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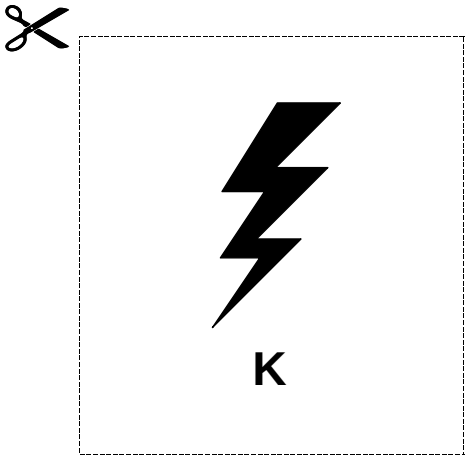

Electrical system

Trucknology Generation A (TG-A)

2002 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12

Wiring diagrams

2nd Edition K 90

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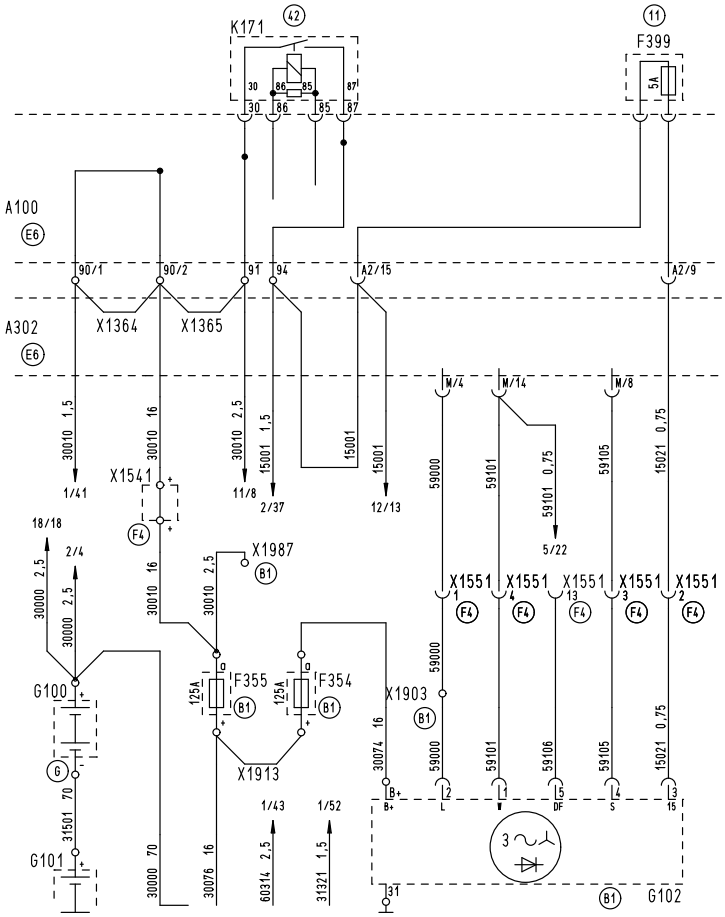
Electrical system

Wiring diagrams K 90 (2nd edition)

Trucknology Generation A (TG-A)



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VSWY / OB/AM 03.2002

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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.

https://truckmanualshub.com/

Contents

Electrical system **0**
Preface ..... 0.10 - 1
Contents ..... 0.11 - 1
Abbreviations ..... 0.13 - 1

General remarks **1**
Safety notes ..... 1.20 - 1
Instructions for the use of wiring diagrams ..... 1.60 - 1
Search criteria ..... 1.99 - 1

Series wiring diagrams **3**
Contents ..... 3.00 - 1

Additional wiring diagrams **4**
Contents ..... 4.00 - 1

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Abbreviations

As of: 11.01

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

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Abbreviations

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

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Abbreviations

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

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Abbreviations

LL Idling speed
LLA Idling speed increase
LLR Idling speed control
LNG Liquified natural gas
LOE Steering oil monitor
LPG Liquified petroleum gas
LWR Headlight beam regulator

M-TCO Modular EU tachograph
MAB Solenoid valve shut-off (engine shut-off by means of high-pressure solenoid valve in injection pump)
MAN-cats MAN computer assisted testing and diagnostic system)
MAR Solenoid valve shut-off relay (redundant engine shut-off relay)
MDB Engine speed range
MES Fuel metering control
ML Midline
MMI Man-machine interface
MOTB Engine brake
MP Engine power box (cable duct on engine block)
MR Engine governor – ASR
MSG Engine control unit (EDC)
MV Solenoid valve
MZ Diaphragm cylinder

n rpm
NA Power take-off (PTO)
NBF Needle movement sensor
NES New electronic structure
NFZ Commercial vehicle
NLA Trailing axle
NSL Rear fog lamp
NSW Front fog lamp

OBDU On-board diagnostic unit
OC Occurrence count (errors/faults)
OEAB Oil separator
OENF Oil top-up

p Pressure
PBM Pulse breadth modulation (→ also see PWM)
PLM Programmable logic module
PSG Pump control unit (EDC)
PTO Power take-off
PWM Pulse width modulation (→ also see PBM)

RA Repair manual
RAH Interior heating
RAM Random access memory
RAS Rear axle steering
RAS-EC Rear axle steering with electronic control
RDRA Tyre pressure control system
RDS Radio data system
RET Retarder
RKL Priority vehicle light
RLV Relay valve
RME Rape seed oil methyl ester (biodiesel)
ROM Read only memory

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Abbreviations

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

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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.

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- 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”.

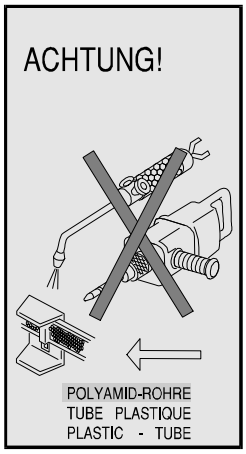
The frame is **not** intended for use as an earth return!

- 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 ℃) for more than bri ef periods; a time of up to around 2 hours is permissible at a maximum of 85 ℃ . 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.



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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.

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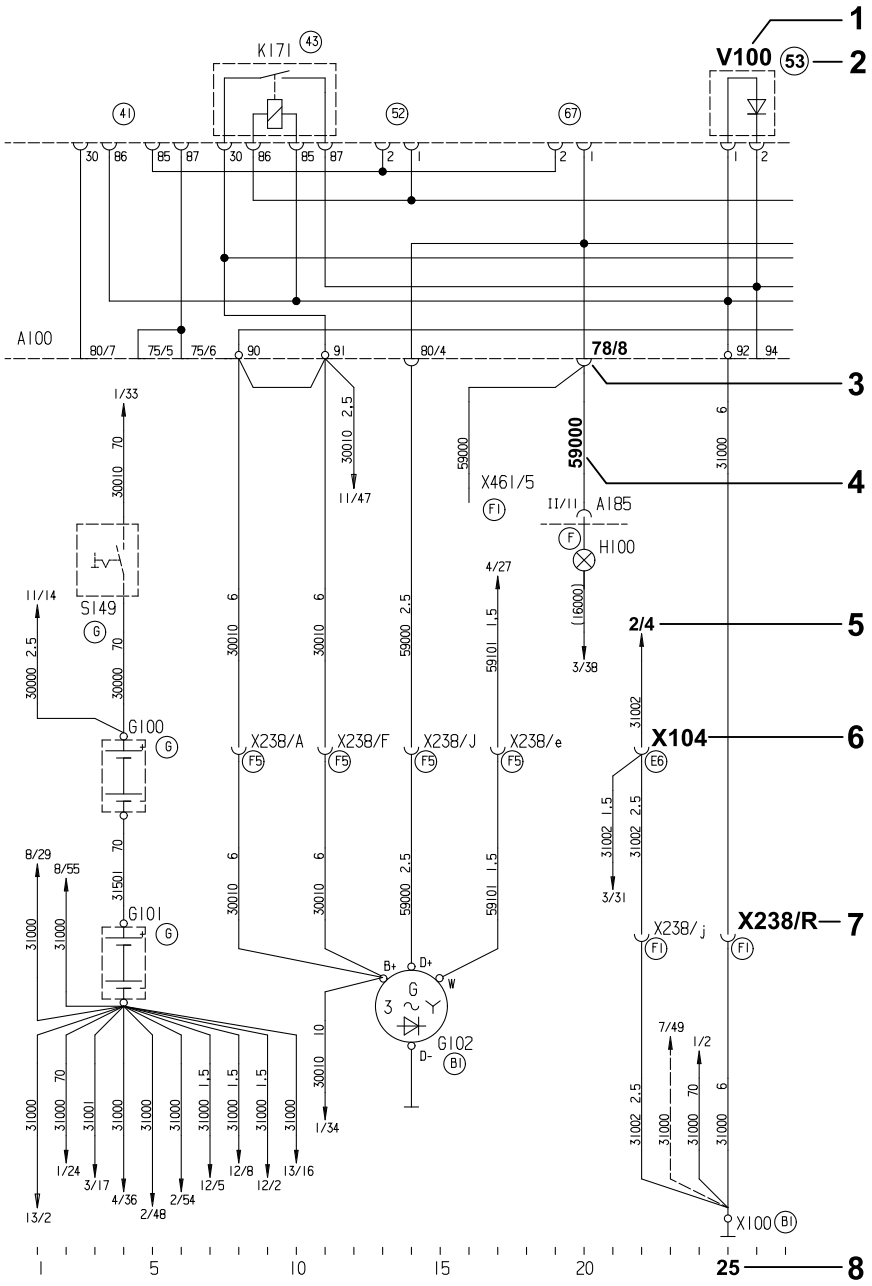
Instructions for using wiring diagrams



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 1^2)
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.

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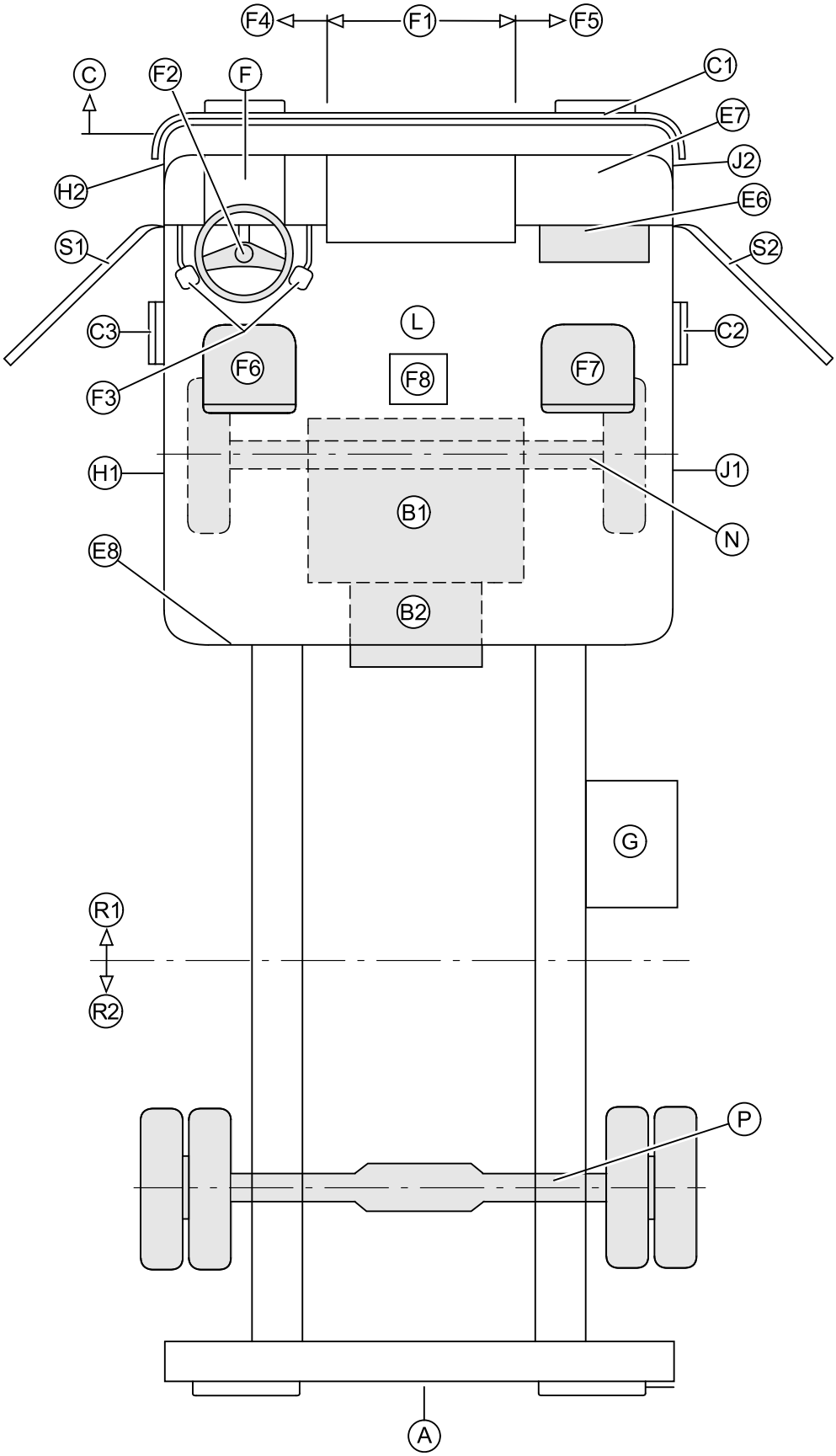
Mounting positions for left-hand drive



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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

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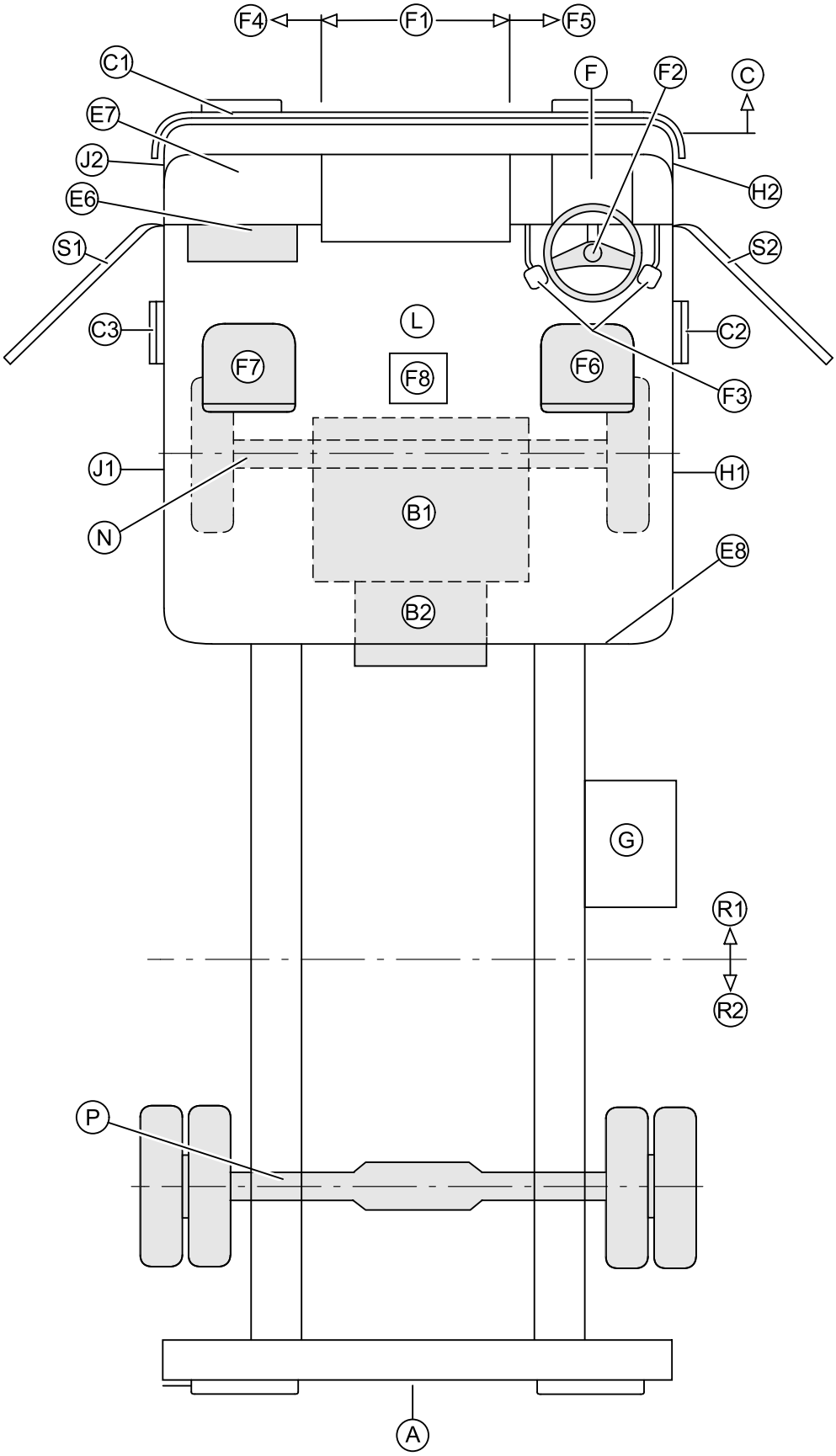
Mounting positions for right-hand drive



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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

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Search criteria

Ascending according to wiring diagram title

Name	Wiring diagram no.	Page
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/ AS-TRONIC/special customer module	81.99192.**2435**	4.03 - **22**
CAN databus driveline (T-CAN) with intarder or retarder/ 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/ 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	81.99192.**1366**	4.04 - **2**
Differential lock transverse, rear axle	81.99192.**1365**	4.04 - **4**

https://truckmanualshub.com/

Name	Wiring diagram no.	Page
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**

https://truckmanualshub.com/

Name	Wiring 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**

https://truckmanualshub.com/

GENERAL REMARKS

Name	Wiring diagram no.	Page
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**

https://truckmanualshub.com/

Ascending according to wiring diagram title – part numbers

Name	Wiring diagram no.	Page
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**

https://truckmanualshub.com/

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**

https://truckmanualshub.com/

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/ 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 customer module	81.99192.**2814**	4.03 - **36**
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 AS-TRONIC/ special customer module	81.99192.**2819**	4.03 - **38**
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 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/ AS-TRONIC	81.99192.**2826**	4.03 - **50**

https://truckmanualshub.com/

Name	Wiring diagram no.	Page
CAN databus driveline (T-CAN) without ECAM but with ECAS/ 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 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 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**

https://truckmanualshub.com/

https://truckmanualshub.com/

Contents

Names of circuits	Wiring diagram no.	Chapter/Page
Series wiring diagrams (LL)	**81.99192.2981**	**3.01**
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**

https://truckmanualshub.com/

Contents

Names of circuits	Wiring diagram no.	Chapter/Page
Series wiring diagrams (RL)	**81.99192.2982**	**3.02**
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**

https://truckmanualshub.com/

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
- (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) 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)

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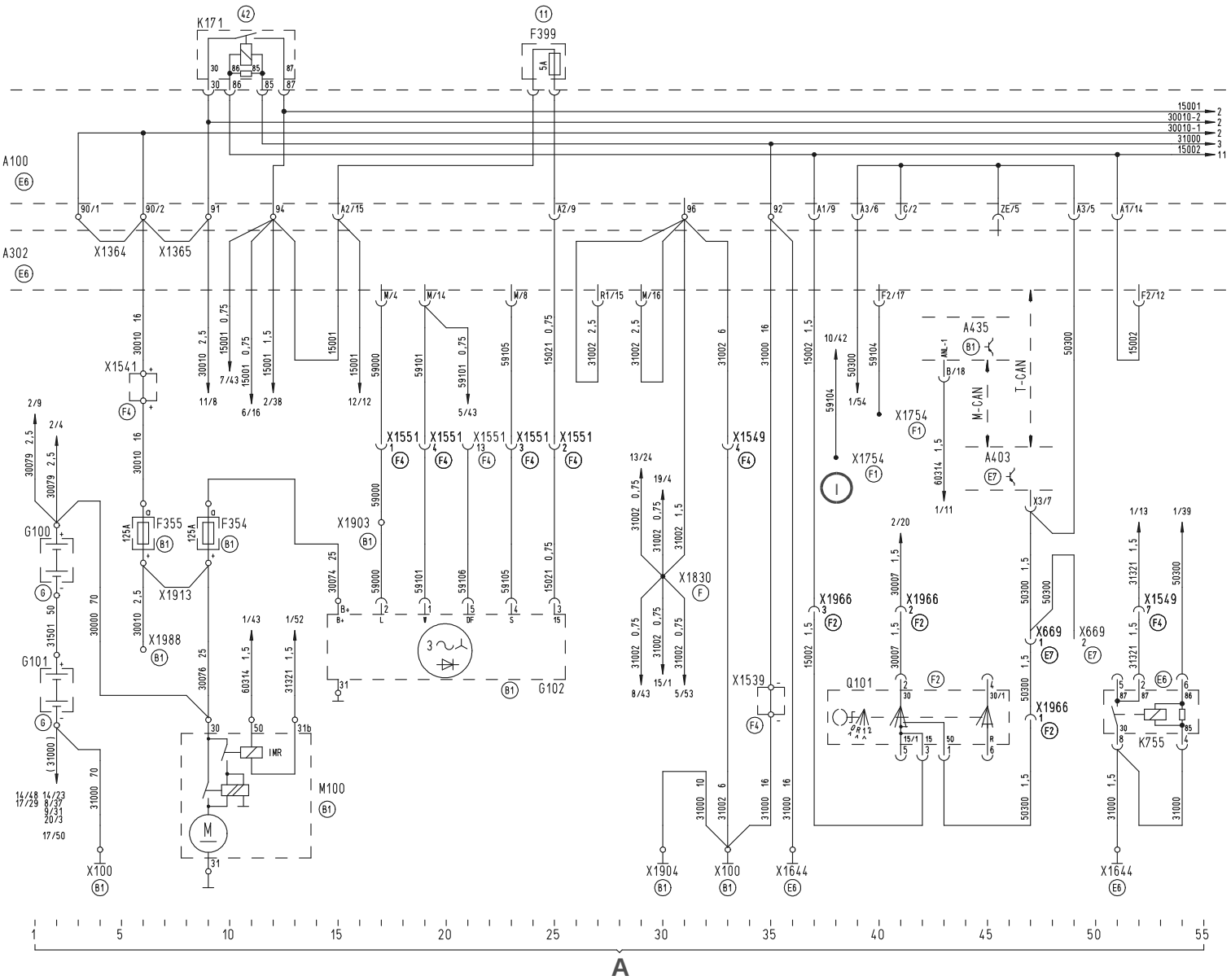
Wiring diagram no. **81.99192.2981** Sheet **1** of 21



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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

- (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) Intarder
- (II) Electronic braking system (EBS)
- (III) Electronically controlled air suspension (ECAS)
- (IV) Retarder

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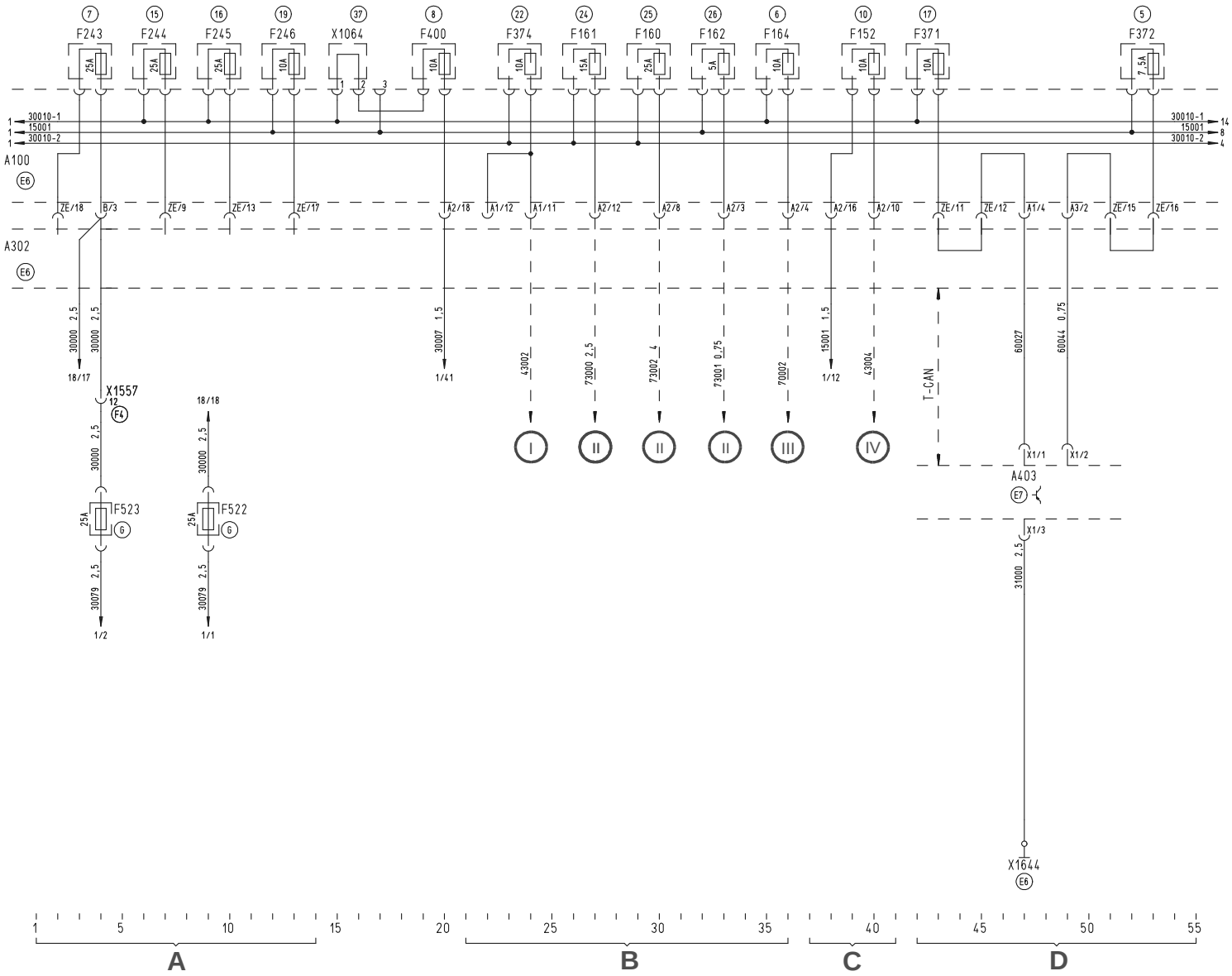
Wiring diagram no. **81.99192.2981** Sheet **2** of 21



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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
- (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) Door module, driver's side
- (II) Door module, passenger's side
- (III) Door module

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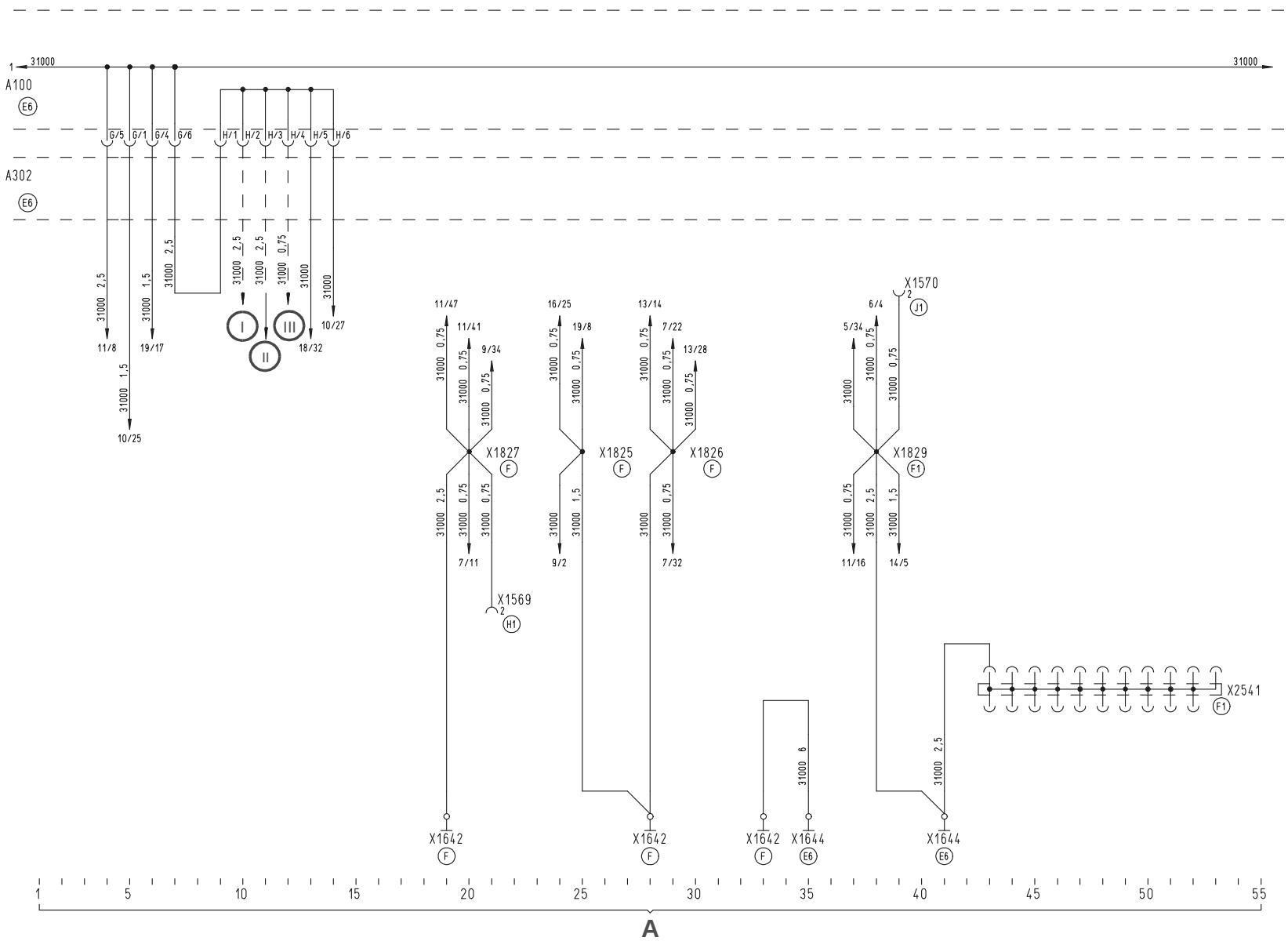
Wiring diagram no. **81.99192.2981** Sheet **3** of 21



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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

- (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

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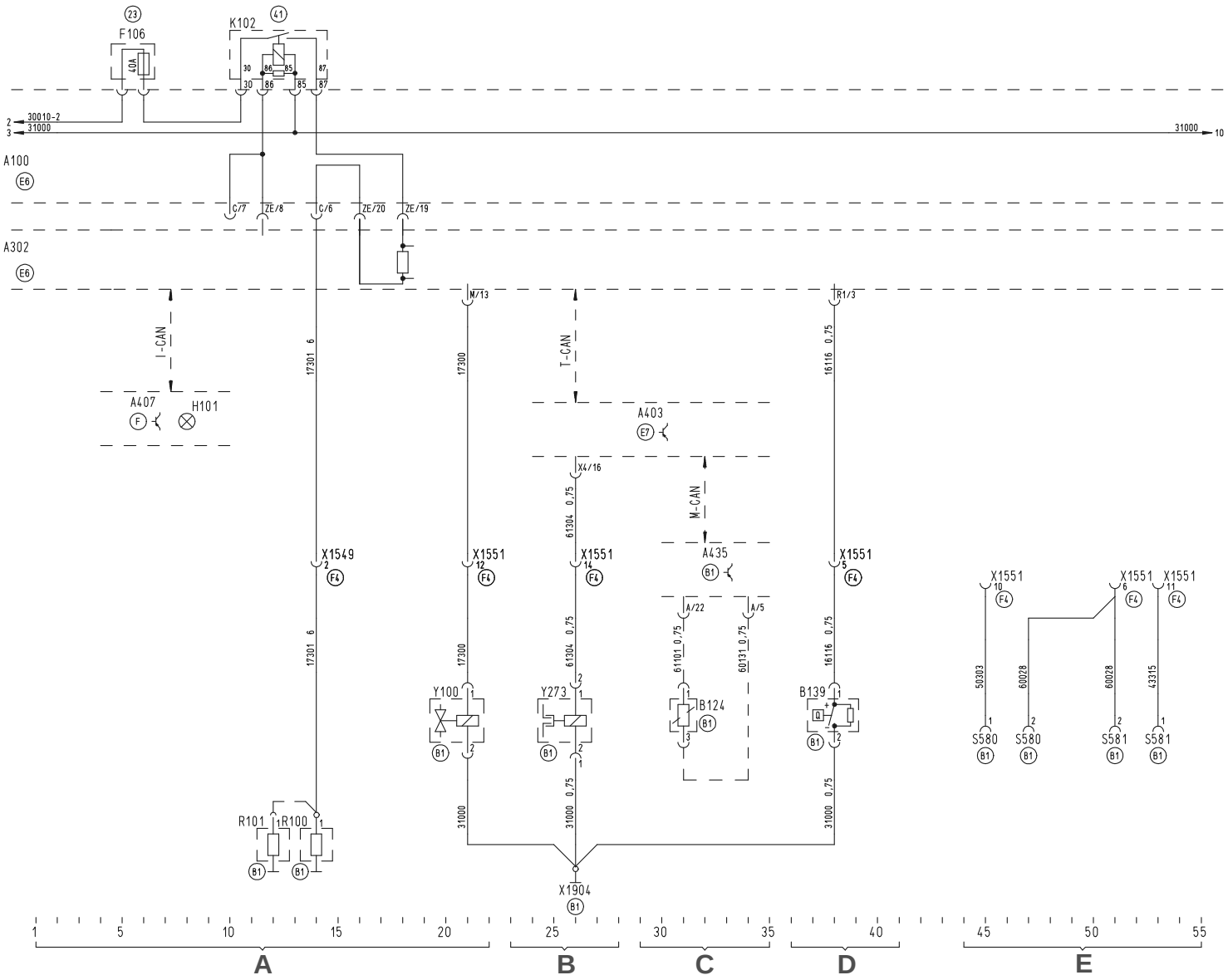
Wiring diagram no. **81.99192.2981** Sheet **4** of 21



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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

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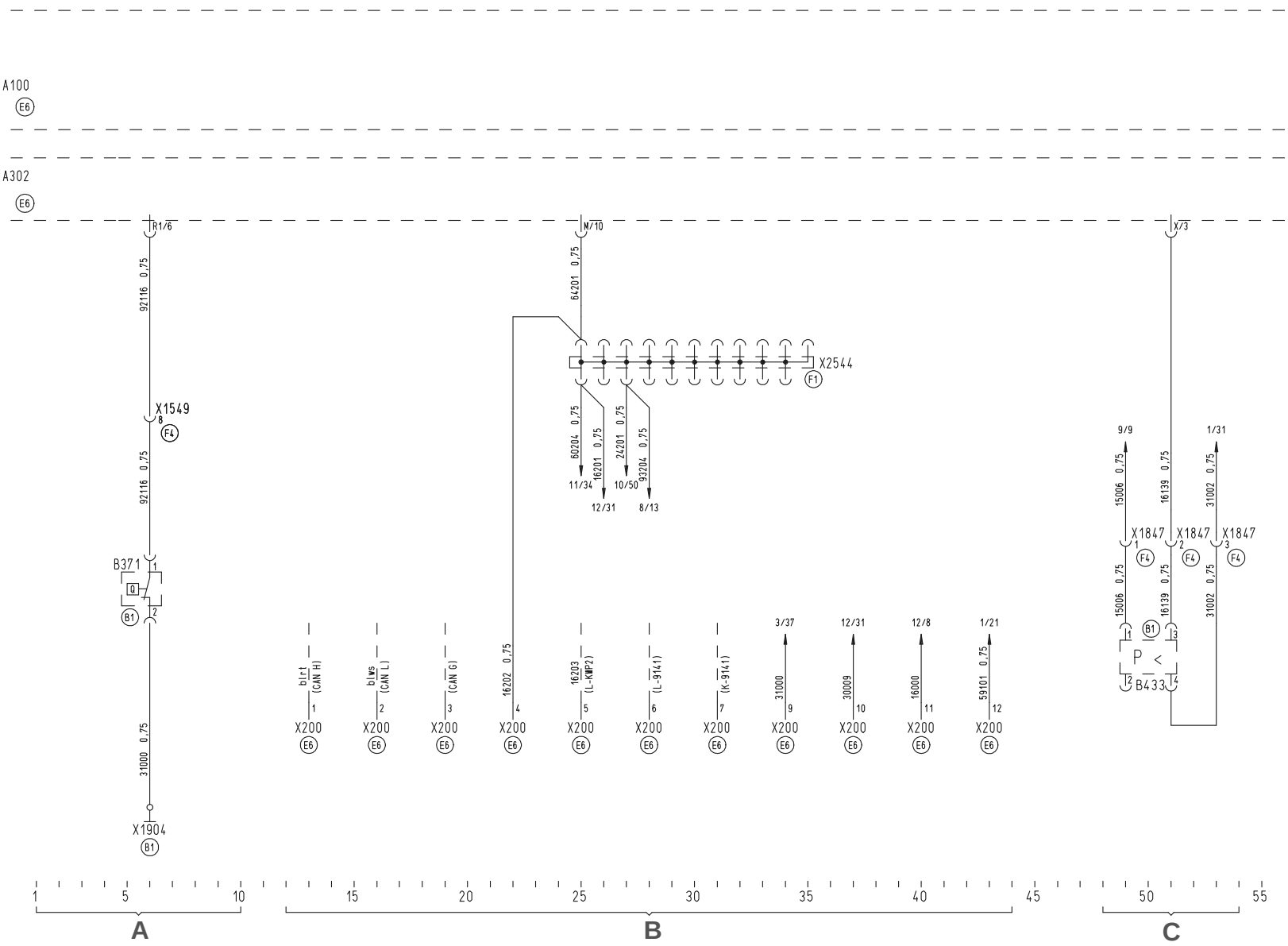
Wiring diagram no. **81.99192.2981** Sheet **5** of 21



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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

- (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) Power take-off 1
- (II) Power take-off 2
- (III) Special customised module

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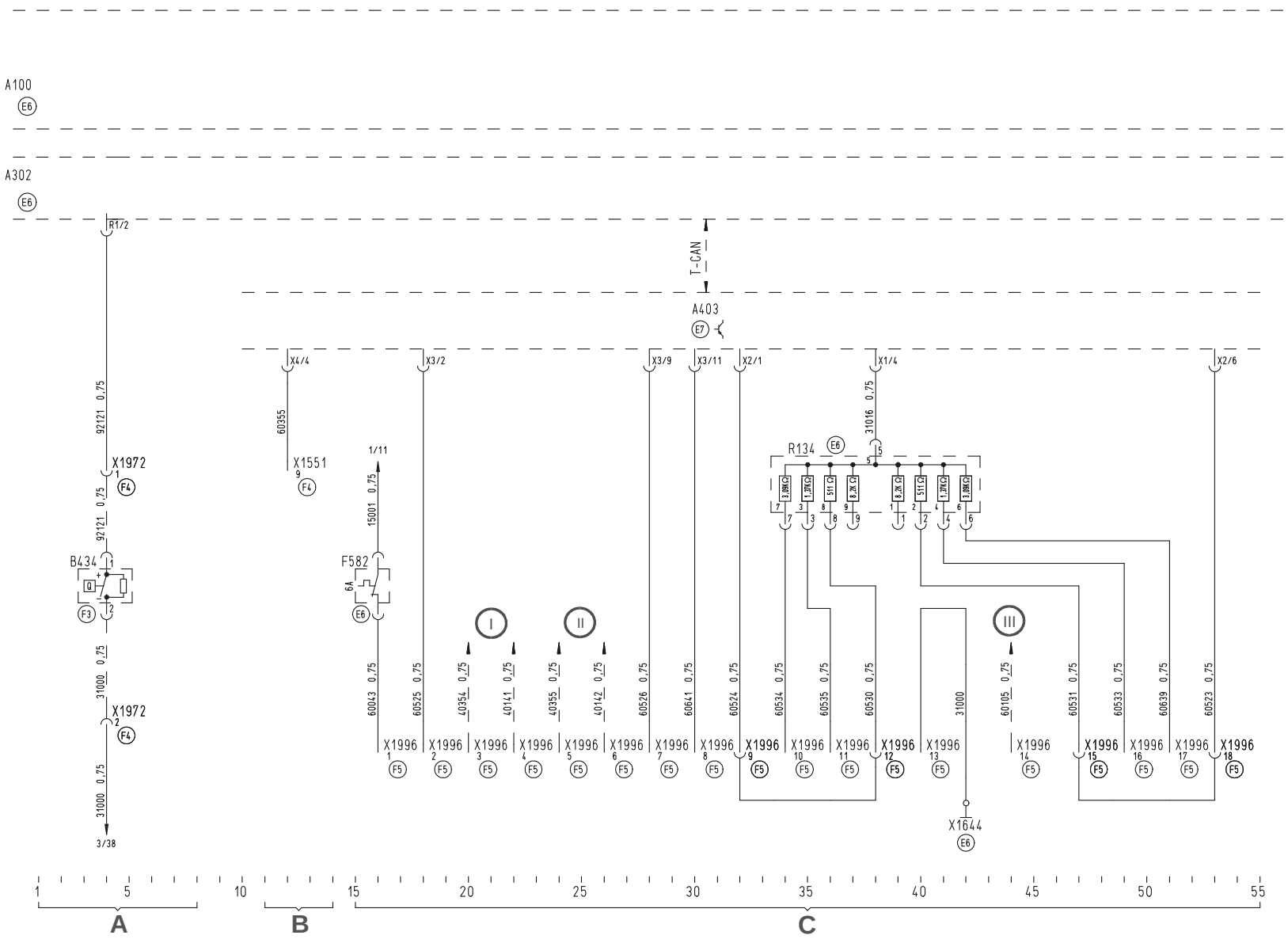
Wiring diagram no. **81.99192.2981** Sheet **6** of 21



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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

- (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) Vehicle management computer (terminal 15)

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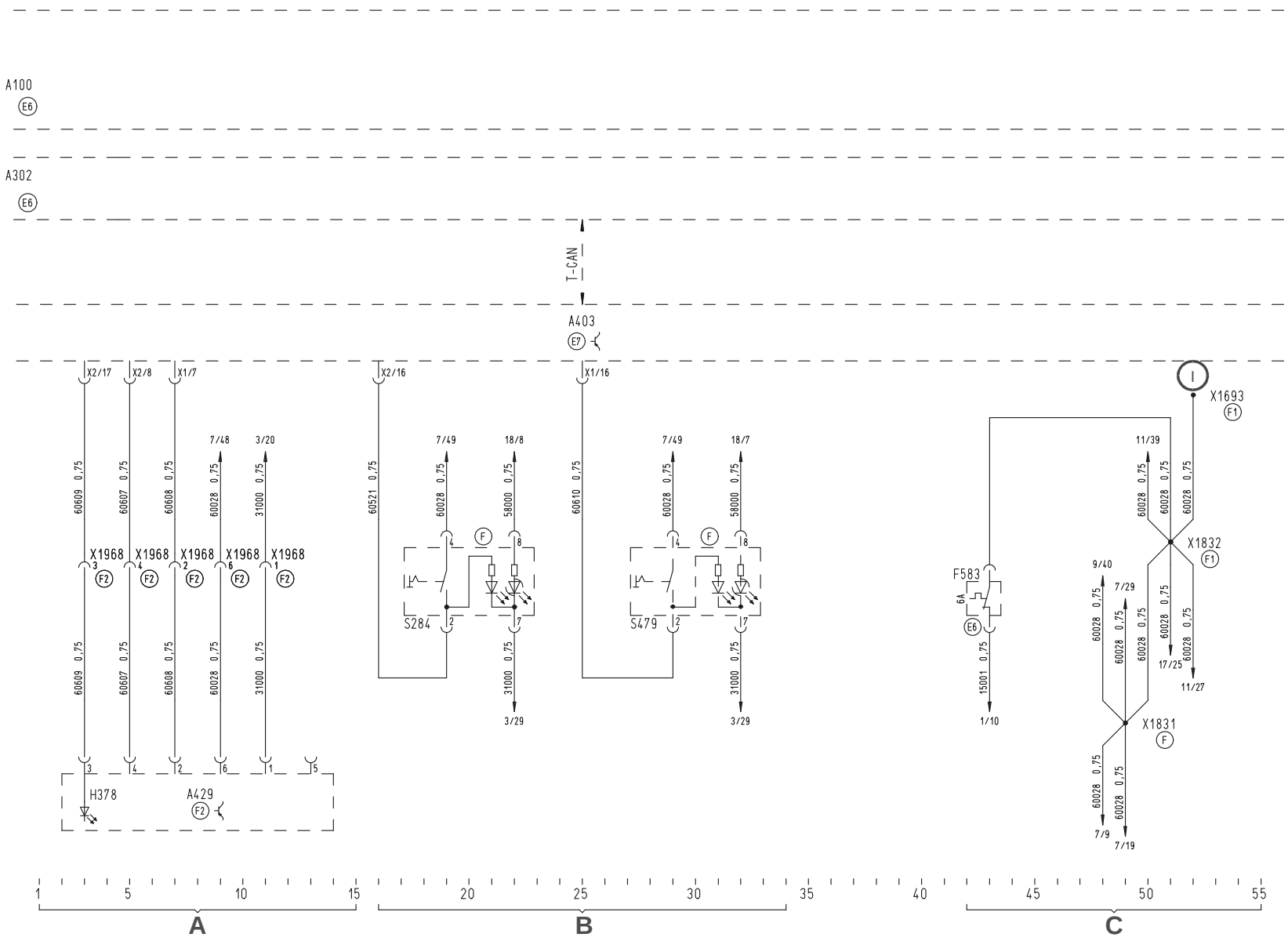
Wiring diagram no. **81.99192.2981** Sheet **7** of 21



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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
- (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) Reserve

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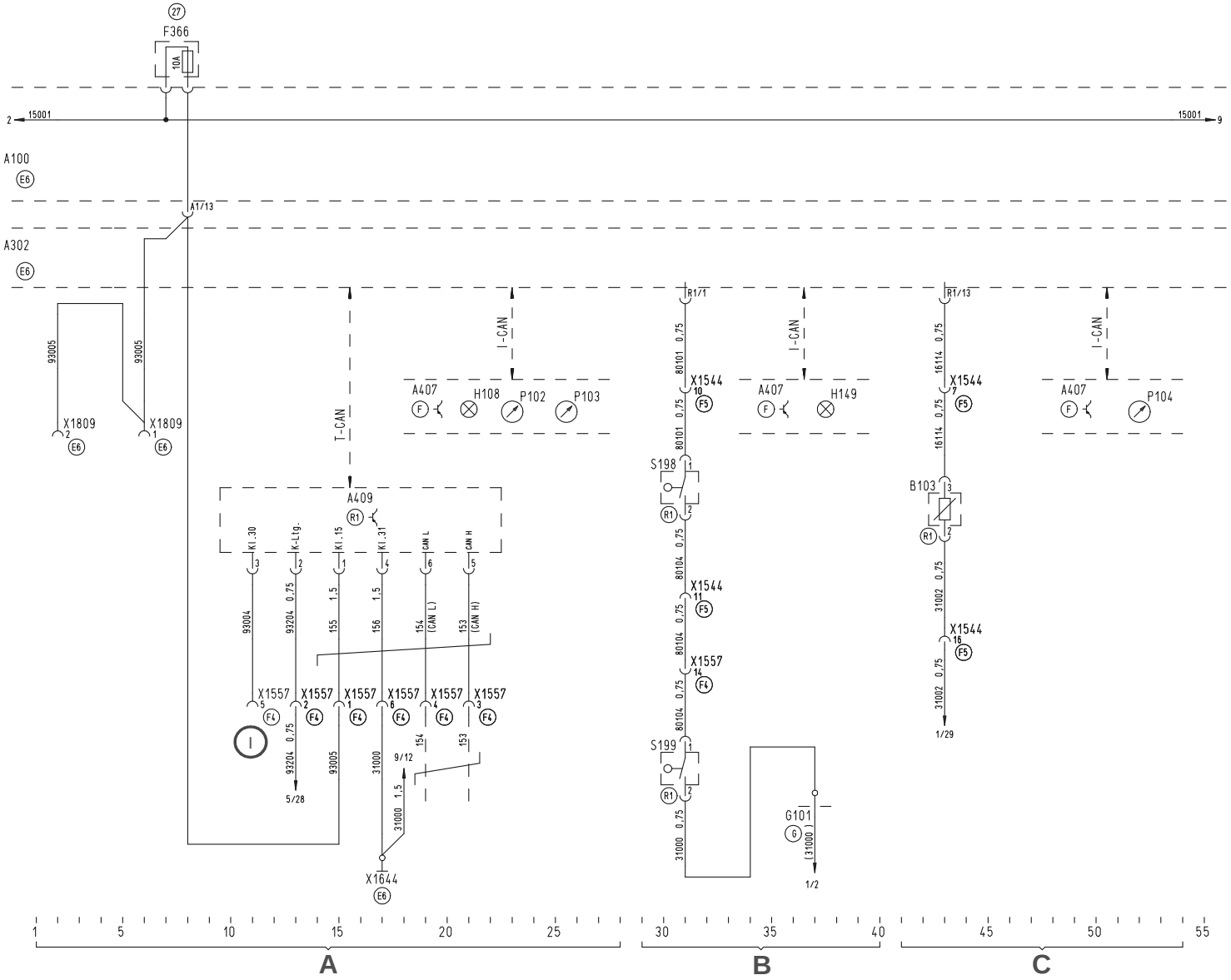
Wiring diagram no. **81.99192.2981** Sheet **8** of 21



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

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

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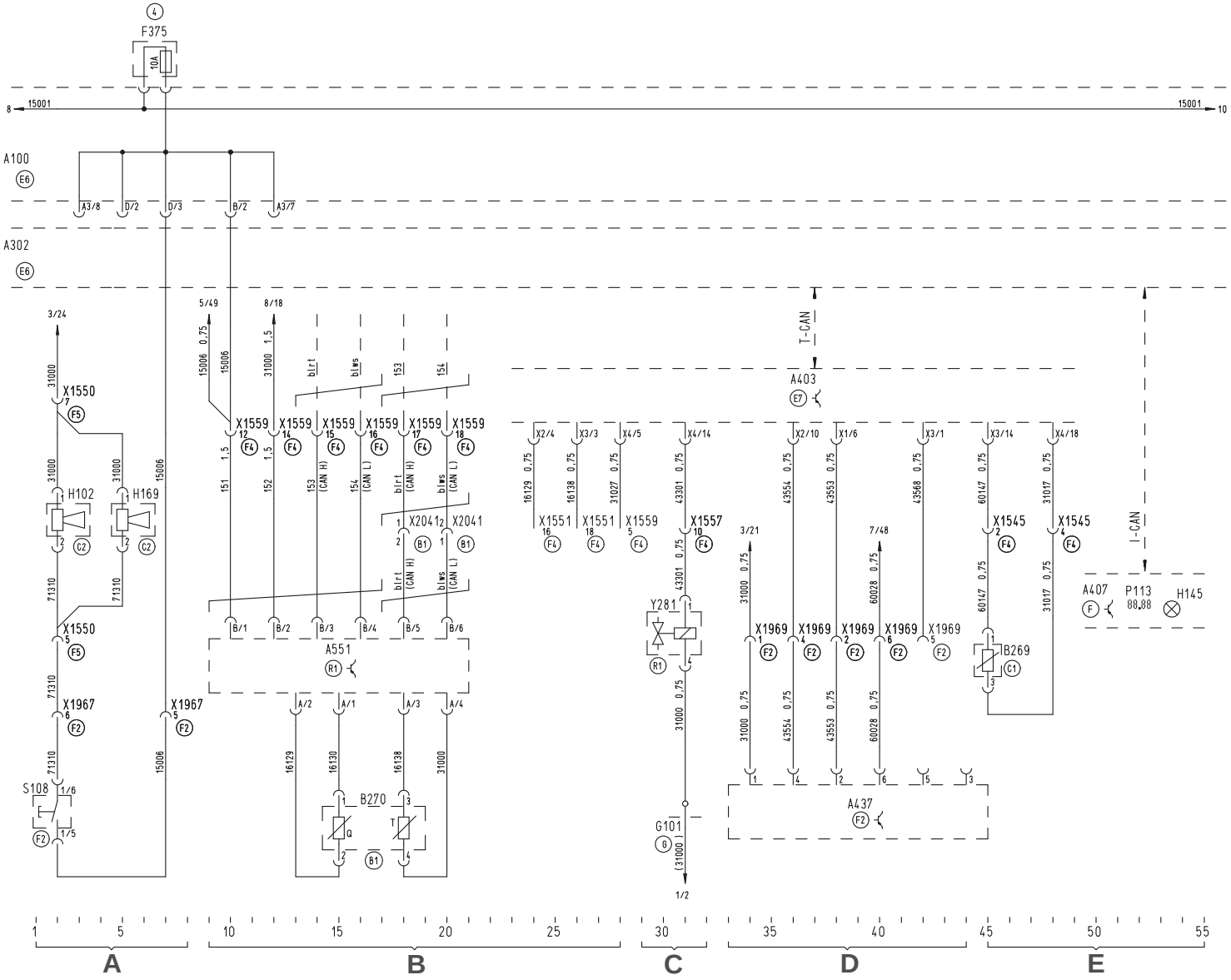
Wiring diagram no. **81.99192.2981** Sheet **9** of 21



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Legend
Wiring diagram no. **81.99192.2981** Sheet **10** of 21
Change status: 03.01

A = Wiper and washer system
B = Heater fan

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

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) Clock-pulse regulator
- (II) Blower
- (III) Fresh/circulating air

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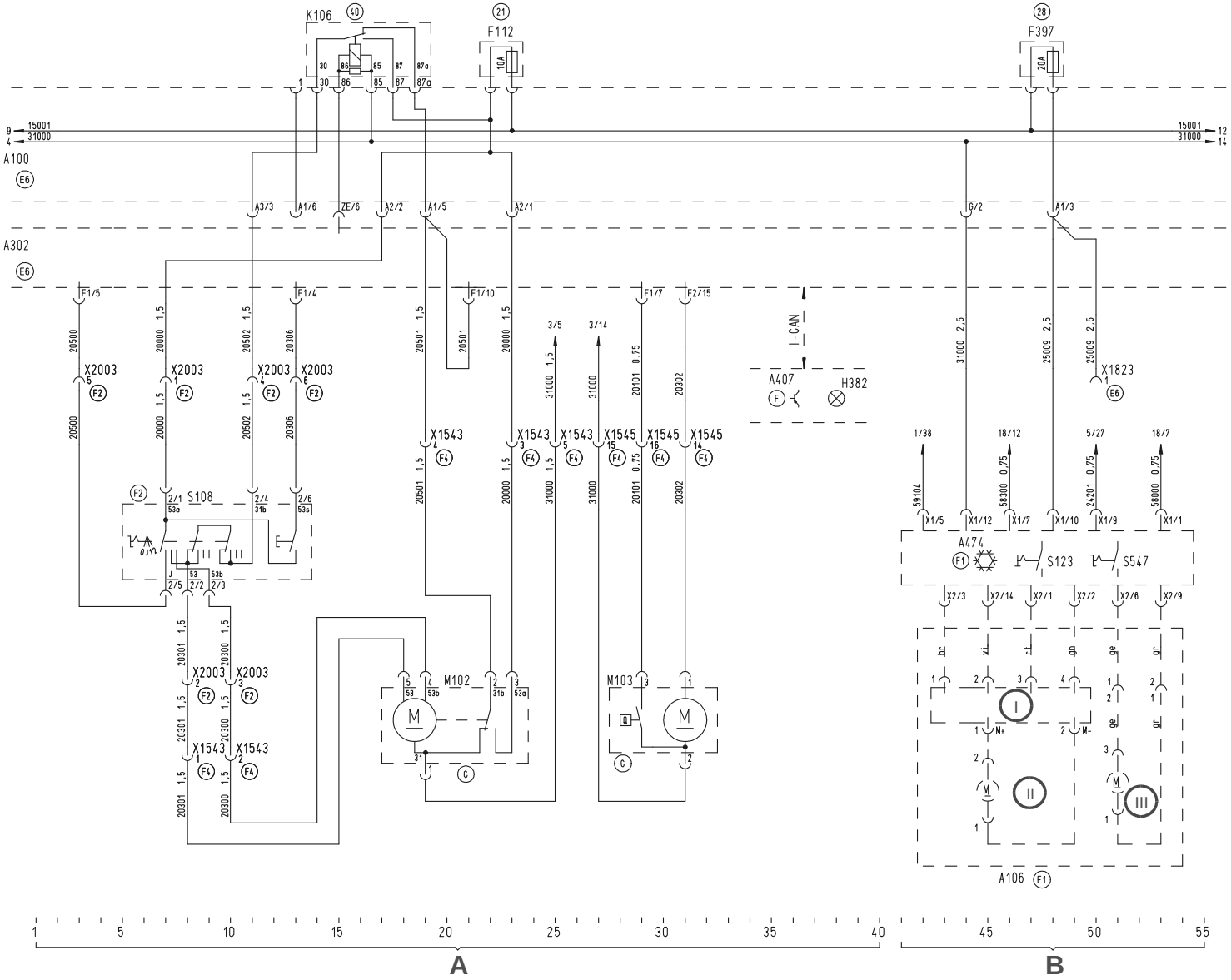
Wiring diagram no. **81.99192.2981** Sheet **10** of 21



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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
- (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) HGS (hydraulic gearshift) heating

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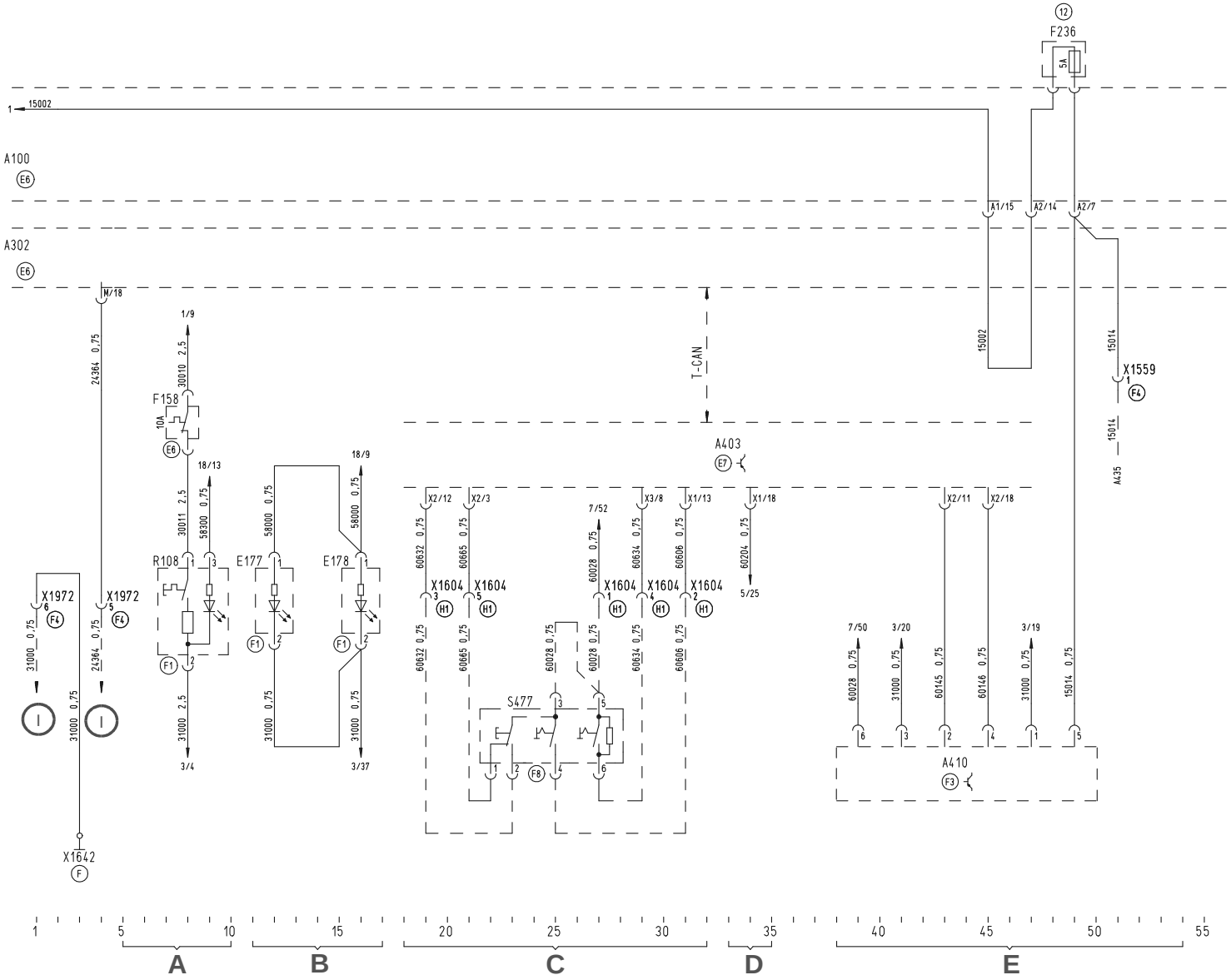
Wiring diagram no. **81.99192.2981** Sheet **11** of 21



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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

- (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) Differential lock
- (II) Supplementary heater
- (III) Door module
- (IV) Terminal 15
- (V) Minus
- (VI) Earth
- (VII) See electronically controlled diesel injection

Note:
X1536/8 regarding soldering
X1536/6 regarding soldering

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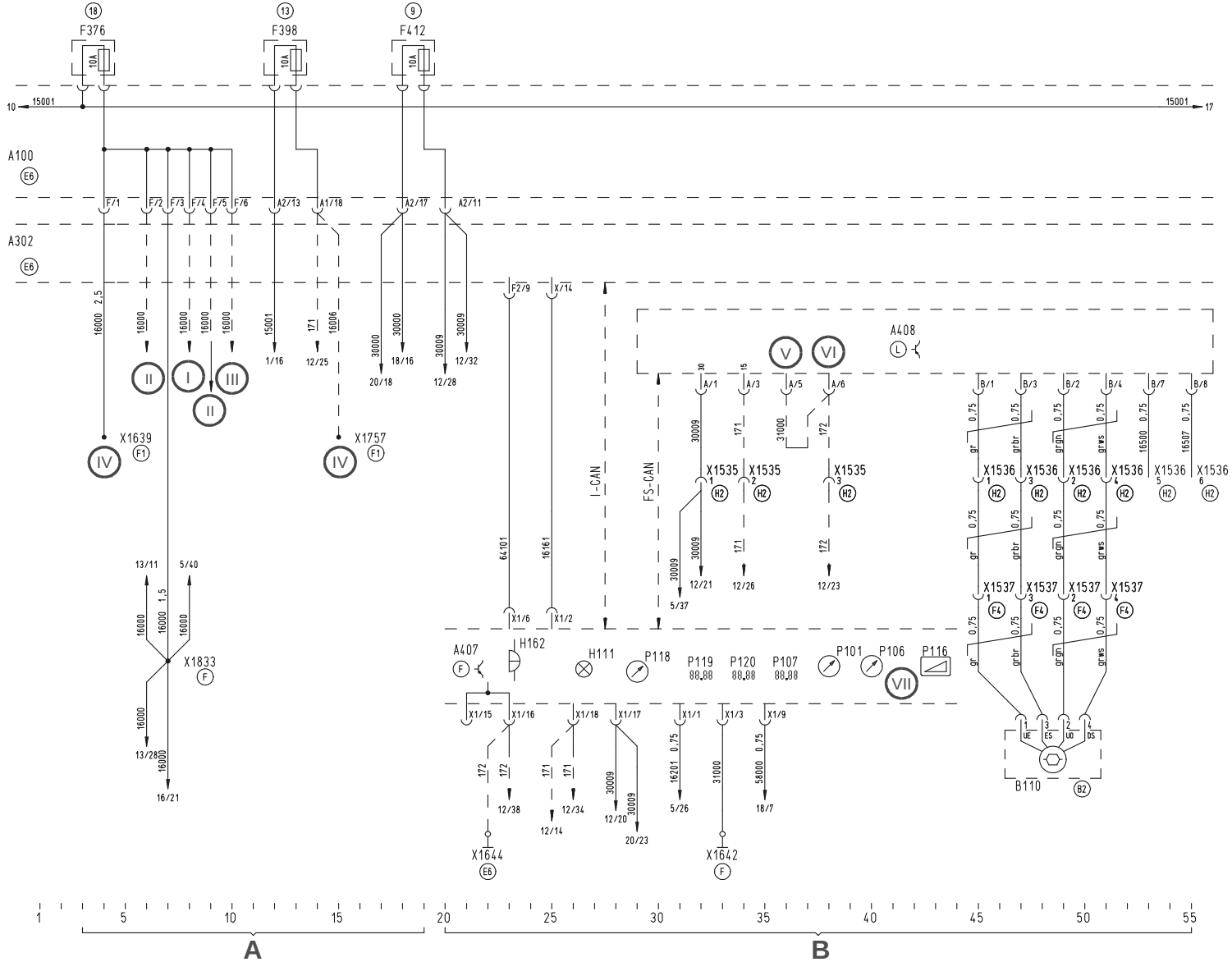
Wiring diagram no. **81.99192.2981** Sheet **12** of 21



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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

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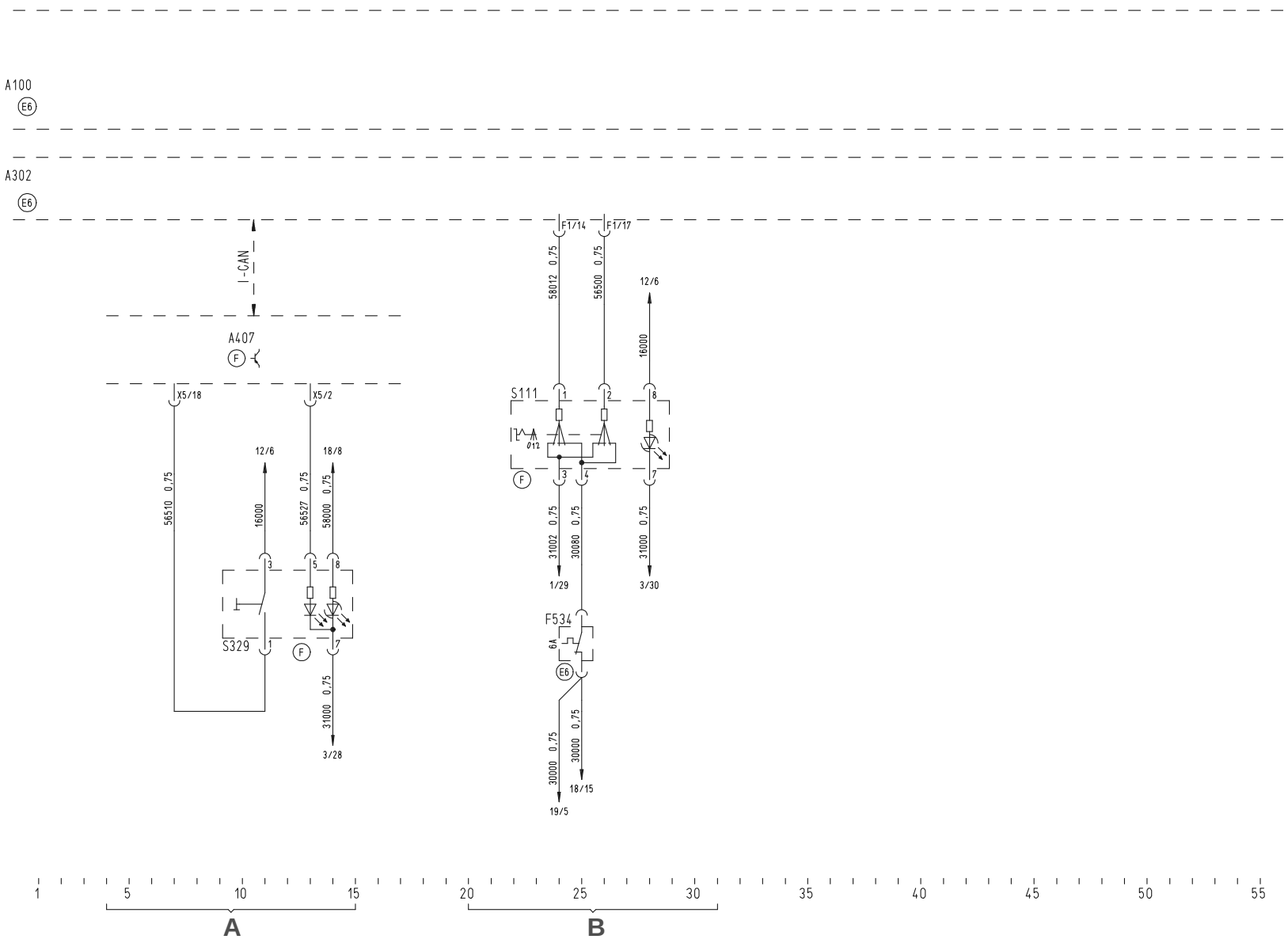
Wiring diagram no. **81.99192.2981** Sheet **13** of 21



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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

- (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) Side marking light, left

(II) Side marker light, right

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

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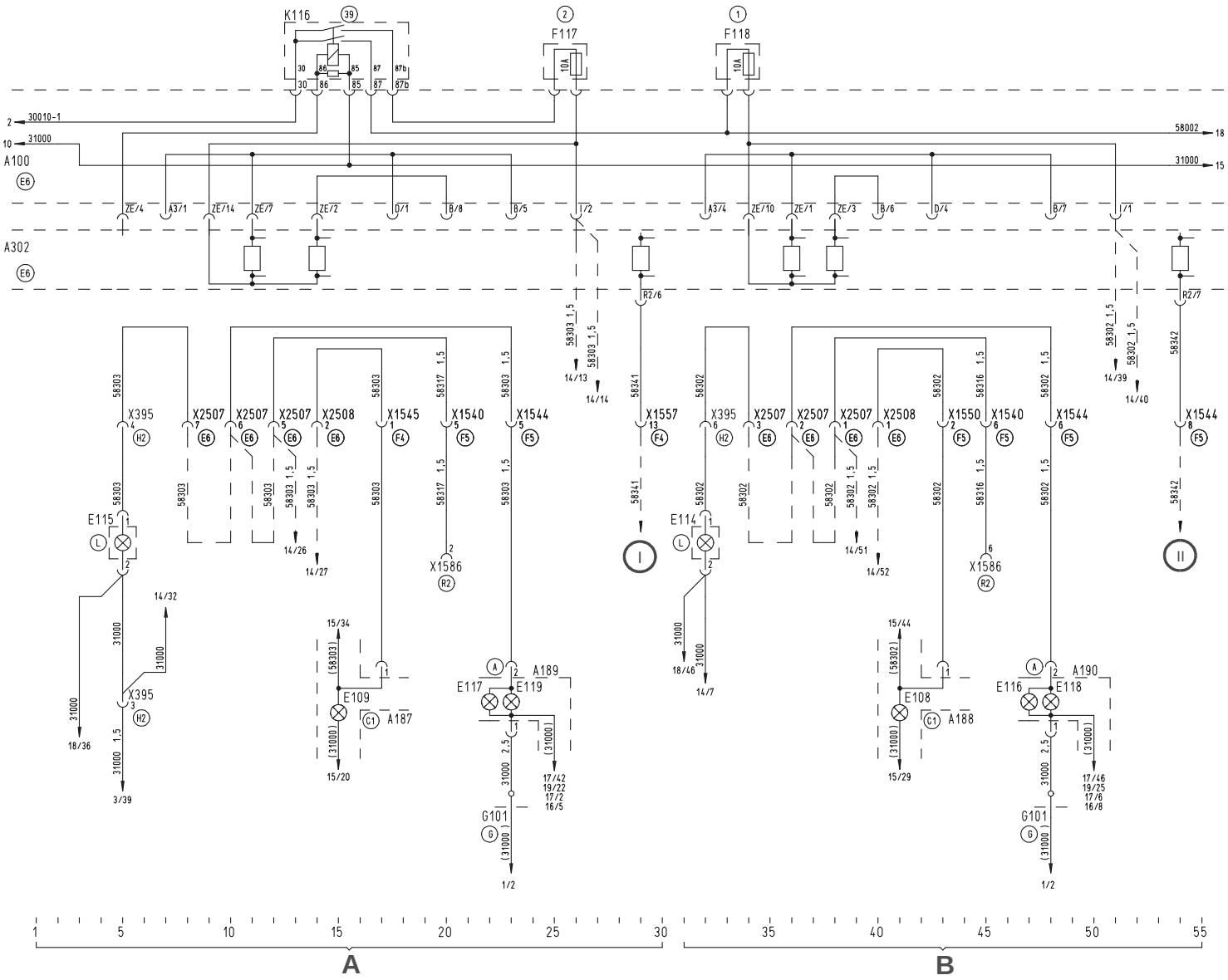
Wiring diagram no. **81.99192.2981** Sheet **14** of 21



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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		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
X1967		Stvd. 1 combination steering column switch

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) for D2R headlights

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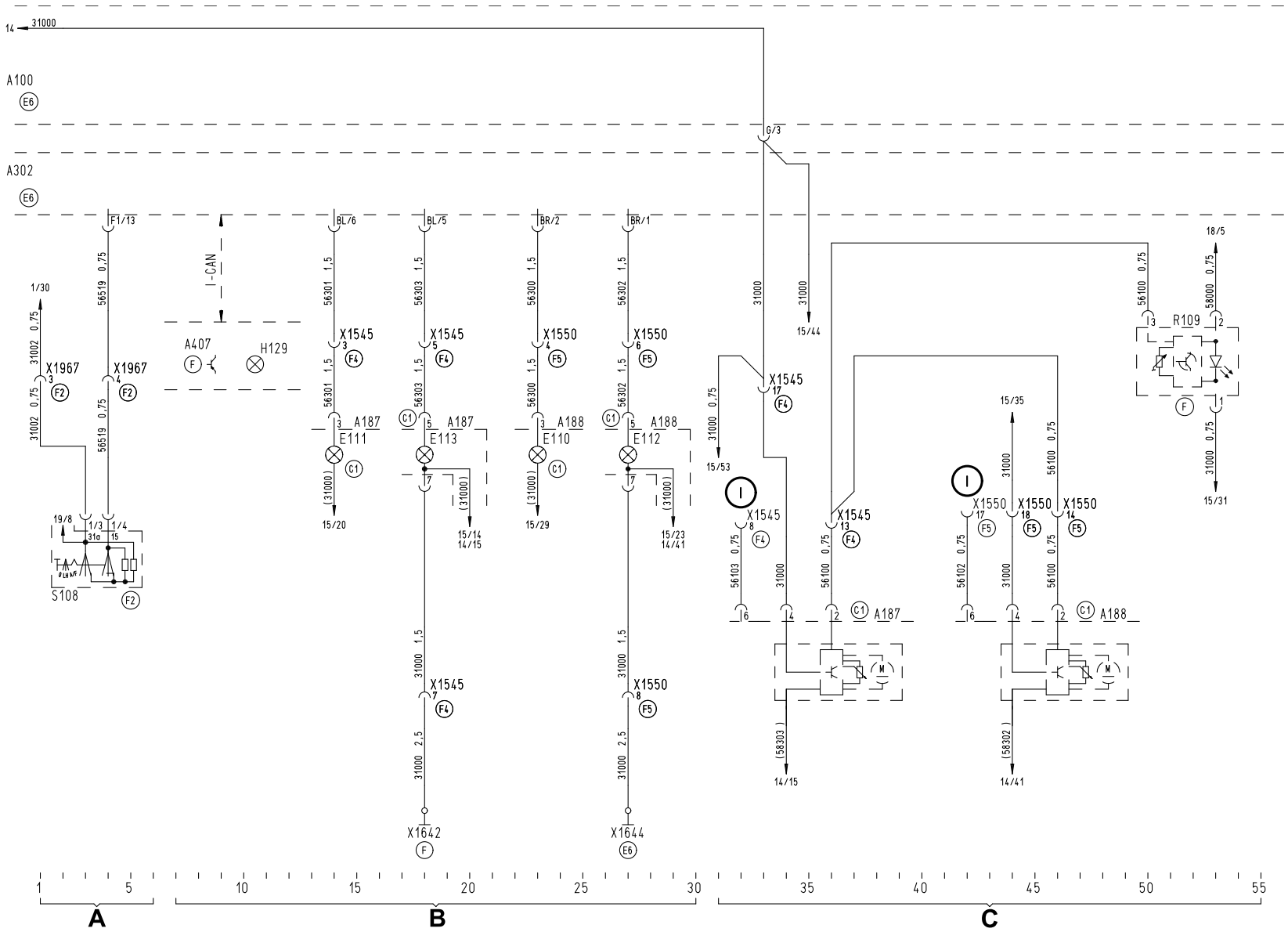
Wiring diagram no. **81.99192.2981** Sheet **15** of 21



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Legend
Wiring diagram no. **81.99192.2981** Sheet **16** of 21
Change status: 03.01

A = Rear fog lights
B = Fog light/rear fog light circuitry
C = Fog lights/additional main beam

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
E122		Fog lights, right
E123		Fog lights, left
E124		Rear fog light, right
E125		Rear fog light, left
E194		High beam, right
E195		High beam, right
S502	(490)	Control switch, rear fog light
X1540		Stvd. frame I
X1544		Stvd. frame III
X1545		Stvd. front region, left
X1550		Stvd. front region, right
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

Note:
Position for mounting **X1587** is E8 on semitrailers!

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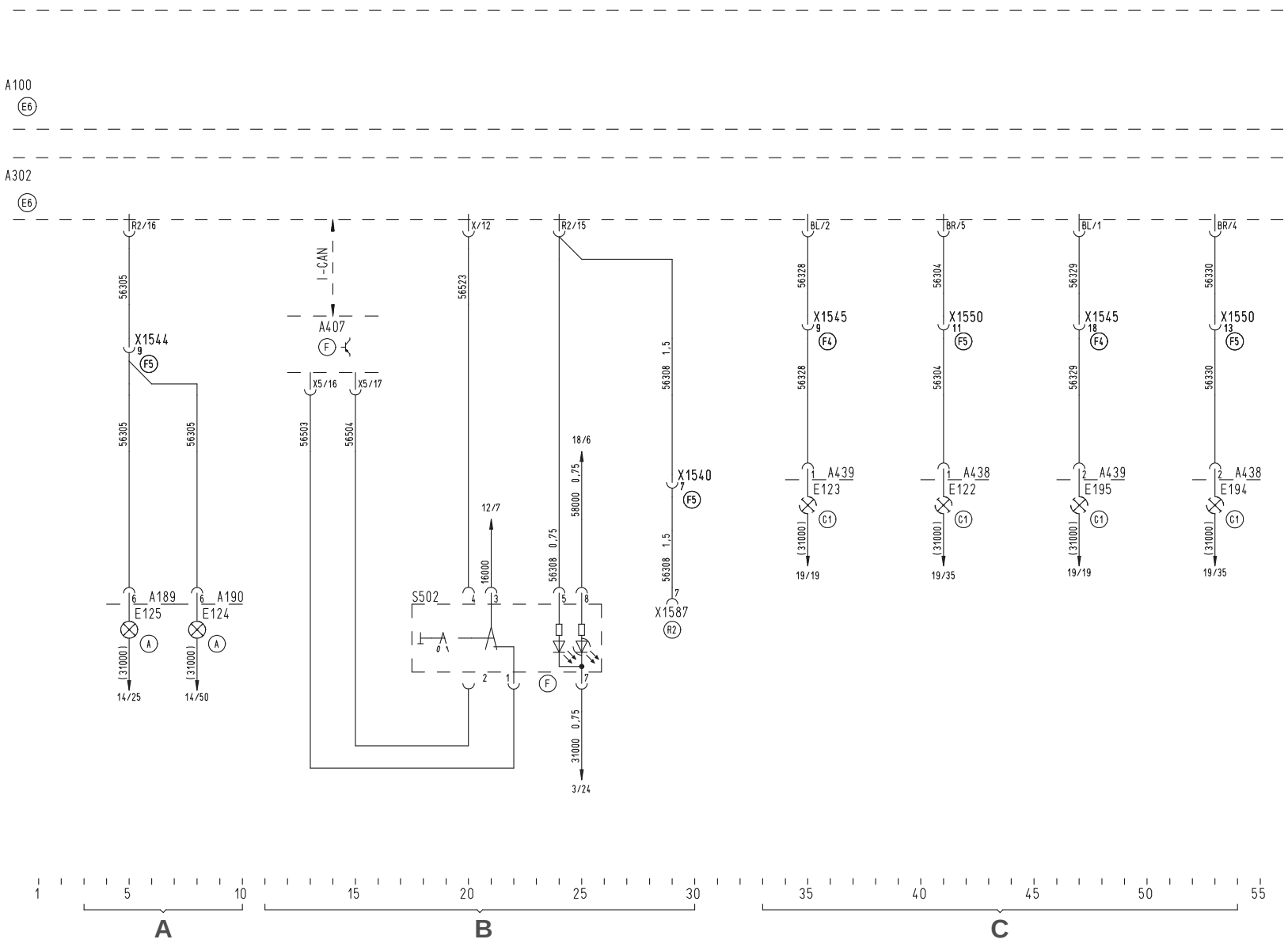
Wiring diagram no. **81.99192.2981** Sheet **16** of 21



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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
- (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) Switch, reverse gear

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

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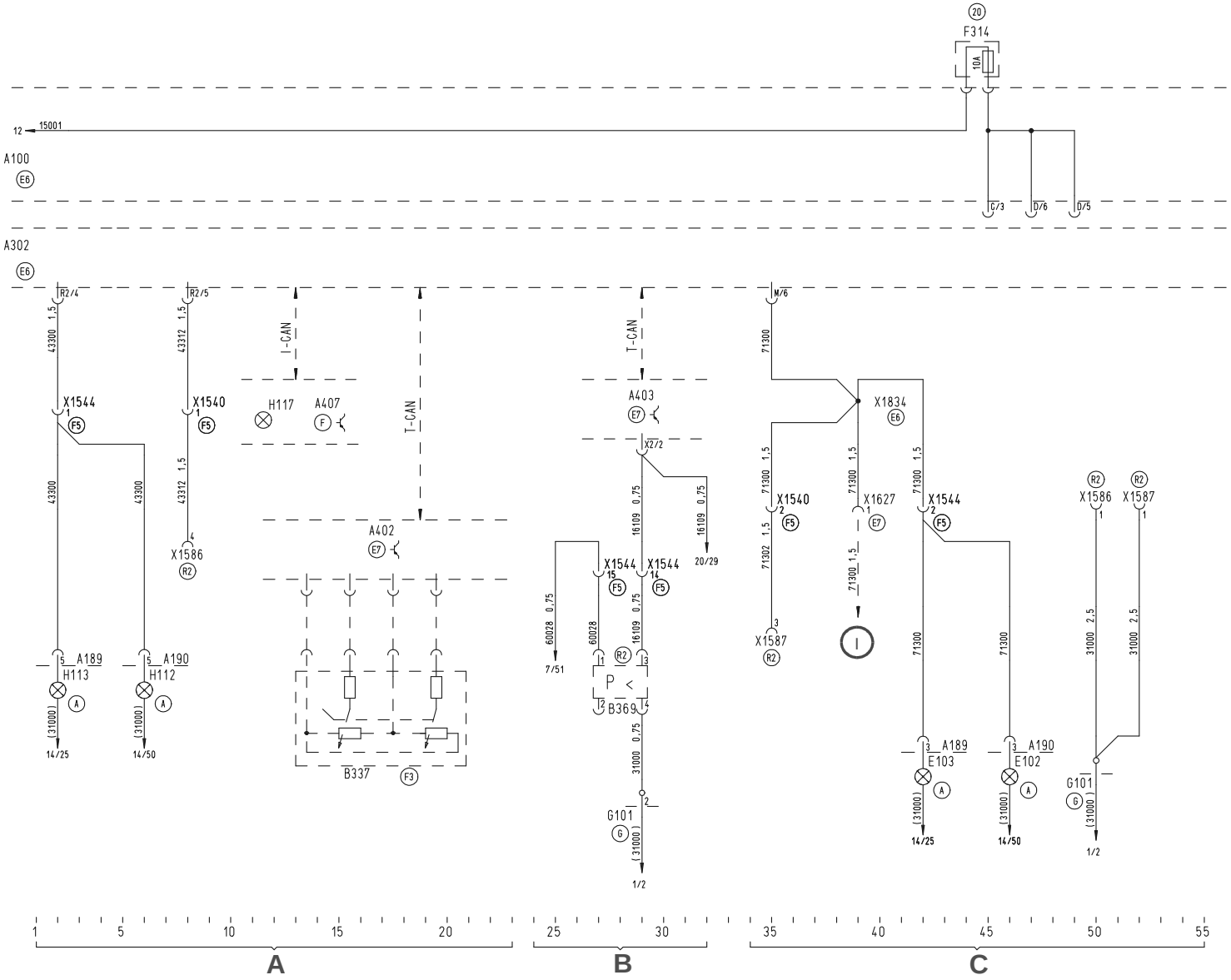
Wiring diagram no. **81.99192.2981** Sheet **17** of 21



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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

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

- (I) Door module
- (II) Terminal 58, dimmed

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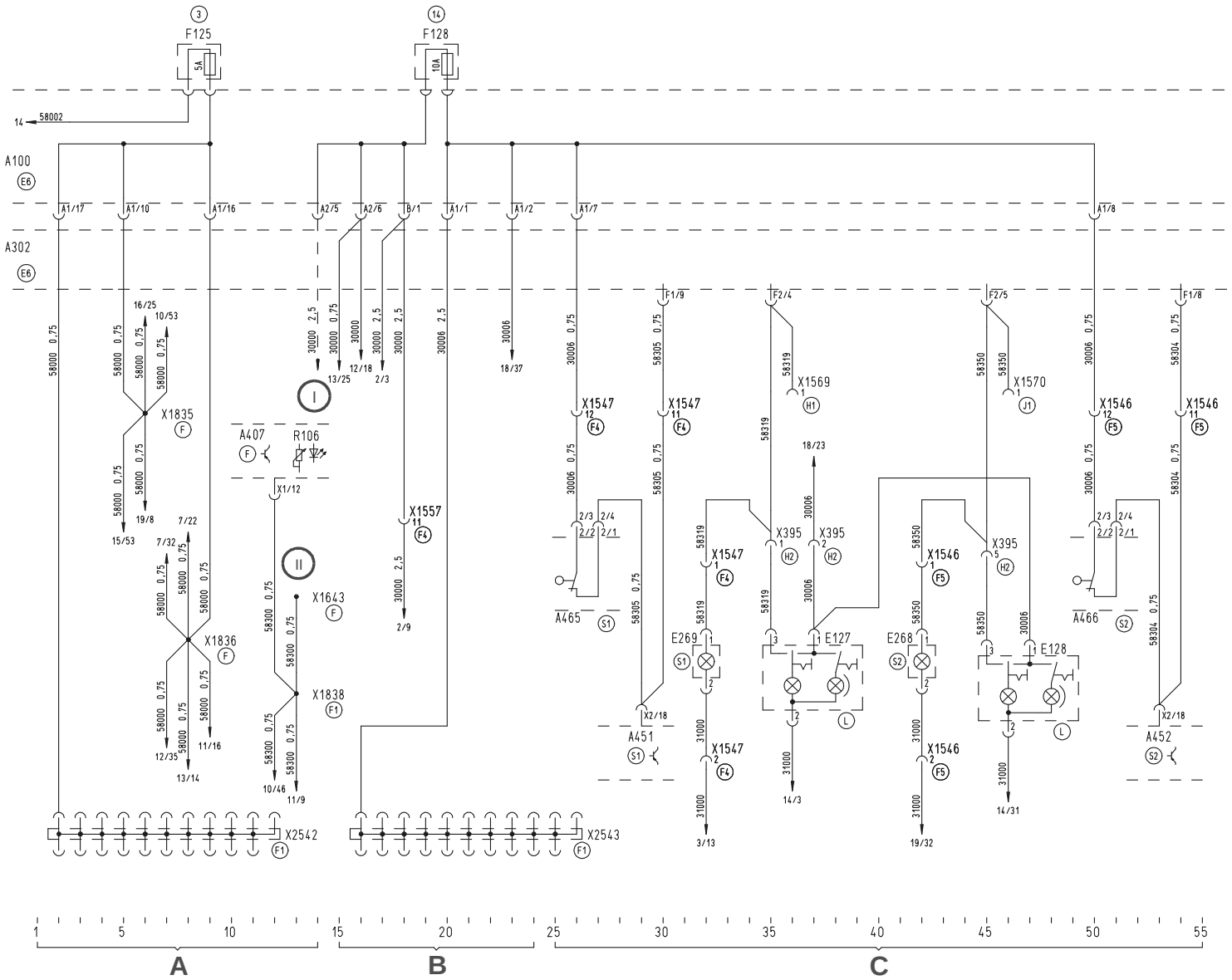
Wiring diagram no. **81.99192.2981** Sheet **18** of 21



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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
- (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

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

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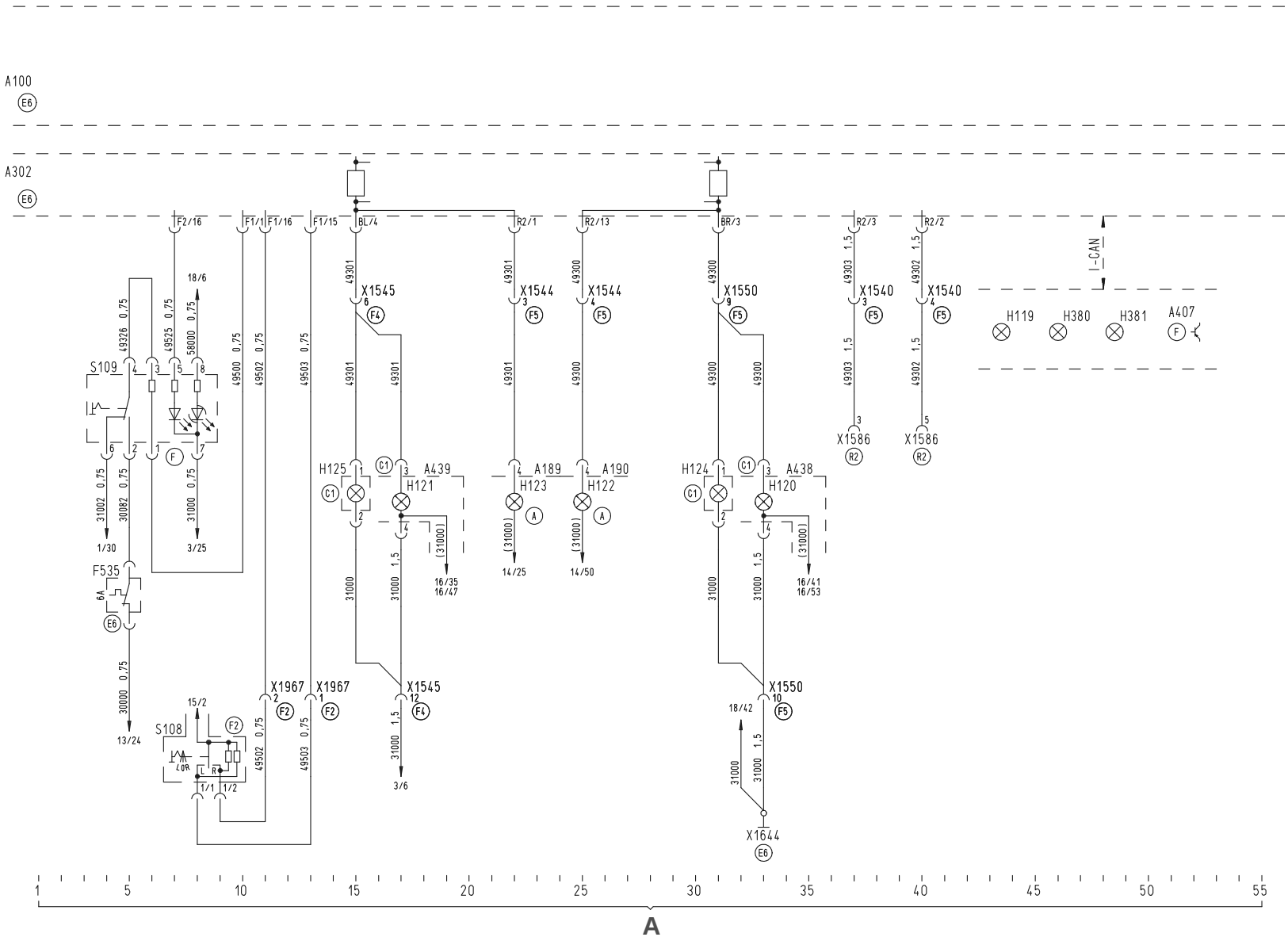
Wiring diagram no. **81.99192.2981** Sheet **19** of 21



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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
- (II) Switch for display, differential lock, transverse
- (III) Indicator light, differential lock, rear axle, transverse
- (IV) Indicator light, differential lock, longitudinal
- (V) Solenoid valve, differential lock, longitudinal
- (VI) Solenoid valve, power take-off 1
- (VII) Data line
- (VIII) Supply to trailer (protection from emptying)
- (IX) Control, trailing axle or leading axle, trailer
- (X) Pressure switch, monitoring, parking brake, trailer
- (XI) Indicator light, brake pad wear indicator, trailer

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

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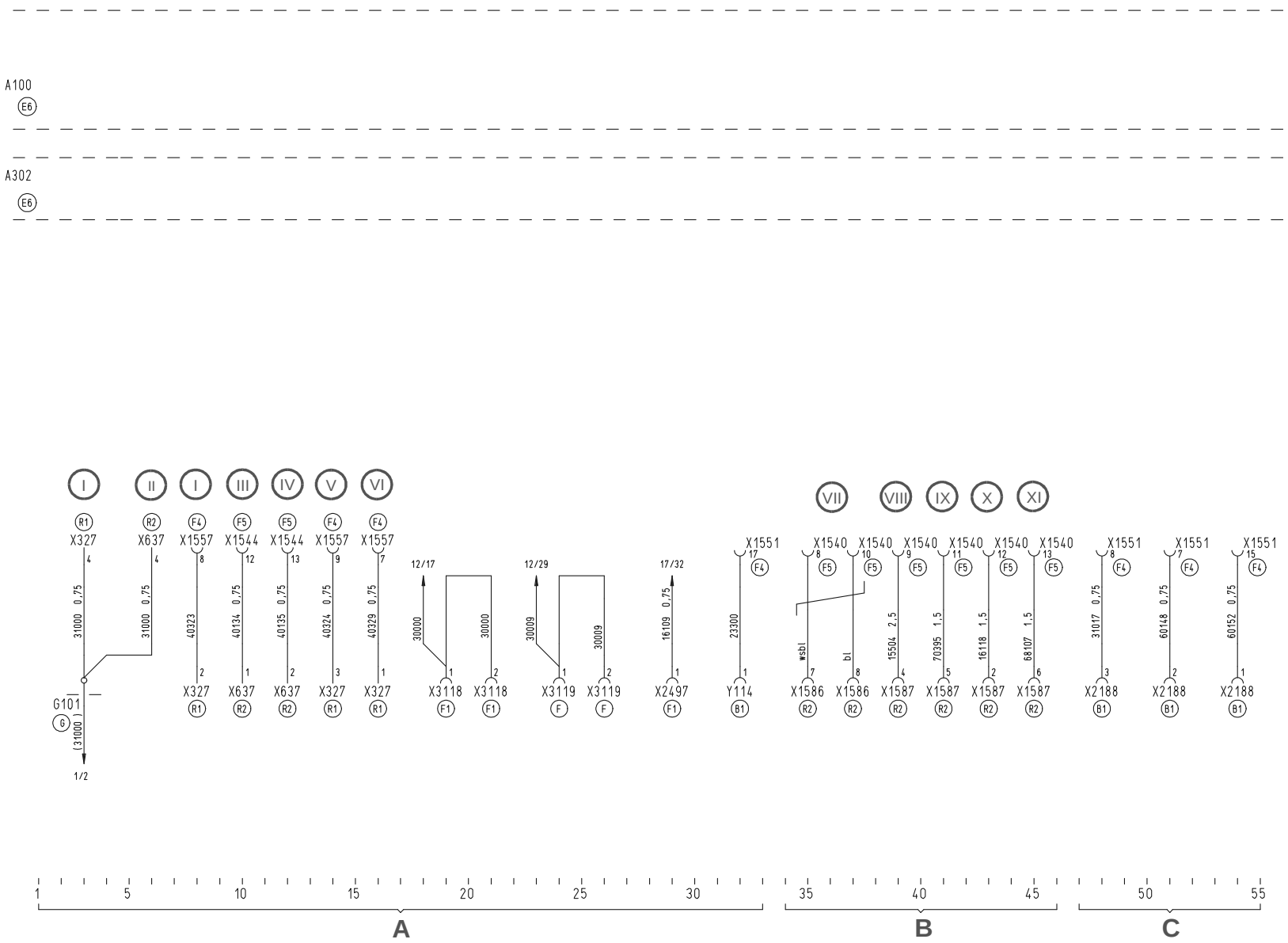
Wiring diagram no. **81.99192.2981** Sheet **20** of 21



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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
- 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 Pressure pickup, positioning pressure
- II Solenoid valve, reservoir
- III Temperature sensor, intarder, retarder
- IV Proportional valve, intarder, retarder
- V Solen. valve, reservoir/press. pickup, actuat. press.
- VI Transmission control module
- VII Clutch servo
- VIII Clutch displacement sensor
- IX Transmission, input speed
- X Transmission, neutral
- XI Switch, reverse gear
- XII Diagnostics, AS-Tronic
- XIII Indicator light, power take-off 1
- XIV Indicator light, power take-off 2

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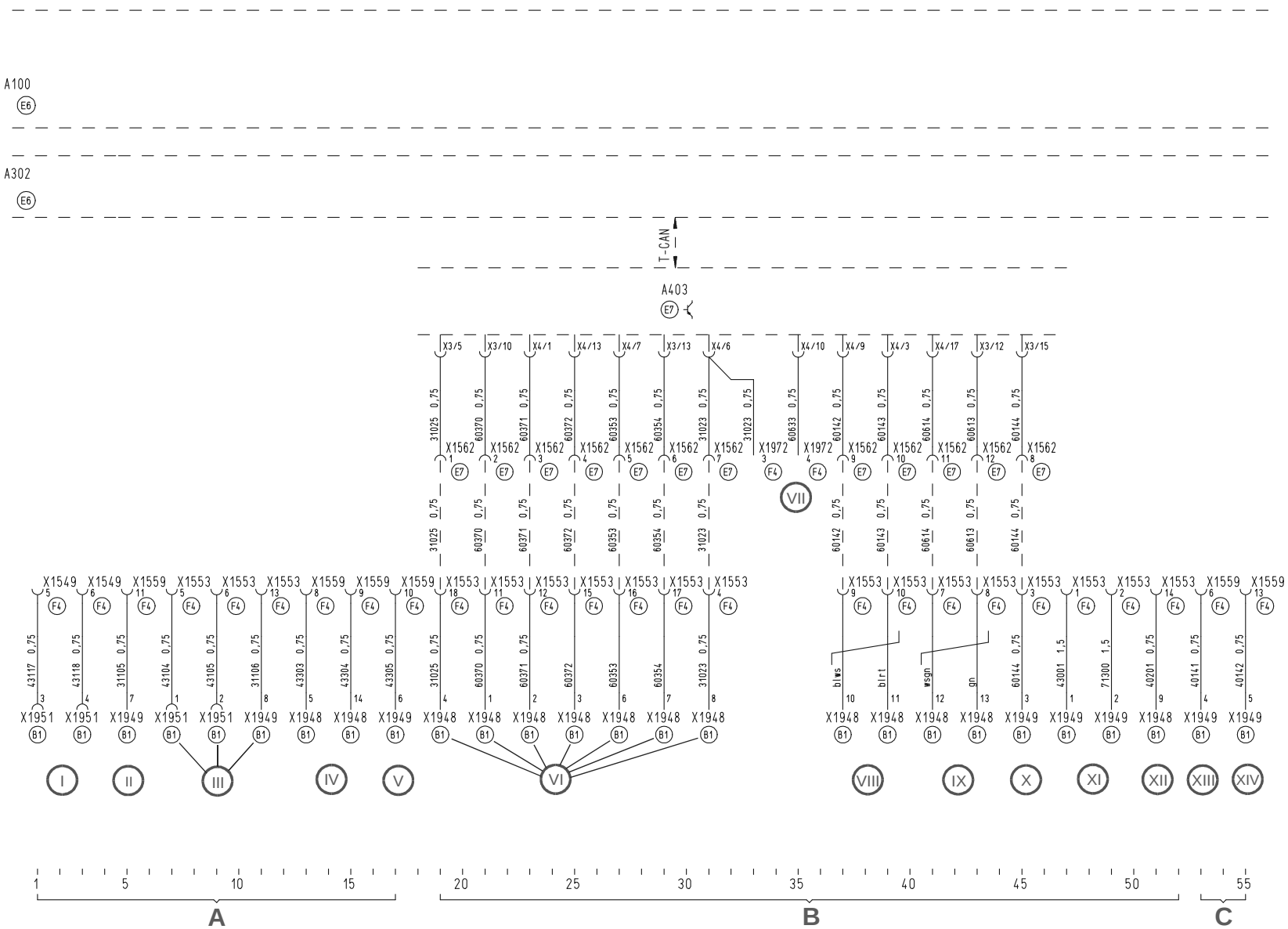
Wiring diagram no. **81.99192.2981** Sheet **21** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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)	Drive initiation switch
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

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) Signal, engine is running

X1830	(221)	Crimped connector, line 31002
X1903		Threaded bolt M6 (MP box)
X1904		Threaded bolt M6 (MP box)
X1913	(199)	Bridge, line 30000 (MP box)
X1966		Stvd. ignition lock
X1988		Threaded bolt M5 (MP box)

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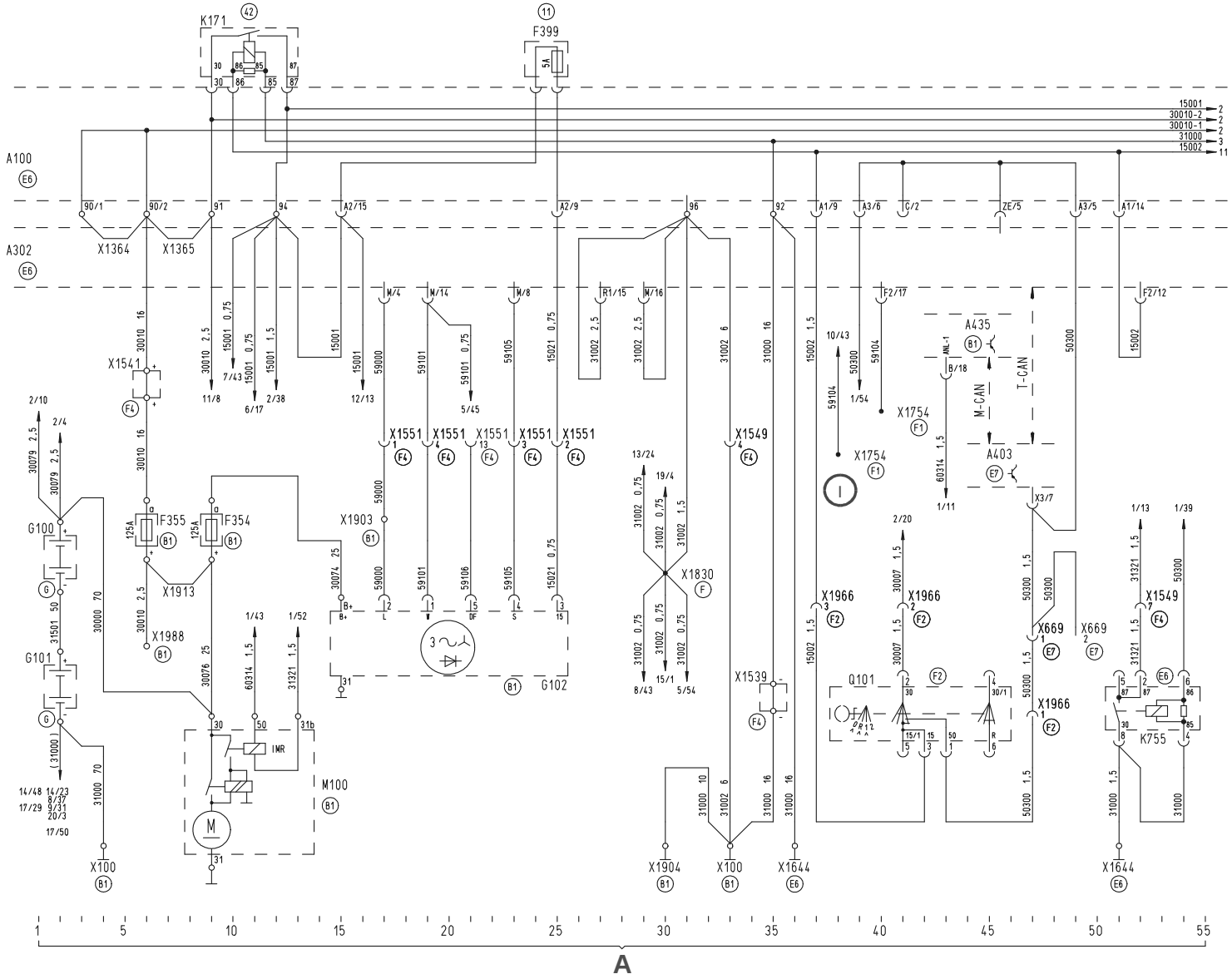
Wiring diagram no. **81.99192.2982** Sheet **1** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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

- (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) Intarder
- (II) Electronic braking system
- (III) Electronically controlled air suspension
- (IV) Retarder

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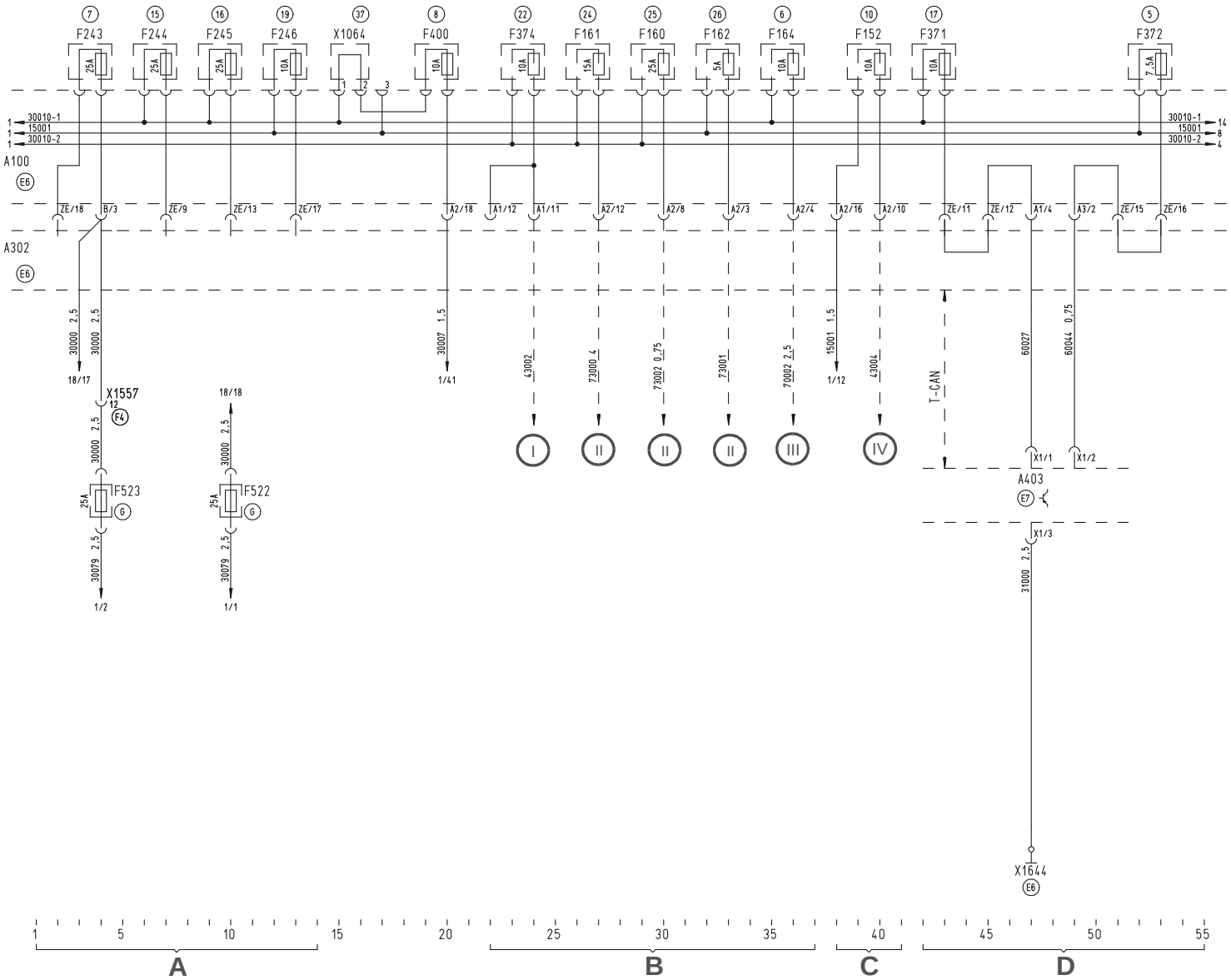
Wiring diagram no. **81.99192.2982** Sheet **2** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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 illumination, left
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, cable 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) Door module, driver's side
- (II) Door module, passenger's side
- (III) Door module

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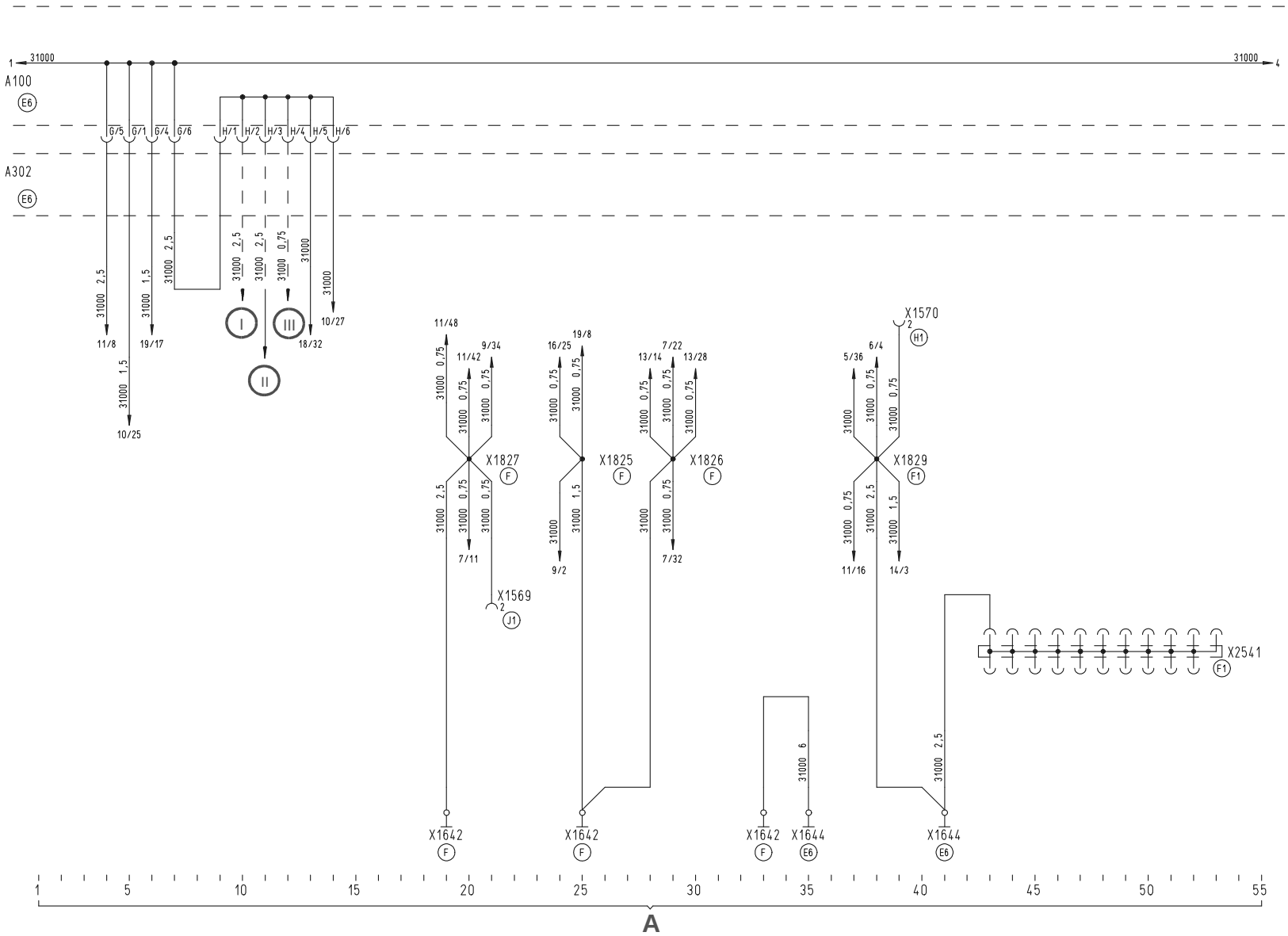
Wiring diagram no. **81.99192.2982** Sheet **3** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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)	Magnetic clutch, blower

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

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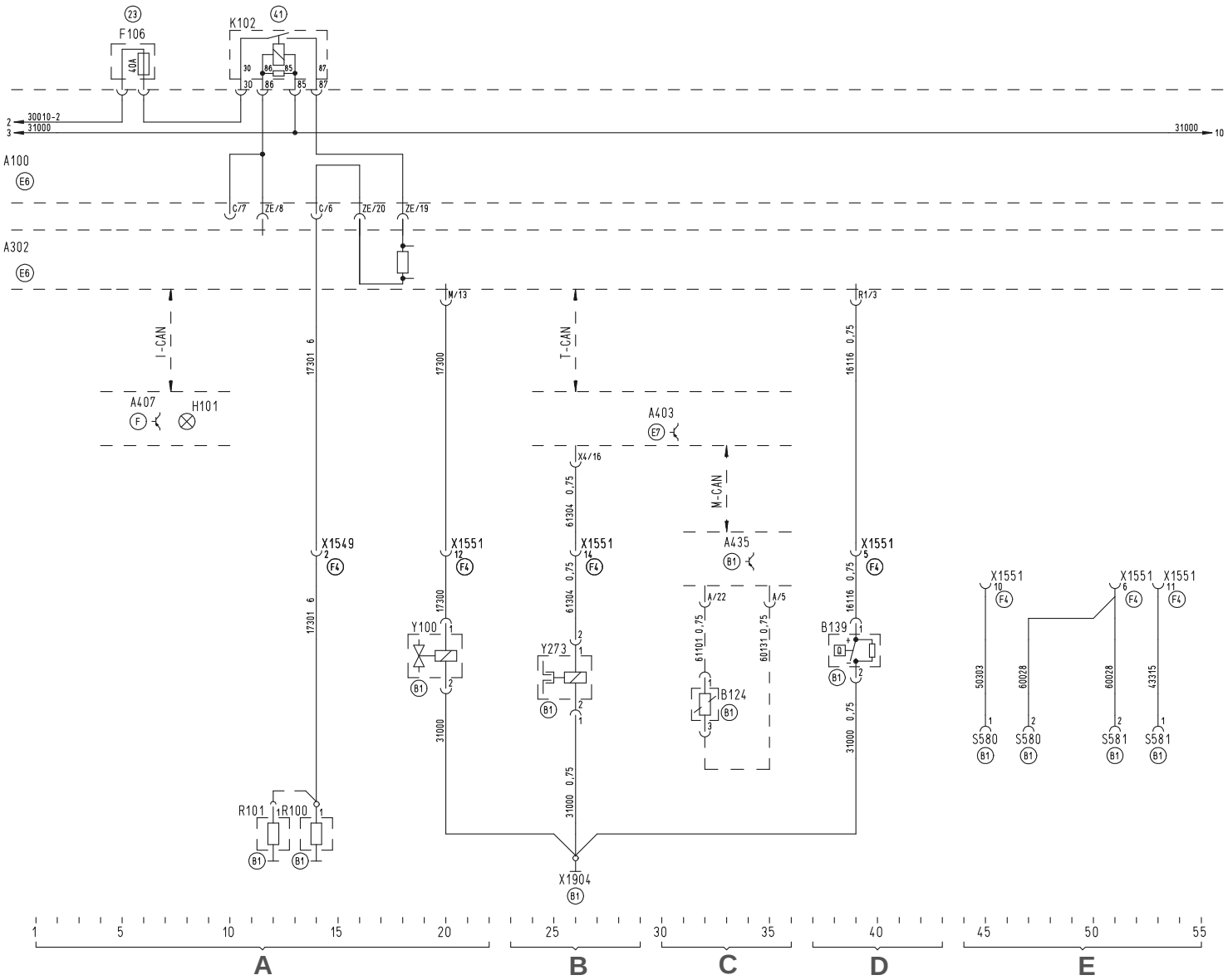
Wiring diagram no. **81.99192.2982** Sheet **4** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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 connector, 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

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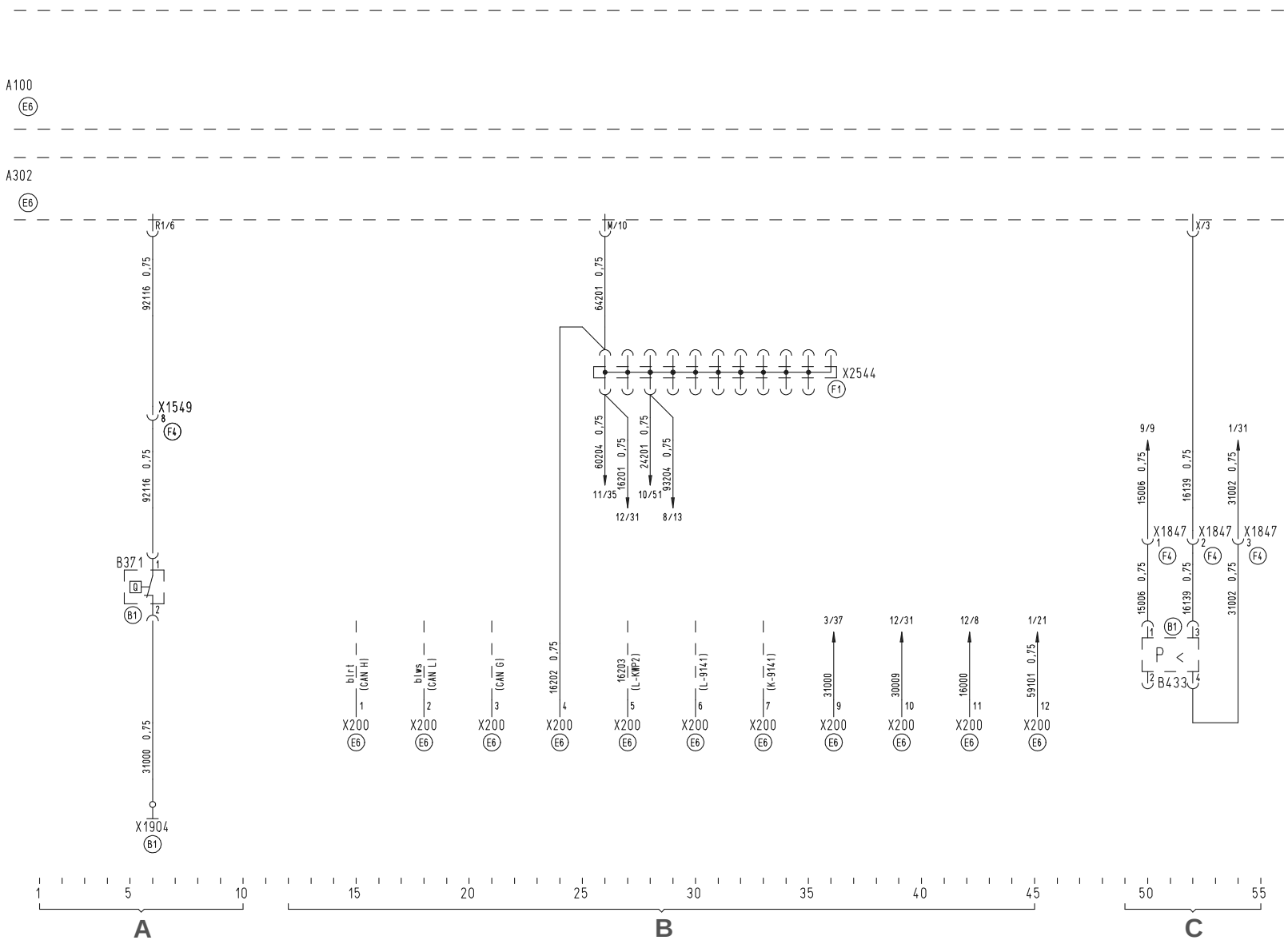
Wiring diagram no. **81.99192.2982** Sheet **5** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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)	Sensor for clutch fluid
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. foot pedals, exterior
X1996		Stvd. intermediate speed control interface (FFR)

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) Power take-off 1
- (II) Power take-off 2
- (III) Special customised module

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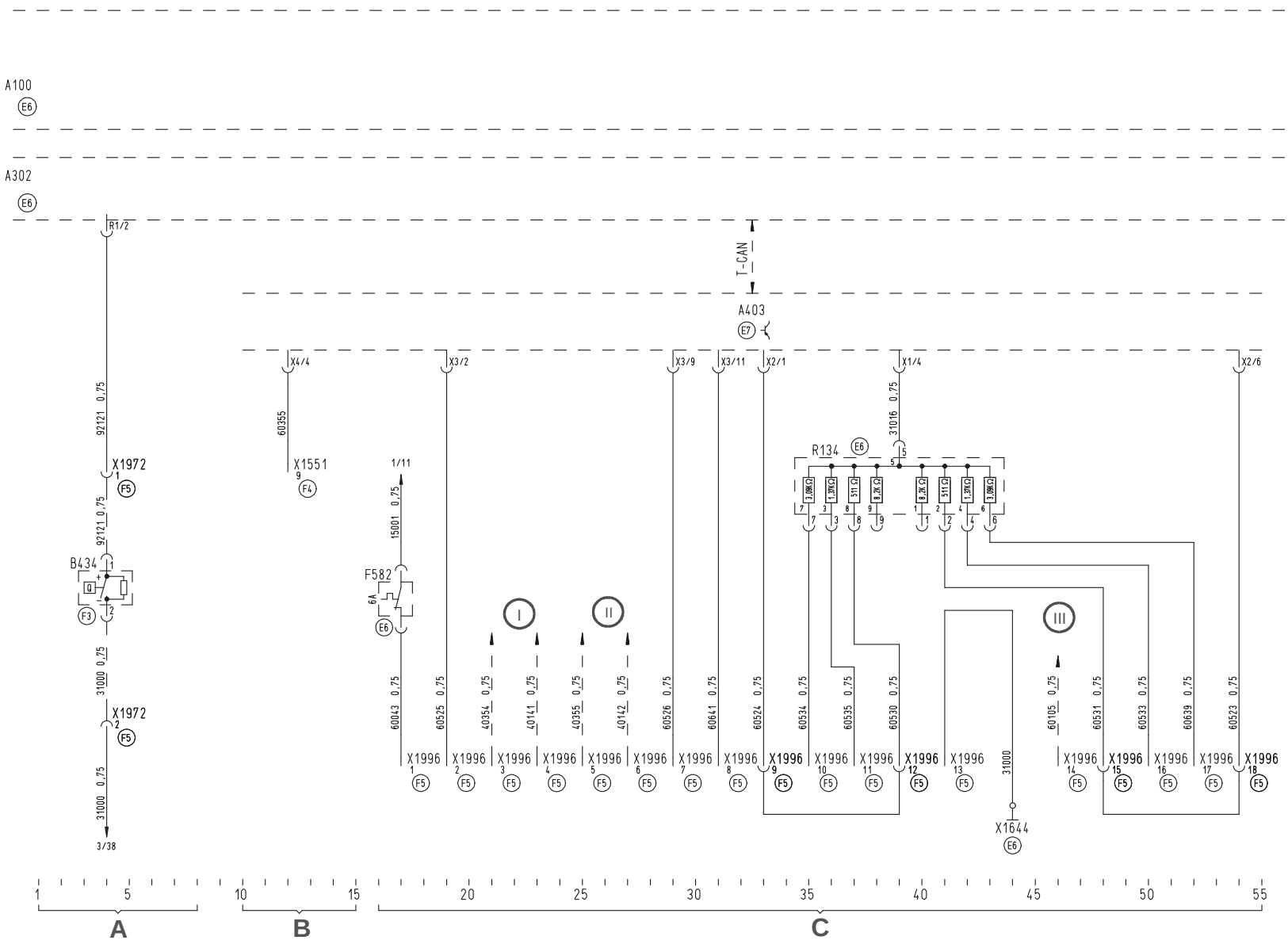
Wiring diagram no. **81.99192.2982** Sheet **6** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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/sensor
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

- (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) Vehicle management computer (terminal 15)

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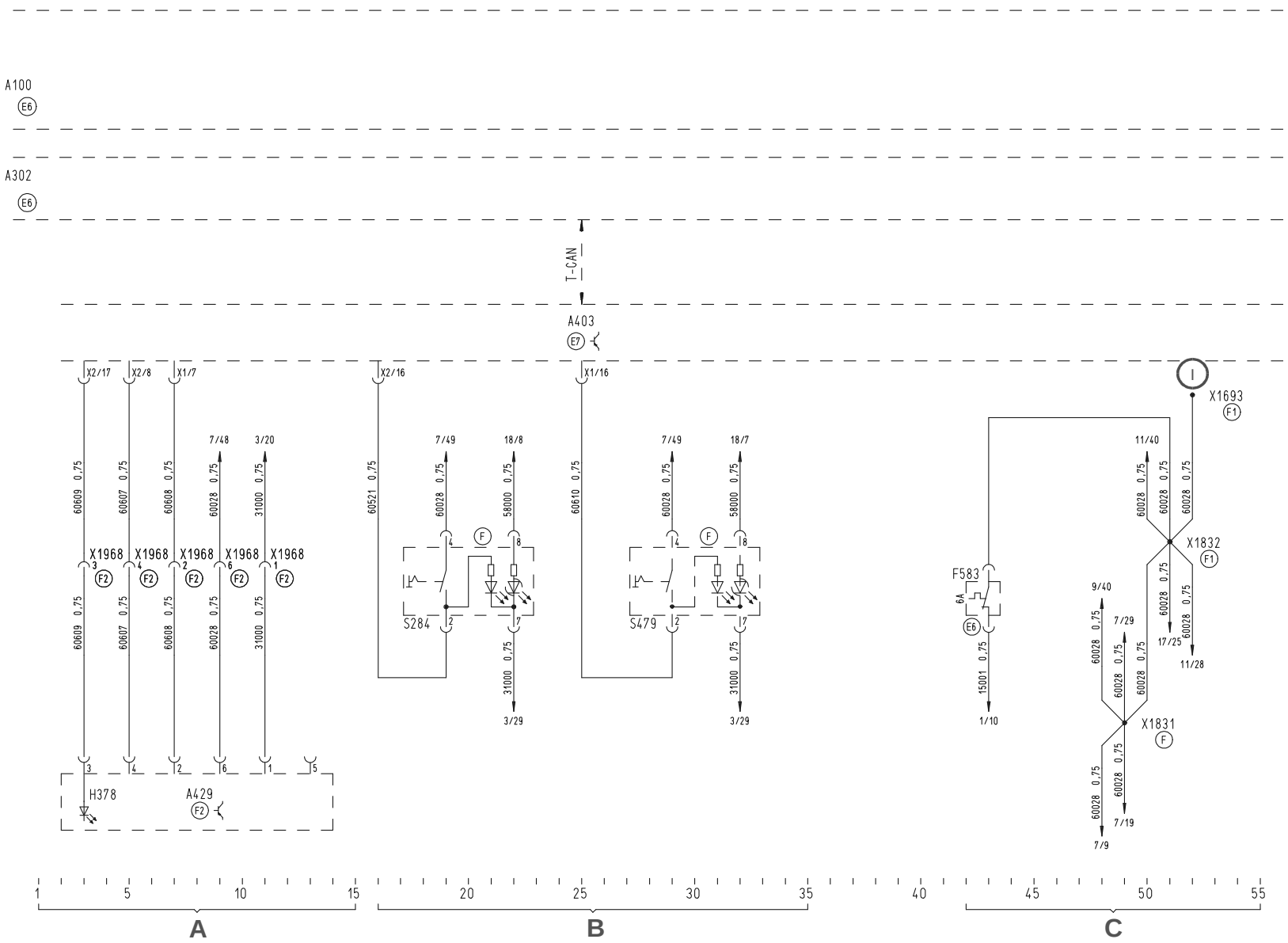
Wiring diagram no. **81.99192.2982** Sheet **7** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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)	Pickup, fuel reserve
F366	(101)	ECAM/ECAS fuse (terminal 15)
G101	(113)	Battery 2
H108		Indicator light, reservoir pressure
H149		Indicator light, cab locking
P102		Indicator instrument, brake circuit 1
P103		Indicator instrument, 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
- (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) Reserve

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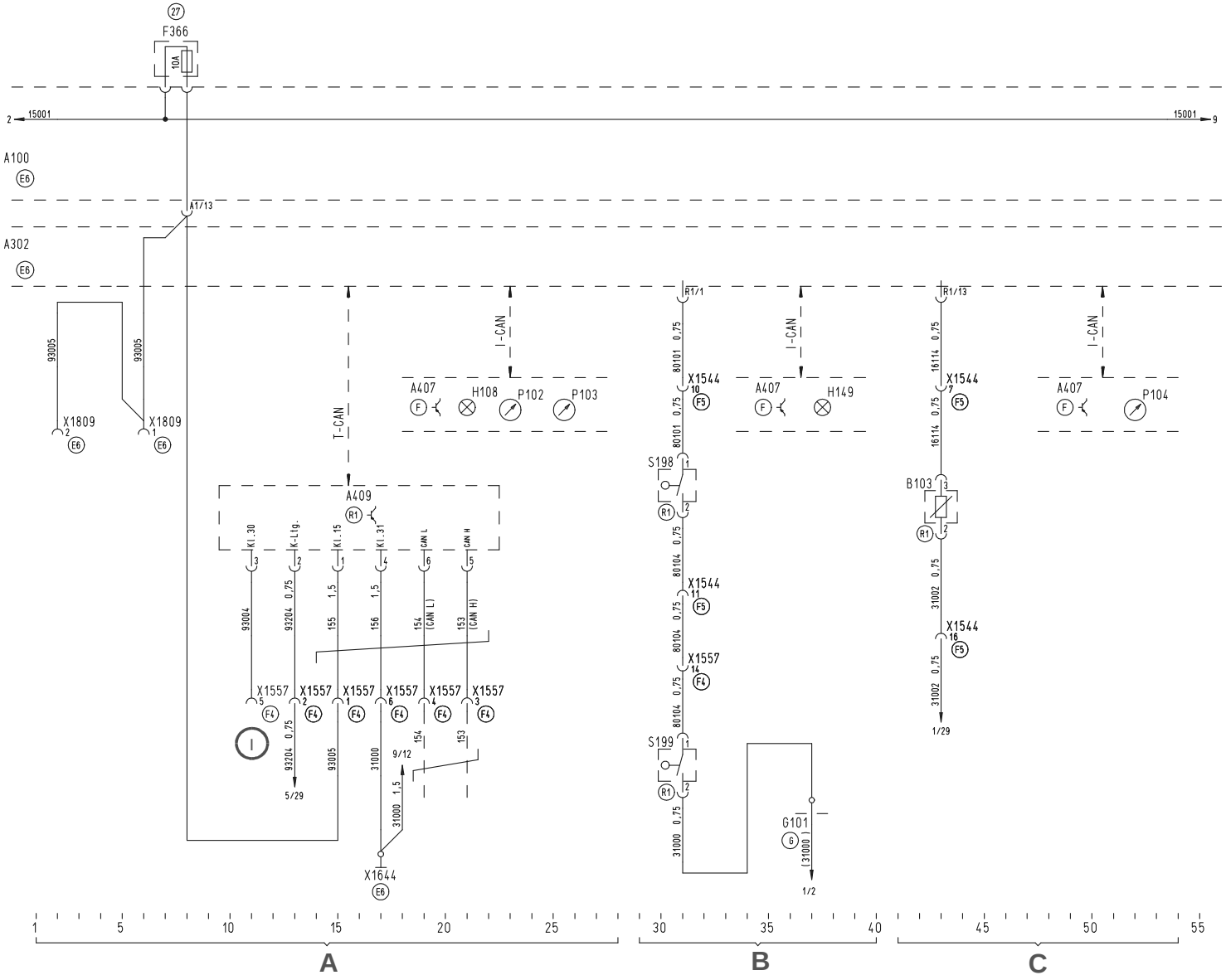
Wiring diagram no. **81.99192.2982** Sheet **8** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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
X1967		Stvd. 1 combination steering column switch
X1969		Stvd. engine brake switch
X2041		Stvd. adaptation AS-TRONIC
Y281	(188)	Solenoid valve, engine brake

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

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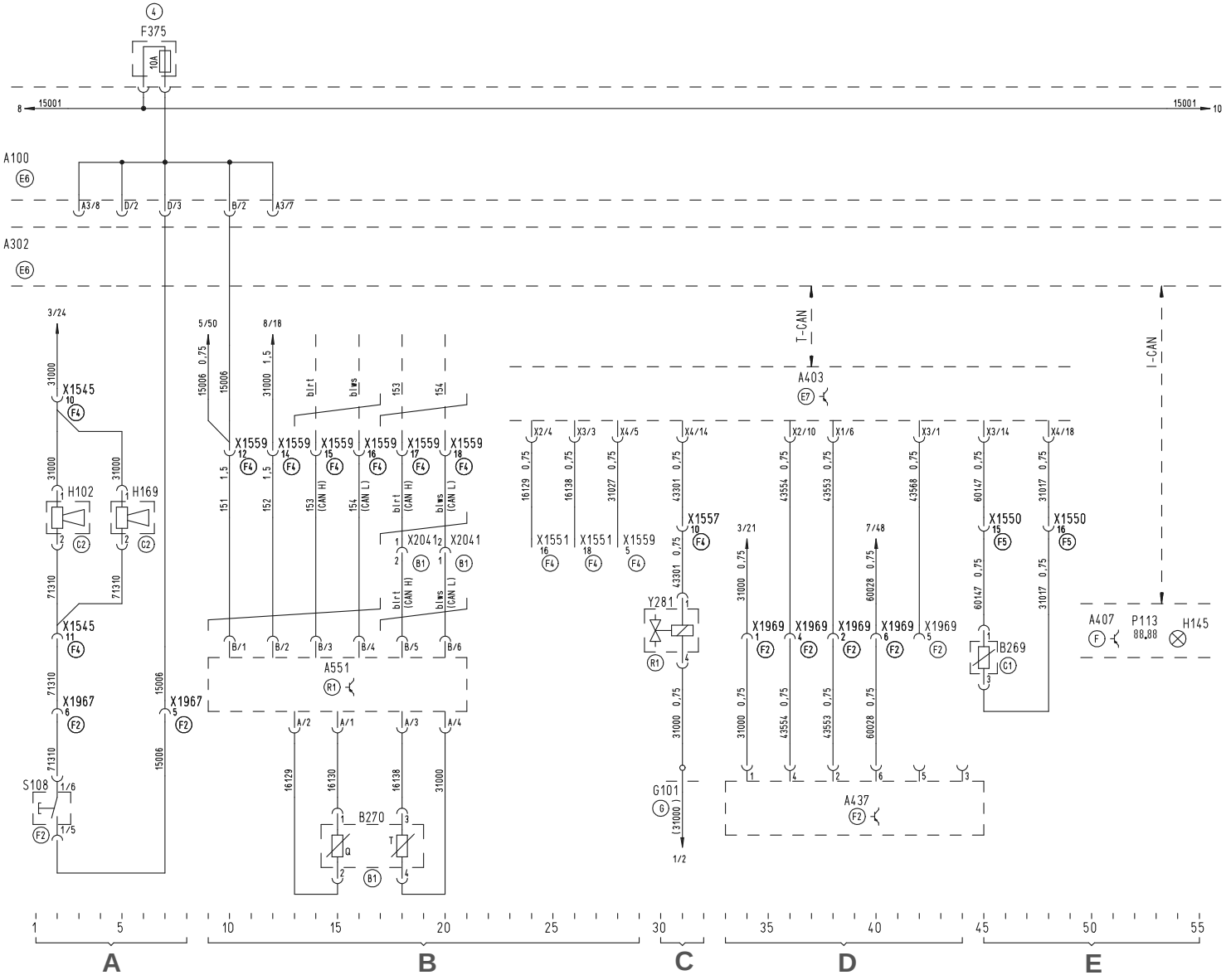
Wiring diagram no. **81.99192.2982** Sheet **9** of 21



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Legend
Wiring diagram no. **81.99192.2982** Sheet **10** of 21
Change status: 03.01

A = Wiper and washer system
B = Heater fan

A100	(255)	Central fuse, relay and terminal block
A106	(383)	Heater
A302	(352)	Central computer 2
A407	(342)	Instrumentation
A474	(375)	Control device, cab heating with/without air-conditioning
F112	(101)	Fuse, wiper and washer system
F397	(104)	Fuse, heater blower/air-conditioning unit
H382		Indicator light, level of washing water
K106	(244)	Relay, wiper pulses
M102	(145)	Screen wiper motor
M103	(146)	Screen wash pump
S108	(472)	Steering column switch (indicators, wipers and headlights)
S123	(A375)	Switch, fresh air circulation vent
S547	(A375)	Rotary control, blower
X1543		Stvd. wiper motor
X1550		Stvd. front region, right
X1823		Stvd. air-conditioning, terminal 15
X2003		Stvd. 2 combination steering column switch

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) Clock-pulse regulator
- (II) Blower
- (III) Fresh/circulating air

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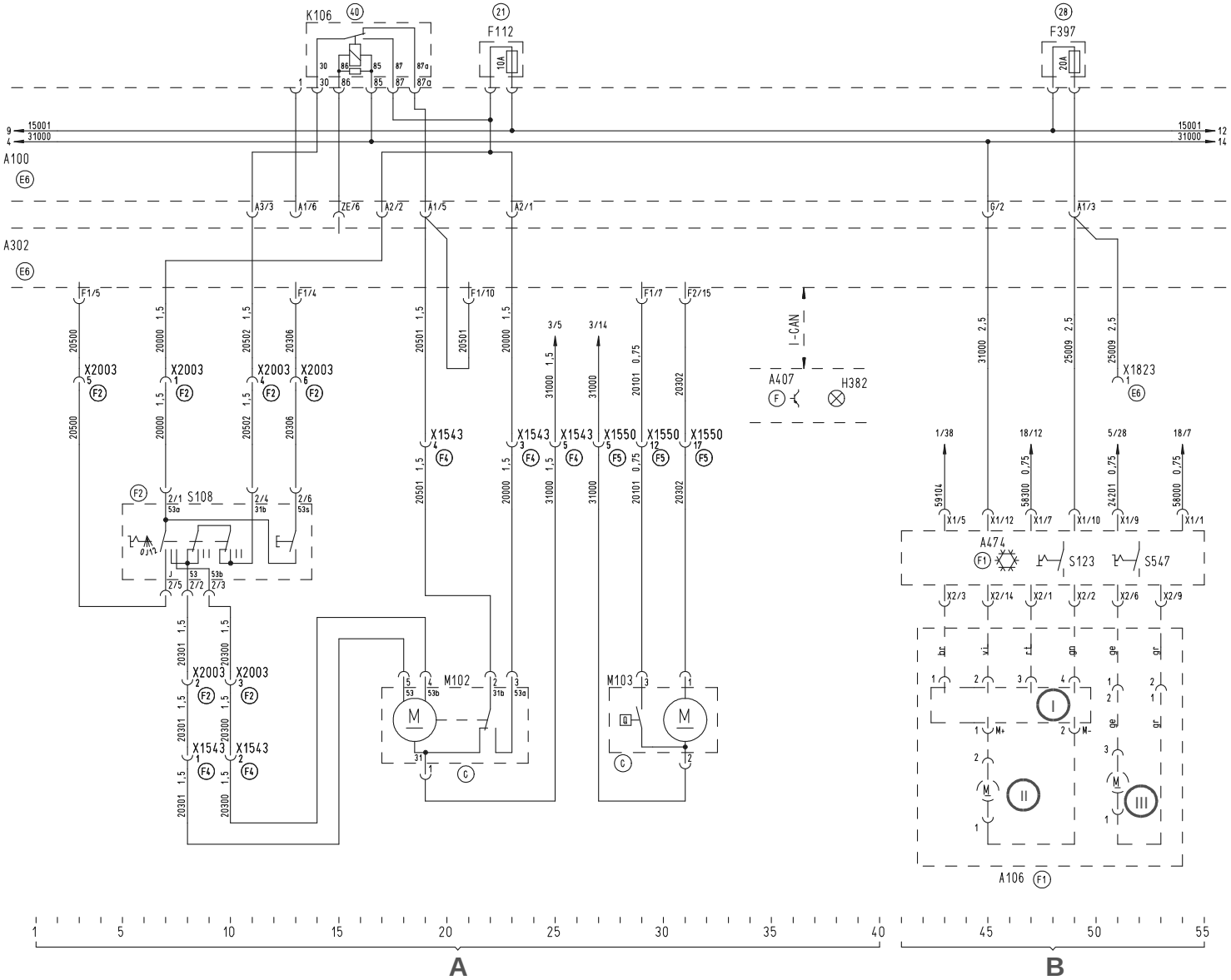
Wiring diagram no. **81.99192.2982** Sheet **10** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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	(474)	Switch, gear lever
X1559		Stvd. engine/EDC/transmission IV
X1604		Stvd. switch in gearshift knob
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
- (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) Reserve for HGS (hydraulic gearshift) heating

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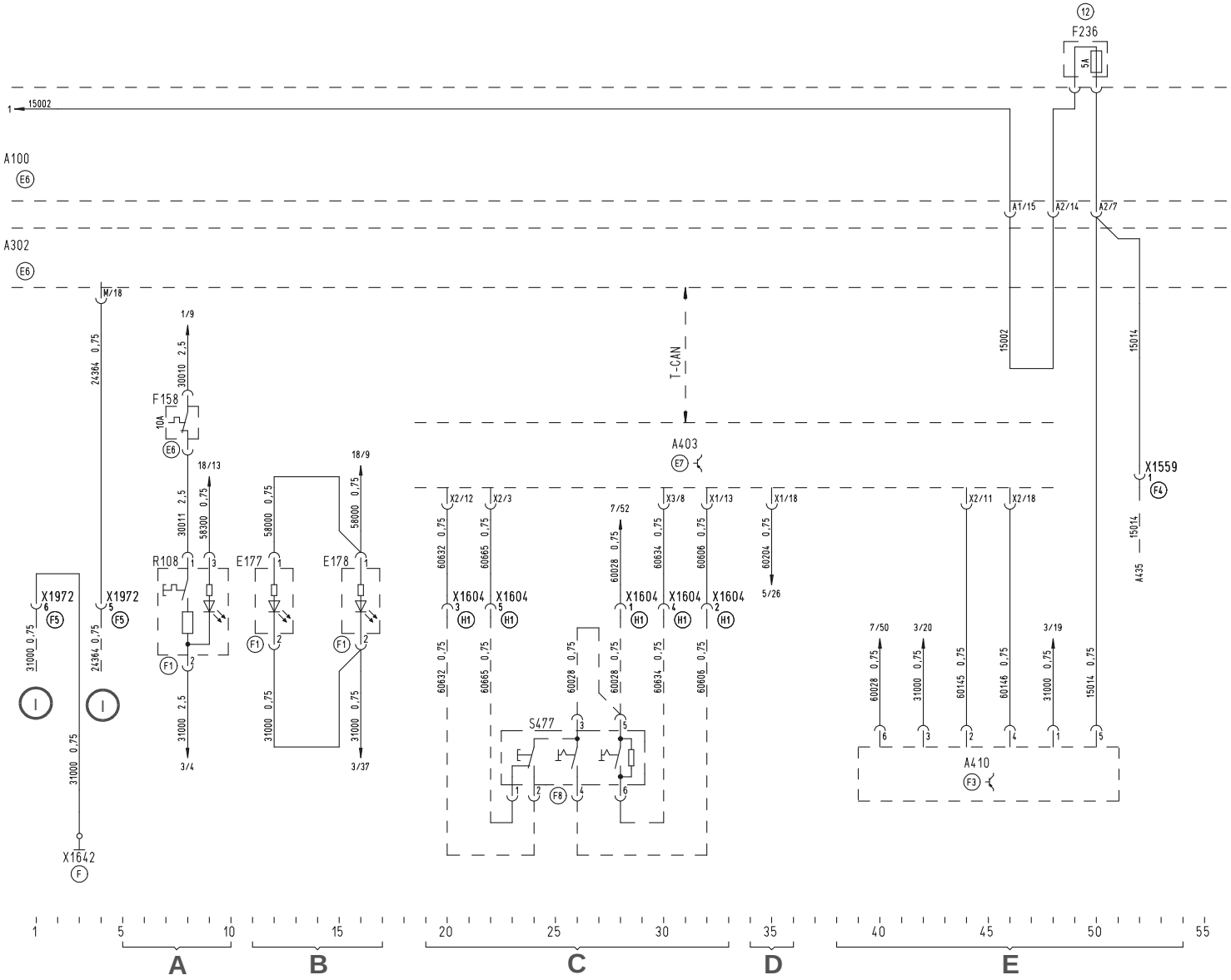
Wiring diagram no. **81.99192.2982** Sheet **11** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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, STOP
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. cab tachograph
X1536		Stvd. cab 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

- (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) Differential lock
- (II) Supplementary heater
- (III) Door module
- (IV) Minus
- (V) Earth
- (VI) See electronically controlled diesel injection
- (VII) Terminal 15

Note:
X1536/8 for lead sealing, **X1537/6** for lead sealing

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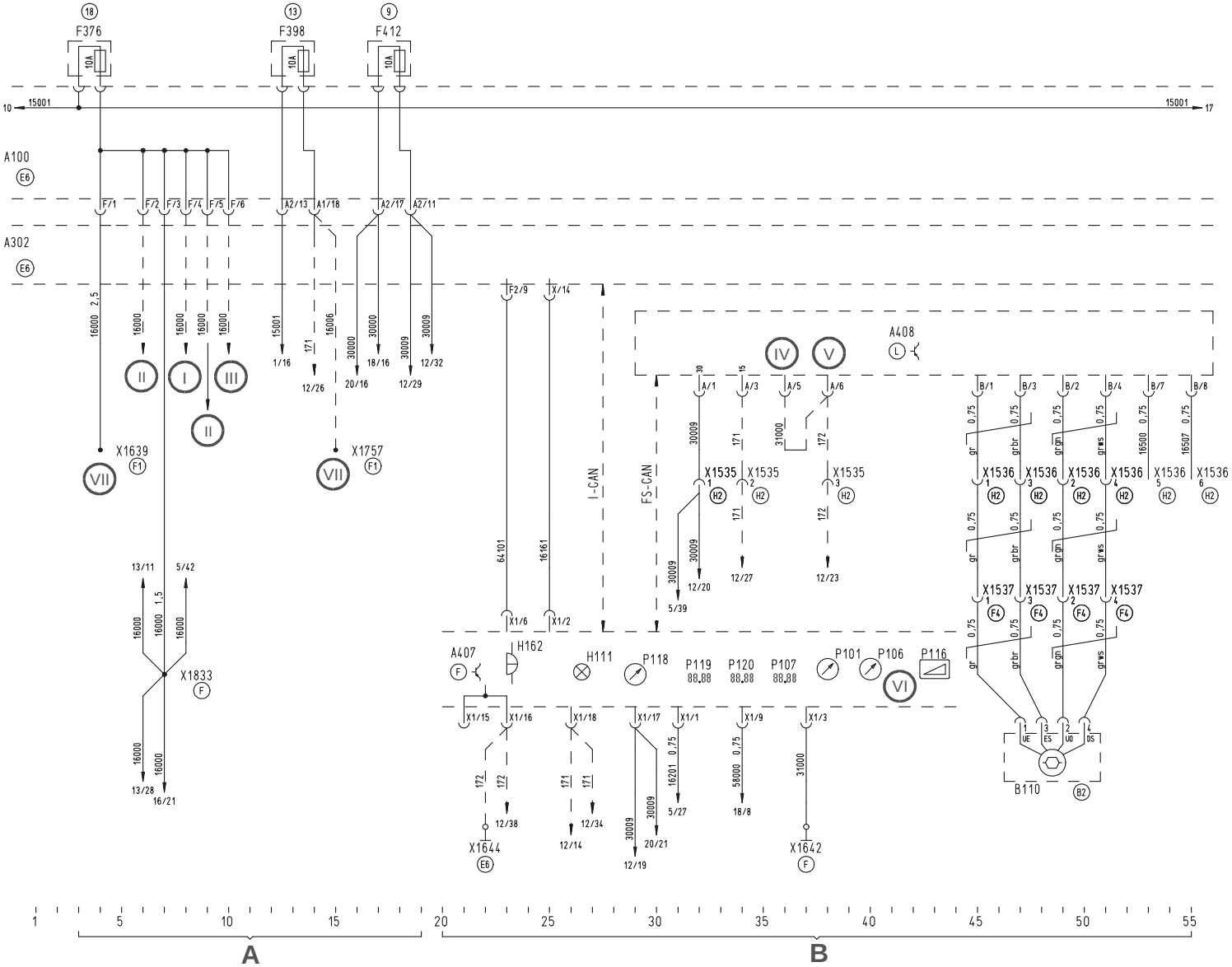
Wiring diagram no. **81.99192.2982** Sheet **12** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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

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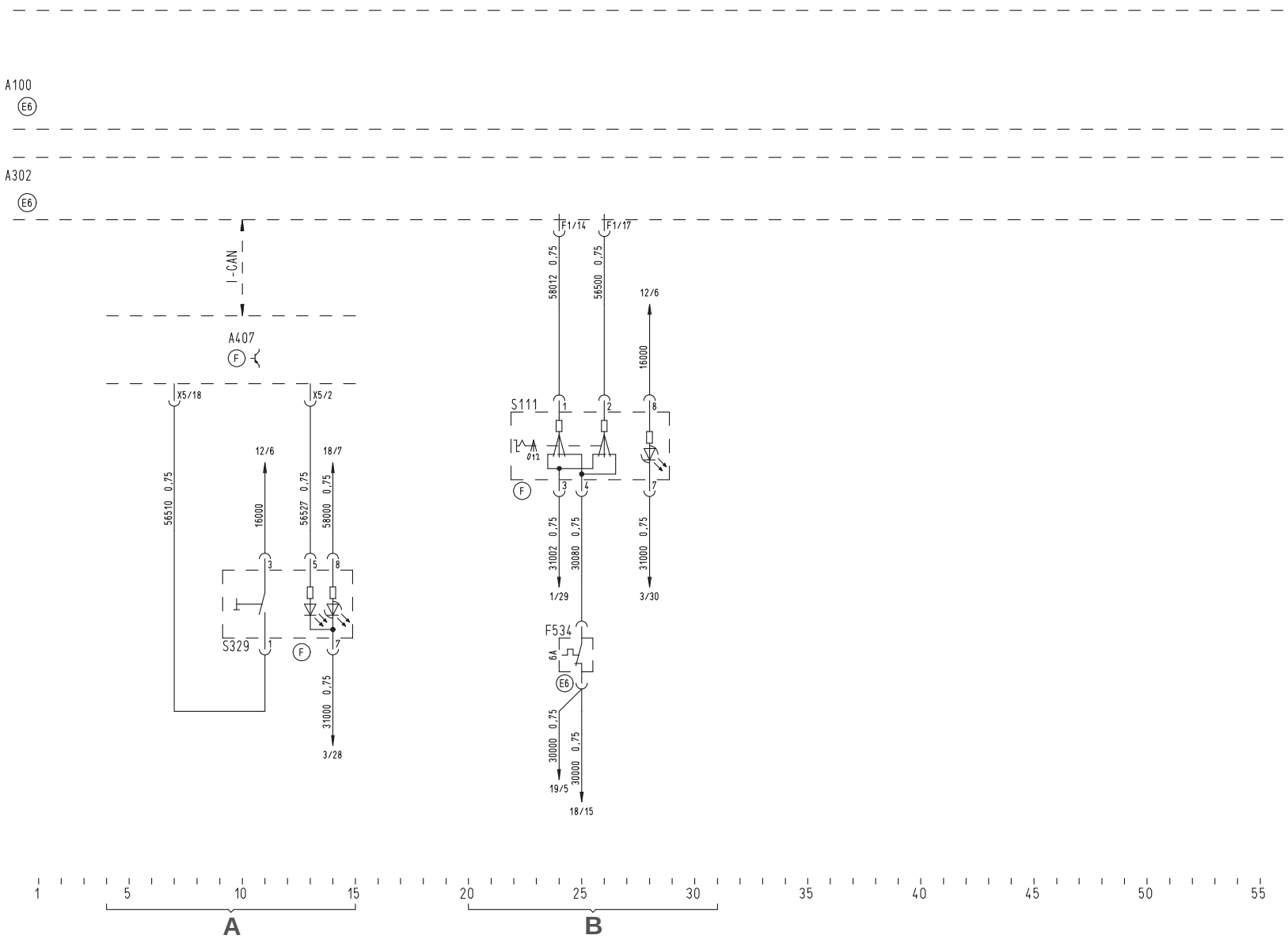
Wiring diagram no. **81.99192.2982** Sheet **13** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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

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) Side marker lights, left

(II) Side marker lights, right

X2507	Stvd. adaptation parking light 1
X2508	Stvd. adaptation parking light 2

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

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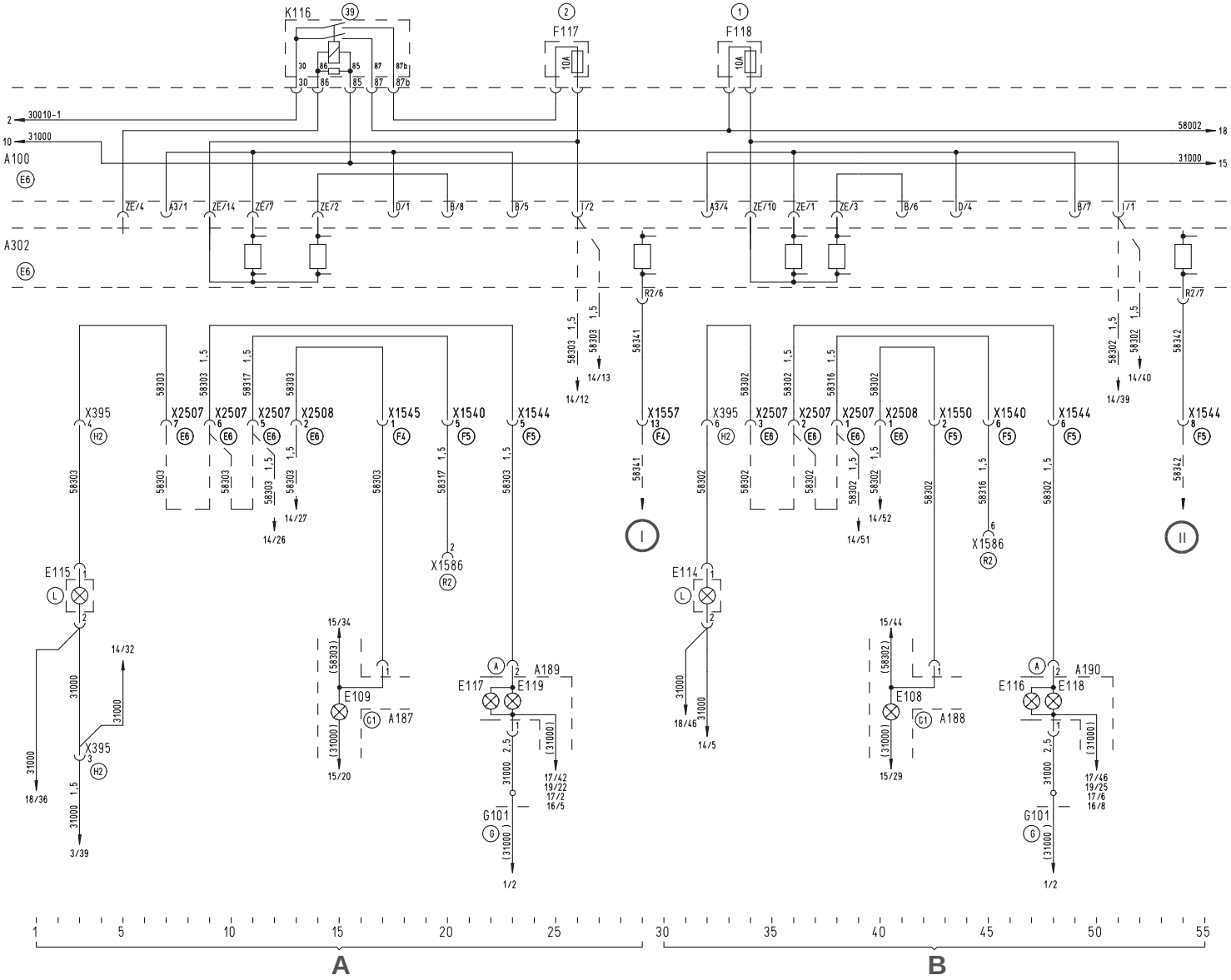
Wiring diagram no. **81.99192.2982** Sheet **14** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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		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
X1967		Stvd. 1 combination steering column switch

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) for D2R headlights

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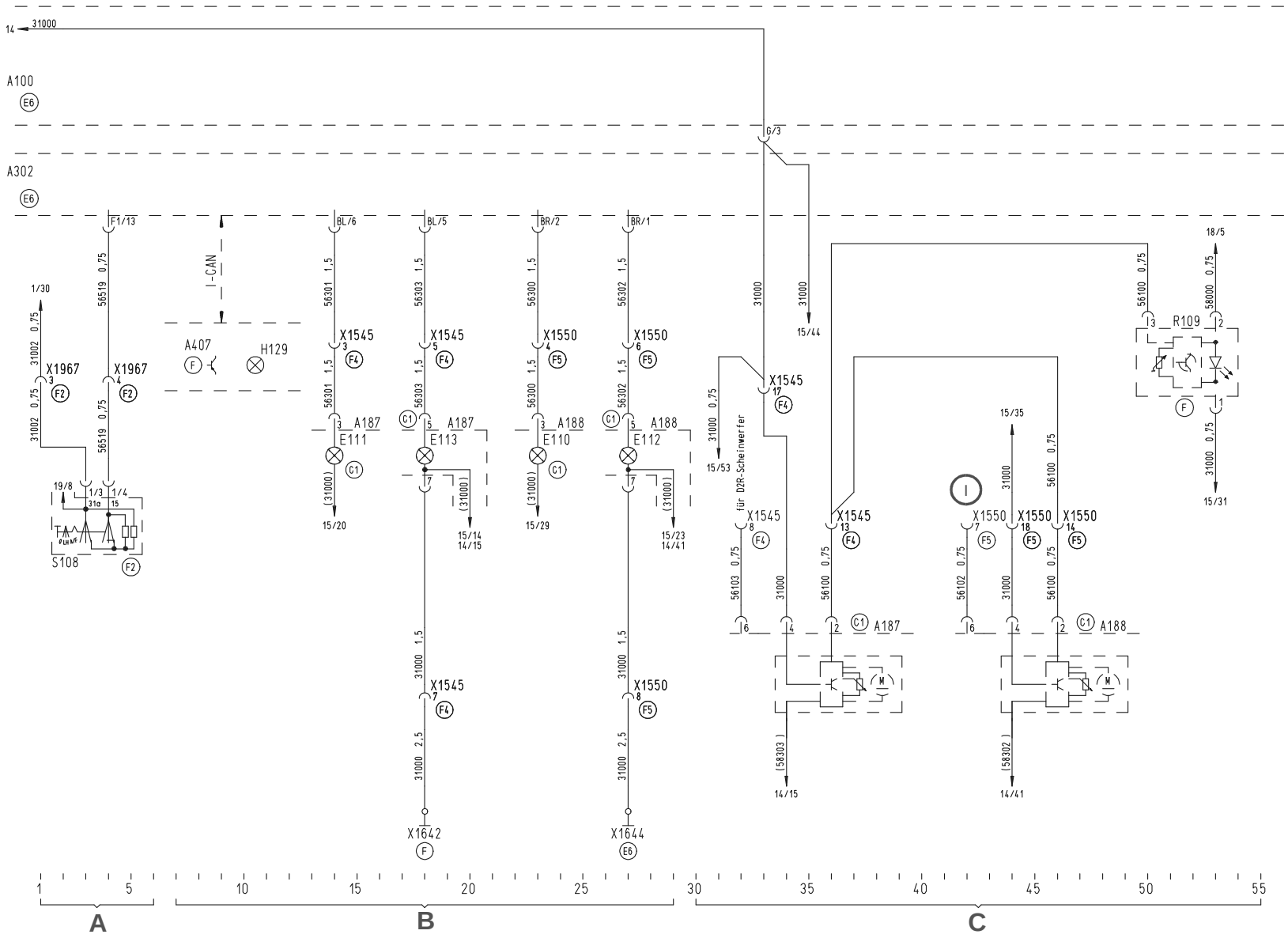
Wiring diagram no. **81.99192.2982** Sheet **15** of 21



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Legend
Wiring diagram no. **81.99192.2982** Sheet **16** of 21
Change status: 03.01

A = Rear fog lights
B = Fog light/rear fog light circuitry
C = Fog lights/additional main beam

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
E122		Fog lights, right
E123		Fog lights, left
E124		Rear fog light, right
E125		Rear fog light, left
E194		High beam, right
E195		High beam, right
S502	(490)	Control switch, rear fog light
X1540		Stvd. frame I
X1544		Stvd. frame III
X1545		Stvd. front region, left
X1550		Stvd. front region, right
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

Note:
Position for mounting **X1587** is E8 on semitrailers!

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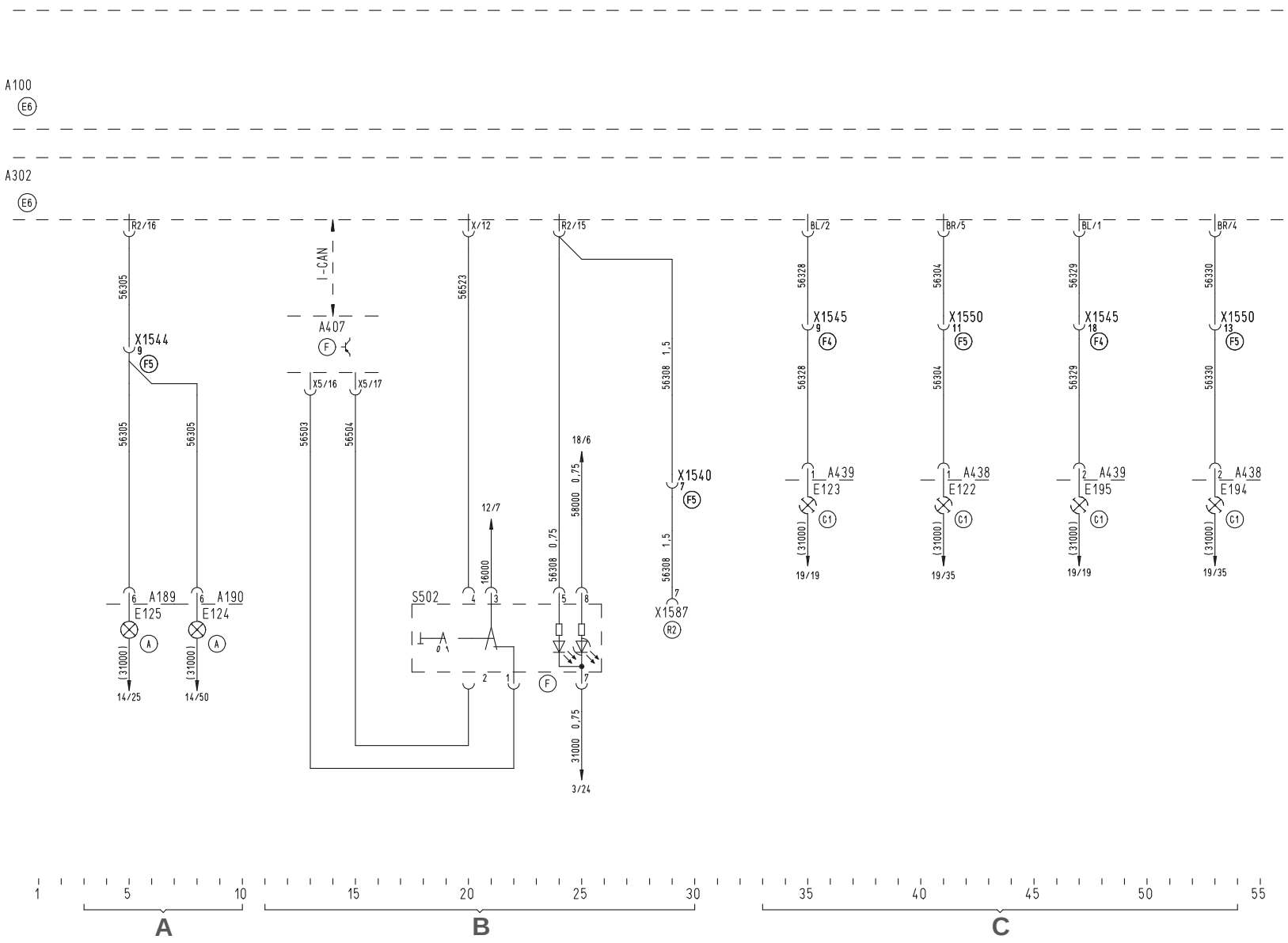
Wiring diagram no. **81.99192.2982** Sheet **16** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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
- (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) Switch, reverse gear

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

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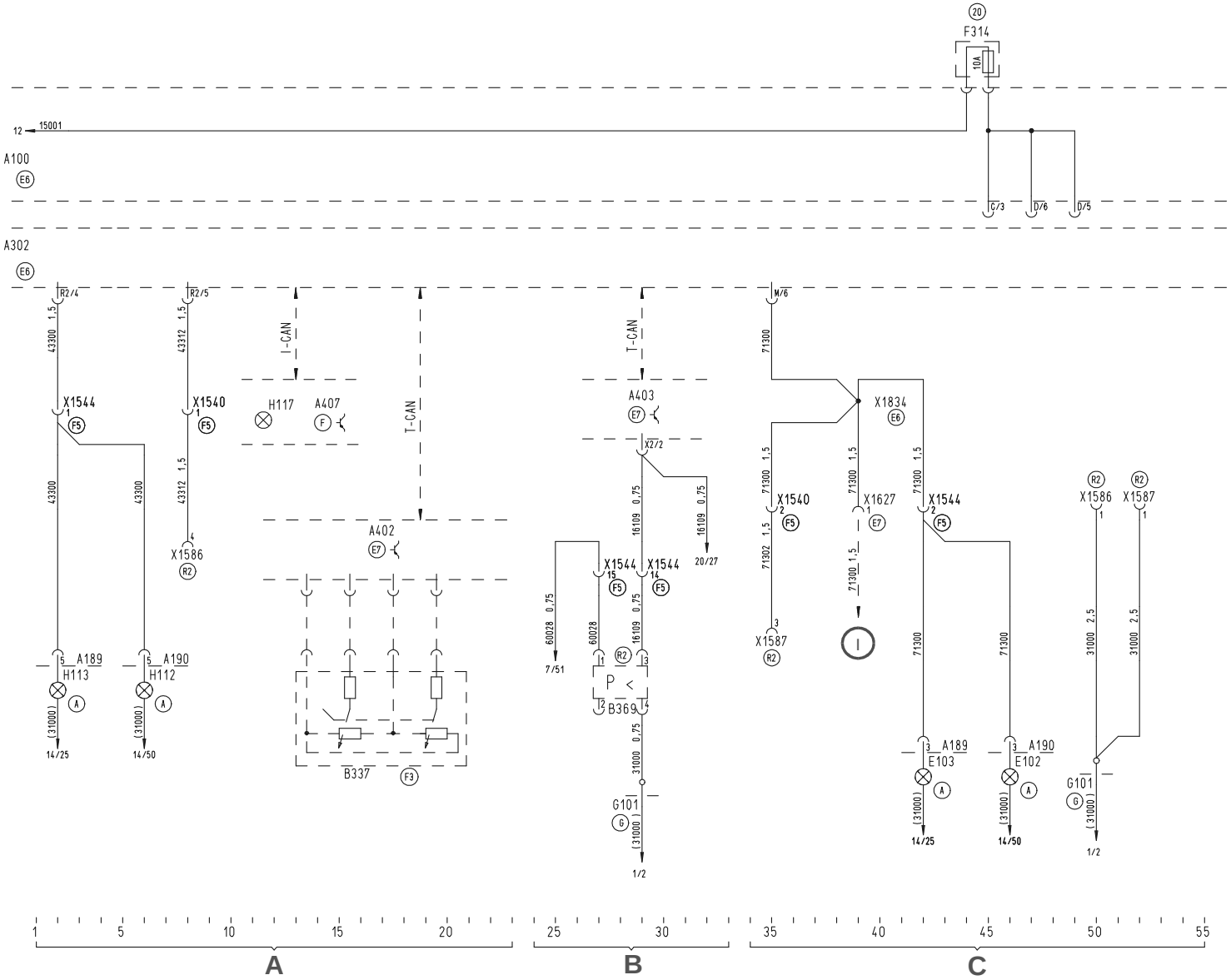
Wiring diagram no. **81.99192.2982** Sheet **17** of 21



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Legend
Wiring diagram no. **81.99192.2982** Sheet **18** of 21
Change status: 03.01

A = Search illumination
B = Power supply, permanent consumers
C = Entrance step illumination/interior lighting

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A407	(342)	Instrumentation
A451	(440)	Door module (driver's side)
A452	(441)	Door module (passenger side)
A465	(453)	Door lock (driver's side)
A466	(454)	Door lock (passenger side)
E127	(174)	Interior light (left)
E128	(174)	interior light (right)
E268	(170)	Entrance illumination, passenger
E269	(170)	Entrance illumination, driver
F125	(111)	Fuse, search illumination
F128	(101)	Fuse, permanent consumer
R106		Potentiometer, instrument illumination
X395		Stvd. outline marker and interior light, left and right
X1546		Stvd. door right
X1547		Stvd. door left
X1557		Stvd. frame left
X1569		Stvd. locker illumination, left
X1570		Stvd. locker lighting, right
X1643		Soldered connector, line 58300

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) Door module

X1835	(221)	Crimped connector, line 58000
X1836	(221)	Crimped connector, line 58000
X1838	(221)	Crimped connector, line 58300
X2542	(246)	Potential distributor, 21-pin, cable 58000
X2543	(246)	Potential distributor, 21-pin, cable 30006

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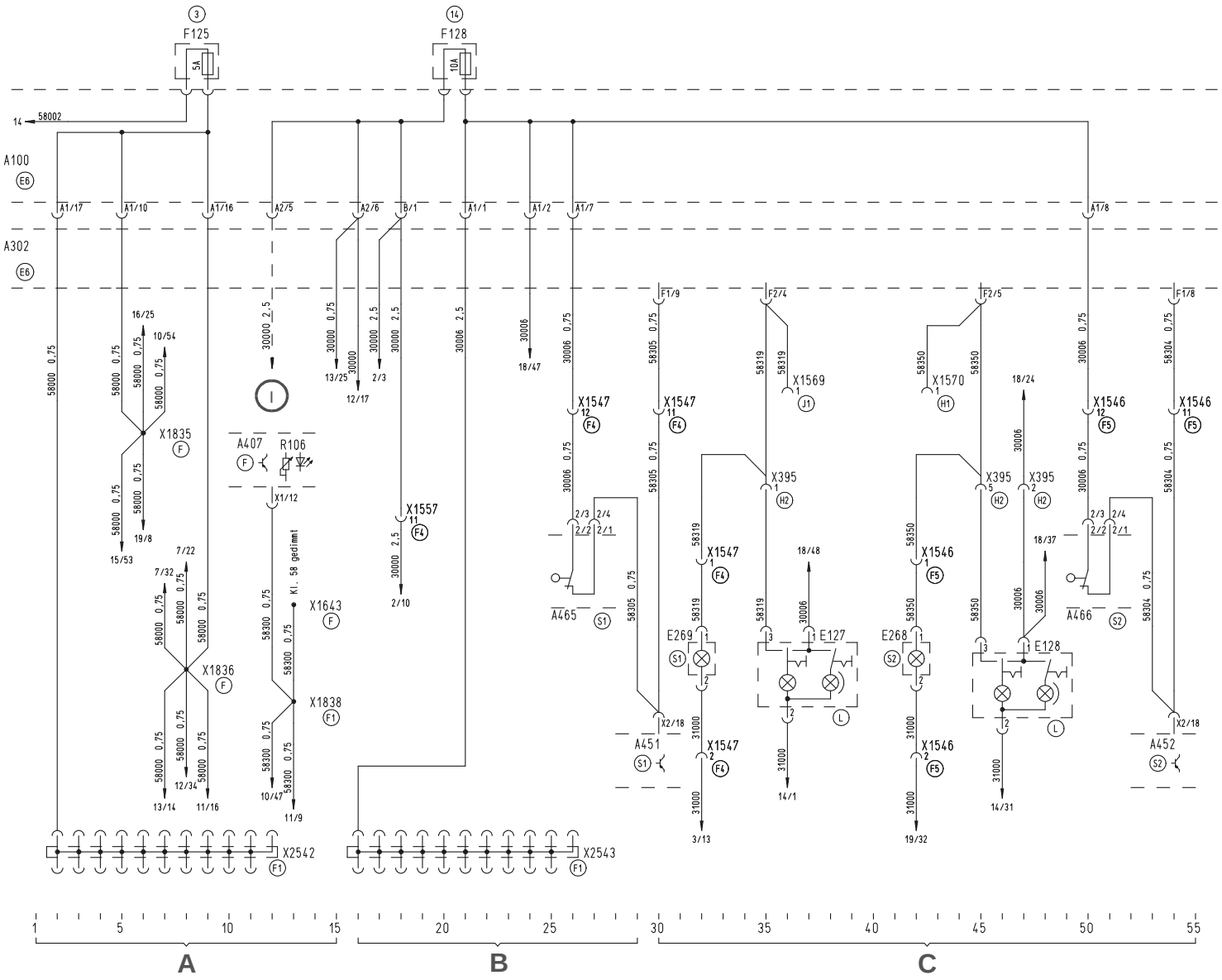
Wiring diagram no. **81.99192.2982** Sheet **18** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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
- (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

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

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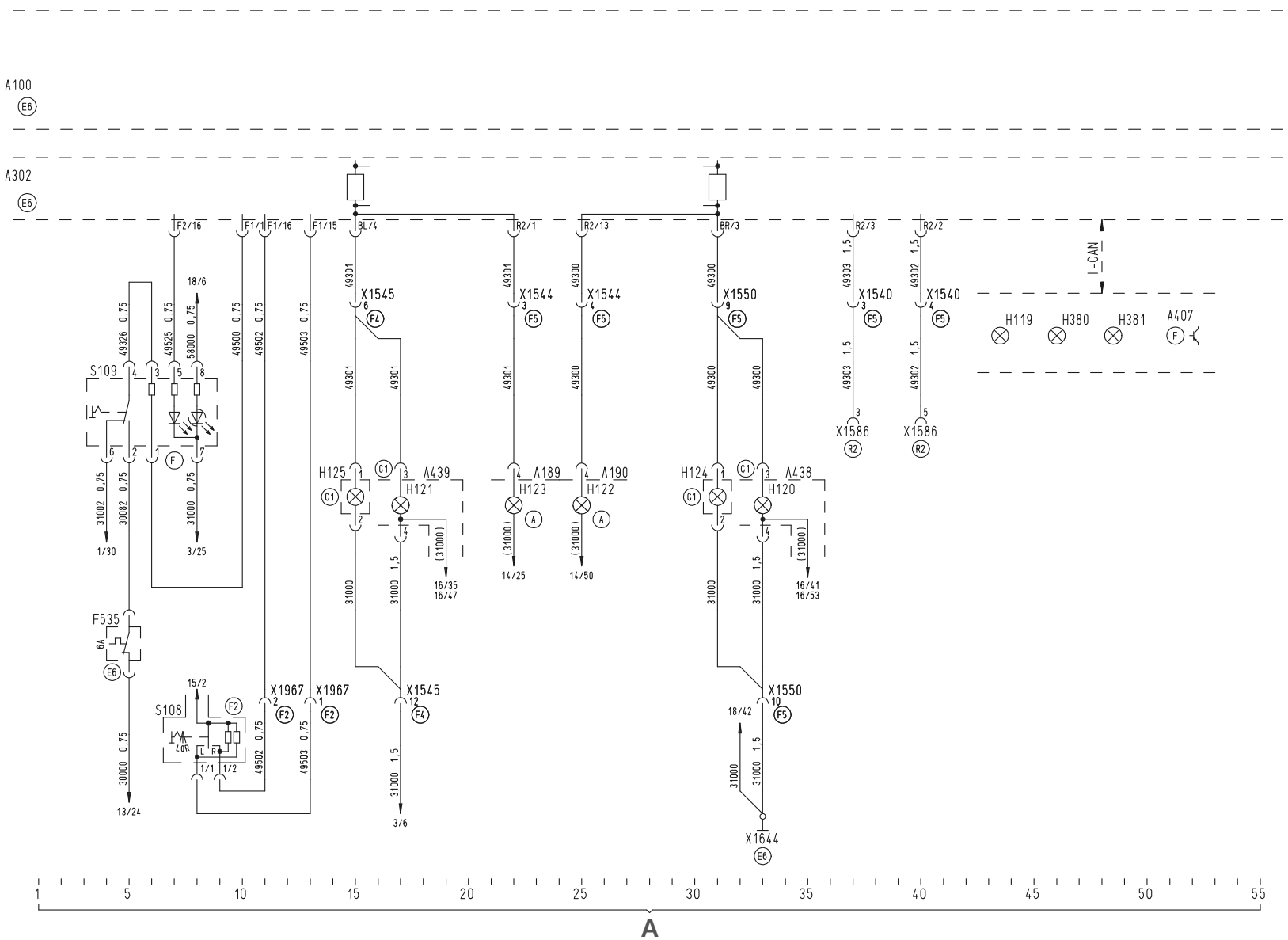
Wiring diagram no. **81.99192.2982** Sheet **19** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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
- (II) Switch for indicator, differential lock, transverse
- (III) Indicator light, differential lock, longitudinal
  Indicator light, differential lock, rear axle, transverse
- (IV) Solenoid valve, differential lock, longitudinal
- (V) Solenoid valve, power take-off 1
- (VI) Data line
- (VII) Power supply, trailer (protection from emptying)
- (VIII) Control, trailing, axle or leading axle, trailer
- (IX) Pressure switch, check Parking brake, trailer
- (X) Indicator light, brake pad wear indicator, trailer

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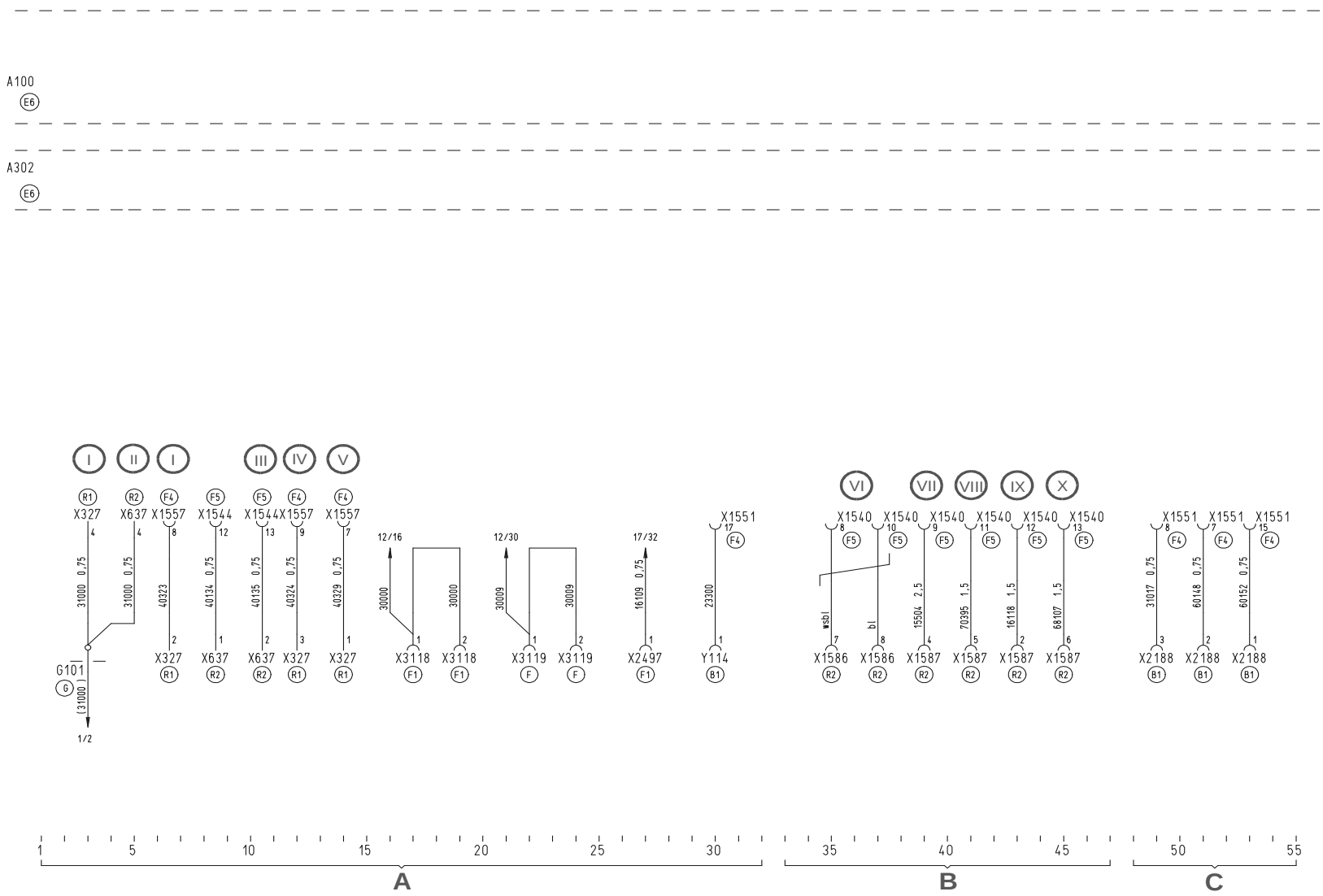
Wiring diagram no. **81.99192.2982** Sheet **20** of 21



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Legend
Wiring diagram no. **81.99192.2982** 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
- 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 Pressure pickup, positioning pressure
- II Solenoid valve, reservoir
- III Temperature sensor, intarder, retarder
- IV Proportional valve, intarder, retarder
- V Solen. valve, reservoir/press. pickup, actuat. press.
- VI Transmission control module
- VII Clutch servo
- VIII Clutch displacement sensor
- IX Transmission, input speed
- X Transmission, neutral
- XI Switch, reverse gear
- XII Diagnostics, AS-Tronic
- XIII Indicator light, power take-off 1
- XIV Indicator light, power take-off 2

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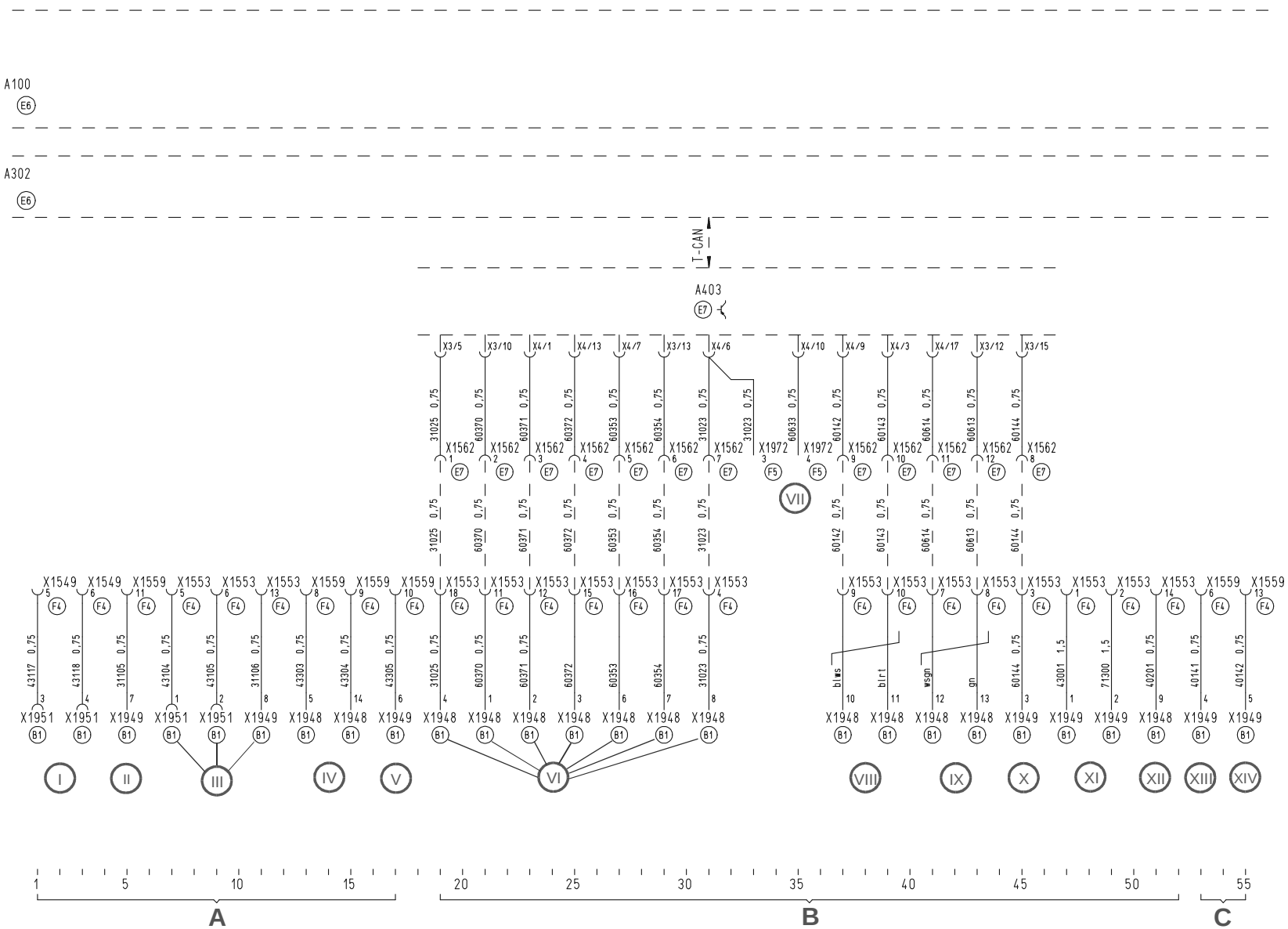
Wiring diagram no. **81.99192.2982** Sheet **21** of 21



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Contents

Titles of wiring diagrams	Wiring diagram no.	Chapter/Page
Additional headlight	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**
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/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**

https://truckmanualshub.com/

Contents

Titles of wiring diagrams	Wiring diagram no.	Chapter/Page
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**

https://truckmanualshub.com/

Contents

Titles of wiring diagrams	Wiring diagram no.	Chapter/Page
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**

https://truckmanualshub.com/

Contents

Titles of wiring diagrams	Wiring diagram no.	Chapter/Page
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**

https://truckmanualshub.com/

Contents

Titles of wiring diagrams	Wiring diagram no.	Chapter/Page
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**
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**

https://truckmanualshub.com/

Contents

Titles of wiring diagrams	Wiring diagram no.	Chapter/Page
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**

https://truckmanualshub.com/

Contents

Titles of wiring diagrams	Wiring diagram no.	Chapter/Page
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**

https://truckmanualshub.com/

Contents

Titles of wiring diagrams	Wiring diagram no.	Chapter/Page
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**

https://truckmanualshub.com/

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
- (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

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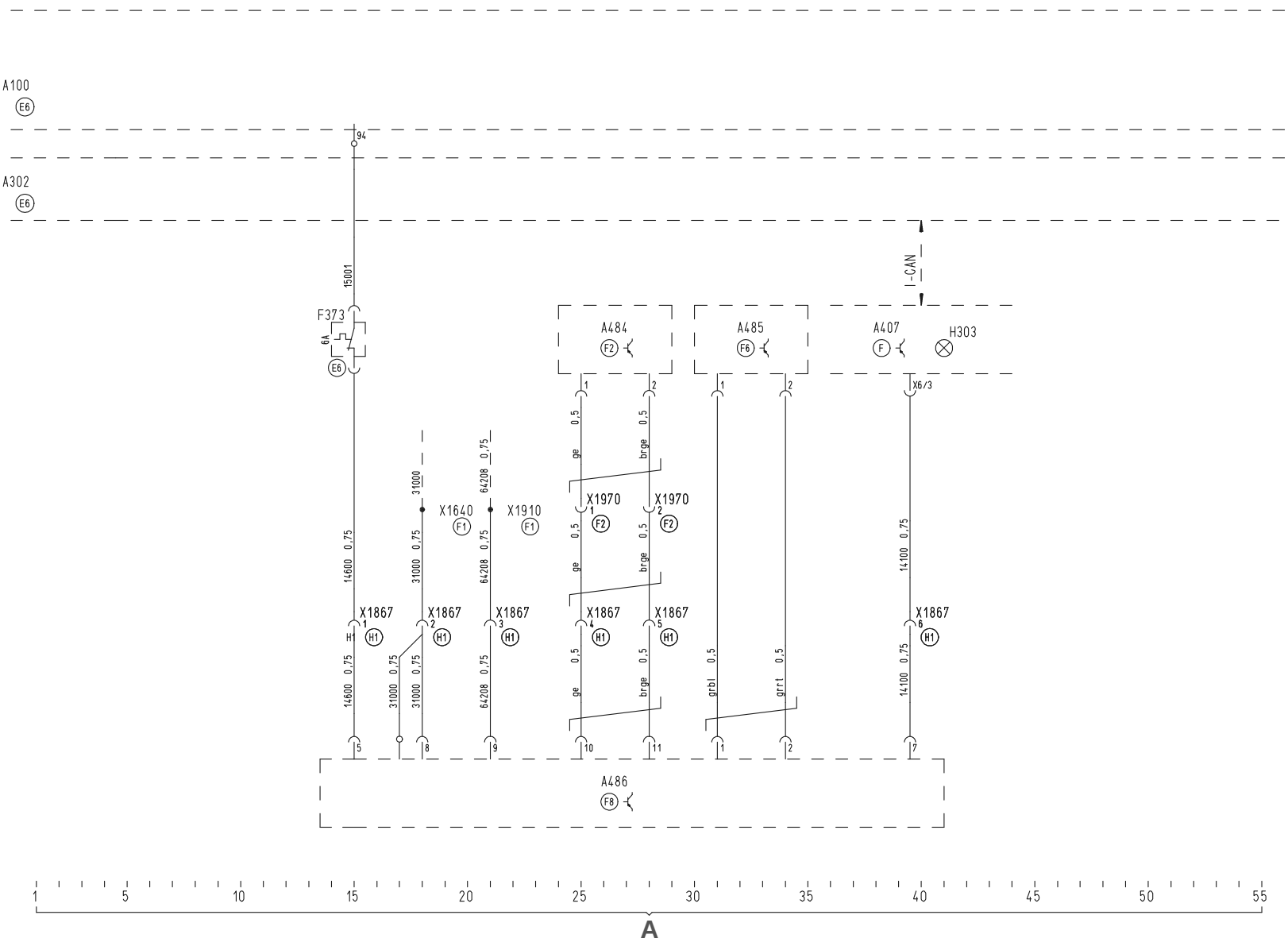
Wiring diagram no. **81.99192.2572** Sheet **1** of 1



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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
- (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

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

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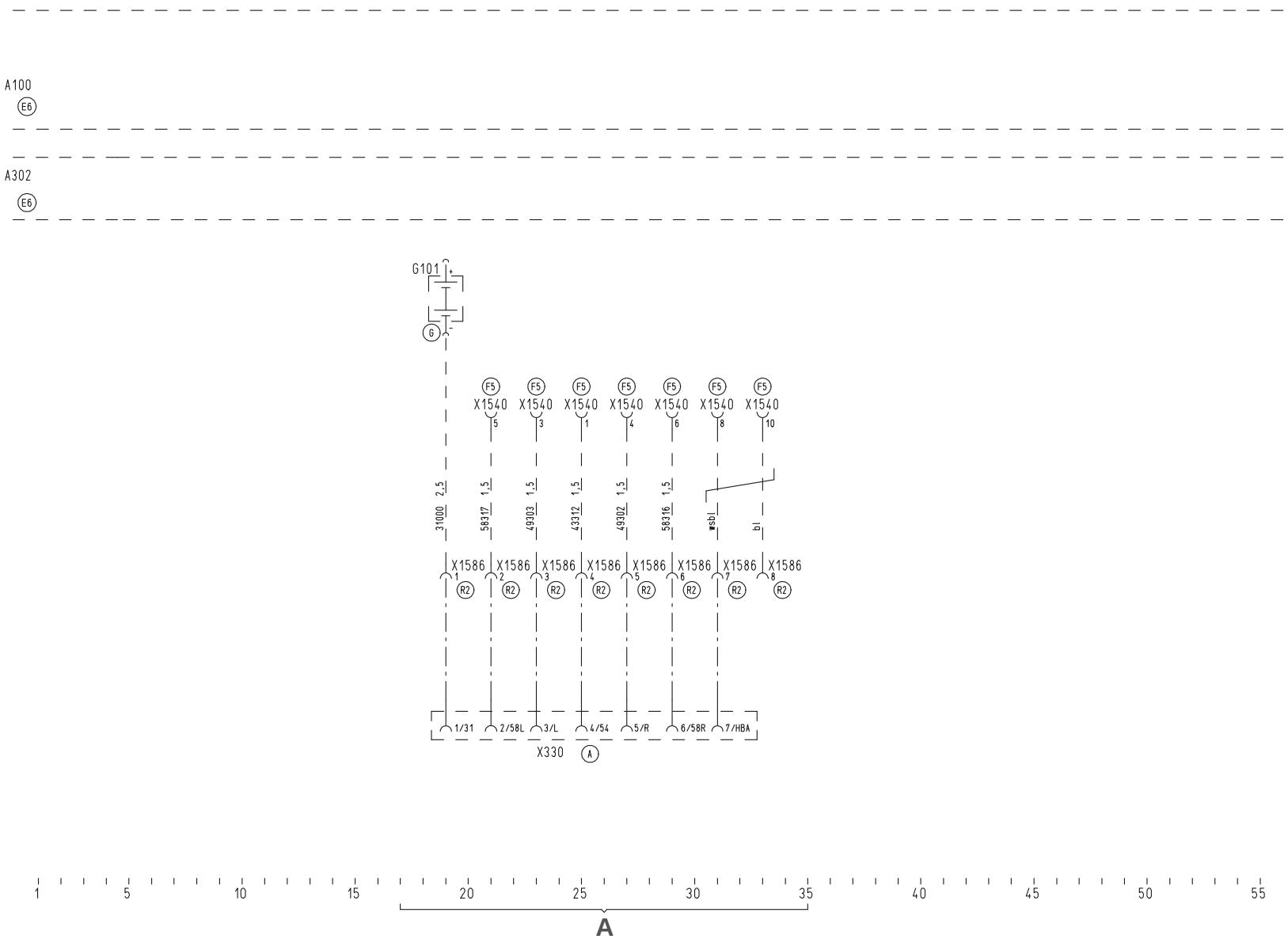
Wiring diagram no. **81.99192.2496** Sheet **1** of 1



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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
- (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

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

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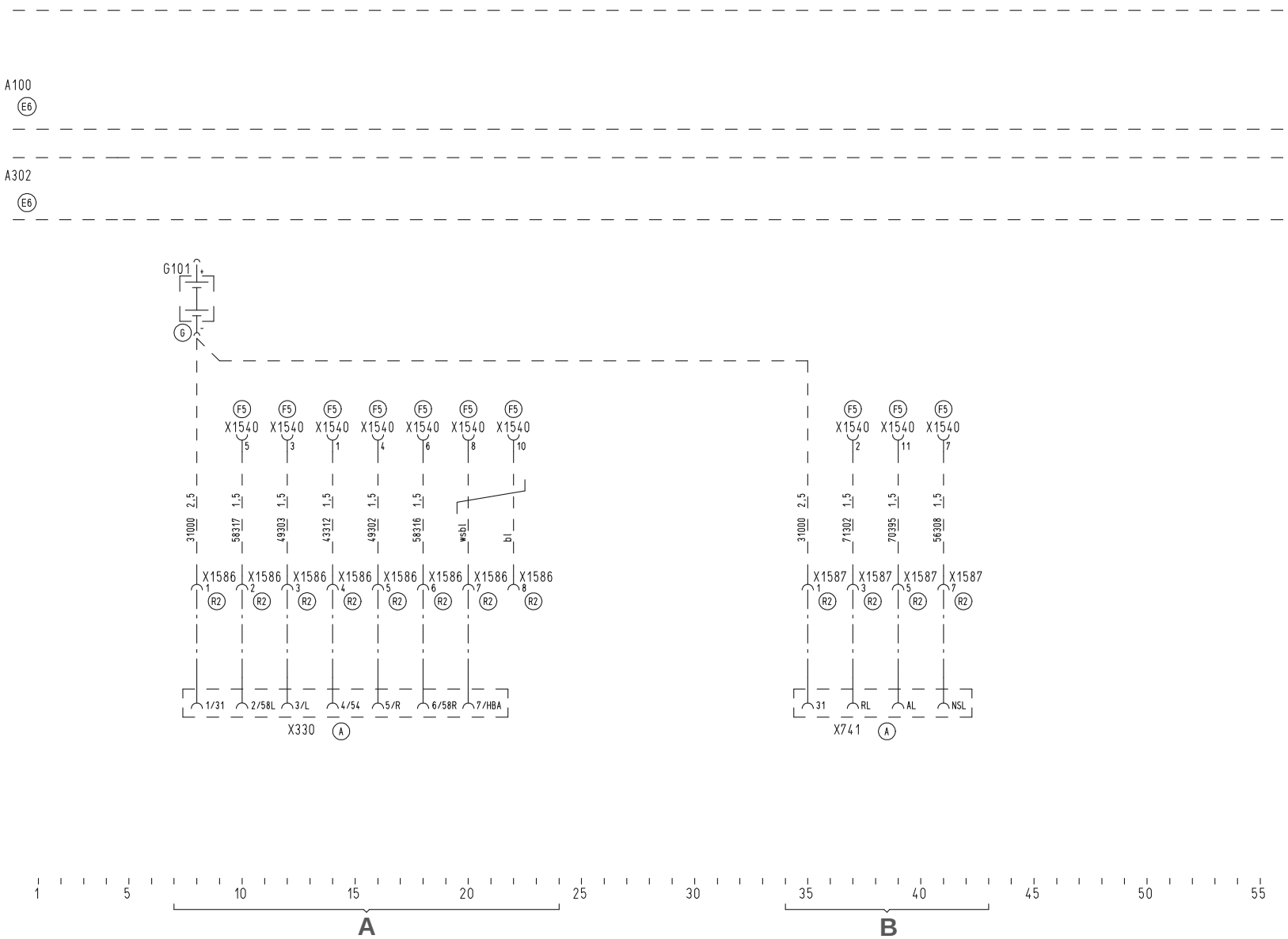
Wiring diagram no. **81.99192.2497** Sheet **1** of 1



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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
- (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

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

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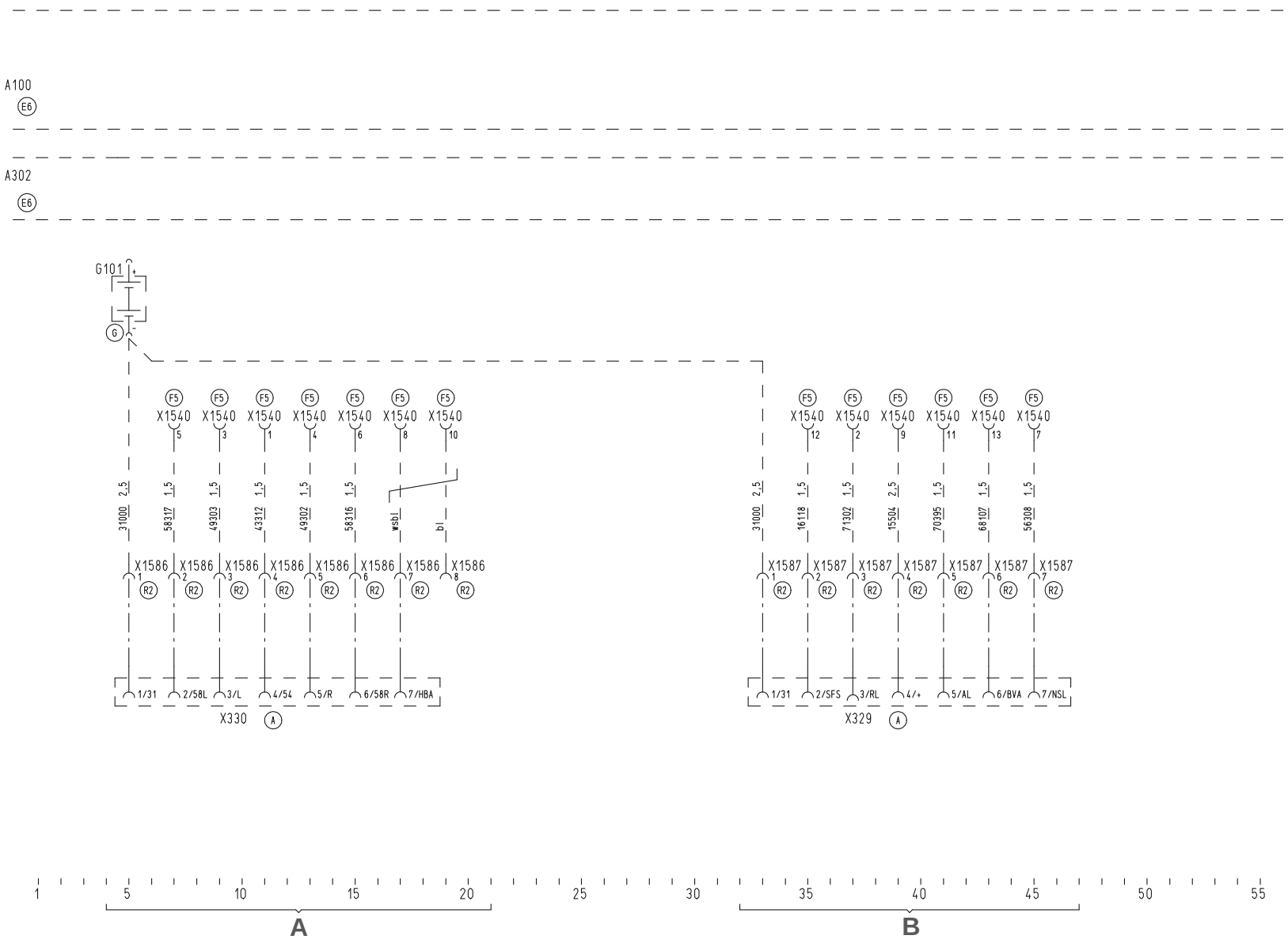
Wiring diagram no. **81.99192.2498** Sheet **1** of 1



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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
- (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

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

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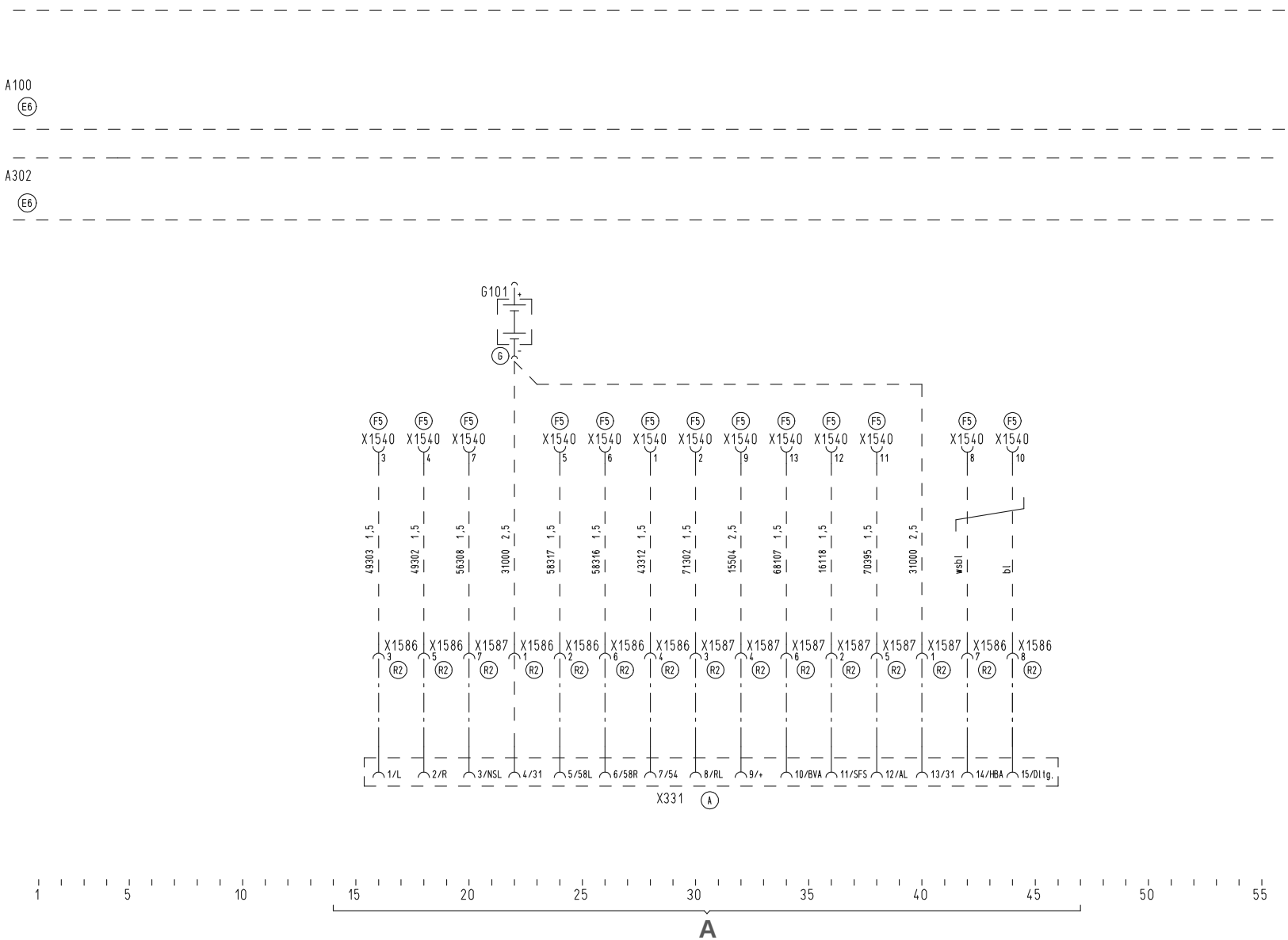
Wiring diagram no. **81.99192.2499** Sheet **1** of 1



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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

- (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

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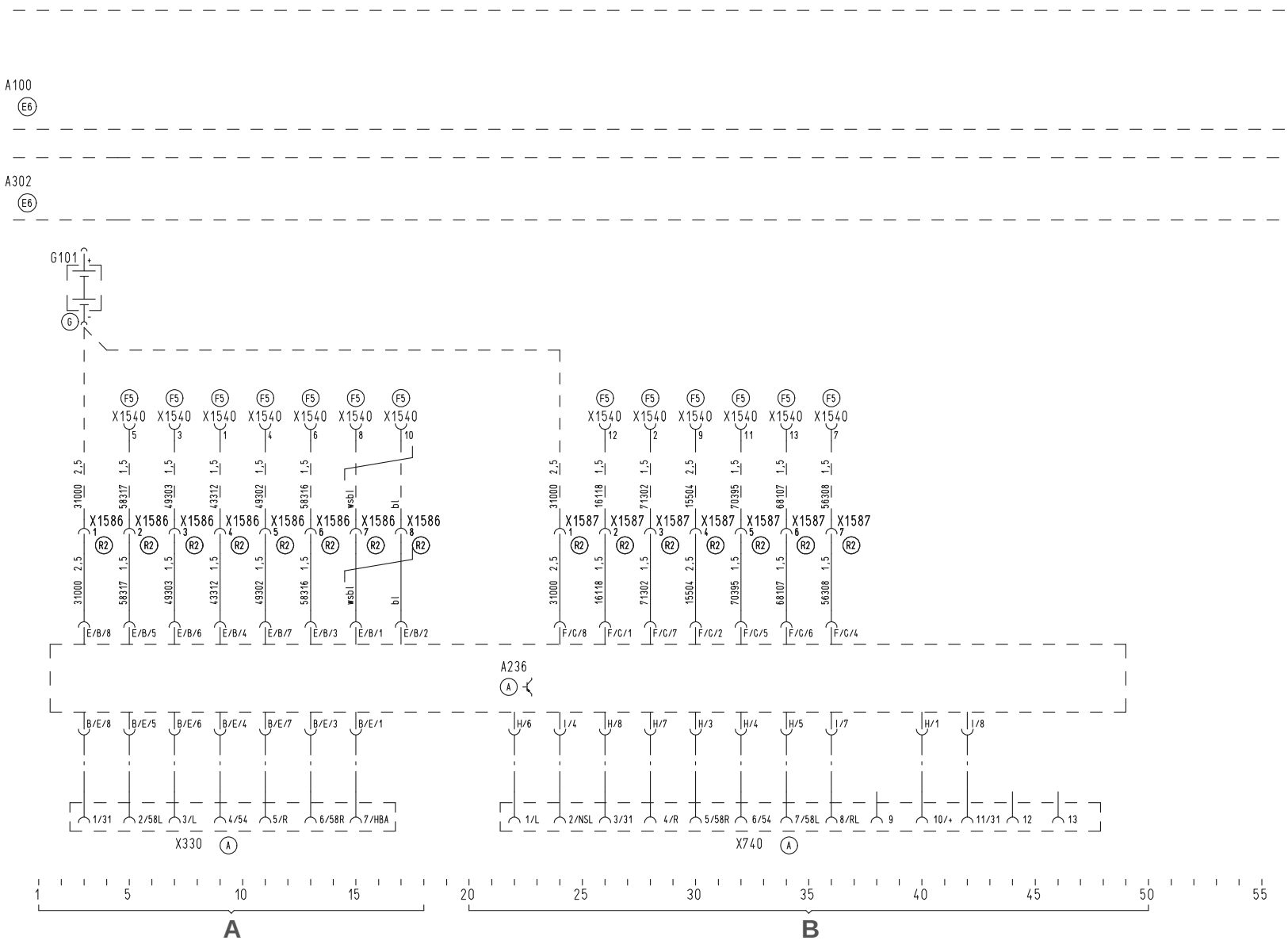
Wiring diagram no. **81.99192.2447** Sheet **1** of 1



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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

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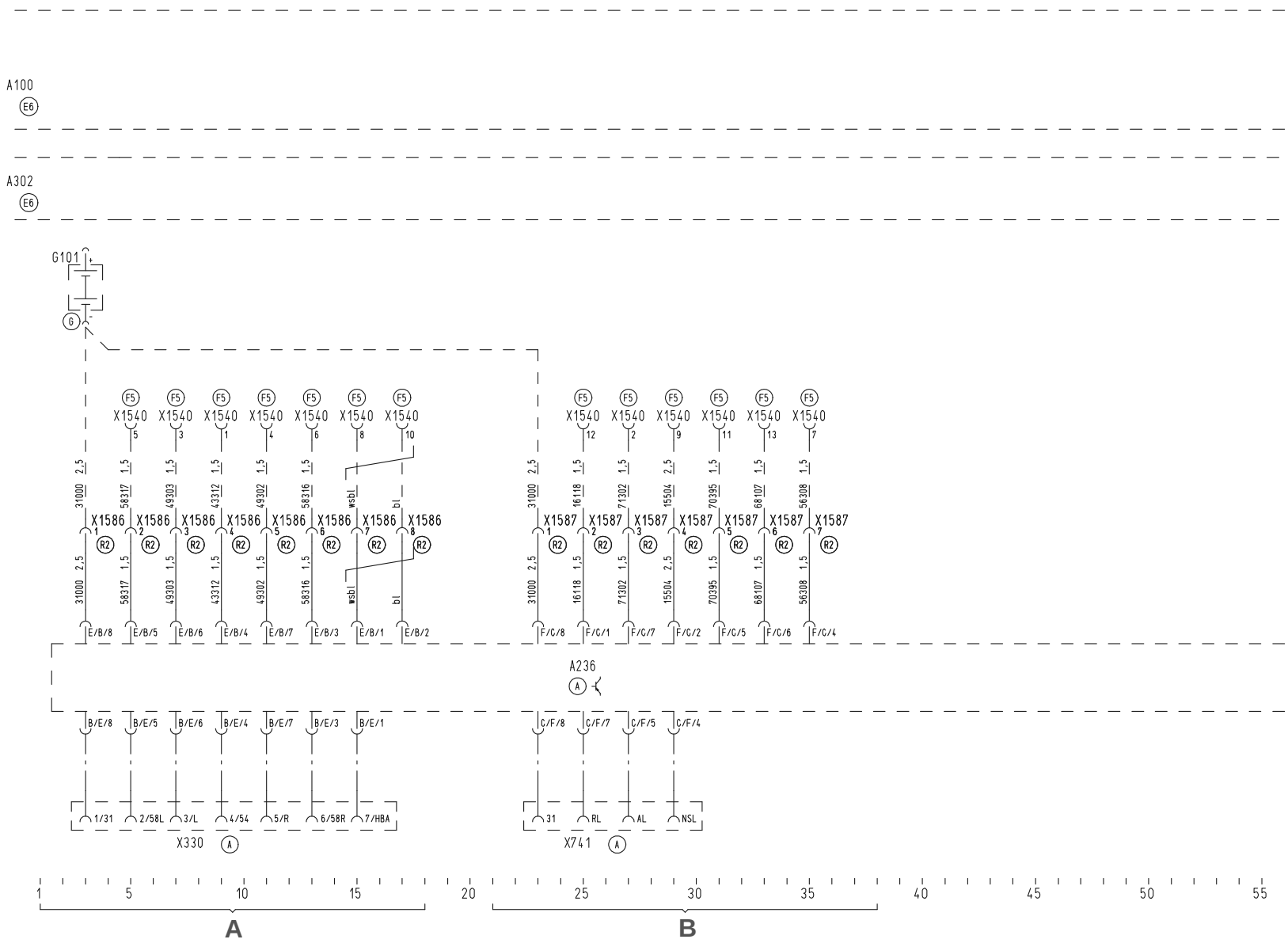
Wiring diagram no. **81.99192.2448** Sheet **1** of 2



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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
- (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

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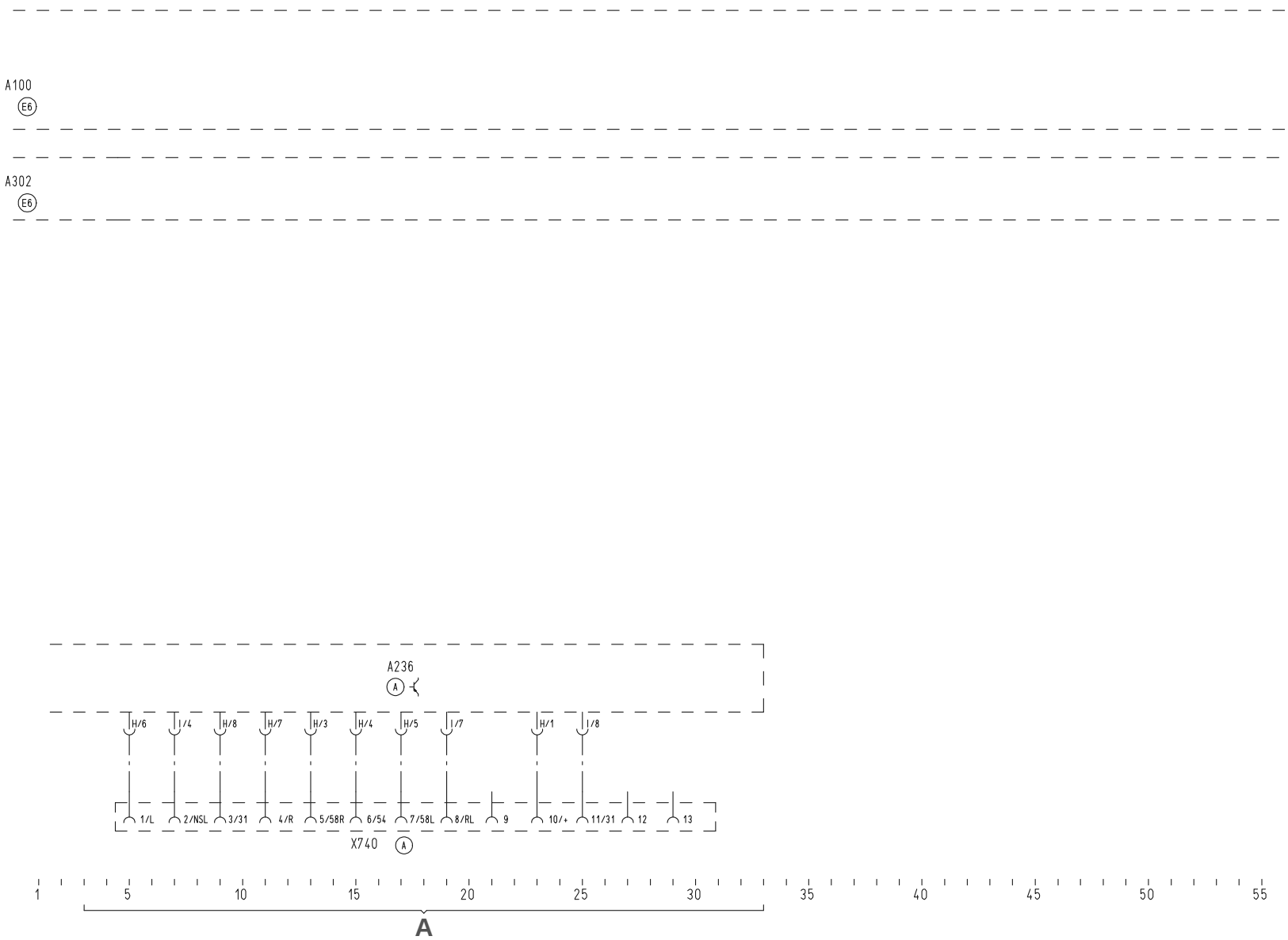
Wiring diagram no. **81.99192.2448** Sheet **2** of 2



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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
- (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

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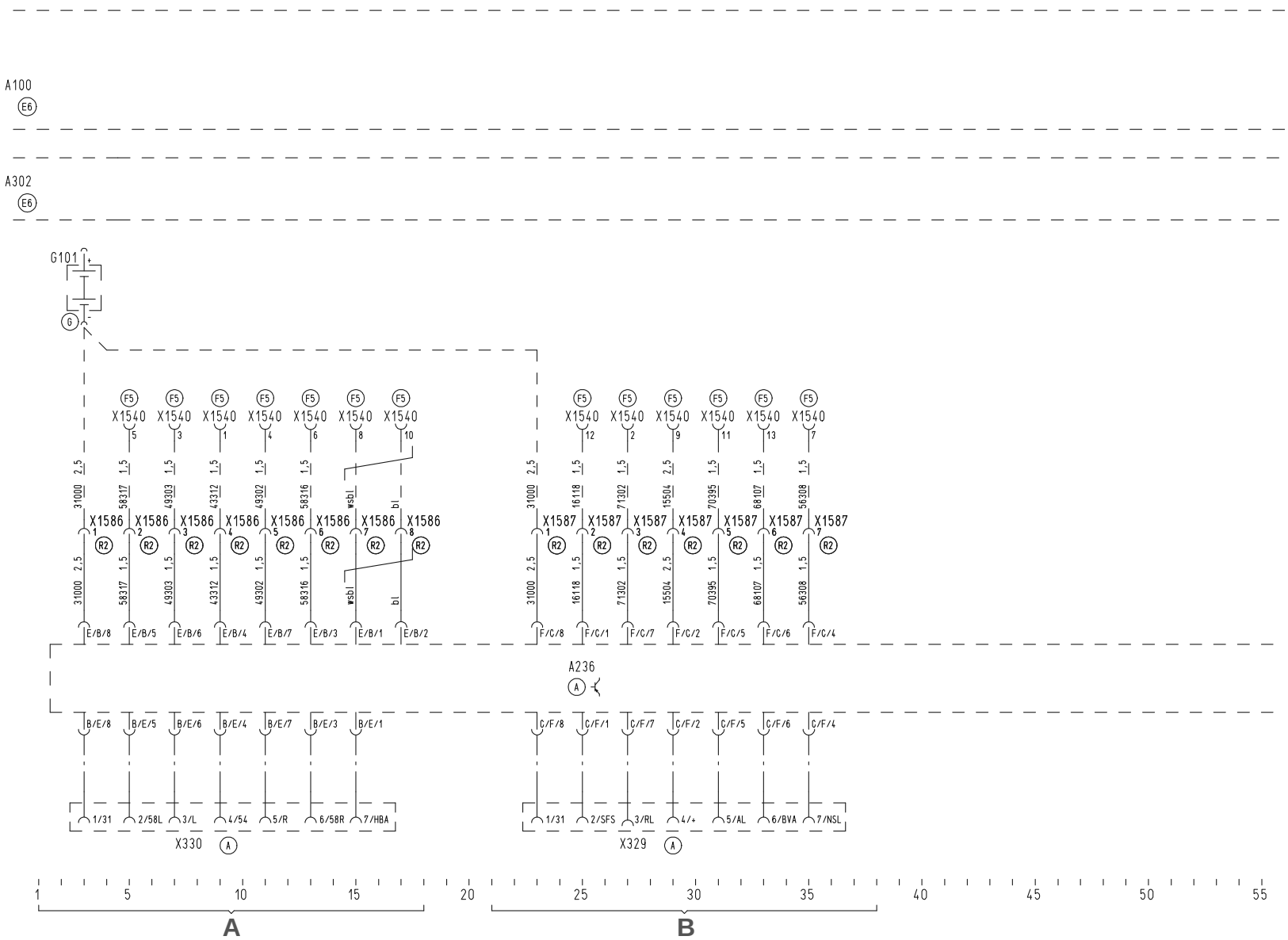
Wiring diagram no. **81.99192.2449** Sheet **1** of 2



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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
- (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

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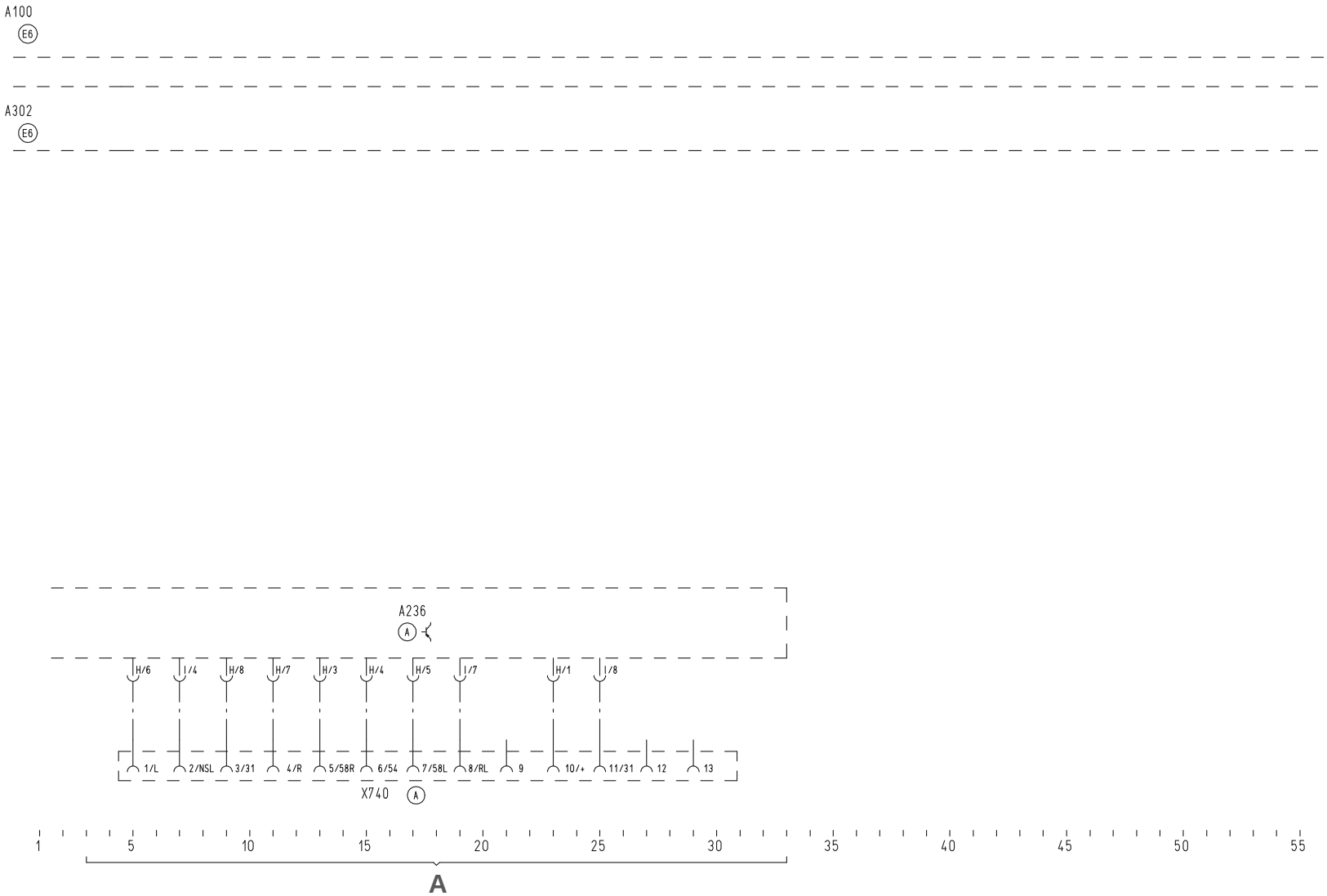
Wiring diagram no. **81.99192.2449** Sheet **2** of 2



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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

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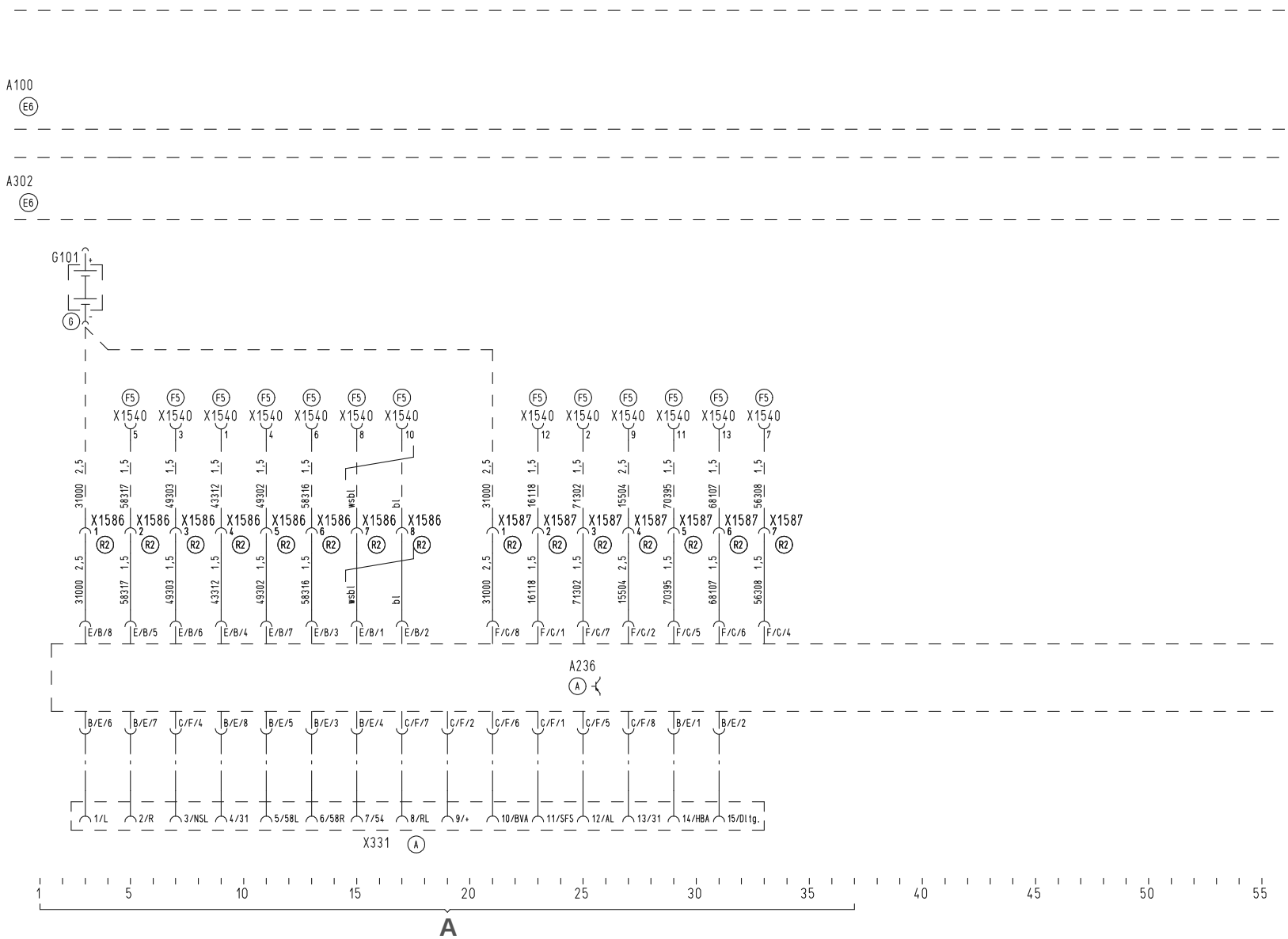
Wiring diagram no. **81.99192.2650** Sheet **1** of 2



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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
- (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

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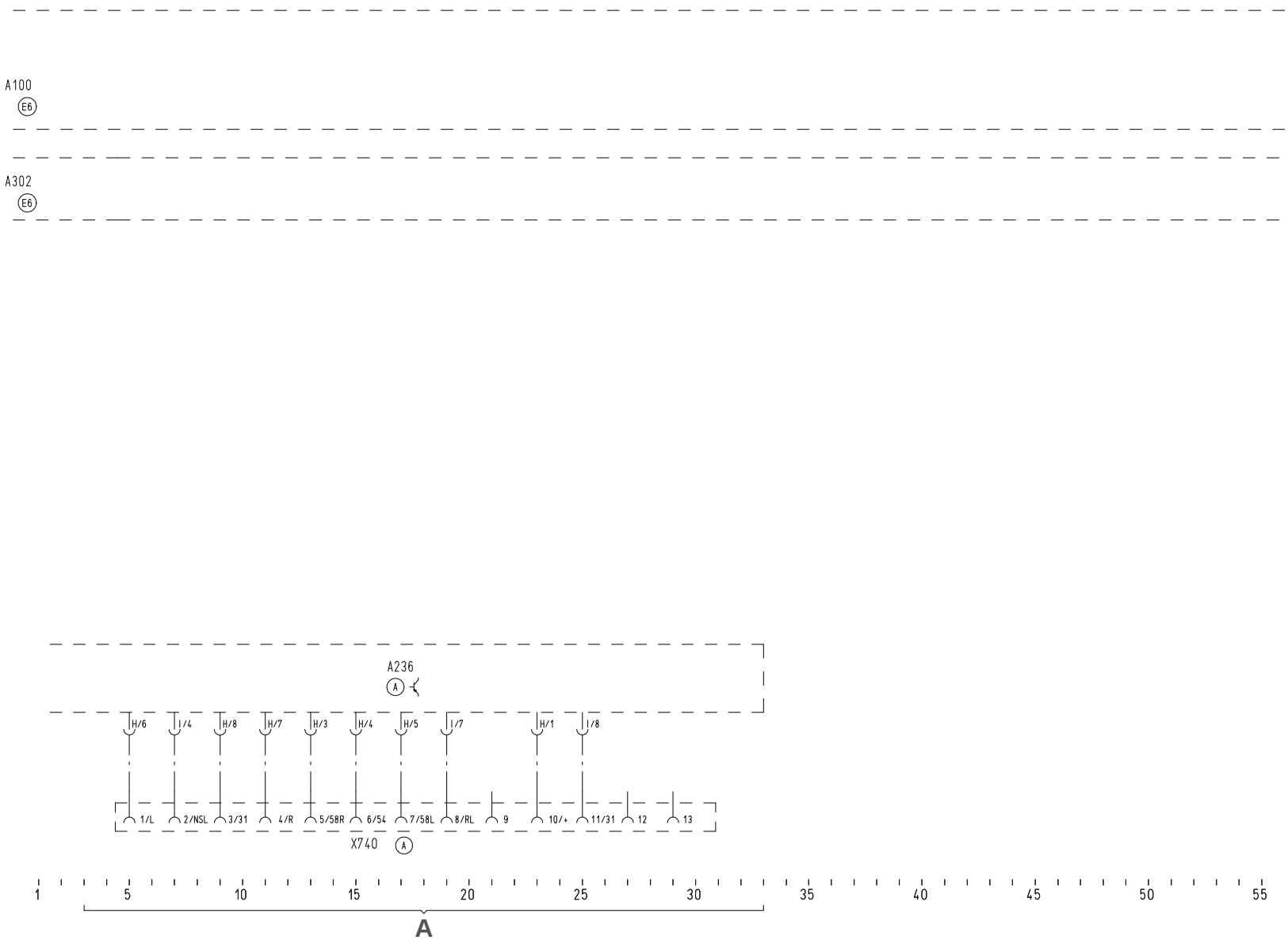
Wiring diagram no. **81.99192.2650** Sheet **2** of 2



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

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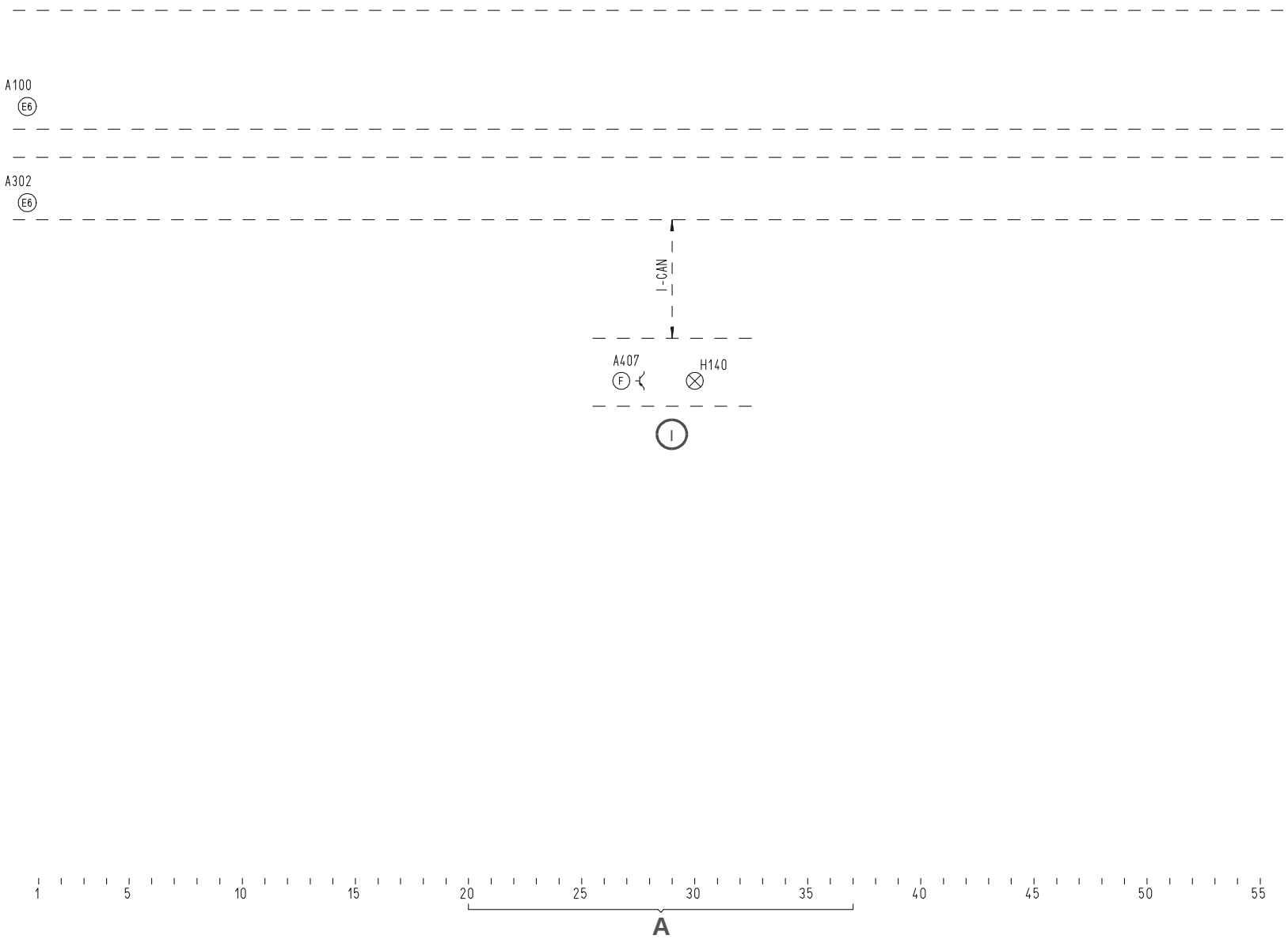
Wiring diagram no. **81.99192.1358** Sheet **1** of 1



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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
- (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

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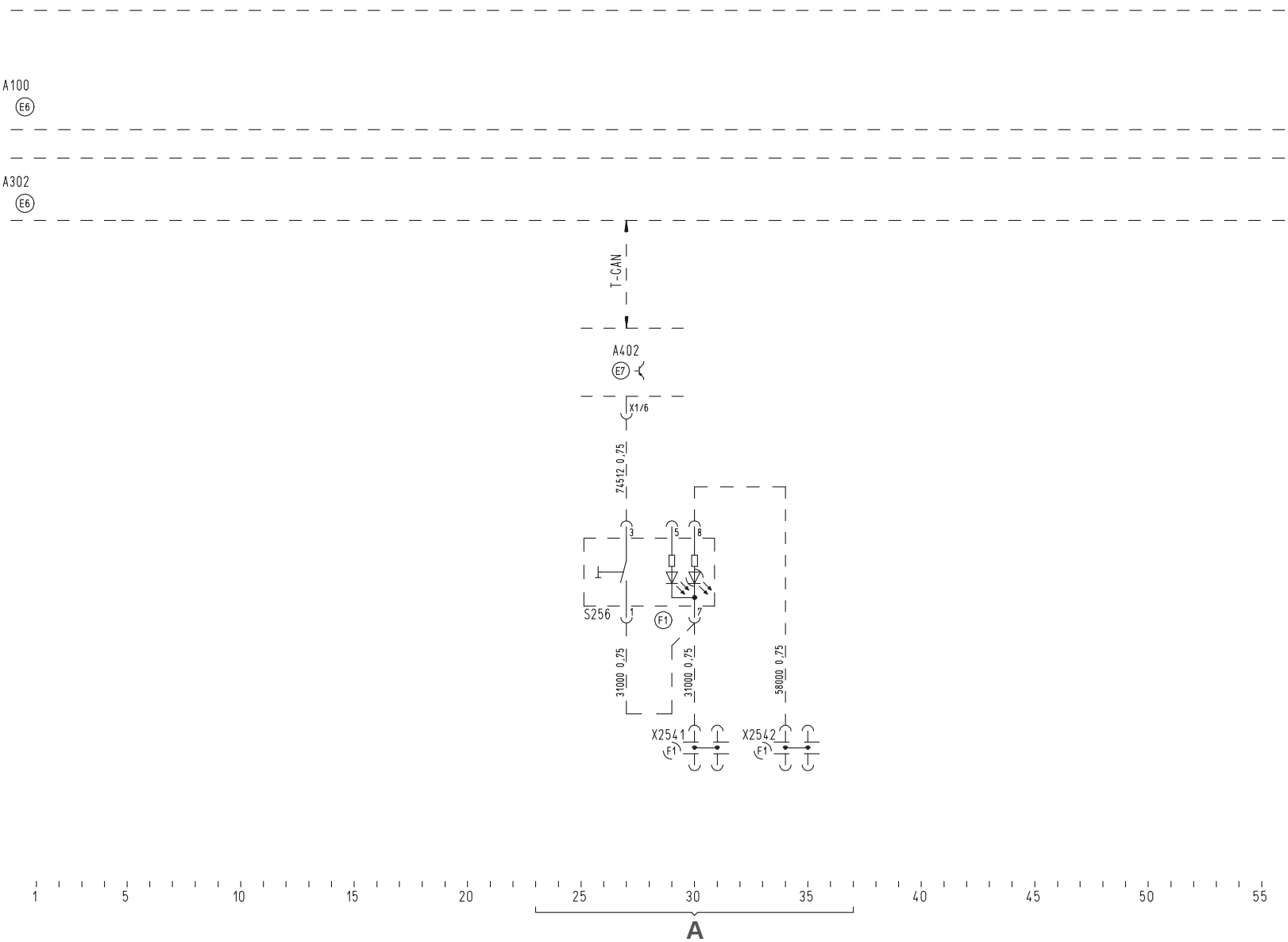
Wiring diagram no. **81.99192.1359** Sheet **1** of 1



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

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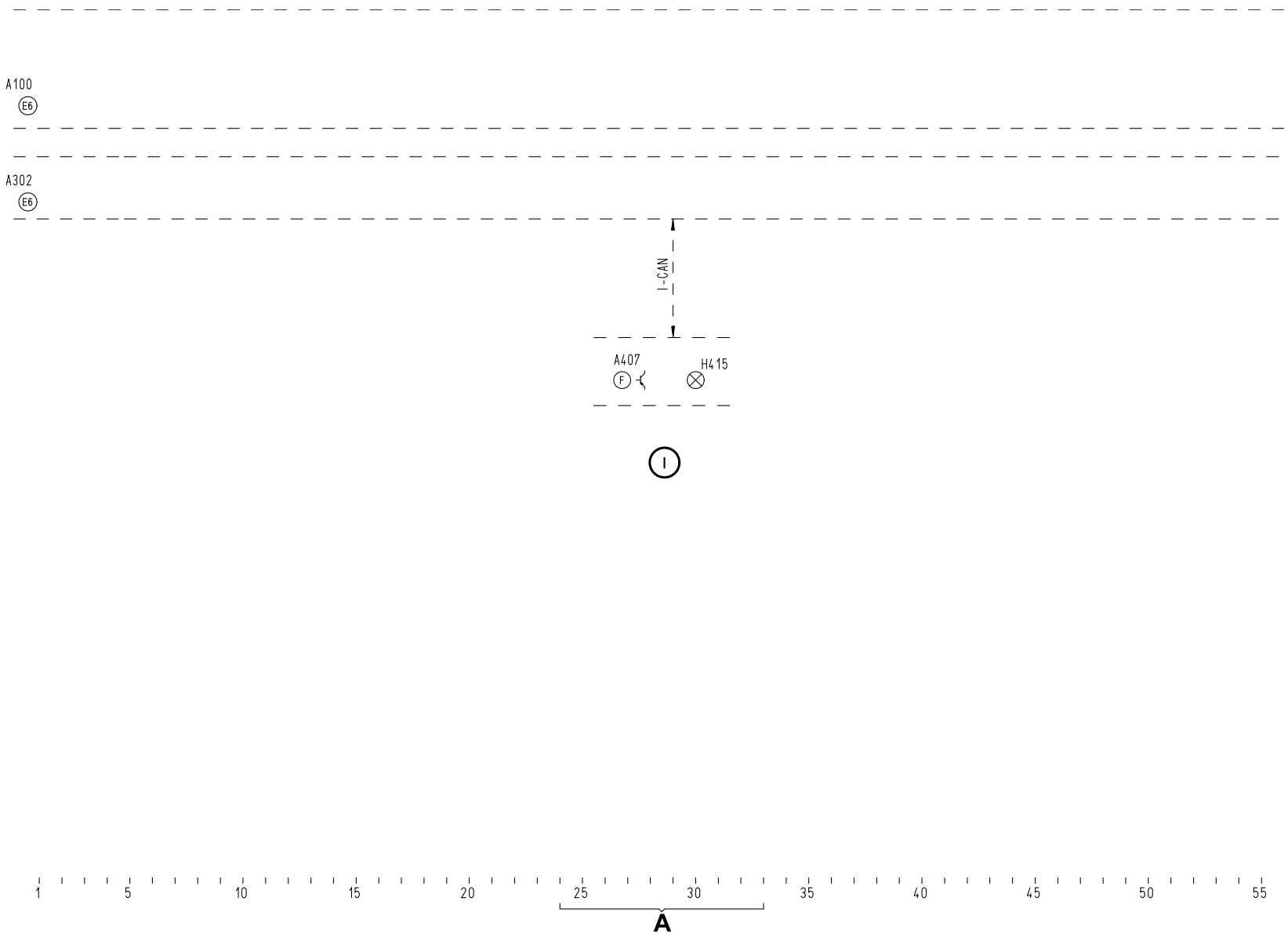
Wiring diagram no. **81.99192.2682** Sheet **1** of 1



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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
- (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

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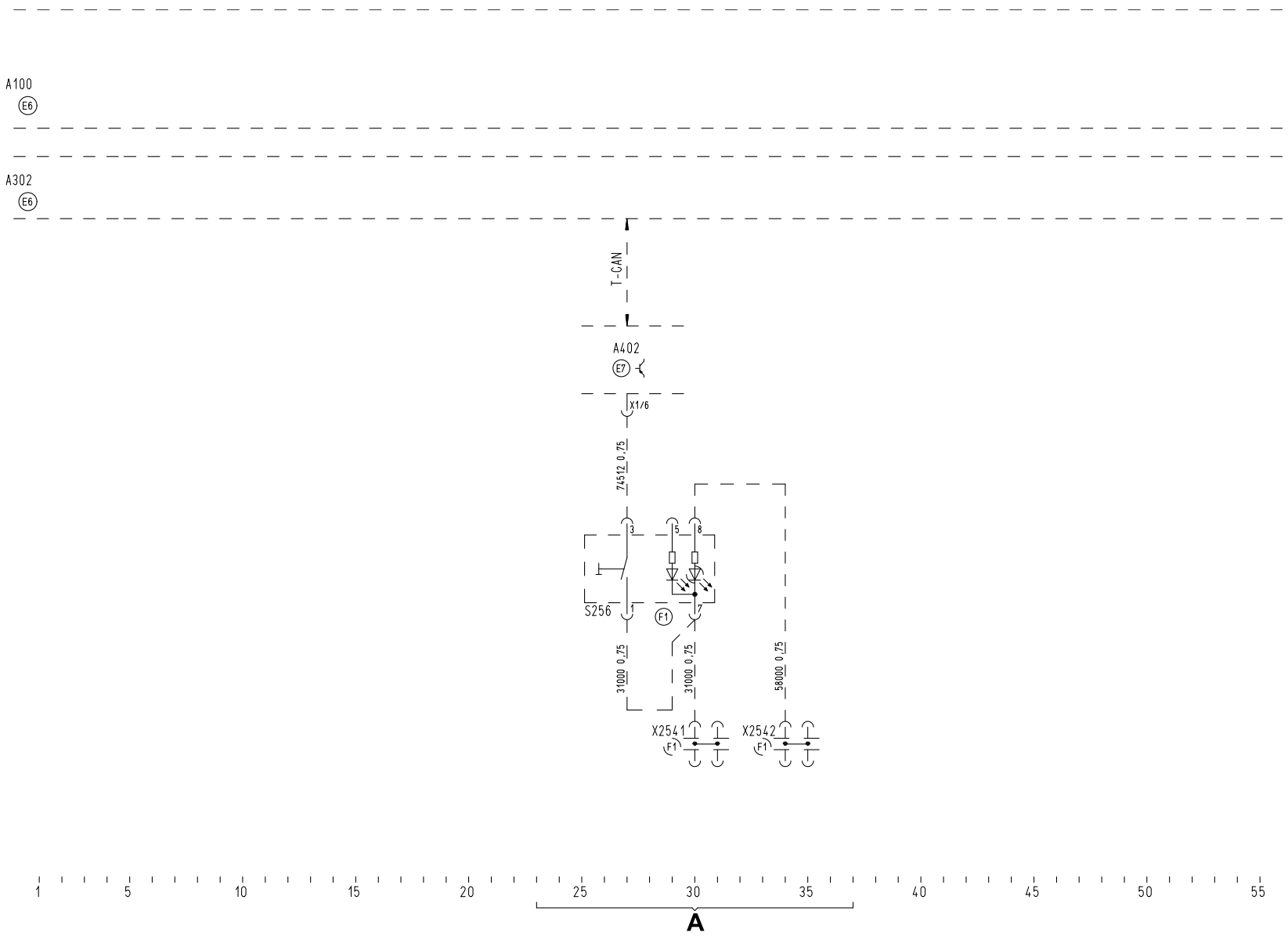
Wiring diagram no. **81.99192.1360** Sheet **1** of 1



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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
- (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

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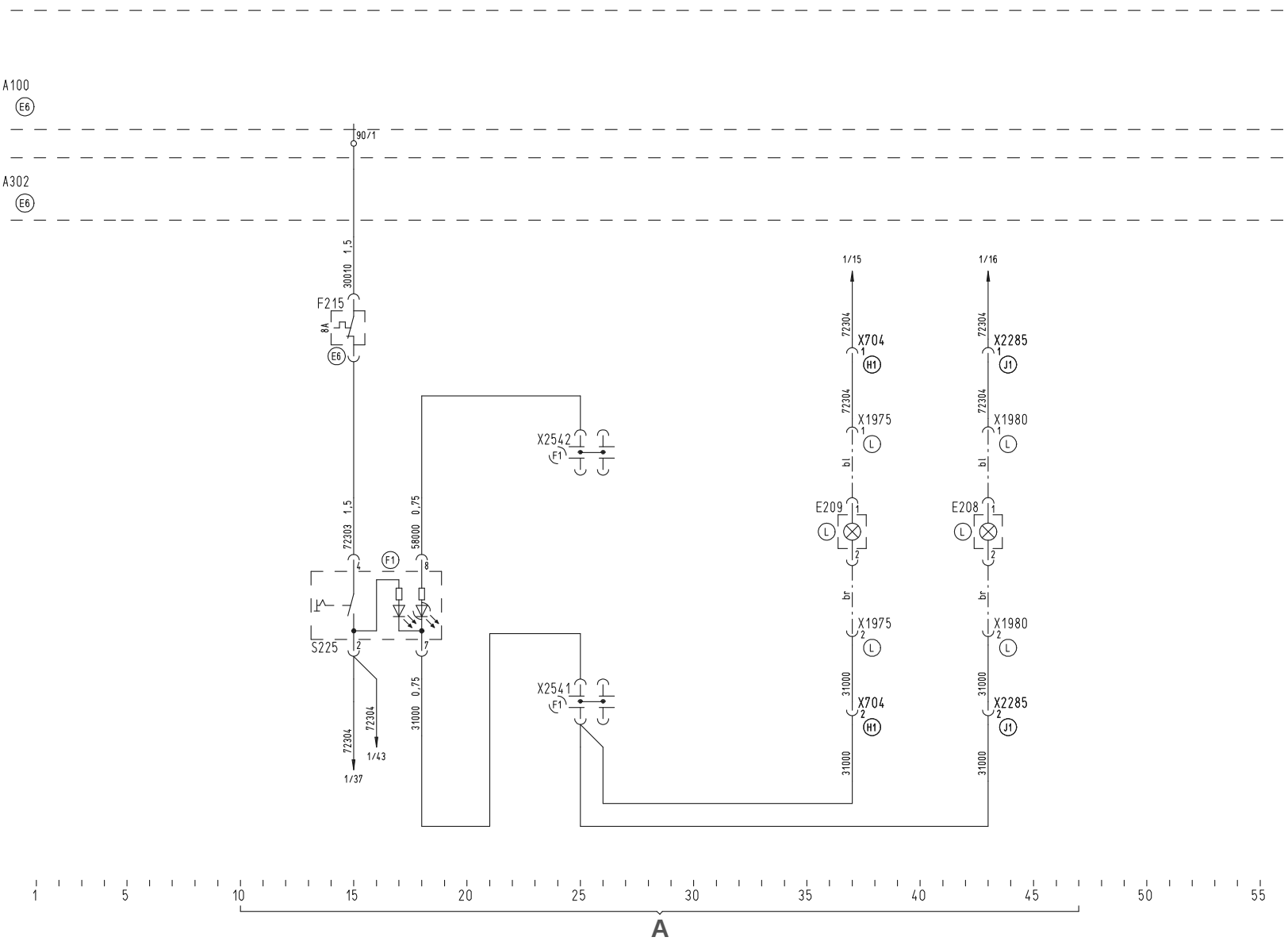
Wiring diagram no. **81.99192.1356** Sheet **1** of 1



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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

- (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

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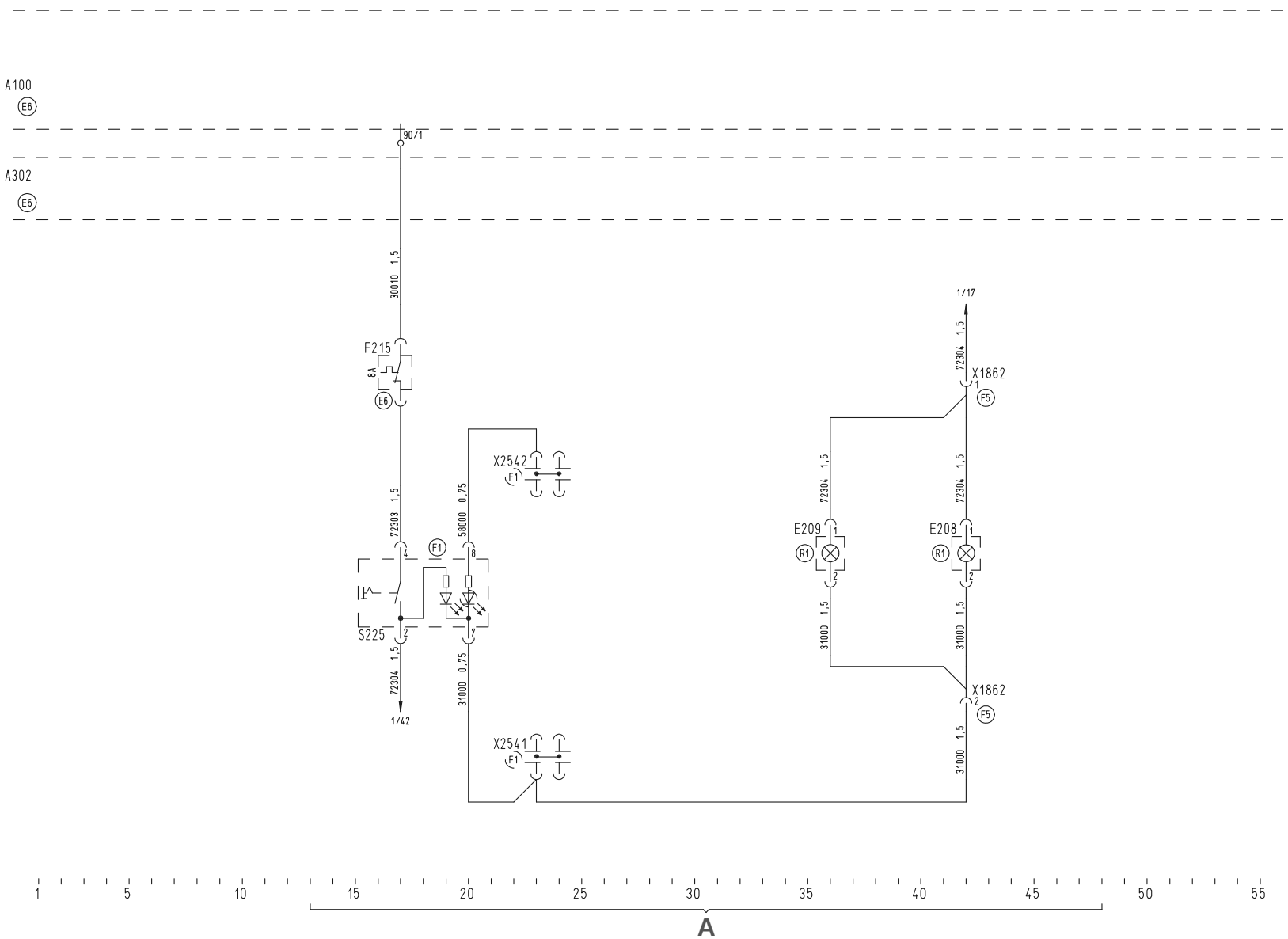
Wiring diagram no. **81.99192.1355** Sheet **1** of 1



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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

- (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

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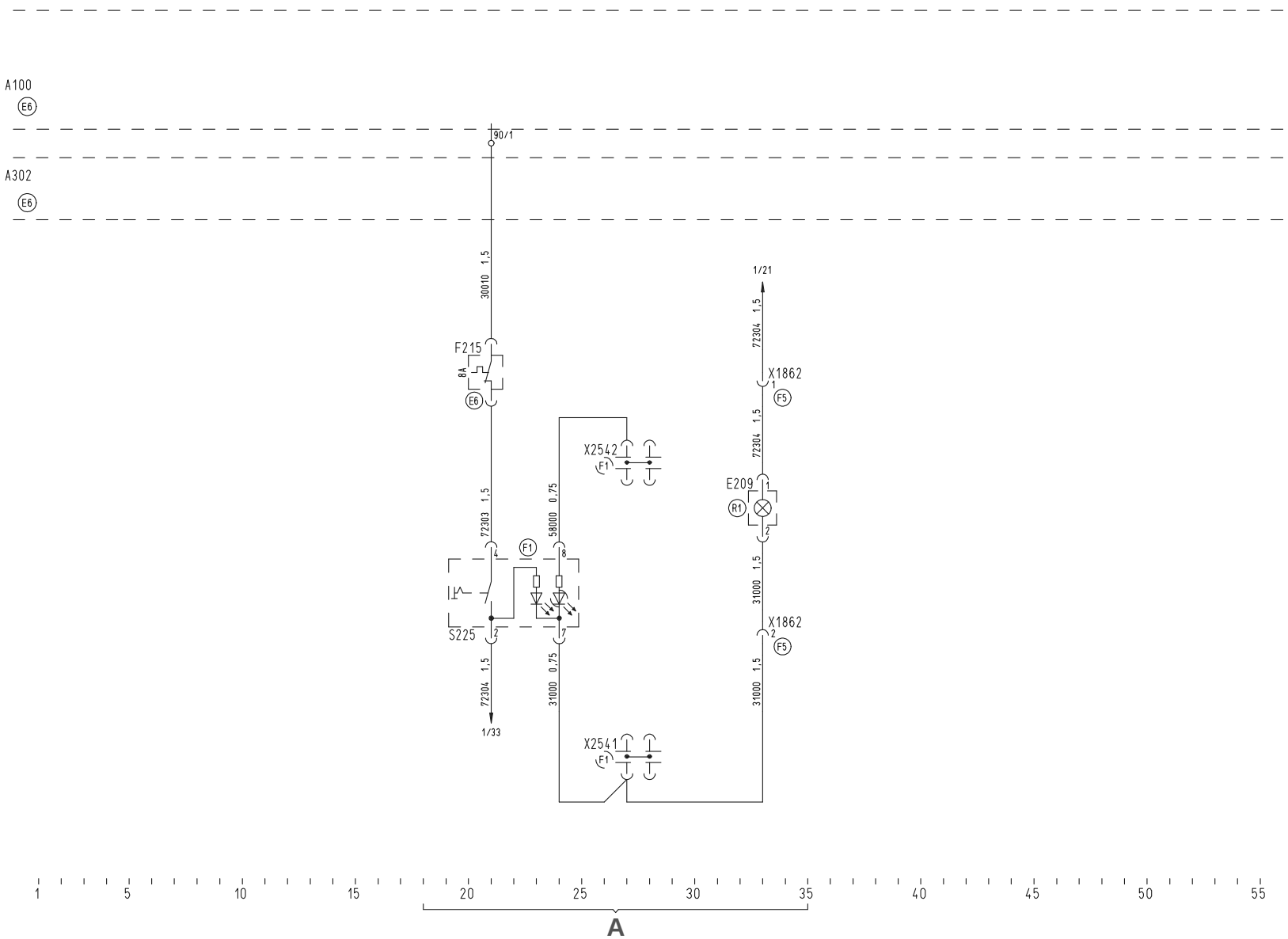
Wiring diagram no. **81.99192.1357** Sheet **1** of 1



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Emergency battery shutdown

Legend

Wiring diagram no. **81.99192.1362** Sheet **1** of 2
Change status: 04.01

A = Emergency battery shutdown

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

- (I) Supplementary heater

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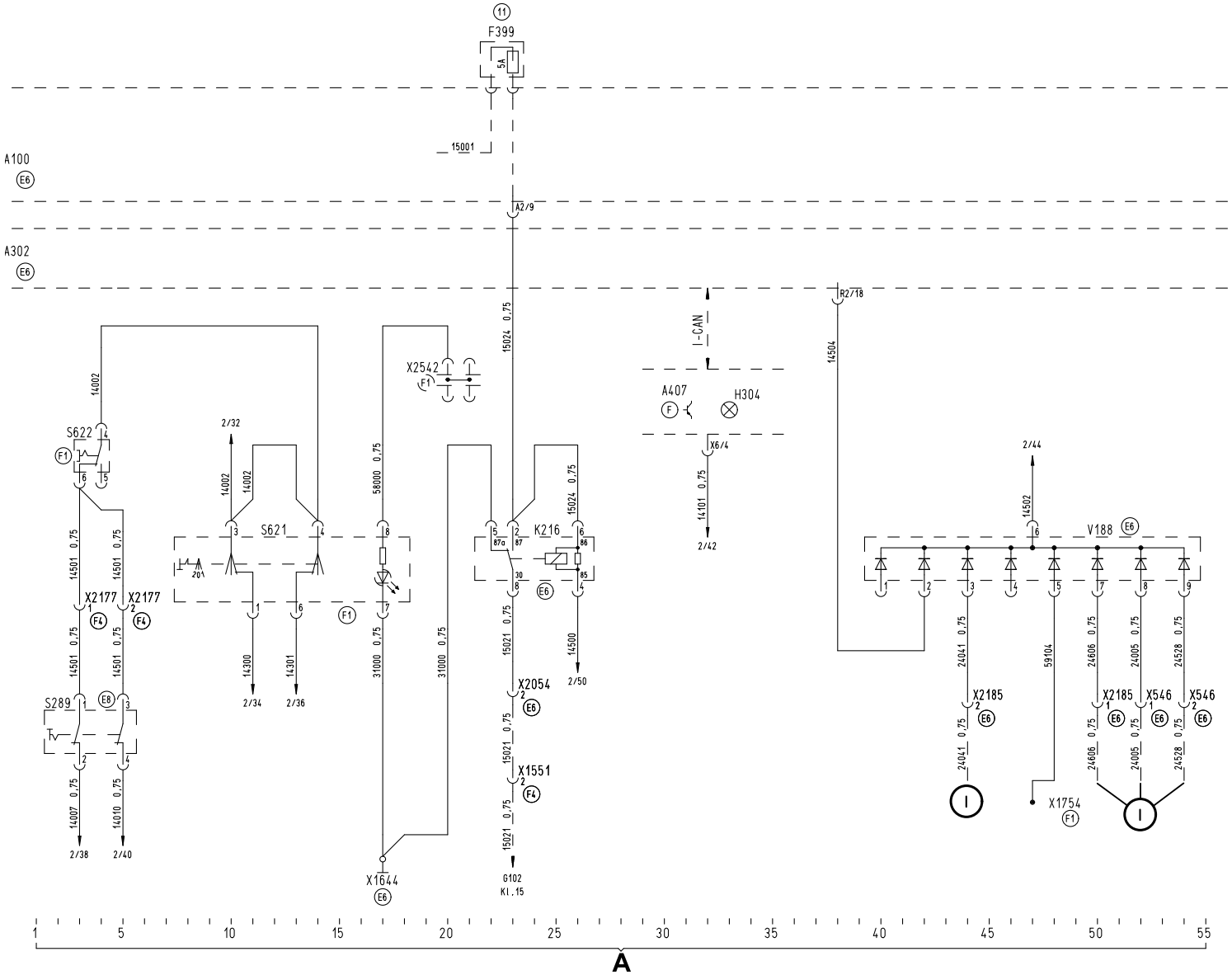
Wiring diagram no. **81.99192.1362** Sheet **1** of 2



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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
- (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

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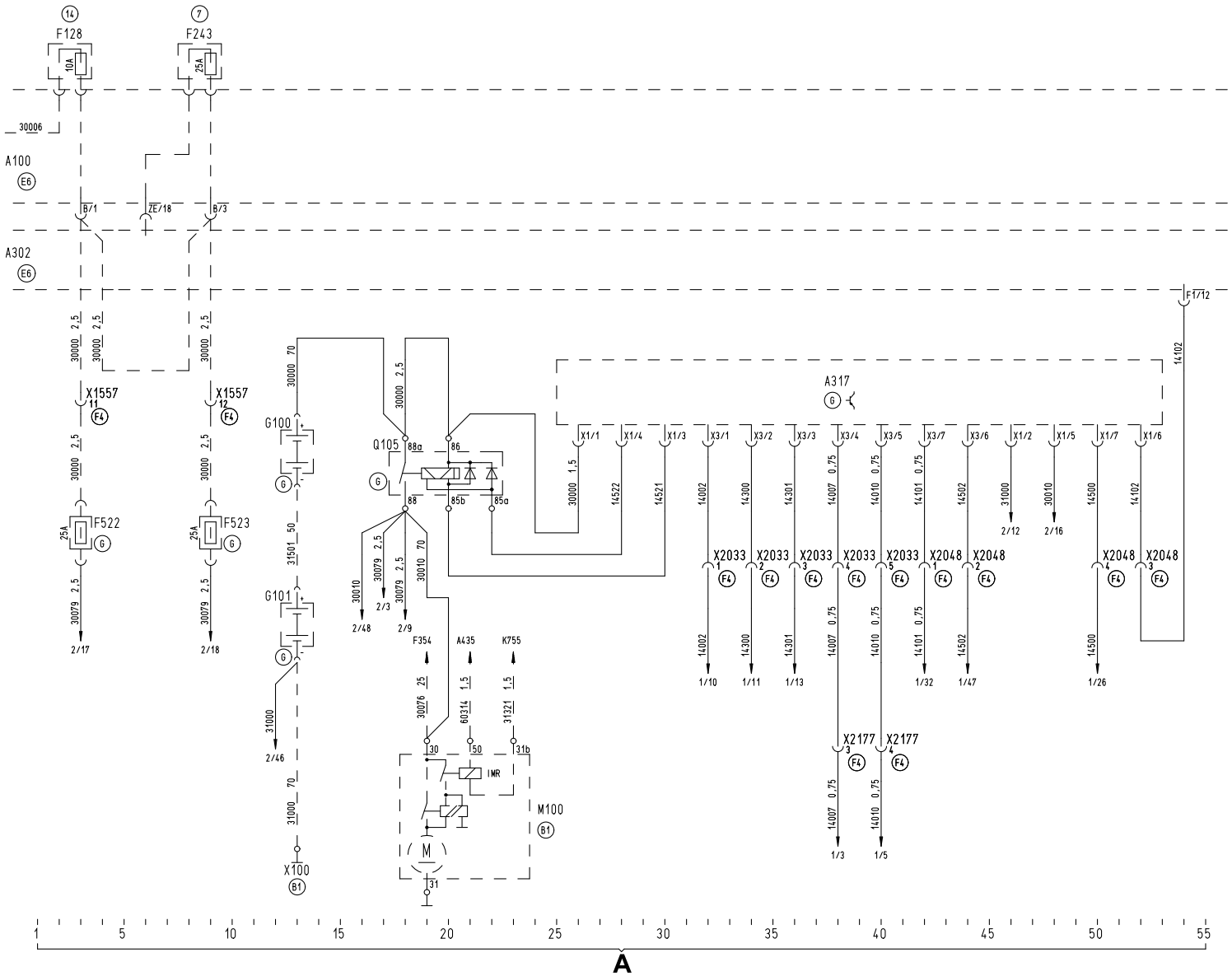
Wiring diagram no. **81.99192.1362** Sheet **2** of 2



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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
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

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) Supplementary heater

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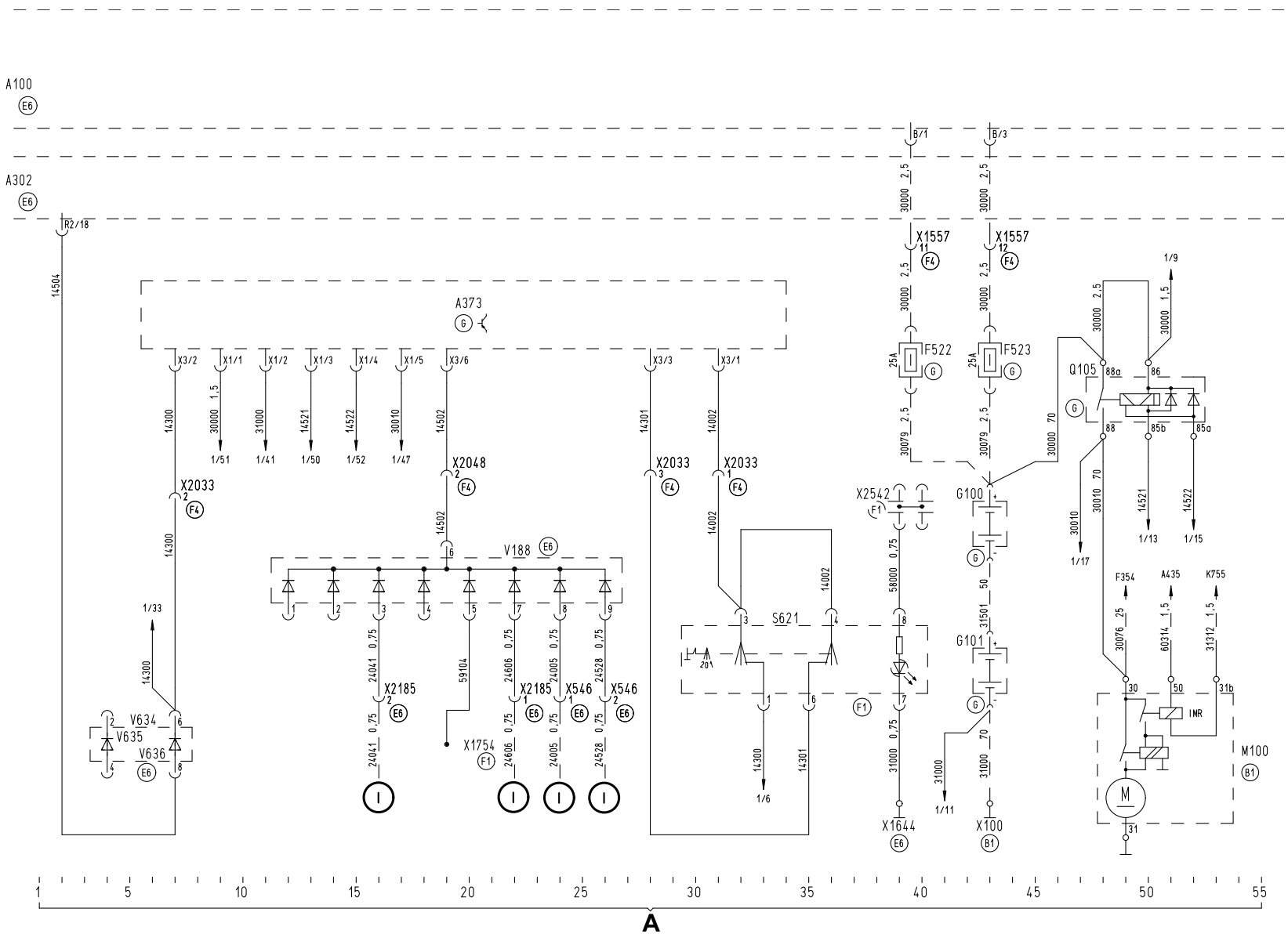
Wiring diagram no. **81.99192.1361** Sheet **1** of 1



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Main battery switch (mechanical)

Legend

Wiring diagram no. **81.99192.2495** Sheet **1** of 1
Change status: a

A = Main battery switch, mechanical

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
G100	(113)	Battery 1
M100	(144)	Starting motor
S149	(100)	Isolator switch, battery +

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

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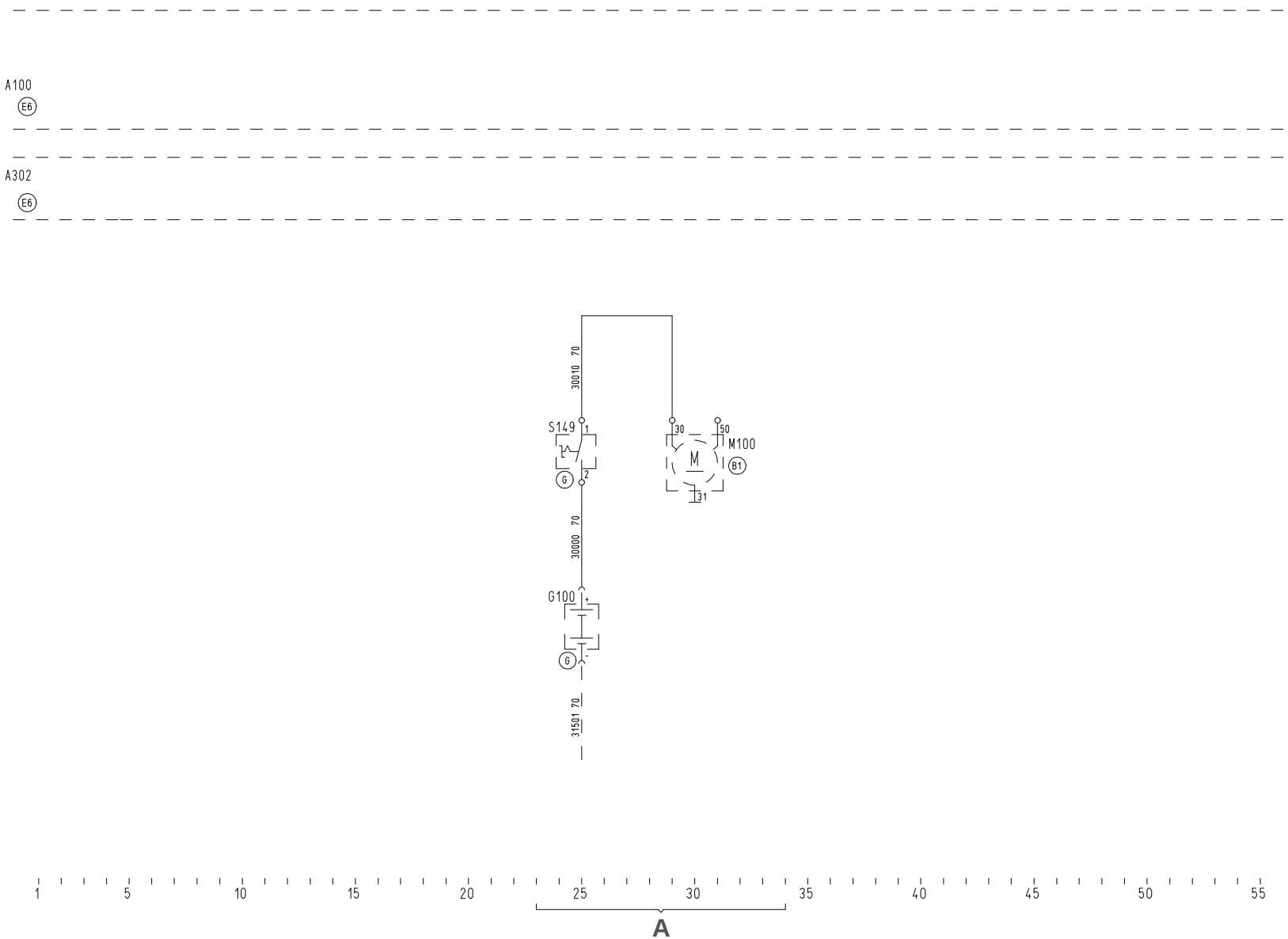
Wiring diagram no. **81.99192.2495** Sheet **1** of 1



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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

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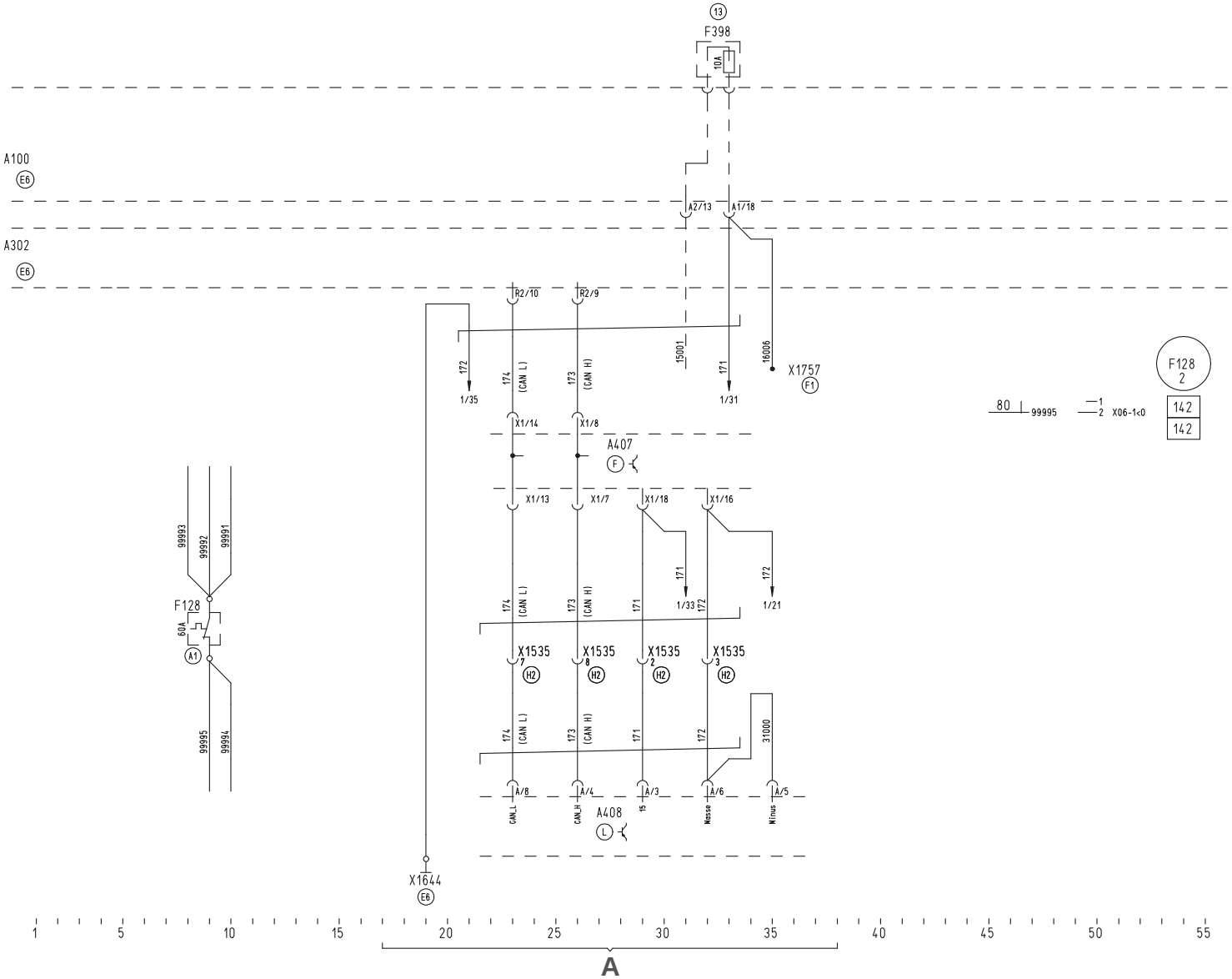
Wiring diagram no. **81.99192.2377** Sheet **1** of 1



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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
- (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

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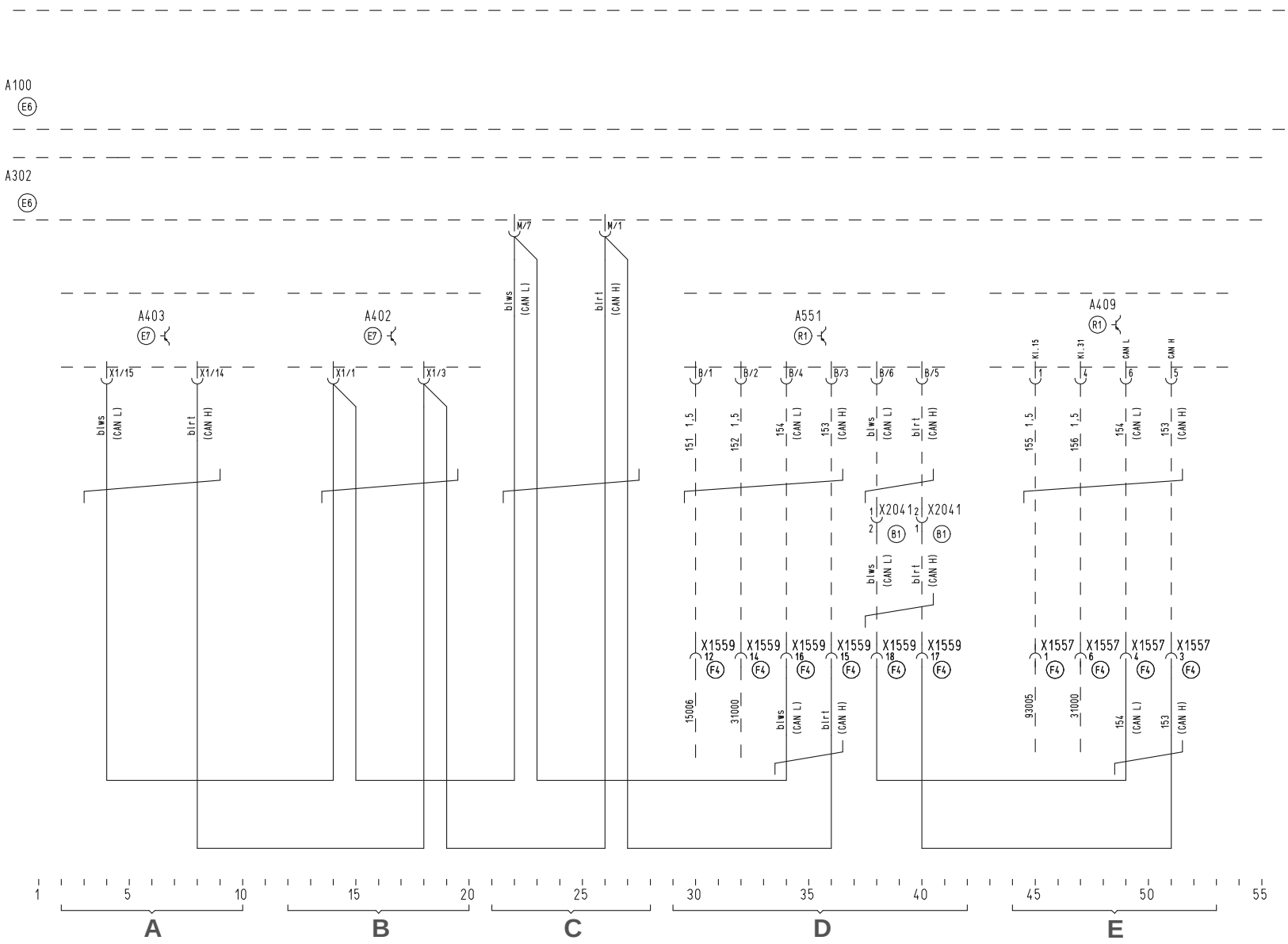
Wiring diagram no. **81.99192.2359** Sheet **1** of 1



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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
- (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

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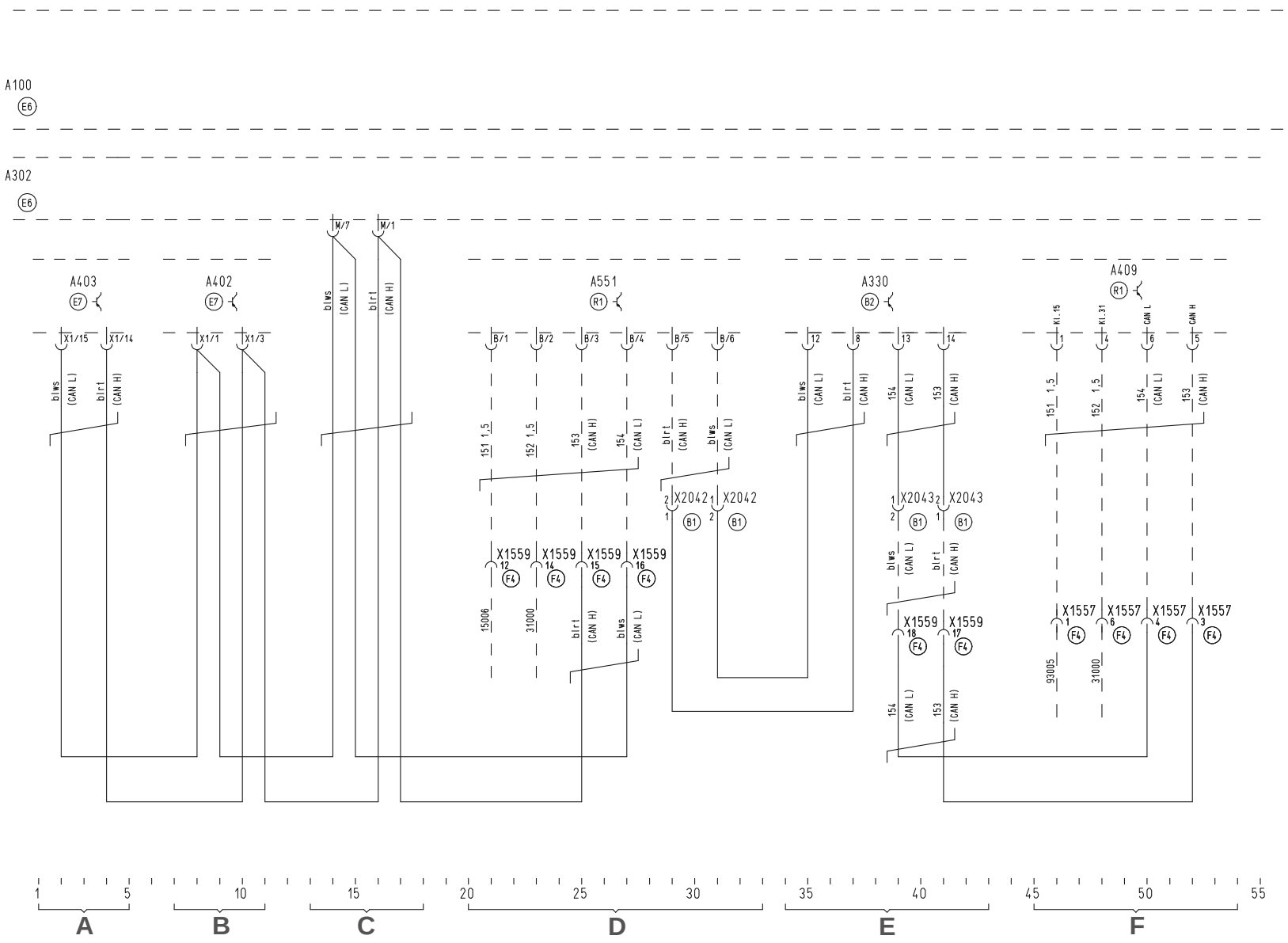
Wiring diagram no. **81.99192.2522** Sheet **1** of 1



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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
- (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

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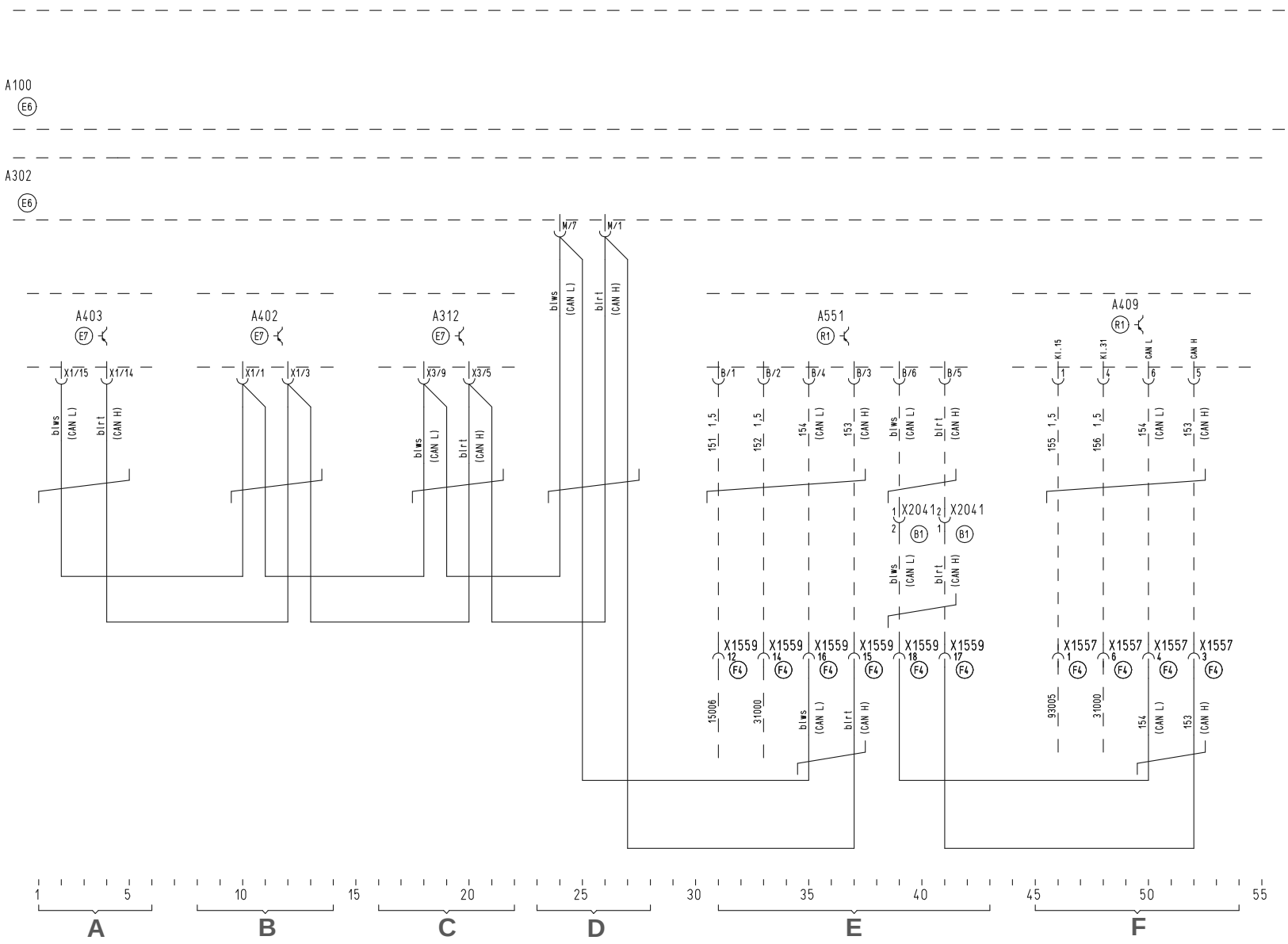
Wiring diagram no. **81.99192.2428** Sheet **1** of 1



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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

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
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
- (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

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

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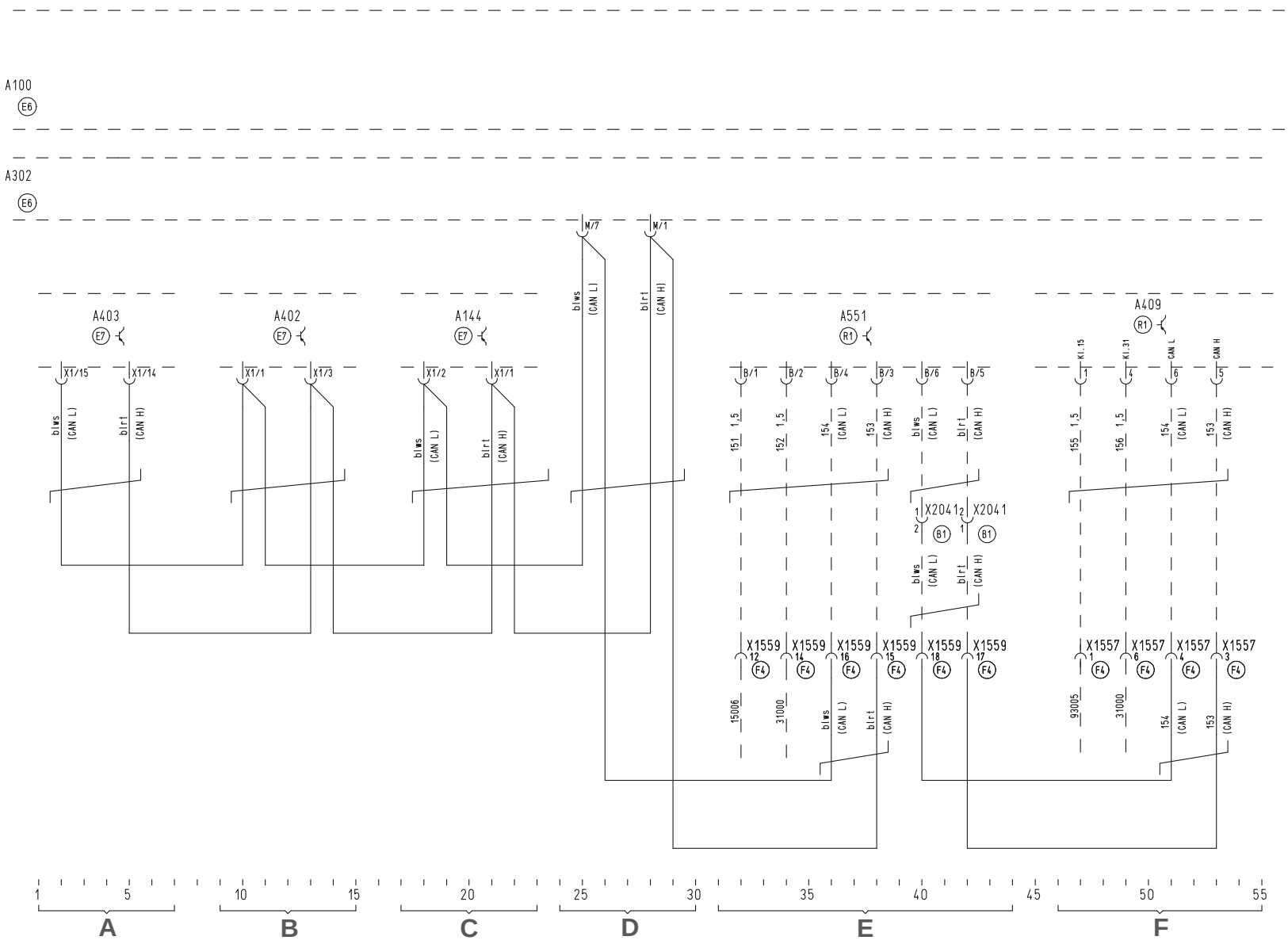
Wiring diagram no. **81.99192.2521** Sheet **1** of 1



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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

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
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
- (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

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

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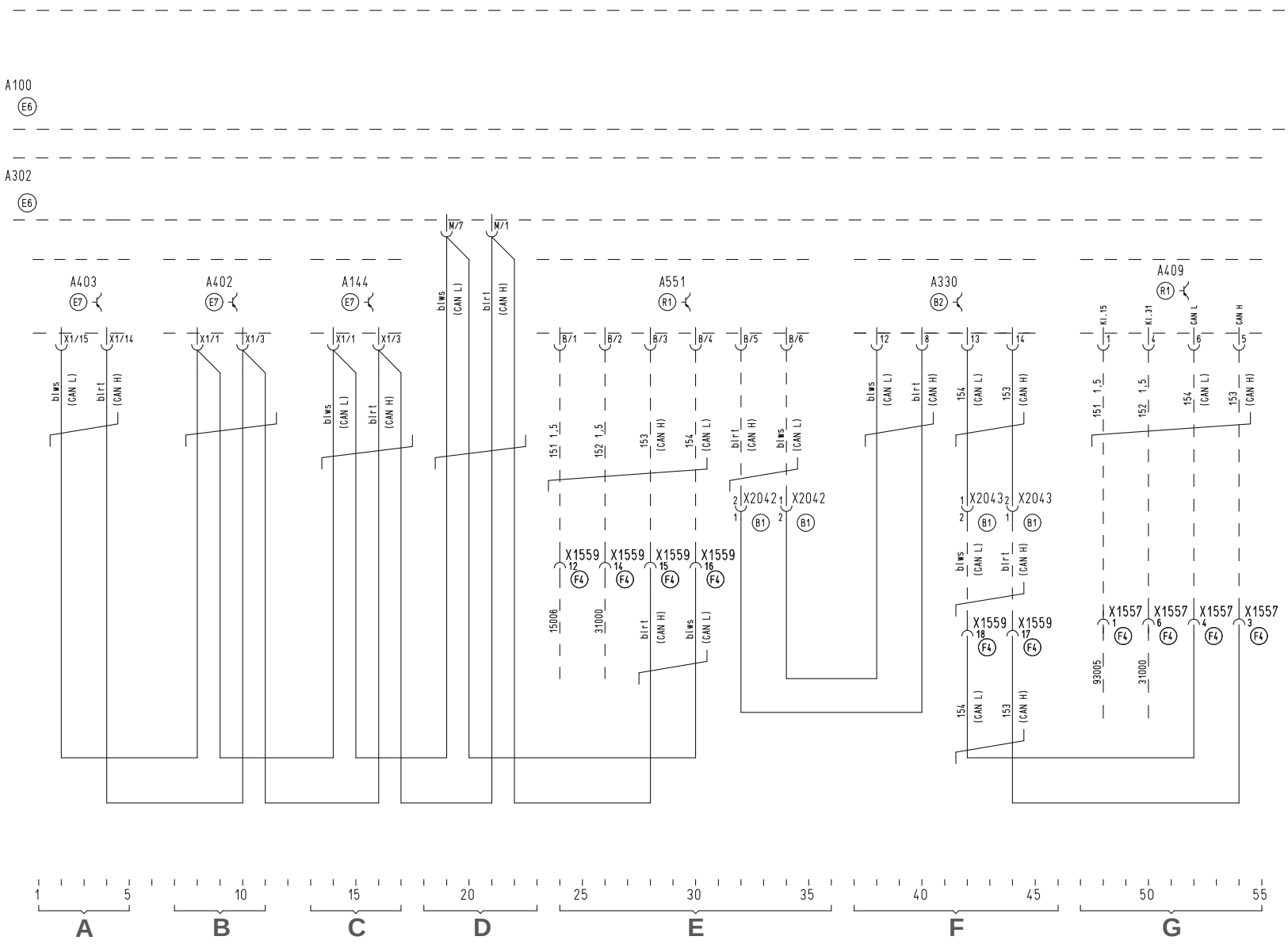
Wiring diagram no. **81.99192.2524** Sheet **1** of 1



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

Legend
Wiring diagram no. **81.99192.2432** Sheet **1** of 2
Change status: 11.99

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
- (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

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

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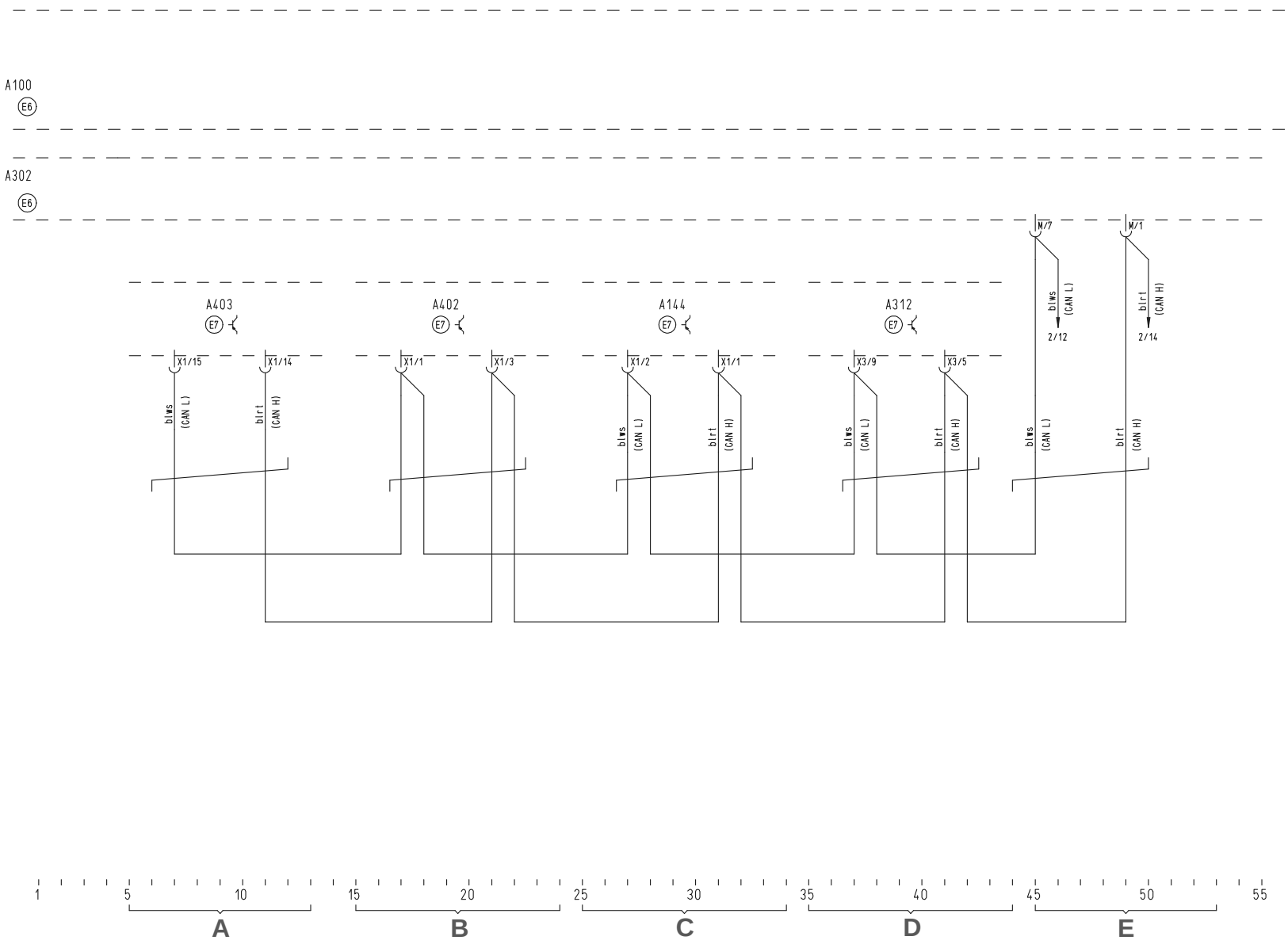
Wiring diagram no. **81.99192.2432** Sheet **1** of 2



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CAN databus driveline (T-CAN) with intarder 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

- (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

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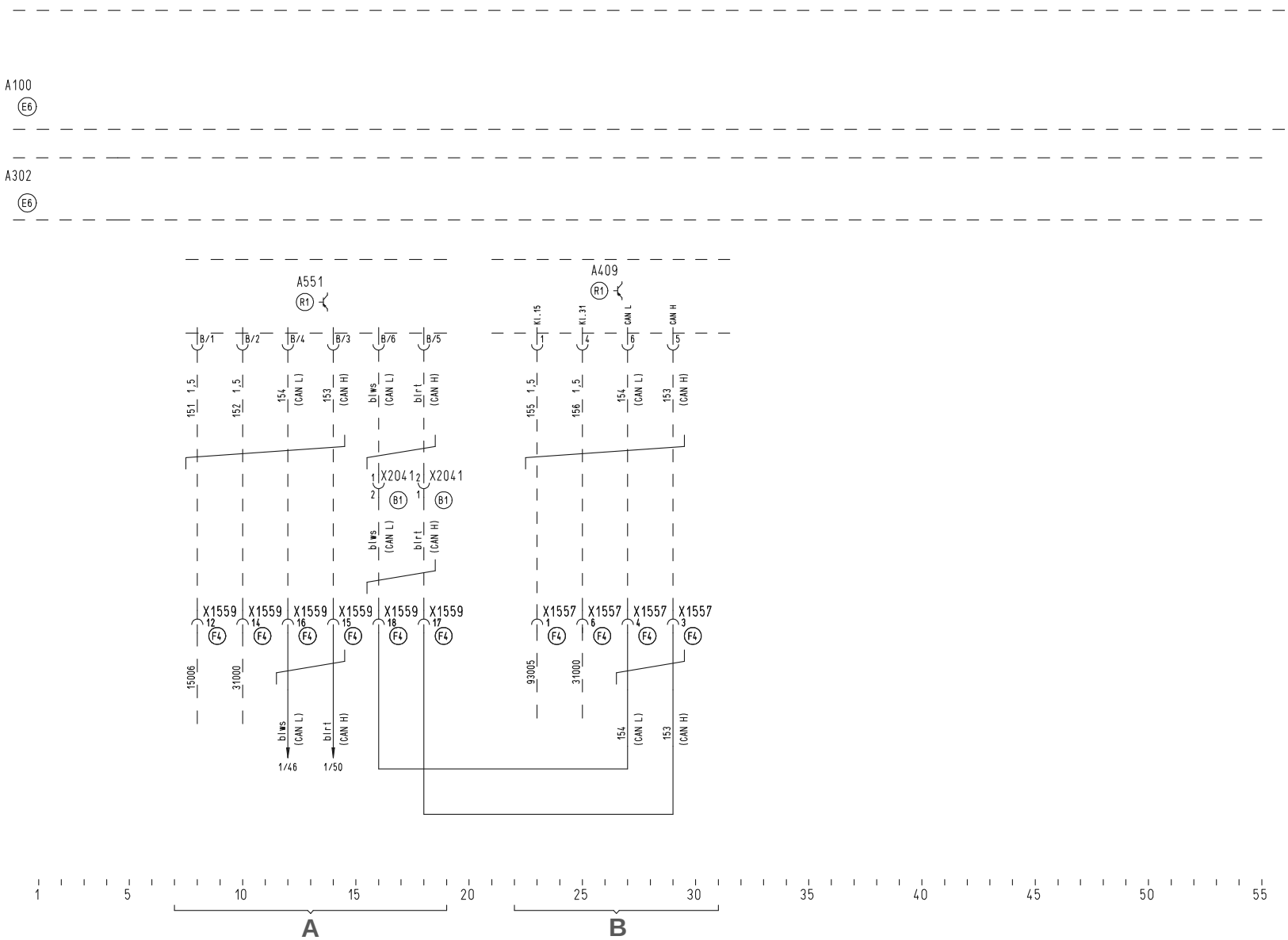
Wiring diagram no. **81.99192.2432** Sheet **2** of 2



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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

- (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

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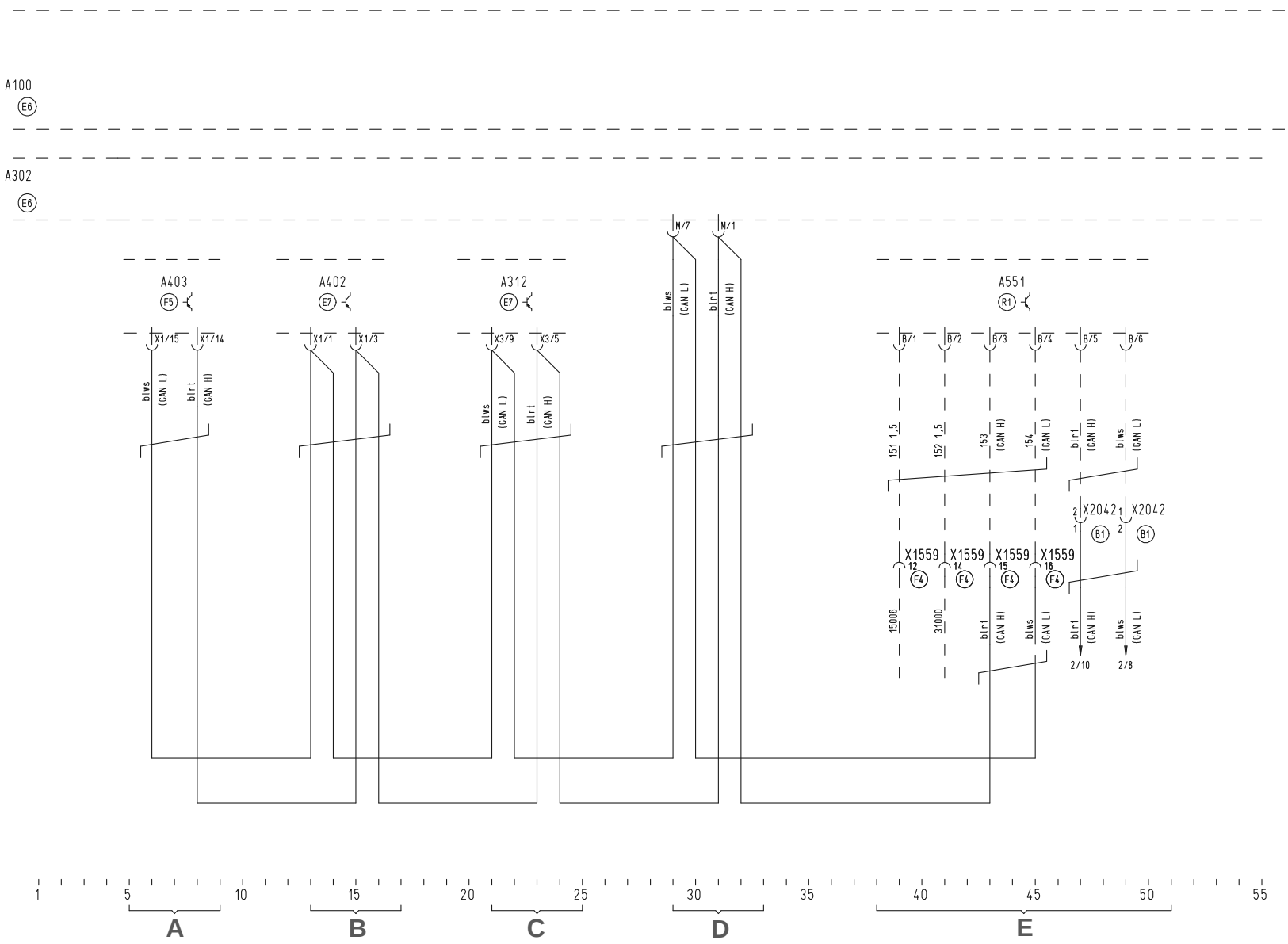
Wiring diagram no. **81.99192.2433** Sheet **1** of 2



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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

- (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

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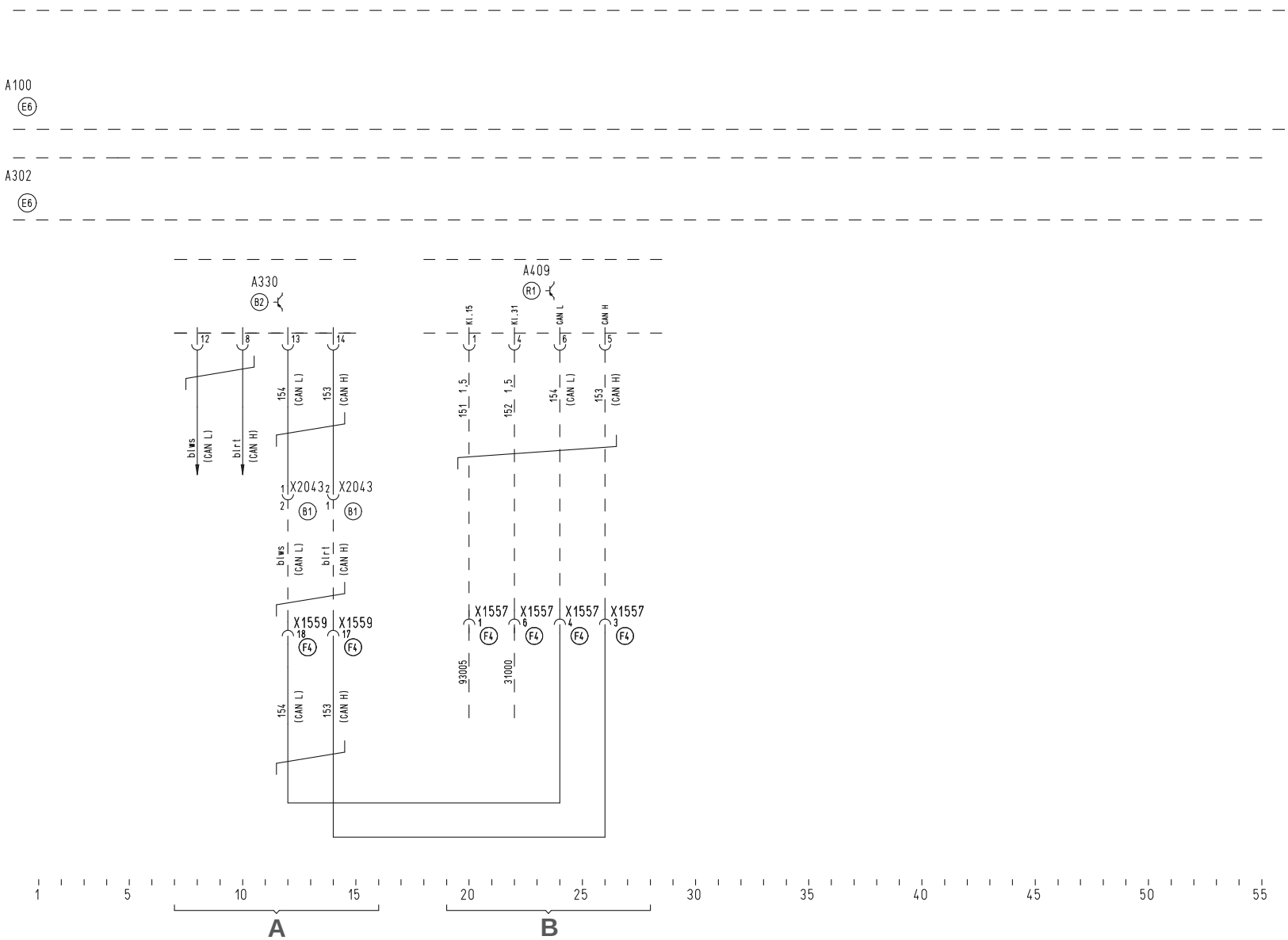
Wiring diagram no. **81.99192.2433** Sheet **2** of 2



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

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

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

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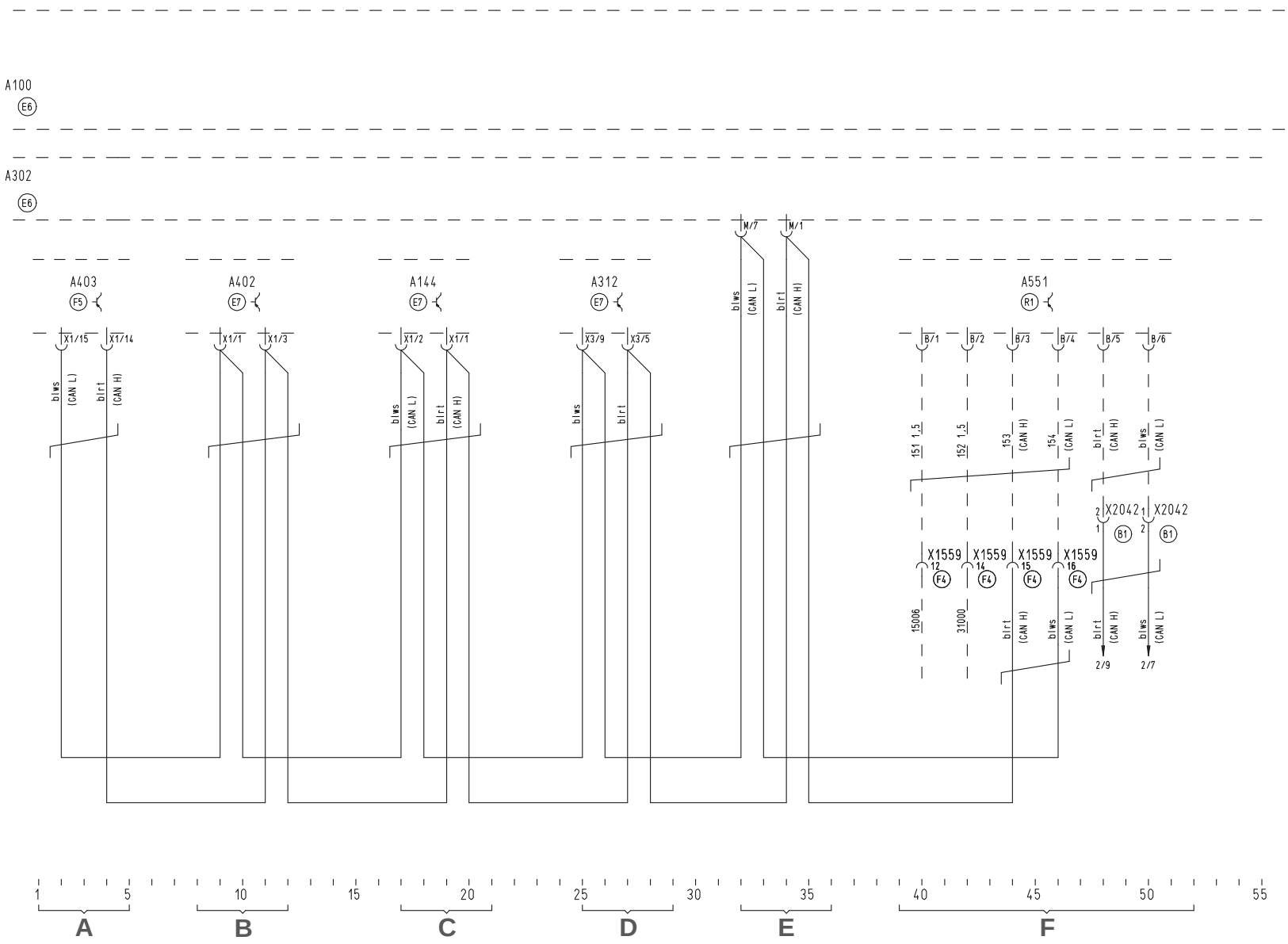
Wiring diagram no. **81.99192.2435** Sheet **1** of 2



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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
- (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

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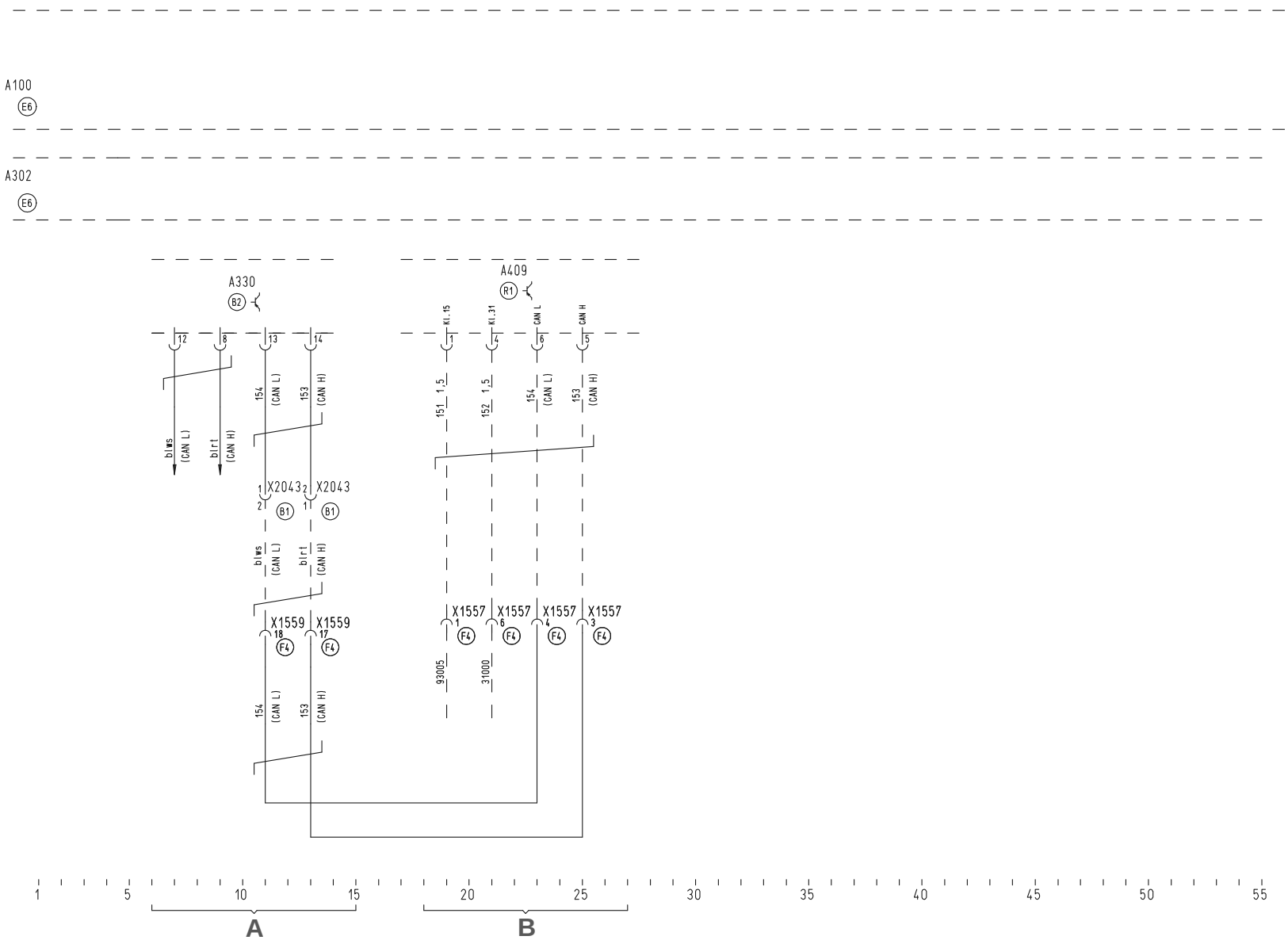
Wiring diagram no. **81.99192.2435** Sheet **2** of 2



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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

- (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

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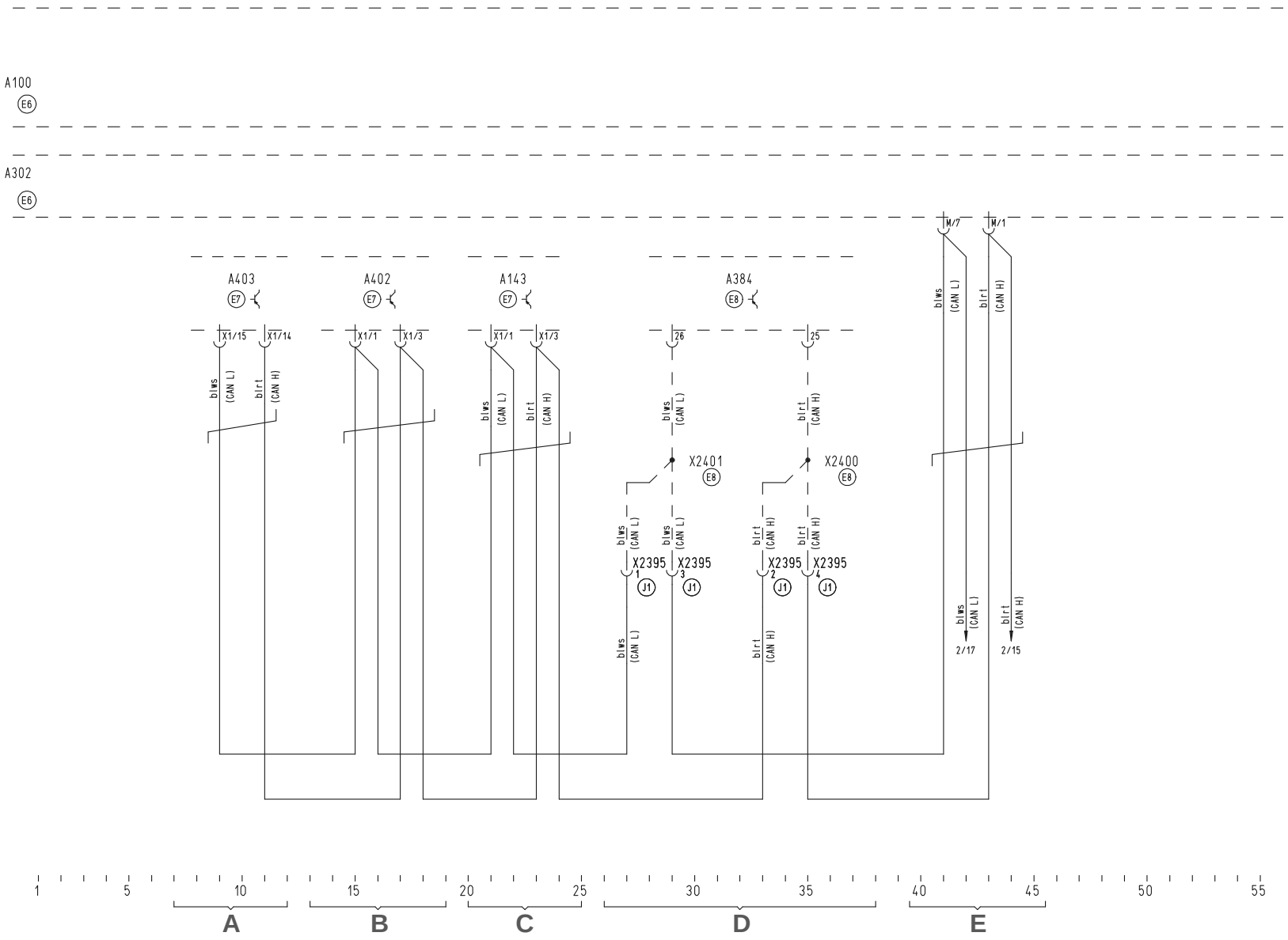
Wiring diagram no. **81.99192.2783** Sheet **1** of 2



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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
- (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

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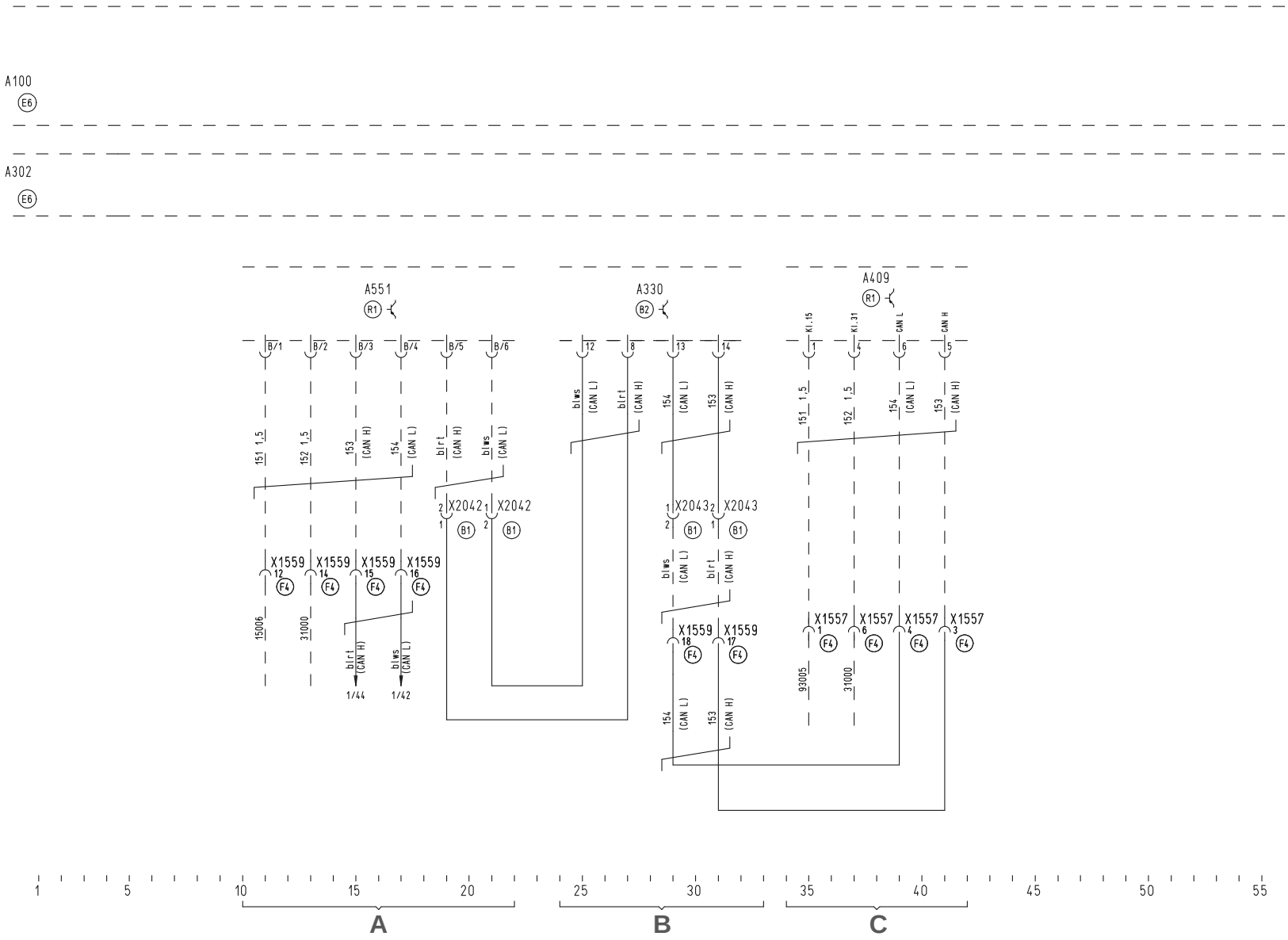
Wiring diagram no. **81.99192.2783** Sheet **2** of 2



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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
- (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

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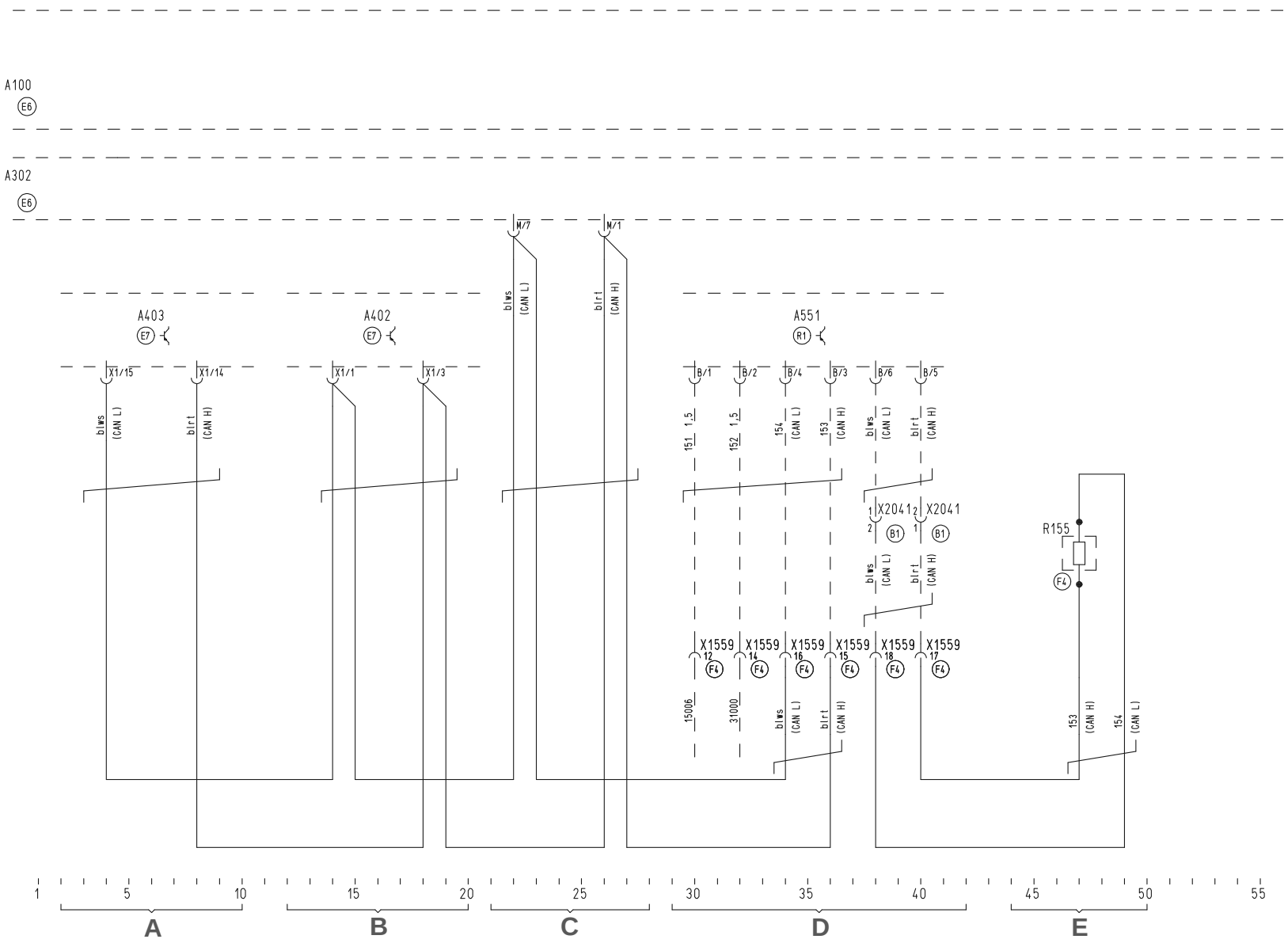
Wiring diagram no. **81.99192.2811** Sheet **1** of 1



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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

- (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

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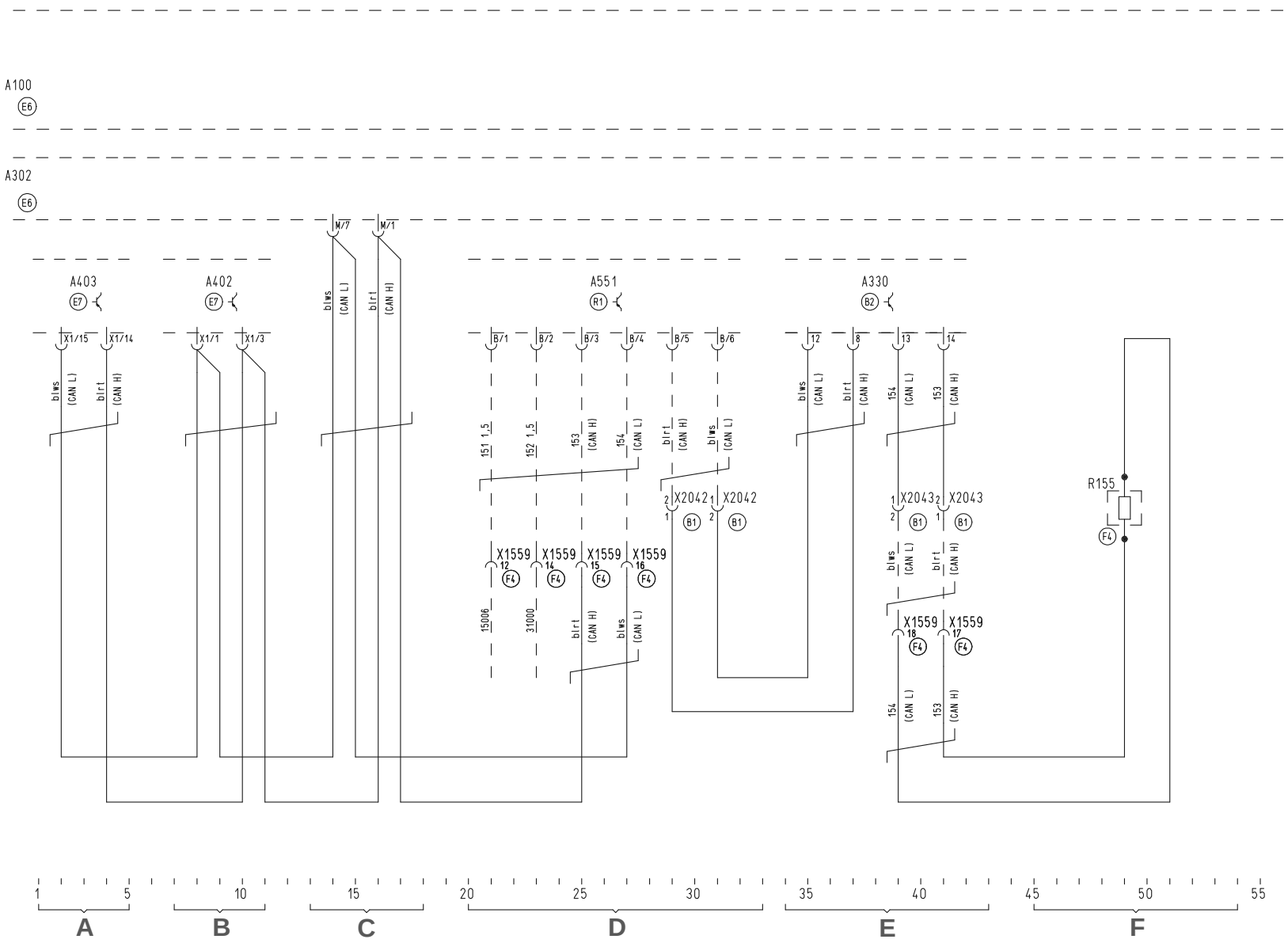
Wiring diagram no. **81.99192.2824** Sheet **1** of 1



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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
- (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

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

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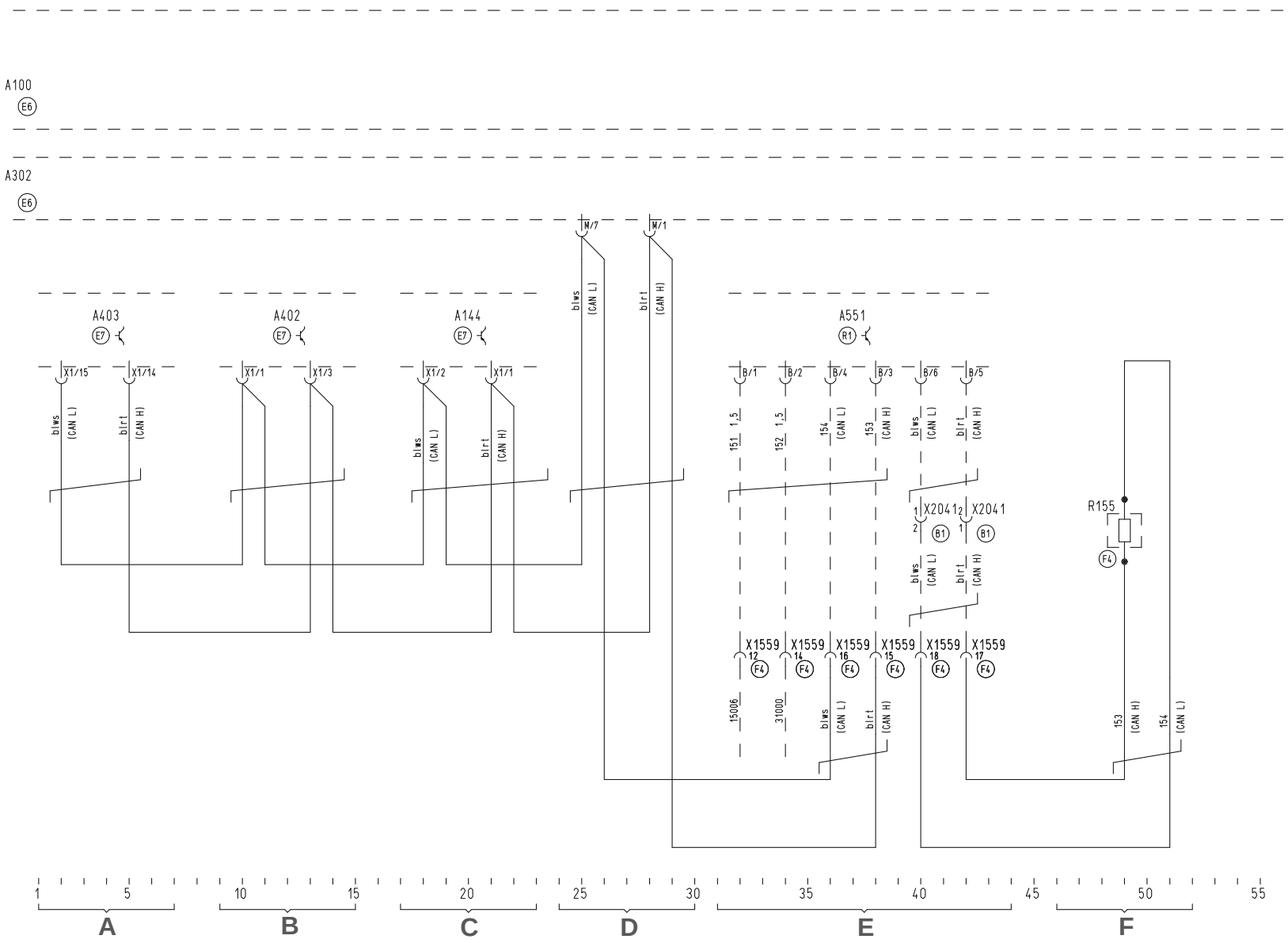
Wiring diagram no. **81.99192.2823** Sheet **1** of 1



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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

- (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

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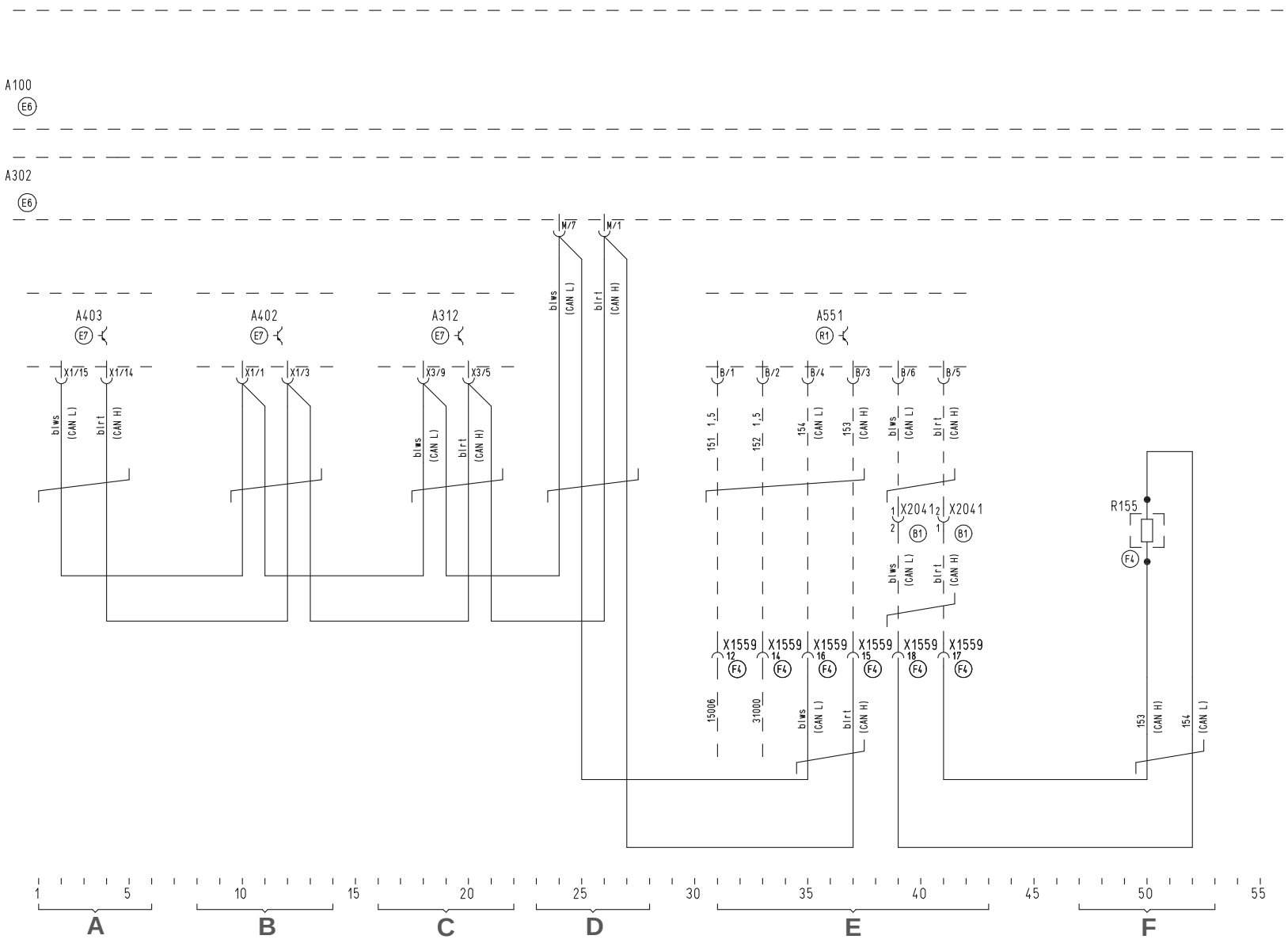
Wiring diagram no. **81.99192.2814** Sheet **1** of 1



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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

- (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

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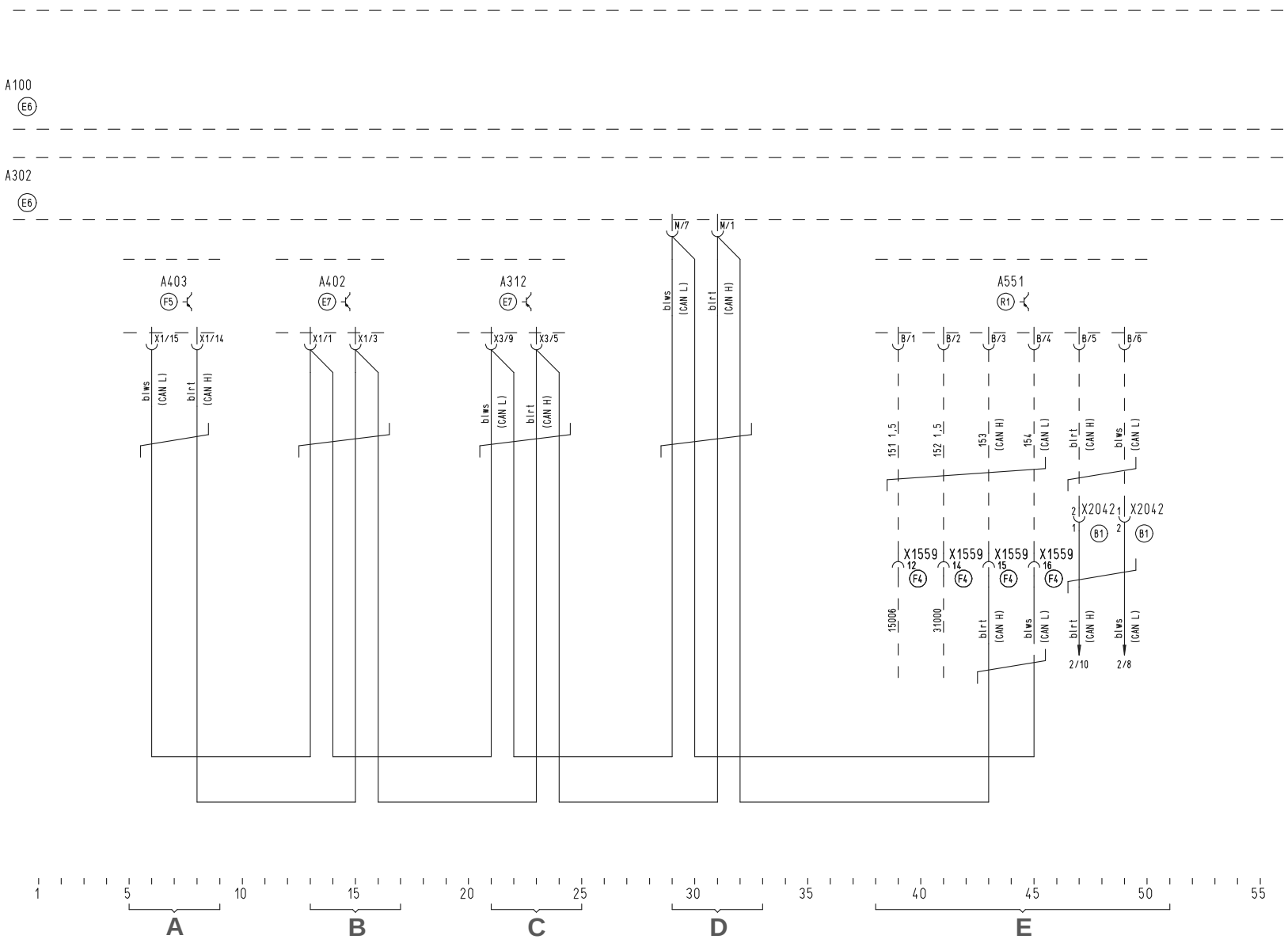
Wiring diagram no. **81.99192.2819** Sheet **1** of 2



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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

- (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

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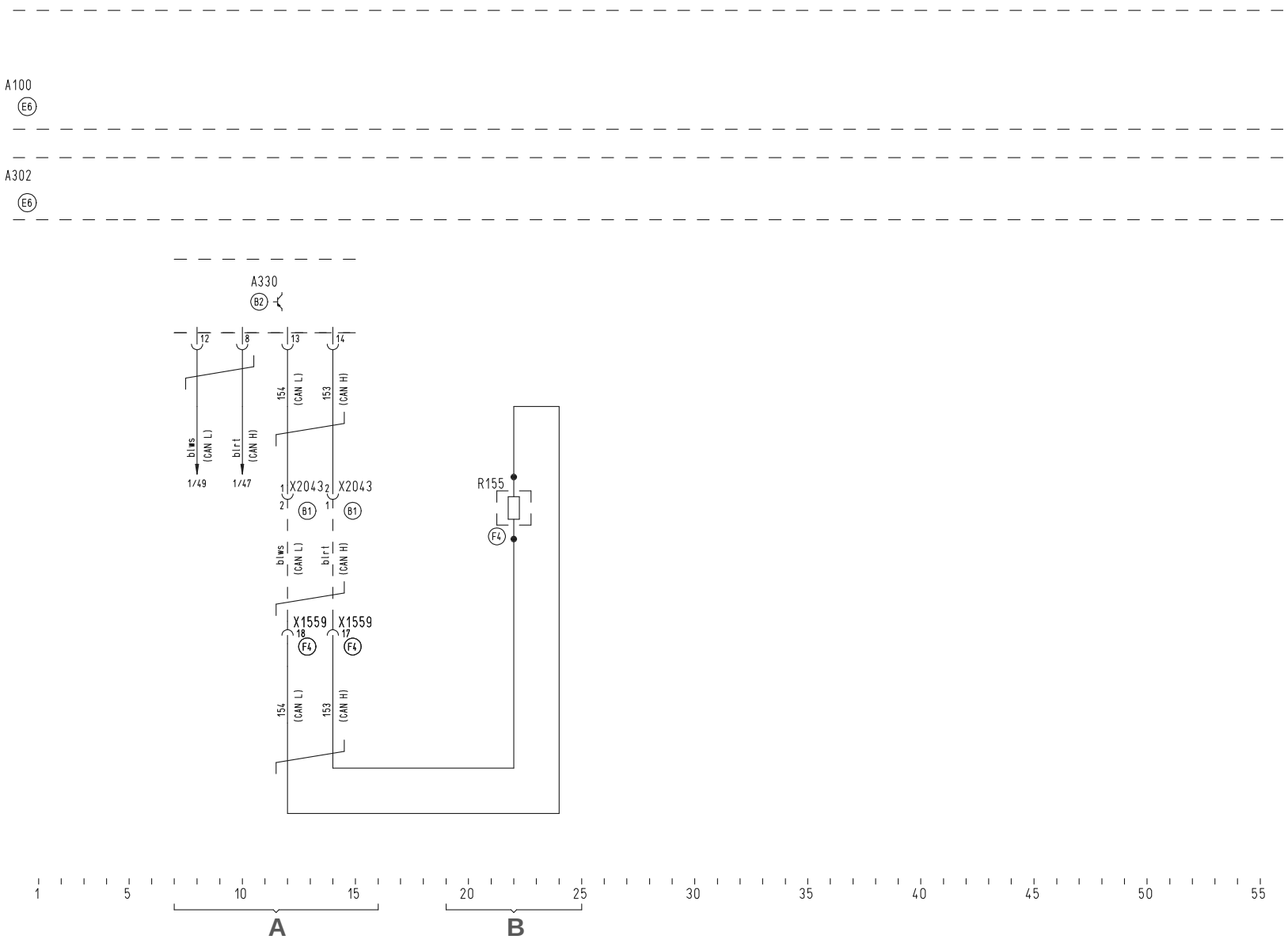
Wiring diagram no. **81.99192.2819** Sheet **2** of 2



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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

- (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

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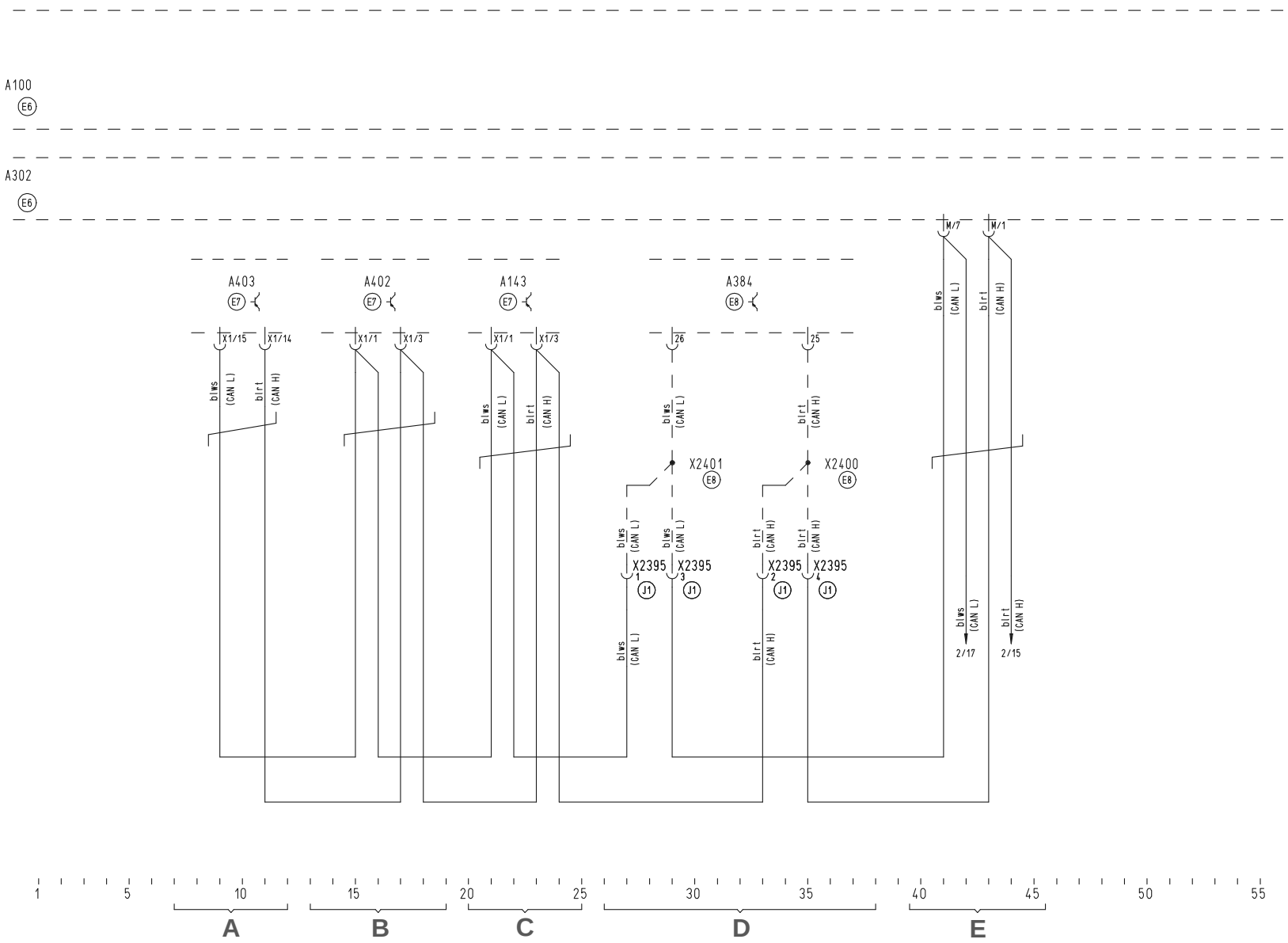
Wiring diagram no. **81.99192.2827** Sheet **1** of 2



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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
- (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

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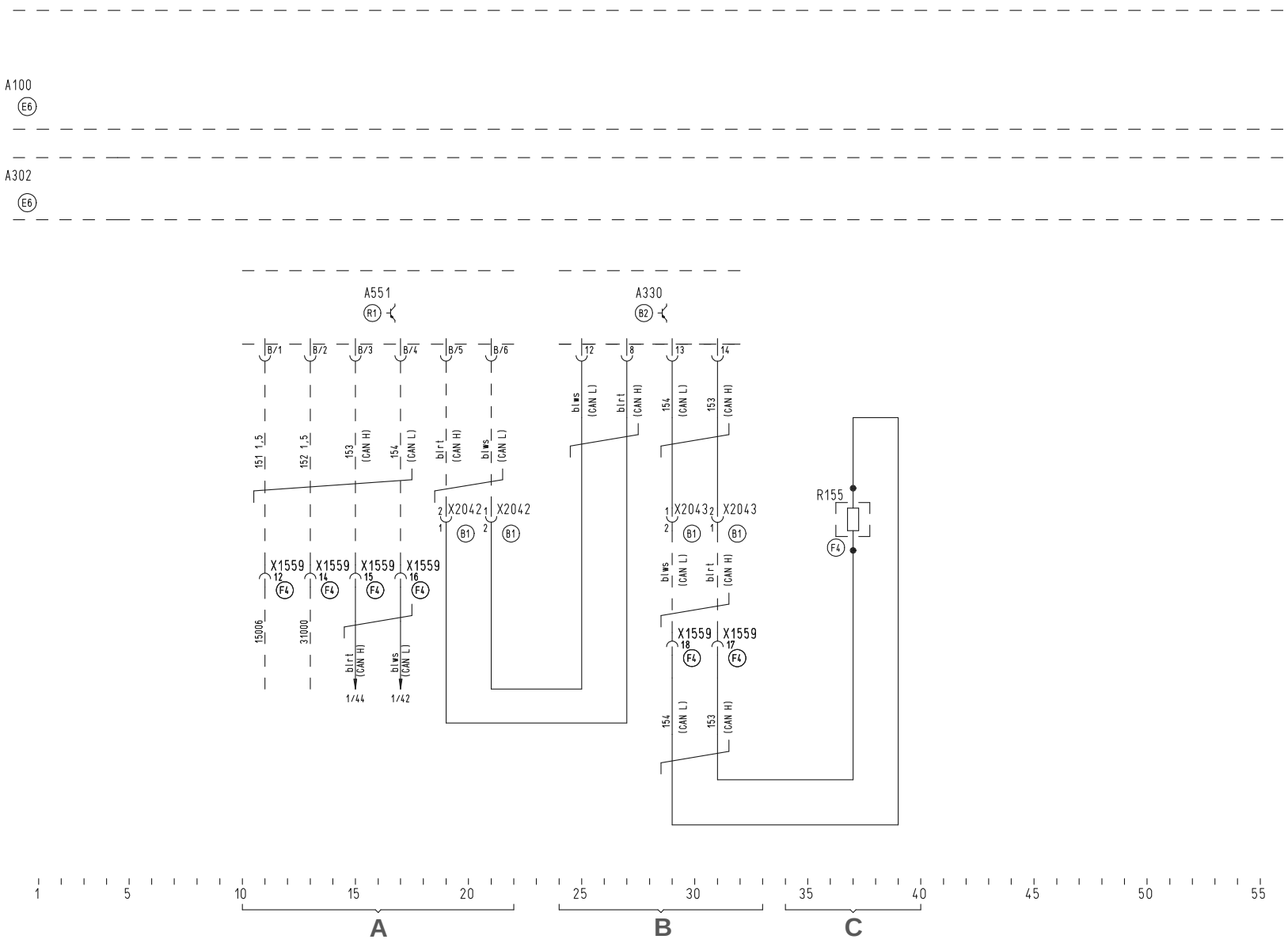
Wiring diagram no. **81.99192.2827** Sheet **2** of 2



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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
- (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

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

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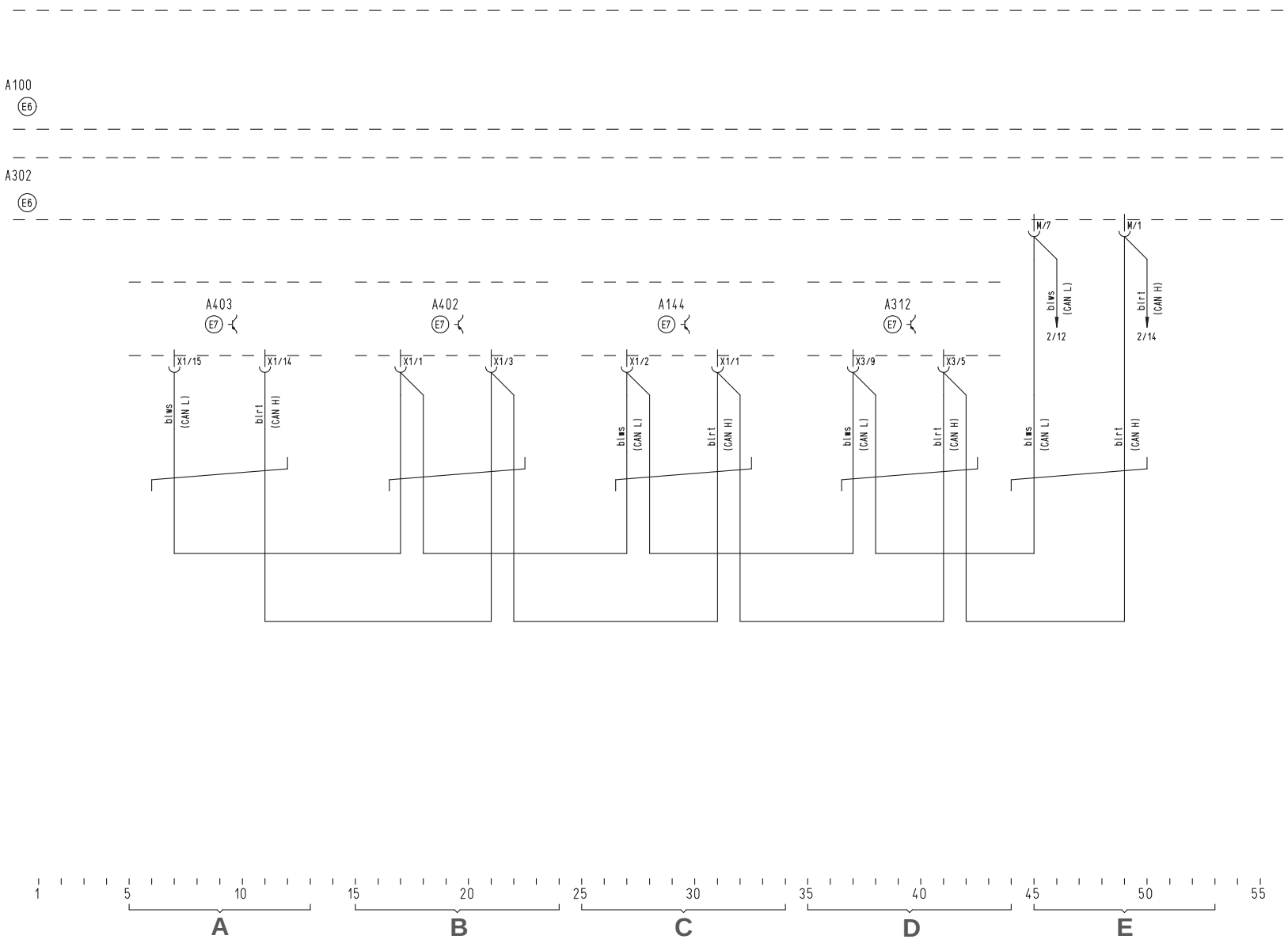
Wiring diagram no. **81.99192.2818** Sheet **1** of 2



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

- (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

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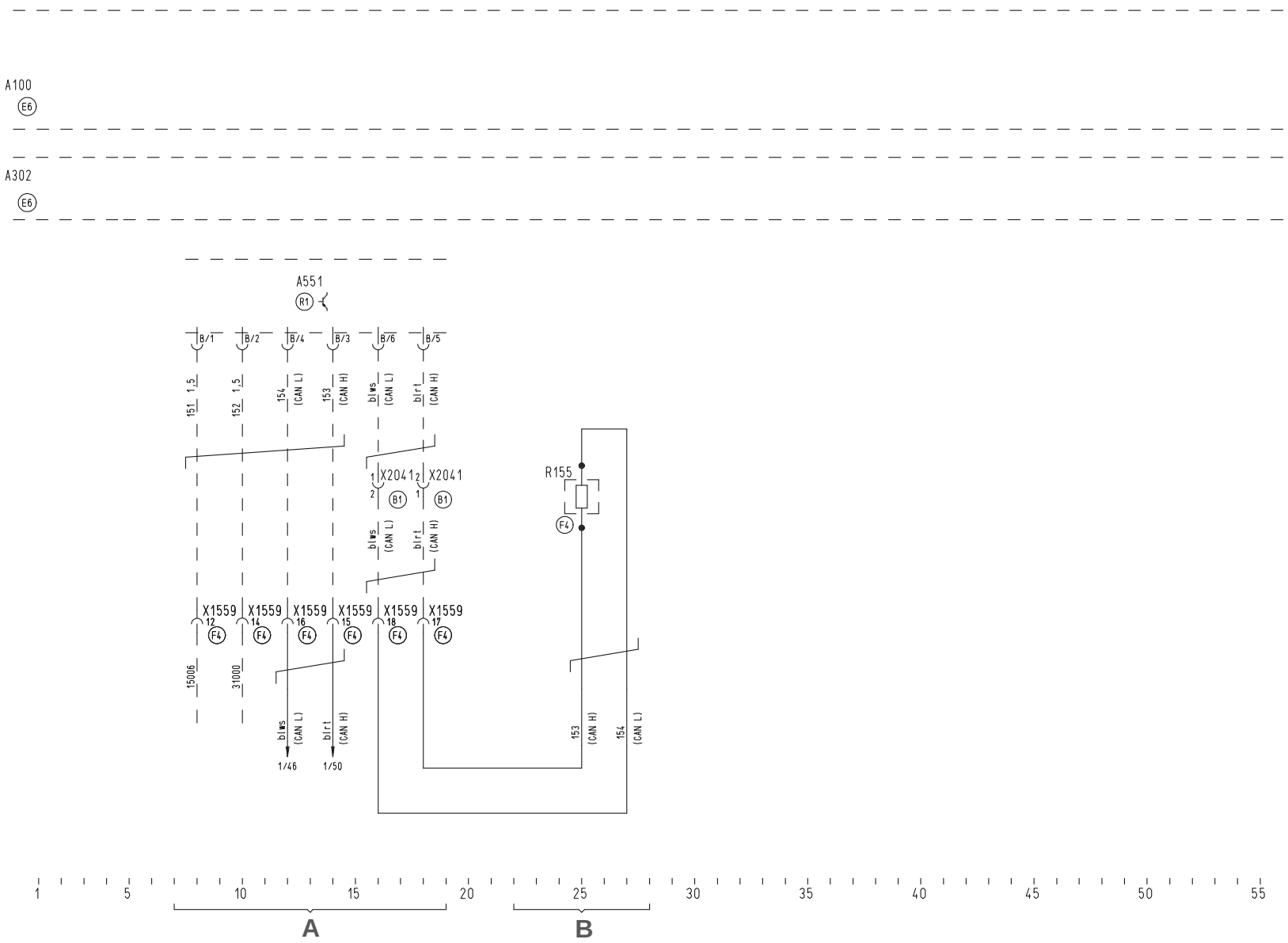
Wiring diagram no. **81.99192.2818** Sheet **2** of 2



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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
- (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

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

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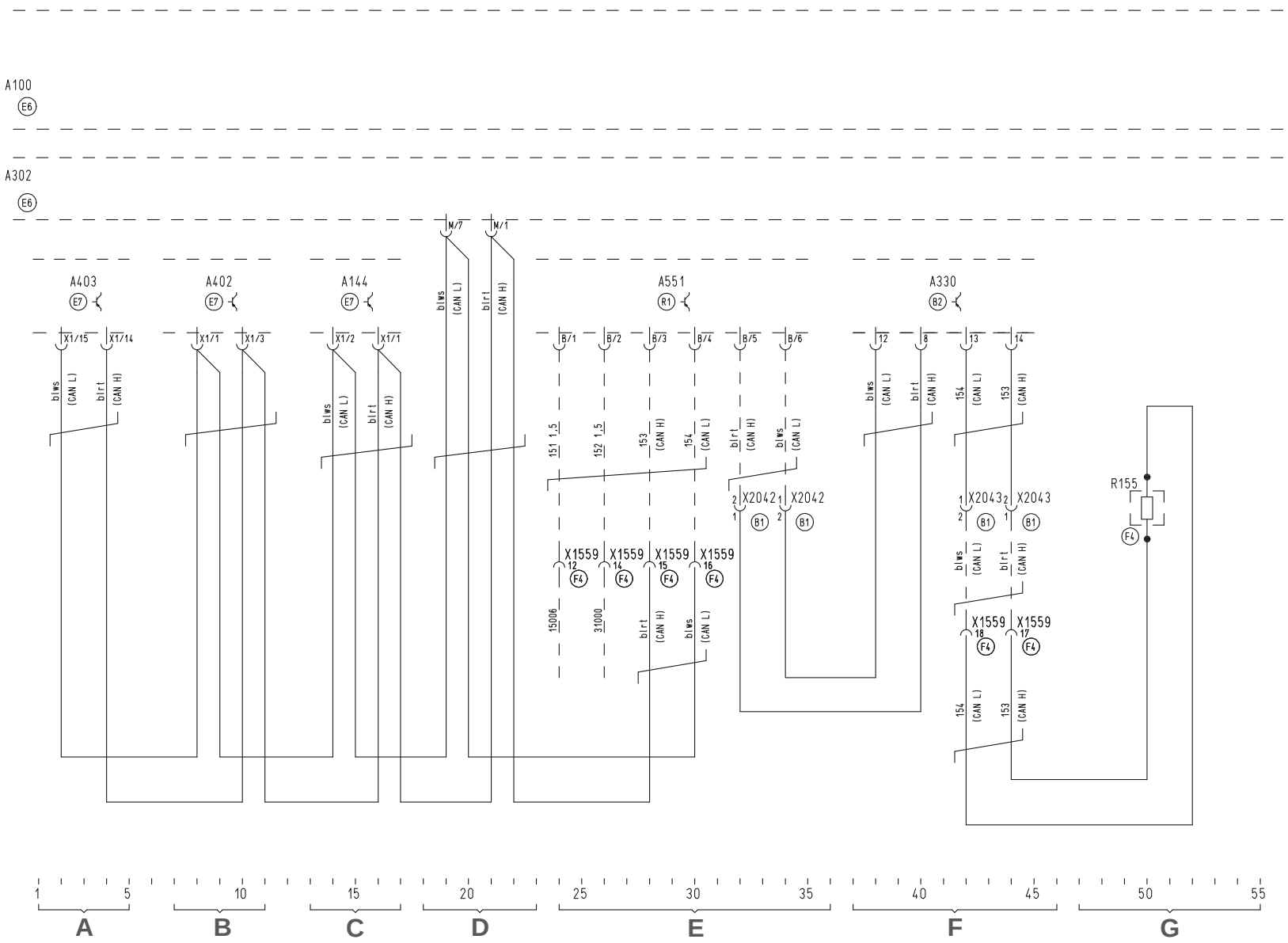
Wiring diagram no. **81.99192.2826** Sheet **1** of 1



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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

- (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

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

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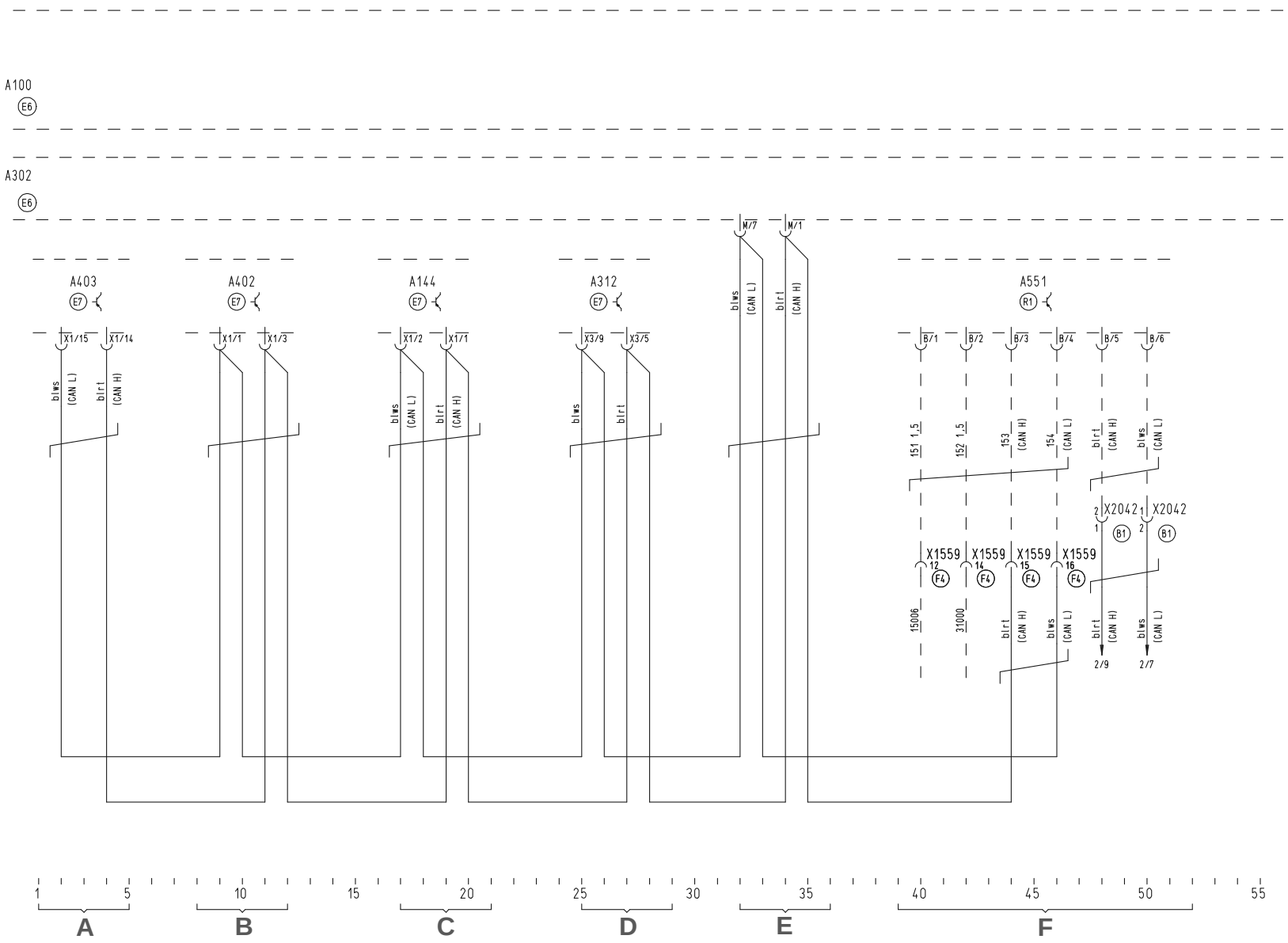
Wiring diagram no. **81.99192.2821** Sheet **1** of 2



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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
- (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

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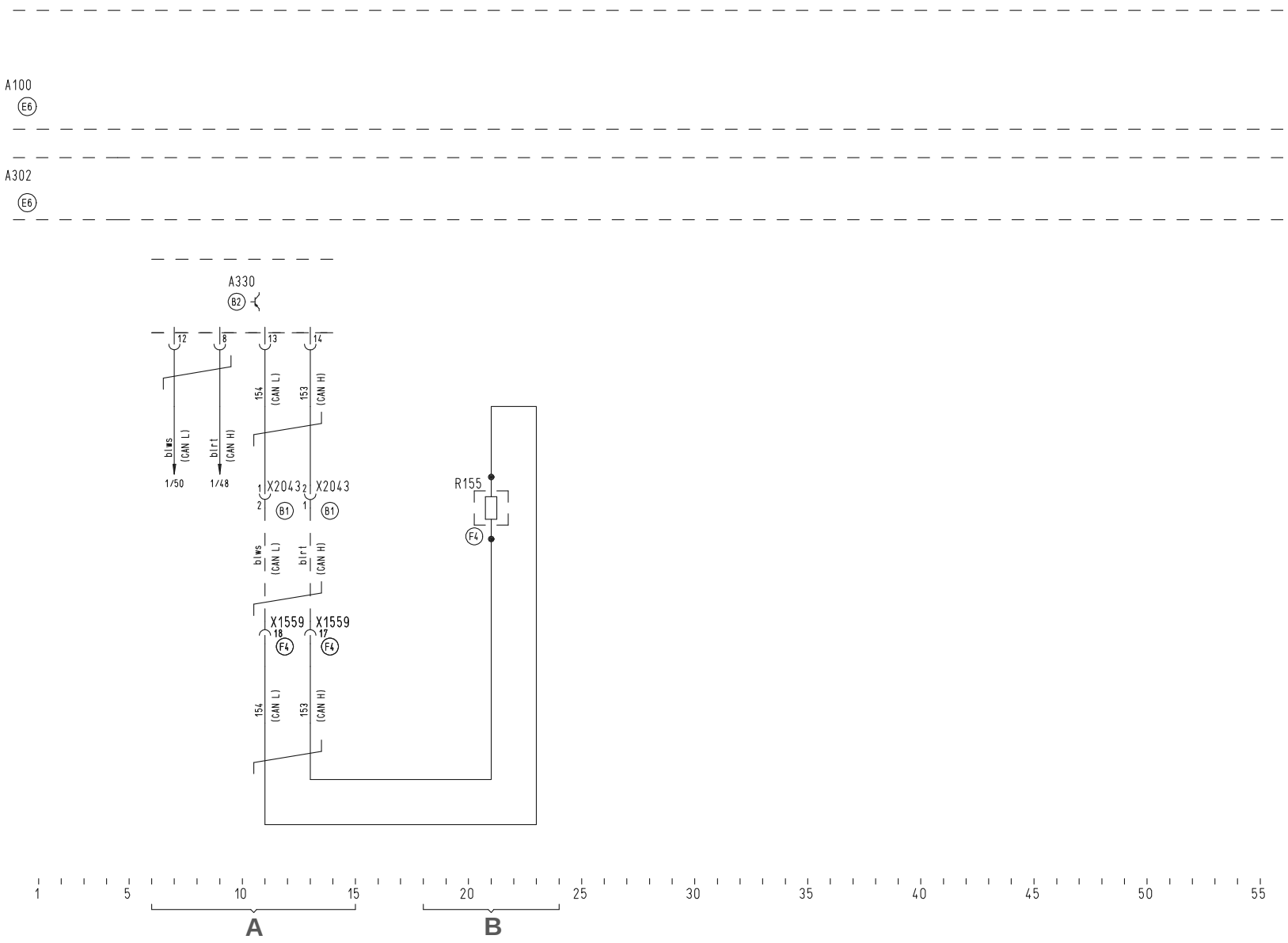
Wiring diagram no. **81.99192.2821** Sheet **2** of 2



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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

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

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

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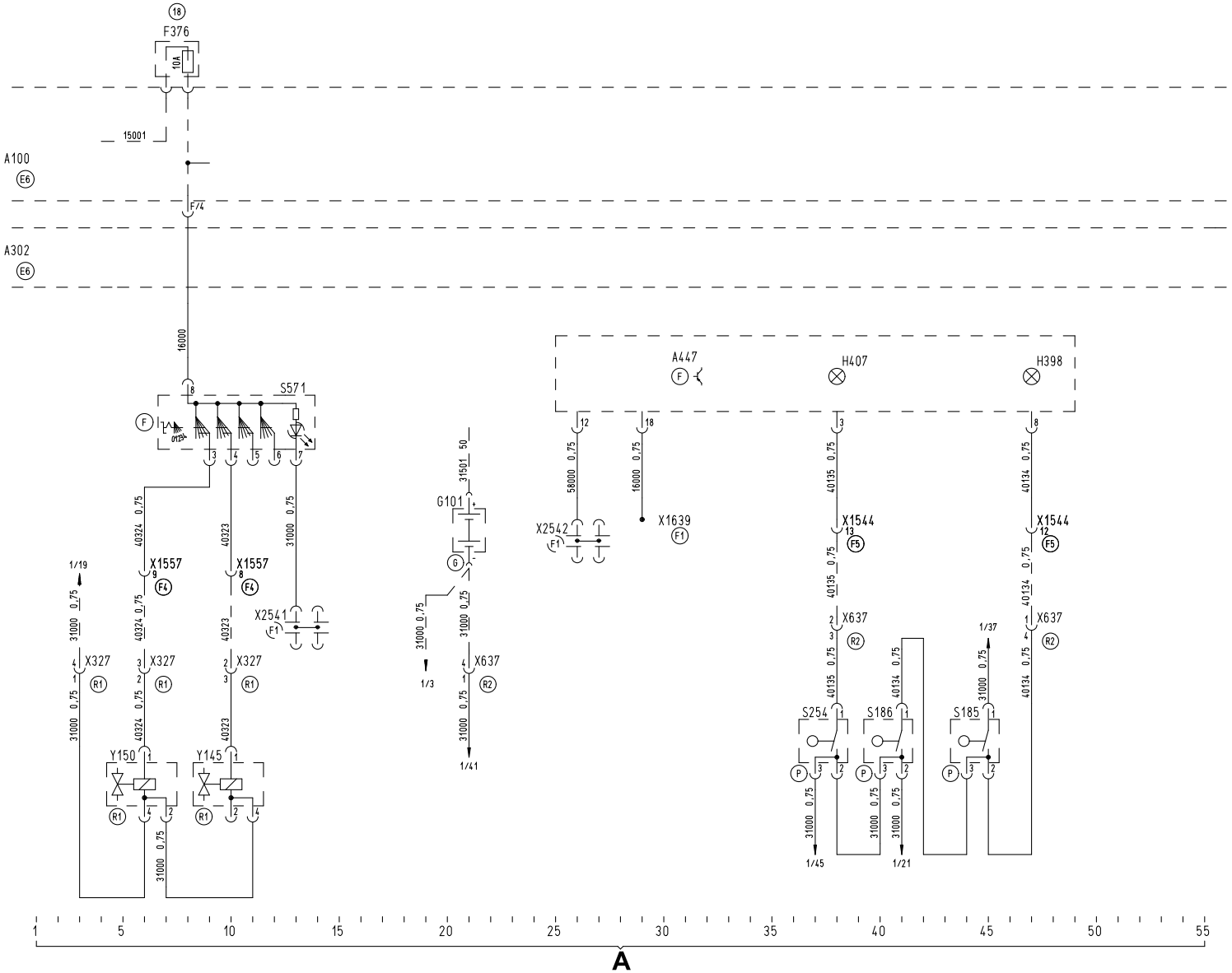
Wiring diagram no. **81.99192.1366** Sheet **1** of 1



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Differential lock transverse, rear axle

Legend

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

A = Differential lock

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

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

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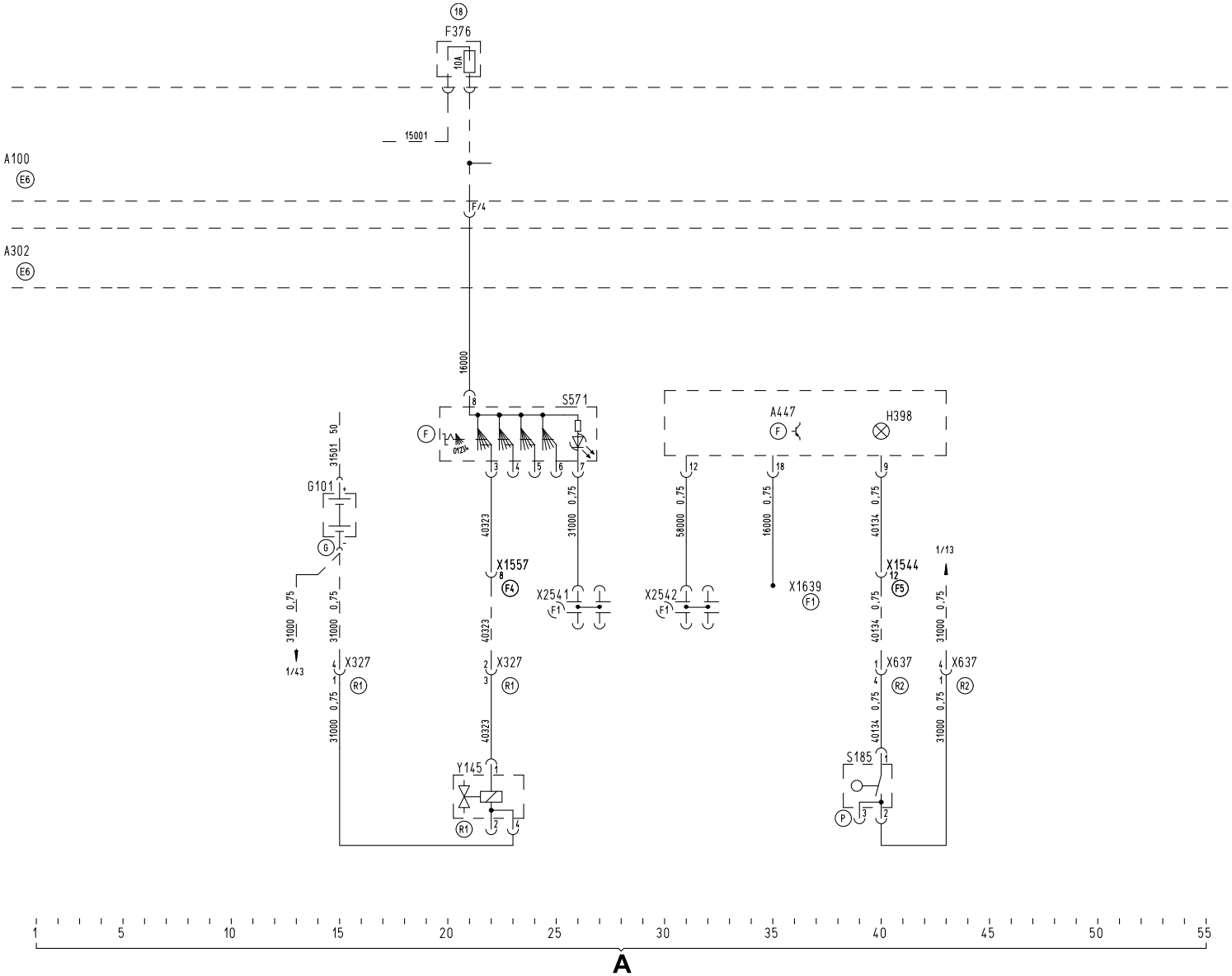
Wiring diagram no. **81.99192.1365** Sheet **1** of 1



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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

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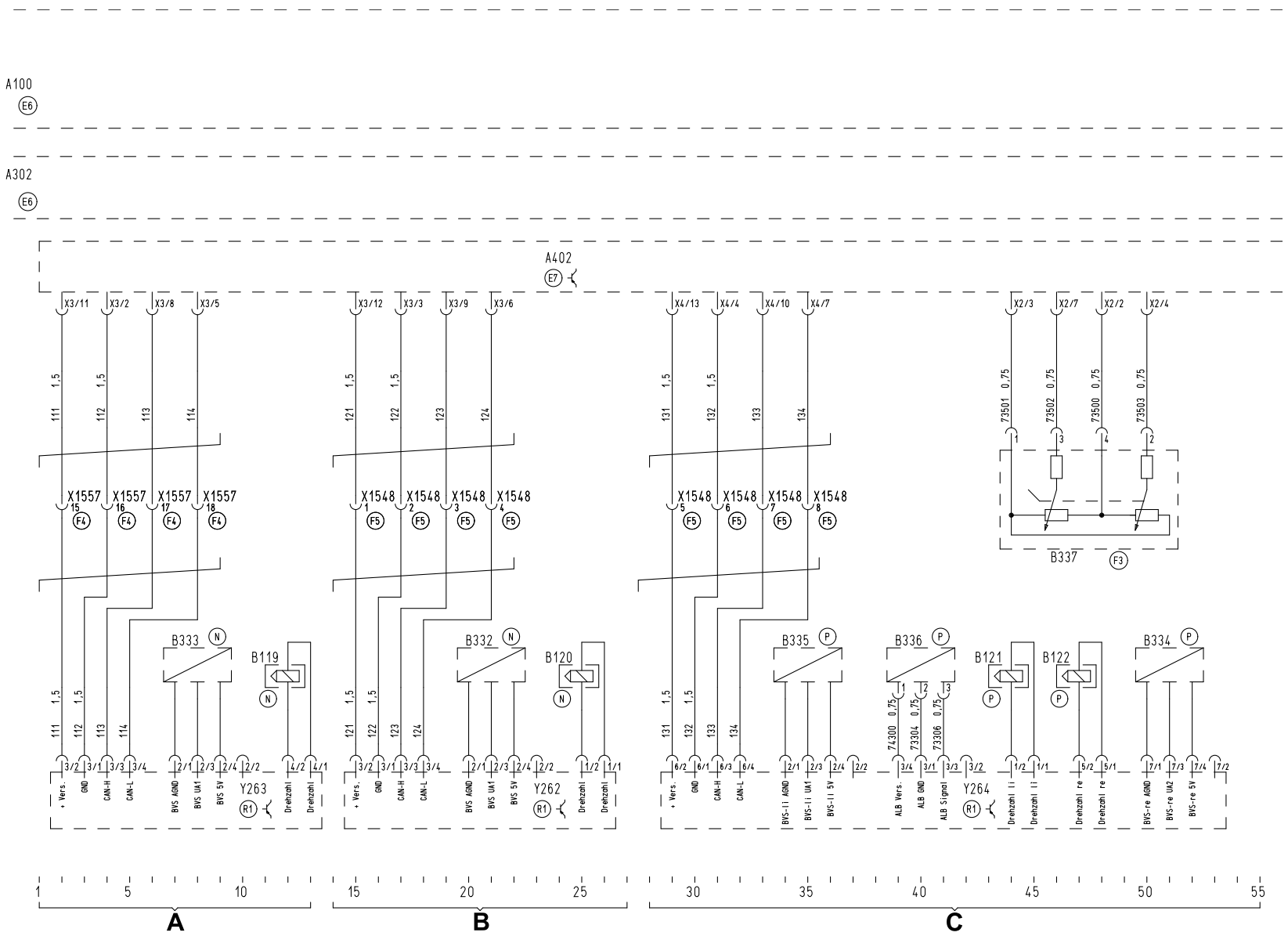
Wiring diagram no. **81.99192.2987** Sheet **1** of 3



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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

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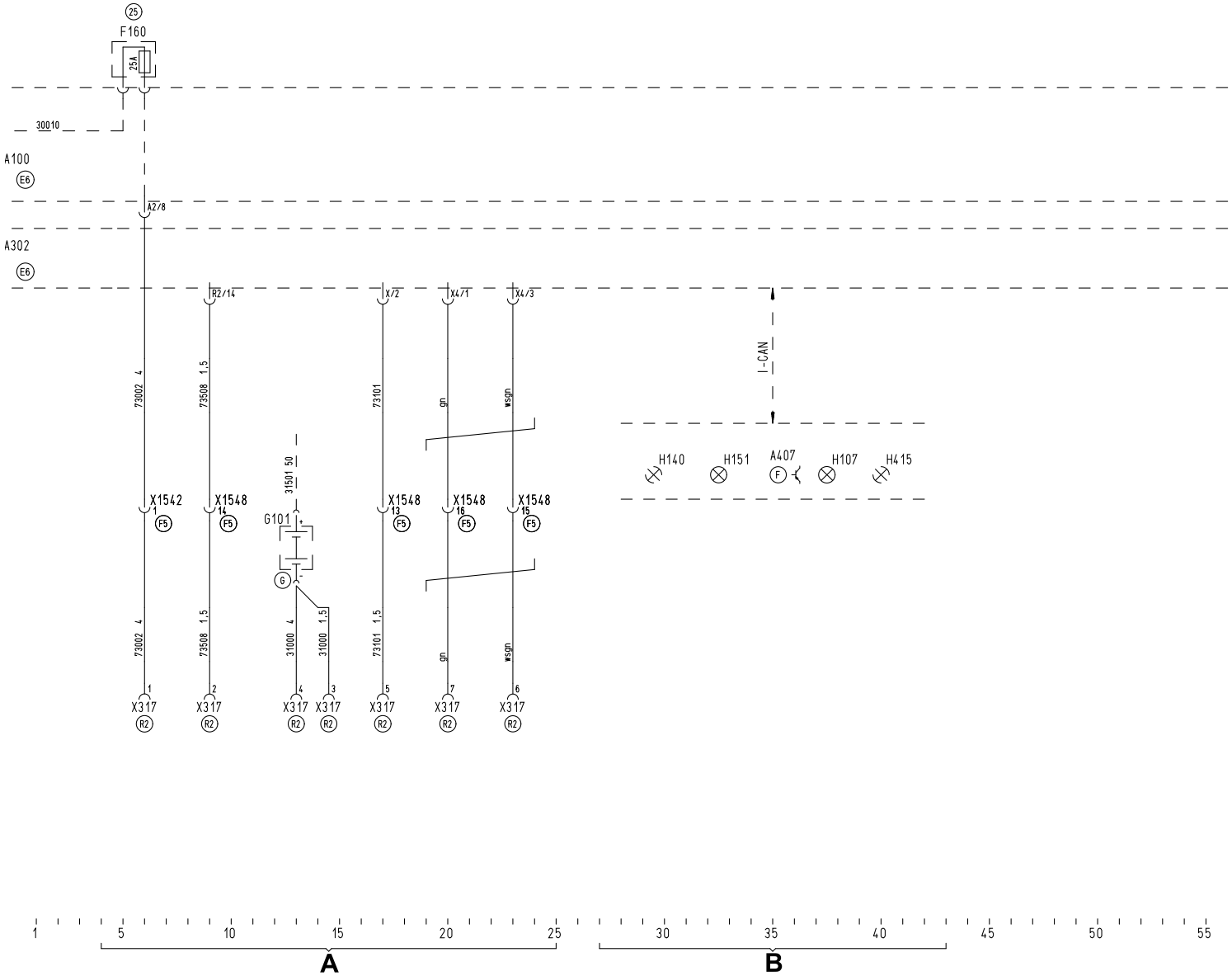
Wiring diagram no. **81.99192.2987** Sheet **2** of 3



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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
- (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

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

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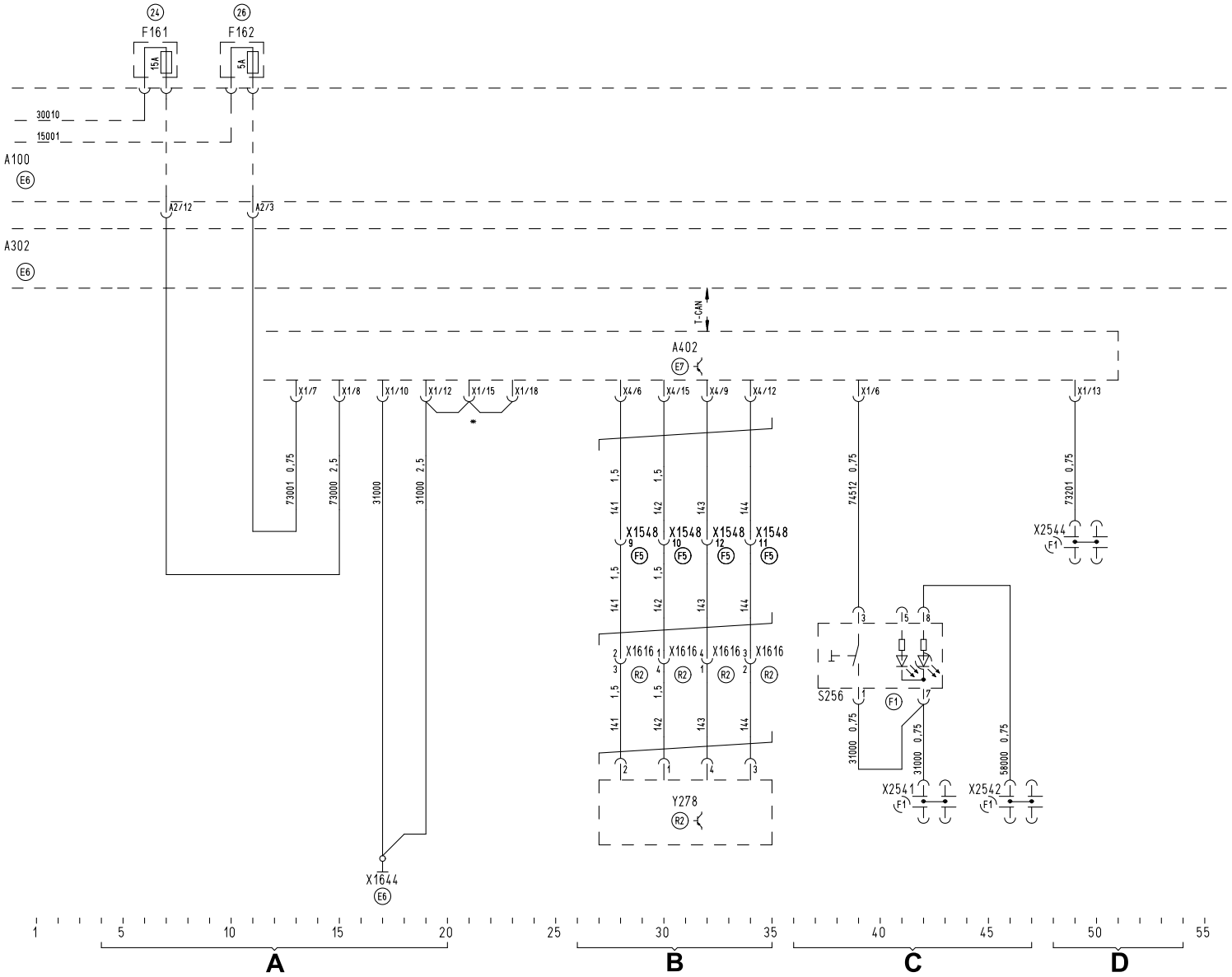
Wiring diagram no. **81.99192.2987** Sheet **3** of 3



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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

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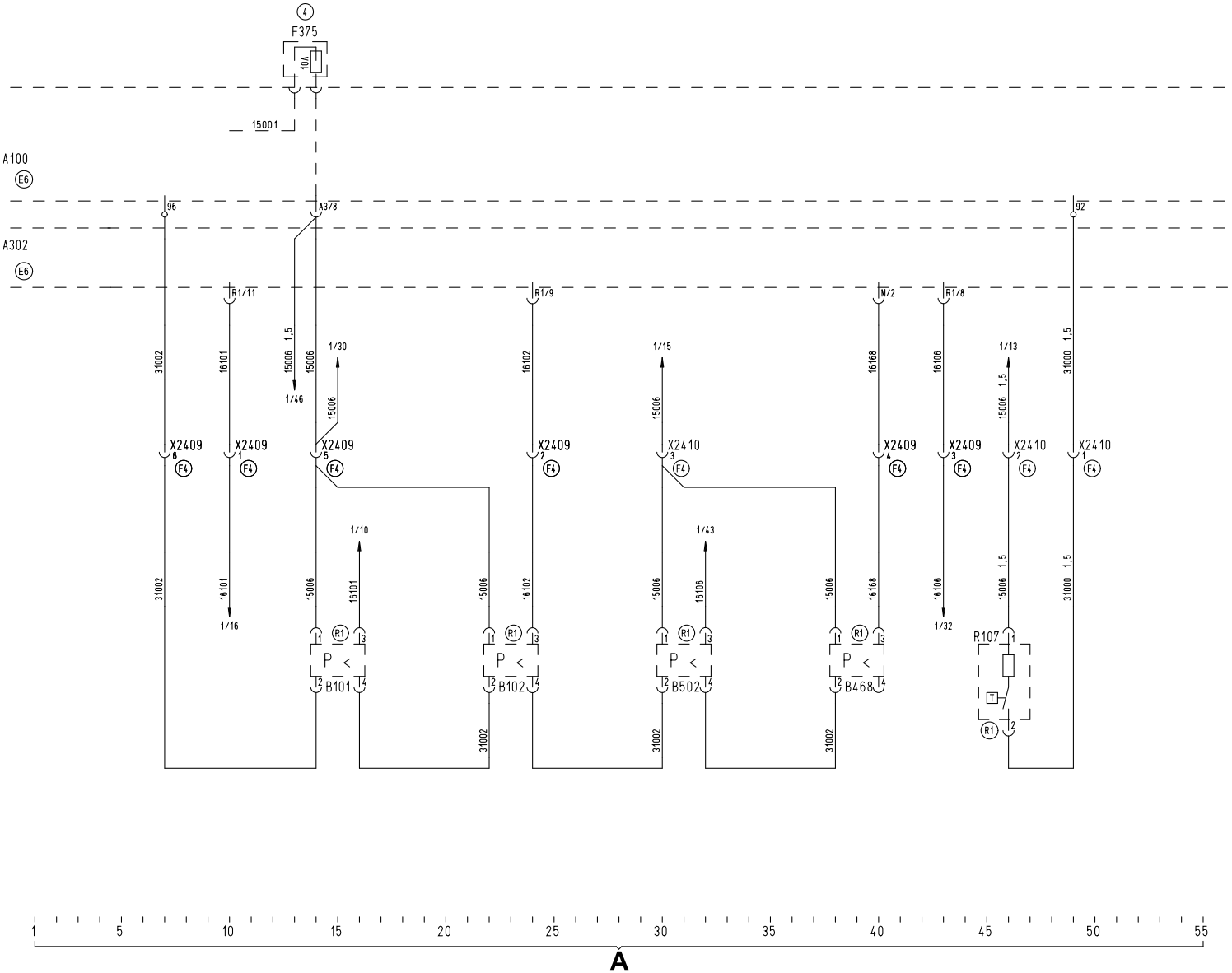
Wiring diagram no. **81.99192.2810** Sheet **1** of 1



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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

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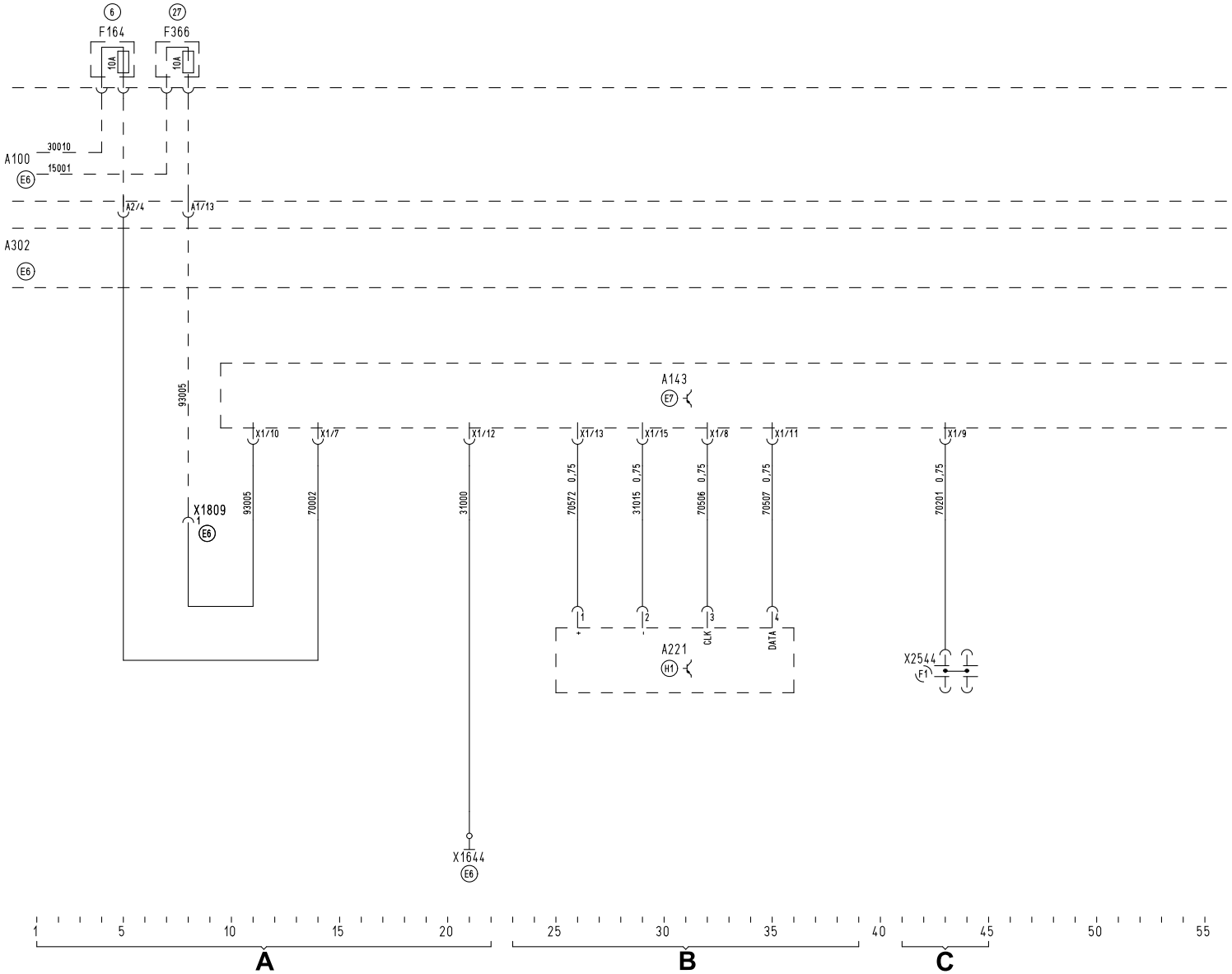
Wiring diagram no. **81.99192.1337** Sheet **1** of 2



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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

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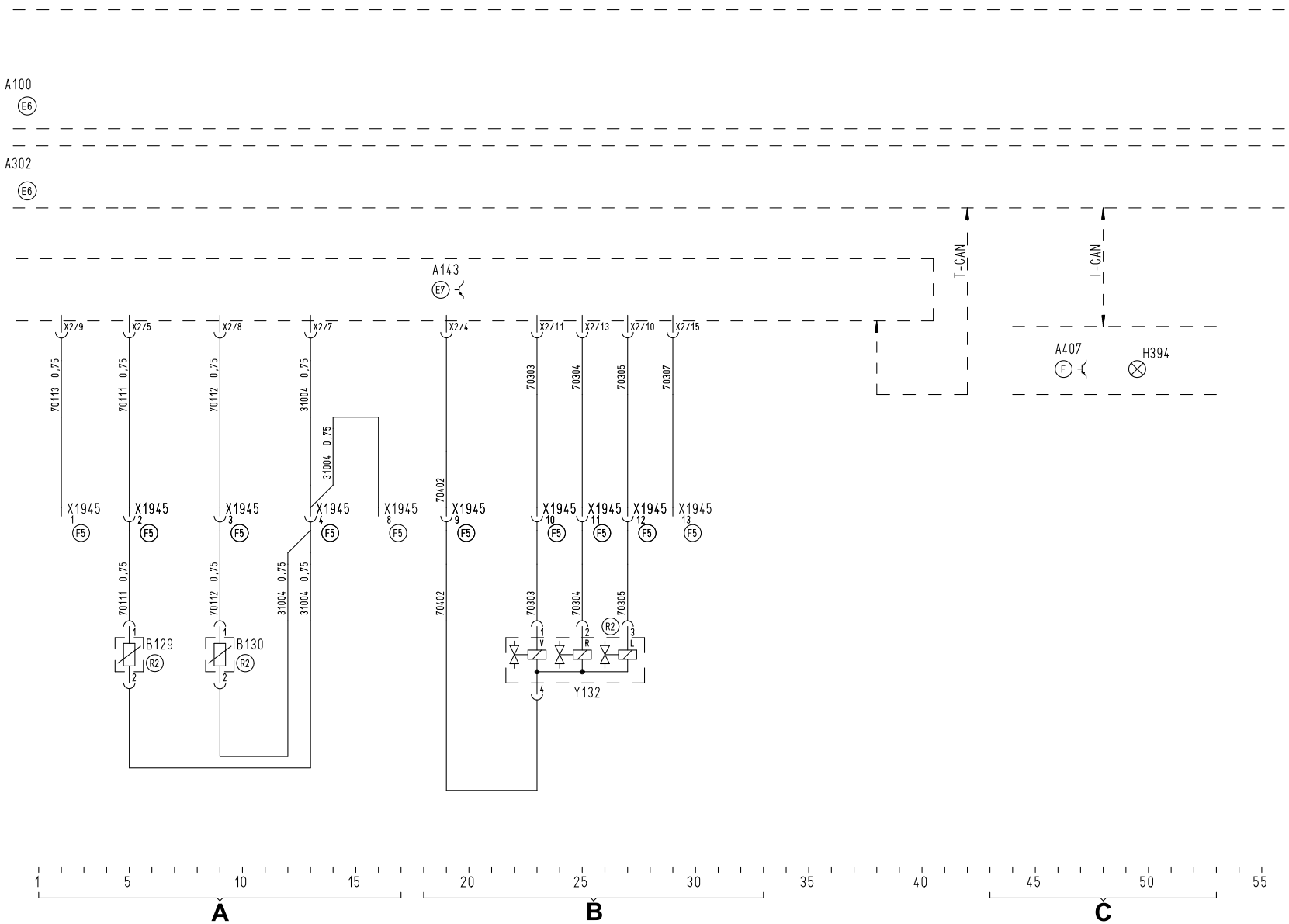
Wiring diagram no. **81.99192.1337** Sheet **2** of 2



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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

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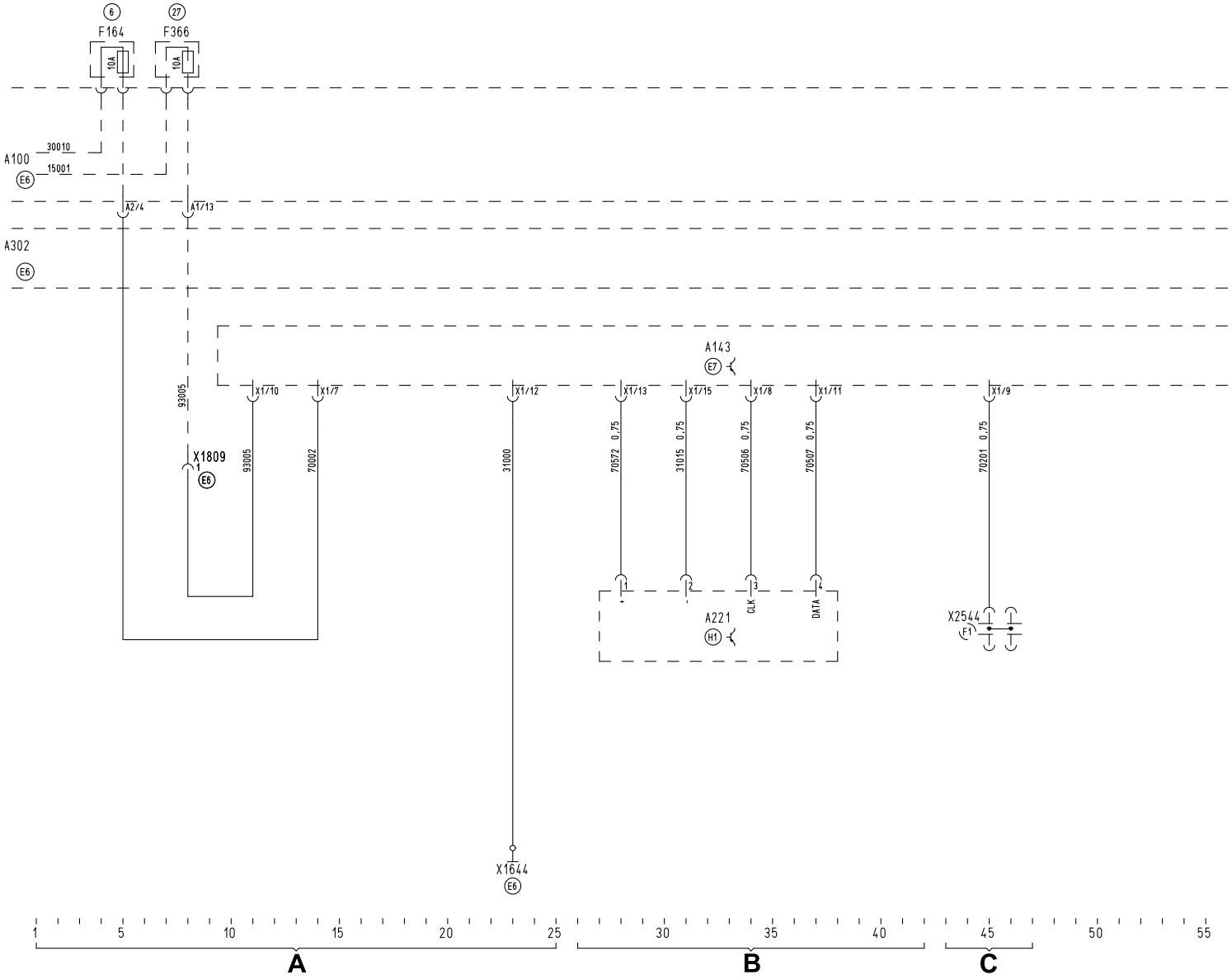
Wiring diagram no. **81.99192.1336** Sheet **1** of 2



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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

- (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

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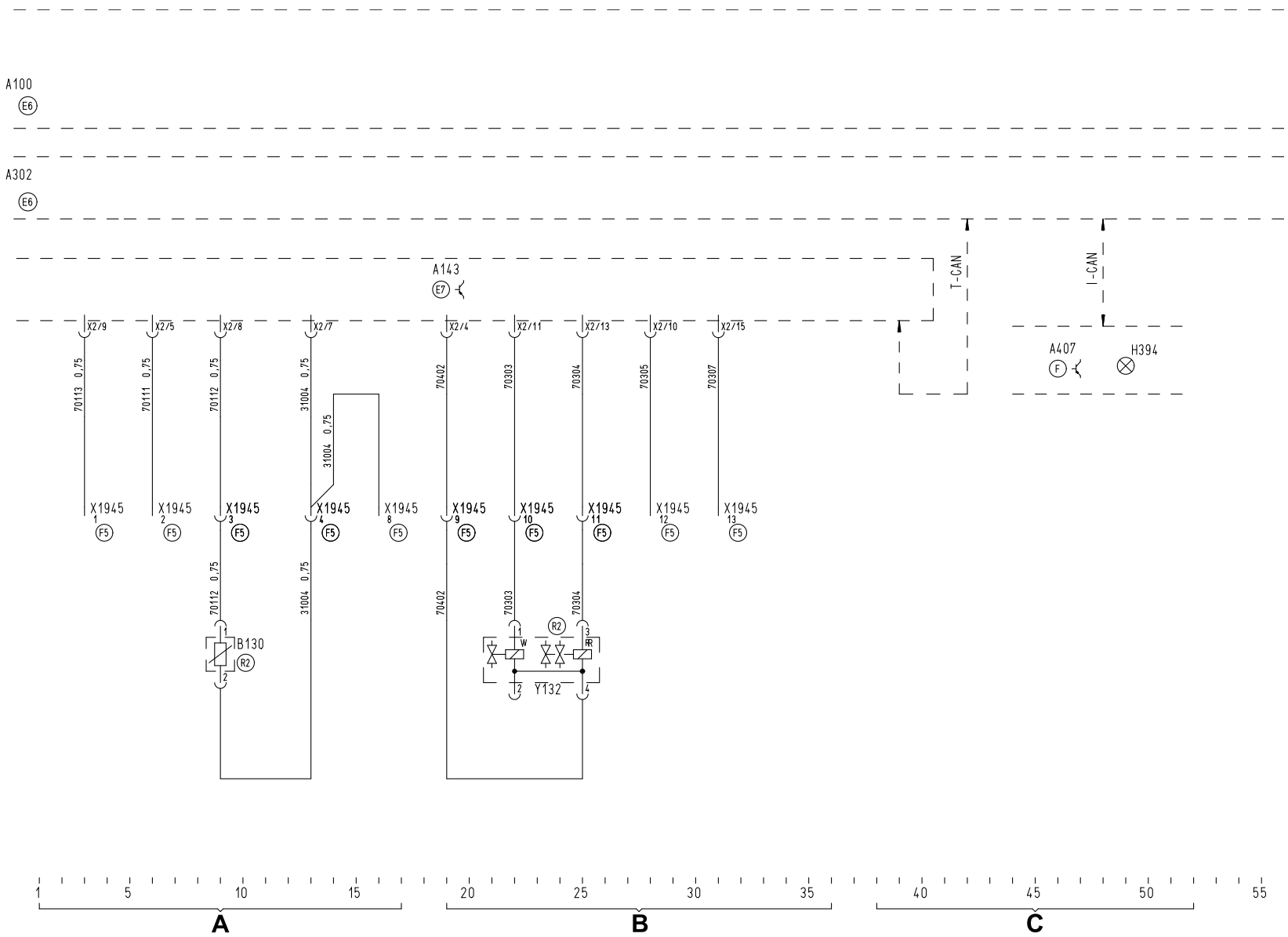
Wiring diagram no. **81.99192.1336** Sheet **2** of 2



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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
- (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

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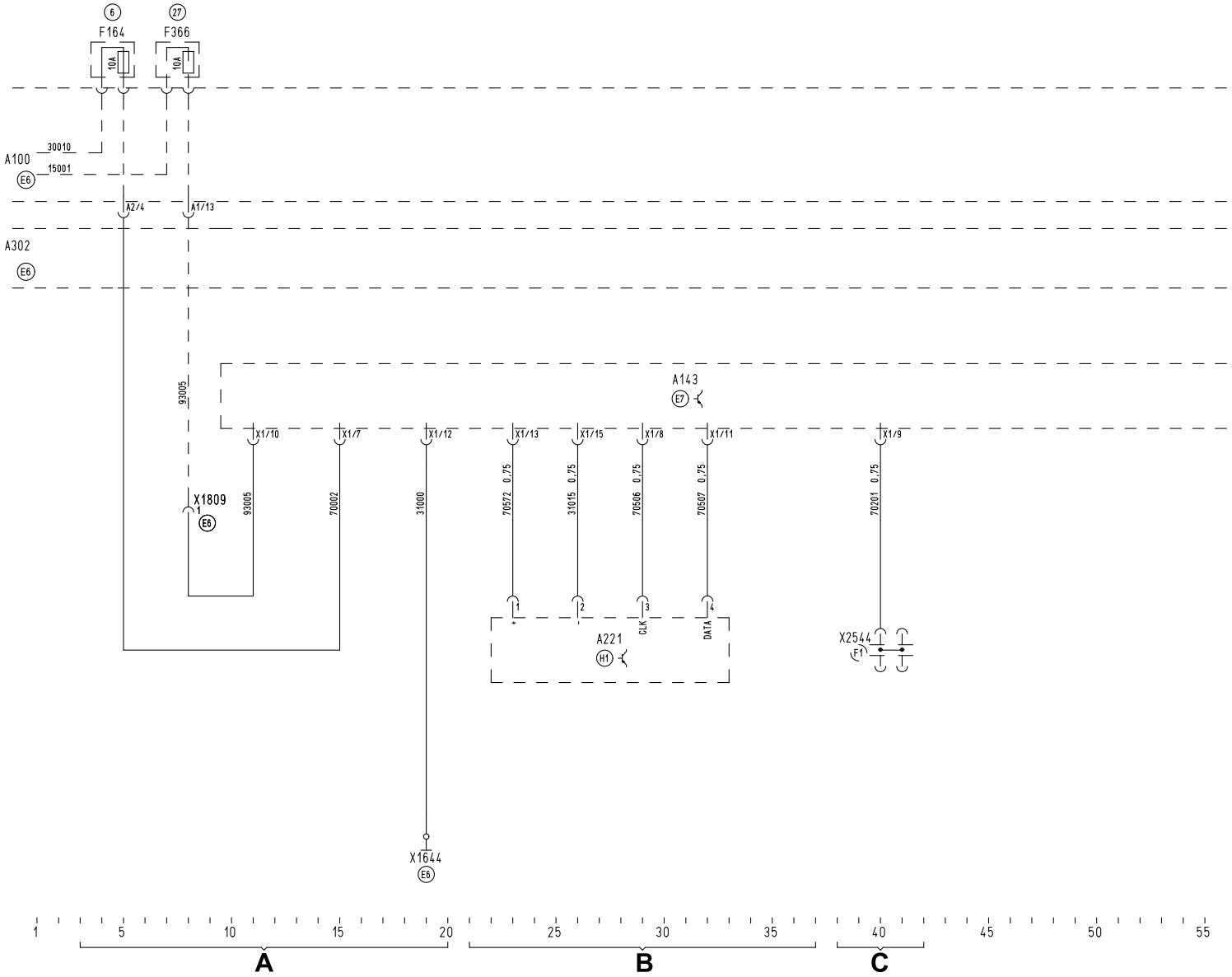
Wiring diagram no. **81.99192.1338** Sheet **1** of 2



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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
- (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

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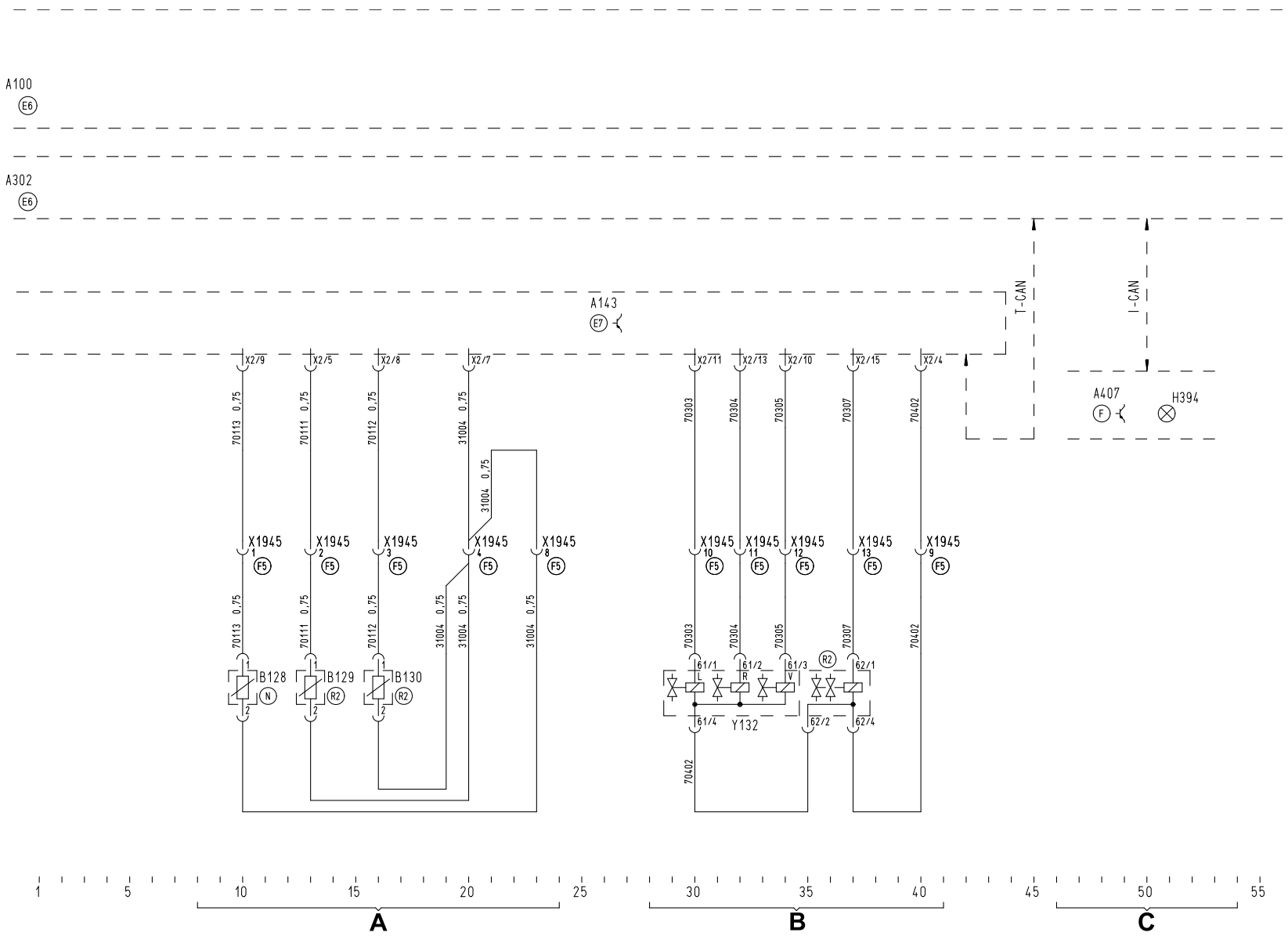
Wiring diagram no. **81.99192.1338** Sheet **2** of 2



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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
- (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

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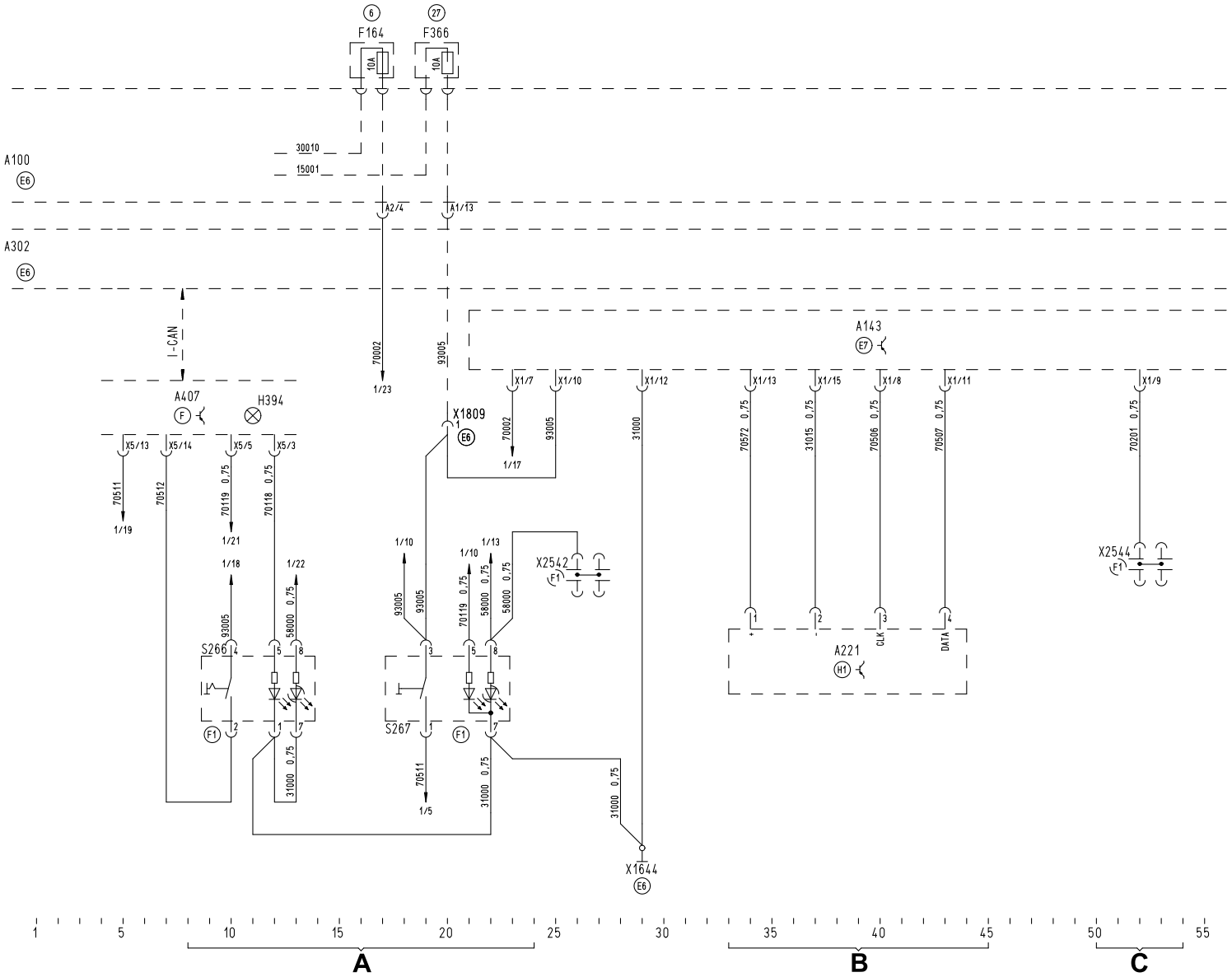
Wiring diagram no. **81.99192.1339** Sheet **1** of 2



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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
- (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

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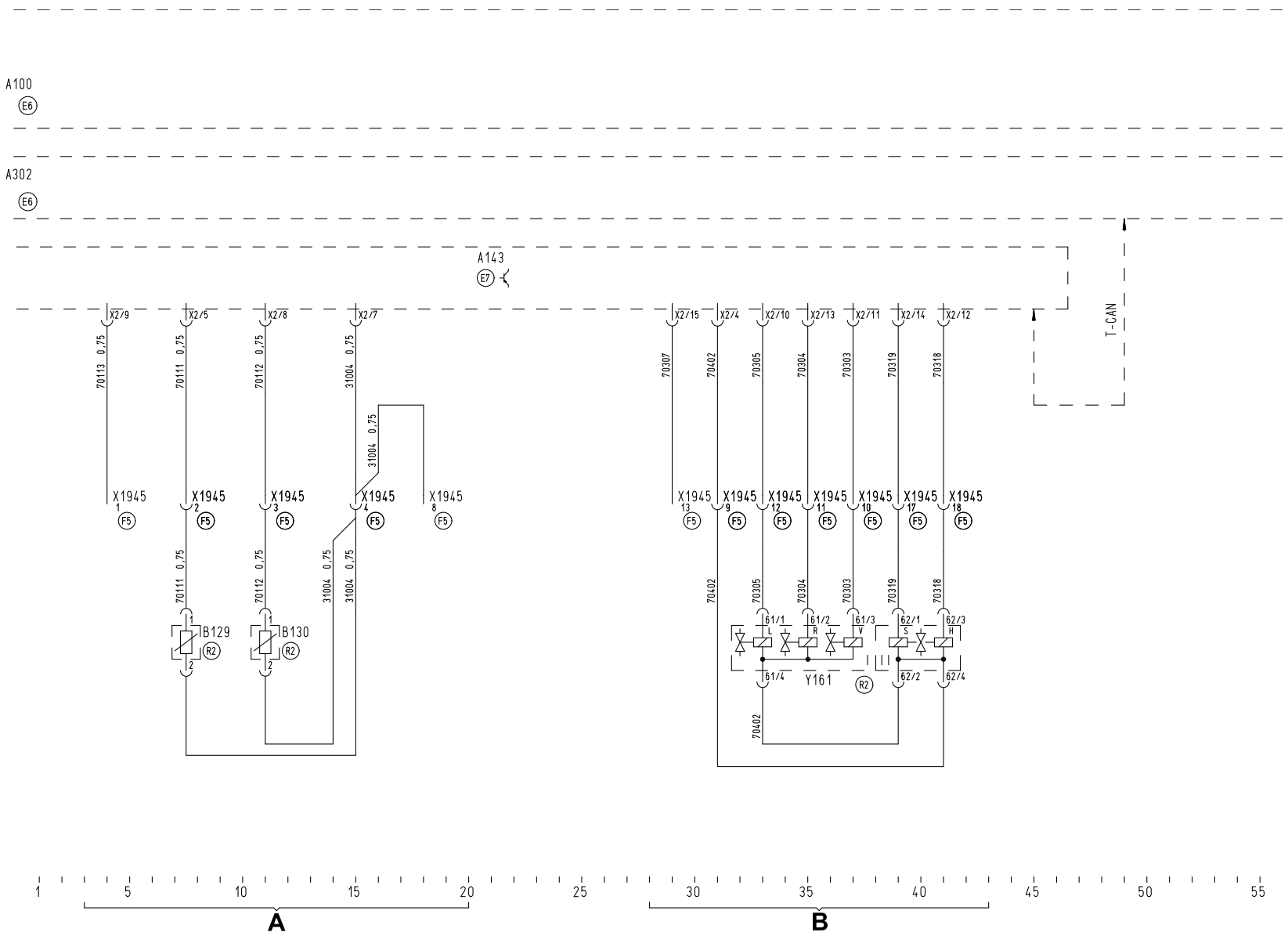
Wiring diagram no. **81.99192.1339** Sheet **2** of 2



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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
- (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

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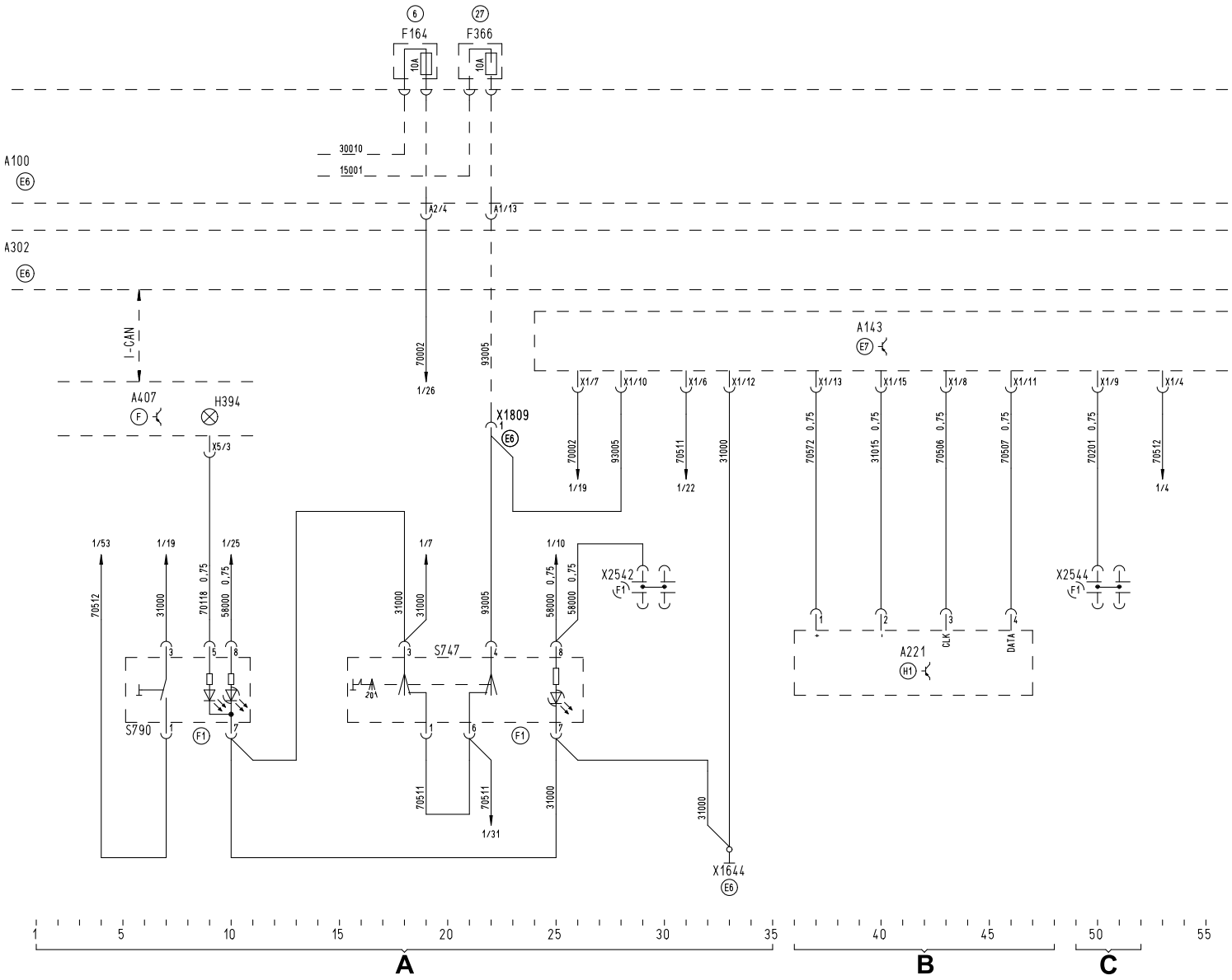
Wiring diagram no. **81.99192.1348** Sheet **1** of 2



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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

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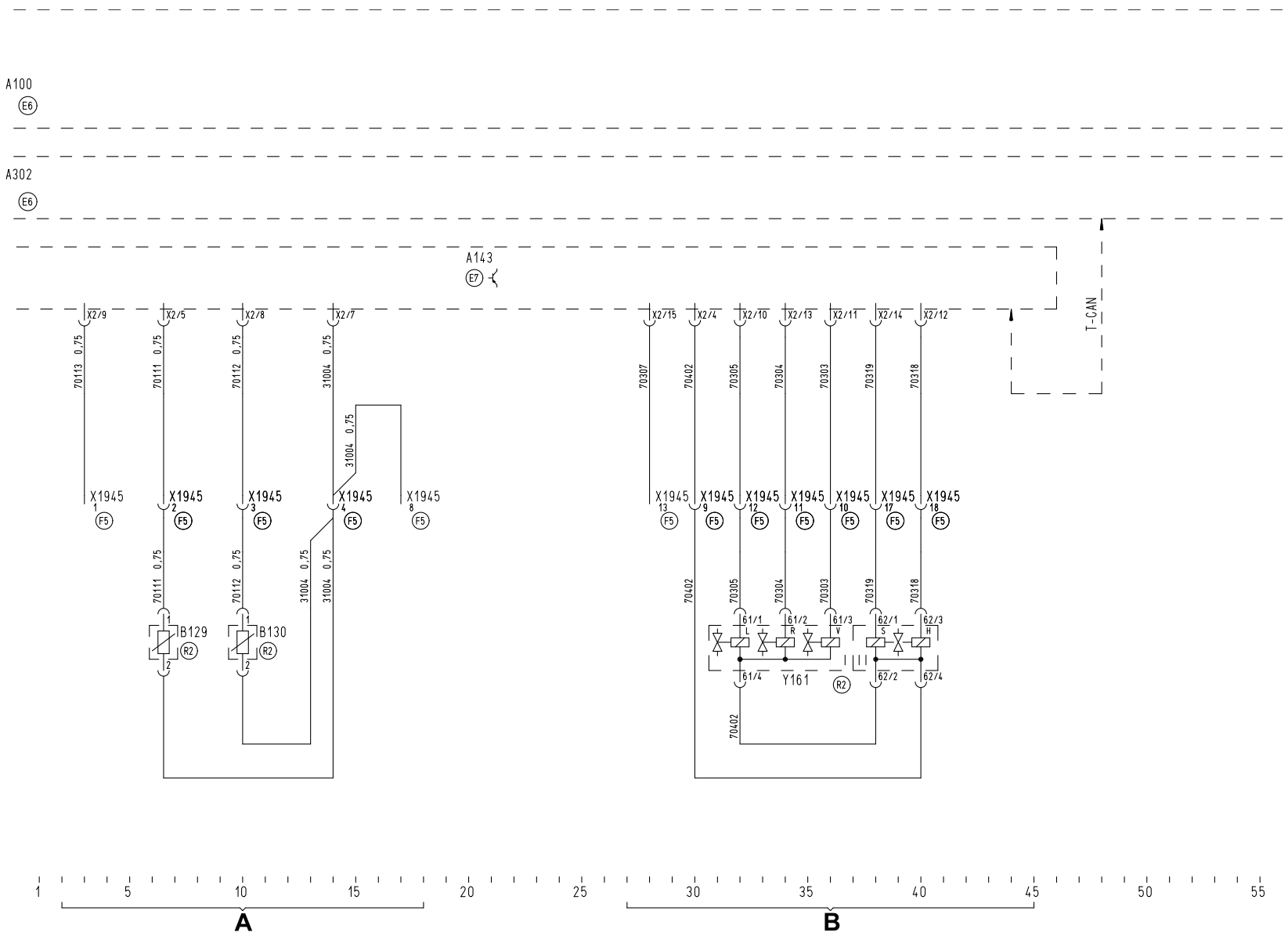
Wiring diagram no. **81.99192.1348** Sheet **2** of 2



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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
- (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

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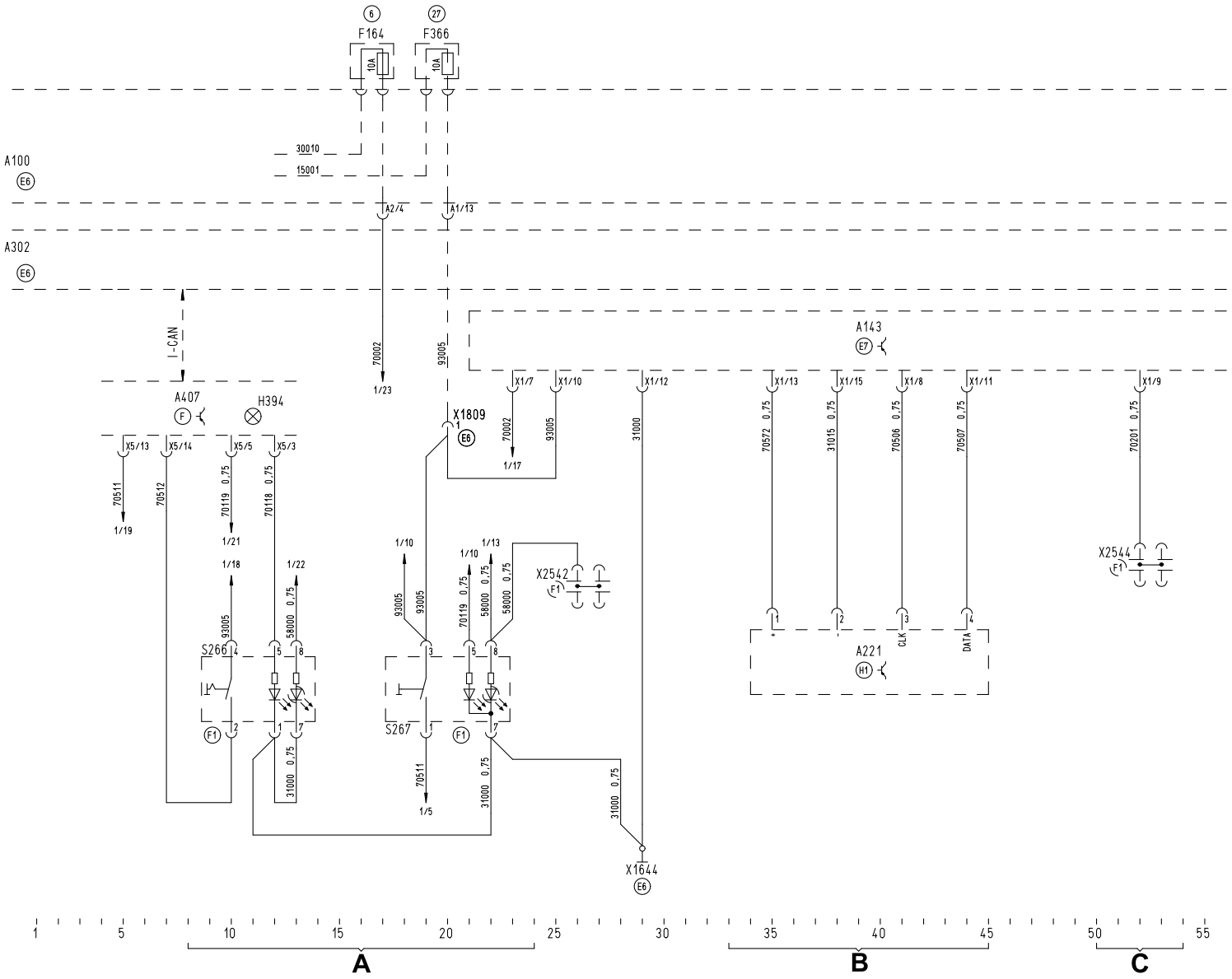
Wiring diagram no. **81.99192.1340** Sheet **1** of 2



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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

- (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

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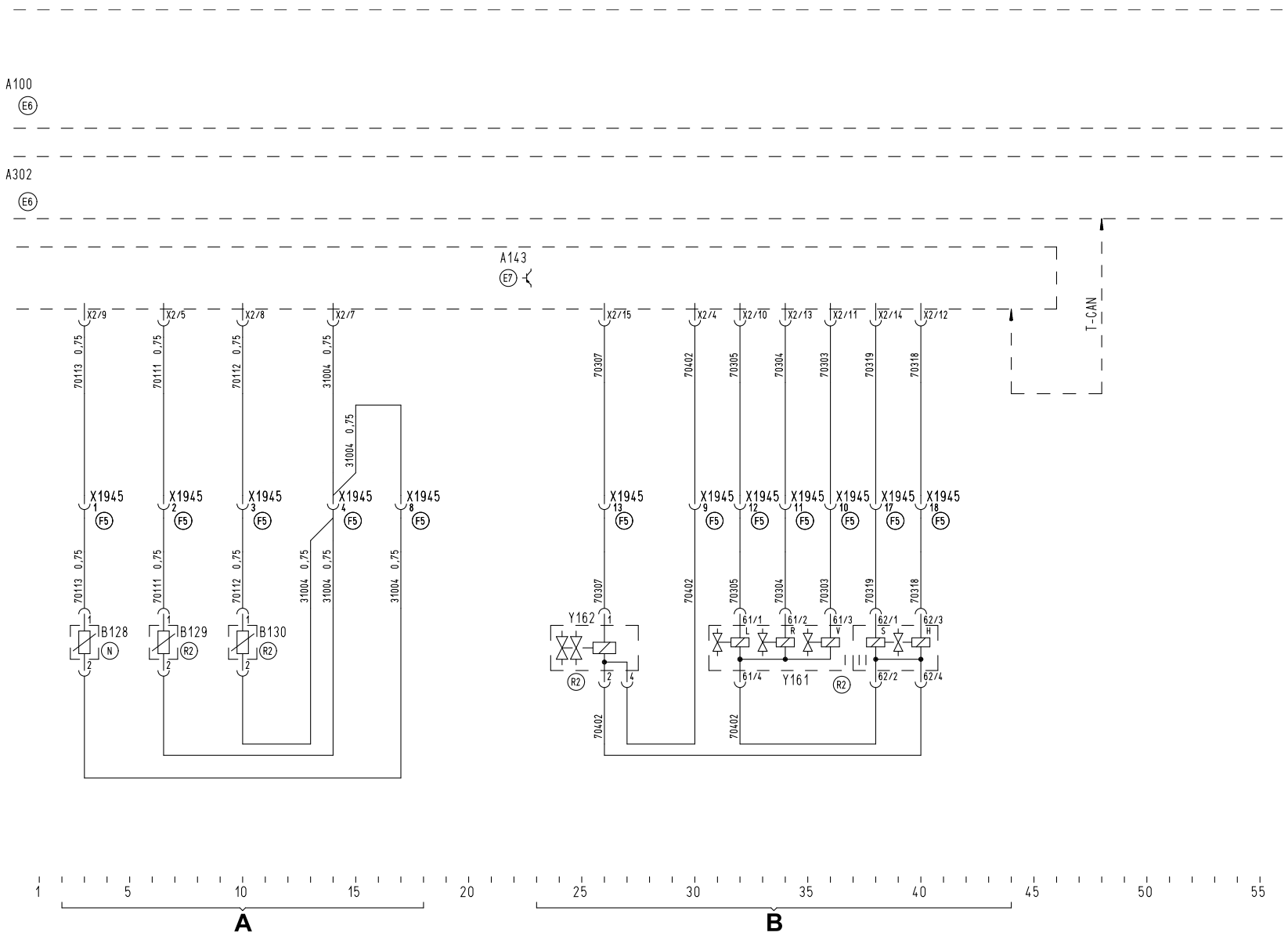
Wiring diagram no. **81.99192.1340** Sheet **2** of 2



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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

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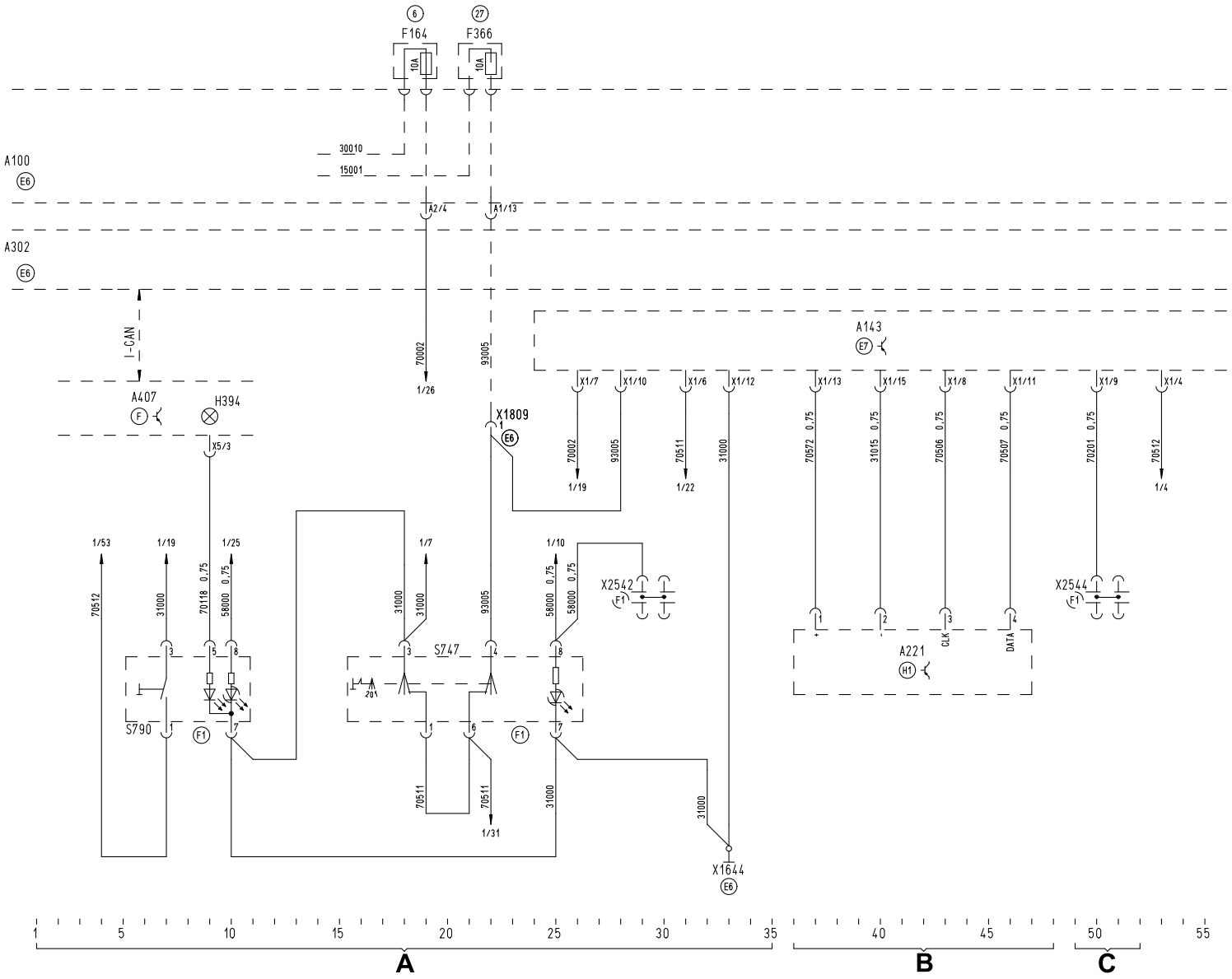
Wiring diagram no. **81.99192.1349** Sheet **1** of 2



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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

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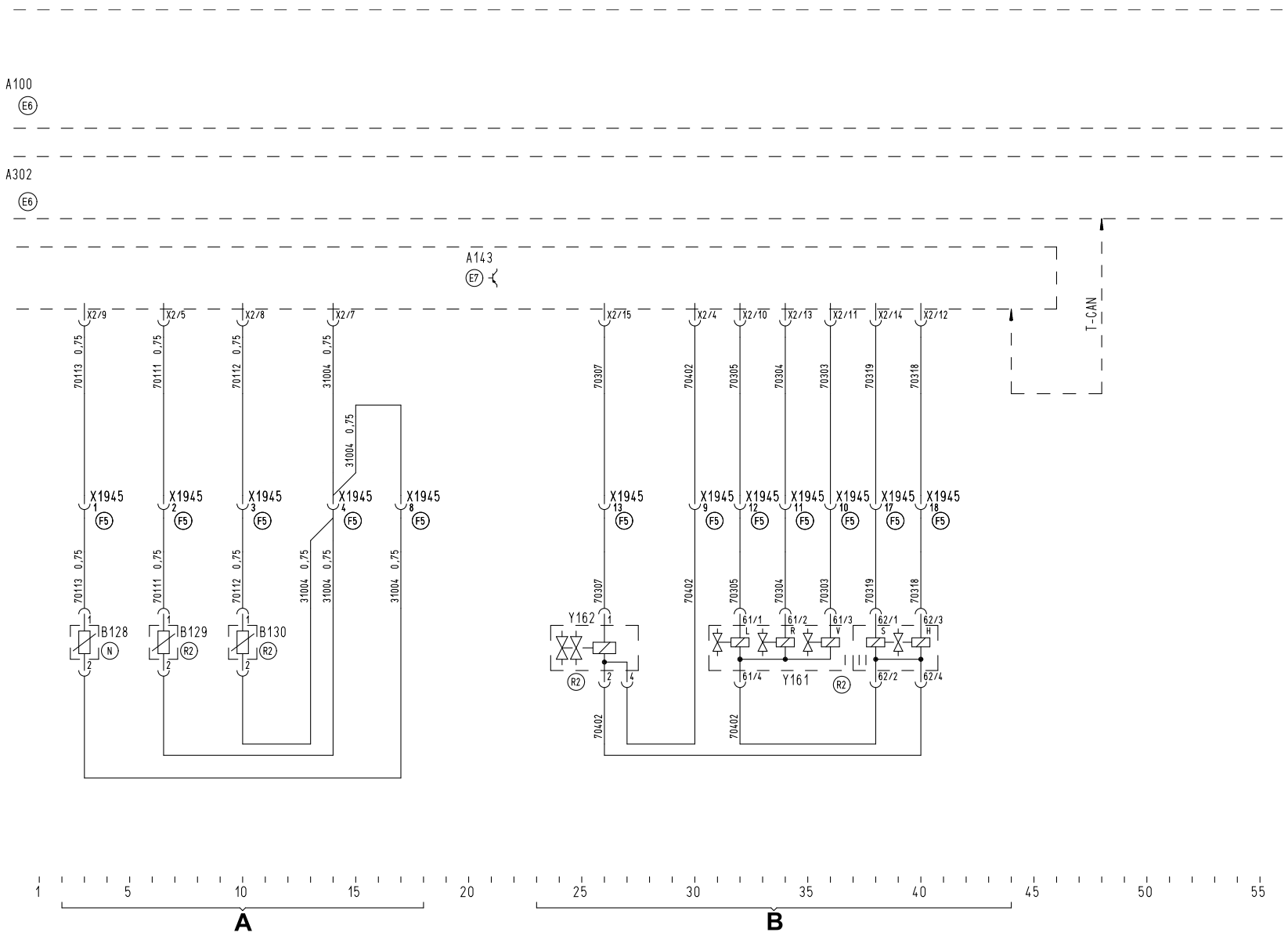
Wiring diagram no. **81.99192.1349** Sheet **2** of 2



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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
- (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

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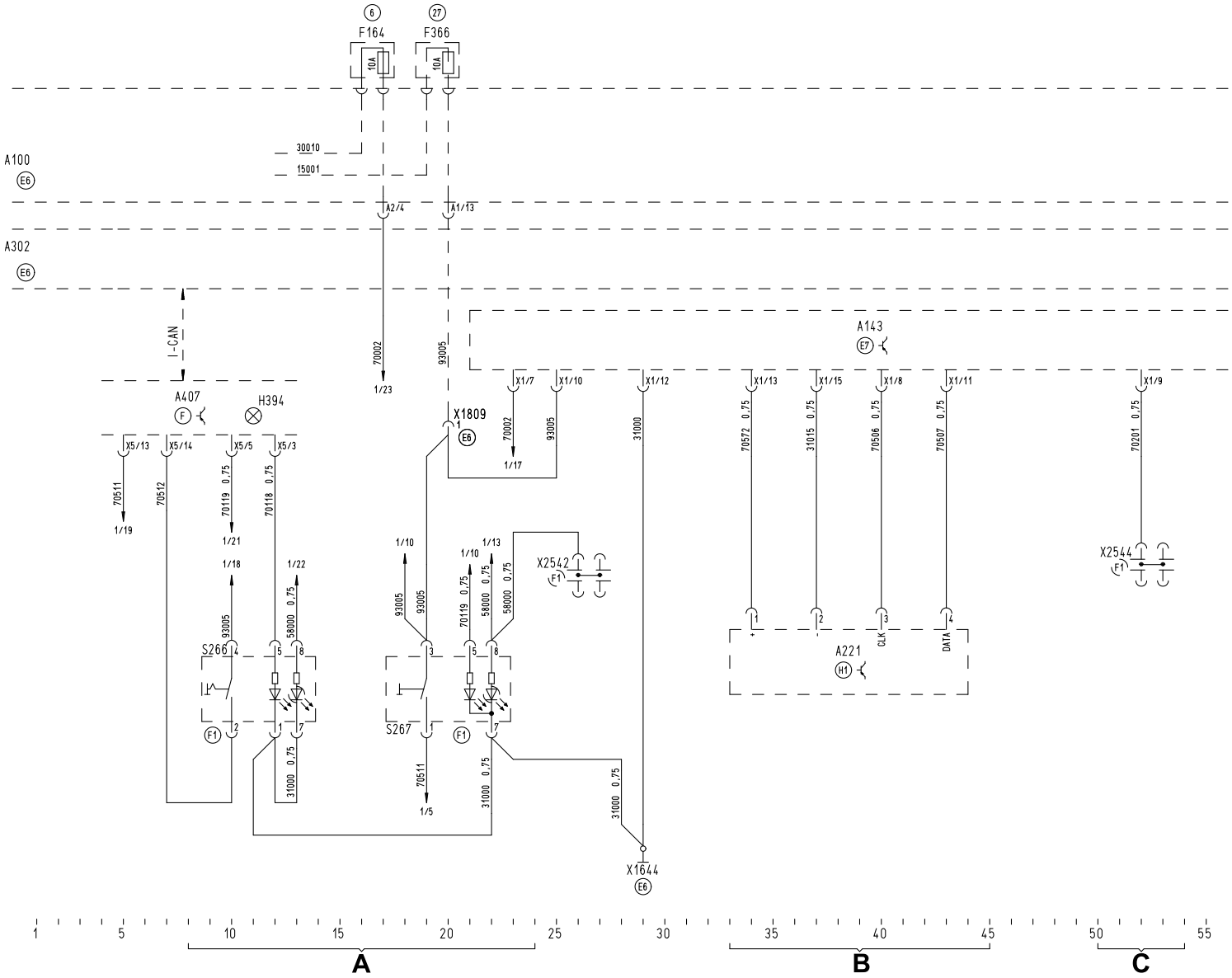
Wiring diagram no. **81.99192.1341** Sheet **1** of 2



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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

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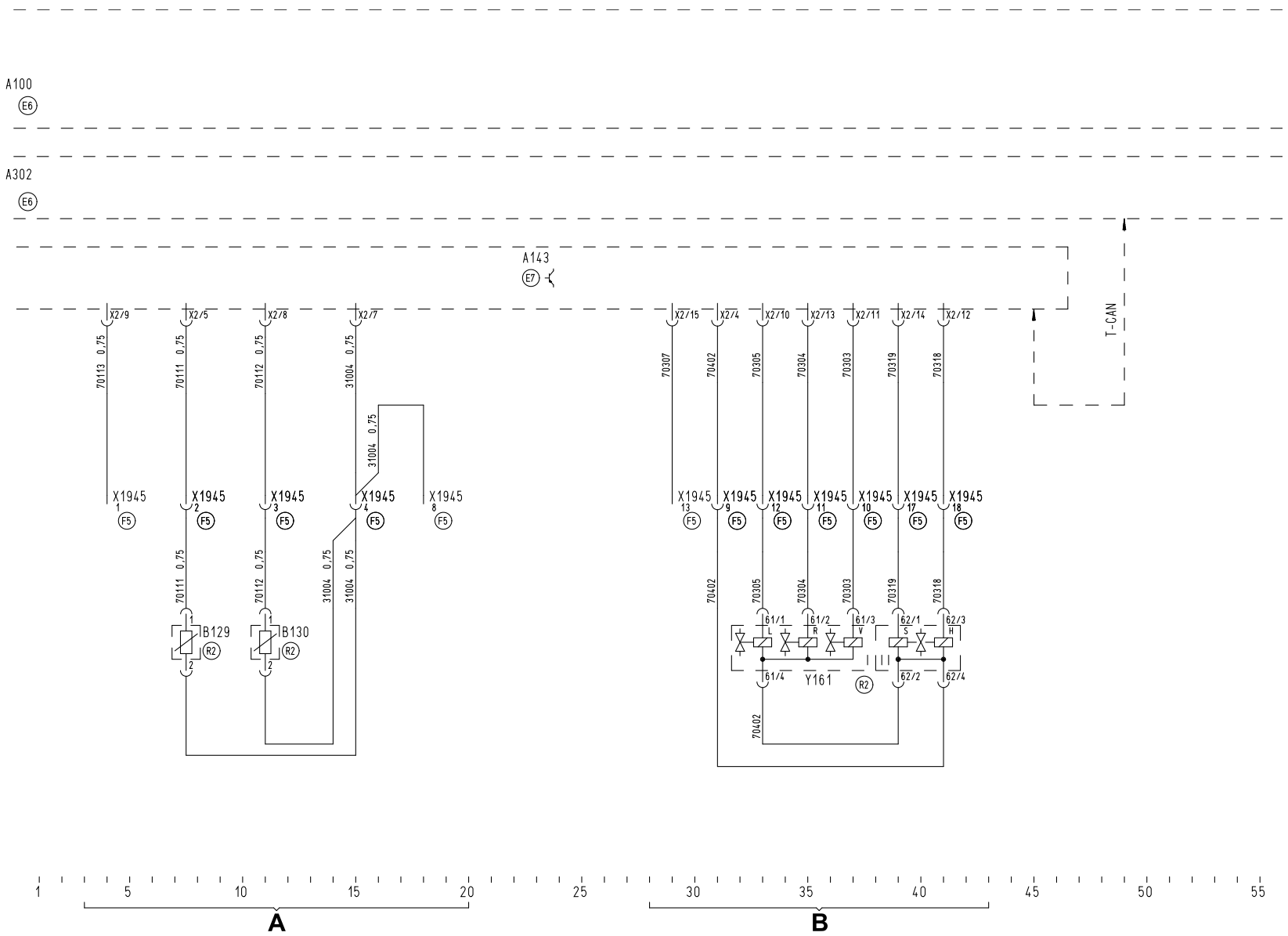
Wiring diagram no. **81.99192.1341** Sheet **2** of 2



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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
- (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

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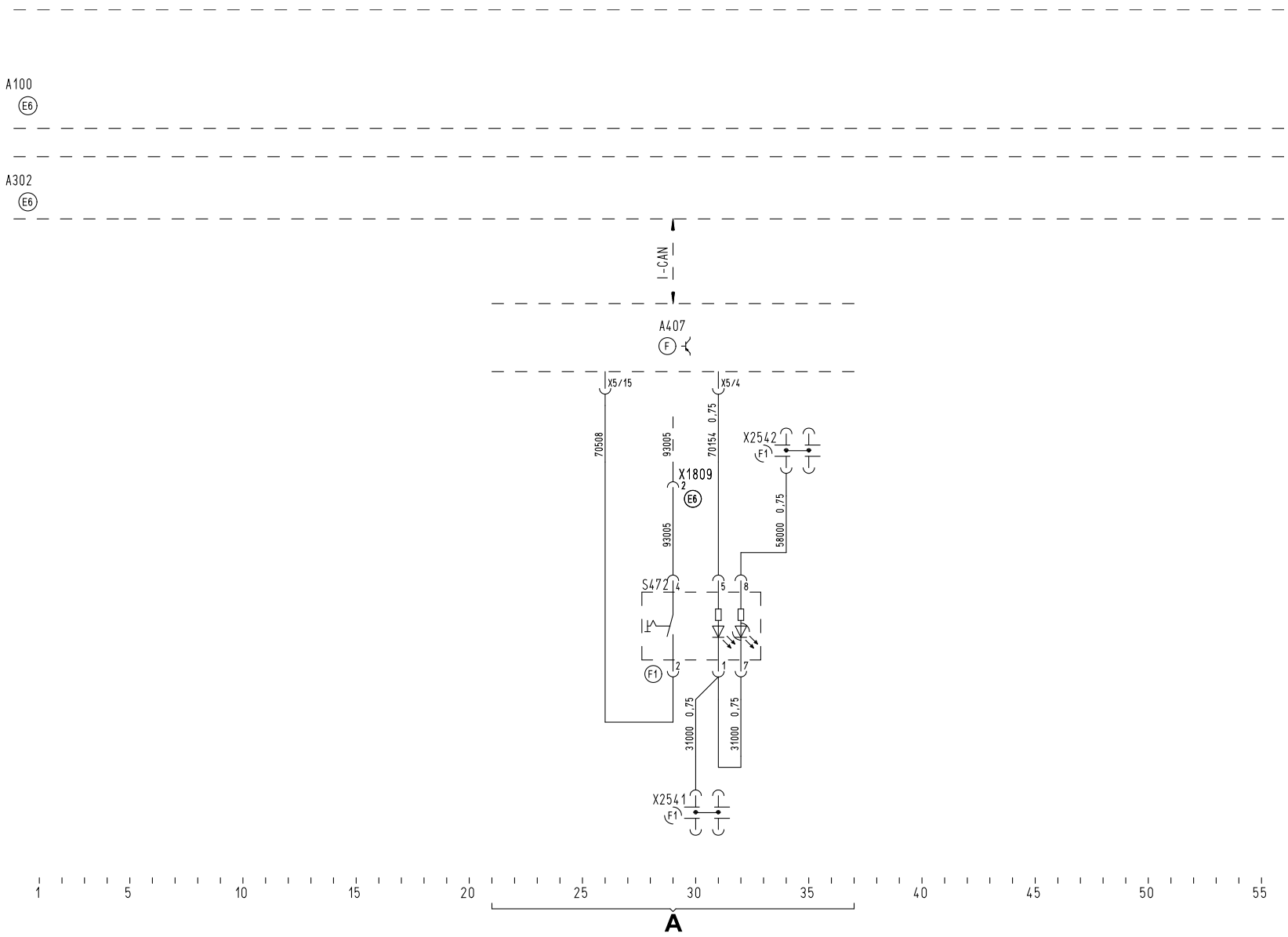
Wiring diagram no. **81.99192.1368** Sheet **1** of 1



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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
- (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

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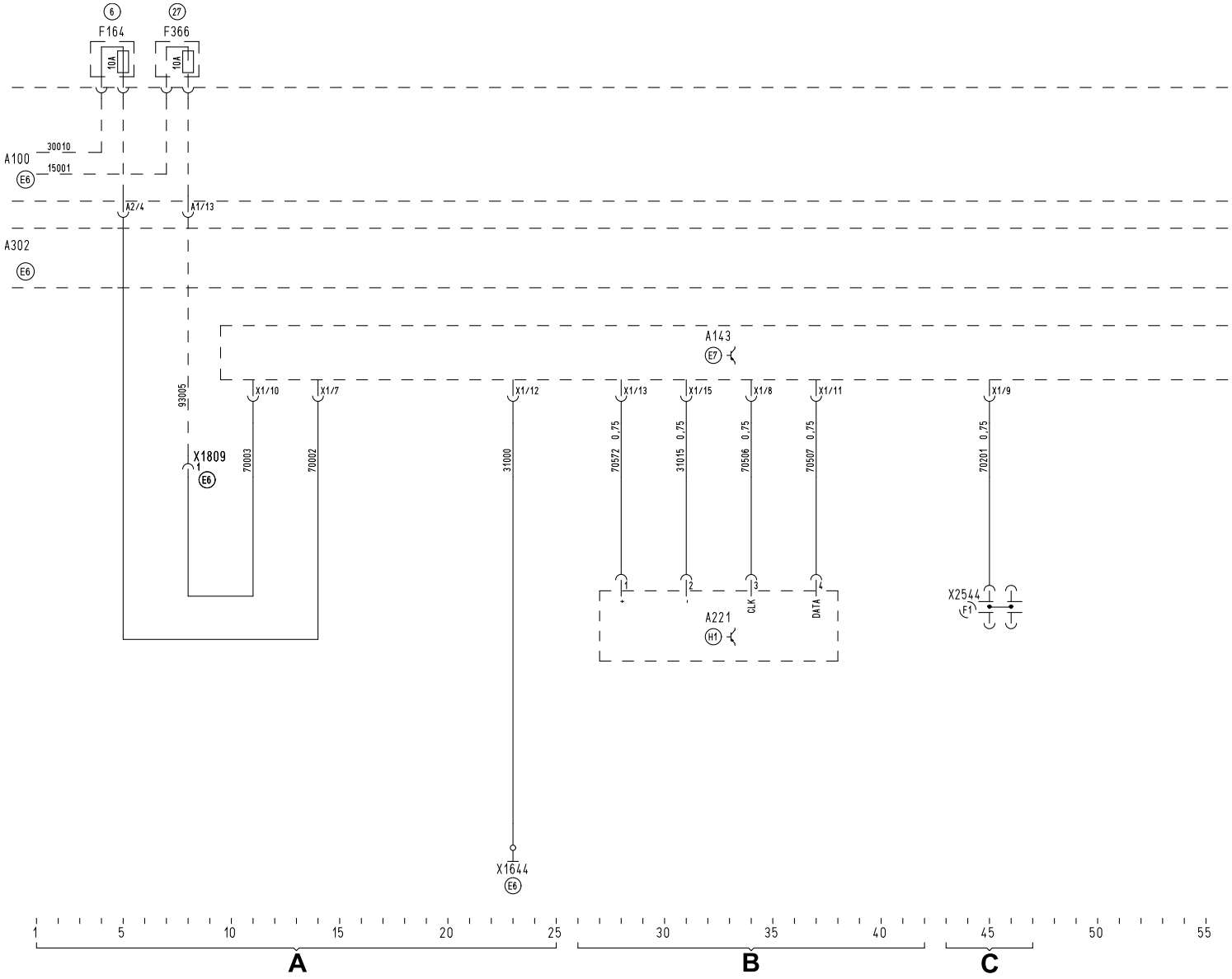
Wiring diagram no. **81.99192.1342** Sheet **1** of 2



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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

- (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

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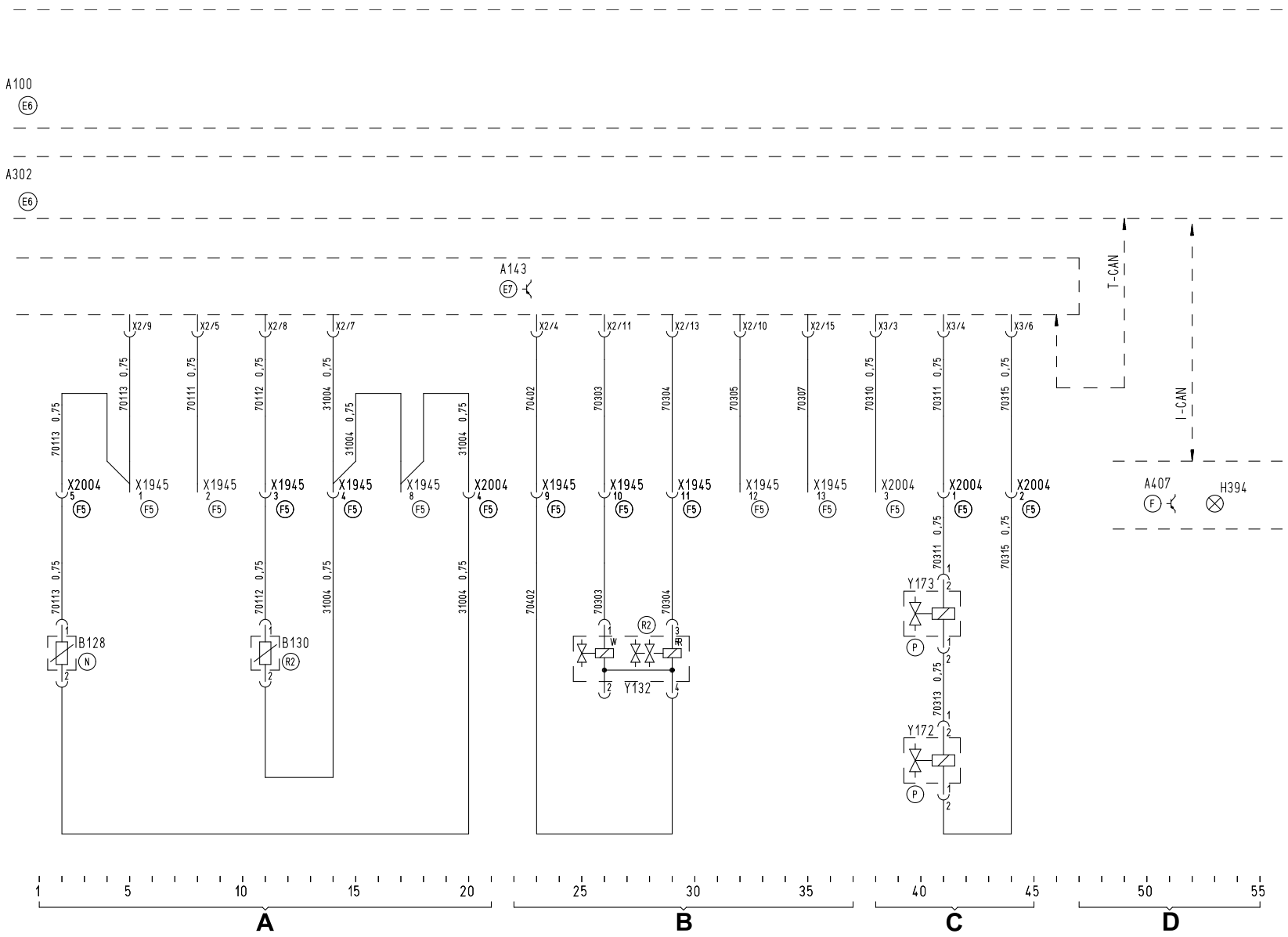
Wiring diagram no. **81.99192.1342** Sheet **2** of 2



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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

- (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

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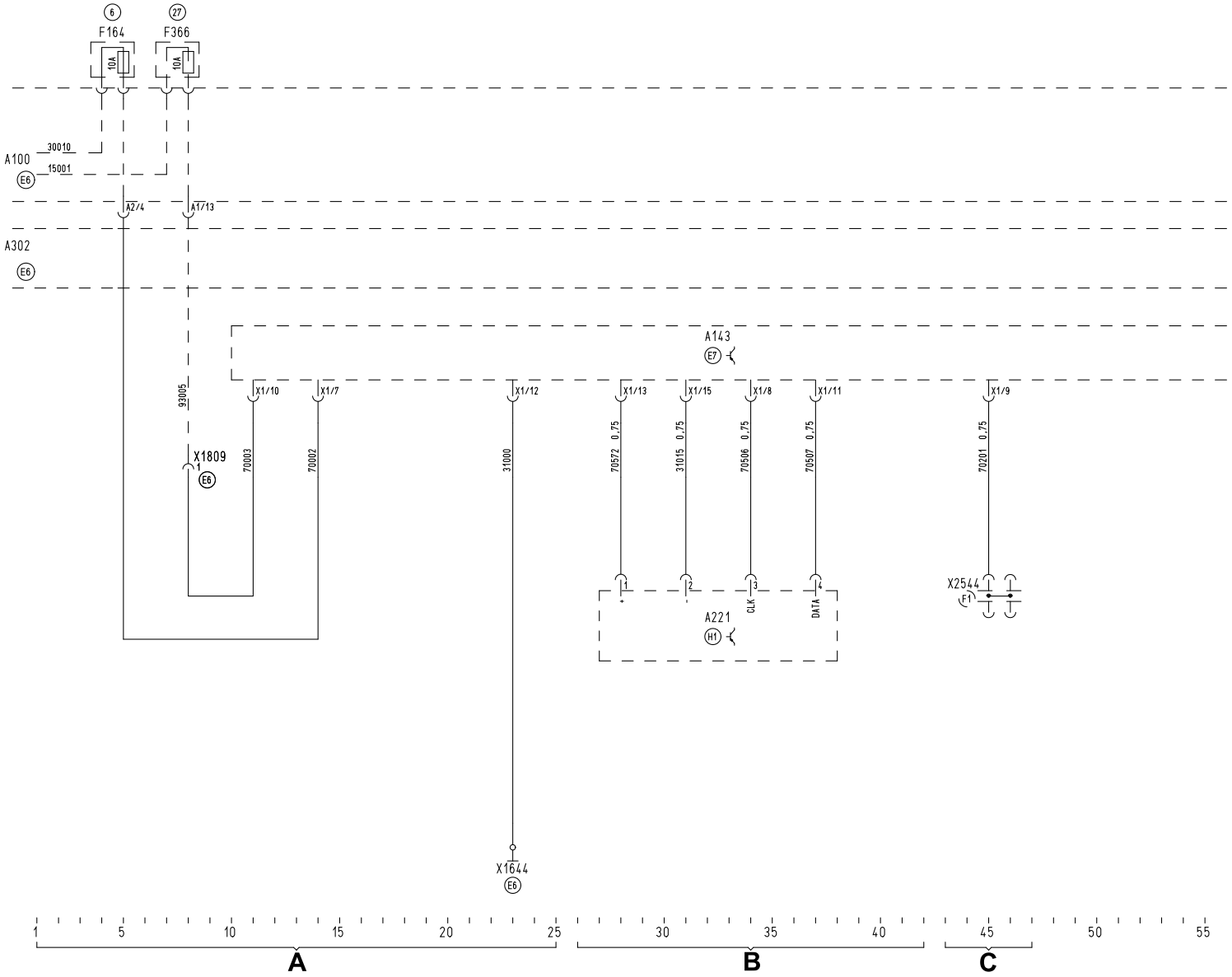
Wiring diagram no. **81.99192.1343** Sheet **1** of 2



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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
- (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

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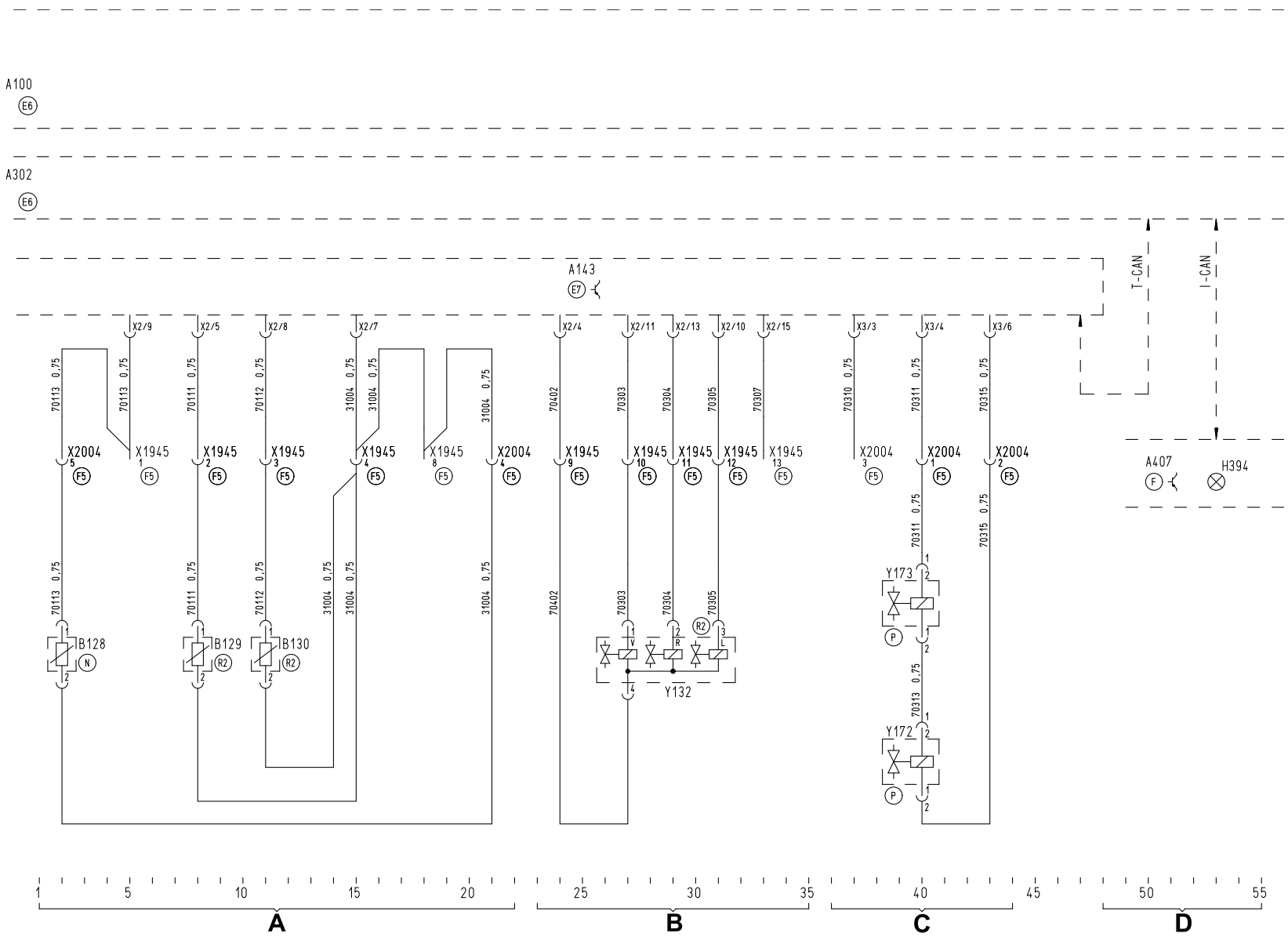
Wiring diagram no. **81.99192.1343** Sheet **2** of 2



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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
- (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

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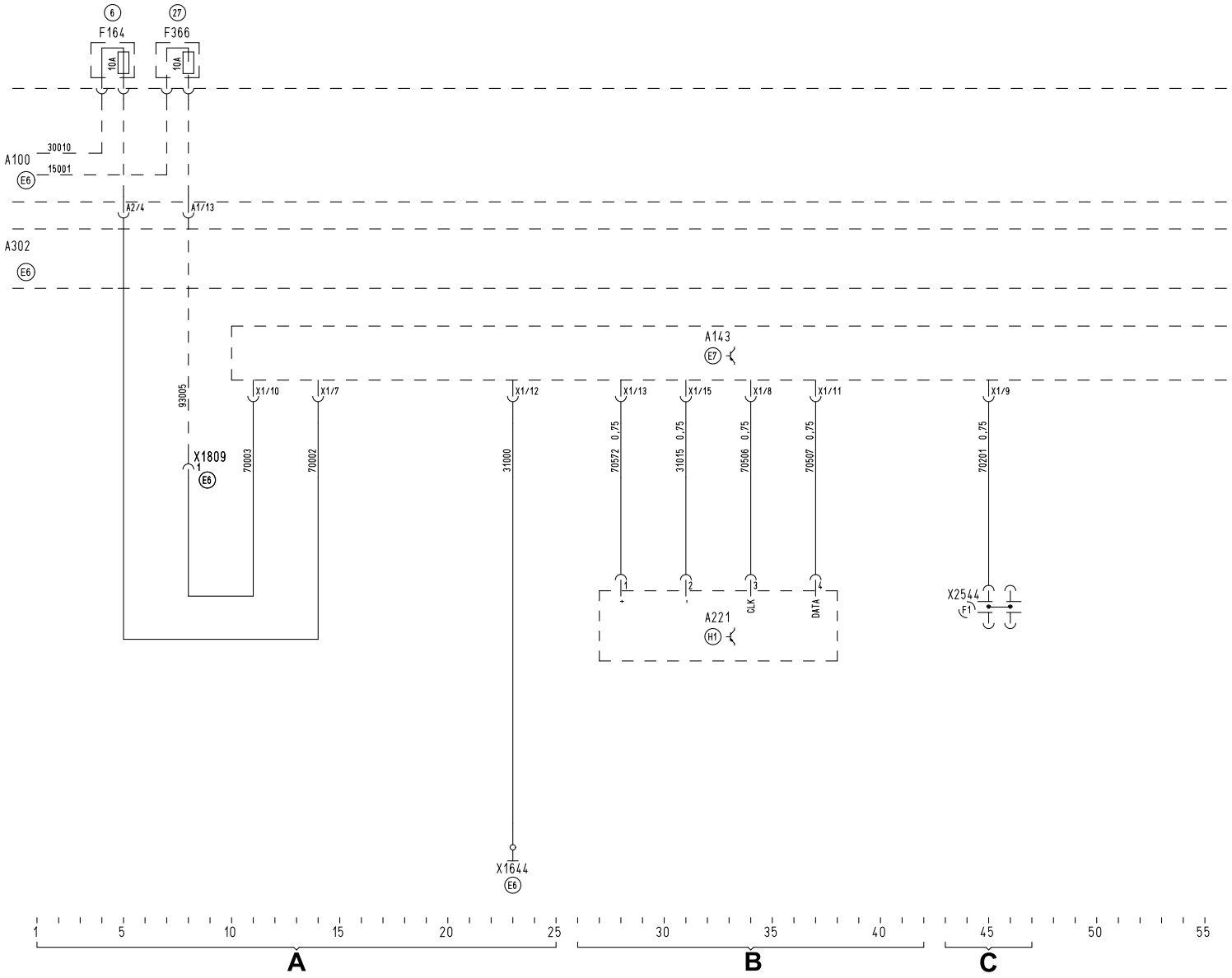
Wiring diagram no. **81.99192.1344** Sheet **1** of 2



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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

- (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

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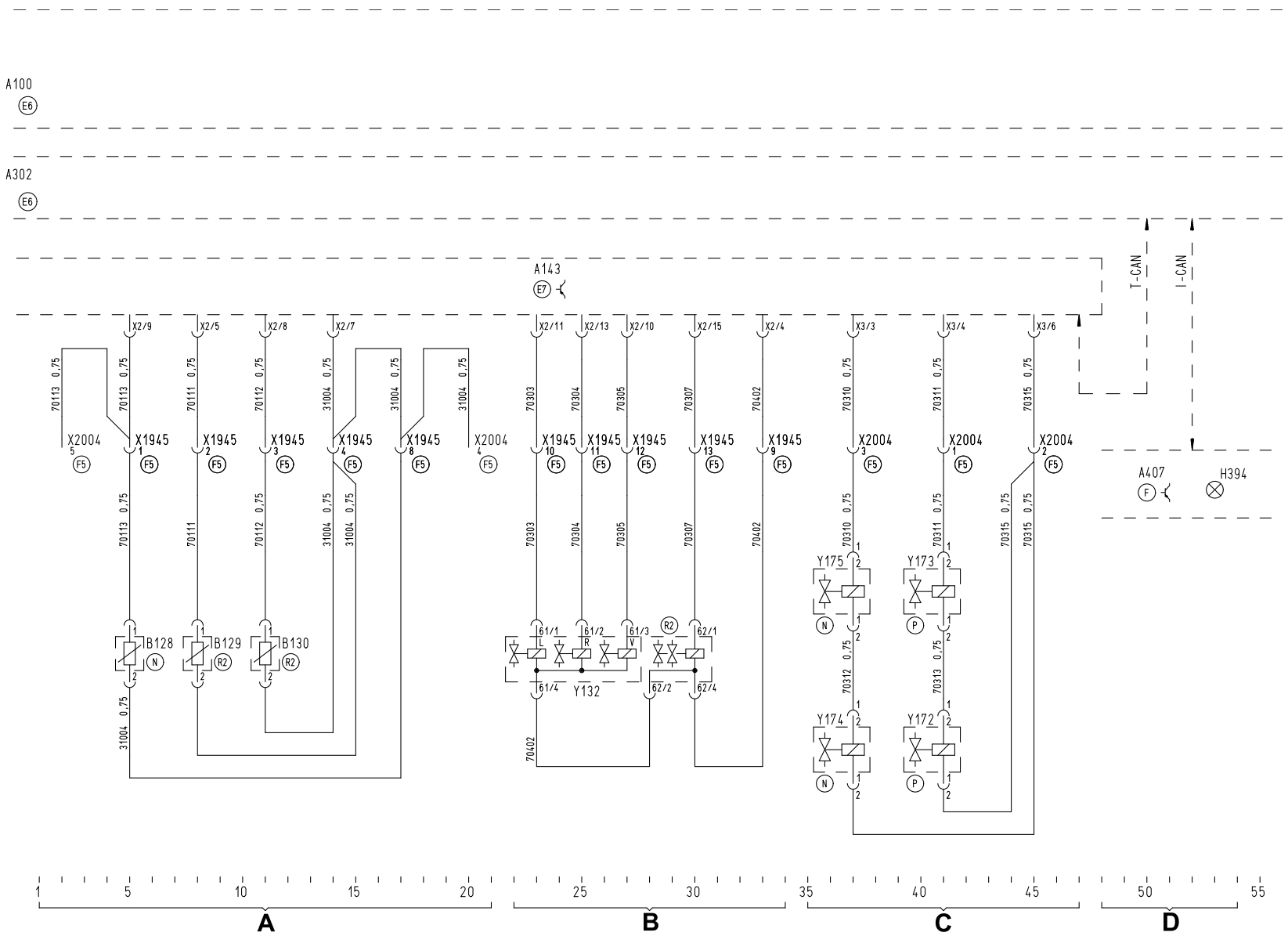
Wiring diagram no. **81.99192.1344** Sheet **2** of 2



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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
- (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

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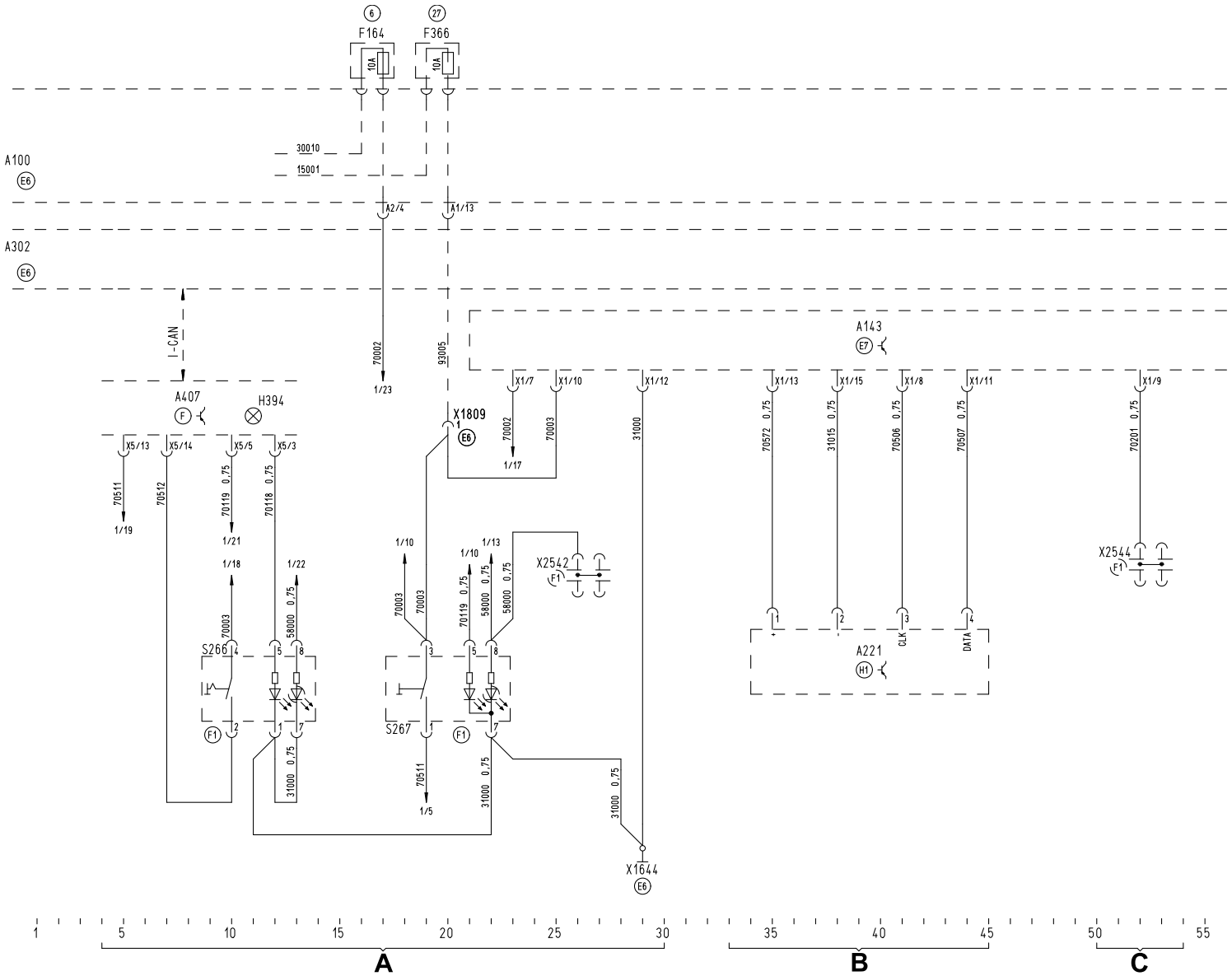
Wiring diagram no. **81.99192.1345** Sheet **1** of 2



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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
- (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

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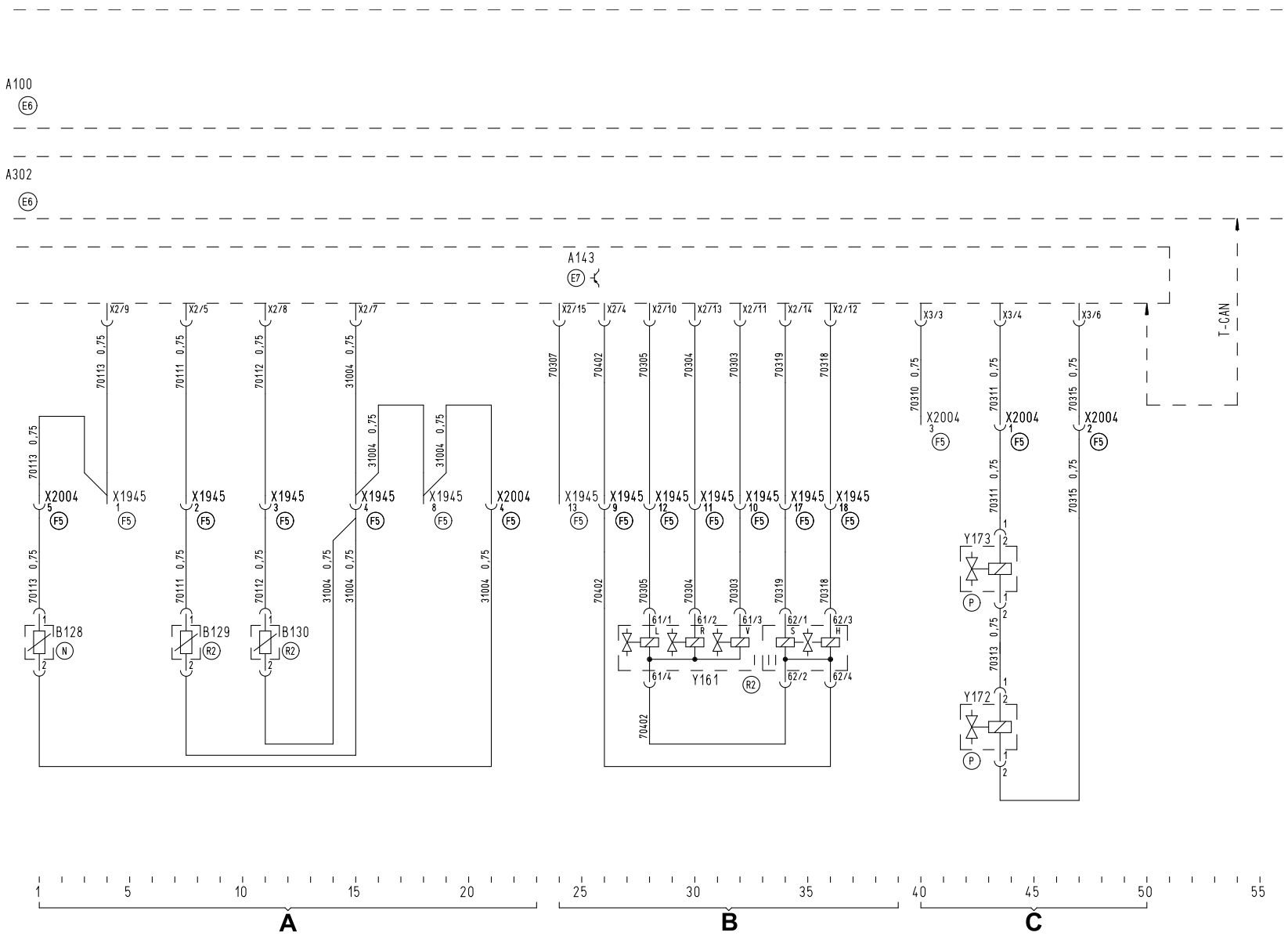
Wiring diagram no. **81.99192.1345** Sheet **2** of 2



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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
- (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

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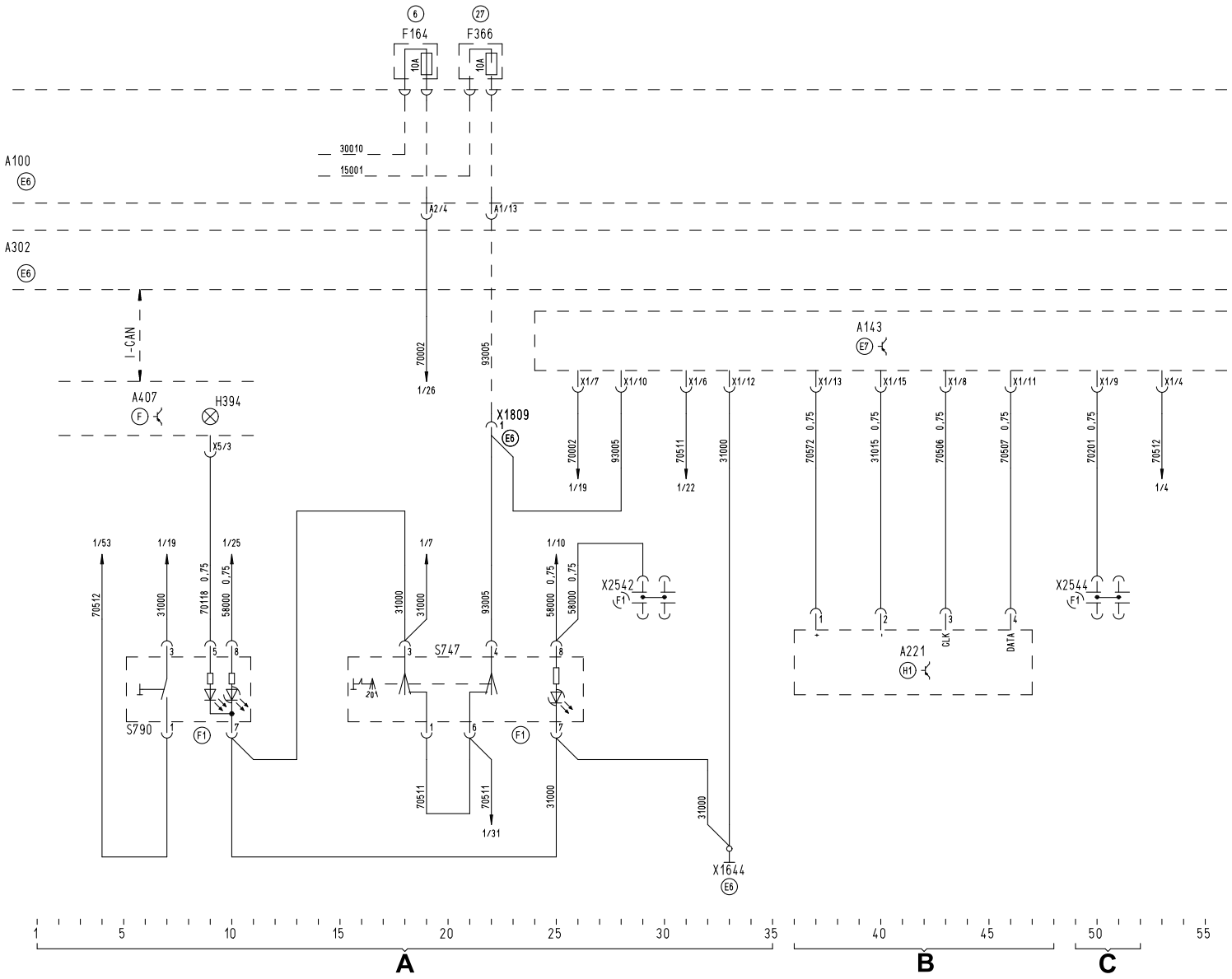
Wiring diagram no. **81.99192.1350** Sheet **1** of 2



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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
- (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

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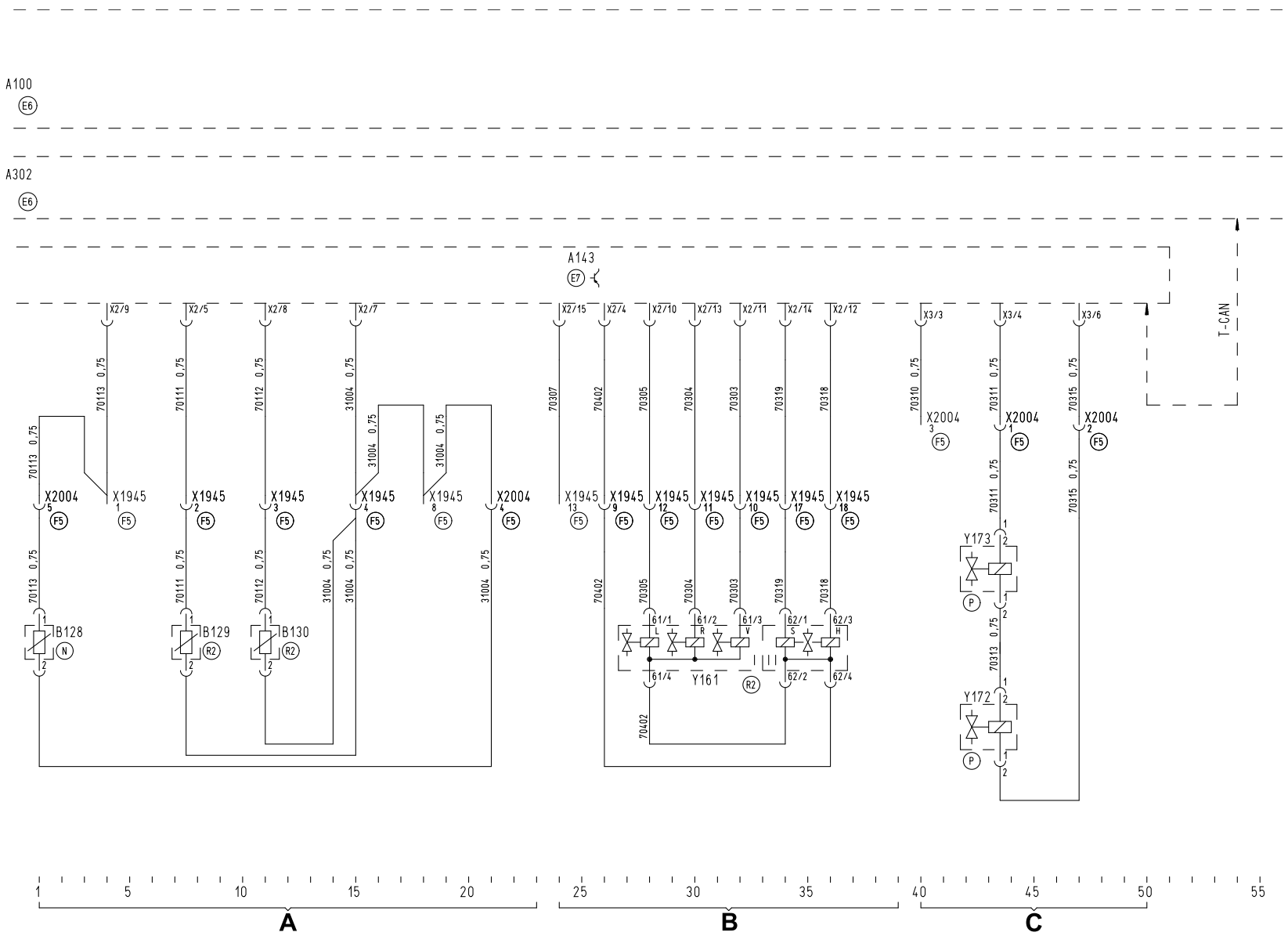
Wiring diagram no. **81.99192.1350** Sheet **2** of 2



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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

- (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

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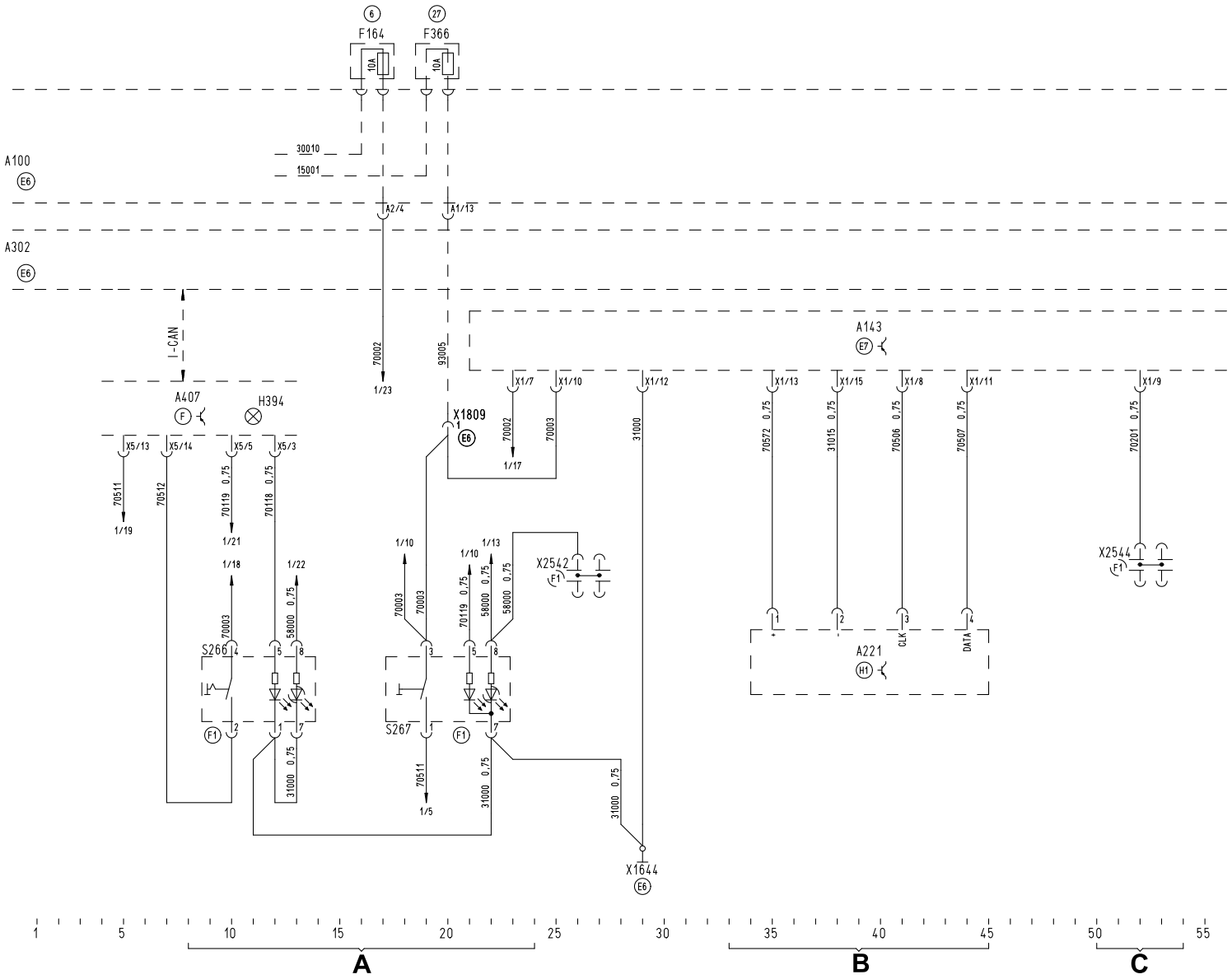
Wiring diagram no. **81.99192.1346** Sheet **1** of 2



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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
- (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

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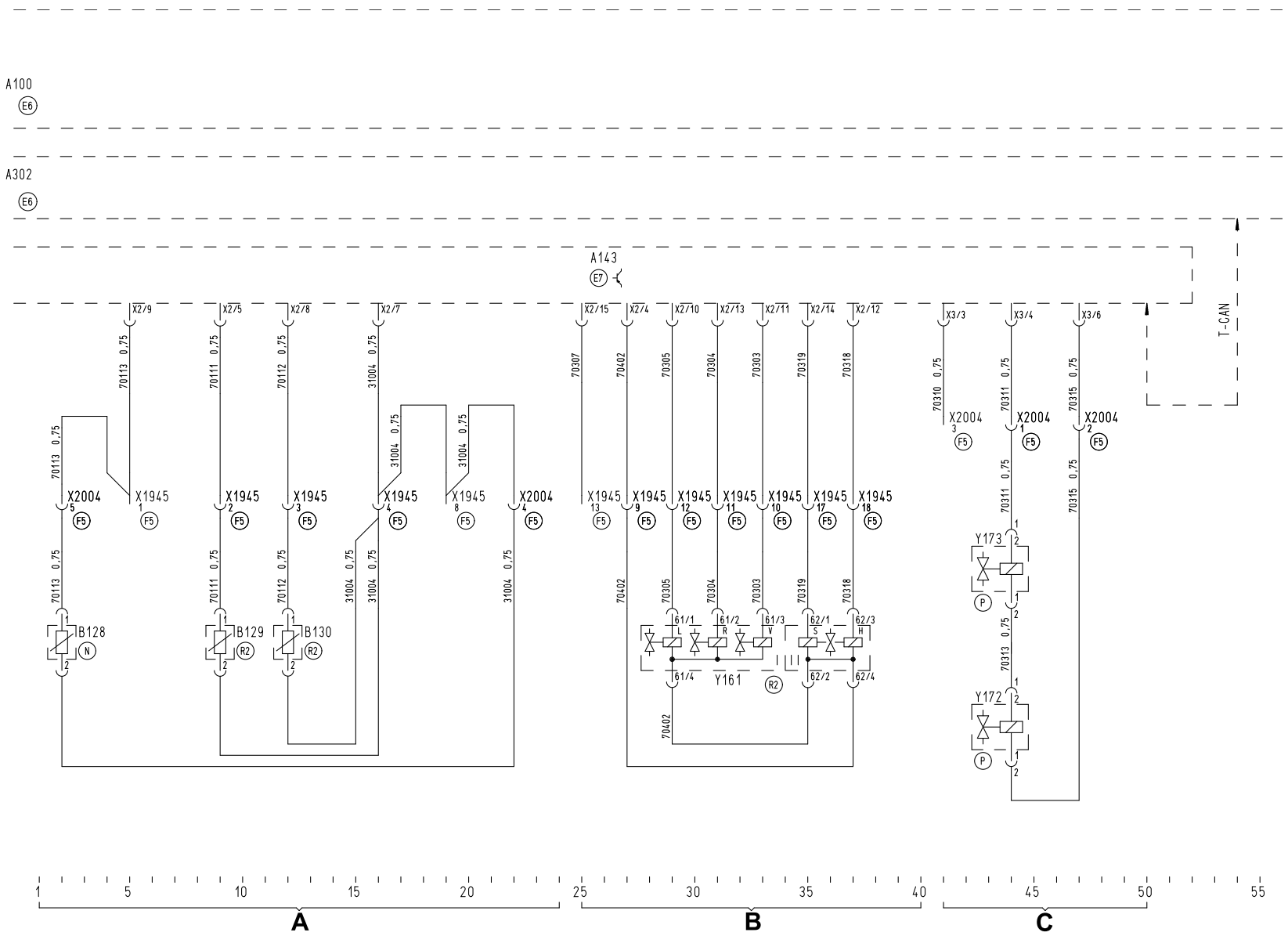
Wiring diagram no. **81.99192.1346** Sheet **2** of 2



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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

- (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

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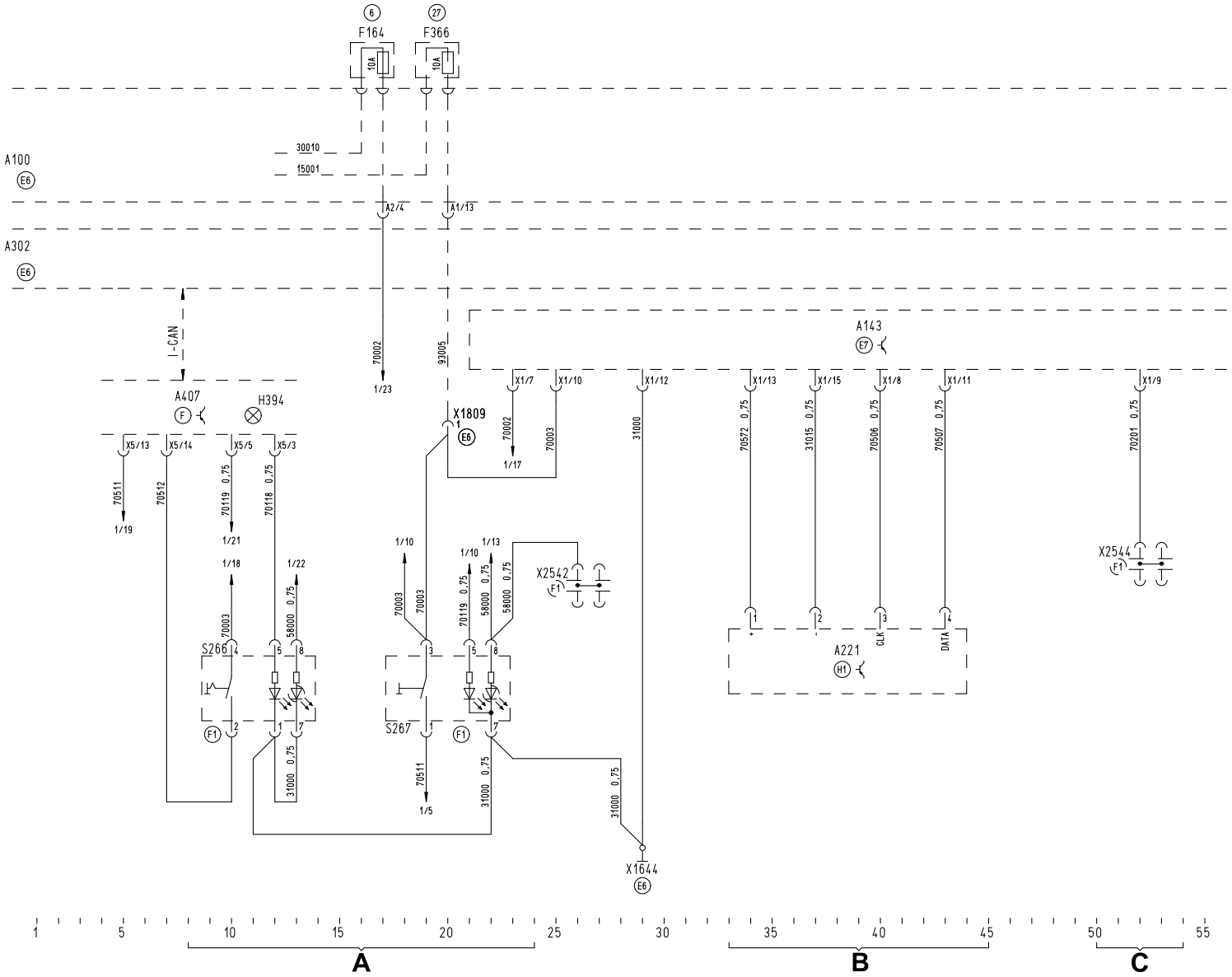
Wiring diagram no. **81.99192.1347** Sheet **1** of 2



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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

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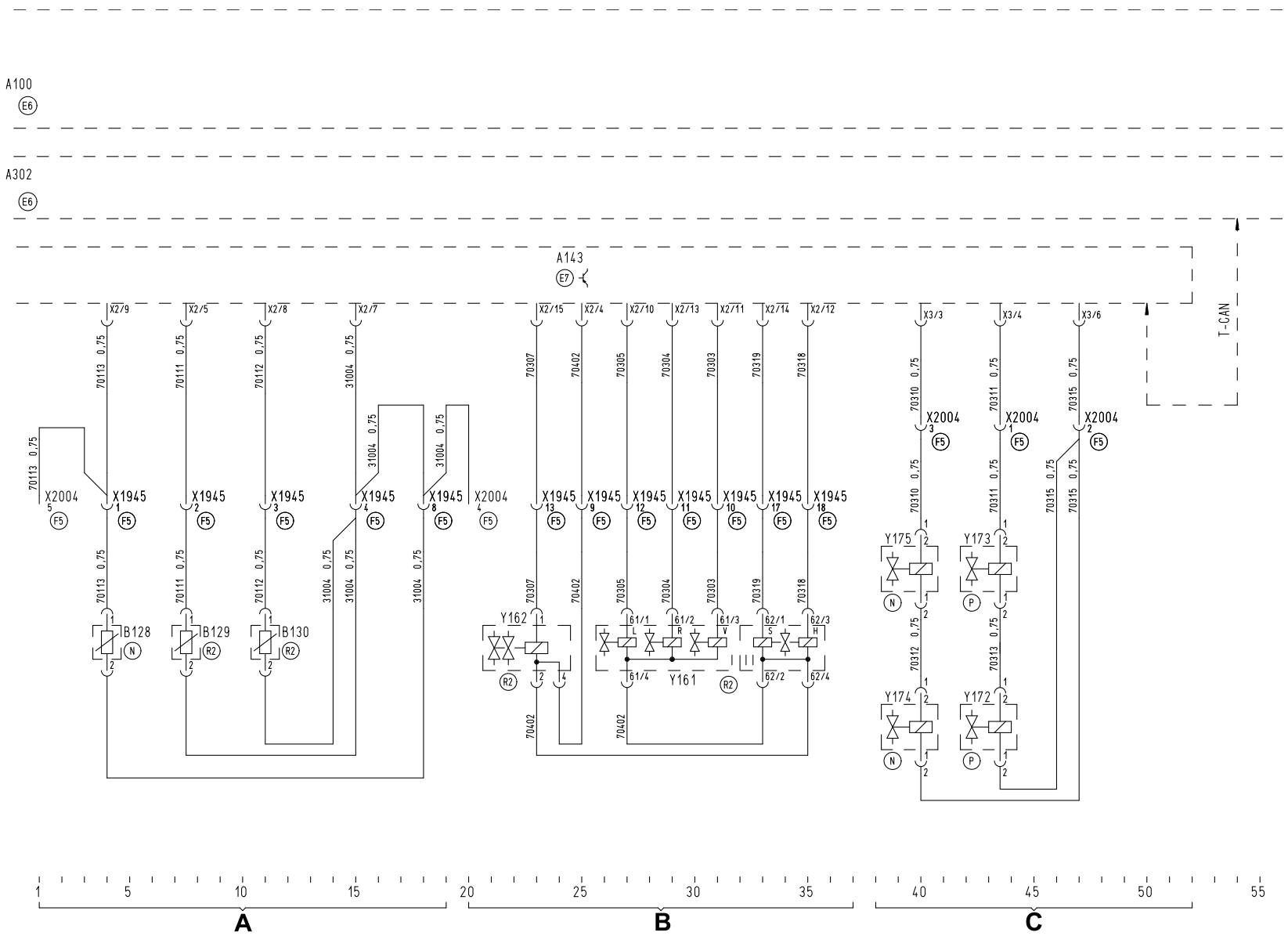
Wiring diagram no. **81.99192.1347** Sheet **2** of 2



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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
- (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

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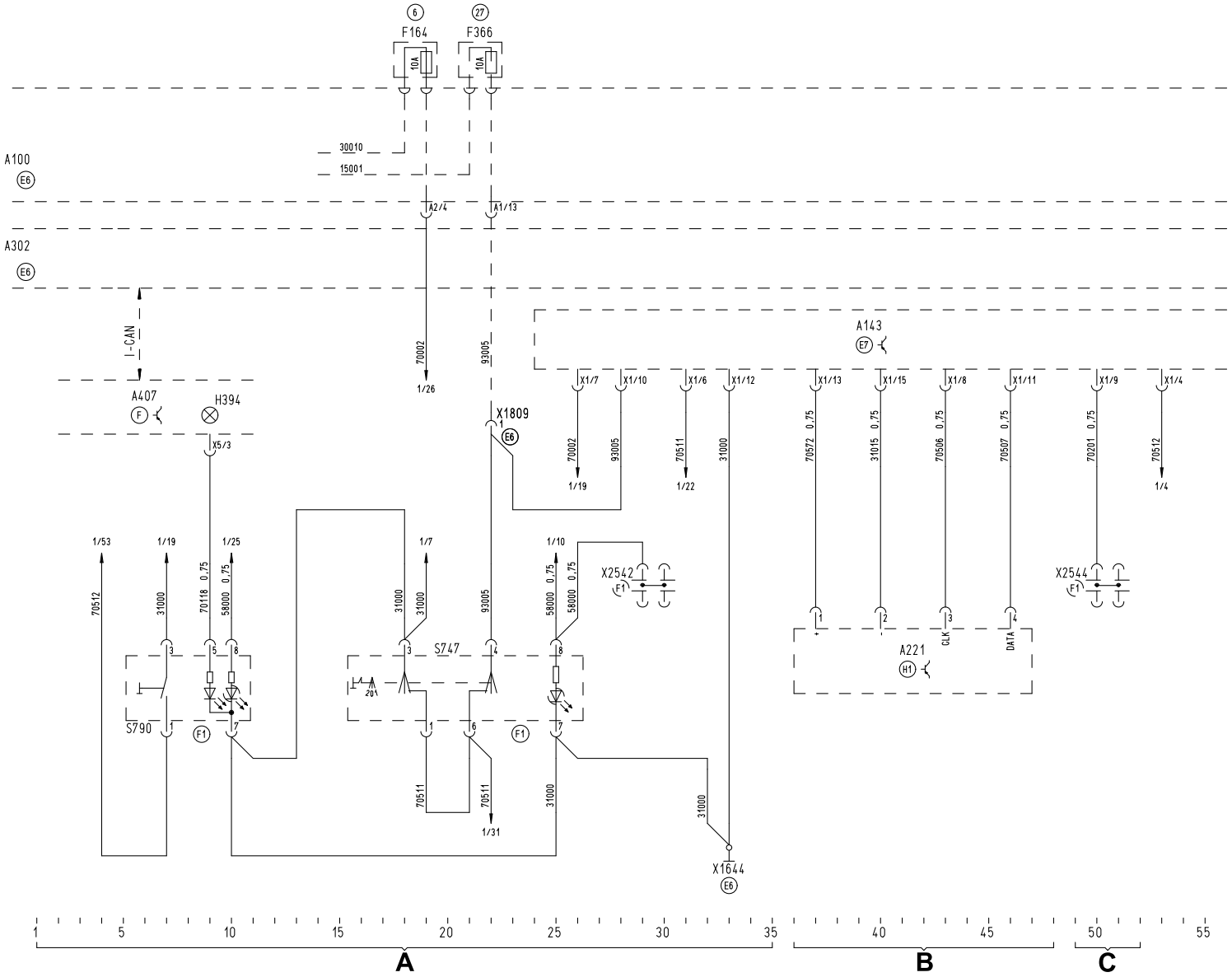
Wiring diagram no. **81.99192.1351** Sheet **1** of 2



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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
- (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

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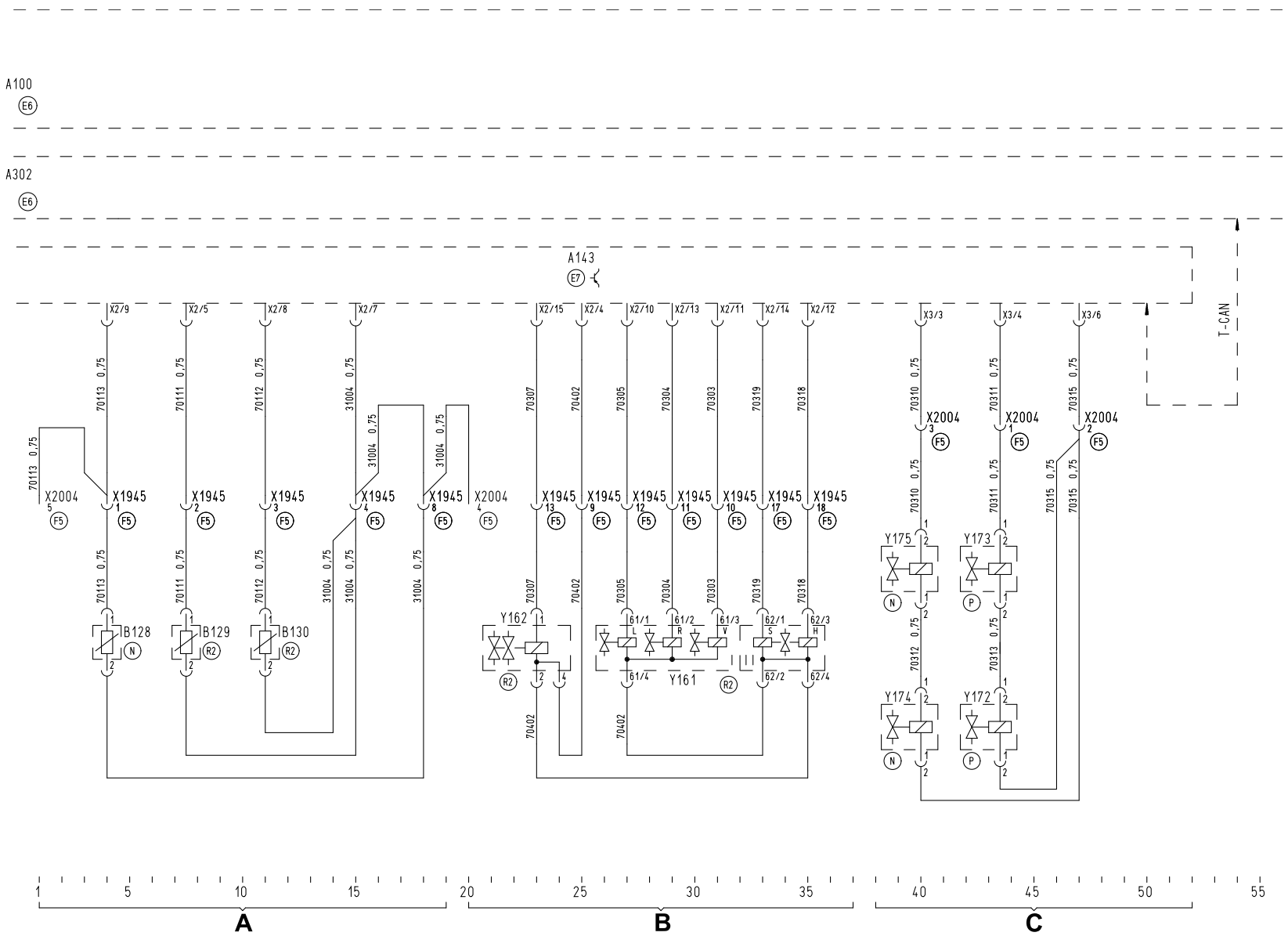
Wiring diagram no. **81.99192.1351** Sheet **2** of 2



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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
- (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

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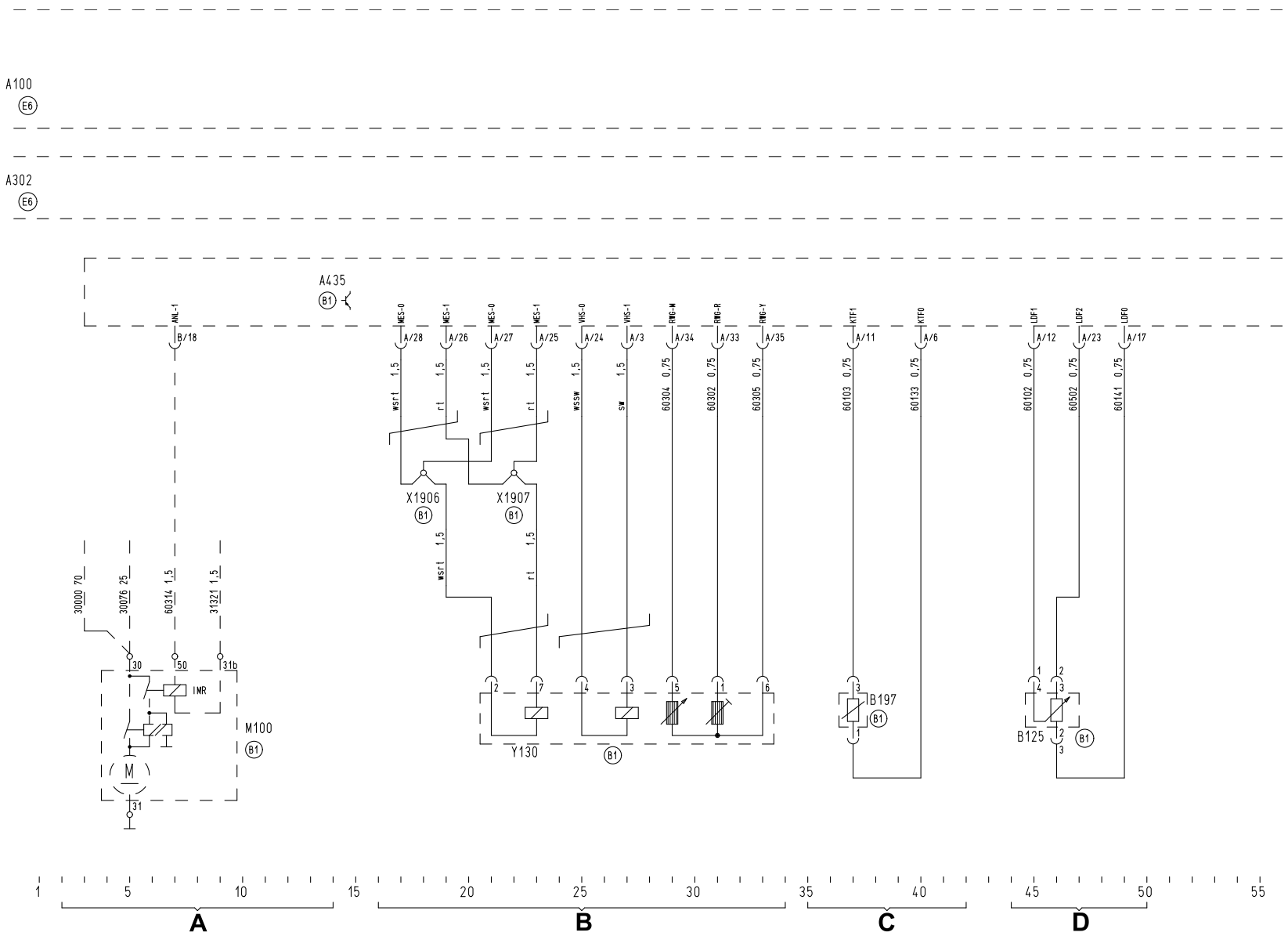
Wiring diagram no. **81.99192.2985** Sheet **1** of 3



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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
- (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

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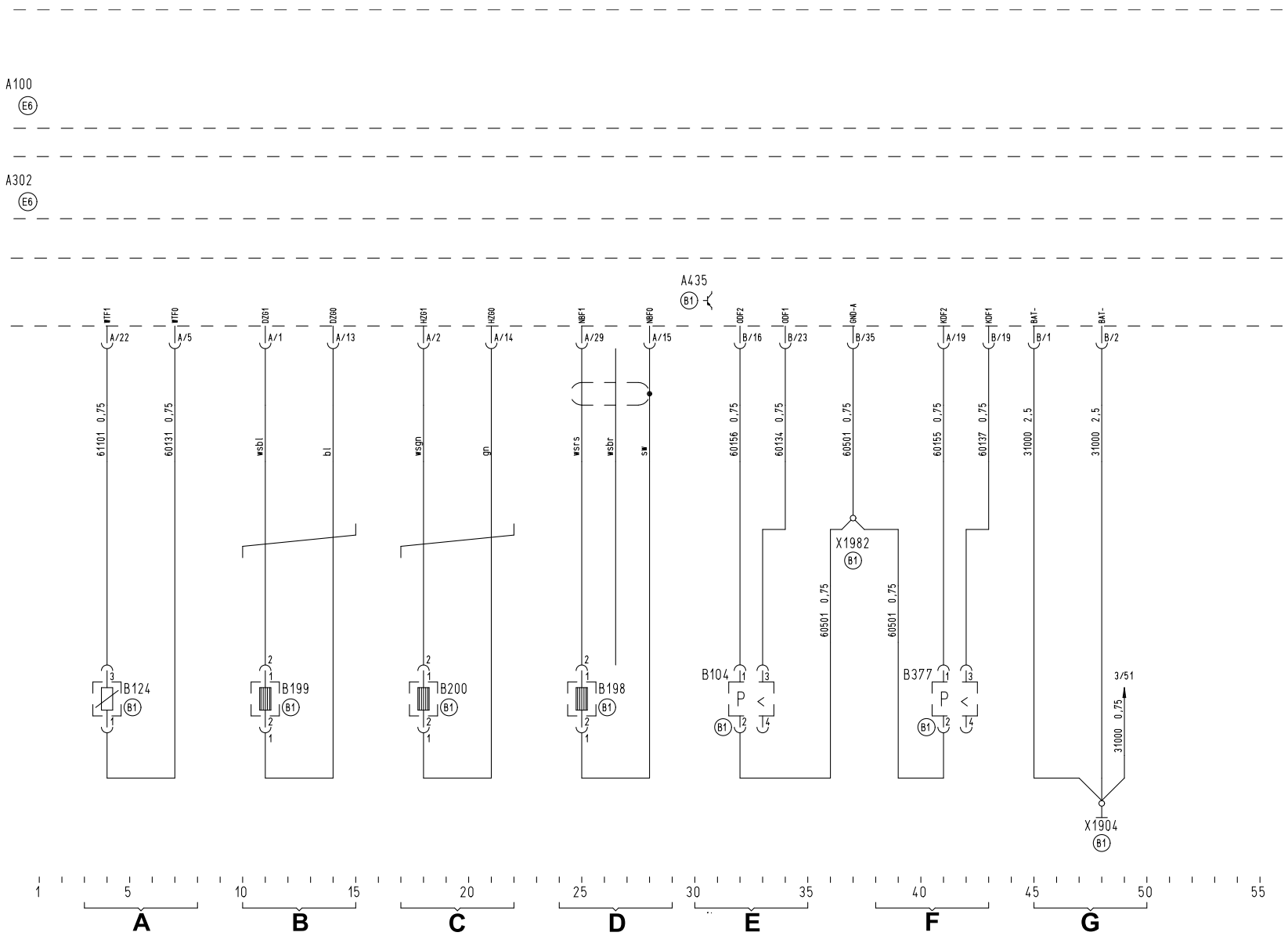
Wiring diagram no. **81.99192.2985** Sheet **2** of 3



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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
- (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) Reserve for engine speed signal

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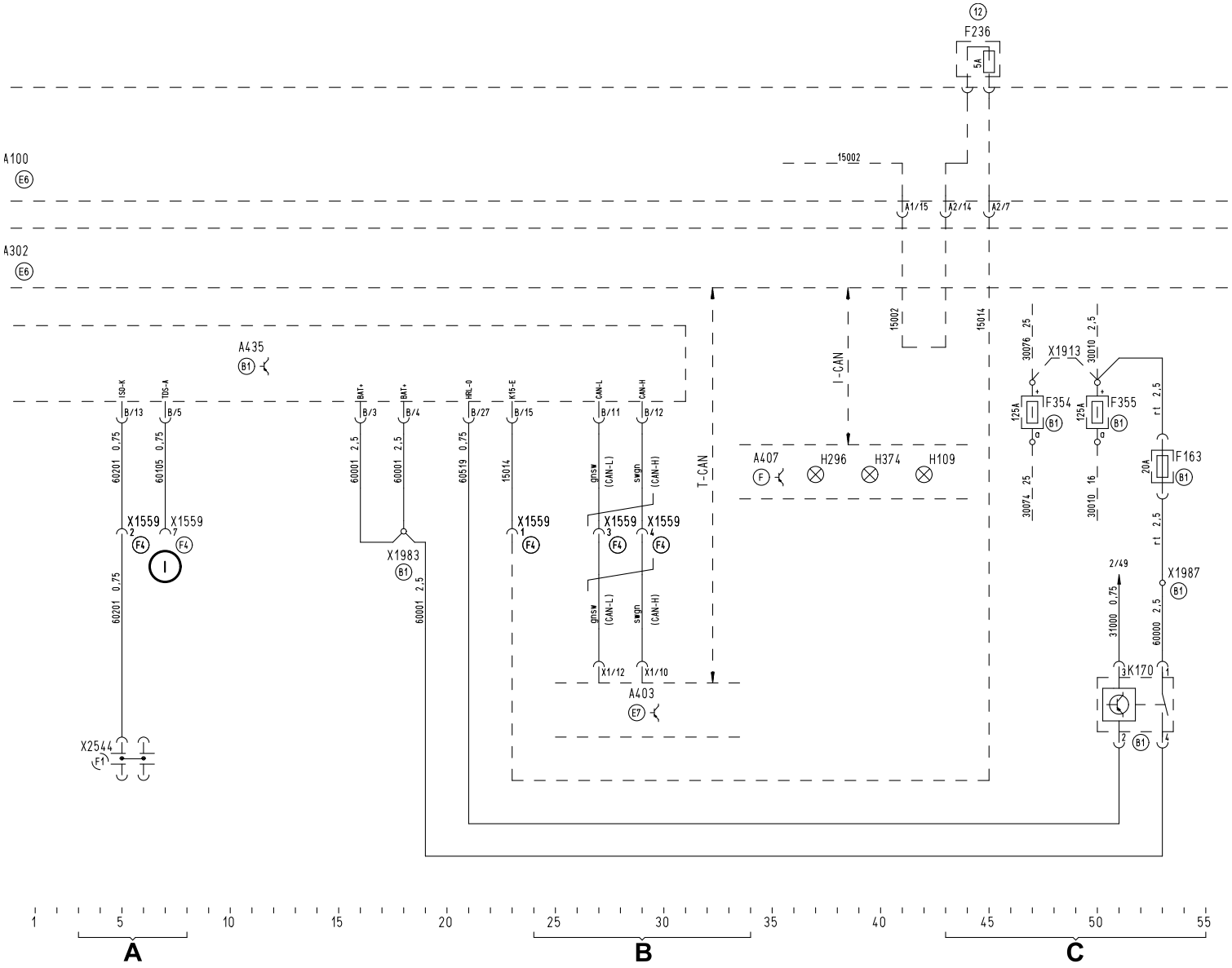
Wiring diagram no. **81.99192.2985** Sheet **3** of 3



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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

- (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

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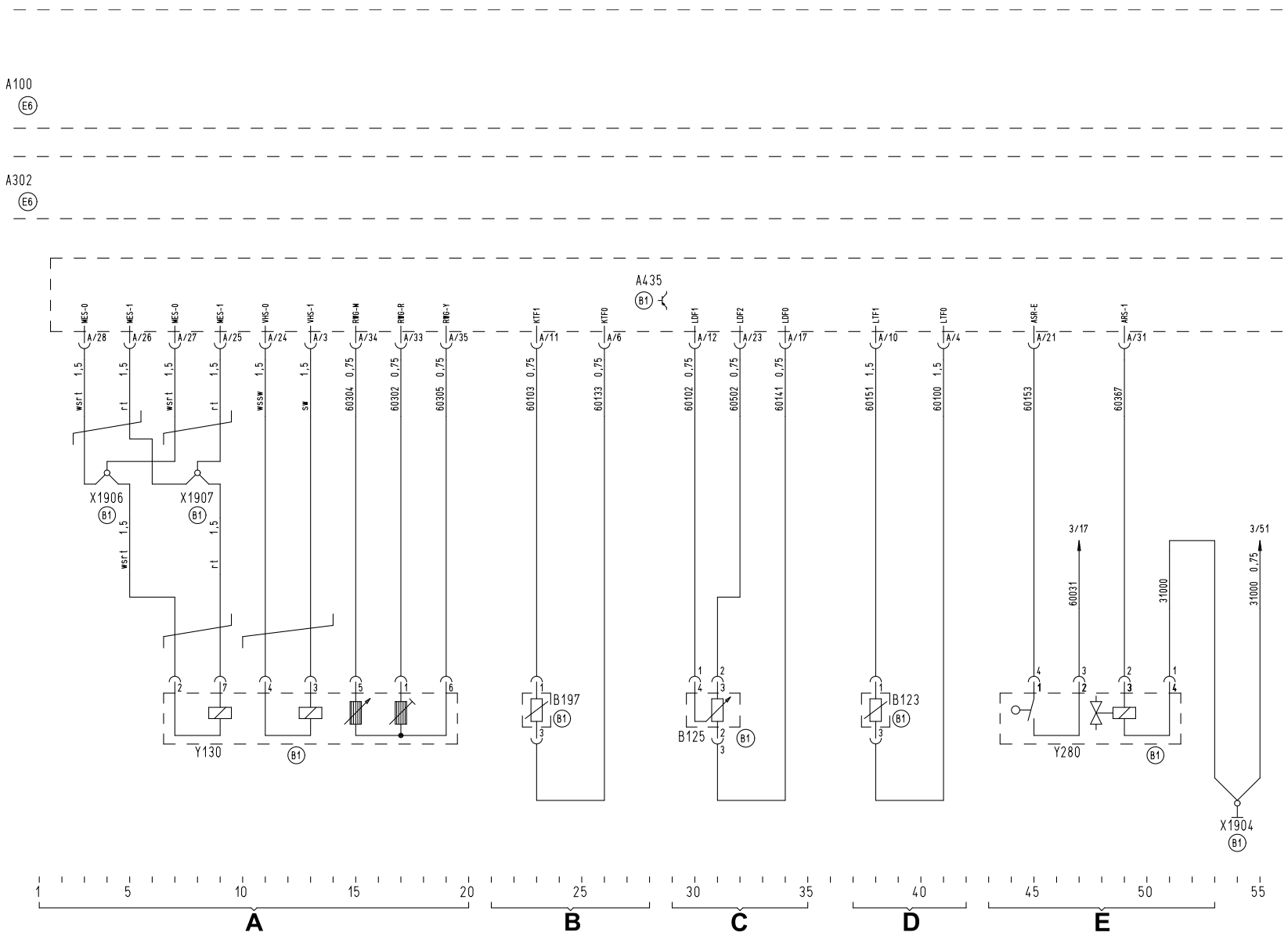
Wiring diagram no. **81.99192.2986** Sheet **1** of 3



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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
- (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

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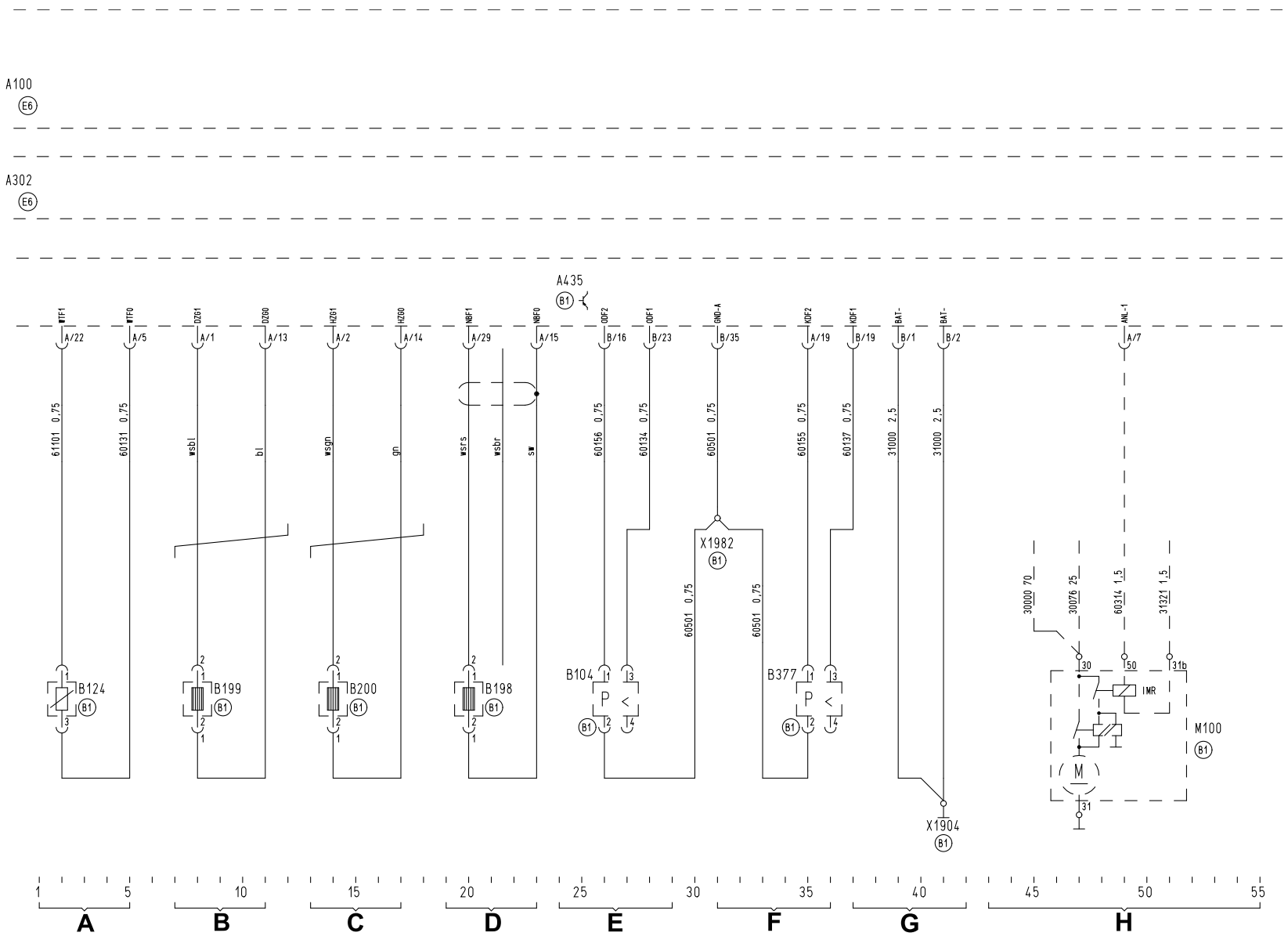
Wiring diagram no. **81.99192.2986** Sheet **2** of 3



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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
- (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) Reserve for engine speed signal

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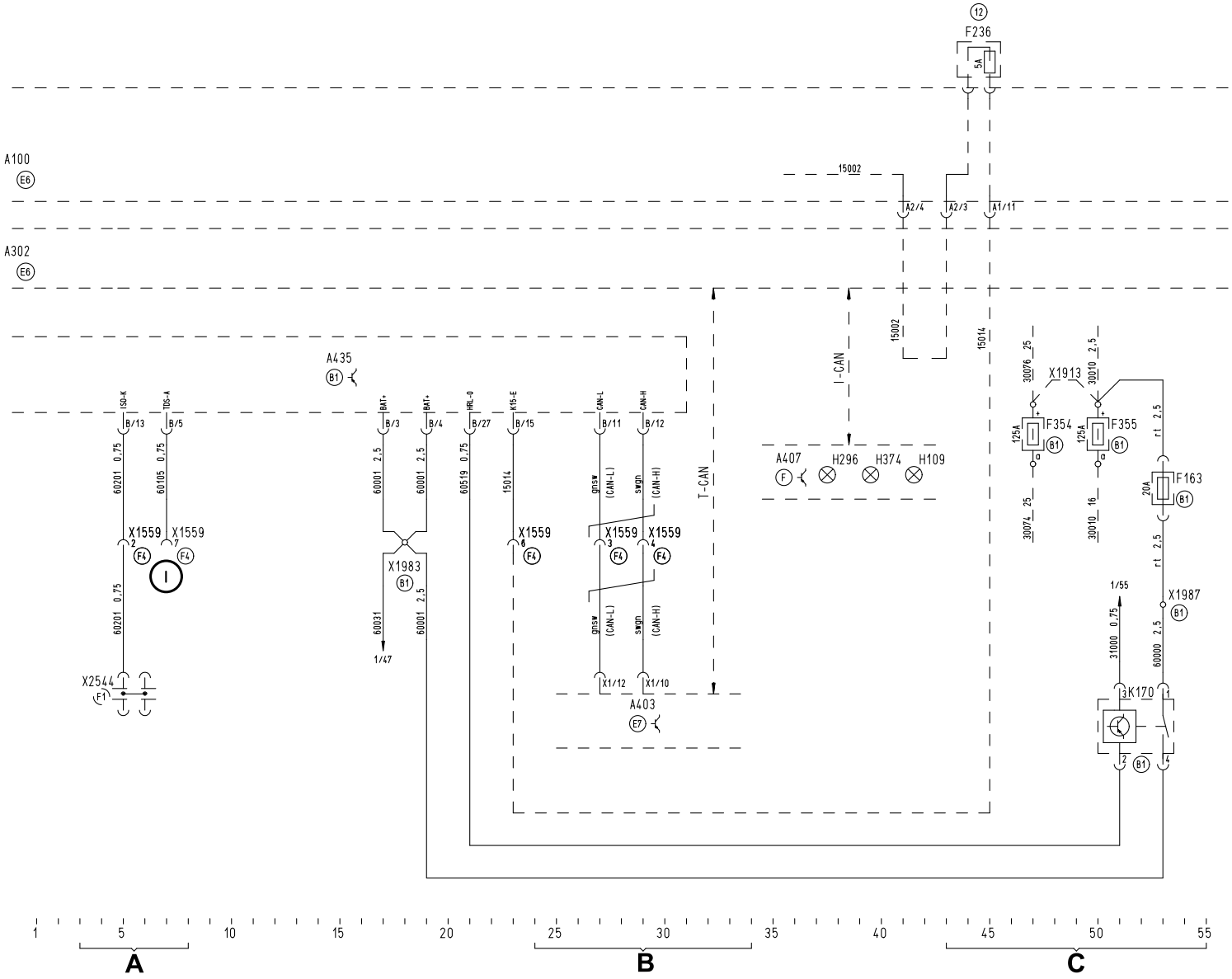
Wiring diagram no. **81.99192.2986** Sheet **3** of 3



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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

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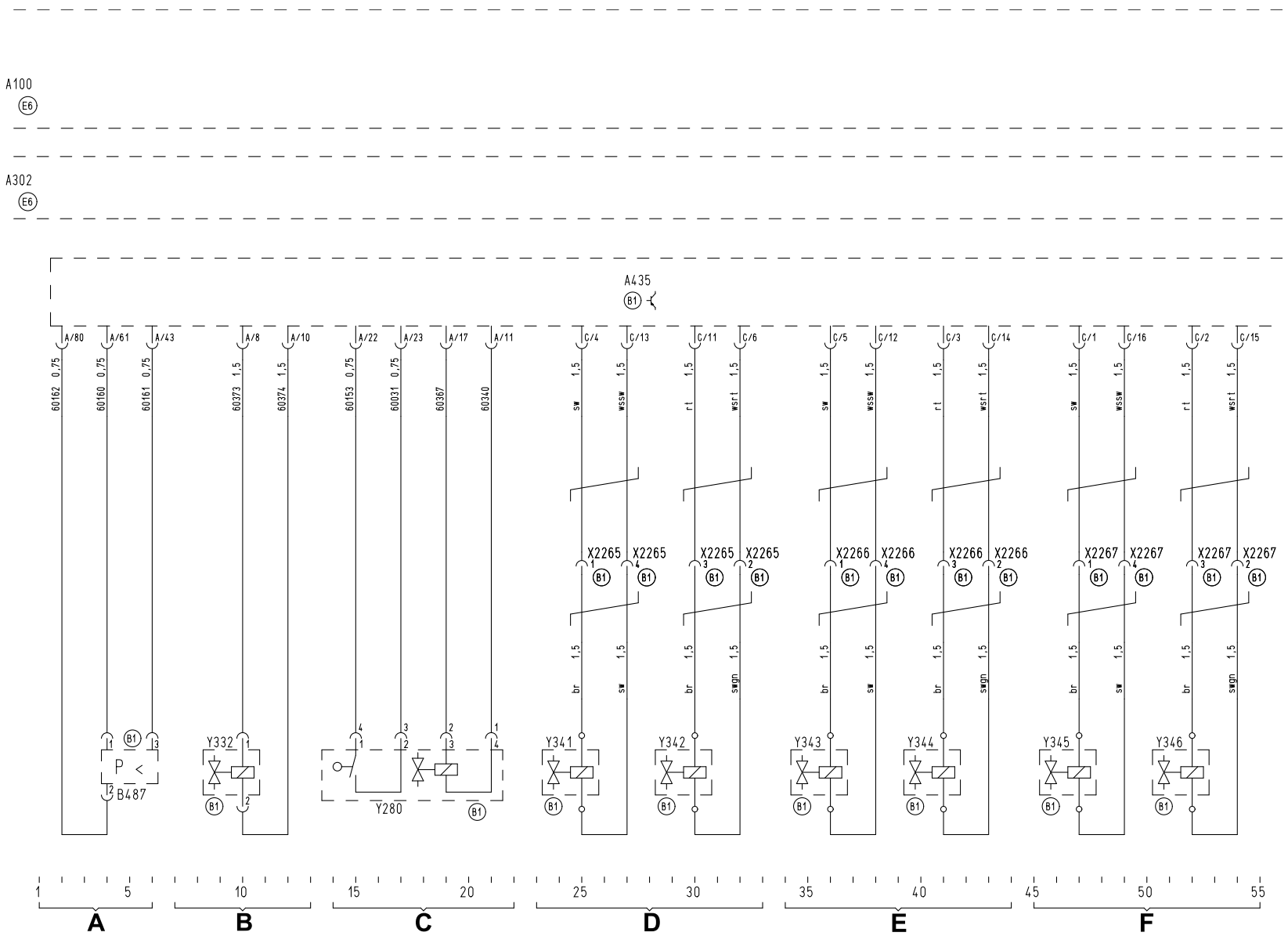
Wiring diagram no. **81.99192.2692** Sheet **1** of 4



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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
- (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

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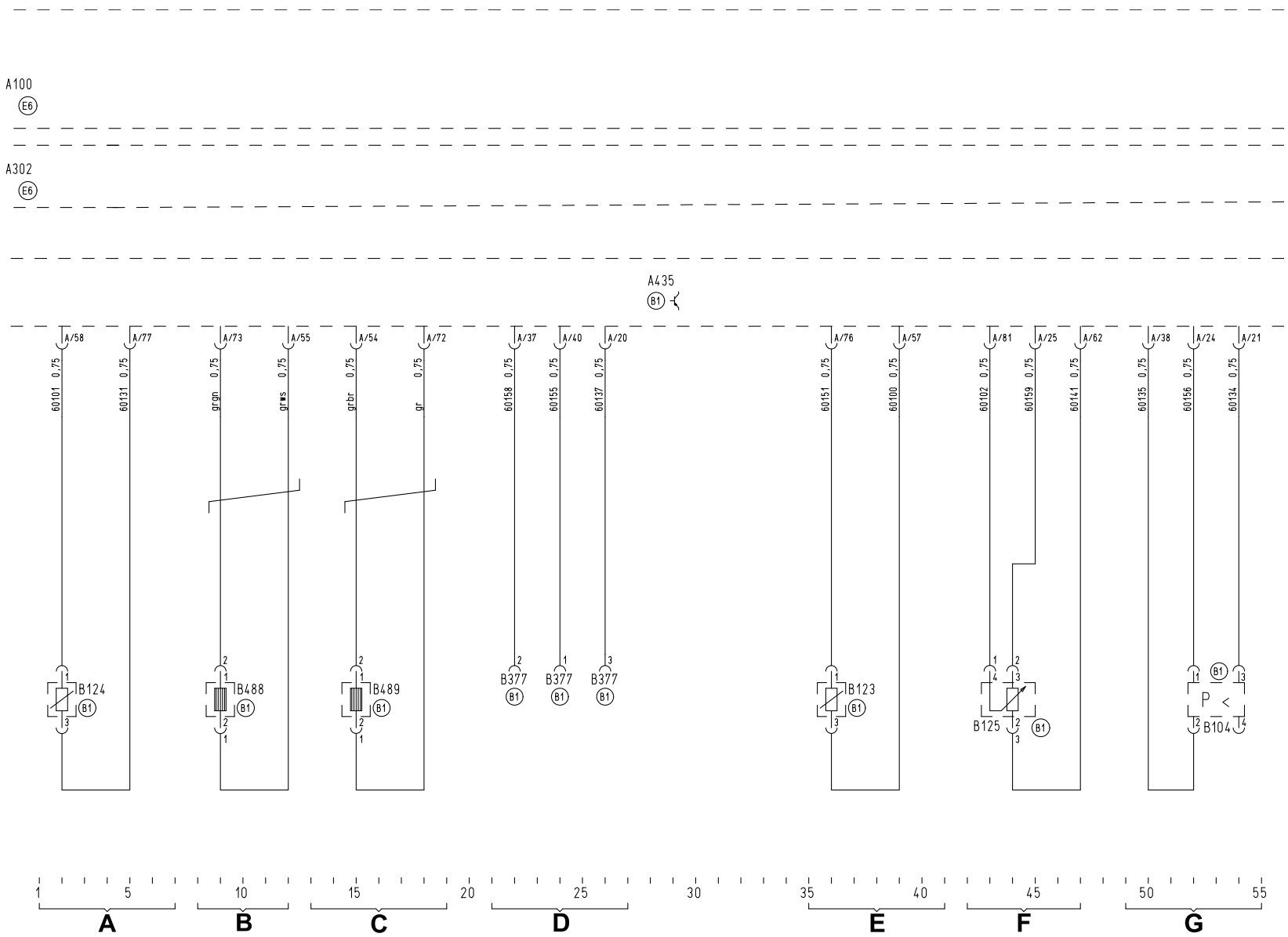
Wiring diagram no. **81.99192.2692** Sheet **2** of 4



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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
- (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

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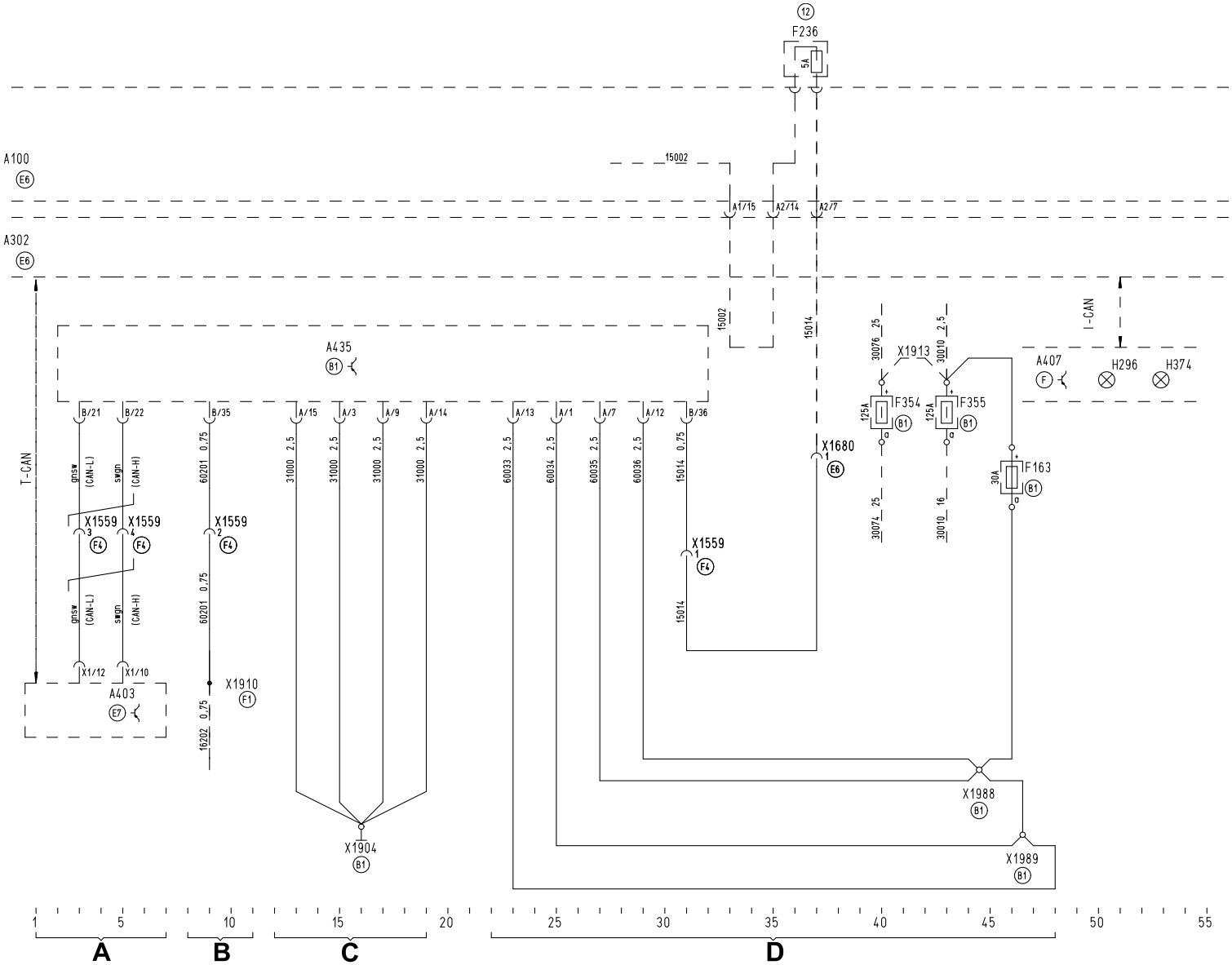
Wiring diagram no. **81.99192.2692** Sheet **3** of 4



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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
- (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

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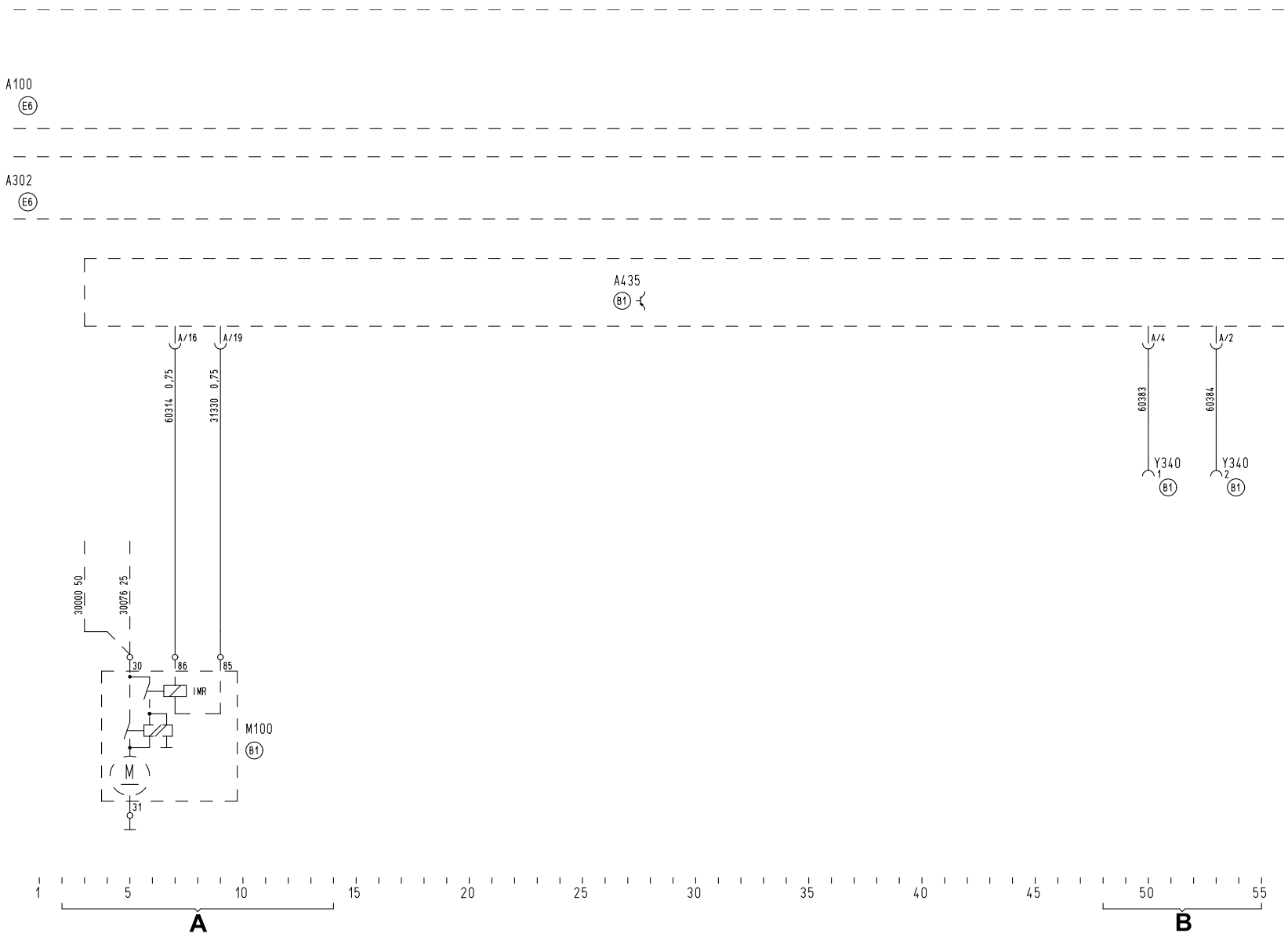
Wiring diagram no. **81.99192.2692** Sheet **4** of 4



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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
- (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

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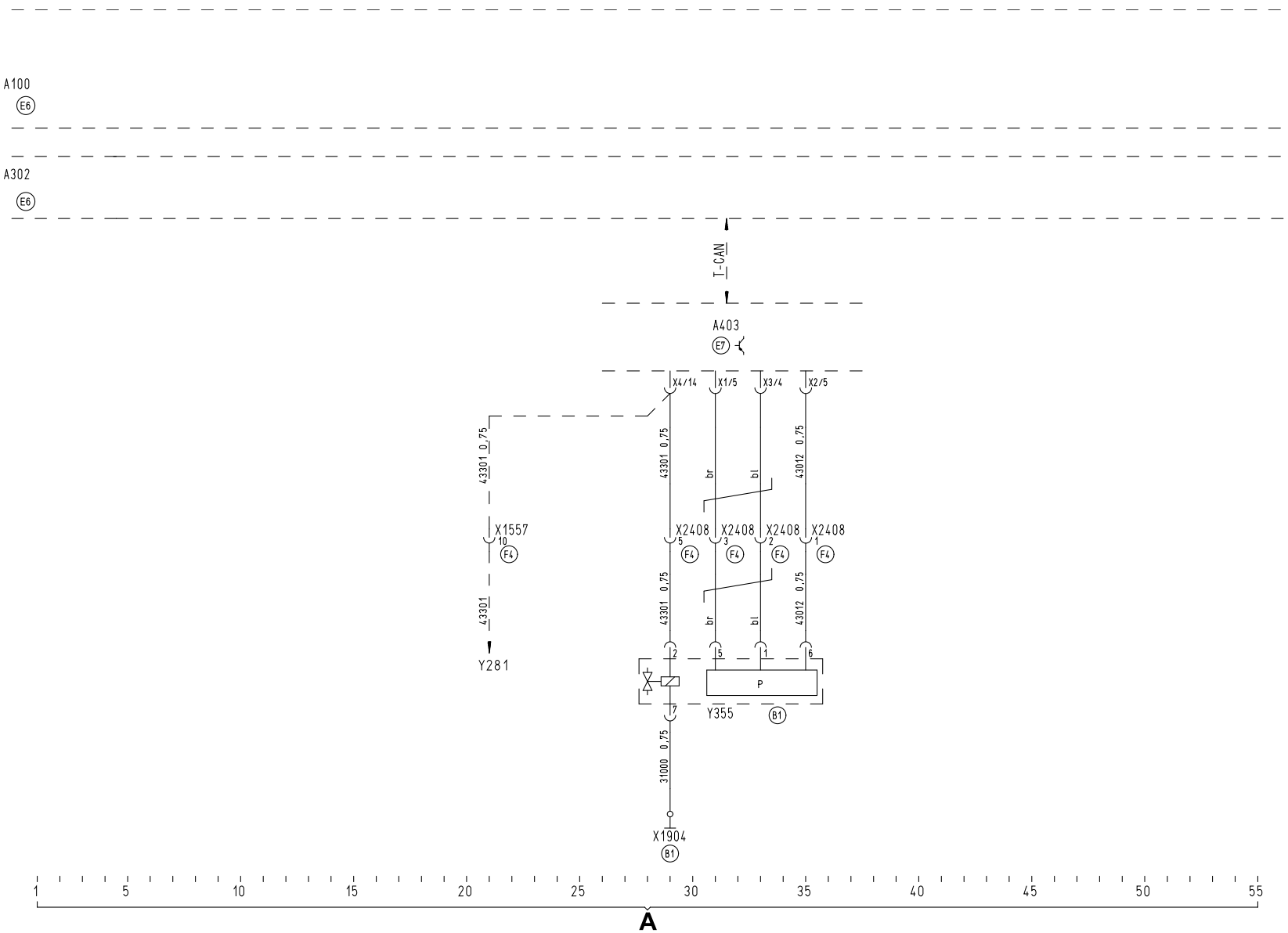
Wiring diagram no. **81.99192.2832** Sheet **1** of 1



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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

- (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 of delivery

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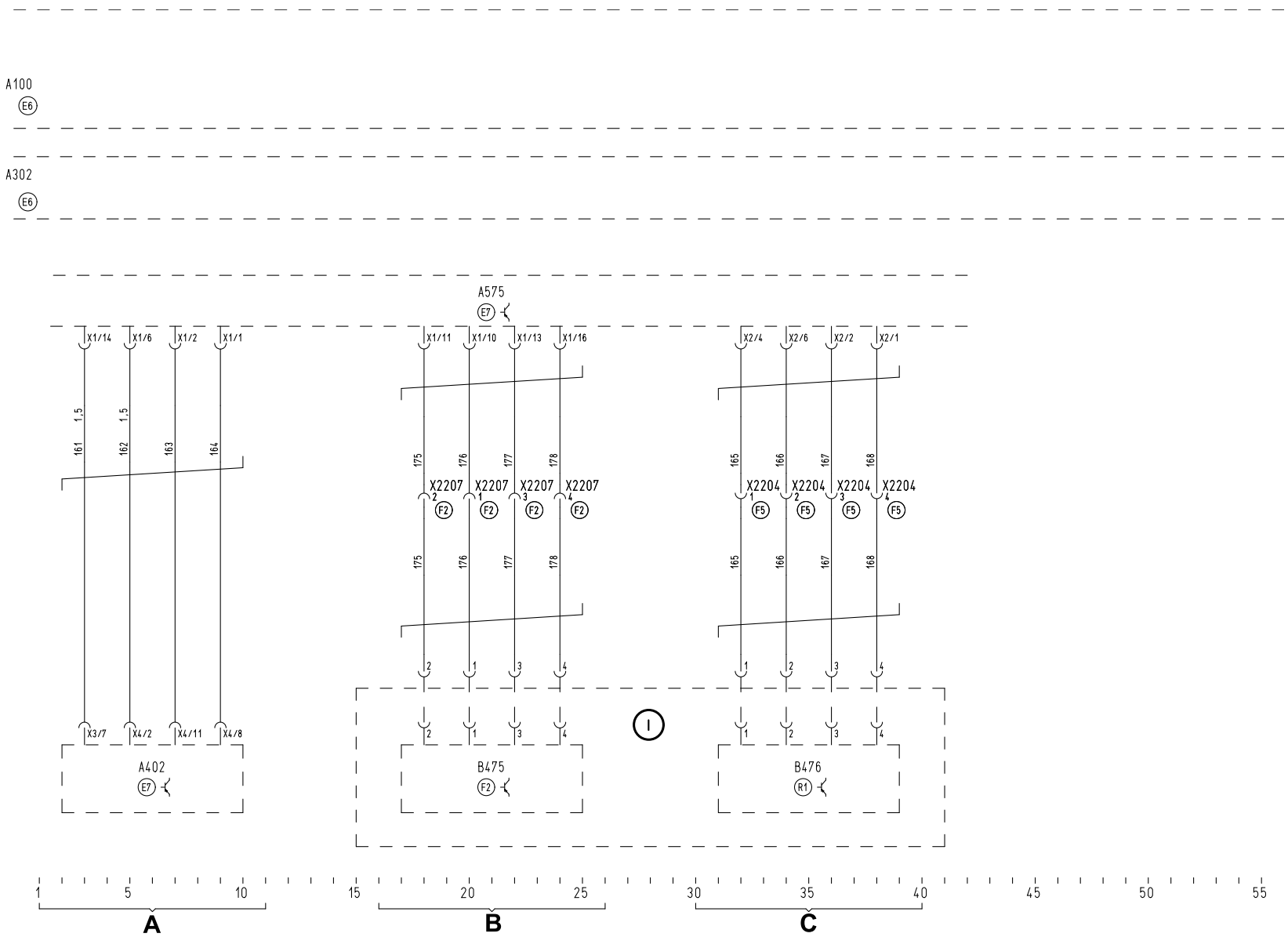
Wiring diagram no. **81.99192.2843** Sheet **1** of 1



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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

- (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

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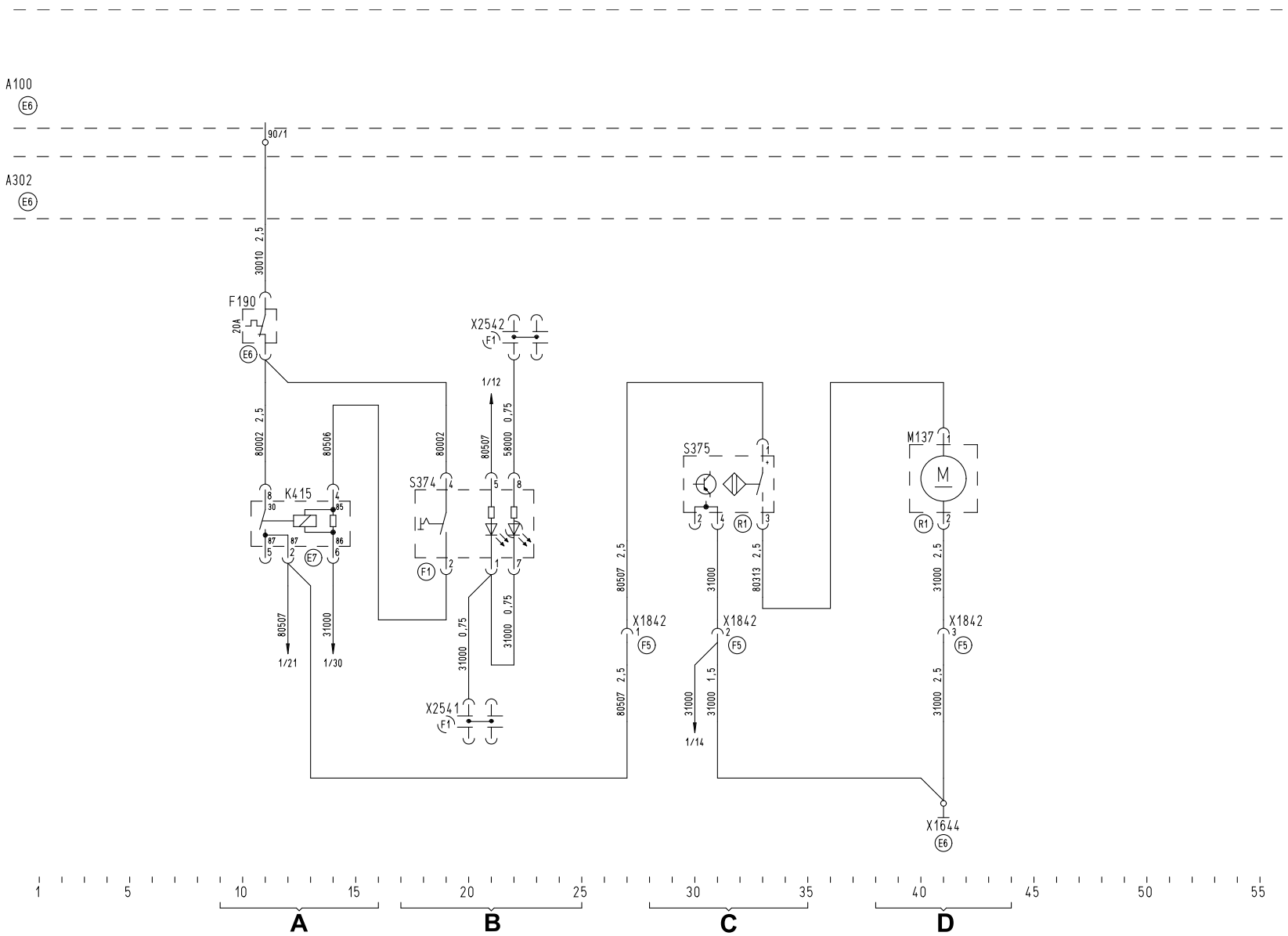
Wiring diagram no. **81.99192.1370** Sheet **1** of 1



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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

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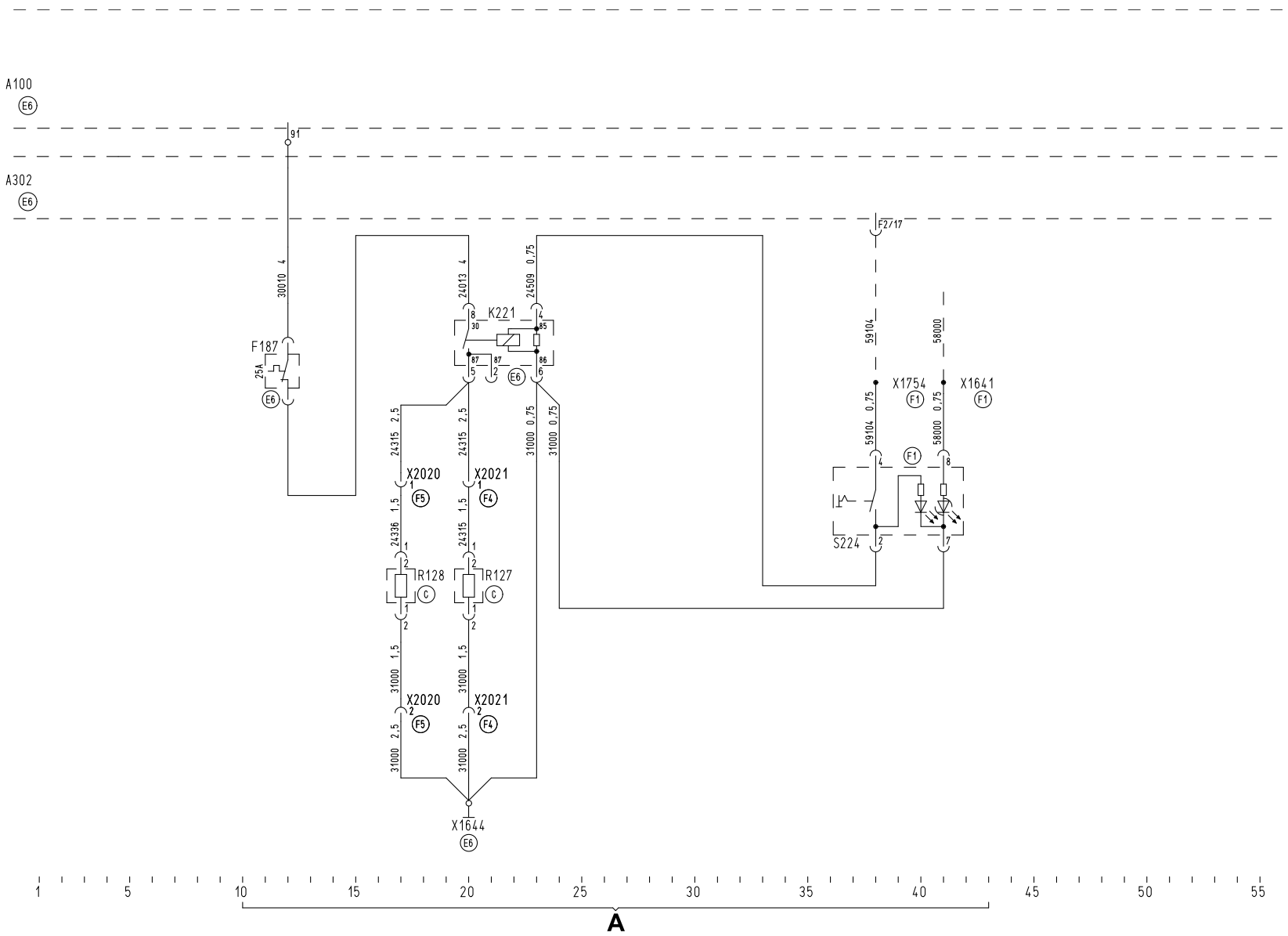
Wiring diagram no. **81.99192.2571** Sheet **1** of 1



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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

- (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

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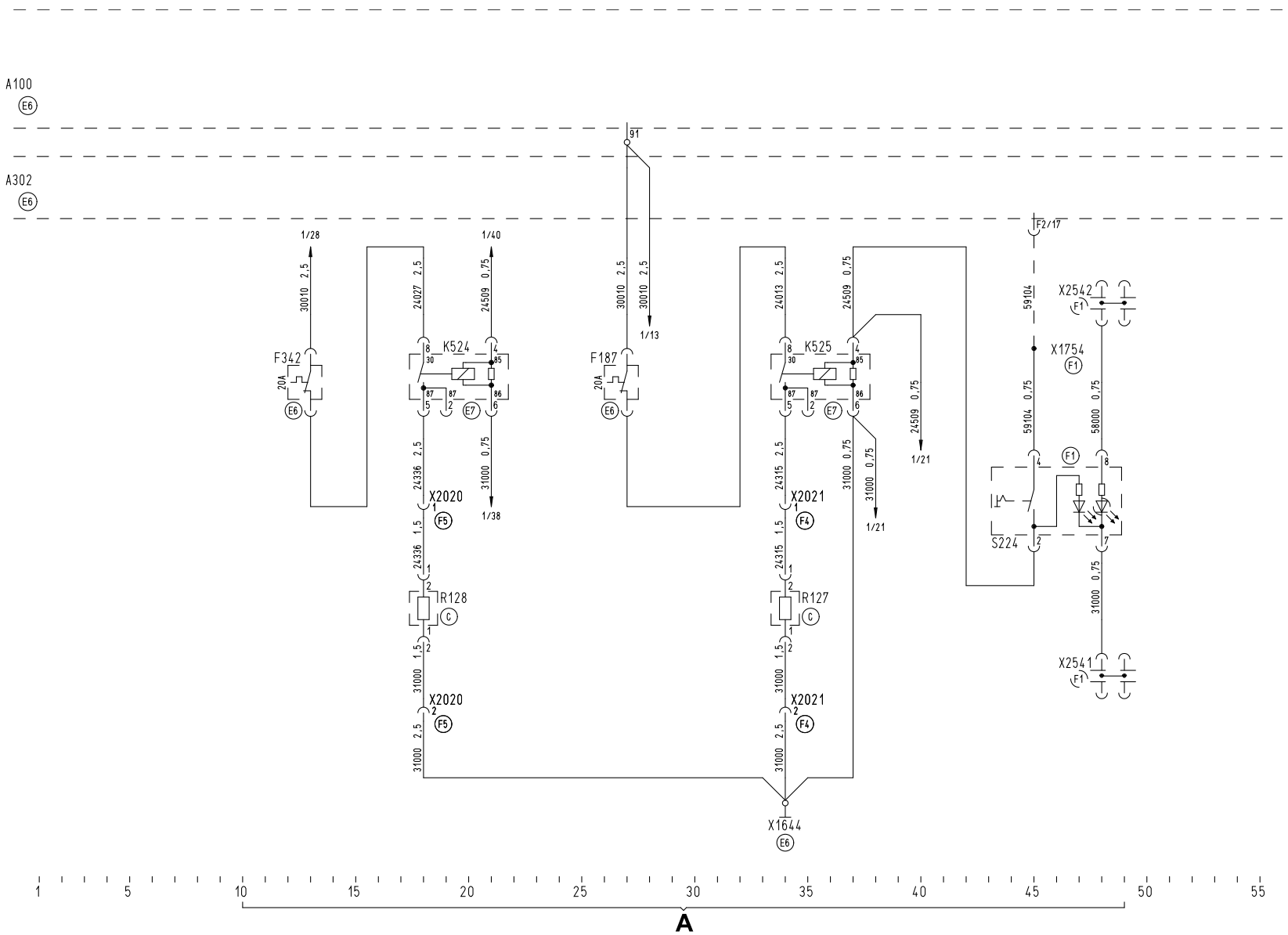
Wiring diagram no. **81.99192.1373** Sheet **1** of 1



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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

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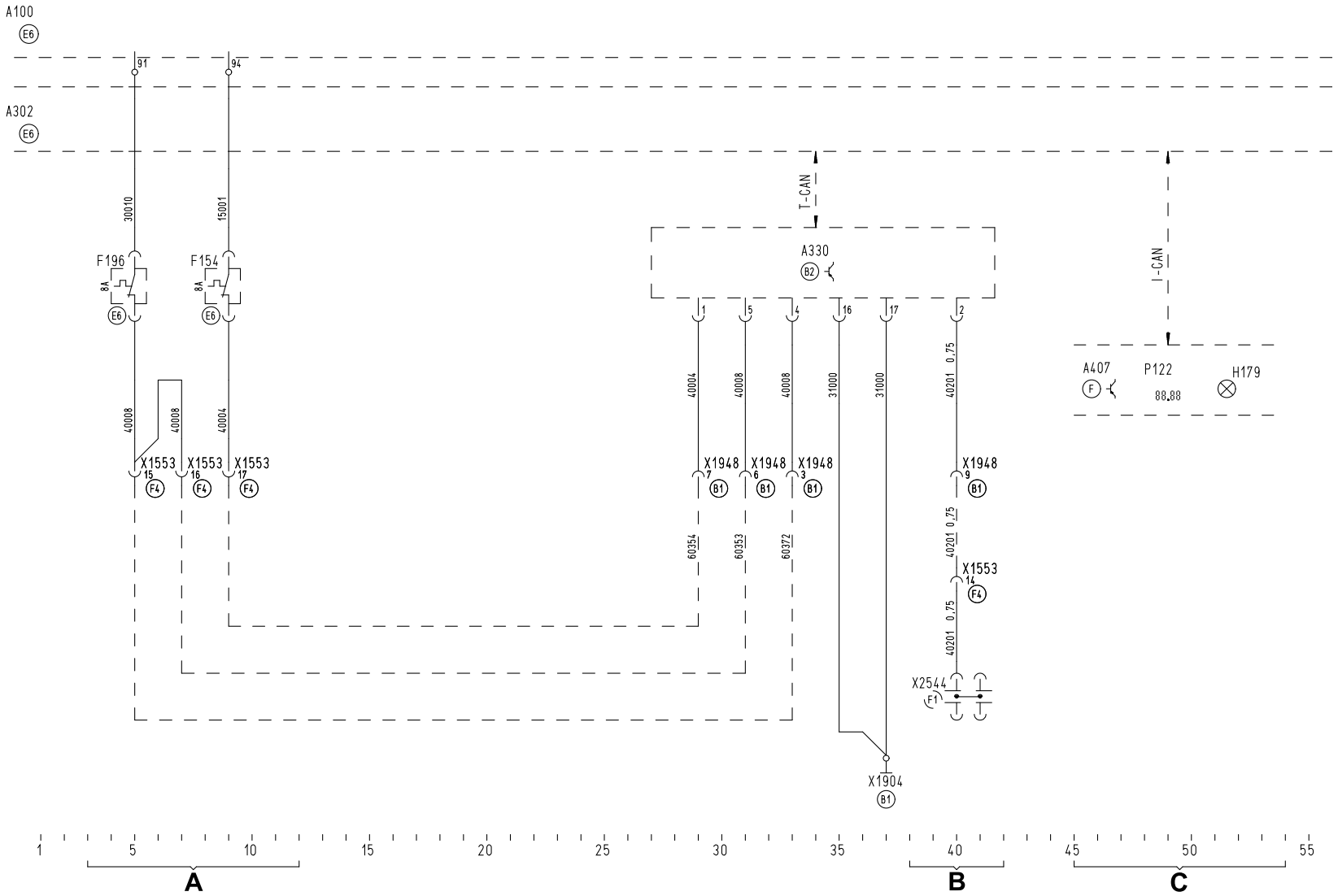
Wiring diagram no. **81.99192.2993** Sheet **1** of 2



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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
- (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) Reversing light

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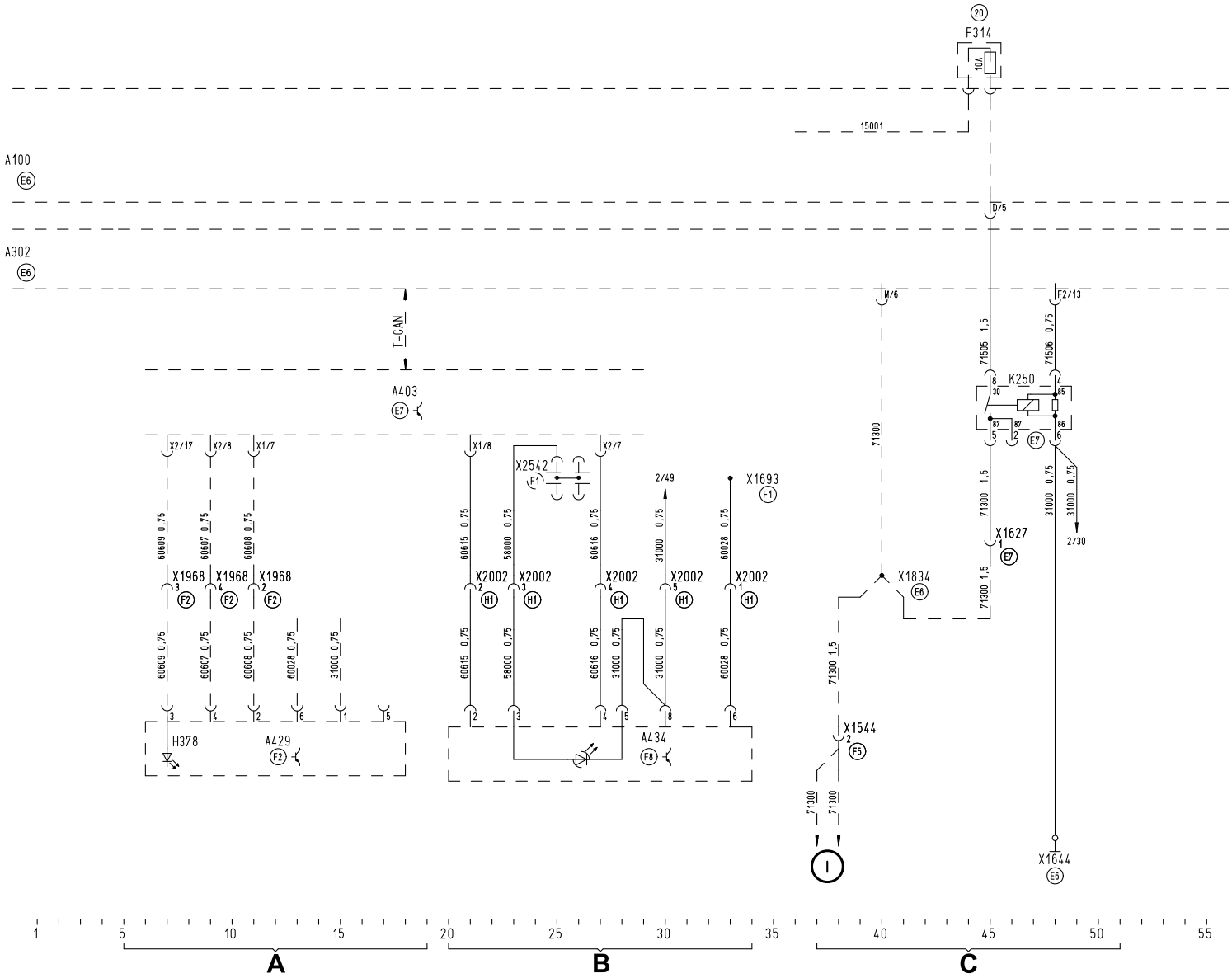
Wiring diagram no. **81.99192.2993** Sheet **2** of 2



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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

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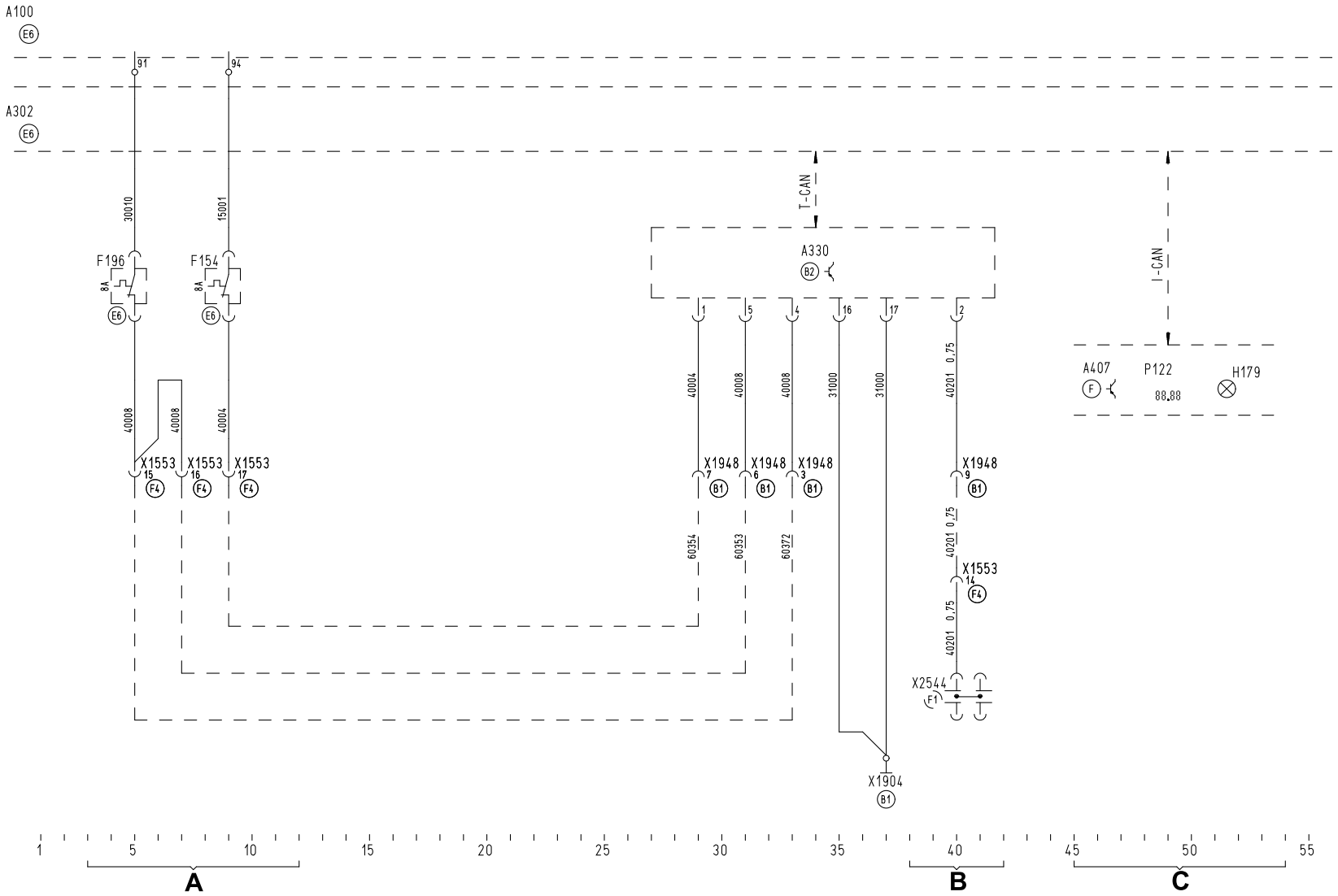
Wiring diagram no. **81.99192.2992** Sheet **1** of 2



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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		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
- (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) Reversing light

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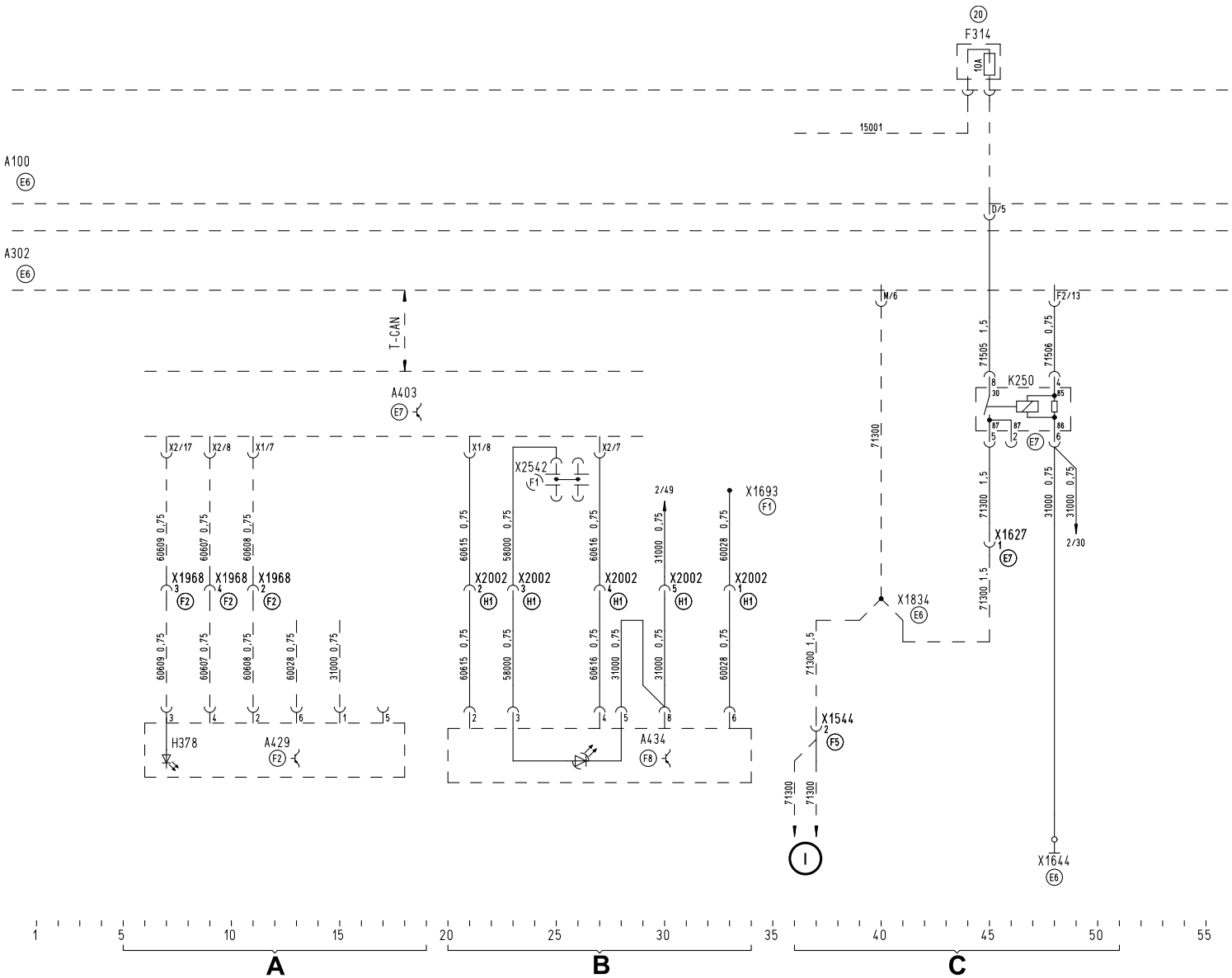
Wiring diagram no. **81.99192.2992** Sheet **2** of 2



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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
- (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

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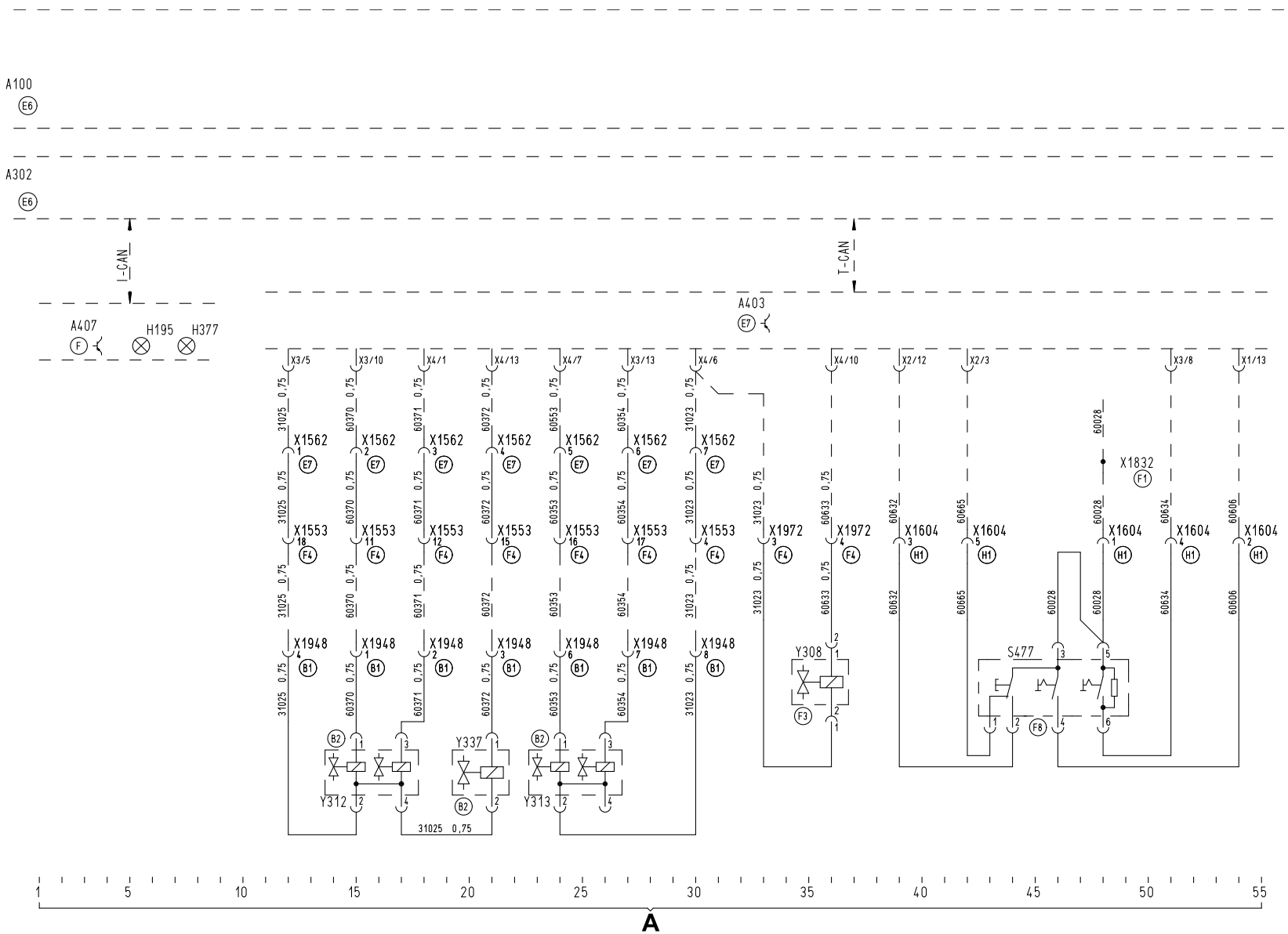
Wiring diagram no. **81.99192.2601** Sheet **1** of 2



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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

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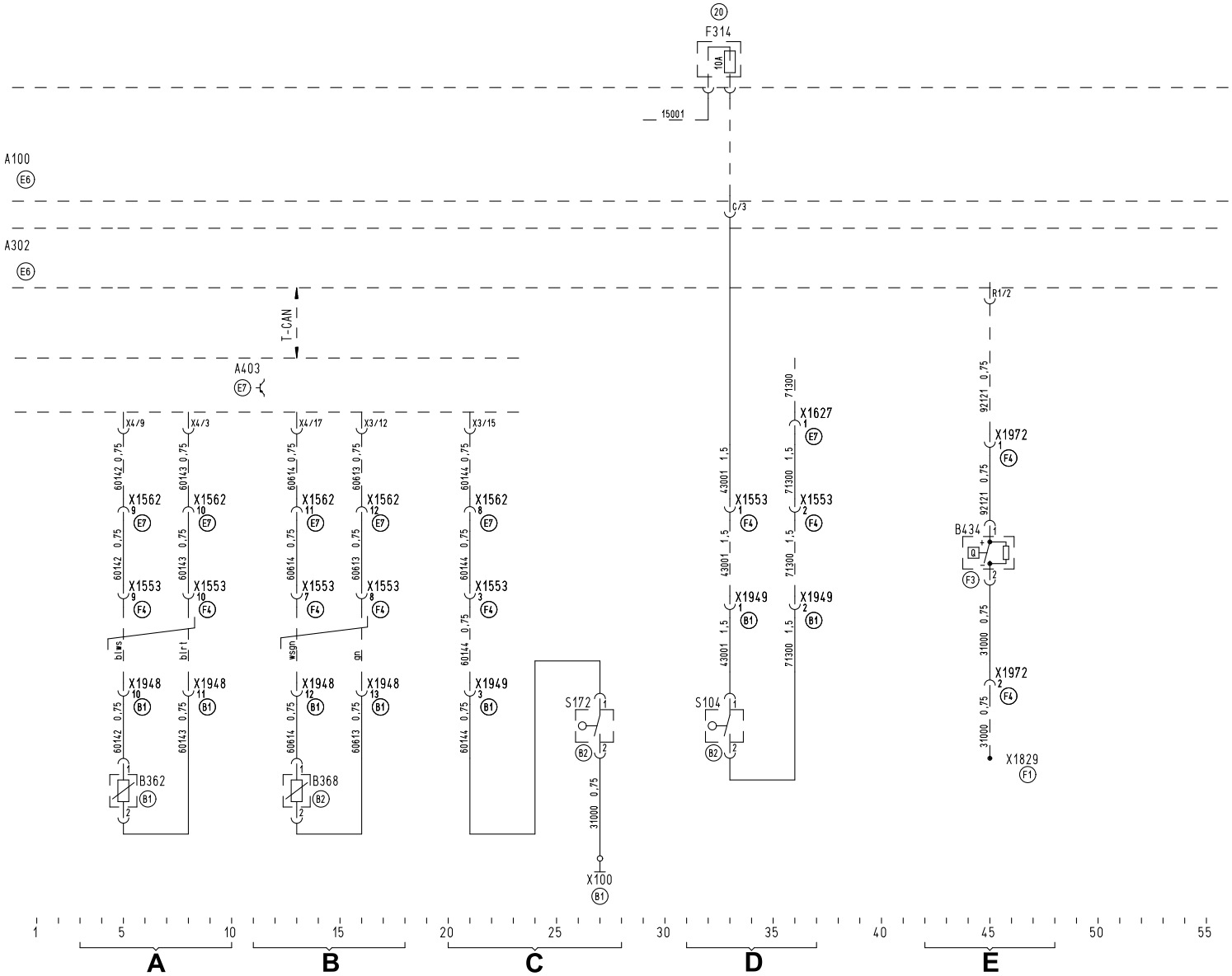
Wiring diagram no. **81.99192.2601** Sheet **2** of 2



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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

- (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

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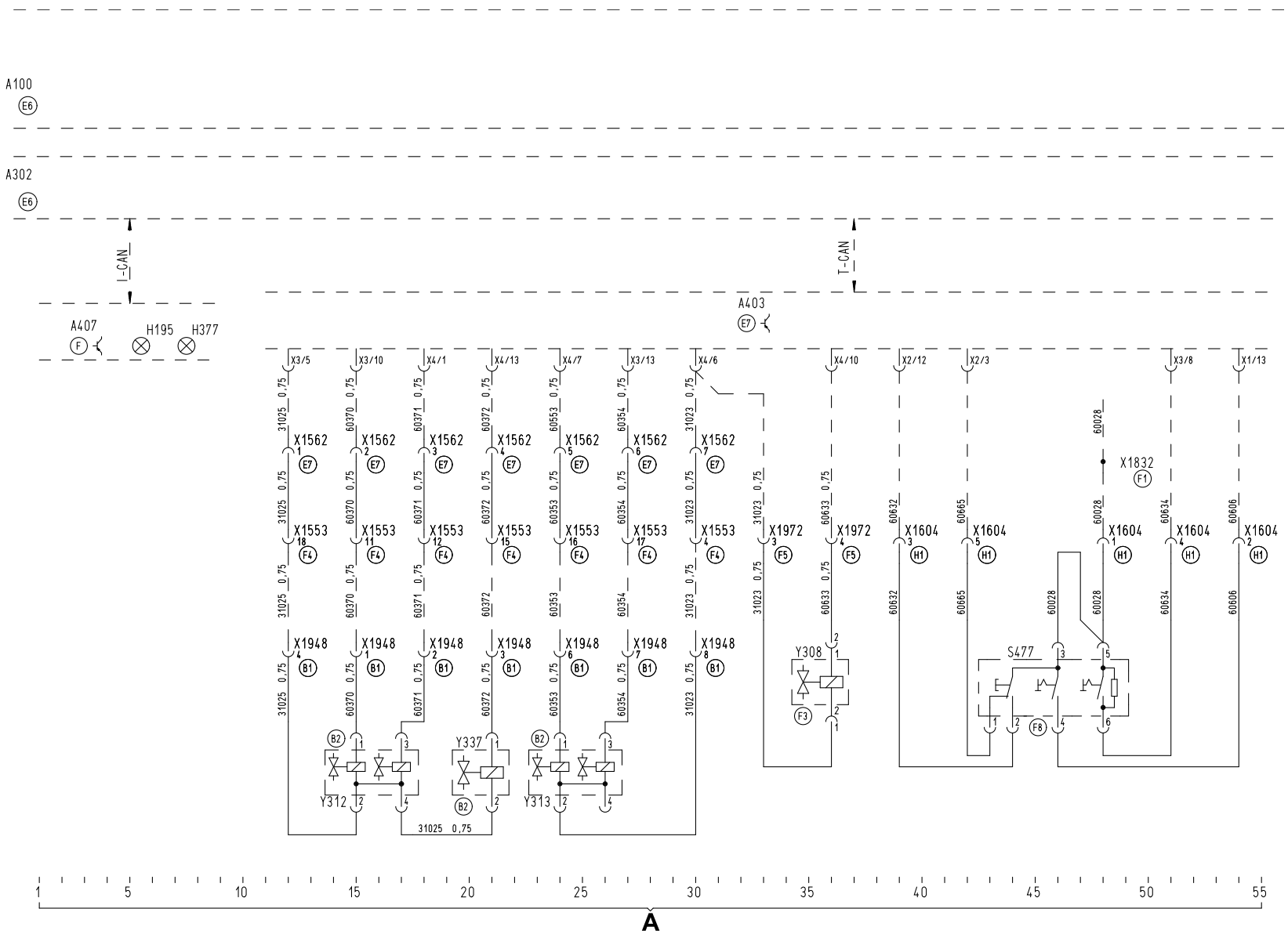
Wiring diagram no. **81.99192.2417** Sheet **1** of 2



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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

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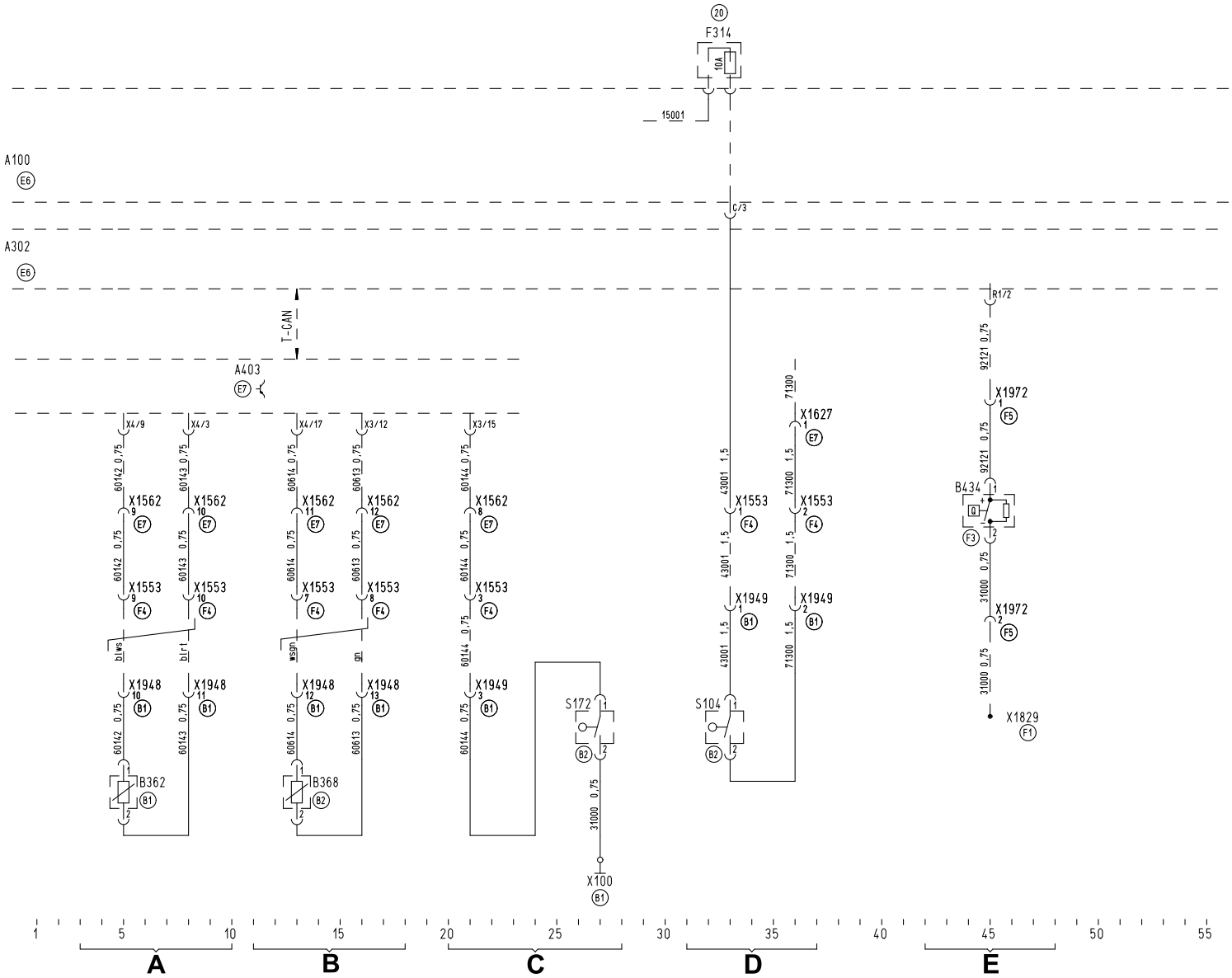
Wiring diagram no. **81.99192.2417** Sheet **2** of 2



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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
- (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

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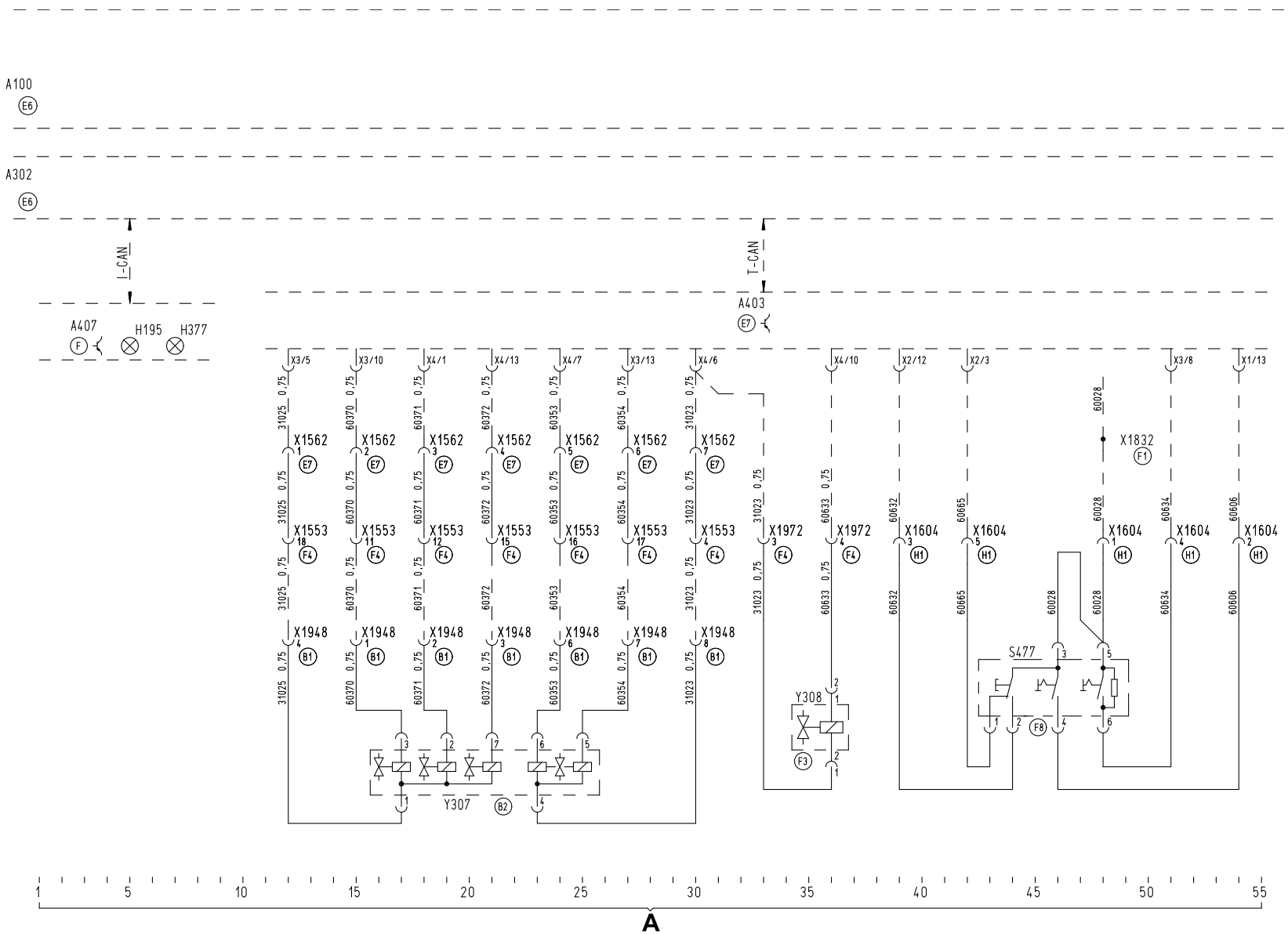
Wiring diagram no. **81.99192.2579** Sheet **1** of 2



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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

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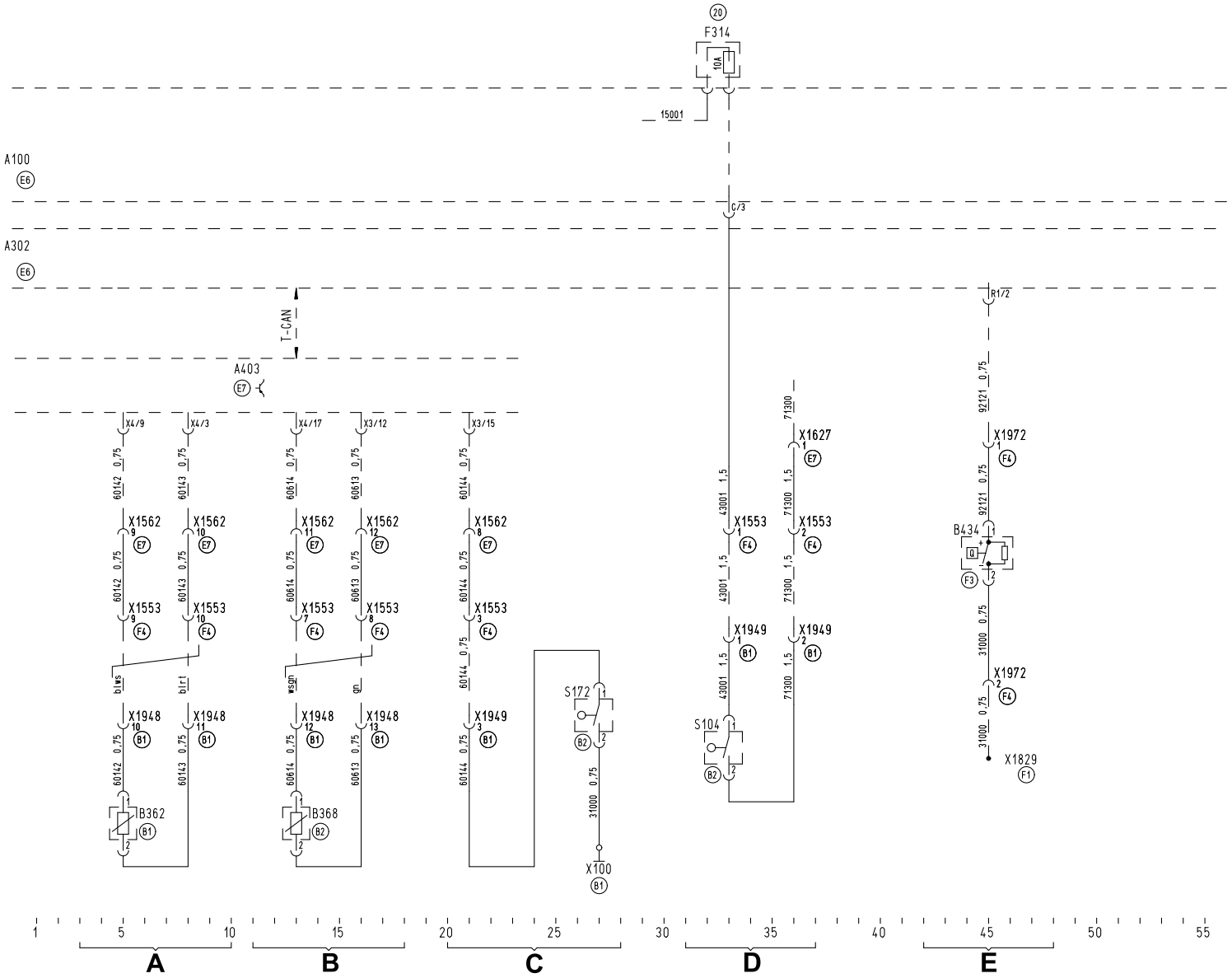
Wiring diagram no. **81.99192.2579** Sheet **2** of 2



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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
- (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

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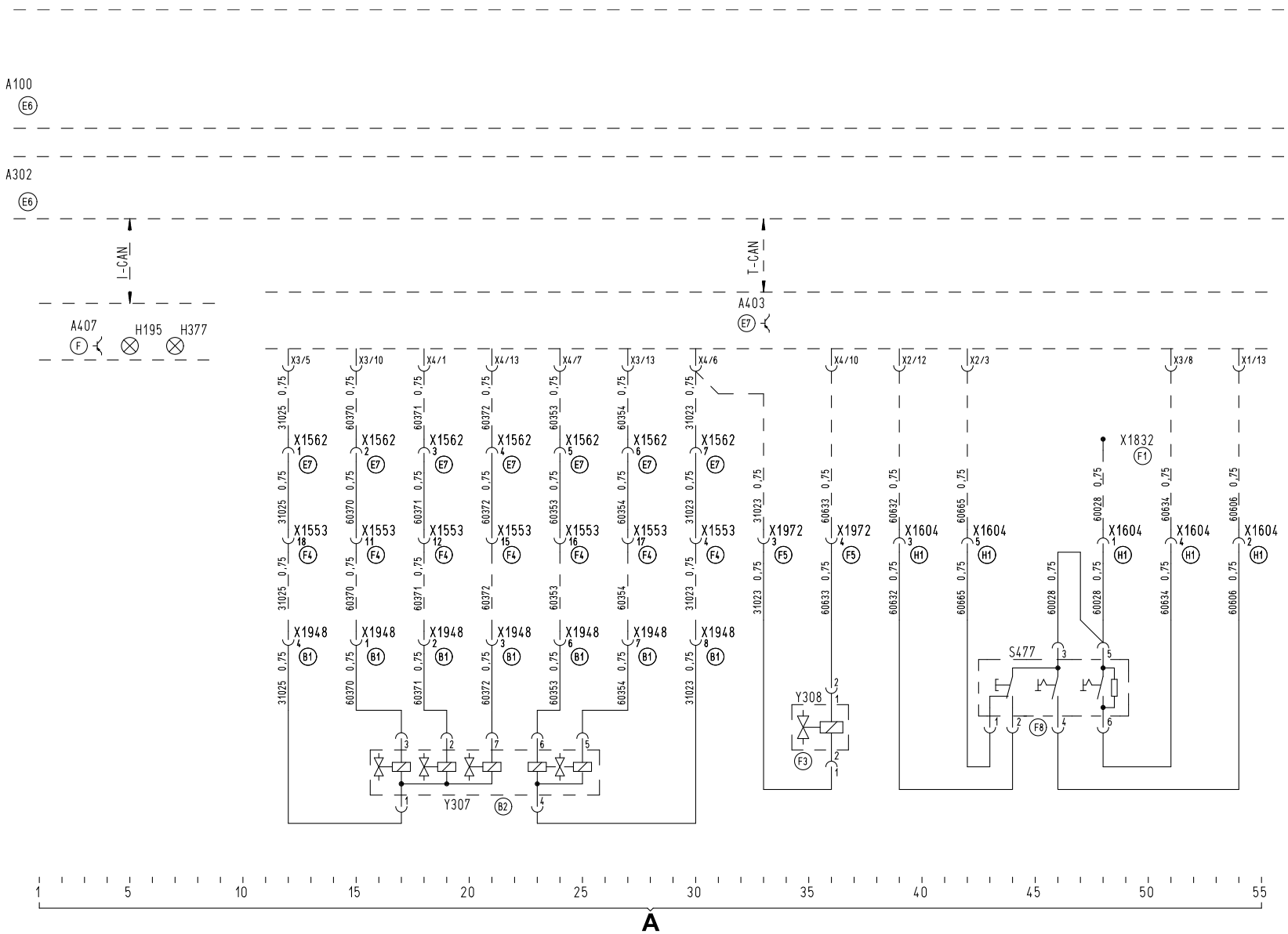
Wiring diagram no. **81.99192.2835** Sheet **1** of 2



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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

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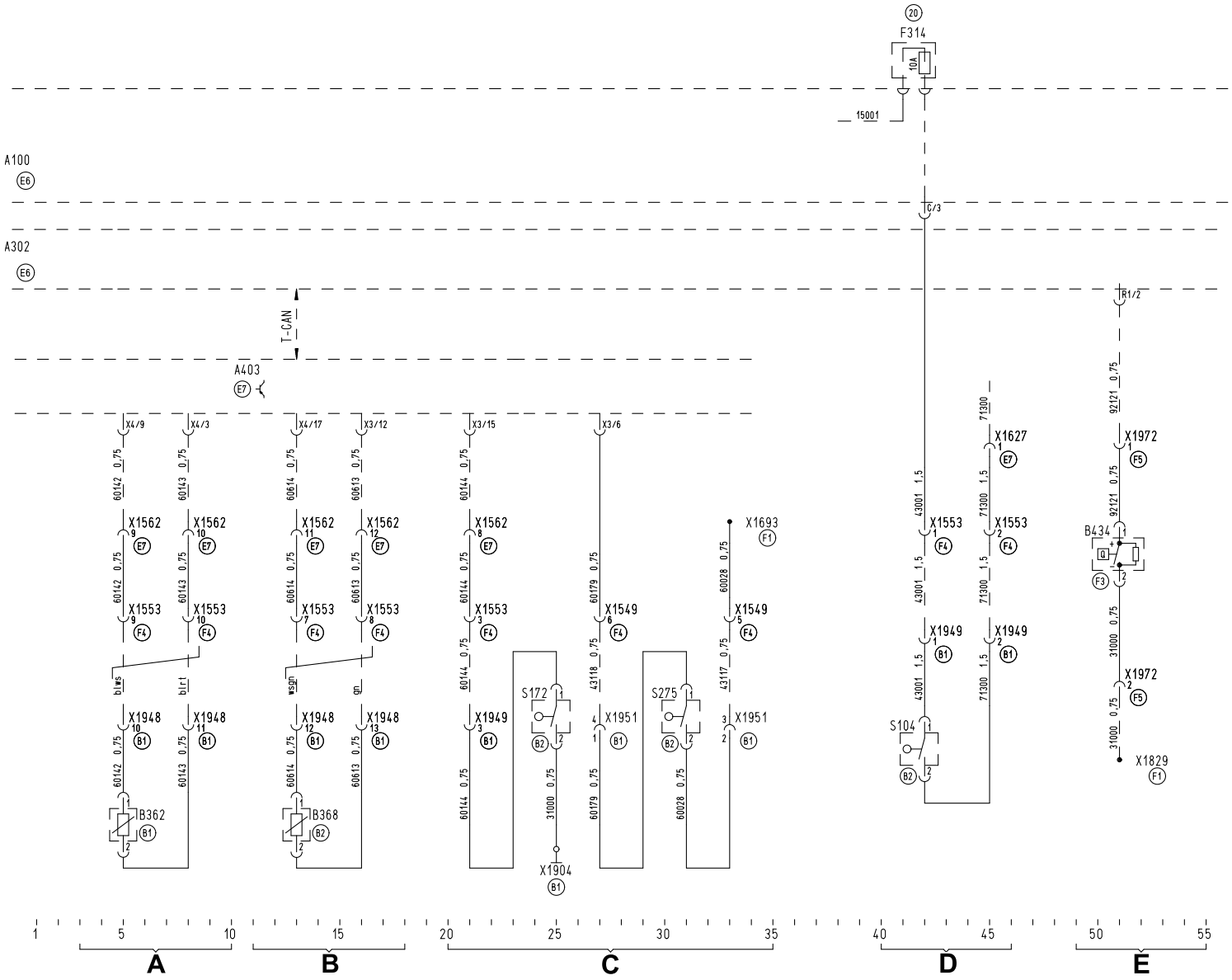
Wiring diagram no. **81.99192.2835** Sheet **2** of 2



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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

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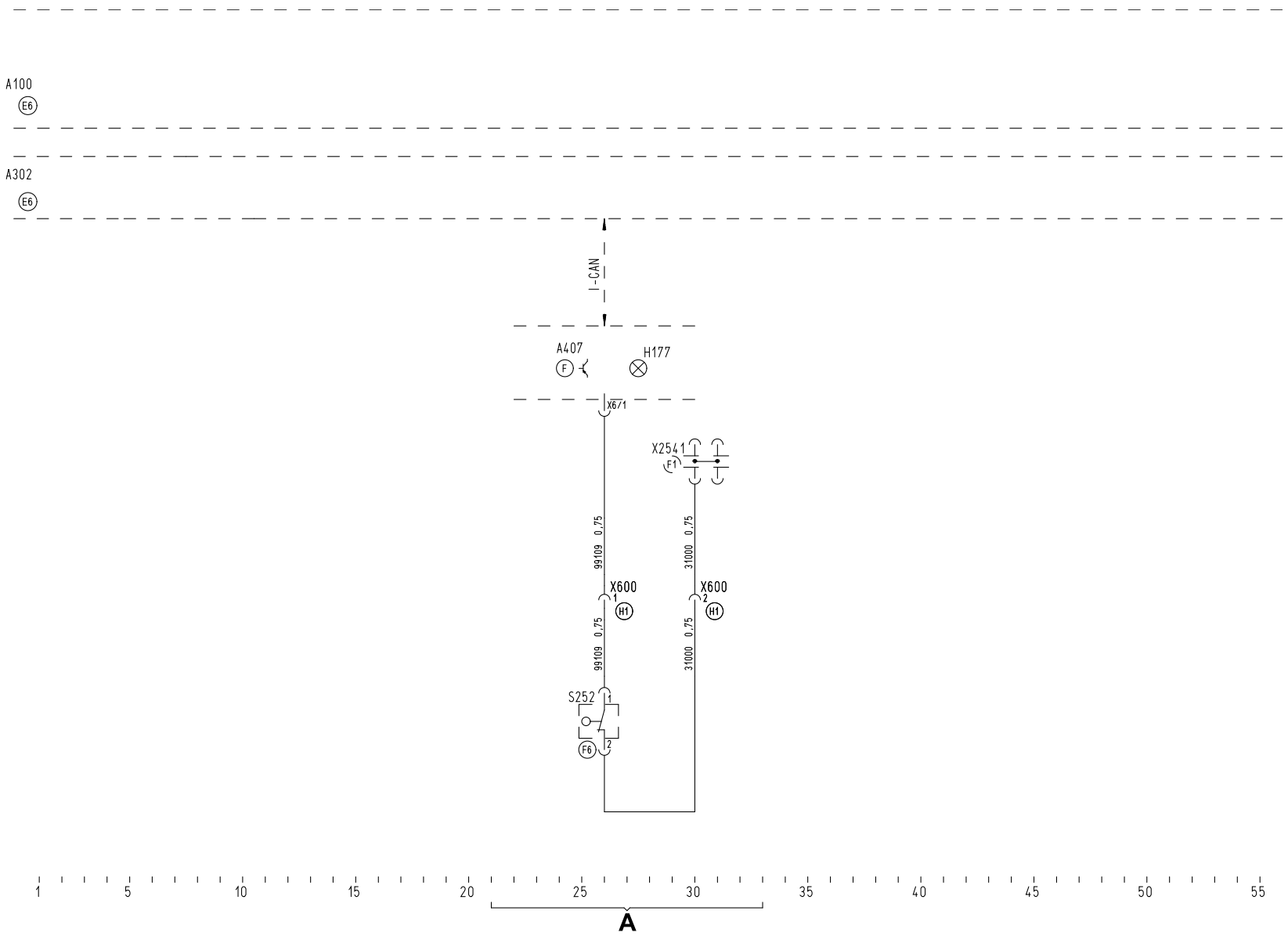
Wiring diagram no. **81.99192.1374** Sheet **1** of 1



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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

- (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) to earth of consumers in frame

Note:
Mounting position of **X808** for semitrailers is E8!

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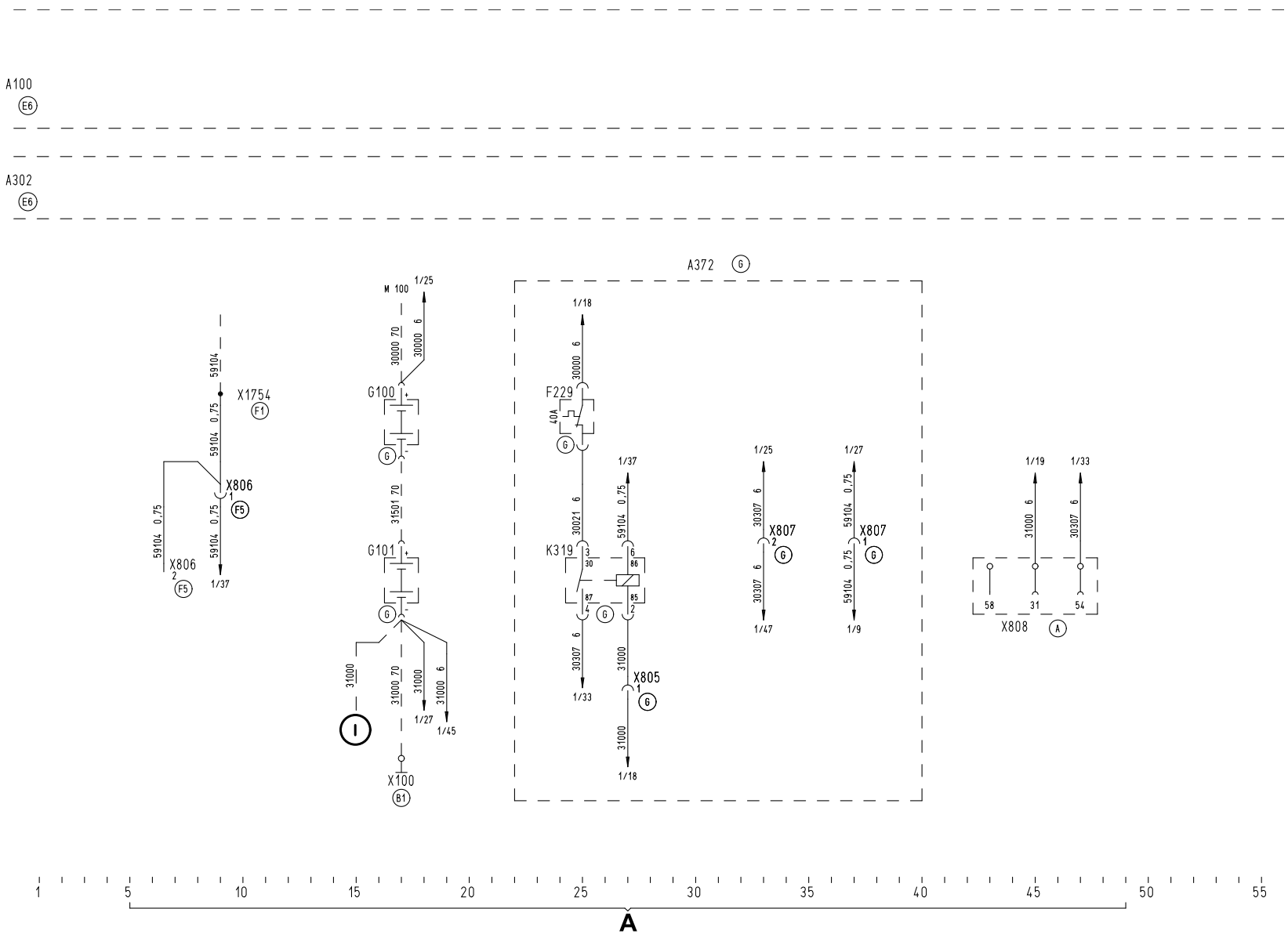
Wiring diagram no. **81.99192.2616** Sheet **1** of 1



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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
- (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

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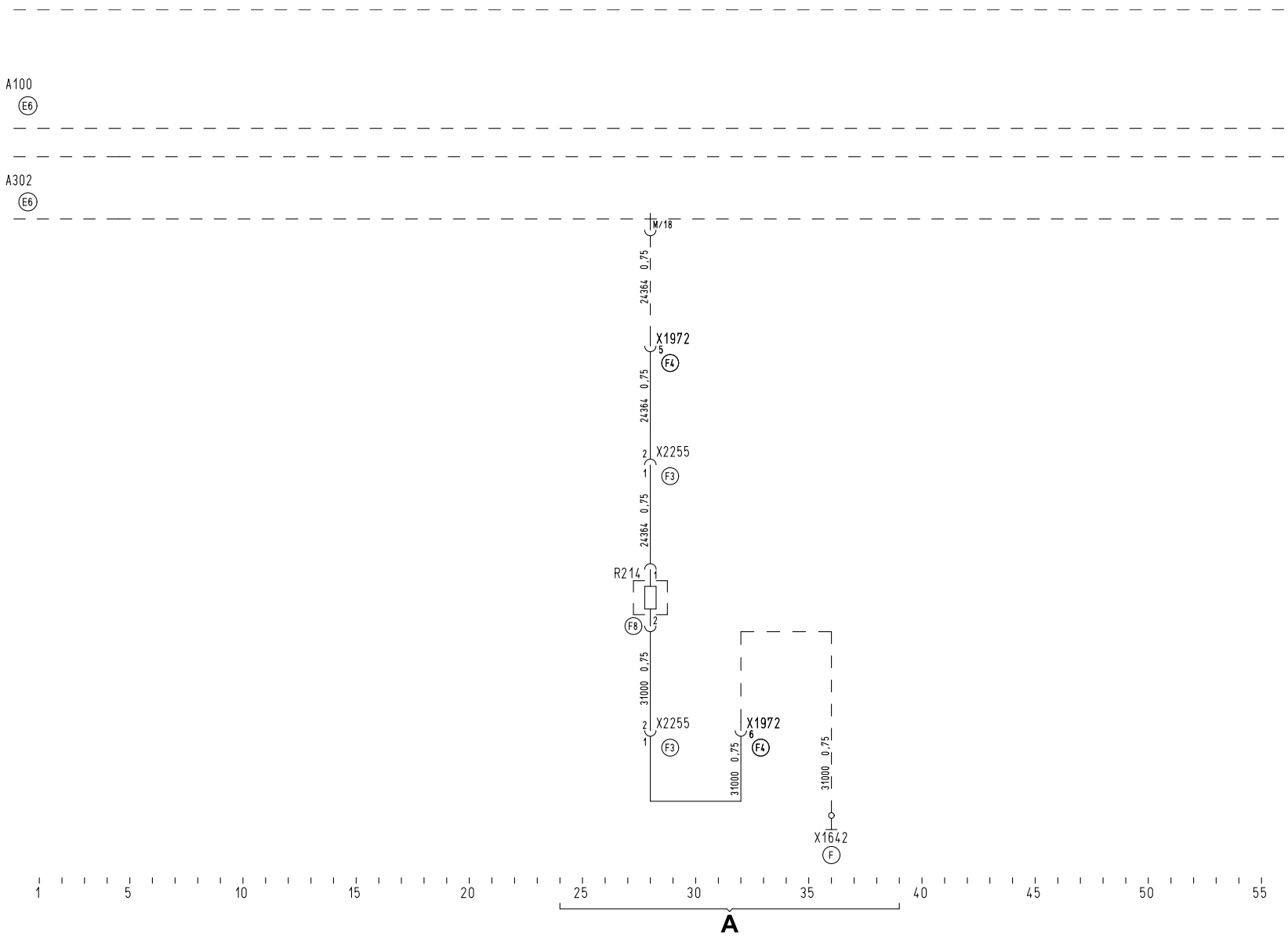
Wiring diagram no. **81.99192.2684** Sheet **1** of 1



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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
- (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

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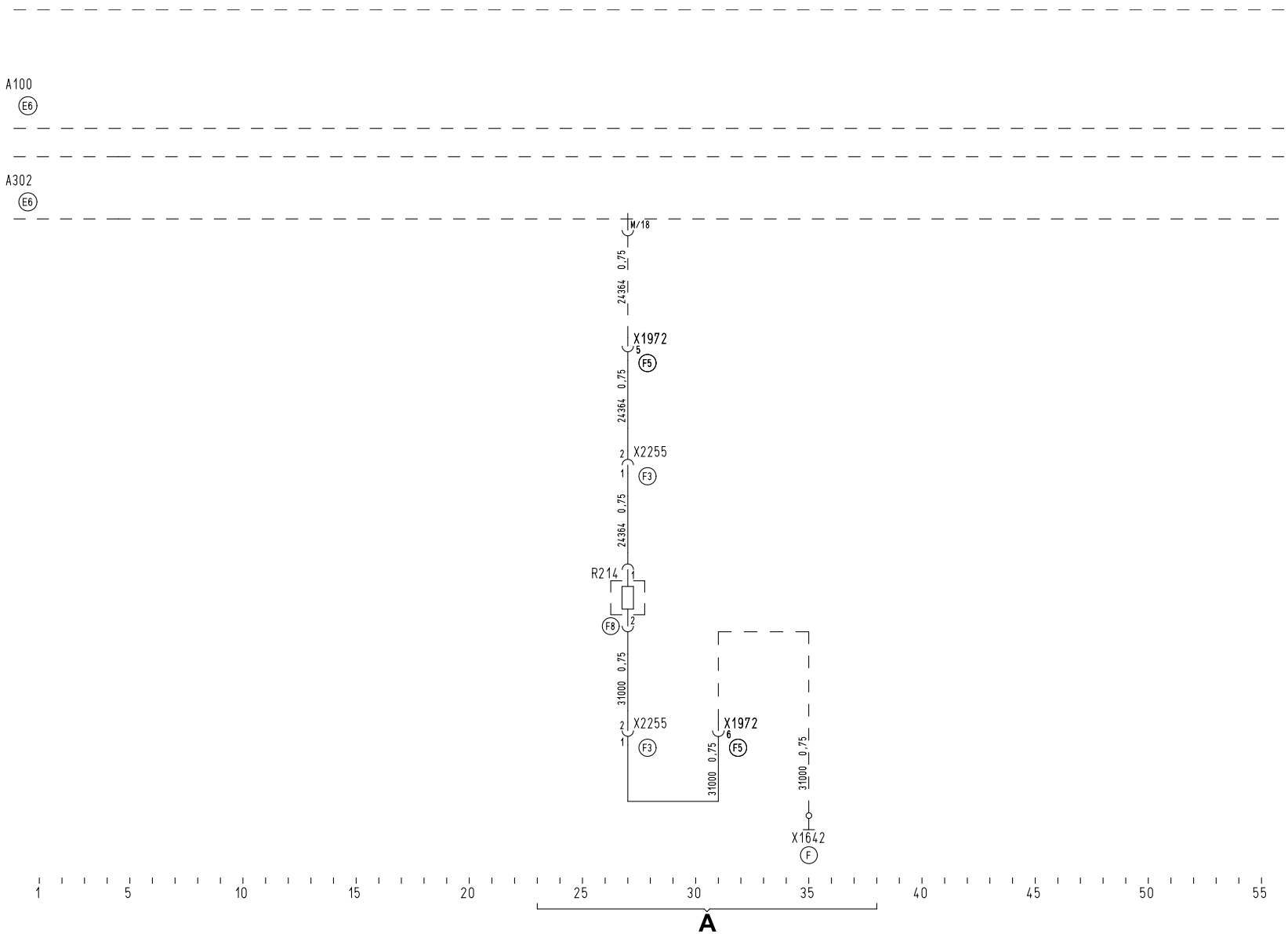
Wiring diagram no. **81.99192.2690** Sheet **1** of 1



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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
- (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

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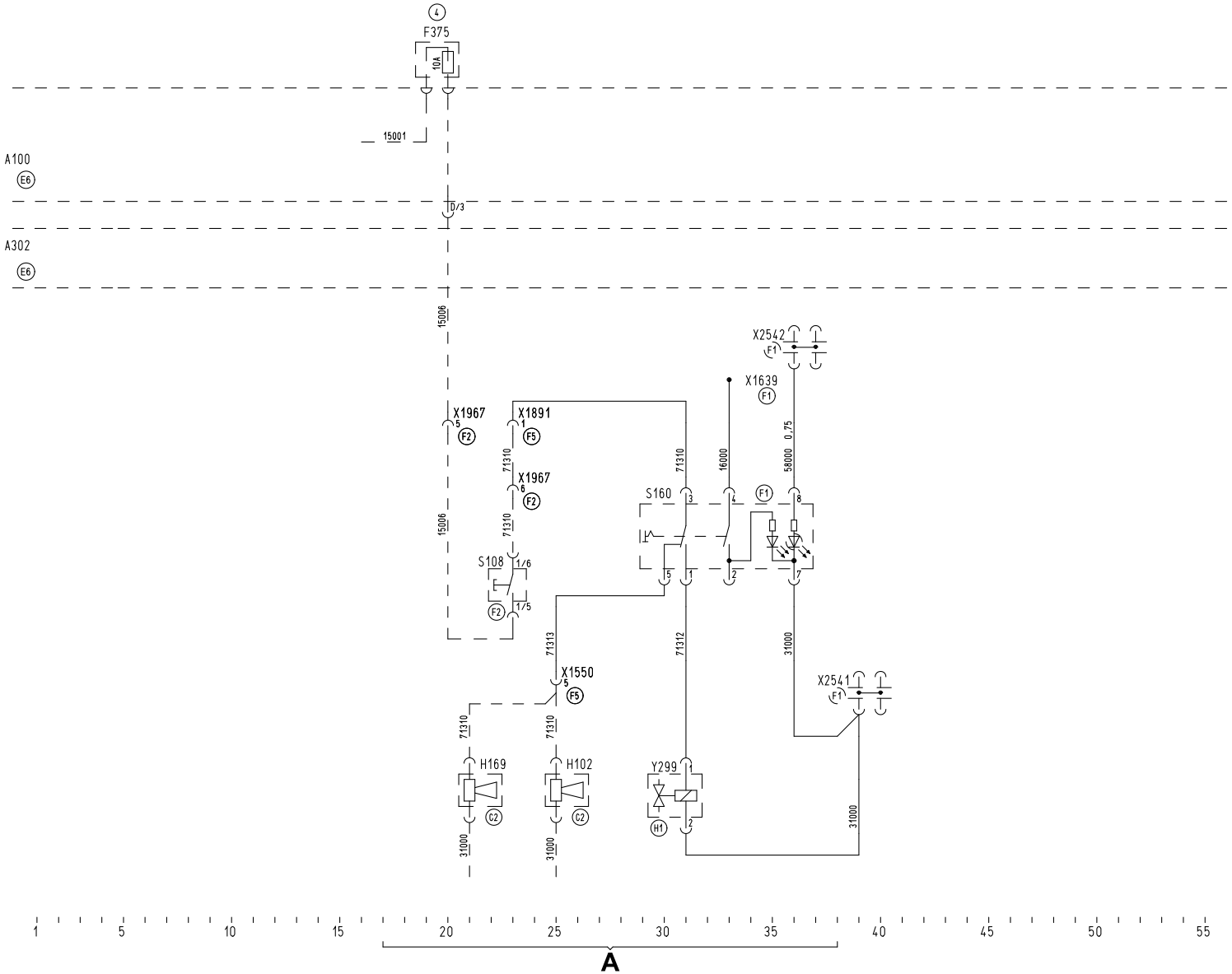
Wiring diagram no. **81.99192.1375** Sheet **1** of 1



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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

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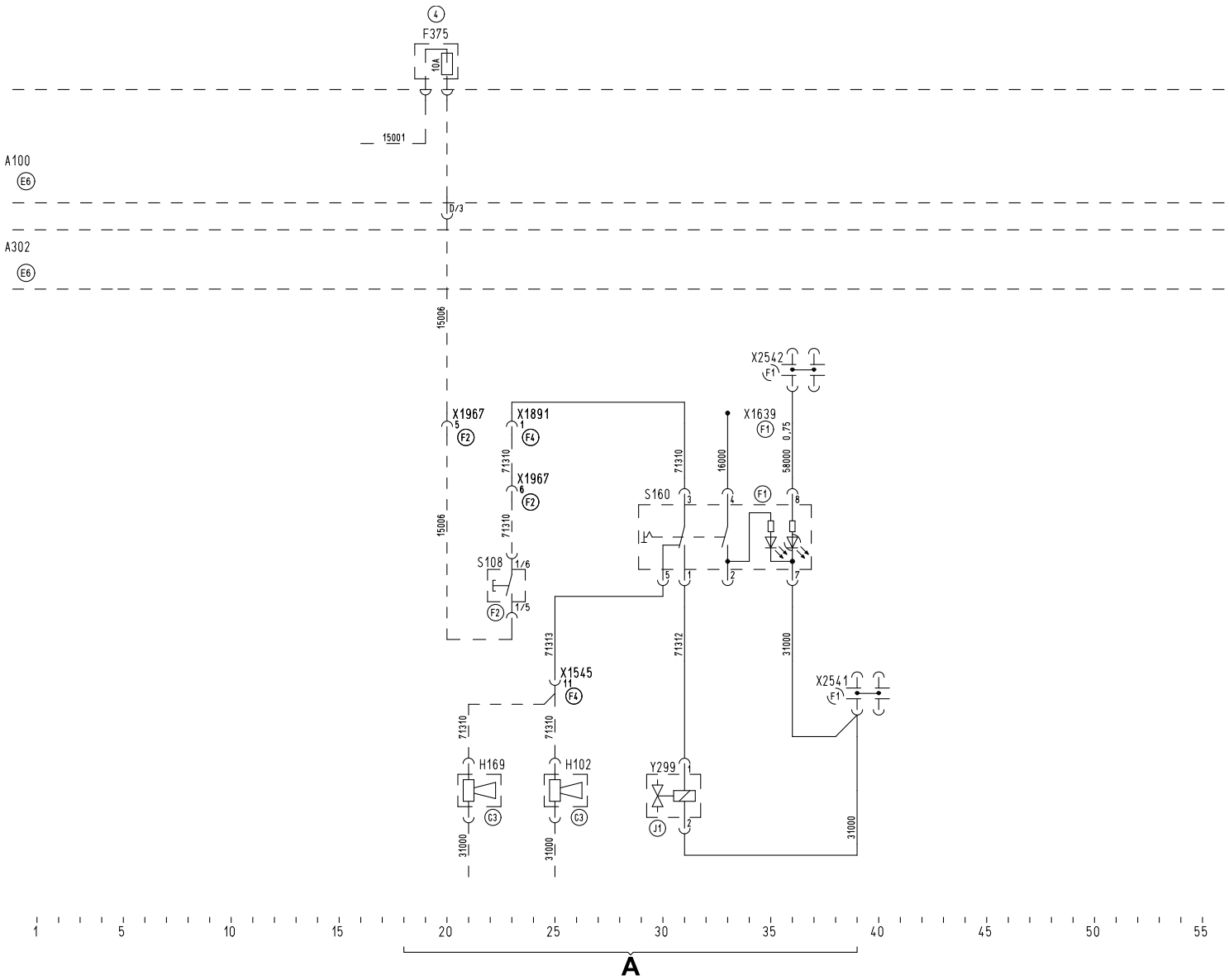
Wiring diagram no. **81.99192.1376** Sheet **1** of 1



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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

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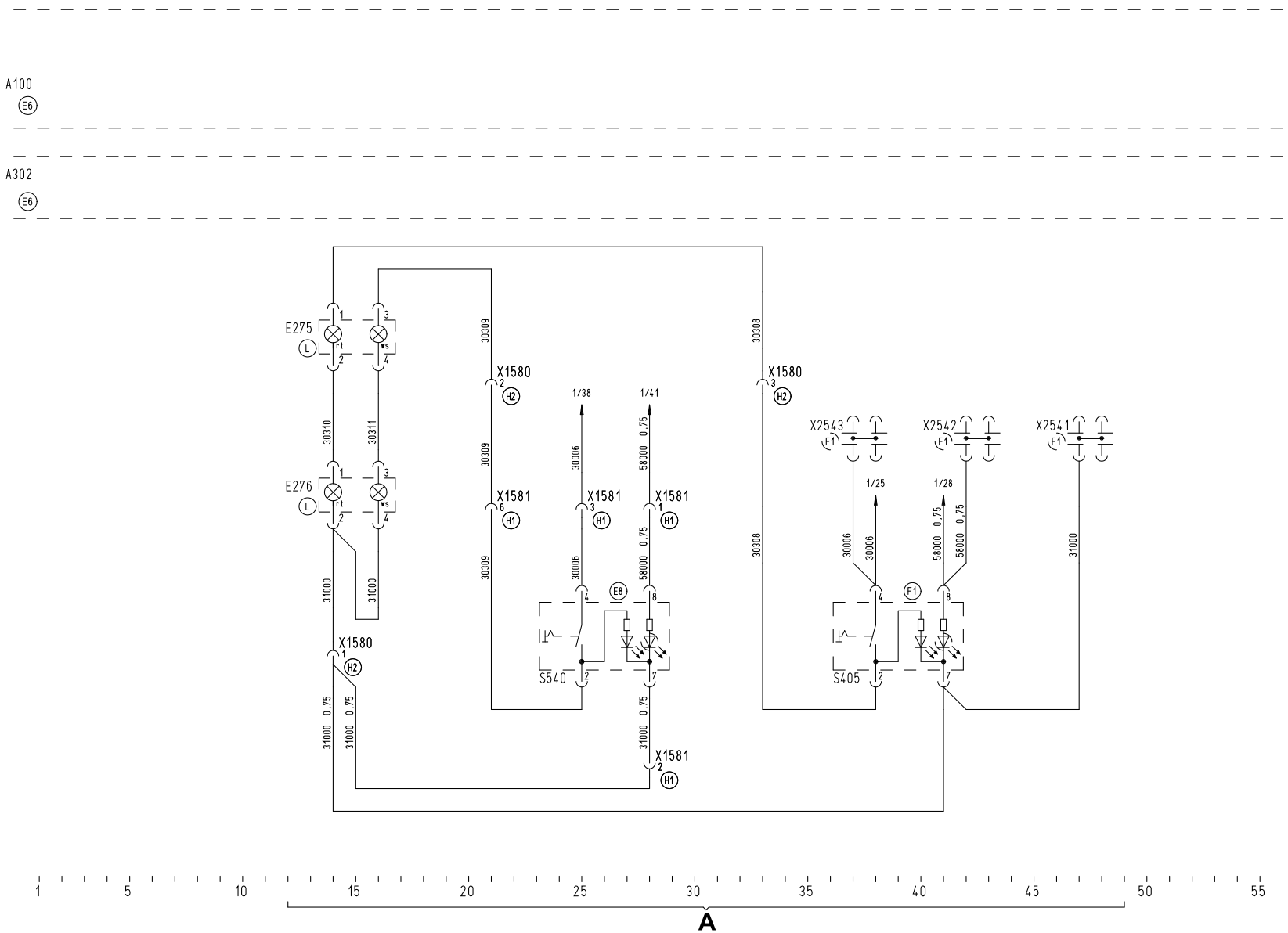
Wiring diagram no. **81.99192.1377** Sheet **1** of 1



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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
- (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

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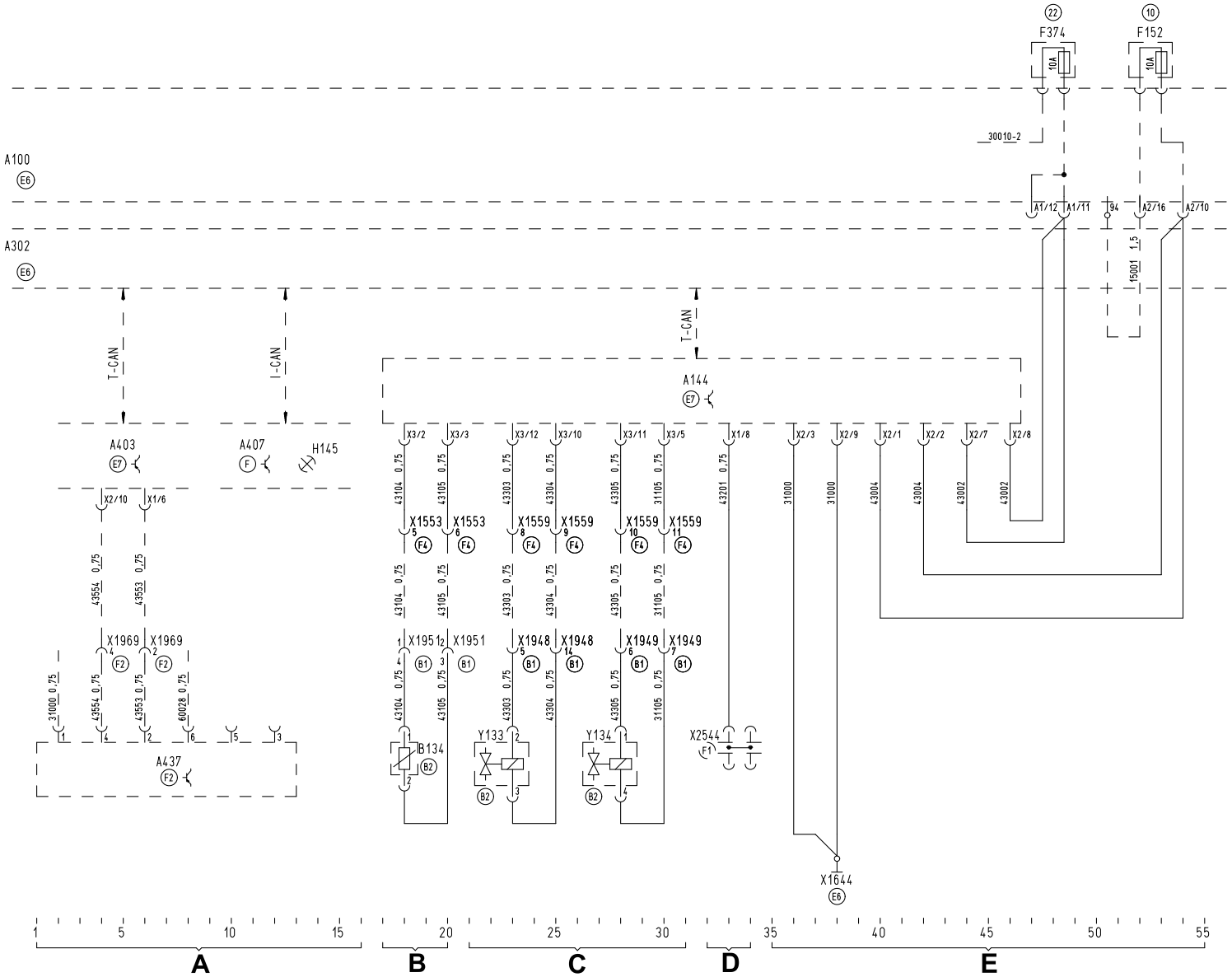
Wiring diagram no. **81.99192.1378** Sheet **1** of 1



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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

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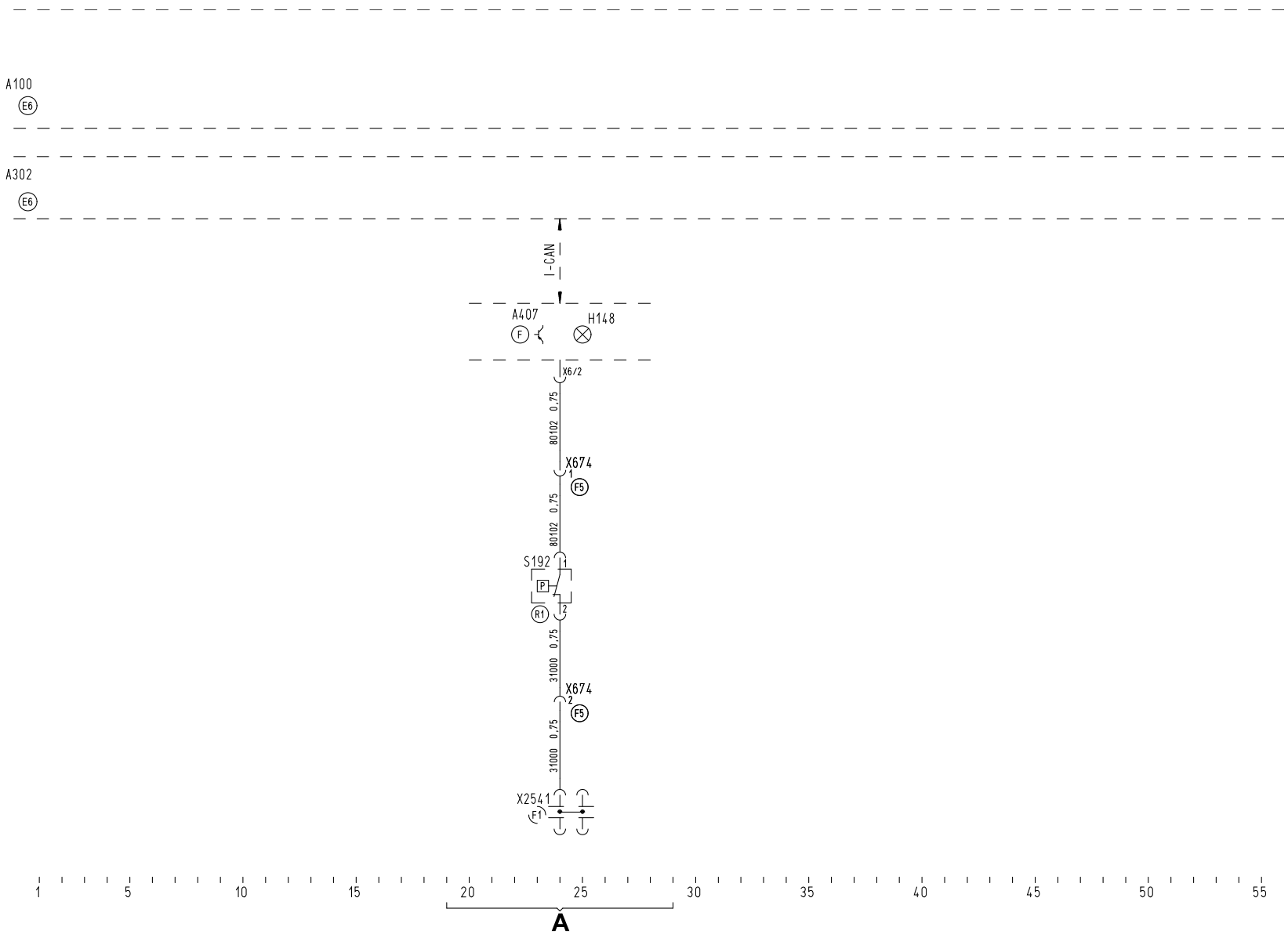
Wiring diagram no. **81.99192.1379** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A474	(467)	Control device, cab heating with/without air-conditioning
B393	(302)	Temperature sensor, internal air (air-conditioning system)
F397	(104)	Fuse, heater blower/air-conditioning unit
K718	(283)	Relay, temperature sensor, internal air (air-conditioning system)
S123	(A467)	Switch, fresh air circulation vent
S544	(A467)	Switch AC-EIN (“ON”)
S545	(A467)	Switch, reheat
S546	(A467)	Rotary control, internal temperature
S547	(A467)	Rotary control, blower
X1560	(203)	Relay socket K718, K...
X1754		Crimped connector, line 59104
X1822		Stvd. air-conditioning system
X1823		Stvd. air-conditioning, terminal 15
X2541	(246)	Potential distributor, 21-pin line 31000
Y117		Solenoid valve, front air-conditioning unit

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

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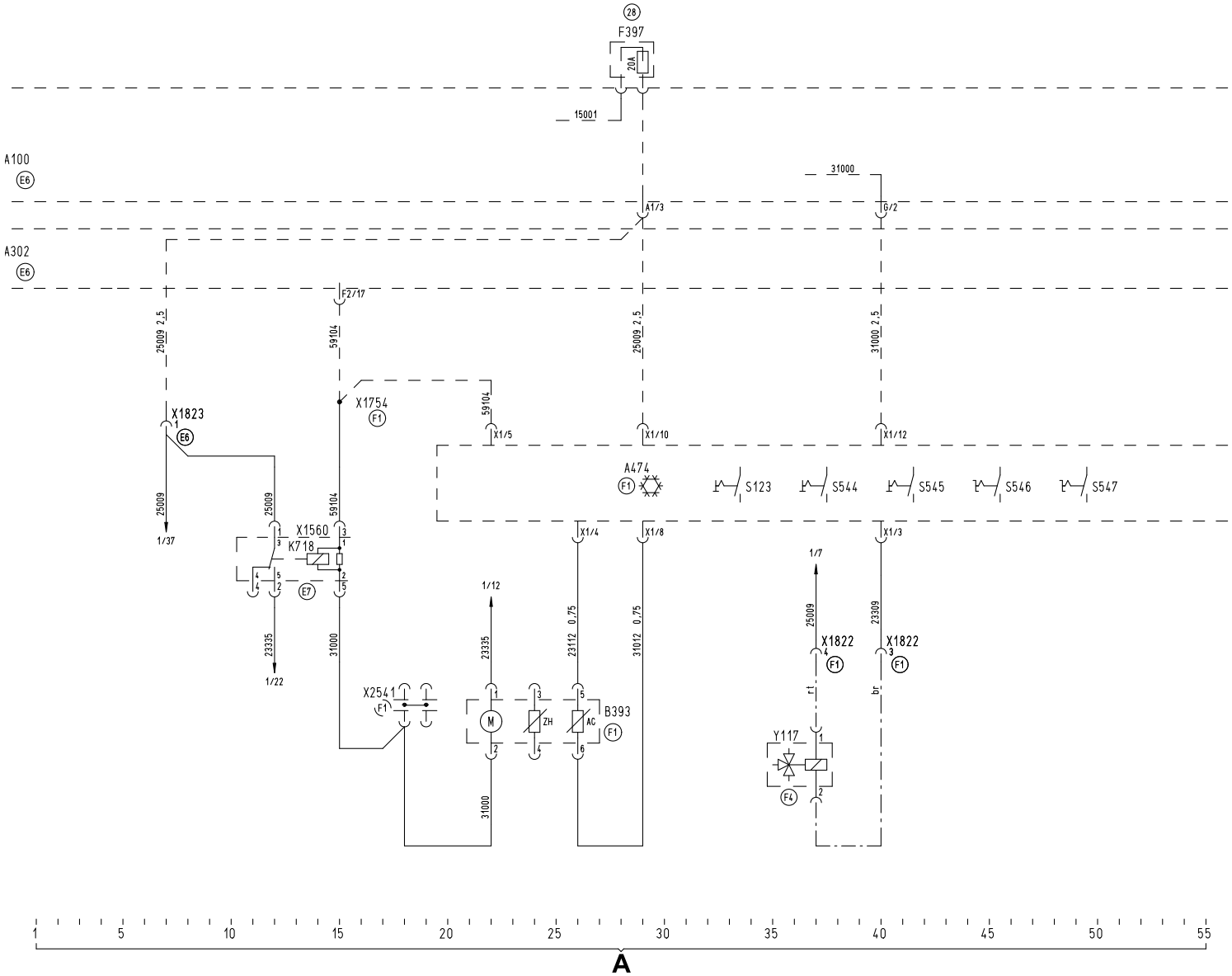
Wiring diagram no. **81.99192.1380** Sheet **1** of 2



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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
- (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) Clock-pulse regulator
- (II) Blower
- (III) Fresh/circulating air
- (IV) HK bypass
- (V) Heat exchanger sensor
- (VI) External temperature sensor
- (VII) Condenser sensor

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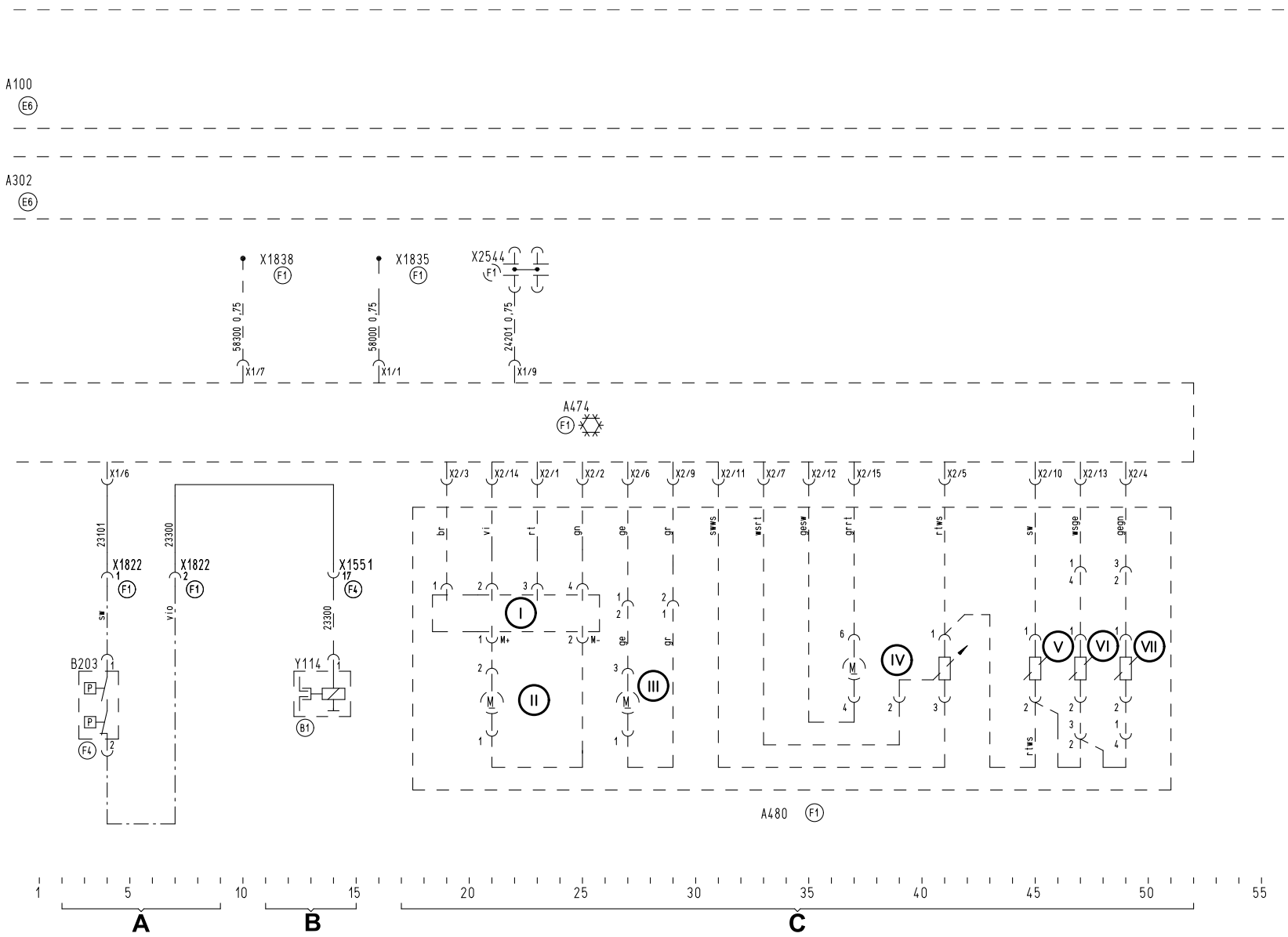
Wiring diagram no. **81.99192.1380** Sheet **2** of 2



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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
- (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

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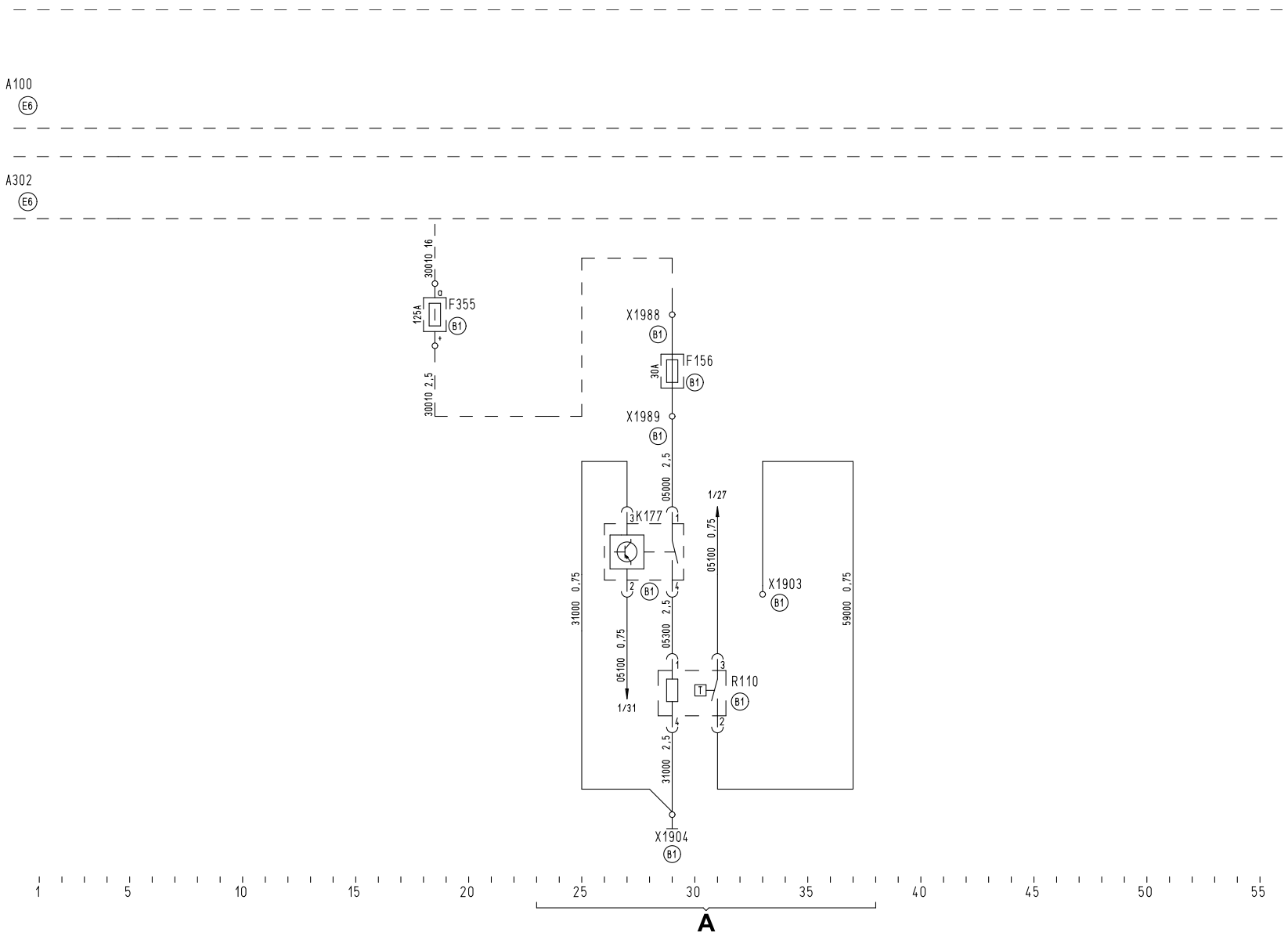
Wiring diagram no. **81.99192.2487** Sheet **1** of 1



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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

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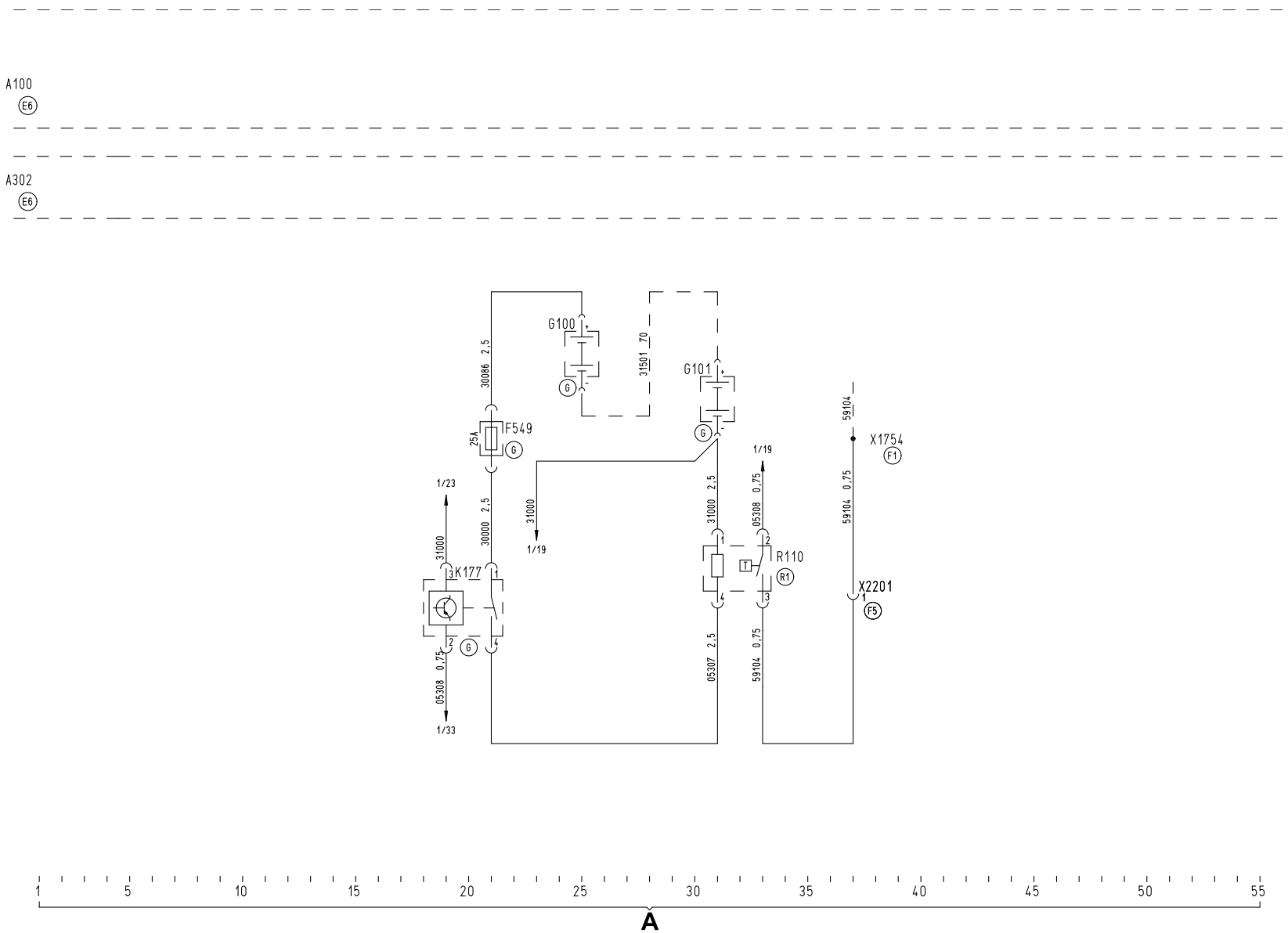
Wiring diagram no. **81.99192.2665** Sheet **1** of 1



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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

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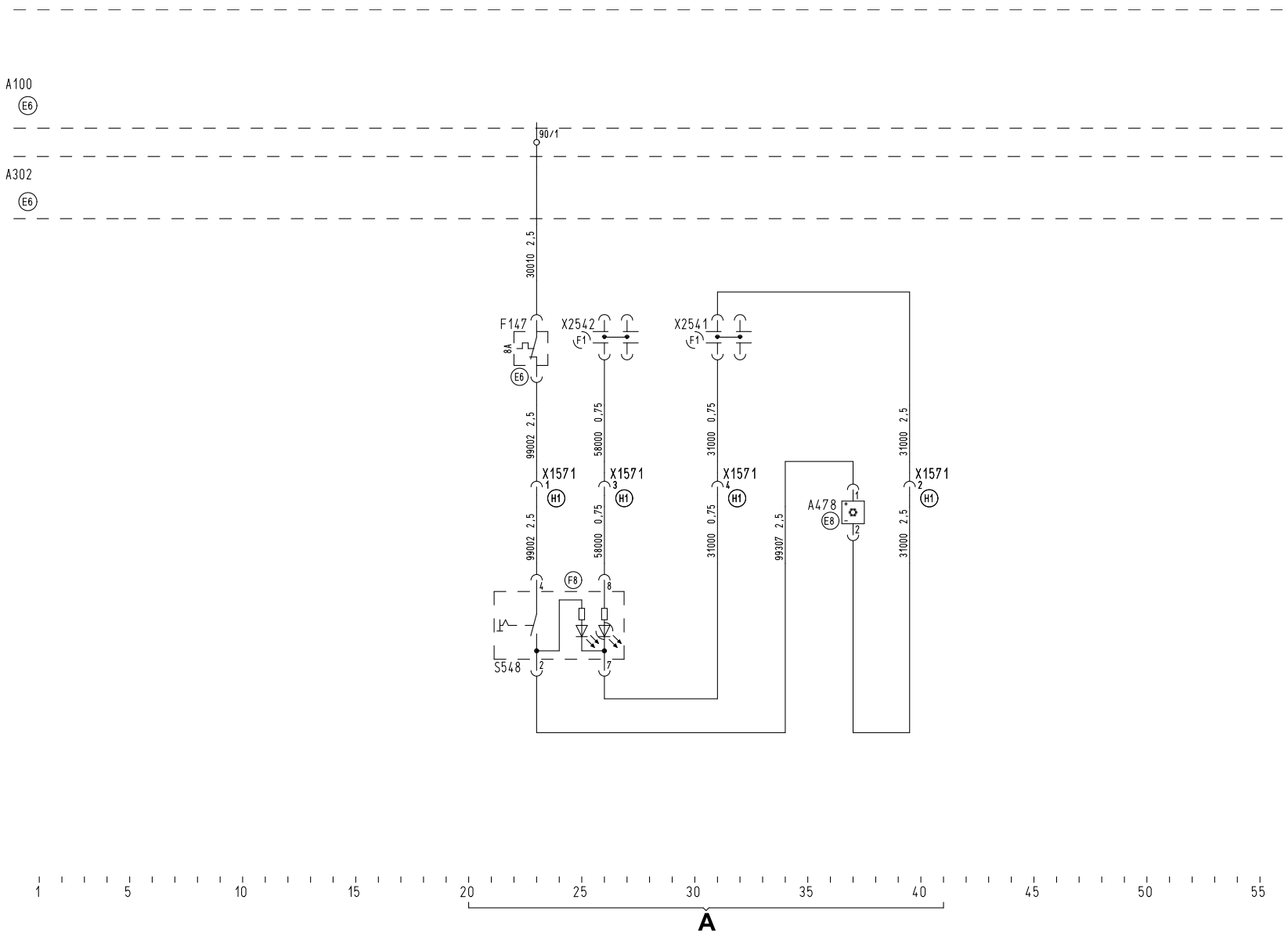
Wiring diagram no. **81.99192.1382** Sheet **1** of 1



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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

- (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

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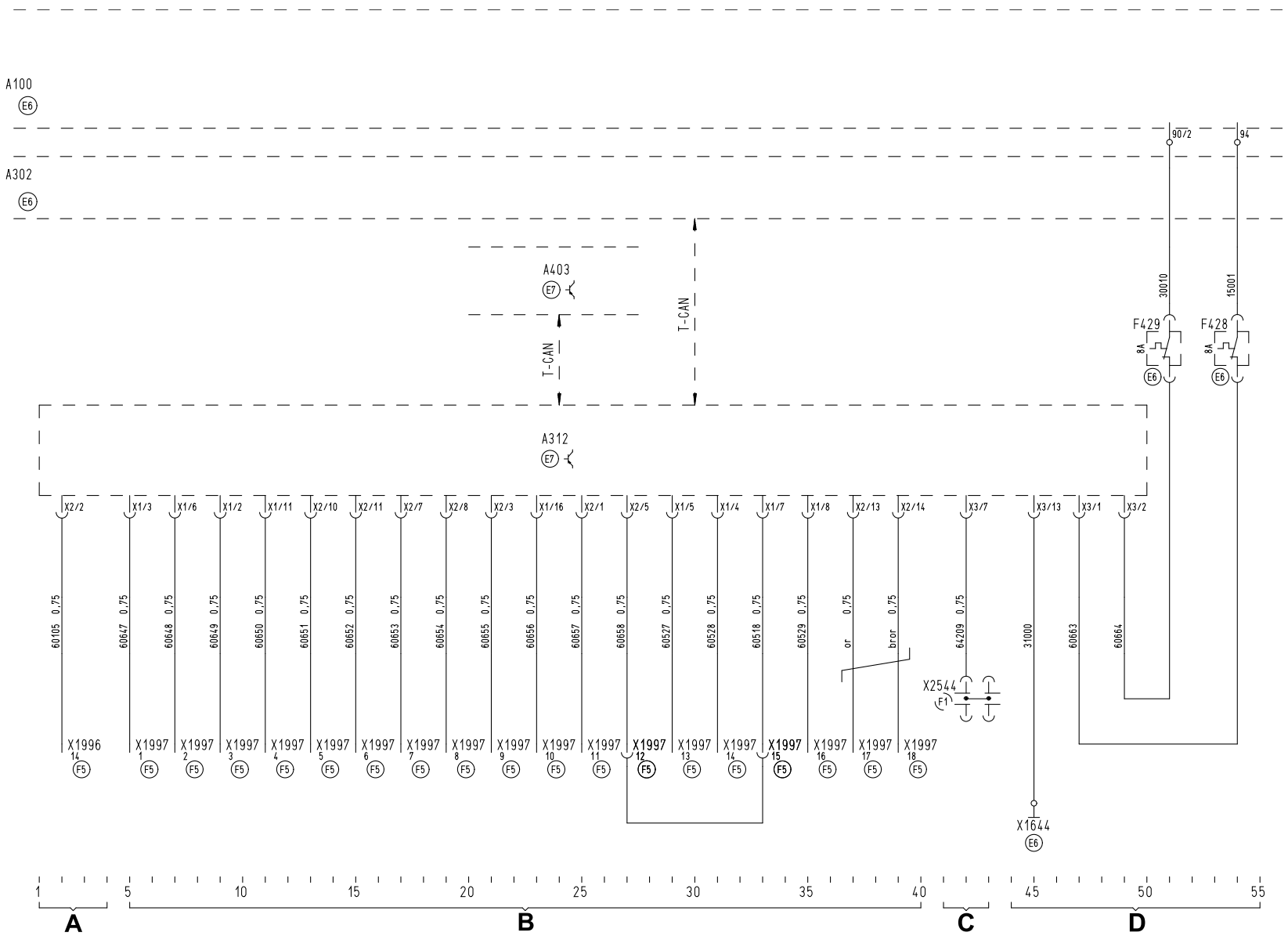
Wiring diagram no. **81.99192.1381** Sheet **1** of 1



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Tailgate

Legend
Wiring diagram no. **81.99192.1537** Sheet **1** of 1
Change status: 09.01

A = Tailgate

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A358		Control, tailgate
A403	(339)	Vehicle management computer
A407	(342)	Instrumentation
F219	(118)	Fuse, tailgate (terminal 15)
H254		Indicator light, tailgate
K175	(281)	Relay, start inhibitor
K467	(281)	Relay, tailgate
S286	(547)	Switch, tailgate
X669		Stvd. start inhibitor
X744		Stvd. cab tailgate
X2541	(246)	Potential distributor, 21-pin line 31000
X2542	(246)	Potential distributor, 21-pin line 58000
X3186		Stvd. tailgate

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) 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)

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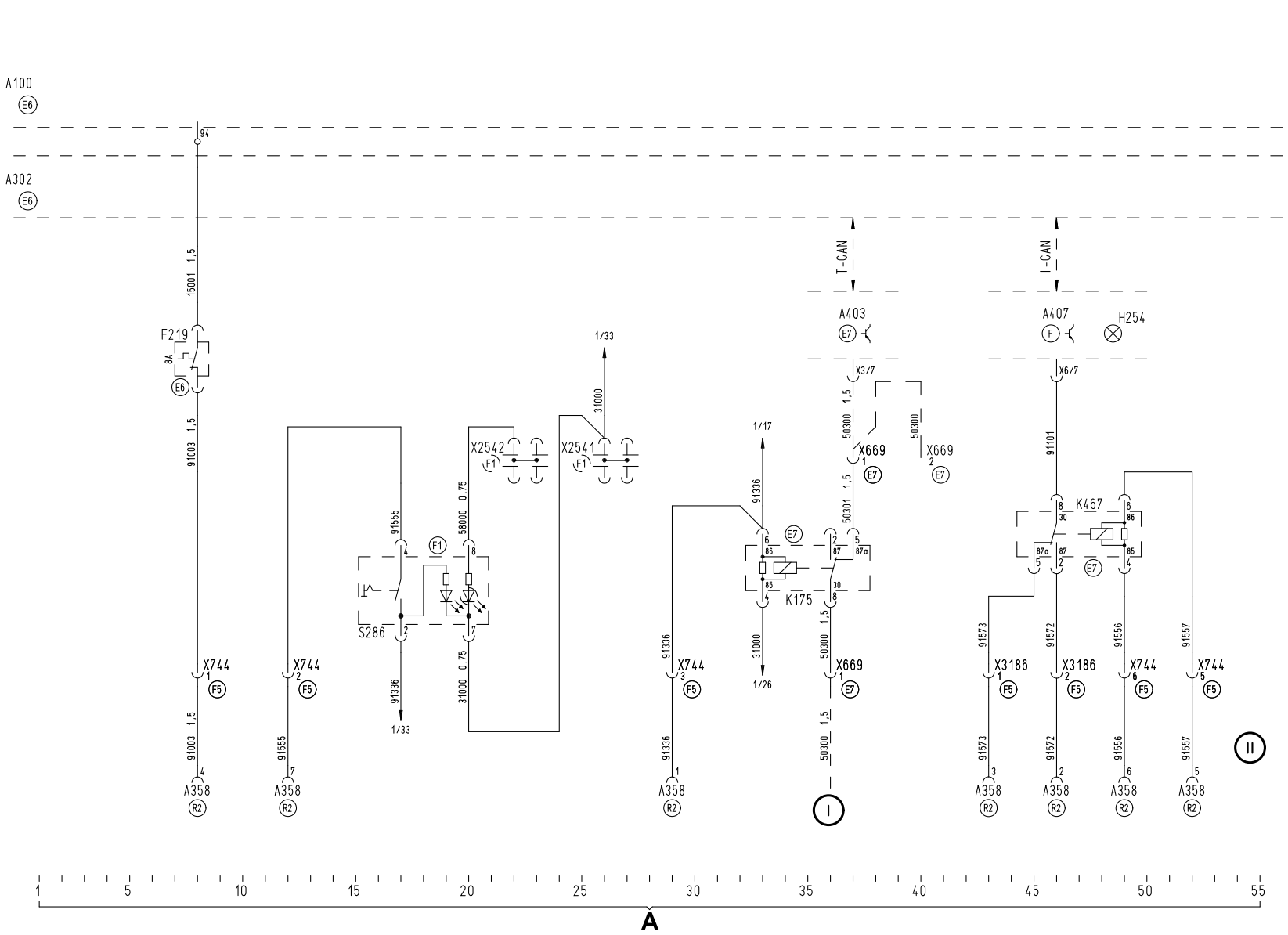
Wiring diagram no. **81.99192.1537** Sheet **1** of 1



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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
- (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 of delivery, body manufacturers

(II) Cables 58009 and 31000 are placed rolled up as reserve for cargo space lighting, left

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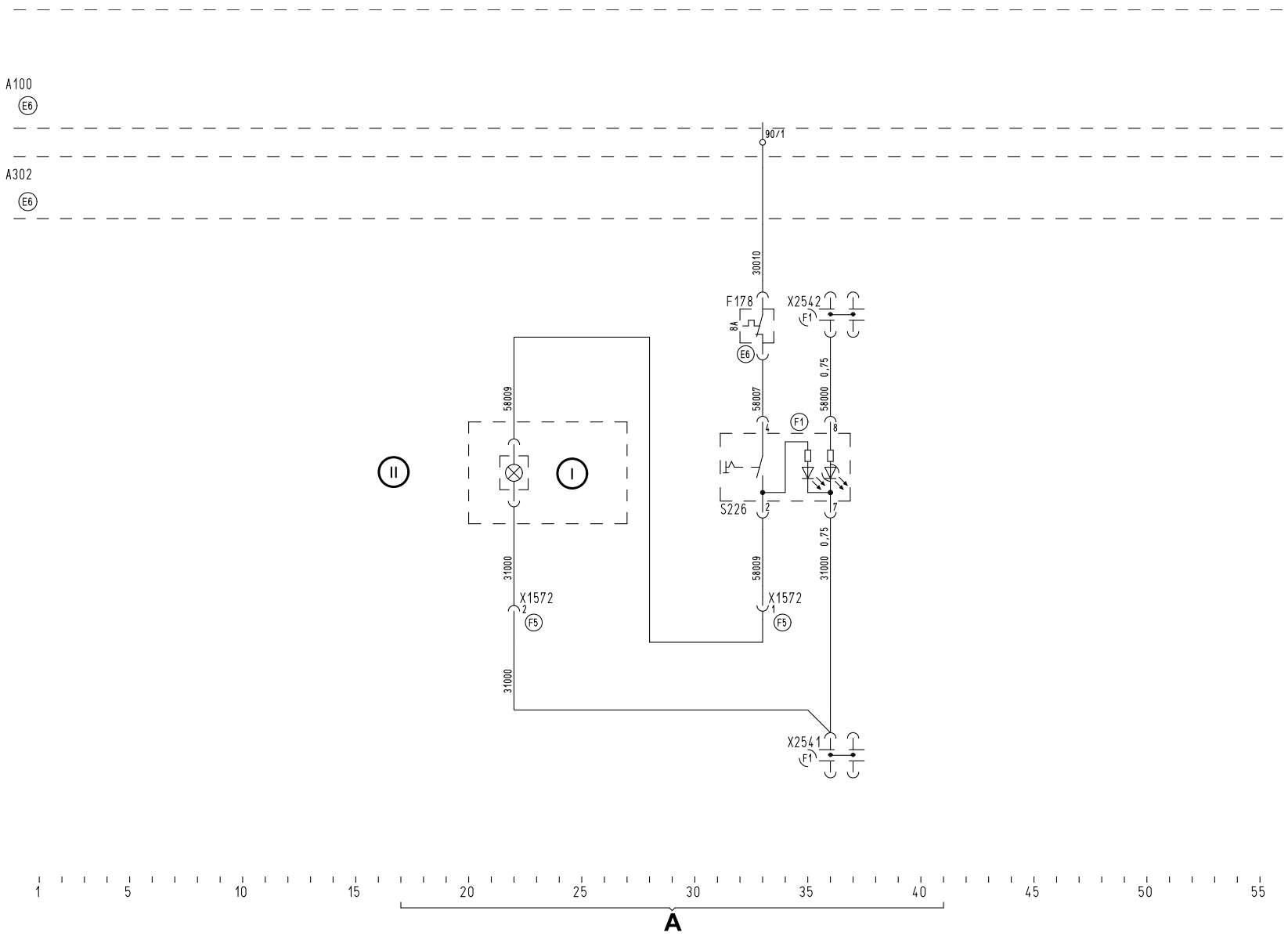
Wiring diagram no. **81.99192.1384** Sheet **1** of 1



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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

- (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) Parking light, left
- (II) Parking light, right

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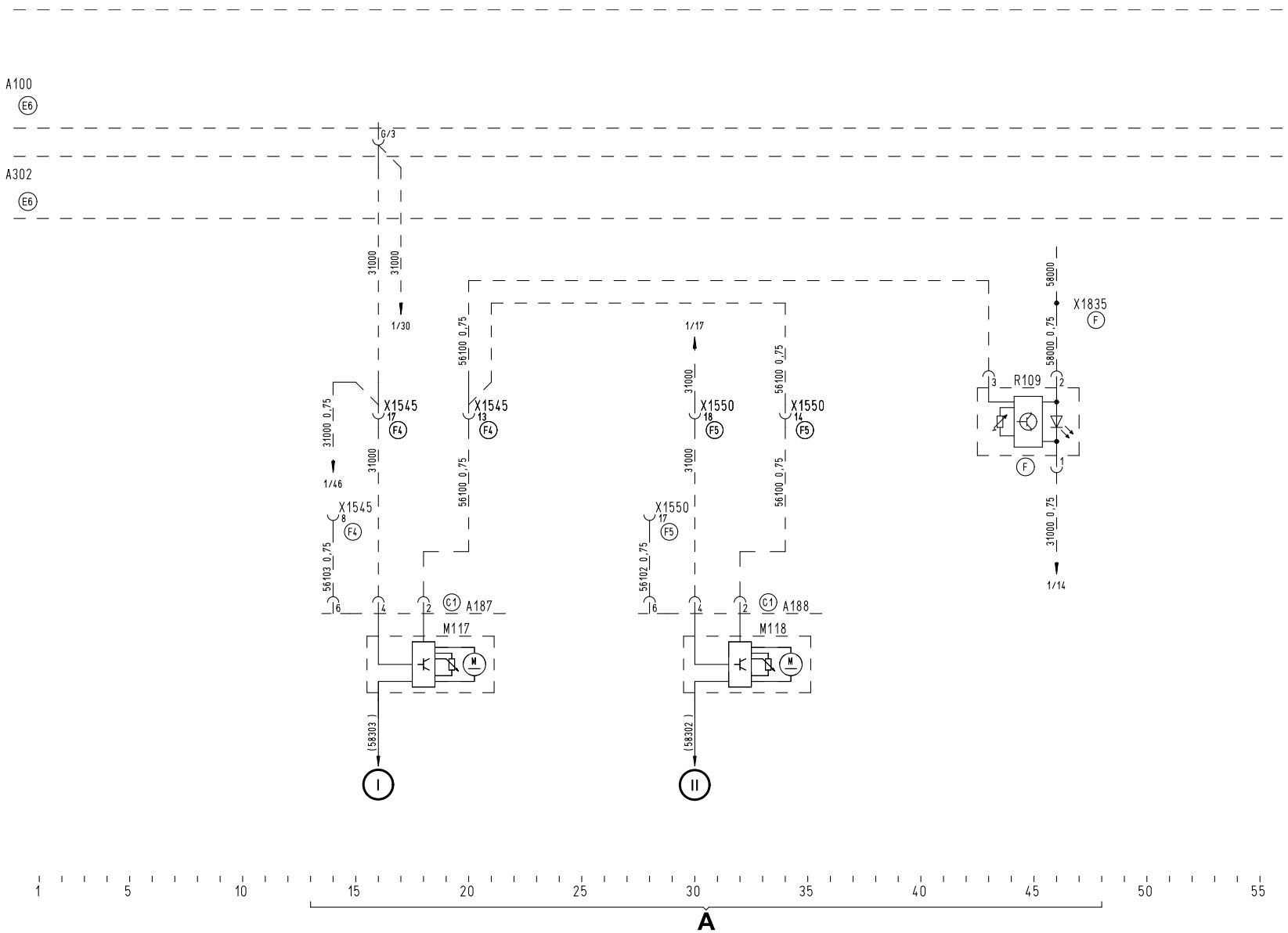
Wiring diagram no. **81.99192.2477** Sheet **1** of 1



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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

- (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) Parking light, left
- (II) Parking light, right

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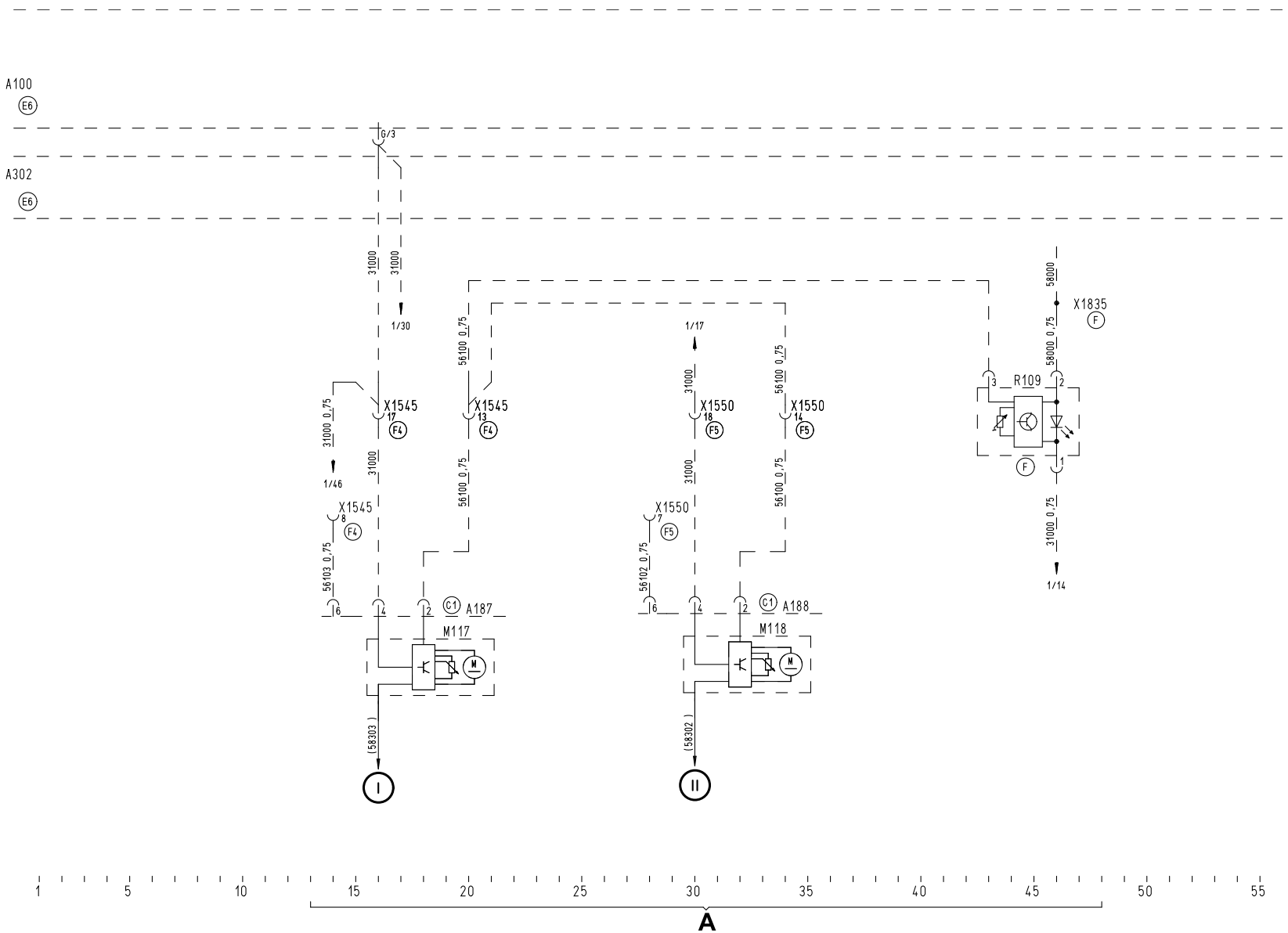
Wiring diagram no. **81.99192.2445** Sheet **1** of 1



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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

- (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

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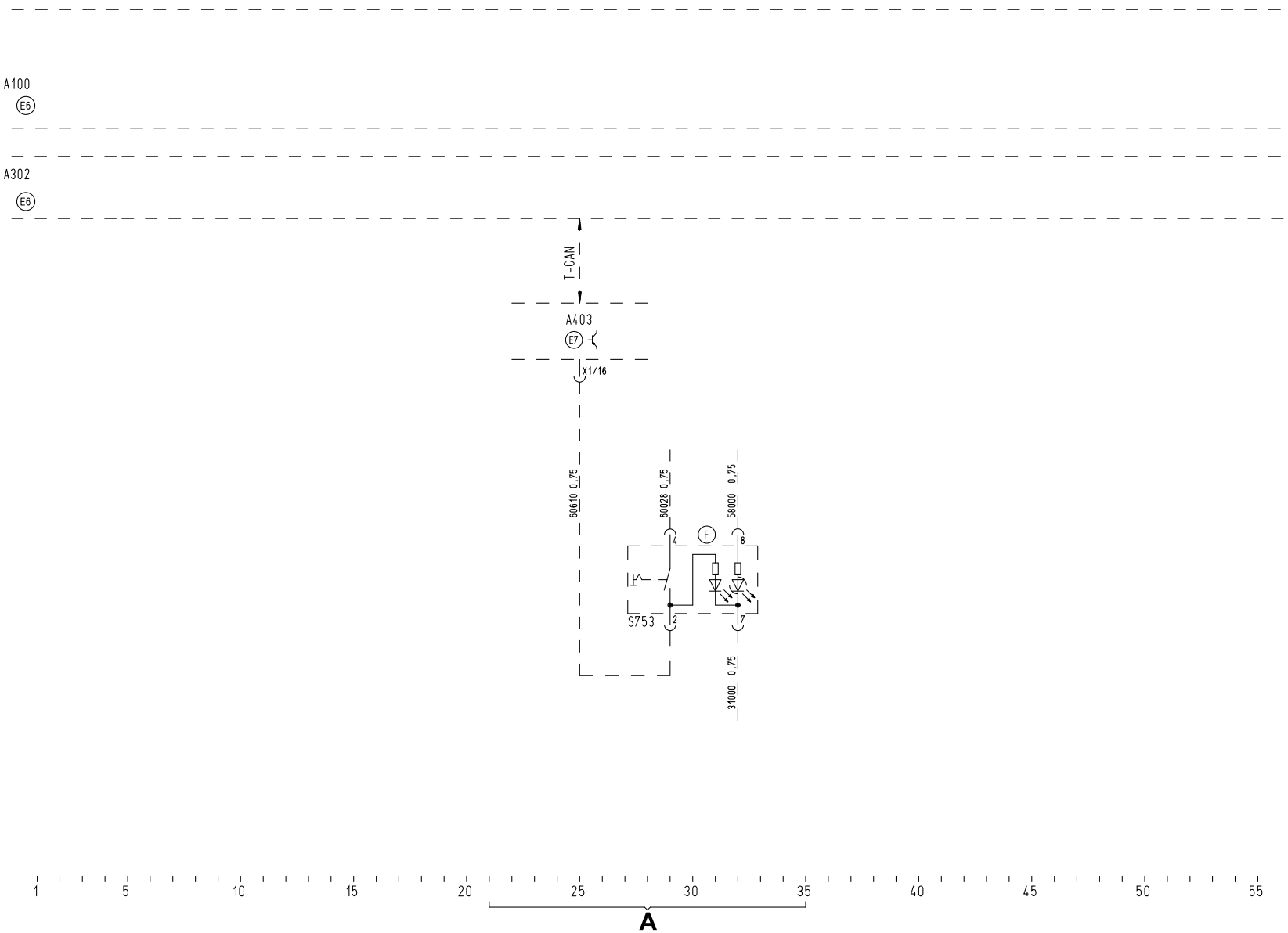
Wiring diagram no. **81.99192.1385** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A403	(339)	Vehicle management computer
G101	(113)	Battery 2
S219	(478)	Switch, indicator, power take-off 1
S222	(536)	Switch, power take-off 1
X327		Stvd. solenoid valve, frame
X1552		Stvd. power take-off I/TRS heating
X1557		Stvd. frame left
X1559		Stvd. engine/EDC/transmission IV
X1693		Crimped connector, line 60028
X1904		Threaded bolt M6 (MP box)
X1949		Stvd. engine/transmission (MP box)
X1996		Stvd. intermediate speed control interface (FFR)
X2541	(246)	Potential distributor, 21-pin line 31000
X2542	(246)	Potential distributor, 21-pin line 58000
Y153	(126)	Solenoid valve, power take-off 1

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

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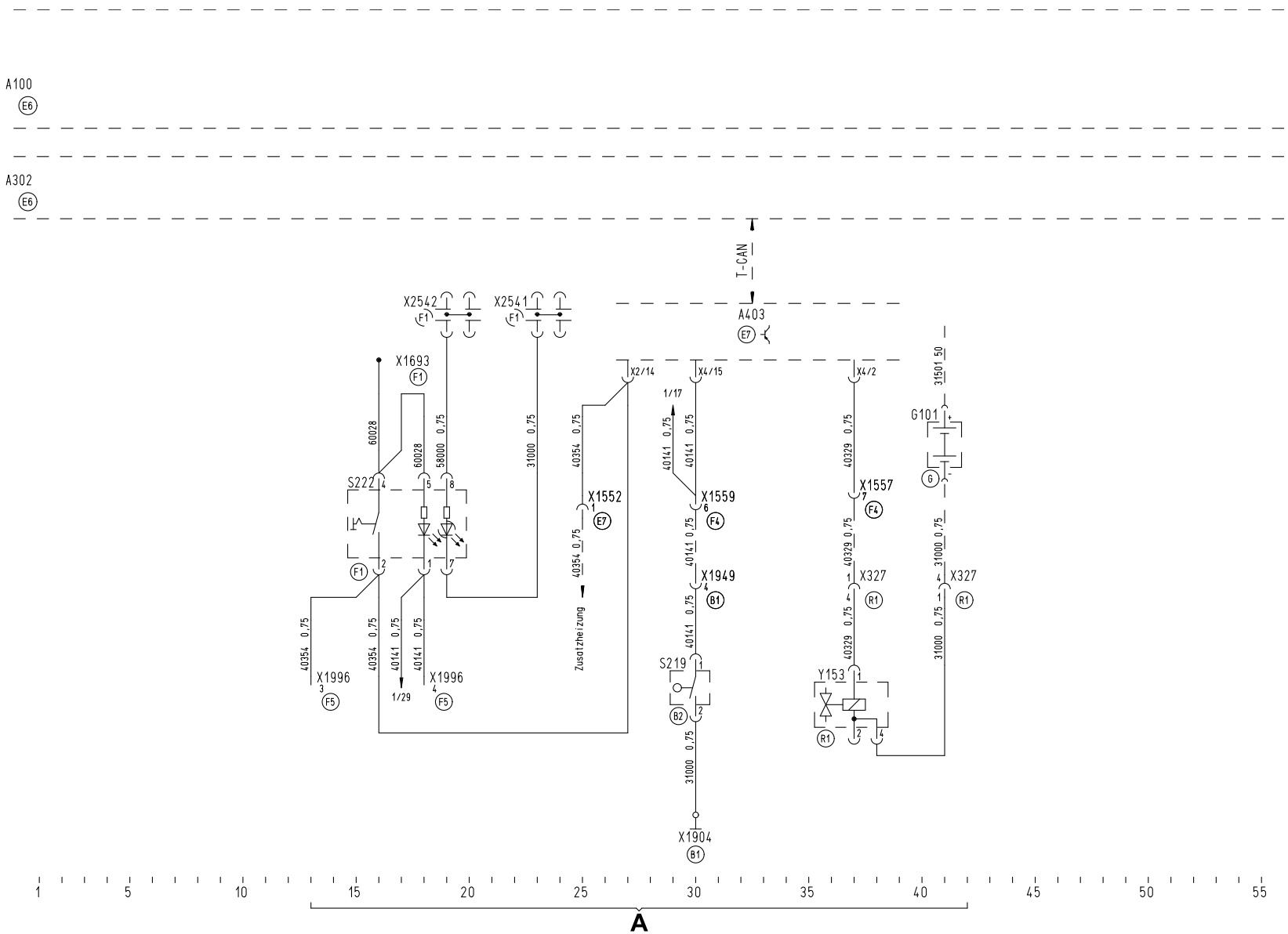
Wiring diagram no. **81.99192.1388** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A403	(339)	Vehicle management computer
S220	(478)	Switch, indicator, power take-off 2
S223	(471)	Switch, power take-off 2
X656		Stvd. cab frame
X1554		Stvd. power take-off 2/TRS heating
X1559		Stvd. engine/EDC/transmission IV
X1644		Earthing point, cab, adjacent to central fuse, relay and terminal block
X1693		Crimped connector, line 60028
X1904		Threaded bolt M6 (MP box)
X1949		Stvd. engine/transmission (MP box)
X1996		Stvd. intermediate speed control interface (FFR)
X2541	(246)	Potential distributor, 21-pin line 31000
X2542	(246)	Potential distributor, 21-pin line 58000
Y154	(126)	Solenoid valve, power take-off 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

- (I) Supplementary heating

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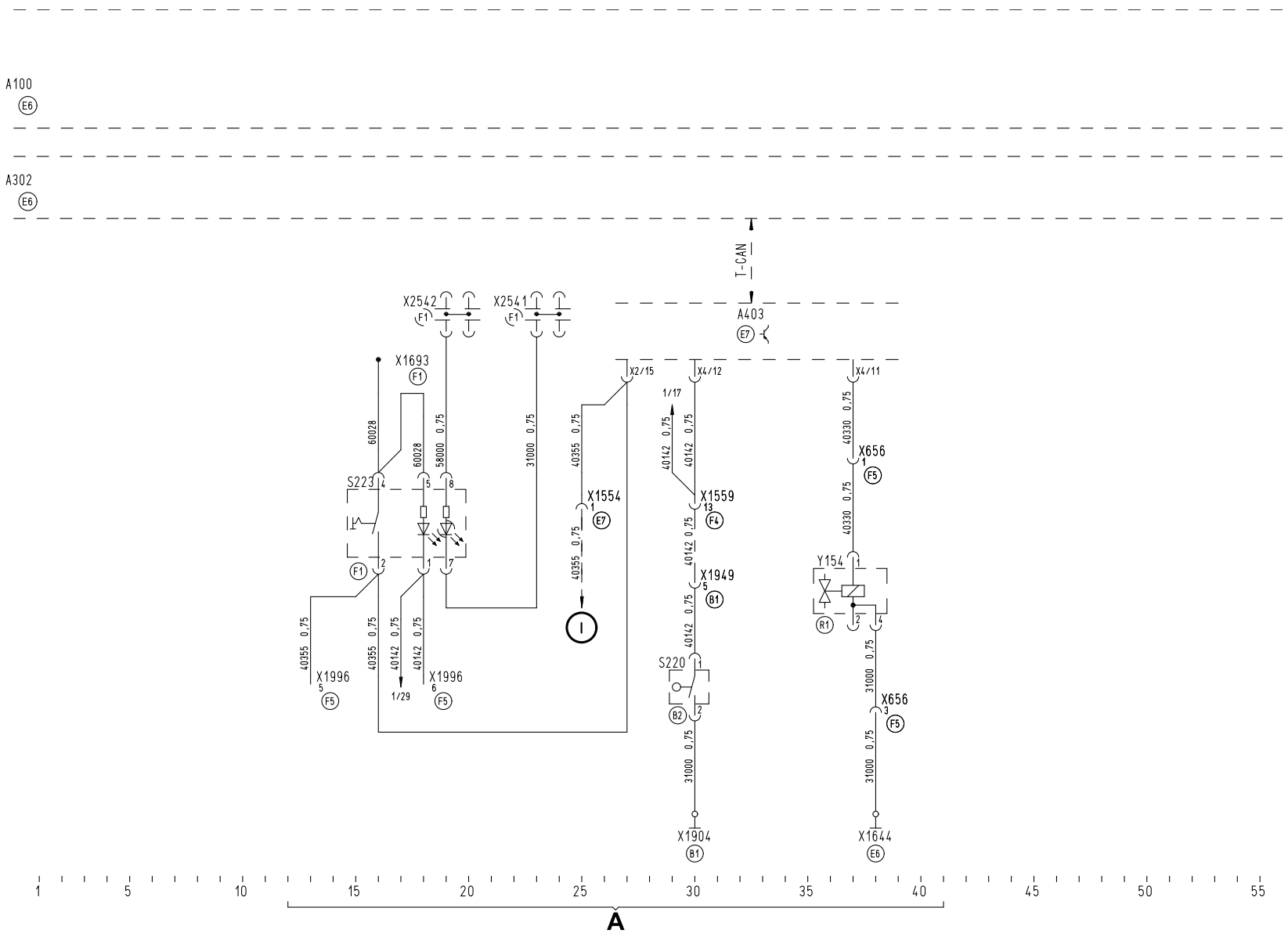
Wiring diagram no. **81.99192.1389** Sheet **1** of 1



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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

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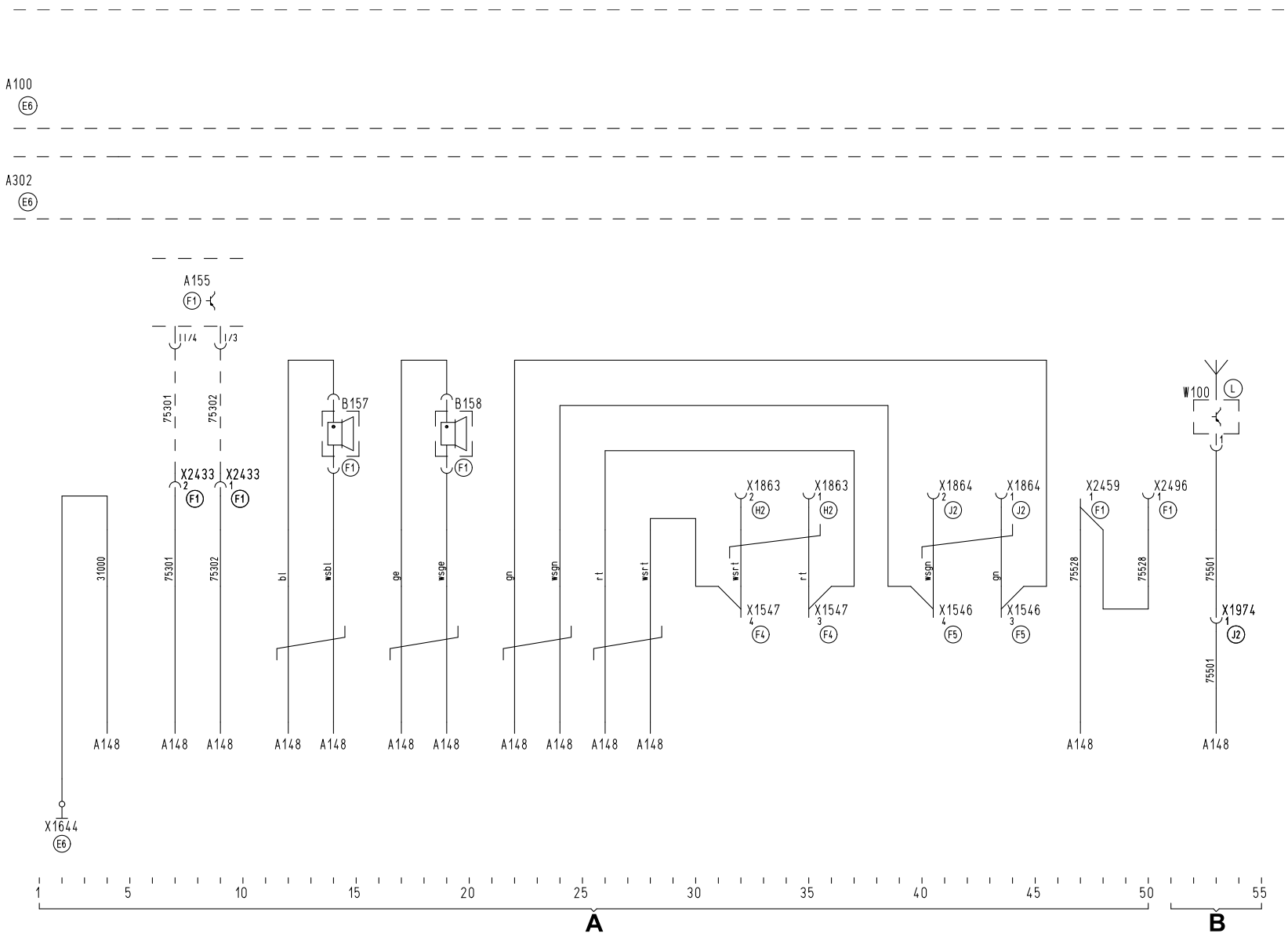
Wiring diagram no. **81.99192.2475** Sheet **1** of 1



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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

- (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

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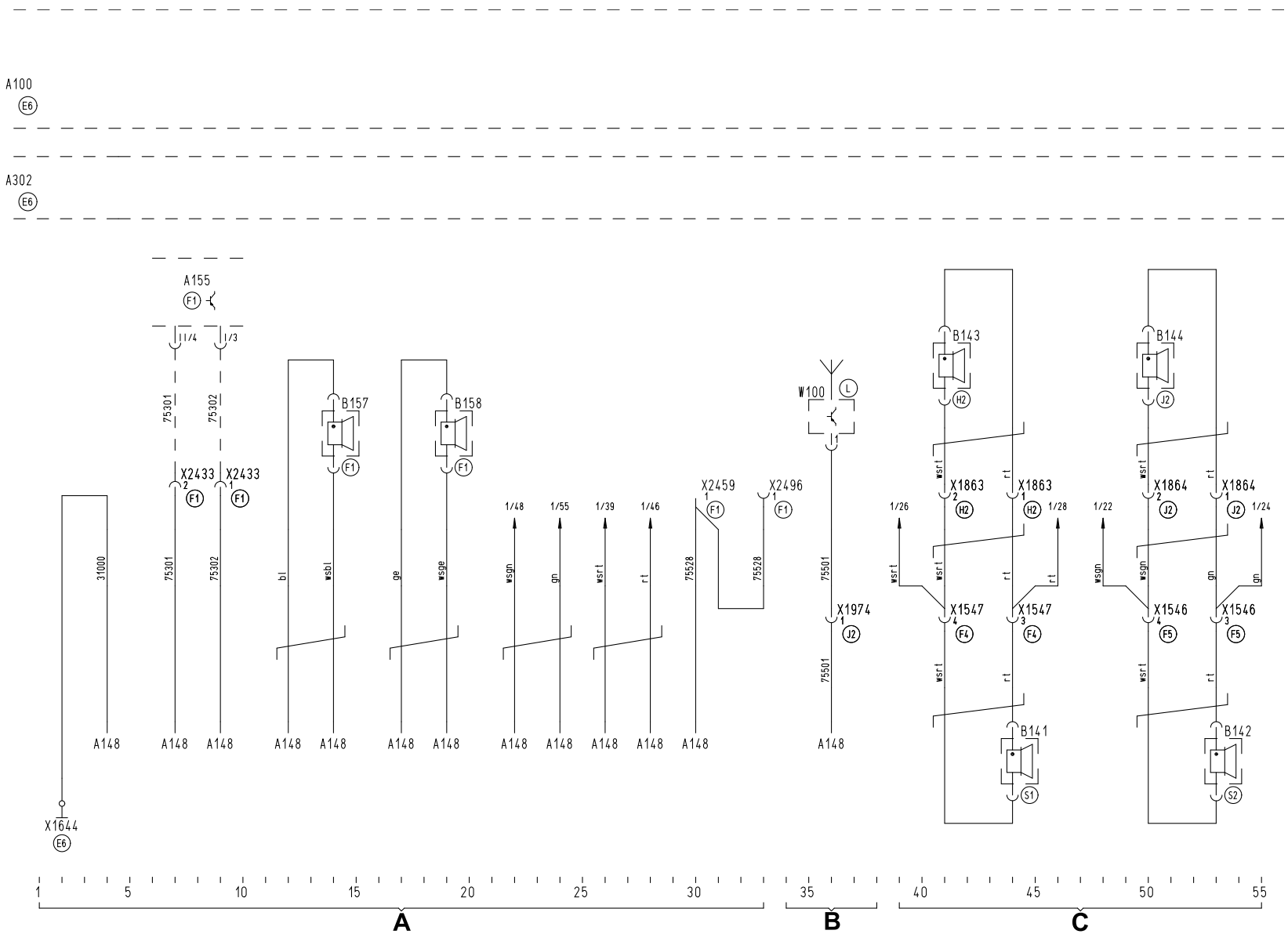
Wiring diagram no. **81.99192.2484** Sheet **1** of 1



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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

- (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

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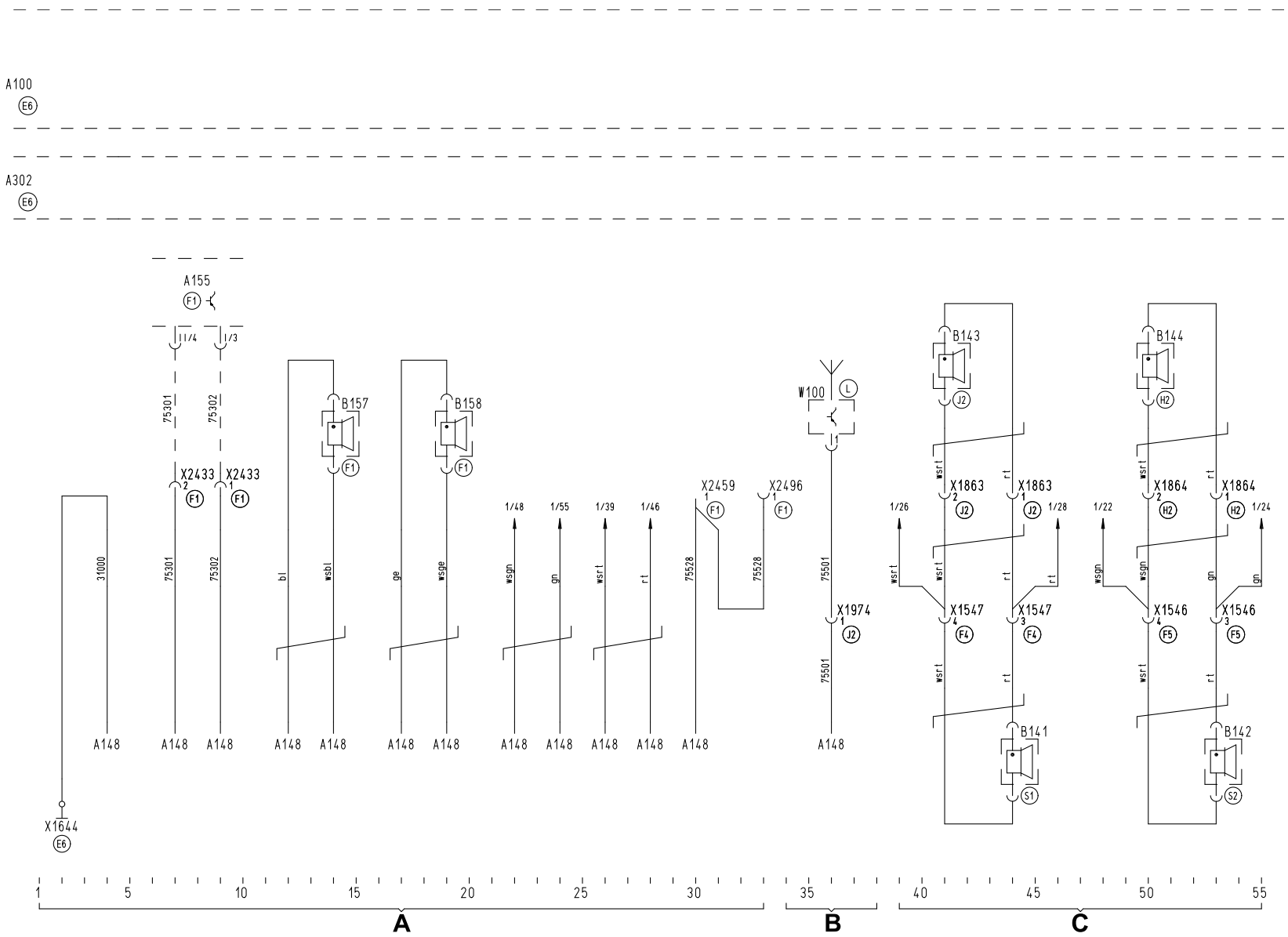
Wiring diagram no. **81.99192.2444** Sheet **1** of 1



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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

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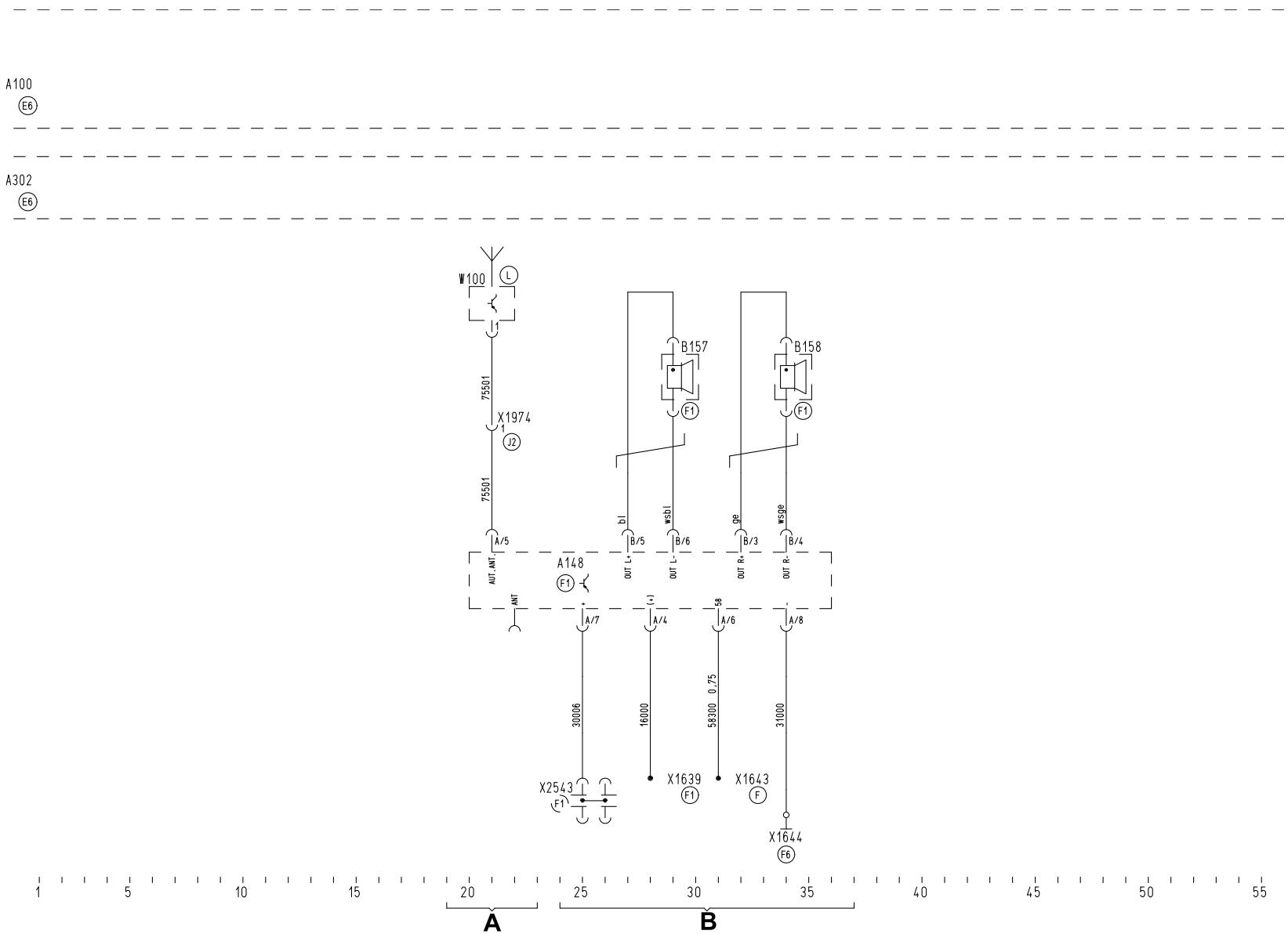
Wiring diagram no. **81.99192.2879** Sheet **1** of 1



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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
- (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

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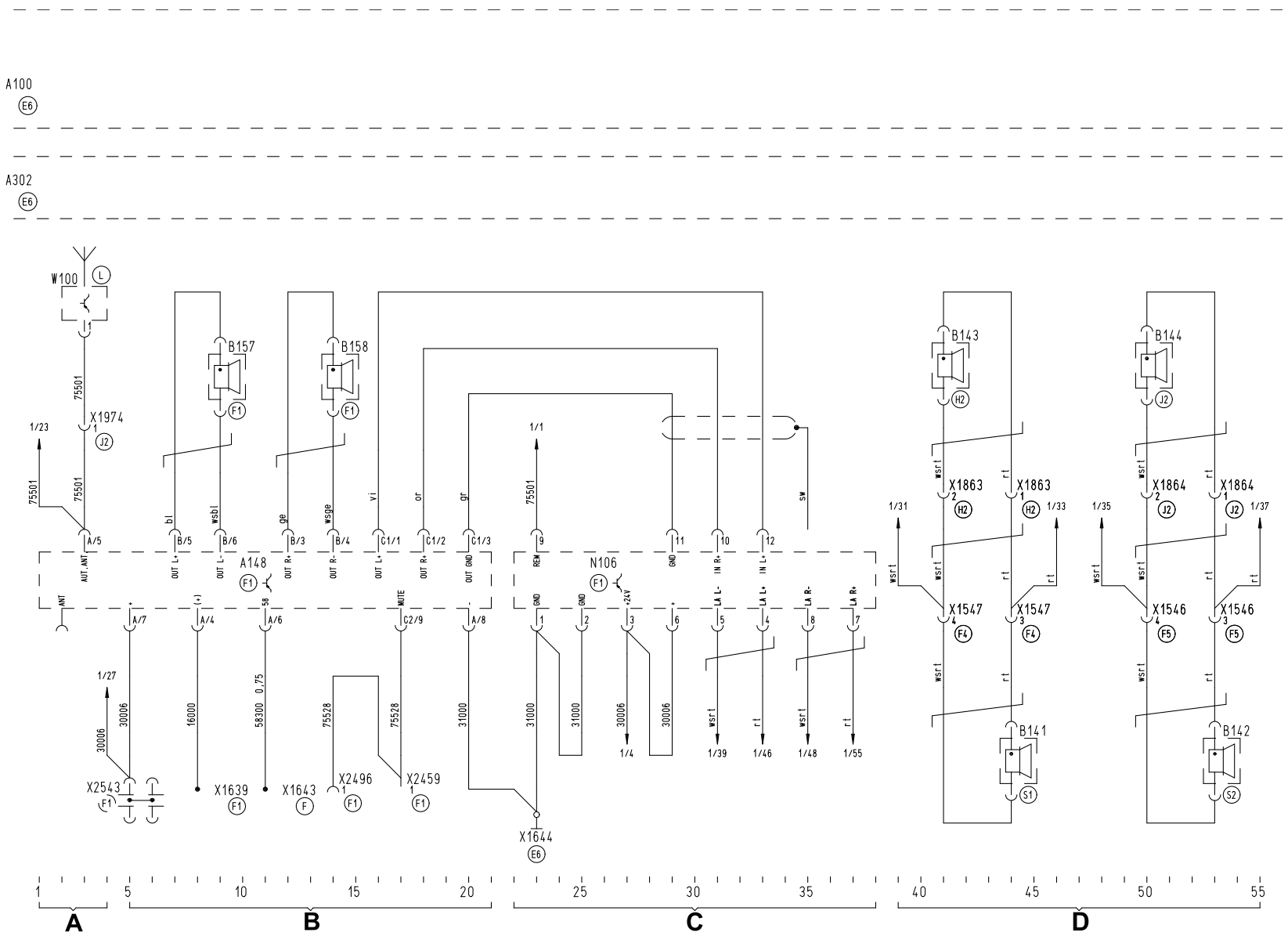
Wiring diagram no. **81.99192.2855** Sheet **1** of 1



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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

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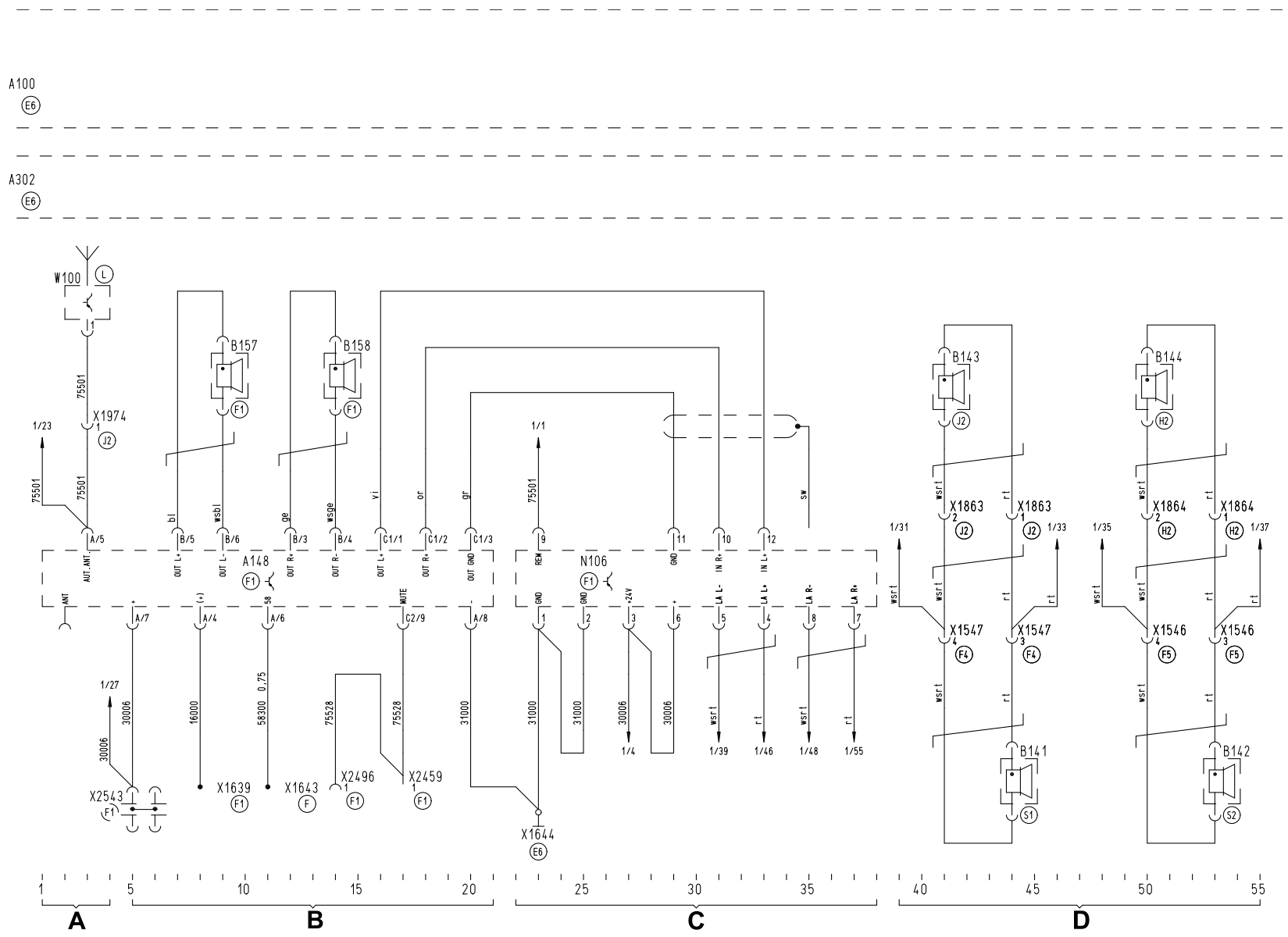
Wiring diagram no. **81.99192.2856** Sheet **1** of 1



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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

- (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

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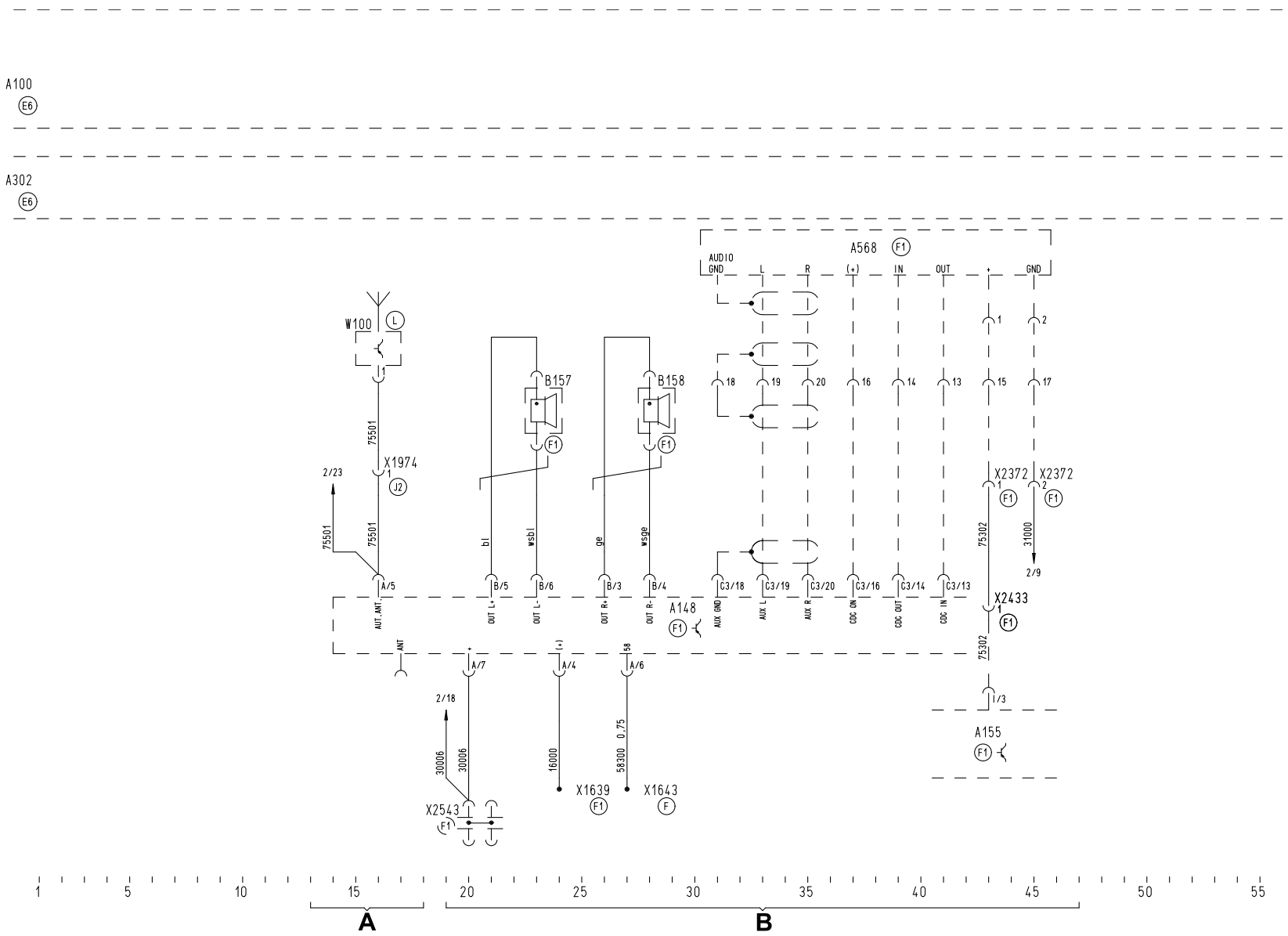
Wiring diagram no. **81.99192.2858** Sheet **1** of 2



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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
- (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

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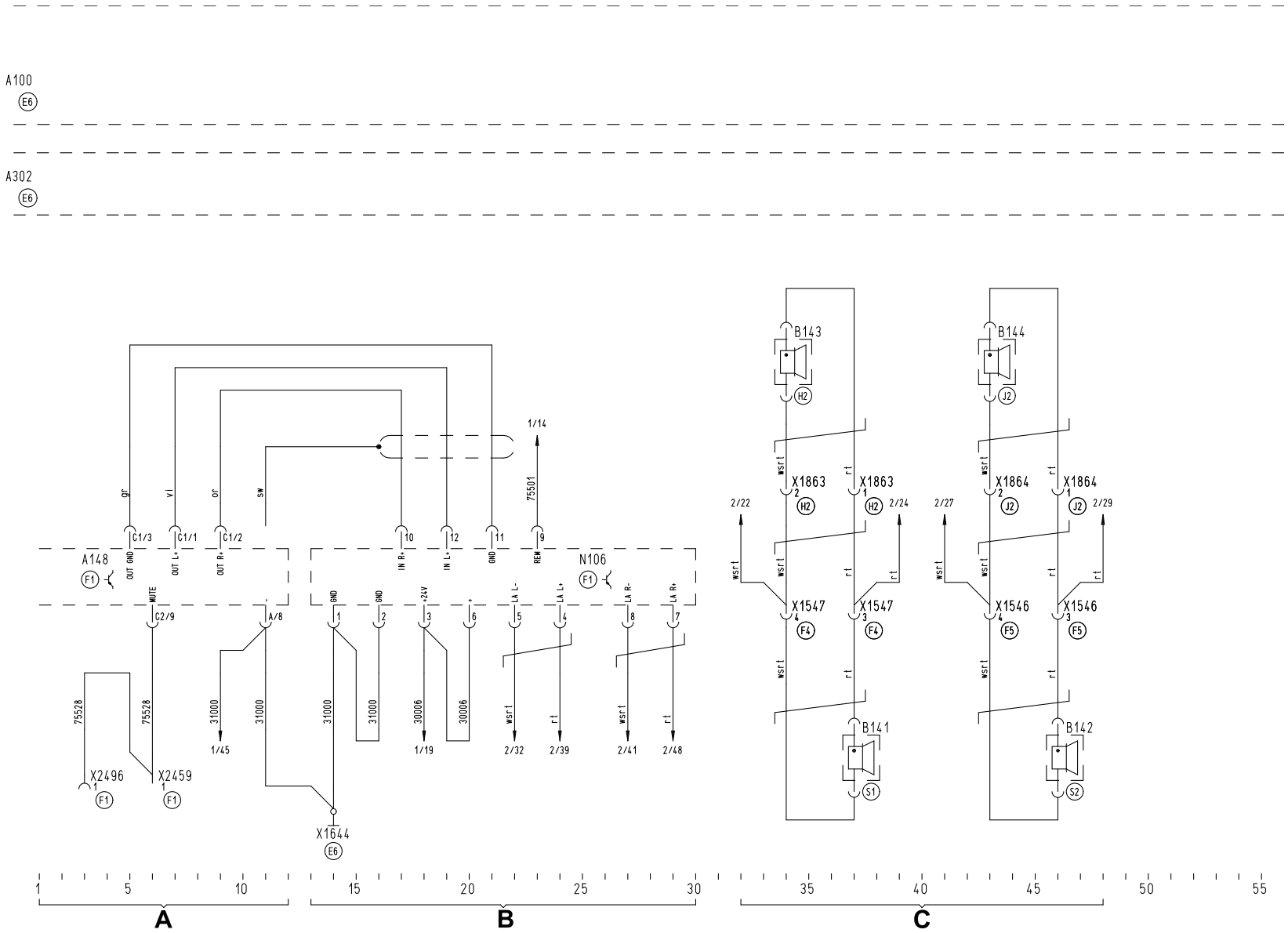
Wiring diagram no. **81.99192.2858** Sheet **2** of 2



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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

- (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

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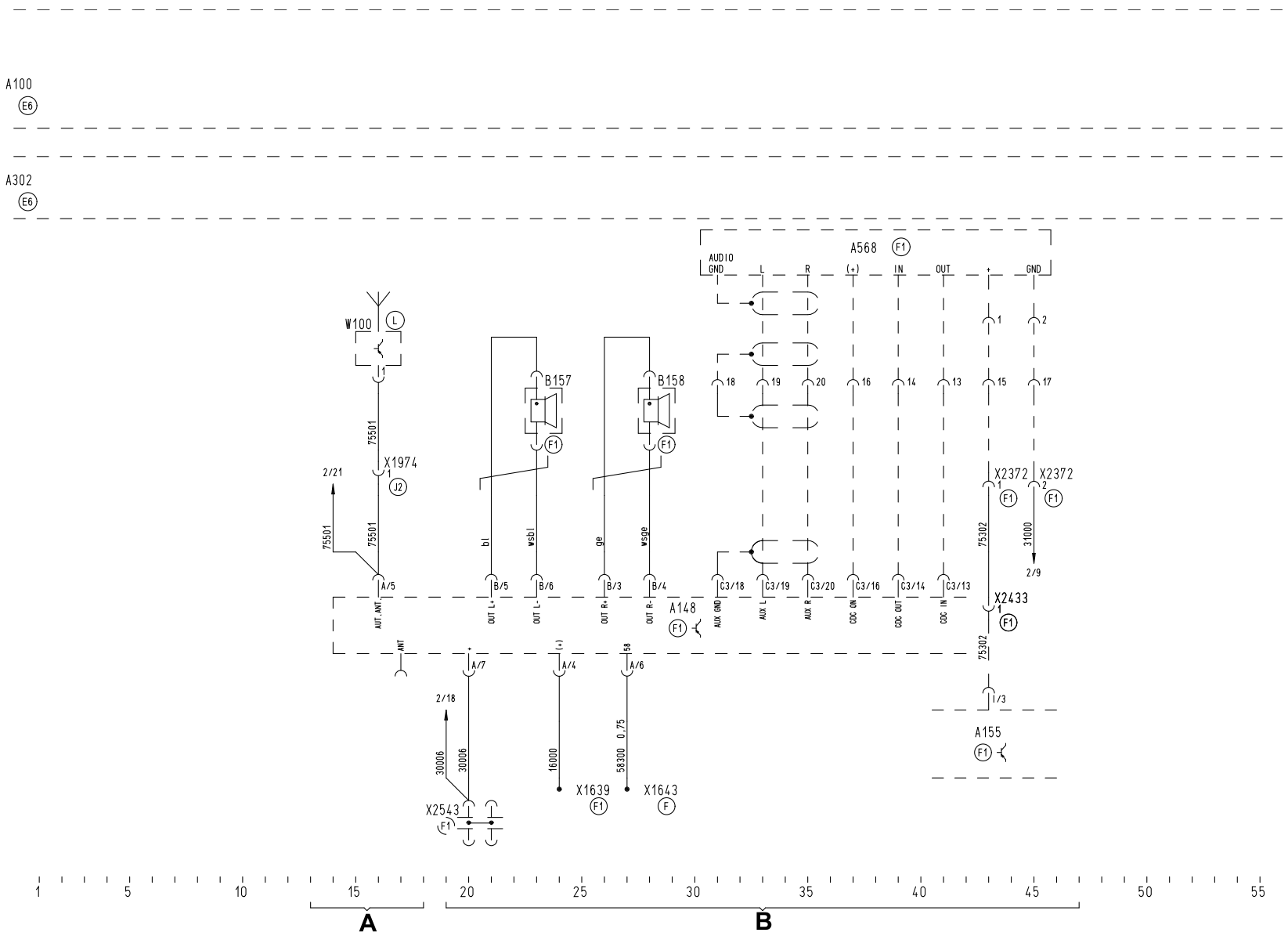
Wiring diagram no. **81.99192.2859** Sheet **1** of 2



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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

- (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

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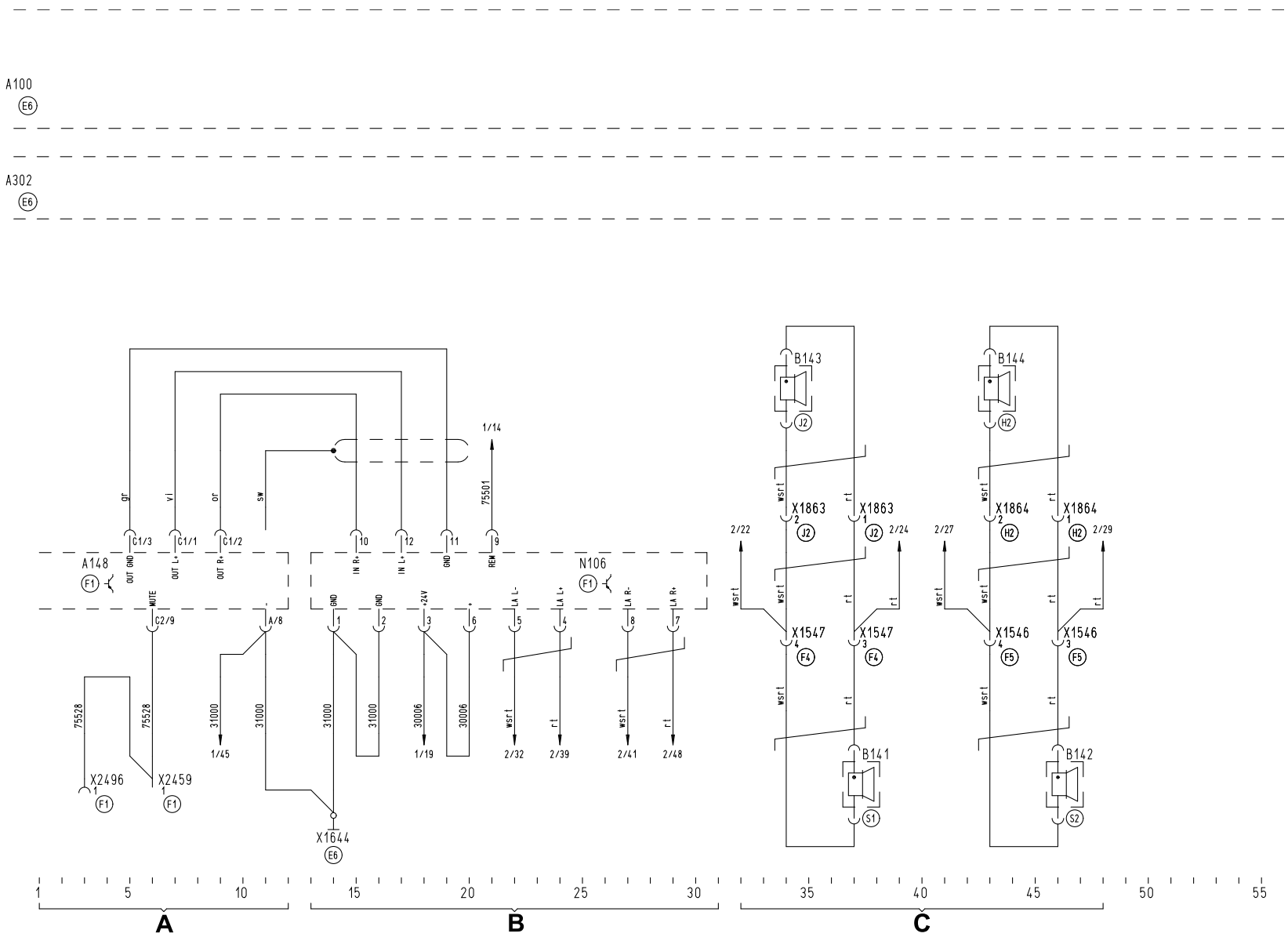
Wiring diagram no. **81.99192.2859** Sheet **2** of 2



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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
- (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

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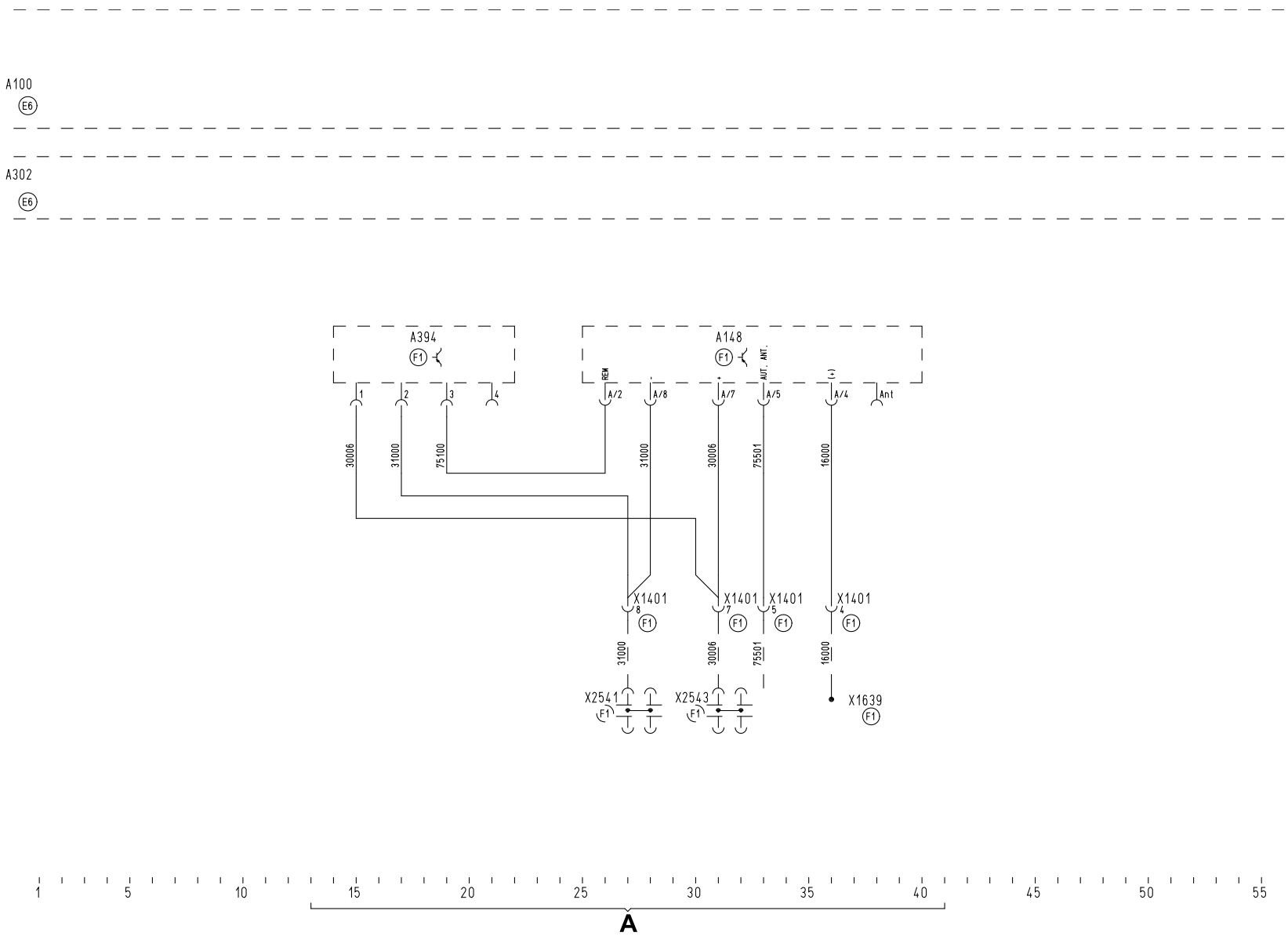
Wiring diagram no. **81.99192.1371** Sheet **1** of 1



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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
- (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

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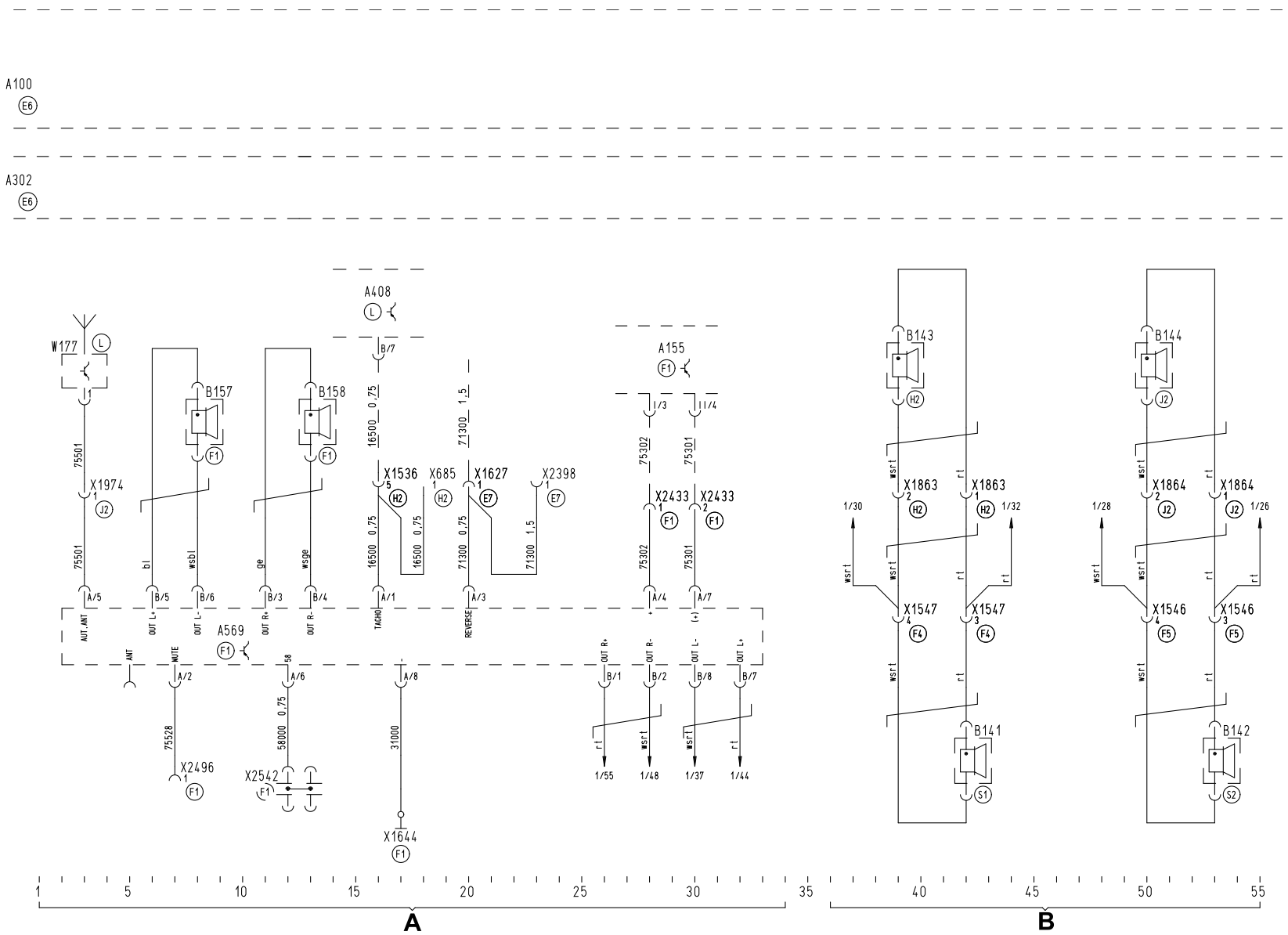
Wiring diagram no. **81.99192.1432** Sheet **1** of 1



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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
- (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

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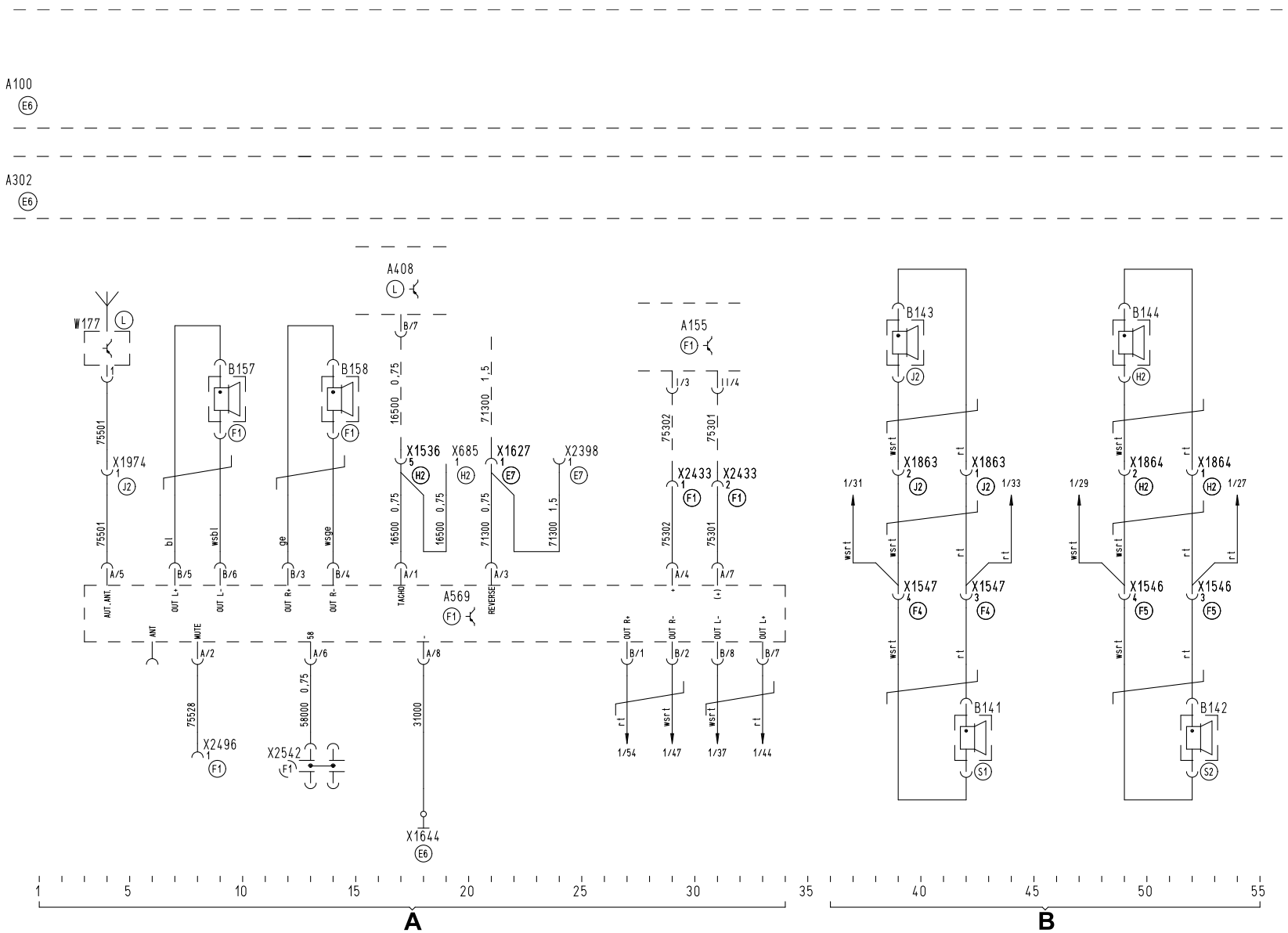
Wiring diagram no. **81.99192.1433** Sheet **1** of 1



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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
- (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

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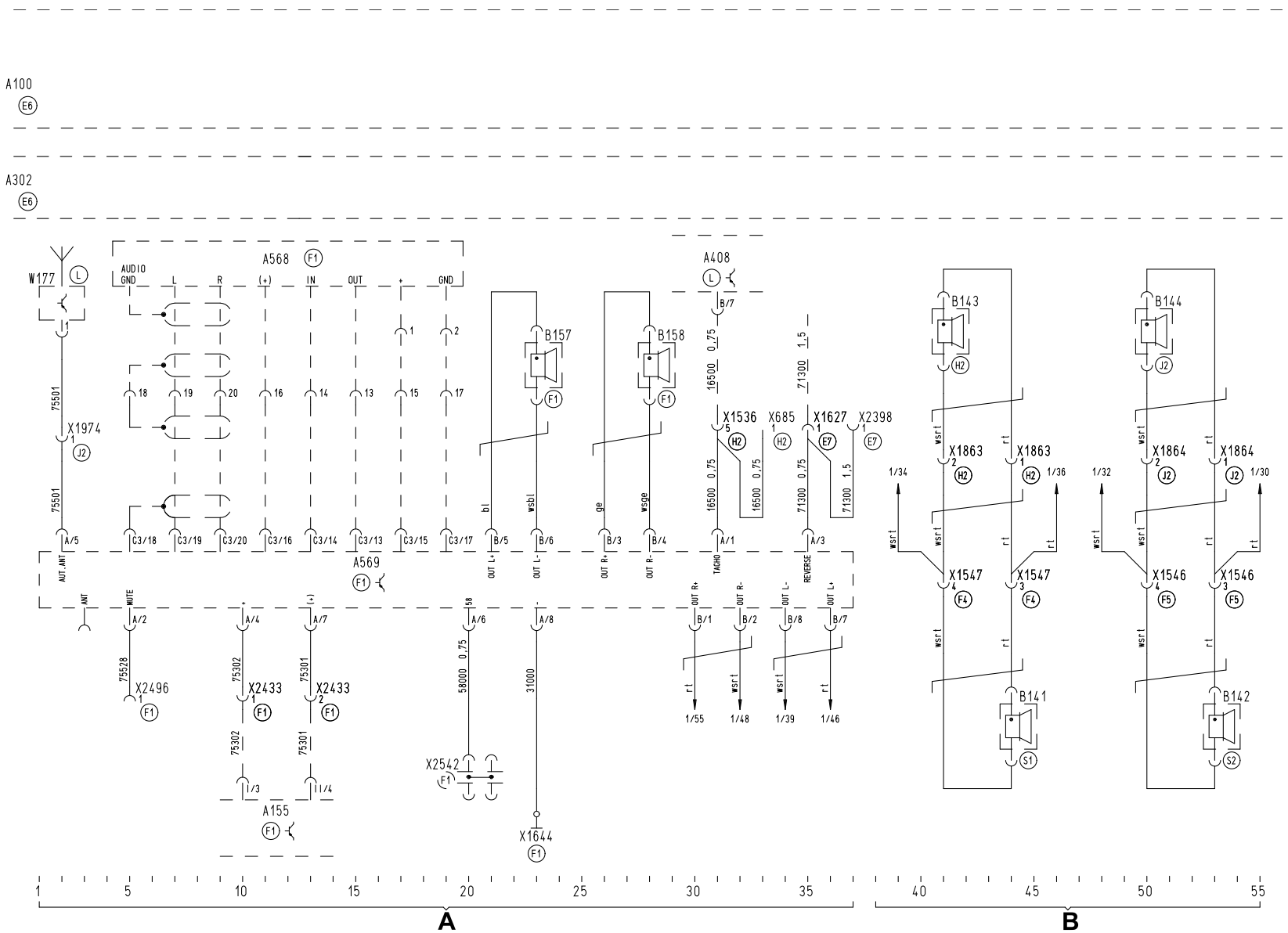
Wiring diagram no. **81.99192.1434** Sheet **1** of 1



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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
- (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

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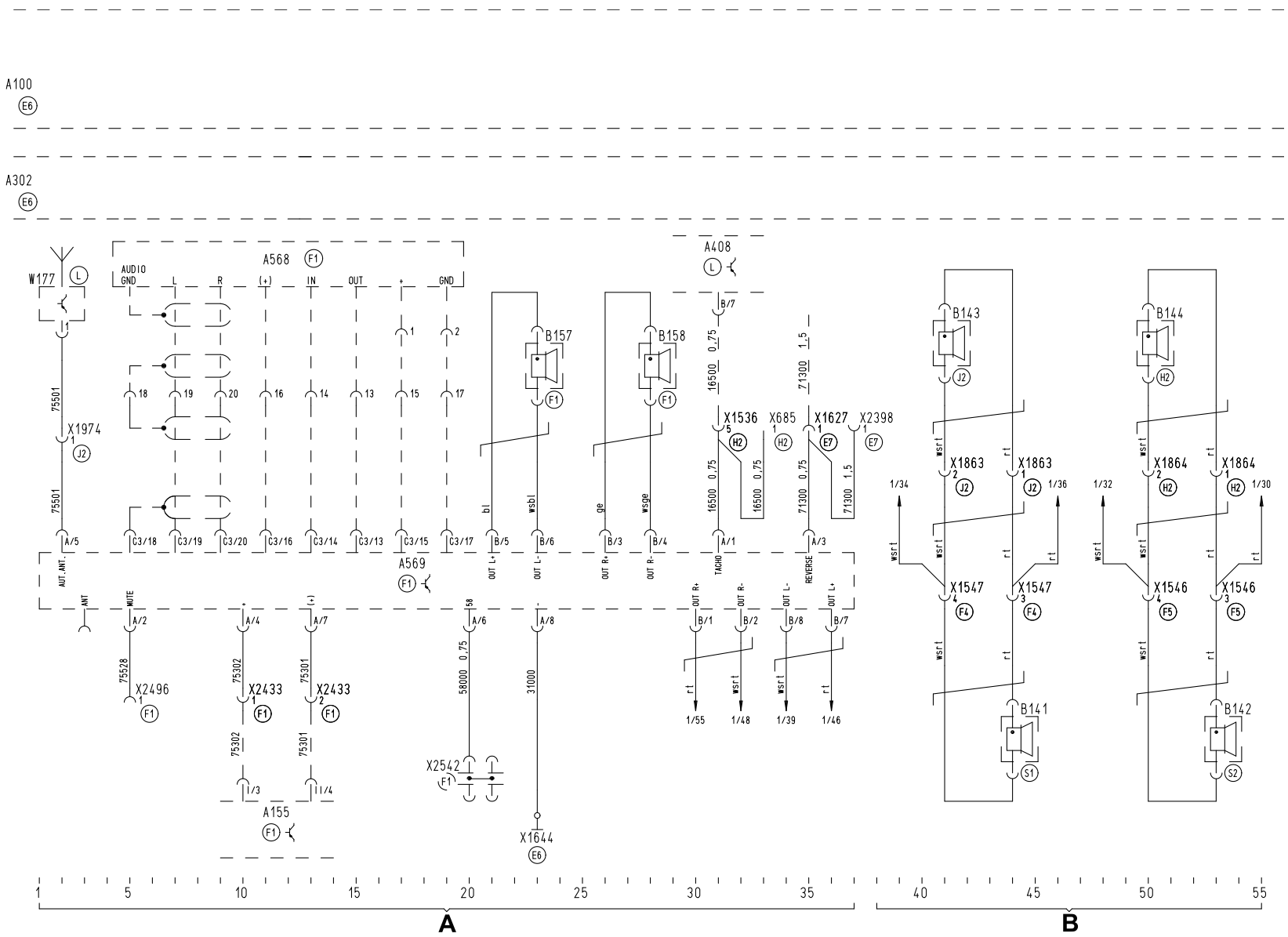
Wiring diagram no. **81.99192.1435** Sheet **1** of 1



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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

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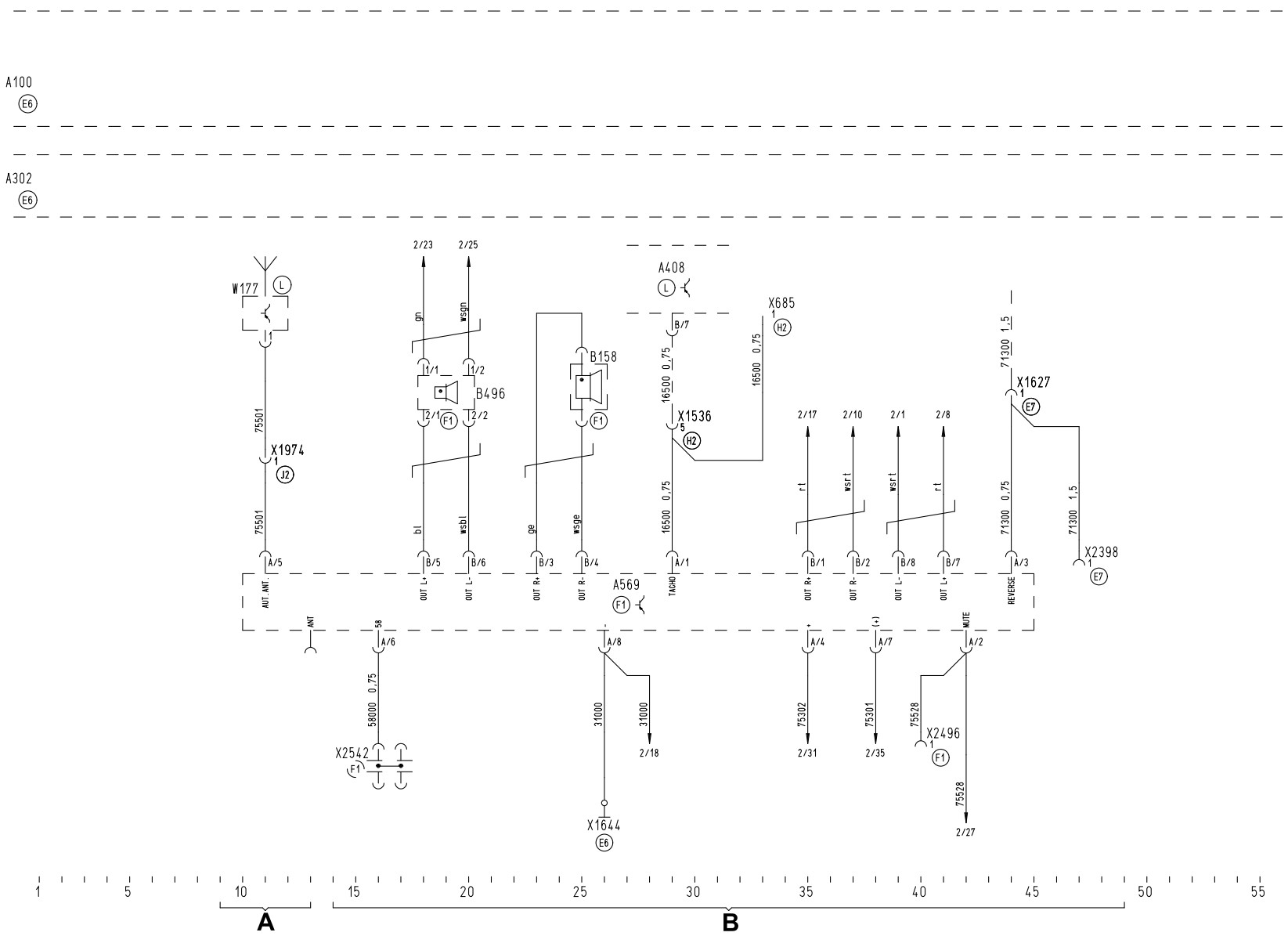
Wiring diagram no. **81.99192.1436** Sheet **1** of 2



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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

- (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) Mobile phone interface

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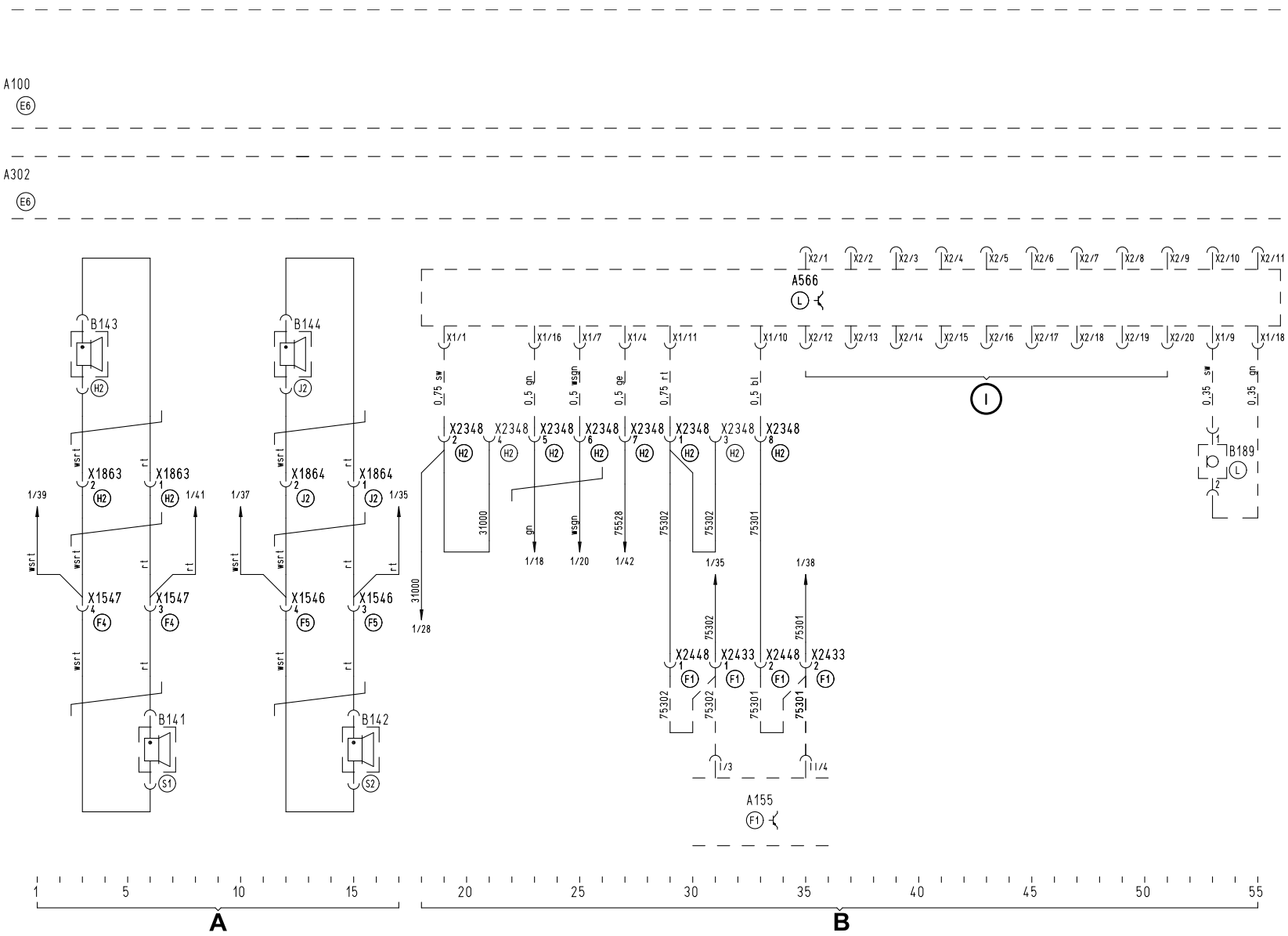
Wiring diagram no. **81.99192.1436** Sheet **2** of 2



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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
- (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

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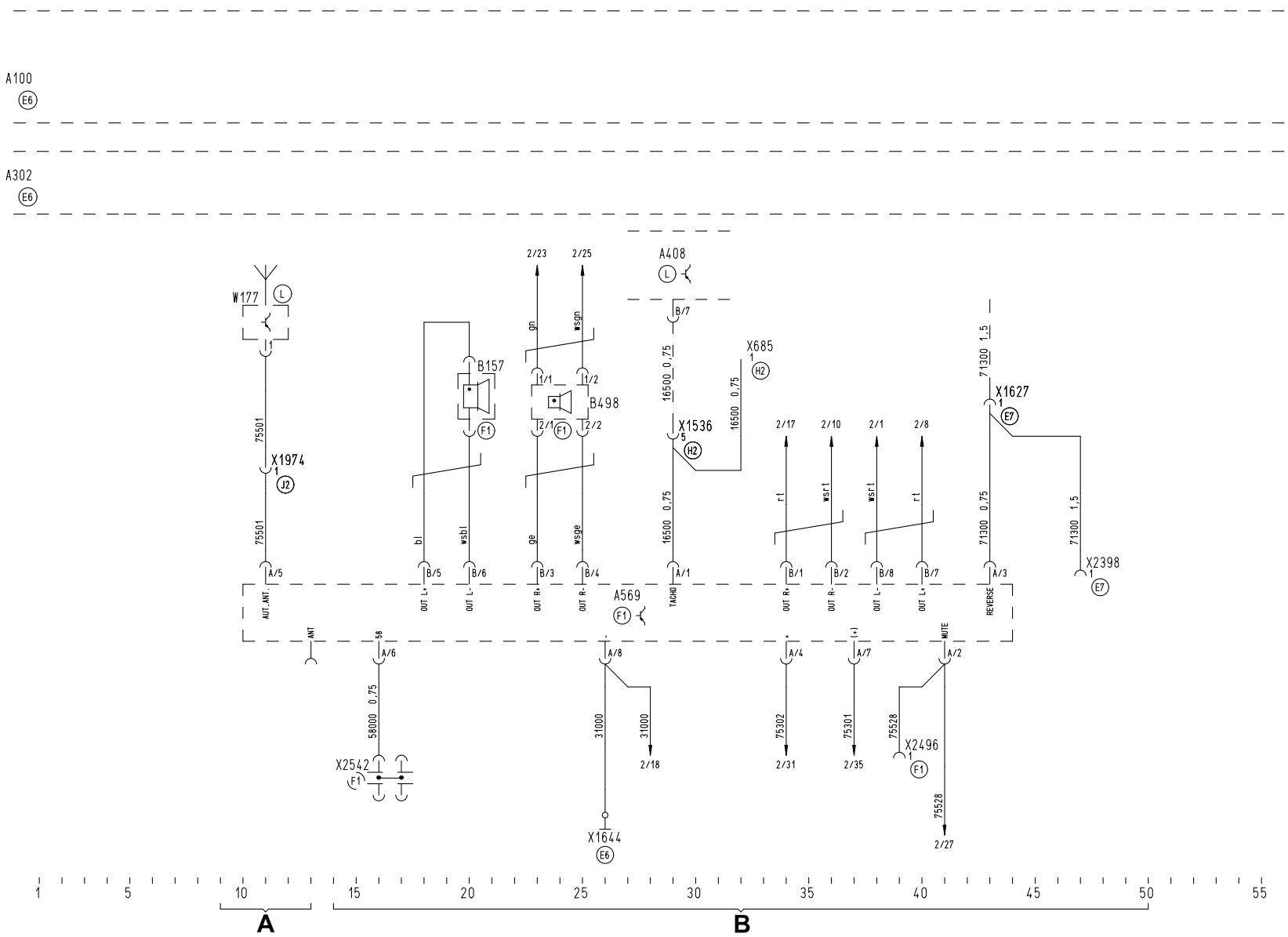
Wiring diagram no. **81.99192.1437** Sheet **1** of 2



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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
- (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) Mobile phone interface

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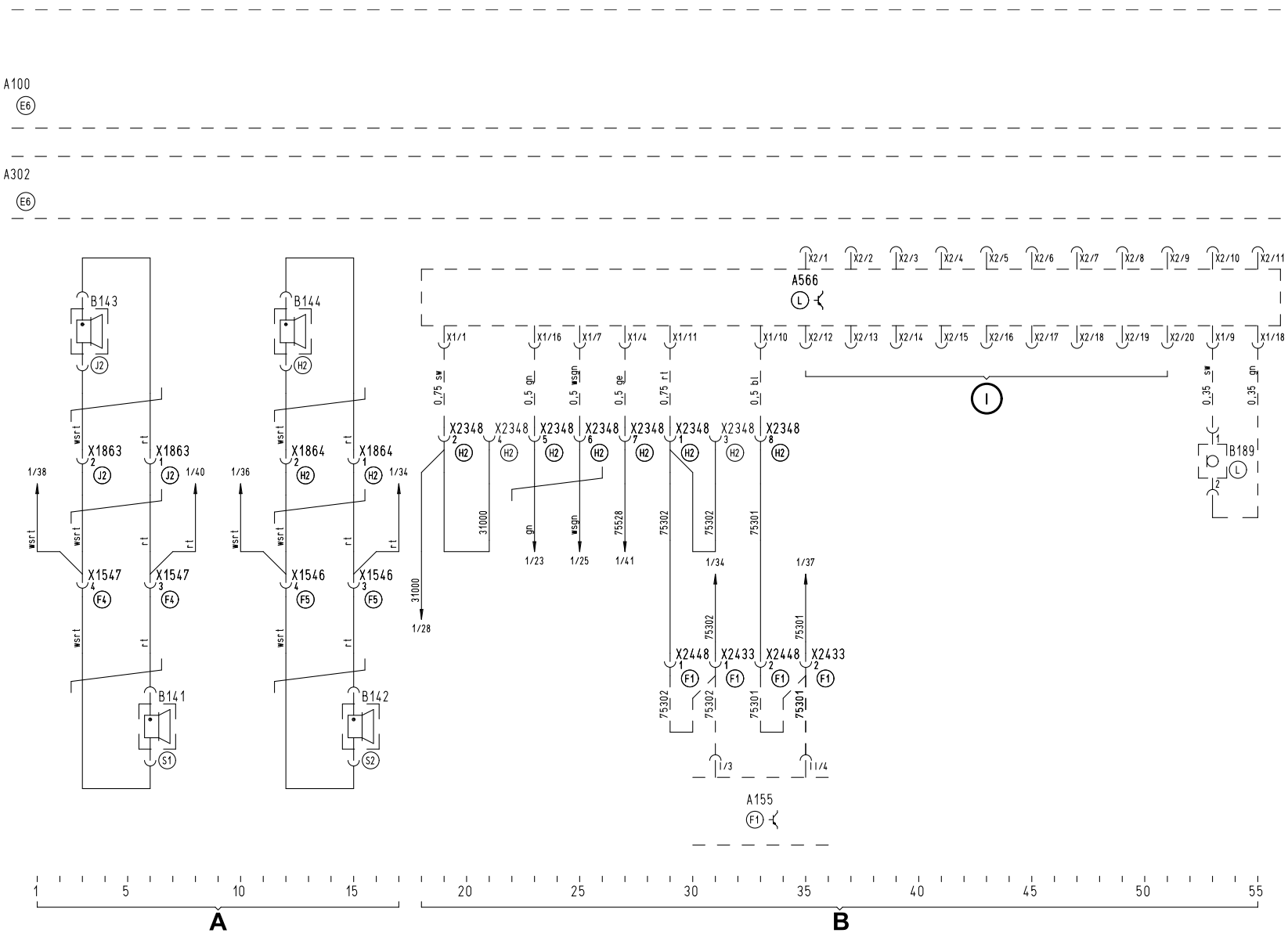
Wiring diagram no. **81.99192.1437** Sheet **2** of 2



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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

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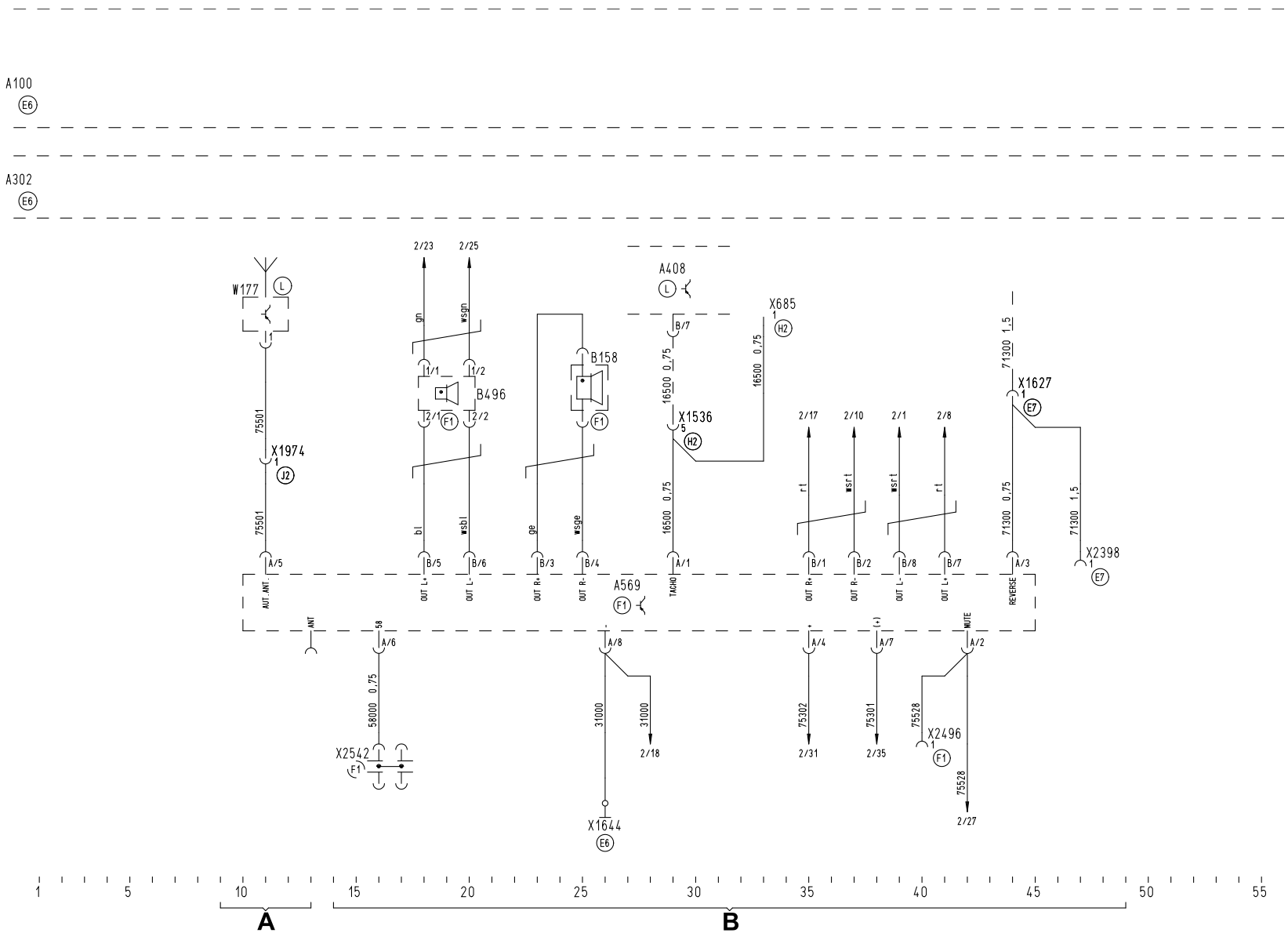
Wiring diagram no. **81.99192.1438** Sheet **1** of 2



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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
- (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

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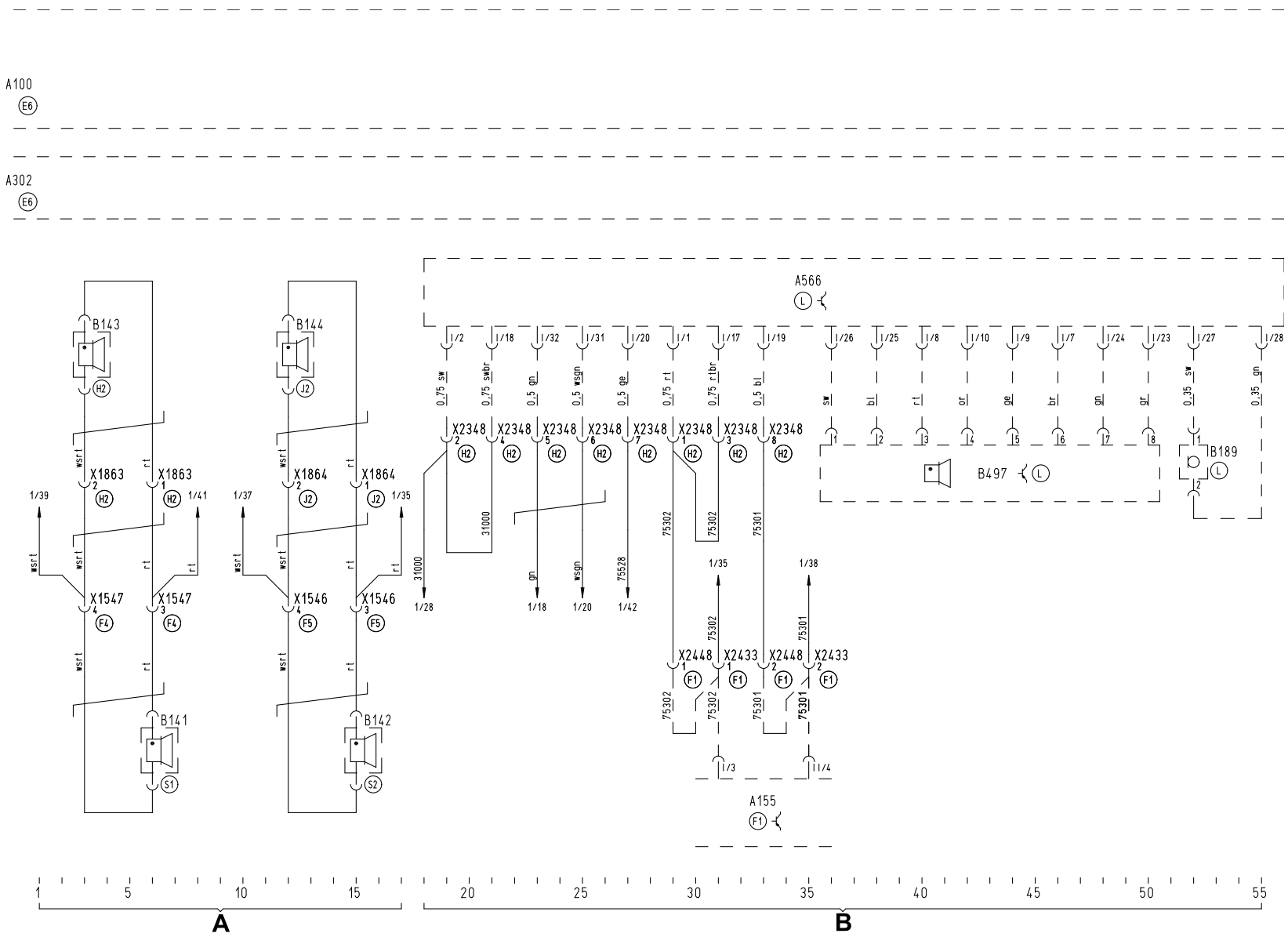
Wiring diagram no. **81.99192.1438** Sheet **2** of 2



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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
- (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

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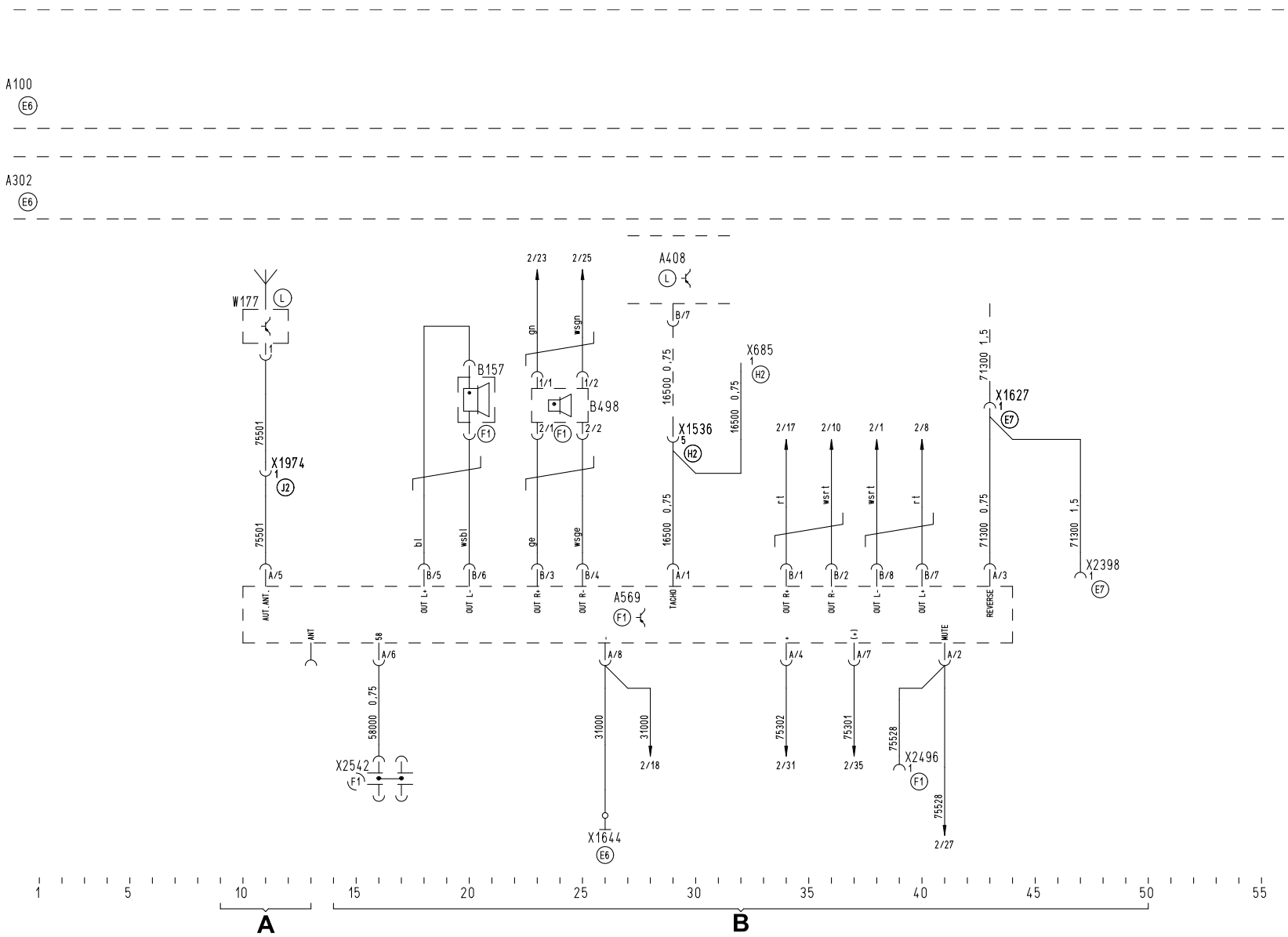
Wiring diagram no. **81.99192.1439** Sheet **1** of 2



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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		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
- (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

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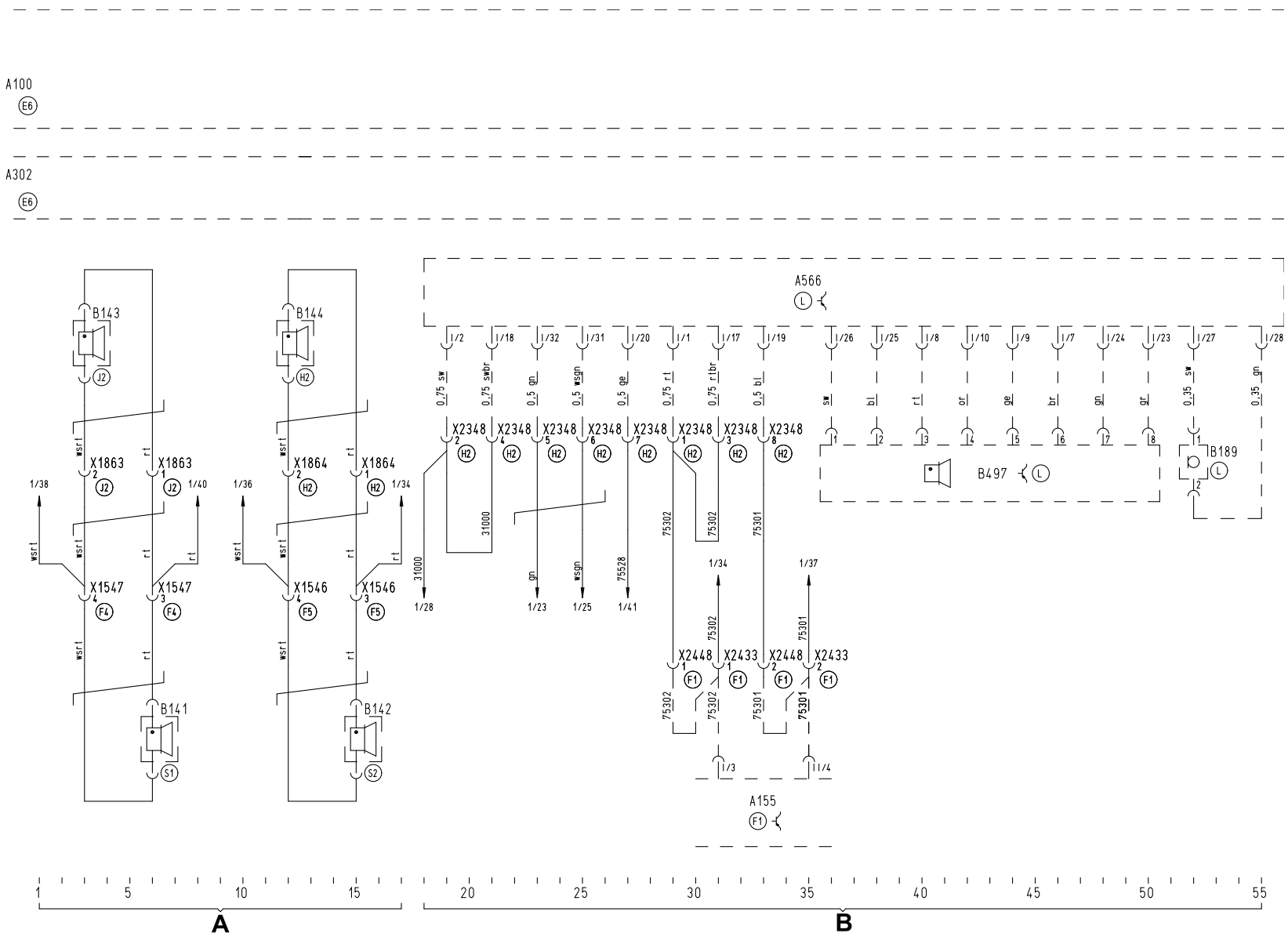
Wiring diagram no. **81.99192.1439** Sheet **2** of 2



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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
- (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

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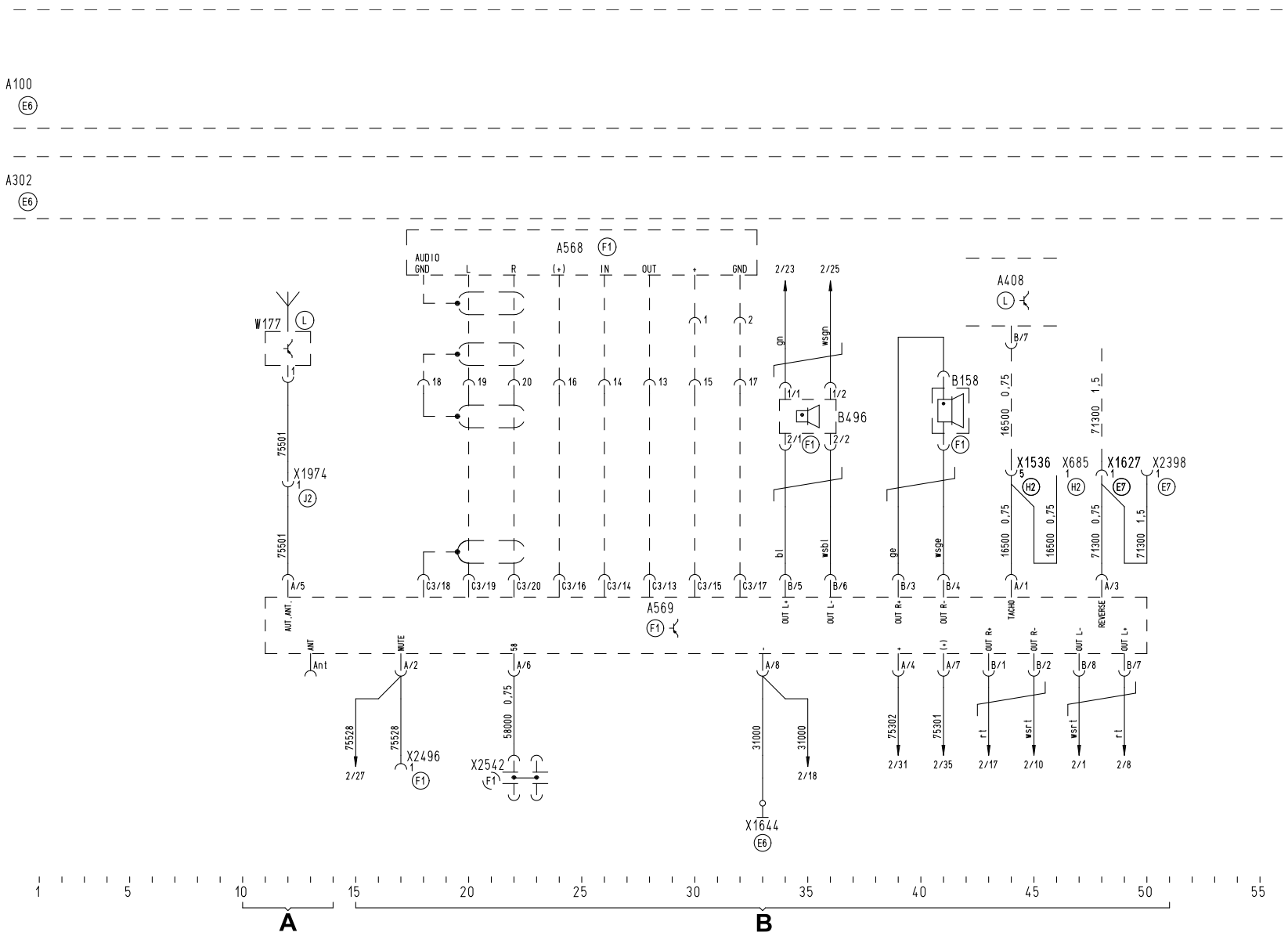
Wiring diagram no. **81.99192.1440** Sheet **1** of 2



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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

- (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) Mobile phone interface

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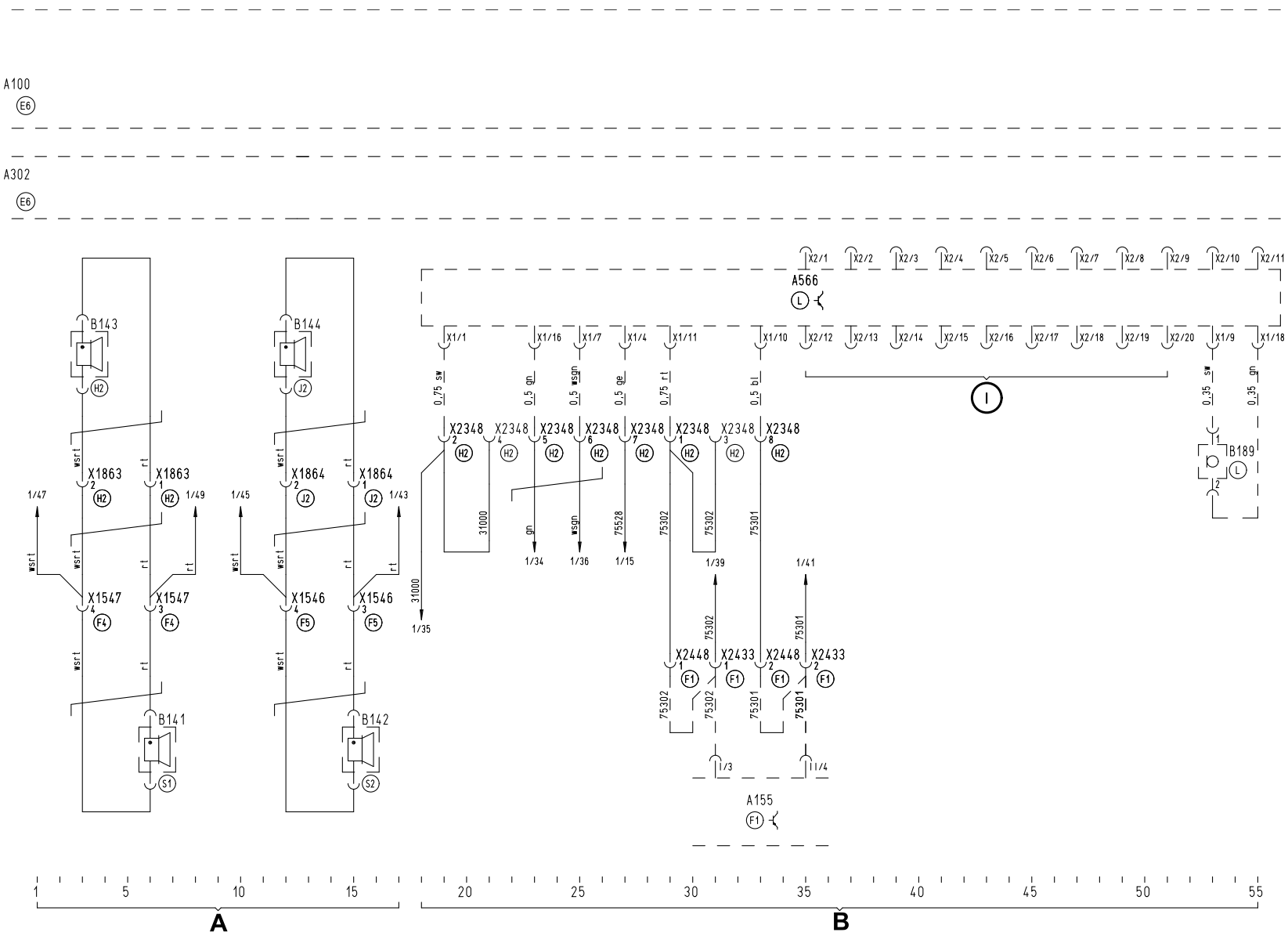
Wiring diagram no. **81.99192.1440** Sheet **2** of 2



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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

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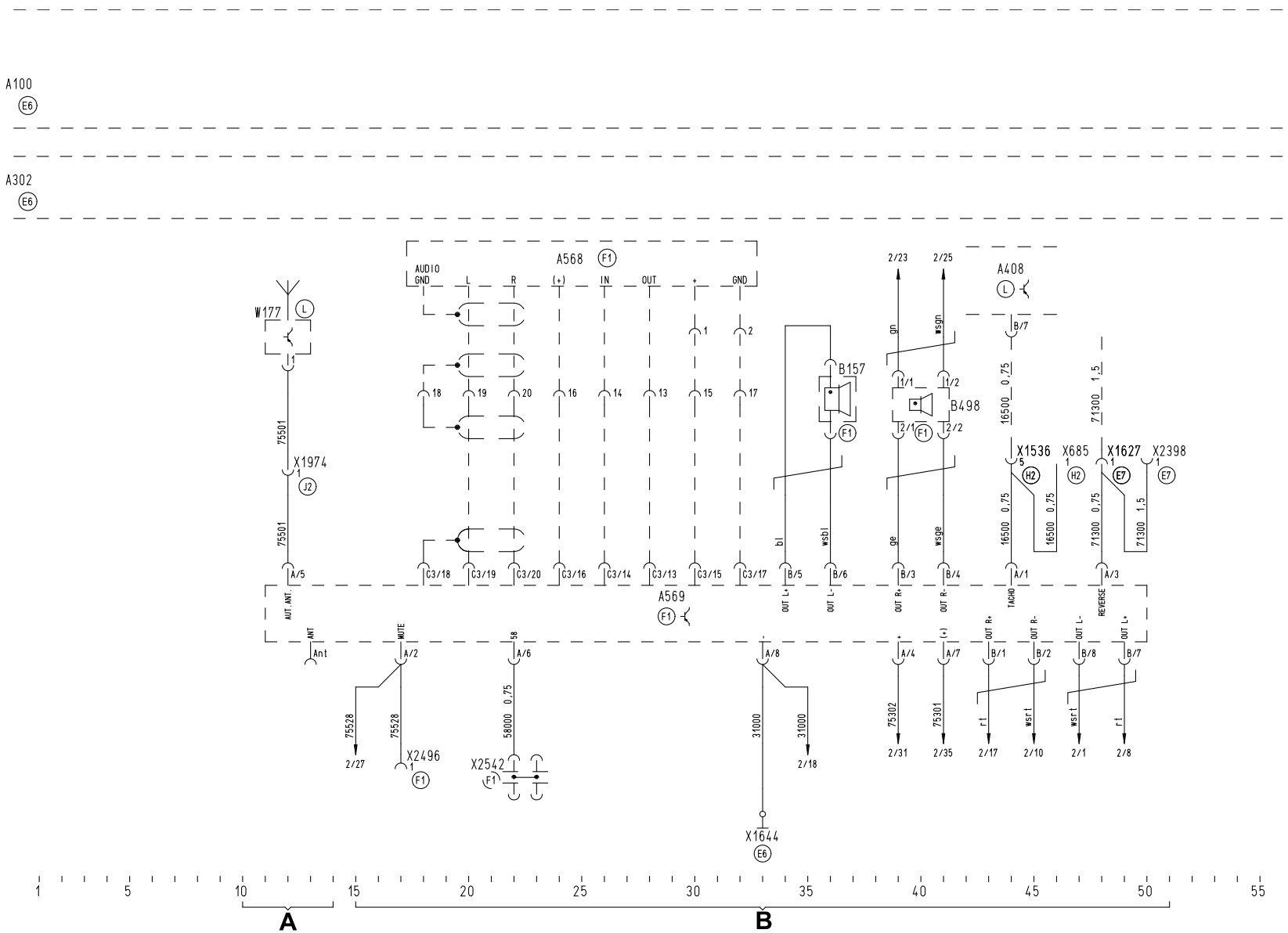
Wiring diagram no. **81.99192.1441** Sheet **1** of 2



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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

- (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) Mobile phone interface

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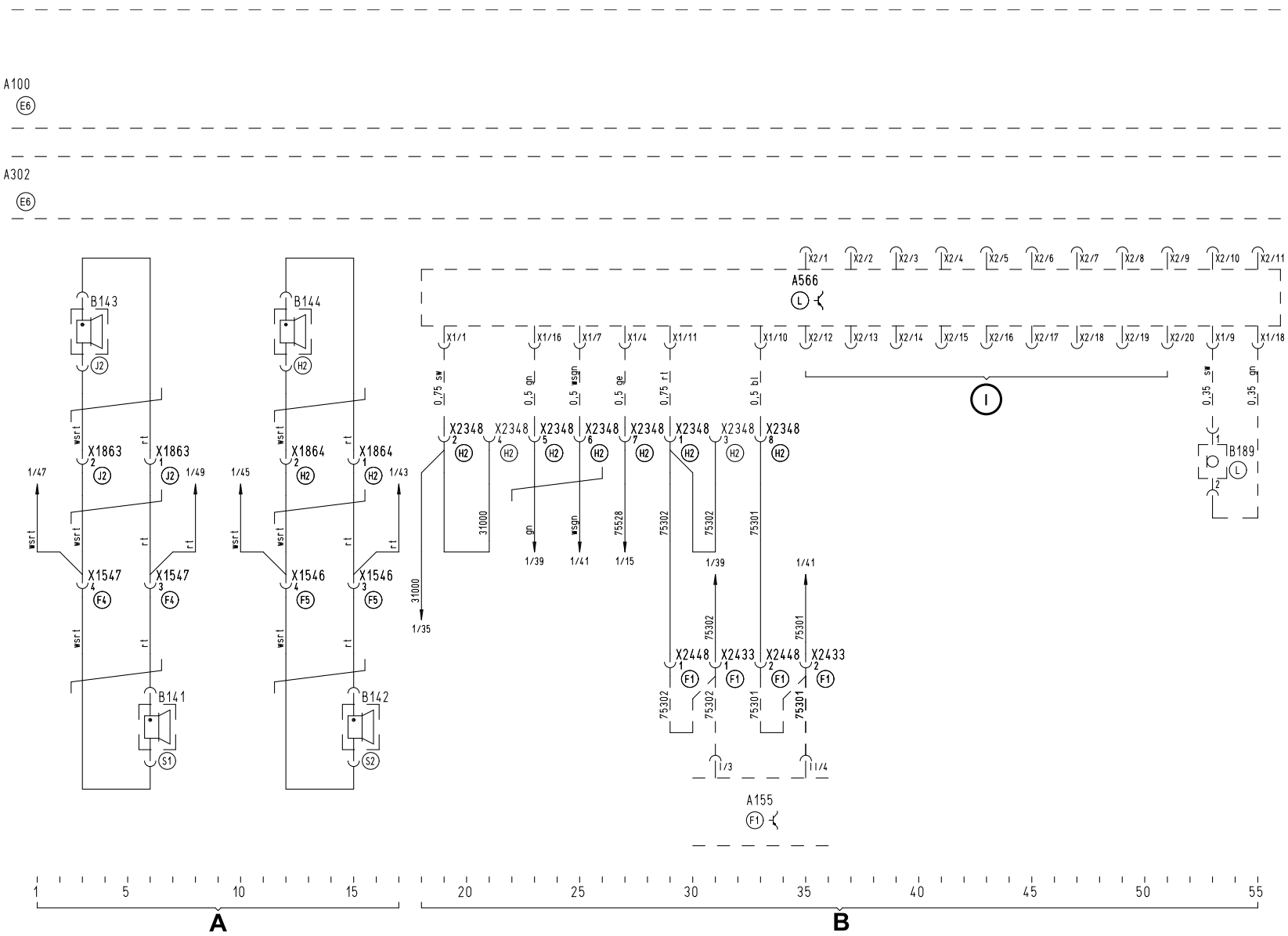
Wiring diagram no. **81.99192.1441** Sheet **2** of 2



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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
- (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

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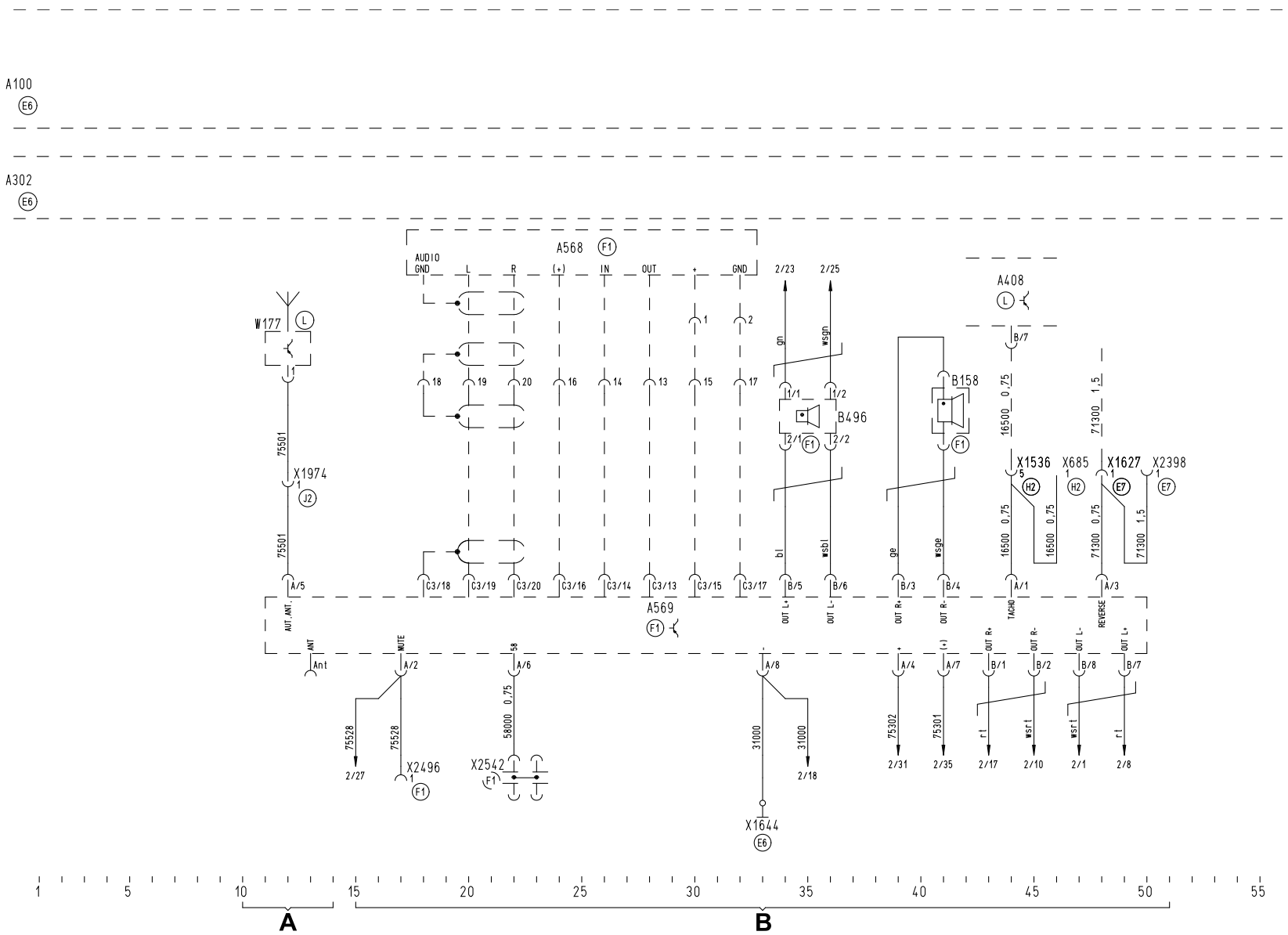
Wiring diagram no. **81.99192.1442** Sheet **1** of 2



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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
- (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

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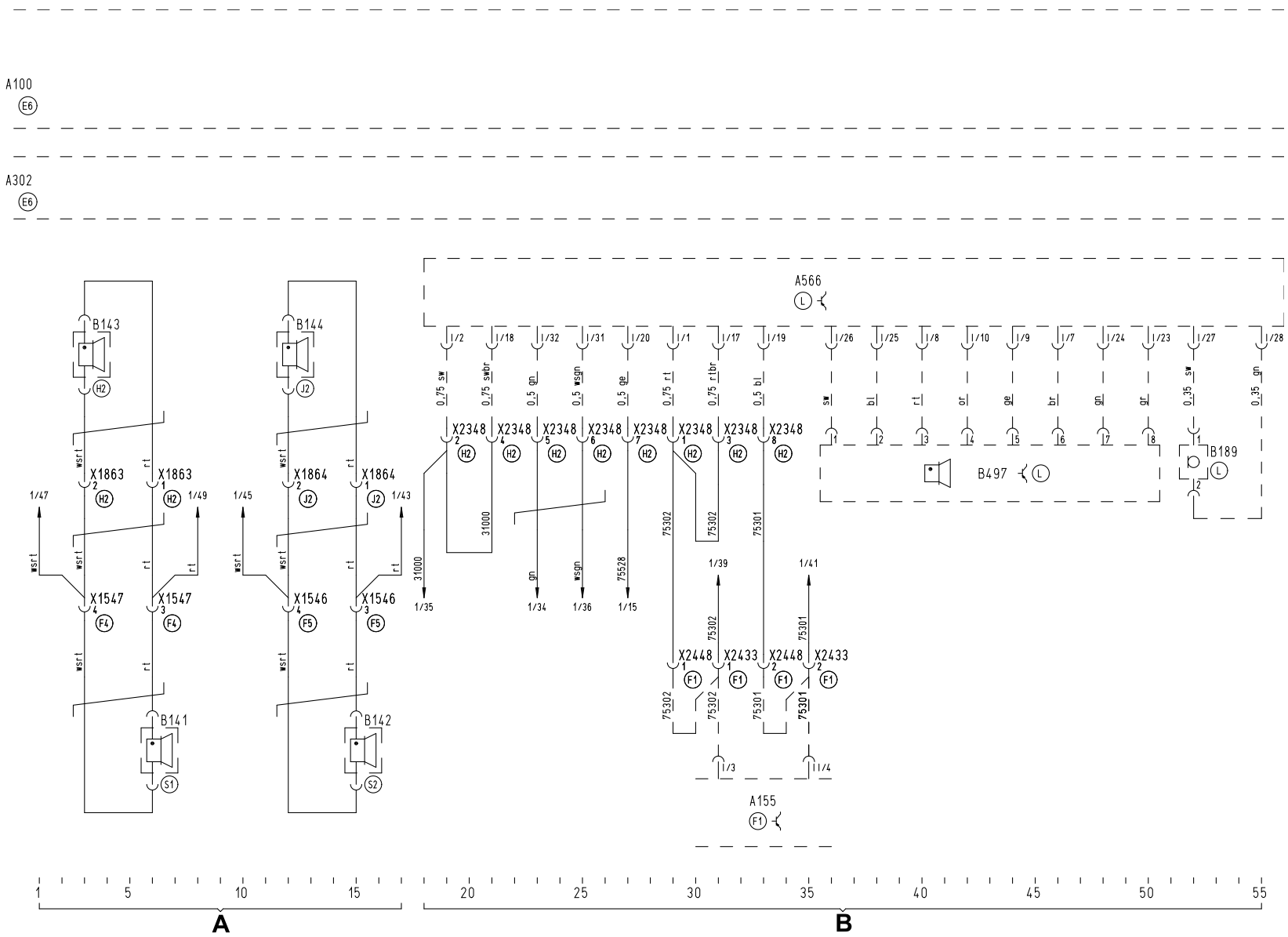
Wiring diagram no. **81.99192.1442** Sheet **2** of 2



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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

- (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

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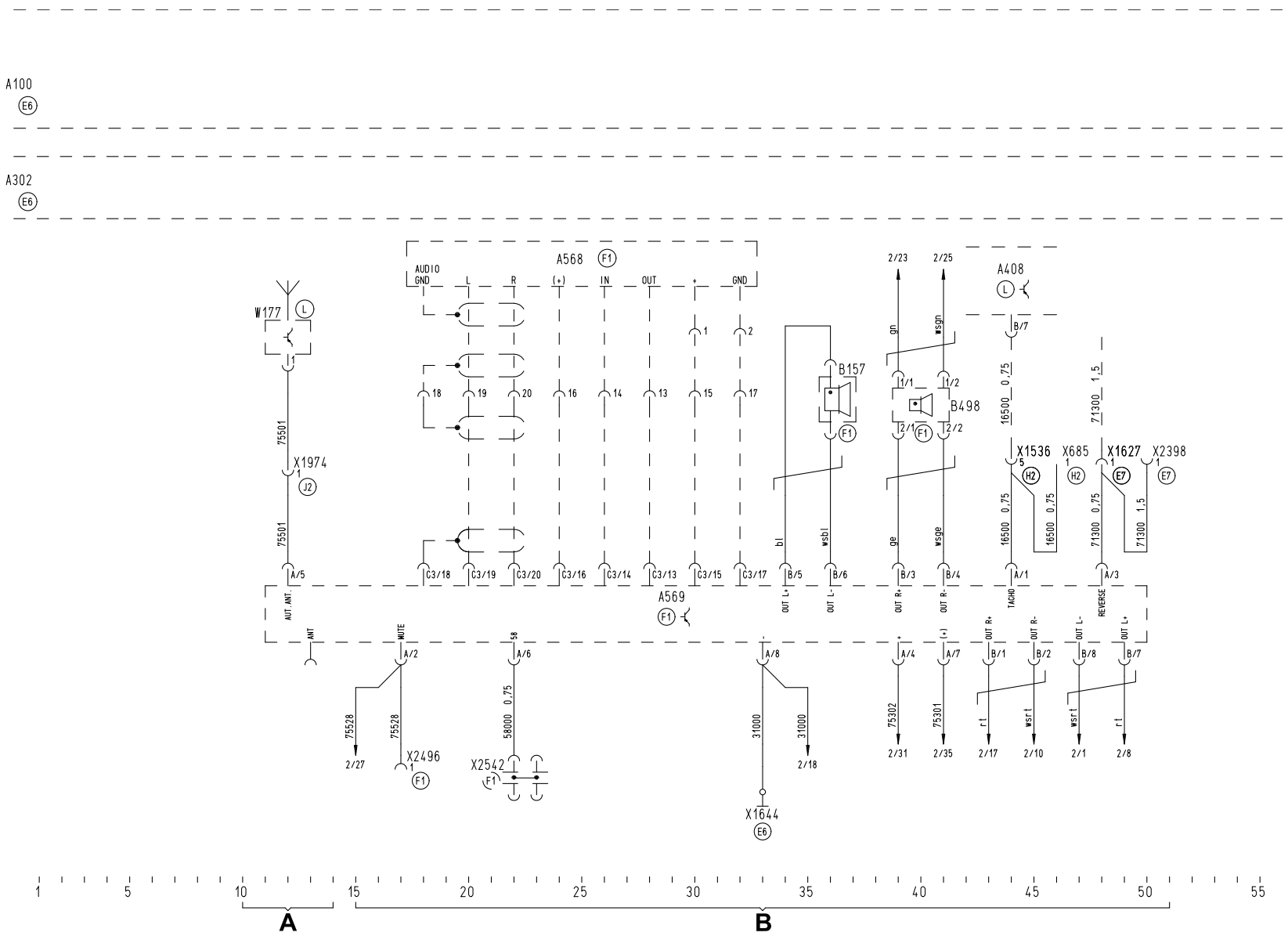
Wiring diagram no. **81.99192.1443** Sheet **1** of 2



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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

- (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

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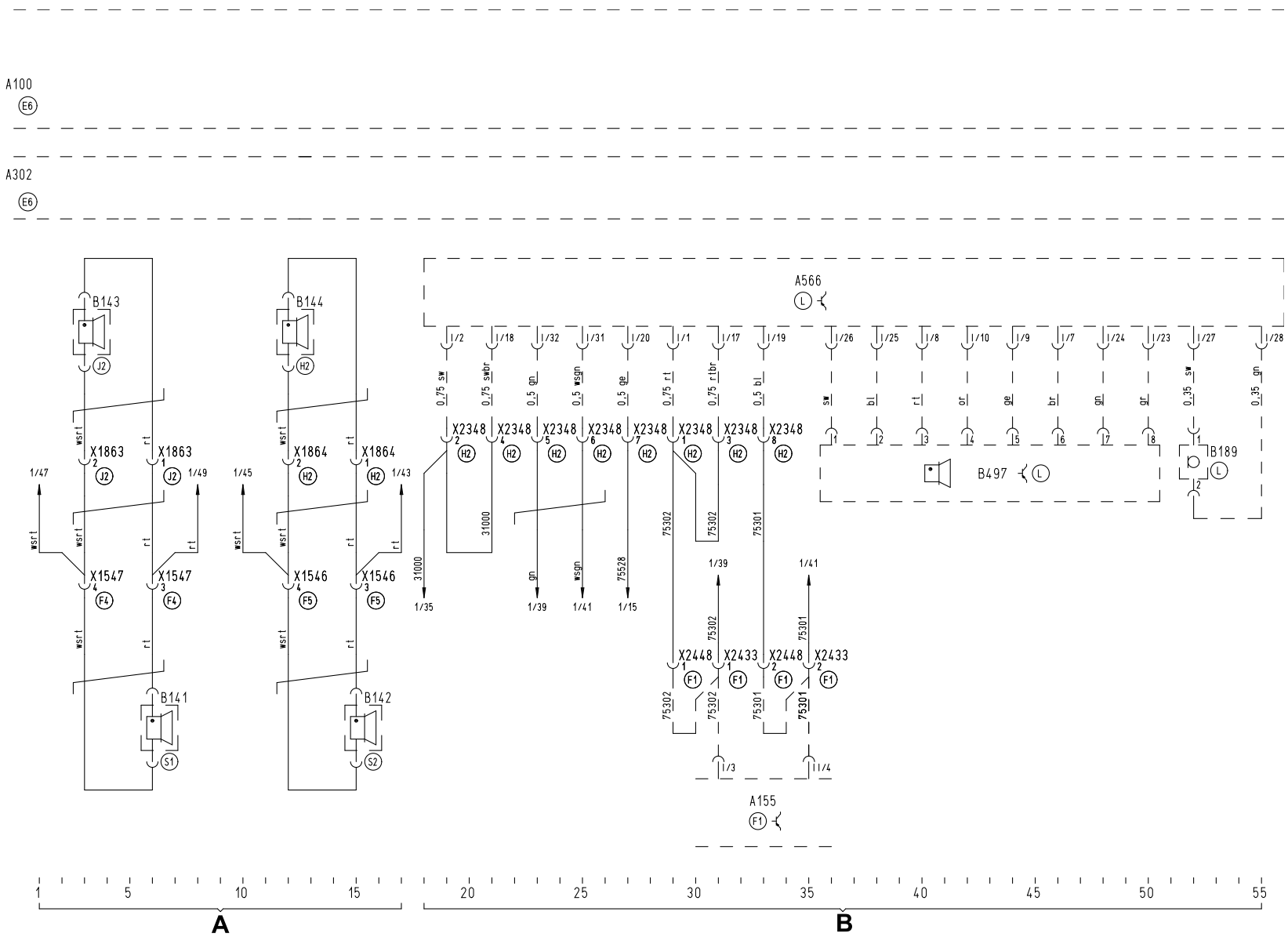
Wiring diagram no. **81.99192.1443** Sheet **2** of 2



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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
- (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

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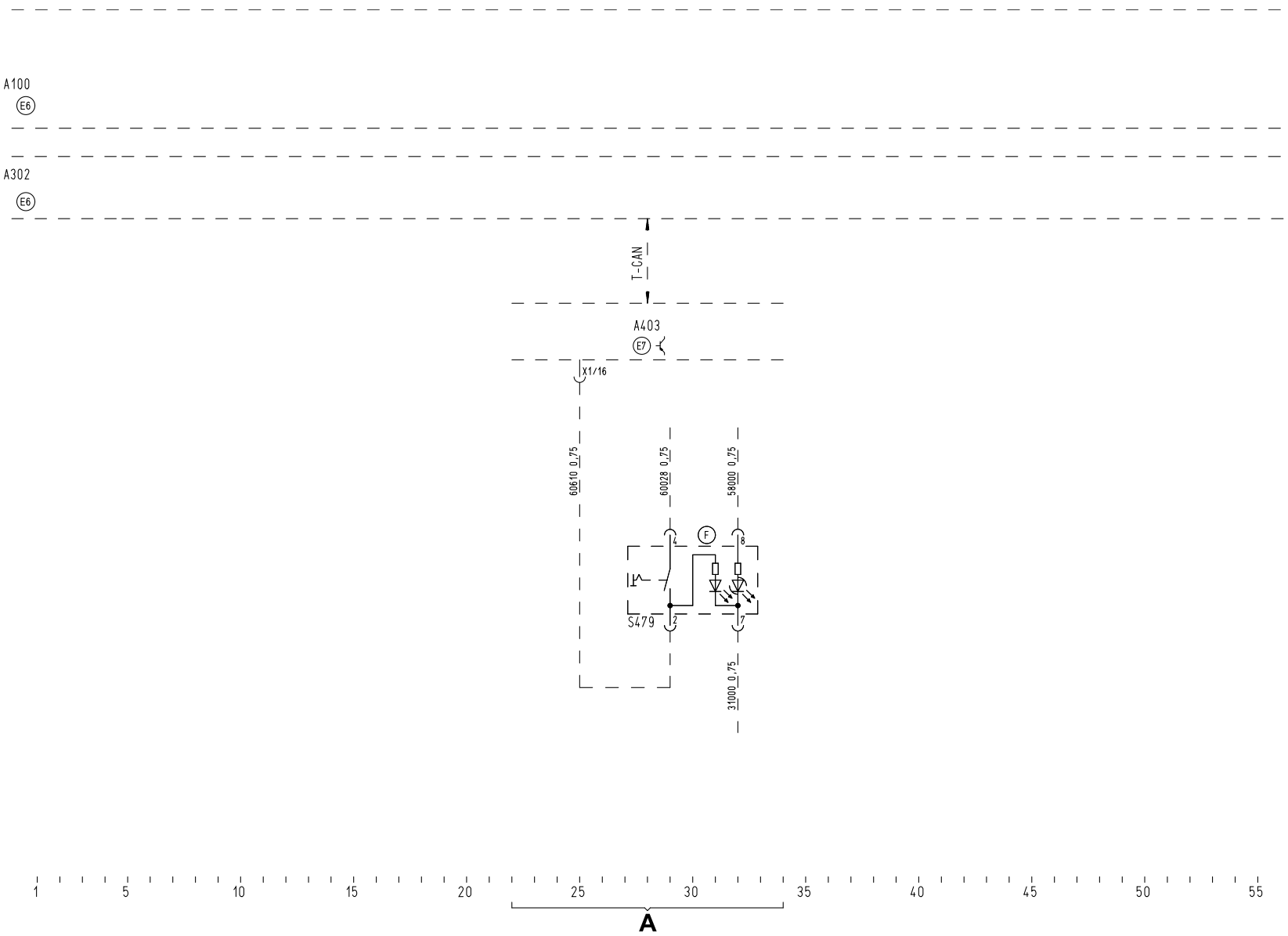
Wiring diagram no. **81.99192.1372** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A144	(374)	Control unit, retarder
A302	(352)	Central computer 2
A403	(339)	Vehicle management computer
A407	(342)	Instrumentation
A437	(398)	Additional retarding brake pushbutton switch
B134	(207)	Temperature sensor, retarder (cooling water)
B188	(208)	Temperature pickup, retarder (oil)
B435	(291)	Pressure pickup, retarder, positioning pressure
F152	(101)	Fuse, retarder
H145		Indicator light, retarder
X1549		Stvd. engine/EDC/transmission I
X1553		Stvd. engine/EDC/transmission III
X1559		Stvd. engine/EDC/transmission IV
X1575		Stvd. temperature sensor, retarder (water, oil)
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

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

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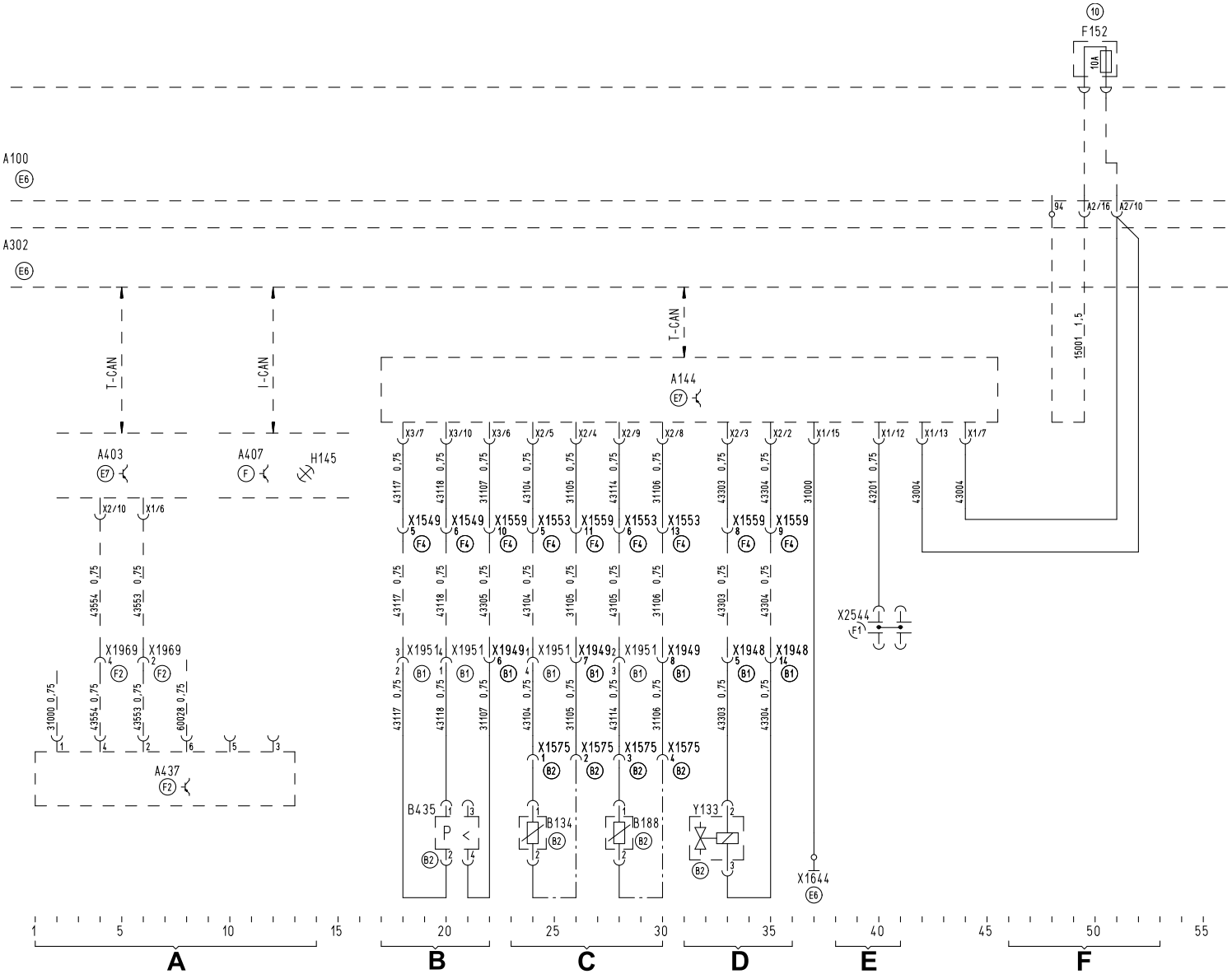
Wiring diagram no. **81.99192.1410** Sheet **1** of 1



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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
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

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

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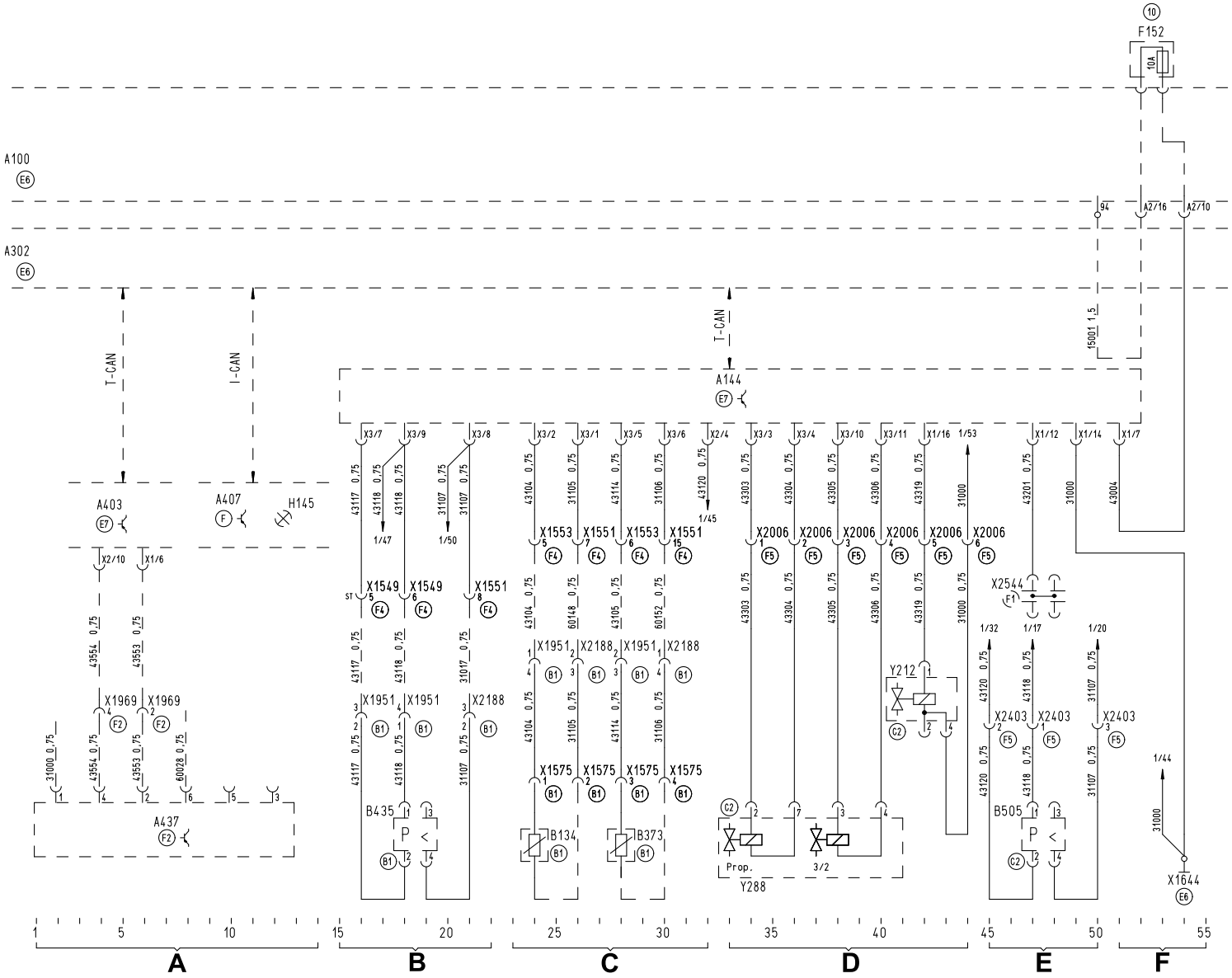
Wiring diagram no. **81.99192.1411** Sheet **1** of 1



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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

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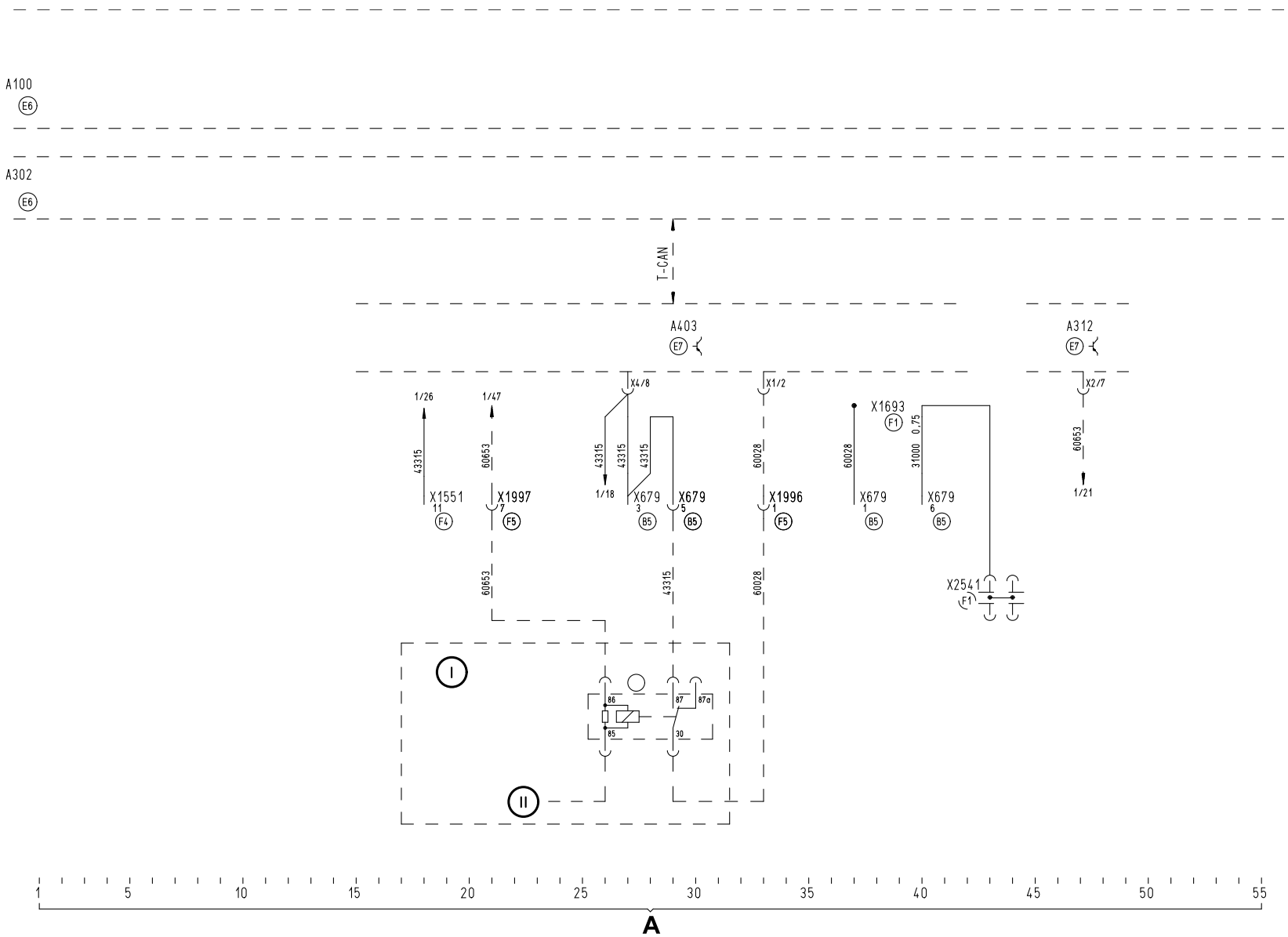
Wiring diagram no. **81.99192.1409** Sheet **1** of 1



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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

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)
F188	(118)	Fuse, all-round marker light
S227	(554)	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
X2244		Stvd. base/stand, all-round marker light, right
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

(I) All-round marker light, left **E197** or right **E196**

(II) All-round marker light, left **X2245**

(III) All-round marker light, left **X2243**

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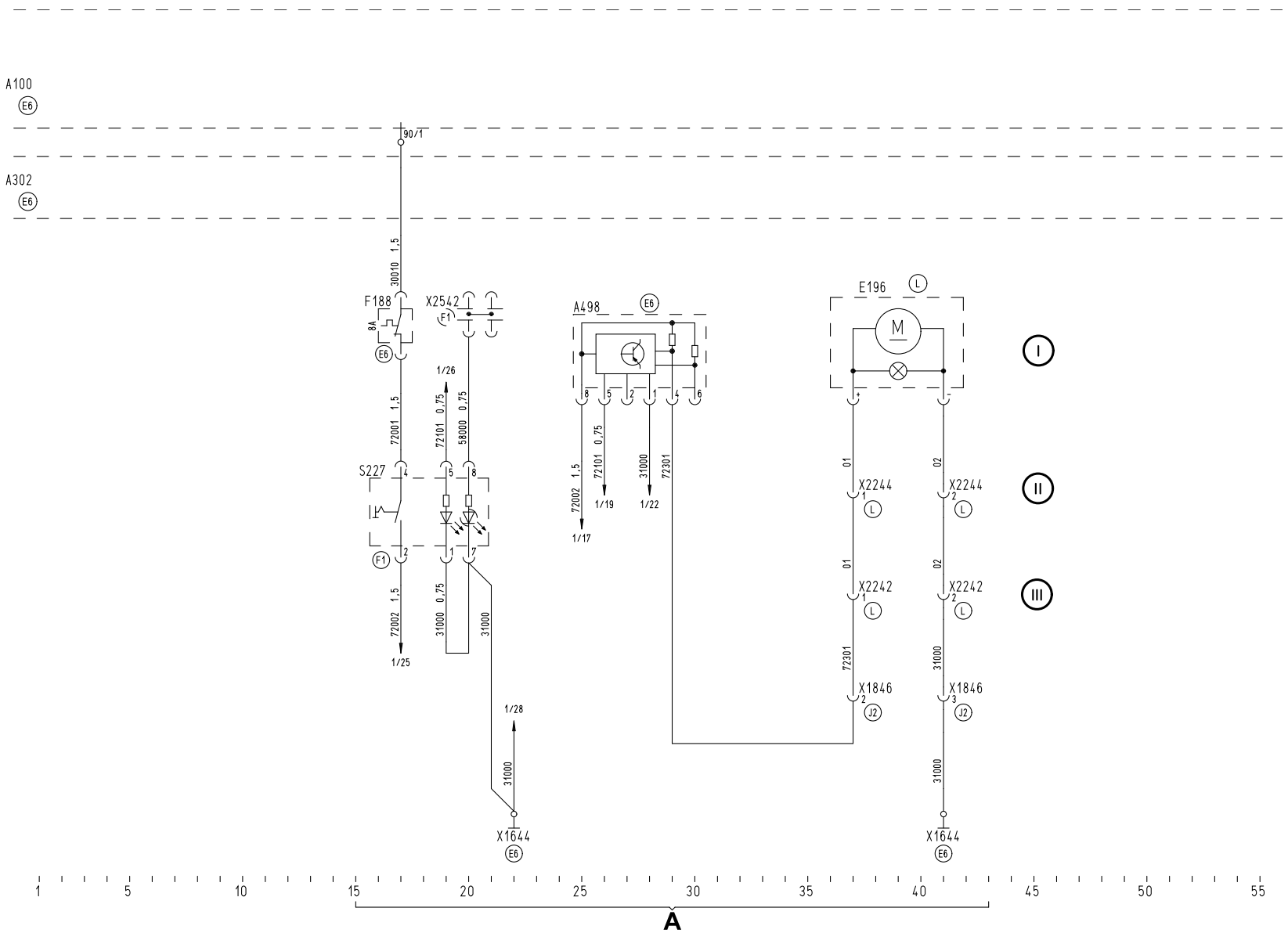
Wiring diagram no. **81.99192.1412** Sheet **1** of 1



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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

- (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

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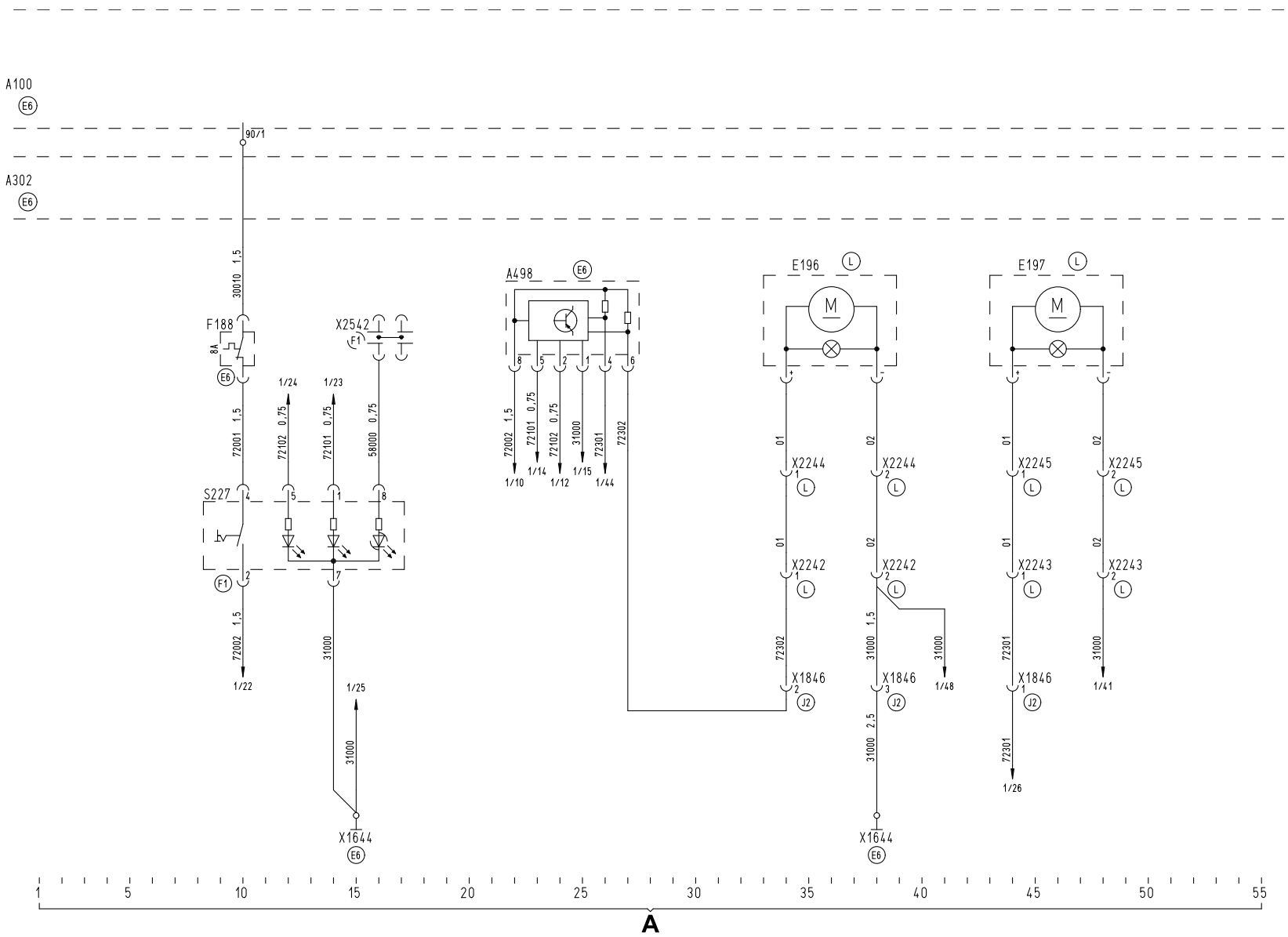
Wiring diagram no. **81.99192.1413** Sheet **1** of 1



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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

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
X1843		Stvd. all-round marker light, B-pillar, left
X1844		Stvd. all-round marker light, B-pillar, right
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

- (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) on the short cab, line 72302 to left and right

(II) **X1844** on RL H1
X1843 on RL J1

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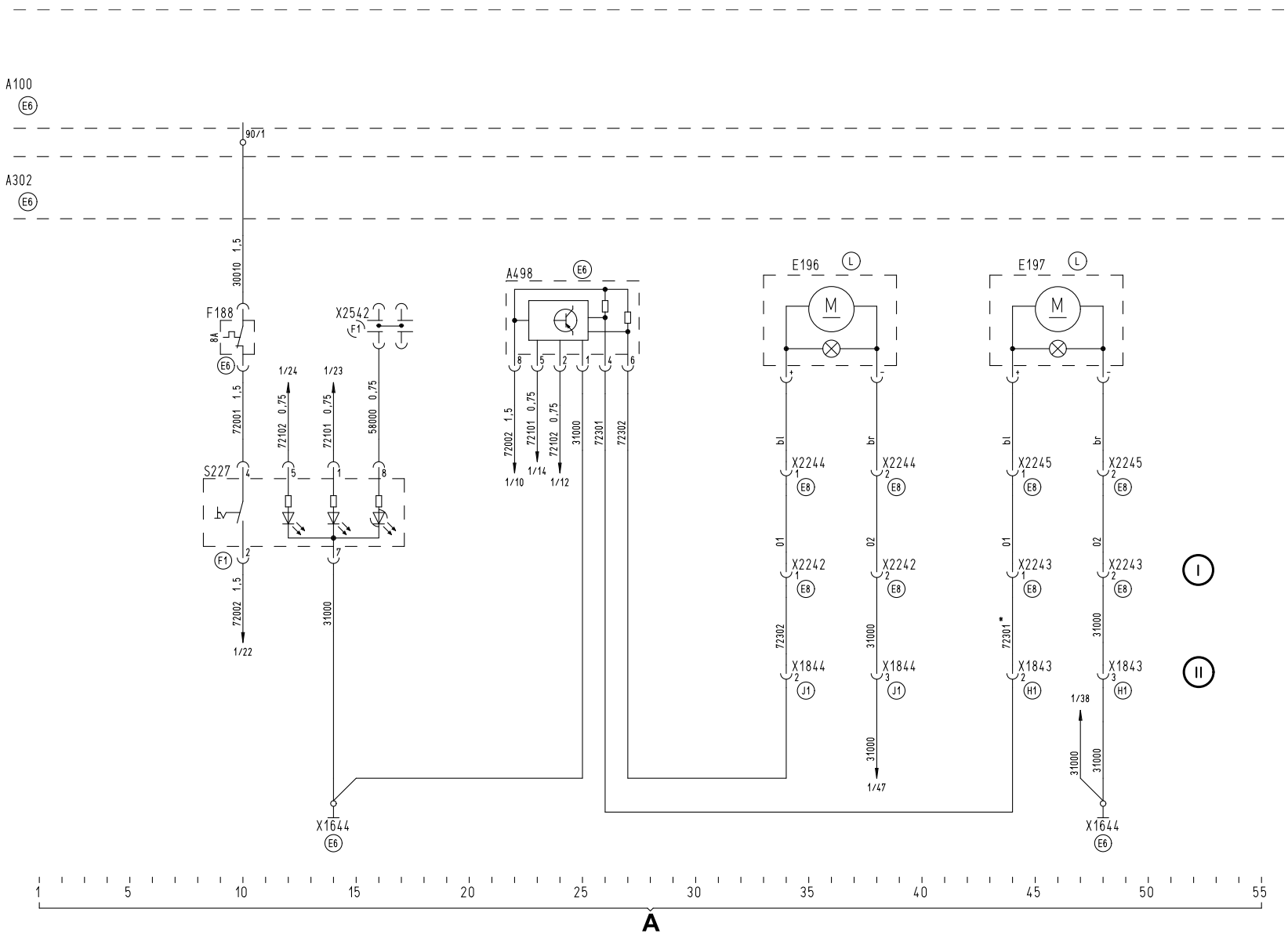
Wiring diagram no. **81.99192.1414** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A498	(516)	Control device, all-round marker light
E197	(183)	All-round marker light (driver's side)
F188	(118)	Fuse, all-round marker light
S227	(554)	Switch, all-round marker light
X1644		Earthing point, cab, adjacent to central fuse, relay and terminal block
X1843		Stvd. all-round marker light, B-pillar, left
X2243		Stvd. cable duct, all-round marker light, left
X2245		Stvd. base/stand, all-round marker light, left
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

(I) on the short cab, line 72302

(II) **X1843** on RL J1

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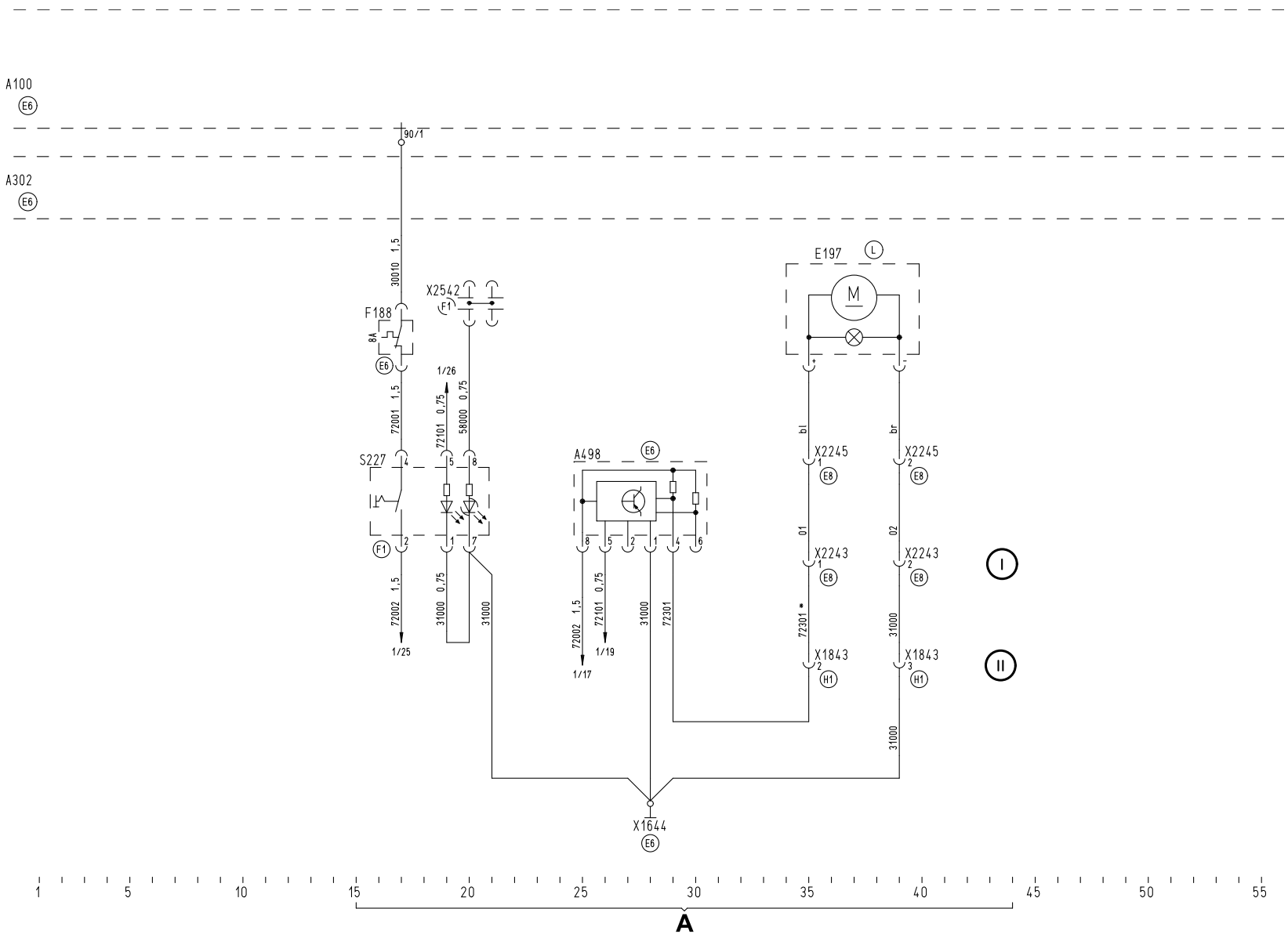
Wiring diagram no. **81.99192.1416** Sheet **1** of 1



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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

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)
F188	(118)	Fuse, all-round marker light
S227	(554)	Switch, all-round marker light
X1644		Earthing point, cab, adjacent to central fuse, relay and terminal block
X1844		Stvd. all-round marker light, B-pillar, right
X2242		Stvd. cable duct, all-round marker light, right
X2244		Stvd. base/stand, all-round marker light, right
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

(I) **X1844** on RL H1

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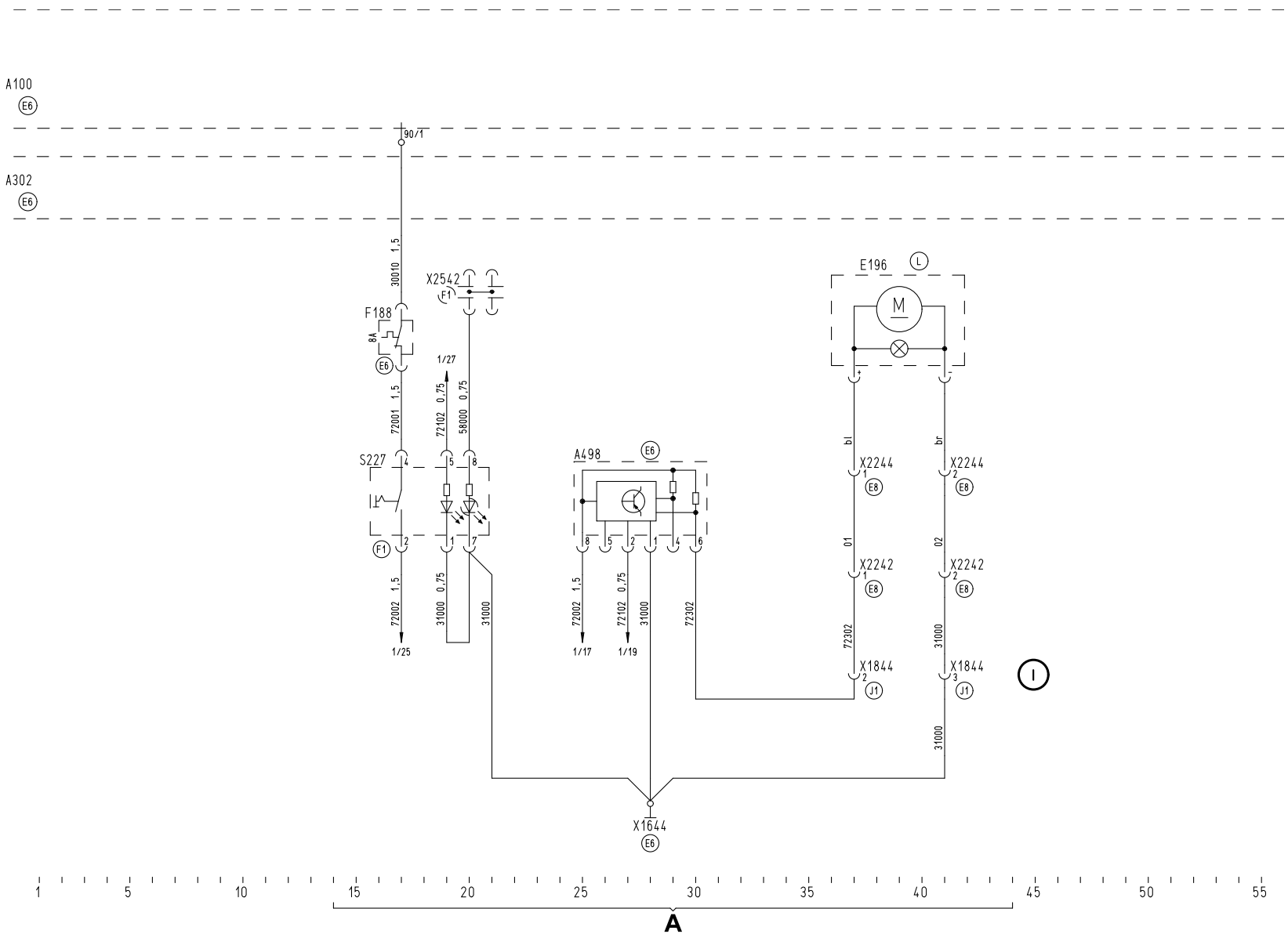
Wiring diagram no. **81.99192.1415** Sheet **1** of 1



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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		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
- (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	Stvd. height sensor, front axle, left
X2508	Stvd. adaptation, parking light 2

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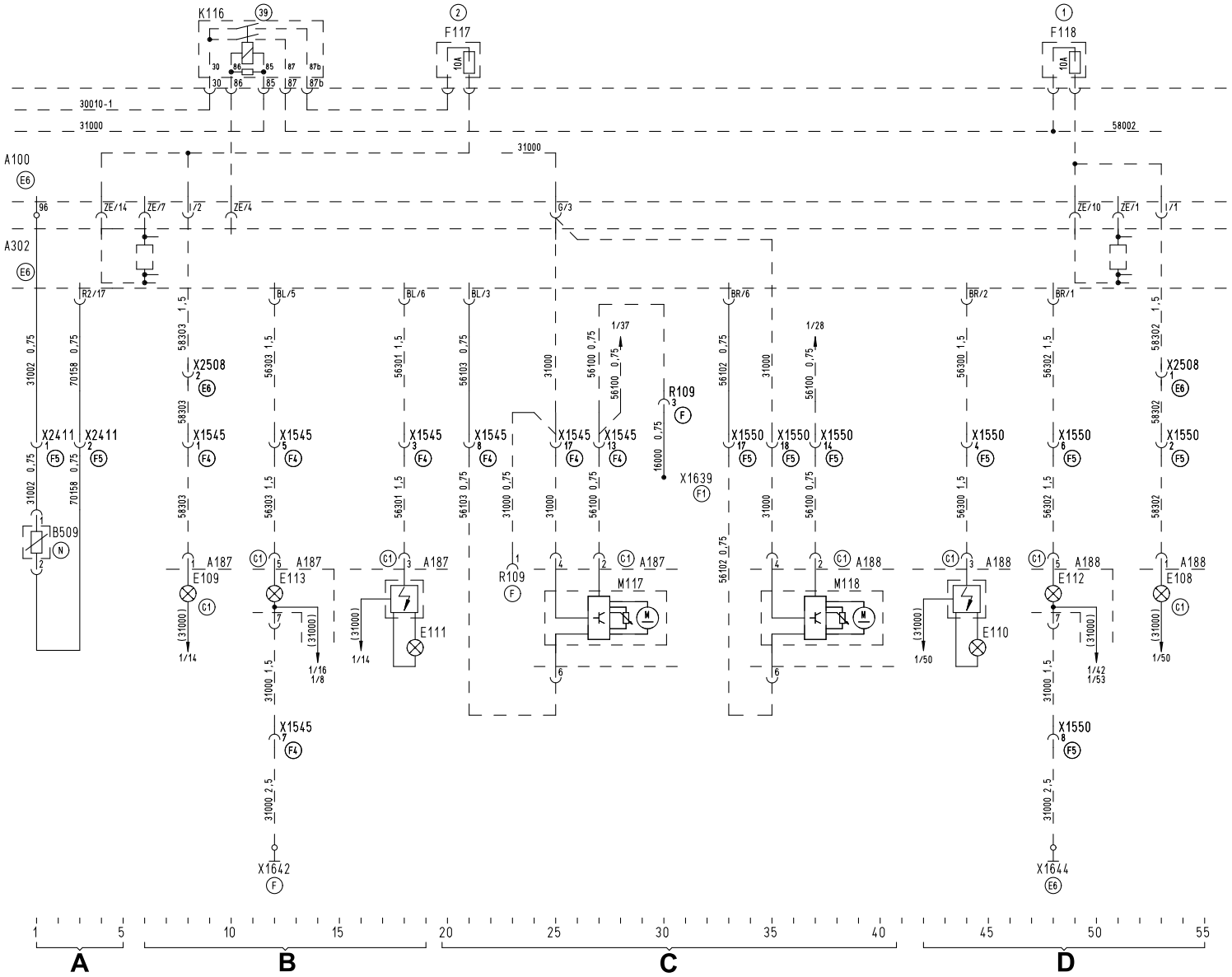
Wiring diagram no. **81.99192.2651** Sheet **1** of 1



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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
- (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	Stvd. height sensor, front axle, left
X2508	Stvd. adaptation, parking light 2

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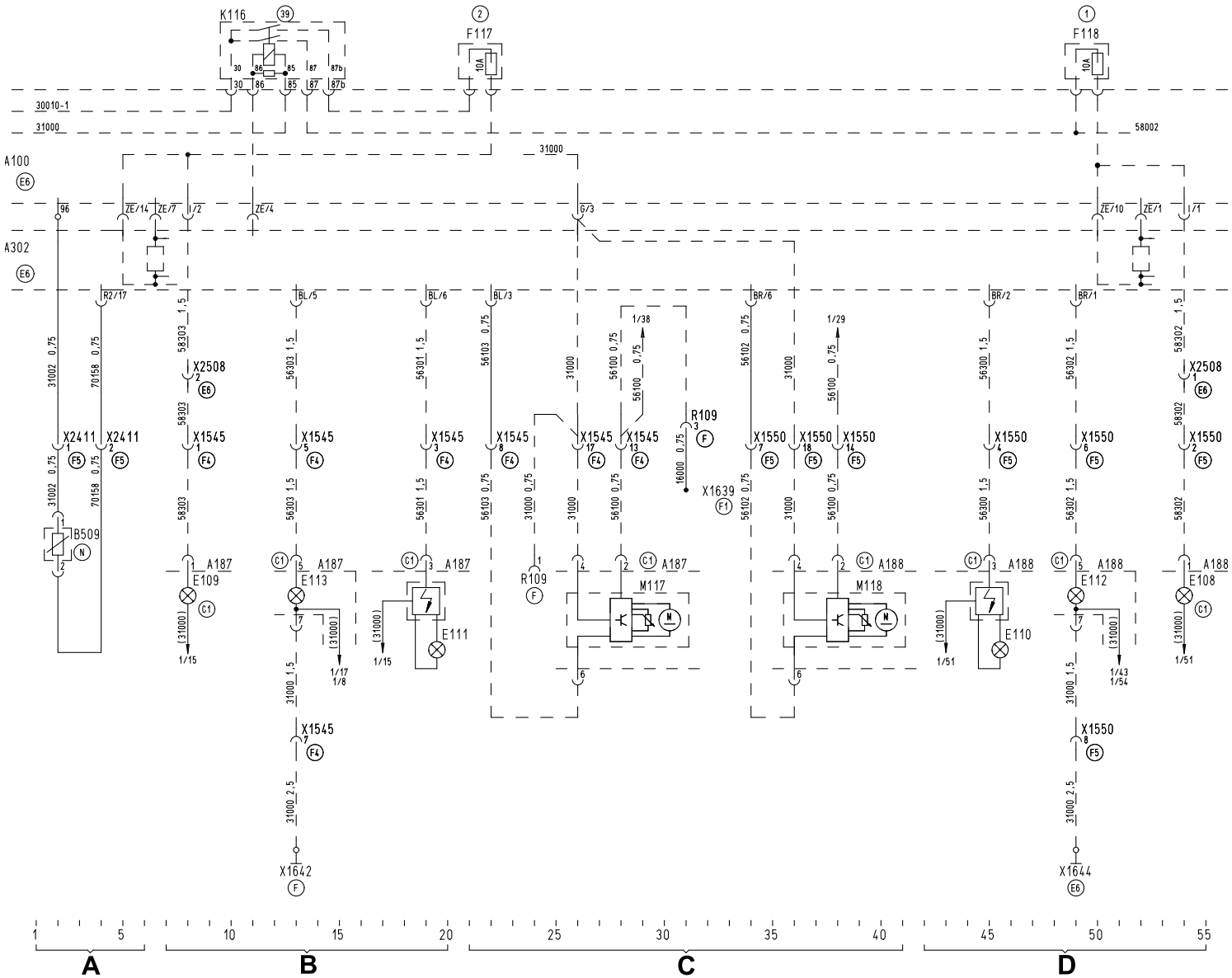
Wiring diagram no. **81.99192.2653** Sheet **1** of 1



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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
- (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

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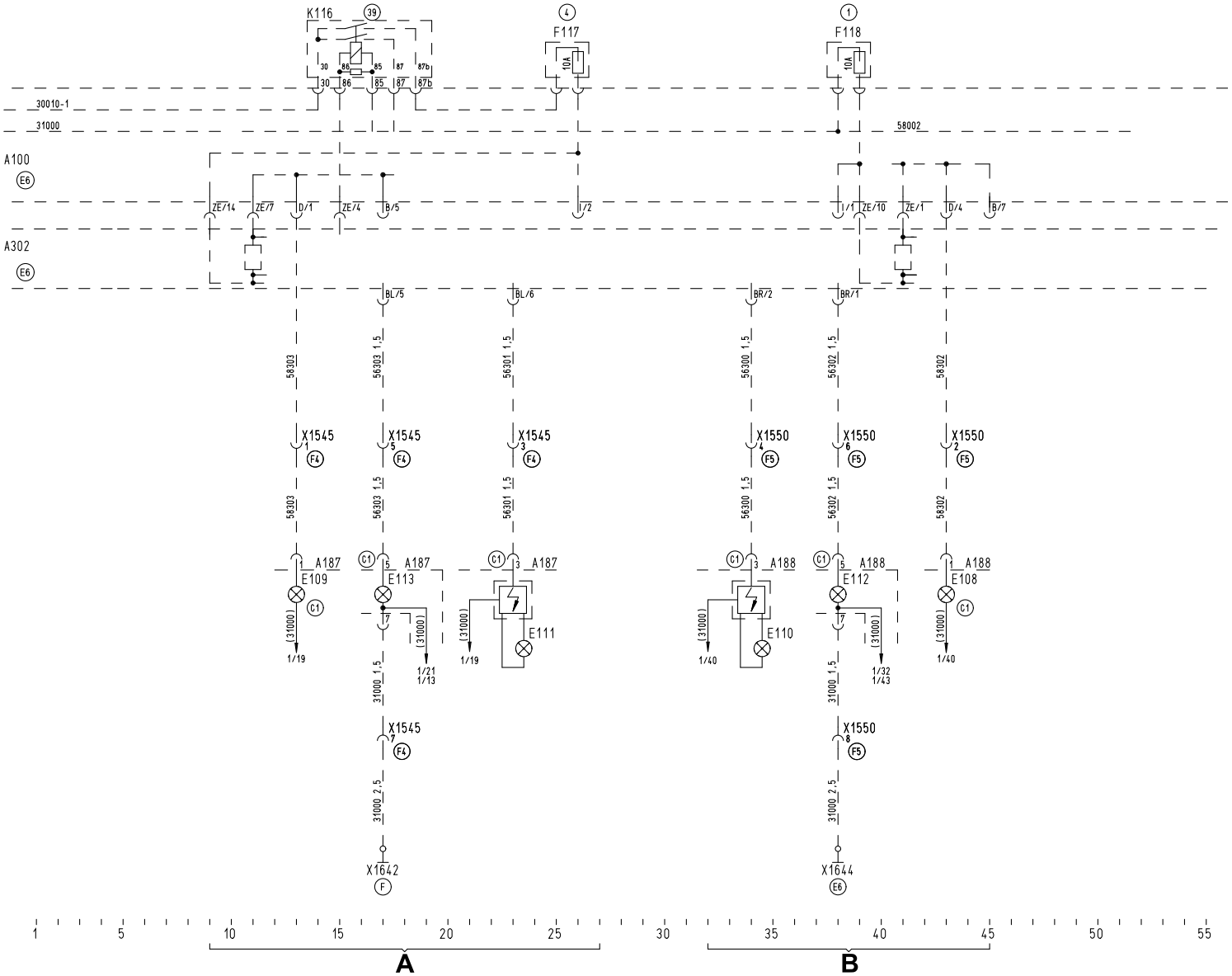
Wiring diagram no. **81.99192.2652** Sheet **1** of 1



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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

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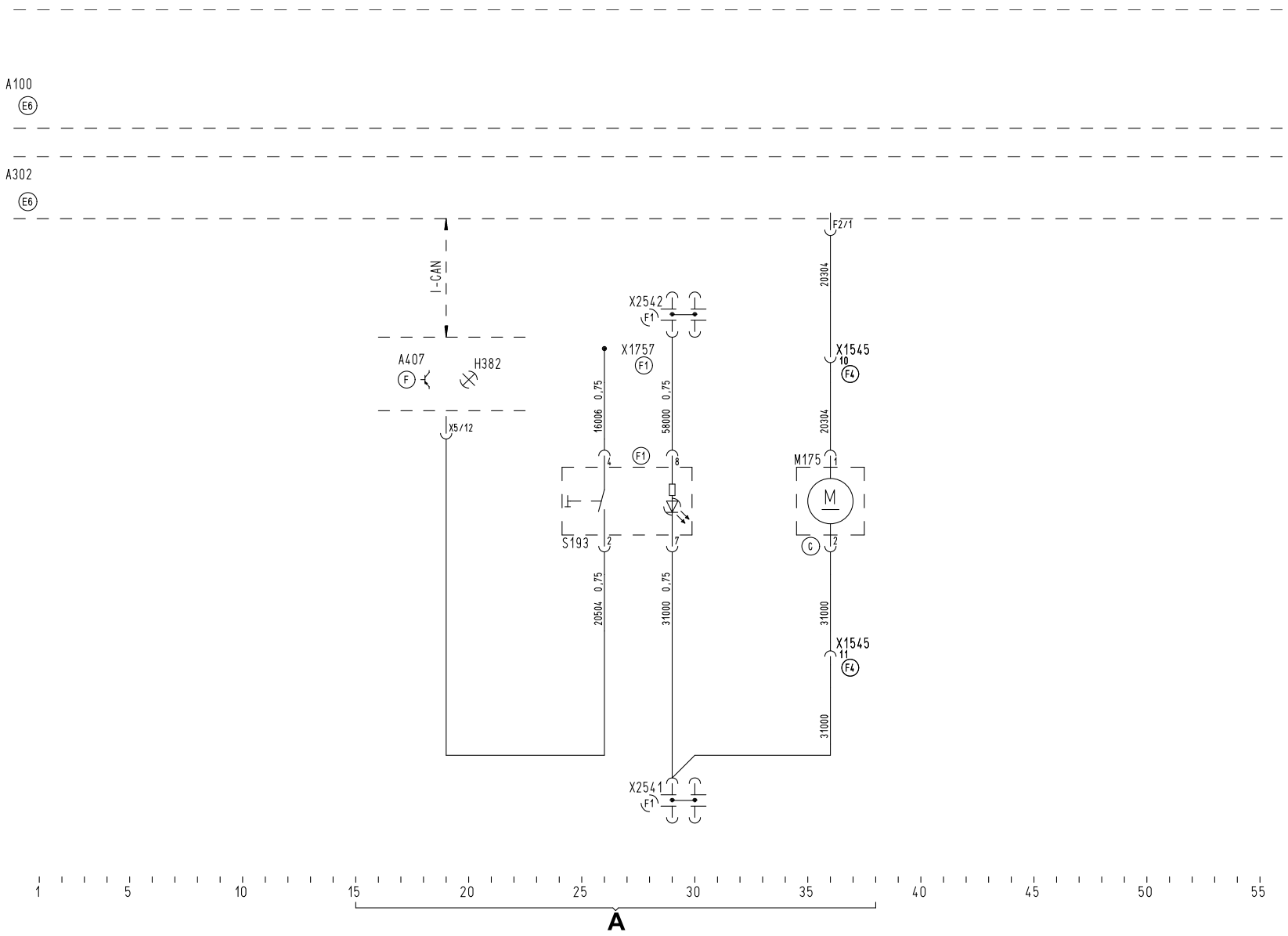
Wiring diagram no. **81.99192.1392** Sheet **1** of 1



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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

- (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

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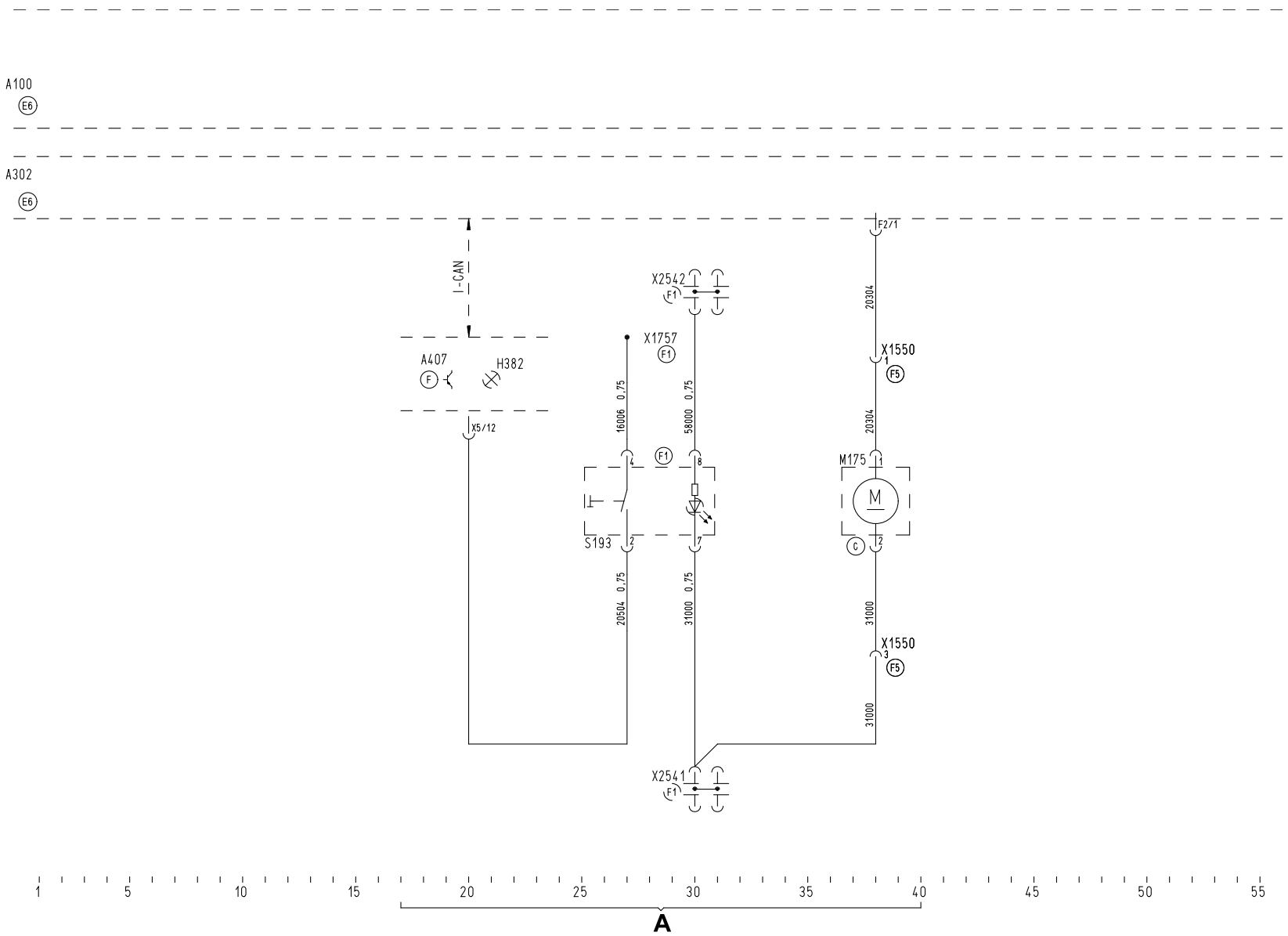
Wiring diagram no. **81.99192.1393** Sheet **1** of 1



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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

- (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) Sunroof electronics

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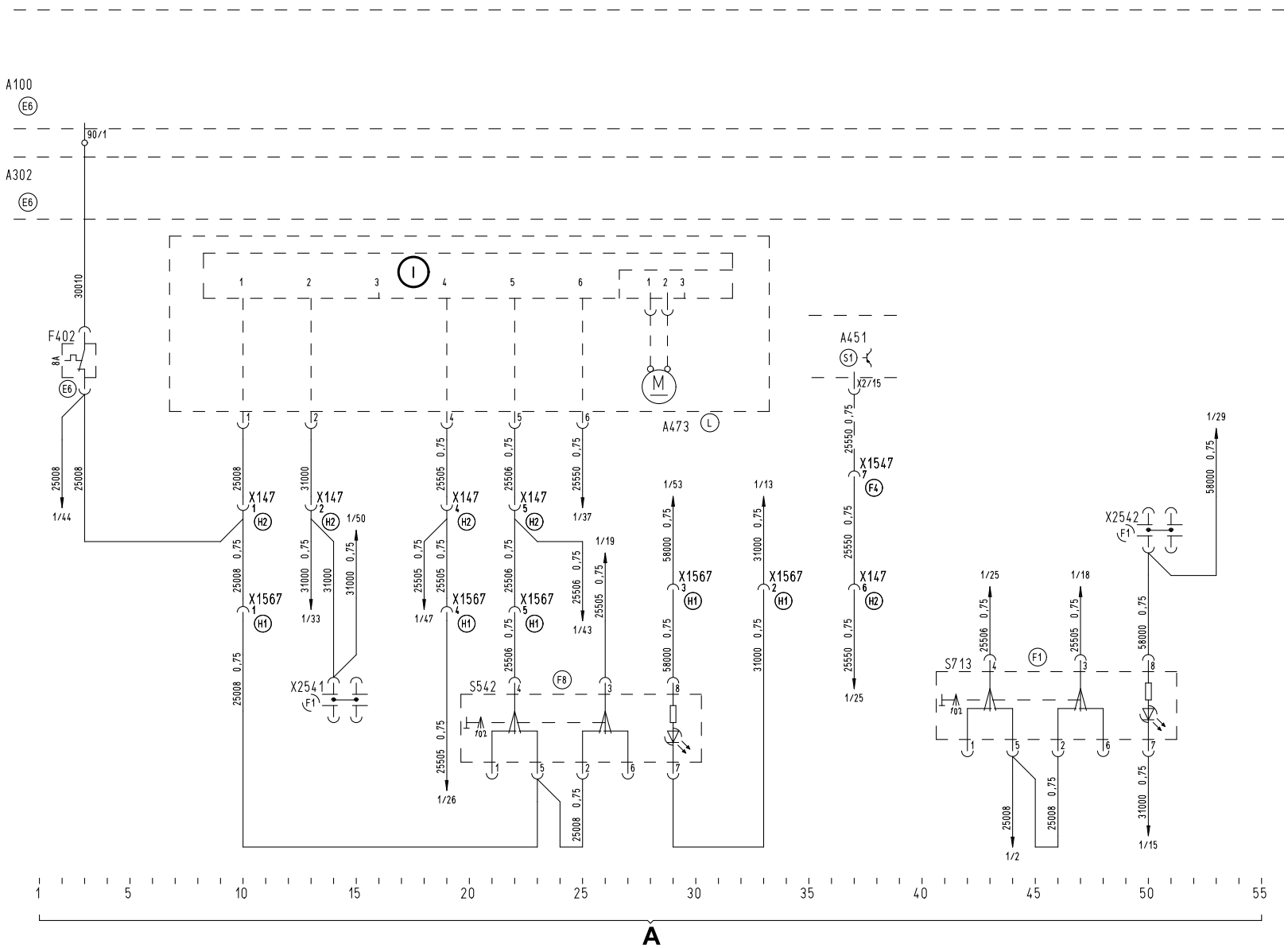
Wiring diagram no. **81.99192.1394** Sheet **1** of 1



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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

- (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) Sunroof electronics

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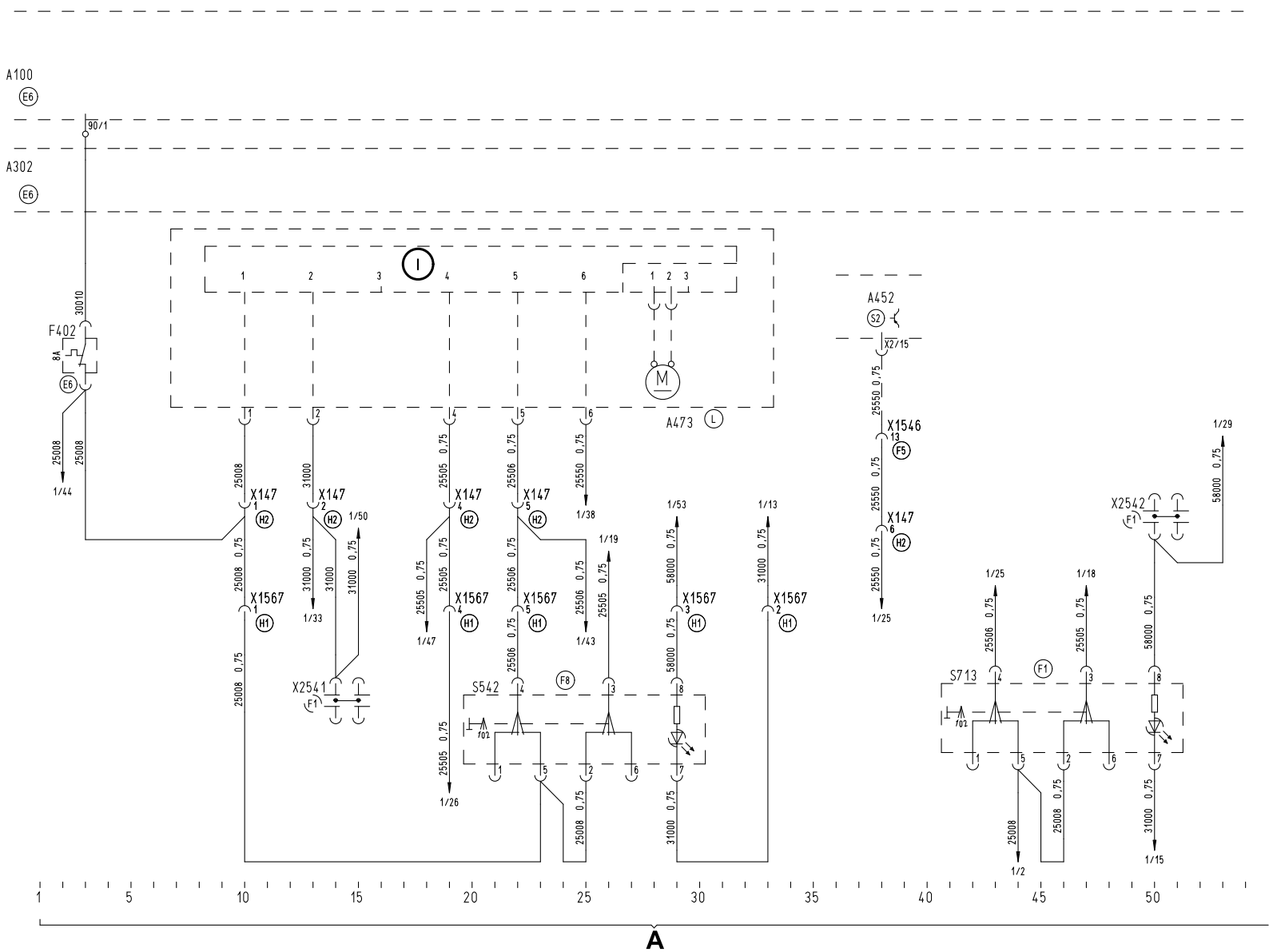
Wiring diagram no. **81.99192.1395** Sheet **1** of 1



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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
- (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

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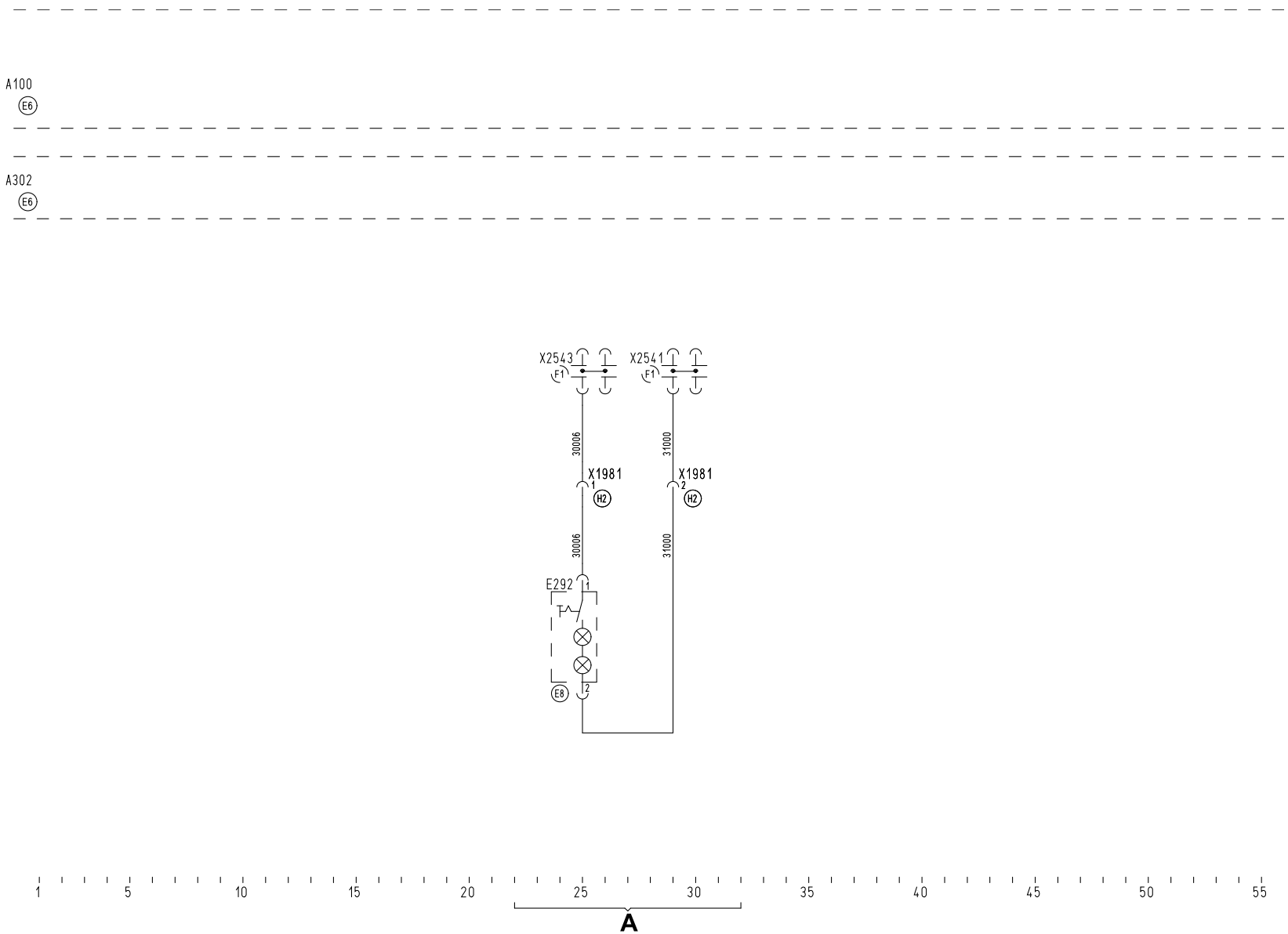
Wiring diagram no. **81.99192.1396** Sheet **1** of 1



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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
- (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

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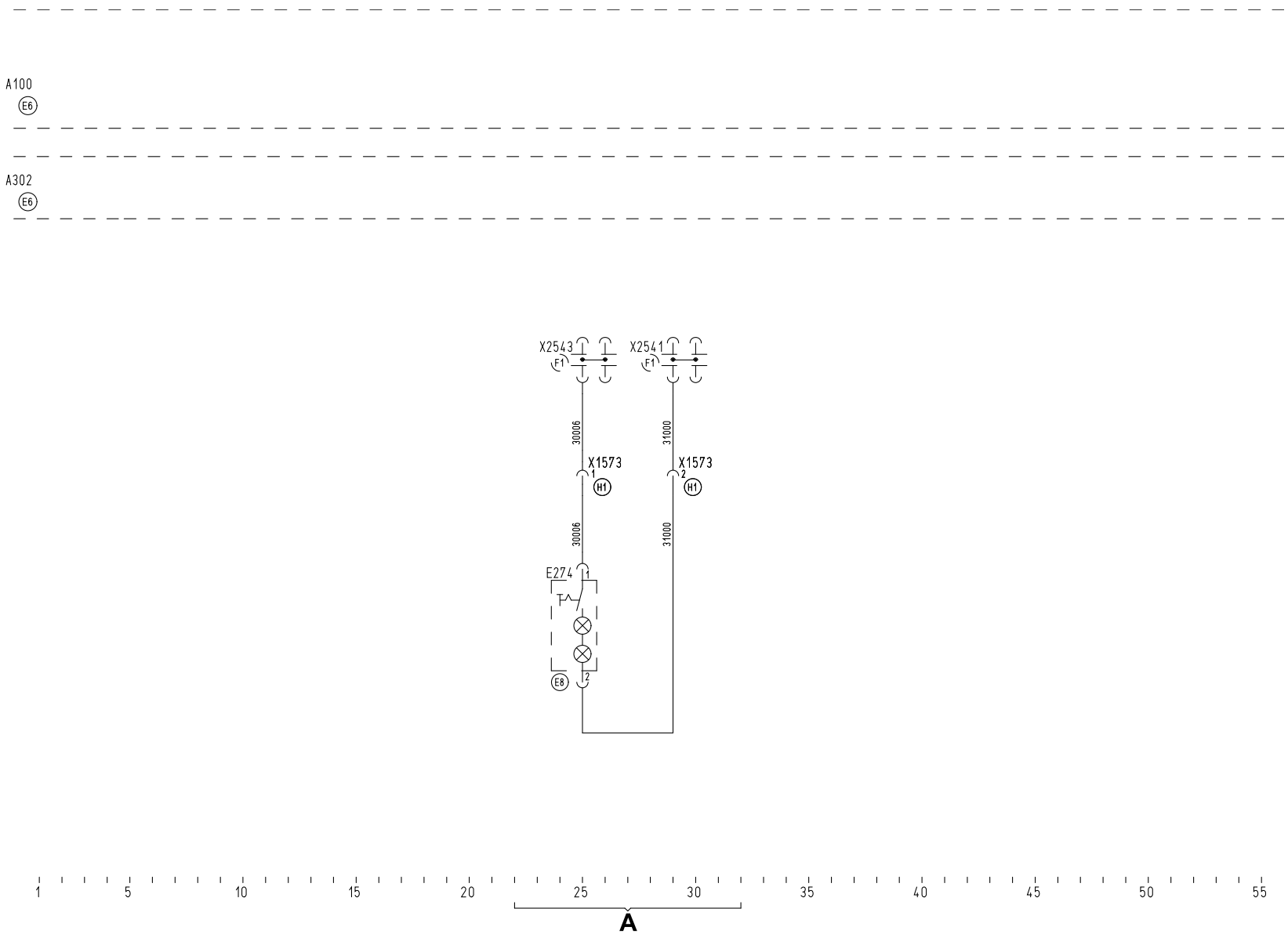
Wiring diagram no. **81.99192.1397** Sheet **1** of 1



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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

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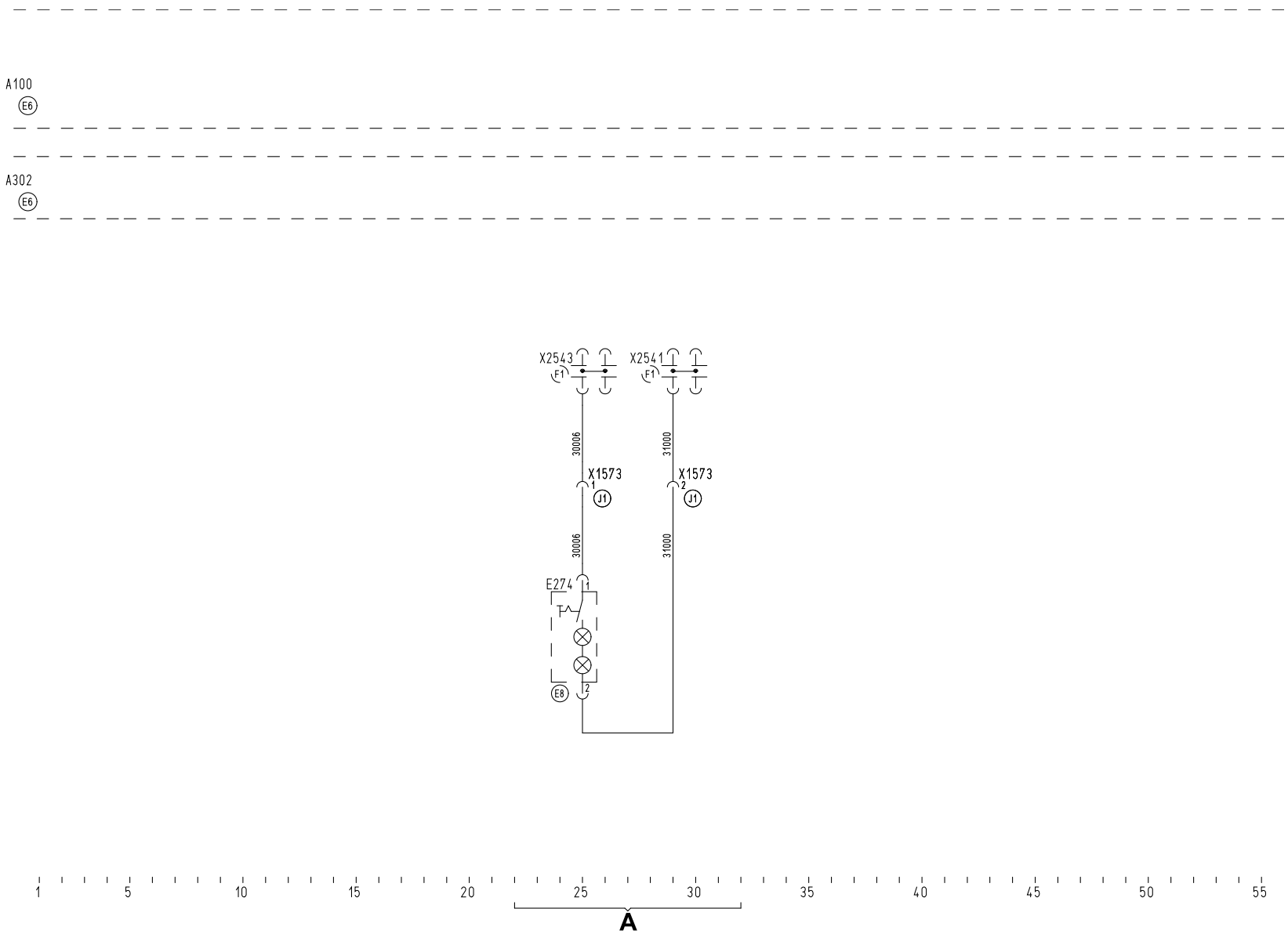
Wiring diagram no. **81.99192.1398** Sheet **1** of 1



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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
- (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

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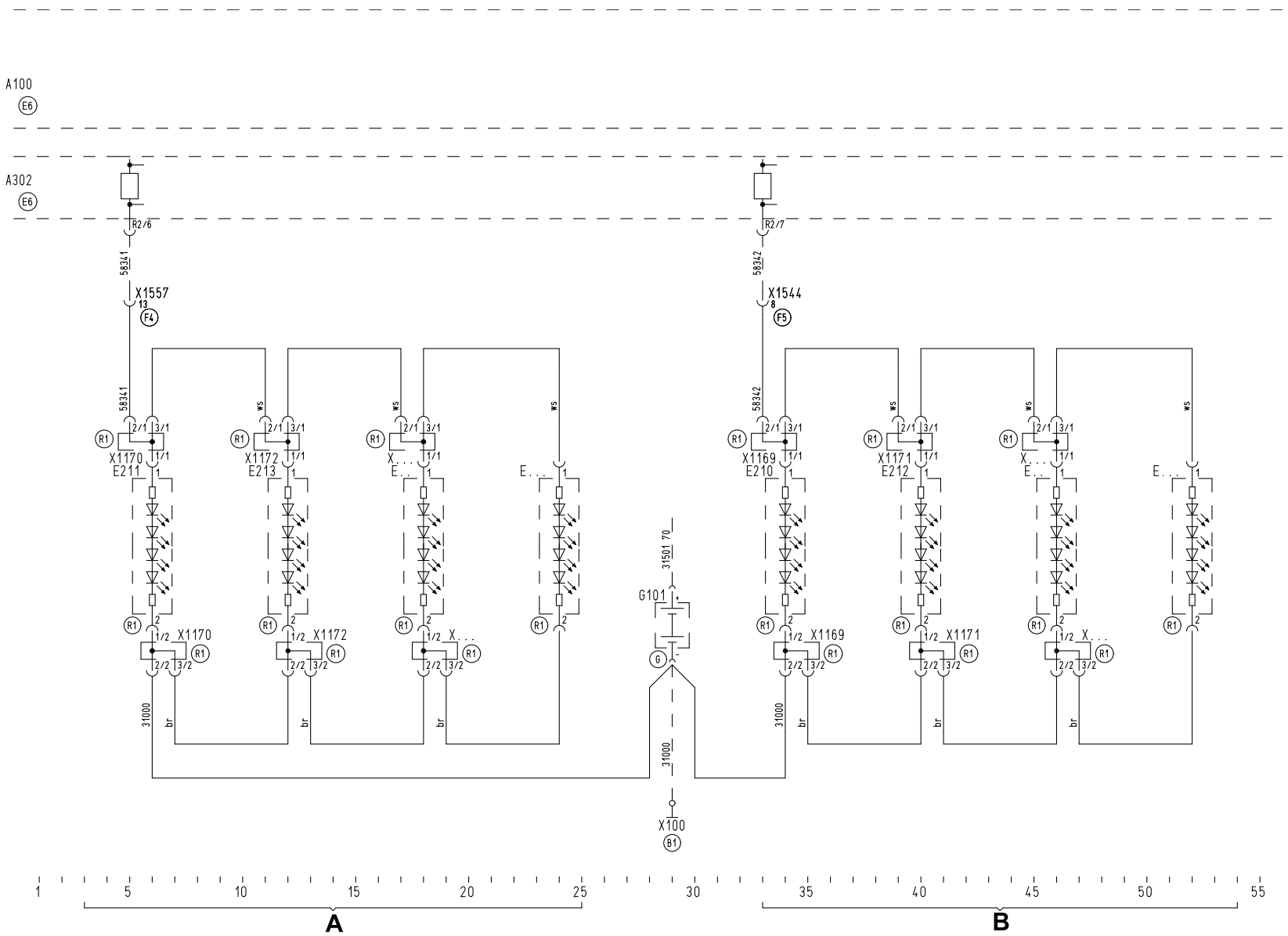
Wiring diagram no. **81.99192.2592** Sheet **1** of 1



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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

- (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) Temperature (NTC)
- (II) Seat
- (III) Backrest

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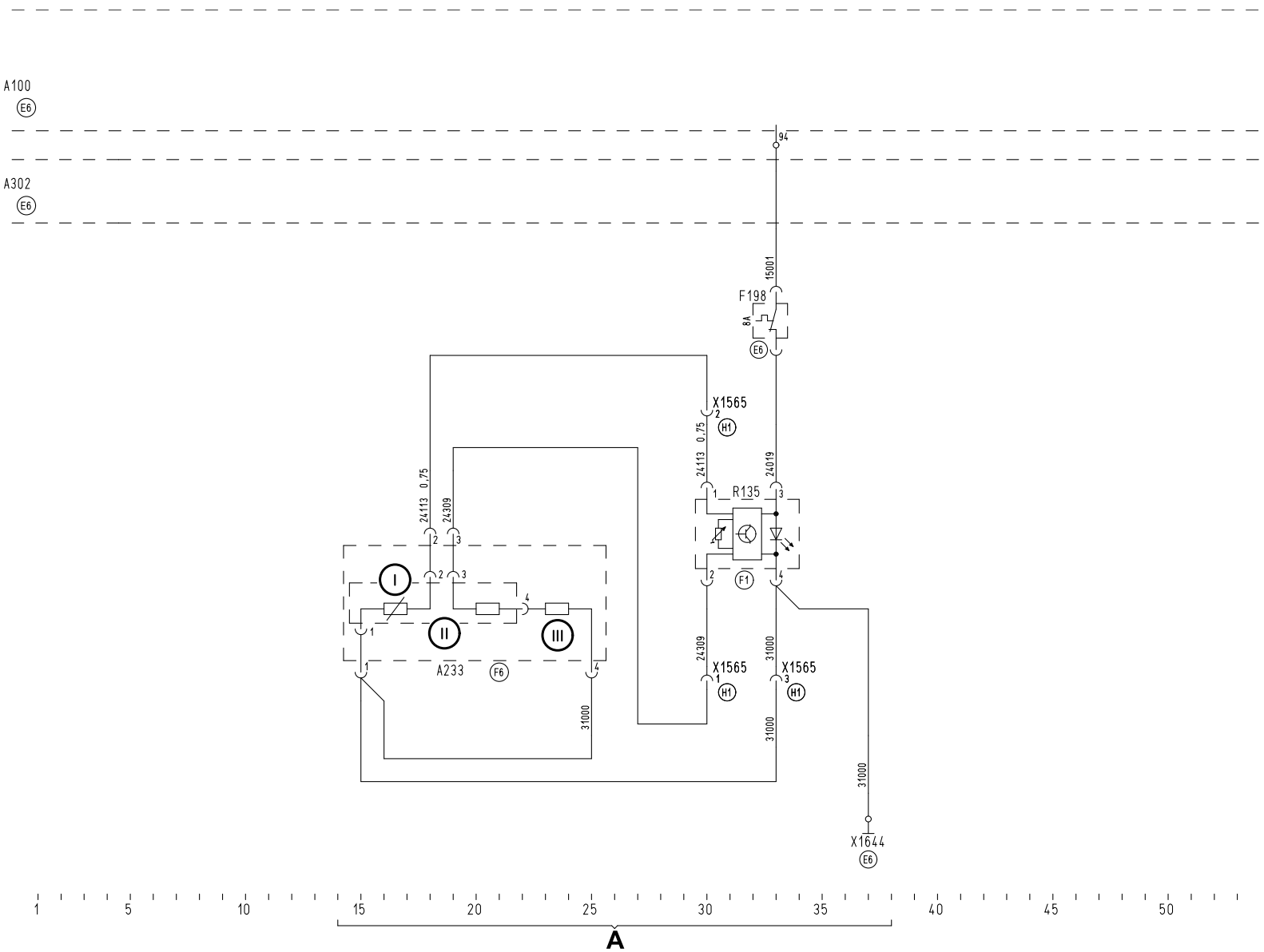
Wiring diagram no. **81.99192.2494** Sheet **1** of 1



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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

- (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) Temperature (NTC)
- (II) Seat
- (III) Backrest

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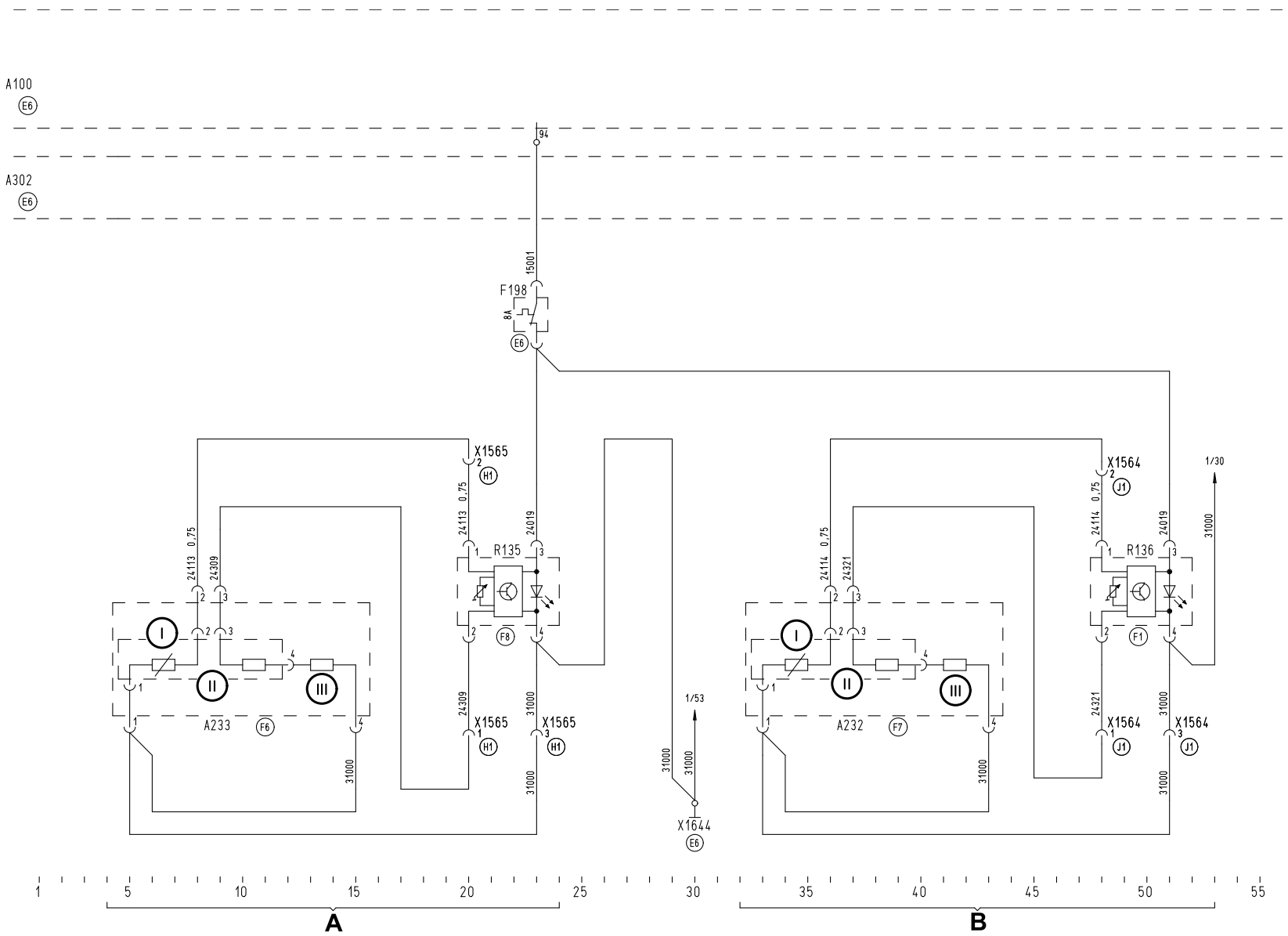
Wiring diagram no. **81.99192.2493** Sheet **1** of 1



https://truckmanualshub.com/

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

- (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

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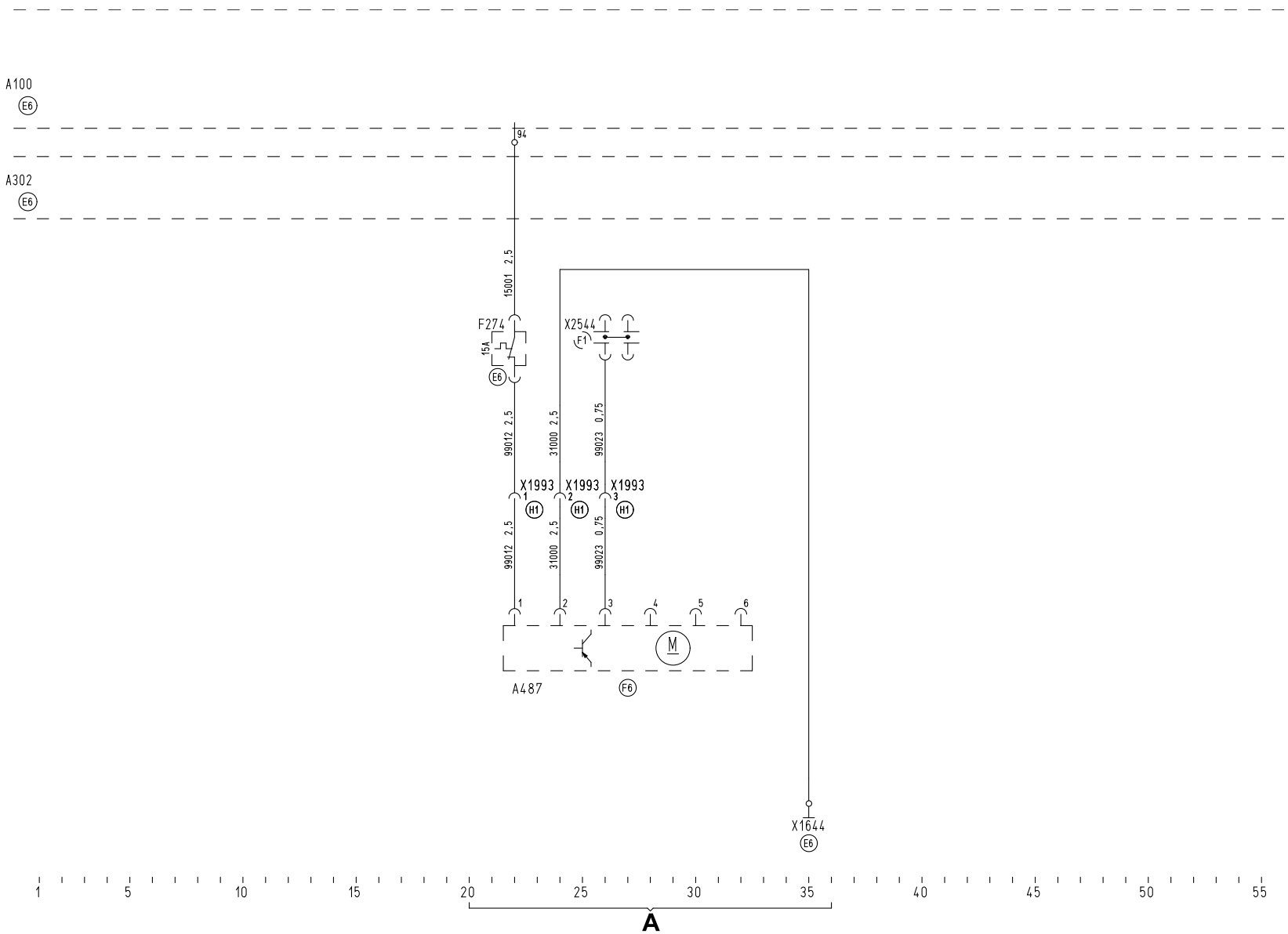
Wiring diagram no. **81.99192.1483** Sheet **1** of 1



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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
- (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

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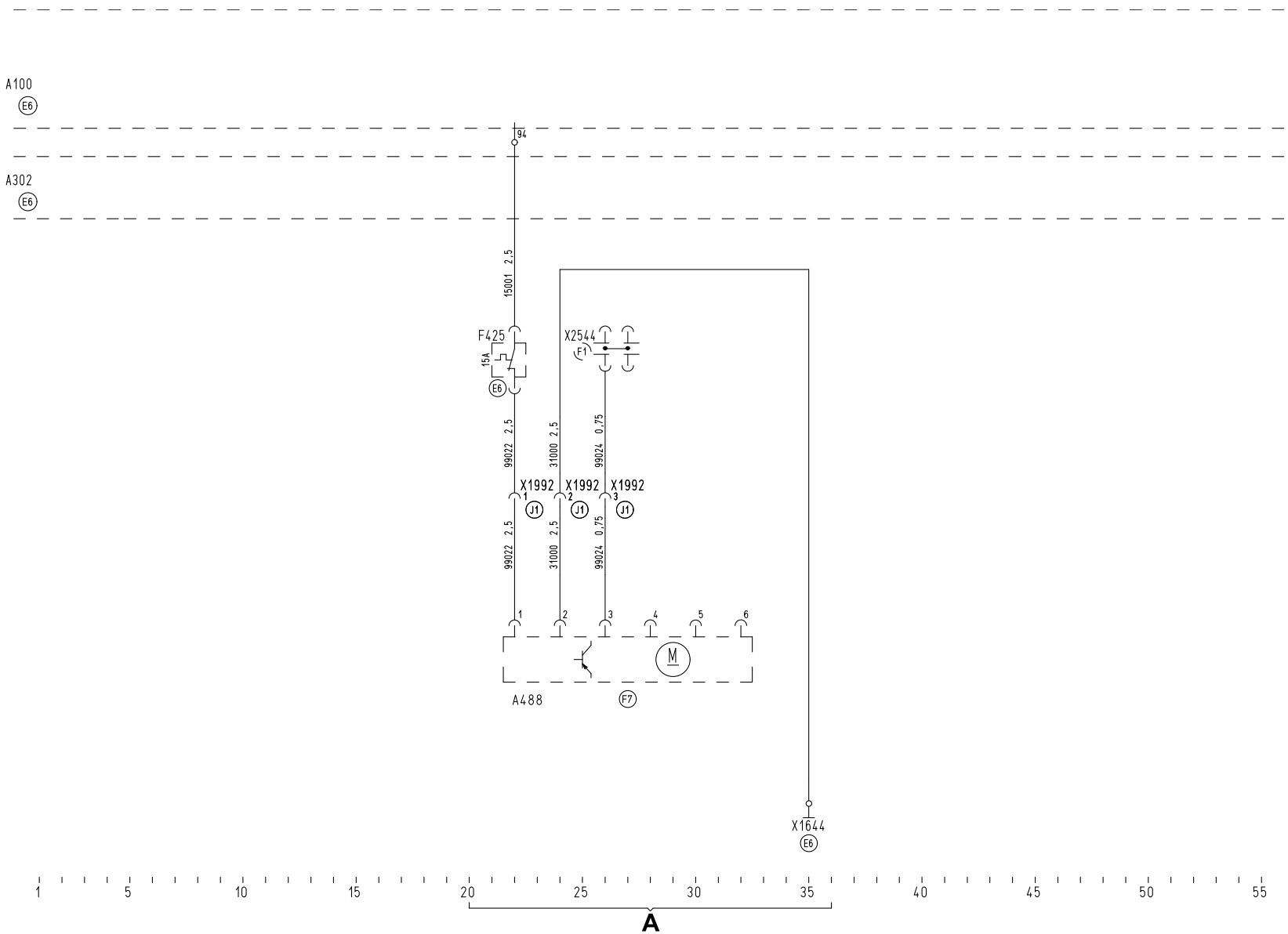
Wiring diagram no. **81.99192.1484** Sheet **1** of 1



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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

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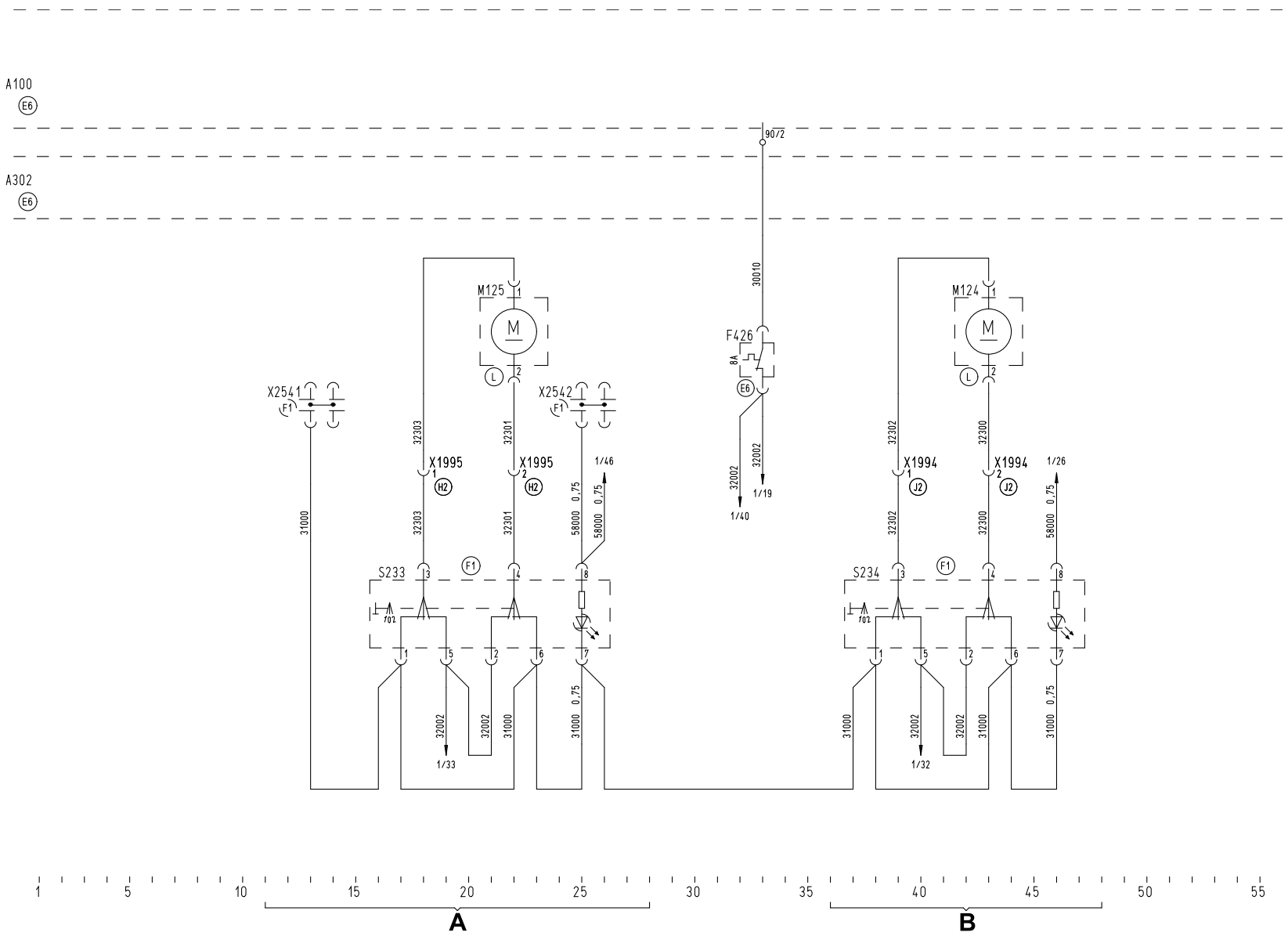
Wiring diagram no. **81.99192.1399** Sheet **1** of 1



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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

- (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) Output

(II) Input

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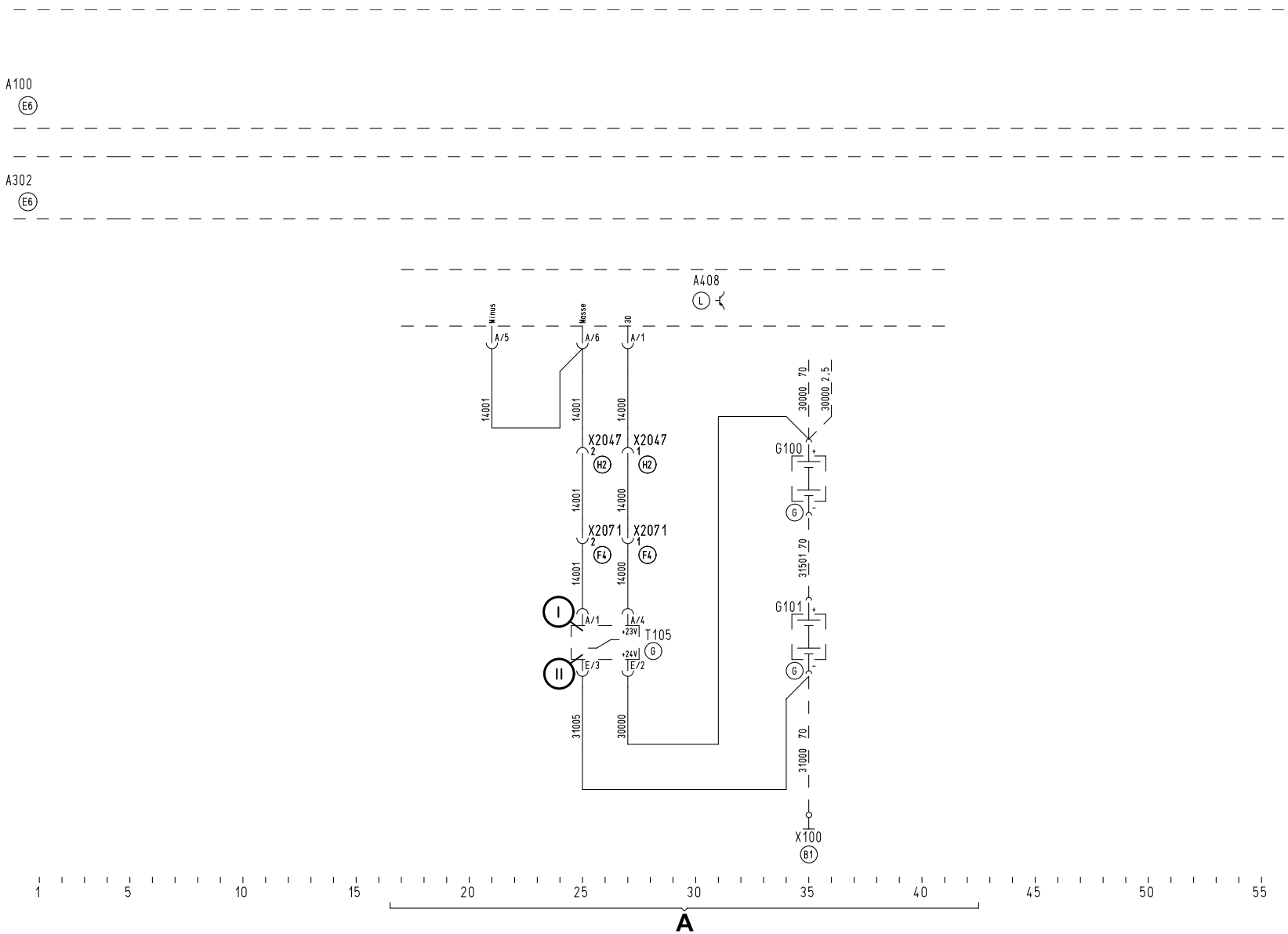
Wiring diagram no. **81.99192.2850** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A403	(339)	Vehicle management computer
A435	(338)	EDC control unit
B493	(276)	Pressure switch, parking brake switch start-stop external
K266	(280)	Relay, parking brake (on start-stop device)
Q101	(110)	Steering wheel lock
S580	(580)	Control switch, engine start (MP box)
S581	(580)	Control switch, engine stop (MP box)
X669		Stvd. start inhibitor
X1551		Stvd. engine/EDC/transmission II
X1693		Crimped connector, line 60028
X1966		Stvd. ignition lock
X2334		Stvd. start-stop device
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) Vehicle immobiliser
- (II) Transmission, neutral
- (III) Starting motor, terminal 50

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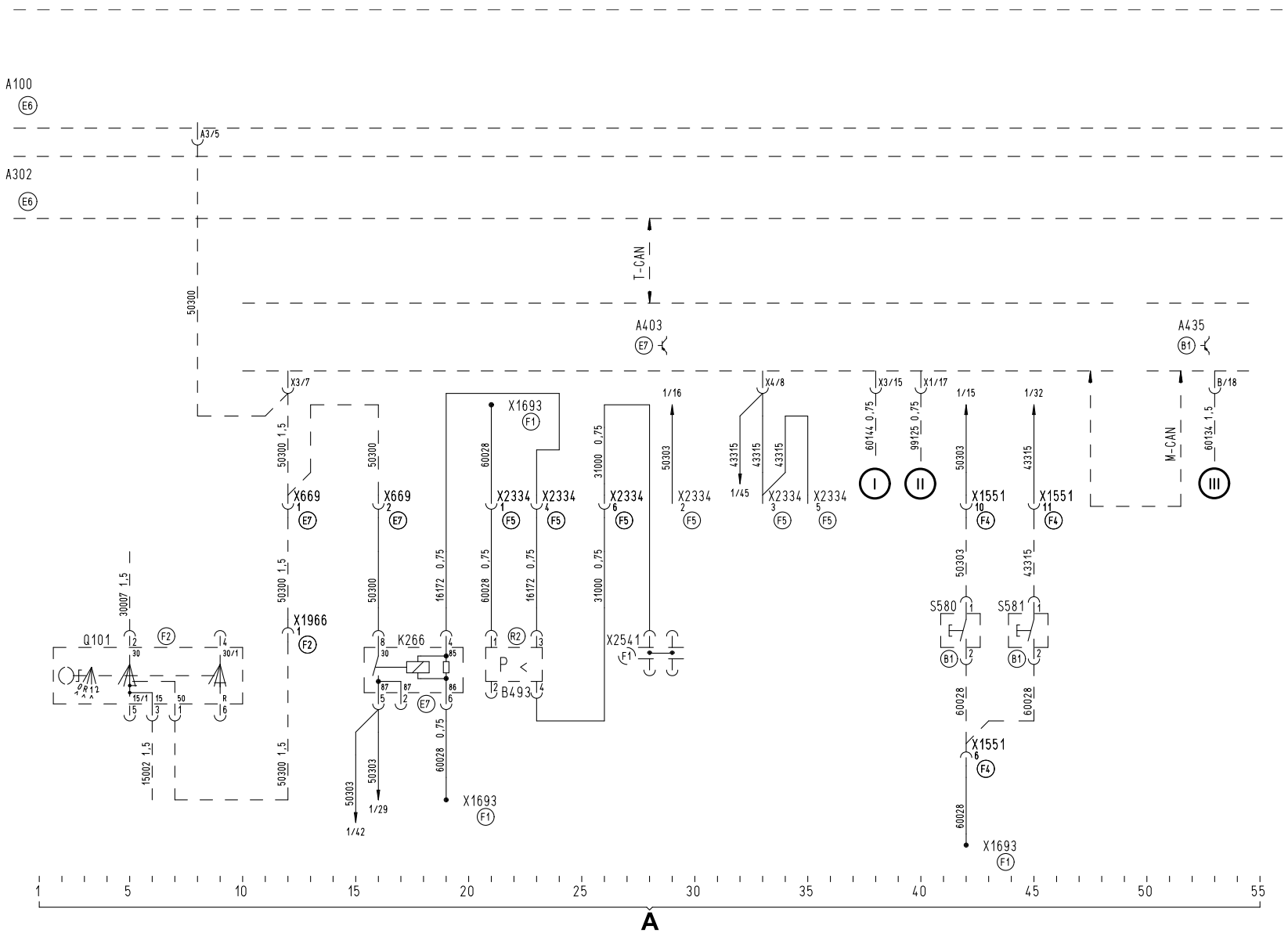
Wiring diagram no. **81.99192.1401** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A403	(339)	Vehicle management computer
A435	(338)	EDC control unit
B490	(276)	Pressure switch, parking brake switch start-stop external
K266	(280)	Relay, parking brake (on start-stop device)
Q101	(110)	Steering wheel lock
S202		Control switch, engine start (superstructure)
S203		Control switch, engine stop (superstructure)
X669		Stvd. start inhibitor
X679		Stvd. start-stop device
X1551		Stvd. engine/EDC/transmission II
X1693		Crimped connector, line 60028
X1966		Stvd. ignition lock
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) Vehicle immobiliser
- (II) Transmission, neutral
- (III) Starting motor, terminal 50

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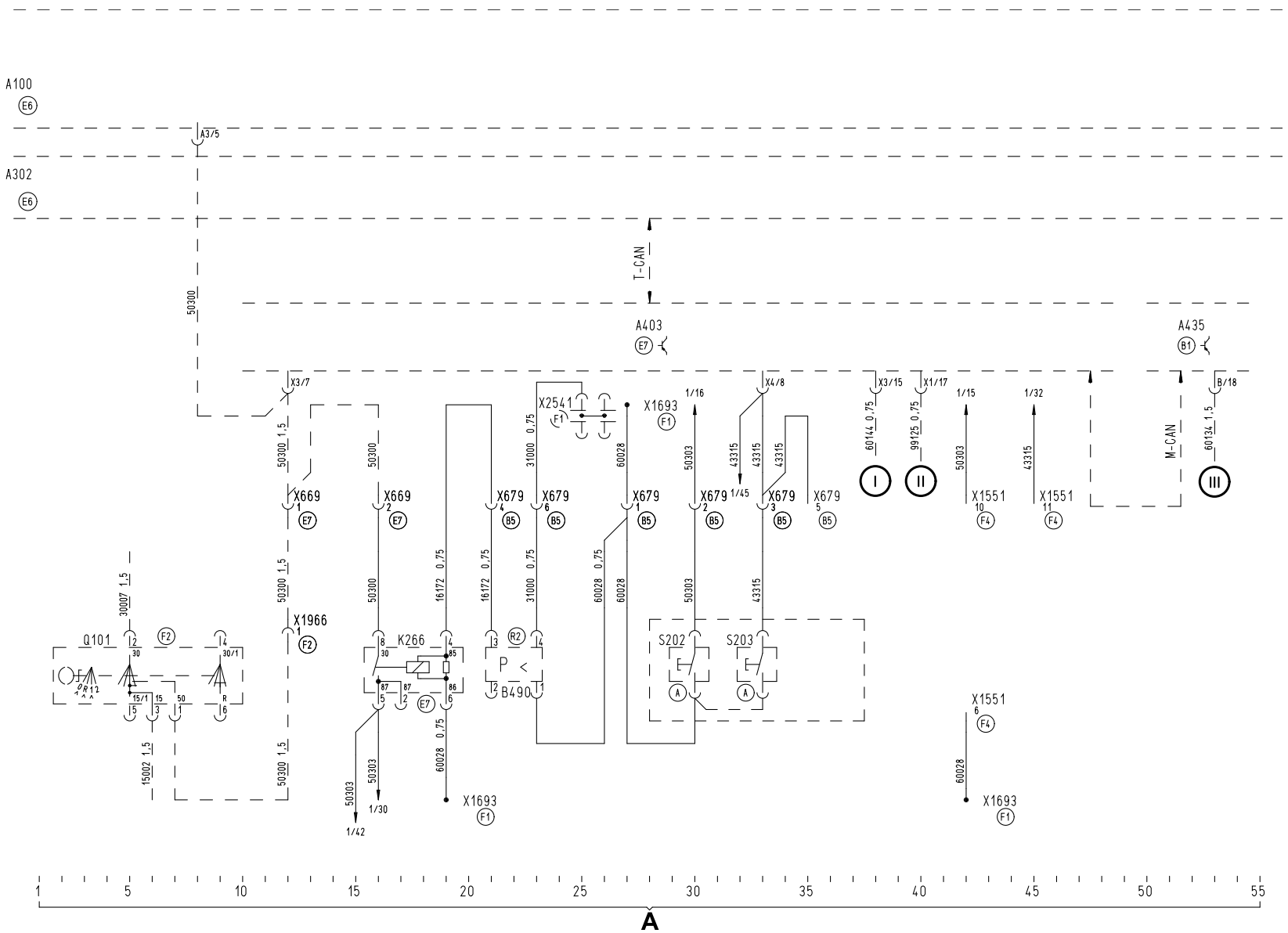
Wiring diagram no. **81.99192.1402** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A403	(339)	Vehicle management computer
A435	(338)	EDC control unit
B490	(276)	Pressure switch, parking brake switch start-stop external
K266	(280)	Relay, parking brake (on start-stop device)
Q101	(110)	Steering wheel lock
S202		Control switch, engine start (superstructure)
S203		Control switch, engine stop (superstructure)
S580	(580)	Control switch, engine start (MP box)
S581	(580)	Control switch, engine stop (MP box)
X669		Stvd. start inhibitor
X679		Stvd. start-stop device
X1551		Stvd. engine/EDC/transmission II
X1693		Crimped connector, line 60028
X1966		Stvd. ignition lock
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) Vehicle immobiliser
- (II) Transmission, neutral
- (III) Starting motor, terminal 50

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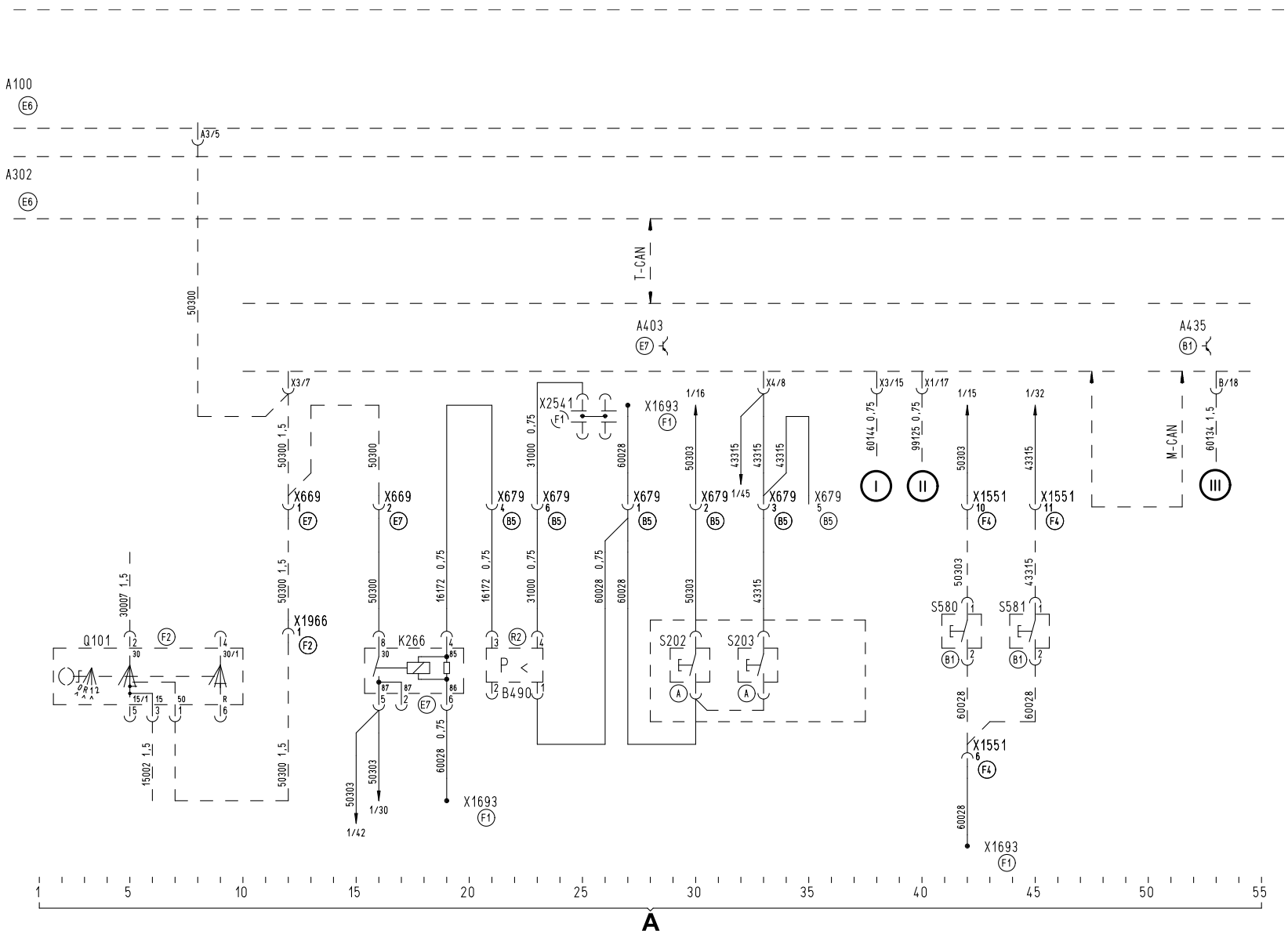
Wiring diagram no. **81.99192.1403** Sheet **1** of 1



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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
- (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

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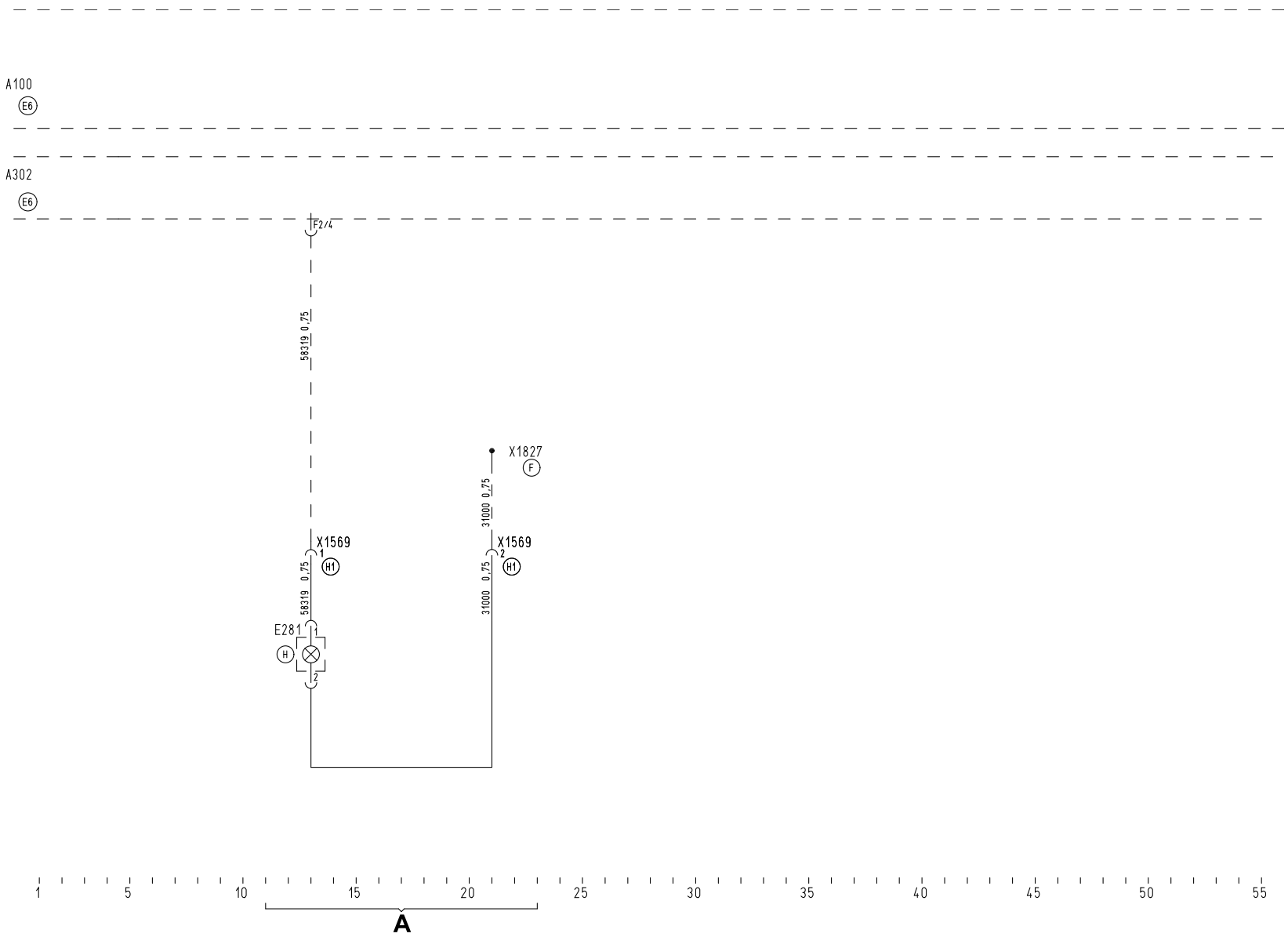
Wiring diagram no. **81.99192.2489** Sheet **1** of 1



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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
- (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

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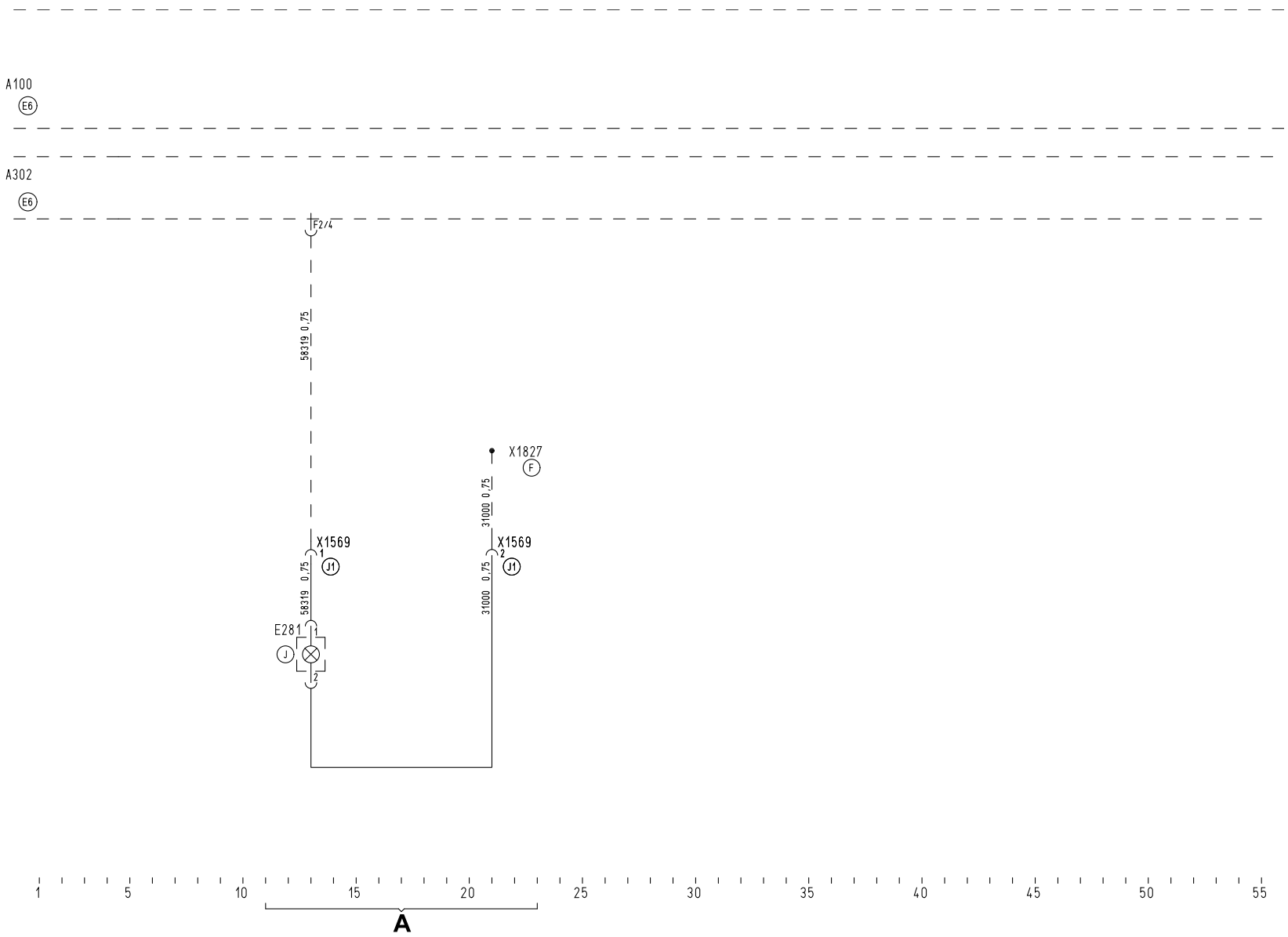
Wiring diagram no. **81.99192.2411** Sheet **1** of 1



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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
- (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

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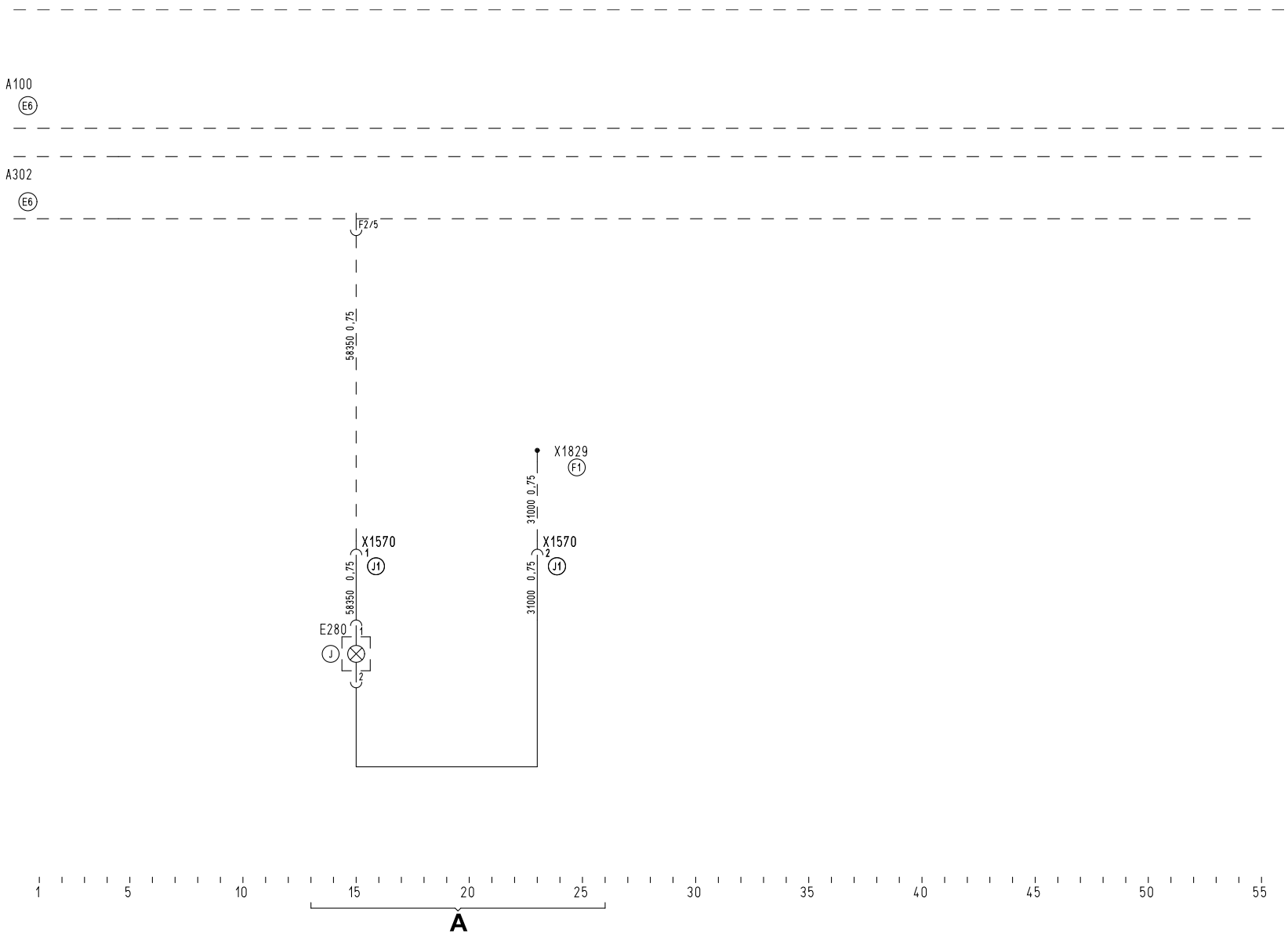
Wiring diagram no. **81.99192.2490** Sheet **1** of 1



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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
- (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

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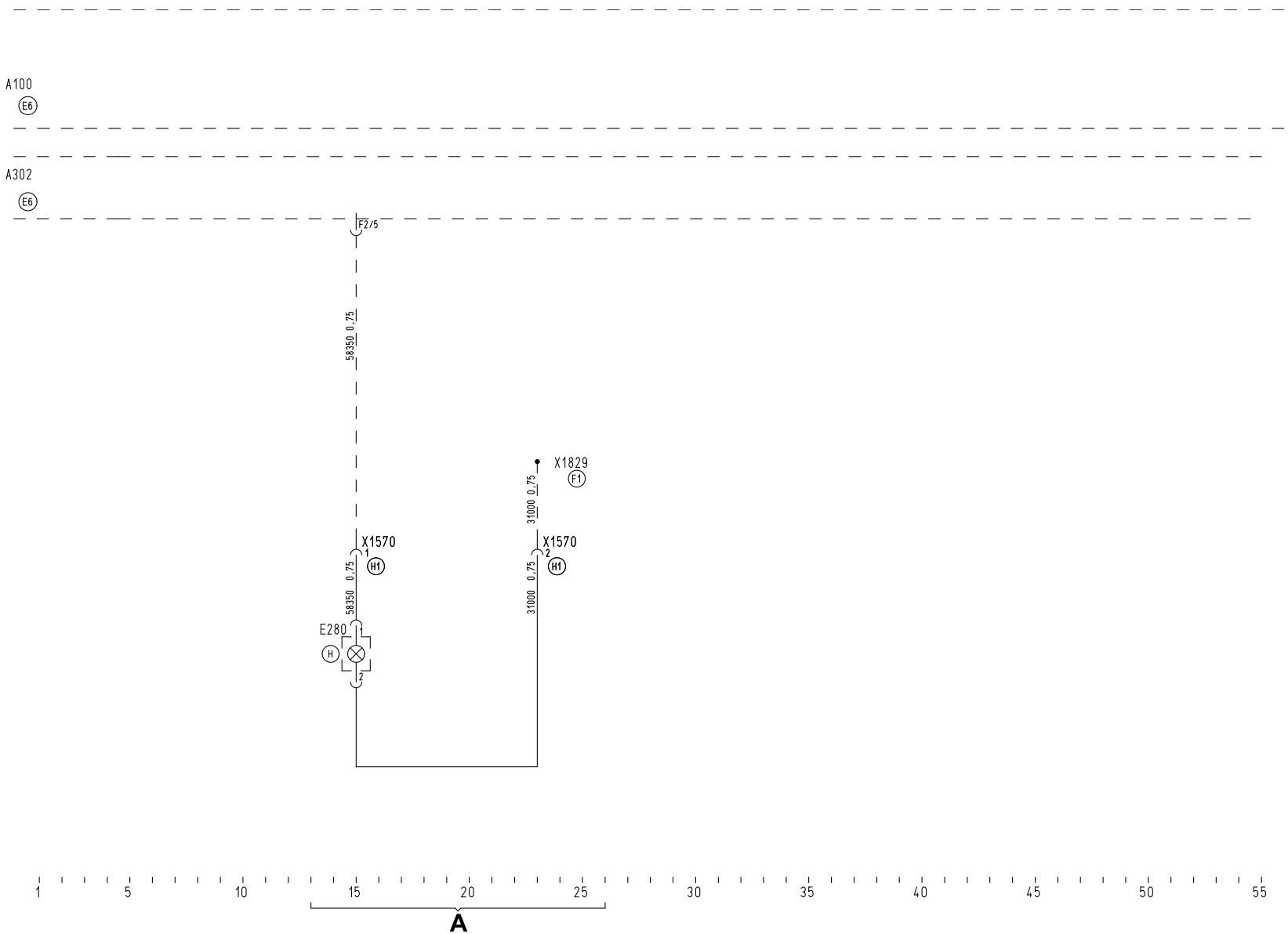
Wiring diagram no. **81.99192.2412** Sheet **1** of 1



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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
- (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

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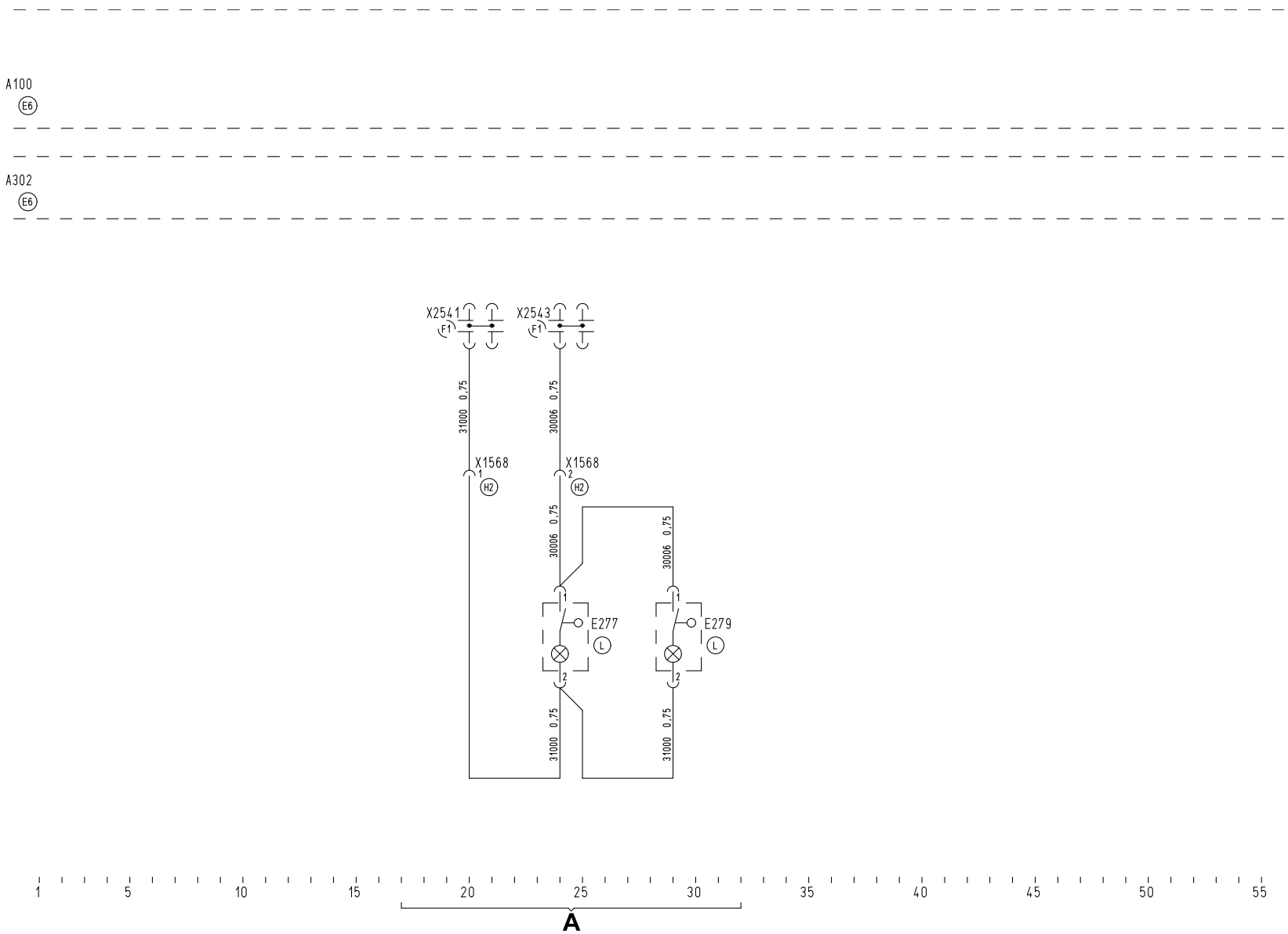
Wiring diagram no. **81.99192.1404** Sheet **1** of 1



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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
- (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

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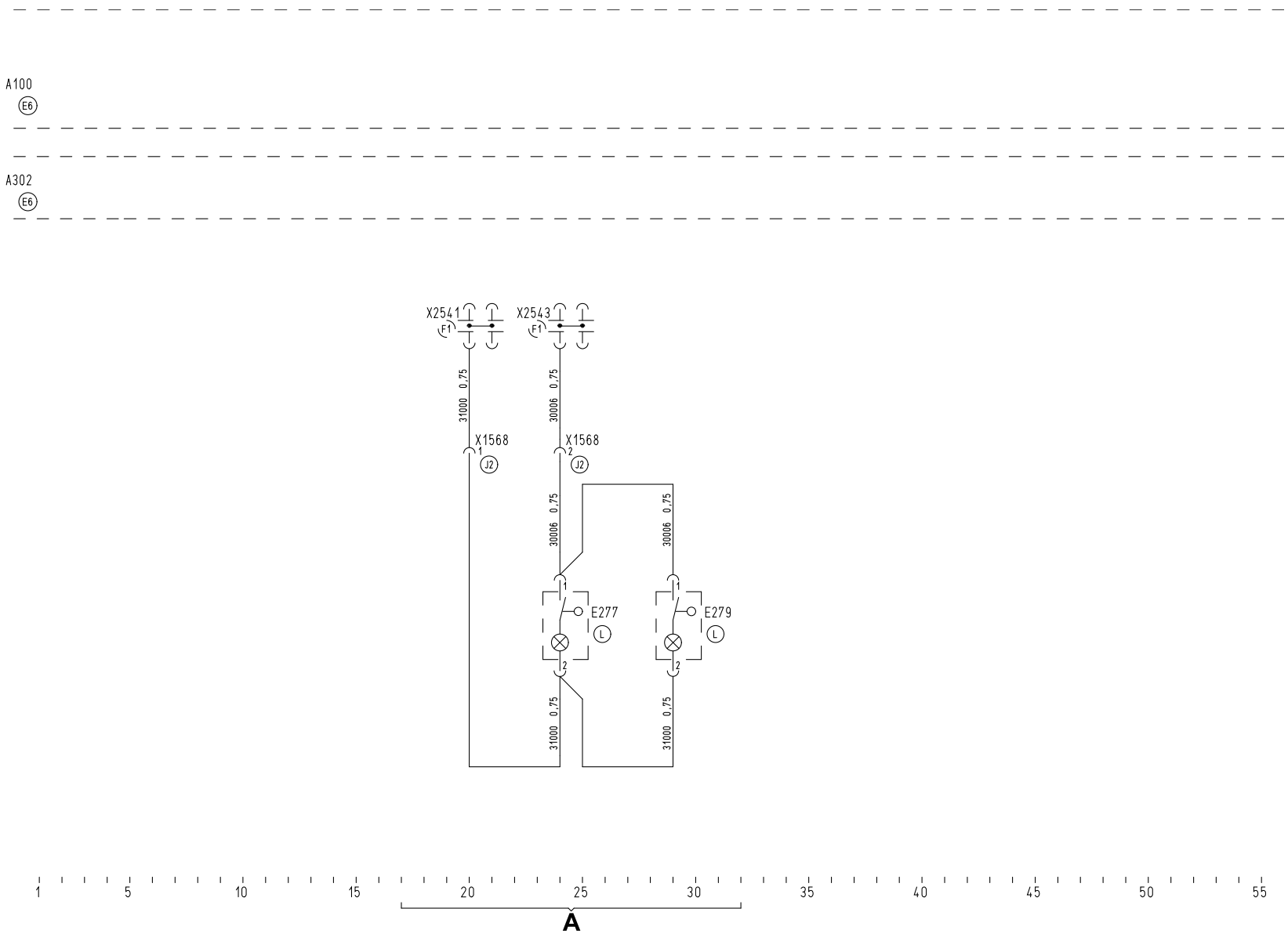
Wiring diagram no. **81.99192.1405** Sheet **1** of 1



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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

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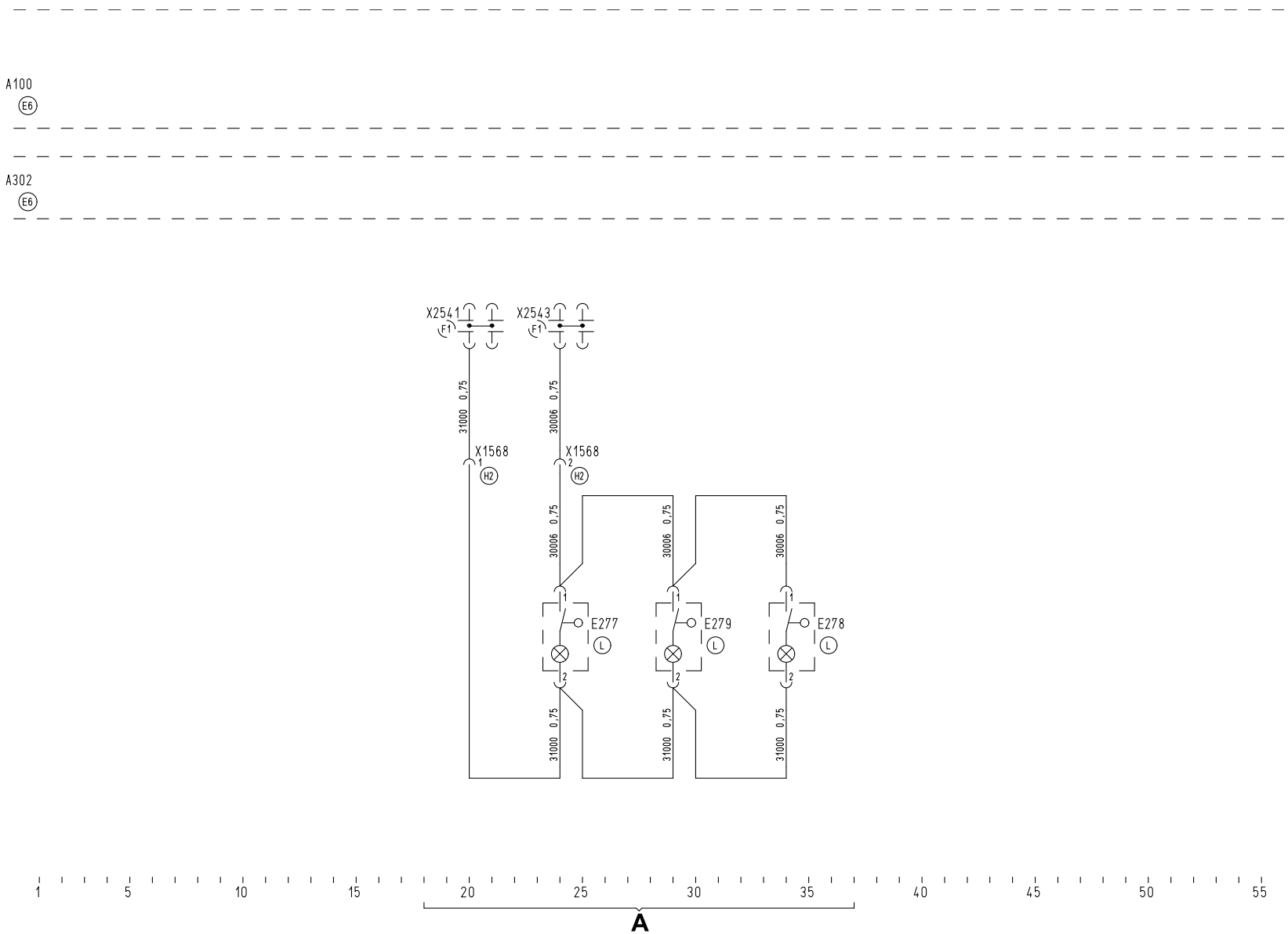
Wiring diagram no. **81.99192.1406** Sheet **1** of 1



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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

- (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

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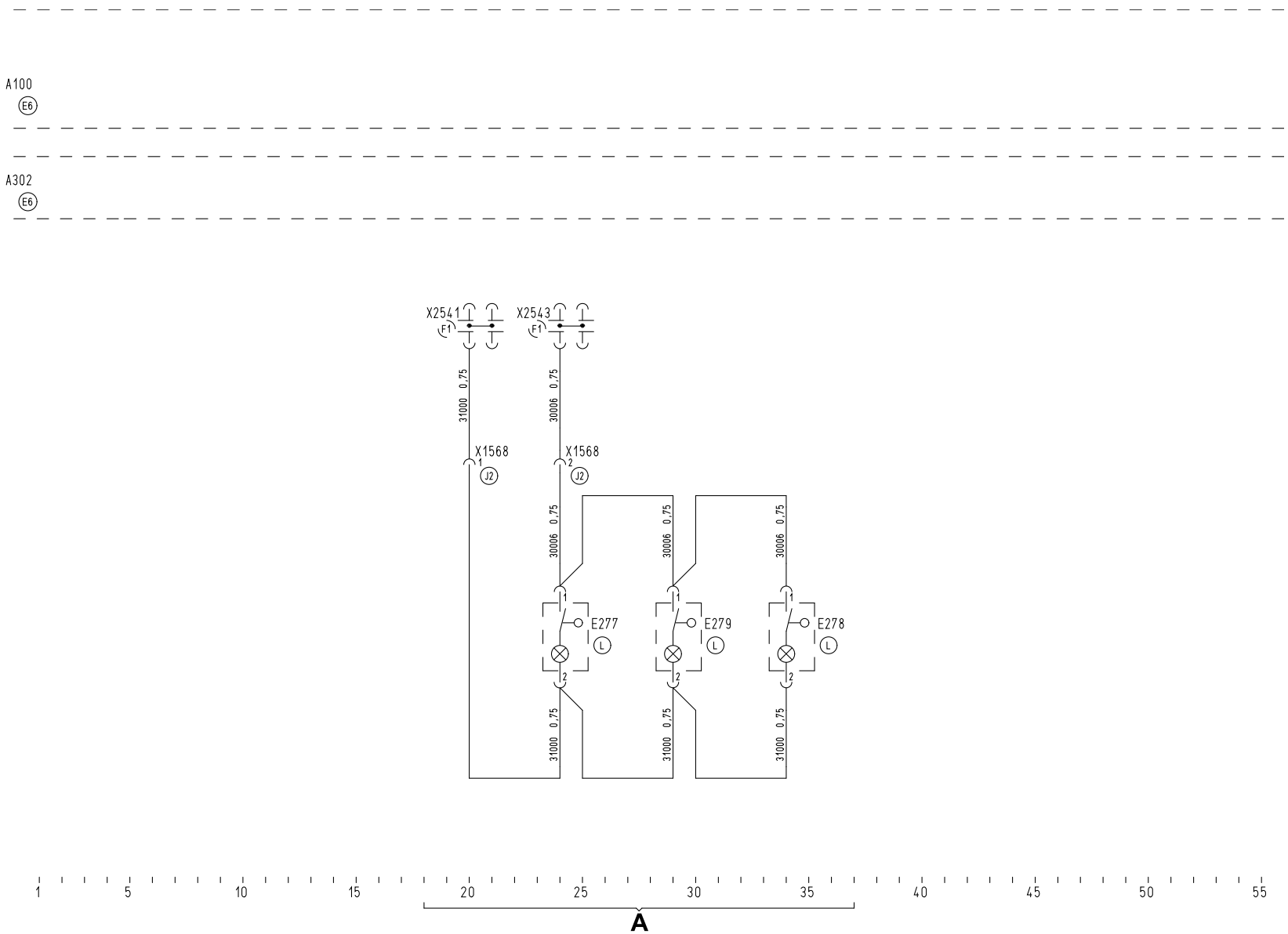
Wiring diagram no. **81.99192.1407** Sheet **1** of 1



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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

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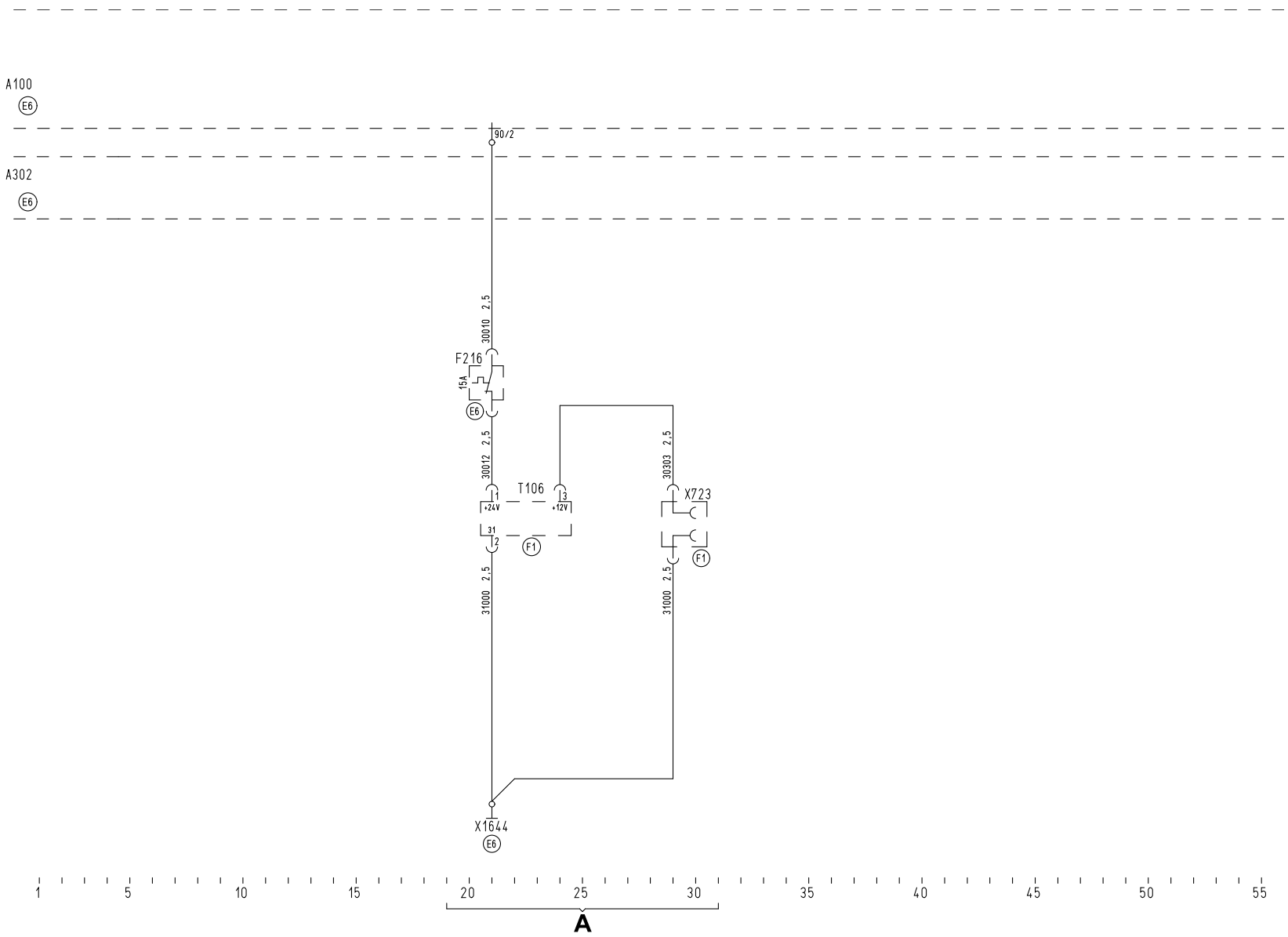
Wiring diagram no. **81.99192.2569** Sheet **1** of 1



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24V socket

Legend
Wiring diagram no. **81.99192.2570** Sheet **1** of 1
Change status: -

A = 24V socket

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
F217	(129)	Fuse, 24V socket
X724	(197)	24V 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

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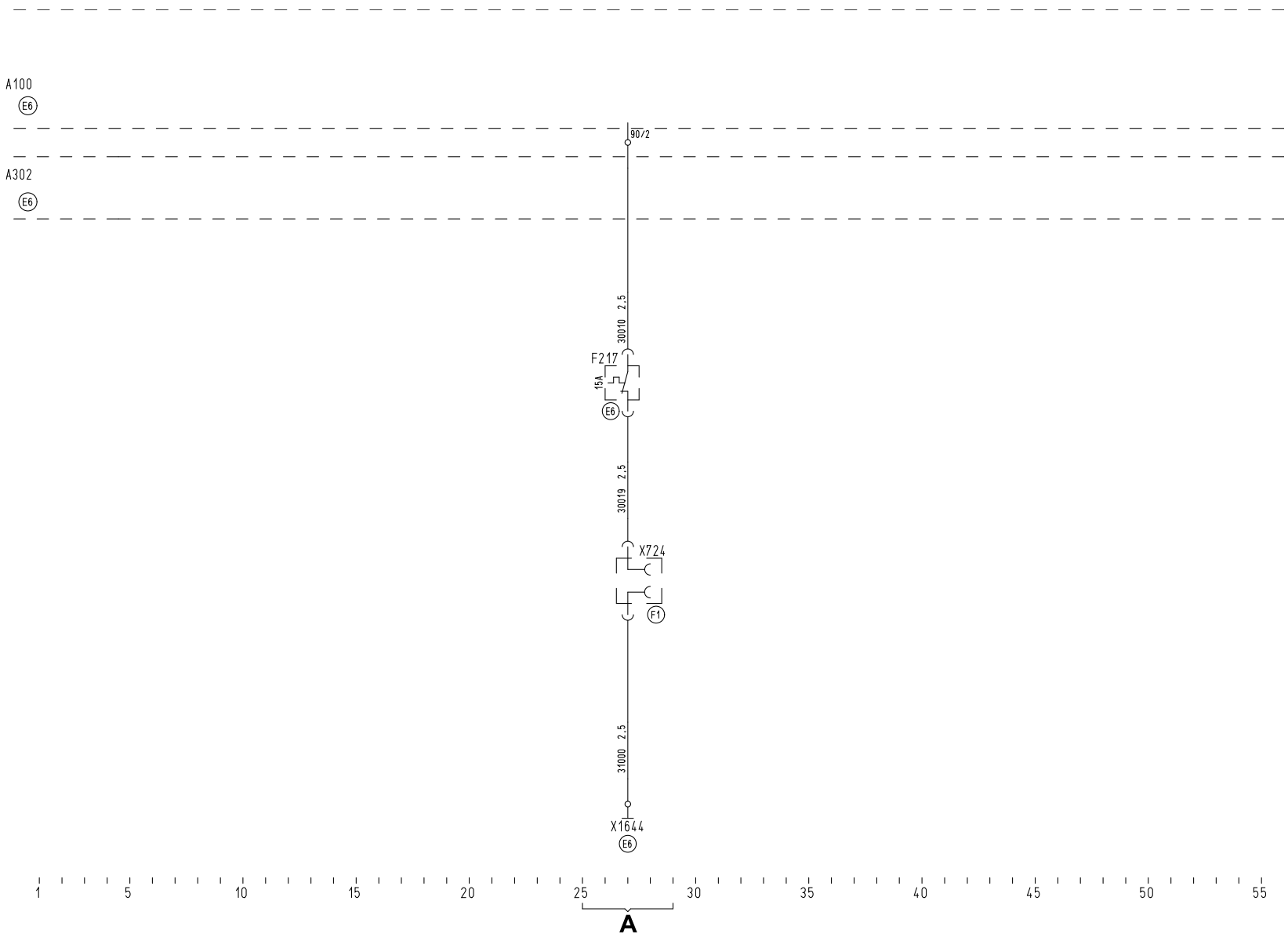
Wiring diagram no. **81.99192.2570** Sheet **1** of 1



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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
- (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) Wiring trough, engine

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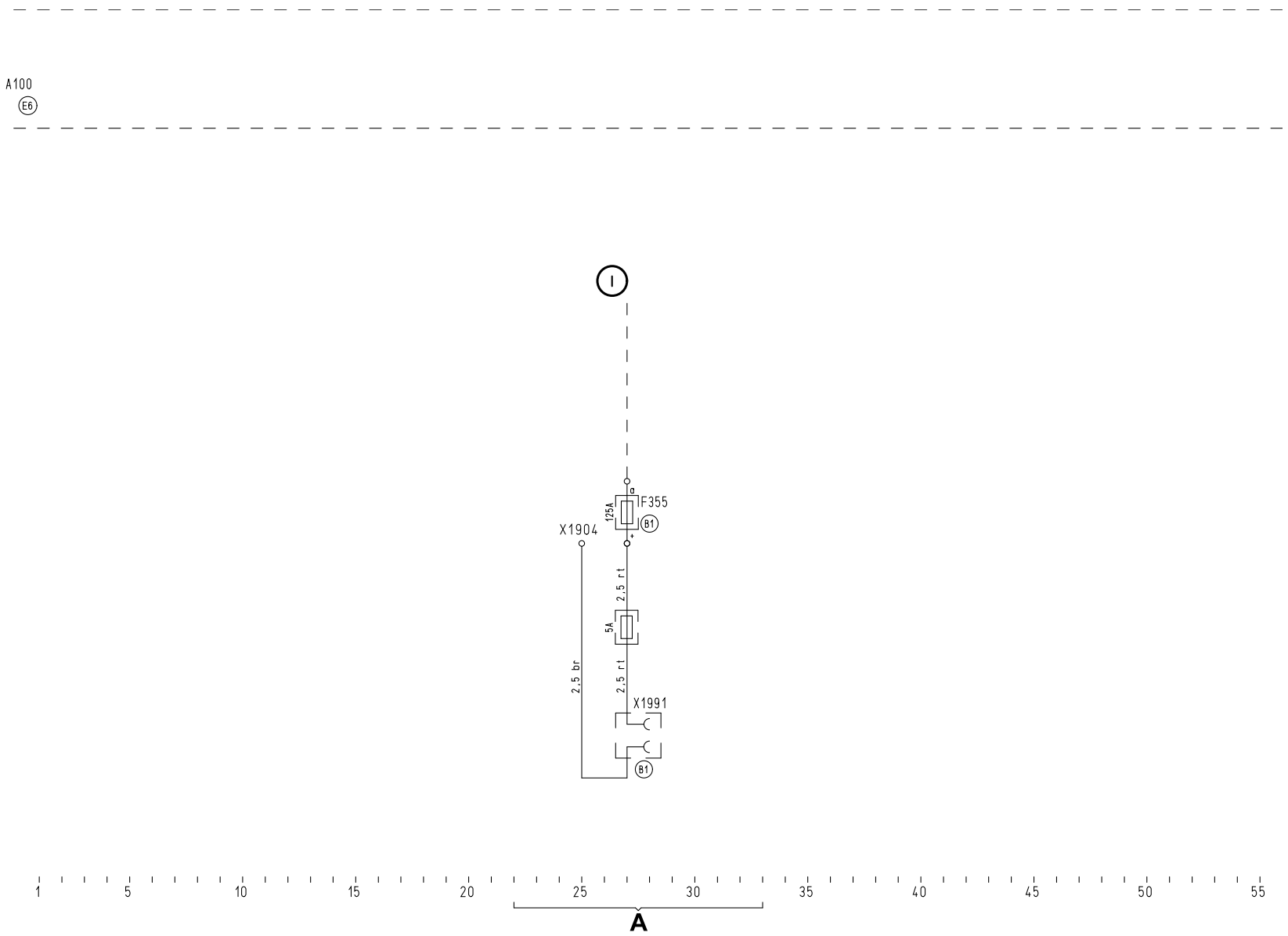
Wiring diagram no. **81.99192.2796** Sheet **1** of 1



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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
- (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

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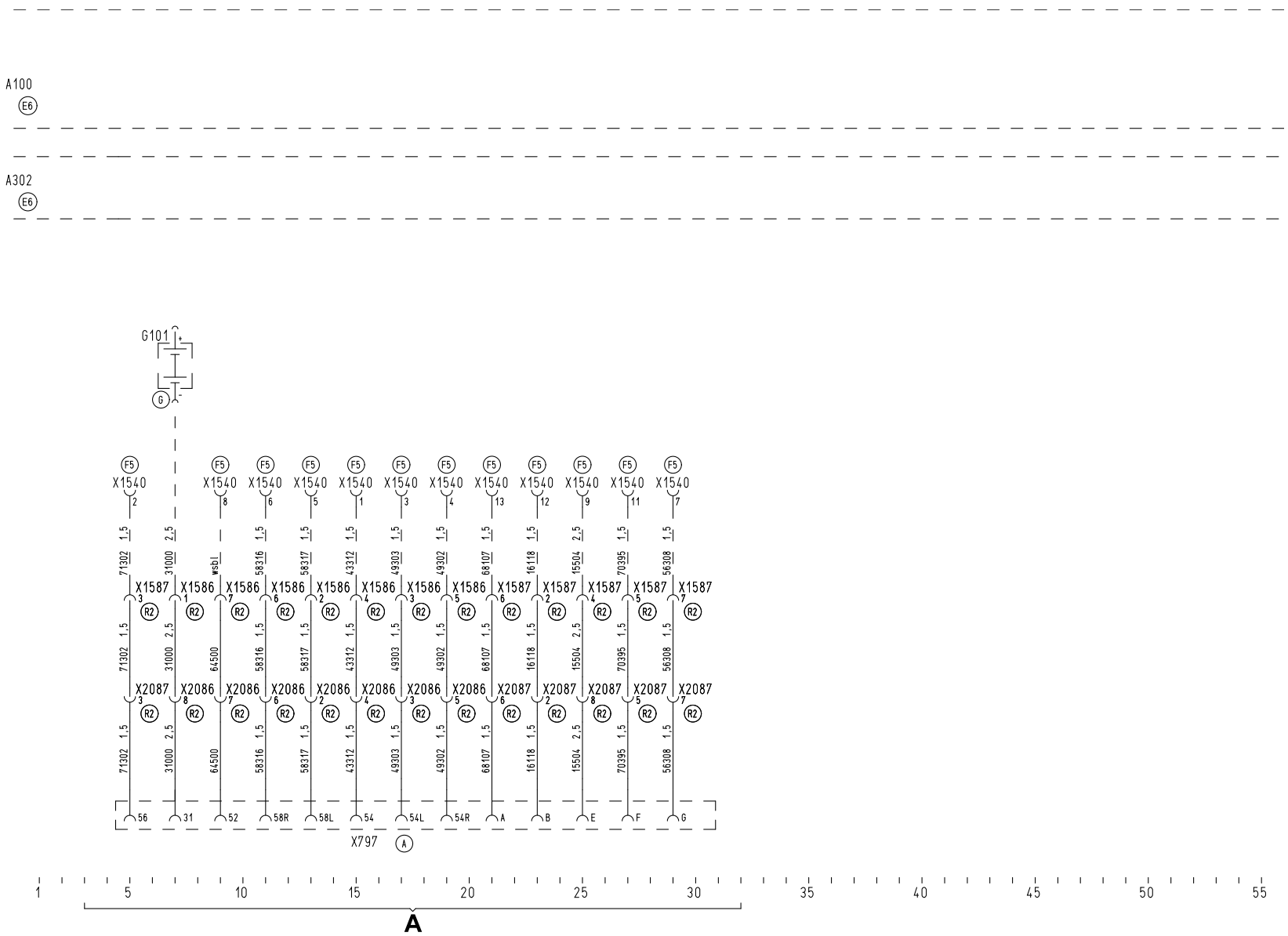
Wiring diagram no. **81.99192.2655** Sheet **1** of 1



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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

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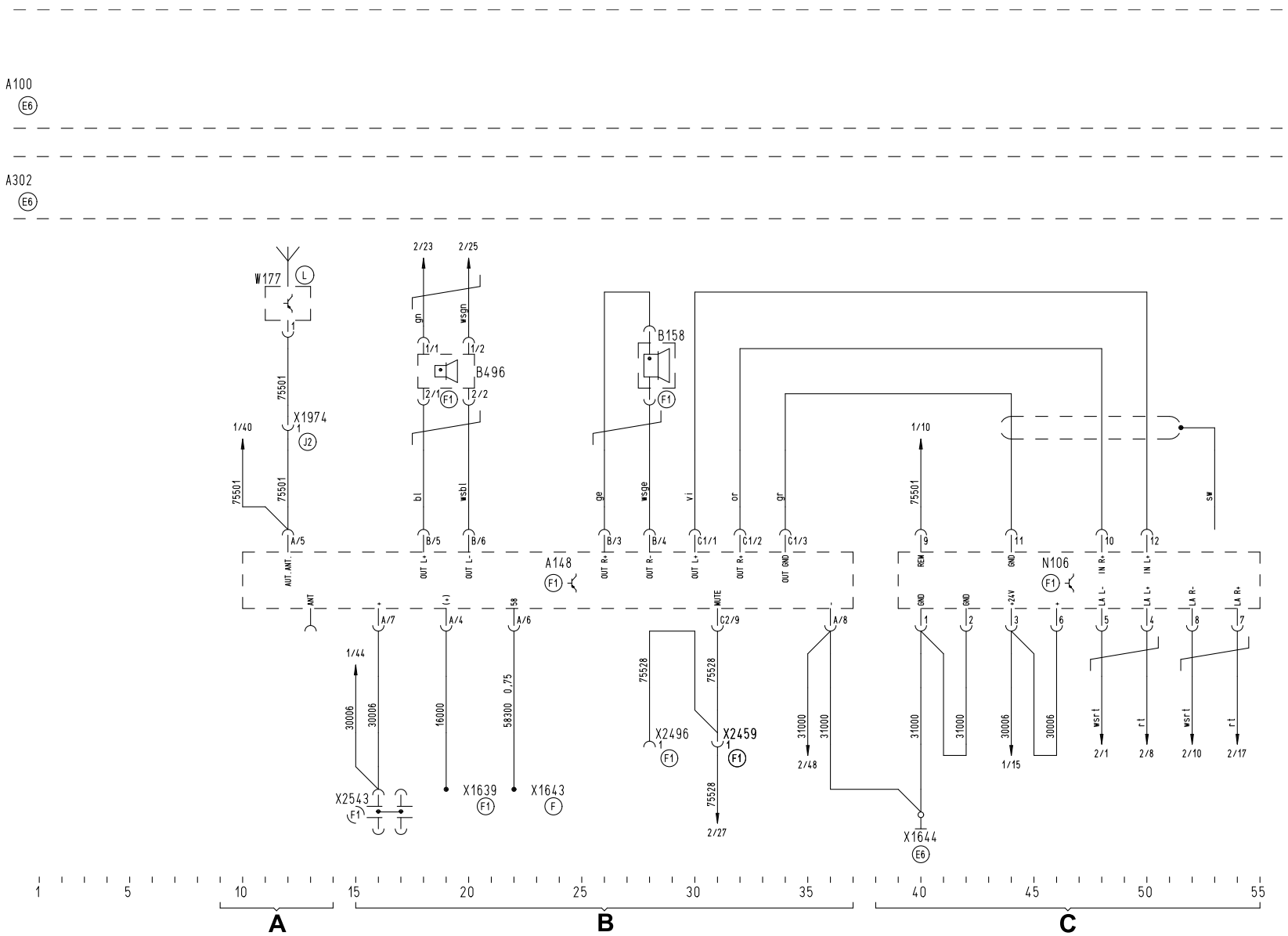
Wiring diagram no. **81.99192.2871** Sheet **1** of 2



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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

- (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) Mobile phone interface
- (II) CD changer

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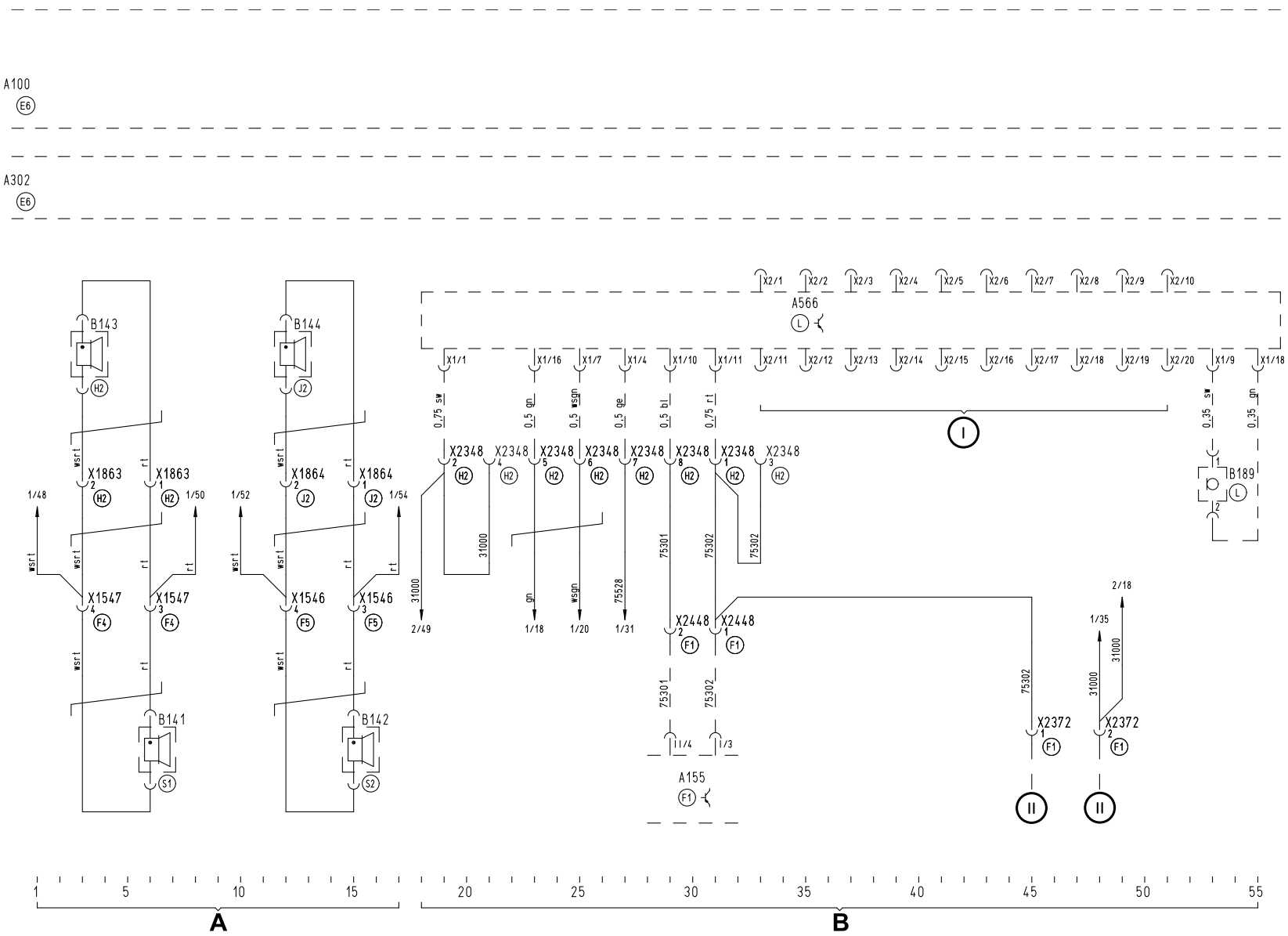
Wiring diagram no. **81.99192.2871** Sheet **2** of 2



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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

- (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

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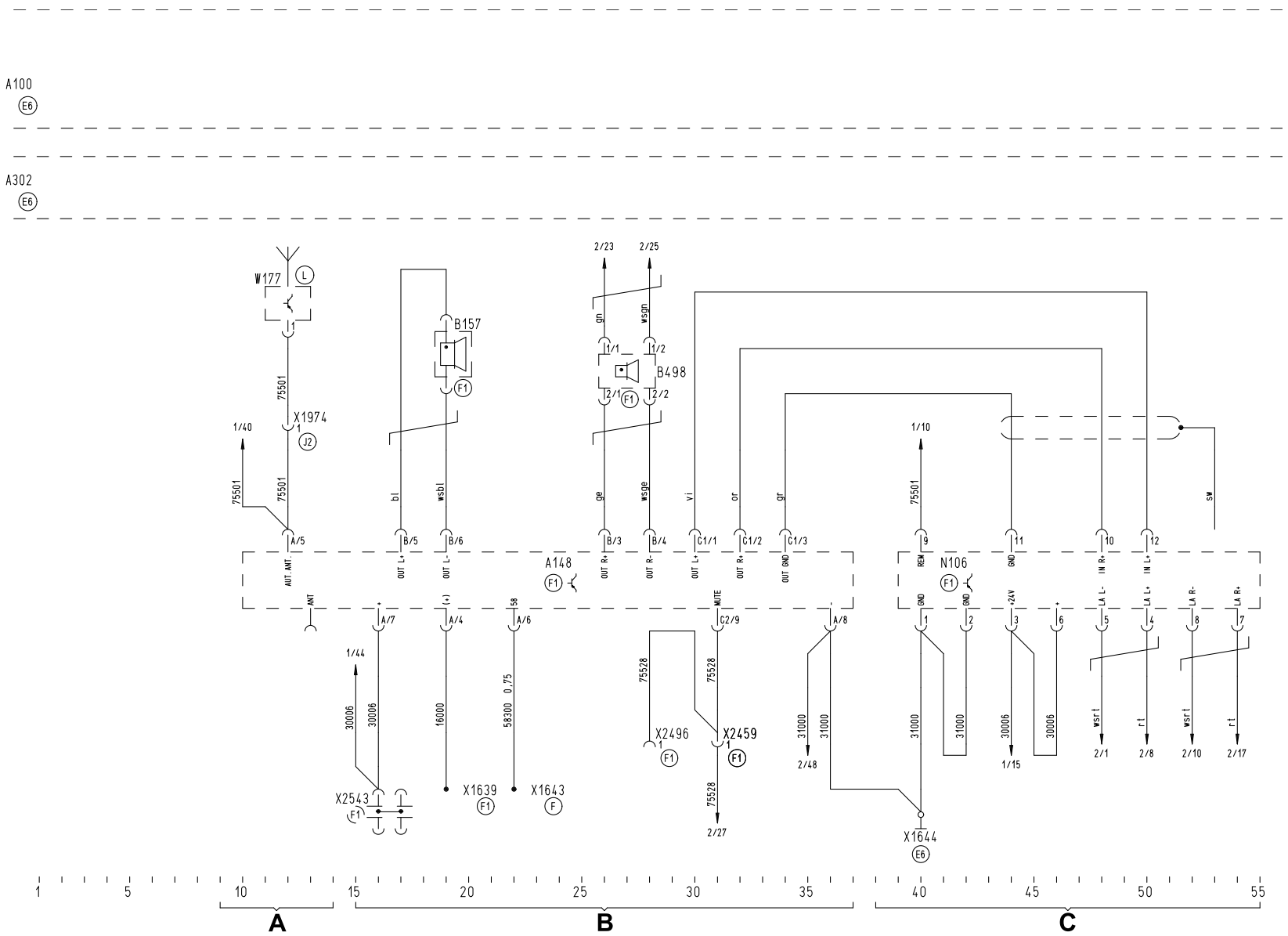
Wiring diagram no. **81.99192.2872** Sheet **1** of 2



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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

- (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) Mobile phone interface

(II) CD changer

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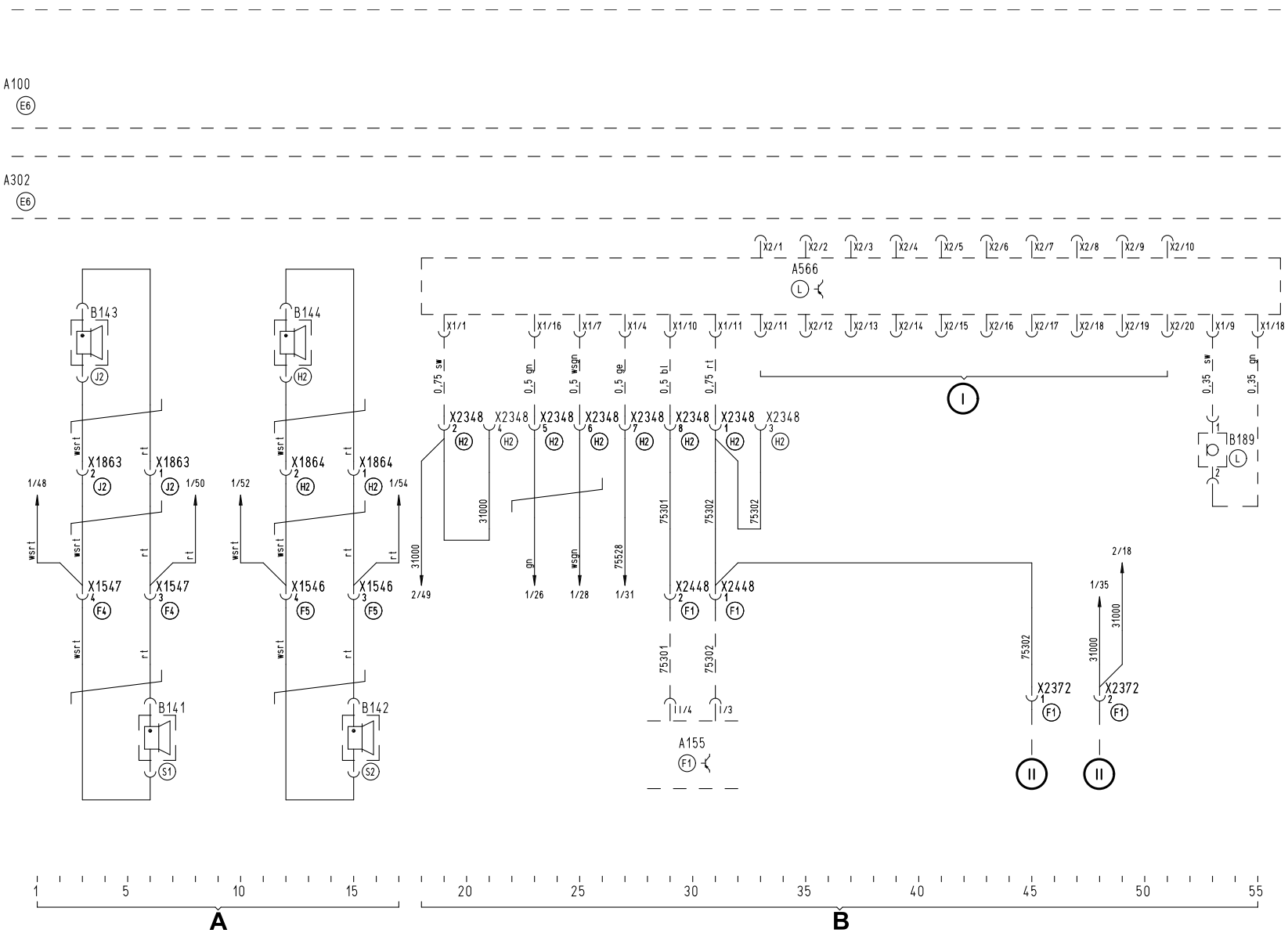
Wiring diagram no. **81.99192.2872** Sheet **2** of 2



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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

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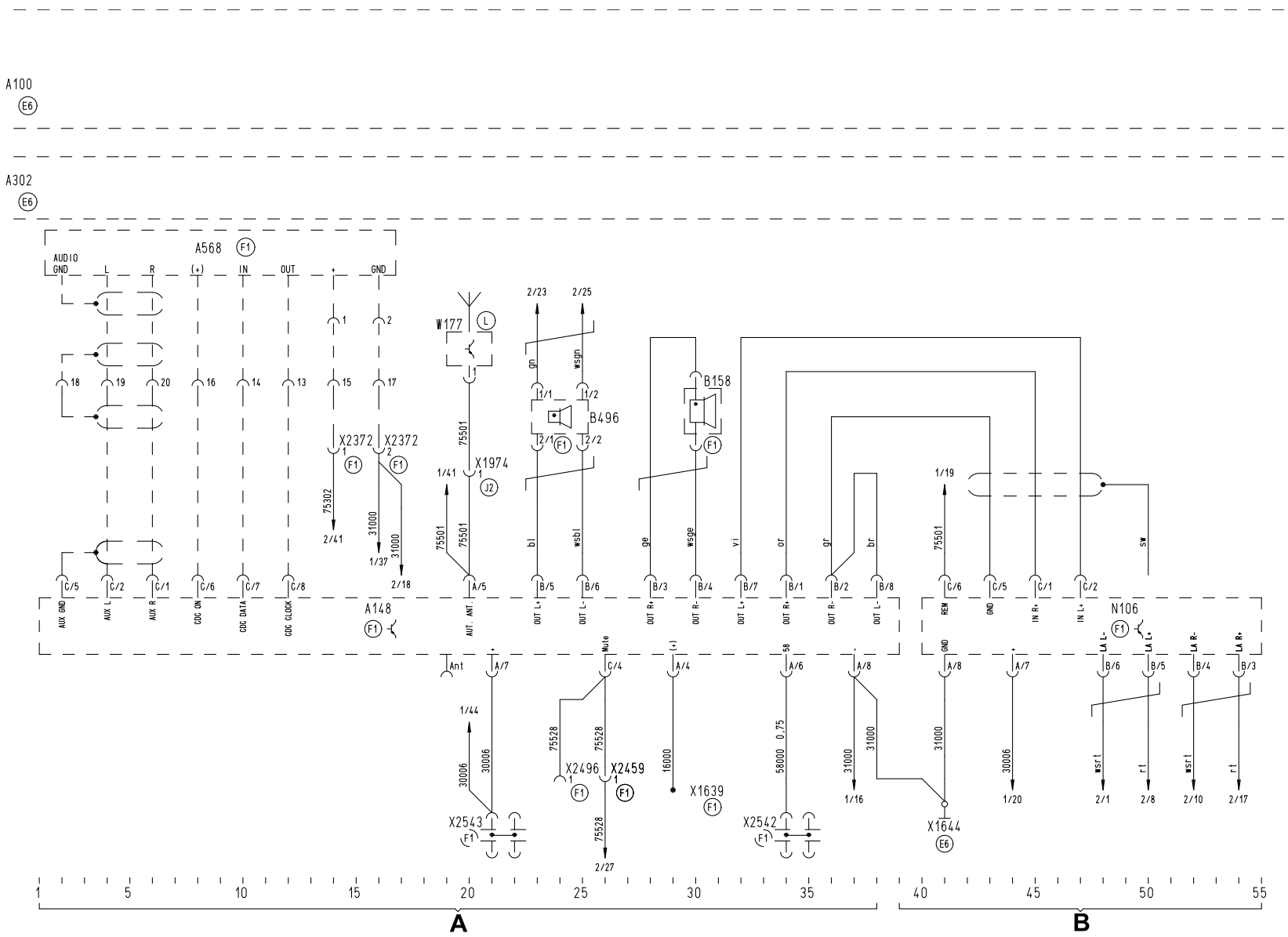
Wiring diagram no. **81.99192.1447** Sheet **1** of 2



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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
- (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) Mobile phone interface

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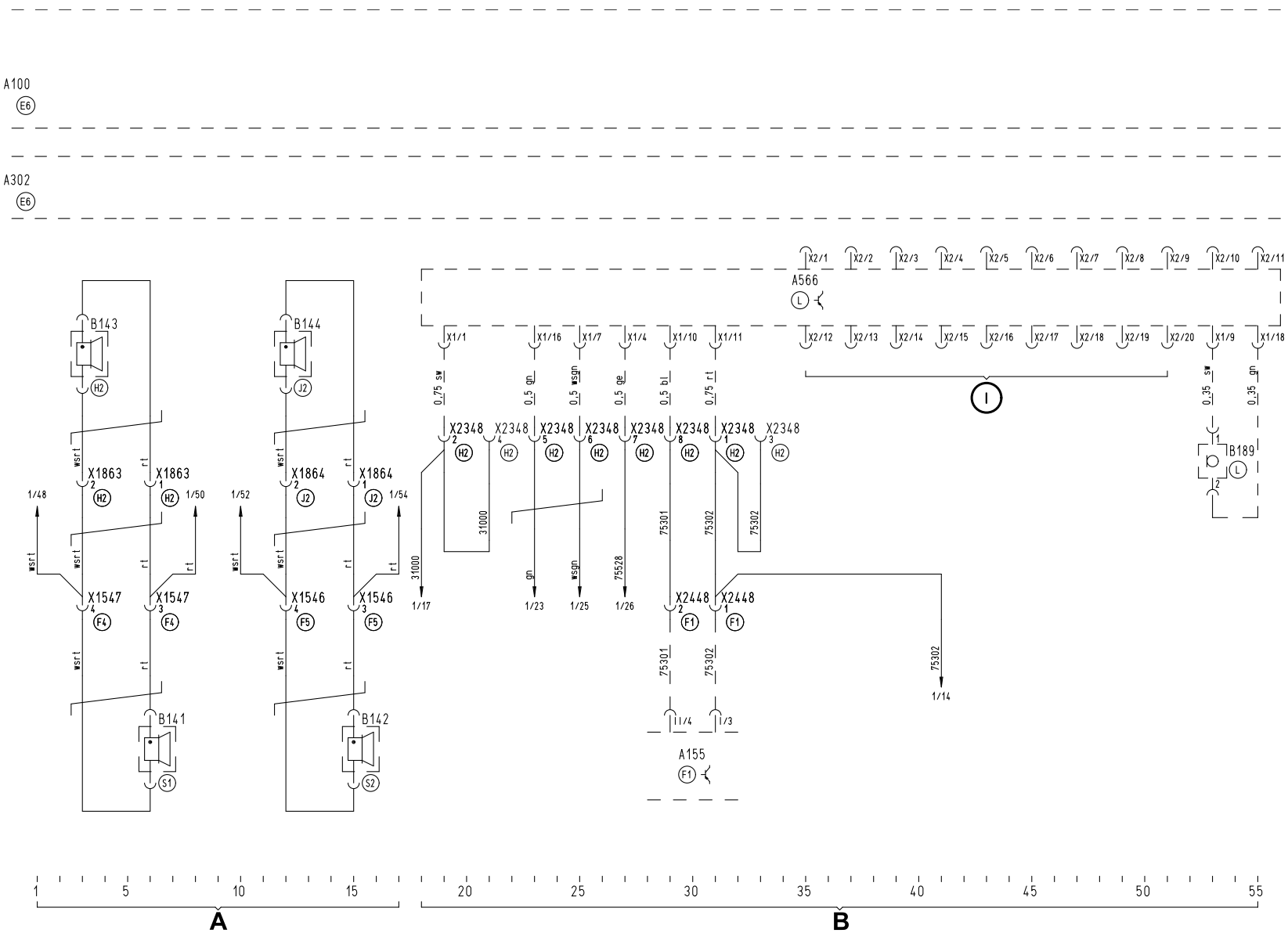
Wiring diagram no. **81.99192.1447** Sheet **2** of 2



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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

- (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

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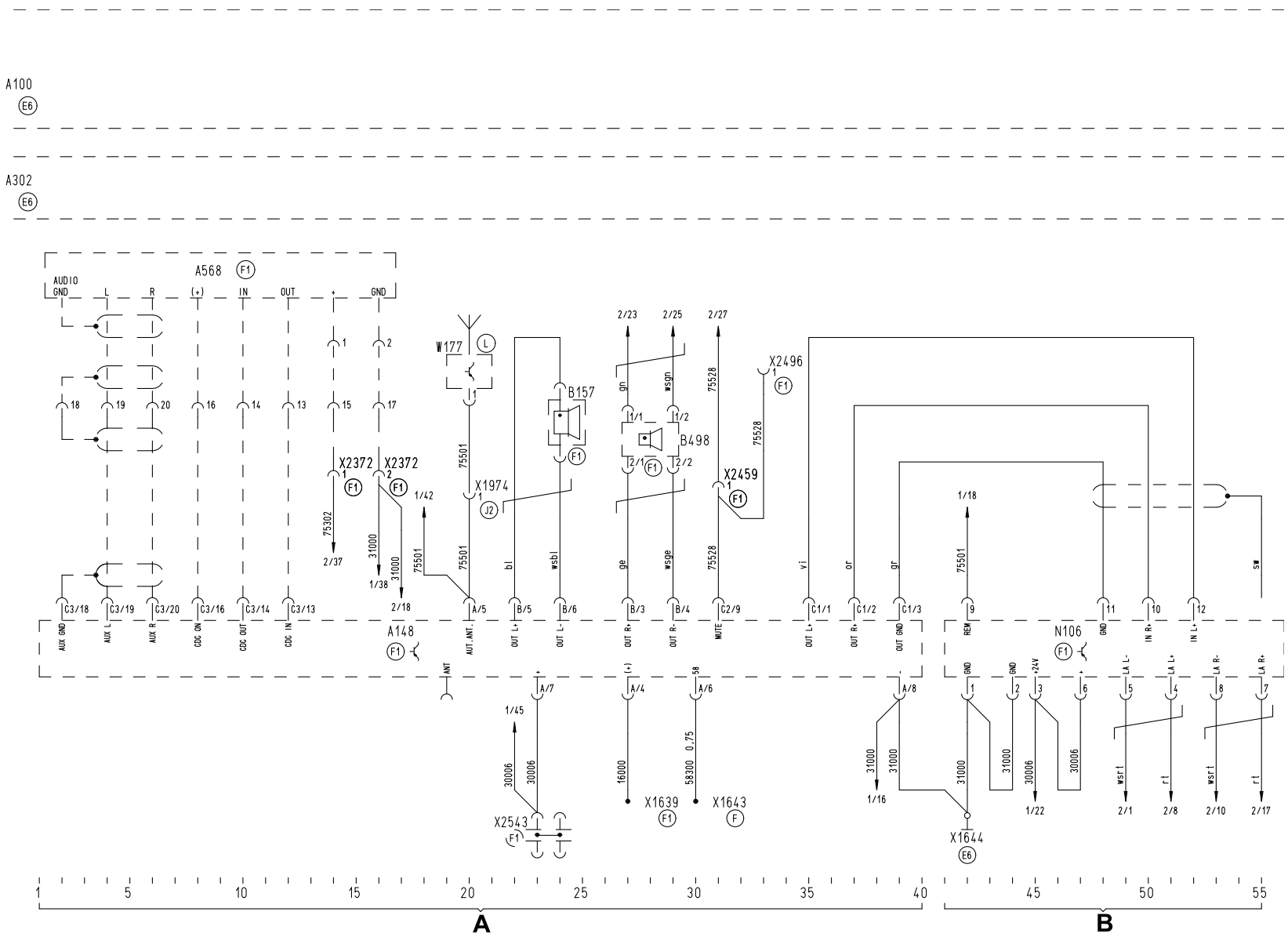
Wiring diagram no. **81.99192.2878** Sheet **1** of 2



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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
- (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) Mobile phone interface

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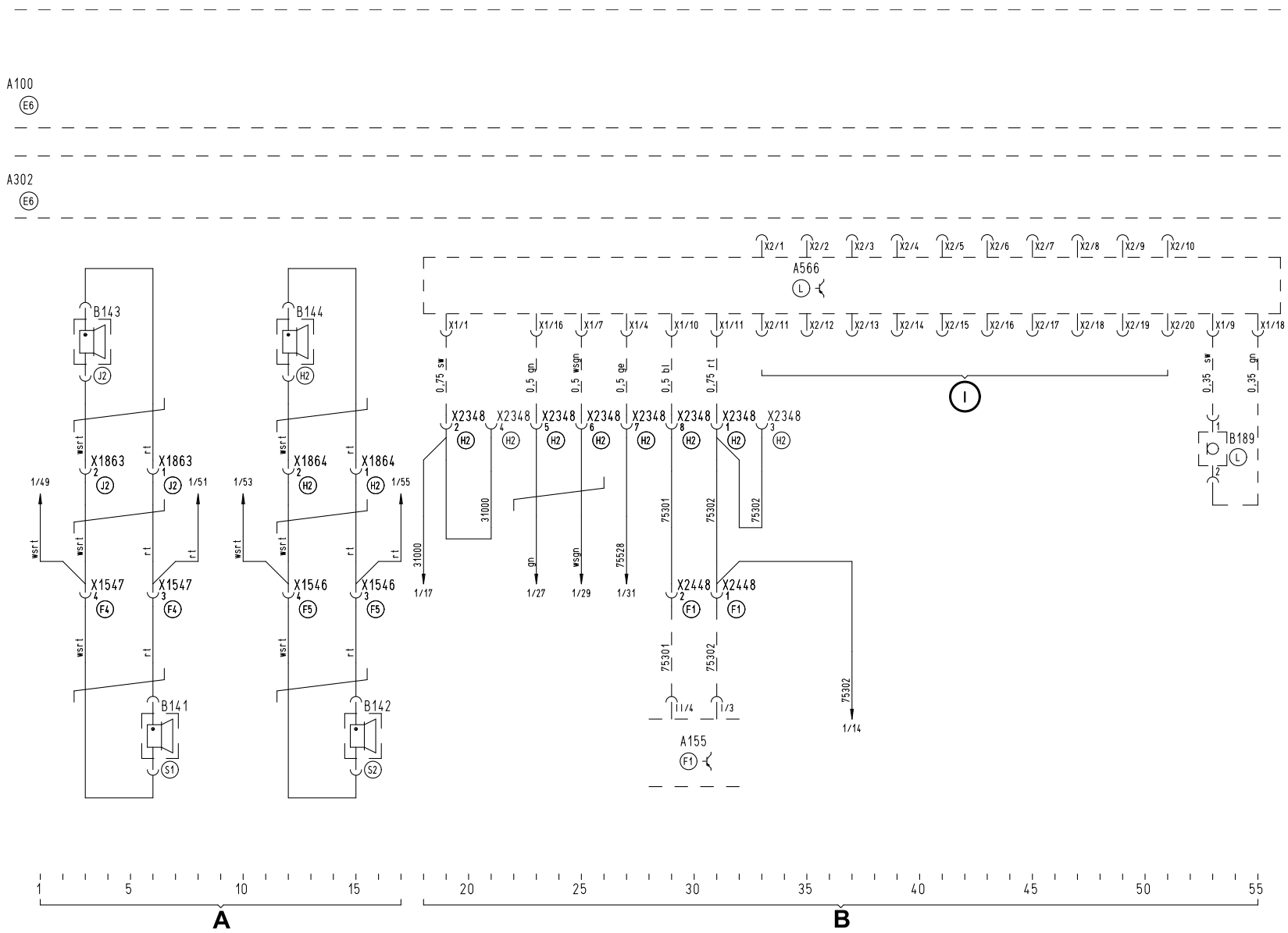
Wiring diagram no. **81.99192.2878** Sheet **2** of 2



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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

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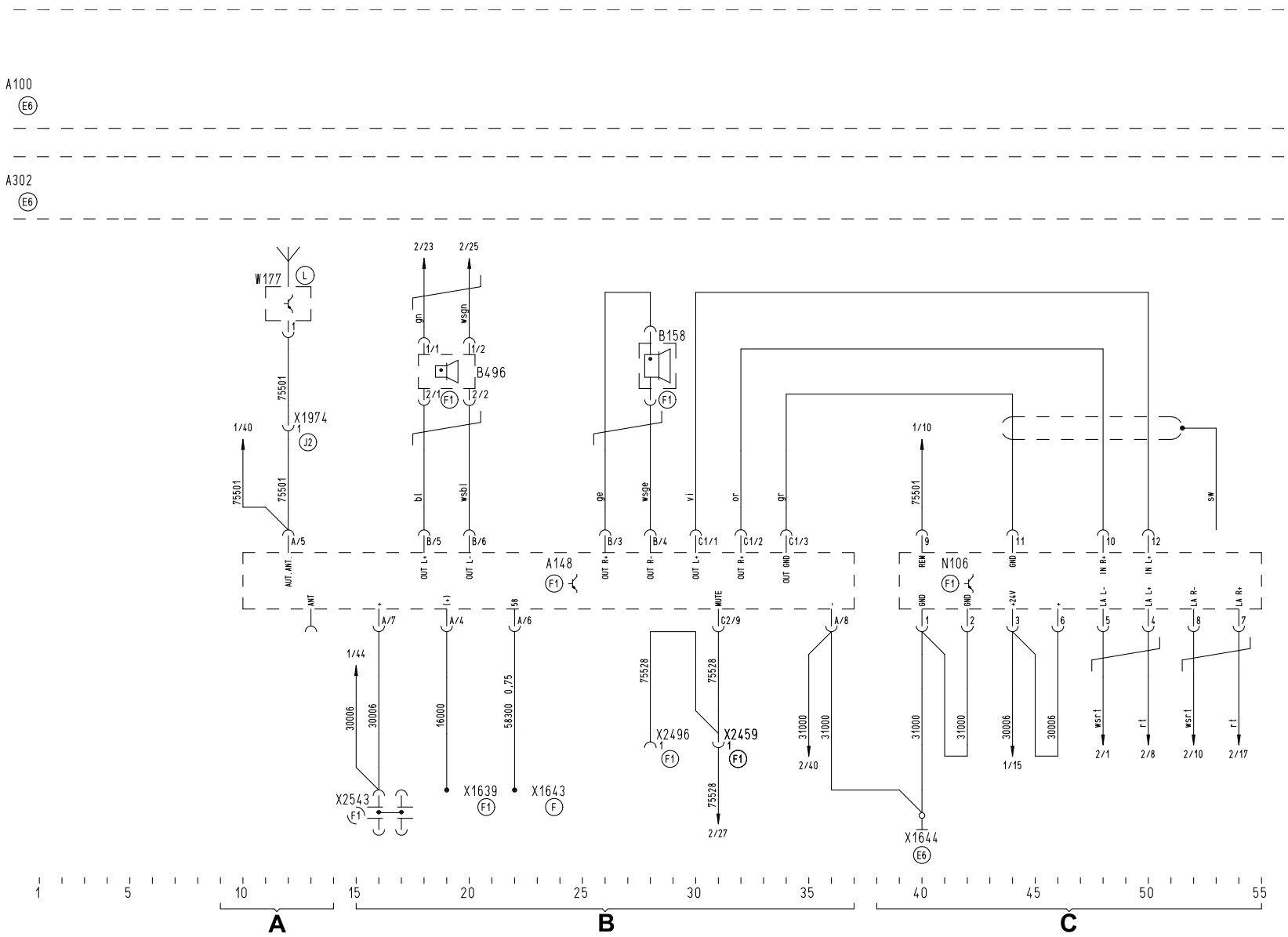
Wiring diagram no. **81.99192.2873** Sheet **1** of 2



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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

- (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) CD changer

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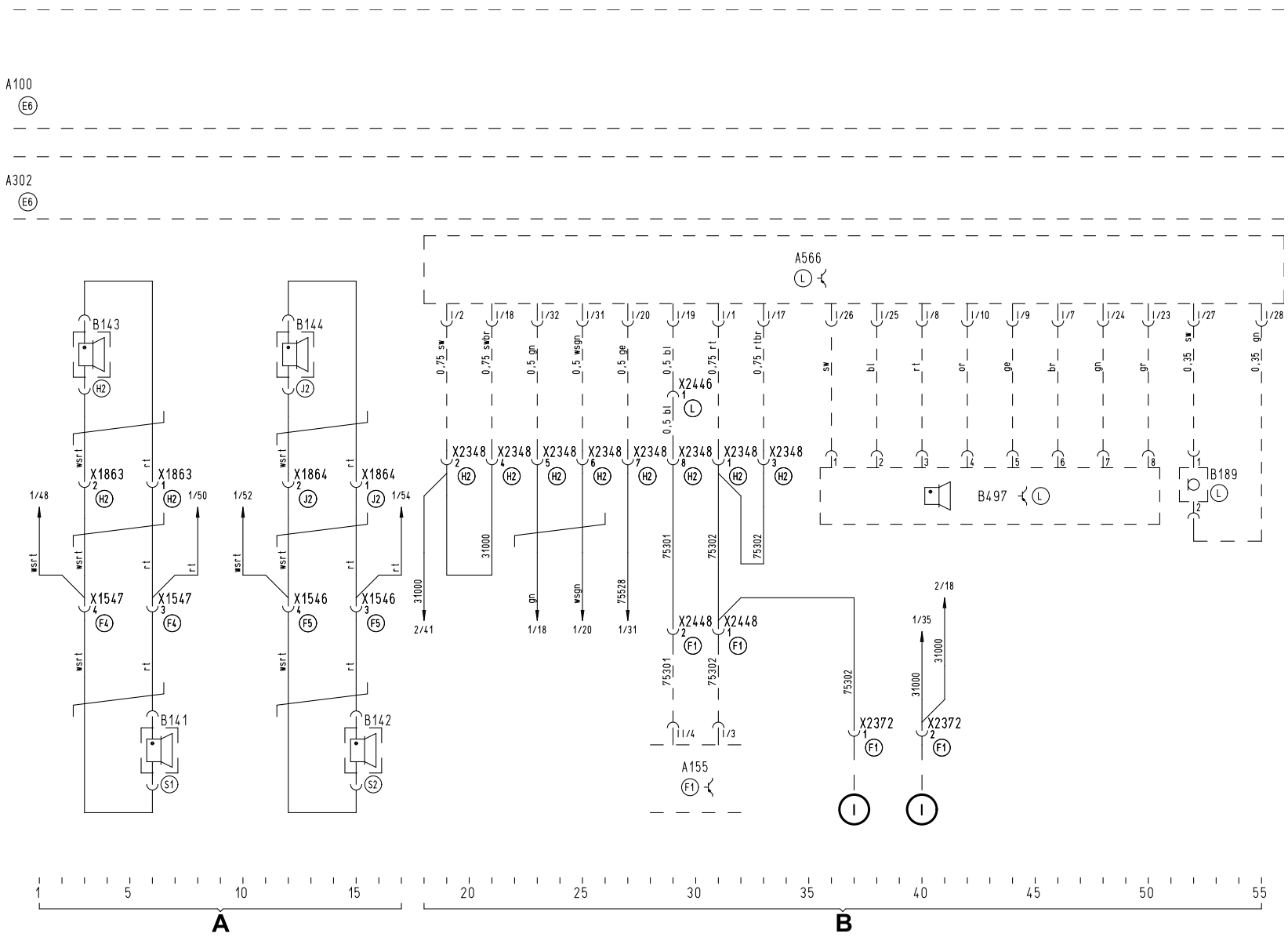
Wiring diagram no. **81.99192.2873** Sheet **2** of 2



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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

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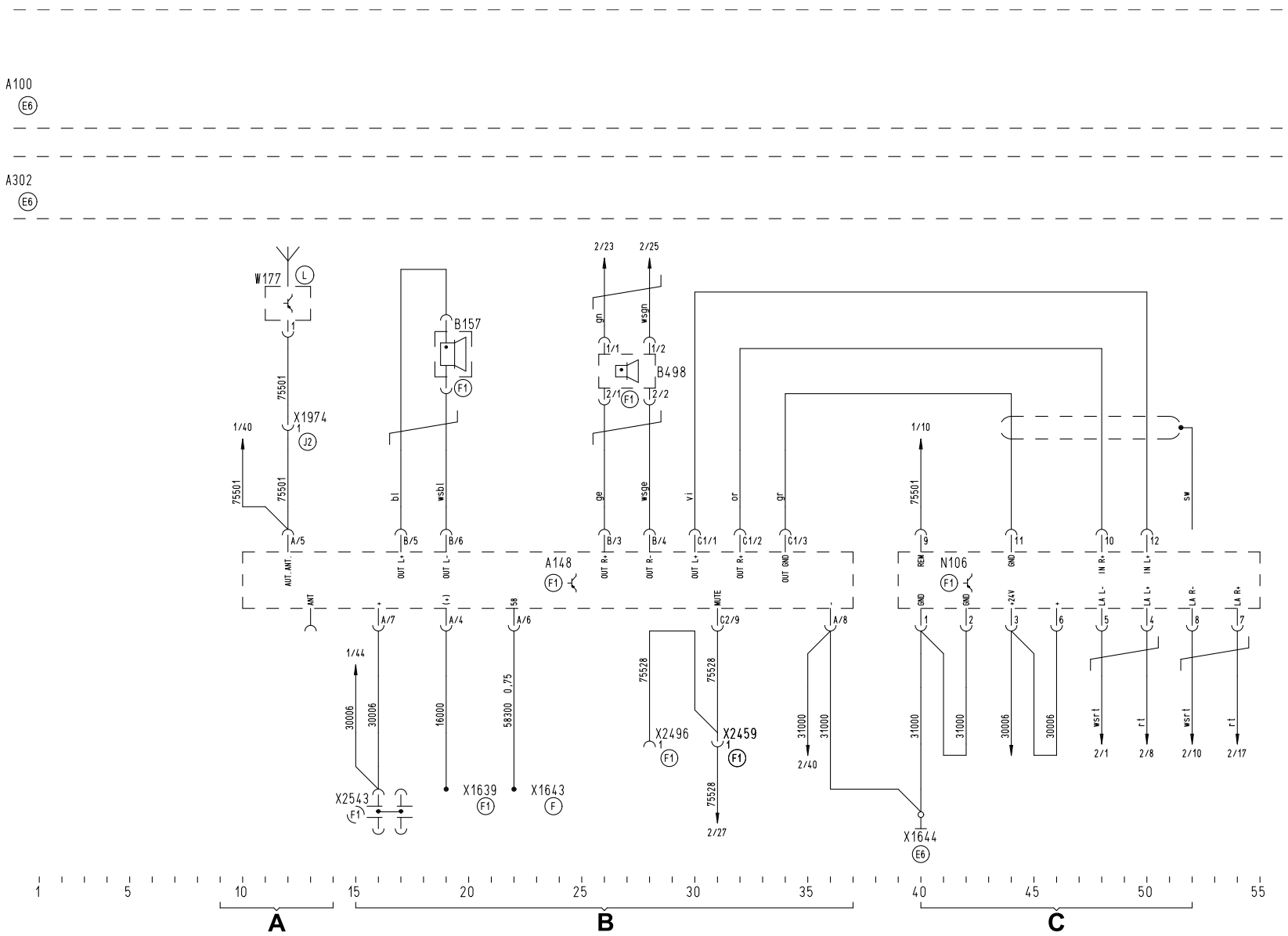
Wiring diagram no. **81.99192.2874** Sheet **1** of 2



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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		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

- (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) CD changer

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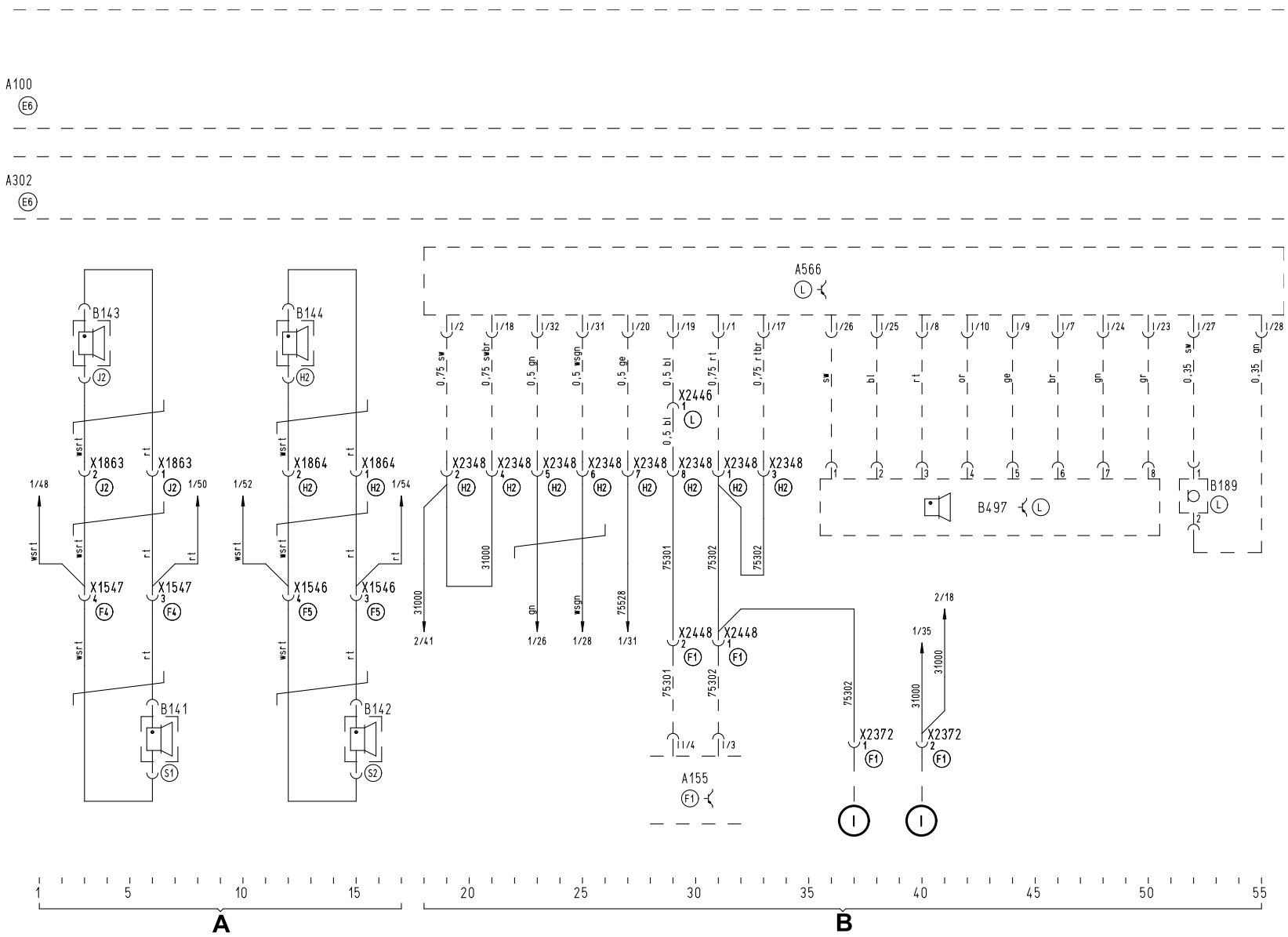
Wiring diagram no. **81.99192.2874** Sheet **2** of 2



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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

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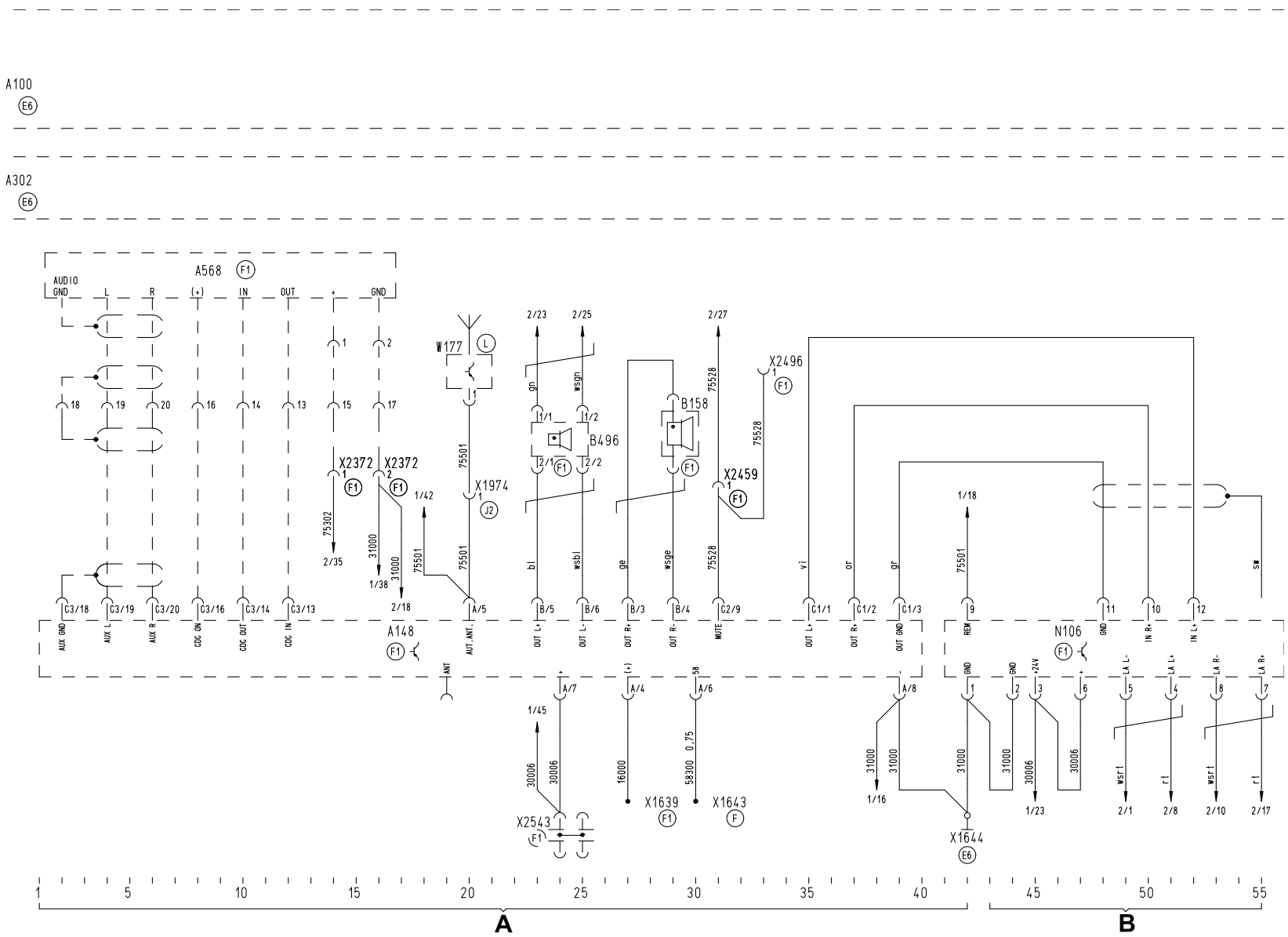
Wiring diagram no. **81.99192.2875** Sheet **1** of 2



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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
- (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

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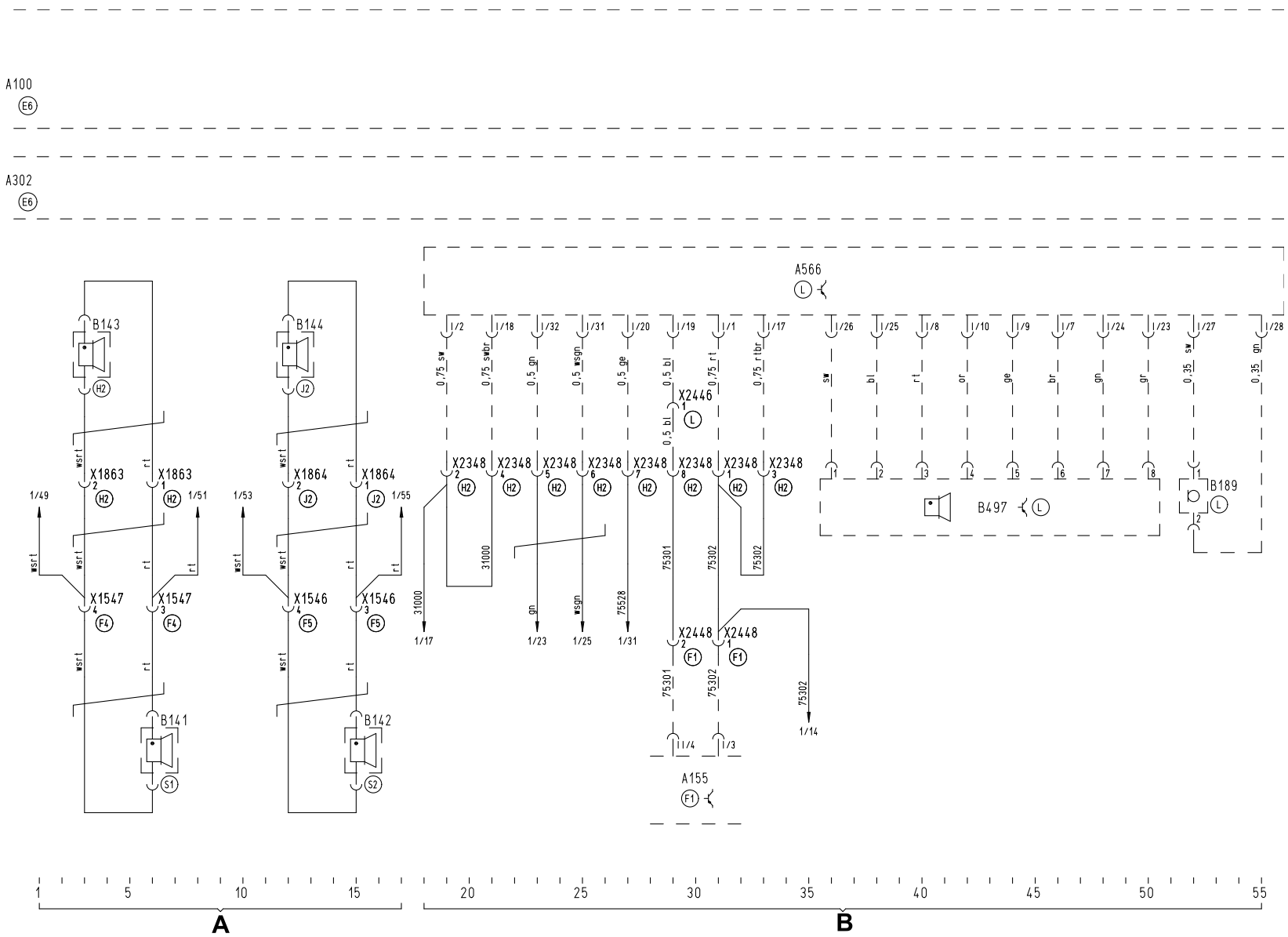
Wiring diagram no. **81.99192.2875** Sheet **2** of 2



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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

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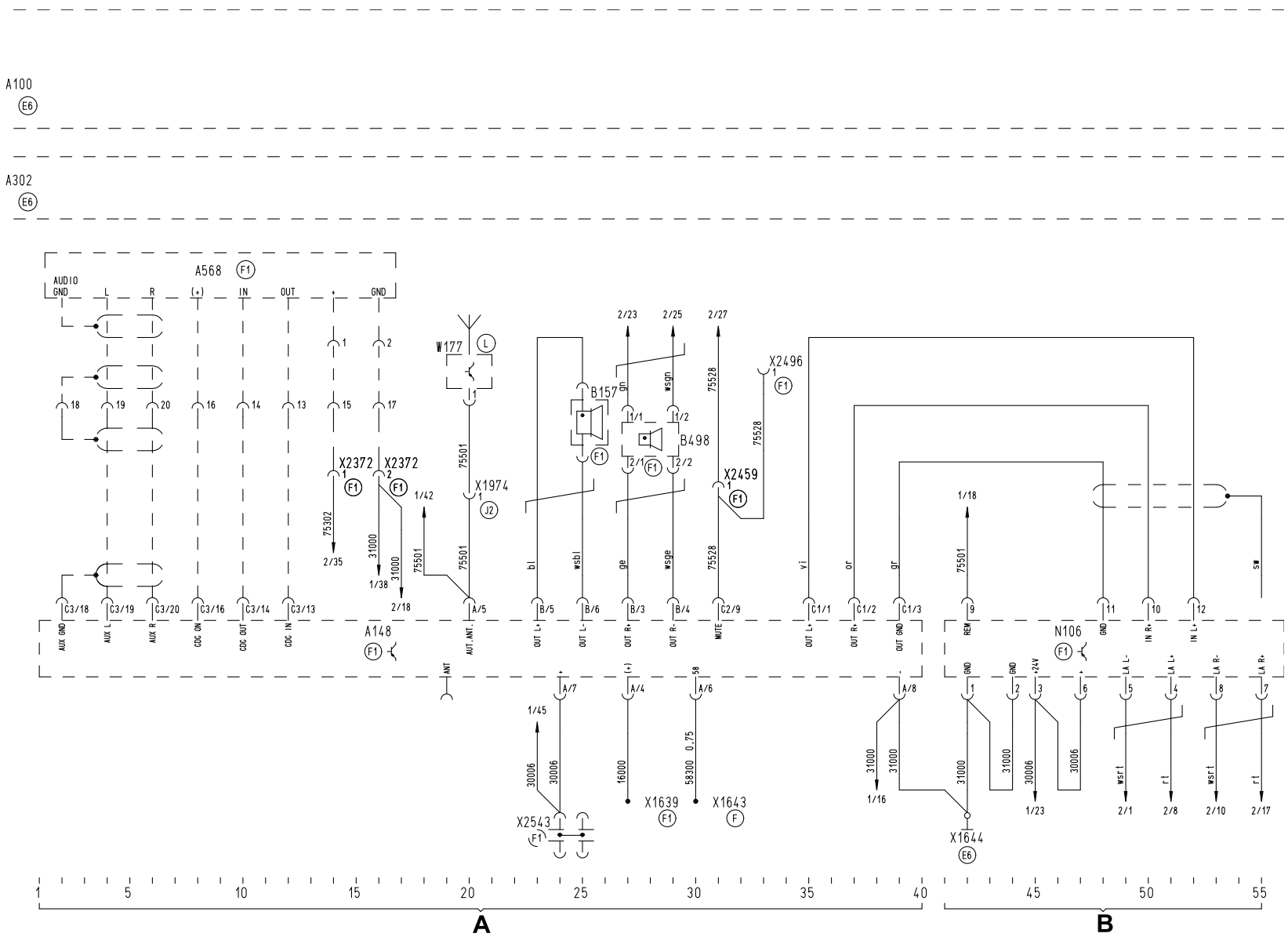
Wiring diagram no. **81.99192.2876** Sheet **1** of 2



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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

- (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

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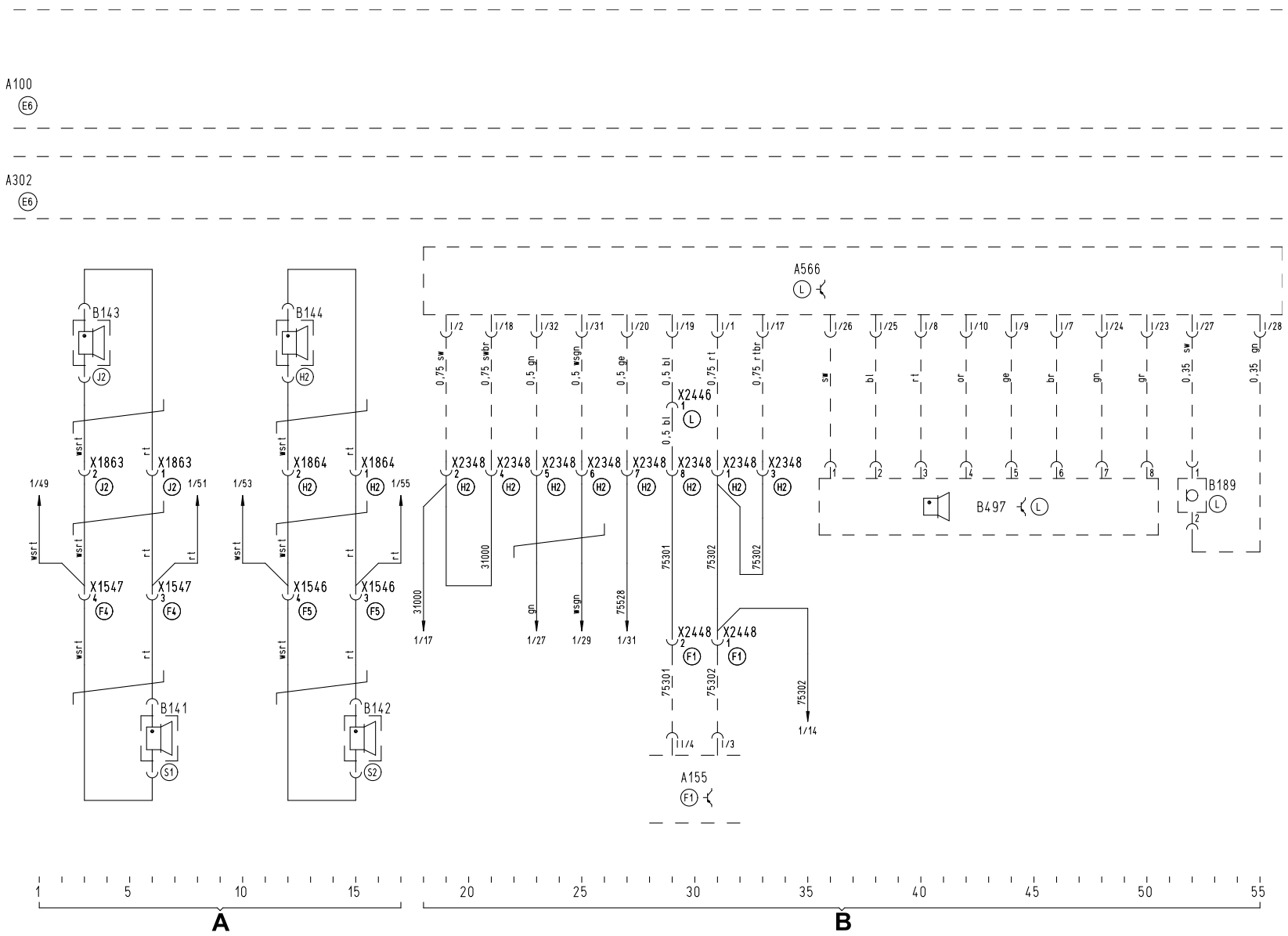
Wiring diagram no. **81.99192.2876** Sheet **2** of 2



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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

- (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) Locking

(II) Unlocking

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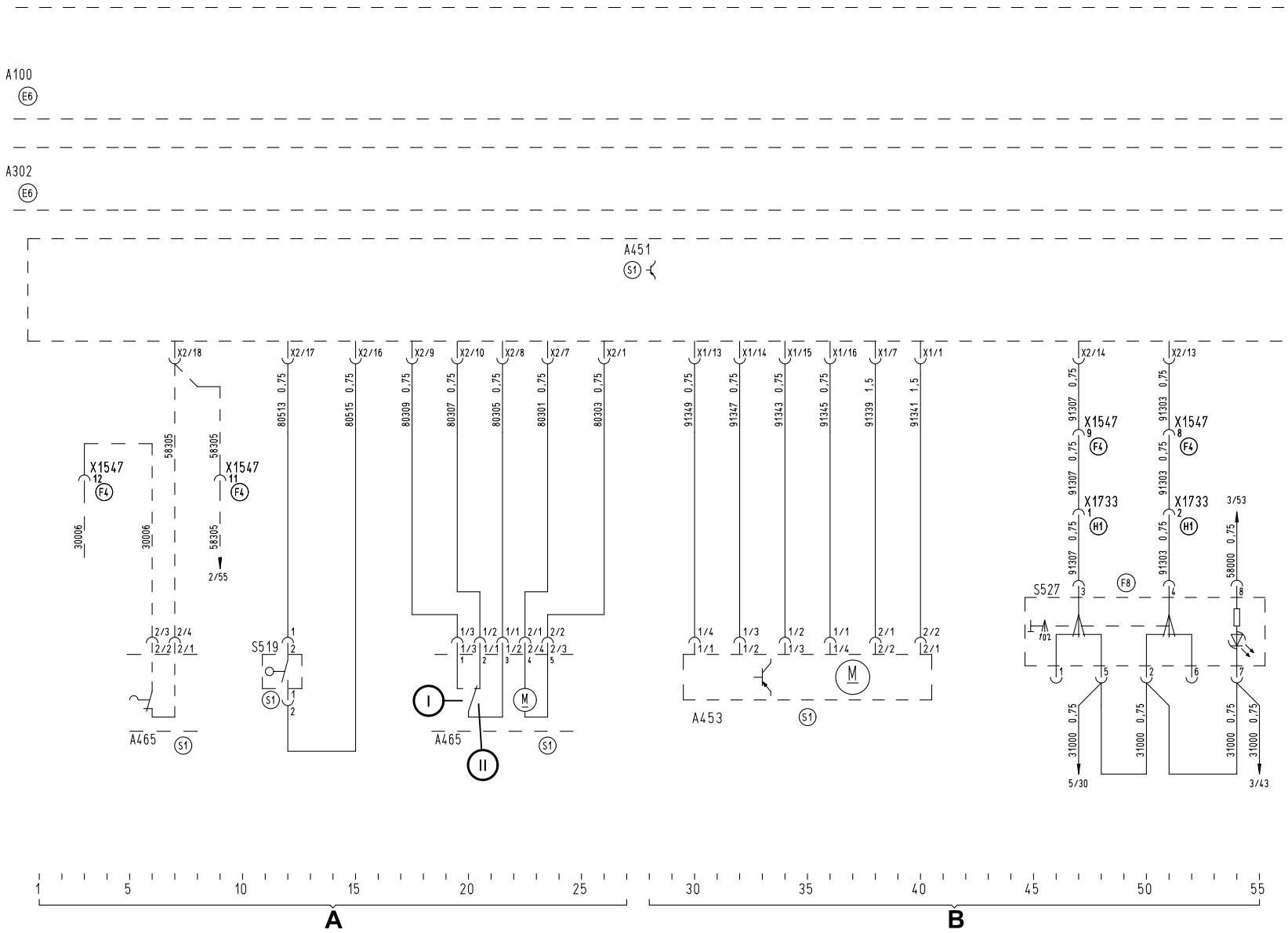
Wiring diagram no. **81.99192.2989** Sheet **1** of 5



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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

- (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) Sunroof

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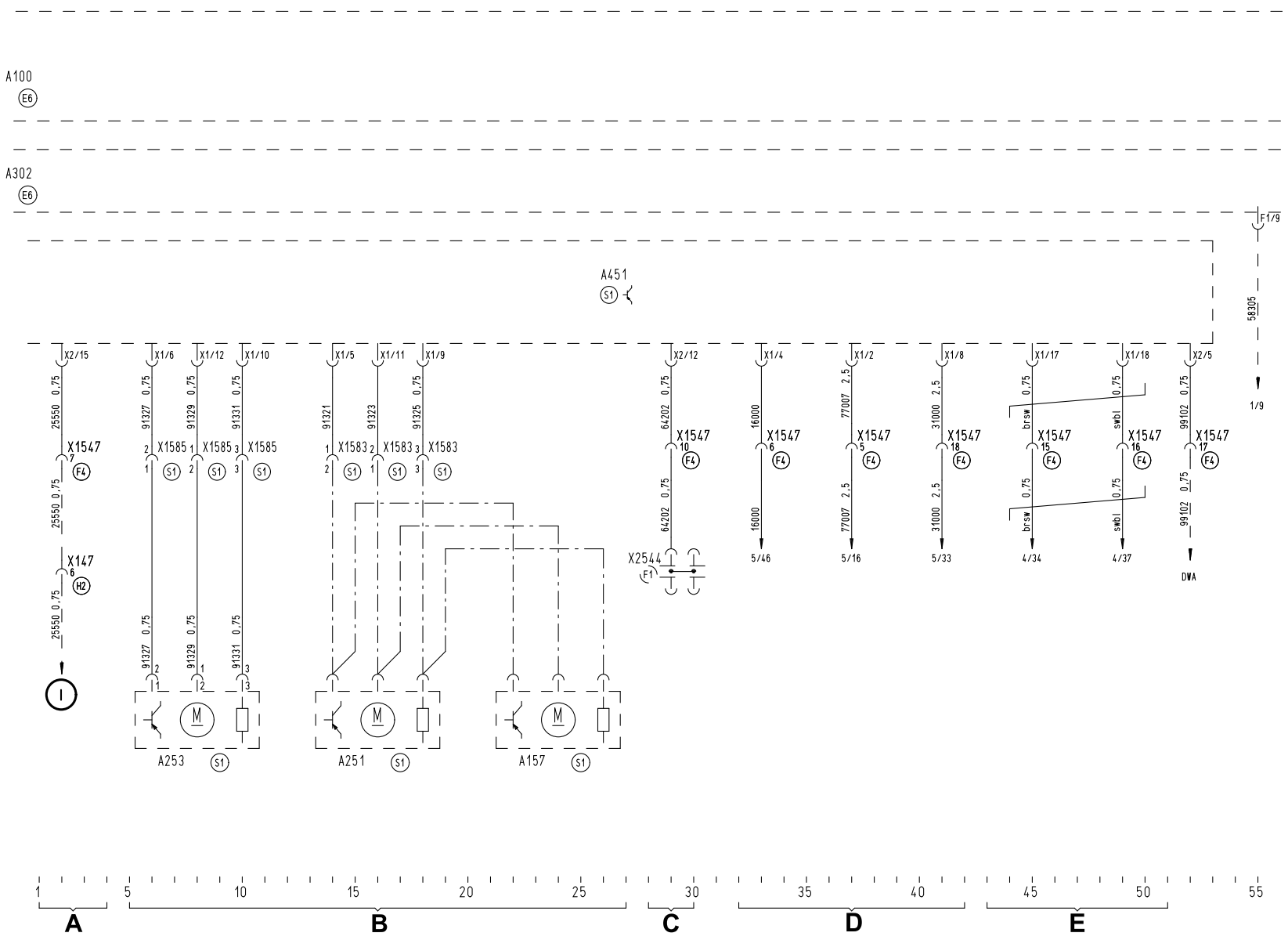
Wiring diagram no. **81.99192.2989** Sheet **2** of 5



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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

- (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) Locking

(II) Unlocking

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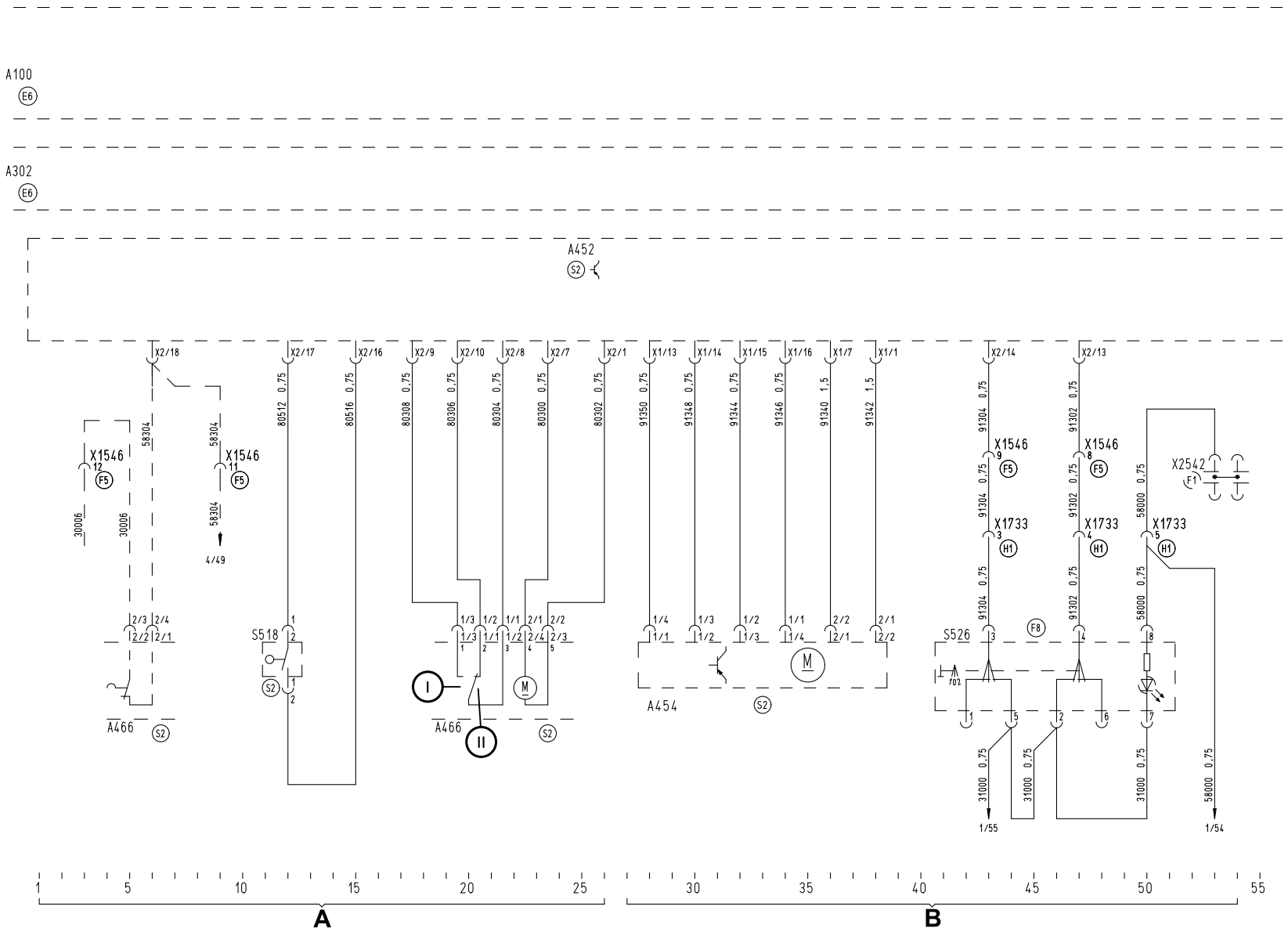
Wiring diagram no. **81.99192.2989** Sheet **3** of 5



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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
- (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

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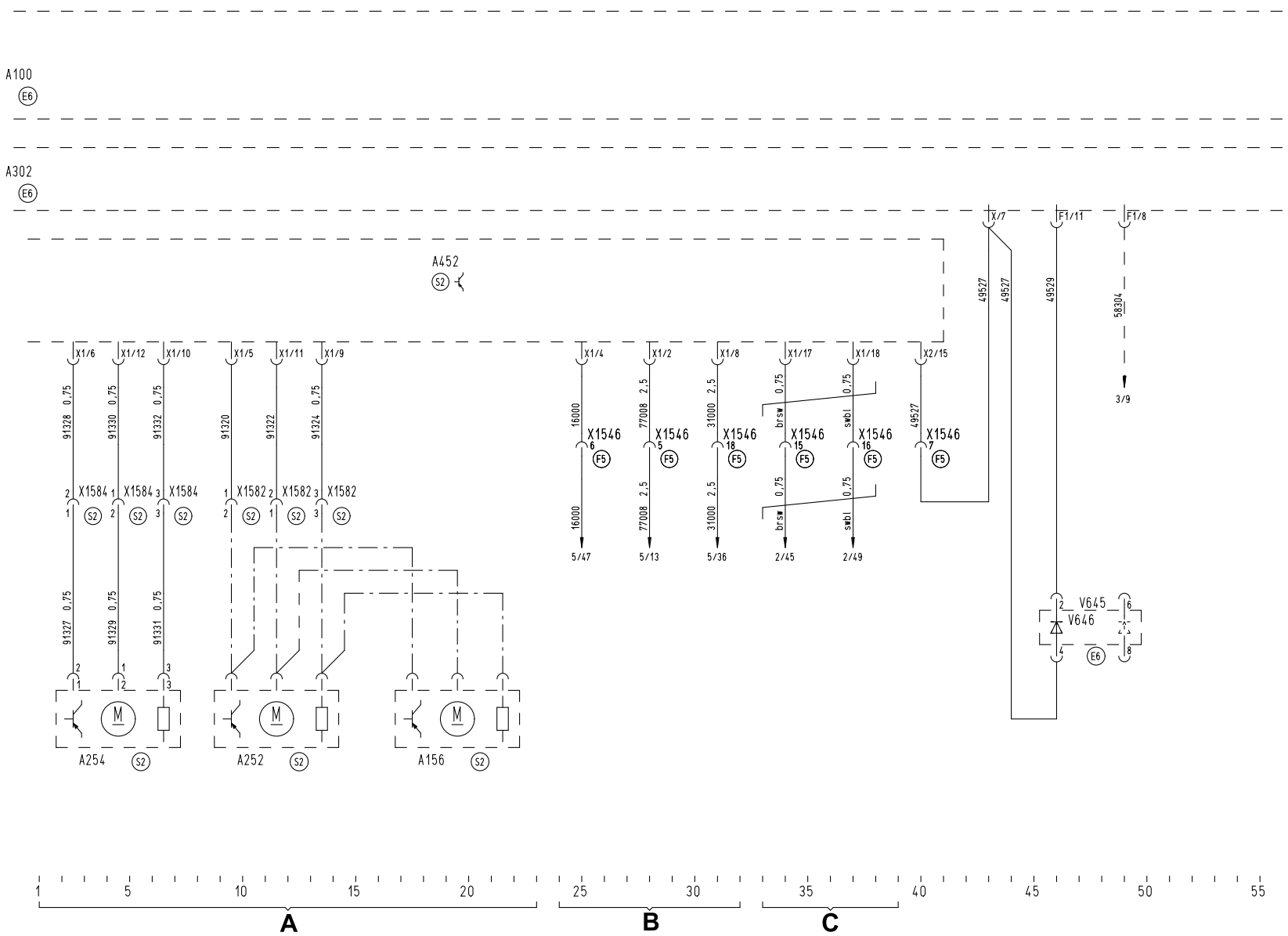
Wiring diagram no. **81.99192.2989** Sheet **4** of 5



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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
- (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

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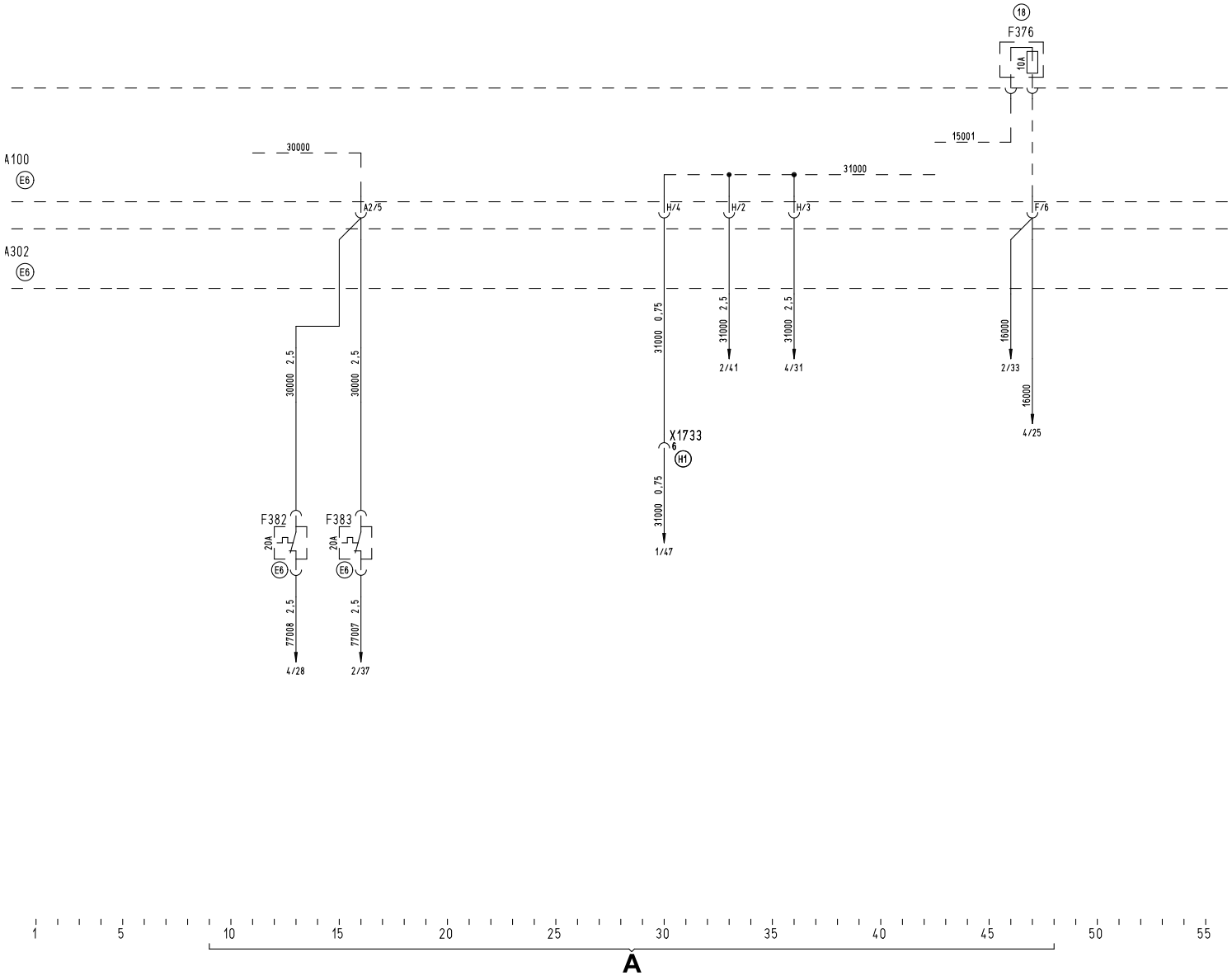
Wiring diagram no. **81.99192.2989** Sheet **5** of 5



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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
- (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) Locking

(II) Unlocking

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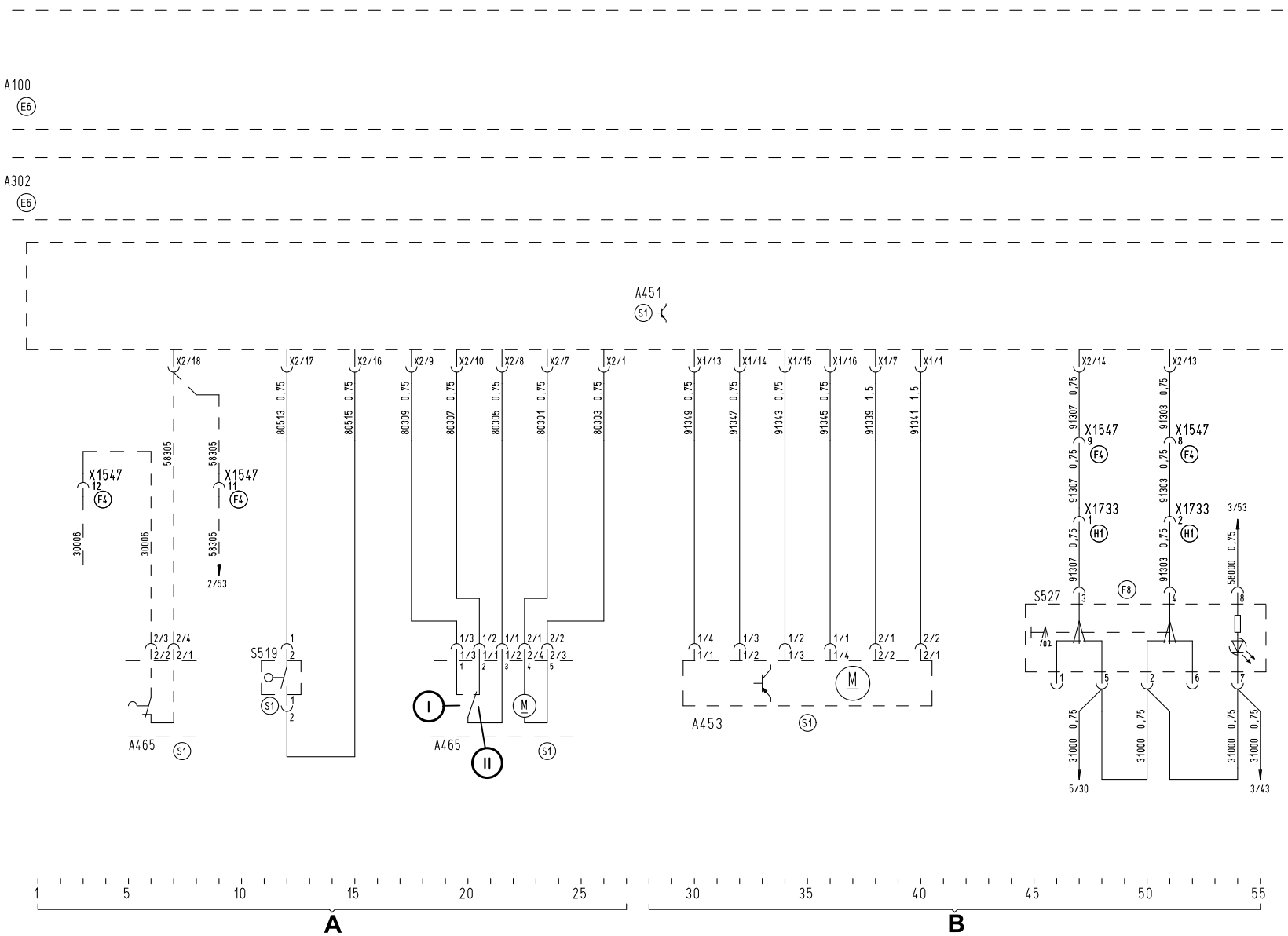
Wiring diagram no. **81.99192.2990** Sheet **1** of 5



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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
- (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

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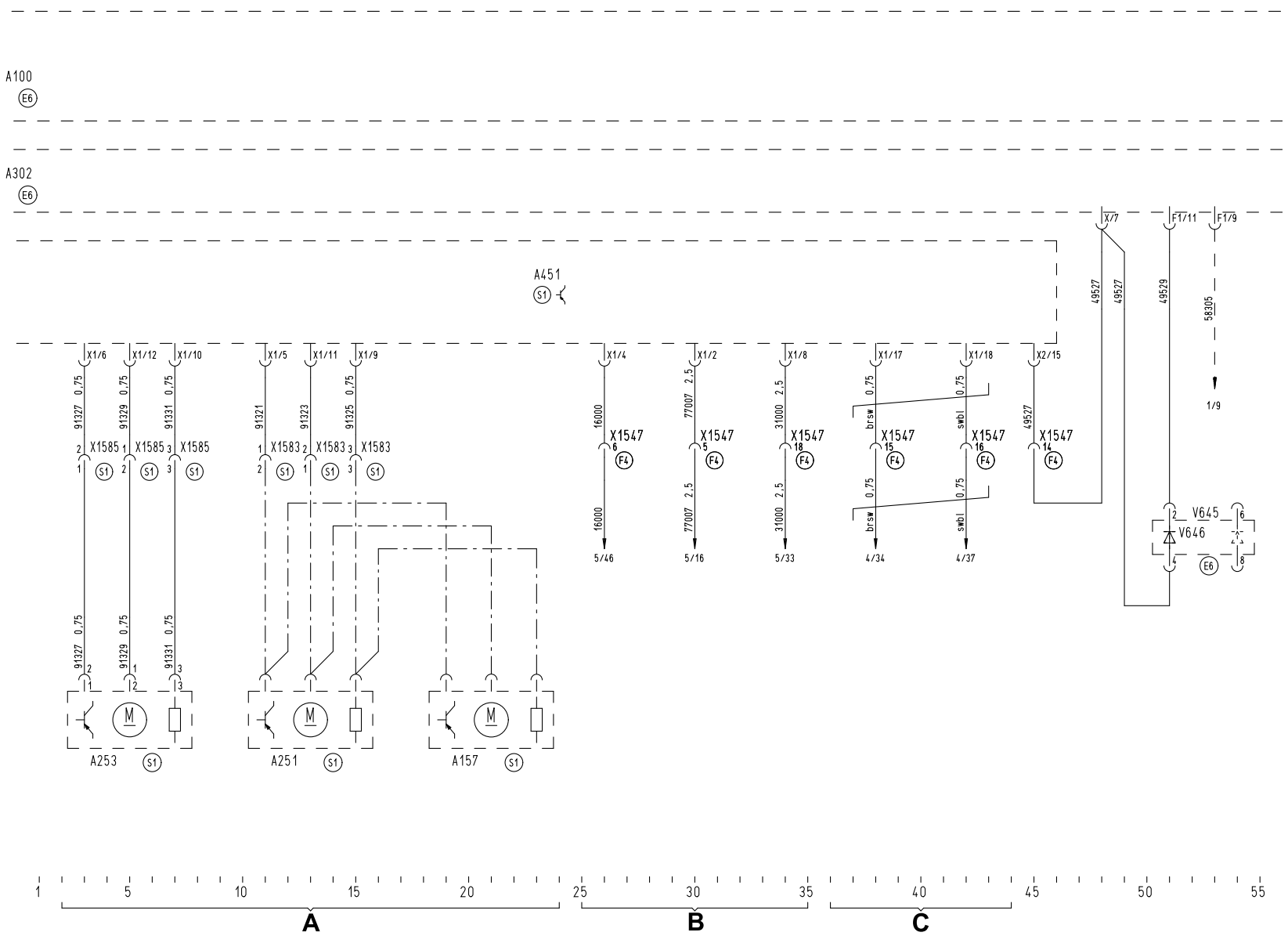
Wiring diagram no. **81.99192.2990** Sheet **2** of 5



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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

- (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) Locking

(II) Unlocking

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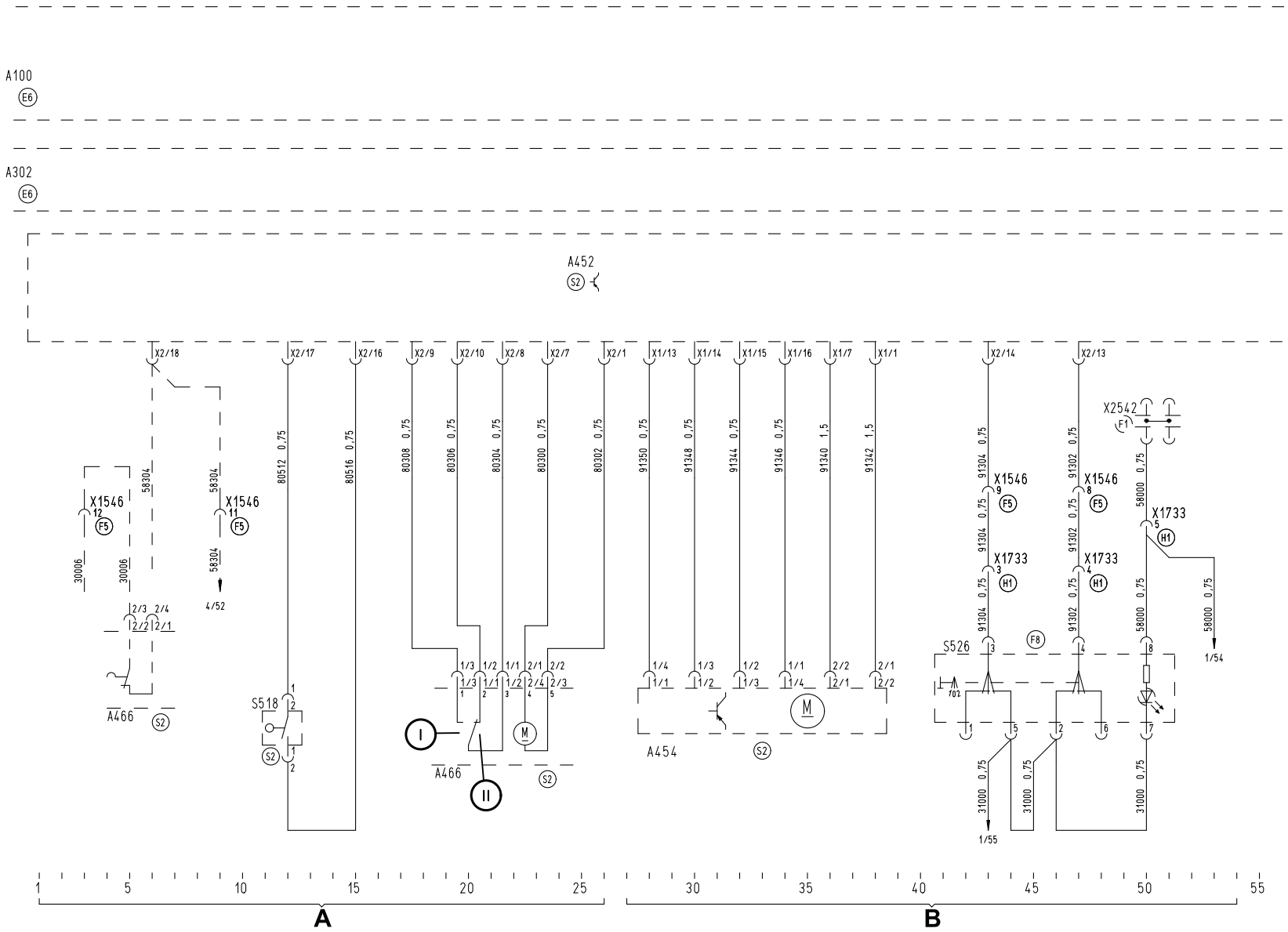
Wiring diagram no. **81.99192.2990** Sheet **3** of 5



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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

- (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) Sunroof

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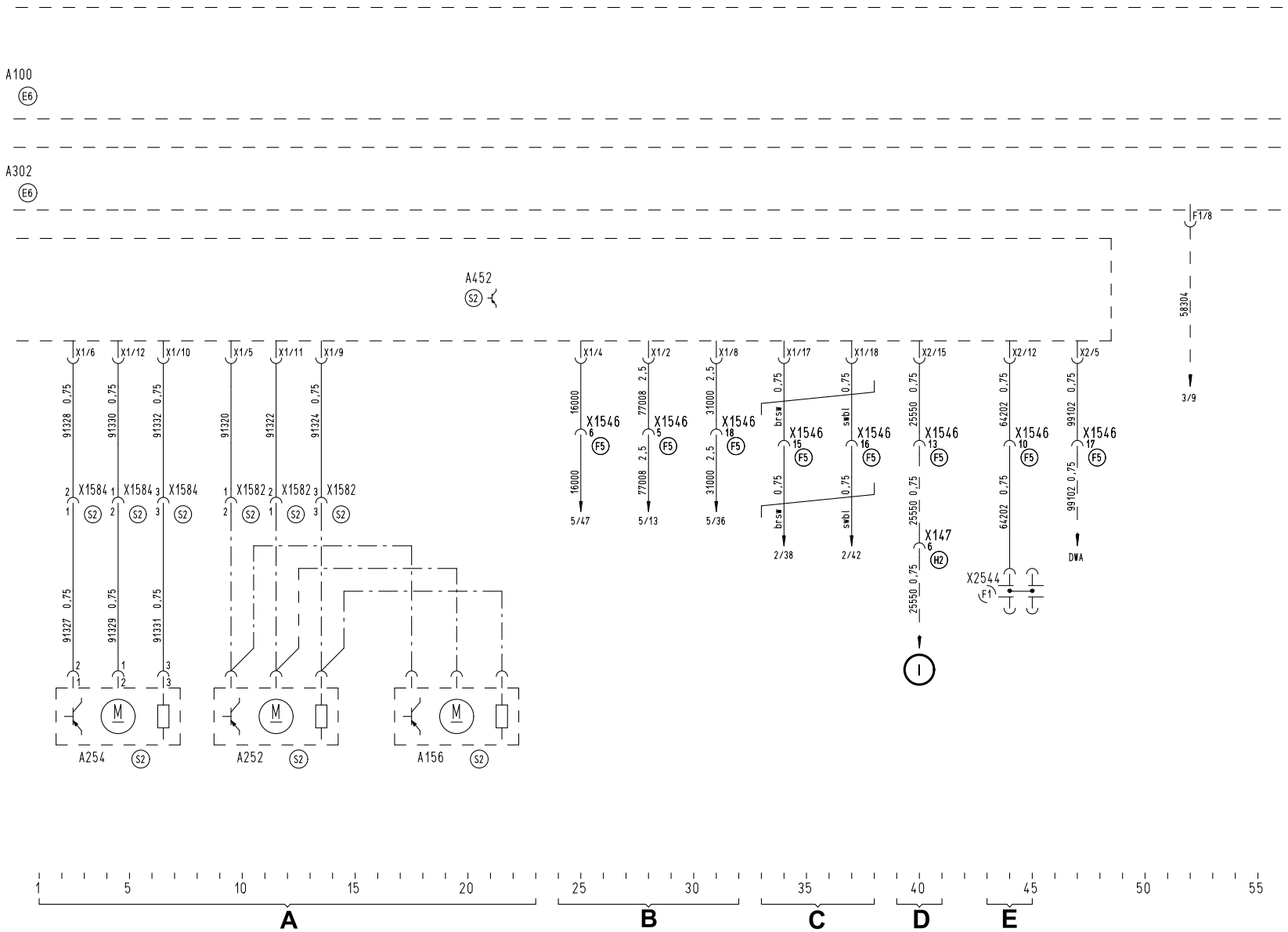
Wiring diagram no. **81.99192.2990** Sheet **4** of 5



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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

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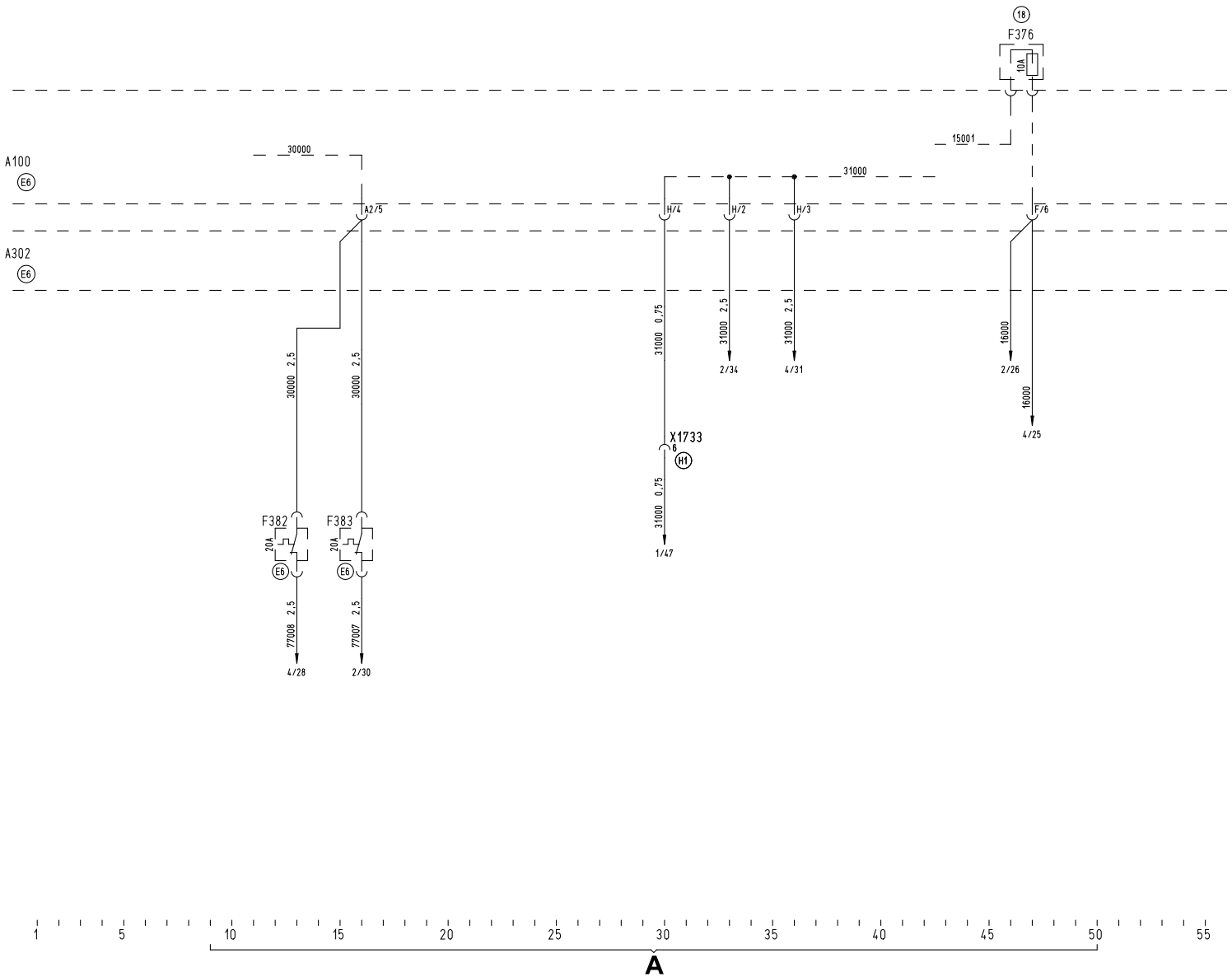
Wiring diagram no. **81.99192.2990** Sheet **5** of 5



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A403	(339)	Vehicle management computer
F558	(129)	Fuse, cooling superstructure
H408	(155)	Indicator light block, cooling, superstructure, tractor vehicle
H410	(104)	Indicator light, cooling, superstructure, tractor vehicle
H412	(104)	Indicator light, cooling, superstructure, defrost, tractor vehicle
K869	(283)	Relay I, cooling, superstructure, tractor vehicle
K870	(283)	Relay II, cooling, superstructure, tractor vehicle
K871	(281)	Relay, start inhibitor for cooling superstructure
K888	(280)	Relay ZDR/cooling superstructure
S764	(676)	Switch, cooling, superstructure, tractor vehicle
S765	(678)	Control switch, cooling, superstructure, defrost, tractor vehicle
X669		Stvd. start inhibitor
X1754		Soldered connector, line 59104
X1757		Soldered connector, line 16006
X1996		Stvd. intermediate speed control interface (FFR)
X2491		Stvd. ZDR/cooling superstructure
X2509	(203)	Relay base K869, K870
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

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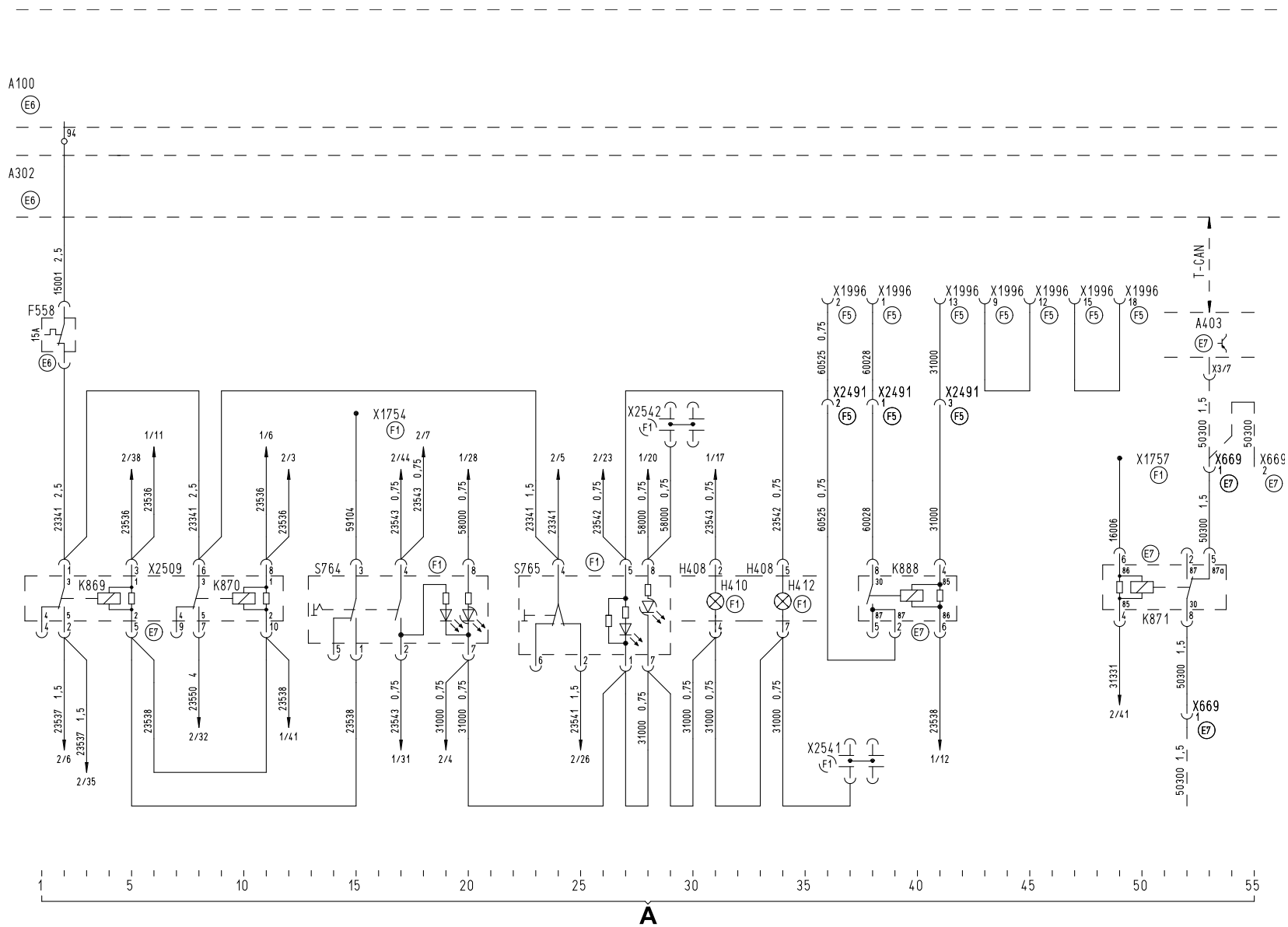
Wiring diagram no. **81.99192.1469** Sheet **1** of 2



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Preparation cooling superstructure (tractor vehicle)

Legend
Wiring diagram no. **81.99192.1469** Sheet **2** of 2
Change status: 05.01

A = Preparation, cooling, superstructure

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A578		Cooling superstructure
X1643		Crimped connector, line 58300
X1644		Earthing point, cab, adjacent to central fuse, relay and terminal block
X2451		Stvd. cooling superstructure
X2452		Stvd. cooling superstructure
X2453		Stvd. 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

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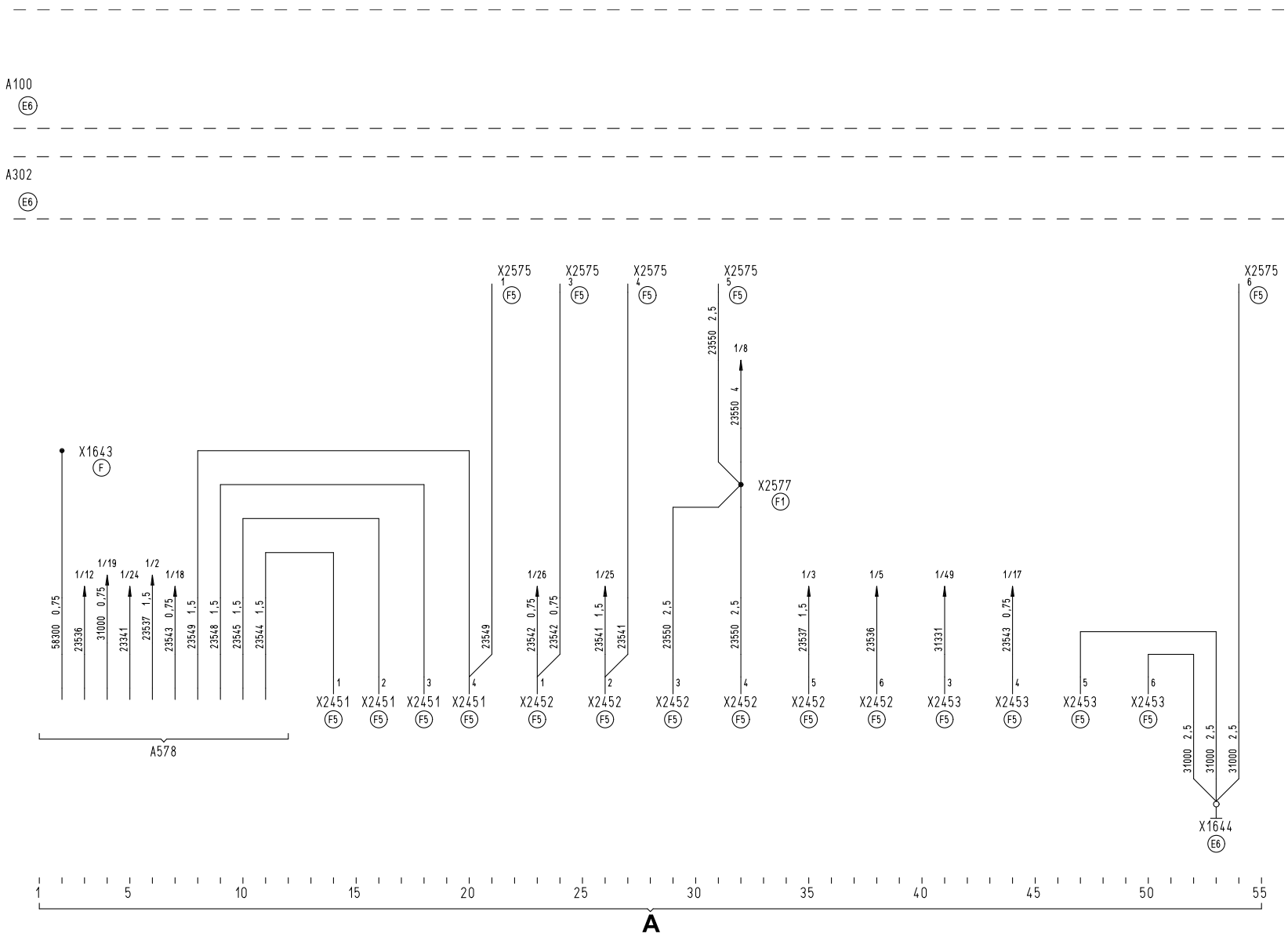
Wiring diagram no. **81.99192.1469** Sheet **2** of 2



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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

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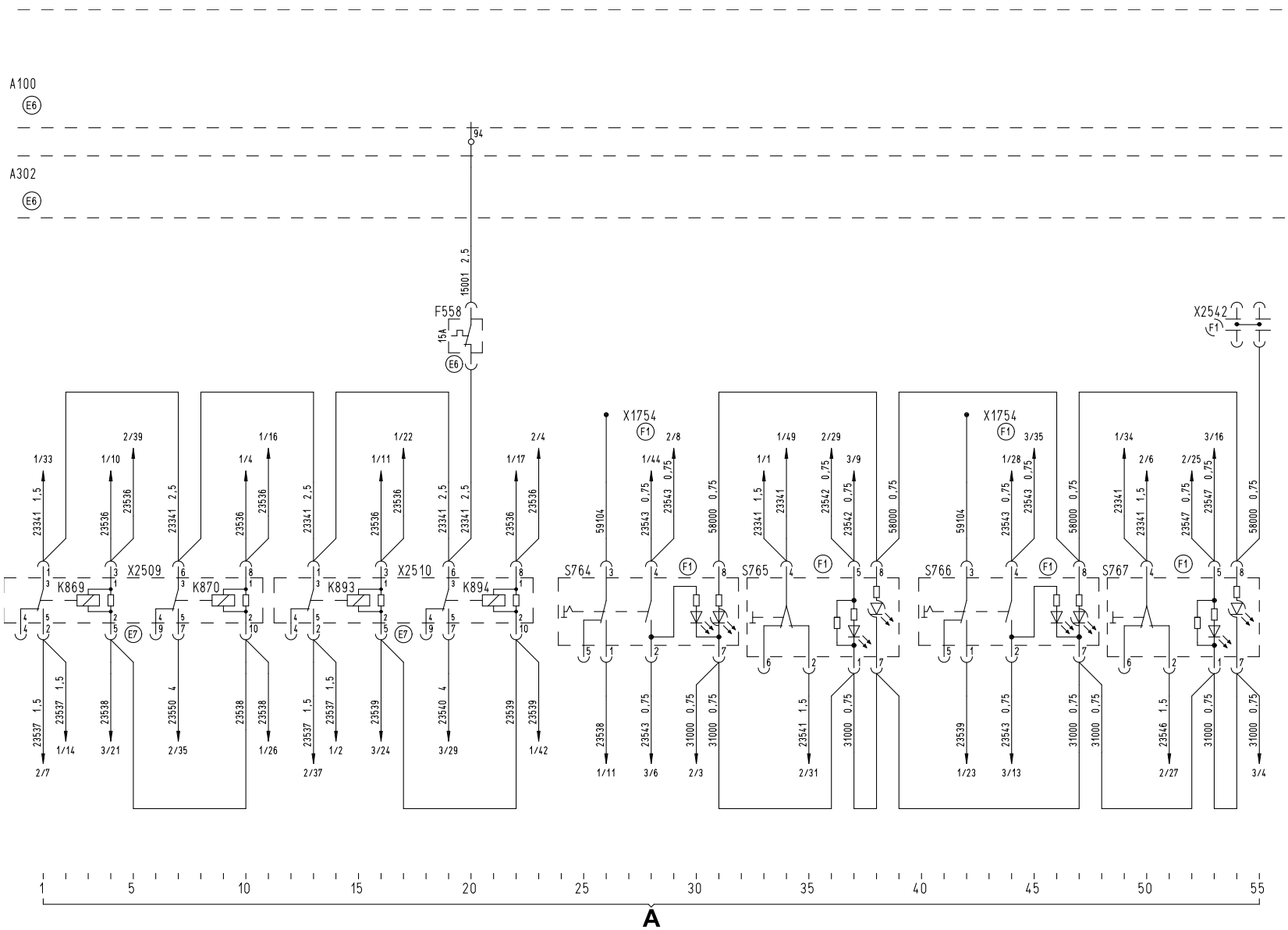
Wiring diagram no. **81.99192.1468** Sheet **1** of 3



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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

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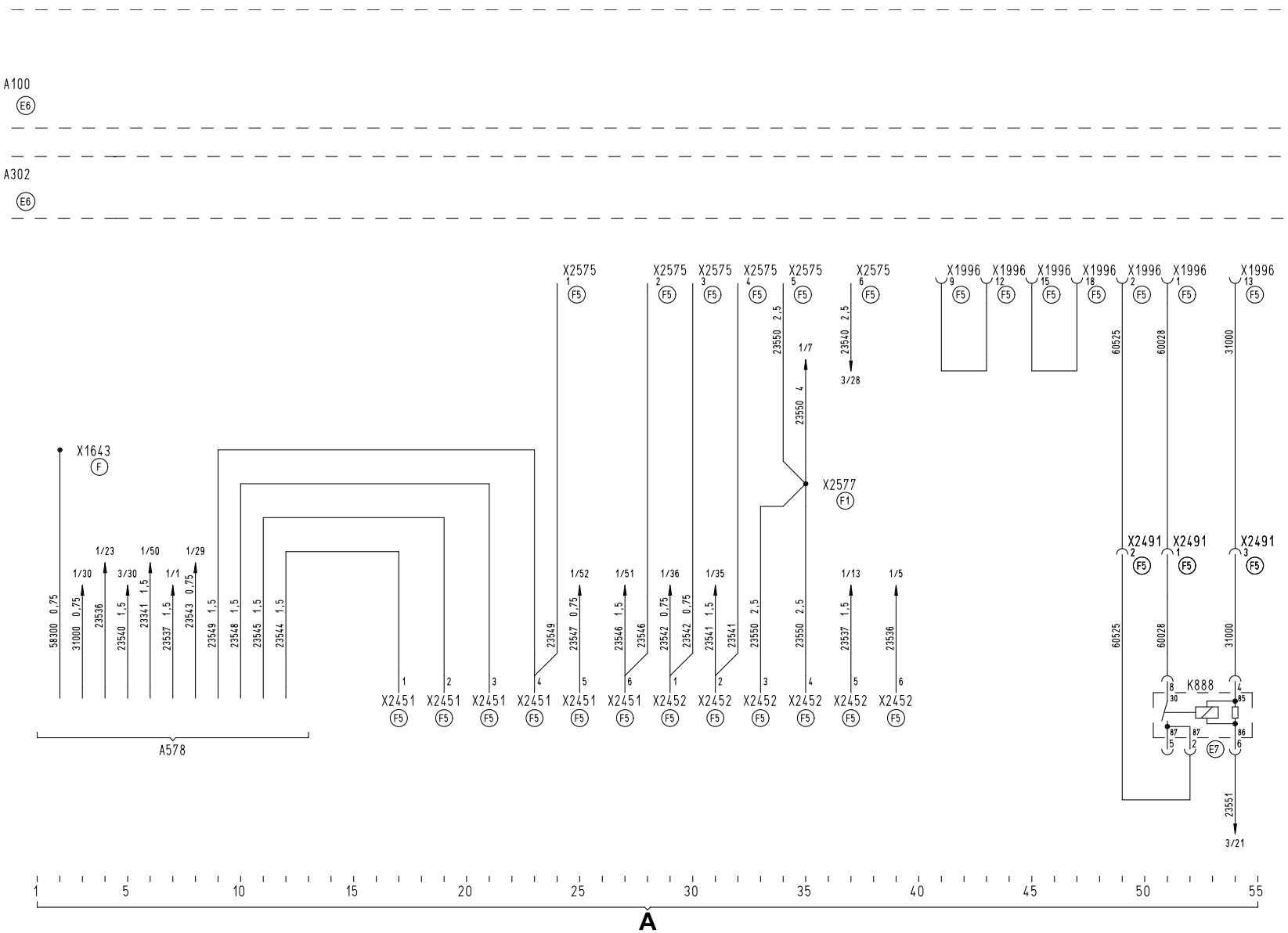
Wiring diagram no. **81.99192.1468** Sheet **2** of 3



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A403	(339)	Vehicle management computer
H408	(155)	Indicator light block, cooling, superstructure, tractor vehicle
H409	(155)	Indicator light block, cooling, superstructure, trailer
H410	(104)	Indicator light, cooling, superstructure, tractor vehicle
H411	(104)	Indicator light, cooling, superstructure, trailer
H412	(104)	Indicator light, cooling, superstructure, defrost, tractor vehicle
H413	(104)	Indicator light, cooling, superstructure, defrost, trailer
K871	(281)	Relay, start inhibitor for cooling superstructure
V779	(117)	Diode group, ZDR/cooling superstructure
V780		Diode, ZDR/cooling superstructure, tractor vehicle
V781		Diode, ZDR/cooling superstructure, trailer
X669		Stvd. start inhibitor
X1644		Earthing point, cab, adjacent to central fuse, relay and terminal block
X1757		Soldered connector, line 16006
X2453		Stvd. cooling superstructure
X2460	(221)	Crimped connector, line 23540
X2541	(246)	Potential distributor, 21-pin line 31000
X2576		Stvd. cooling superstructure

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

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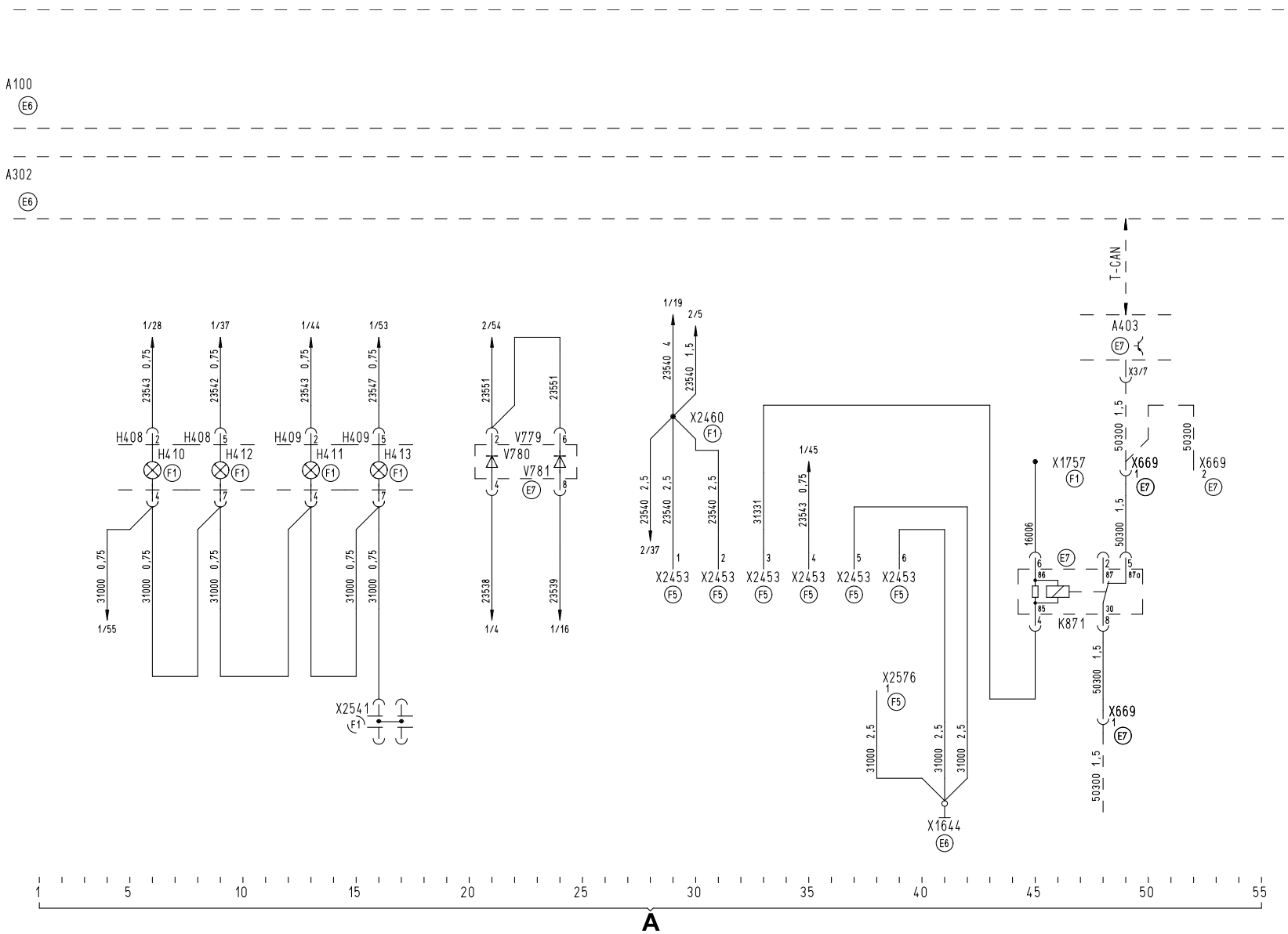
Wiring diagram no. **81.99192.1468** Sheet **3** of 3



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A408	(403)	Tachograph
A557		LSVA recording device
F128	(101)	Fuse, permanent consumer
F376	(101)	Fuse, cab interior (terminal 15)
V712	(117)	Diode group, load detection, trailer
V716		Diode, load detection, trailer
V717		Diode, load detection, trailer
X1536		Stvd. cab tachograph
X1540		Stvd. frame I
X1586		Stvd. connection to trailer lighting socket 1
X1639		Soldered connector, line 16000
X2328		Stvd. 2-pin adaptation trailer light
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

- (I) Battery 1

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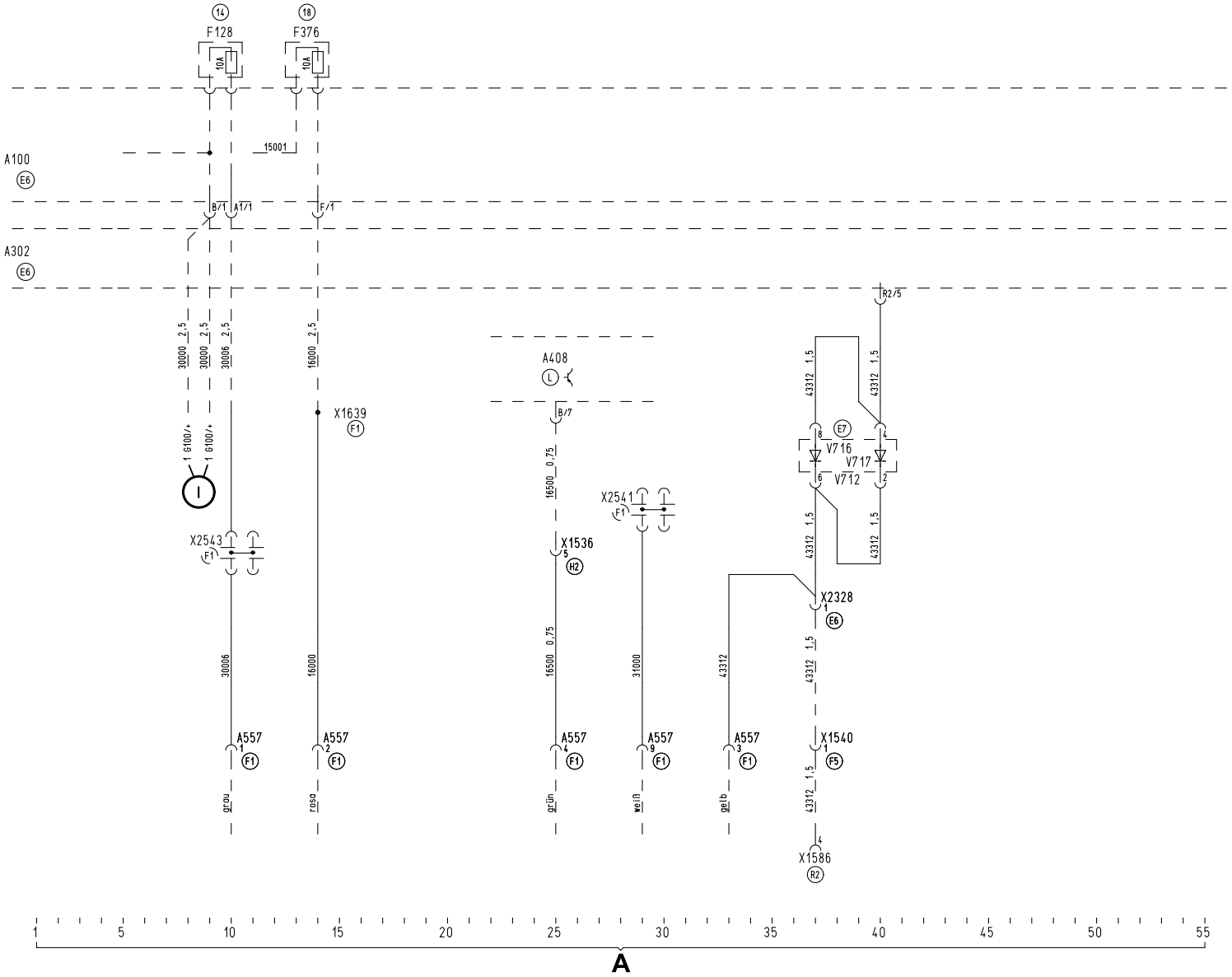
Wiring diagram no. **81.99192.1464** Sheet **1** of 1



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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

- (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) Roll up cables behind cab

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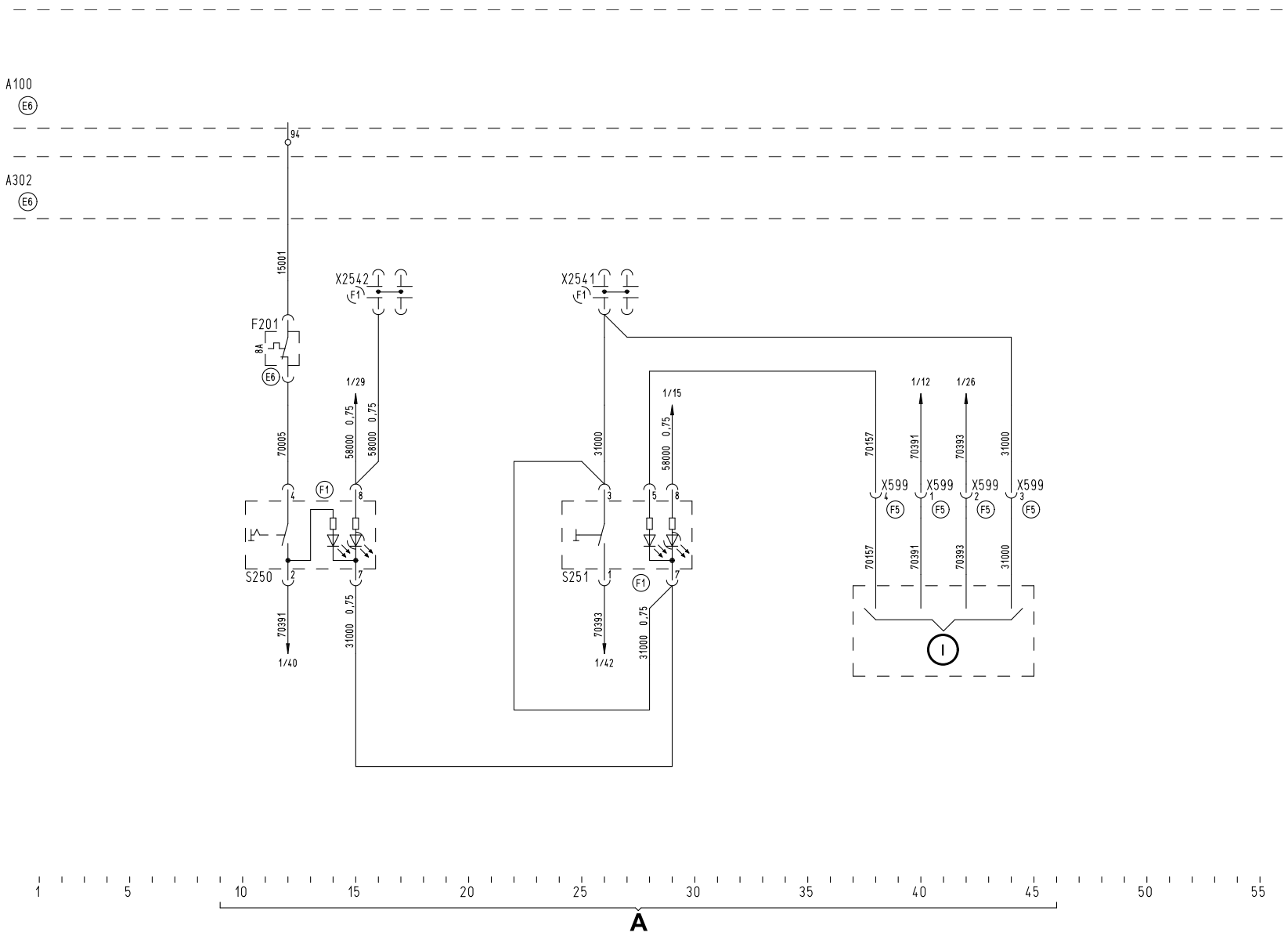
Wiring diagram no. **81.99192.1465** Sheet **1** of 1



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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

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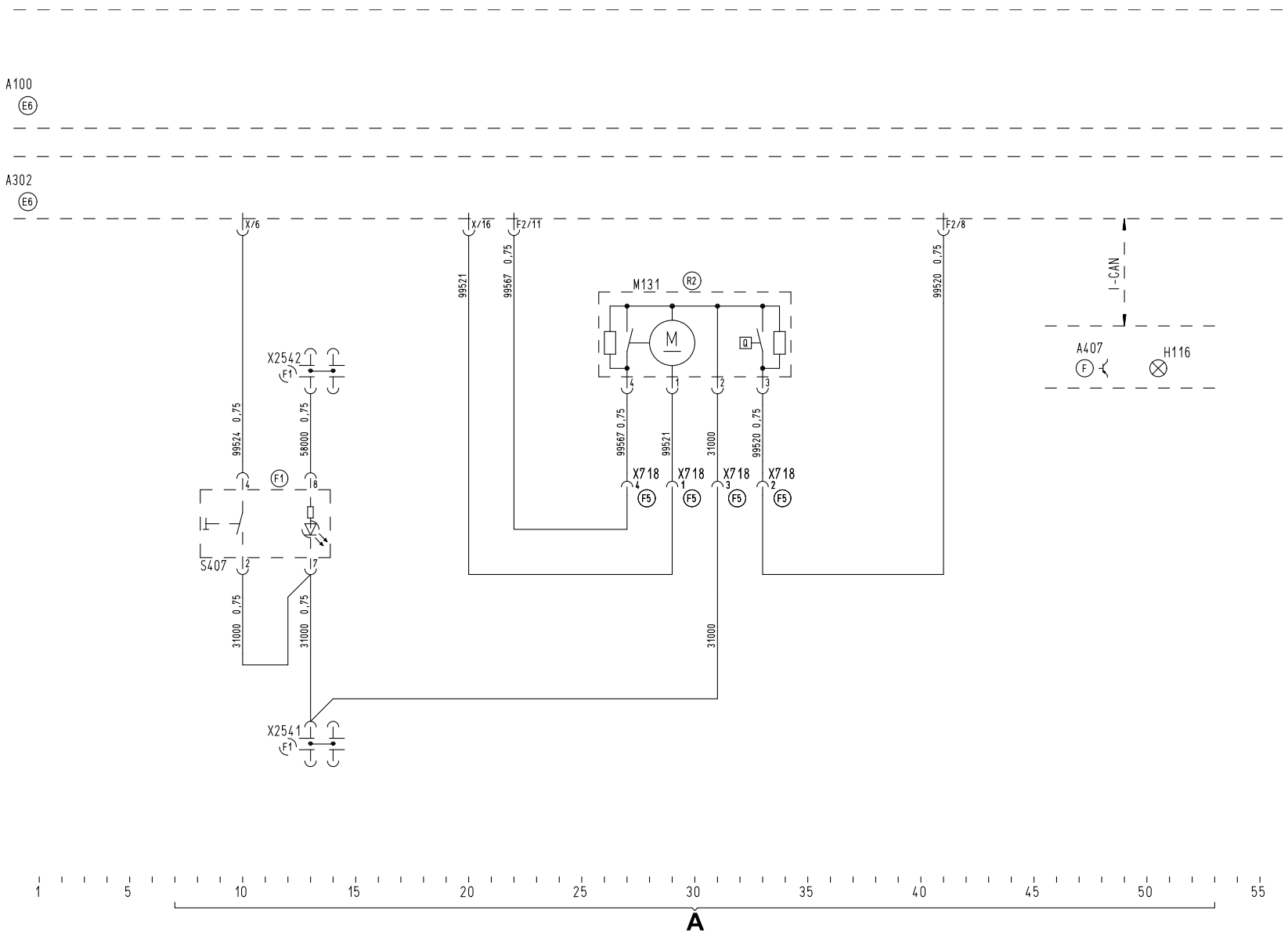
Wiring diagram no. **81.99192.1466** Sheet **1** of 1



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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
- (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

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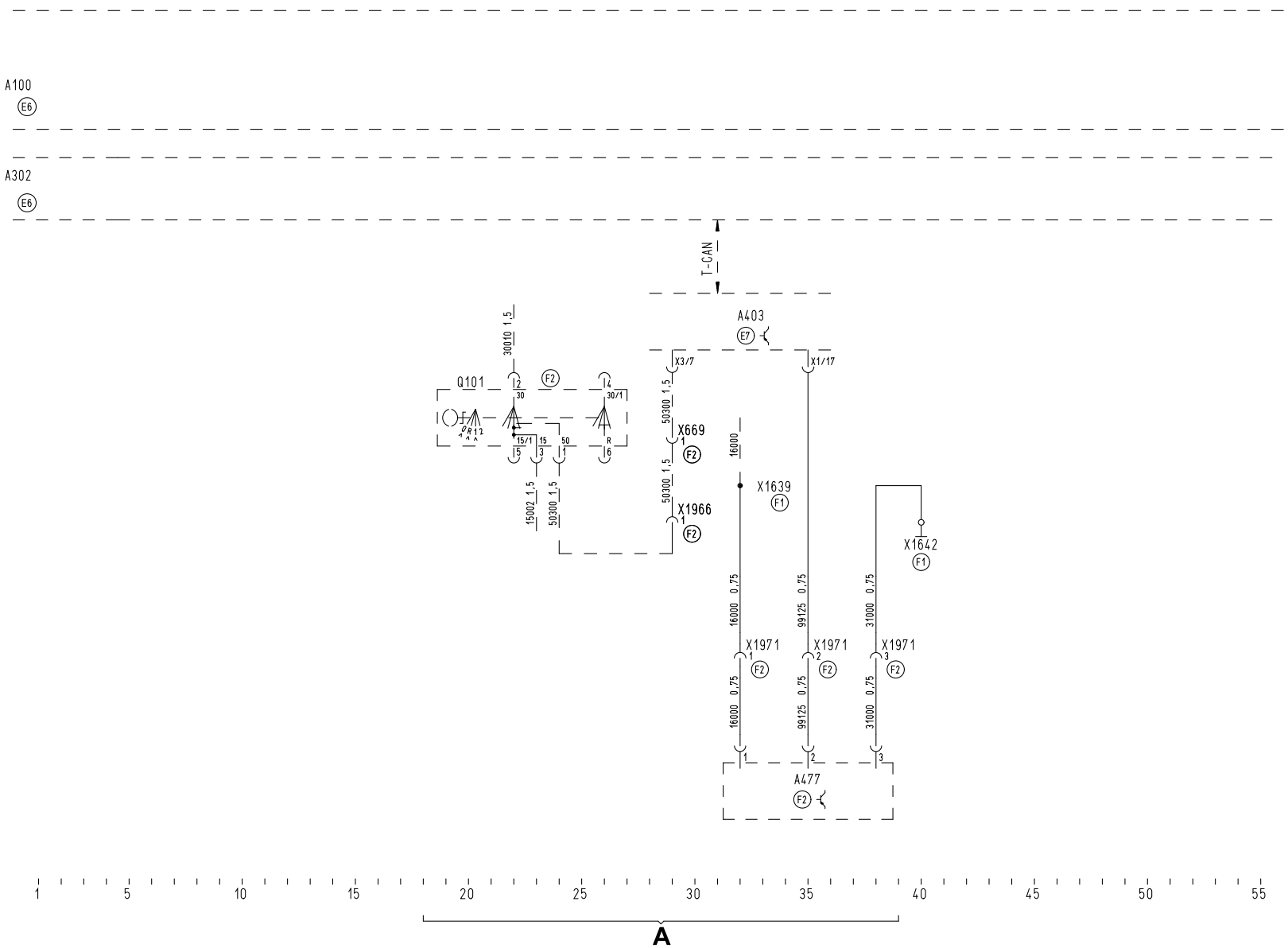
Wiring diagram no. **81.99192.2476** Sheet **1** of 1



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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
- (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

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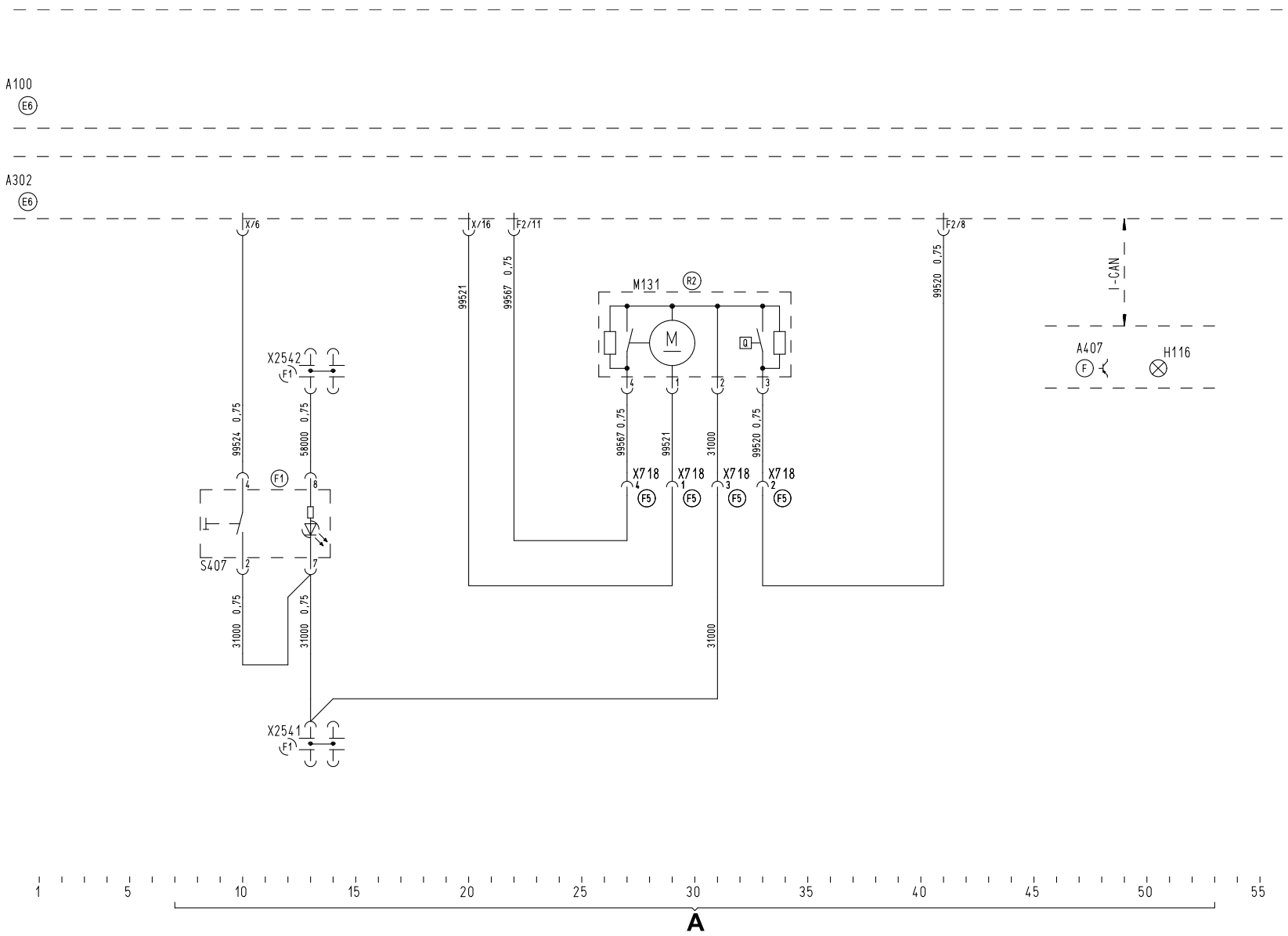
Wiring diagram no. **81.99192.1467** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A290	(379)	Keypad for supplementary heating (clock/thermostat)
A302	(352)	Central computer 2
A483	(380)	Scope of delivery: supplementary hot-air heating
F185	(129)	Fuse, supplementary heating
M123	(152)	Metering pump, supplementary heating
V188	(120)	Diode group, 8 times, for battery emergency shutdown switch
X546		Stvd. supplementary heating, battery main switch, electrical
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
X2182		Stvd. TRS shutdown, air 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

- (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 of delivery from Eberspächer

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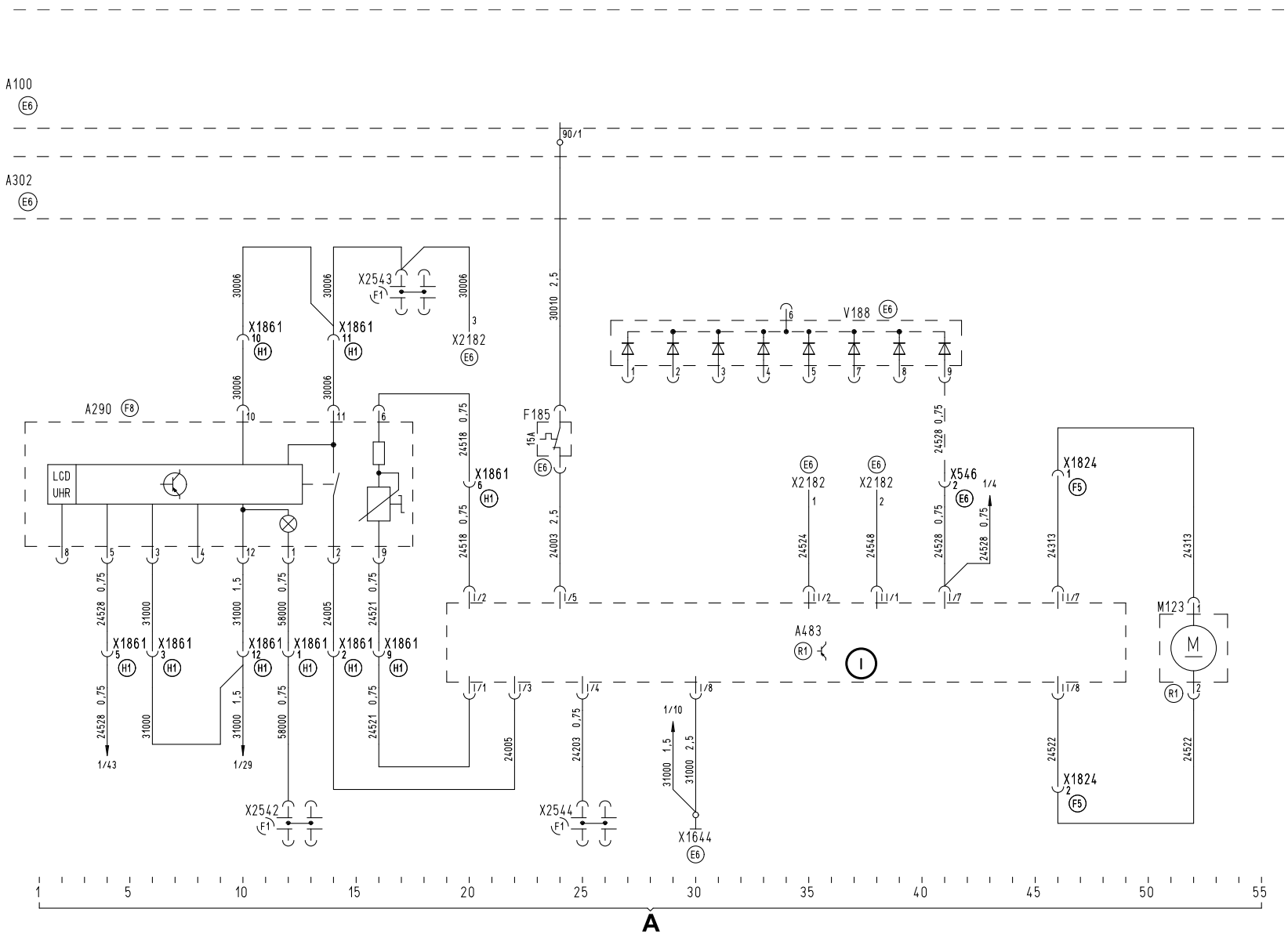
Wiring diagram no. **81.99192.1472** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A290	(379)	Keypad for supplementary heating (clock/thermostat)
A302	(352)	Central computer 2
A483	(380)	Scope of delivery: supplementary hot-air heating
F185	(129)	Fuse, supplementary heating
F376	(101)	Fuse, cab interior (terminal 15)
M123	(152)	Metering pump, supplementary heating
V188	(120)	Diode group, 8 times, for battery emergency shutdown switch
X546		Stvd. supplementary heating, battery main switch, electrical
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

- (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 of delivery from Eberspächer

(II) LCD clock

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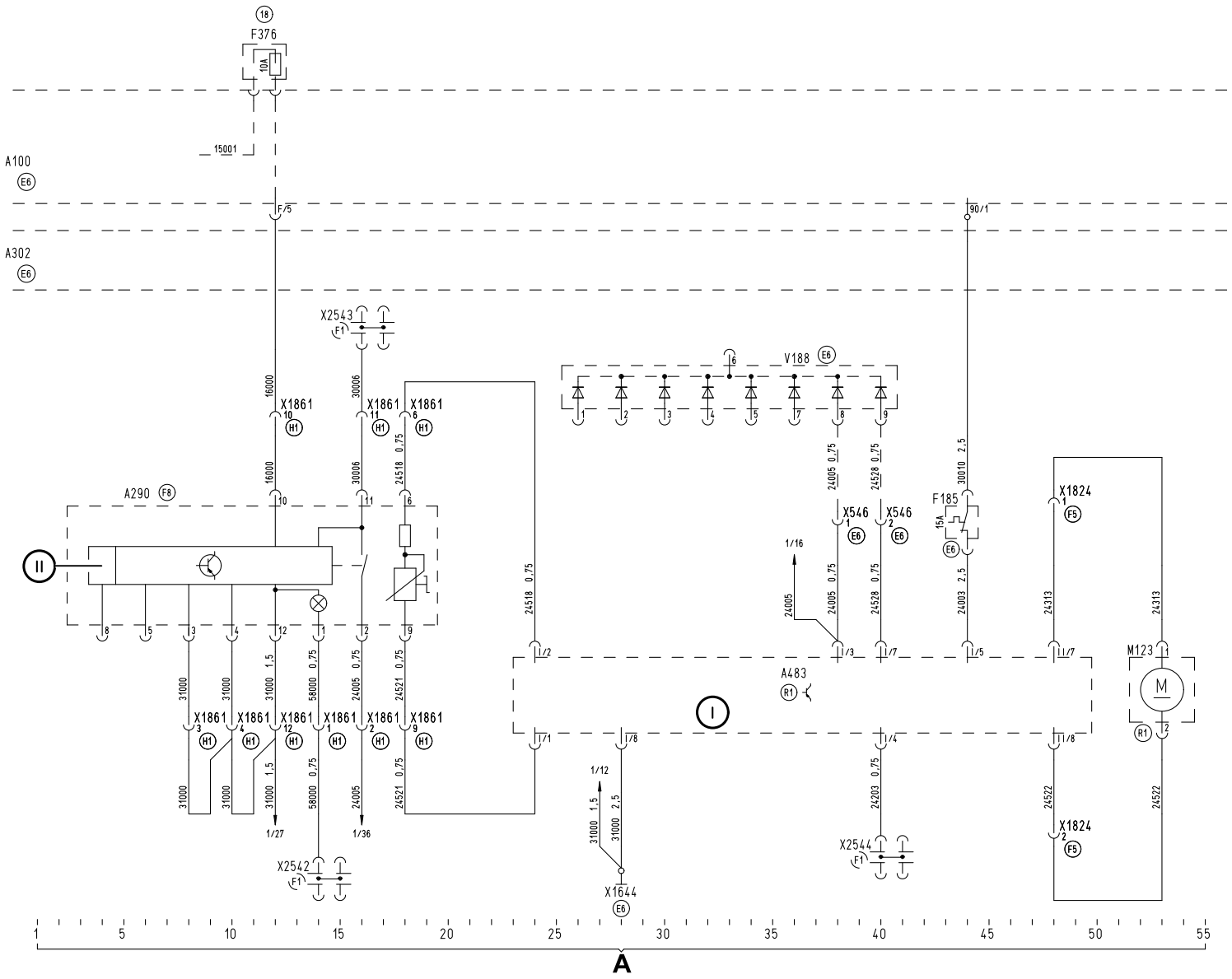
Wiring diagram no. **81.99192.1471** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A494	(510)	Auxiliary water heating
A625	(508)	Keypad, supplementary water heating
F284	(129)	Fuse, supplementary heating
F376	(101)	Fuse, cab interior (terminal 15)
M180	(153)	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
- (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 of delivery from Eberspächer

(II) LCD clock

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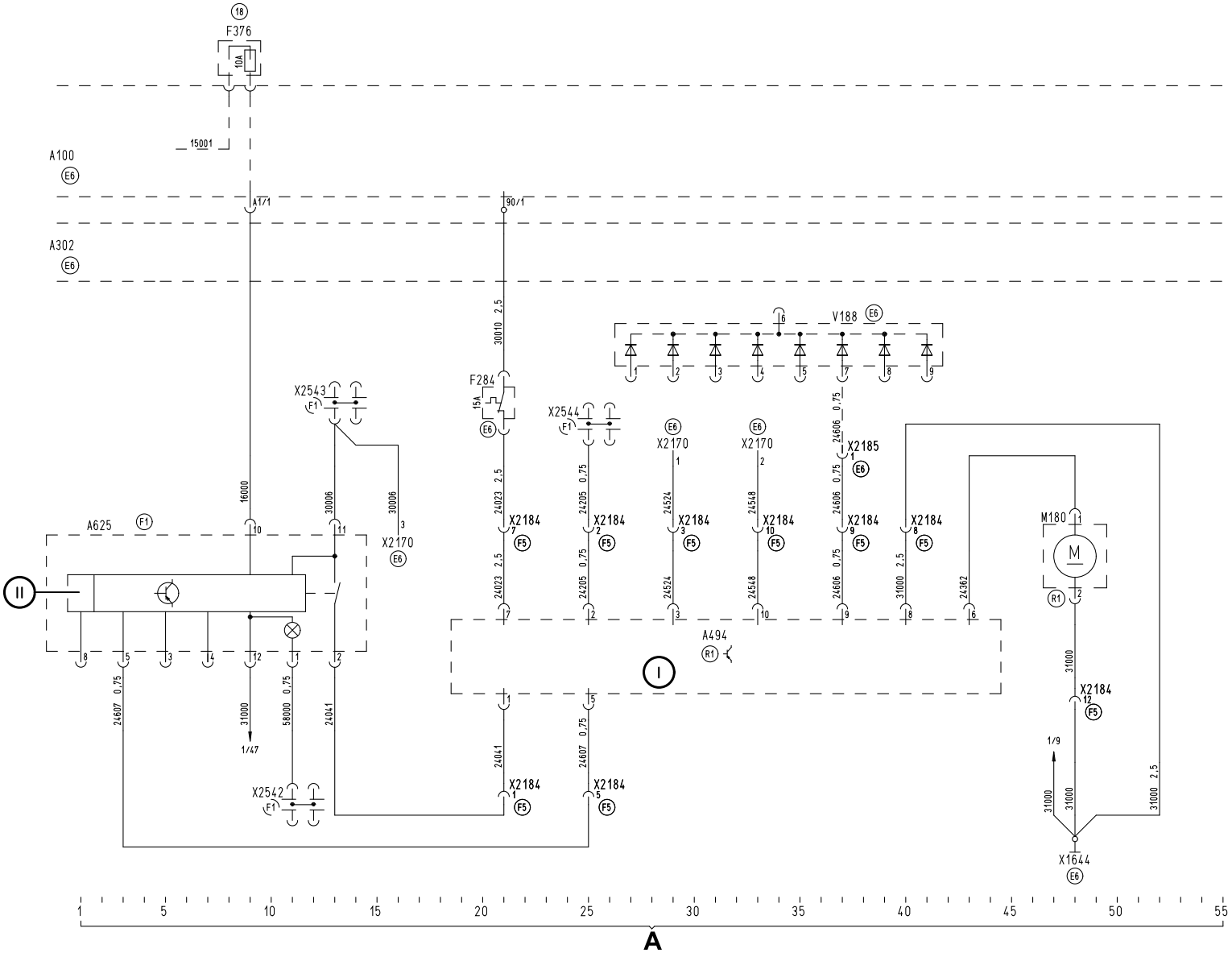
Wiring diagram no. **81.99192.1478** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A494	(510)	Auxiliary water heating
A625	(508)	Keypad, supplementary water heating
F284	(129)	Fuse, supplementary heating
F376	(101)	Fuse, cab interior (terminal 15)
M180	(153)	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
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
- (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 of delivery from Eberspächer

(II) LCD clock

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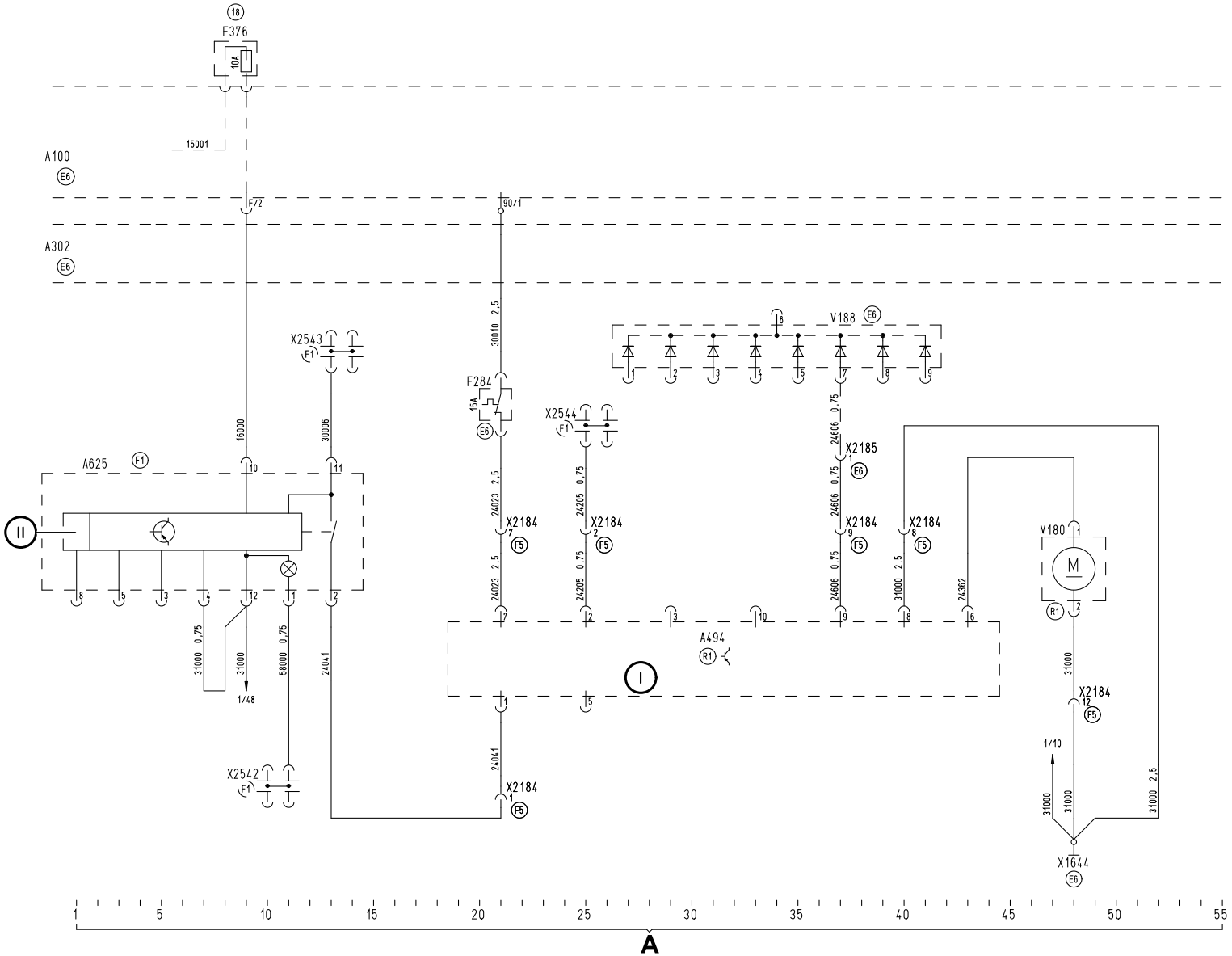
Wiring diagram no. **81.99192.1477** Sheet **1** of 1



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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
- (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 of delivery, Webasto

(II) LCD clock

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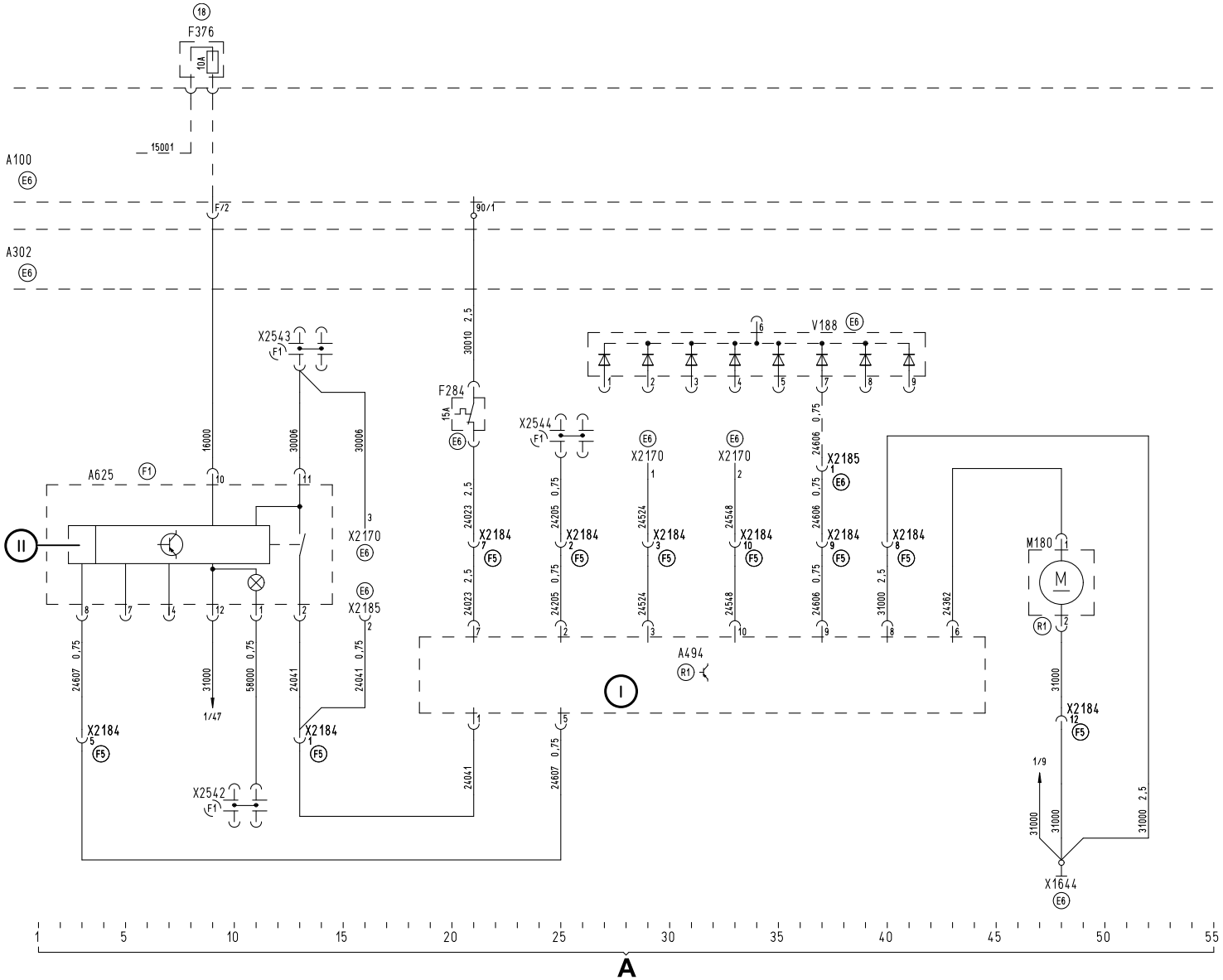
Wiring diagram no. **81.99192.1476** Sheet **1** of 1



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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

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
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
- (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 of delivery, Webasto

(II) LCD clock

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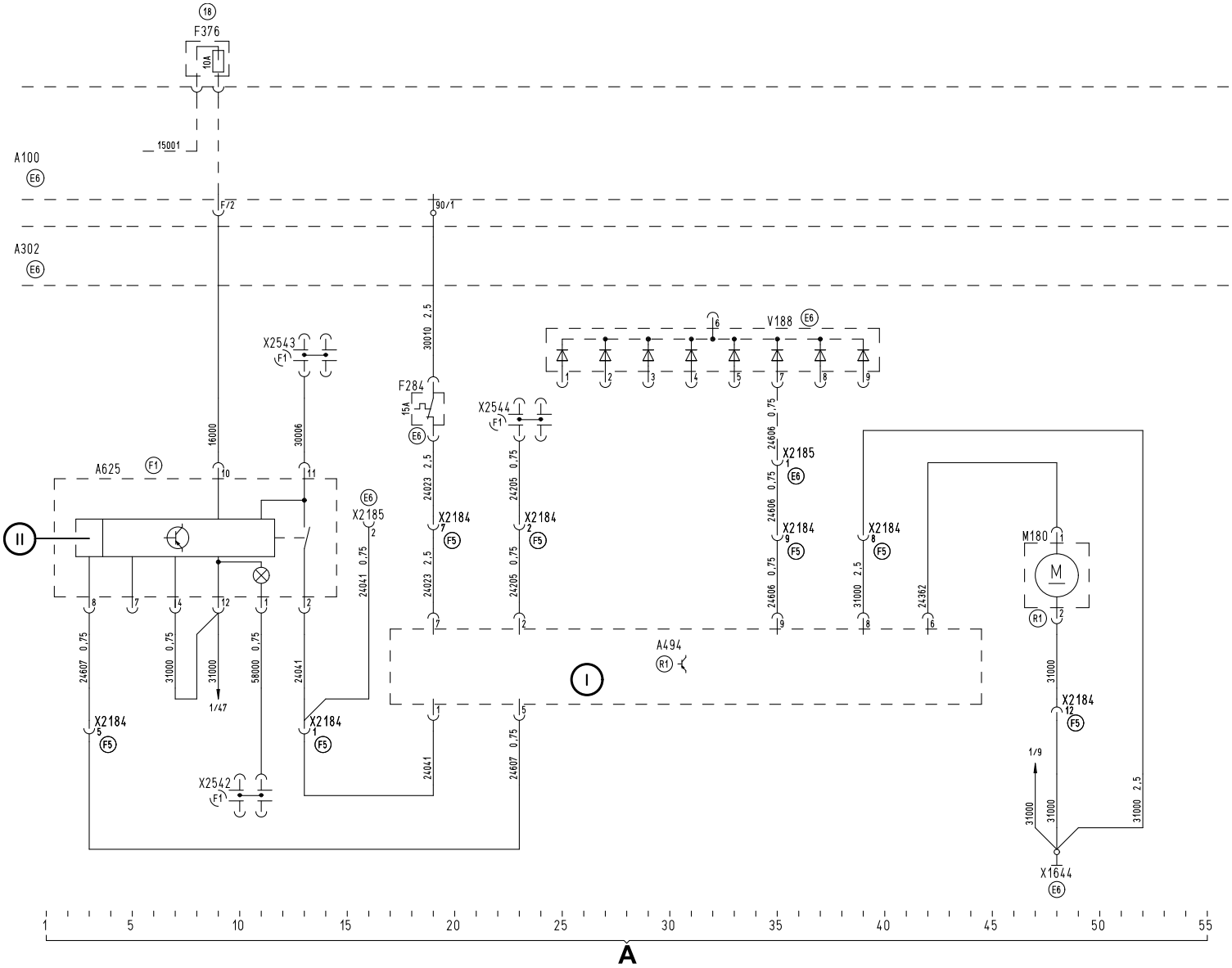
Wiring diagram no. **81.99192.1475** Sheet **1** of 1



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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

- (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) Power take-off 1
- (II) Power take-off 2

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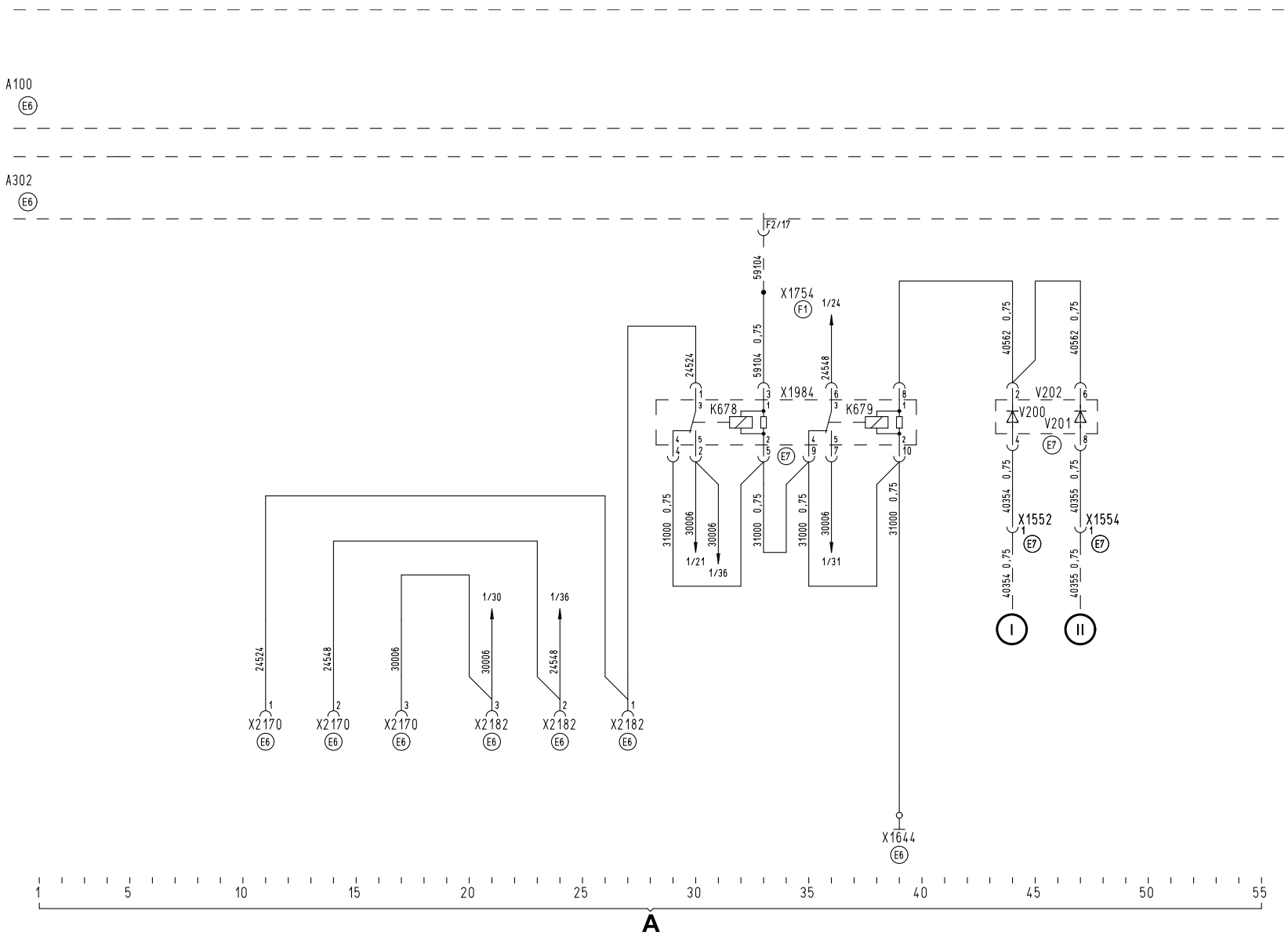
Wiring diagram no. **81.99192.2621** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A290	(395)	Keypad for supplementary heating (clock/thermostat)
A302	(352)	Central computer 2
A489	(396)	Supplementary gas heating
F185	(122)	Fuse, 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
X1861		Stvd. cab keypad, supplementary heating
X2182		Stvd. TRS shutdown, hot-air heating
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

(I) Scope of delivery, Truma

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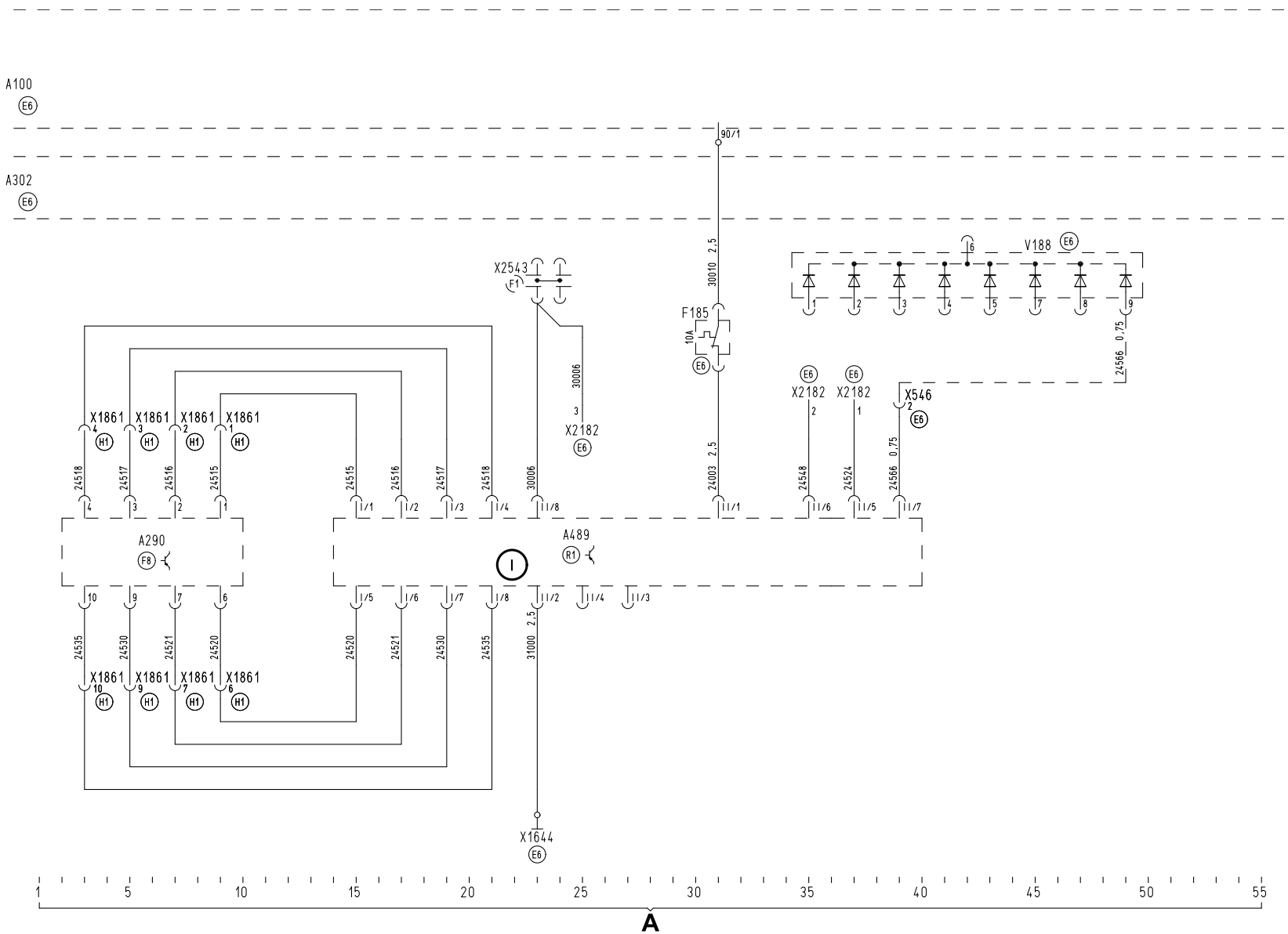
Wiring diagram no. **81.99192.1480** Sheet **1** of 1



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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

A100	(255)	Central fuse, relay and terminal block
A290	(395)	Keypad for supplementary heating (clock/thermostat)
A302	(352)	Central computer 2
A489	(396)	Supplementary gas heating
F185	(122)	Fuse, supplementary heating
S114	(575)	Time switch, 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
X1861		Stvd. cab keypad, supplementary heating
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

(I) Scope of delivery, Truma

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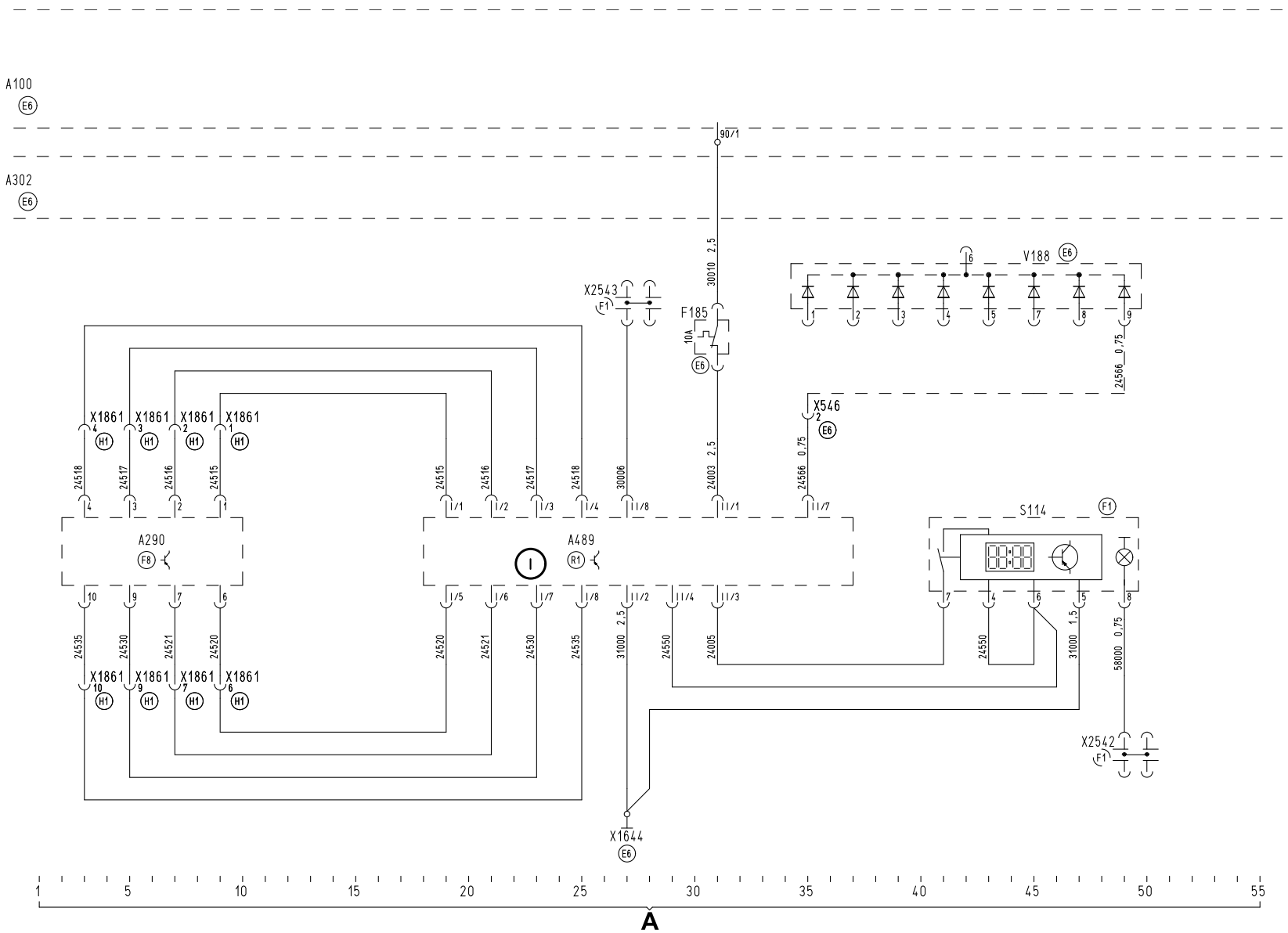
Wiring diagram no. **81.99192.1479** Sheet **1** of 1



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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

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	(158)	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
X2182		Stvd. TRS shutdown, hot-air 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

- (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 of delivery, Webasto

(II) LCD clock

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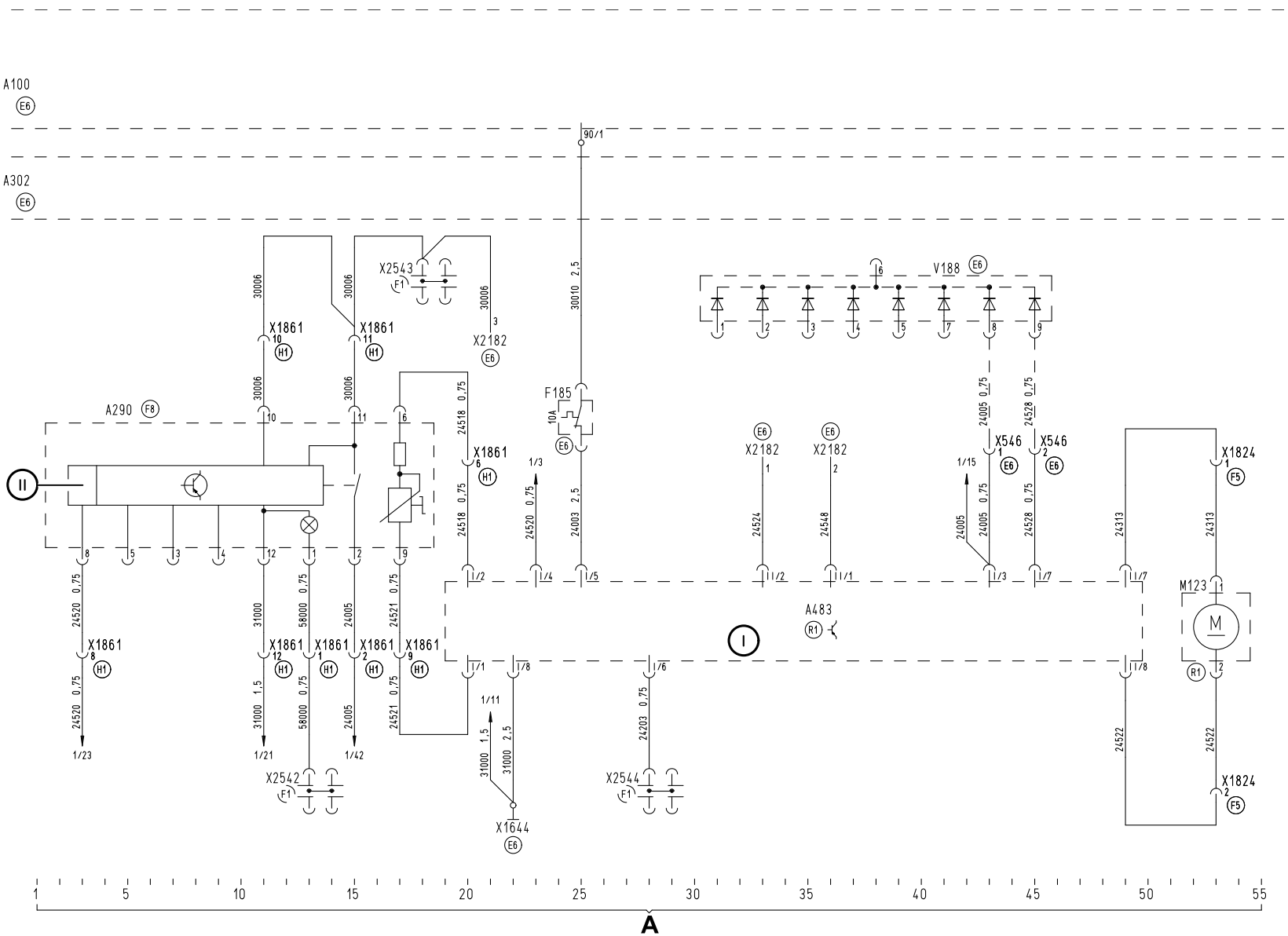
Wiring diagram no. **81.99192.1473** Sheet **1** of 1



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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

- (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 of delivery, Webasto

(II) LCD clock

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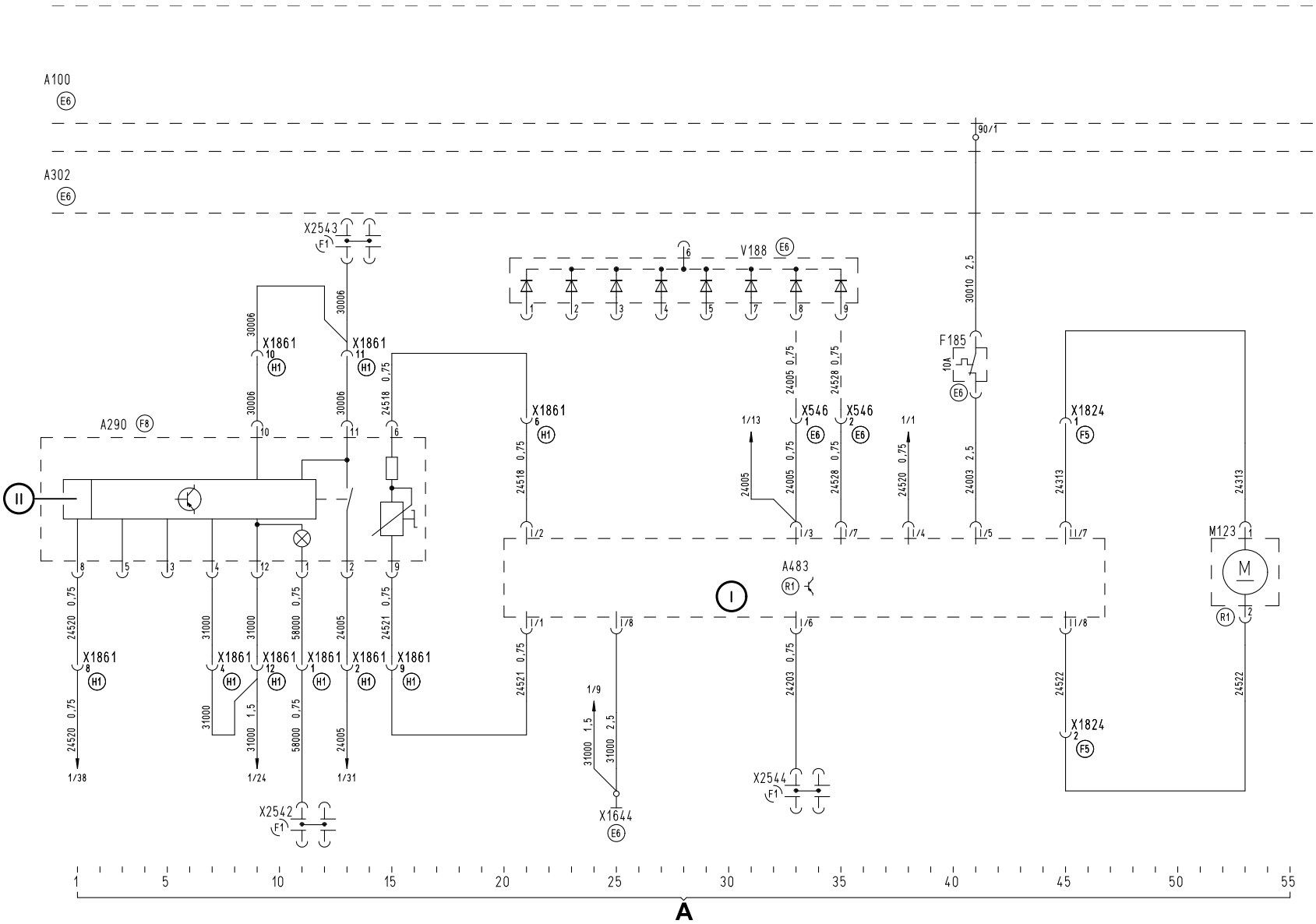
Wiring diagram no. **81.99192.1474** Sheet **1** of 1



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Additional headlight

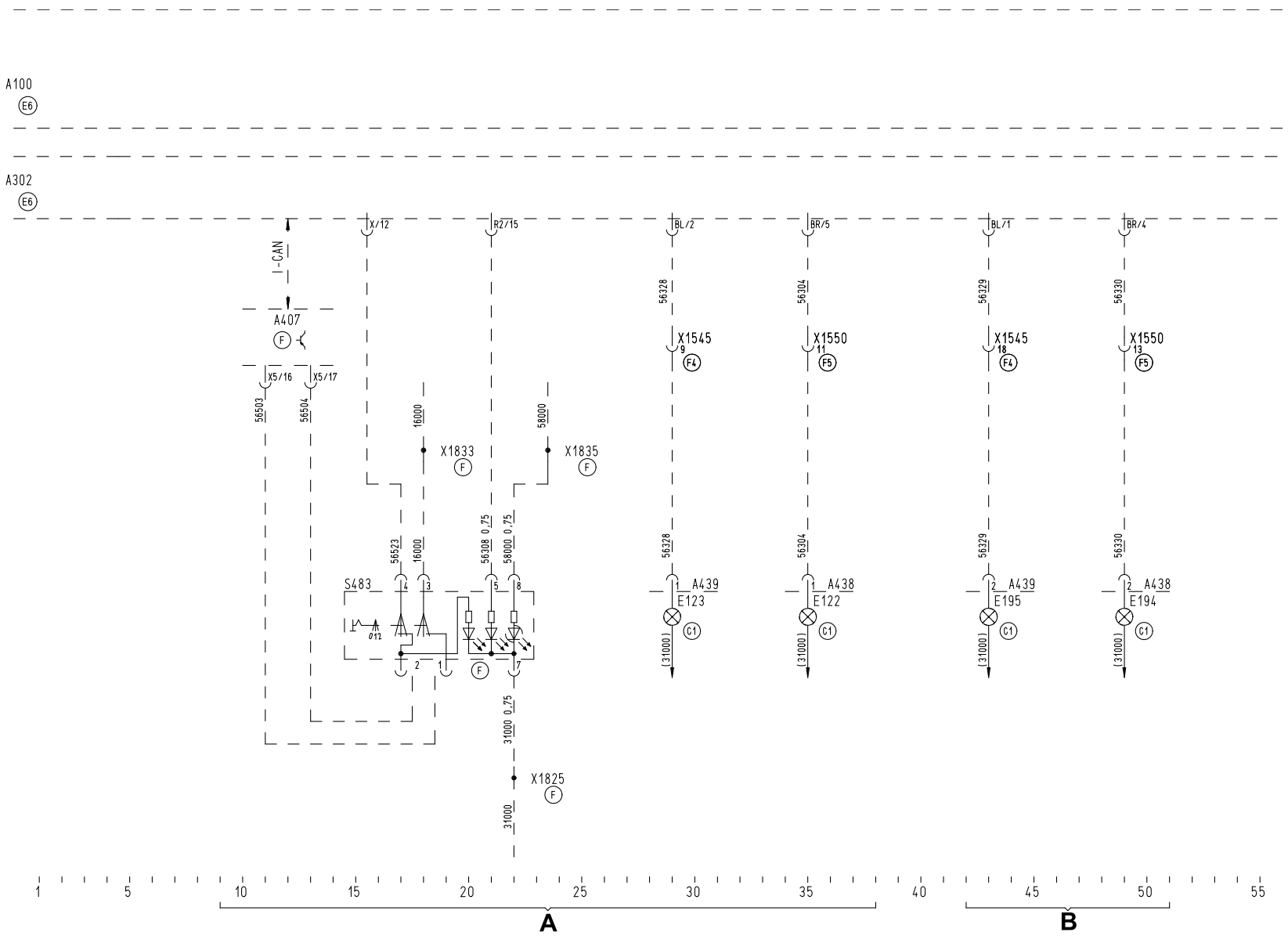
Legend
Wiring diagram no. **81.99192.2461** Sheet **1** of 1
Change status: -

A = Front fog light
B = Additional main beam

A100	(255)	Central fuse, relay and terminal block
A302	(352)	Central computer 2
A407	(342)	Instrumentation
A438		Light strip, right
A439		Light strip, left
E122		Fog lights, right
E123		Fog lights, left
E194		High beam, right
E195		High beam, right
S483	(477)	Switch/control switch combination front fog light/ rear fog lamp
X1545		Stvd. front region, left
X1550		Stvd. front region, right
X1825		Crimped connector, line 31000
X1833		Crimped connector, line 16000
X1835		Crimped connector, 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

https://truckmanualshub.com/

Wiring diagram no. **81.99192.2461** Sheet **1** of 1