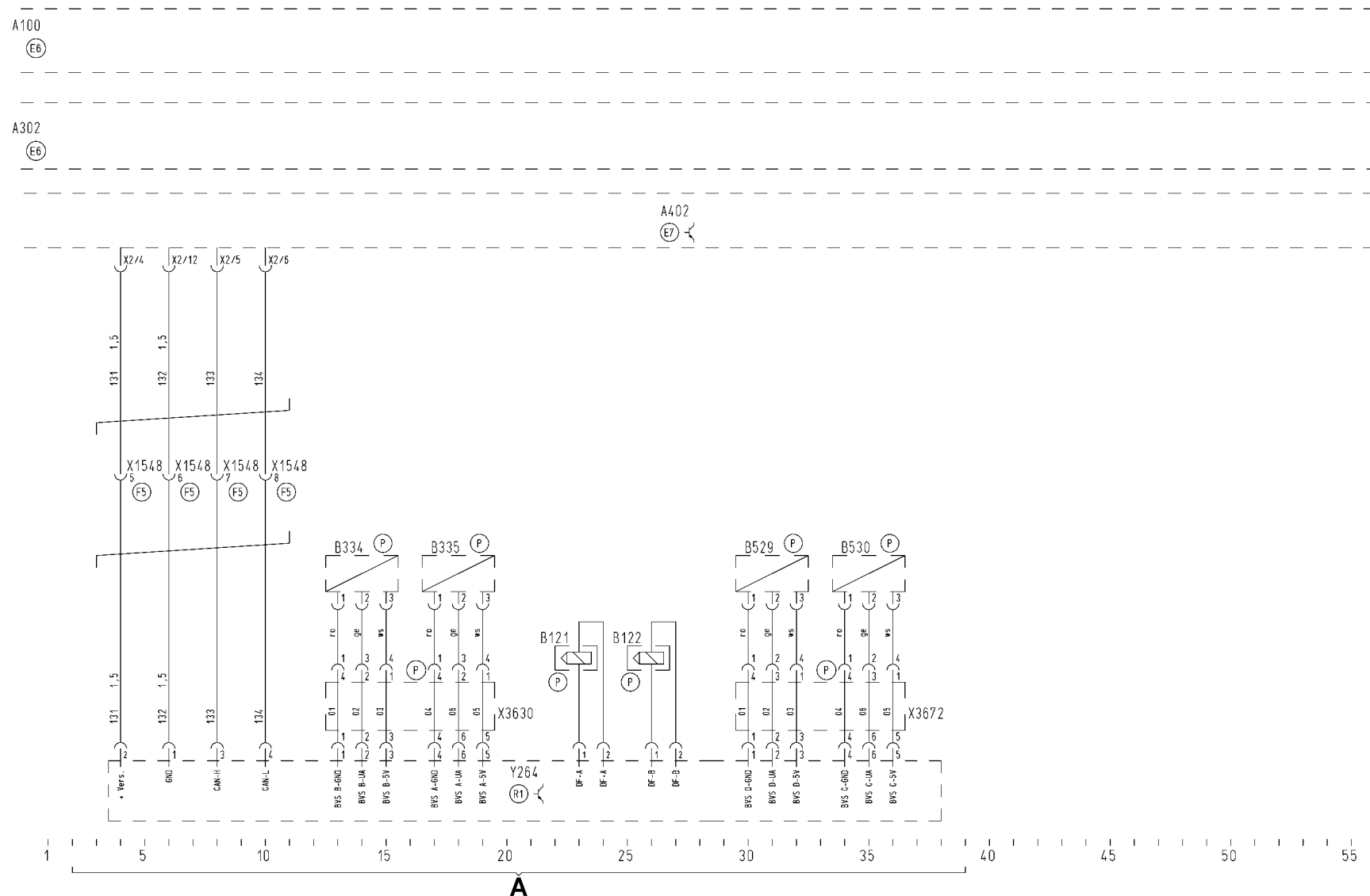


Electronic Brake System EBS 5 (3-axle vehicle) sheet 2 of 4



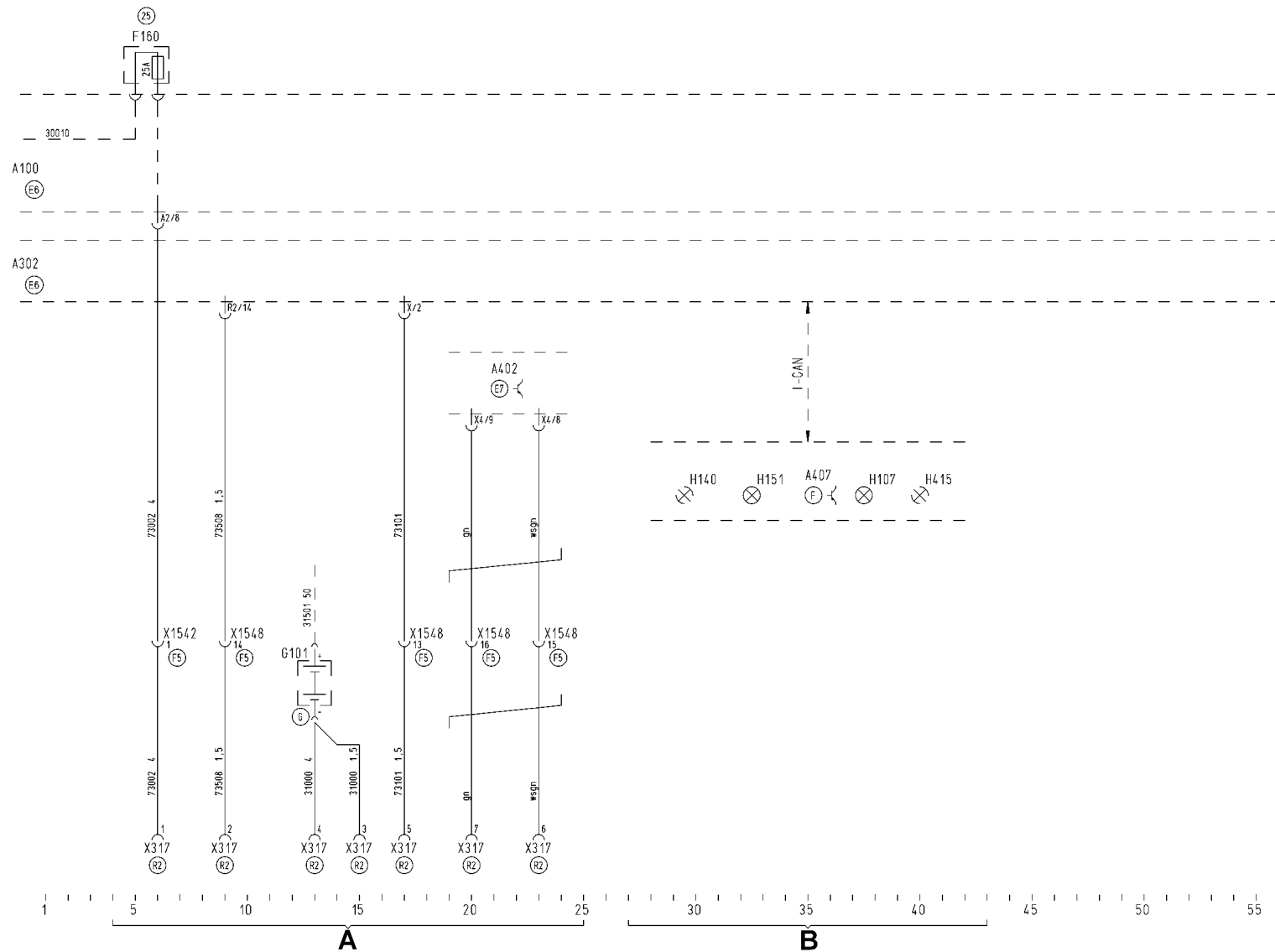
WIRING DIAGRAM NO. 81.99192.3247**Electronic Brake System EBS 5 (3-axle vehicle) sheet 3 of 4**

Date: 11.2005

Legend**A Trailer socket****B Check lamps**

A100	Central electrical system
A302	Central computer 2
A402	Control unit, EBS
A407	Instrumentation
F160	Fuse, EBS (ABS), trailer voltage supply
G101	Battery 2
H107	ABS, tractor/trailer
H140	Check lamp, ASR info
H151	Check lamp, ABS info., trailer
H415	Check lamp, directional stability
X317	Trailer socket, ABS
X1542	Plug conn., frame II
X1548	Plug conn., frame IV

Electronic Brake System EBS 5 (3-axle vehicle) sheet 3 of 4



WIRING DIAGRAM NO. 81.99192.3247**Electronic Brake System EBS 5 (3-axle vehicle) sheet 4 of 4**

Date: 09.2006

Legend

- A Voltage supply**
- B Trailer control module**
- C ASR slip thresholds**

-
- A100** Central electrical system
 - A302** Central computer 2
 - A402** Control unit, EBS
 - F161** Fuse, EBS (ABS), pressure control valve voltage supply
 - F162** Fuse, EBS (ABS), control
 - S256** Button, ASR or ASR/ESP - spin threshold increase
 - X1540** Plug conn., frame I
 - X1548** Plug conn., frame IV
 - X1644** Earthing point, cab, next to central electrical system
 - X2541** Potential distributor, 21-pin, line 31000
 - X4664** Plug conn., ASR
 - X4732** Potential distributor, line 16000, switch lighting
 - Y278** Trailer control module

**Note**

***Connector drop-out detection:** Short-circuit spring insulated by control unit cell X1/15 when inserted. PIN X1/12 and pin X1/18 short-circuit if not inserted!

The diagram illustrates a cable tray layout with three main sections: A, B, and C. Section A (left) shows a cable tray with a width of 1500 mm and a height of 300 mm. It contains two cable bundles, F161 and F162, each with a 15A rating. Section B (middle) shows a cable tray with a width of 1500 mm and a height of 300 mm. It contains a cable bundle X1644 and a cable bundle X1645. Section C (right) shows a cable tray with a width of 1500 mm and a height of 300 mm. It contains a cable bundle X1646 and a cable bundle X1647. The drawing includes various cable labels, dimensions, and a scale bar at the bottom.

WIRING DIAGRAM NO. 81.99192.3250**ECAS 2 (4x2) sheet 1 of 2**

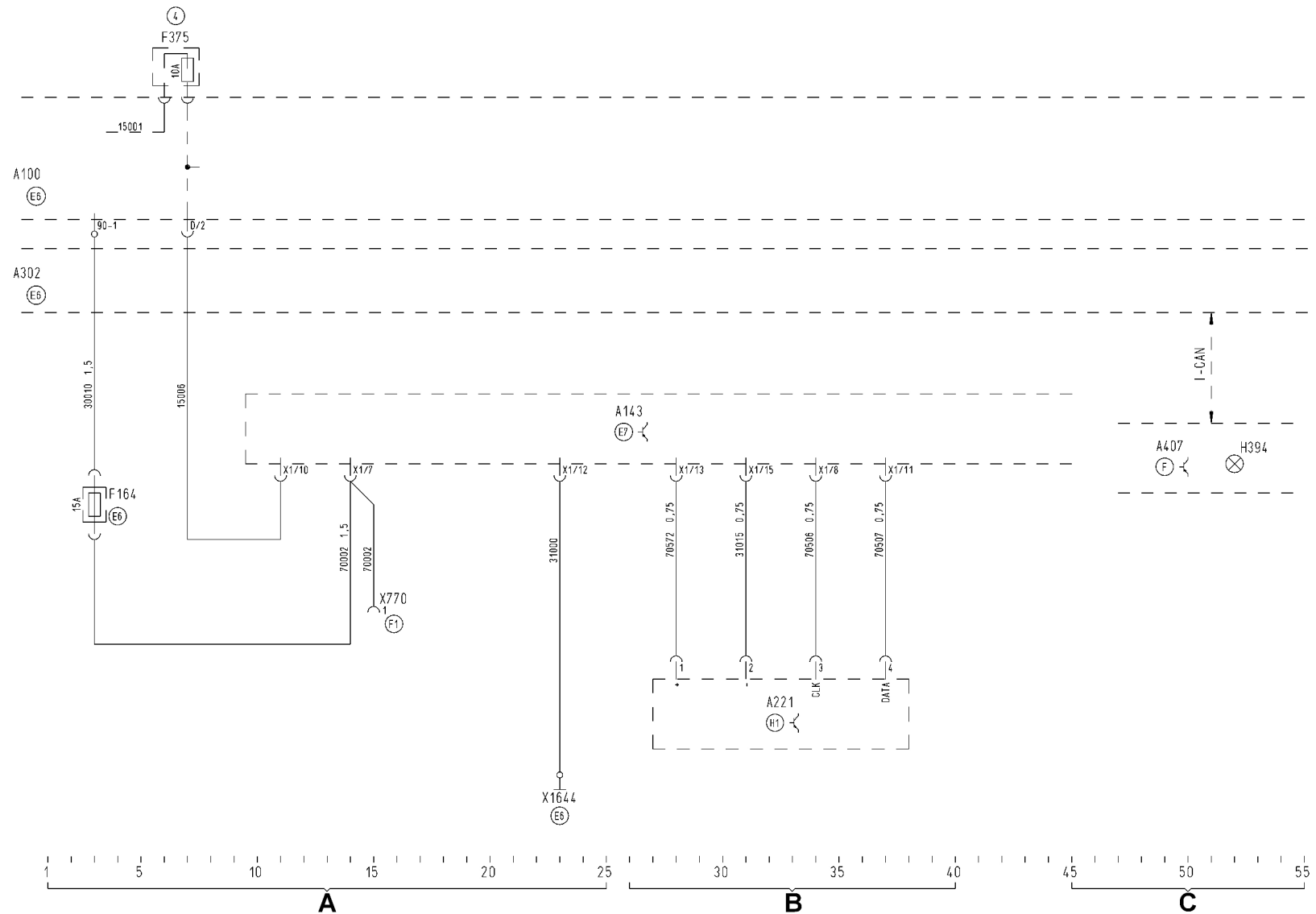
Date: 09.06

Legend

- A Voltage supply**
- B Remote control**
- C Check lamp**

A100	Central electrical system
A143	Control unit, ECAS
A221	Remote control, ECAS
A302	Central computer 2
A407	Instrumentation
F164	Fuse, ECAS (terminal 30)
F375	Fuse, cab, outside (terminal 15)
H394	Check lamp, ECAS, fault/warning
X770	Plug conn., ECAS ride height II
X1644	Earthing point, cab, next to central electrical system

ECAS 2 (4x2) sheet 1 of 2



WIRING DIAGRAM NO. 81.99192.3250

ECAS 2 (4x2) sheet 2 of 2

Date: 11.05

Legend

- A Position sensors**
- B Pressure sensors**
- C Solenoid valves**

A100	Central electrical system
A143	Control unit, ECAS
A302	Central computer 2
B129	Position sensor, rear axle, left
B130	Position sensor, rear axle, right
X1945	Plug conn., ECAS/CDC
Y132	Valve block, ECAS

The diagram illustrates a 55-pin connector layout, divided into three main sections: A, B, and C. The pins are numbered 1 through 55 along the bottom edge.

- Section A (Pins 1-15):** This section contains several components. Pins 1, 2, 3, and 4 are connected to X1945 (F5). Pins 5, 6, 7, and 8 are connected to X1945 (F5). Pins 9, 10, 11, and 12 are connected to X1945 (F5). Pins 13, 14, and 15 are connected to X1945 (F5). Pins 16, 17, 18, and 19 are connected to X1945 (F5). Pins 20, 21, 22, and 23 are connected to X1945 (F5). Pins 24, 25, 26, and 27 are connected to X1945 (F5). Pins 28, 29, 30, and 31 are connected to X1945 (F5). Pins 32, 33, 34, and 35 are connected to X1945 (F5). Pins 36, 37, 38, and 39 are connected to X1945 (F5). Pins 40, 41, 42, and 43 are connected to X1945 (F5). Pins 44, 45, 46, and 47 are connected to X1945 (F5). Pins 48, 49, 50, and 51 are connected to X1945 (F5). Pins 52, 53, 54, and 55 are connected to X1945 (F5).
- Section B (Pins 16-35):** This section is mostly empty, with only a few pins (16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35) connected to X1945 (F5).
- Section C (Pins 36-55):** This section contains several components. Pins 36, 37, 38, and 39 are connected to X1945 (F5). Pins 40, 41, 42, and 43 are connected to X1945 (F5). Pins 44, 45, 46, and 47 are connected to X1945 (F5). Pins 48, 49, 50, and 51 are connected to X1945 (F5). Pins 52, 53, 54, and 55 are connected to X1945 (F5).

A dashed box labeled "I-CAN" is located on the right side of the diagram, spanning pins 48 through 55.

WIRING DIAGRAM NO. 81.99192.3248**ECAS 2 (4x2 - semitrailer) sheet 1 of 2**

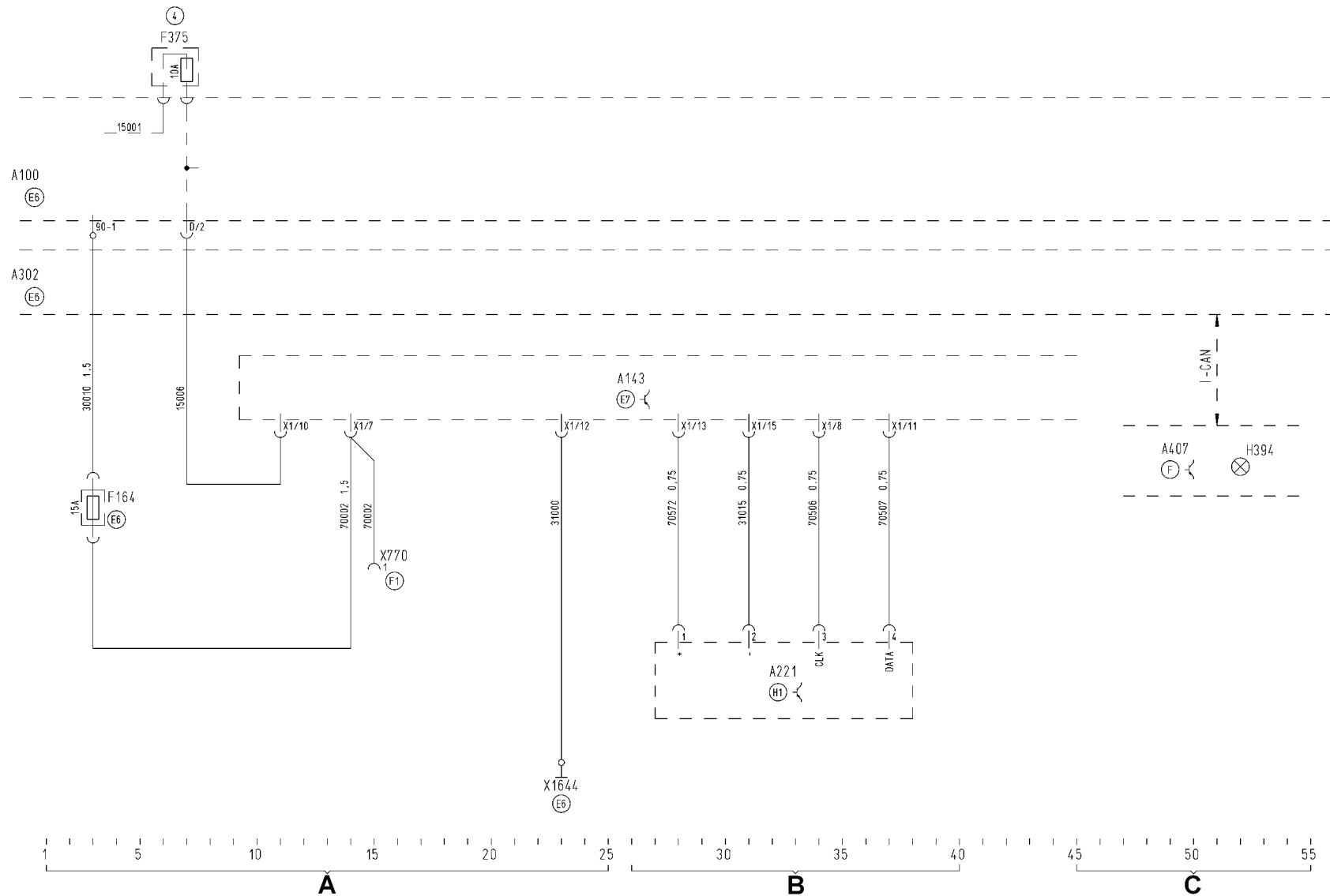
Date: 09.06

Legend

- A Voltage supply**
- B Remote control**
- C Check lamp**

A100	Central electrical system
A143	Control unit, ECAS
A221	Remote control, ECAS
A302	Central computer 2
A407	Instrumentation
F164	Fuse, ECAS (terminal 30)
F375	Fuse, cab, outside (terminal 15)
H394	Check lamp, ECAS, fault/warning
X770	Plug conn., ECAS ride height II
X1644	Earthing point, cab, next to central electrical system

ECAS 2 (4x2 - semitrailer) sheet 1 of 2



WIRING DIAGRAM NO. 81.99192.3248**ECAS 2 (4x2 - semitrailer) sheet 2 of 2**

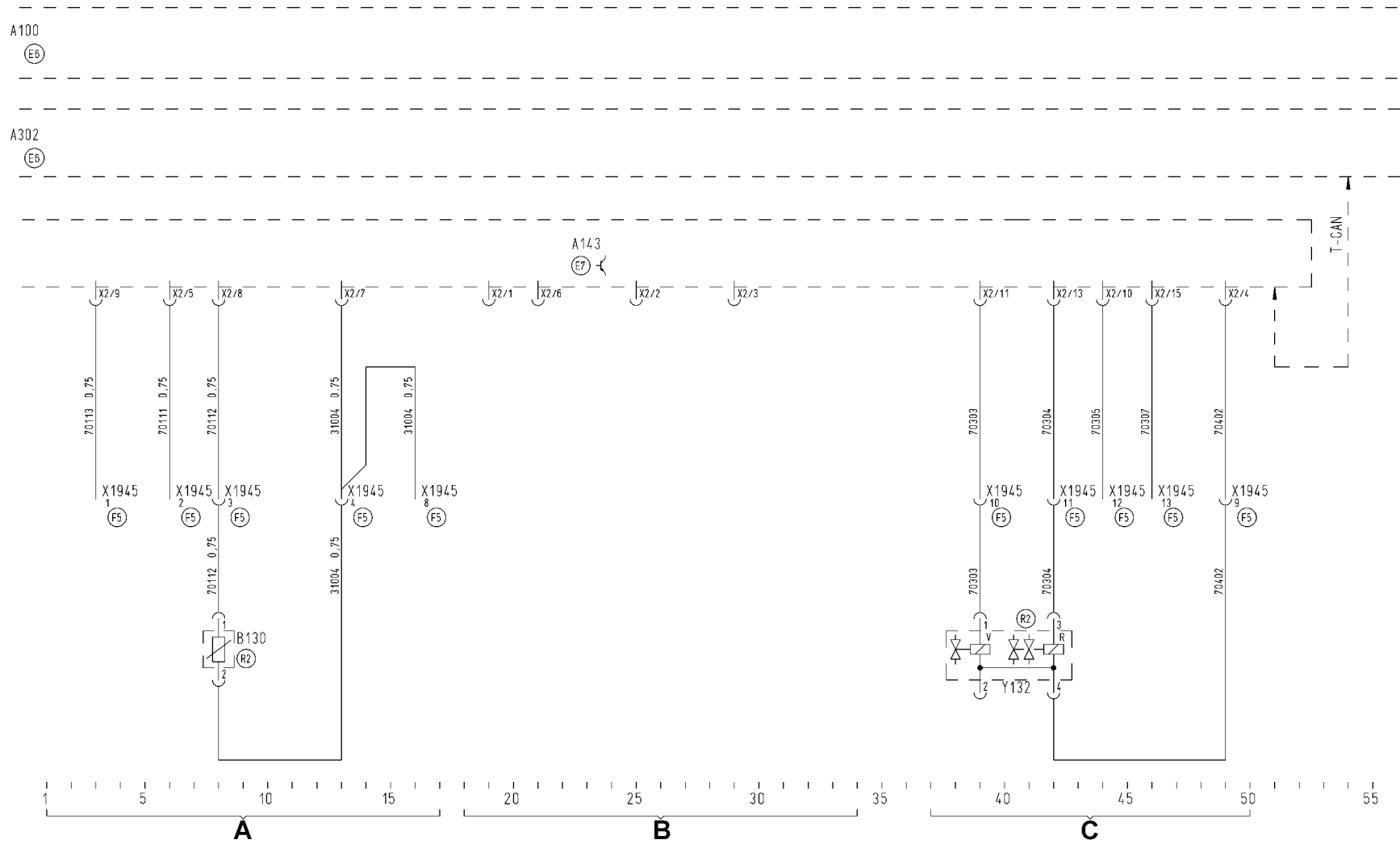
Date: 11.05

Legend

- A Position sensors**
- B Pressure sensors**
- C Solenoid valves**

A100	Central electrical system
A143	Control unit, ECAS
A302	Central computer 2
B130	Position sensor, rear axle, right
X1945	Plug conn., ECAS/CDC
Y132	Valve block, ECAS

ECAS 2 (4x2 - semitrailer) sheet 2 of 2



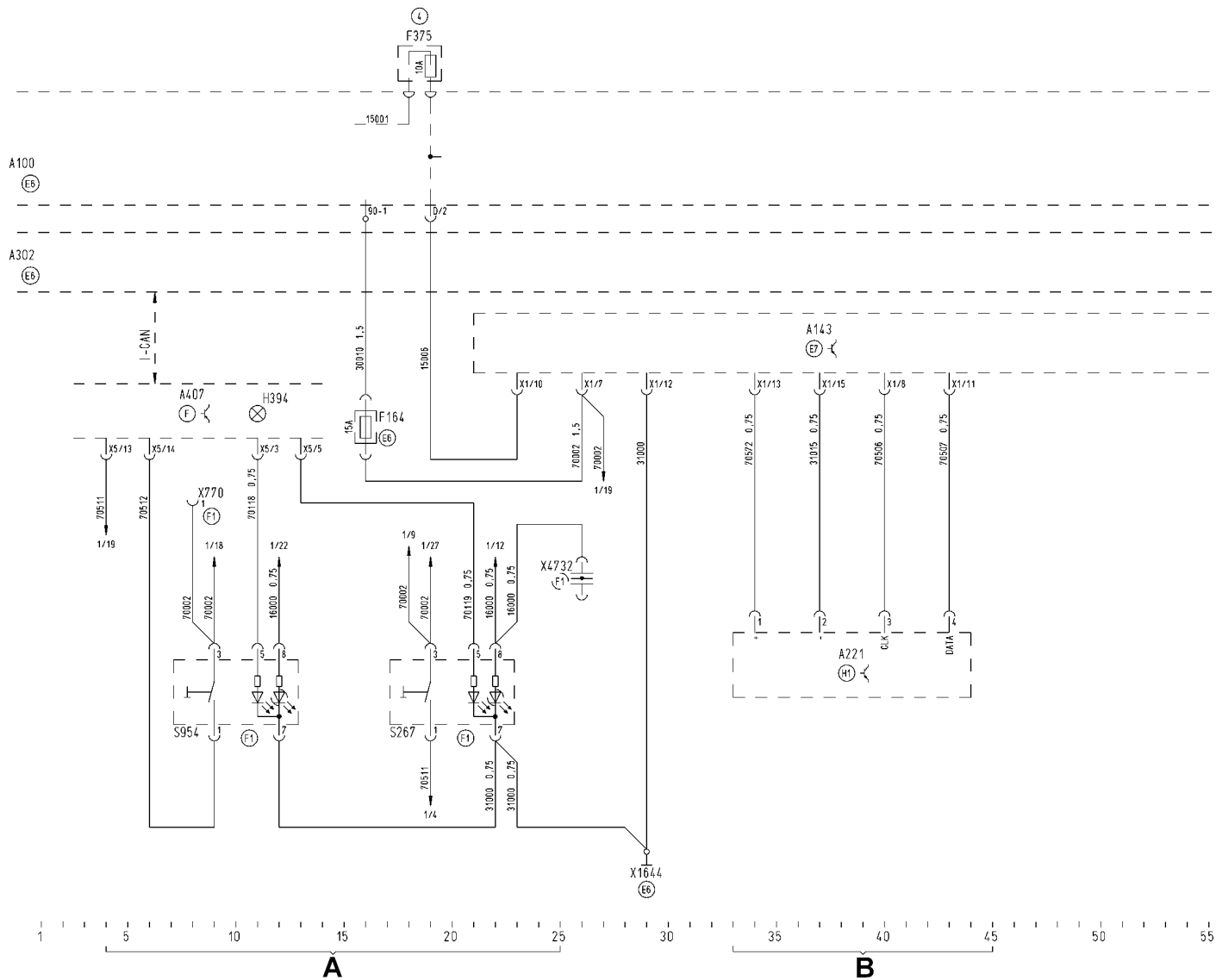
WIRING DIAGRAM NO. 81.99192.3253**ECAS 2 (6x2 optionally with ALM/crane) sheet 1 of 2**

Date: 06.07

Legend**A Buttons****B Remote control**

A100	Central electrical system
A143	Control unit, ECAS
A221	Remote control, ECAS
A302	Central computer 2
A407	Instrumentation
F164	Fuse, ECAS (terminal 30)
F375	Fuse, cab, outside (terminal 15)
H394	Check lamp, ECAS, fault/warning
S267	Button, ECAS, starting-traction control
S954	Button, ECAS, trailing axle/leading axle, raise/relieve
X770	Plug conn., ECAS ride height II
X1644	Earthing point, cab, next to central electrical system
X4732	Potential distributor, line 16000, switch lighting

ECAS 2 (6x2 optionally with ALM/crane) sheet 1 of 2



WIRING DIAGRAM NO. 81.99192.3253**ECAS 2 (6x2 optionally with ALM/crane) sheet 2 of 2**

Date: 06.07

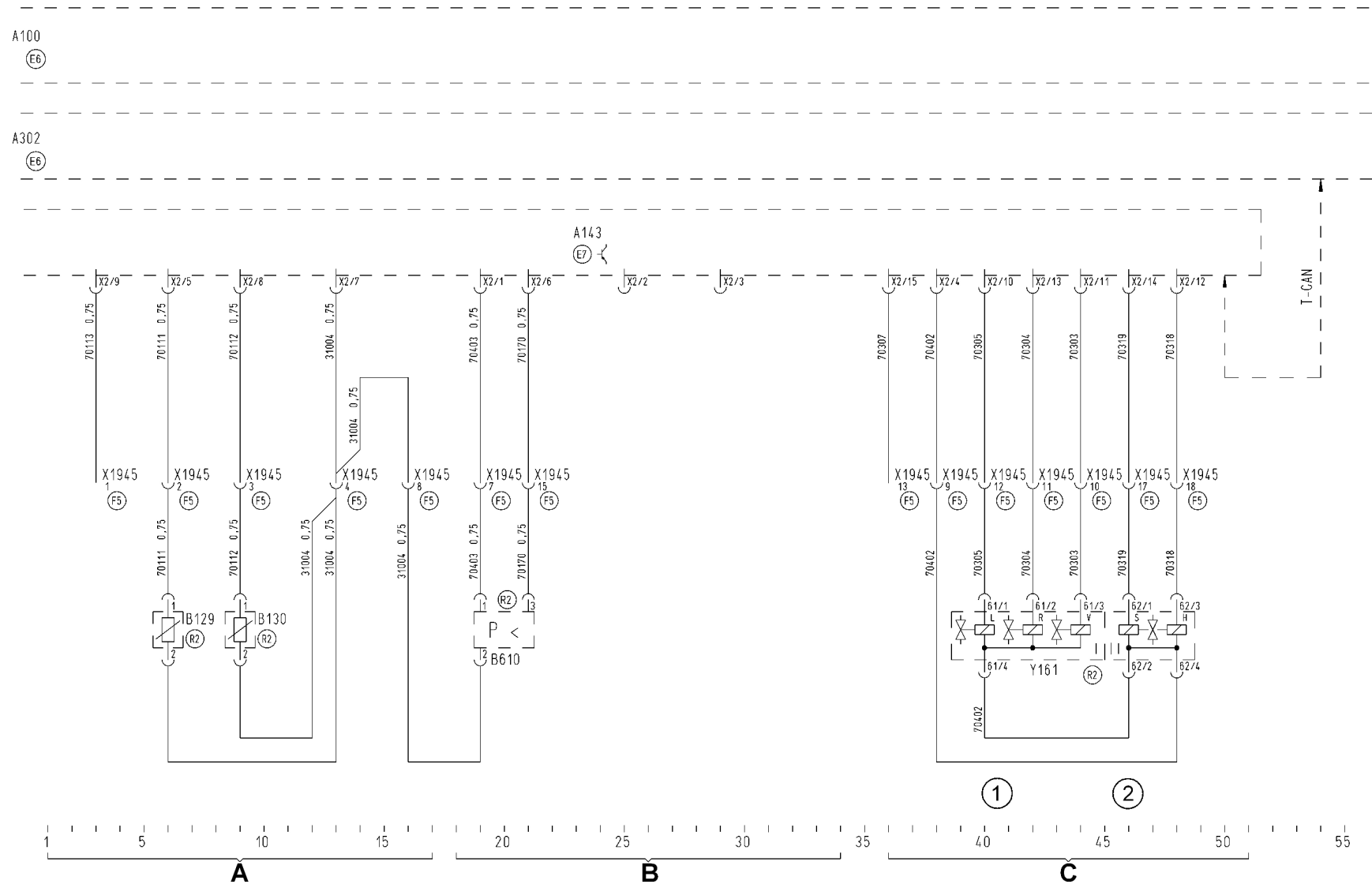
Legend

- A Position sensors**
- B Pressure sensors**
- C Solenoid valves**

A100 Central electrical system**A143** Control unit, ECAS**A302** Central computer 2**B129** Position sensor, rear axle, left**B130** Position sensor, rear axle, right**B610** Pressure sensor, rear axle, left**X1945** Plug conn., ECAS/CDC**Y161** Solenoid valve block, ECAS, rear axle (II = trailing axle/leading axle)

1 Marking sleeve "1" on connector Y161/61**2** Marking sleeve "2" on connector Y161/62

ECAS 2 (6x2 optionally with ALM/crane) sheet 2 of 2



WIRING DIAGRAM NO. 81.99192.3624

EDC7 Euro 3 D20... sheet 1 of 3

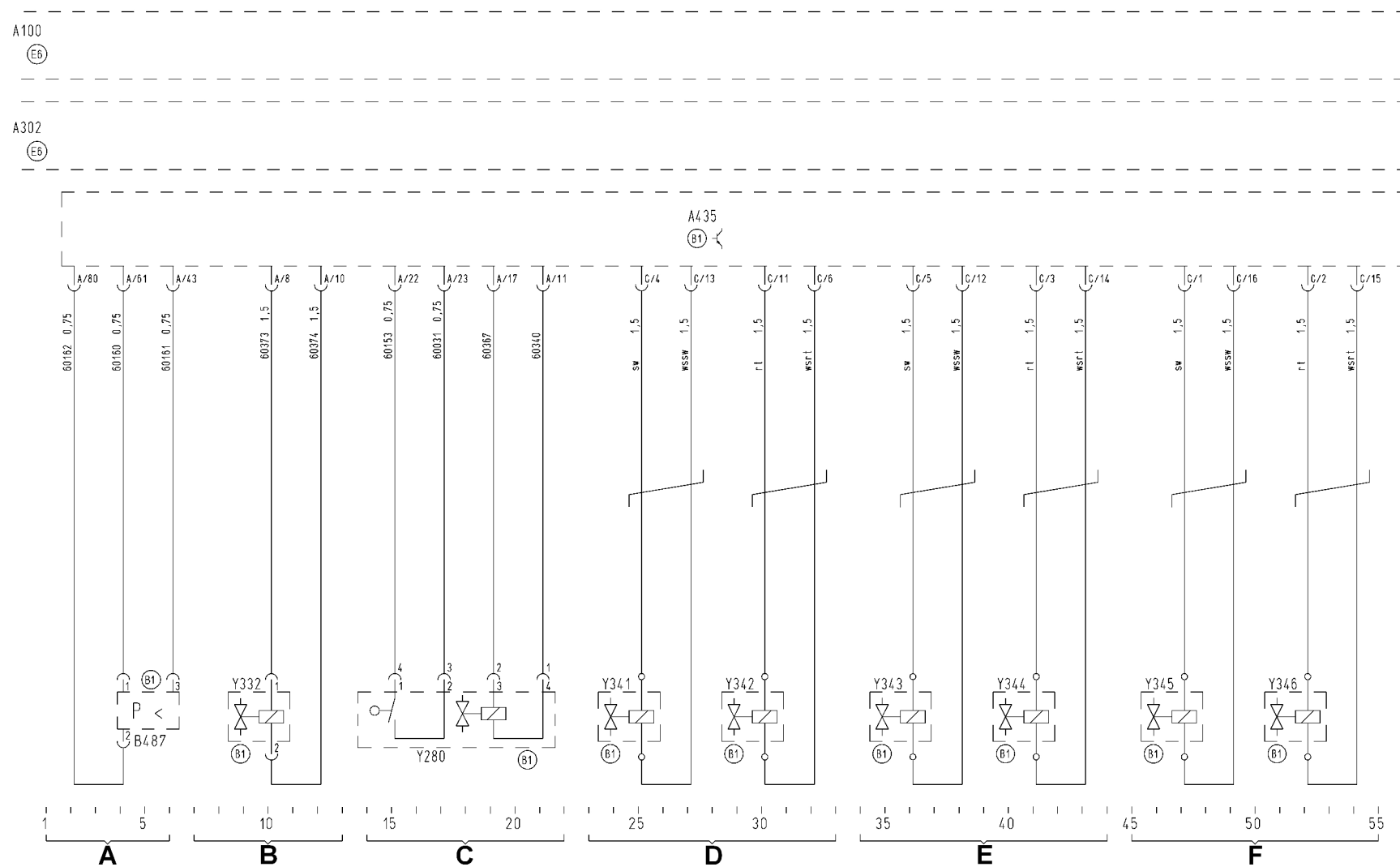
Date: 02.2008

Legend

- A** Rail-pressure sensor
- B** Proportional valve, fuel
- C** Exhaust gas recirculation cylinder
- D** Cylinder 1+2
- E** Cylinder 3+4
- F** Cylinder 5+6

-
- A100** Central electrical system
 - A302** Central computer 2
 - A435** Control unit, EDC
 - B487** Rail-pressure sensor
 - Y280** EGR cylinder
 - Y332** Proportional valve, fuel
 - Y341** Injector, 1st cylinder
 - Y342** Injector, 2nd cylinder
 - Y343** Injector, 3rd cylinder
 - Y344** Injector, 4th cylinder
 - Y345** Injector, 5th cylinder
 - Y346** Injector, 6th cylinder

EDC7 Euro 3 D20... sheet 1 of 3



WIRING DIAGRAM NO. 81.99192.3624

EDC7 Euro 3 D20... sheet 2 of 3

Date: 02.2008

Legend

- A** Water temperature sensor
- B** Crankshaft
- C** Camshaft
- D** Fuel pressure sensor
- E** Air temperature sensor
- F** Charge pressure sensor
- G** Oil pressure sensor

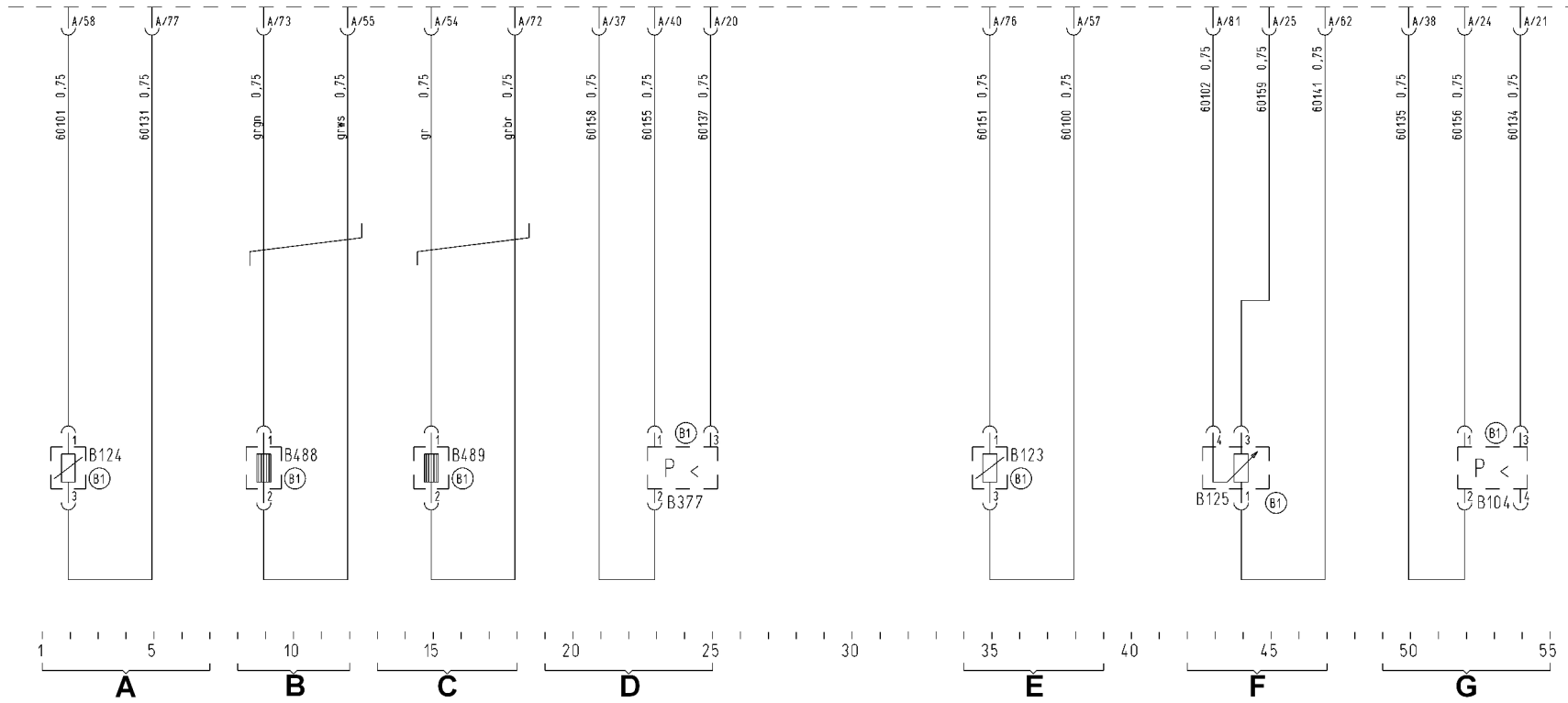
-
- A100** Central electrical system
 - A302** Central computer 2
 - A435** Control unit, EDC
 - B104** Oil pressure sensor
 - B123** Temperature sensor, charge air, EDC/CNG
 - B124** Temperature sensor, coolant
 - B125** Pressure sensor, charge air
 - B377** Fuel pressure sensor
 - B488** Speed increment sensor
 - B489** Speed segment sensor

EDC7 Euro 3 D20... sheet 2 of 3

A100
(E6)

A302
(E6)

A435
(B1)



WIRING DIAGRAM NO. 81.99192.3624**EDC7 Euro 3 D20... sheet 3 of 3**

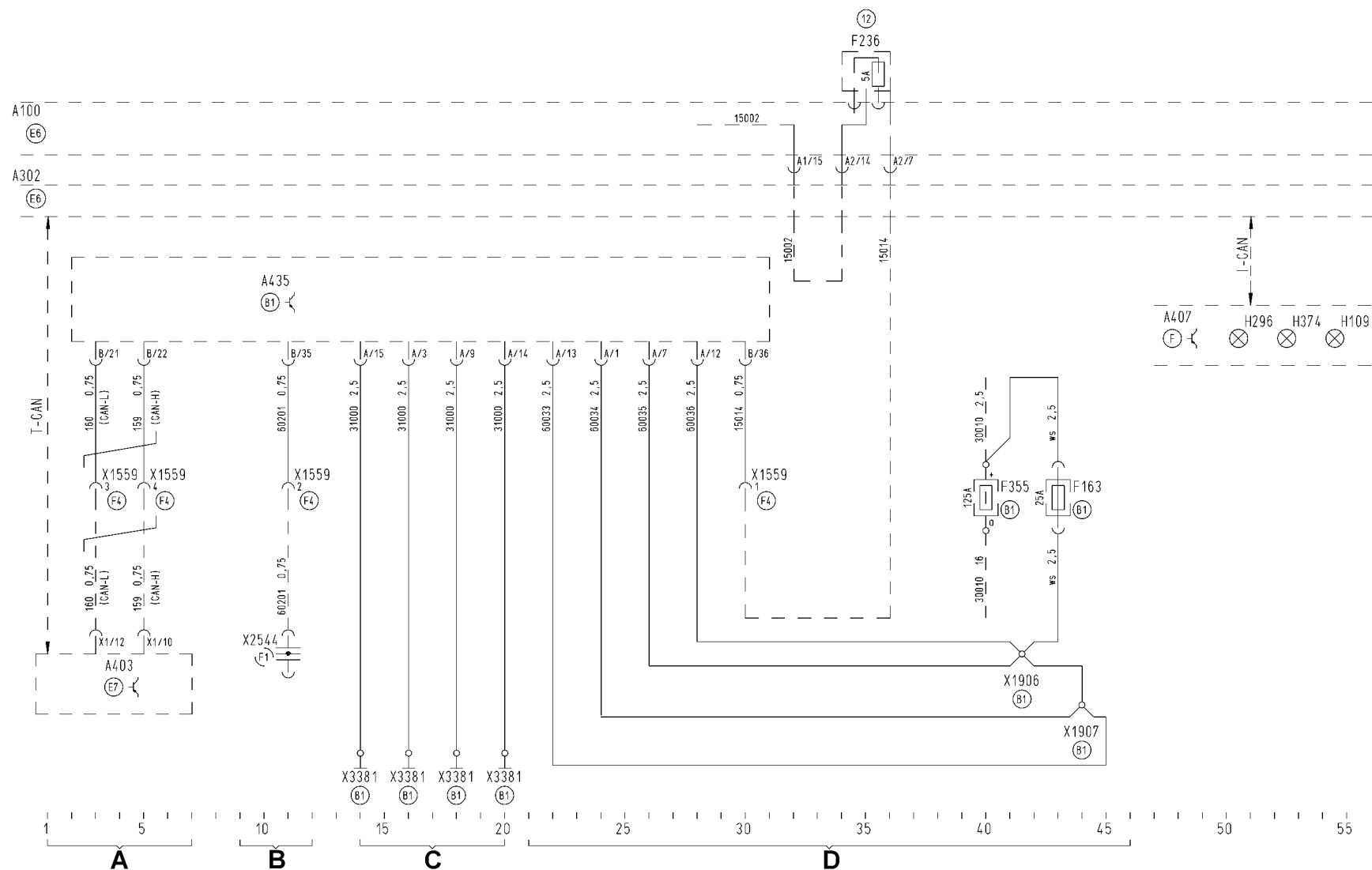
Date: 02.2008

Legend

- A M-CAN databus**
 - B Diagnosis**
 - C Earthing point, box**
 - D Voltage supply**
-

- A100** Central electrical system
- A302** Central computer 2
- A403** Vehicle management computer
- A407** Instrumentation
- A435** Control unit, EDC
- F163** Fuse, engine control (terminal 30)
- F236** Fuse, engine regulation (terminal 15)
- F355** Main fuse (terminal 30-2)
- H109** Check lamp, oil pressure
- H296** Check lamp, EDC (fault)
- H374** Check lamp, air cleaner dirty
- X1559** Plug conn., engine/EDC/gearbox IV
- X1906** Threaded pin M6 (motor power box)
- X1907** Threaded pin M6 (motor power box)
- X2544** Potential distributor, 21-pin, K-line
- X3381** Threaded pin (motor power box)

EDC7 Euro 3 D20... sheet 3 of 3



WIRING DIAGRAM NO. 81.99192.3625**EDC7 Common Rail Euro 3 D2676 LF, E-EGR sheet 1 of 4**

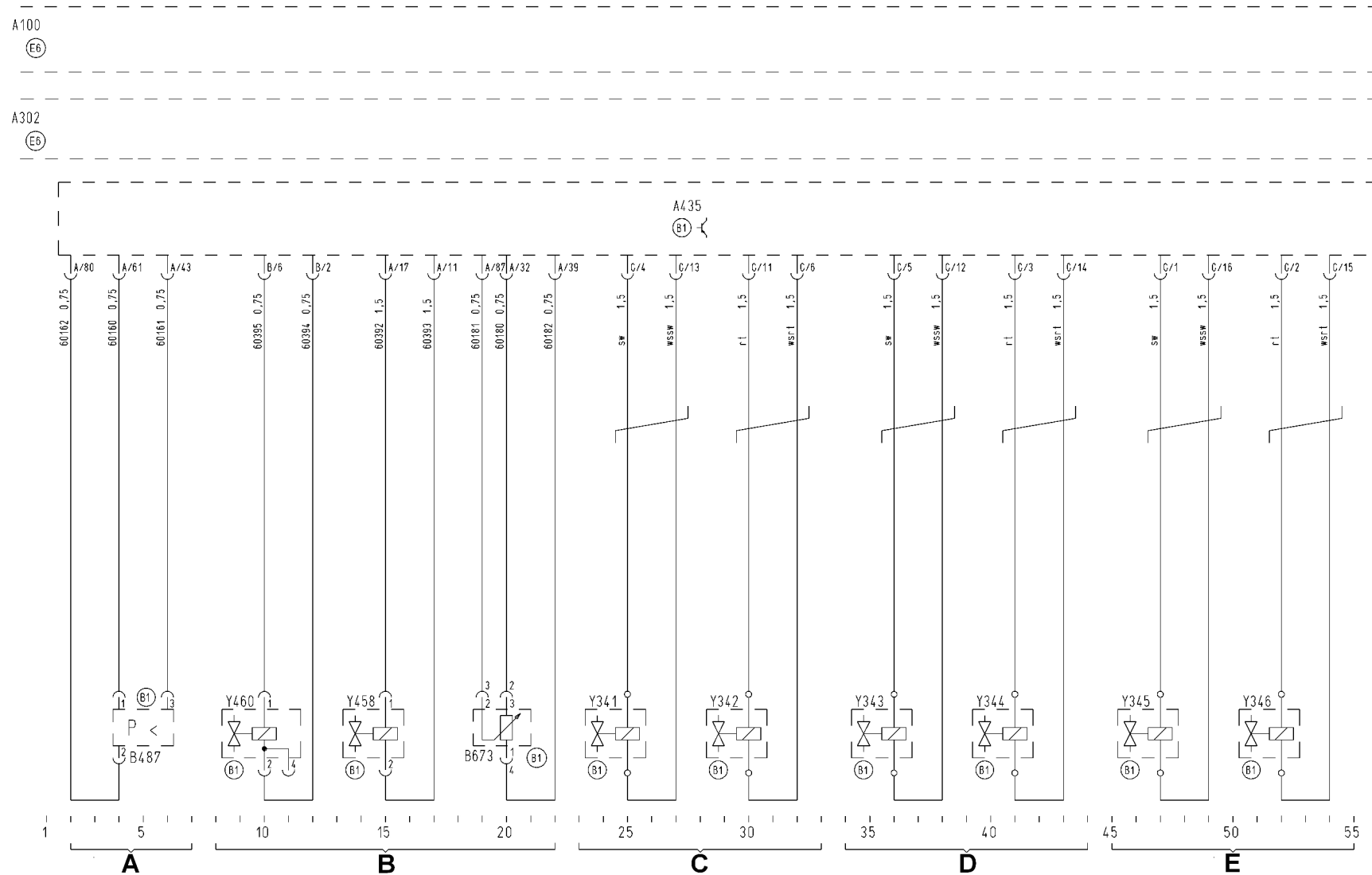
Date: 02.2008

Legend

- A** Rail-pressure sensor
- B** Controlled exhaust gas recirculation
- C** Cylinder 1+2
- D** Cylinder 3+4
- E** Cylinder 5+6

-
- A100** Central electrical system
 - A302** Central computer 2
 - A435** Control unit, EDC
 - B487** Rail-pressure sensor
 - B673** Position sensor, E-EGR, cylinder
 - Y341** Injector, 1st cylinder
 - Y342** Injector, 2nd cylinder
 - Y343** Injector, 3rd cylinder
 - Y344** Injector, 4th cylinder
 - Y345** Injector, 5th cylinder
 - Y346** Injector, 6th cylinder
 - Y458** Proportional valve, E-EGR
 - Y460** Shut-off valve - E-EGR/controlled EVB

EDC7 Common Rail Euro 3 D2676 LF, E-EGR sheet 1 of 4



WIRING DIAGRAM NO. 81.99192.3625**EDC7 Common Rail Euro 3 D2676 LF, E-EGR sheet 2 of 4**

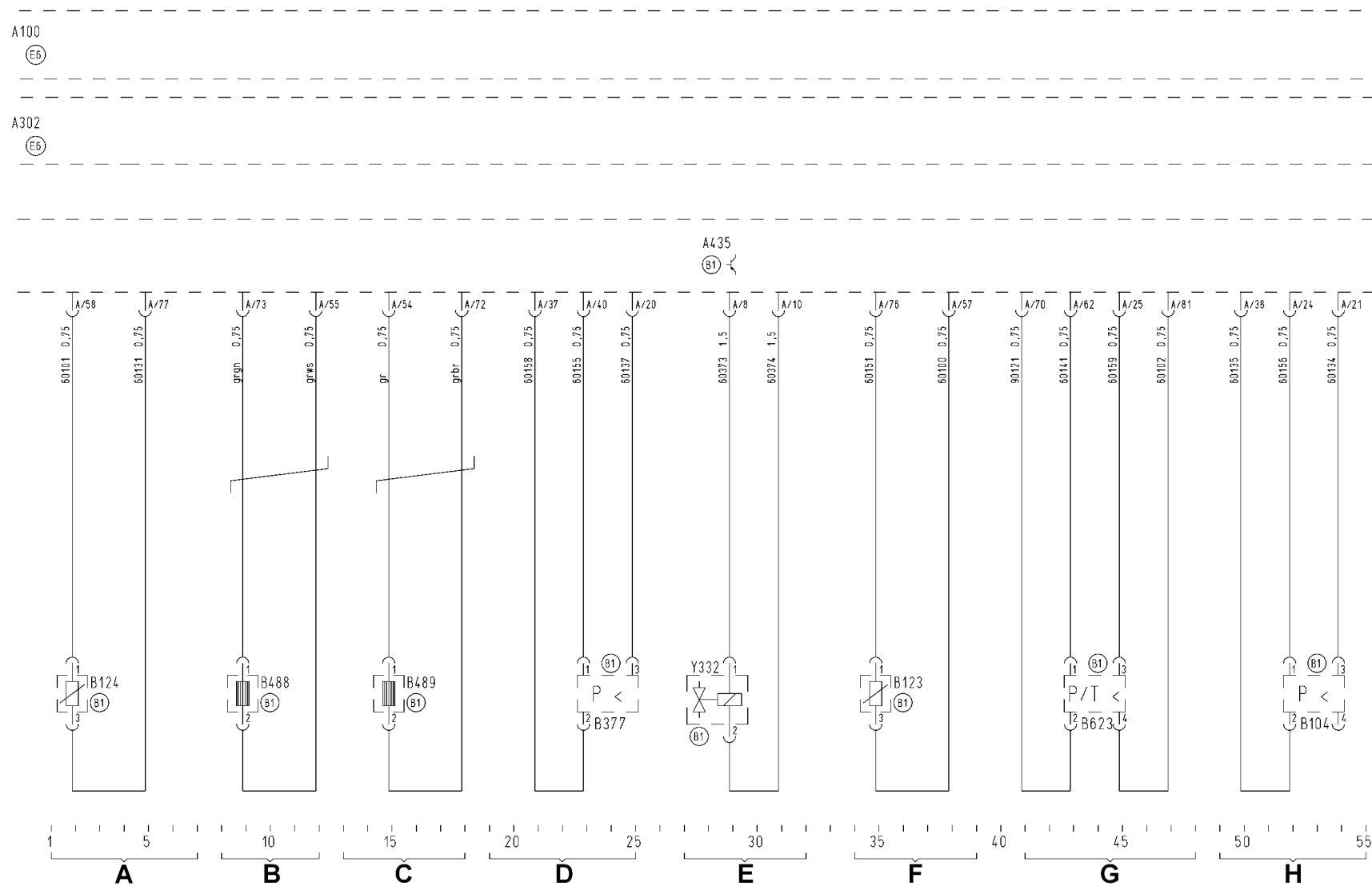
Date: 02.2008

Legend

- A** Water temperature sensor
 - B** Crankshaft
 - C** Camshaft
 - D** Fuel pressure sensor
 - E** Proportional valve, fuel
 - F** Air temperature sensor
 - G** Charge pressure/temperature sensor
 - H** Oil pressure sensor
-

- A100** Central electrical system
- A302** Central computer 2
- A435** Control unit, EDC
- B104** Oil pressure sensor
- B123** Temperature sensor, charge air, EDC/CNG
- B124** Temperature sensor, coolant
- B377** Fuel pressure sensor
- B488** Speed increment sensor
- B489** Speed segment sensor
- B623** Charge pressure/temperature sensor
- Y332** Proportional valve, fuel

EDC7 Common Rail Euro 3 D2676 LF, E-EGR sheet 2 of 4



WIRING DIAGRAM NO. 81.99192.3625**EDC7 Common Rail Euro 3 D2676 LF, E-EGR sheet 3 of 4**

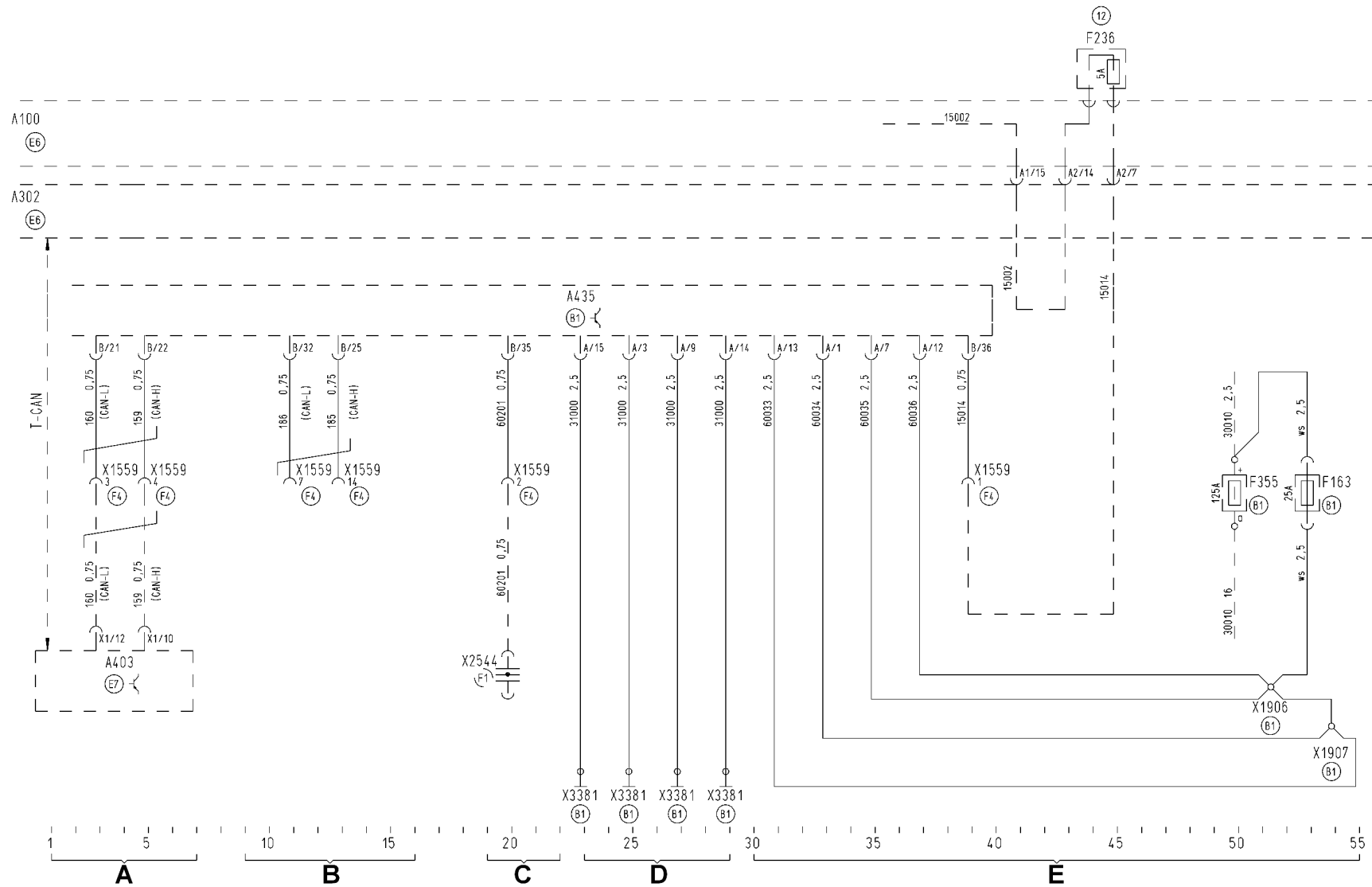
Date: 02.2008

Legend

- A M-CAN databus**
- B HD OBD CAN databus**
- C Diagnosis**
- D Earthing point, box**
- E Voltage supply**

-
- A100** Central electrical system
 - A302** Central computer 2
 - A403** Vehicle management computer
 - A435** Control unit, EDC
 - F163** Fuse, engine regulation (terminal 30)
 - F236** Fuse, engine regulation (terminal 15)
 - F355** Main fuse (terminal 30-2)
 - X1559** Plug conn., engine/EDC/gearbox IV
 - X1906** Threaded pin M6 (motor power box)
 - X1907** Threaded pin M6 (motor power box)
 - X2544** Potential distributor, 21-pin, K-line
 - X3381** Threaded pin (motor power box)

EDC7 Common Rail Euro 3 D2676 LF, E-EGR sheet 3 of 4



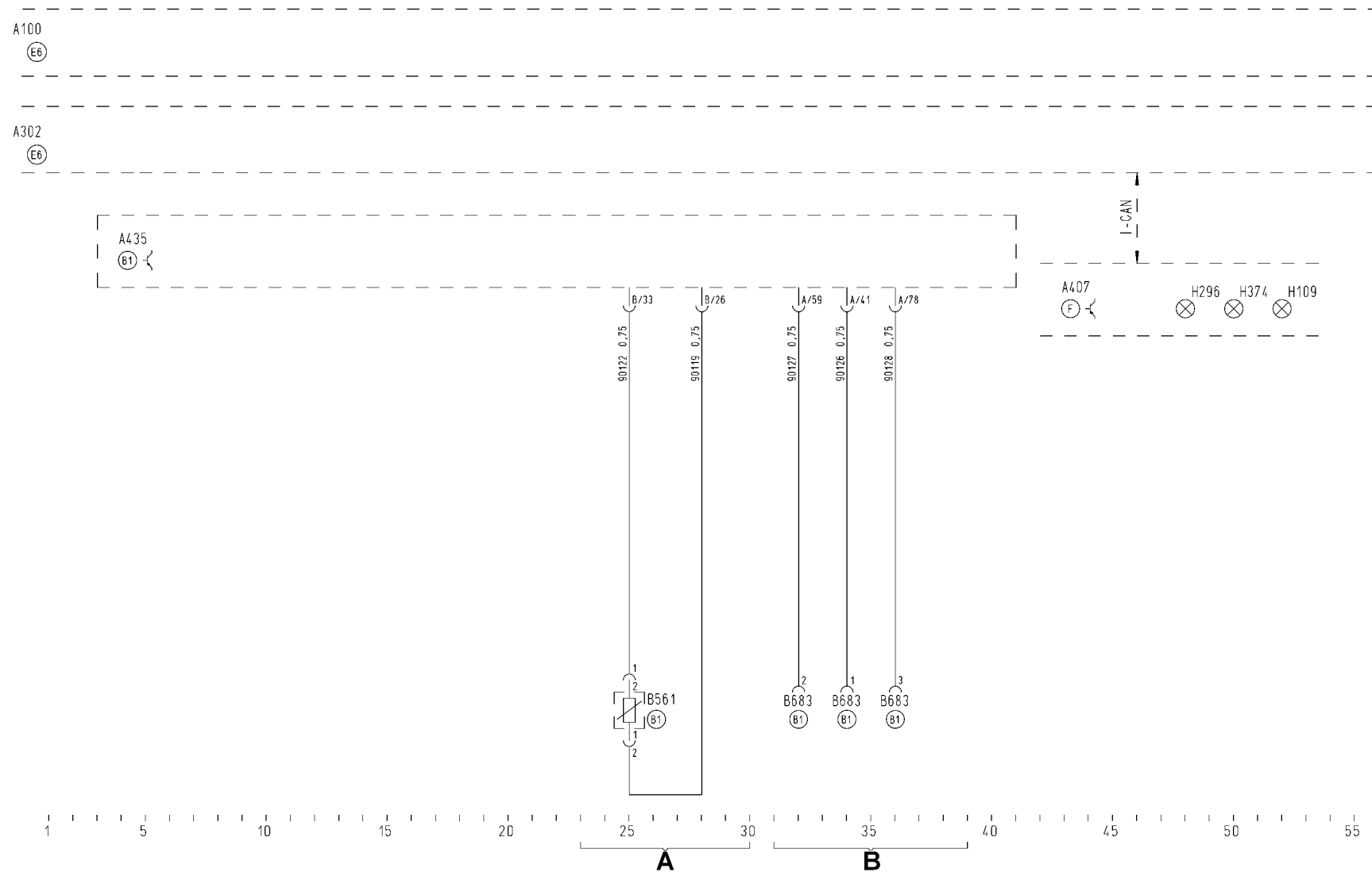
WIRING DIAGRAM NO. 81.99192.3625**EDC7 Common Rail Euro 3 D2676 LF, E-EGR sheet 4 of 4**

Date: 02.2008

Legend**A Exhaust gas temperature sensor 1****B Exhaust gas relative pressure sensor**

A100 Central electrical system**A302** Central computer 2**A407** Instrumentation**A435** Control unit, EDC**B561** Exhaust gas temperature sensor 1 (upstream of filter)**B683** Exhaust gas relative pressure sensor**H109** Check lamp, oil pressure**H296** Check lamp, EDC (fault)**H374** Check lamp, air filter contaminated

EDC7 Common Rail Euro 3 D2676 LF, E-EGR sheet 4 of 4



WIRING DIAGRAM NO. 81.99192.3617**Electric cab tilt mechanism sheet 1 of 1**

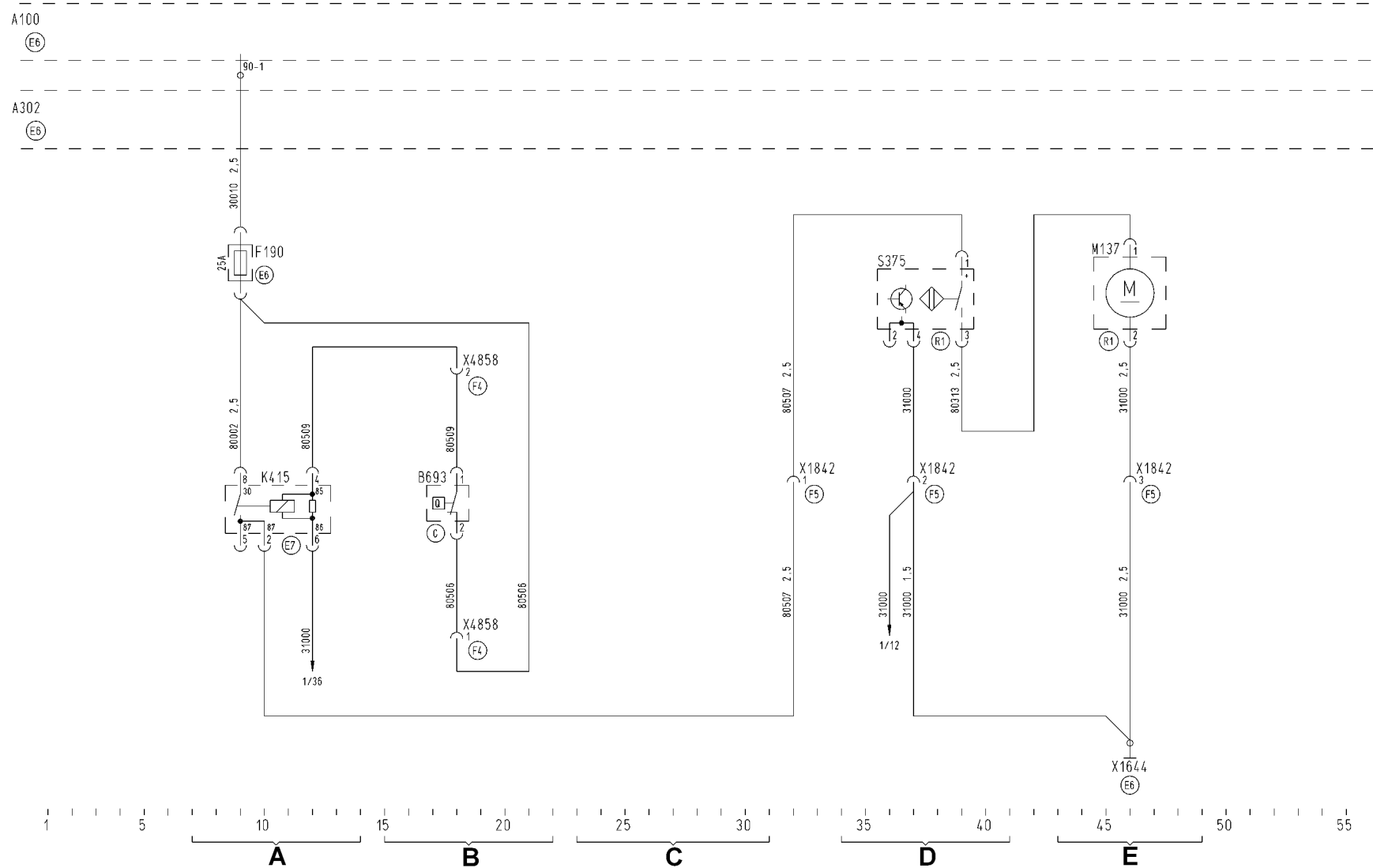
02.2008

Legend

- A Voltage supply**
- B Sensor switch, front flap**
- C Enable switch**
- D Tilt buttons**
- E Tilt pump**

-
- A100** Central electrical system
 - A302** Central computer 2
 - B693** Sensor switch, front flap
 - F190** Fuse, cab tilt mechanism
 - K415** Relay, cab tilt mechanism
 - M137** Pump, cab tilt mechanism
 - S375** Button, cab tilt mechanism actuation
 - X1644** Earthing point, cab, next to central electrical system
 - X1842** Plug conn., cab tilt mechanism
 - X4858** Plug conn., front flap sensing

Electric cab tilt mechanism sheet 1 of 1



WIRING DIAGRAM NO. 81.99192.3260**EVB, controlled sheet 1 of 1**

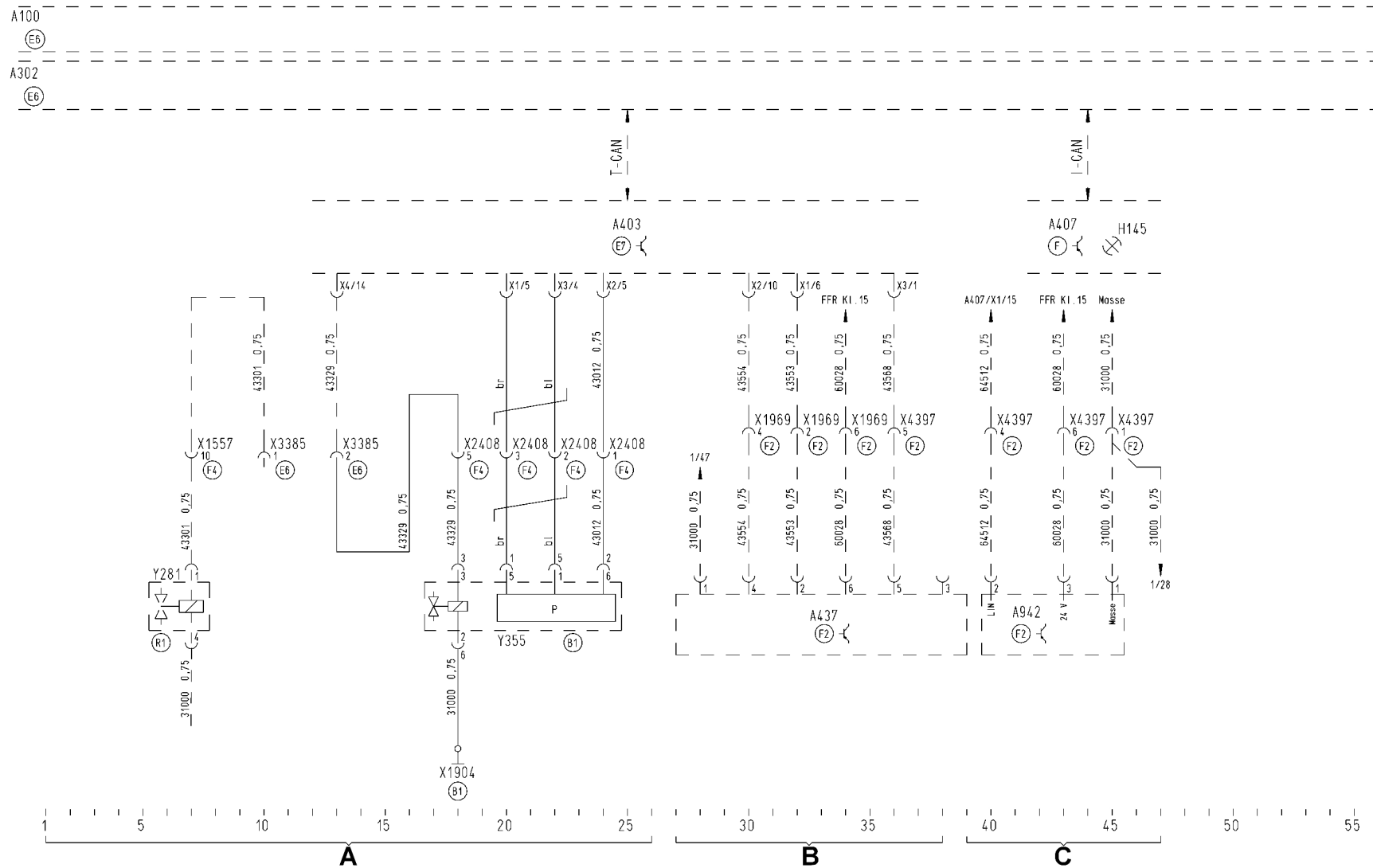
Date: 09.2006

Legend

- A Engine brake / EVB, controlled**
- B Sustained-action brake lever without multifunctional steering wheel**
- C Sustained-action brake lever with multifunctional steering wheel**

A100 Central electrical system
A302 Central computer 2
A402 Control unit, EBS
A403 Vehicle management computer
A407 Instrumentation
A437 Sustained-action brake lever
A942 Steering column stalk, retarder/gearbox
H145 Check lamp, retarder
X1557 Plug conn., frame, left
X1904 Threaded pin M6 (motor power box)
X1969 Plug conn., engine brake switch
X2408 Plug conn., EVB module
X3385 Plug conn., engine brake/EVB
X4397 Plug conn., multifunctional steering wheel
Y281 Solenoid valve, engine brake/EVB
Y355 EVB module

EVB, controlled sheet 1 of 1



WIRING DIAGRAM NO. 81.99192.3173**Cab, T-CAN, standard sheet 1 of 1**

Date: 09.2005

Legend

- A** FFR (vehicle management computer)
- B** EBS
- C** ZBR (central on-board computer)
- D** Adaptation, supplementary equipment
- E** Terminating resistor

-
- A100** Central electrical system
 - A302** Central computer 2
 - A402** Control unit, EBS
 - A403** Vehicle management computer
 - R155** Terminating resistor, T-CAN
 - X1559** Plug conn., engine/EDC/gearbox IV
 - X1948** Plug conn., engine/gearbox
 - X4669** Adaptation, supplementary equipment

**Note**

In vehicles with TPM, the T-CAN terminating resistor sits in the frame on the TPM module!

Cab, T-CAN, standard sheet 1 of 1



WIRING DIAGRAM NO. 81.99192.3267

Window lifter, button in shift console sheet 1 of 1

Date: 04.2007

Legend

- A Window lifter, switch console for door, left**
- B Window lifter, switch console for door, right**

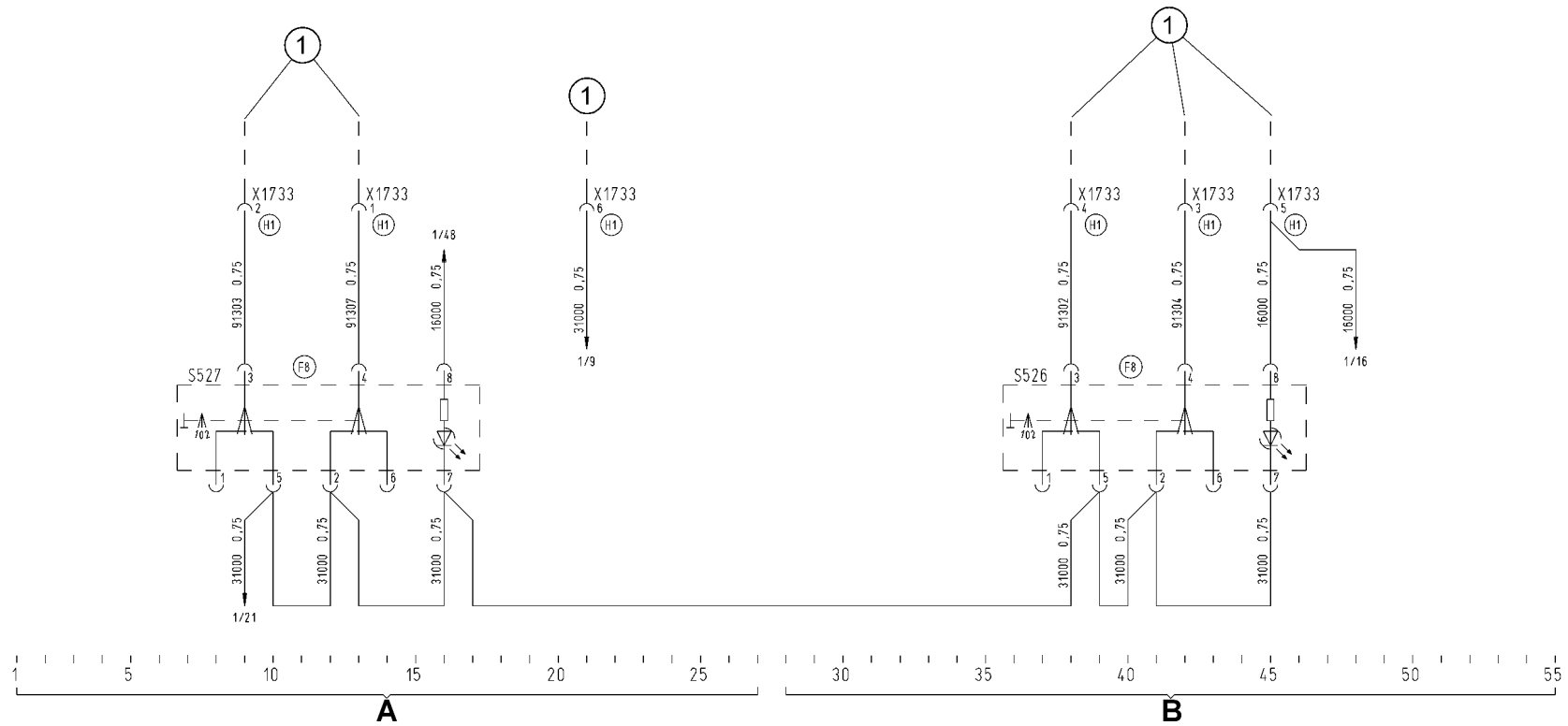
-
- A100** Central electrical system
 - A302** Central computer 2
 - S526** Button, window lifter, right
 - S527** Button, window lifter, left
 - X1733** Plug conn., switch, window lifters
-

- 1** See wiring diagram for door module

Window lifter, button in shift console sheet 1 of 1

A100
(E6)

A302
(E6)



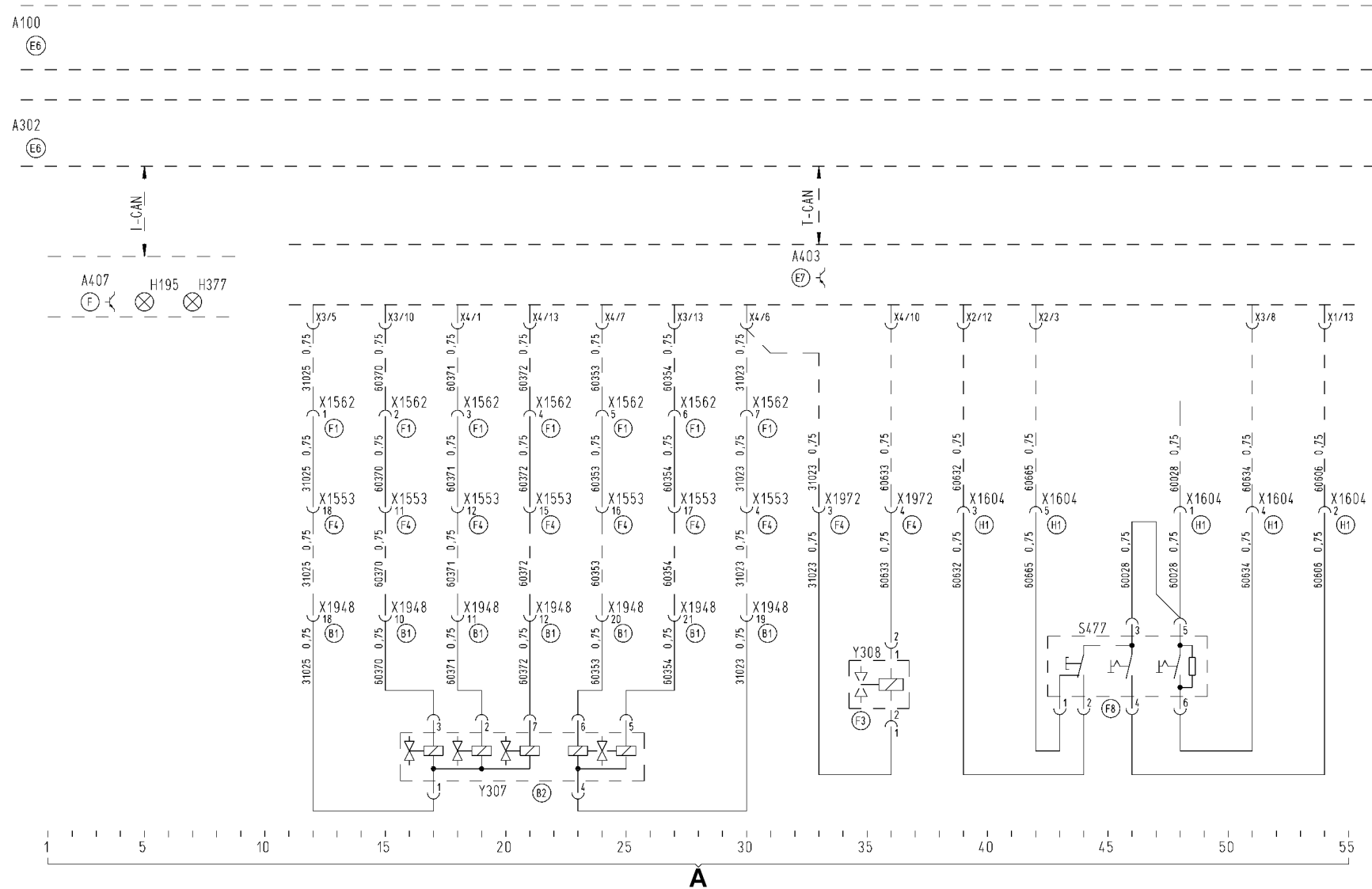
WIRING DIAGRAM NO. 81.99192.3276**Gearbox / manual gearbox sheet 1 of 2**

Date: 11.2005

Legend**A Splitter, range-change**

A100	Central electrical system
A302	Central computer 2
A403	Vehicle management computer
A407	Instrumentation
H195	Check lamp, splitter
H377	Check lamp, range-change
S477	Switch, gear selector lever
X1553	Plug conn., engine/EDC/gearbox III
X1562	Plug conn., gearbox
X1604	Plug conn., switch in gearshift knob
X1948	Plug conn., engine/gearbox
X1972	Plug conn., pedals, outside
Y307	Solenoid valve, splitter and range-change
Y308	Clutch servo

Gearbox / manual gearbox sheet 1 of 2



WIRING DIAGRAM NO. 81.99192.3276**Gearbox / manual gearbox sheet 2 of 2**

Date: 09.2006

Legend

- A** Clutch travel sensor
- B** Gearbox input speed
- C** Gearbox neutral
- D** T-CAN network
- E** Reverse gear switch
- F** Clutch fluid level probe

-
- A100** Central electrical system
 - A302** Central computer 2
 - A403** Vehicle management computer
 - B362** Clutch travel sensor
 - B368** Inductive pickup, gearbox input speed
 - B434** Clutch fluid level probe
 - F314** Fuse, reversing light
 - S104** Switch, reverse gear
 - S172** Switch, neutral, gearbox
 - X1553** Plug conn., engine/EDC/gearbox III
 - X1559** Plug conn., engine/EDC/gearbox IV
 - X1562** Plug conn., gearbox
 - X1627** Plug conn., Reversing light
 - X1948** Plug conn., engine/gearbox
 - X1972** Plug conn., pedals, outside
 - X1983** Threaded pin M6 (motor power box)

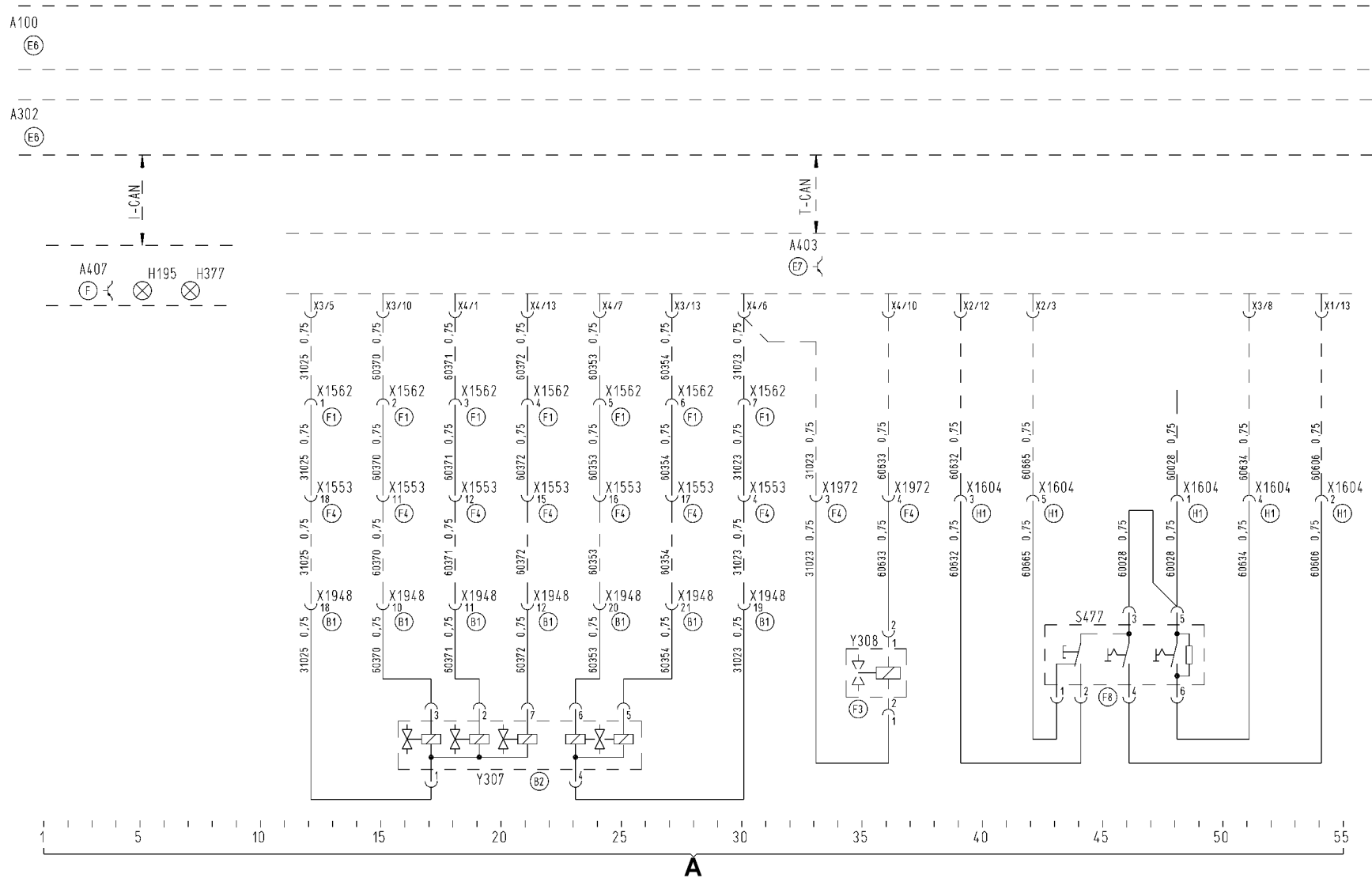
WIRING DIAGRAM NO. 81.99192.3748**Gearbox / manual gearbox sheet 1 of 2**

Date: 11.2008

Legend**A Splitter, range-change**

A100	Central electrical system
A302	Central computer 2
A403	Vehicle management computer
A407	Instrumentation
H195	Check lamp, splitter
H377	Check lamp, range-change
S477	Switch, gear selector lever
X1553	Plug conn., engine/EDC/gearbox III
X1562	Plug conn., gearbox
X1604	Plug conn., switch in gearshift knob
X1948	Plug conn., engine/gearbox
X1972	Plug conn., pedals, outside
Y307	Solenoid valve, splitter and range-change
Y308	Clutch servo

Gearbox / manual gearbox sheet 1 of 2



WIRING DIAGRAM NO. 81.99192.3748**Gearbox / manual gearbox sheet 2 of 2**

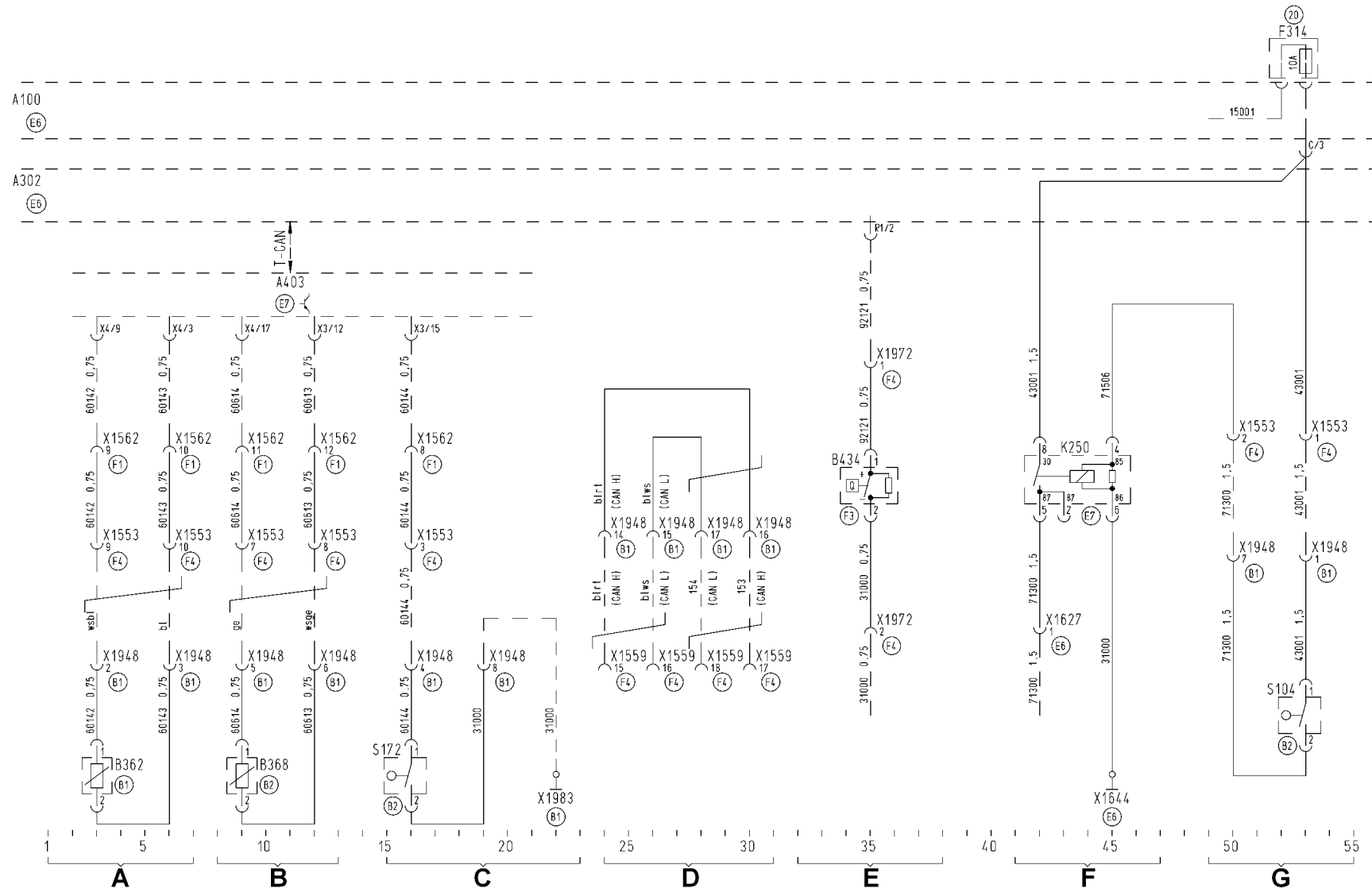
Date: 11.2008

Legend

- A** Clutch position sensor
- B** Gearbox input speed
- C** Gearbox neutral
- D** T-CAN network
- E** Clutch fluid level probe
- F** Control, reversing light
- G** Switch, reverse gear

-
- A100** Central electrical system
 - A302** Central computer 2
 - A403** Vehicle management computer
 - B362** Clutch position sensor
 - B368** Inductive pickup, gearbox input speed
 - B434** Clutch fluid level probe
 - F314** Fuse, reversing light
 - K250** Relay, reversing light
 - S104** Switch, reverse gear
 - S172** Switch, neutral, gearbox
 - X1553** Plug conn., engine/EDC/gearbox III
 - X1559** Plug conn., engine/EDC/gearbox IV
 - X1562** Plug conn., gearbox
 - X1627** Plug conn., reversing light
 - X1644** Earthing point, cab, next to central electrical system
 - X1948** Plug conn., engine/gearbox
 - X1972** Plug conn., pedals, outside
 - X1983** Threaded pin M6 (motor power box)

Gearbox / manual gearbox sheet 2 of 2



WIRING DIAGRAM NO. 81.99192.1374

Seat belt indicator, driver sheet 1 of 1

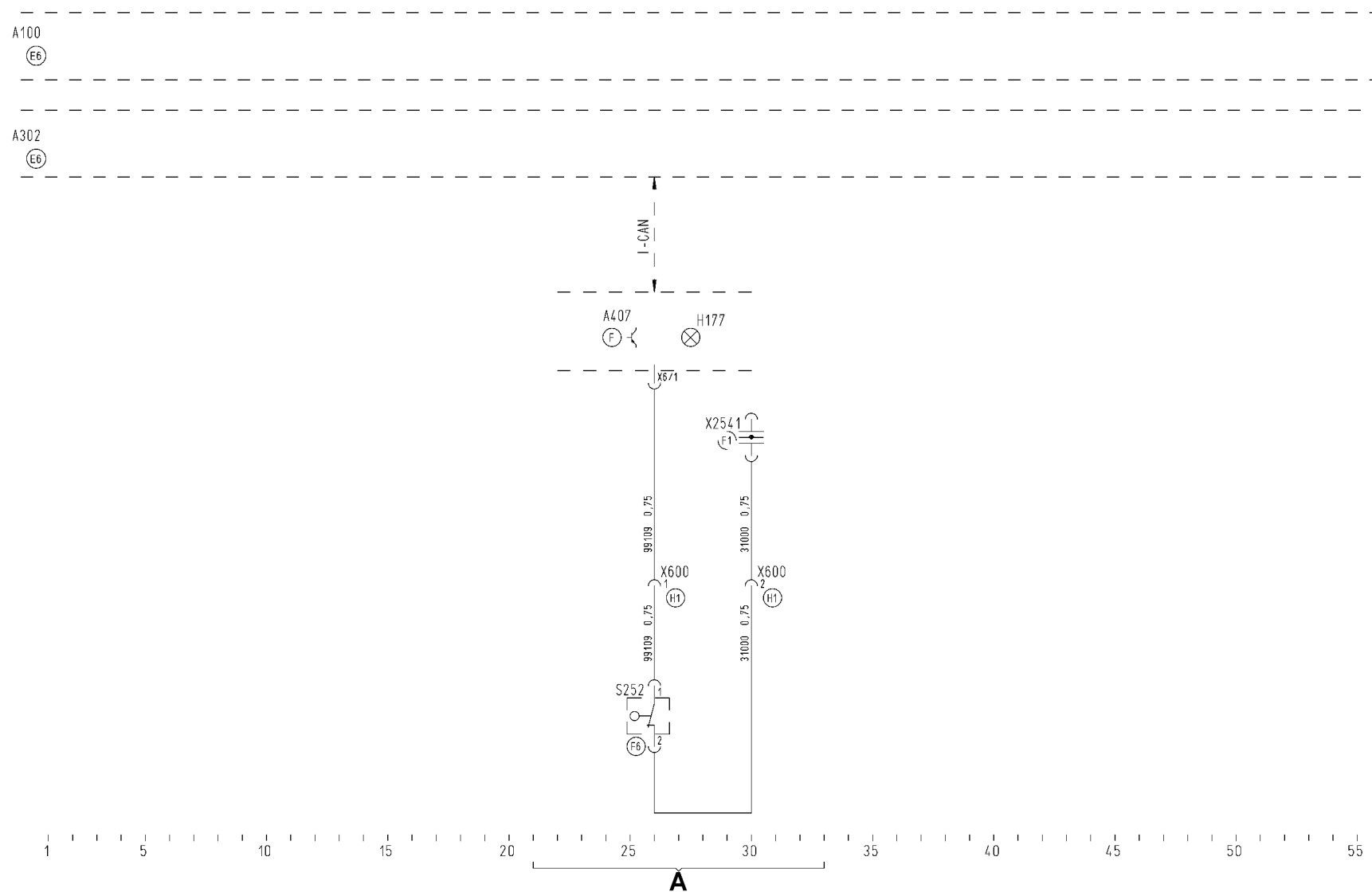
Date: 10.2006

Legend

A Seat belt indicator

A100	Central electrical system
A302	Central computer 2
A407	Instrumentation
H177	Check lamp, seat belt
S252	Switch in seat belt buckle, driver
X600	Plug conn., seat belt indicator, driver/centre seat
X2541	Potential distributor, 21-pin, line 31000

Seat belt indicator, driver sheet 1 of 1



WIRING DIAGRAM NO. 81.99192.3292**Trailer charge, 24V sheet 1 of 1**

Date: 11.2005

Legend**A Trailer charge**

A100	Central electrical system
A302	Central computer 2
A372	Distributor box, trailer charge, 24V
F229	Fuse, trailer charge, 24V
G100	Battery 1
G101	Battery 2
K319	Relay, trailer charge, 24V
X100	Ground connection, engine
X805	Plug connection for trailer charge 24V
X806	Plug connection for trailer charge 24V
X807	Plug connection for trailer charge 24V
X808	Socket, trailer charge, 24V
X4643	Potential distributor, line 59104

**Note**

Installation position for X808 for semitrailer E8!

A100
(E6)

A302
(E6)



WIRING DIAGRAM NO. 81.99192.3237

I-CAN cab (standard) sheet 1 of 1

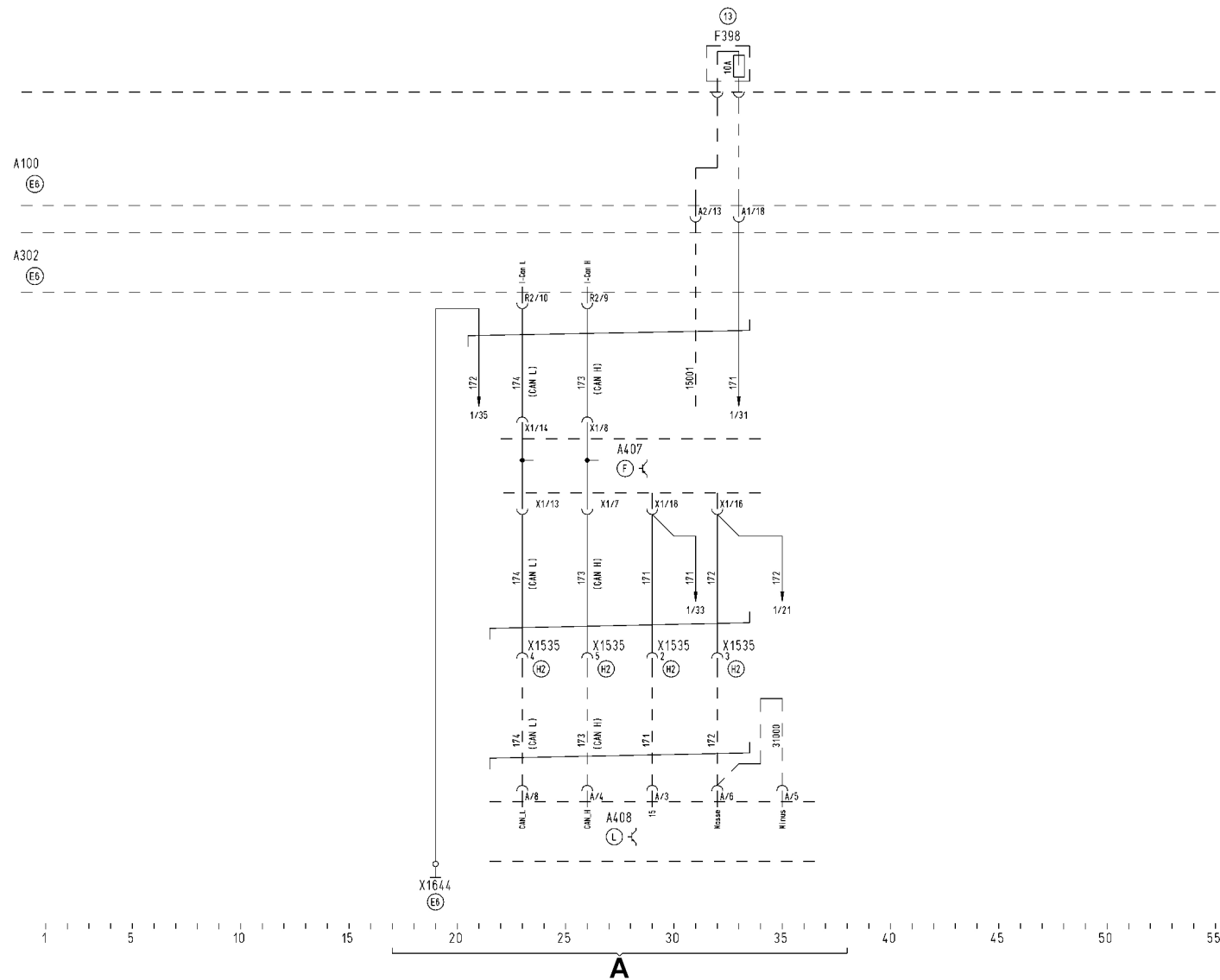
Date: 11.2005

Legend

A I-CAN

A100	Central electrical system
A302	Central computer 2
A407	Instrumentation
A408	Tachograph
F398	Fuse, instrumentation, tachograph (terminal 15)
X1535	Plug conn., tachograph
X1644	Earthing point, cab, next to central electrical system

I-CAN cab (standard) sheet 1 of 1



WIRING DIAGRAM NO. 81.99192.3405

I-CAN roof (standard) sheet 1 of 1

Date: 09.2007

Legend

A I-CAN

A100	Central electrical system
A302	Central computer 2
A407	Instrumentation
A408	Tachograph
F398	Fuse, instrumentation, tachograph (terminal 15)
X1535	Plug conn., tachograph
X1644	Earthing point, cab, next to central electrical system

WIRING DIAGRAM NO. 81.99192.3293**Interior lighting, roof, white/red sheet 1 of 1**

Date: 04.2006

Legend**A Interior lighting, roof, white/red**

A100	Central electrical system
A302	Central computer 2
E275	Interior light, roof, white/red
E276	Interior light, roof, white/red
S405	Switch, interior lighting, red
S540	Switch, interior lighting, white
X1580	Plug conn., interior lighting
X1581	Plug conn., switch, interior lighting
X2541	Potential distributor, 21-pin, line 31000
X2543	Potential distributor, 21-pin, line 30006
X4732	Potential distributor, line 16000, switch lighting