

Electrical system

Trucknology Generation A (TG-A)

2002

1 | 2

3

4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12

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Wiring diagrams

2nd Edition K 90

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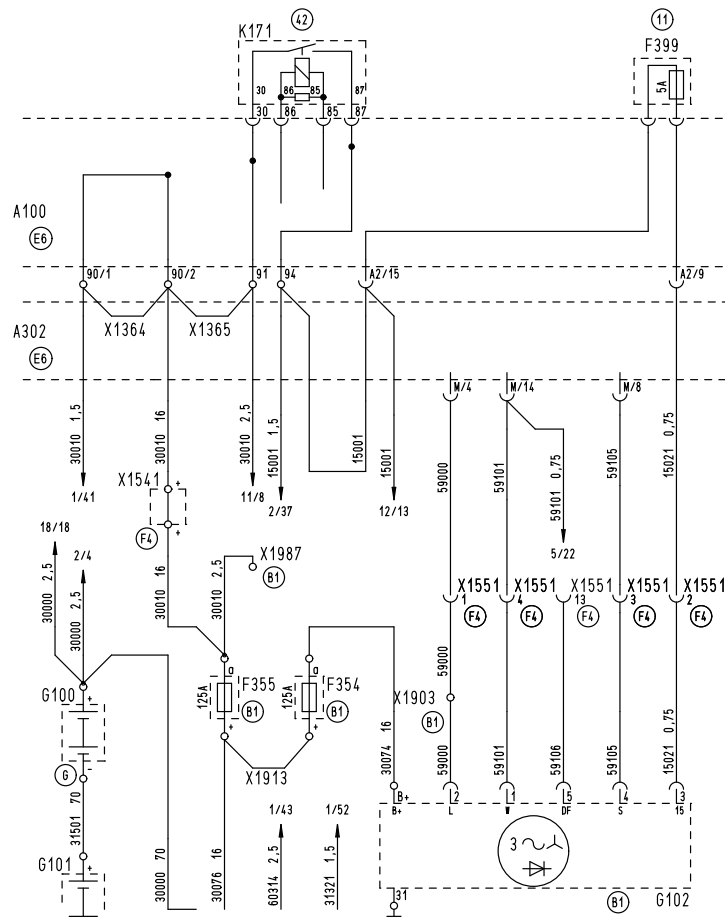
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Electrical system



Wiring diagrams K 90 (2nd edition)

Trucknology Generation A (TG-A)



Subject to technical changes in the course of continuing development.

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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.

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

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

ELECTRICAL SYSTEM

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

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

ELECTRICAL SYSTEM

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

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
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)

Notes on safety

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

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

Important:

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

Regulations for preventing accidents leading to injury to personnel.

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

- Secure the vehicle to prevent it from rolling away.

Support the frame when working on the pneumatic or spring suspension system.

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



GENERAL INFORMATION

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

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

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

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

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

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

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

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

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

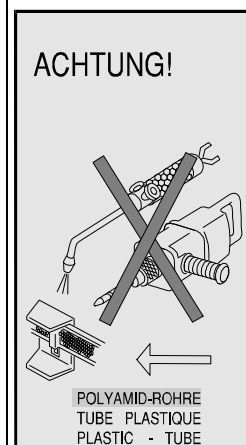
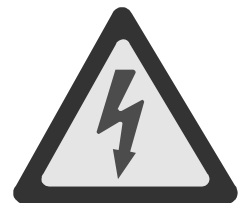
The frame is **not** intended for use as an earth return!

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

Plastic tubes (polyamide)

Important! – Risk of damage and fire!

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



Limited liability for accessories and parts

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

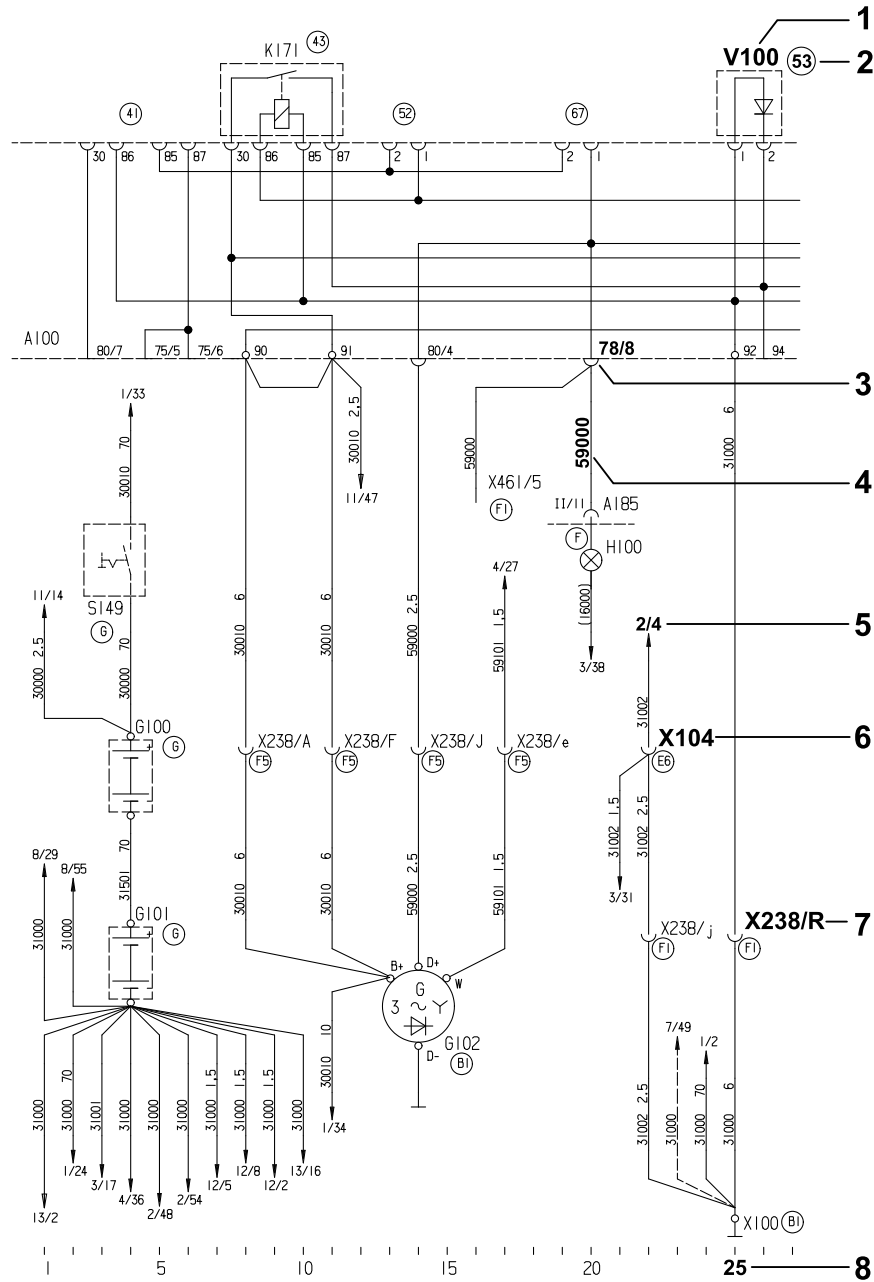
Bodies and special attachments

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

Taking out of operation or putting into storage

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

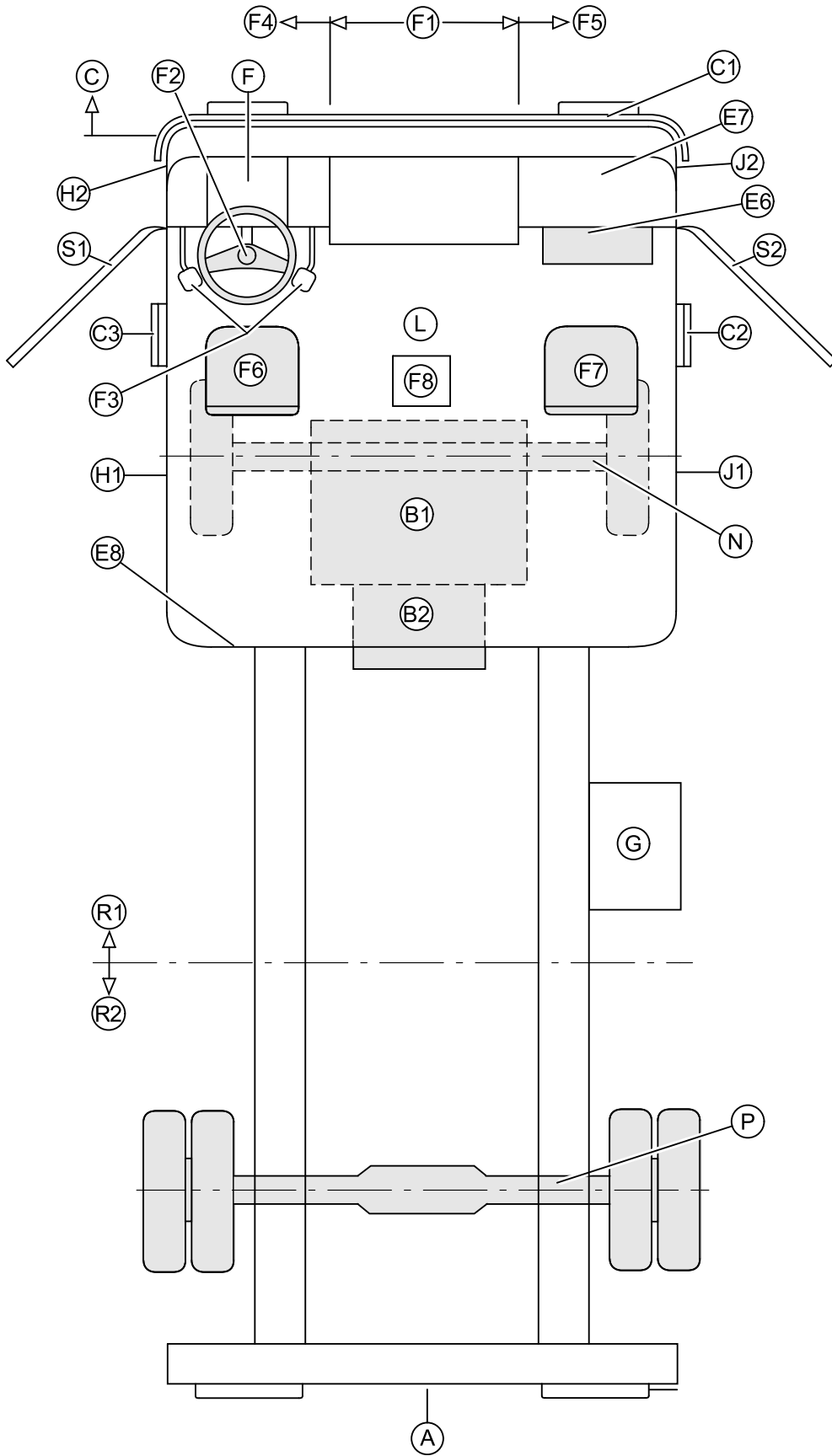
Instructions for using wiring diagrams



- 1 Name of component (here: diode V100 on the central fuse, relay and terminal box ("ZE"), position 53)
- 2 Mounting position on the front panel of the central fuse, relay and terminal box ("ZE") (here: engraved position number 53)
- 3 Plug connector on the rear of the central fuse, relay and terminal box ("ZE") (here: plug 78, connection 8)
- 4 Cable number; printed on the cable at short intervals (cross-section only if greater than 1²)
- 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.

Mounting positions for left-hand drive



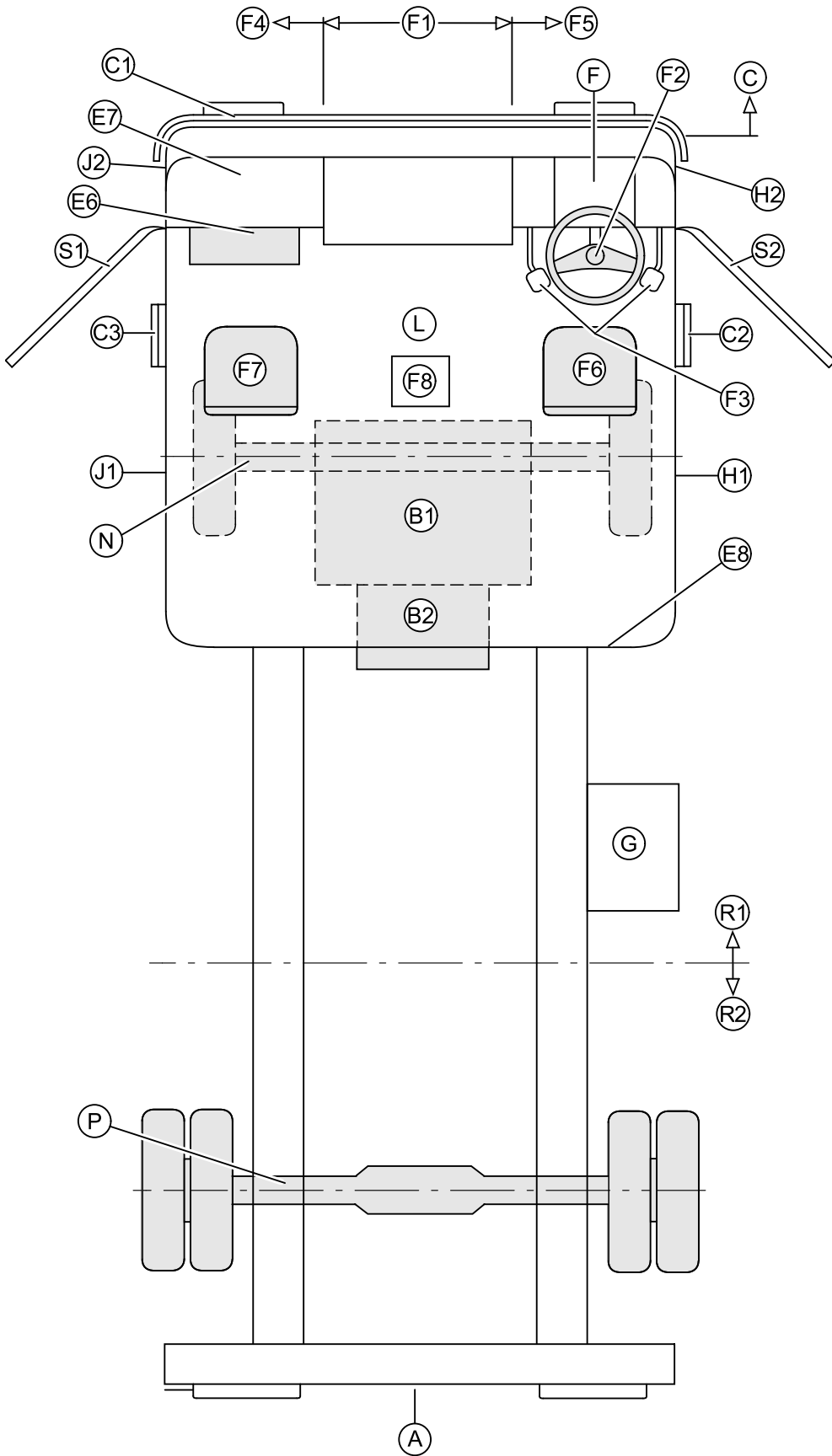
Marks

Mounting position

<p>Ⓐ Ⓑ1 Ⓑ2 Ⓒ Ⓒ1 Ⓒ2 Ⓒ3 Ⓔ6 Ⓔ7 Ⓔ8 Ⓕ Ⓕ1 Ⓕ2 Ⓕ3 Ⓕ4 Ⓕ5 Ⓕ6 Ⓕ7 Ⓕ8 Ⓖ Ⓕ1 Ⓕ2 Ⓖ1 Ⓖ2 Ⓖ3 Ⓖ4 Ⓖ5 Ⓖ6 Ⓖ7 Ⓖ8 Ⓖ Ⓕ1 Ⓕ2 Ⓖ Ⓖ Ⓖ1 Ⓖ2 Ⓖ1 Ⓖ2</p>	<p>Tail Engine Gearbox Front Bumper Entrance right Entrance left Central electrics area Control unit racks Rear wall of cab Instrument panel Central part Steering wheel/column Foot pedals Front wall, inside left Front wall, inside right Driving seat Passenger seat Control panel Battery box B-pillar on driver's side A-pillar on driver's side B-pillar on passenger's side A-pillar on passenger's side Ceiling/roof Front axle Rear axle Front parts of frame Rear part of frame Door left Door right</p>
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GENERAL REMARKS

Mounting positions for right-hand drive



Marks

Mounting position

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

GENERAL REMARKS

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

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

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

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

GENERAL REMARKS

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

Name	Wiring diagram no.	Page
CAN databus driveline (T-CAN) with AS-TRONIC/special customer module	81.99192.2433	4.03 - 18
CAN databus driveline (T-CAN) with intarder or retarder/AS-TRONIC/ 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

GENERAL REMARKS

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

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

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

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)

Legend

Wiring diagram no. **81.99192.2981** Sheet 2 of 21
Change status: 03.01

A = Supply voltage, central vehicle computer

B = Power supply intarder, EBS, ECAS

C = Power supply retarder

D = Power supply vehicle management computer

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A403 (339) Vehicle management computer

F152 (101) Fuse retarder (terminal 15)

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

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

F162 (111) Fuse EBS/ABS control

F164 (101) Fuse ECAS (terminal 30)

F243 (105) Fuse central vehicle computer, permanent positive

F244 (105) Fuse central vehicle computer (terminal 30-1)

F245 (105) Fuse central vehicle computer (terminal 30-2)

F246 (101) Fuse central vehicle computer (terminal 15)

F371 (101) Fuse vehicle management computer (terminal 30)

F372 (116) Fuse vehicle management computer (terminal 15)

F374 (101) Fuse intarder/retarder (terminal 30)

F400 (101) Fuse steering wheel lock

F522 (105) Fuse, lead 30000

F523 (105) Fuse, lead 30000

X1064 (104) Bridge on central fuse, relay and terminal box 2 item 37
(Pin 1-2)

X1557 Stvd. frame left

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ1 Control unit racks

Ⓔ2 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Intarder

Ⓙ Electronic braking system (EBS)

Ⓚ Electronically controlled air suspension (ECAS)

Ⓛ Retarder

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓕ9 Battery box

Ⓕ10 B-pillar on driver's side

Ⓕ11 A-pillar on driver's side

Ⓕ12 B-pillar on passenger's side

Ⓕ13 A-pillar on passenger's side

Ⓛ Ceiling/roof

Ⓝ Front axle

Ⓞ Rear axle

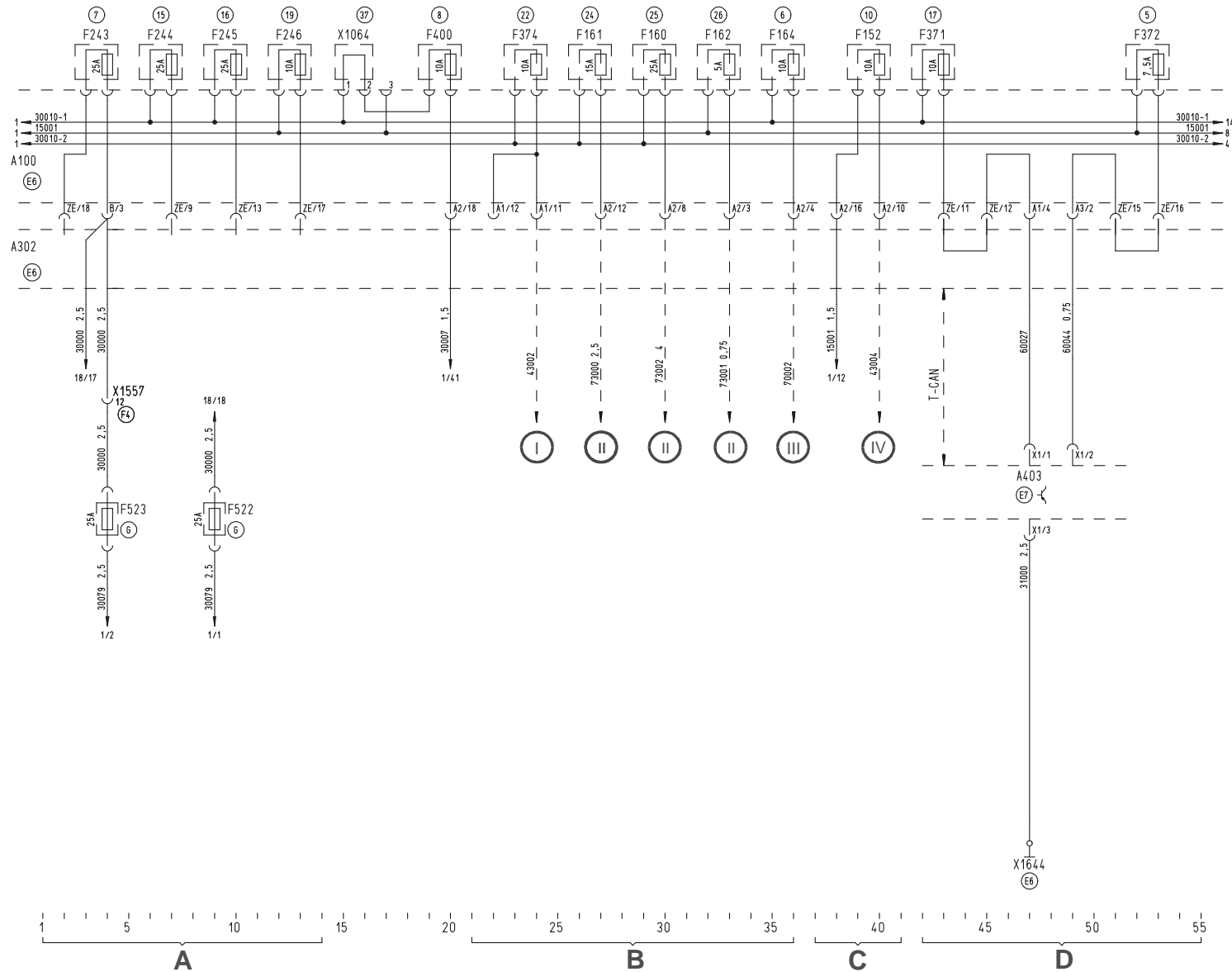
Ⓡ1 Front part of frame

Ⓡ2 Rear part of frame

Ⓢ1 Door left

Ⓢ2 Door right

Wiring diagram no. 81.99192.2981 Sheet 2 of 21



LegendWiring 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**

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

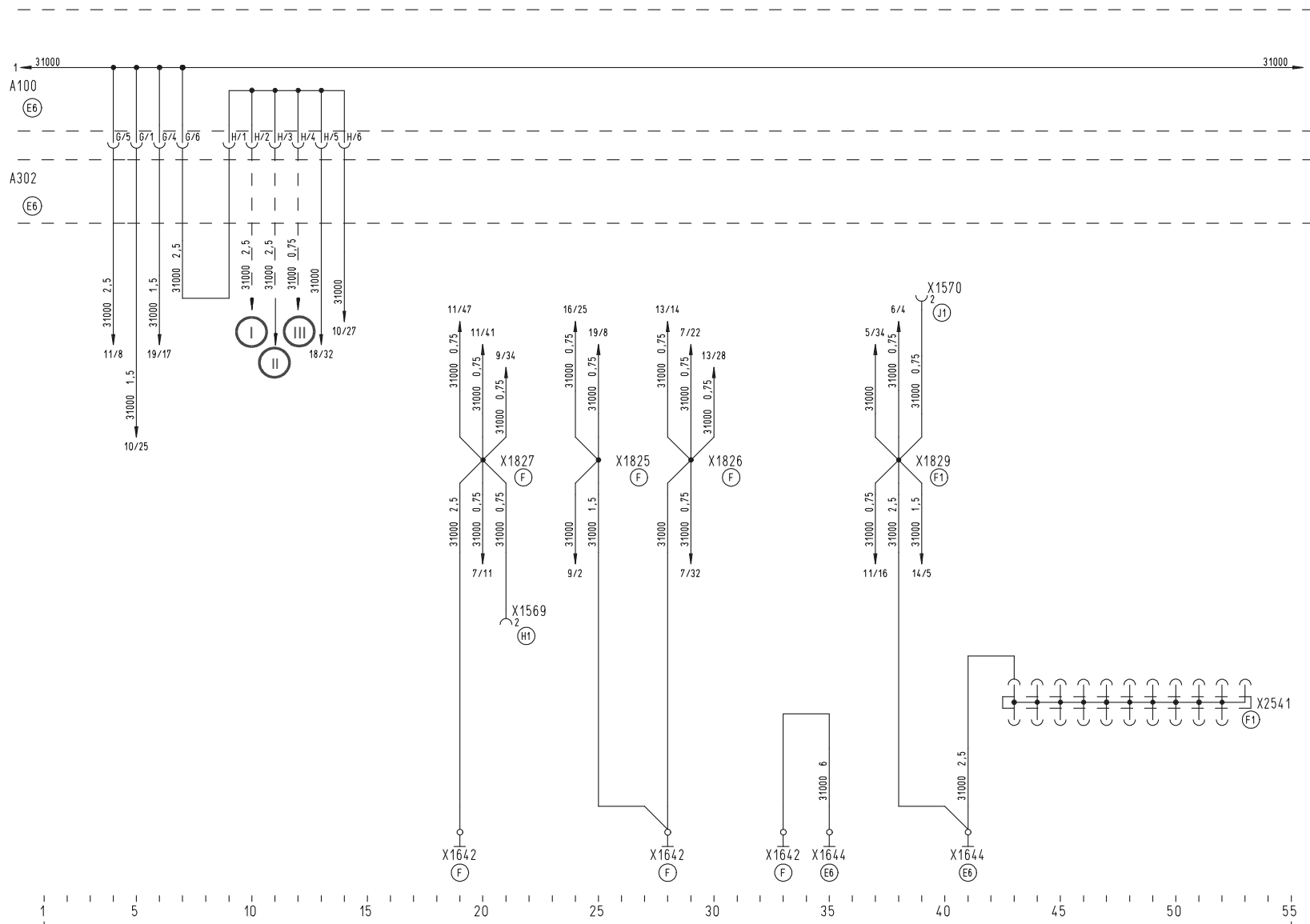
Ⓕ Door right

Ⓘ Door module, driver's side

Ⓙ Door module, passenger's side

Ⓚ Door module

Wiring diagram no. 81.99192.2981 Sheet 3 of 21



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

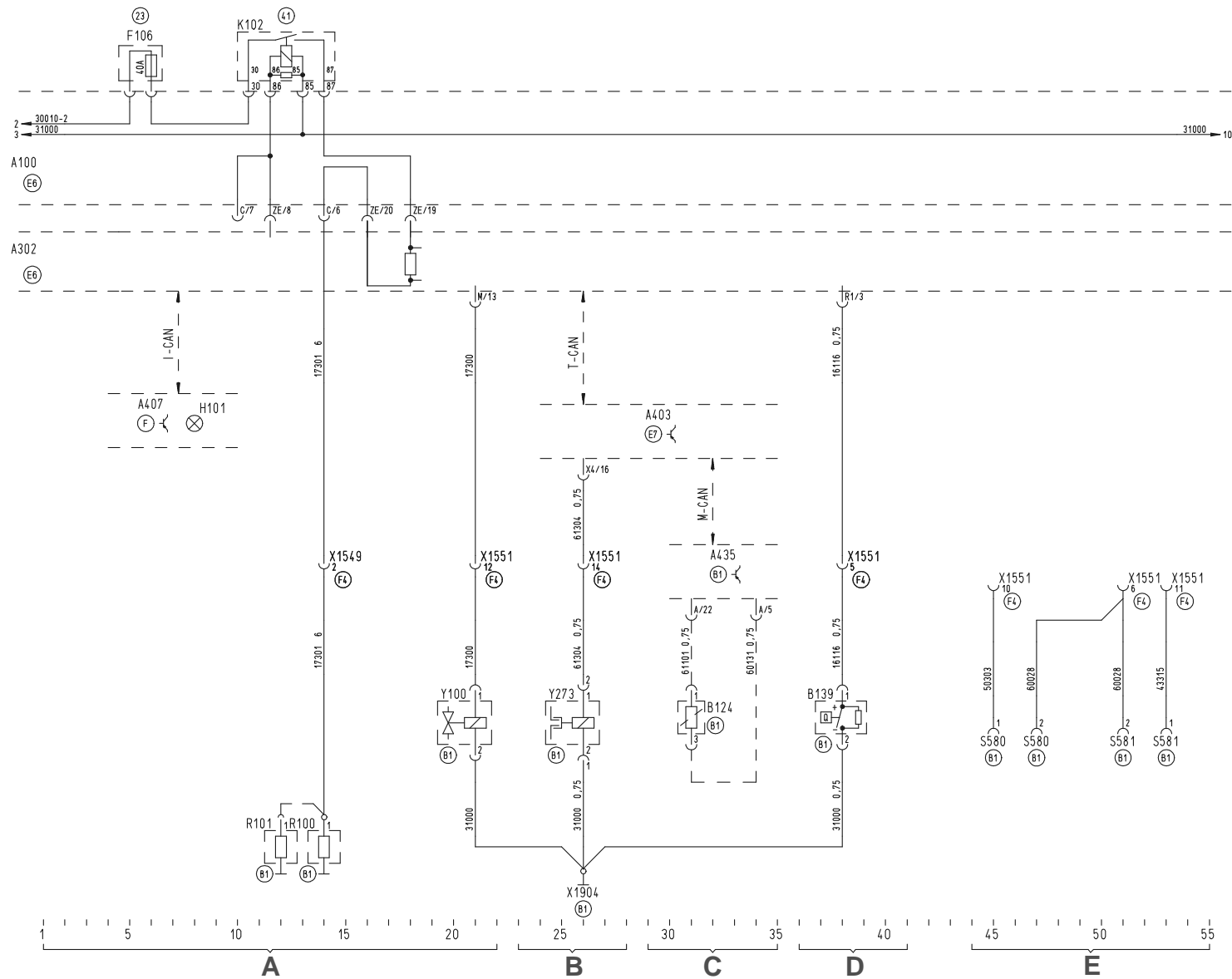
(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2981 Sheet 4 of 21



LegendWiring 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**

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

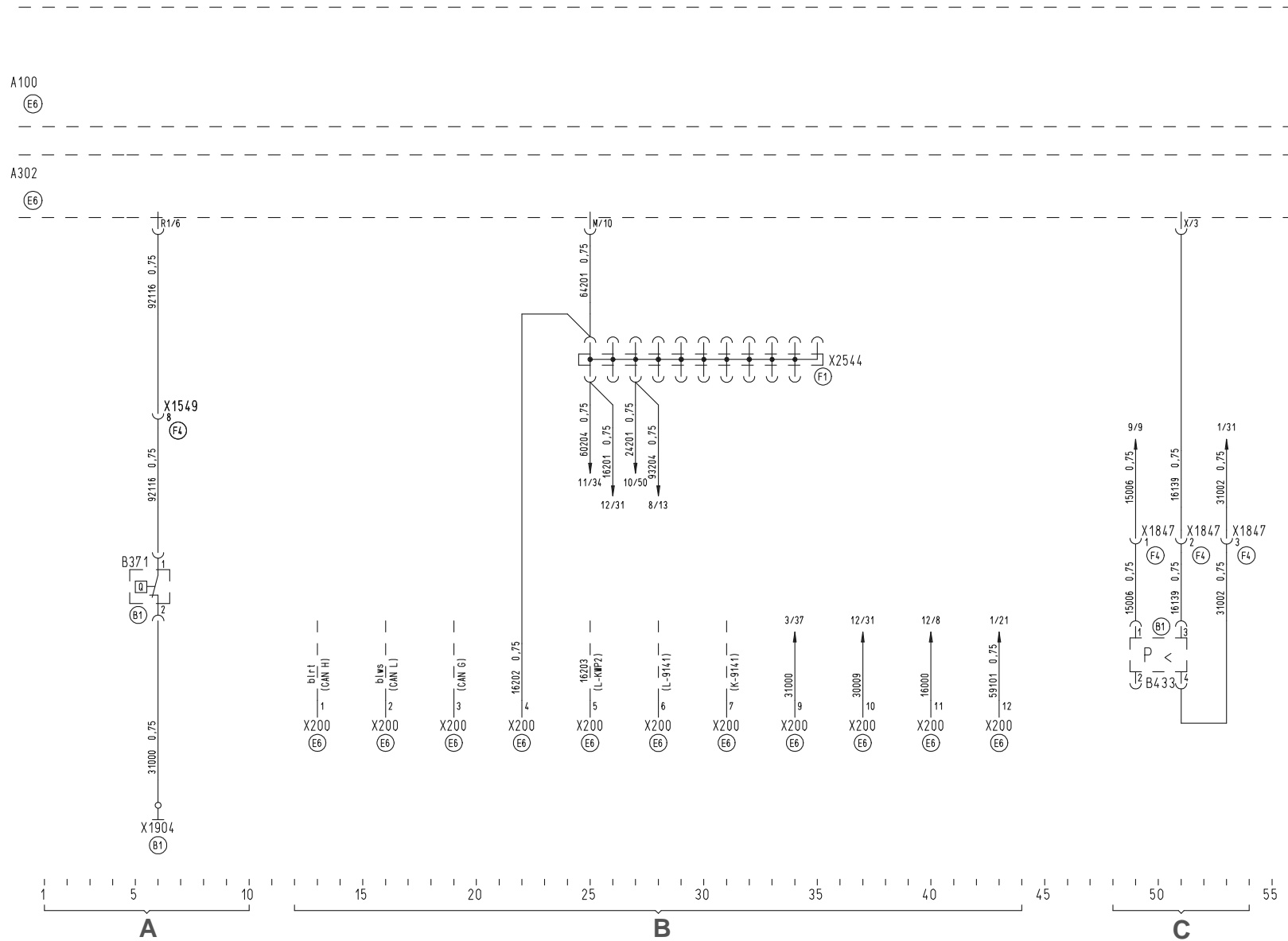
Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.2981 Sheet 5 of 21



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

Change status: 03.01

A = Clutch fluid level sensor**B = Heating thermostat****C = ZDR interface (vehicle management computer) (MDB, HGB)**

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A403 (339) Vehicle management computer

B434 (272) Clutch fluid level sensor

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

R134 (146) EDC resistor group

X1551 Stvd. engine/EDC/transmission II

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

X1972 Stvd. pedals, external

X1996 Stvd. intermediate speed control interface (FFR)

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Power take-off 1

Ⓙ Power take-off 2

Ⓚ Special customised module

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓕ9 Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

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

Change status: 03.01

A = Cruise control**B = Vehicle speed control/vehicle speed limiting, additional retarding brake****C = Distributor line 60028**

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

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

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

S284 (489) Switch FGR/FGB

S479 (476) Switch, additional retarding brake

X1693 Crimped connector, line 60028

X1831 (221) Crimped connector, line 60028

X1832 (221) Crimped connector, line 60028

X1968 Stvd. cruise control switch

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓔ Vehicle management computer (terminal 15)

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

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)

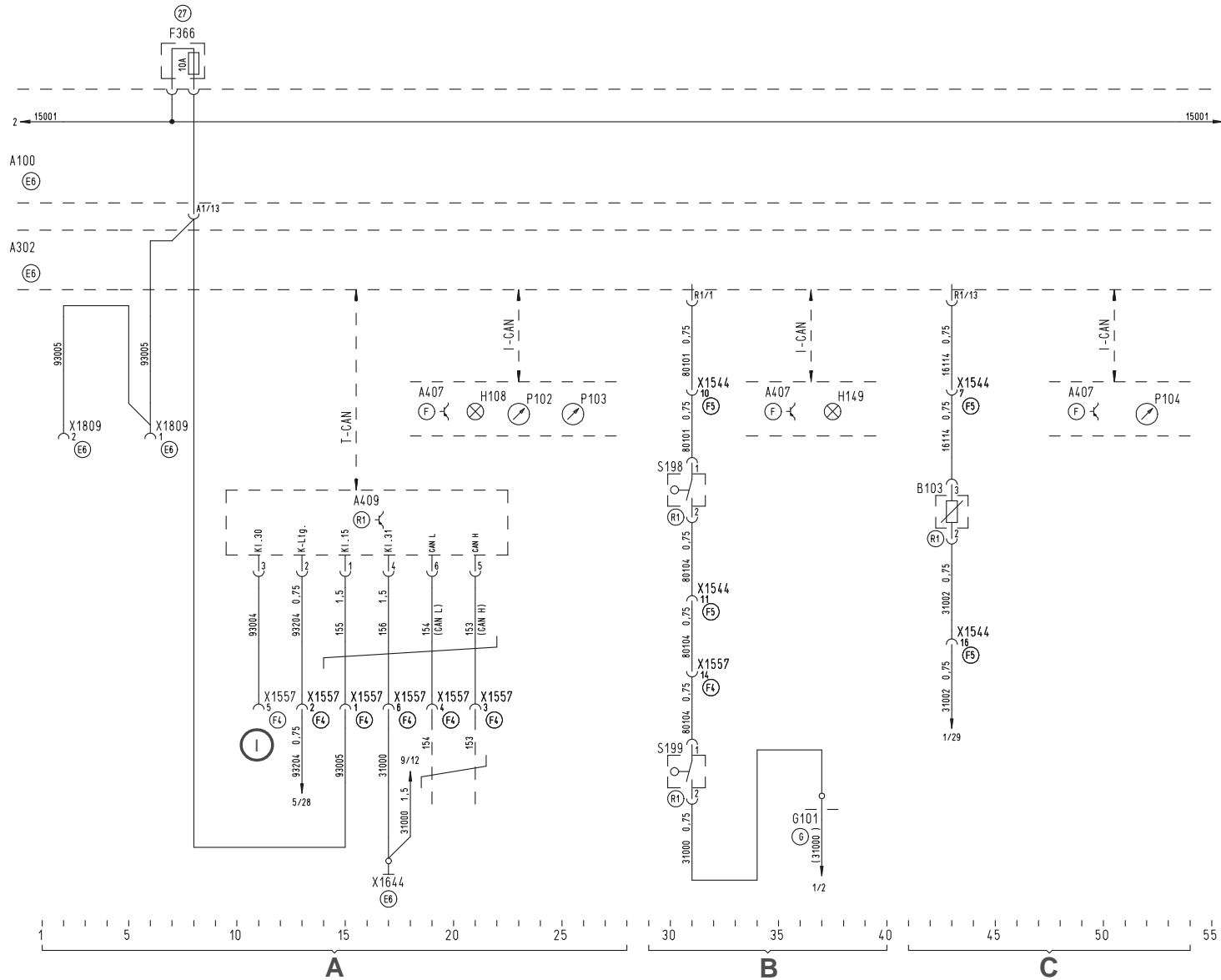
Marking of mounting positions

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

- Ⓘ Reserve

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓕ Ceiling/roof
- Ⓕ Front axle
- Ⓕ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.2981 Sheet 8 of 21



Legend

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

A = Horn

B = Oil level sensor

C = Engine brake

D = Additional retarding brake pushbutton switch

E = External temperature

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

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

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

G101 (113) Battery 2

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

P113 Indicator device, external temperature

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

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

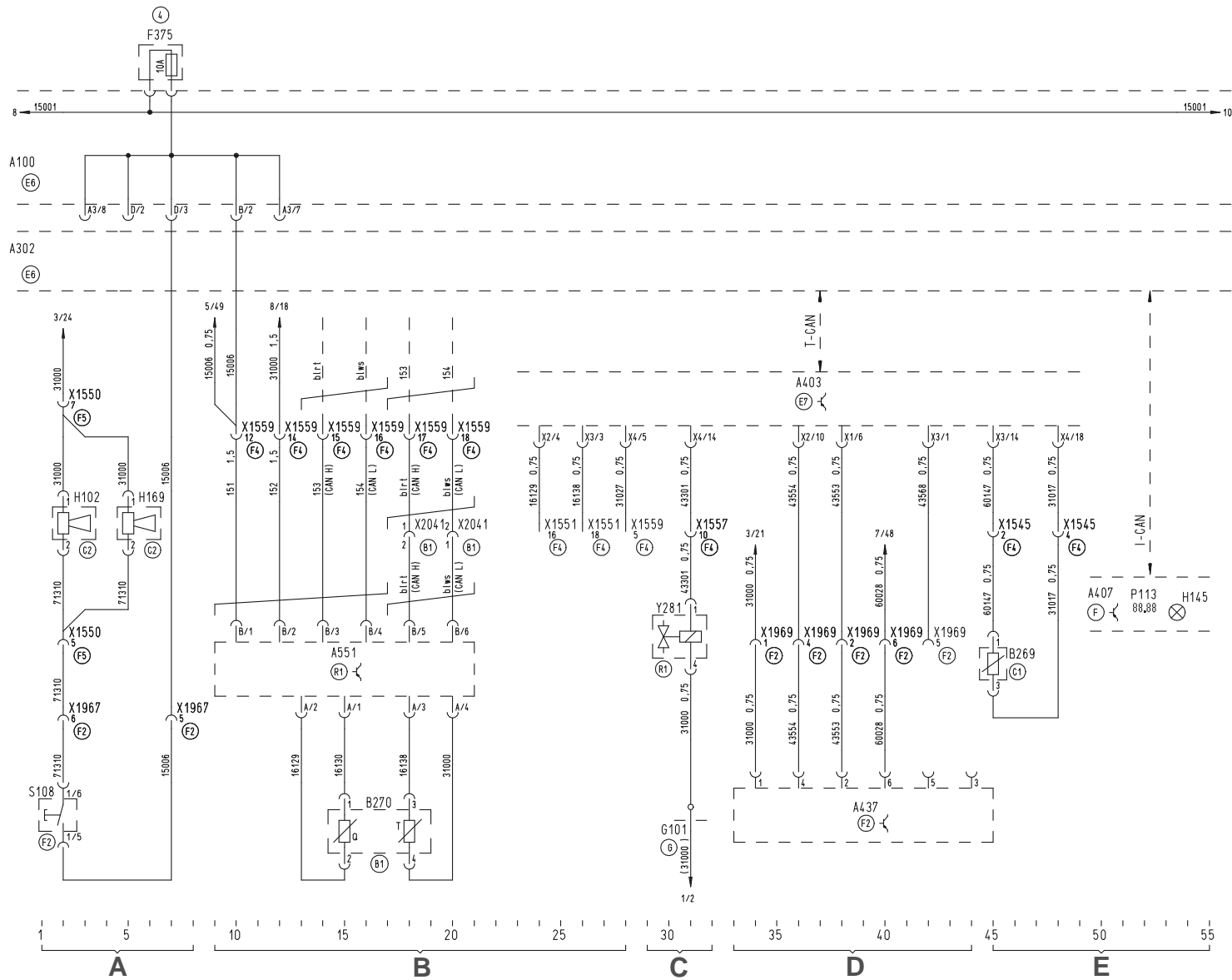
Marking of mounting positions

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

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

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

Wiring diagram no. 81.99192.2981 Sheet 9 of 21



Legend

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

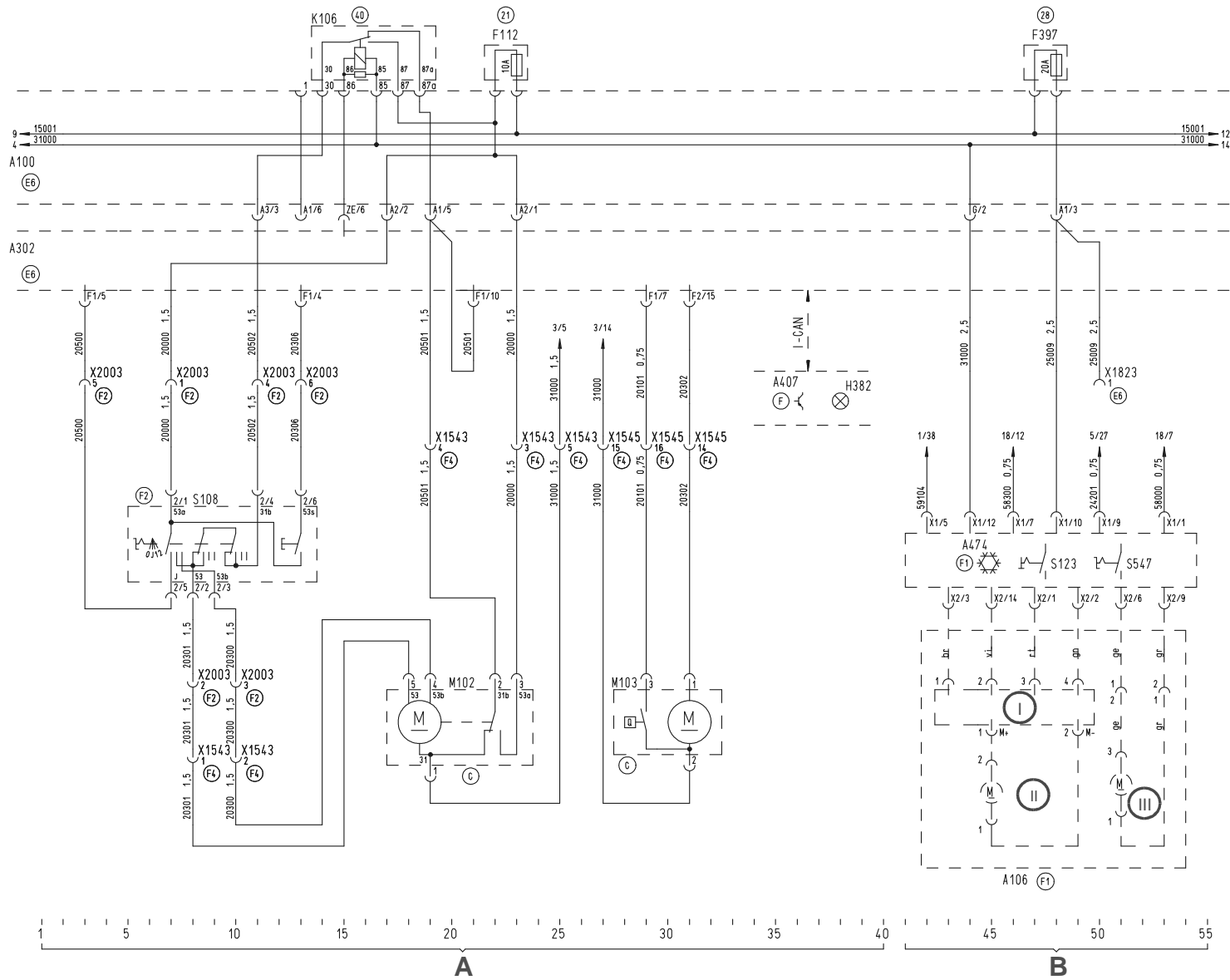
A = Wiper and washer system

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



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓘ HGS (hydraulic gearshift) heating

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

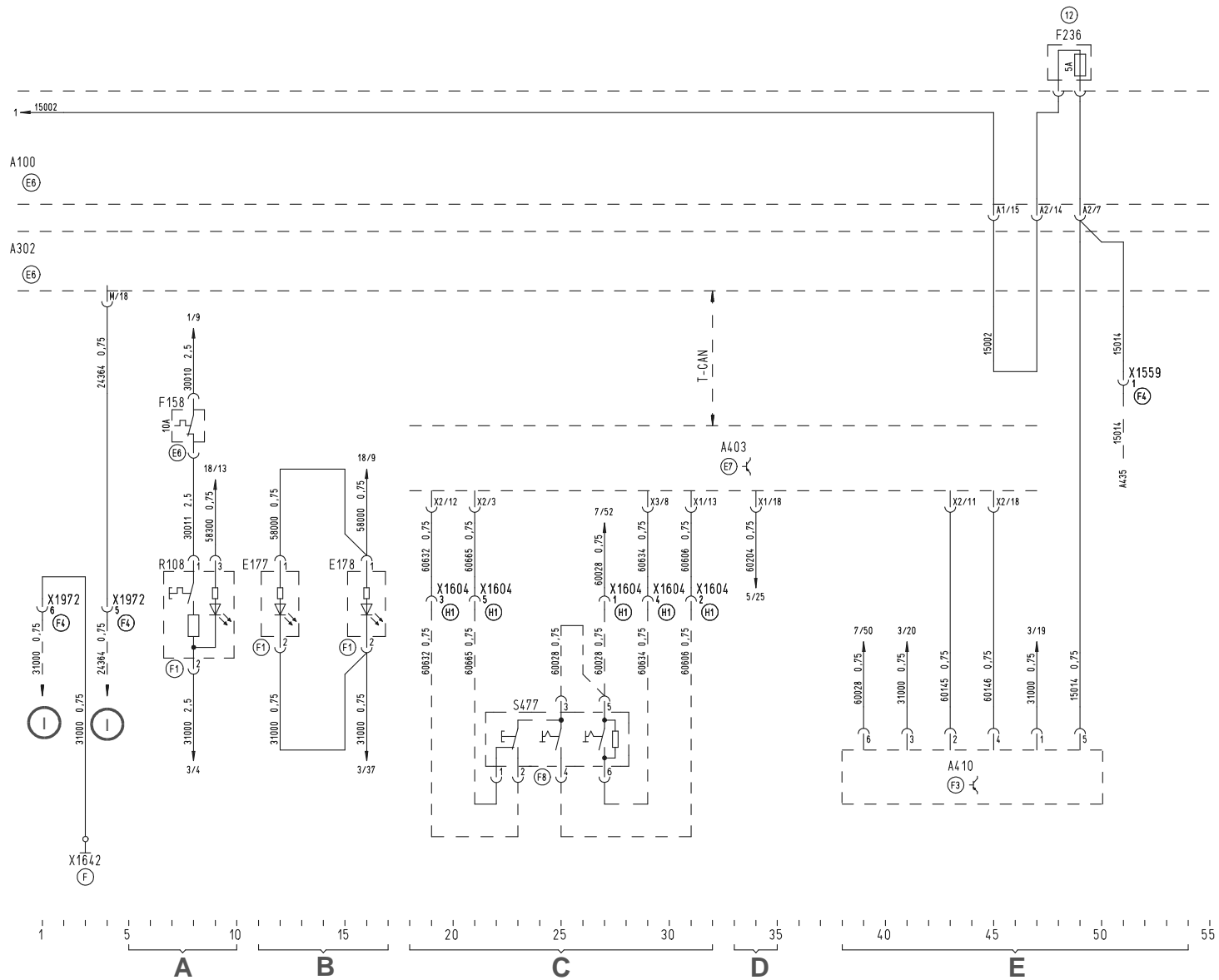
Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right



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

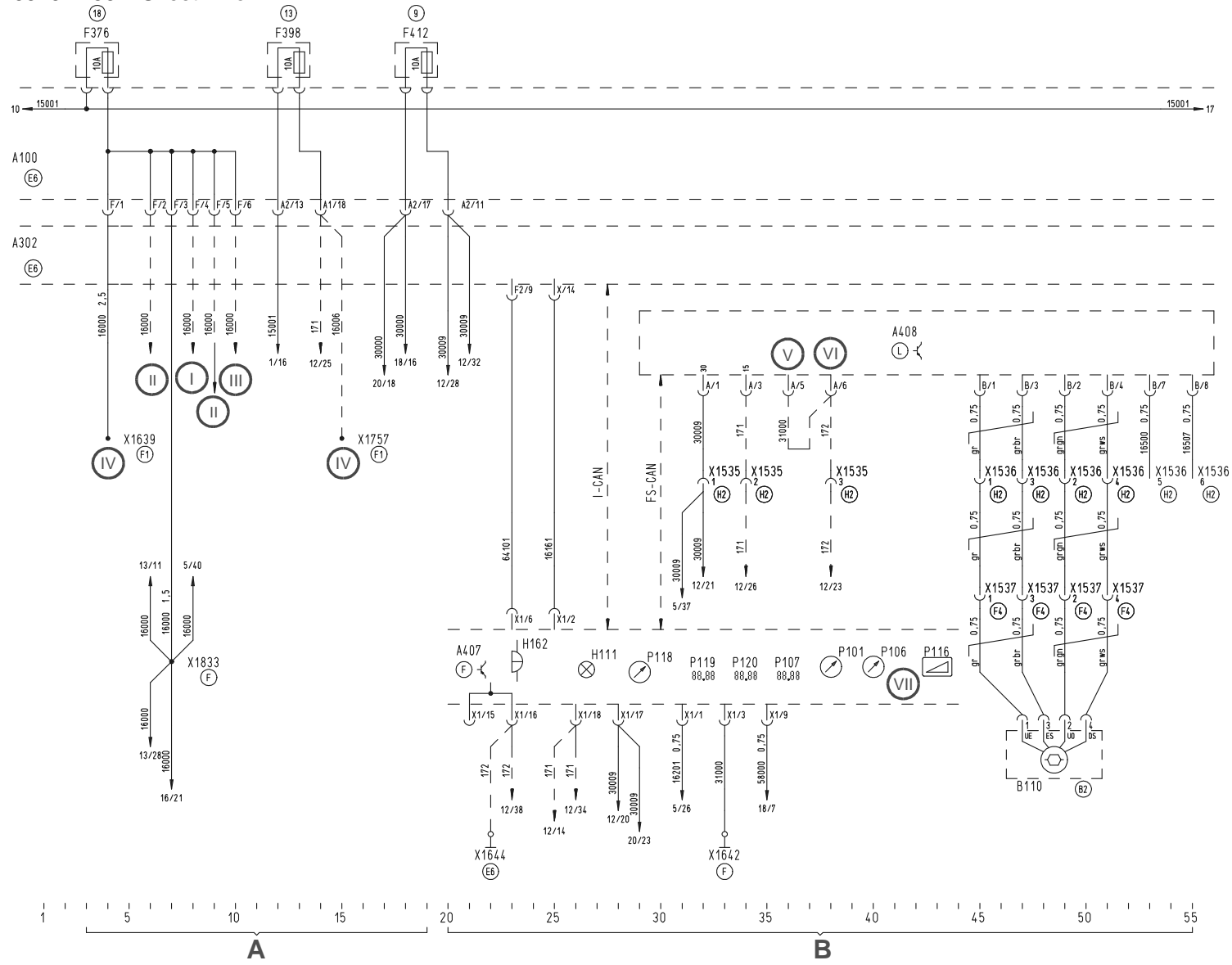
- (A) Tail
- (B1) Engine
- (B2) Gearbox
- (C) Front
- (C1) Bumper
- (C2) Entrance right
- (C3) Entrance left
- (E6) Central electrics area
- (E7) Control unit racks
- (E8) Rear wall of cab
- (F) Instrument panel
- (F1) Central part
- (F2) Steering wheel/column
- (F3) Foot pedals
- (F4) Front wall, inside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

Wiring diagram no. 81.99192.2981 Sheet 12 of 21



Legend

Wiring diagram no. **81.99192.2981** Sheet **13** of 21
 Change status: 03.01

A = Lighting learning run

B = Light circuits

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A407 (342) Instrumentation

F534 (117) Fuse, light switch

S111 (482) Light switch

S329 (473) Control switch, lighting learning run

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

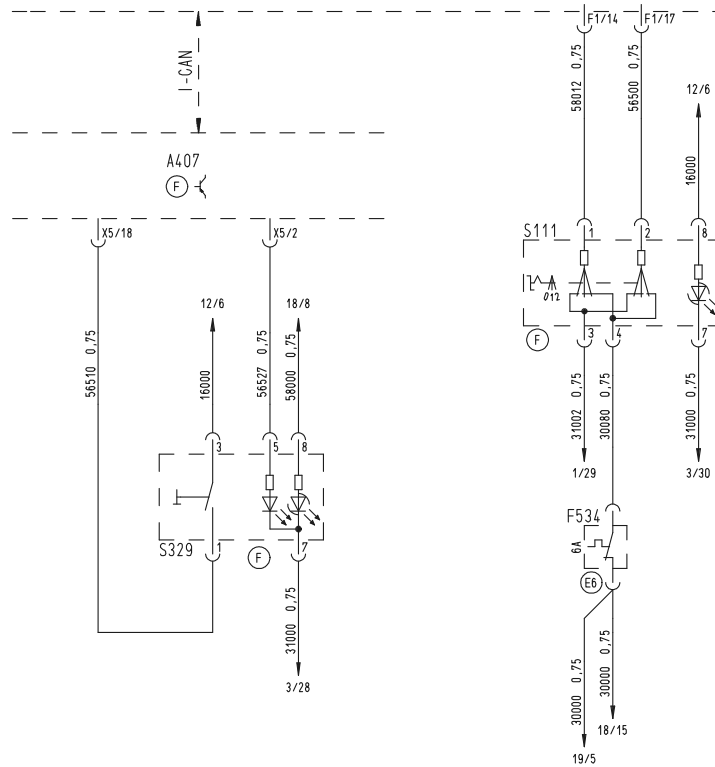
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2981 Sheet 13 of 21

A100
E6

A302
E6



Legend

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

A = Parking lights, left
B = Parking lights, right

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

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

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

- G101 (113) Battery 2

- K116 (187) Relay, parking tail light

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

Marking of mounting positions

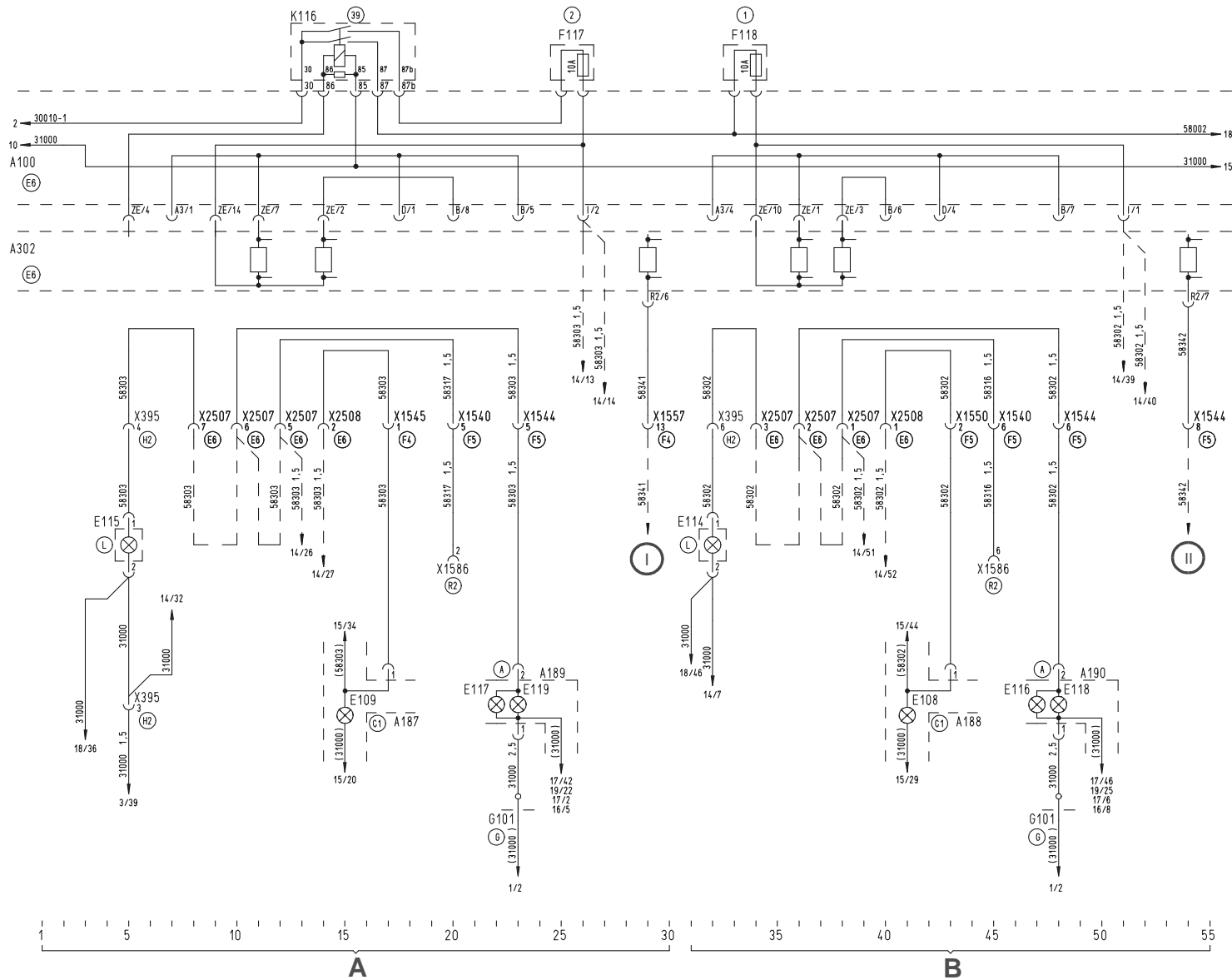
- Ⓐ Tail
- Ⓑ Engine
- Ⓒ Gearbox
- Ⓓ Front
- Ⓔ Bumper
- Ⓕ Entrance right
- Ⓖ Entrance left
- Ⓖ Central electrics area
- Ⓖ Control unit racks
- Ⓖ Rear wall of cab
- Ⓖ Instrument panel
- Ⓖ Central part
- Ⓖ Steering wheel/column
- Ⓖ Foot pedals
- Ⓖ Front wall, inside left
- Ⓖ Front wall, inside right

- Ⓘ Side marking light, left
- Ⓛ Side marker light, right

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

Note:

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



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓘ for D2R headlights

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

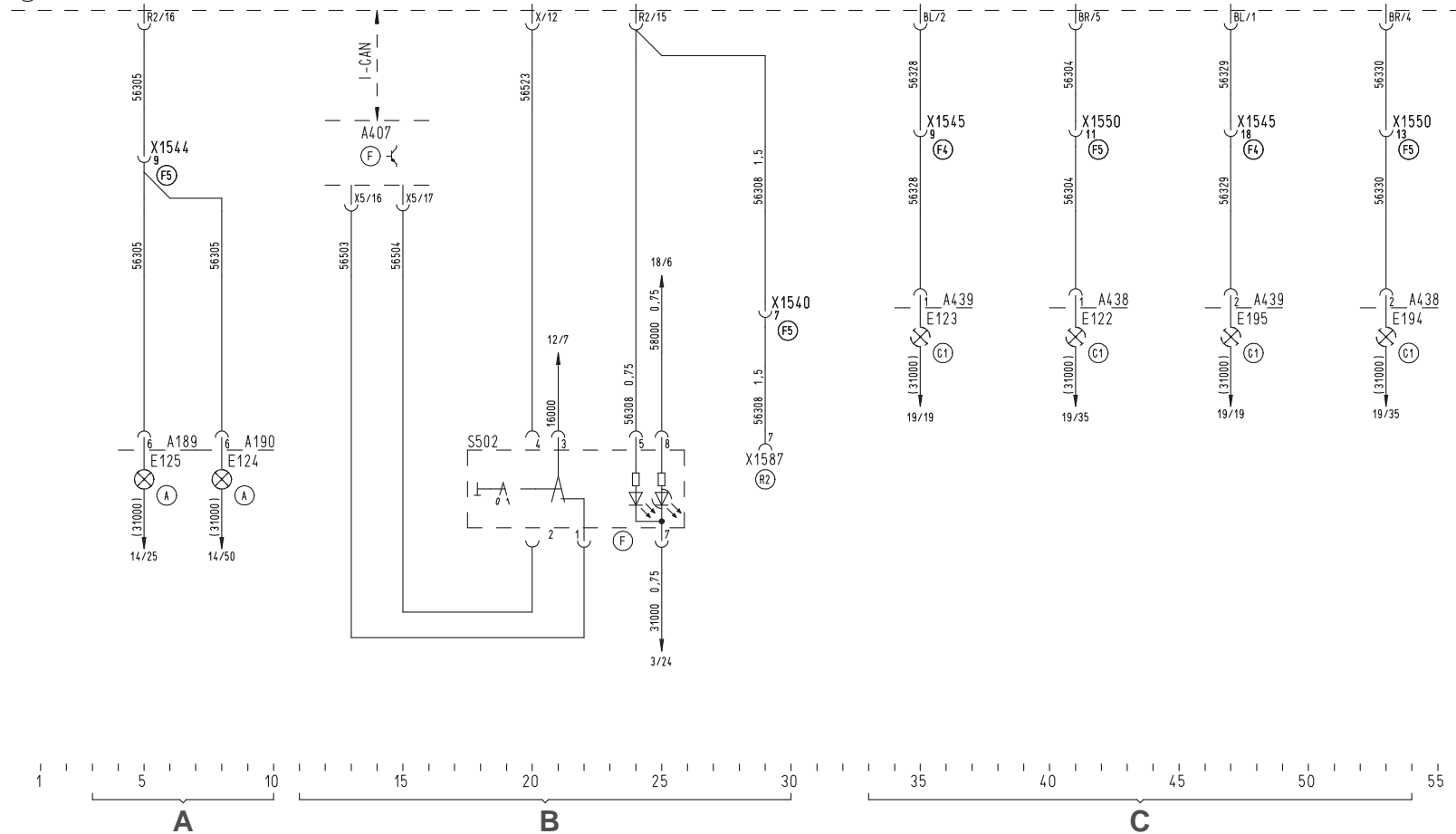
Note:

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

Wiring diagram no. 81.99192.2981 Sheet 16 of 21

A100
E6

A302
E6



Legend

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

A = Brake light**B = Parking brake****C = Reversing light**

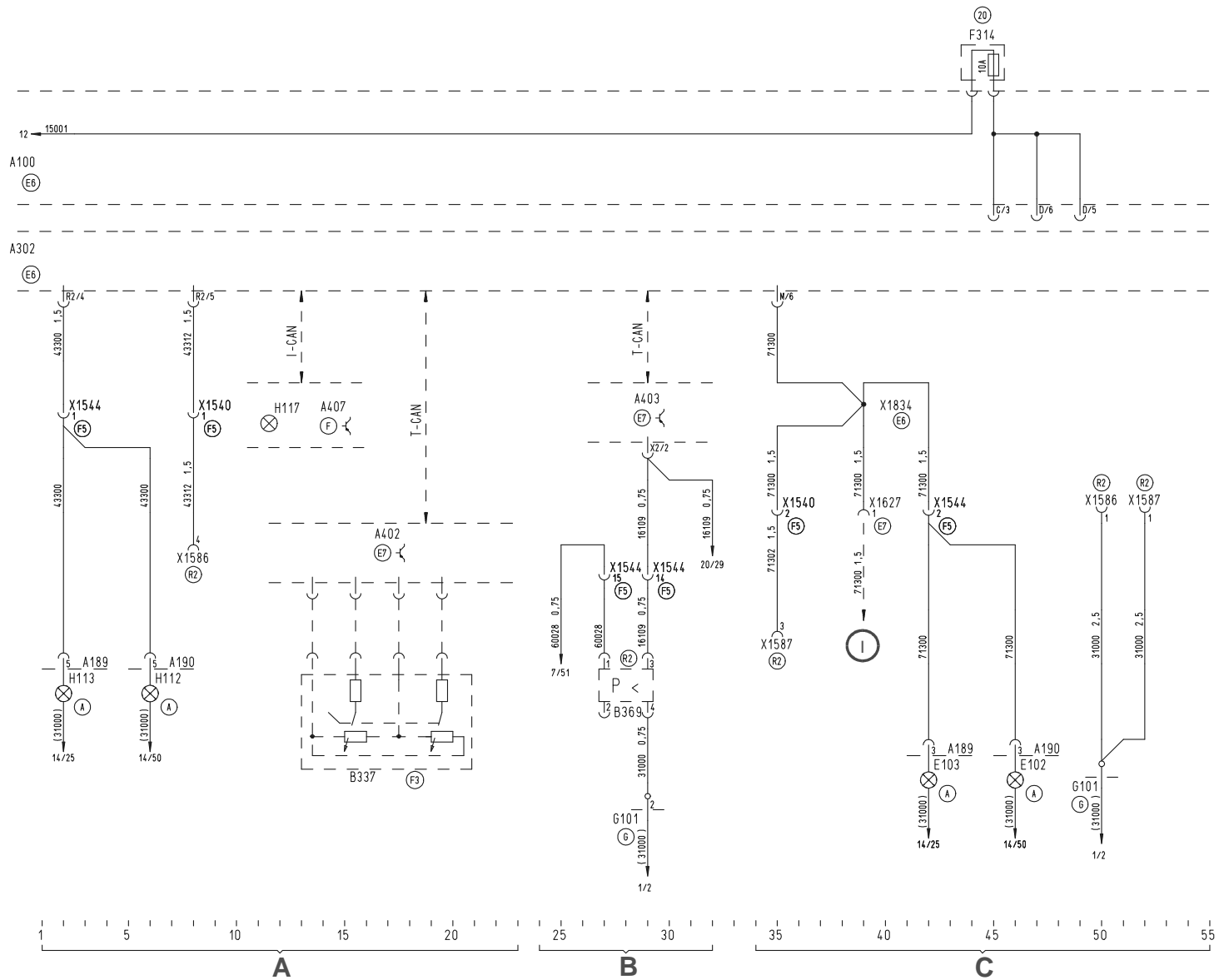
A100	(255)	Central fuse, relay and terminal block
A189	(195)	Tail light, left
A190	(195)	Tail light, right
A302	(352)	Central computer 2
A402	(399)	EBS control unit
A403	(339)	Vehicle management computer
A407	(342)	Instrumentation
B337	(244)	Brake sensor
B369	(276)	Pressure switch, control lamp for parking 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	(F6)	Driving seat
(B1)	Engine	(F7)	Passenger seat
(B2)	Gearbox	(F8)	Control panel
(C)	Front	(G)	Battery box
(C1)	Bumper	(H1)	B-pillar on driver's side
(C2)	Entrance right	(H2)	A-pillar on driver's side
(C3)	Entrance left	(J1)	B-pillar on passenger's side
(E6)	Central electrics area	(J2)	A-pillar on passenger's side
(E7)	Control unit racks	(L)	Ceiling/roof
(E8)	Rear wall of cab	(N)	Front axle
(F)	Instrument panel	(P)	Rear axle
(F1)	Central part	(R1)	Front part of frame
(F2)	Steering wheel/column	(R2)	Rear part of frame
(F3)	Foot pedals	(S1)	Door left
(F4)	Front wall, inside left	(S2)	Door right
(F5)	Front wall, inside right		
(I)	Switch, reverse gear		

Note:

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



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

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Door module

Ⓙ Terminal 58, dimmed

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓕ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

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

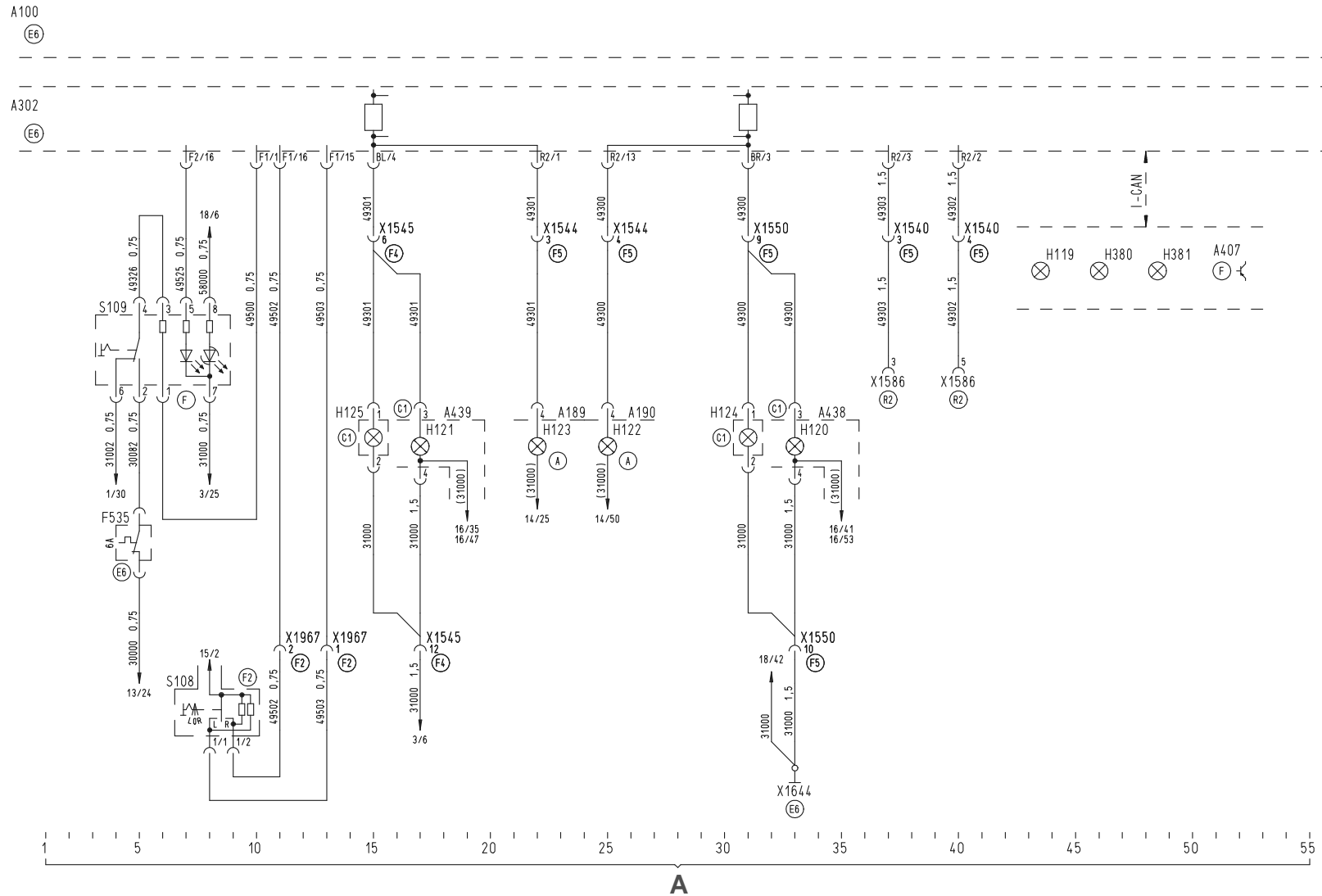
X1540 Stvd. frame I
X1544 Stvd. frame III
X1545 Stvd. front region, left
X1550 Stvd. front region, right
X1586 Stvd. connection for trailer lighting socket 1
X1644 Earthing point, cab, adjacent to central fuse, relay and terminal block
X1967 Stvd. 1 combination steering column switch

Marking of mounting positions

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

Note:

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



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

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Solenoid valve, differential lock, rear axle, transverse

Ⓙ Switch for display, differential lock, transverse

Ⓜ Indicator light, differential lock, rear axle, transverse

Ⓝ Indicator light, differential lock, longitudinal

Ⓟ Solenoid valve, differential lock, longitudinal

Ⓡ Solenoid valve, power take-off 1

Ⓢ Data line

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓕ9 Battery box

Ⓕ11 B-pillar on driver's side

Ⓕ12 A-pillar on driver's side

Ⓕ11 B-pillar on passenger's side

Ⓕ12 A-pillar on passenger's side

Ⓕ Ceiling/roof

ⒻN Front axle

ⒻP Rear axle

ⒻR1 Front part of frame

ⒻR2 Rear part of frame

ⒻS1 Door left

ⒻS2 Door right

Ⓕ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

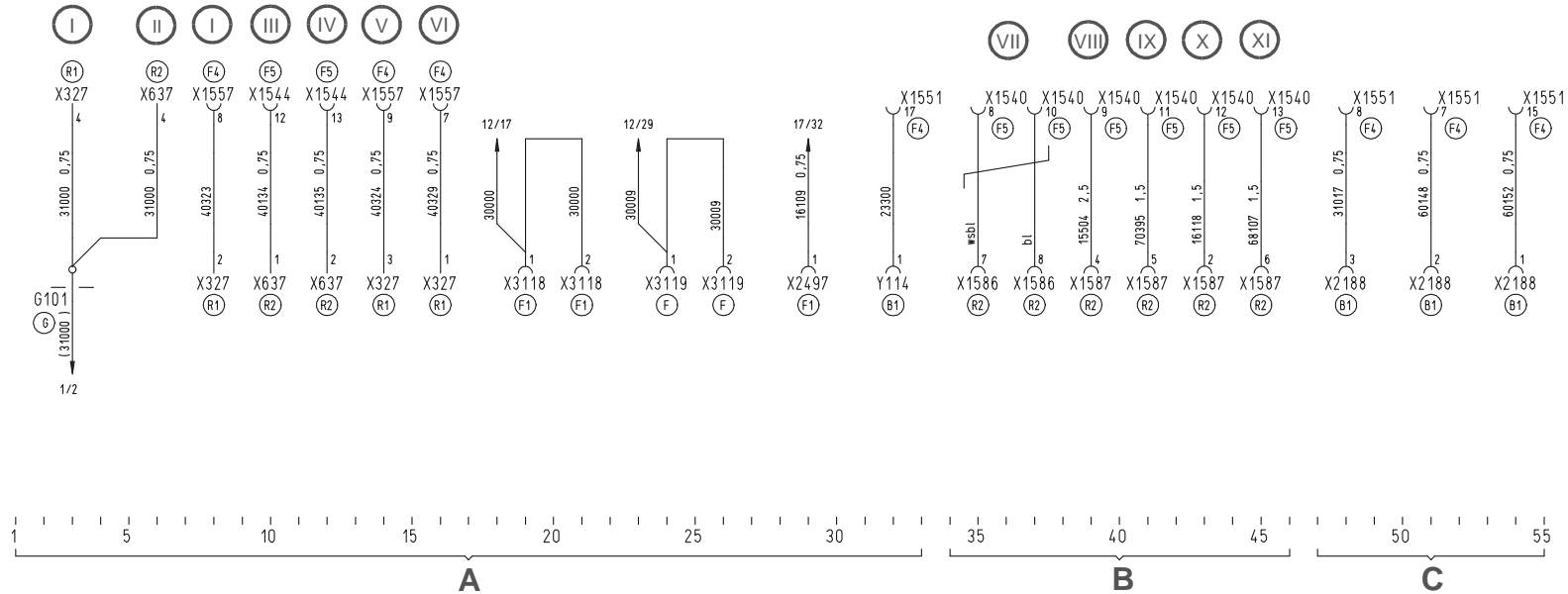
Note:

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

Wiring diagram no. 81.99192.2981 Sheet 20 of 21

A100
E6

A302
E6



Legend

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

A = Intarder, retarder
B = Transmission
C = Power take-off

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

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

Marking of mounting positions

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

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

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

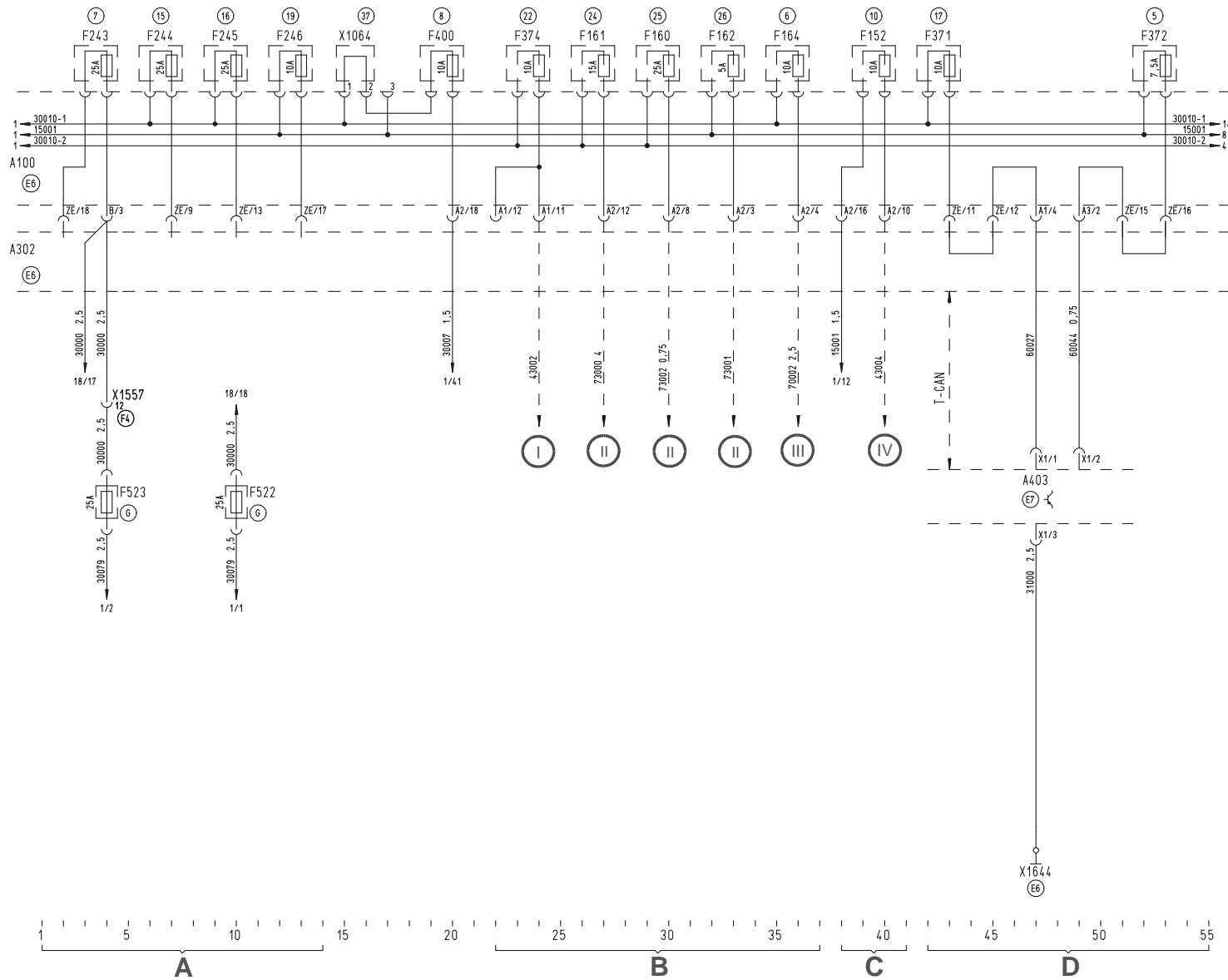
F152 (101) Fuse retarder (terminal 15)
F160 (105) Fuse EBS/ABS power supply, trailer
F161 (103) Fuse, EBS/ABS power supply pressure control valve
F162 (111) Fuse EBS/ABS control
F164 (101) Fuse ECAS (terminal 30)
F243 (105) Fuse central vehicle computer, permanent positive
F244 (105) Fuse central vehicle 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

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ1 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ1 Control unit racks
- Ⓔ2 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓖ Intarder
- Ⓖ1 Electronic braking system
- Ⓖ2 Electronically controlled air suspension
- Ⓖ3 Retarder
- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓕ9 Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓕ5 Ceiling/roof
- Ⓕ6 Front axle
- Ⓕ7 Rear axle
- Ⓕ8 Front part of frame
- Ⓕ9 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.2982 Sheet 2 of 21



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

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

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

LegendWiring 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**

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

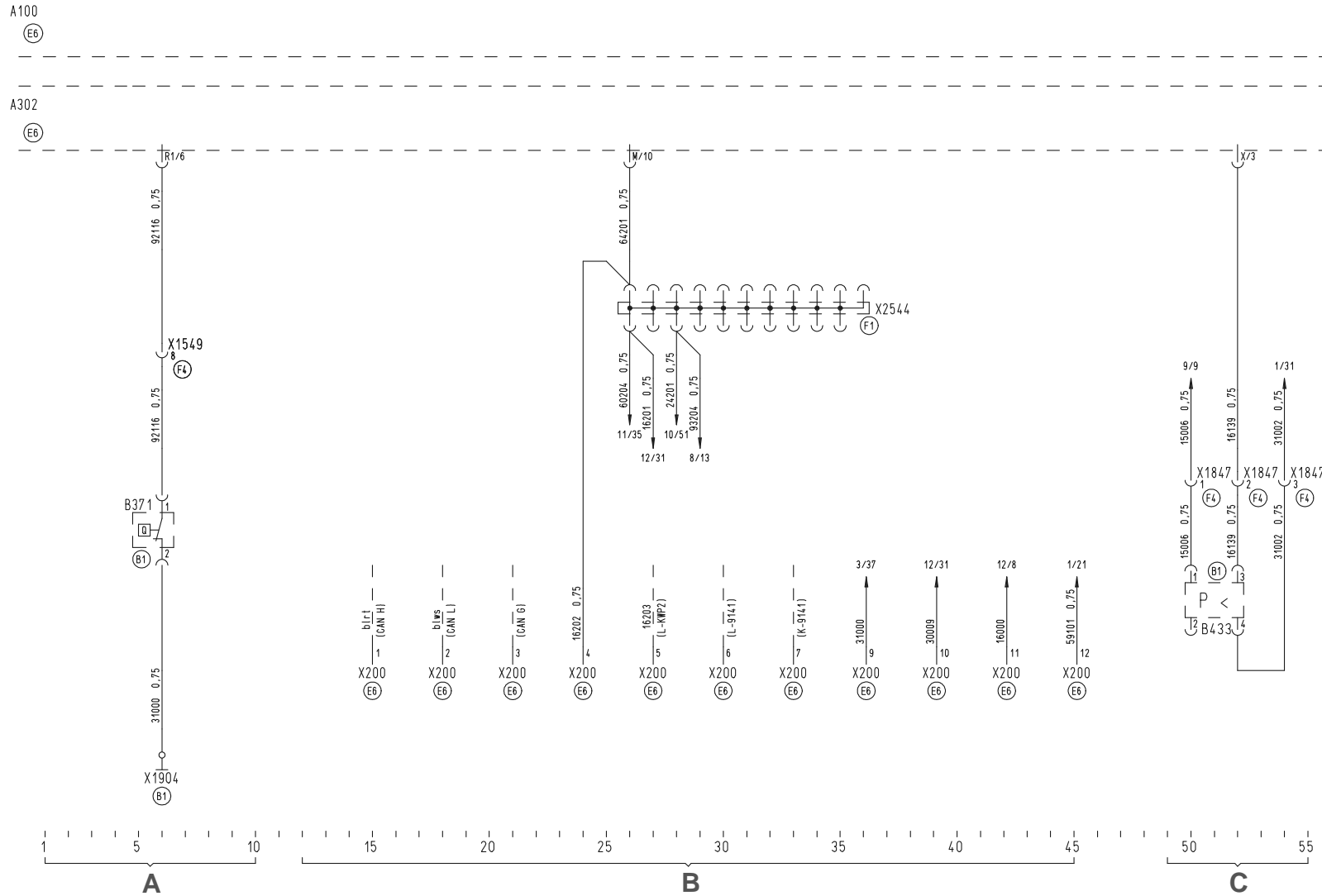
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2982 Sheet 5 of 21



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

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Power take-off 1

Ⓙ Power take-off 2

Ⓚ Special customised module

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓕ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

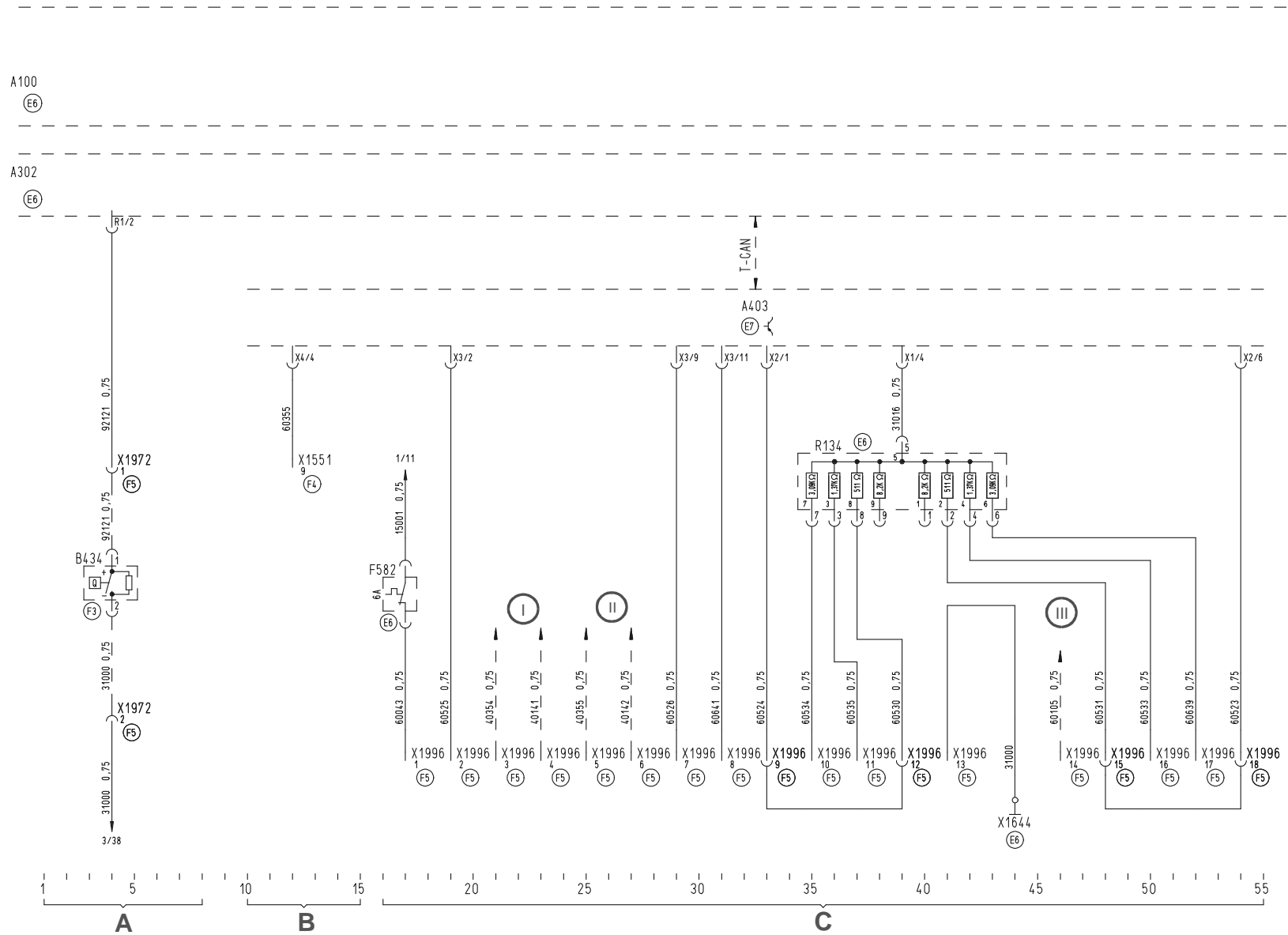
Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.2982 Sheet 6 of 21



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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓔ Vehicle management computer (terminal 15)

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

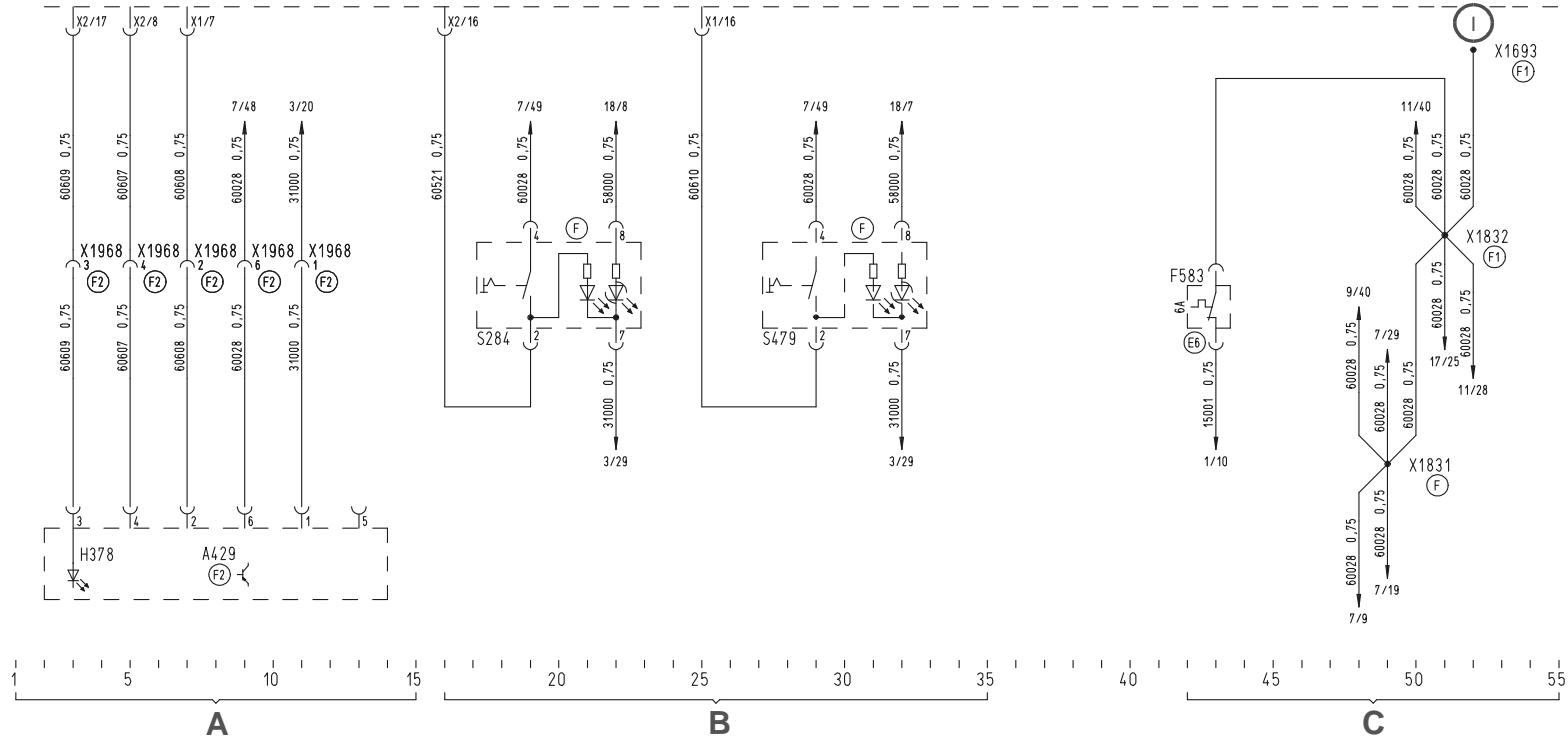
Wiring diagram no. 81.99192.2982 Sheet 7 of 21

A100
E6

A302
E6

T-CAN

A403
E7



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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓖ Reserve

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

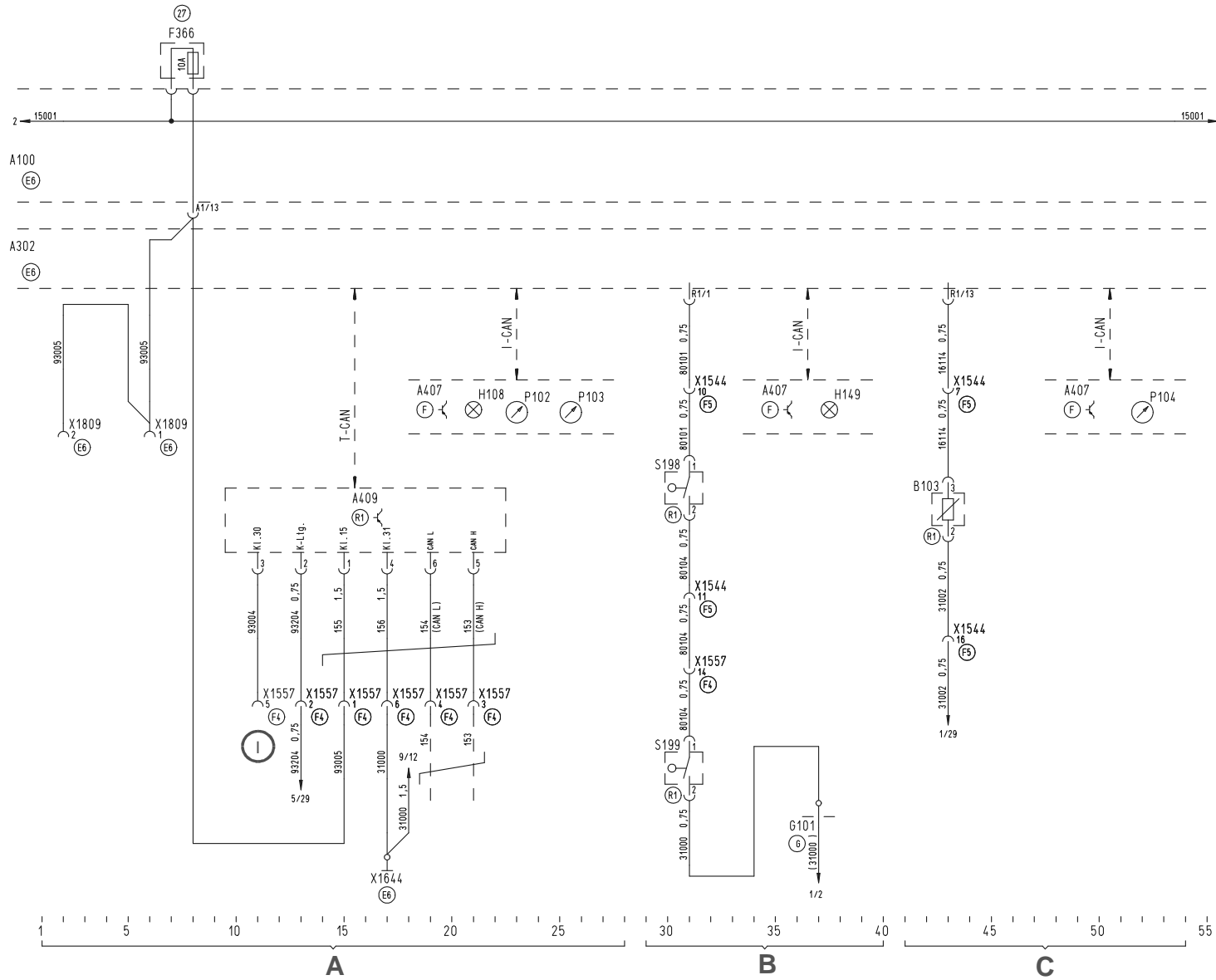
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2982 Sheet 8 of 21



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)

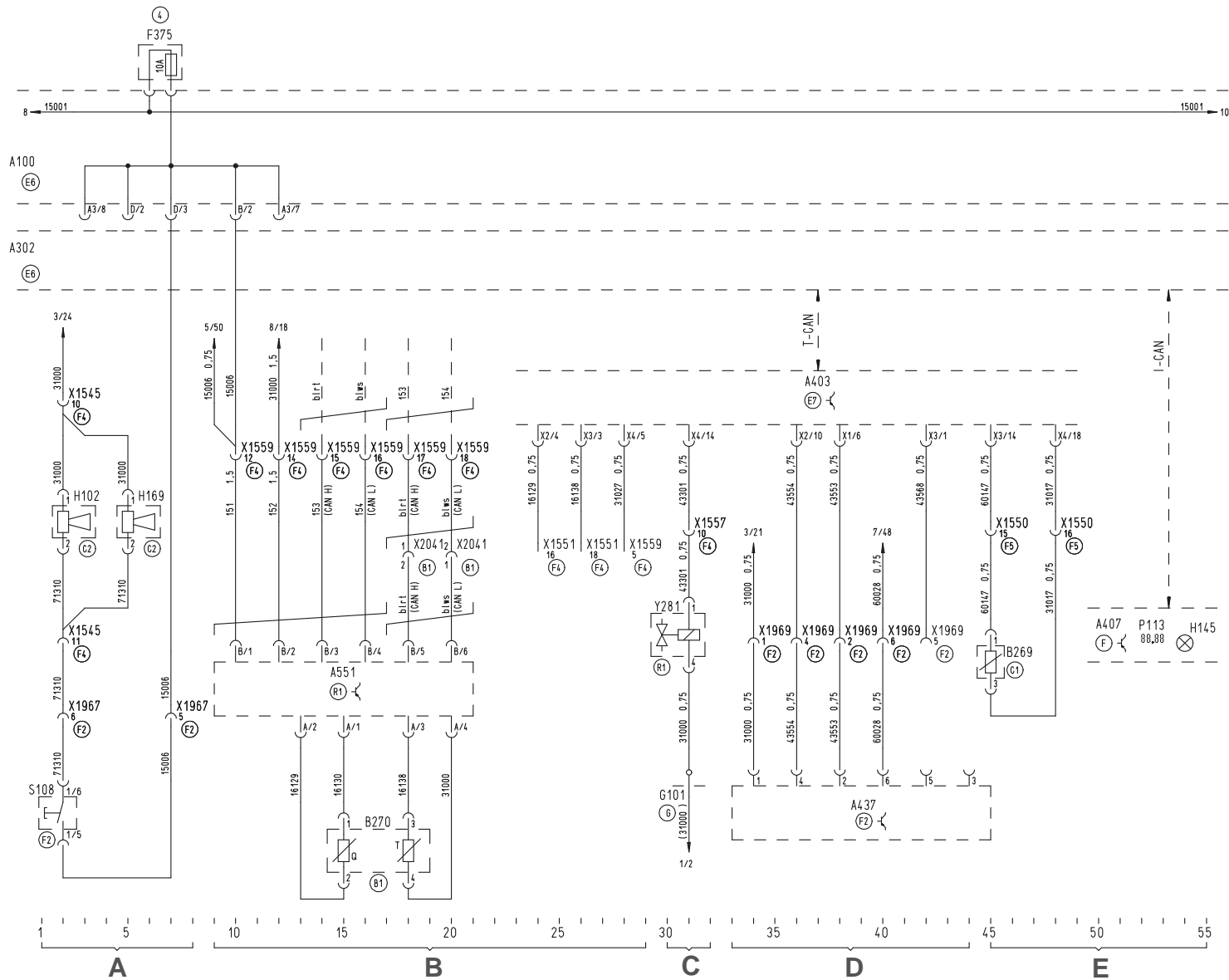
X1545 Stvd. front region, left
X1550 Stvd. front region, right
X1551 Stvd. engine/EDC/transmission II

Marking of mounting positions

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

- 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



Legend

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

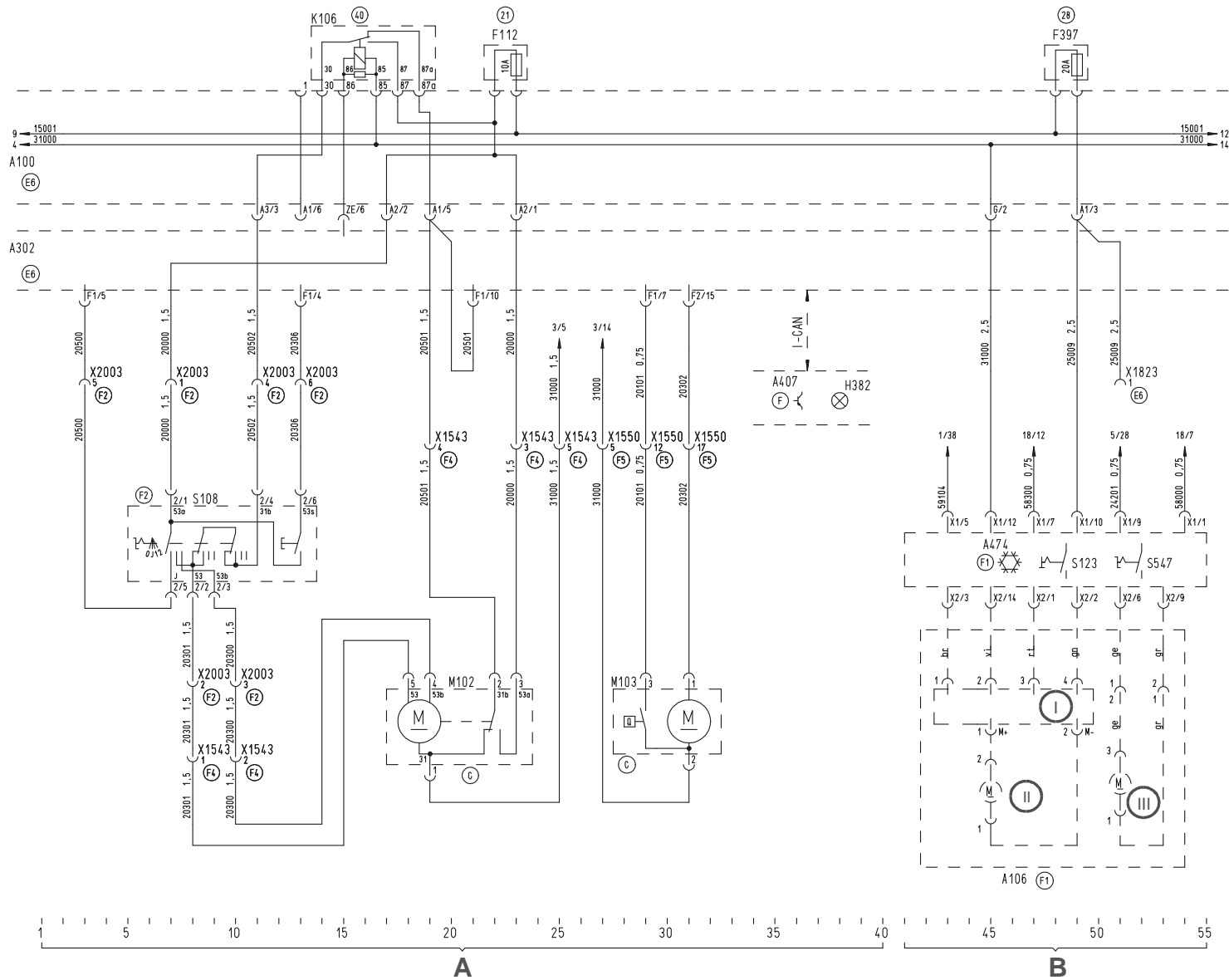
A = Wiper and washer system

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

Ⓐ	Tail	Ⓕ	Driving seat
Ⓑ1	Engine	Ⓖ7	Passenger seat
Ⓑ2	Gearbox	Ⓖ8	Control panel
Ⓒ	Front	Ⓖ	Battery box
Ⓒ1	Bumper	Ⓕ1	B-pillar on driver's side
Ⓒ2	Entrance right	Ⓕ2	A-pillar on driver's side
Ⓒ3	Entrance left	Ⓖ1	B-pillar on passenger's side
Ⓔ6	Central electrics area	Ⓖ2	A-pillar on passenger's side
Ⓔ7	Control unit racks	Ⓖ	Ceiling/roof
Ⓔ8	Rear wall of cab	Ⓖ	Front axle
Ⓕ	Instrument panel	Ⓖ	Rear axle
Ⓕ1	Central part	Ⓕ1	Front part of frame
Ⓕ2	Steering wheel/column	Ⓕ2	Rear part of frame
Ⓕ3	Foot pedals	Ⓕ1	Door left
Ⓕ4	Front wall, inside left	Ⓕ2	Door right
Ⓕ5	Front wall, inside right		
Ⓘ	Clock-pulse regulator		
Ⓙ	Blower		
Ⓚ	Fresh/circulating air		



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓘ Reserve for HGS (hydraulic gearshift) heating

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

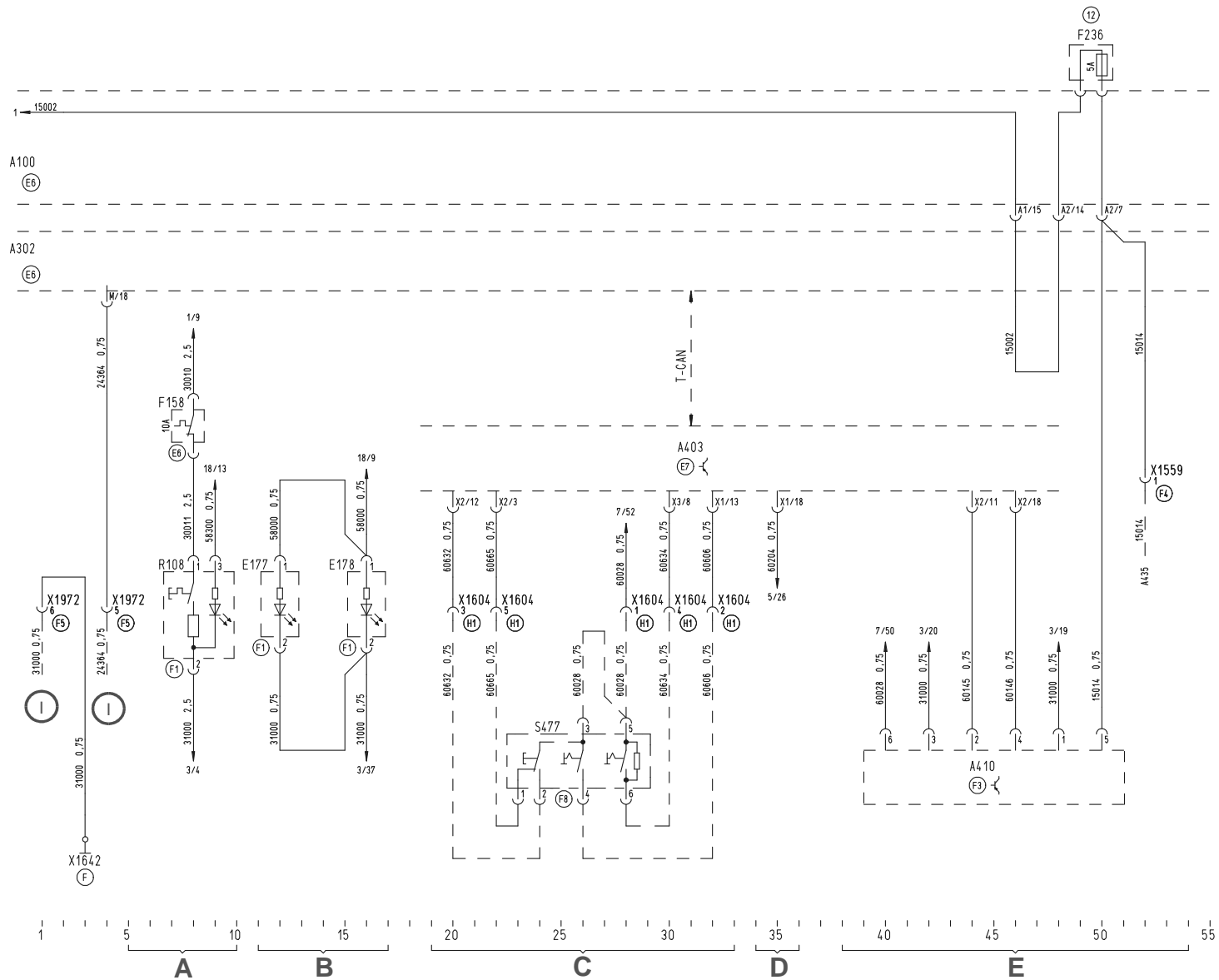
Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right



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

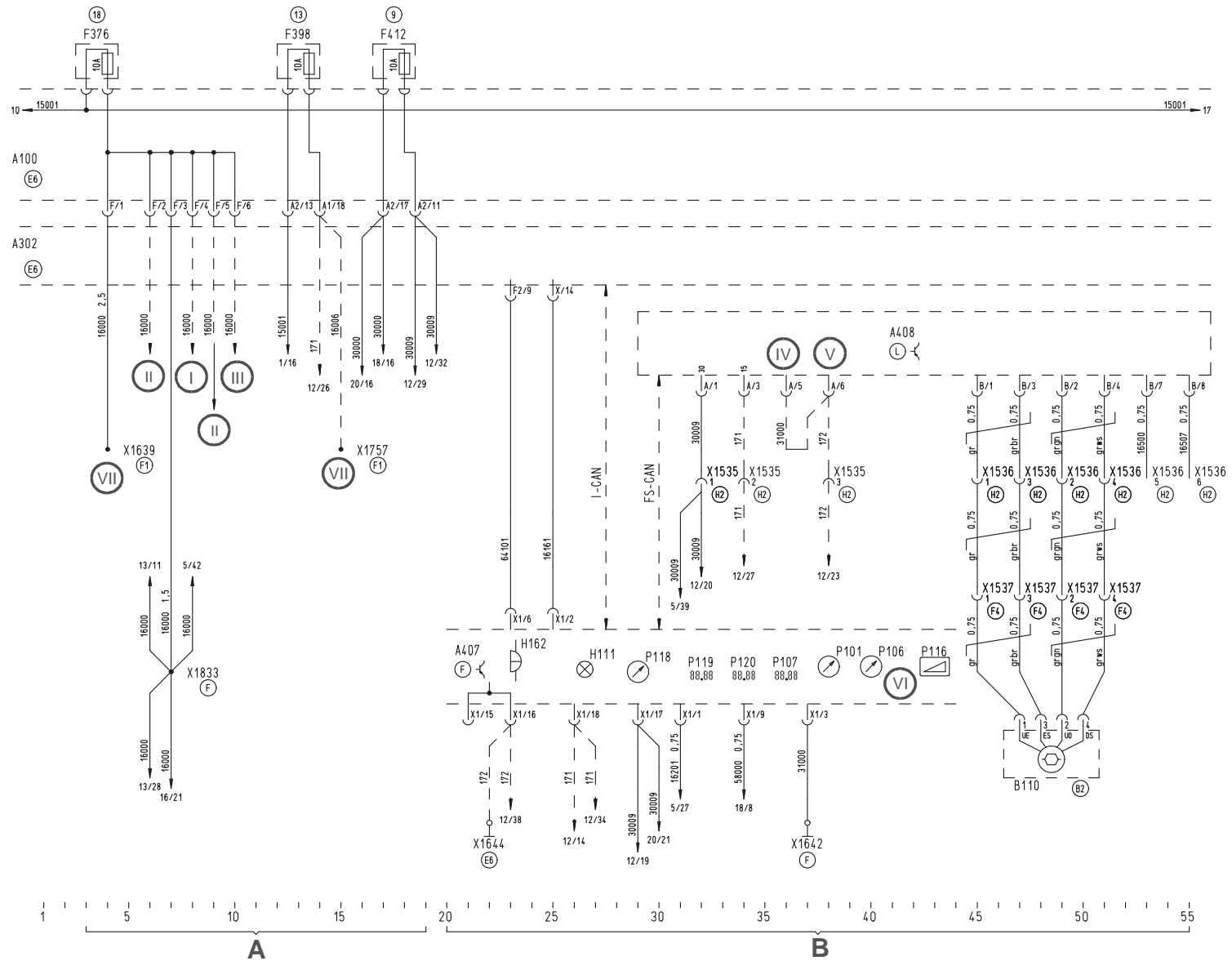
Marking of mounting positions

- (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

Wiring diagram no. 81.99192.2982 Sheet 12 of 21



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

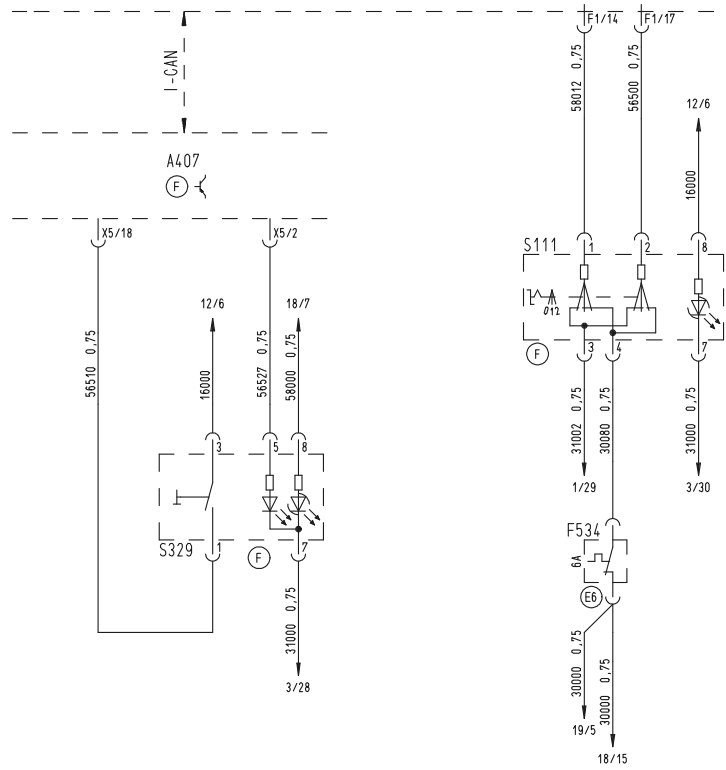
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2982 Sheet 13 of 21

A100
E6

A302
E6



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

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

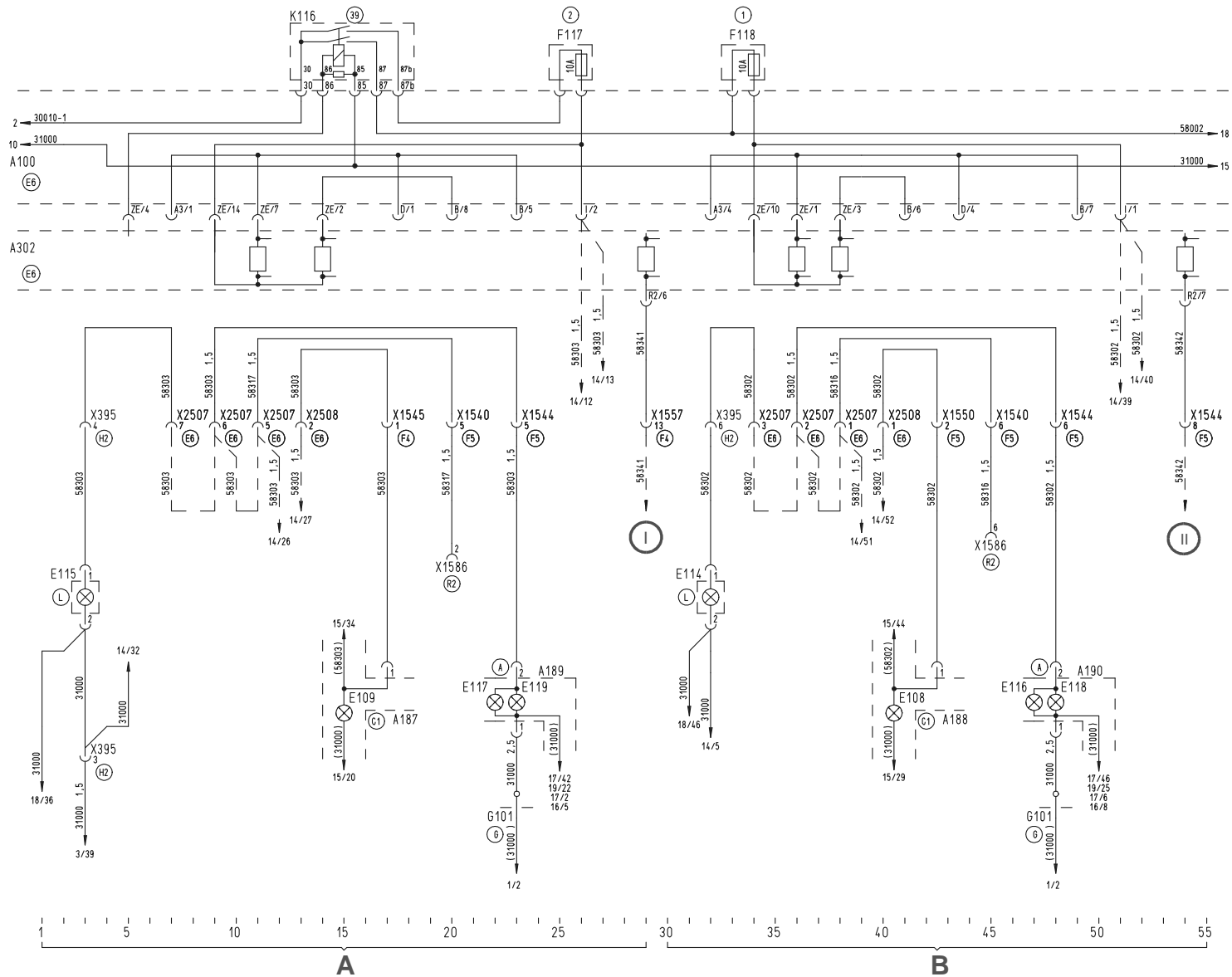
 - Ⓘ Side marker lights, left
 - Ⓜ Side marker lights, right

 - X2507 Stvd. adaptation parking light 1
 - X2508 Stvd. adaptation parking light 2
- Ⓕ6 Driving seat
 - Ⓕ7 Passenger seat
 - Ⓕ8 Control panel
 - Ⓕ9 Battery box
 - Ⓖ1 B-pillar on driver's side
 - Ⓖ2 A-pillar on driver's side
 - Ⓖ3 B-pillar on passenger's side
 - Ⓖ4 A-pillar on passenger's side
 - Ⓖ5 Ceiling/roof
 - Ⓖ6 Front axle
 - Ⓖ7 Rear axle
 - Ⓖ8 Front part of frame
 - Ⓖ9 Rear part of frame
 - Ⓖ10 Door left
 - Ⓖ11 Door right

Note:

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

Wiring diagram no. 81.99192.2982 Sheet 14 of 21



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

(I) for D2R headlights

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

Legend

Wiring diagram no. **81.99192.2982** 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!

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

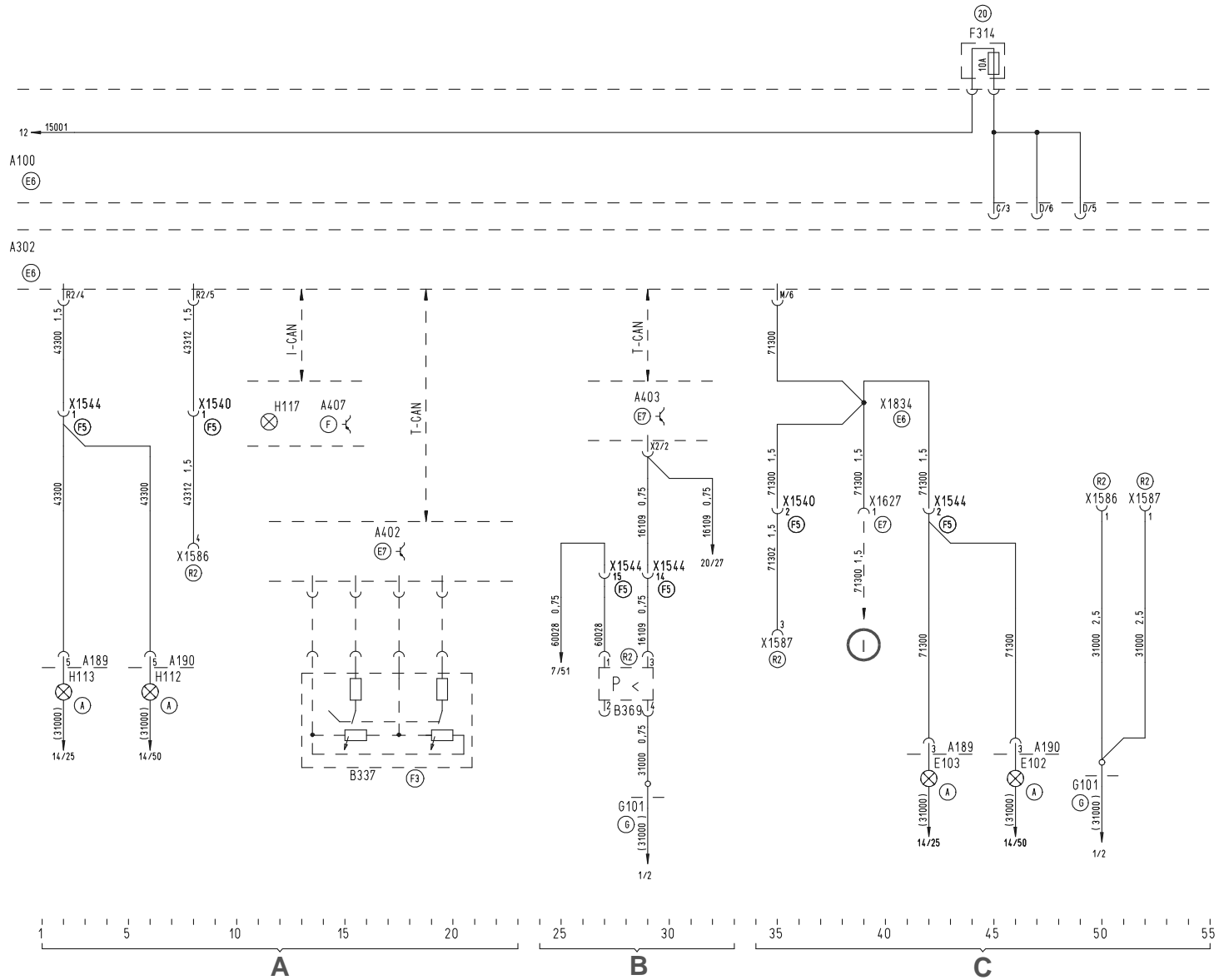
- (A) Tail
- (B1) Engine
- (B2) Gearbox
- (C) Front
- (C1) Bumper
- (C2) Entrance right
- (C3) Entrance left
- (E6) Central electrics area
- (E7) Control unit racks
- (E8) Rear wall of cab
- (F) Instrument panel
- (F1) Central part
- (F2) Steering wheel/column
- (F3) Foot pedals
- (F4) Front wall, inside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

- (I) Switch, reverse gear

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

Note:

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



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

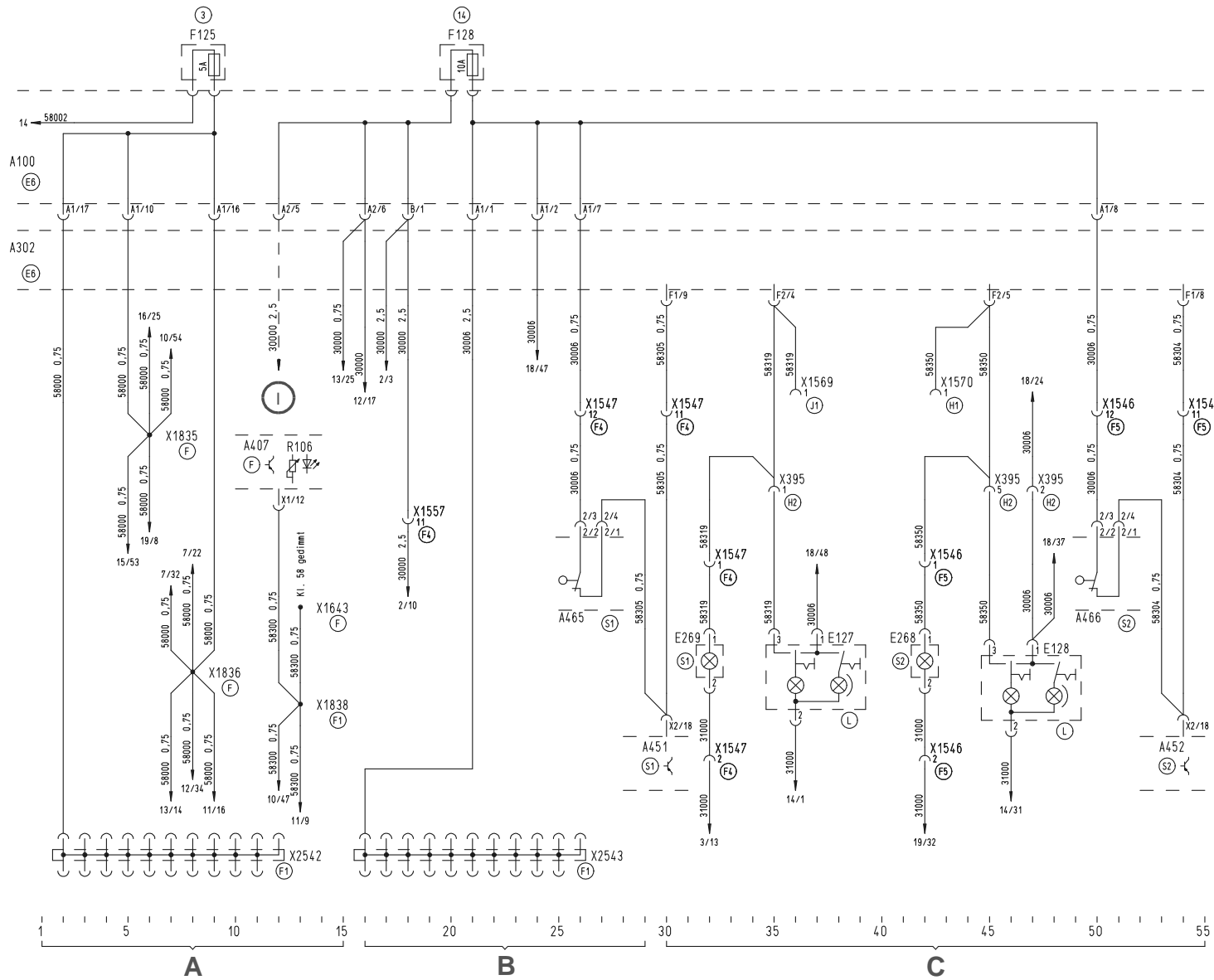
(A) Tail
(B1) Engine
(B2) Gearbox
(C) Front
(C1) Bumper
(C2) Entrance right
(C3) Entrance left
(E6) Central electrics area
(E7) Control unit racks
(E8) Rear wall of cab
(F) Instrument panel
(F1) Central part
(F2) Steering wheel/column
(F3) Foot pedals
(F4) Front wall, inside left
(F5) Front wall, inside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

(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

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

Wiring diagram no. 81.99192.2982 Sheet 18 of 21



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

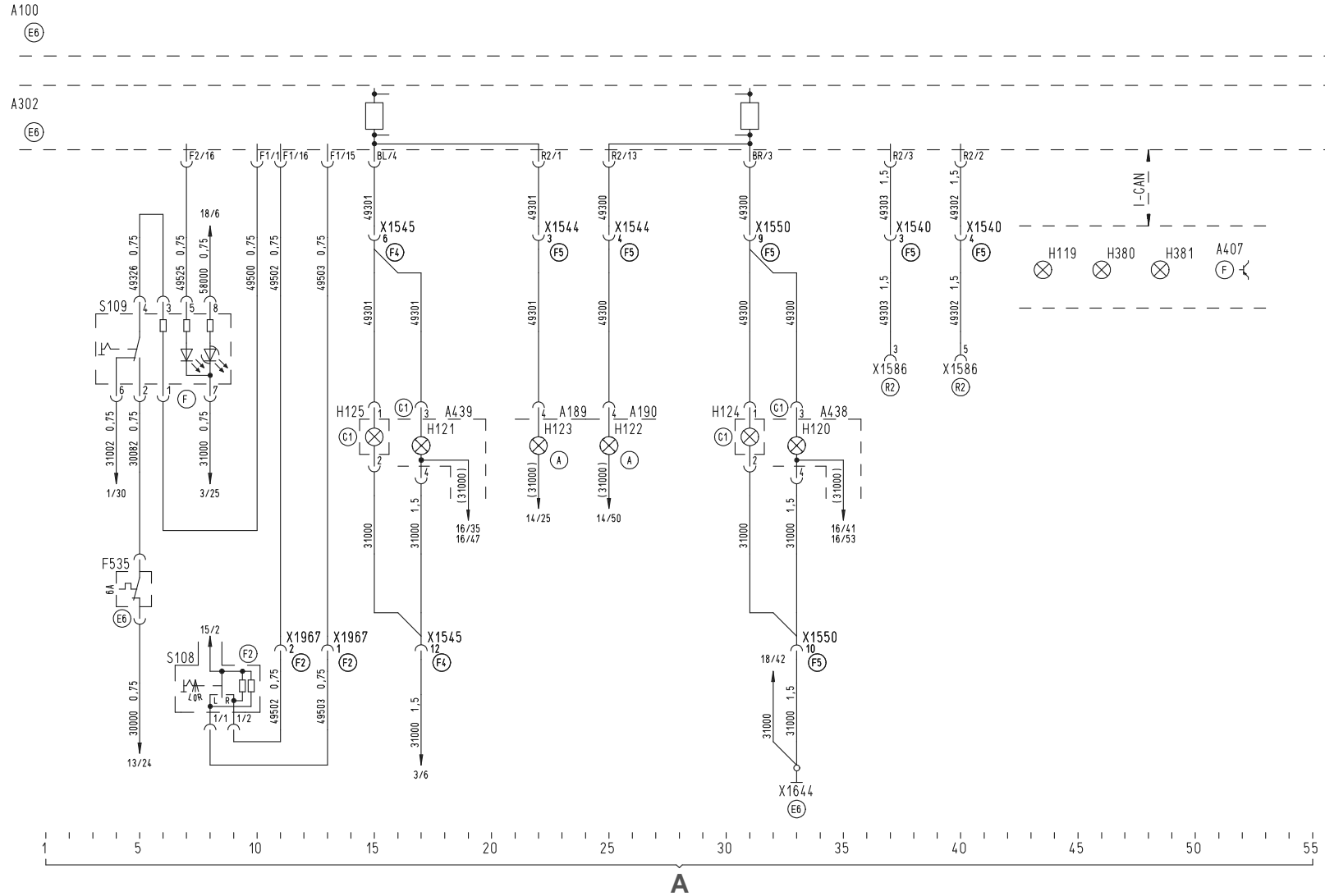
Marking of mounting positions

- (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!

Wiring diagram no. 81.99192.2982 Sheet 19 of 21



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

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Solenoid valve, differential lock, rear axle, transverse

Ⓙ Switch for indicator, differential lock, transverse

Ⓚ Indicator light, differential lock, longitudinal
Indicator light, differential lock, rear axle, transverse

Ⓛ Solenoid valve, differential lock, longitudinal

Ⓜ Solenoid valve, power take-off 1

Ⓝ Data line

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓕ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

Ⓕ Power supply, trailer
(protection from emptying)

Ⓕ Control, trailing, axle or
leading axle, trailer

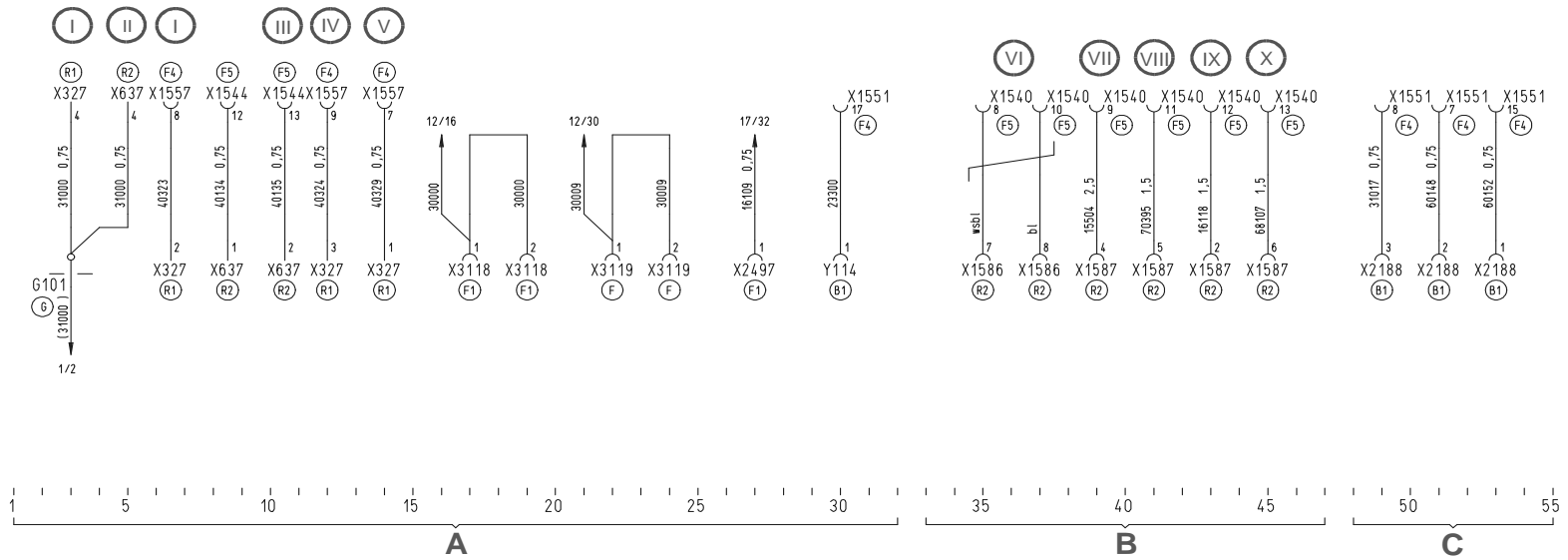
Ⓕ Pressure switch, check
Parking brake, trailer

Ⓕ Indicator light, brake pad wear
indicator, trailer

Wiring diagram no. 81.99192.2982 Sheet 20 of 21

A100
E6

A302
E6



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

- | | |
|---|--|
| Ⓐ Tail | Ⓕ Driving seat |
| Ⓑ1 Engine | Ⓖ7 Passenger seat |
| Ⓑ2 Gearbox | Ⓖ8 Control panel |
| Ⓒ Front | Ⓖ Battery box |
| Ⓒ1 Bumper | Ⓖ11 B-pillar on driver's side |
| Ⓒ2 Entrance right | Ⓖ12 A-pillar on driver's side |
| Ⓒ3 Entrance left | Ⓖ1 B-pillar on passenger's side |
| Ⓔ6 Central electrics area | Ⓖ2 A-pillar on passenger's side |
| Ⓔ7 Control unit racks | Ⓖ Ceiling/roof |
| Ⓔ8 Rear wall of cab | Ⓖ N Front axle |
| Ⓕ Instrument panel | Ⓖ P Rear axle |
| Ⓕ1 Central part | Ⓕ1 Front part of frame |
| Ⓕ2 Steering wheel/column | Ⓕ2 Rear part of frame |
| Ⓕ3 Foot pedals | Ⓕ1 Door left |
| Ⓕ4 Front wall, inside left | Ⓕ2 Door right |
| Ⓕ5 Front wall, inside right | |
| | |
| Ⓘ Pressure pickup, positioning pressure | ⒾX Transmission, input speed |
| Ⓙ Solenoid valve, reservoir | ⒾX Transmission, neutral |
| Ⓚ Temperature sensor, intarder, retarder | ⒾX1 Switch, reverse gear |
| Ⓛ Proportional valve, intarder, retarder | ⒾX11 Diagnostics, AS-Tronic |
| Ⓜ Solen. valve, reservoir/press. pickup, actuat. press. | ⒾX111 Indicator light, power take-off 1 |
| Ⓨ Transmission control module | ⒾX1111 Indicator light, power take-off 2 |
| Ⓩ Clutch servo | |
| Ⓩ1 Clutch displacement sensor | |

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

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

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

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

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

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

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

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
W indscreen 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
Z F transmission 16S151/16S181 (LL)	81.99192. 2579	4.07 - 18
Z F transmission 16S151/16S181 (RL)	81.99192. 2835	4.07 - 22

Airbag

Legend

Wiring diagram no. **81.99192.2572** Sheet 1 of 1
Change status: 06.00

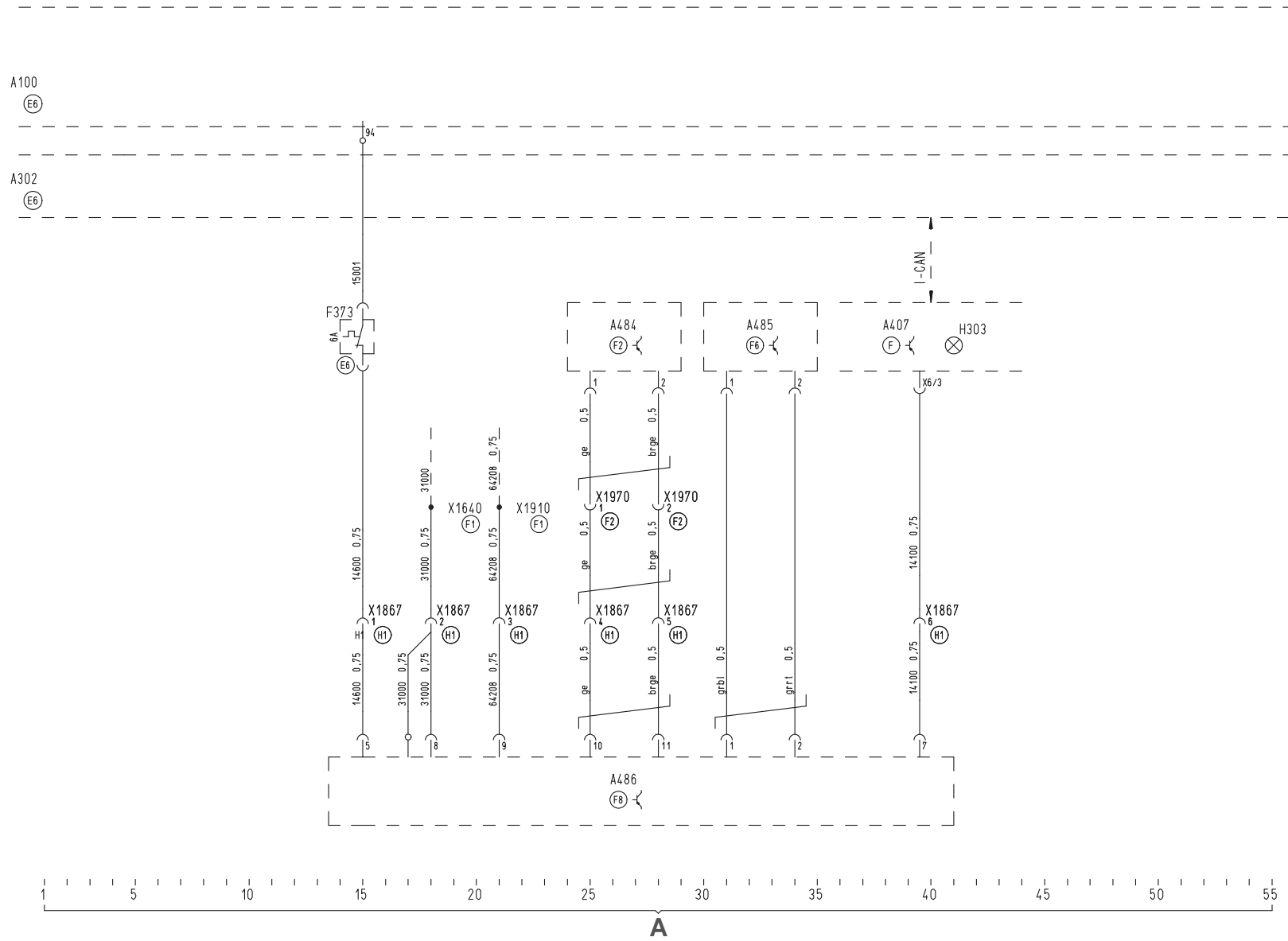
A = Airbag with seat belt tensioner

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		Std. control unit airbag
X1910		Crimped connector K-KWP2 (SA)
X1970		Std. airbag

Marking of mounting positions

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

Wiring diagram no. 81.99192.2572 Sheet 1 of 1



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

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

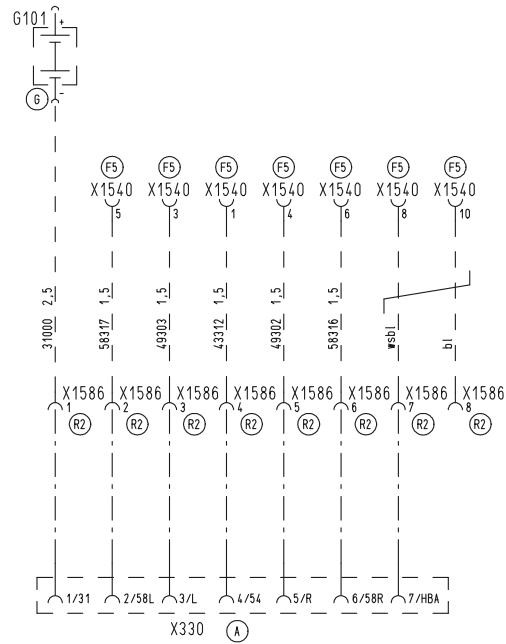
Note:

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

Wiring diagram no. 81.99192.2496 Sheet 1 of 1

A100


A302

A

K 90

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

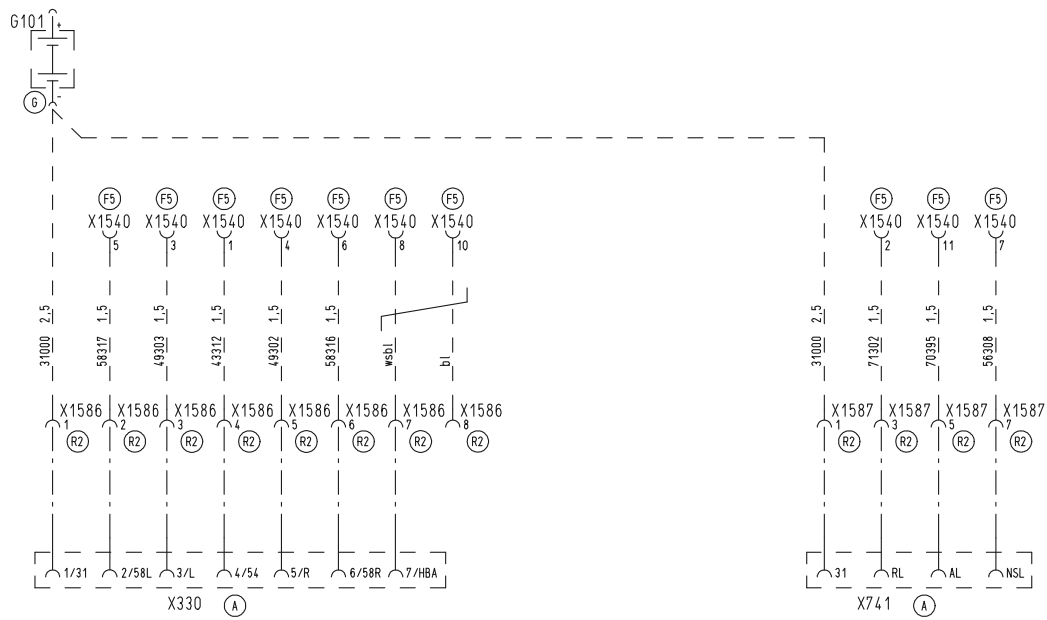
Note:

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

Wiring diagram no. 81.99192.2497 Sheet 1 of 1

A100
E6

A302
E6



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

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓂ Engine | ⓕⓗ Passenger seat |
| ⒷⓃ Gearbox | ⓕⓓ Control panel |
| ⒷⓈ Front | ⓕⓔ Battery box |
| ⒷⓈⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒷⓈⓇ Entrance right | ⓕⓗⓇ A-pillar on driver's side |
| ⒷⓈⓁ Entrance left | ⓕⓗⓁ B-pillar on passenger's side |
| ⒷⓕⓁ Central electrics area | ⓕⓗⓇ A-pillar on passenger's side |
| ⒷⓕⓇ Control unit racks | ⓕⓁ Ceiling/roof |
| ⒷⓕⓈ Rear wall of cab | ⓕⓃ Front axle |
| Ⓑⓕ Instrument panel | ⓕⓅ Rear axle |
| ⒷⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⒷⓇⓁ Steering wheel/column | ⓕⓇⓇ Rear part of frame |
| ⒷⓇⓈ Foot pedals | ⓕⓈⓁ Door left |
| ⒷⓇⓁ Front wall, inside left | ⓕⓈⓇ Door right |
| ⒷⓇⓇ Front wall, inside right | |

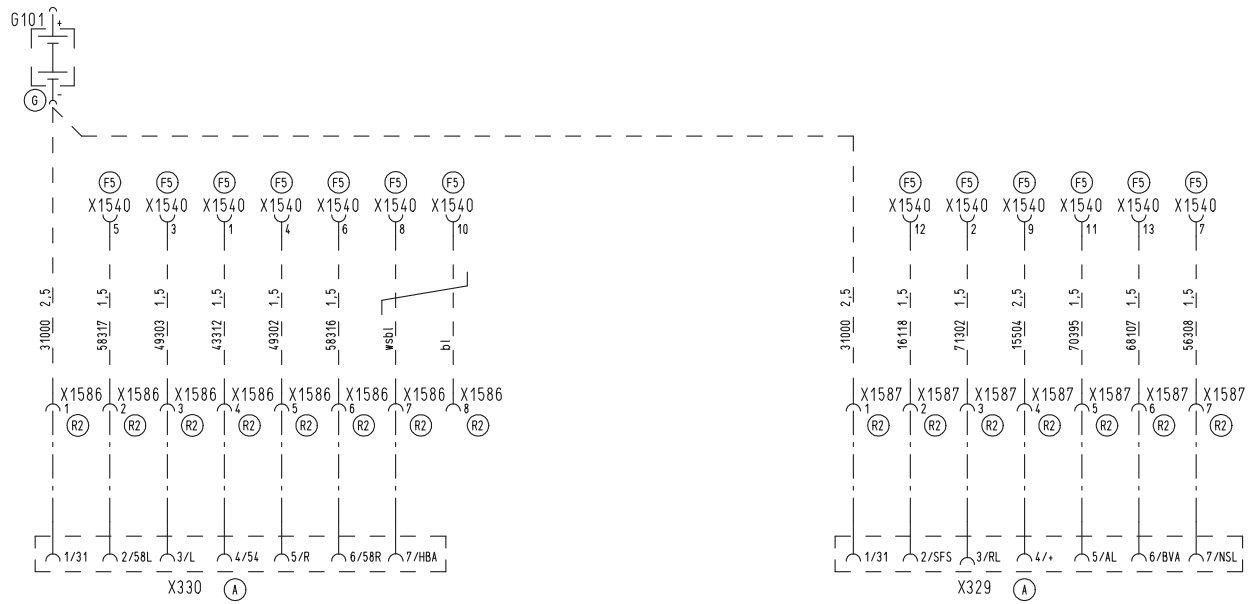
Note:

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

Wiring diagram no. 81.99192.2498 Sheet 1 of 1

A100
E6

A302
E6



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

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

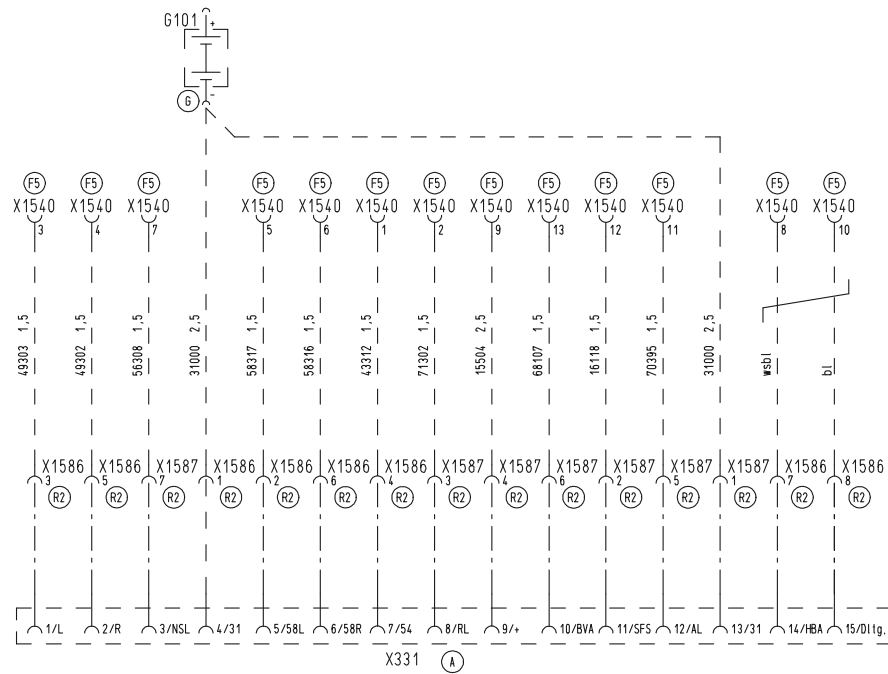
Note:

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

Wiring diagram no. 81.99192.2499 Sheet 1 of 1

A100
E6

A302
E6



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

A

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

Legend

Wiring diagram no. **81.99192.2447** Sheet 1 of 1
Change status: 03.99

A = Trailer lighting socket 24V 7-pin N

B = Trailer lighting socket 12V 13-pin

A100 (255) Central fuse, relay and terminal block

A236 (503) DC-converter 24/12V

A302 (352) Central computer 2

G101 (113) Battery 2

X330 (191) Socket connector N 24V

X740 (206) Trailer lighting socket 12V

X1540 Stvd. frame I

X1586 Stvd. connection for trailer lighting socket 1

X1587 Stvd. connection for trailer lighting socket 2

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

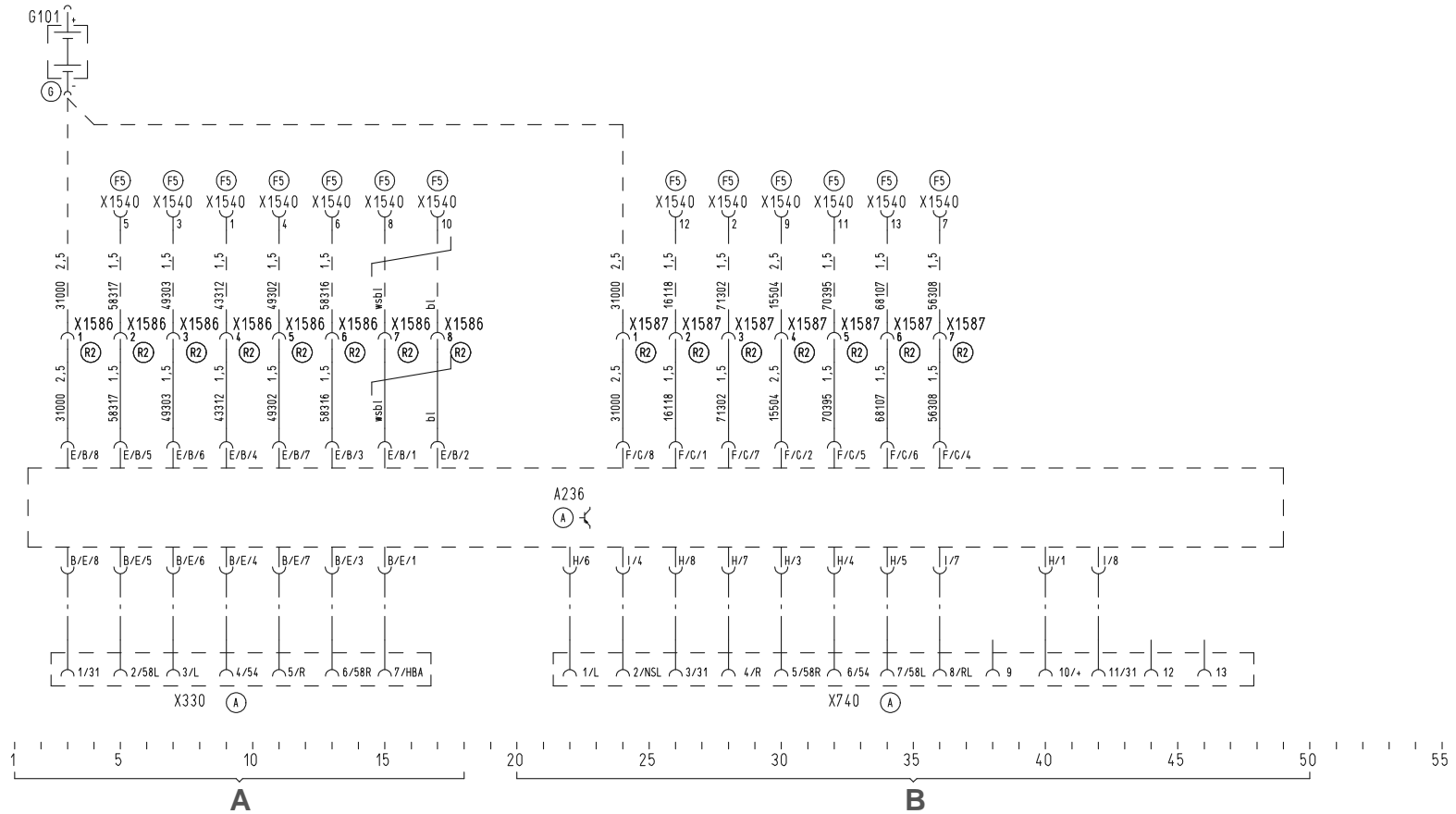
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2447 Sheet 1 of 1

A100
E6

A302
E6



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

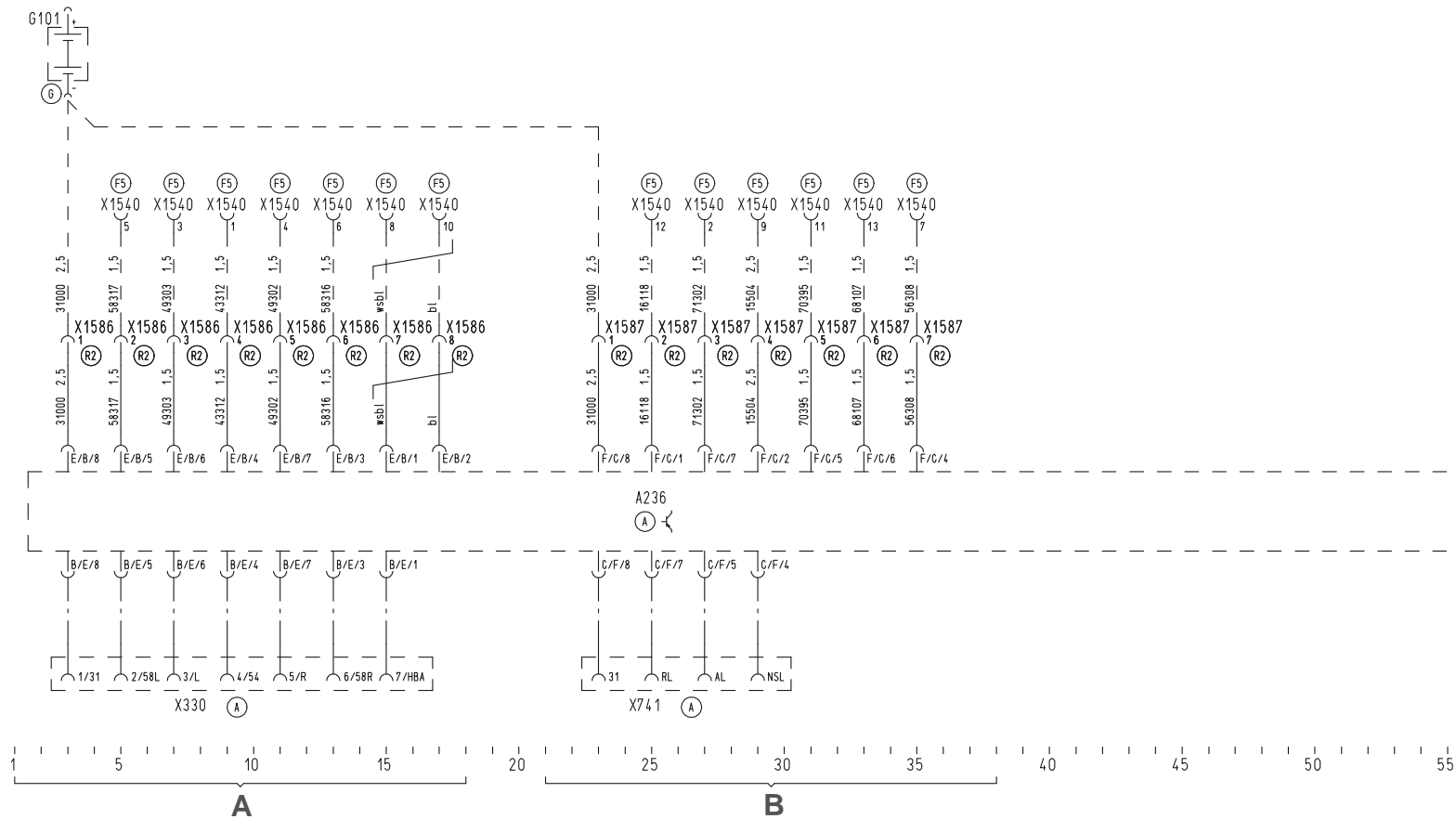
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2448 Sheet 1 of 2

A100
E6

A302
E6



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

Legend

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

Change status: 07.99

A = Trailer lighting socket 12V 13-pin

A100 (255) Central fuse, relay and terminal block

A236 (503) DC-converter 24/12V

A302 (352) Central computer 2

X740 (206) Trailer lighting socket 12V

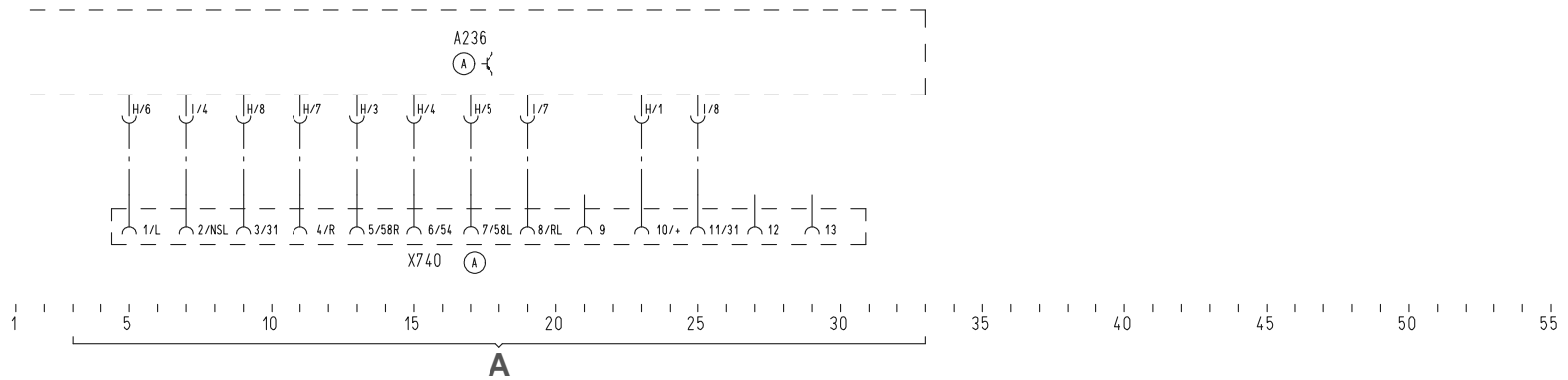
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓂ Engine | ⓕⓗ Passenger seat |
| ⒷⓃ Gearbox | ⓕⓓ Control panel |
| ⒷⓈ Front | ⓕⓔ Battery box |
| ⒷⓈⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒷⓈⓇ Entrance right | ⓕⓗⓇ A-pillar on driver's side |
| ⒷⓈⓁ Entrance left | ⓕⓗⓁ B-pillar on passenger's side |
| Ⓑⓕⓖ Central electrics area | ⓕⓗⓇ A-pillar on passenger's side |
| ⒷⓕⓇ Control unit racks | ⓕⓁ Ceiling/roof |
| Ⓑⓕⓓ Rear wall of cab | ⓕⓃ Front axle |
| Ⓑⓕ Instrument panel | ⓕⓅ Rear axle |
| ⒷⓕⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⒷⓕⓇ Steering wheel/column | ⓕⓇⓇ Rear part of frame |
| ⒷⓕⓈ Foot pedals | ⓕⓈⓁ Door left |
| ⒷⓕⓁ Front wall, inside left | ⓕⓈⓇ Door right |
| ⒷⓕⓇ Front wall, inside right | |

Wiring diagram no. 81.99192.2448 Sheet 2 of 2

A100


A302

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

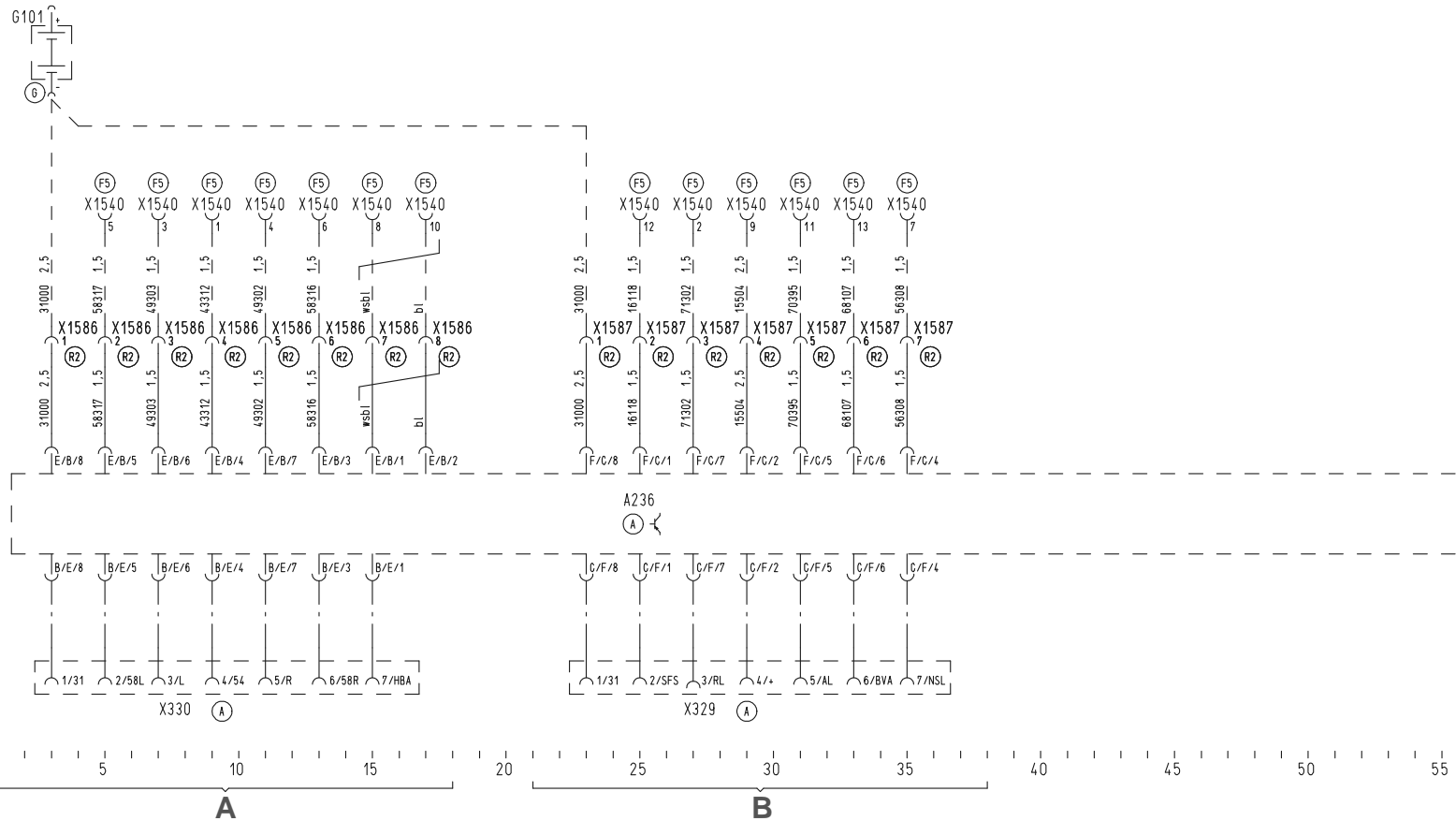
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2449 Sheet 1 of 2

A100
E6

A302
E6



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

Legend

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

Change status: 07.99

A = Trailer lighting socket 12V 13-pin

A100 (255) Central fuse, relay and terminal block

A236 (503) DC-converter 24/12V

A302 (352) Central computer 2

X740 (206) Trailer lighting socket 12V

Marking of mounting positions

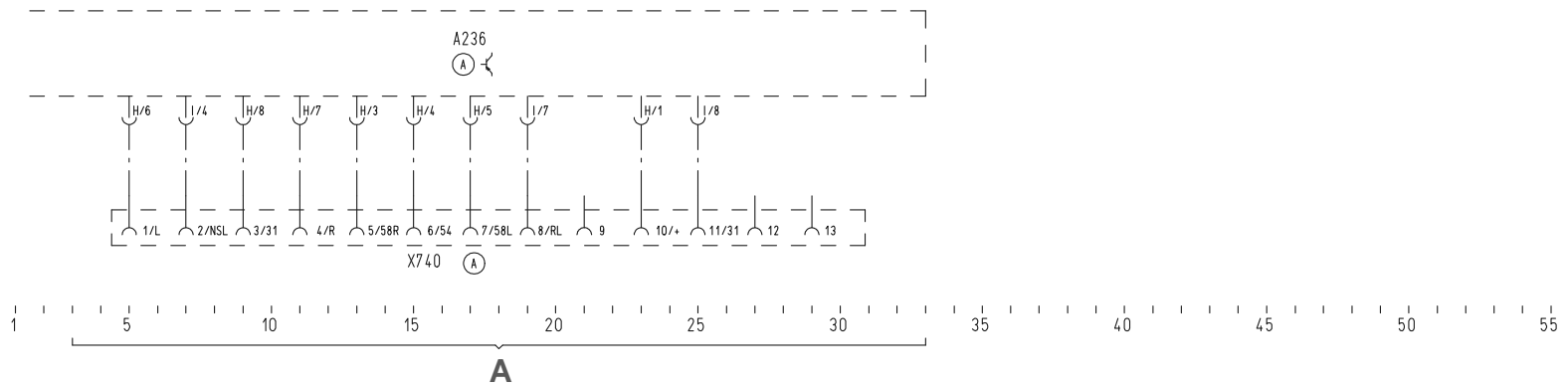
- | | |
|-----------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓂ Engine | ⓕⓗ Passenger seat |
| ⒷⓃ Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| ⒸⓂ Bumper | ⓕⓗⓂ B-pillar on driver's side |
| ⒸⓃ Entrance right | ⓕⓗⓃ A-pillar on driver's side |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

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

A100



A302



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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓔ Bumper

Ⓕ Entrance right

Ⓖ Entrance left

Ⓔ Central electrics area

Ⓖ Control unit racks

Ⓔ Rear wall of cab

Ⓖ Instrument panel

Ⓖ Central part

Ⓖ Steering wheel/column

Ⓖ Foot pedals

Ⓖ Front wall, inside left

Ⓖ Front wall, inside right

Ⓖ Driving seat

Ⓖ Passenger seat

Ⓖ Control panel

Ⓖ Battery box

Ⓖ B-pillar on driver's side

Ⓖ A-pillar on driver's side

Ⓖ B-pillar on passenger's side

Ⓖ A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓖ Front part of frame

Ⓖ Rear part of frame

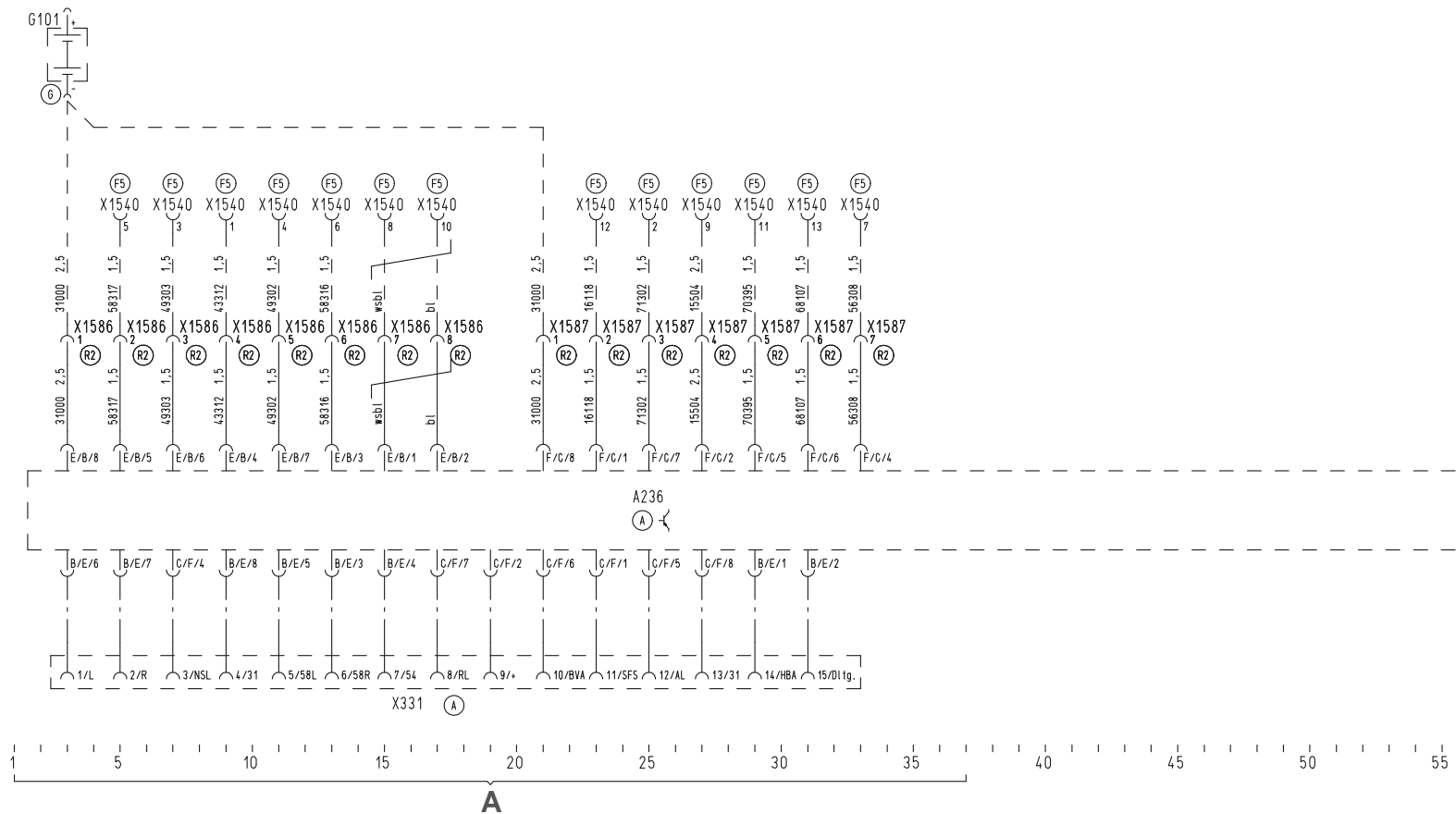
Ⓖ Door left

Ⓖ Door right

Wiring diagram no. 81.99192.2650 Sheet 1 of 2

A100
E6

A302
E6



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

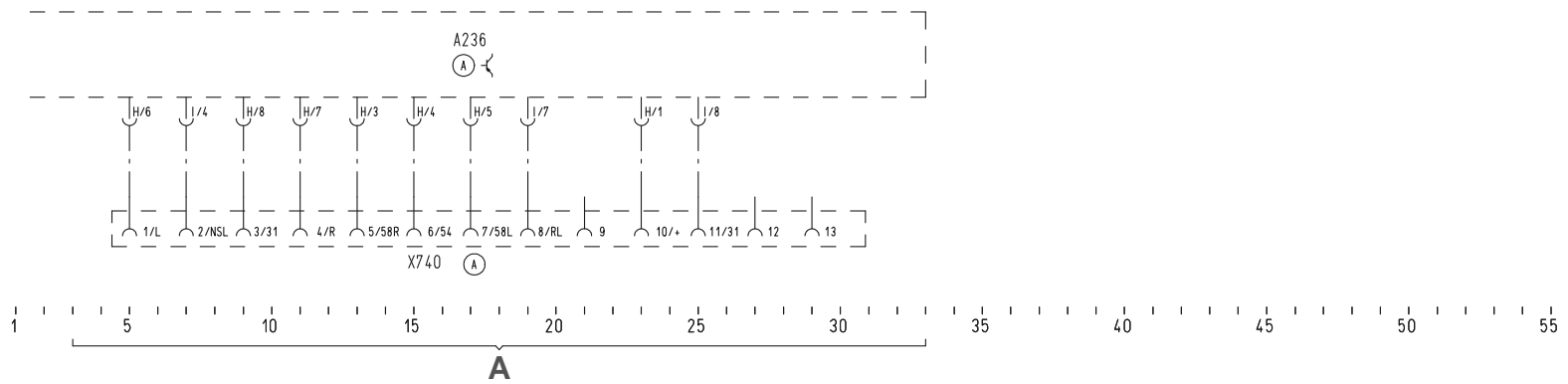
Marking of mounting positions

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

Wiring diagram no. 81.99192.2650 Sheet 2 of 2

A100
ⓔ6

A302
ⓔ6



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

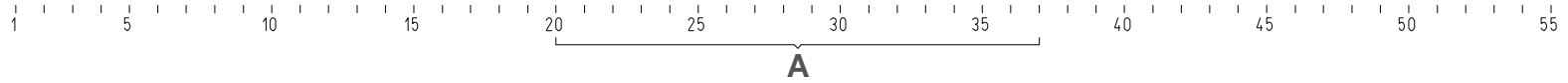
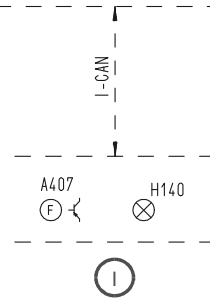
- (F6) Driving seat
- (F7) Passenger seat
- (F8) Control panel
- (G) Battery box
- (H1) B-pillar on driver's side
- (H2) A-pillar on driver's side
- (J1) B-pillar on passenger's side
- (J2) A-pillar on passenger's side
- (L) Ceiling/roof
- (N) Front axle
- (P) Rear axle
- (R1) Front part of frame
- (R2)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

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

Wiring diagram no. 81.99192.1358 Sheet 1 of 1

A100
⊕

A302
⊕



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

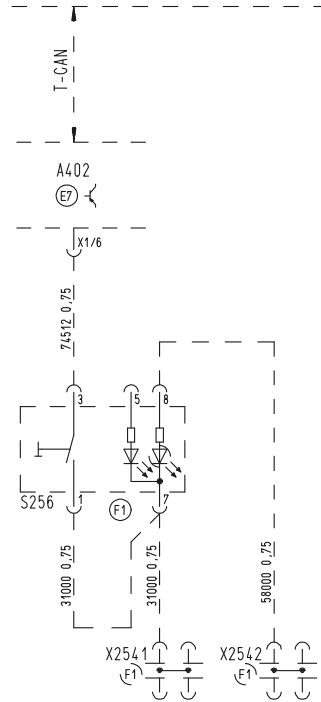
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1359 Sheet 1 of 1

A100


A302

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

A

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

Legend

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

A = ASR/ESP indicator light

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A407 (342) Instrumentation

H415 Indicator light, driving stability

Marking of mounting positions

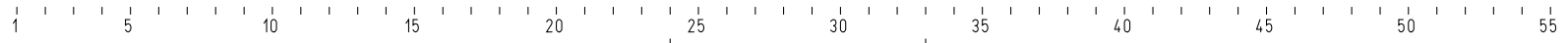
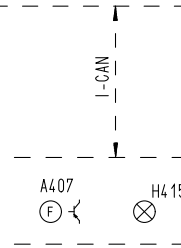
- (A) Tail
- (B1) Engine
- (B2) Gearbox
- (C) Front
- (C1) Bumper
- (C2) Entrance right
- (C3) Entrance left
- (E6) Central electrics area
- (E7) Control unit racks
- (E8) Rear wall of cab
- (F) Instrument panel
- (F1) Central part
- (F2) Steering wheel/column
- (F3) Foot pedals
- (F4) Front wall, inside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

Wiring diagram no. 81.99192.2682 Sheet 1 of 1

A100
⊕E6

A302
⊕E6



A

**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

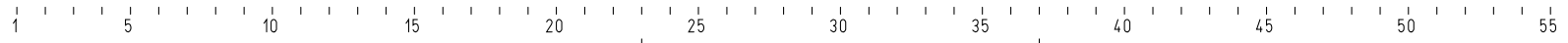
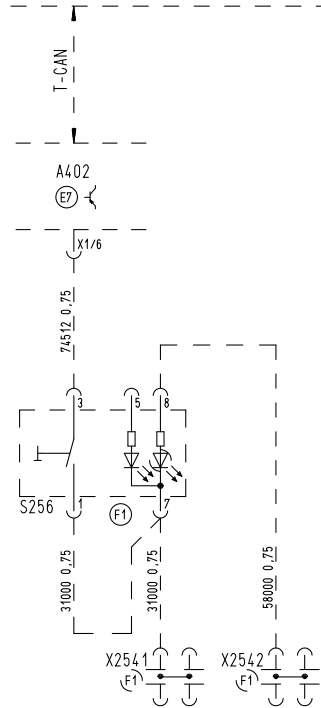
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓁ Engine | ⓕⓗ Passenger seat |
| ⒷⓂ Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| ⒸⓁ Bumper | ⓕⓕⓁ B-pillar on driver's side |
| ⒸⓇ Entrance right | ⓕⓕⓂ A-pillar on driver's side |
| ⒸⓈ Entrance left | ⓕⓕⓇ B-pillar on passenger's side |
| Ⓒⓔ Central electrics area | ⓕⓕⓈ A-pillar on passenger's side |
| ⒸⓇ Control unit racks | ⓕⓕⓁ Ceiling/roof |
| ⒸⓕⓇ Rear wall of cab | ⓕⓕⓃ Front axle |
| Ⓒⓕ Instrument panel | ⓕⓕⓅ Rear axle |
| ⒸⓕⓁ Central part | ⓕⓕⓇⓁ Front part of frame |
| ⒸⓕⓇ Steering wheel/column | ⓕⓕⓈⓇ Rear part of frame |
| ⒸⓕⓈ Foot pedals | ⓕⓕⓁⓁ Door left |
| ⒸⓕⓇ Front wall, inside left | ⓕⓕⓇⓇ Door right |
| ⒸⓕⓈ Front wall, inside right | |

Wiring diagram no. 81.99192.1360 Sheet 1 of 1

A100


A302

A

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

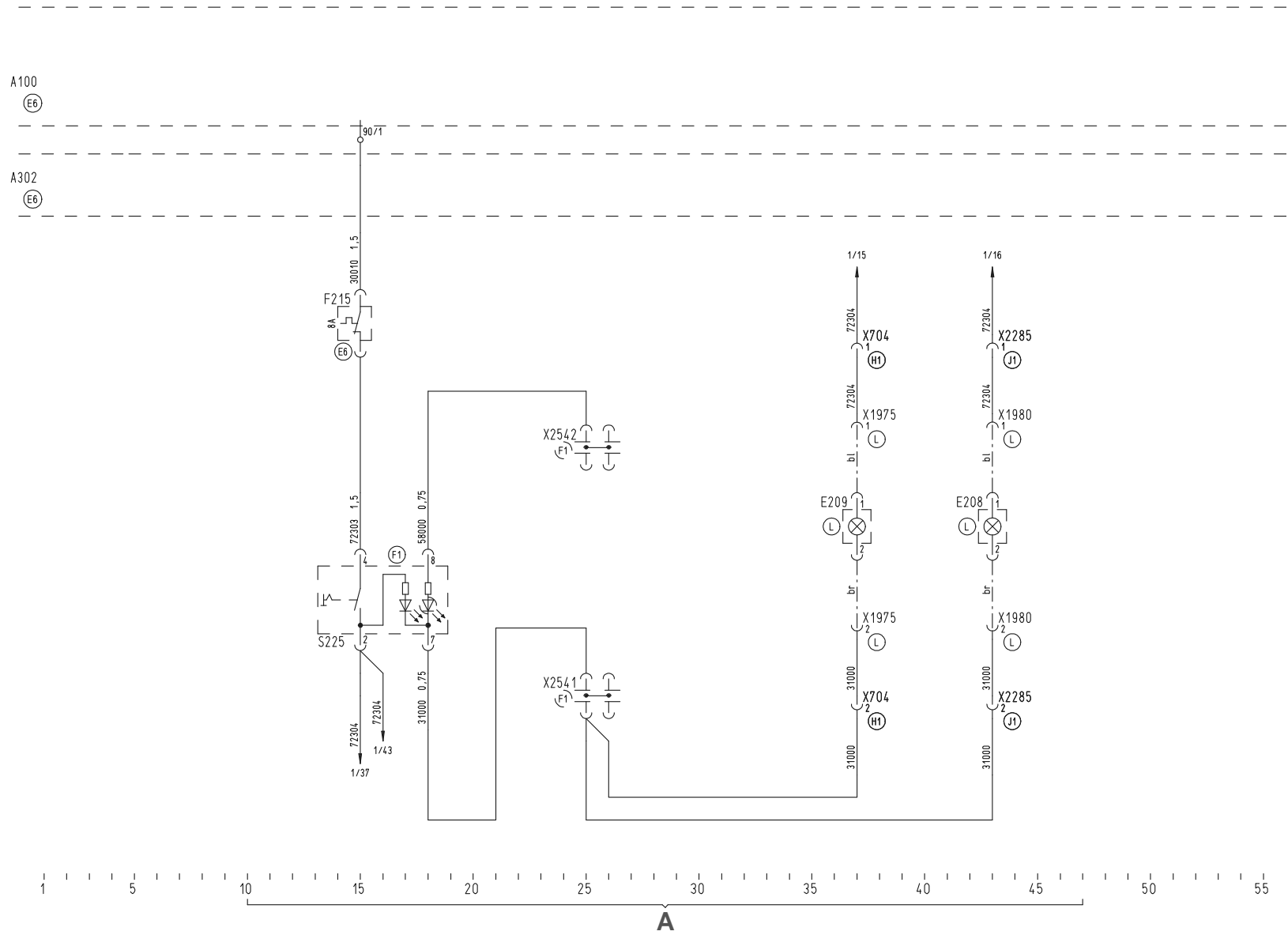
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1356 Sheet 1 of 1



Work spotlight, cab closure (left/right)

Legend

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

Change status: 04.01

A = Work spotlight

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

E208 (171) Work spotlight, right

E209 (171) Work spotlight, left

F215 (118) Fuse, work spotlight

S225 (481) Switch, work spotlight

X1862 Stvd. work spotlight

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

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

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

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

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

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓕ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

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

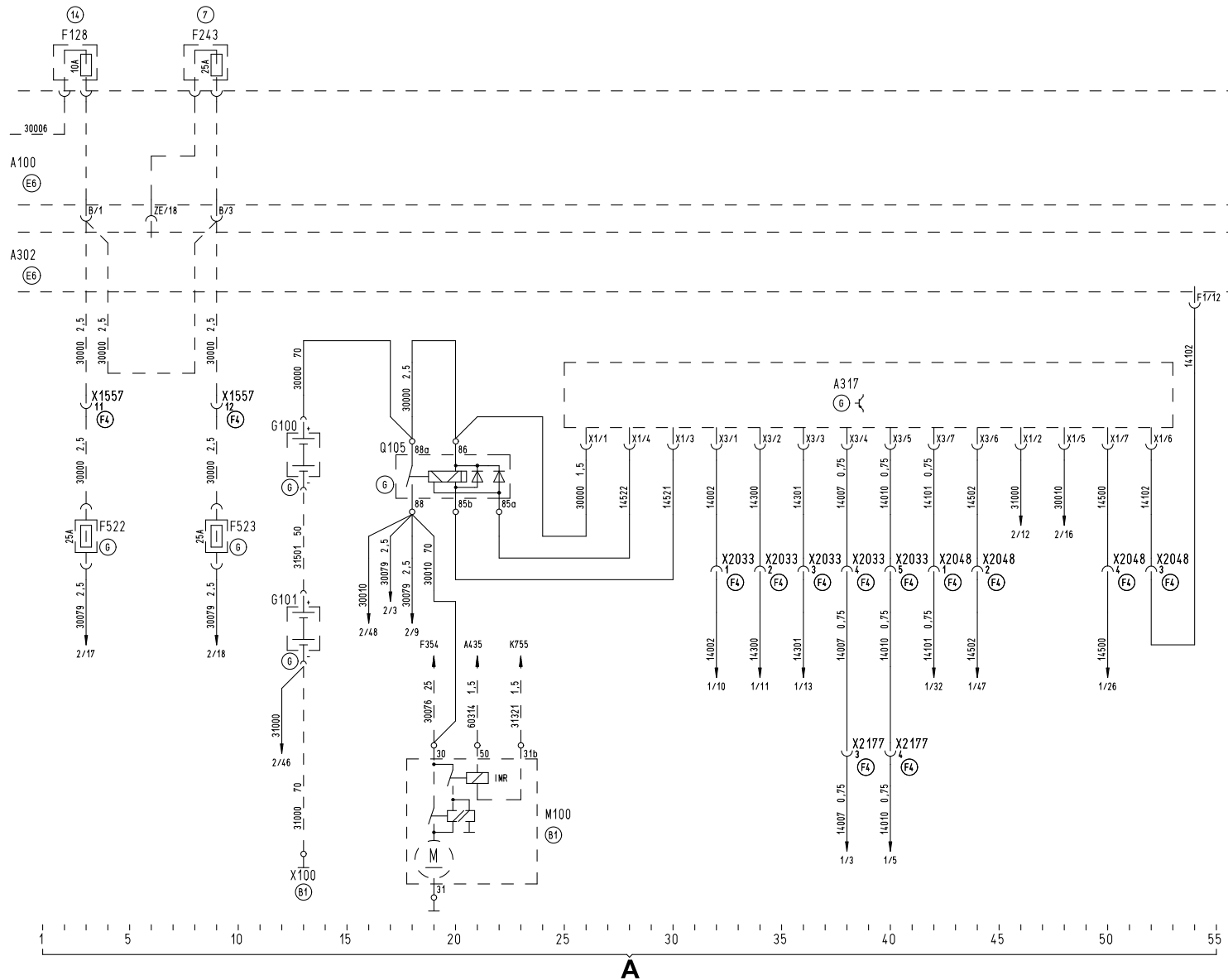
Q105 (112) Isolator switch, battery +

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

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

Wiring diagram no. 81.99192.1362 Sheet 2 of 2



Main battery switch (electric)

Legend

Wiring diagram no. **81.99192.1361** Sheet 1 of 1
Change status: 04.01

A = Main battery switch (electric)

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

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

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

- M100** (144) Starting motor

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

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

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

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

Marking of mounting positions

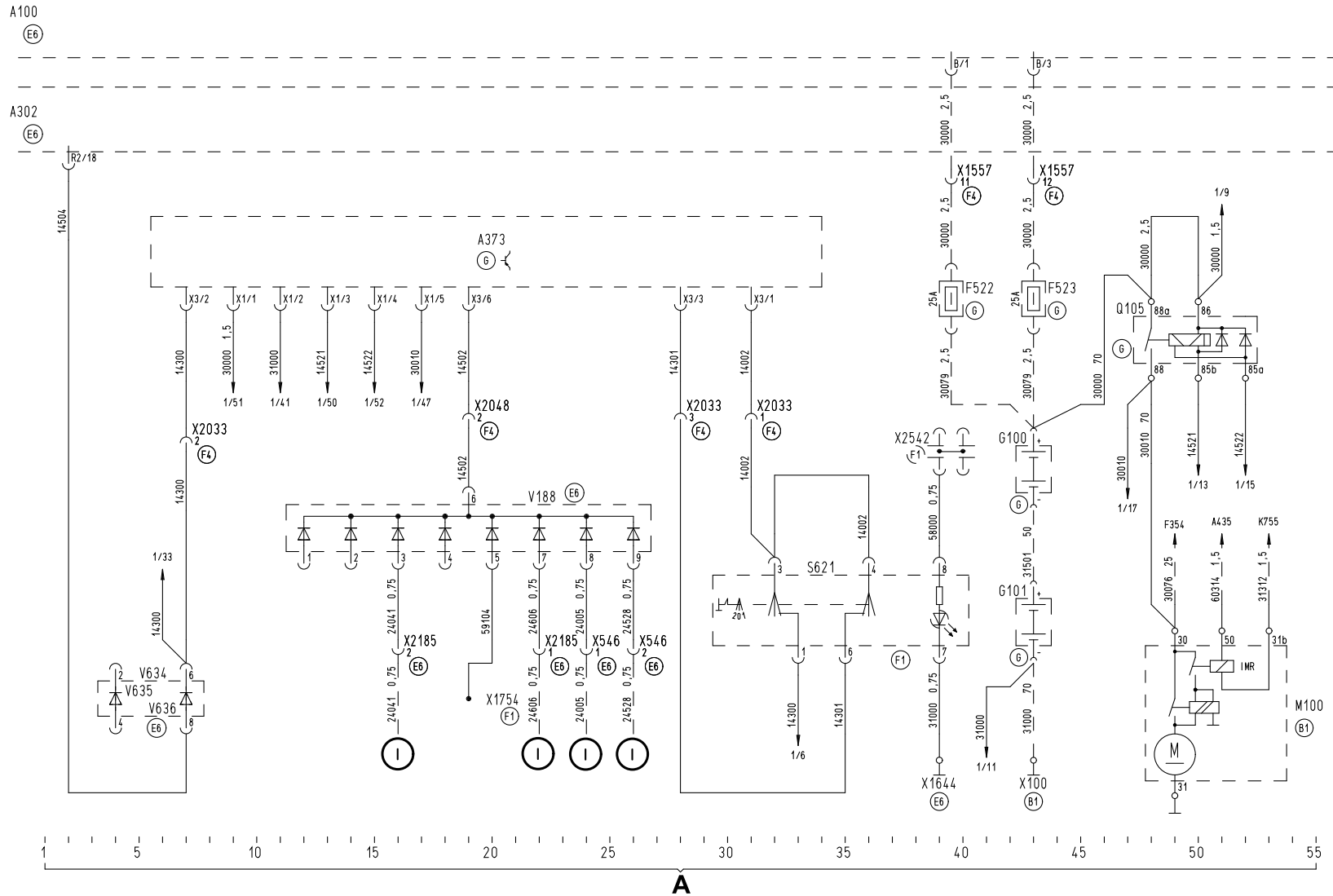
- Ⓐ Tail
- Ⓑ Engine
- Ⓑ1 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ1 Control unit racks
- Ⓔ2 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside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

- Ⓛ Supplementary heater

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

- 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

Wiring diagram no. 81.99192.1361 Sheet 1 of 1



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 +

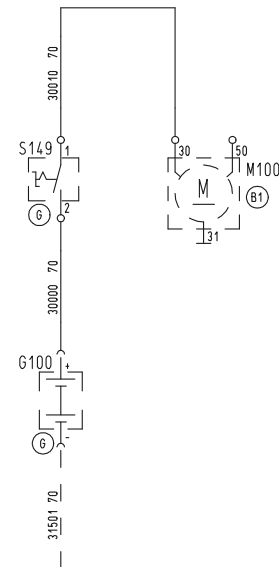
Marking of mounting positions

- | | |
|-----------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓁ Engine | ⓕⓗ Passenger seat |
| ⒷⓂ Gearbox | ⓕⓘ Control panel |
| Ⓒ Front | ⓕⓙ Battery box |
| ⒸⓁ Bumper | ⓕⓓⓁ B-pillar on driver's side |
| ⒸⓂ Entrance right | ⓕⓓⓂ A-pillar on driver's side |
| ⒸⓁ Entrance left | ⓕⓓⓁ B-pillar on passenger's side |
| Ⓔⓖ Central electrics area | ⓕⓓⓂ A-pillar on passenger's side |
| Ⓔⓗ Control unit racks | ⓕⓁ Ceiling/roof |
| Ⓔⓓ Rear wall of cab | ⓕⓃ Front axle |
| Ⓔⓕ Instrument panel | ⓕⓅ Rear axle |
| ⒺⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⒺⓂ Steering wheel/column | ⓕⓇⓂ Rear part of frame |
| ⒺⓁ Foot pedals | ⓕⓈⓁ Door left |
| Ⓔⓕ Front wall, inside left | ⓕⓈⓂ Door right |
| Ⓔⓕ Front wall, inside right | |

Wiring diagram no. 81.99192.2495 Sheet 1 of 1

A100
E6

A302
E6



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

A

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

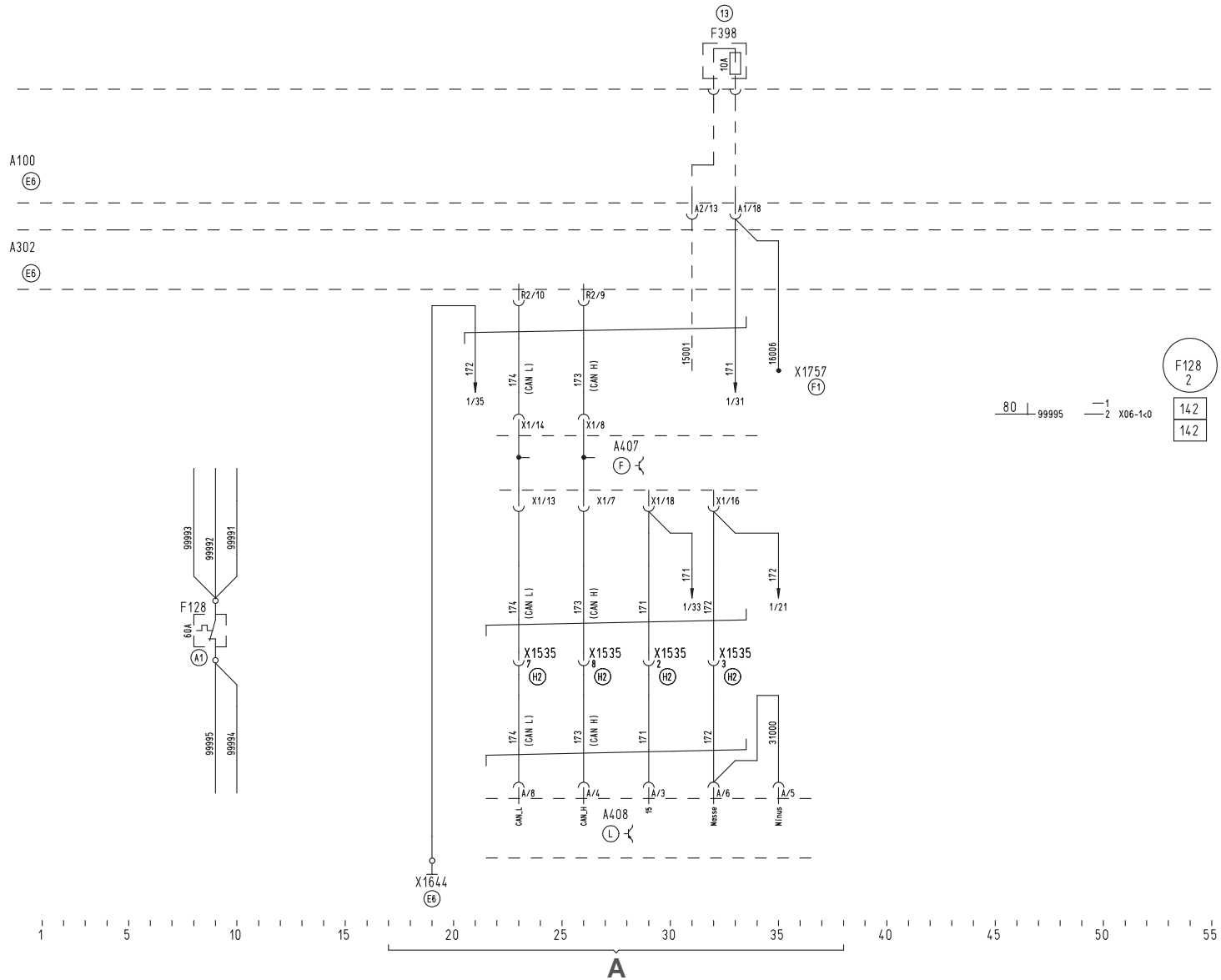
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2377 Sheet 1 of 1



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

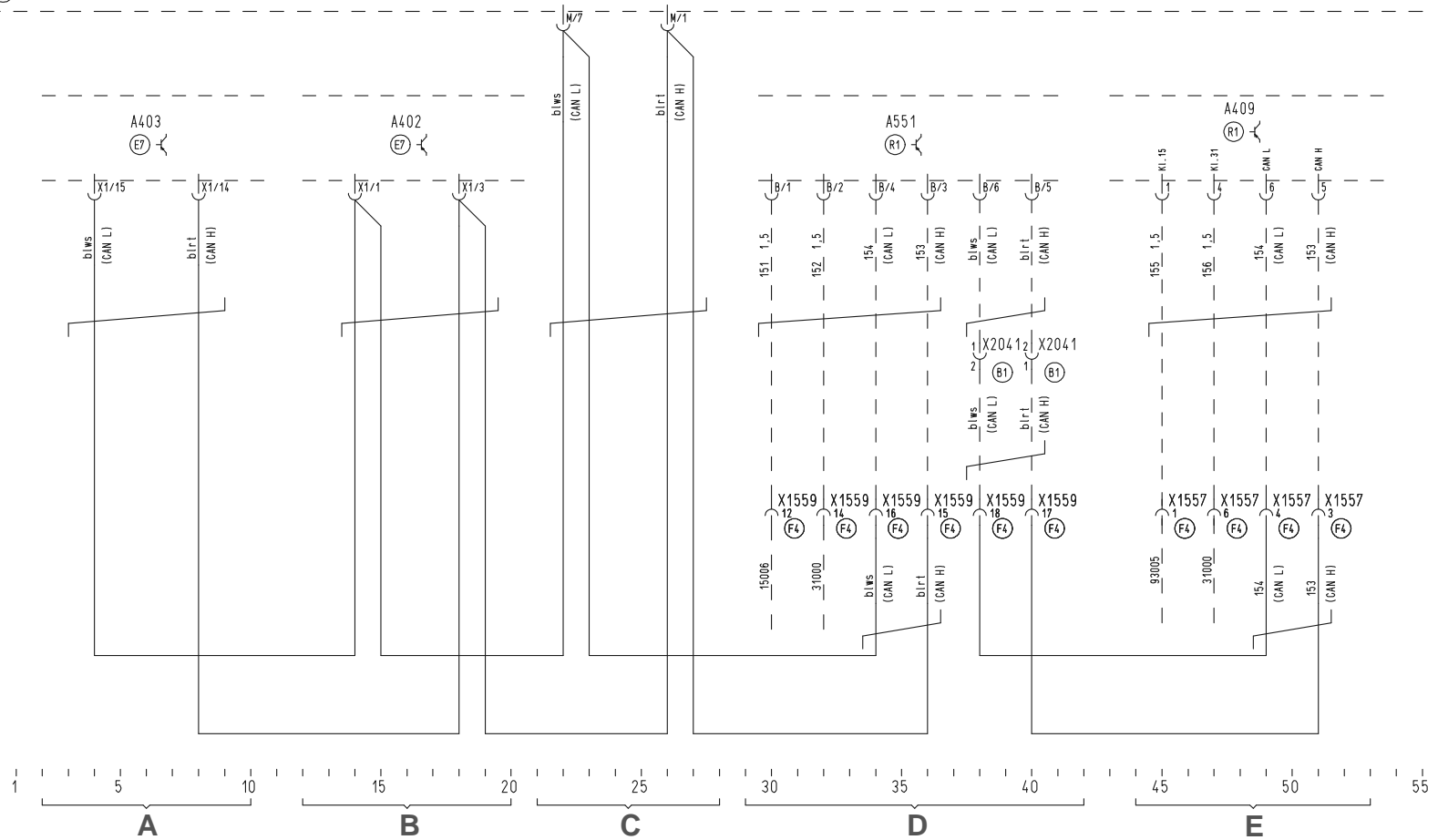
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2359 Sheet 1 of 1

A100
E6

A302
E6



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

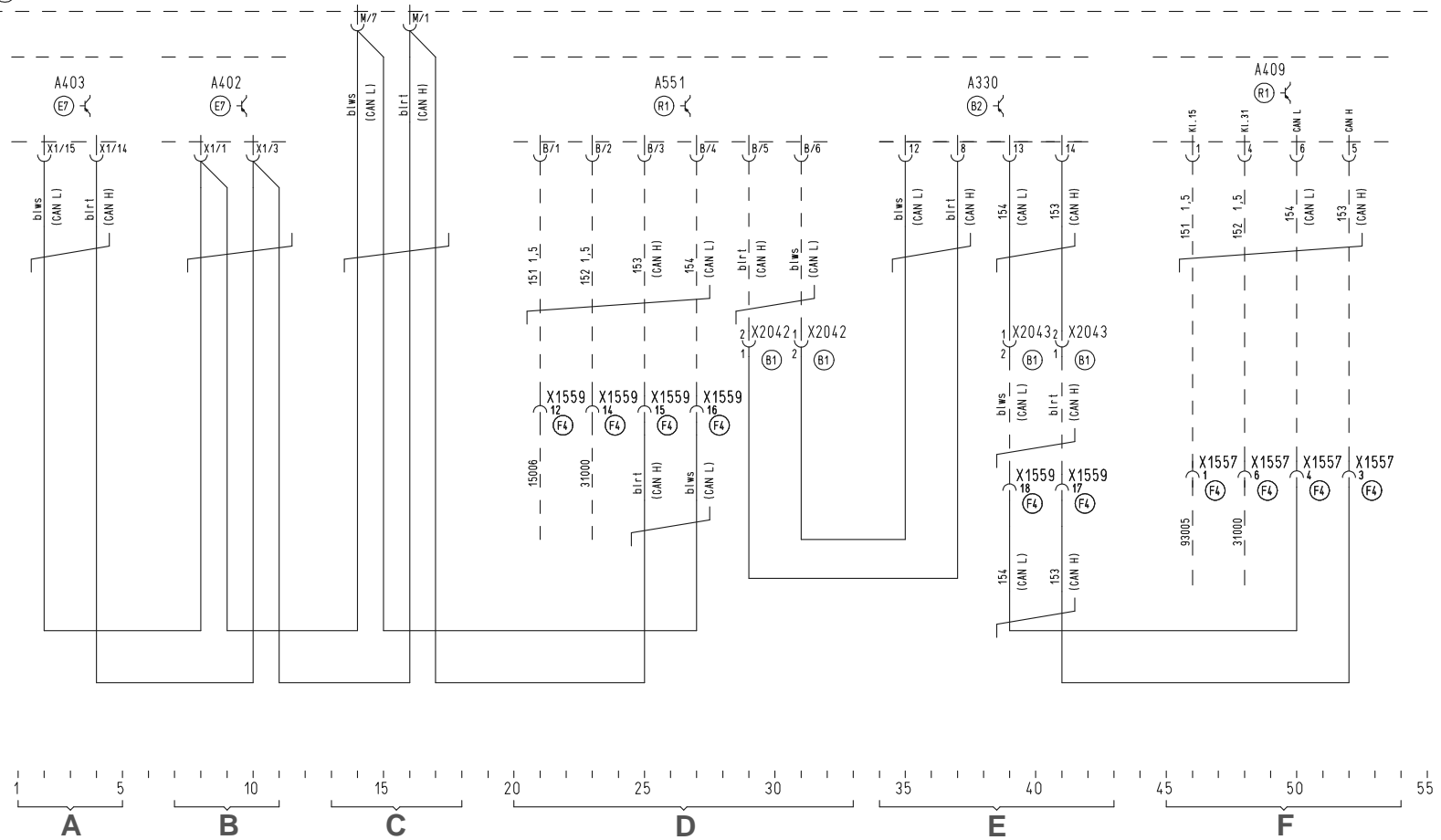
Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ2 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ6 Central electrics area
- Ⓔ7 Control unit racks
- Ⓔ8 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ1 B-pillar on passenger's side
- Ⓕ2 A-pillar on passenger's side
- Ⓕ Ceiling/roof
- Ⓕ Front axle
- Ⓕ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.2522 Sheet 1 of 1

A100
E6

A302
E6



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

Legend

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

Change status: 03.00

A = Vehicle management computer

B = Electronic braking system

C = Special customer module

D = Central vehicle computer

E = Oil level sensor

F = Electronically controlled air management unit

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A312 (397) Customer-specific control module

A402 (399) EBS control unit

A403 (339) Vehicle management computer

A409 (353) ECAM control unit

A551 (533) Control unit, oil level sensor

X1557 Stvd. frame left

X1559 Stvd. engine/EDC/transmission IV

X2041 Stvd. adaptation AS-TRONIC

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

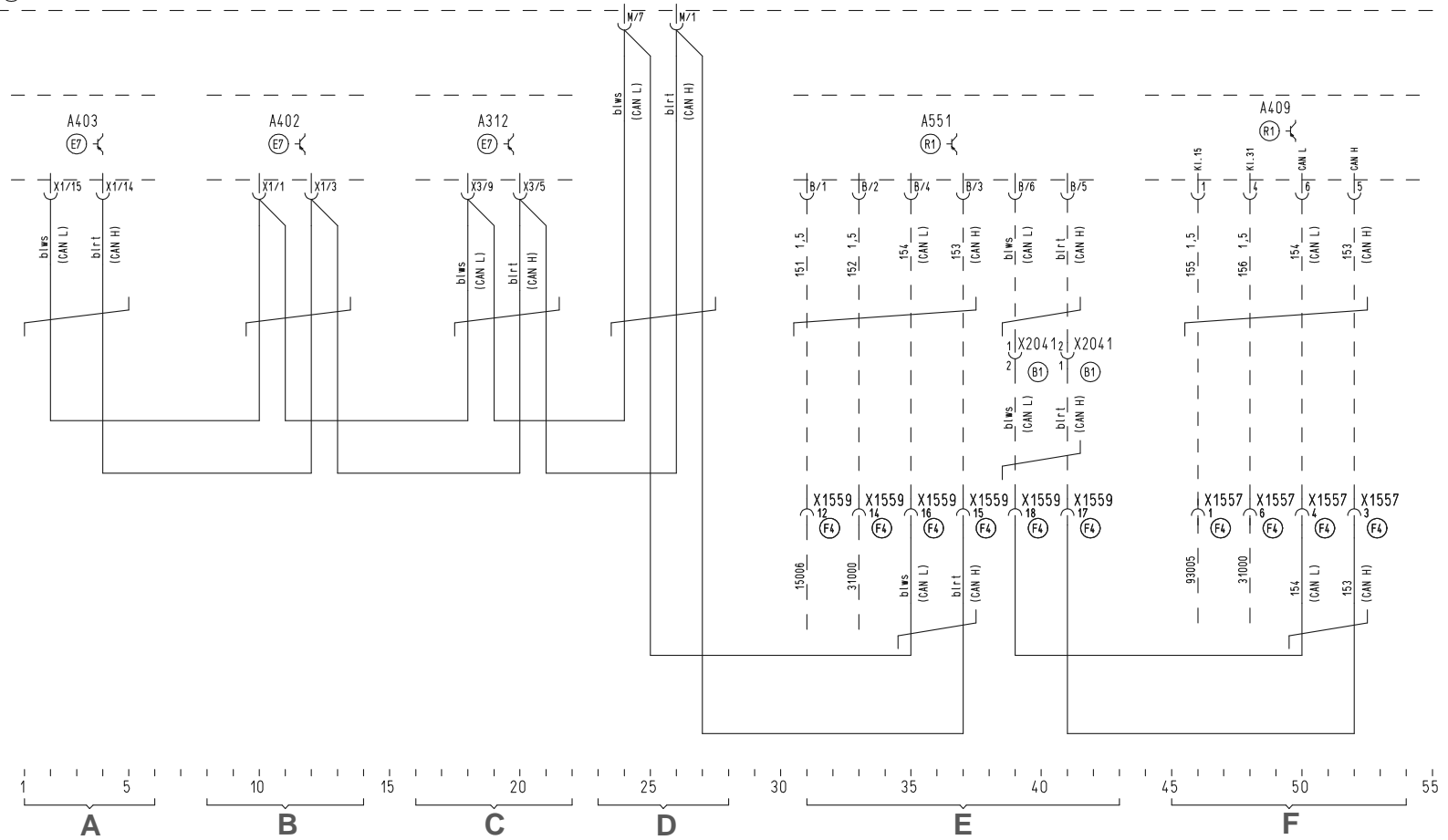
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2428 Sheet 1 of 1

A100
E6

A302
E6



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Note:

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

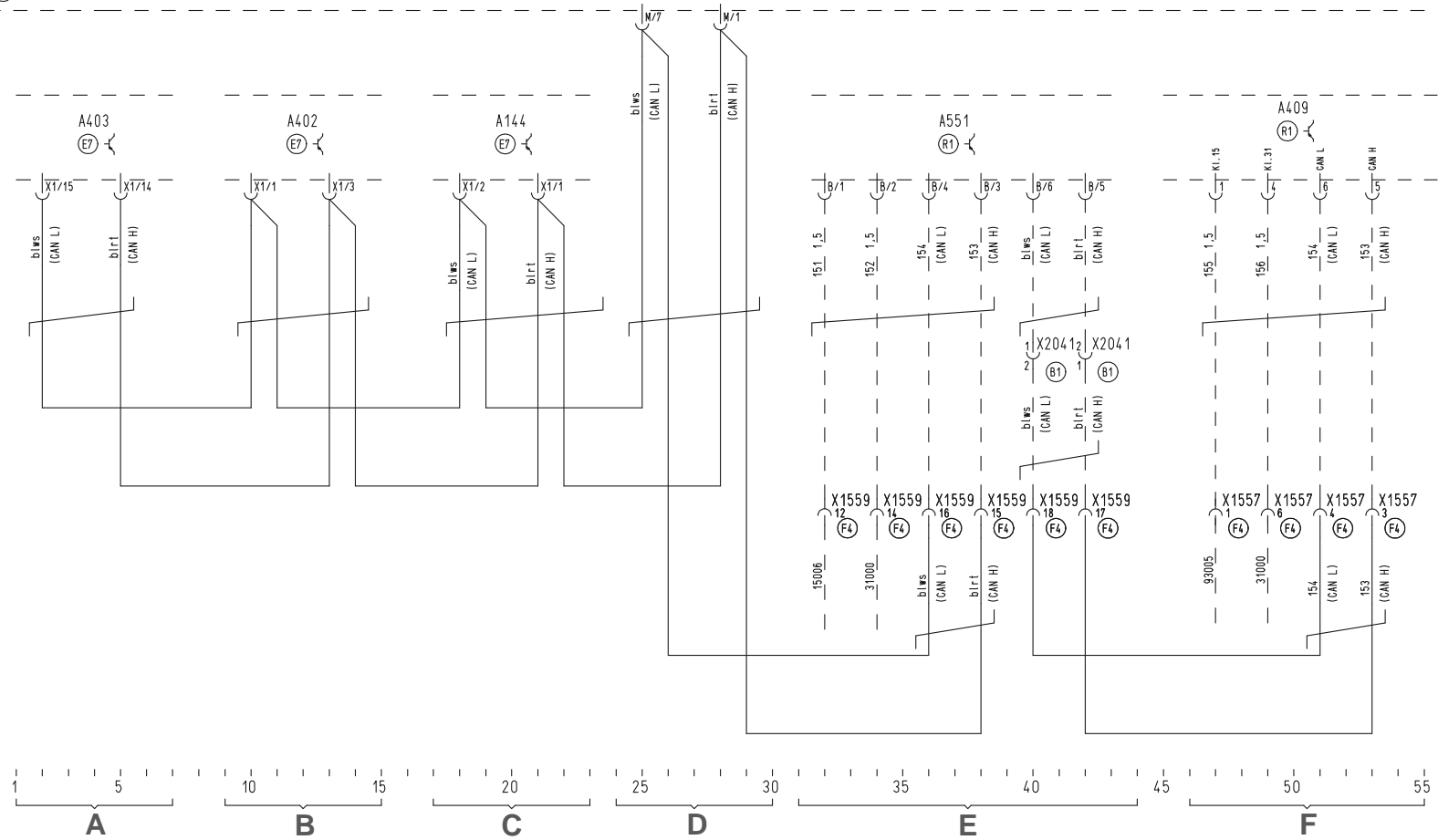
The pin assignment for Voith retarders is: CAN High: X1/3

CAN Low: X1/1

Wiring diagram no. 81.99192.2521 Sheet 1 of 1

A100
E6

A302
E6



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:

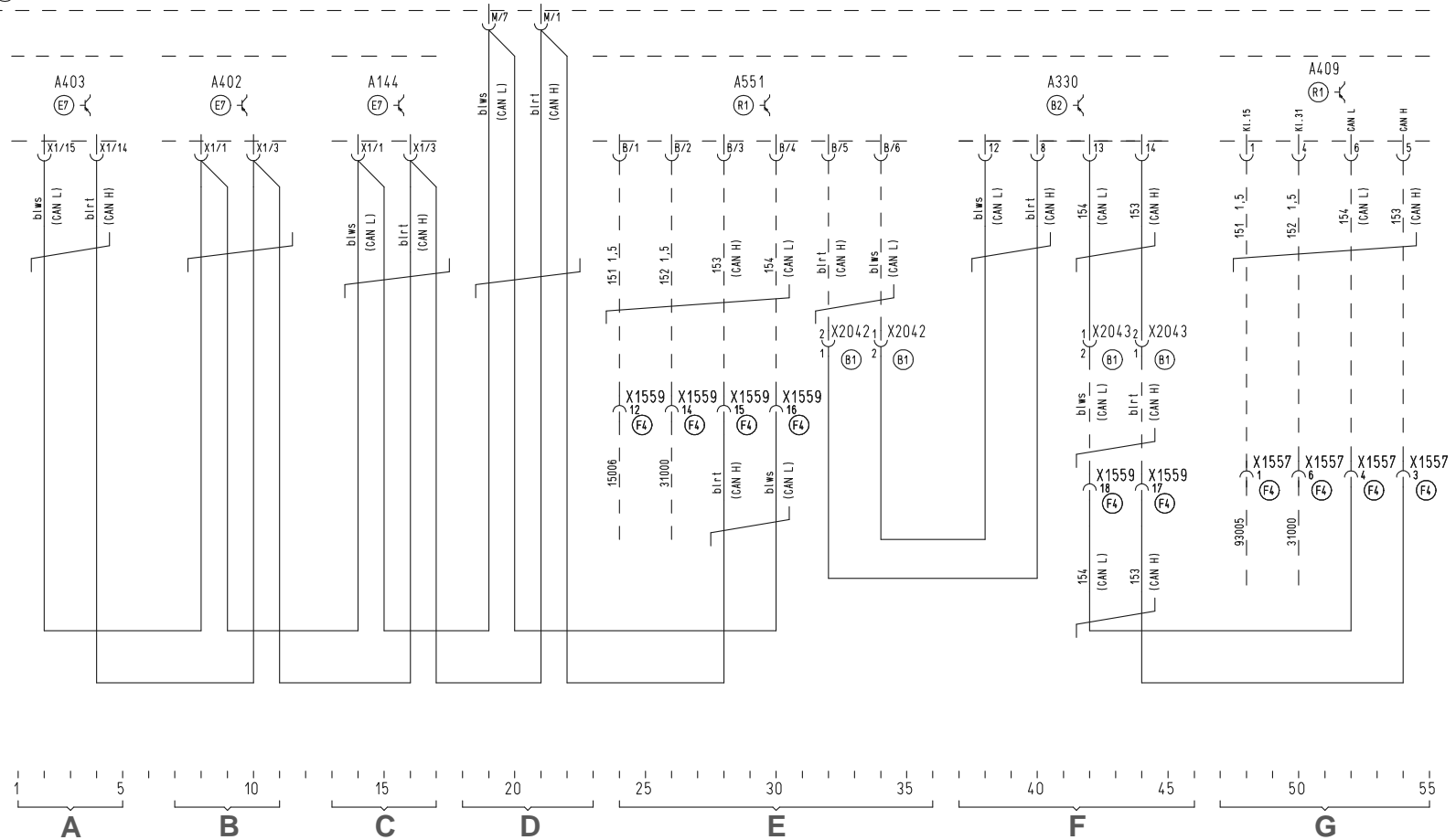
The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

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

Wiring diagram no. 81.99192.2524 Sheet 1 of 1

A100
E6

A302
E6



**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

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ2 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ7 Control unit racks
- Ⓔ8 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ1 B-pillar on passenger's side
- Ⓕ2 A-pillar on passenger's side
- Ⓕ Ceiling/roof
- Ⓕ Front axle
- Ⓕ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Note:

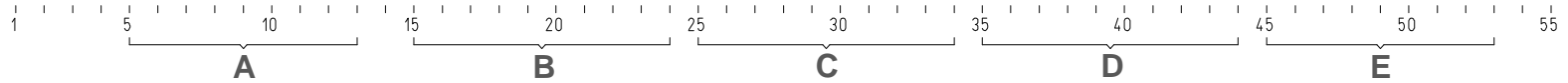
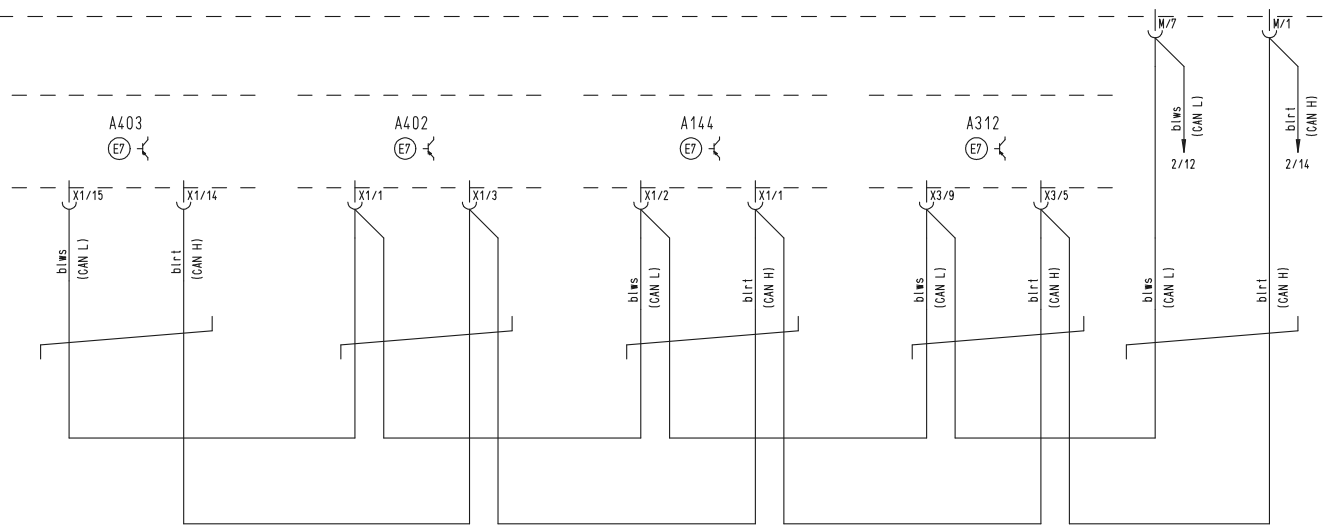
The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

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

Wiring diagram no. 81.99192.2432 Sheet 1 of 2

A100
 (E6)

A302
 (E6)



**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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

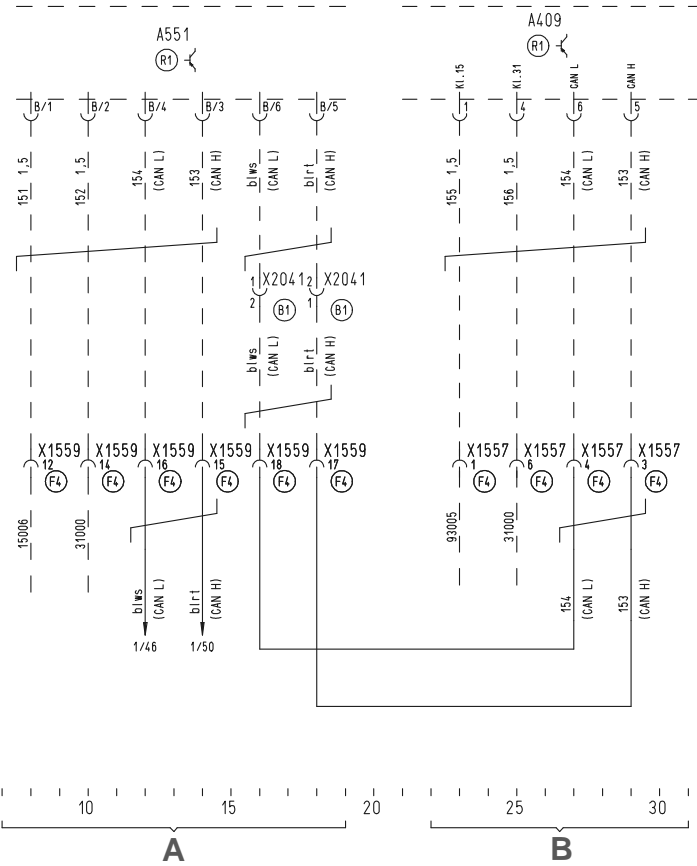
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2432 Sheet 2 of 2

A100
E6

A302
E6



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

Legend

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

Change status: 03.00

A = Vehicle management computer

B = Electronic braking system

C = Special customer module

D = Central vehicle computer

E = Oil level sensor

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A312 (397) Customer-specific control module

A402 (399) EBS control unit

A403 (339) Vehicle management computer

A551 (533) Control unit, oil level sensor

X1559 Stvd. engine/EDC/transmission IV

X2042 Stvd. adaptation AS-TRONIC

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

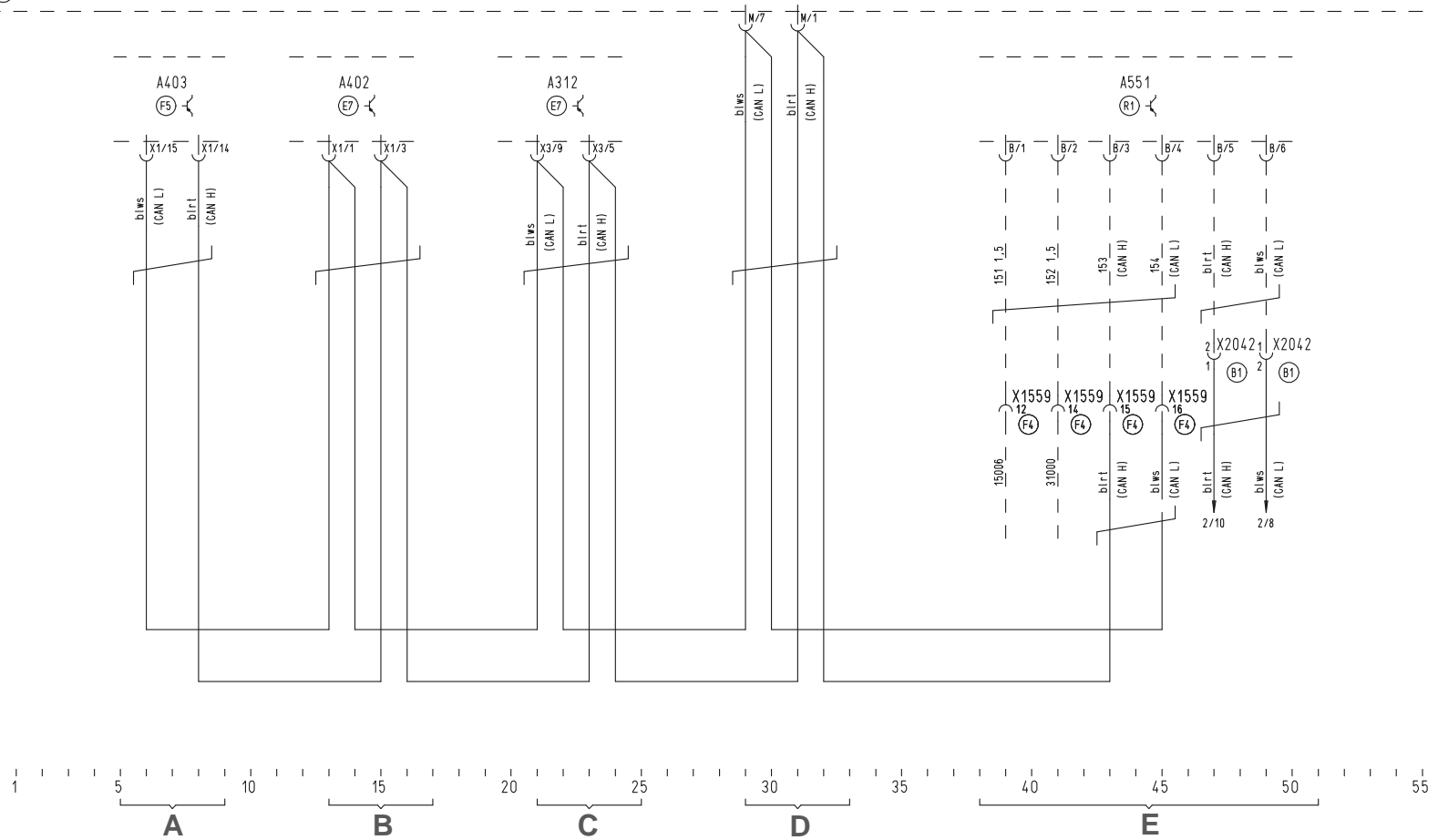
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2433 Sheet 1 of 2

A100
E6

A302
E6



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

Legend

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

Change status: 06.99

A = AS-TRONIC

B = Electronically controlled air management unit

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

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

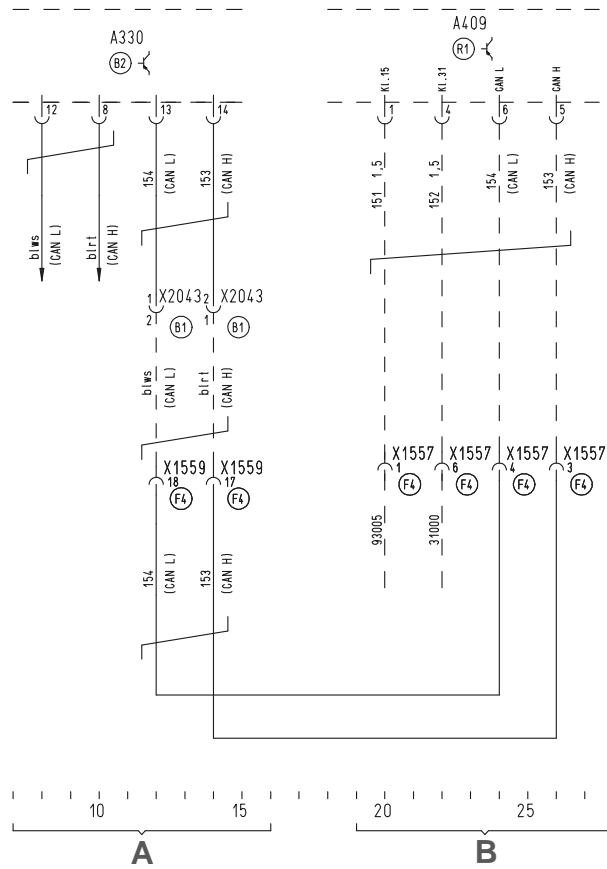
Marking of mounting positions

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

Wiring diagram no. 81.99192.2433 Sheet 2 of 2

A100
E6

A302
E6



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

Marking of mounting positions

Ⓐ	Tail	ⓕ6	Driving seat
Ⓑ1	Engine	ⓕ7	Passenger seat
Ⓑ2	Gearbox	ⓕ8	Control panel
Ⓒ	Front	Ⓔ	Battery box
Ⓒ1	Bumper	ⓓ1	B-pillar on driver's side
Ⓒ2	Entrance right	ⓓ2	A-pillar on driver's side
Ⓒ3	Entrance left	ⓓ1	B-pillar on passenger's side
Ⓔ6	Central electrics area	ⓓ2	A-pillar on passenger's side
Ⓔ7	Control unit racks	ⓓ	Ceiling/roof
Ⓔ8	Rear wall of cab	ⓓ	Front axle
ⓕ	Instrument panel	ⓓ	Rear axle
ⓕ1	Central part	ⓓ1	Front part of frame
ⓕ2	Steering wheel/column	ⓓ2	Rear part of frame
ⓕ3	Foot pedals	ⓓ1	Door left
ⓕ4	Front wall, inside left	ⓓ2	Door right
ⓕ5	Front wall, inside right		

Note:

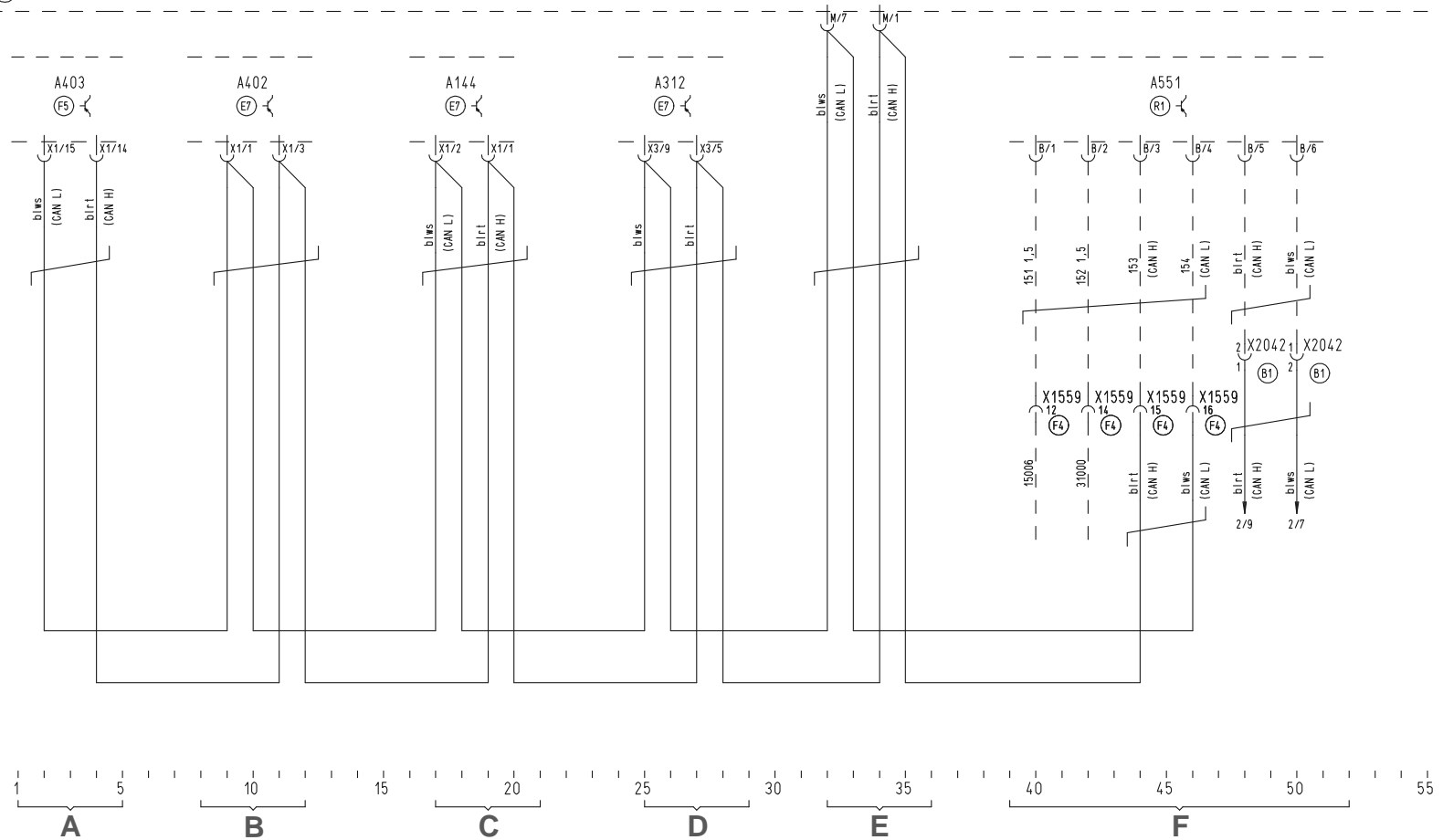
The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

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

Wiring diagram no. 81.99192.2435 Sheet 1 of 2

A100
E6

A302
E6



**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

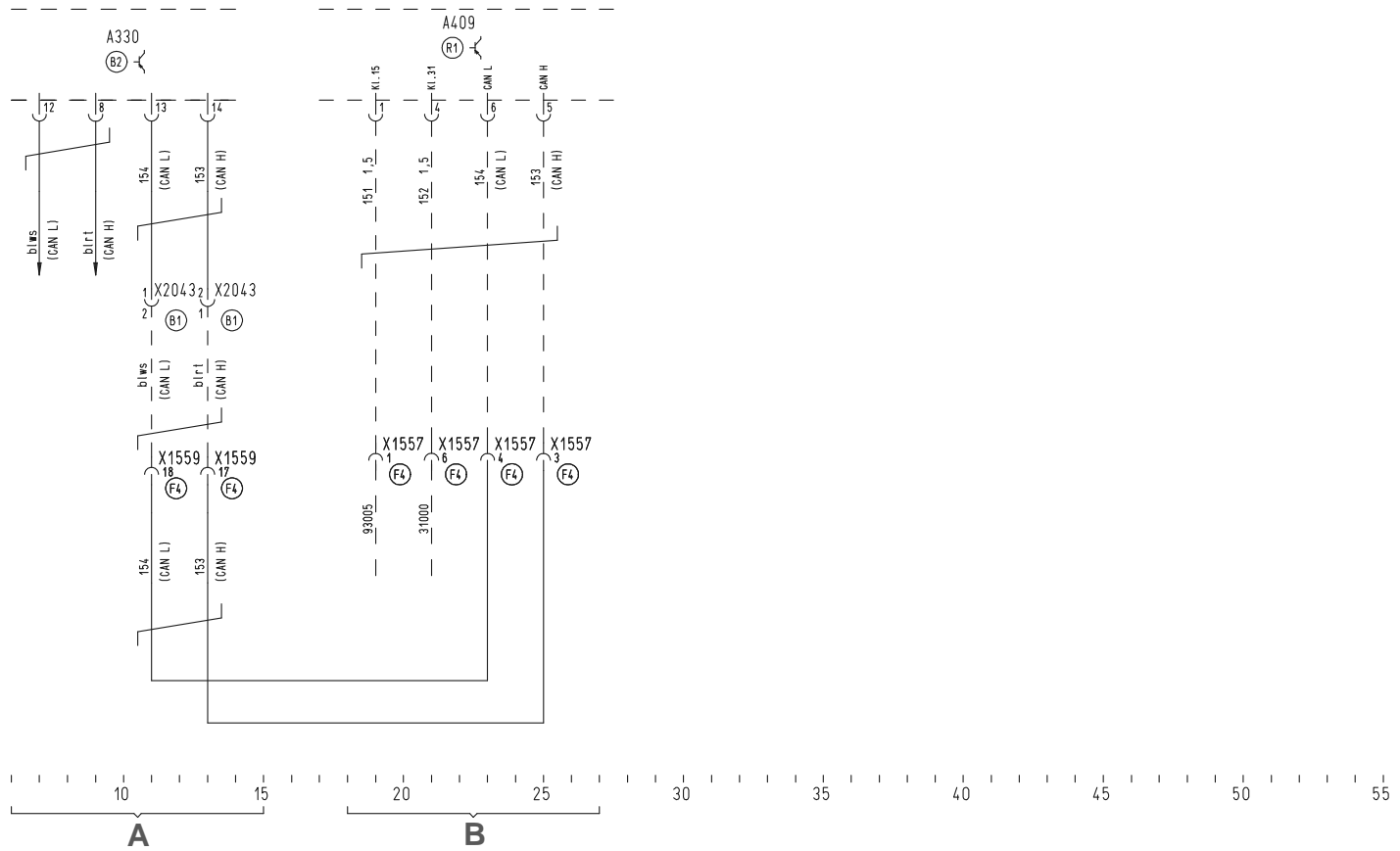
Marking of mounting positions

- | | |
|-----------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓁ Engine | ⓕⓗ Passenger seat |
| ⒷⓂ Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| ⒸⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒸⓂ Entrance right | ⓕⓗⓂ A-pillar on driver's side |
| ⒸⓁ Entrance left | ⓕⓙⓁ B-pillar on passenger's side |
| Ⓔⓖ Central electrics area | ⓕⓙⓂ A-pillar on passenger's side |
| Ⓔⓔ Control unit racks | ⓕⓁ Ceiling/roof |
| Ⓔⓖ Rear wall of cab | ⓕⓃ Front axle |
| ⓕ Instrument panel | ⓕⓓ Rear axle |
| ⓕⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⓕⓂ Steering wheel/column | ⓕⓇⓂ Rear part of frame |
| ⓕⓁ Foot pedals | ⓕⓁⓁ Door left |
| ⓕⓄ Front wall, inside left | ⓕⓁⓂ Door right |
| ⓕⓄ Front wall, inside right | |

Wiring diagram no. 81.99192.2435 Sheet 2 of 2

A100
E6

A302
E6



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

Legend

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

Change status: 05.00

A = Vehicle management computer

B = Electronic braking system

C = Electronically controlled air suspension

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

E = Central vehicle computer

A100 (255) Central fuse, relay and terminal block

A143 (343) ECAS control unit

A302 (352) Central computer 2

A384 (548) Control unit ZF – RAS-EC

A402 (399) EBS control unit

A403 (339) Vehicle management computer

X2395 Stvd. cab rump RAS-EC 2

X2400 Crimped connector, line blue/red

X2401 Crimped connector, line blue/white

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

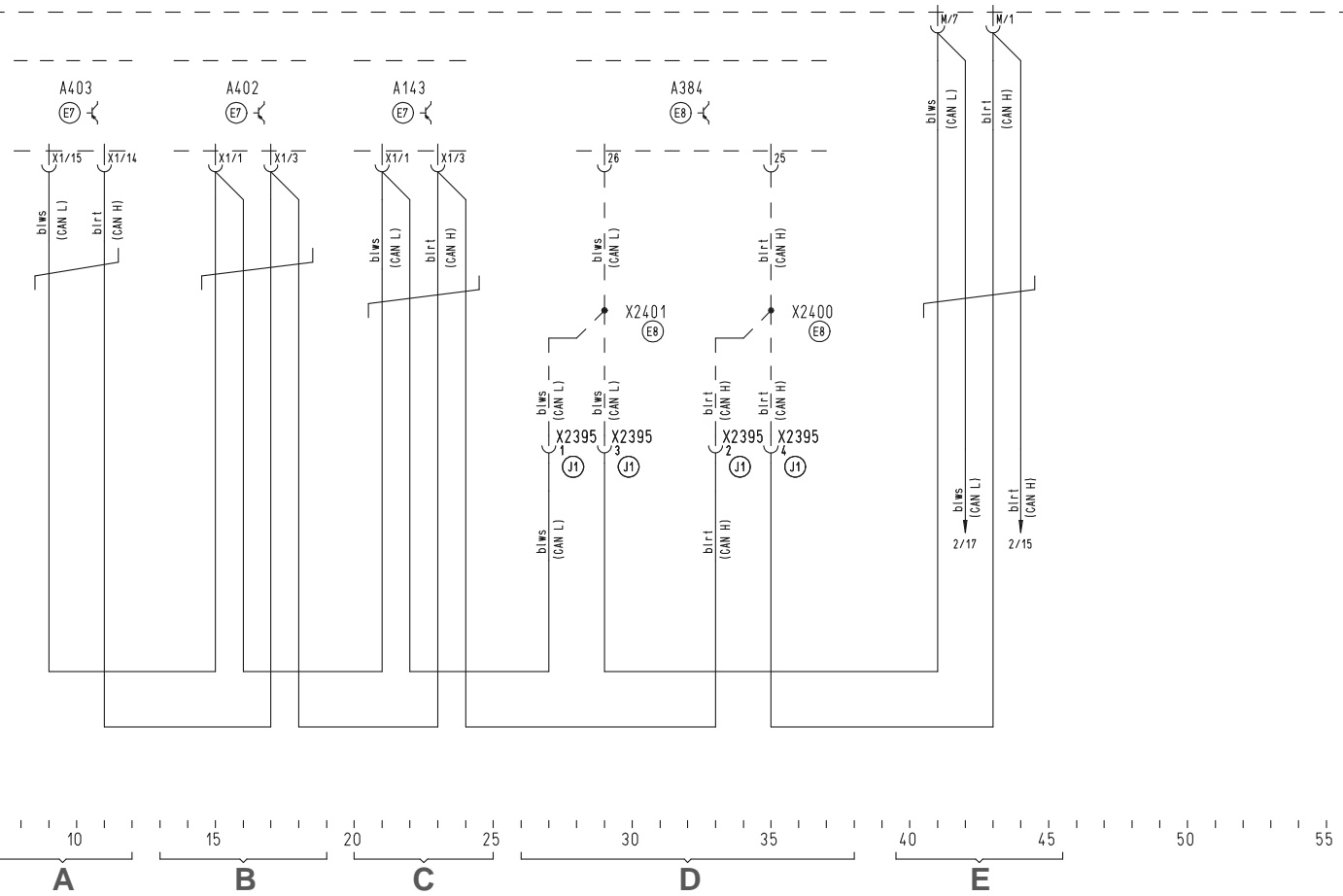
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.2783 Sheet 1 of 2

A100
E6

A302
E6



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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

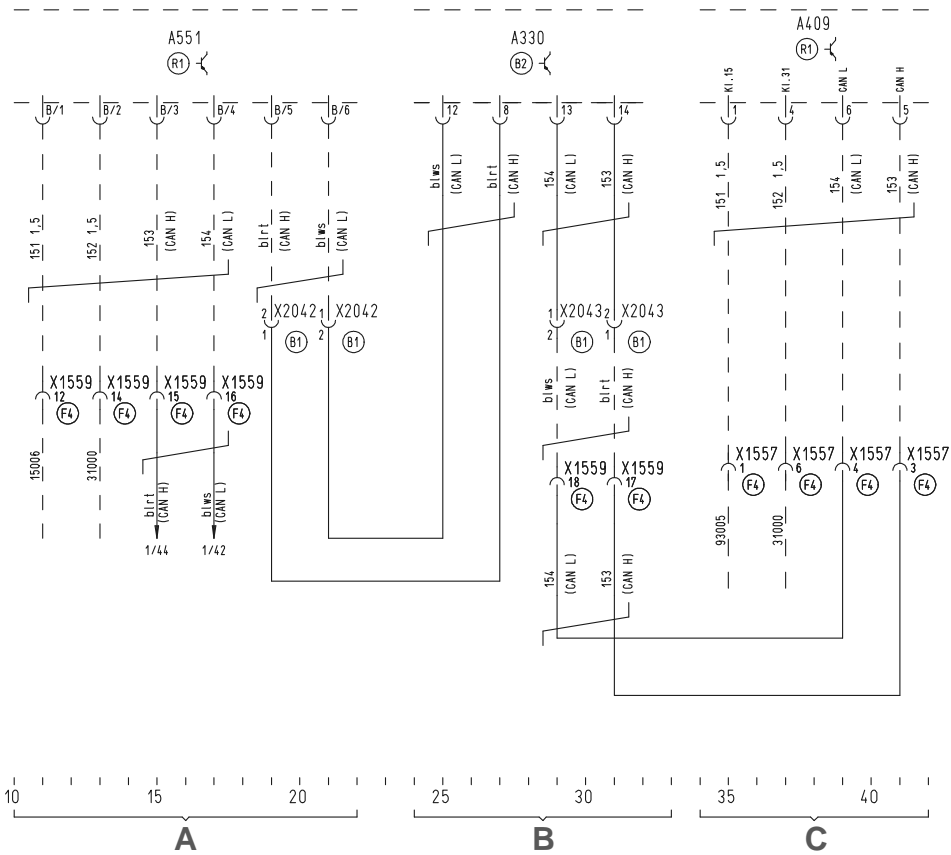
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2783 Sheet 2 of 2

A100
E6

A302
E6



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

A

B

C

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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓕ Control unit racks

Ⓖ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

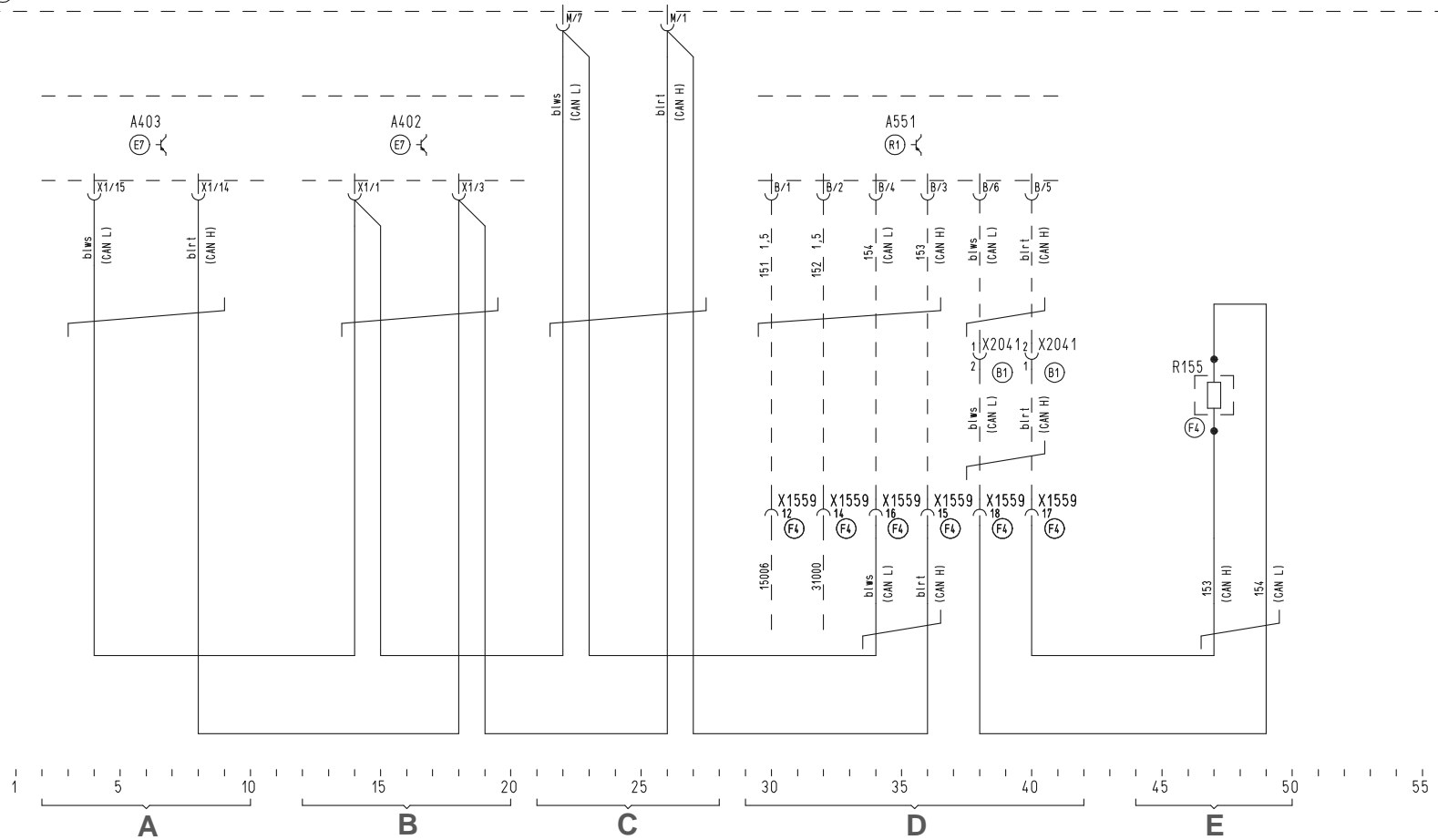
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2811 Sheet 1 of 1

A100
E6

A302
E6



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

Legend

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

Change status: 06.00

A = Vehicle management computer

B = Electronic braking system

C = Central vehicle computer

D = Oil level sensor

E = AS-TRONIC

F = Terminator

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

R155 (122) Terminator CAN databus

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

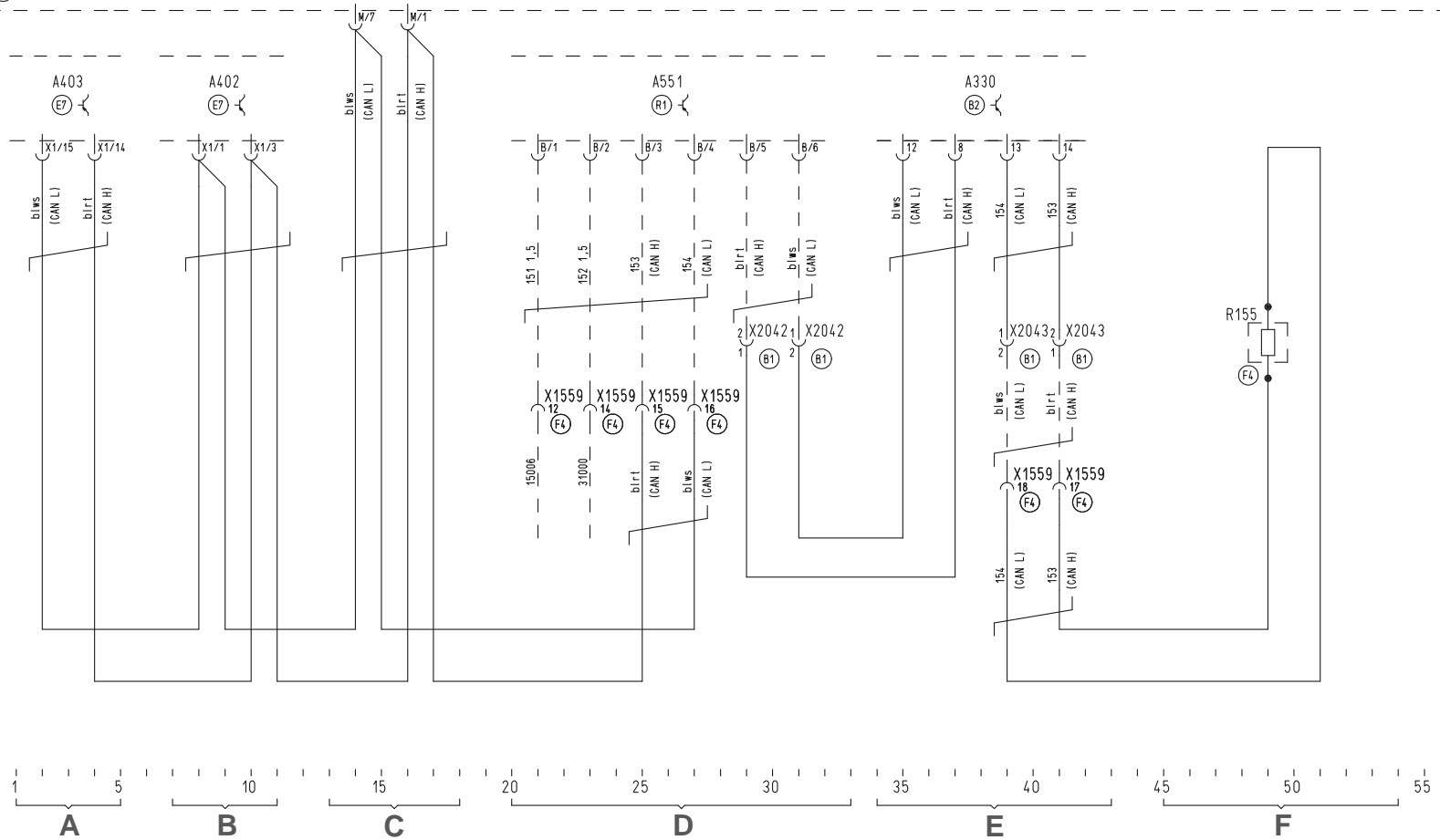
Marking of mounting positions

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

Wiring diagram no. 81.99192.2824 Sheet 1 of 1

A100
E6

A302
E6



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

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

Note:

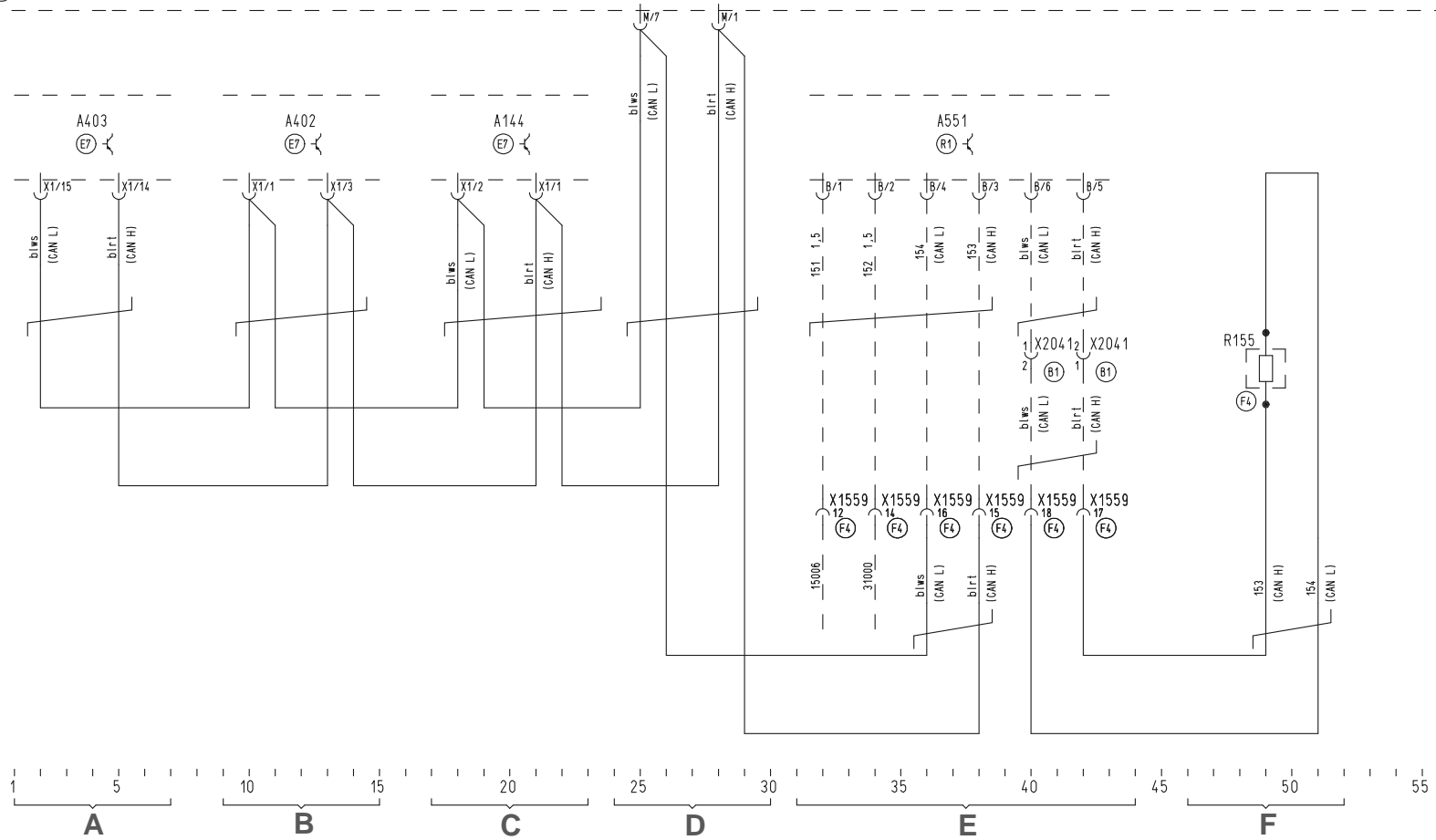
The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

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

Wiring diagram no. 81.99192.2823 Sheet 1 of 1

A100
E6

A302
E6



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

Legend

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

A = Vehicle management computer

B = Electronic braking system

C = Special customer module

D = Central vehicle computer

E = Oil level sensor

F = Terminator

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

R155 (122) Terminator CAN databus

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

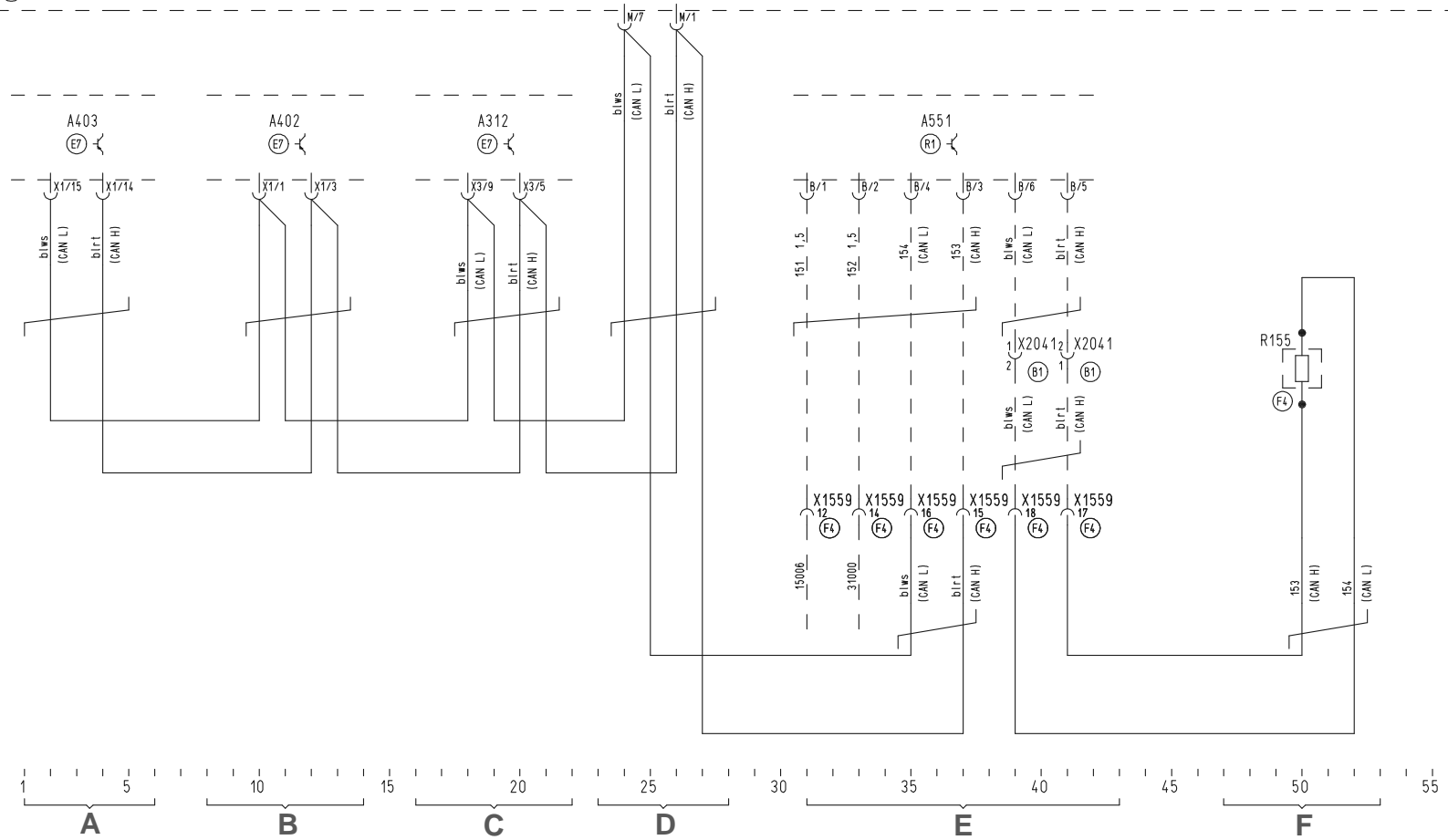
Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ2 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ6 Central electrics area
- Ⓔ7 Control unit racks
- Ⓔ8 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ1 B-pillar on passenger's side
- Ⓕ2 A-pillar on passenger's side
- Ⓕ Ceiling/roof
- Ⓕ Front axle
- Ⓕ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.2814 Sheet 1 of 1

A100
E6

A302
E6



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

Legend

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

Change status: 06.00

A = Vehicle management computer

B = Electronic braking system

C = Special customer module

D = Central vehicle computer

E = Oil level sensor

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A312 (397) Customer-specific control module

A402 (399) EBS control unit

A403 (339) Vehicle management computer

A551 (533) Control unit, oil level sensor

X1559 Stvd. engine/EDC/transmission IV

X2042 Stvd. adaptation AS-TRONIC

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

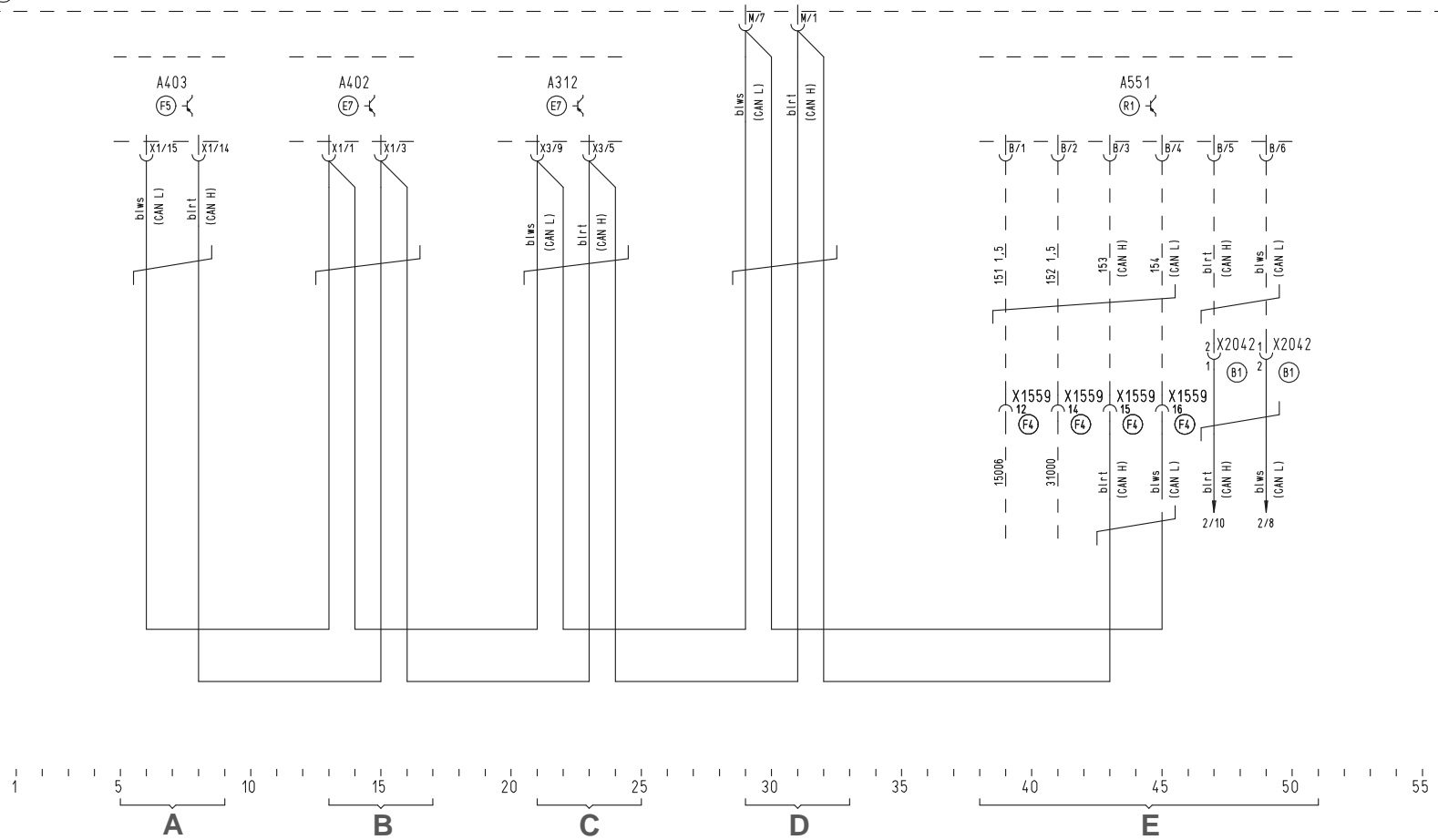
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2819 Sheet 1 of 2

A100
E6

A302
E6



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

Legend

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

Change status: 06.00

A = AS-TRONIC

B = Terminator

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

R155 (112) Terminator CAN databus

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

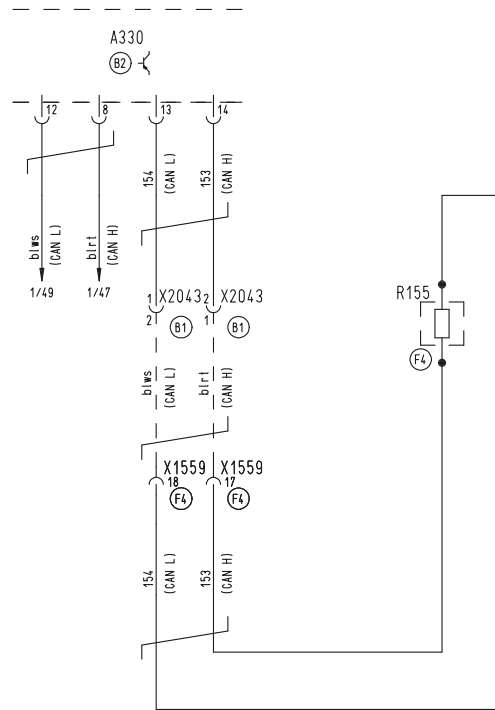
Marking of mounting positions

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

Wiring diagram no. 81.99192.2819 Sheet 2 of 2

A100
E6

A302
E6



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

Legend

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

Change status: 06.00

A = Vehicle management computer

B = Electronic braking system

C = Electronically controlled air suspension

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

E = Central vehicle computer

A100 (255) Central fuse, relay and terminal block

A143 (343) ECAS control unit

A302 (352) Central computer 2

A384 (548) Control unit ZF – RAS-EC

A402 (399) EBS control unit

A403 (339) Vehicle management computer

X2395 Stvd. cab rump RAS-EC 2

X2400 Crimped connector, line blue/red

X2401 Crimped connector, line blue/white

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

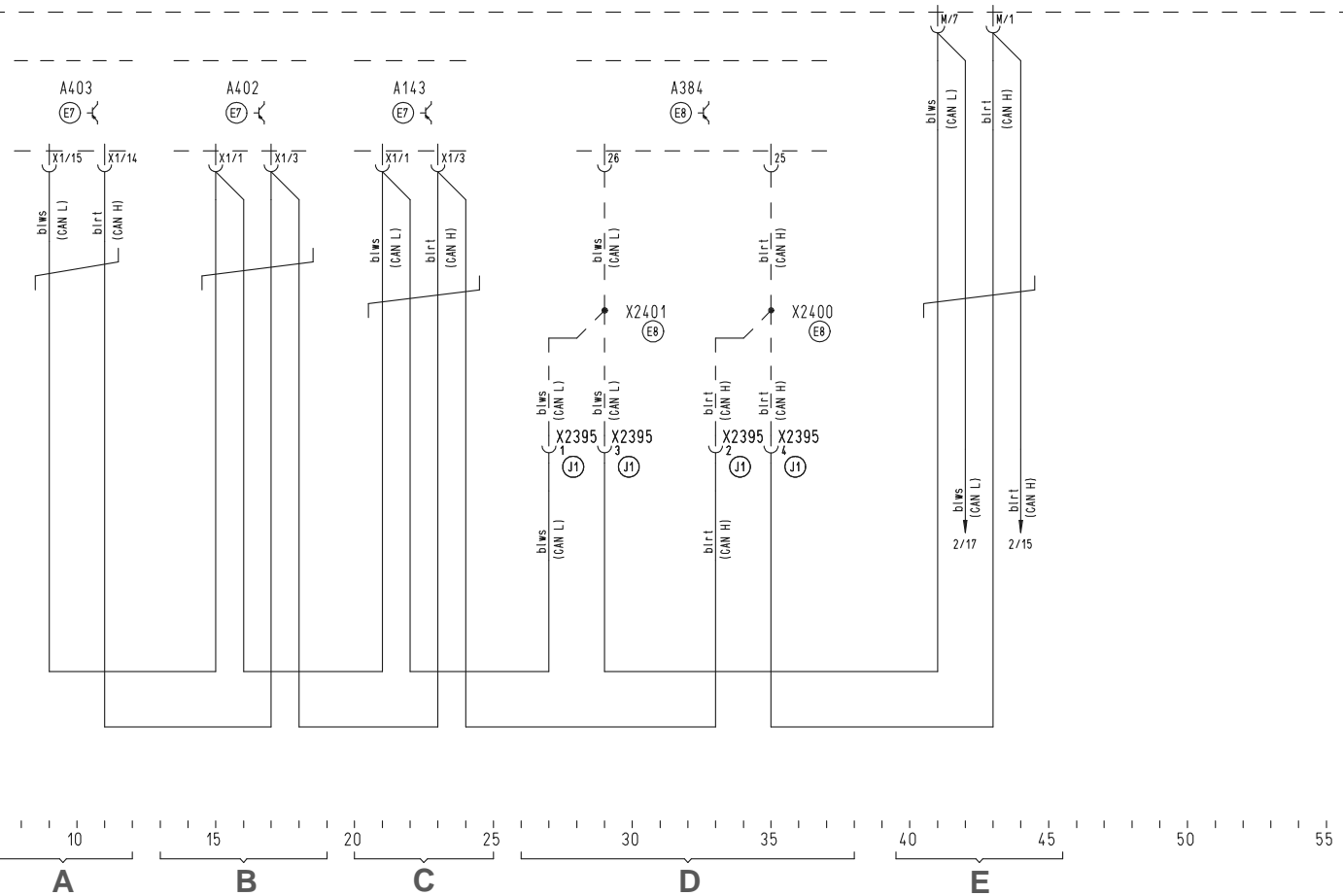
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2827 Sheet 1 of 2

A100
E6

A302
E6



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

Legend

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

Change status: 06.00

A = Oil level sensor

B = AS-TRONIC

C = Terminator

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

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

A551 (533) Control unit, oil level sensor

R155 (112) Terminator CAN databus

X1559 Stvd. engine/EDC/transmission IV

X2042 Stvd. adaptation AS-TRONIC

X2043 Stvd. adaptation AS-TRONIC

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

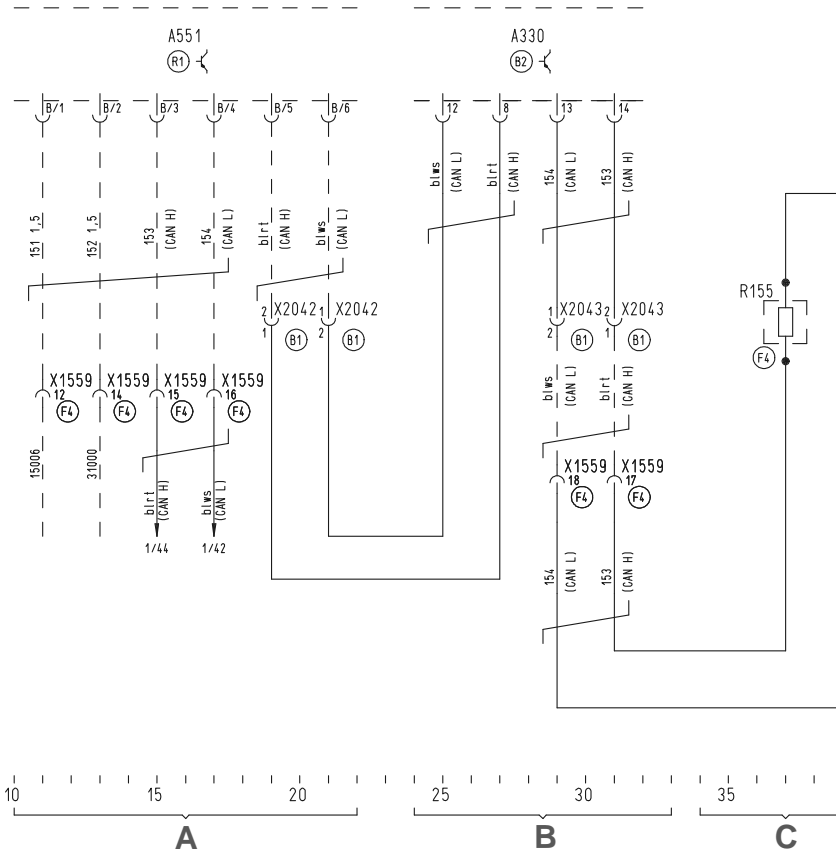
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2827 Sheet 2 of 2

A100
E6

A302
E6



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

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ2 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ7 Control unit racks
- Ⓔ8 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ1 B-pillar on passenger's side
- Ⓕ2 A-pillar on passenger's side
- Ⓕ Ceiling/roof
- Ⓕ Front axle
- Ⓕ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Note:

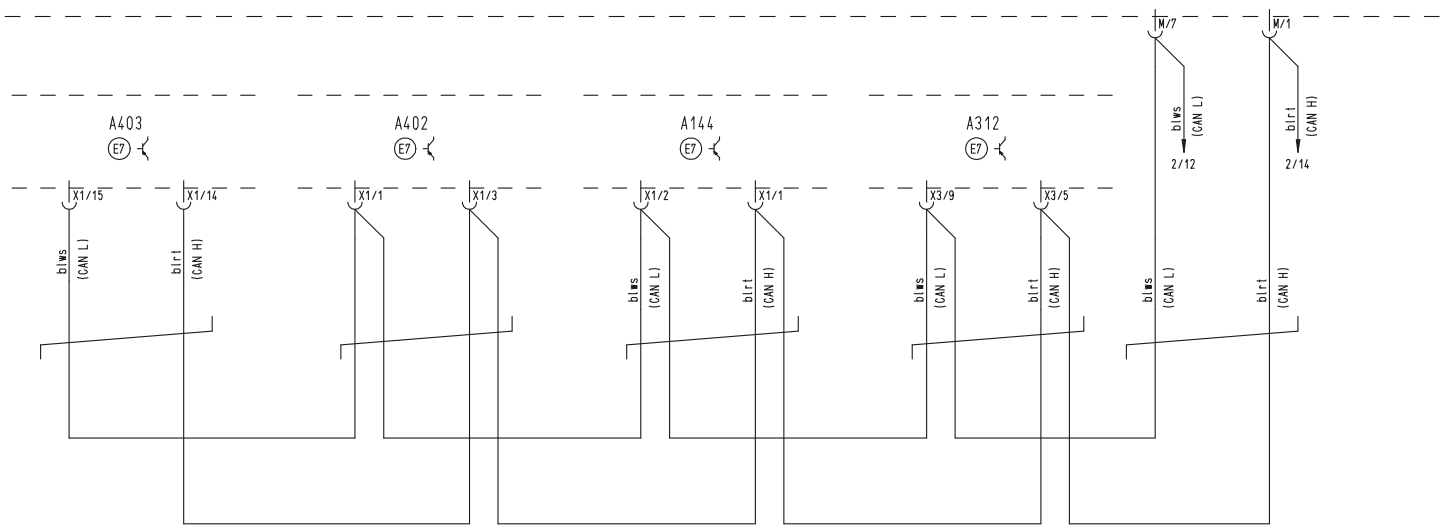
The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

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

Wiring diagram no. 81.99192.2818 Sheet 1 of 2

A100
E6

A302
E6



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

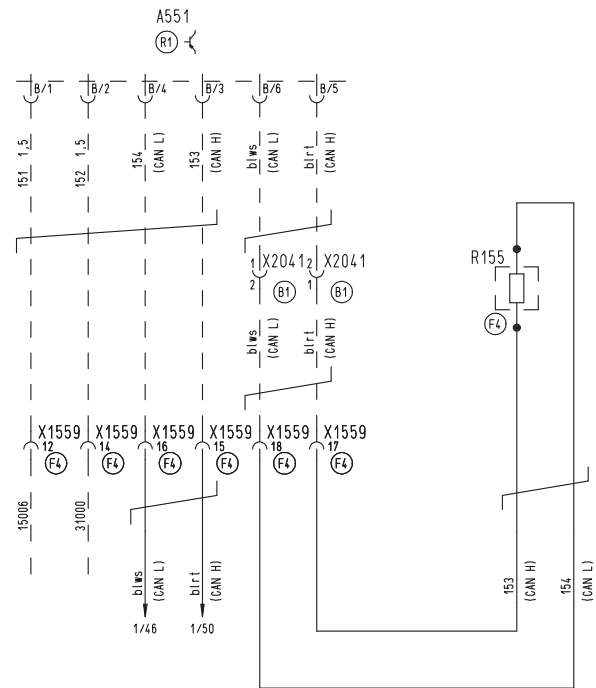
Marking of mounting positions

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

Wiring diagram no. 81.99192.2818 Sheet 2 of 2

A100
E6

A302
E6



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

- | | |
|-----------------------------|------------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| Ⓑ1 Engine | ⓕⓗ Passenger seat |
| Ⓑ2 Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| Ⓒ1 Bumper | ⓕⓕ H1 B-pillar on driver's side |
| Ⓒ2 Entrance right | ⓕⓕ H2 A-pillar on driver's side |
| Ⓒ3 Entrance left | ⓕⓕ J1 B-pillar on passenger's side |
| Ⓔ6 Central electrics area | ⓕⓕ J2 A-pillar on passenger's side |
| Ⓔ7 Control unit racks | ⓕⓕ L Ceiling/roof |
| Ⓔ8 Rear wall of cab | ⓕⓕ N Front axle |
| ⓕ Instrument panel | ⓕⓕ P Rear axle |
| ⓕ1 Central part | ⓕⓕ R1 Front part of frame |
| ⓕ2 Steering wheel/column | ⓕⓕ R2 Rear part of frame |
| ⓕ3 Foot pedals | ⓕⓕ S1 Door left |
| ⓕ4 Front wall, inside left | ⓕⓕ S2 Door right |
| ⓕ5 Front wall, inside right | |

Note:

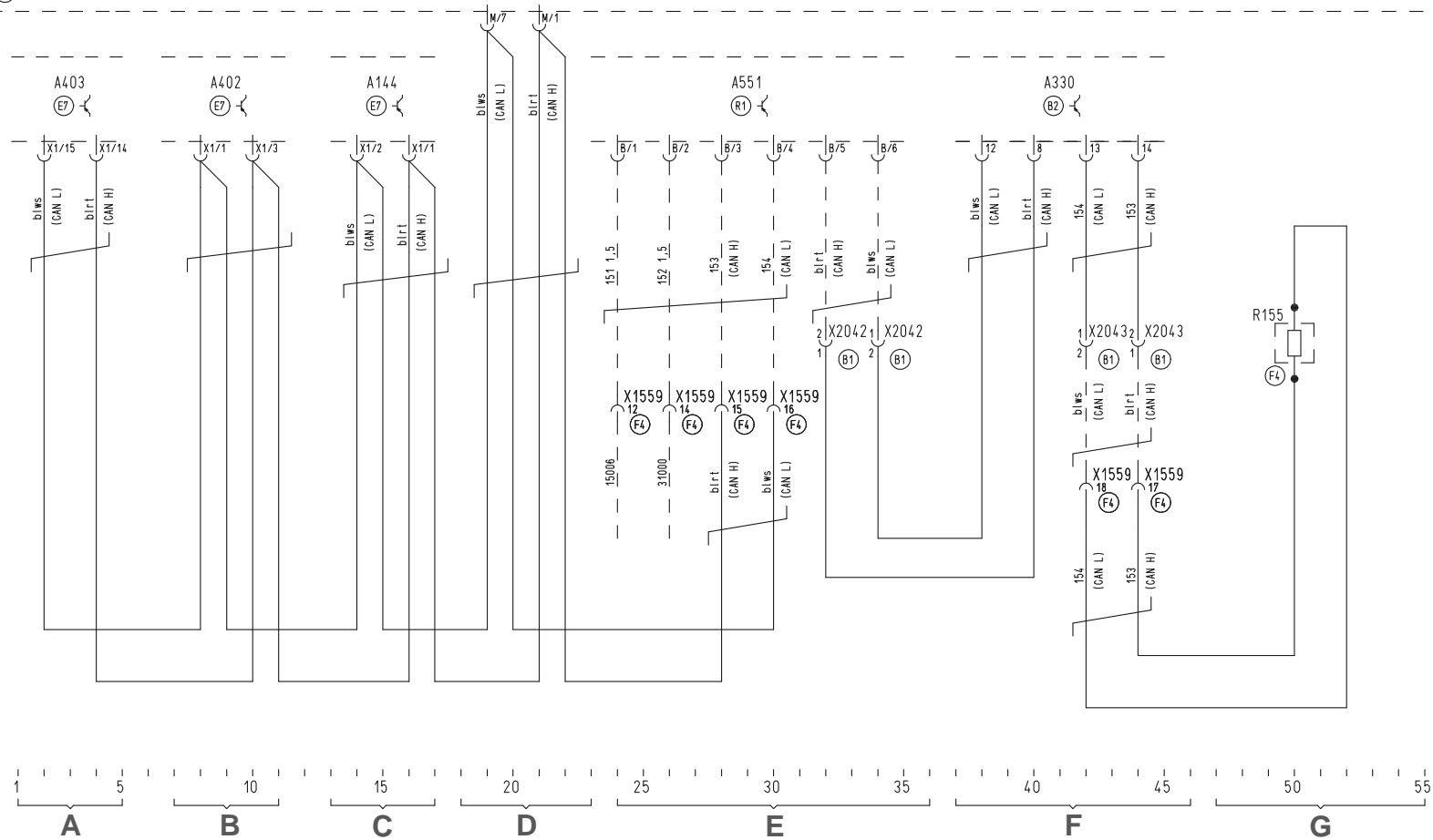
The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

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

Wiring diagram no. 81.99192.2826 Sheet 1 of 1

A100
E6

A302
E6



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

Legend

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

A = Vehicle management computer

B = Electronic braking system

C = Intarder

D = Special customer module

E = Central vehicle computer

F = Oil level sensor

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

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

Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ2 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ6 Central electrics area
- Ⓔ7 Control unit racks
- Ⓔ8 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ1 B-pillar on passenger's side
- Ⓕ2 A-pillar on passenger's side
- Ⓕ Ceiling/roof
- Ⓕ Front axle
- Ⓕ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Note:

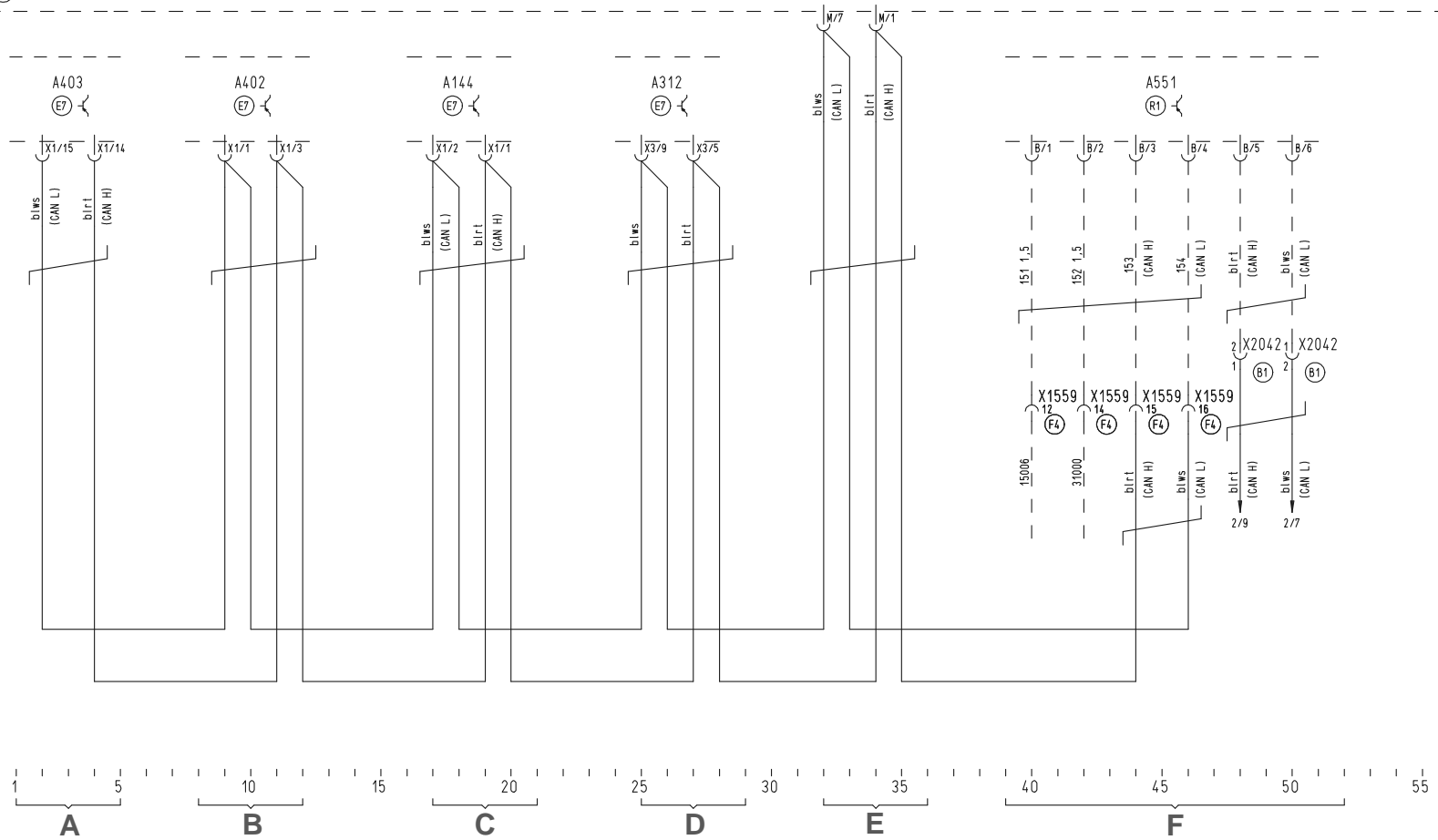
The pin assignment for the **A144** control unit shown in the wiring diagram only corresponds to EST 48 for intarders!

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

Wiring diagram no. 81.99192.2821 Sheet 1 of 2

A100
E6

A302
E6



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

Legend

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

Change status: 06.00

A = AS-TRONIC

B = Terminator

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

R155 (112) Terminator CAN databus

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

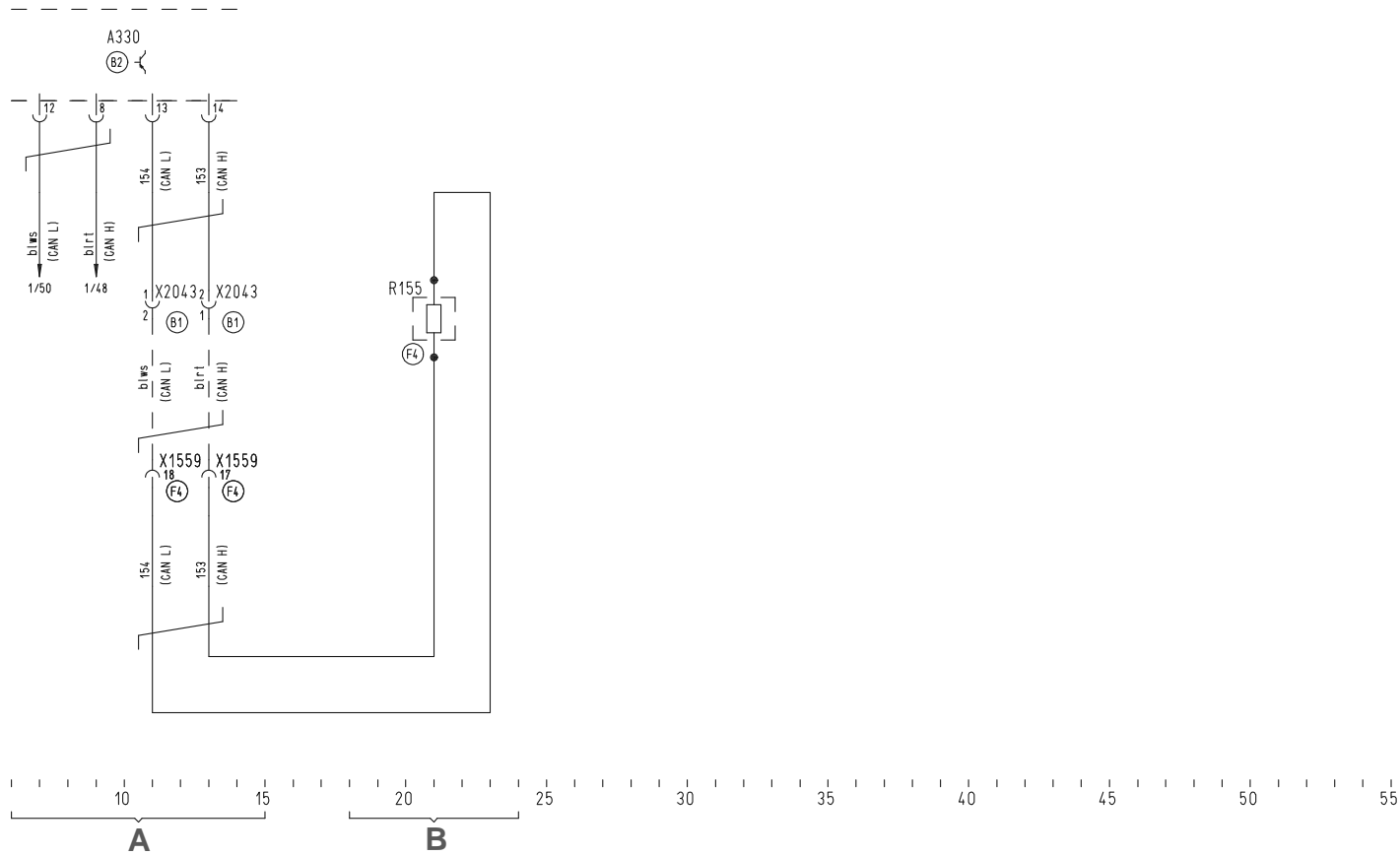
Marking of mounting positions

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

Wiring diagram no. 81.99192.2821 Sheet 2 of 2

A100
E6

A302
E6



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

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

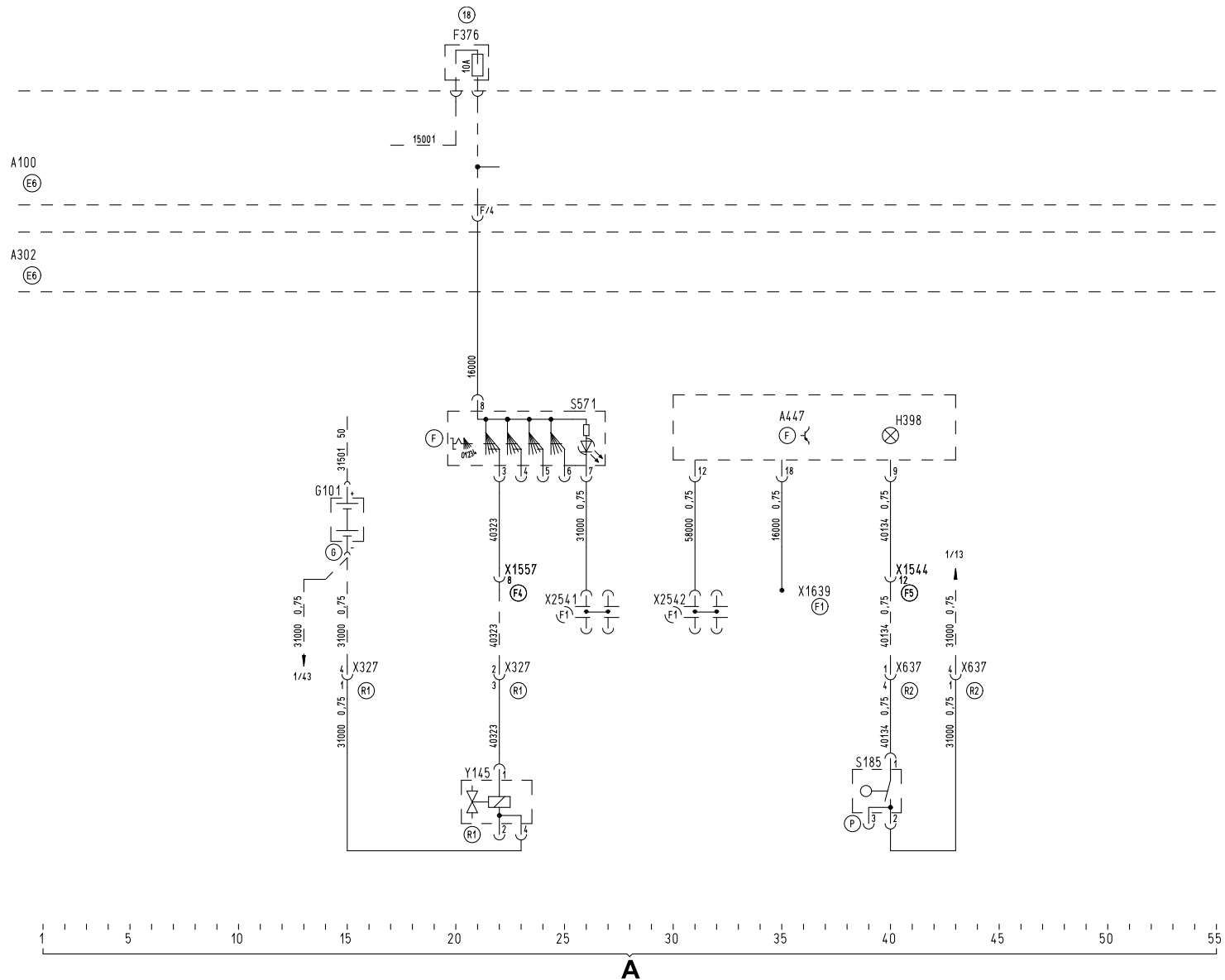
- X327** Stvd. solenoid valve, frame
- X637** Stvd. differential lock, rear axle
- X1544** Stvd. frame III
- X1557** Stvd. frame, left
- X1639** Soldered connector, line 16000
- X2541** (246) Potential distributor, 21-pin line 31000
- X2542** (246) Potential distributor, 21-pin line 58000

- 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

Wiring diagram no. 81.99192.1365 Sheet 1 of 1



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

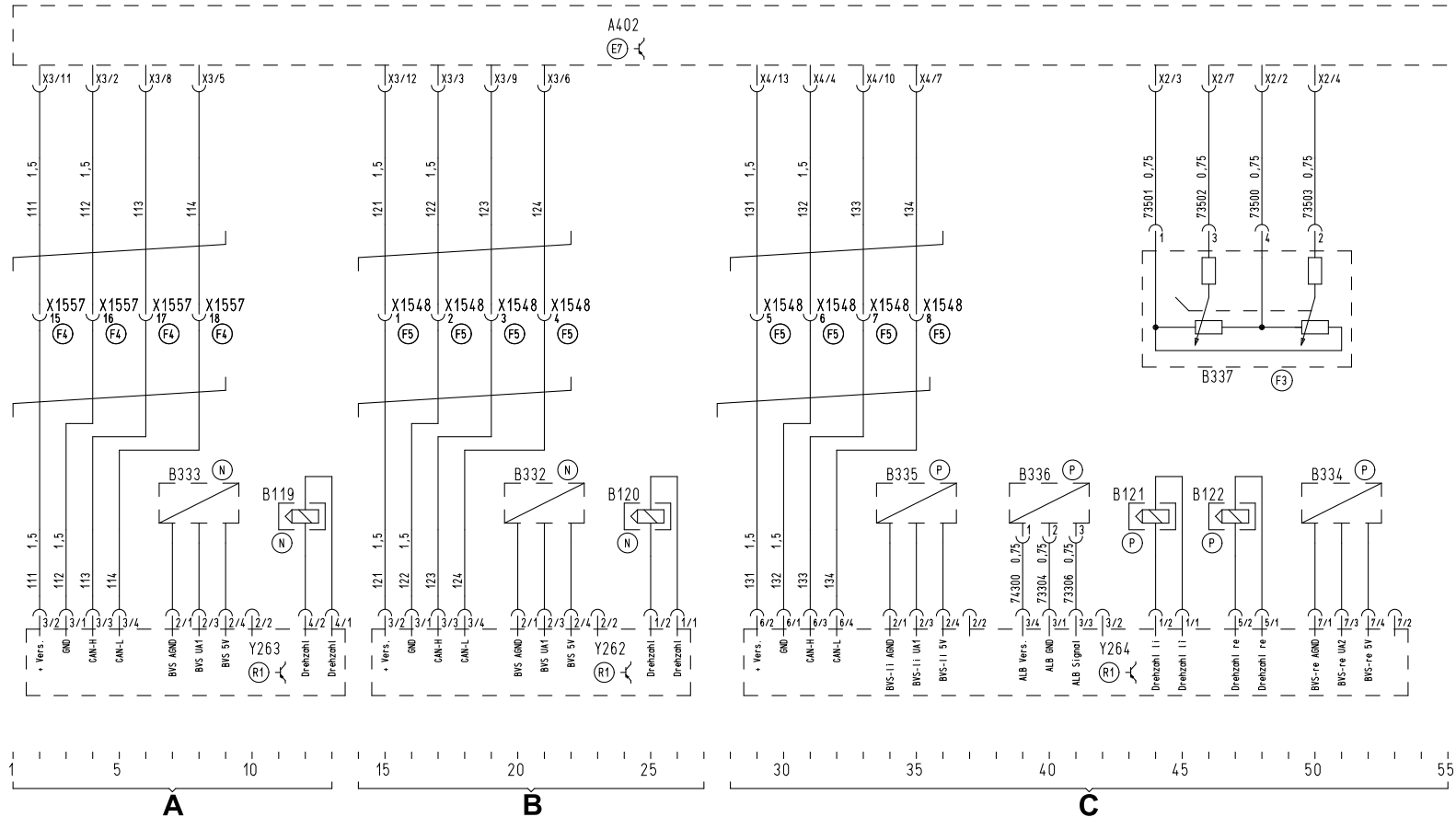
Marking of mounting positions

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

Wiring diagram no. 81.99192.2987 Sheet 1 of 3

A100
E6

A302
E6



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

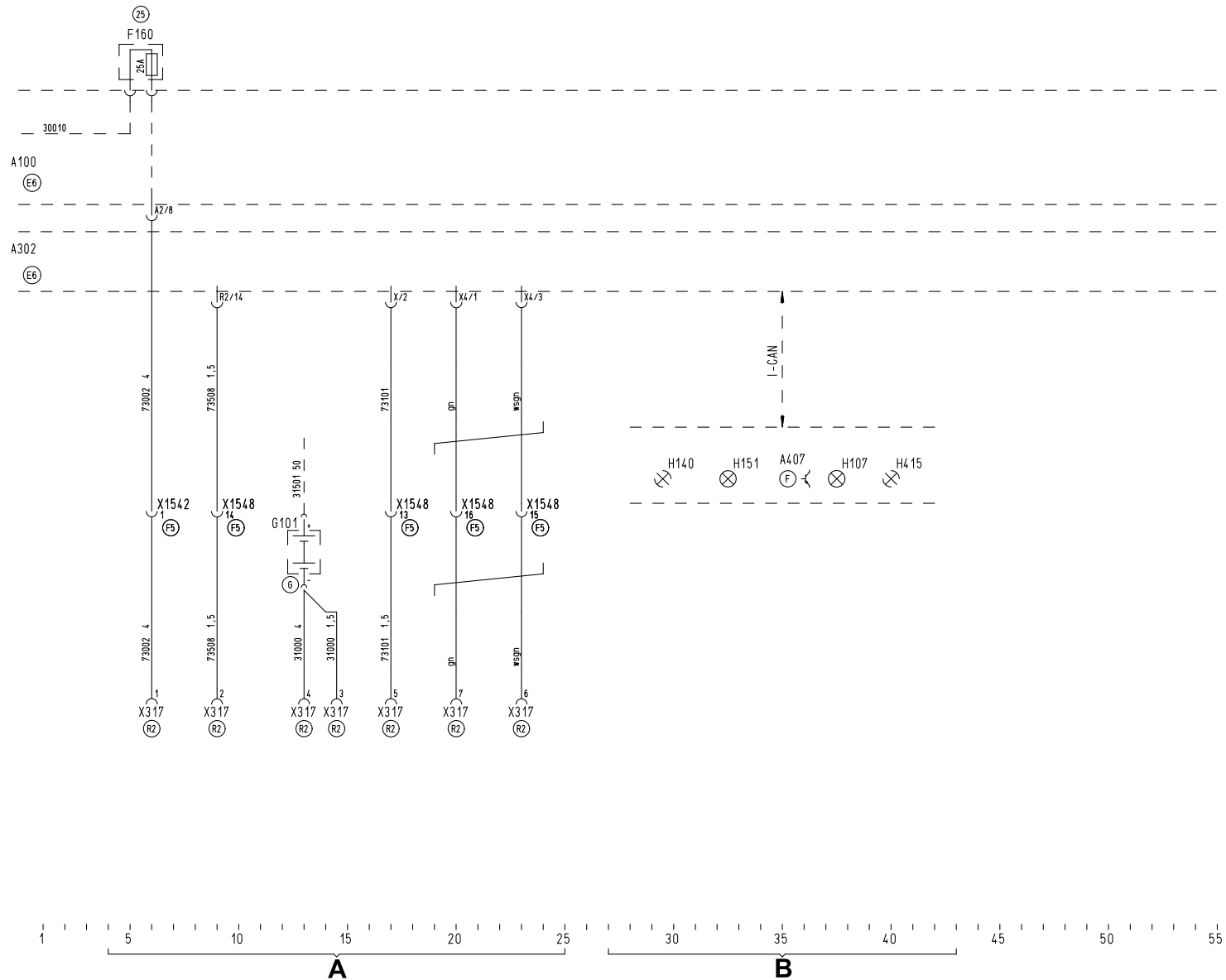
(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2987 Sheet 2 of 3



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

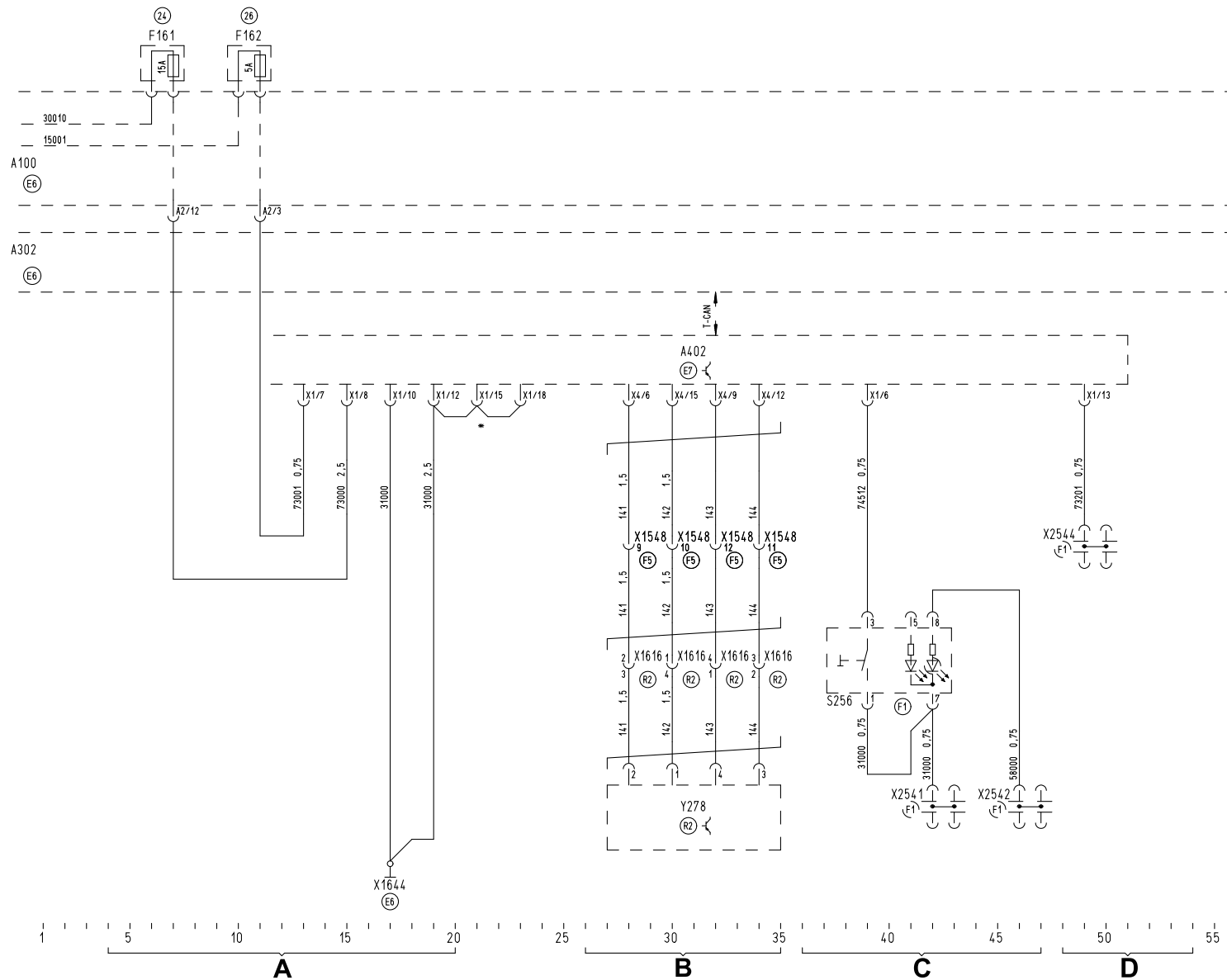
Ⓕ Door left

Ⓕ Door right

Note:

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

Wiring diagram no. 81.99192.2987 Sheet 3 of 3



**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

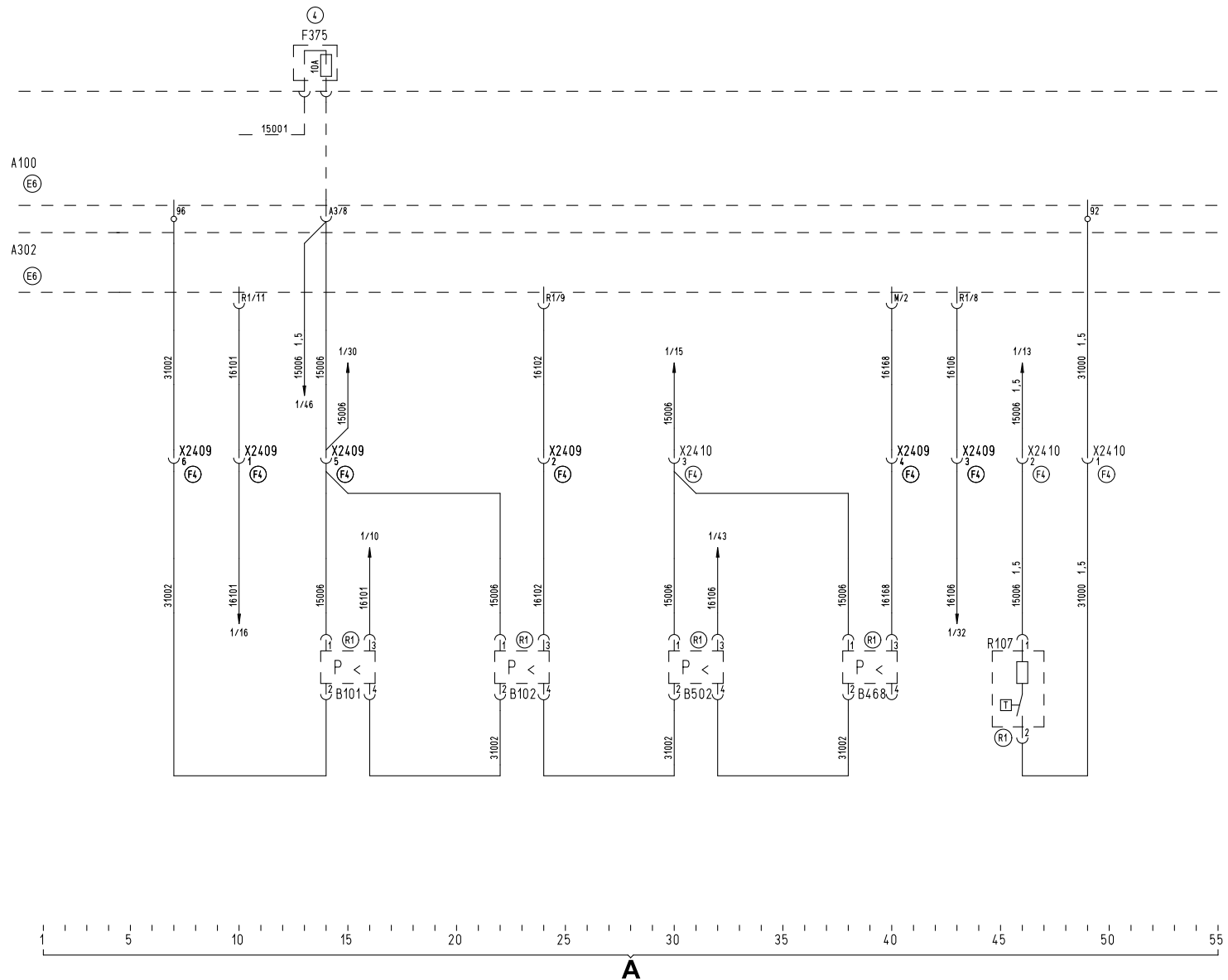
(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2810 Sheet 1 of 1



ECAS electronically controlled air suspension 4x2 FL (truck)

Legend

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

Change status: 04.01

A = Supply voltage

B = Remote control

C = Diagnosis

A100 (255) Central fuse, relay and terminal block

A143 (343) ECAS control unit

A221 (349) ECAS remote control

A302 (352) Central computer 2

F164 (101) Fuse ECAS (terminal 30)

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

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

X1809 Stvd. ECAS (terminal 15)

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

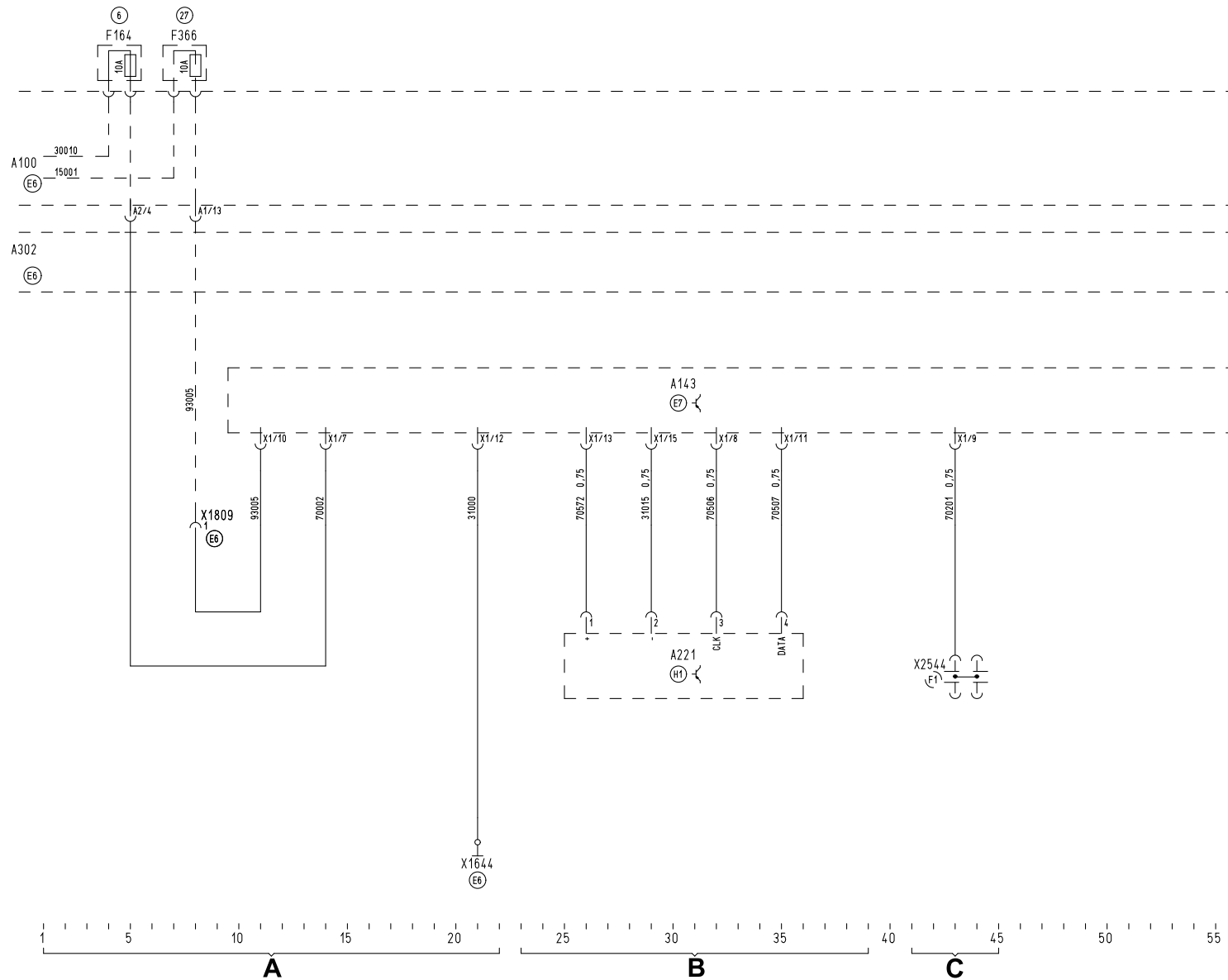
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1337 Sheet 1 of 2



ECAS electronically controlled air suspension 4x2 FL (truck)

Legend

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

Change status: 04.01

A = Height sensors

B = Solenoid valves

C = Indicator light

A100 (255) Central fuse, relay and terminal block

A143 (343) ECAS control unit

A302 (352) Central computer 2

A407 (342) Instrumentation

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

H394 Indicator light, ECAS malfunction/warning

X1945 Stvd. ECAS/EFR

Y132 (168) ECAS valve block

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

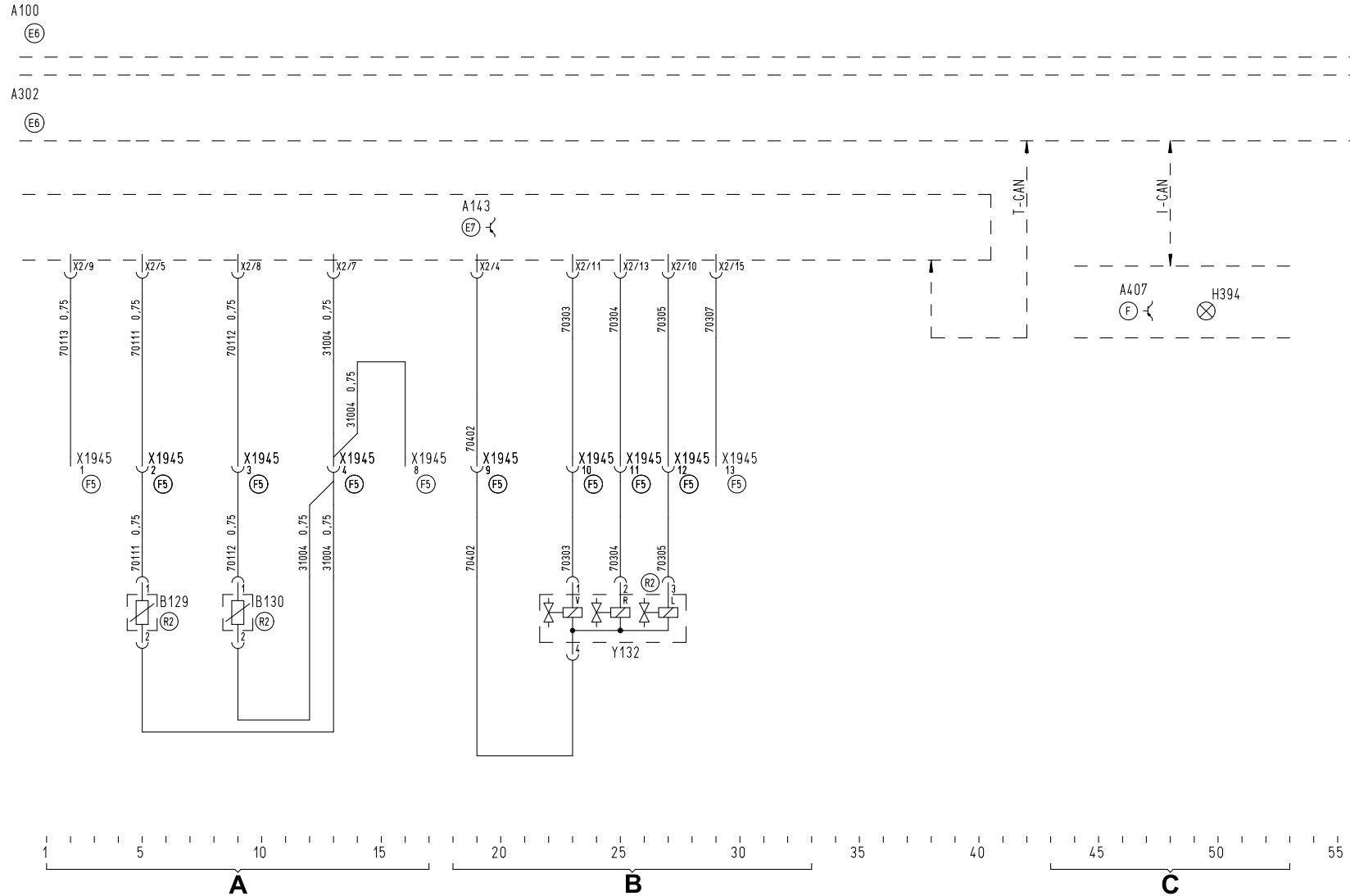
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1337 Sheet 2 of 2



ECAS electronically controlled air suspension 4x2 FL (semitrailer)

Legend

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

Change status: 04.01

A = Supply voltage

B = Remote control

C = Diagnosis

A100 (255) Central fuse, relay and terminal block

A143 (343) ECAS control unit

A221 (349) ECAS remote control

A302 (352) Central computer 2

F164 (101) Fuse ECAS (terminal 30)

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

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

X1809 Stvd. ECAS (terminal 15)

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

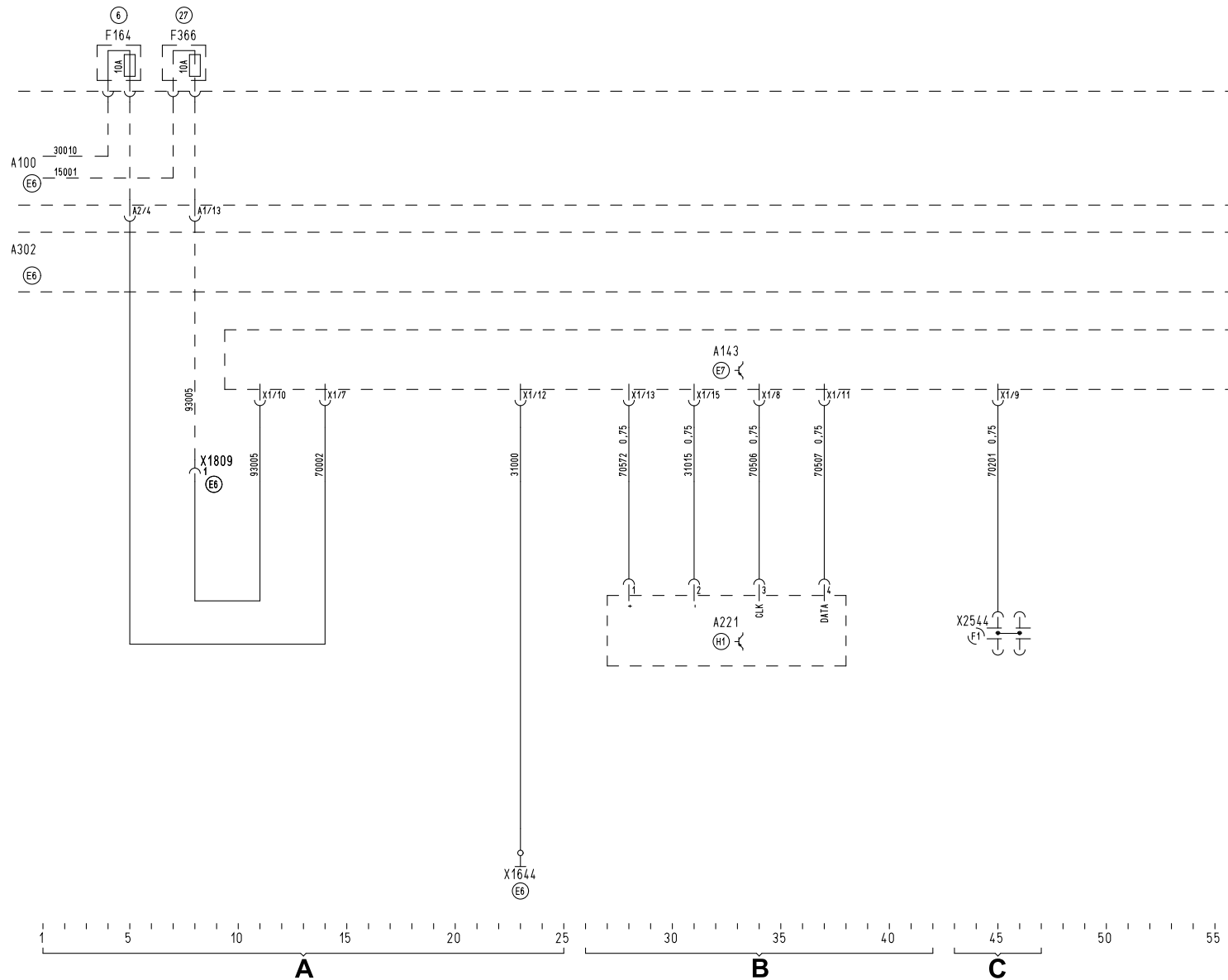
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1336 Sheet 1 of 2



ECAS electronically controlled air suspension 4x2 FL (semitrailer)

Legend

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

Change status: 04.01

A = Height sensors

B = Solenoid valves

C = Indicator light

A100 (255) Central fuse, relay and terminal block

A143 (343) ECAS control unit

A302 (352) Central computer 2

A407 (342) Instrumentation

B130 (311) Height sensor, rear axle right

H394 Indicator light, ECAS malfunction/warning

X1945 Stvd. ECAS/EFR

Y132 (167) ECAS valve block

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

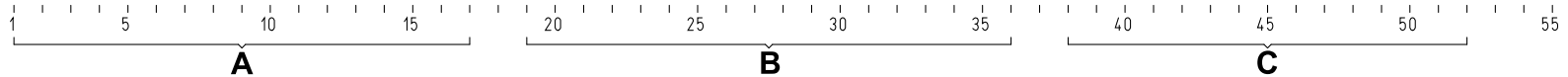
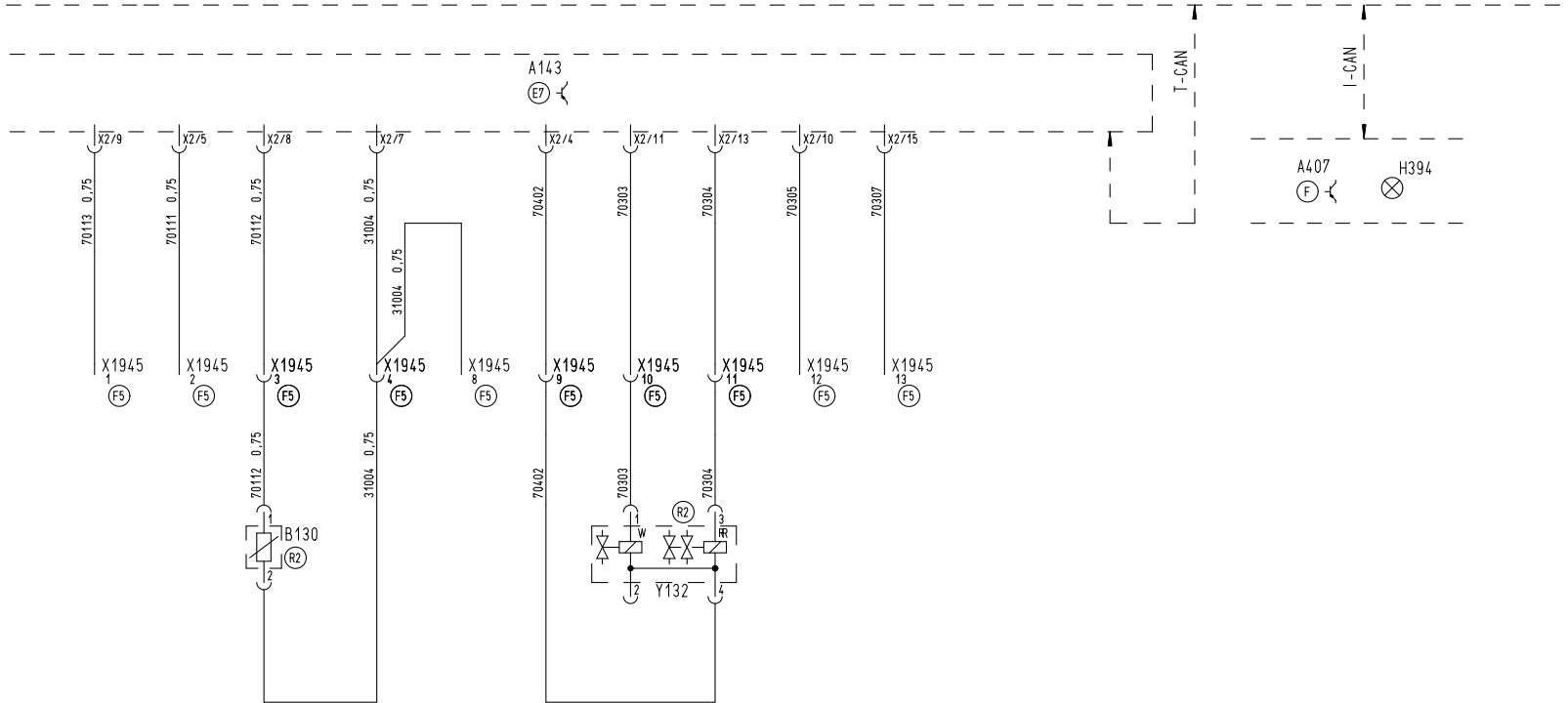
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1336 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



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

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

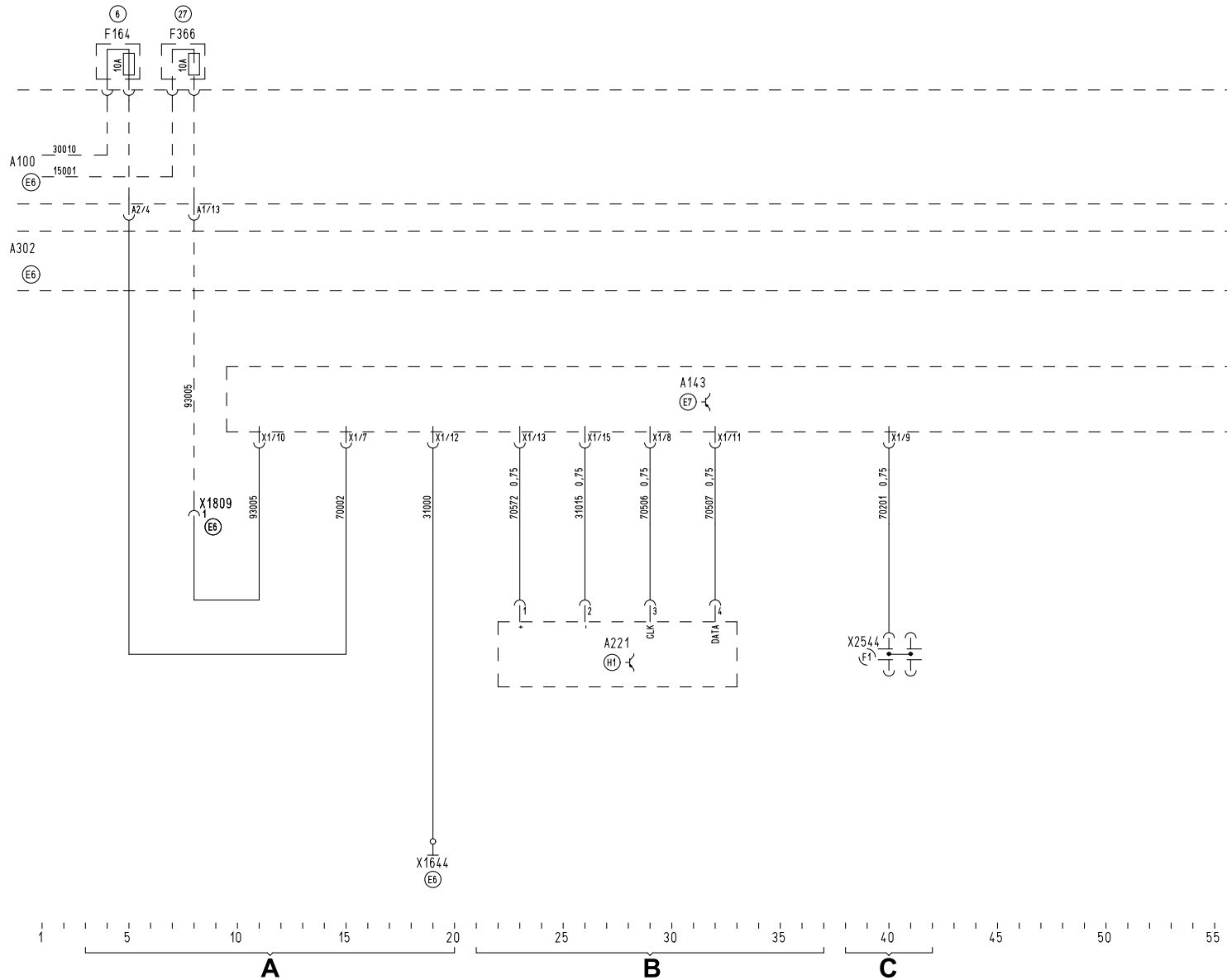
Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

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



ECAS electronically controlled air suspension 4x2 FLL

Legend

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

Change status: 04.01

A = Height sensors

B = Solenoid valves

C = Indicator light

A100 (255) Central fuse, relay and terminal block

A143 (343) ECAS control unit

A302 (352) Central computer 2

A407 (342) Instrumentation

B128 (311) Height sensor, front axle

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

H394 Indicator light, ECAS malfunction/warning

X1945 Stvd. ECAS/EFR

Y132 (124) ECAS valve block

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1338 Sheet 2 of 2

A100

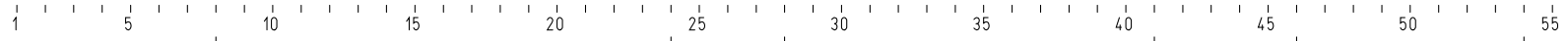
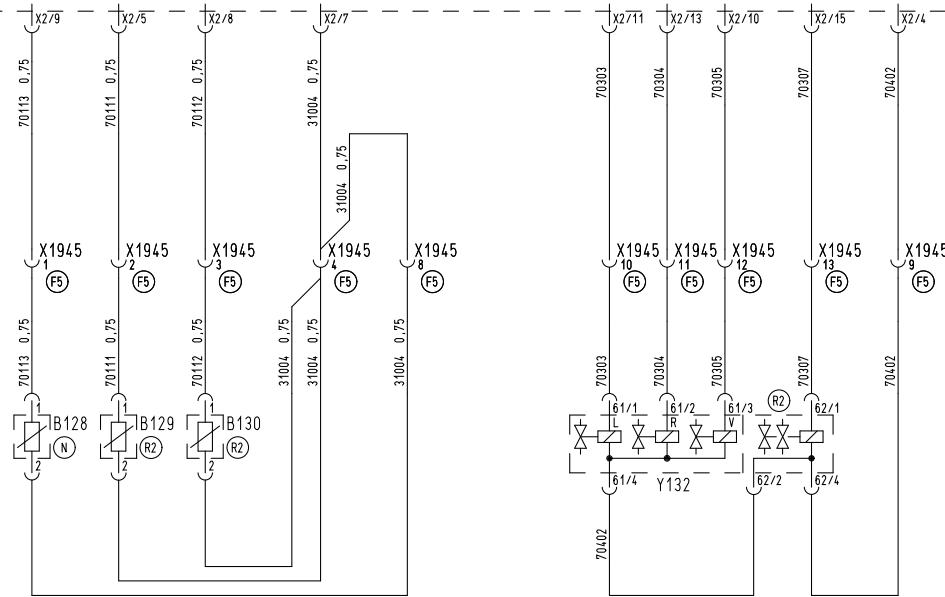

A302


A143


T-CAN

A407


H394

A

B

C

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

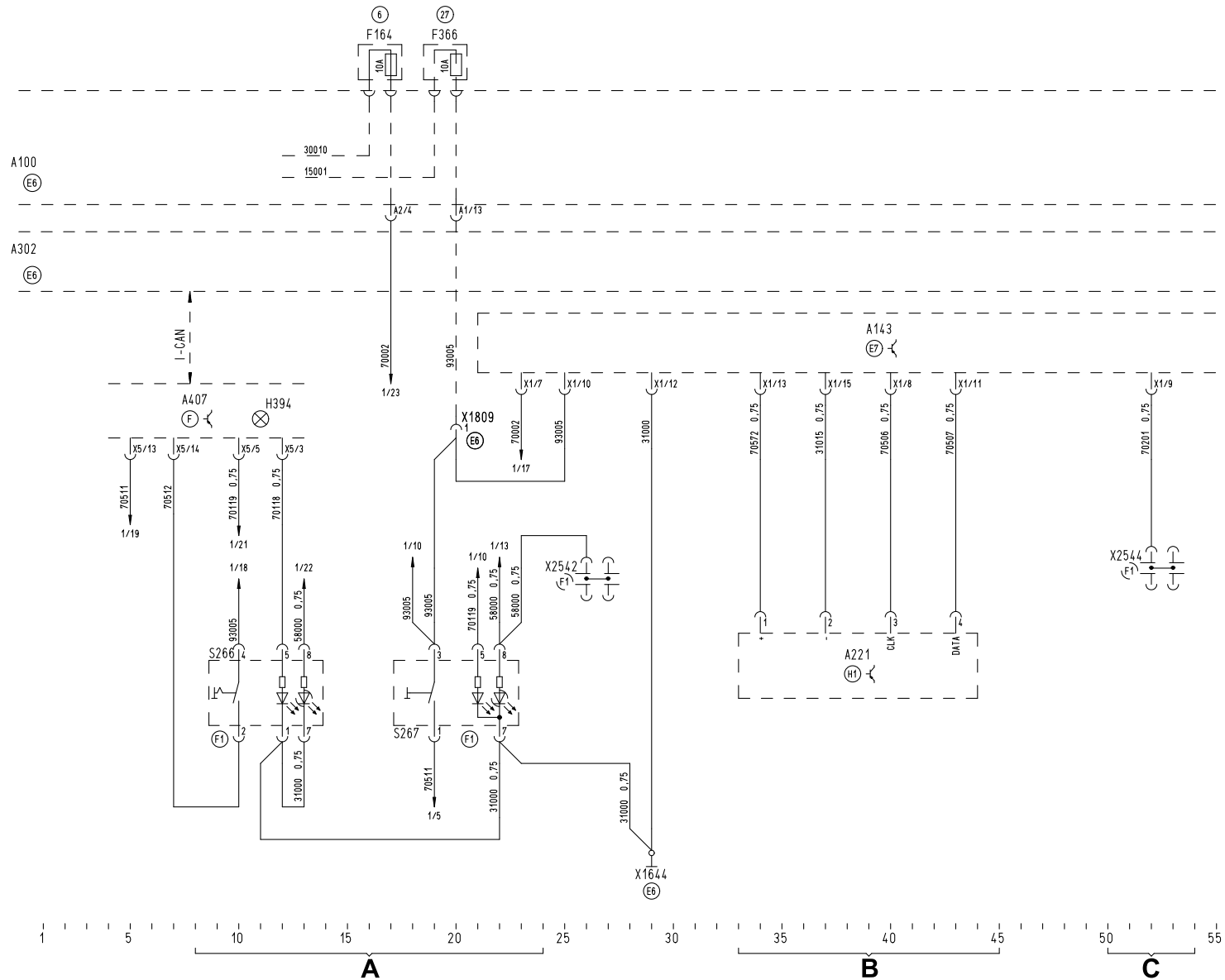
(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1339 Sheet 1 of 2



ECAS electronically controlled air suspension 6x2 FNL

Legend

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

Change status: 04.01

A = Height sensors

B = Solenoid valves

A100 (255) Central fuse, relay and terminal block

A143 (344) ECAS control unit

A302 (352) Central computer 2

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

X1945 Stvd. ECAS/EFR

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

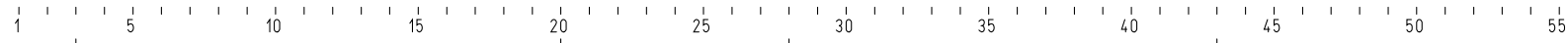
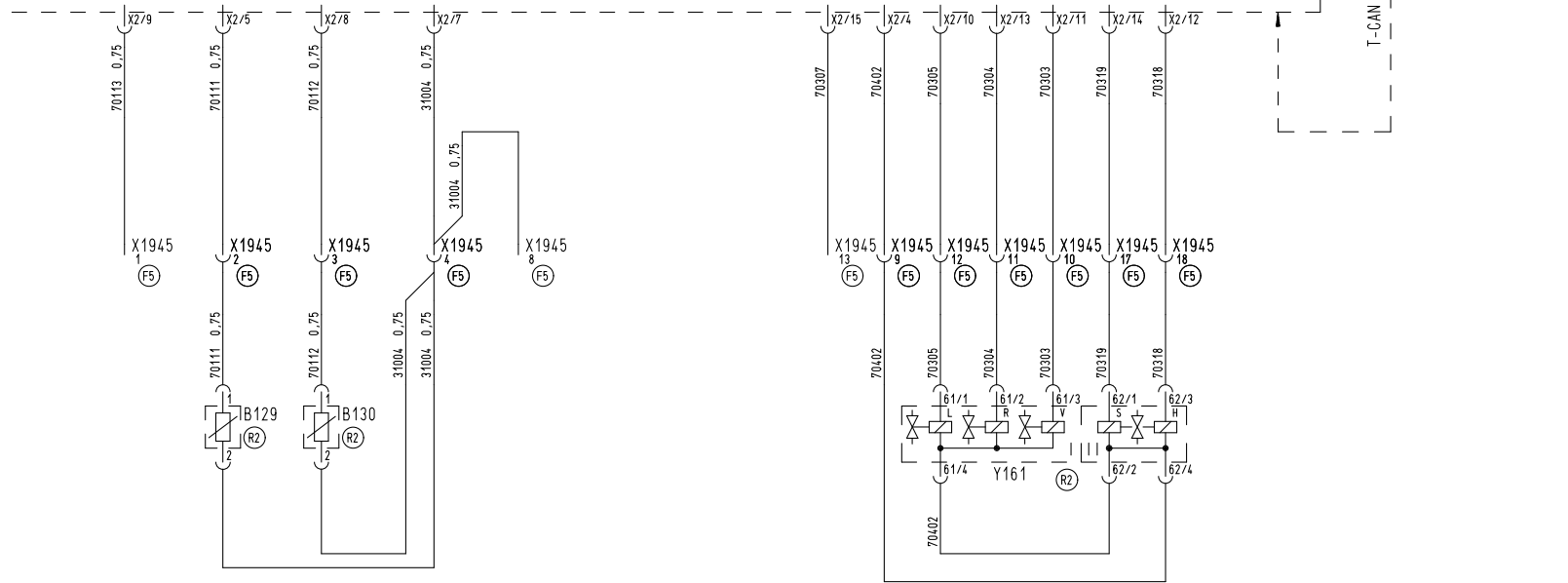
Ⓕ Door right

Wiring diagram no. 81.99192.1339 Sheet 2 of 2

A100


A302


A143

A

B

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

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

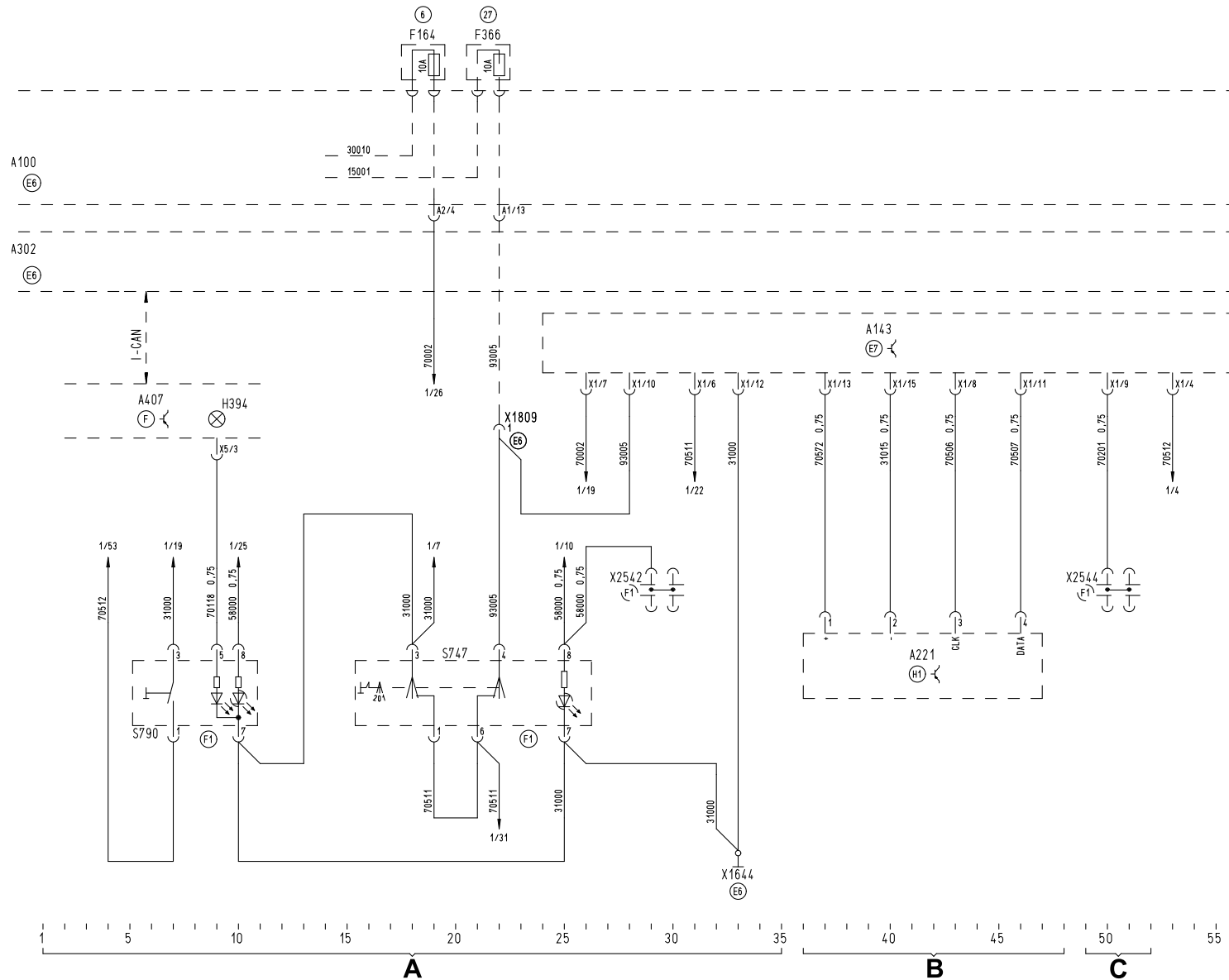
Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1348 Sheet 1 of 2



ECAS electronically controlled air suspension 6x2 FNL (Nordland)

Legend

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

Change status: 04.01

A = Height sensors

B = Solenoid valves

A100 (255) Central fuse, relay and terminal block

A143 (344) ECAS control unit

A302 (352) Central computer 2

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

X1945 Stvd. ECAS/EFR

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

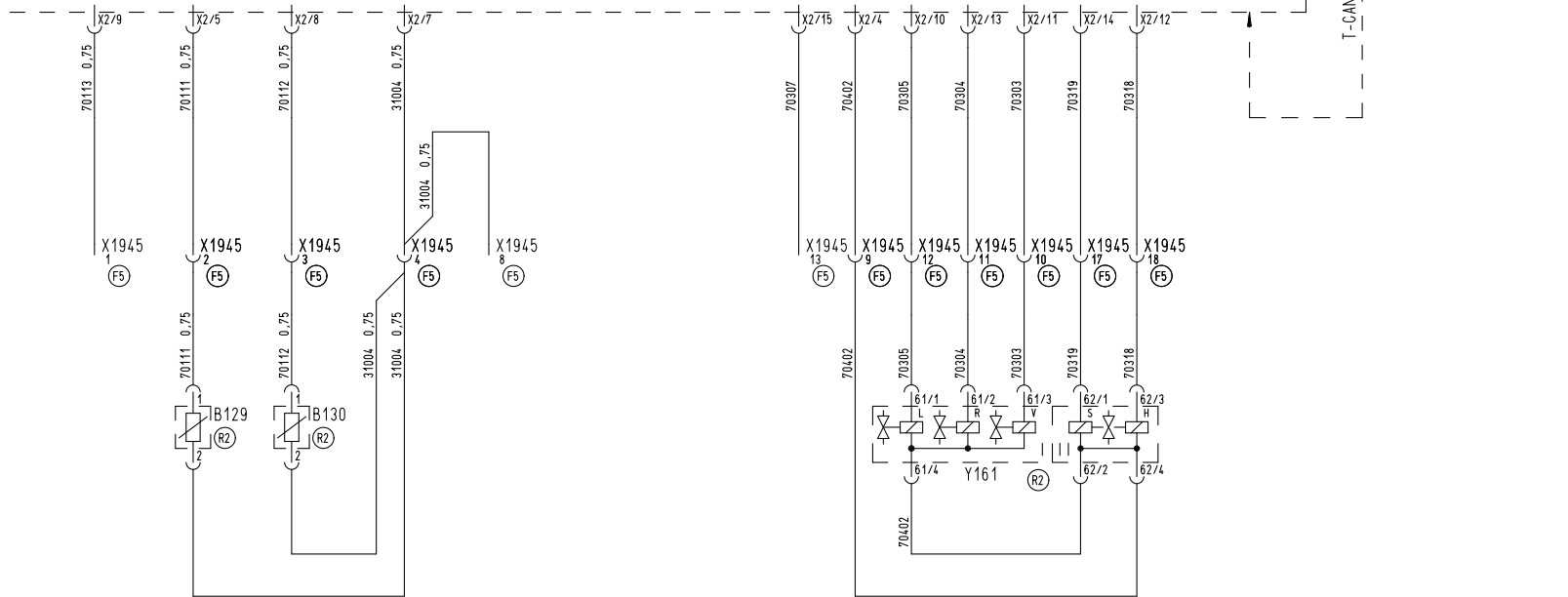
Ⓕ Door right

Wiring diagram no. 81.99192.1348 Sheet 2 of 2

A100
 (E6)

A302
 (E6)

A143
 (E7)



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

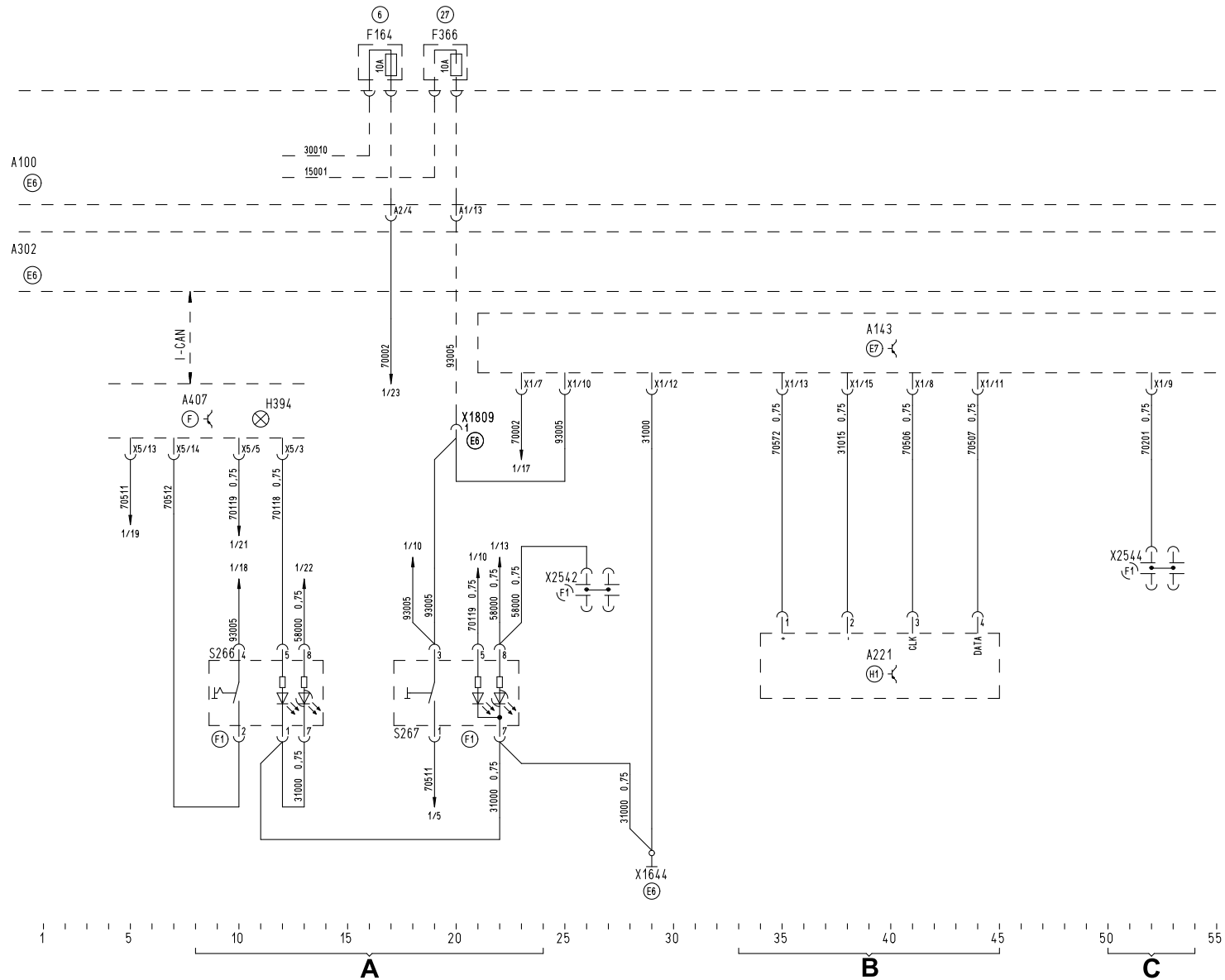
(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1340 Sheet 1 of 2



ECAS electronically controlled air suspension 6x2 FNLL

Legend

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

Change status: 04.01

A = Height sensors

B = Solenoid valves

A100 (255) Central fuse, relay and terminal block

A143 (344) ECAS control unit

A302 (352) Central computer 2

B128 (311) Height sensor, front axle

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

X1945 Stvd. ECAS/EFR

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

Y162 (128) Solenoid valve block ECAS front axle

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

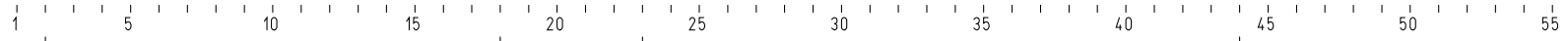
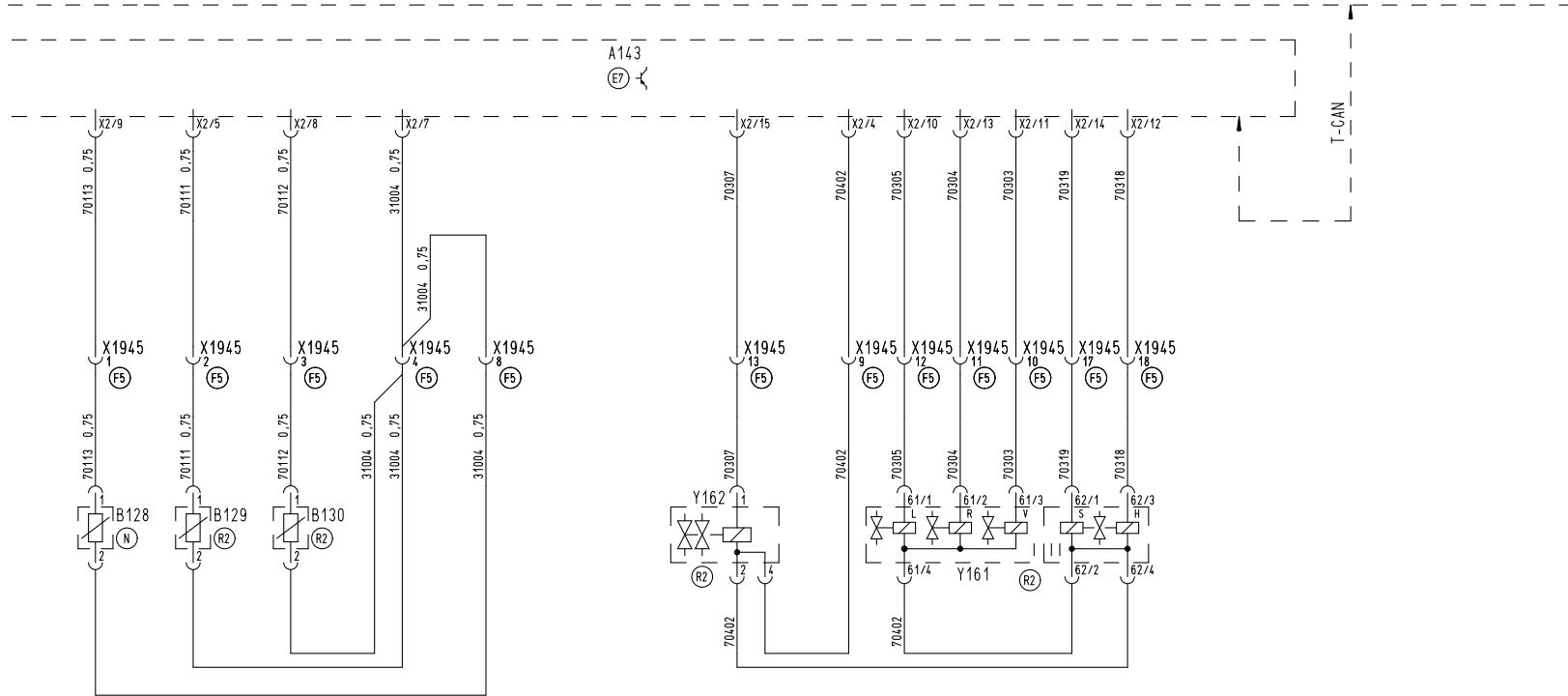
Ⓕ Door right

Wiring diagram no. 81.99192.1340 Sheet 2 of 2

A100
E6

A302
E6

A143
E7



A

B

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

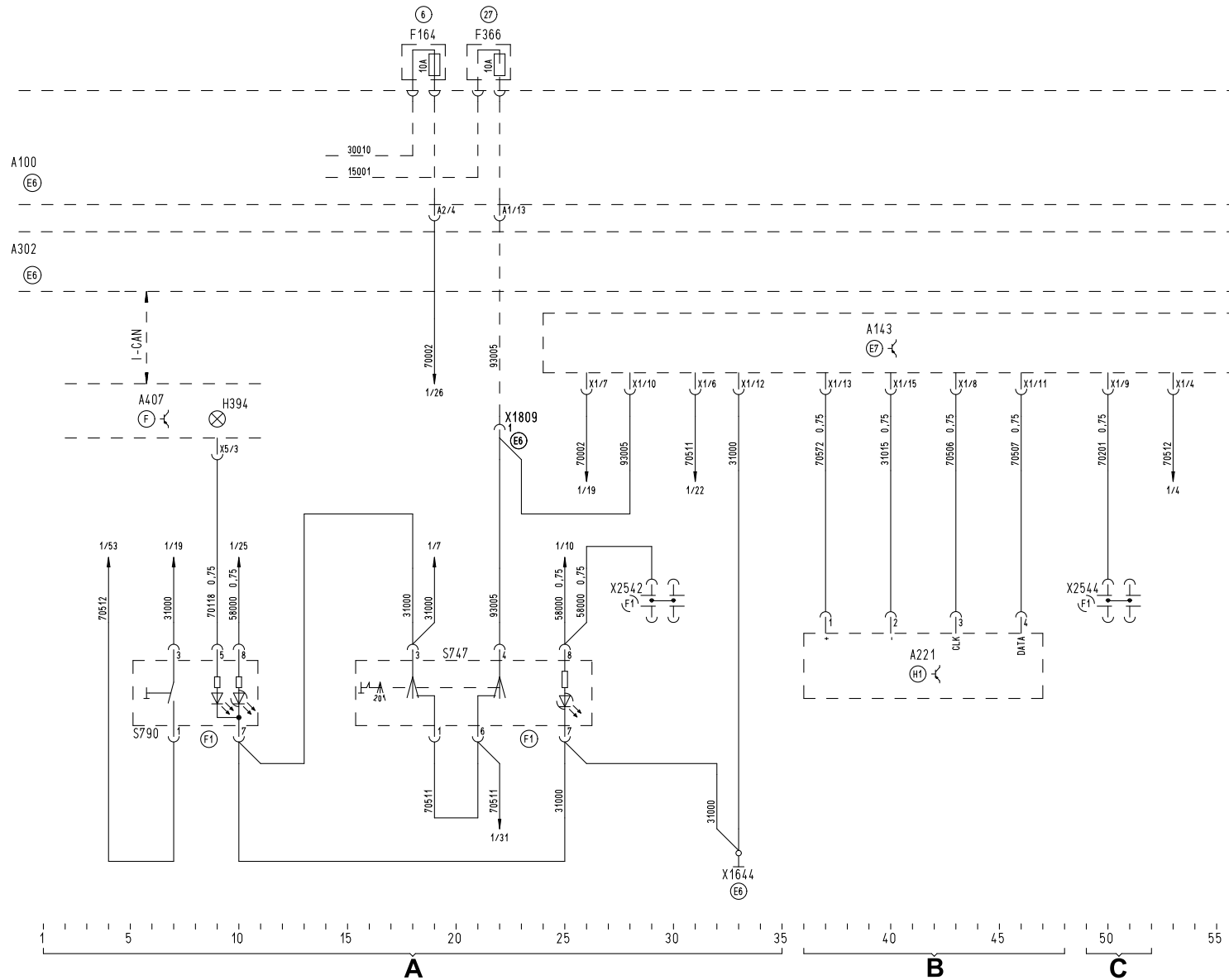
(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1349 Sheet 1 of 2



ECAS electronically controlled air suspension 6x2 FNLL (Nordland)

Legend

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

Change status: 04.01

A = Height sensors

B = Solenoid valves

A100 (255) Central fuse, relay and terminal block

A143 (344) ECAS control unit

A302 (352) Central computer 2

B128 (311) Height sensor, front axle

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

X1945 Stvd. ECAS/EFR

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

Y162 (128) Solenoid valve ECAS front axle

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

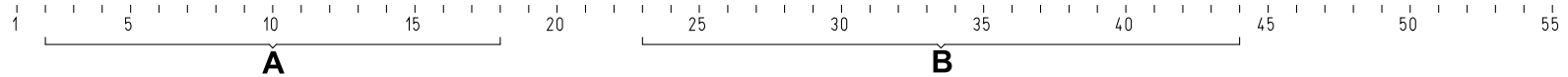
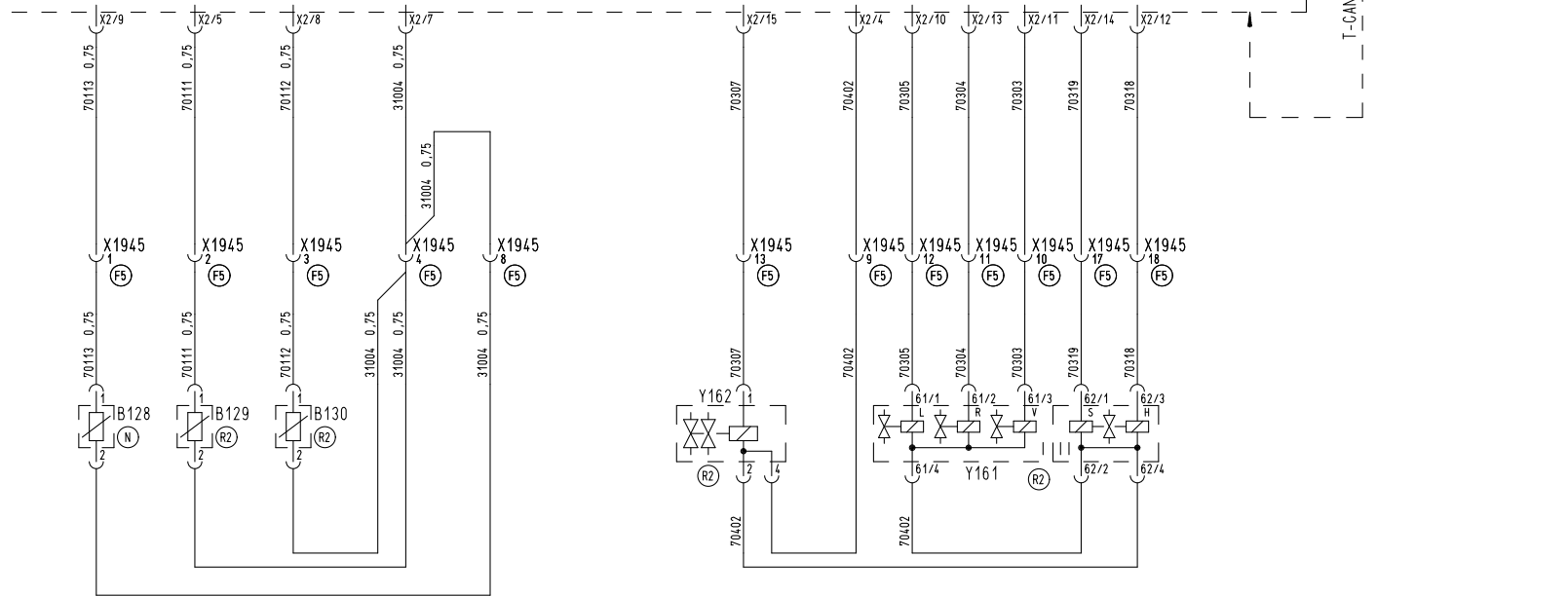
Ⓕ Door right

Wiring diagram no. 81.99192.1349 Sheet 2 of 2

A100
E6

A302
E6

A143
E7



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

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

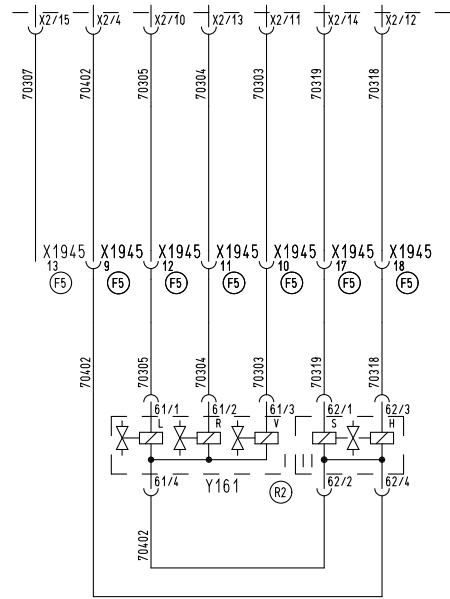
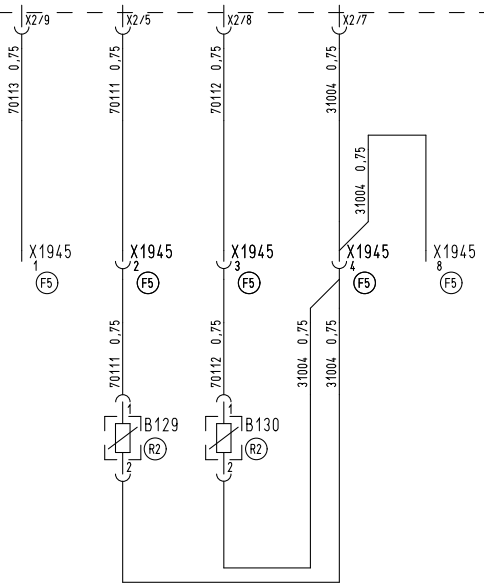
Ⓕ Door right

Wiring diagram no. 81.99192.1341 Sheet 2 of 2

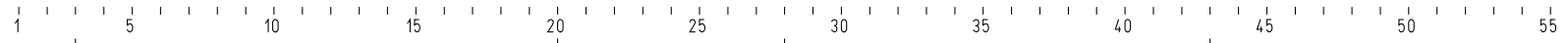
A100


A302


A143

T-CAN



A

B

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

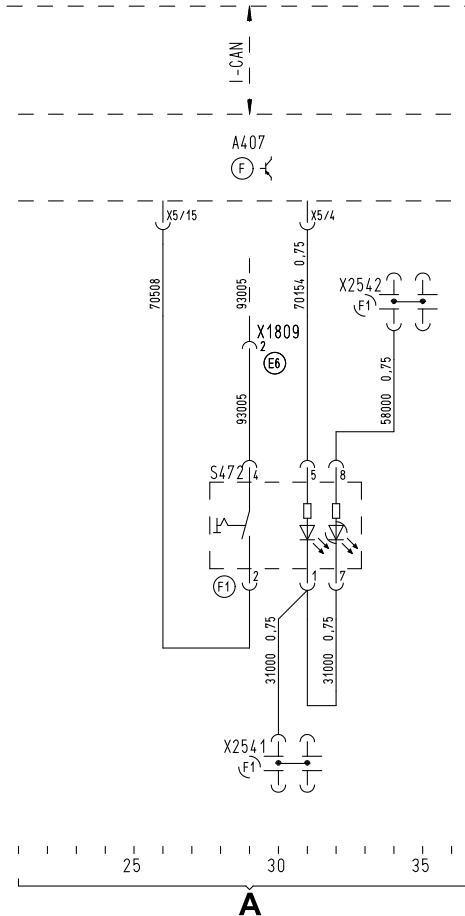
Marking of mounting positions

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

Wiring diagram no. 81.99192.1368 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



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

A

**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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

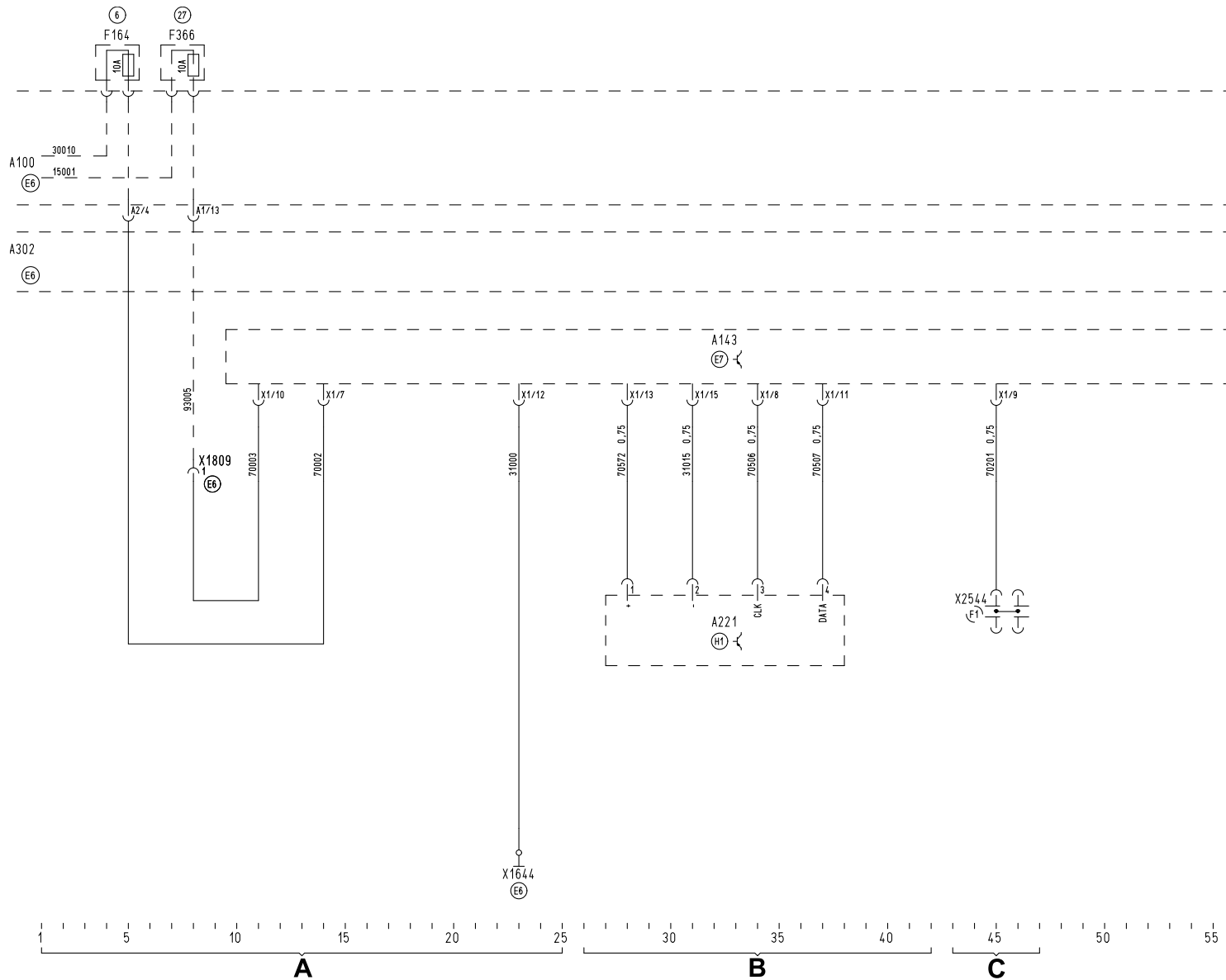
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1342 Sheet 1 of 2



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

Legend

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

Change status: 09.01

A = Height sensors

B = Solenoid valves

C = Adjustable shock absorbers

D = Control lamp

A100 (255) Central fuse, relay and terminal block

A143 (345) ECAS control unit

A302 (352) Central computer 2

A407 (342) Instrumentation

B128 (311) Height sensor, front axle

B130 (311) Height sensor, rear axle right

H394 Indicator light, ECAS malfunction/warning

X1945 Stvd. ECAS/EFR

X2004 Stvd. cab frame EFR

Y132 (167) Solenoid valve block ECAS

Y172 (203) Adjustable shock absorber on rear axle right

Y173 (203) Adjustable shock absorber on rear axle left

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

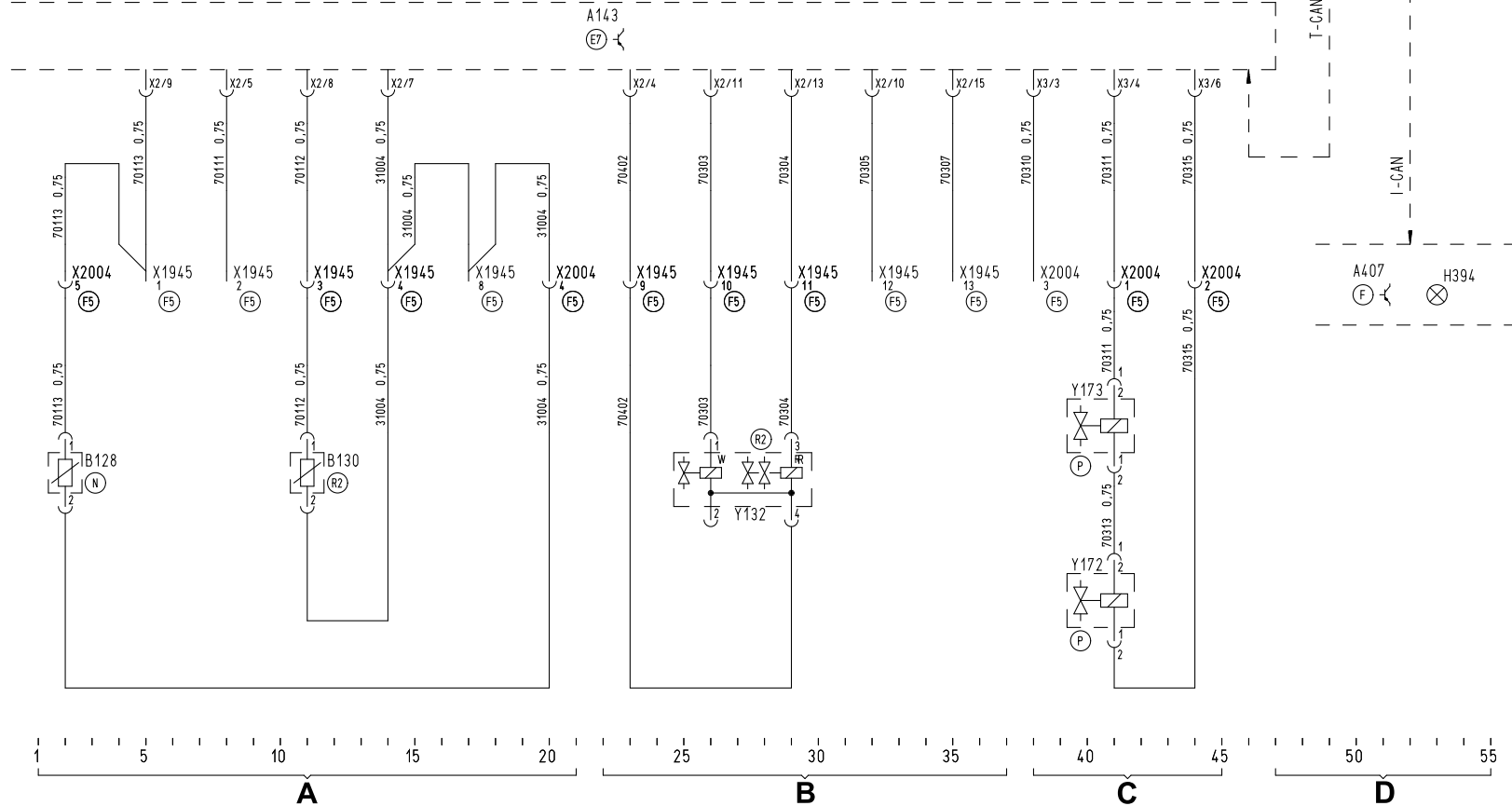
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1342 Sheet 2 of 2

A100
E6

A302
E6



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

Legend

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

Change status: 04.01

A = Supply voltage

B = Remote control

C = Diagnosis

A100 (255) Central fuse, relay and terminal block

A143 (345) ECAS control unit

A221 (349) ECAS remote control

A302 (352) Central computer 2

F164 (101) Fuse ECAS (terminal 30)

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

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

X1809 Stvd. ECAS (terminal 15)

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓔ Bumper

Ⓕ Entrance right

Ⓖ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

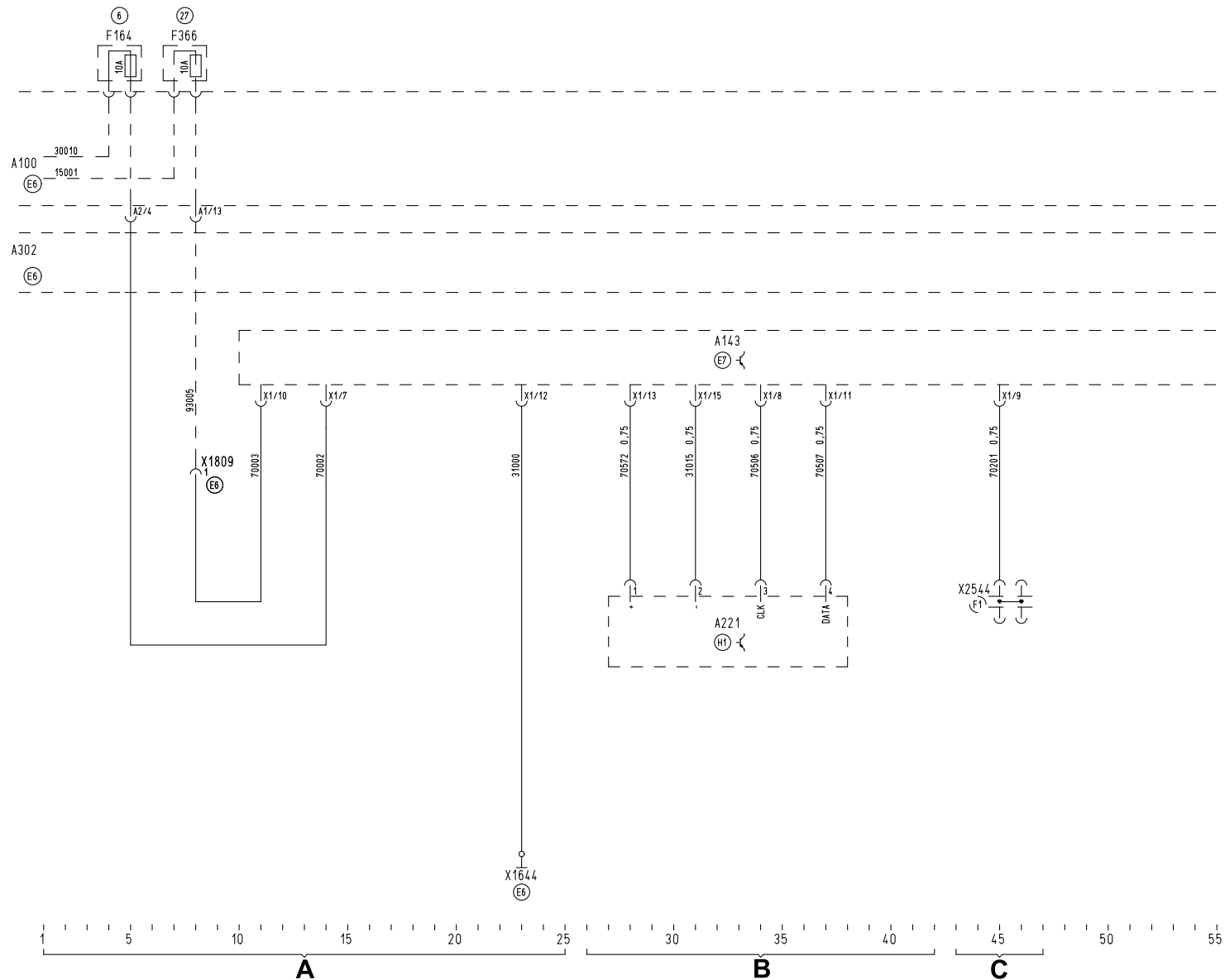
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1343 Sheet 1 of 2



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

Legend

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

Change status: 09.01

A = Height sensors

B = Solenoid valves

C = Adjustable shock absorbers

D = Control lamp

A100 (255) Central fuse, relay and terminal block

A143 (345) ECAS control unit

A302 (352) Central computer 2

A407 (342) Instrumentation

B128 (311) Height sensor, front axle

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

H394 Indicator light, ECAS malfunction/warning

X1945 Stvd. ECAS/EFR

X2004 Stvd. cab frame EFR

Y132 (168) Solenoid valve block ECAS

Y172 (203) Adjustable shock absorber on rear axle right

Y173 (203) Adjustable shock absorber on rear axle left

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

**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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

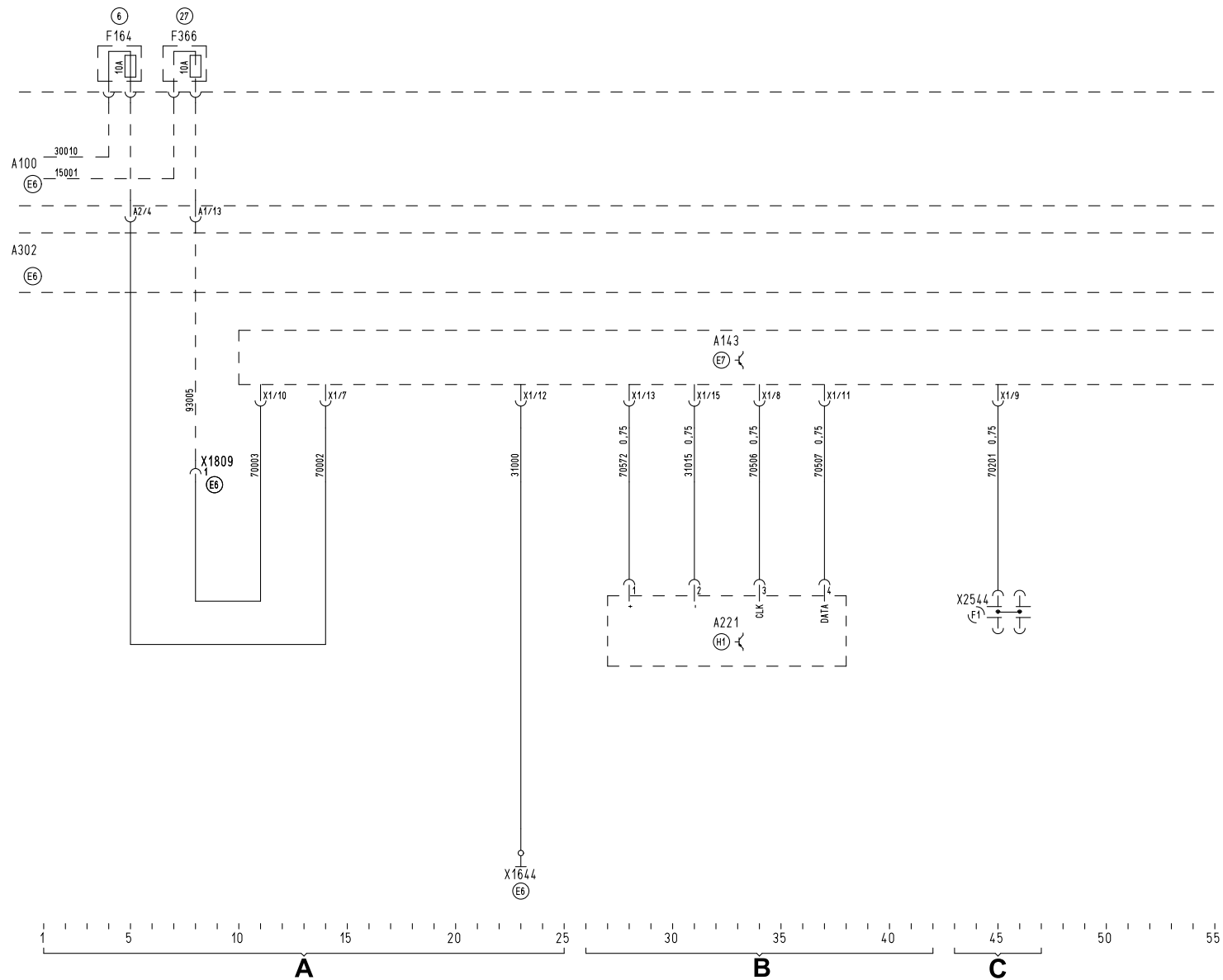
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1344 Sheet 1 of 2



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

Legend

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

Change status: 09.01

A = Height sensors

B = Solenoid valves

C = Adjustable shock absorbers

D = Control lamp

A100 (255) Central fuse, relay and terminal block

A143 (345) ECAS control unit

A302 (352) Central computer 2

A407 (342) Instrumentation

B128 (311) Height sensor, front axle

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

H394 Indicator light, ECAS malfunction/warning

X1945 Stvd. ECAS/EFR

X2004 Stvd. cab frame EFR

Y132 (124) Solenoid valve block ECAS

Y172 (203) Adjustable shock absorber on rear axle right

Y173 (203) Adjustable shock absorber on rear axle left

Y174 (202) Adjustable shock absorber on front axle right

Y175 (202) Adjustable shock absorber on front axle left

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

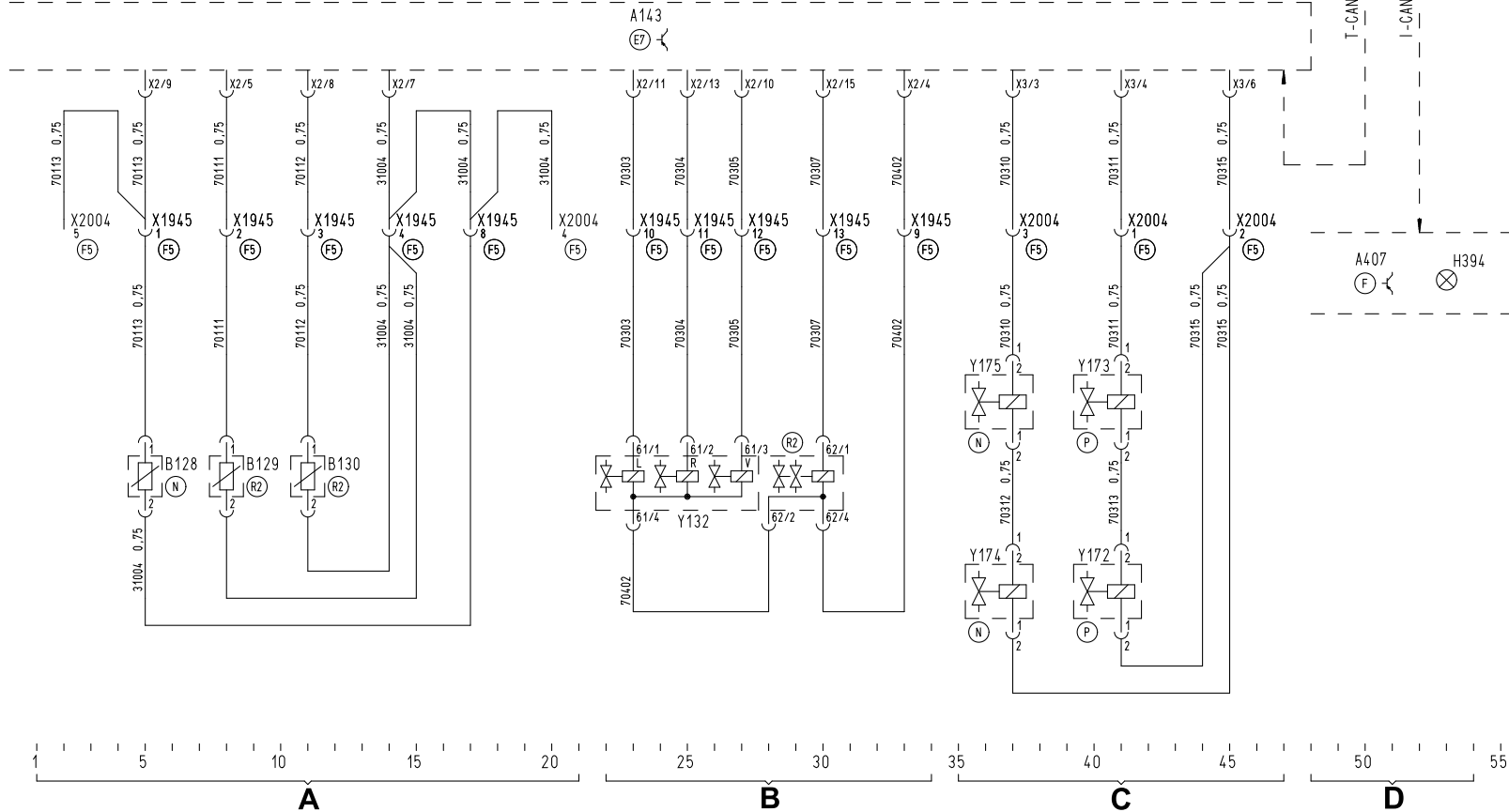
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1344 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



**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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ H1 B-pillar on driver's side

Ⓕ H2 A-pillar on driver's side

Ⓕ J1 B-pillar on passenger's side

Ⓕ J2 A-pillar on passenger's side

Ⓕ L Ceiling/roof

Ⓕ N Front axle

Ⓕ P Rear axle

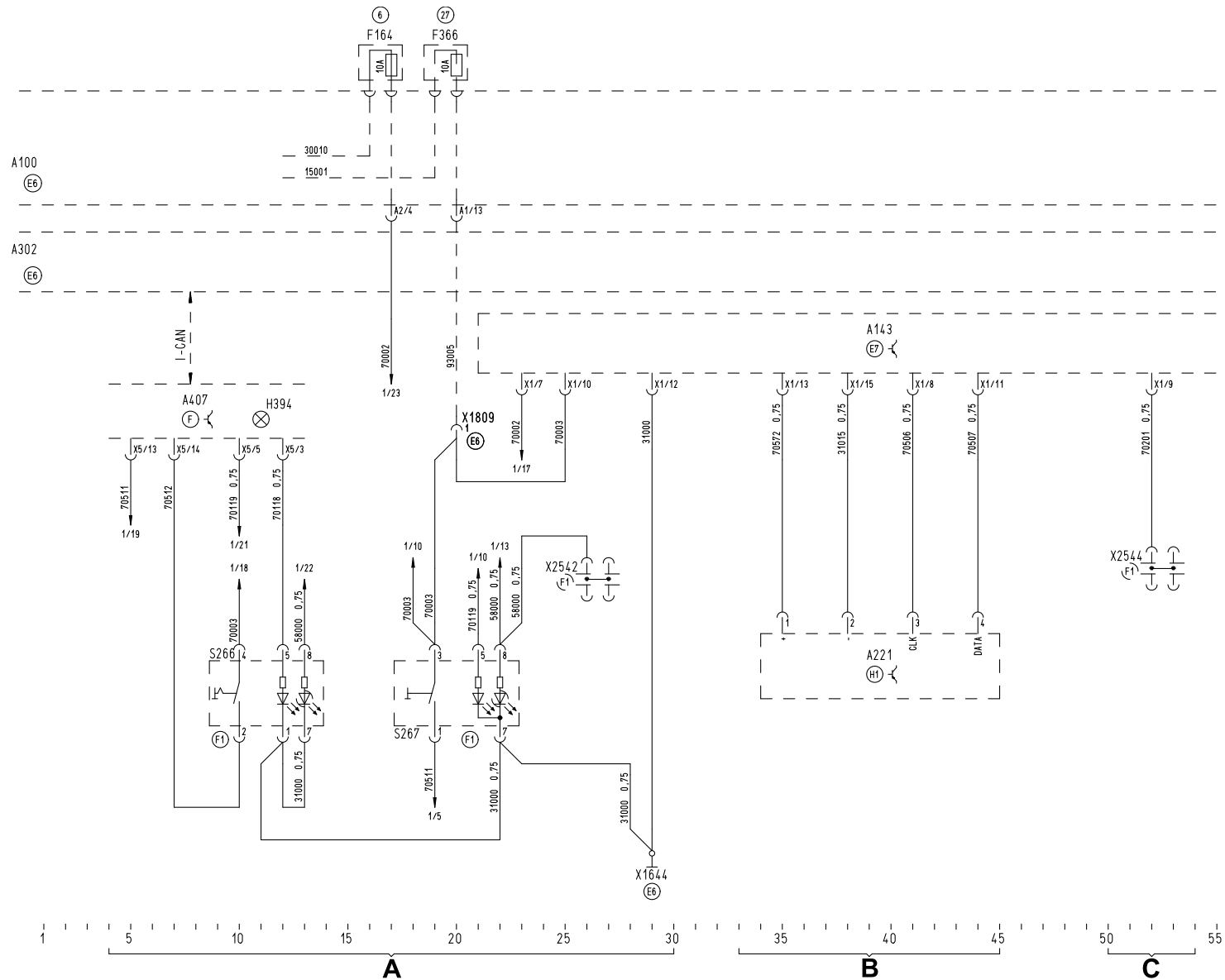
Ⓕ R1 Front part of frame

Ⓕ R2 Rear part of frame

Ⓕ S1 Door left

Ⓕ S2 Door right

Wiring diagram no. 81.99192.1345 Sheet 1 of 2



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

Legend

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

Change status: 09.01

A = Height sensors

B = Solenoid valves

C = Adjustable shock absorbers

A100 (255) Central fuse, relay and terminal block

A143 (345) ECAS control unit

A302 (352) Central computer 2

B128 (311) Height sensor, front axle

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

X1945 Stvd. ECAS/EFR

X2004 Stvd. cab frame EFR

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

Y172 (203) Adjustable shock absorber on rear axle right

Y173 (203) Adjustable shock absorber on rear axle left

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

**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)

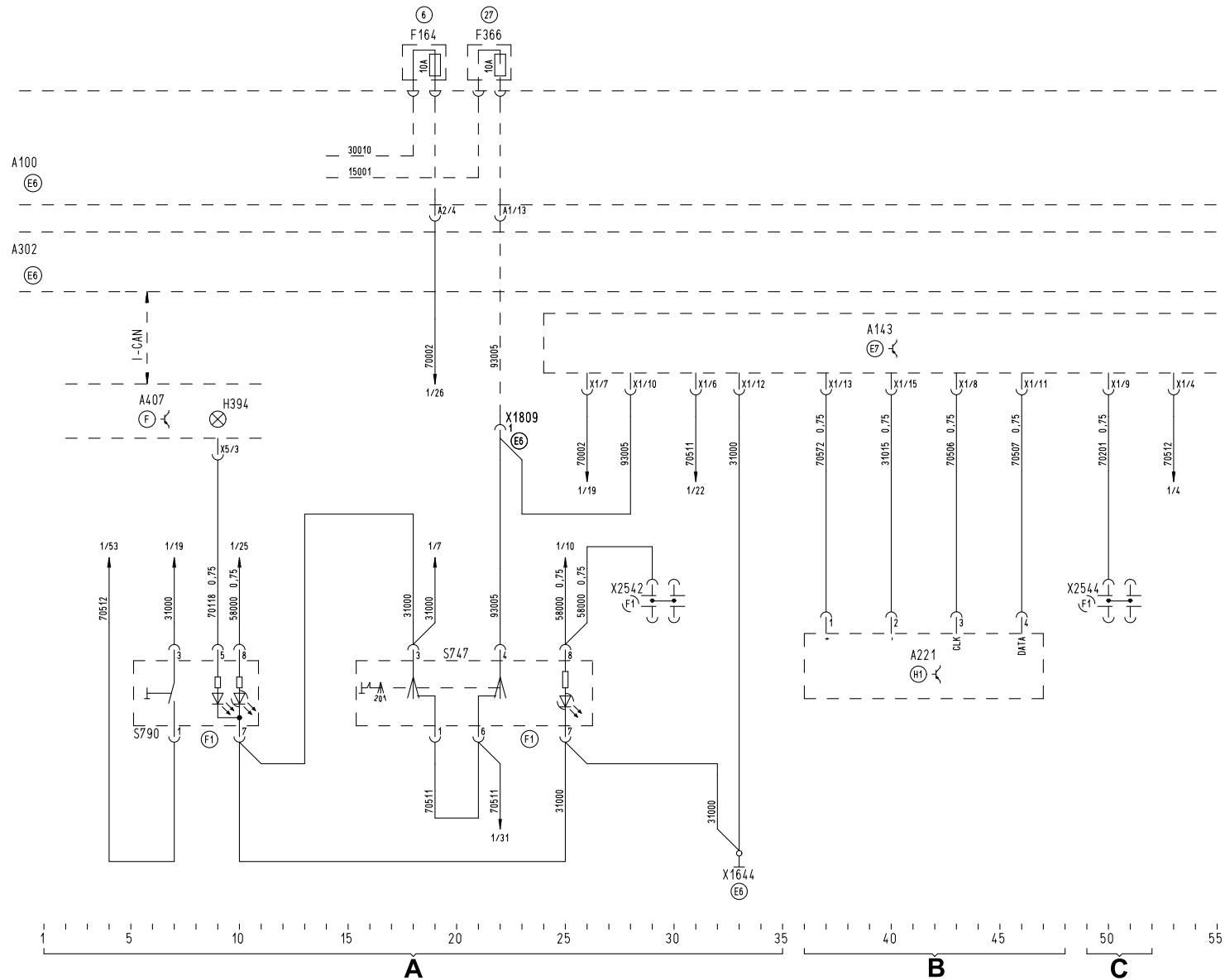
X2542 (246) Potential distributor, 21-pin line 58000

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

Marking of mounting positions

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

Wiring diagram no. 81.99192.1350 Sheet 1 of 2



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

Legend

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

Change status: 09.01

A = Height sensors

B = Solenoid valves

C = Adjustable shock absorbers

A100 (255) Central fuse, relay and terminal block

A143 (345) ECAS control unit

A302 (352) Central computer 2

B128 (311) Height sensor, front axle

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

X1945 Stvd. ECAS/EFR

X2004 Stvd. cab frame EFR

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

Y172 (203) Adjustable shock absorber on rear axle right

Y173 (203) Adjustable shock absorber on rear axle left

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

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

Legend

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

Change status: 04.01

A = Switch

B = Remote control

C = Diagnosis

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

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

H394 Indicator light, ECAS malfunction/warning

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

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

Marking of mounting positions

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

**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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

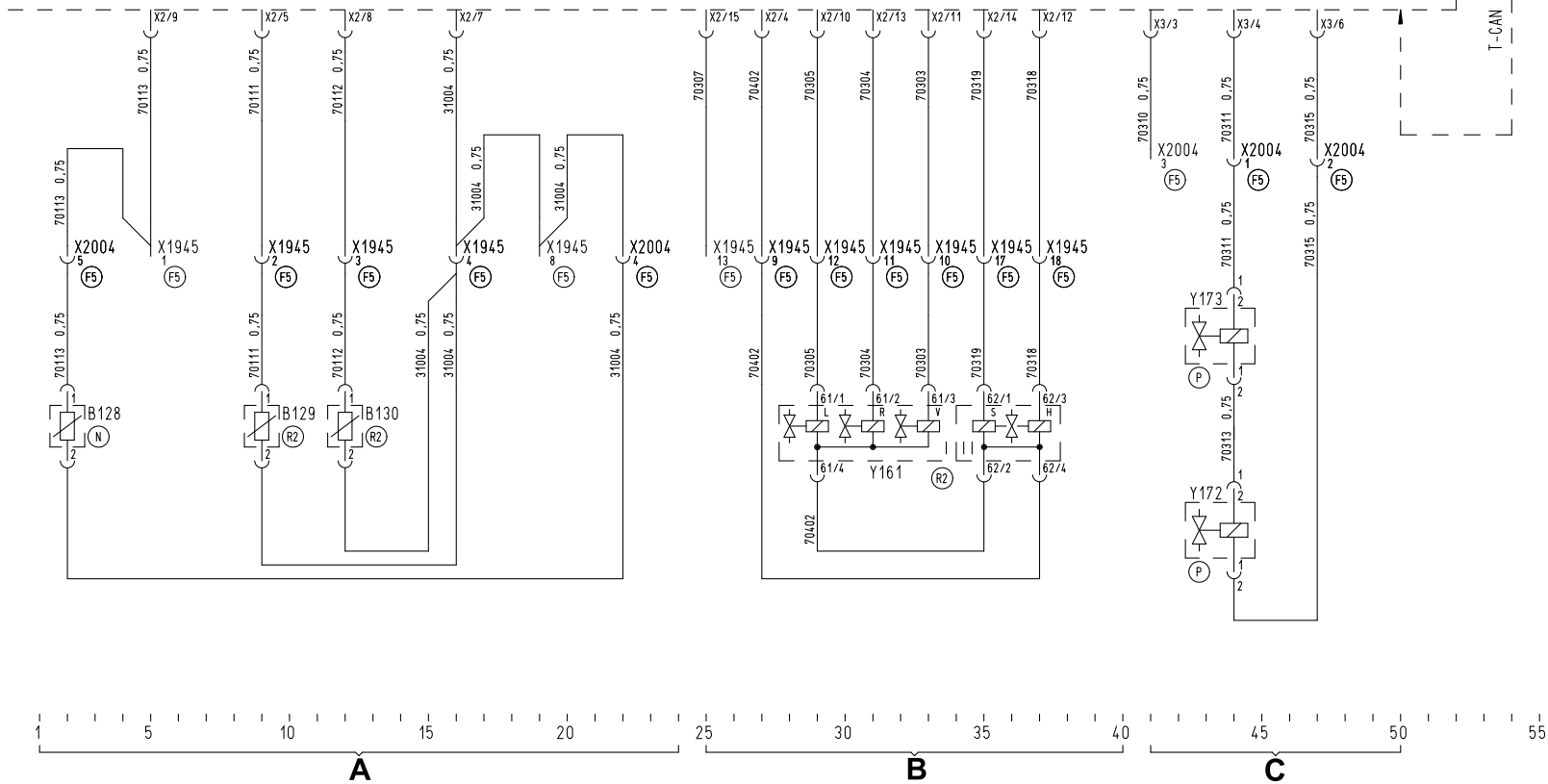
Ⓕ Door right

Wiring diagram no. 81.99192.1346 Sheet 2 of 2

A100
E6

A302
E6

A143
E7



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

Legend

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

Change status: 04.01

A = Switch

B = Remote control

C = Diagnosis

A100 (255) Central fuse, relay and terminal block
 A143 (345) ECAS control unit
 A221 (350) ECAS remote control
 A302 (352) Central computer 2
 A407 (342) Instrumentation

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

H394 Indicator light, ECAS malfunction/warning

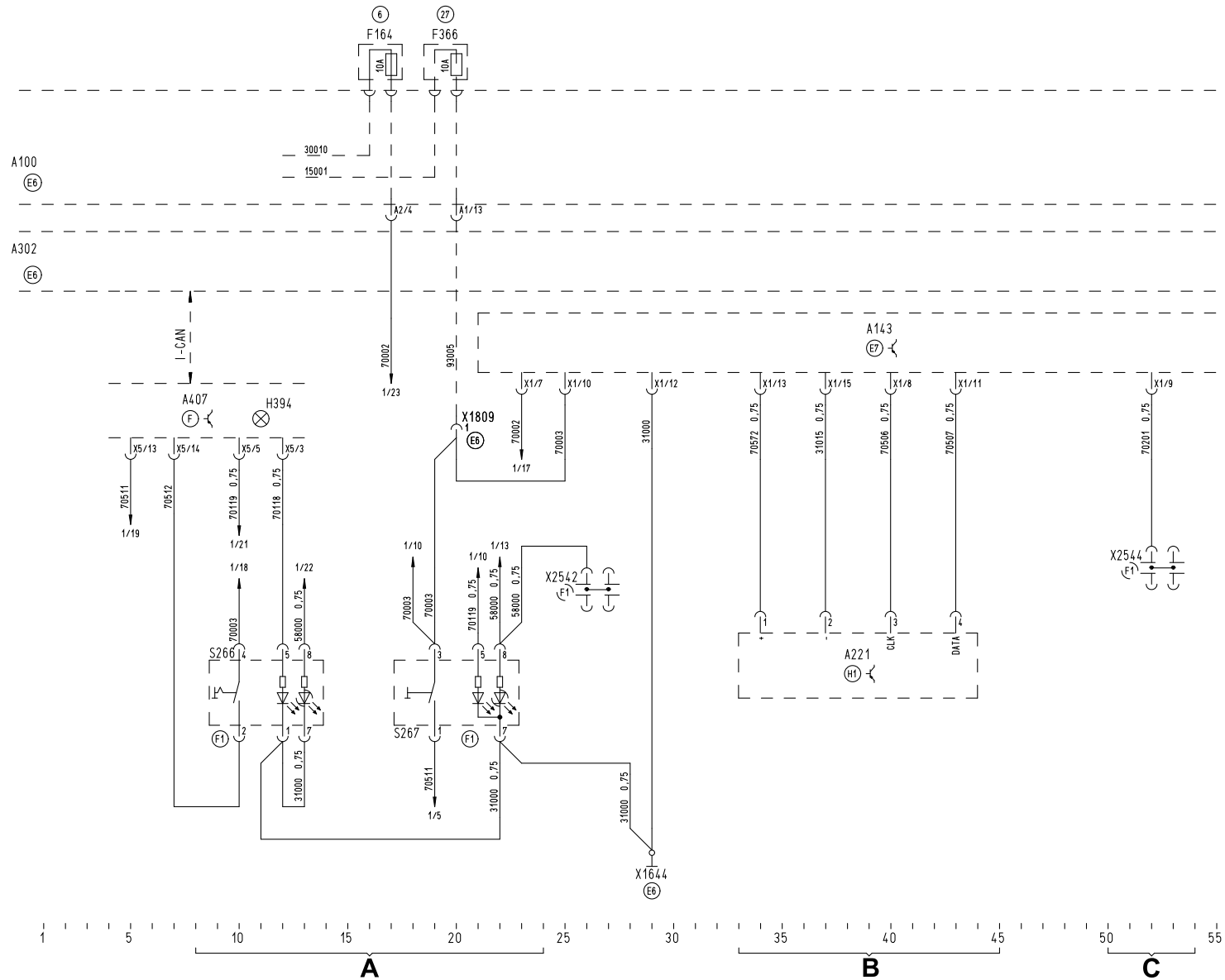
S266 (514) Switch ECAS NLA/VLA raise/release
 S267 (515) Control switch ECAS traction help

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

Marking of mounting positions

- | | |
|-----------------------------|---------------------------------|
| Ⓐ Tail | Ⓕ Driving seat |
| Ⓑ1 Engine | Ⓖ7 Passenger seat |
| Ⓑ2 Gearbox | Ⓖ8 Control panel |
| Ⓒ Front | Ⓖ9 Battery box |
| Ⓒ1 Bumper | Ⓕ1 B-pillar on driver's side |
| Ⓒ2 Entrance right | Ⓕ2 A-pillar on driver's side |
| Ⓒ3 Entrance left | Ⓕ3 B-pillar on passenger's side |
| Ⓔ6 Central electrics area | Ⓕ4 A-pillar on passenger's side |
| Ⓔ7 Control unit racks | Ⓖ Ceiling/roof |
| Ⓔ8 Rear wall of cab | Ⓖ Front axle |
| Ⓕ Instrument panel | Ⓖ Rear axle |
| Ⓕ1 Central part | Ⓕ1 Front part of frame |
| Ⓕ2 Steering wheel/column | Ⓕ2 Rear part of frame |
| Ⓕ3 Foot pedals | Ⓕ1 Door left |
| Ⓕ4 Front wall, inside left | Ⓕ2 Door right |
| Ⓕ5 Front wall, inside right | |

Wiring diagram no. 81.99192.1347 Sheet 1 of 2



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

Legend

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

Change status: 09.01

A = Height sensors

B = Solenoid valves

C = Adjustable shock absorbers

A100 (255) Central fuse, relay and terminal block

A143 (345) ECAS control unit

A302 (352) Central computer 2

B128 (311) Height sensor, front axle

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

X1945 Stvd. ECAS/EFR

X2004 Stvd. cab frame EFR

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

Y162 (128) Solenoid valve block ECAS front axle

Y172 (203) Adjustable shock absorber on rear axle right

Y173 (203) Adjustable shock absorber on rear axle left

Y174 (202) Adjustable shock absorber on front axle right

Y175 (202) Adjustable shock absorber on front axle left

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

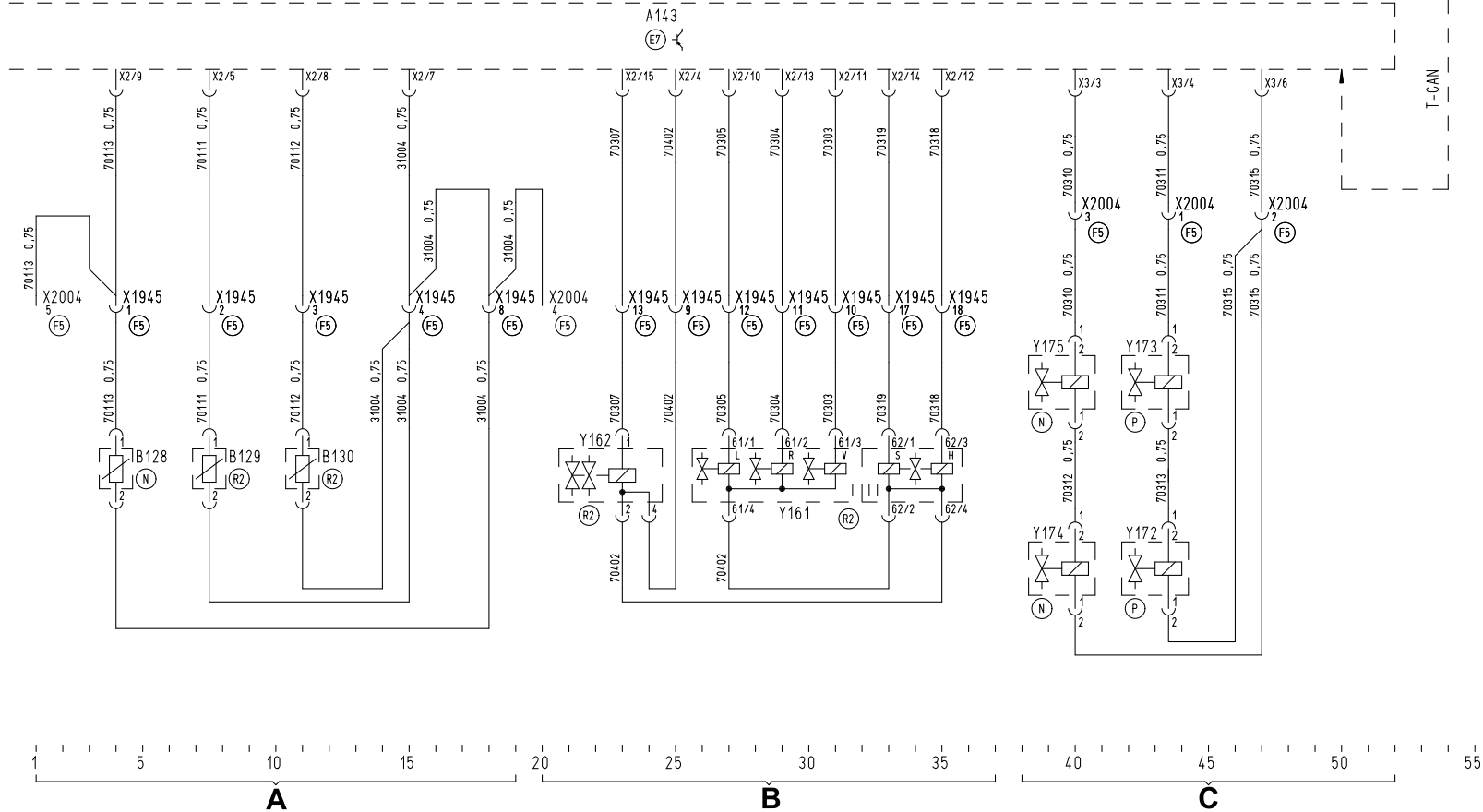
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1347 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



**ECAS electronically controlled air suspension/
EFR electronic shock absorber control 6x2 FNLL (Nordland)**

Legend

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

Change status: 04.01

A = Supply voltage, switch

B = Remote control

C = Diagnosis

A100 (255) Central fuse, relay and terminal block
A143 (345) ECAS control unit
A221 (350) ECAS remote control
A302 (352) Central computer 2
A407 (342) Instrumentation

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

H394 Indicator light, ECAS malfunction/warning

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

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

X1809 Stvd. ECAS (terminal 15)

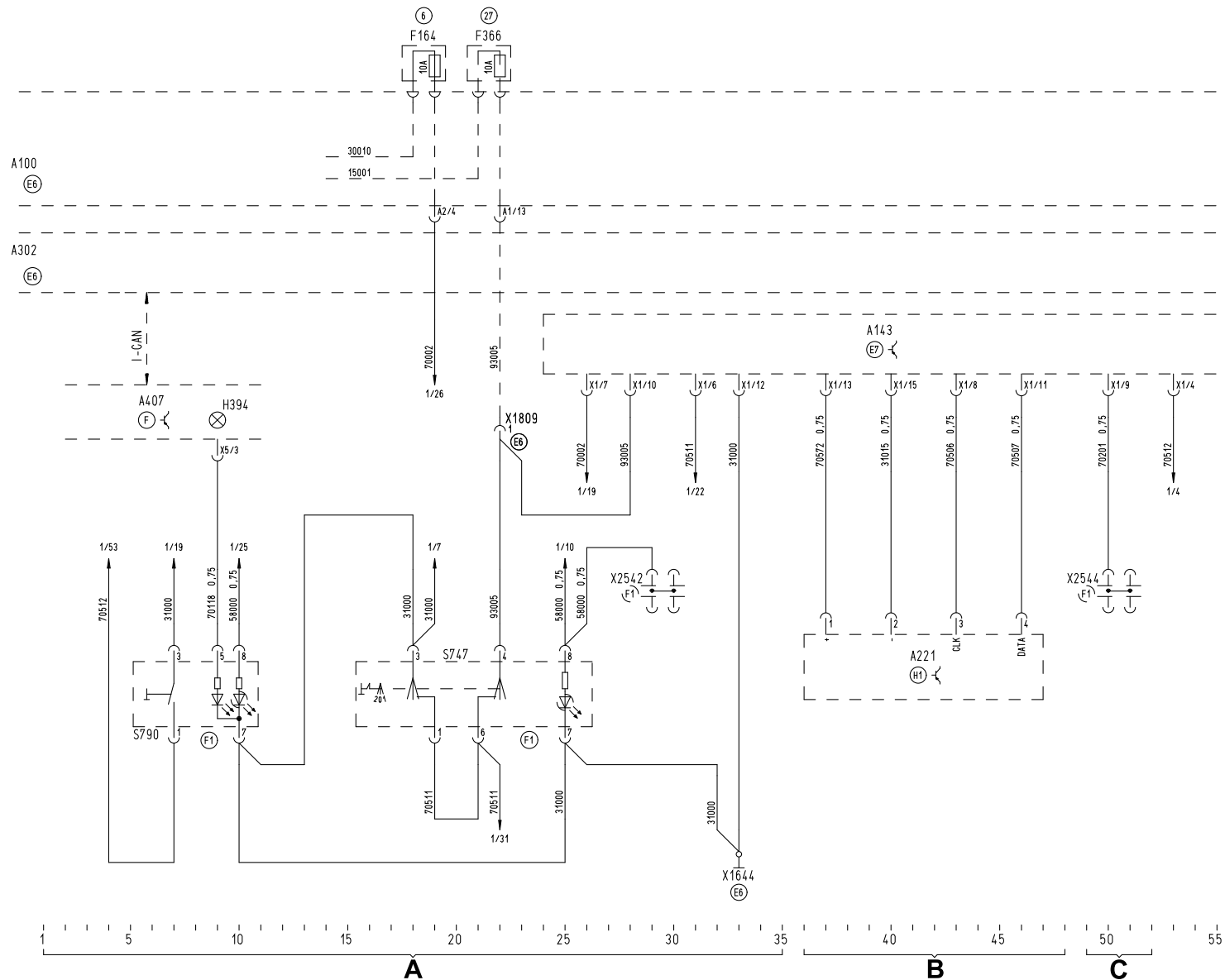
X2542 (246) Potential distributor, 21-pin line 58000

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

Marking of mounting positions

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

Wiring diagram no. 81.99192.1351 Sheet 1 of 2



**ECAS electronically controlled air suspension/
EFR electronic shock absorber control 6x2 FNLL (Nordland)**

Legend

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

Change status: 09.01

A = Height sensors

B = Solenoid valves

C = Adjustable shock absorbers

A100 (255) Central fuse, relay and terminal block

A143 (345) ECAS control unit

A302 (352) Central computer 2

B128 (311) Height sensor, front axle

B129 (311) Height sensor, rear axle left

B130 (311) Height sensor, rear axle right

X1945 Stvd. ECAS/EFR

X2004 Stvd. cab frame EFR

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

Y162 (128) Solenoid valve block ECAS front axle

Y172 (203) Adjustable shock absorber on rear axle right

Y173 (203) Adjustable shock absorber on rear axle left

Y174 (202) Adjustable shock absorber on front axle right

Y175 (202) Adjustable shock absorber on front axle left

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

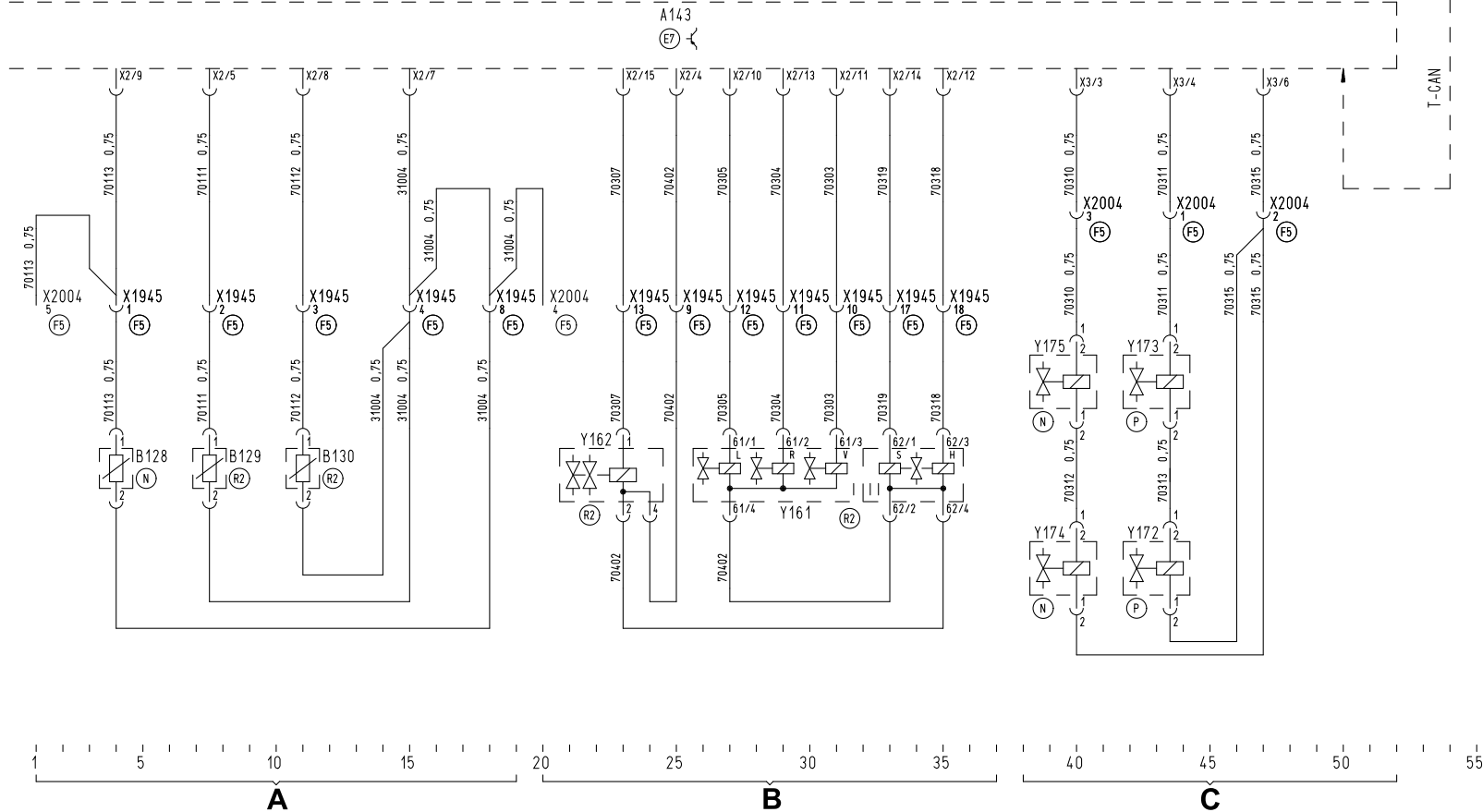
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1351 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



**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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

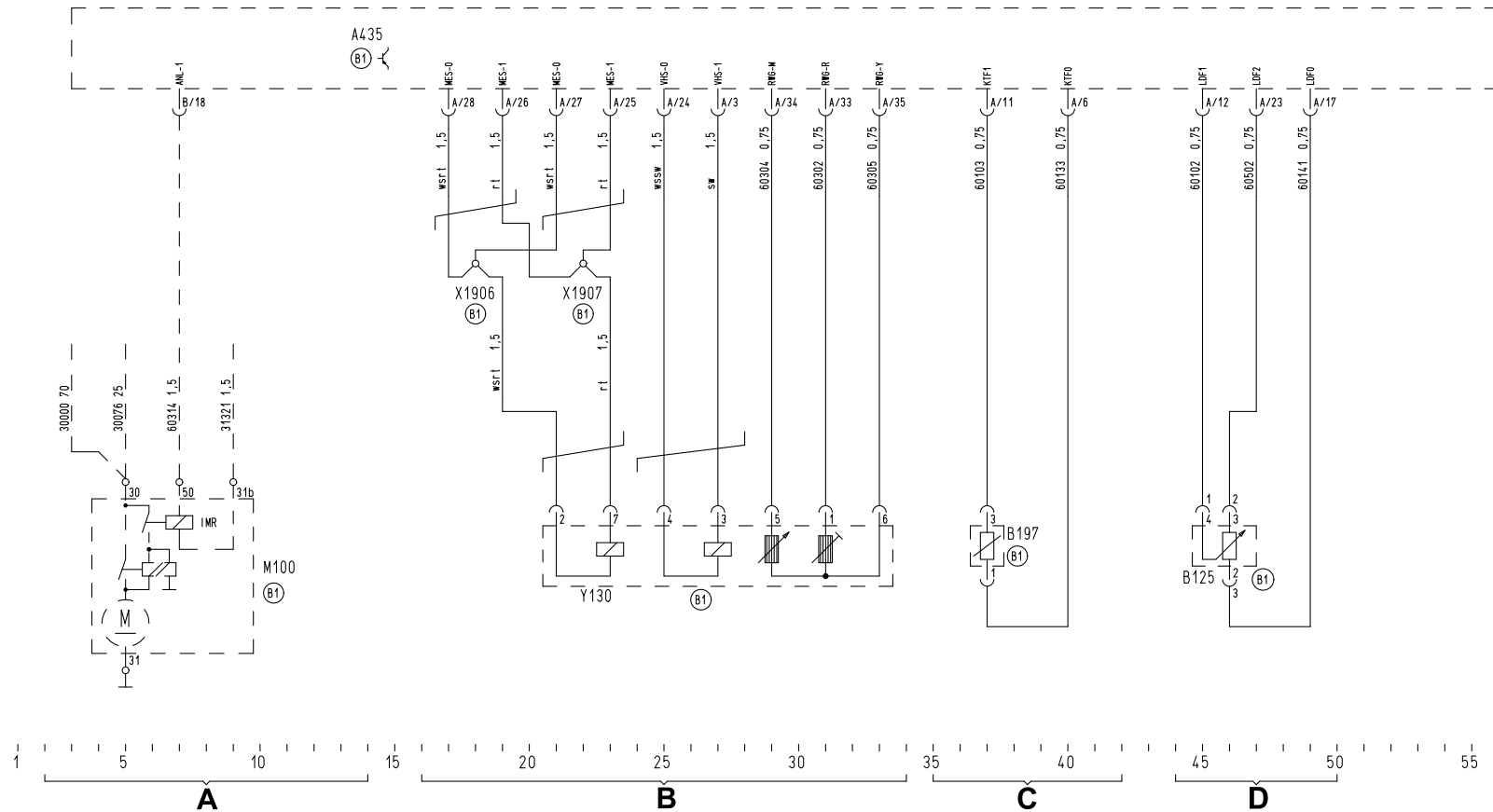
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2985 Sheet 1 of 3

A100
 (E6)

A302
 (E6)



**EDC electronically controlled diesel injection
EDC MS6.1 (EURO 2)**

Legend

Wiring diagram no. **81.99192.2985** Sheet 2 of 3
Change status: 03.01

A = Temperature sensor, coolant

B = Engine speed sensor

C = Auxiliary engine speed sensor

D = Needle movement sensor

E = Oil pressure sensor

F = Fuel pressure sensor

G = Earthing point, engine

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A435 (338) EDC control unit

B104 (340) Oil pressure sensor

B124 (265) Temperature sensor, coolant

B198 (315) Needle movement sensor

B199 (316) Engine speed sensor

B200 (317) Auxiliary engine speed sensor

B377 (340) Fuel pressure sensor

X1904 Threaded bolt M6 (MP box)

X1982 Threaded bolt M5 (MP box)

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

**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

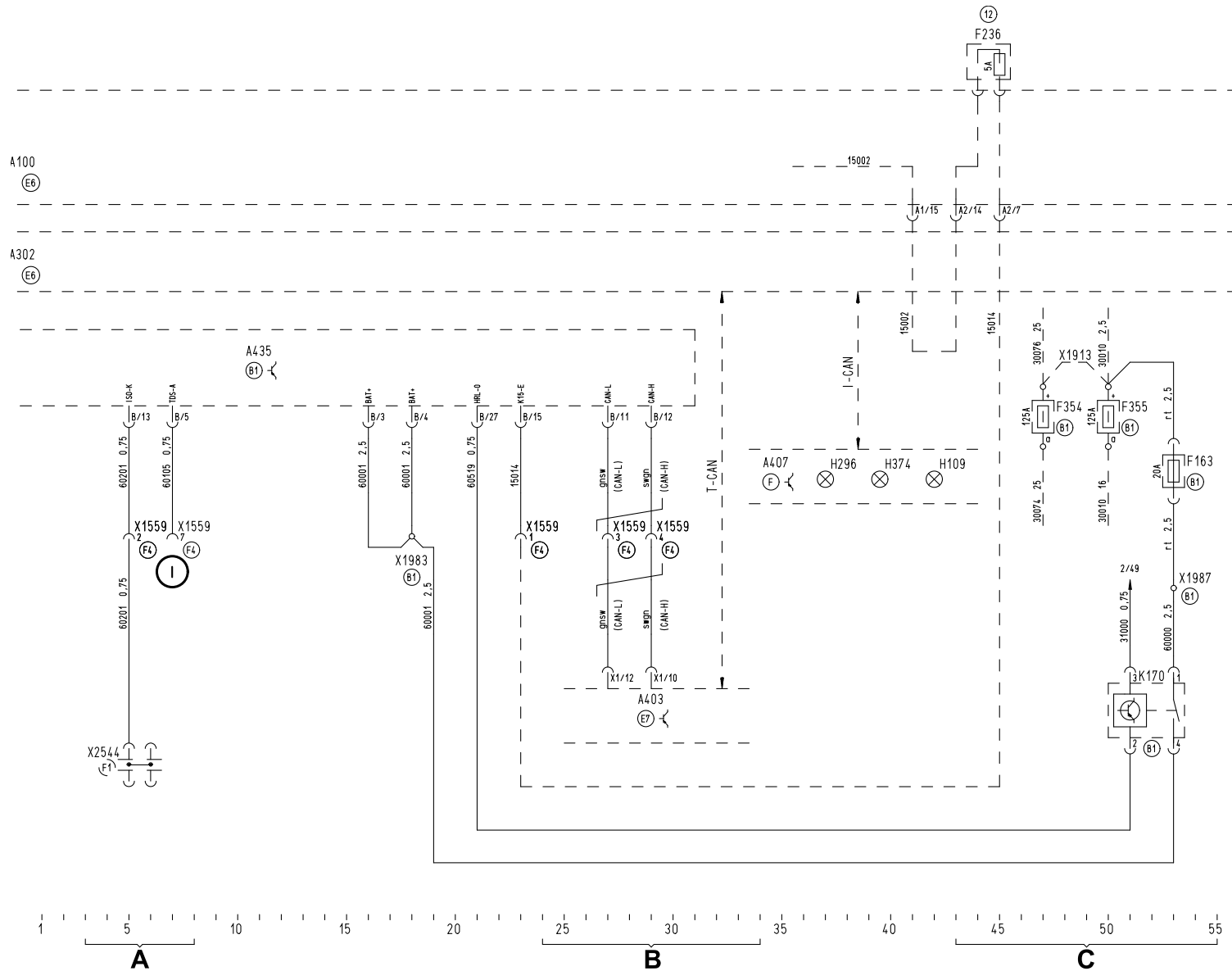
K170 (297) Relay, power supply engine control (terminal 30)

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

- | | |
|-------------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| Ⓑⓑ Engine | ⓕⓗ Passenger seat |
| ⒷⒸ Gearbox | ⓕⓓ Control panel |
| ⒷⒸ Front | ⓕⓔ Battery box |
| ⒷⒸⓑ Bumper | ⓕⓕⓑ B-pillar on driver's side |
| ⒷⒸⒸ Entrance right | ⓕⓕⒸ A-pillar on driver's side |
| ⒷⒸⒸ Entrance left | ⓕⓕⓑ B-pillar on passenger's side |
| ⒷⒸⓔ Central electrics area | ⓕⓕⒸ A-pillar on passenger's side |
| ⒷⒸⓕ Control unit racks | ⓕⓕⓓ Ceiling/roof |
| ⒷⒸⓕ Rear wall of cab | ⓕⓕⓓ Front axle |
| ⒷⒸⓕ Instrument panel | ⓕⓕⓓ Rear axle |
| ⒷⒸⓕⓑ Central part | ⓕⓕⓑⓑ Front part of frame |
| ⒷⒸⓕⒸ Steering wheel/column | ⓕⓕⒸⒸ Rear part of frame |
| ⒷⒸⓕⒸ Foot pedals | ⓕⓕⓑⓑ Door left |
| ⒷⒸⓕⒸ Front wall, inside left | ⓕⓕⒸⒸ Door right |
| ⒷⒸⓕⒸ Front wall, inside right | |
| ⓕⓕⓑ Reserve for engine speed signal | |

Wiring diagram no. 81.99192.2985 Sheet 3 of 3



**EDC electronically controlled diesel injection
EDC MS6.1 with exhaust gas recirculation EGR (EURO 3)**

Legend

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

Change status: 03.01

A = Actuator unit

B = Temperature sensor, fuel

C = Charge air pressure sensor

D = Temperature sensor, charge air

E = Exhaust gas recirculation cylinder

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A435 (338) EDC control unit

B123 (341) Temperature sensor, charge air

B125 (314) Charge air pressure sensor

B197 (265) Temperature sensor, fuel

X1904 Threaded bolt M6 (MP box)

X1906 Threaded bolt M6 (MP box)

X1907 Threaded bolt M6 (MP box)

Y130 (196) Actuator unit, injector pump

Y280 (205) AGR cylinder

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

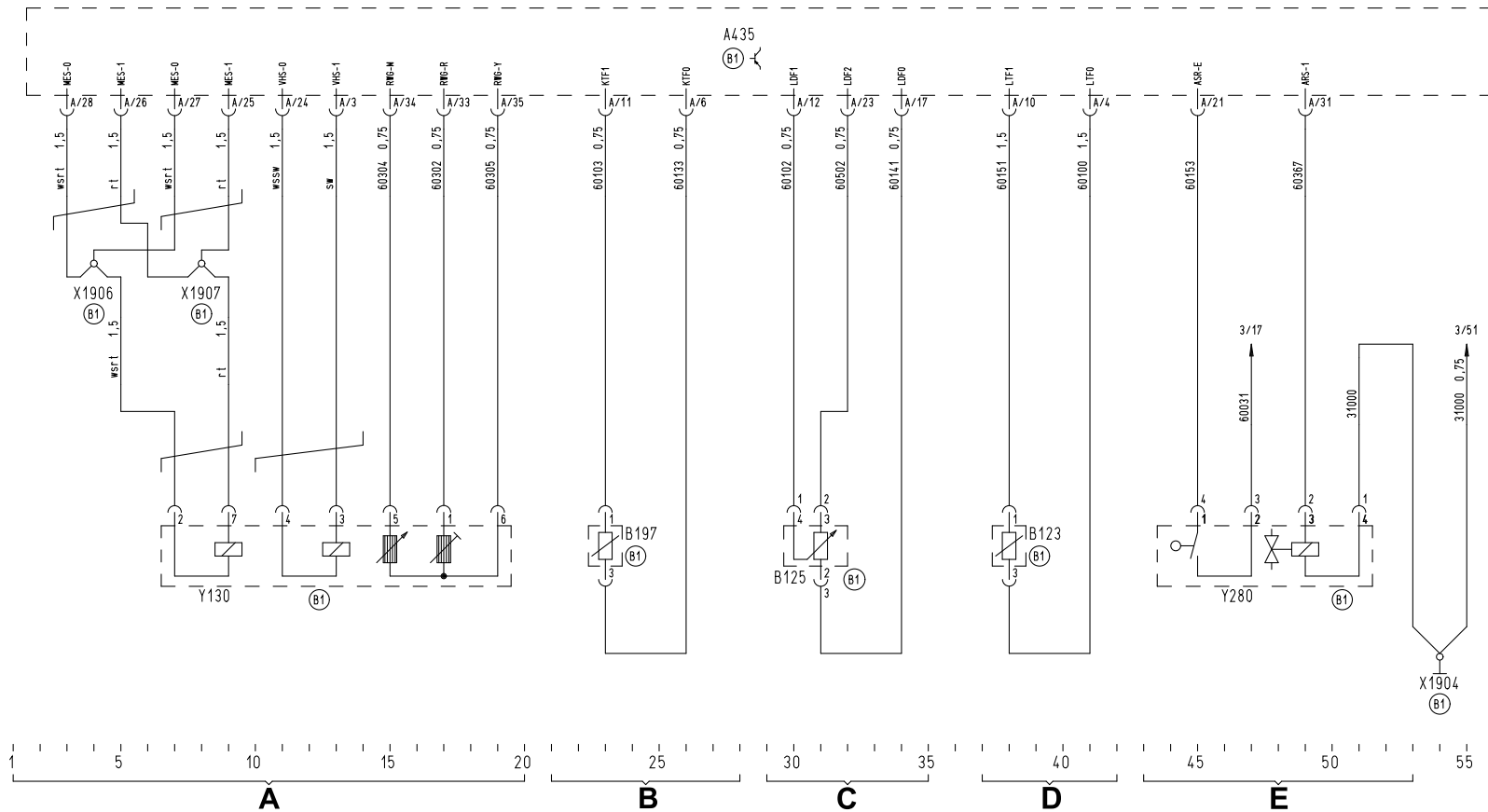
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.2986 Sheet 1 of 3

A100
 (E6)

A302
 (E6)



**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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

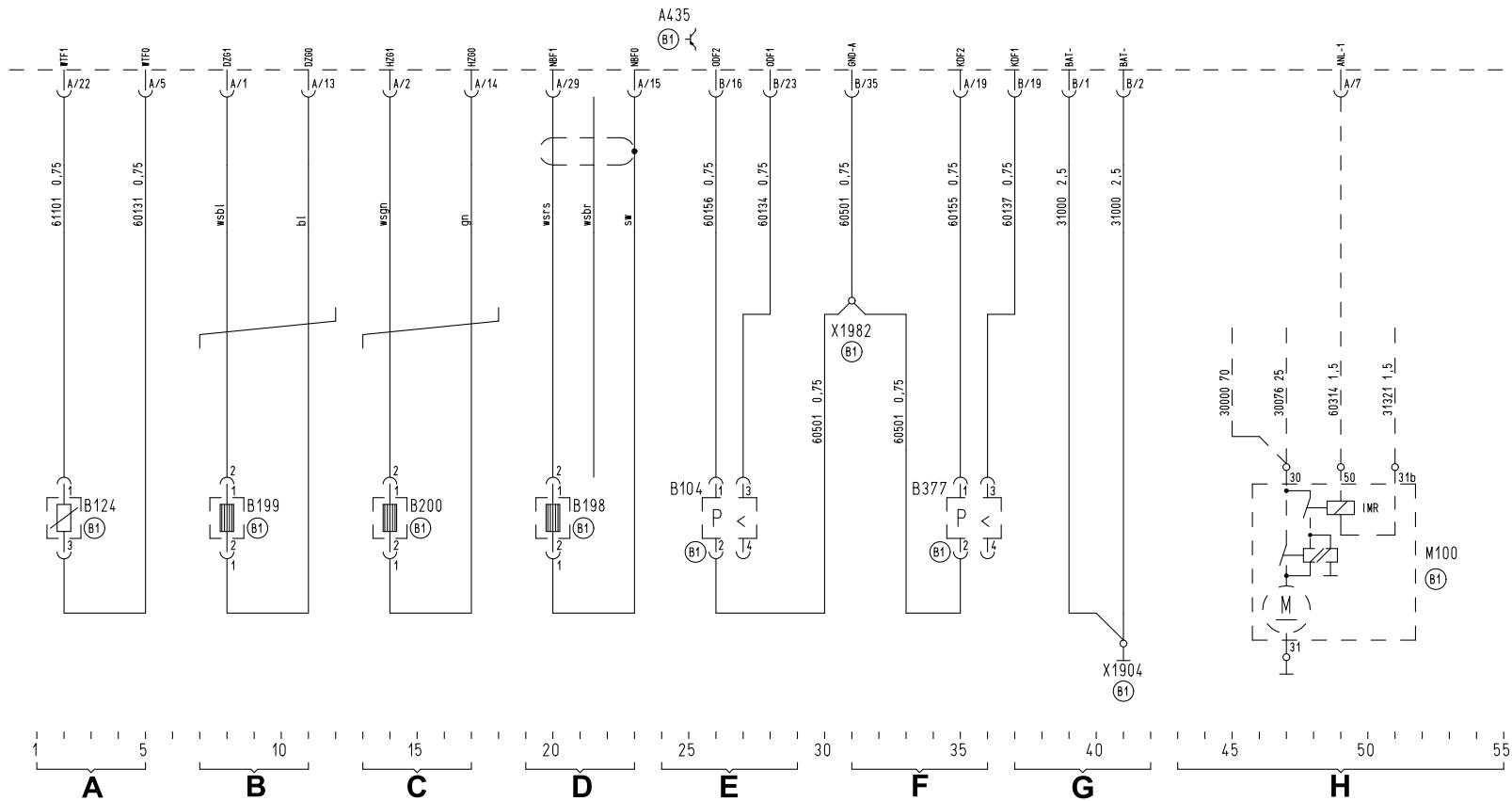
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2986 Sheet 2 of 3

A100
E6

A302
E6



**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)

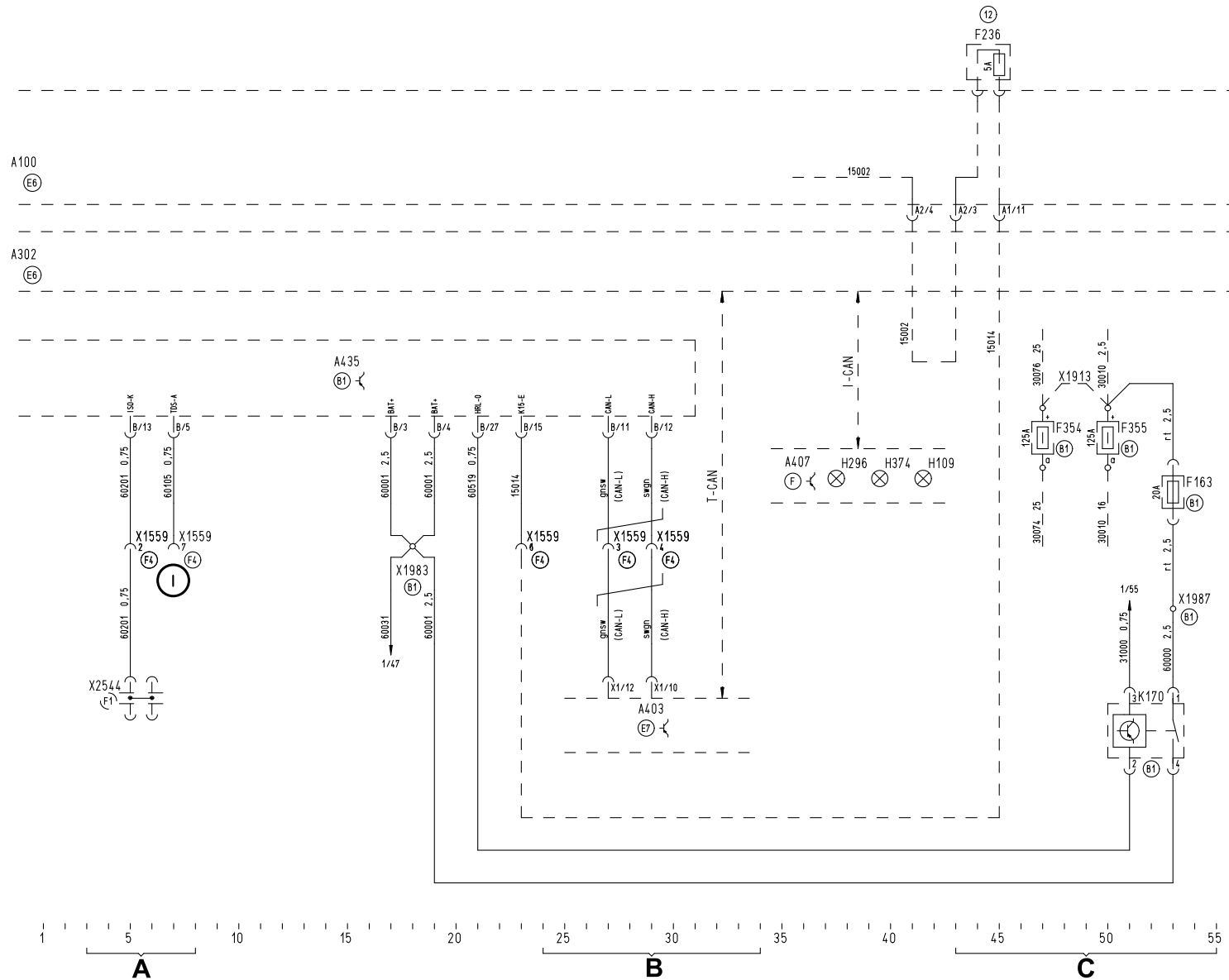
H109 Indicator light, oil pressure
H296 Indicator light, EDC (malfunction)
H374 Indicator light, air filter dirty

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



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

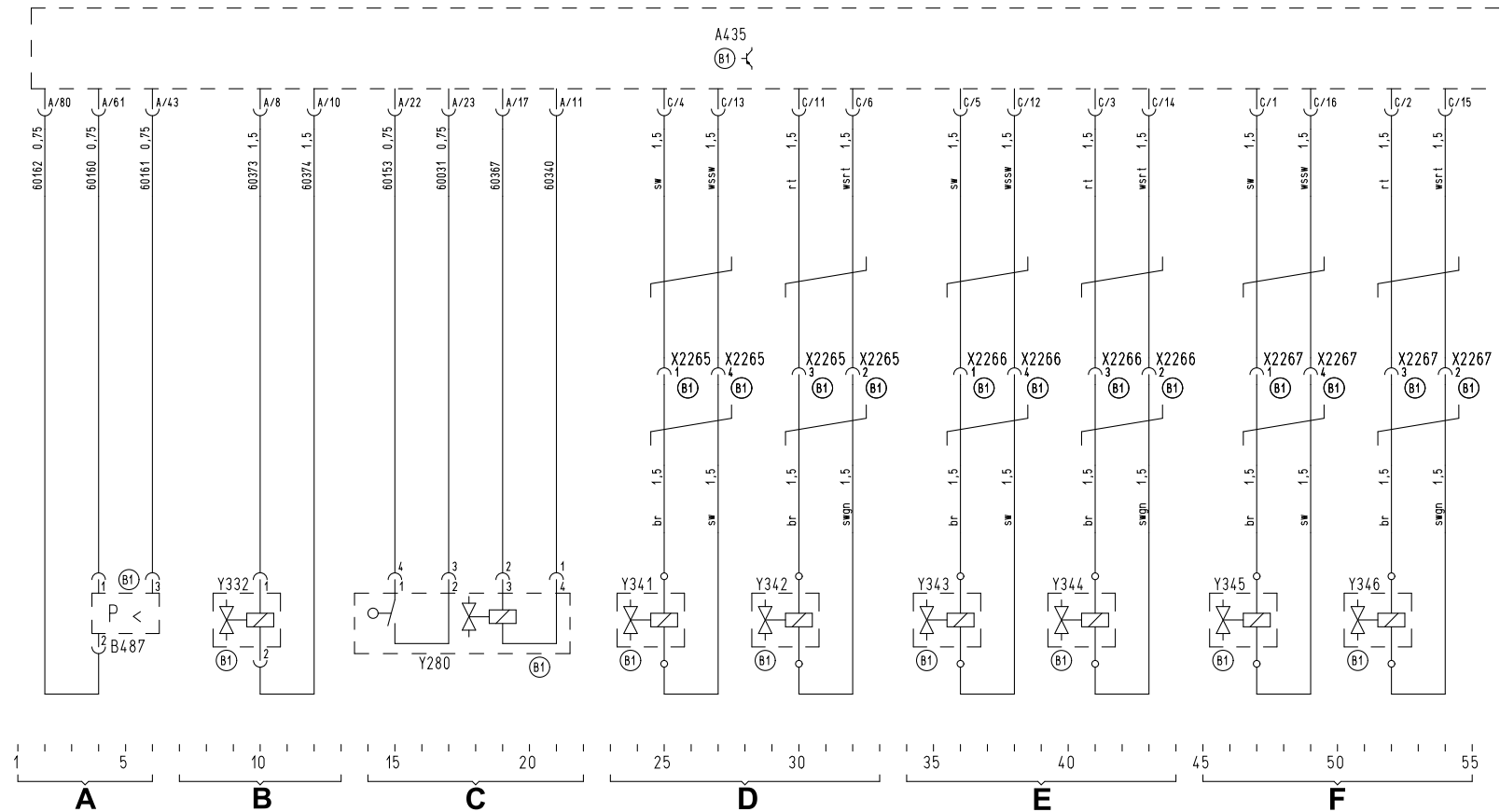
Marking of mounting positions

- | | |
|-----------------------------|---------------------------------|
| Ⓐ Tail | Ⓕ Driving seat |
| Ⓑ1 Engine | Ⓖ7 Passenger seat |
| Ⓑ2 Gearbox | Ⓖ8 Control panel |
| Ⓒ Front | Ⓖ Battery box |
| Ⓒ1 Bumper | Ⓕ1 B-pillar on driver's side |
| Ⓒ2 Entrance right | Ⓕ2 A-pillar on driver's side |
| Ⓒ3 Entrance left | Ⓖ1 B-pillar on passenger's side |
| Ⓔ6 Central electrics area | Ⓖ2 A-pillar on passenger's side |
| Ⓔ7 Control unit racks | Ⓖ Ceiling/roof |
| Ⓔ8 Rear wall of cab | Ⓖ Front axle |
| Ⓕ Instrument panel | Ⓖ Rear axle |
| Ⓕ1 Central part | Ⓕ1 Front part of frame |
| Ⓕ2 Steering wheel/column | Ⓕ2 Rear part of frame |
| Ⓕ3 Foot pedals | Ⓕ1 Door left |
| Ⓕ4 Front wall, inside left | Ⓕ2 Door right |
| Ⓕ5 Front wall, inside right | |

Wiring diagram no. 81.99192.2692 Sheet 1 of 4

A100
E6

A302
E6



EDC7 electronically controlled diesel injection
EDC7 Common Rail D0836LF

Legend

Wiring diagram no. **81.99192.2692** Sheet 2 of 4
 Change status: 10.00

A = Water temperature sensor

B = Crankshaft

C = Camshaft

D = Fuel pressure sensor

E = Air temperature sensor

F = Charge air pressure sensor

G = Oil pressure sensor

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A435 (526) EDC control unit

B104 (340) Oil pressure sensor

B123 (341) Temperature sensor, charge air

B124 (265) Temperature sensor, coolant

B125 (350) Charge air pressure sensor

B377 Fuel pressure sensor

B488 (348) Engine speed incremental encoder

B489 (349) Engine speed segment encoder

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

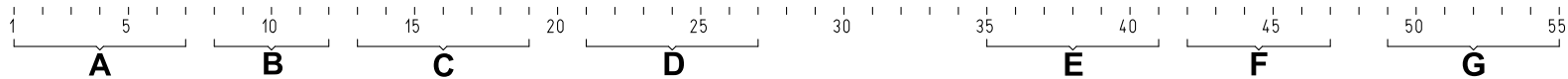
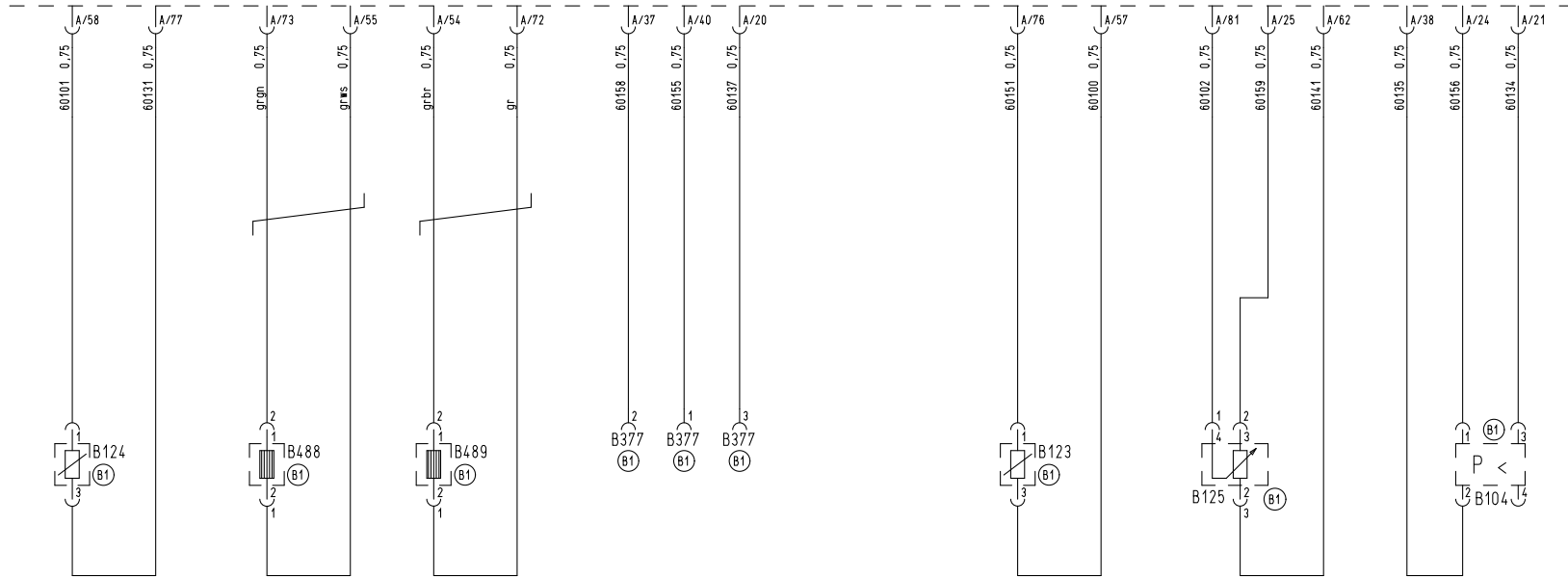
Ⓕ2 Door right

Wiring diagram no. 81.99192.2692 Sheet 2 of 4

A100

A302

A435



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

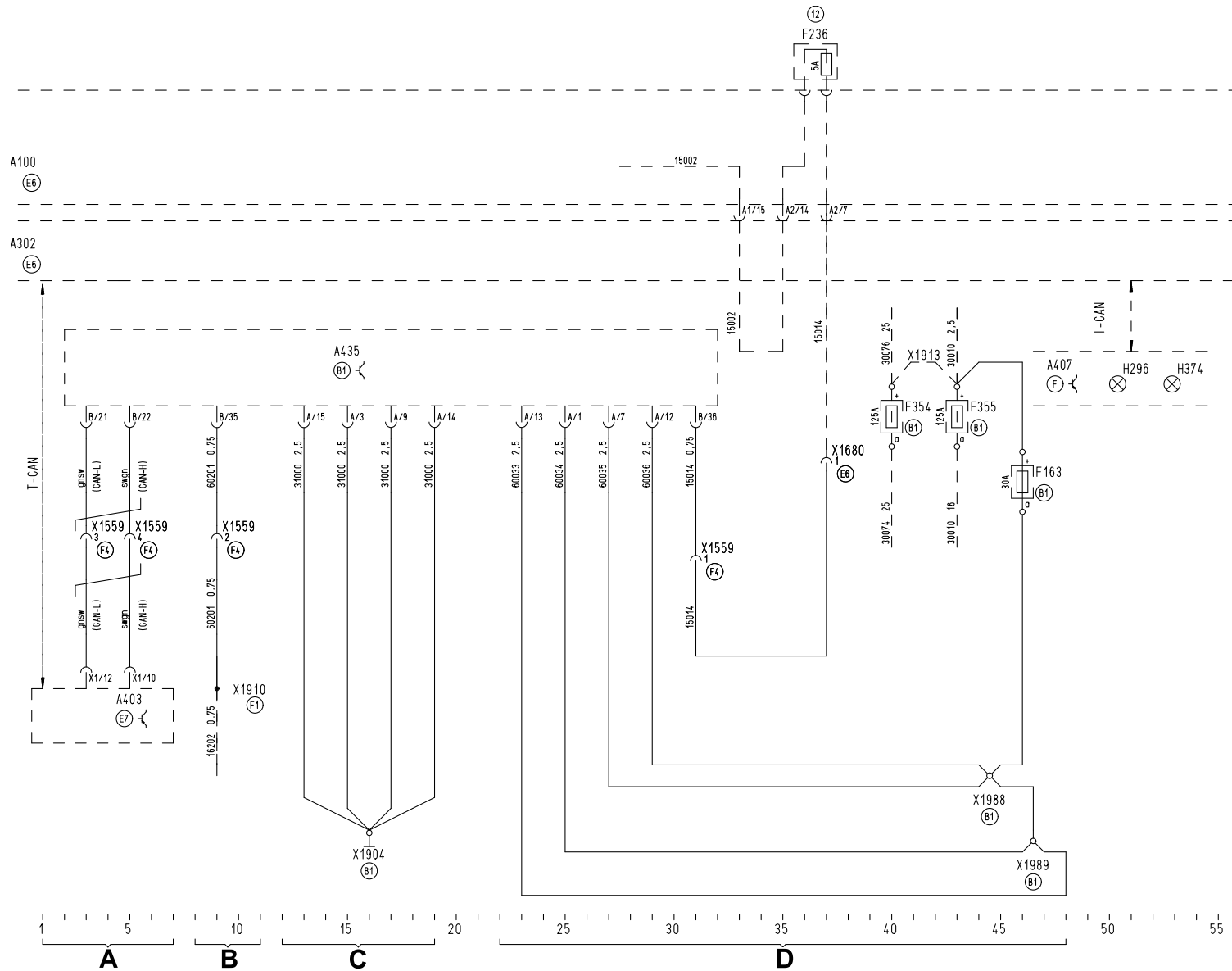
F163 (140) Generator engine control (terminal 30)
F236 (111) Generator engine control (terminal 15)
F354 (132) Main fuse (terminal 30-1)
F355 (132) Main fuse (terminal 30-2)

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

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



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

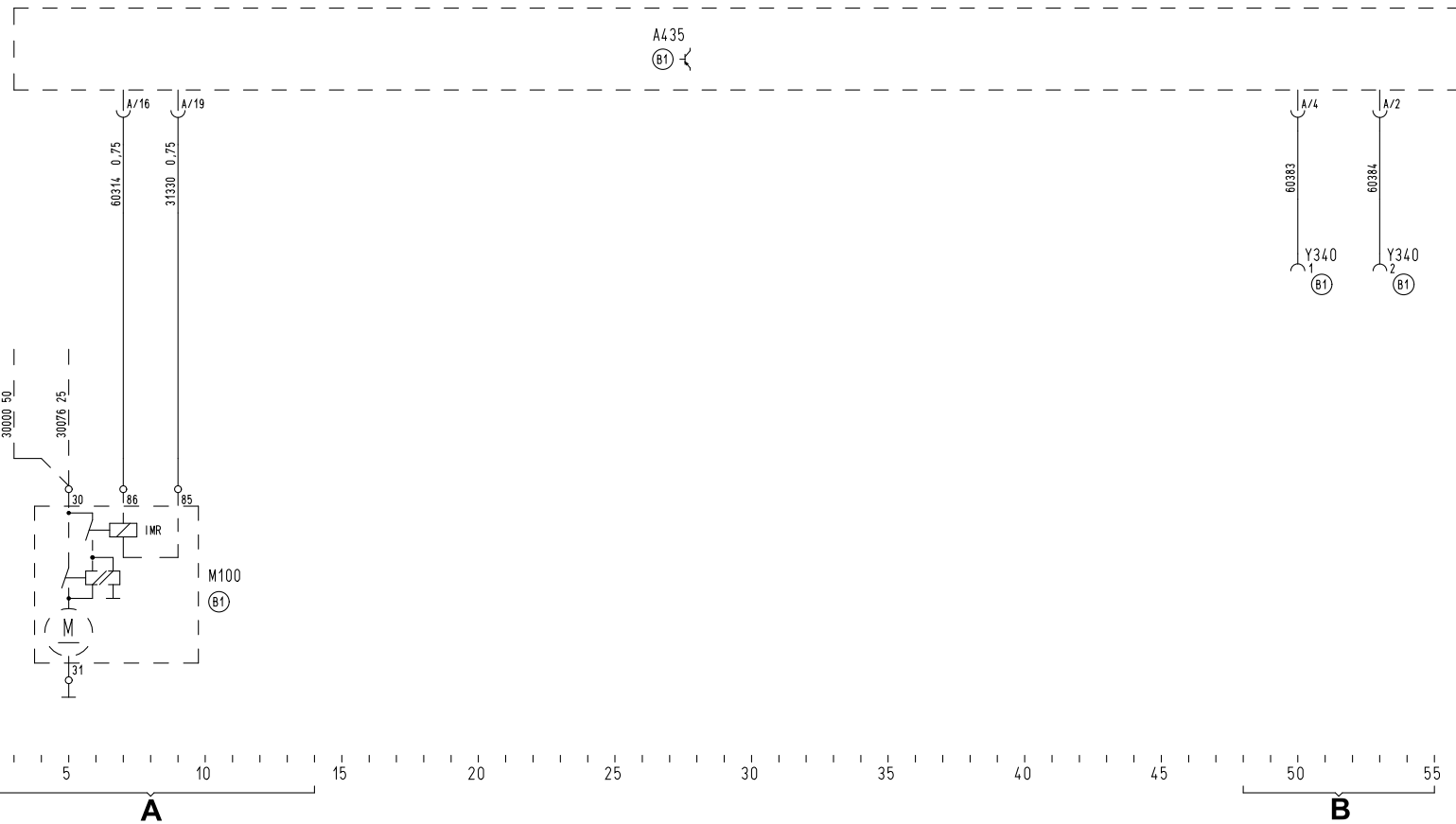
Marking of mounting positions

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

Wiring diagram no. 81.99192.2692 Sheet 4 of 4

A100


A302

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

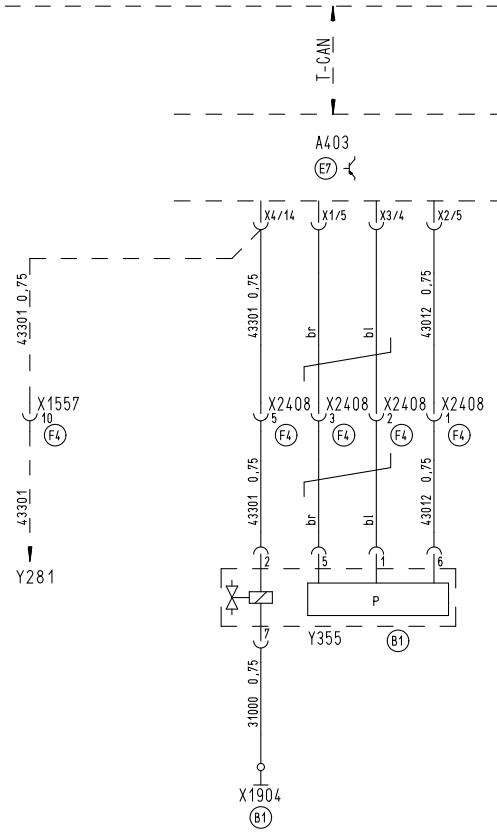
Marking of mounting positions

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

Wiring diagram no. 81.99192.2832 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

Driving dynamics control

Legend

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

Change status: 07.00

A = EBS control unit 2.3

B = Steering angle sensor

C = Turning rate sensor

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A402 (399) EBS control unit

A575 (568) Control unit, driving dynamics control

B475 ESP steering angle sensor

B476 ESP steering rate sensor

X2204 Stvd. cab steering rate sensor

X2207 Stvd. steering column, ESP steering angle sensor

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓘ Scope of delivery

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

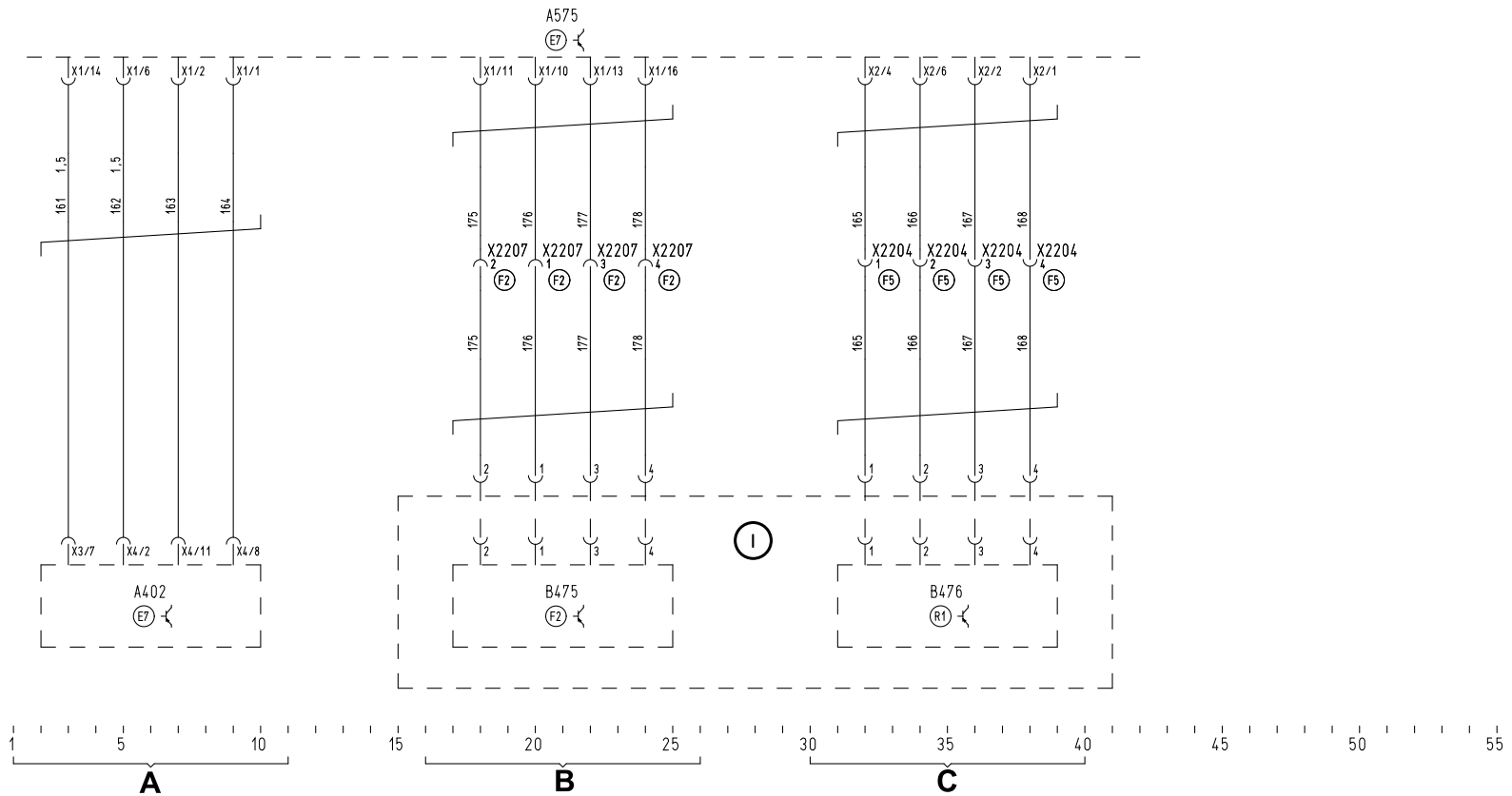
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2843 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



Cab tilt device (electrical)

Legend

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

Change status: 05.01

A = Supply voltage

B = Release switch

C = Tilt switches

D = Tilt pump

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

F190 (130) Fuse, cab tilt device

K415 (280) Relay, cab tilt device

M137 (148) Pump, cab tilt device

S374 (548) Switch, release cab tilt device

S375 (292) Control switch, actuation cab tilt device

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

X1842 Stvd. cab tilt device

X2541 (246) Potential distributor, 21-pin line 31000

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

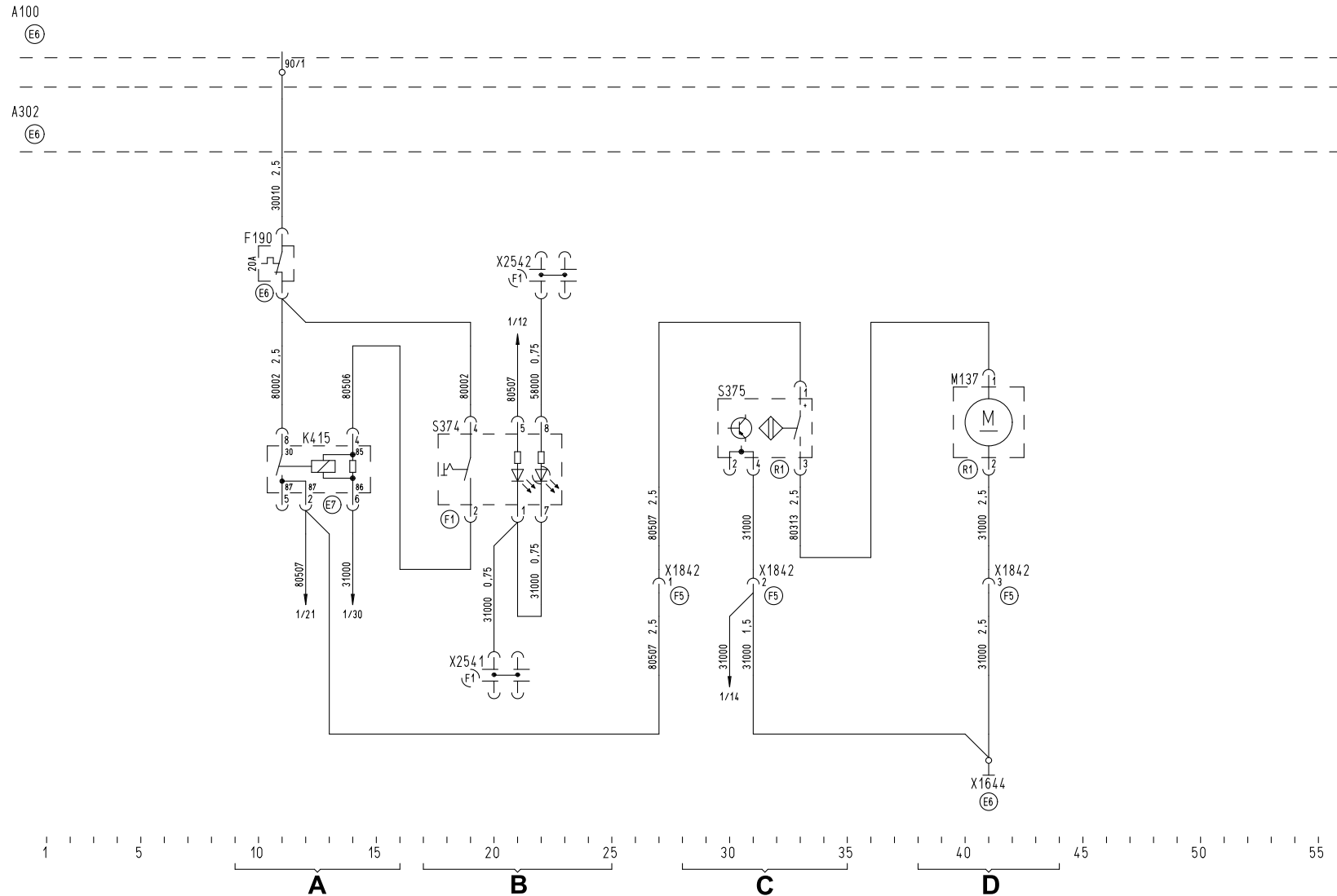
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1370 Sheet 1 of 1



Windscreen heating

Legend

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

Change status: 03.01

A = Windscreen heating

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

F187 (131) Fuse, windscreen heating

K221 (280) Relay, windscreen heating

R127 (150) Windscreen heating, left

R128 (150) Windscreen heating, right

S224 (561) Switch, screen heating

X1641 Soldered connector, line 58000

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

X1754 Crimped connector, line 59104

X2020 Stvd. windscreen heating, right

X2021 Stvd. windscreen heating, left

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

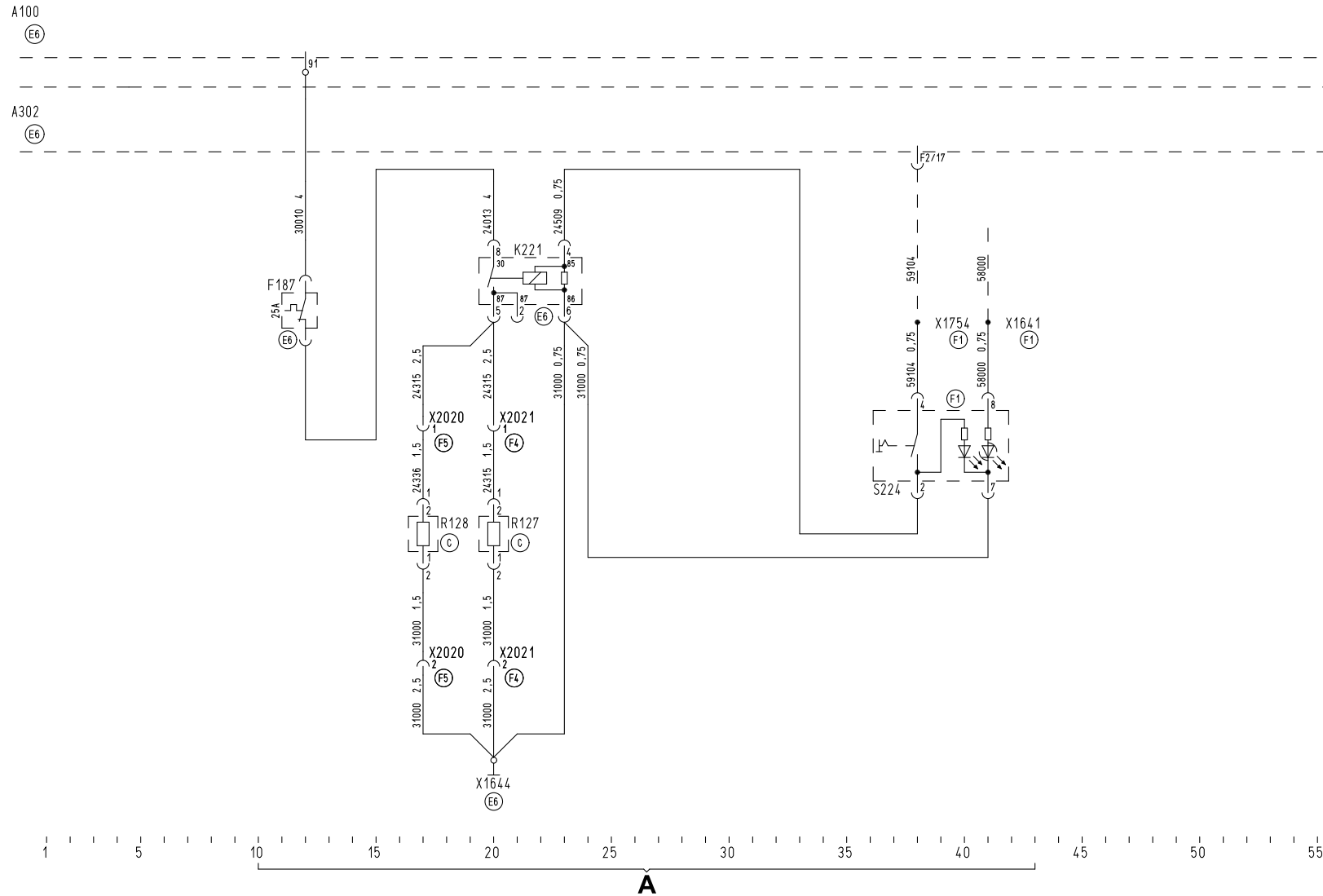
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2571 Sheet 1 of 1



Windscreen heating (wide cab)

Legend

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

Change status: 04.01

A = Windscreen heating

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

F187 (130) Fuse, windscreen heating

F342 (130) Fuse, front nose screen heating

K524 (280) Relay, front nose screen heating

K525 (280) Relay, front nose screen heating

R127 (150) Windscreen heating, left

R128 (150) Windscreen heating, right

S224 (561) Switch, screen heating

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

X1754 Soldered connector, line 59104

X2020 Stvd. windscreen heating, right

X2021 Stvd. windscreen heating, left

X2541 (246) Potential distributor, 21-pin line 31000

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

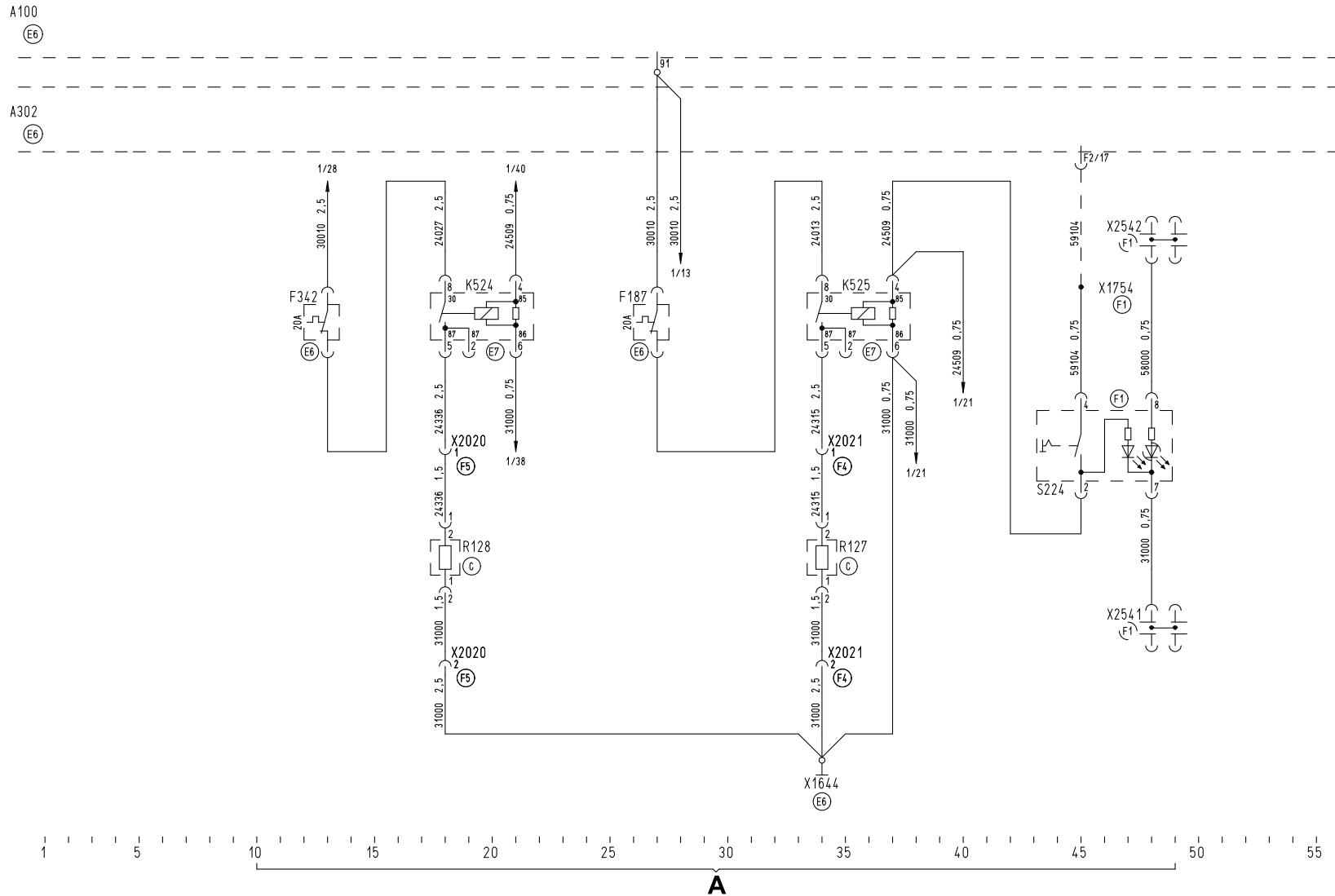
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1373 Sheet 1 of 1



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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

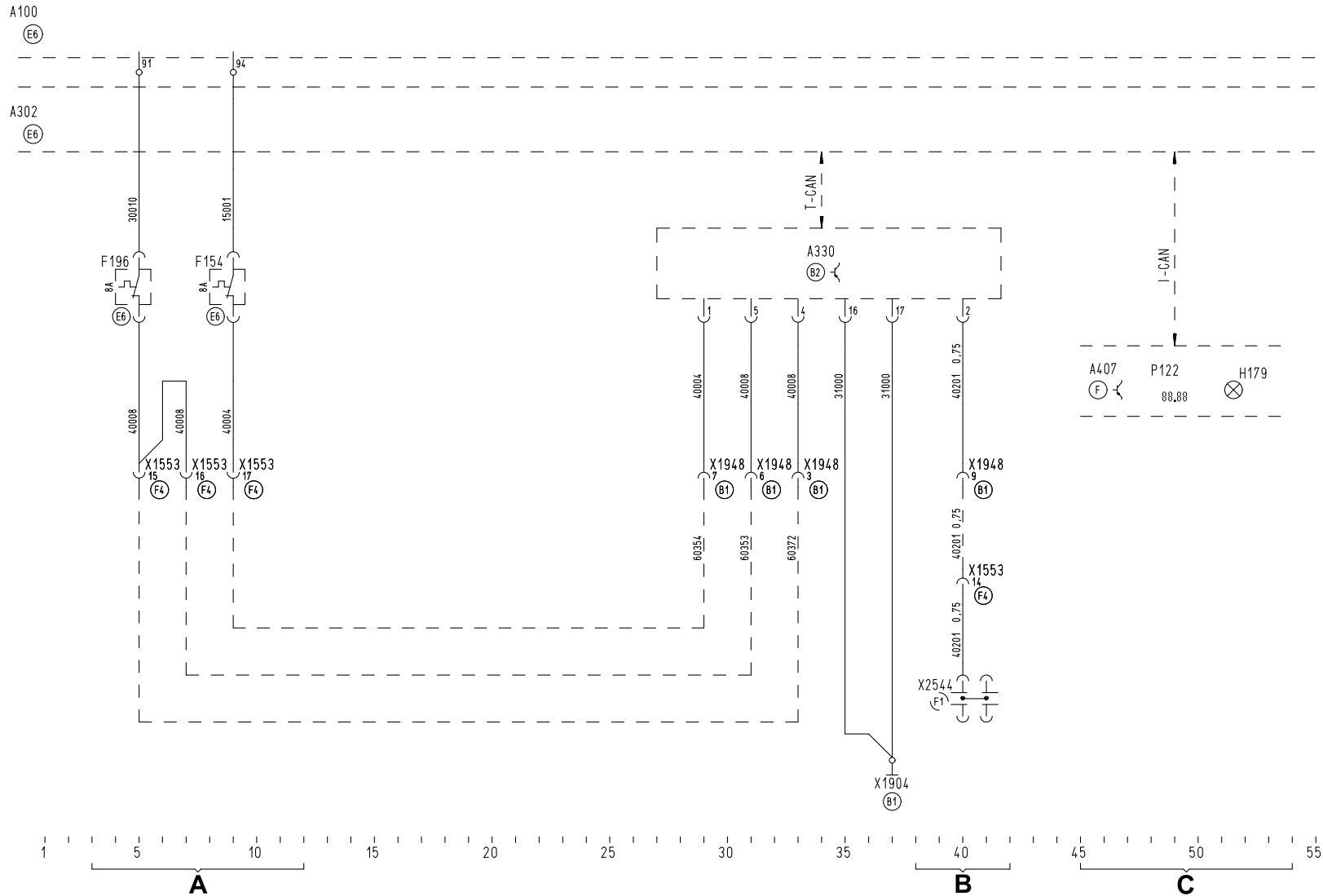
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2993 Sheet 1 of 2



AS-TRONIC transmission (12-GEAR)

Legend

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

Change status: 04.01

A = Gear selection, cruise control

B = Driving range selection

C = Actuation of reversing light

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A403 (339) Vehicle management computer

A429 (401) Steering column switch, cruise control/transmission

A434 (402) Driving range switch, transmission

F314 (101) Fuse, reversing light

H378 Indicator light FGR/FGB (LED)

K250 (280) Relay, reversing light

X1544 Stvd. frame III

X1627 Stvd. reversing beam

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

X1693 Crimped connector, line 60028

X1834 Crimped connector, line 71300

X1968 Stvd. cruise control switch

X2002 Stvd. B-pillar preselector switch

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓔ Reversing light

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2993 Sheet 2 of 2



AS-TRONIC transmission (16-GEAR)

Legend

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

Change status: 04.01

A = Supply voltage

B = Diagnosis

C = Gear display, indicator light

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

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

A407 (342) Instrumentation

F154 (118) Fuse, transmission (terminal 15)

F196 (118) Fuse, transmission (terminal 30)

H179 Indicator light, transmission, monitoring of state

P122 Gear display

X1553 Stvd. engine/EDC/transmission III

X1904 Threaded bolt M6 (MP box)

X1948 Stvd. engine/transmission (MP box)

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

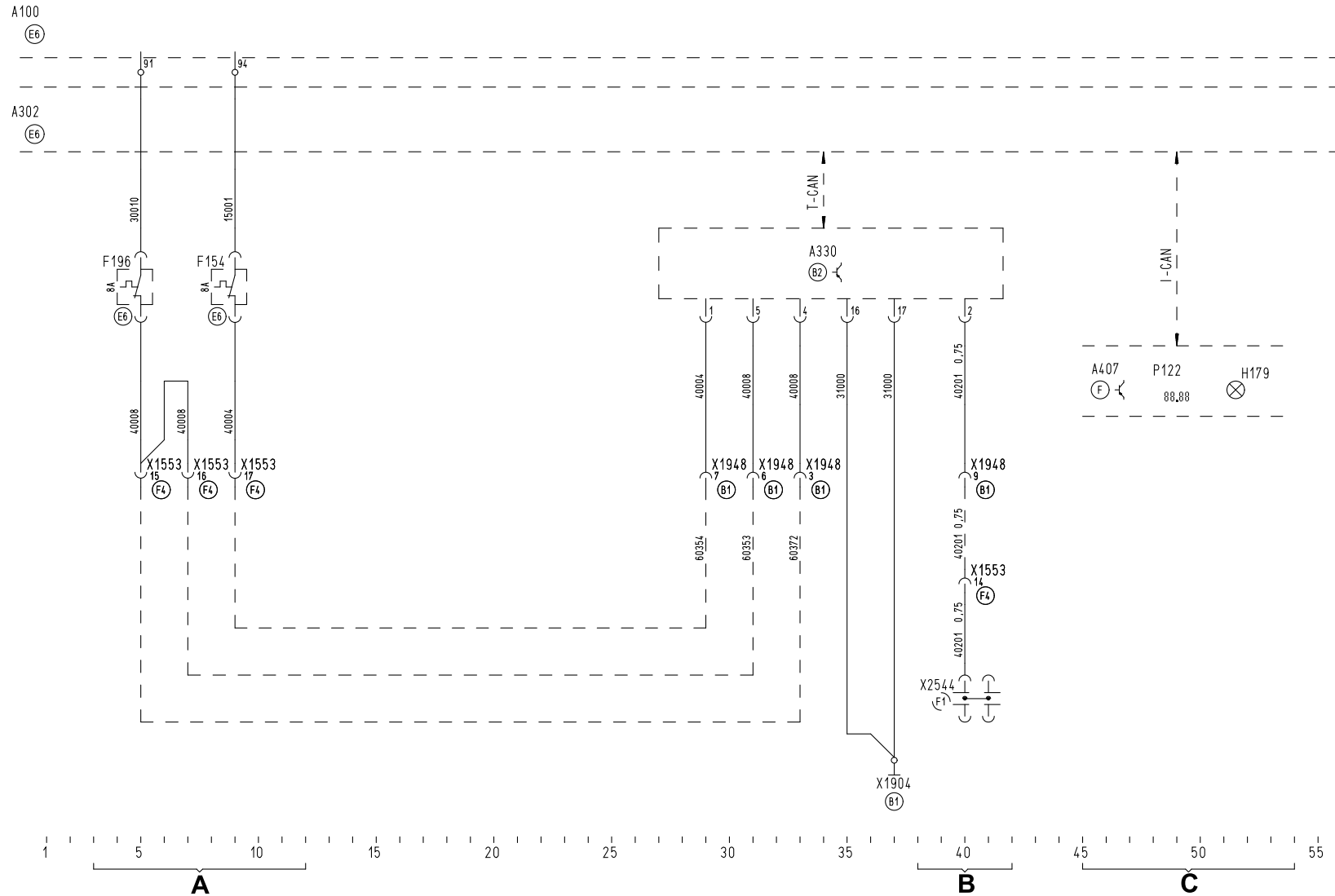
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2992 Sheet 1 of 2



AS-TRONIC transmission (16-GEAR)

Legend

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

Change status: 04.01

A = Gear selection, cruise control

B = Driving range selection

C = Actuation of reversing light

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A403 (339) Vehicle management computer

A429 (401) Steering column switch, cruise control/transmission

A434 (402) Driving range switch, transmission

F314 (101) Fuse, reversing light

H378 Indicator light FGR/FGB (LED)

K250 (280) Relay, reversing light

X1544 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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓘ Reversing light

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

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

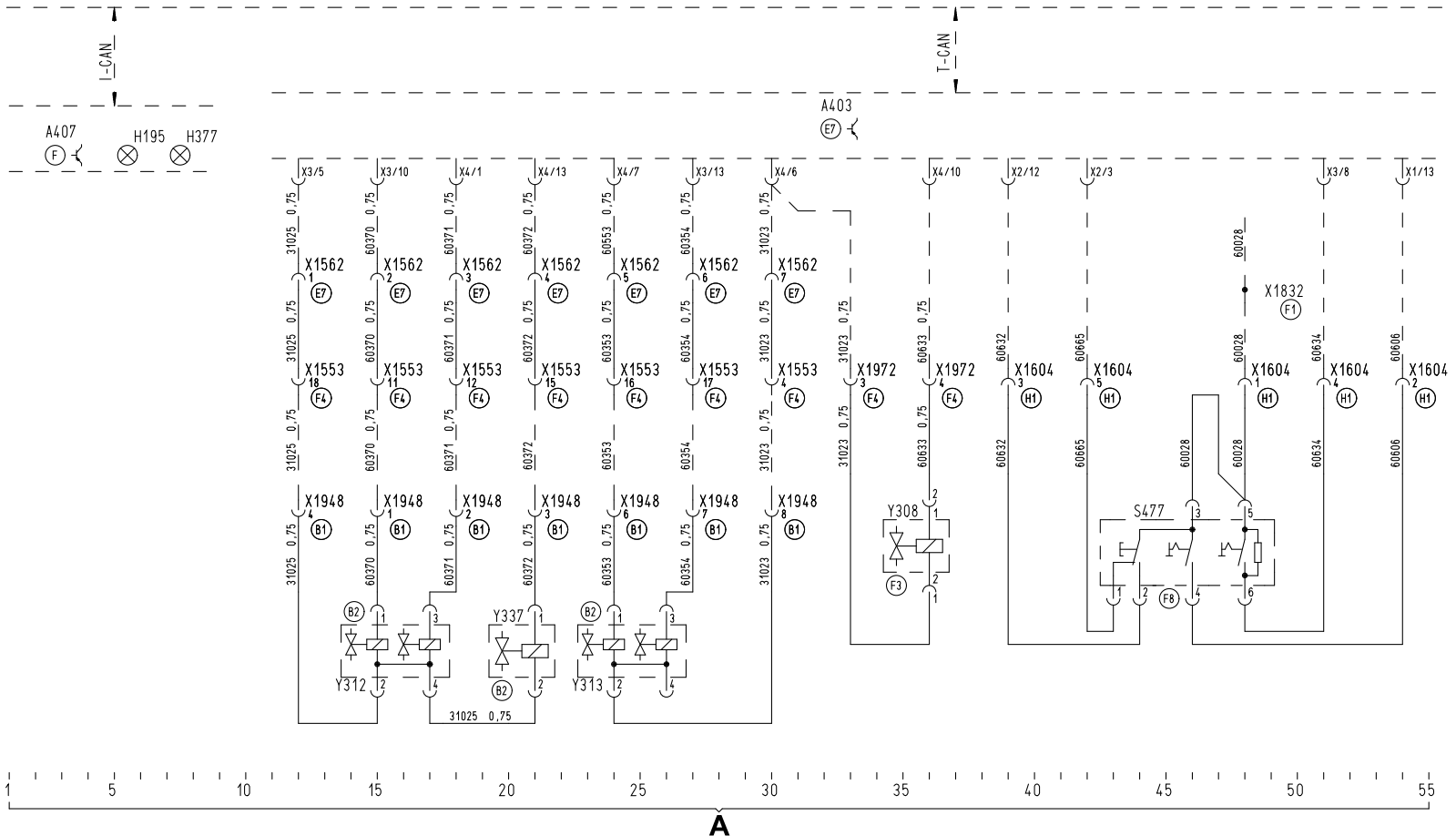
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓂ Engine | ⓕⓗ Passenger seat |
| ⒷⓃ Gearbox | ⓕⓓ Control panel |
| ⒷⓈ Front | ⓕⓔ Battery box |
| ⒷⓈⓁ Bumper | ⓕⓕⓁ B-pillar on driver's side |
| ⒷⓈⓇ Entrance right | ⓕⓕⓂ A-pillar on driver's side |
| ⒷⓈⓁ Entrance left | ⓕⓕⓃ B-pillar on passenger's side |
| Ⓑⓕⓖ Central electrics area | ⓕⓕⓄ A-pillar on passenger's side |
| Ⓑⓕⓗ Control unit racks | ⓕⓕⓁ Ceiling/roof |
| Ⓑⓕⓓ Rear wall of cab | ⓕⓕⓃ Front axle |
| Ⓑⓕ Instrument panel | ⓕⓕⓔ Rear axle |
| ⒷⓕⓁ Central part | ⓕⓕⓁⓁ Front part of frame |
| ⒷⓕⓇ Steering wheel/column | ⓕⓕⓂⓇ Rear part of frame |
| ⒷⓕⓈ Foot pedals | ⓕⓕⓁⓁ Door left |
| ⒷⓕⓁ Front wall, inside left | ⓕⓕⓂⓇ Door right |
| ⒷⓕⓇ Front wall, inside right | |

Wiring diagram no. 81.99192.2601 Sheet 1 of 2

A100
E6

A302
E6



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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ H1 B-pillar on driver's side

Ⓕ H2 A-pillar on driver's side

Ⓕ J1 B-pillar on passenger's side

Ⓕ J2 A-pillar on passenger's side

Ⓕ L Ceiling/roof

Ⓕ N Front axle

Ⓕ P Rear axle

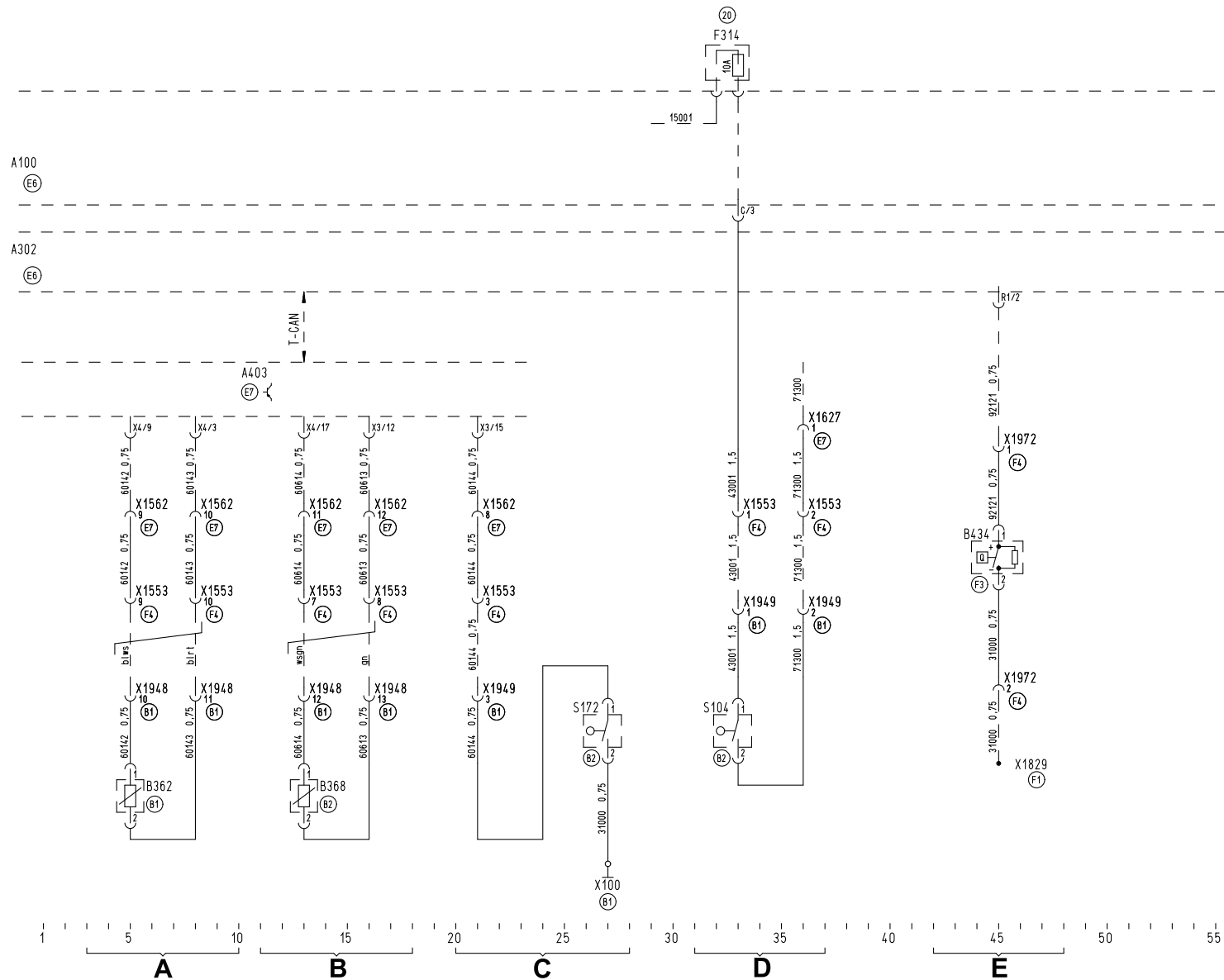
Ⓕ R1 Front part of frame

Ⓕ R2 Rear part of frame

Ⓕ S1 Door left

Ⓕ S2 Door right

Wiring diagram no. 81.99192.2601 Sheet 2 of 2



EATON RTSO transmission (RL)

Legend

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

Change status: 06.00

A = Pre-shift group, range shift group

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A403 (339) Vehicle management computer

A407 (342) Instrumentation

H195 Indicator light pre-shift group

H377 Indicator light, lower range active

S477 (474) Switch, gearshift lever

X1553 Stvd. engine/EDC/transmission III

X1562 Stvd. gearbox

X1604 Stvd. switch in gearshift knob

X1832 Crimped connector, line 60028

X1948 Stvd. engine/transmission (MP box)

X1972 Stvd. pedals, external

Y308 (192) Clutch servo

Y312 (193) Solenoid valve, range group

Y313 (193) Solenoid valve, splitter group

Y337 (220) Solenoid valve, lane guard

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

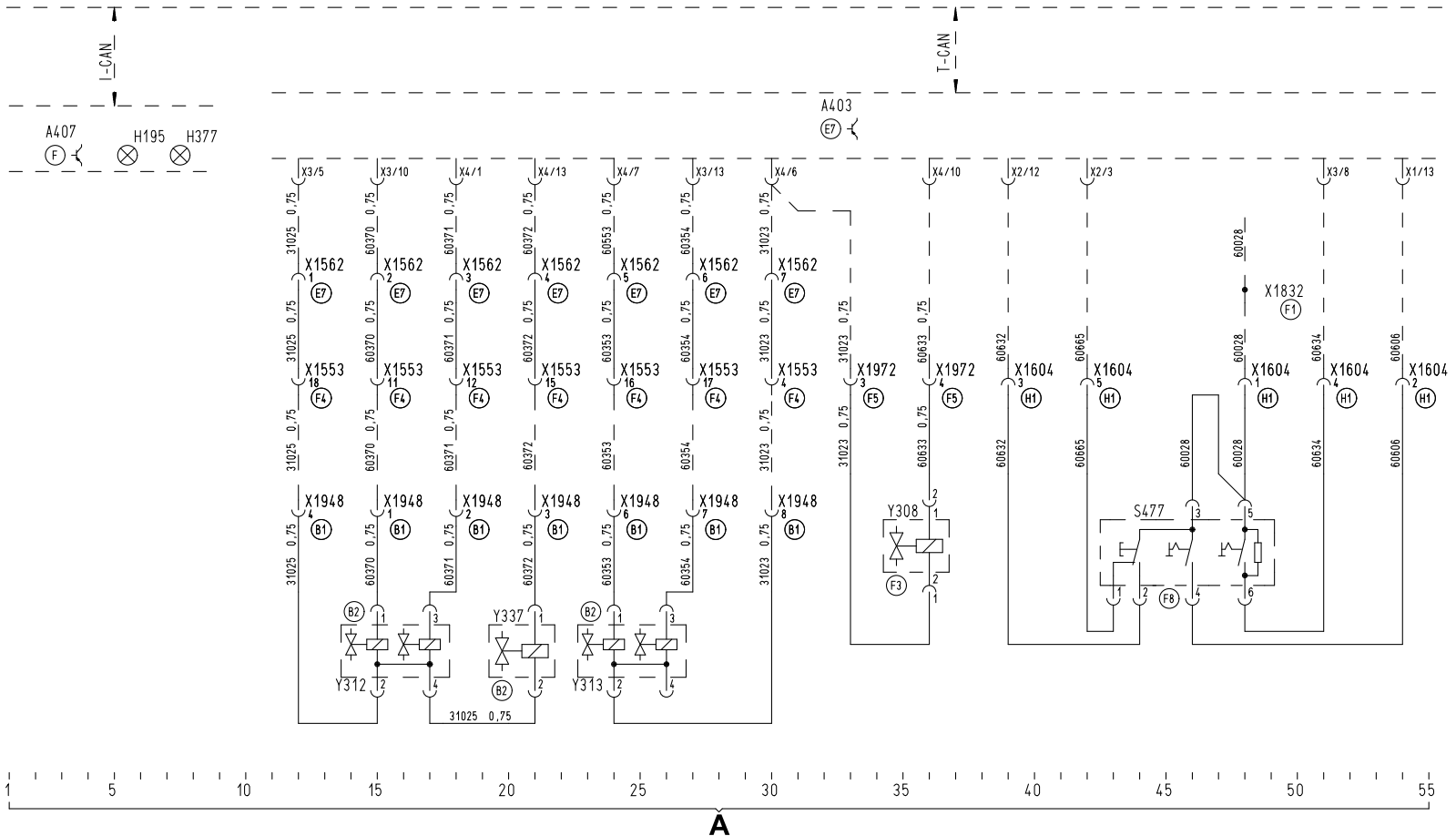
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.2417 Sheet 1 of 2

A100
E6

A302
E6



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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ H1 B-pillar on driver's side

Ⓕ H2 A-pillar on driver's side

Ⓕ J1 B-pillar on passenger's side

Ⓕ J2 A-pillar on passenger's side

Ⓕ L Ceiling/roof

Ⓕ N Front axle

Ⓕ P Rear axle

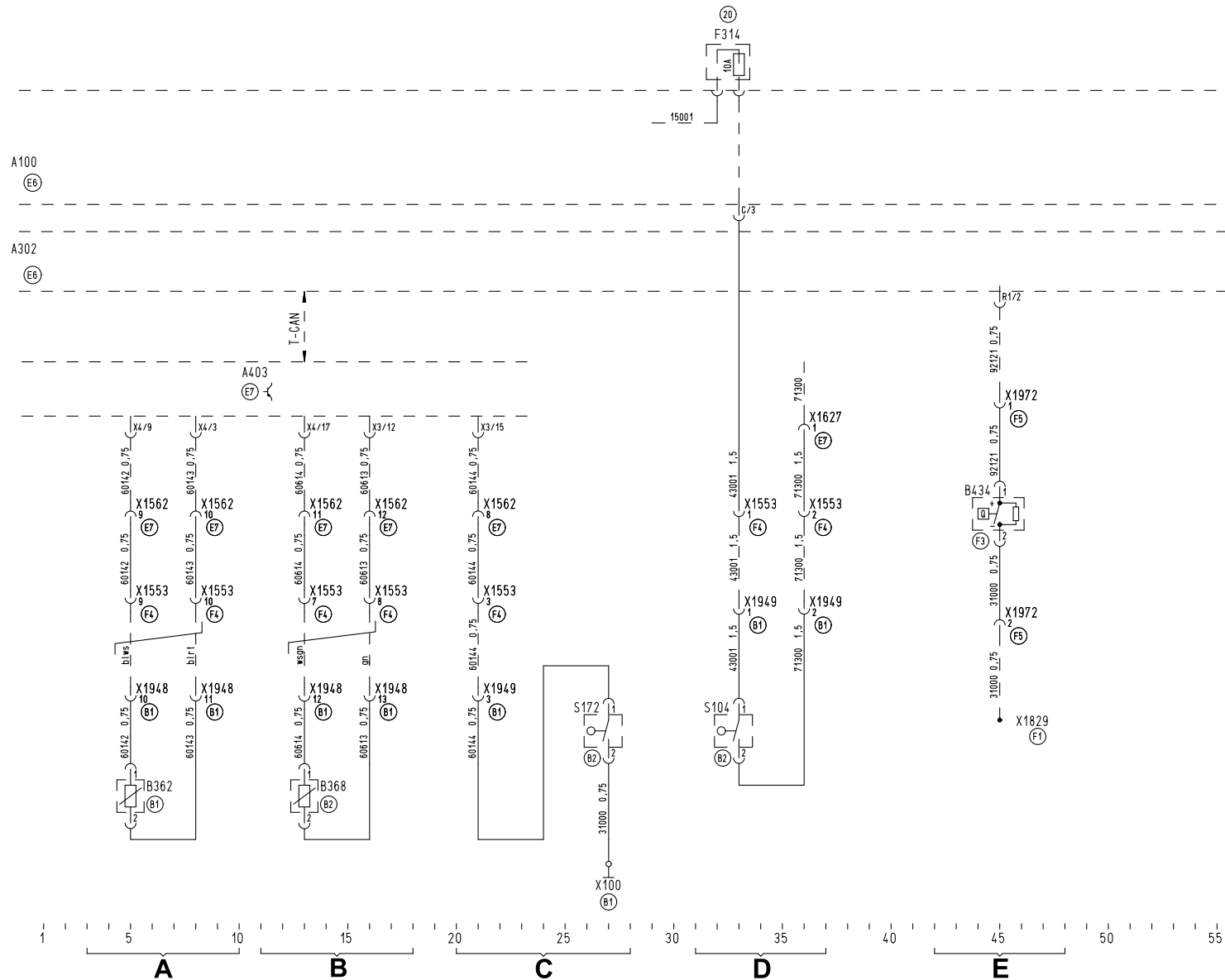
Ⓕ R1 Front part of frame

Ⓕ R2 Rear part of frame

Ⓕ S1 Door left

Ⓕ S2 Door right

Wiring diagram no. 81.99192.2417 Sheet 2 of 2



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

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

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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

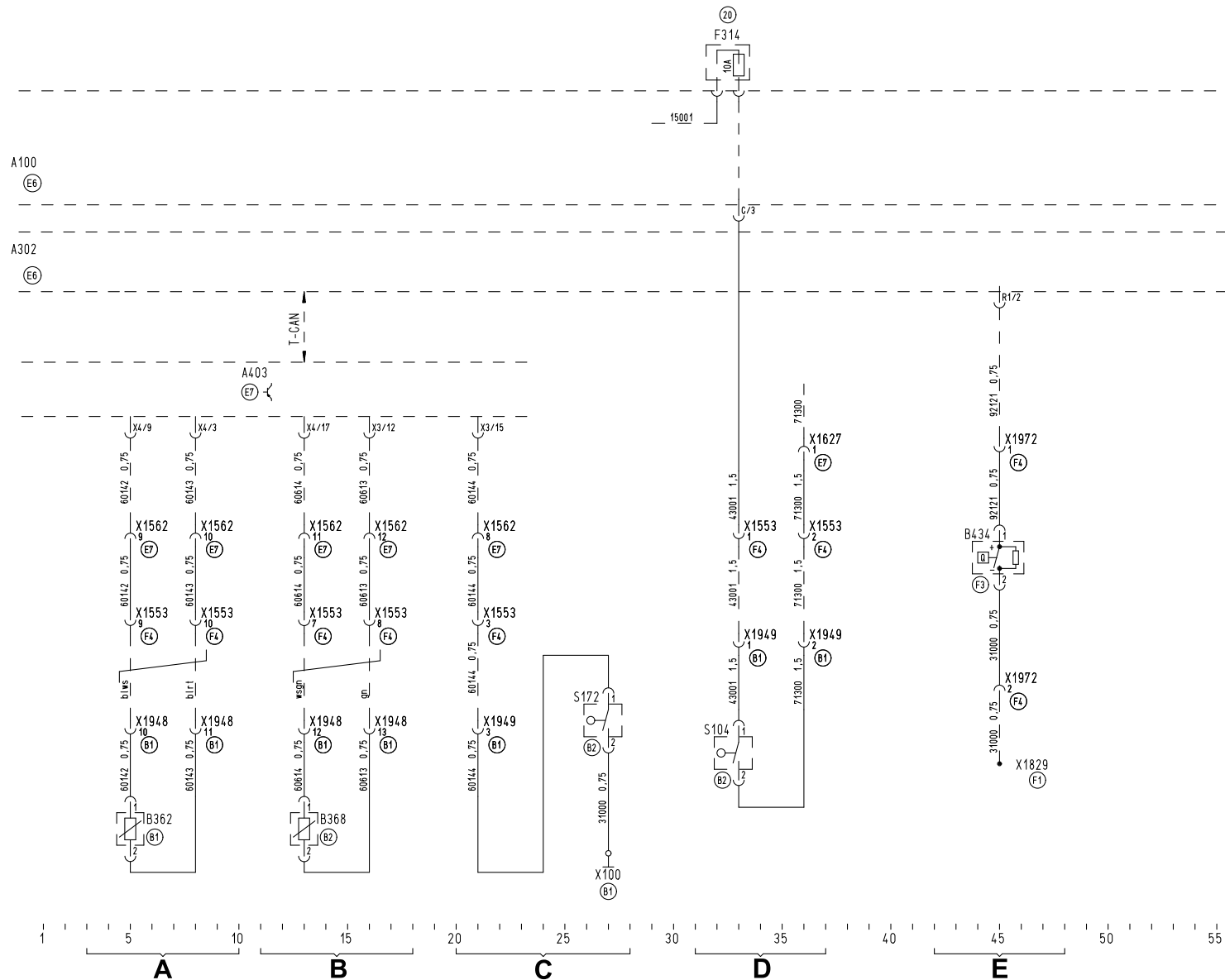
Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right



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

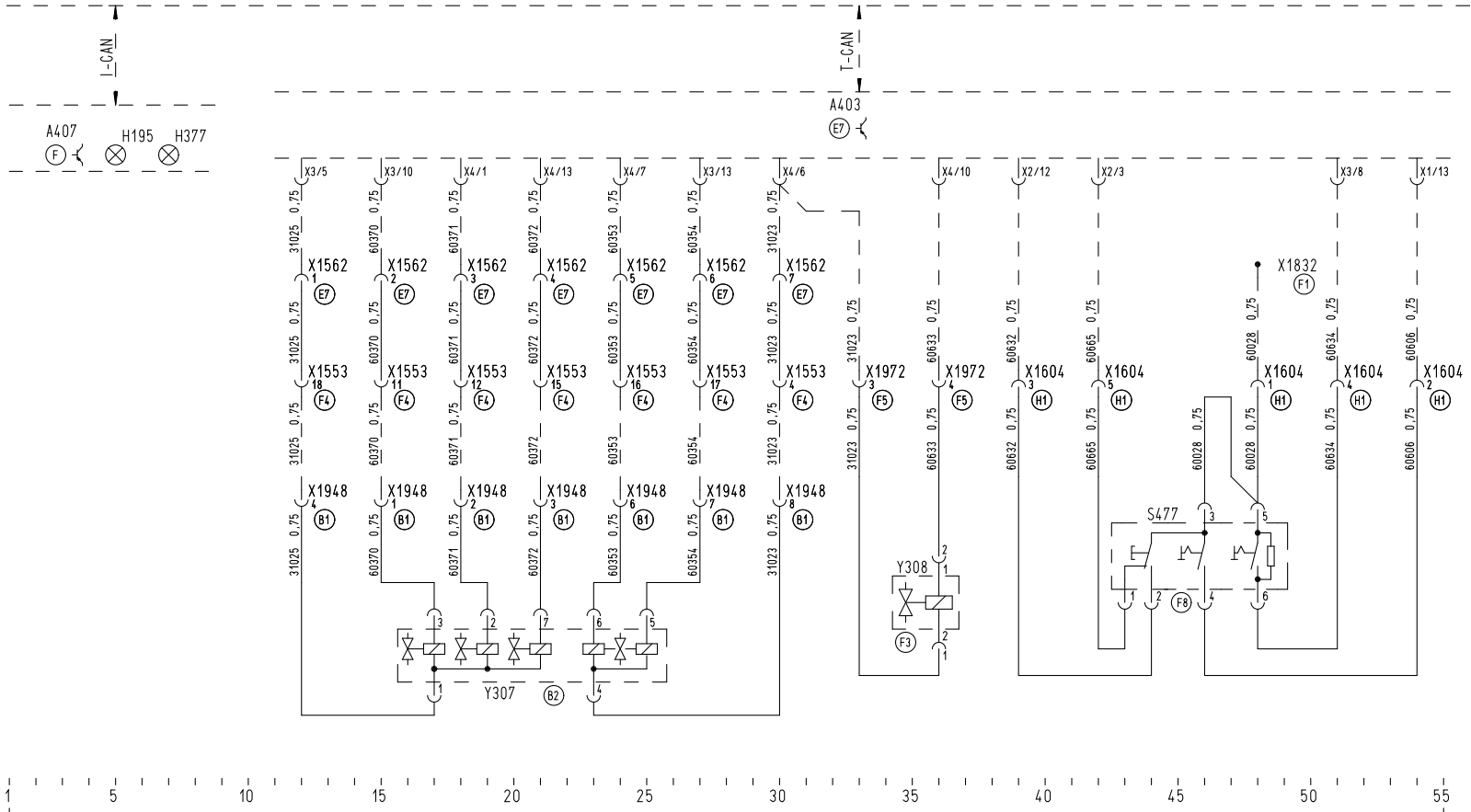
Marking of mounting positions

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

Wiring diagram no. 81.99192.2835 Sheet 1 of 2

A100
E6

A302
E6



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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

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

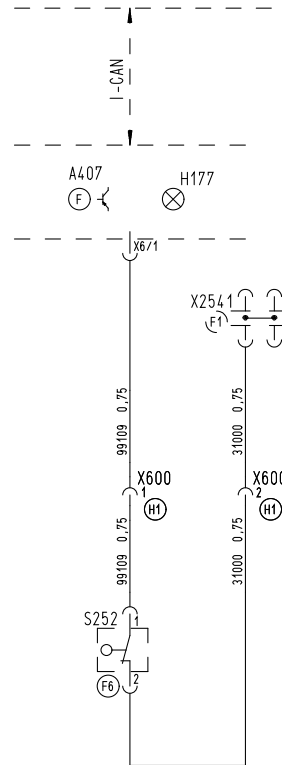
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓁ Engine | ⓕⓗ Passenger seat |
| ⒷⓂ Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| ⒸⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒸⓇ Entrance right | ⓕⓗⓂ A-pillar on driver's side |
| ⒸⓈ Entrance left | ⓕⓇⓁ B-pillar on passenger's side |
| Ⓔⓖ Central electrics area | ⓕⓇⓂ A-pillar on passenger's side |
| ⒺⓇ Control unit racks | ⓕⓁ Ceiling/roof |
| ⒺⓈ Rear wall of cab | ⓕⓃ Front axle |
| ⓕ Instrument panel | ⓕⓅ Rear axle |
| ⓕⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⓕⓇⓂ Steering wheel/column | ⓕⓇⓂ Rear part of frame |
| ⓕⓇⓃ Foot pedals | ⓕⓈⓁ Door left |
| ⓕⓇⓁ Front wall, inside left | ⓕⓈⓂ Door right |
| ⓕⓇⓂ Front wall, inside right | |

Wiring diagram no. 81.99192.1374 Sheet 1 of 1

A100
ⓔⓑ

A302
ⓔⓑ



A

K 90

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

(I) to earth of consumers in frame

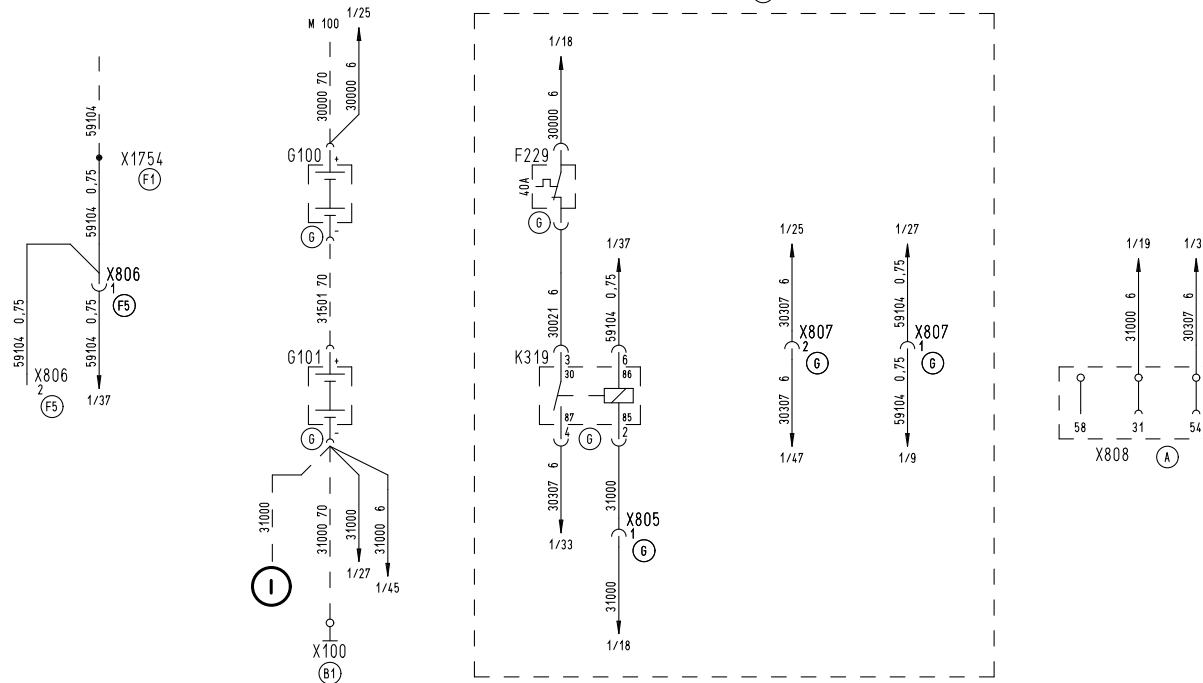
Note:

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

Wiring diagram no. 81.99192.2616 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

K 90

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

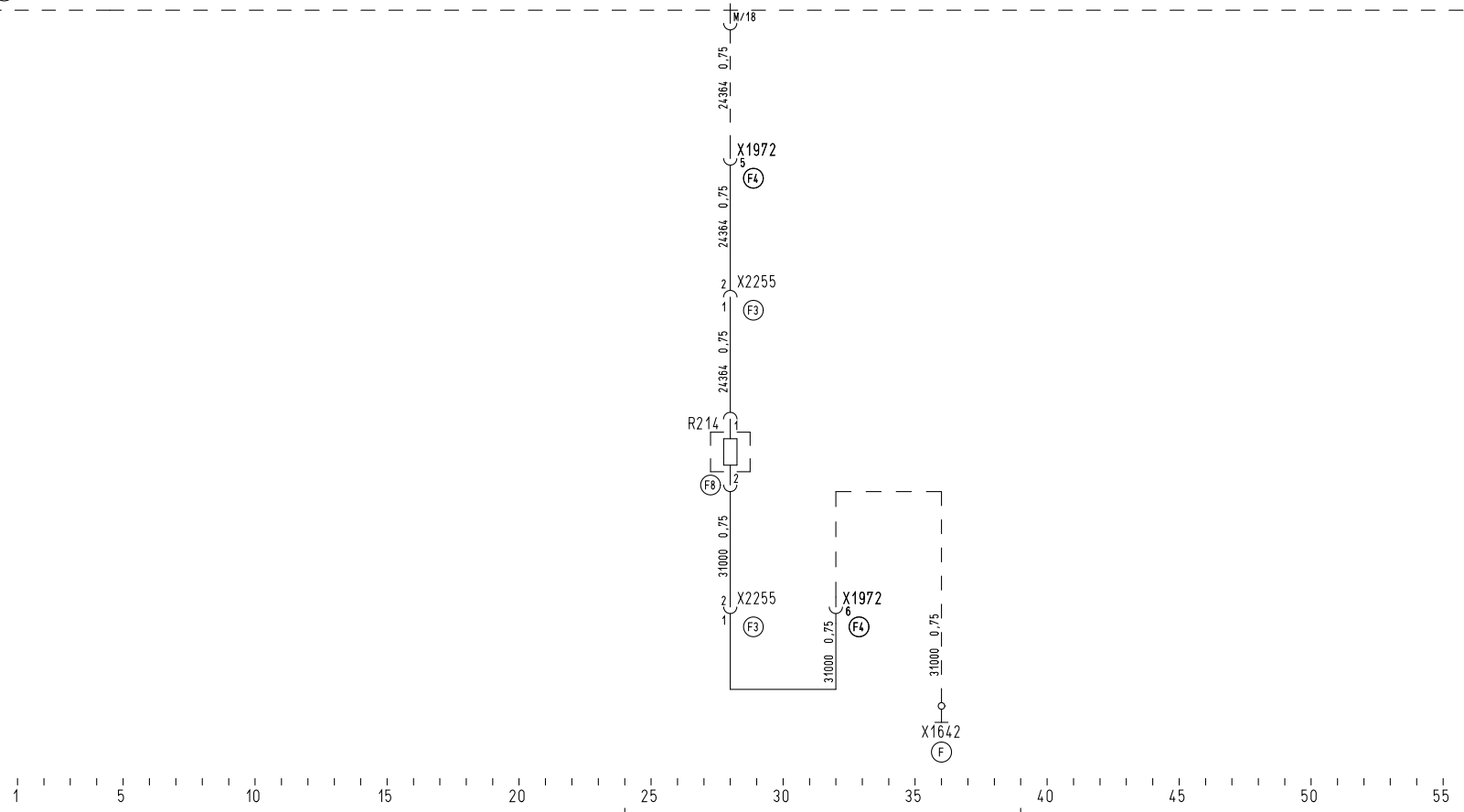
Marking of mounting positions

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

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

A100
 (E6)

A302
 (E6)



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

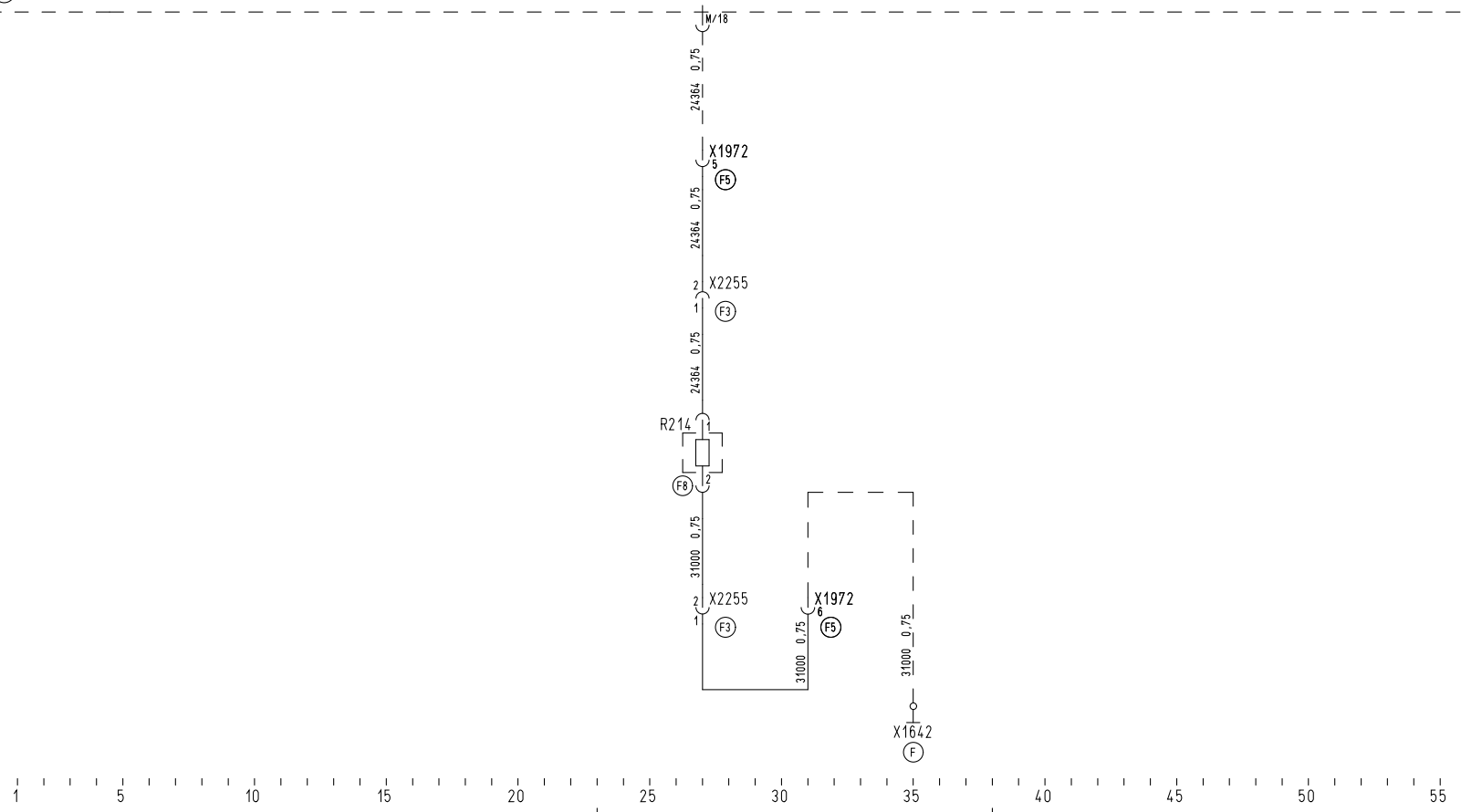
Marking of mounting positions

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

Wiring diagram no. 81.99192.2690 Sheet 1 of 1

A100


A302

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

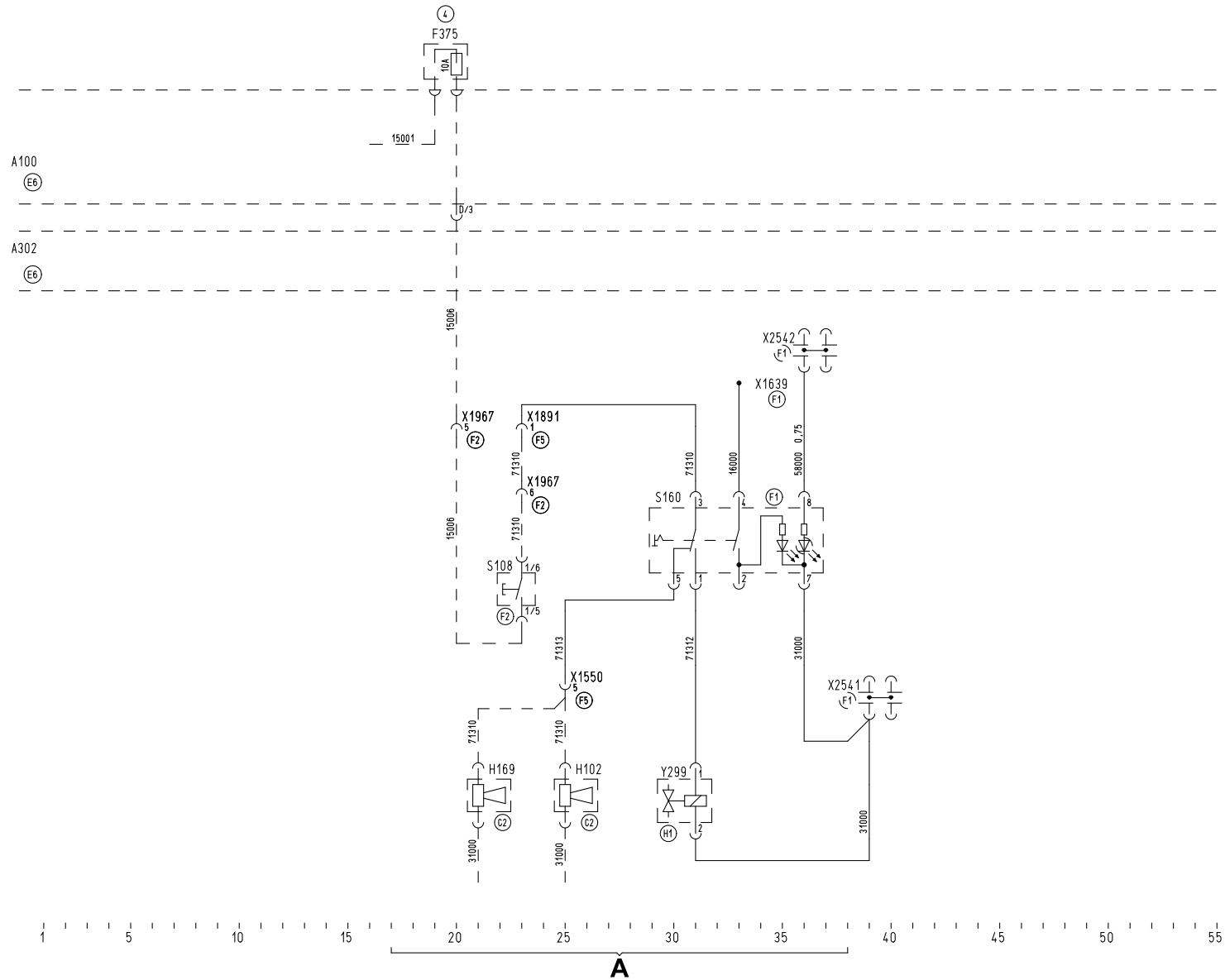
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1375 Sheet 1 of 1



K 90

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

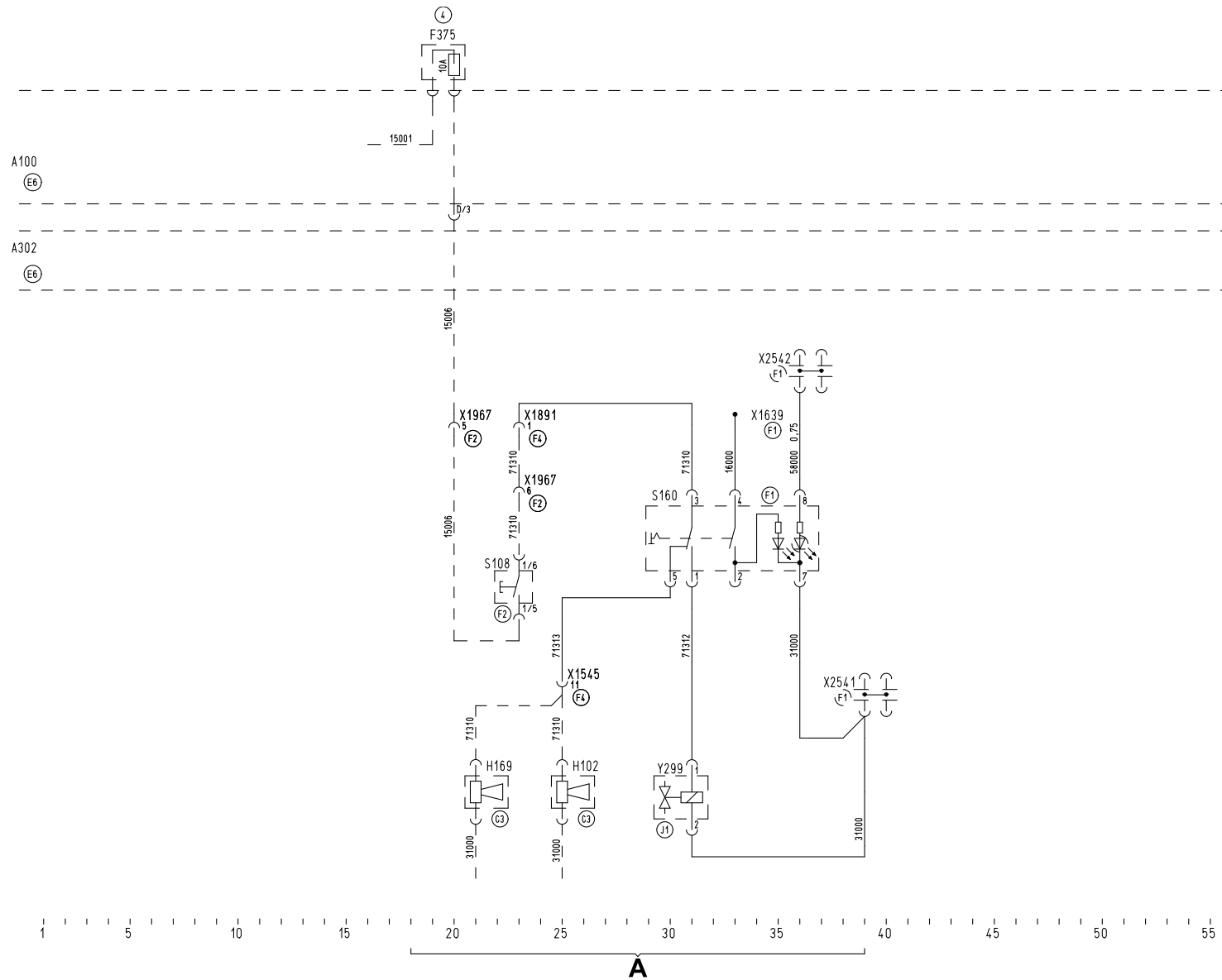
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1376 Sheet 1 of 1



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

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

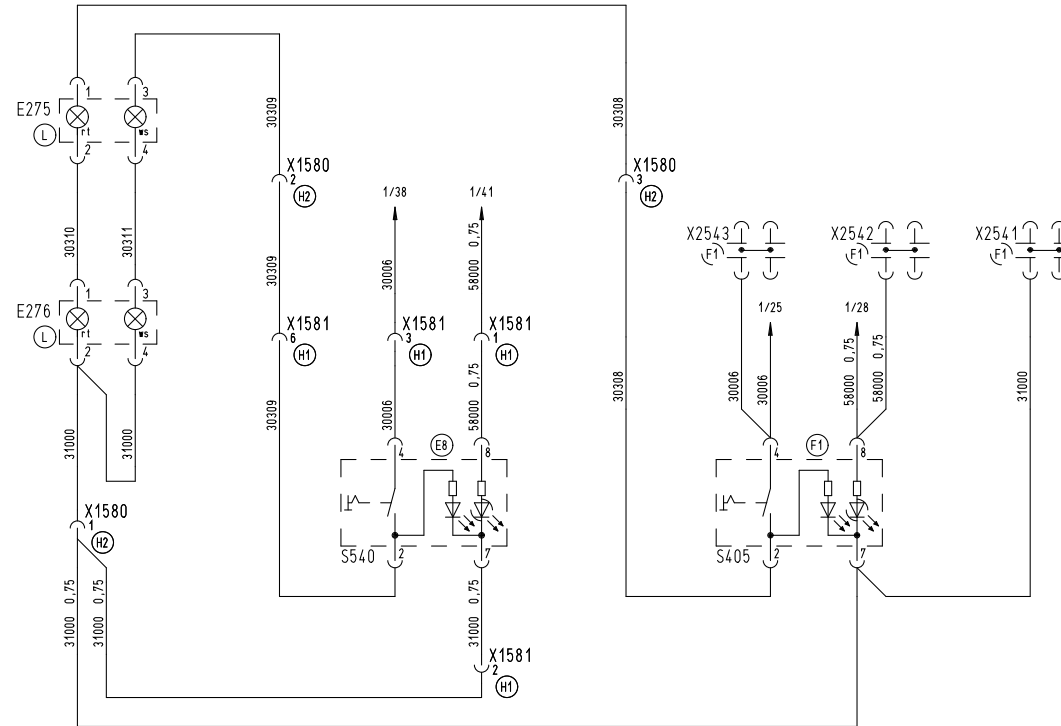
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1377 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

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

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

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

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

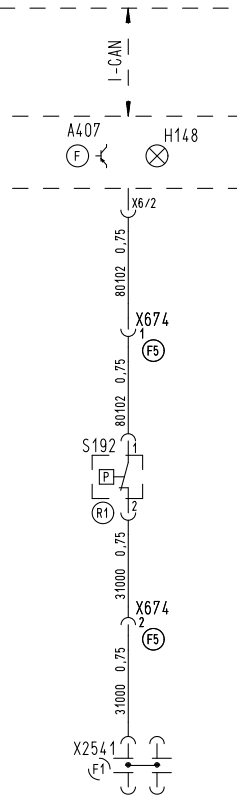
Marking of mounting positions

- (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

Wiring diagram no. 81.99192.1379 Sheet 1 of 1

A100


A302

A

Air conditioning unit

Legend

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

Change status: 04.01

**A = Power supply, water timing valve,
internal temperature sensor**

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

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

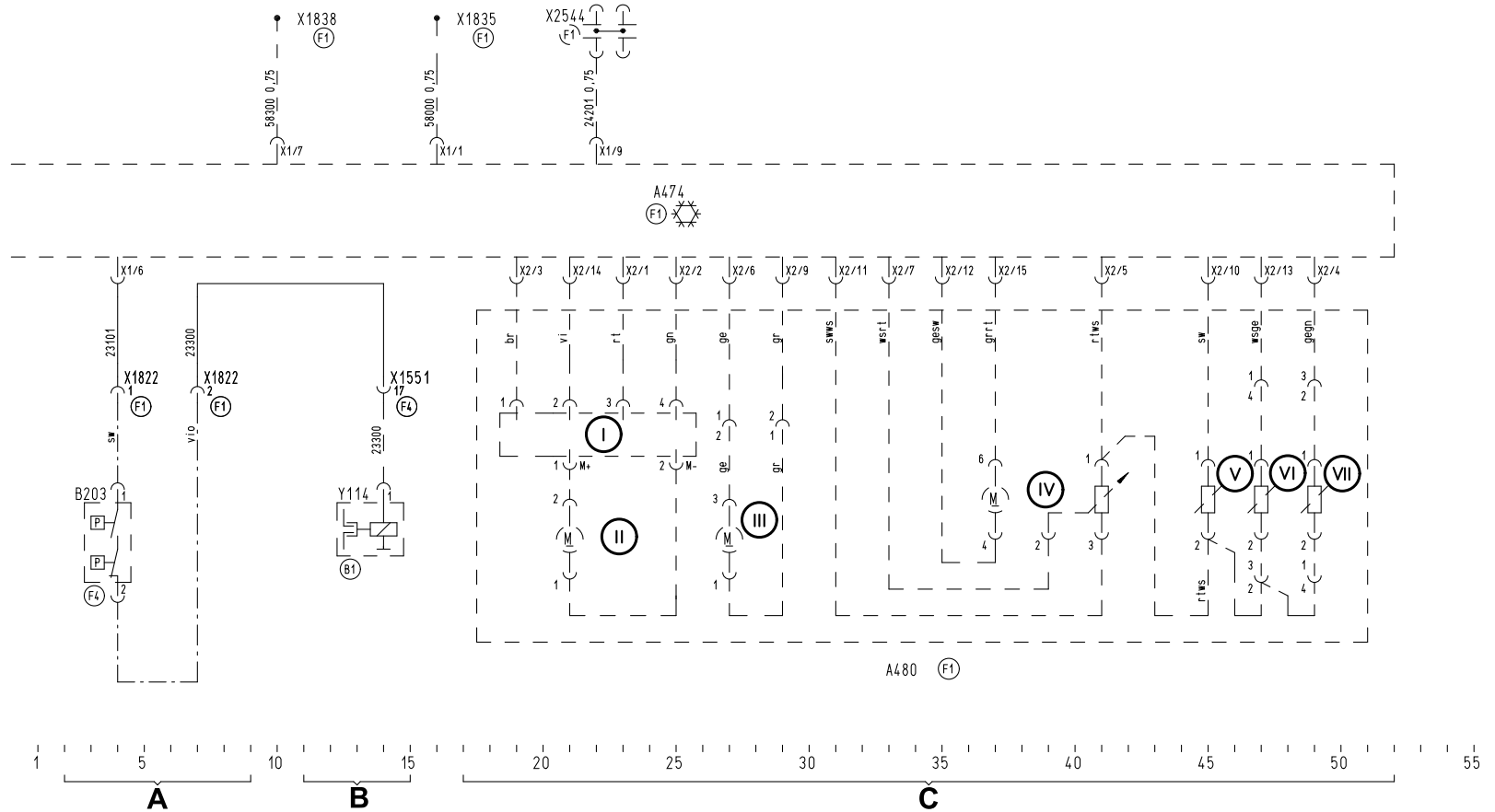
Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ1 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ1 Control unit racks
- Ⓔ2 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓖ Driving seat
- Ⓖ1 Passenger seat
- Ⓖ2 Control panel
- Ⓖ3 Battery box
- Ⓖ4 B-pillar on driver's side
- Ⓖ5 A-pillar on driver's side
- Ⓖ6 B-pillar on passenger's side
- Ⓖ7 A-pillar on passenger's side
- Ⓖ8 Ceiling/roof
- Ⓖ9 Front axle
- Ⓖ10 Rear axle
- Ⓖ11 Front part of frame
- Ⓖ12 Rear part of frame
- Ⓖ13 Door left
- Ⓖ14 Door right
- Ⓘ Clock-pulse regulator
- Ⓙ Blower
- Ⓚ Fresh/circulating air
- Ⓚ1 HK bypass
- Ⓚ2 Heat exchanger sensor
- Ⓚ3 External temperature sensor
- Ⓚ4 Condenser sensor

Wiring diagram no. 81.99192.1380 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Fuel filter heater

Legend

Wiring diagram no. **81.99192.2487** Sheet 1 of 1
 Change status: 05.00

A = Fuel filter heating

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

F156 (140) Fuse, fuel filter heating

F355 (132) Main fuse (terminal 30-2)

K177 (299) Relay, fuel filter heating

R110 (147) Fuel filter heating 1

X1903 Threaded bolt M6 (MP box)

X1904 Threaded bolt M6 (MP box)

X1988 Threaded bolt M5 (MP box)

X1989 Threaded bolt M5 (MP box)

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

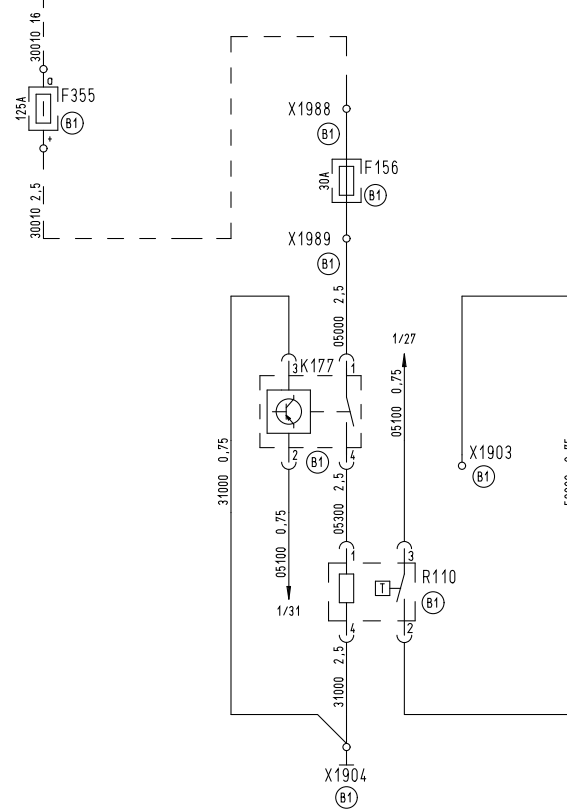
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2487 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



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

A

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

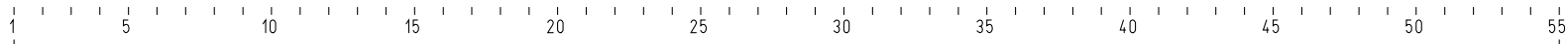
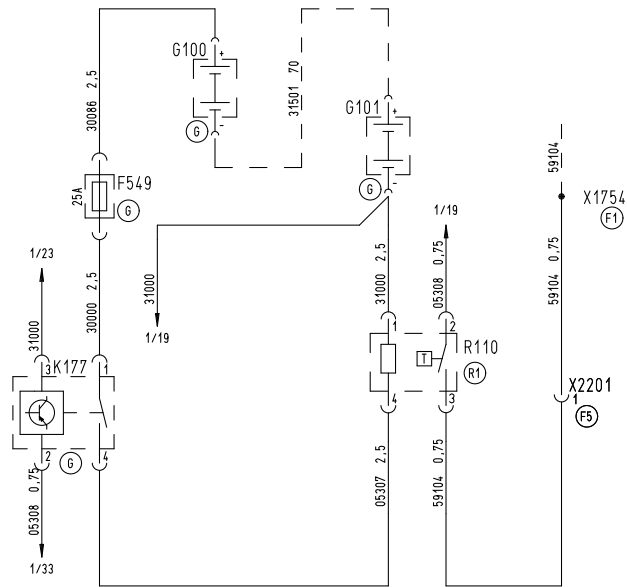
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2665 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

K 90

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

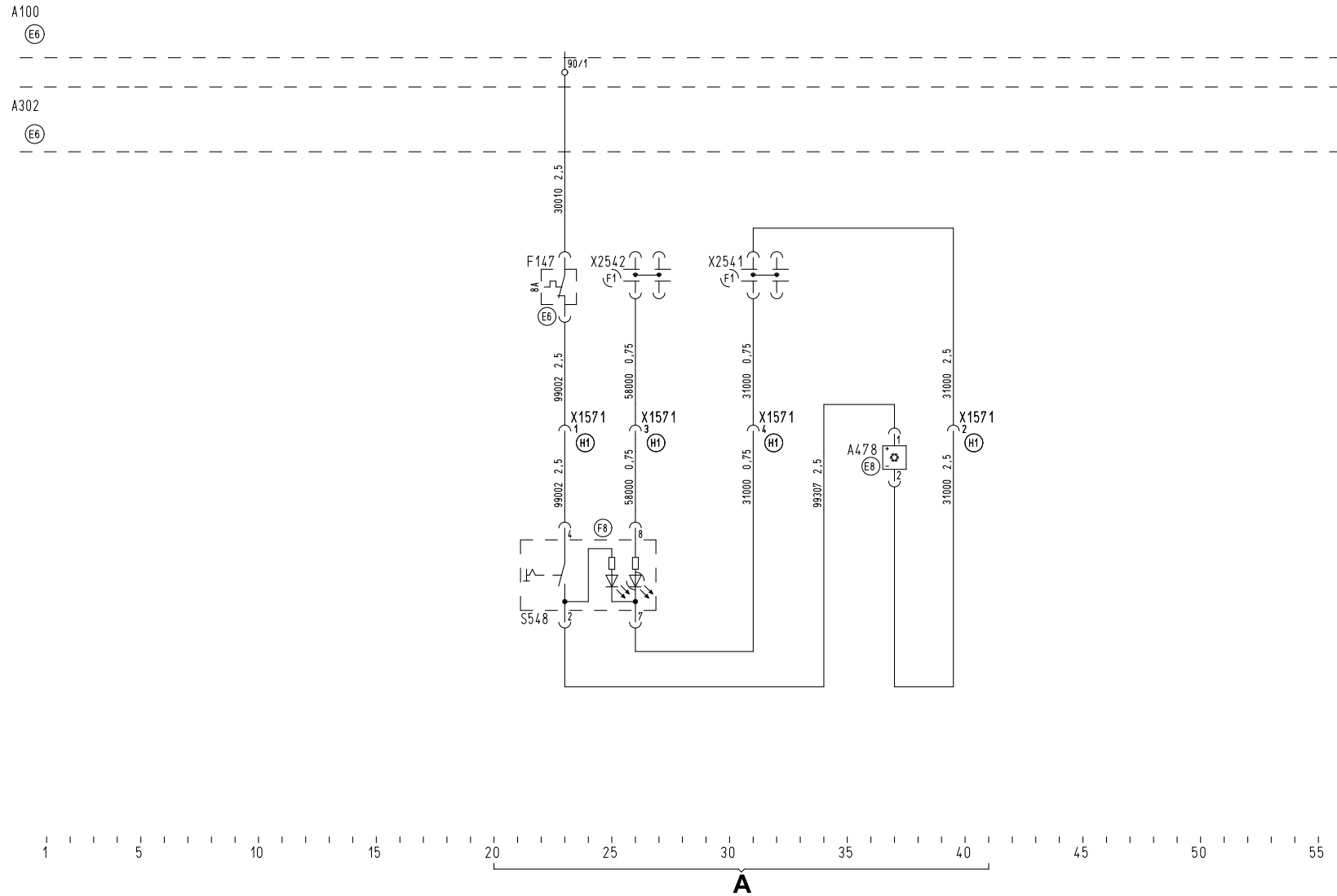
- S548** (521) Switch, refrigerator

- 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

Wiring diagram no. 81.99192.1382 Sheet 1 of 1



Special customised module

Legend

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

Change status: 04.01

A = ZDR interface (FFR)

B = ZDR interface (KSM)

C = Diagnosis

D = Power supply

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A312 (397) Customer-specific control module

A403 (339) Vehicle management computer

F428 (118) Fuse, special customer module (terminal 15)

F429 (118) Fuse, special customer module (terminal 30)

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

X1996 Stvd. intermediate speed control interface (FFR)

X1997 Stvd. intermediate speed control interface (KSM)

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ H1 B-pillar on driver's side

Ⓕ H2 A-pillar on driver's side

Ⓕ J1 B-pillar on passenger's side

Ⓕ J2 A-pillar on passenger's side

Ⓕ L Ceiling/roof

Ⓕ N Front axle

Ⓕ P Rear axle

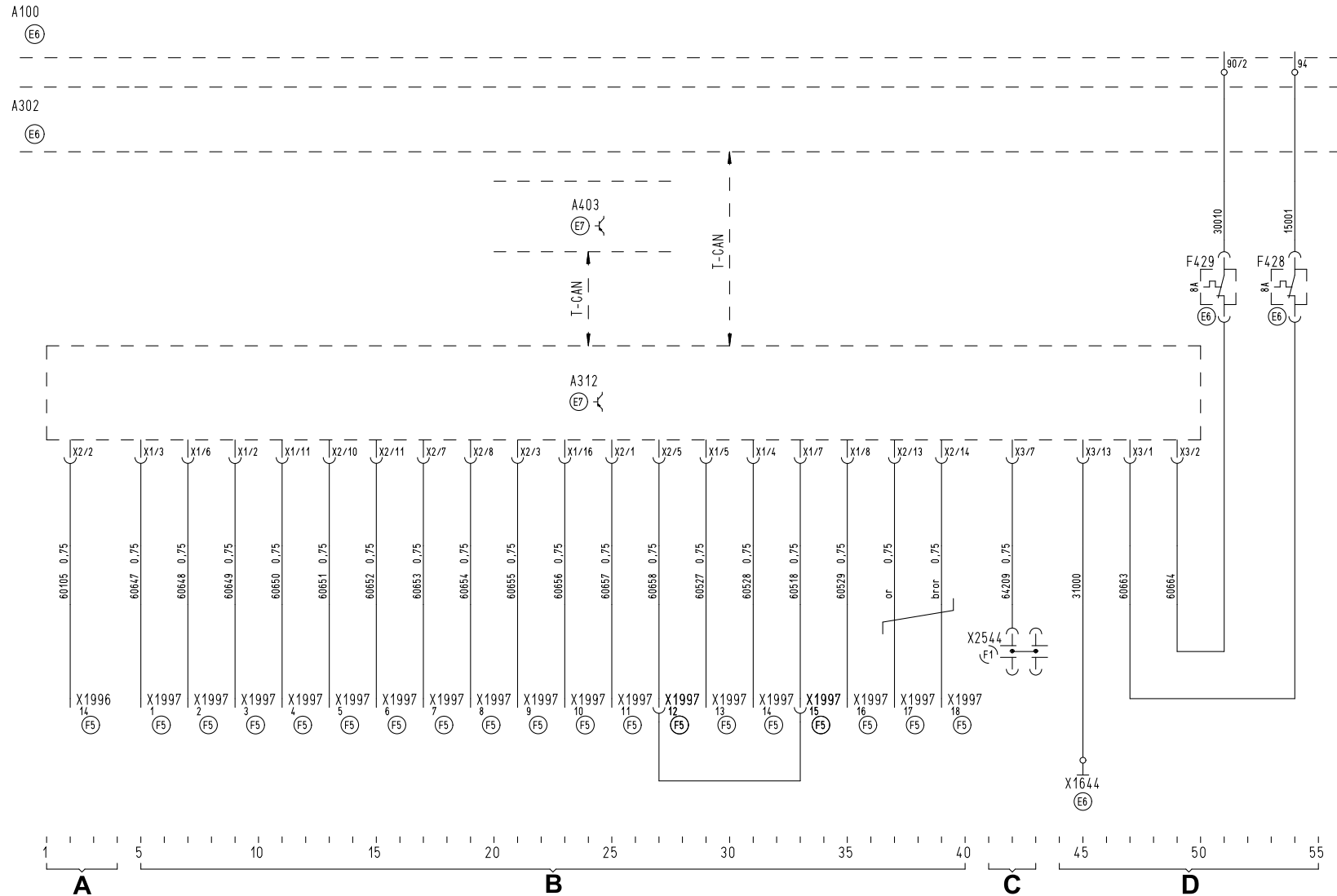
Ⓕ R1 Front part of frame

Ⓕ R2 Rear part of frame

Ⓕ S1 Door left

Ⓕ S2 Door right

Wiring diagram no. 81.99192.1381 Sheet 1 of 1



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

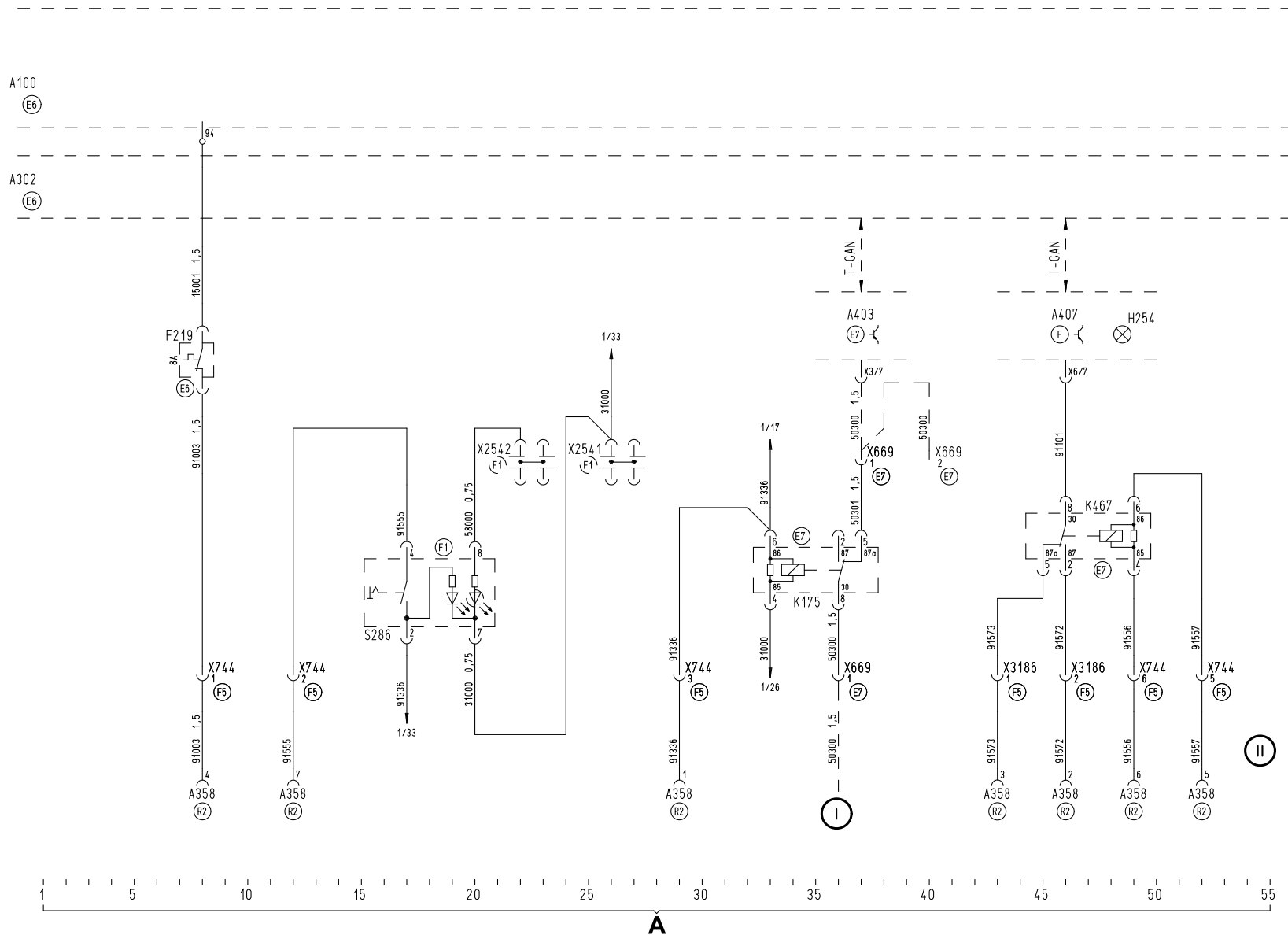
Marking of mounting positions

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

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

- Ⓕ Separate series Stvd. **X669** and connect "Kbs." cab-tailgate between them
- Ⓖ Cables 91003, 91336, 91555, 91556, 91557, 91572 and 91573 lead to 7-pin terminal casing at the end of the frame (rolled up)

Wiring diagram no. 81.99192.1537 Sheet 1 of 1



Cargo area lighting

Legend

Wiring diagram no. **81.99192.1384** Sheet 1 of 1
 Change status: 04.01

A = Cargo space lighting

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

F178 (118) Fuse, cargo space lighting

S226 (541) Switch, cargo space lighting

X1572 Stvd. cargo area lighting

X2541 (246) Potential distributor, 21-pin line 31000

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ H1 B-pillar on driver's side

Ⓕ H2 A-pillar on driver's side

Ⓕ J1 B-pillar on passenger's side

Ⓕ J2 A-pillar on passenger's side

Ⓕ L Ceiling/roof

Ⓕ N Front axle

Ⓕ P Rear axle

Ⓕ R1 Front part of frame

Ⓕ R2 Rear part of frame

Ⓕ S1 Door left

Ⓕ S2 Door right

Ⓘ Scope of delivery, body manufacturers

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

Headlight levelling (LL)

Legend

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

Change status: -

A = Headlight levelling

A100 (255) Central fuse, relay and terminal block

A187 (411) Headlights, left

A188 (412) Headlights, right

A302 (352) Central computer 2

M117 (A411) Actuator motor, headlight levelling, left

M118 (A412) Actuator motor, headlight levelling, right

R109 (136) Positioning potentiometer, headlight levelling

X1545 Stvd. front region, left

X1550 Stvd. front region, right

X1835 Crimped connector, line 58000

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓔ Bumper

Ⓕ Entrance right

Ⓖ Entrance left

Ⓔ Central electrics area

Ⓖ Control unit racks

Ⓔ Rear wall of cab

Ⓖ Instrument panel

Ⓖ Central part

Ⓖ Steering wheel/column

Ⓖ Foot pedals

Ⓖ Front wall, inside left

Ⓖ Front wall, inside right

Ⓖ Parking light, left

Ⓖ Parking light, right

Ⓖ Driving seat

Ⓖ Passenger seat

Ⓖ Control panel

Ⓖ Battery box

Ⓖ B-pillar on driver's side

Ⓖ A-pillar on driver's side

Ⓖ B-pillar on passenger's side

Ⓖ A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

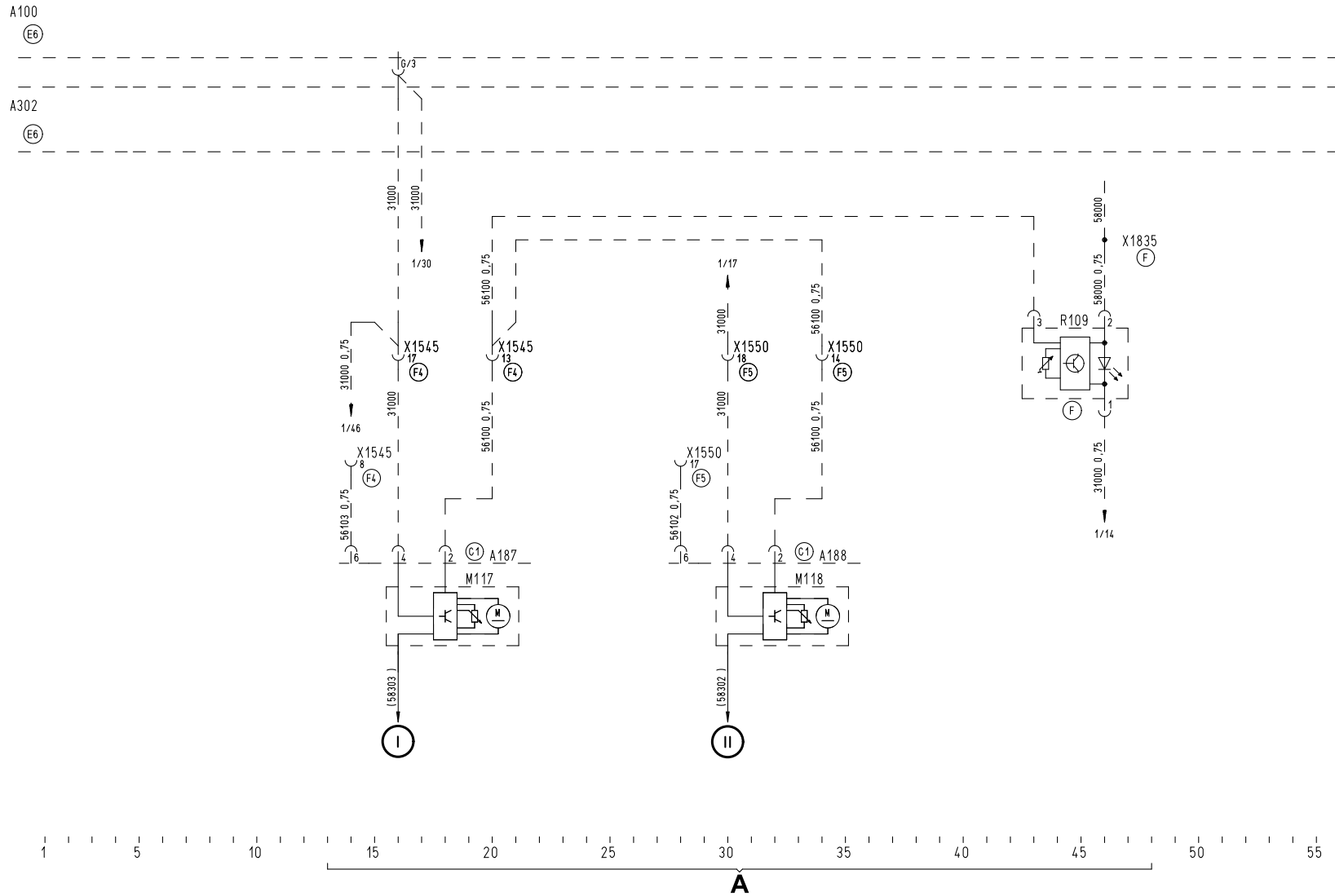
Ⓖ Front part of frame

Ⓖ Rear part of frame

Ⓖ Door left

Ⓖ Door right

Wiring diagram no. 81.99192.2477 Sheet 1 of 1



Headlight levelling (RL)

Legend

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

Change status: 02.99

A = Headlight levelling

A100 (255) Central fuse, relay and terminal block

A187 (411) Headlights, left

A188 (412) Headlights, right

A302 (352) Central computer 2

M117 (A411) Actuator motor, headlight levelling, left

M118 (A412) Actuator motor, headlight levelling, right

R109 (136) Positioning potentiometer, headlight levelling

X1545 Stvd. front region, left

X1550 Stvd. front region, right

X1835 Crimped connector, line 58000

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓘ Parking light, left

Ⓙ Parking light, right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

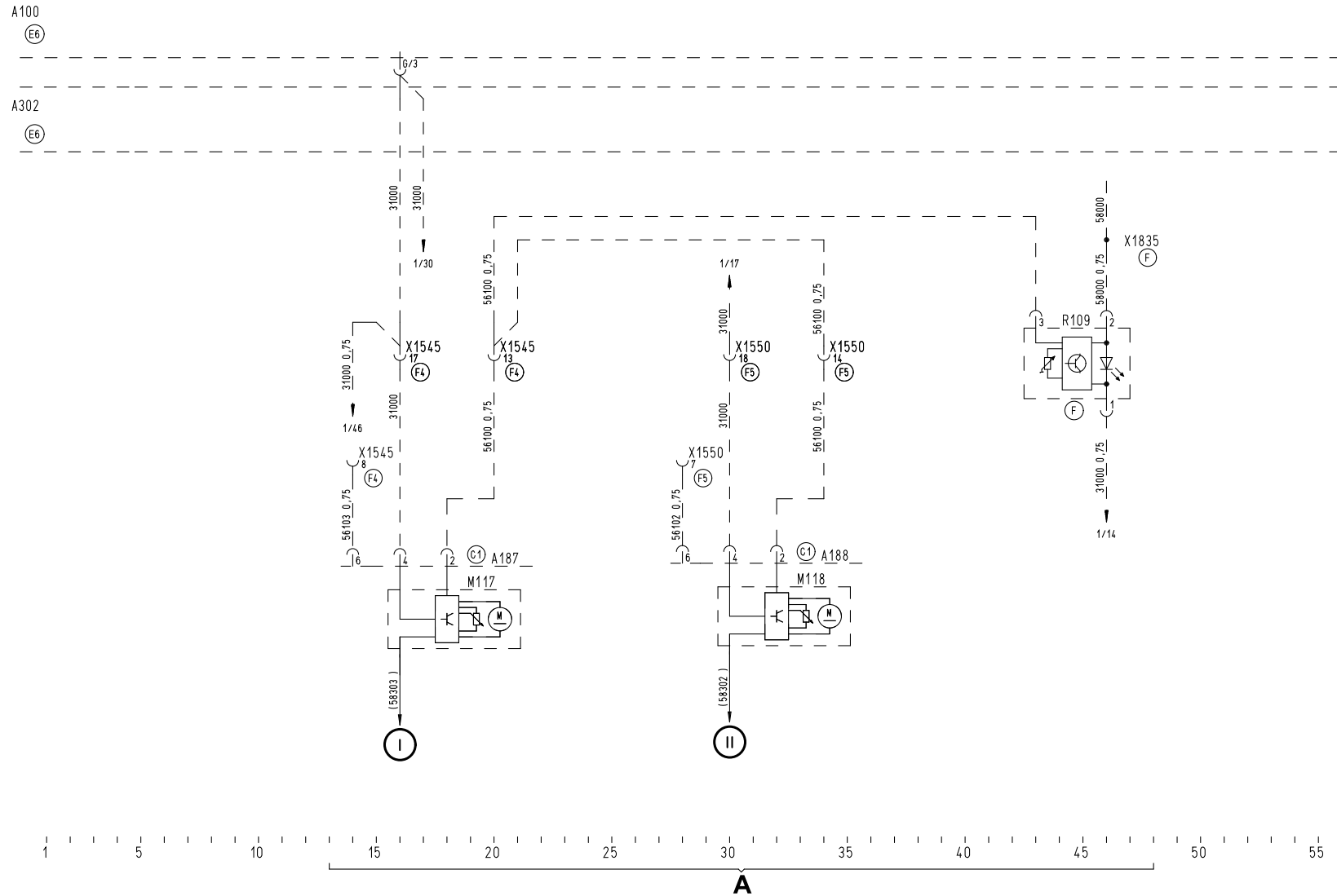
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2445 Sheet 1 of 1



Engine brake, automatic

Legend

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

Change status: 04.01

A = Engine brake, automatic

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A403 (339) Vehicle management computer

S753 (667) Switch, engine brake

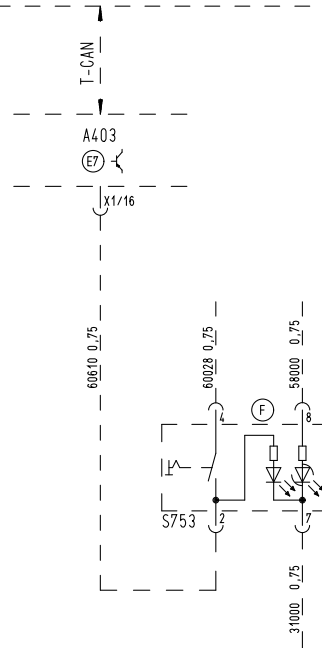
Marking of mounting positions

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

Wiring diagram no. 81.99192.1385 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



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

A

K 90

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

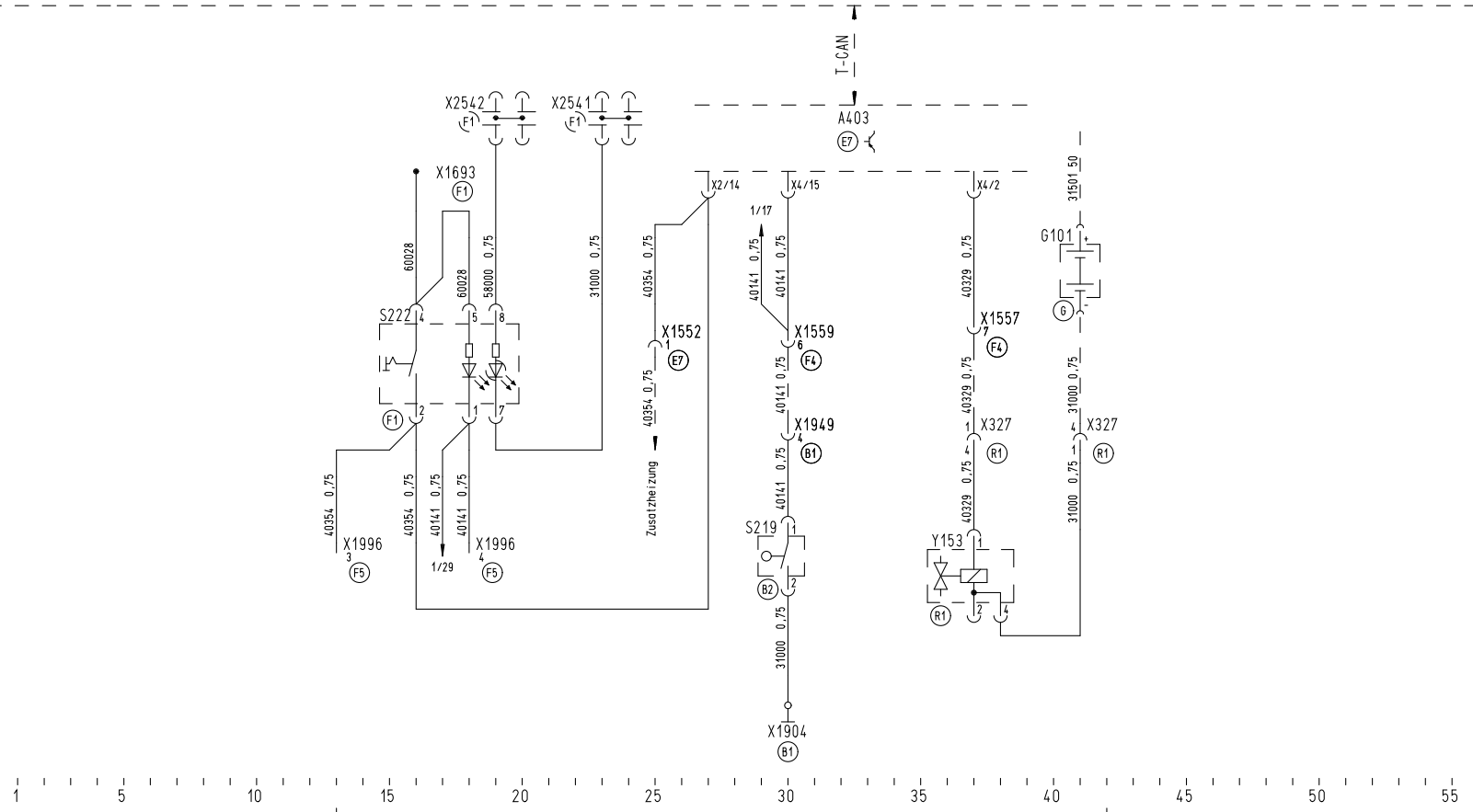
Marking of mounting positions

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

Wiring diagram no. 81.99192.1388 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

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

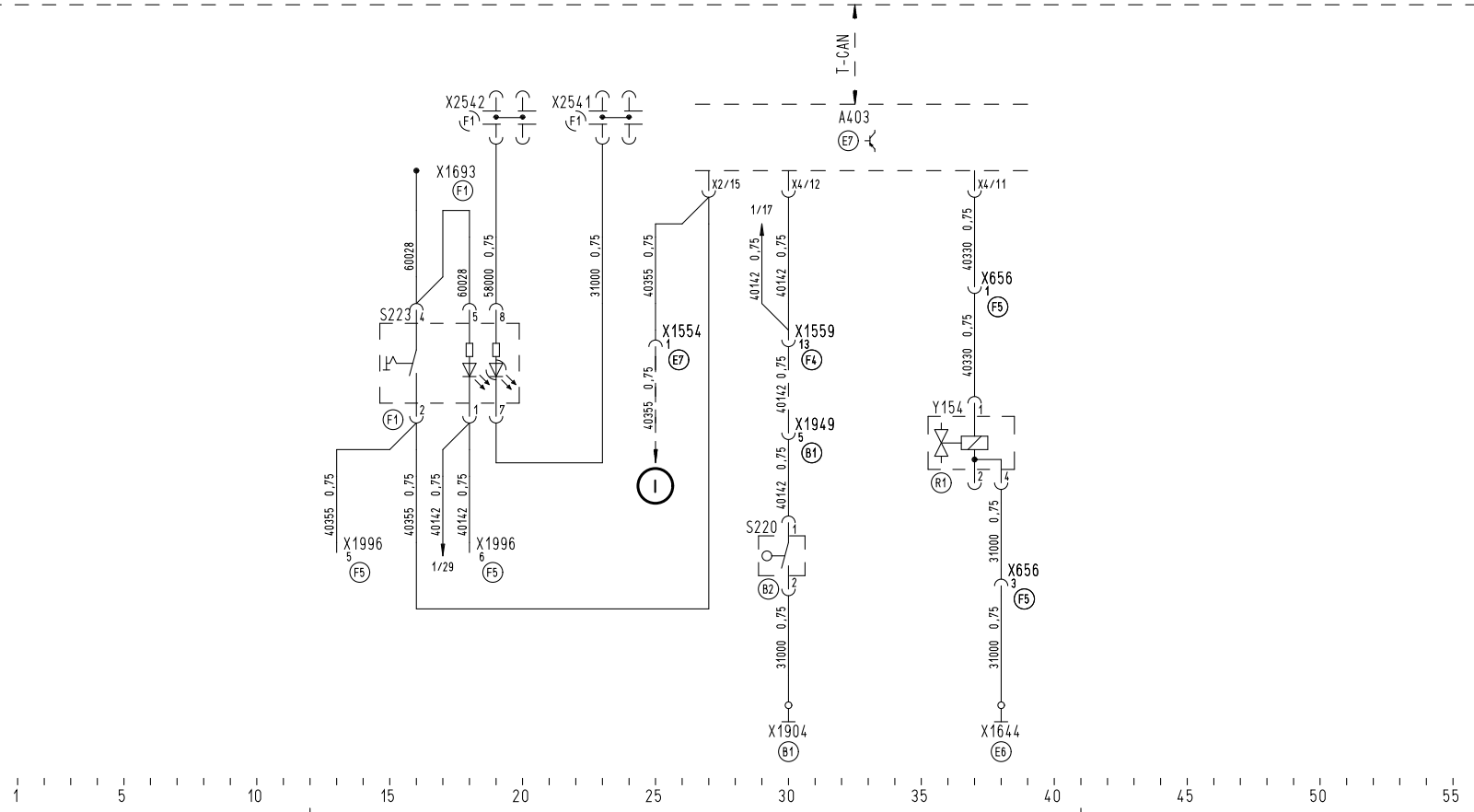
Marking of mounting positions

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

Wiring diagram no. 81.99192.1389 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

K 90

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

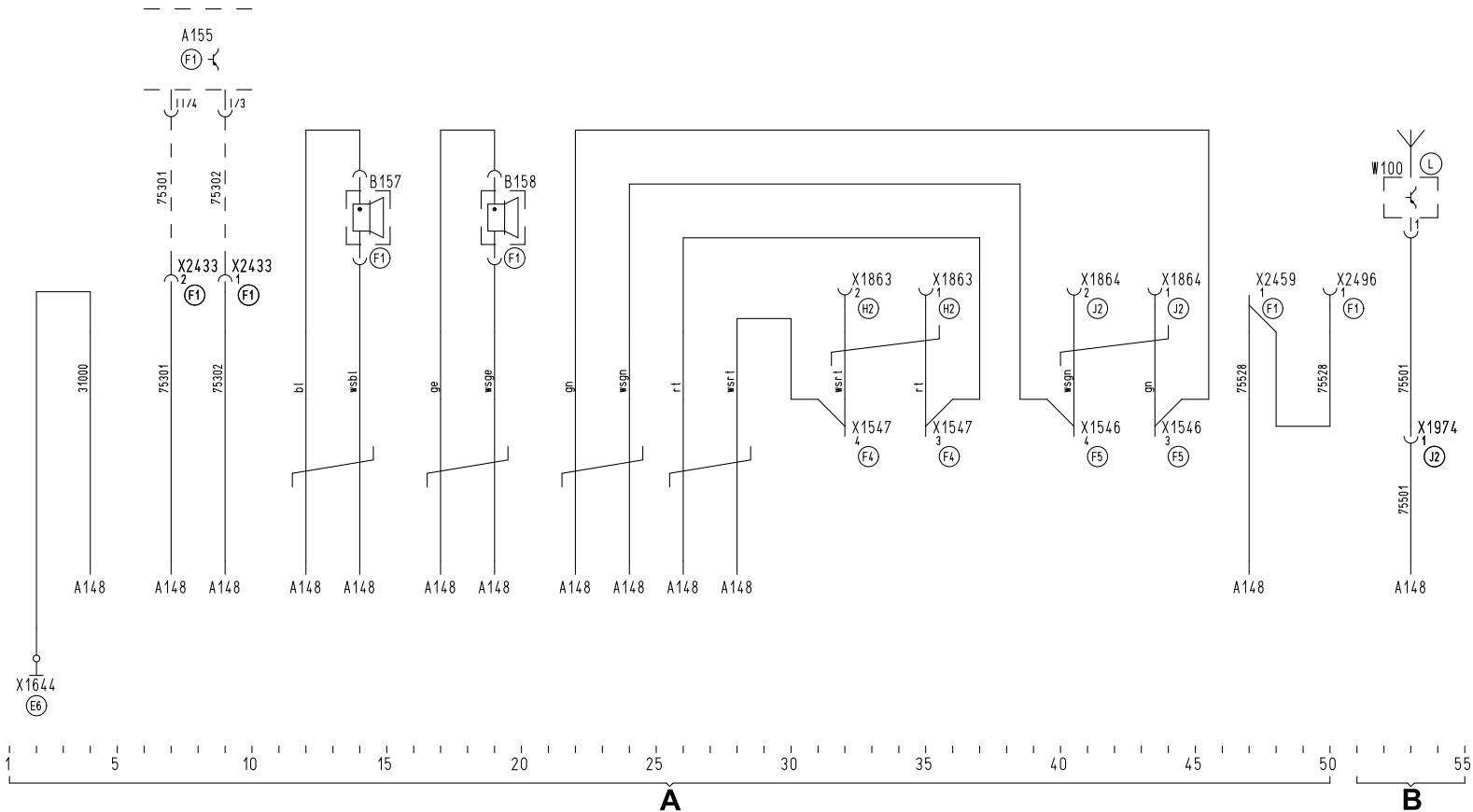
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓂ Engine | ⓕⓗ Passenger seat |
| ⒷⓃ Gearbox | ⓕⓓ Control panel |
| ⒷⓈ Front | ⓕⓔ Battery box |
| ⒷⓈⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒷⓈⓇ Entrance right | ⓕⓗⓂ A-pillar on driver's side |
| ⒷⓈⓁ Entrance left | ⓕⓈⓁ B-pillar on passenger's side |
| ⒷⓕⓂ Central electrics area | ⓕⓈⓂ A-pillar on passenger's side |
| ⒷⓕⓇ Control unit racks | ⓕⓁ Ceiling/roof |
| ⒷⓕⓈ Rear wall of cab | ⓕⓃ Front axle |
| Ⓑⓕ Instrument panel | ⓕⓅ Rear axle |
| ⒷⓕⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⒷⓕⓂ Steering wheel/column | ⓕⓇⓂ Rear part of frame |
| ⒷⓕⓇ Foot pedals | ⓕⓈⓁ Door left |
| ⒷⓕⓇ Front wall, inside left | ⓕⓈⓂ Door right |
| ⒷⓕⓇ Front wall, inside right | |

Wiring diagram no. 81.99192.2475 Sheet 1 of 1

A100


A302

Radio 12V MAN-Sound (LL)

Legend

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

Change status: 11.00

A = Radio

B = Active aerial

C = Loudspeaker

A100 (255) Central fuse, relay and terminal block

A148 Radio/cassette player

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B157 (298) Driver's loudspeaker, front left

B158 (298) Driver's loudspeaker, front right

W100 (173) Radio aerial

X1546 Stvd. door right

X1547 Stvd. door left

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

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X1974 Stvd. for active aerial

X2433 Stvd. adaptation 12V radio

X2459 Stvd. adaptation mute signal

X2496 Stvd. adaptation mute signal lane guard

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

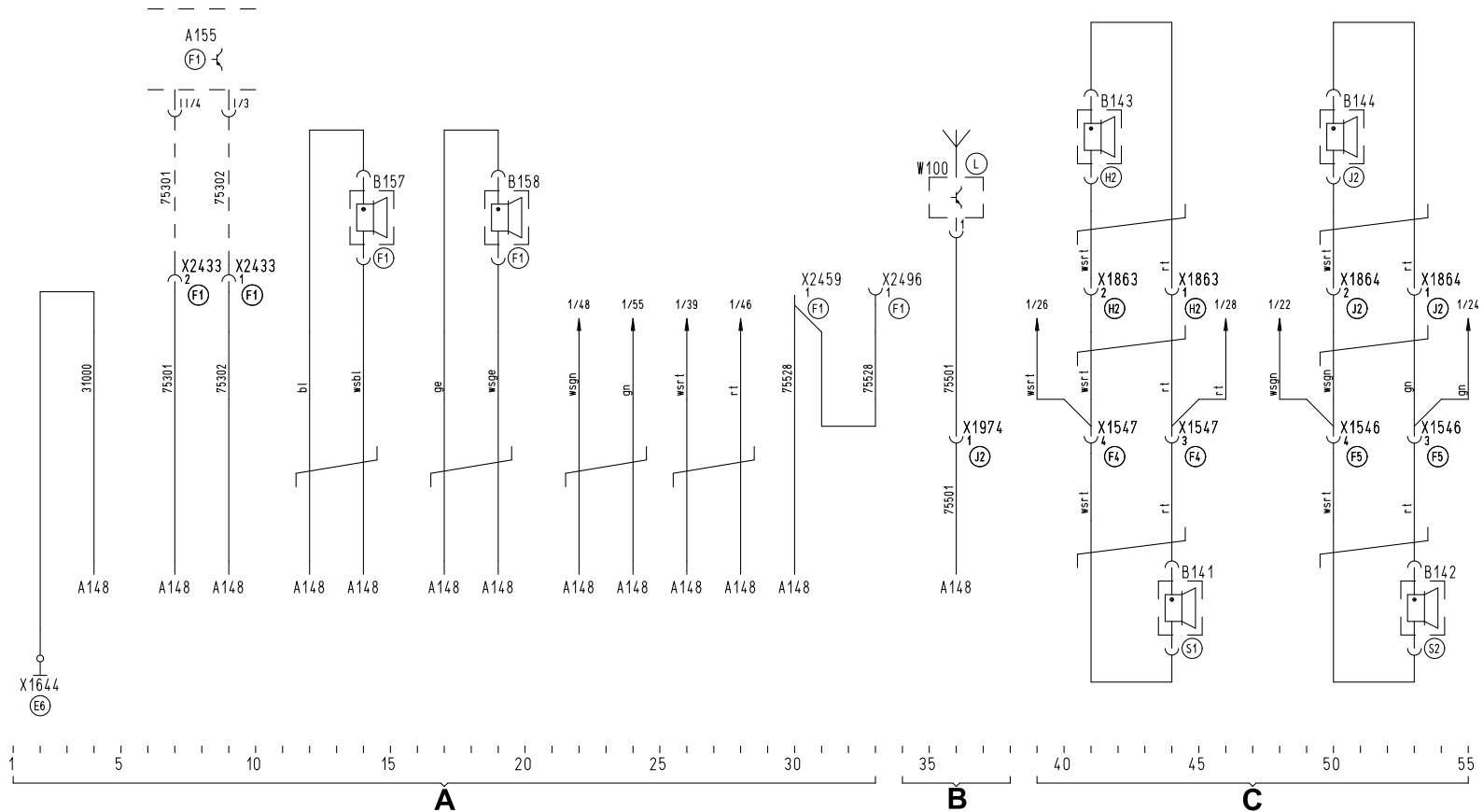
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.2484 Sheet 1 of 1

A100


A302

Radio 12V MAN-Sound (RL)

Legend

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

Change status: 12.00

A = Radio

B = Active aerial

C = Loudspeaker

A100 (255) Central fuse, relay and terminal block

A148 Radio/cassette player

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B157 (298) Driver's loudspeaker, front left

B158 (298) Driver's loudspeaker, front right

W100 (173) Radio aerial

X1546 Stvd. door right

X1547 Stvd. door left

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

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X1974 Stvd. for active aerial

X2433 Stvd. adaptation 12V radio

X2459 Stvd. adaptation mute signal

X2496 Stvd. adaptation mute signal lane guard

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

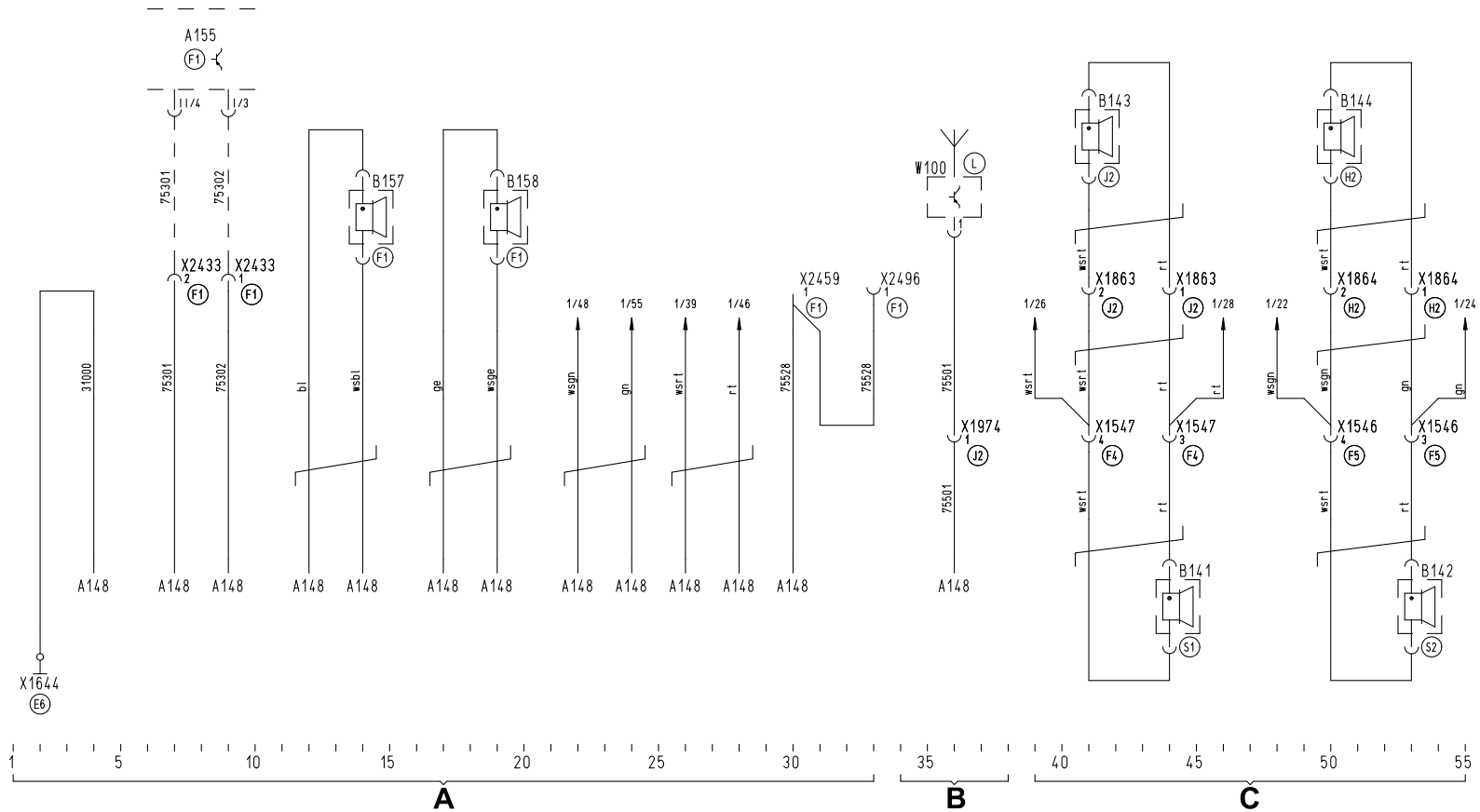
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.2444 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



Radio 24V

Legend

Wiring diagram no. **81.99192.2879** Sheet 1 of 1
Change status: 10.00

A = Active aerial

B = Radio

A100 (255) Central fuse, relay and terminal block

A148 (574) Radio/cassette player

A302 (352) Central computer 2

B157 (298) Driver's loudspeaker, front left

B158 (298) Driver's loudspeaker, front right

W100 (173) Radio aerial

X1639 Soldered connector, line 16000

X1643 Soldered connector, line 58300

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

X1974 Stvd. for active aerial

X2543 (246) Potential distributor, 21-pin line 30006

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

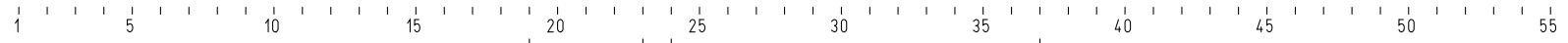
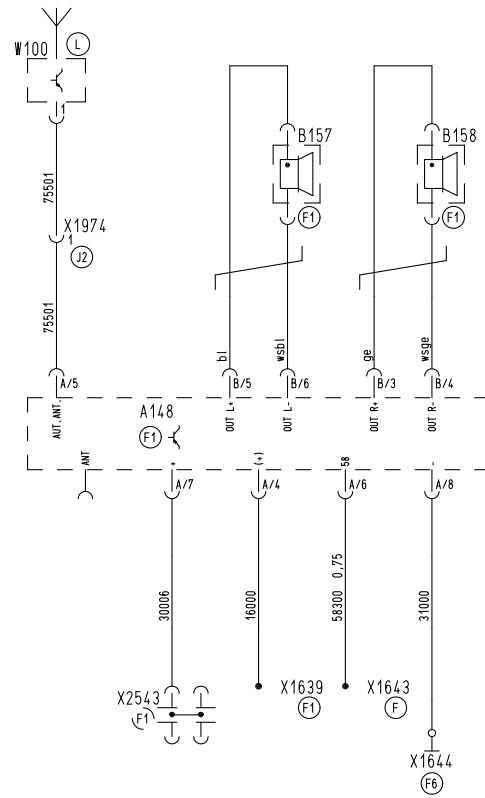
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2879 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

B

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

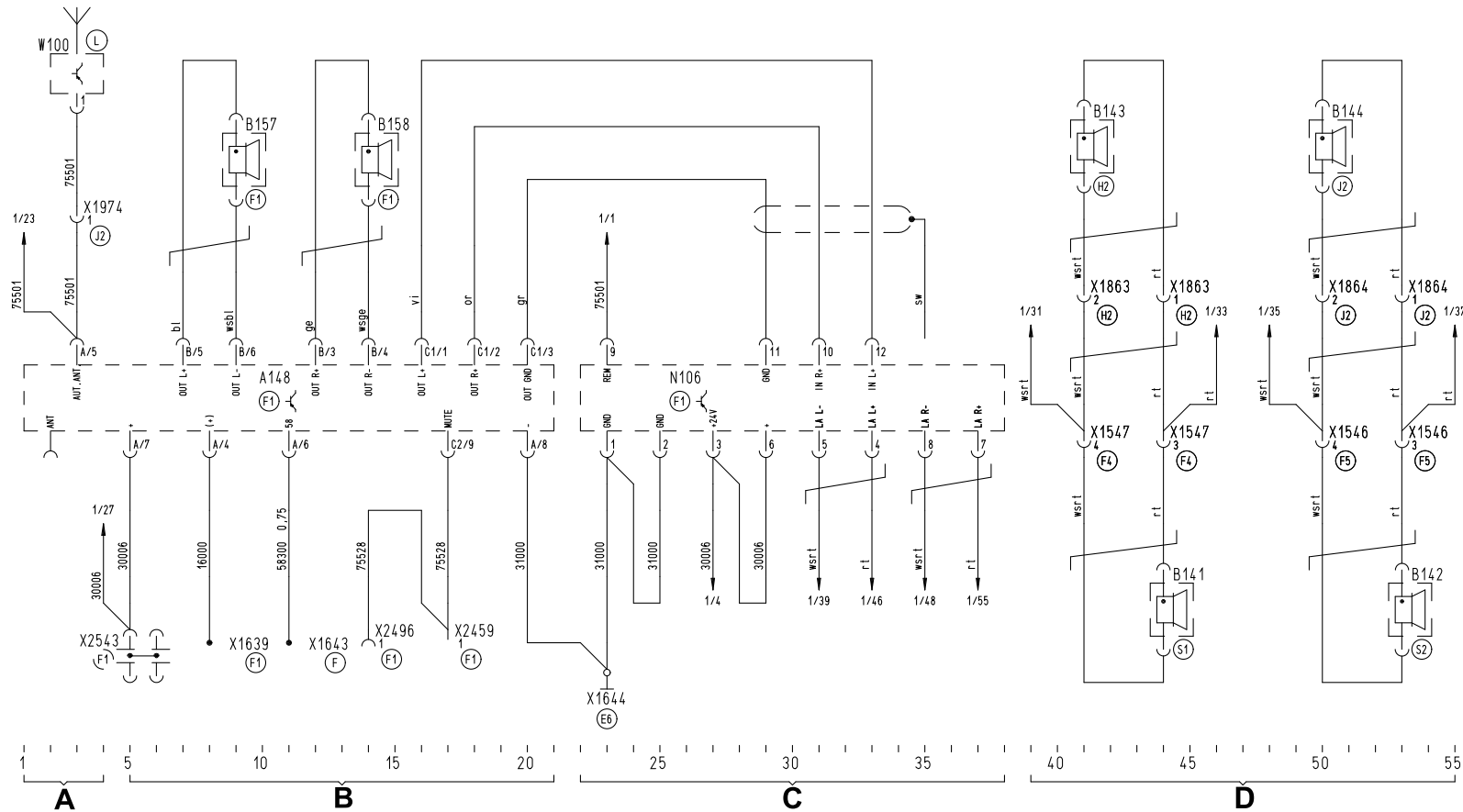
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓂ Engine | ⓕⓗ Passenger seat |
| ⒷⓃ Gearbox | ⓕⓓ Control panel |
| ⒷⓈ Front | ⓕⓔ Battery box |
| ⒷⓈⓁ Bumper | ⓕⓕⓁ B-pillar on driver's side |
| ⒷⓈⓇ Entrance right | ⓕⓕⓇ A-pillar on driver's side |
| ⒷⓈⓁ Entrance left | ⓕⓕⓂ B-pillar on passenger's side |
| ⒷⓕⓈ Central electrics area | ⓕⓕⓇ A-pillar on passenger's side |
| ⒷⓕⓇ Control unit racks | ⓕⓕⓁ Ceiling/roof |
| ⒷⓕⓈ Rear wall of cab | ⓕⓕⓃ Front axle |
| Ⓑⓕ Instrument panel | ⓕⓕⓅ Rear axle |
| ⒷⓕⓁ Central part | ⓕⓕⓁⓁ Front part of frame |
| ⒷⓕⓇ Steering wheel/column | ⓕⓕⓇⓇ Rear part of frame |
| ⒷⓕⓈ Foot pedals | ⓕⓕⓁⓁ Door left |
| ⒷⓕⓁ Front wall, inside left | ⓕⓕⓇⓇ Door right |
| ⒷⓕⓇ Front wall, inside right | |

Wiring diagram no. 81.99192.2855 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



Radio 24V MAN-Sound (RL)

Legend

Wiring diagram no. **81.99192.2856** Sheet 1 of 1
Change status: 09.00

A = Active aerial

B = Radio

C = Amplifier

D = Loudspeaker

A100 (255) Central fuse, relay and terminal block

A148 (574) Radio/cassette player

A302 (352) Central computer 2

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B157 (298) Driver's loudspeaker, front left

B158 (298) Driver's loudspeaker, front right

N106 (127) Audio amplifier

W100 (173) Radio aerial

X1546 Stvd. door right

X1547 Stvd. door left

X1639 Soldered connector, line 16000

X1643 Soldered connector, line 58300

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

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X1974 Stvd. for active aerial

X2459 Stvd. adaptation mute signal

X2496 Adaptation mute signal lane guard

X2543 (246) Potential distributor, 21-pin line 30006

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

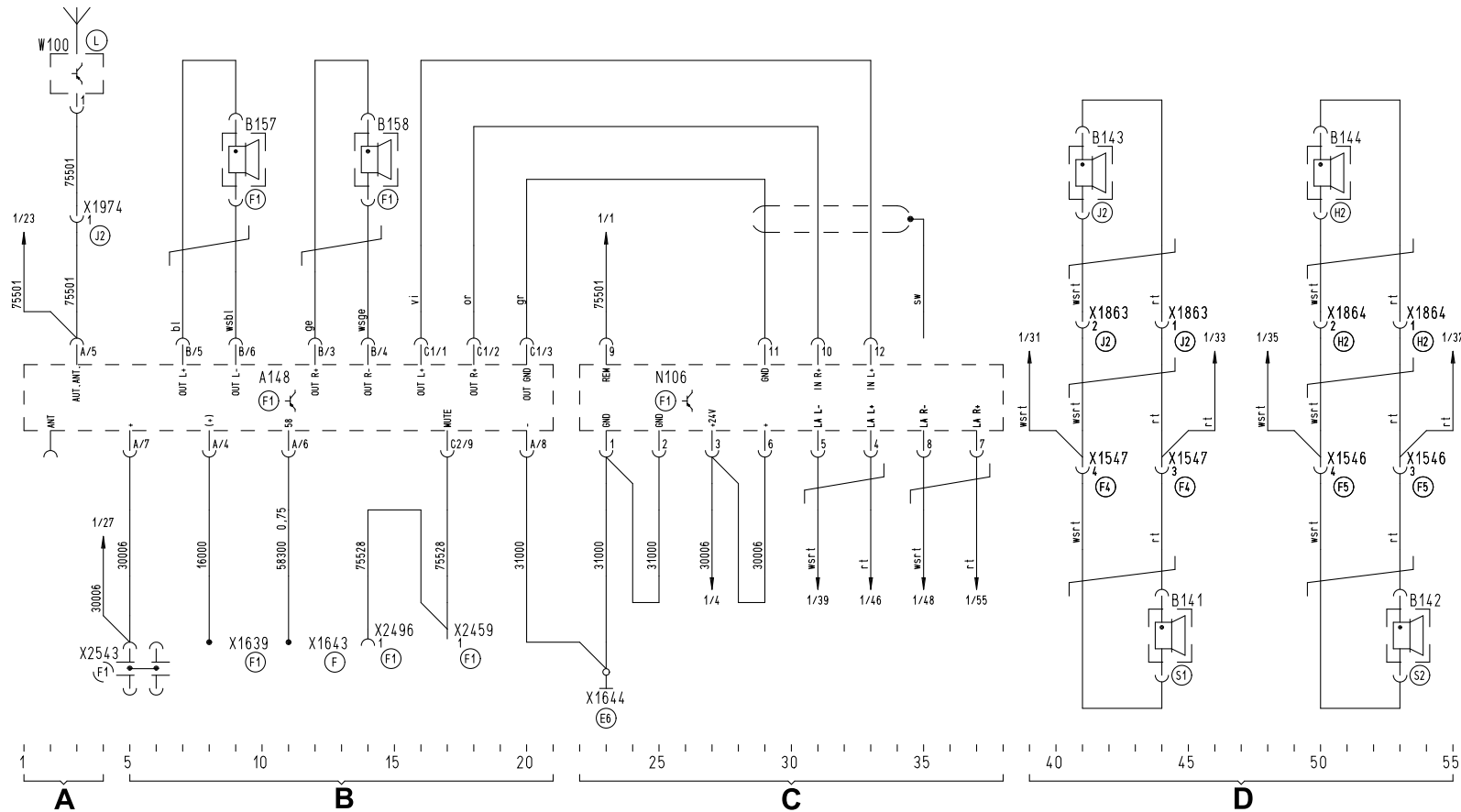
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2856 Sheet 1 of 1

A100
E6

A302
E6



Radio 24V with CD changer and MAN-Sound (LL)

Legend

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

Change status: 09.00

A = Active aerial

B = Radio, CD changer

A100 (255) Central fuse, relay and terminal block

A148 (574) Radio/cassette player

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A568 (546) CD changer

B157 (298) Driver's loudspeaker, front left

B158 (298) Driver's loudspeaker, front right

W100 (173) Radio aerial

X1639 Soldered connector, line 16000

X1643 Soldered connector, line 58300

X1974 Stvd. for active aerial

X2372 Stvd. supply to CD changer

X2433 Stvd. adaptation 12V radio

X2543 (246) Potential distributor, 21-pin line 30006

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

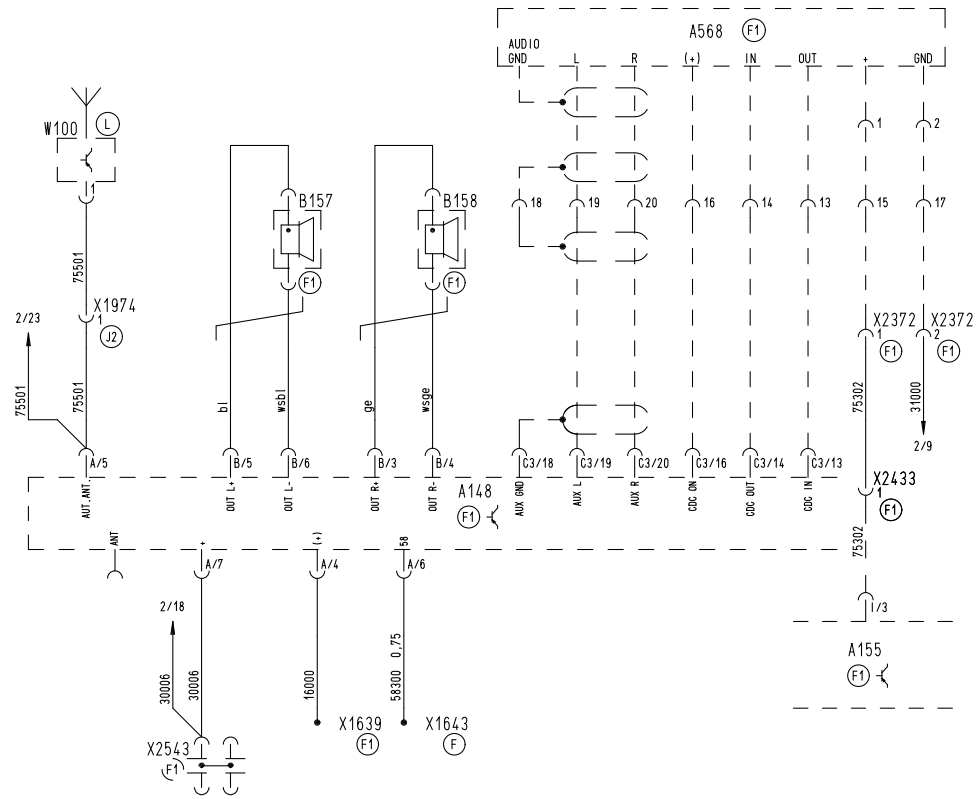
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2858 Sheet 1 of 2

A100
 (E6)

A302
 (E6)



A

B

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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

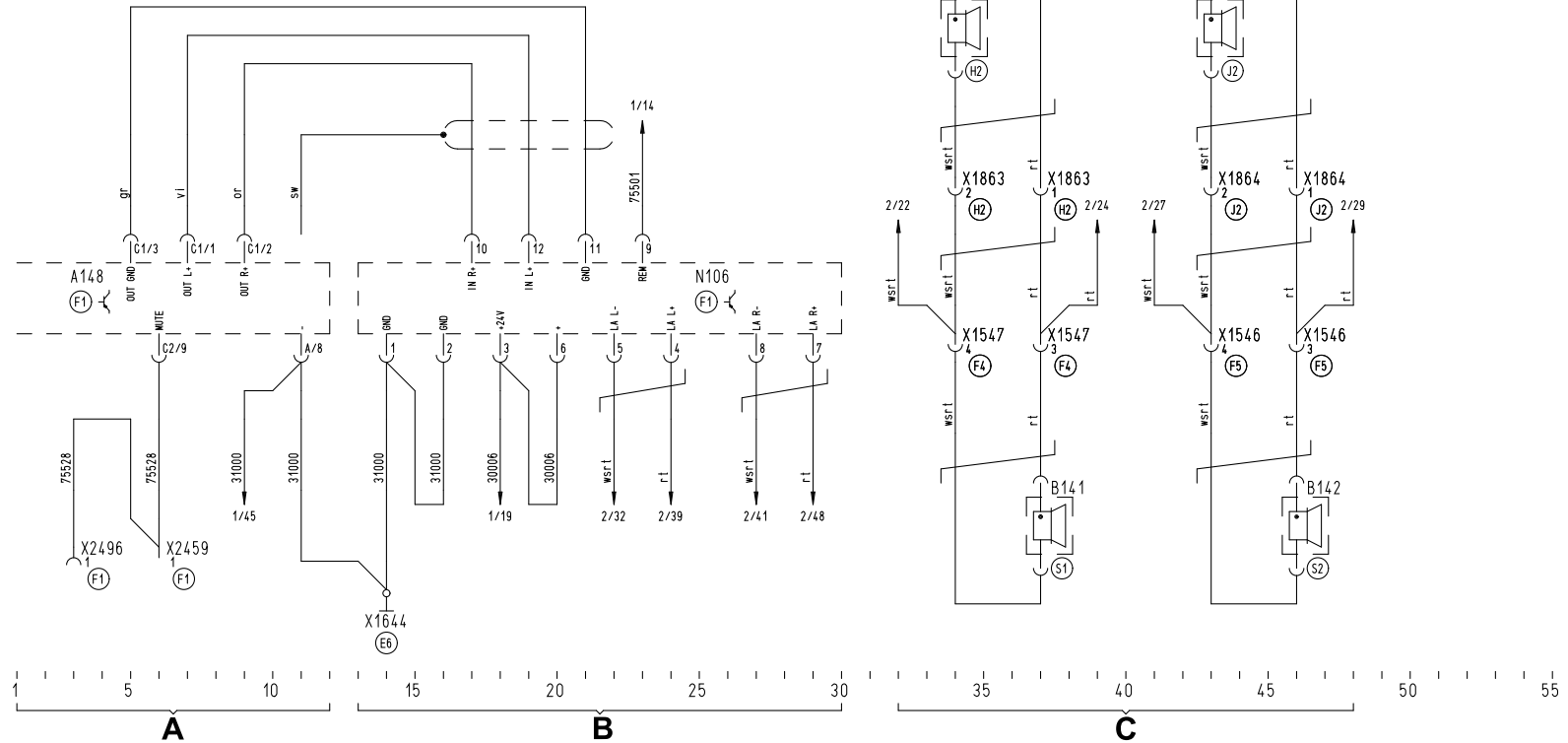
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2858 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Radio 24V with CD changer and MAN-Sound (RL)

Legend

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

Change status: 09.00

A = Active aerial

B = Radio, CD changer

A100 (255) Central fuse, relay and terminal block

A148 (574) Radio/cassette player

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A568 (546) CD changer

B157 (298) Driver's loudspeaker, front left

B158 (298) Driver's loudspeaker, front right

W100 (173) Radio aerial

X1639 Soldered connector, line 16000

X1643 Soldered connector, line 58300

X1974 Stvd. for active aerial

X2372 Stvd. supply to CD changer

X2433 Stvd. adaptation 12V radio

X2543 (246) Potential distributor, 21-pin line 30006

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

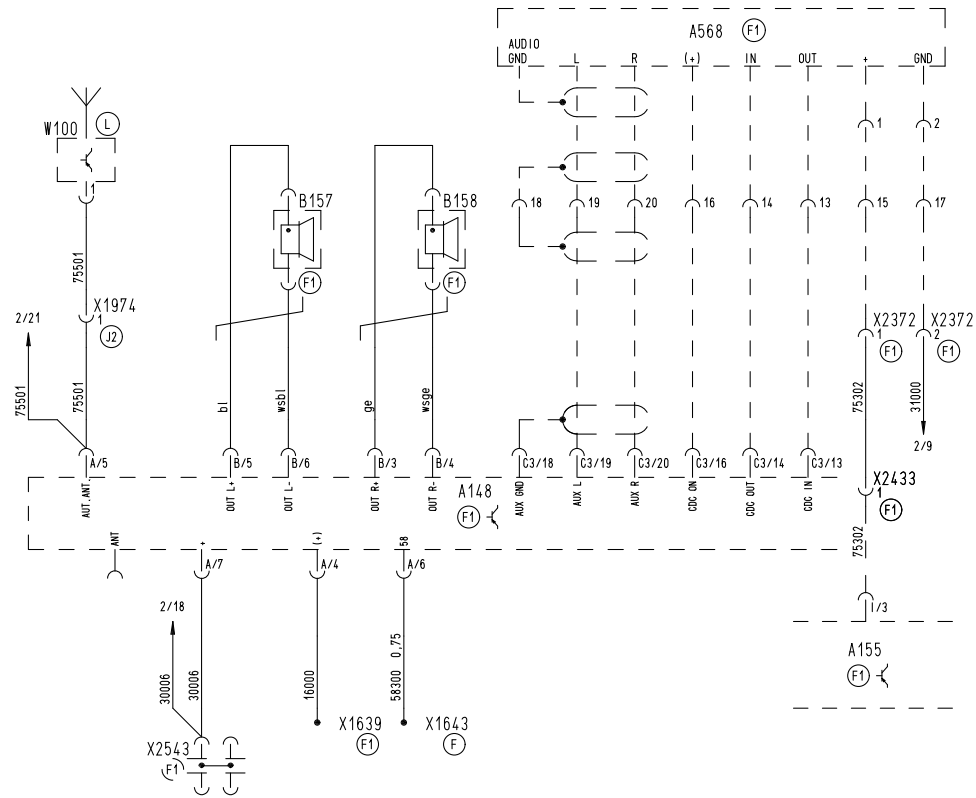
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.2859 Sheet 1 of 2

A100
 (E6)

A302
 (E6)



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

A

B

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

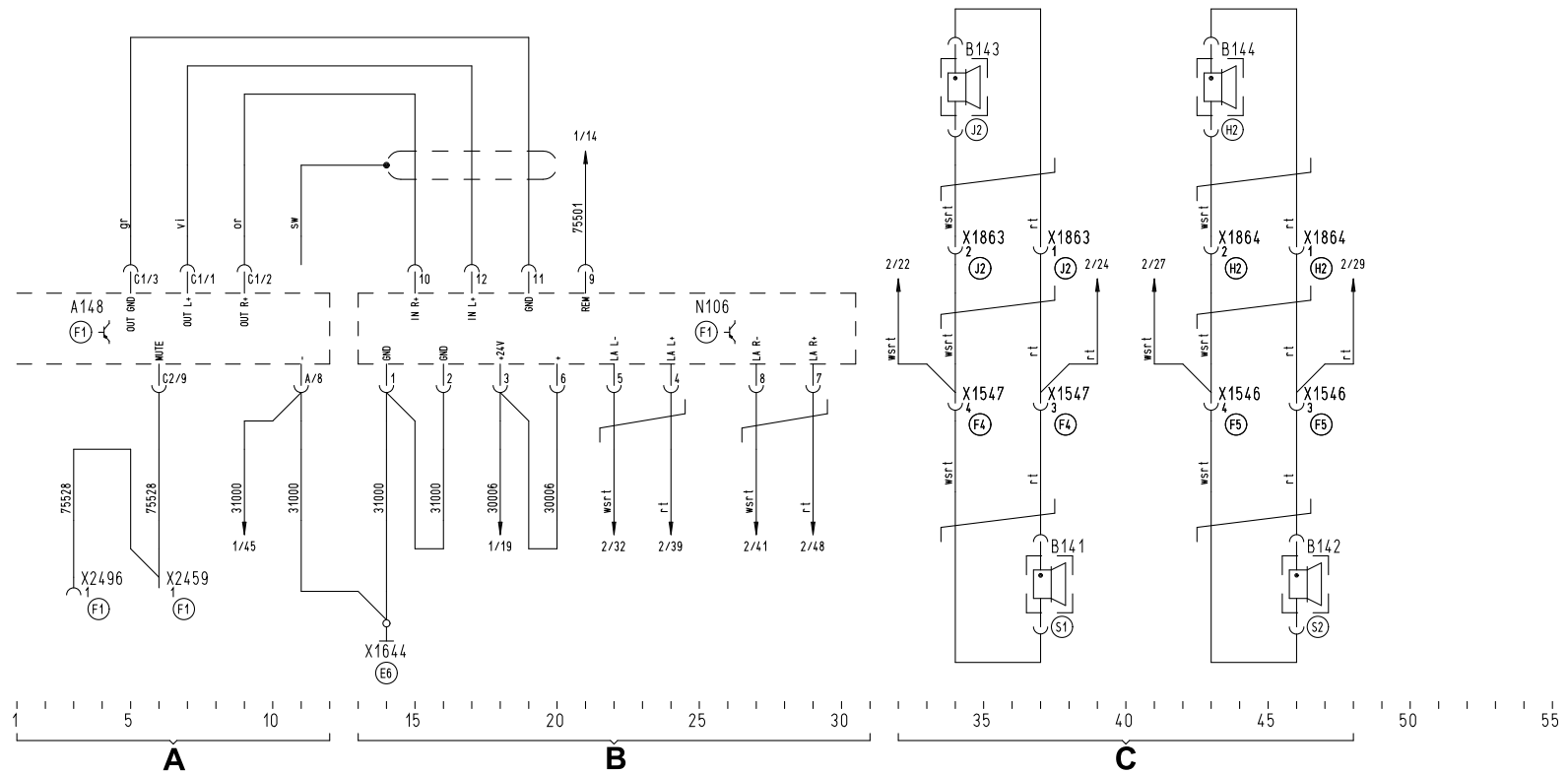
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2859 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Radio remote control (infrared)

Legend

Wiring diagram no. **81.99192.1371** Sheet 1 of 1
Change status: 05.01

A = Infrared radio remote control

- A100 (255) Central fuse, relay and terminal block
- A148 (388) Radio/cassette player
- A302 (352) Central computer 2
- A394 (476) Infrared remote control (receiver)

- X1401 Stvd. adaptor radio
- X1639 Soldered connector, line 16000
- X2541 (246) Potential distributor, 21-pin line 31000
- X2543 (246) Potential distributor, 21-pin line 30006

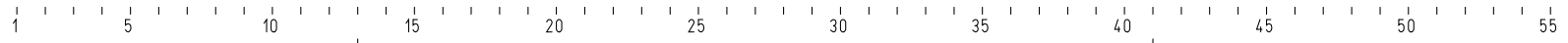
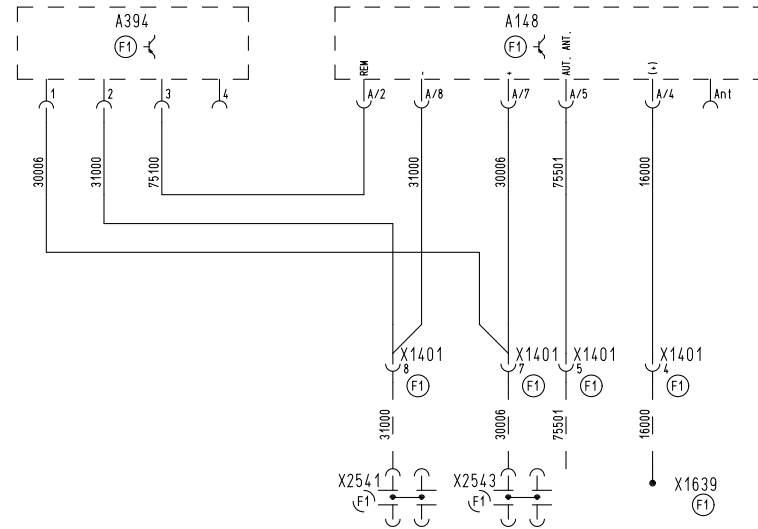
Marking of mounting positions

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

Wiring diagram no. 81.99192.1371 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

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

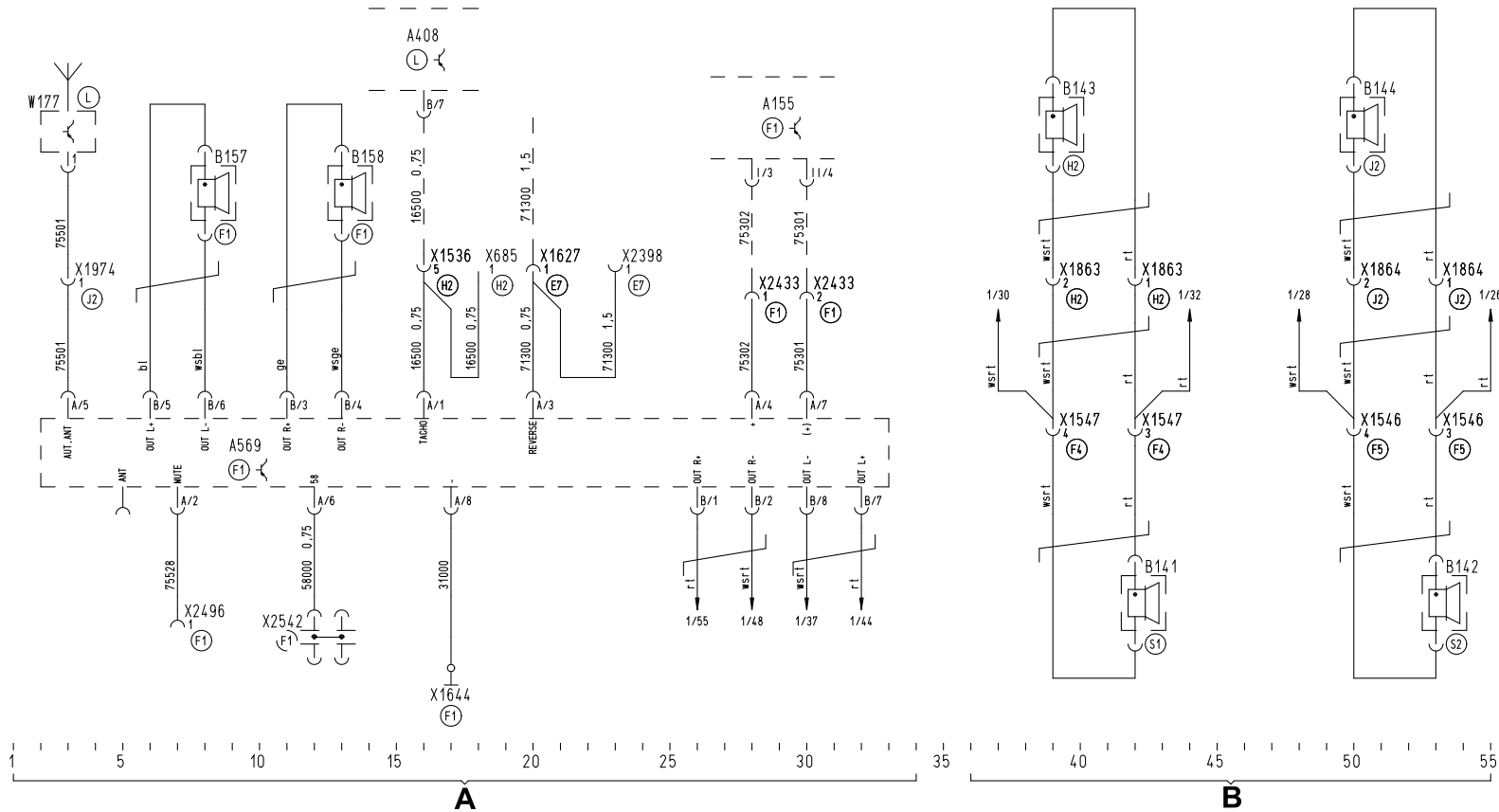
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓁ Engine | ⓕⓗ Passenger seat |
| ⒷⓂ Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| ⒸⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒸⓇ Entrance right | ⓕⓗⓂ A-pillar on driver's side |
| ⒸⓇ Entrance left | ⓕⓓⓁ B-pillar on passenger's side |
| Ⓔⓖ Central electrics area | ⓕⓓⓂ A-pillar on passenger's side |
| ⒺⓇ Control unit racks | ⓕⓁ Ceiling/roof |
| Ⓔⓗ Rear wall of cab | ⓕⓃ Front axle |
| ⓕ Instrument panel | ⓕⓅ Rear axle |
| ⓕⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⓕⓇⓁ Steering wheel/column | ⓕⓇⓂ Rear part of frame |
| ⓕⓇⓂ Foot pedals | ⓕⓁⓁ Door left |
| ⓕⓇⓁ Front wall, inside left | ⓕⓁⓂ Door right |
| ⓕⓇⓂ Front wall, inside right | |

Wiring diagram no. 81.99192.1432 Sheet 1 of 1

A100


A302

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

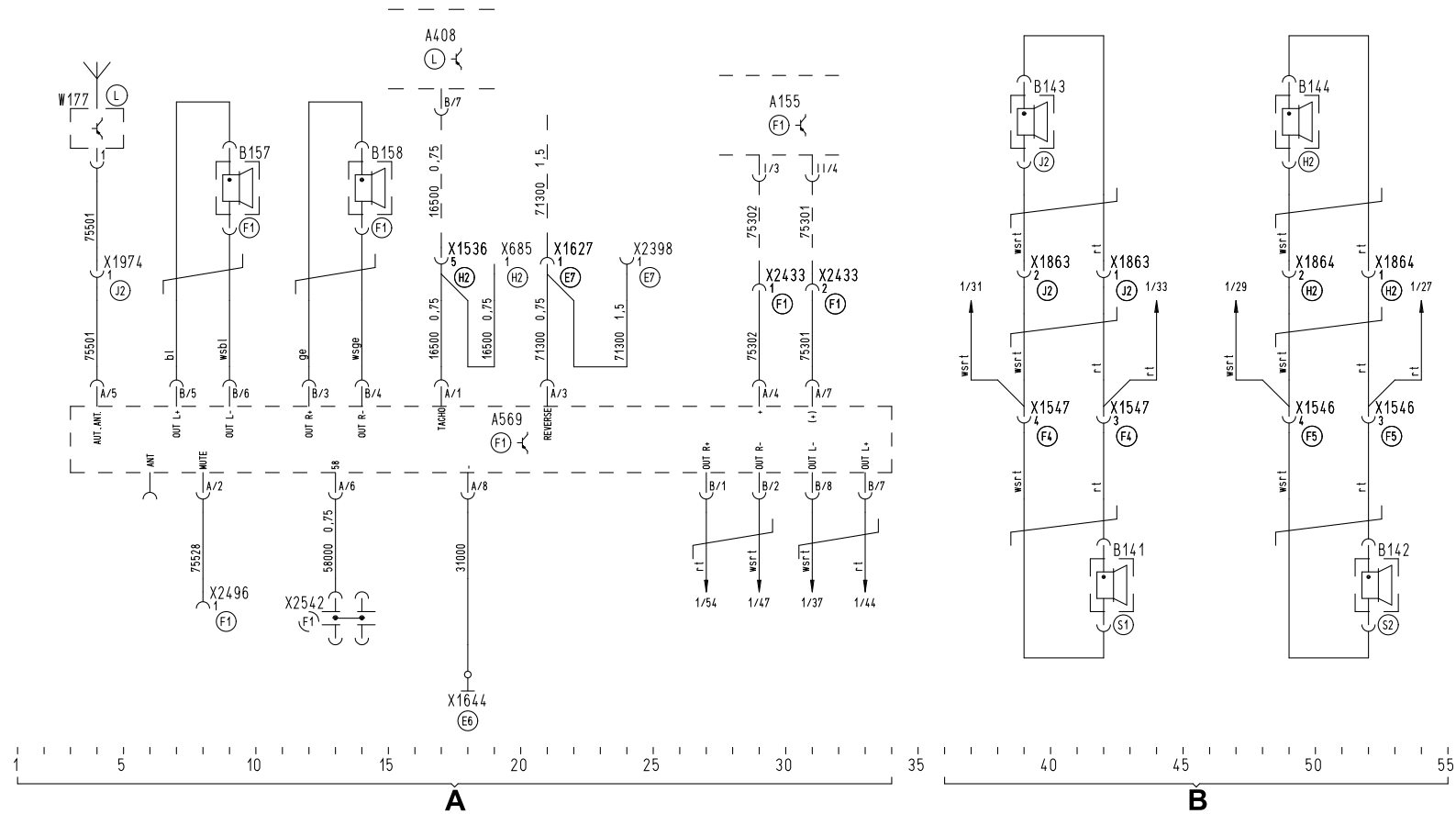
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓂ Engine | ⓕⓗ Passenger seat |
| ⒷⓃ Gearbox | ⓕⓓ Control panel |
| ⒷⓈ Front | ⓕⓔ Battery box |
| ⒷⓈⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒷⓈⓇ Entrance right | ⓕⓗⓂ A-pillar on driver's side |
| ⒷⓈⓁ Entrance left | ⓕⓙⓁ B-pillar on passenger's side |
| ⒷⓕⓆ Central electrics area | ⓕⓙⓂ A-pillar on passenger's side |
| ⒷⓕⓇ Control unit racks | ⓕⓁ Ceiling/roof |
| ⒷⓕⓈ Rear wall of cab | ⓕⓃ Front axle |
| Ⓑⓕ Instrument panel | ⓕⓅ Rear axle |
| ⒷⓕⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⒷⓕⓂ Steering wheel/column | ⓕⓇⓂ Rear part of frame |
| ⒷⓕⓃ Foot pedals | ⓕⓈⓁ Door left |
| ⒷⓕⓄ Front wall, inside left | ⓕⓈⓂ Door right |
| ⒷⓕⓅ Front wall, inside right | |

Wiring diagram no. 81.99192.1433 Sheet 1 of 1

A100
E6

A302
E6



Radio navigation system 12V with CD changer (LL)

Legend

Wiring diagram no. **81.99192.1434** Sheet 1 of 1
Change status: 05.01

A = Active aerial, radio, CD changer

B = Loudspeaker

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A408 (403) Tachograph

A568 (546) CD changer

A569 (547) Radio navigation device RNS 3

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B157 (298) Driver's loudspeaker, front left

B158 (298) Driver's loudspeaker, front right

W177 (171) Combination aerial

X685 Stvd. line 16500

X1536 Stvd. cab tachograph

X1546 Stvd. door, right

X1547 Stvd. door, left

X1627 Stvd. reversing beam

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

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X1974 Stvd. for active aerial

X2398 Stvd. adaptation reversing light

X2433 Stvd. adaptation 12V radio

X2496 Adaptation mute signal lane guard

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

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

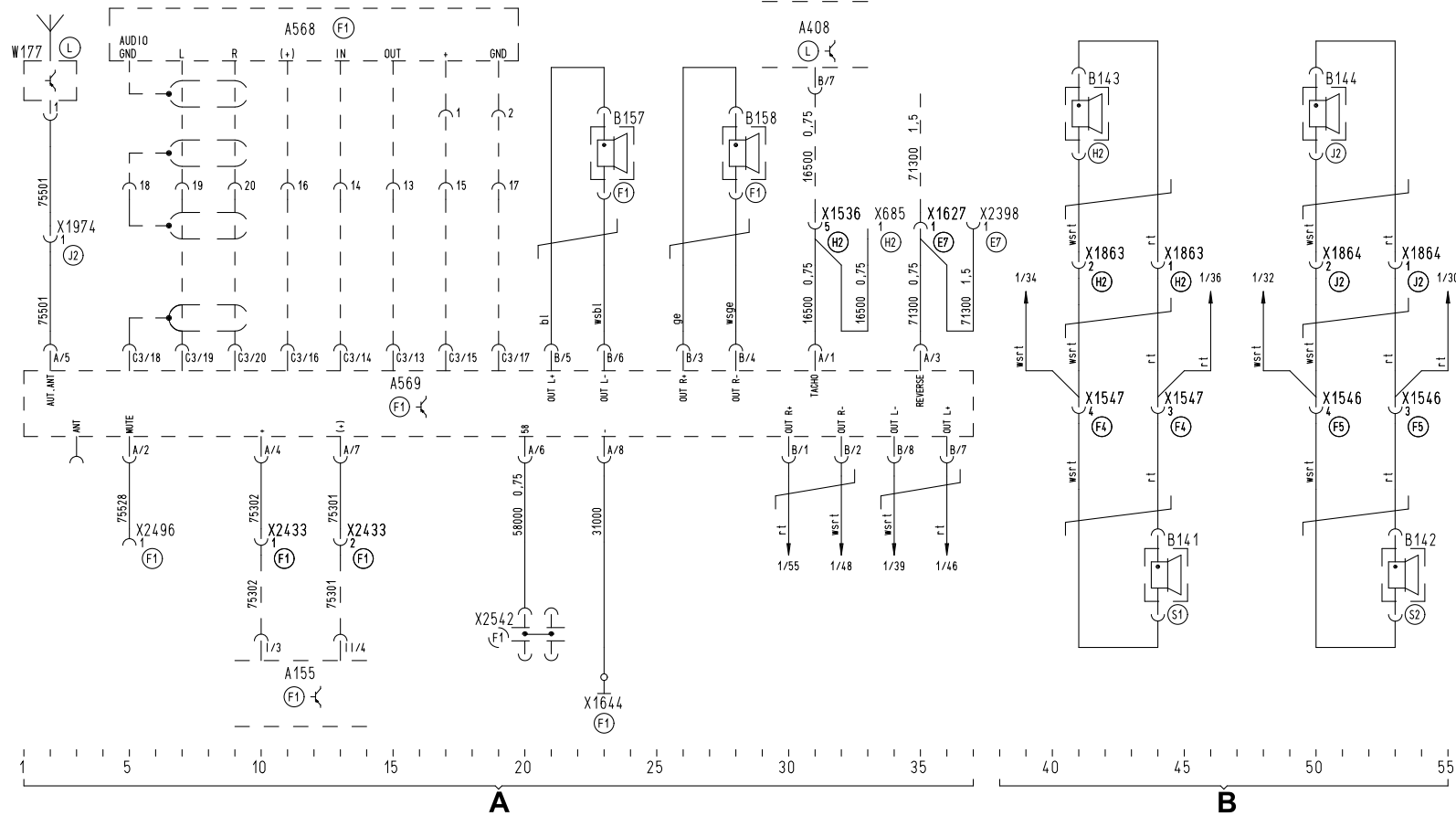
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1434 Sheet 1 of 1

A100
E6

A302
E6



Radio navigation system 12V with CD changer (RL)

Legend

Wiring diagram no. **81.99192.1435** Sheet 1 of 1
Change status: 05.01

A = Active aerial, radio, CD changer

B = Loudspeaker

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A408 (403) Tachograph

A568 (546) CD changer

A569 (547) Radio navigation device RNS 3

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B157 (298) Driver's loudspeaker, front left

B158 (298) Driver's loudspeaker, front right

W177 (171) Combination aerial

X685 Stvd. line 16500

X1536 Stvd. cab tachograph

X1546 Stvd. door, right

X1547 Stvd. door, left

X1627 Stvd. reversing beam

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

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X1974 Stvd. for active aerial

X2398 Stvd. adaptation reversing light

X2433 Stvd. adaptation 12V radio

X2496 Adaptation mute signal lane guard

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

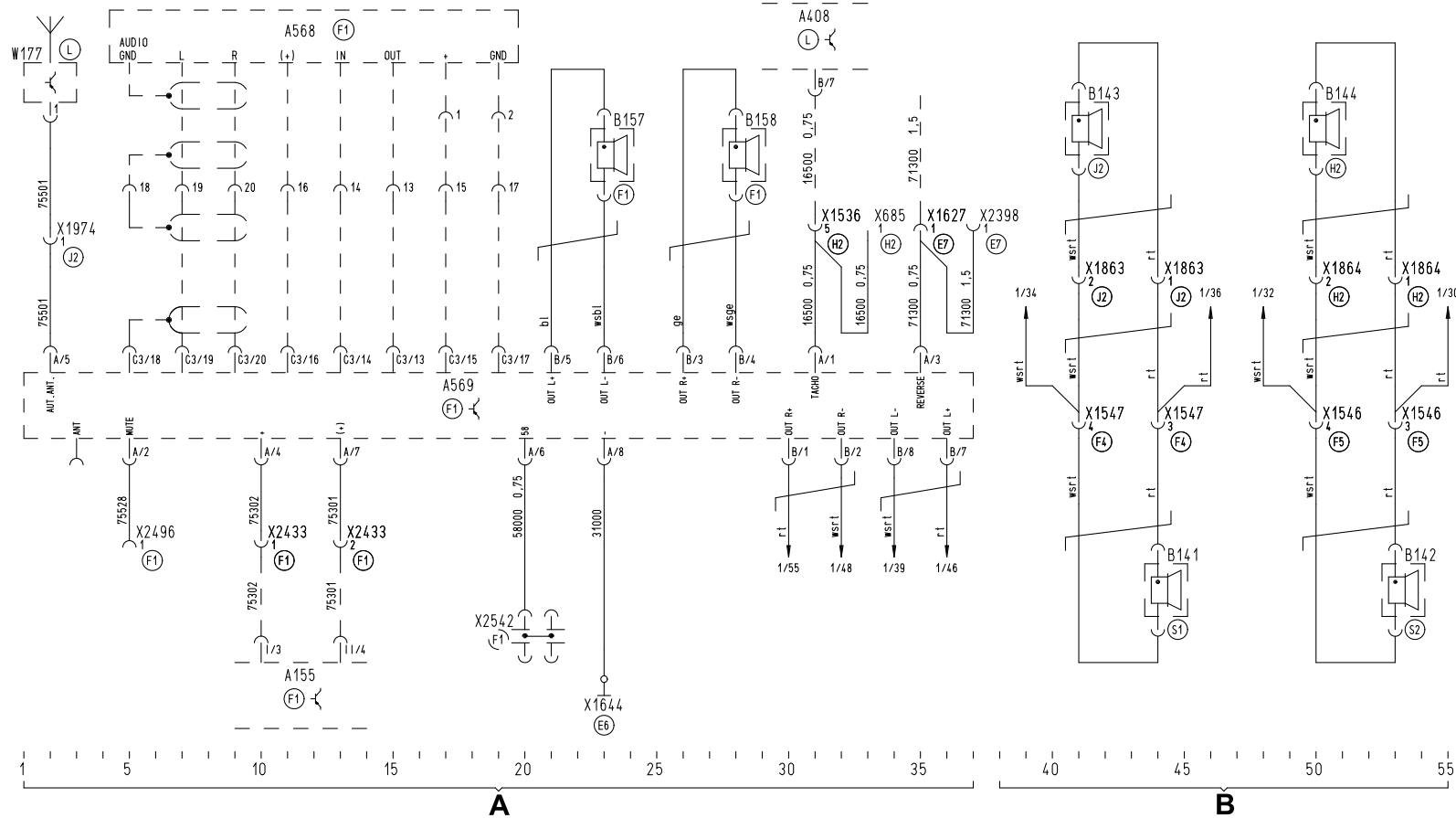
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1435 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



Radio navigation system 12V with Cullmann phone (LL)

Legend

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

Change status: 05.01

A = Active aerial

B = Radio navigation system

A100 (255) Central fuse, relay and terminal block

A148 (388) Radio/cassette player

A302 (352) Central computer 2

A408 (403) Tachograph

A569 (547) Radio navigation device RNS 3

B158 (298) Driver's loudspeaker, front right

B496 (344) Cab loudspeaker, left, with hand-free telephone

W177 (171) Combination aerial

X685 Stvd. line 16500

X1536 Stvd. cab tachograph

X1627 Stvd. reversing beam

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

X1974 Stvd. for active aerial

X2398 Stvd. adaptation reversing light

X2496 Adaptation mute signal lane guard

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

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

Radio navigation system 12V with Cullmann phone (LL)

Legend

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

Change status: 05.01

A = Loudspeaker

B = Cullmann telephone

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (545) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

X1546 Stvd. door right

X1547 Stvd. door left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2433 Stvd. adaptation 12V radio

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Mobile phone interface

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

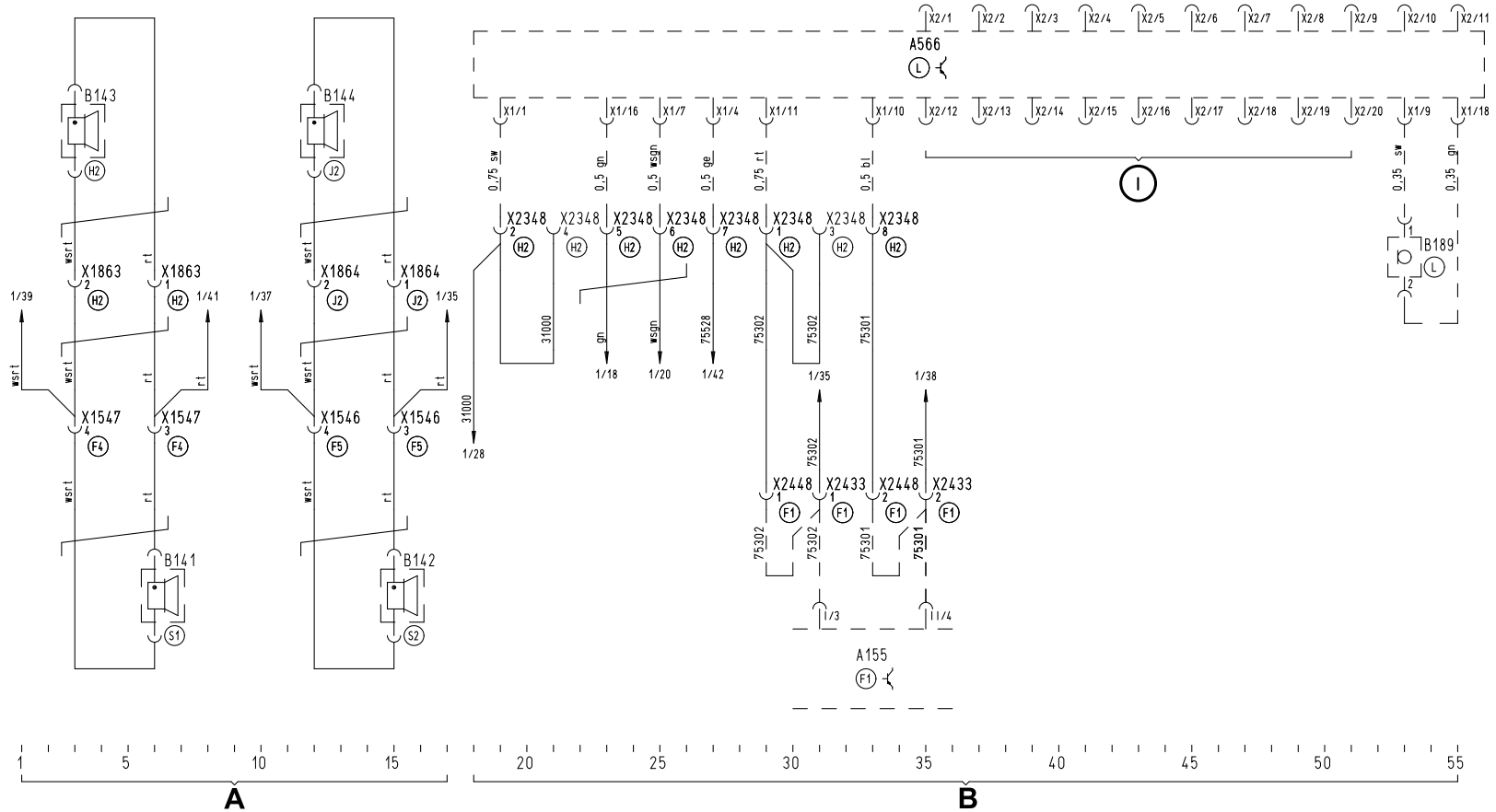
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1436 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Radio navigation system 12V with Cullmann phone (RL)

Legend

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

Change status: 05.01

A = Active aerial

B = Radio navigation system

A100 (255) Central fuse, relay and terminal block

A148 (388) Radio/cassette player

A302 (352) Central computer 2

A408 (403) Tachograph

A569 (547) Radio navigation device RNS 3

B157 (298) Driver's loudspeaker, front left

B498 (344) Cab loudspeaker, right, with hand-free telephone

W177 (171) Combination aerial

X685 Stvd. line 16500

X1536 Stvd. cab tachograph

X1627 Stvd. reversing beam

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

X1974 Stvd. for active aerial

X2398 Stvd. adaptation reversing light

X2496 Adaptation mute signal lane guard

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

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

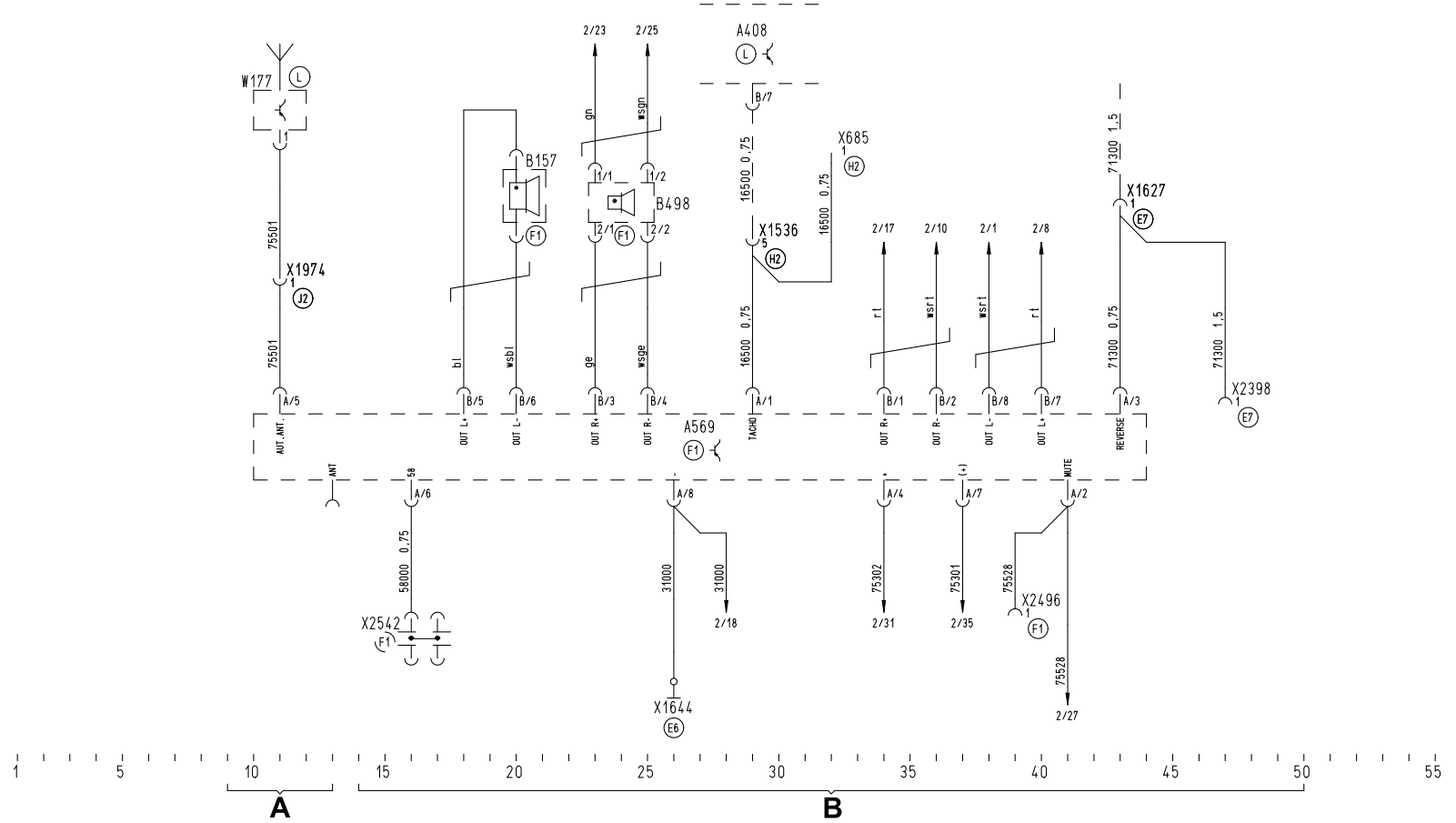
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1437 Sheet 1 of 2

A100

A302



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

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Mobile phone interface

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓕ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

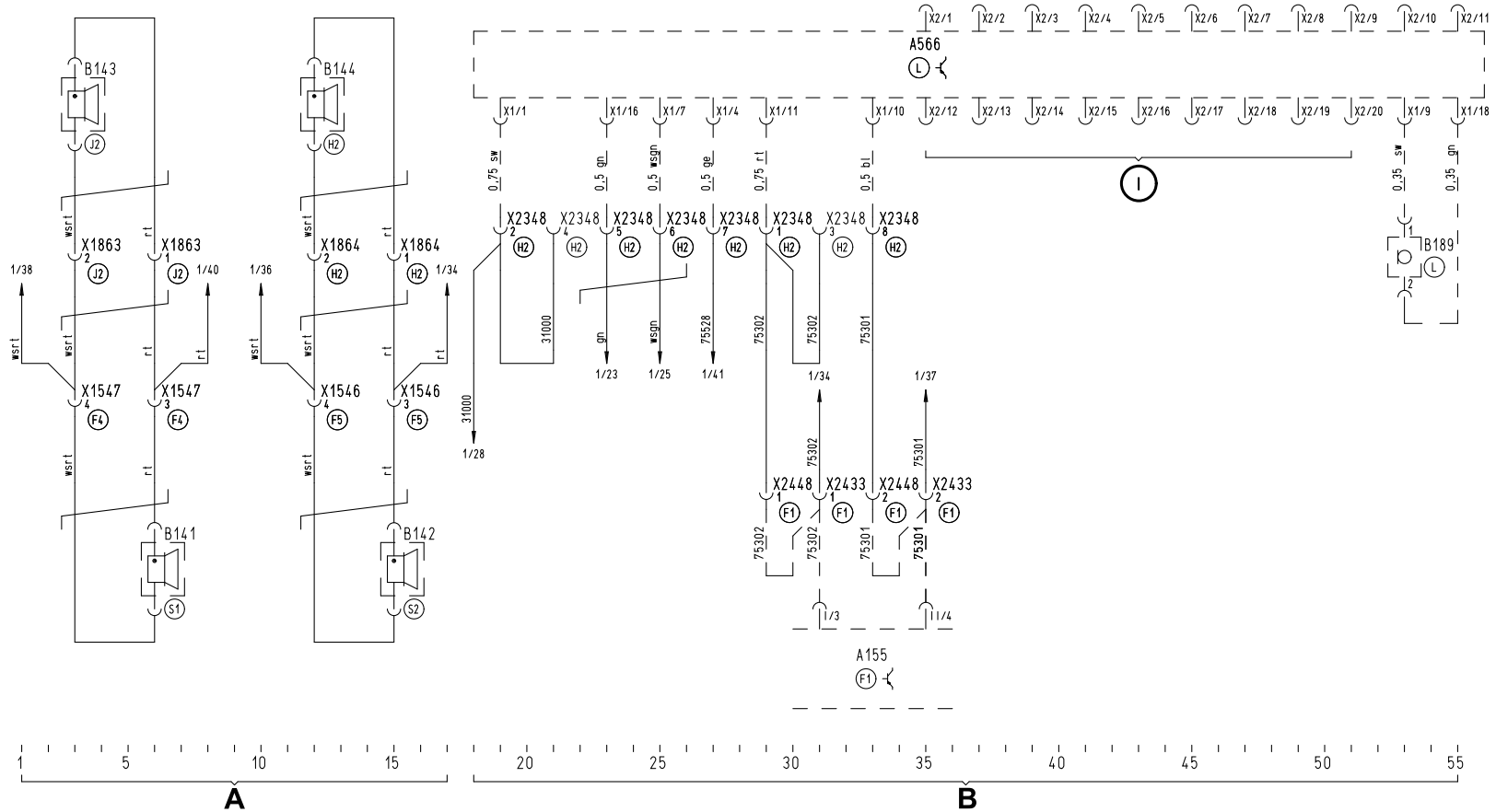
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1437 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Radio navigation system 12V with Nokia phone (LL)

Legend

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

Change status: 05.01

A = Active aerial

B = Radio navigation system

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A408 (403) Tachograph

A569 (547) Radio navigation device RNS 3

B158 (298) Driver's loudspeaker, front right

B496 (344) Cab loudspeaker, left, with hand-free telephone

W177 (171) Combination aerial

X685 Stvd. line 16500

X1536 Stvd. cab tachograph

X1627 Stvd. reversing beam

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

X1974 Stvd. for active aerial

X2398 Stvd. adaptation reversing light

X2496 Adaptation mute signal lane guard

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

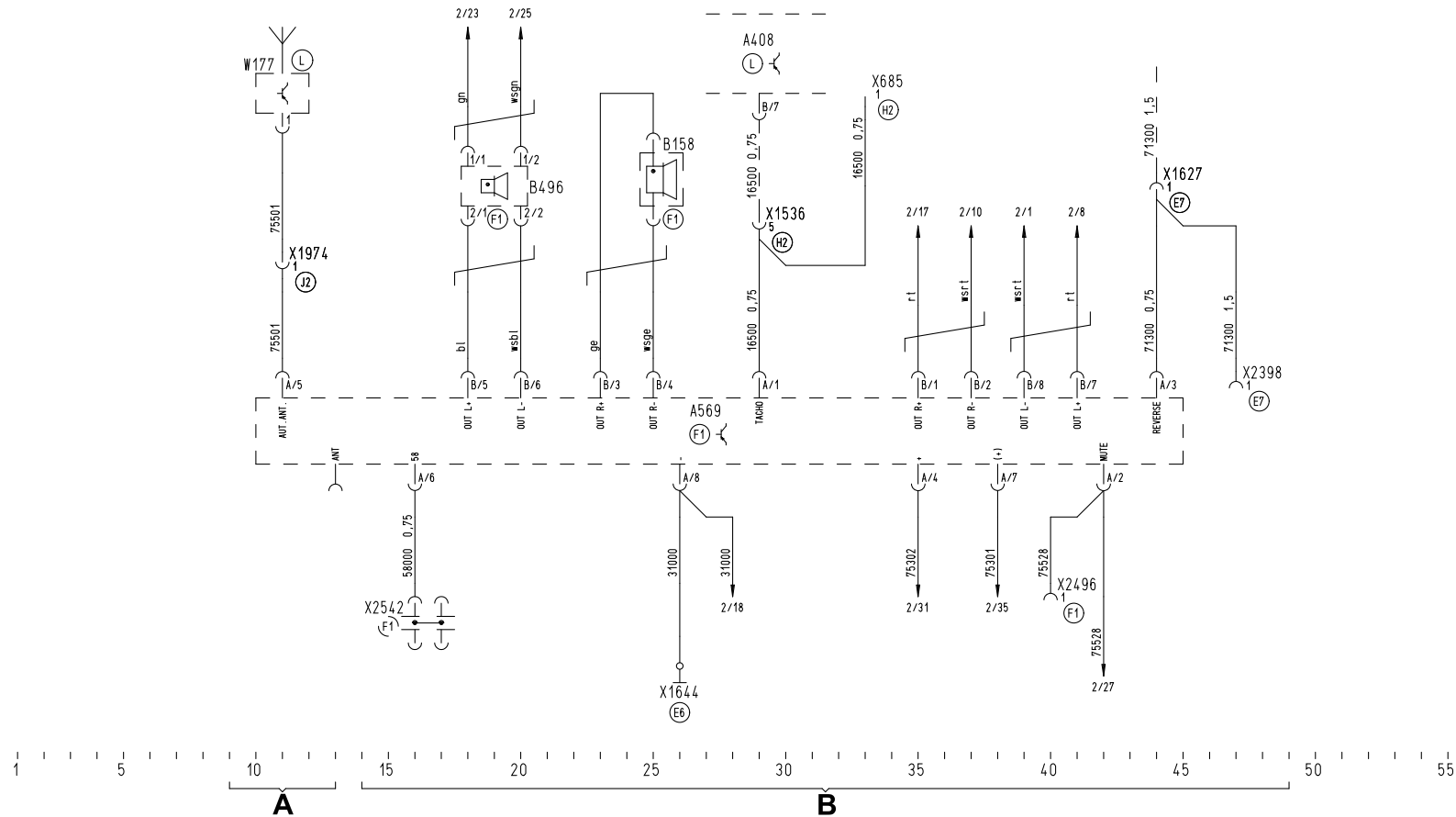
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1438 Sheet 1 of 2

A100
 (E6)

A302
 (E6)



Radio navigation system 12V with Nokia phone (LL)

Legend

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

Change status: 05.01

A = Loudspeaker

B = Nokia telephone

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (539) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

B497 (346) Telephone receiver

X1546 Stvd. door, right

X1547 Stvd. door, left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2433 Stvd. adaptation 12V radio

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

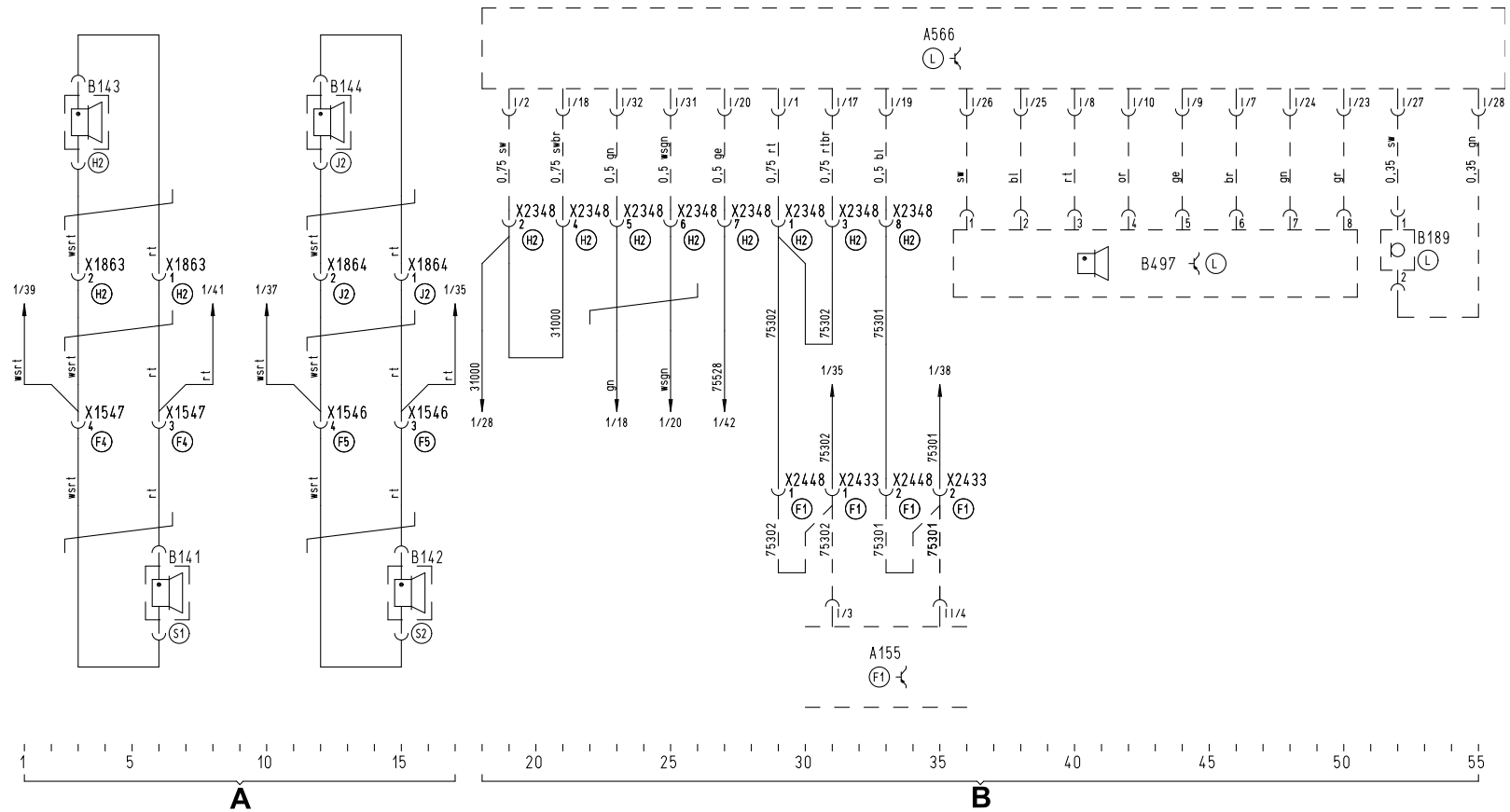
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1438 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



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

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

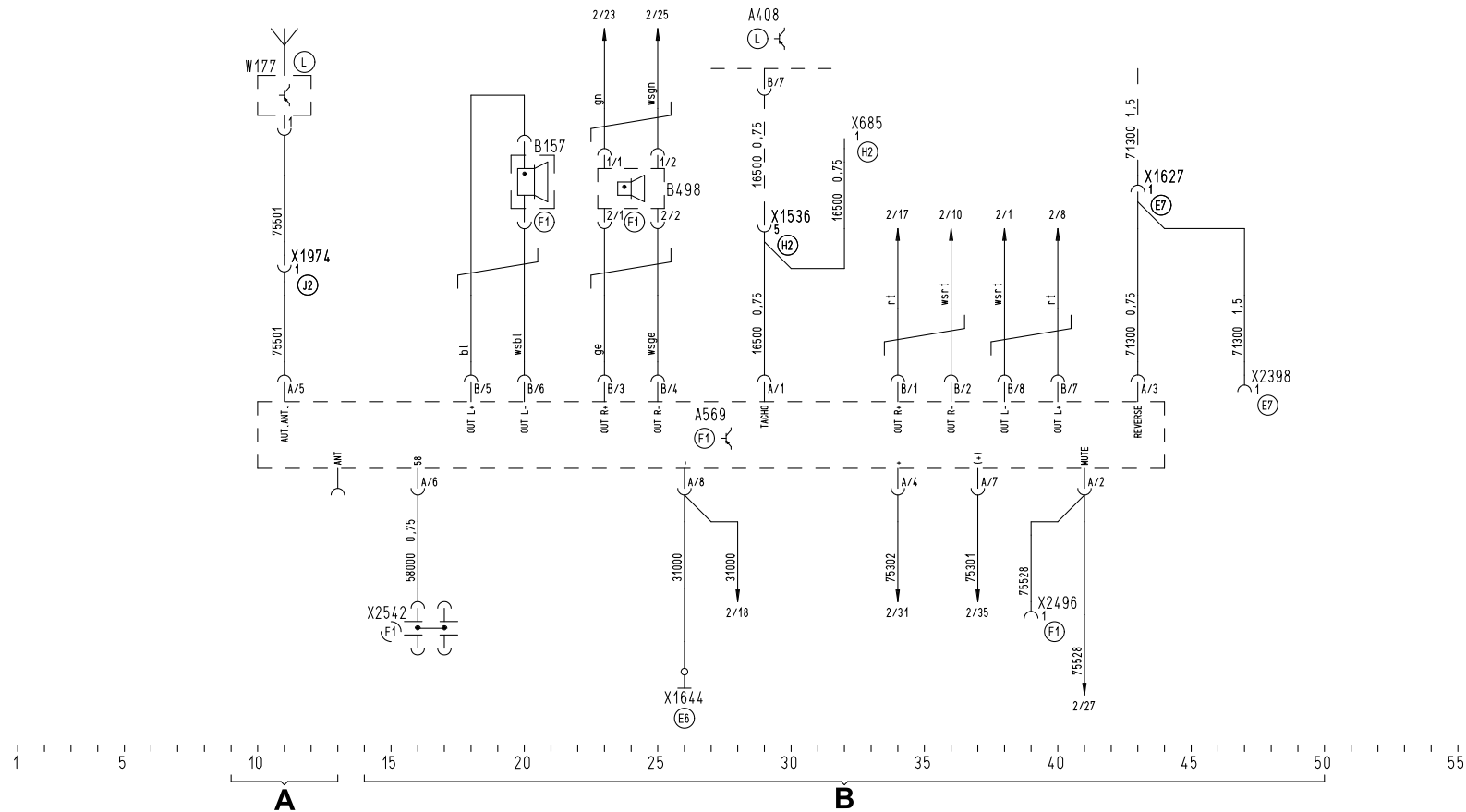
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1439 Sheet 1 of 2

A100
 (E6)

A302
 (E6)



Radio navigation system 12V with Nokia phone (RL)

Legend

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

Change status: 05.01

A = Loudspeaker

B = Nokia telephone

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (539) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

B497 (346) Telephone receiver

X1546 Stvd. door right

X1547 Stvd. door left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2433 Stvd. adaptation 12V radio

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

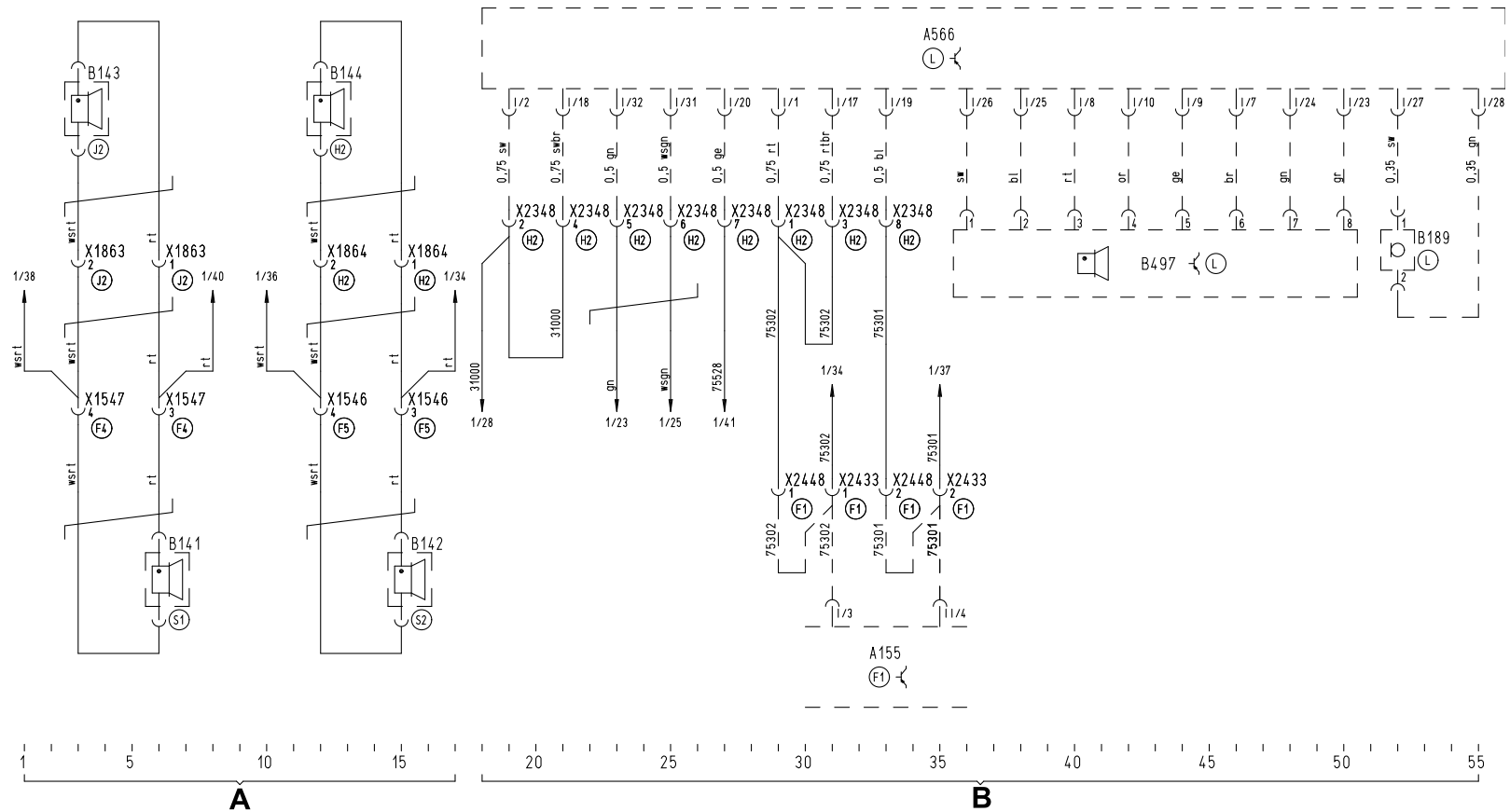
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1439 Sheet 2 of 2

A100


A302

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

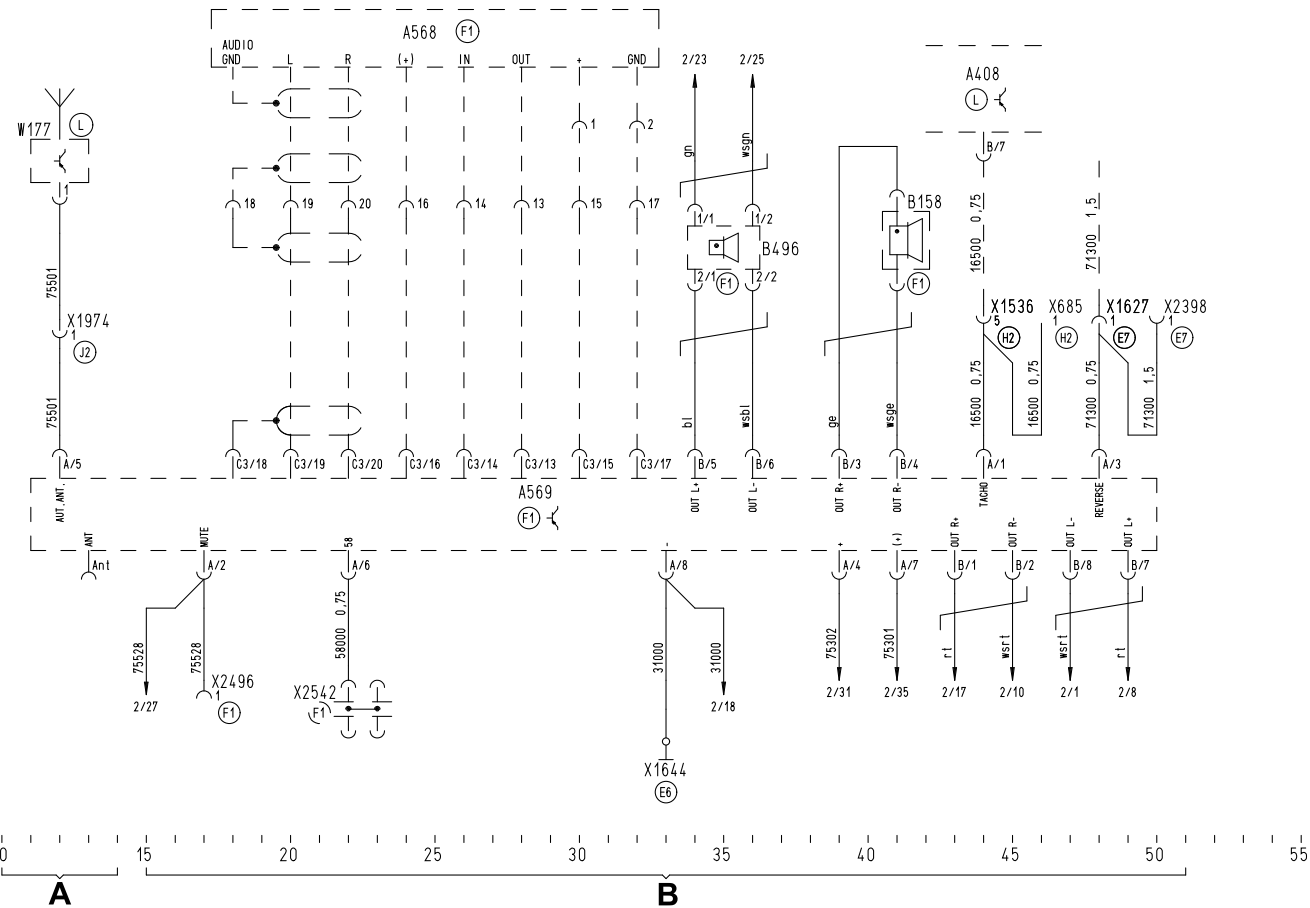
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1440 Sheet 1 of 2

A100
E6

A302
E6



Radio navigation system 12V with Cullmann phone and CD changer (LL)

Legend

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

Change status: 05.01

A = Loudspeaker

B = Cullmann telephone

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (545) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

X1546 Stvd. door, right

X1547 Stvd. door, left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2433 Stvd. adaptation 12V radio

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓖ Mobile phone interface

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

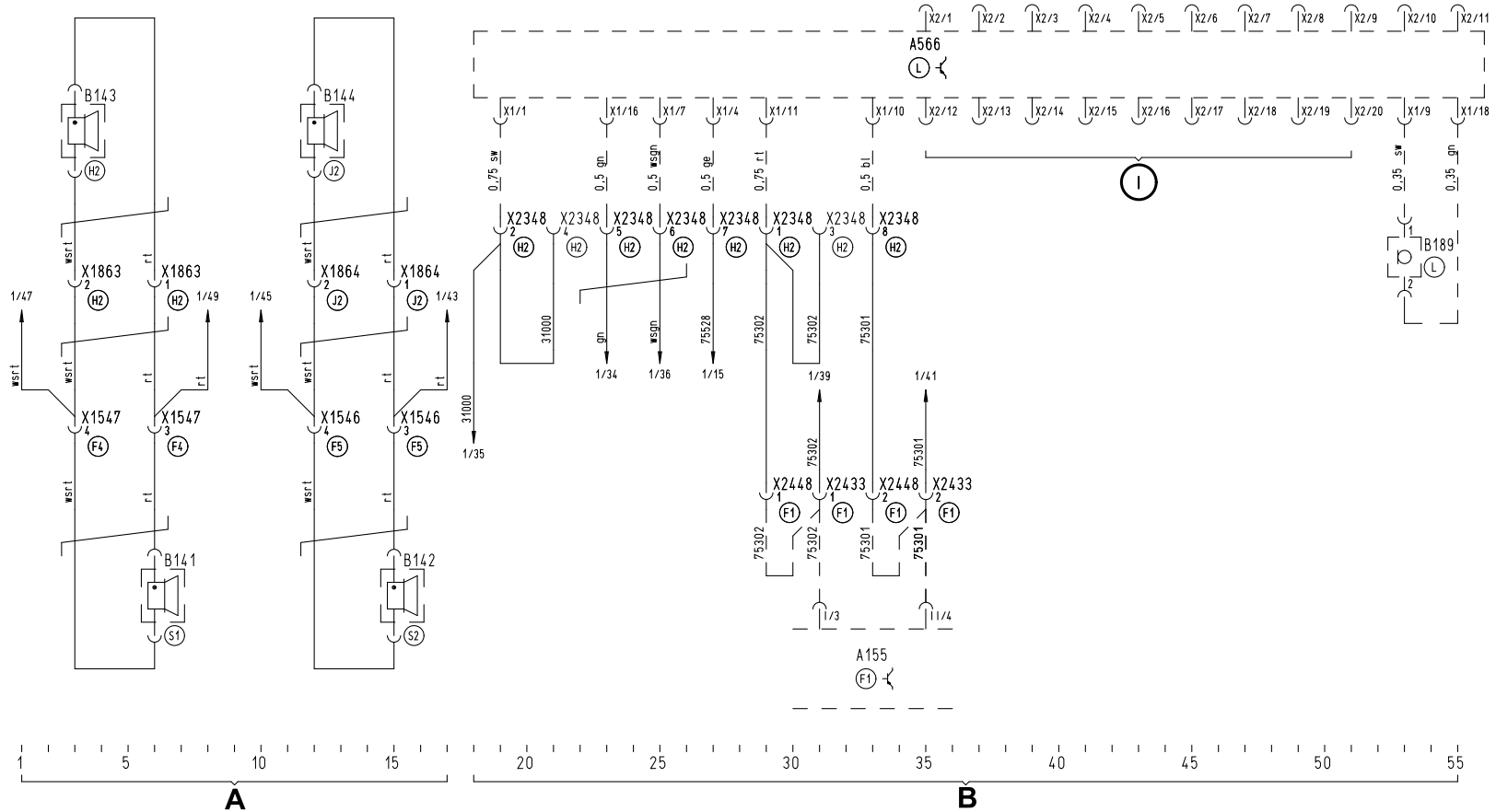
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1440 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Radio navigation system 12V with Cullmann phone and CD changer (RL)

Legend

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

Change status: 05.01

A = Active aerial

B = Radio navigation, CD changer

A100 (255) Central fuse, relay and terminal block

A148 (388) Radio/cassette player

A302 (352) Central computer 2

A408 (403) Tachograph

A568 (546) CD changer

A569 (547) Radio navigation device RNS 3

B157 (298) Driver's loudspeaker, front left

B498 (344) Cab loudspeaker, right, with hand-free telephone

W177 (171) Combination aerial

X685 Stvd. line 16500

X1536 Stvd. cab tachograph

X1627 Stvd. reversing beam

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

X1974 Stvd. for active aerial

X2398 Stvd. adaptation reversing light

X2496 Adaptation mute signal lane guard

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

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

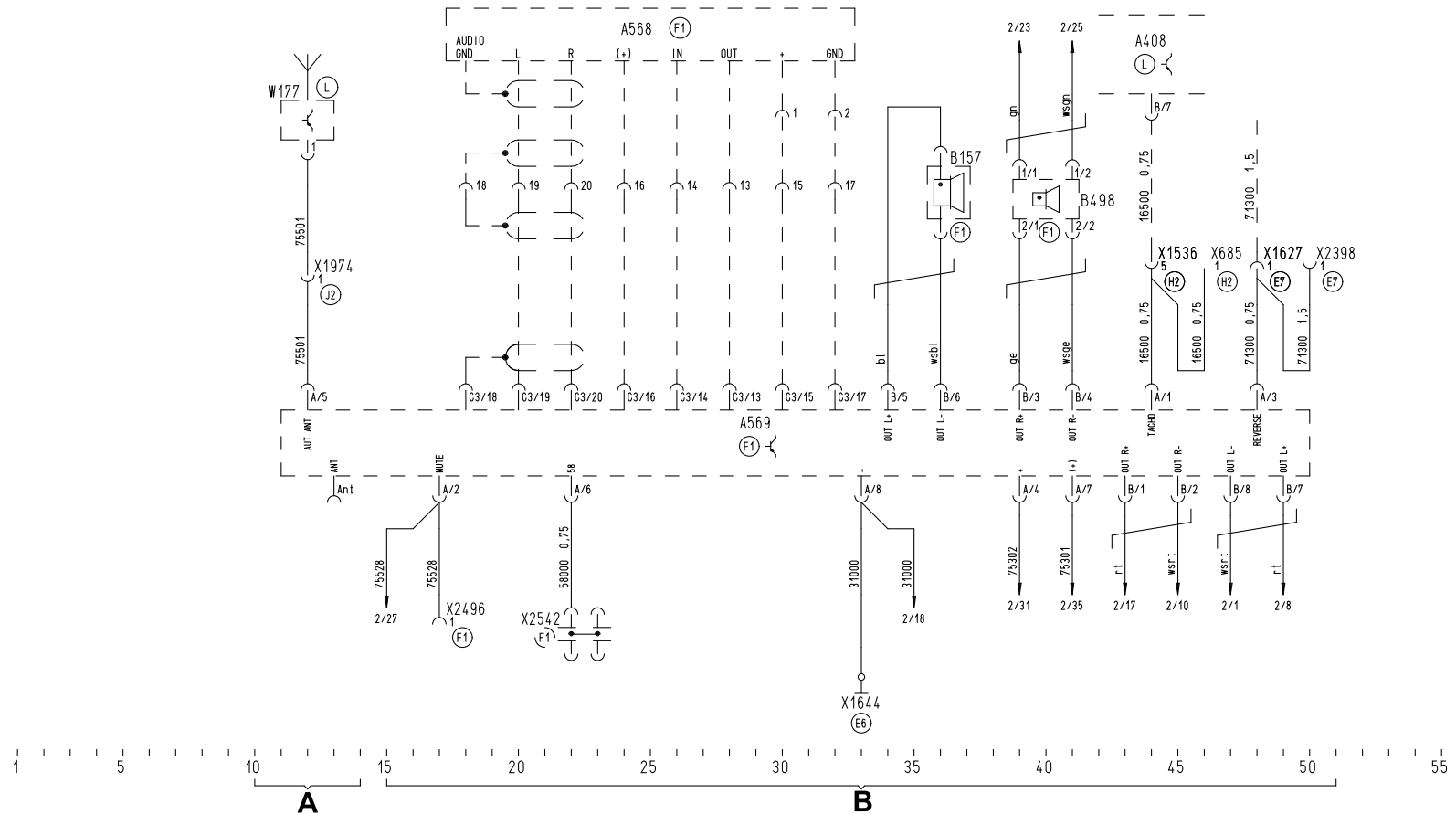
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1441 Sheet 1 of 2

A100
 (E6)

A302
 (E6)



Radio navigation system 12V with Cullmann phone and CD changer (RL)

Legend

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

Change status: 05.01

A = Loudspeaker

B = Cullmann telephone

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (545) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

X1546 Stvd. door right

X1547 Stvd. door left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2433 Stvd. adaptation 12V radio

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓖ Mobile phone interface

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

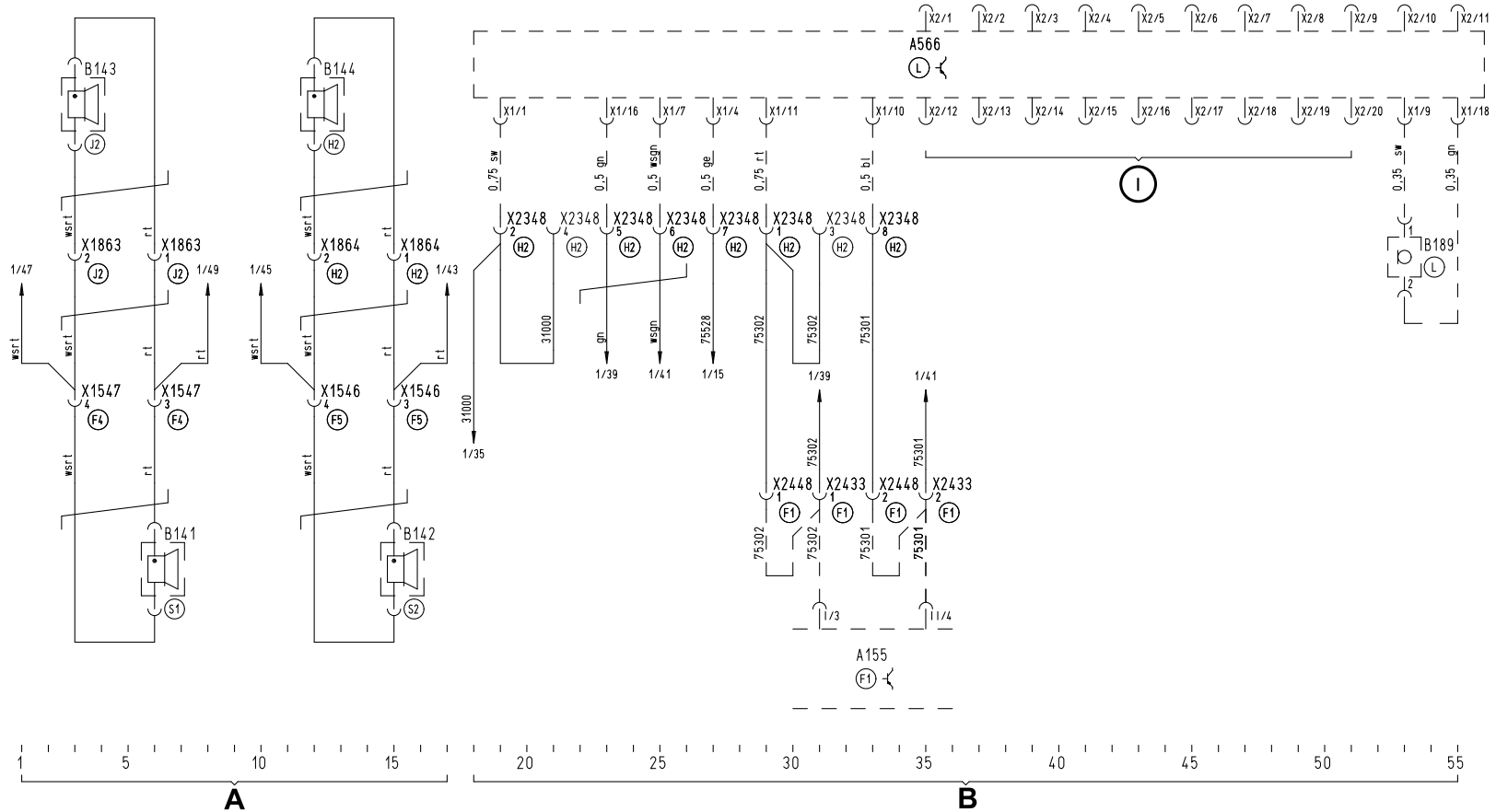
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1441 Sheet 2 of 2

A100


A302

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

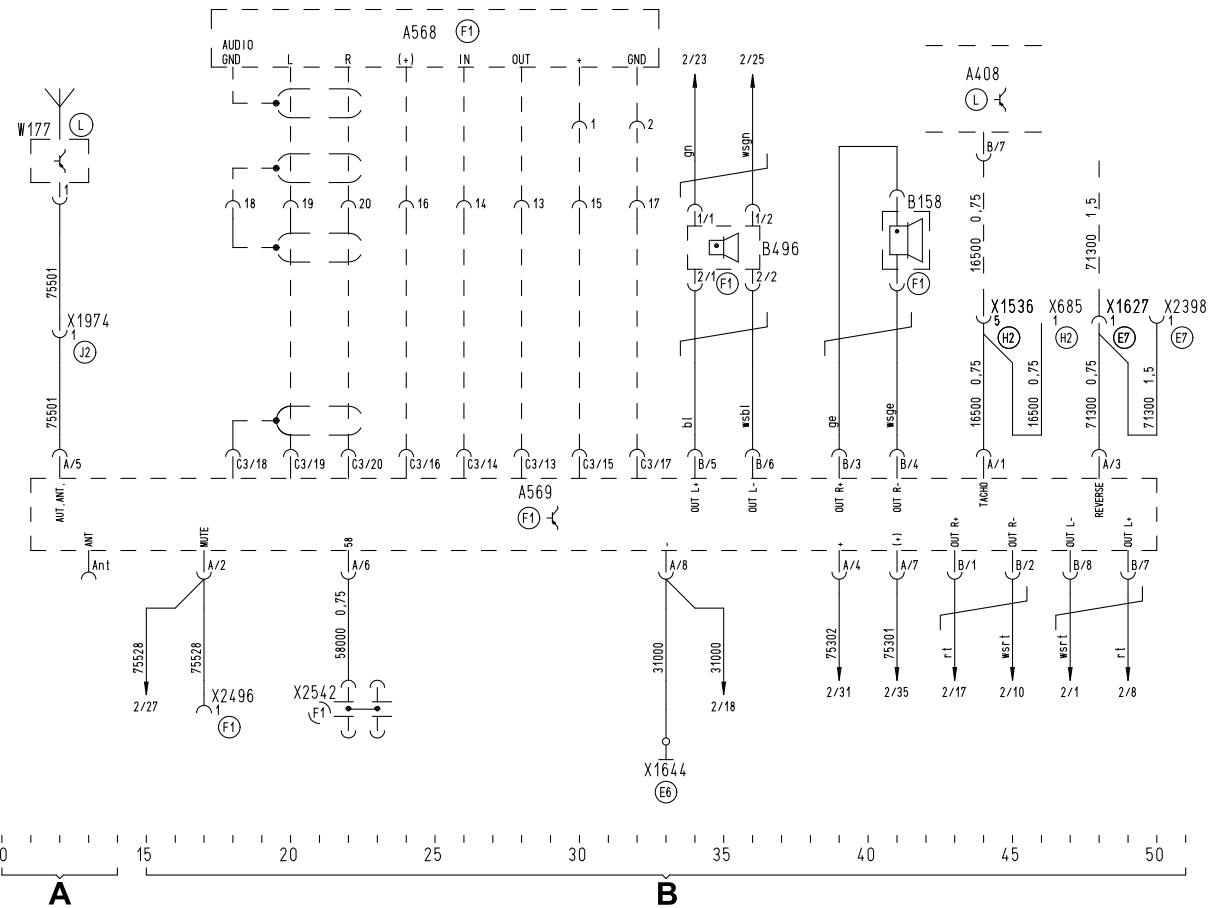
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1442 Sheet 1 of 2

A100
E6

A302
E6



A

B

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

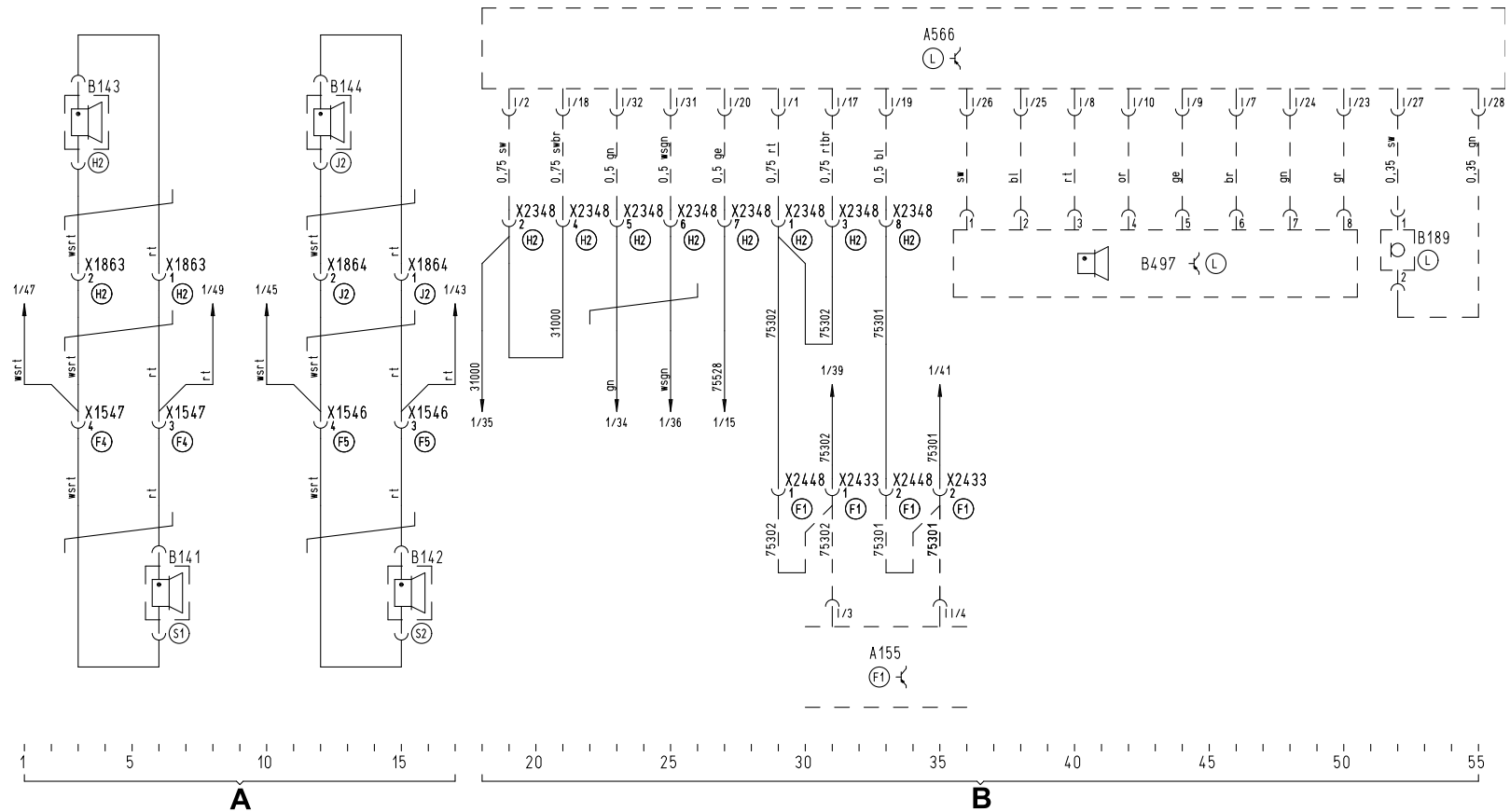
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1442 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Radio navigation system 12V with Nokia phone and CD changer (RL)

Legend

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

Change status: 05.01

A = Active aerial

B = Radio navigation, CD changer

A100 (255) Central fuse, relay and terminal block

A148 (388) Radio/cassette player

A302 (352) Central computer 2

A408 (403) Tachograph

A568 (546) CD changer

A569 (547) Radio navigation device RNS 3

B157 (298) Driver's loudspeaker, front left

B498 (344) Cab loudspeaker, right, with hand-free telephone

W177 (171) Combination aerial

X685 Stvd. line 16500

X1536 Stvd. cab tachograph

X1627 Stvd. reversing beam

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

X1974 Stvd. for active aerial

X2398 Stvd. adaptation reversing light

X2496 Adaptation mute signal lane guard

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

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

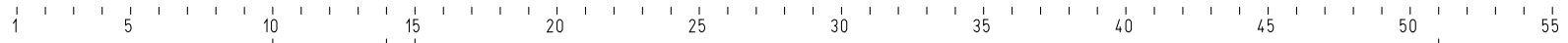
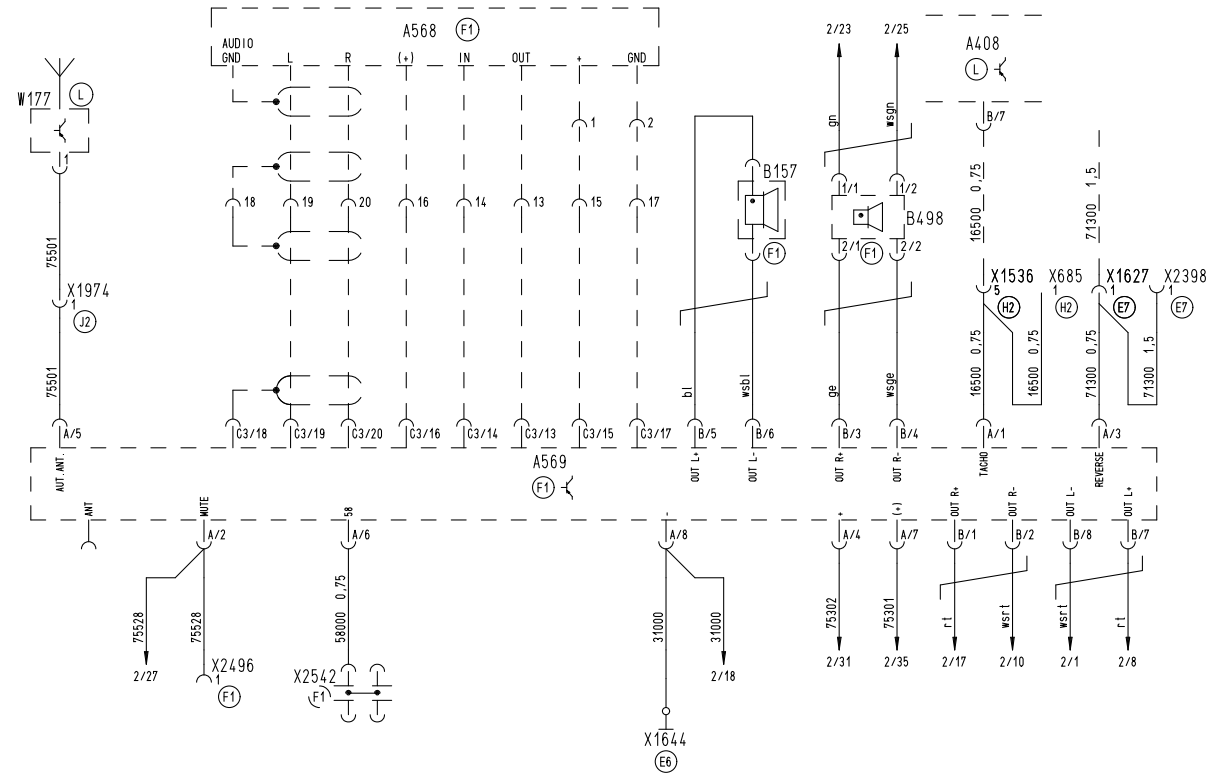
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1443 Sheet 1 of 2

A100
 (E6)

A302
 (E6)



Radio navigation system 12V with Nokia phone and CD changer (RL)

Legend

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

Change status: 05.01

A = Loudspeaker

B = Nokia telephone

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (539) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

B497 (346) Telephone receiver

X1546 Stvd. door, right

X1547 Stvd. door, left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2433 Stvd. adaptation 12V radio

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

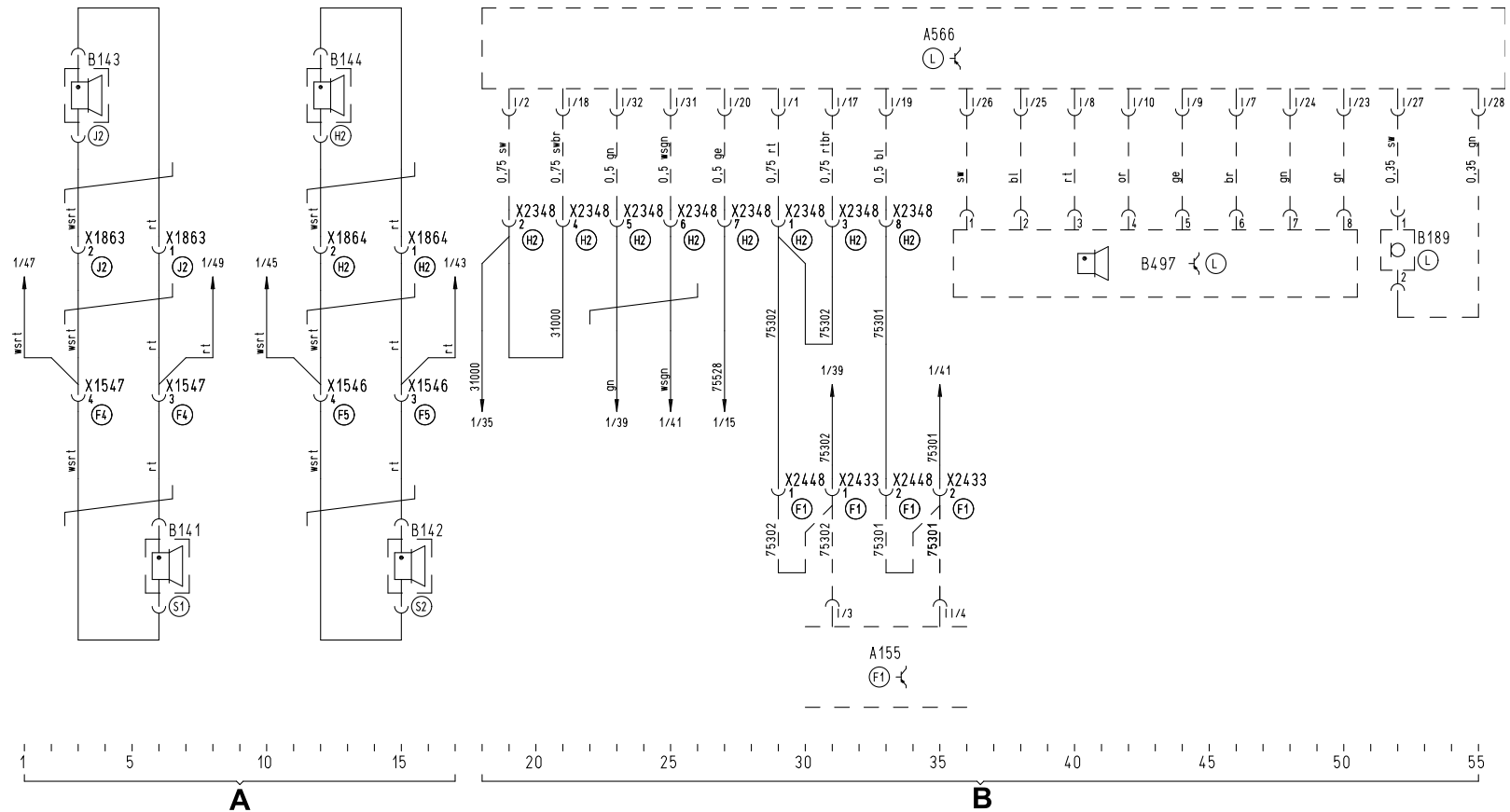
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1443 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



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

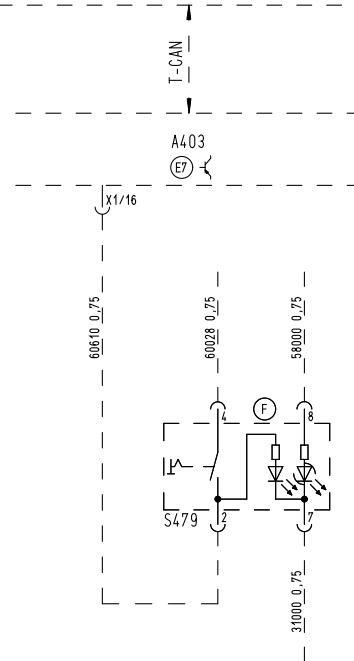
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓂ Engine | ⓕⓗ Passenger seat |
| ⒷⓃ Gearbox | ⓕⓓ Control panel |
| ⒷⓈ Front | ⓕⓔ Battery box |
| ⒷⓈⓁ Bumper | ⓕⓕⓁ B-pillar on driver's side |
| ⒷⓈⓇ Entrance right | ⓕⓕⓂ A-pillar on driver's side |
| ⒷⓈⓁ Entrance left | ⓕⓕⓃ B-pillar on passenger's side |
| Ⓑⓕⓖ Central electrics area | ⓕⓕⓄ A-pillar on passenger's side |
| Ⓑⓕⓗ Control unit racks | ⓕⓕⓁ Ceiling/roof |
| Ⓑⓕⓓ Rear wall of cab | ⓕⓕⓃ Front axle |
| Ⓑⓕ Instrument panel | ⓕⓕⓄ Rear axle |
| ⒷⓕⓁ Central part | ⓕⓕⓁⓇ Front part of frame |
| ⒷⓕⓇ Steering wheel/column | ⓕⓕⓂⓇ Rear part of frame |
| ⒷⓕⓈ Foot pedals | ⓕⓕⓁⓇⓁ Door left |
| ⒷⓕⓁ Front wall, inside left | ⓕⓕⓂⓇⓁ Door right |
| ⒷⓕⓇ Front wall, inside right | |

Wiring diagram no. 81.99192.1372 Sheet 1 of 1

A100


A302

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

A

K 90

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)

Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ2 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ6 Central electrics area
- Ⓔ7 Control unit racks
- Ⓔ8 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right

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

- X1951 Stvd. engine/transmission (MP box)
- X1969 Stvd. engine brake switch
- X2544 (246) Potential distributor 21-pin K-line

- Y133 (182) Proportioning valve, retarder

Retarder, hydroretarder (CAN)

Legend

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

Change status: 05.01

A = Additional retarding brake pushbutton switch

B = Pressure pickup

C = Temperature sensor

D = Solenoid valve

E = Pressure pickup

F = Power supply

- A100 (255) Central fuse, relay and terminal block
- A144 (567) Control unit, retarder
- A302 (352) Central computer 2
- A403 (339) Vehicle management computer
- A407 (342) Instrumentation
- A437 (398) Additional retarding brake pushbutton switch

- B134 (352) Temperature sensor, retarder (cooling water)
- B373 (352) Temperature sensor, retarder (cooling water)
- B435 (291) Pressure pickup, retarder, housing pressure
- B505 (291) Pressure pickup, retarder, positioning pressure

- F152 (101) Fuse retarder (terminal 15)

- H145 Indicator light, retarder

- X1549 Stvd. engine/EDC/transmission I
- X1551 Stvd. engine/EDC/transmission II
- X1553 Stvd. engine/EDC/transmission III
- X1575 Stvd. temperature sensor, retarder (water, oil)
- X1644 Earthing point, cab, adjacent to central fuse, relay and terminal block

- X1951 Stvd. engine/transmission (MP box)
- X1969 Stvd. engine brake switch
- X2006 Stvd. cab/solenoid valves, right

Marking of mounting positions

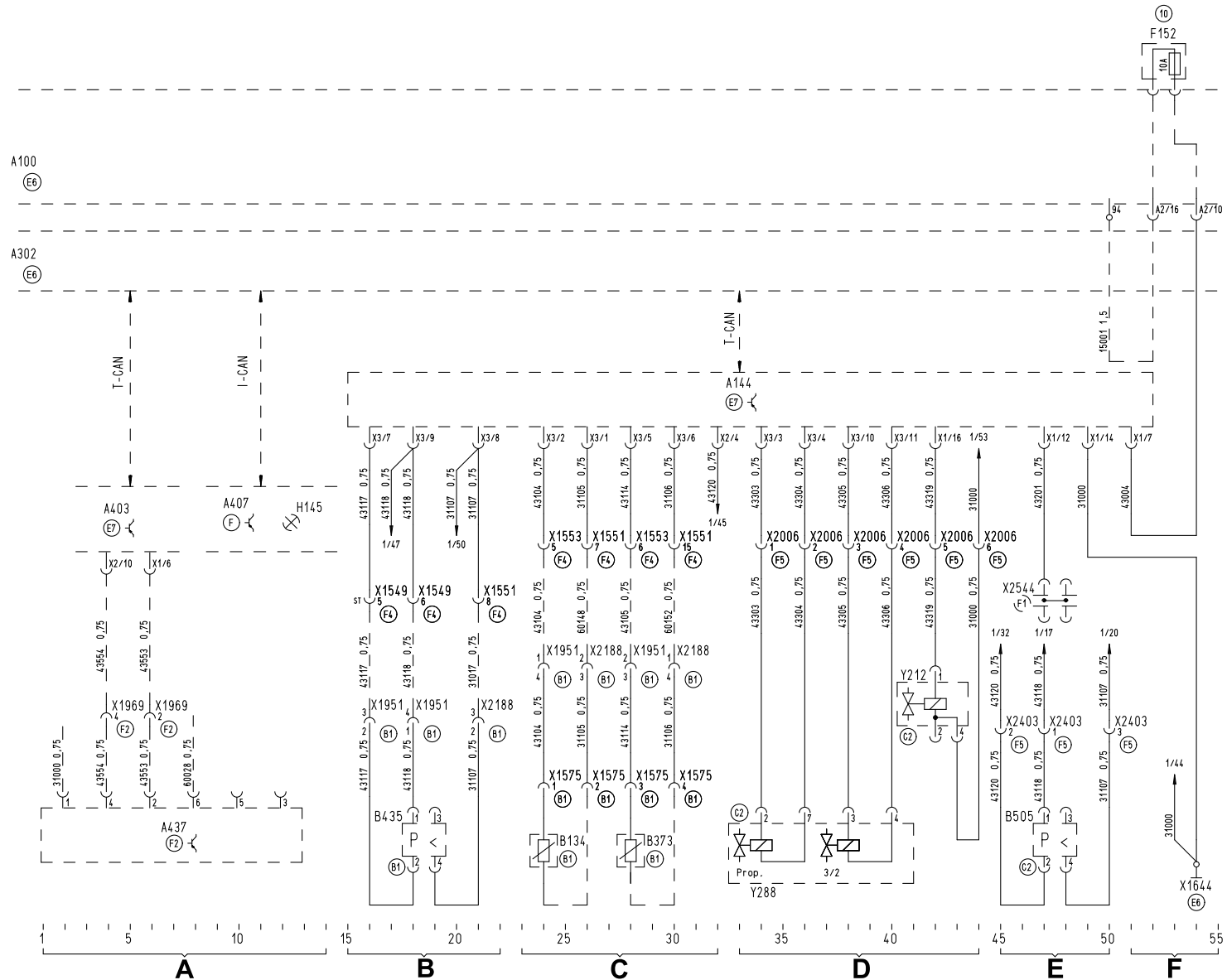
- Ⓐ Tail
- Ⓑ Engine
- Ⓒ Gearbox
- Ⓓ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ Control unit racks
- Ⓔ Rear wall of cab
- Ⓔ Instrument panel
- Ⓔ Central part
- Ⓔ Steering wheel/column
- Ⓔ Foot pedals
- Ⓔ Front wall, inside left
- Ⓔ Front wall, inside right

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

- 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

Wiring diagram no. 81.99192.1411 Sheet 1 of 1



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

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

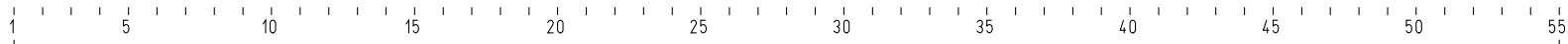
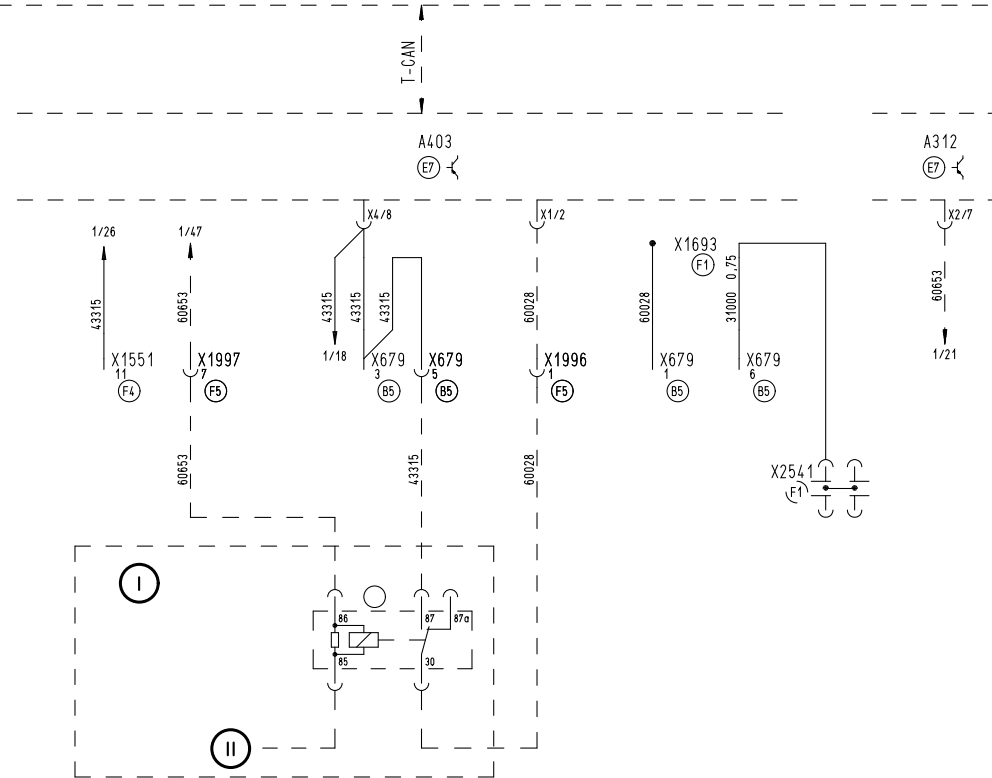
- Ⓘ Scope, body manufacturers
- Ⓜ Earthing from foot contact

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.1409 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

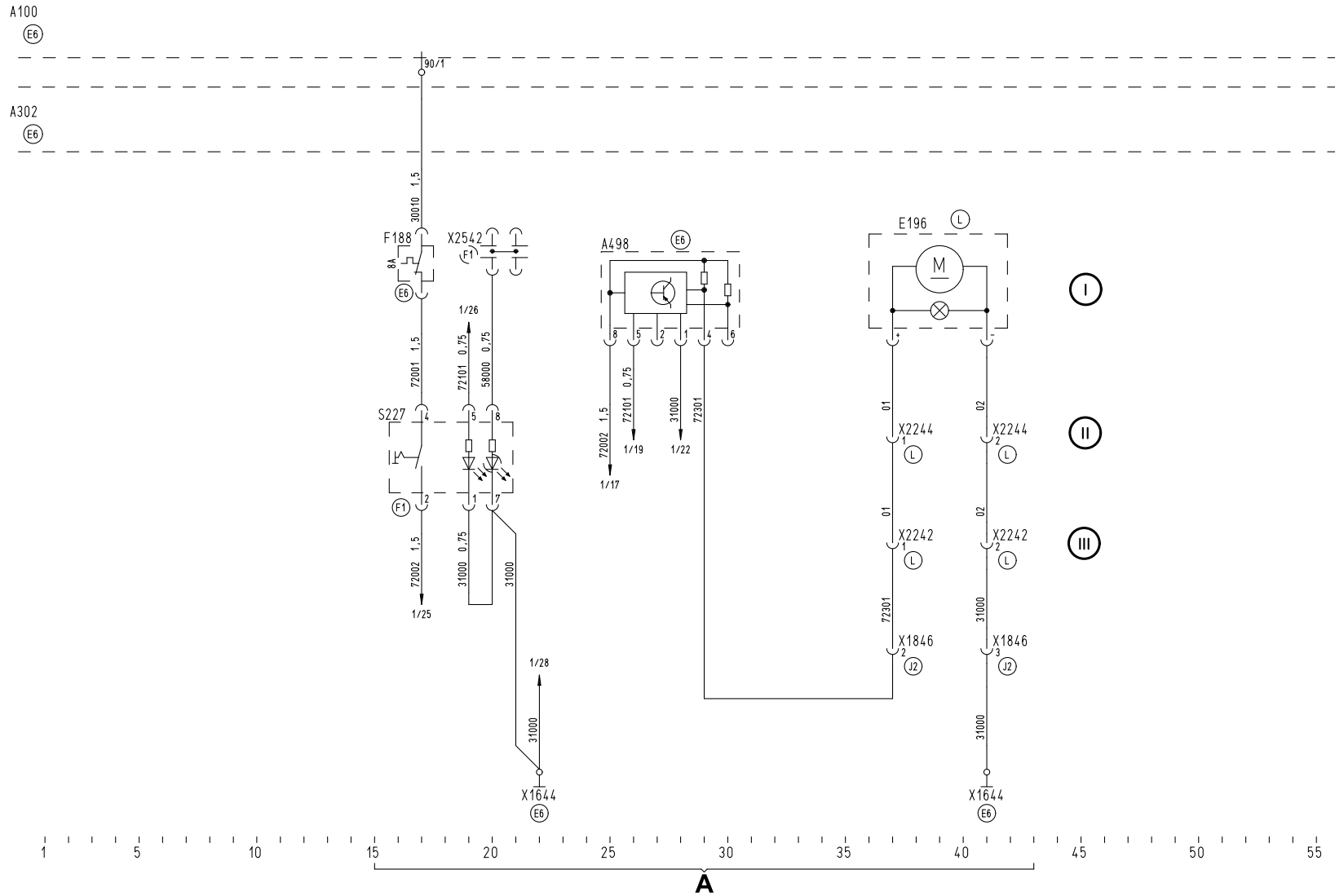
Ⓕ Door right

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

Ⓙ All-round marker light, left **X2245**

Ⓚ All-round marker light, left **X2243**

Wiring diagram no. 81.99192.1412 Sheet 1 of 1



All-round marker light 2 on roof

Legend

Wiring diagram no. **81.99192.1413** Sheet 1 of 1
Change status: 05.01

A = All-round marker lights 2 on roof

- A100 (255) Central fuse, relay and terminal block
- A302 (352) Central computer 2
- A498 (516) Control device, all-round marker light

- E196 (183) All-round marker light (passenger side)
- E197 (183) All-round marker light (driver's side)

- F188 (118) Fuse, all-round marker light

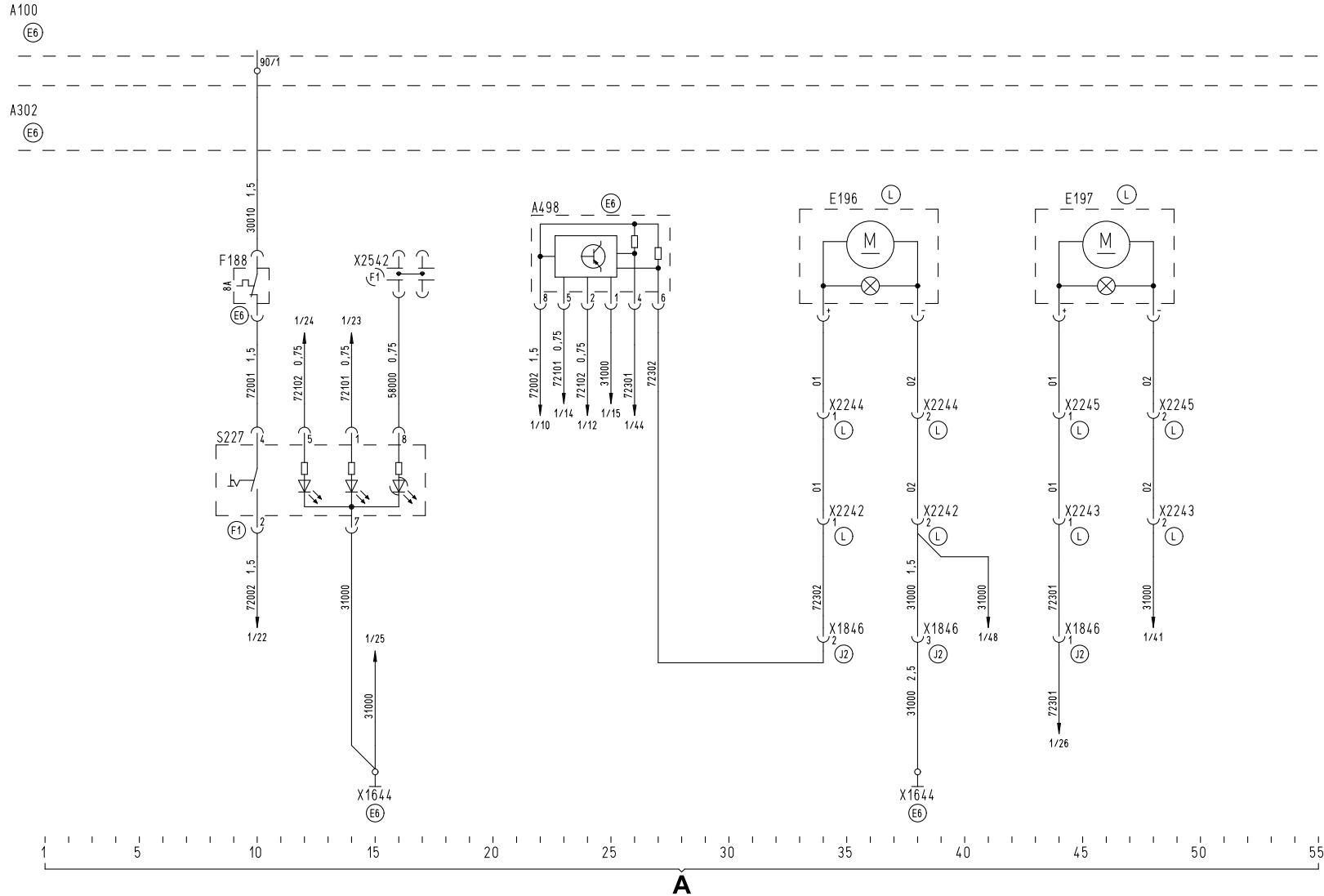
- S227 (557) Switch, all-round marker light

- X1644 Earthing point, cab, adjacent to central fuse, relay and terminal block
- X1846 Stvd. all-round marker light
- X2242 Stvd. cable duct, all-round marker light, right
- X2243 Stvd. cable duct, all-round marker light, left
- X2244 Stvd. base/stand, all-round marker light, right
- X2245 Stvd. base/stand, all-round marker light, left
- X2542 (246) Potential distributor, 21-pin line 58000

Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ1 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ1 Control unit racks
- Ⓔ2 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓖ6 Driving seat
- Ⓖ7 Passenger seat
- Ⓖ8 Control panel
- Ⓖ9 Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.1413 Sheet 1 of 1



All-round marker light 2 on stand

Legend

Wiring diagram no. **81.99192.1414** Sheet 1 of 1
Change status: 05.01

A = All-round marker lights 2 on stand

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

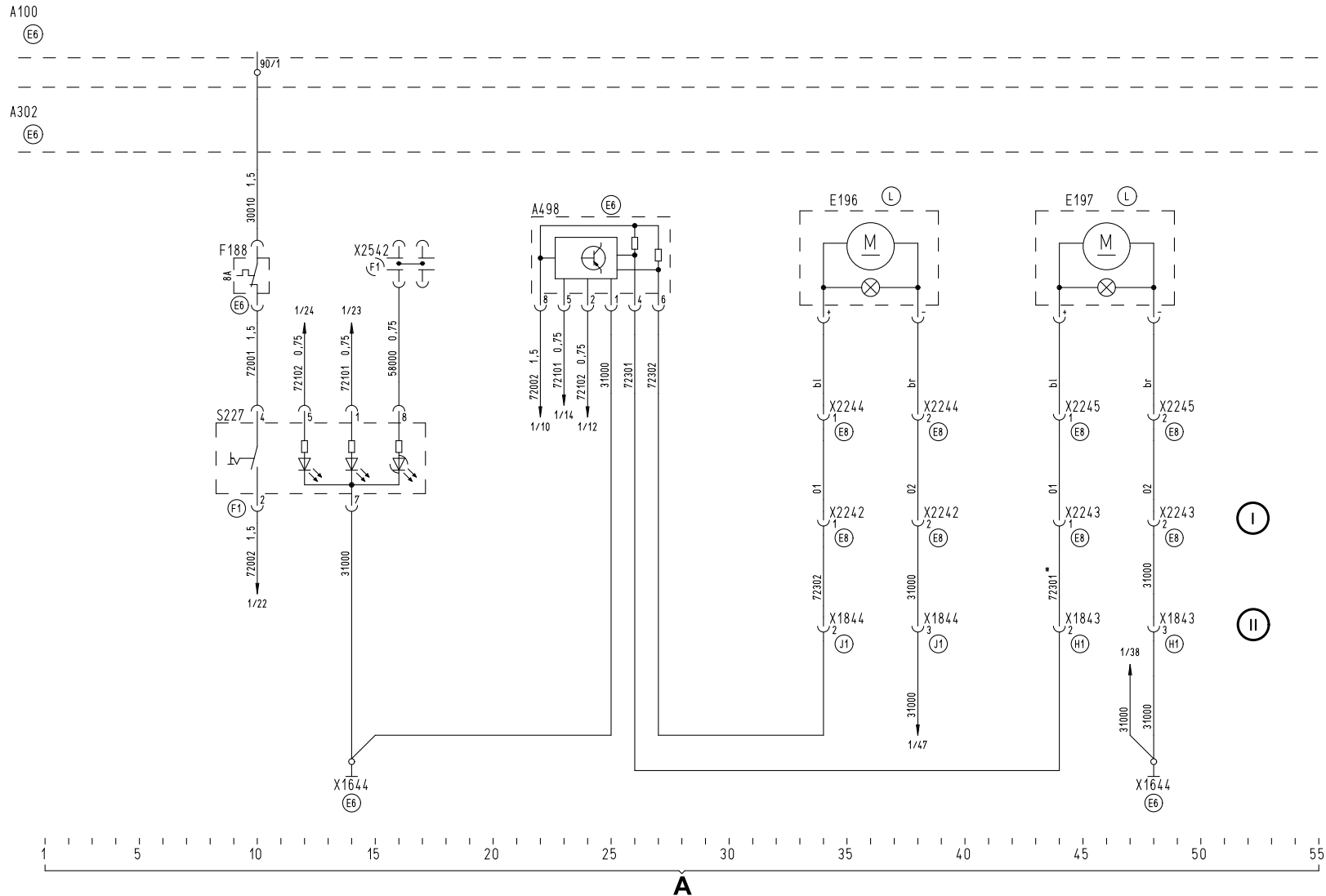
Marking of mounting positions

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

Ⓘ on the short cab, line 72302 to left and right

Ⓙ **X1844** on RL H1
X1843 on RL J1

Wiring diagram no. 81.99192.1414 Sheet 1 of 1



All-round marker light, left, on stand

Legend

Wiring diagram no. **81.99192.1416** Sheet 1 of 1
Change status: 05.01

A = All-round marker lights, left, on stand

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

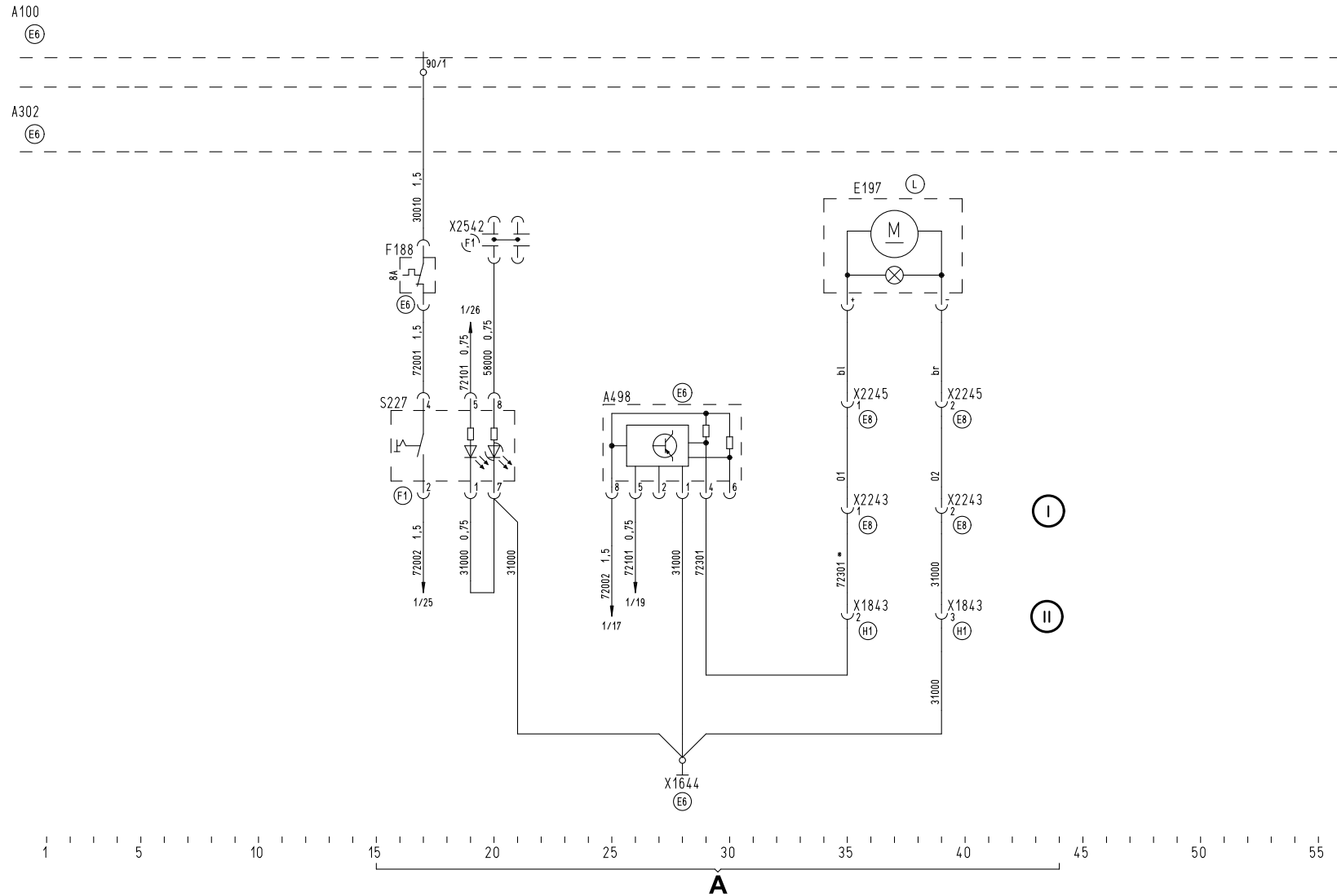
Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ1 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ1 Control unit racks
- Ⓔ2 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓖ6 Driving seat
- Ⓖ7 Passenger seat
- Ⓖ8 Control panel
- Ⓖ9 Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Ⓘ on the short cab, line 72302

Ⓙ **X1843** on RL J1

Wiring diagram no. 81.99192.1416 Sheet 1 of 1



All-round marker light, right, on stand

Legend

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

Change status: 05.01

A = All-round marker light, right, on stand

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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓔ Bumper

Ⓕ Entrance right

Ⓖ Entrance left

Ⓖ Central electrics area

Ⓖ Control unit racks

Ⓖ Rear wall of cab

Ⓖ Instrument panel

Ⓖ Central part

Ⓖ Steering wheel/column

Ⓖ Foot pedals

Ⓖ Front wall, inside left

Ⓖ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

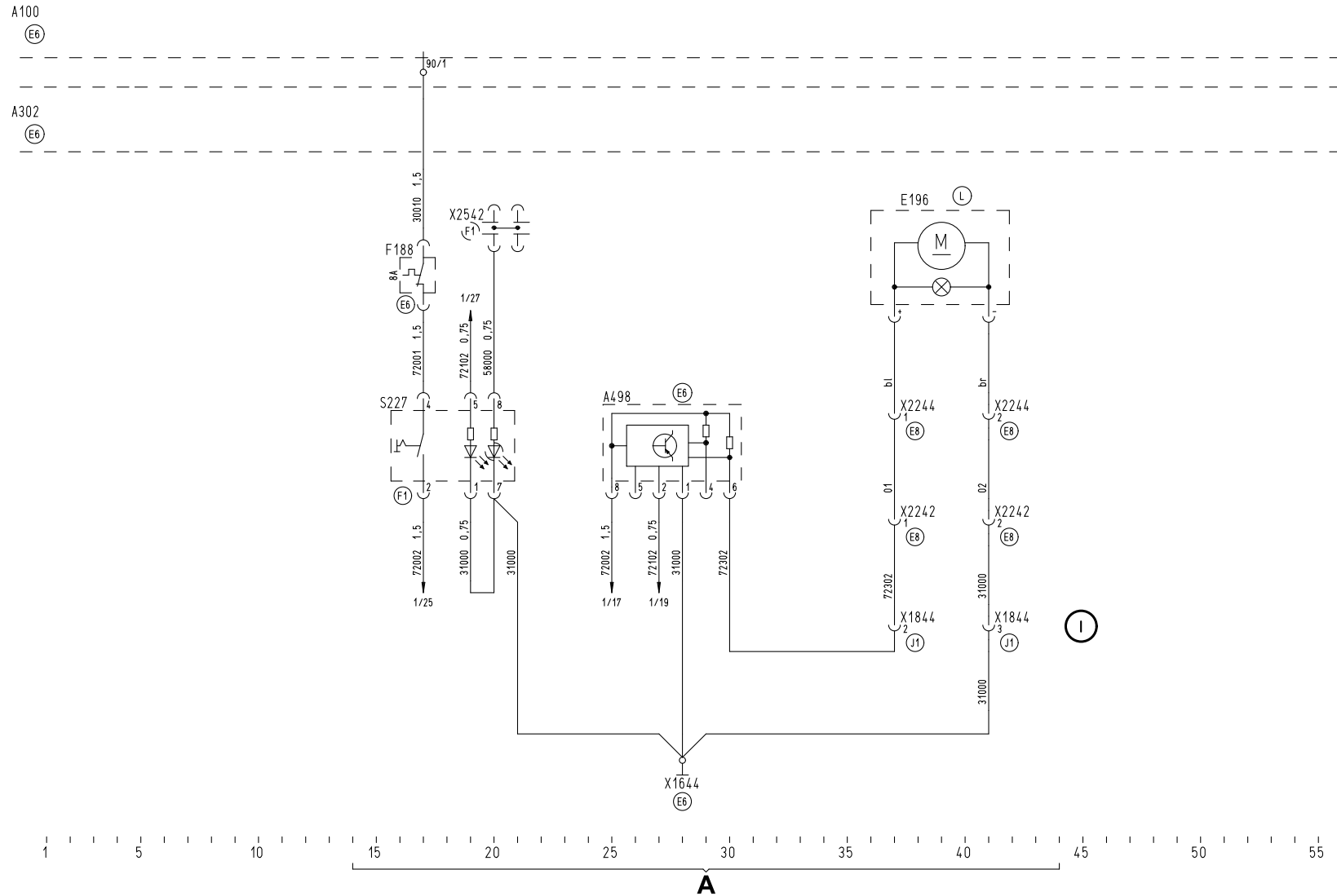
Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Ⓕ **X1844** on RL H1

Wiring diagram no. 81.99192.1415 Sheet 1 of 1



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

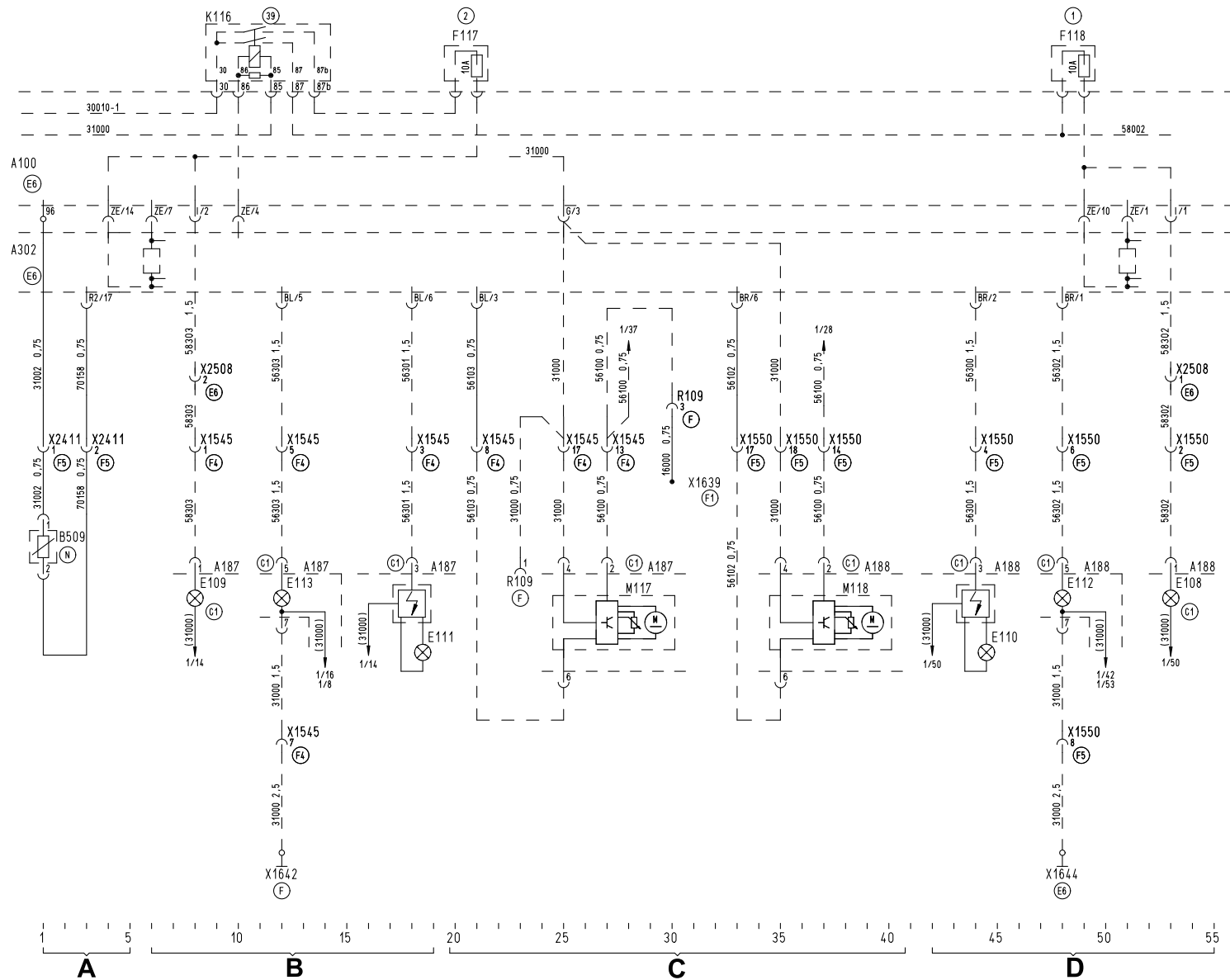
(S2) Door right

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

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



Headlight gas discharge with headlight levelling (RL)

Legend

Wiring diagram no. **81.99192.2653** Sheet 1 of 1
Change status: 04.99

A = Height sensor, front axle

B = Headlight, left

C = Headlight levelling

D = Headlight, right

A100 (255) Central fuse, relay and terminal block

A187 (493) Headlights, left

A188 (494) Headlights, right

A302 (352) Central computer 2

B509 (311) Height sensor, front axle, left

E108 Parking light, right

E109 Parking light, left

E110 Dipped beam, right

E111 Dipped beam, left

E112 Main beam, right

E113 Main beam, left

F117 (101) Fuse, parking tail light, left

F118 (101) Fuse, parking tail light, right

K116 (187) Relay, parking tail light

M117 (A493) Actuator motor, headlight levelling, left

M118 (A494) Actuator motor, headlight levelling, right

R109 Positioning potentiometer, headlight levelling

X1545 Stvd. front region, left

X1550 Stvd. front region, right

X1639 Soldered connector, line 16000

X1642 Earthing point, cab, behind instrument panel

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

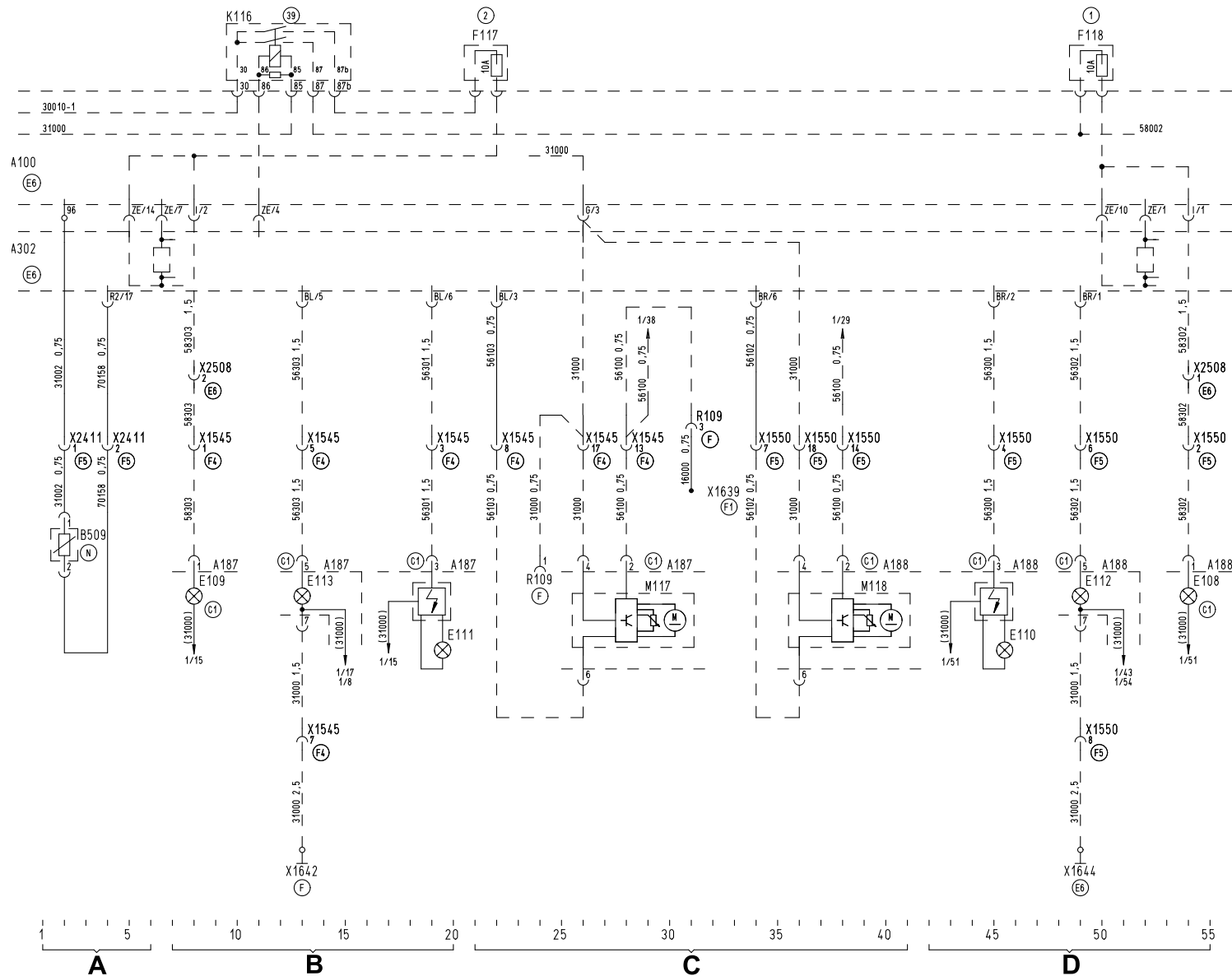
Ⓕ Door right

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

Wiring diagram no. 81.99192.2653 Sheet 1 of 1



Headlight gas discharge without headlight levelling

Legend

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

Change status: 04.99

A = Headlight, left

B = Headlight, right

A100 (255) Central fuse, relay and terminal block

A187 (493) Headlights, left

A188 (494) Headlights, right

A302 (352) Central computer 2

E108 Parking light, right

E109 Parking light, left

E110 Dipped beam, right

E111 Dipped beam, left

E112 Main beam, right

E113 Main beam, left

F117 (101) Fuse, parking tail light, left

F118 (101) Fuse, parking tail light, right

K116 (187) Relay, parking tail light

X1545 Stvd. front region, left

X1550 Stvd. front region, right

X1642 Earthing point, cab, behind instrument panel

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

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

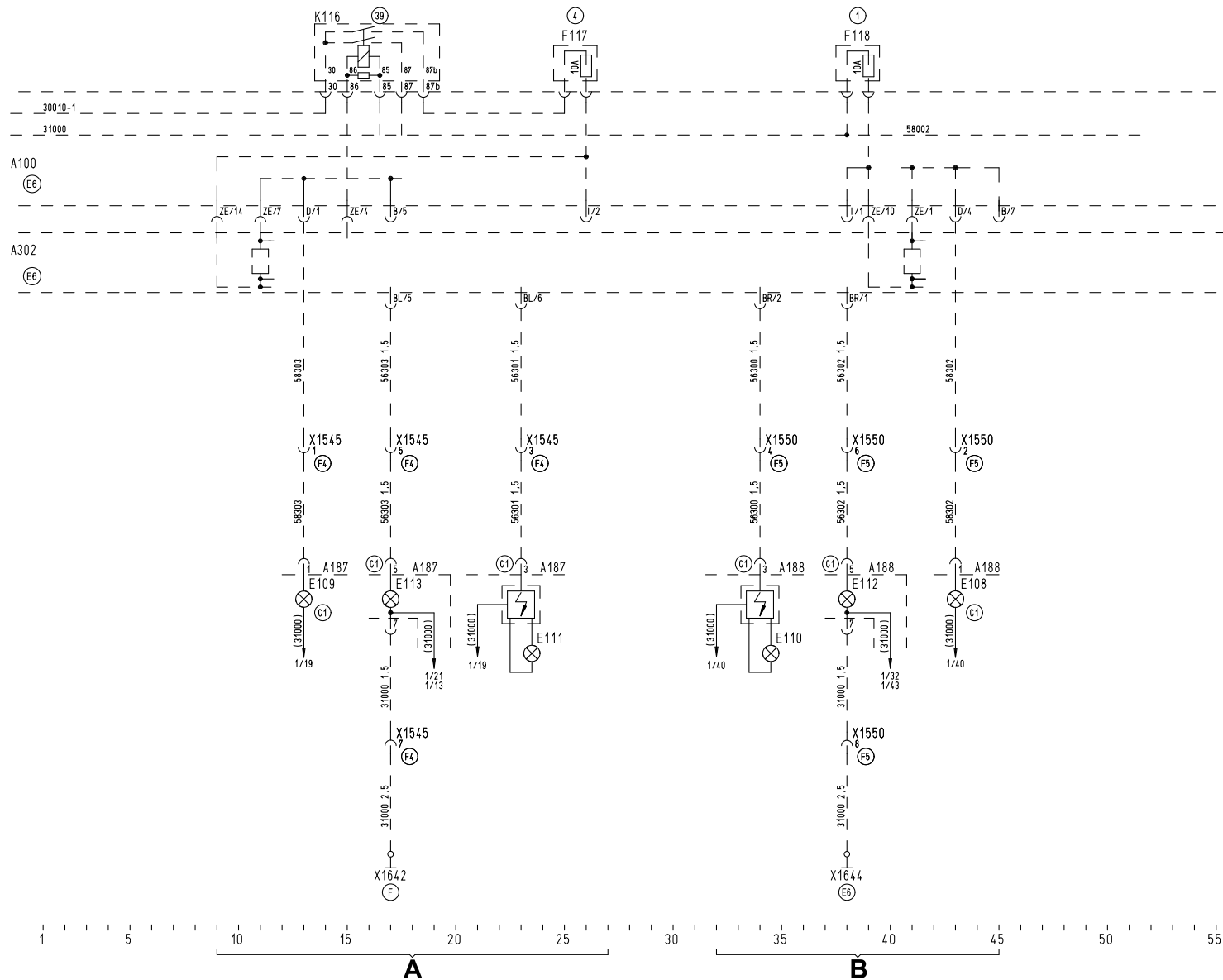
(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2652 Sheet 1 of 1



Headlight cleaning unit (LL)

Legend

Wiring diagram no. **81.99192.1392** Sheet 1 of 1
 Change status: 04.01

A = Headlight cleaning unit

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

H382 Indicator light, level of washing water

M175 (149) Washer pump for headlight cleaning unit

S193 (553) Control switch, headlight cleaning unit

X1545 Stvd. front region, left

X1757 Soldered connector, line 16006

X2541 (246) Potential distributor, 21-pin line 31000

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

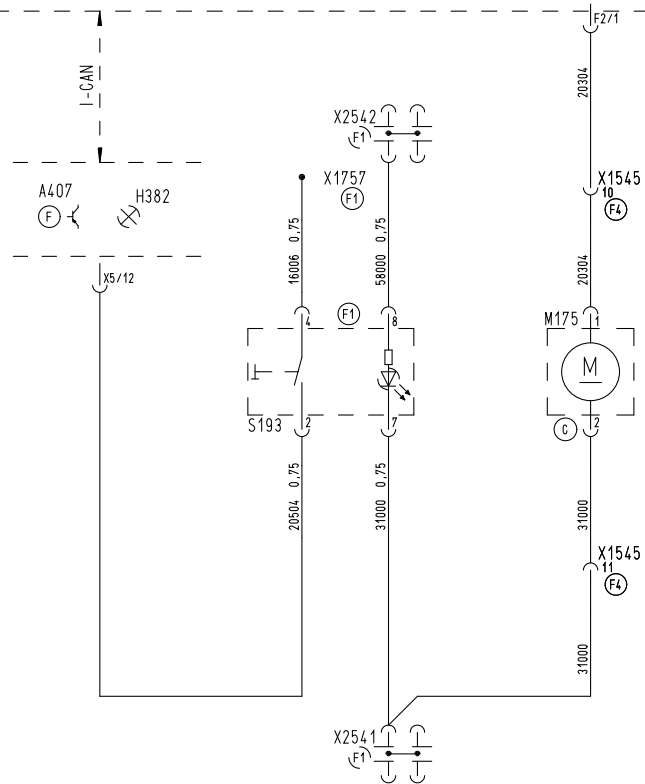
Marking of mounting positions

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

Wiring diagram no. 81.99192.1392 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

K 90

Headlight cleaning unit (RL)

Legend

Wiring diagram no. **81.99192.1393** Sheet 1 of 1
 Change status: 04.01

A = Headlight cleaning unit

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

H382 Indicator light, level of washing water

M175 (149) Washer pump for headlight cleaning unit

S193 (553) Control switch, headlight cleaning unit

X1550 Stvd. front region, right
X1757 Soldered connector, line 16006
X2541 (246) Potential distributor, 21-pin line 31000
X2542 (246) Potential distributor, 21-pin line 58000

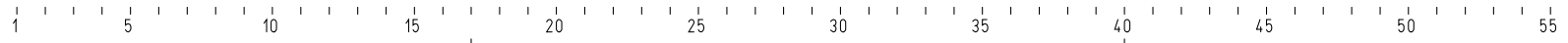
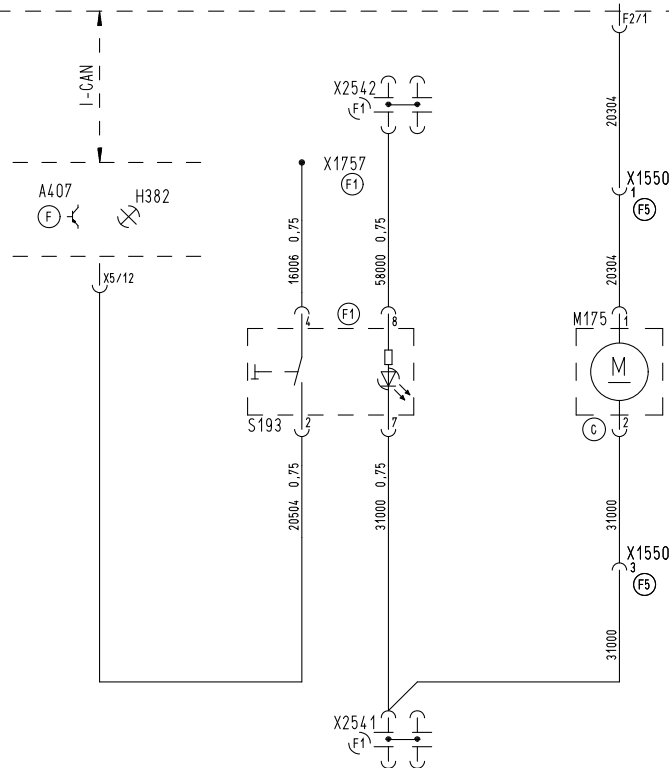
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓁ Engine | ⓕⓗ Passenger seat |
| ⒷⓂ Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| ⒸⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒸⓇ Entrance right | ⓕⓗⓂ A-pillar on driver's side |
| ⒸⓈ Entrance left | ⓕⓇⓁ B-pillar on passenger's side |
| Ⓔⓖ Central electrics area | ⓕⓇⓂ A-pillar on passenger's side |
| ⒺⓇ Control unit racks | ⓕⓁ Ceiling/roof |
| ⒺⓈ Rear wall of cab | ⓕⓃ Front axle |
| ⓕ Instrument panel | ⓕⓅ Rear axle |
| ⓕⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⓕⓇⓂ Steering wheel/column | ⓕⓇⓂ Rear part of frame |
| ⓕⓇⓁ Foot pedals | ⓕⓇⓁ Door left |
| ⓕⓇⓇ Front wall, inside left | ⓕⓇⓂ Door right |
| ⓕⓇⓈ Front wall, inside right | |

Wiring diagram no. 81.99192.1393 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

Sunroof (INALFA) (LL)

Legend

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

Change status: 04.01

A = Sunroof

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A451 (441) Door module (driver's side)

A473 (369) Sunroof

F402 (118) Fuse, sunroof

S542 (495) Control switch, sunroof

S713 (495) Control switch, sunroof

X147 Stvd. sunroof/roof hatch

X1547 Stvd. door left

X1567 Stvd. sunroof

X2541 (246) Potential distributor, 21-pin line 31000

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓘ Sunroof electronics

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

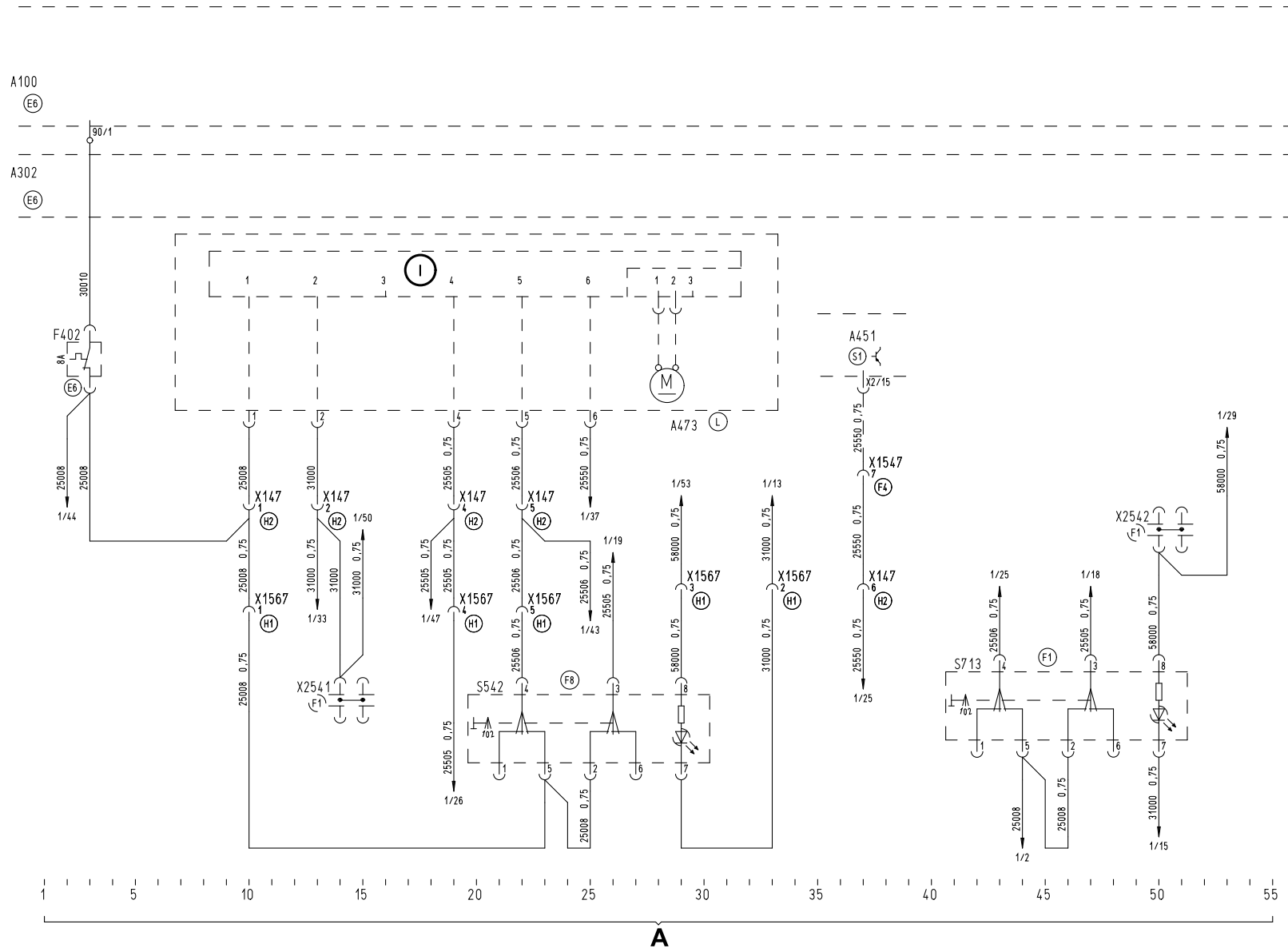
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1394 Sheet 1 of 1



Sunroof (INALFA) (RL)

Legend

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

Change status: 04.01

A = Sunroof

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A452 (441) Door module (driver's side)

A473 (369) Sunroof

F402 (118) Fuse, sunroof

S542 (495) Control switch, sunroof

S713 (495) Control switch, sunroof

X147 Stvd. sunroof/roof hatch

X1546 Stvd. door, right

X1567 Stvd. sunroof

X2541 (246) Potential distributor, 21-pin line 31000

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓘ Sunroof electronics

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

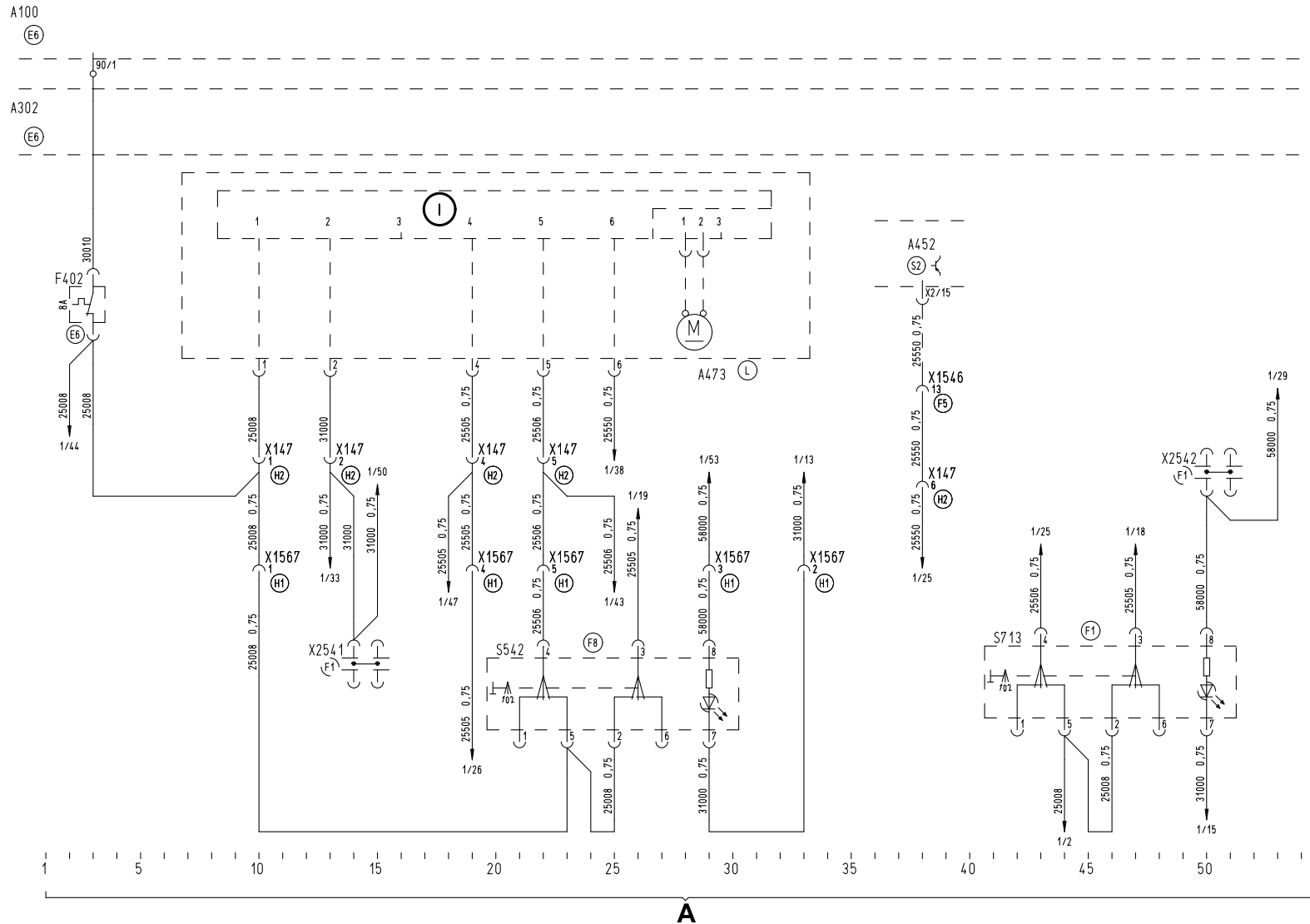
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1395 Sheet 1 of 1



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

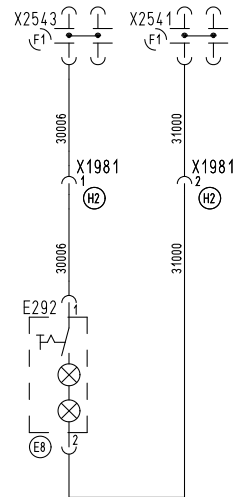
Marking of mounting positions

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

Wiring diagram no. 81.99192.1396 Sheet 1 of 1

A100

A302



A

K 90

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

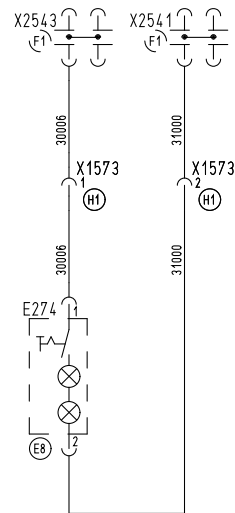
Marking of mounting positions

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

Wiring diagram no. 81.99192.1397 Sheet 1 of 1

A100
ⓔⓅ

A302
ⓔⓅ



A

K 90

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

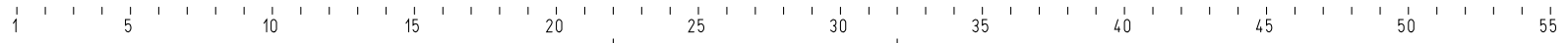
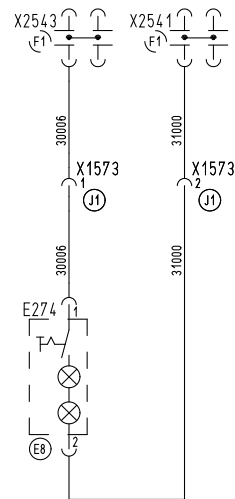
Marking of mounting positions

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

Wiring diagram no. 81.99192.1398 Sheet 1 of 1

A100
ⓔB

A302
ⓔB



A

K 90

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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

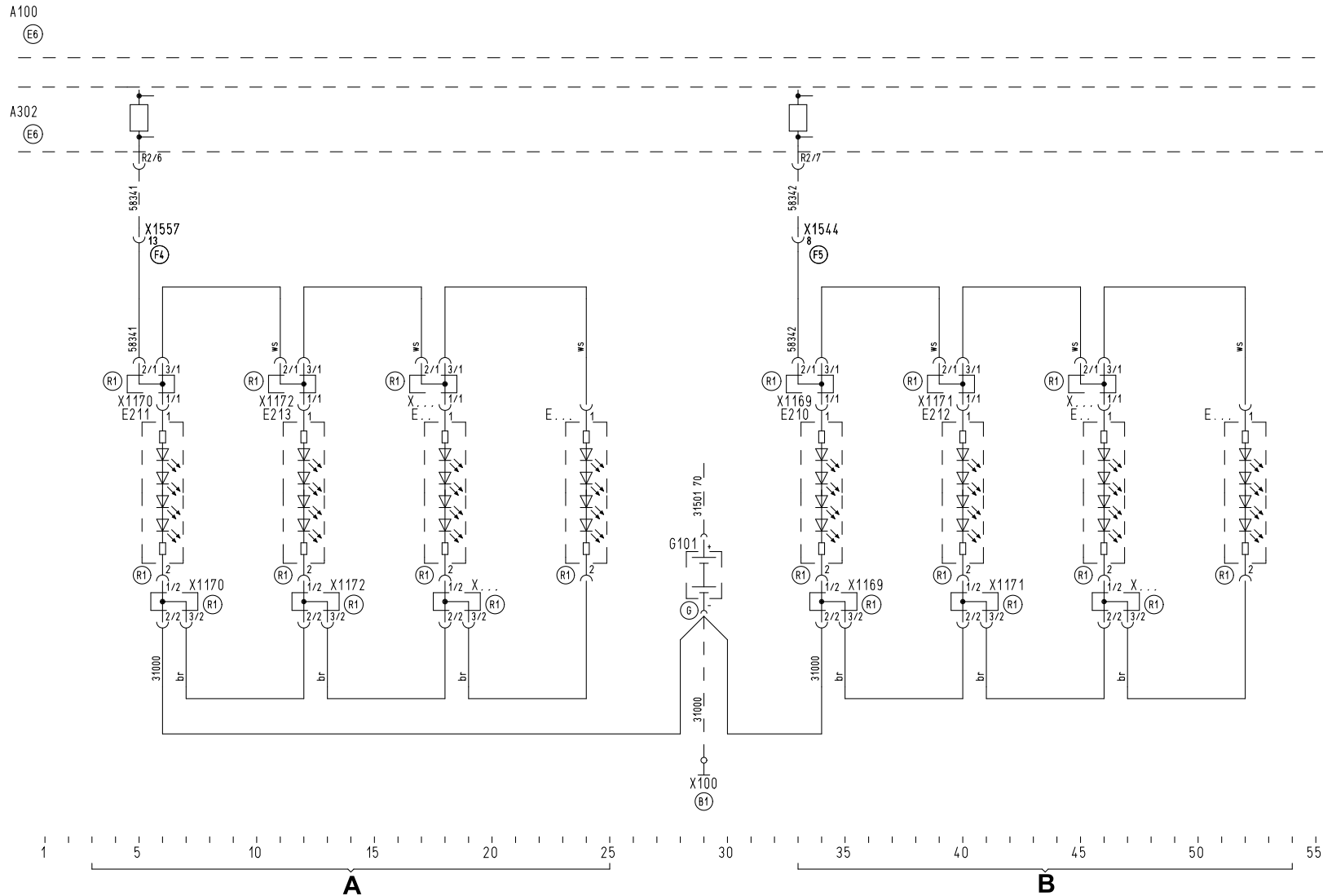
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2592 Sheet 1 of 1



Seat heating, driver

Legend

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

Change status: 02.00

A = Sitzheizung Fahrer

A100 (255) Central fuse, relay and terminal block

A233 (461) Seat, driver's side

A302 (352) Central computer 2

F198 (118) Fuse, seat heating

R135 (143) Potentiometer seat heating, driver

X1565 Stvd. seat heating, left

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓔ Bumper

Ⓕ Entrance right

Ⓖ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓘ Temperature (NTC)

Ⓙ Seat

Ⓚ Backrest

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

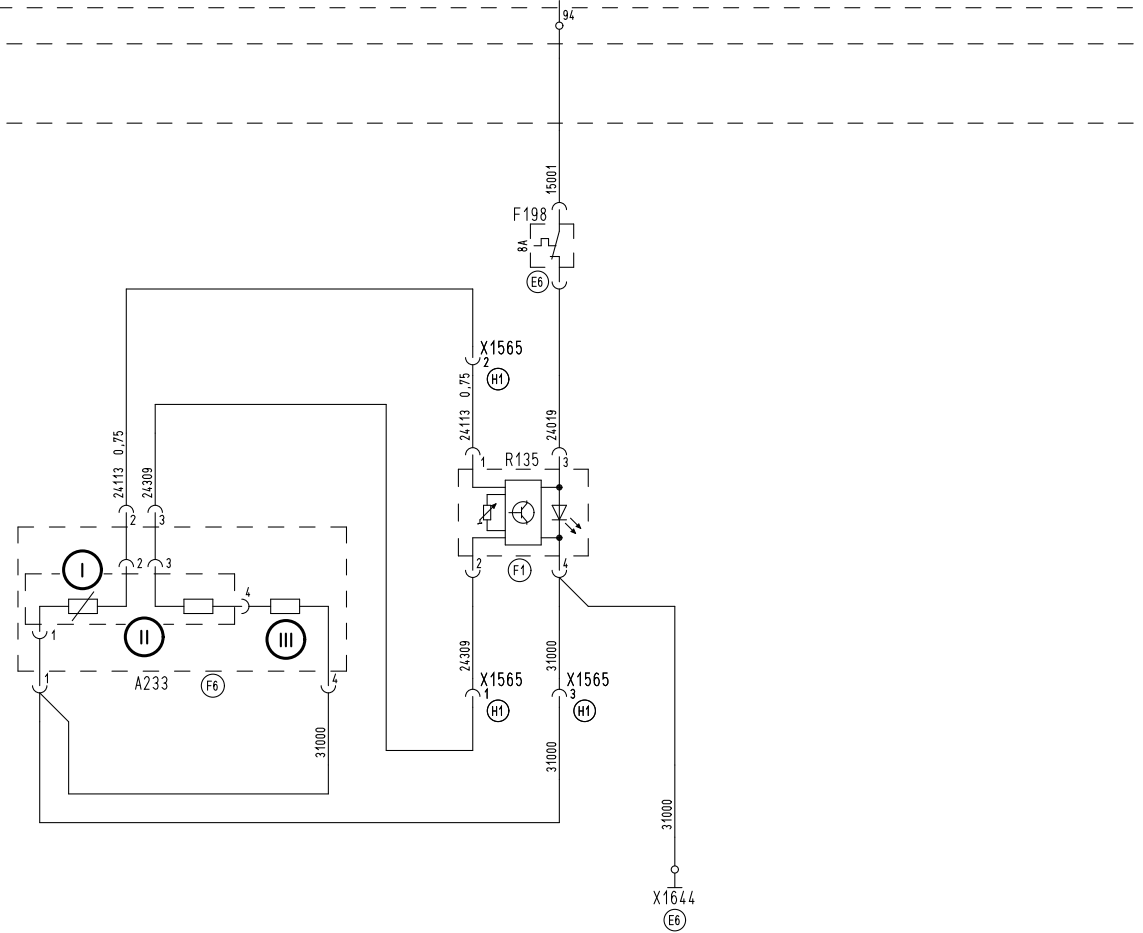
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2494 Sheet 1 of 1

A100
ⓔⓔ

A302
ⓔⓔ



A

K 90

Seat heating, driver and passenger

Legend

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

Change status: 02.00

A = Seat heating, driver

B = Seat heating, passenger

A100 (255) Central fuse, relay and terminal block

A232 (461) Seat, passenger side

A233 (461) Seat, driver's side

A302 (352) Central computer 2

F198 (118) Fuse, seat heating

R135 (143) Potentiometer seat heating, driver

R136 (143) Potentiometer seat heating, passenger

X1564 Stvd. seat heating, right

X1565 Stvd. seat heating, left

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓘ Temperature (NTC)

Ⓙ Seat

Ⓚ Backrest

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

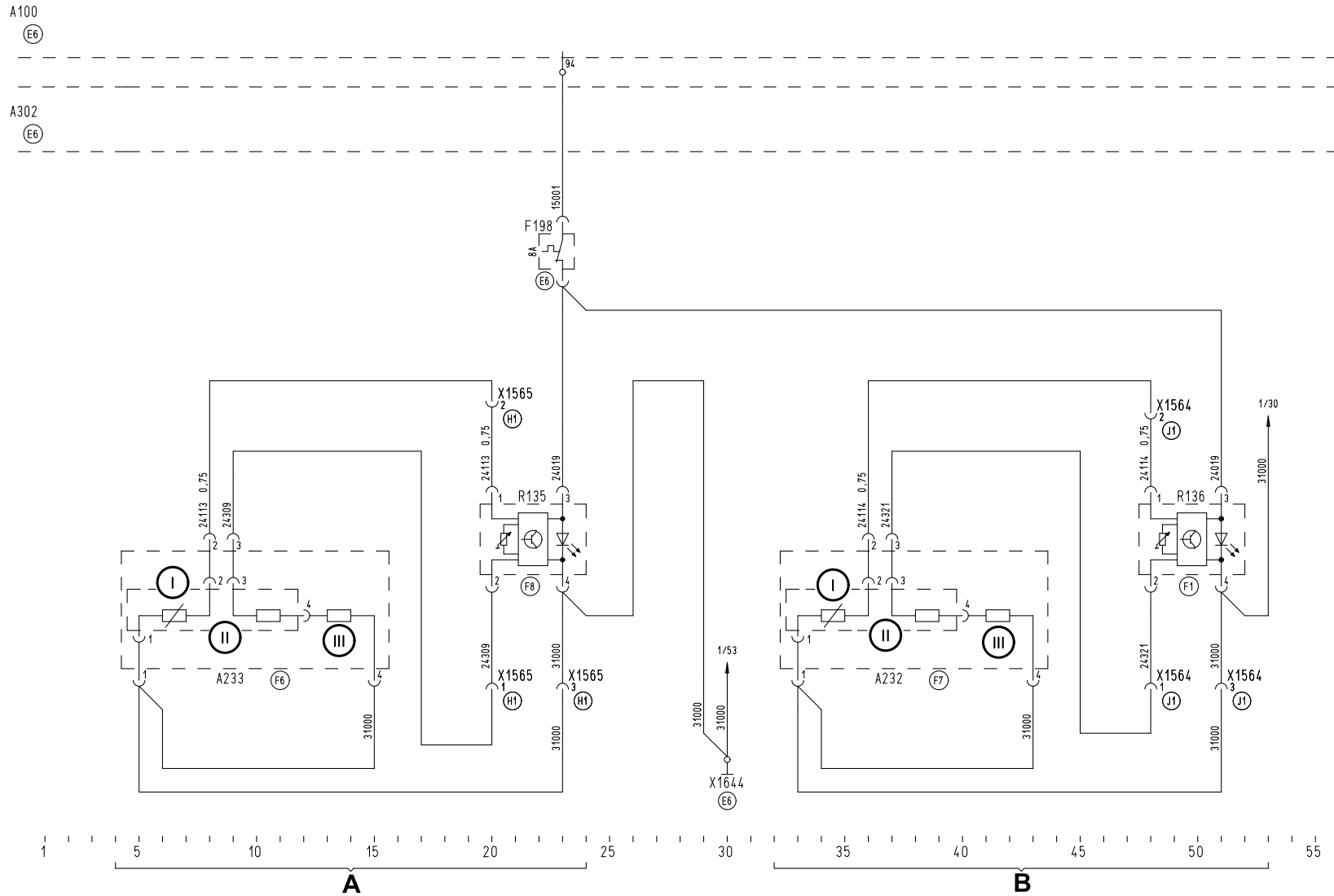
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2493 Sheet 1 of 1



Seat adjustment, electric (driver)

Legend

Wiring diagram no. **81.99192.1483** Sheet 1 of 1
Change status: 05.01

A = Seat adjustment, electric, driver

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A487 (393) Electrically adjustable driving seat

F274 (129) Fuse, seat adjustment

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

X1993 Stvd. seat adjustment, right

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

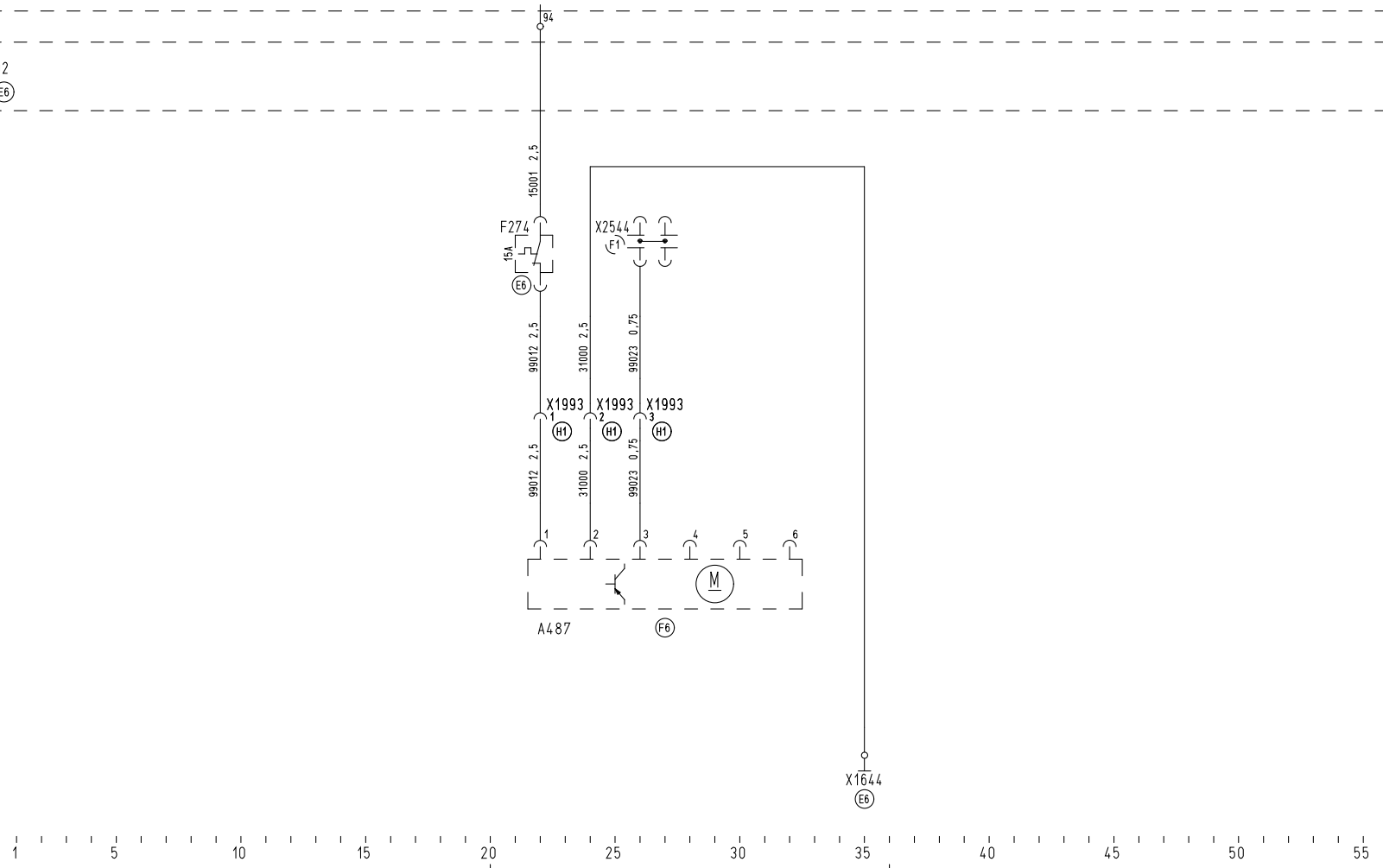
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1483 Sheet 1 of 1

A100


A302

A

K 90

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

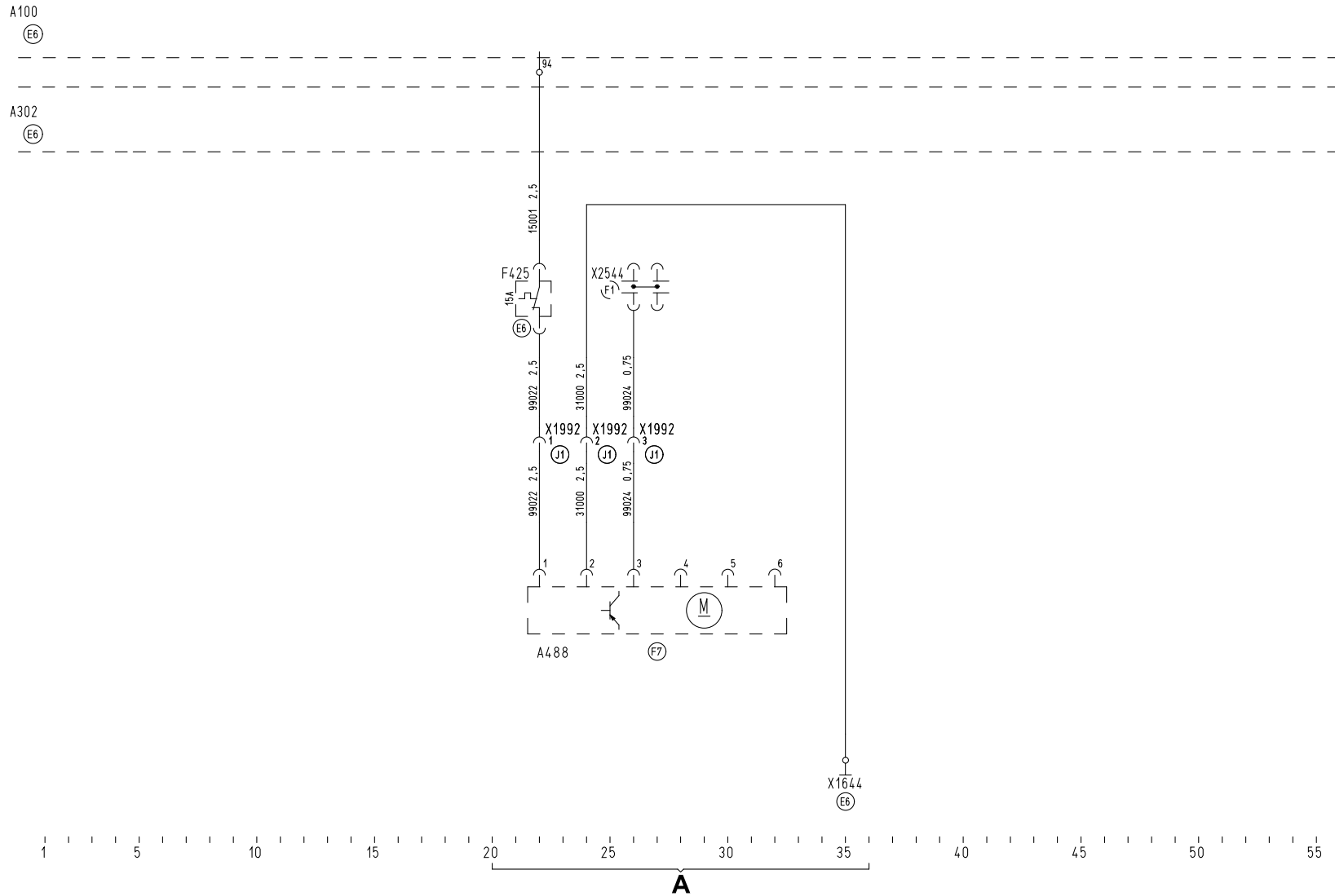
(R1) Front part of frame

(R2) Rear part of frame

(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1484 Sheet 1 of 1



Sunblind, electric

Legend

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

Change status: 04.01

A = Sunblind, electric, driver

B = Sunblind, electric, passenger

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

F426 (118) Fuse, sunblind

M124 (154) Sunblind, electr. actuated, right

M125 (154) Sunblind, electr. actuated, left

S233 (574) Control switch, sunblind driver, driver's side

S234 (574) Control switch, sunblind passenger, passenger's side

X1994 Stvd. sunblind, right

X1995 Stvd. sunblind, left

X2541 (246) Potential distributor, 21-pin line 31000

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓖ Ceiling/roof

Ⓖ Front axle

Ⓖ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

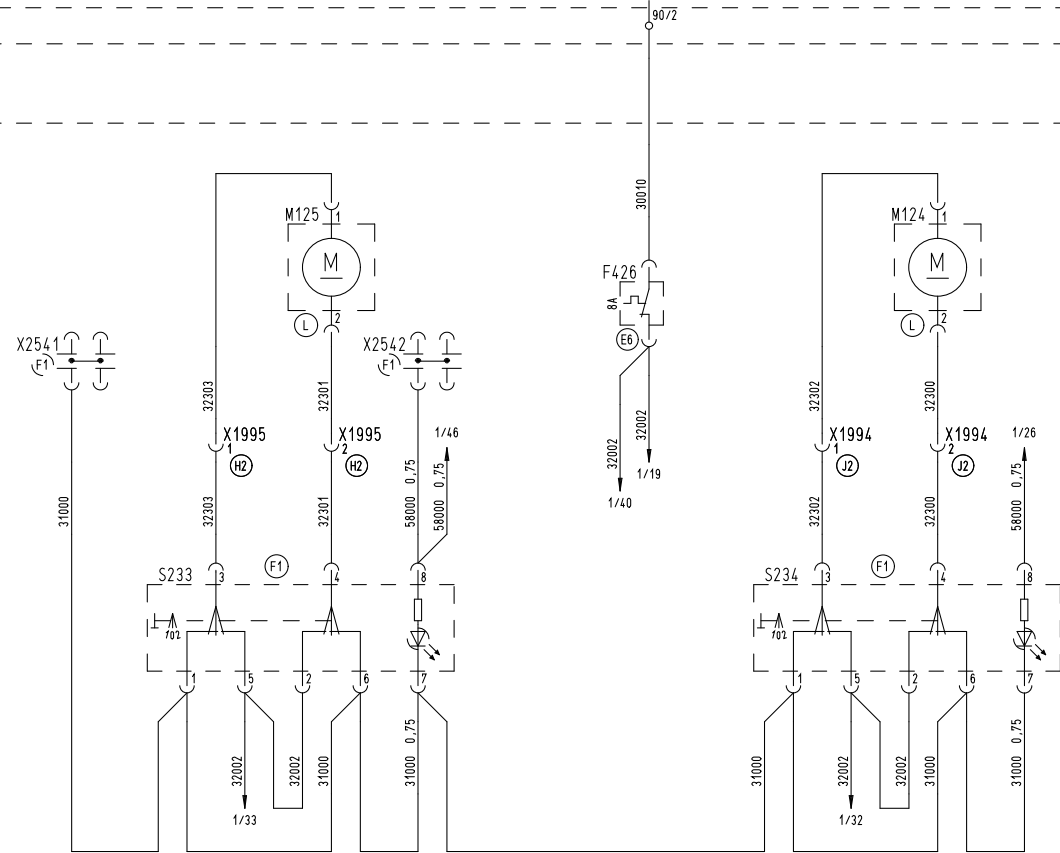
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1399 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



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

A

B

Voltage limiter

Legend

Wiring diagram no. **81.99192.2850** Sheet 1 of 1
 Change status: 08.00

A = Voltage limiter

A100 (255) Central fuse, relay and terminal block
A302 (352) Central computer 2
A408 (403) Tachograph

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

T105 (116) Voltage limiter, tachograph

X100 Earthing point, engine
X2047 Stvd. tachograph
X2071 Stvd. voltage limiter

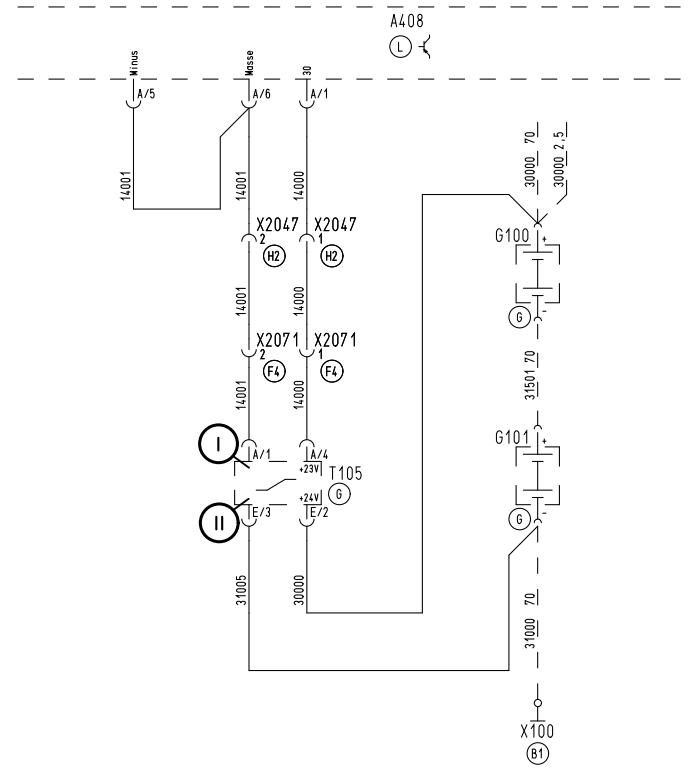
Marking of mounting positions

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

Wiring diagram no. 81.99192.2850 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

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

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

- Ⓘ Vehicle immobiliser
- Ⓙ Transmission, neutral
- Ⓚ Starting motor, terminal 50

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

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

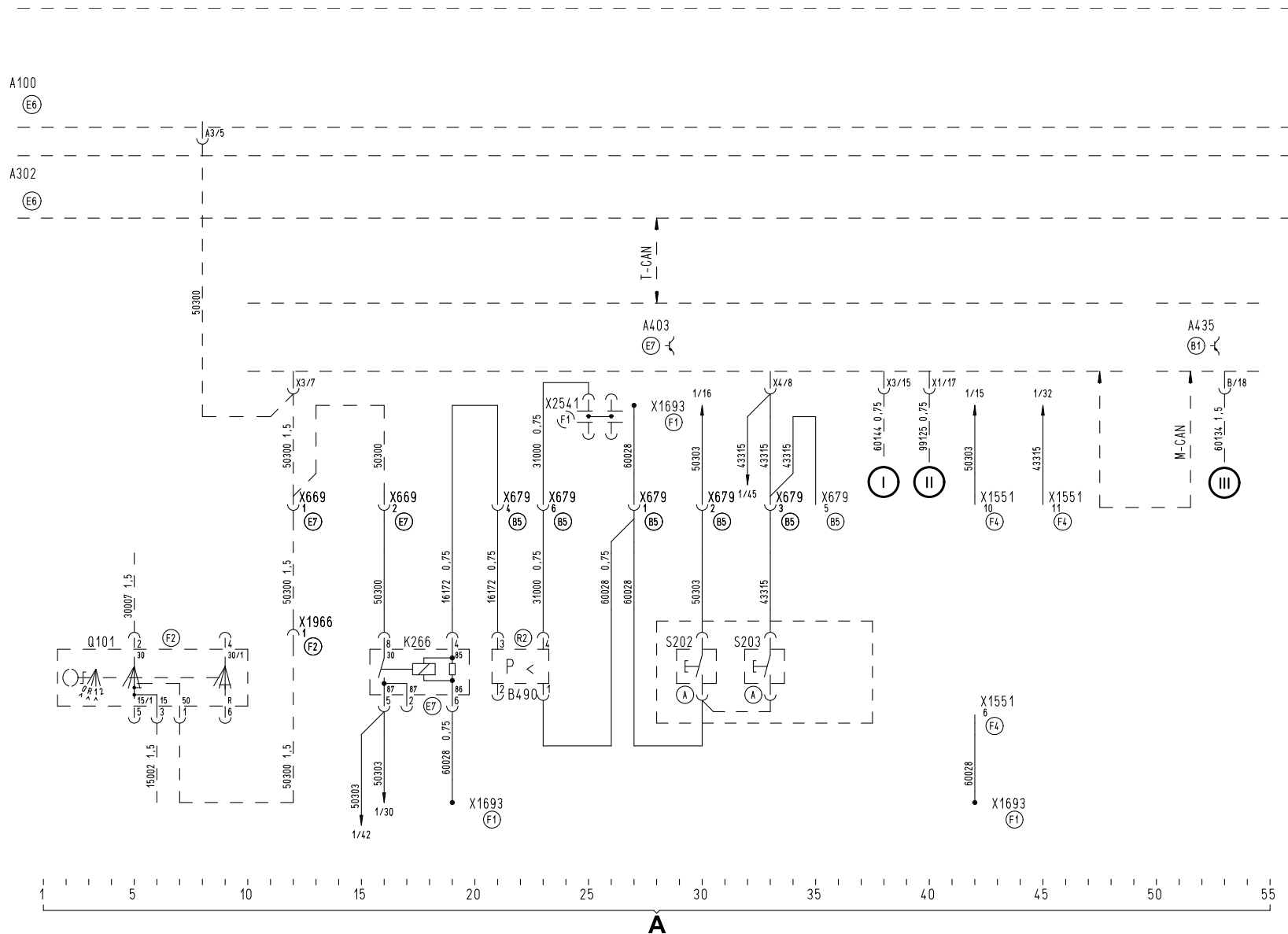
Marking of mounting positions

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

- Ⓘ Vehicle immobiliser
- Ⓙ Transmission, neutral
- Ⓚ Starting motor, terminal 50

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓕ Ceiling/roof
- Ⓕ Front axle
- Ⓕ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.1402 Sheet 1 of 1



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

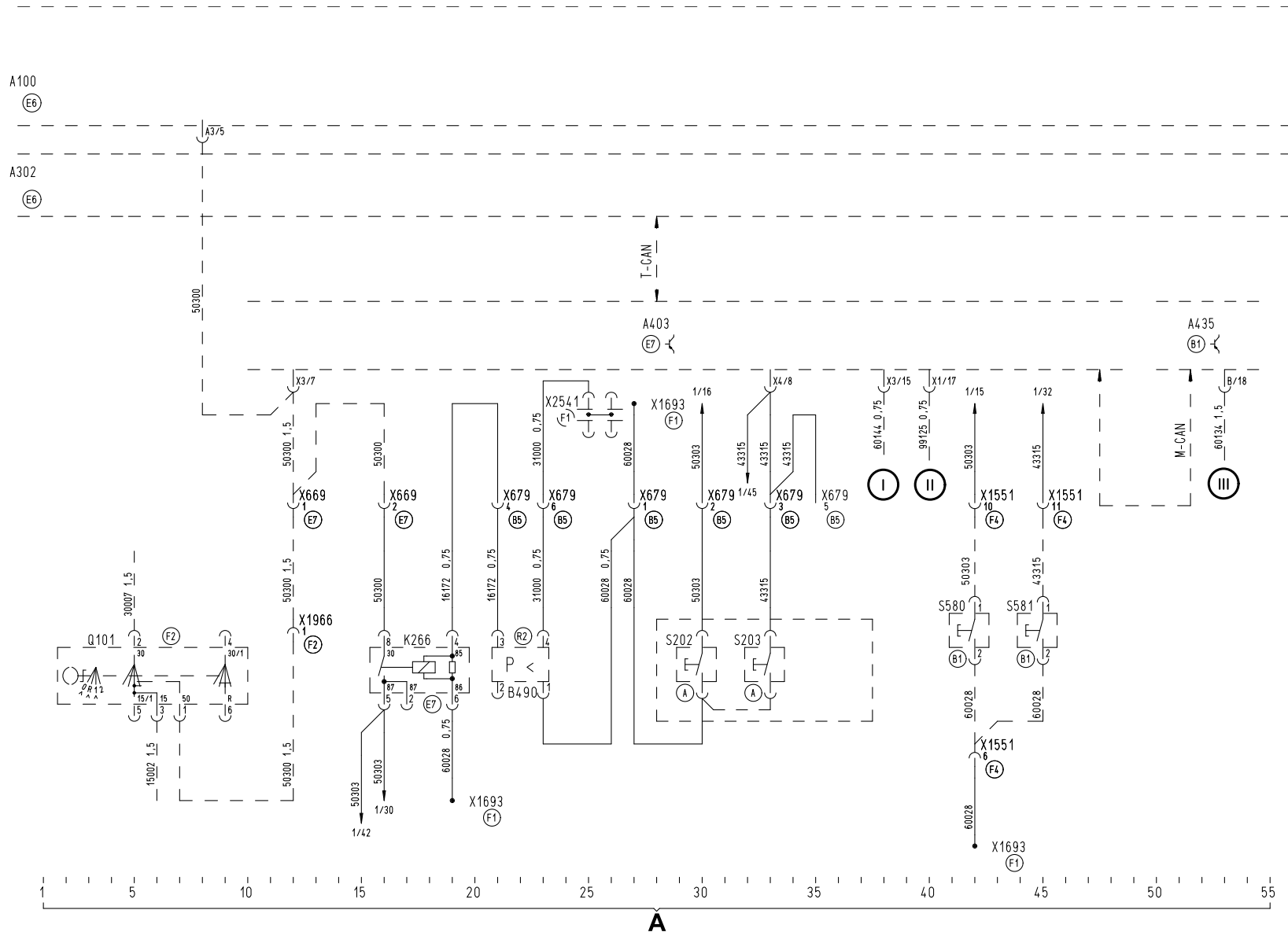
Marking of mounting positions

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

- Ⓘ Vehicle immobiliser
- Ⓙ Transmission, neutral
- Ⓚ Starting motor, terminal 50

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓕ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.1403 Sheet 1 of 1



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

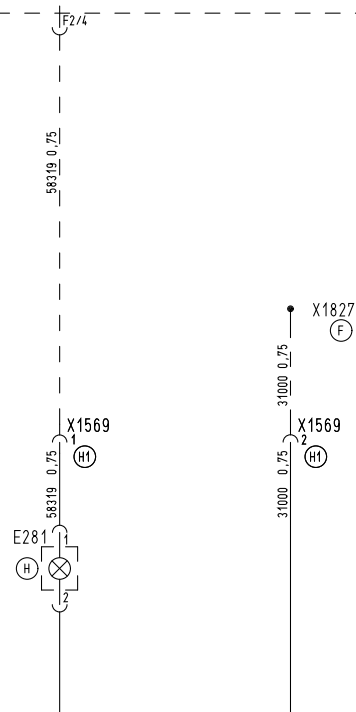
Marking of mounting positions

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

Wiring diagram no. 81.99192.2489 Sheet 1 of 1

A100


A302

A

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

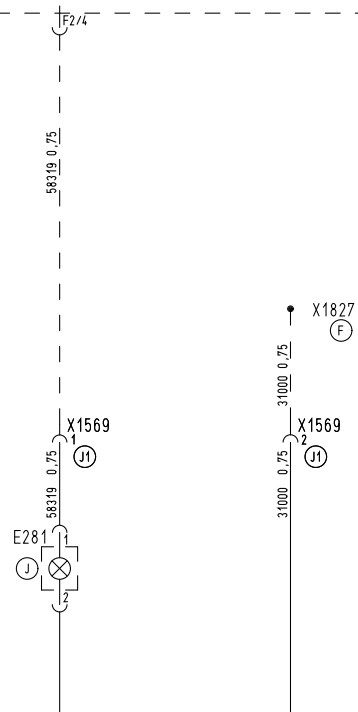
Marking of mounting positions

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

Wiring diagram no. 81.99192.2411 Sheet 1 of 1

A100
ⓔB

A302
ⓔB



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

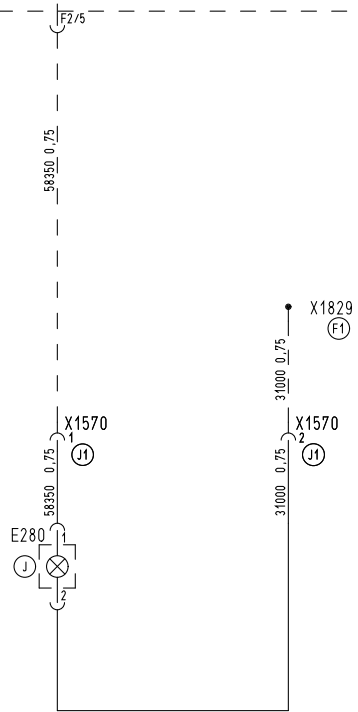
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓂ Engine | ⓕⓗ Passenger seat |
| ⒷⓃ Gearbox | ⓕⓓ Control panel |
| ⒷⓈ Front | ⓕⓔ Battery box |
| ⒷⓁⓂ Bumper | ⓕⓗⓂ B-pillar on driver's side |
| ⒷⓈⓂ Entrance right | ⓕⓗⓃ A-pillar on driver's side |
| ⒷⓈⓁ Entrance left | ⓕⓂⓂ B-pillar on passenger's side |
| ⒷⓔⓈ Central electrics area | ⓕⓂⓃ A-pillar on passenger's side |
| ⒷⓔⓁ Control unit racks | ⓕⓁ Ceiling/roof |
| ⒷⓔⓈ Rear wall of cab | ⓕⓃ Front axle |
| Ⓑⓔ Instrument panel | ⓕⓄ Rear axle |
| ⒷⓁⓂ Central part | ⓕⓂⓁ Front part of frame |
| ⒷⓔⓂ Steering wheel/column | ⓕⓂⓃ Rear part of frame |
| ⒷⓔⓈ Foot pedals | ⓕⓁⓂ Door left |
| ⒷⓔⓁ Front wall, inside left | ⓕⓁⓃ Door right |
| ⒷⓔⓈ Front wall, inside right | |

Wiring diagram no. 81.99192.2490 Sheet 1 of 1

A100
E6

A302
E6



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

A

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

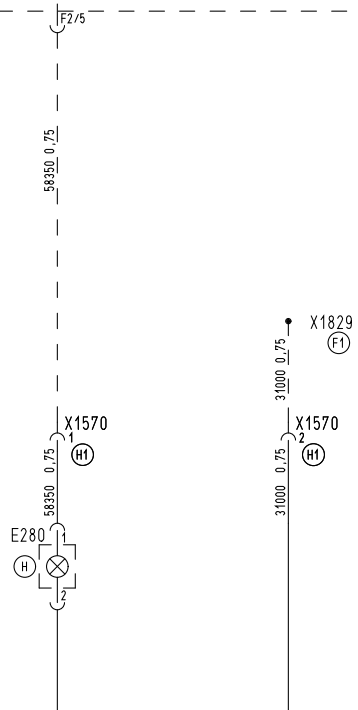
Marking of mounting positions

- | | |
|-----------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓁ Engine | ⓕⓗ Passenger seat |
| ⒷⓂ Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| ⒸⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒸⓇ Entrance right | ⓕⓗⓂ A-pillar on driver's side |
| ⒸⓁ Entrance left | ⓕⓇⓁ B-pillar on passenger's side |
| Ⓔⓖ Central electrics area | ⓕⓇⓂ A-pillar on passenger's side |
| ⒺⓇ Control unit racks | ⓕⓁ Ceiling/roof |
| Ⓔⓓ Rear wall of cab | ⓕⓃ Front axle |
| Ⓔⓕ Instrument panel | ⓕⓅ Rear axle |
| ⒺⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⒺⓇ Steering wheel/column | ⓕⓇⓂ Rear part of frame |
| ⒺⓁ Foot pedals | ⓕⓁⓁ Door left |
| ⒺⓇ Front wall, inside left | ⓕⓁⓂ Door right |
| ⒺⓁ Front wall, inside right | |

Wiring diagram no. 81.99192.2412 Sheet 1 of 1

A100
E6

A302
E6



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

A

Locker lighting, top (left, middle) (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

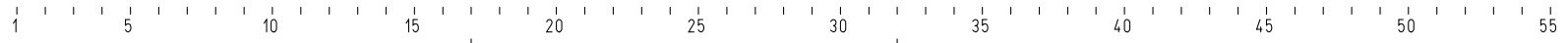
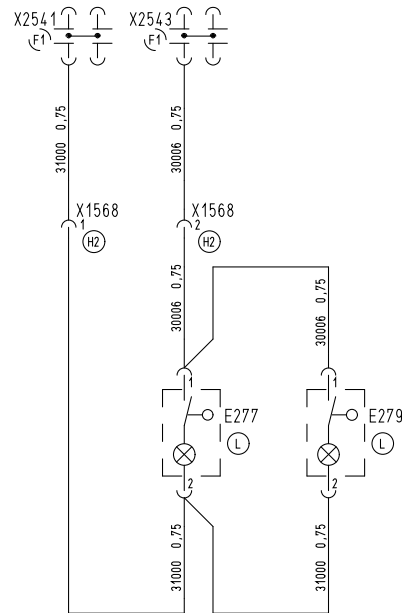
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1404 Sheet 1 of 1

A100


A302

A

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

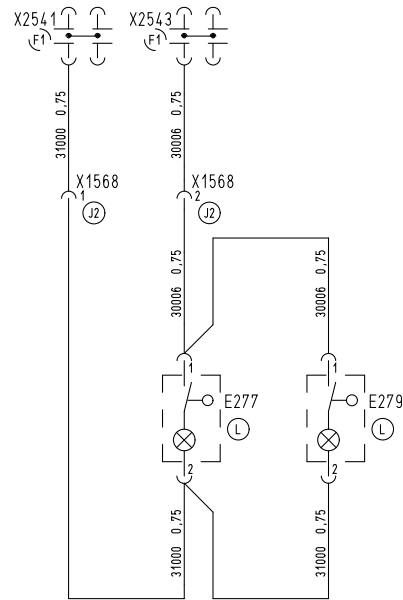
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1405 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

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

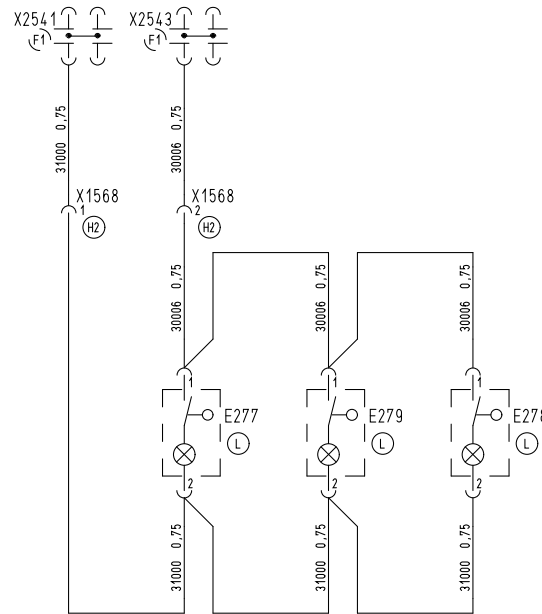
Marking of mounting positions

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

Wiring diagram no. 81.99192.1406 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

K 90

Locker lighting, top (left, middle, right) (RL)

Legend

Wiring diagram no. **81.99192.1407** Sheet 1 of 1
Change status: 05.01

A = Locker lighting, top (left, middle, right)

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

E277 (177) Locker lighting, top left
E278 (177) Locker lighting, top right
E279 (177) Locker lighting, top centre

X1568 Stvd. locker lighting, top
X2541 (246) Potential distributor, 21-pin line 31000
X2543 (246) Potential distributor, 21-pin line 30006

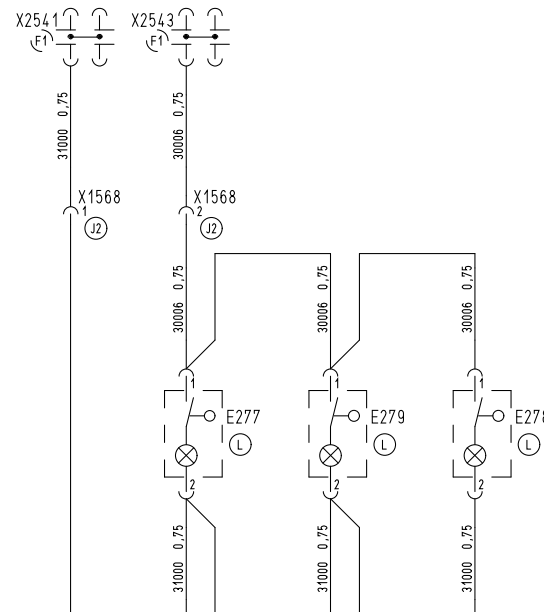
Marking of mounting positions

- | | |
|-----------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓁ Engine | ⓕⓗ Passenger seat |
| ⒷⓂ Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| ⒸⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒸⓂ Entrance right | ⓕⓗⓂ A-pillar on driver's side |
| ⒸⓁ Entrance left | ⓕⓙⓁ B-pillar on passenger's side |
| Ⓔⓖ Central electrics area | ⓕⓙⓂ A-pillar on passenger's side |
| Ⓔⓓ Control unit racks | ⓕⓁ Ceiling/roof |
| Ⓔⓔ Rear wall of cab | ⓕⓃ Front axle |
| ⓕ Instrument panel | ⓕⓓ Rear axle |
| ⓕⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⓕⓂ Steering wheel/column | ⓕⓇⓂ Rear part of frame |
| ⓕⓁ Foot pedals | ⓕⓁⓁ Door left |
| ⓕⓄ Front wall, inside left | ⓕⓁⓂ Door right |
| ⓕⓄ Front wall, inside right | |

Wiring diagram no. 81.99192.1407 Sheet 1 of 1

A100
ⓔ6

A302
ⓔ6



A

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

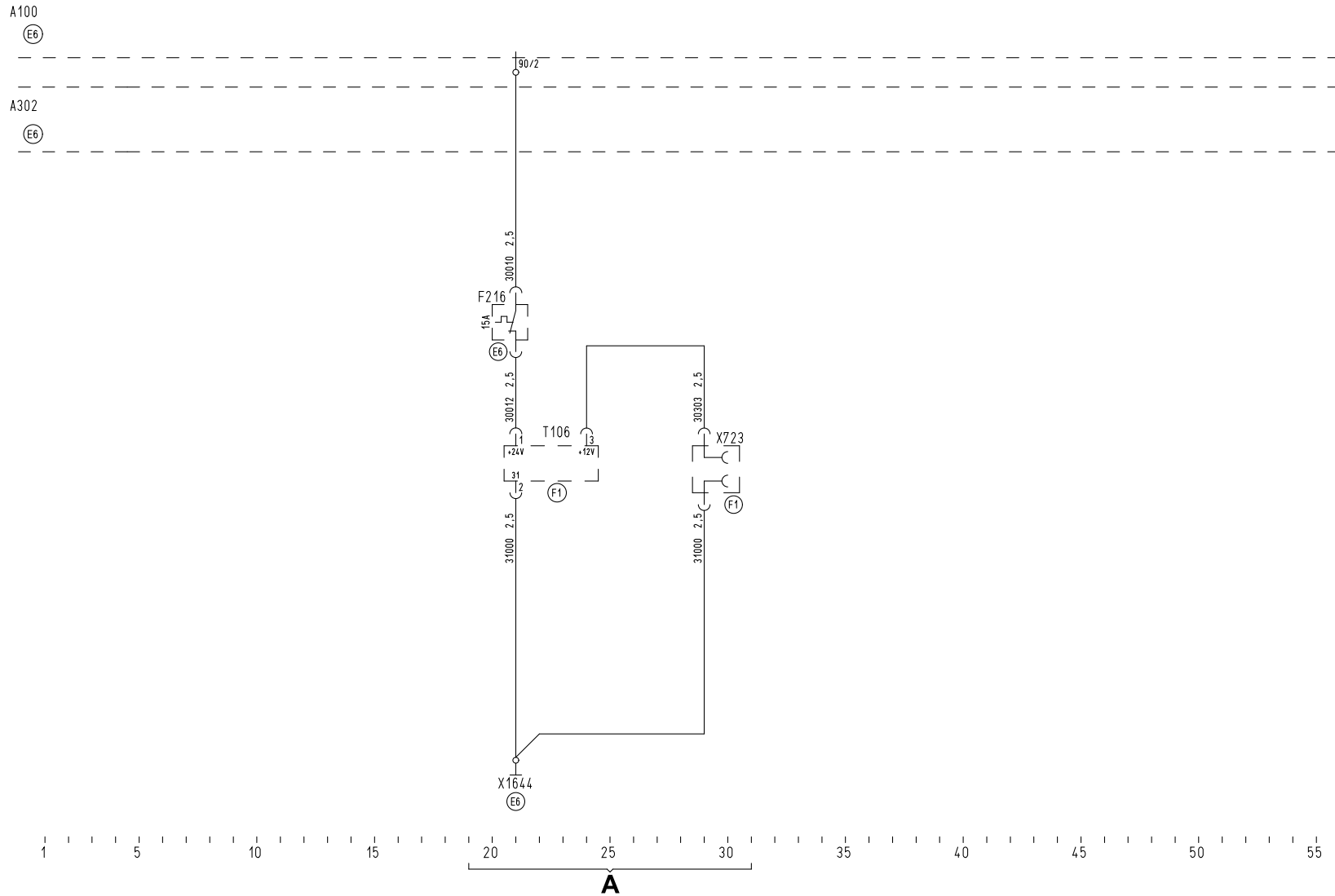
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2569 Sheet 1 of 1



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

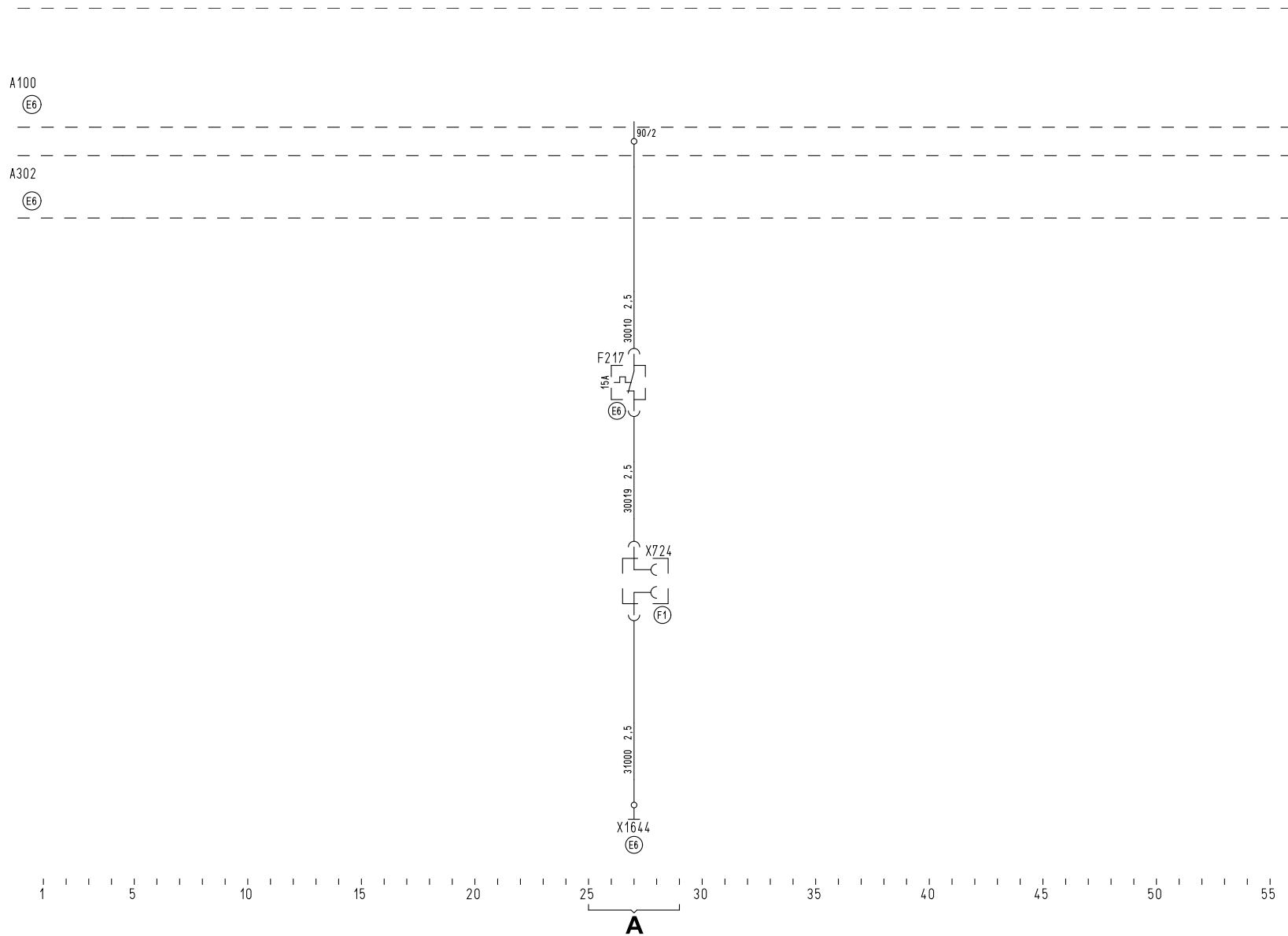
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2570 Sheet 1 of 1



Socket 24V in wiring trough

Legend

Wiring diagram no. **81.99192.2796** Sheet 1 of 1
Change status: 05.00

A = Socket 24V in wiring trough (engine)

F355 (132) Main fuse (terminal 30-2)

X1904 Threaded bolt M6 (MP box)

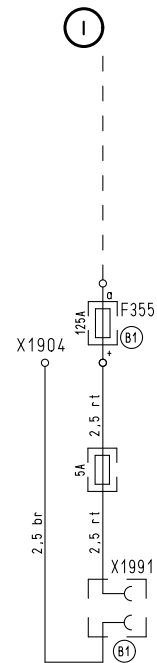
X1991 (219) 24V socket (MP box)

Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ1 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ1 Control unit racks
- Ⓔ2 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓖ Driving seat
- Ⓖ1 Passenger seat
- Ⓖ2 Control panel
- Ⓖ3 Battery box
- Ⓖ4 B-pillar on driver's side
- Ⓖ5 A-pillar on driver's side
- Ⓖ6 B-pillar on passenger's side
- Ⓖ7 A-pillar on passenger's side
- Ⓖ8 Ceiling/roof
- Ⓖ9 Front axle
- Ⓖ10 Rear axle
- Ⓖ11 Front part of frame
- Ⓖ12 Rear part of frame
- Ⓖ13 Door left
- Ⓖ14 Door right
- Ⓖ15 Wiring trough, engine

Wiring diagram no. 81.99192.2796 Sheet 1 of 1

A100
ⓔB



A

K 90

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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

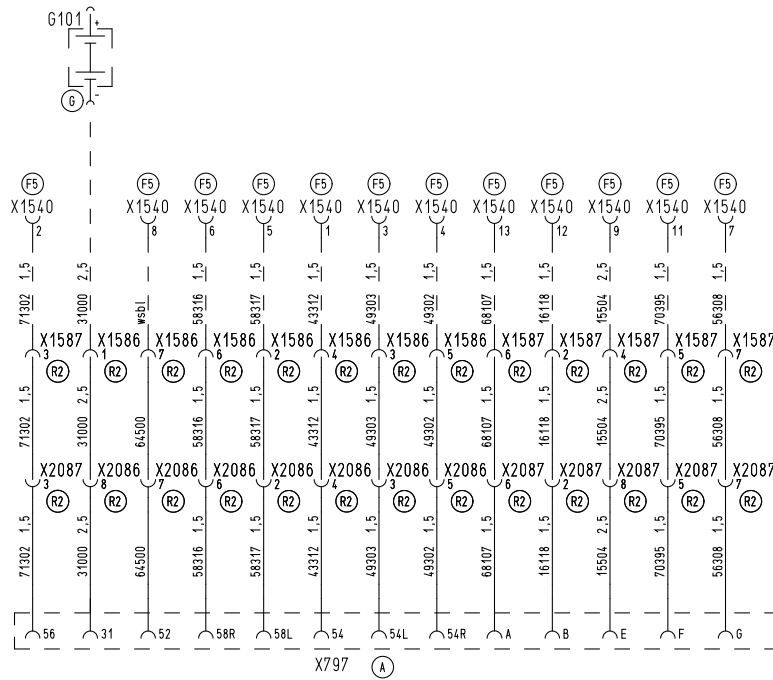
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2655 Sheet 1 of 1

A100


A302

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

A

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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

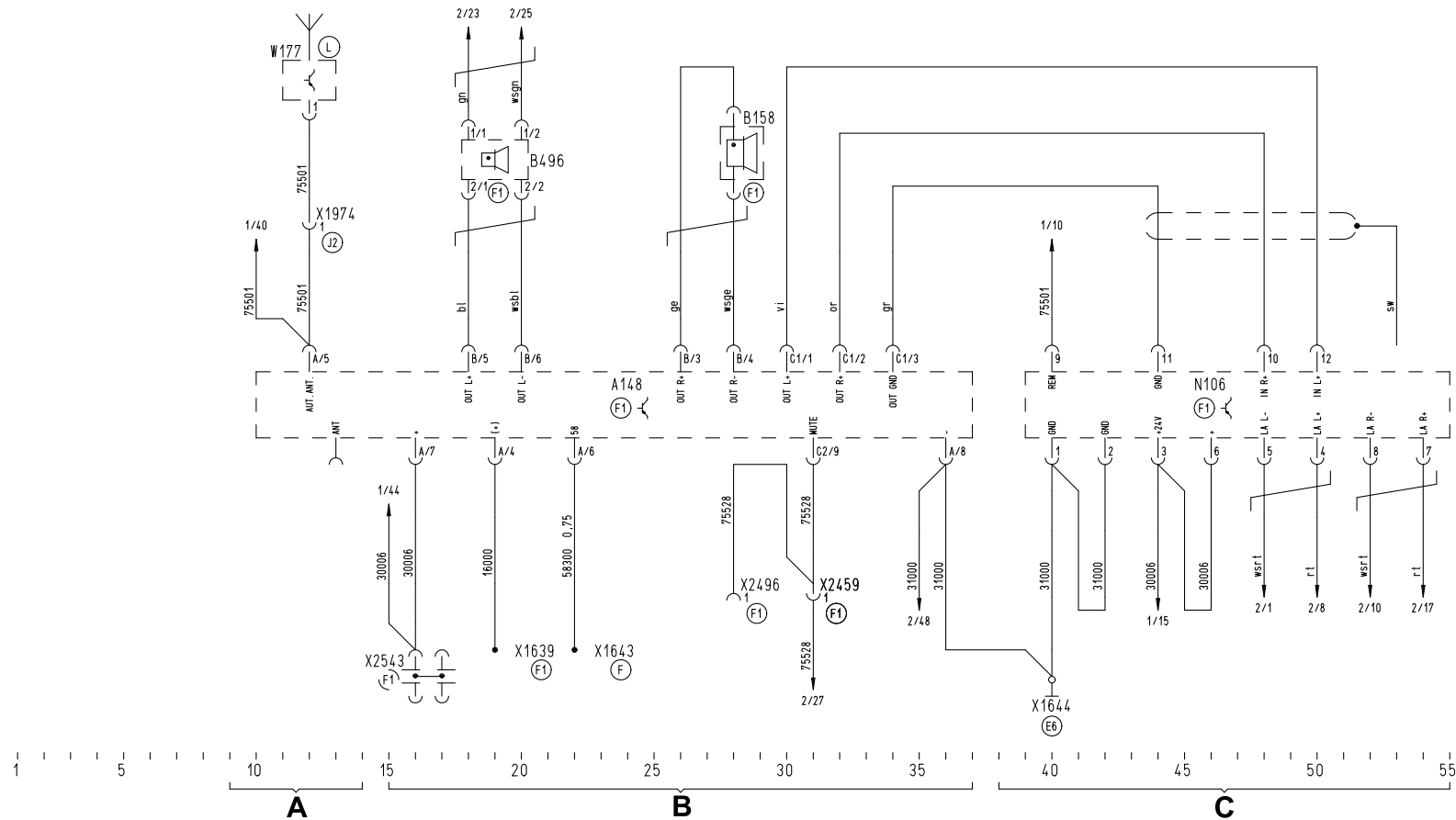
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2871 Sheet 1 of 2

A100
 (E6)

A302
 (E6)



Cullmann phone with radio 24V MAN-Sound (LL)

Legend

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

Change status: 10.00

A = Loudspeaker

B = Cullmann telephone box

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (545) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

X1546 Stvd. door, right

X1547 Stvd. door, left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2372 Stvd. supply to CD changer

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓘ Mobile phone interface

Ⓙ CD changer

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

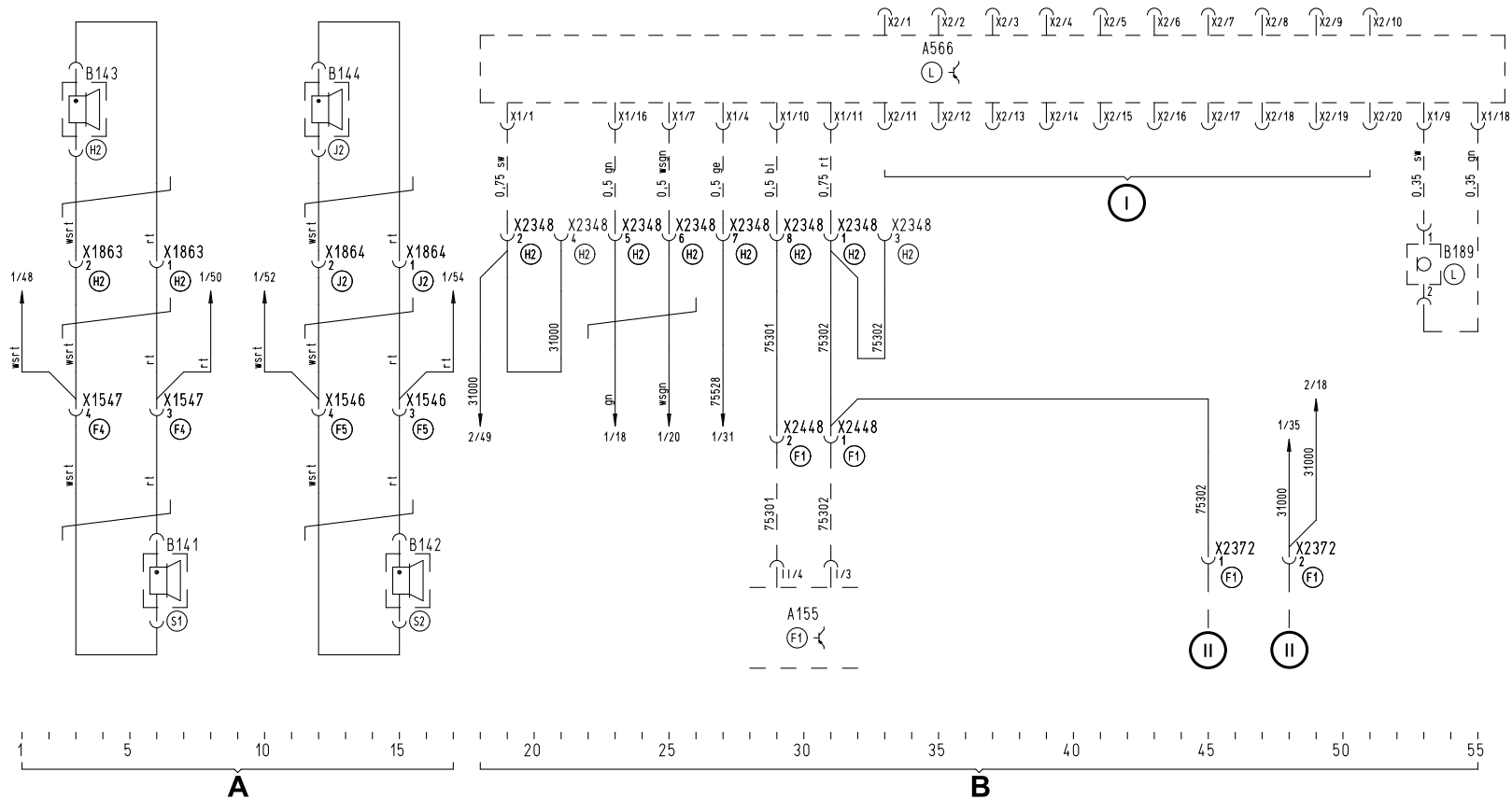
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2871 Sheet 2 of 2

A100


A302

Cullmann phone with radio 24V MAN-Sound (RL)

Legend

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

Change status: 10.00

A = Active aerial

B = Radio

C = Amplifier

A100 (255) Central fuse, relay and terminal block

A148 (574) Radio/cassette player

A302 (352) Central computer 2

B157 (298) Driver's loudspeaker, front left

B498 (344) Cab loudspeaker, right, with hand-free telephone

N106 (127) Audio amplifier

W177 (172) Combination aerial

X1639 Soldered connector, line 16000

X1643 Soldered connector, line 58300

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

X1974 Stvd. for active aerial

X2459 Stvd. adaptation mute signal

X2496 Adaptation mute signal lane guard

X2543 (246) Potential distributor, 21-pin line 30006

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

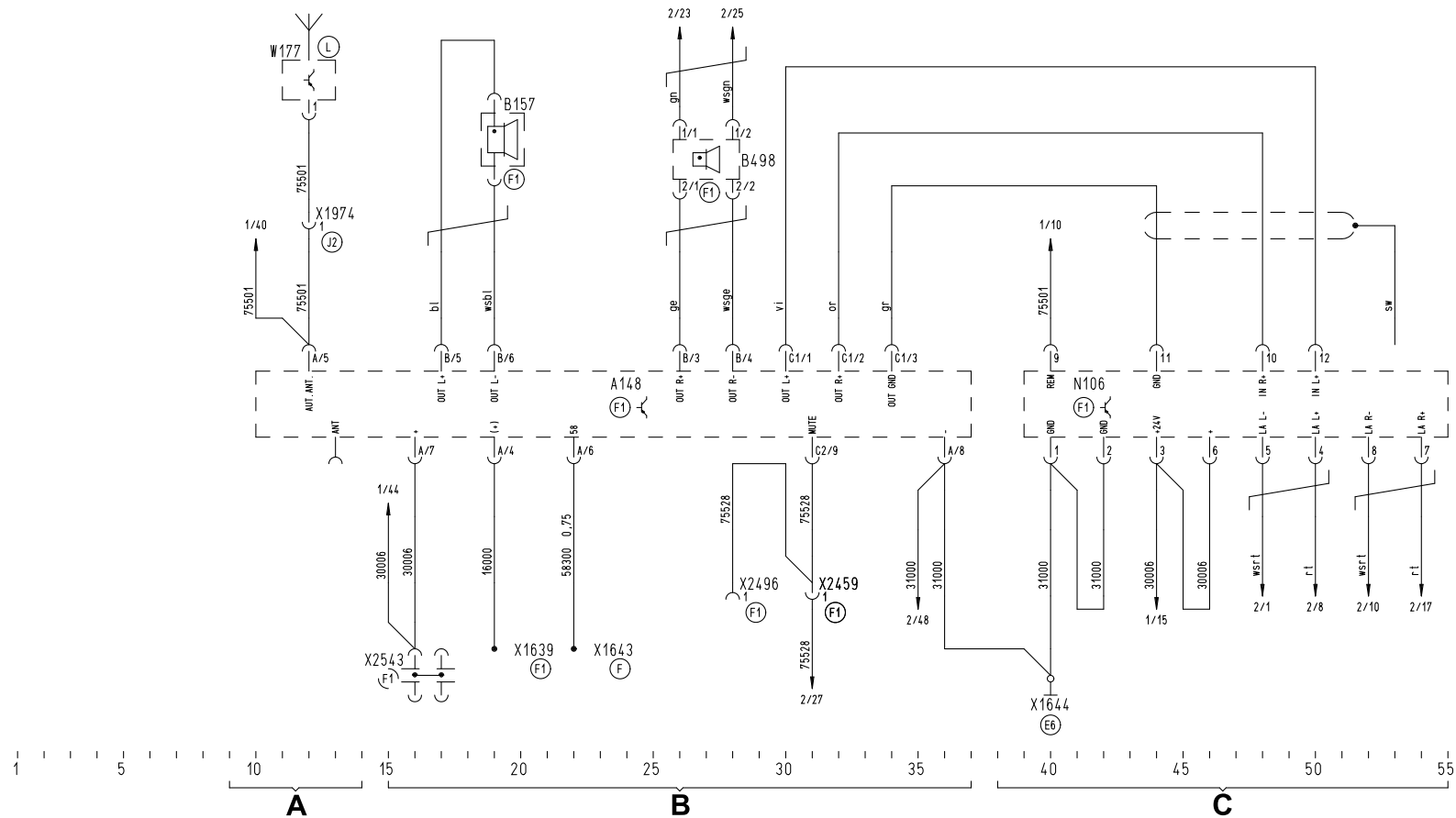
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2872 Sheet 1 of 2

A100
 (E6)

A302
 (E6)



Cullmann phone with radio 24V MAN-Sound (RL)

Legend

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

Change status: 10.00

A = Loudspeaker

B = Cullmann telephone box

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (545) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

X1546 Stvd. door right

X1547 Stvd. door left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2372 Stvd. supply to CD changer

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Mobile phone interface

Ⓙ CD changer

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓕ9 Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

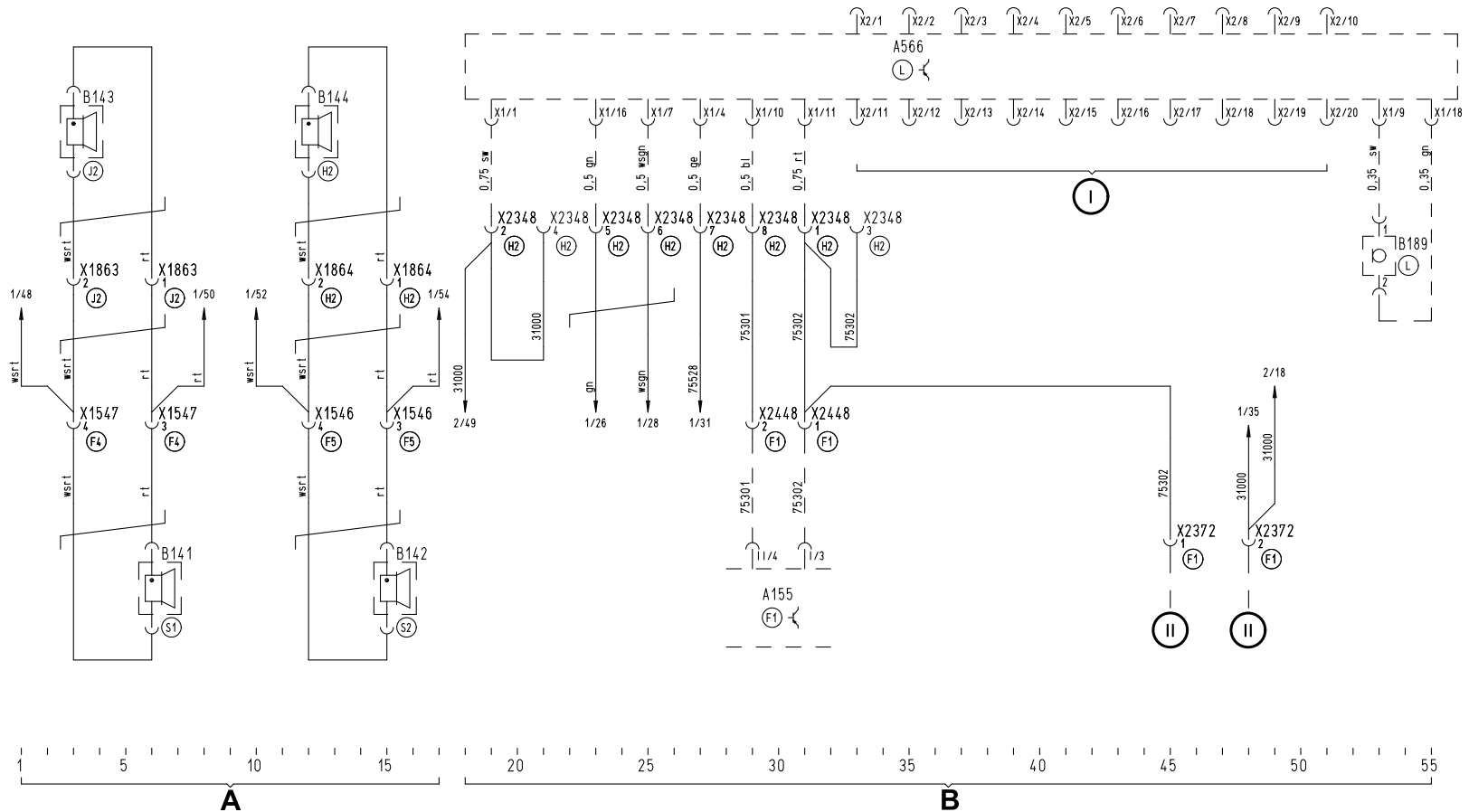
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.2872 Sheet 2 of 2

A100
E6

A302
E6



Cullmann phone with radio 24V and CD changer MAN-Sound (LL)

Legend

Wiring diagram no. **81.99192.1447** Sheet 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

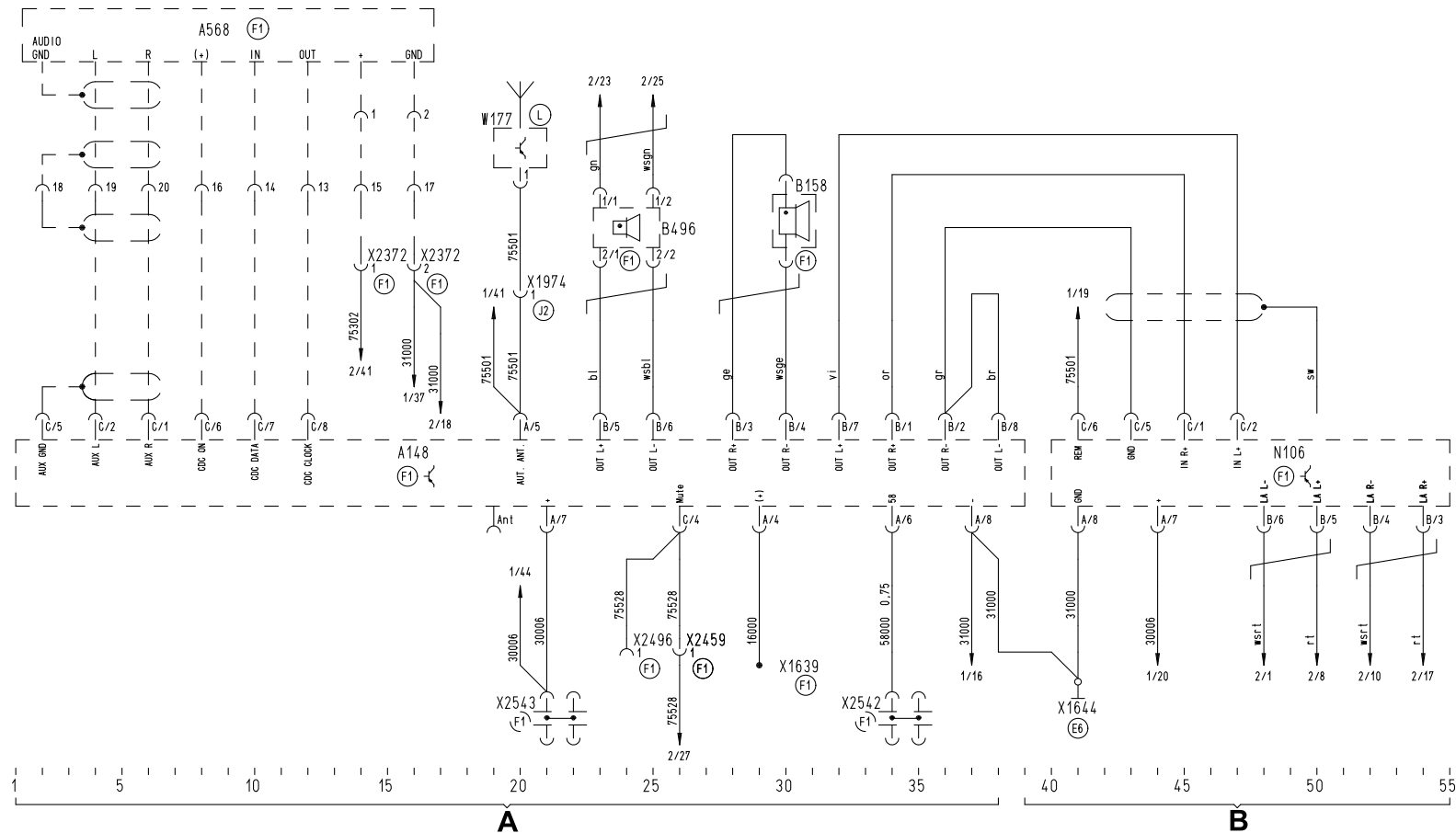
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1447 Sheet 1 of 2

A100
E6

A302
E6



Cullmann phone with radio 24V and CD changer MAN-Sound (LL)

Legend

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

Change status: 05.01

A = Loudspeaker

B = Cullmann telephone box

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (545) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

X1546 Stvd. door, right

X1547 Stvd. door, left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓖ Mobile phone interface

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

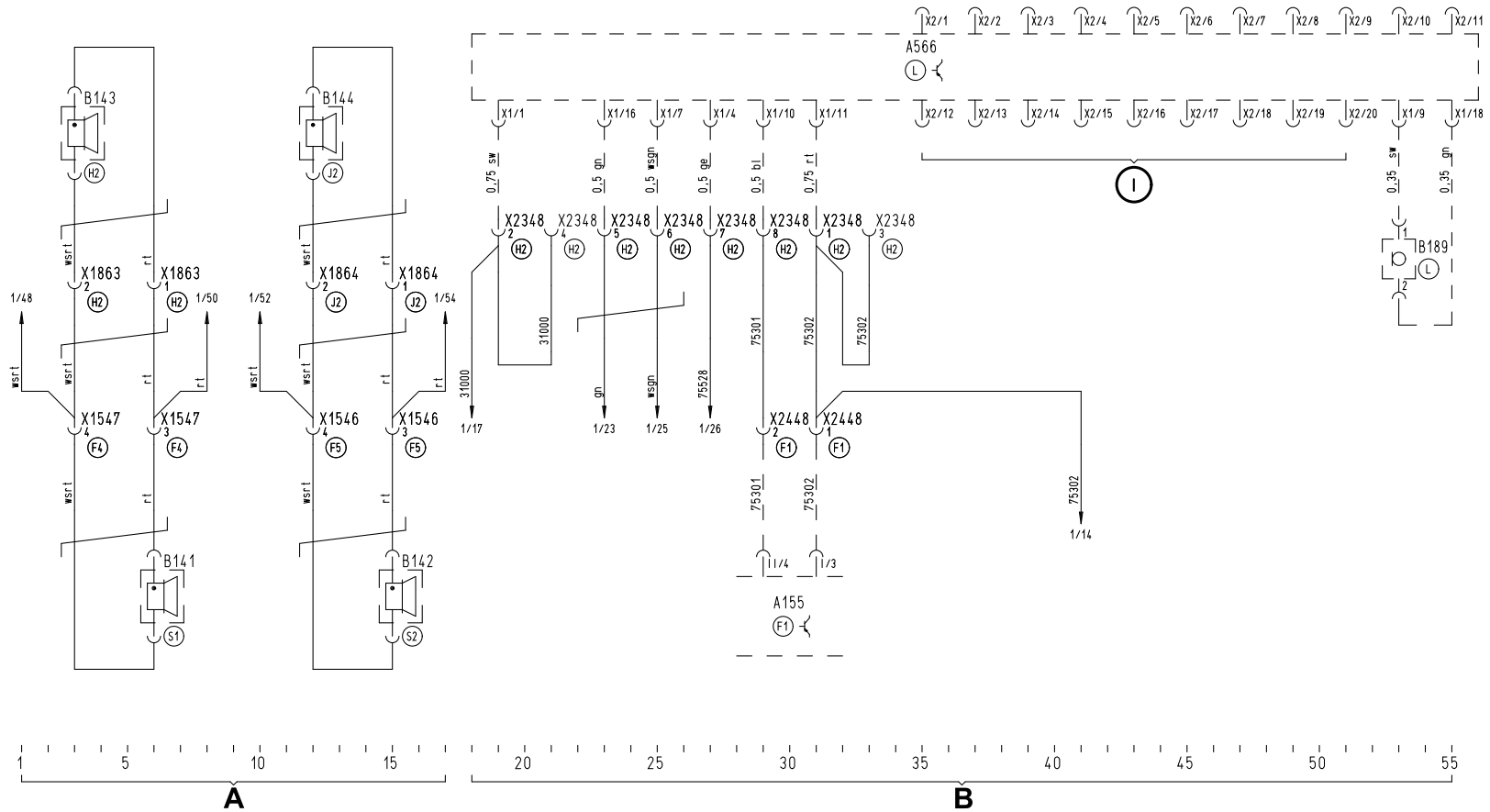
Ⓕ Door left

Ⓕ Door right

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

A100

A302



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

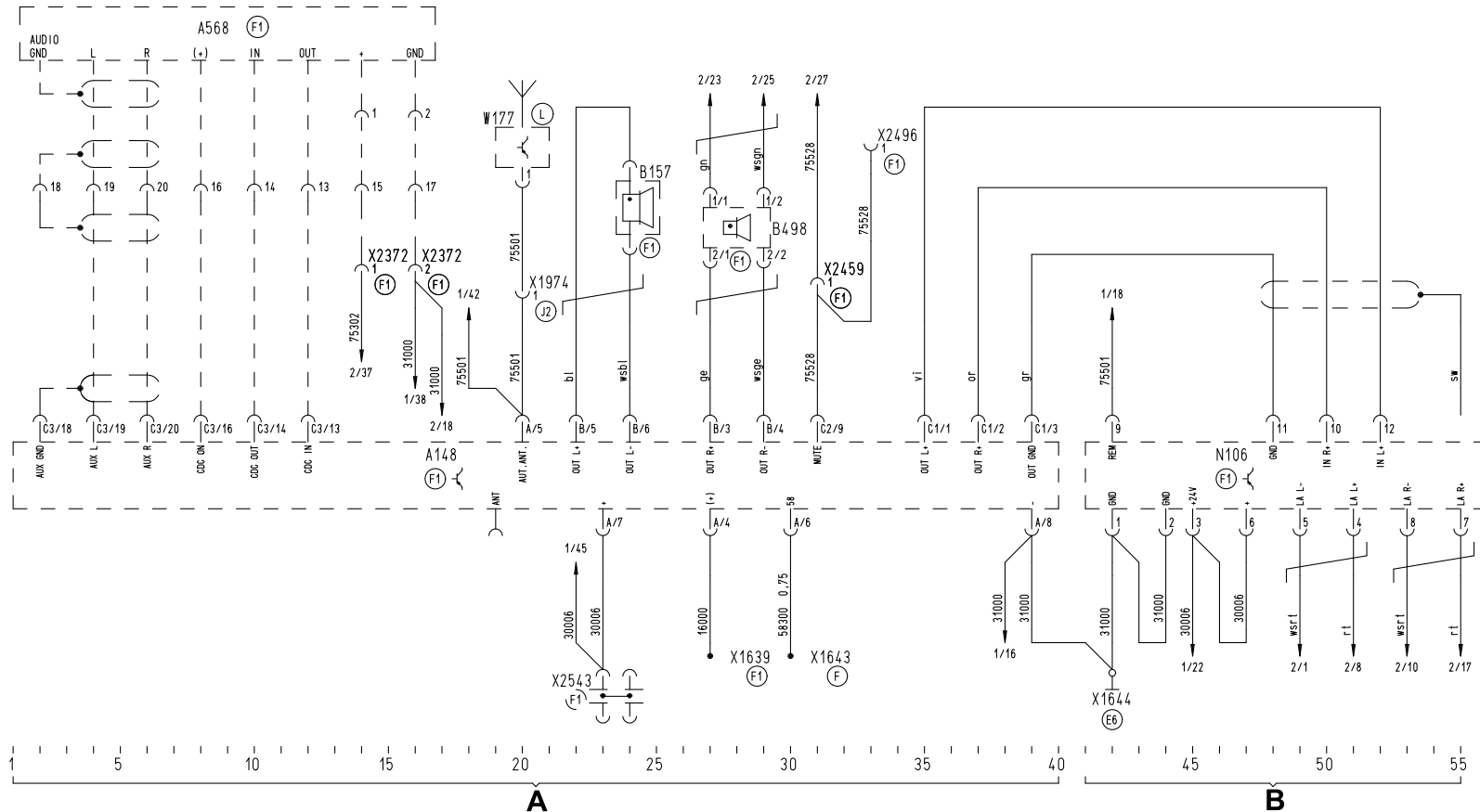
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2878 Sheet 1 of 2

A100
E6

A302
E6



Cullmann phone with radio 24V and CD changer MAN-Sound (RL)

Legend

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

Change status: 10.00

A = Loudspeaker

B = Cullmann telephone box

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (545) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

X1546 Stvd. door right

X1547 Stvd. door left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓘ Mobile phone interface

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

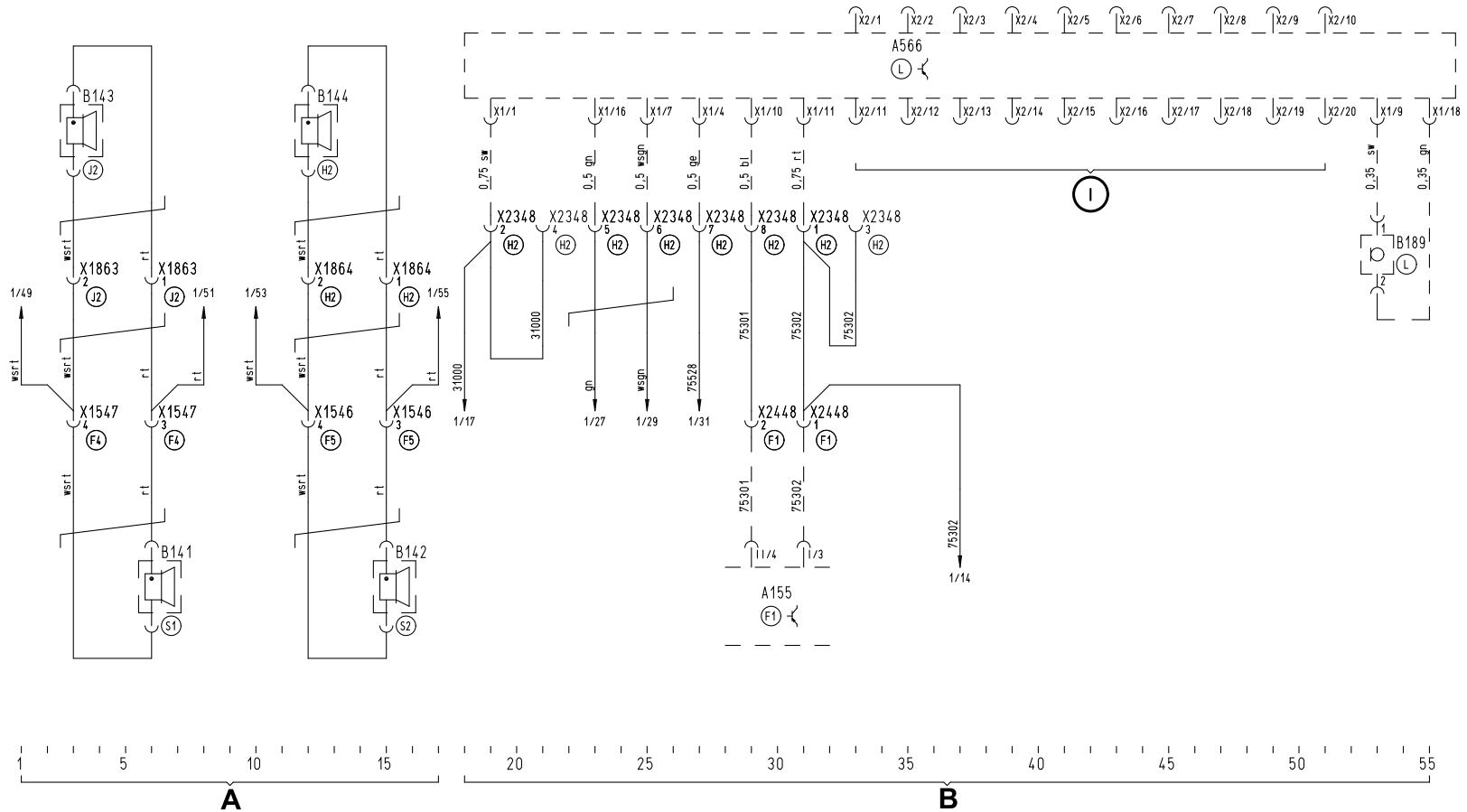
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2878 Sheet 2 of 2

A100
E6

A302
E6



Nokia phone with radio 24V MAN-Sound (LL)

Legend

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

Change status: 10.00

A = Active aerial

B = Radio

C = Amplifier

A100 (255) Central fuse, relay and terminal block

A148 (574) Radio/cassette player

A302 (352) Central computer 2

B158 (298) Driver's loudspeaker, front right

B496 (344) Cab loudspeaker, left, with hand-free telephone

N106 (127) Audio amplifier

W177 (172) Combination aerial

X1639 Soldered connector, line 16000

X1643 Soldered connector, line 58300

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

X1974 Stvd. for active aerial

X2459 Stvd. adaptation mute signal

X2496 Adaptation mute signal lane guard

X2543 (246) Potential distributor, 21-pin line 30006

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

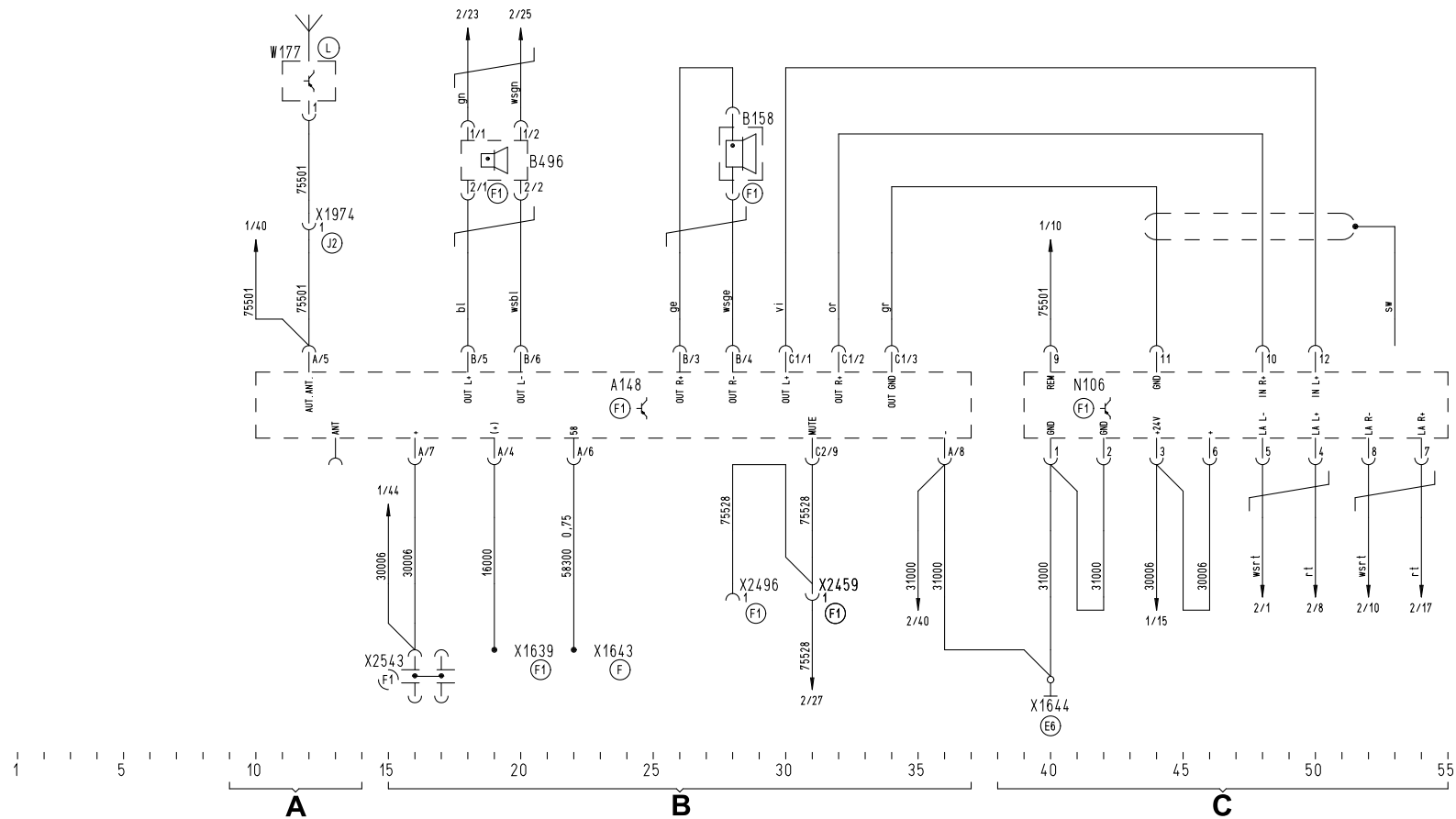
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2873 Sheet 1 of 2

A100
E6

A302
E6



Nokia phone with radio 24V MAN-Sound (LL)

Legend

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

Change status: 10.00

A = Loudspeaker

B = Nokia telephone

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (539) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

B497 (346) Telephone receiver

X1546 Stvd. door right

X1547 Stvd. door left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2372 Stvd. supply to CD changer

X2446 Stvd. TBM (terminal 15)

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓘ CD changer

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

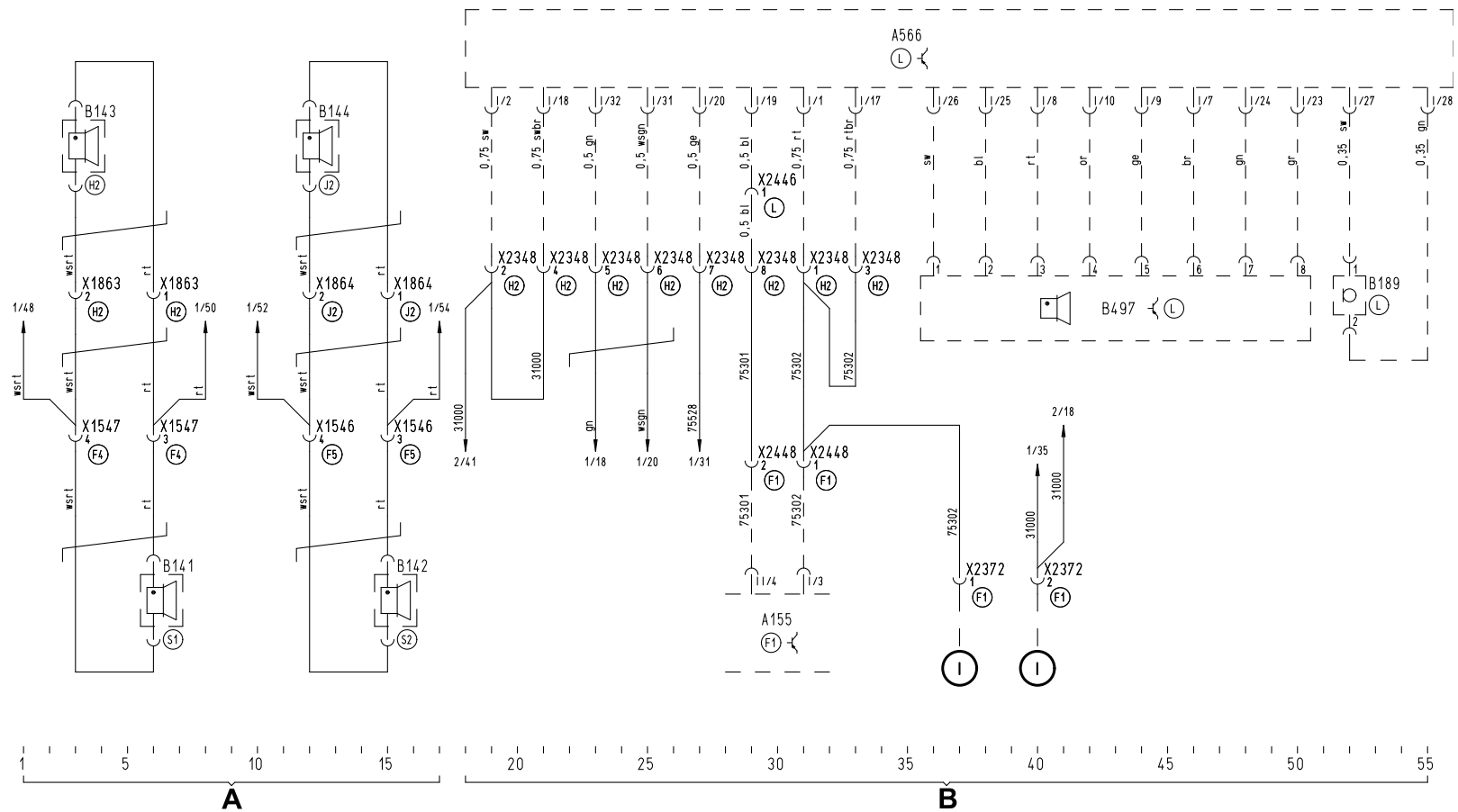
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2873 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Nokia phone with radio 24V MAN-Sound (RL)

Legend

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

Change status: 10.00

A = Active aerial

B = Radio

C = Amplifier

A100 (255) Central fuse, relay and terminal block

A148 (574) Radio/cassette player

A302 (352) Central computer 2

B157 (298) Driver's loudspeaker, front left

B498 (344) Cab loudspeaker, right, with hand-free telephone

N106 (127) Audio amplifier

W177 (172) Combination aerial

X1639 Soldered connector, line 16000

X1643 Soldered connector, line 58300

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

X1974 Stvd. for active aerial

X2459 Stvd. adaptation mute signal

X2496 Adaptation mute signal lane guard

X2543 (246) Potential distributor, 21-pin line 30006

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

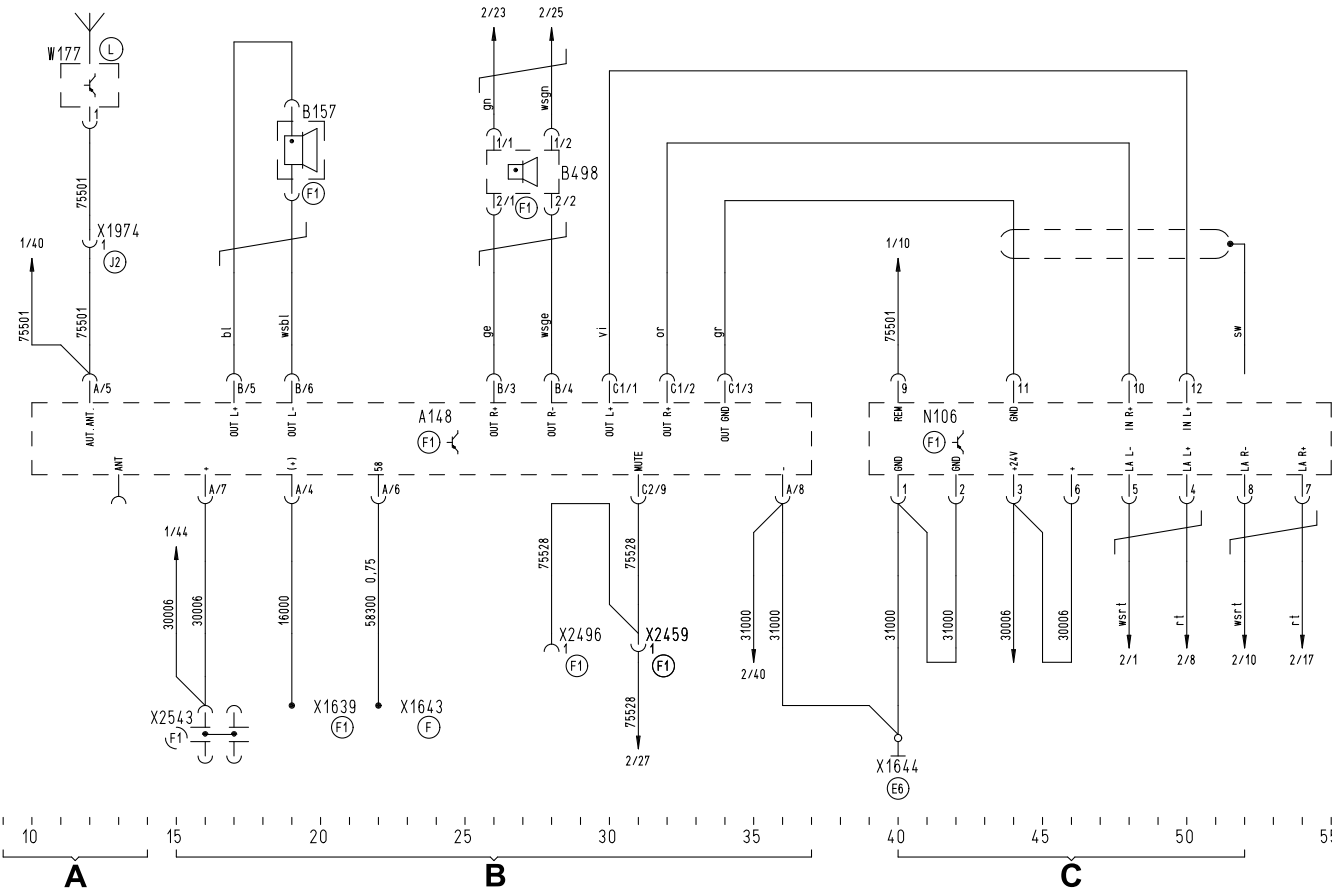
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2874 Sheet 1 of 2

A100
E6

A302
E6



Nokia phone with radio 24V MAN-Sound (RL)

Legend

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

Change status: 10.00

A = Loudspeaker

B = Nokia telephone

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer

A302 (352) Central computer 2

A566 (539) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

B497 (346) Telephone receiver

X1546 Stvd. door, right

X1547 Stvd. door, left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2372 Stvd. supply to CD changer

X2446 Stvd. TBM (terminal 15)

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓘ CD changer

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

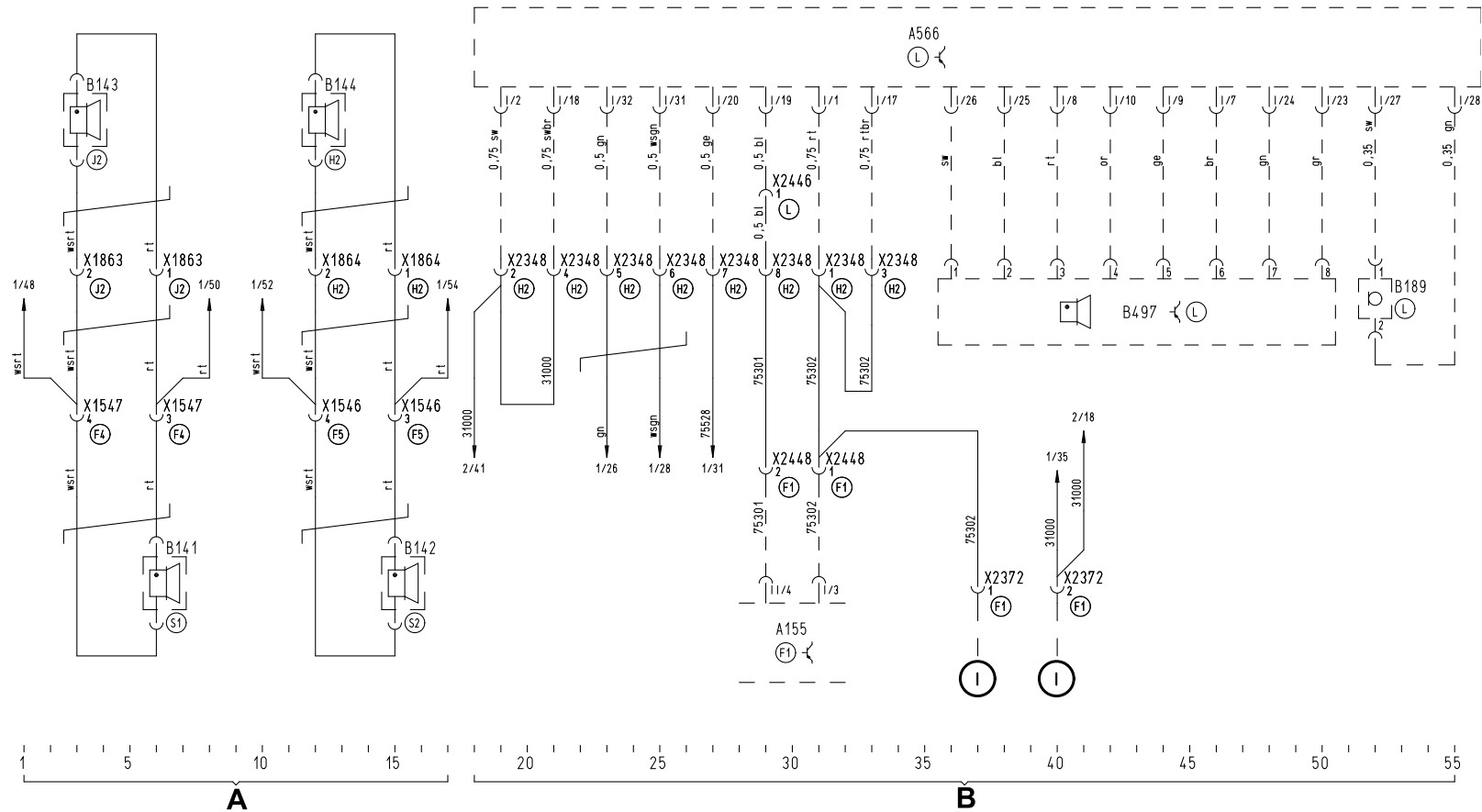
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2874 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Nokia phone with radio 24V and CD changer MAN-Sound (LL)

Legend

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

Change status: 10.00

A = Radio, CD changer, active aerial

B = Amplifier

A100 (255) Central fuse, relay and terminal block

A148 (574) Radio/cassette player

A302 (352) Central computer 2

A568 (546) CD changer

B158 (298) Driver's loudspeaker, front right

B496 (344) Cab loudspeaker, left, with hand-free telephone

N106 (127) Audio amplifier

W177 (172) Combination aerial

X1639 Soldered connector, line 16000

X1643 Soldered connector, line 58300

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

X1974 Stvd. for active aerial

X2372 Stvd. supply to CD changer

X2459 Stvd. adaptation mute signal

X2496 Adaptation mute signal lane guard

X2543 (246) Potential distributor, 21-pin line 30006

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

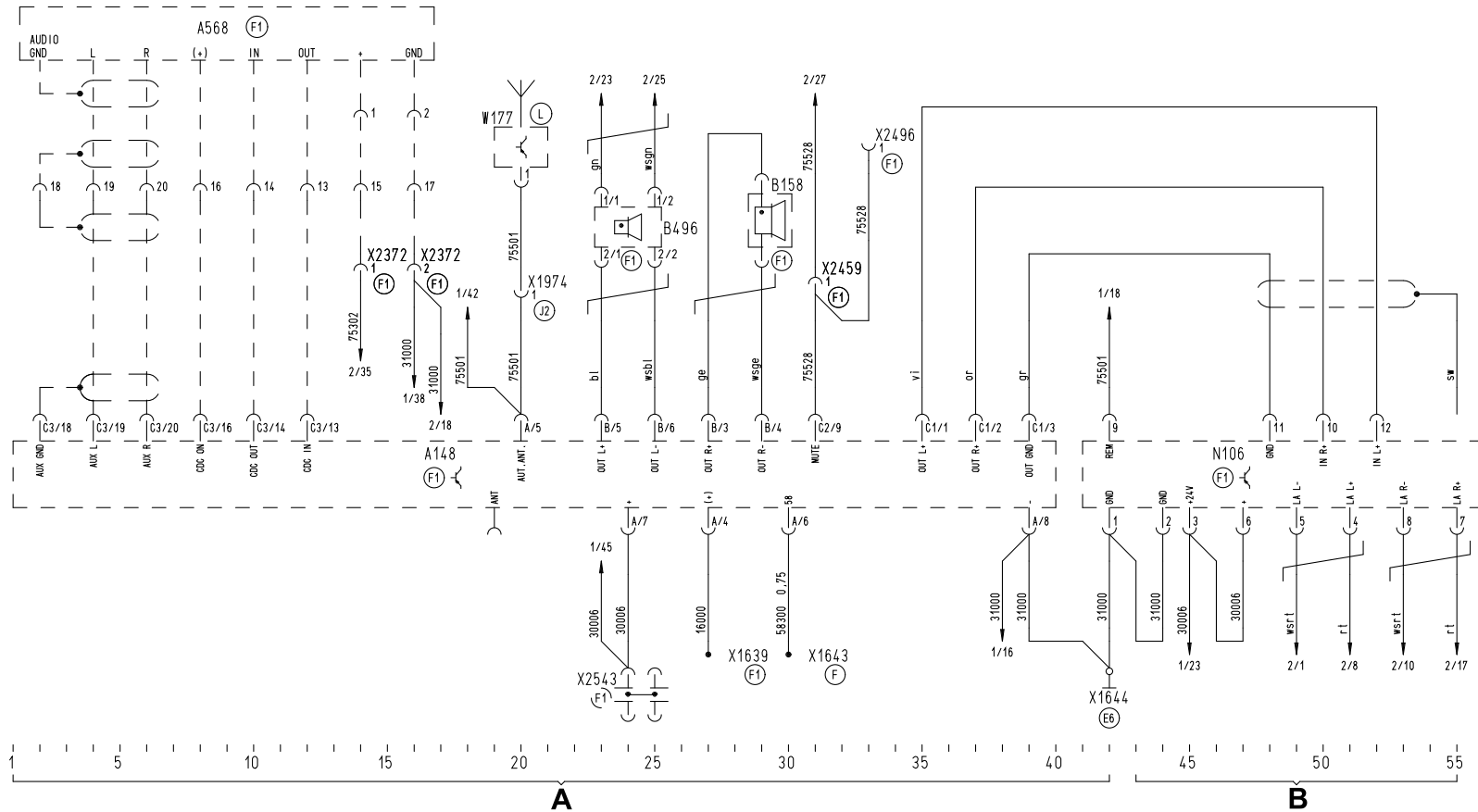
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2875 Sheet 1 of 2

A100
E6

A302
E6



Nokia phone with radio 24V and CD changer MAN-Sound (LL)

Legend

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

Change status: 10.00

A = Loudspeaker

B = Nokia telephone

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (539) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

B497 (346) Telephone receiver

X1546 Stvd. door right

X1547 Stvd. door left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2446 Stvd. TBM (terminal 15)

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

(A) Tail

(B1) Engine

(B2) Gearbox

(C) Front

(C1) Bumper

(C2) Entrance right

(C3) Entrance left

(E6) Central electrics area

(E7) Control unit racks

(E8) Rear wall of cab

(F) Instrument panel

(F1) Central part

(F2) Steering wheel/column

(F3) Foot pedals

(F4) Front wall, inside left

(F5) Front wall, inside right

(F6) Driving seat

(F7) Passenger seat

(F8) Control panel

(G) Battery box

(H1) B-pillar on driver's side

(H2) A-pillar on driver's side

(J1) B-pillar on passenger's side

(J2) A-pillar on passenger's side

(L) Ceiling/roof

(N) Front axle

(P) Rear axle

(R1) Front part of frame

(R2) Rear part of frame

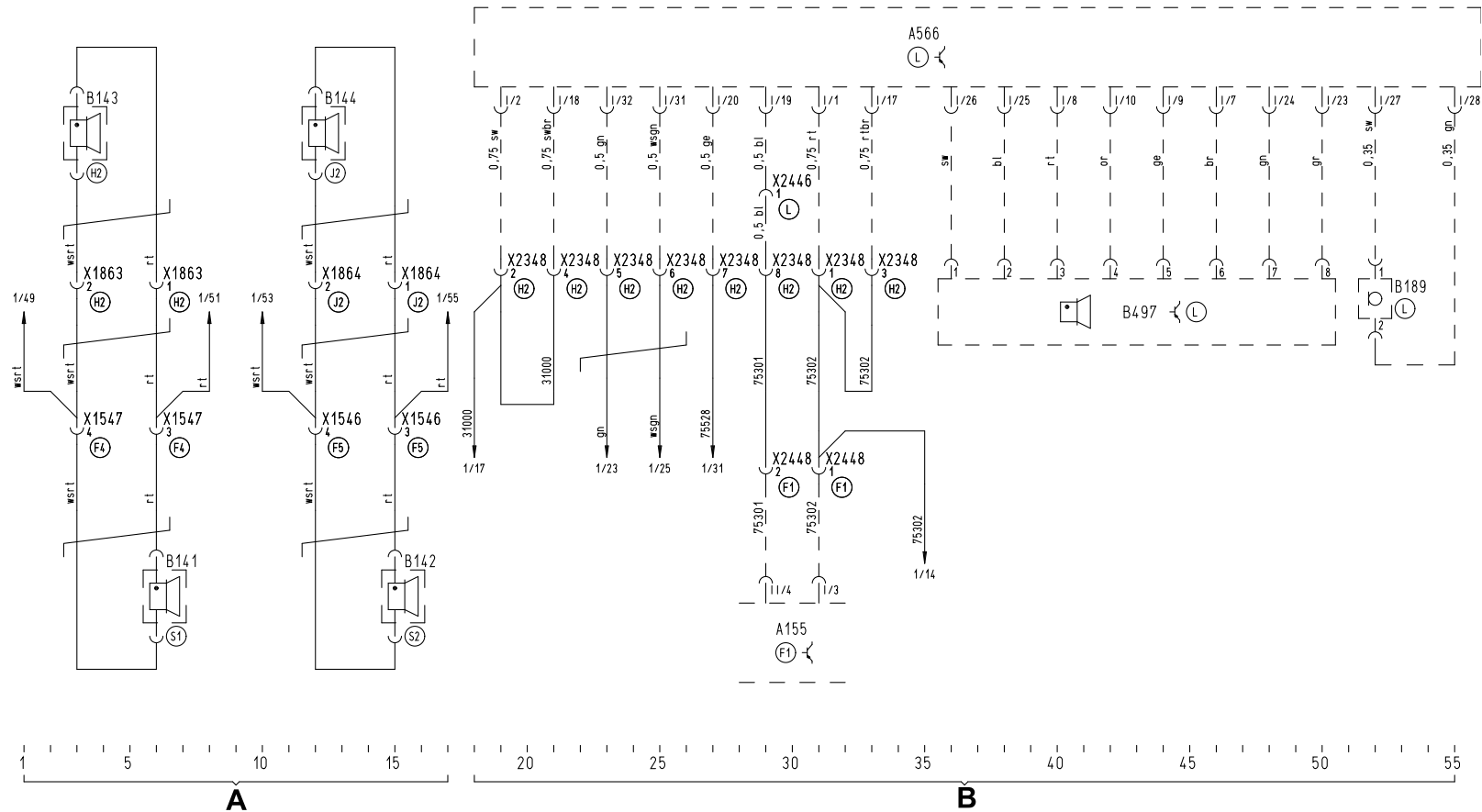
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2875 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Nokia phone with radio 24V and CD changer MAN-Sound (RL)

Legend

Wiring diagram no. **81.99192.2876** Sheet 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

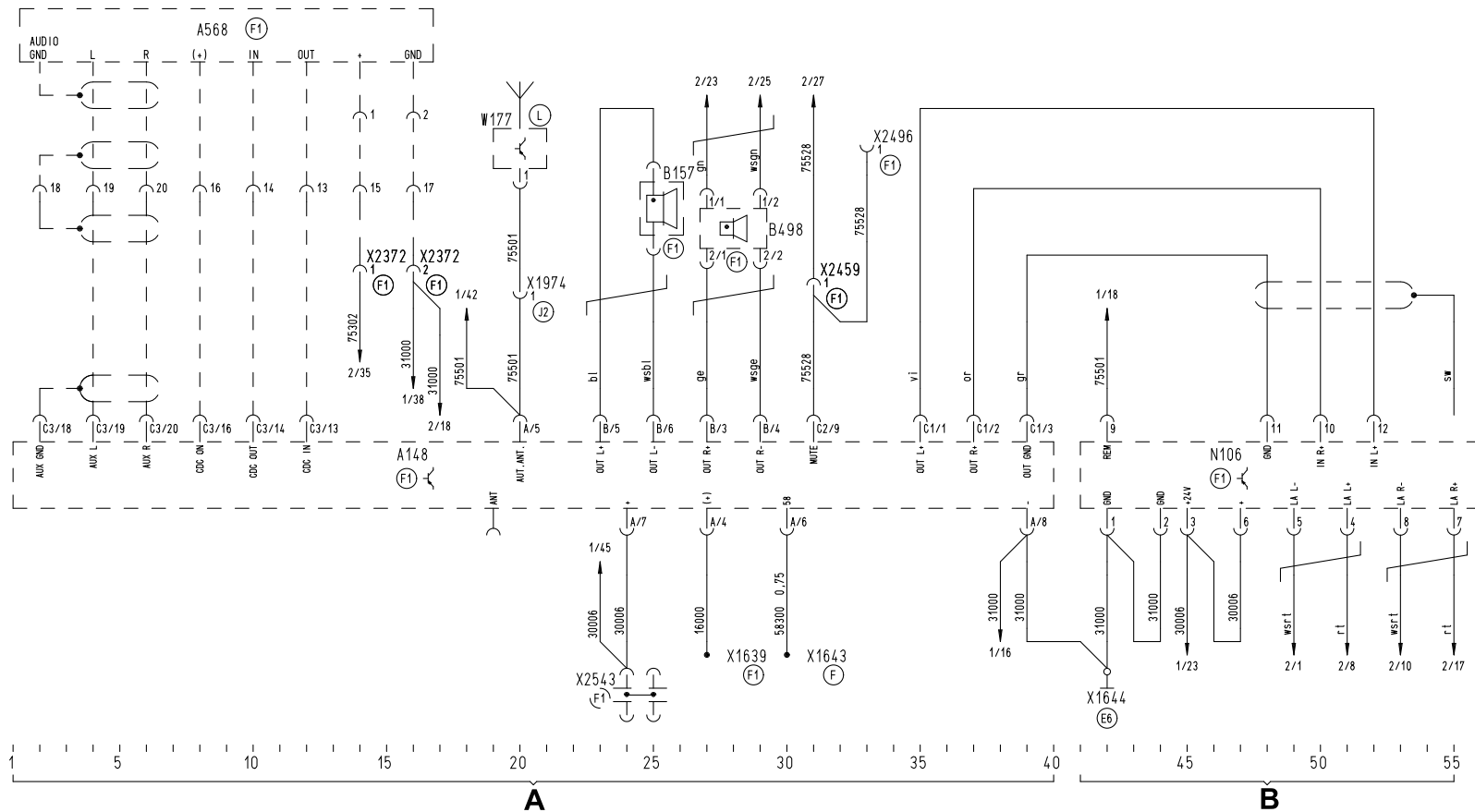
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.2876 Sheet 1 of 2

A100
E6

A302
E6



Nokia phone with radio 24V and CD changer MAN-Sound (RL)

Legend

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

Change status: 10.00

A = Loudspeaker

B = Nokia telephone

A100 (255) Central fuse, relay and terminal block

A155 (182) Voltage transformer 24V/12V

A302 (352) Central computer 2

A566 (539) Cellular phone station

B141 (296) Loudspeaker 1, door left

B142 (296) Loudspeaker 1, door right

B143 (297) Loudspeaker 2, door left

B144 (297) Loudspeaker 2, door right

B189 (345) Microphone for hands-free telephone

B497 (346) Telephone receiver

X1546 Stvd. door right

X1547 Stvd. door left

X1863 Stvd. loudspeaker, left

X1864 Stvd. loudspeaker, right

X2348 Stvd. telephone

X2446 Stvd. TBM (terminal 15)

X2448 Stvd. adaptation 12V telephone

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

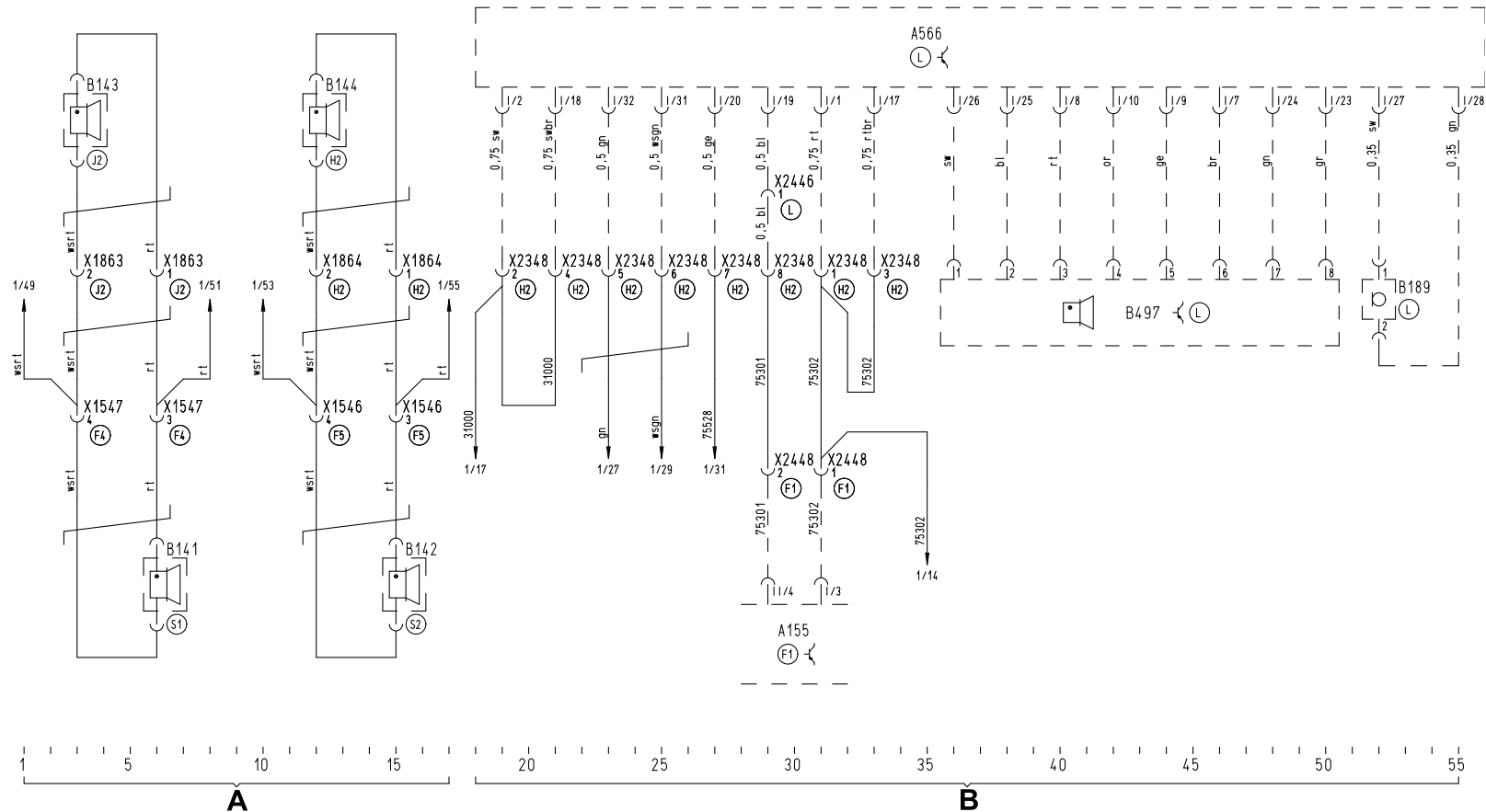
Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2876 Sheet 2 of 2

A100
 (E6)

A302
 (E6)



Door module (LL)

Legend

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

Change status: 03.01

A = Central locking, driver's door

A = Window lift, driver's door

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A451 (441) Door module (driver's side)

A453 (443) Window lift (driver side)

A465 (453) Door lock (driver's side)

S519 (522) Lock nut switch, driver's side

S527 (525) Control switch, window lift, left

X1547 Stvd. door, left

X1733 Stvd. switch sunroof

Pin assignment A451:

X2/18 Central locking, lock latch switch E

X2/17 Central locking, lock nut switch E

X2/16 Central locking, lock nut switch A

X2/9 Central locking, actuator element locked/unlocked

X2/10 Central locking, actuator element locked/unlocked

X2/8 Central locking, actuator element locked/unlocked

X2/7 Central locking, engine, actuator element +

X2/1 Central locking, engine, actuator element -

X1/13 Window lift, hall sensor 2 signal

X1/14 Window lift, hall sensor 1 signal

X1/15 Window lift, hall sensor 1/2 +

X1/16 Window lift, hall sensor 1/2 -

X1/7 Window lift, engine +

X1/1 Window lift, engine -

X2/14 Close window lift

X2/13 Open window lift

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Locking

Ⓙ Unlocking

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓕ9 Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

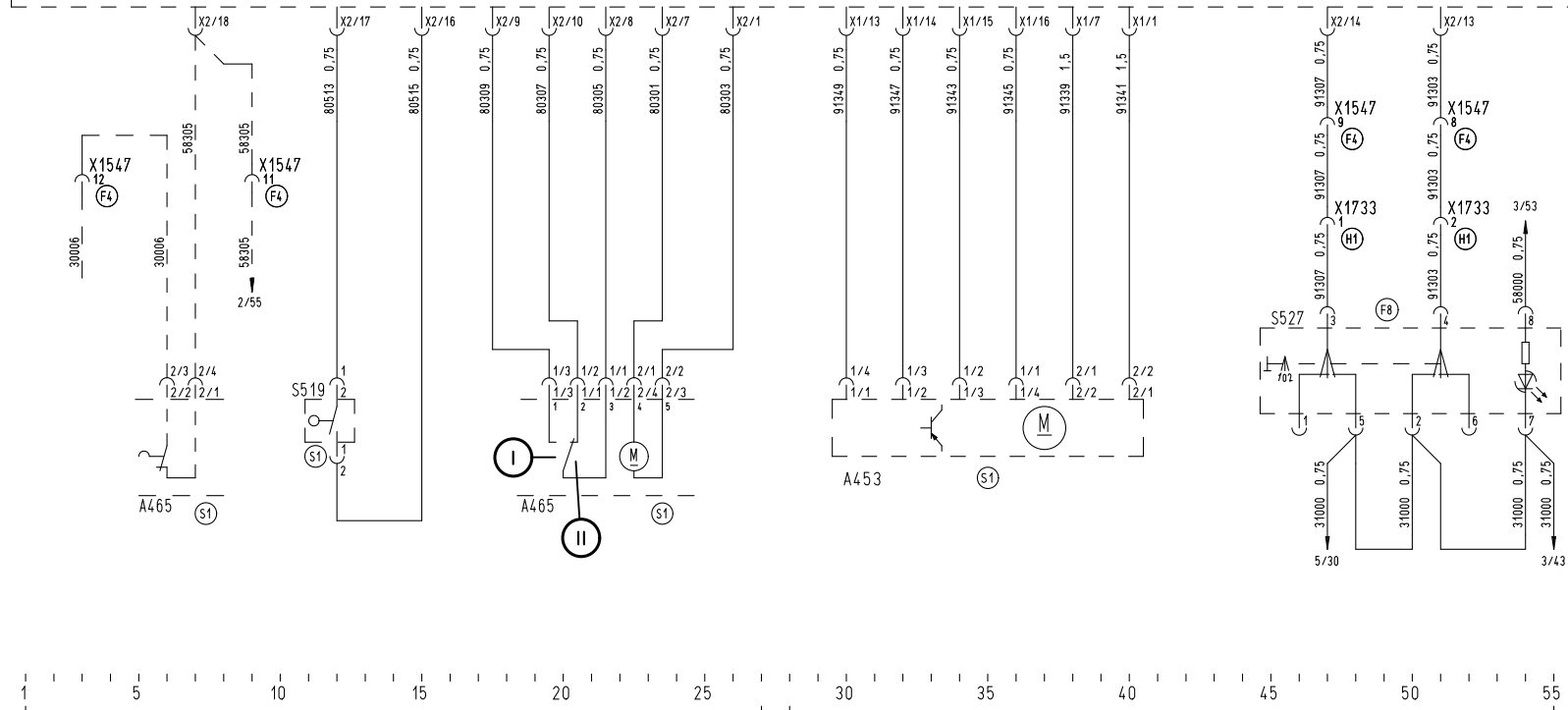
Ⓕ2 Door right

Wiring diagram no. 81.99192.2989 Sheet 1 of 5

A100

A302

A451



A

B

Door module (LL)

Legend

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

Change status: 03.01

A = Sunroof

B = Mirror adjustment/mirror heating, driver's door

C = Diagnosis

D = Power supply, driver's door

E = CAN

- A100 (255) Central fuse, relay and terminal block
- A157 (449) Main mirror (driver)
- A251 (447) Wide-angle mirror (driver)
- A253 (445) Curb mirror (driver)
- A302 (352) Central computer 2
- A451 (441) Door module (driver's side)

- X147 Stvd. sunroof/roof hatch
- X1547 Stvd. door left
- X1583 Stvd. main and wide-angle mirror, left
- X1585 Stvd. curb mirror, left
- X2544 (246) Potential distributor 21-pin K-line

Pin assignment A451:

- X2/15 Sunroof
- X1/6 Curb mirror + terminal 30
- X1/12 Curb mirror, earth
- X1/10 Curb mirror, serial
- X1/5 Main and wide-angle mirror + terminal 30
- X1/11 Main and wide-angle mirror, earth
- X1/9 Main and wide-angle mirror, serial
- X2/12 K-line
- X1/4 Power supply +15 (serial)
- X1/2 Power supply +30 (cab + central locking)
- X1/8 Earth, load
- X1/17 CAN low
- X1/18 CAN high
- X2/5 Alarm system

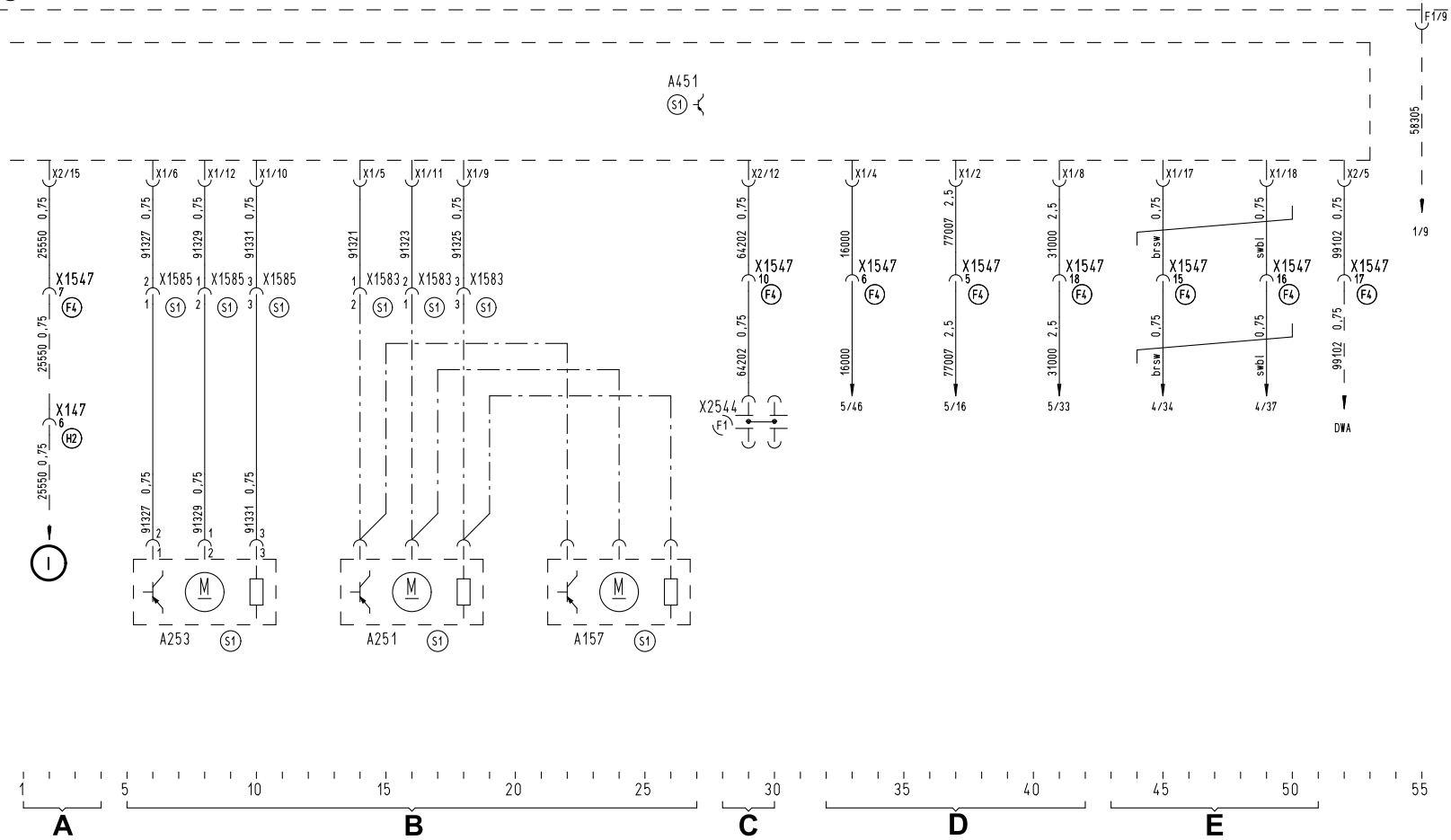
Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ2 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ6 Central electrics area
- Ⓔ7 Control unit racks
- Ⓔ8 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓖ1 B-pillar on passenger's side
- Ⓖ2 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right
- Ⓕ Sunroof

Wiring diagram no. 81.99192.2989 Sheet 2 of 5

A100
E6

A302
E6



Door module (LL)

Legend

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

Change status: 03.01

A = Central locking, passenger door

B = Window lift, passenger door

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A452 (440) Door module (passenger side)

A454 (444) Window lift (passenger side)

A466 (454) Door lock (passenger side)

S518 (522) Lock nut switch, passenger side

S526 (525) Control switch, window lift, right

X1546 Stvd. door, right

X1733 Stvd. switch sunroof

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

Pin assignment A452:

X2/18 Central locking, lock latch switch E

X2/17 Central locking, lock nut switch E

X2/16 Central locking, lock nut switch A

X2/9 Central locking, actuator element locked/unlocked

X2/10 Central locking, actuator element locked/unlocked

X2/8 Central locking, actuator element locked/unlocked

X2/7 Central locking, engine, actuator element +

X2/1 Central locking, engine, actuator element -

X1/13 Window lift, hall sensor 2 signal

X1/14 Window lift, hall sensor 1 signal

X1/15 Window lift, hall sensor 1/2 +

X1/16 Window lift, hall sensor 1/2 -

X1/7 Window lift, engine +

X1/1 Window lift, engine -

X2/14 Close window lift

X2/13 Open window lift

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

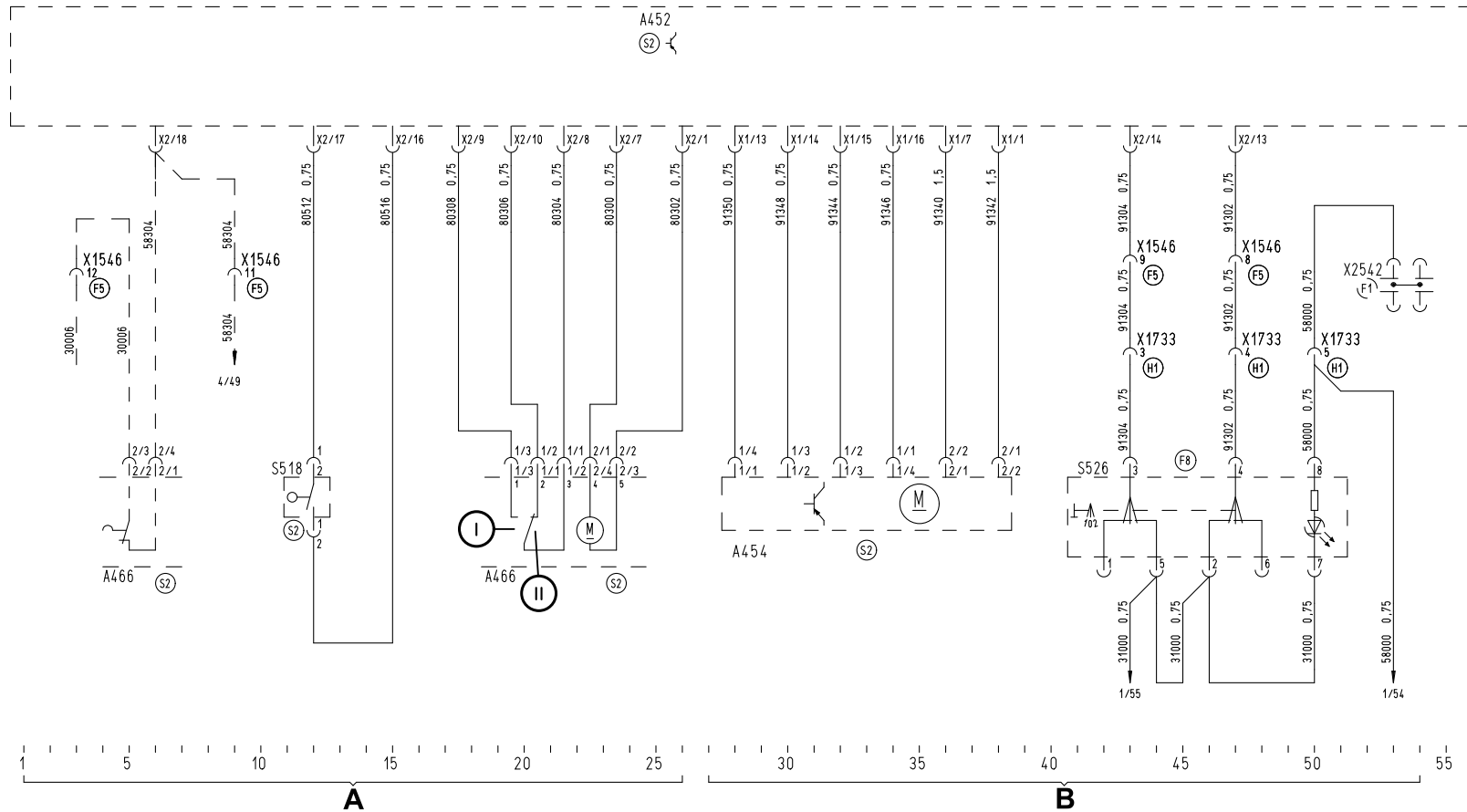
Ⓘ Locking

Ⓙ Unlocking

Wiring diagram no. 81.99192.2989 Sheet 3 of 5

A100

A302



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

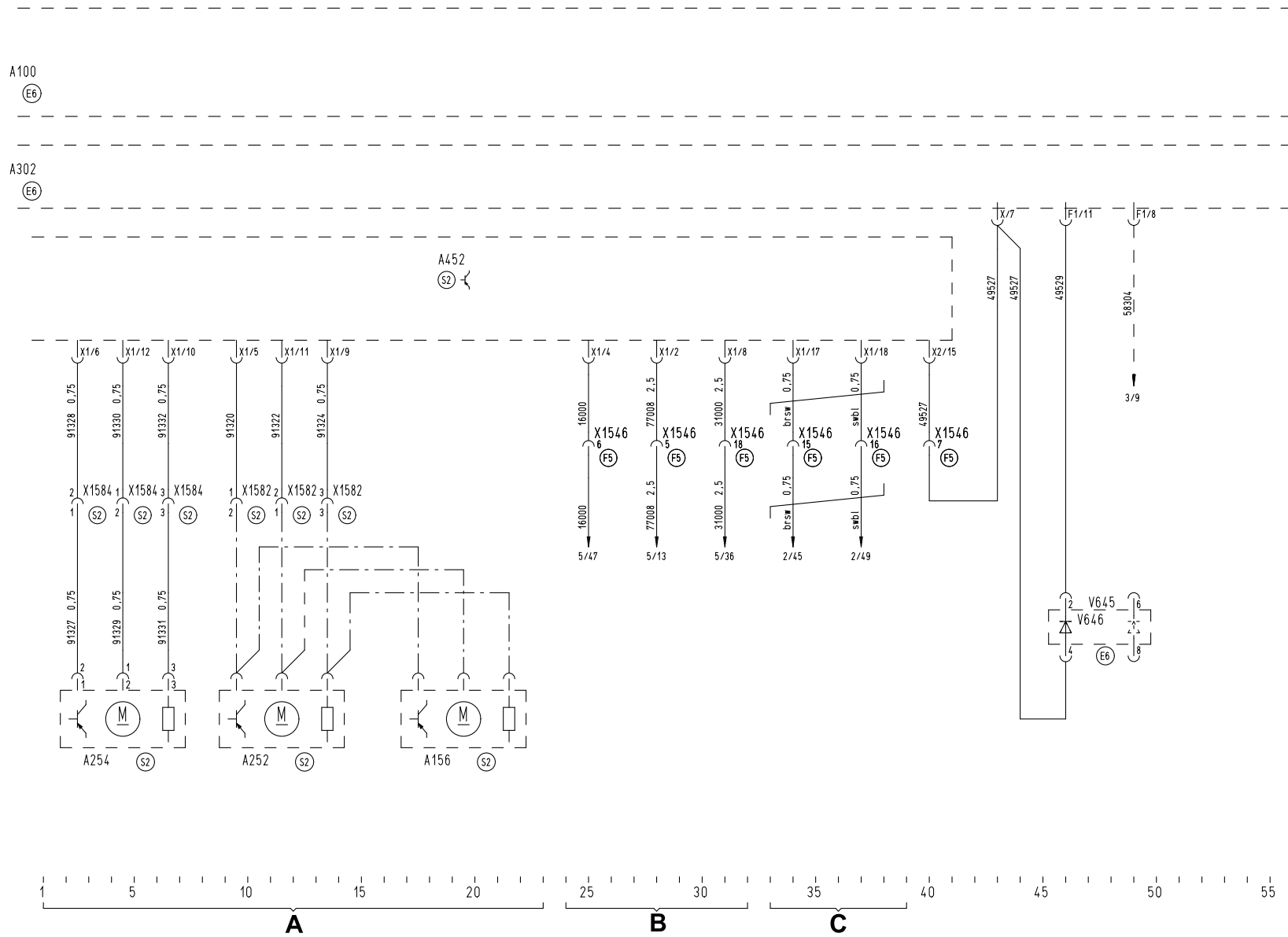
Pin assignment A452:

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

- | | |
|-----------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| Ⓑ1 Engine | ⓕⓗ Passenger seat |
| Ⓑ2 Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| Ⓒ1 Bumper | ⓕⓕ1 B-pillar on driver's side |
| Ⓒ2 Entrance right | ⓕⓕ2 A-pillar on driver's side |
| Ⓒ3 Entrance left | ⓕⓕ3 B-pillar on passenger's side |
| Ⓔ6 Central electrics area | ⓕⓕ4 A-pillar on passenger's side |
| Ⓔ7 Control unit racks | ⓕⓕ L Ceiling/roof |
| Ⓔ8 Rear wall of cab | ⓕⓕ N Front axle |
| ⓕ Instrument panel | ⓕⓕ P Rear axle |
| ⓕ1 Central part | ⓕⓕ R1 Front part of frame |
| ⓕ2 Steering wheel/column | ⓕⓕ R2 Rear part of frame |
| ⓕ3 Foot pedals | ⓕⓕ S1 Door left |
| ⓕ4 Front wall, inside left | ⓕⓕ S2 Door right |
| ⓕ5 Front wall, inside right | |

Wiring diagram no. 81.99192.2989 Sheet 4 of 5



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

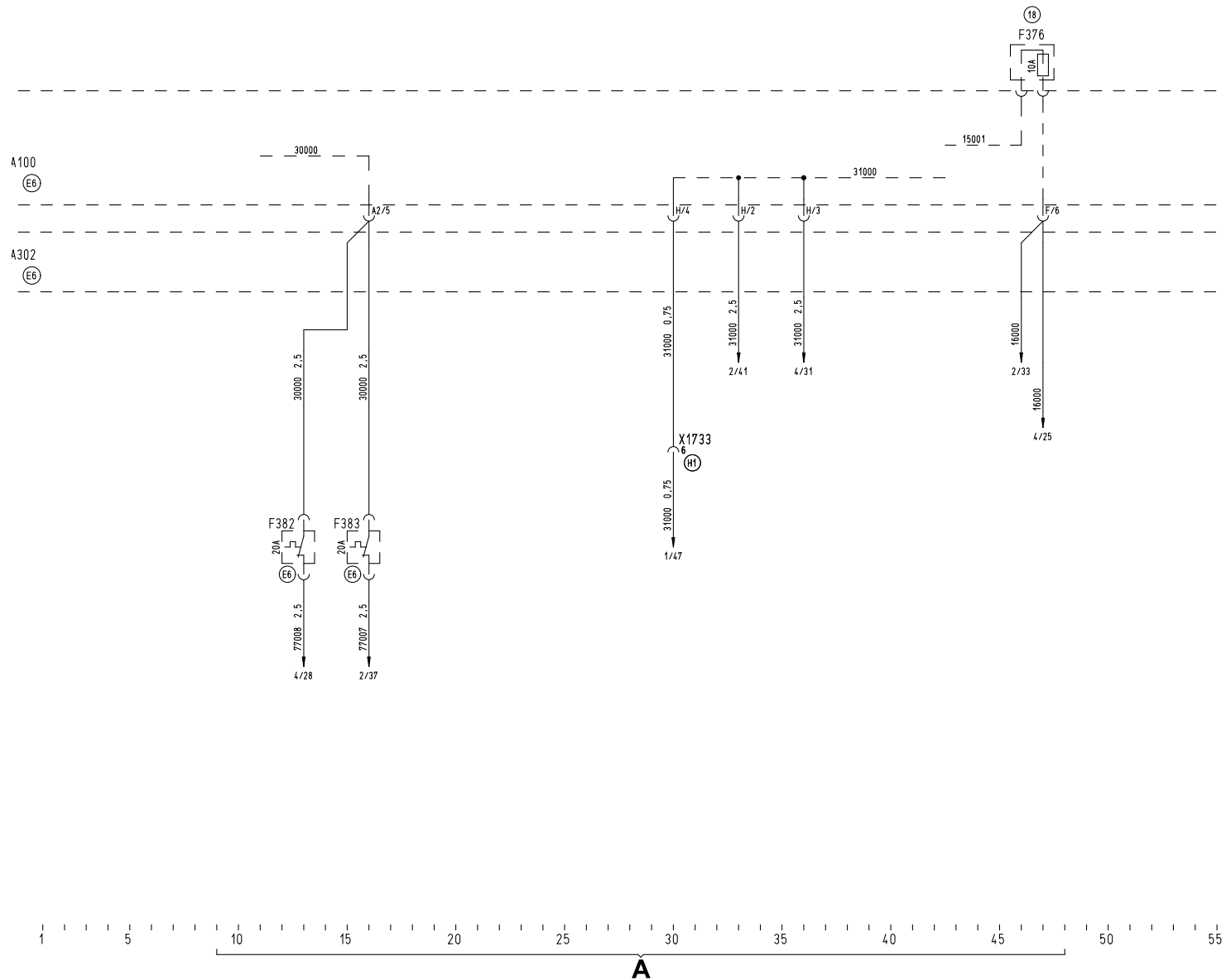
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2989 Sheet 5 of 5



Door module (RL)

Legend

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

Change status: 03.01

A = Central locking, passenger door

B = Window lift, passenger door

A100 (255) Central fuse, relay and terminal block
 A302 (352) Central computer 2
 A451 (440) Door module (passenger side)
 A453 (443) Window lift (passenger side)
 A465 (453) Door lock (passenger side)

S519 (522) Lock nut switch, left
 S527 (525) Control switch, window lift, left

X1547 Stvd. door, left
 X1733 Stvd. switch sunroof

Pin assignment A451:

X2/18 Central locking, lock latch switch E
 X2/17 Central locking, lock nut switch E
 X2/16 Central locking, lock nut switch A
 X2/9 Central locking, actuator element locked/unlocked
 X2/10 Central locking, actuator element locked/unlocked
 X2/8 Central locking, actuator element locked/unlocked
 X2/7 Central locking, engine, actuator element +
 X2/1 Central locking, engine, actuator element -
 X1/13 Window lift, hall sensor 2 signal
 X1/14 Window lift, hall sensor 1 signal
 X1/15 Window lift, hall sensor 1/2 +
 X1/16 Window lift, hall sensor 1/2 -
 X1/7 Window lift, engine +
 X1/1 Window lift, engine -
 X2/14 Close window lift
 X2/13 Open window lift

Marking of mounting positions

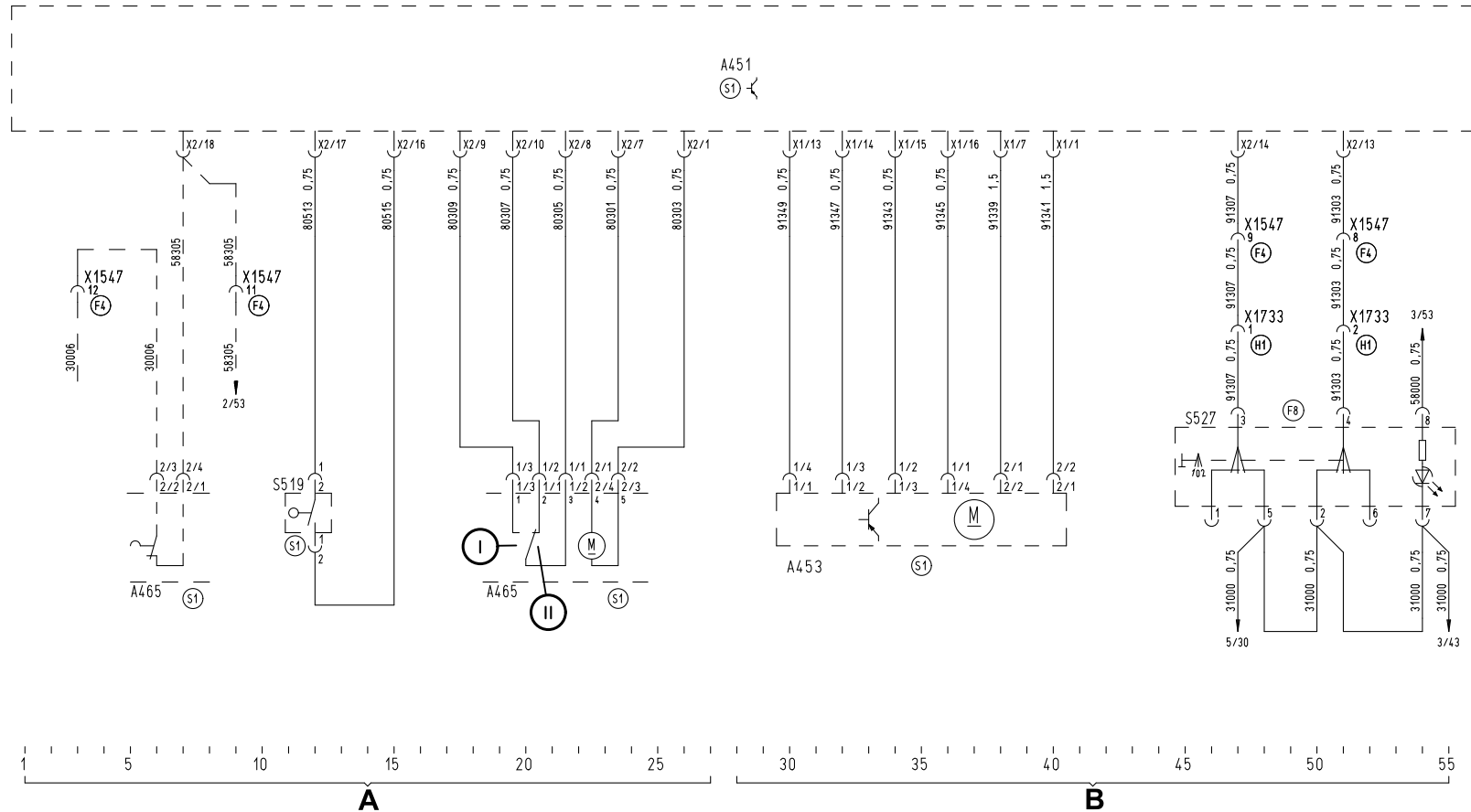
- Ⓐ Tail
- Ⓑ Engine
- Ⓑ1 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ1 Control unit racks
- Ⓔ2 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓖ6 Driving seat
- Ⓖ7 Passenger seat
- Ⓖ8 Control panel
- Ⓖ9 Battery box
- Ⓕ11 B-pillar on driver's side
- Ⓕ12 A-pillar on driver's side
- Ⓕ13 B-pillar on passenger's side
- Ⓕ14 A-pillar on passenger's side
- Ⓕ15 Ceiling/roof
- Ⓕ16 Front axle
- Ⓕ17 Rear axle
- Ⓕ18 Front part of frame
- Ⓕ19 Rear part of frame
- Ⓕ20 Door left
- Ⓕ21 Door right

- Ⓘ Locking
- Ⓙ Unlocking

Wiring diagram no. 81.99192.2990 Sheet 1 of 5

A100
E6

A302
E6



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

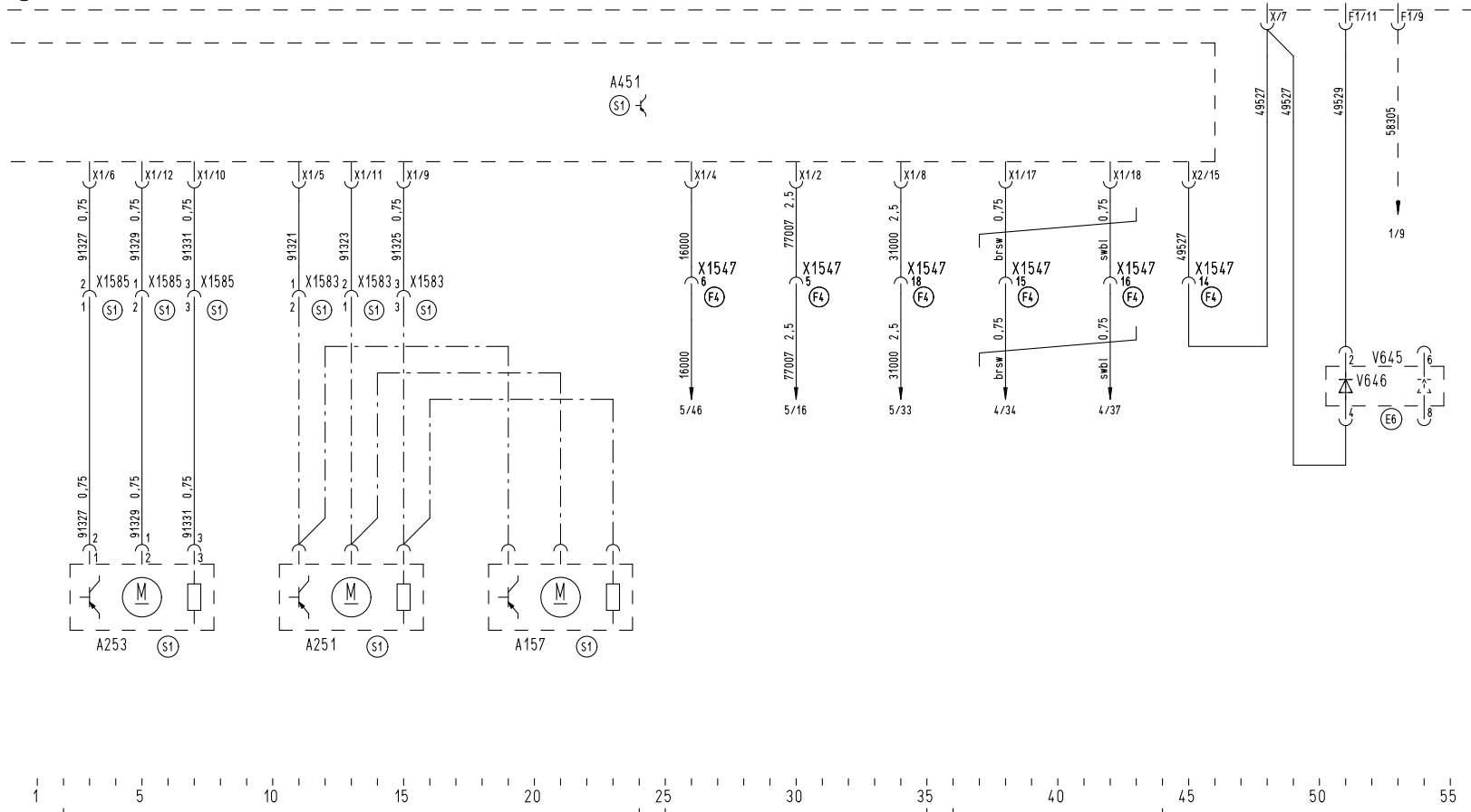
Marking of mounting positions

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

Wiring diagram no. 81.99192.2990 Sheet 2 of 5

A100


A302

Door module (RL)

Legend

Wiring diagram no. **81.99192.2990** Sheet 3 of 5
Change status: 03.01

A = Central locking, driver's door

A = Window lift, driver's door

A100 (255) Central fuse, relay and terminal block
A302 (352) Central computer 2
A452 (441) Door module (driver's side)
A454 (443) Window lift (driver side)
A466 (454) Door lock (driver's side)

S518 (522) Lock nut switch, driver's door
S526 (525) Control switch, window lift, right

X1546 Stvd. door, right
X1733 Stvd. switch sunroof
X2542 (246) Potential distributor, 21-pin line 58000

Pin assignment A451:

X2/18 Central locking, lock latch switch E
X2/17 Central locking, lock nut switch E
X2/16 Central locking, lock nut switch A
X2/9 Central locking, actuator element locked/unlocked
X2/10 Central locking, actuator element locked/unlocked
X2/8 Central locking, actuator element locked/unlocked
X2/7 Central locking, engine, actuator element +
X2/1 Central locking, engine, actuator element -
X1/13 Window lift, hall sensor 2 signal
X1/14 Window lift, hall sensor 1 signal
X1/15 Window lift, hall sensor 1/2 +
X1/16 Window lift, hall sensor 1/2 -
X1/7 Window lift, engine +
X1/1 Window lift, engine -
X2/14 Close window lift
X2/13 Open window lift

Marking of mounting positions

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

- Ⓘ Locking
Ⓙ Unlocking

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

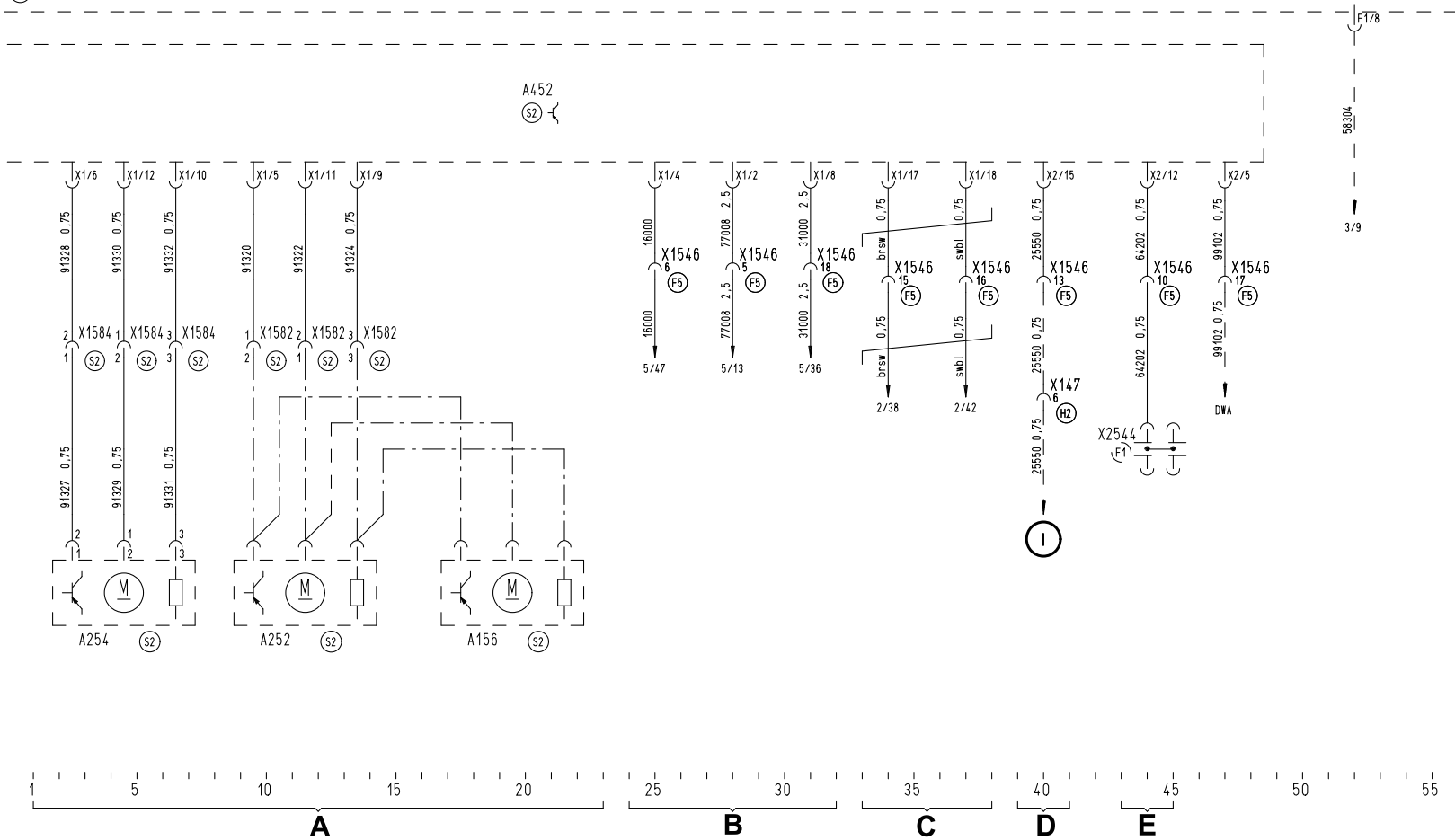
- (A) Tail
- (B1) Engine
- (B2) Gearbox
- (C) Front
- (C1) Bumper
- (C2) Entrance right
- (C3) Entrance left
- (E6) Central electrics area
- (E7) Control unit racks
- (E8) Rear wall of cab
- (F) Instrument panel
- (F1) Central part
- (F2) Steering wheel/column
- (F3) Foot pedals
- (F4) Front wall, inside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

Wiring diagram no. 81.99192.2990 Sheet 4 of 5

A100

A302

A452



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

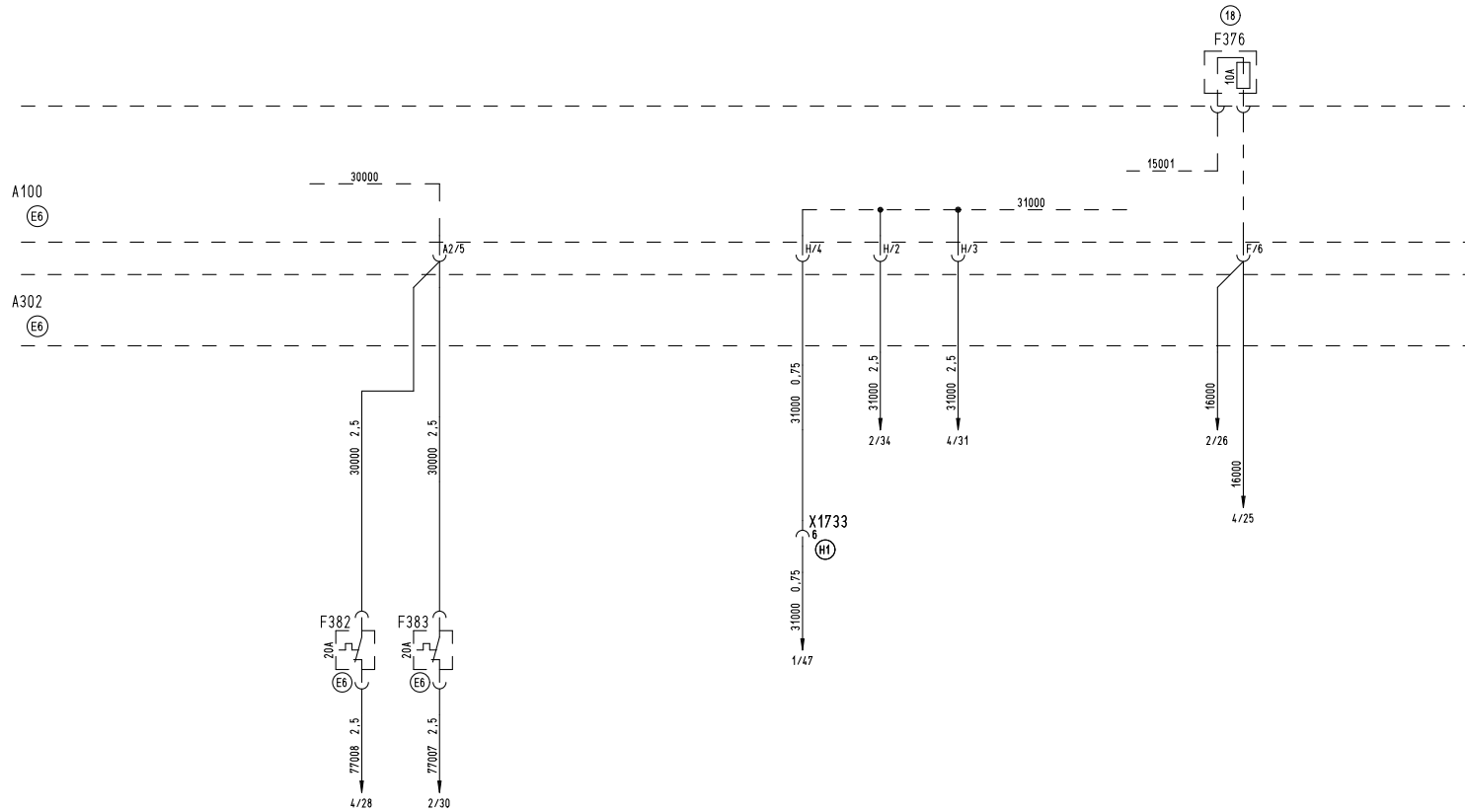
Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right



A

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

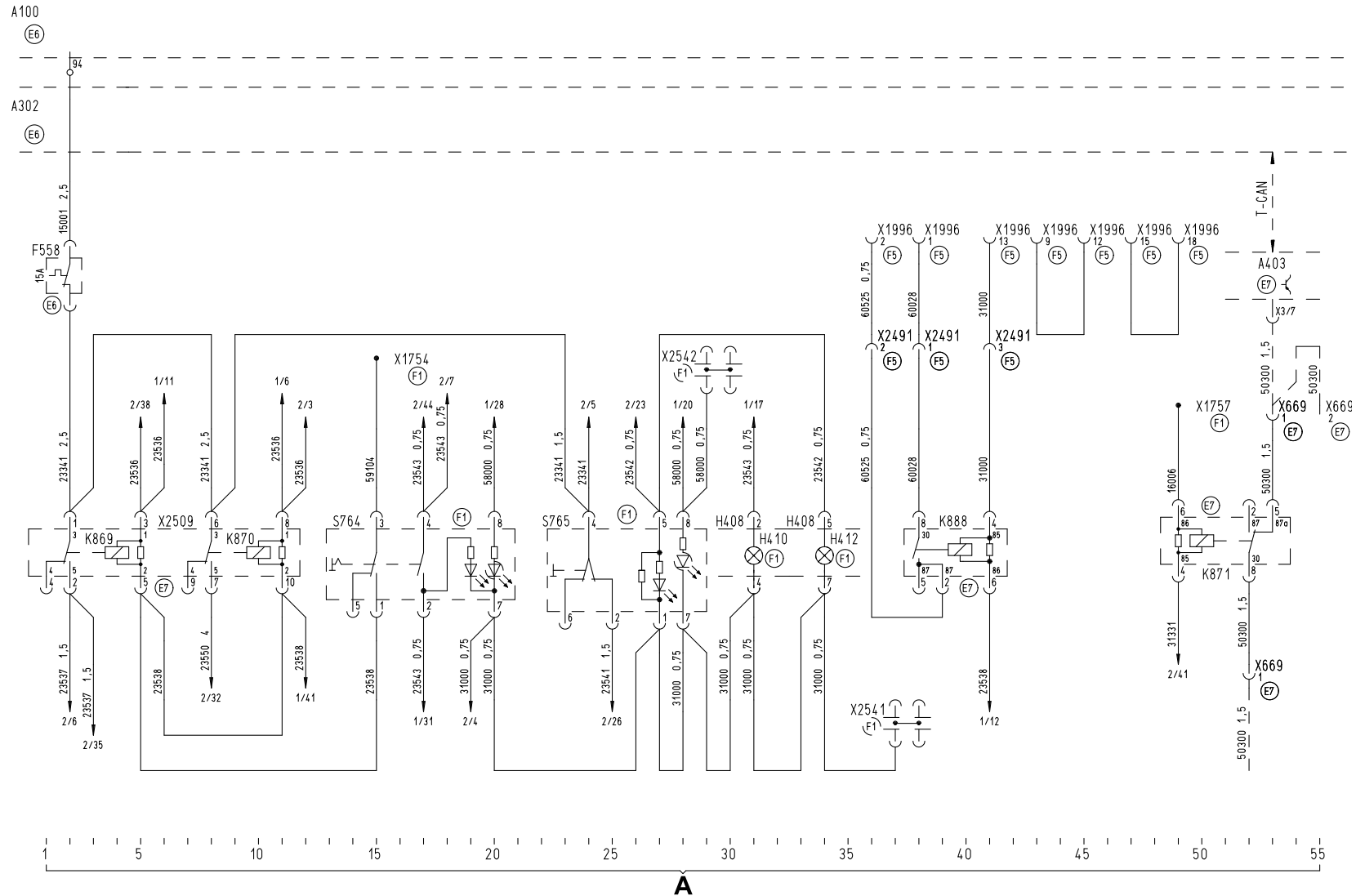
- S764 (676) Switch, cooling, superstructure, tractor vehicle
- S765 (678) Control switch, cooling, superstructure, defrost, tractor vehicle

- 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

Wiring diagram no. 81.99192.1469 Sheet 1 of 2



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

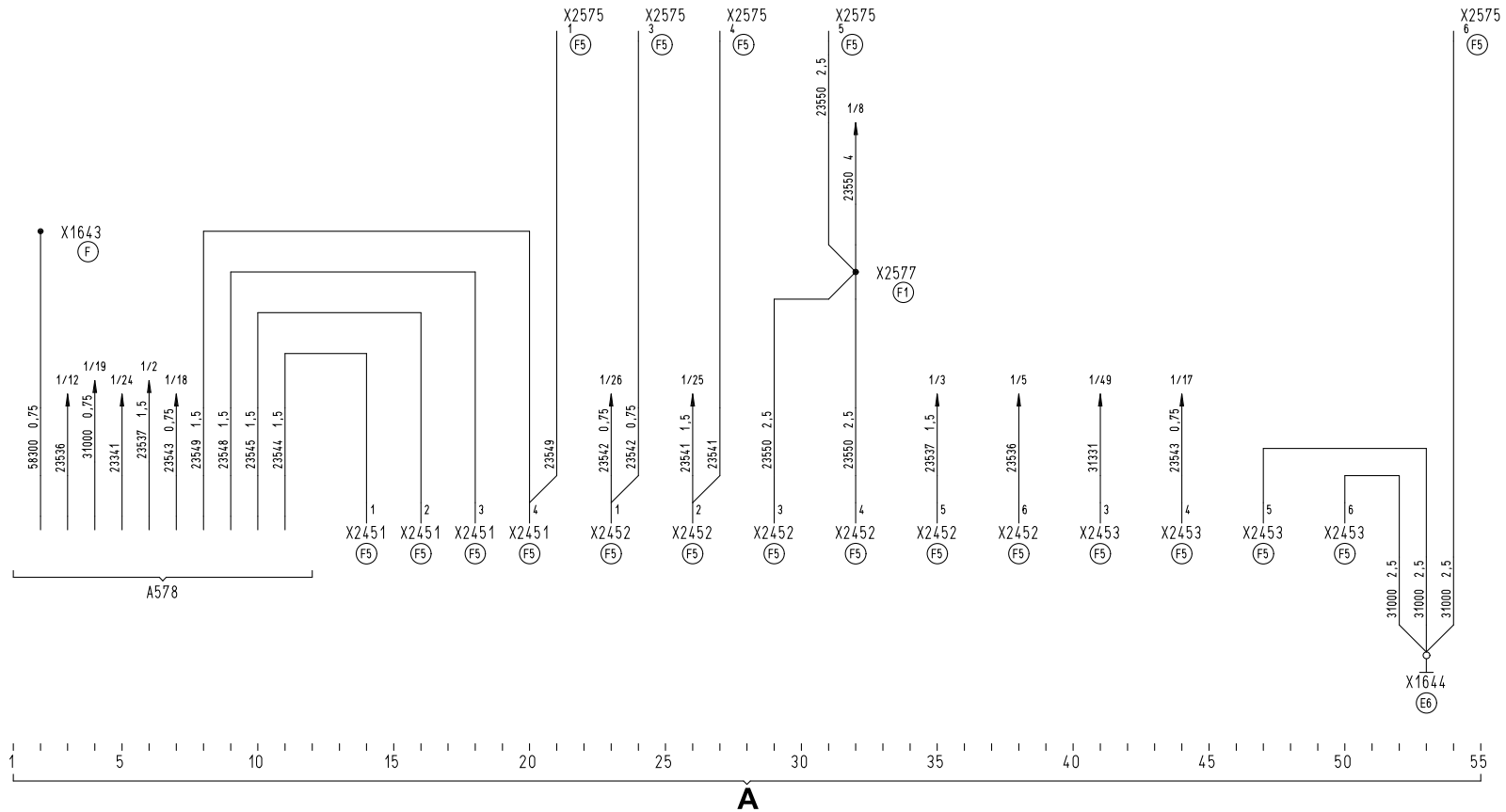
Ⓕ Door left

Ⓕ Door right

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

A100
 (E6)

A302
 (E6)



Preparation cooling superstructure (tractor vehicle, trailer)

Legend

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

Change status: 05.01

A = Preparation, cooling, superstructure

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

F558 (129) Fuse, cooling superstructure

K869 (283) Relay I, cooling, superstructure, tractor vehicle

K870 (283) Relay II, cooling, superstructure, tractor vehicle

K893 (283) Relay I, cooling, superstructure, trailer

K894 (283) Relay II, cooling, superstructure, trailer

S764 (676) Switch, cooling, superstructure, tractor vehicle

S765 (678) Control switch, cooling, superstructure, defrost, tractor vehicle

S766 (677) Switch, cooling, superstructure, trailer

S767 (679) Control switch, cooling, superstructure, defrost, trailer

X1754 Soldered connector, line 59104

X2509 (203) Relay base K869, K870

X2510 (203) Relay base K893, K894

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ6 Central electrics area

Ⓔ7 Control unit racks

Ⓔ8 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

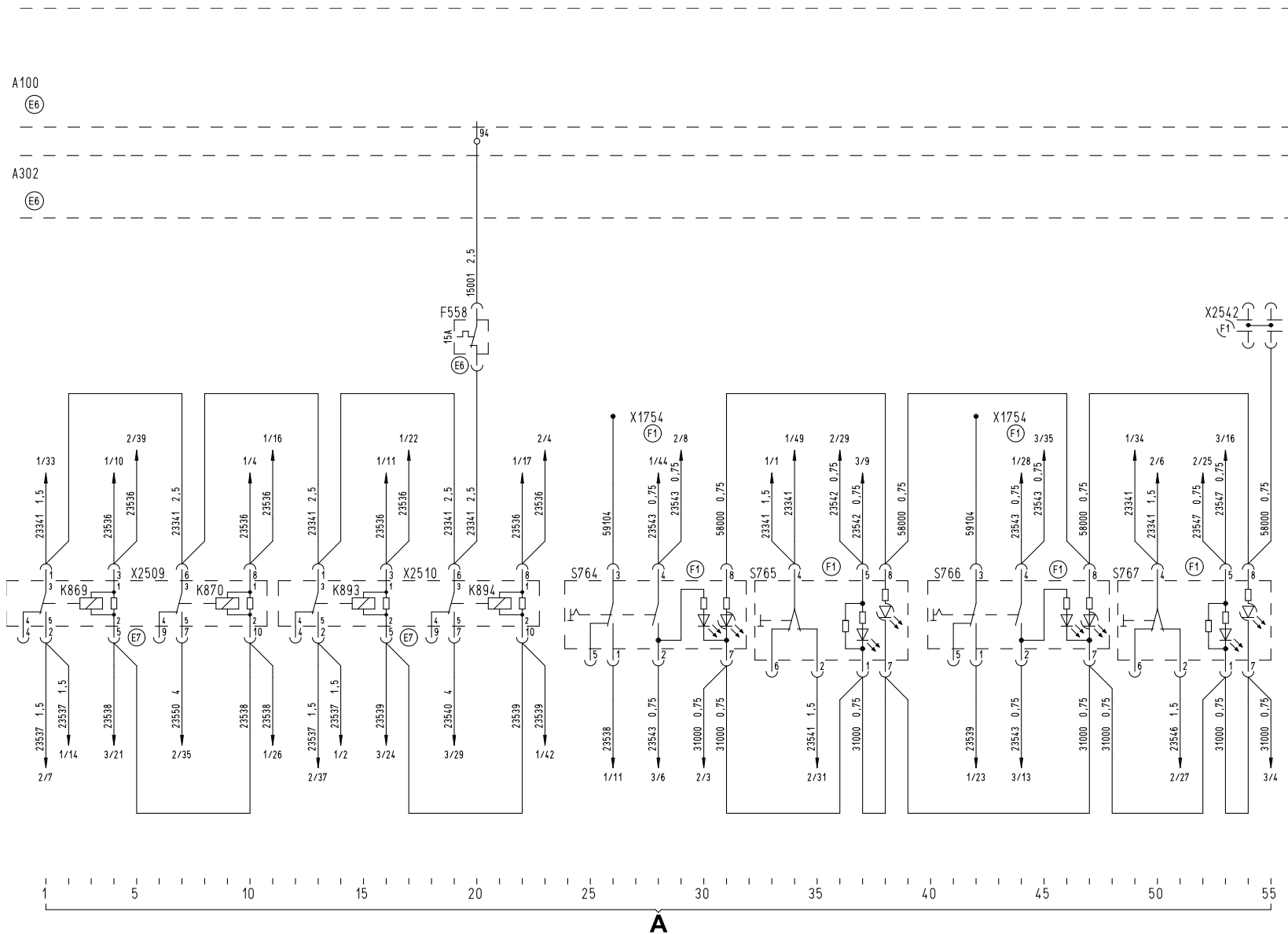
Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.1468 Sheet 1 of 3



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

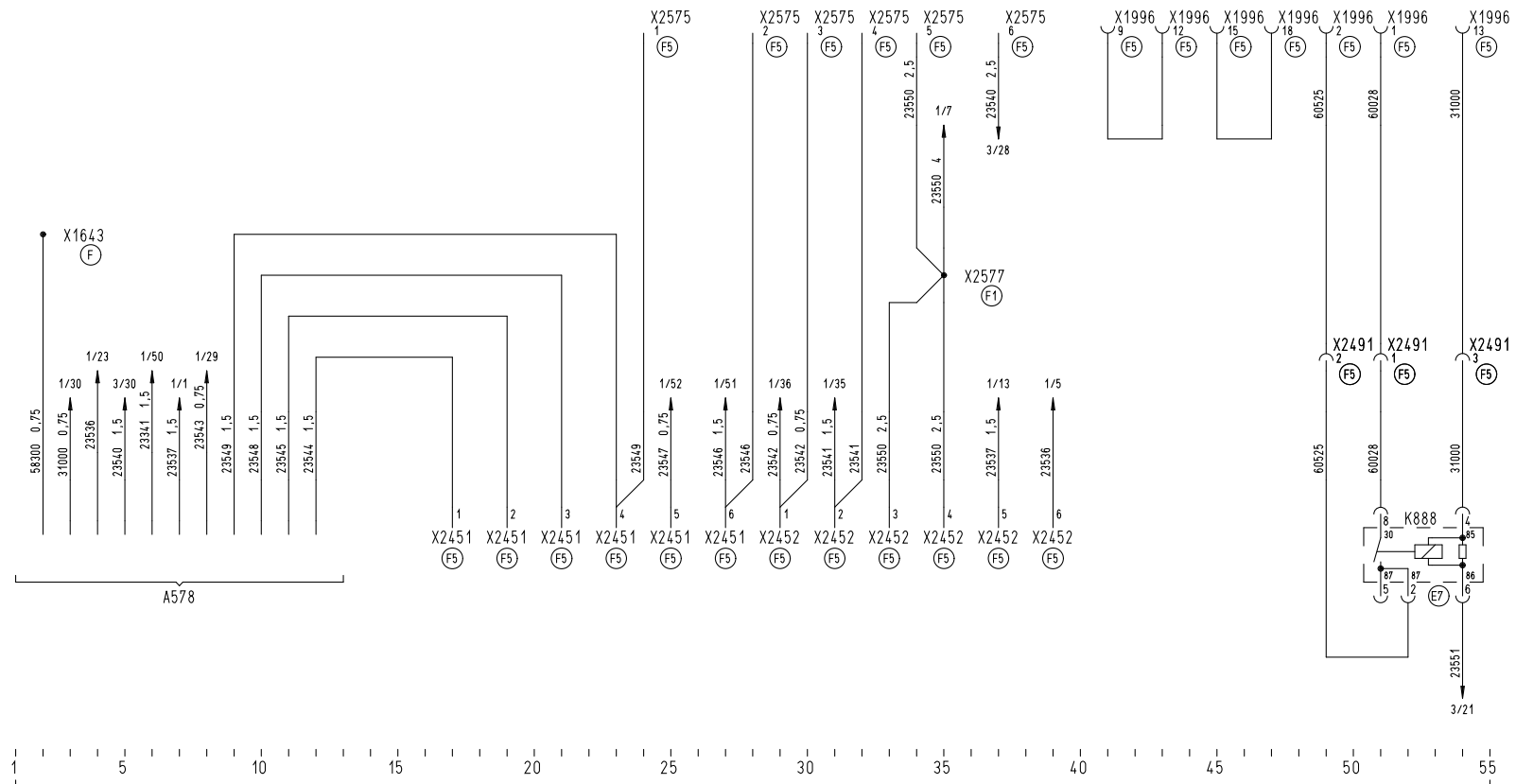
(S1) Door left

(S2) Door right

Wiring diagram no. 81.99192.1468 Sheet 2 of 3

A100
E6

A302
E6



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

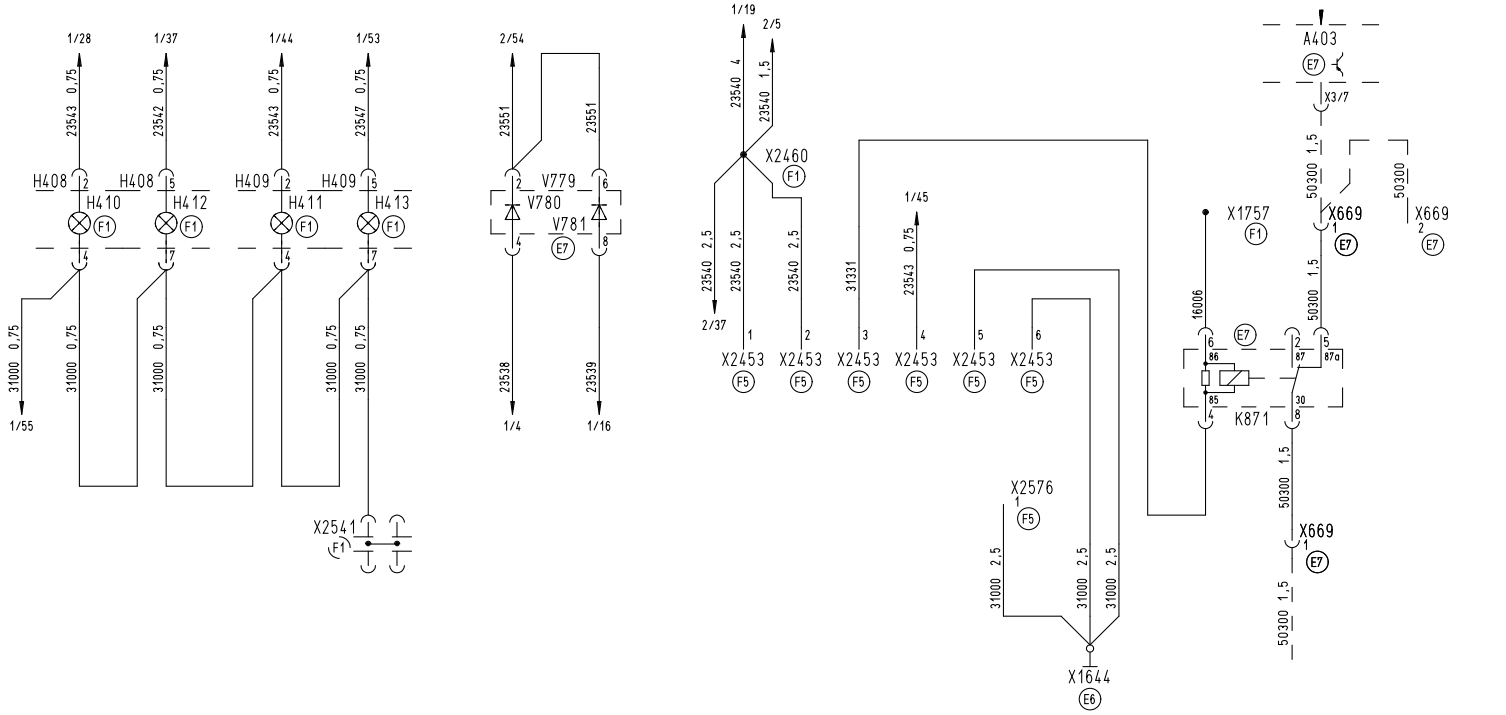
Marking of mounting positions

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ1 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ1 Control unit racks
- Ⓔ2 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓖ6 Driving seat
- Ⓖ7 Passenger seat
- Ⓖ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.1468 Sheet 3 of 3

A100
 (E6)

A302
 (E6)



A

Preparation LSVVA (performance-related heavy traffic levy)

Legend

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

Change status: 05.01

A = Preparation for LSVVA

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A408 (403) Tachograph

A557 LSVVA 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

Ⓐ Tail

Ⓑ Engine

Ⓒ Gearbox

Ⓓ Front

Ⓔ Bumper

Ⓕ Entrance right

Ⓖ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓔ Battery 1

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

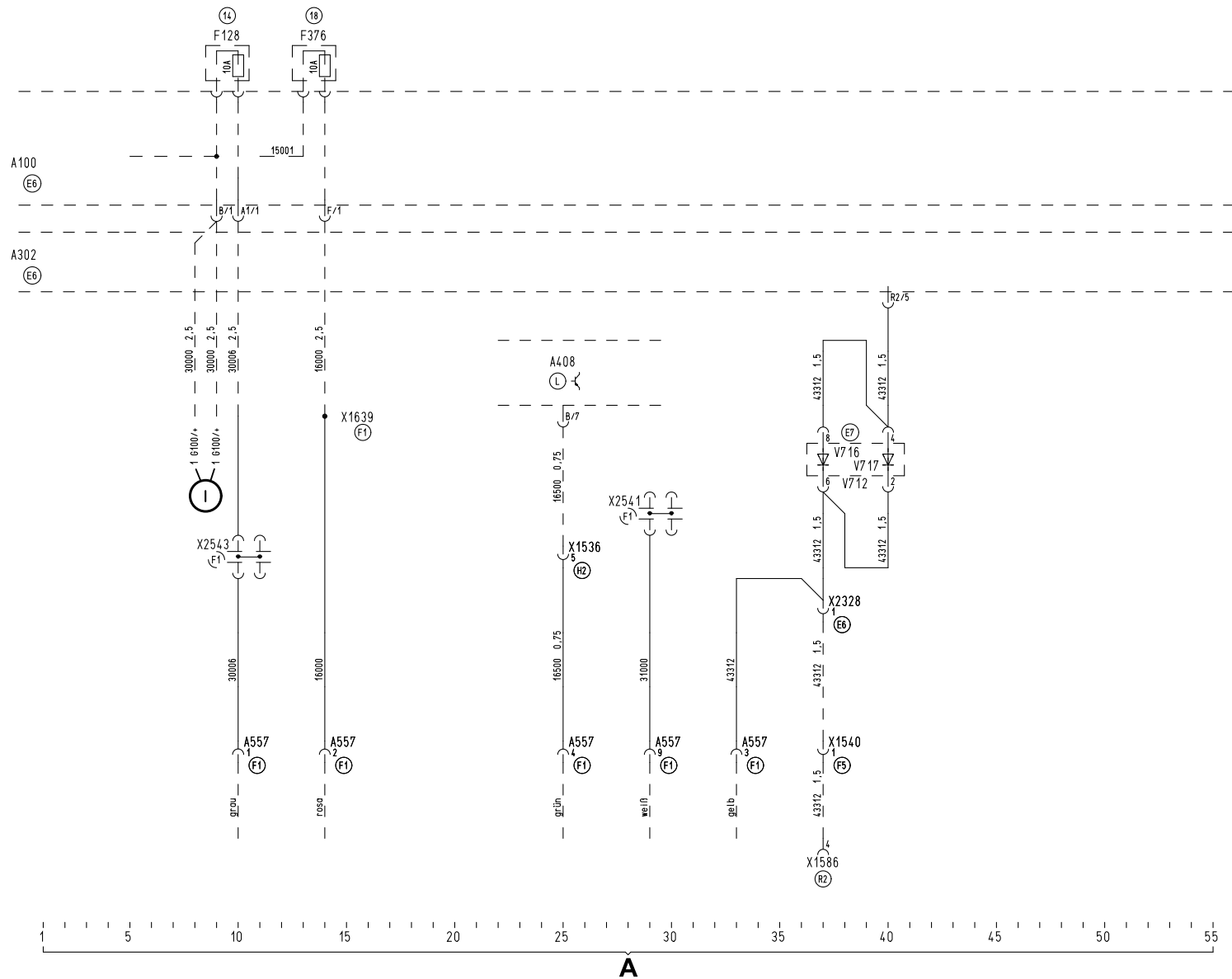
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1464 Sheet 1 of 1



Preparation trailing axle control, semitrailer

Legend

Wiring diagram no. **81.99192.1465** Sheet 1 of 1
Change status: 05.01

A = Preparation trailing axle control, semitrailer

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

F201 (118) Fuse, trailing axle control, semitrailer

S250 (543) Switch, raise trailing axle

S251 (544) Traction help control switch

X599 Stvd. trailing axle control, semitrailer

X2541 (246) Potential distributor, 21-pin line 31000

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

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓒ Central electrics area

Ⓒ Control unit racks

Ⓒ Rear wall of cab

Ⓒ Instrument panel

Ⓒ Central part

Ⓒ Steering wheel/column

Ⓒ Foot pedals

Ⓒ Front wall, inside left

Ⓒ Front wall, inside right

Ⓘ Roll up cables behind cab

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

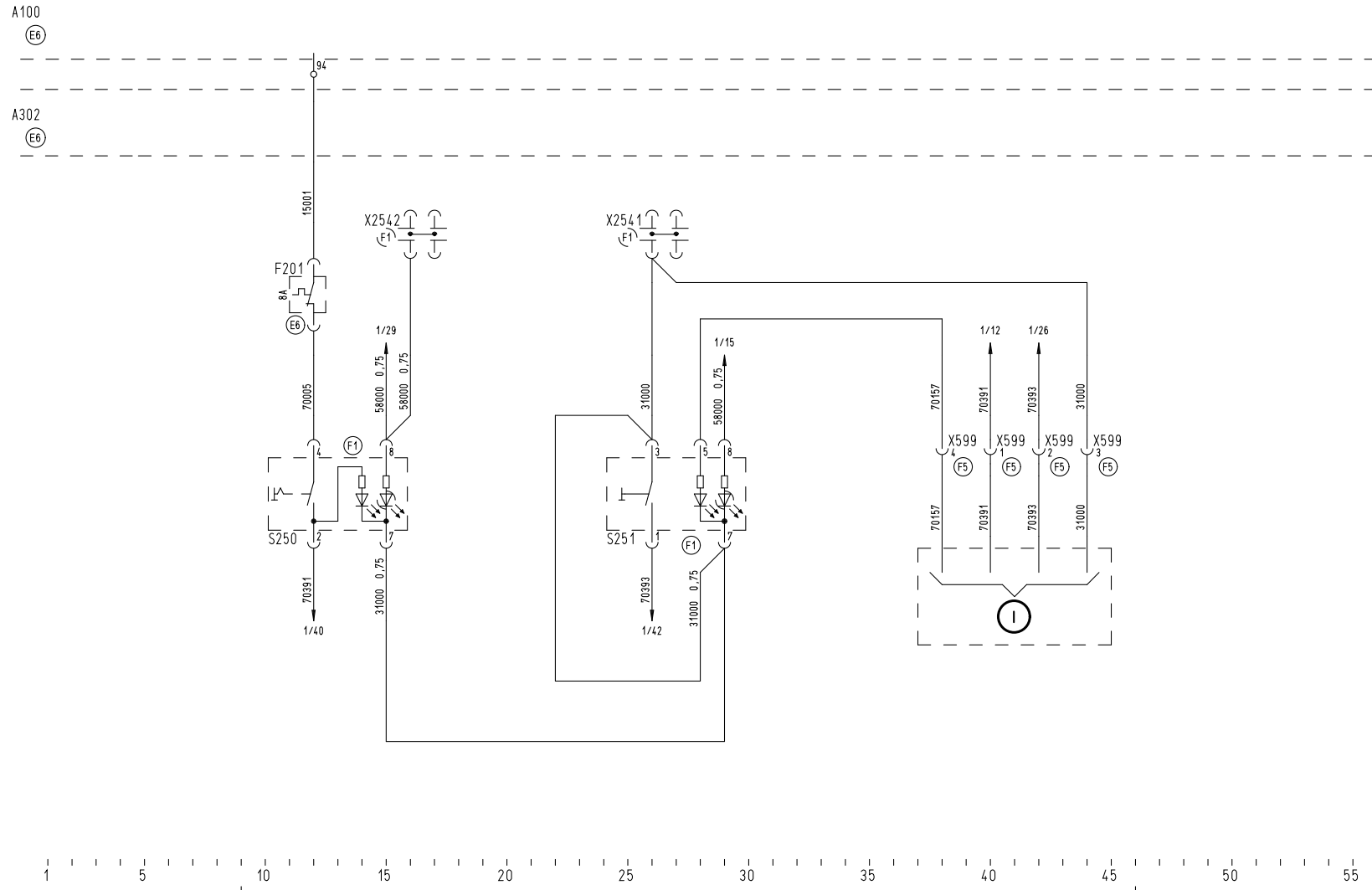
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.1465 Sheet 1 of 1



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

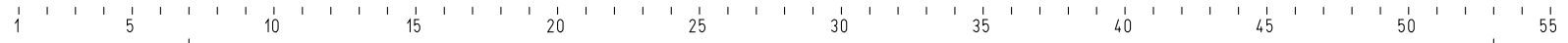
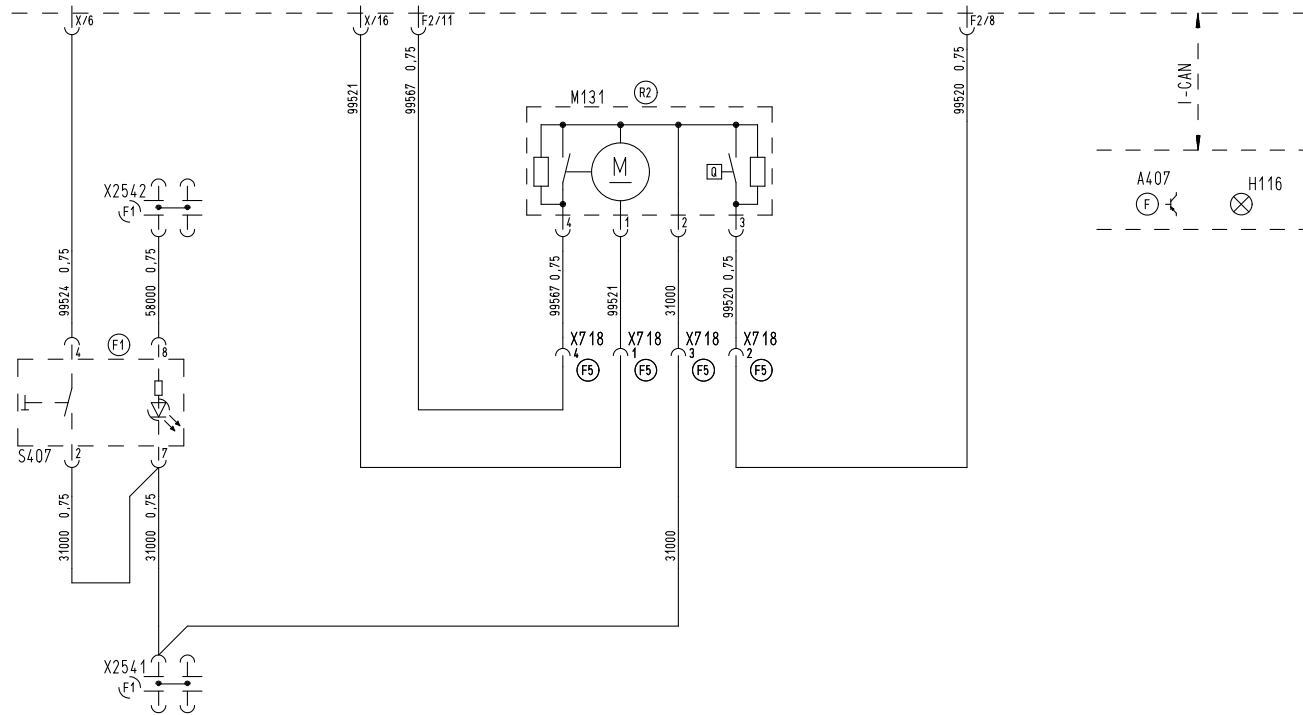
Marking of mounting positions

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

Wiring diagram no. 81.99192.1466 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

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

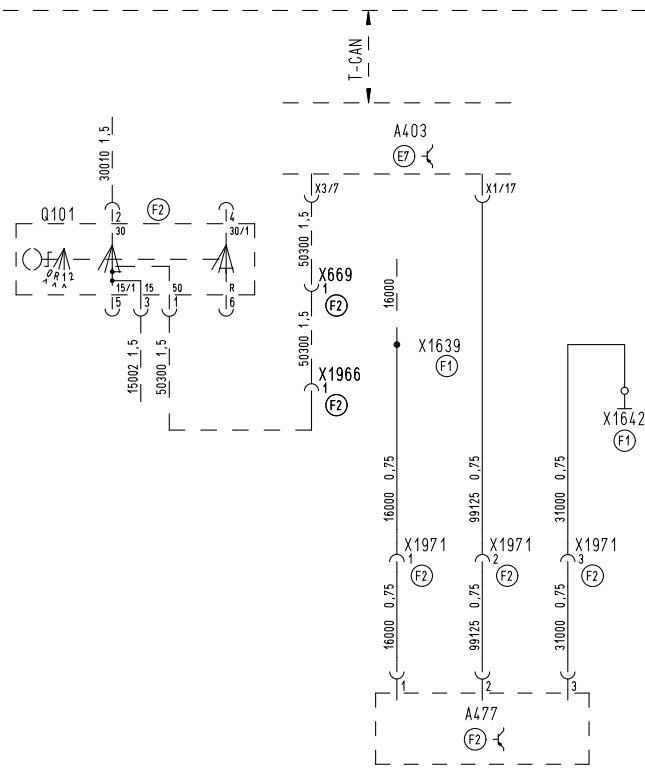
Wiring diagram no. 81.99192.2476 Sheet 1 of 1

A100

(E6)

A302

(E6)



A

K 90

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

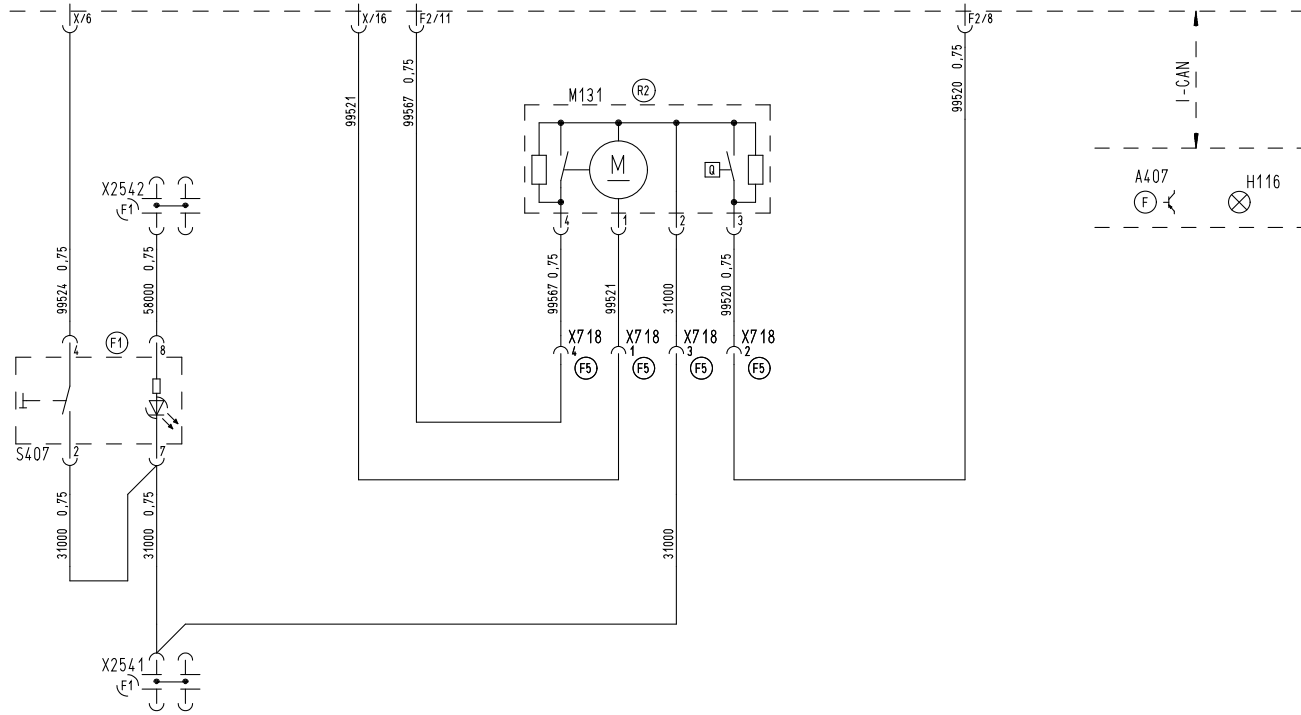
Marking of mounting positions

- | | |
|------------------------------|----------------------------------|
| Ⓐ Tail | ⓕⓖ Driving seat |
| ⒷⓁ Engine | ⓕⓗ Passenger seat |
| ⒷⓂ Gearbox | ⓕⓓ Control panel |
| Ⓒ Front | ⓕⓔ Battery box |
| ⒸⓁ Bumper | ⓕⓗⓁ B-pillar on driver's side |
| ⒸⓇ Entrance right | ⓕⓗⓂ A-pillar on driver's side |
| ⒸⓈ Entrance left | ⓕⓇⓁ B-pillar on passenger's side |
| Ⓔⓖ Central electrics area | ⓕⓇⓂ A-pillar on passenger's side |
| ⒺⓇ Control unit racks | ⓕⓁ Ceiling/roof |
| ⒺⓈ Rear wall of cab | ⓕⓃ Front axle |
| ⓕ Instrument panel | ⓕⓅ Rear axle |
| ⓕⓁ Central part | ⓕⓇⓁ Front part of frame |
| ⓕⓇⓂ Steering wheel/column | ⓕⓇⓂ Rear part of frame |
| ⓕⓇⓁ Foot pedals | ⓕⓇⓁ Door left |
| ⓕⓇⓁ Front wall, inside left | ⓕⓇⓂ Door right |
| ⓕⓇⓂ Front wall, inside right | |

Wiring diagram no. 81.99192.1467 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

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

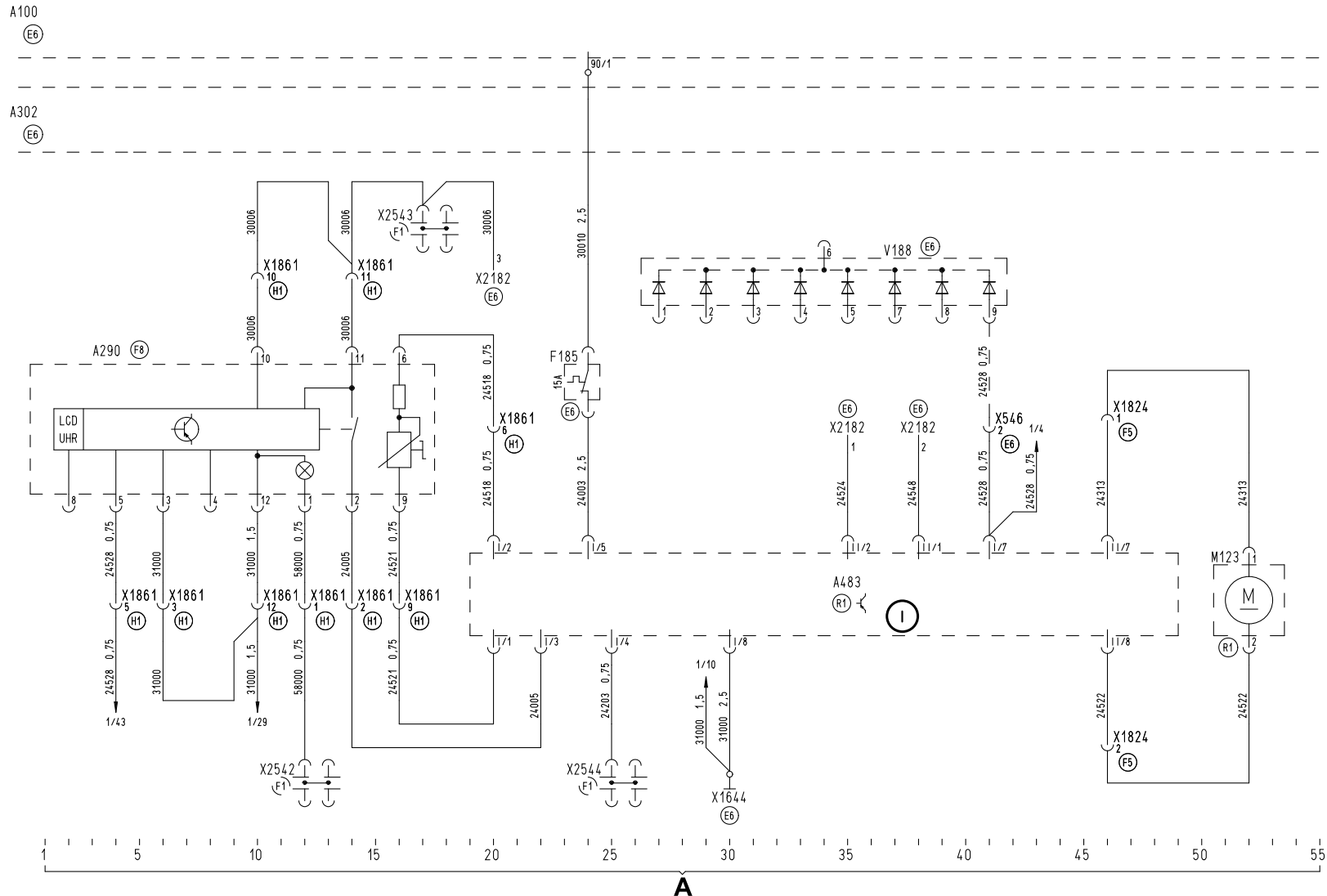
Marking of mounting positions

- (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

- (I) Scope of delivery from Eberspächer

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

Wiring diagram no. 81.99192.1472 Sheet 1 of 1



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

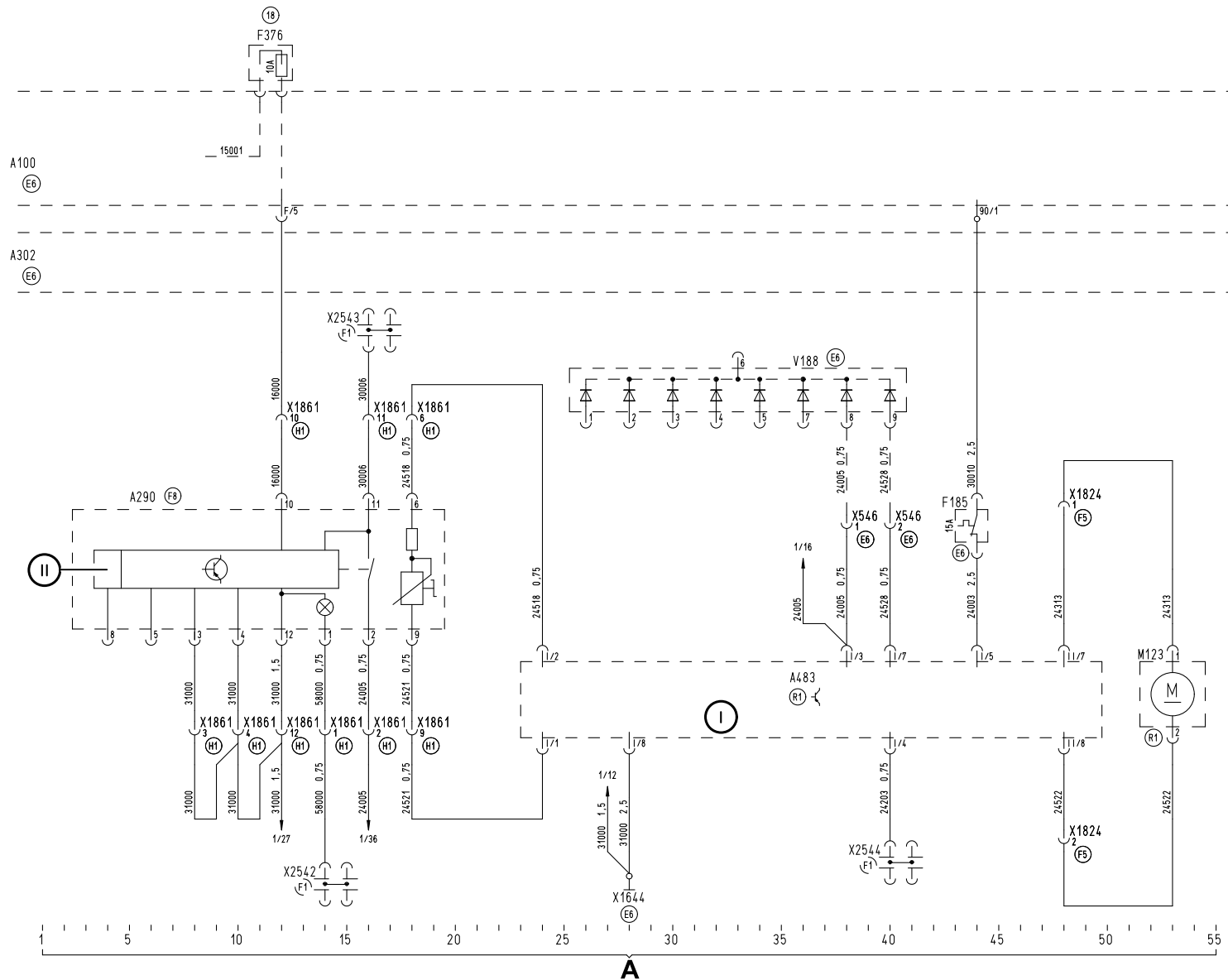
Marking of mounting positions

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

- Ⓘ Scope of delivery from Eberspächer
- Ⓙ LCD clock

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.1471 Sheet 1 of 1



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

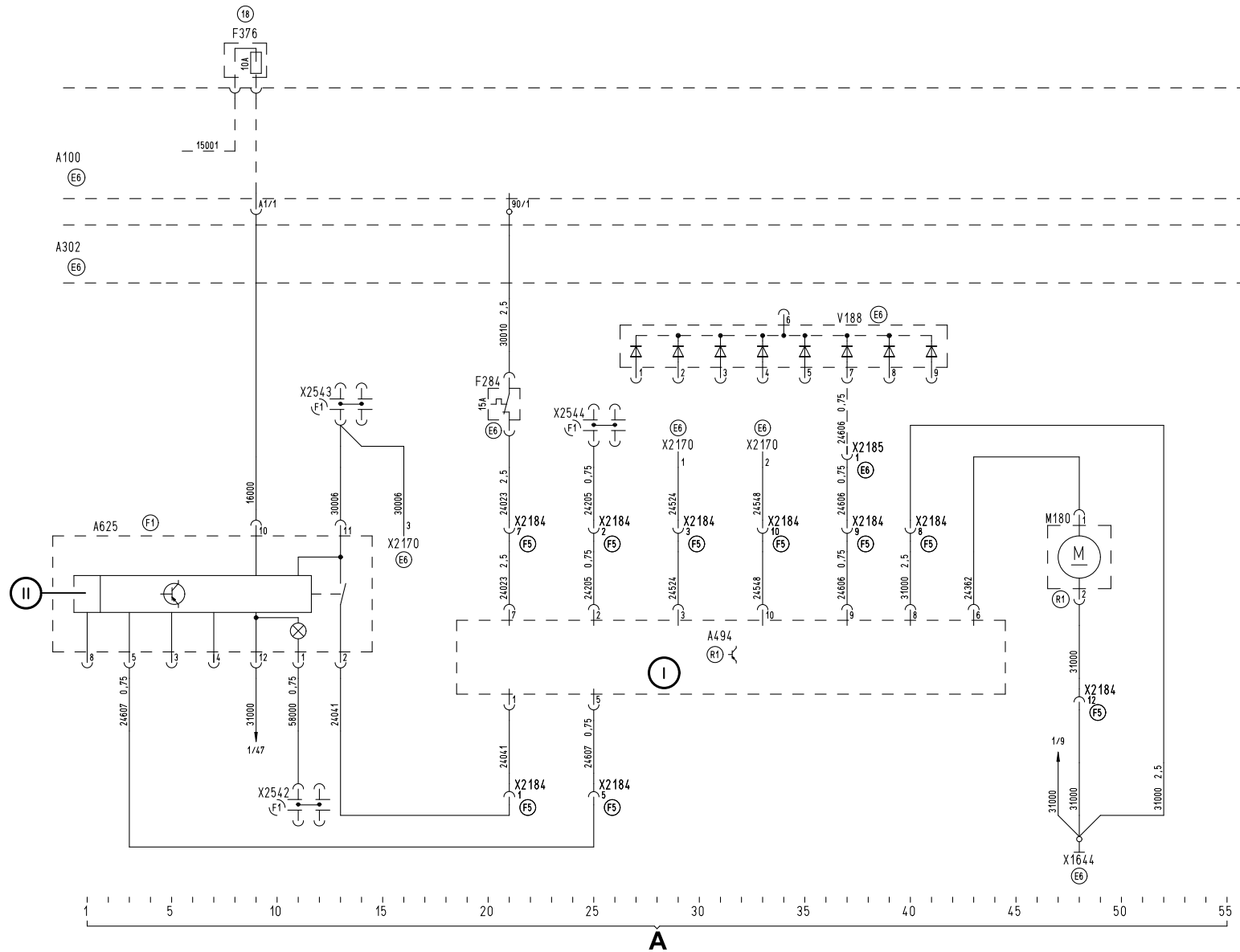
Marking of mounting positions

- (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

- (I) Scope of delivery from Eberspächer
- (II) LCD clock

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

Wiring diagram no. 81.99192.1478 Sheet 1 of 1



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

- (I) Scope of delivery from Eberspächer
- (II) LCD clock

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

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

- Ⓐ Tail
- Ⓑ Engine
- Ⓑ1 Gearbox
- Ⓒ Front
- Ⓒ1 Bumper
- Ⓒ2 Entrance right
- Ⓒ3 Entrance left
- Ⓔ Central electrics area
- Ⓔ1 Control unit racks
- Ⓔ2 Rear wall of cab
- Ⓕ Instrument panel
- Ⓕ1 Central part
- Ⓕ2 Steering wheel/column
- Ⓕ3 Foot pedals
- Ⓕ4 Front wall, inside left
- Ⓕ5 Front wall, inside right
- Ⓖ Scope of delivery, Webasto
- Ⓖ1 LCD clock
- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ1 B-pillar on passenger's side
- Ⓕ2 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

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

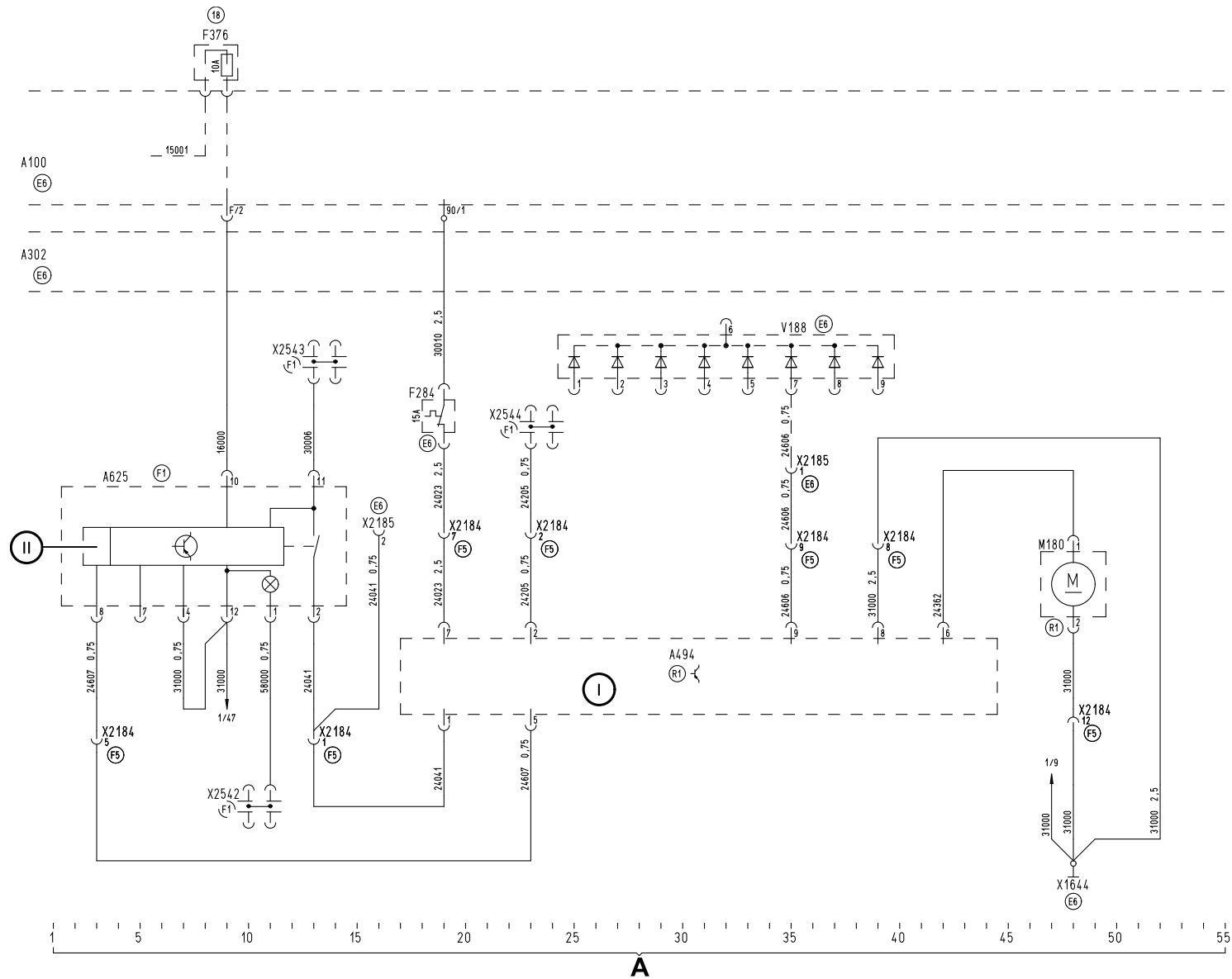
Marking of mounting positions

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

- Ⓘ Scope of delivery, Webasto
- Ⓜ LCD clock

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.1475 Sheet 1 of 1



Supplementary heating, TRS shutdown

Legend

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

Change status: 07.99

A = Supplementary heating, TRS shutdown

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

K678 (283) Relay, supplementary heating, TRS shutdown

K679 (283) Relay, supplementary heating, TRS shutdown

V200 Diode, power take-off 1

V201 Diode, power take-off 2

V202 (117) Diode group V200, V201

X1552 Stvd. power take-off I/TRS heating

X1554 Stvd. power take-off II/TRS heating

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

X1754 Crimped connector, line 59104

X1984 (203) Relay base K678, K679

X2170 Stvd. TRS shutdown, water heating

X2182 Stvd. TRS shutdown, hot-air heating

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ2 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Power take-off 1

Ⓙ Power take-off 2

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓕ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

Ⓕ2 Rear part of frame

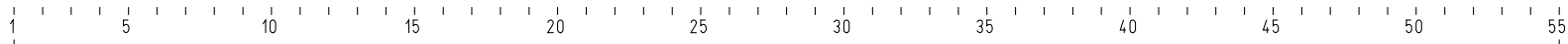
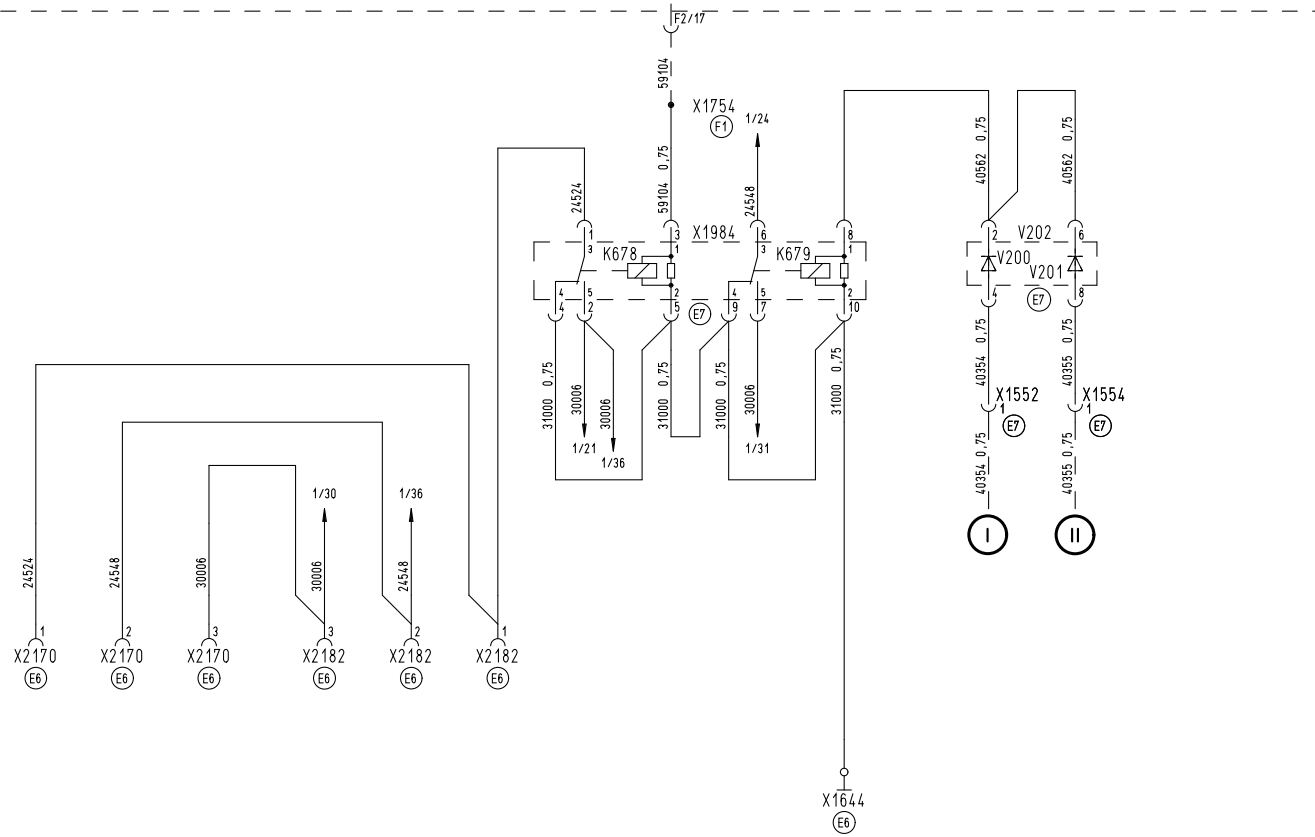
Ⓕ1 Door left

Ⓕ2 Door right

Wiring diagram no. 81.99192.2621 Sheet 1 of 1

A100
 (E6)

A302
 (E6)



A

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

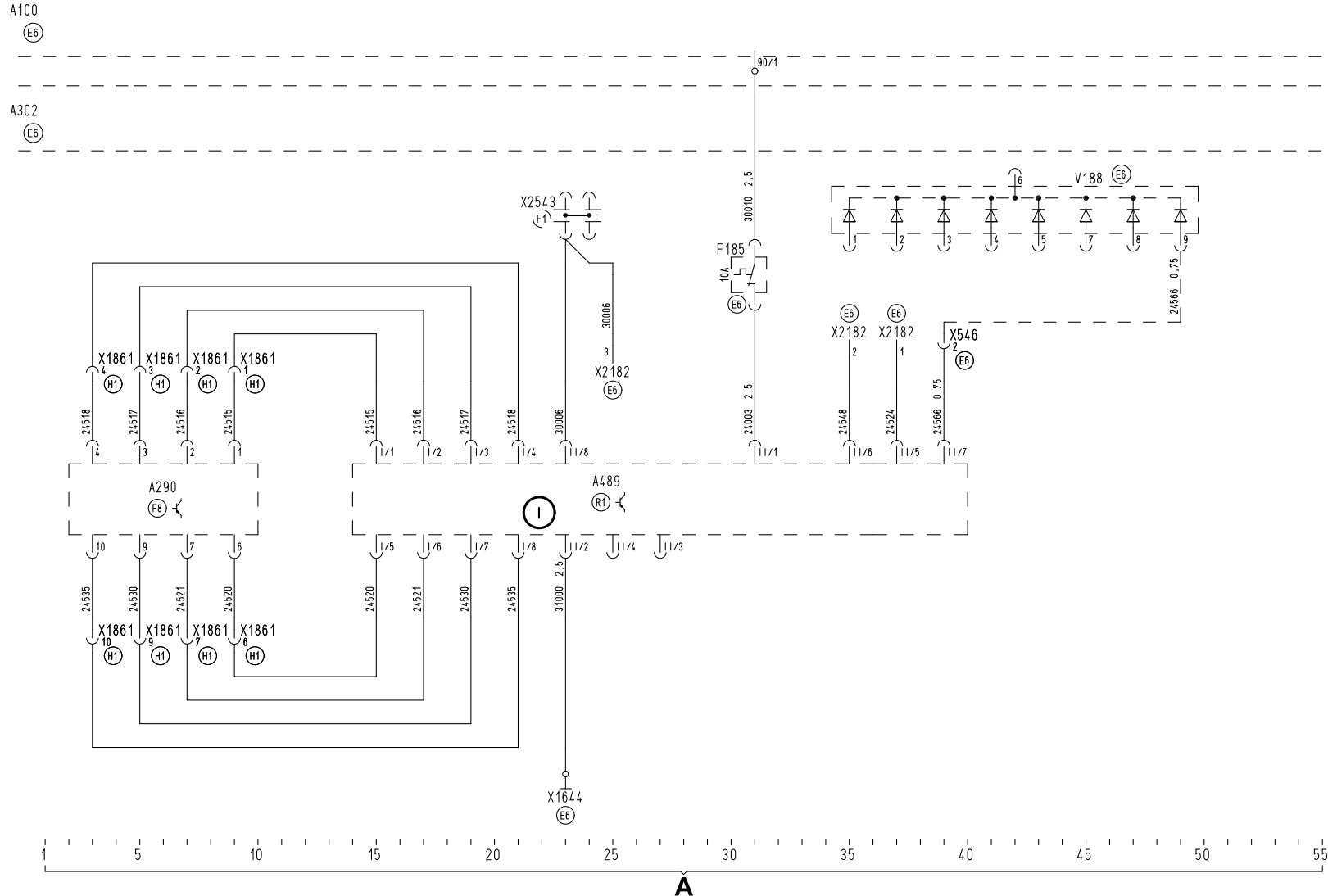
Marking of mounting positions

- (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

- (I) Scope of delivery, Truma

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

Wiring diagram no. 81.99192.1480 Sheet 1 of 1



Supplementary heating Truma E24-2 without TRS

Legend

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

Change status: 05.01

A = Supplementary heating Truma E24-2 without TRS

- 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

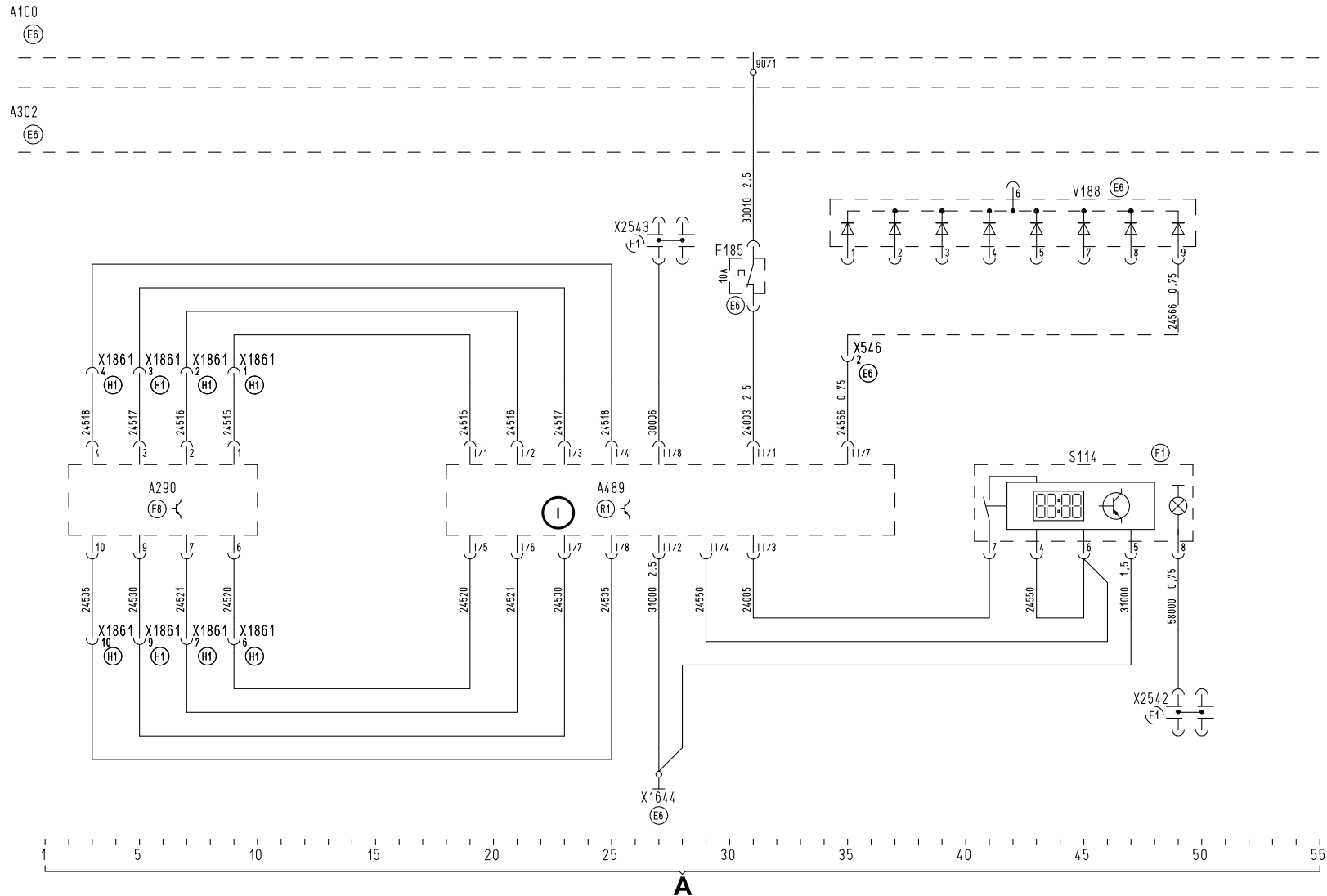
Marking of mounting positions

- (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

- (I) Scope of delivery, Truma

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

Wiring diagram no. 81.99192.1479 Sheet 1 of 1



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

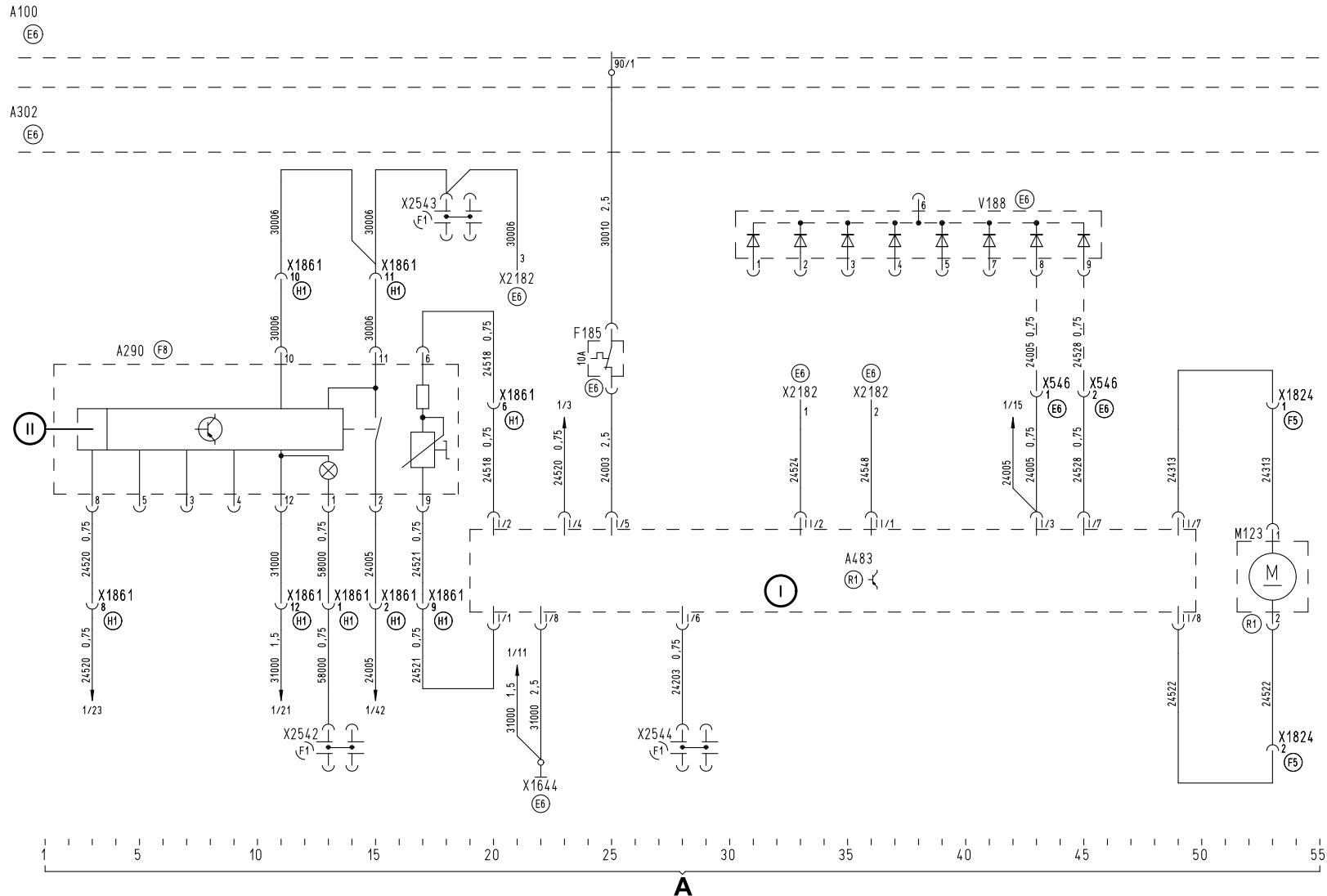
Marking of mounting positions

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

- Ⓘ Scope of delivery, Webasto
- Ⓙ LCD clock

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓖ Ceiling/roof
- Ⓖ Front axle
- Ⓖ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.1473 Sheet 1 of 1



Supplementary heating Webasto Airtop 2000 OEM and 3500 without TRS

Legend

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

Change status: 05.01

A = Supplementary heating Webasto Airtop 2000 OEM and 3500 without TRS

- A100 (255) Central fuse, relay and terminal block
- A290 (381) Keypad for supplementary heating (clock/thermostat)
- A302 (352) Central computer 2
- A483 (382) Scope of delivery: supplementary hot-air heating

- F185 (122) Fuse, supplementary heating

- M123 (153) Metering pump, supplementary heating

- V188 (120) Diode group, 8 times, for battery emergency shutdown switch

- X546 Stvd. supplementary heating, main battery switch (electric)
- X1644 Earthing point, cab, adjacent to central fuse, relay and terminal block
- X1824 Stvd. cab, metering pump, supplementary heating
- X1861 Stvd. cab keypad, supplementary heating
- X2542 (246) Potential distributor, 21-pin line 58000
- X2543 (246) Potential distributor, 21-pin line 30006
- X2544 (246) Potential distributor 21-pin K-line

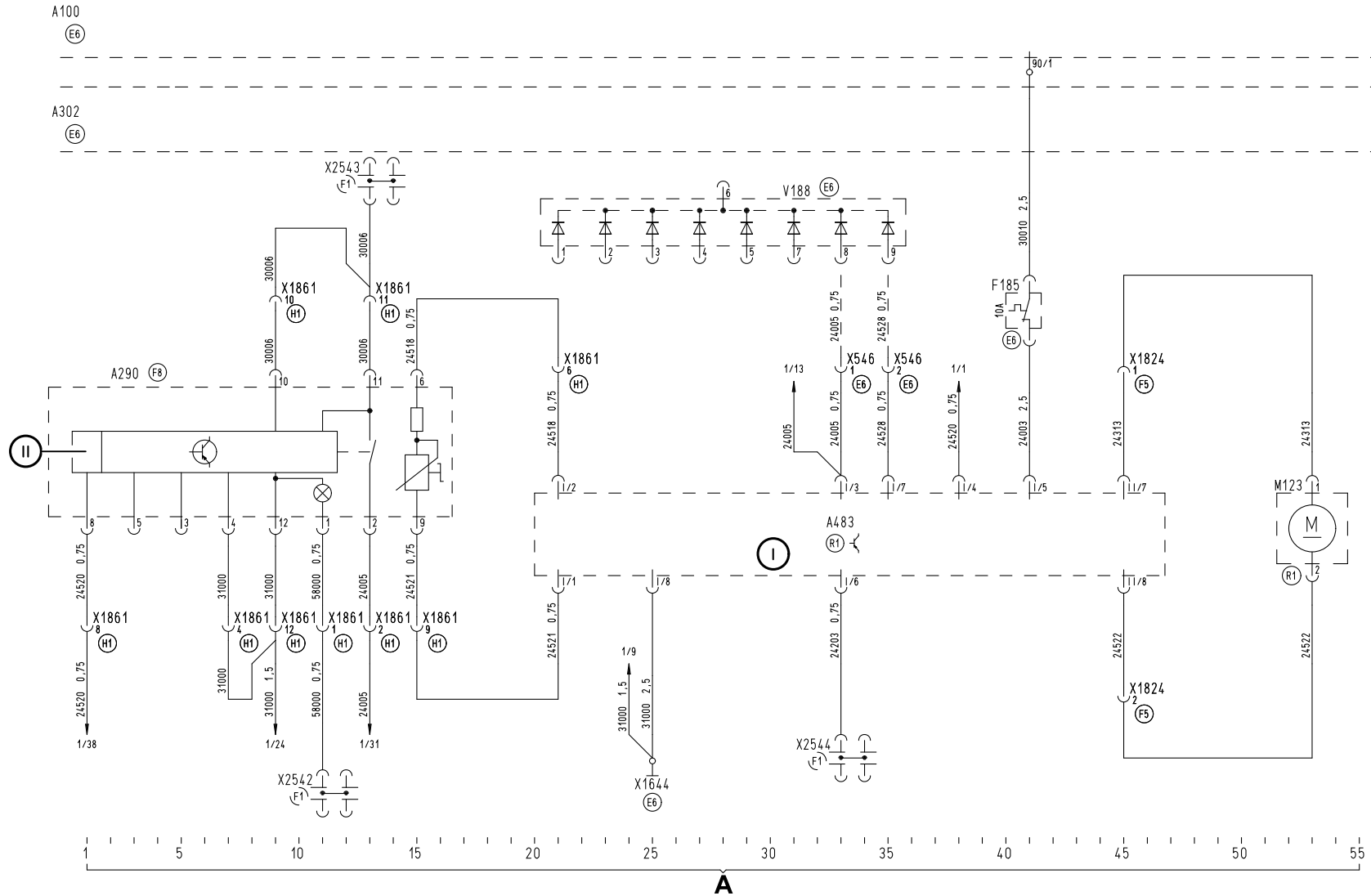
Marking of mounting positions

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

- Ⓘ Scope of delivery, Webasto
- Ⓙ LCD clock

- Ⓕ6 Driving seat
- Ⓕ7 Passenger seat
- Ⓕ8 Control panel
- Ⓖ Battery box
- Ⓕ1 B-pillar on driver's side
- Ⓕ2 A-pillar on driver's side
- Ⓕ3 B-pillar on passenger's side
- Ⓕ4 A-pillar on passenger's side
- Ⓕ Ceiling/roof
- Ⓕ Front axle
- Ⓕ Rear axle
- Ⓕ1 Front part of frame
- Ⓕ2 Rear part of frame
- Ⓕ1 Door left
- Ⓕ2 Door right

Wiring diagram no. 81.99192.1474 Sheet 1 of 1



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

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. 81.99192.2461 Sheet 1 of 1

A100
 (E6)

A302
 (E6)

