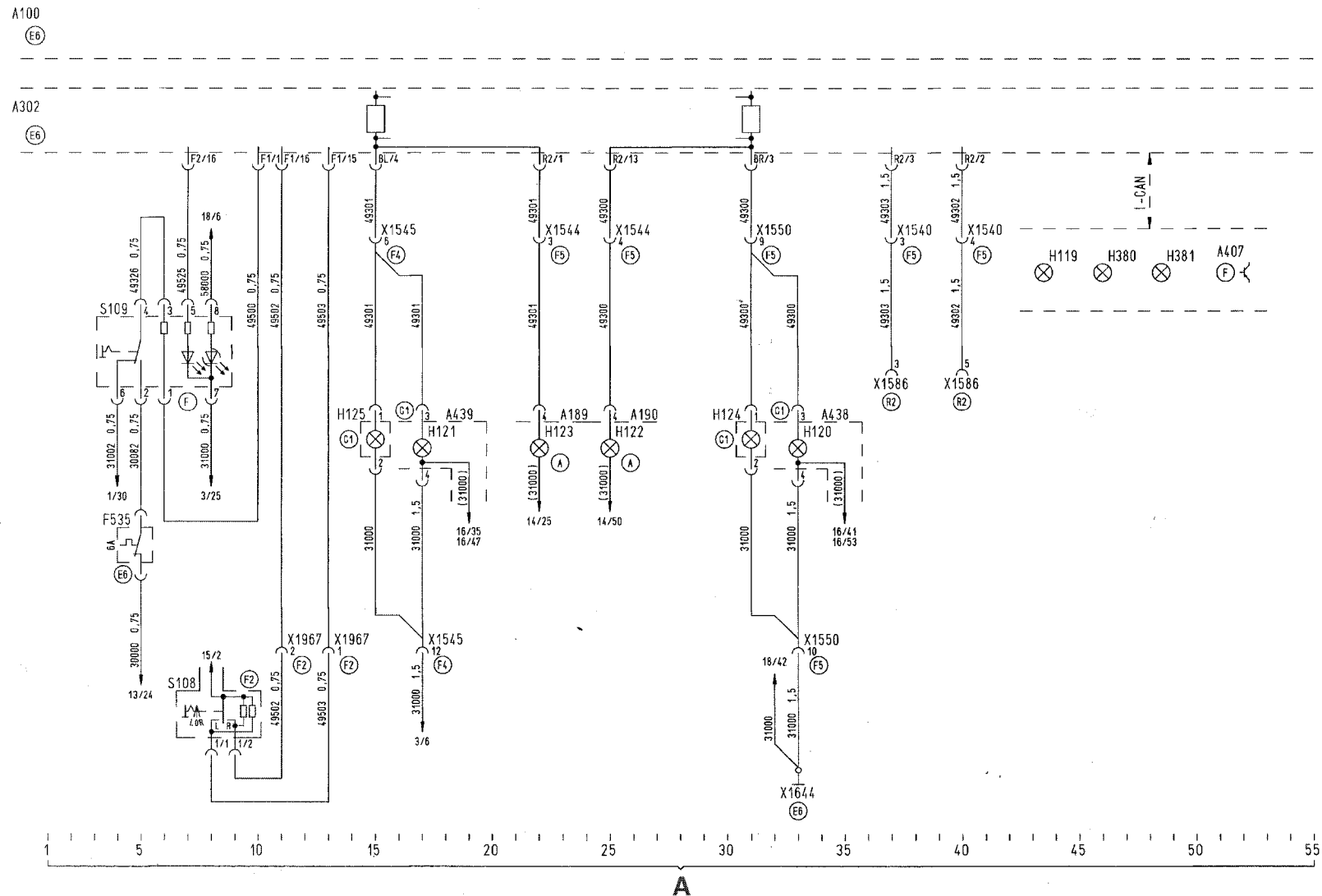
|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

### Note:

Position for mounting **X1586** is E8 on semitrailers!

LL SERIES WIRING DIAGRAMS

Wiring diagram no. 81.99192.2981 Sheet 19 of 21



## Legend

Wiring diagram no. **81.99192.2981** Sheet **20** of 21

Change status: 03.01

**A = Reserve lines**

**B = Reserve lines for trailer lighting socket**

**C = Periphery of retarder**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**G101** (113) Battery 2

**X327** Stvd. solenoid valve, frame

**X637** Stvd. differential lock, rear axle

**X1540** Stvd. frame I

**X1544** Stvd. frame III

**X1551** Stvd. engine/EDC/transmission II

**X1557** Stvd. frame, left

**X1586** Stvd. connection for trailer lighting socket 1

**X1587** Stvd. connection for trailer lighting socket 2

**X2188** Stvd. cable duct, hydroretarder

**X2497** Stvd. distributor line 16109

**X3118** Stvd. distributor line 30000

**X3119** Stvd. distributor line 30009

**Y114** Magnetic clutch, compressor

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

(I) Solenoid valve, differential lock, rear axle, transverse (VIII) Supply to trailer (protection from emptying)

(II) Switch for display, differential lock, transverse

(III) Indicator light, differential lock, rear axle, transverse

(IX) Control, trailing axle or leading axle, trailer

(IV) Indicator light, differential lock, longitudinal

(X) Pressure switch, monitoring, parking brake, trailer

(V) Solenoid valve, differential lock, longitudinal

(VI) Solenoid valve, power take-off 1

(XI) Indicator light, brake pad wear indicator, trailer

(VII) Data line

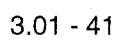
## Note:

Position for mounting **X1586** and **X1587** is E8 on semitrailers!



E6

E6



### Legend

Wiring diagram no. **81.99192.2981** Sheet **21** of 21  
Change status: 03.01

**A = Intarder, retarder**

**B = Transmission**

**C = Power take-off**

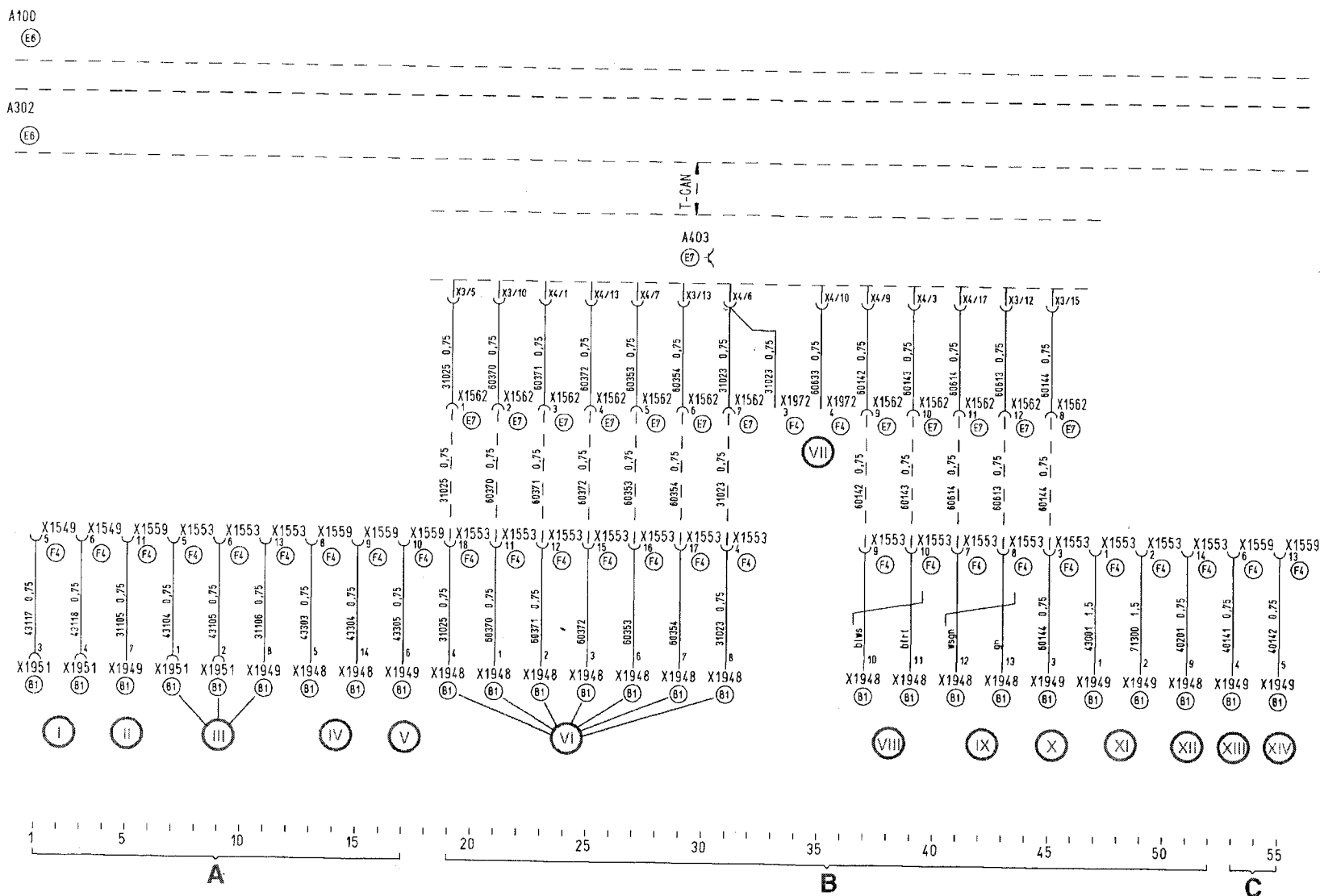
**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer

**X1549** Stvd. engine/EDC/transmission I  
**X1553** Stvd. engine/EDC/transmission III  
**X1559** Stvd. engine/EDC/transmission IV  
**X1562** Stvd. gearbox  
**X1948** Stvd. engine/transmission (MP box)  
**X1949** Stvd. engine/transmission (MP box)  
**X1951** Stvd. engine/transmission (MP box)  
**X1972** Stvd. foot pedals, exterior

### Marking of mounting positions

- |                                                         |                                          |
|---------------------------------------------------------|------------------------------------------|
| (A) Tail                                                | (F6) Driving seat                        |
| (B1) Engine                                             | (F7) Passenger seat                      |
| (B2) Gearbox                                            | (F8) Control panel                       |
| (C) Front                                               | (G) Battery box                          |
| (C1) Bumper                                             | (H1) B-pillar on driver's side           |
| (C2) Entrance right                                     | (H2) A-pillar on driver's side           |
| (C3) Entrance left                                      | (J1) B-pillar on passenger's side        |
| (E6) Central electrics area                             | (J2) A-pillar on passenger's side        |
| (E7) Control unit racks                                 | (L) Ceiling/roof                         |
| (E8) Rear wall of cab                                   | (N) Front axle                           |
| (F) Instrument panel                                    | (P) Rear axle                            |
| (F1) Central part                                       | (R1) Front part of frame                 |
| (F2) Steering wheel/column                              | (R2) Rear part of frame                  |
| (F3) Foot pedals                                        | (S1) Door left                           |
| (F4) Front wall, inside left                            | (S2) Door right                          |
| (F5) Front wall, inside right                           |                                          |
|                                                         |                                          |
| (I) Pressure pickup, positioning pressure               | (IX) Transmission, input speed           |
| (II) Solenoid valve, reservoir                          | (X) Transmission, neutral                |
| (III) Temperature sensor, intarder, retarder            | (XI) Switch, reverse gear                |
| (IV) Proportional valve, intarder, retarder             | (XII) Diagnostics, AS-Tronic             |
| (V) Solen. valve, reservoir/press. pickup, actu. press. | (XIII) Indicator light, power take-off 1 |
| (VI) Transmission control module                        | (XIV) Indicator light, power take-off 2  |
| (VII) Clutch servo                                      |                                          |
| (VIII) Clutch displacement sensor                       |                                          |

Wiring diagram no. **81.99192.2981** Sheet **21** of 21



**ADDITIONAL WIRING DIAGRAMS**
**Contents**

| <b>Titles of wiring diagrams</b>                                                          | <b>Wiring diagram no.</b> | <b>Chapter/Page</b> |
|-------------------------------------------------------------------------------------------|---------------------------|---------------------|
| <b>Additional headlight</b>                                                               | 81.99192.2461             | 4.26 - 26           |
| Air bag                                                                                   | 81.99192.2572             | 4.01 - 2            |
| Air conditioning unit                                                                     | 81.99192.1380             | 4.11 - 4            |
| All-round marker light 1 on roof                                                          | 81.99192.1412             | 4.18 - 72           |
| All-round marker light 2 on pedestal                                                      | 81.99192.1414             | 4.18 - 76           |
| All-round marker light 2 on roof                                                          | 81.99192.1413             | 4.18 - 74           |
| All-round marker light, left, on pedestal                                                 | 81.99192.1416             | 4.18 - 78           |
| All-round marker light, right, on pedestal                                                | 81.99192.1415             | 4.18 - 80           |
| AS-TRONIC transmission (12-gear)                                                          | 81.99192.2993             | 4.07 - 2            |
| AS-TRONIC transmission (16-gear)                                                          | 81.99192.2992             | 4.07 - 6            |
| ASR traction control indicator light                                                      | 81.99192.1358             | 4.01 - 26           |
| ASR traction control slip threshold control switch                                        | 81.99192.1359             | 4.01 - 28           |
| ASR traction control/electronic stability program ASR/ESP indicator light                 | 81.99192.2862             | 4.01 - 30           |
| ASR traction control/electronic stability program ASR/ESP slip threshold control switch   | 81.99192.1360             | 4.01 - 32           |
| <b>Bunk light, bottom (LL)</b>                                                            | 81.99192.1397             | 4.19 - 18           |
| Bunk light, bottom (RL)                                                                   | 81.99192.1398             | 4.19 - 20           |
| Bunk light, top                                                                           | 81.99192.1396             | 4.19 - 16           |
| <b>Cab tilt device, electrical</b>                                                        | 81.99192.1370             | 4.06 - 4            |
| CAN databus driveline (T-CAN)                                                             | 81.99192.2359             | 4.03 - 4            |
| CAN databus driveline (T-CAN) with AS-TRONIC                                              | 81.99192.2522             | 4.03 - 6            |
| CAN databus driveline (T-CAN) with AS-TRONIC/special customer module                      | 81.99192.2433             | 4.03 - 18           |
| CAN databus driveline (T-CAN) with ECAS/AS-TRONIC/RAS-EC                                  | 81.99192.2783             | 4.03 - 26           |
| CAN databus driveline (T-CAN) with intarder or retarder                                   | 81.99192.2521             | 4.03 - 10           |
| CAN databus driveline (T-CAN) with intarder or retarder/AS-TRONIC                         | 81.99192.2524             | 4.03 - 12           |
| CAN databus driveline (T-CAN) with intarder or retarder/AS-TRONIC/special customer module | 81.99192.2435             | 4.03 - 22           |

**ADDITIONAL WIRING DIAGRAMS**
**Contents**

| <b>Titles of wiring diagrams</b>                                                                           | <b>Wiring diagram no.</b> | <b>Chapter/Page</b> |
|------------------------------------------------------------------------------------------------------------|---------------------------|---------------------|
| CAN databus driveline (T-CAN) with intarder or retarder/special customer module                            | 81.99192.2432             | 4.03 - 14           |
| CAN databus driveline (T-CAN) with special customer module                                                 | 81.99192.2428             | 4.03 - 8            |
| CAN databus driveline (T-CAN) without ECAM                                                                 | 81.99192.2811             | 4.03 - 30           |
| CAN databus driveline (T-CAN) without ECAM but with AS-TRONIC                                              | 81.99192.2824             | 4.03 - 32           |
| CAN databus driveline (T-CAN) without ECAM but with AS-TRONIC/special customer module                      | 81.99192.2819             | 4.03 - 38           |
| CAN databus driveline (T-CAN) without ECAM but with ECAS/AS-TRONIC/RAS-EC                                  | 81.99192.2827             | 4.03 - 42           |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder                                   | 81.99192.2823             | 4.03 - 34           |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/special customer module           | 81.99192.2818             | 4.03 - 46           |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/AS-TRONIC                         | 81.99192.2826             | 4.03 - 50           |
| CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/AS-TRONIC/special customer module | 81.99192.2821             | 4.03 - 52           |
| CAN databus driveline (T-CAN) without ECAM but with special customer module                                | 81.99192.2814             | 4.03 - 36           |
| CAN databus instrumentation (I-CAN)/tachograph (FS-CAN)                                                    | 81.99192.2377             | 4.03 - 2            |
| Cargo area lighting                                                                                        | 81.99192.1384             | 4.12 - 4            |
| Central lubrication                                                                                        | 81.99192.1467             | 4.26 - 2            |
| Cool box                                                                                                   | 81.99192.1382             | 4.11 - 12           |
| Cullmann phone with radio 24V and CD changer MAN-Sound (LL)                                                | 81.99192.1447             | 4.20 - 10           |
| Cullmann phone with radio 24V and CD changer MAN-Sound (RL)                                                | 81.99192.2878             | 4.20 - 14           |
| Cullmann phone with radio 24V MAN-Sound (LL)                                                               | 81.99192.2871             | 4.20 - 2            |
| Cullmann phone with radio 24V MAN-Sound (RL)                                                               | 81.99192.2872             | 4.20 - 6            |
| Differential lock longitudinal and transverse, 3-axle vehicle                                              | 81.99192.1366             | 4.04 - 2            |
| Differential lock transverse, rear axle                                                                    | 81.99192.1365             | 4.04 - 4            |
| Door module (LL)                                                                                           | 81.99192.2989             | 4.20 - 34           |
| Door module (RL)                                                                                           | 81.99192.2990             | 4.20 - 44           |

**ADDITIONAL WIRING DIAGRAMS**
**Contents**

| <b>Titles of wiring diagrams</b>                                                                         | <b>Wiring diagram no.</b> | <b>Chapter/Page</b> |
|----------------------------------------------------------------------------------------------------------|---------------------------|---------------------|
| Driving dynamics control                                                                                 | 81.99192.2843             | 4.06 - 2            |
| EATON RTSO transmission (LL)                                                                             | 81.99192.2601             | 4.07 - 10           |
| EATON RTSO transmission (RL)                                                                             | 81.99192.2417             | 4.07 - 14           |
| EBS electronic braking system                                                                            | 81.99192.2987             | 4.05 - 2            |
| ECAM electronically controlled compressed air device, fallback level                                     | 81.99192.2810             | 4.05 - 8            |
| ECAS electronically controlled air suspension 4x2 FL (semitrailer)                                       | 81.99192.1336             | 4.05 - 14           |
| ECAS electronically controlled air suspension 4x2 FL (truck)                                             | 81.99192.1337             | 4.05 - 10           |
| ECAS electronically controlled air suspension 4x2 FLL                                                    | 81.99192.1338             | 4.05 - 18           |
| ECAS electronically controlled air suspension 6x2 FNL                                                    | 81.99192.1339             | 4.05 - 22           |
| ECAS electronically controlled air suspension 6x2 FNL (Nordland)                                         | 81.99192.1348             | 4.05 - 26           |
| ECAS electronically controlled air suspension 6x2 FNLL                                                   | 81.99192.1340             | 4.05 - 30           |
| ECAS electronically controlled air suspension 6x2 FNLL (Nordland)                                        | 81.99192.1349             | 4.05 - 34           |
| ECAS electronically controlled air suspension 6x2 FVL                                                    | 81.99192.1341             | 4.05 - 38           |
| ECAS electronically controlled air suspension, switch level 1/2                                          | 81.99192.1368             | 4.05 - 42           |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 4x2 FL (semitrailer) | 81.99192.1342             | 4.05 - 44           |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 4x2 FL (truck)       | 81.99192.1343             | 4.05 - 48           |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 4x2 FLL              | 81.99192.1344             | 4.05 - 52           |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNL              | 81.99192.1345             | 4.05 - 56           |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNL (Nordland)   | 81.99192.1350             | 4.05 - 60           |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FVL              | 81.99192.1346             | 4.05 - 64           |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNLL             | 81.99192.1347             | 4.05 - 68           |
| ECAS electronically controlled air suspension/EFR electronic shock absorber control 6x2 FNLL (Nordland)  | 81.99192.1351             | 4.05 - 72           |
| EDC electronically controlled diesel injection EDC MS6.1 (EURO 2)                                        | 81.99192.2985             | 4.05 - 76           |
| EDC electronically controlled diesel injection EDC MS6.1 with exhaust gas recirculation (EURO 3)         | 81.99192.2986             | 4.05 - 82           |

**ADDITIONAL WIRING DIAGRAMS**
**Contents**

| <b>Titles of wiring diagrams</b>                                        | <b>Wiring diagram no.</b> | <b>Chapter/Page</b> |
|-------------------------------------------------------------------------|---------------------------|---------------------|
| EDC electronically controlled diesel injection EDC7 Common Rail D0836LF | 81.99192. <b>2692</b>     | 4.05 - <b>88</b>    |
| Emergency battery shutdown                                              | 81.99192. <b>1362</b>     | 4.02 - <b>2</b>     |
| Engine brake, automatic                                                 | 81.99192. <b>1385</b>     | 4.13 - <b>2</b>     |
| EVB electronically controlled engine brake, controlled                  | 81.99192. <b>2832</b>     | 4.05 - <b>96</b>    |
| <b>Fuel filter heater</b>                                               | 81.99192. <b>2487</b>     | 4.11 - <b>8</b>     |
| Fuel filter heater, Separ                                               | 81.99192. <b>2665</b>     | 4.11 - <b>10</b>    |
| <b>Headlight cleaning unit (LL)</b>                                     | 81.99192. <b>1392</b>     | 4.19 - <b>8</b>     |
| Headlight cleaning unit (RL)                                            | 81.99192. <b>1393</b>     | 4.19 - <b>10</b>    |
| Headlight gas discharge with headlight levelling (LL)                   | 81.99192. <b>2651</b>     | 4.19 - <b>2</b>     |
| Headlight gas discharge with headlight levelling (RL)                   | 81.99192. <b>2653</b>     | 4.19 - <b>4</b>     |
| Headlight gas discharge without headlight levelling                     | 81.99192. <b>2652</b>     | 4.19 - <b>6</b>     |
| Headlight levelling (LL)                                                | 81.99192. <b>2477</b>     | 4.12 - <b>6</b>     |
| Headlight levelling (RL)                                                | 81.99192. <b>2445</b>     | 4.12 - <b>8</b>     |
| Heating for hydraulic gearshift (HGS) (LL)                              | 81.99192. <b>2684</b>     | 4.08 - <b>4</b>     |
| Heating for hydraulic gearshift (HGS) (RL)                              | 81.99192. <b>2690</b>     | 4.08 - <b>6</b>     |
| Horn switchover (LL)                                                    | 81.99192. <b>1375</b>     | 4.08 - <b>8</b>     |
| Horn switchover (RL)                                                    | 81.99192. <b>1376</b>     | 4.08 - <b>10</b>    |
| Intarder ZF-EST 48                                                      | 81.99192. <b>1378</b>     | 4.09 - <b>4</b>     |
| Interior lighting, roof (white/red)                                     | 81.99192. <b>1377</b>     | 4.09 - <b>2</b>     |
| <b>Locker lighting, rear left (LL)</b>                                  | 81.99192. <b>2489</b>     | 4.19 - <b>42</b>    |
| Locker lighting, rear left (RL)                                         | 81.99192. <b>2411</b>     | 4.19 - <b>44</b>    |
| Locker lighting, rear right (LL)                                        | 81.99192. <b>2490</b>     | 4.19 - <b>46</b>    |

**ADDITIONAL WIRING DIAGRAMS**
**Contents**

| <b>Titles of wiring diagrams</b>                                | <b>Wiring diagram no.</b> | <b>Chapter/Page</b> |
|-----------------------------------------------------------------|---------------------------|---------------------|
| Locker lighting, rear right (RL)                                | 81.99192.2412             | 4.19 - 48           |
| Locker lighting, top (left, middle) (LL)                        | 81.99192.1404             | 4.19 - 50           |
| Locker lighting, top (left, middle) (RL)                        | 81.99192.1405             | 4.19 - 52           |
| Locker lighting, top (left, middle, right) (LL)                 | 81.99192.1406             | 4.19 - 54           |
| Locker lighting, top (left, middle, right) (RL)                 | 81.99192.1407             | 4.19 - 56           |
| <b>Main battery switch (electric)</b>                           | 81.99192.1361             | 4.02 - 6            |
| Main battery switch (mechanical)                                | 81.99192.2495             | 4.02 - 8            |
| <b>Nokia phone with radio 24V and CD changer MAN-Sound (LL)</b> | 81.99192.2875             | 4.20 - 26           |
| Nokia phone with radio 24V and CD changer MAN-Sound (RL)        | 81.99192.2876             | 4.20 - 30           |
| Nokia phone with radio 24V MAN-Sound (LL)                       | 81.99192.2873             | 4.20 - 18           |
| Nokia phone with radio 24V MAN-Sound (RL)                       | 81.99192.2874             | 4.20 - 22           |
| <b>Power take-off 1</b>                                         | 81.99192.1388             | 4.14 - 2            |
| Power take-off 2                                                | 81.99192.1389             | 4.14 - 4            |
| Preparation cooling superstructure (tractor vehicle)            | 81.99192.1469             | 4.22 - 2            |
| Preparation cooling superstructure (tractor vehicle, trailer)   | 81.99192.1468             | 4.22 - 6            |
| Preparation LSVA (performance-related heavy traffic levy)       | 81.99192.1464             | 4.22 - 12           |
| Preparation trailing axle control, semitrailer                  | 81.99192.1465             | 4.22 - 14           |
| Preparation, central lubrication                                | 81.99192.1466             | 4.22 - 16           |
| <b>Radio 12V</b>                                                | 81.99192.2475             | 4.18 - 2            |
| Radio 12V MAN-Sound (LL)                                        | 81.99192.2484             | 4.18 - 4            |
| Radio 12V MAN-Sound (RL)                                        | 81.99192.2444             | 4.18 - 6            |
| Radio 24V                                                       | 81.99192.2879             | 4.18 - 8            |
| Radio 24V MAN-Sound (LL)                                        | 81.99192.2855             | 4.18 - 10           |



**ADDITIONAL WIRING DIAGRAMS**
**Contents**

| <b>Titles of wiring diagrams</b>                                    | <b>Wiring diagram no.</b> | <b>Chapter/Page</b> |
|---------------------------------------------------------------------|---------------------------|---------------------|
| Radio 24V MAN-Sound (RL)                                            | 81.99192.2856             | 4.18 - 12           |
| Radio 24V with CD changer and MAN-Sound (LL)                        | 81.99192.2858             | 4.18 - 14           |
| Radio 24V with CD changer and MAN-Sound (RL)                        | 81.99192.2859             | 4.18 - 18           |
| Radio navigation system 12V (LL)                                    | 81.99192.1432             | 4.18 - 24           |
| Radio navigation system 12V (RL)                                    | 81.99192.1433             | 4.18 - 26           |
| Radio navigation system 12V with CD changer (LL)                    | 81.99192.1434             | 4.18 - 28           |
| Radio navigation system 12V with CD changer (RL)                    | 81.99192.1435             | 4.18 - 30           |
| Radio navigation system 12V with Cullmann phone (LL)                | 81.99192.1436             | 4.18 - 32           |
| Radio navigation system 12V with Cullmann phone (RL)                | 81.99192.1437             | 4.18 - 36           |
| Radio navigation system 12V with Cullmann phone and CD changer (LL) | 81.99192.1440             | 4.18 - 48           |
| Radio navigation system 12V with Cullmann phone and CD changer (RL) | 81.99192.1441             | 4.18 - 52           |
| Radio navigation system 12V with Nokia phone (LL)                   | 81.99192.1438             | 4.18 - 40           |
| Radio navigation system 12V with Nokia phone (RL)                   | 81.99192.1439             | 4.18 - 44           |
| Radio navigation system 12V with Nokia phone and CD changer (LL)    | 81.99192.1442             | 4.18 - 56           |
| Radio navigation system 12V with Nokia phone and CD changer (RL)    | 81.99192.1443             | 4.18 - 60           |
| Radio remote control (infrared)                                     | 81.99192.1371             | 4.18 - 22           |
| Retarder VOITH DIGIPROP (CAN)                                       | 81.99192.1410             | 4.18 - 66           |
| Retarder, hydroretarder (CAN)                                       | 81.99192.1411             | 4.18 - 68           |
| Retarder/intarder, automatic                                        | 81.99192.1372             | 4.18 - 64           |
| Reversing stop                                                      | 81.99192.1409             | 4.18 - 70           |
| <br>Seat adjustment, electric (driver)                              | <br>81.99192.1483         | <br>4.19 - 28       |
| Seat adjustment, electric (passenger)                               | 81.99192.1484             | 4.19 - 30           |
| Seat belt indicator, driver                                         | 81.99192.1374             | 4.07 - 26           |
| Seat heating, driver                                                | 81.99192.2494             | 4.19 - 24           |
| Seat heating, driver and passenger                                  | 81.99192.2493             | 4.19 - 26           |

**ADDITIONAL WIRING DIAGRAMS**
**Contents**

| <b>Titles of wiring diagrams</b>                                   | <b>Wiring diagram no.</b> | <b>Chapter/Page</b> |
|--------------------------------------------------------------------|---------------------------|---------------------|
| Side marker lights (LL)                                            | 81.99192.2592             | 4.19 - 22           |
| Socket 12V                                                         | 81.99192.2569             | 4.19 - 58           |
| Socket 24V                                                         | 81.99192.2570             | 4.19 - 60           |
| Socket 24V in wiring trough                                        | 81.99192.2796             | 4.19 - 62           |
| Socket, tanker                                                     | 81.99192.2655             | 4.19 - 64           |
| Special customised module                                          | 81.99192.1381             | 4.11 - 14           |
| START-STOP device at end of frame                                  | 81.99192.1402             | 4.19 - 38           |
| START-STOP device on engine                                        | 81.99192.1401             | 4.19 - 36           |
| START-STOP device on engine and end of frame                       | 81.99192.1403             | 4.19 - 40           |
| Sunblind, electric                                                 | 81.99192.1399             | 4.19 - 32           |
| Sunroof (INALFA) (LL)                                              | 81.99192.1394             | 4.19 - 12           |
| Sunroof (INALFA) (RL)                                              | 81.99192.1395             | 4.19 - 14           |
| Supplementary heating D1LCC/D3LCC with TRS                         | 81.99192.1472             | 4.26 - 4            |
| Supplementary heating D1LCC/D3LCC without TRS                      | 81.99192.1471             | 4.26 - 6            |
| Supplementary heating D5W with TRS                                 | 81.99192.1478             | 4.26 - 8            |
| Supplementary heating D5W without TRS                              | 81.99192.1477             | 4.26 - 10           |
| Supplementary heating Thermo 50 with TRS                           | 81.99192.1476             | 4.26 - 12           |
| Supplementary heating Thermo 50 without TRS                        | 81.99192.1475             | 4.26 - 14           |
| Supplementary heating Truma E24-2 with TRS                         | 81.99192.1480             | 4.26 - 18           |
| Supplementary heating Truma E24-2 without TRS                      | 81.99192.1479             | 4.26 - 20           |
| Supplementary heating Webasto Airtop 2000 OEM and 3500 with TRS    | 81.99192.1473             | 4.26 - 22           |
| Supplementary heating Webasto Airtop 2000 OEM and 3500 without TRS | 81.99192.1474             | 4.26 - 24           |
| Supplementary heating, TRS shutdown                                | 81.99192.2621             | 4.26 - 16           |
| Tailgate                                                           | 81.99192.1537             | 4.12 - 2            |
| Tipper indicator                                                   | 81.99192.1379             | 4.11 - 2            |

**ADDITIONAL WIRING DIAGRAMS**

**Contents**

| <b>Titles of wiring diagrams</b>                     | <b>Wiring diagram no.</b> | <b>Chapter/Page</b> |
|------------------------------------------------------|---------------------------|---------------------|
| Trailer charge 24V                                   | 81.99192.2616             | 4.08 - 2            |
| Trailer lighting socket 24V 15-pin                   | 81.99192.2499             | 4.01 - 10           |
| Trailer lighting socket 24V 15-pin + 12V 13-pin      | 81.99192.2650             | 4.01 - 22           |
| Trailer lighting socket 24V 7-pin                    | 81.99192.2496             | 4.01 - 4            |
| Trailer lighting socket 24V 7-pin + 12V 13-pin       | 81.99192.2447             | 4.01 - 12           |
| Trailer lighting socket 24V 7-pin/4-pin              | 81.99192.2497             | 4.01 - 6            |
| Trailer lighting socket 24V 7-pin/4-pin + 12V 13-pin | 81.99192.2448             | 4.01 - 14           |
| Trailer lighting socket 24V 7-pin/7-pin              | 81.99192.2498             | 4.01 - 8            |
| Trailer lighting socket 24V 7-pin/7-pin + 12V 13-pin | 81.99192.2449             | 4.01 - 18           |
| Vehicle immobiliser                                  | 81.99192.2476             | 4.23 - 2            |
| Voltage limiter                                      | 81.99192.2850             | 4.19 - 34           |
| Windscreen heating                                   | 81.99192.2571             | 4.06 - 6            |
| Windscreen heating (wide cab)                        | 81.99192.1373             | 4.06 - 8            |
| Work spotlight on top of cab                         | 81.99192.1356             | 4.01 - 34           |
| Work spotlight, cab closure (right)                  | 81.99192.1357             | 4.01 - 38           |
| Work spotlight, cab closure(left/right)              | 81.99192.1355             | 4.01 - 36           |
| ZF transmission 16S151/16S181 (LL)                   | 81.99192.2579             | 4.07 - 18           |
| ZF transmission 16S151/16S181 (RL)                   | 81.99192.2835             | 4.07 - 22           |

**ADDITIONAL WIRING DIAGRAMS**

## ADDITIONAL WIRING DIAGRAMS

### Airbag

#### Legend

Wiring diagram no. **81.99192.2572** Sheet 1 of 1

Change status: 06.00

#### A = Airbag with seat belt tensioner

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation  
**A484** (485) Steering wheel with airbag  
**A485** (484) Seat belt tensioner  
**A486** (483) Control unit airbag

**F373** (117) Fuse, airbag

**H303** Indicator light, airbag

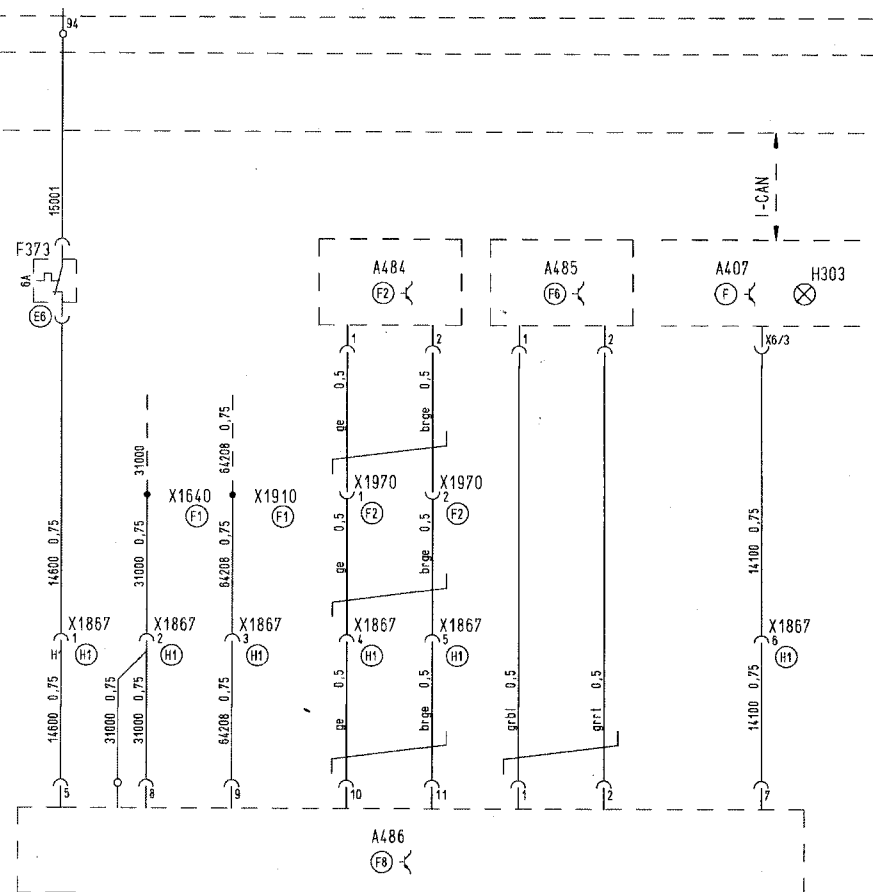
**X1640** Soldered connector, line 31000  
**X1867** Stvd. control unit airbag  
**X1910** Crimped connector K-KWP2 (SA)  
**X1970** Stvd. airbag

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

A100  
(E6)

A302  
(E6)



A horizontal number line is shown, ranging from 1 to 55. Major tick marks are labeled every 5 units (1, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55). Minor tick marks are present every 1 unit. A bracket labeled 'A' is positioned below the line, spanning from the tick mark for 28 to the tick mark for 55.

### Trailer lighting socket 24V 7-pin

#### Legend

Wiring diagram no. **81.99192.2496** Sheet **1** of 1

Change status: 07.99

#### A = Trailer lighting socket 24V 7-pin N

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**G101** (113) Battery 2

**X330** (191) Socket connector N 24V

**X1540** Stvd. frame I

**X1586** Stvd. connection for trailer lighting socket 1

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

#### Note:

Position for mounting **X1586** is E8 on semitrailers!

ADDITIONAL WIRING DIAGRAMS

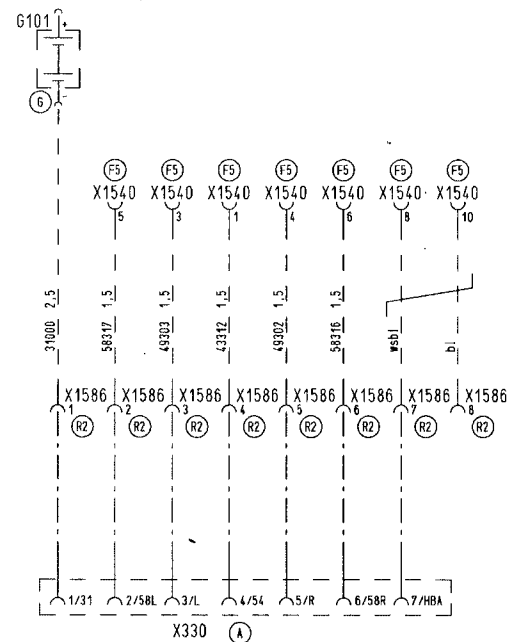
Wiring diagram no. 81.99192.2496 Sheet 1 of 1

A100

(E6)

A302

(E6)





## ADDITIONAL WIRING DIAGRAMS

### Trailer lighting socket 24V 7-pin/4-pin

#### Legend

Wiring diagram no. **81.99192.2497** Sheet 1 of 1  
Change status: 07.99

**A = Trailer lighting socket 24V 7-pin N**

**B = Trailer lighting socket 24V 4-pin**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**G101** (113) Battery 2

**X330** (191) Socket connector N 24V

**X741** (193) Trailer lighting socket

**X1540** Stvd. frame I

**X1586** Stvd. connection for trailer lighting socket 1

**X1587** Stvd. connection for trailer lighting socket 2

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

#### Note:

Position for mounting **X1586** and **X1587** is E8 on semitrailers!

ADDITIONAL WIRING DIAGRAMS

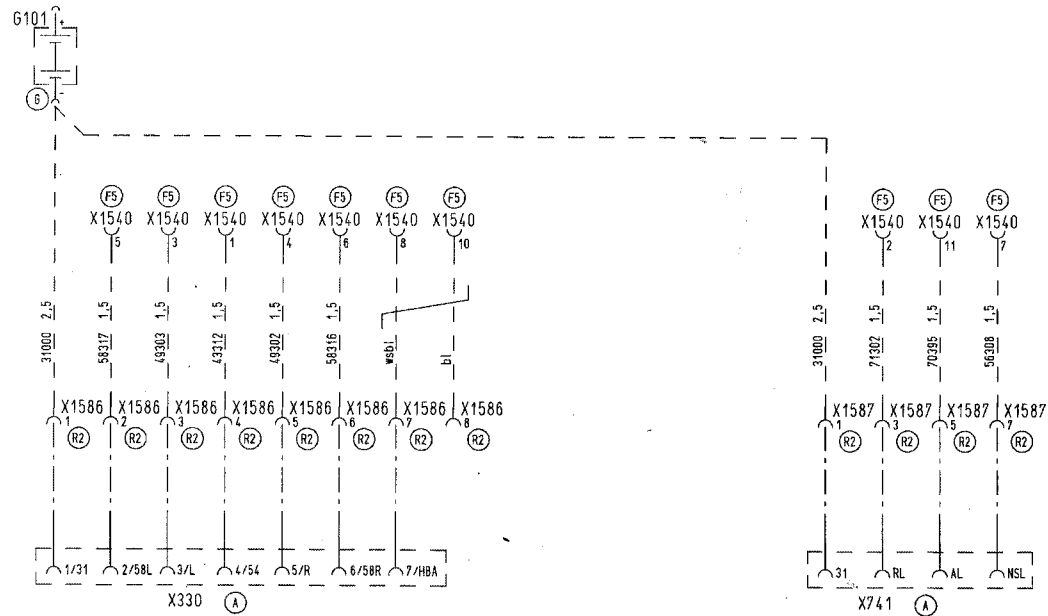
Wiring diagram no. 81.99192.2497 Sheet 1 of 1

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Trailer lighting socket 24V 7-pin/7-pin

#### Legend

Wiring diagram no. **81.99192.2498** Sheet 1 of 1

Change status: 07.99

**A = Trailer lighting socket 24V 7-pin N**

**B = Trailer lighting socket 24V 7-pin S**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**G101** (113) Battery 2

**X329** (192) Socket connector S 24V

**X330** (191) Socket connector N 24V

**X1540** Stvd. frame I

**X1586** Stvd. connection for trailer lighting socket 1

**X1587** Stvd. connection for trailer lighting socket 2

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

#### Note:

Position for mounting **X1586** and **X1587** is E8 on semitrailers!

ADDITIONAL WIRING DIAGRAMS

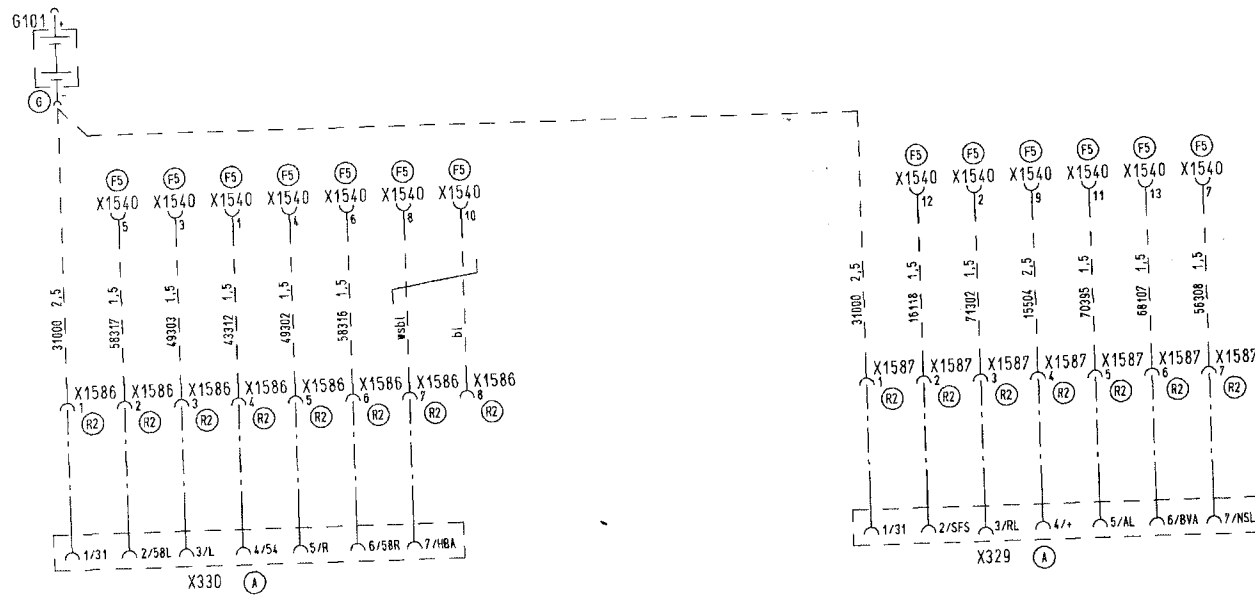
Wiring diagram no. 81.99192.2498 Sheet 1 of 1

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Trailer lighting socket 24V 15-pin

#### Legend

Wiring diagram no. **81.99192.2499** Sheet **1** of 1

Change status: 07.99

#### A = Trailer lighting socket 24V 15-pin

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**G101** (113) Battery 2

**X331** (194) Socket 24V

**X1540** Stvd. frame I

**X1586** Stvd. connection for trailer lighting socket 1

**X1587** Stvd. connection for trailer lighting socket 2

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

#### Note:

Position for mounting **X1586** and **X1587** is E8 on semitrailers!

ADDITIONAL WIRING DIAGRAMS

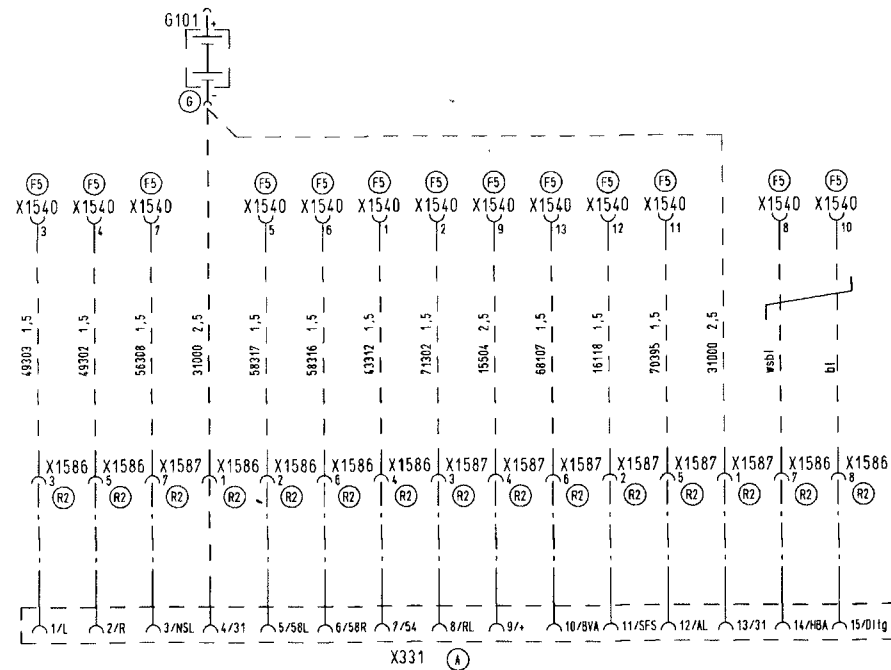
Wiring diagram no. 81.99192.2499 Sheet 1 of 1

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

A

## ADDITIONAL WIRING DIAGRAMS

### Trailer lighting socket 24V 7-pin + 12V 13-pin

#### Legend

Wiring diagram no. **81.99192.2447** Sheet **1** of 1

Change status: 03.99

**A = Trailer lighting socket 24V 7-pin N**

**B = Trailer lighting socket 12V 13-pin**

**A100** (255) Central fuse, relay and terminal block

**A236** (503) DC-converter 24/12V

**A302** (352) Central computer 2

**G101** (113) Battery 2

**X330** (191) Socket connector N 24V

**X740** (206) Trailer lighting socket 12V

**X1540** Stvd. frame I

**X1586** Stvd. connection for trailer lighting socket 1

**X1587** Stvd. connection for trailer lighting socket 2

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

## ADDITIONAL WIRING DIAGRAMS

### Trailer lighting socket 24V 7-pin/4-pin + 12V 13-pin

#### Legend

Wiring diagram no. **81.99192.2448** Sheet 1 of 2

Change status: 03.99

**A = Trailer lighting socket 24V 7-pin N**

**B = Trailer lighting socket 24V 4-pin**

**A100** (255) Central fuse, relay and terminal block

**A236** (503) DC-converter 24/12V

**A302** (352) Central computer 2

**G101** (113) Battery 2

**X330** (191) Socket connector N 24V

**X741** (193) Trailer lighting socket

**X1540** Stvd. frame I

**X1586** Stvd. connection for trailer lighting socket 1

**X1587** Stvd. connection for trailer lighting socket 2

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right



ADDITIONAL WIRING DIAGRAMS

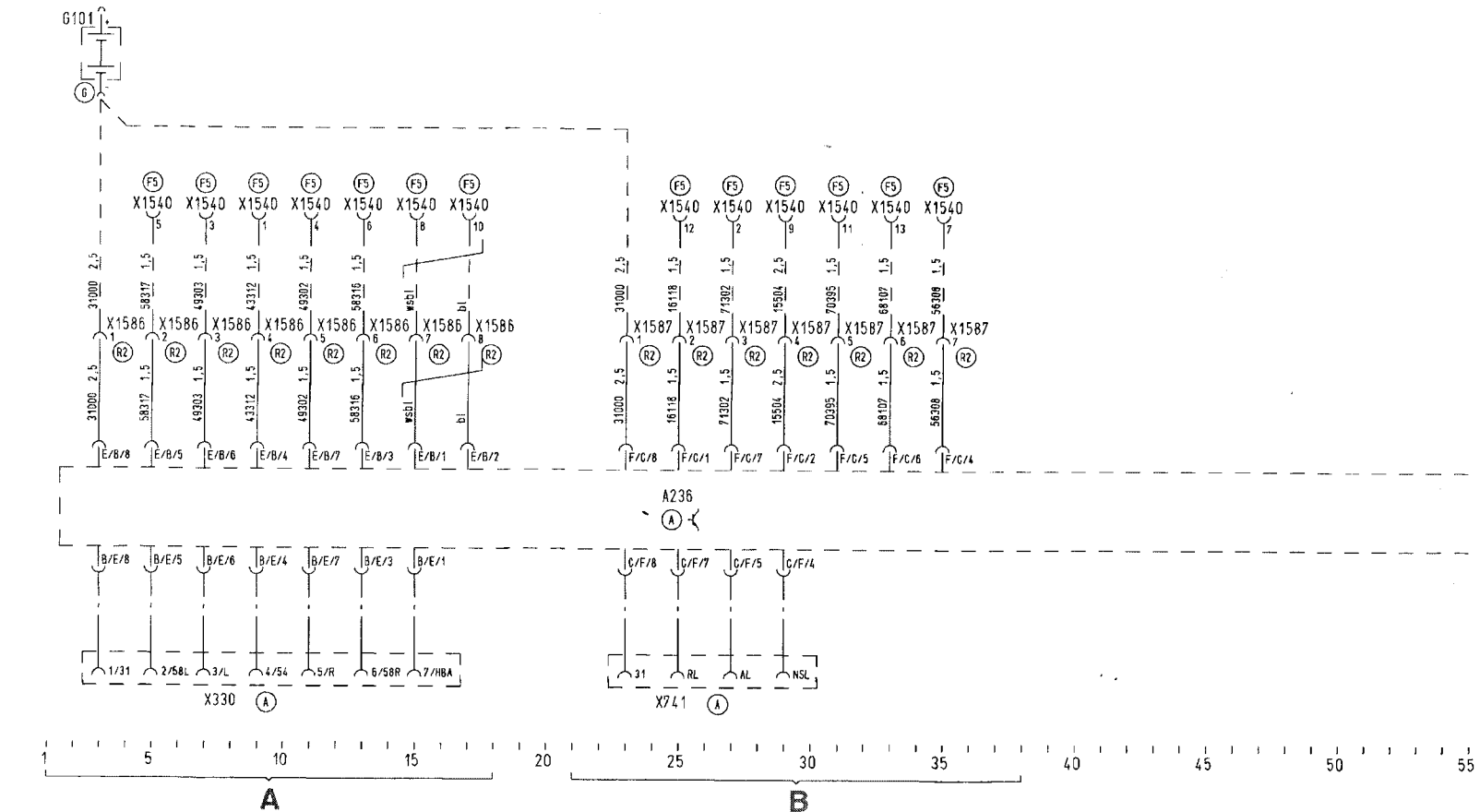
Wiring diagram no. 81.99192.2448 Sheet 1 of 2

A100

(E6)

A302

(E6)



**Trailer lighting socket 24V 7-pin/4-pin + 12V 13-pin**

**Legend**

Wiring diagram no. **81.99192.2448** Sheet **2** of 2

Change status: 07.99

**A = Trailer lighting socket 12V 13-pin**

**A100** (255) Central fuse, relay and terminal block

**A236** (503) DC-converter 24/12V

**A302** (352) Central computer 2

**X740** (206) Trailer lighting socket 12V

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

**ADDITIONAL WIRING DIAGRAMS**

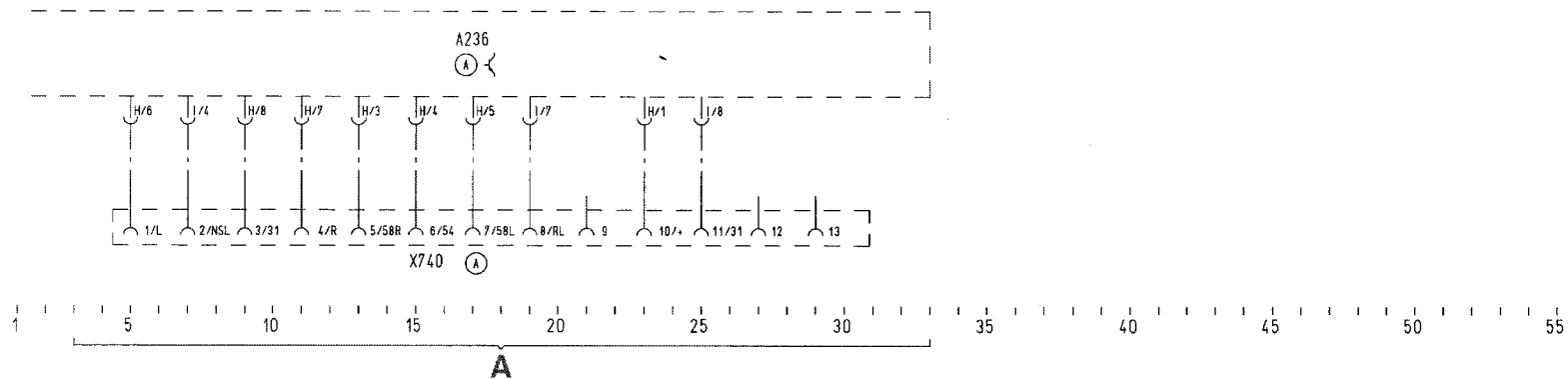
Wiring diagram no. **81.99192.2448** Sheet **2** of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Trailer lighting socket 24V 7-pin/7-pin + 12V 13-pin

#### Legend

Wiring diagram no. **81.99192.2449** Sheet **1** of 2

Change status: 03.99

**A = Trailer lighting socket 24V 7-pin N**

**B = Trailer lighting socket 24V 7-pin S**

**A100** (255) Central fuse, relay and terminal block

**A236** (503) DC-converter 24/12V

**A302** (352) Central computer 2

**G101** (113) Battery 2

**X329** (192) Socket connector S 24V

**X330** (191) Socket connector N 24V

**X1540** Stvd. frame I

**X1586** Stvd. connection for trailer lighting socket 1

**X1587** Stvd. connection for trailer lighting socket 2

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

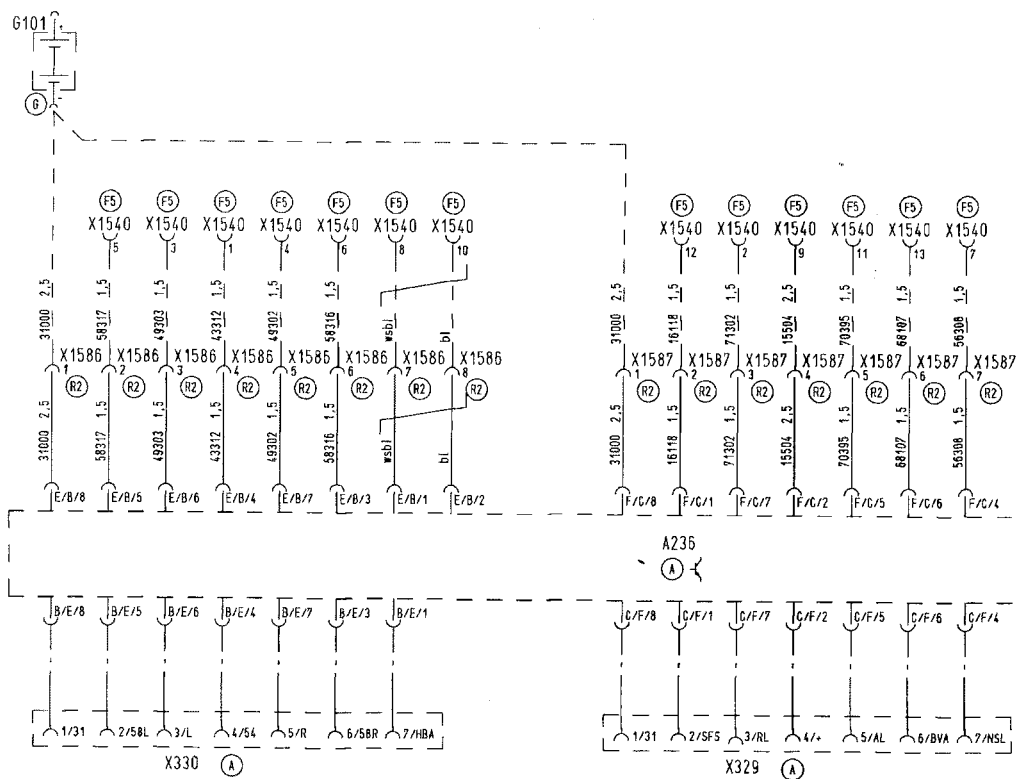
Wiring diagram no. **81.99192.2449** Sheet 1 of 2

A100

(E6)

A302

(E6)



## Trailer lighting socket 24V 7-pin/7-pin + 12V 13-pin

### Legend

Wiring diagram no. **81.99192.2449** Sheet **2** of 2  
Change status: 07.99

### A = Trailer lighting socket 12V 13-pin

**A100** (255) Central fuse, relay and terminal block  
**A236** (503) DC-converter 24/12V  
**A302** (352) Central computer 2  
  
**X740** (206) Trailer lighting socket 12V

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

**ADDITIONAL WIRING DIAGRAMS**

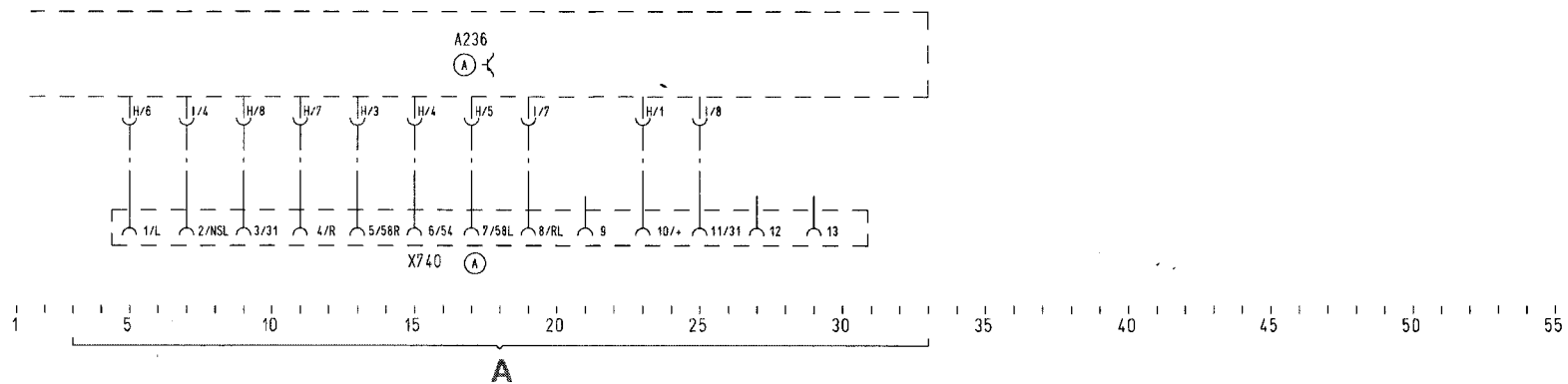
Wiring diagram no. **81.99192.2449** Sheet **2** of **2**

A100

(E6)

A302

(E6)



## Trailer lighting socket 24V 15-pin + 12V 13-pin

### Legend

Wiring diagram no. **81.99192.2650** Sheet **1** of 2

Change status: 03.99

### A = Trailer lighting socket 24V 15-pin

**A100** (255) Central fuse, relay and terminal block

**A236** (503) DC-converter 24/12V

**A302** (352) Central computer 2

**G101** (113) Battery 2

**X331** (194) Socket 24V

**X1540** Stvd. frame I

**X1586** Stvd. connection for trailer lighting socket 1

**X1587** Stvd. connection for trailer lighting socket 2

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

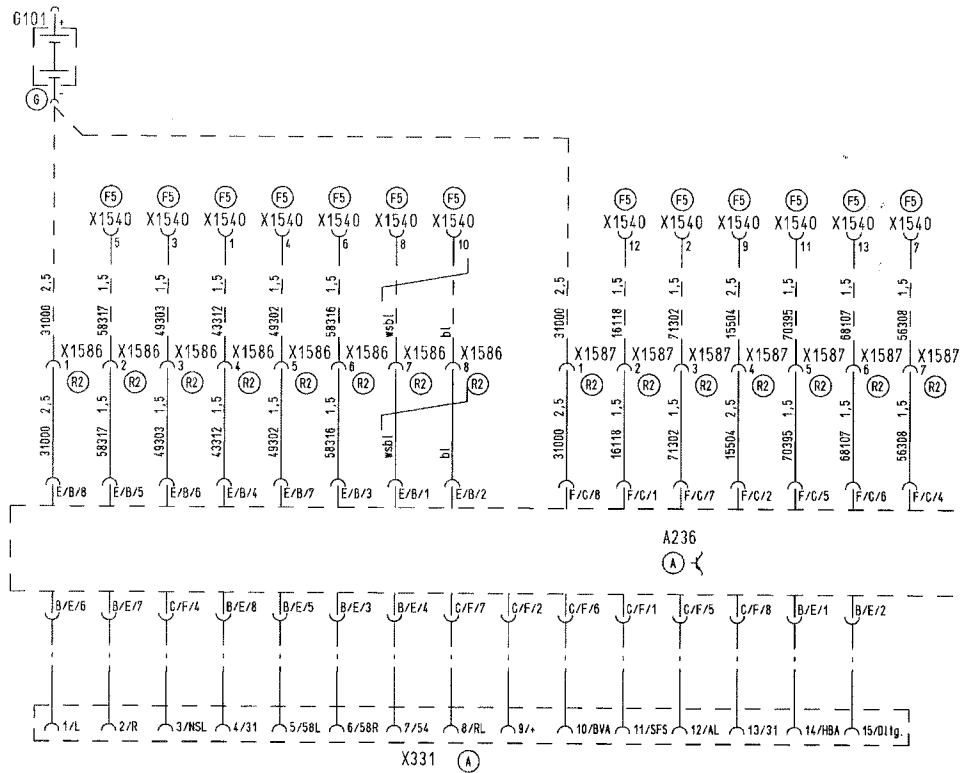


ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2650 Sheet 1 of 2

A100  
(E6)

A302  
(E6)



## ADDITIONAL WIRING DIAGRAMS

### Trailer lighting socket 24V 15-pin + 12V 13-pin

#### Legend

Wiring diagram no. **81.99192.2650** Sheet 2 of 2

Change status: 08.99

#### A = Trailer lighting socket 12V 13-pin

**A100** (255) Central fuse, relay and terminal block

**A236** (503) DC-converter 24/12V

**A302** (352) Central computer 2

**X740** (206) Trailer lighting socket 12V

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

**ADDITIONAL WIRING DIAGRAMS**

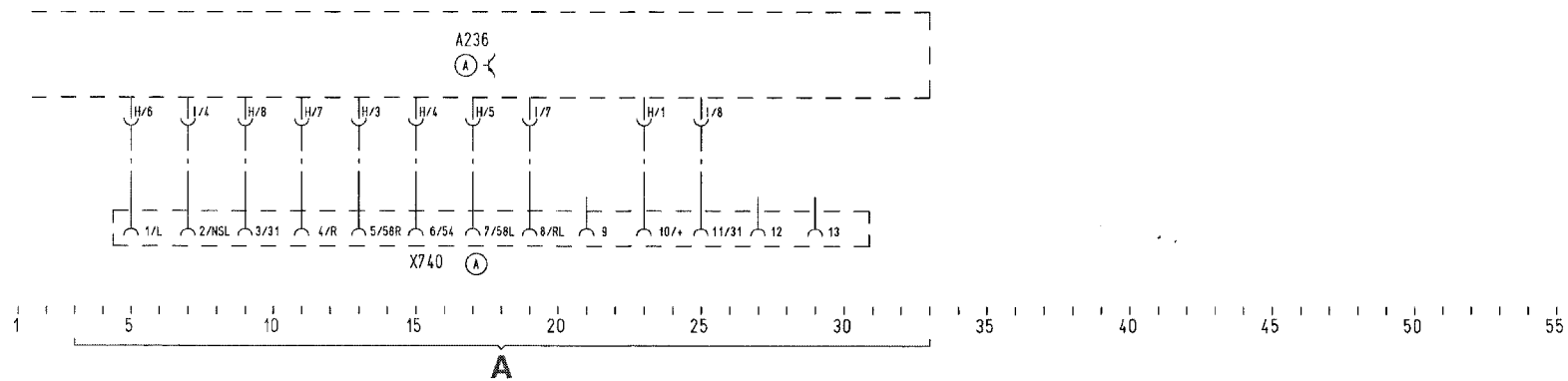
Wiring diagram no. **81.99192.2650** Sheet **2** of 2

A100

(E6)

A302

(E6)



## ASR traction control indicator light

### Legend

Wiring diagram no. **81.99192.1358** Sheet 1 of 1

Change status: 04.01

### A = ASR indicator light

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**H140** Indicator light, ASR/ESP information

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

(I) For basic equipment please refer to EBS wiring diagram

ADDITIONAL WIRING DIAGRAMS

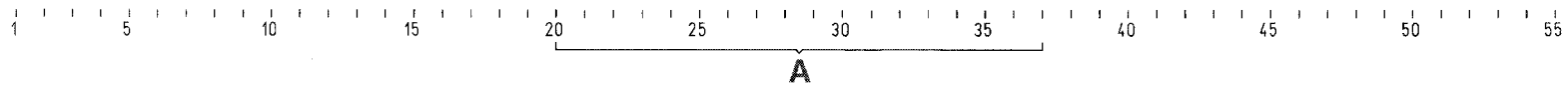
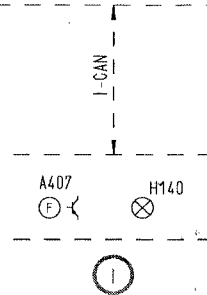
Wiring diagram no. **81.99192.1358** Sheet **1** of 1

A100

(EB)

A302

(EB)



## ASR traction control slip threshold control switch

### Legend

Wiring diagram no. **81.99192.1359** Sheet 1 of 1  
Change status: 07.01

### A = ASR slip threshold control switch

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A402** (399) EBS control unit

**S256** (455) Control switch ASR or increase in ASR/ESP slip threshold

**X2541** (246) Potential distributor, 21-pin, cable 31000  
**X2542** (246) Potential distributor, 21-pin, cable 58000

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

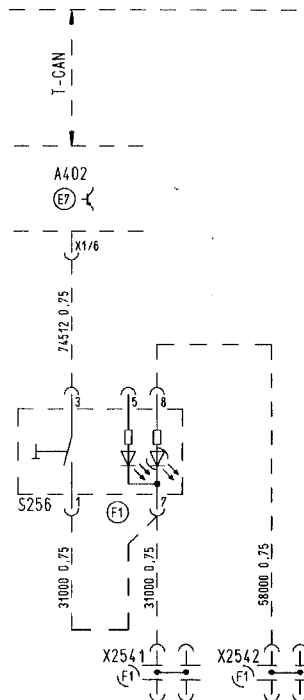
Wiring diagram no. **81.99192.1359** Sheet **1** of 1

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

A

**ASR traction control system/electronic stability program  
ASR/ESP indicator light**

**Legend**

Wiring diagram no. **81.99192.2862** Sheet **1** of 1  
Change status: 03.01

**A = ASR/ESP indicator light**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**H415** Indicator light, driving stability

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

(I) For basic equipment please refer to EBS wiring diagram



**ADDITIONAL WIRING DIAGRAMS**

Wiring diagram no. **81.99192.2682** Sheet **1** of **1**

A100

(E6)

A302

(E6)

I-CAN

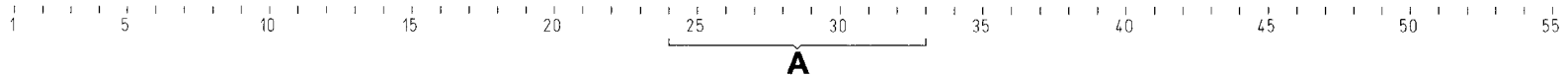
A407

(F)

H4 15

(X)

(I)



**ASR traction control system/electronic stability program  
ASR/ESP slip threshold control switch**

**Legend**

Wiring diagram no. **81.99192.1360** Sheet 1 of 1  
Change status: 07.01

**A = ASR/ESP slip threshold control switch**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A402** (399) EBS control unit

**S256** (675) Control switch ASR or increase in ASR/ESP slip threshold

**X2541** (246) Potential distributor, 21-pin, cable 31000  
**X2542** (246) Potential distributor, 21-pin, cable 58000

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

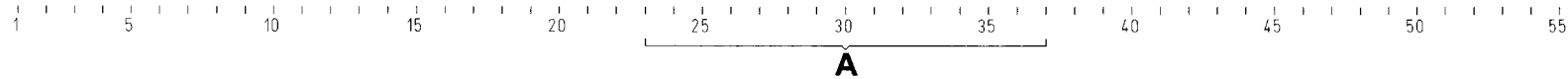
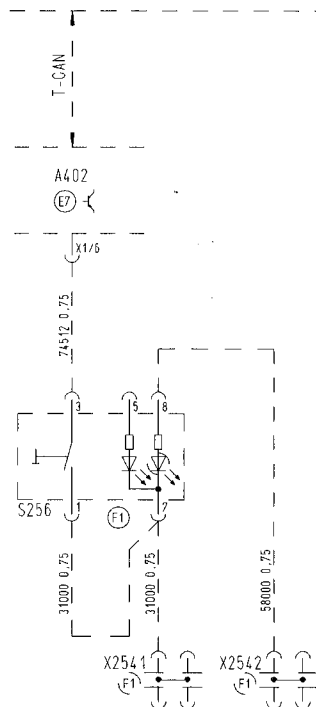
Wiring diagram no. 81.99192.1360 Sheet 1 of 1

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Work spotlight on top of cab

#### Legend

Wiring diagram no. **81.99192.1356** Sheet 1 of 1

Change status: 04.01

#### A = Work spotlight

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**E208** (171) Work spotlight, right

**E209** (171) Work spotlight, left

**F215** (118) Fuse, work spotlight

**S225** (481) Switch, work spotlight

**X704** Stvd. work spotlight, left

**X1975** Stvd. work spotlight in roof, left

**X1980** Stvd. work spotlight in roof, right

**X2285** Stvd. work spotlight

**X2541** (246) Potential distributor, 21-pin, cable 31000

**X2542** (246) Potential distributor, 21-pin, cable 58000

### Marking of mounting positions

(A) Tail

(E1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

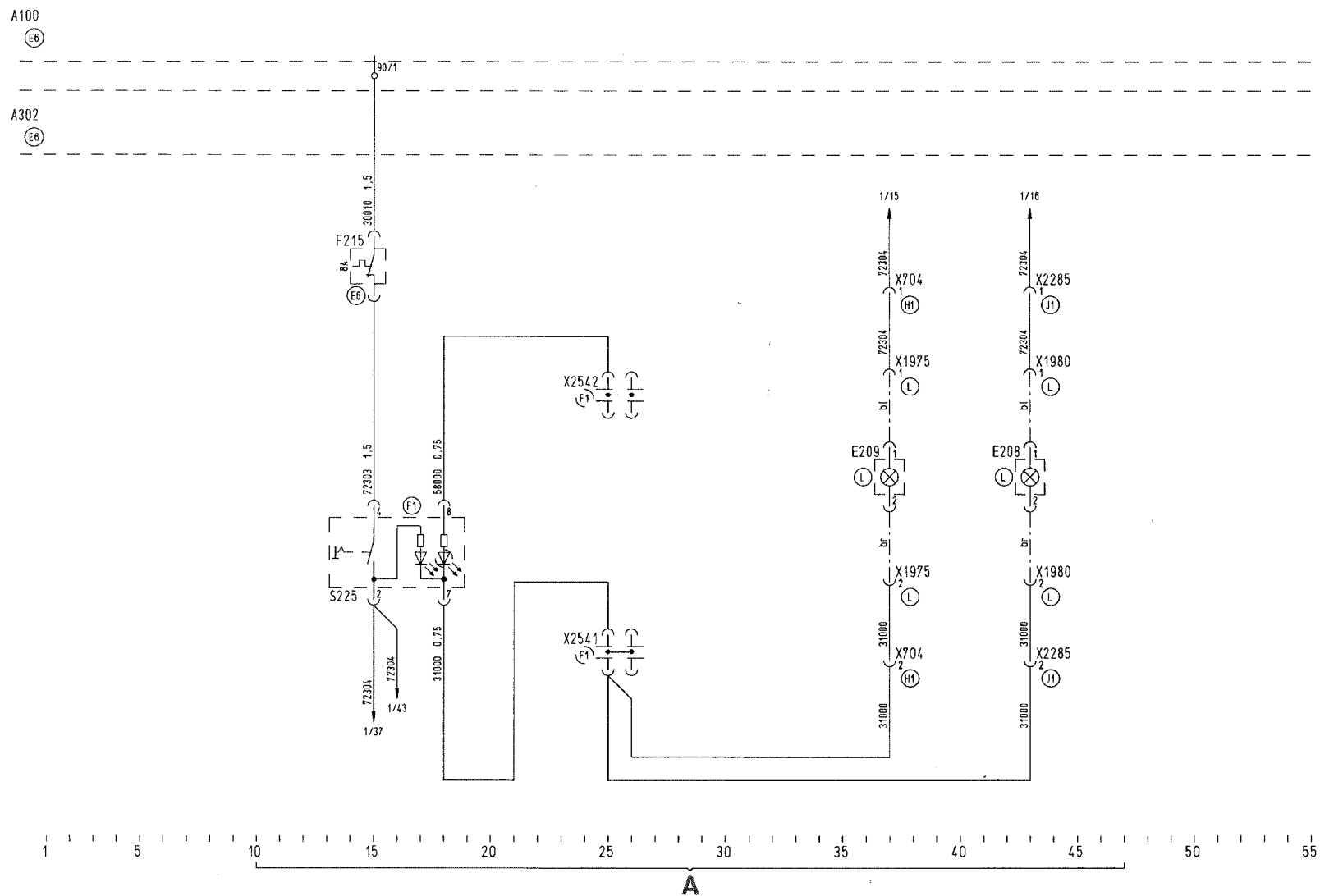
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1356** Sheet 1 of 1



## Work spotlight, cab closure (left/right)

### Legend

Wiring diagram no. **81.99192.1355** Sheet **1** of **1**

Change status: 04.01

### A = Work spotlight

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**E208** (171) Work spotlight, right

**E209** (171) Work spotlight, left

**F215** (118) Fuse, work spotlight

**S225** (481) Switch, work spotlight

**X1862** Stvd. work spotlight

**X2541** (246) Potential distributor, 21-pin, cable 31000

**X2542** (246) Potential distributor, 21-pin, cable 58000

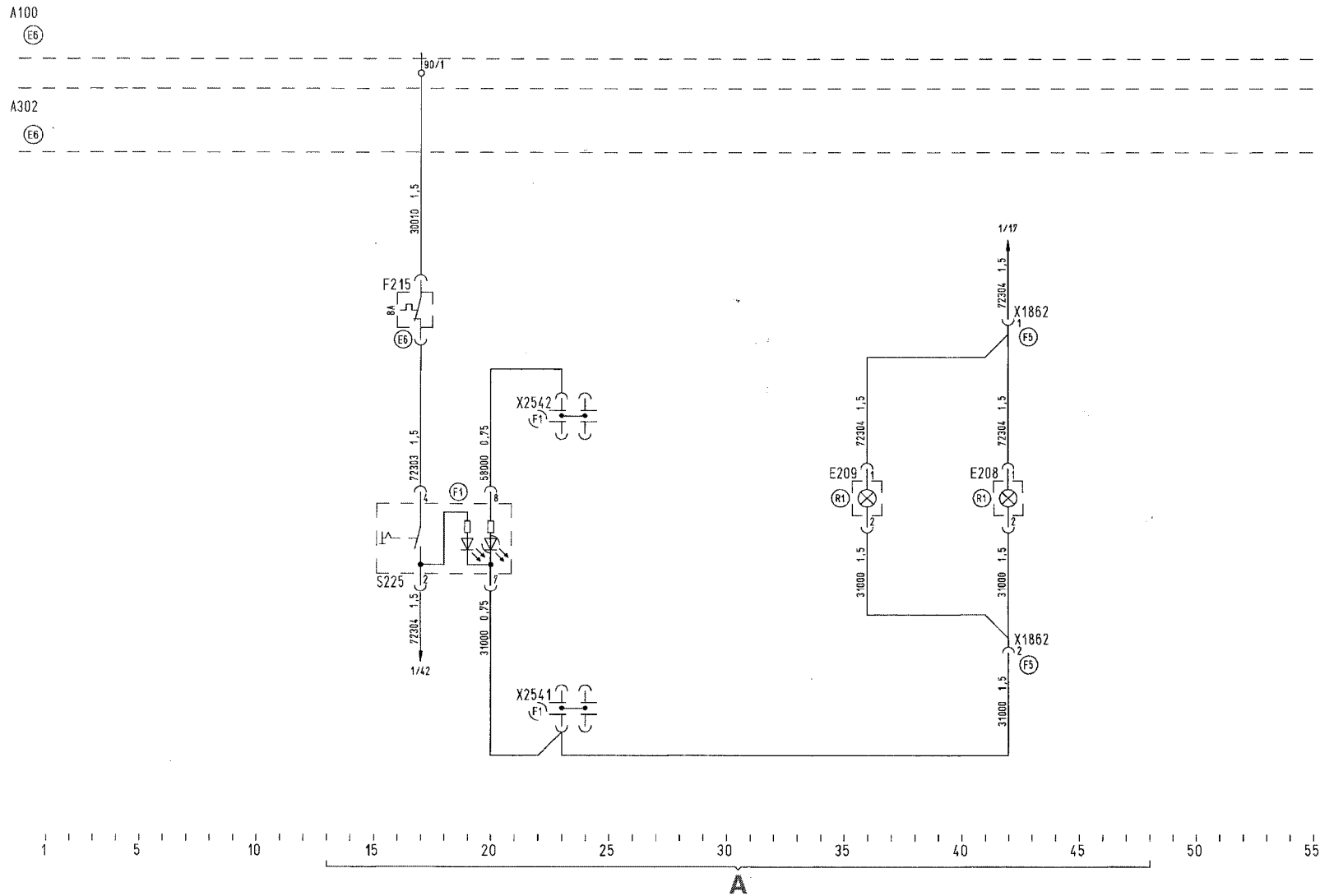
### Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ2 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ7 Control unit racks
- Ⓔ8 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓖ1 B-pillar on passenger's side
- Ⓖ2 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1355 Sheet 1 of 1



## Work spotlight, cab closure (right)

### Legend

Wiring diagram no. **81.99192.1357** Sheet **1** of 1  
Change status: 04.01

### A = Work spotlight

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
  
**E209** (171) Work spotlight, left  
  
**F215** (118) Fuse, work spotlight  
  
**S225** (481) Switch, work spotlight  
  
**X1862** Stvd. work spotlight  
**X2541** (246) Potential distributor, 21-pin, cable 31000  
**X2542** (246) Potential distributor, 21-pin, cable 58000

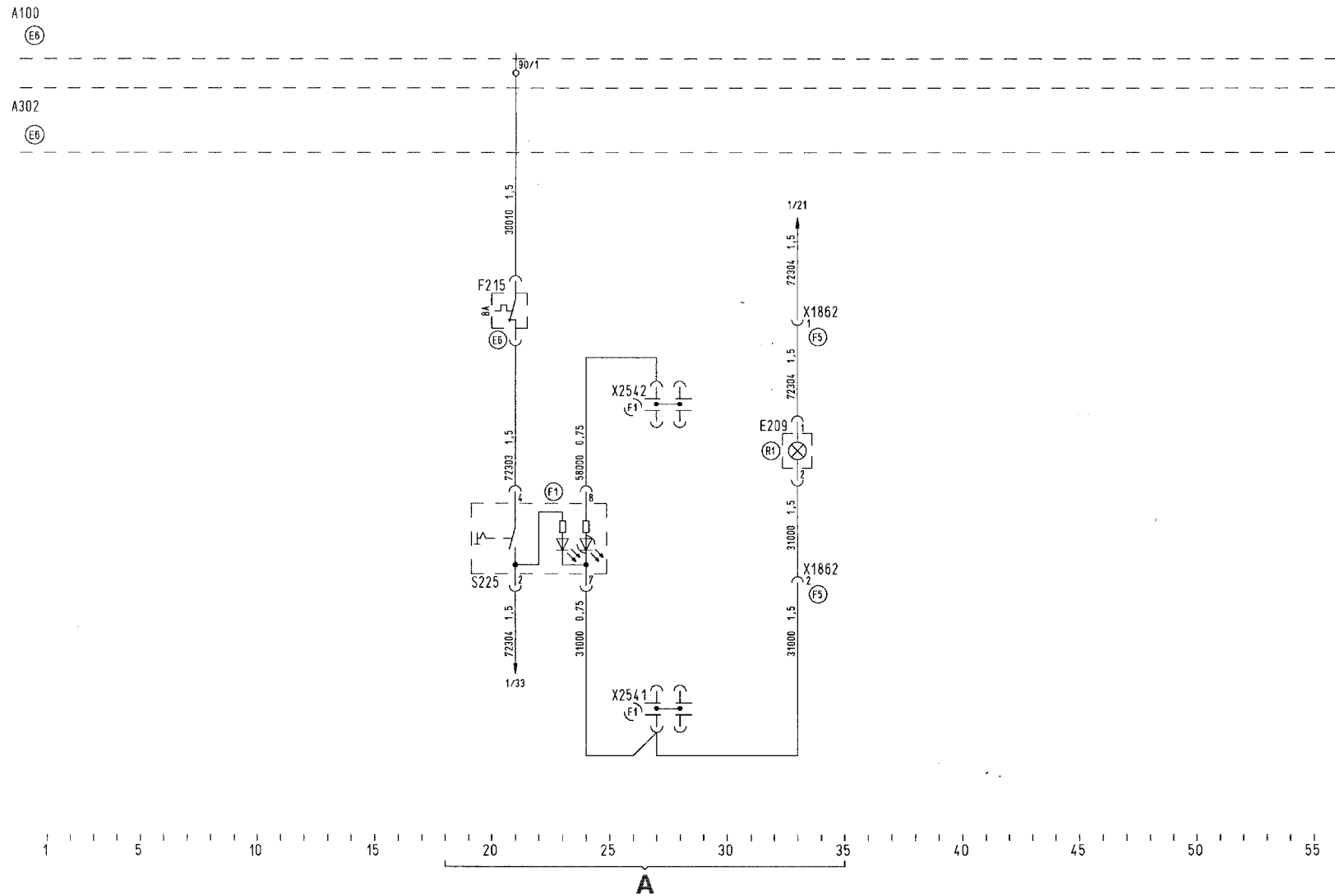
### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓒ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓒ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓒ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓒ Instrument panel         | Ⓖ Rear axle                    |
| Ⓒ Central part             | Ⓖ Front part of frame          |
| Ⓒ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓒ Foot pedals              | Ⓖ Door left                    |
| Ⓒ Front wall, inside left  | Ⓖ Door right                   |
| Ⓒ Front wall, inside right |                                |



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1357** Sheet 1 of 1



**ADDITIONAL WIRING DIAGRAMS**

## Emergency battery shutdown

### Legend

Wiring diagram no. **81.99192.1362** Sheet **1** of 2

Change status: 04.01

### A = Emergency battery shutdown

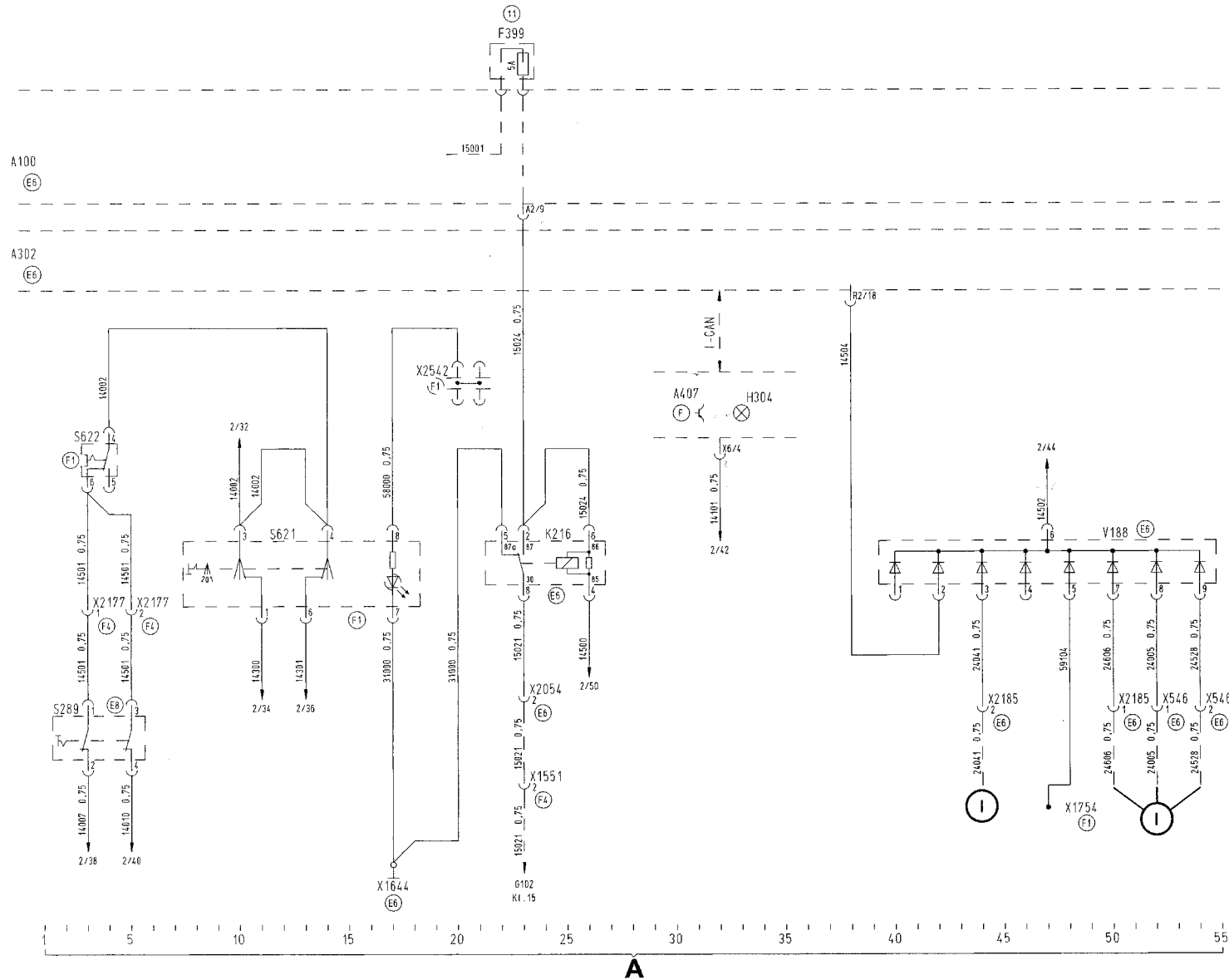
|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A407</b>  | (342) Instrumentation                                                   |
| <b>F399</b>  | (111) Generator fuse (terminal 15)                                      |
| <b>H304</b>  | Indicator light, emergency shutdown malfunction                         |
| <b>K216</b>  | (281) Relay, emergency shutdown generator                               |
| <b>S289</b>  | (587) Switch emergency shutdown, cab, external                          |
| <b>S621</b>  | (589) Switch, isolator switch, battery                                  |
| <b>S622</b>  | (588) Switch emergency shutdown, cab                                    |
| <b>V188</b>  | (120) Diode group, 8 times, for battery emergency shutdown switch       |
| <b>X546</b>  | Std. additional heating, battery main switch, electrical                |
| <b>X1551</b> | Std. engine/EDC/transmission II                                         |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1754</b> | Crimped connector, line 59104                                           |
| <b>X2054</b> | Std. emergency shutdown generator, terminal 15                          |
| <b>X2177</b> | Std. emergency shutdown switch, external                                |
| <b>X2185</b> | Std. extra water heating – battery isolator switch                      |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                          |

### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |
| (I) Supplementary heater      |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1362 Sheet 1 of 2



## Emergency battery shutdown

### Legend

Wiring diagram no. **81.99192.1362** Sheet 2 of 2

Change status: 04.01

### A = Emergency battery shutdown

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A317** (497) Control unit, battery isolator switch, emergency battery shutdown

**F128** (101) Fuse, permanent consumer  
**F243** (105) Fuse central vehicle computer, permanent positive  
**F522** (105) Fuse, lead 30000  
**F523** (105) Fuse, lead 30000

**G100** (113) Battery 1  
**G101** (113) Battery 2

**M100** (144) Starting motor

**Q105** (112) Isolator switch, battery +

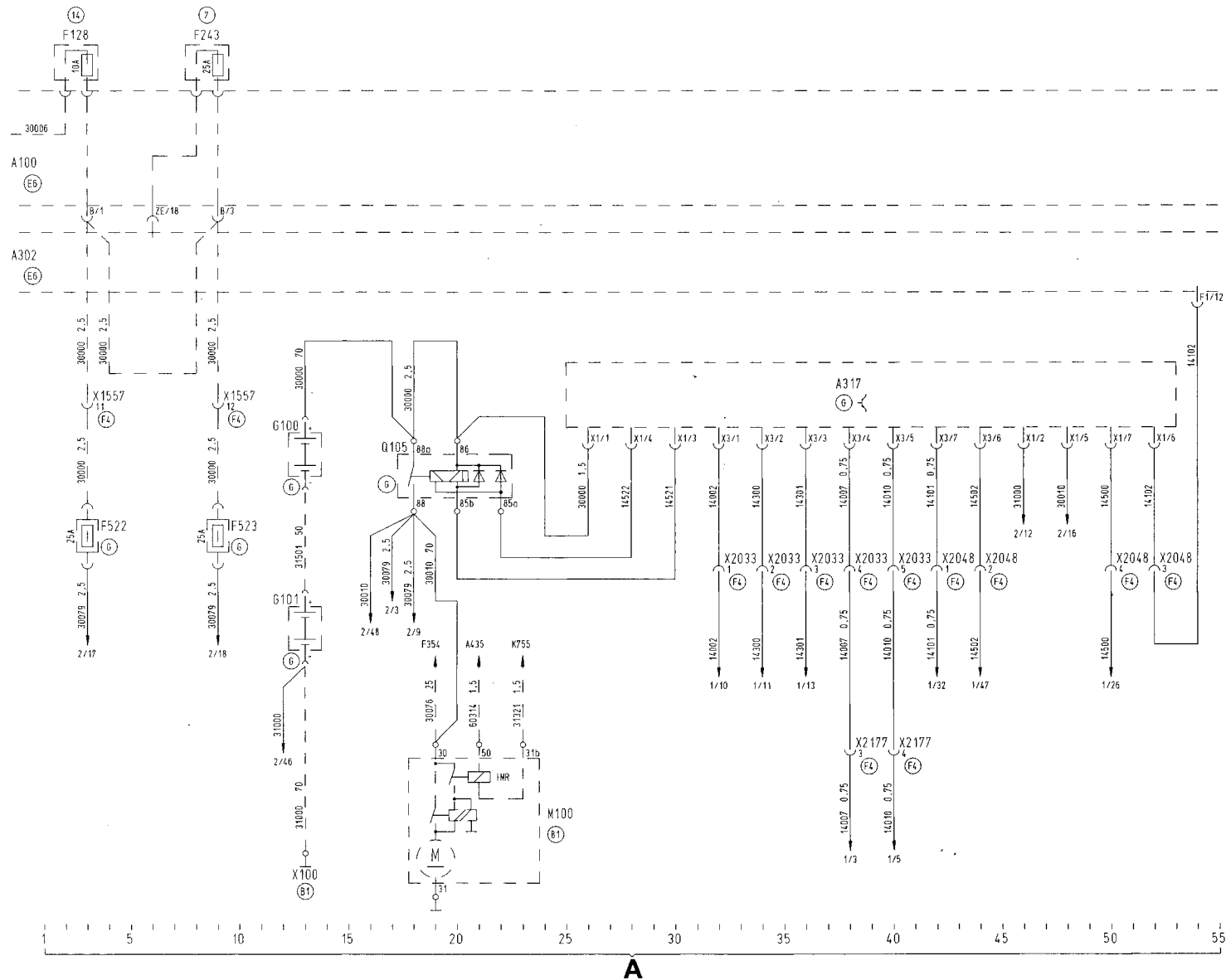
**X100** Earthing point, engine  
**X1557** Stvd. frame, left  
**X2033** Stvd. emergency battery shutdown  
**X2048** Stvd. emergency shutdown  
**X2177** Stvd. emergency shutdown switch, external

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1362 Sheet 2 of 2



## ADDITIONAL WIRING DIAGRAMS

### Main battery switch (electric)

#### Legend

Wiring diagram no. **81.99192.1361** Sheet 1 of 1

Change status: 04.01

#### A = Main battery switch (electric)

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A373** (507) Control unit, battery isolator switch  
 Electrical main battery switch

**F522** (105) Fuse, lead 30000  
**F523** (105) Fuse, lead 30000

**G100** (113) Battery 1  
**G101** (113) Battery 2

**M100** (144) Starting motor

**Q105** (112) Isolator switch, battery +

**S621** (589) Switch, isolator switch, battery

**V188** (120) Diode group, 8 times, battery isolator switch  
**V634** (117) Diode group, 2 times, V635; V636  
**V635** Diode central vehicle computer – control unit,  
 battery isolator switch  
**V636** Diode terminal 15 – control unit batter isolator switch

**X100** Earthing point, engine  
**X546** Stvd. extra water heating – battery isolator switch  
**X1557** Stvd. frame, left  
**X1644** Earthing point, cab, adjacent to central fuse,  
 relay and terminal block  
**X1754** Crimped connector, line 59104

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (FB) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

(I) Supplementary heater

**X2033** Stvd. battery isolator switch  
**X2048** Stvd. battery isolator switch  
**X2185** Stvd. extra water heating – battery isolator switch  
**X2542** (246) Potential distributor, 21-pin line 58000

The diagram illustrates the electrical wiring for the A100, featuring a scale bar at the bottom ranging from 1 to 55. Key components and connections include:

- Top Section:** A horizontal line with a dashed line above it, labeled "A100" and "E6".
- Left Section:** A vertical line labeled "R2/18" and "14504". It connects to a horizontal line with several downward-pointing arrows labeled "X3/2", "X1/1", "X1/2", "X1/3", "X1/4", "X1/5", "X3/6", "X2048", "X3/3", and "X3/1".
- Center Section:** A horizontal line labeled "V188" (E6) with several downward-pointing arrows labeled "X2185", "X2185", "X546", and "X546". Below this line are several circular components labeled "I".
- Right Section:** A vertical line labeled "X1557" (F4) and "X1557" (F4). It connects to a horizontal line with several downward-pointing arrows labeled "X1644" (E6), "X100" (B1), and "X100".
- Bottom Section:** A horizontal line with several downward-pointing arrows labeled "X1644" (E6), "X100" (B1), and "X100".
- Scale Bar:** A horizontal line at the bottom with a scale from 1 to 55.



ADDITIONAL WIRING DIAGRAMS

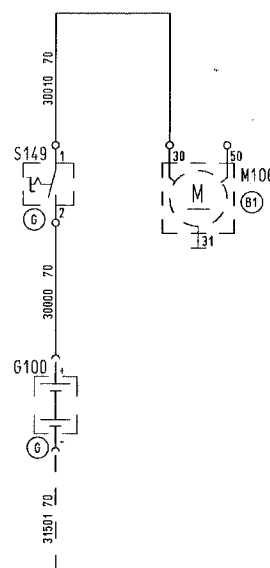
Wiring diagram no. **81.99192.2495** Sheet **1** of 1

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

A

**ADDITIONAL WIRING DIAGRAMS**

## ADDITIONAL WIRING DIAGRAMS

### CAN databus instrumentation (I-CAN)/tachograph (FS-CAN)

#### Legend

Wiring diagram no. **81.99192.2377** Sheet 1 of 1

Change status: 03.00

#### A = I-CAN/FS-CAN

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A407 (342) Instrumentation

A408 (403) Tachograph

F398 Fuse, tachograph, instrumentation (terminal 15)

X1535 Stvd. cab tachograph

X1644 Earthing point, cab, adjacent to central fuse, relay and terminal block

X1757 Soldered connector, line 16006

#### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

[illegible]

## CAN databus driveline (T-CAN)

### Legend

Wiring diagram no. **81.99192.2359** Sheet 1 of 1

Change status: 03.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Central vehicle computer**

**D = Oil level sensor**

**E = Electronically controlled air management unit**

A100 (255) Central fuse, relay and terminal block  
 A302 (352) Central computer 2  
 A402 (399) EBS control unit  
 A403 (339) Vehicle management computer  
 A409 (353) ECAM control unit  
 A551 (533) Control unit, oil level sensor

X1557 Stvd. frame, left  
 X1559 Stvd. engine/EDC/transmission IV  
 X2041 Stvd. adaptation AS-TRONIC

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

# ADDITIONAL WIRING DIAGRAMS

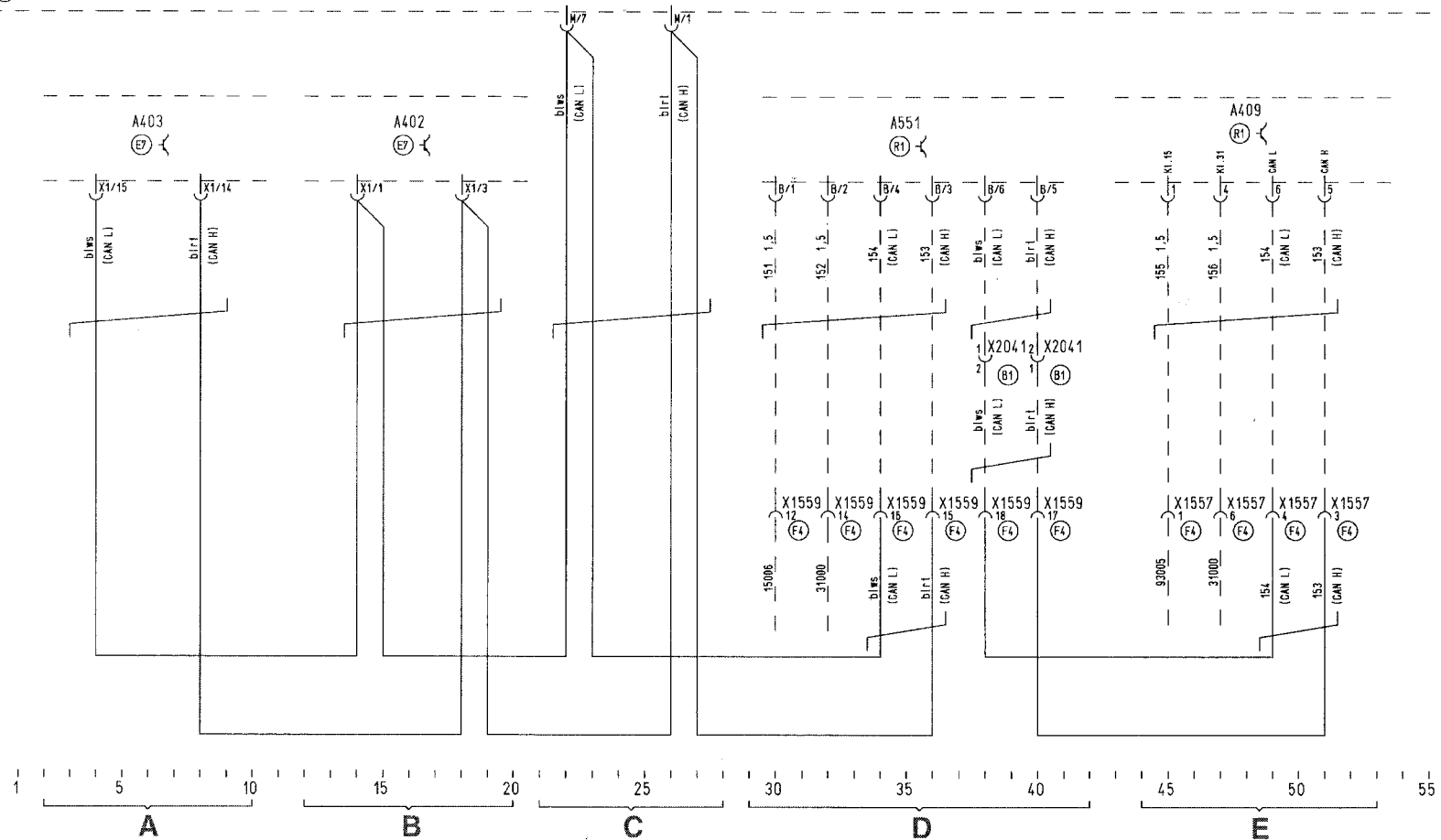
Wiring diagram no. **81.99192.2359** Sheet 1 of 1

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### CAN databus driveline (T-CAN) with AS-TRONIC

#### Legend

Wiring diagram no. **81.99192.2522** Sheet **1** of 1  
Change status: 03.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Central vehicle computer**

**D = Oil level sensor**

**E = AS-TRONIC**

**F = Electronically controlled air management unit**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A330** (442) Control unit, AS-TRONIC (at gearbox)  
**A402** (399) EBS control unit  
**A403** (339) Vehicle management computer  
**A409** (353) ECAM control unit  
**A551** (533) Control unit, oil level sensor

**X1557** Stvd. frame left  
**X1559** Stvd. engine/EDC/transmission IV  
**X2042** Stvd. adaptation AS-TRONIC  
**X2043** Stvd. adaptation AS-TRONIC

#### Marking of mounting positions

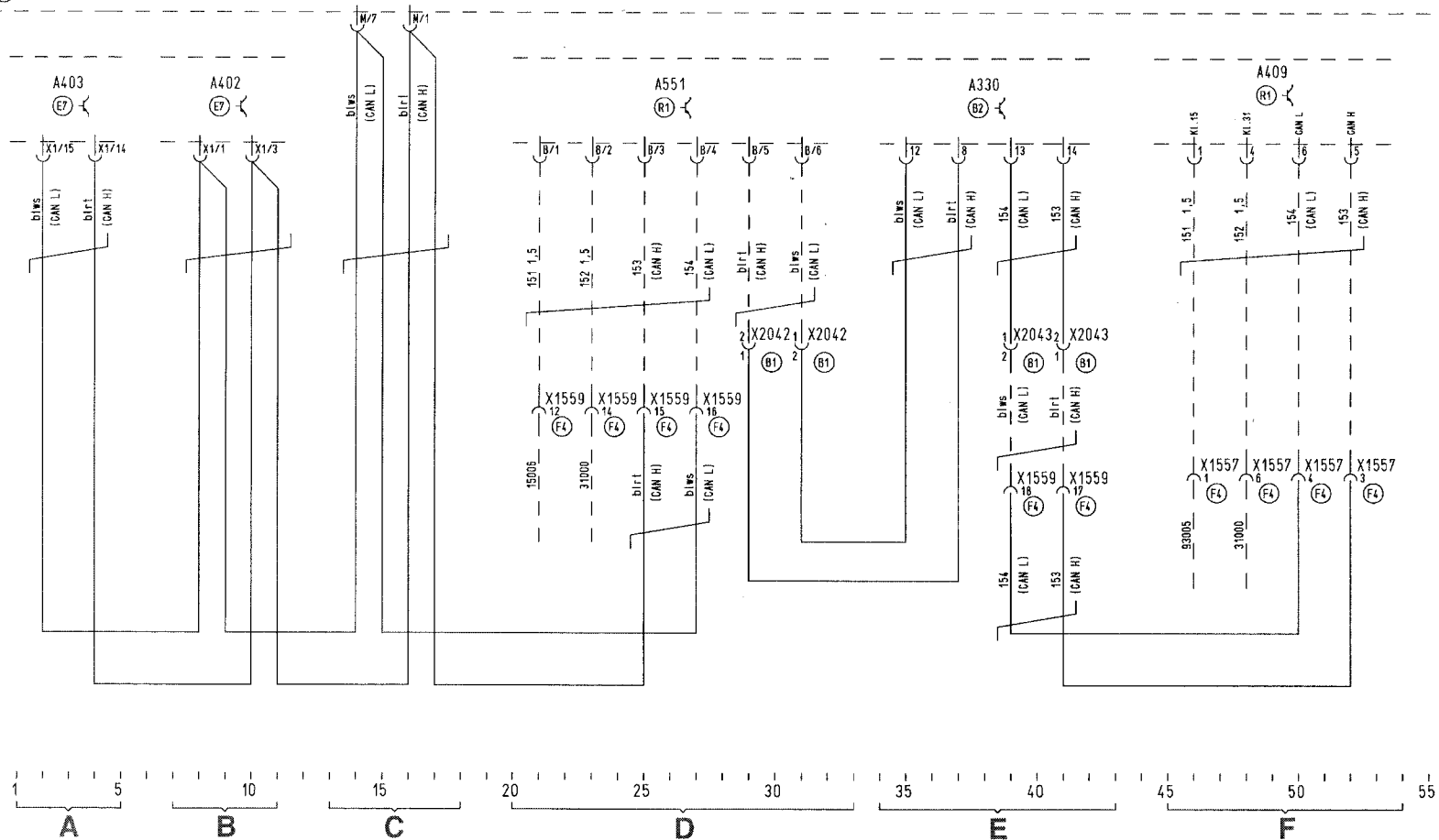
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2522 Sheet 1 of 1

A100  
(E6)

A302  
(E6)





# CAN databus driveline (T-CAN) with special customer module

## Legend

Wiring diagram no. **81.99192.2428** Sheet 1 of 1

Change status: 03.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Special customer module**

**D = Central vehicle computer**

**E = Oil level sensor**

**F = Electronically controlled air management unit**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A312** (397) Customer-specific control module  
**A402** (399) EBS control unit  
**A403** (339) Vehicle management computer  
**A409** (353) ECAM control unit  
**A551** (533) Control unit, oil level sensor

**X1557** Stvd. frame left  
**X1559** Stvd. engine/EDC/transmission IV  
**X2041** Stvd. adaptation AS-TRONIC

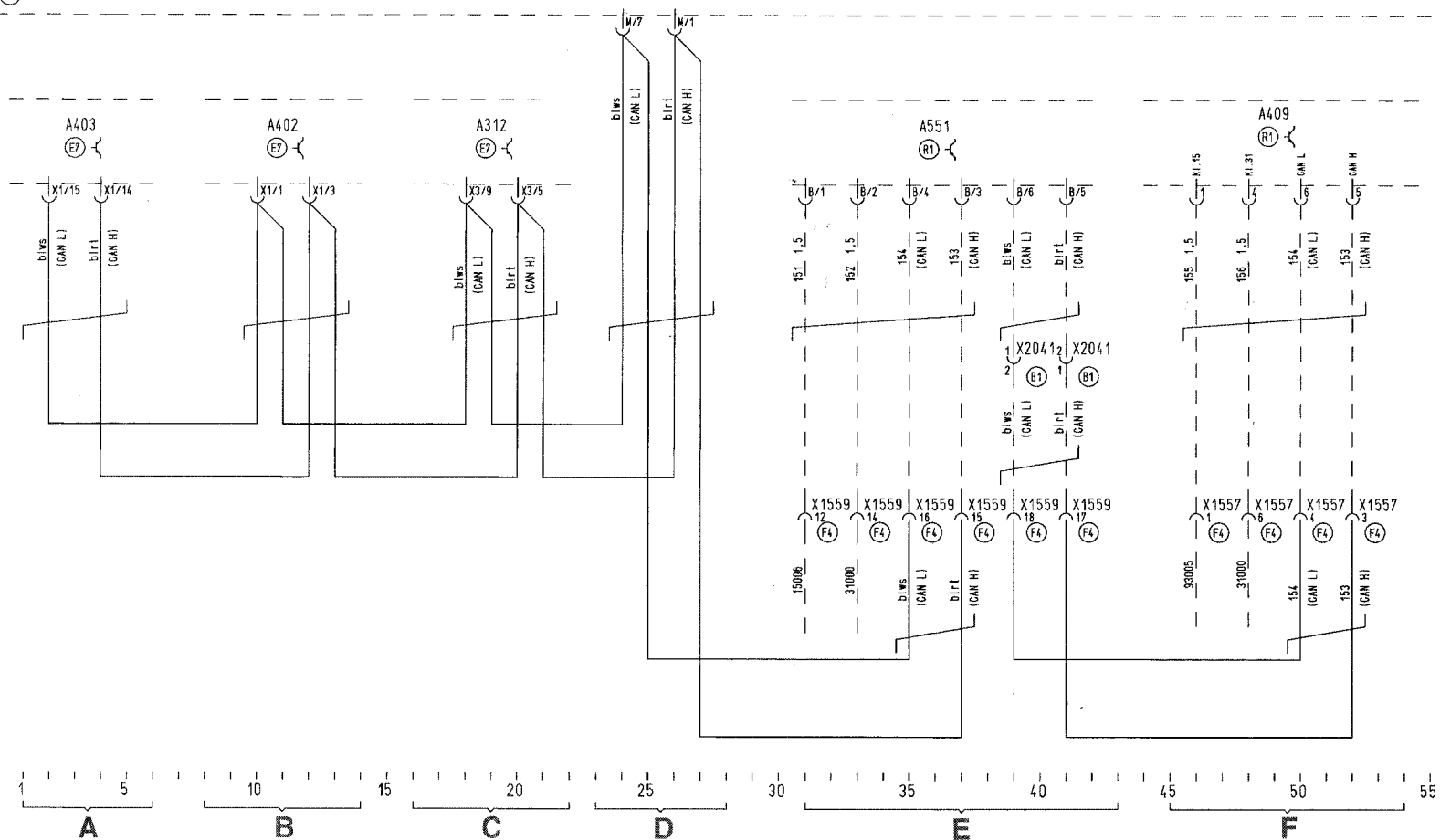
## Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

A100  
(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### AN databus driveline (T-CAN) with intarder or retarder

#### Legend

Wiring diagram no. **81.99192.2521** Sheet 1 of 1  
Change status: 03.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Intarder**

**D = Central vehicle computer**

**E = Oil level sensor**

**F = Electronically controlled air management unit**

|             |       |                                        |
|-------------|-------|----------------------------------------|
| <b>A100</b> | (255) | Central fuse, relay and terminal block |
| <b>A144</b> | (451) | Control unit, retarder                 |
| <b>A302</b> | (352) | Central computer 2                     |
| <b>A402</b> | (399) | EBS control unit                       |
| <b>A403</b> | (339) | Vehicle management computer            |
| <b>A409</b> | (353) | ECAM control unit                      |
| <b>A551</b> | (533) | Control unit, oil level sensor         |

|              |                                 |
|--------------|---------------------------------|
| <b>X1557</b> | Std. frame left                 |
| <b>X1559</b> | Std. engine/EDC/transmission IV |
| <b>X2041</b> | Std. adaptation AS-TRONIC       |

#### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

#### Note:

The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

The pin assignment for Voith retarders is: CAN High: X1/3  
CAN Low: X1/1

# ADDITIONAL WIRING DIAGRAMS

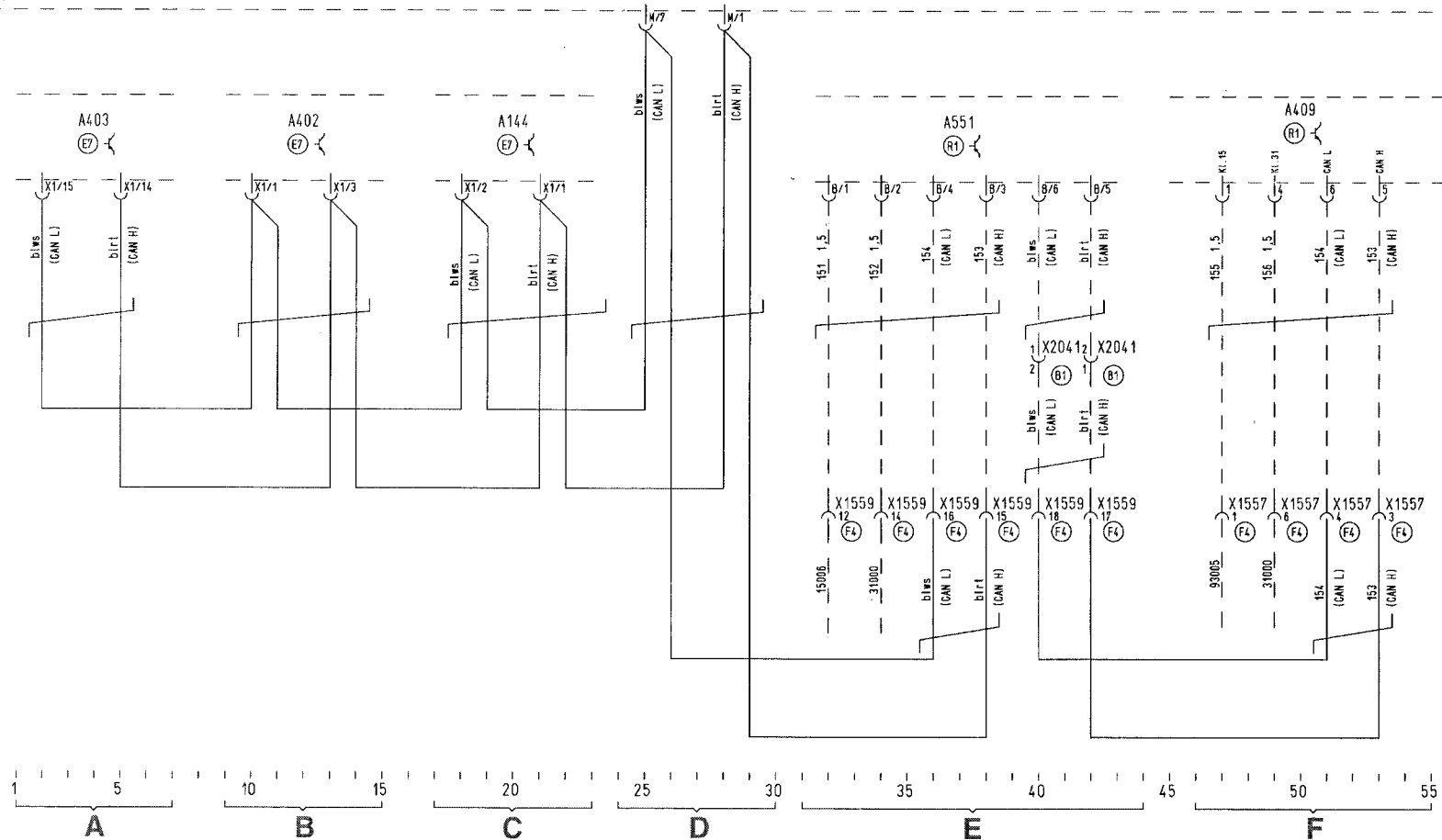
Wiring diagram no. **81.99192.2521** Sheet 1 of 1

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### CAN databus driveline (T-CAN) with intarder or retarder/AS-TRONIC

#### Legend

Wiring diagram no. **81.99192.2524** Sheet 1 of 1

Change status: 03.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Intarder**

**D = Central vehicle computer**

**E = Oil level sensor**

**F = AS-TRONIC**

**G = Electronically controlled air management unit**

|             |       |                                        |
|-------------|-------|----------------------------------------|
| <b>A100</b> | (255) | Central fuse, relay and terminal block |
| <b>A144</b> | (451) | Control unit, retarder                 |
| <b>A302</b> | (352) | Central computer 2                     |
| <b>A330</b> | (442) | Control unit, AS-TRONIC (at gearbox)   |
| <b>A402</b> | (399) | EBS control unit                       |
| <b>A403</b> | (339) | Vehicle management computer            |
| <b>A409</b> | (353) | ECAM control unit                      |
| <b>A551</b> | (533) | Control unit, oil level sensor         |

|              |                                 |
|--------------|---------------------------------|
| <b>X1557</b> | Std. frame left                 |
| <b>X1559</b> | Std. engine/EDC/transmission IV |
| <b>X2042</b> | Std. adaptation AS-TRONIC       |
| <b>X2043</b> | Std. adaptation AS-TRONIC       |

#### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

#### Note:

The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

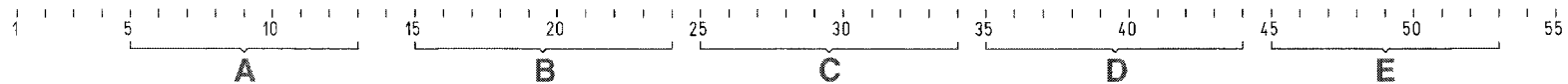
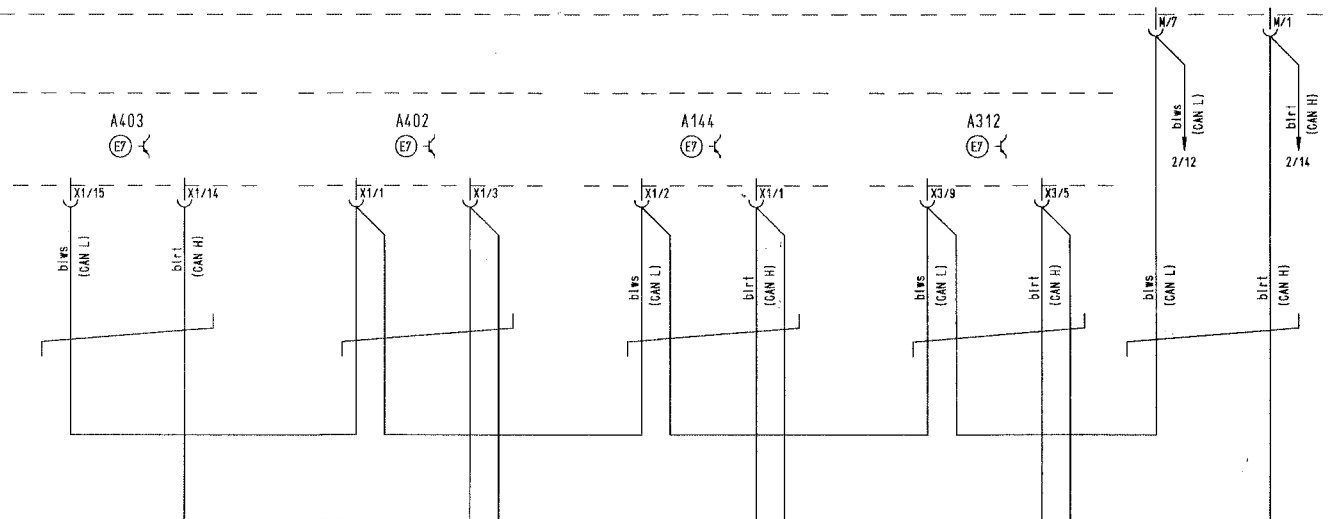
The pin assignment for Voith retarders is: CAN High: X1/3  
CAN Low: X1/1

**ADDITIONAL WIRING DIAGRAMS**

Wiring diagram no. **81.99192.2432** Sheet 1 of 2

A100  
(E6)

A302  
(E6)



**CAN databus driveline (T-CAN) with interarder or retarder/  
special customer module**

**Legend**

Wiring diagram no. **81.99192.2432** Sheet 2 of 2  
Change status: 03.00

**A = Oil level sensor**

**B = Electronically controlled air management unit**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A409** (353) ECAM control unit  
**A551** (533) Control unit, oil level sensor

**X1557** Stvd. frame left  
**X1559** Stvd. engine/EDC/transmission IV  
**X2041** Stvd. adaptation AS-TRONIC

**Marking of mounting positions**

- |                             |                                 |
|-----------------------------|---------------------------------|
| Ⓐ Tail                      | Ⓕ Driving seat                  |
| Ⓑ Engine                    | Ⓖ Passenger seat                |
| Ⓒ Gearbox                   | Ⓗ Control panel                 |
| Ⓓ Front                     | Ⓖ Battery box                   |
| Ⓒ1 Bumper                   | Ⓗ1 B-pillar on driver's side    |
| Ⓒ2 Entrance right           | Ⓗ2 A-pillar on driver's side    |
| Ⓒ3 Entrance left            | Ⓖ1 B-pillar on passenger's side |
| Ⓔ Central electrics area    | Ⓖ2 A-pillar on passenger's side |
| Ⓔ Control unit racks        | Ⓖ Ceiling/roof                  |
| Ⓔ Rear wall of cab          | Ⓖ Front axle                    |
| Ⓖ Instrument panel          | Ⓖ Rear axle                     |
| Ⓖ1 Central part             | Ⓖ1 Front part of frame          |
| Ⓖ2 Steering wheel/column    | Ⓖ2 Rear part of frame           |
| Ⓖ3 Foot pedals              | Ⓖ1 Door left                    |
| Ⓖ4 Front wall, inside left  | Ⓖ2 Door right                   |
| Ⓖ5 Front wall, inside right |                                 |

ADDITIONAL WIRING DIAGRAMS

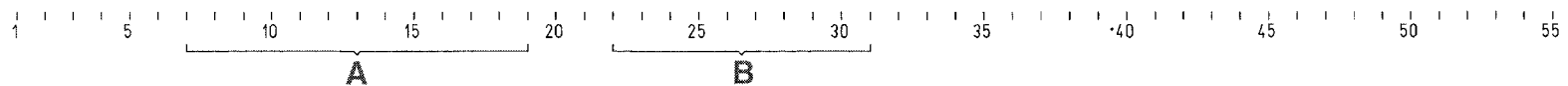
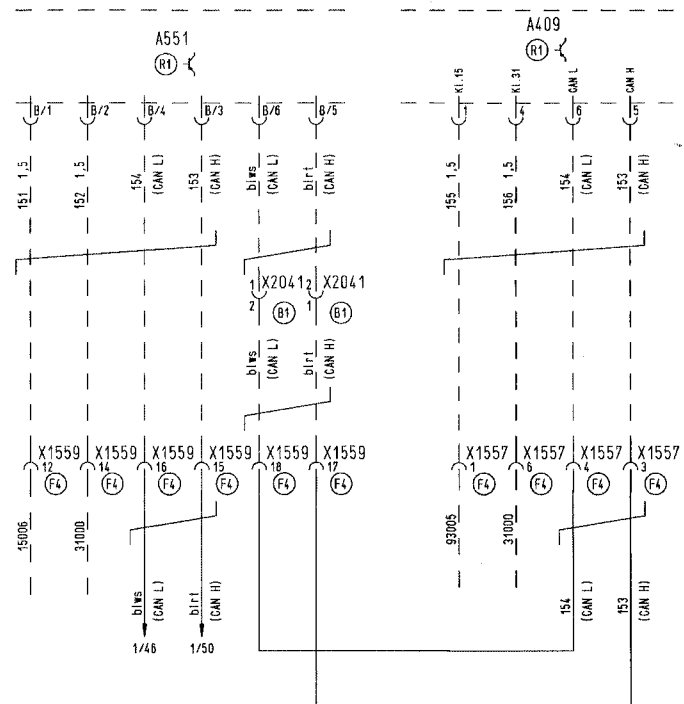
Wiring diagram no. 81.99192.2432 Sheet 2 of 2

A100

(E6)

A302

(E6)





**CAN databus driveline (T-CAN) with AS-TRONIC/  
special customer module**

**Legend**

Wiring diagram no. **81.99192.2433** Sheet 1 of 2  
Change status: 03.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Special customer module**

**D = Central vehicle computer**

**E = Oil level sensor**

A100 (255) Central fuse, relay and terminal block  
A302 (352) Central computer 2  
A312 (397) Customer-specific control module  
A402 (399) EBS control unit  
A403 (339) Vehicle management computer  
A551 (533) Control unit, oil level sensor

X1559 Stvd. engine/EDC/transmission IV  
X2042 Stvd. adaptation AS-TRONIC

**Marking of mounting positions**

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓕ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓖ Instrument panel         | Ⓕ Rear axle                    |
| Ⓖ Central part             | Ⓕ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓕ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓕ Door left                    |
| Ⓖ Front wall, inside left  | Ⓕ Door right                   |
| Ⓖ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

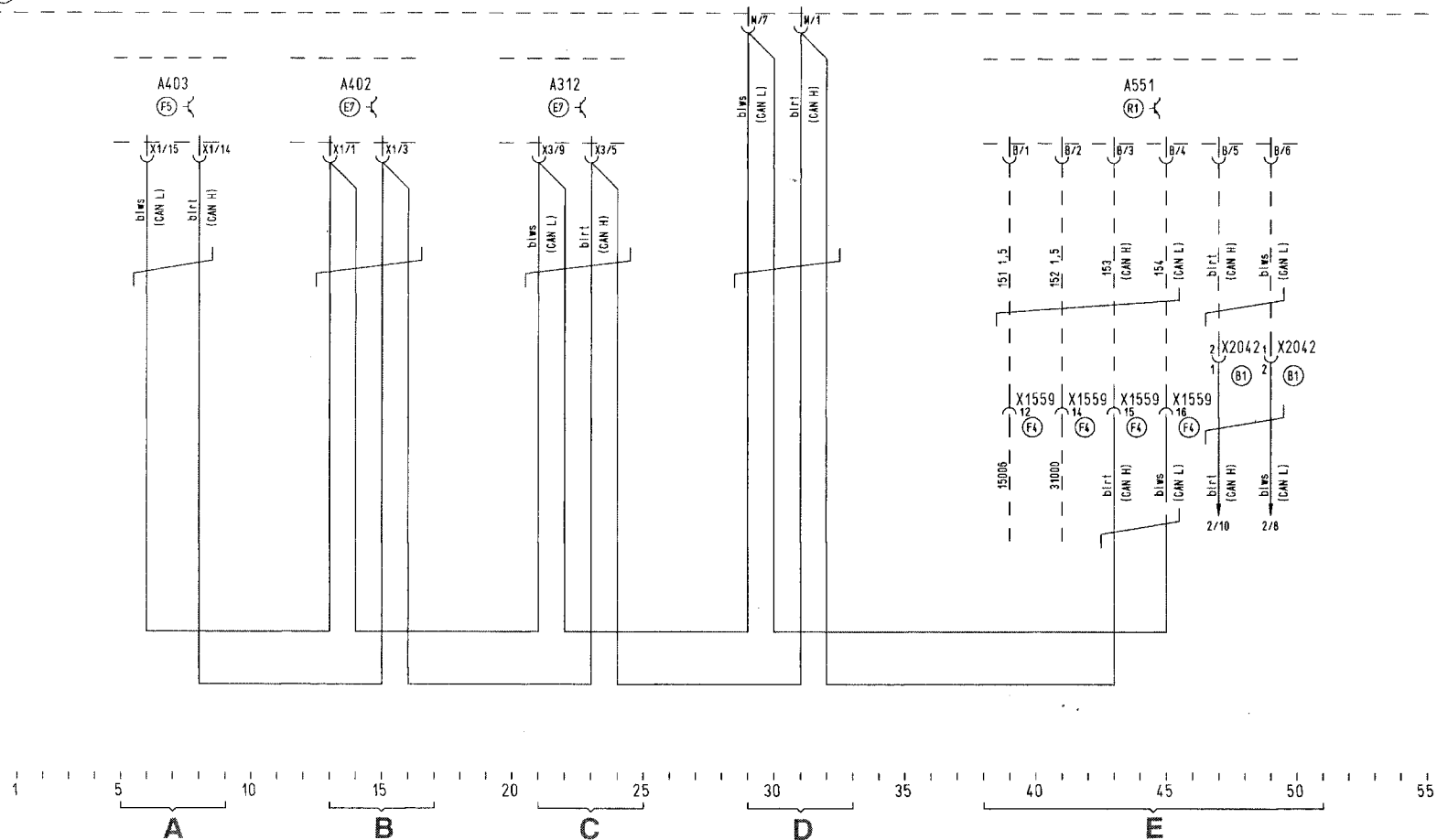
Wiring diagram no. 81.99192.2433 Sheet 1 of 2

A100

(E6)

A302

(E6)



**CAN databus driveline (T-CAN) with AS-TRONIC/  
special customer module**

**Legend**

Wiring diagram no. **81.99192.2433** Sheet 2 of 2  
Change status: 06.99

**A = AS-TRONIC**

**B = Electronically controlled air management unit**

A100 (255) Central fuse, relay and terminal block  
A302 (352) Central computer 2  
A330 (442) Control unit, AS-TRONIC (at gearbox)  
A409 (353) ECAM control unit

X1557 Stvd. frame left  
X1559 Stvd. engine/EDC/transmission IV  
X2043 Stvd. adaptation AS-TRONIC

**Marking of mounting positions**

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓕ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

**ADDITIONAL WIRING DIAGRAMS**

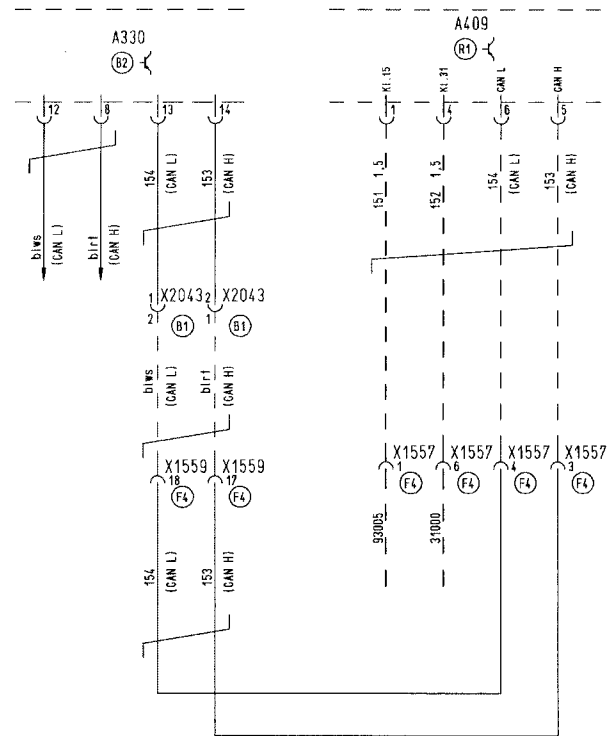
Wiring diagram no. **81.99192.2433** Sheet **2** of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### CAN databus driveline (T-CAN) with intarder or retarder/ AS-TRONIC/special customer module

#### Legend

Wiring diagram no. **81.99192.2435** Sheet 1 of 2  
Change status: 03.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Intarder**

**D = Special customer module**

**E = Central vehicle computer**

**F = Oil level sensor**

|      |       |                                        |
|------|-------|----------------------------------------|
| A100 | (255) | Central fuse, relay and terminal block |
| A144 | (451) | Control unit, retarder                 |
| A302 | (352) | Central computer 2                     |
| A312 | (397) | Customer-specific control module       |
| A402 | (399) | EBS control unit                       |
| A403 | (339) | Vehicle management computer            |
| A551 | (533) | Control unit, oil level sensor         |

|       |                                 |
|-------|---------------------------------|
| X1559 | Std. engine/EDC/transmission IV |
| X2042 | Std. adaptation AS-TRONIC       |

#### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

#### Note:

The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

The pin assignment for Voith retarders is: CAN High: X1/3  
CAN Low: X1/1

ADDITIONAL WIRING DIAGRAMS

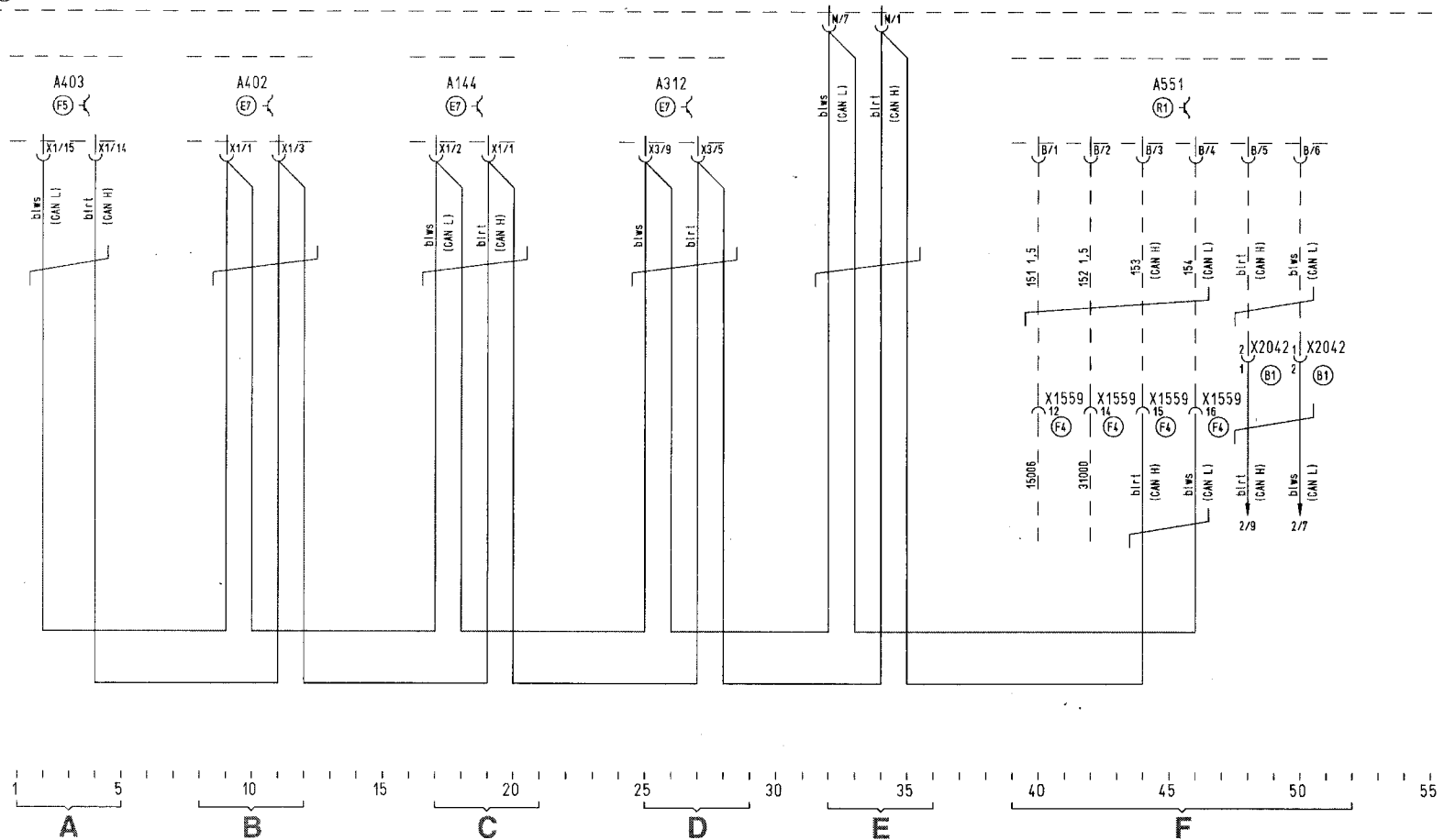
Wiring diagram no. 81.99192.2435 Sheet 1 of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### CAN databus driveline (T-CAN) with intarder or retarder/ AS-TRONIC/special customer module

#### Legend

Wiring diagram no. **81.99192.2435** Sheet **2** of 2  
Change status: 06.99

**A = AS-TRONIC**

**B = Electronically controlled air management unit**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A330** (442) Control unit, AS-TRONIC (at gearbox)  
**A409** (353) ECAM control unit

**X1557** Stvd. frame left  
**X1559** Stvd. engine/EDC/transmission IV  
**X2043** Stvd. adaptation AS-TRONIC

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

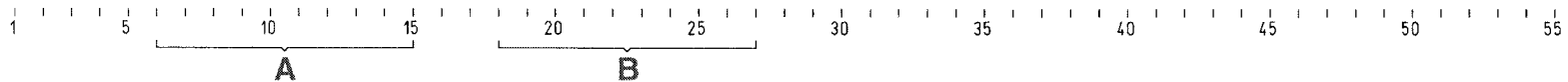
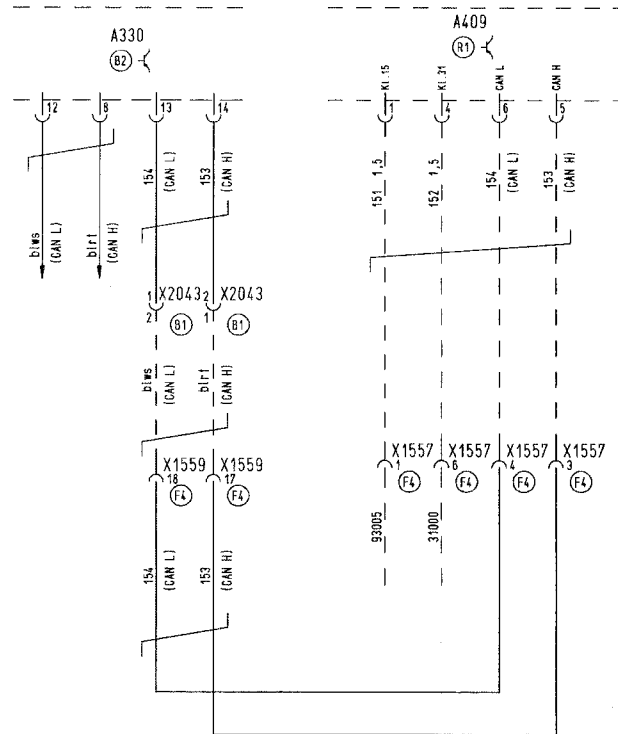
Wiring diagram no. **81.99192.2435** Sheet **2** of 2

A100

(E6)

A302

(F6)





## ADDITIONAL WIRING DIAGRAMS

### CAN databus driveline (T-CAN) with ECAS/AS-TRONIC/RAS-EC

#### Legend

Wiring diagram no. **81.99192.2783** Sheet **1** of 2

Change status: 05.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Electronically controlled air suspension**

**D = Electronically controlled steered rear axle (RAS-EC)**

**E = Central vehicle computer**

**A100** (255) Central fuse, relay and terminal block

**A143** (343) ECAS control unit

**A302** (352) Central computer 2

**A384** (548) Control unit ZF – RAS-EC

**A402** (399) EBS control unit

**A403** (339) Vehicle management computer

**X2395** Stvd. cab rump RAS-EC 2

**X2400** Crimped connector, line blue/red

**X2401** Crimped connector, line blue/white

#### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

ADDITIONAL WIRING DIAGRAMS

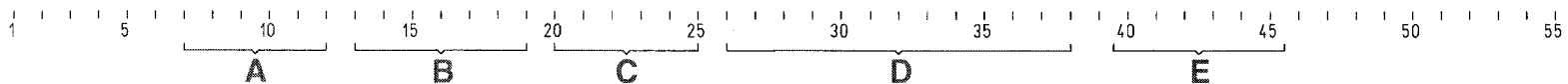
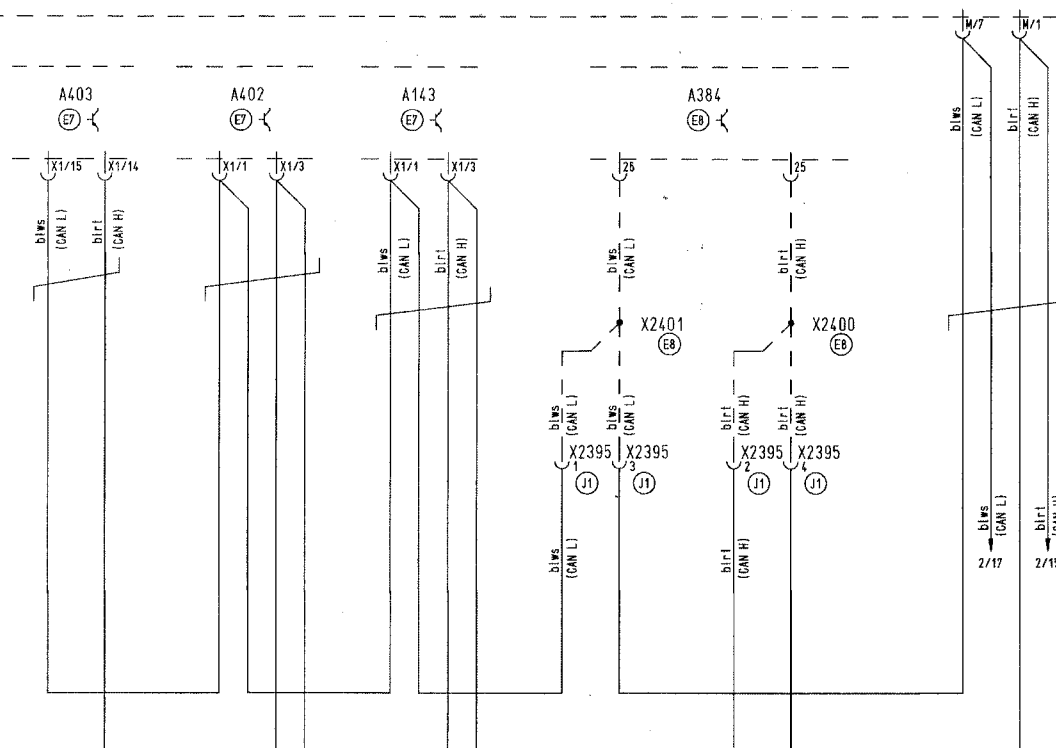
Wiring diagram no. 81.99192.2783 Sheet 1 of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### CAN databus driveline (T-CAN) with ECAS/AS-TRONIC/RAS-EC

#### Legend

Wiring diagram no. **81.99192.2783** Sheet 2 of 2

Change status: 05.00

**A = Oil level sensor**

**B = AS-TRONIC**

**C = Electronically controlled air management unit**

A100 (255) Central fuse, relay and terminal block  
 A302 (352) Central computer 2  
 A330 (442) Control unit, AS-TRONIC (at gearbox)  
 A409 (353) ECAM control unit  
 A551 (533) Control unit, oil level sensor

X1557 Stvd. frame left  
 X1559 Stvd. engine/EDC/transmission IV  
 X2042 Stvd. adaptation AS-TRONIC  
 X2043 Stvd. adaptation AS-TRONIC

#### Marking of mounting positions

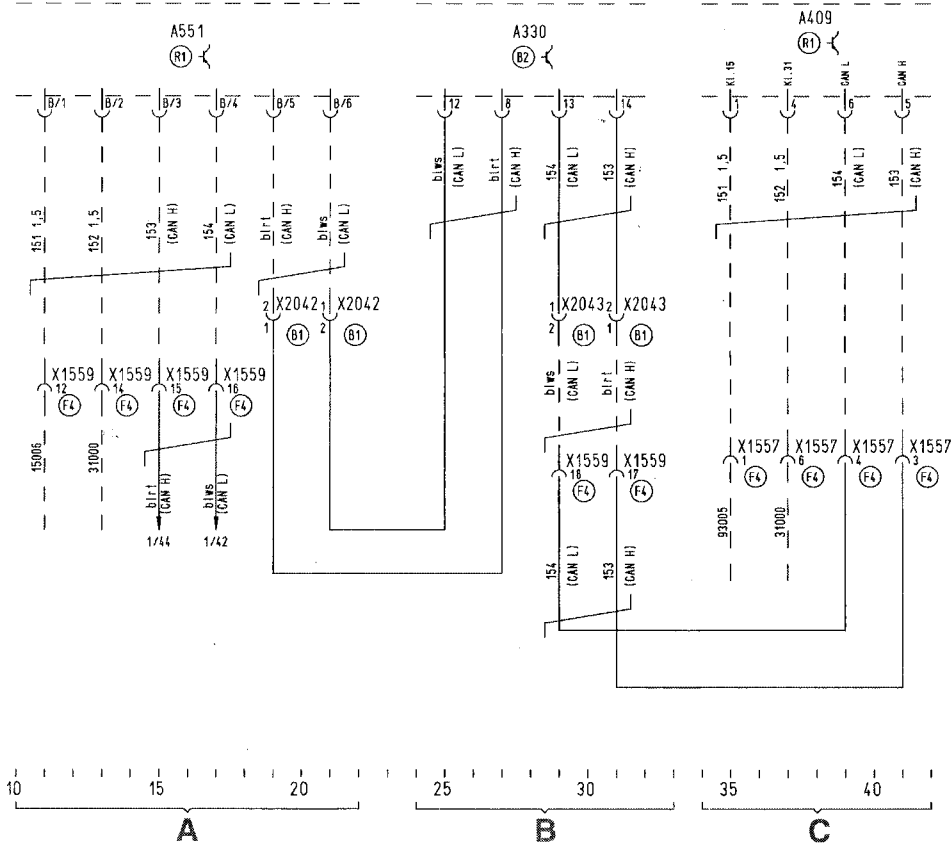
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2783** Sheet **2** of 2

A100  
(E6)

A302  
(E6)



## CAN databus driveline (T-CAN) without ECAM

### Legend

Wiring diagram no. **81.99192.2811** Sheet **1** of **1**  
Change status: 06.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Central vehicle computer**

**D = Oil level sensor**

**E = Terminator**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A402** (399) EBS control unit  
**A403** (339) Vehicle management computer  
**A551** (533) Control unit, oil level sensor

**R155** (122) Terminator CAN databus

**X1559** Stvd. engine/EDC/transmission IV  
**X2041** Stvd. adaptation AS-TRONIC

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

# ADDITIONAL WIRING DIAGRAMS

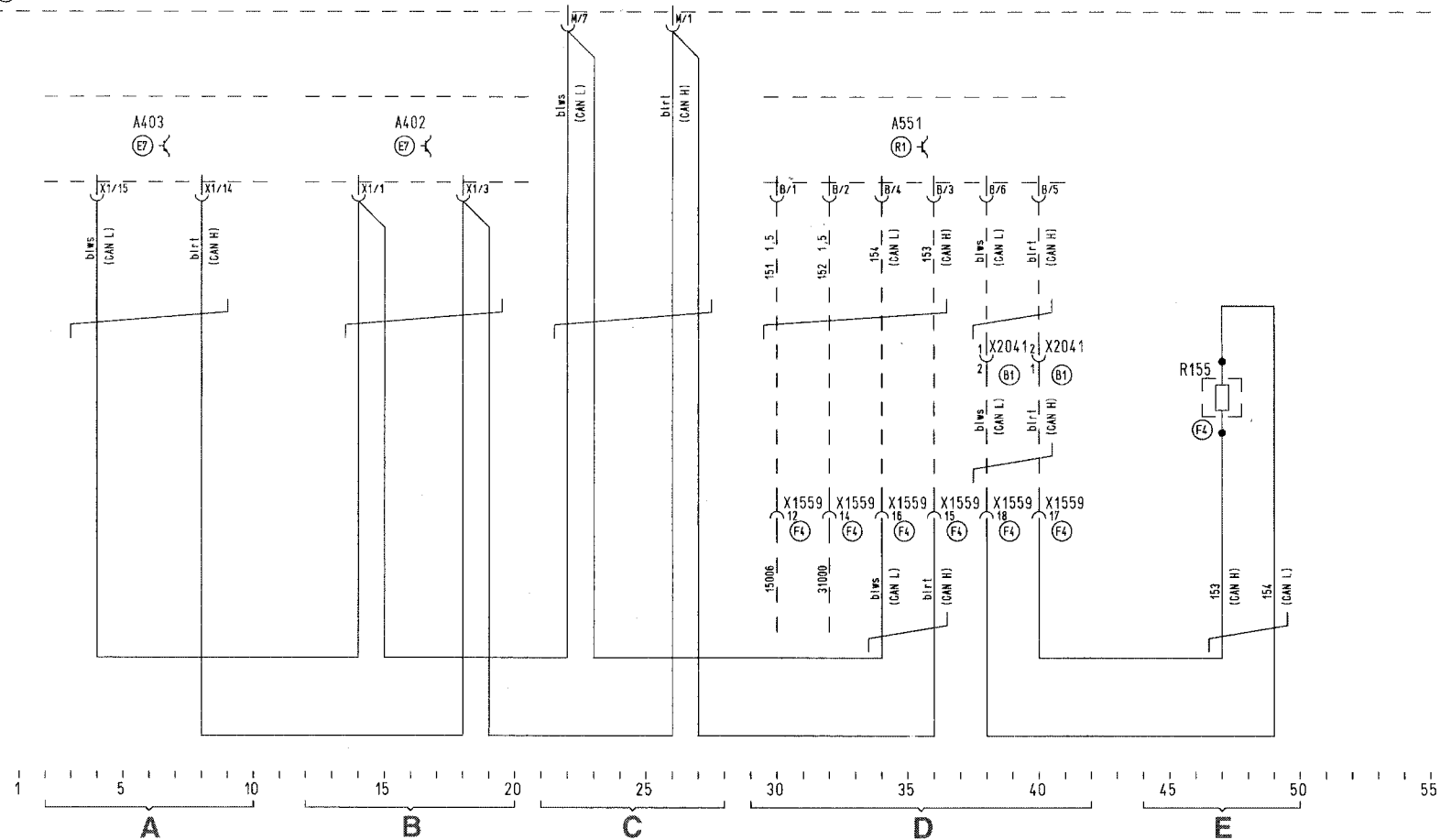
Wiring diagram no. **81.99192.2811** Sheet **1** of **1**

A100

(E6)

A302

(E6)



**CAN databus driveline (T-CAN) without ECAM but with AS-TRONIC**

**Legend**

Wiring diagram no. **81.99192.2824** Sheet **1** of 1

Change status: 06.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Central vehicle computer**

**D = Oil level sensor**

**E = AS-TRONIC**

**F = Terminator**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A330** (442) Control unit, AS-TRONIC (at gearbox)  
**A402** (399) EBS control unit  
**A403** (339) Vehicle management computer  
**A551** (533) Control unit, oil level sensor

**R155** (122) Terminator CAN databus

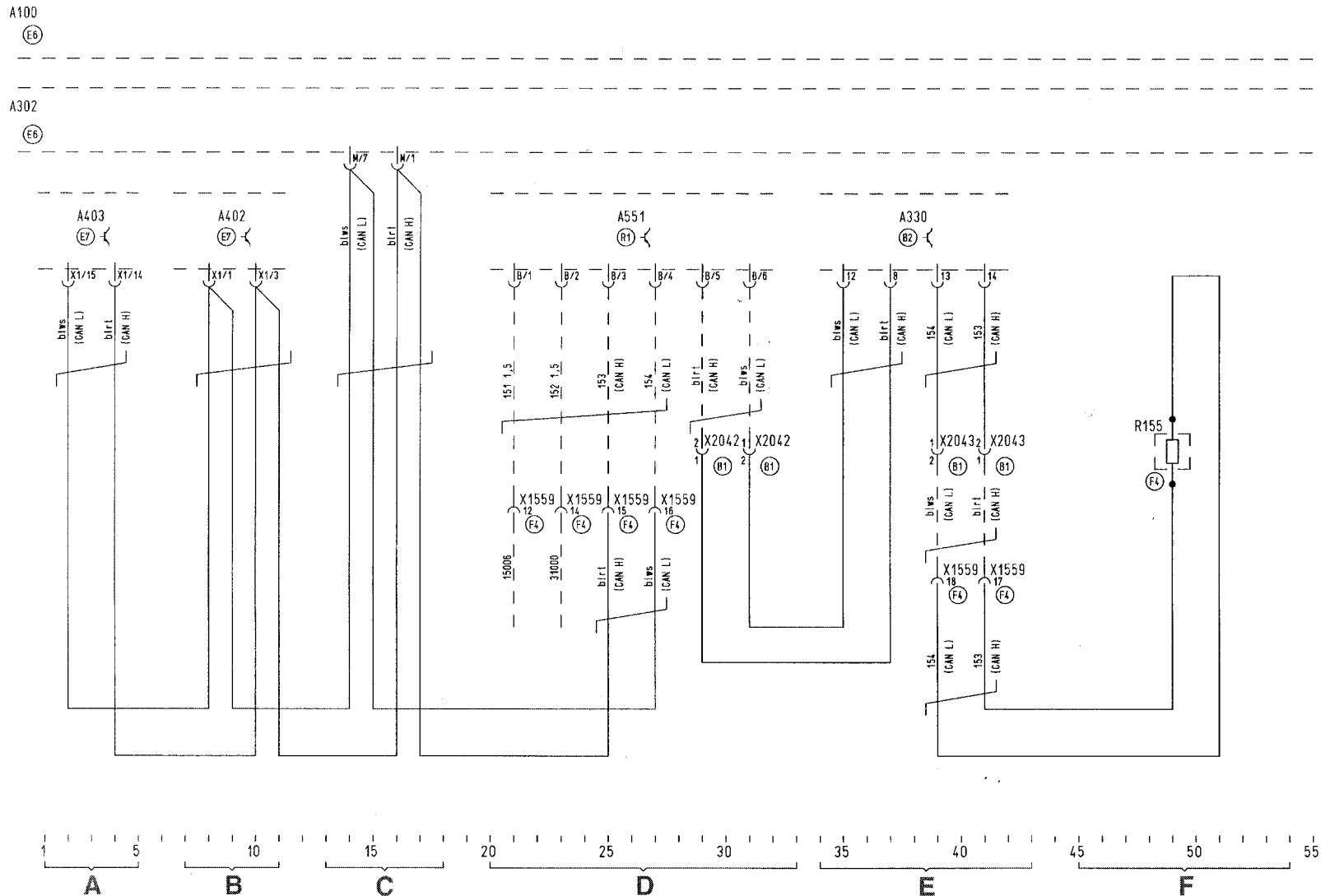
**X1559** Stvd. engine/EDC/transmission IV  
**X2042** Stvd. adaptation AS-TRONIC  
**X2043** Stvd. adaptation AS-TRONIC

**Marking of mounting positions**

- |                             |                                |
|-----------------------------|--------------------------------|
| Ⓐ Tail                      | Ⓕ Driving seat                 |
| Ⓑ Engine                    | Ⓖ Passenger seat               |
| Ⓑ2 Gearbox                  | Ⓕ Control panel                |
| Ⓒ Front                     | Ⓖ Battery box                  |
| Ⓒ1 Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ2 Entrance right           | Ⓕ A-pillar on driver's side    |
| Ⓒ3 Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area    | Ⓕ A-pillar on passenger's side |
| Ⓖ7 Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓖ8 Rear wall of cab         | Ⓕ Front axle                   |
| Ⓕ Instrument panel          | Ⓕ Rear axle                    |
| Ⓕ1 Central part             | Ⓕ Front part of frame          |
| Ⓕ2 Steering wheel/column    | Ⓕ Rear part of frame           |
| Ⓕ3 Foot pedals              | Ⓕ1 Door left                   |
| Ⓕ4 Front wall, inside left  | Ⓕ2 Door right                  |
| Ⓕ5 Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2824** Sheet **1** of **1**





**CAN databus driveline (T-CAN) without ECAM but with intarder or retarder**

**Legend**

Wiring diagram no. **81.99192.2823** Sheet **1** of 1  
Change status: 06.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Intarder**

**D = Central vehicle computer**

**E = Oil level sensor**

**F = Terminator**

**A100** (255) Central fuse, relay and terminal block  
**A144** (451) Control unit, retarder  
**A302** (352) Central computer 2  
**A402** (399) EBS control unit  
**A403** (339) Vehicle management computer  
**A551** (533) Control unit, oil level sensor

**R155** (122) Terminator CAN databus

**X1559** Stvd. engine/EDC/transmission IV  
**X2041** Stvd. adaptation AS-TRONIC

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

**Note:**

The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

The pin assignment for Voith retarders is: CAN High: X1/3  
CAN Low: X1/1

ADDITIONAL WIRING DIAGRAMS

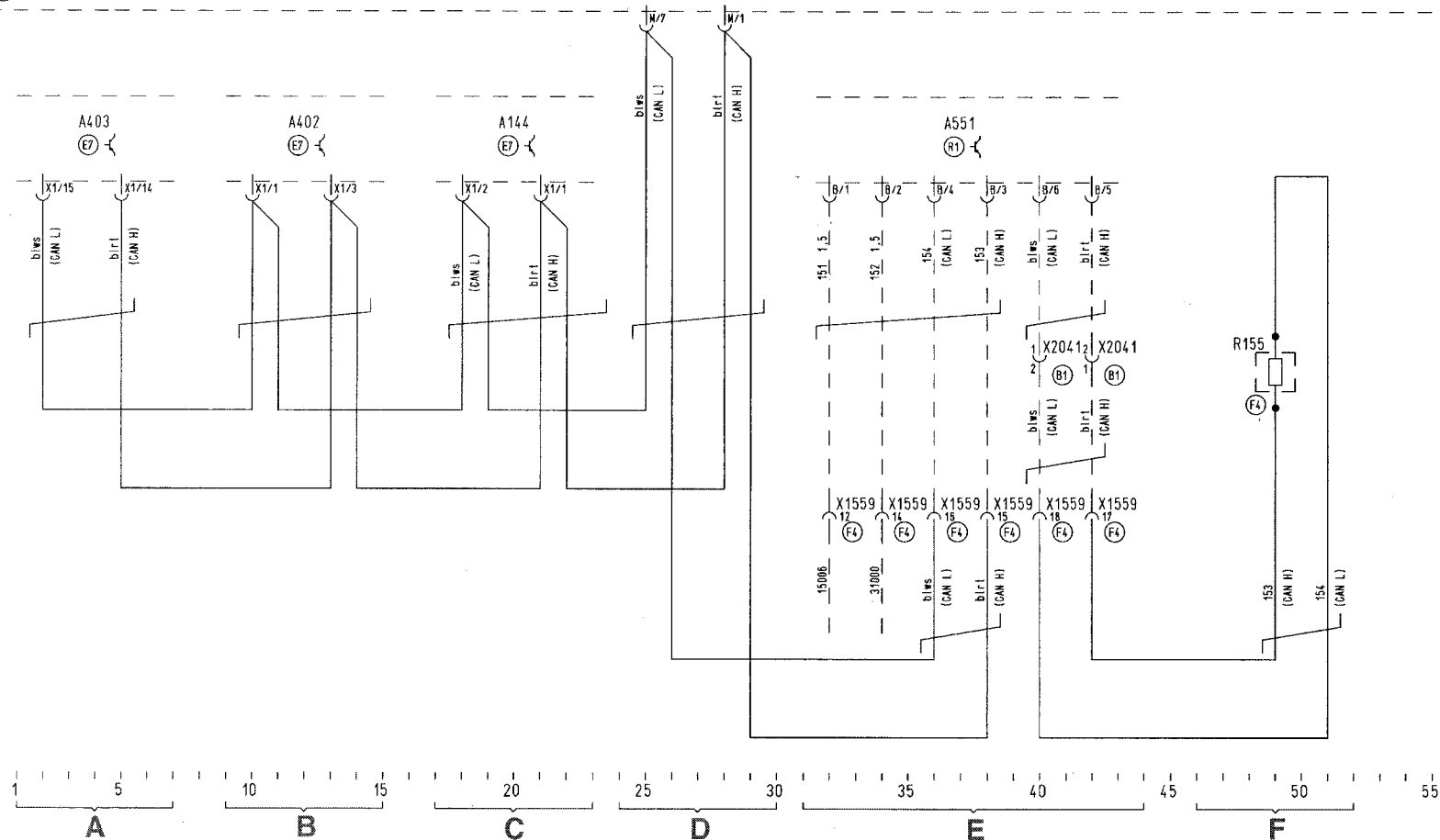
Wiring diagram no. **81.99192.2823** Sheet 1 of 1

A100

(E6)

A302

(E6)



**CAN databus driveline (T-CAN) without ECAM  
with special customer module**

**Legend**

Wiring diagram no. **81.99192.2814** Sheet **1** of 1  
Change status: 06.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Special customer module**

**D = Central vehicle computer**

**E = Oil level sensor**

**F = Terminator**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A312** (397) Customer-specific control module  
**A402** (399) EBS control unit  
**A403** (339) Vehicle management computer  
**A551** (533) Control unit, oil level sensor

**R155** (122) Terminator CAN databus

**X1559** Stvd. engine/EDC/transmission IV  
**X2041** Stvd. adaptation AS-TRONIC

**Marking of mounting positions**

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓗ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓗ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

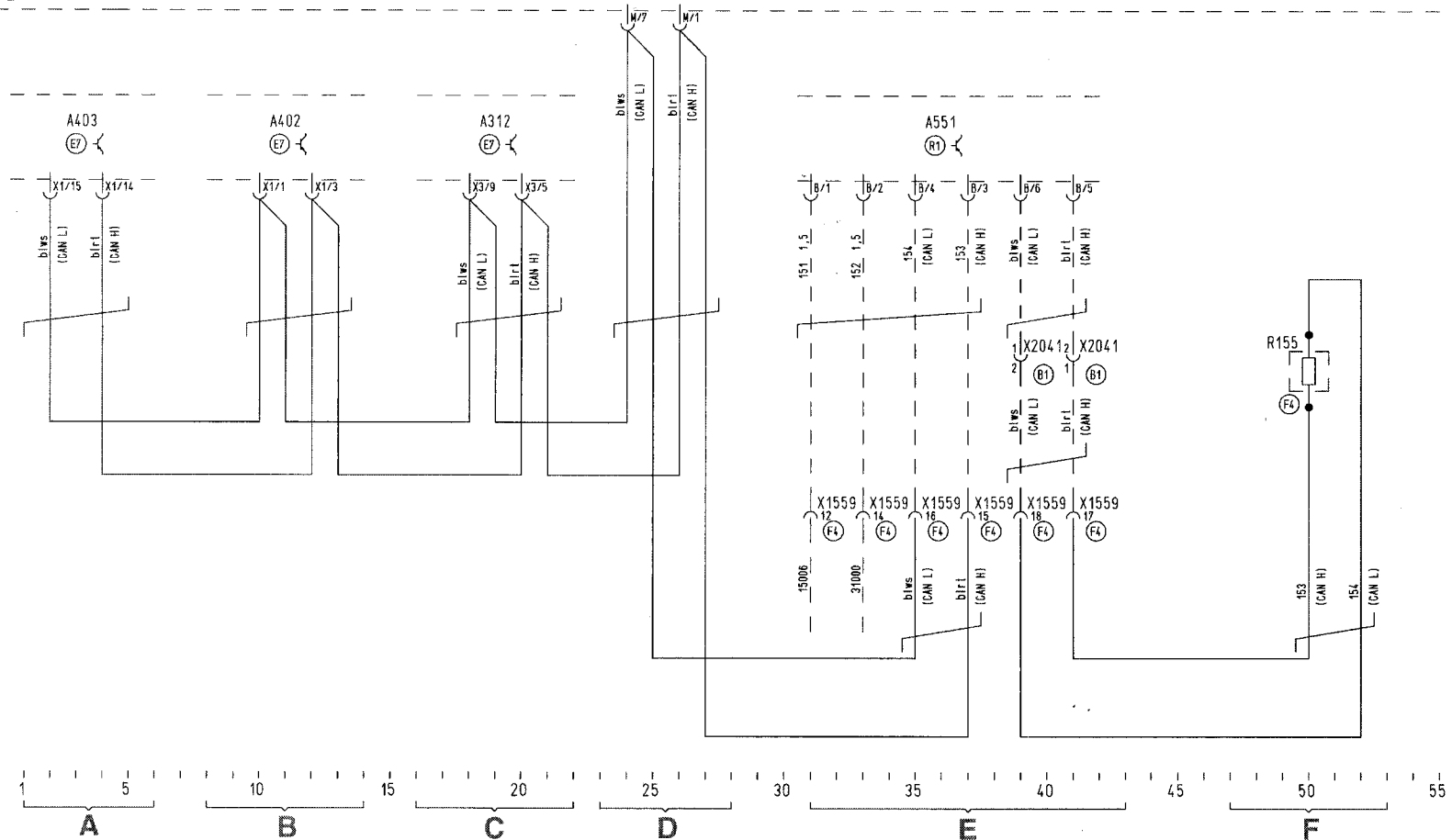
Wiring diagram no. **81.99192.2814** Sheet 1 of 1

A100

(E6)

A302

(E6)



**CAN databus driveline (T-CAN) without ECAM but with AS-TRONIC/  
special customised module**

**Legend**

Wiring diagram no. **81.99192.2819** Sheet 1 of 2  
Change status: 06.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Special customer module**

**D = Central vehicle computer**

**E = Oil level sensor**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A312** (397) Customer-specific control module  
**A402** (399) EBS control unit  
**A403** (339) Vehicle management computer  
**A551** (533) Control unit, oil level sensor

**X1559** Stvd. engine/EDC/transmission IV  
**X2042** Stvd. adaptation AS-TRONIC

**Marking of mounting positions**

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓕ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓕ Instrument panel         | Ⓕ Rear axle                    |
| Ⓕ Central part             | Ⓕ Front part of frame          |
| Ⓕ Steering wheel/column    | Ⓕ Rear part of frame           |
| Ⓕ Foot pedals              | Ⓕ Door left                    |
| Ⓕ Front wall, inside left  | Ⓕ Door right                   |
| Ⓕ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

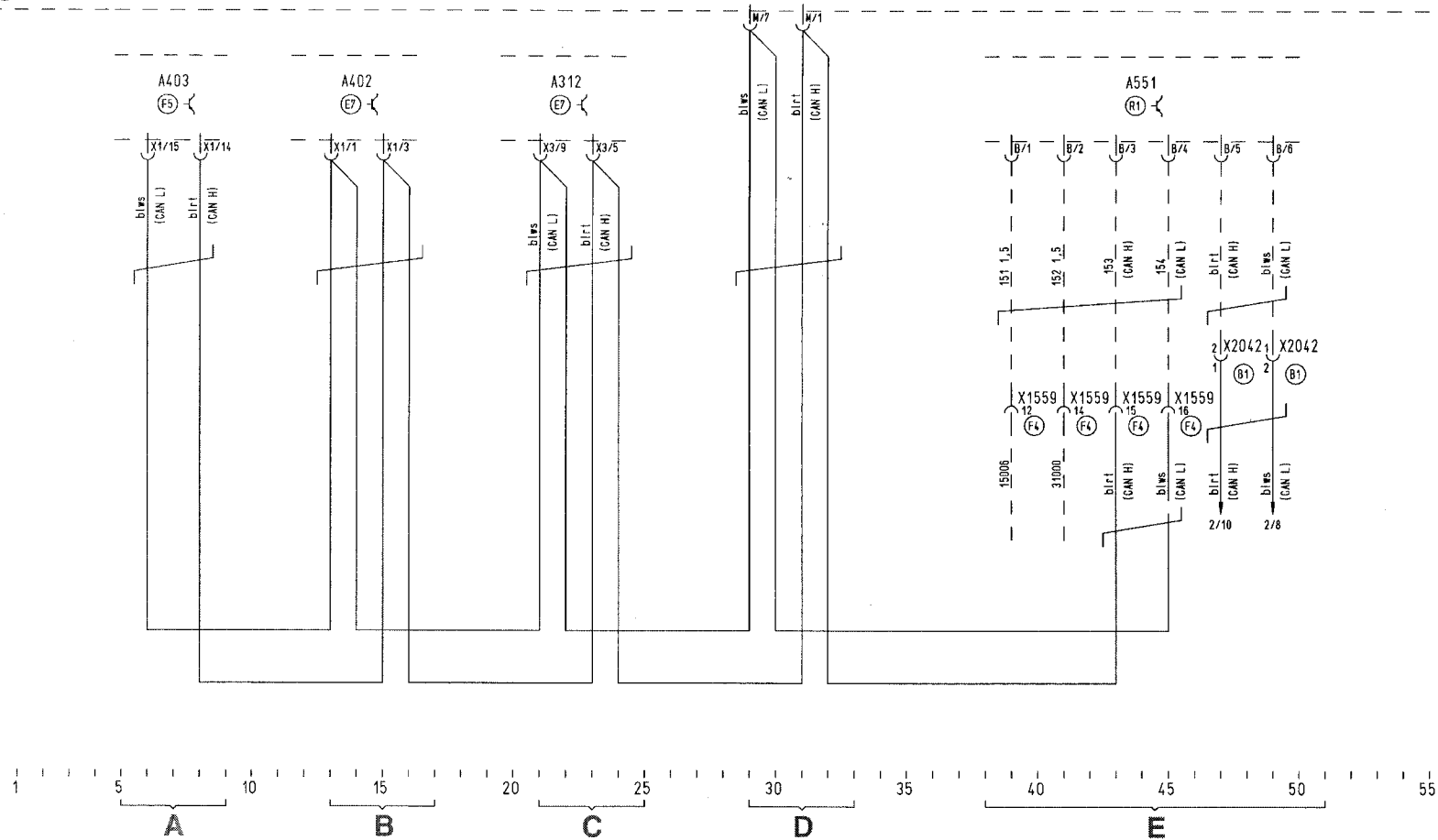
Wiring diagram no. 81.99192.2819 Sheet 1 of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### CAN databus driveline (T-CAN) without ECAM but with AS-TRONIC/ special customised module

#### Legend

Wiring diagram no. **81.99192.2819** Sheet **2** of 2

Change status: 06.00

**A = AS-TRONIC**

**B = Terminator**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A330** (442) Control unit, AS-TRONIC (at gearbox)

**R155** (112) Terminator CAN databus

**X1559** Stvd. engine/EDC/transmission IV

**X2043** Stvd. adaptation AS-TRONIC

### Marking of mounting positions

- |                             |                                 |
|-----------------------------|---------------------------------|
| Ⓐ Tail                      | Ⓕ Driving seat                  |
| Ⓑ Engine                    | Ⓖ Passenger seat                |
| Ⓒ Gearbox                   | Ⓗ Control panel                 |
| Ⓓ Front                     | Ⓖ Battery box                   |
| Ⓒ1 Bumper                   | Ⓗ1 B-pillar on driver's side    |
| Ⓒ2 Entrance right           | Ⓗ2 A-pillar on driver's side    |
| Ⓒ3 Entrance left            | Ⓖ1 B-pillar on passenger's side |
| Ⓔ Central electrics area    | Ⓖ2 A-pillar on passenger's side |
| Ⓔ Control unit racks        | Ⓖ Ceiling/roof                  |
| Ⓔ Rear wall of cab          | Ⓖ Front axle                    |
| Ⓖ Instrument panel          | Ⓖ Rear axle                     |
| Ⓖ1 Central part             | Ⓖ1 Front part of frame          |
| Ⓖ2 Steering wheel/column    | Ⓖ2 Rear part of frame           |
| Ⓖ3 Foot pedals              | Ⓖ1 Door left                    |
| Ⓖ4 Front wall, inside left  | Ⓖ2 Door right                   |
| Ⓖ5 Front wall, inside right |                                 |

ADDITIONAL WIRING DIAGRAMS

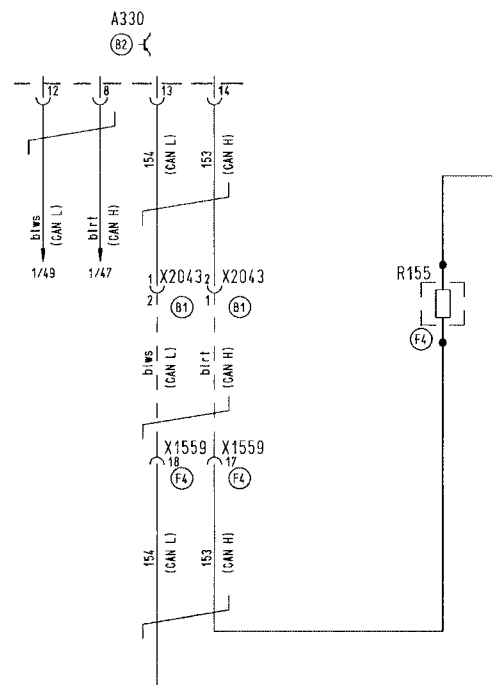
Wiring diagram no. 81.99192.2819 Sheet 2 of 2

A100

(E6)

A302

(E6)





**CAN databus driveline (T-CAN) without ECAM but with ECAS/  
AS-TRONIC/RAS-EC**

**Legend**

Wiring diagram no. **81.99192.2827** Sheet 1 of 2  
Change status: 06.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Electronically controlled air suspension**

**D = Electronically controlled steered rear axle (RAS-EC)**

**E = Central vehicle computer**

**A100** (255) Central fuse, relay and terminal block

**A143** (343) ECAS control unit

**A302** (352) Central computer 2

**A384** (548) Control unit ZF – RAS-EC

**A402** (399) EBS control unit

**A403** (339) Vehicle management computer

**X2395** Stvd. cab rump RAS-EC 2

**X2400** Crimped connector, line blue/red

**X2401** Crimped connector, line blue/white

**Marking of mounting positions**

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

ADDITIONAL WIRING DIAGRAMS

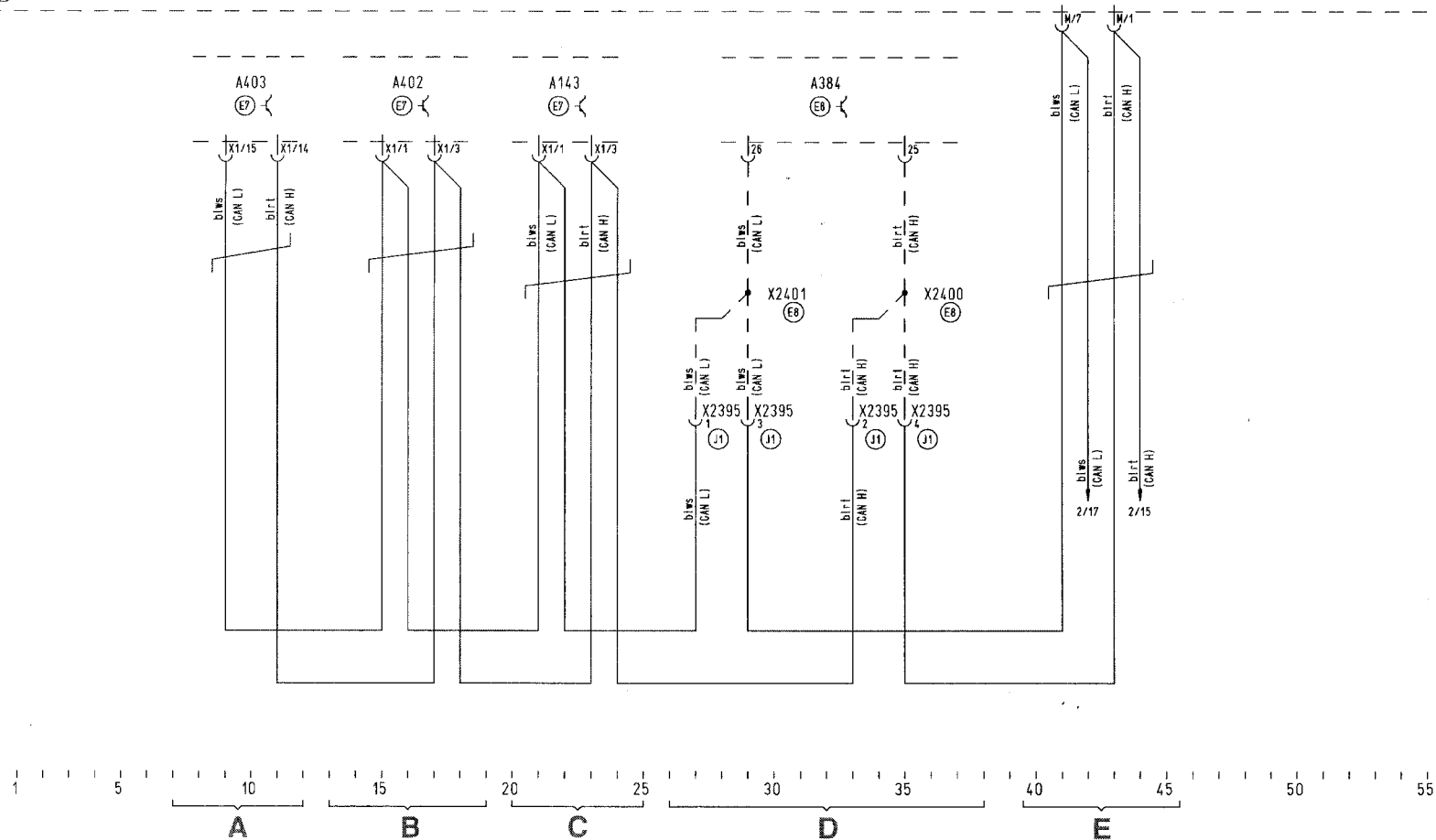
Wiring diagram no. 81.99192.2827 Sheet 1 of 2

A100

(E6)

A302

(E6)



**CAN databus driveline (T-CAN) without ECAM but with ECAS/  
AS-TRONIC/RAS-EC**

**Legend**

Wiring diagram no. **81.99192.2827** Sheet **2** of 2

Change status: 06.00

**A = Oil level sensor**

**B = AS-TRONIC**

**C = Terminator**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A330** (442) Control unit, AS-TRONIC (at gearbox)  
**A551** (533) Control unit, oil level sensor

**R155** (112) Terminator CAN databus

**X1559** Stvd. engine/EDC/transmission IV  
**X2042** Stvd. adaptation AS-TRONIC  
**X2043** Stvd. adaptation AS-TRONIC

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

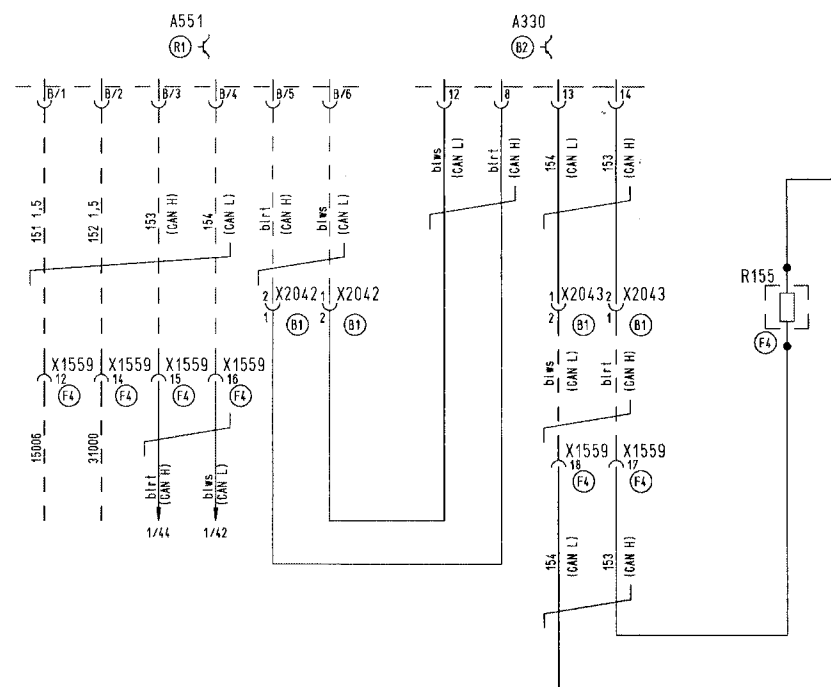
Wiring diagram no. 81.99192.2827 Sheet 2 of 2

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

A B C

## ADDITIONAL WIRING DIAGRAMS

### CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/special customer module

#### Legend

Wiring diagram no. **81.99192.2818** Sheet **1** of 2  
Change status: 06.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Intarder**

**D = Special customer module**

**E = Central vehicle computer**

|      |       |                                        |
|------|-------|----------------------------------------|
| A100 | (255) | Central fuse, relay and terminal block |
| A144 | (451) | Control unit, retarder                 |
| A302 | (352) | Central computer 2                     |
| A312 | (397) | Customer-specific control module       |
| A402 | (399) | EBS control unit                       |
| A403 | (339) | Vehicle management computer            |

#### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

#### Note:

The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

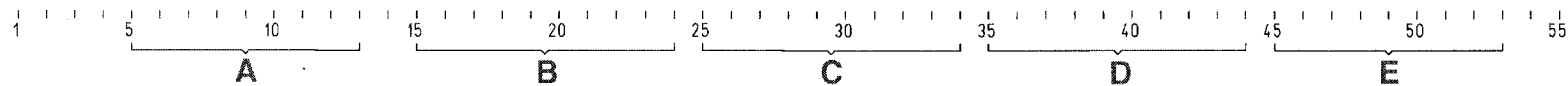
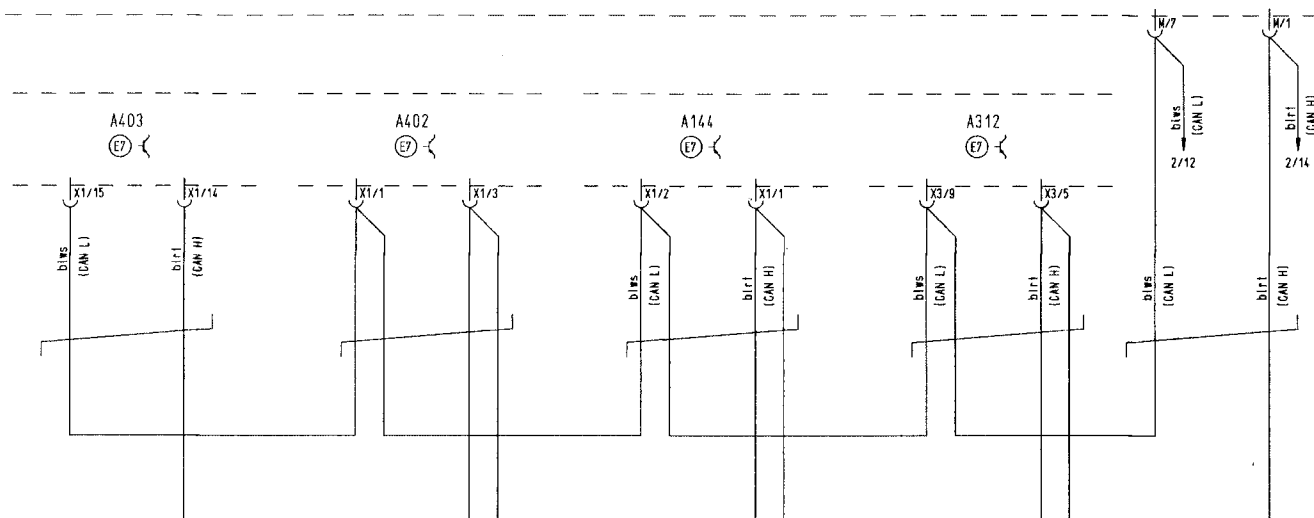
The pin assignment for Voith retarders is: CAN High: X1/3  
CAN Low: X1/1

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2818 Sheet 1 of 2

A100  
E6

A302  
E6



**CAN databus driveline (T-CAN) without ECAM but with interarder or retarder/special customer module**

**Legend**

Wiring diagram no. **81.99192.2818** Sheet **2** of 2  
Change status: 06.00

**A = Oil level sensor**

**B = Terminator**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A551** (533) Control unit, oil level sensor

**R155** (112) Terminator CAN databus

**X1559** Stvd. engine/EDC/transmission IV  
**X2041** Stvd. adaptation AS-TRONIC

**Marking of mounting positions**

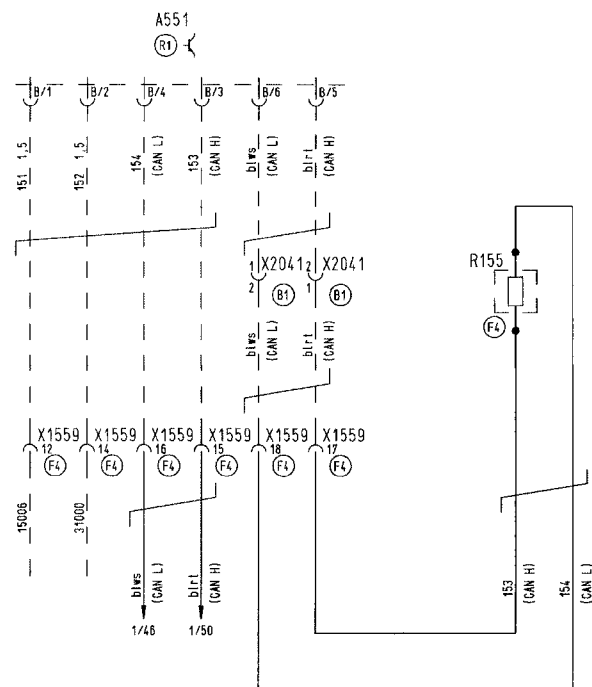
- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓕ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓖ Instrument panel         | Ⓕ Rear axle                    |
| Ⓖ Central part             | Ⓕ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓕ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓕ Door left                    |
| Ⓖ Front wall, inside left  | Ⓕ Door right                   |
| Ⓖ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2818** Sheet 2 of 2

A100  
(EB)

A302  
(EB)





## ADDITIONAL WIRING DIAGRAMS

### CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/AS-TRONIC

#### Legend

Wiring diagram no. **81.99192.2826** Sheet 1 of 1  
Change status: 06.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Intarder**

**D = Central vehicle computer**

**E = Oil level sensor**

**F = AS-TRONIC**

**G = Terminator**

**A100** (255) Central fuse, relay and terminal block  
**A144** (451) Control unit, retarder  
**A302** (352) Central computer 2  
**A330** (442) Control unit, AS-TRONIC (at gearbox)  
**A402** (399) EBS control unit  
**A403** (339) Vehicle management computer  
**A551** (533) Control unit, oil level sensor

**R155** (122) Terminator CAN databus

**X1559** Stvd. engine/EDC/transmission IV  
**X2042** Stvd. adaptation AS-TRONIC  
**X2043** Stvd. adaptation AS-TRONIC

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

#### Note:

The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

The pin assignment for Voith retarders is: CAN High: X1/3  
CAN Low: X1/1

ADDITIONAL WIRING DIAGRAMS

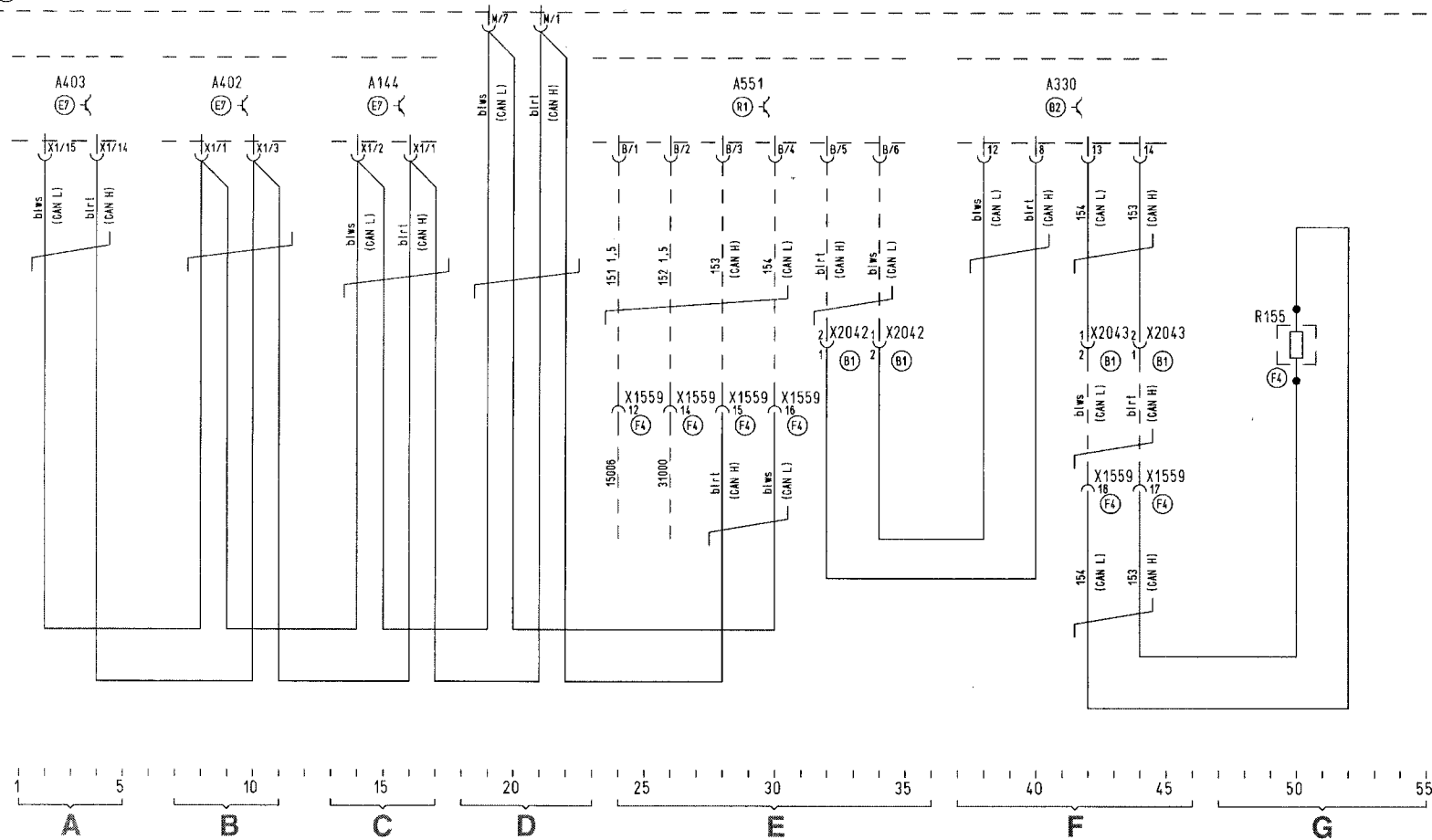
Wiring diagram no. 81.99192.2826 Sheet 1 of 1

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

**CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/AS-TRONIC/special customer module**

### Legend

Wiring diagram no. **81.99192.2821** Sheet **1** of 2  
Change status: 06.00

**A = Vehicle management computer**

**B = Electronic braking system**

**C = Intarder**

**D = Special customer module**

**E = Central vehicle computer**

**F = Oil level sensor**

**A100** (255) Central fuse, relay and terminal block  
**A144** (451) Control unit, retarder  
**A302** (352) Central computer 2  
**A312** (397) Customer-specific control module  
**A402** (399) EBS control unit  
**A403** (339) Vehicle management computer  
**A551** (533) Control unit, oil level sensor

**X1559** Stvd. engine/EDC/transmission IV  
**X2042** Stvd. adaptation AS-TRONIC

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

### Note:

The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

The pin assignment for Voith retarders is: CAN High: X1/3  
CAN Low: X1/1

ADDITIONAL WIRING DIAGRAMS

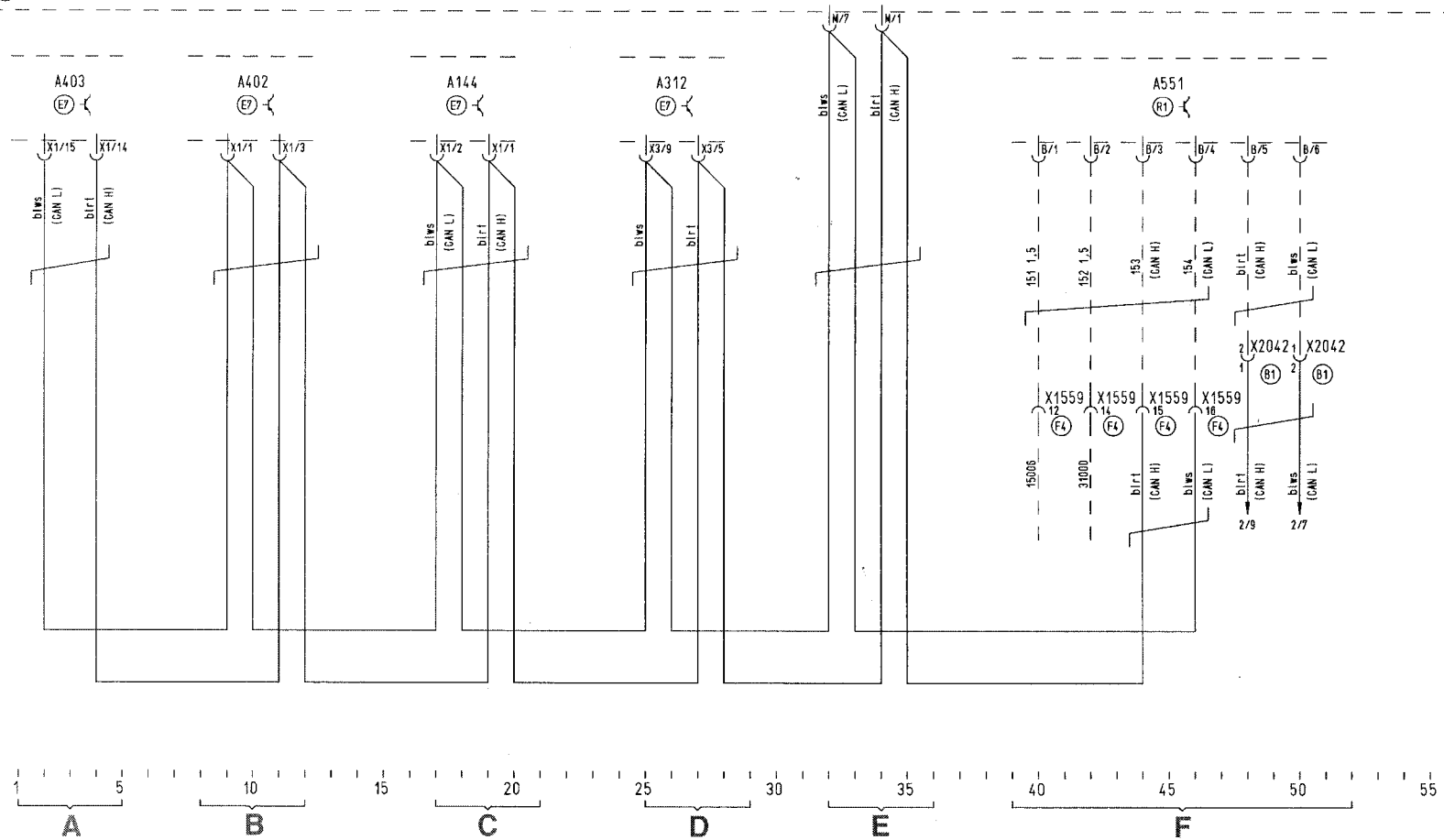
Wiring diagram no. 81.99192.2821 Sheet 1 of 2

A100

(E6)

A302

(E6)



**CAN databus driveline (T-CAN) without ECAM but with intarder or retarder/AS-TRONIC/special customer module**

**Legend**

Wiring diagram no. **81.99192.2821** Sheet **2** of 2  
Change status: 06.00

**A = AS-TRONIC**

**B = Terminator**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A330** (442) Control unit, AS-TRONIC (at gearbox)

**R155** (112) Terminator CAN databus

**X1559** Stvd. engine/EDC/transmission IV  
**X2043** Stvd. adaptation AS-TRONIC

**Marking of mounting positions**

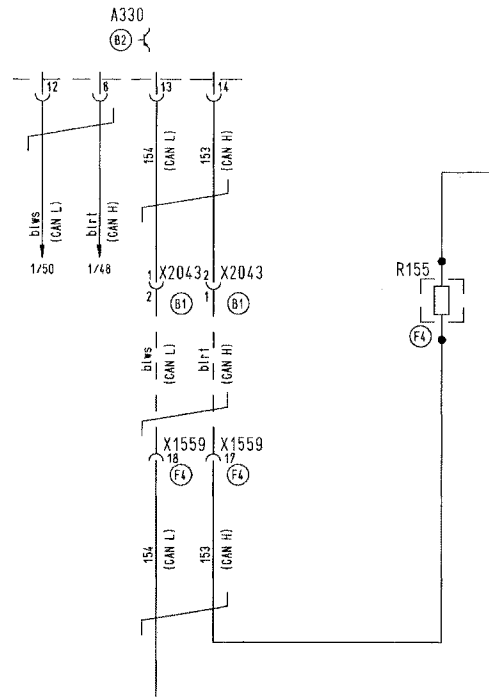
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

**ADDITIONAL WIRING DIAGRAMS**

Wiring diagram no. **81.99192.2821** Sheet **2** of 2

A100  
(E6)

A302  
(E6)



1 5 10 15 20 25 30 35 40 45 50 55  
A B

**ADDITIONAL WIRING DIAGRAMS**

## Differential lock longitudinal and transverse 3-axle

### Legend

Wiring diagram no. **81.99192.1366** Sheet 1 of 1

Change status: 04.01

### A = Differential lock

|              |                                                                     |
|--------------|---------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                        |
| <b>A302</b>  | (352) Central computer 2                                            |
| <b>A447</b>  | (439) Multi-functional display, differential locks                  |
| <b>F376</b>  | (101) Fuse, cab interior (terminal 15)                              |
| <b>G101</b>  | (113) Battery 2                                                     |
| <b>H398</b>  | Indicator light, differential lock, rear axle, transverse           |
| <b>H407</b>  | Indicator light, differential lock, rear axle, longitudinal         |
| <b>S185</b>  | (328) Switch, indicator, differential lock, rear axle, transverse   |
| <b>S186</b>  | (328) Indicator light, differential lock, 2nd rear axle, transverse |
| <b>S254</b>  | (328) Indicator light, differential lock, rear axle, transverse     |
| <b>S571</b>  | (492) Switch for differential locks                                 |
| <b>X327</b>  | Stvd. solenoid valve, frame                                         |
| <b>X637</b>  | Stvd. differential lock, rear axle                                  |
| <b>X1544</b> | Stvd. frame III                                                     |
| <b>X1557</b> | Stvd. frame, left                                                   |
| <b>X1639</b> | Soldered connector, line 16000                                      |
| <b>X2541</b> | (246) Potential distributor, 21-pin line 31000                      |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                      |
| <b>Y145</b>  | (126) Solenoid valve, differential lock, rear axle, transverse      |
| <b>Y150</b>  | (126) Solenoid valve, differential lock, longitudinal               |

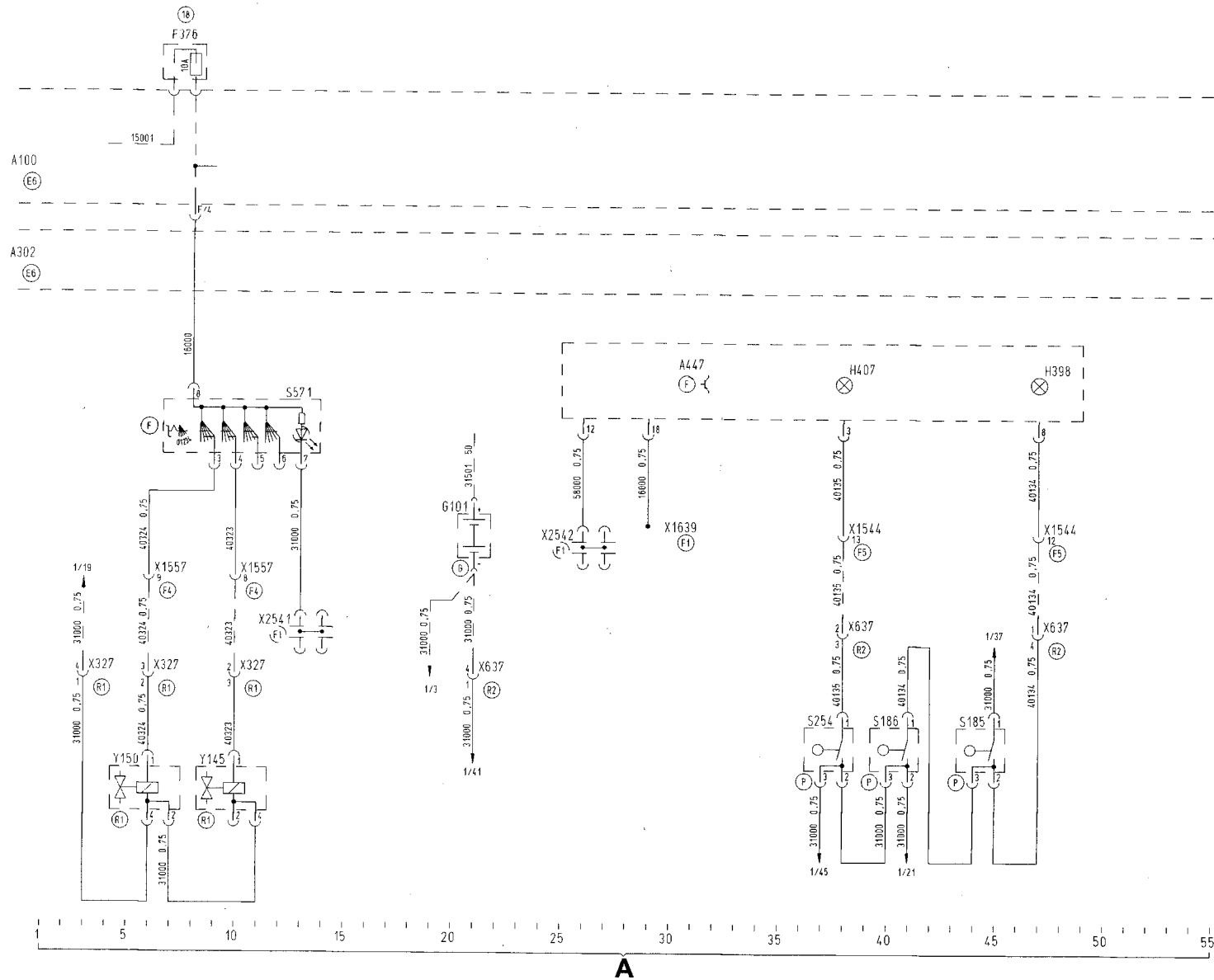
### Marking of mounting positions

|             |                          |             |                              |
|-------------|--------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                     | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                   | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                  | <b>(FB)</b> | Control panel                |
| <b>(C)</b>  | Front                    | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                   | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right           | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left            | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area   | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks       | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab         | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel         | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part             | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column    | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals              | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left  | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right |             |                              |



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1366 Sheet 1 of 1



## Differential lock transverse, rear axle

### Legend

Wiring diagram no. **81.99192.1365** Sheet **1** of 1  
Change status: 04.01

### A = Differential lock

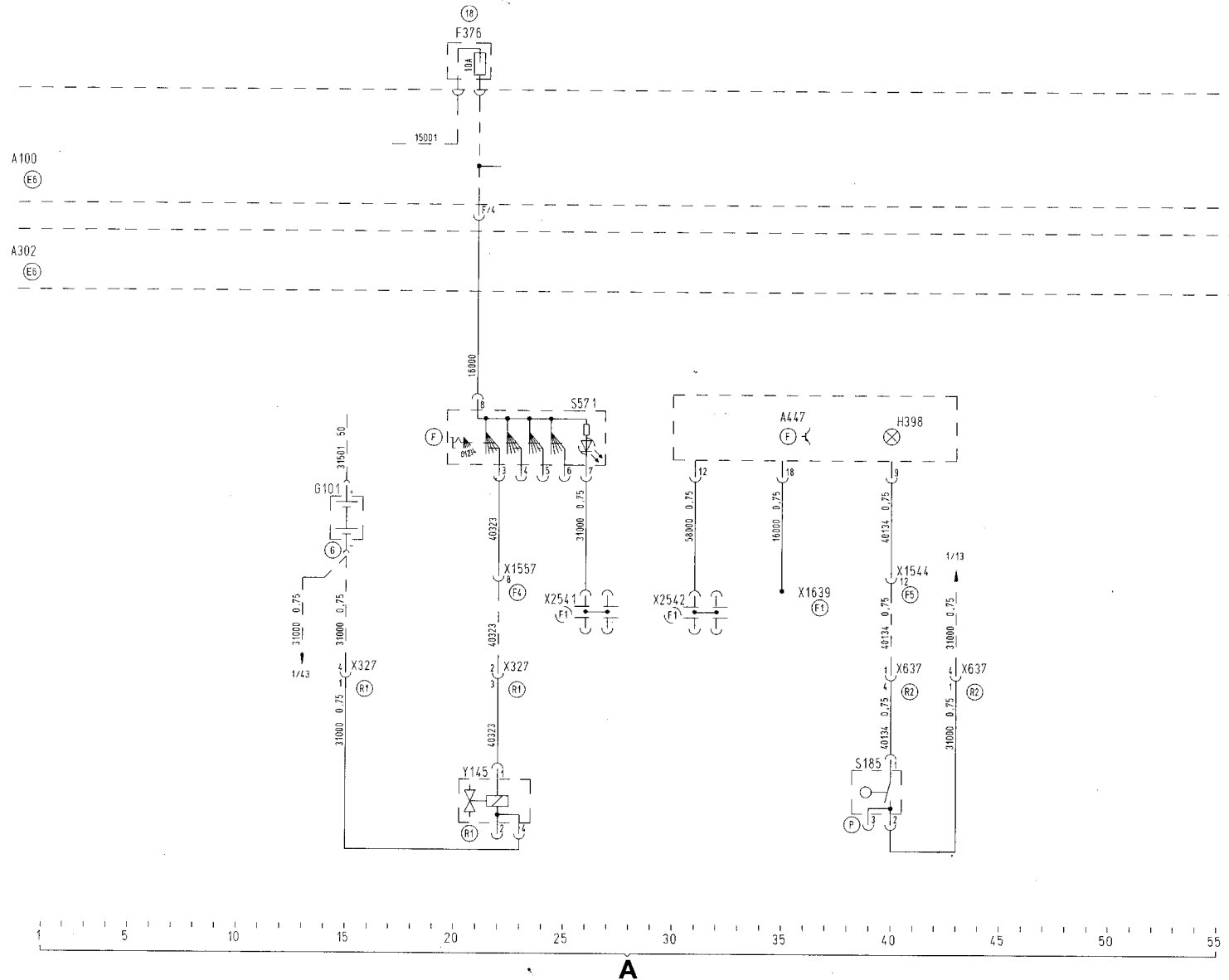
|              |       |                                                             |
|--------------|-------|-------------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                      |
| <b>A302</b>  | (352) | Central computer 2                                          |
| <b>A447</b>  | (439) | Multi-functional display, differential locks                |
| <b>F376</b>  | (101) | Fuse, cab interior (terminal 15)                            |
| <b>G101</b>  | (113) | Battery 2                                                   |
| <b>H398</b>  |       | Indicator light, differential lock, rear axle, transverse   |
| <b>S185</b>  | (328) | Switch, indicator, differential lock, rear axle, transverse |
| <b>S571</b>  | (492) | Switch for differential locks                               |
| <b>X327</b>  |       | Std. solenoid valve, frame                                  |
| <b>X637</b>  |       | Std. differential lock, rear axle                           |
| <b>X1544</b> |       | Std. frame III                                              |
| <b>X1557</b> |       | Std. frame, left                                            |
| <b>X1639</b> |       | Soldered connector, line 16000                              |
| <b>X2541</b> | (246) | Potential distributor, 21-pin line 31000                    |
| <b>X2542</b> | (246) | Potential distributor, 21-pin line 58000                    |
| <b>Y145</b>  | (126) | Solenoid valve, differential lock, rear axle, transverse    |

### Marking of mounting positions

|      |                          |      |                              |
|------|--------------------------|------|------------------------------|
| (A)  | Tail                     | (F6) | Driving seat                 |
| (B1) | Engine                   | (F7) | Passenger seat               |
| (B2) | Gearbox                  | (F8) | Control panel                |
| (C)  | Front                    | (G)  | Battery box                  |
| (C1) | Bumper                   | (H1) | B-pillar on driver's side    |
| (C2) | Entrance right           | (H2) | A-pillar on driver's side    |
| (C3) | Entrance left            | (J1) | B-pillar on passenger's side |
| (E6) | Central electrics area   | (J2) | A-pillar on passenger's side |
| (E7) | Control unit racks       | (L)  | Ceiling/roof                 |
| (E8) | Rear wall of cab         | (N)  | Front axle                   |
| (F)  | Instrument panel         | (P)  | Rear axle                    |
| (F1) | Central part             | (R1) | Front part of frame          |
| (F2) | Steering wheel/column    | (R2) | Rear part of frame           |
| (F3) | Foot pedals              | (S1) | Door left                    |
| (F4) | Front wall, inside left  | (S2) | Door right                   |
| (F5) | Front wall, inside right |      |                              |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1365 Sheet 1 of 1



**ADDITIONAL WIRING DIAGRAMS**

## ADDITIONAL WIRING DIAGRAMS

### EBS electronic braking system

#### Legend

Wiring diagram no. **81.99192.2987** Sheet **1** of 3

Change status: 03.01

**A = Pressure control module, front axle, left**

**B = Pressure control module, front axle, right**

**C = Pressure control module, rear axle**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A402** (399) EBS control unit

**B119** (245) Engine speed sensor, front axle, left

**B120** (246) Engine speed sensor, front axle, right

**B121** (247) Engine speed sensor, driving shaft, left

**B122** (248) Engine speed sensor, driving shaft, right

**B332** (243) Sensor, brake pad, front axle, right

**B333** (253) Sensor, brake pad, front axle, left

**B334** (254) Sensor, brake pad, drive shaft, right

**B335** (255) Sensor, brake pad, drive shaft, left

**B336** (256) ALB (load) sensor, drive shaft

**B337** (244) Brake sensor

**X1548** Stvd. frame IV

**X1557** Stvd. frame left

**Y262** (170) Pressure control module, front axle, right

**Y263** (170) Pressure control module, front axle, left

**Y264** (171) Pressure control module, rear axle

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

# ADDITIONAL WIRING DIAGRAMS

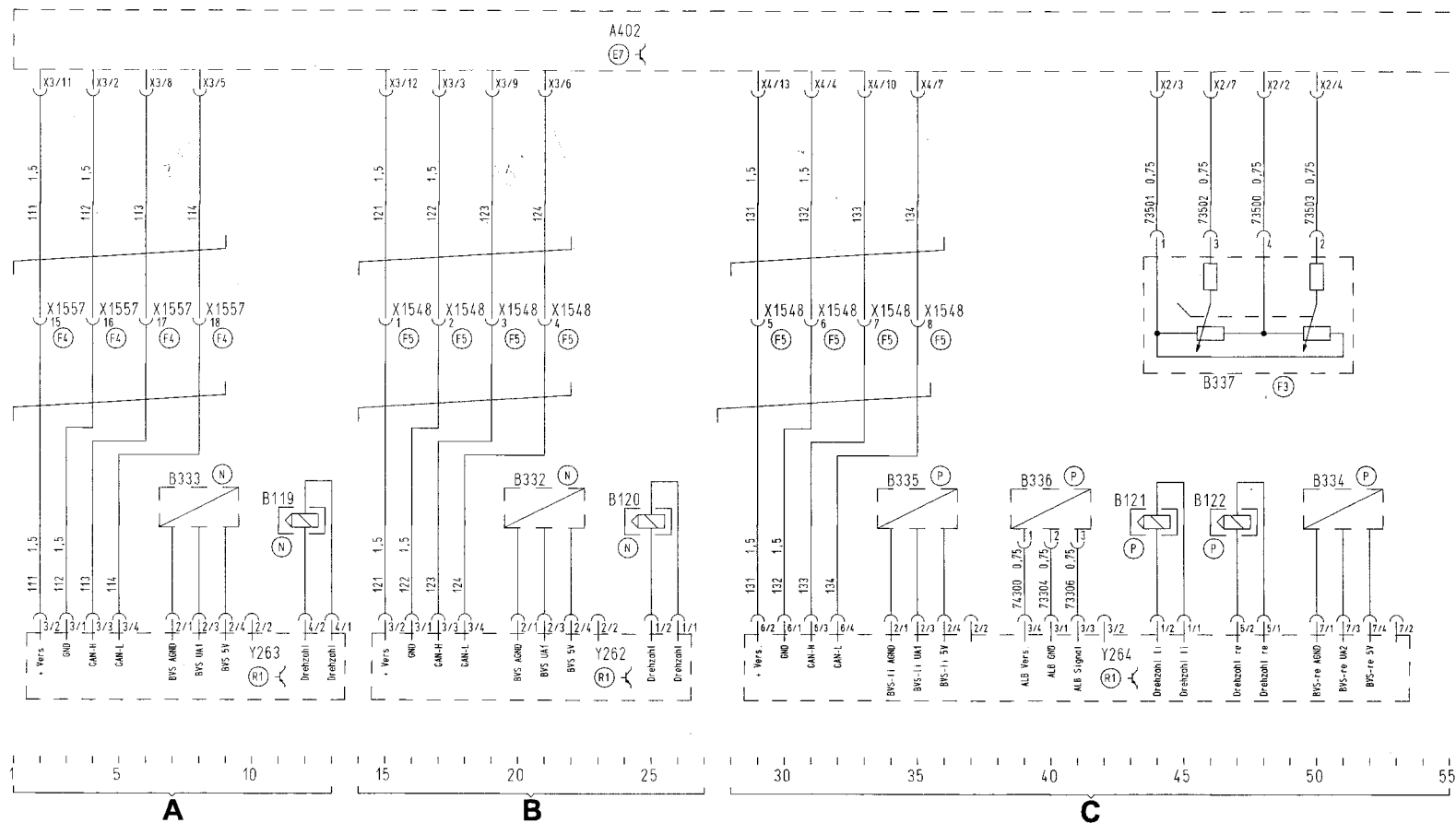
Wiring diagram no. **81.99192.2987** Sheet **1** of 3

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### EBS electronic braking system

#### Legend

Wiring diagram no. **81.99192.2987** Sheet 2 of 3

Change status: 03.01

**A = Trailer lighting socket**

**B = Indicator lights**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A402** (399) EBS control unit

**A407** (342) Instrumentation

**F160** (105) Fuse EBS/ABS power supply, trailer

**G101** (113) Battery 2

**H107** Indicator light, ABS tractor vehicle/trailer

**H140** Indicator light, ASR/ESP information

**H151** Indicator light, ABS information, trailer

**H415** Indicator light, driving stability

**X317** (202) Trailer lighting socket, ABS

**X1542** Stvd. frame II

**X1548** Stvd. frame IV

#### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

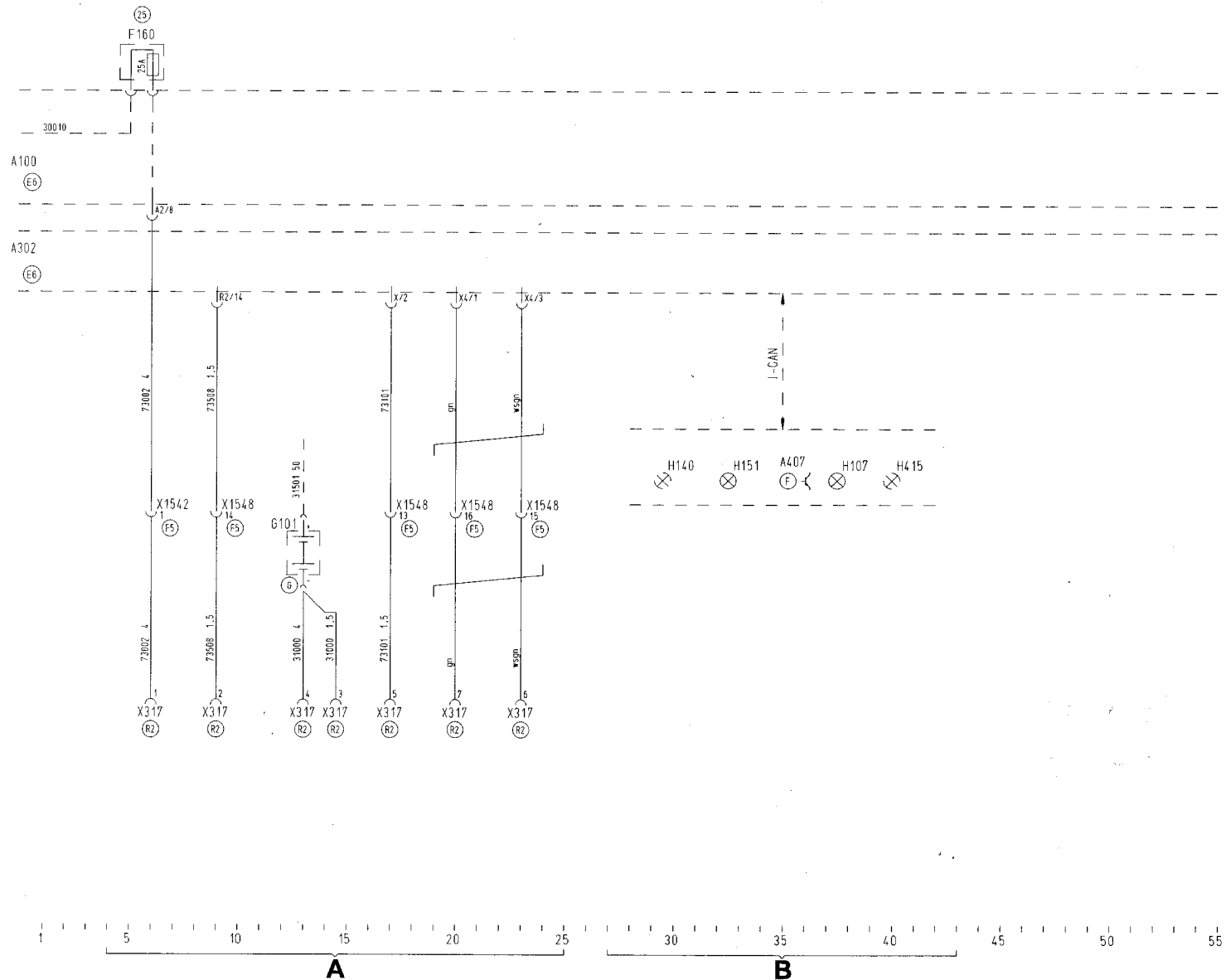
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2987 Sheet 2 of 3





## ADDITIONAL WIRING DIAGRAMS

### EBS electronic braking system

#### Legend

Wiring diagram no. **81.99192.2987** Sheet **3** of 3  
Change status: 03.01

**A = Supply voltage**

**B = Trailer control module**

**C = ASR traction control – slip thresholds**

**D = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A402** (399) EBS control unit

**F161** (103) Fuse, EBS/ABS power supply  
pressure control valve

**F162** (111) Fuse EBS/ABS control

**S256** (455) Control switch, ASR slip threshold increase

**X1548** Stvd. frame IV  
**X1616** Stvd. trailer control module  
**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2542** (246) Potential distributor, 21-pin line 58000  
**X2544** (246) Potential distributor 21-pin K-line

**Y278** (175) Trailer control module

#### Marking of mounting positions

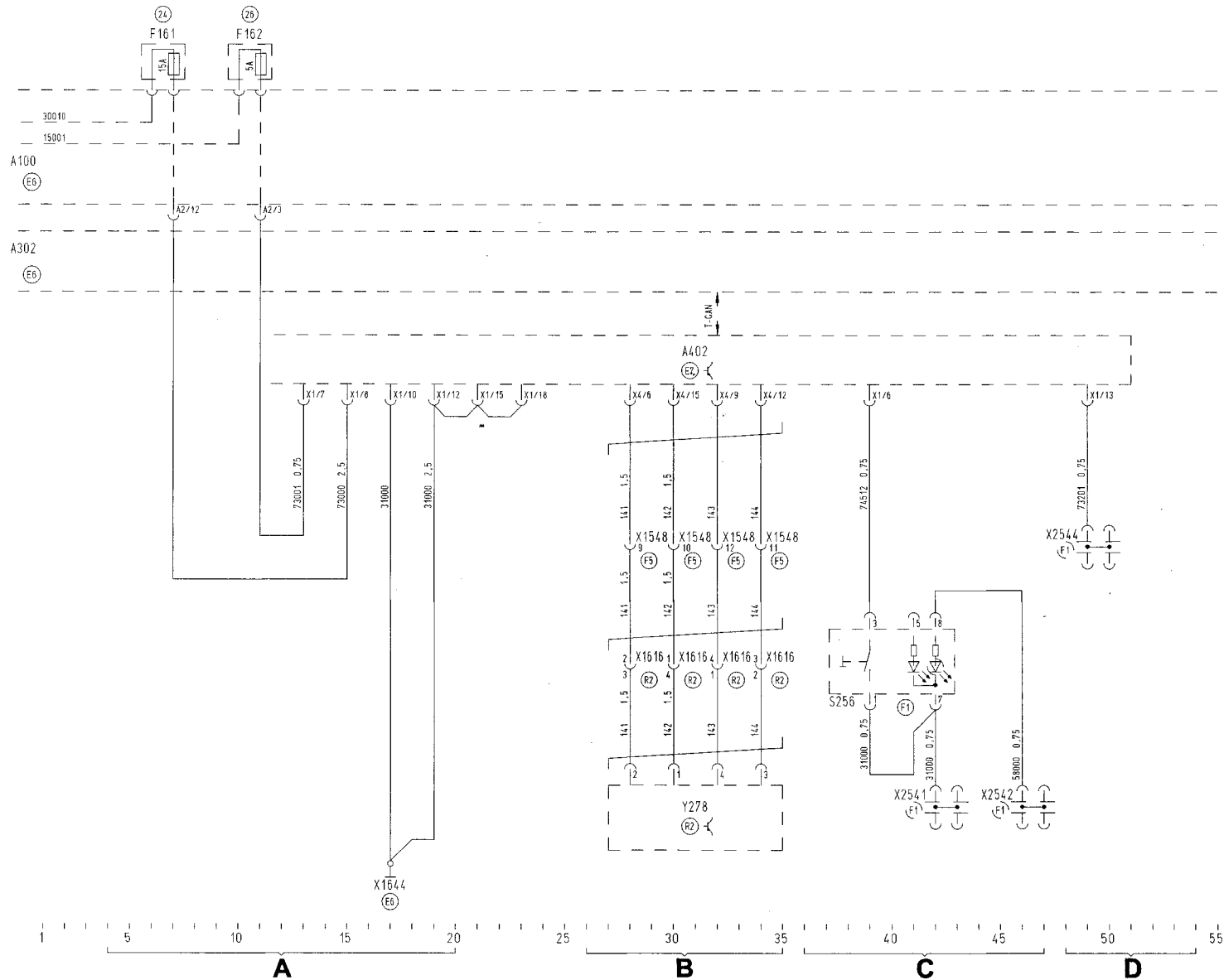
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

#### Note:

In the case of ASR with ESP, **S256** is replaced by **S788!**

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2987 Sheet 3 of 3



## ADDITIONAL WIRING DIAGRAMS

### ECAM electronically controlled air management unit fallback level

#### Legend

Wiring diagram no. **81.99192.2810** Sheet **1** of 1

Change status: 06.00

#### A = ECAM fallback level

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**B101** (351) Transmitter reservoir pressure brake circuit 1

**B102** (351) Transmitter reservoir pressure brake circuit 2

**B468** (351) Transmitter reservoir pressure brake circuit 4

**B502** (351) Transmitter reservoir pressure brake circuit 3

**F375** (101) Fuse, cab outside (terminal 15)

**R107** (161) Air dryer

**X2409** Stvd. ECAM fallback level I

**X2410** Stvd. ECAM fallback level II

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

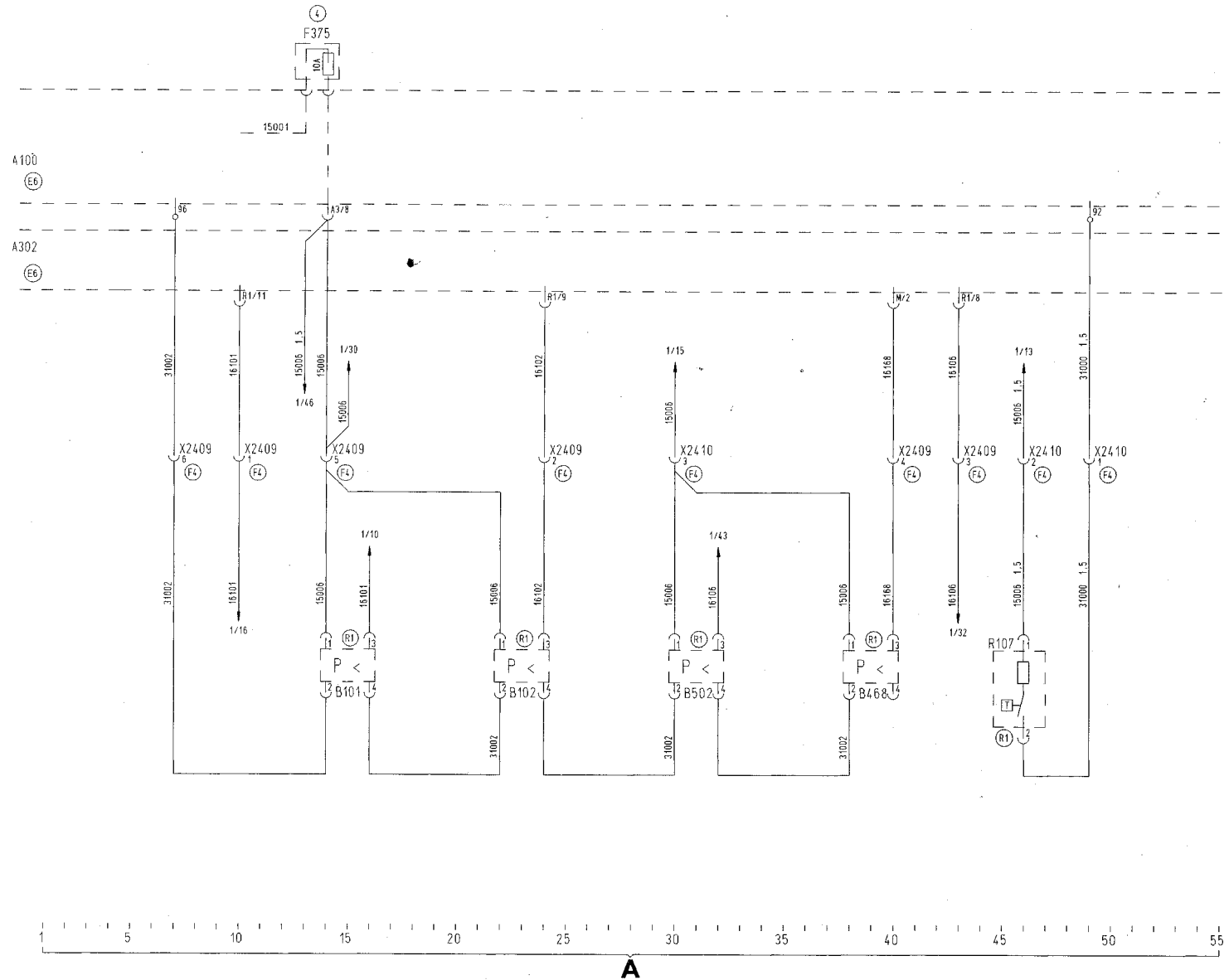
(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

## ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2810** Sheet 1 of 1

**ECAS electronically controlled air suspension 4x2 FL (truck)**

**Legend**

Wiring diagram no. **81.99192.1337** Sheet **1** of 2

Change status: 04.01

**A = Supply voltage**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block

**A143** (343) ECAS control unit

**A221** (349) ECAS remote control

**A302** (352) Central computer 2

**F164** (101) Fuse ECAS (terminal 30)

**F366** (101) ECAM/ECAS fuse (terminal 15)

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1809** Stvd. ECAS (terminal 15)

**X2544** (246) Potential distributor 21-pin K-line

**Marking of mounting positions**

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

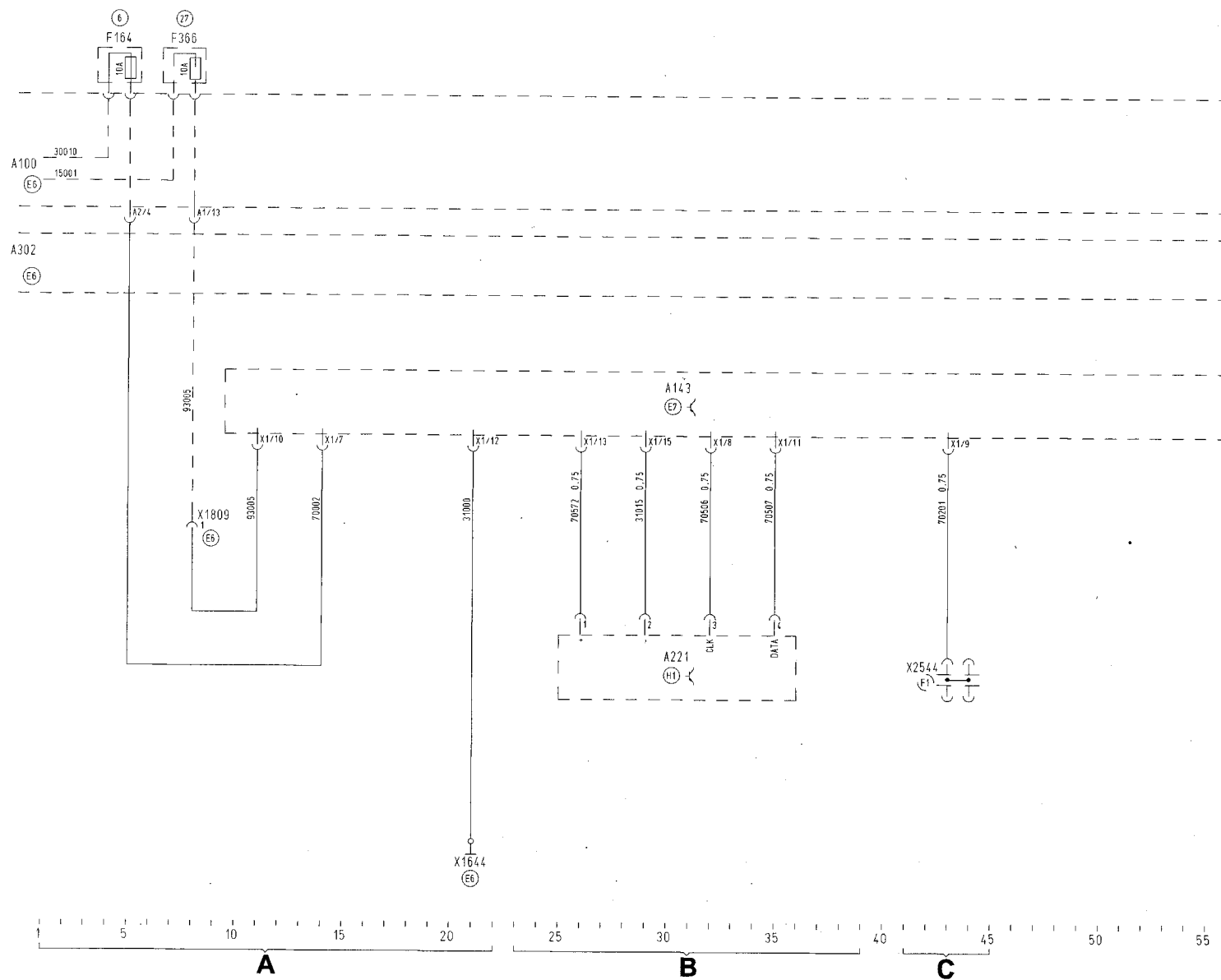
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1337 Sheet 1 of 2



**ECAS electronically controlled air suspension 4x2 FL (truck)**

**Legend**

Wiring diagram no. **81.99192.1337** Sheet 2 of 2

Change status: 04.01

**A = Height sensors**

**B = Solenoid valves**

**C = Indicator light**

**A100** (255) Central fuse, relay and terminal block

**A143** (343) ECAS control unit

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**B129** (311) Height sensor, rear axle left

**B130** (311) Height sensor, rear axle right

**H394** Indicator light, ECAS malfunction/warning

**X1945** Stvd. ECAS/EFR

**Y132** (168) ECAS valve block

**Marking of mounting positions**

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

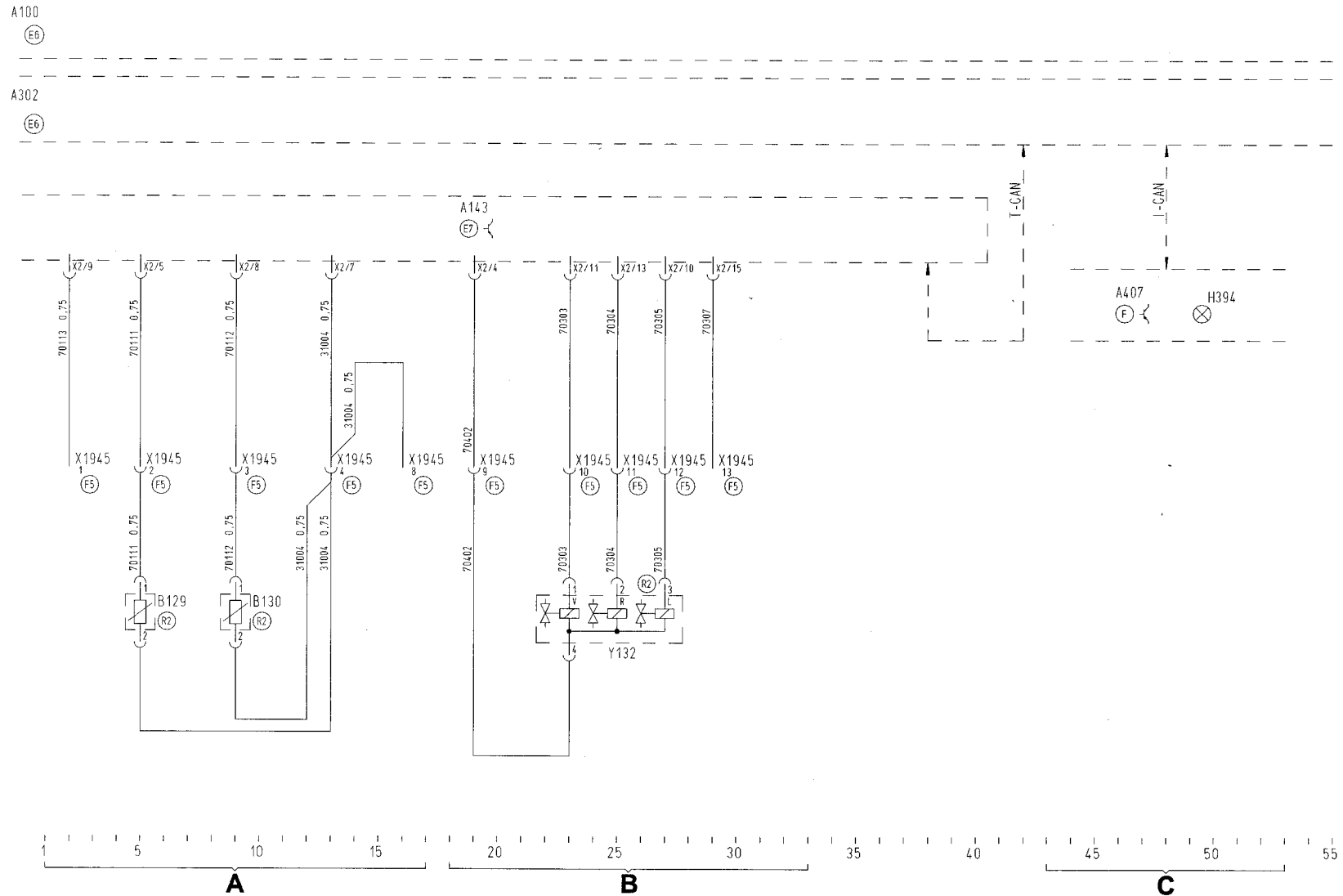
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1337 Sheet 2 of 2





# ECAS electronically controlled air suspension 4x2 FL (semitrailer)

## Legend

Wiring diagram no. **81.99192.1336** Sheet 1 of 2

Change status: 04.01

**A = Supply voltage**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block

**A143** (343) ECAS control unit

**A221** (349) ECAS remote control

**A302** (352) Central computer 2

**F164** (101) Fuse ECAS (terminal 30)

**F366** (101) ECAM/ECAS fuse (terminal 15)

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1809** Stvd. ECAS (terminal 15)

**X2544** (246) Potential distributor 21-pin K-line

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

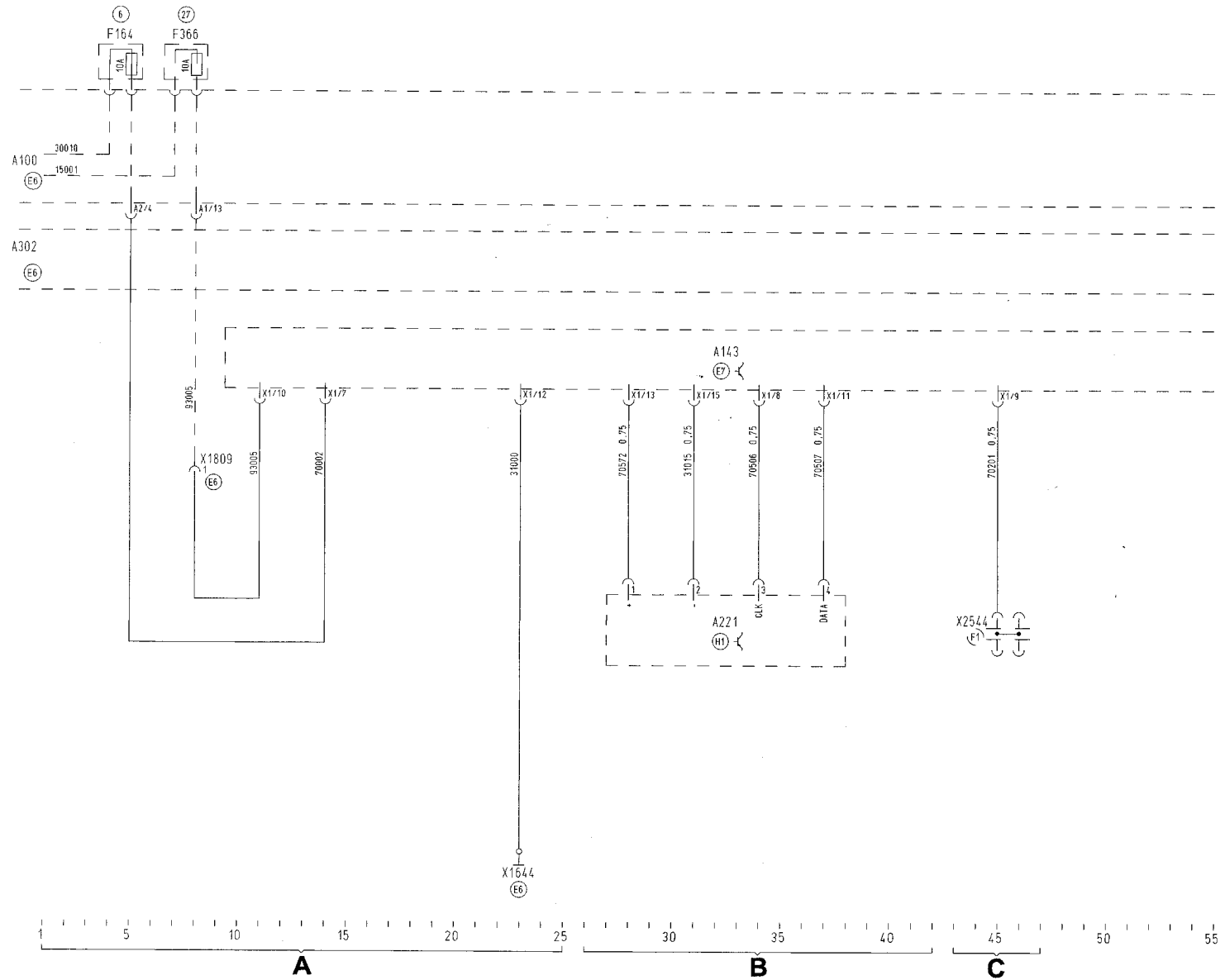
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1336 Sheet 1 of 2



**ECAS electronically controlled air suspension 4x2 FL (semitrailer)**

**Legend**

Wiring diagram no. **81.99192.1336** Sheet **2** of 2  
Change status: 04.01

**A = Height sensors**

**B = Solenoid valves**

**C = Indicator light**

**A100** (255) Central fuse, relay and terminal block  
**A143** (343) ECAS control unit  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**B130** (311) Height sensor, rear axle right

**H394** Indicator light, ECAS malfunction/warning

**X1945** Stvd. ECAS/EFR

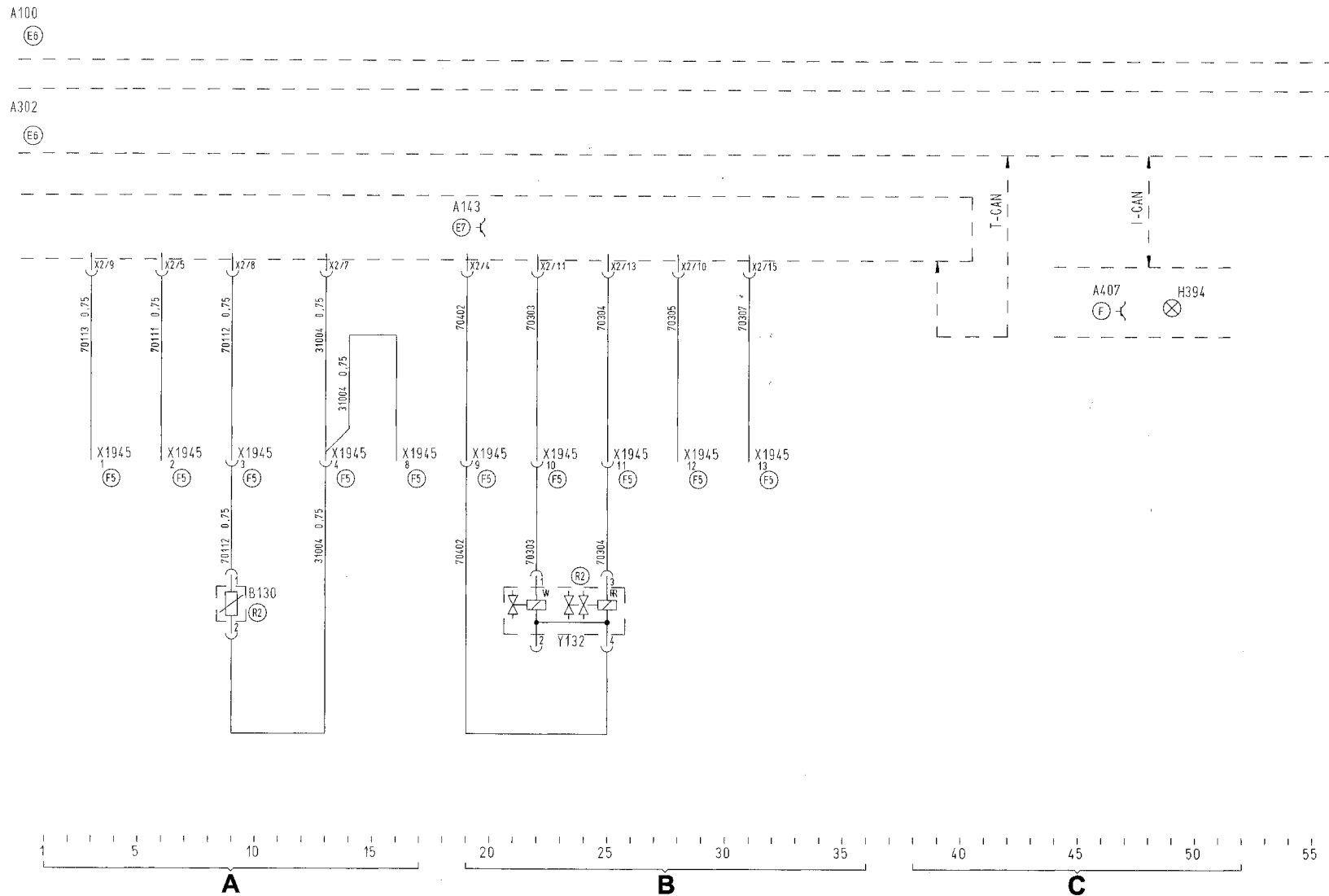
**Y132** (167) ECAS valve block

**Marking of mounting positions**

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓕ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓕ Instrument panel         | Ⓖ Rear axle                    |
| Ⓕ Central part             | Ⓕ Front part of frame          |
| Ⓕ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓕ Foot pedals              | Ⓕ Door left                    |
| Ⓕ Front wall, inside left  | Ⓖ Door right                   |
| Ⓕ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1336** Sheet 2 of 2



**ECAS electronically controlled air suspension 4x2 FLL**

**Legend**

Wiring diagram no. **81.99192.1338** Sheet 1 of 2  
Change status: 04.01

**A = Supply voltage**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (343) ECAS control unit  
**A221** (350) ECAS remote control  
**A302** (352) Central computer 2

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

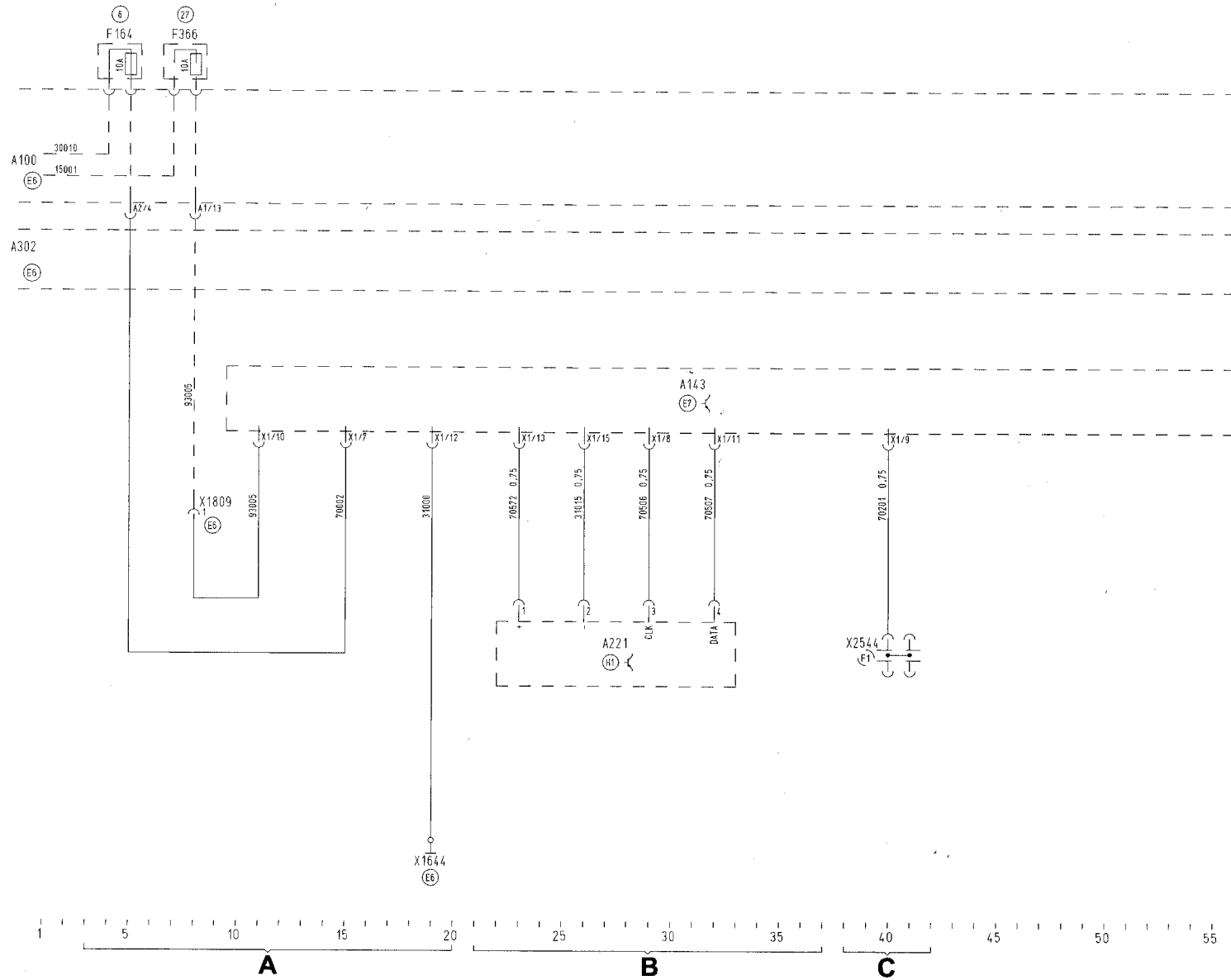
**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2544** (246) Potential distributor 21-pin K-line

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1338 Sheet 1 of 2



**ECAS electronically controlled air suspension 4x2 FLL**

**Legend**

Wiring diagram no. **81.99192.1338** Sheet 2 of 2  
Change status: 04.01

**A = Height sensors**

**B = Solenoid valves**

**C = Indicator light**

**A100** (255) Central fuse, relay and terminal block  
**A143** (343) ECAS control unit  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**B128** (311) Height sensor, front axle  
**B129** (311) Height sensor, rear axle left  
**B130** (311) Height sensor, rear axle right

**H394** Indicator light, ECAS malfunction/warning

**X1945** Stvd. ECAS/EFR

**Y132** (124) ECAS valve block

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

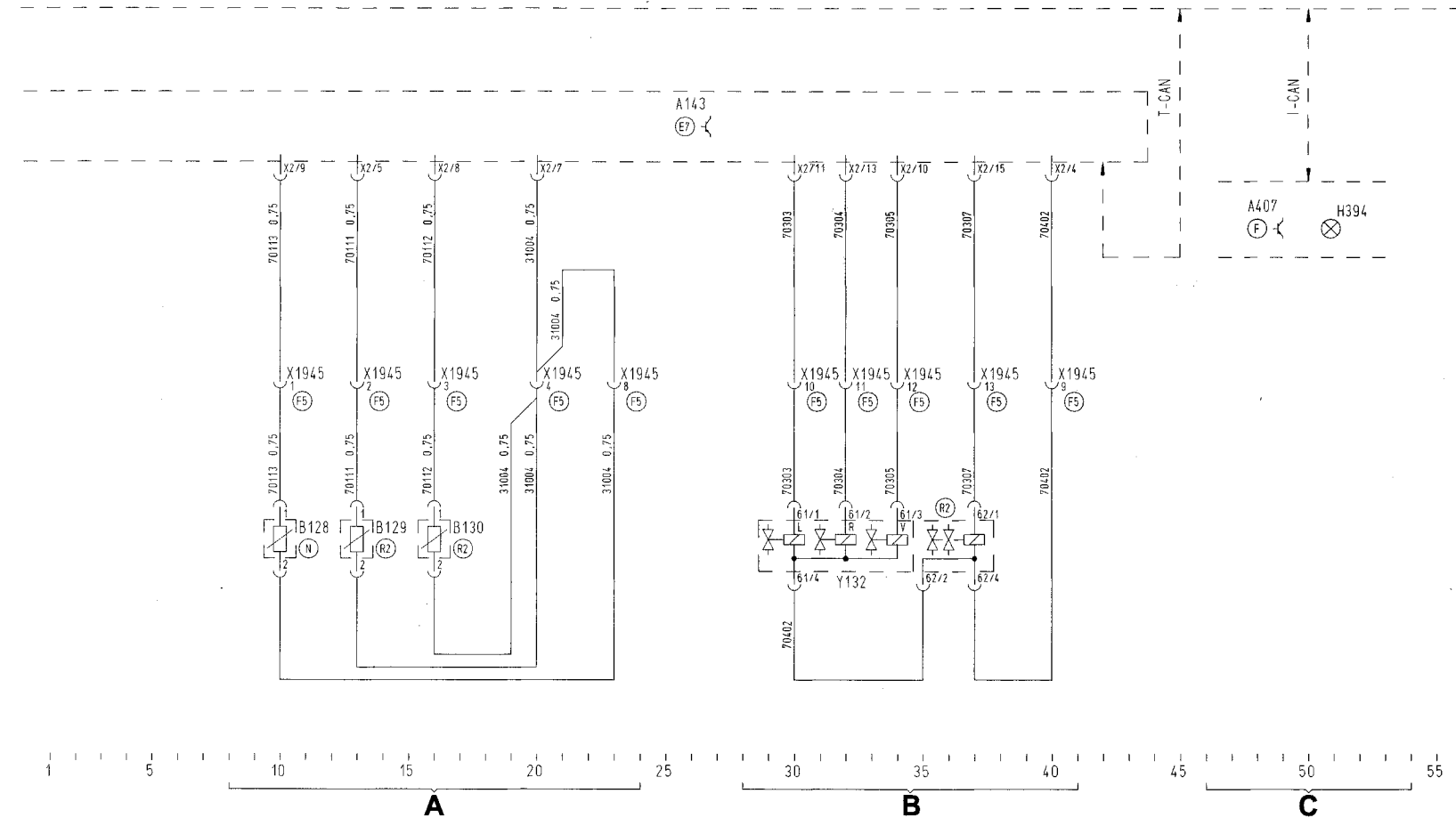
Wiring diagram no. **81.99192.1338** Sheet 2 of 2

A100

(E6)

A302

(E6)





## ECAS electronically controlled air suspension 6x2 FNL

### Legend

Wiring diagram no. **81.99192.1339** Sheet 1 of 2

Change status: 04.01

**A = Switch**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (344) ECAS control unit  
**A221** (349) ECAS remote control  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

**H394** Indicator light, ECAS malfunction/warning

**S266** (514) Switch ECAS NLA/VLA raise/release  
**S267** (515) Control switch ECAS traction help

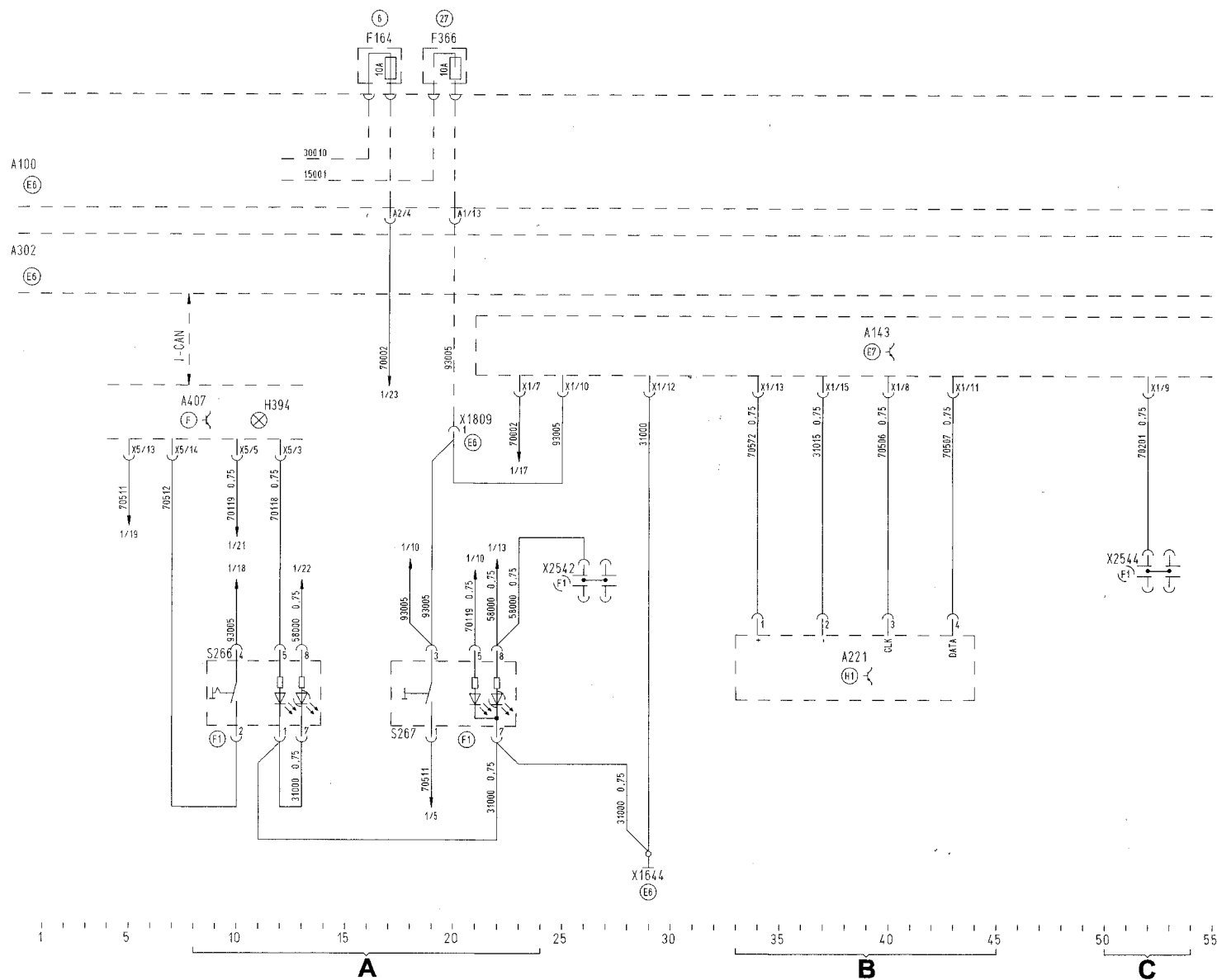
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2542** (246) Potential distributor, 21-pin line 58000  
**X2544** (246) Potential distributor 21-pin K-line

### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

# ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1339** Sheet **1** of **2**



**ECAS electronically controlled air suspension 6x2 FNL**

**Legend**

Wiring diagram no. **81.99192.1339** Sheet **2** of 2  
Change status: 04.01

**A = Height sensors**

**B = Solenoid valves**

**A100** (255) Central fuse, relay and terminal block  
**A143** (344) ECAS control unit  
**A302** (352) Central computer 2

**B129** (311) Height sensor, rear axle left  
**B130** (311) Height sensor, rear axle right

**X1945** Stvd. ECAS/EFR

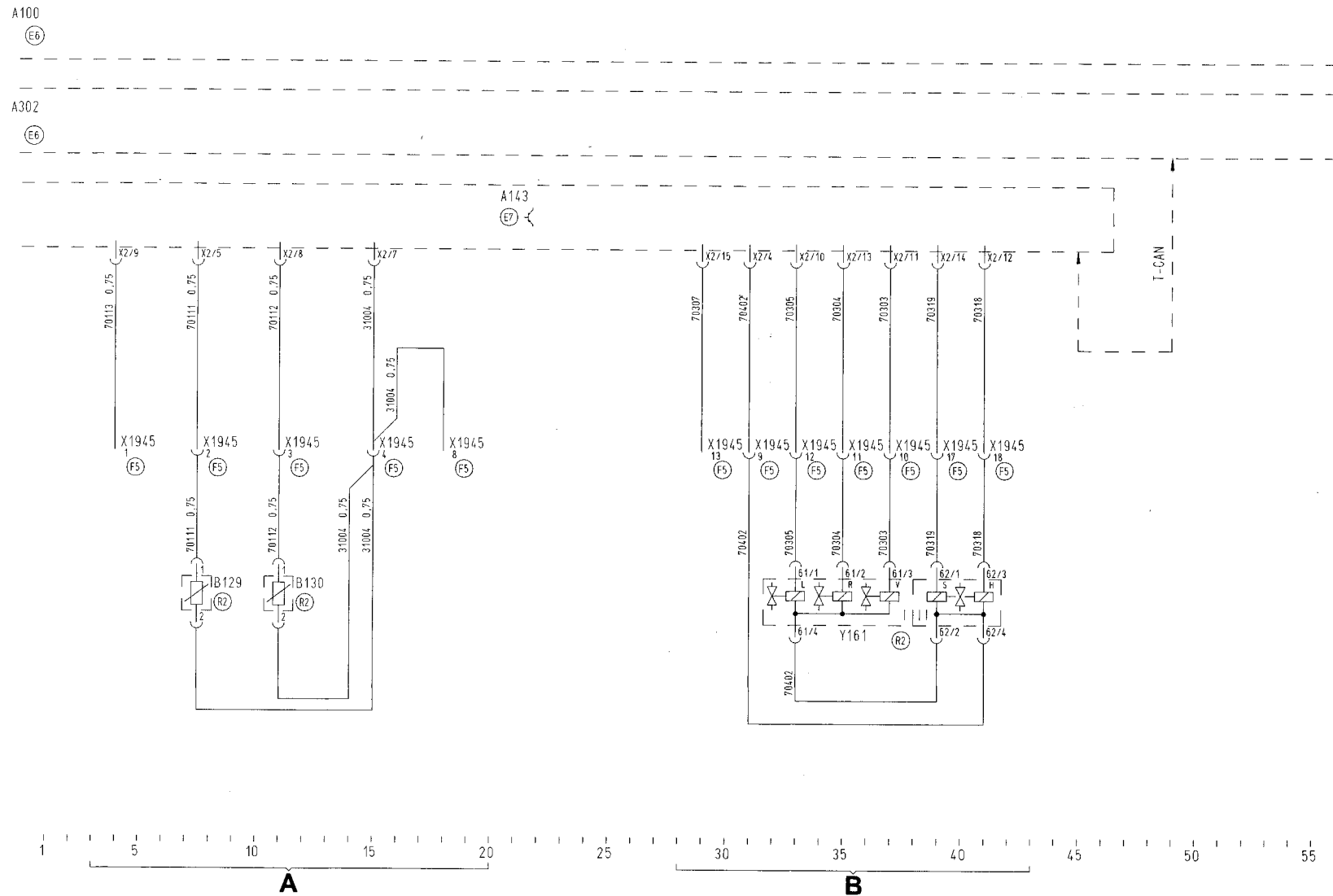
**Y161** (169) Solenoid valve block ECAS I = HA II = NLA/VLA

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1339 Sheet 2 of 2



# ECAS electronically controlled air suspension 6x2 FNL (Nordland)

## Legend

Wiring diagram no. **81.99192.1348** Sheet 1 of 2  
Change status: 04.01

**A = Supply voltage, switch**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (344) ECAS control unit  
**A221** (350) ECAS remote control  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

**H394** Indicator light, ECAS malfunction/warning

**S747** (680) Switch ECAS traction help Nordland  
**S790** (699) Control switch ECAS lift/relieve trailing/  
leading axle Nordland

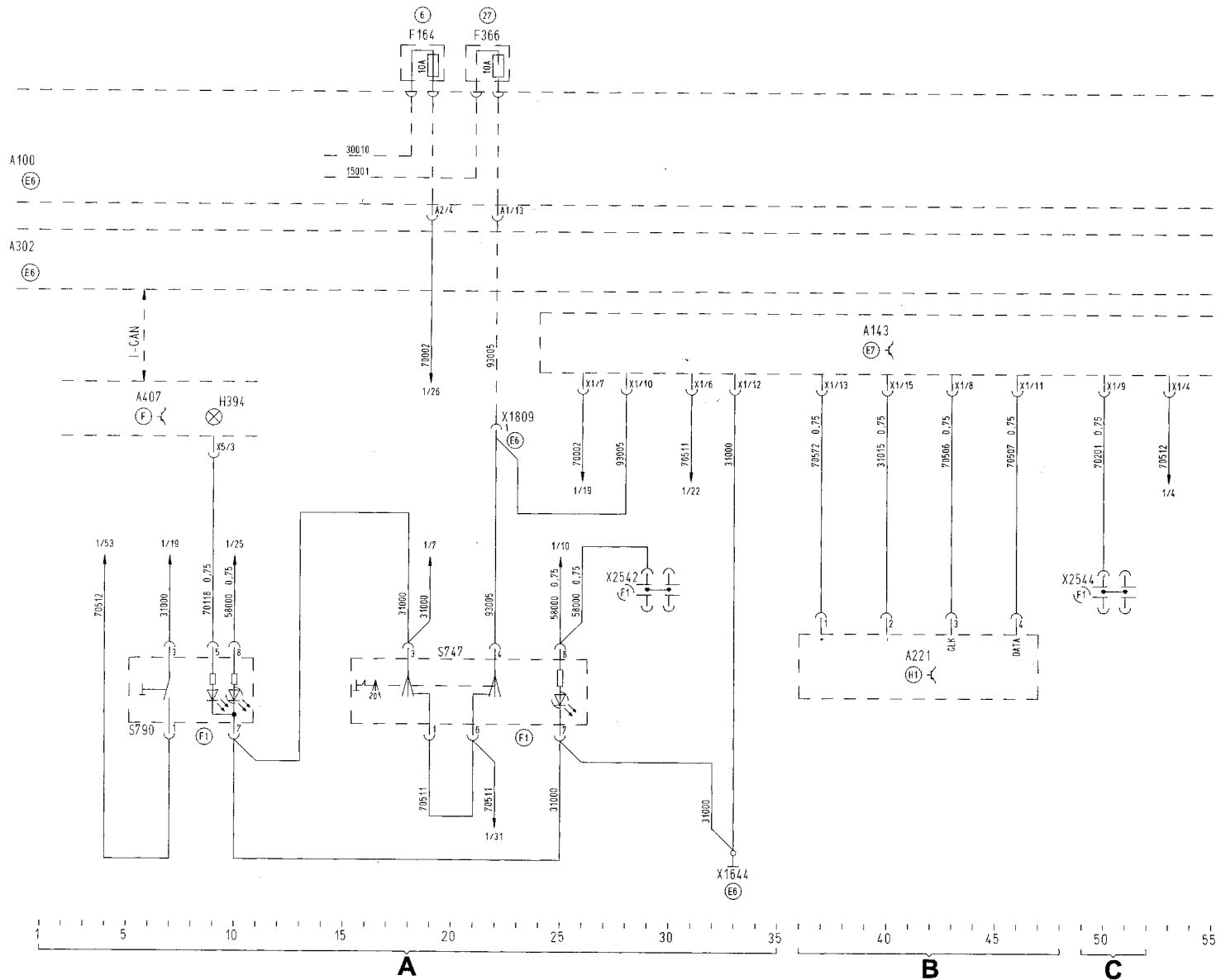
**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2542** (246) Potential distributor, 21-pin line 58000  
**X2544** (246) Potential distributor 21-pin K-line

## Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1348 Sheet 1 of 2



# ECAS electronically controlled air suspension 6x2 FNL (Nordland)

## Legend

Wiring diagram no. **81.99192.1348** Sheet 2 of 2

Change status: 04.01

**A = Height sensors**

**B = Solenoid valves**

**A100** (255) Central fuse, relay and terminal block

**A143** (344) ECAS control unit

**A302** (352) Central computer 2

**B129** (311) Height sensor, rear axle left

**B130** (311) Height sensor, rear axle right

**X1945** Stvd. ECAS/EFR

**Y161** (169) Solenoid valve block ECAS I = HA II = NLA/VLA

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

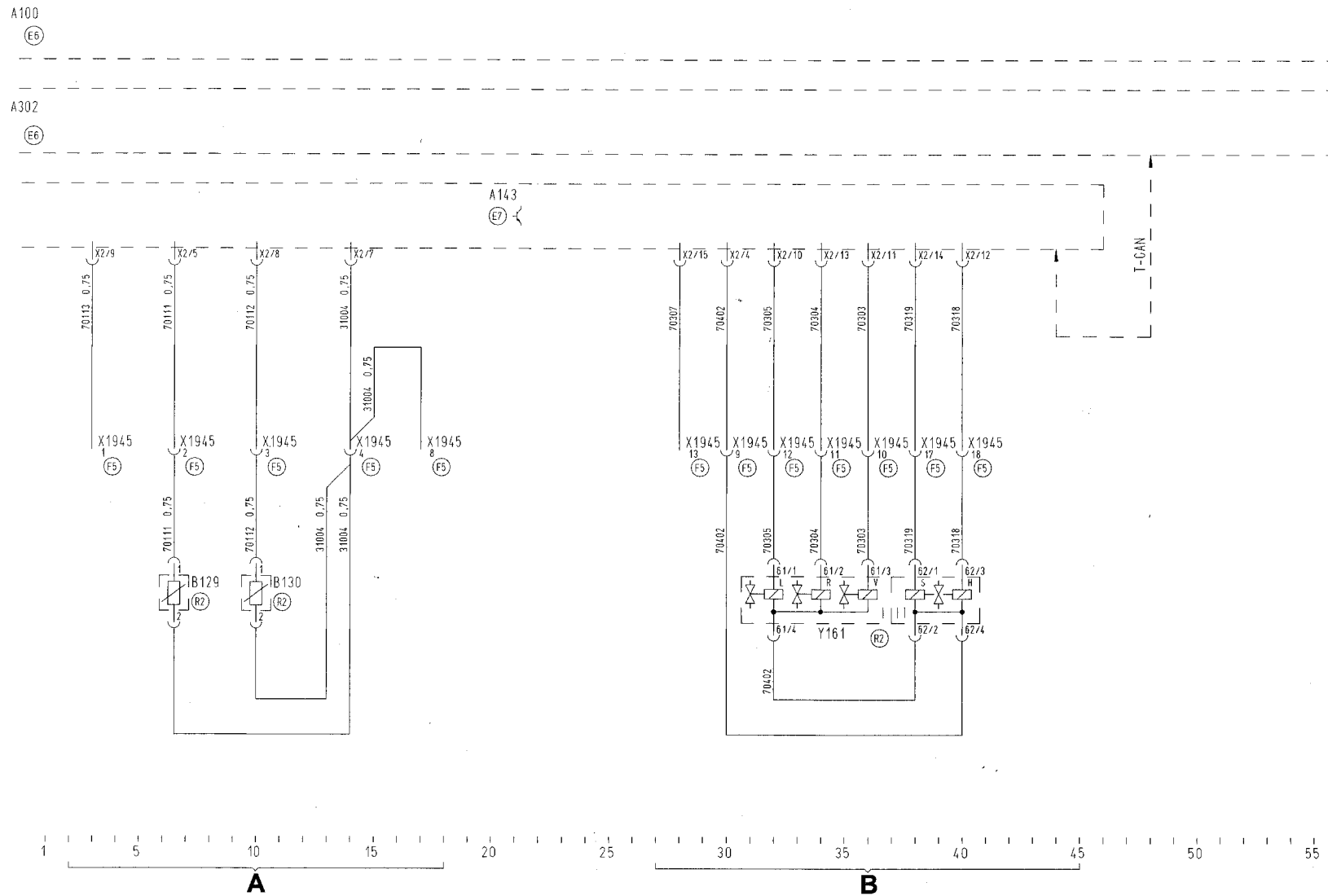
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1348** Sheet **2** of 2





## ADDITIONAL WIRING DIAGRAMS

### ECAS electronically controlled air suspension 6x2 FNLL

#### Legend

Wiring diagram no. **81.99192.1340** Sheet 1 of 2

Change status: 04.01

**A = Switch**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (344) ECAS control unit  
**A221** (350) ECAS remote control  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

**H394** Indicator light, ECAS malfunction/warning

**S266** (514) Switch ECAS NLA/VLA raise/release  
**S267** (515) Control switch ECAS traction help

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2542** (246) Potential distributor, 21-pin line 58000  
**X2544** (246) Potential distributor 21-pin K-line

#### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



## ECAS electronically controlled air suspension 6x2 FNLL

### Legend

Wiring diagram no. **81.99192.1340** Sheet 2 of 2

Change status: 04.01

**A = Height sensors**

**B = Solenoid valves**

**A100** (255) Central fuse, relay and terminal block

**A143** (344) ECAS control unit

**A302** (352) Central computer 2

**B128** (311) Height sensor, front axle

**B129** (311) Height sensor, rear axle left

**B130** (311) Height sensor, rear axle right

**X1945** Stvd. ECAS/EFR

**Y161** (169) Solenoid valve block ECAS I = HA II = NLA/VLA

**Y162** (128) Solenoid valve block ECAS front axle

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

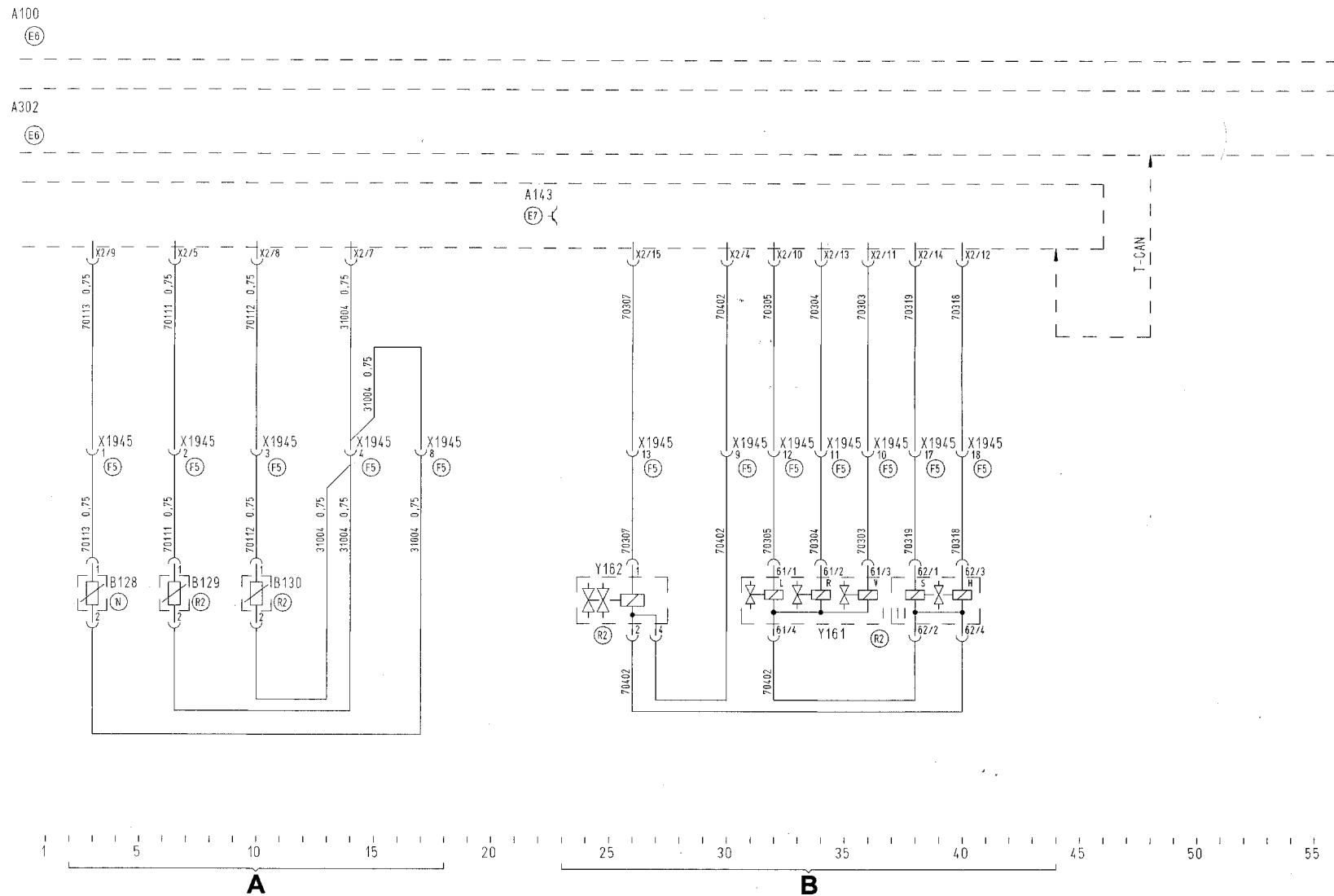
Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

**ADDITIONAL WIRING DIAGRAMS**

Wiring diagram no. **81.99192.1340** Sheet **2** of 2



# ECAS electronically controlled air suspension 6x2 FNLL (Nordland)

## Legend

Wiring diagram no. **81.99192.1349** Sheet **1** of 2

Change status: 04.01

**A = Supply voltage, switch**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block

**A143** (344) ECAS control unit

**A221** (350) ECAS remote control

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**F164** (101) Fuse ECAS (terminal 30)

**F366** (101) ECAM/ECAS fuse (terminal 15)

**H394** Indicator light, ECAS malfunction/warning

**S747** (680) Switch ECAS traction help Nordland

**S790** (699) Control switch ECAS lift/relieve trailing/  
leading axle Nordland

**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block

**X1809** Stvd. ECAS (terminal 15)

**X2542** (246) Potential distributor, 21-pin line 58000

**X2544** (246) Potential distributor 21-pin K-line

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

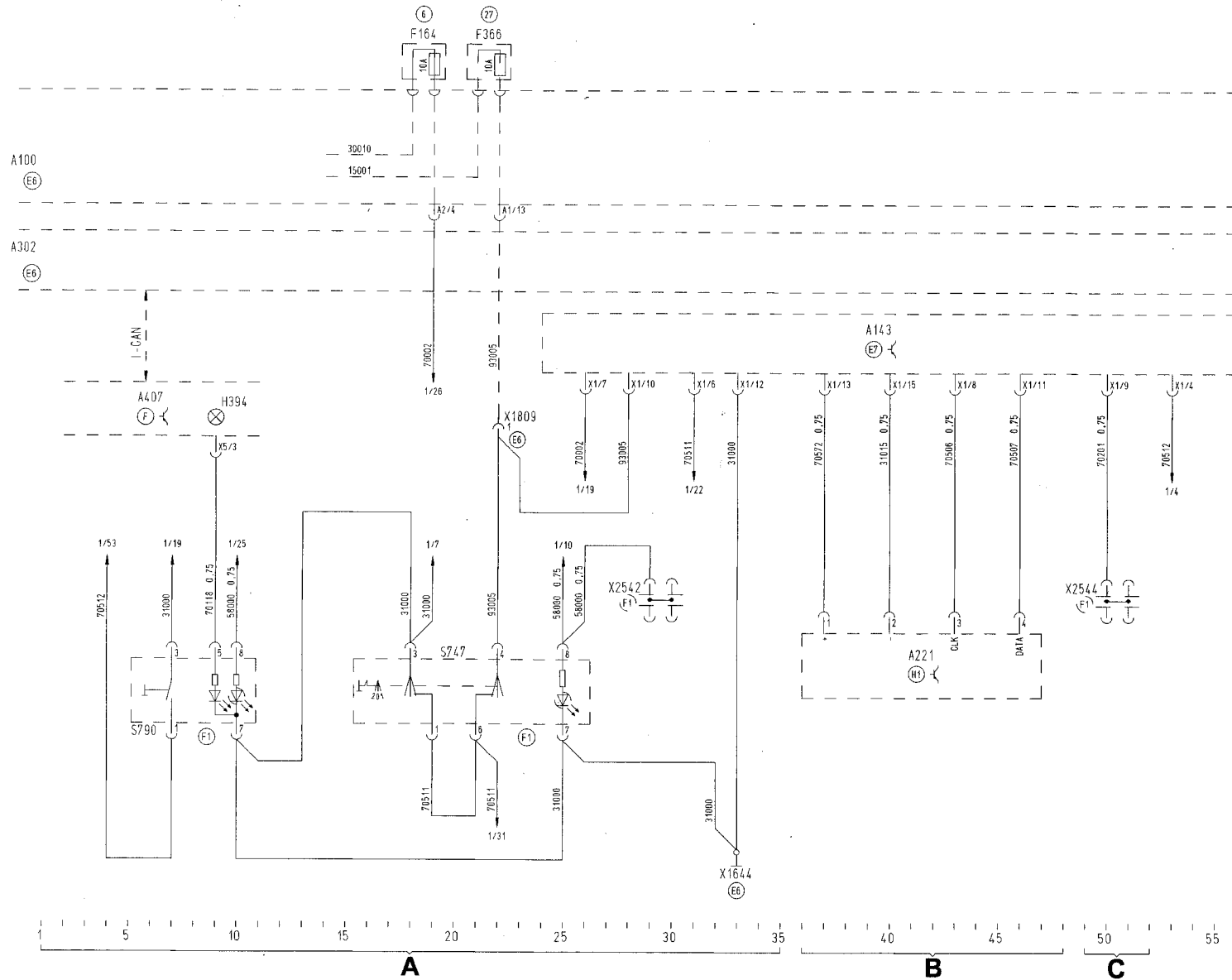
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1349 Sheet 1 of 2



# ECAS electronically controlled air suspension 6x2 FNLL (Nordland)

## Legend

Wiring diagram no. **81.99192.1349** Sheet 2 of 2

Change status: 04.01

**A = Height sensors**

**B = Solenoid valves**

**A100** (255) Central fuse, relay and terminal block

**A143** (344) ECAS control unit

**A302** (352) Central computer 2

**B128** (311) Height sensor, front axle

**B129** (311) Height sensor, rear axle left

**B130** (311) Height sensor, rear axle right

**X1945** Stvd. ECAS/EFR

**Y161** (169) Solenoid valve ECAS I = HA (rear axle) II = NLA/VLA  
(trailing/leading axle)

**Y162** (128) Solenoid valve ECAS front axle

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

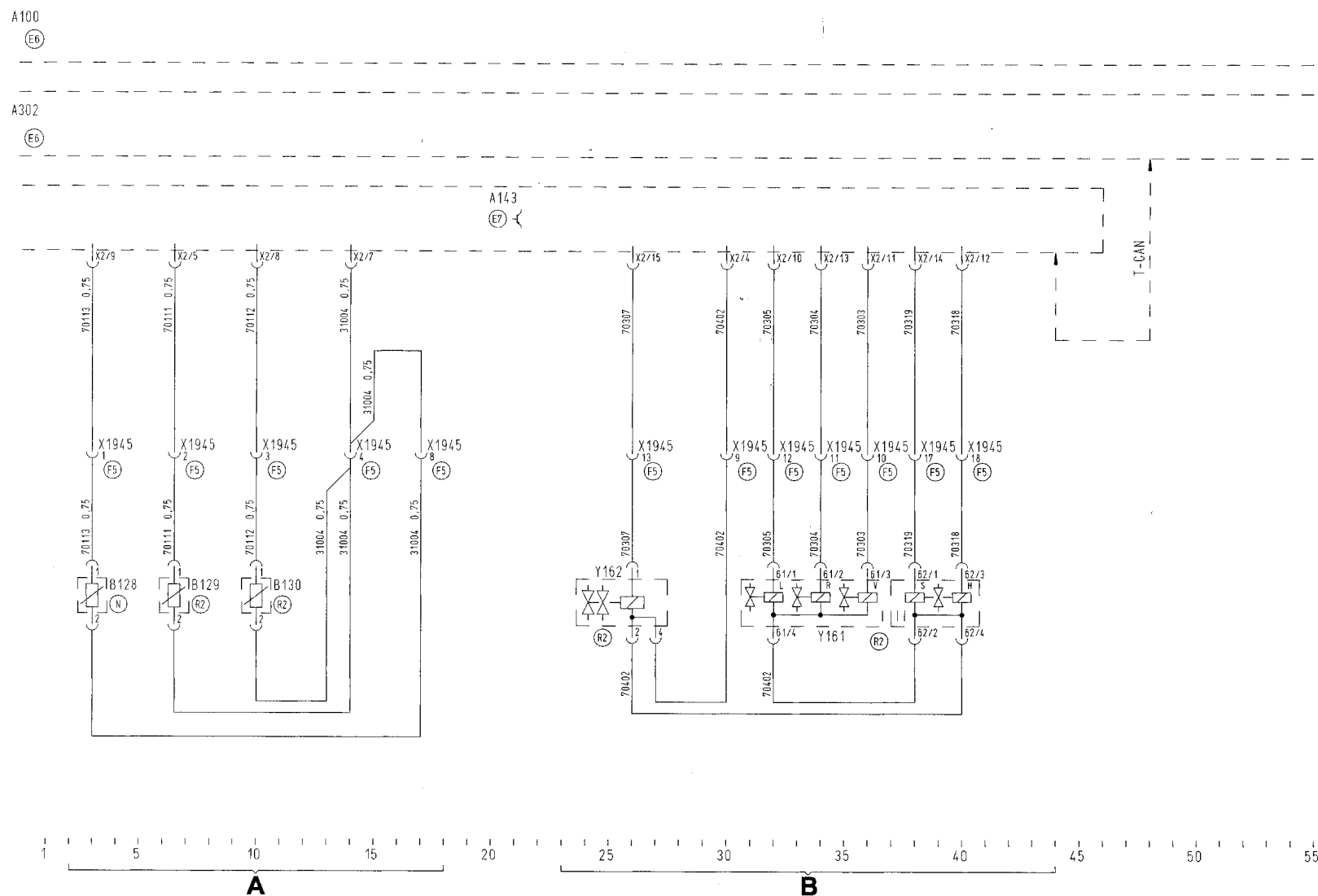
(R2) Rear part of frame

(S1) Door left

(S2) Door right

# ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1349** Sheet **2** of 2





## ECAS electronically controlled air suspension 6x2 FVL

### Legend

Wiring diagram no. **81.99192.1341** Sheet **1** of 2

Change status: 04.01

**A = Switch**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (344) ECAS control unit  
**A221** (349) ECAS remote control  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

**H394** Indicator light, ECAS malfunction/warning

**S266** (519) Switch ECAS NLA/VLA raise/release  
**S267** (563) Control switch ECAS traction help

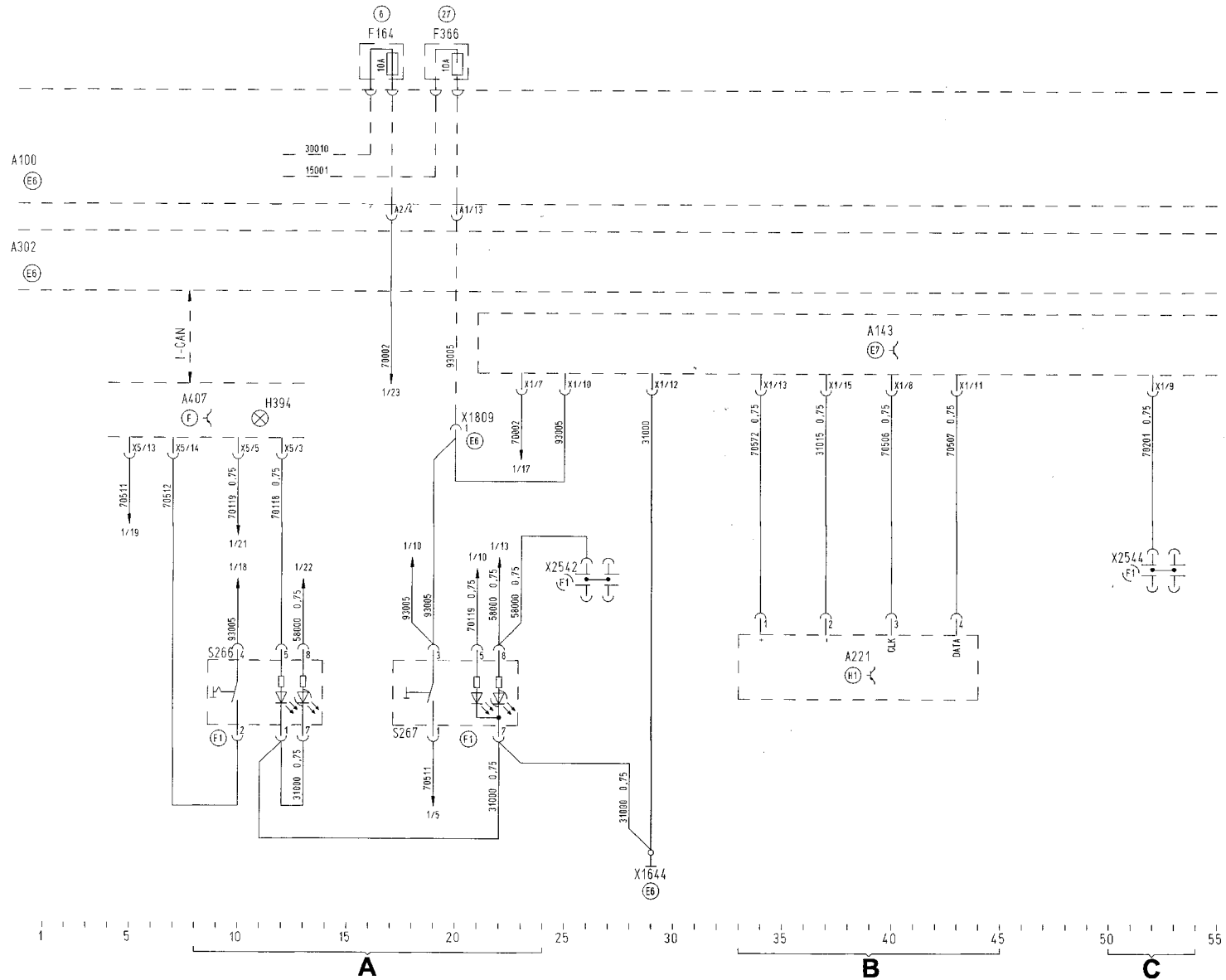
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2542** (246) Potential distributor, 21-pin line 58000  
**X2544** (246) Potential distributor 21-pin K-line

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1341 Sheet 1 of 2



## ADDITIONAL WIRING DIAGRAMS

### ECAS electronically controlled air suspension 6x2 FVL

#### Legend

Wiring diagram no. **81.99192.1341** Sheet 2 of 2  
Change status: 04.01

**A = Height sensors**

**B = Solenoid valves**

**A100** (255) Central fuse, relay and terminal block

**A143** (344) ECAS control unit

**A302** (352) Central computer 2

**B129** (311) Height sensor, rear axle left

**B130** (311) Height sensor, rear axle right

**X1945** Stvd. ECAS/EFR

**Y161** (169) Solenoid valve block ECAS I = HA II = NLA/VLA

#### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right



**ECAS electronically controlled air suspension**  
**Switch level 1/2**

**Legend**

Wiring diagram no. **81.99192.1368** Sheet 1 of 1  
Change status: 04.01

**A = Switch ECAS level 1/2**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**S472** (516) Switch ECAS level 1/2

**X1809** Stvd. ECAS (terminal 15)  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2542** (246) Potential distributor, 21-pin line 58000

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

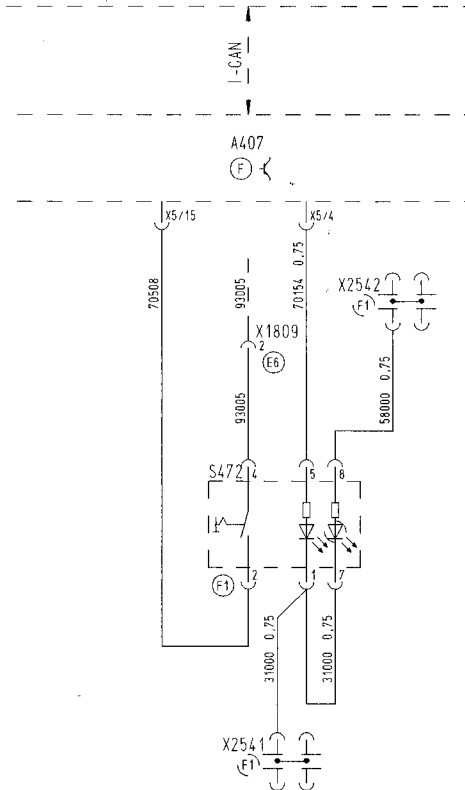
Wiring diagram no. **81.99192.1368** Sheet **1** of **1**

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

A

## ADDITIONAL WIRING DIAGRAMS

### ECAS electronically controlled air suspension/ EFR electronic shock absorber control 4x2 FL (semitrailer)

#### Legend

Wiring diagram no. **81.99192.1342** Sheet **1** of 2  
Change status: 04.01

**A = Supply voltage**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A221** (349) ECAS remote control  
**A302** (352) Central computer 2

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

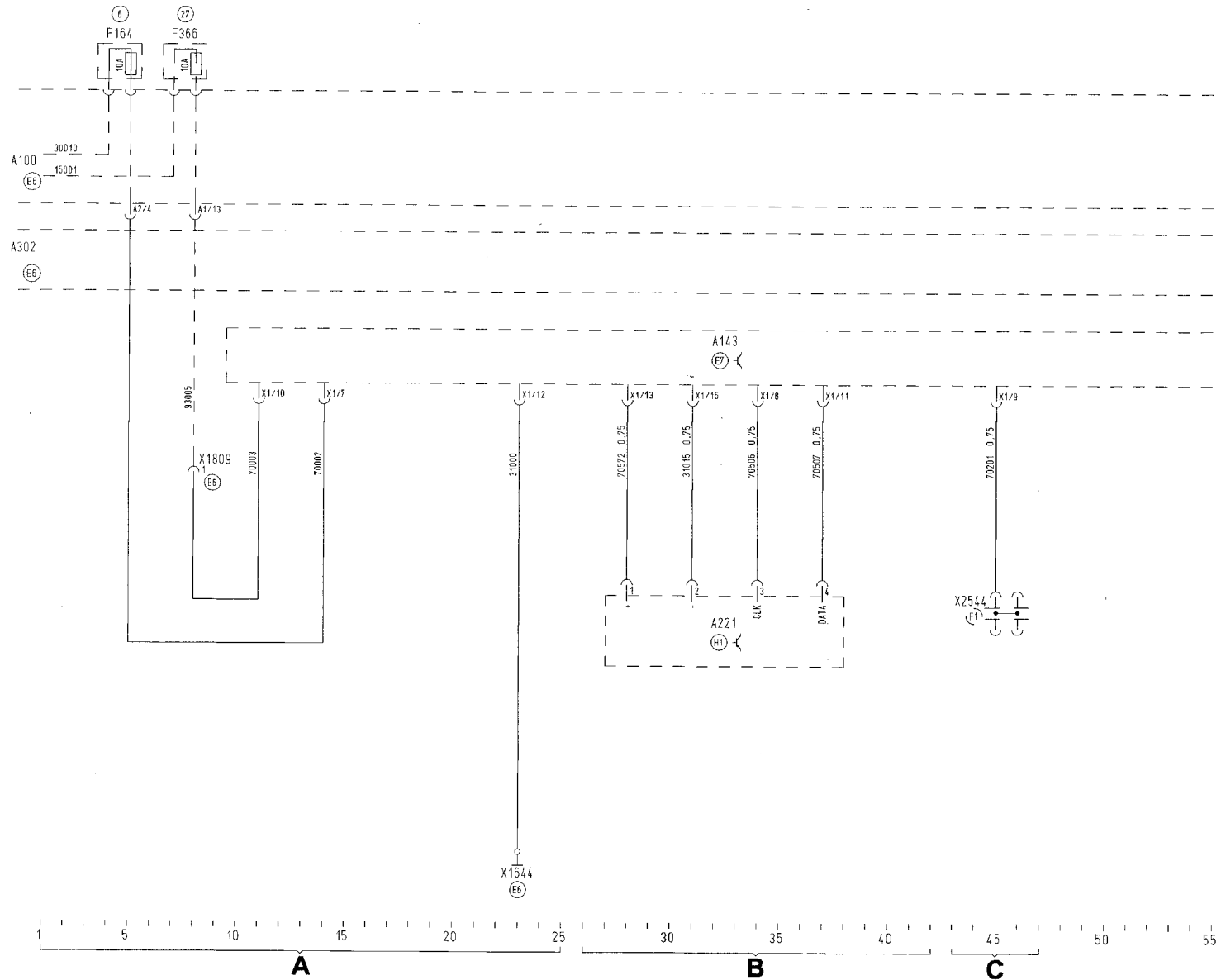
**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2544** (246) Potential distributor 21-pin K-line

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1342** Sheet 1 of 2





**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 4x2 FL (semitrailer)**

**Legend**

Wiring diagram no. **81.99192.1342** Sheet 2 of 2  
Change status: 09.01

**A = Height sensors**

**B = Solenoid valves**

**C = Adjustable shock absorbers**

**D = Control lamp**

A100 (255) Central fuse, relay and terminal block  
A143 (345) ECAS control unit  
A302 (352) Central computer 2  
A407 (342) Instrumentation

B128 (311) Height sensor, front axle  
B130 (311) Height sensor, rear axle right

H394 Indicator light, ECAS malfunction/warning

X1945 Stvd. ECAS/EFR  
X2004 Stvd. cab frame EFR

Y132 (167) Solenoid valve block ECAS  
Y172 (203) Adjustable shock absorber on rear axle right  
Y173 (203) Adjustable shock absorber on rear axle left

**Marking of mounting positions**

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓗ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓗ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 4x2 FL (truck)**

**Legend**

Wiring diagram no. **81.99192.1343** Sheet **1** of 2

Change status: 04.01

**A = Supply voltage**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block

**A143** (345) ECAS control unit

**A221** (349) ECAS remote control

**A302** (352) Central computer 2

**F164** (101) Fuse ECAS (terminal 30)

**F366** (101) ECAM/ECAS fuse (terminal 15)

**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block

**X1809** Stvd. ECAS (terminal 15)

**X2544** (246) Potential distributor 21-pin K-line

**Marking of mounting positions**

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

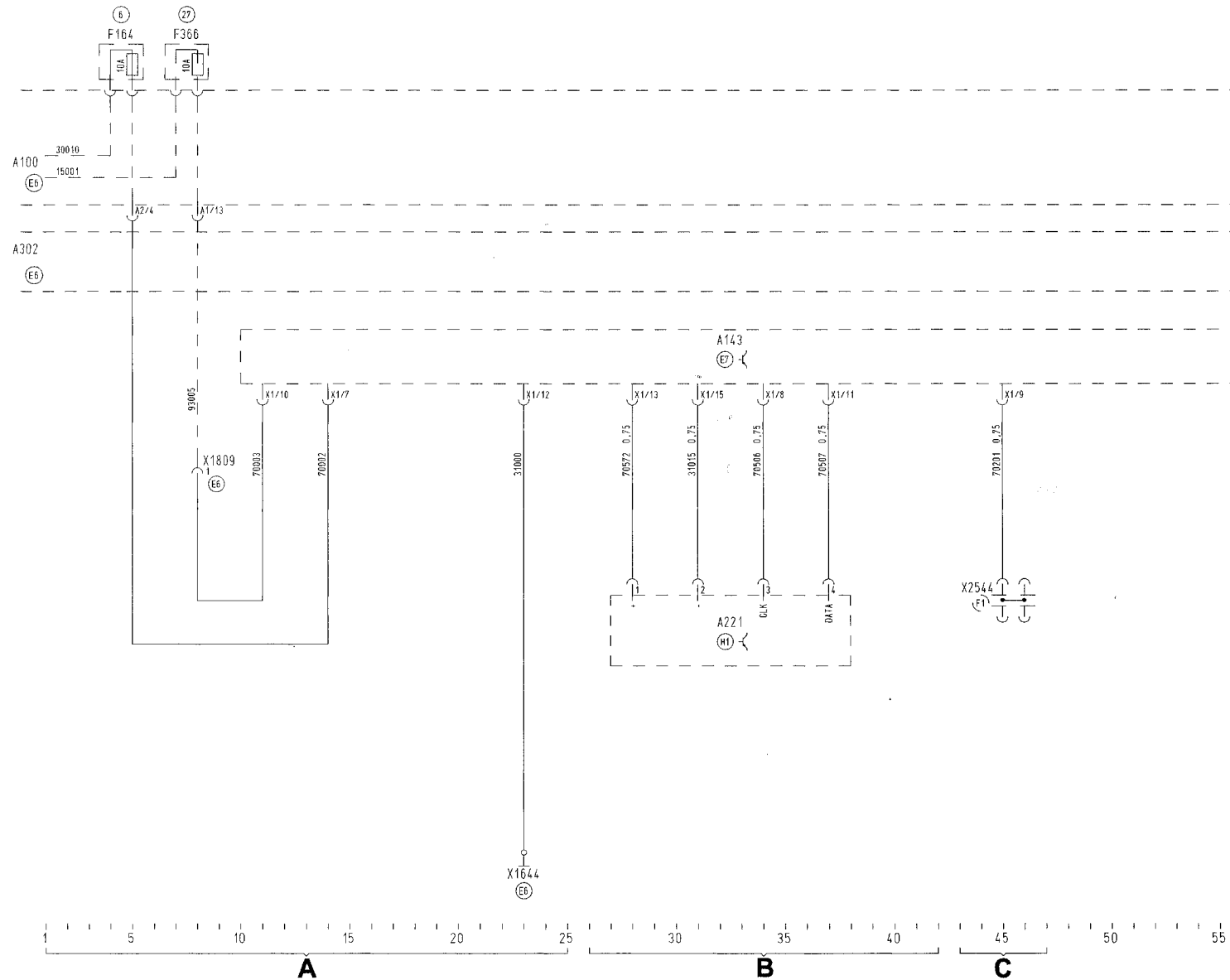
Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1343 Sheet 1 of 2



**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 4x2 FL (truck)**

**Legend**

Wiring diagram no. **81.99192.1343** Sheet 2 of 2  
Change status: 09.01

**A = Height sensors**

**B = Solenoid valves**

**C = Adjustable shock absorbers**

**D = Control lamp**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**B128** (311) Height sensor, front axle  
**B129** (311) Height sensor, rear axle left  
**B130** (311) Height sensor, rear axle right

**H394** Indicator light, ECAS malfunction/warning

**X1945** Stvd. ECAS/EFR  
**X2004** Stvd. cab frame EFR

**Y132** (168) Solenoid valve block ECAS  
**Y172** (203) Adjustable shock absorber on rear axle right  
**Y173** (203) Adjustable shock absorber on rear axle left

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

[illegible]

**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 4x2 FLL**

**Legend**

Wiring diagram no. **81.99192.1344** Sheet **1** of 2  
Change status: 04.01

**A = Supply voltage**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A221** (349) ECAS remote control  
**A302** (352) Central computer 2

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

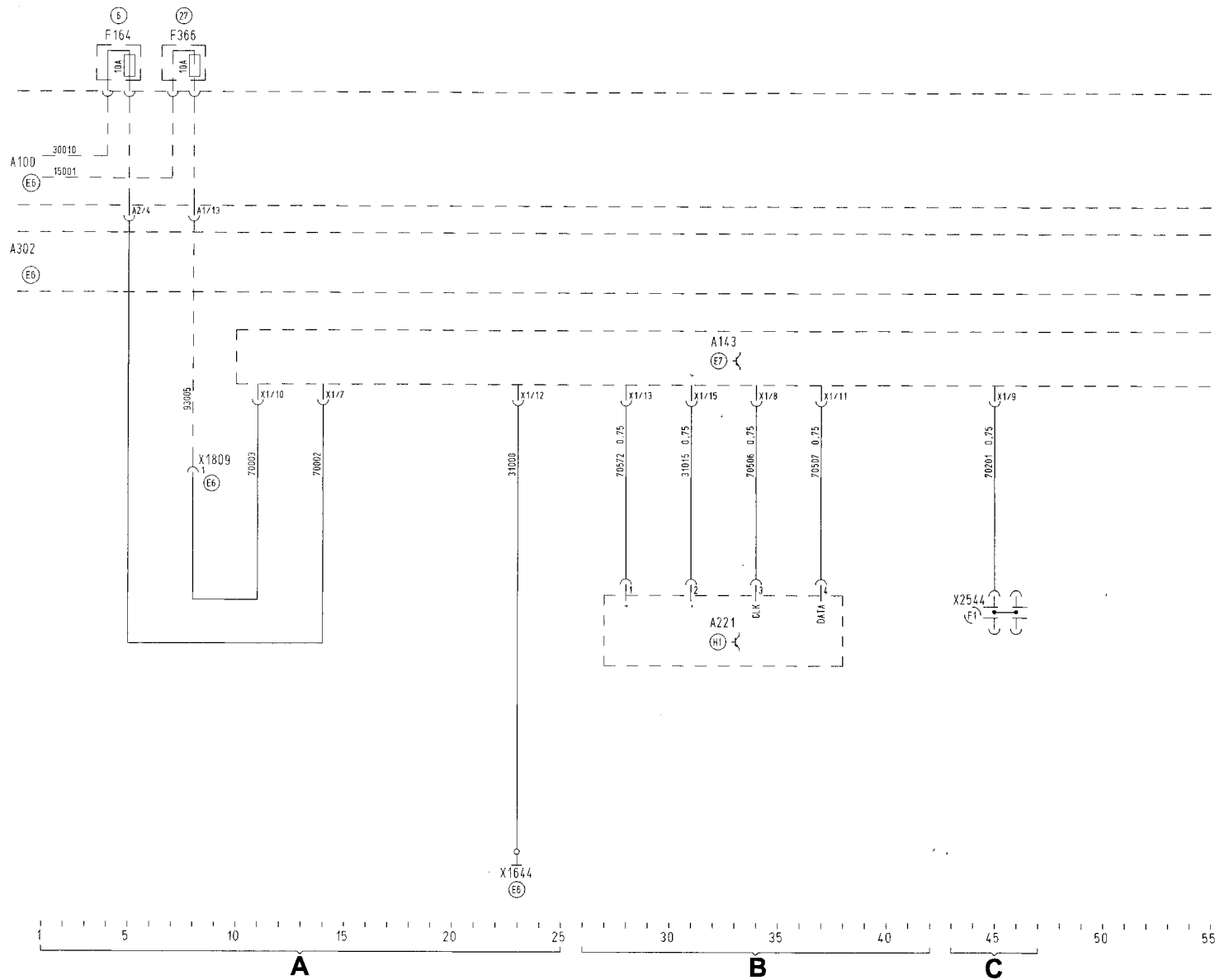
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2544** (246) Potential distributor 21-pin K-line

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1344 Sheet 1 of 2



**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 4x2 FLL**

**Legend**

Wiring diagram no. **81.99192.1344** Sheet 2 of 2  
Change status: 09.01

**A = Height sensors**

**B = Solenoid valves**

**C = Adjustable shock absorbers**

**D = Control lamp**

A100 (255) Central fuse, relay and terminal block  
A143 (345) ECAS control unit  
A302 (352) Central computer 2  
A407 (342) Instrumentation

B128 (311) Height sensor, front axle  
B129 (311) Height sensor, rear axle left  
B130 (311) Height sensor, rear axle right

H394 Indicator light, ECAS malfunction/warning

X1945 Stvd. ECAS/EFR  
X2004 Stvd. cab frame EFR

Y132 (124) Solenoid valve block ECAS  
Y172 (203) Adjustable shock absorber on rear axle right  
Y173 (203) Adjustable shock absorber on rear axle left  
Y174 (202) Adjustable shock absorber on front axle right  
Y175 (202) Adjustable shock absorber on front axle left

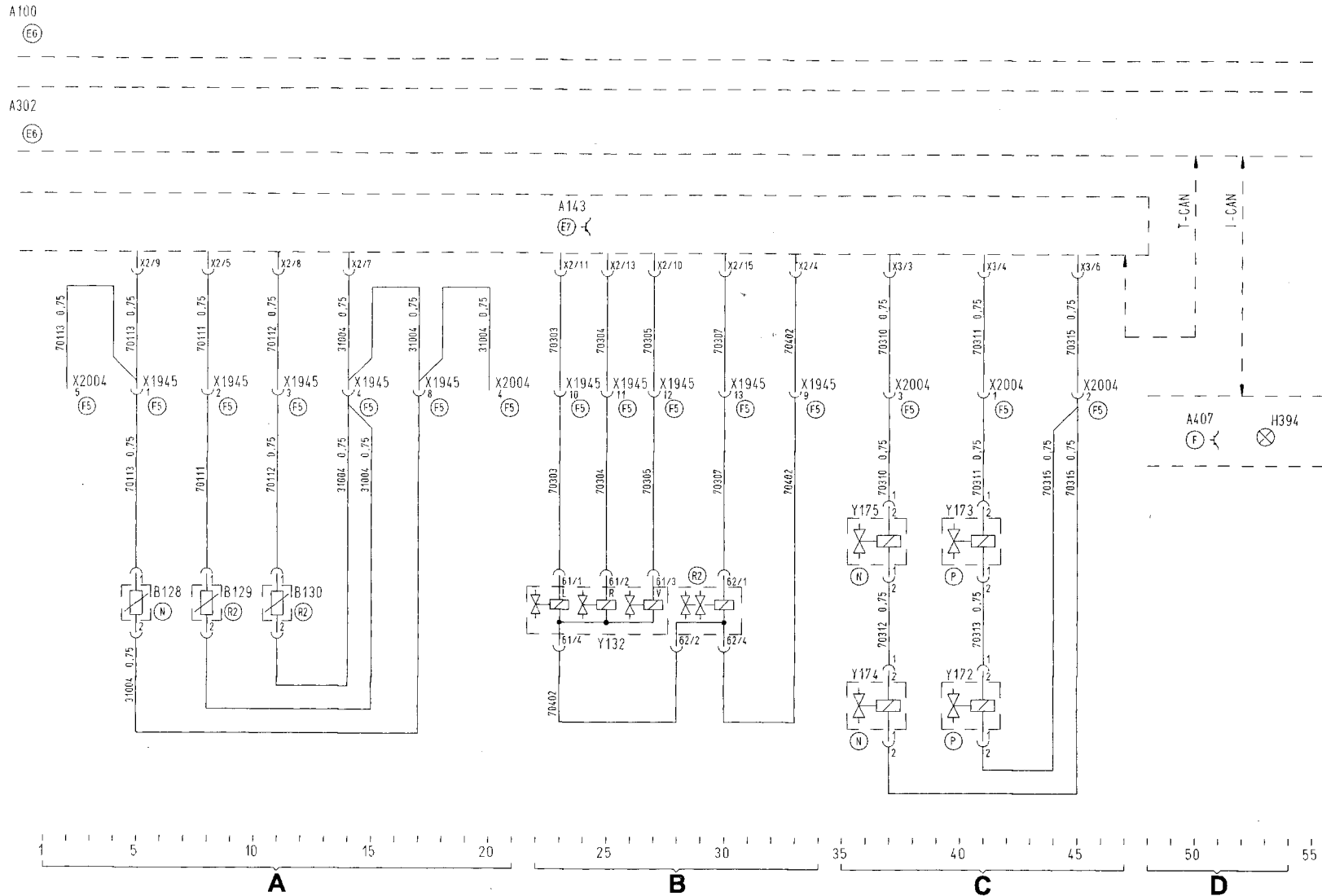
**Marking of mounting positions**

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓗ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓗ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1344 Sheet 2 of 2



**ADDITIONAL WIRING DIAGRAMS**

**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 6x2 FNL**

**Legend**

Wiring diagram no. **81.99192.1345** Sheet **1** of 2  
Change status: 04.01

**A = Switch/control lamp**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A221** (349) ECAS remote control  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

**H394** Indicator light, ECAS malfunction/warning

**S266** (514) Switch ECAS NLA/VLA raise/release  
**S267** (515) Control switch ECAS traction help

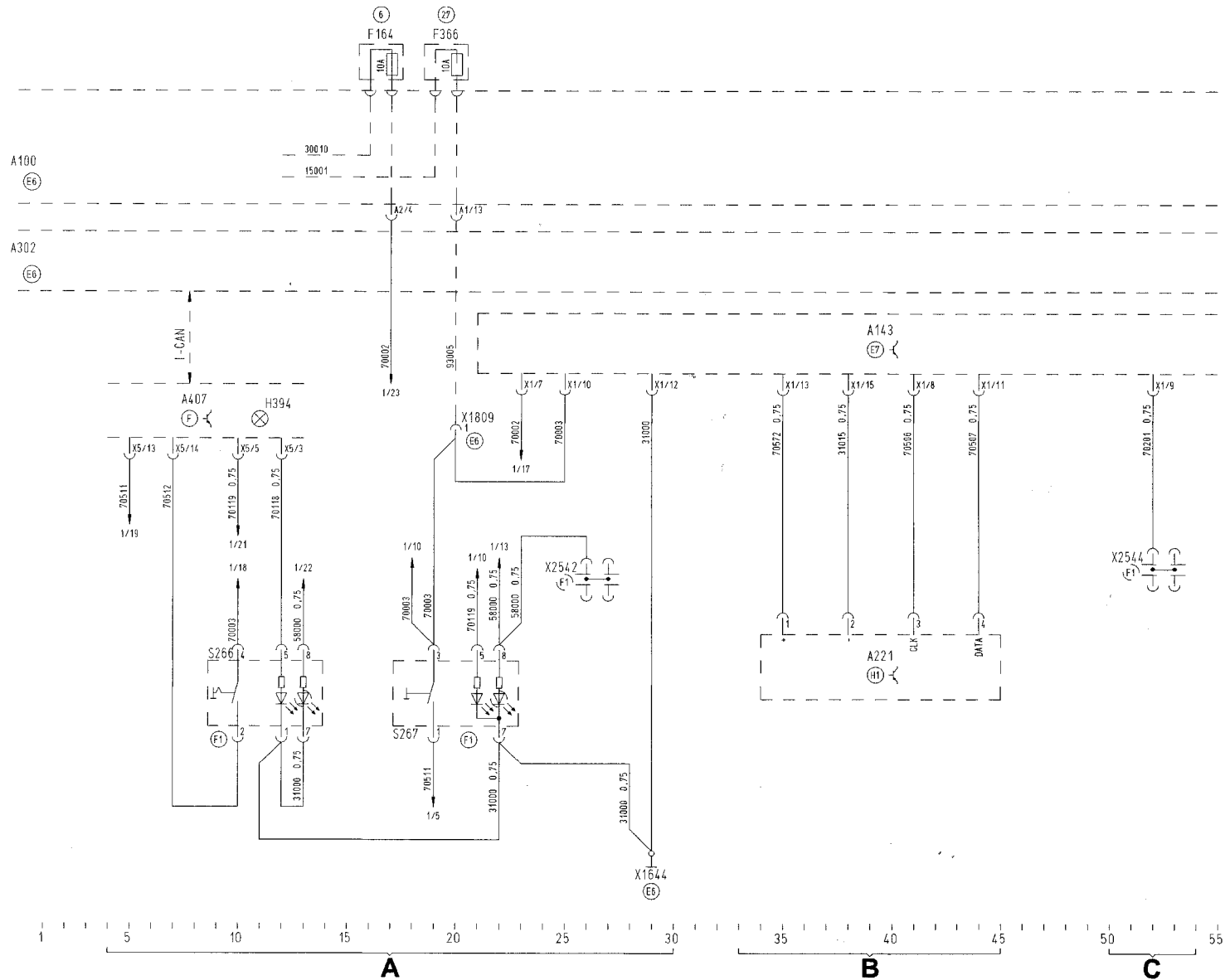
**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2542** (246) Potential distributor, 21-pin line 58000  
**X2544** (246) Potential distributor 21-pin K-line

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1345** Sheet **1** of 2



**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 6x2 FNL**

**Legend**

Wiring diagram no. **81.99192.1345** Sheet 2 of 2  
Change status: 09.01

**A = Height sensors**

**B = Solenoid valves**

**C = Adjustable shock absorbers**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A302** (352) Central computer 2

**B128** (311) Height sensor, front axle  
**B129** (311) Height sensor, rear axle left  
**B130** (311) Height sensor, rear axle right

**X1945** Stvd. ECAS/EFR  
**X2004** Stvd. cab frame EFR

**Y161** (169) Solenoid valve ECAS I = HA (rear axle) II = NLA/VLA  
(trailing/leading axle)  
**Y172** (203) Adjustable shock absorber on rear axle right  
**Y173** (203) Adjustable shock absorber on rear axle left

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

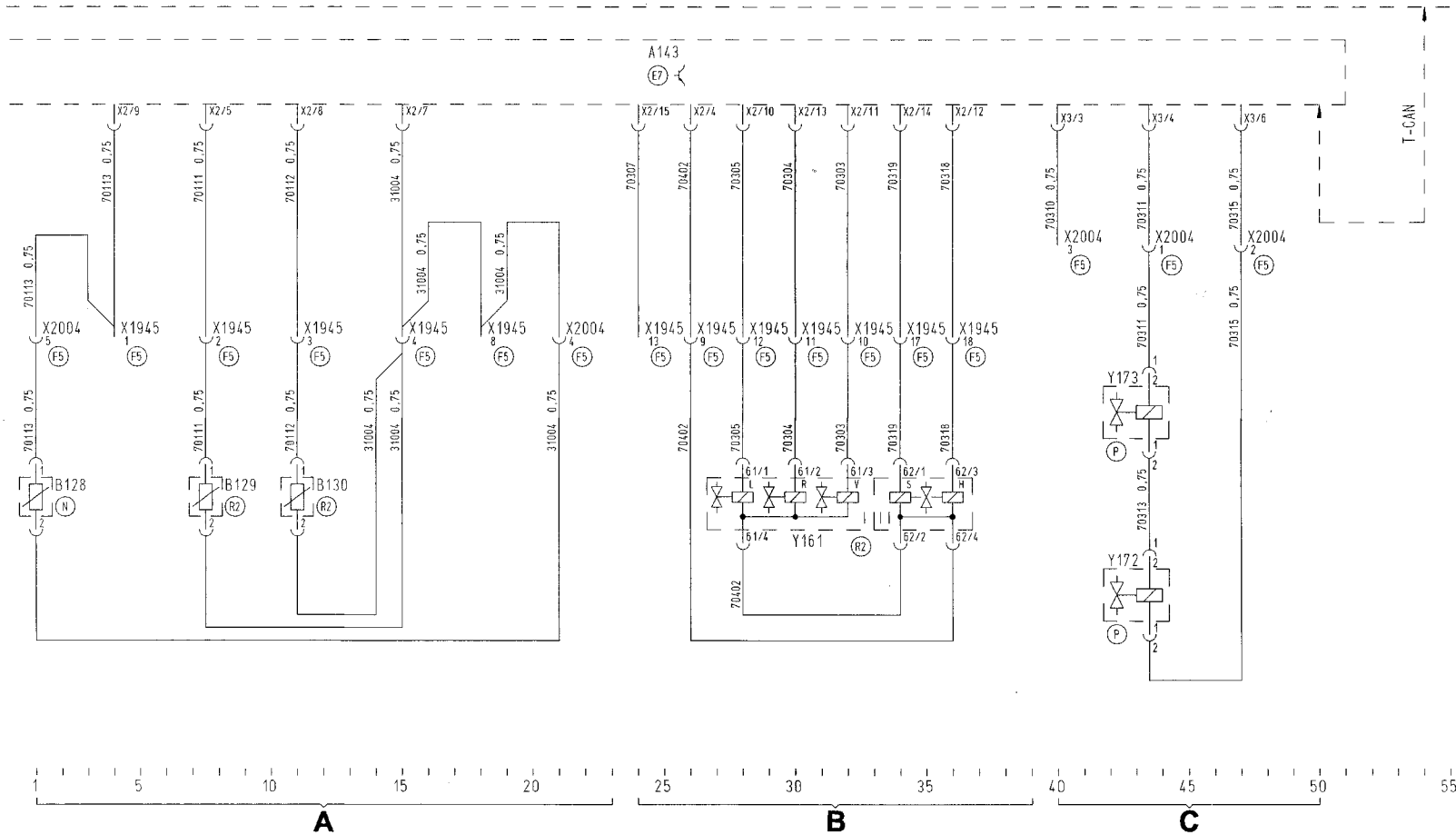
Wiring diagram no. 81.99192.1345 Sheet 2 of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### ECAS electronically controlled air suspension/ EFR electronic shock absorber control 6x2 FNL (Nordland)

#### Legend

Wiring diagram no. **81.99192.1350** Sheet 1 of 2  
Change status: 04.01

**A = Supply voltage, switch**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A221** (350) ECAS remote control  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

**H394** Indicator light, ECAS malfunction/warning

**S747** (680) Switch ECAS traction help Nordland  
**S790** (699) Control switch ECAS lift/relieve trailing/  
leading axle Nordland

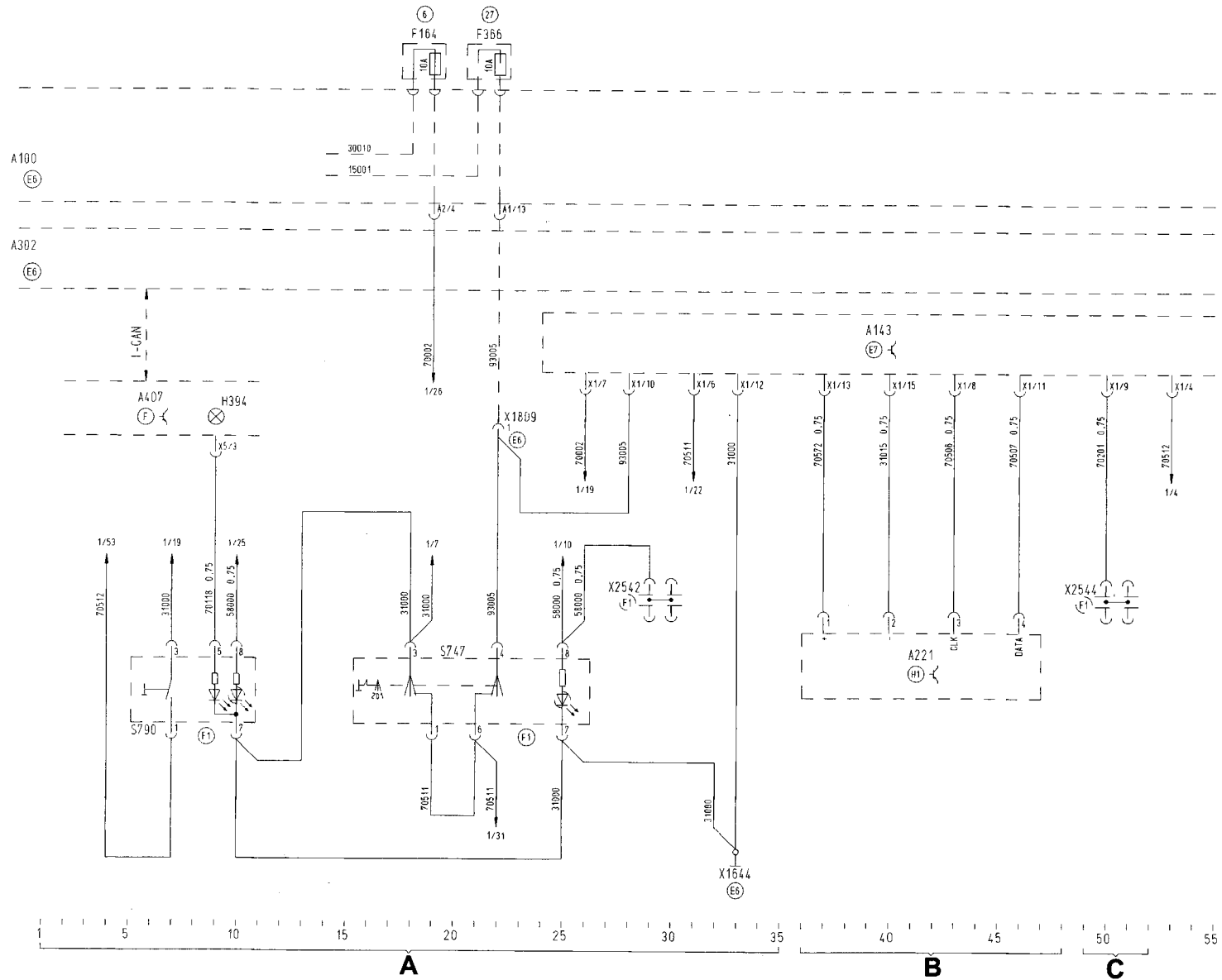
**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2542** (246) Potential distributor, 21-pin line 58000  
**X2544** (246) Potential distributor 21-pin K-line

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (EB) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1350 Sheet 1 of 2



**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 6x2 FNL (Nordland)**

**Legend**

Wiring diagram no. **81.99192.1350** Sheet 2 of 2  
Change status: 09.01

**A = Height sensors**

**B = Solenoid valves**

**C = Adjustable shock absorbers**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A302** (352) Central computer 2

**B128** (311) Height sensor, front axle  
**B129** (311) Height sensor, rear axle left  
**B130** (311) Height sensor, rear axle right

**X1945** Stvd. ECAS/EFR  
**X2004** Stvd. cab frame EFR

**Y161** (169) Solenoid valve block ECAS I = HA II = NLA/VLA  
**Y172** (203) Adjustable shock absorber on rear axle right  
**Y173** (203) Adjustable shock absorber on rear axle left

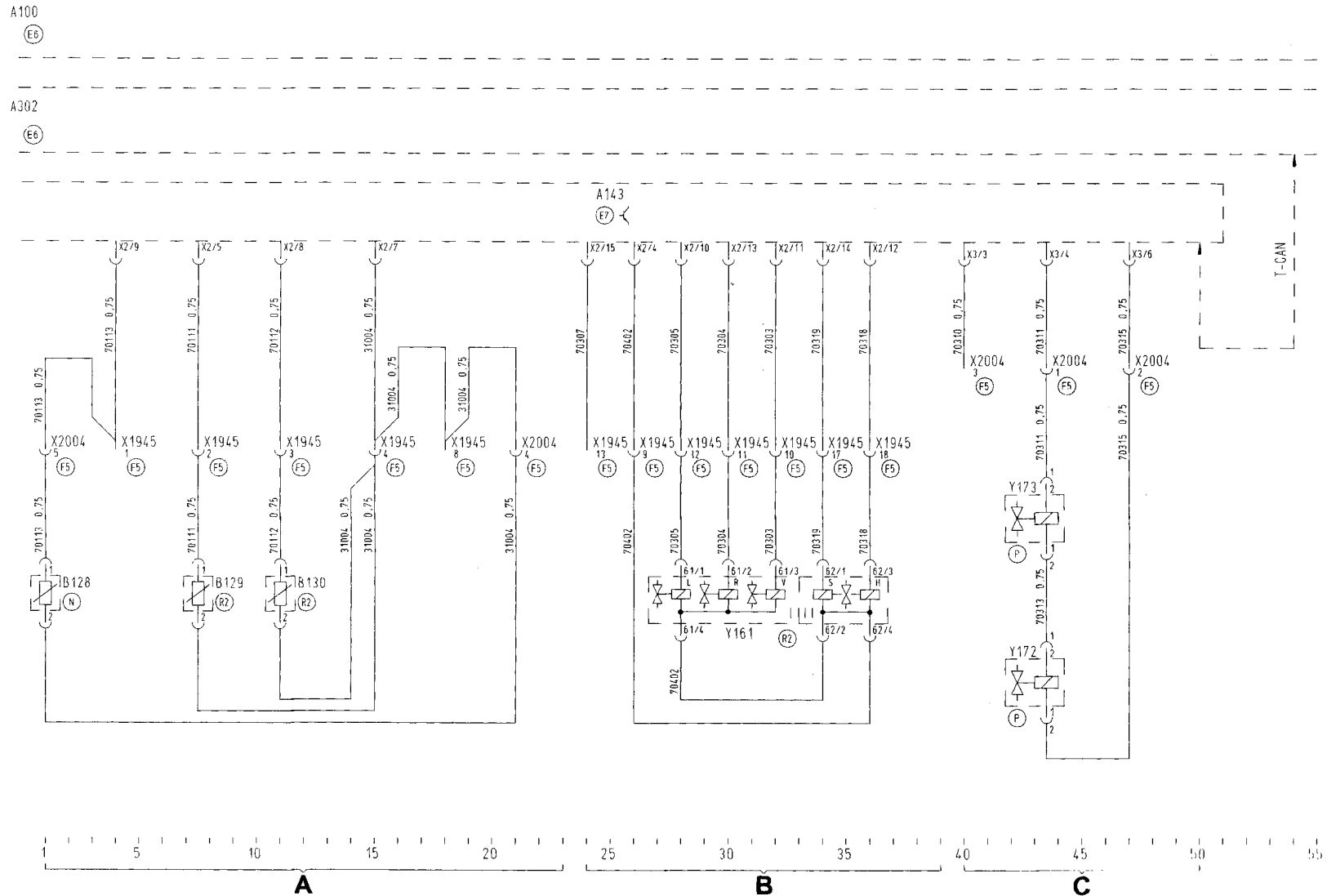
**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (FB) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1350 Sheet 2 of 2



**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 6x2 FVL**

**Legend**

Wiring diagram no. **81.99192.1346** Sheet **1** of 2  
Change status: 04.01

**A = Switch**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A221** (349) ECAS remote control  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

**H394** Indicator light, ECAS malfunction/warning

**S266** (519) Switch ECAS NLA/VLA raise/release  
**S267** (563) Control switch ECAS traction help

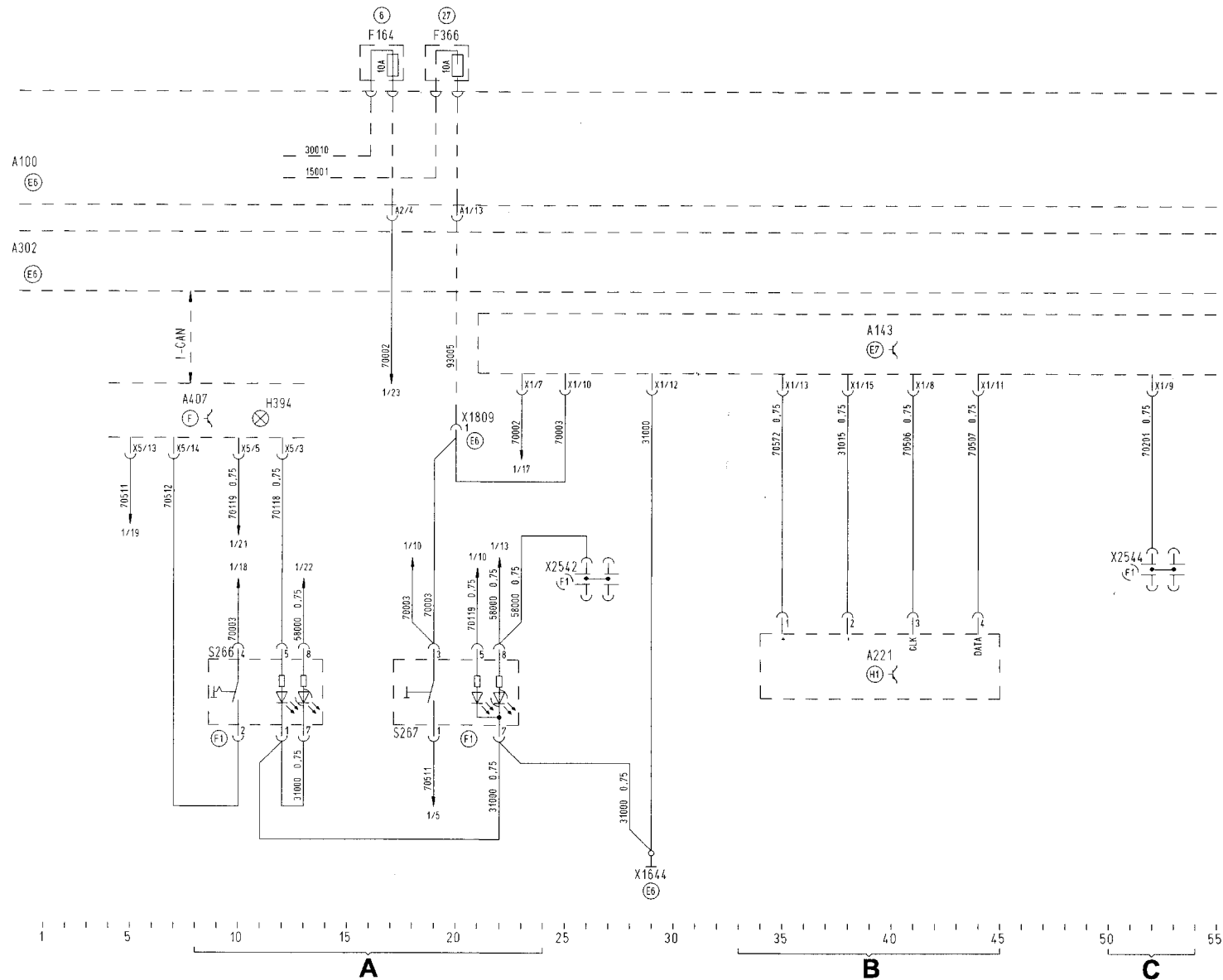
**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2542** (246) Potential distributor, 21-pin line 58000  
**X2544** (246) Potential distributor 21-pin K-line

**Marking of mounting positions**

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓒ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓒ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓒ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓒ Instrument panel         | Ⓖ Rear axle                    |
| Ⓒ Central part             | Ⓖ Front part of frame          |
| Ⓒ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓒ Foot pedals              | Ⓖ Door left                    |
| Ⓒ Front wall, inside left  | Ⓖ Door right                   |
| Ⓒ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1346 Sheet 1 of 2



**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 6x2 FVL**

**Legend**

Wiring diagram no. **81.99192.1346** Sheet 2 of 2  
Change status: 09.01.

**A = Height sensors**

**B = Solenoid valves**

**C = Adjustable shock absorbers**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A302** (352) Central computer 2

**B128** (311) Height sensor, front axle  
**B129** (311) Height sensor, rear axle left  
**B130** (311) Height sensor, rear axle right

**X1945** Stvd. ECAS/EFR  
**X2004** Stvd. cab frame EFR

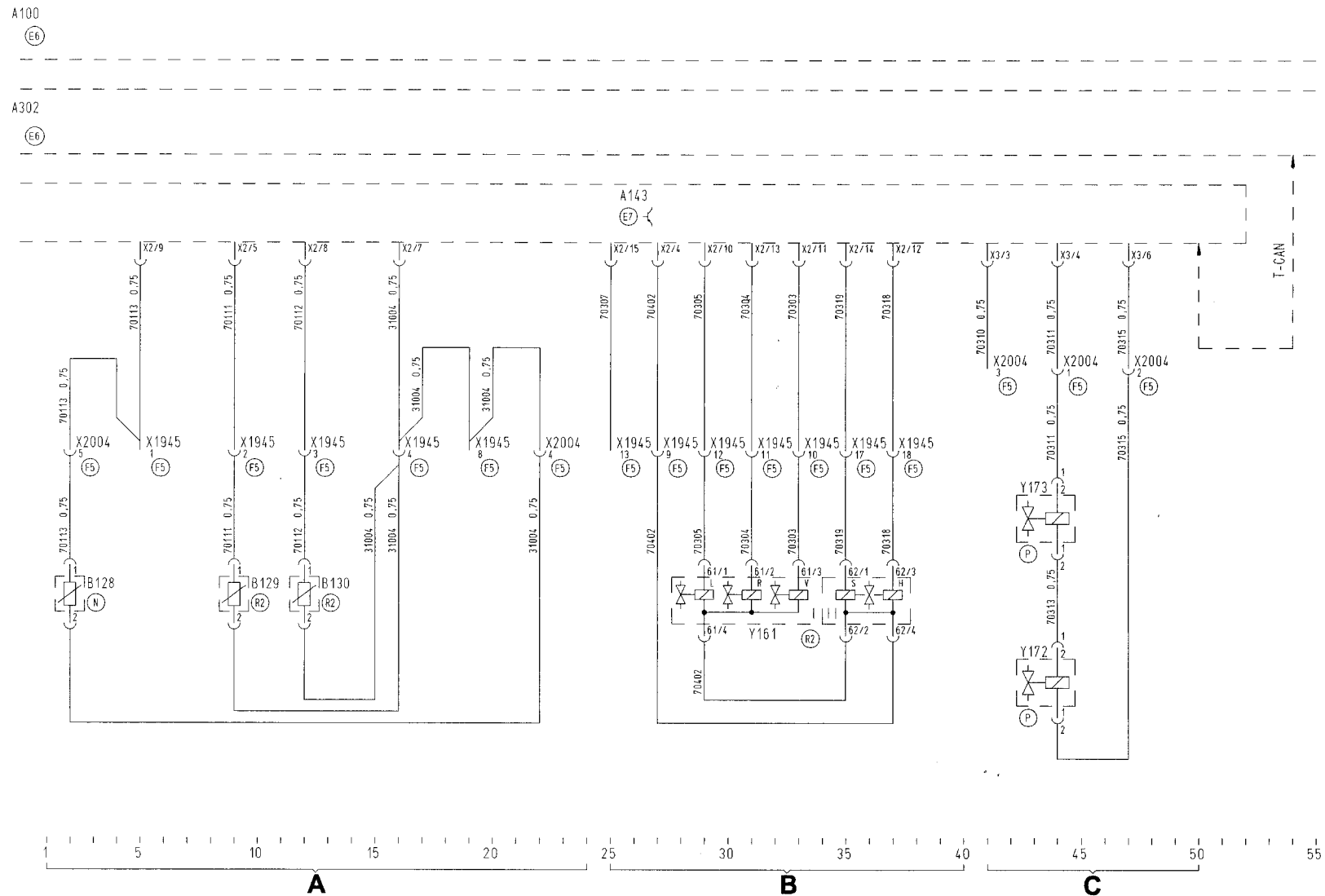
**Y161** (169) Solenoid valve block ECAS I = HA II = NLA/VLA  
**Y172** (203) Adjustable shock absorber on rear axle right  
**Y173** (203) Adjustable shock absorber on rear axle left

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1346 Sheet 2 of 2



**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 6x2 FNLL**

**Legend**

Wiring diagram no. **81.99192.1347** Sheet 1 of 2  
Change status: 04.01

**A = Switch**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A221** (350) ECAS remote control  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

**H394** Indicator light, ECAS malfunction/warning

**S266** (514) Switch ECAS NLA/VLA raise/release  
**S267** (515) Control switch ECAS traction help

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1809** Stvd. ECAS (terminal 15)

**X2542** (246) Potential distributor, 21-pin line 58000

**X2544** (246) Potential distributor 21-pin K-line

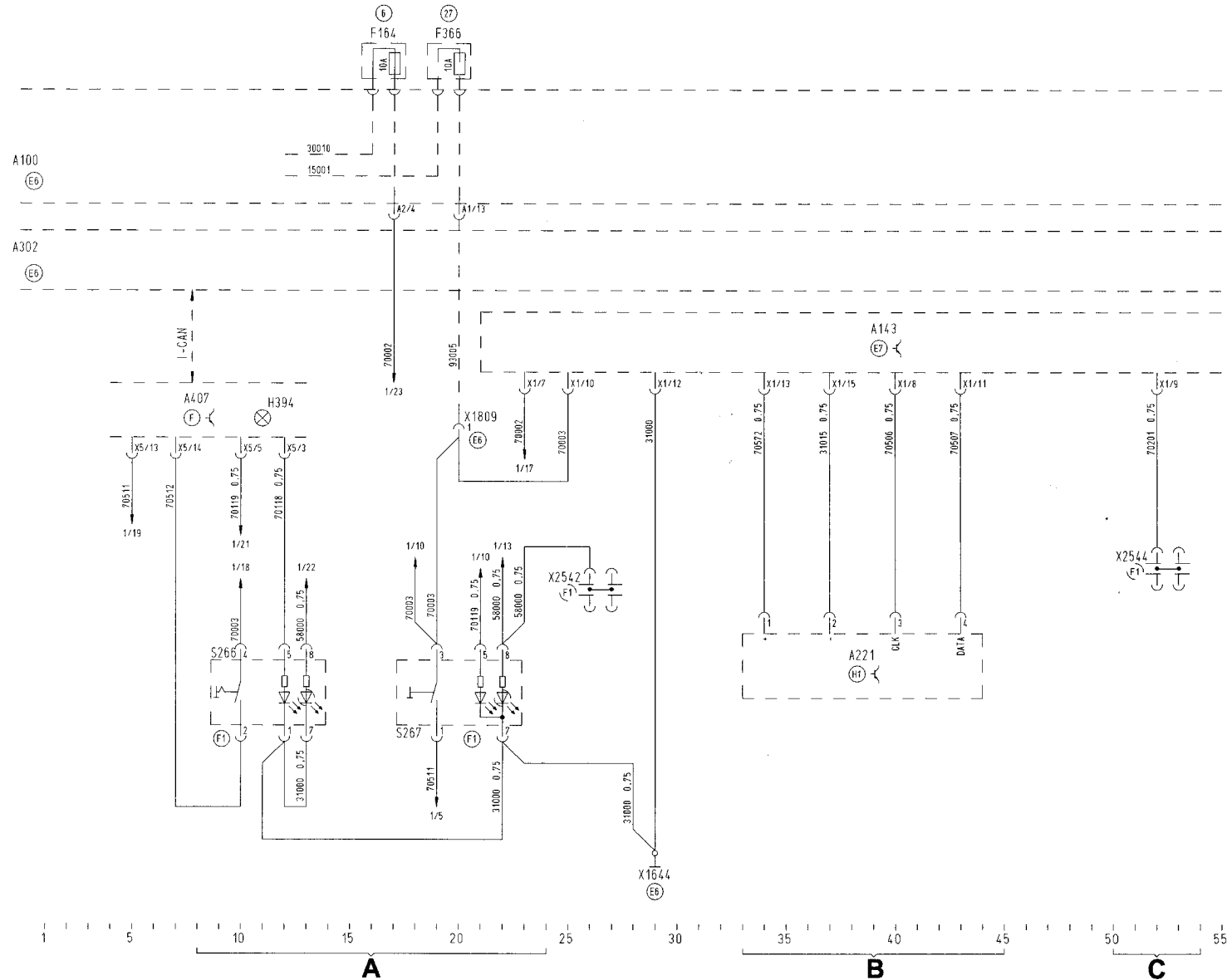
**Marking of mounting positions**

Ⓐ Tail  
Ⓑ Engine  
Ⓑ2 Gearbox  
Ⓒ Front  
Ⓒ1 Bumper  
Ⓒ2 Entrance right  
Ⓒ3 Entrance left  
Ⓔ Central electrics area  
Ⓔ7 Control unit racks  
Ⓔ8 Rear wall of cab  
Ⓕ Instrument panel  
Ⓕ1 Central part  
Ⓕ2 Steering wheel/column  
Ⓕ3 Foot pedals  
Ⓕ4 Front wall, inside left  
Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat  
Ⓕ7 Passenger seat  
Ⓕ8 Control panel  
Ⓖ Battery box  
Ⓕ1 B-pillar on driver's side  
Ⓕ2 A-pillar on driver's side  
Ⓖ1 B-pillar on passenger's side  
Ⓖ2 A-pillar on passenger's side  
Ⓖ Ceiling/roof  
Ⓖ Front axle  
Ⓖ Rear axle  
Ⓕ1 Front part of frame  
Ⓕ2 Rear part of frame  
Ⓕ1 Door left  
Ⓕ2 Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1347 Sheet 1 of 2



**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 6x2 FNLL**

**Legend**

Wiring diagram no. **81.99192.1347** Sheet 2 of 2  
Change status: 09.01

**A = Height sensors**

**B = Solenoid valves**

**C = Adjustable shock absorbers**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A302** (352) Central computer 2

**B128** (311) Height sensor, front axle  
**B129** (311) Height sensor, rear axle left  
**B130** (311) Height sensor, rear axle right

**X1945** Stvd. ECAS/EFR  
**X2004** Stvd. cab frame EFR

**Y161** (169) Solenoid valve block ECAS I = HA II = NLA/VLA  
**Y162** (128) Solenoid valve block ECAS front axle  
**Y172** (203) Adjustable shock absorber on rear axle right  
**Y173** (203) Adjustable shock absorber on rear axle left  
**Y174** (202) Adjustable shock absorber on front axle right  
**Y175** (202) Adjustable shock absorber on front axle left

**Marking of mounting positions**

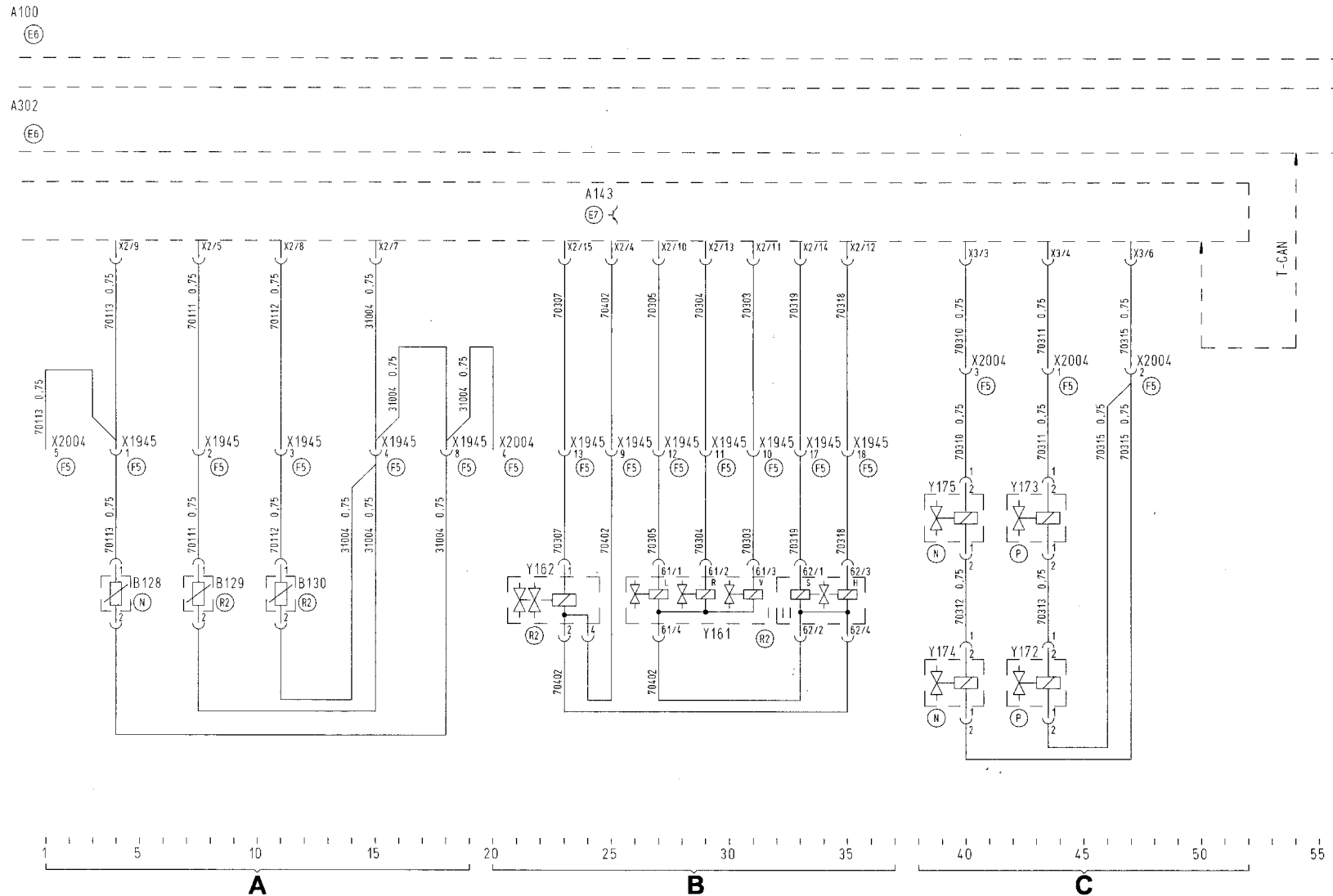
(A) Tail  
(B1) Engine  
(B2) Gearbox  
(C) Front  
(C1) Bumper  
(C2) Entrance right  
(C3) Entrance left  
(E6) Central electrics area  
(E7) Control unit racks  
(E8) Rear wall of cab  
(F) Instrument panel  
(F1) Central part  
(F2) Steering wheel/column  
(F3) Foot pedals  
(F4) Front wall, inside left  
(F5) Front wall, inside right

(F6) Driving seat  
(F7) Passenger seat  
(F8) Control panel  
(G) Battery box  
(H1) B-pillar on driver's side  
(H2) A-pillar on driver's side  
(J1) B-pillar on passenger's side  
(J2) A-pillar on passenger's side  
(L) Ceiling/roof  
(N) Front axle  
(P) Rear axle  
(R1) Front part of frame  
(R2) Rear part of frame  
(S1) Door left  
(S2) Door right



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1347** Sheet 2 of 2



## ADDITIONAL WIRING DIAGRAMS

### ECAS electronically controlled air suspension/ EFR electronic shock absorber control 6x2 FNLL (Nordland)

#### Legend

Wiring diagram no. **81.99192.1351** Sheet 1 of 2  
Change status: 04.01

**A = Supply voltage, switch**

**B = Remote control**

**C = Diagnosis**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A221** (350) ECAS remote control  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**F164** (101) Fuse ECAS (terminal 30)  
**F366** (101) ECAM/ECAS fuse (terminal 15)

**H394** Indicator light, ECAS malfunction/warning

**S747** (680) Switch ECAS traction help Nordland  
**S790** (699) Control switch ECAS lift/relieve trailing/  
leading axle Nordland

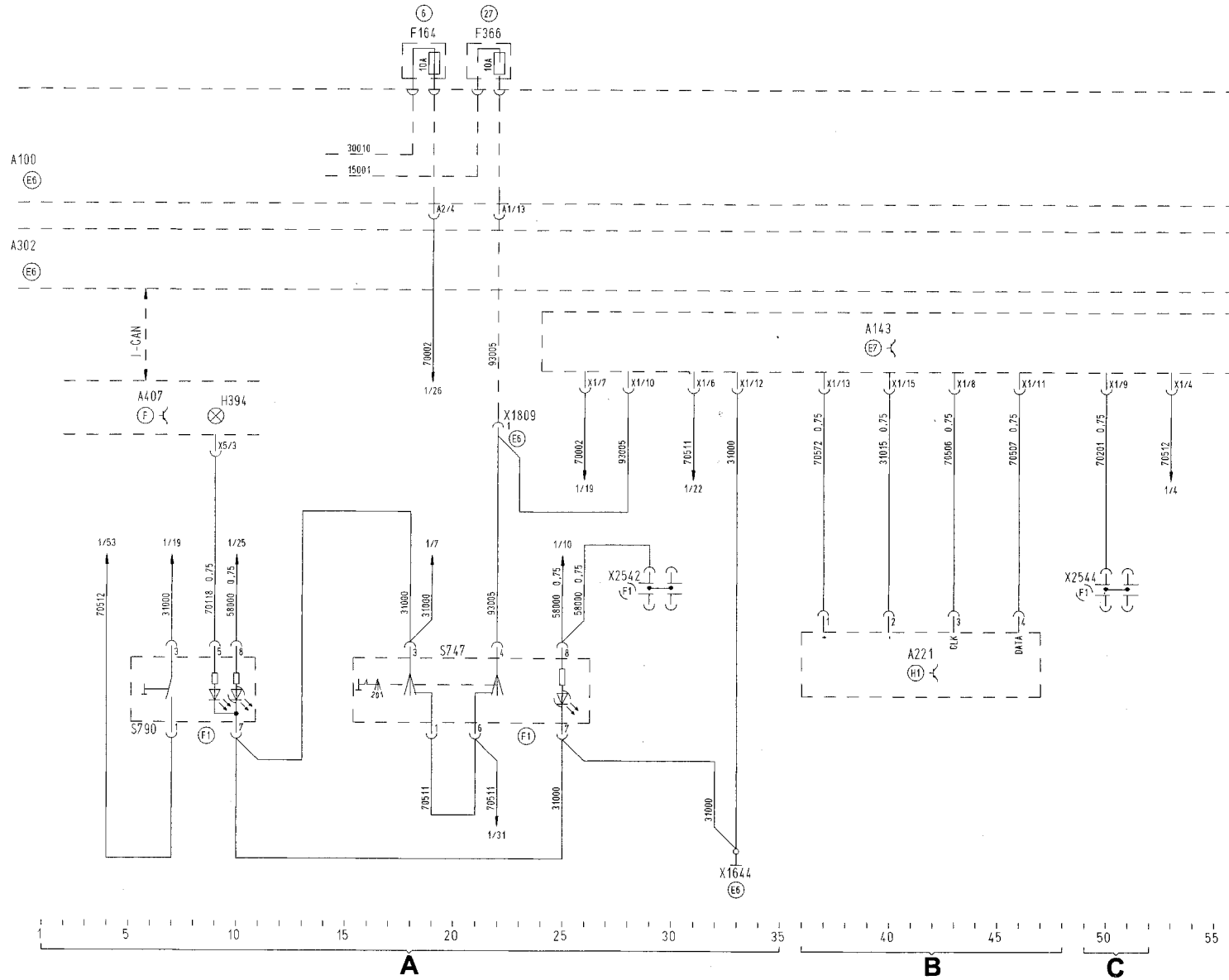
**X1644** Earthing point, cab, adjacent to central fuse,  
relay and terminal block  
**X1809** Stvd. ECAS (terminal 15)  
**X2542** (246) Potential distributor, 21-pin line 58000  
**X2544** (246) Potential distributor 21-pin K-line

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1351 Sheet 1 of 2



**ECAS electronically controlled air suspension/  
EFR electronic shock absorber control 6x2 FNLL (Nordland)**

**Legend**

Wiring diagram no. **81.99192.1351** Sheet **2** of 2  
Change status: 09.01

**A = Height sensors**

**B = Solenoid valves**

**C = Adjustable shock absorbers**

**A100** (255) Central fuse, relay and terminal block  
**A143** (345) ECAS control unit  
**A302** (352) Central computer 2

**B128** (311) Height sensor, front axle  
**B129** (311) Height sensor, rear axle left  
**B130** (311) Height sensor, rear axle right

**X1945** Stvd. ECAS/EFR  
**X2004** Stvd. cab frame EFR

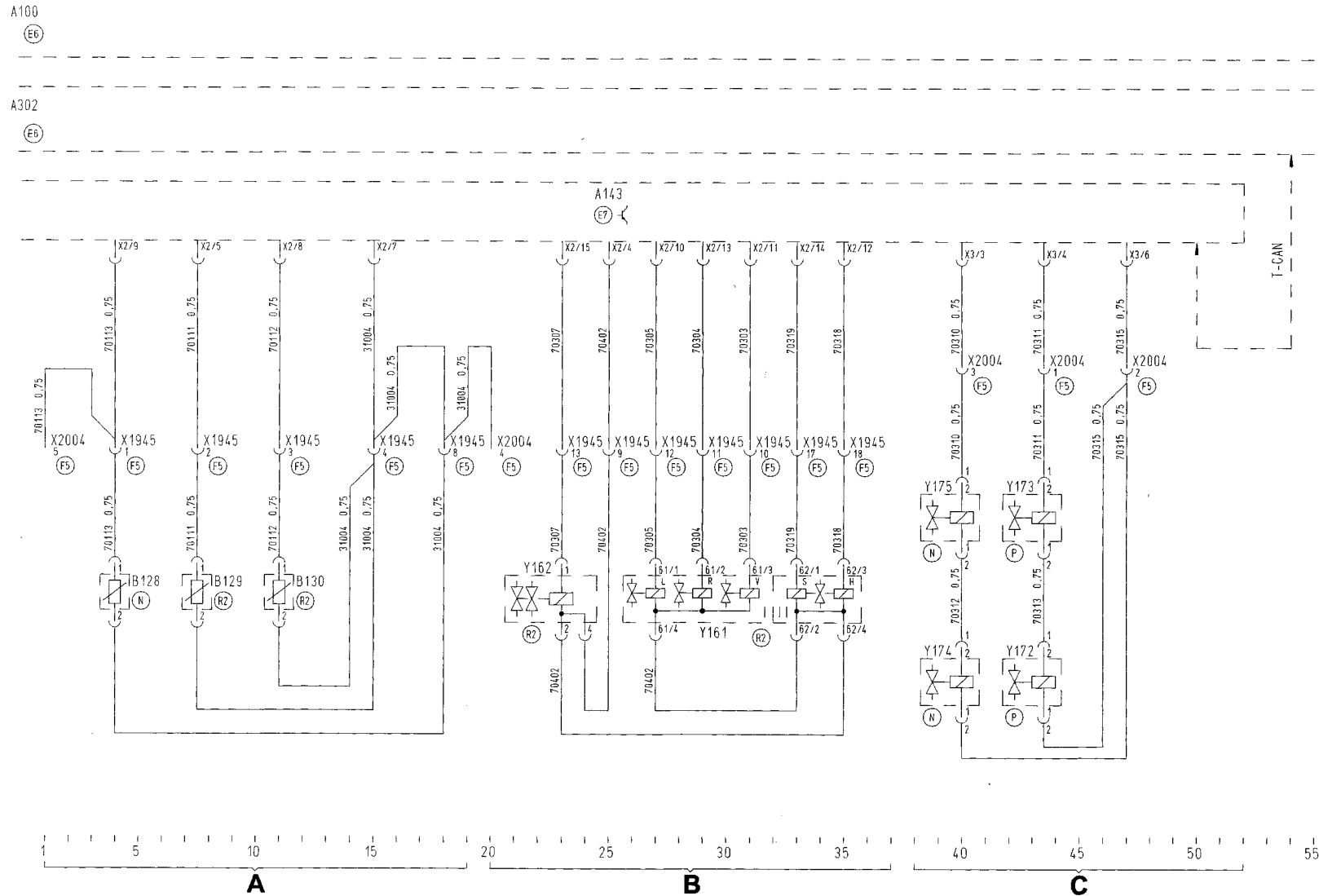
**Y161** (169) Solenoid valve block ECAS I = HA II = NLA/VLA  
**Y162** (128) Solenoid valve block ECAS front axle  
**Y172** (203) Adjustable shock absorber on rear axle right  
**Y173** (203) Adjustable shock absorber on rear axle left  
**Y174** (202) Adjustable shock absorber on front axle right  
**Y175** (202) Adjustable shock absorber on front axle left

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1351 Sheet 2 of 2



**EDC electronically controlled diesel injection**  
**EDC MS6.1 (EURO 2)**

**Legend**

Wiring diagram no. **81.99192.2985** Sheet 1 of 3  
Change status: 03.01

**A = Starting motor control (see series wiring diagram)**

**B = Actuator unit**

**C = Temperature sensor, fuel**

**D = Charge air pressure sensor**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A435** (338) EDC control unit

**B125** (314) Charge air pressure sensor  
**B197** (265) Temperature sensor, fuel

**M100** (144) Starting motor

**X1906** Threaded bolt M6 (MP box)  
**X1907** Threaded bolt M6 (MP box)

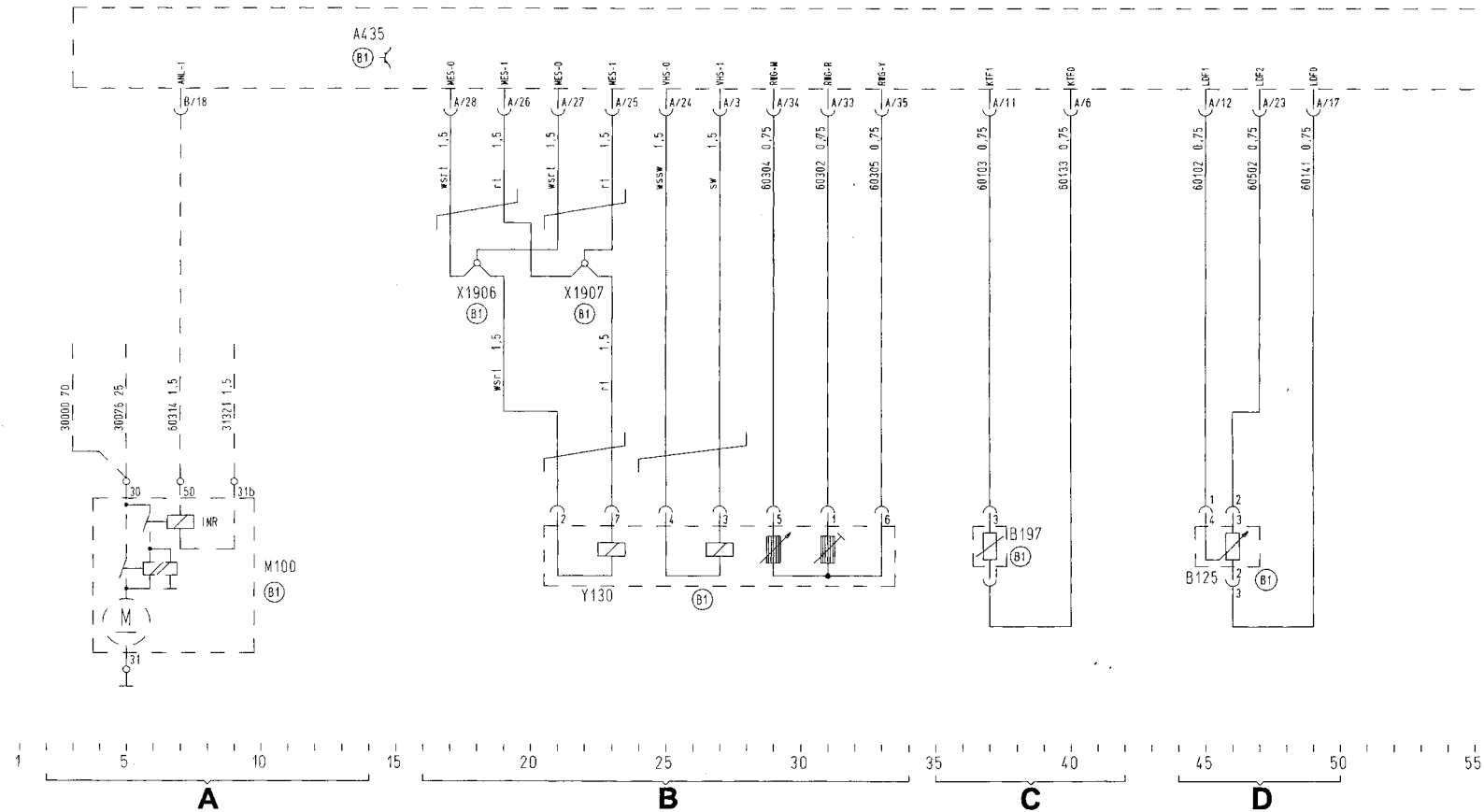
**Y130** (196) Actuator unit, injector pump

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

A100  
(E6)

A302  
(E6)



**EDC electronically controlled diesel injection  
EDC MS6.1 (EURO 2)**

**Legend**

Wiring diagram no. **81.99192.2985** Sheet 2 of 3  
Change status: 03.01

**A = Temperature sensor, coolant**  
**B = Engine speed sensor**  
**C = Auxiliary engine speed sensor**  
**D = Needle movement sensor**  
**E = Oil pressure sensor**  
**F = Fuel pressure sensor**  
**G = Earthing point, engine**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A435** (338) EDC control unit

**B104** (340) Oil pressure sensor  
**B124** (265) Temperature sensor, coolant  
**B198** (315) Needle movement sensor  
**B199** (316) Engine speed sensor  
**B200** (317) Auxiliary engine speed sensor  
**B377** (340) Fuel pressure sensor

**X1904** Threaded bolt M6 (MP box)  
**X1982** Threaded bolt M5 (MP box)

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



A100

E6

A302

E6



**EDC electronically controlled diesel injection**  
**EDC MS6.1 (EURO 2)**

**Legend**

Wiring diagram no. **81.99192.2985** Sheet **3** of 3  
Change status: 03.01

**A = Diagnosis**

**B = CAN databus**

**C = Power supply**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer  
**A407** (342) Instrumentation  
**A435** (338) EDC control unit

**F163** (104) Generator engine control (terminal 30)  
**F236** (111) Generator engine control (terminal 15)  
**F354** (132) Main fuse (terminal 30-1)  
**F355** (132) Main fuse (terminal 30-2)

**H109** Indicator light, oil pressure  
**H296** Indicator light, EDC (malfunction)  
**H374** Indicator light, air filter dirty

**K170** (297) Relay, power supply engine control (terminal 30)

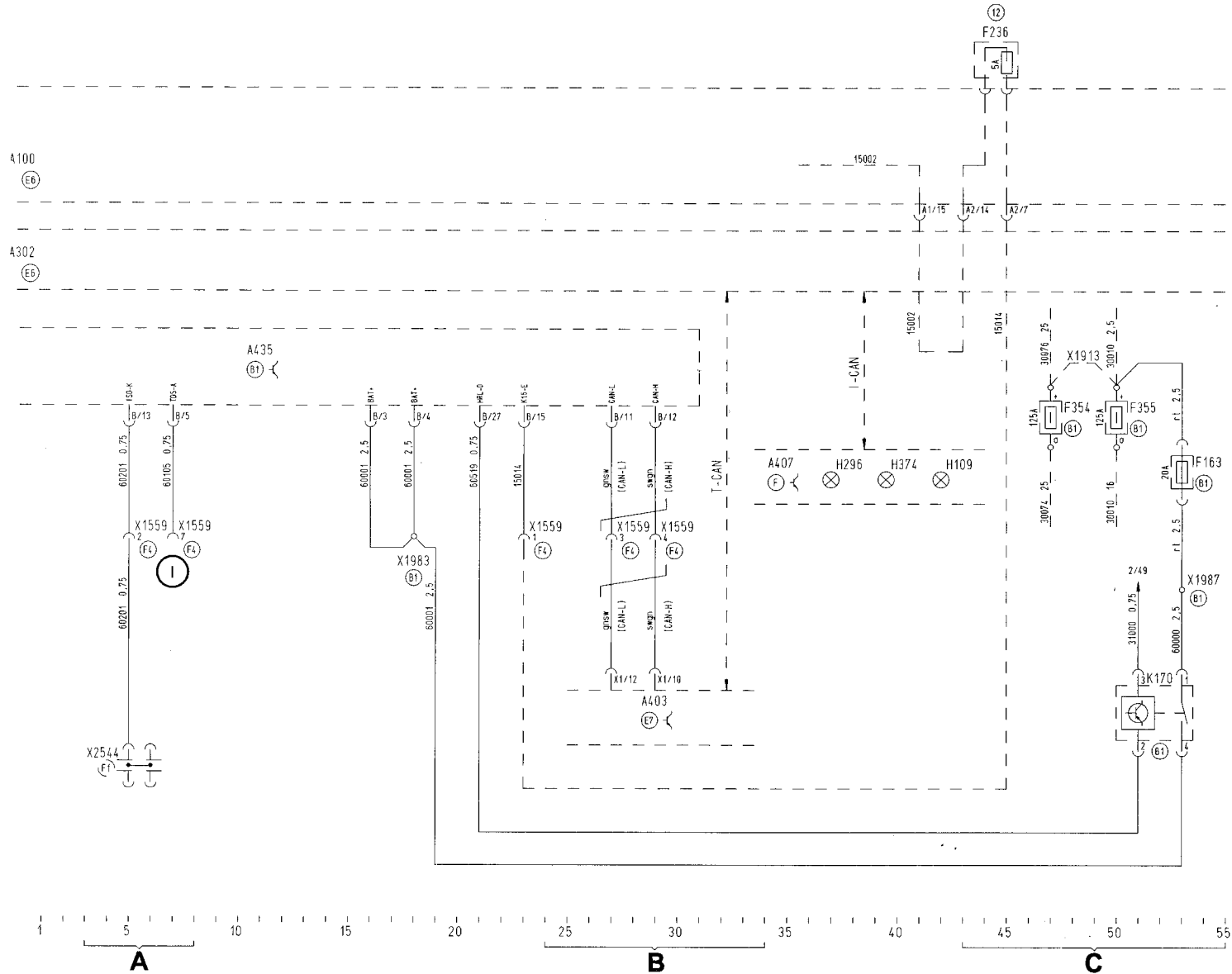
**X1559** Stvd. engine/EDC/transmission IV  
**X1913** (199) Bridge, line 30000 (MP box)  
**X1983** Threaded bolt M6 (MP box)  
**X1987** Threaded bolt M6 (MP box)  
**X2544** (246) Potential distributor 21-pin K-line

**Marking of mounting positions**

- |                                     |                                   |
|-------------------------------------|-----------------------------------|
| (A) Tail                            | (F6) Driving seat                 |
| (B1) Engine                         | (F7) Passenger seat               |
| (B2) Gearbox                        | (F8) Control panel                |
| (C) Front                           | (G) Battery box                   |
| (C1) Bumper                         | (H1) B-pillar on driver's side    |
| (C2) Entrance right                 | (H2) A-pillar on driver's side    |
| (C3) Entrance left                  | (J1) B-pillar on passenger's side |
| (E6) Central electrics area         | (J2) A-pillar on passenger's side |
| (E7) Control unit racks             | (L) Ceiling/roof                  |
| (E8) Rear wall of cab               | (N) Front axle                    |
| (F) Instrument panel                | (P) Rear axle                     |
| (F1) Central part                   | (R1) Front part of frame          |
| (F2) Steering wheel/column          | (R2) Rear part of frame           |
| (F3) Foot pedals                    | (S1) Door left                    |
| (F4) Front wall, inside left        | (S2) Door right                   |
| (F5) Front wall, inside right       |                                   |
| (I) Reserve for engine speed signal |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2985 Sheet 3 of 3



## ADDITIONAL WIRING DIAGRAMS

### EDC electronically controlled diesel injection EDC MS6.1 with exhaust gas recirculation EGR (EURO 3)

#### Legend

Wiring diagram no. **81.99192.2986** Sheet 1 of 3

Change status: 03.01

**A = Actuator unit**

**B = Temperature sensor, fuel**

**C = Charge air pressure sensor**

**D = Temperature sensor, charge air**

**E = Exhaust gas recirculation cylinder**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A435** (338) EDC control unit

**B123** (341) Temperature sensor, charge air

**B125** (314) Charge air pressure sensor

**B197** (265) Temperature sensor, fuel

**X1904** Threaded bolt M6 (MP box)

**X1906** Threaded bolt M6 (MP box)

**X1907** Threaded bolt M6 (MP box)

**Y130** (196) Actuator unit, injector pump

**Y280** (205) AGR cylinder

#### Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ2 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ7 Control unit racks
- Ⓔ8 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ1 B-pillar on passenger's side
- Ⓕ2 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

# ADDITIONAL WIRING DIAGRAMS

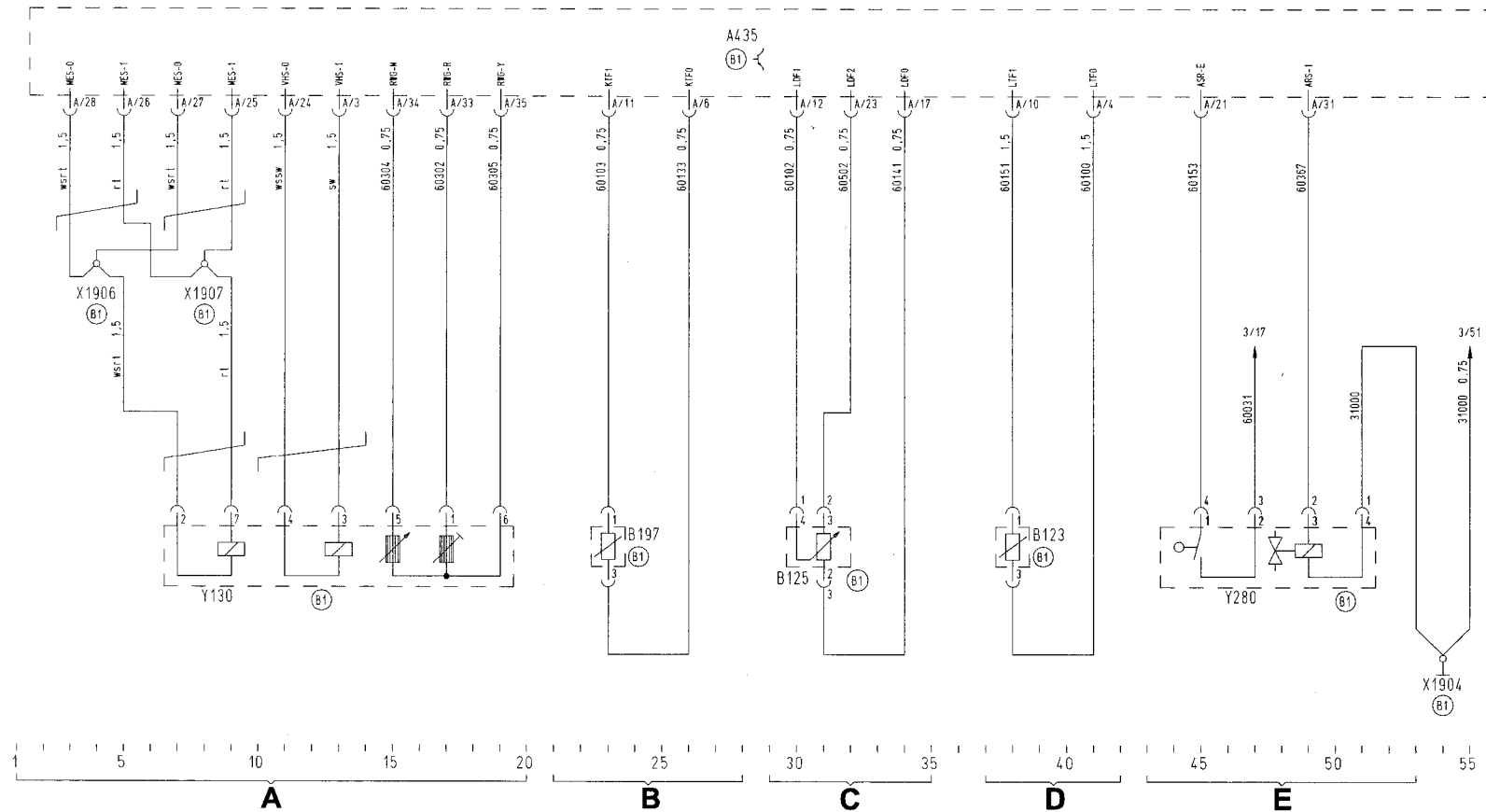
Wiring diagram no. **81.99192.2986** Sheet **1** of 3

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### EDC electronically controlled diesel injection EDC MS6.1 with exhaust gas recirculation (EURO 3)

#### Legend

Wiring diagram no. **81.99192.2986** Sheet 2 of 3  
Change status: 03.01

**A = Temperature sensor, coolant**  
**B = Engine speed sensor**  
**C = Auxiliary engine speed sensor**  
**D = Needle movement sensor**  
**E = Oil pressure sensor**  
**F = Fuel pressure sensor**  
**G = Earthing point, engine**  
**H = Starting motor control (see series wiring diagram)**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A435** (338) EDC control unit

**B104** (340) Oil pressure sensor  
**B124** (265) Temperature sensor, coolant  
**B198** (315) Needle movement sensor  
**B199** (316) Engine speed sensor  
**B200** (317) Auxiliary engine speed sensor  
**B377** (340) Fuel pressure sensor

**M100** Starting motor

**X1904** Threaded bolt M6 (MP box)  
**X1982** Threaded bolt M5 (MP box)

#### Marking of mounting positions

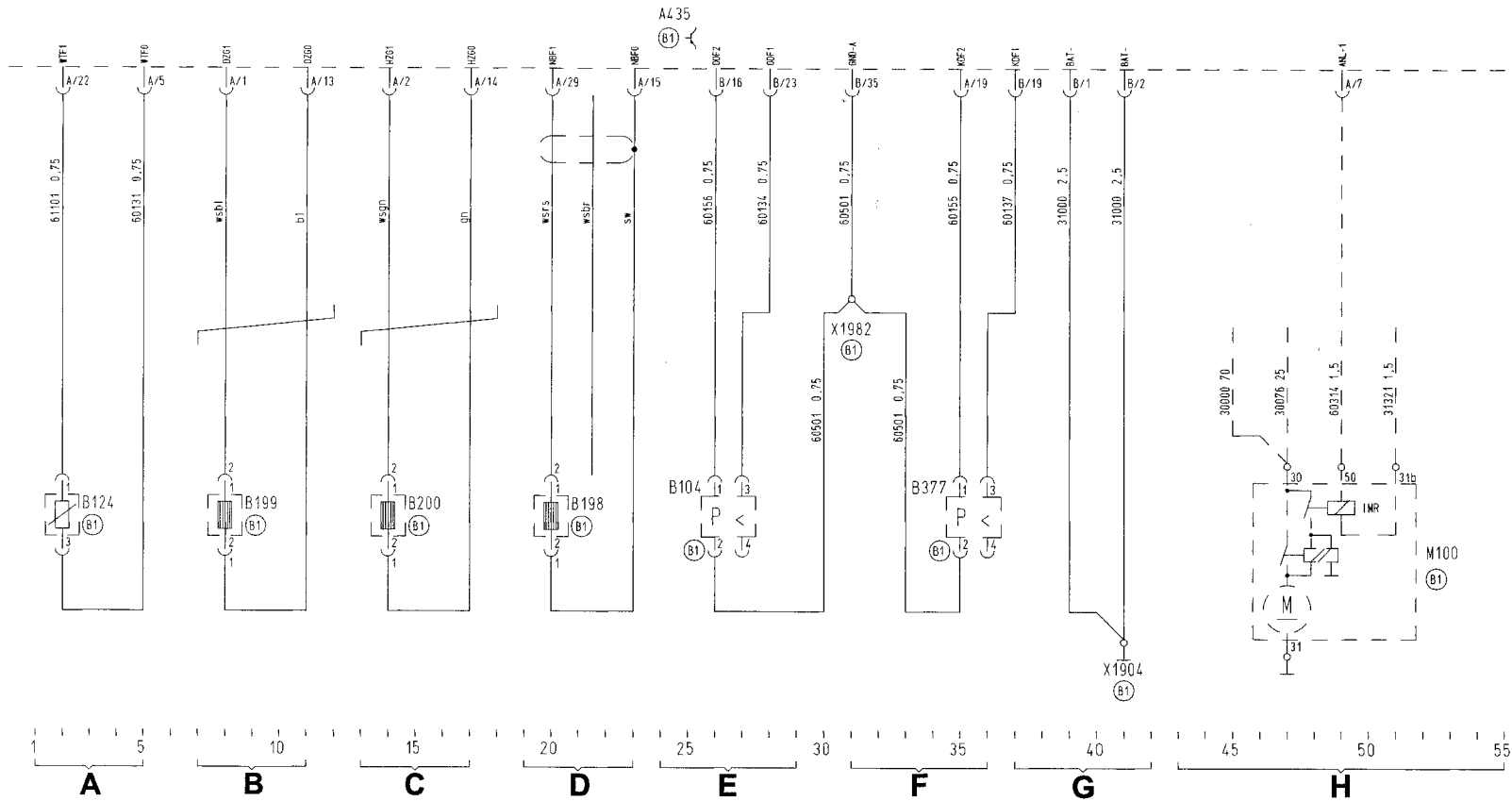
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2986 Sheet 2 of 3

A100  
(E6)

A302  
(E6)



## ADDITIONAL WIRING DIAGRAMS

### EDC electronically controlled diesel injection EDC MS6.1 with exhaust gas recirculation (EURO 3)

#### Legend

Wiring diagram no. **81.99192.2986** Sheet 3 of 3  
Change status: 03.01

**A = Diagnosis**

**B = CAN databus**

**C = Power supply**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer  
**A407** (342) Instrumentation  
**A435** (338) EDC control unit

**F163** (104) Generator engine control (terminal 30)  
**F236** (111) Generator engine control (terminal 15)  
**F354** (132) Main fuse (terminal 30-1)  
**F355** (132) Main fuse (terminal 30-2)

**H109** Indicator light, oil pressure  
**H296** Indicator light, EDC (malfunction)  
**H374** Indicator light, air filter dirty

**K170** (297) Relay, power supply engine control (terminal 30)

**X1559** Stvd. engine/EDC/transmission IV  
**X1913** (199) Bridge, line 30000 (MP box)  
**X1983** Threaded bolt M6 (MP box)  
**X1987** Threaded bolt M6 (MP box)  
**X2544** (246) Potential distributor 21-pin K-line

#### Marking of mounting positions

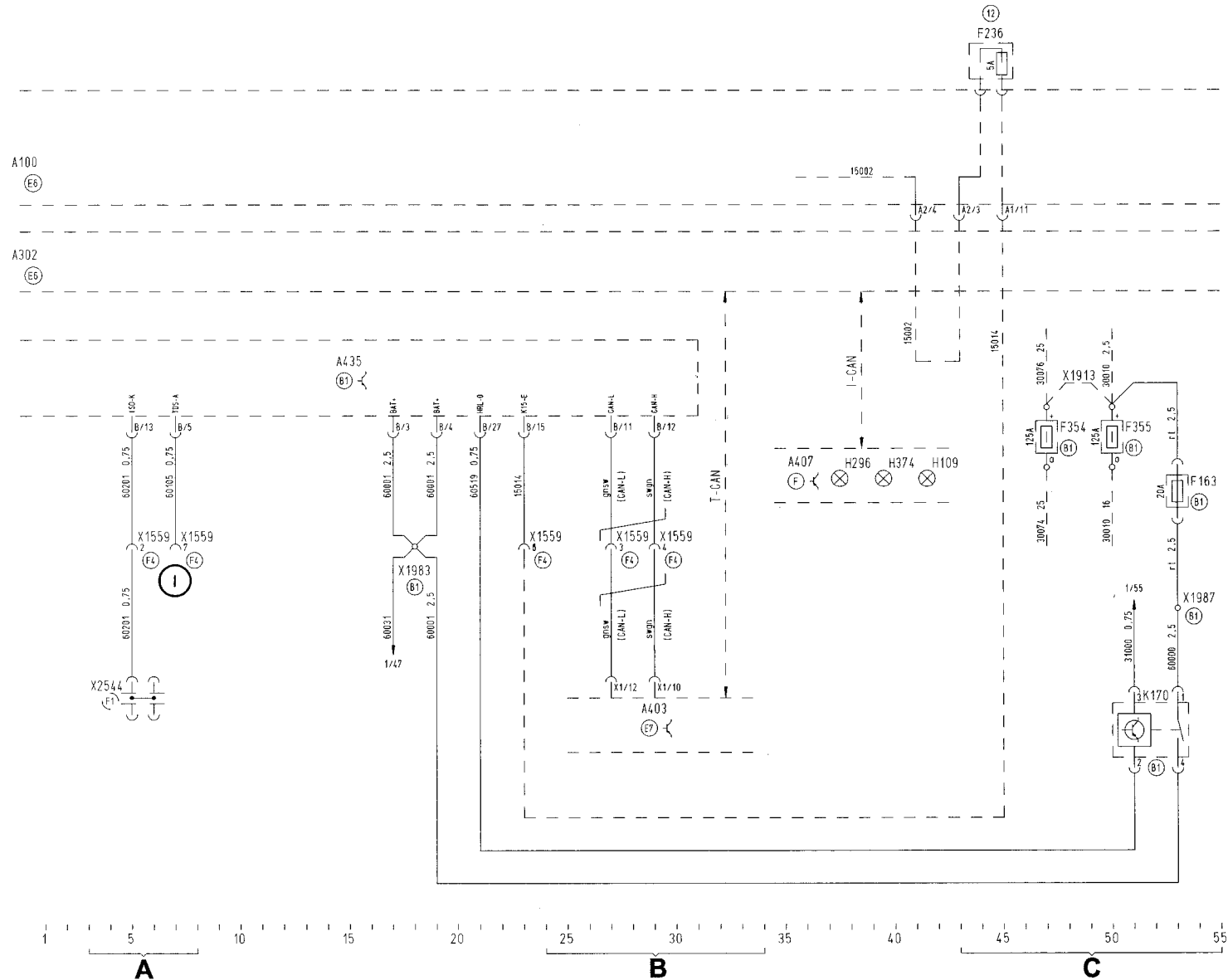
(A) Tail  
(B1) Engine  
(B2) Gearbox  
(C) Front  
(C1) Bumper  
(C2) Entrance right  
(C3) Entrance left  
(E6) Central electrics area  
(E7) Control unit racks  
(E8) Rear wall of cab  
(F) Instrument panel  
(F1) Central part  
(F2) Steering wheel/column  
(F3) Foot pedals  
(F4) Front wall, inside left  
(F5) Front wall, inside right  
  
(I) Reserve for engine speed signal

(F6) Driving seat  
(F7) Passenger seat  
(F8) Control panel  
(G) Battery box  
(H1) B-pillar on driver's side  
(H2) A-pillar on driver's side  
(J1) B-pillar on passenger's side  
(J2) A-pillar on passenger's side  
(L) Ceiling/roof  
(N) Front axle  
(P) Rear axle  
(R1) Front part of frame  
(R2) Rear part of frame  
(S1) Door left  
(S2) Door right



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2986 Sheet 3 of 3



## ADDITIONAL WIRING DIAGRAMS

### EDC7 electronically controlled diesel injection EDC7 Common Rail D0836LF

#### Legend

Wiring diagram no. **81.99192.2692** Sheet **1** of 4  
Change status: 10.00

**A = Rail pressure sensor**

**B = Proportional valve, fuel**

**C = Exhaust gas recirculation cylinder**

**D = Cylinders 1 + 2**

**E = Cylinders 3 + 4**

**F = Cylinders 5 + 6**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A435** (526) EDC control unit

**B487** (342) Rail pressure pickup

**X2265** Stvd. injector cylinders 1 + 2

**X2266** Stvd. injector cylinders 3 + 4

**X2267** Stvd. injector cylinders 5 + 6

**Y280** (205) AGR actuator

**Y332** (215) Proportional valve, fuel

**Y341** (216) Injector, 1st cylinder

**Y342** (216) Injector, 2nd cylinder

**Y343** (216) Injector, 3rd cylinder

**Y344** (216) Injector, 4th cylinder

**Y345** (216) Injector, 5th cylinder

**Y346** (216) Injector, 6th cylinder

#### Marking of mounting positions

- (A) Tail
- (B1) Engine
- (B2) Gearbox
- (C) Front
- (C1) Bumper
- (C2) Entrance right
- (C3) Entrance left
- (E6) Central electrics area
- (E7) Control unit racks
- (E8) Rear wall of cab
- (F) Instrument panel
- (F1) Central part
- (F2) Steering wheel/column
- (F3) Foot pedals
- (F4) Front wall, inside left
- (F5) Front wall, inside right

- (F6) Driving seat
- (F7) Passenger seat
- (F8) Control panel
- (G) Battery box
- (H1) B-pillar on driver's side
- (H2) A-pillar on driver's side
- (J1) B-pillar on passenger's side
- (J2) A-pillar on passenger's side
- (L) Ceiling/roof
- (N) Front axle
- (P) Rear axle
- (R1) Front part of frame
- (R2) Rear part of frame
- (S1) Door left
- (S2) Door right

A100

E6

A302

E6



**EDC7 electronically controlled diesel injection**  
**EDC7 Common Rail D0836LF**

**Legend**

Wiring diagram no. **81.99192.2692** Sheet 2 of 4  
Change status: 10.00

**A = Water temperature sensor**

**B = Crankshaft**

**C = Camshaft**

**D = Fuel pressure sensor**

**E = Air temperature sensor**

**F = Charge air pressure sensor**

**G = Oil pressure sensor**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A435** (526) EDC control unit

**B104** (340) Oil pressure sensor  
**B123** (341) Temperature sensor, charge air  
**B124** (265) Temperature sensor, coolant  
**B125** (350) Charge air pressure sensor  
**B377** Fuel pressure sensor  
**B488** (348) Engine speed incremental encoder  
**B489** (349) Engine speed segment encoder

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

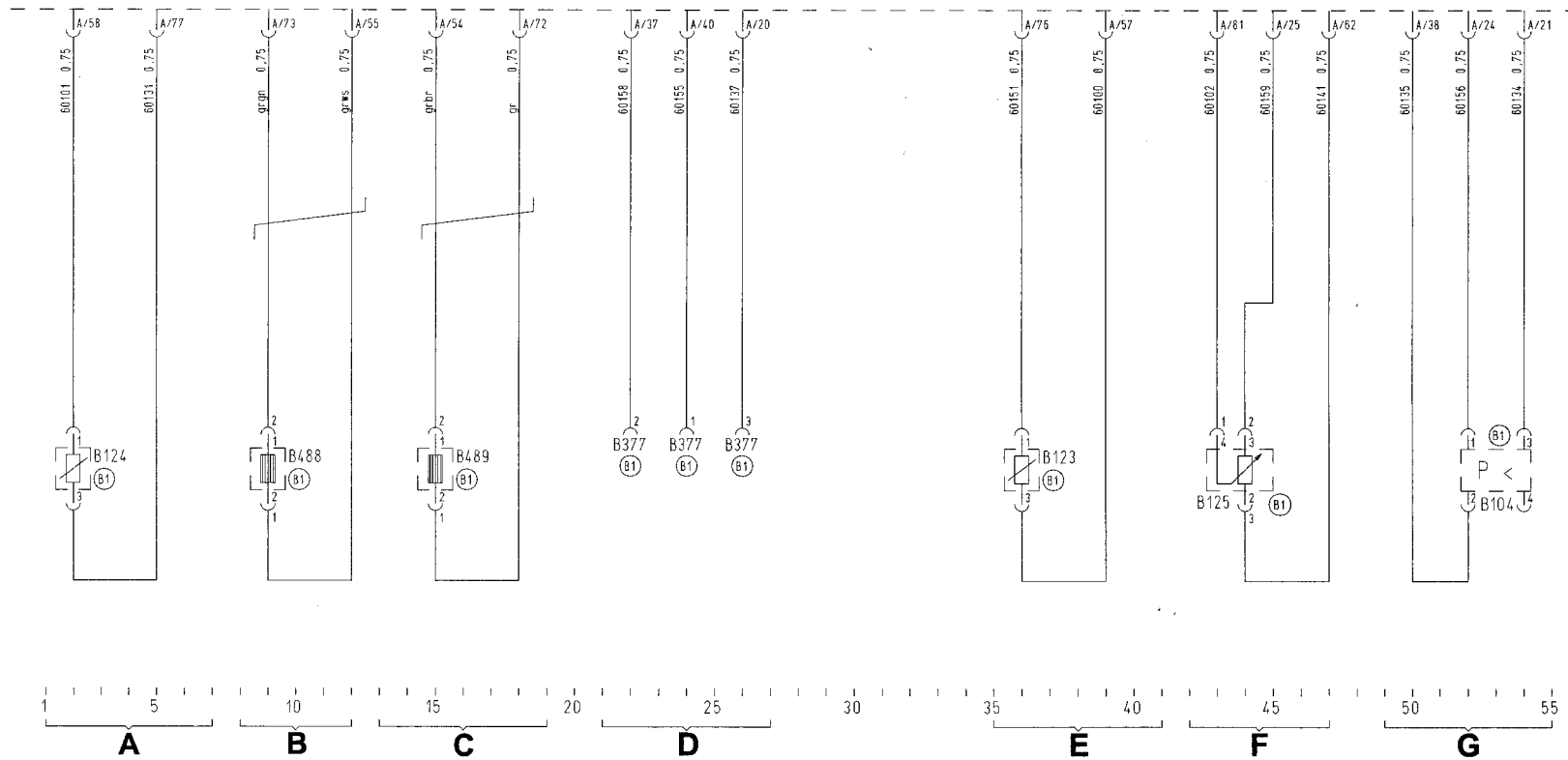
ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2692** Sheet **2** of 4

A100  
(E6)

A302  
(E6)

A435  
(B1)



## ADDITIONAL WIRING DIAGRAMS

### EDC7 electronically controlled diesel injection EDC7 Common Rail D0836LF

#### Legend

Wiring diagram no. **81.99192.2692** Sheet **3** of 4  
Change status: 10.00

**A = CAN databus**

**B = Diagnosis**

**C = Earthing point, box**

**D = Power supply**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer  
**A407** (342) Instrumentation  
**A435** (526) EDC control unit

**F163** (140) Generator engine control (terminal 30)  
**F236** (111) Generator engine control (terminal 15)  
**F354** (132) Main fuse (terminal 30-1)  
**F355** (132) Main fuse (terminal 30-2)

**H296** Indicator light, EDC (malfunction)  
**H374** Indicator light, air filter dirty

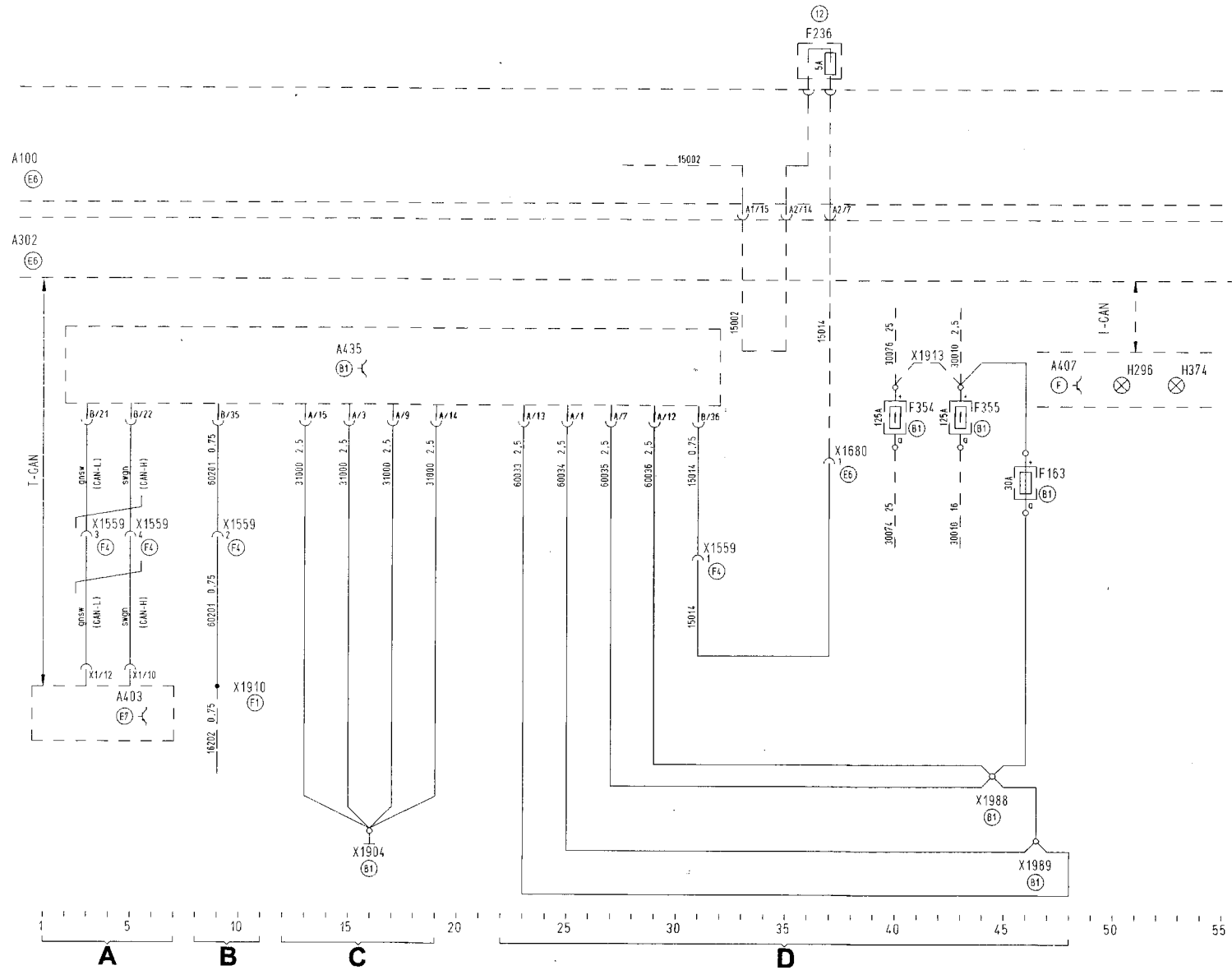
**X1559** Stvd. engine/EDC/transmission IV  
**X1680** Stvd. power supply, EDC, terminal 15  
**X1904** Threaded bolt M6 (MP box)  
**X1910** Crimped connector K-KWP2 (SA)  
**X1913** (199) Bridge, line 30000 (MP box)  
**X1988** Threaded bolt M5 (MP box)  
**X1989** Threaded bolt M5 (MP box)

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2692 Sheet 3 of 4



## ADDITIONAL WIRING DIAGRAMS

### EDC7 electronically controlled diesel injection EDC7 Common Rail D0836LF

#### Legend

Wiring diagram no. **81.99192.2692** Sheet 4 of 4  
Change status: 10.00

**A = Starting motor control (see series wiring diagram)**

**B = Proportional valve, turbocharger**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A435** (526) EDC control unit

**M100** (167) Starter motor

**Y340** Proportional valve, 2-stage charging

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



**ADDITIONAL WIRING DIAGRAMS**

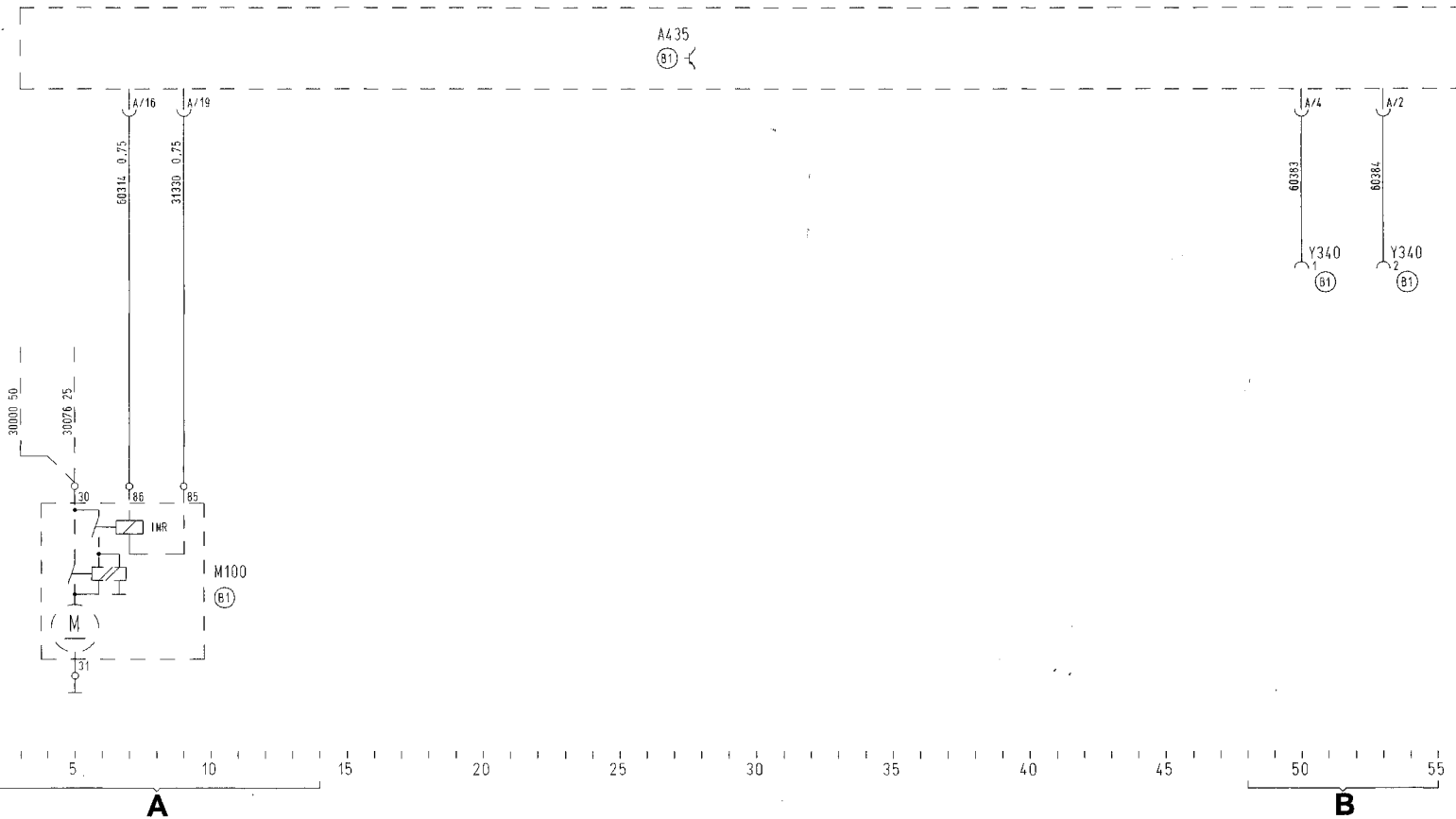
Wiring diagram no. **81.99192.2692** Sheet **4** of **4**

A100

(E6)

A302

(E6)



**EVb electronically controlled engine brake, controlled**

**Legend**

Wiring diagram no. **81.99192.2832** Sheet 1 of 1  
Change status: 06.00

**A = EVB (exhaust valve brake), controlled**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer

**X1557** Stvd. frame left  
**X1904** Threaded bolt M6 (MP box)  
**X2408** Stvd. EVB module

**Y355** (222) EVB module

**Marking of mounting positions**

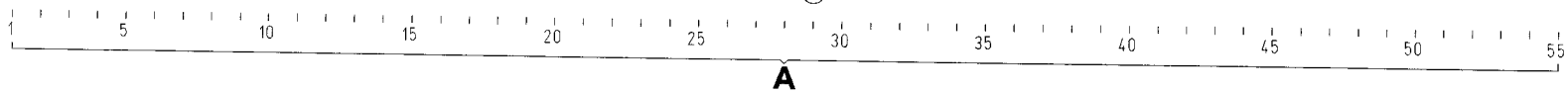
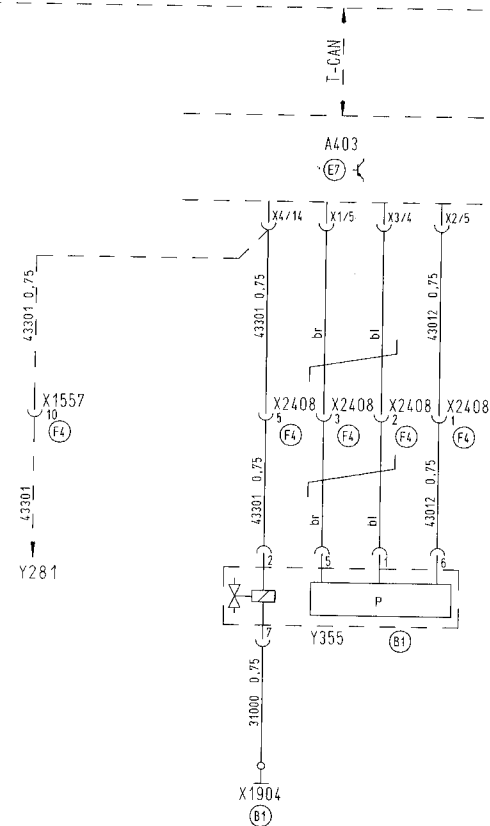
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2832 Sheet 1 of 1

A100  
(E6)

A302  
(E6)



**ADDITIONAL WIRING DIAGRAMS**

## Driving dynamics control

### Legend

Wiring diagram no. **81.99192.2843** Sheet 1 of 1

Change status: 07.00

**A = EBS control unit 2.3**

**B = Steering angle sensor**

**C = Turning rate sensor**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A402** (399) EBS control unit

**A575** (568) Control unit, driving dynamics control

**B475** ESP steering angle sensor

**B476** ESP steering rate sensor

**X2204** Stvd. cab steering rate sensor

**X2207** Stvd. steering column, ESP steering angle sensor

## Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓖ Scope of delivery

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓖ1 B-pillar on passenger's side

Ⓖ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

ADDITIONAL WIRING DIAGRAMS

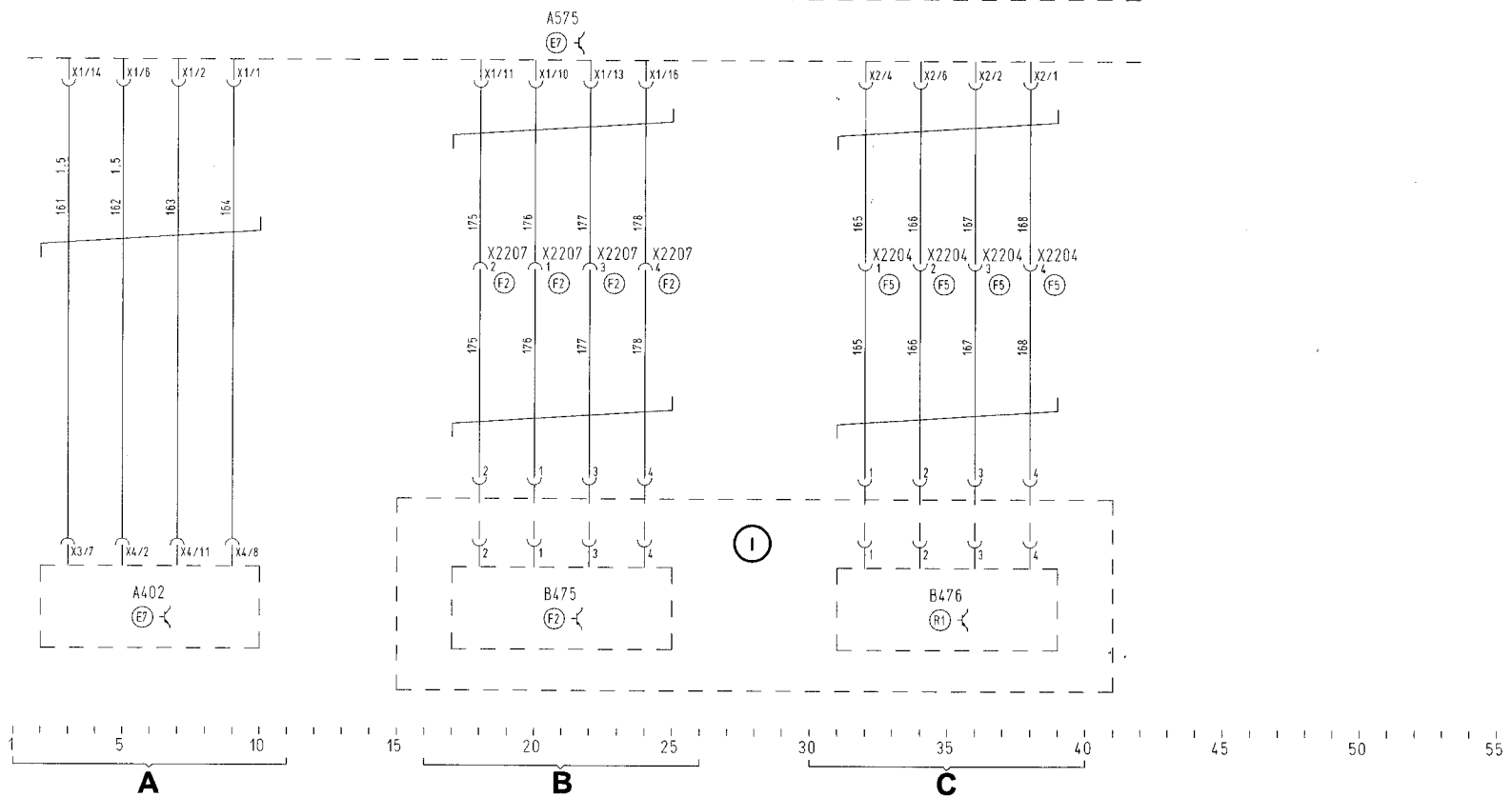
Wiring diagram no. **81.99192.2843** Sheet **1** of **1**

A100

(E6)

A302

(E6)



### Cab tilt device (electrical)

#### Legend

Wiring diagram no. **81.99192.1370** Sheet **1** of 1  
Change status: 05.01

**A = Supply voltage**

**B = Release switch**

**C = Tilt switches**

**D = Tilt pump**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**F190** (130) Fuse, cab tilt device

**K415** (280) Relay, cab tilt device

**M137** (148) Pump, cab tilt device

**S374** (548) Switch, release cab tilt device

**S375** (292) Control switch, actuation cab tilt device

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1842** Stvd. cab tilt device

**X2541** (246) Potential distributor, 21-pin line 31000

**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

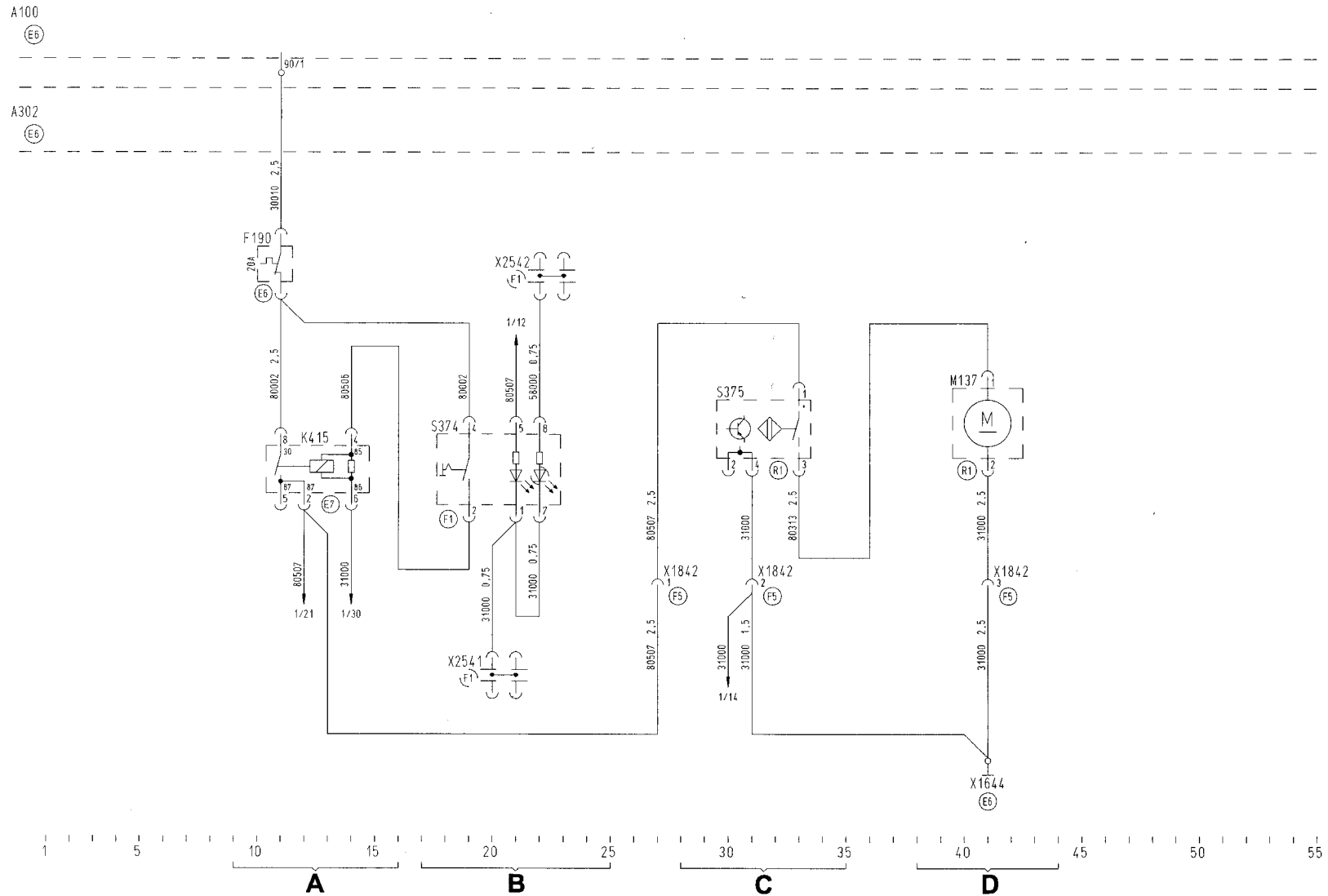
Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1370** Sheet **1** of **1**





## Windscreen heating

### Legend

Wiring diagram no. **81.99192.2571** Sheet **1** of 1

Change status: 03.01

### A = Windscreen heating

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**F187** (131) Fuse, windscreen heating

**K221** (280) Relay, windscreen heating

**R127** (150) Windscreen heating, left

**R128** (150) Windscreen heating, right

**S224** (561) Switch, screen heating

**X1641** Soldered connector, line 58000

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1754** Crimped connector, line 59104

**X2020** Stvd. windscreen heating, right

**X2021** Stvd. windscreen heating, left

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

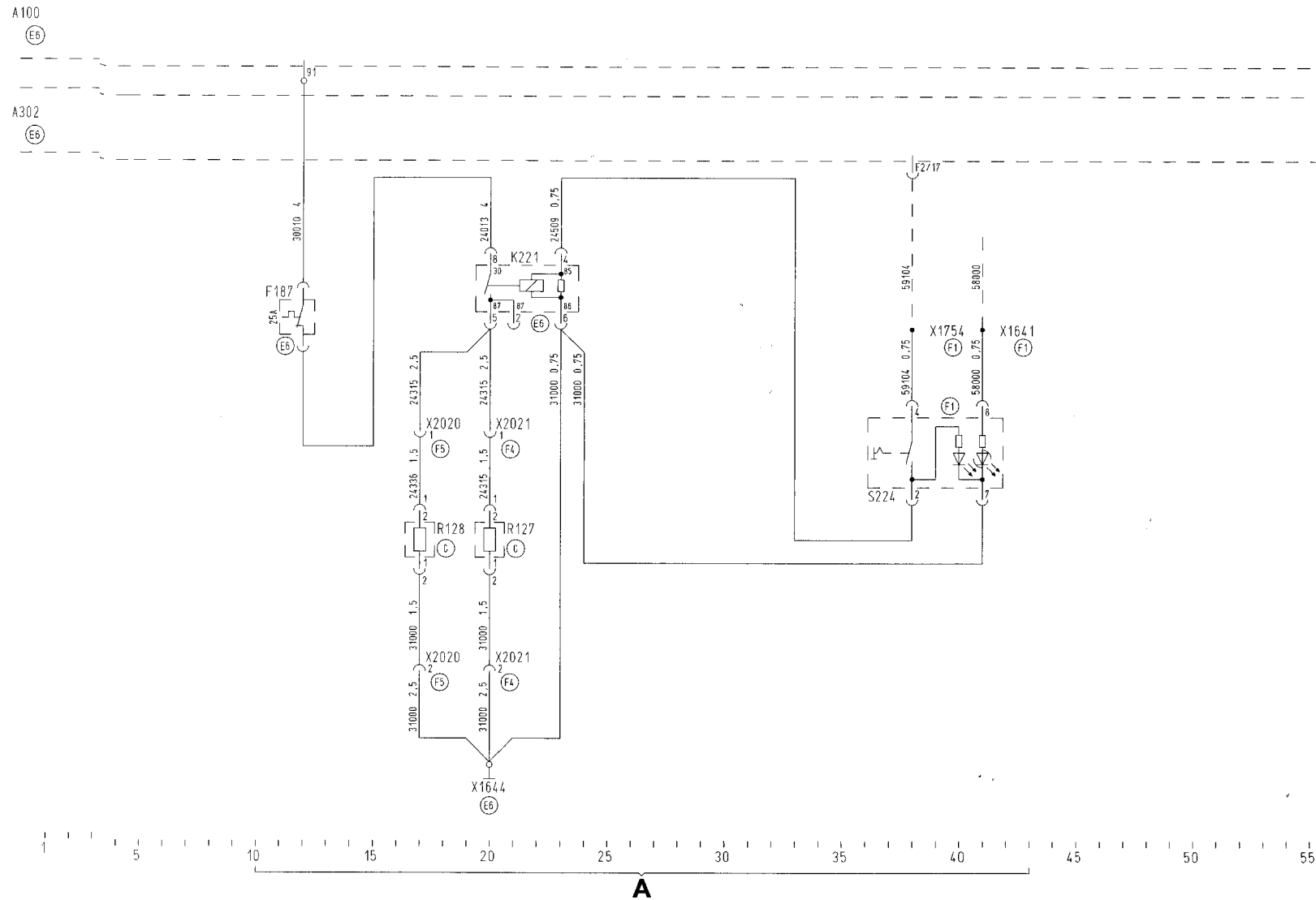
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2571 Sheet 1 of 1



## Windscreen heating (wide cab)

### Legend

Wiring diagram no. **81.99192.1373** Sheet **1** of 1

Change status: 04.01

### A = Windscreen heating

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**F187** (130) Fuse, windscreen heating

**F342** (130) Fuse, front nose screen heating

**K524** (280) Relay, front nose screen heating

**K525** (280) Relay, front nose screen heating

**R127** (150) Windscreen heating, left

**R128** (150) Windscreen heating, right

**S224** (561) Switch, screen heating

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1754** Soldered connector, line 59104

**X2020** Stvd. windscreen heating, right

**X2021** Stvd. windscreen heating, left

**X2541** (246) Potential distributor, 21-pin line 31000

**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

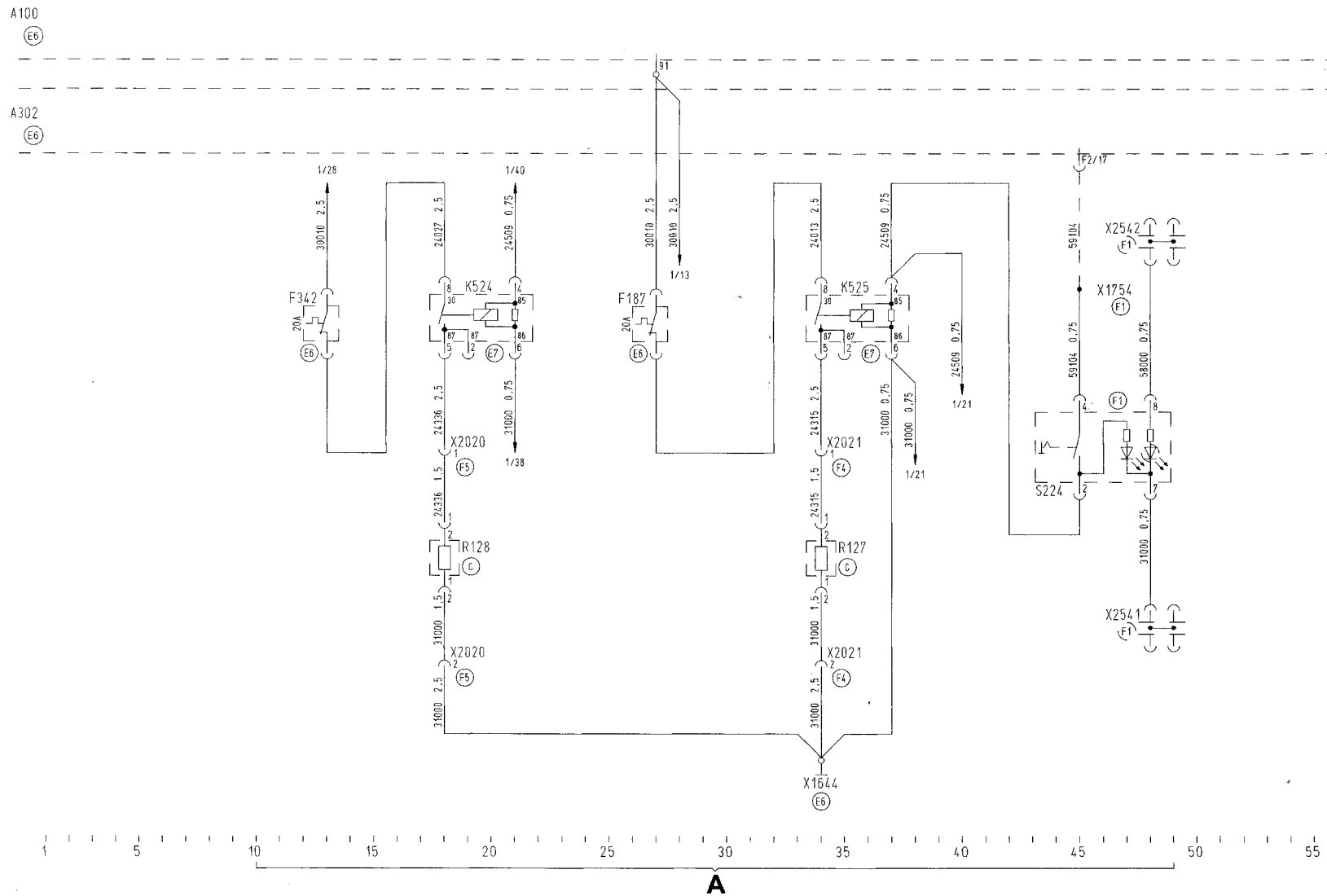
Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1373** Sheet 1 of 1



**ADDITIONAL WIRING DIAGRAMS**

## ADDITIONAL WIRING DIAGRAMS

### AS-TRONIC transmission (12-GEAR)

#### Legend

Wiring diagram no. **81.99192.2993** Sheet **1** of 2

Change status: 04.01

**A = Supply voltage**

**B = Diagnosis**

**C = Gear display, indicator light**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A330** (442) Control unit, AS-TRONIC (at gearbox)

**A407** (342) Instrumentation

**F154** (118) Fuse, transmission (terminal 15)

**F196** (118) Fuse, transmission (terminal 30)

**H179** Indicator light, transmission, monitoring of state

**P122** Gear display

**X1553** Stvd. engine/EDC/transmission III

**X1904** Threaded bolt M6 (MP box)

**X1948** Stvd. engine/transmission (MP box)

**X2544** (246) Potential distributor 21-pin K-line

#### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

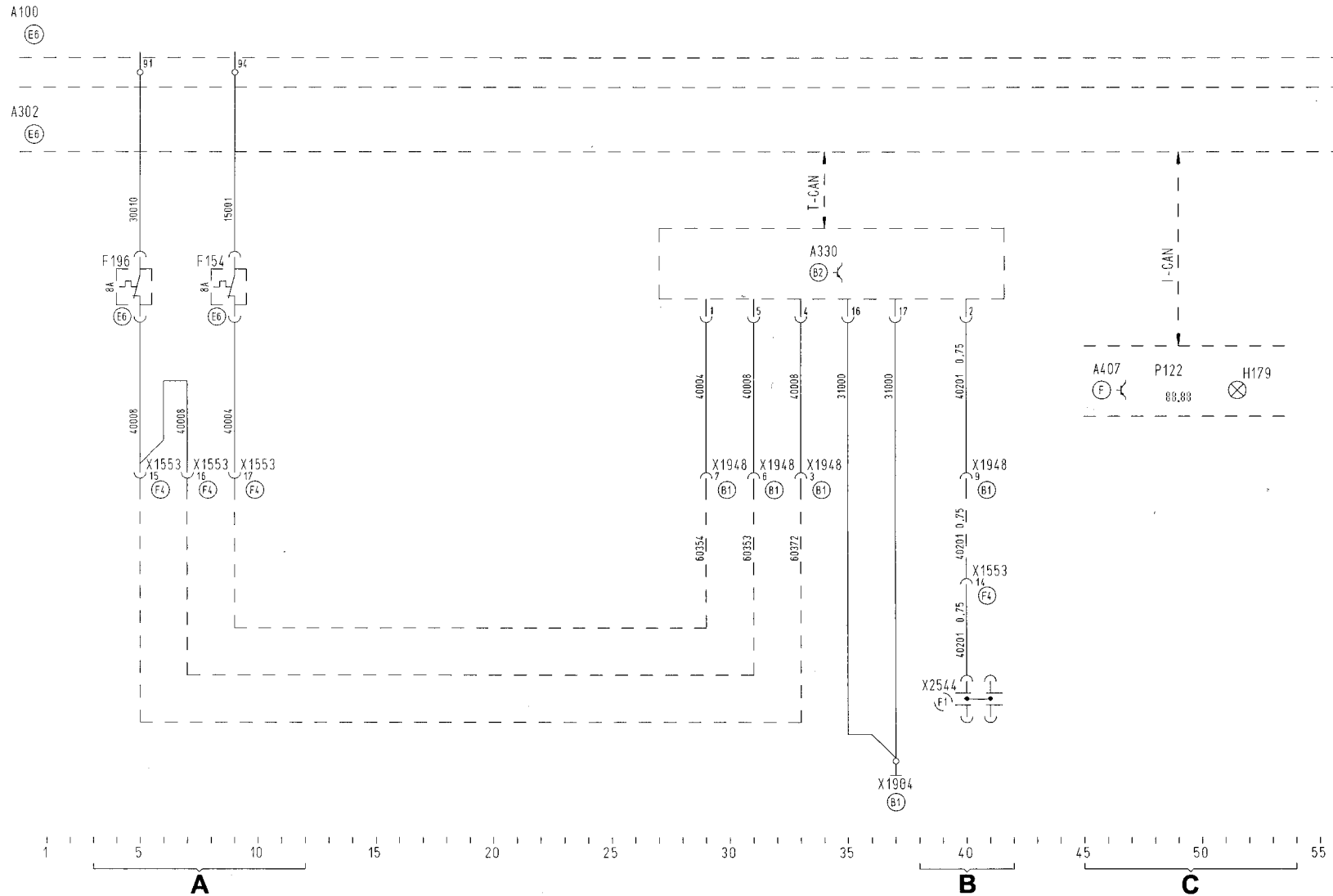
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2993** Sheet **1** of 2



## AS-TRONIC transmission (12-GEAR)

### Legend

Wiring diagram no. **81.99192.2993** Sheet 2 of 2

Change status: 04.01

**A = Gear selection, cruise control**

**B = Driving range selection**

**C = Actuation of reversing light**

A100 (255) Central fuse, relay and terminal block  
A302 (352) Central computer 2  
A403 (339) Vehicle management computer  
A429 (401) Steering column switch, cruise control/transmission  
A434 (402) Driving range switch, transmission

F314 (101) Fuse, reversing light

H378 Indicator light FGR/FGB (LED)

K250 (280) Relay, reversing light

X1544 Stvd. frame III  
X1627 Stvd. reversing beam  
X1644 Earthing point, cab, adjacent to central fuse, relay and terminal block  
X1693 Crimped connector, line 60028  
X1834 Crimped connector, line 71300  
X1968 Stvd. cruise control switch  
X2002 Stvd. B-pillar preselector switch  
X2542 (246) Potential distributor, 21-pin line 58000

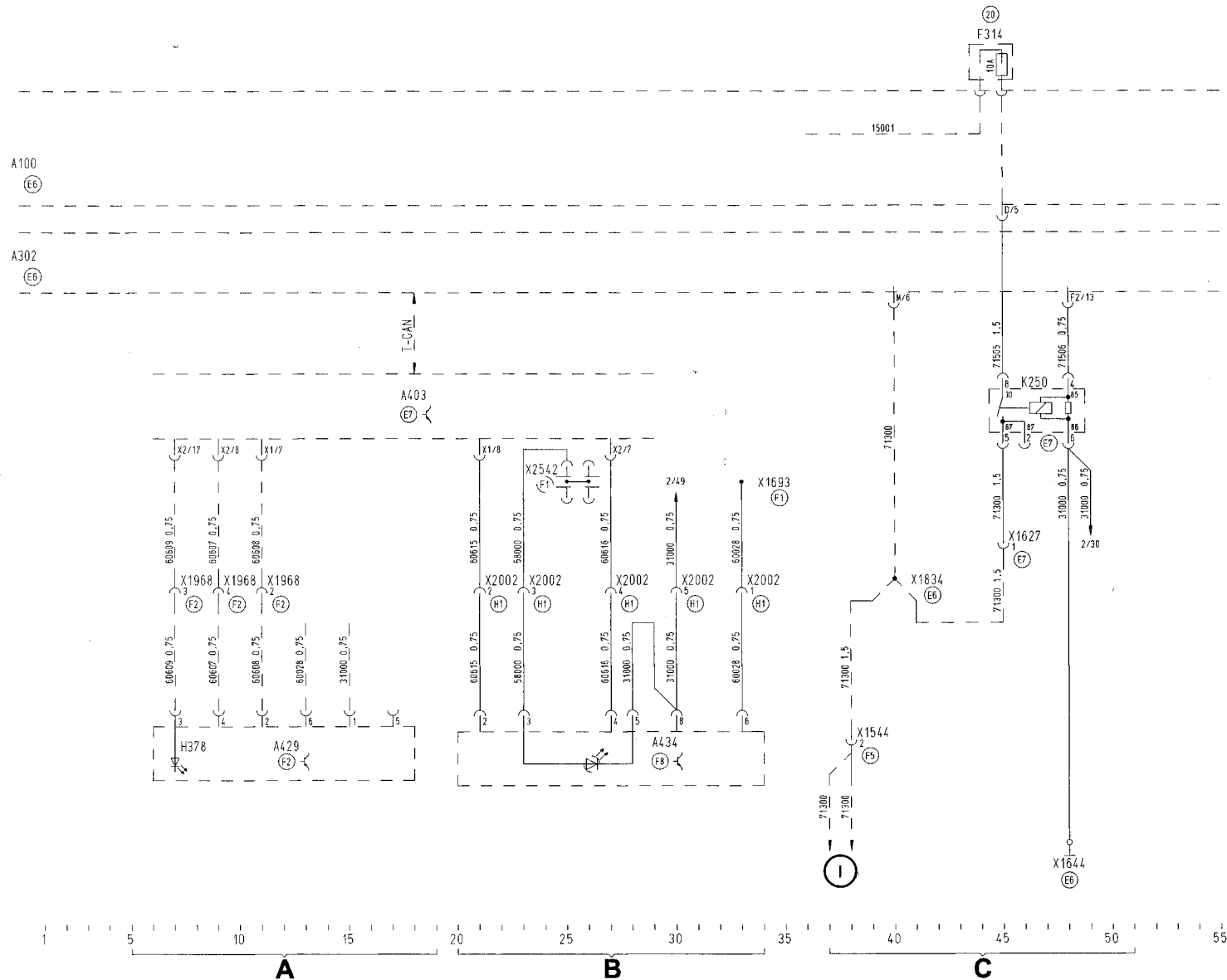
### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |
| (I) Reversing light           |                                   |



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2993 Sheet 2 of 2



## AS-TRONIC transmission (16-GEAR)

### Legend

Wiring diagram no. **81.99192.2992** Sheet 1 of 2

Change status: 04.01

**A = Supply voltage**

**B = Diagnosis**

**C = Gear display, indicator light**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A330** (442) Control unit, AS-TRONIC (at gearbox)

**A407** (342) Instrumentation

**F154** (118) Fuse, transmission (terminal 15)

**F196** (118) Fuse, transmission (terminal 30)

**H179** Indicator light, transmission, monitoring of state

**P122** Gear display

**X1553** Stvd. engine/EDC/transmission III

**X1904** Threaded bolt M6 (MP box)

**X1948** Stvd. engine/transmission (MP box)

**X2544** (246) Potential distributor 21-pin K-line

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

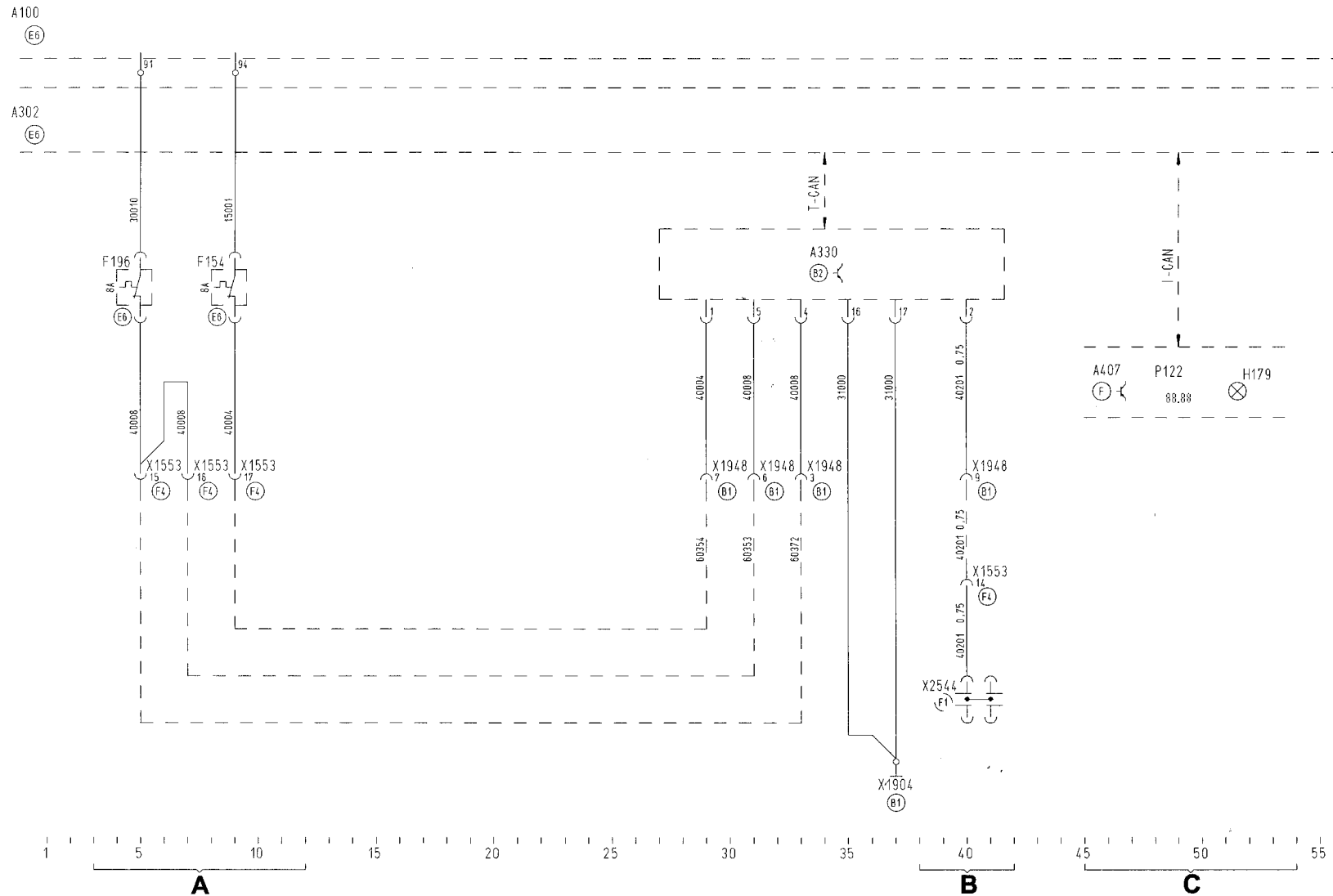
(R2) Rear part of frame

(S1) Door left

(S2) Door right

# ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2992** Sheet 1 of 2



## AS-TRONIC transmission (16-GEAR)

### Legend

Wiring diagram no. **81.99192.2992** Sheet 2 of 2

Change status: 04.01

**A = Gear selection, cruise control**

**B = Driving range selection**

**C = Actuation of reversing light**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A403** (339) Vehicle management computer

**A429** (401) Steering column switch, cruise control/transmission

**A434** (402) Driving range switch, transmission

**F314** (101) Fuse, reversing light

**H378** Indicator light FGR/FGB (LED)

**K250** (280) Relay, reversing light

**X1544** Std. frame III

**X1627** Std. reversing beam

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1693** Crimped connector, line 60028

**X1834** Crimped connector, line 71300

**X1968** Std. cruise control switch

**X2002** Std. B-pillar preselector switch

**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓔ Reversing light

Ⓔ Driving seat

Ⓔ Passenger seat

Ⓔ Control panel

Ⓔ Battery box

Ⓔ B-pillar on driver's side

Ⓔ A-pillar on driver's side

Ⓔ B-pillar on passenger's side

Ⓔ A-pillar on passenger's side

Ⓔ Ceiling/roof

Ⓔ Front axle

Ⓔ Rear axle

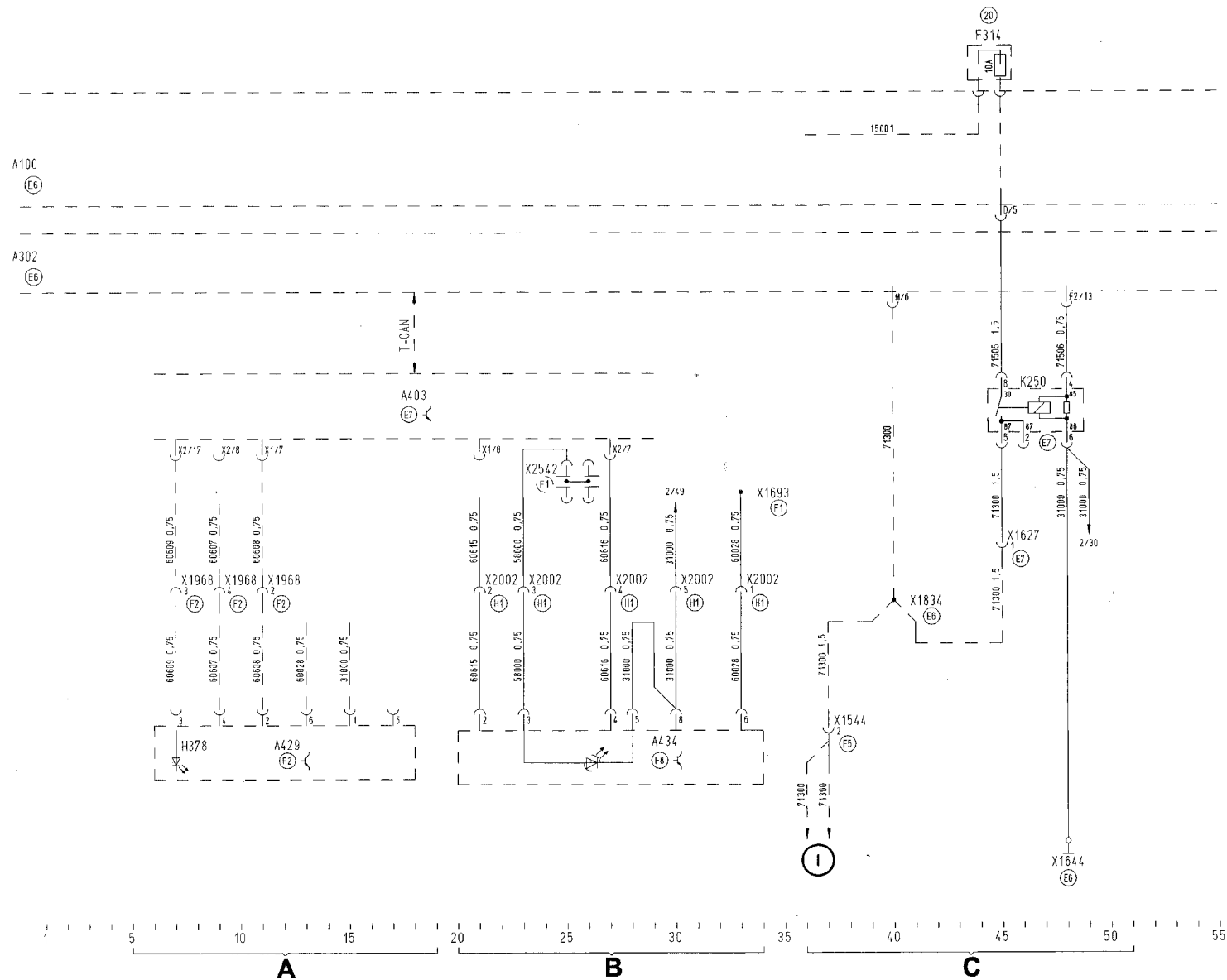
Ⓔ Front part of frame

Ⓔ Rear part of frame

Ⓔ Door left

Ⓔ Door right

**ADDITIONAL WIRING DIAGRAMS**



## ADDITIONAL WIRING DIAGRAMS

### EATON RTSO transmission (LL)

#### Legend

Wiring diagram no. **81.99192.2601** Sheet **1** of 2

Change status: 06.00

#### A = Pre-shift group, range shift group

A100 (255) Central fuse, relay and terminal block  
A302 (352) Central computer 2  
A403 (339) Vehicle management computer  
A407 (342) Instrumentation

H195 Indicator light, pre-shift group  
H377 Indicator light, range shift group

S477 (474) Switch, gearshift lever

X1553 Stvd. engine/EDC/transmission III  
X1562 Stvd. gearbox  
X1604 Stvd. switch in gearshift knob  
X1832 Crimped connector, line 60028  
X1948 Stvd. engine/transmission (MP box)  
X1972 Stvd. pedals, external

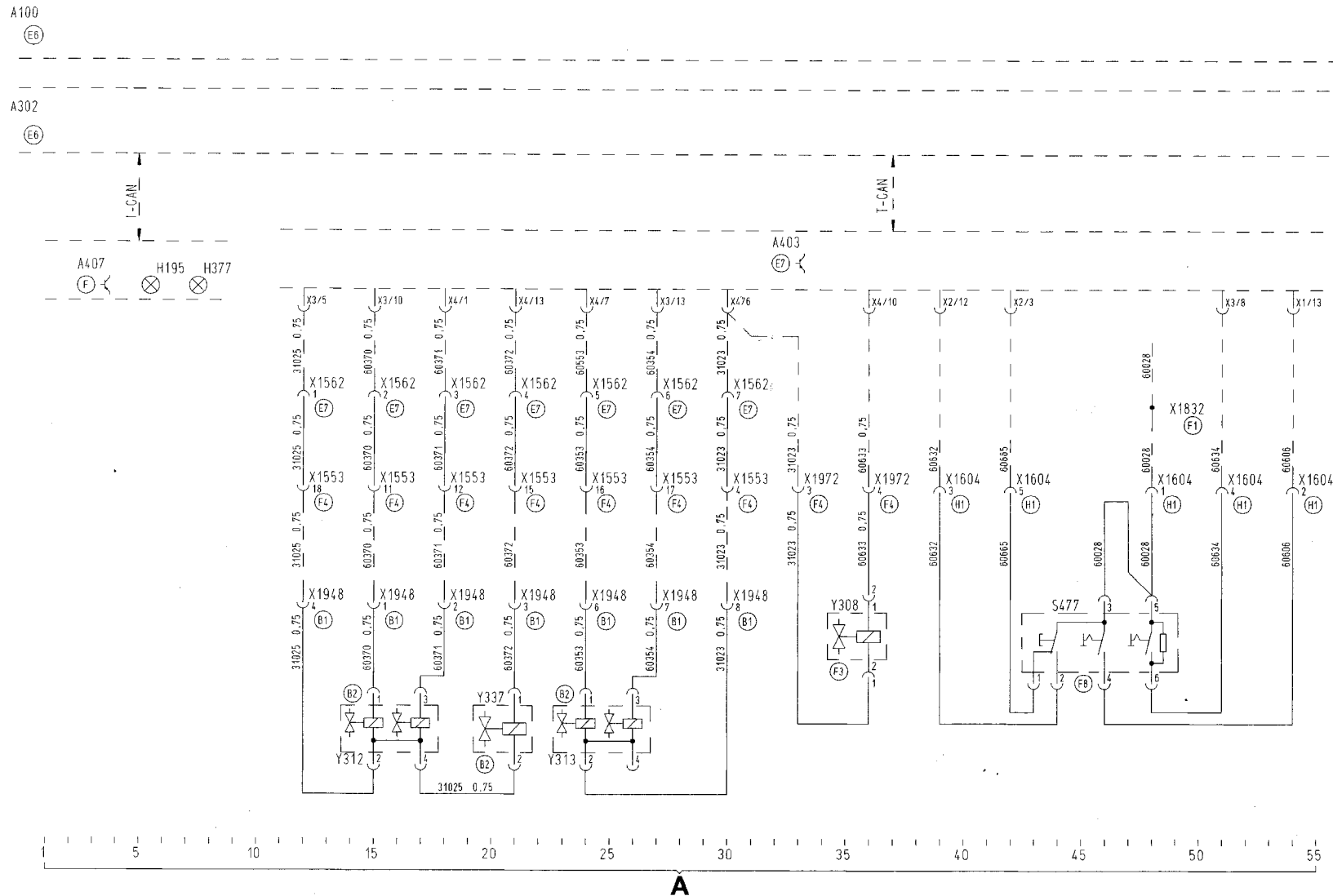
Y308 (192) Clutch servo  
Y312 (193) Solenoid valve, range group  
Y313 (193) Solenoid valve, splitter group  
Y337 (220) Solenoid valve, lane guard

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2601** Sheet **1** of **2**



## EATON RTSO transmission (LL)

### Legend

Wiring diagram no. **81.99192.2601** Sheet 2 of 2

Change status: 04.00

**A = Clutch displacement sensor**

**B = Gearbox input speed**

**C = Gearbox neutral**

**D = Switch, reverse gear**

**E = Clutch fluid level probe**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A403** (339) Vehicle management computer

**B362** (264) Clutch displacement sensor

**B368** (292) Induction-type pulse generator, gearbox input speed

**B434** (272) Sensor for clutch fluid

**F314** (101) Fuse, reversing light

**S104** (478) Switch, reverse gear

**S172** (646) Switch, neutral position

**X100** Earthing point, engine

**X1553** Stvd. engine/EDC/transmission III

**X1562** Stvd. gearbox

**X1627** Stvd. reversing beam

**X1829** Crimped connector, line 31000

**X1948** Stvd. engine/transmission (MP box)

**X1949** Stvd. engine/transmission (MP box)

**X1972** Stvd. pedals, external

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

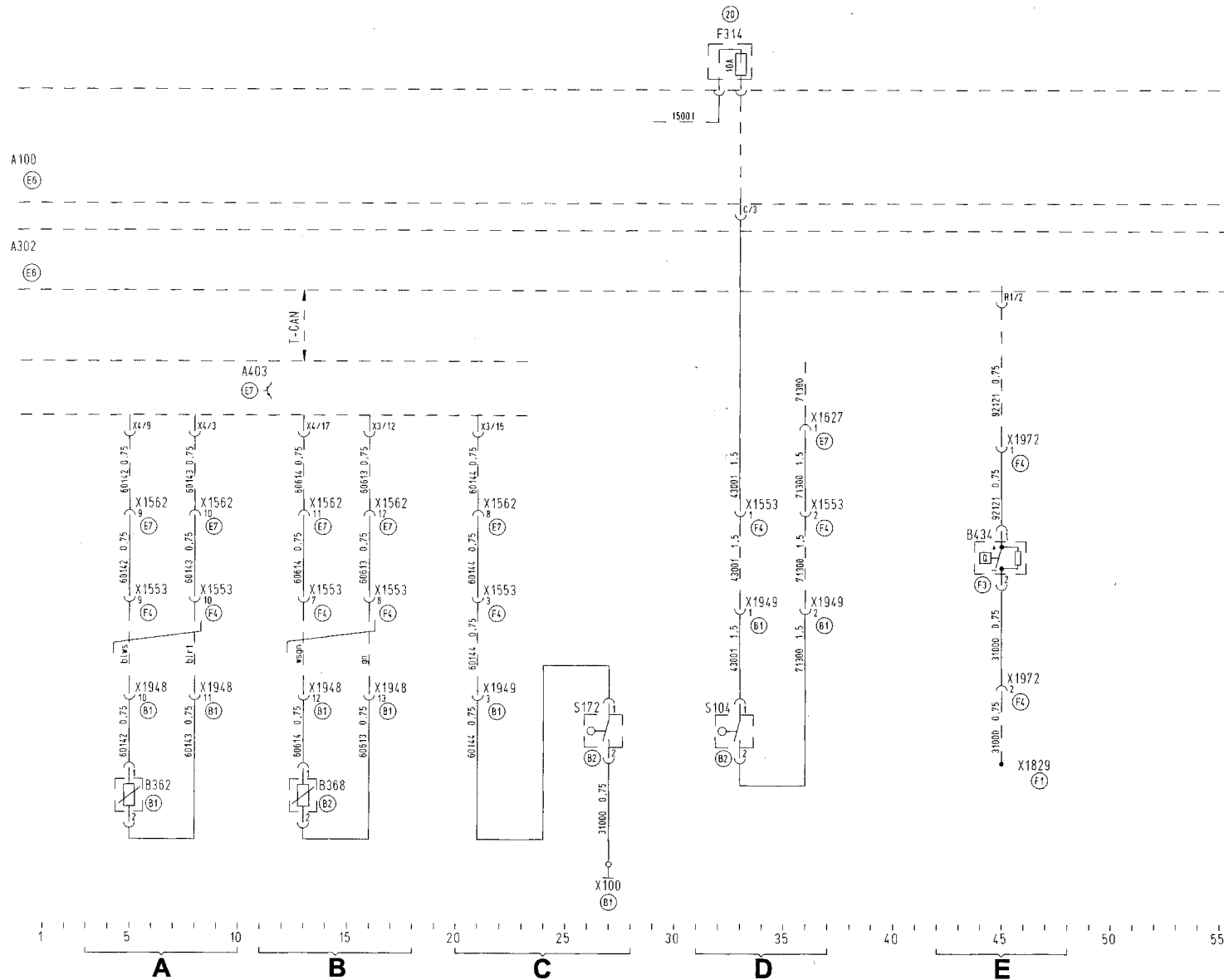
(S1) Door left

(S2) Door right



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2601 Sheet 2 of 2



## EATON RTSO transmission (RL)

### Legend

Wiring diagram no. **81.99192.2417** Sheet **1** of 2  
Change status: 06.00

### A = Pre-shift group, range shift group

A100 (255) Central fuse, relay and terminal block  
A302 (352) Central computer 2  
A403 (339) Vehicle management computer  
A407 (342) Instrumentation

H195 Indicator light pre-shift group  
H377 Indicator light, lower range active

S477 (474) Switch, gearshift lever

X1553 Stvd. engine/EDC/transmission III  
X1562 Stvd. gearbox  
X1604 Stvd. switch in gearshift knob  
X1832 Crimped connector, line 60028  
X1948 Stvd. engine/transmission (MP box)  
X1972 Stvd. pedals, external

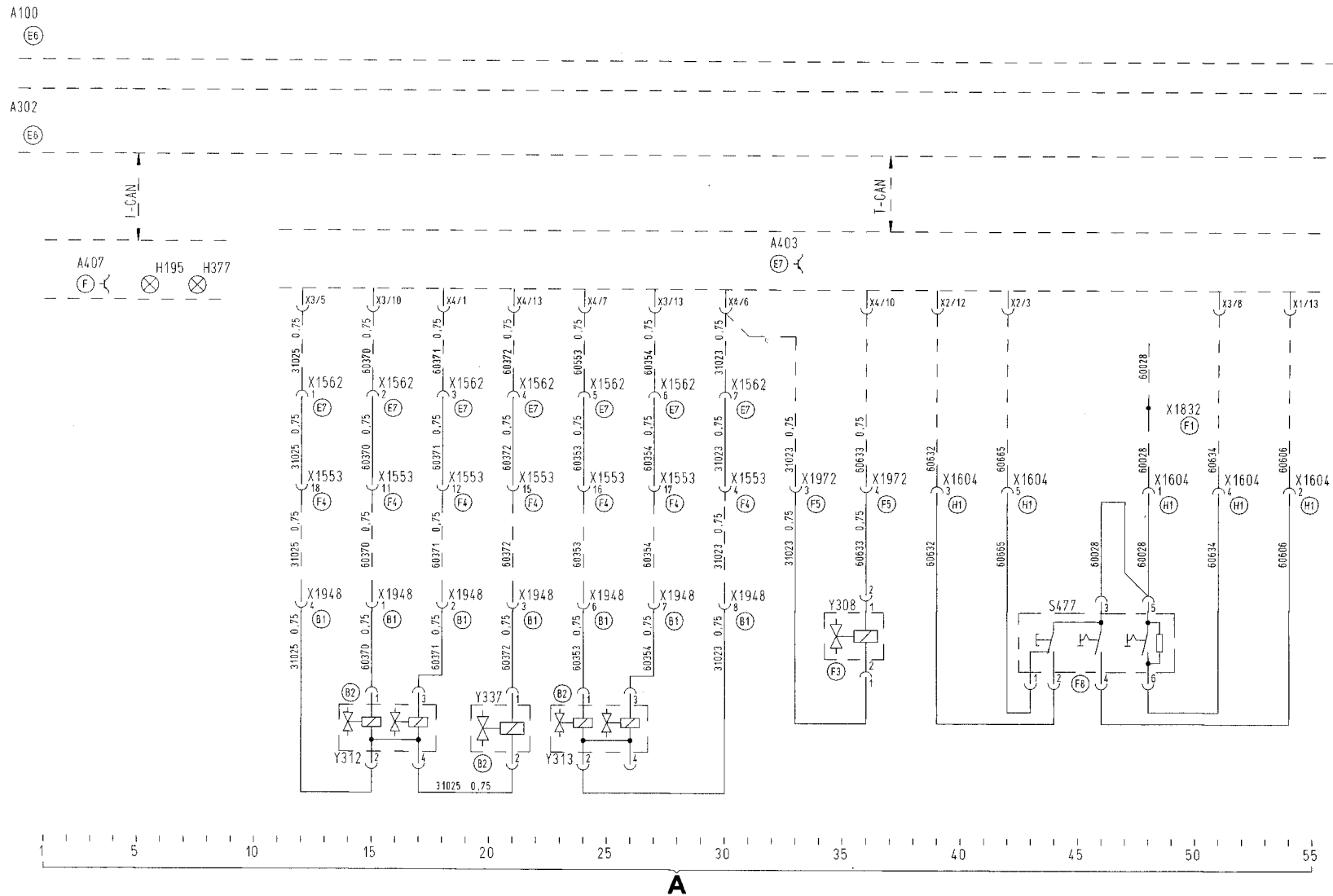
Y308 (192) Clutch servo  
Y312 (193) Solenoid valve, range group  
Y313 (193) Solenoid valve, splitter group  
Y337 (220) Solenoid valve, lane guard

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓘ Battery box                  |
| Ⓔ Bumper                   | Ⓜ B-pillar on driver's side    |
| Ⓕ Entrance right           | Ⓨ A-pillar on driver's side    |
| Ⓖ Entrance left            | Ⓛ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓜ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓛ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓨ Front axle                   |
| Ⓖ Instrument panel         | Ⓛ Rear axle                    |
| Ⓖ Central part             | Ⓛ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓛ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓛ Door left                    |
| Ⓖ Front wall, inside left  | Ⓛ Door right                   |
| Ⓖ Front wall, inside right |                                |

# ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2417 Sheet 1 of 2



## EATON RTSO transmission (RL)

### Legend

Wiring diagram no. **81.99192.2417** Sheet 2 of 2  
Change status: 04.00

**A = Clutch displacement sensor**

**B = Gearbox input speed**

**C = Gearbox neutral**

**D = Switch, reverse gear**

**E = Clutch fluid level probe**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** Vehicle management computer

**B362** (264) Clutch displacement sensor  
**B368** (292) Induction-type pulse generator, gearbox input speed  
**B434** (272) Sensor for clutch fluid

**F314** (101) Fuse, reversing light

**S104** (478) Switch, reverse gear  
**S172** (646) Switch, neutral position

**X100** Earthing point, engine  
**X1553** Stvd. engine/EDC/transmission III  
**X1562** Stvd. gearbox  
**X1627** Stvd. reversing beam  
**X1829** Crimped connector, line 31000  
**X1948** Stvd. engine/transmission (MP box)  
**X1949** Stvd. engine/transmission (MP box)  
**X1972** Stvd. pedals, external

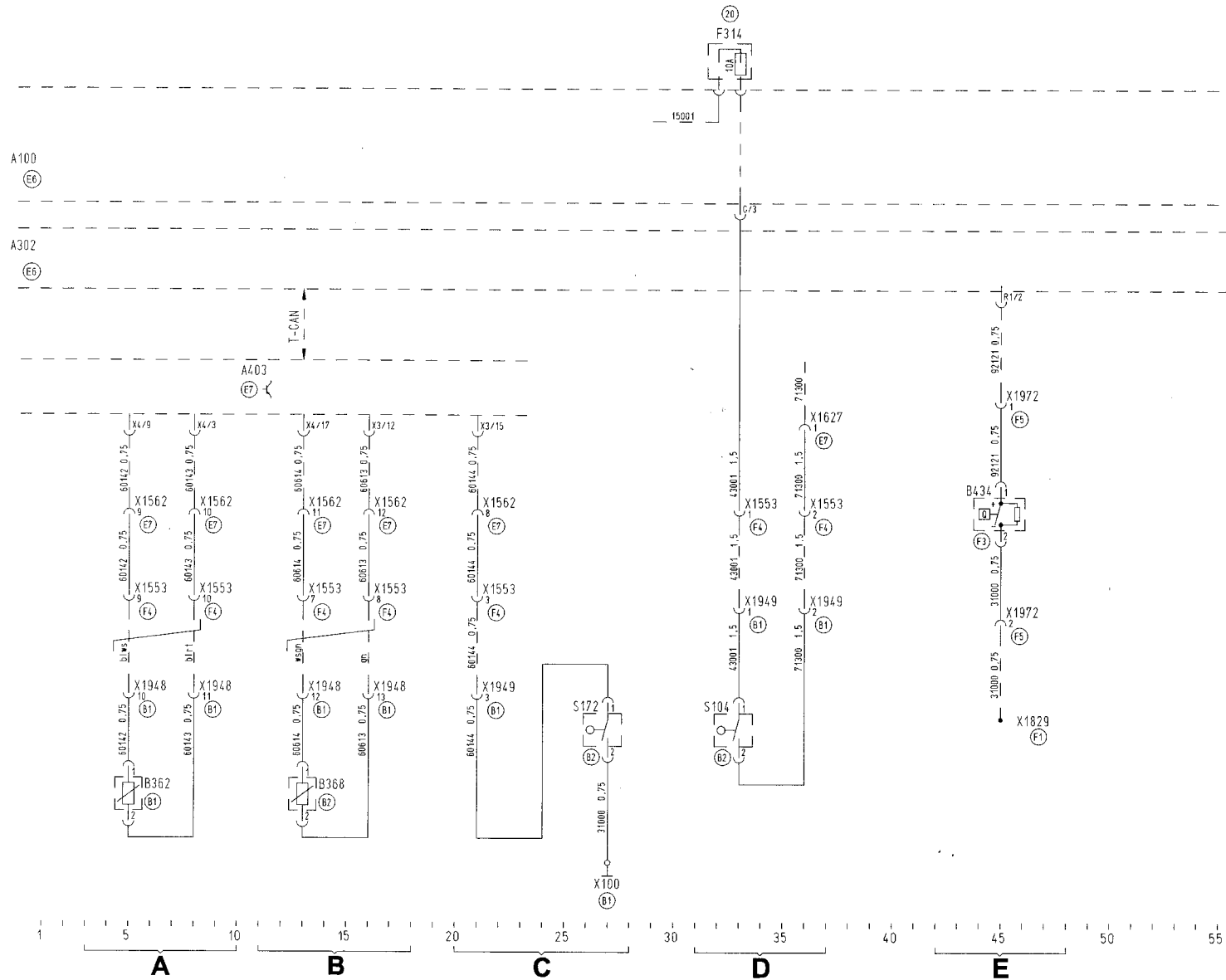
### Marking of mounting positions

(A) Tail  
(B1) Engine  
(B2) Gearbox  
(C) Front  
(C1) Bumper  
(C2) Entrance right  
(C3) Entrance left  
(E6) Central electrics area  
(E7) Control unit racks  
(E8) Rear wall of cab  
(F) Instrument panel  
(F1) Central part  
(F2) Steering wheel/column  
(F3) Foot pedals  
(F4) Front wall, inside left  
(F5) Front wall, inside right

(F6) Driving seat  
(F7) Passenger seat  
(F8) Control panel  
(G) Battery box  
(H1) B-pillar on driver's side  
(H2) A-pillar on driver's side  
(J1) B-pillar on passenger's side  
(J2) A-pillar on passenger's side  
(L) Ceiling/roof  
(N) Front axle  
(P) Rear axle  
(R1) Front part of frame  
(R2) Rear part of frame  
(S1) Door left  
(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2417 Sheet 2 of 2



## ADDITIONAL WIRING DIAGRAMS

### ZF transmission 16S151/16S181 (LL)

#### Legend

Wiring diagram no. **81.99192.2579** Sheet 1 of 2  
Change status: 07.01

#### A = Pre-shift group, range shift group

A100 (255) Central fuse, relay and terminal block  
A302 (352) Central computer 2  
A403 (339) Vehicle management computer  
A407 (342) Instrumentation

H195 Indicator light, pre-shift group  
H377 Indicator light, range shift group

S477 (474) Switch, gearshift lever

X1553 Stvd. engine/EDC/transmission III  
X1562 Stvd. gearbox  
X1604 Stvd. switch in gearshift knob  
X1832 Crimped connector, line 60028  
X1948 Stvd. engine/transmission (MP box)  
X1972 Stvd. foot pedals, exterior

Y307 (191) Solenoid valve, splitter and range group  
Y308 (192) Clutch servo

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

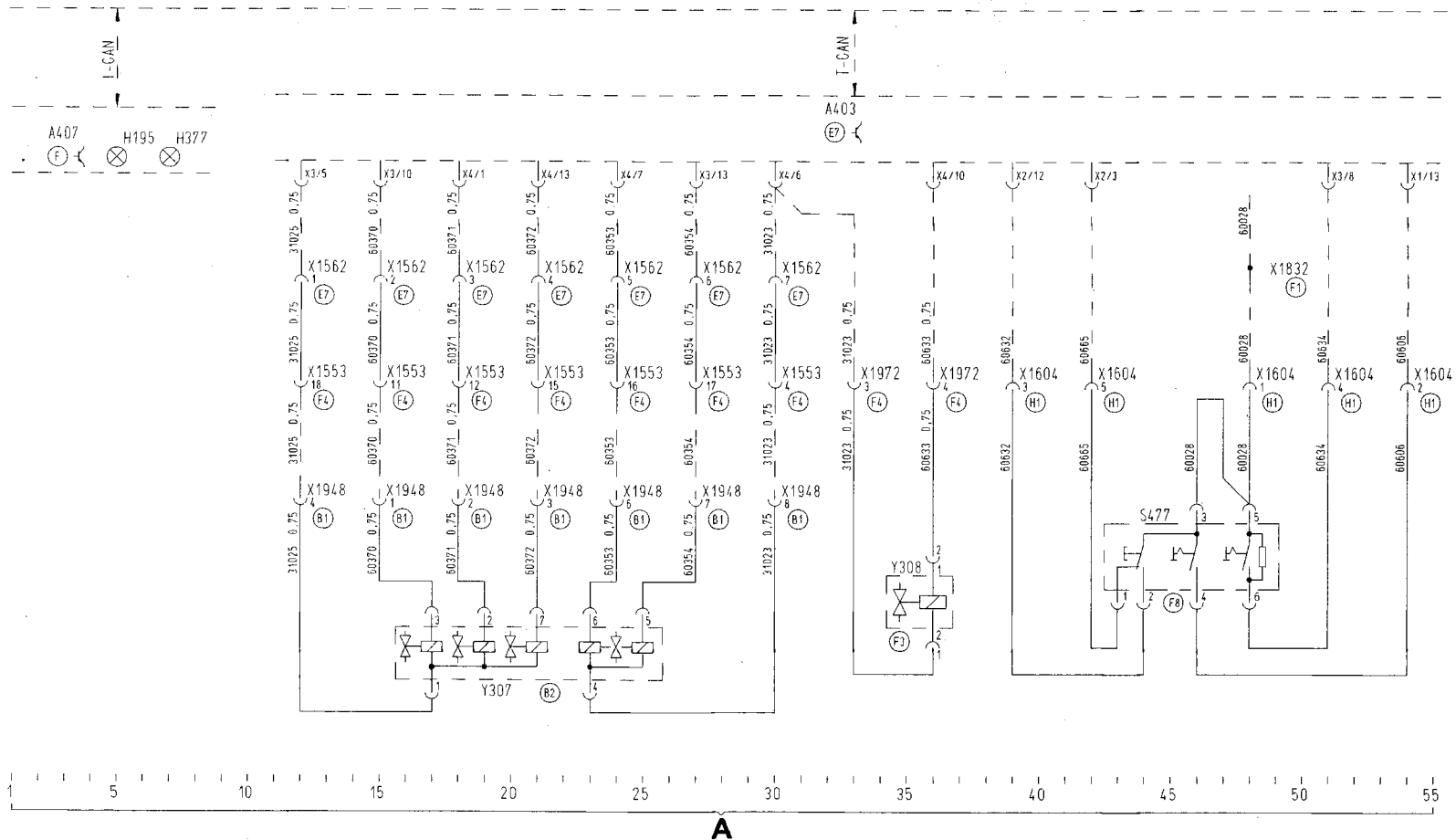
Wiring diagram no. 81.99192.2579 Sheet 1 of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### ZF transmission 16S151/16S181 (LL)

#### Legend

Wiring diagram no. **81.99192.2579** Sheet 2 of 2  
Change status: 07.01

**A = Clutch displacement sensor**

**B = Gearbox input speed**

**C = Gearbox neutral**

**D = Switch, reverse gear**

**E = Clutch fluid level probe**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A403** (339) Vehicle management computer

**B362** (264) Clutch displacement sensor

**B368** (292) Induction-type pulse generator, gearbox input speed

**B434** (272) Sensor for clutch fluid

**F314** (101) Fuse, reversing light

**S104** (478) Switch, reverse gear

**S172** (478) Switch, neutral position

**X100** Earthing point, engine

**X1553** Stvd. engine/EDC/transmission III

**X1562** Stvd. gearbox

**X1627** Stvd. reversing beam

**X1829** Crimped connector, line 31000

**X1948** Stvd. engine/transmission (MP box)

**X1949** Stvd. engine/transmission (MP box)

**X1972** Stvd. pedals, external

#### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

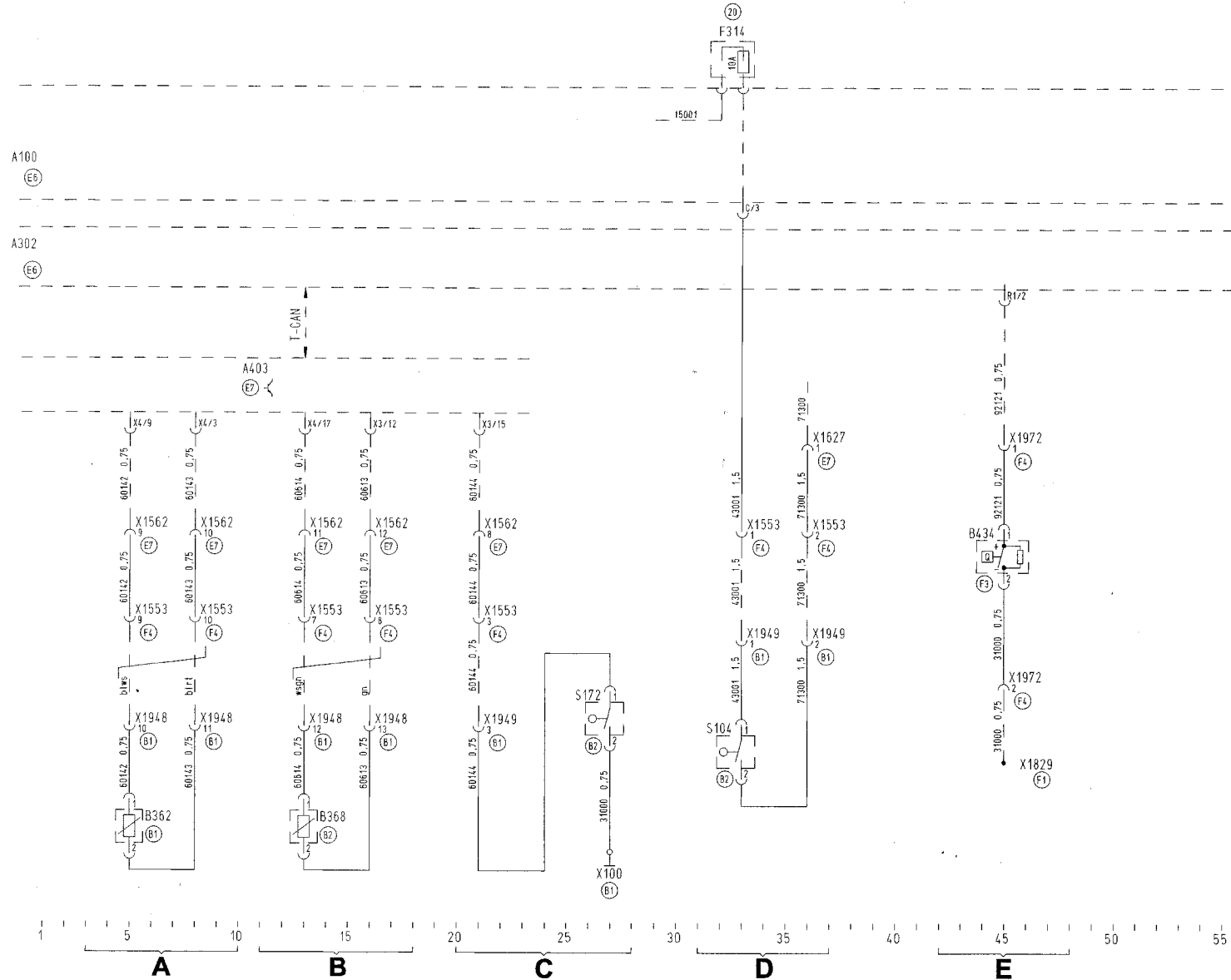
(S1) Door left

(S2) Door right



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2579** Sheet **2** of 2



## ZF transmission 16S151/16S181 (RL)

### Legend

Wiring diagram no. **81.99192.2835** Sheet 1 of 2

Change status: 05.01

### A = Pre-shift group, range shift group

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer  
**A407** (342) Instrumentation

**H195** Indicator light pre-shift group  
**H377** Indicator light, lower range active

**S477** (474) Switch, gearshift lever

**X1553** Stvd. engine/EDC/transmission III  
**X1562** Stvd. gearbox  
**X1604** Stvd. switch in gearshift knob  
**X1832** Crimped connector, line 60028  
**X1948** Stvd. engine/transmission (MP box)  
**X1972** Stvd. foot pedals, exterior

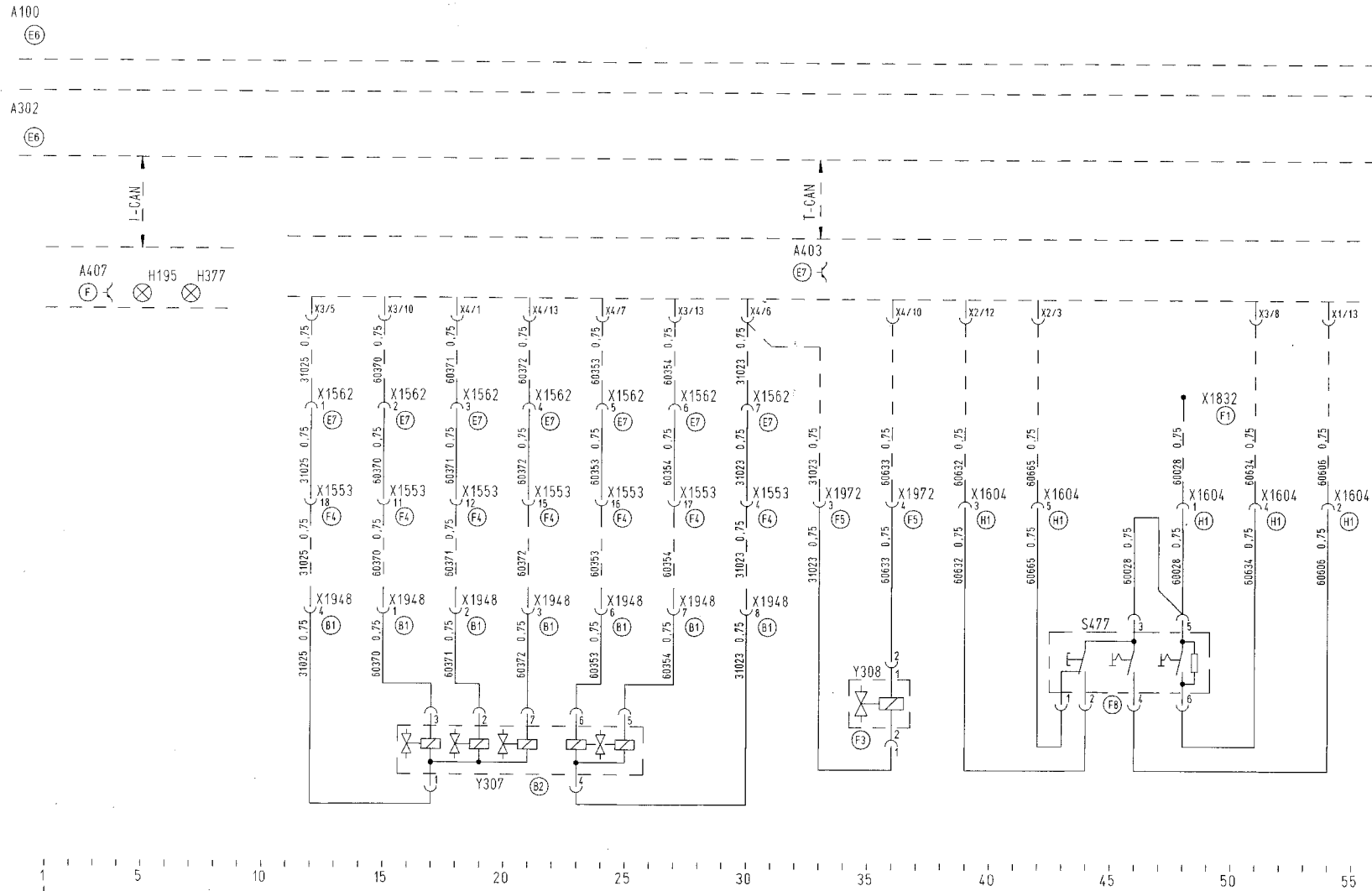
**Y307** (191) Solenoid valve, splitter and range group  
**Y308** (192) Clutch servo

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2835 Sheet 1 of 2



## ADDITIONAL WIRING DIAGRAMS

### ZF transmission 16S151/16S181 (RL)

#### Legend

Wiring diagram no. **81.99192.2835** Sheet 2 of 2

Change status: 12.00

**A = Clutch displacement sensor**

**B = Gearbox input speed**

**C = Gearbox neutral**

**D = Switch, reverse gear**

**E = Clutch fluid level probe**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A403** (339) Vehicle management computer

**B362** (264) Clutch displacement sensor

**B368** (292) Induction-type pulse generator, gearbox input speed

**B434** (272) Sensor for clutch fluid

**F314** (101) Fuse, reversing light

**S104** Switch, reverse gear

**S172** (478) Switch, neutral position gearbox

**S275** (478) Switch, neutral position gearbox

**X1549** Stvd. engine/EDC/transmission I

**X1553** Stvd. engine/EDC/transmission III

**X1562** Stvd. gearbox

**X1627** Stvd. reversing beam

**X1693** Crimped connector, line 60028

**X1829** Crimped connector, line 31000

**X1904** Threaded bolt M6 (MP box)

**X1948** Stvd. engine/transmission (MP box)

**X1949** Stvd. engine/transmission (MP box)

**X1951** Stvd. engine/transmission (MP box)

**X1972** Stvd. pedals, external

#### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2835 Sheet 2 of 2



## ADDITIONAL WIRING DIAGRAMS

### Seat belt indicator, driver

#### Legend

Wiring diagram no. **81.99192.1374** Sheet **1** of 1

Change status: 04.01

#### A = Seatbelt indicator

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**H177** Indicator light, seat belt

**S252** (562) Switch in driver's seat belt lock

**X600** Stvd. seat belt indicator, driver/middle seat

**X2541** (246) Potential distributor, 21-pin line 31000

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

**ADDITIONAL WIRING DIAGRAMS**

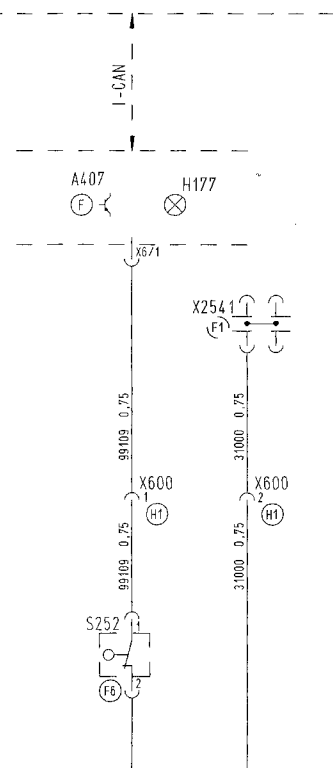
Wiring diagram no. **81.99192.1374** Sheet 1 of 1

A100

(EB)

A302

(EB)



1 5 10 15 20 25 30 35 40 45 50 55

**A**

**ADDITIONAL WIRING DIAGRAMS**



## ADDITIONAL WIRING DIAGRAMS

### Trailer charge 24V

#### Legend

Wiring diagram no. **81.99192.2616** Sheet 1 of 1  
Change status: 07.99

#### A = Trailer charge

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A372** Distributor box, trailer charge 24V

**F229** (125) Fuse, trailer charge 24V

**G100** (113) Battery 1  
**G101** (113) Battery 2

**K319** (104) Relay, trailer charge 24V

**X100** Earthing point, engine  
**X805** Stvd. trailer charge 24V  
**X806** Stvd. trailer charge 24V  
**X807** Stvd. trailer charge 24V  
**X808** (141) Trailer charge 24V  
**X1754** Crimped connector, line 59104

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓖ Battery box                  |
| Ⓔ Bumper                   | Ⓗ B-pillar on driver's side    |
| Ⓕ Entrance right           | Ⓗ A-pillar on driver's side    |
| Ⓖ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

Ⓖ to earth of consumers in frame

#### Note:

Mounting position of **X808** for semitrailers is E8!

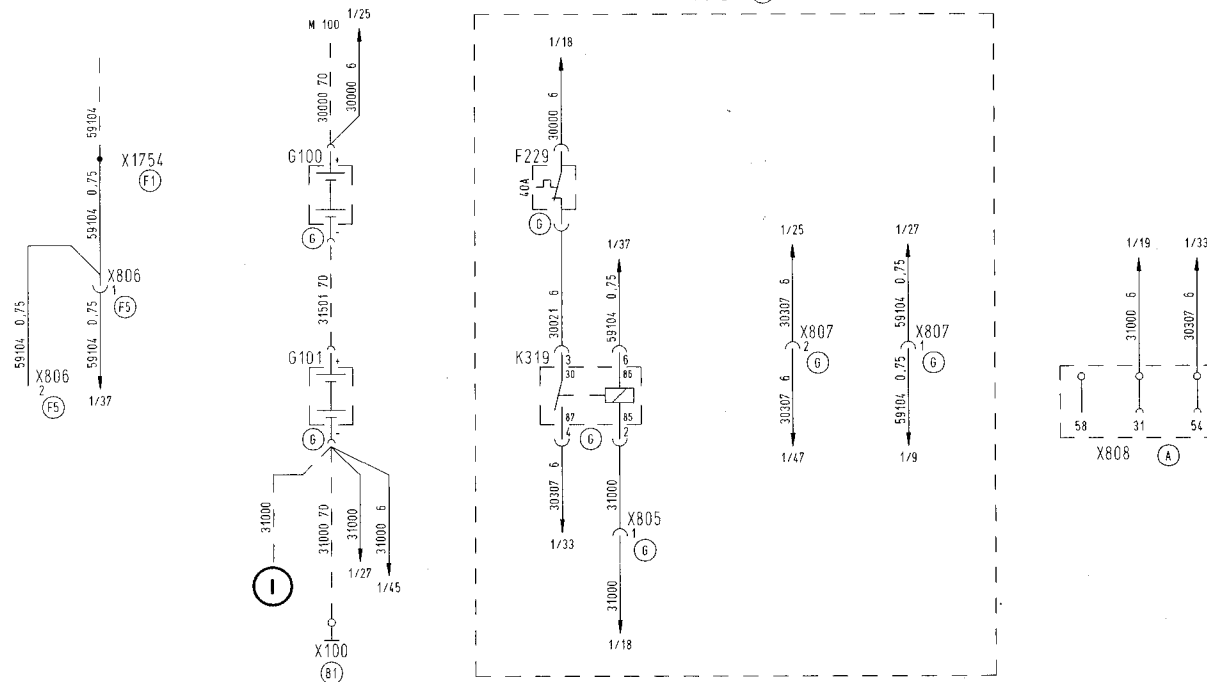
ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2616 Sheet 1 of 1

A100  
(E6)

A302  
(E6)

A372 (6)



A

## Heating for hydraulic gearshift (HGS) (LL)

### Legend

Wiring diagram no. **81.99192.2684** Sheet **1** of 1  
Change status: 10.99

### A = HGS (hydraulic gearshift) heating

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**R214** (155) Heating element for HGS (hydraulic gearshift) heating

**X1642** Earthing point, cab, behind instrument panel

**X1972** Stvd. pedals, external

**X2255** Stvd. HGS (hydraulic gearshift) heating

### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

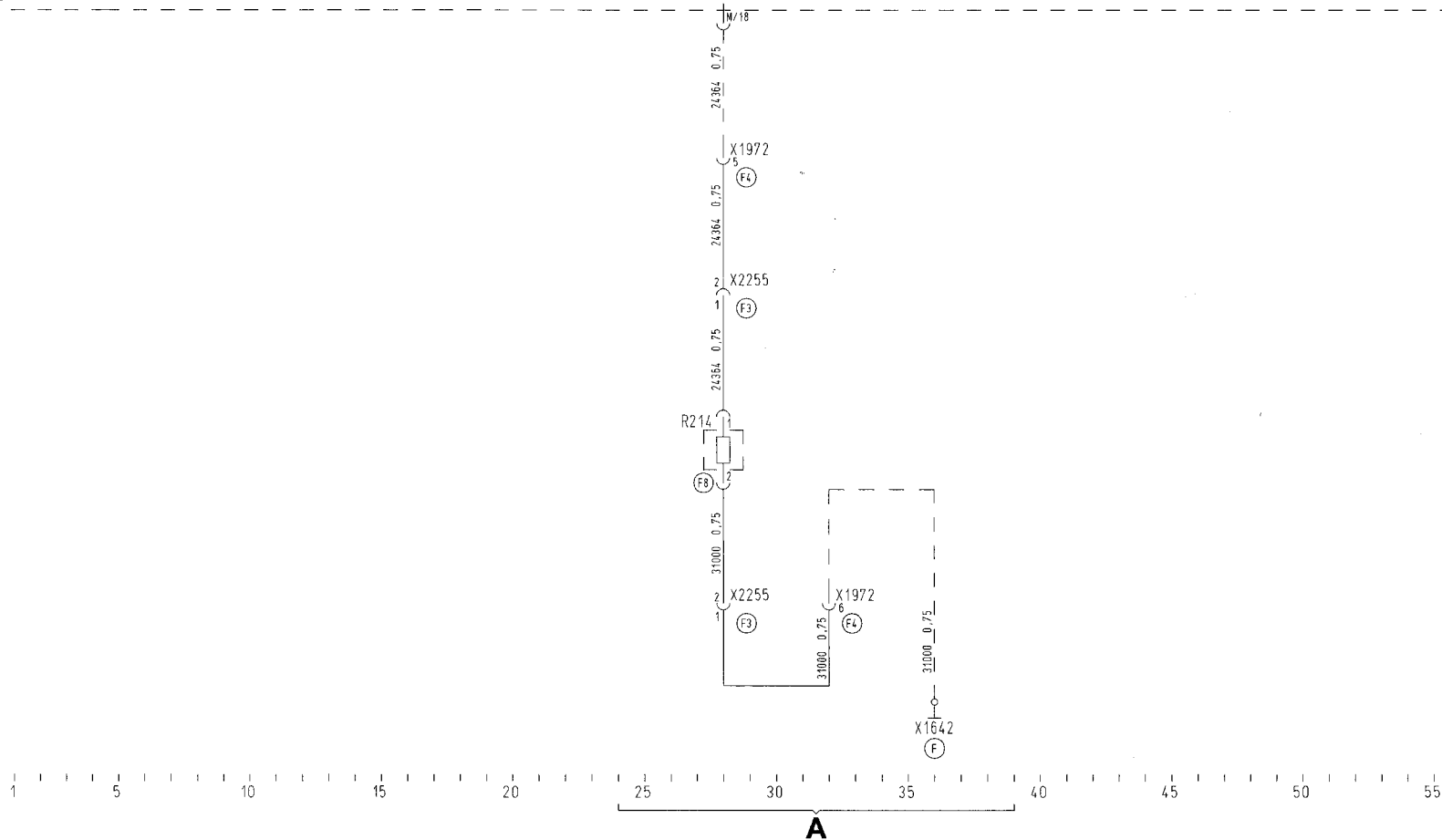
Wiring diagram no. **81.99192.2684** Sheet 1 of 1

A100

(E5)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Heating for hydraulic gearshift (HGS) (RL)

#### Legend

Wiring diagram no. **81.99192.2690** Sheet 1 of 1

Change status: 10.99

#### A = HGS (hydraulic gearshift) heating

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**R214** (155) Heating element for HGS (hydraulic gearshift) heating

**X1642** Earthing point, cab, behind instrument panel

**X1972** Stvd. foot pedals, exterior

**X2255** Stvd. HGS (hydraulic gearshift) heating

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

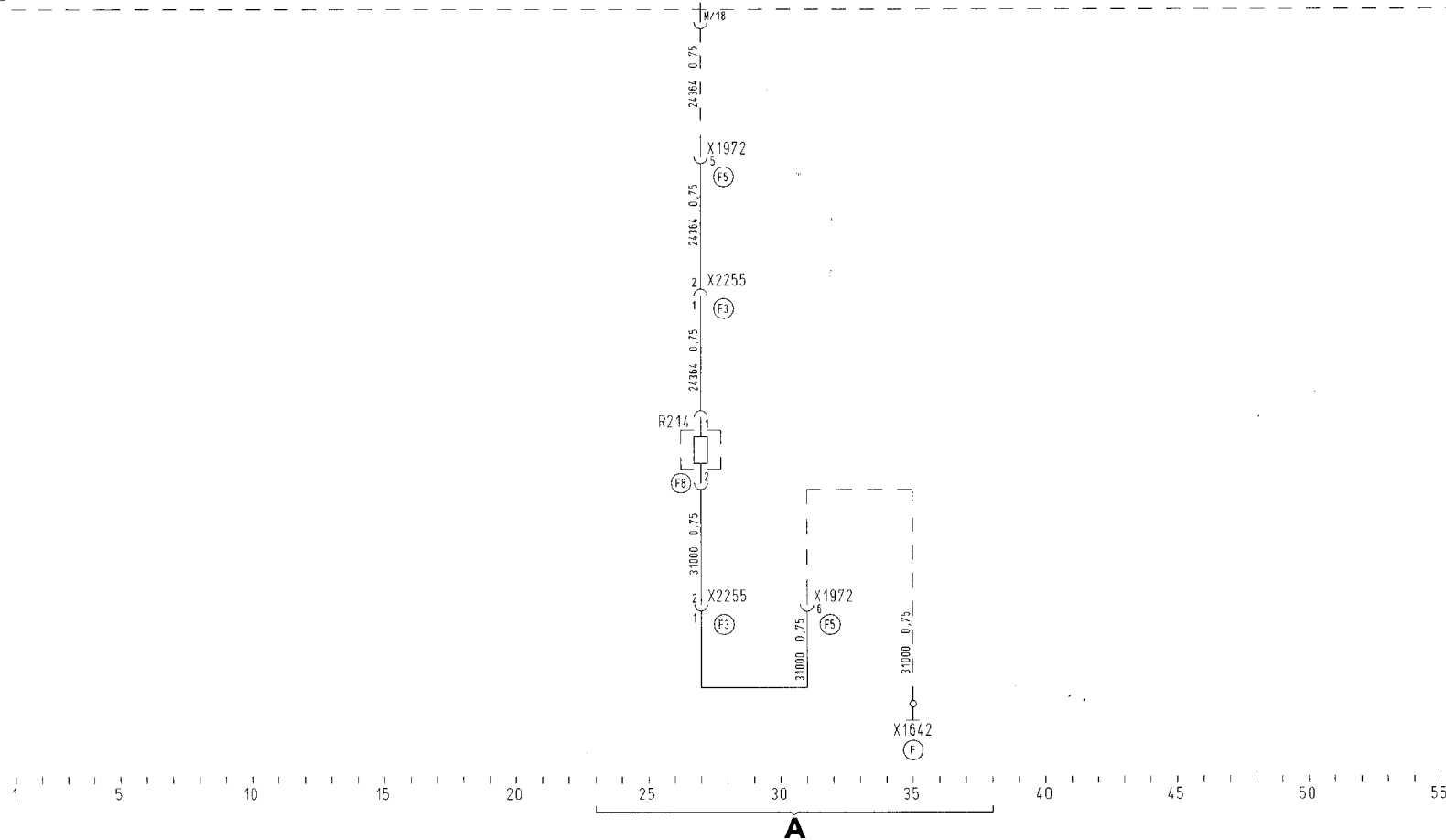
Wiring diagram no. **81.99192.2690** Sheet 1 of 1

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Horn switchover (LL)

#### Legend

Wiring diagram no. **81.99192.1375** Sheet 1 of 1  
Change status: 04.01

#### A = Horn switchover

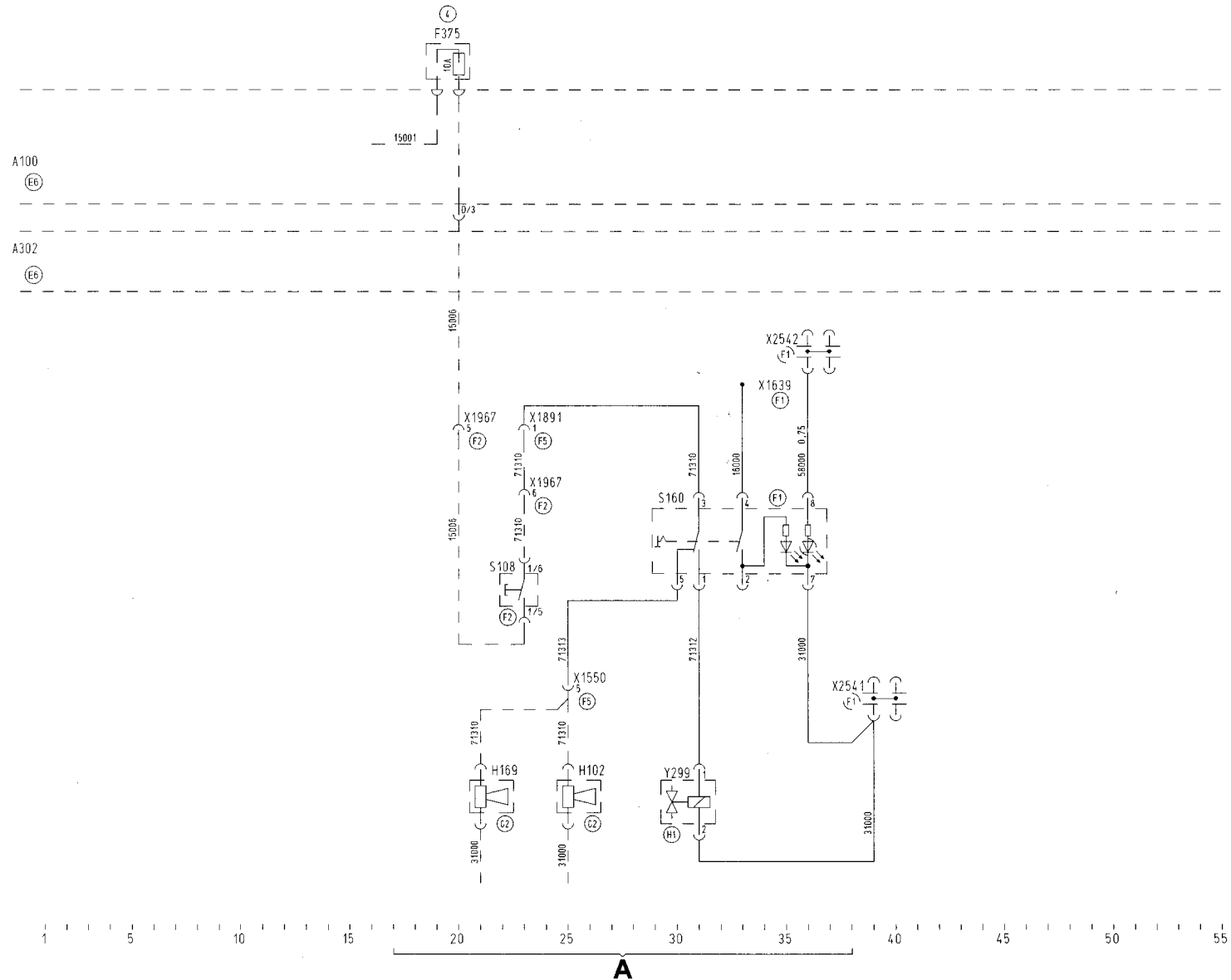
- A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2
- F375** (101) Fuse, cab outside (terminal 15)
- H102** (142) Horn  
**H169** (143) Horn (dual-tone)
- S108** (472) Steering column switch (indicators, wipers and headlights)  
**S160** (565) Switchover device, horn 1 – horn 2
- X1550** Stvd. front region, right  
**X1639** Soldered connector, line 16000  
**X1891** Stvd. adaptation horn switchover  
**X1967** Stvd. 1 combination steering column switch  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2542** (246) Potential distributor, 21-pin line 58000
- Y299** (186) Solenoid valve for compressed air horn

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1375** Sheet **1** of **1**





## ADDITIONAL WIRING DIAGRAMS

### Horn switchover (RL)

#### Legend

Wiring diagram no. **81.99192.1376** Sheet 1 of 1

Change status: 04.01

#### A = Horn switchover

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**F375** (101) Fuse, cab outside (terminal 15)

**H102** (142) Horn

**H169** (143) Horn (dual-tone)

**S108** (472) Steering column switch (indicators, wipers and headlights)

**S160** (565) Switchover device, horn 1 – horn 2

**X1545** Stvd. front region, left

**X1639** Crimped connector, line 16000

**X1891** Stvd. adaptation horn switchover

**X1967** Stvd. 1 combination steering column switch

**X2541** (246) Potential distributor, 21-pin line 31000

**X2542** (246) Potential distributor, 21-pin line 58000

**Y299** (186) Solenoid valve for compressed air horn

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

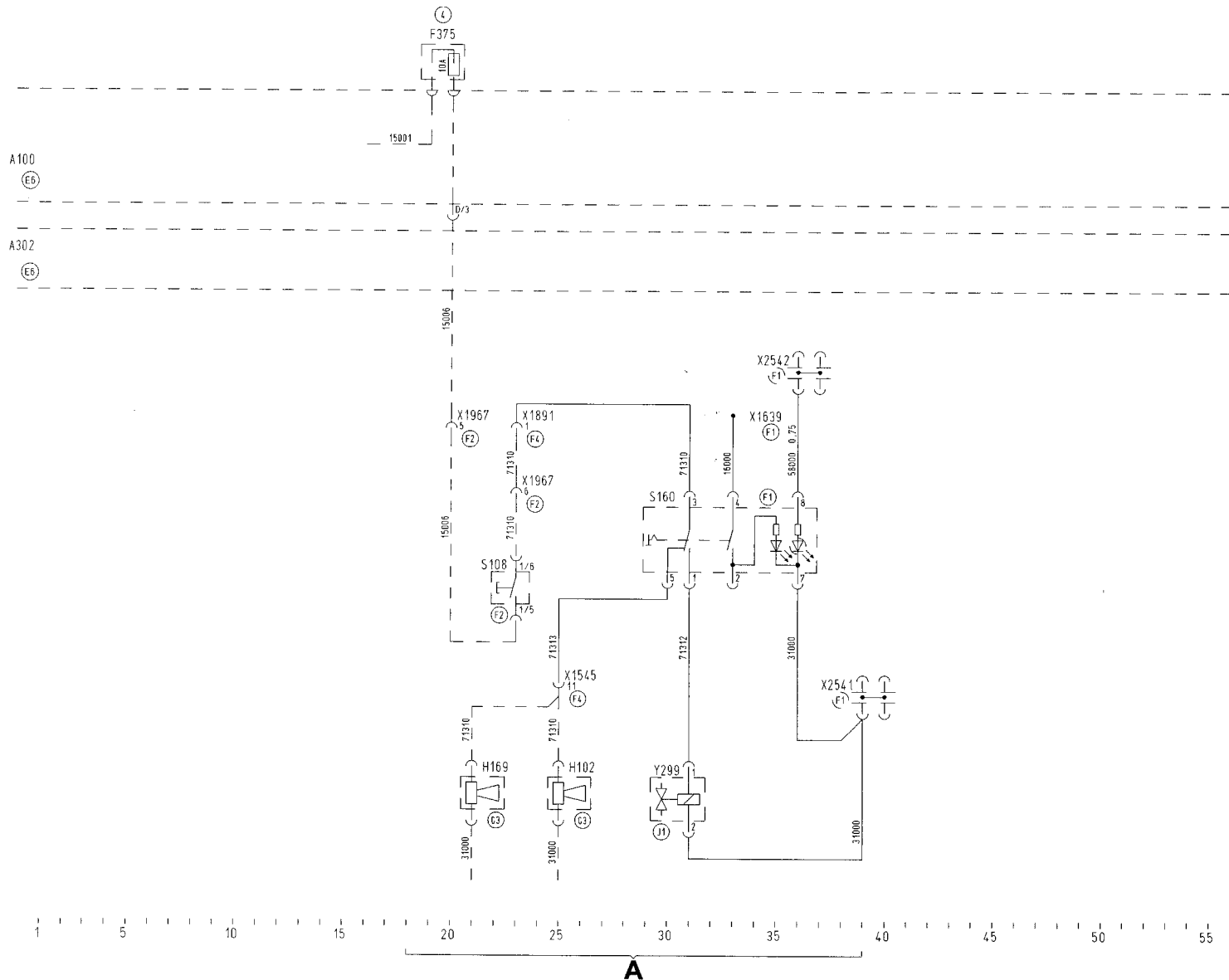
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1376** Sheet 1 of 1



**ADDITIONAL WIRING DIAGRAMS**

## ADDITIONAL WIRING DIAGRAMS

### Interior lighting, roof (white/red)

#### Legend

Wiring diagram no. **81.99192.1377** Sheet 1 of 1

Change status: 04.01

#### A = Interior lighting, roof (white/red)

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**E275** (175) Interior lighting, roof (white/red), left

**E276** (175) Interior lighting, roof (white/red), right

**S405** (540) Switch, interior lighting (red)

**S540** (539) Switch, interior lighting (white)

**X1580** Stvd. interior lighting

**X1581** Stvd. switch, interior lighting

**X2541** (246) Potential distributor, 21-pin line 31000

**X2542** (246) Potential distributor, 21-pin line 58000

**X2543** (246) Potential distributor, 21-pin line 30006

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

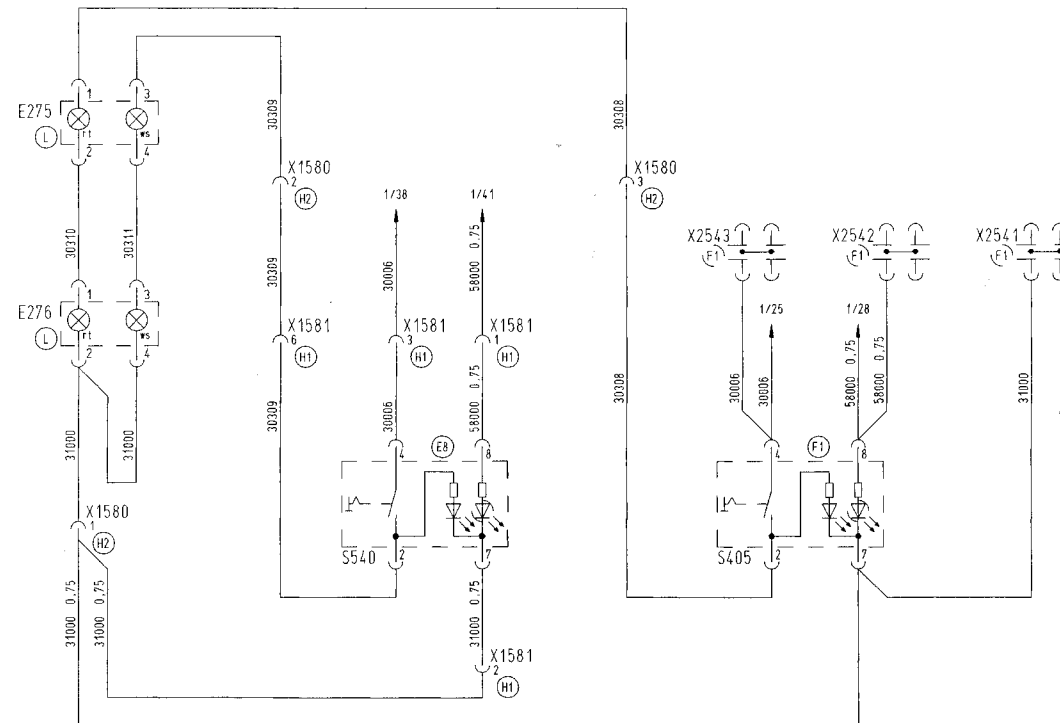
(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1377 Sheet 1 of 1

A100  
(E6)

A302  
(E6)



1 5 10 15 20 25 30 35 40 45 50 55

A

## ADDITIONAL WIRING DIAGRAMS

### Intarder ZF-EST 48

#### Legend

Wiring diagram no. **81.99192.1378** Sheet **1** of 1

Change status: 04.01

**A = Additional retarding brake pushbutton switch**

**B = Temperature sensor**

**C = Solenoid valve**

**D = Diagnosis**

**E = Power supply**

A100 (255) Central fuse, relay and terminal block  
A144 (451) Control unit, retarder  
A302 (352) Central computer 2  
A403 (339) Vehicle management computer  
A407 (342) Instrumentation  
A437 (398) Additional retarding brake pushbutton switch

B134 (155) Temperature sensor, cooling water (retarder)

F152 (101) Fuse retarder (terminal 15)

F374 (101) Fuse retarder (terminal 30)

H145 Indicator light, retarder

X1553 Stvd. engine/EDC/transmission III  
X1559 Stvd. engine/EDC/transmission IV  
X1644 Earthing point, cab, adjacent to central fuse, relay and terminal block  
X1948 Stvd. engine/transmission (MP box)  
X1949 Stvd. engine/transmission (MP box)  
X1951 Stvd. engine/transmission (MP box)  
X1969 Stvd. engine brake switch  
X2544 (246) Potential distributor 21-pin K-line

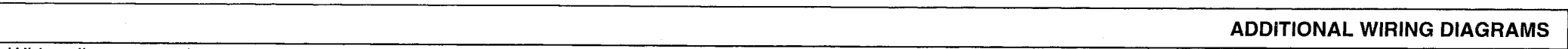
Y133 (182) Proportioning valve, retarder

Y134 (123) Solenoid valve, reservoir

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS



**ADDITIONAL WIRING DIAGRAMS**



## Tipper indicator

### Legend

Wiring diagram no. **81.99192.1379** Sheet **1** of 1

Change status: 04.01

### A = Tipper indicator

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**H148** Indicator light, tipper

**S192** (537) Switch, indicator tipper

**X674** Stvd. tipper indicator

**X2541** (246) Potential distributor, 21-pin line 31000

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

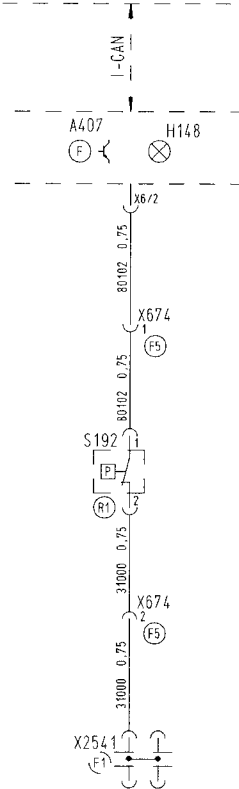
ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1379** Sheet **1** of **1**

A100



A302



1 5 10 15 20 25 30 35 40 45 50 55

A

## Air conditioning unit

### Legend

Wiring diagram no. **81.99192.1380** Sheet 1 of 2

Change status: 04.01

**A = Power supply, water timing valve,  
internal temperature sensor**

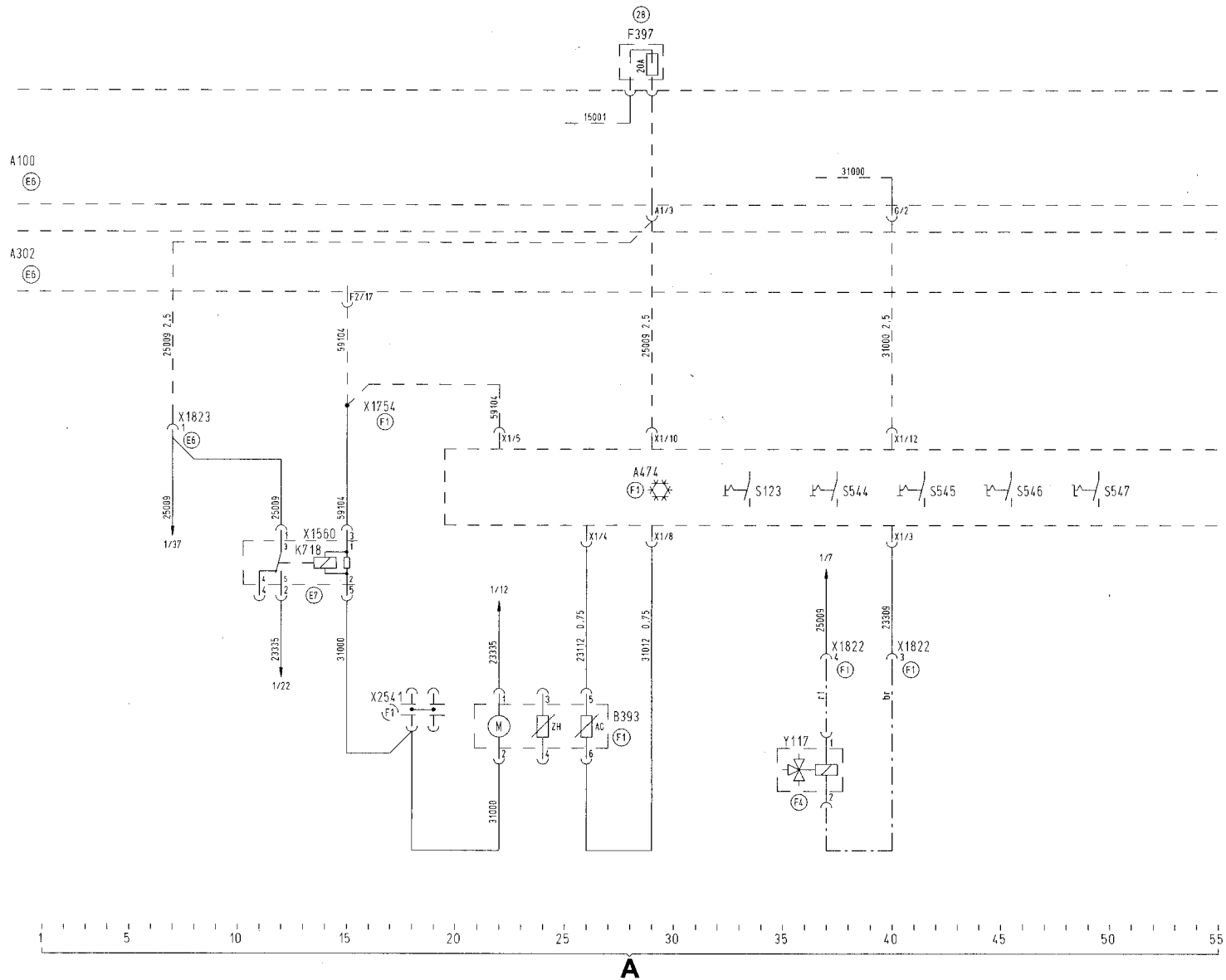
|              |        |                                                                   |
|--------------|--------|-------------------------------------------------------------------|
| <b>A100</b>  | (255)  | Central fuse, relay and terminal block                            |
| <b>A302</b>  | (352)  | Central computer 2                                                |
| <b>A474</b>  | (467)  | Control device, cab heating with/without air-conditioning         |
| <b>B393</b>  | (302)  | Temperature sensor, internal air (air-conditioning system)        |
| <b>F397</b>  | (104)  | Fuse, heater blower/air-conditioning unit                         |
| <b>K718</b>  | (283)  | Relay, temperature sensor, internal air (air-conditioning system) |
| <b>S123</b>  | (A467) | Switch, fresh air circulation vent                                |
| <b>S544</b>  | (A467) | Switch AC-EIN ("ON")                                              |
| <b>S545</b>  | (A467) | Switch, reheat                                                    |
| <b>S546</b>  | (A467) | Rotary control, internal temperature                              |
| <b>S547</b>  | (A467) | Rotary control, blower                                            |
| <b>X1560</b> | (203)  | Relay socket K718, K...                                           |
| <b>X1754</b> |        | Crimped connector, line 59104                                     |
| <b>X1822</b> |        | Std. air-conditioning system                                      |
| <b>X1823</b> |        | Std. air-conditioning, terminal 15                                |
| <b>X2541</b> | (246)  | Potential distributor, 21-pin line 31000                          |
| <b>Y117</b>  |        | Solenoid valve, front air-conditioning unit                       |

### Marking of mounting positions

|             |                          |             |                              |
|-------------|--------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                     | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                   | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                  | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                    | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                   | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right           | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left            | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area   | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks       | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab         | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel         | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part             | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column    | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals              | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left  | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right |             |                              |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1380 Sheet 1 of 2



## ADDITIONAL WIRING DIAGRAMS

### Air conditioning unit

#### Legend

Wiring diagram no. **81.99192.1380** Sheet 2 of 2

Change status: 04.01

**A = Coolant vessel**

**B = Magnetic clutch, compressor**

**C = Air-conditioning system, scope of delivery, Behr**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A474** (467) Control device, cab heating with/without air-conditioning  
**A480** (373) Air-conditioning system, scope of delivery, BEHR

**B203** (303) High/low pressure switch, coolant vessel

**X1551** Stvd. engine/EDC/transmission II  
**X1822** Stvd. air conditioning unit  
**X1835** (221) Crimped connector, line 58000  
**X1838** (221) Crimped connector, line 58300  
**X2544** (246) Potential distributor 21-pin K-line

**Y114** (139) Magnetic clutch, compressor

#### Marking of mounting positions

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| (A) Tail                         | (F6) Driving seat                 |
| (B1) Engine                      | (F7) Passenger seat               |
| (B2) Gearbox                     | (F8) Control panel                |
| (C) Front                        | (G) Battery box                   |
| (C1) Bumper                      | (H1) B-pillar on driver's side    |
| (C2) Entrance right              | (H2) A-pillar on driver's side    |
| (C3) Entrance left               | (J1) B-pillar on passenger's side |
| (E6) Central electrics area      | (J2) A-pillar on passenger's side |
| (E7) Control unit racks          | (L) Ceiling/roof                  |
| (E8) Rear wall of cab            | (N) Front axle                    |
| (F) Instrument panel             | (P) Rear axle                     |
| (F1) Central part                | (R1) Front part of frame          |
| (F2) Steering wheel/column       | (R2) Rear part of frame           |
| (F3) Foot pedals                 | (S1) Door left                    |
| (F4) Front wall, inside left     | (S2) Door right                   |
| (F5) Front wall, inside right    |                                   |
| (I) Clock-pulse regulator        |                                   |
| (II) Blower                      |                                   |
| (III) Fresh/circulating air      |                                   |
| (IV) HK bypass                   |                                   |
| (V) Heat exchanger sensor        |                                   |
| (VI) External temperature sensor |                                   |
| (VII) Condenser sensor           |                                   |

ADDITIONAL WIRING DIAGRAMS

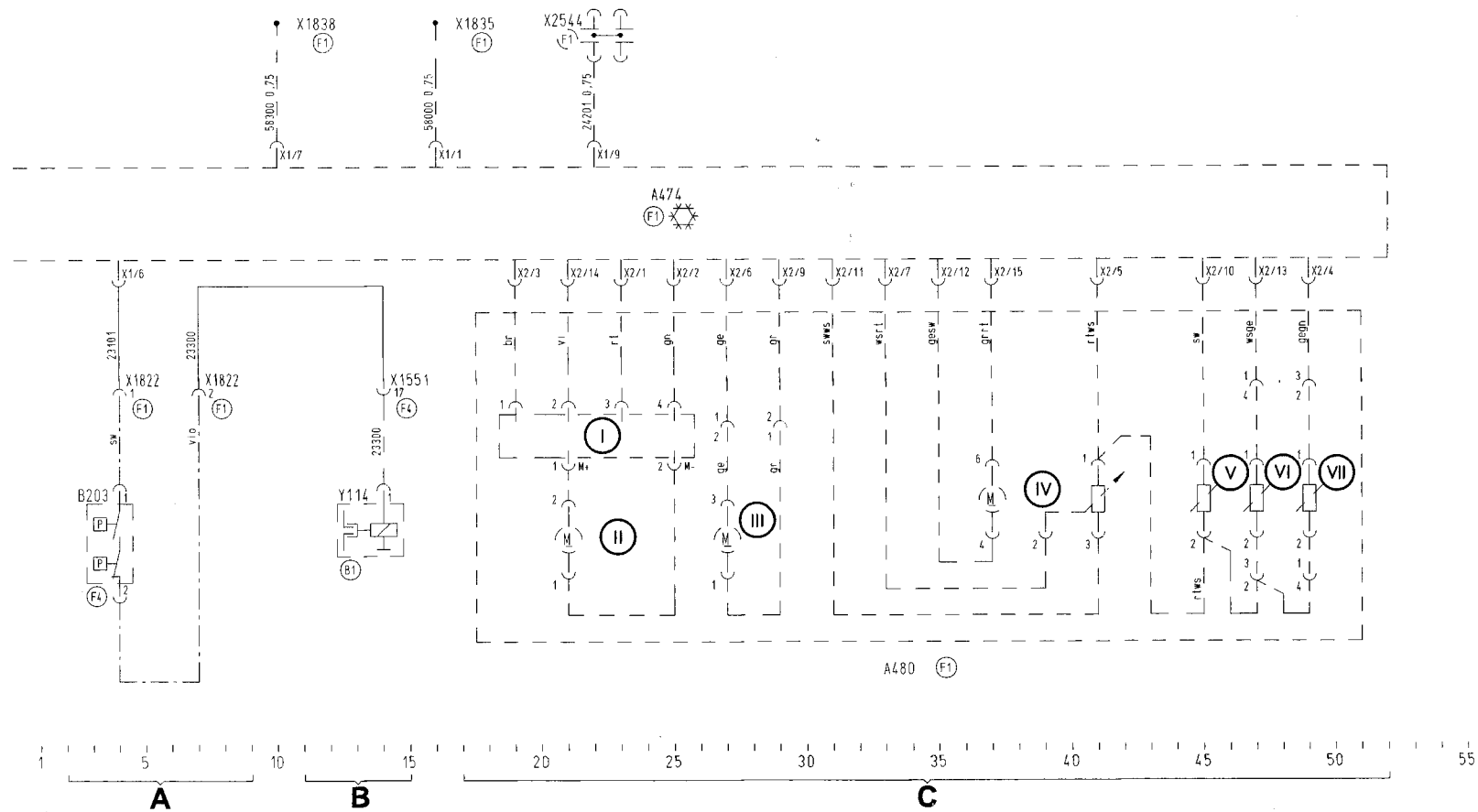
Wiring diagram no. **81.99192.1380** Sheet **2** of 2

A100

(E6)

A302

(E6)



## Fuel filter heater

### Legend

Wiring diagram no. **81.99192.2487** Sheet **1** of 1  
Change status: 05.00

### A = Fuel filter heating

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**F156** (140) Fuse, fuel filter heating  
**F355** (132) Main fuse (terminal 30-2)

**K177** (299) Relay, fuel filter heating

**R110** (147) Fuel filter heating 1

**X1903** Threaded bolt M6 (MP box)  
**X1904** Threaded bolt M6 (MP box)  
**X1988** Threaded bolt M5 (MP box)  
**X1989** Threaded bolt M5 (MP box)

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

Figure 1: Schematic representation of the experimental design. The figure shows two horizontal timelines for two groups: A100 and A302. Both groups have a baseline period (E6) and a treatment period (E6). The treatment period for A100 is 100 days, and for A302 is 302 days. The timelines are labeled with 'E6' and 'E6'.





# ADDITIONAL WIRING DIAGRAMS

## Fuel filter heater, Separ

### Legend

Wiring diagram no. **81.99192.2665** Sheet **1** of 1

Change status: 08.00

### A = Fuel filter heating, Separ

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**F549** (105) Fuse, fuel filter heating

**G100** (113) Battery 1

**G101** (113) Battery 2

**K177** (299) Relay, fuel filter heating

**R110** (153) Fuel filter heating 1

**X1754** Crimped connector, line 59104

**X2201** Stvd. filter heating, Separ

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

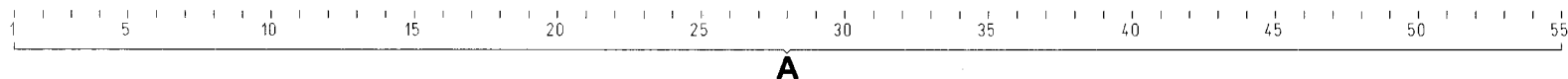
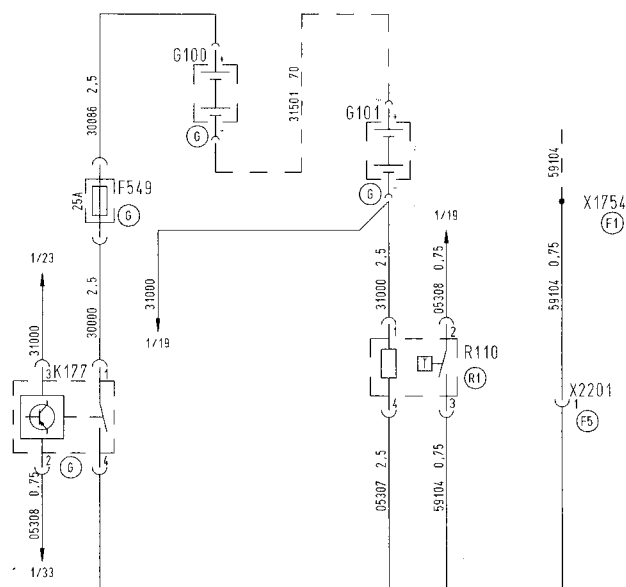
(S2) Door right

A100

E6

A302

E6



## Cool box

### Legend

Wiring diagram no. **81.99192.1382** Sheet 1 of 1

Change status: 11.01

### A = Cool box

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A478** (368) Refrigerator

**F147** (118) Fuse, refrigerator

**S548** (521) Switch, refrigerator

**X1571** Stvd. refrigerator

**X2541** (246) Potential distributor, 21-pin line 31000

**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

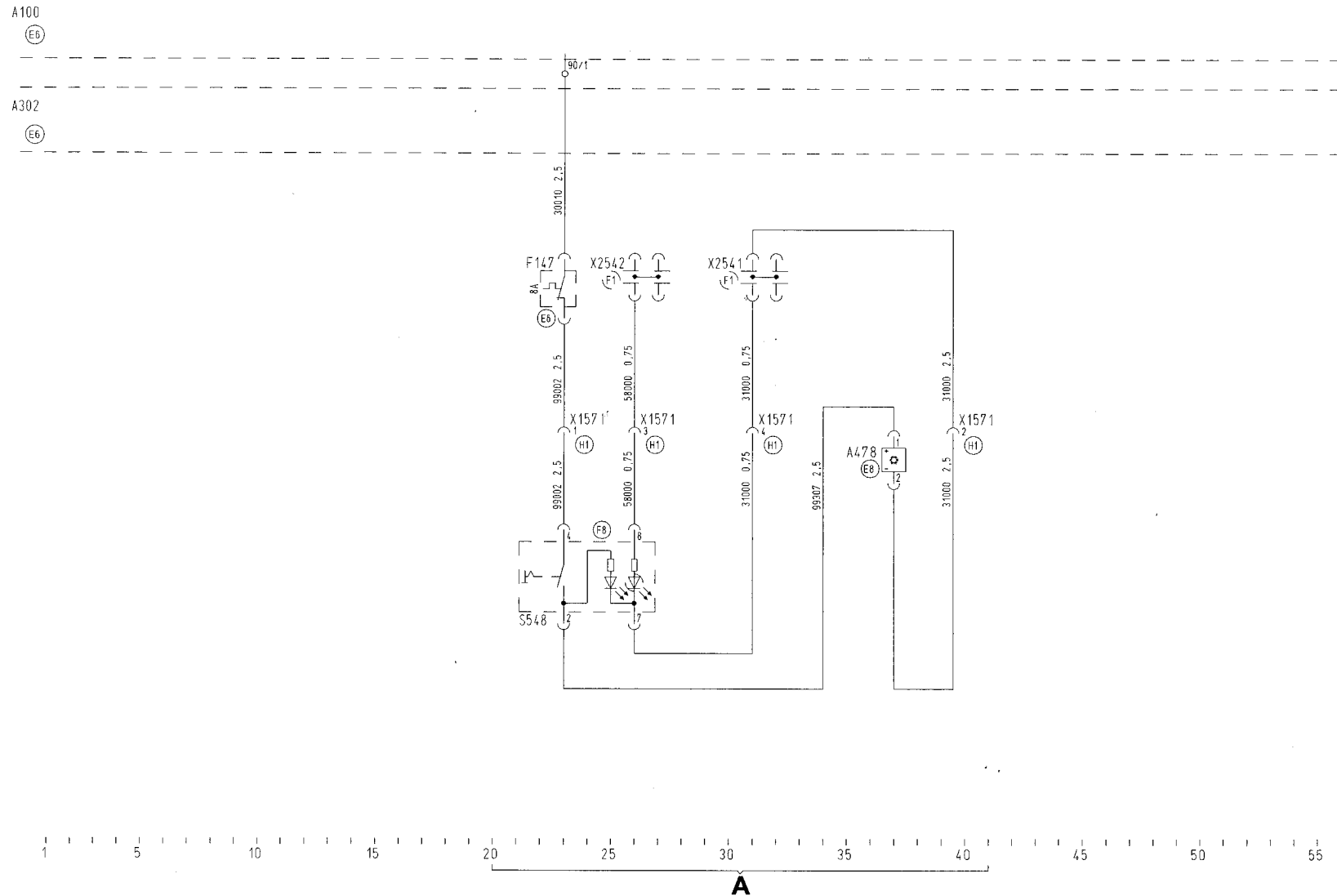
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1382** Sheet **1** of **1**



## Special customised module

### Legend

Wiring diagram no. **81.99192.1381** Sheet **1** of 1  
Change status: 04.01

**A = ZDR interface (FFR)**

**B = ZDR interface (KSM)**

**C = Diagnosis**

**D = Power supply**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A312** (397) Customer-specific control module

**A403** (339) Vehicle management computer

**F428** (118) Fuse, special customer module (terminal 15)

**F429** (118) Fuse, special customer module (terminal 30)

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1996** Stvd. intermediate speed control interface (FFR)

**X1997** Stvd. intermediate speed control interface (KSM)

**X2544** (246) Potential distributor 21-pin K-line

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right



**ADDITIONAL WIRING DIAGRAMS**

## ADDITIONAL WIRING DIAGRAMS

### Tailgate

#### Legend

Wiring diagram no. **81.99192.1537** Sheet **1** of 1  
Change status: 09.01

#### A = Tailgate

|              |       |                                          |
|--------------|-------|------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block   |
| <b>A302</b>  | (352) | Central computer 2                       |
| <b>A358</b>  |       | Control, tailgate                        |
| <b>A403</b>  | (339) | Vehicle management computer              |
| <b>A407</b>  | (342) | Instrumentation                          |
| <b>F219</b>  | (118) | Fuse, tailgate (terminal 15)             |
| <b>H254</b>  |       | Indicator light, tailgate                |
| <b>K175</b>  | (281) | Relay, start inhibitor                   |
| <b>K467</b>  | (281) | Relay, tailgate                          |
| <b>S286</b>  | (547) | Switch, tailgate                         |
| <b>X669</b>  |       | Stvd. start inhibitor                    |
| <b>X744</b>  |       | Stvd. cab tailgate                       |
| <b>X2541</b> | (246) | Potential distributor, 21-pin line 31000 |
| <b>X2542</b> | (246) | Potential distributor, 21-pin line 58000 |
| <b>X3186</b> |       | Stvd. tailgate                           |

#### Marking of mounting positions

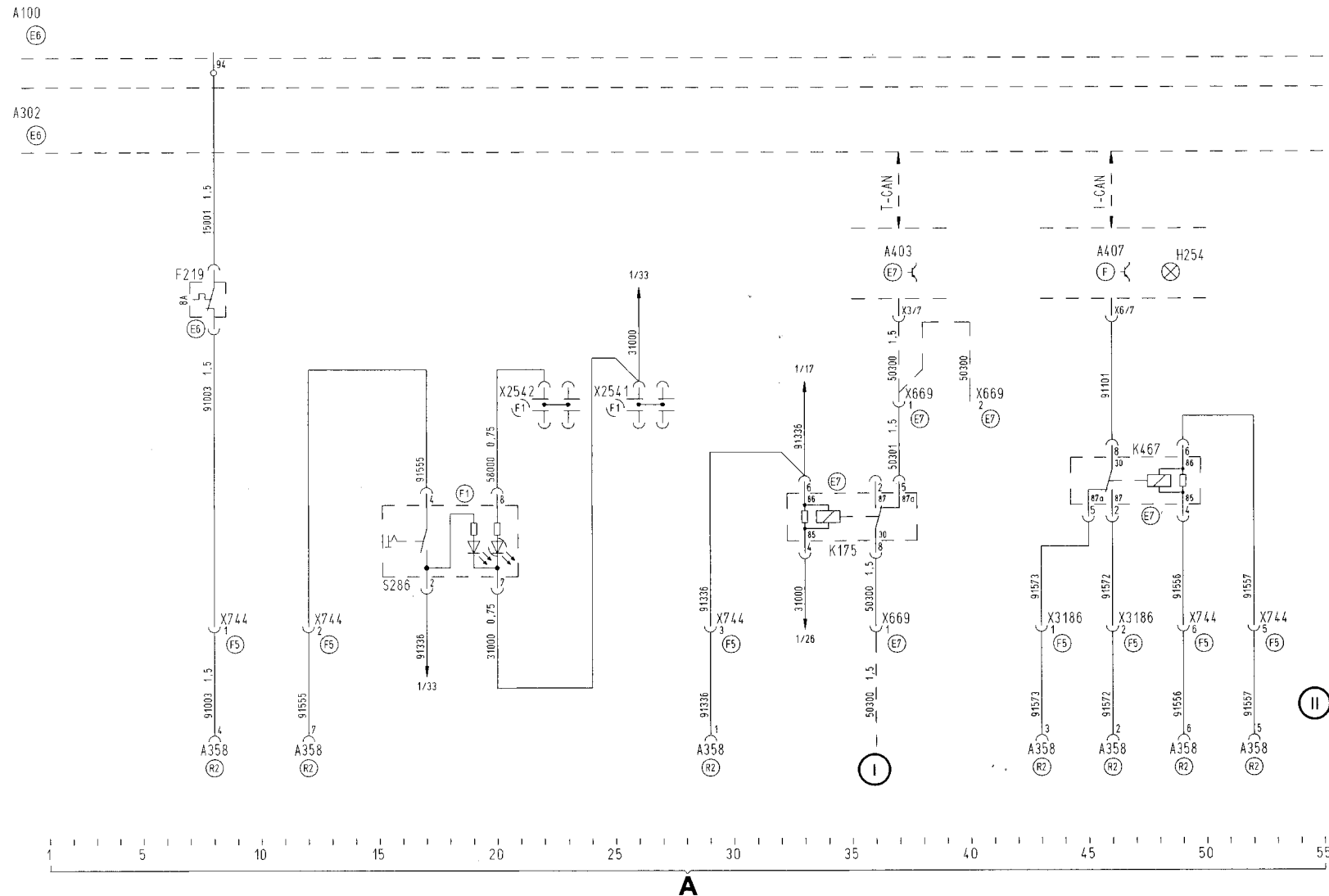
|             |                          |             |                              |
|-------------|--------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                     | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                   | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                  | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                    | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                   | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right           | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left            | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area   | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks       | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab         | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel         | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part             | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column    | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals              | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left  | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right |             |                              |

- (I)** Separate series Stvd. **X669** and connect "Kbs." cab-tailgate between them
- (II)** Cables 91003, 91336, 91555, 91556, 91557, 91572 and 91573 lead to 7-pin terminal casing at the end of the frame (rolled up)



## ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1537** Sheet **1** of **1**



## Cargo area lighting

### Legend

Wiring diagram no. **81.99192.1384** Sheet 1 of 1

Change status: 04.01

### A = Cargo space lighting

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**F178** (118) Fuse, cargo space lighting

**S226** (541) Switch, cargo space lighting

**X1572** Stvd. cargo area lighting

**X2541** (246) Potential distributor, 21-pin line 31000

**X2542** (246) Potential distributor, 21-pin line 58000

## Marking of mounting positions

- |                                                                                            |                                   |
|--------------------------------------------------------------------------------------------|-----------------------------------|
| (A) Tail                                                                                   | (F6) Driving seat                 |
| (B1) Engine                                                                                | (F7) Passenger seat               |
| (B2) Gearbox                                                                               | (F8) Control panel                |
| (C) Front                                                                                  | (G) Battery box                   |
| (C1) Bumper                                                                                | (H1) B-pillar on driver's side    |
| (C2) Entrance right                                                                        | (H2) A-pillar on driver's side    |
| (C3) Entrance left                                                                         | (J1) B-pillar on passenger's side |
| (E6) Central electrics area                                                                | (J2) A-pillar on passenger's side |
| (E7) Control unit racks                                                                    | (L) Ceiling/roof                  |
| (E8) Rear wall of cab                                                                      | (N) Front axle                    |
| (F) Instrument panel                                                                       | (P) Rear axle                     |
| (F1) Central part                                                                          | (R1) Front part of frame          |
| (F2) Steering wheel/column                                                                 | (R2) Rear part of frame           |
| (F3) Foot pedals                                                                           | (S1) Door left                    |
| (F4) Front wall, inside left                                                               | (S2) Door right                   |
| (F5) Front wall, inside right                                                              |                                   |
| (I) Scope of delivery, body manufacturers                                                  |                                   |
| (II) Cables 58009 and 31000 are placed rolled up as reserve for cargo space lighting, left |                                   |

ADDITIONAL WIRING DIAGRAMS

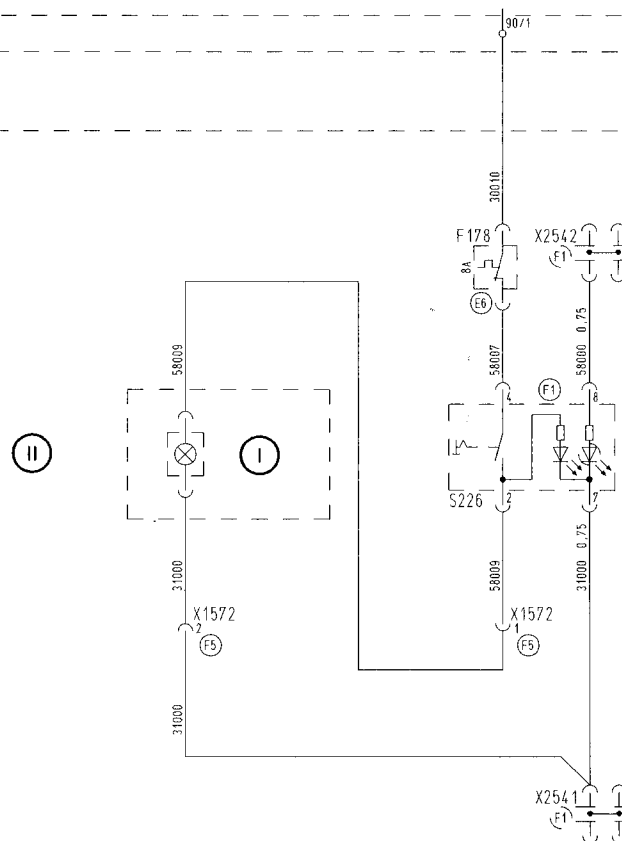
Wiring diagram no. **81.99192.1384** Sheet **1** of **1**

A100

(E6)

A302

(E6)



## Headlight levelling (LL)

### Legend

Wiring diagram no. **81.99192.2477** Sheet 1 of 1

Change status: -

### A = Headlight levelling

**A100** (255) Central fuse, relay and terminal block

**A187** (411) Headlights, left

**A188** (412) Headlights, right

**A302** (352) Central computer 2

**M117** (A411) Actuator motor, headlight levelling, left

**M118** (A412) Actuator motor, headlight levelling, right

**R109** (136) Positioning potentiometer, headlight levelling

**X1545** Stvd. front region, left

**X1550** Stvd. front region, right

**X1835** Crimped connector, line 58000

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓘ Parking light, left

Ⓙ Parking light, right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

**Headlight levelling (RL)****Legend**

Wiring diagram no. **81.99192.2445** Sheet 1 of 1  
Change status: 02.99

**A = Headlight levelling**

**A100** (255) Central fuse, relay and terminal block  
**A187** (411) Headlights, left  
**A188** (412) Headlights, right  
**A302** (352) Central computer 2

**M117** (A411) Actuator motor, headlight levelling, left  
**M118** (A412) Actuator motor, headlight levelling, right

**R109** (136) Positioning potentiometer, headlight levelling

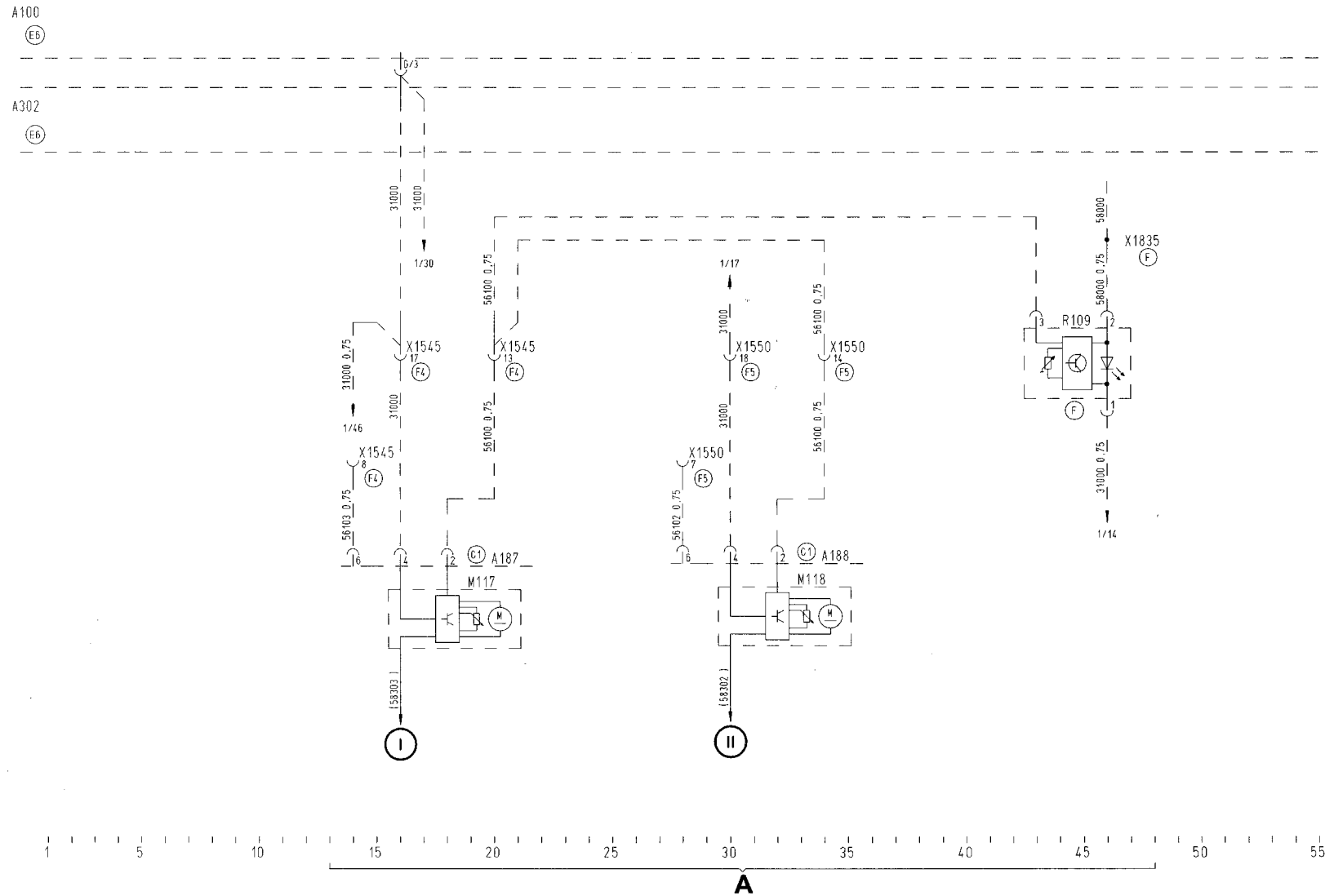
**X1545** Stvd. front region, left  
**X1550** Stvd. front region, right  
**X1835** Crimped connector, line 58000

**Marking of mounting positions**

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |
| Ⓘ Parking light, left      |                                |
| Ⓙ Parking light, right     |                                |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2445 Sheet 1 of 1



**ADDITIONAL WIRING DIAGRAMS**

## ADDITIONAL WIRING DIAGRAMS

### Engine brake, automatic

#### Legend

Wiring diagram no. **81.99192.1385** Sheet 1 of 1

Change status: 04.01

#### A = Engine brake, automatic

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A403** (339) Vehicle management computer

**S753** (667) Switch, engine brake

#### Marking of mounting positions

- |                             |                                 |
|-----------------------------|---------------------------------|
| Ⓐ Tail                      | Ⓕ Driving seat                  |
| Ⓑ Engine                    | Ⓖ Passenger seat                |
| Ⓑ2 Gearbox                  | Ⓖ Control panel                 |
| Ⓒ Front                     | Ⓖ Battery box                   |
| Ⓒ1 Bumper                   | Ⓖ1 B-pillar on driver's side    |
| Ⓒ2 Entrance right           | Ⓖ2 A-pillar on driver's side    |
| Ⓒ3 Entrance left            | Ⓖ1 B-pillar on passenger's side |
| Ⓔ Central electrics area    | Ⓖ2 A-pillar on passenger's side |
| Ⓔ Control unit racks        | Ⓖ Ceiling/roof                  |
| Ⓔ Rear wall of cab          | Ⓖ Front axle                    |
| Ⓖ Instrument panel          | Ⓖ Rear axle                     |
| Ⓖ1 Central part             | Ⓖ1 Front part of frame          |
| Ⓖ2 Steering wheel/column    | Ⓖ2 Rear part of frame           |
| Ⓖ3 Foot pedals              | Ⓖ1 Door left                    |
| Ⓖ4 Front wall, inside left  | Ⓖ2 Door right                   |
| Ⓖ5 Front wall, inside right |                                 |



ADDITIONAL WIRING DIAGRAMS

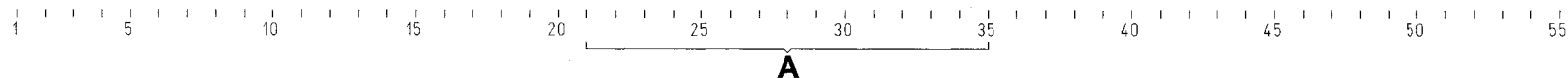
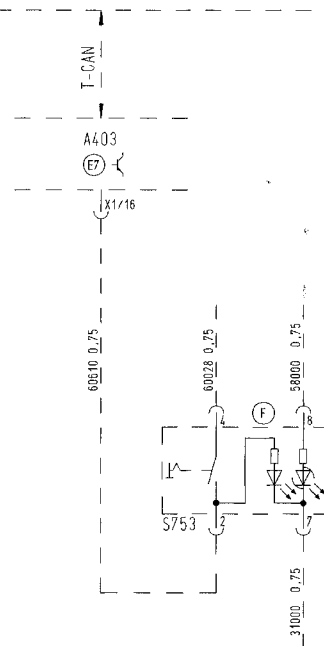
Wiring diagram no. **81.99192.1385** Sheet **1** of **1**

A100

(E6)

A302

(E6)



**ADDITIONAL WIRING DIAGRAMS**

## Power take-off 1

### Legend

Wiring diagram no. **81.99192.1388** Sheet 1 of 1  
Change status: 04.01

### A = Power take-off 1 with ZDR interface

|              |       |                                                  |
|--------------|-------|--------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block           |
| <b>A302</b>  | (352) | Central computer 2                               |
| <b>A403</b>  | (339) | Vehicle management computer                      |
| <b>G101</b>  | (113) | Battery 2                                        |
| <b>S219</b>  | (478) | Switch, indicator, power take-off 1              |
| <b>S222</b>  | (536) | Switch, power take-off 1                         |
| <b>X327</b>  |       | Stvd. solenoid valve, frame                      |
| <b>X1552</b> |       | Stvd. power take-off I/TRS heating               |
| <b>X1557</b> |       | Stvd. frame left                                 |
| <b>X1559</b> |       | Stvd. engine/EDC/transmission IV                 |
| <b>X1693</b> |       | Crimped connector, line 60028                    |
| <b>X1904</b> |       | Threaded bolt M6 (MP box)                        |
| <b>X1949</b> |       | Stvd. engine/transmission (MP box)               |
| <b>X1996</b> |       | Stvd. intermediate speed control interface (FFR) |
| <b>X2541</b> | (246) | Potential distributor, 21-pin line 31000         |
| <b>X2542</b> | (246) | Potential distributor, 21-pin line 58000         |
| <b>Y153</b>  | (126) | Solenoid valve, power take-off 1                 |

### Marking of mounting positions

|      |                          |      |                              |
|------|--------------------------|------|------------------------------|
| (A)  | Tail                     | (F6) | Driving seat                 |
| (B1) | Engine                   | (F7) | Passenger seat               |
| (B2) | Gearbox                  | (F8) | Control panel                |
| (C)  | Front                    | (G)  | Battery box                  |
| (C1) | Bumper                   | (H1) | B-pillar on driver's side    |
| (C2) | Entrance right           | (H2) | A-pillar on driver's side    |
| (C3) | Entrance left            | (J1) | B-pillar on passenger's side |
| (E6) | Central electrics area   | (J2) | A-pillar on passenger's side |
| (E7) | Control unit racks       | (L)  | Ceiling/roof                 |
| (E8) | Rear wall of cab         | (N)  | Front axle                   |
| (F)  | Instrument panel         | (P)  | Rear axle                    |
| (F1) | Central part             | (R1) | Front part of frame          |
| (F2) | Steering wheel/column    | (R2) | Rear part of frame           |
| (F3) | Foot pedals              | (S1) | Door left                    |
| (F4) | Front wall, inside left  | (S2) | Door right                   |
| (F5) | Front wall, inside right |      |                              |



## Power take-off 2

### Legend

Wiring diagram no. **81.99192.1389** Sheet 1 of 1  
Change status: 04.01

### A = Power take-off 2 with ZDR interface

|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A403</b>  | (339) Vehicle management computer                                       |
| <b>S220</b>  | (478) Switch, indicator, power take-off 2                               |
| <b>S223</b>  | (471) Switch, power take-off 2                                          |
| <b>X656</b>  | Stvd. cab frame                                                         |
| <b>X1554</b> | Stvd. power take-off 2/TRS heating                                      |
| <b>X1559</b> | Stvd. engine/EDC/transmission IV                                        |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1693</b> | Crimped connector, line 60028                                           |
| <b>X1904</b> | Threaded bolt M6 (MP box)                                               |
| <b>X1949</b> | Stvd. engine/transmission (MP box)                                      |
| <b>X1996</b> | Stvd. intermediate speed control interface (FFR)                        |
| <b>X2541</b> | (246) Potential distributor, 21-pin line 31000                          |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                          |
| <b>Y154</b>  | (126) Solenoid valve, power take-off 2                                  |

### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (FB) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |
| (I) Supplementary heating     |                                   |

A100  
(E6)

A302  
(E6)



**ADDITIONAL WIRING DIAGRAMS**

## ADDITIONAL WIRING DIAGRAMS

### Radio 12V

#### Legend

Wiring diagram no. **81.99192.2475** Sheet **1** of **1**  
Change status: 02.01

**A = Radio**

**B = Active aerial**

**A100** (255) Central fuse, relay and terminal block

**A148** Radio/cassette player

**A155** (182) Voltage transformer 24V/12V

**A302** (352) Central computer 2

**B157** (298) Driver's loudspeaker, front left

**B158** (298) Driver's loudspeaker, front right

**W100** (173) Radio aerial

**X1546** Stvd. door right

**X1547** Stvd. door left

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1863** Stvd. loudspeaker, left

**X1864** Stvd. loudspeaker, right

**X1974** Stvd. for active aerial

**X2433** Stvd. adaptation 12V radio

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right



ADDITIONAL WIRING DIAGRAMS

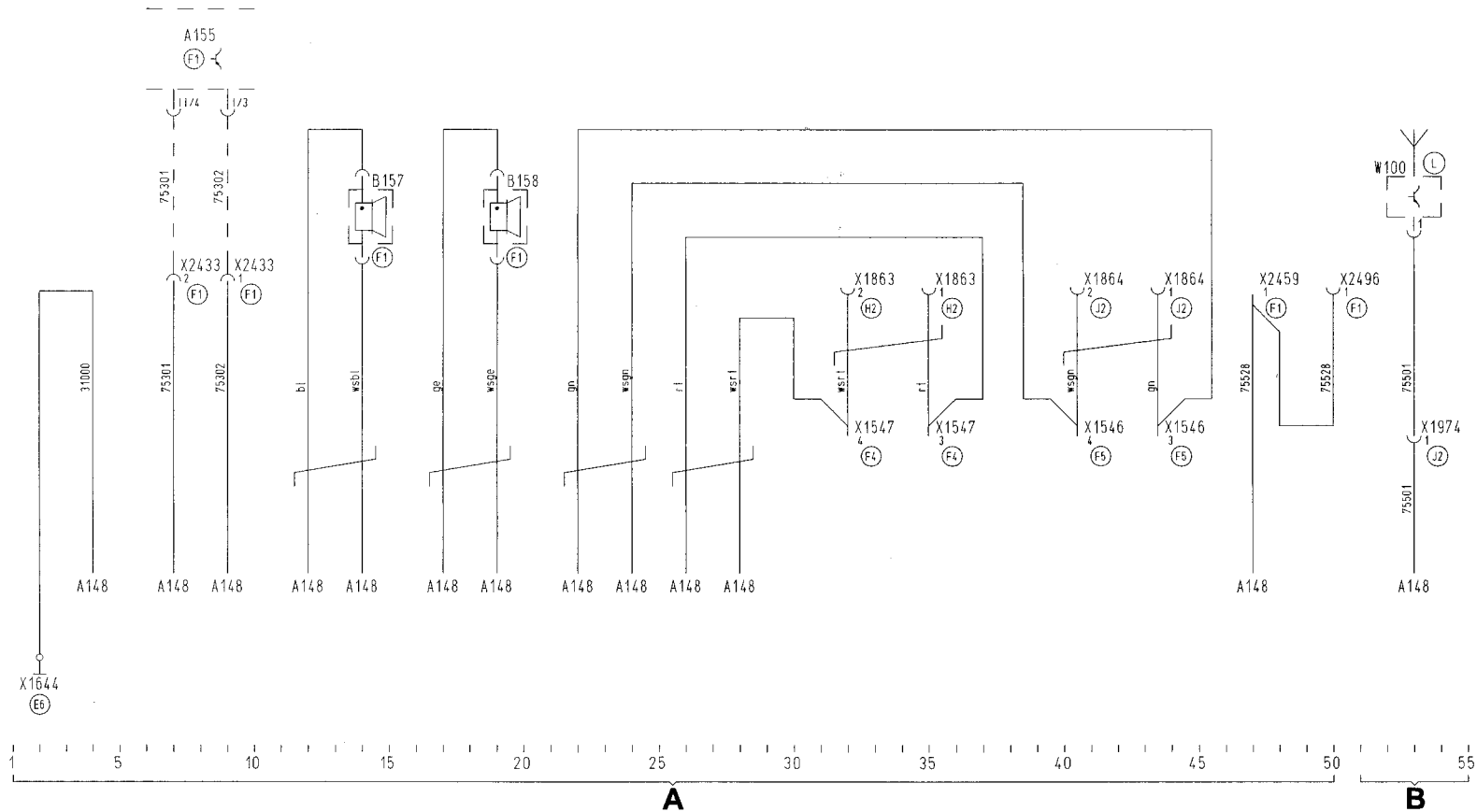
Wiring diagram no. **81.99192.2475** Sheet 1 of 1

A100

(E6)

A302

(E6)



## Radio 12V MAN-Sound (LL)

### Legend

Wiring diagram no. **81.99192.2484** Sheet **1** of 1

Change status: 11.00

**A = Radio**

**B = Active aerial**

**C = Loudspeaker**

**A100** (255) Central fuse, relay and terminal block  
**A148** Radio/cassette player  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B157** (298) Driver's loudspeaker, front left  
**B158** (298) Driver's loudspeaker, front right

**W100** (173) Radio aerial

**X1546** Stvd. door right  
**X1547** Stvd. door left  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X1974** Stvd. for active aerial  
**X2433** Stvd. adaptation 12V radio  
**X2459** Stvd. adaptation mute signal  
**X2496** Stvd. adaptation mute signal lane guard

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ1 Gearbox                 | Ⓕ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ1 Bumper                  | Ⓕ B-pillar on driver's side    |
| Ⓒ2 Entrance right          | Ⓖ A-pillar on driver's side    |
| Ⓒ3 Entrance left           | Ⓕ B-pillar on passenger's side |
| Ⓔ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓕ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓕ Instrument panel         | Ⓖ Rear axle                    |
| Ⓕ Central part             | Ⓕ Front part of frame          |
| Ⓕ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓕ Foot pedals              | Ⓕ Door left                    |
| Ⓕ Front wall, inside left  | Ⓖ Door right                   |
| Ⓕ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

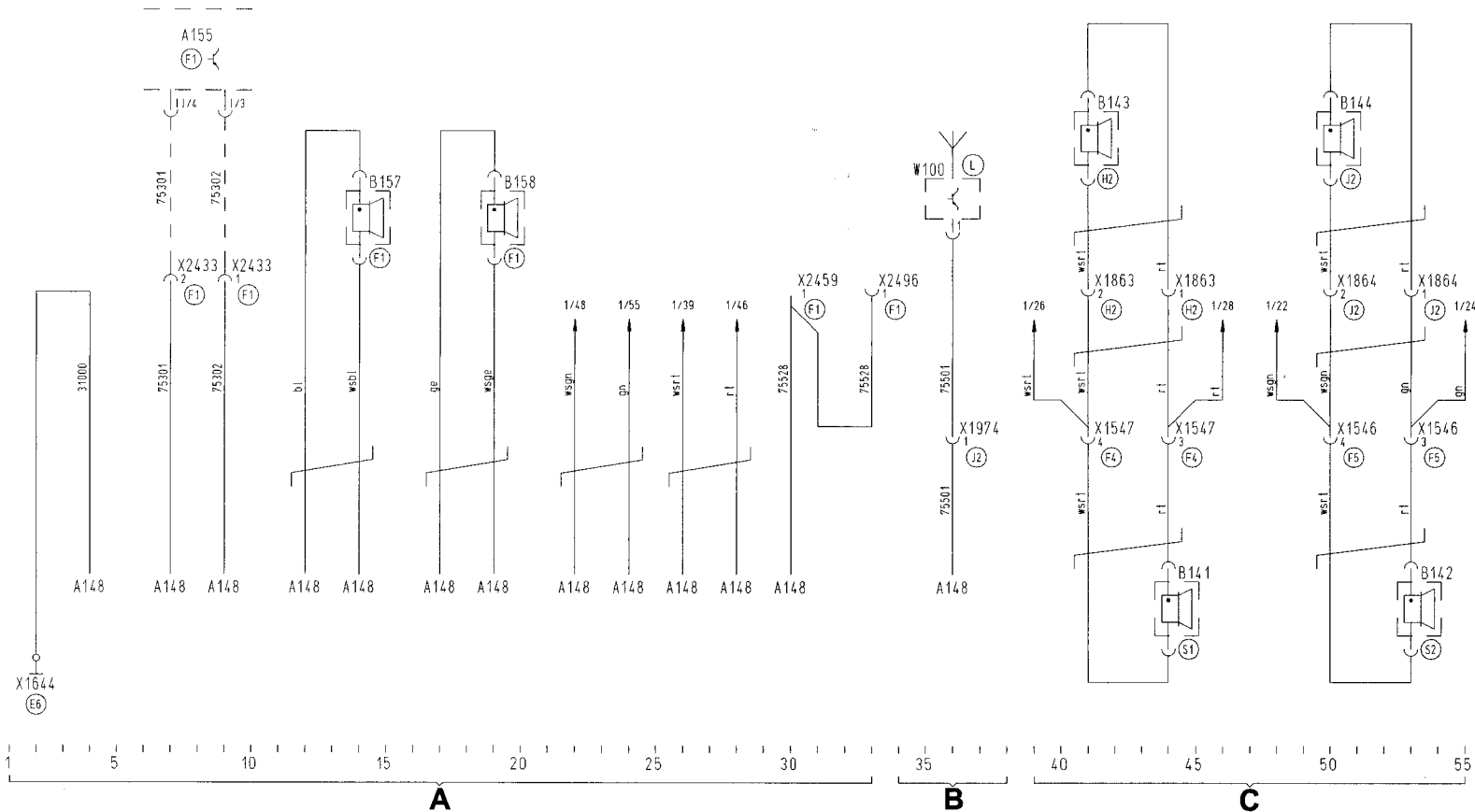
Wiring diagram no. 81.99192.2484 Sheet 1 of 1

A100

(E6)

A302

(E6)



## Radio 12V MAN-Sound (RL)

### Legend

Wiring diagram no. **81.99192.2444** Sheet 1 of 1  
Change status: 12.00

**A = Radio**

**B = Active aerial**

**C = Loudspeaker**

**A100** (255) Central fuse, relay and terminal block  
**A148** Radio/cassette player  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B157** (298) Driver's loudspeaker, front left  
**B158** (298) Driver's loudspeaker, front right

**W100** (173) Radio aerial

**X1546** Stvd. door right  
**X1547** Stvd. door left  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X1974** Stvd. for active aerial  
**X2433** Stvd. adaptation 12V radio  
**X2459** Stvd. adaptation mute signal  
**X2496** Stvd. adaptation mute signal lane guard

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓕ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓕ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

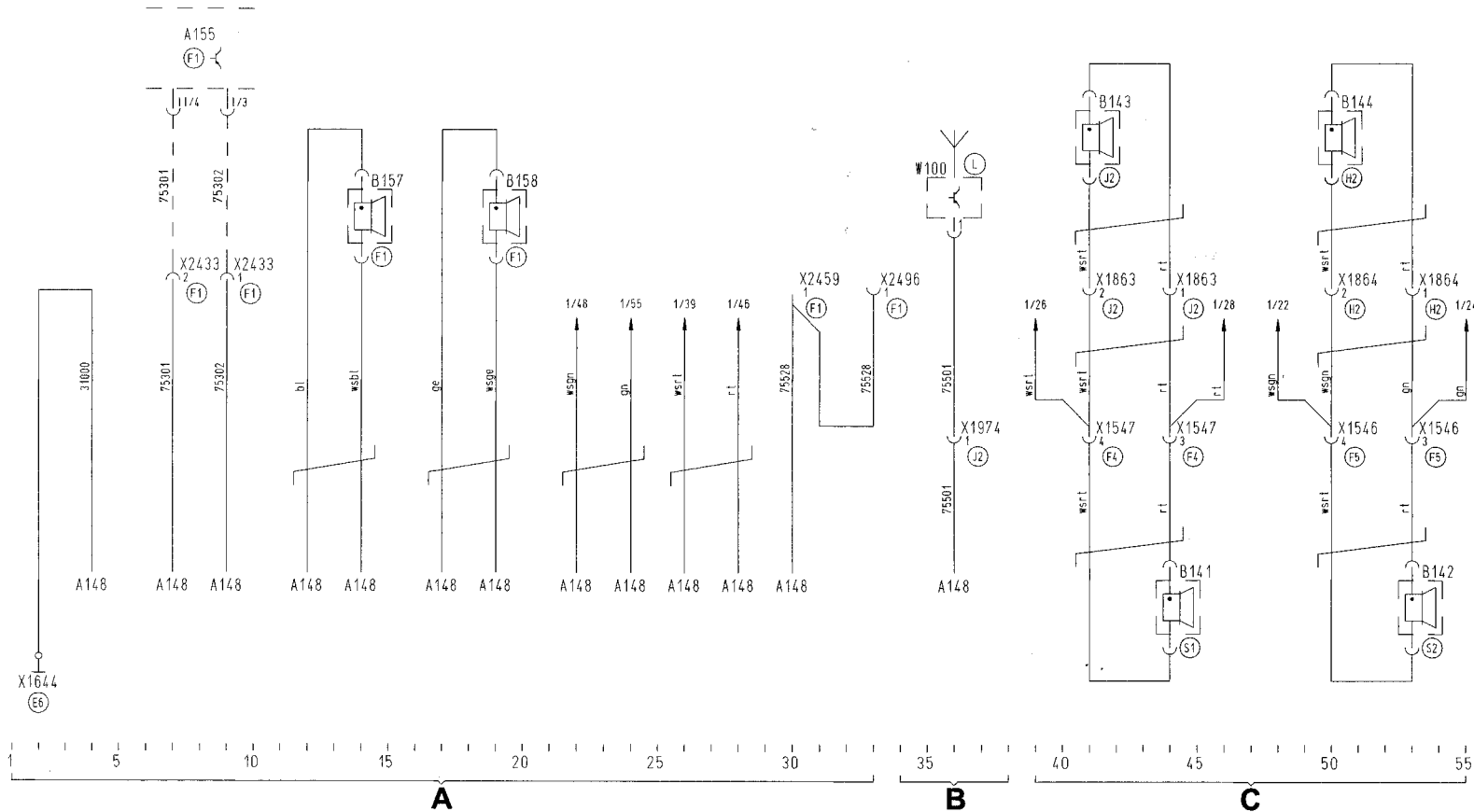
Wiring diagram no. 81.99192.2444 Sheet 1 of 1

A100

(E6)

A302

(E6)



## Radio 24V

### Legend

Wiring diagram no. **81.99192.2879** Sheet 1 of 1

Change status: 10.00

**A = Active aerial**

**B = Radio**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**B157** (298) Driver's loudspeaker, front left

**B158** (298) Driver's loudspeaker, front right

**W100** (173) Radio aerial

**X1639** Soldered connector, line 16000

**X1643** Soldered connector, line 58300

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2543** (246) Potential distributor, 21-pin line 30006

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

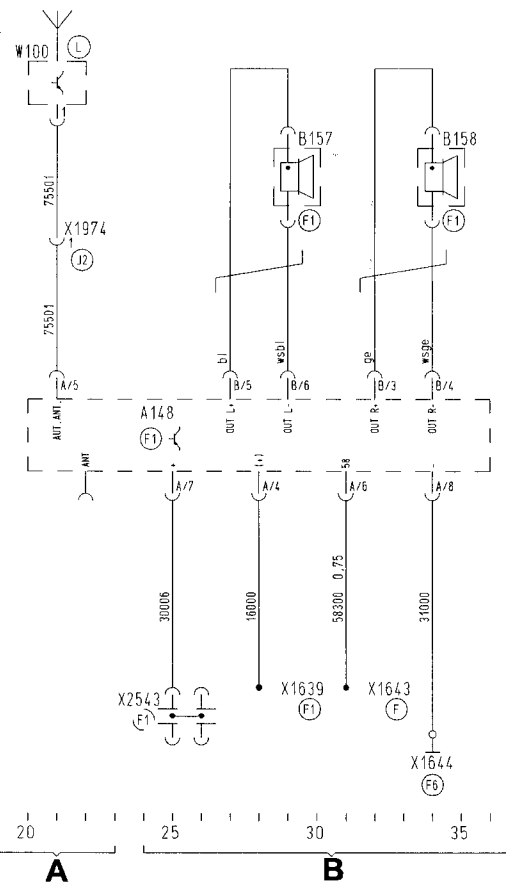
Wiring diagram no. **81.99192.2879** Sheet **1** of 1

A100

(E6)

A302

(E6)



## Radio 24V MAN-Sound (LL)

### Legend

Wiring diagram no. **81.99192.2855** Sheet **1** of 1  
Change status: 09.00

**A = Active aerial**

**B = Radio**

**C = Amplifier**

**D = Loudspeaker**

**A100** (255) Central fuse, relay and terminal block  
**A148** (574) Radio/cassette player  
**A302** (352) Central computer 2

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B157** (298) Driver's loudspeaker, front left  
**B158** (298) Driver's loudspeaker, front right

**N106** (127) Audio amplifier

**W100** (173) Radio aerial

**X1546** Stvd. door right  
**X1547** Stvd. door left  
**X1639** Soldered connector, line 16000  
**X1643** Soldered connector, line 58300  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X1974** Stvd. for active aerial  
**X2459** Stvd. adaptation mute signal  
**X2496** Adaptation mute signal lane guard  
**X2543** (246) Potential distributor, 21-pin line 30006

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



# ADDITIONAL WIRING DIAGRAMS

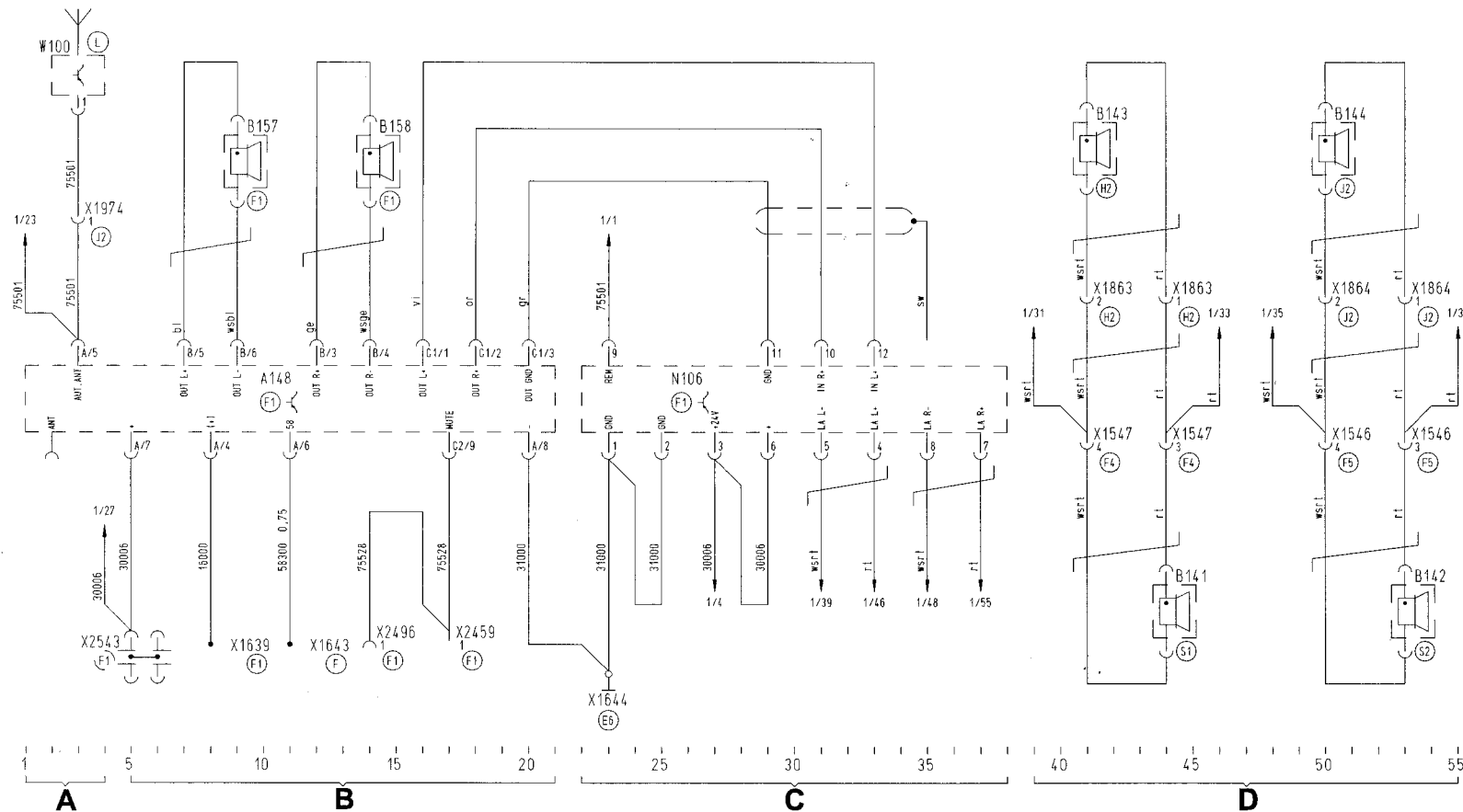
Wiring diagram no. **81.99192.2855** Sheet **1** of **1**

A100

(E6)

A302

(E6)



## Radio 24V MAN-Sound (RL)

### Legend

Wiring diagram no. **81.99192.2856** Sheet 1 of 1

Change status: 09.00

**A = Active aerial**

**B = Radio**

**C = Amplifier**

**D = Loudspeaker**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**B141** (296) Loudspeaker 1, door left

**B142** (296) Loudspeaker 1, door right

**B143** (297) Loudspeaker 2, door left

**B144** (297) Loudspeaker 2, door right

**B157** (298) Driver's loudspeaker, front left

**B158** (298) Driver's loudspeaker, front right

**N106** (127) Audio amplifier

**W100** (173) Radio aerial

**X1546** Stvd. door right

**X1547** Stvd. door left

**X1639** Soldered connector, line 16000

**X1643** Soldered connector, line 58300

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1863** Stvd. loudspeaker, left

**X1864** Stvd. loudspeaker, right

**X1974** Stvd. for active aerial

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

**X2543** (246) Potential distributor, 21-pin line 30006

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

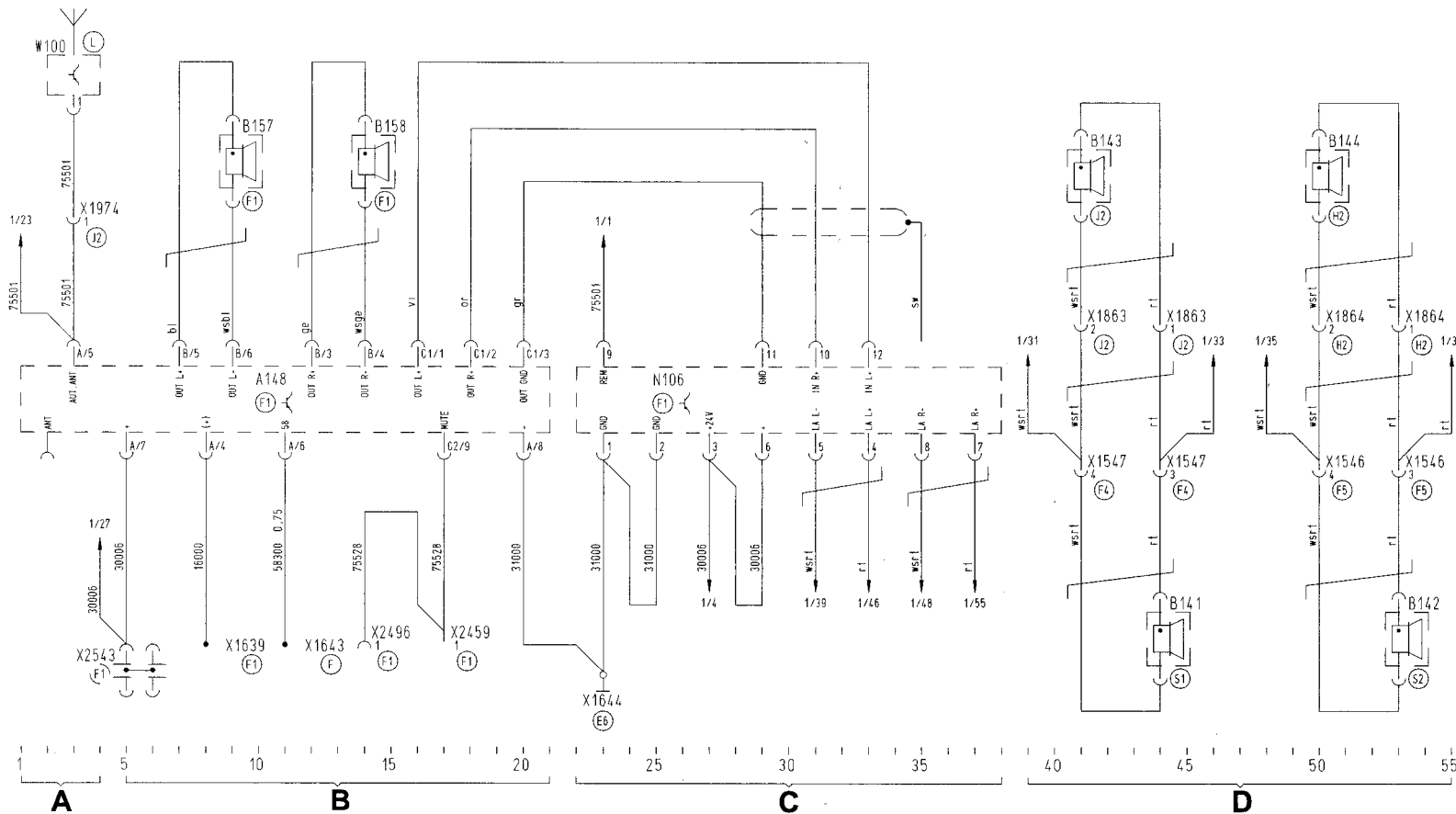
(S2) Door right

# ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2856** Sheet 1 of 1

A100  
(E6)

A302  
(E6)



## Radio 24V with CD changer and MAN-Sound (LL)

### Legend

Wiring diagram no. **81.99192.2858** Sheet 1 of 2  
Change status: 09.00

**A = Active aerial**

**B = Radio, CD changer**

**A100** (255) Central fuse, relay and terminal block  
**A148** (574) Radio/cassette player  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A568** (546) CD changer

**B157** (298) Driver's loudspeaker, front left  
**B158** (298) Driver's loudspeaker, front right

**W100** (173) Radio aerial

**X1639** Soldered connector, line 16000  
**X1643** Soldered connector, line 58300  
**X1974** Stvd. for active aerial  
**X2372** Stvd. supply to CD changer  
**X2433** Stvd. adaptation 12V radio  
**X2543** (246) Potential distributor, 21-pin line 30006

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓗ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓗ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓔ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓔ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓔ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

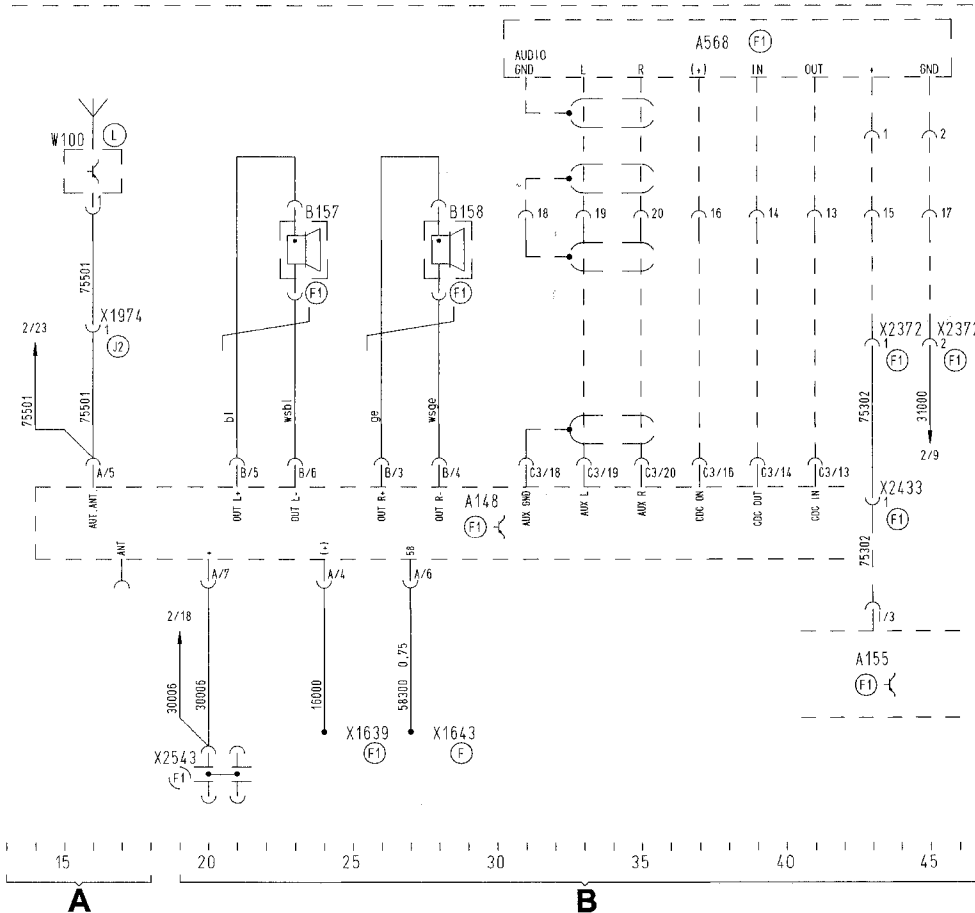
Wiring diagram no. **81.99192.2858** Sheet 1 of 2

A100

(E6)

A302

(E6)



## Radio 24V with CD changer and MAN-Sound (LL)

### Legend

Wiring diagram no. **81.99192.2858** Sheet **2** of 2

Change status: 10.00

**A = Radio**

**B = Amplifier**

**C = Loudspeaker**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**B141** (296) Loudspeaker 1, door left

**B142** (296) Loudspeaker 1, door right

**B143** (297) Loudspeaker 2, door left

**B144** (297) Loudspeaker 2, door right

**N106** (127) Audio amplifier

**X1546** Stvd. door right

**X1547** Stvd. door left

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1863** Stvd. loudspeaker, left

**X1864** Stvd. loudspeaker, right

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(EB) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

# ADDITIONAL WIRING DIAGRAMS

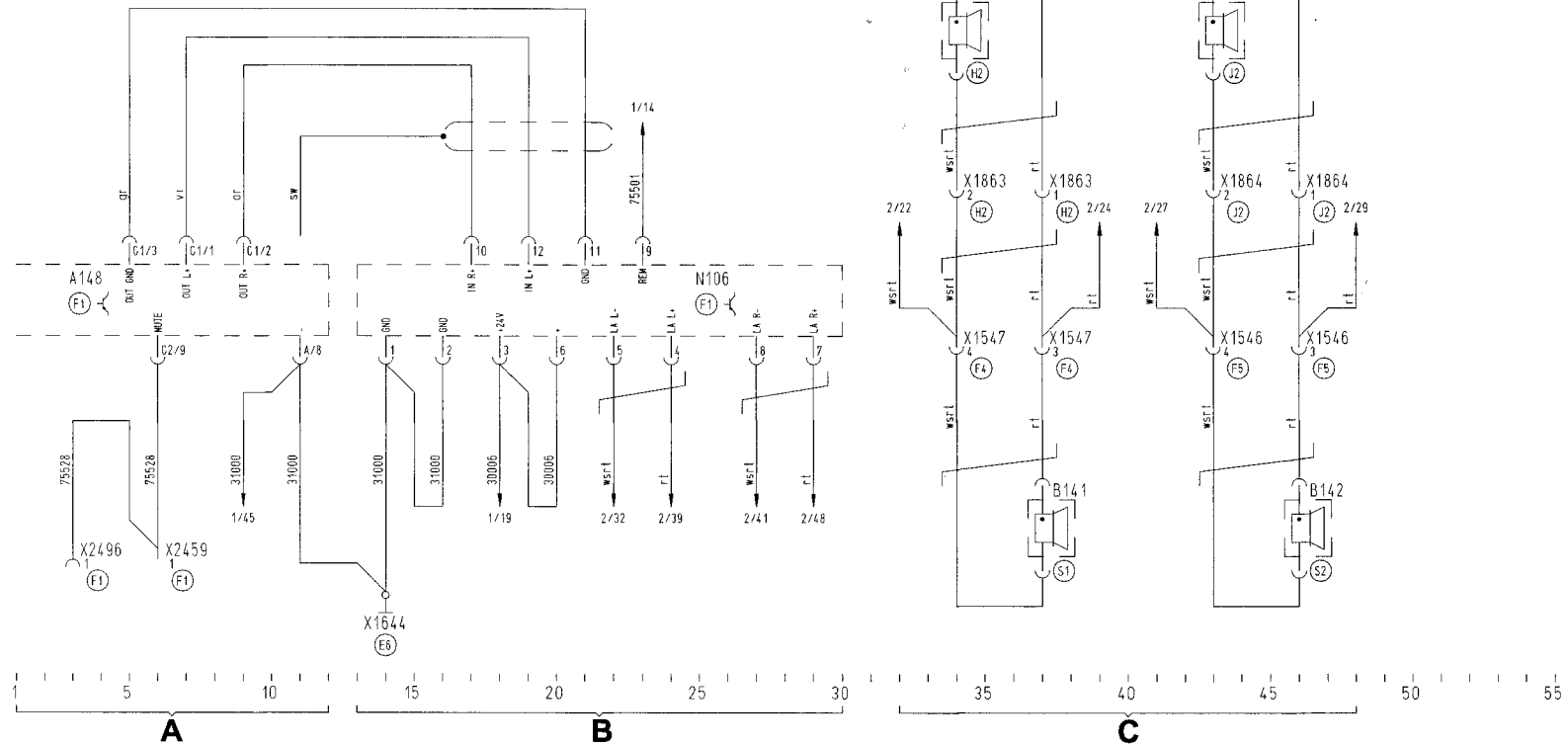
Wiring diagram no. **81.99192.2858** Sheet 2 of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Radio 24V with CD changer and MAN-Sound (RL)

#### Legend

Wiring diagram no. **81.99192.2859** Sheet 1 of 2

Change status: 09.00

**A = Active aerial**

**B = Radio, CD changer**

**A100** (255) Central fuse, relay and terminal block  
**A148** (574) Radio/cassette player  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A568** (546) CD changer

**B157** (298) Driver's loudspeaker, front left  
**B158** (298) Driver's loudspeaker, front right

**W100** (173) Radio aerial

**X1639** Soldered connector, line 16000  
**X1643** Soldered connector, line 58300  
**X1974** Stvd. for active aerial  
**X2372** Stvd. supply to CD changer  
**X2433** Stvd. adaptation 12V radio  
**X2543** (246) Potential distributor, 21-pin line 30006

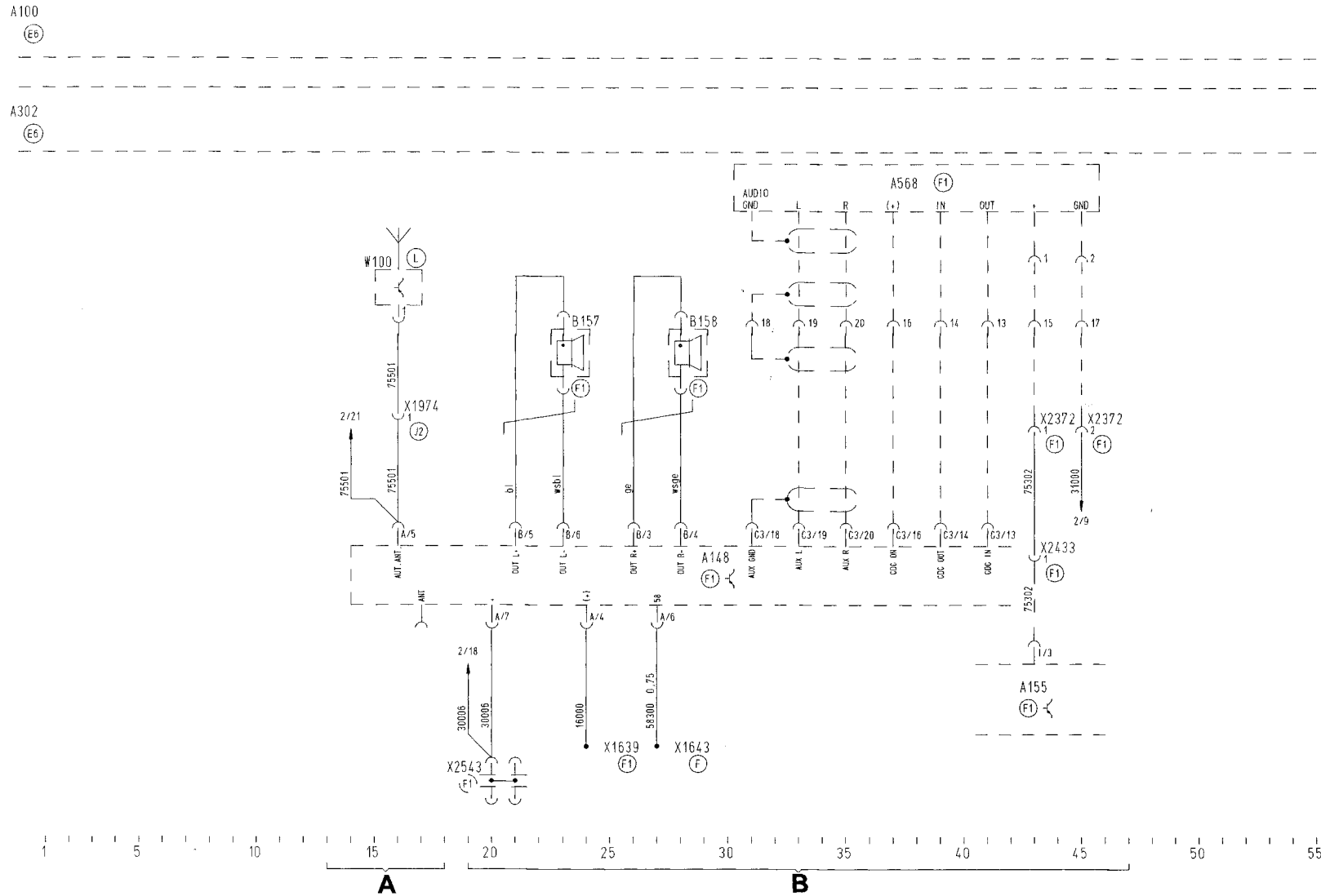
#### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓖ Battery box                  |
| Ⓔ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓕ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓖ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓕ Instrument panel         | Ⓕ Rear axle                    |
| Ⓕ Central part             | Ⓕ Front part of frame          |
| Ⓕ Steering wheel/column    | Ⓕ Rear part of frame           |
| Ⓕ Foot pedals              | Ⓕ Door left                    |
| Ⓕ Front wall, inside left  | Ⓕ Door right                   |
| Ⓕ Front wall, inside right |                                |



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2859** Sheet **1** of **2**



## Radio 24V with CD changer and MAN-Sound (RL)

### Legend

Wiring diagram no. **81.99192.2859** Sheet **2** of 2

Change status: 10.00

**A = Radio**

**B = Amplifier**

**C = Loudspeaker**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**B141** (296) Loudspeaker 1, door left

**B142** (296) Loudspeaker 1, door right

**B143** (297) Loudspeaker 2, door left

**B144** (297) Loudspeaker 2, door right

**N106** (127) Audio amplifier

**X1546** Stvd. door right

**X1547** Stvd. door left

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1863** Stvd. loudspeaker, left

**X1864** Stvd. loudspeaker, right

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

ADDITIONAL WIRING DIAGRAMS

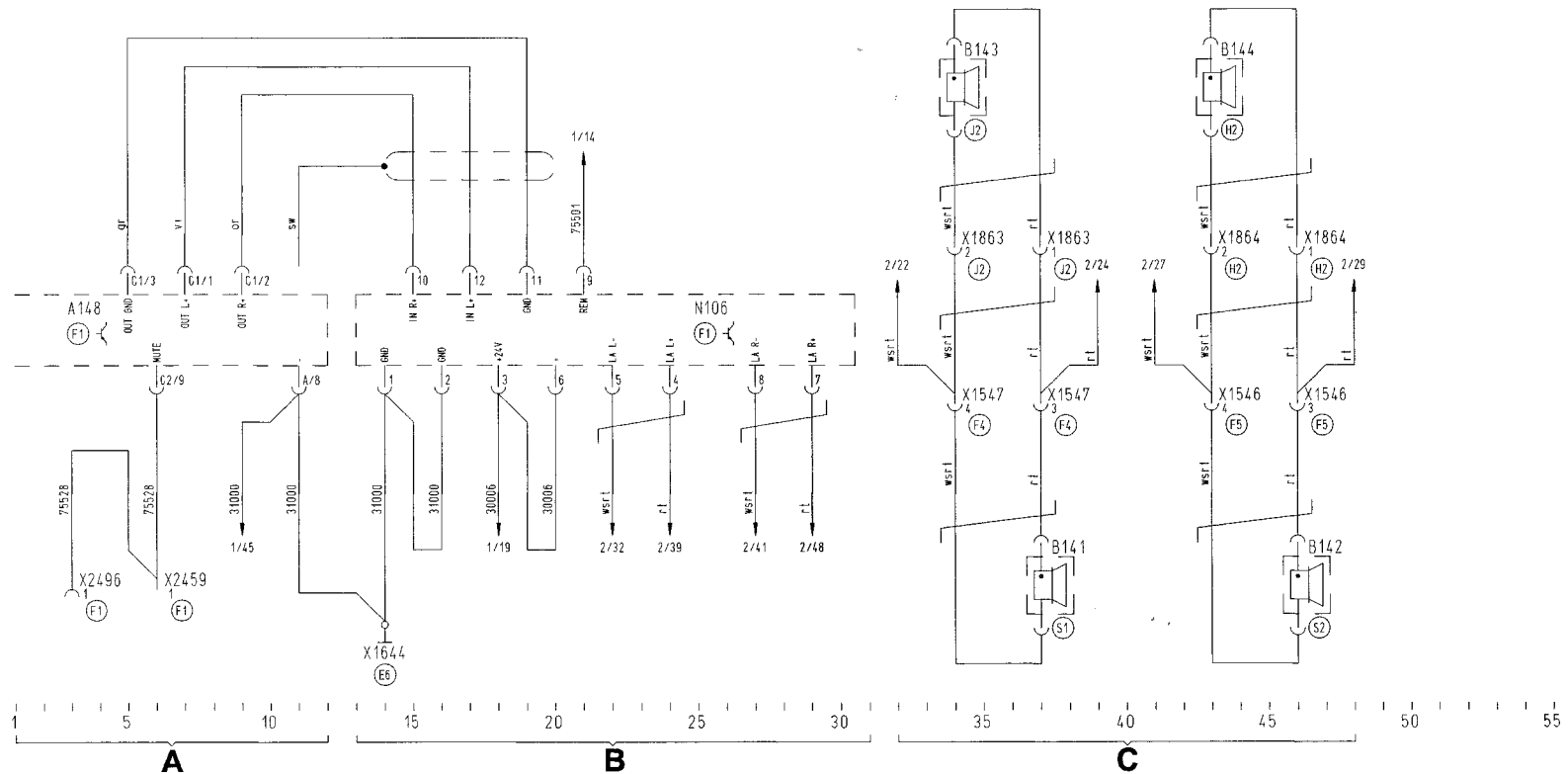
Wiring diagram no. 81.99192.2859 Sheet 2 of 2

A100

(E6)

A302

(E6)



**Radio remote control (infrared)**

**Legend**

Wiring diagram no. **81.99192.1371** Sheet **1** of 1

Change status: 05.01

**A = Infrared radio remote control**

**A100** (255) Central fuse, relay and terminal block  
**A148** (388) Radio/cassette player  
**A302** (352) Central computer 2  
**A394** (476) Infrared remote control (receiver)

**X1401** Stvd. adaptor radio  
**X1639** Soldered connector, line 16000  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2543** (246) Potential distributor, 21-pin line 30006

**Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

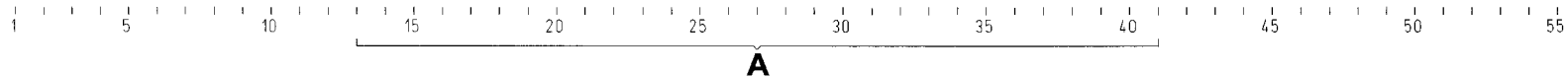
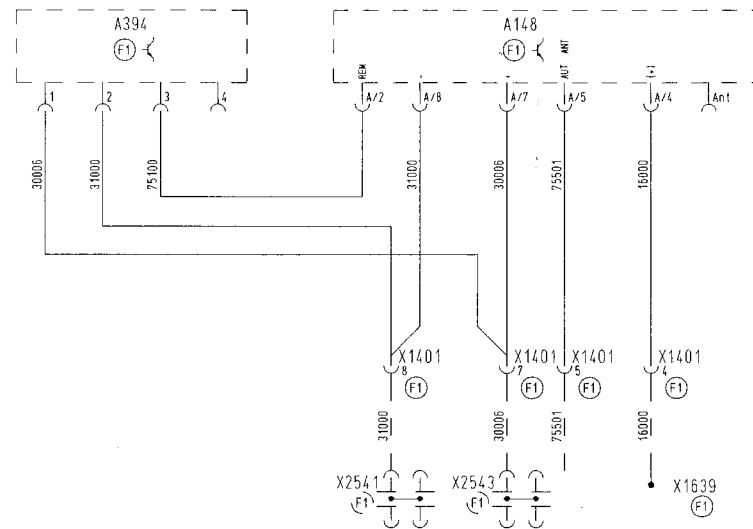
Wiring diagram no. **81.99192.1371** Sheet **1** of **1**

A100

(E6)

A302

(E6)



## Radio navigation system 12V (LL)

### Legend

Wiring diagram no. **81.99192.1432** Sheet 1 of 1

Change status: 05.01

**A = Active aerial, radio**

**B = Loudspeaker**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A408** (403) Tachograph  
**A569** (547) Radio navigation device RNS 3

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B157** (298) Driver's loudspeaker, front left  
**B158** (298) Driver's loudspeaker, front right

**W177** (171) Combination aerial

**X685** Stvd. line 16500  
**X1536** Stvd. cab tachograph  
**X1546** Stvd. door, right  
**X1547** Stvd. door, left  
**X1627** Stvd. reversing beam  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X1974** Stvd. for active aerial  
**X2398** Stvd. adaptation reversing light  
**X2433** Stvd. adaptation 12V radio  
**X2496** Adaptation mute signal lane guard  
**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

# ADDITIONAL WIRING DIAGRAMS

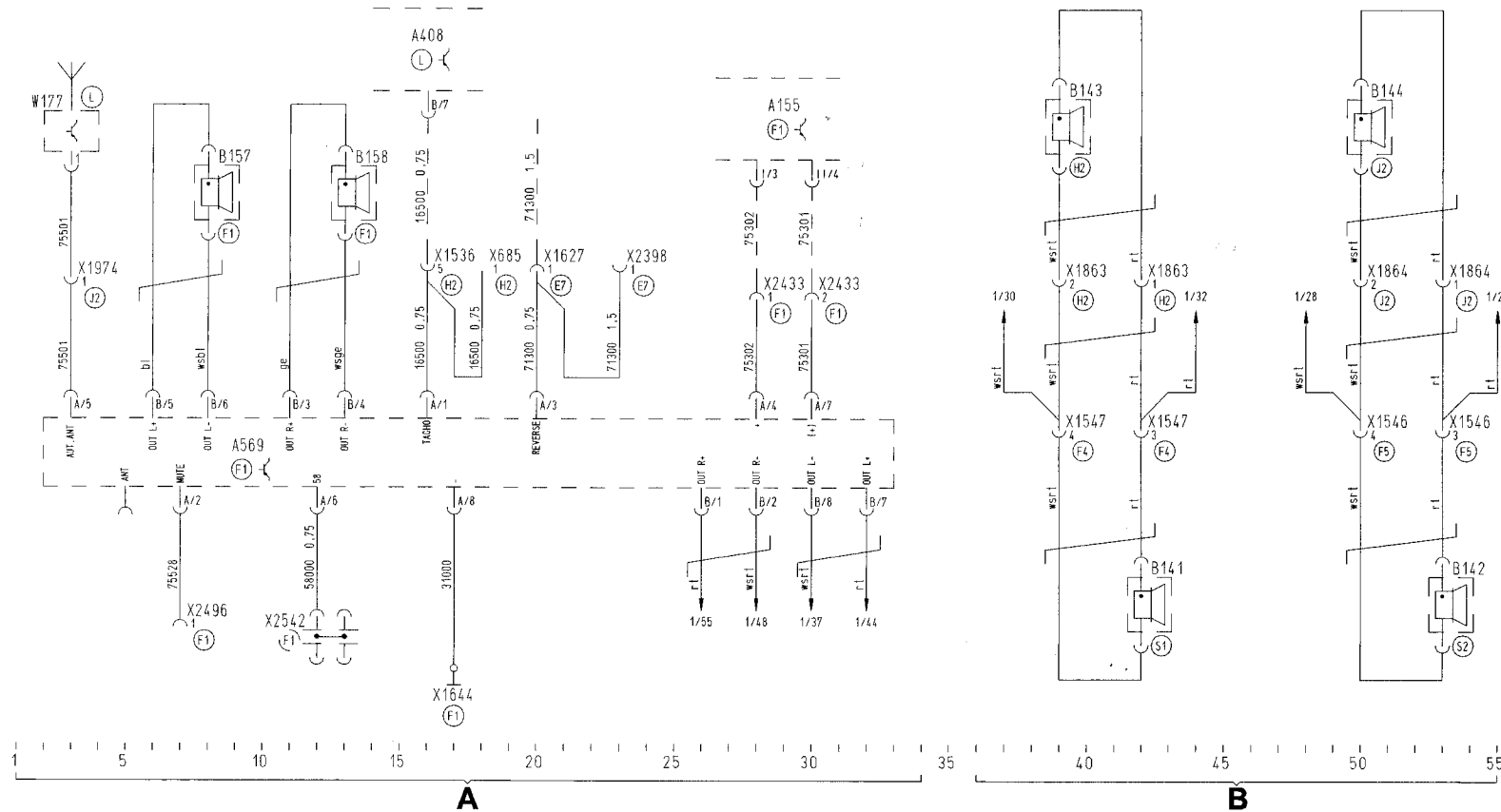
Wiring diagram no. 81.99192.1432 Sheet 1 of 1

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Radio navigation system 12V (RL)

#### Legend

Wiring diagram no. **81.99192.1433** Sheet 1 of 1  
Change status: 05.01

**A = Active aerial, radio**

**B = Loudspeaker**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A408** (403) Tachograph  
**A569** (547) Radio navigation device RNS 3

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B157** (298) Driver's loudspeaker, front left  
**B158** (298) Driver's loudspeaker, front right

**W177** (171) Combination aerial

**X685** Stvd. line 16500  
**X1536** Stvd. cab tachograph  
**X1546** Stvd. door, right  
**X1547** Stvd. door, left  
**X1627** Stvd. reversing beam  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X1974** Stvd. for active aerial  
**X2398** Stvd. adaptation reversing light  
**X2433** Stvd. adaptation 12V radio  
**X2496** Adaptation mute signal lane guard  
**X2542** (246) Potential distributor, 21-pin line 58000

#### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (FB) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



ADDITIONAL WIRING DIAGRAMS

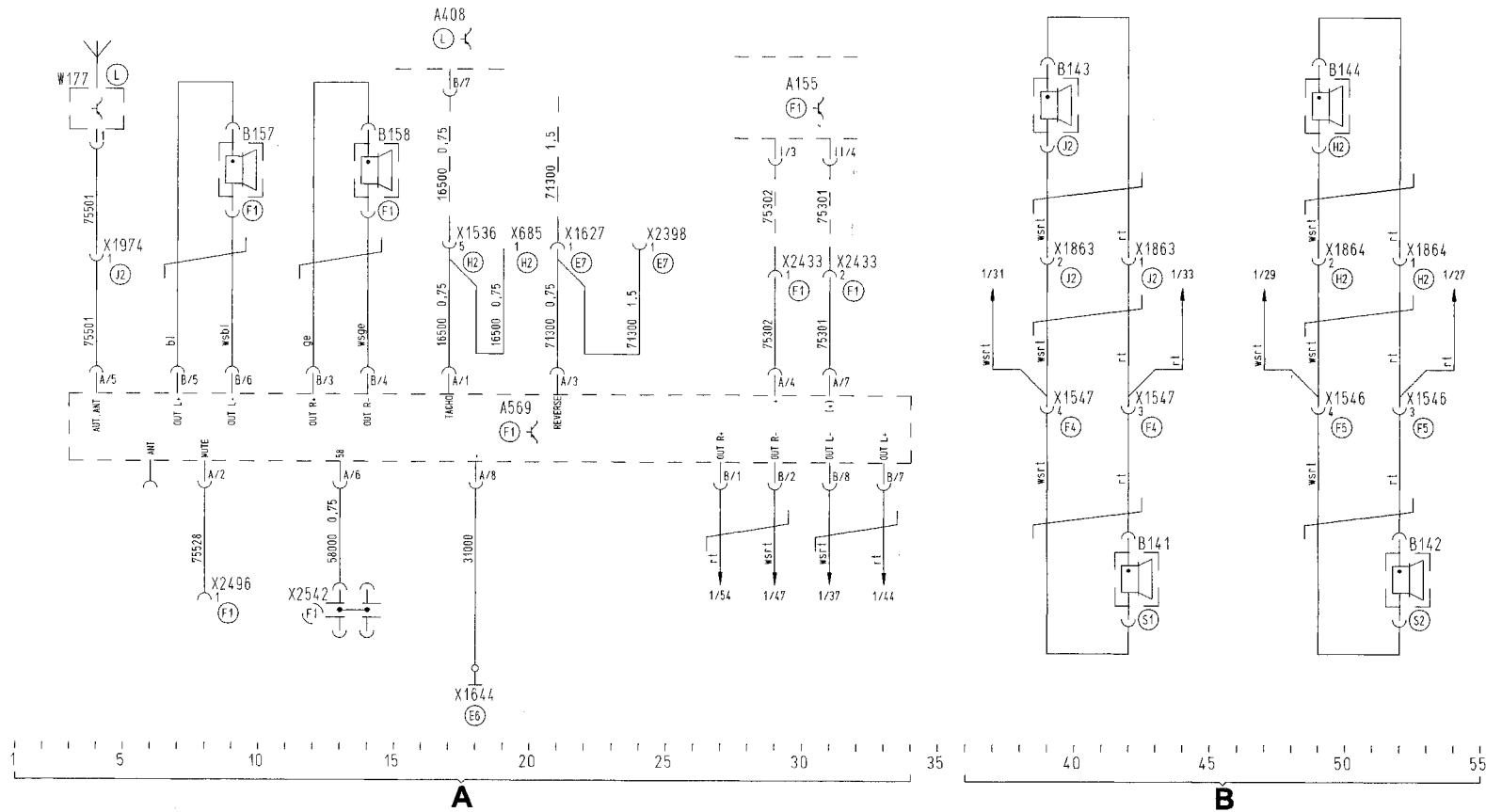
Wiring diagram no. 81.99192.1433 Sheet 1 of 1

A100

(E6)

A302

(E6)



# Radio navigation system 12V with CD changer (LL)

## Legend

Wiring diagram no. **81.99192.1434** Sheet 1 of 1

Change status: 05.01

**A = Active aerial, radio, CD changer**

**B = Loudspeaker**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A408** (403) Tachograph  
**A568** (546) CD changer  
**A569** (547) Radio navigation device RNS 3

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B157** (298) Driver's loudspeaker, front left  
**B158** (298) Driver's loudspeaker, front right

**W177** (171) Combination aerial

**X685** Stvd. line 16500  
**X1536** Stvd. cab tachograph  
**X1546** Stvd. door, right  
**X1547** Stvd. door, left  
**X1627** Stvd. reversing beam  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X1974** Stvd. for active aerial  
**X2398** Stvd. adaptation reversing light  
**X2433** Stvd. adaptation 12V radio  
**X2496** Adaptation mute signal lane guard  
**X2542** (246) Potential distributor, 21-pin line 58000

## Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

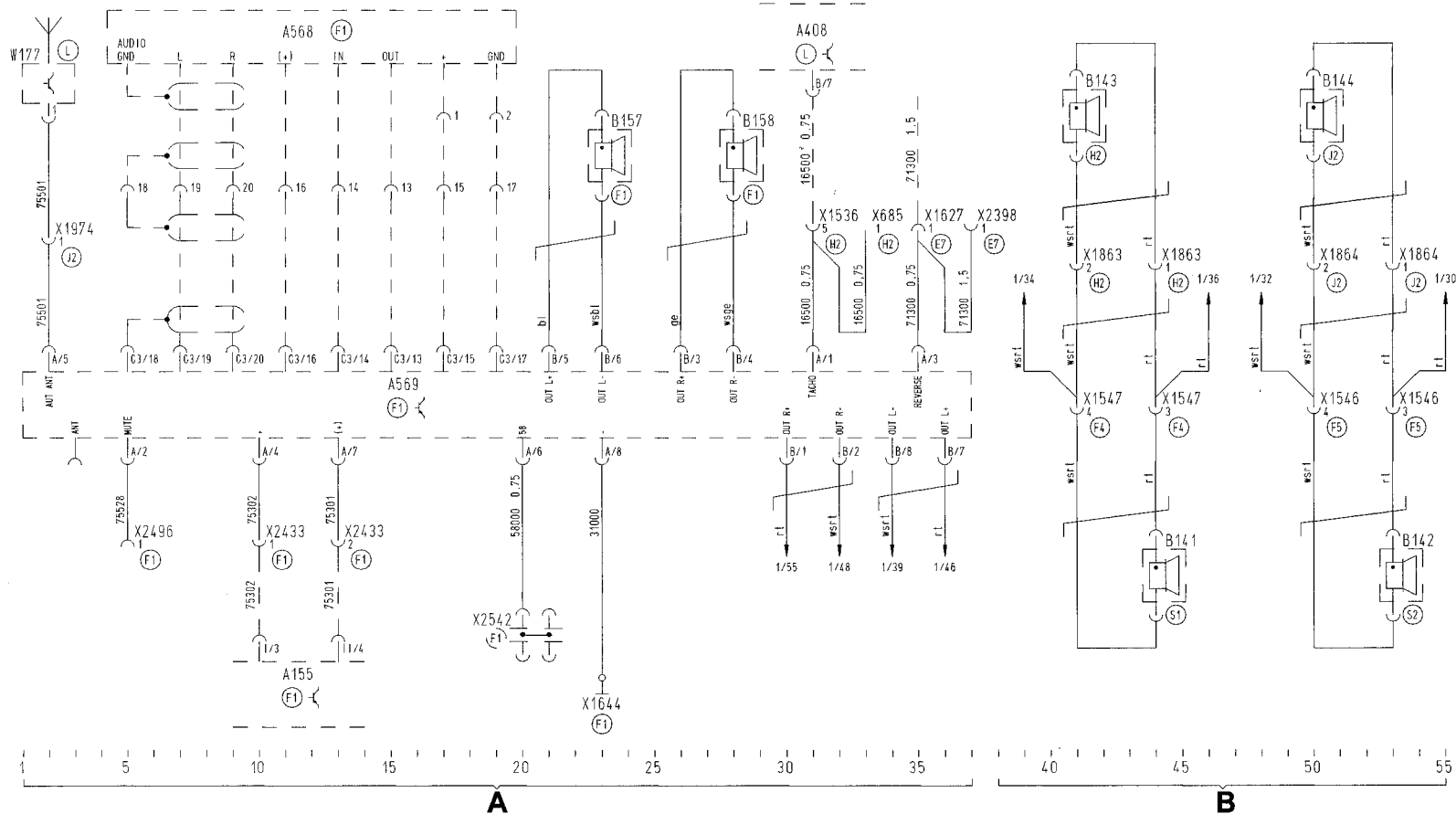
Wiring diagram no. 81.99192.1434 Sheet 1 of 1

A100

(E6)

A302

(E6)



## Radio navigation system 12V with CD changer (RL)

### Legend

Wiring diagram no. **81.99192.1435** Sheet 1 of 1  
Change status: 05.01

**A = Active aerial, radio, CD changer**

**B = Loudspeaker**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A408** (403) Tachograph  
**A568** (546) CD changer  
**A569** (547) Radio navigation device RNS 3

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B157** (298) Driver's loudspeaker, front left  
**B158** (298) Driver's loudspeaker, front right

**W177** (171) Combination aerial

**X685** Stvd. line 16500  
**X1536** Stvd. cab tachograph  
**X1546** Stvd. door, right  
**X1547** Stvd. door, left  
**X1627** Stvd. reversing beam  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X1974** Stvd. for active aerial  
**X2398** Stvd. adaptation reversing light  
**X2433** Stvd. adaptation 12V radio  
**X2496** Adaptation mute signal lane guard  
**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

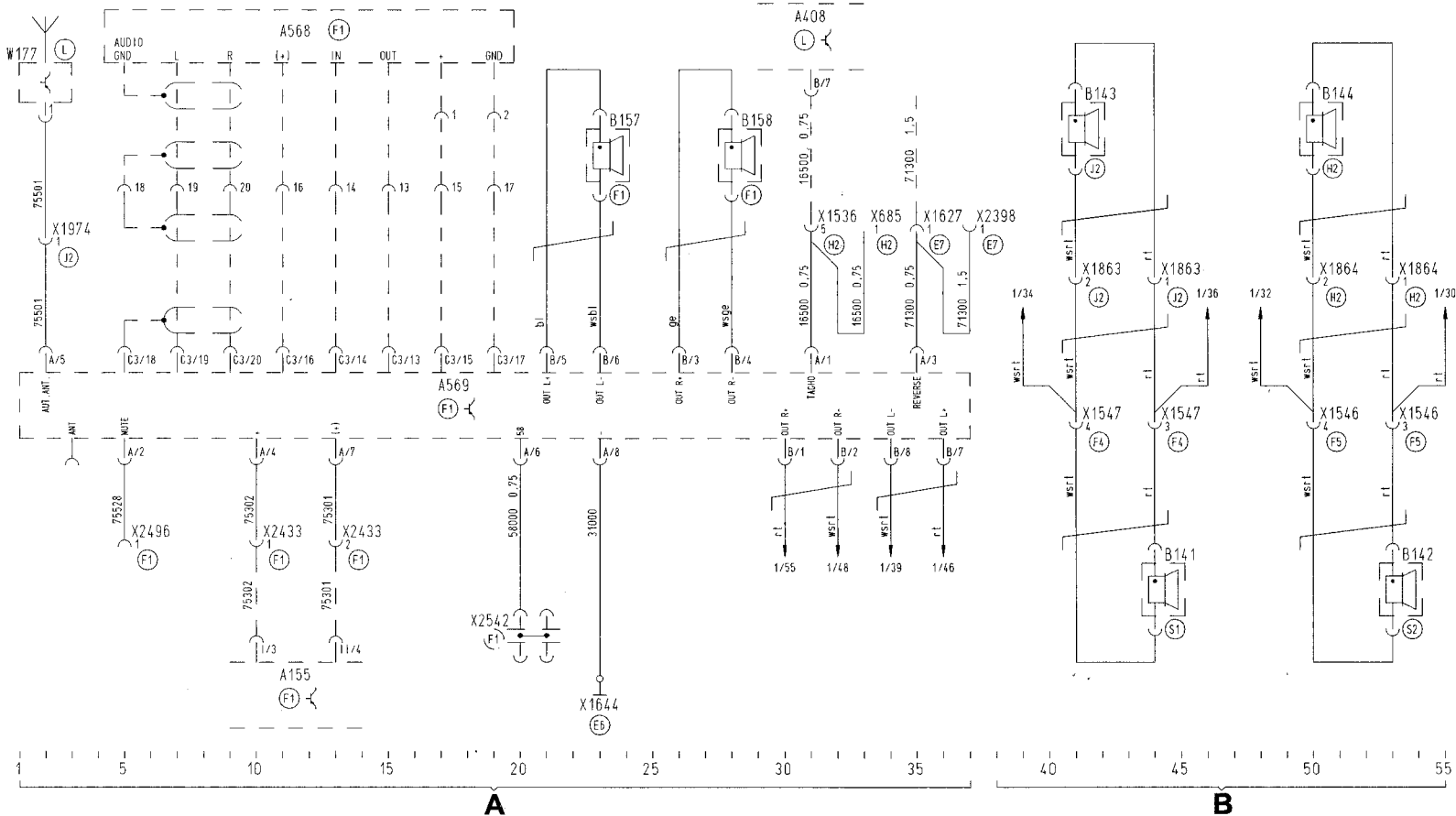
Wiring diagram no. 81.99192.1435 Sheet 1 of 1

A100

(E6)

A302

(E6)



# Radio navigation system 12V with Cullmann phone (LL)

## Legend

Wiring diagram no. **81.99192.1436** Sheet 1 of 2

Change status: 05.01

**A = Active aerial**

**B = Radio navigation system**

**A100** (255) Central fuse, relay and terminal block

**A148** (388) Radio/cassette player

**A302** (352) Central computer 2

**A408** (403) Tachograph

**A569** (547) Radio navigation device RNS 3

**B158** (298) Driver's loudspeaker, front right

**B496** (344) Cab loudspeaker, left, with hand-free telephone

**W177** (171) Combination aerial

**X685** Stvd. line 16500

**X1536** Stvd. cab tachograph

**X1627** Stvd. reversing beam

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2398** Stvd. adaptation reversing light

**X2496** Adaptation mute signal lane guard

**X2542** (246) Potential distributor, 21-pin line 58000

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

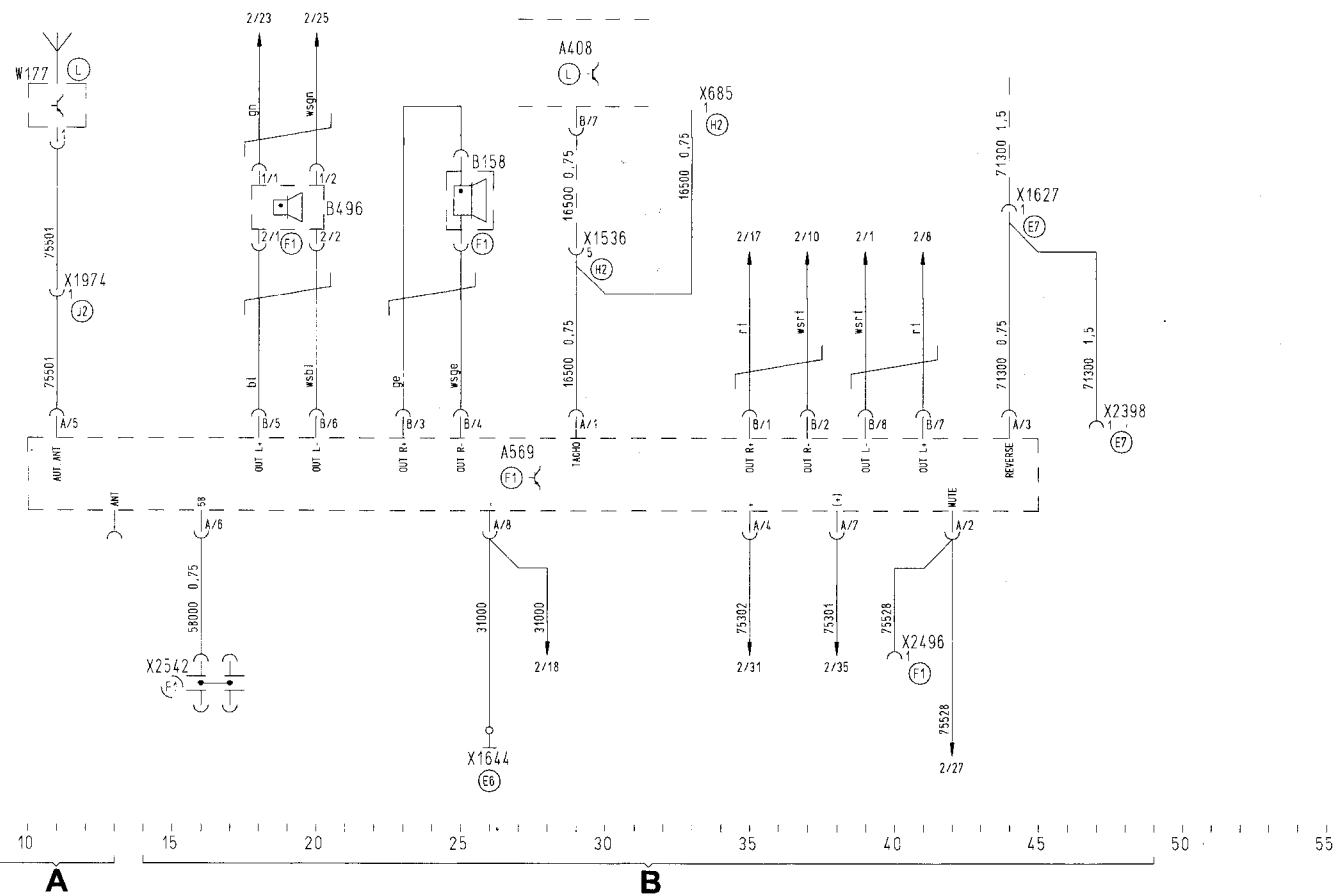
Wiring diagram no. **81.99192.1436** Sheet **1** of 2

A100

(E6)

A302

(E6)



# Radio navigation system 12V with Cullmann phone (LL)

## Legend

Wiring diagram no. **81.99192.1436** Sheet **2** of 2  
Change status: 05.01

**A = Loudspeaker**

**B = Cullmann telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (545) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone

**X1546** Stvd. door right  
**X1547** Stvd. door left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2433** Stvd. adaptation 12V radio  
**X2448** Stvd. adaptation 12V telephone

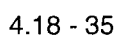
## Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |
| Ⓖ Mobile phone interface   |                                |



E6

(E6)



# Radio navigation system 12V with Cullmann phone (RL)

## Legend

Wiring diagram no. **81.99192.1437** Sheet **1** of 2

Change status: 05.01

**A = Active aerial**

**B = Radio navigation system**

**A100** (255) Central fuse, relay and terminal block  
**A148** (388) Radio/cassette player  
**A302** (352) Central computer 2  
**A408** (403) Tachograph  
**A569** (547) Radio navigation device RNS 3

**B157** (298) Driver's loudspeaker, front left  
**B498** (344) Cab loudspeaker, right, with hand-free telephone

**W177** (171) Combination aerial

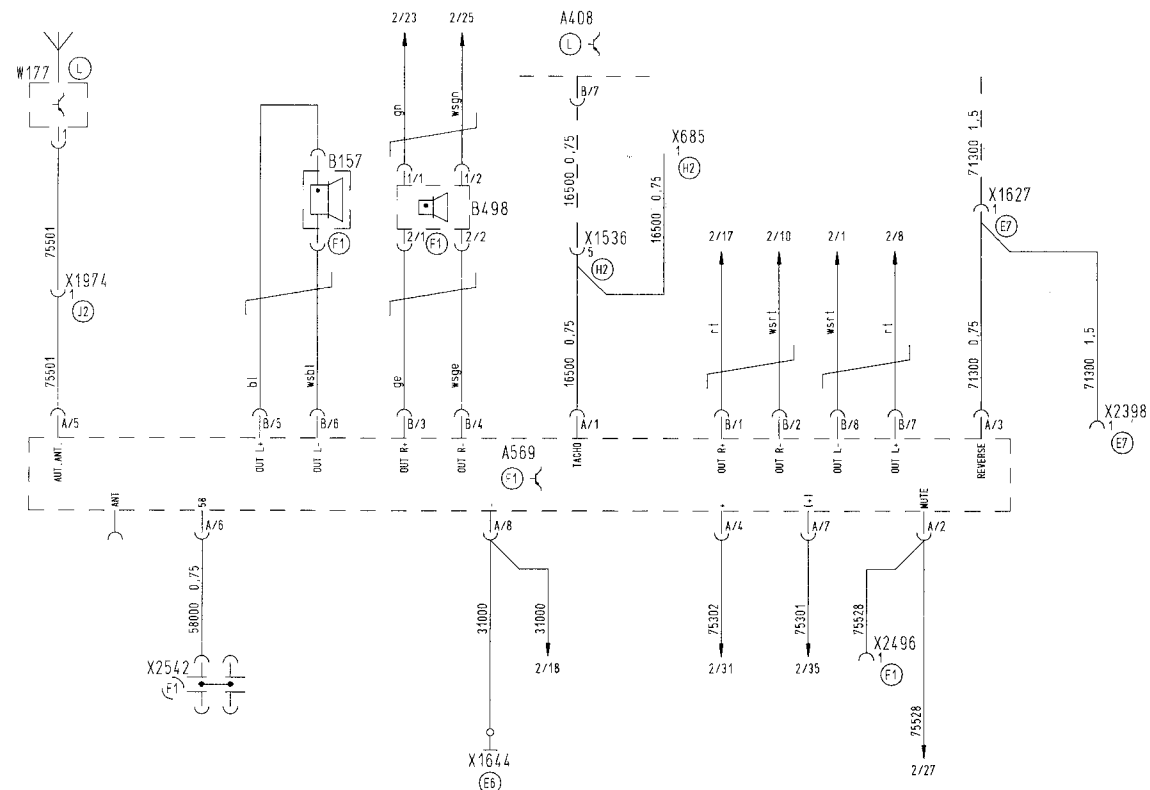
**X685** Stvd. line 16500  
**X1536** Stvd. cab tachograph  
**X1627** Stvd. reversing beam  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1974** Stvd. for active aerial  
**X2398** Stvd. adaptation reversing light  
**X2496** Adaptation mute signal lane guard  
**X2542** (246) Potential distributor, 21-pin line 58000

## Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

A100  
(E6)

A302  
(E6)



A number line is shown with major tick marks every 5 units, labeled 1, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, and 55. Minor tick marks are present between the major ones, representing 1-unit intervals. A bracket labeled **A** is drawn below the line, spanning from the tick mark for 10 to the tick mark for 15. Another bracket labeled **B** is drawn below the line, spanning from the tick mark for 15 to the tick mark for 50.

## ADDITIONAL WIRING DIAGRAMS

### Radio navigation system 12V with Cullmann phone (RL)

#### Legend

Wiring diagram no. **81.99192.1437** Sheet 2 of 2  
Change status: 05.01

**A = Loudspeaker**

**B = Cullmann telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (545) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone

**X1546** Stvd. door, right  
**X1547** Stvd. door, left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2433** Stvd. adaptation 12V radio  
**X2448** Stvd. adaptation 12V telephone

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |
| (I) Mobile phone interface    |                                   |

ADDITIONAL WIRING DIAGRAMS

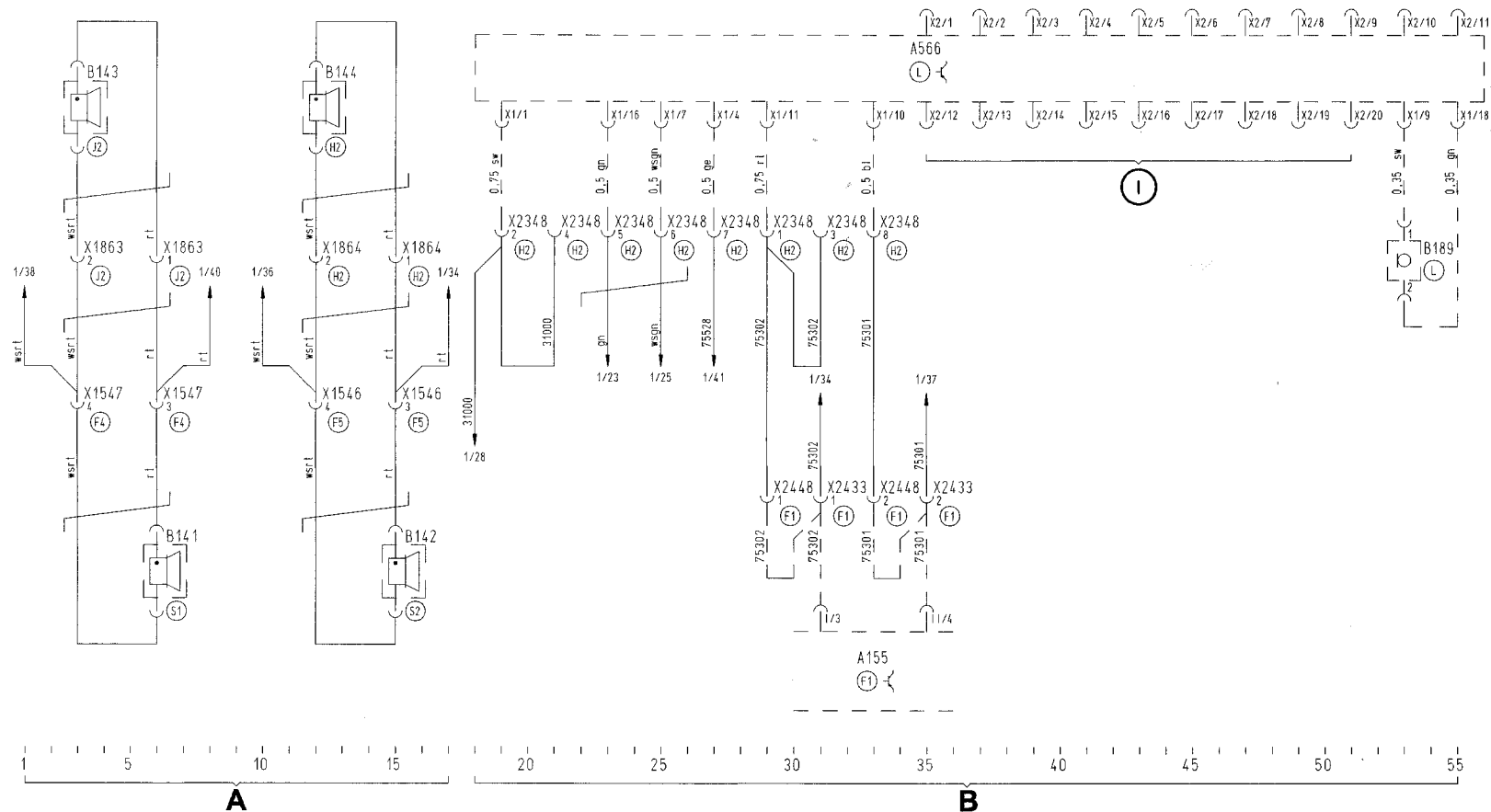
Wiring diagram no. 81.99192.1437 Sheet 2 of 2

A100

(E6)

A302

(E6)



# Radio navigation system 12V with Nokia phone (LL)

## Legend

Wiring diagram no. **81.99192.1438** Sheet 1 of 2

Change status: 05.01

**A = Active aerial**

**B = Radio navigation system**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A408** (403) Tachograph

**A569** (547) Radio navigation device RNS 3

**B158** (298) Driver's loudspeaker, front right

**B496** (344) Cab loudspeaker, left, with hand-free telephone

**W177** (171) Combination aerial

**X685** Stvd. line 16500

**X1536** Stvd. cab tachograph

**X1627** Stvd. reversing beam

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2398** Stvd. adaptation reversing light

**X2496** Adaptation mute signal lane guard

**X2542** (246) Potential distributor, 21-pin line 58000

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

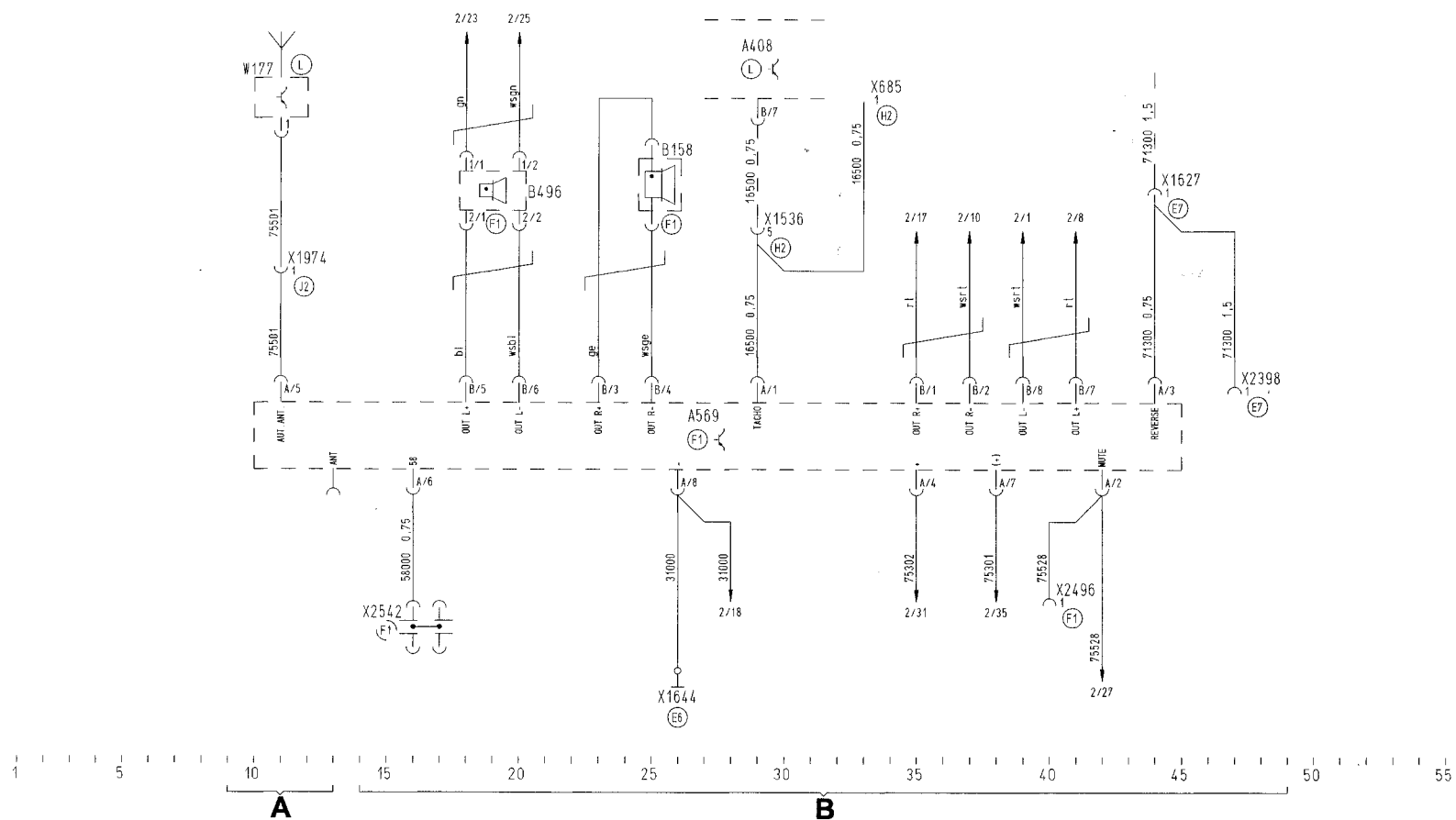
(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1438** Sheet 1 of 2

A100  
(E6)

A302  
(E6)



## Radio navigation system 12V with Nokia phone (LL)

### Legend

Wiring diagram no. **81.99192.1438** Sheet **2** of 2  
Change status: 05.01

**A = Loudspeaker**

**B = Nokia telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (539) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone  
**B497** (346) Telephone receiver

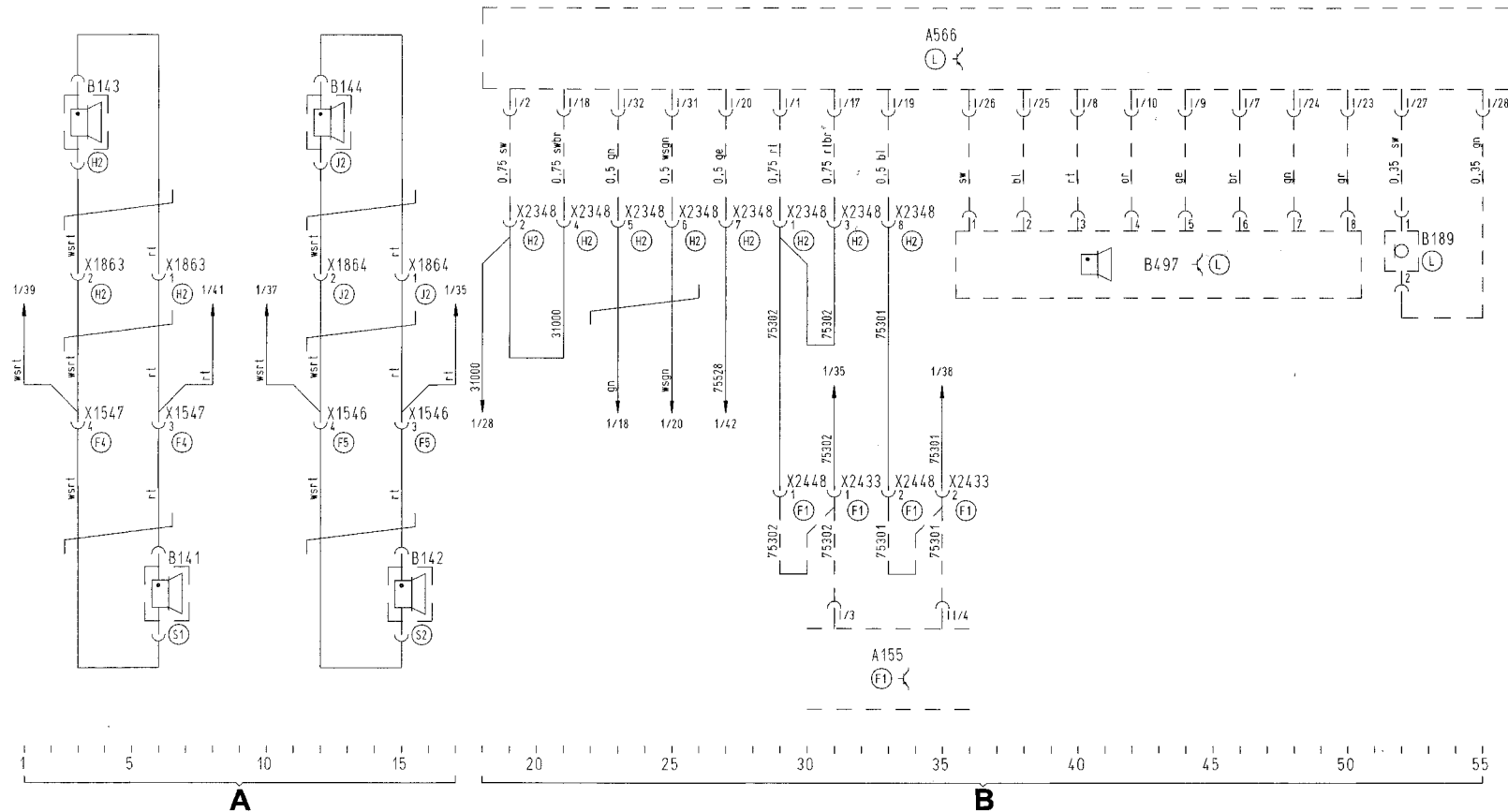
**X1546** Stvd. door, right  
**X1547** Stvd. door, left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2433** Stvd. adaptation 12V radio  
**X2448** Stvd. adaptation 12V telephone

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



## ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1438** Sheet **2** of 2

## Radio navigation system 12V with Nokia phone (RL)

### Legend

Wiring diagram no. **81.99192.1439** Sheet 1 of 2  
Change status: 05.01

**A = Active aerial**

**B = Radio navigation system**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A408** (403) Tachograph  
**A569** (547) Radio navigation device RNS 3

**B157** (298) Driver's loudspeaker, front left  
**B498** (344) Cab loudspeaker, right, with hand-free telephone

**W177** (171) Combination aerial

**X685** Stvd. line 16500  
**X1536** Stvd. cab tachograph  
**X1627** Stvd. reversing beam  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1974** Stvd. for active aerial  
**X2398** Stvd. adaptation reversing light  
**X2496** Adaptation mute signal lane guard  
**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

# ADDITIONAL WIRING DIAGRAMS

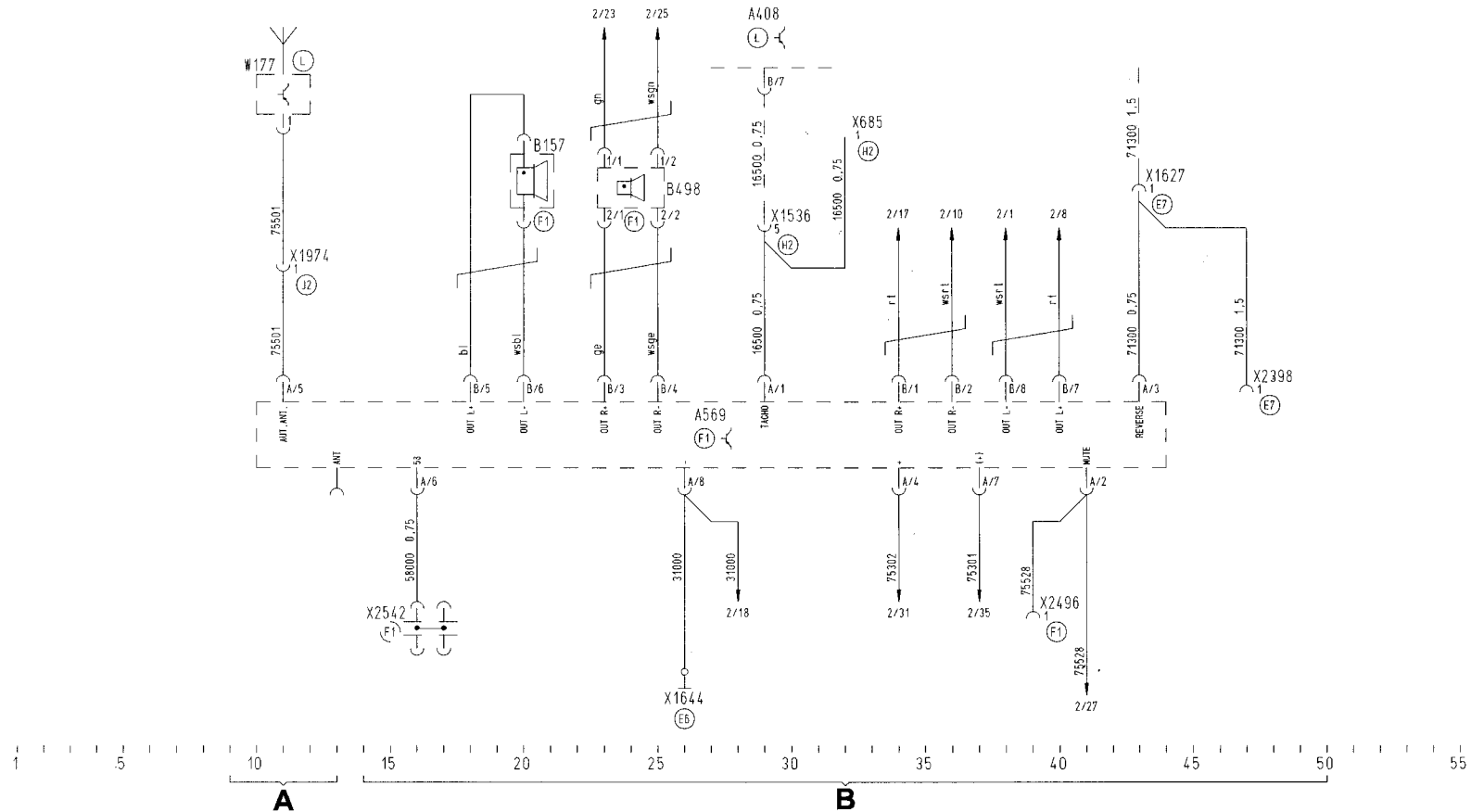
Wiring diagram no. **81.99192.1439** Sheet **1** of 2

A100

(E6)

A302

(E6)



## Radio navigation system 12V with Nokia phone (RL)

### Legend

Wiring diagram no. **81.99192.1439** Sheet **2** of 2  
Change status: 05.01

**A = Loudspeaker**

**B = Nokia telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (539) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone  
**B497** (346) Telephone receiver

**X1546** Std. door right  
**X1547** Std. door left  
**X1863** Std. loudspeaker, left  
**X1864** Std. loudspeaker, right  
**X2348** Std. telephone  
**X2433** Std. adaptation 12V radio  
**X2448** Std. adaptation 12V telephone

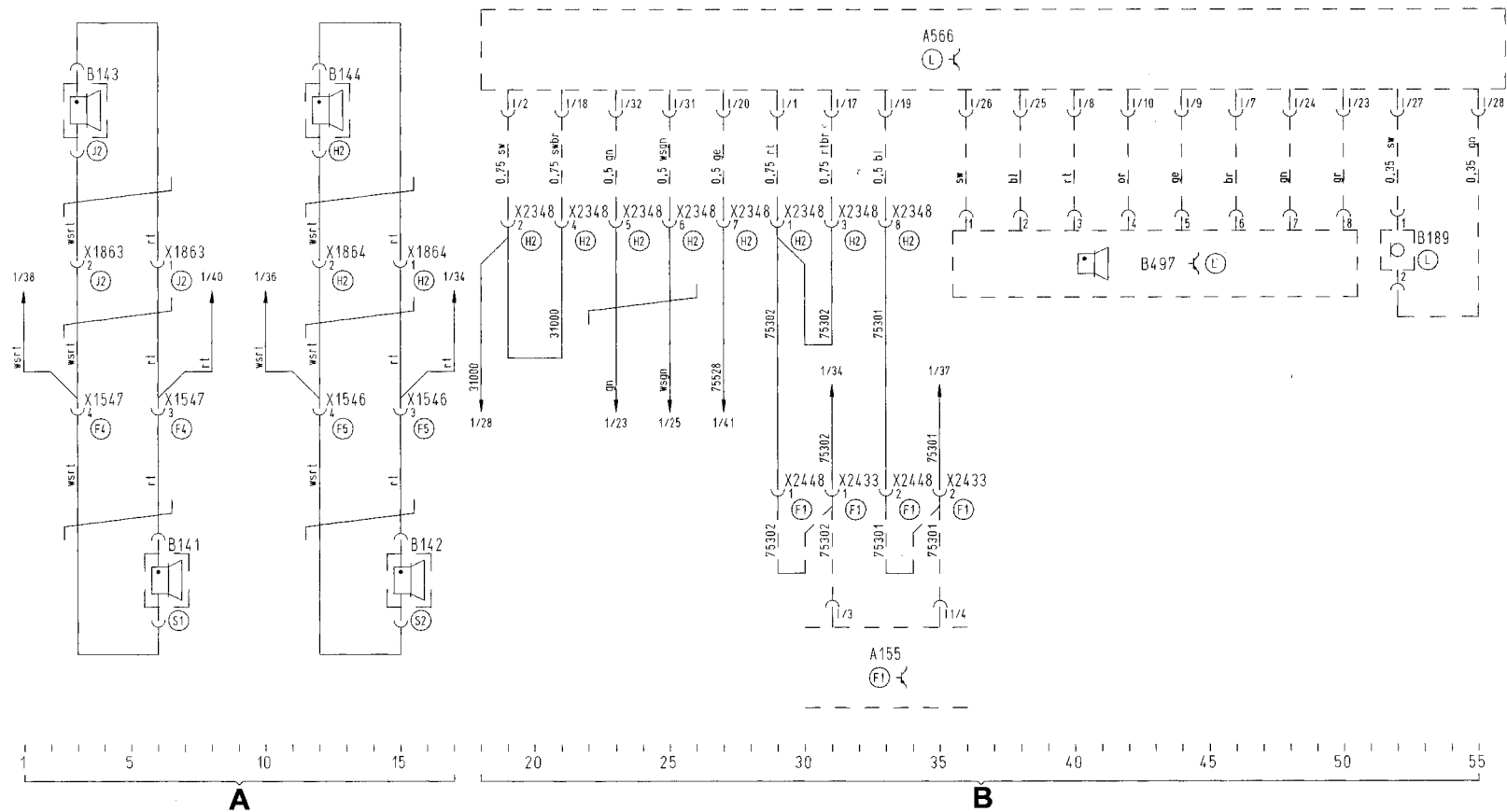
### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

A100  
(E6)

A302

(E6)



# Radio navigation system 12V with Cullmann phone and CD changer (LL)

## Legend

Wiring diagram no. **81.99192.1440** Sheet 1 of 2  
Change status: 05.01

**A = Active aerial**

**B = Radio navigation, CD changer**

**A100** (255) Central fuse, relay and terminal block  
**A148** (388) Radio/cassette player  
**A302** (352) Central computer 2  
**A408** (403) Tachograph  
**A568** (546) CD changer  
**A569** (547) Radio navigation device RNS 3

**B158** (298) Driver's loudspeaker, front right  
**B496** (344) Cab loudspeaker, left, with hands-free telephone

**W177** (171) Combination aerial

**X685** Stvd. line 16500  
**X1536** Stvd. cab tachograph  
**X1627** Stvd. reversing beam  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1974** Stvd. for active aerial  
**X2398** Stvd. adaptation reversing light  
**X2496** Adaptation mute signal lane guard  
**X2542** (246) Potential distributor, 21-pin line 58000

## Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

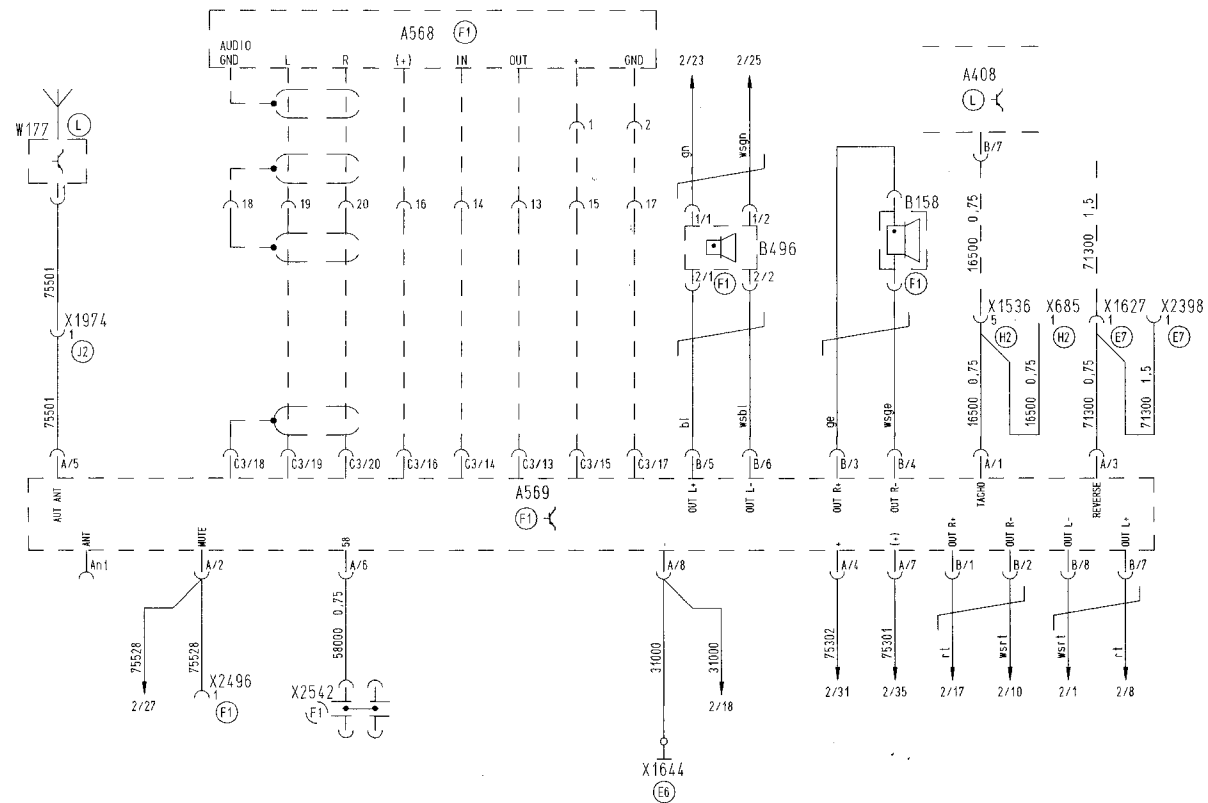
Wiring diagram no. 81.99192.1440 Sheet 1 of 2

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

**A** **B**

# Radio navigation system 12V with Cullmann phone and CD changer (LL)

## Legend

Wiring diagram no. **81.99192.1440** Sheet **2** of 2  
Change status: 05.01

**A = Loudspeaker**

**B = Cullmann telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (545) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone

**X1546** Stvd. door, right  
**X1547** Stvd. door, left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2433** Stvd. adaptation 12V radio  
**X2448** Stvd. adaptation 12V telephone

## Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓒ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓒ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓒ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓒ Instrument panel         | Ⓖ Rear axle                    |
| Ⓒ Central part             | Ⓖ Front part of frame          |
| Ⓒ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓒ Foot pedals              | Ⓖ Door left                    |
| Ⓒ Front wall, inside left  | Ⓖ Door right                   |
| Ⓒ Front wall, inside right |                                |
| Ⓖ Mobile phone interface   |                                |



ADDITIONAL WIRING DIAGRAMS

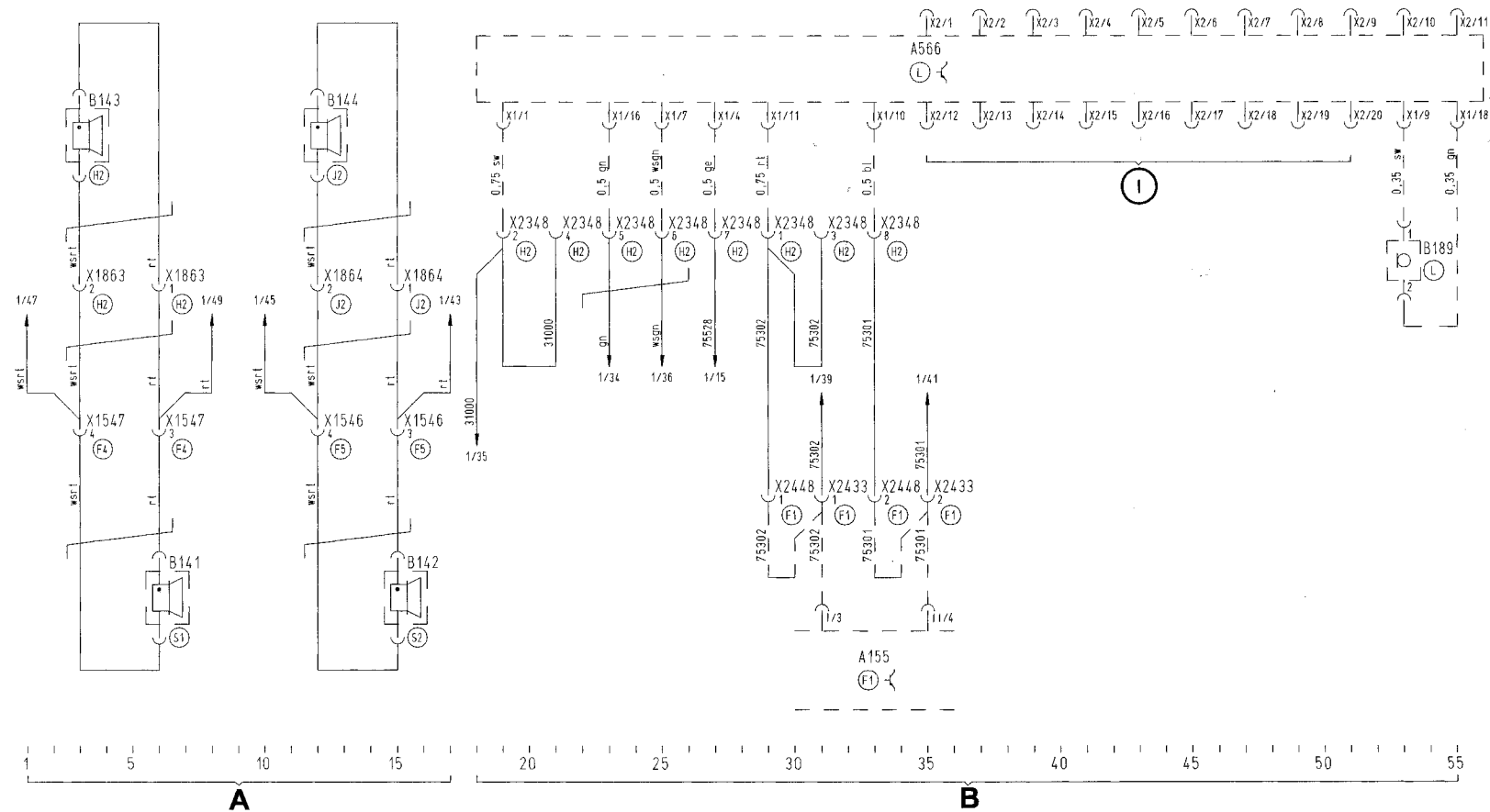
Wiring diagram no. 81.99192.1440 Sheet 2 of 2

A100

(E6)

A302

(E6)



# Radio navigation system 12V with Cullmann phone and CD changer (RL)

## Legend

Wiring diagram no. **81.99192.1441** Sheet 1 of 2

Change status: 05.01

**A = Active aerial**

**B = Radio navigation, CD changer**

**A100** (255) Central fuse, relay and terminal block

**A148** (388) Radio/cassette player

**A302** (352) Central computer 2

**A408** (403) Tachograph

**A568** (546) CD changer

**A569** (547) Radio navigation device RNS 3

**B157** (298) Driver's loudspeaker, front left

**B498** (344) Cab loudspeaker, right, with hand-free telephone

**W177** (171) Combination aerial

**X685** Stvd. line 16500

**X1536** Stvd. cab tachograph

**X1627** Stvd. reversing beam

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2398** Stvd. adaptation reversing light

**X2496** Adaptation mute signal lane guard

**X2542** (246) Potential distributor, 21-pin line 58000

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

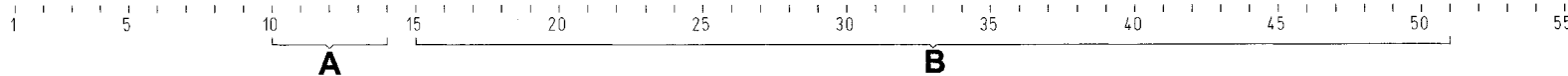
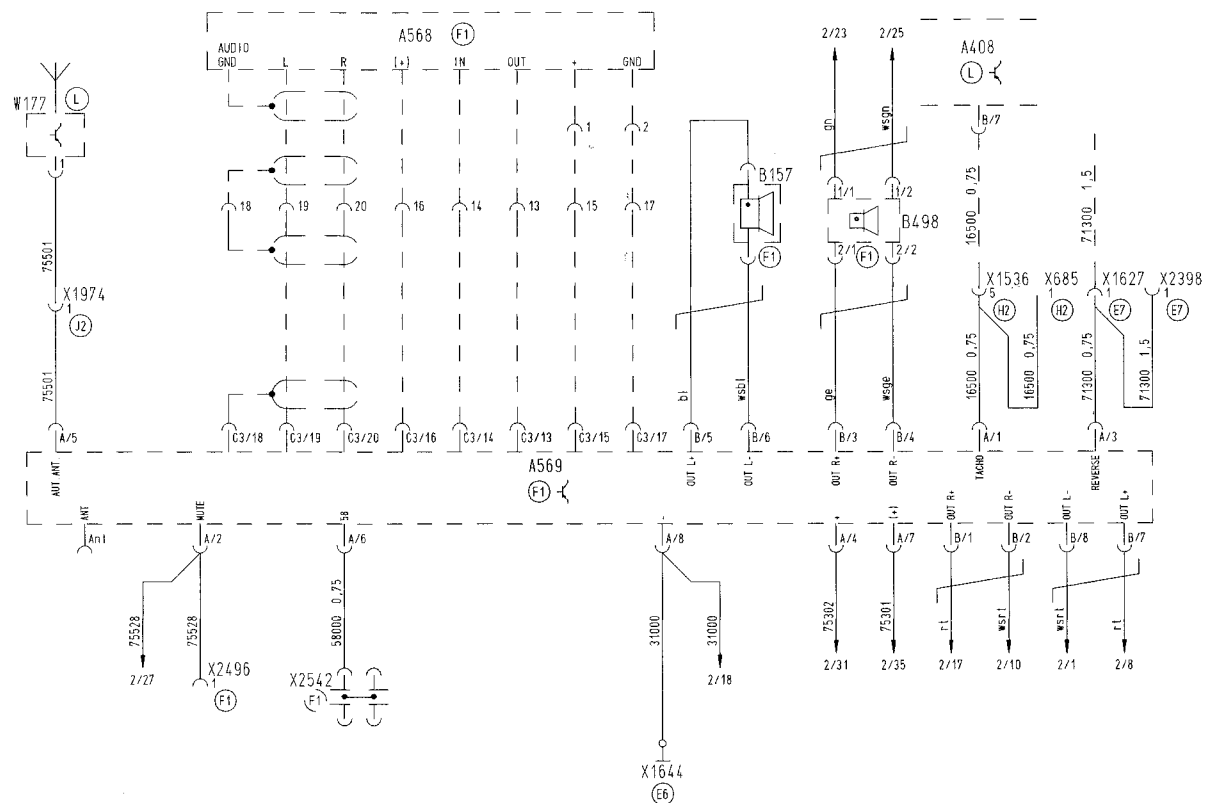
Wiring diagram no. **81.99192.1441** Sheet **1** of 2

A100

(E6)

A302

(E6)



# Radio navigation system 12V with Cullmann phone and CD changer (RL)

## Legend

Wiring diagram no. **81.99192.1441** Sheet **2** of 2  
Change status: 05.01

**A = Loudspeaker**

**B = Cullmann telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (545) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone

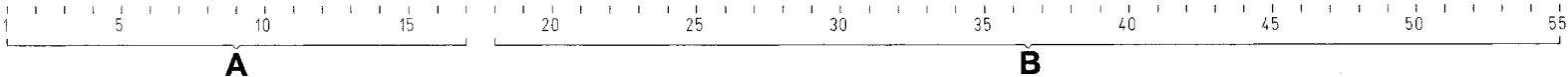
**X1546** Stvd. door right  
**X1547** Stvd. door left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2433** Stvd. adaptation 12V radio  
**X2448** Stvd. adaptation 12V telephone

## Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓒ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓒ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓒ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓒ Instrument panel         | Ⓖ Rear axle                    |
| Ⓒ Central part             | Ⓖ Front part of frame          |
| Ⓒ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓒ Foot pedals              | Ⓖ Door left                    |
| Ⓒ Front wall, inside left  | Ⓖ Door right                   |
| Ⓒ Front wall, inside right |                                |
| Ⓖ Mobile phone interface   |                                |

E6

(E6)



# **Radio navigation system 12V with Nokia phone and CD changer (LL)**

## **Legend**

Wiring diagram no. **81.99192.1442** Sheet 1 of 2  
Change status: 05.01

**A = Active aerial**

**B = Radio navigation, CD changer**

**A100** (255) Central fuse, relay and terminal block  
**A148** (388) Radio/cassette player  
**A302** (352) Central computer 2  
**A408** (403) Tachograph  
**A568** (546) CD changer  
**A569** (547) Radio navigation device RNS 3

**B158** (298) Driver's loudspeaker, front right  
**B496** (344) Cab loudspeaker, left, with hands-free telephone

**W177** (171) Combination aerial

**X685** Stvd. line 16500  
**X1536** Stvd. cab tachograph  
**X1627** Stvd. reversing beam  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1974** Stvd. for active aerial  
**X2398** Stvd. adaptation reversing light  
**X2496** Adaptation mute signal lane guard  
**X2542** (246) Potential distributor, 21-pin line 58000

## **Marking of mounting positions**

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

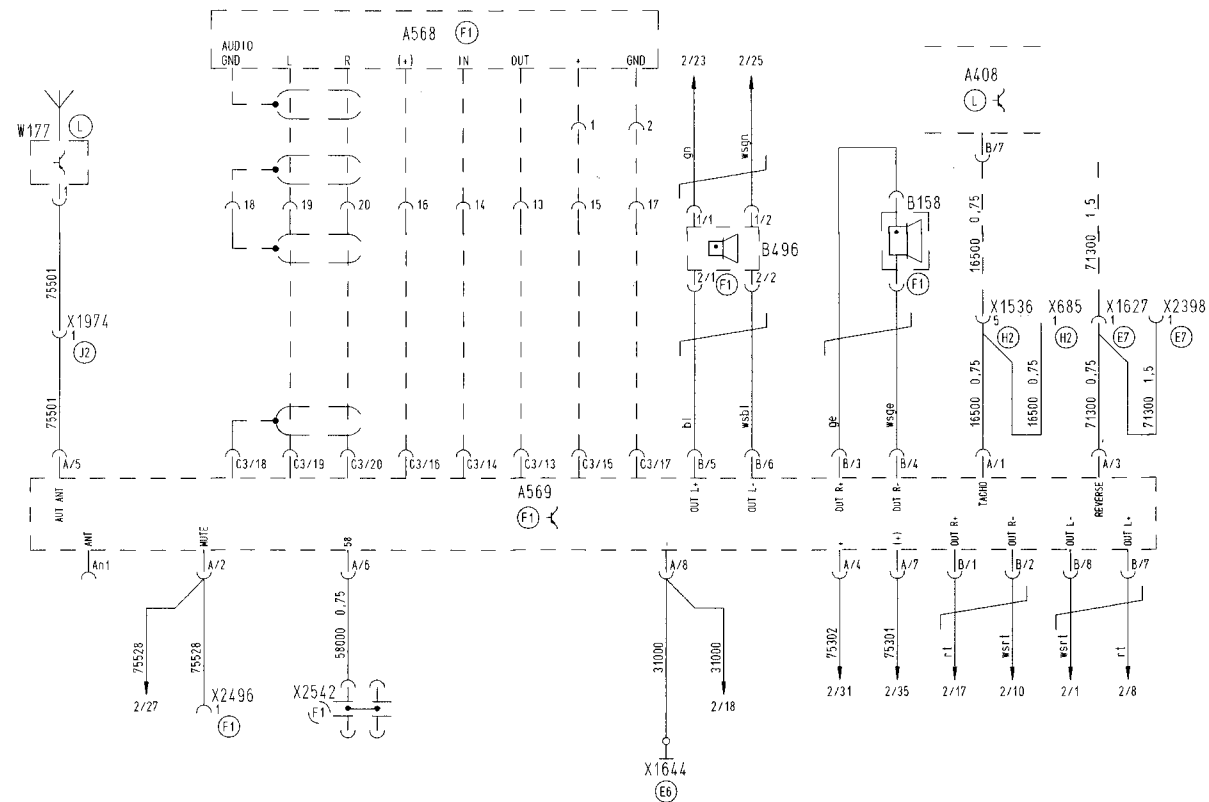
Wiring diagram no. 81.99192.1442 Sheet 1 of 2

A100

(E6)

A302

(E6)



# Radio navigation system 12V with Nokia phone and CD changer (LL)

## Legend

Wiring diagram no. **81.99192.1442** Sheet **2** of 2  
Change status: 05.01

**A = Loudspeaker**

**B = Nokia telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (539) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone  
**B497** (346) Telephone receiver

**X1546** Stvd. door right  
**X1547** Stvd. door left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2433** Stvd. adaptation 12V radio  
**X2448** Stvd. adaptation 12V telephone

## Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



A100  
(E6)

A302  
(E6)



**Radio navigation system 12V with Nokia phone and CD changer (RL)**

**Legend**

Wiring diagram no. **81.99192.1443** Sheet 1 of 2  
Change status: 05.01

**A = Active aerial**

**B = Radio navigation, CD changer**

- A100** (255) Central fuse, relay and terminal block  
**A148** (388) Radio/cassette player  
**A302** (352) Central computer 2  
**A408** (403) Tachograph  
**A568** (546) CD changer  
**A569** (547) Radio navigation device RNS 3
- B157** (298) Driver's loudspeaker, front left  
**B498** (344) Cab loudspeaker, right, with hand-free telephone
- W177** (171) Combination aerial
- X685** Stvd. line 16500  
**X1536** Stvd. cab tachograph  
**X1627** Stvd. reversing beam  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1974** Stvd. for active aerial  
**X2398** Stvd. adaptation reversing light  
**X2496** Adaptation mute signal lane guard  
**X2542** (246) Potential distributor, 21-pin line 58000

**Marking of mounting positions**

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓕ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓕ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

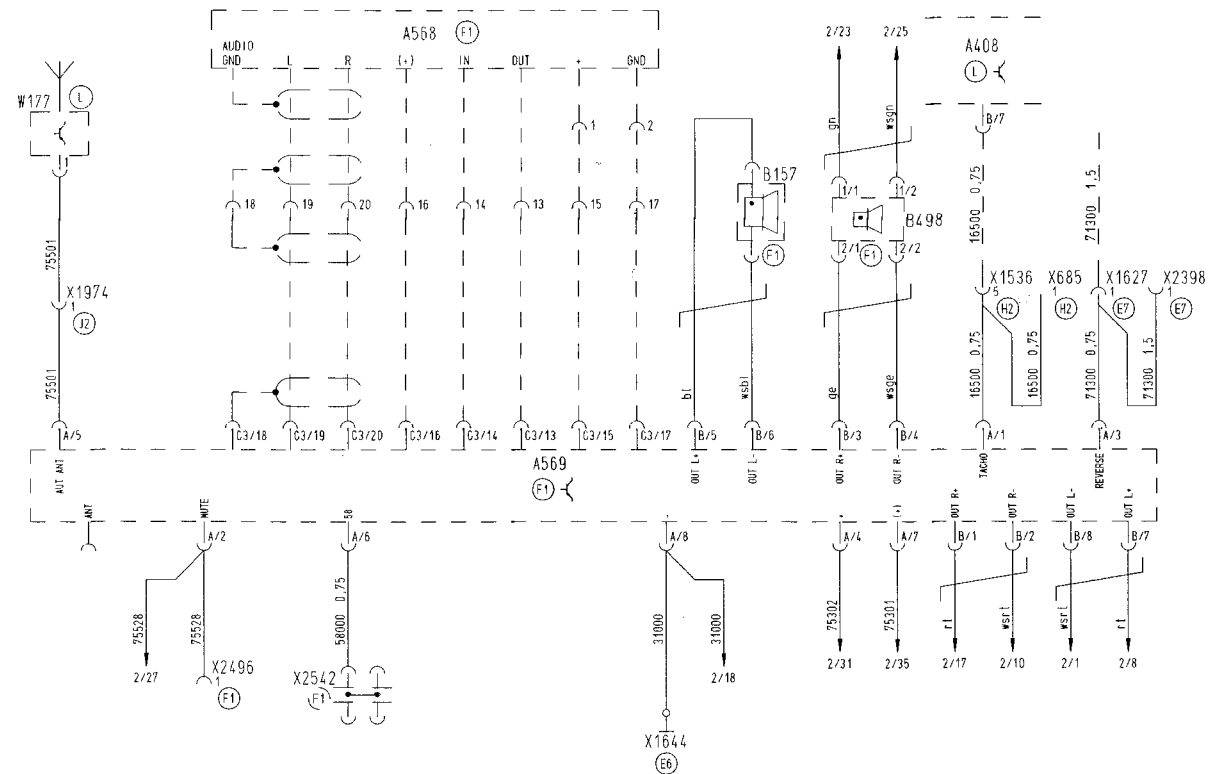
Wiring diagram no. 81.99192.1443 Sheet 1 of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Radio navigation system 12V with Nokia phone and CD changer (RL)

#### Legend

Wiring diagram no. **81.99192.1443** Sheet 2 of 2

Change status: 05.01

**A = Loudspeaker**

**B = Nokia telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (539) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone  
**B497** (346) Telephone receiver

**X1546** Stvd. door, right  
**X1547** Stvd. door, left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2433** Stvd. adaptation 12V radio  
**X2448** Stvd. adaptation 12V telephone

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓖ Battery box                  |
| Ⓔ Bumper                   | Ⓗ B-pillar on driver's side    |
| Ⓕ Entrance right           | Ⓗ A-pillar on driver's side    |
| Ⓖ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

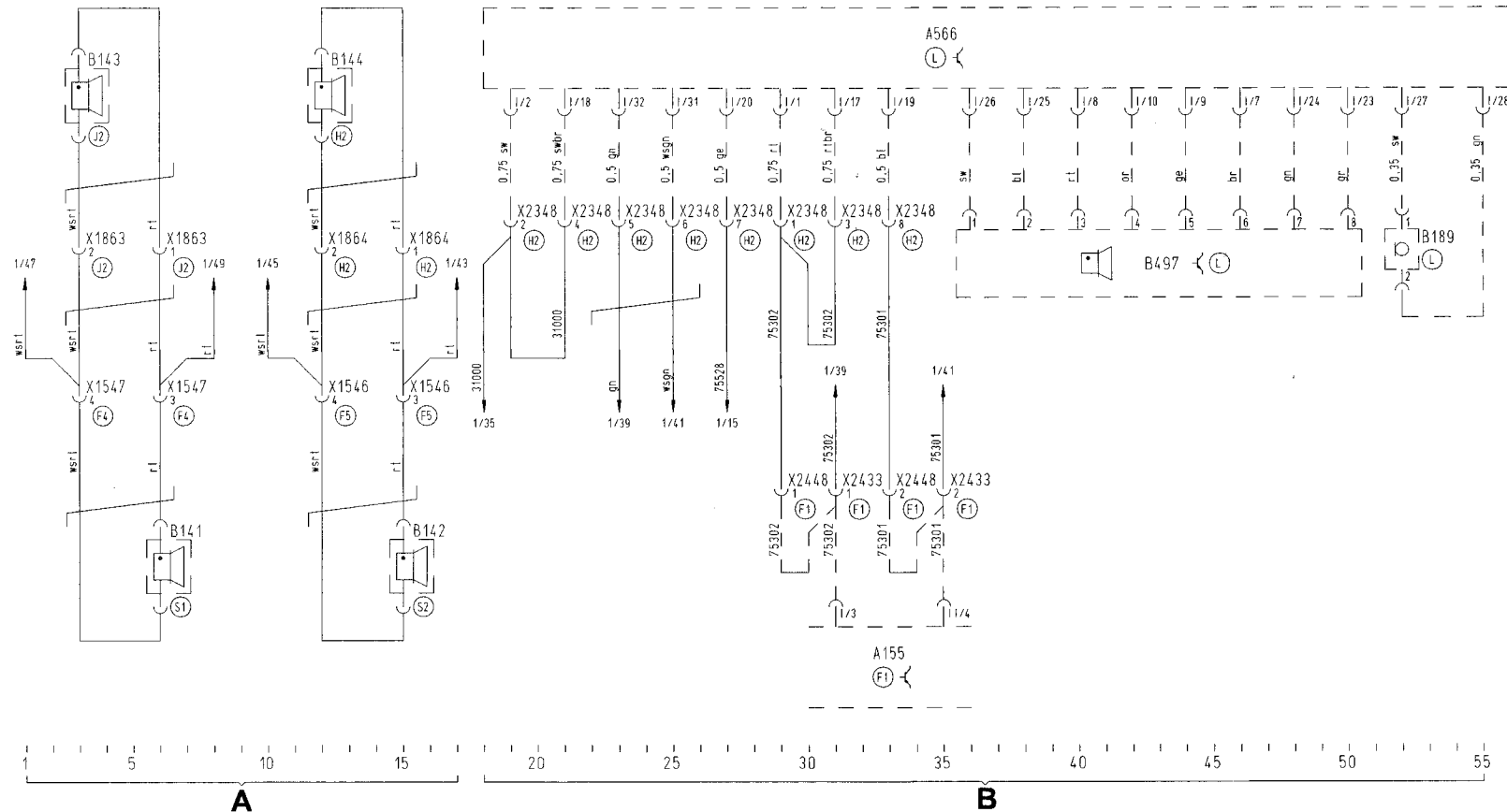
Wiring diagram no. 81.99192.1443 Sheet 2 of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Retarder/intarder, automatic

#### Legend

Wiring diagram no. **81.99192.1372** Sheet **1** of 1

Change status: 05.01

#### A = Retarder/intarder, automatic

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A403** (339) Vehicle management computer

**S479** (476) Switch, additional retarding brake off

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

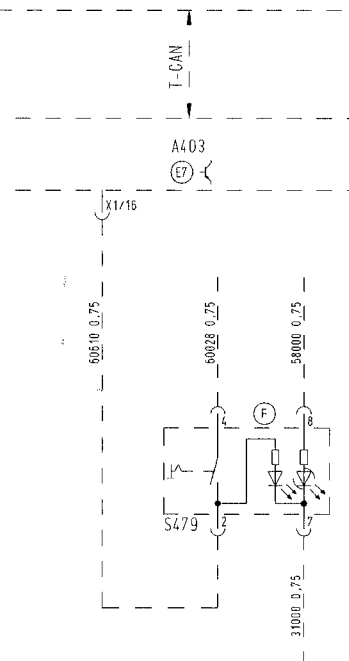
Wiring diagram no. **81.99192.1372** Sheet **1** of 1

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

**A**

**Retarder VOITH DIGIPROP (CAN)****Legend**

Wiring diagram no. **81.99192.1410** Sheet 1 of 1  
Change status: 05.01

**A = Additional retarding brake pushbutton switch**

**B = Pressure pickup**

**C = Temperature sensor**

**D = Solenoid valve**

**E = Diagnosis**

**F = Power supply**

|              |       |                                                                         |
|--------------|-------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                                  |
| <b>A144</b>  | (374) | Control unit, retarder                                                  |
| <b>A302</b>  | (352) | Central computer 2                                                      |
| <b>A403</b>  | (339) | Vehicle management computer                                             |
| <b>A407</b>  | (342) | Instrumentation                                                         |
| <b>A437</b>  | (398) | Additional retarding brake pushbutton switch                            |
| <b>B134</b>  | (207) | Temperature sensor, retarder (cooling water)                            |
| <b>B188</b>  | (208) | Temperature pickup, retarder (oil)                                      |
| <b>B435</b>  | (291) | Pressure pickup, retarder, positioning pressure                         |
| <b>F152</b>  | (101) | Fuse, retarder                                                          |
| <b>H145</b>  |       | Indicator light, retarder                                               |
| <b>X1549</b> |       | Std. engine/EDC/transmission I                                          |
| <b>X1553</b> |       | Std. engine/EDC/transmission III                                        |
| <b>X1559</b> |       | Std. engine/EDC/transmission IV                                         |
| <b>X1575</b> |       | Std. temperature sensor, retarder (water, oil)                          |
| <b>X1644</b> |       | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1948</b> |       | Std. engine/transmission (MP box)                                       |
| <b>X1949</b> |       | Std. engine/transmission (MP box)                                       |

**Marking of mounting positions**

|                    |                                     |             |                              |
|--------------------|-------------------------------------|-------------|------------------------------|
| <b>(A)</b>         | Tail                                | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b>        | Engine                              | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b>        | Gearbox                             | <b>(F8)</b> | Control panel                |
| <b>(C)</b>         | Front                               | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b>        | Bumper                              | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b>        | Entrance right                      | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b>        | Entrance left                       | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b>        | Central electrics area              | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b>        | Control unit racks                  | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b>        | Rear wall of cab                    | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>         | Instrument panel                    | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b>        | Central part                        | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b>        | Steering wheel/column               | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b>        | Foot pedals                         | <b>(S1)</b> | Door left                    |
| <b>(F4)</b>        | Front wall, inside left             | <b>(S2)</b> | Door right                   |
| <b>(F5)</b>        | Front wall, inside right            |             |                              |
| <b>X1951</b>       | Std. engine/transmission (MP box)   |             |                              |
| <b>X1969</b>       | Std. engine brake switch            |             |                              |
| <b>X2544 (246)</b> | Potential distributor 21-pin K-line |             |                              |
| <b>Y133 (182)</b>  | Proportioning valve, retarder       |             |                              |



[illegible]

## ADDITIONAL WIRING DIAGRAMS

### Retarder, hydroretarder (CAN)

#### Legend

Wiring diagram no. **81.99192.1411** Sheet 1 of 1  
Change status: 05.01

**A = Additional retarding brake pushbutton switch**

**B = Pressure pickup**

**C = Temperature sensor**

**D = Solenoid valve**

**E = Pressure pickup**

**F = Power supply**

A100 (255) Central fuse, relay and terminal block  
A144 (567) Control unit, retarder  
A302 (352) Central computer 2  
A403 (339) Vehicle management computer  
A407 (342) Instrumentation  
A437 (398) Additional retarding brake pushbutton switch  
  
B134 (352) Temperature sensor, retarder (cooling water)  
B373 (352) Temperature sensor, retarder (cooling water)  
B435 (291) Pressure pickup, retarder, housing pressure  
B505 (291) Pressure pickup, retarder, positioning pressure

F152 (101) Fuse retarder (terminal 15)

H145 Indicator light, retarder

X1549 Stvd. engine/EDC/transmission I  
X1551 Stvd. engine/EDC/transmission II  
X1553 Stvd. engine/EDC/transmission III  
X1575 Stvd. temperature sensor, retarder (water, oil)  
X1644 Earthing point, cab, adjacent to central fuse, relay and terminal block  
X1951 Stvd. engine/transmission (MP box)  
X1969 Stvd. engine brake switch  
X2006 Stvd. cab/solenoid valves, right

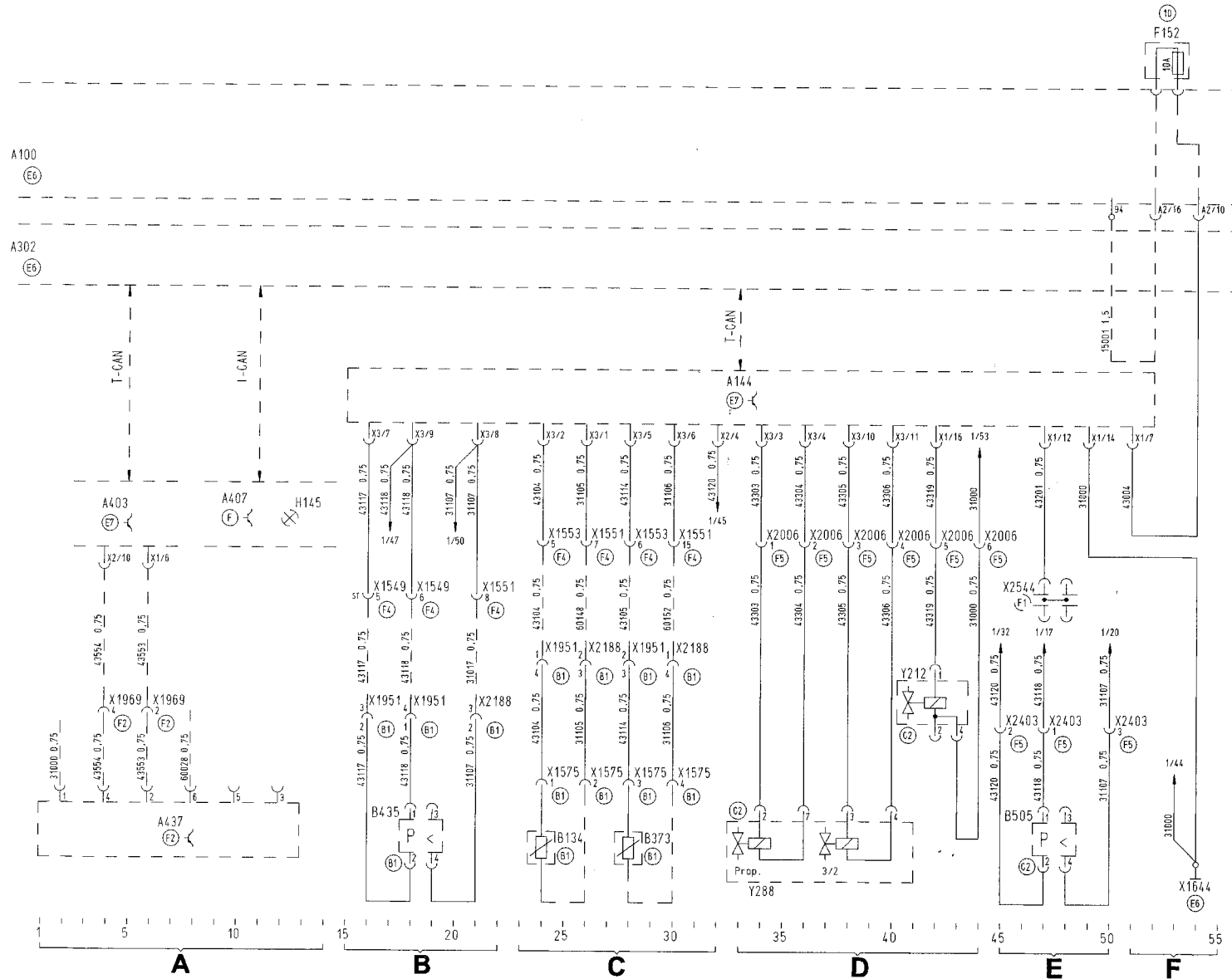
#### Marking of mounting positions

|                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓒ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓒ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓒ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓒ Instrument panel         | Ⓖ Rear axle                    |
| Ⓒ Central part             | Ⓖ Front part of frame          |
| Ⓒ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓒ Foot pedals              | Ⓖ Door left                    |
| Ⓒ Front wall, inside left  | Ⓖ Door right                   |
| Ⓒ Front wall, inside right |                                |

X2188 Stvd. cable duct, hydroretarder  
X2403 Stvd. cab/pressure pickup, positioning pressure  
X2544 (246) Potential distributor 21-pin K-line  
  
Y212 (126) Solenoid valve, "DvKRetarder"  
Y288 (223) Valve block, retarder

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1411 Sheet 1 of 1



## ADDITIONAL WIRING DIAGRAMS

### Reversing stop

#### Legend

Wiring diagram no. **81.99192.1409** Sheet 1 of 1

Change status: 05.01

#### A = Reversing inhibitor with/without start-stop on engine and frame end

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A312 (397) Customer-specific control module

A403 (339) Vehicle management computer

X679 Stvd. start-stop device

X1551 Stvd. engine/EDC/transmission II

X1693 Crimped connector, line 60028

X1996 Stvd. intermediate speed control interface (FFR)

X1997 Stvd. intermediate speed control interface (KSM)

X2541 (246) Potential distributor, 21-pin line 31000

#### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

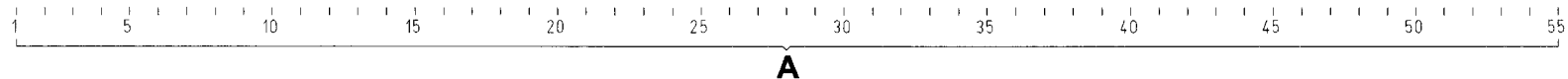
(S2) Door right

(I) Scope, body manufacturers

(II) Earthing from foot contact

(E6)

(E6)



## All-round marker light 1 on roof

### Legend

Wiring diagram no. **81.99192.1412** Sheet 1 of 1  
Change status: 05.01

### A = All-round marker light 1 on roof

|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A498</b>  | (516) Control device, all-round marker light                            |
| <b>E196</b>  | (183) All-round marker light (passenger side)                           |
| <b>F188</b>  | (118) Fuse, all-round marker light                                      |
| <b>S227</b>  | (554) Switch, all-round marker light                                    |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1846</b> | Std. all-round marker light                                             |
| <b>X2242</b> | Std. cable duct, all-round marker light, right                          |
| <b>X2244</b> | Std. base/stand, all-round marker light, right                          |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                          |

### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

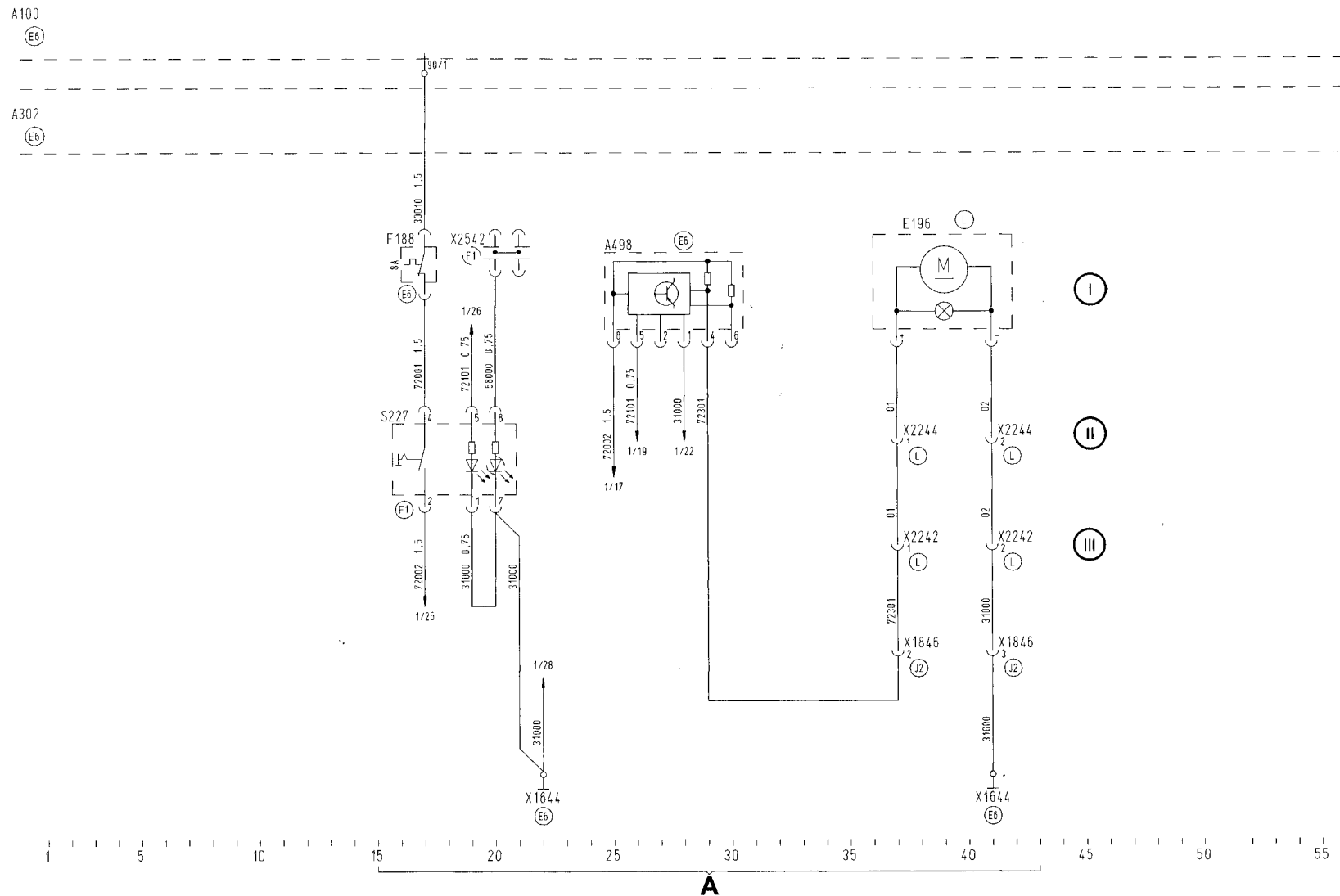
(I) All-round marker light, left **E197** or right **E196**

(II) All-round marker light, left **X2245**

(III) All-round marker light, left **X2243**

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1412 Sheet 1 of 1



## All-round marker light 2 on roof

### Legend

Wiring diagram no. **81.99192.1413** Sheet **1** of 1

Change status: 05.01

### A = All-round marker lights 2 on roof

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A498** (516) Control device, all-round marker light

**E196** (183) All-round marker light (passenger side)

**E197** (183) All-round marker light (driver's side)

**F188** (118) Fuse, all-round marker light

**S227** (557) Switch, all-round marker light

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1846** Stvd. all-round marker light

**X2242** Stvd. cable duct, all-round marker light, right

**X2243** Stvd. cable duct, all-round marker light, left

**X2244** Stvd. base/stand, all-round marker light, right

**X2245** Stvd. base/stand, all-round marker light, left

**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

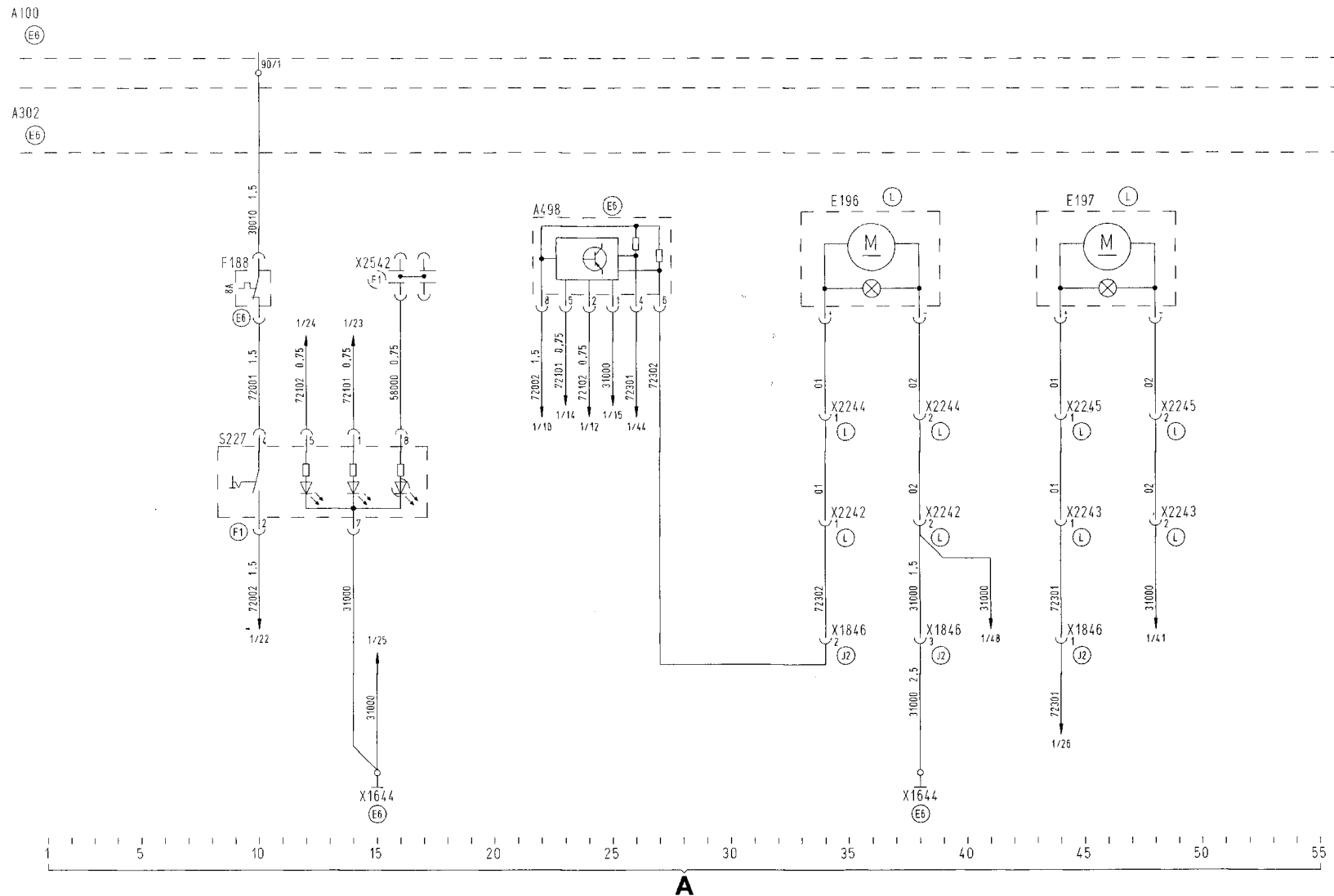
Ⓕ Door left

Ⓕ Door right



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1413 Sheet 1 of 1



## All-round marker light 2 on stand

### Legend

Wiring diagram no. **81.99192.1414** Sheet 1 of 1

Change status: 05.01

### A = All-round marker lights 2 on stand

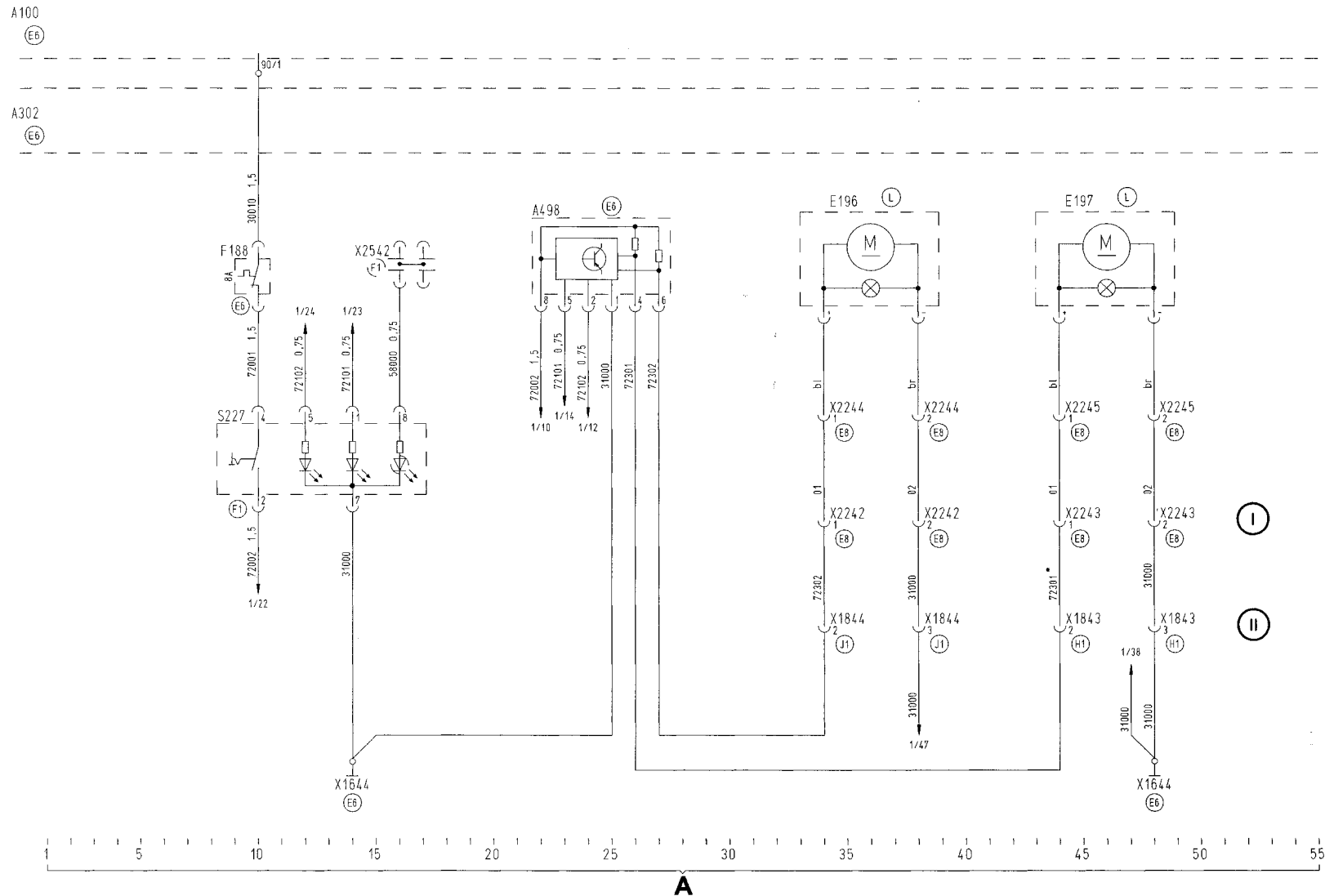
|              |       |                                                                         |
|--------------|-------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                                  |
| <b>A302</b>  | (352) | Central computer 2                                                      |
| <b>A498</b>  | (516) | Control device, all-round marker light                                  |
| <b>E196</b>  | (183) | All-round marker light (passenger side)                                 |
| <b>E197</b>  | (183) | All-round marker light (driver's side)                                  |
| <b>F188</b>  | (118) | Fuse, all-round marker light                                            |
| <b>S227</b>  | (557) | Switch, all-round marker light                                          |
| <b>X1644</b> |       | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1843</b> |       | Std. all-round marker light, B-pillar, left                             |
| <b>X1844</b> |       | Std. all-round marker light, B-pillar, right                            |
| <b>X2242</b> |       | Std. cable duct, all-round marker light, right                          |
| <b>X2243</b> |       | Std. cable duct, all-round marker light, left                           |
| <b>X2244</b> |       | Std. base/stand, all-round marker light, right                          |
| <b>X2245</b> |       | Std. base/stand, all-round marker light, left                           |
| <b>X2542</b> | (246) | Potential distributor, 21-pin line 58000                                |

### Marking of mounting positions

|             |                                                |             |                              |
|-------------|------------------------------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                                           | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                                         | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                                        | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                                          | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                                         | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right                                 | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left                                  | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area                         | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks                             | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab                               | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel                               | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part                                   | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column                          | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals                                    | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left                        | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right                       |             |                              |
| <b>(I)</b>  | on the short cab, line 72302 to left and right |             |                              |
| <b>(II)</b> | <b>X1844</b> on RL H1<br><b>X1843</b> on RL J1 |             |                              |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1414** Sheet **1** of **1**



## All-round marker light, left, on stand

### Legend

Wiring diagram no. **81.99192.1416** Sheet 1 of 1

Change status: 05.01

### A = All-round marker lights, left, on stand

|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A498</b>  | (516) Control device, all-round marker light                            |
| <b>E197</b>  | (183) All-round marker light (driver's side)                            |
| <b>F188</b>  | (118) Fuse, all-round marker light                                      |
| <b>S227</b>  | (554) Switch, all-round marker light                                    |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1843</b> | Std. all-round marker light, B-pillar, left                             |
| <b>X2243</b> | Std. cable duct, all-round marker light, left                           |
| <b>X2245</b> | Std. base/stand, all-round marker light, left                           |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                          |

### Marking of mounting positions

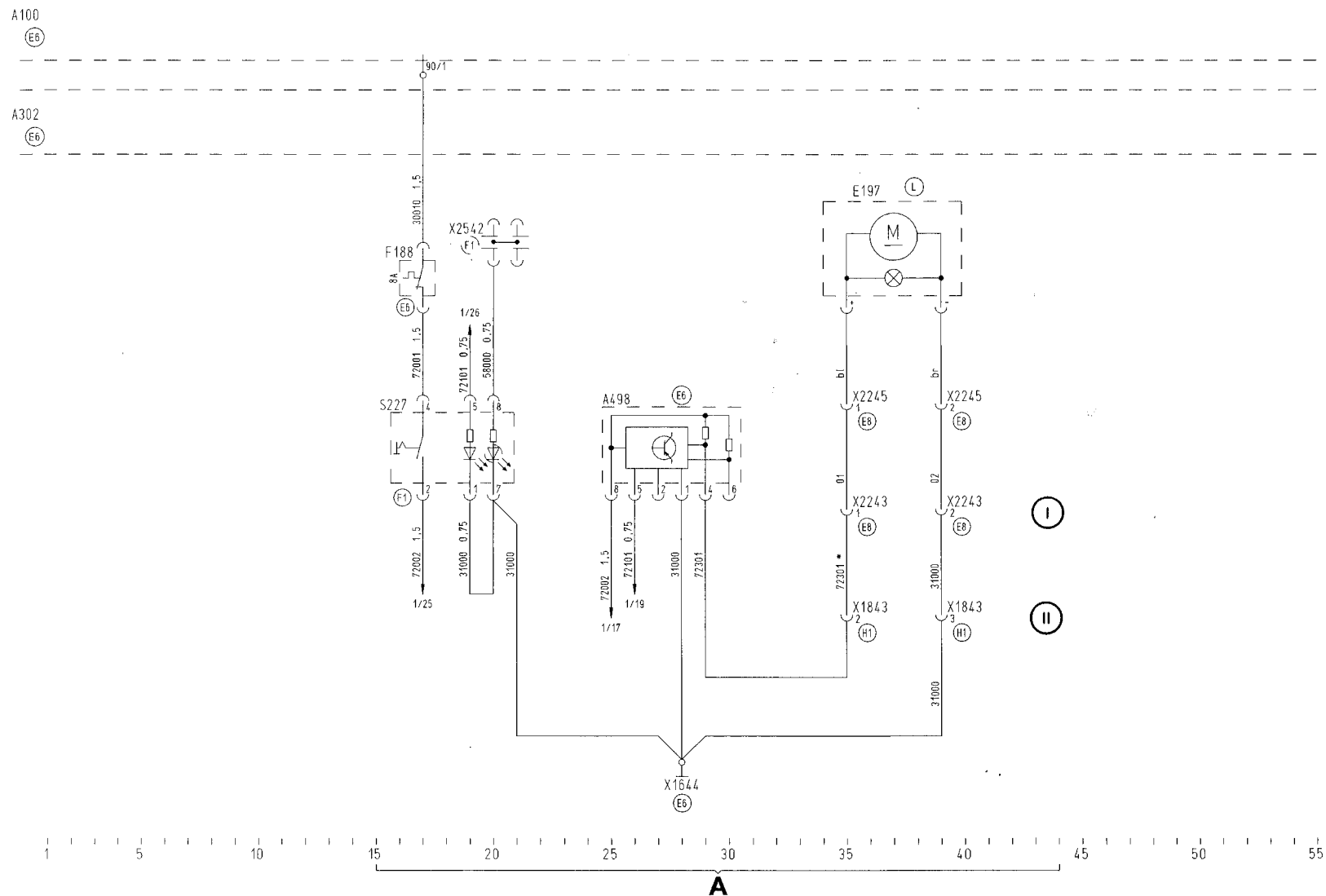
|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

(I) on the short cab, line 72302

(II) **X1843** on RL J1

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1416** Sheet 1 of 1



## All-round marker light, right, on stand

### Legend

Wiring diagram no. **81.99192.1415** Sheet 1 of 1  
Change status: 05.01

### A = All-round marker light, right, on stand

|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A498</b>  | (516) Control device, all-round marker light                            |
| <b>E196</b>  | (183) All-round marker light (passenger side)                           |
| <b>F188</b>  | (118) Fuse, all-round marker light                                      |
| <b>S227</b>  | (554) Switch, all-round marker light                                    |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1844</b> | Std. all-round marker light, B-pillar, right                            |
| <b>X2242</b> | Std. cable duct, all-round marker light, right                          |
| <b>X2244</b> | Std. base/stand, all-round marker light, right                          |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                          |

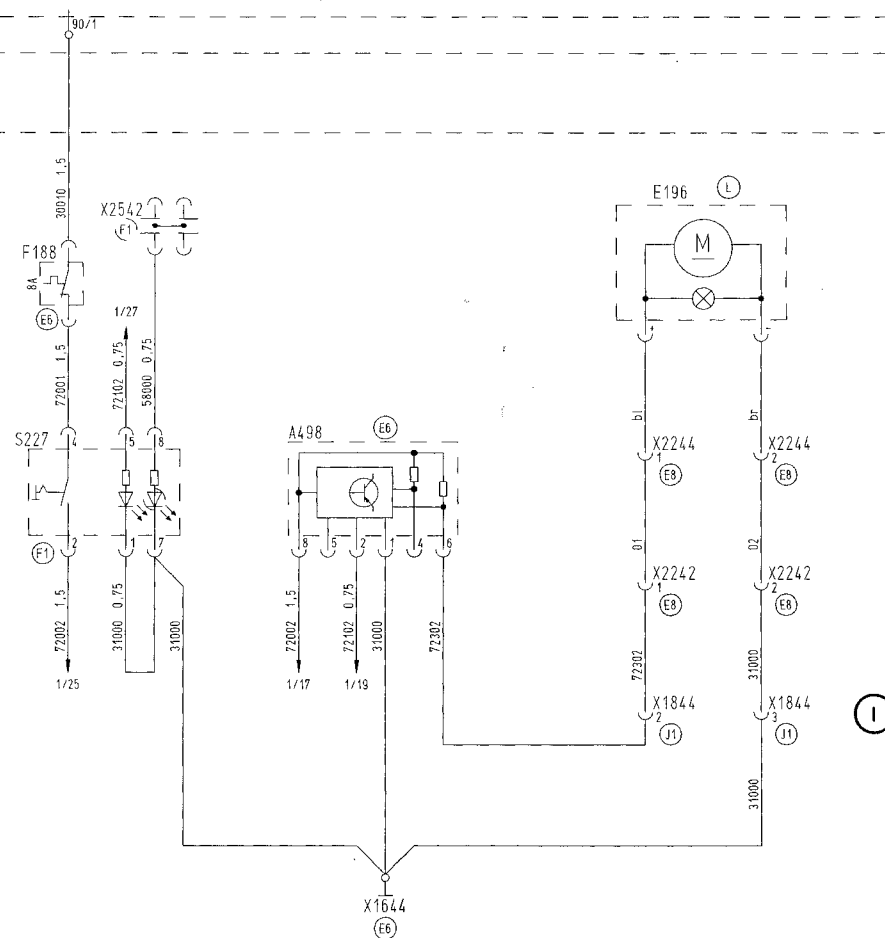
### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

(I) **X1844** on RL H1

A100  
(E6)

A302  
(E6)



①

**A**

**ADDITIONAL WIRING DIAGRAMS**



## Headlight gas discharge with headlight levelling (LL)

### Legend

Wiring diagram no. **81.99192.2651** Sheet **1** of **1**  
Change status: 04.99

**A = Height sensor, front axle**

**B = Headlight, left**

**C = Headlight levelling**

**D = Headlight, right**

**A100** (255) Central fuse, relay and terminal block  
**A187** (493) Headlights, left  
**A188** (494) Headlights, right  
**A302** (352) Central computer 2

**B509** (311) Height sensor, front axle, left

**E108** Parking light, right  
**E109** Parking light, left  
**E110** Dipped beam, right  
**E111** Dipped beam, left  
**E112** Main beam, right  
**E113** Main beam, left

**F117** (101) Fuse, parking tail light, left  
**F118** (101) Fuse, parking tail light, right

**K116** (187) Relay, parking tail light

**M117** (A493) Actuator motor, headlight levelling, left  
**M118** (A494) Actuator motor, headlight levelling, right

**R109** Positioning potentiometer, headlight levelling

**X1545** Std. front region, left  
**X1550** Std. front region, right  
**X1639** Soldered connector, line 16000  
**X1642** Earthing point, cab, behind instrument panel

### Marking of mounting positions

(A) Tail  
(B1) Engine  
(B2) Gearbox  
(C) Front  
(C1) Bumper  
(C2) Entrance right  
(C3) Entrance left  
(E6) Central electrics area  
(E7) Control unit racks  
(E8) Rear wall of cab  
(F) Instrument panel  
(F1) Central part  
(F2) Steering wheel/column  
(F3) Foot pedals  
(F4) Front wall, inside left  
(F5) Front wall, inside right

(F6) Driving seat  
(F7) Passenger seat  
(F8) Control panel  
(G) Battery box  
(H1) B-pillar on driver's side  
(H2) A-pillar on driver's side  
(J1) B-pillar on passenger's side  
(J2) A-pillar on passenger's side  
(L) Ceiling/roof  
(N) Front axle  
(P) Rear axle  
(R1) Front part of frame  
(R2) Rear part of frame  
(S1) Door left  
(S2) Door right

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X2411** Std. height sensor, front axle, left  
**X2508** Std. adaptation, parking light 2

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2651 Sheet 1 of 1



## Headlight gas discharge with headlight levelling (RL)

### Legend

Wiring diagram no. **81.99192.2653** Sheet 1 of 1  
Change status: 04.99

**A = Height sensor, front axle**

**B = Headlight, left**

**C = Headlight levelling**

**D = Headlight, right**

**A100** (255) Central fuse, relay and terminal block  
**A187** (493) Headlights, left  
**A188** (494) Headlights, right  
**A302** (352) Central computer 2

**B509** (311) Height sensor, front axle, left

**E108** Parking light, right  
**E109** Parking light, left  
**E110** Dipped beam, right  
**E111** Dipped beam, left  
**E112** Main beam, right  
**E113** Main beam, left

**F117** (101) Fuse, parking tail light, left  
**F118** (101) Fuse, parking tail light, right

**K116** (187) Relay, parking tail light

**M117** (A493) Actuator motor, headlight levelling, left  
**M118** (A494) Actuator motor, headlight levelling, right

**R109** Positioning potentiometer, headlight levelling

**X1545** Stvd. front region, left  
**X1550** Stvd. front region, right  
**X1639** Soldered connector, line 16000  
**X1642** Earthing point, cab, behind instrument panel

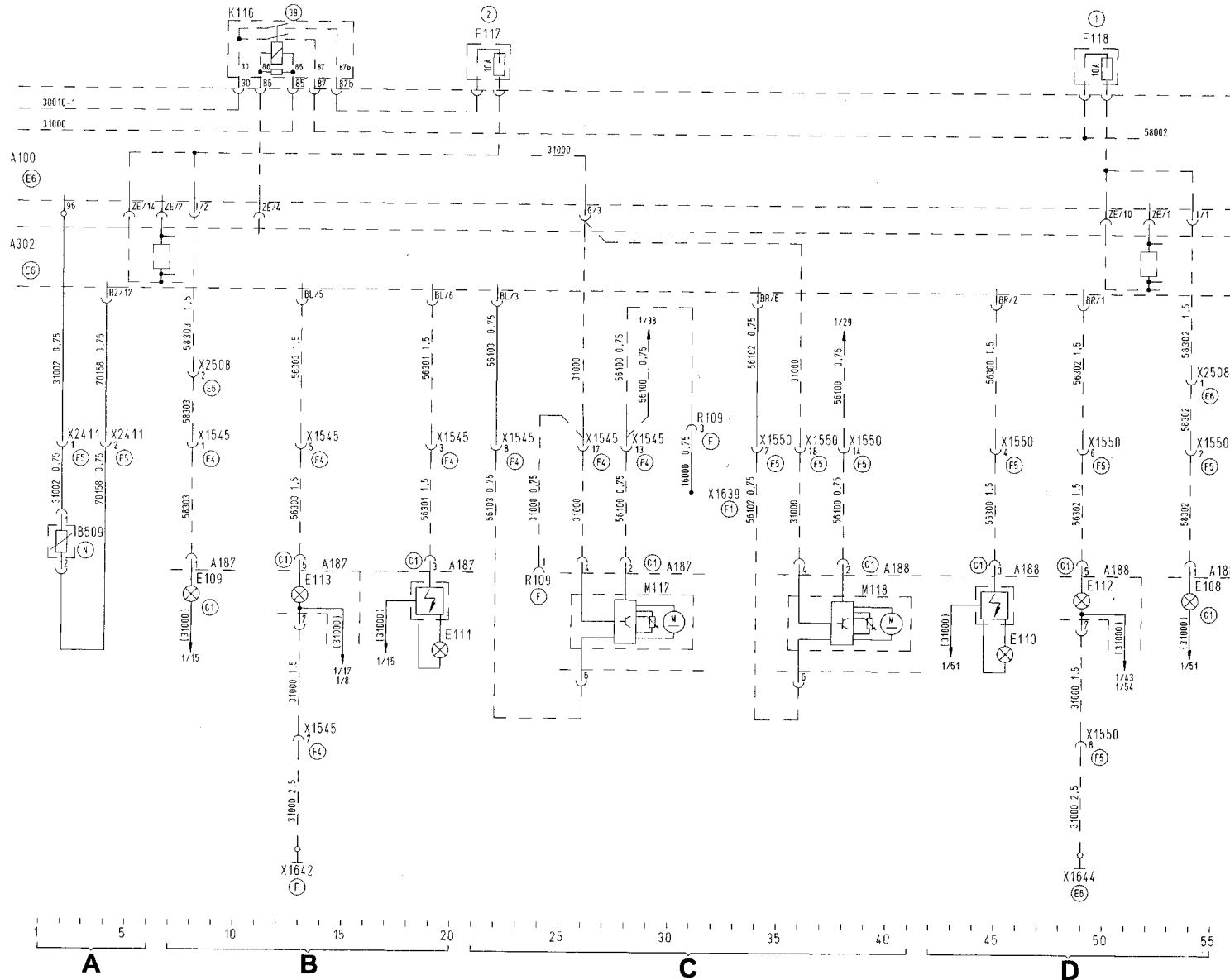
### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X2411** Stvd. height sensor, front axle, left  
**X2508** Stvd. adaptation, parking light 2

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2653 Sheet 1 of 1



## Headlight gas discharge without headlight levelling

### Legend

Wiring diagram no. **81.99192.2652** Sheet **1** of 1

Change status: 04.99

**A = Headlight, left**

**B = Headlight, right**

**A100** (255) Central fuse, relay and terminal block  
**A187** (493) Headlights, left  
**A188** (494) Headlights, right  
**A302** (352) Central computer 2

**E108** Parking light, right  
**E109** Parking light, left  
**E110** Dipped beam, right  
**E111** Dipped beam, left  
**E112** Main beam, right  
**E113** Main beam, left

**F117** (101) Fuse, parking tail light, left  
**F118** (101) Fuse, parking tail light, right

**K116** (187) Relay, parking tail light

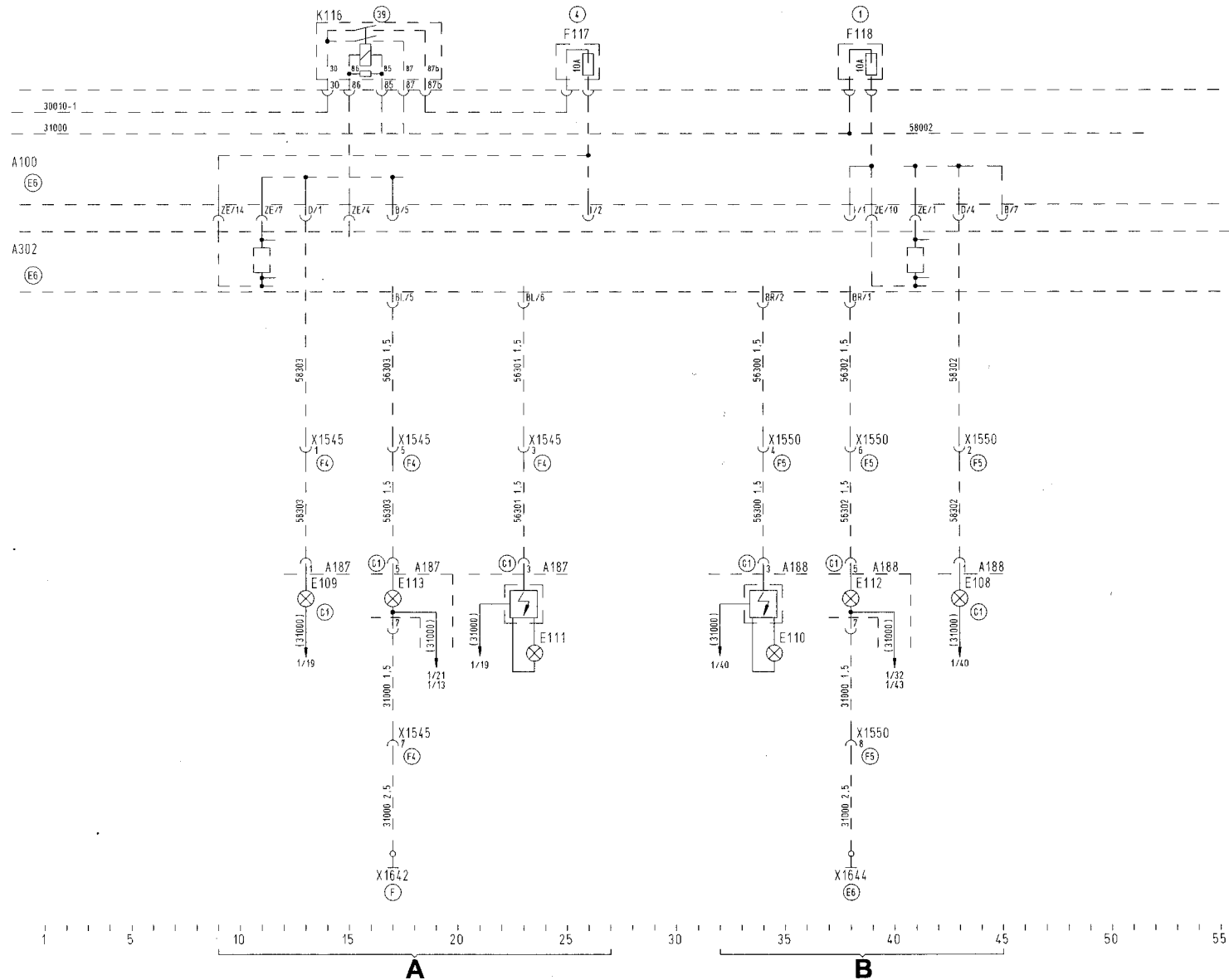
**X1545** Stvd. front region, left  
**X1550** Stvd. front region, right  
**X1642** Earthing point, cab, behind instrument panel  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (FB) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

**ADDITIONAL WIRING DIAGRAMS**

Wiring diagram no. **81.99192.2652** Sheet **1** of 1



## Headlight cleaning unit (LL)

### Legend

Wiring diagram no. **81.99192.1392** Sheet 1 of 1

Change status: 04.01

### A = Headlight cleaning unit

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**H382** Indicator light, level of washing water

**M175** (149) Washer pump for headlight cleaning unit

**S193** (553) Control switch, headlight cleaning unit

**X1545** Stvd. front region, left

**X1757** Soldered connector, line 16006

**X2541** (246) Potential distributor, 21-pin line 31000

**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

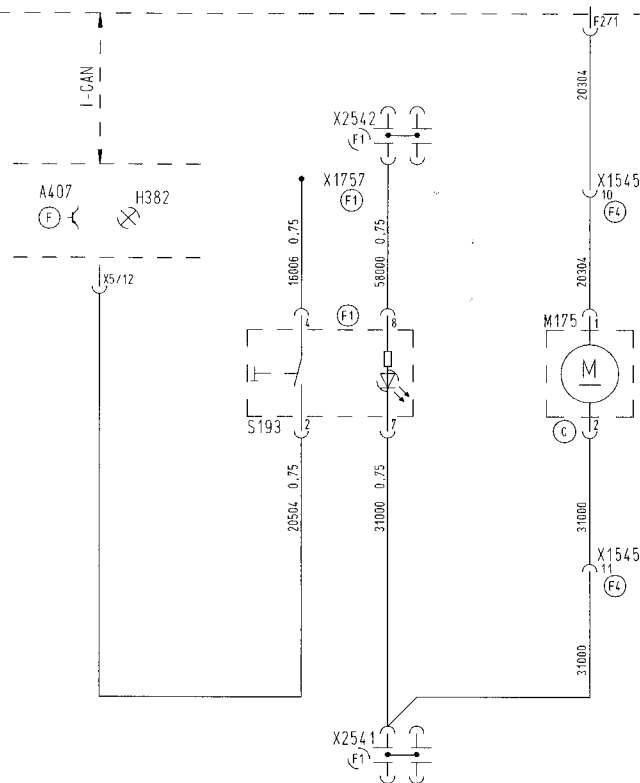
(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1392** Sheet 1 of 1

A100  
(E6)

A302  
(E6)





## Headlight cleaning unit (RL)

### Legend

Wiring diagram no. **81.99192.1393** Sheet **1** of 1

Change status: 04.01

### A = Headlight cleaning unit

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**H382** Indicator light, level of washing water

**M175** (149) Washer pump for headlight cleaning unit

**S193** (553) Control switch, headlight cleaning unit

**X1550** Stvd. front region, right

**X1757** Soldered connector, line 16006

**X2541** (246) Potential distributor, 21-pin line 31000

**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

ADDITIONAL WIRING DIAGRAMS

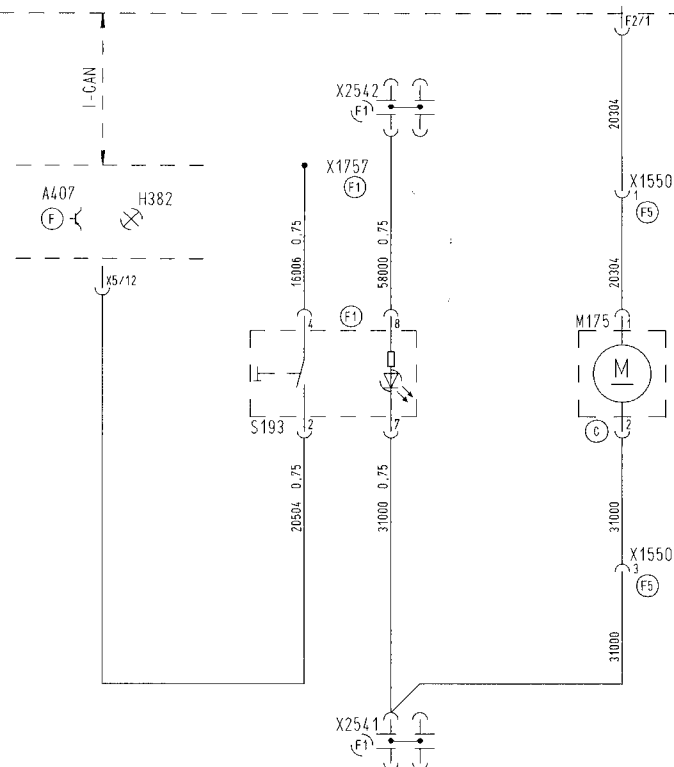
Wiring diagram no. **81.99192.1393** Sheet **1** of 1

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

A

## Sunroof (INALFA) (LL)

### Legend

Wiring diagram no. **81.99192.1394** Sheet **1** of 1  
Change status: 04.01

### A = Sunroof

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A451** (441) Door module (driver's side)  
**A473** (369) Sunroof

**F402** (118) Fuse, sunroof

**S542** (495) Control switch, sunroof  
**S713** (495) Control switch, sunroof

**X147** Stvd. sunroof/roof hatch  
**X1547** Stvd. door left  
**X1567** Stvd. sunroof  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

- |                             |                                 |
|-----------------------------|---------------------------------|
| Ⓐ Tail                      | ⒻⒼ Driving seat                 |
| ⒷⒶ Engine                   | ⒻⒿ Passenger seat               |
| ⒷⒶ Gearbox                  | ⒼⒾ Control panel                |
| Ⓒ Front                     | ⒼⒿ Battery box                  |
| ⒸⒶ Bumper                   | ⒻⒾ B-pillar on driver's side    |
| ⒸⒶ Entrance right           | ⒻⒿ A-pillar on driver's side    |
| ⒸⒶ Entrance left            | ⒼⒿ B-pillar on passenger's side |
| ⒼⒶ Central electrics area   | ⒼⒿ A-pillar on passenger's side |
| ⒼⒶ Control unit racks       | ⒼⒿ Ceiling/roof                 |
| ⒼⒶ Rear wall of cab         | ⒼⒿ Front axle                   |
| ⒼⒶ Instrument panel         | ⒼⒿ Rear axle                    |
| ⒼⒶ Central part             | ⒼⒿ Front part of frame          |
| ⒼⒶ Steering wheel/column    | ⒼⒿ Rear part of frame           |
| ⒼⒶ Foot pedals              | ⒼⒿ Door left                    |
| ⒼⒶ Front wall, inside left  | ⒼⒿ Door right                   |
| ⒼⒶ Front wall, inside right |                                 |
| ⒼⒶ Sunroof electronics      |                                 |



## ADDITIONAL WIRING DIAGRAMS

### Sunroof (INALFA) (RL)

#### Legend

Wiring diagram no. **81.99192.1395** Sheet **1** of 1  
Change status: 04.01

#### A = Sunroof

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A452** (441) Door module (driver's side)  
**A473** (369) Sunroof

**F402** (118) Fuse, sunroof

**S542** (495) Control switch, sunroof  
**S713** (495) Control switch, sunroof

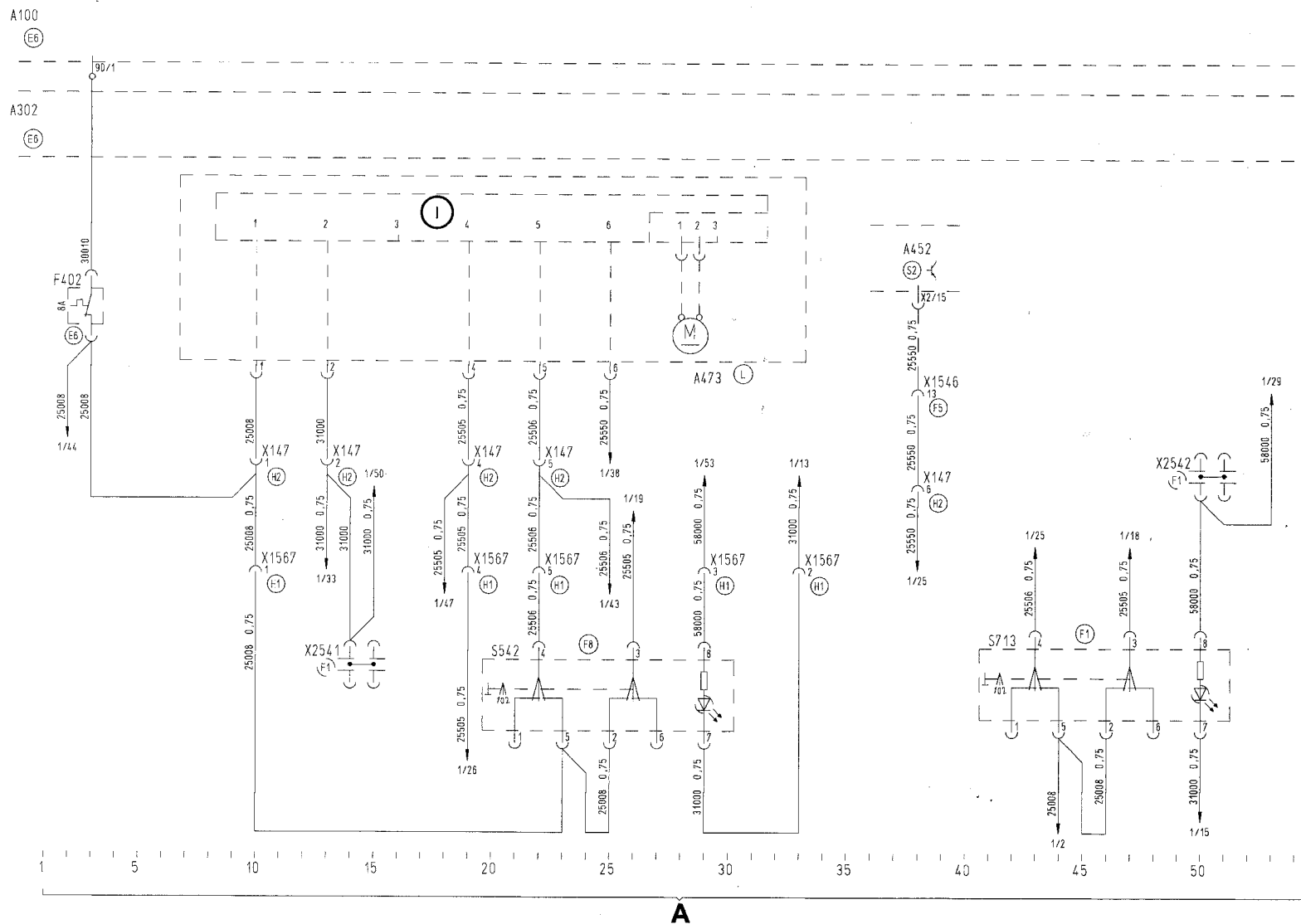
**X147** Stvd. sunroof/roof hatch  
**X1546** Stvd. door, right  
**X1567** Stvd. sunroof  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2542** (246) Potential distributor, 21-pin line 58000

#### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓖ Battery box                  |
| Ⓔ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓕ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓖ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓕ Instrument panel         | Ⓕ Rear axle                    |
| Ⓕ Central part             | Ⓕ Front part of frame          |
| Ⓕ Steering wheel/column    | Ⓕ Rear part of frame           |
| Ⓕ Foot pedals              | Ⓕ Door left                    |
| Ⓕ Front wall, inside left  | Ⓕ Door right                   |
| Ⓕ Front wall, inside right |                                |
| Ⓕ Sunroof electronics      |                                |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1395** Sheet 1 of 1



## ADDITIONAL WIRING DIAGRAMS

### Bunk light, top

#### Legend

Wiring diagram no. **81.99192.1396** Sheet 1 of 1

Change status: 04.01

#### A = Bunk light, top

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

E292 (173) Lamp, driver's bunk, top

X1981 Stvd. bunk light, top

X2541 (246) Potential distributor, 21-pin line 31000

X2543 (246) Potential distributor, 21-pin line 30006

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

**ADDITIONAL WIRING DIAGRAMS**

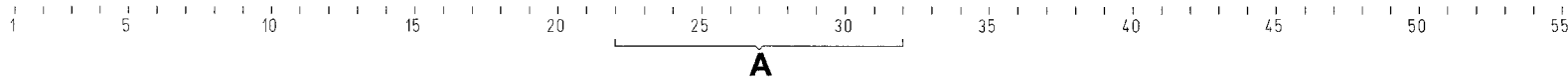
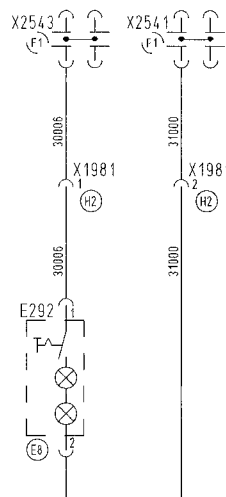
Wiring diagram no. **81.99192.1396** Sheet 1 of 1

A100

(E6)

A302

(E6)





**Bunk light, bottom (LL)**

**Legend**

Wiring diagram no. **81.99192.1397** Sheet **1** of 1  
Change status: 04.01

**A = Bunk light, bottom**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**E274** (173) Bunk lamp, bottom

**X1573** Stvd. bunk lighting, bottom  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2543** (246) Potential distributor, 21-pin line 30006

**Marking of mounting positions**

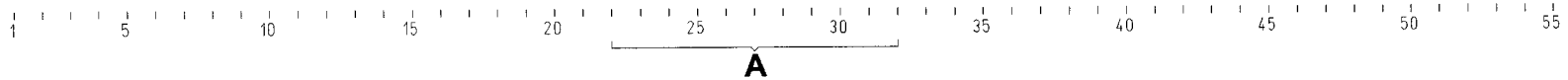
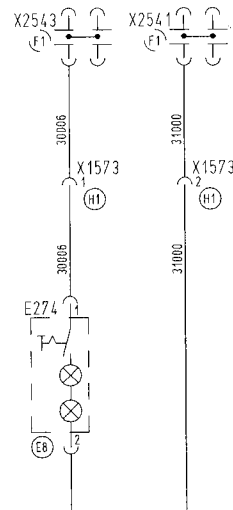
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1397** Sheet **1** of **1**

A100  
E6

A302  
E6



## Bunk light, bottom (RL)

### Legend

Wiring diagram no. **81.99192.1398** Sheet 1 of 1  
Change status: 04.01

### A = Bunk light, bottom

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**E274** (173) Bunk lamp, bottom

**X1573** Stvd. bunk lighting, bottom

**X2541** (246) Potential distributor, 21-pin line 31000

**X2543** (246) Potential distributor, 21-pin line 30006

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

**ADDITIONAL WIRING DIAGRAMS**

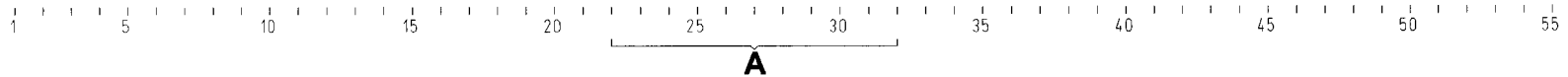
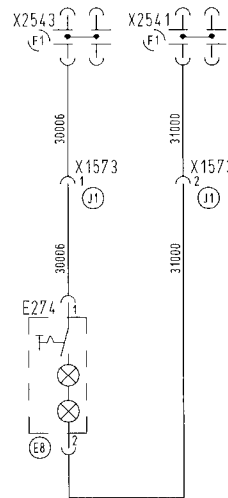
Wiring diagram no. **81.99192.1398** Sheet **1** of **1**

A100

(E6)

A302

(E6)



## Side marker lights (LL)

### Legend

Wiring diagram no. **81.99192.2592** Sheet 1 of 1  
Change status: 10.99

**A = Side marker lights, left**

**B = Side marker lights, right**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**E210** (193) 1. Side marker light, right  
**E211** (193) 1. Side marking light, left  
**E212** (193) 2. Side marker light, right  
**E213** (193) 2. Side marking light, left  
**E...** (193) Other side marker light with no title  
**E...** (193) Last side marker light with no title

**G101** (113) Battery 2

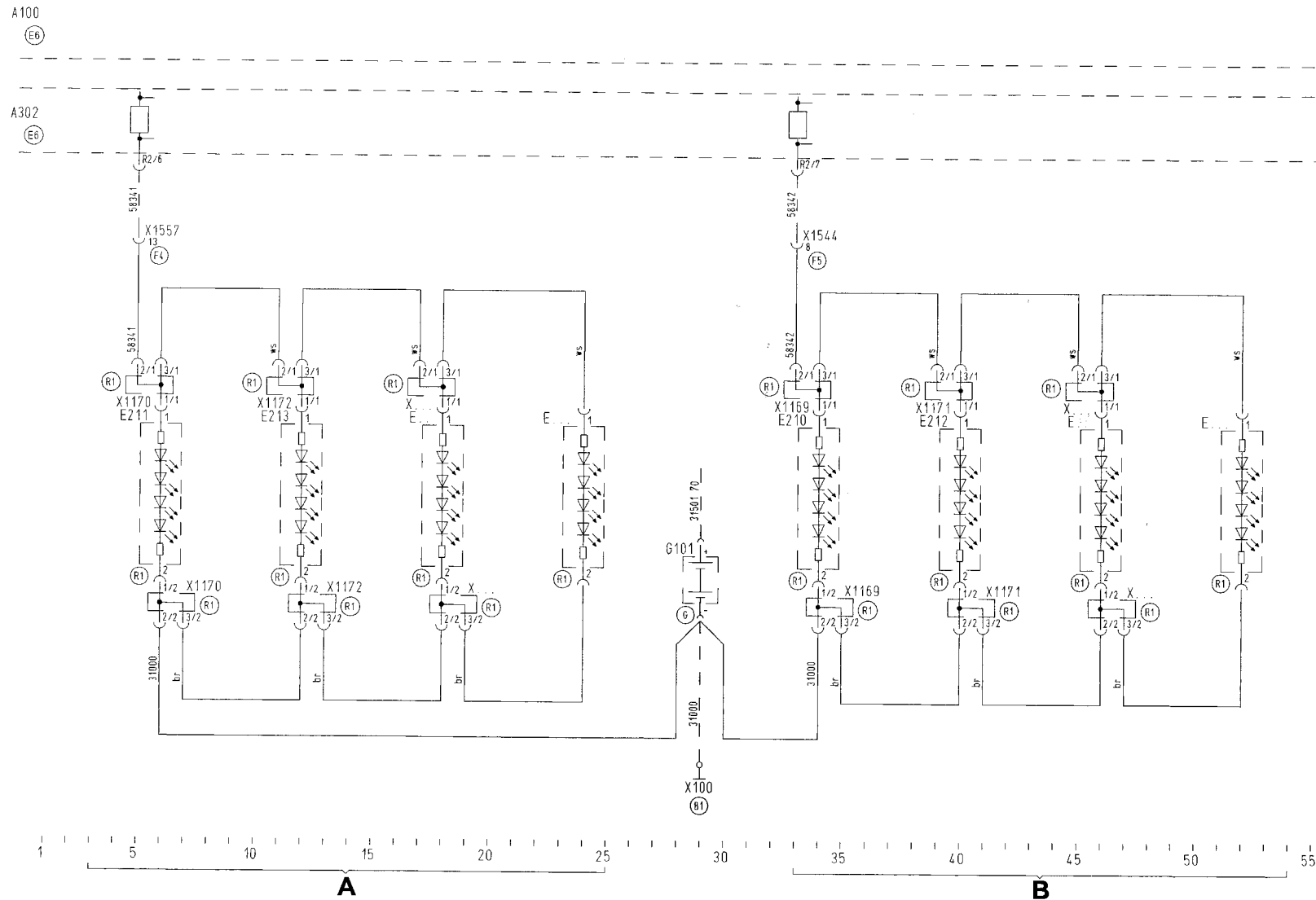
**X100** Earthing point, engine  
**X1169** (170) 3x coupling for 1st side marker light, right  
**X1170** (170) 3x coupling for 1st side marker light, left  
**X1171** (170) 3x coupling for 2nd side marker light, right  
**X1172** (170) 3x coupling for 2nd side marker light, left  
**X1544** Stvd. frame III  
**X1557** Stvd. frame, left  
**X...** (170) Other coupling with no title

## Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2592 Sheet 1 of 1



## Seat heating, driver

### Legend

Wiring diagram no. **81.99192.2494** Sheet **1** of 1

Change status: 02.00

### A = Sitzheizung Fahrer

**A100** (255) Central fuse, relay and terminal block

**A233** (461) Seat, driver's side

**A302** (352) Central computer 2

**F198** (118) Fuse, seat heating

**R135** (143) Potentiometer seat heating, driver

**X1565** Stvd. seat heating, left

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Temperature (NTC)

Ⓙ Seat

Ⓚ Backrest

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

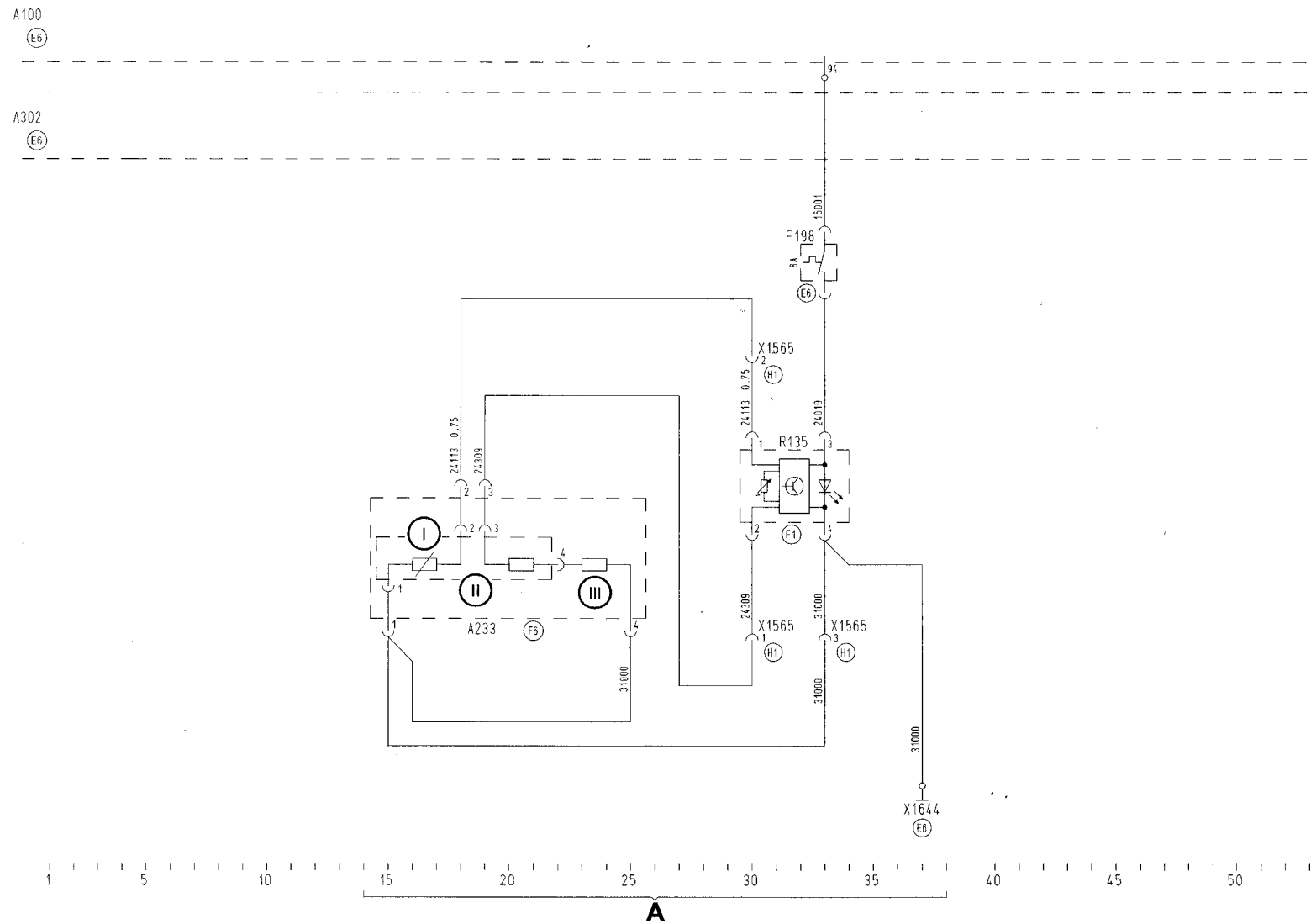
Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2494 Sheet 1 of 1





## ADDITIONAL WIRING DIAGRAMS

### Seat heating, driver and passenger

#### Legend

Wiring diagram no. **81.99192.2493** Sheet 1 of 1

Change status: 02.00

**A = Seat heating, driver**

**B = Seat heating, passenger**

**A100** (255) Central fuse, relay and terminal block

**A232** (461) Seat, passenger side

**A233** (461) Seat, driver's side

**A302** (352) Central computer 2

**F198** (118) Fuse, seat heating

**R135** (143) Potentiometer seat heating, driver

**R136** (143) Potentiometer seat heating, passenger

**X1564** Stvd. seat heating, right

**X1565** Stvd. seat heating, left

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

#### Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Temperature (NTC)

Ⓙ Seat

Ⓚ Backrest

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

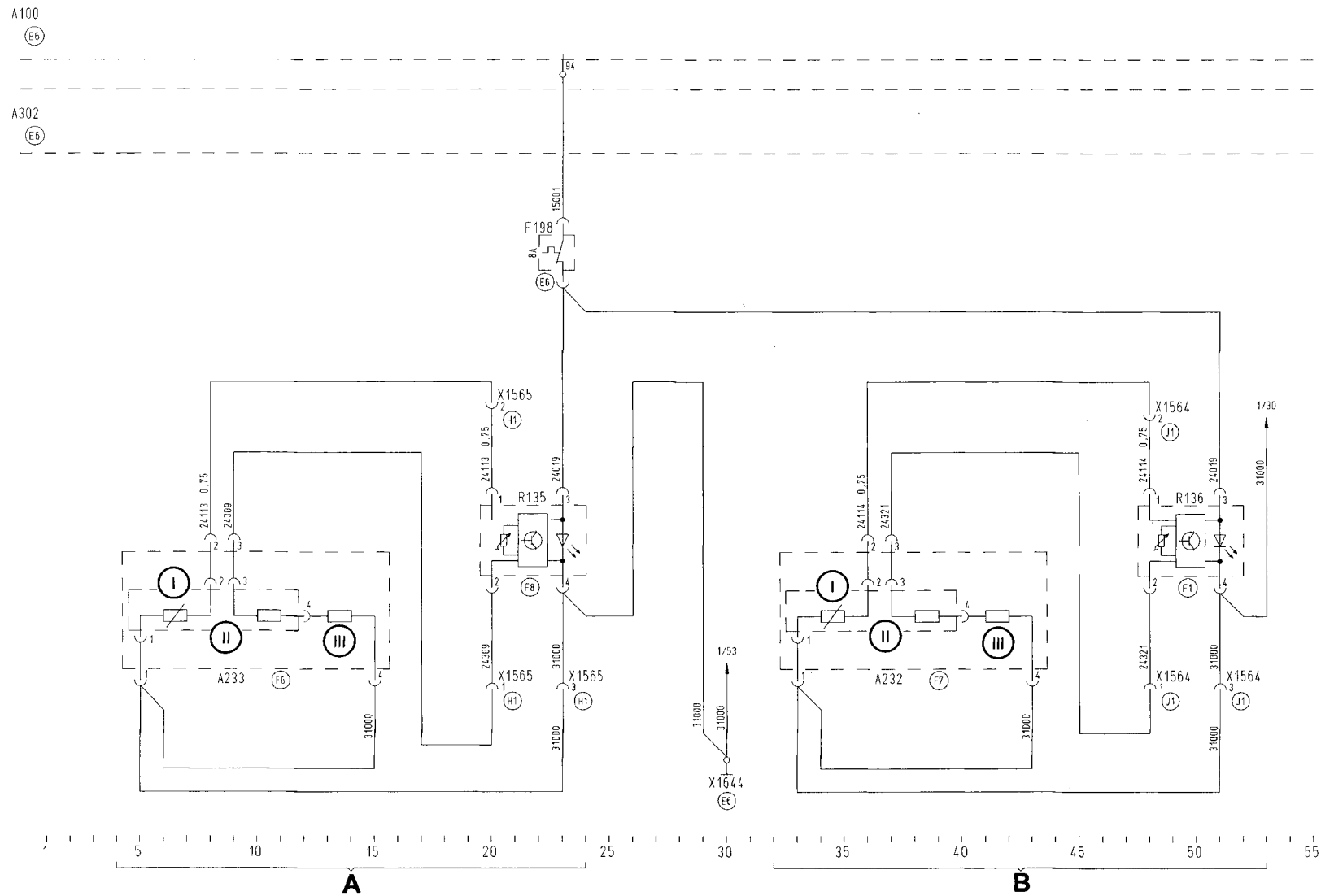
Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2493 Sheet 1 of 1



**Seat adjustment, electric (driver)**

**Legend**

Wiring diagram no. **81.99192.1483** Sheet **1** of 1  
Change status: 05.01

**A = Seat adjustment, electric, driver**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A487** (393) Electrically adjustable driving seat

**F274** (129) Fuse, seat adjustment

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1993** Stvd. seat adjustment, right

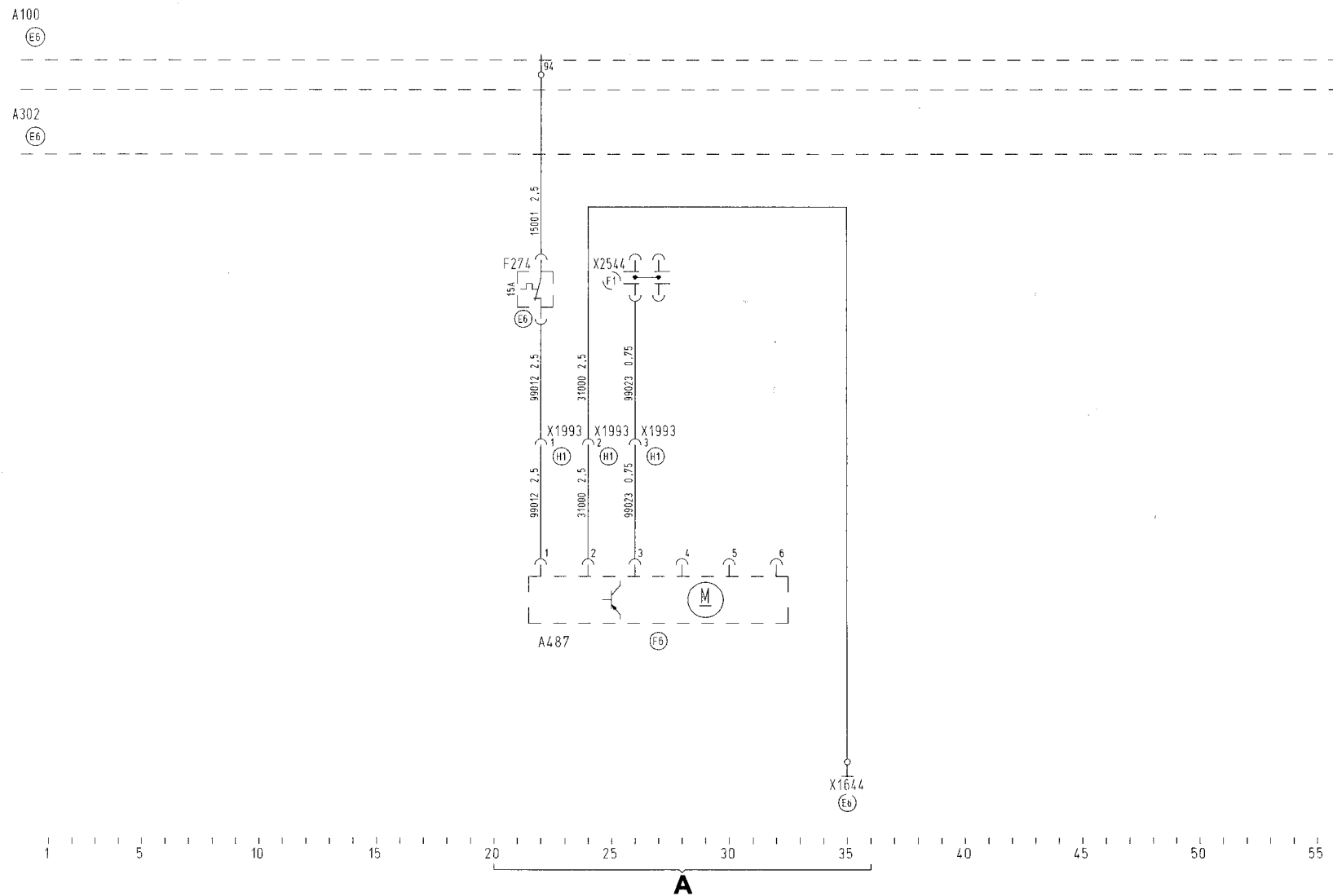
**X2544** (246) Potential distributor 21-pin K-line

**Marking of mounting positions**

- |                             |                                  |
|-----------------------------|----------------------------------|
| Ⓐ Tail                      | Ⓕ Driving seat                   |
| Ⓑ Engine                    | Ⓖ Passenger seat                 |
| Ⓑ2 Gearbox                  | ⒼB Control panel                 |
| Ⓒ Front                     | ⒼG Battery box                   |
| Ⓒ1 Bumper                   | ⒼH1 B-pillar on driver's side    |
| Ⓒ2 Entrance right           | ⒼH2 A-pillar on driver's side    |
| Ⓒ3 Entrance left            | ⒼJ1 B-pillar on passenger's side |
| Ⓔ Central electrics area    | ⒼJ2 A-pillar on passenger's side |
| Ⓔ7 Control unit racks       | ⒼL Ceiling/roof                  |
| Ⓔ8 Rear wall of cab         | ⒼN Front axle                    |
| Ⓕ Instrument panel          | ⒼP Rear axle                     |
| Ⓕ1 Central part             | ⒼR1 Front part of frame          |
| Ⓕ2 Steering wheel/column    | ⒼR2 Rear part of frame           |
| Ⓕ3 Foot pedals              | ⒼS1 Door left                    |
| Ⓕ4 Front wall, inside left  | ⒼS2 Door right                   |
| Ⓕ5 Front wall, inside right |                                  |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1483** Sheet **1** of **1**



## ADDITIONAL WIRING DIAGRAMS

### Seat adjustment, electric (passenger)

#### Legend

Wiring diagram no. **81.99192.1484** Sheet 1 of 1

Change status: 05.01

#### A = Seat adjustment, electric, passenger

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A488** (394) Electrically adjustable passenger seat

**F425** (129) Fuse, seat adjustment, right

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1992** Stvd. seat adjustment, right

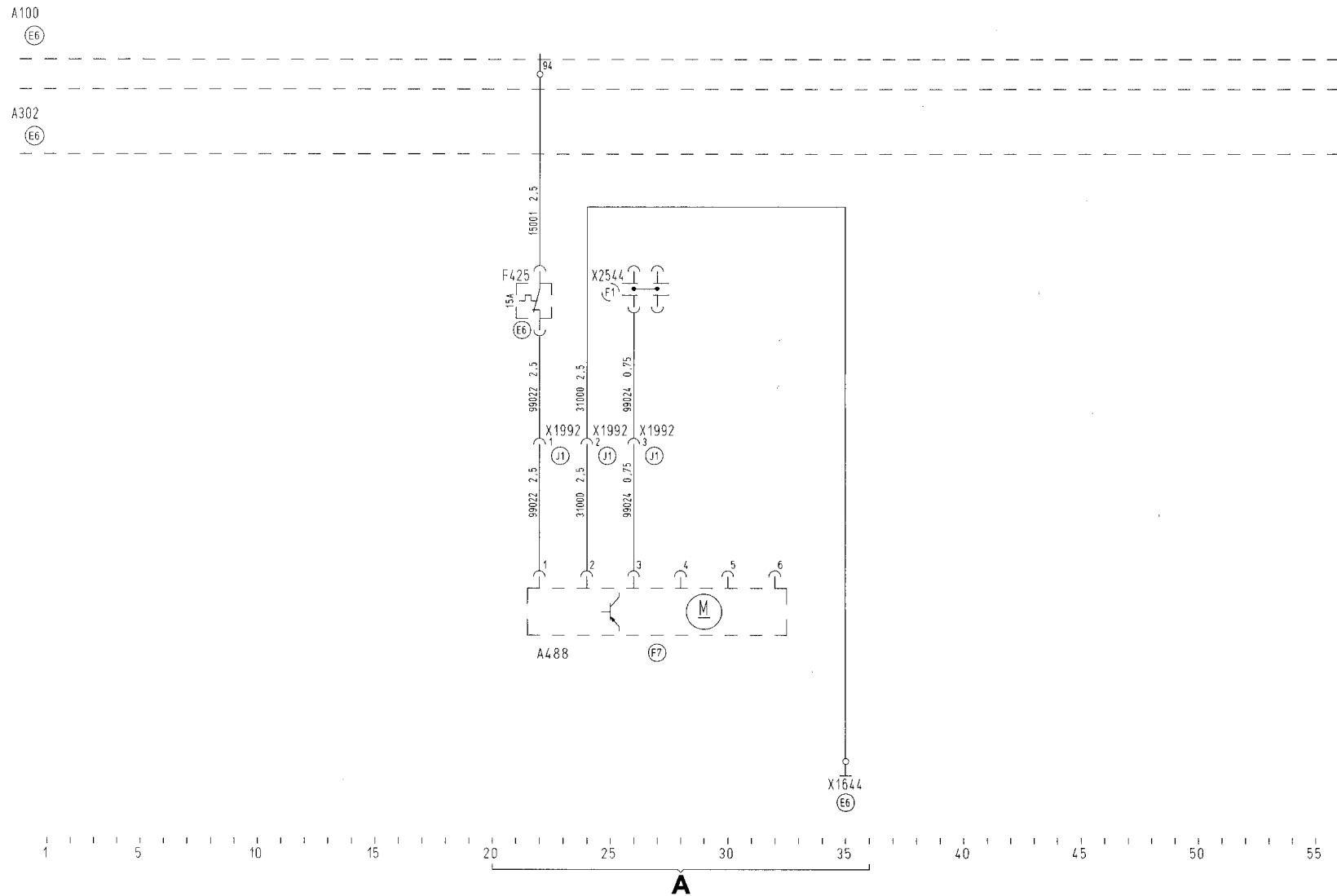
**X2544** (246) Potential distributor 21-pin K-line

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1484** Sheet **1** of **1**



## Sunblind, electric

### Legend

Wiring diagram no. **81.99192.1399** Sheet 1 of 1

Change status: 04.01

**A = Sunblind, electric, driver**

**B = Sunblind, electric, passenger**

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**F426** (118) Fuse, sunblind

**M124** (154) Sunblind, electr. actuated, right

**M125** (154) Sunblind, electr. actuated, left

**S233** (574) Control switch, sunblind driver, driver's side

**S234** (574) Control switch, sunblind passenger, passenger's side

**X1994** Stvd. sunblind, right

**X1995** Stvd. sunblind, left

**X2541** (246) Potential distributor, 21-pin line 31000

**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

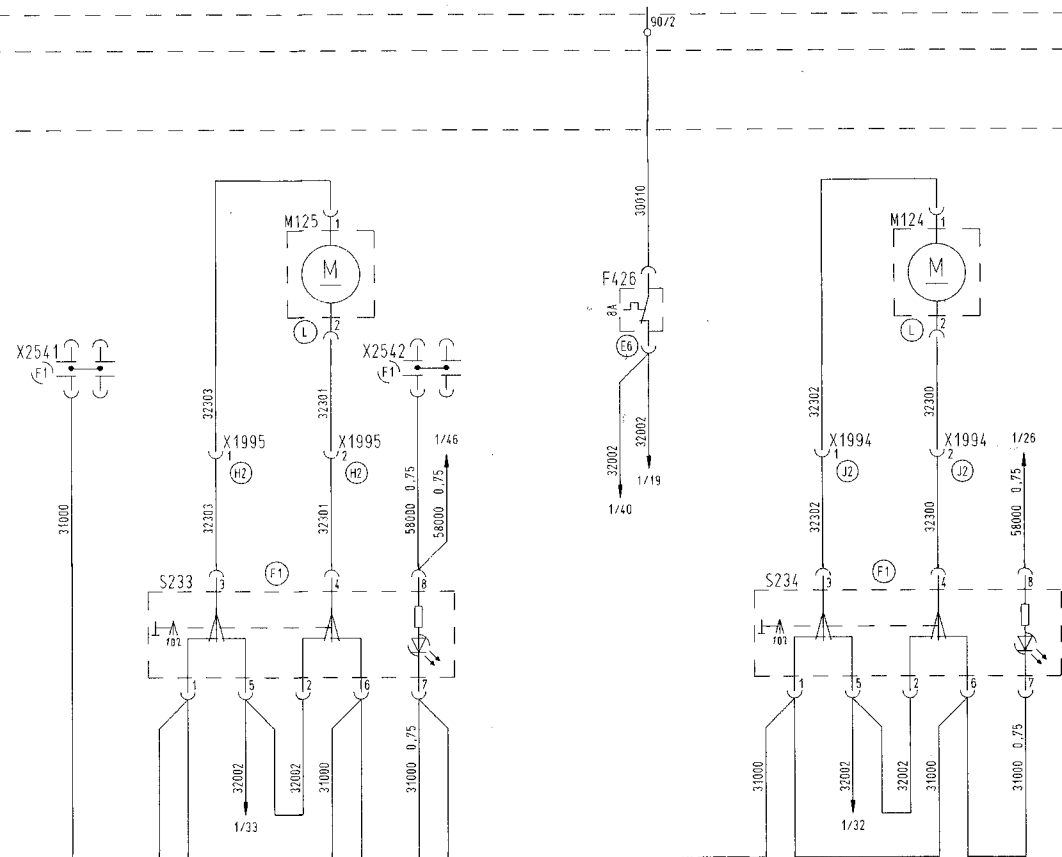
Wiring diagram no. 81.99192.1399 Sheet 1 of 1

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

**A** **B**



## Voltage limiter

### Legend

Wiring diagram no. **81.99192.2850** Sheet 1 of 1  
Change status: 08.00

### A = Voltage limiter

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A408** (403) Tachograph

**G100** (113) Battery 1  
**G101** (113) Battery 2

**T105** (116) Voltage limiter, tachograph

**X100** Earthing point, engine  
**X2047** Stvd. tachograph  
**X2071** Stvd. voltage limiter

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ2 Gearbox                 | Ⓕ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ1 Bumper                  | Ⓕ B-pillar on driver's side    |
| Ⓒ2 Entrance right          | Ⓕ A-pillar on driver's side    |
| Ⓒ3 Entrance left           | Ⓕ B-pillar on passenger's side |
| Ⓔ Central electrics area   | Ⓕ A-pillar on passenger's side |
| Ⓕ Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓕ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓕ Instrument panel         | Ⓕ Rear axle                    |
| Ⓕ Central part             | Ⓕ Front part of frame          |
| Ⓕ Steering wheel/column    | Ⓕ Rear part of frame           |
| Ⓕ Foot pedals              | Ⓕ Door left                    |
| Ⓕ Front wall, inside left  | Ⓕ Door right                   |
| Ⓕ Front wall, inside right |                                |
| Ⓕ Output                   |                                |
| Ⓕ Input                    |                                |

## START-STOP device on engine

### Legend

Wiring diagram no. **81.99192.1401** Sheet 1 of 1

Change status: 05.01

### A = Start-stop device on engine

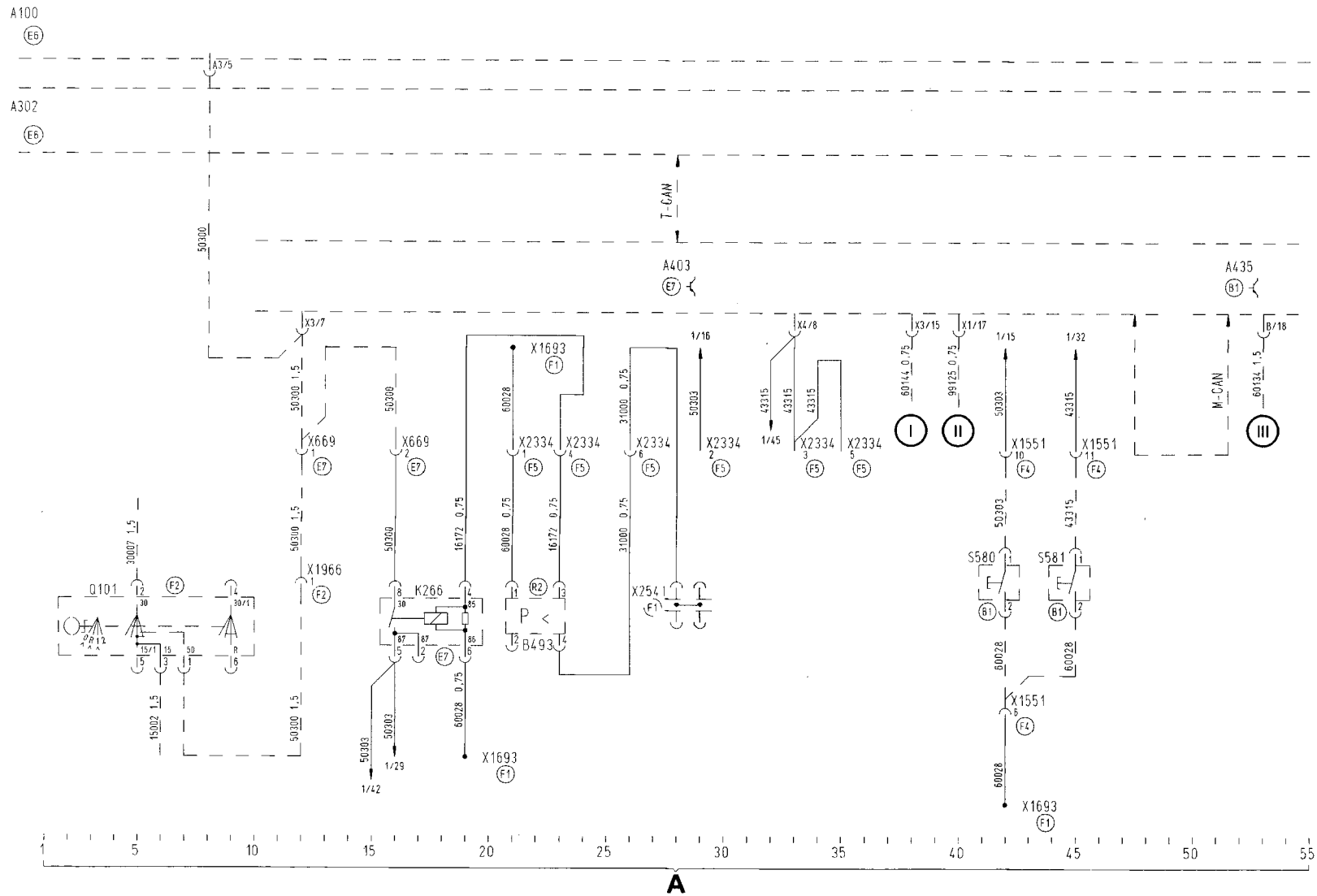
|              |       |                                                           |
|--------------|-------|-----------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                    |
| <b>A302</b>  | (352) | Central computer 2                                        |
| <b>A403</b>  | (339) | Vehicle management computer                               |
| <b>A435</b>  | (338) | EDC control unit                                          |
| <b>B493</b>  | (276) | Pressure switch, parking brake switch start-stop external |
| <b>K266</b>  | (280) | Relay, parking brake (on start-stop device)               |
| <b>Q101</b>  | (110) | Steering wheel lock                                       |
| <b>S580</b>  | (580) | Control switch, engine start (MP box)                     |
| <b>S581</b>  | (580) | Control switch, engine stop (MP box)                      |
| <b>X669</b>  |       | Std. start inhibitor                                      |
| <b>X1551</b> |       | Std. engine/EDC/transmission II                           |
| <b>X1693</b> |       | Crimped connector, line 60028                             |
| <b>X1966</b> |       | Std. ignition lock                                        |
| <b>X2334</b> |       | Std. start-stop device                                    |
| <b>X2541</b> | (246) | Potential distributor, 21-pin line 31000                  |

### Marking of mounting positions

|   |                             |   |                              |
|---|-----------------------------|---|------------------------------|
| Ⓐ | Tail                        | Ⓕ | Driving seat                 |
| Ⓑ | Engine                      | Ⓖ | Passenger seat               |
| Ⓑ | Gearbox                     | Ⓕ | Control panel                |
| Ⓒ | Front                       | Ⓖ | Battery box                  |
| Ⓒ | Bumper                      | Ⓕ | B-pillar on driver's side    |
| Ⓒ | Entrance right              | Ⓕ | A-pillar on driver's side    |
| Ⓒ | Entrance left               | Ⓖ | B-pillar on passenger's side |
| Ⓖ | Central electrics area      | Ⓖ | A-pillar on passenger's side |
| Ⓖ | Control unit racks          | Ⓖ | Ceiling/roof                 |
| Ⓖ | Rear wall of cab            | Ⓖ | Front axle                   |
| Ⓖ | Instrument panel            | Ⓖ | Rear axle                    |
| Ⓖ | Central part                | Ⓖ | Front part of frame          |
| Ⓖ | Steering wheel/column       | Ⓖ | Rear part of frame           |
| Ⓖ | Foot pedals                 | Ⓖ | Door left                    |
| Ⓖ | Front wall, inside left     | Ⓖ | Door right                   |
| Ⓖ | Front wall, inside right    |   |                              |
| Ⓖ | Vehicle immobiliser         |   |                              |
| Ⓖ | Transmission, neutral       |   |                              |
| Ⓖ | Starting motor, terminal 50 |   |                              |

## ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1401** Sheet **1** of **1**



## ADDITIONAL WIRING DIAGRAMS

### START-STOP device at end of frame

#### Legend

Wiring diagram no. **81.99192.1402** Sheet **1** of 1  
Change status: 05.01

#### A = Start-stop device on frame end

|              |                                                                 |
|--------------|-----------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                    |
| <b>A302</b>  | (352) Central computer 2                                        |
| <b>A403</b>  | (339) Vehicle management computer                               |
| <b>A435</b>  | (338) EDC control unit                                          |
| <b>B490</b>  | (276) Pressure switch, parking brake switch start-stop external |
| <b>K266</b>  | (280) Relay, parking brake (on start-stop device)               |
| <b>Q101</b>  | (110) Steering wheel lock                                       |
| <b>S202</b>  | Control switch, engine start (superstructure)                   |
| <b>S203</b>  | Control switch, engine stop (superstructure)                    |
| <b>X669</b>  | Stvd. start inhibitor                                           |
| <b>X679</b>  | Stvd. start-stop device                                         |
| <b>X1551</b> | Stvd. engine/EDC/transmission II                                |
| <b>X1693</b> | Crimped connector, line 60028                                   |
| <b>X1966</b> | Stvd. ignition lock                                             |
| <b>X2541</b> | (246) Potential distributor, 21-pin line 31000                  |

### Marking of mounting positions

|              |                             |             |                              |
|--------------|-----------------------------|-------------|------------------------------|
| <b>(A)</b>   | Tail                        | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b>  | Engine                      | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b>  | Gearbox                     | <b>(F8)</b> | Control panel                |
| <b>(C)</b>   | Front                       | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b>  | Bumper                      | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b>  | Entrance right              | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b>  | Entrance left               | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b>  | Central electrics area      | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b>  | Control unit racks          | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b>  | Rear wall of cab            | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>   | Instrument panel            | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b>  | Central part                | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b>  | Steering wheel/column       | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b>  | Foot pedals                 | <b>(S1)</b> | Door left                    |
| <b>(F4)</b>  | Front wall, inside left     | <b>(S2)</b> | Door right                   |
| <b>(F5)</b>  | Front wall, inside right    |             |                              |
| <b>(I)</b>   | Vehicle immobiliser         |             |                              |
| <b>(II)</b>  | Transmission, neutral       |             |                              |
| <b>(III)</b> | Starting motor, terminal 50 |             |                              |

K 90

## START-STOP device on engine and end of frame

### Legend

Wiring diagram no. **81.99192.1403** Sheet 1 of 1

Change status: 05.01

### A = Start-stop device on engine and frame end

|              |       |                                                           |
|--------------|-------|-----------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                    |
| <b>A302</b>  | (352) | Central computer 2                                        |
| <b>A403</b>  | (339) | Vehicle management computer                               |
| <b>A435</b>  | (338) | EDC control unit                                          |
| <b>B490</b>  | (276) | Pressure switch, parking brake switch start-stop external |
| <b>K266</b>  | (280) | Relay, parking brake (on start-stop device)               |
| <b>Q101</b>  | (110) | Steering wheel lock                                       |
| <b>S202</b>  |       | Control switch, engine start (superstructure)             |
| <b>S203</b>  |       | Control switch, engine stop (superstructure)              |
| <b>S580</b>  | (580) | Control switch, engine start (MP box)                     |
| <b>S581</b>  | (580) | Control switch, engine stop (MP box)                      |
| <b>X669</b>  |       | Std. start inhibitor                                      |
| <b>X679</b>  |       | Std. start-stop device                                    |
| <b>X1551</b> |       | Std. engine/EDC/transmission II                           |
| <b>X1693</b> |       | Crimped connector, line 60028                             |
| <b>X1966</b> |       | Std. ignition lock                                        |
| <b>X2541</b> | (246) | Potential distributor, 21-pin line 31000                  |

### Marking of mounting positions

|              |                             |             |                              |
|--------------|-----------------------------|-------------|------------------------------|
| <b>(A)</b>   | Tail                        | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b>  | Engine                      | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b>  | Gearbox                     | <b>(F8)</b> | Control panel                |
| <b>(C)</b>   | Front                       | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b>  | Bumper                      | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b>  | Entrance right              | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b>  | Entrance left               | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b>  | Central electrics area      | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b>  | Control unit racks          | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b>  | Rear wall of cab            | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>   | Instrument panel            | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b>  | Central part                | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b>  | Steering wheel/column       | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b>  | Foot pedals                 | <b>(S1)</b> | Door left                    |
| <b>(F4)</b>  | Front wall, inside left     | <b>(S2)</b> | Door right                   |
| <b>(F5)</b>  | Front wall, inside right    |             |                              |
| <b>(I)</b>   | Vehicle immobiliser         |             |                              |
| <b>(II)</b>  | Transmission, neutral       |             |                              |
| <b>(III)</b> | Starting motor, terminal 50 |             |                              |

## 4.19 - 41



## Locker lighting, rear left (LL)

### Legend

Wiring diagram no. **81.99192.2489** Sheet **1** of 1  
Change status: 12.99

### A = Locker lighting, rear left

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**E281** (170) Locker lighting, rear left

**X1569** Stvd. locker lighting, left  
**X1827** Crimped connector, line 31000

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



ADDITIONAL WIRING DIAGRAMS

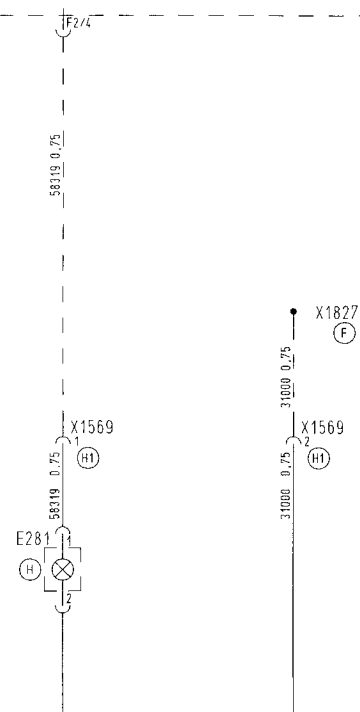
Wiring diagram no. **81.99192.2489** Sheet **1** of **1**

A100

(E6)

A302

(E6)



## Locker lighting, rear left (RL)

### Legend

Wiring diagram no. **81.99192.2411** Sheet **1** of 1  
Change status: 12.99

### A = Locker lighting, rear left

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**E281** (170) Locker lighting, rear left

**X1569** Stvd. locker illumination, left

**X1827** Crimped connector, line 31000

### Marking of mounting positions

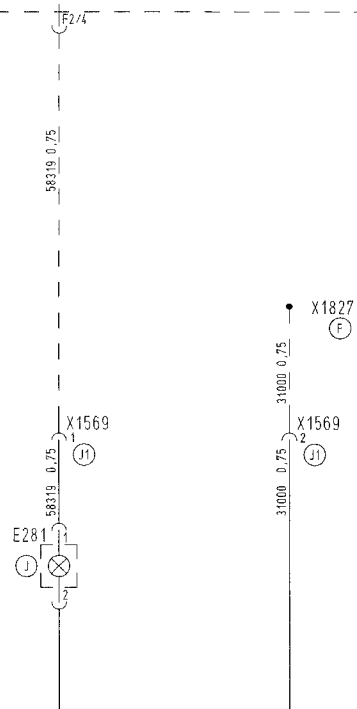
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2411** Sheet 1 of 1

A100  
(E6)

A302  
(E6)



## ADDITIONAL WIRING DIAGRAMS

### Locker lighting, rear right (LL)

#### Legend

Wiring diagram no. **81.99192.2490** Sheet **1** of 1

Change status: 12.99

#### A = Locker lighting, rear left

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**E280** (170) Locker lighting, rear right

**X1570** Stvd. locker lighting, right

**X1829** Crimped connector, line 31000

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

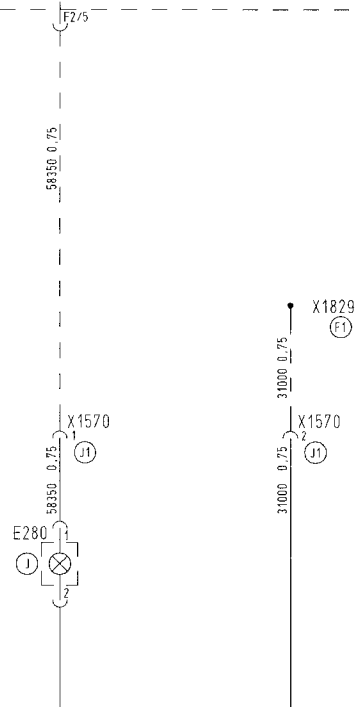
Wiring diagram no. **81.99192.2490** Sheet 1 of 1

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Locker lighting, rear right (RL)

#### Legend

Wiring diagram no. **81.99192.2412** Sheet 1 of 1

Change status: 12.99

#### A = Locker lighting, rear left

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**E280** (170) Locker lighting, rear right

**X1570** Stvd. locker lighting, right

**X1829** Crimped connector, line 31000

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

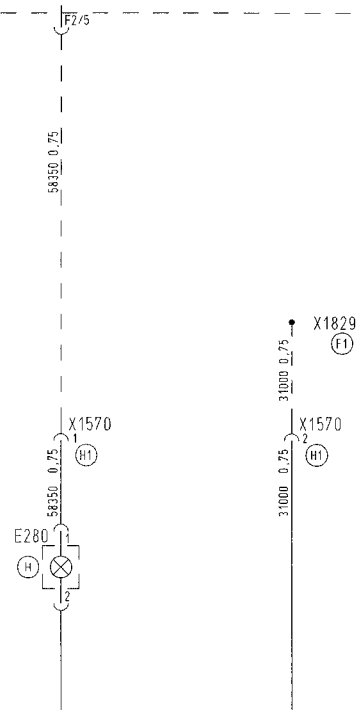
Wiring diagram no. **81.99192.2412** Sheet **1** of **1**

A100

(E6)

A302

(E6)



## Locker lighting, top (left, middle) (LL)

### Legend

Wiring diagram no. **81.99192.1404** Sheet **1** of 1  
Change status: 05.01

### A = Locker lighting, top (left, middle)

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**E277** (177) Locker lighting, top left  
**E279** (177) Locker lighting, top centre

**X1568** Stvd. locker lighting, top  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2543** (246) Potential distributor, 21-pin line 30006

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



**ADDITIONAL WIRING DIAGRAMS**

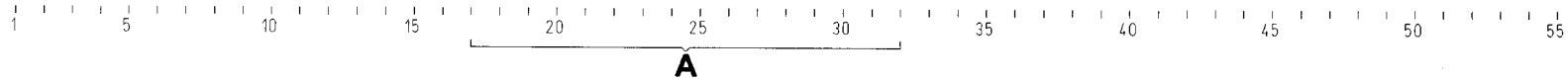
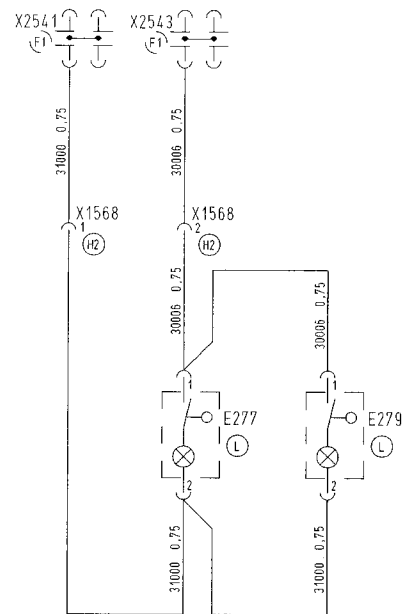
Wiring diagram no. **81.99192.1404** Sheet **1** of **1**

A100

(E6)

A302

(E6)



## Locker lighting, top (left, middle) (RL)

### Legend

Wiring diagram no. **81.99192.1405** Sheet 1 of 1  
Change status: 05.01

### A = Locker lighting, top (left, middle)

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**E277** (177) Locker lighting, top left  
**E279** (177) Locker lighting, top centre

**X1568** Stvd. locker lighting, top  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2543** (246) Potential distributor, 21-pin line 30006

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (EB) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

**ADDITIONAL WIRING DIAGRAMS**

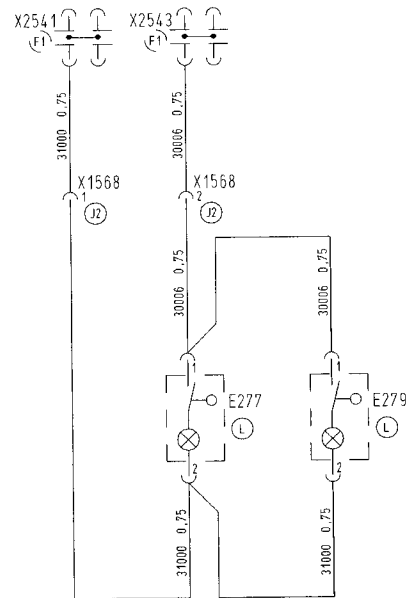
Wiring diagram no. **81.99192.1405** Sheet **1** of **1**

A100

(E6)

A302

(E6)



## Locker lighting, top (left, middle, right) (LL)

### Legend

Wiring diagram no. **81.99192.1406** Sheet **1** of 1

Change status: 05.01

### A = Locker lighting, top (left, middle, right)

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**E277** (177) Locker lighting, top left

**E278** (177) Locker lighting, top right

**E279** (177) Locker lighting, top centre

**X1568** Stvd. locker lighting, top

**X2541** (246) Potential distributor, 21-pin line 31000

**X2543** (246) Potential distributor, 21-pin line 30006

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

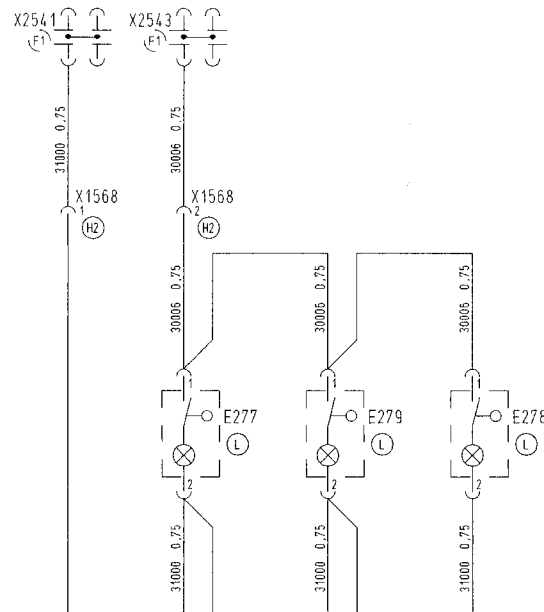
Wiring diagram no. **81.99192.1406** Sheet **1** of **1**

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

**A**

**Locker lighting, top (left, middle, right) (RL)**

**Legend**

Wiring diagram no. **81.99192.1407** Sheet 1 of 1  
Change status: 05.01

**A = Locker lighting, top (left, middle, right)**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**E277** (177) Locker lighting, top left  
**E278** (177) Locker lighting, top right  
**E279** (177) Locker lighting, top centre

**X1568** Stvd. locker lighting, top  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2543** (246) Potential distributor, 21-pin line 30006

**Marking of mounting positions**

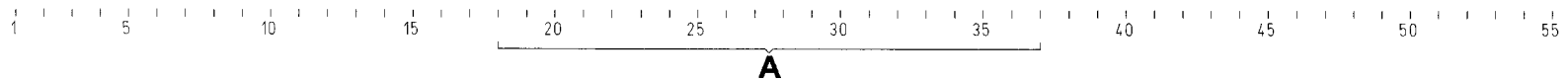
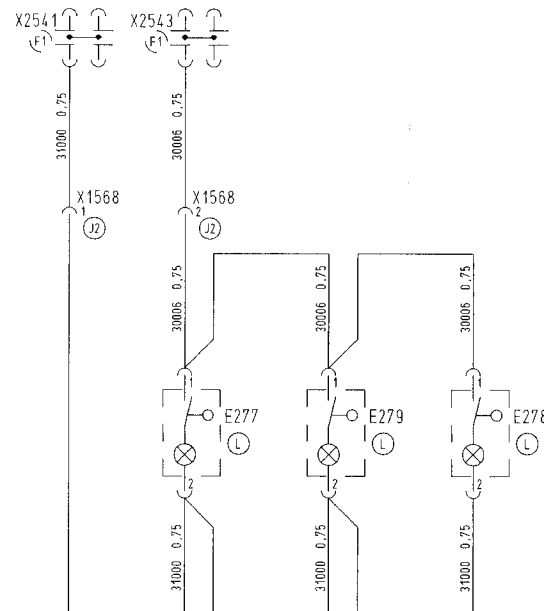
- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ2 Gearbox                 | Ⓕ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ1 Bumper                  | Ⓕ B-pillar on driver's side    |
| Ⓒ2 Entrance right          | Ⓕ A-pillar on driver's side    |
| Ⓒ3 Entrance left           | Ⓕ B-pillar on passenger's side |
| Ⓔ Central electrics area   | Ⓕ A-pillar on passenger's side |
| Ⓔ Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓔ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓕ Instrument panel         | Ⓕ Rear axle                    |
| Ⓕ Central part             | Ⓕ Front part of frame          |
| Ⓕ Steering wheel/column    | Ⓕ Rear part of frame           |
| Ⓕ Foot pedals              | Ⓕ Door left                    |
| Ⓕ Front wall, inside left  | Ⓕ Door right                   |
| Ⓕ Front wall, inside right |                                |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1407** Sheet **1** of **1**

A100  
E5

A302  
E6



## ADDITIONAL WIRING DIAGRAMS

### 12V socket

#### Legend

Wiring diagram no. **81.99192.2569** Sheet **1** of 1

Change status: 10.99

#### A = 12V socket

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**F216** (129) Fuse, voltage transformer for 12V socket

**T106** (107) Voltage transformer for 12V/24V 15A socket

**X723** (196) 12V socket

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

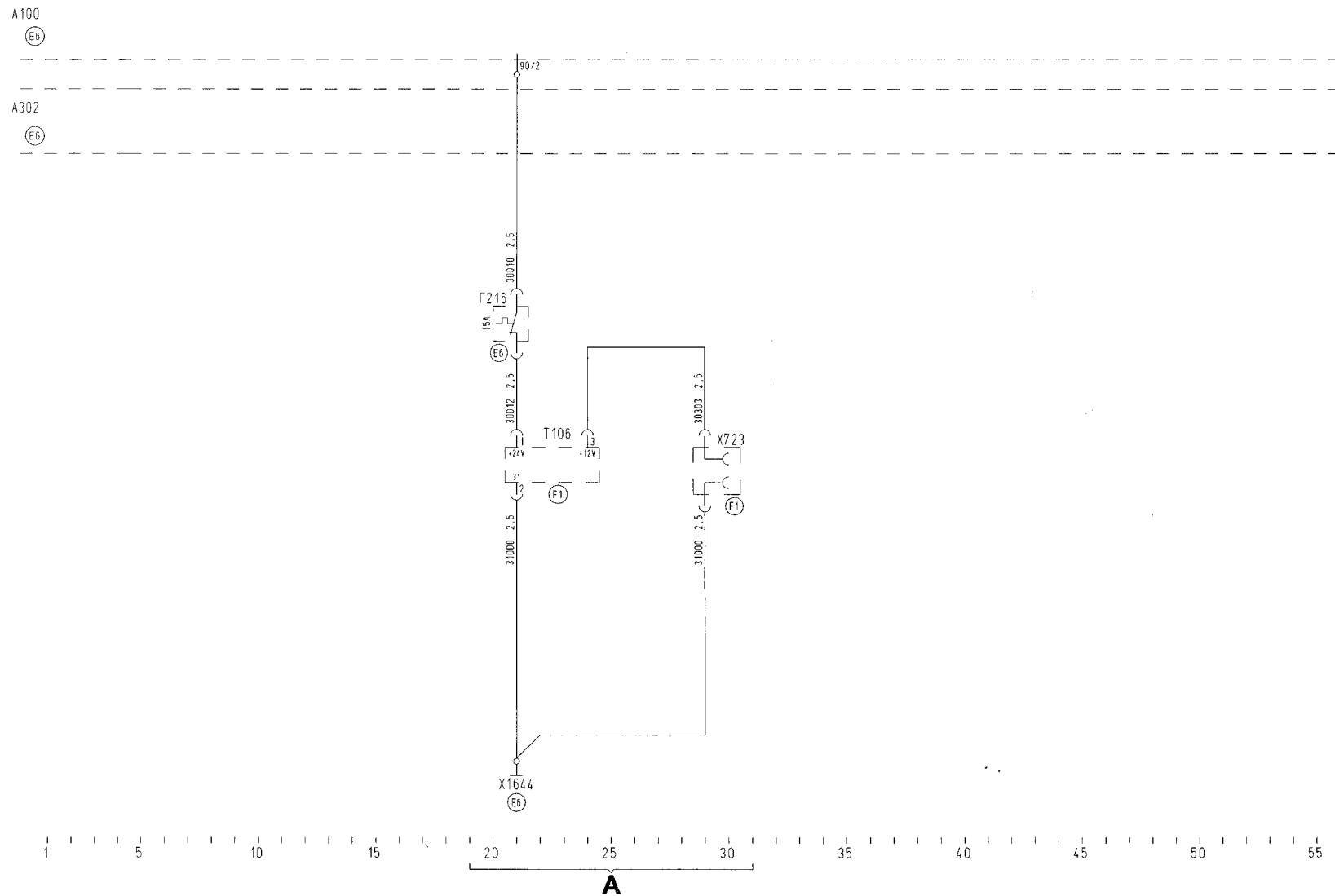
(S1) Door left

(S2) Door right



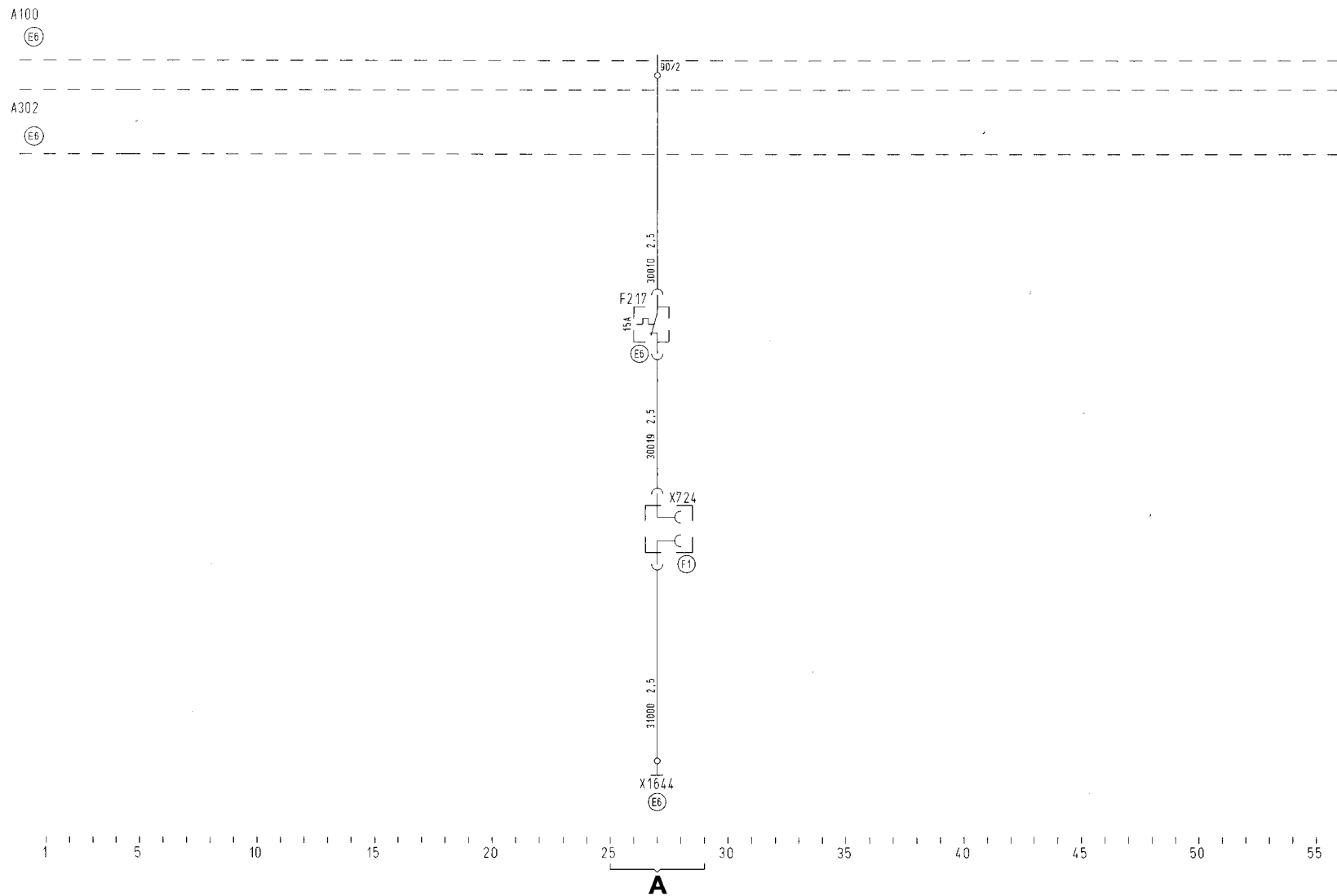
ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2569** Sheet 1 of 1



**ADDITIONAL WIRING DIAGRAMS**

Wiring diagram no. **81.99192.2570** Sheet **1** of 1



### Socket 24V in wiring trough

#### Legend

Wiring diagram no. **81.99192.2796** Sheet **1** of 1  
Change status: 05.00

#### A = Socket 24V in wiring trough (engine)

**F355** (132) Main fuse (terminal 30-2)

**X1904** Threaded bolt M6 (MP box)

**X1991** (219) 24V socket (MP box)

### Marking of mounting positions

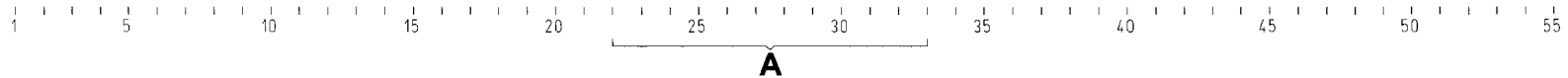
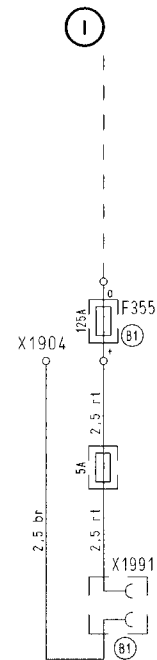
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |
| (I) Wiring trough, engine     |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2796** Sheet **1** of **1**

A100

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Socket, tanker

#### Legend

Wiring diagram no. **81.99192.2655** Sheet **1** of 1  
Change status: 04.99

#### A = Socket, 13-pin, tanker

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**G101** (113) Battery 2

**X797** (207) Socket, tanker  
**X1540** Stvd. frame I  
**X1586** Stvd. connection for trailer lighting socket 1  
**X1587** Stvd. connection for trailer lighting socket 2  
**X2086** Stvd. adapter cable socket, tanker  
**X2087** Stvd. adapter cable socket, tanker

#### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

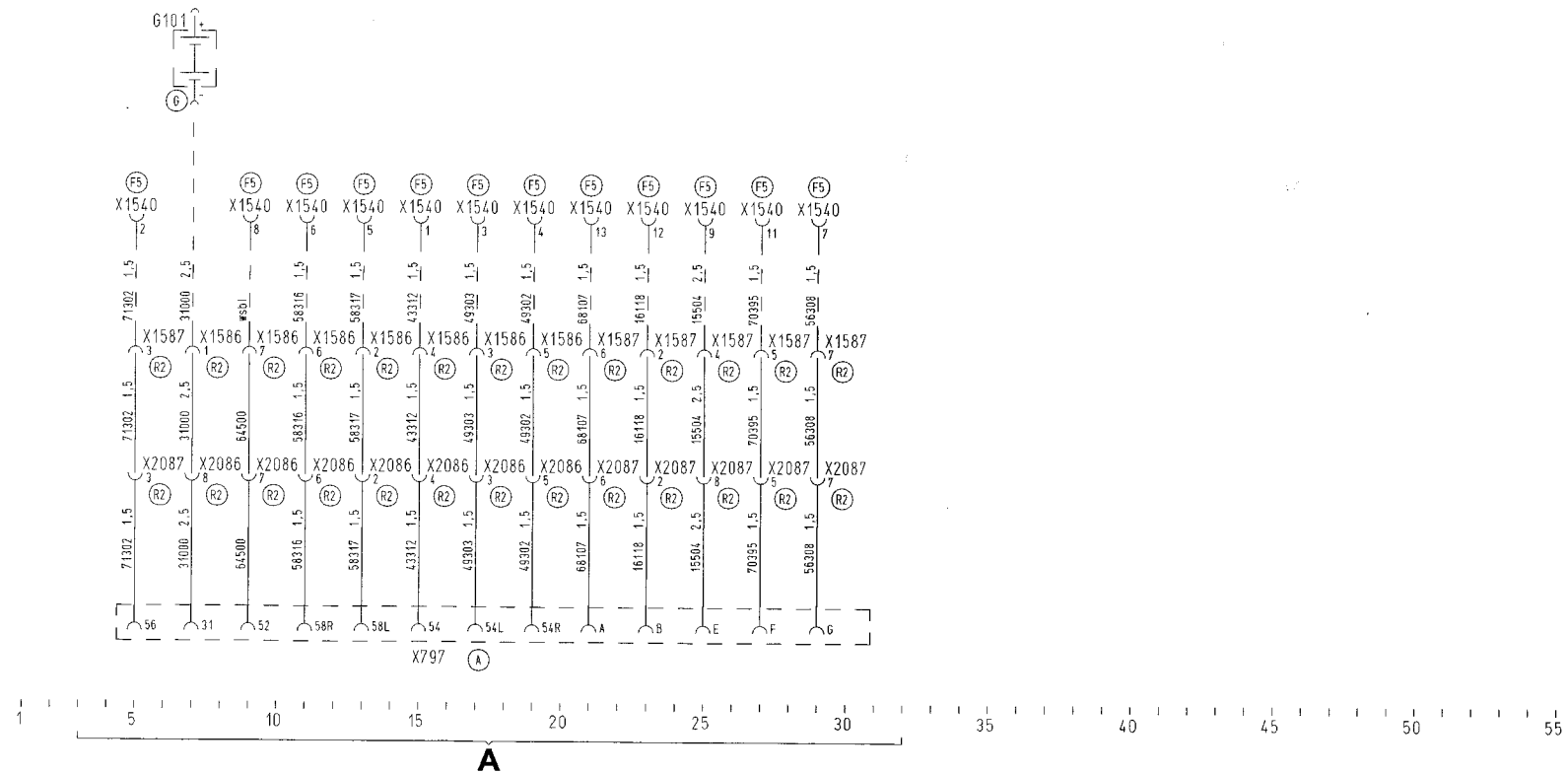
Wiring diagram no. **81.99192.2655** Sheet **1** of **1**

A100

(E6)

A302

(E6)



**ADDITIONAL WIRING DIAGRAMS**

# Cullmann phone with radio 24V MAN-Sound (LL)

## Legend

Wiring diagram no. **81.99192.2871** Sheet **1** of 2

Change status: 10.00

**A = Active aerial**

**B = Radio**

**C = Amplifier**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**B158** (298) Driver's loudspeaker, front right

**B496** (344) Cab loudspeaker, left, with hand-free telephone

**N106** (127) Audio amplifier

**W177** (172) Combination aerial

**X1639** Soldered connector, line 16000

**X1643** Soldered connector, line 58300

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

**X2543** (246) Potential distributor, 21-pin line 30006

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right



ADDITIONAL WIRING DIAGRAMS

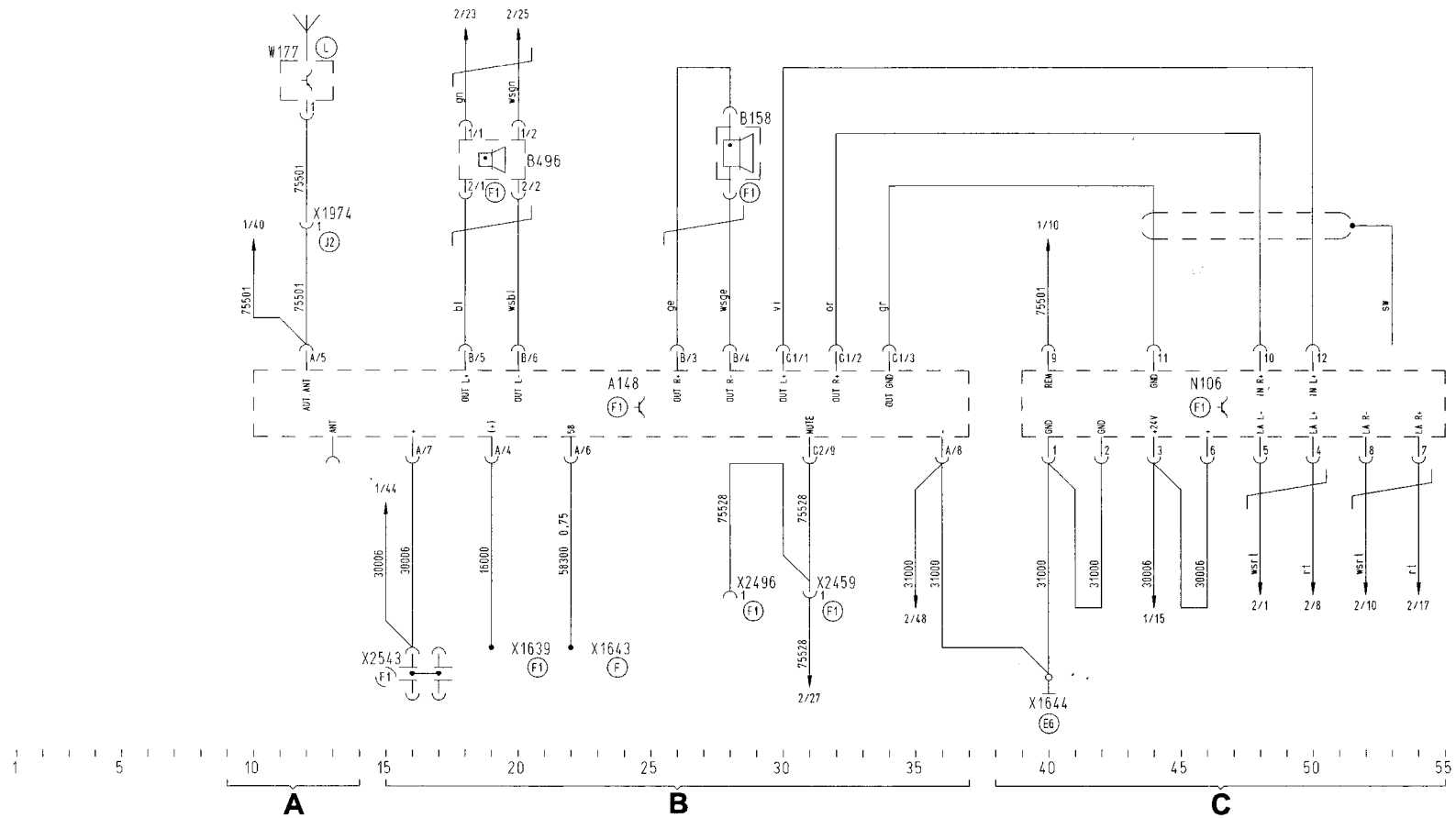
Wiring diagram no. **81.99192.2871** Sheet 1 of 2

A100

(E6)

A302

(E6)



## Cullmann phone with radio 24V MAN-Sound (LL)

### Legend

Wiring diagram no. **81.99192.2871** Sheet 2 of 2  
Change status: 10.00

**A = Loudspeaker**

**B = Cullmann telephone box**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (545) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone

**X1546** Stvd. door, right  
**X1547** Stvd. door, left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2372** Stvd. supply to CD changer  
**X2448** Stvd. adaptation 12V telephone

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓖ Battery box                  |
| Ⓔ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓕ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓖ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |
| Ⓖ Mobile phone interface   |                                |
| Ⓖ CD changer               |                                |

# ADDITIONAL WIRING DIAGRAMS

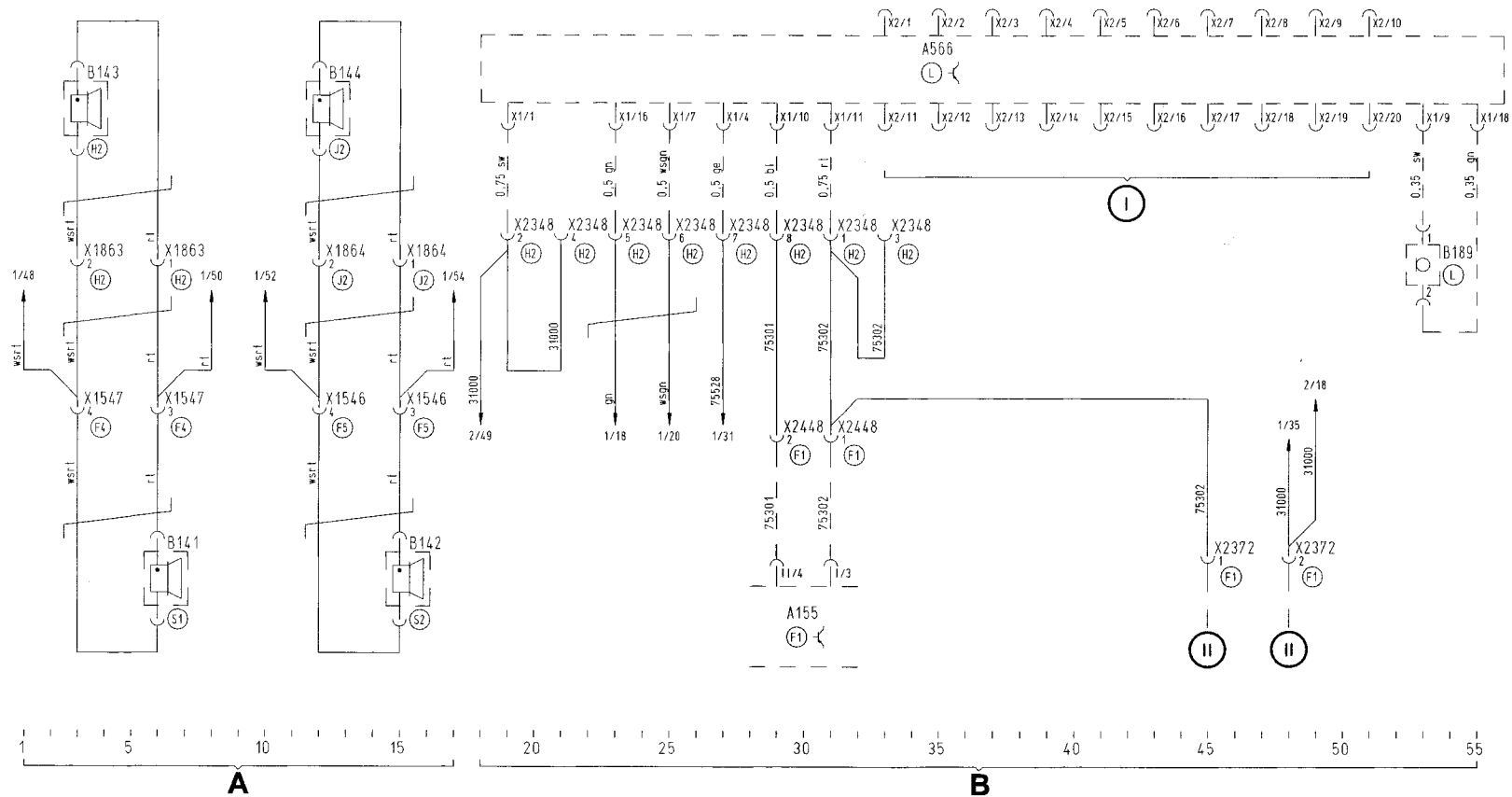
Wiring diagram no. **81.99192.2871** Sheet 2 of 2

A100

(E6)

A302

(E6)



# Cullmann phone with radio 24V MAN-Sound (RL)

## Legend

Wiring diagram no. **81.99192.2872** Sheet 1 of 2

Change status: 10.00

**A = Active aerial**

**B = Radio**

**C = Amplifier**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**B157** (298) Driver's loudspeaker, front left

**B498** (344) Cab loudspeaker, right, with hand-free telephone

**N106** (127) Audio amplifier

**W177** (172) Combination aerial

**X1639** Soldered connector, line 16000

**X1643** Soldered connector, line 58300

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

**X2543** (246) Potential distributor, 21-pin line 30006

## Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

ADDITIONAL WIRING DIAGRAMS

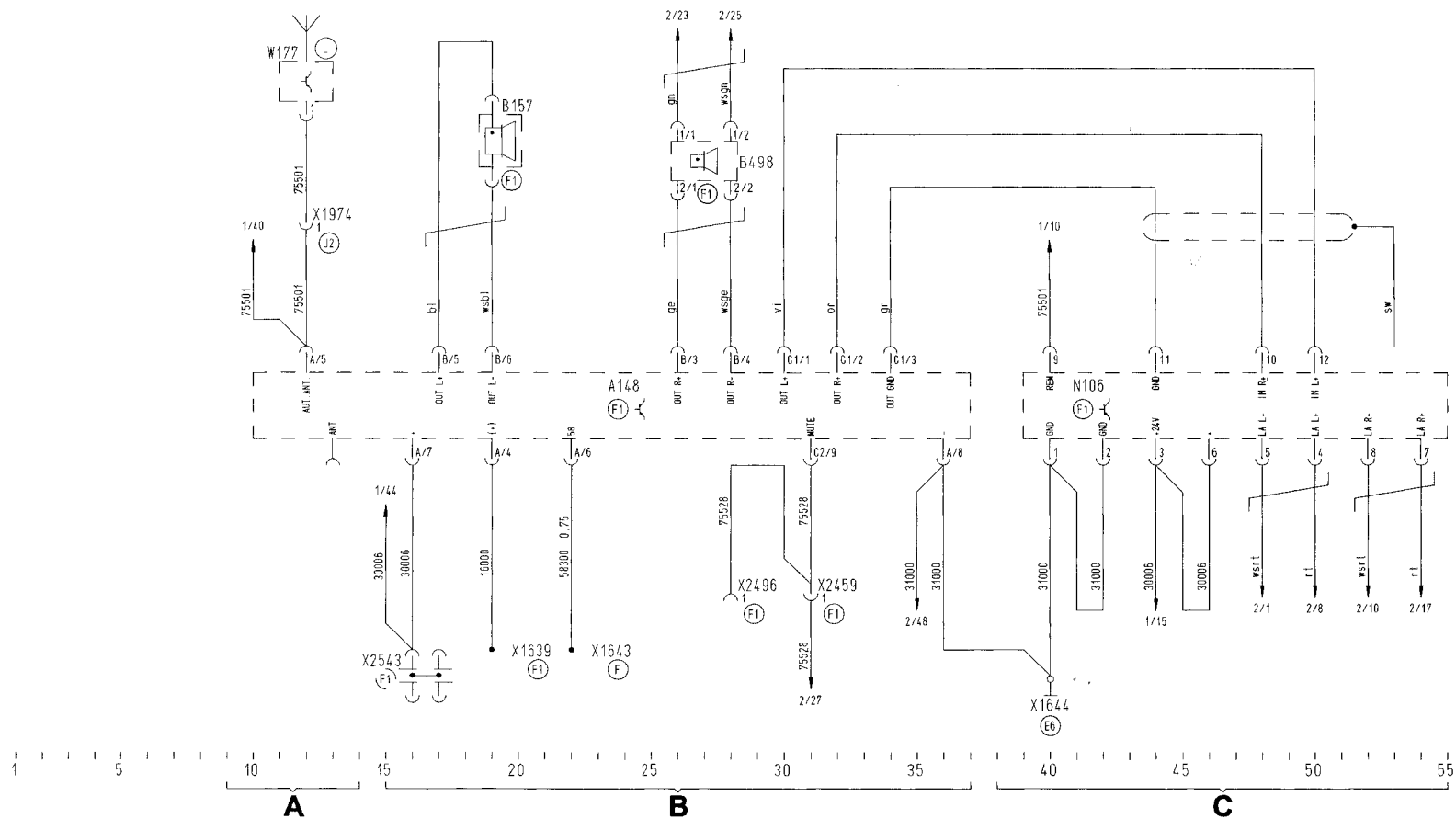
Wiring diagram no. 81.99192.2872 Sheet 1 of 2

A100

(E6)

A302

(E6)



# Cullmann phone with radio 24V MAN-Sound (RL)

## Legend

Wiring diagram no. **81.99192.2872** Sheet 2 of 2  
Change status: 10.00

**A = Loudspeaker**

**B = Cullmann telephone box**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (545) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone

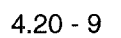
**X1546** Stvd. door right  
**X1547** Stvd. door left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2372** Stvd. supply to CD changer  
**X2448** Stvd. adaptation 12V telephone

## Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓒ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓒ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓒ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓒ Instrument panel         | Ⓖ Rear axle                    |
| Ⓒ Central part             | Ⓖ Front part of frame          |
| Ⓒ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓒ Foot pedals              | Ⓖ Door left                    |
| Ⓒ Front wall, inside left  | Ⓖ Door right                   |
| Ⓒ Front wall, inside right |                                |
| Ⓖ Mobile phone interface   |                                |
| Ⓖ CD changer               |                                |

E6

E6



# Cullmann phone with radio 24V and CD changer MAN-Sound (LL)

## Legend

Wiring diagram no. **81.99192.1447** Sheet **1** of 2

Change status: 05.01

**A = Active aerial, radio, CD changer**

**B = Amplifier**

**A100** (255) Central fuse, relay and terminal block

**A148** (388) Radio/cassette player

**A302** (352) Central computer 2

**A568** (546) CD changer

**B158** (298) Driver's loudspeaker, front right

**B496** (344) Cab loudspeaker, left, with hand-free telephone

**N106** (123) Audio amplifier

**W177** (172) Combination aerial

**X1639** Soldered connector, line 16000

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2372** Stvd. supply to CD changer

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

**X2542** (246) Potential distributor, 21-pin line 58000

**X2543** (246) Potential distributor, 21-pin line 30006

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right



ADDITIONAL WIRING DIAGRAMS

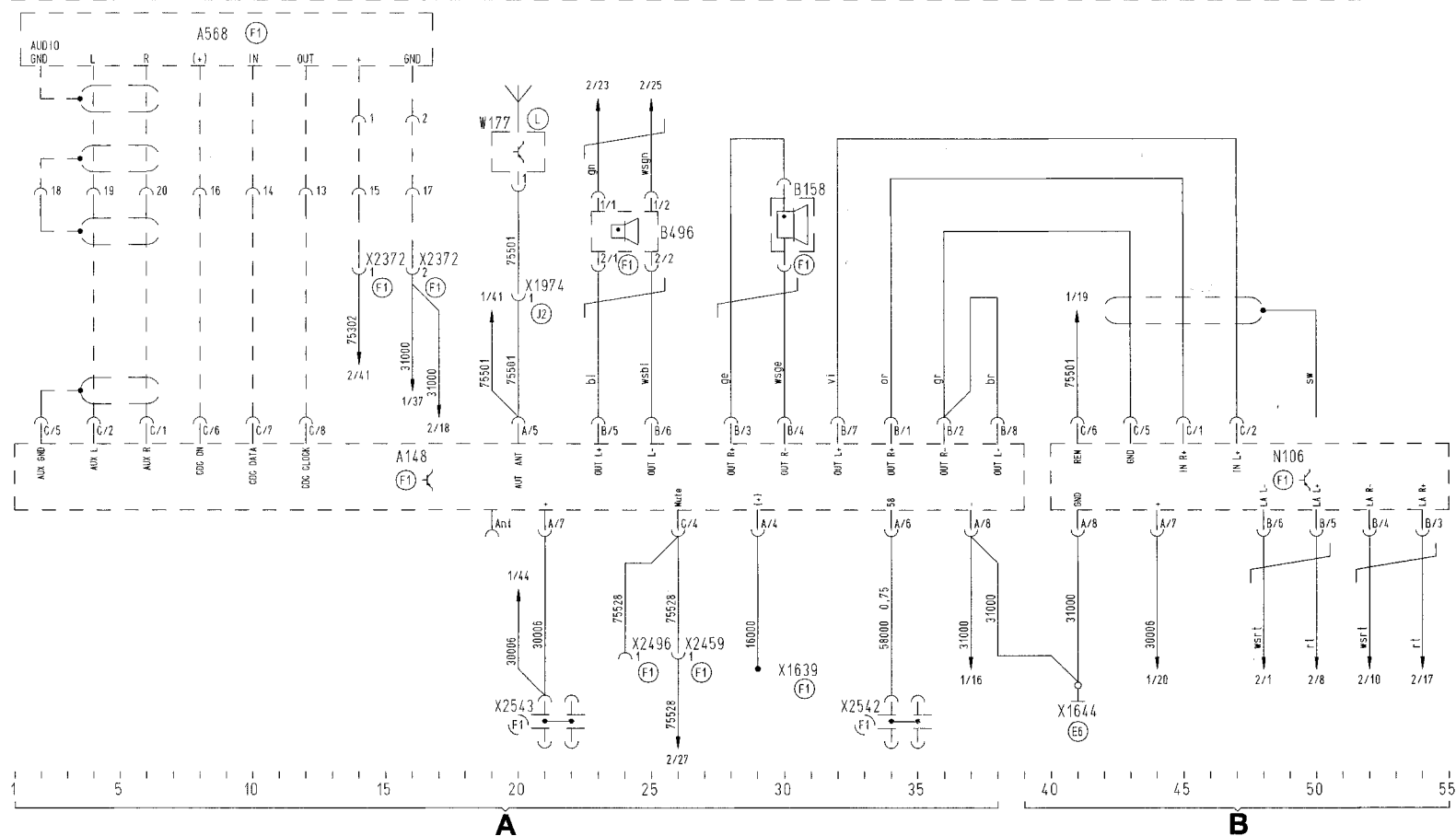
Wiring diagram no. **81.99192.1447** Sheet 1 of 2

A100

(E6)

A302

(E6)



# Cullmann phone with radio 24V and CD changer MAN-Sound (LL)

## Legend

Wiring diagram no. **81.99192.1447** Sheet **2** of 2

Change status: 05.01

**A = Loudspeaker**

**B = Cullmann telephone box**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (545) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone

**X1546** Stvd. door, right  
**X1547** Stvd. door, left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2448** Stvd. adaptation 12V telephone

## Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |
| (I) Mobile phone interface    |                                   |

ADDITIONAL WIRING DIAGRAMS

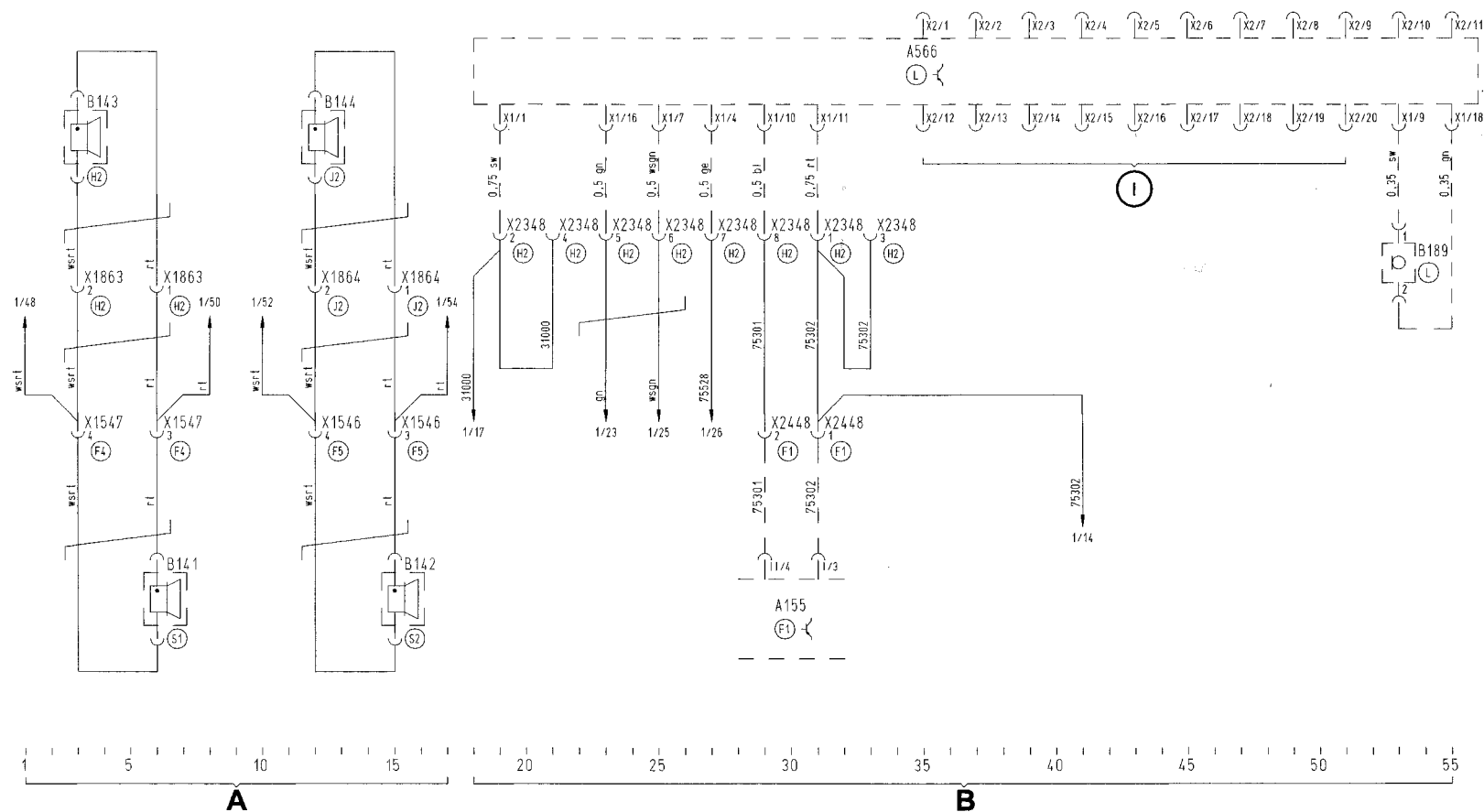
Wiring diagram no. **81.99192.1447** Sheet **2** of 2

A100

(E6)

A302

(E6)



# Cullmann phone with radio 24V and CD changer MAN-Sound (RL)

## Legend

Wiring diagram no. **81.99192.2878** Sheet 1 of 2

Change status: 10.00

**A = Radio, CD changer, active aerial**

**B = Amplifier**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**A568** (546) CD changer

**B157** (298) Driver's loudspeaker, front left

**B498** (344) Cab loudspeaker, right, with hand-free telephone

**N106** (127) Audio amplifier

**W177** (172) Combination aerial

**X1639** Soldered connector, line 16000

**X1643** Soldered connector, line 58300

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2372** Stvd. supply to CD changer

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

**X2543** (246) Potential distributor, 21-pin line 30006

## Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

ADDITIONAL WIRING DIAGRAMS

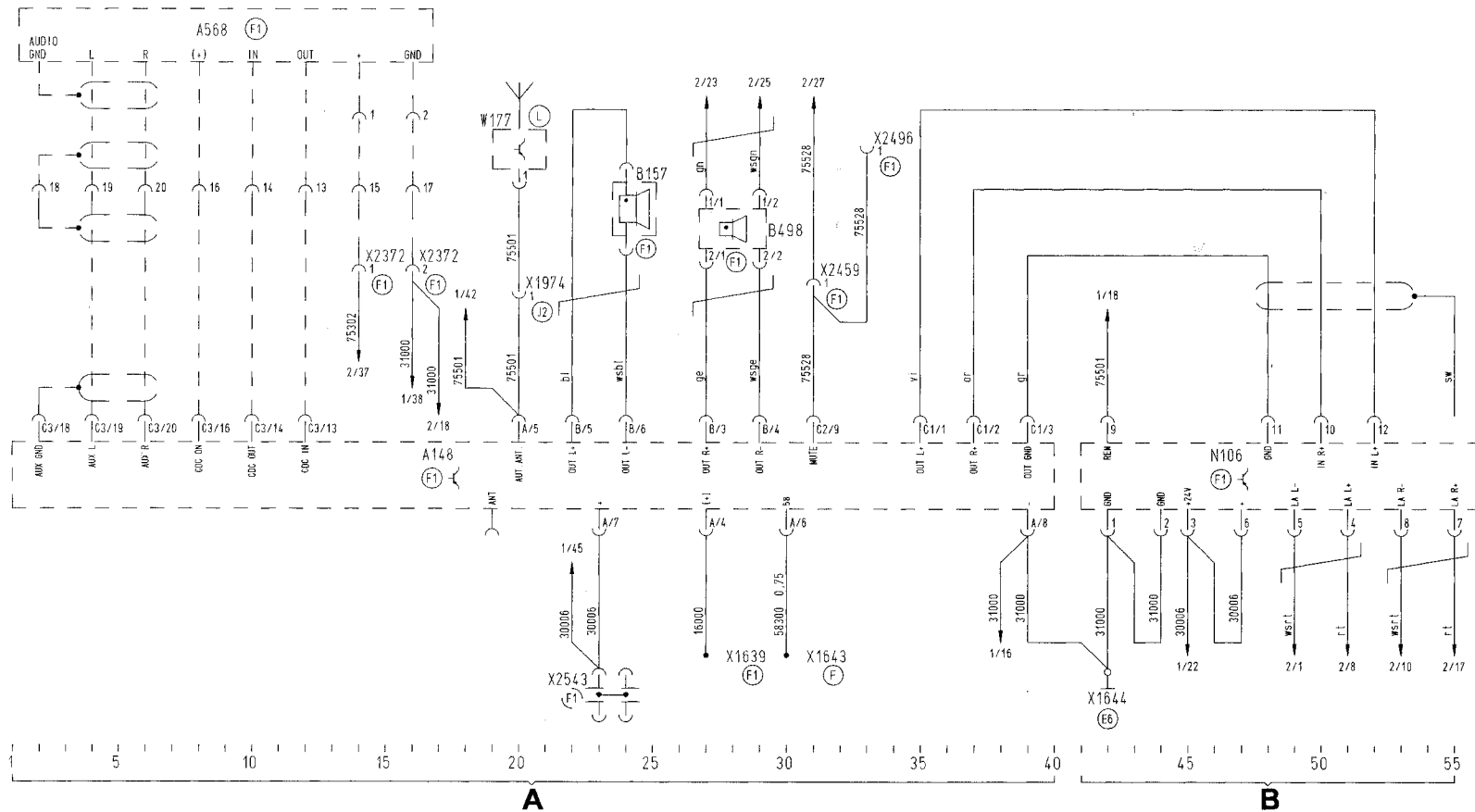
Wiring diagram no. 81.99192.2878 Sheet 1 of 2

A100

(E6)

A302

(E6)



# Cullmann phone with radio 24V and CD changer MAN-Sound (RL)

## Legend

Wiring diagram no. **81.99192.2878** Sheet 2 of 2

Change status: 10.00

**A = Loudspeaker**

**B = Cullmann telephone box**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (545) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone

**X1546** Stvd. door right  
**X1547** Stvd. door left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2448** Stvd. adaptation 12V telephone

## Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |
| (I) Mobile phone interface    |                                   |

ADDITIONAL WIRING DIAGRAMS

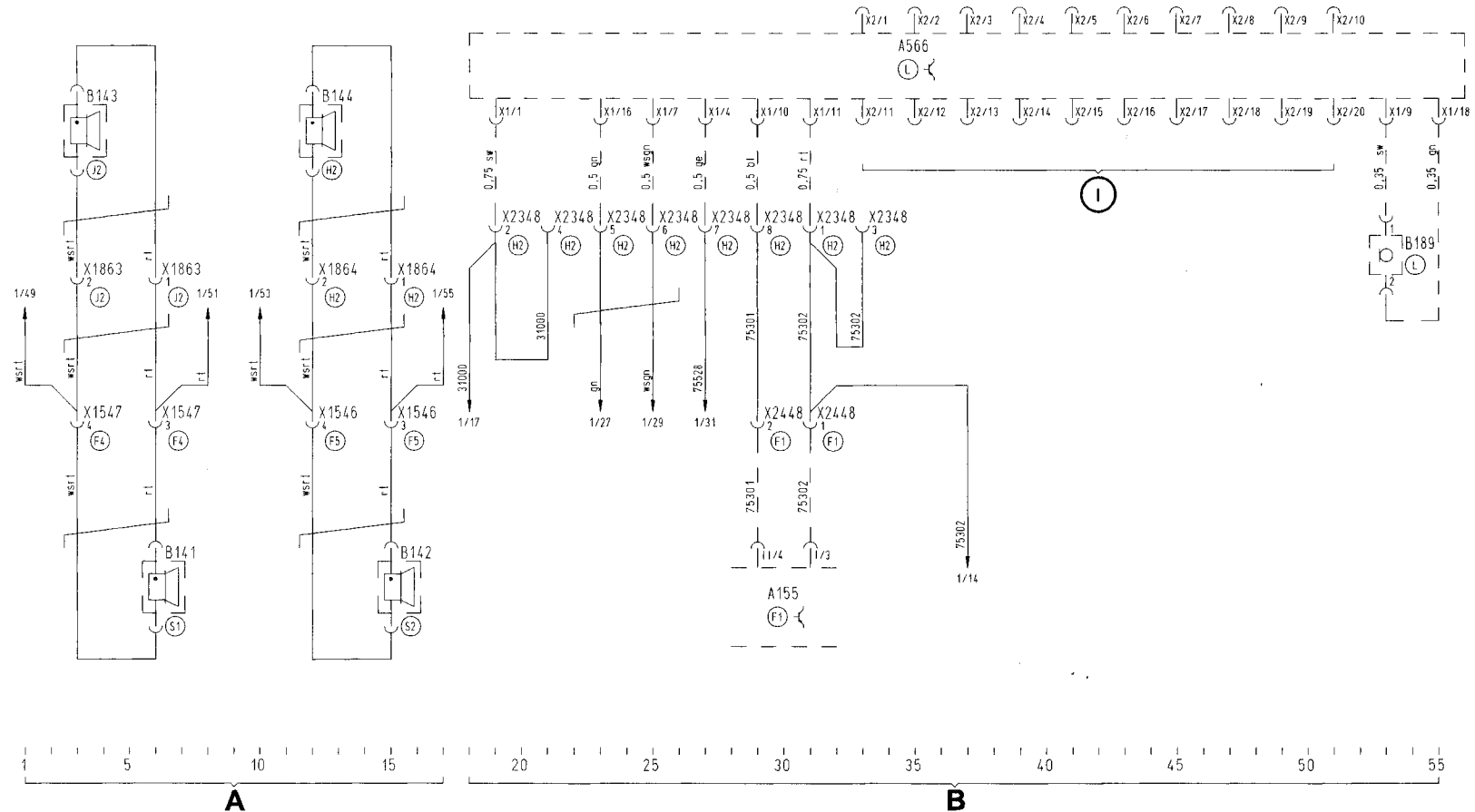
Wiring diagram no. **81.99192.2878** Sheet 2 of 2

A100

(E6)

A302

(E6)



# Nokia phone with radio 24V MAN-Sound (LL)

## Legend

Wiring diagram no. **81.99192.2873** Sheet 1 of 2

Change status: 10.00

**A = Active aerial**

**B = Radio**

**C = Amplifier**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**B158** (298) Driver's loudspeaker, front right

**B496** (344) Cab loudspeaker, left, with hand-free telephone

**N106** (127) Audio amplifier

**W177** (172) Combination aerial

**X1639** Soldered connector, line 16000

**X1643** Soldered connector, line 58300

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

**X2543** (246) Potential distributor, 21-pin line 30006

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

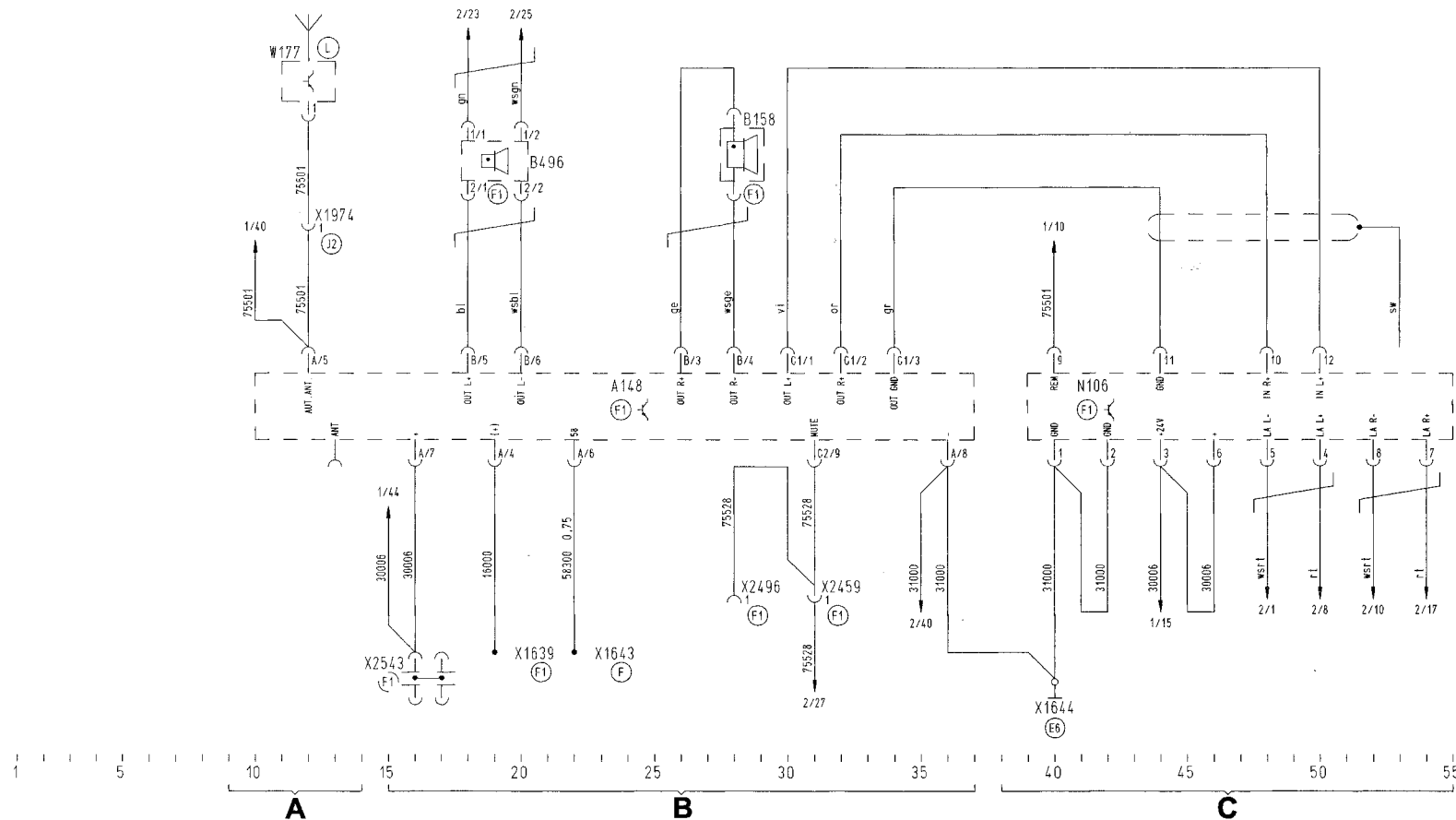


ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2873 Sheet 1 of 2

A100  
(E6)

A302  
(E6)



# Nokia phone with radio 24V MAN-Sound (LL)

## Legend

Wiring diagram no. **81.99192.2873** Sheet **2** of 2  
Change status: 10.00

**A = Loudspeaker**

**B = Nokia telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (539) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone  
**B497** (346) Telephone receiver

**X1546** Stvd. door right  
**X1547** Stvd. door left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2372** Stvd. supply to CD changer  
**X2446** Stvd. TBM (terminal 15)  
**X2448** Stvd. adaptation 12V telephone

## Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |
| Ⓖ CD changer               |                                |

ADDITIONAL WIRING DIAGRAMS

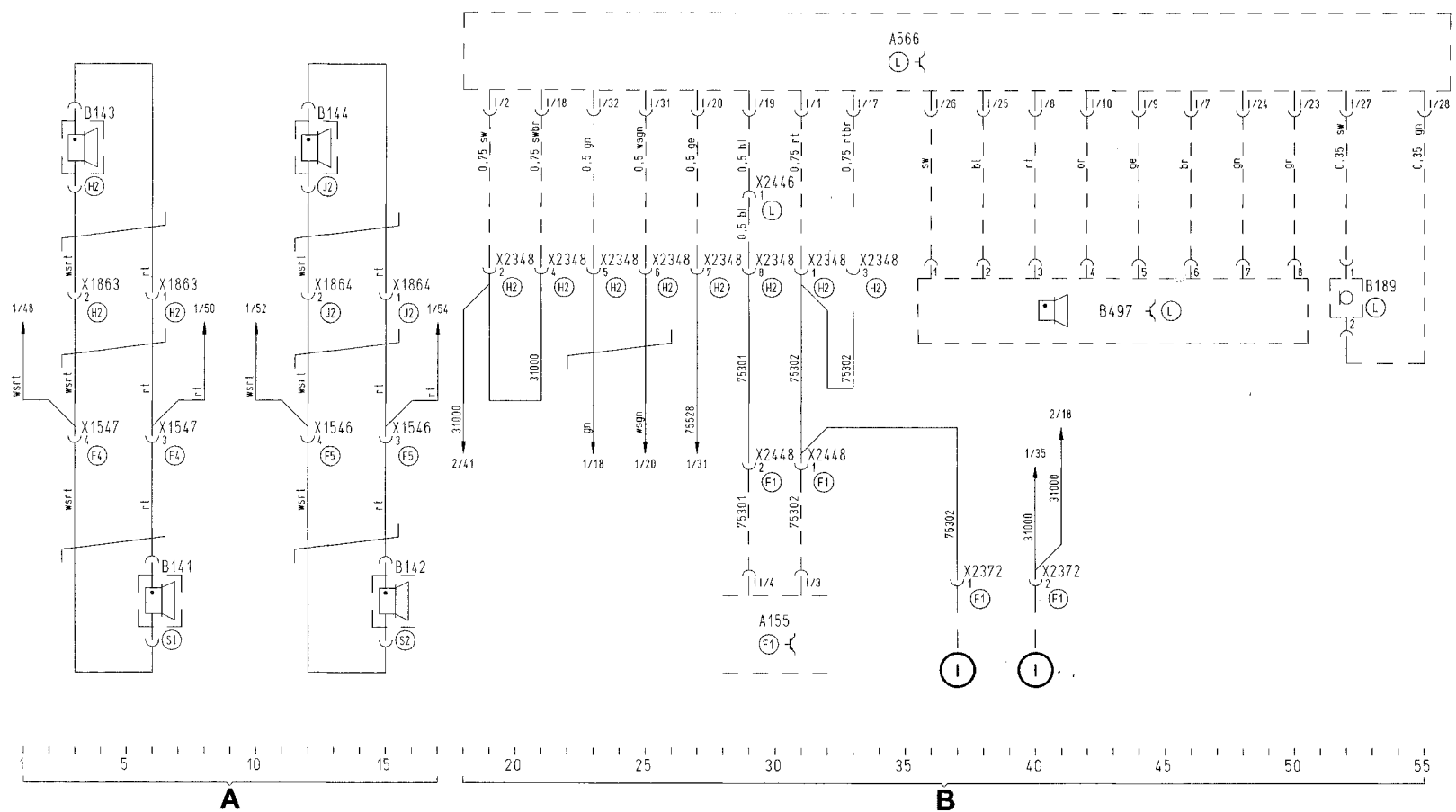
Wiring diagram no. 81.99192.2873 Sheet 2 of 2

A100

(E6)

A302

(E6)



# Nokia phone with radio 24V MAN-Sound (RL)

## Legend

Wiring diagram no. **81.99192.2874** Sheet **1** of 2

Change status: 10.00

**A = Active aerial**

**B = Radio**

**C = Amplifier**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**B157** (298) Driver's loudspeaker, front left

**B498** (344) Cab loudspeaker, right, with hand-free telephone

**N106** (127) Audio amplifier

**W177** (172) Combination aerial

**X1639** Soldered connector, line 16000

**X1643** Soldered connector, line 58300

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

**X2543** (246) Potential distributor, 21-pin line 30006

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

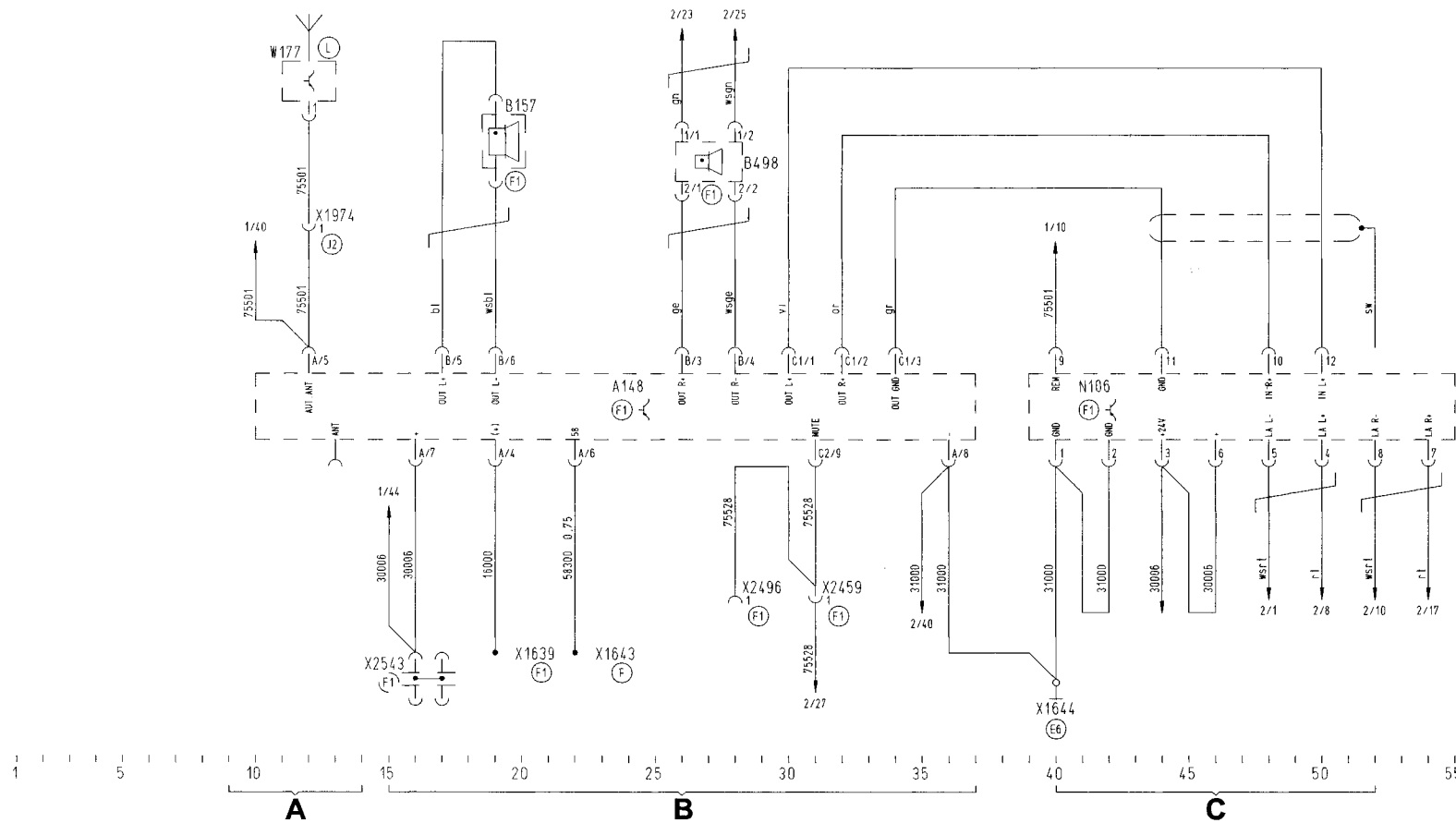
Wiring diagram no. **81.99192.2874** Sheet **1** of **2**

A100

(E6)

A302

(E6)



## Nokia phone with radio 24V MAN-Sound (RL)

### Legend

Wiring diagram no. **81.99192.2874** Sheet **2** of 2

Change status: 10.00

**A = Loudspeaker**

**B = Nokia telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer  
**A302** (352) Central computer 2  
**A566** (539) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone  
**B497** (346) Telephone receiver

**X1546** Std. door, right  
**X1547** Std. door, left  
**X1863** Std. loudspeaker, left  
**X1864** Std. loudspeaker, right  
**X2348** Std. telephone  
**X2372** Std. supply to CD changer  
**X2446** Std. TBM (terminal 15)  
**X2448** Std. adaptation 12V telephone

### Marking of mounting positions

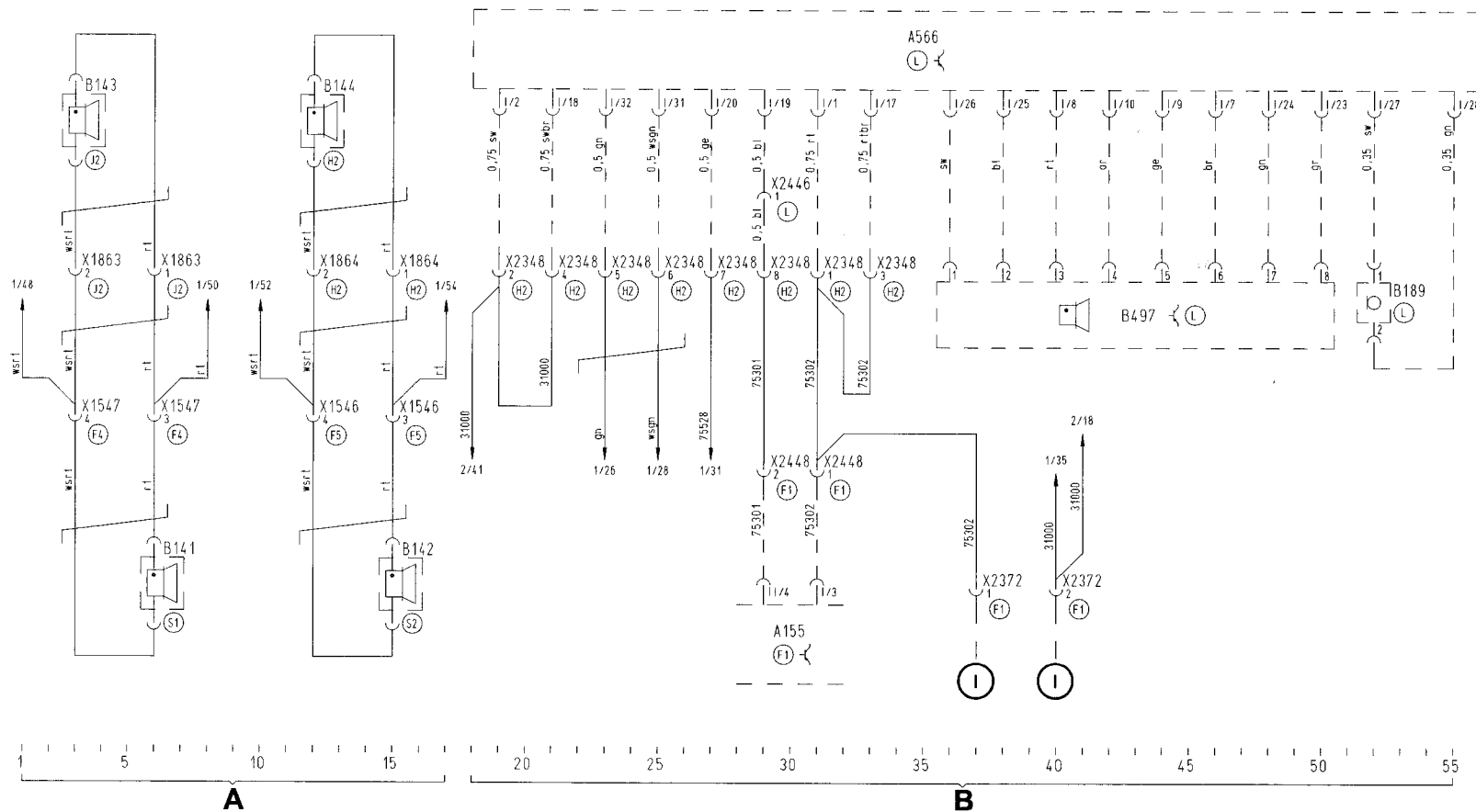
- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |
| Ⓖ CD changer               |                                |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2874** Sheet 2 of 2

A100  
(E6)

A302  
(E6)



# Nokia phone with radio 24V and CD changer MAN-Sound (LL)

## Legend

Wiring diagram no. **81.99192.2875** Sheet **1** of 2

Change status: 10.00

**A = Radio, CD changer, active aerial**

**B = Amplifier**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**A568** (546) CD changer

**B158** (298) Driver's loudspeaker, front right

**B496** (344) Cab loudspeaker, left, with hand-free telephone

**N106** (127) Audio amplifier

**W177** (172) Combination aerial

**X1639** Soldered connector, line 16000

**X1643** Soldered connector, line 58300

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2372** Stvd. supply to CD changer

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

**X2543** (246) Potential distributor, 21-pin line 30006

## Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right



ADDITIONAL WIRING DIAGRAMS

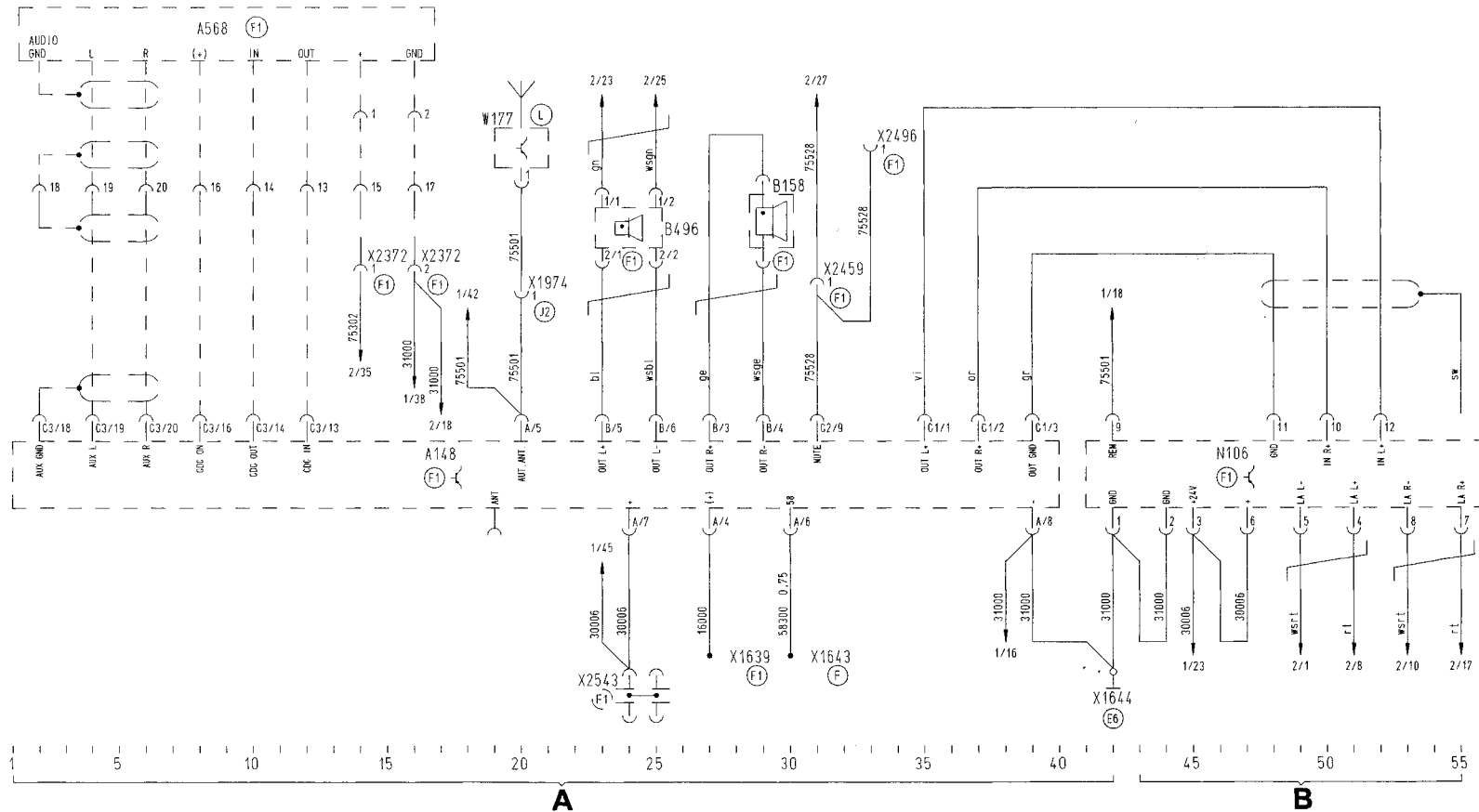
Wiring diagram no. **81.99192.2875** Sheet 1 of 2

A100

(E6)

A302

(E6)



# Nokia phone with radio 24V and CD changer MAN-Sound (LL)

## Legend

Wiring diagram no. **81.99192.2875** Sheet **2** of 2  
Change status: 10.00

**A = Loudspeaker**

**B = Nokia telephone**

**A100** (255) Central fuse, relay and terminal block  
**A155** (182) Voltage transformer 24V/12V  
**A302** (352) Central computer 2  
**A566** (539) Cellular phone station

**B141** (296) Loudspeaker 1, door left  
**B142** (296) Loudspeaker 1, door right  
**B143** (297) Loudspeaker 2, door left  
**B144** (297) Loudspeaker 2, door right  
**B189** (345) Microphone for hands-free telephone  
**B497** (346) Telephone receiver

**X1546** Stvd. door right  
**X1547** Stvd. door left  
**X1863** Stvd. loudspeaker, left  
**X1864** Stvd. loudspeaker, right  
**X2348** Stvd. telephone  
**X2446** Stvd. TBM (terminal 15)  
**X2448** Stvd. adaptation 12V telephone

## Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

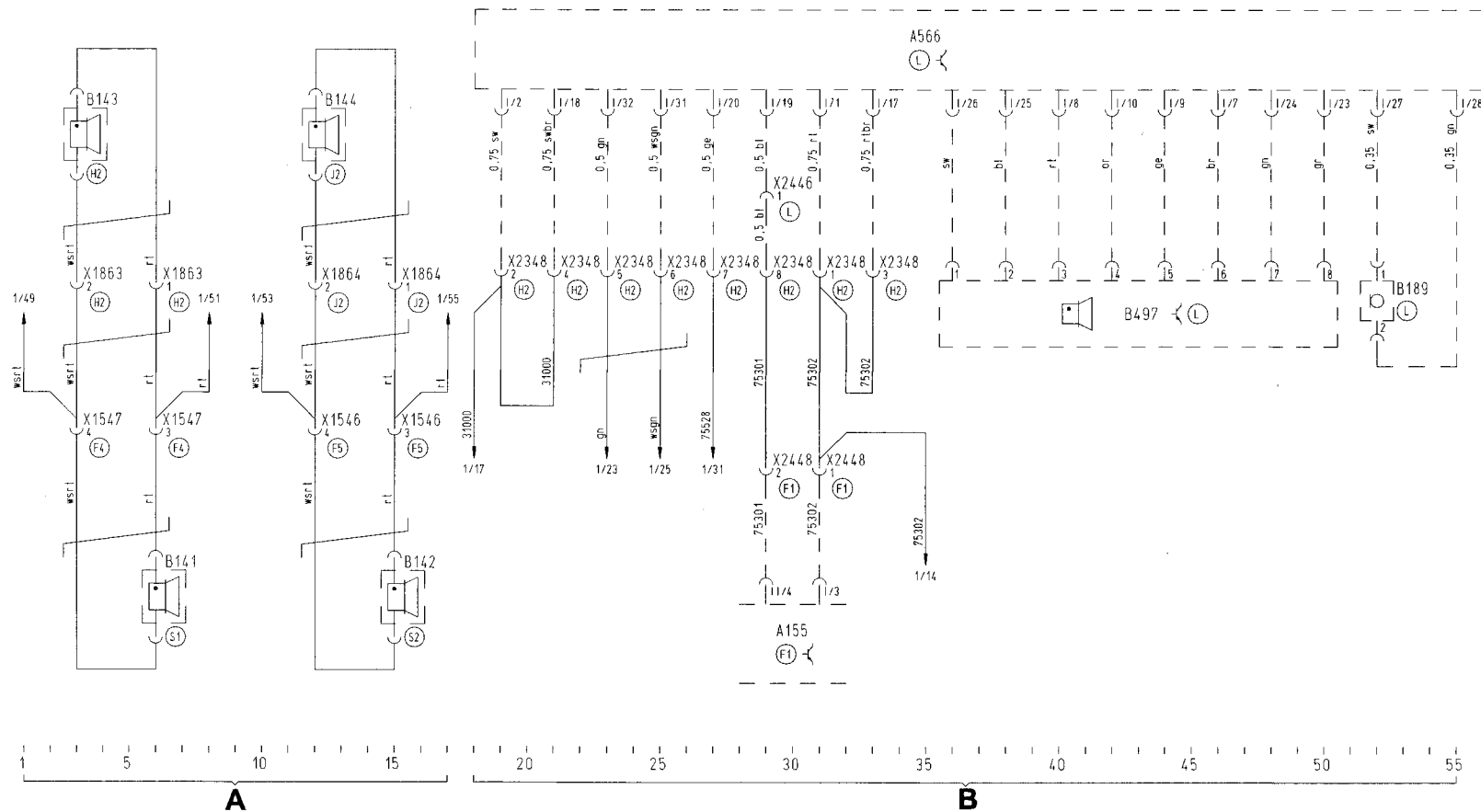
Wiring diagram no. **81.99192.2875** Sheet 2 of 2

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Nokia phone with radio 24V and CD changer MAN-Sound (RL)

#### Legend

Wiring diagram no. **81.99192.2876** Sheet 1 of 2

Change status: 10.00

**A = Radio, CD changer, active aerial**

**B = Amplifier**

**A100** (255) Central fuse, relay and terminal block

**A148** (574) Radio/cassette player

**A302** (352) Central computer 2

**A568** (546) CD changer

**B157** (298) Driver's loudspeaker, front left

**B498** (344) Cab loudspeaker, right, with hand-free telephone

**N106** (127) Audio amplifier

**W177** (172) Combination aerial

**X1639** Soldered connector, line 16000

**X1643** Soldered connector, line 58300

**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block

**X1974** Stvd. for active aerial

**X2372** Stvd. supply to CD changer

**X2459** Stvd. adaptation mute signal

**X2496** Adaptation mute signal lane guard

**X2543** (246) Potential distributor, 21-pin line 30006

#### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

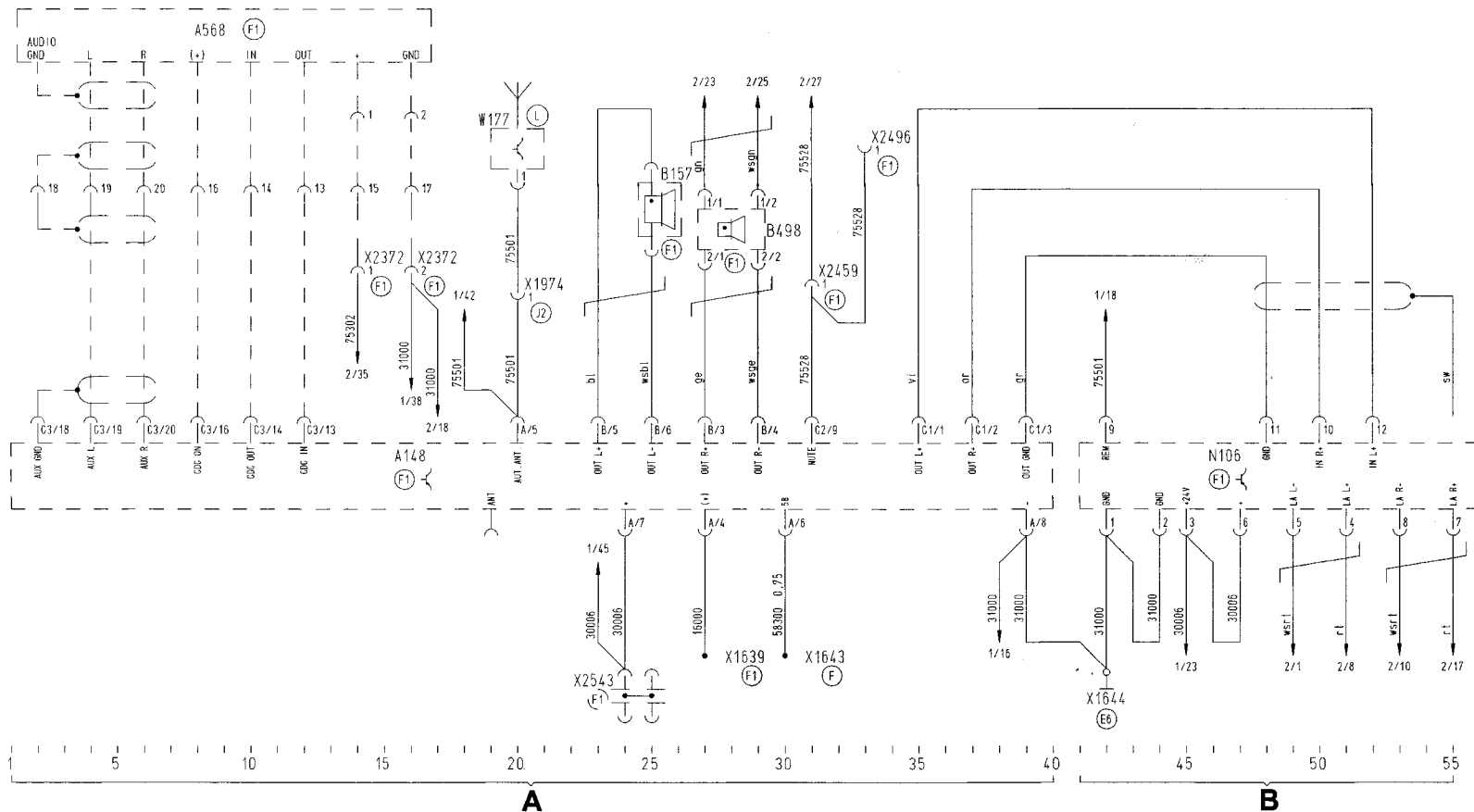
Wiring diagram no. **81.99192.2876** Sheet 1 of 2

A100

(E6)

A302

(E6)



# Nokia phone with radio 24V and CD changer MAN-Sound (RL)

## Legend

Wiring diagram no. **81.99192.2876** Sheet 2 of 2

Change status: 10.00

**A = Loudspeaker**

**B = Nokia telephone**

**A100** (255) Central fuse, relay and terminal block

**A155** (182) Voltage transformer 24V/12V

**A302** (352) Central computer 2

**A566** (539) Cellular phone station

**B141** (296) Loudspeaker 1, door left

**B142** (296) Loudspeaker 1, door right

**B143** (297) Loudspeaker 2, door left

**B144** (297) Loudspeaker 2, door right

**B189** (345) Microphone for hands-free telephone

**B497** (346) Telephone receiver

**X1546** Stvd. door right

**X1547** Stvd. door left

**X1863** Stvd. loudspeaker, left

**X1864** Stvd. loudspeaker, right

**X2348** Stvd. telephone

**X2446** Stvd. TBM (terminal 15)

**X2448** Stvd. adaptation 12V telephone

## Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

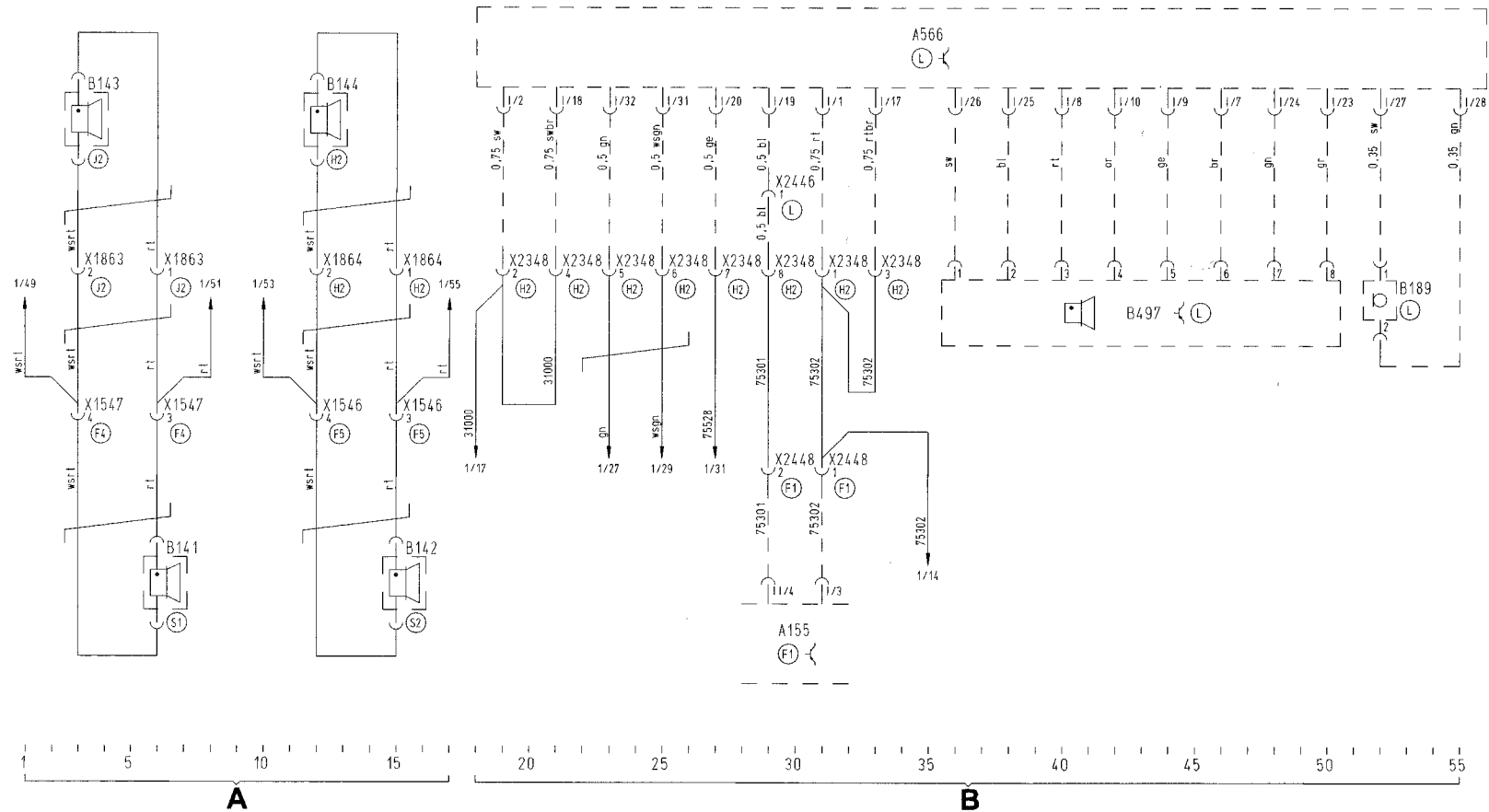
Ⓕ Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2876 Sheet 2 of 2

A100  
(E6)

A302  
(E6)



## Door module (LL)

### Legend

Wiring diagram no. **81.99192.2989** Sheet **1** of 5  
Change status: 03.01

**A = Central locking, driver's door**

**A = Window lift, driver's door**

A100 (255) Central fuse, relay and terminal block  
A302 (352) Central computer 2  
A451 (441) Door module (driver's side)  
A453 (443) Window lift (driver side)  
A465 (453) Door lock (driver's side)

S519 (522) Lock nut switch, driver's side  
S527 (525) Control switch, window lift, left

X1547 Stvd. door, left  
X1733 Stvd. switch sunroof

### Pin assignment A451:

X2/18 Central locking, lock latch switch E  
X2/17 Central locking, lock nut switch E  
X2/16 Central locking, lock nut switch A  
X2/9 Central locking, actuator element locked/unlocked  
X2/10 Central locking, actuator element locked/unlocked  
X2/8 Central locking, actuator element locked/unlocked  
X2/7 Central locking, engine, actuator element +  
X2/1 Central locking, engine, actuator element -  
X1/13 Window lift, hall sensor 2 signal  
X1/14 Window lift, hall sensor 1 signal  
X1/15 Window lift, hall sensor 1/2 +  
X1/16 Window lift, hall sensor 1/2 -  
X1/7 Window lift, engine +  
X1/1 Window lift, engine -  
X2/14 Close window lift  
X2/13 Open window lift

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓒ Gearbox                  | Ⓗ Control panel                |
| Ⓓ Front                    | Ⓖ Battery box                  |
| Ⓔ Bumper                   | Ⓗ B-pillar on driver's side    |
| Ⓕ Entrance right           | Ⓗ A-pillar on driver's side    |
| Ⓖ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

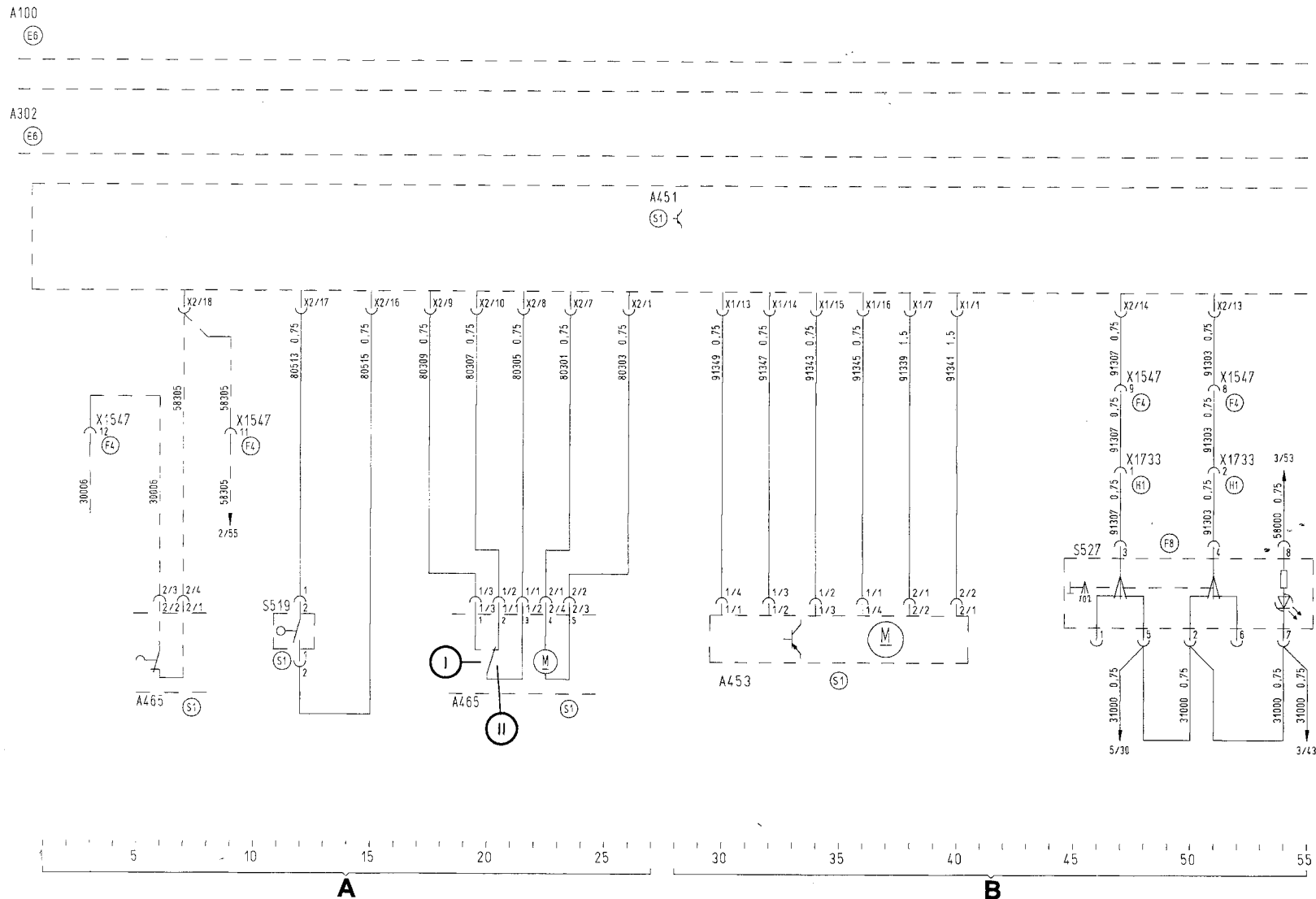
Ⓘ Locking

Ⓙ Unlocking



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2989 Sheet 1 of 5



## Door module (LL)

### Legend

Wiring diagram no. **81.99192.2989** Sheet 2 of 5  
Change status: 03.01

**A = Sunroof**

**B = Mirror adjustment/mirror heating, driver's door**

**C = Diagnosis**

**D = Power supply, driver's door**

**E = CAN**

**A100** (255) Central fuse, relay and terminal block  
**A157** (449) Main mirror (driver)  
**A251** (447) Wide-angle mirror (driver)  
**A253** (445) Curb mirror (driver)  
**A302** (352) Central computer 2  
**A451** (441) Door module (driver's side)

**X147** Stvd. sunroof/roof hatch  
**X1547** Stvd. door left  
**X1583** Stvd. main and wide-angle mirror, left  
**X1585** Stvd. curb mirror, left  
**X2544** (246) Potential distributor 21-pin K-line

### Pin assignment A451:

**X2/15** Sunroof  
**X1/6** Curb mirror + terminal 30  
**X1/12** Curb mirror, earth  
**X1/10** Curb mirror, serial  
**X1/5** Main and wide-angle mirror + terminal 30  
**X1/11** Main and wide-angle mirror, earth  
**X1/9** Main and wide-angle mirror, serial  
**X2/12** K-line  
**X1/4** Power supply +15 (serial)  
**X1/2** Power supply +30 (cab + central locking)  
**X1/8** Earth, load  
**X1/17** CAN low  
**X1/18** CAN high  
**X2/5** Alarm system

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓕ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓒ Central electrics area   | Ⓕ A-pillar on passenger's side |
| Ⓒ Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓒ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓒ Instrument panel         | Ⓕ Rear axle                    |
| Ⓒ Central part             | Ⓕ Front part of frame          |
| Ⓒ Steering wheel/column    | Ⓕ Rear part of frame           |
| Ⓒ Foot pedals              | Ⓕ Door left                    |
| Ⓒ Front wall, inside left  | Ⓕ Door right                   |
| Ⓒ Front wall, inside right |                                |

Ⓐ Sunroof

A1C0  
(E6)

A302  
(E6)



## Door module (LL)

### Legend

Wiring diagram no. **81.99192.2989** Sheet 3 of 5

Change status: 03.01

**A = Central locking, passenger door**

**B = Window lift, passenger door**

A100 (255) Central fuse, relay and terminal block  
A302 (352) Central computer 2  
A452 (440) Door module (passenger side)  
A454 (444) Window lift (passenger side)  
A466 (454) Door lock (passenger side)

S518 (522) Lock nut switch, passenger side  
S526 (525) Control switch, window lift, right

X1546 Stvd. door, right  
X1733 Stvd. switch sunroof  
X2542 (246) Potential distributor, 21-pin line 58000

### Pin assignment A452:

X2/18 Central locking, lock latch switch E  
X2/17 Central locking, lock nut switch E  
X2/16 Central locking, lock nut switch A  
X2/9 Central locking, actuator element locked/unlocked  
X2/10 Central locking, actuator element locked/unlocked  
X2/8 Central locking, actuator element locked/unlocked  
X2/7 Central locking, engine, actuator element +  
X2/1 Central locking, engine, actuator element -  
X1/13 Window lift, hall sensor 2 signal  
X1/14 Window lift, hall sensor 1 signal  
X1/15 Window lift, hall sensor 1/2 +  
X1/16 Window lift, hall sensor 1/2 -  
X1/7 Window lift, engine +  
X1/1 Window lift, engine -  
X2/14 Close window lift  
X2/13 Open window lift

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓕ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓕ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓕ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓕ Front axle                   |
| Ⓖ Instrument panel         | Ⓕ Rear axle                    |
| Ⓖ Central part             | Ⓕ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓕ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓕ Door left                    |
| Ⓖ Front wall, inside left  | Ⓕ Door right                   |
| Ⓖ Front wall, inside right |                                |

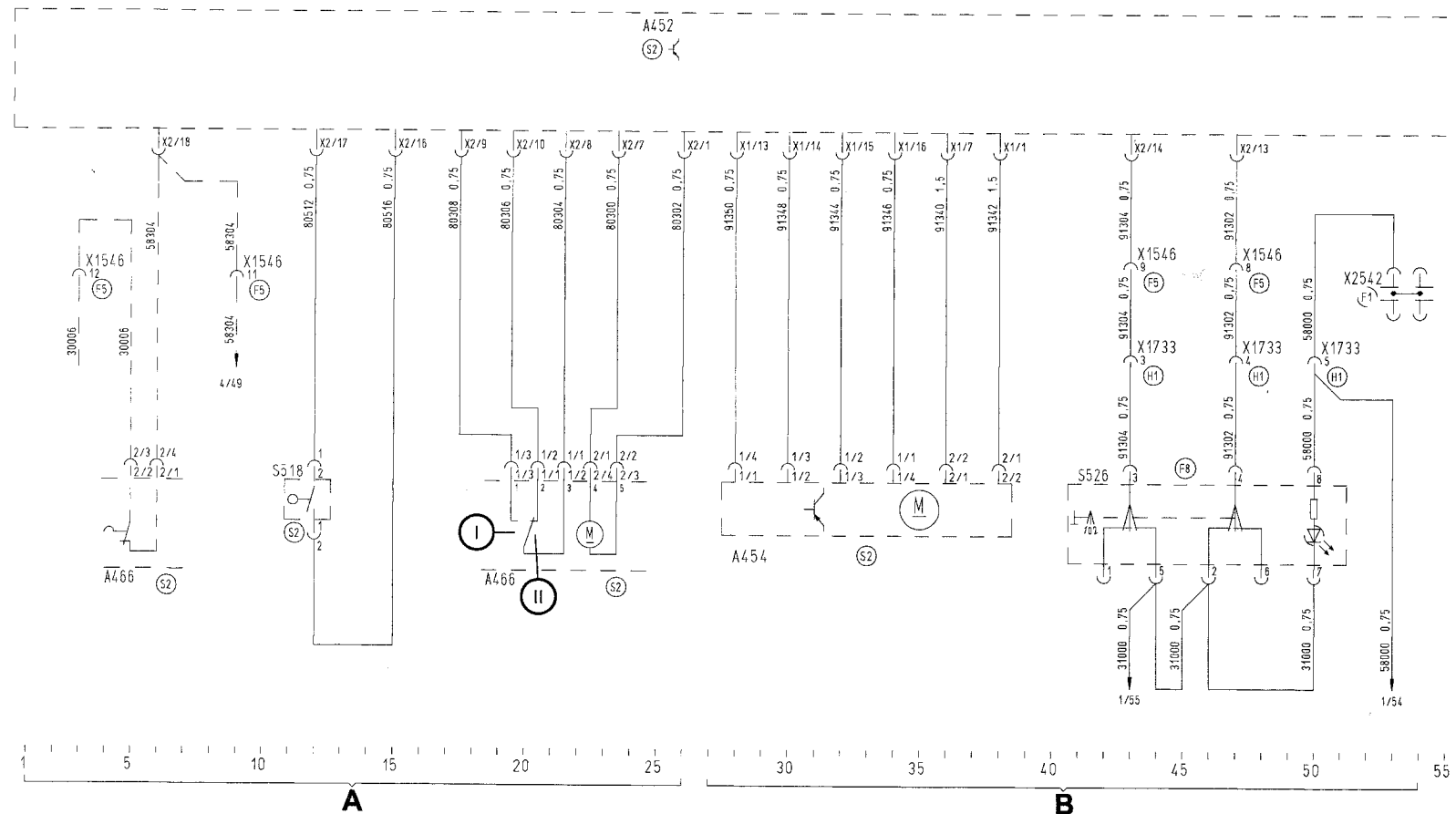
- Ⓘ Locking  
Ⓙ Unlocking

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2989** Sheet **3** of 5

A100  
(E6)

A302  
(E6)



## Door module (LL)

### Legend

Wiring diagram no. **81.99192.2989** Sheet 4 of 5

Change status: 03.01

**A = Mirror adjustment/mirror heating, passenger side**

**B = Power supply, passenger door**

**C = CAN**

**A100** (255) Central fuse, relay and terminal block  
**A156** (450) Main mirror (passenger)  
**A252** (448) Wide-angle mirror (passenger)  
**A254** (446) Curb mirror (passenger)  
**A302** (352) Central computer 2  
**A452** (440) Door module (passenger side)

**V645** (117) Diode group, door module  
**V646** Diode, waking ZBR

**X1546** Stvd. door, right  
**X1582** Stvd. main and wide-angle mirror, right  
**X1584** Stvd. curb mirror, right

### Pin assignment A452:

**X1/6** Curb mirror + terminal 30  
**X1/12** Curb mirror, earth  
**X1/10** Curb mirror, serial  
**X1/5** Main and wide-angle mirror + terminal 30  
**X1/11** Main and wide-angle mirror, earth  
**X1/9** Main and wide-angle mirror, serial  
**X1/4** Power supply +15 (mirror)  
**X1/2** Power supply +30 (cab + central locking)  
**X1/8** Earth, load  
**X1/17** CAN low  
**X1/18** CAN high  
**X2/15** Central vehicle computer, hazard warning light

### Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

# ADDITIONAL WIRING DIAGRAMS

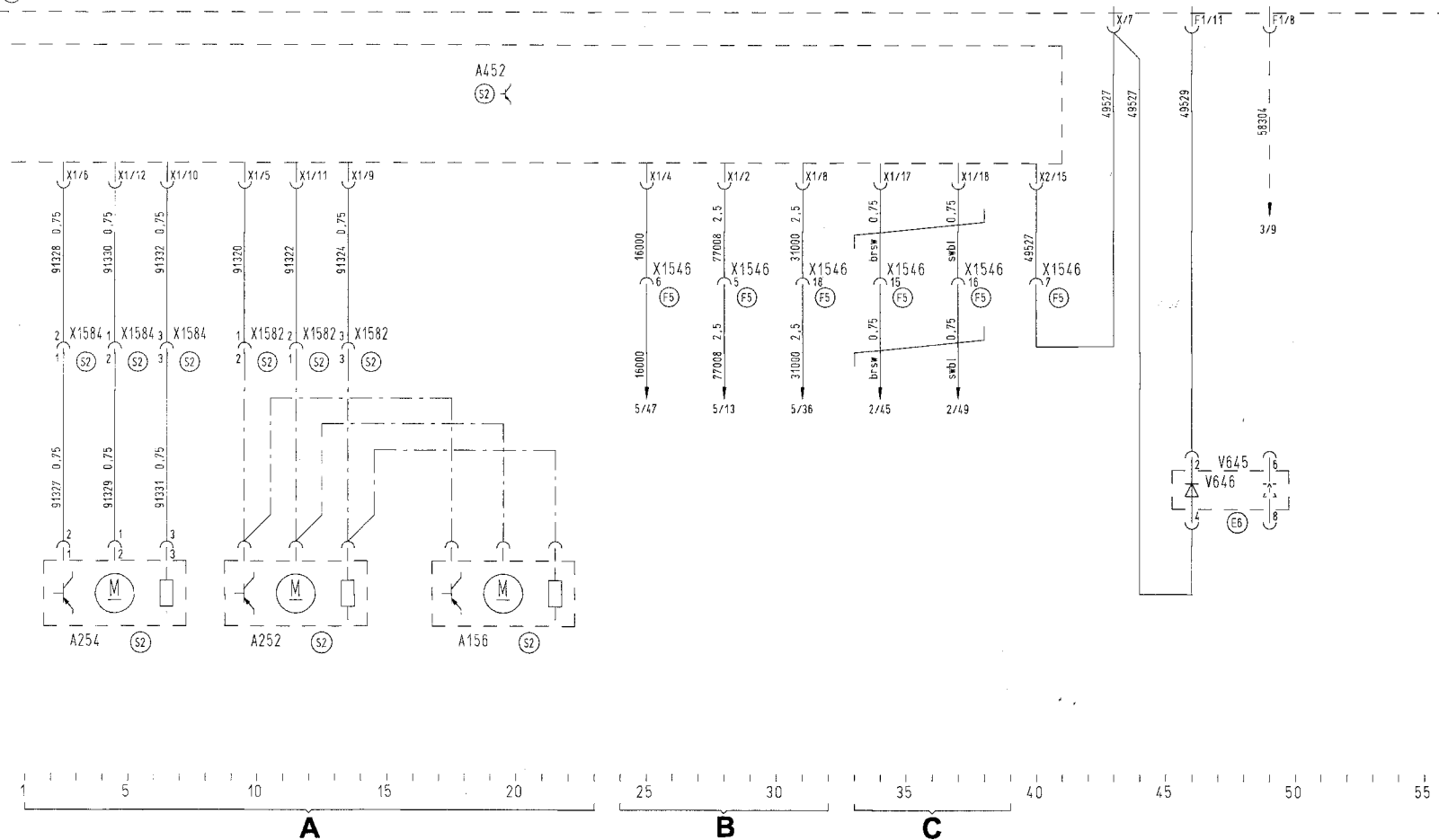
Wiring diagram no. **81.99192.2989** Sheet 4 of 5

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Door module (LL)

#### Legend

Wiring diagram no. **81.99192.2989** Sheet **5** of 5  
Change status: 03.01

#### A = Supply voltage

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**F376** (101) Fuse, cab interior (terminal 15)  
**F382** (130) Fuse, door module (terminal 15)  
**F383** (130) Fuse, door module (terminal 30)

**X1733** Stvd. switch sunroof

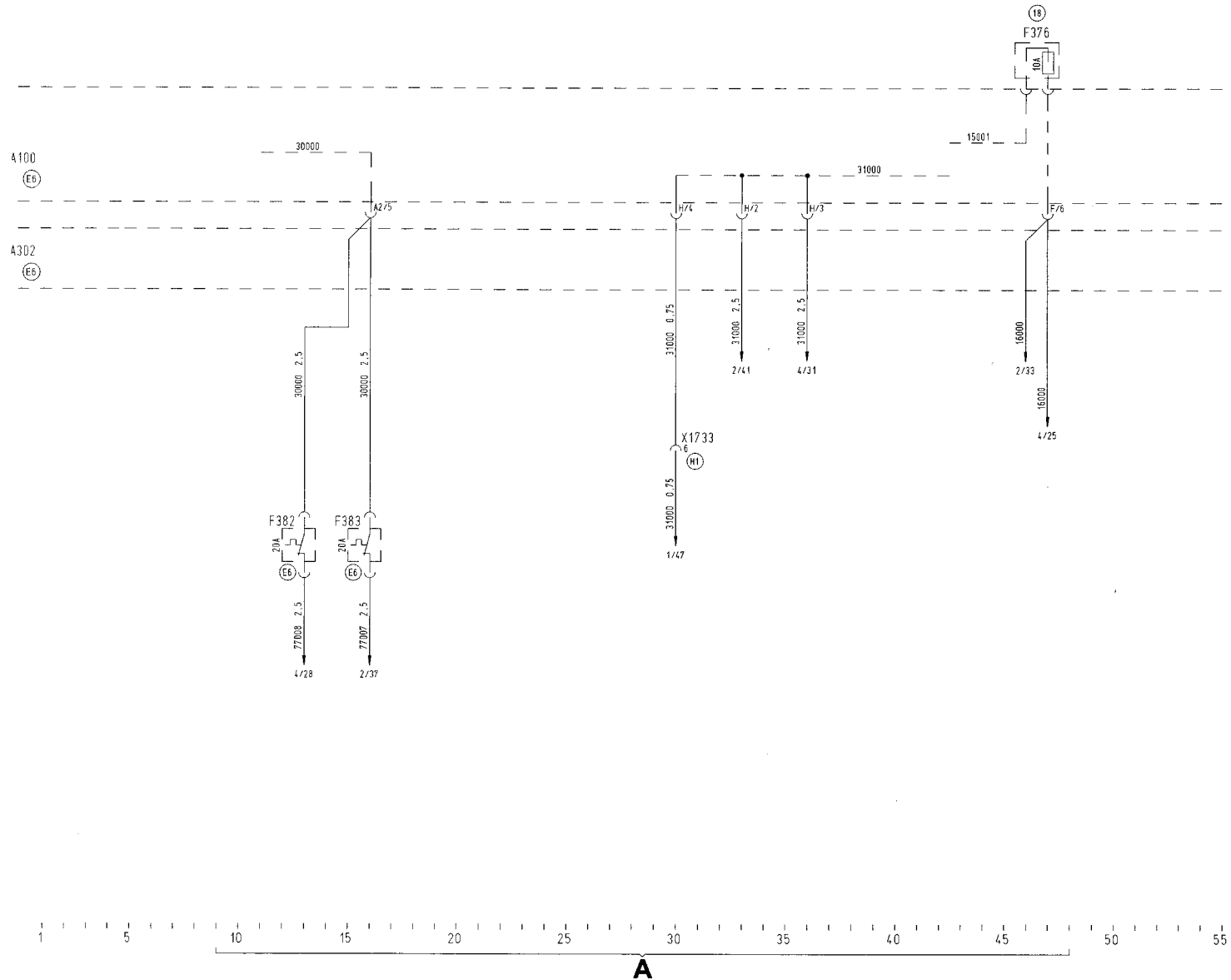
### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |



ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.2989 Sheet 5 of 5



## Door module (RL)

### Legend

Wiring diagram no. **81.99192.2990** Sheet **1** of 5

Change status: 03.01

**A = Central locking, passenger door**

**B = Window lift, passenger door**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A451** (440) Door module (passenger side)  
**A453** (443) Window lift (passenger side)  
**A465** (453) Door lock (passenger side)

**S519** (522) Lock nut switch, left  
**S527** (525) Control switch, window lift, left

**X1547** Stvd. door, left  
**X1733** Stvd. switch sunroof

### Pin assignment A451:

**X2/18** Central locking, lock latch switch E  
**X2/17** Central locking, lock nut switch E  
**X2/16** Central locking, lock nut switch A  
**X2/9** Central locking, actuator element locked/unlocked  
**X2/10** Central locking, actuator element locked/unlocked  
**X2/8** Central locking, actuator element locked/unlocked  
**X2/7** Central locking, engine, actuator element +  
**X2/1** Central locking, engine, actuator element -  
**X1/13** Window lift, hall sensor 2 signal  
**X1/14** Window lift, hall sensor 1 signal  
**X1/15** Window lift, hall sensor 1/2 +  
**X1/16** Window lift, hall sensor 1/2 -  
**X1/7** Window lift, engine +  
**X1/1** Window lift, engine -  
**X2/14** Close window lift  
**X2/13** Open window lift

### Marking of mounting positions

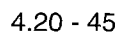
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

(I) Locking

(II) Unlocking

A100  
(E6)

A302  
(E6)



## ADDITIONAL WIRING DIAGRAMS

### Door module (RL)

#### Legend

Wiring diagram no. **81.99192.2990** Sheet 2 of 5  
Change status: 03.01

**A = Mirror adjustment/mirror heating, passenger door**

**B = Power supply, passenger door**

**C = CAN**

**A100** (255) Central fuse, relay and terminal block  
**A157** (449) Main mirror (passenger side)  
**A251** (447) Wide-angle mirror (passenger side)  
**A253** (445) Curb mirror (passenger side)  
**A302** (352) Central computer 2  
**A451** (440) Door module (passenger side)

**V645** (117) Diode group, door module  
**V646** Diode, waking ZBR

**X1547** Stvd. door, left  
**X1583** Stvd. main and wide-angle mirror, left  
**X1585** Stvd. curb mirror, left

#### Pin assignment A451:

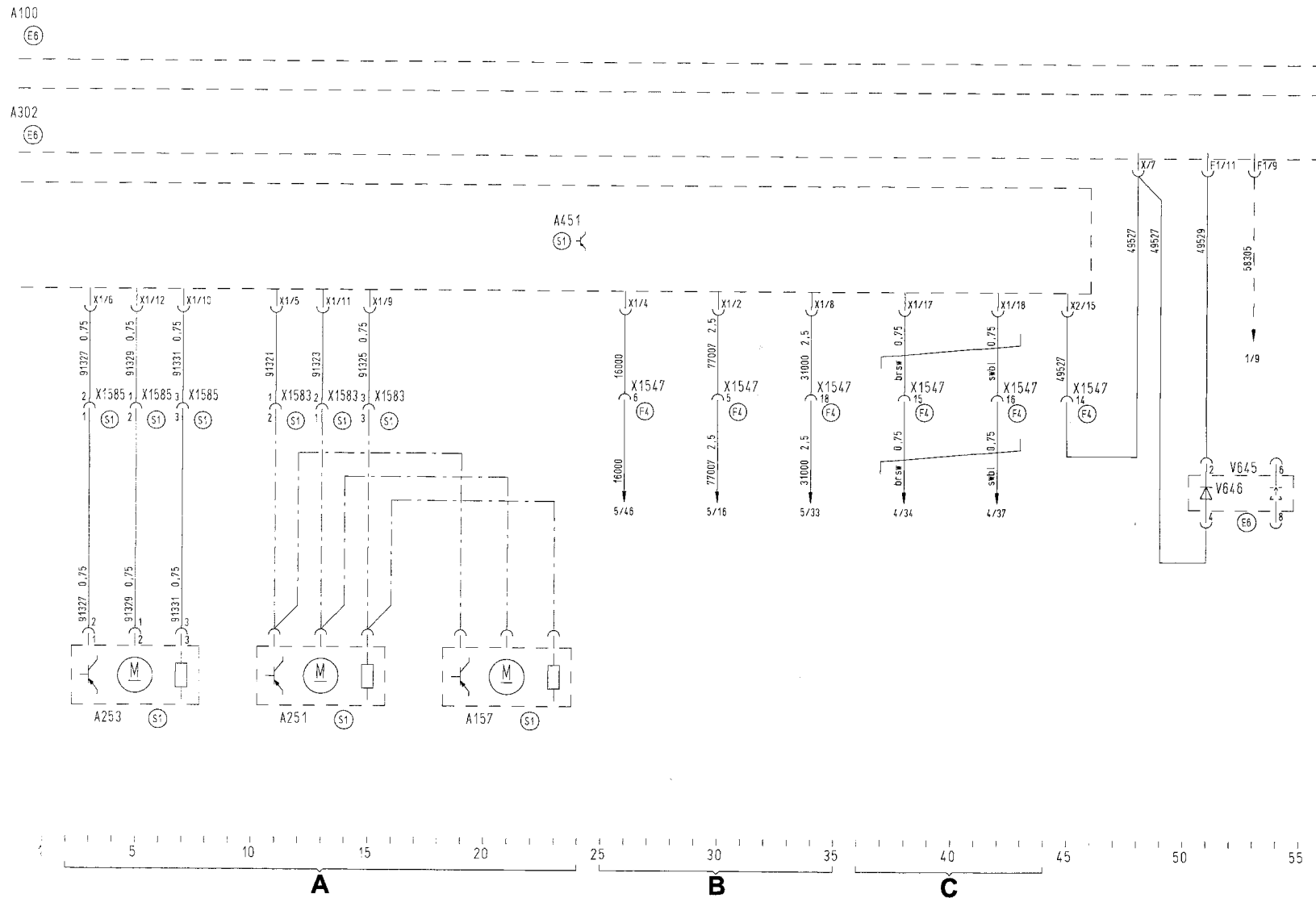
**X1/6** Curb mirror + terminal 30  
**X1/12** Curb mirror, earth  
**X1/10** Curb mirror, serial  
**X1/5** Main and wide-angle mirror + terminal 30  
**X1/11** Main and wide-angle mirror, earth  
**X1/9** Main and wide-angle mirror, serial  
**X1/4** Power supply +15 (mirror)  
**X1/2** Power supply +30 (cab + central locking)  
**X1/8** Earth, load  
**X1/17** CAN low  
**X1/18** CAN high  
**X2/15** Central vehicle computer, hazard warning light

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2990** Sheet 2 of 5



## Door module (RL)

### Legend

Wiring diagram no. **81.99192.2990** Sheet 3 of 5  
Change status: 03.01

**A = Central locking, driver's door**

**A = Window lift, driver's door**

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A452** (441) Door module (driver's side)  
**A454** (443) Window lift (driver side)  
**A466** (454) Door lock (driver's side)

**S518** (522) Lock nut switch, driver's door  
**S526** (525) Control switch, window lift, right

**X1546** Stvd. door, right  
**X1733** Stvd. switch sunroof  
**X2542** (246) Potential distributor, 21-pin line 58000

### Pin assignment A451:

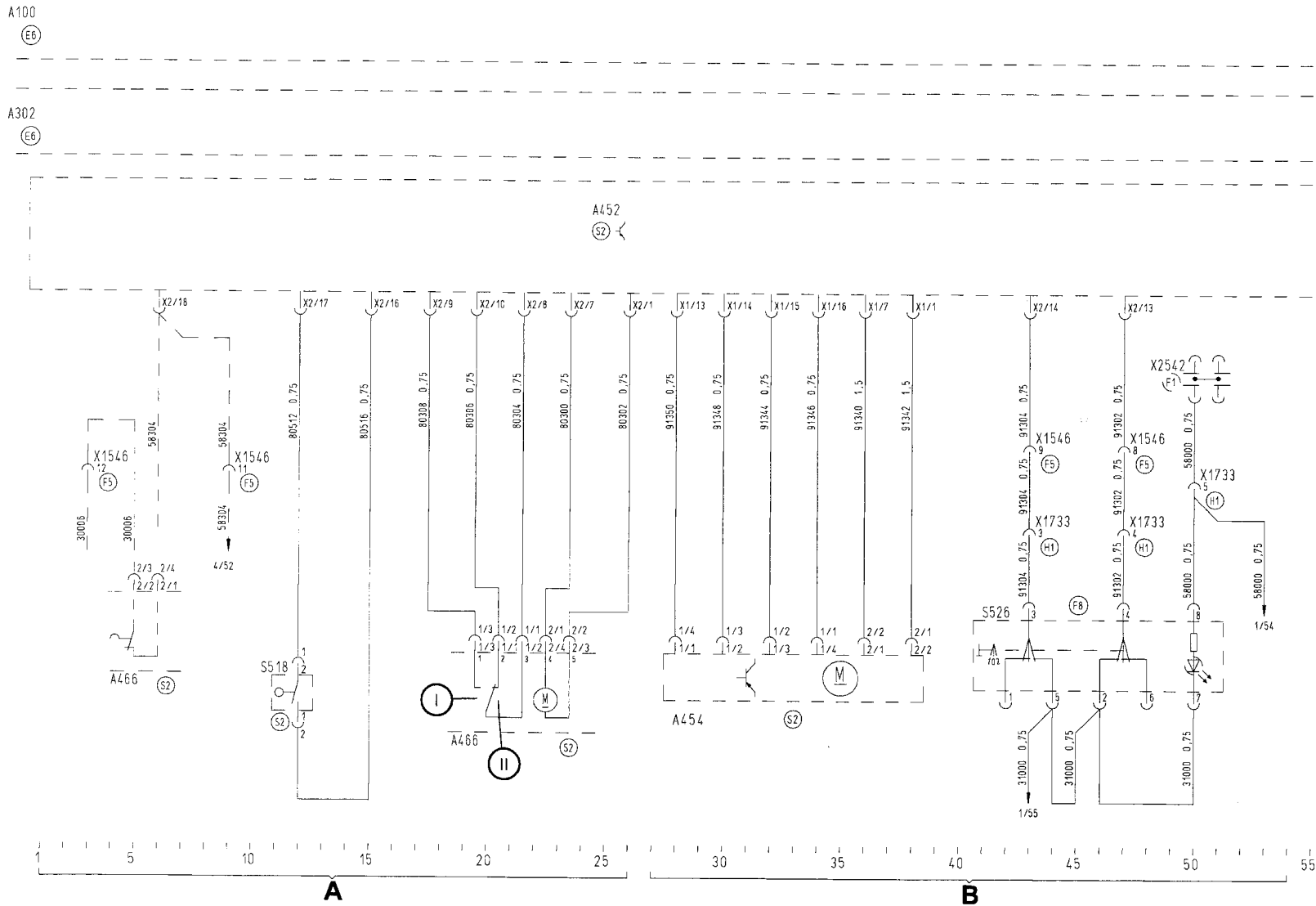
**X2/18** Central locking, lock latch switch E  
**X2/17** Central locking, lock nut switch E  
**X2/16** Central locking, lock nut switch A  
**X2/9** Central locking, actuator element locked/unlocked  
**X2/10** Central locking, actuator element locked/unlocked  
**X2/8** Central locking, actuator element locked/unlocked  
**X2/7** Central locking, engine, actuator element +  
**X2/1** Central locking, engine, actuator element -  
**X1/13** Window lift, hall sensor 2 signal  
**X1/14** Window lift, hall sensor 1 signal  
**X1/15** Window lift, hall sensor 1/2 +  
**X1/16** Window lift, hall sensor 1/2 -  
**X1/7** Window lift, engine +  
**X1/1** Window lift, engine -  
**X2/14** Close window lift  
**X2/13** Open window lift

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |

- Ⓘ Locking  
Ⓜ Unlocking

Wiring diagram no. **81.99192.2990** Sheet **3** of 5



## Door module (RL)

### Legend

Wiring diagram no. **81.99192.2990** Sheet **4** of 5

Change status: 03.01

**A = Mirror adjustment/mirror heating, driver's door**

**B = Power supply, driver's door**

**C = CAN**

**D = Sunroof**

**E = Diagnosis**

A100 (255) Central fuse, relay and terminal block  
A157 (450) Main mirror (driver)  
A252 (448) Wide-angle mirror (driver)  
A254 (446) Curb mirror (driver)  
A302 (352) Central computer 2  
A452 (441) Door module (driver's side)

X147 Stvd. sunroof/roof hatch  
X1546 Stvd. door right  
X1582 Stvd. main and wide-angle mirror, right  
X1584 Stvd. curb mirror, right  
X2544 (246) Potential distributor 21-pin K-line

### Pin assignment A452:

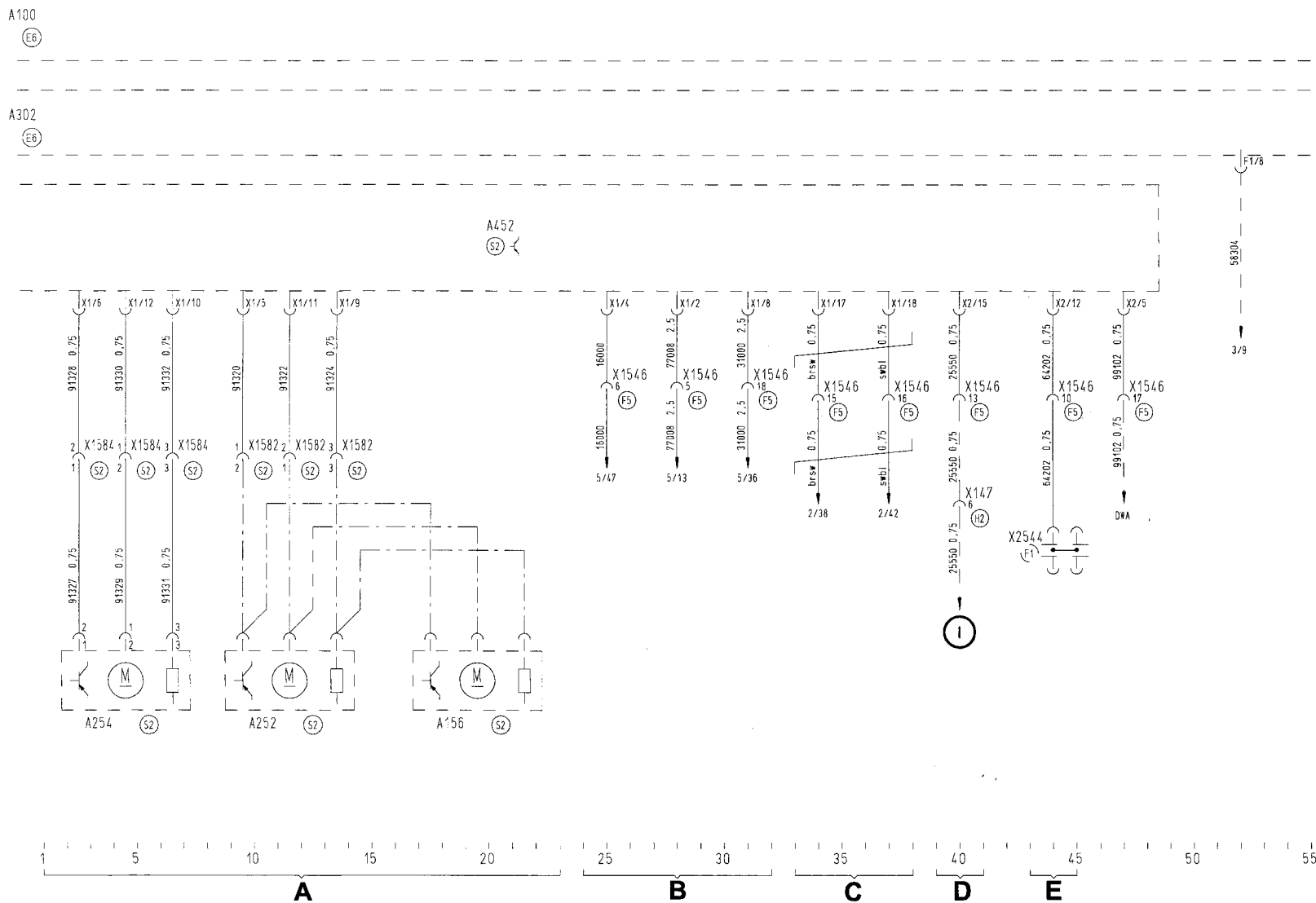
X1/6 Curb mirror + terminal 30  
X1/12 Curb mirror, earth  
X1/10 Curb mirror, serial  
X1/5 Main and wide-angle mirror + terminal 30  
X1/11 Main and wide-angle mirror, earth  
X1/9 Main and wide-angle mirror, serial  
X1/4 Power supply +15 (serial)  
X1/2 Power supply +30 (cab + central locking)  
X1/8 Earth, load  
X1/17 CAN low  
X1/18 CAN high  
X2/15 Sunroof  
X2/12 K-line  
X2/5 Alarm system

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |
| Ⓖ Sunroof                  |                                |



## ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2990** Sheet 4 of 5

## ADDITIONAL WIRING DIAGRAMS

### Door module (RL)

#### Legend

Wiring diagram no. **81.99192.2990** Sheet **5** of 5

Change status: 03.01

#### A = Supply voltage

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**F376** (101) Fuse, cab interior (terminal 15)

**F382** (130) Fuse, door module (terminal 15)

**F383** (130) Fuse, door module (terminal 30)

**X1733.** Stvd. switch sunroof

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

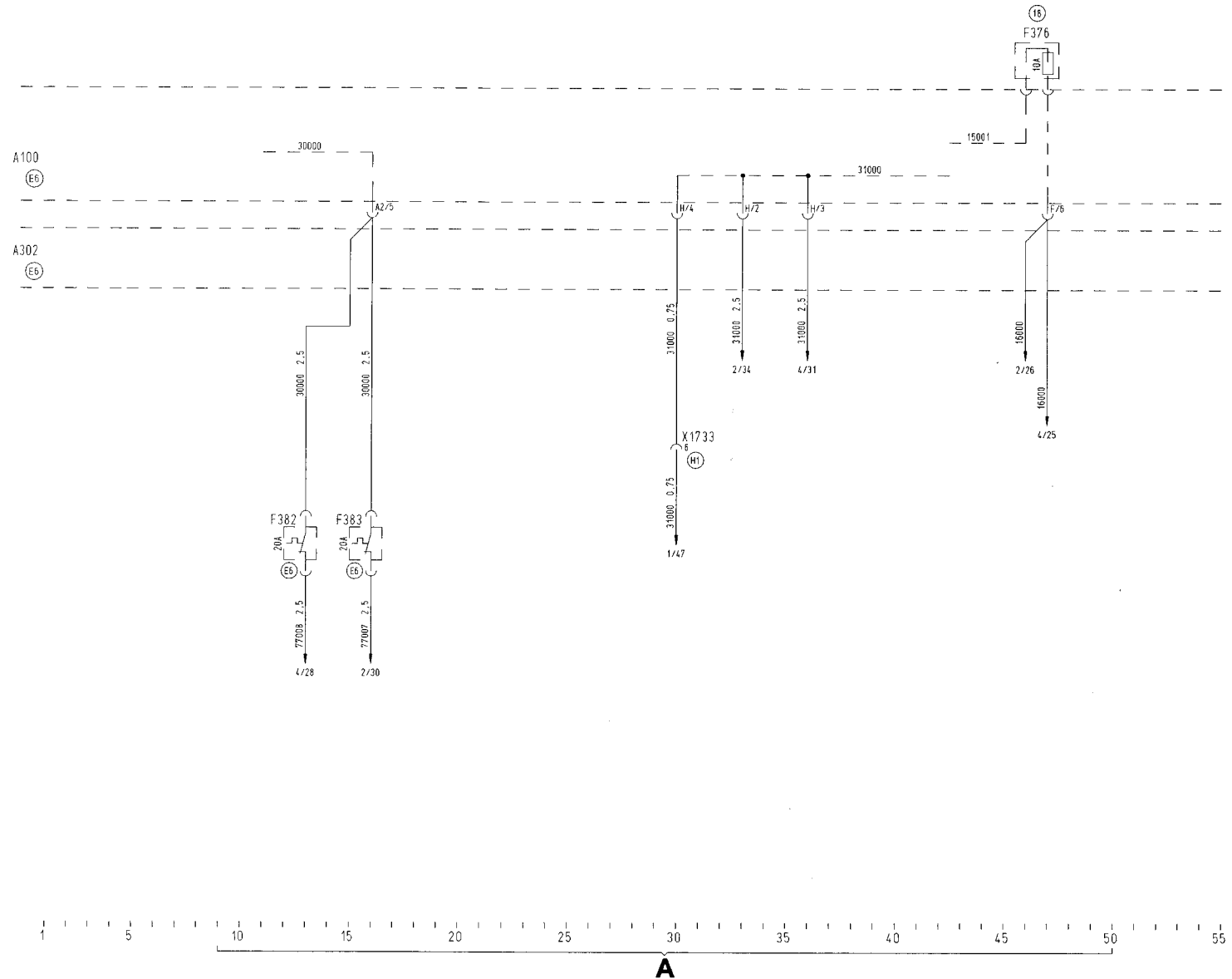
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2990** Sheet **5** of **5**



**ADDITIONAL WIRING DIAGRAMS**

## ADDITIONAL WIRING DIAGRAMS

### Preparation for cooling superstructure (tractor vehicle)

#### Legend

Wiring diagram no. **81.99192.1469** Sheet **1** of 2

Change status: 05.01

#### A = Preparation for cooling, superstructure

|              |       |                                                                    |
|--------------|-------|--------------------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                             |
| <b>A302</b>  | (352) | Central computer 2                                                 |
| <b>A403</b>  | (339) | Vehicle management computer                                        |
| <b>F558</b>  | (129) | Fuse, cooling superstructure                                       |
| <b>H408</b>  | (155) | Indicator light block, cooling, superstructure, tractor vehicle    |
| <b>H410</b>  | (104) | Indicator light, cooling, superstructure, tractor vehicle          |
| <b>H412</b>  | (104) | Indicator light, cooling, superstructure, defrost, tractor vehicle |
| <b>K869</b>  | (283) | Relay I, cooling, superstructure, tractor vehicle                  |
| <b>K870</b>  | (283) | Relay II, cooling, superstructure, tractor vehicle                 |
| <b>K871</b>  | (281) | Relay, start inhibitor for cooling superstructure                  |
| <b>K888</b>  | (280) | Relay ZDR/cooling superstructure                                   |
| <b>S764</b>  | (676) | Switch, cooling, superstructure, tractor vehicle                   |
| <b>S765</b>  | (678) | Control switch, cooling, superstructure, defrost, tractor vehicle  |
| <b>X669</b>  |       | Stvd. start inhibitor                                              |
| <b>X1754</b> |       | Soldered connector, line 59104                                     |
| <b>X1757</b> |       | Soldered connector, line 16006                                     |
| <b>X1996</b> |       | Stvd. intermediate speed control interface (FFR)                   |
| <b>X2491</b> |       | Stvd. ZDR/cooling superstructure                                   |
| <b>X2509</b> | (203) | Relay base K869, K870                                              |
| <b>X2541</b> | (246) | Potential distributor, 21-pin line 31000                           |
| <b>X2542</b> | (246) | Potential distributor, 21-pin line 58000                           |

#### Marking of mounting positions

|             |                          |             |                              |
|-------------|--------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                     | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                   | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                  | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                    | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                   | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right           | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left            | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area   | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks       | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab         | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel         | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part             | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column    | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals              | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left  | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right |             |                              |

The diagram illustrates the power supply system for the A100, showing the connection of various components to the A302 and T-CAN lines. The horizontal axis is labeled 'A' and ranges from 1 to 55. The vertical axis is labeled 'A100' and 'A302'. The diagram includes a horizontal axis labeled 'A' from 1 to 55 and a vertical axis labeled 'A100' and 'A302'. The diagram shows the connection of various components, including relays (K869, K870, K871, K888), switches (S764, S765), and lamps (H408, H410, H412). The diagram also shows the connection of various components to the A302 and T-CAN lines. The diagram includes a horizontal axis labeled 'A' from 1 to 55 and a vertical axis labeled 'A100' and 'A302'. The diagram shows the connection of various components, including relays (K869, K870, K871, K888), switches (S764, S765), and lamps (H408, H410, H412). The diagram also shows the connection of various components to the A302 and T-CAN lines.

# Preparation cooling superstructure (tractor vehicle)

## Legend

Wiring diagram no. **81.99192.1469** Sheet **2** of 2

Change status: 05.01

## **A = Preparation, cooling, superstructure**

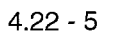
|              |       |                                                                         |
|--------------|-------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                                  |
| <b>A302</b>  | (352) | Central computer 2                                                      |
| <b>A578</b>  |       | Cooling superstructure                                                  |
| <b>X1643</b> |       | Crimped connector, line 58300                                           |
| <b>X1644</b> |       | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X2451</b> |       | Stvd. cooling superstructure                                            |
| <b>X2452</b> |       | Stvd. cooling superstructure                                            |
| <b>X2453</b> |       | Stvd. cooling superstructure                                            |
| <b>X2575</b> |       | Stvd. cooling superstructure                                            |
| <b>X2577</b> | (221) | Crimped connector, line 23550                                           |

## Marking of mounting positions

|                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

E6

E6





## Preparation cooling superstructure (tractor vehicle, trailer)

### Legend

Wiring diagram no. **81.99192.1468** Sheet 1 of 3

Change status: 05.01

### A = Preparation, cooling, superstructure

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**F558** (129) Fuse, cooling superstructure

**K869** (283) Relay I, cooling, superstructure, tractor vehicle

**K870** (283) Relay II, cooling, superstructure, tractor vehicle

**K893** (283) Relay I, cooling, superstructure, trailer

**K894** (283) Relay II, cooling, superstructure, trailer

**S764** (676) Switch, cooling, superstructure, tractor vehicle

**S765** (678) Control switch, cooling, superstructure, defrost, tractor vehicle

**S766** (677) Switch, cooling, superstructure, trailer

**S767** (679) Control switch, cooling, superstructure, defrost, trailer

**X1754** Soldered connector, line 59104

**X2509** (203) Relay base K869, K870

**X2510** (203) Relay base K893, K894

**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

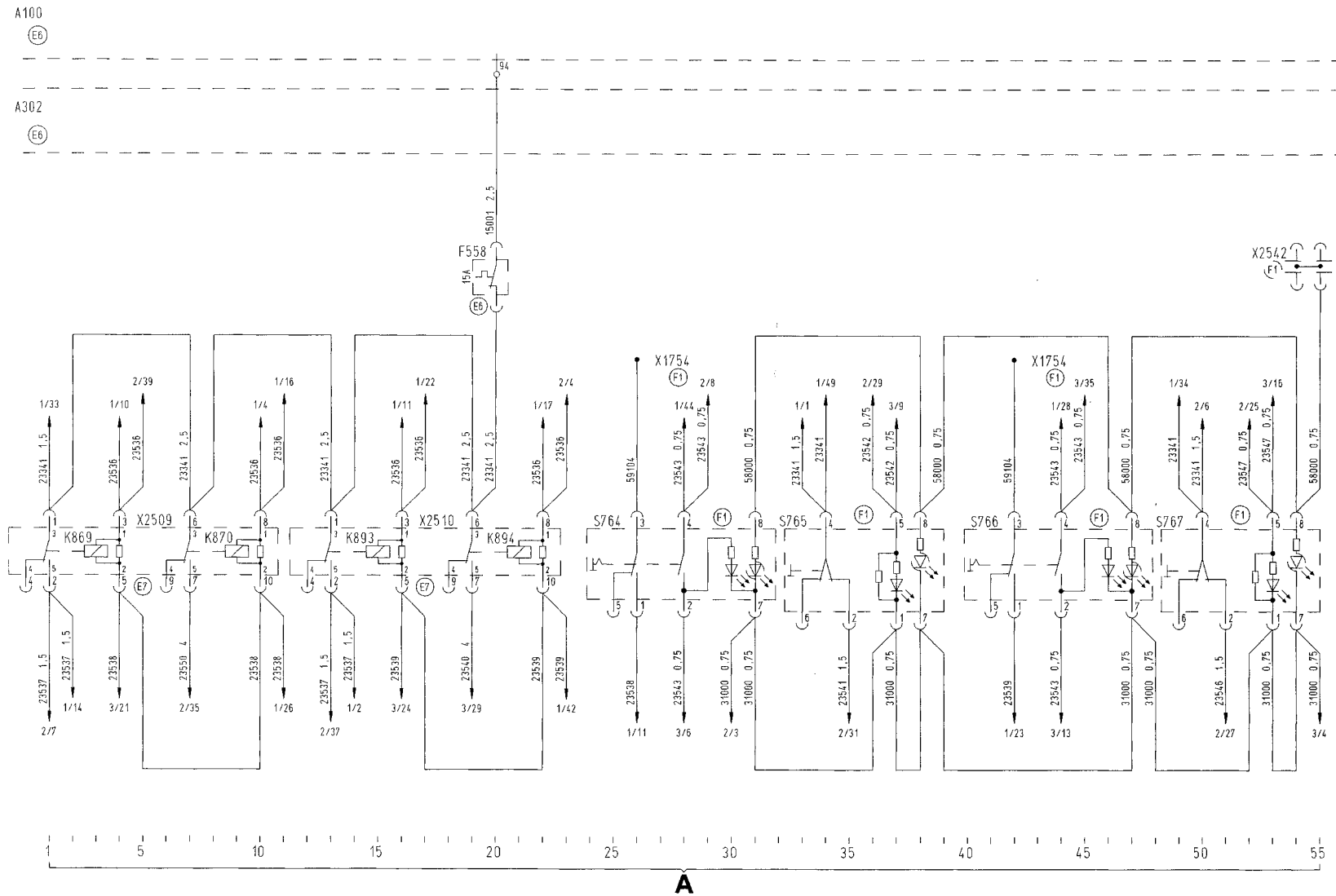
(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1468** Sheet **1** of **3**



## ADDITIONAL WIRING DIAGRAMS

### Preparation cooling superstructure (tractor vehicle, trailer)

#### Legend

Wiring diagram no. **81.99192.1468** Sheet 2 of 3

Change status: 05.01

#### A = Preparation, cooling, superstructure

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A578** Cooling superstructure

**K888** (280) Relay ZDR/cooling superstructure

**X1643** Crimped connector, line 58300

**X1996** Stvd. intermediate speed control interface (FFR)

**X2451** Stvd. cooling superstructure

**X2452** Stvd. cooling superstructure

**X2491** Stvd. ZDR/cooling superstructure

**X2575** Stvd. cooling superstructure

**X2577** (221) Crimped connector, line 23550

#### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

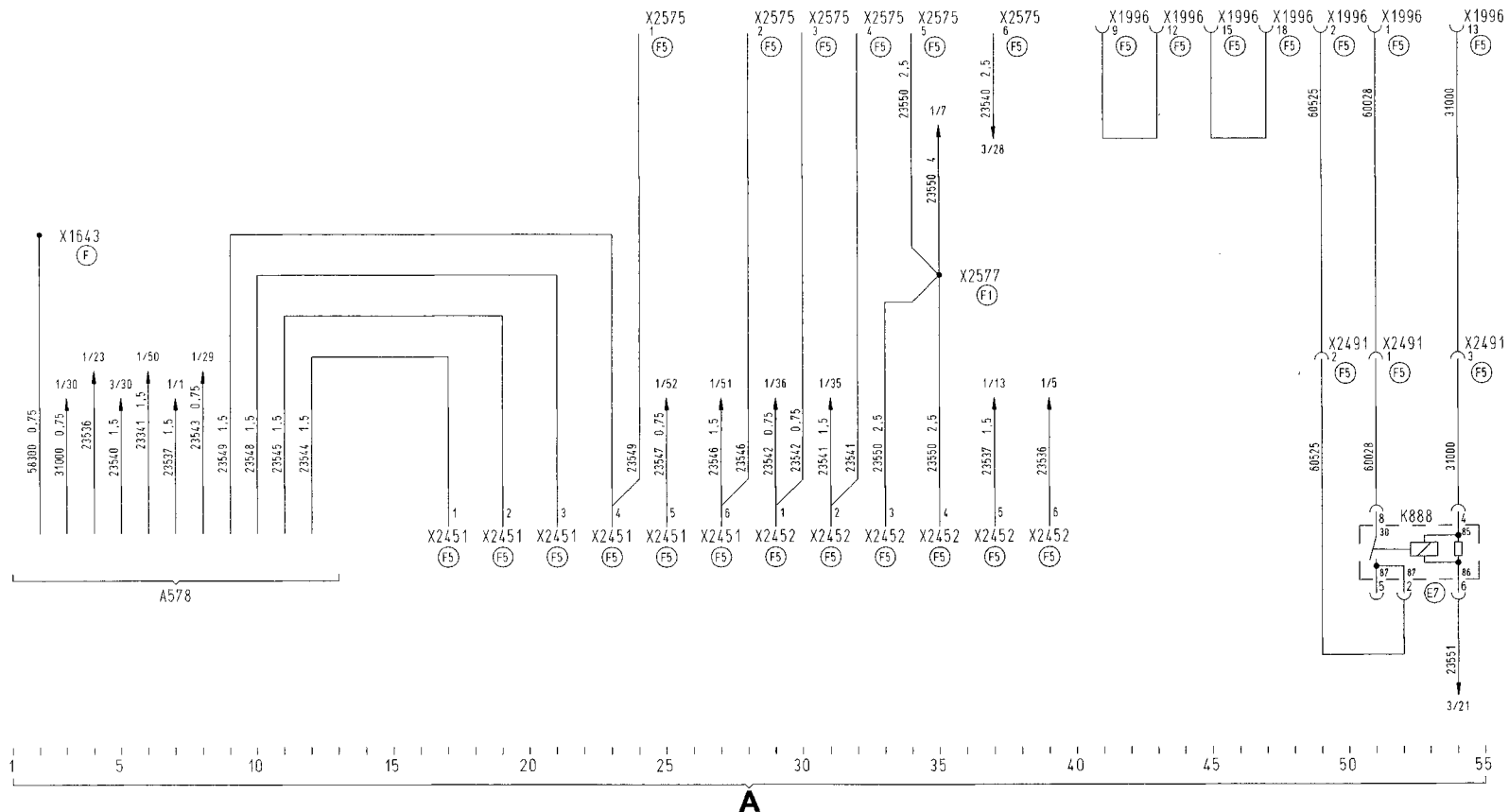
Wiring diagram no. **81.99192.1468** Sheet **2** of 3

A100

(E6)

A302

(E6)



## ADDITIONAL WIRING DIAGRAMS

### Preparation cooling superstructure (tractor vehicle, trailer)

#### Legend

Wiring diagram no. **81.99192.1468** Sheet **3** of 3

Change status: 05.01

#### A = Preparation, cooling, superstructure

|              |       |                                                                         |
|--------------|-------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                                  |
| <b>A302</b>  | (352) | Central computer 2                                                      |
| <b>A403</b>  | (339) | Vehicle management computer                                             |
| <b>H408</b>  | (155) | Indicator light block, cooling, superstructure, tractor vehicle         |
| <b>H409</b>  | (155) | Indicator light block, cooling, superstructure, trailer                 |
| <b>H410</b>  | (104) | Indicator light, cooling, superstructure, tractor vehicle               |
| <b>H411</b>  | (104) | Indicator light, cooling, superstructure, trailer                       |
| <b>H412</b>  | (104) | Indicator light, cooling, superstructure, defrost, tractor vehicle      |
| <b>H413</b>  | (104) | Indicator light, cooling, superstructure, defrost, trailer              |
| <b>K871</b>  | (281) | Relay, start inhibitor for cooling superstructure                       |
| <b>V779</b>  | (117) | Diode group, ZDR/cooling superstructure                                 |
| <b>V780</b>  |       | Diode, ZDR/cooling superstructure, tractor vehicle                      |
| <b>V781</b>  |       | Diode, ZDR/cooling superstructure, trailer                              |
| <b>X669</b>  |       | Std. start inhibitor                                                    |
| <b>X1644</b> |       | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1757</b> |       | Soldered connector, line 16006                                          |
| <b>X2453</b> |       | Std. cooling superstructure                                             |
| <b>X2460</b> | (221) | Crimped connector, line 23540                                           |
| <b>X2541</b> | (246) | Potential distributor, 21-pin line 31000                                |
| <b>X2576</b> |       | Std. cooling superstructure                                             |

#### Marking of mounting positions

|             |                          |             |                              |
|-------------|--------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                     | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                   | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                  | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                    | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                   | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right           | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left            | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area   | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks       | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab         | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel         | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part             | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column    | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals              | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left  | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right |             |                              |

## ADDITIONAL WIRING DIAGRAMS

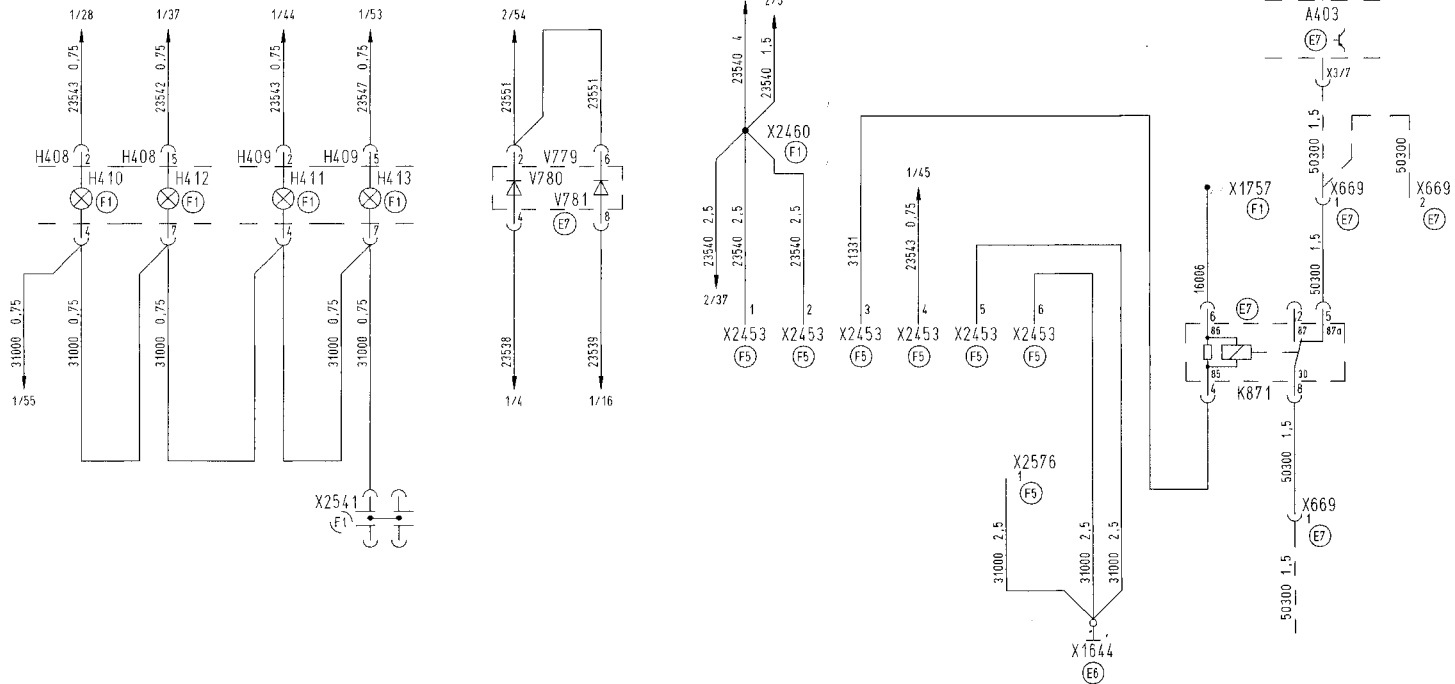
Wiring diagram no. **81.99192.1468** Sheet **3** of 3

A100

E6

A302

E6



A horizontal number line is shown, ranging from 1 to 55. Major tick marks are labeled every 5 units (1, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55). Minor tick marks are present every 1 unit. A bracket labeled 'A' is drawn below the line, spanning from 1 to 28.

# Preparation LSVA (performance-related heavy traffic levy)

## Legend

Wiring diagram no. **81.99192.1464** Sheet 1 of 1

Change status: 05.01

## A = Preparation for LSVA

|              |       |                                              |
|--------------|-------|----------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block       |
| <b>A302</b>  | (352) | Central computer 2                           |
| <b>A408</b>  | (403) | Tachograph                                   |
| <b>A557</b>  |       | LSVA recording device                        |
| <b>F128</b>  | (101) | Fuse, permanent consumer                     |
| <b>F376</b>  | (101) | Fuse, cab interior (terminal 15)             |
| <b>V712</b>  | (117) | Diode group, load detection, trailer         |
| <b>V716</b>  |       | Diode, load detection, trailer               |
| <b>V717</b>  |       | Diode, load detection, trailer               |
| <b>X1536</b> |       | Std. cab tachograph                          |
| <b>X1540</b> |       | Std. frame I                                 |
| <b>X1586</b> |       | Std. connection to trailer lighting socket 1 |
| <b>X1639</b> |       | Soldered connector, line 16000               |
| <b>X2328</b> |       | Std. 2-pin adaptation trailer light          |
| <b>X2541</b> | (246) | Potential distributor, 21-pin line 31000     |
| <b>X2543</b> | (246) | Potential distributor, 21-pin line 30006     |

## Marking of mounting positions

|             |                          |             |                              |
|-------------|--------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                     | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                   | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                  | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                    | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                   | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right           | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left            | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area   | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks       | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab         | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel         | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part             | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column    | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals              | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left  | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right |             |                              |
| <b>(I)</b>  | Battery 1                |             |                              |

[illegible]



## ADDITIONAL WIRING DIAGRAMS

### Preparation trailing axle control, semitrailer

#### Legend

Wiring diagram no. **81.99192.1465** Sheet **1** of 1  
Change status: 05.01

#### A = Preparation trailing axle control, semitrailer

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**F201** (118) Fuse, trailing axle control, semitrailer

**S250** (543) Switch, raise trailing axle  
**S251** (544) Traction help control switch

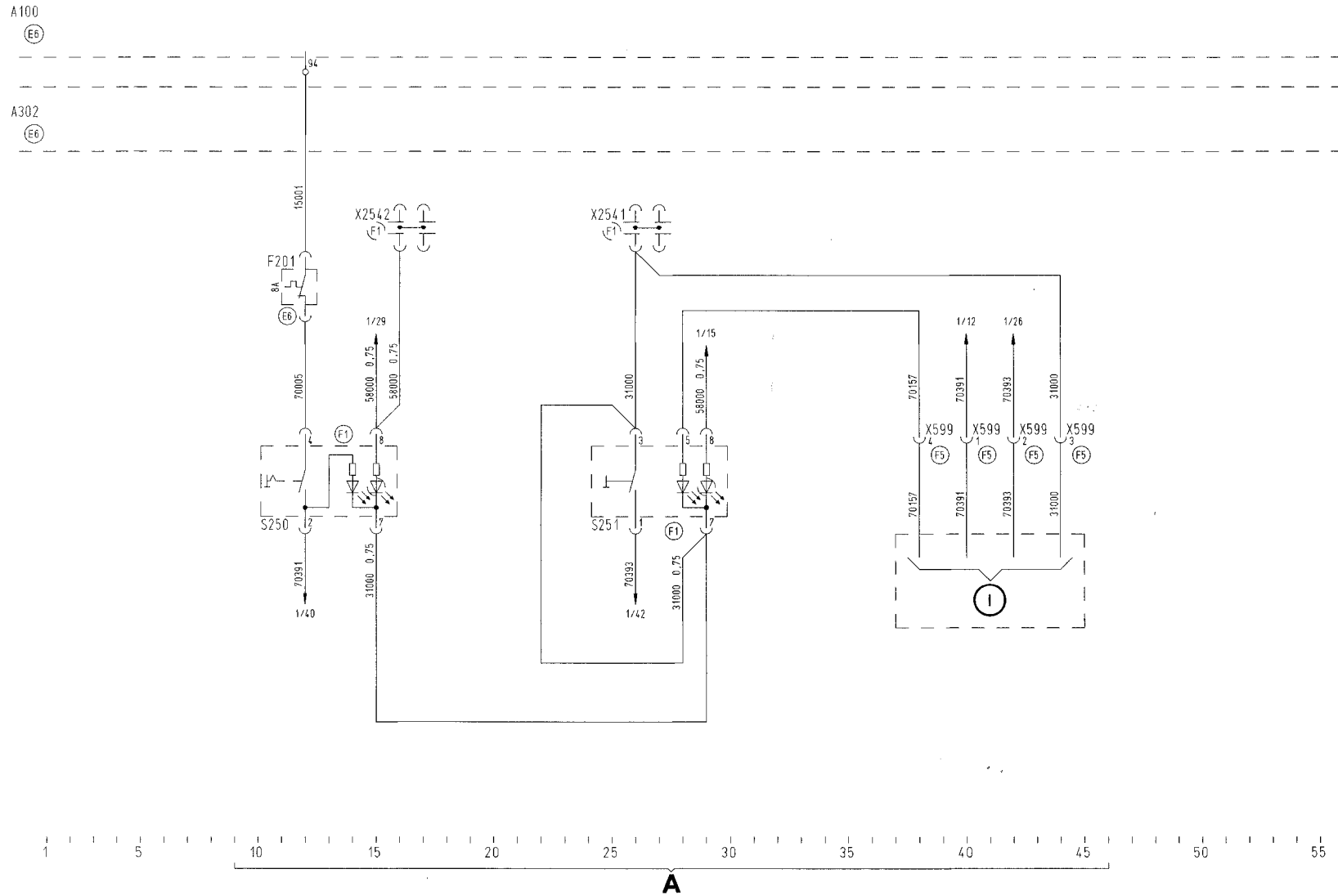
**X599** Stvd. trailing axle control, semitrailer  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

- |                             |                                |
|-----------------------------|--------------------------------|
| Ⓐ Tail                      | Ⓕ Driving seat                 |
| Ⓑ Engine                    | Ⓖ Passenger seat               |
| Ⓑ Gearbox                   | Ⓖ Control panel                |
| Ⓒ Front                     | Ⓖ Battery box                  |
| Ⓒ Bumper                    | Ⓖ B-pillar on driver's side    |
| Ⓒ Entrance right            | Ⓖ A-pillar on driver's side    |
| Ⓒ Entrance left             | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area    | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks        | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab          | Ⓖ Front axle                   |
| Ⓖ Instrument panel          | Ⓖ Rear axle                    |
| Ⓖ Central part              | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column     | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals               | Ⓖ Door left                    |
| Ⓖ Front wall, inside left   | Ⓖ Door right                   |
| Ⓖ Front wall, inside right  |                                |
| Ⓖ Roll up cables behind cab |                                |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1465** Sheet **1** of **1**



## ADDITIONAL WIRING DIAGRAMS

### Preparation, central lubrication

#### Legend

Wiring diagram no. **81.99192.1466** Sheet **1** of 1

Change status: 05.01

#### A = Central lubrication

**A100** (255) Central fuse, relay and terminal block

**A302** (352) Central computer 2

**A407** (342) Instrumentation

**H116** Indicator light, central lubrication

**M131** (147) Central lubrication pump

**S407** (556) Control switch, intermediate lubrication

**X718** Stvd. cab central lubrication

**X2541** (246) Potential distributor, 21-pin line 31000

**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

ADDITIONAL WIRING DIAGRAMS

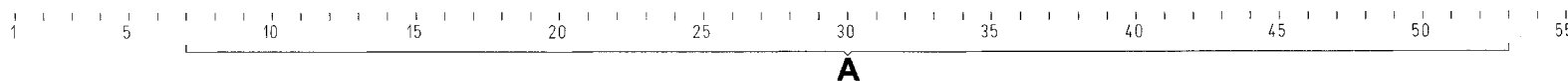
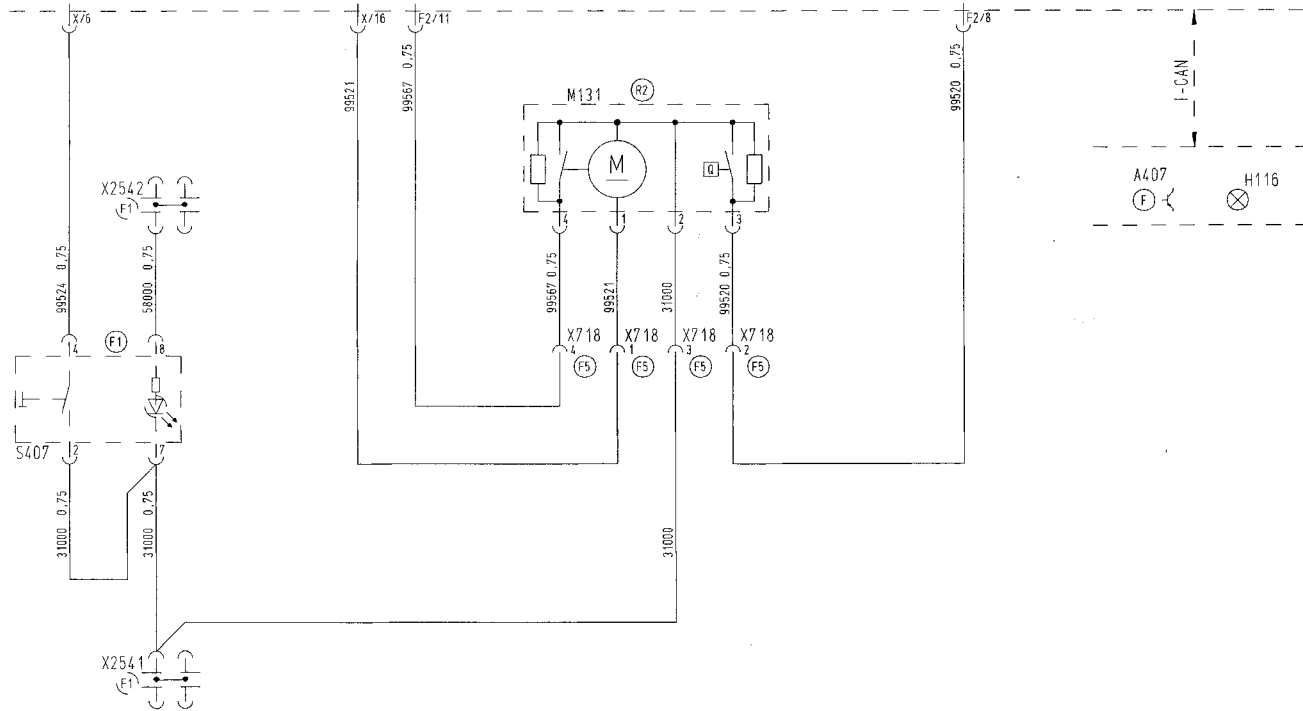
Wiring diagram no. **81.99192.1466** Sheet 1 of 1

A100

(E6)

A302

(E6)



**ADDITIONAL WIRING DIAGRAMS**

## Vehicle immobiliser

### Legend

Wiring diagram no. **81.99192.2476** Sheet **1** of 1  
Change status: 11.00

### A = Vehicle immobiliser

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A403** (339) Vehicle management computer  
**A477** (371) Electronics, vehicle immobiliser

**Q101** (110) Steering wheel lock

**X669** Stvd. start inhibitor  
**X1639** Soldered connector, line 16000  
**X1642** Earthing point, cab, behind instrument panel  
**X1966** Stvd. ignition lock  
**X1971** Stvd. vehicle immobiliser

### Marking of mounting positions

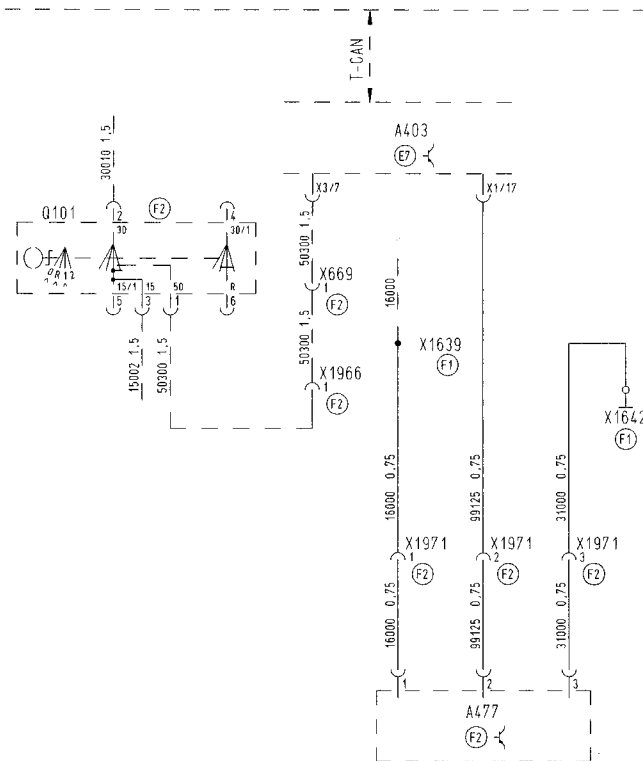
- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.2476** Sheet 1 of 1

A100  
(E6)

A302  
(E6)



1 5 10 15 20 25 30 35 40 45 50 55

A

**ADDITIONAL WIRING DIAGRAMS**



## ADDITIONAL WIRING DIAGRAMS

### Central lubrication

#### Legend

Wiring diagram no. **81.99192.1467** Sheet 1 of 1  
Change status: 05.01

#### A = Central lubrication

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A407** (342) Instrumentation

**H116** Indicator light, central lubrication

**M131** (147) Central lubrication pump

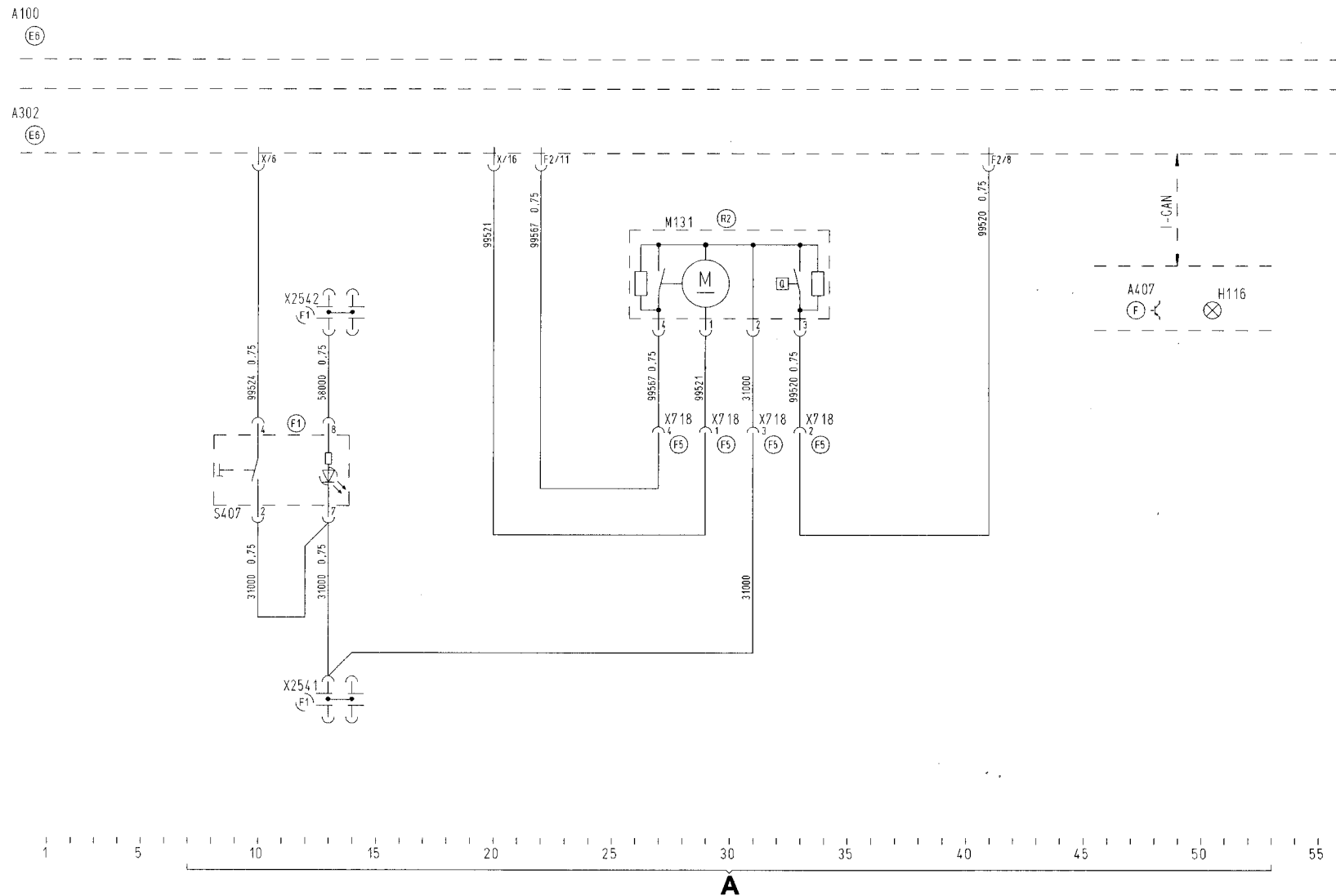
**S407** (556) Control switch, intermediate lubrication

**X718** Stvd. cab – central lubrication  
**X2541** (246) Potential distributor, 21-pin line 31000  
**X2542** (246) Potential distributor, 21-pin line 58000

### Marking of mounting positions

- |                               |                                   |
|-------------------------------|-----------------------------------|
| (A) Tail                      | (F6) Driving seat                 |
| (B1) Engine                   | (F7) Passenger seat               |
| (B2) Gearbox                  | (F8) Control panel                |
| (C) Front                     | (G) Battery box                   |
| (C1) Bumper                   | (H1) B-pillar on driver's side    |
| (C2) Entrance right           | (H2) A-pillar on driver's side    |
| (C3) Entrance left            | (J1) B-pillar on passenger's side |
| (E6) Central electrics area   | (J2) A-pillar on passenger's side |
| (E7) Control unit racks       | (L) Ceiling/roof                  |
| (E8) Rear wall of cab         | (N) Front axle                    |
| (F) Instrument panel          | (P) Rear axle                     |
| (F1) Central part             | (R1) Front part of frame          |
| (F2) Steering wheel/column    | (R2) Rear part of frame           |
| (F3) Foot pedals              | (S1) Door left                    |
| (F4) Front wall, inside left  | (S2) Door right                   |
| (F5) Front wall, inside right |                                   |

## ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1467** Sheet 1 of 1

## Supplementary heating D1LCC/D3LCC with TRS

### Legend

Wiring diagram no. **81.99192.1472** Sheet **1** of 1

Change status: 05.01

### A = Supplementary heating Eberspächer D1LCC/D3LCC with TRS

|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A290</b>  | (379) Keypad for supplementary heating (clock/thermostat)               |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A483</b>  | (380) Scope of delivery: supplementary hot-air heating                  |
| <b>F185</b>  | (129) Fuse, supplementary heating                                       |
| <b>M123</b>  | (152) Metering pump, supplementary heating                              |
| <b>V188</b>  | (120) Diode group, 8 times, for battery emergency shutdown switch       |
| <b>X546</b>  | Stvd. supplementary heating, battery main switch, electrical            |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1824</b> | Stvd. cab, metering pump, supplementary heating                         |
| <b>X1861</b> | Stvd. cab keypad, supplementary heating                                 |
| <b>X2182</b> | Stvd. TRS shutdown, air heating                                         |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                          |
| <b>X2543</b> | (246) Potential distributor, 21-pin line 30006                          |
| <b>X2544</b> | (246) Potential distributor 21-pin K-line                               |

### Marking of mounting positions

|             |                                    |             |                              |
|-------------|------------------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                               | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                             | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                            | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                              | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                             | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right                     | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left                      | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area             | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks                 | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab                   | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel                   | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part                       | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column              | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals                        | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left            | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right           |             |                              |
| <b>(I)</b>  | Scope of delivery from Eberspächer |             |                              |

[illegible]

## Supplementary heating D1LCC/D3LCC without TRS

### Legend

Wiring diagram no. **81.99192.1471** Sheet 1 of 1

Change status: 05.01

### A = Supplementary heating Eberspächer D1LCC/D3LCC without TRS

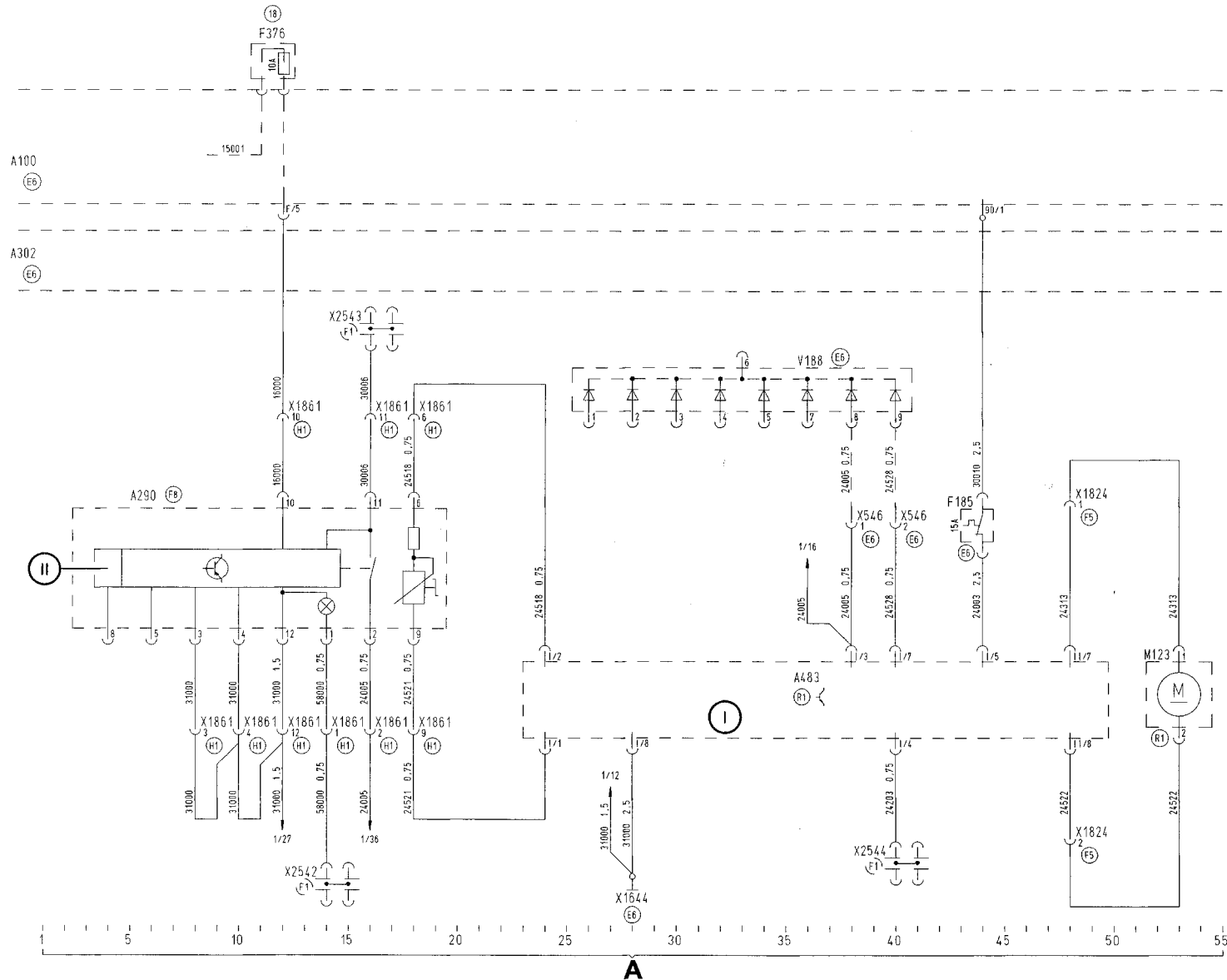
|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A290</b>  | (379) Keypad for supplementary heating (clock/thermostat)               |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A483</b>  | (380) Scope of delivery: supplementary hot-air heating                  |
| <b>F185</b>  | (129) Fuse, supplementary heating                                       |
| <b>F376</b>  | (101) Fuse, cab interior (terminal 15)                                  |
| <b>M123</b>  | (152) Metering pump, supplementary heating                              |
| <b>V188</b>  | (120) Diode group, 8 times, for battery emergency shutdown switch       |
| <b>X546</b>  | Stvd. supplementary heating, battery main switch, electrical            |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1824</b> | Stvd. cab, metering pump, supplementary heating                         |
| <b>X1861</b> | Stvd. cab keypad, supplementary heating                                 |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                          |
| <b>X2543</b> | (246) Potential distributor, 21-pin line 30006                          |
| <b>X2544</b> | (246) Potential distributor 21-pin K-line                               |

### Marking of mounting positions

|             |                                    |             |                              |
|-------------|------------------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                               | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                             | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                            | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                              | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                             | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right                     | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left                      | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area             | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks                 | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab                   | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel                   | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part                       | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column              | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals                        | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left            | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right           |             |                              |
| <b>(I)</b>  | Scope of delivery from Eberspächer |             |                              |
| <b>(II)</b> | LCD clock                          |             |                              |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1471 Sheet 1 of 1



## ADDITIONAL WIRING DIAGRAMS

### Supplementary heating D5W with TRS

#### Legend

Wiring diagram no. **81.99192.1478** Sheet 1 of 1

Change status: 05.01

#### A = Supplementary heating D5W with TRS

|              |       |                                                                         |
|--------------|-------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                                  |
| <b>A302</b>  | (352) | Central computer 2                                                      |
| <b>A494</b>  | (510) | Auxiliary water heating                                                 |
| <b>A625</b>  | (508) | Keypad, supplementary water heating                                     |
| <b>F284</b>  | (129) | Fuse, supplementary heating                                             |
| <b>F376</b>  | (101) | Fuse, cab interior (terminal 15)                                        |
| <b>M180</b>  | (153) | Metering pump 2, supplementary heating                                  |
| <b>V188</b>  | (120) | Diode group, 8 times, for battery emergency shutdown switch             |
| <b>X1644</b> |       | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X2170</b> |       | Std. TRS shutdown, water heating                                        |
| <b>X2184</b> |       | Std. cab – supplementary water heater                                   |
| <b>X2185</b> |       | Std. supplementary water heating – battery isolator switch              |
| <b>X2542</b> | (246) | Potential distributor, 21-pin line 58000                                |
| <b>X2543</b> | (246) | Potential distributor, 21-pin line 30006                                |
| <b>X2544</b> | (246) | Potential distributor 21-pin K-line                                     |

#### Marking of mounting positions

|             |                                    |             |                              |
|-------------|------------------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                               | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                             | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                            | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                              | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                             | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right                     | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left                      | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area             | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks                 | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab                   | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel                   | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part                       | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column              | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals                        | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left            | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right           |             |                              |
| <b>(I)</b>  | Scope of delivery from Eberspächer |             |                              |
| <b>(II)</b> | LCD clock                          |             |                              |

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## Supplementary heating D5W without TRS

### Legend

Wiring diagram no. **81.99192.1477** Sheet **1** of 1

Change status: 05.01

### A = Supplementary heating D5W without TRS

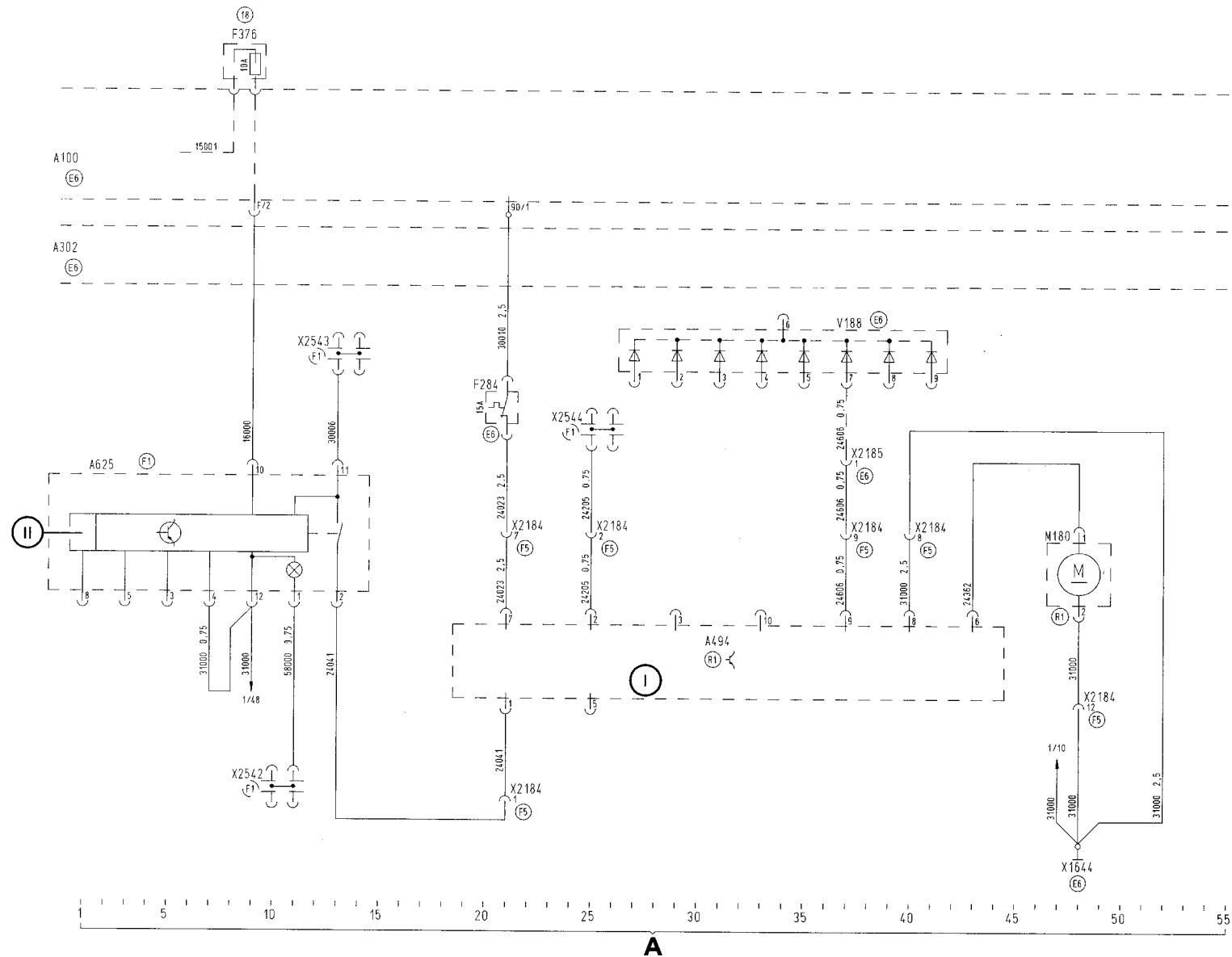
|              |       |                                                                         |
|--------------|-------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                                  |
| <b>A302</b>  | (352) | Central computer 2                                                      |
| <b>A494</b>  | (510) | Auxiliary water heating                                                 |
| <b>A625</b>  | (508) | Keypad, supplementary water heating                                     |
| <b>F284</b>  | (129) | Fuse, supplementary heating                                             |
| <b>F376</b>  | (101) | Fuse, cab interior (terminal 15)                                        |
| <b>M180</b>  | (153) | Metering pump 2, supplementary heating                                  |
| <b>V188</b>  | (120) | Diode group, 8 times, for battery emergency shutdown switch             |
| <b>X1644</b> |       | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X2184</b> |       | Stvd. cab – supplementary water heater                                  |
| <b>X2185</b> |       | Stvd. supplementary water heating – battery isolator switch             |
| <b>X2542</b> | (246) | Potential distributor, 21-pin line 58000                                |
| <b>X2543</b> | (246) | Potential distributor, 21-pin line 30006                                |
| <b>X2544</b> | (246) | Potential distributor 21-pin K-line                                     |

### Marking of mounting positions

|             |                                    |             |                              |
|-------------|------------------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                               | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                             | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                            | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                              | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                             | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right                     | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left                      | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area             | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks                 | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab                   | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel                   | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part                       | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column              | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals                        | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left            | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right           |             |                              |
| <b>(I)</b>  | Scope of delivery from Eberspächer |             |                              |
| <b>(II)</b> | LCD clock                          |             |                              |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1477 Sheet 1 of 1



## Supplementary heating Thermo 50 with TRS

### Legend

Wiring diagram no. **81.99192.1476** Sheet 1 of 1  
Change status: 05.01

### A = Supplementary heating Thermo 50 with TRS

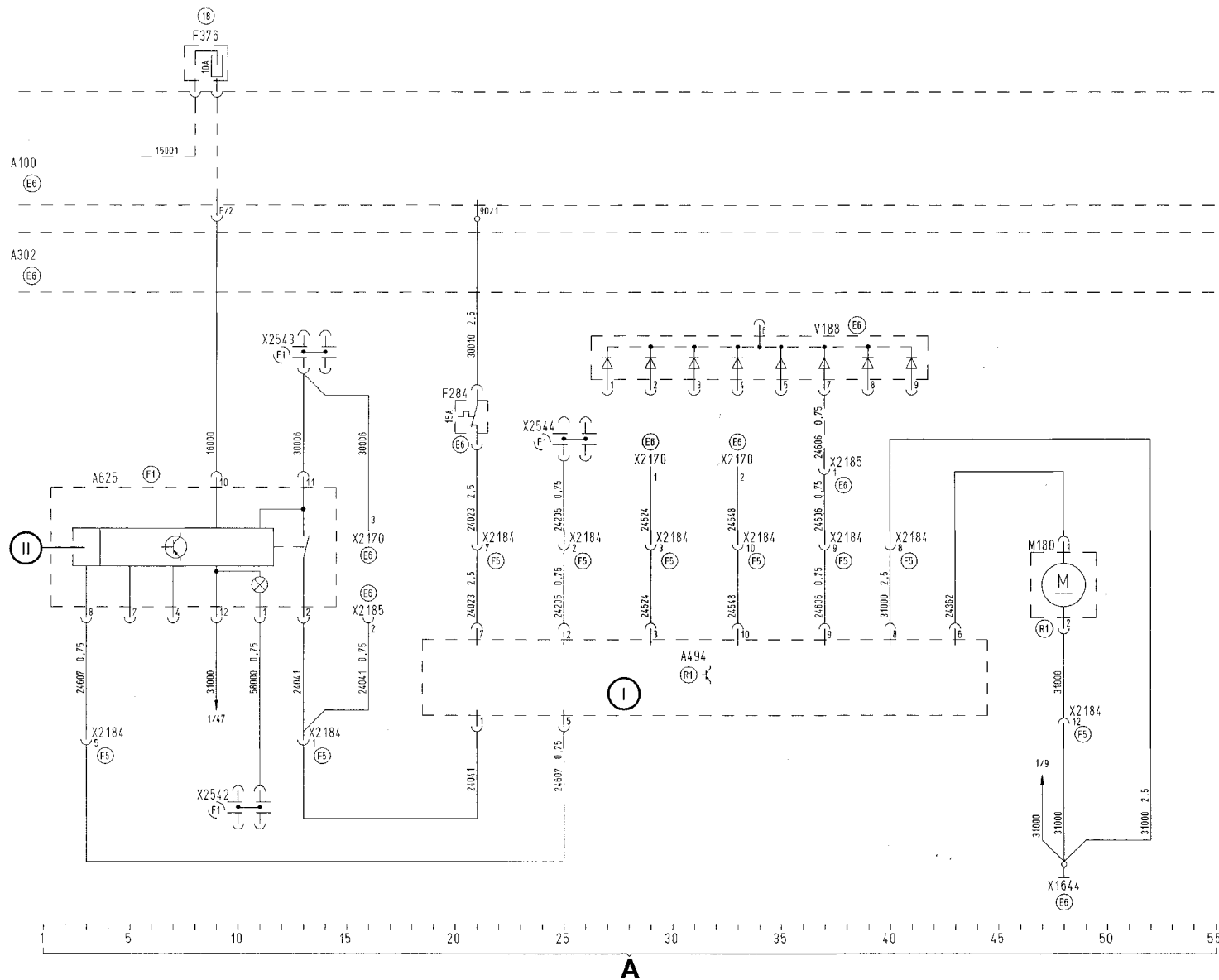
- A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2  
**A494** (510) Auxiliary water heating  
**A625** (509) Keypad, supplementary water heating  
  
**F284** (129) Fuse, supplementary heating  
**F376** (101) Fuse, cab interior (terminal 15)  
  
**M180** (158) Metering pump 2, supplementary heating  
  
**V188** (120) Diode group, 8 times, for battery emergency shutdown switch  
  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X2170** Stvd. TRS shutdown, water heating  
**X2184** Stvd. cab – supplementary water heater  
**X2185** Stvd. supplementary water heating – battery isolator switch  
**X2542** (246) Potential distributor, 21-pin line 58000  
**X2543** (246) Potential distributor, 21-pin line 30006  
**X2544** (246) Potential distributor 21-pin K-line

### Marking of mounting positions

- |                                |                                   |
|--------------------------------|-----------------------------------|
| (A) Tail                       | (F6) Driving seat                 |
| (B1) Engine                    | (F7) Passenger seat               |
| (B2) Gearbox                   | (F8) Control panel                |
| (C) Front                      | (G) Battery box                   |
| (C1) Bumper                    | (H1) B-pillar on driver's side    |
| (C2) Entrance right            | (H2) A-pillar on driver's side    |
| (C3) Entrance left             | (J1) B-pillar on passenger's side |
| (E6) Central electrics area    | (J2) A-pillar on passenger's side |
| (E7) Control unit racks        | (L) Ceiling/roof                  |
| (E8) Rear wall of cab          | (N) Front axle                    |
| (F) Instrument panel           | (P) Rear axle                     |
| (F1) Central part              | (R1) Front part of frame          |
| (F2) Steering wheel/column     | (R2) Rear part of frame           |
| (F3) Foot pedals               | (S1) Door left                    |
| (F4) Front wall, inside left   | (S2) Door right                   |
| (F5) Front wall, inside right  |                                   |
| (I) Scope of delivery, Webasto |                                   |
| (II) LCD clock                 |                                   |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1476 Sheet 1 of 1



## Supplementary heating Thermo 50 without TRS

### Legend

Wiring diagram no. **81.99192.1475** Sheet **1** of 1  
Change status: 05.01

### A = Supplementary heating Thermo 50 without TRS

|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A494</b>  | (510) Auxiliary water heating                                           |
| <b>A625</b>  | (509) Keypad, supplementary water heating                               |
| <b>F284</b>  | (129) Fuse, supplementary heating                                       |
| <b>F376</b>  | (101) Fuse, cab interior (terminal 15)                                  |
| <b>M180</b>  | (158) Metering pump 2, supplementary heating                            |
| <b>V188</b>  | (120) Diode group, 8 times, for battery emergency shutdown switch       |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X2184</b> | Stvd. cab – supplementary water heater                                  |
| <b>X2185</b> | Stvd. supplementary water heating – battery isolator switch             |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                          |
| <b>X2543</b> | (246) Potential distributor, 21-pin line 30006                          |
| <b>X2544</b> | (246) Potential distributor 21-pin K-line                               |

### Marking of mounting positions

|             |                            |             |                              |
|-------------|----------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                       | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                     | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                    | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                      | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                     | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right             | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left              | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area     | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks         | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab           | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel           | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part               | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column      | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals                | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left    | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right   |             |                              |
| <b>(I)</b>  | Scope of delivery, Webasto |             |                              |
| <b>(II)</b> | LCD clock                  |             |                              |

[illegible]

## Supplementary heating, TRS shutdown

### Legend

Wiring diagram no. **81.99192.2621** Sheet 1 of 1  
Change status: 07.99

### A = Supplementary heating, TRS shutdown

**A100** (255) Central fuse, relay and terminal block  
**A302** (352) Central computer 2

**K678** (283) Relay, supplementary heating, TRS shutdown  
**K679** (283) Relay, supplementary heating, TRS shutdown

**V200** Diode, power take-off 1  
**V201** Diode, power take-off 2  
**V202** (117) Diode group V200, V201

**X1552** Stvd. power take-off I/TRS heating  
**X1554** Stvd. power take-off II/TRS heating  
**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block  
**X1754** Crimped connector, line 59104  
**X1984** (203) Relay base K678, K679  
**X2170** Stvd. TRS shutdown, water heating  
**X2182** Stvd. TRS shutdown, hot-air heating

### Marking of mounting positions

- |                            |                                |
|----------------------------|--------------------------------|
| Ⓐ Tail                     | Ⓕ Driving seat                 |
| Ⓑ Engine                   | Ⓖ Passenger seat               |
| Ⓑ Gearbox                  | Ⓖ Control panel                |
| Ⓒ Front                    | Ⓖ Battery box                  |
| Ⓒ Bumper                   | Ⓕ B-pillar on driver's side    |
| Ⓒ Entrance right           | Ⓕ A-pillar on driver's side    |
| Ⓒ Entrance left            | Ⓕ B-pillar on passenger's side |
| Ⓖ Central electrics area   | Ⓕ A-pillar on passenger's side |
| Ⓖ Control unit racks       | Ⓖ Ceiling/roof                 |
| Ⓖ Rear wall of cab         | Ⓖ Front axle                   |
| Ⓖ Instrument panel         | Ⓖ Rear axle                    |
| Ⓖ Central part             | Ⓖ Front part of frame          |
| Ⓖ Steering wheel/column    | Ⓖ Rear part of frame           |
| Ⓖ Foot pedals              | Ⓖ Door left                    |
| Ⓖ Front wall, inside left  | Ⓖ Door right                   |
| Ⓖ Front wall, inside right |                                |
| Ⓖ Power take-off 1         |                                |
| Ⓖ Power take-off 2         |                                |

ADDITIONAL WIRING DIAGRAMS

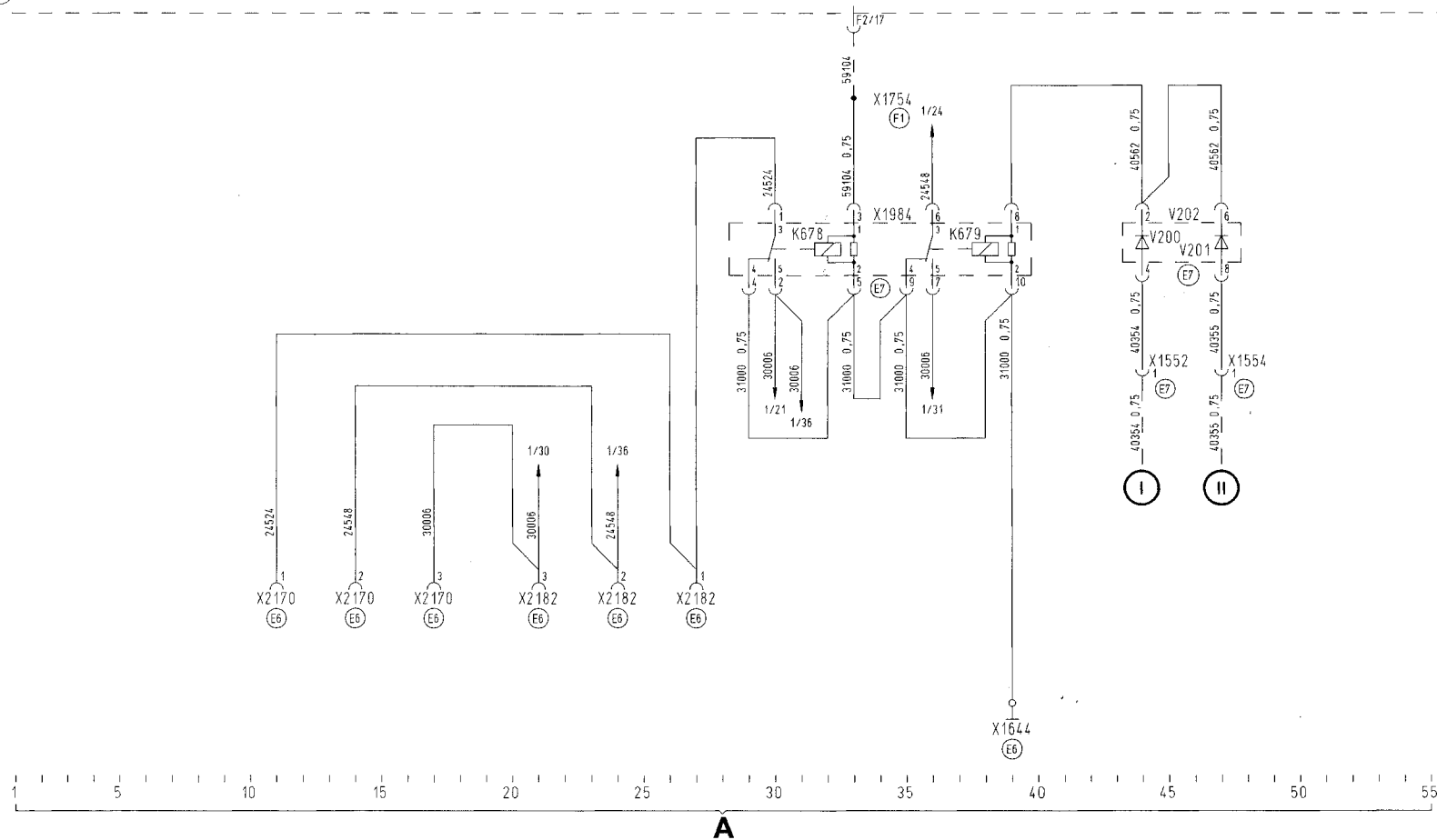
Wiring diagram no. **81.99192.2621** Sheet 1 of 1

A100

(E6)

A302

(E6)





## Supplementary heating Truma E24-2 with TRS

### Legend

Wiring diagram no. **81.99192.1480** Sheet 1 of 1

Change status: 05.01

### A = Supplementary heating Truma E24-2 with TRS

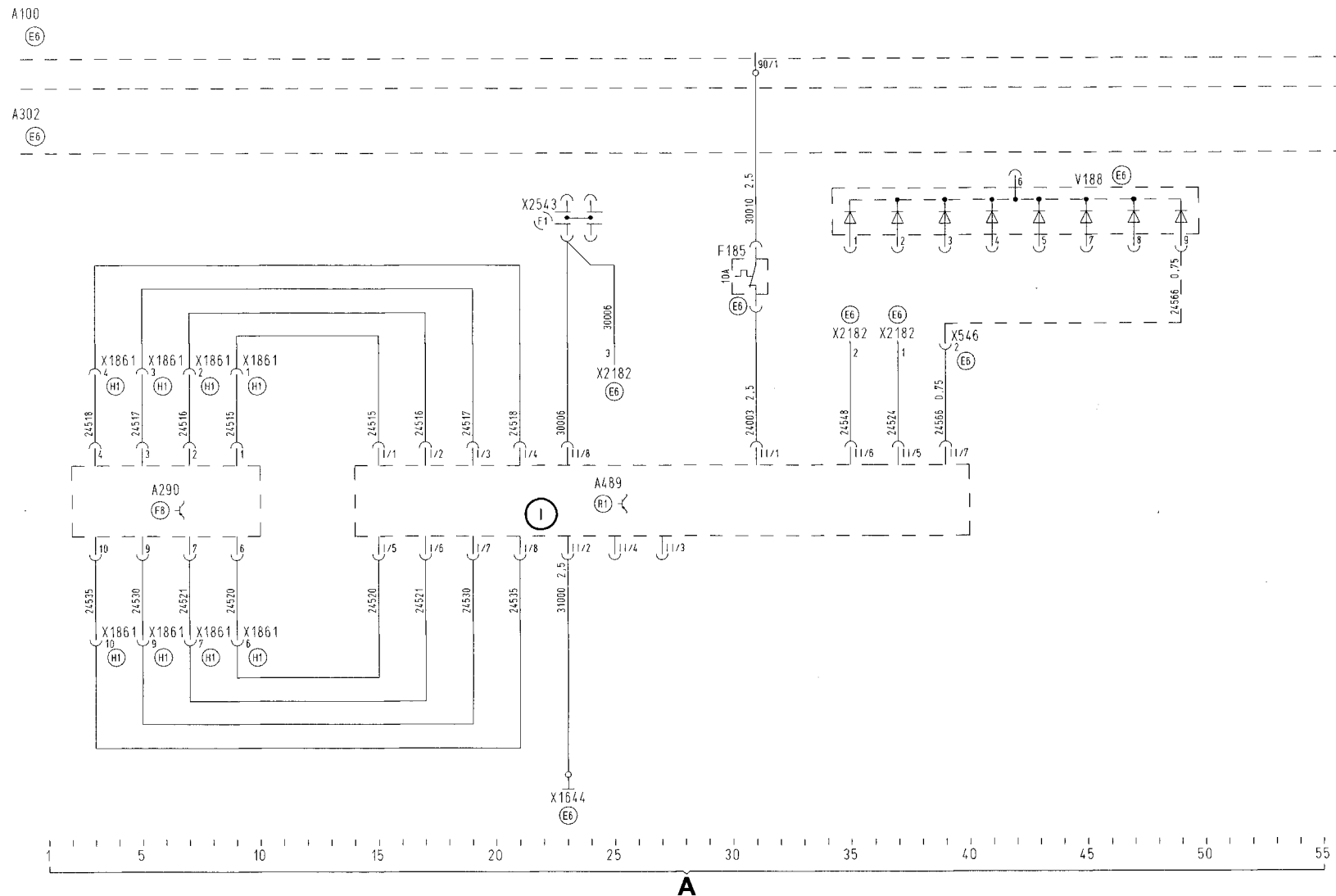
|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A290</b>  | (395) Keypad for supplementary heating (clock/thermostat)               |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A489</b>  | (396) Supplementary gas heating                                         |
| <b>F185</b>  | (122) Fuse, supplementary heating                                       |
| <b>V188</b>  | (120) Diode group, 8 times, for battery emergency shutdown switch       |
| <b>X546</b>  | Stvd. supplementary heating, main battery switch (electric)             |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1861</b> | Stvd. cab keypad, supplementary heating                                 |
| <b>X2182</b> | Stvd. TRS shutdown, hot-air heating                                     |
| <b>X2543</b> | (246) Potential distributor, 21-pin line 30006                          |

### Marking of mounting positions

|             |                          |             |                              |
|-------------|--------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                     | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                   | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                  | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                    | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                   | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right           | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left            | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area   | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks       | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab         | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel         | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part             | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column    | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals              | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left  | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right |             |                              |
| <b>(I)</b>  | Scope of delivery, Truma |             |                              |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. 81.99192.1480 Sheet 1 of 1



## Supplementary heating Truma E24-2 without TRS

### Legend

Wiring diagram no. **81.99192.1479** Sheet 1 of 1

Change status: 05.01

### A = Supplementary heating Truma E24-2 without TRS

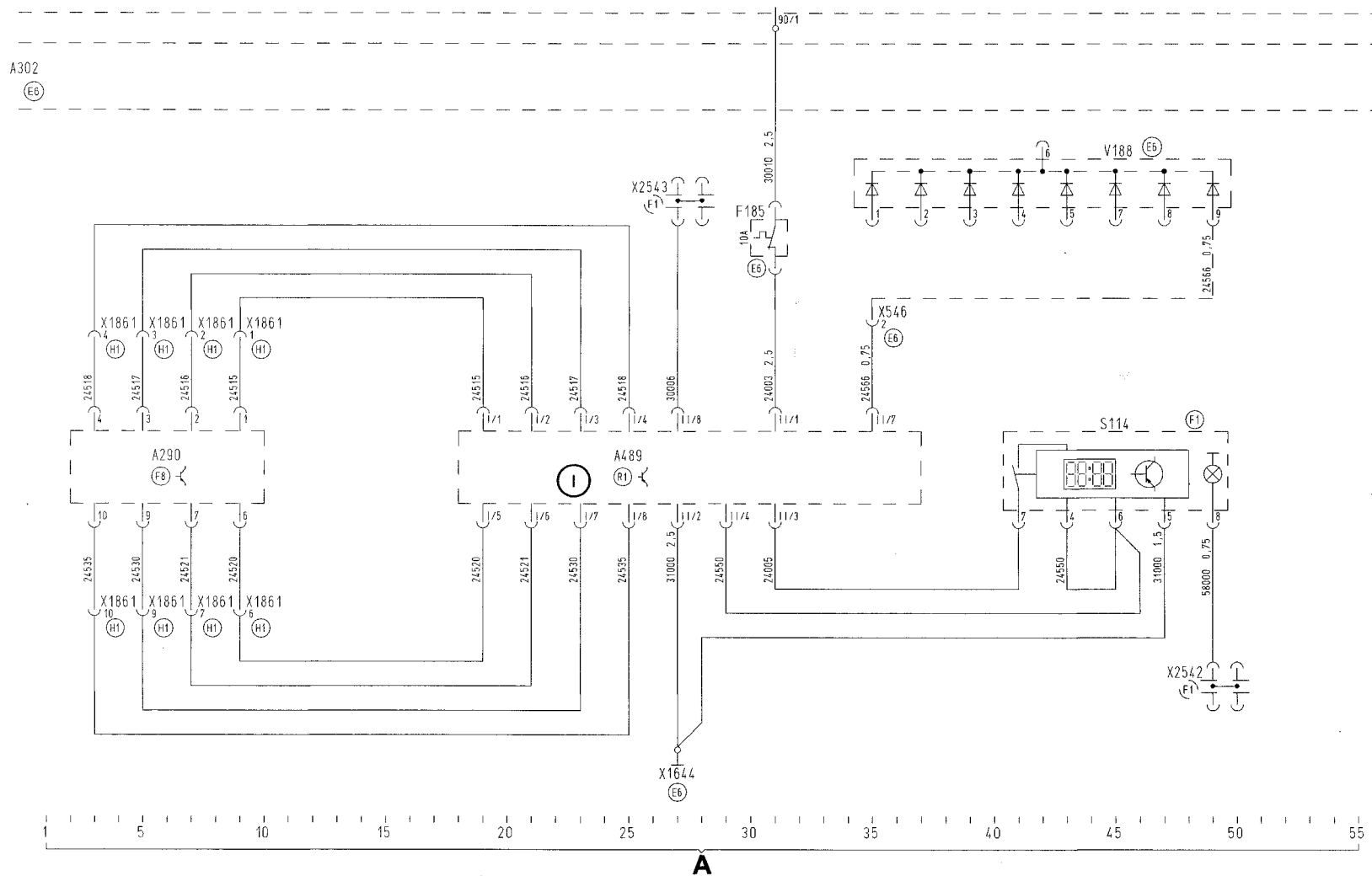
|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A290</b>  | (395) Keypad for supplementary heating (clock/thermostat)               |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A489</b>  | (396) Supplementary gas heating                                         |
| <b>F185</b>  | (122) Fuse, supplementary heating                                       |
| <b>S114</b>  | (575) Time switch, supplementary heating                                |
| <b>V188</b>  | (120) Diode group, 8 times, for battery emergency shutdown switch       |
| <b>X546</b>  | Stvd. supplementary heating, main battery switch (electric)             |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1861</b> | Stvd. cab keypad, supplementary heating                                 |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                          |
| <b>X2543</b> | (246) Potential distributor, 21-pin line 30006                          |

### Marking of mounting positions

|             |                          |             |                              |
|-------------|--------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                     | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                   | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                  | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                    | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                   | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right           | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left            | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area   | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks       | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab         | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel         | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part             | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column    | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals              | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left  | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right |             |                              |
| <b>(I)</b>  | Scope of delivery, Truma |             |                              |

A100  
(E6)

A302  
(E6)



# Supplementary heating Webasto Airtop 2000 OEM and 3500 with TRS

## Legend

Wiring diagram no. **81.99192.1473** Sheet **1** of 1

Change status: 05.01

## **A = Supplementary heating Webasto Airtop 2000 OEM and 3500 with TRS**

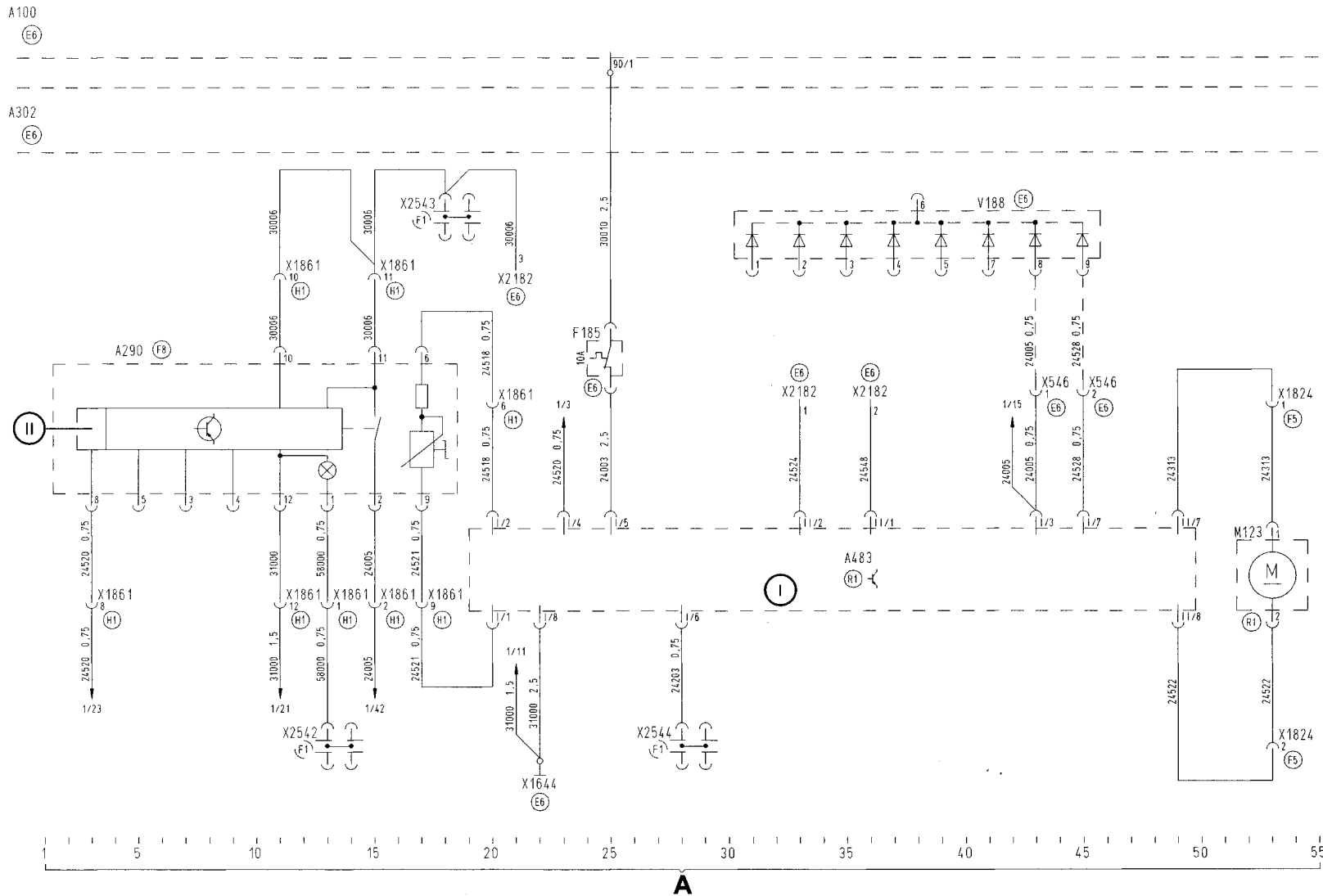
|              |                                                                         |
|--------------|-------------------------------------------------------------------------|
| <b>A100</b>  | (255) Central fuse, relay and terminal block                            |
| <b>A290</b>  | (381) Keypad for supplementary heating (clock/thermostat)               |
| <b>A302</b>  | (352) Central computer 2                                                |
| <b>A483</b>  | (382) Scope of delivery: supplementary hot-air heating                  |
| <b>F185</b>  | (122) Fuse, supplementary heating                                       |
| <b>M123</b>  | (158) Metering pump, supplementary heating                              |
| <b>V188</b>  | (120) Diode group, 8 times, for battery emergency shutdown switch       |
| <b>X546</b>  | Stvd. supplementary heating, main battery switch (electric)             |
| <b>X1644</b> | Earthing point, cab, adjacent to central fuse, relay and terminal block |
| <b>X1824</b> | Stvd. cab, metering pump, supplementary heating                         |
| <b>X1861</b> | Stvd. cab keypad, supplementary heating                                 |
| <b>X2182</b> | Stvd. TRS shutdown, hot-air heating                                     |
| <b>X2542</b> | (246) Potential distributor, 21-pin line 58000                          |
| <b>X2543</b> | (246) Potential distributor, 21-pin line 30006                          |
| <b>X2544</b> | (246) Potential distributor 21-pin K-line                               |

## Marking of mounting positions

|           |                            |           |                              |
|-----------|----------------------------|-----------|------------------------------|
| <b>A</b>  | Tail                       | <b>F6</b> | Driving seat                 |
| <b>B1</b> | Engine                     | <b>F7</b> | Passenger seat               |
| <b>B2</b> | Gearbox                    | <b>F8</b> | Control panel                |
| <b>C</b>  | Front                      | <b>G</b>  | Battery box                  |
| <b>C1</b> | Bumper                     | <b>H1</b> | B-pillar on driver's side    |
| <b>C2</b> | Entrance right             | <b>H2</b> | A-pillar on driver's side    |
| <b>C3</b> | Entrance left              | <b>J1</b> | B-pillar on passenger's side |
| <b>E6</b> | Central electrics area     | <b>J2</b> | A-pillar on passenger's side |
| <b>E7</b> | Control unit racks         | <b>L</b>  | Ceiling/roof                 |
| <b>E8</b> | Rear wall of cab           | <b>N</b>  | Front axle                   |
| <b>F</b>  | Instrument panel           | <b>P</b>  | Rear axle                    |
| <b>F1</b> | Central part               | <b>R1</b> | Front part of frame          |
| <b>F2</b> | Steering wheel/column      | <b>R2</b> | Rear part of frame           |
| <b>F3</b> | Foot pedals                | <b>S1</b> | Door left                    |
| <b>F4</b> | Front wall, inside left    | <b>S2</b> | Door right                   |
| <b>F5</b> | Front wall, inside right   |           |                              |
| <b>I</b>  | Scope of delivery, Webasto |           |                              |
| <b>II</b> | LCD clock                  |           |                              |

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1473** Sheet 1 of 1



**Supplementary heating Webasto Airtop 2000 OEM and 3500 without TRS**

**Legend**

Wiring diagram no. **81.99192.1474** Sheet 1 of 1

Change status: 05.01

**A = Supplementary heating Webasto Airtop 2000 OEM and 3500 without TRS**

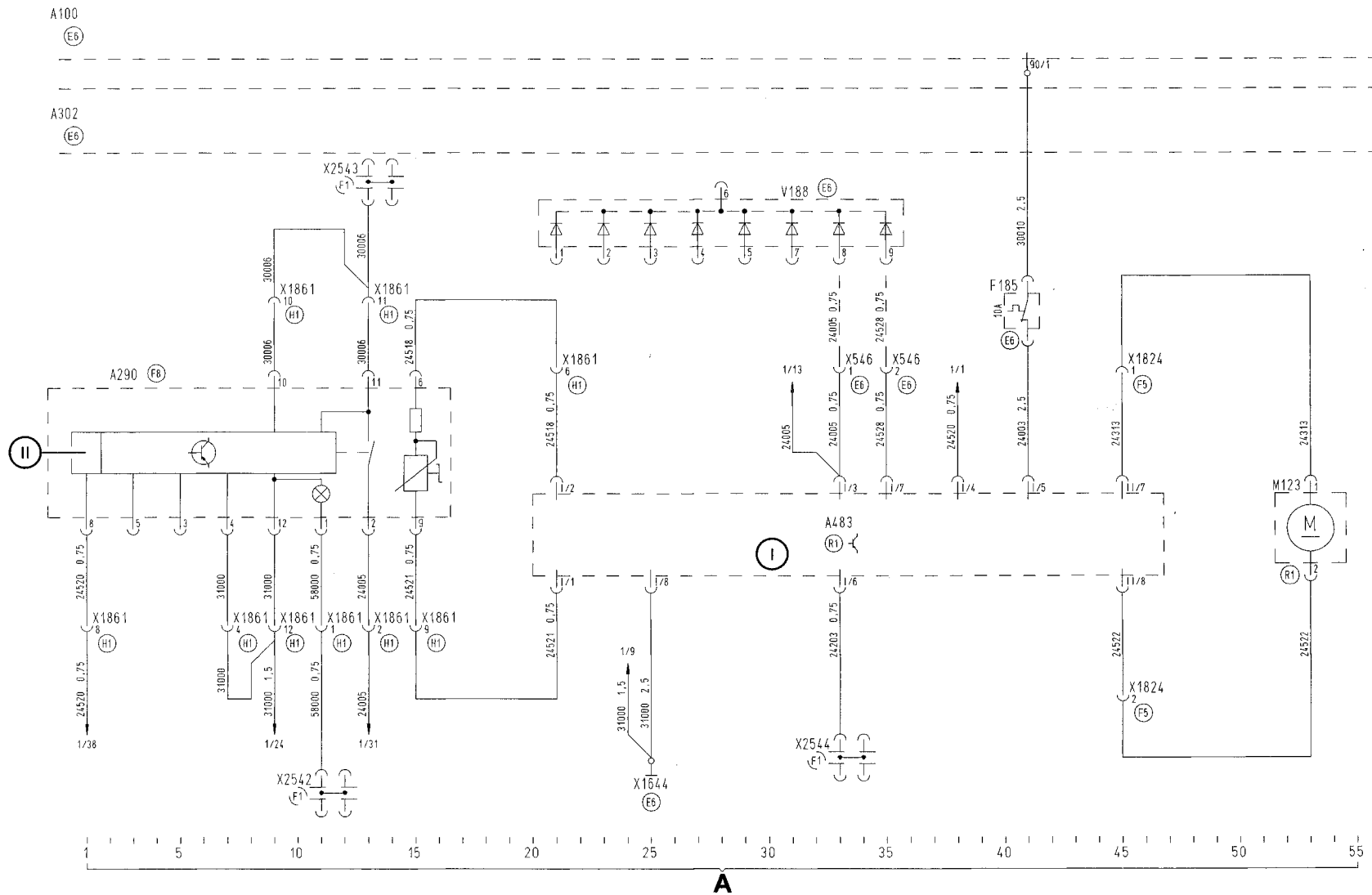
- A100** (255) Central fuse, relay and terminal block
- A290** (381) Keypad for supplementary heating (clock/thermostat)
- A302** (352) Central computer 2
- A483** (382) Scope of delivery: supplementary hot-air heating
  
- F185** (122) Fuse, supplementary heating
  
- M123** (153) Metering pump, supplementary heating
  
- V188** (120) Diode group, 8 times, for battery emergency shutdown switch
  
- X546** Stvd. supplementary heating, main battery switch (electric)
- X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block
  
- X1824** Stvd. cab, metering pump, supplementary heating
- X1861** Stvd. cab keypad, supplementary heating
- X2542** (246) Potential distributor, 21-pin line 58000
- X2543** (246) Potential distributor, 21-pin line 30006
- X2544** (246) Potential distributor 21-pin K-line

**Marking of mounting positions**

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ2 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ6 Central electrics area
- Ⓔ7 Control unit racks
- Ⓔ8 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
  
- Ⓘ Scope of delivery, Webasto
- Ⓜ LCD clock
  
- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ11 B-pillar on driver's side
- Ⓕ12 A-pillar on driver's side
- Ⓕ1 B-pillar on passenger's side
- Ⓕ2 A-pillar on passenger's side
- Ⓕ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

ADDITIONAL WIRING DIAGRAMS

Wiring diagram no. **81.99192.1474** Sheet 1 of 1





## ADDITIONAL WIRING DIAGRAMS

### Additional headlight

#### Legend

Wiring diagram no. **81.99192.2461** Sheet 1 of 1

Change status: -

**A = Front fog light**

**B = Additional main beam**

|              |       |                                                                     |
|--------------|-------|---------------------------------------------------------------------|
| <b>A100</b>  | (255) | Central fuse, relay and terminal block                              |
| <b>A302</b>  | (352) | Central computer 2                                                  |
| <b>A407</b>  | (342) | Instrumentation                                                     |
| <b>A438</b>  |       | Light strip, right                                                  |
| <b>A439</b>  |       | Light strip, left                                                   |
| <b>E122</b>  |       | Fog lights, right                                                   |
| <b>E123</b>  |       | Fog lights, left                                                    |
| <b>E194</b>  |       | High beam, right                                                    |
| <b>E195</b>  |       | High beam, right                                                    |
| <b>S483</b>  | (477) | Switch/control switch combination front fog light/<br>rear fog lamp |
| <b>X1545</b> |       | Std. front region, left                                             |
| <b>X1550</b> |       | Std. front region, right                                            |
| <b>X1825</b> |       | Crimped connector, line 31000                                       |
| <b>X1833</b> |       | Crimped connector, line 16000                                       |
| <b>X1835</b> |       | Crimped connector, line 58000                                       |

### Marking of mounting positions

|             |                          |             |                              |
|-------------|--------------------------|-------------|------------------------------|
| <b>(A)</b>  | Tail                     | <b>(F6)</b> | Driving seat                 |
| <b>(B1)</b> | Engine                   | <b>(F7)</b> | Passenger seat               |
| <b>(B2)</b> | Gearbox                  | <b>(F8)</b> | Control panel                |
| <b>(C)</b>  | Front                    | <b>(G)</b>  | Battery box                  |
| <b>(C1)</b> | Bumper                   | <b>(H1)</b> | B-pillar on driver's side    |
| <b>(C2)</b> | Entrance right           | <b>(H2)</b> | A-pillar on driver's side    |
| <b>(C3)</b> | Entrance left            | <b>(J1)</b> | B-pillar on passenger's side |
| <b>(E6)</b> | Central electrics area   | <b>(J2)</b> | A-pillar on passenger's side |
| <b>(E7)</b> | Control unit racks       | <b>(L)</b>  | Ceiling/roof                 |
| <b>(E8)</b> | Rear wall of cab         | <b>(N)</b>  | Front axle                   |
| <b>(F)</b>  | Instrument panel         | <b>(P)</b>  | Rear axle                    |
| <b>(F1)</b> | Central part             | <b>(R1)</b> | Front part of frame          |
| <b>(F2)</b> | Steering wheel/column    | <b>(R2)</b> | Rear part of frame           |
| <b>(F3)</b> | Foot pedals              | <b>(S1)</b> | Door left                    |
| <b>(F4)</b> | Front wall, inside left  | <b>(S2)</b> | Door right                   |
| <b>(F5)</b> | Front wall, inside right |             |                              |

A100

E6

A302

