



10 - Electrical equipment

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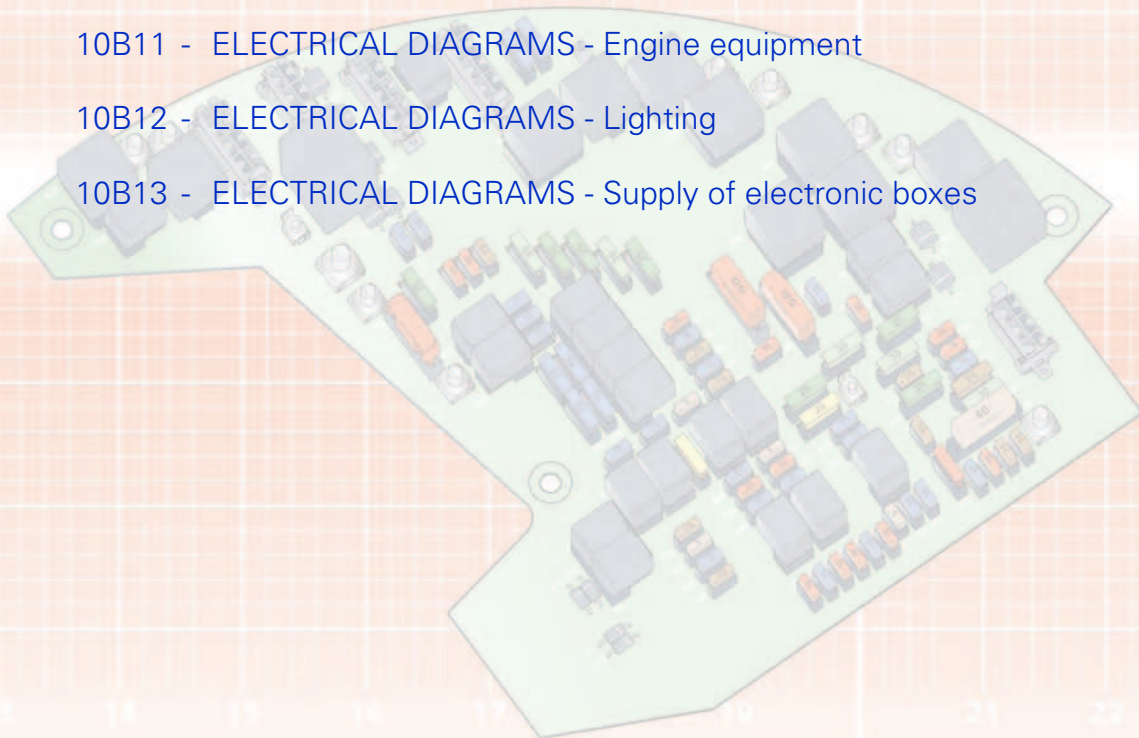
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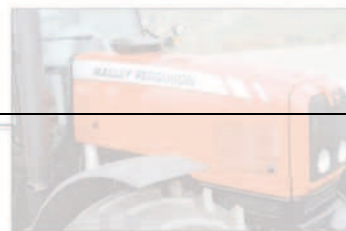
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Electrical equipment



6400



10A10- Fuse boxes

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Fuse boxes

A . General













The fuse box elements are named depending on their function:

F Fuse

SH Shunt (shunts are fuses)

R Relay

The fuses used are of different powers and sizes:

Amperage	Size	Colour
3	normal	
5	min.	
7,5	min.	
10	min.	
10	normal	
15	min.	
15	normal	
20	normal	
25	normal	
30	normal	
40	max.	
50	max.	

Fuse boxes

B . Version for Europe

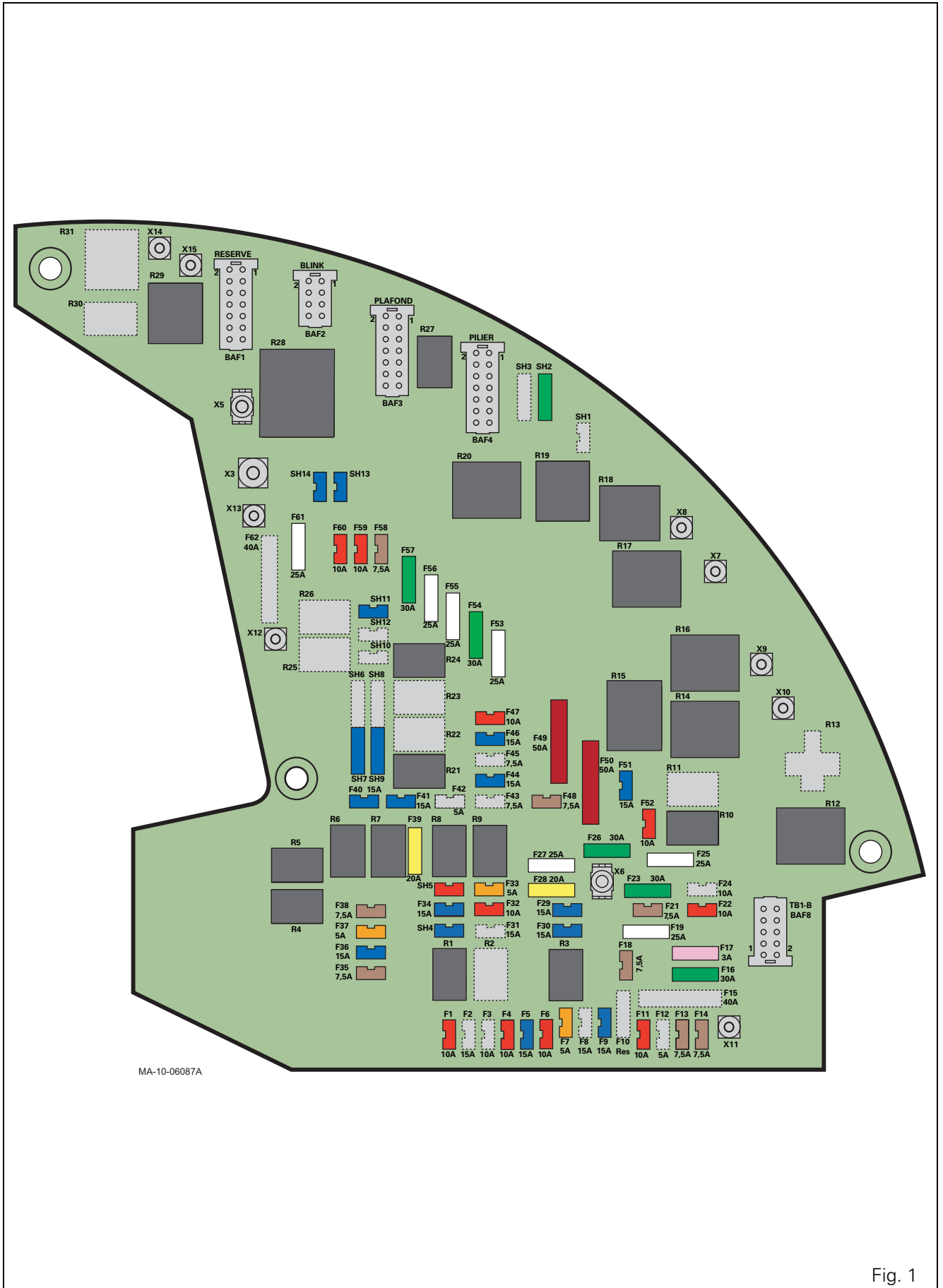
Dynashift and Dyna-6 with Perkins Engine (Fig. 1)

Ref.	Amp.	Size	Protected function
F1	10	min.	Front right- and rear left-hand side lights, back-lighting of switches / console / cigarette lighter
F4	10	min.	Auto III (Dynashift), Auto V (Dyna-6), instrument panel, gearbox / differential / 4WD / PTO / creeper unit neutral switch
F5	15	min.	Stop lights
F6	10	min.	Controls on armrest (Dyna-6)
F7	5	min.	Electronic injection control unit (ECU) control relay, reversing light relay
F9	15	min.	Suspended front axle and front PTO
F11	10	min.	Air conditioning compressor (manual air conditioning)
F13	7,5	min.	Work headlights module
F14	7,5	min.	Electrical rear view mirrors
F16	30	normal	Injection pump stop solenoid valve, braking pressure sensor, alternator, booster pump
F17	3	normal	Brake switch
F18	7,5	min.	Linkage, diagnostics, braking circuit pressure sensor
F19	25	normal	Pneumatic seat, fuel heater
F21	7,5	min.	Linkage, Datatronic 3
F22	10	min.	TOC/BOC pedal switch, buzzer, start switch, reverse shuttle lever, throttle pedal position sensor, armrest, parameter display selector switch
F23	30	normal	Cigarette lighter, radio, roof light, 12 V socket
F25	25	normal	Hazard warning light switch, permanent 12 V
F26	30	normal	Power socket
F27	25	normal	Electronic injection control unit (ECU)
F28	20	normal	Electronic injection control unit (ECU)
F29	15	min.	Auto III and Auto V calculators (Dyna-6)
F30	15	min.	Electronic injection control unit (ECU)
F32	10	min.	Electronic injection control unit (ECU)
F33	5	min.	Electronic injection control unit (ECU) - Thermostart
F34	15	min.	Dipped lights
F35	7,5	min.	Horn
F36	15	min.	Headlights
F37	5	min.	Clutch safety start switch
F38	7,5	min.	Front left- and rear right-hand side light, instrument panel back lighting
F39	20	normal	Handrail side / road lights switch, rear windscreen wiper
F40	15	min.	Left-hand direction indicator
F41	15	min.	Joystick
F44	15	min.	Right-hand direction indicator
F46	15	min.	Rear windscreen wiper, heating
F47	10	min.	Radio
F48	7,5	min.	Suspended front axle
F49	50	max.	Cab suspension
F50	50	max.	Air conditioning, radio
F51	15	min.	Instrument panel
F52	10	min.	Power socket
F53	25	normal	Control unit
F54	30	normal	Front work headlights
F55	25	normal	Rear work headlights
F56	25	normal	Work headlights on rear fenders and/or handrails
F57	30	normal	Work headlights on footsteps and/or handrails
F58	7,5	min.	Work headlights module

F59	10	min.	Flashing beacon
F60	10	min.	+ ignition on relay control
F61	25	normal	Hazard warning lights
SH2	30	normal	Work headlights on fenders and/or handrails
SH4	15	min.	Road lights (B)
SH5	10	min.	Dipped lights (B)
SH7	15	normal	Direction indicator
SH9	15	normal	Direction indicator
SH11	15	min.	Direction indicator
SH13	15	min.	Direction indicator
SH14	15	min.	Direction indicator
R1			Handrail road lights (A)
R3			Electronic injection control unit (ECU)
R4			Reversing light
R5			Stop lights
R6			1 st additional ON/OFF spool valve
R7			2 nd additional ON/OFF spool valve
R8			Handrail dipped lights (A)
R9			Electronic injection control unit (ECU)
R10			Power socket
R12			Wiper timer
R14			Air conditioning
R15			+ ignition on
R16			Cab suspension
R17			Front work headlights
R18			Rear work headlights
R19			Rear fender work headlights
R20			Footstep work headlights
R21			Left-hand direction indicator
R24			Right-hand direction indicator
R27			Flashing beacon
R28			Hazard warning light
R29			Air conditioning compressor (manual air conditioning)

(A): Tractors with Germany specifications only.

(B) : All models except tractors with Germany specifications.



Fuse boxes

Dynashift with Sisu engine (Fig. 2)

Ref.	Amp.	Size	Protected function
F1	10	min.	Front right- and rear left-hand side lights, back-lighting of switches / console / cigarette lighter
F4	10	min.	Auto III or Auto V, instrument panel, gearbox / differential / 4WD / PTO / creeper unit neutral switch
F5	15	min.	Stop lights
F6	10	min.	Controls on armrest (with Auto V)
F7	5	min.	Electronic injection control unit (ECU) control relay, reversing light relay
F9	15	min.	Suspended front axle and front PTO
F11	10	min.	Air conditioning compressor
F13	7,5	min.	Work headlights module
F14	7,5	min.	Electrical rear view mirrors
F16	30	normal	Injection pump stop solenoid valve, braking pressure sensor, alternator, booster pump
F17	3	normal	Brake switch
F18	7,5	min.	Linkage, diagnostics, braking circuit pressure sensor
F19	25	normal	Pneumatic seat, fuel heater
F21	7,5	min.	Linkage, Datatronic 3
F22	10	min.	TOC/BOC pedal switch, buzzer, start switch, reverse shuttle lever, throttle pedal position sensor, armrest, parameter display selector switch
F23	30	normal	Cigarette lighter, radio, roof light, 12 V socket
F25	25	normal	Hazard warning light switch, permanent 12 V
F26	30	normal	Power socket
F28	20	normal	Electronic injection control unit (ECU)
F29	15	min.	Auto III or Auto V calculator
F30	15	min.	Electronic injection control module (ECU), Grid Heater
F31	15	min.	Sisu ECM module
F32	10	min.	Electronic injection control unit (ECU)
F34	15	min.	Dipped lights
F35	7,5	min.	Horn
F36	15	min.	Headlights
F37	5	min.	Clutch safety start switch
F38	7,5	min.	Front left- and rear right-hand side light, instrument panel back lighting
F39	20	normal	Handrail side / road lights switch, rear windscreen wiper
F40	15	min.	Left-hand direction indicator
F41	15	min.	Joystick
F42	5	min.	Sisu ECU
F44	15	min.	Right-hand direction indicator
F46	15	min.	Rear windscreen wiper, heating
F47	10	min.	Radio
F48	7,5	min.	Suspended front axle
F49	50	max.	Cab suspension
F50	50	max.	Air conditioning, radio
F51	15	min.	Instrument panel
F52	10	min.	Power socket
F53	25	normal	Control unit
F54	30	normal	Front work headlights
F55	25	normal	Rear work headlights
F56	25	normal	Work headlights on rear fenders and/or handrails
F57	30	normal	Work headlights on footsteps and/or handrails
F58	7,5	min.	Work headlights module
F59	10	min.	Flashing beacon
F60	10	min.	+ ignition on relay control
F61	25	normal	Hazard warning lights
SH2	30	normal	Work headlights on fenders and/or handrails

SH4	15	min.	Road lights (B)
SH5	10	min.	Dipped lights (B)
SH7	15	normal	Direction indicator
SH9	15	normal	Direction indicator
SH11	15	min.	Direction indicator
SH13	15	min.	Direction indicator
SH14	15	min.	Direction indicator
R1			Handrail road lights (A)
R2			Electronic injection control unit (ECU)
R3			Electronic injection control unit (ECU)
R4			Reversing light
R5			Stop lights
R6			1 st additional ON/OFF spool valve
R7			2 nd additional ON/OFF spool valve
R8			Handrail dipped lights (A)
R10			Power socket
R12			Wiper timer
R14			Air conditioning
R15			+ ignition on
R16			Cab suspension
R17			Front work headlights
R18			Rear work headlights
R19			Rear fender work headlights
R20			Footstep work headlights
R21			Left-hand direction indicator
R24			Right-hand direction indicator
R27			Flashing beacon
R28			Hazard warning light
R29			Air conditioning compressor

(A): Tractors with Germany specifications only.

(B) : All models except tractors with Germany specifications.

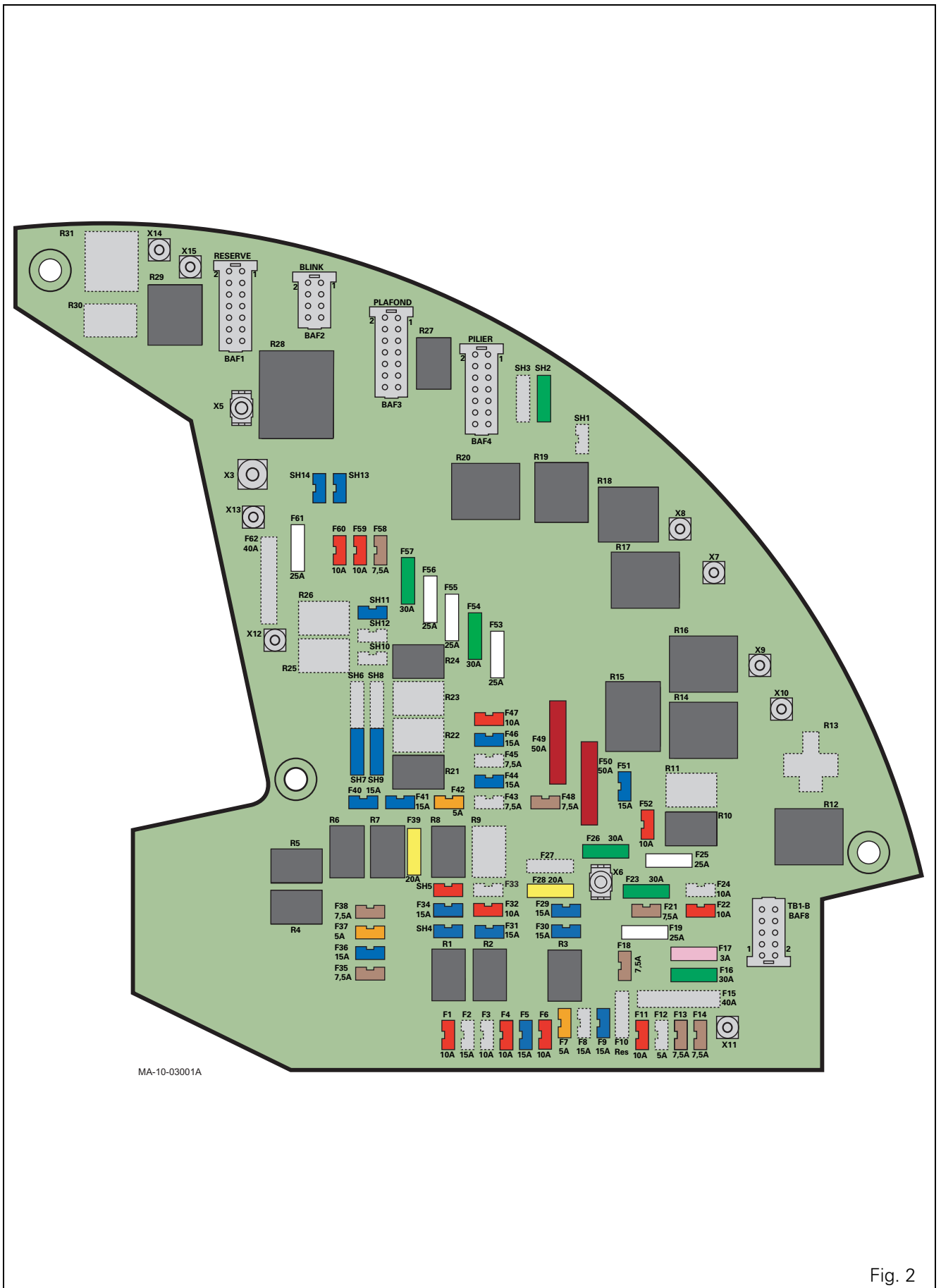


Fig. 2

Fuse boxes

C . Version for North America

Dynashift and Dyna-6 with Perkins Engine (Fig. 3)

Ref.	Amp.	Size	Protected function
F1	10	min.	Front right- and rear left-hand side lights, back-lighting of switches / console / cigarette lighter
F2	15	min.	Roof direction indicators
F3	10	min.	Left-hand fender extension direction indicator
F4	10	min.	Auto III (Dynashift), Auto V (Dyna-6), instrument panel, gearbox / differential / 4WD / PTO / creeper unit neutral switch
F5	15	min.	Stop lights
F6	10	min.	Controls on armrest (with Auto V)
F7	5	min.	Electronic injection control unit (ECU) control relay, reversing light relay
F9	15	min.	Suspended front axle and front PTO
F11	10	min.	Air conditioning compressor
F13	7,5	min.	Work headlights module
F14	7,5	min.	Electrical rear view mirrors
F16	30	normal	Injection pump stop solenoid valve, braking pressure sensor
F17	3	normal	Brake switch
F18	7,5	min.	Linkage, diagnostics, braking circuit pressure sensor
F19	25	normal	Pneumatic seat, fuel heater
F21	7,5	min.	Linkage, Datatronic 3
F22	10	min.	TOC/BOC pedal switch, buzzer, start switch, reverse shuttle lever, throttle pedal position sensor, armrest, parameter display selector switch
F23	30	normal	Cigarette lighter, radio, roof light
F24	10	min.	Right-hand fender extension direction indicator
F25	25	normal	Hazard warning light switch, permanent 12 V
F26	30	normal	Power socket
F27	25	normal	Electronic injection control unit (ECU)
F28	20	normal	Electronic injection control unit (ECU)
F29	15	min.	Auto III and Auto V calculators (Dyna-6)
F30	15	min.	Electronic injection control unit (ECU)
F32	10	min.	Electronic injection control unit (ECU)
F33	5	min.	Electronic injection control unit (ECU) - Thermostart
F34	15	min.	Dipped lights
F35	7,5	min.	Horn
F36	15	min.	Headlights
F37	5	min.	Clutch safety start switch
F38	7,5	min.	Front left- and rear right-hand side light, instrument panel back lighting
F39	20	normal	Side / road lights switch on handrails
F40	15	min.	Left-hand direction indicator
F41	15	min.	Joystick
F44	15	min.	Right-hand direction indicator
F46	15	min.	Rear windscreen wiper, heating
F47	10	min.	Radio
F48	7,5	min.	Suspended front axle
F49	50	max.	Cab suspension
F50	50	max.	Air conditioning
F51	15	min.	Instrument panel
F52	10	min.	Power socket
F53	25	normal	Front windscreen wiper
F54	30	normal	Front work headlights
F55	25	normal	Rear work headlights
F56	25	normal	Work headlights on rear fenders and/or handrails

F57	30	normal	Footstep work headlights
F58	7,5	min.	Work headlights module
F59	10	min.	Flashing beacon
F60	10	min.	+ ignition on relay control
F61	25	normal	Hazard warning lights
SH3	30	normal	Work headlights on footsteps and handrails
SH4	15	min.	Headlights
SH5	10	min.	Dipped lights
SH6	10	normal	Direction indicator
SH8	10	normal	Direction indicator
SH10	15	min.	Direction indicator
SH12	15	min.	Direction indicator
R1			Handrail road lights
R3			Electronic injection control unit (ECU)
R4			Reversing light
R5			Stop lights
R6			1 st additional ON/OFF spool valve
R7			2 nd additional ON/OFF spool valve
R9			Electronic injection control unit (ECU)
R10			Power socket
R12			Wiper timer
R14			Air conditioning
R15			+ ignition on
R16			Cab suspension (optional)
R17			Front work headlights
R18			Rear work headlights
R19			Rear fender work headlights
R20			Footstep work headlights
R21			Left-hand direction indicator
R22			Direction indicator and brake light on left-hand fender extension
R23			Direction indicator and brake light on right-hand fender extension
R24			Right-hand direction indicator
R25			Right-hand direction indicator on rear fender
R26			Left-hand direction indicator on rear fender
R27			Flashing beacon
R28			Hazard warning light
R29			Air conditioning compressor

Fuse boxes

Dynashift with Sisu engine (Fig. 4)

Ref.	Amp.	Size	Protected function
F1	10	min.	Front right- and rear left-hand side lights, back-lighting of switches / console / cigarette lighter
F2	15	min.	Roof direction indicators
F3	10	min.	Left-hand fender extension direction indicator
F4	10	min.	Auto III, instrument panel, gearbox / differential / 4WD / PTO / creeper unit neutral switch
F5	15	min.	Stop lights
F6	10	min.	Controls on armrest (with Auto V)
F7	5	min.	Electronic injection control unit (ECU) control relay, reversing light relay
F9	15	min.	Suspended front axle and front PTO
F11	10	min.	Air conditioning compressor
F13	7,5	min.	Work headlights module
F14	7,5	min.	Electrical rear view mirrors
F16	30	normal	Injection pump stop solenoid valve, braking pressure sensor
F17	3	normal	Brake switch
F18	7,5	min.	Linkage, diagnostics, braking circuit pressure sensor
F19	25	normal	Pneumatic seat, fuel heater
F21	7,5	min.	Linkage, Datatronic 3
F22	10	min.	TOC/BOC pedal switch, buzzer, start switch, reverse shuttle lever, throttle pedal position sensor, armrest, parameter display selector switch
F23	30	normal	Cigarette lighter, radio, roof light
F24	10	min.	Right-hand fender extension direction indicator
F25	25	normal	Hazard warning light switch, permanent 12 V
F26	30	normal	Power socket
F28	20	normal	Electronic injection control unit (ECU)
F29	15	min.	Auto III calculator
F30	15	min.	Electronic injection control unit (ECU)
F31	15	min.	Sisu ECM module
F32	10	min.	Electronic injection control unit (ECU)
F34	15	min.	Dipped lights
F35	7,5	min.	Horn
F36	15	min.	Headlights
F37	5	min.	Clutch safety start switch
F38	7,5	min.	Front left- and rear right-hand side light, instrument panel back lighting
F39	20	normal	Side / road lights switch on handrails
F40	15	min.	Left-hand direction indicator
F41	15	min.	Joystick
F42	5	min.	Sisu ECU
F44	15	min.	Right-hand direction indicator
F46	15	min.	Rear windscreen wiper, heating
F47	10	min.	Radio
F48	7,5	min.	Suspended front axle
F49	50	max.	Cab suspension
F50	50	max.	Air conditioning
F51	15	min.	Instrument panel
F52	10	min.	Power socket
F53	25	normal	Front windscreen wiper
F54	30	normal	Front work headlights
F55	25	normal	Rear work headlights
F56	25	normal	Work headlights on rear fenders and/or handrails
F57	30	normal	Footstep work headlights
F58	7,5	min.	Work headlights module
F59	10	min.	Flashing beacon
F60	10	min.	+ ignition on relay control
F61	25	normal	Hazard warning lights

SH3	30	normal	Work headlights on footsteps and handrails
SH4	15	min.	Headlights
SH5	10	min.	Dipped lights
SH6	10	normal	Direction indicator
SH8	10	normal	Direction indicator
SH10	15	min.	Direction indicator
SH12	15	min.	Direction indicator
R2			Electronic injection control unit (ECU)
R3			Electronic injection control unit (ECU)
R4			Reversing light
R5			Stop lights
R6			1 st additional ON/OFF spool valve
R7			2 nd additional ON/OFF spool valve
R10			Power socket
R12			Wiper timer
R14			Air conditioning
R15			+ ignition on
R16			Cab suspension (optional)
R17			Front work headlights
R18			Rear work headlights
R19			Rear fender work headlights
R20			Footstep work headlights
R21			Left-hand direction indicator
R22			Direction indicator and brake light on left-hand fender extension
R23			Direction indicator and brake light on right-hand fender extension
R24			Right-hand direction indicator
R25			Right-hand direction indicator on rear fender
R26			Left-hand direction indicator on rear fender
R27			Flashing beacon
R28			Hazard warning light
R29			Air conditioning compressor

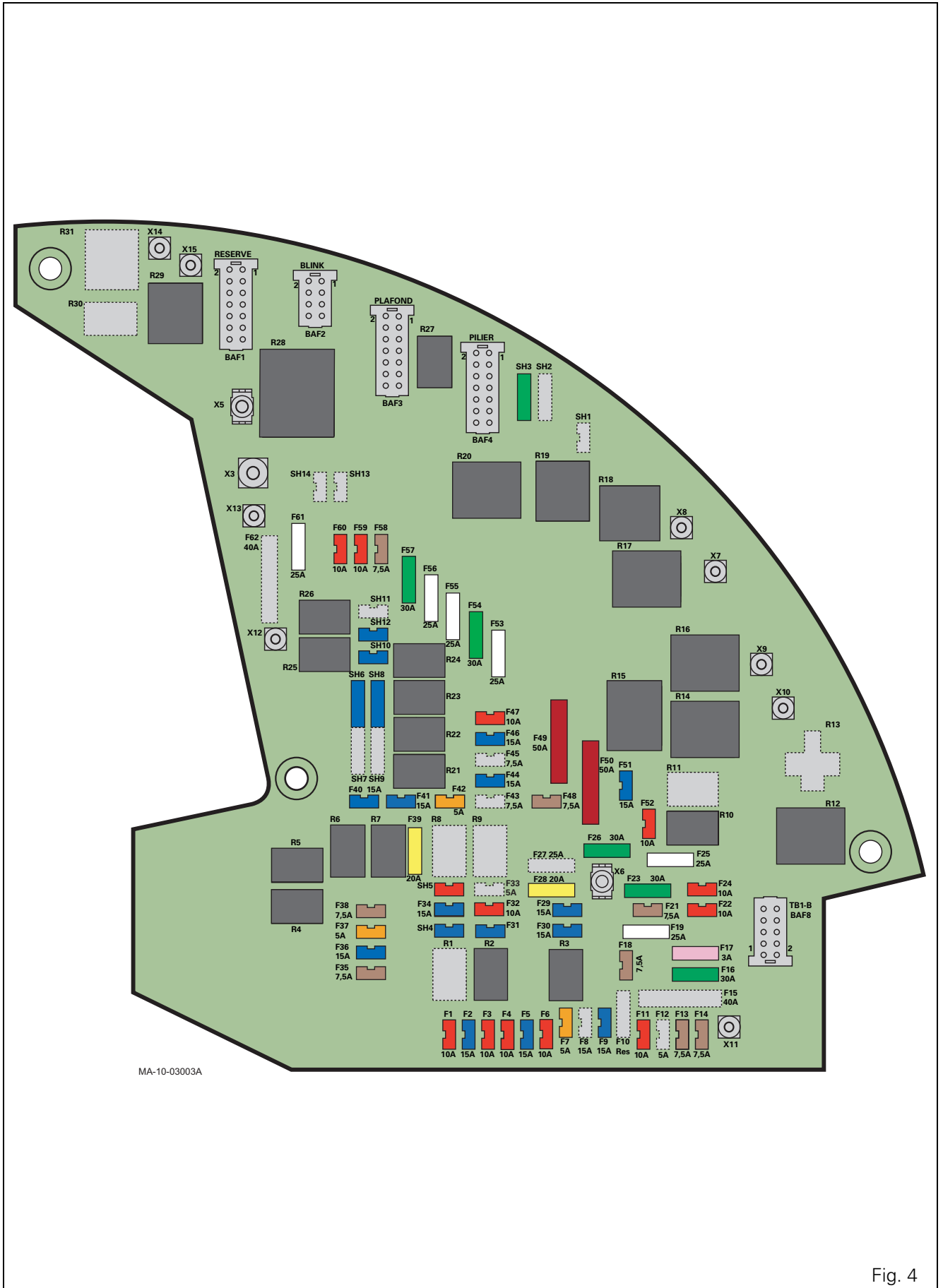


Fig. 4

Fuse boxes

10B10- ELECTRICAL DIAGRAMS - Cab equipment

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ELECTRICAL DIAGRAMS - Cab equipment

ELECTRICAL DIAGRAMS - Cab equipment

A . General

Description

The harnesses fitted on the tractor allow data to be exchanged and power to be supplied to the electrical and electronic systems.

The tractor is fitted with 3 different types of power supply:

- +12V Battery (Permanent)
- +12V APC (Ignition key ON)
- +12V ACC (Accessories)

Most harnesses have a maximum of six different wire colours:

- Black: Ground
- Brown: +12V Permanent
- Red: +12V APC (Ignition key ON) and Accessories
- White: Information
- Yellow: CAN High
- Green: CAN Low

The CAN network wires (yellow and green) are twisted together.

- Components with only one connector are identified by the connector name:

CAB03 - Road lights switch (Fig. 1).

- All wires can be identified by the pins of the outgoing and incoming connectors of the harness:

CAB3.7/CAB28.1 : The wire connects pin 7 of the CAB03 connector to pin 1 of the CAB28 connector

- The detail of pins allocation for each connector is shown on the harness side

- The wire colour is indicated: CAB3.7/CAB28.1 N, the wire is black.

List of colours:

- N: Black
- M: Brown
- R: Red
- B: White
- J: Yellow
- V: Green

- The splices inside the harnesses are indicated by a dot and the letter S (S2).

In general, the components or connectors are named in order to indicate the corresponding elements of the tractor:

AC##	Armrest
BAF##	Fuse box
CA##	Automatic air conditioning
CAB##	Cab
ENG##	Engine
FA##	Suspended front axle
L##	Linkage - ParkLock (HA)
LIG##	Lighting
R##	Linkage and roof
ROOF##	Roof
TR##	Transmission
V#	Electrohydraulic spool valve
X#	Round battery cable terminal on fuse box

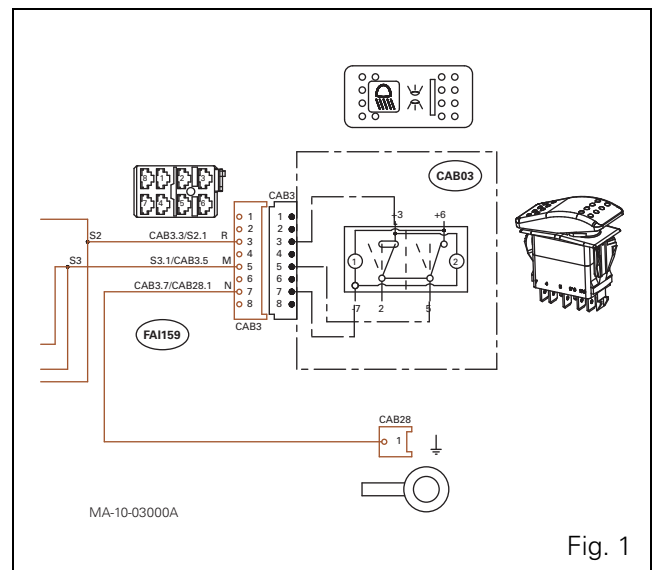


Fig. 1

ELECTRICAL DIAGRAMS - Cab equipment

Layout

5 Deutsch connectors (31-way) are connected to the cab:

- 2 on the front panel (Fig. 2)
- 3 at the bottom rear right-hand side of the cab (Fig. 3).

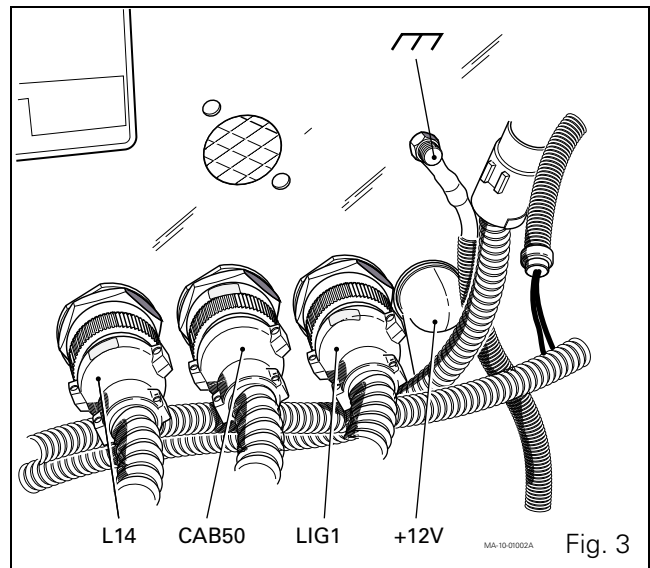
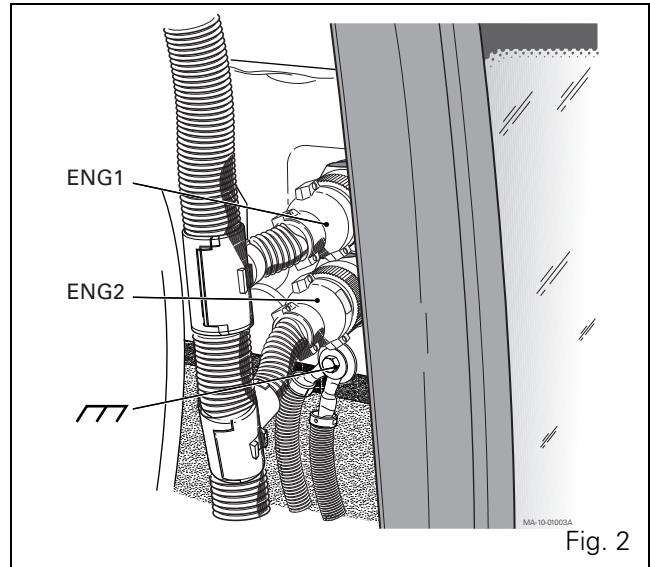
Fig. 2 :

All these connectors belong to the engine harness. ENG2 is dedicated to information concerning the electronic injection.

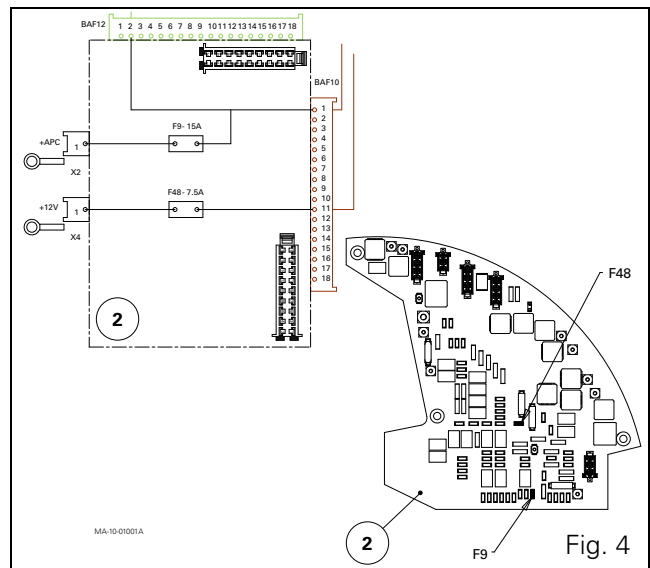
Fig. 3 :

Always in the following order (regardless of tractor configuration and options), from left to right:

- L14 Linkage harness junction
- CAB50 Transmission harness junction
- LIG1 Lighting harness junction



The fuses and relays of the electrical or electronic board (Fig. 4) are indicated by a black mark on their locations on the fuse box (2).



ELECTRICAL DIAGRAMS - Cab equipment

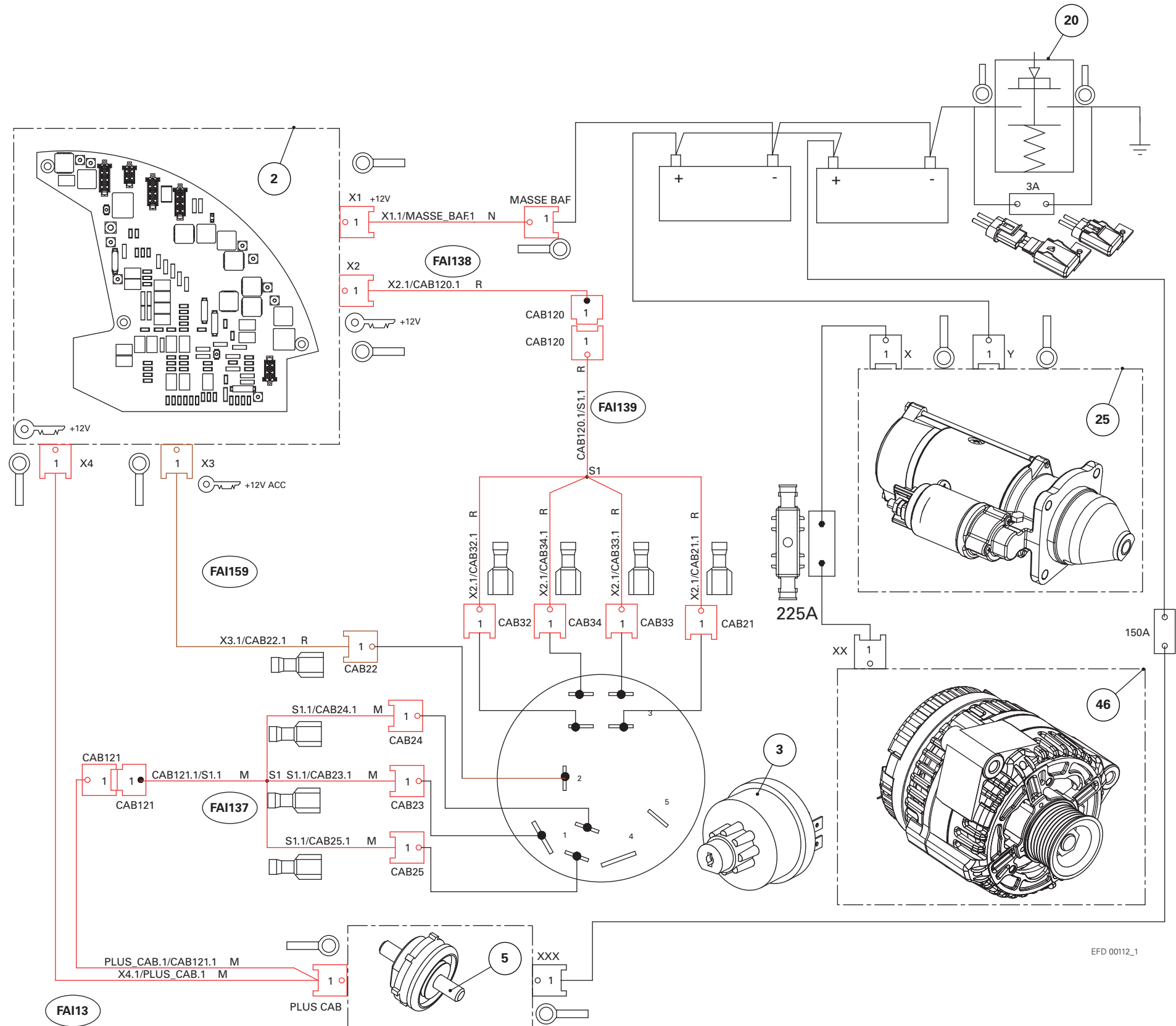
B . Electrical panels

General fuse box power supply with circuit breaker (GBA25 and GBA10-Auto5)	7	Automatic air conditioning unit supply (GBA25 and GBA10-Auto5)	37
General fuse box power supply without circuit breaker (GBA25 and GBA10-Auto5)	8	Automatic air conditioning (GBA25 and GBA10-Auto5)	38
General fuse box power supply (GBA20 and GBA10)	9	Automatic air conditioning without circuit breaker (GBA20 and GBA10)	39
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Rear windscreen wiper (GBA25 and GBA10-Auto5)	21	Fieldstar (GBA25 and GBA10-Auto5)	51
Rear windscreen wiper (GBA20 and GBA10)	22	Parking brake (GBA25 and GBA10-Auto5)	52
Cab suspension (GBA25 and GBA10-Auto5)	23	Parking brake (GBA25 and GBA10)	53
Cab suspension (GBA20 and GBA10)	24	Diagnostics connector power supply (GBA25 and GBA10-Auto5)	54
Pneumatic seat (GBA25 and GBA10-Auto5)	25	Headland mode switch (GBA25 and GBA10-Auto5)	55
Pneumatic seat (GBA20 and GBA10)	26	Front power take-off (GBA25 and GBA10-Auto5)	56
Radio—Europe (except Germany) (GBA25 and GBA10-Auto5)	27	Front power take-off (GBA20 and GBA10)	57
Radio—Europe (except Germany) (GBA20 and GBA10)	28		
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General fuse box power supply with circuit breaker (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 3 Start switch
- 5 Supply terminal
- 20 Circuit breaker
- 25 Starter
- 46 Alternator
- FAI 13 Fuse box supply harness
- FAI 137 Battery +12V fuse box supply harness
- FAI 138 Ignition on +12V APC fuse box supply harness
- FAI 139 Ignition on instrument panel + APC harness
- FAI 159 Instrument panel harness

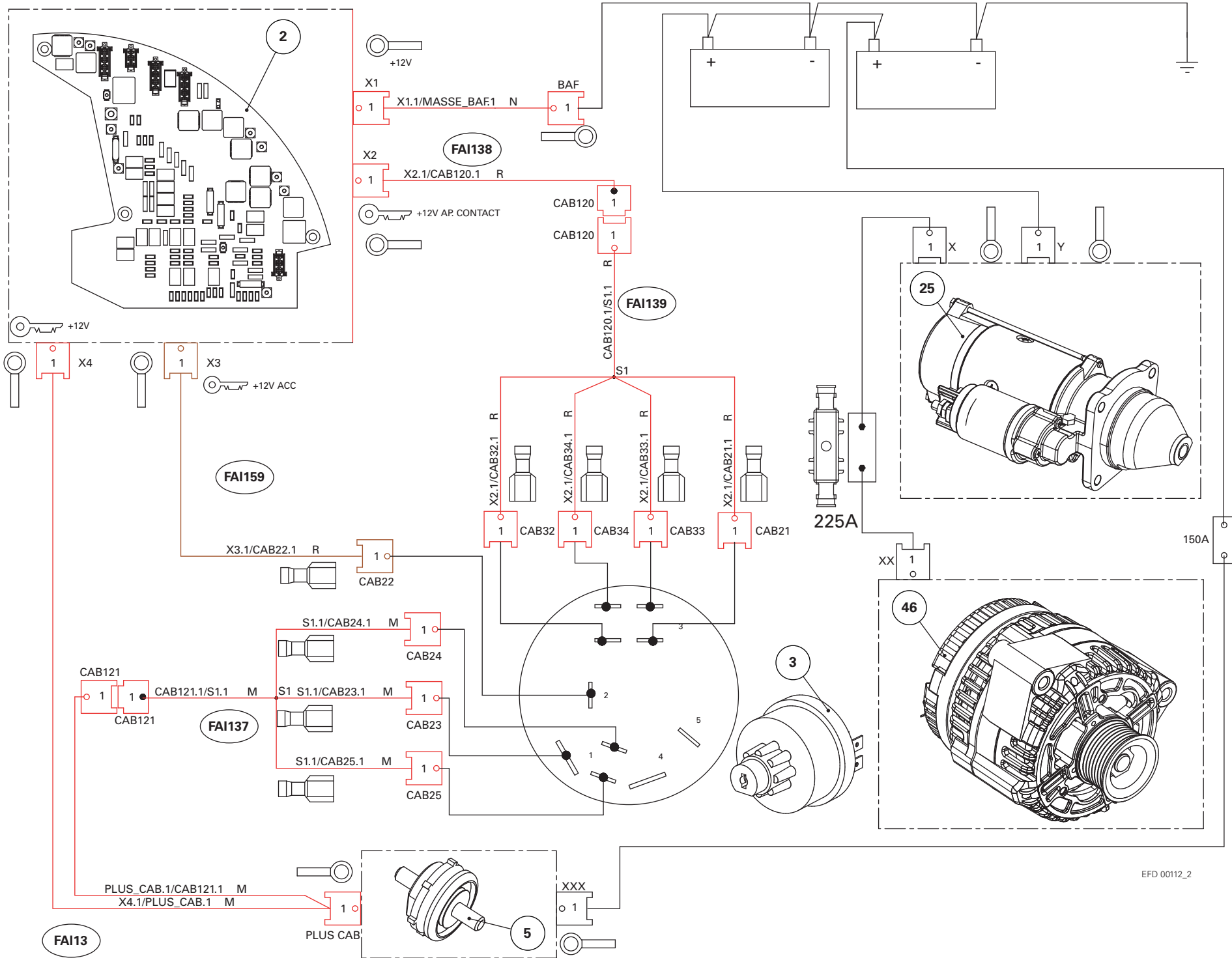


EFD 00112_1

ELECTRICAL DIAGRAMS - Cab equipment

General fuse box power supply without circuit breaker (GBA25 and GBA10-Auto5)

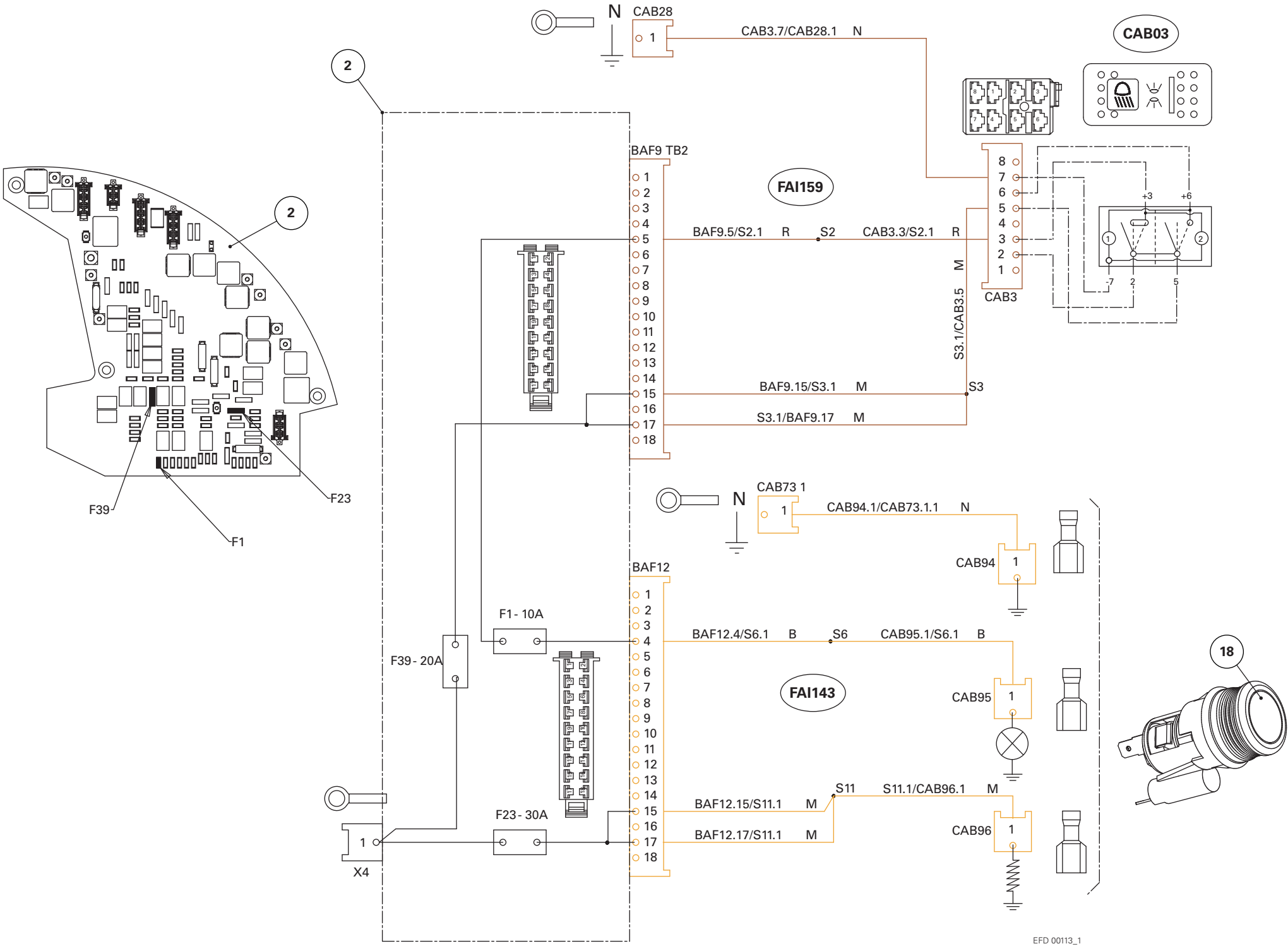
- 2 Fuse box
- 3 Start switch
- 5 Supply terminal
- 25 Starter
- 46 Alternator
- FAI 13 Fuse box supply harness
- FAI 137 Battery +12V fuse box supply harness
- FAI 138 Ignition on +12V APC fuse box supply harness
- FAI 139 Ignition on instrument panel + APC harness
- FAI 159 Instrument panel harness



ELECTRICAL DIAGRAMS - Cab equipment

Cigarette lighter on right-hand side (GBA25 and GBA10-Auto5)

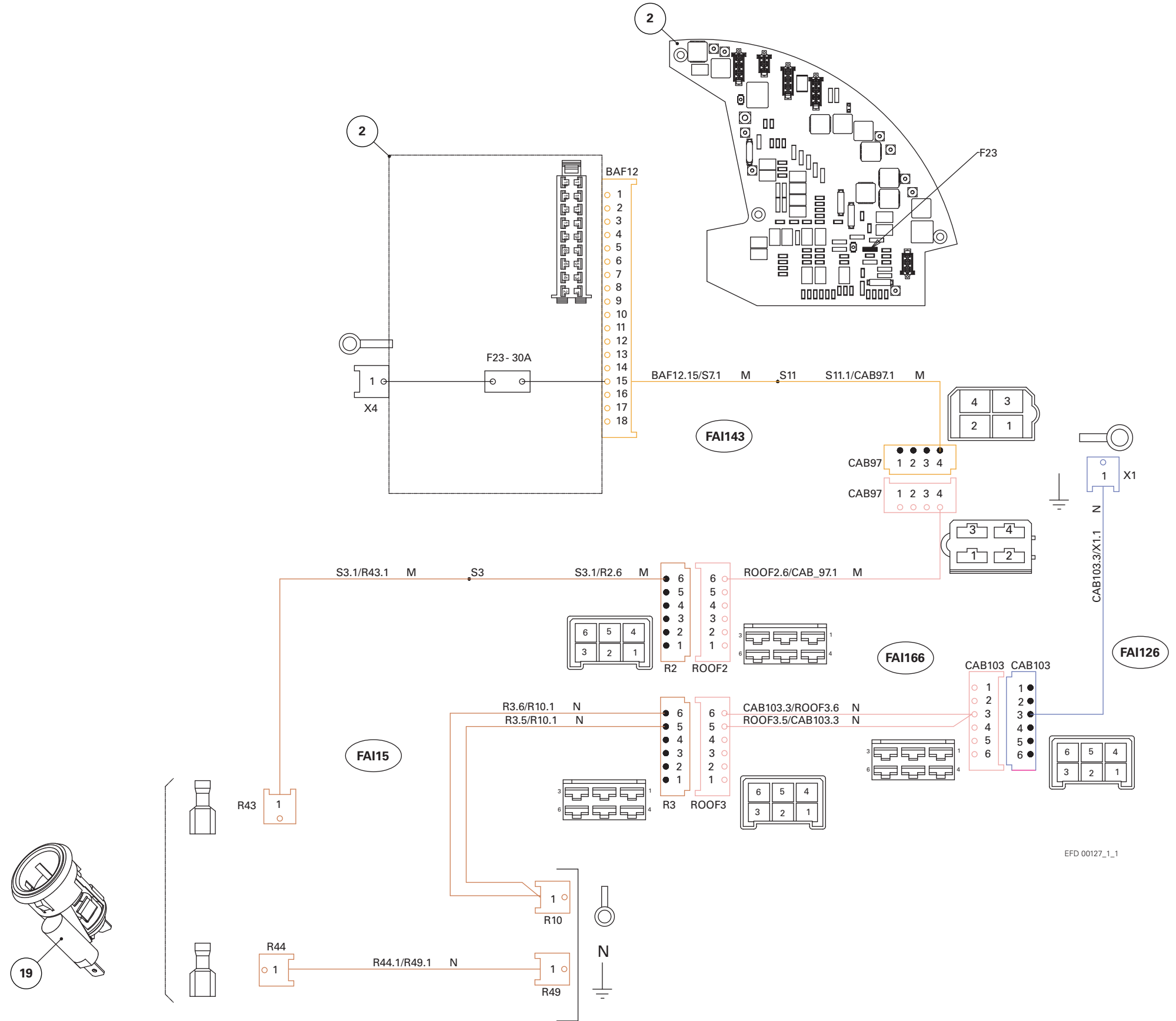
- 2 Fuse box
- 18 Cigarette lighter
- FAI 143 Dyna-6 cab transmission harness
- FAI 159 Instrument panel harness
- CAB03 Road lights switch



EFD 00113_1

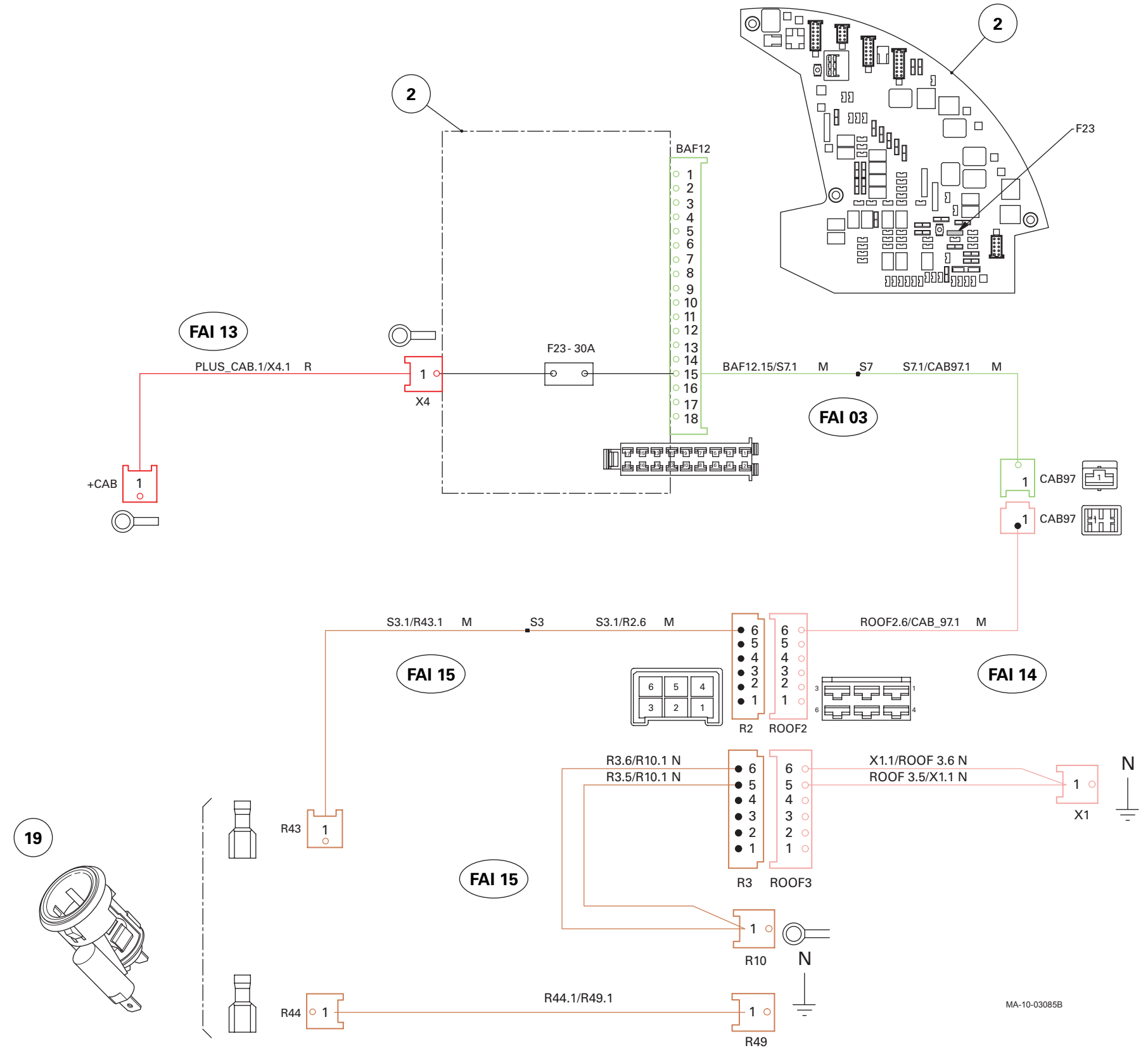
Cigarette lighter on left-hand side (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 19 Cigarette lighter socket
- FAI 15 Roof harness
- FAI 126 Cab interior lighting harness (all countries except US)
- FAI 143 Cab transmission harness
- FAI 166 Pillar harness



Cigarette lighter on left-hand side without circuit breaker (GBA20 and GBA10)

- 2 Fuse box
- 19 Cigarette lighter socket
- FAI 03 Dynashift console harness
- FAI 13 Fuse box supply harness
- FAI 14 Pillar harness
- FAI 15 Roof harness

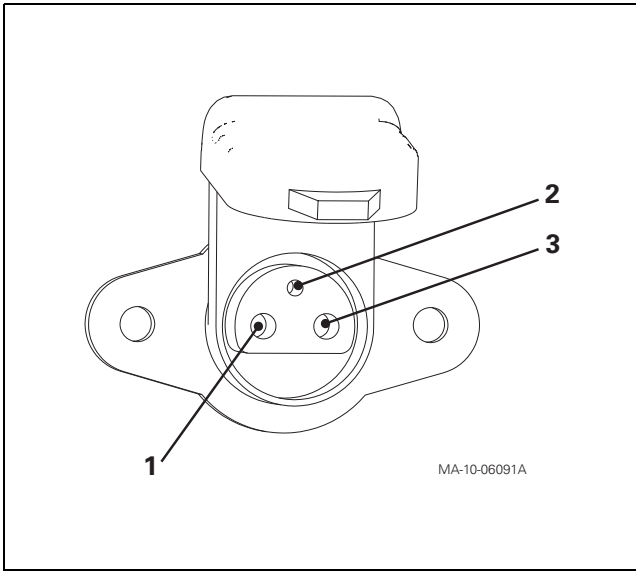


ELECTRICAL DIAGRAMS - Cab equipment

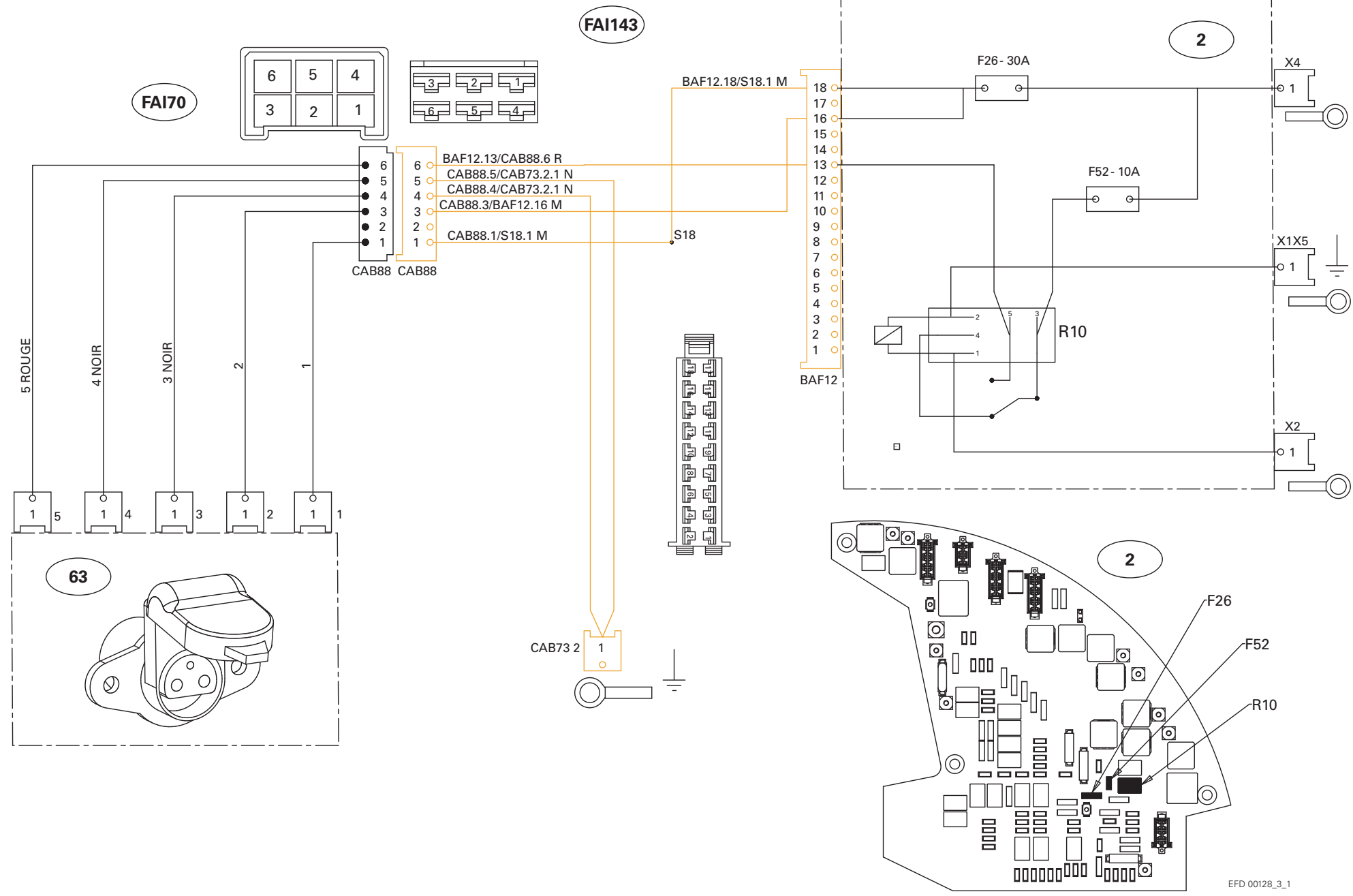
EEC cab power socket (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 63 EEC cab interior power socket
- FAI 70 Cab interior power socket harness
- FAI 143 Cab transmission harness

Power socket connection



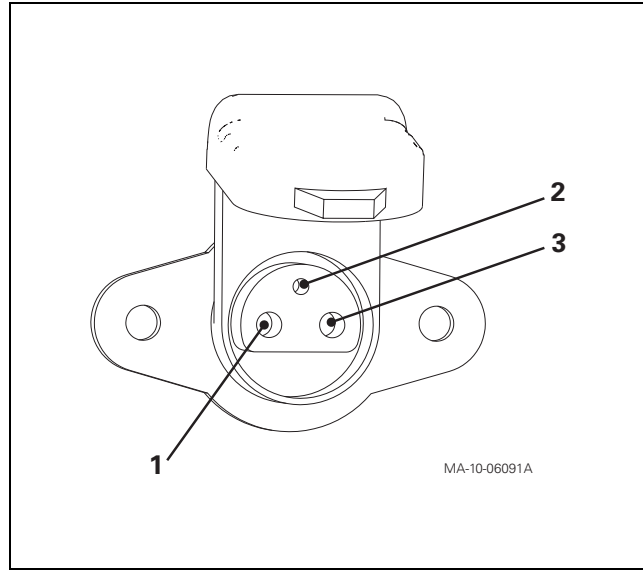
- Terminal 1: +12V permanent (25A)
- Terminal 2: +12V ignition on (5A)
- Terminal 3: earth



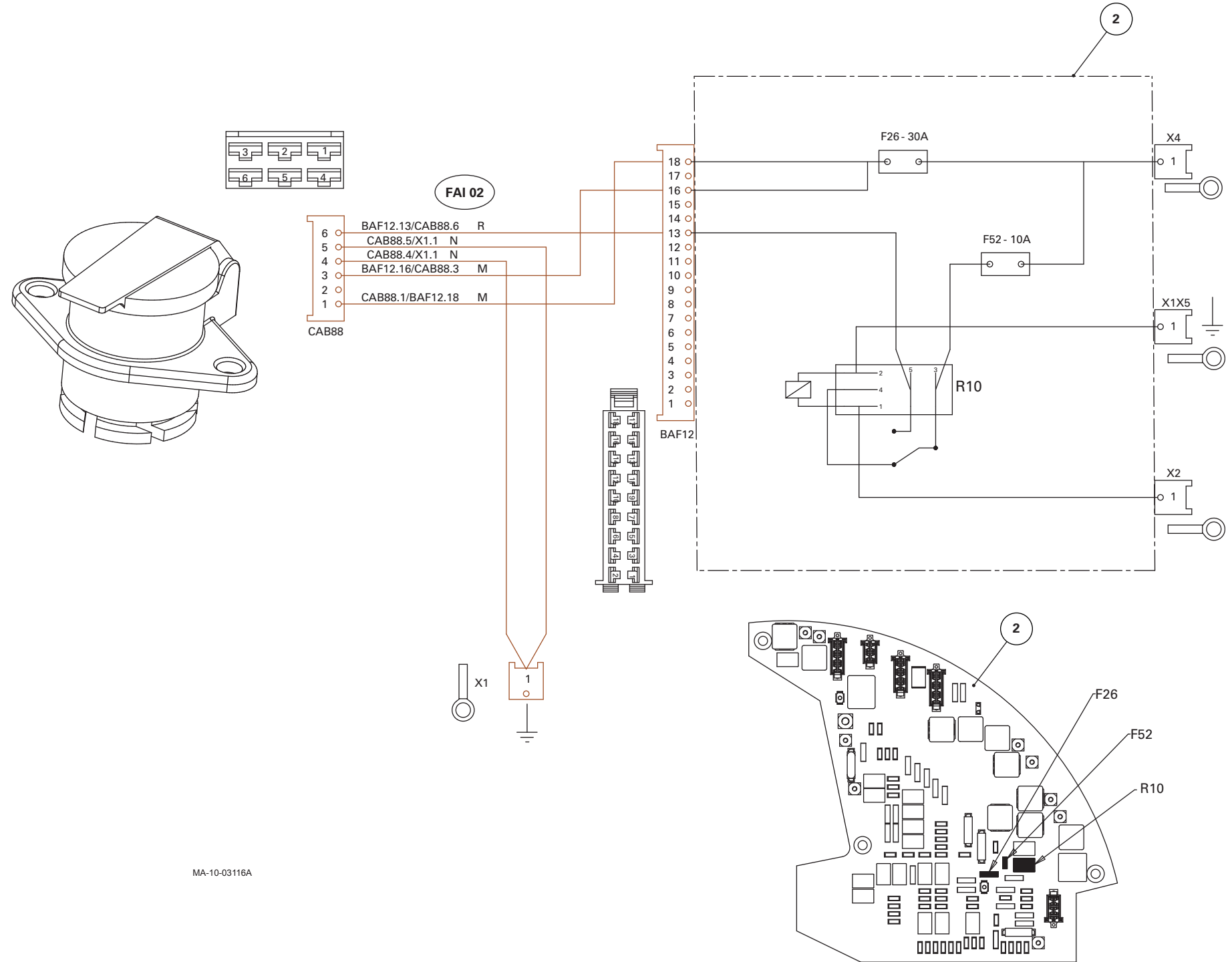
Power socket (GBA20 and GBA10)

- 2 Fuse box
- FAI 02 Instrument panel harness

Power socket connection



- Terminal 1: +12V permanent (25A)
- Terminal 2: +12V ignition on (5A)
- Terminal 3: earth

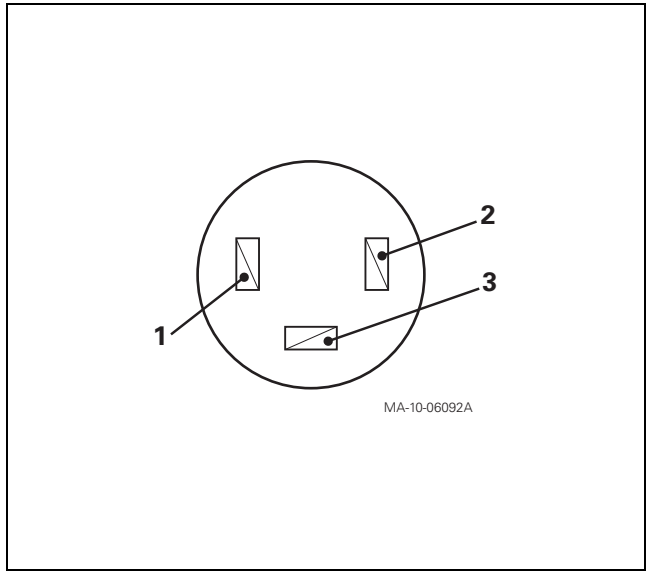


ELECTRICAL DIAGRAMS - Cab equipment

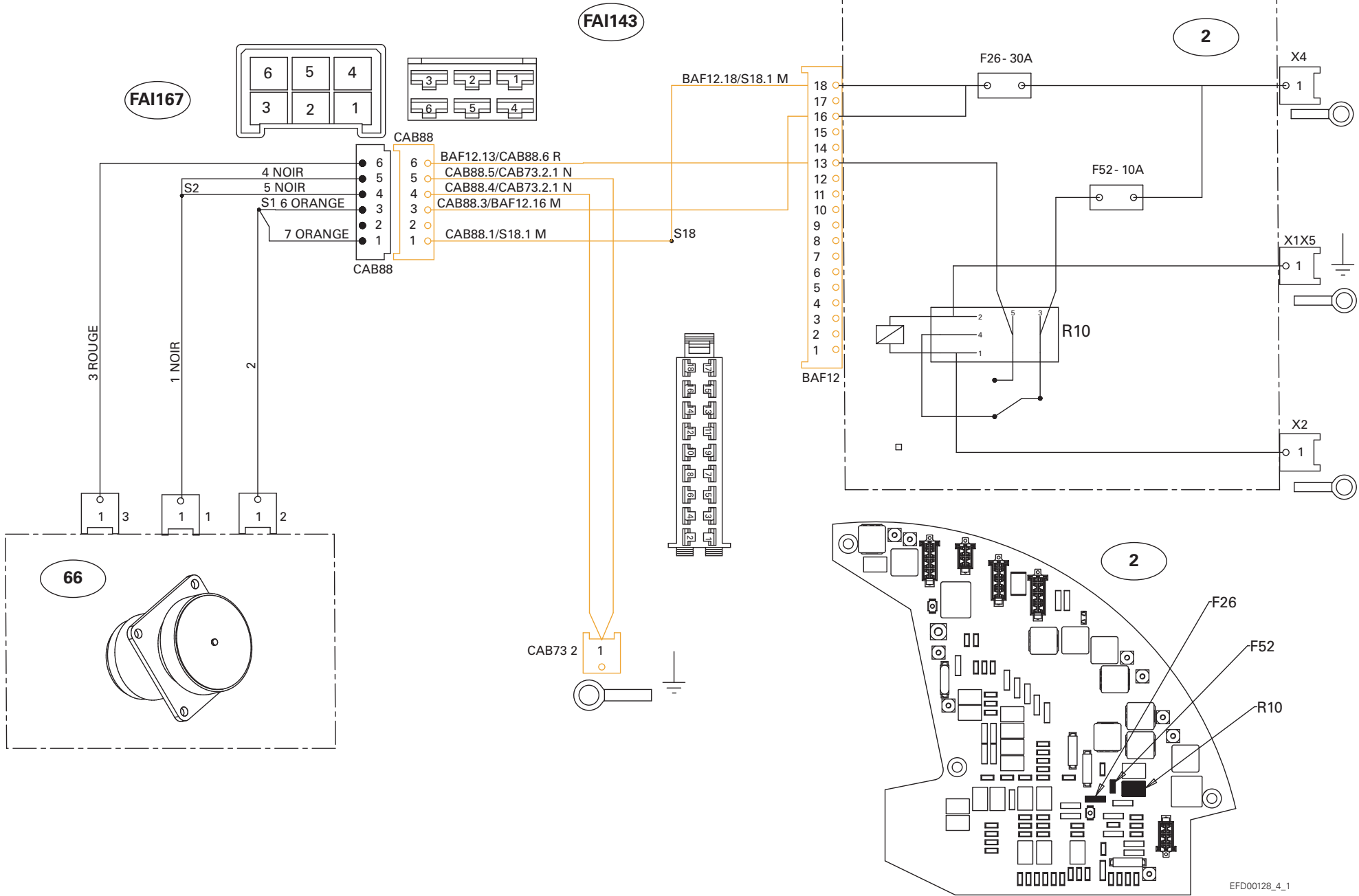
SAE cab power socket (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 66 SAE cab interior power socket
- FAI 143 Cab transmission harness
- FAI 167 Cab interior power socket harness—SAE standard

Power socket connection

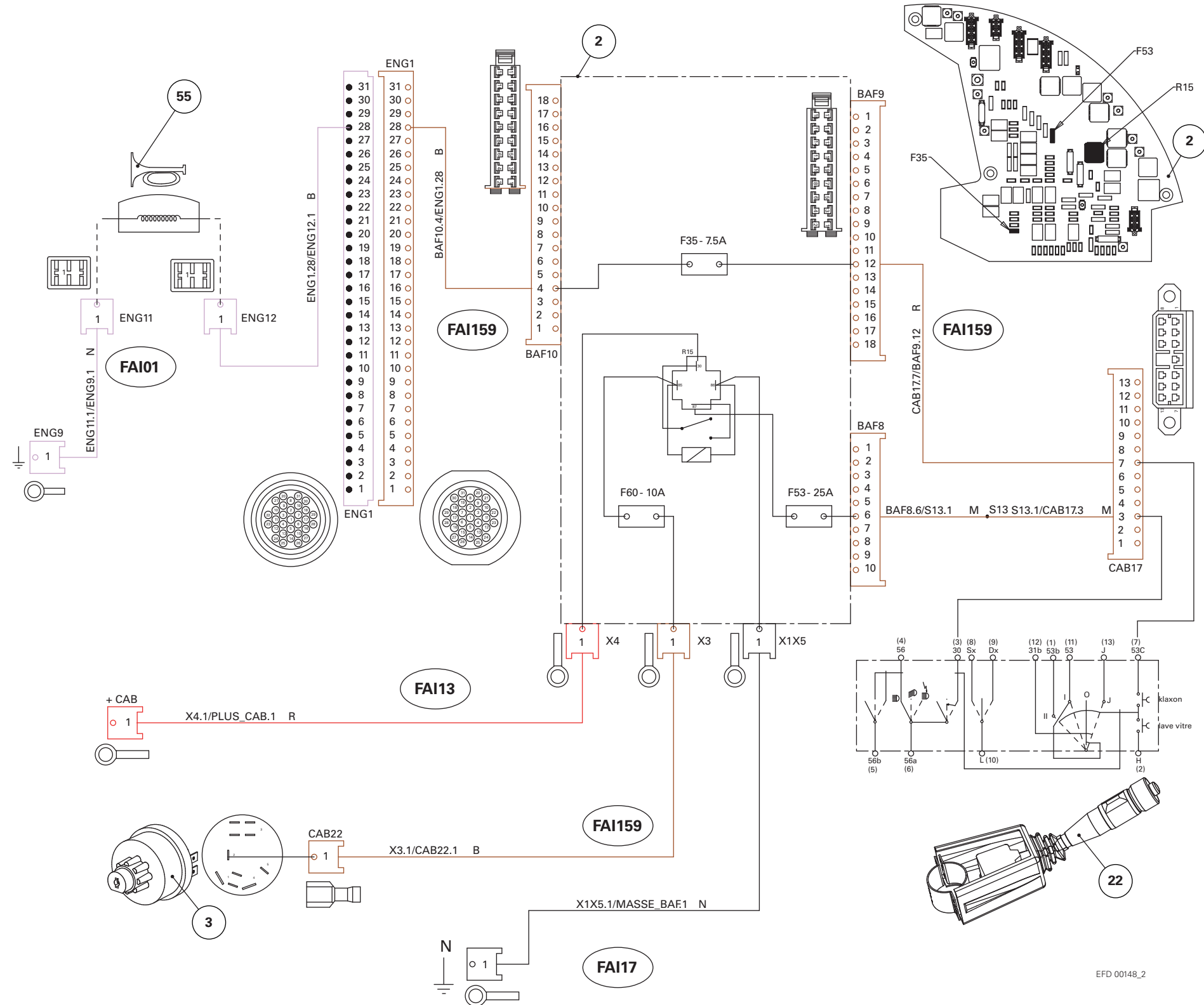


- Terminal 1: +12V permanent (30A)
- Terminal 2: +12V ignition on (5A)
- Terminal 3: earth



Horn (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 3 Start switch
- 22 Windscreen wiper controls
- 55 Horn
- FAI 01 Engine harness
- FAI 13 Fuse box supply harness
- FAI 17 BAF fuse box earth harness
- FAI 159 Instrument panel harness

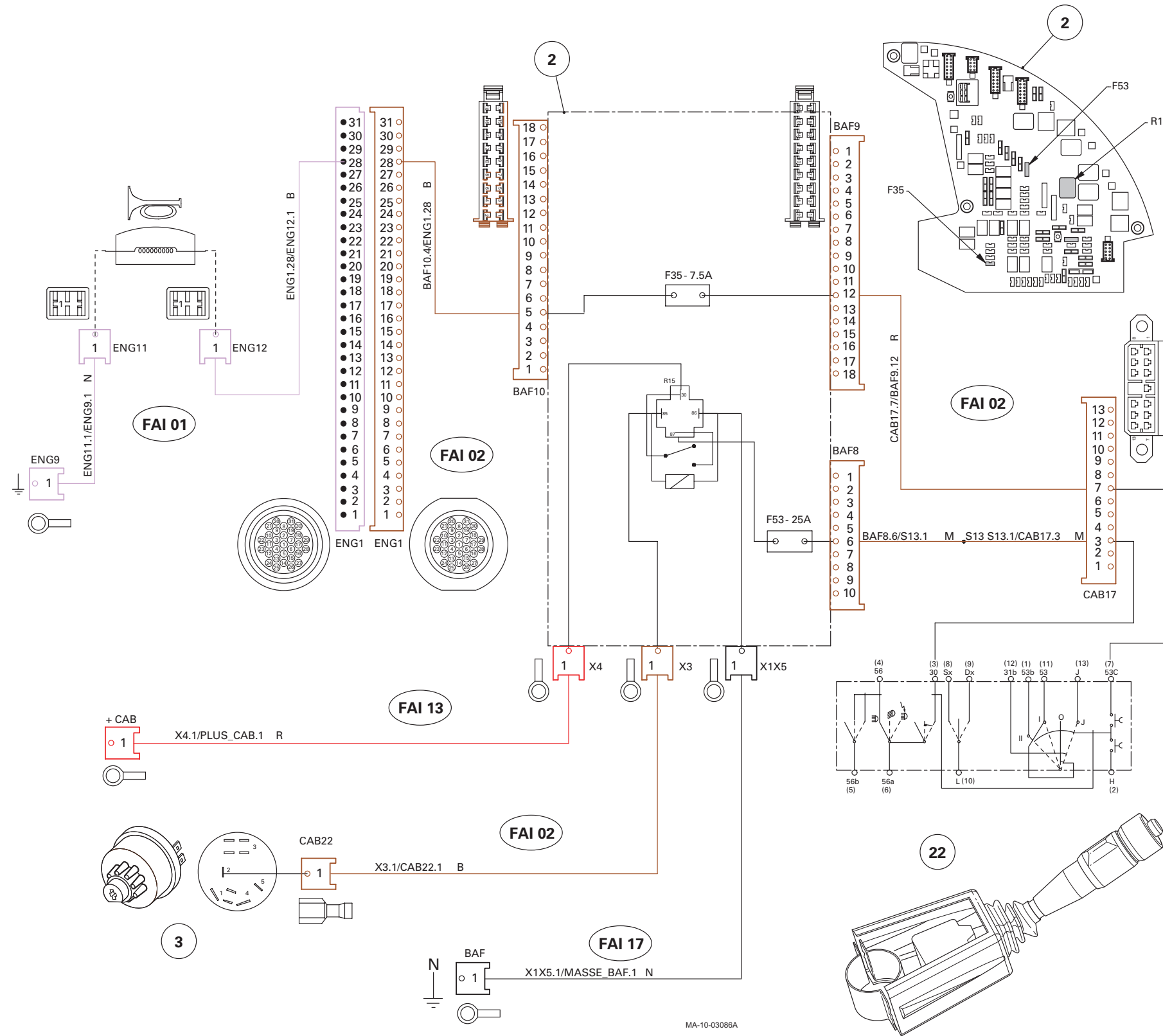


EFD 00148_2

ELECTRICAL DIAGRAMS - Cab equipment

Horn (GBA20 and GBA10)

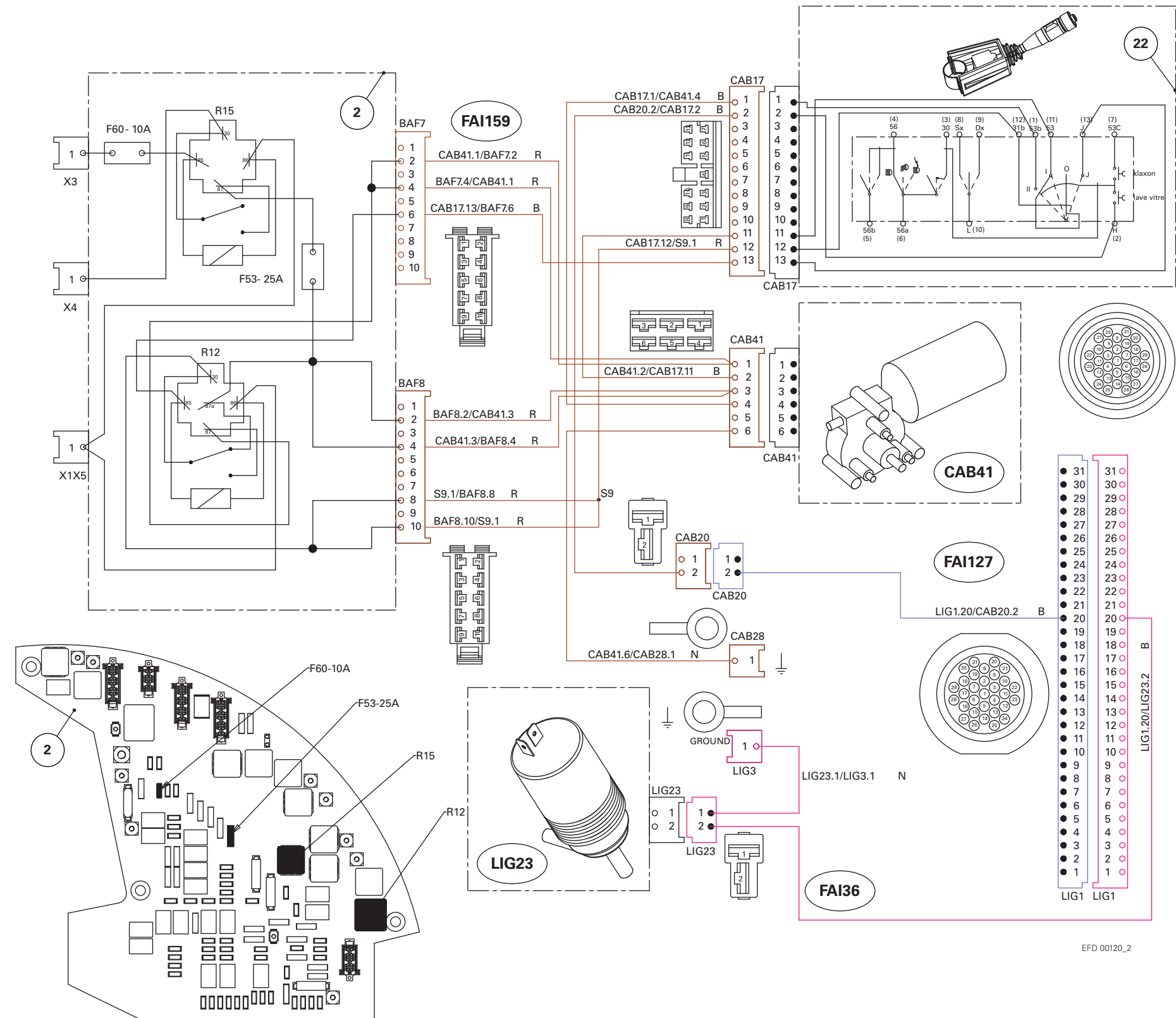
- 2 Fuse box
- 3 Start switch
- 22 Windscreen wiper controls
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- FAI 13 Fuse box supply harness
- FAI 17 BAF earth harness



MA-10-03086A

Front windscreen wiper (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 22 Windscreen wiper controls
- FAI 36 Fender lighting harness (US)
- FAI 127 Cab interior lighting harness—US
- FAI 159 Instrument panel harness
- CAB41 Front windscreen wiper motor
- LIG23 Windscreen washer pump

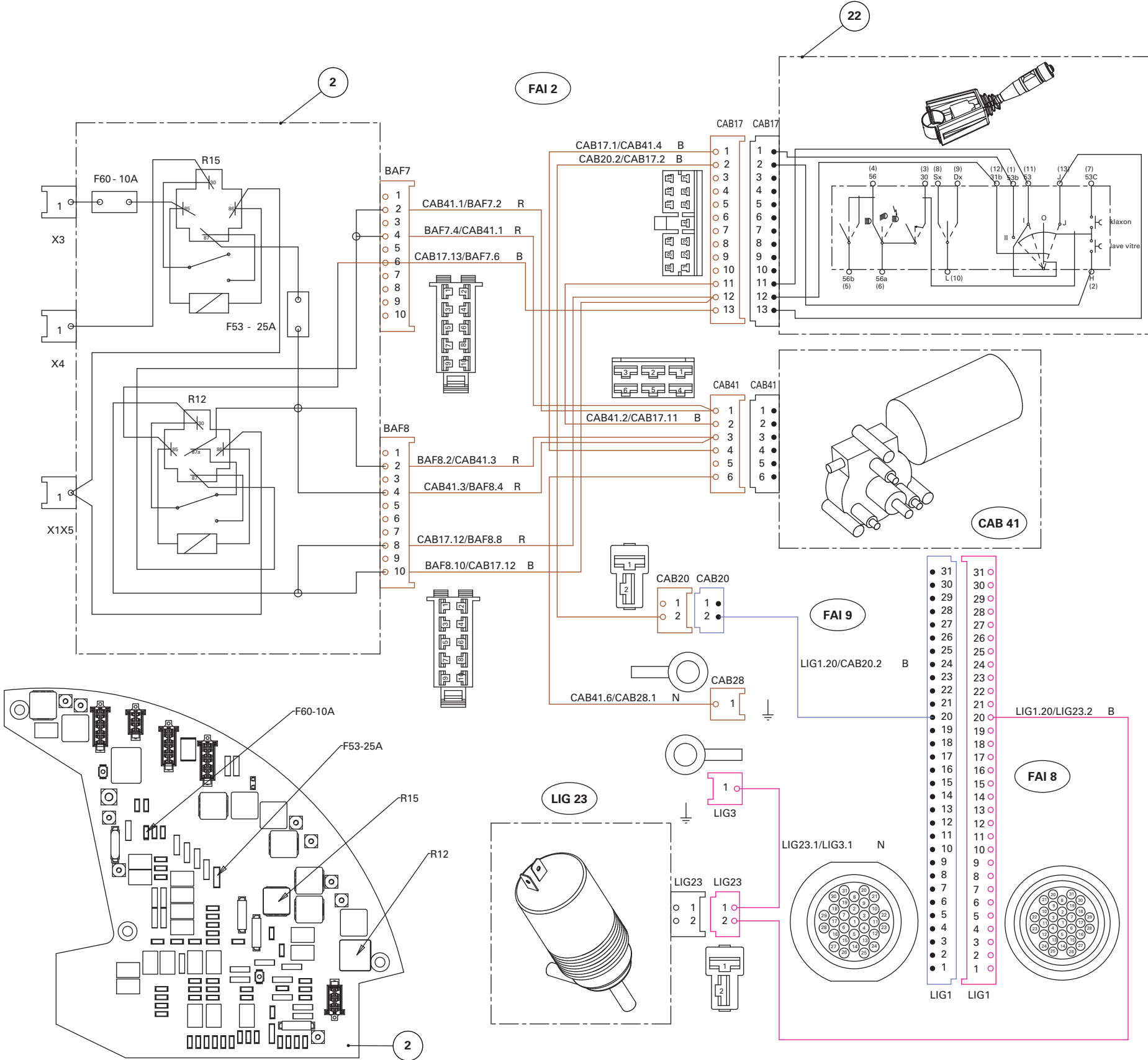


EFD 00120_2

ELECTRICAL DIAGRAMS - Cab equipment

Front windscreen wiper (GBA20 and GBA10)

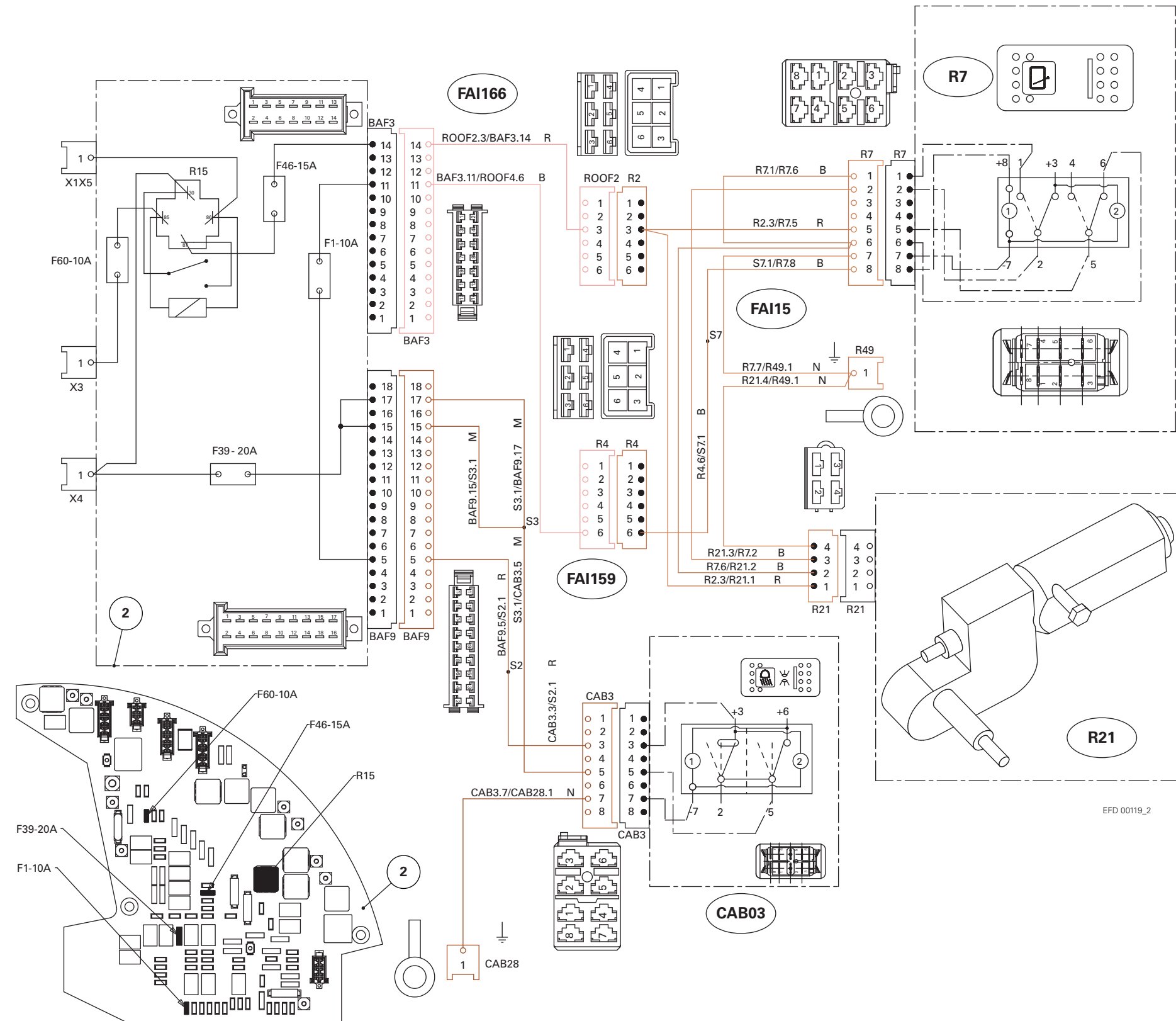
- 2 Fuse box
- 22 Windscreen wiper controls
- FAI 02 Instrument panel harness
- FAI 08 Lighting harness
- FAI 09 Cab interior lighting harness
- CAB41 Windscreen wiper motor
- LIG23 Windscreen washer pump



MA-10-03119A

Rear windscreen wiper (GBA25 and GBA10-Auto5)

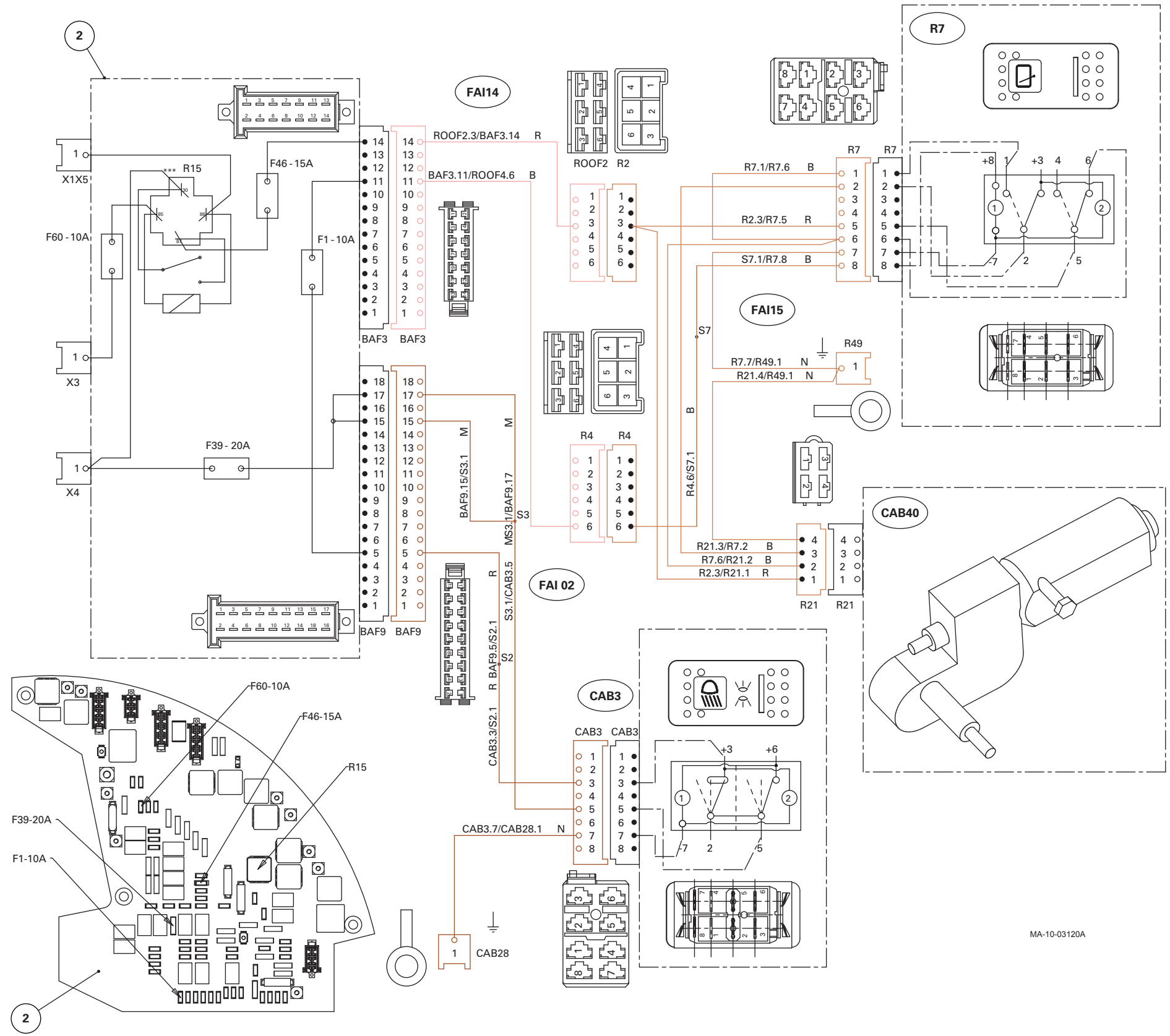
- 2 Fuse box
- FAI 15 Roof harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB03 Road lights switch
- R7 Rear windscreen wiper switch
- R21 Rear windscreen wiper motor



ELECTRICAL DIAGRAMS - Cab equipment

Rear wipers (GBA20 and GBA10)

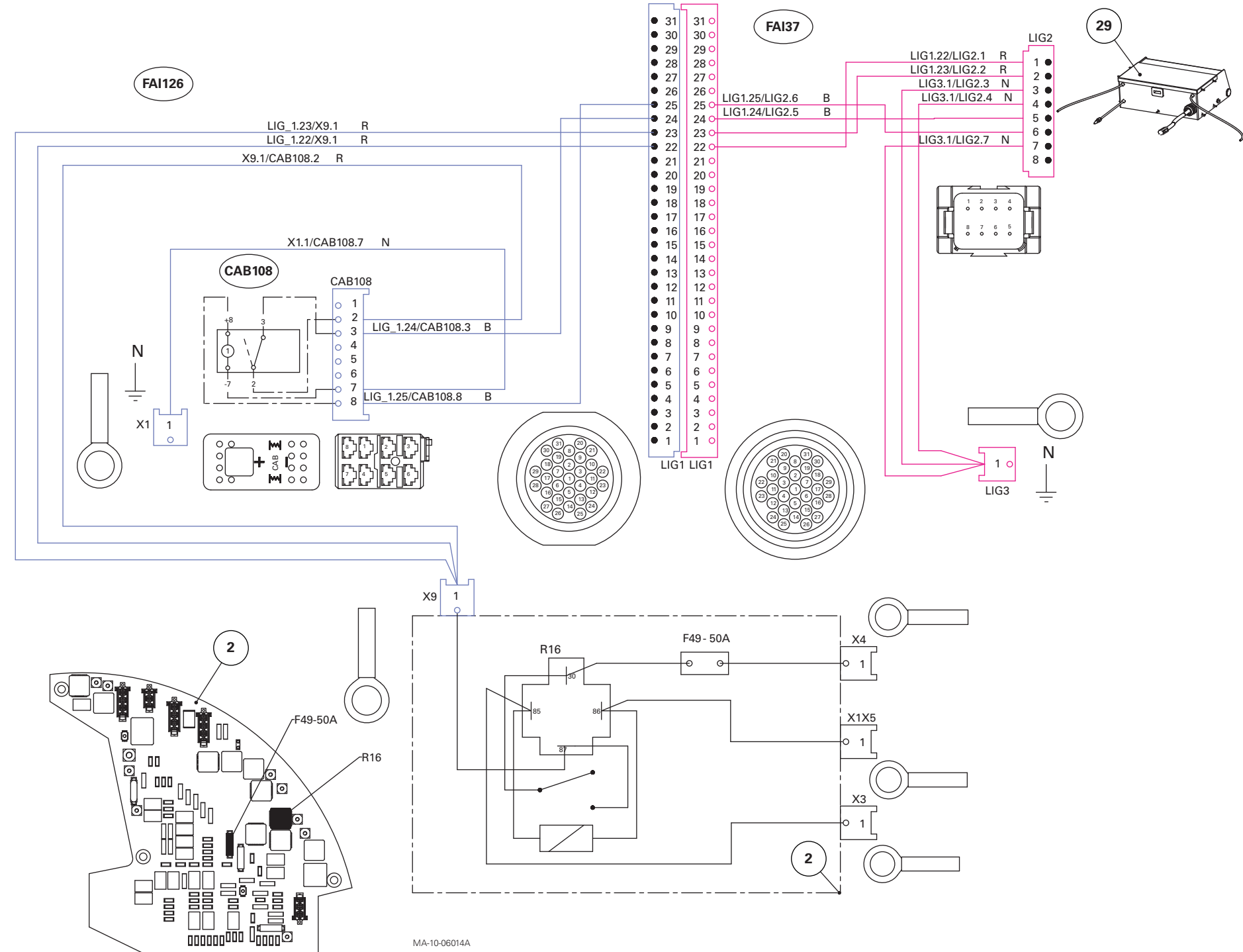
- 2 Fuse box
- FAI 02 Instrument panel harness
- FAI 14 Pillar harness
- FAI 15 Roof harness
- CAB3 Road lights switch
- CAB40 Rear wipers motor
- R7 Rear wipers switch



MA-10-03120A

Cab suspension (GBA25 and GBA10-Auto5)

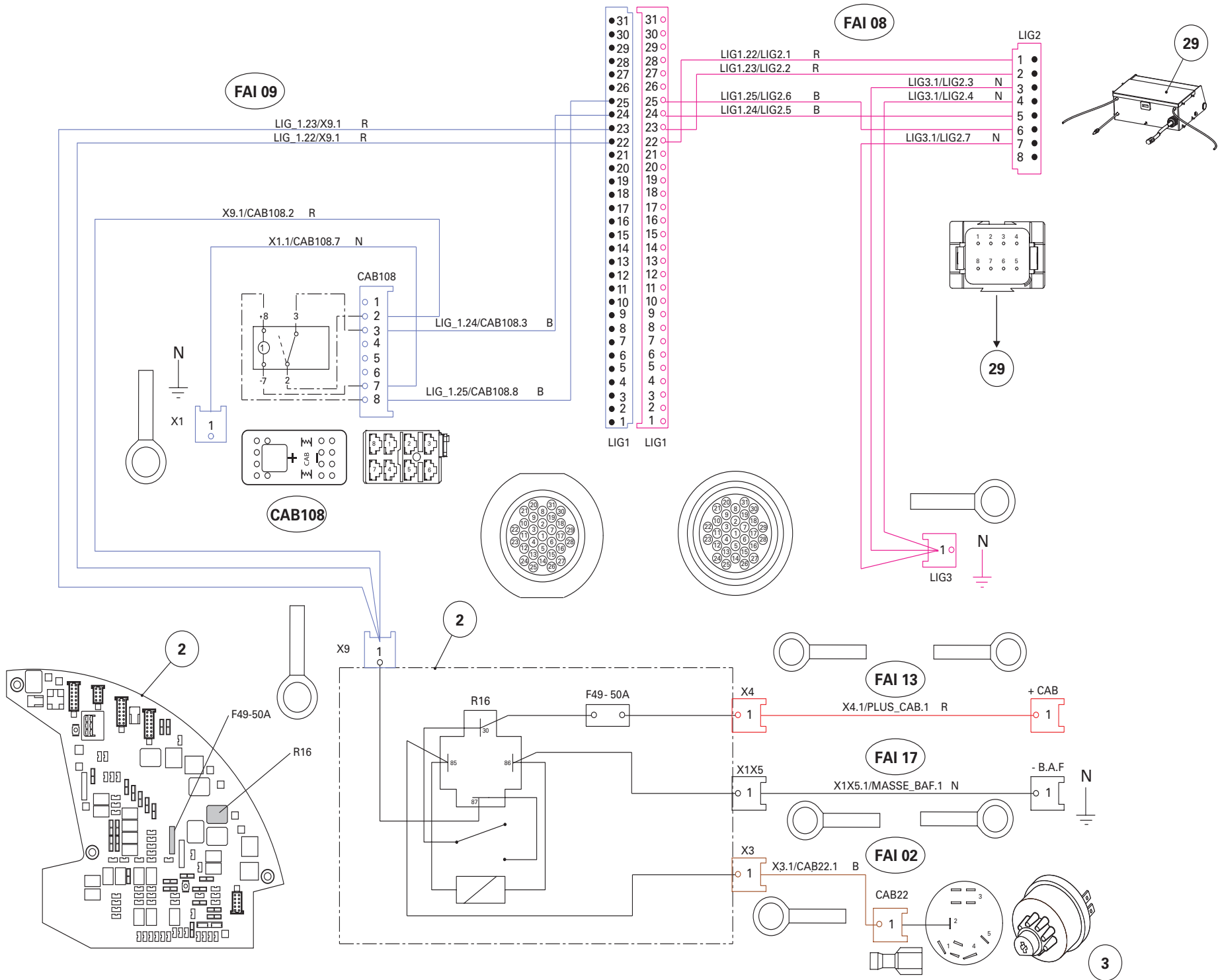
- 2 Fuse box
- 29 Control unit
- FAI 37 Fender lighting harness
- FAI 126 Lighting harness—Europe
- CAB108 Suspended cab switch



ELECTRICAL DIAGRAMS - Cab equipment

Cab suspension (GBA20 and GBA10)

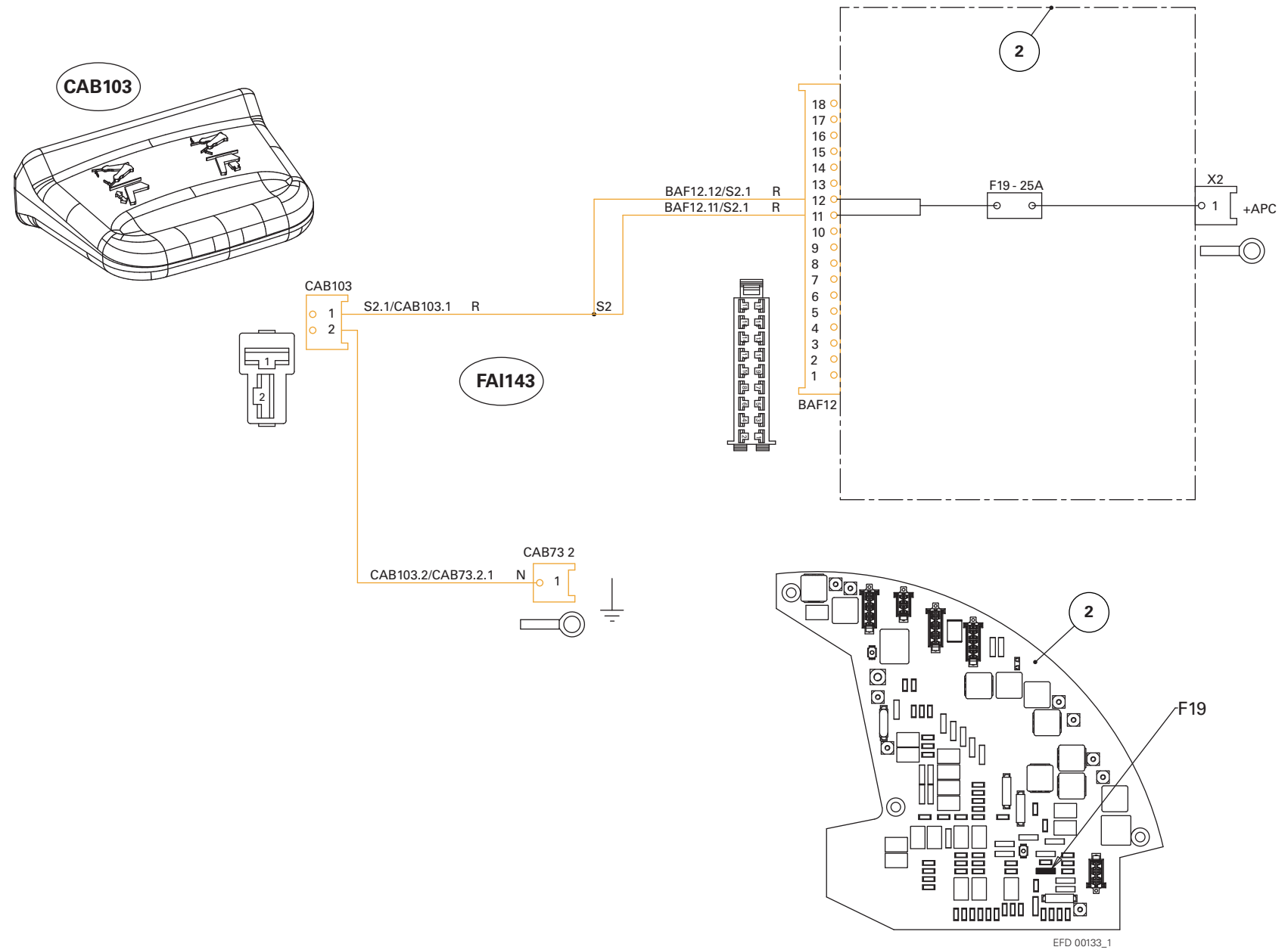
- 2 Fuse box
- 3 Start switch
- 29 Control unit
- FAI 02 Instrument panel harness
- FAI 08 Lighting harness
- FAI 09 Cab interior lighting harness
- FAI 13 Fuse box supply harness
- FAI 17 BAF earth harness
- CAB108 Suspended cab switch



MA-10-03102A

Pneumatic seat (GBA25 and GBA10-Auto5)

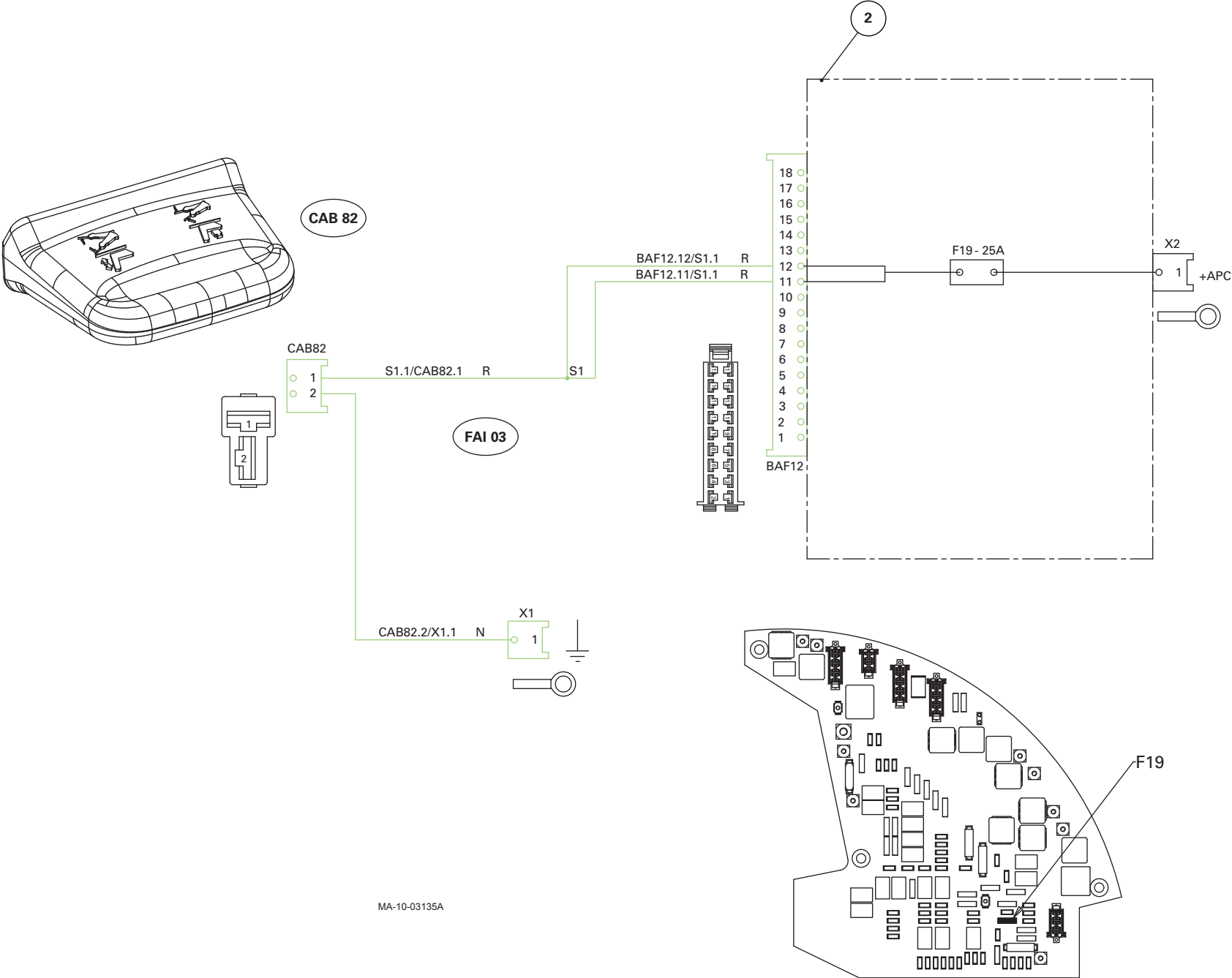
- 2 Fuse box
- FAI 143 Dyna-6 cab transmission harness
- CAB103 Pneumatic seat adjustment control



ELECTRICAL DIAGRAMS - Cab equipment

Pneumatic seat (GBA20 and GBA10)

- 2 Fuse box
- FAI 03 Dynashift console harness
- CAB82 Pneumatic seat adjustment control

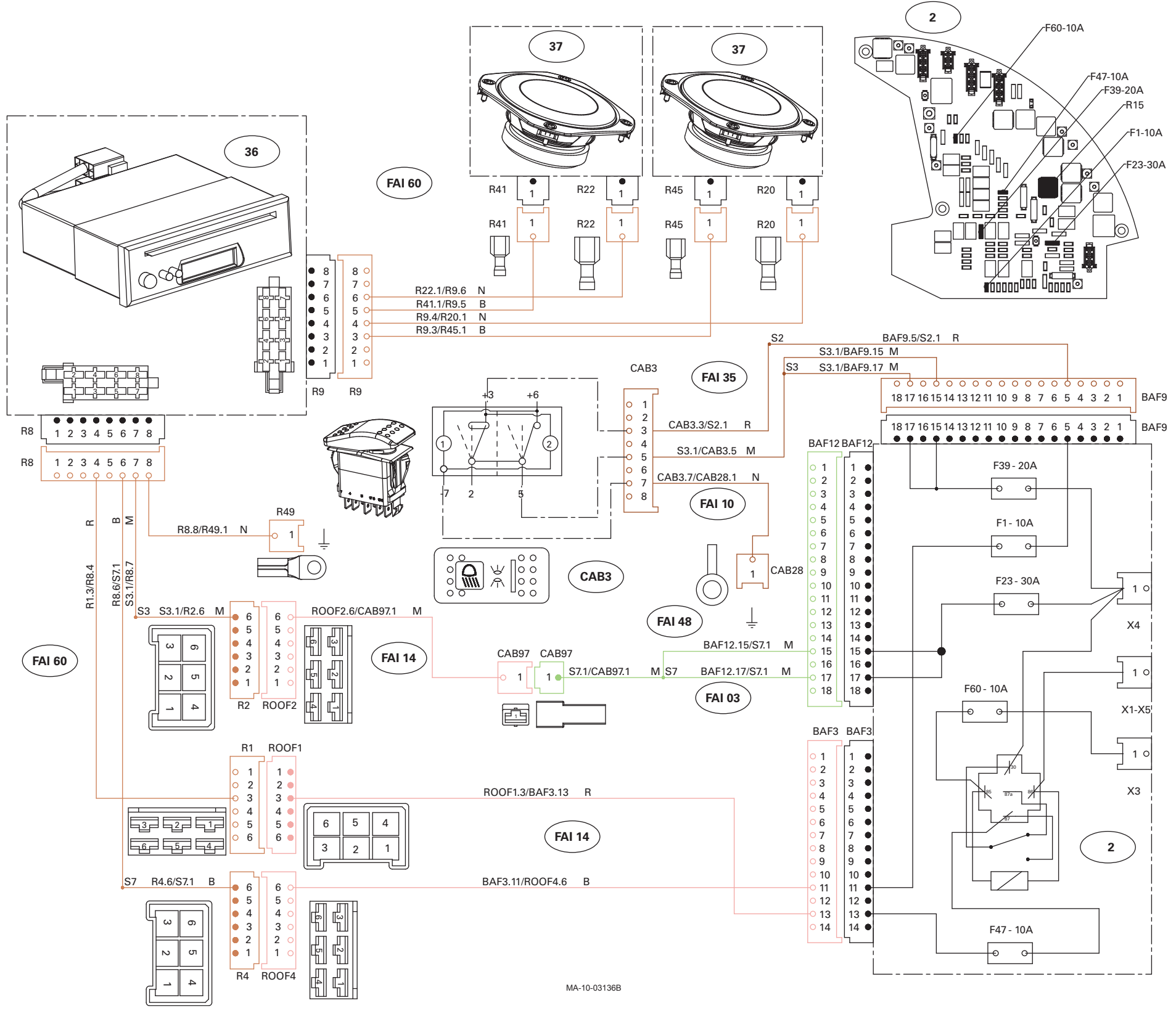


MA-10-03135A

ELECTRICAL DIAGRAMS - Cab equipment

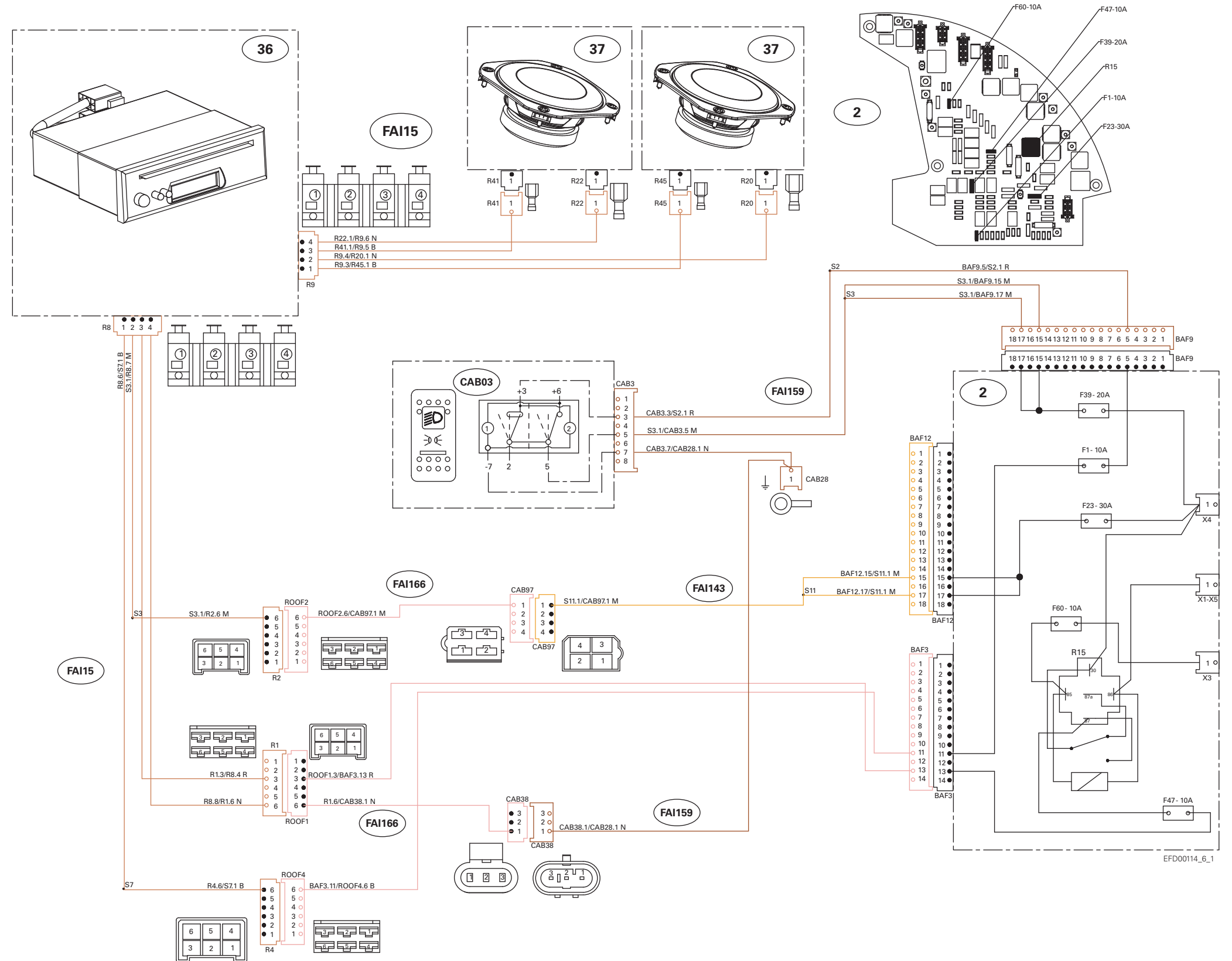
Radio—Europe (except Germany) (GBA20 and GBA10)

- 2 Fuse box
- 36 CD/radio
- 37 Speaker
- FAI 14 Pillar harness
- FAI 10 Dynashift with EEM instrument panel harness
- FAI 03 Dynashift console harness
- FAI 60 Roof harness (all countries except US)
- CAB3 Road lights switch



Radio—North America (GBA25 and GBA10-Auto5)

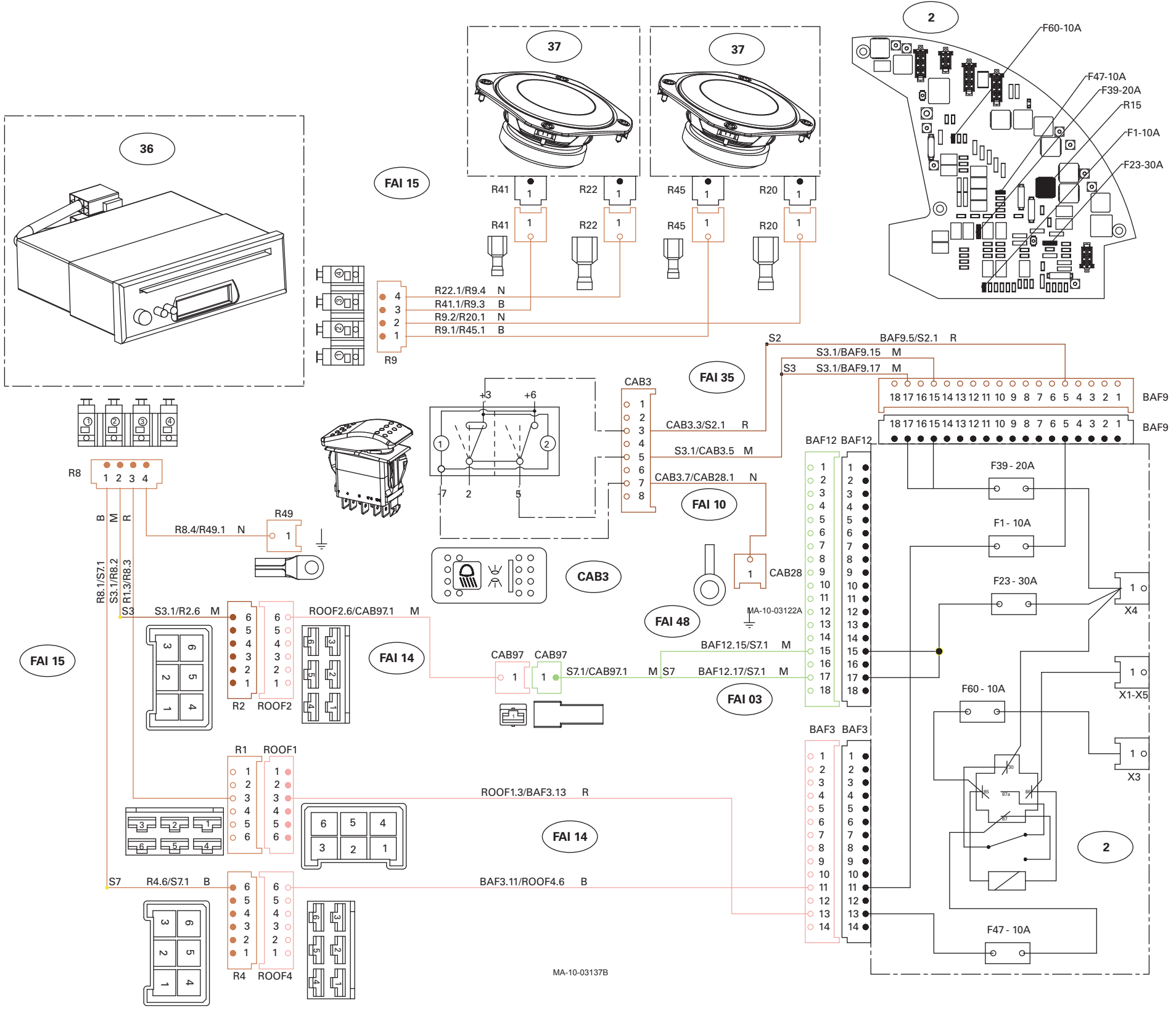
- 2 Fuse box
- 36 CD/radio
- 37 Speaker
- FAI 15 Roof harness
- FAI 143 Cab transmission harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB03 Road lights switch



ELECTRICAL DIAGRAMS - Cab equipment

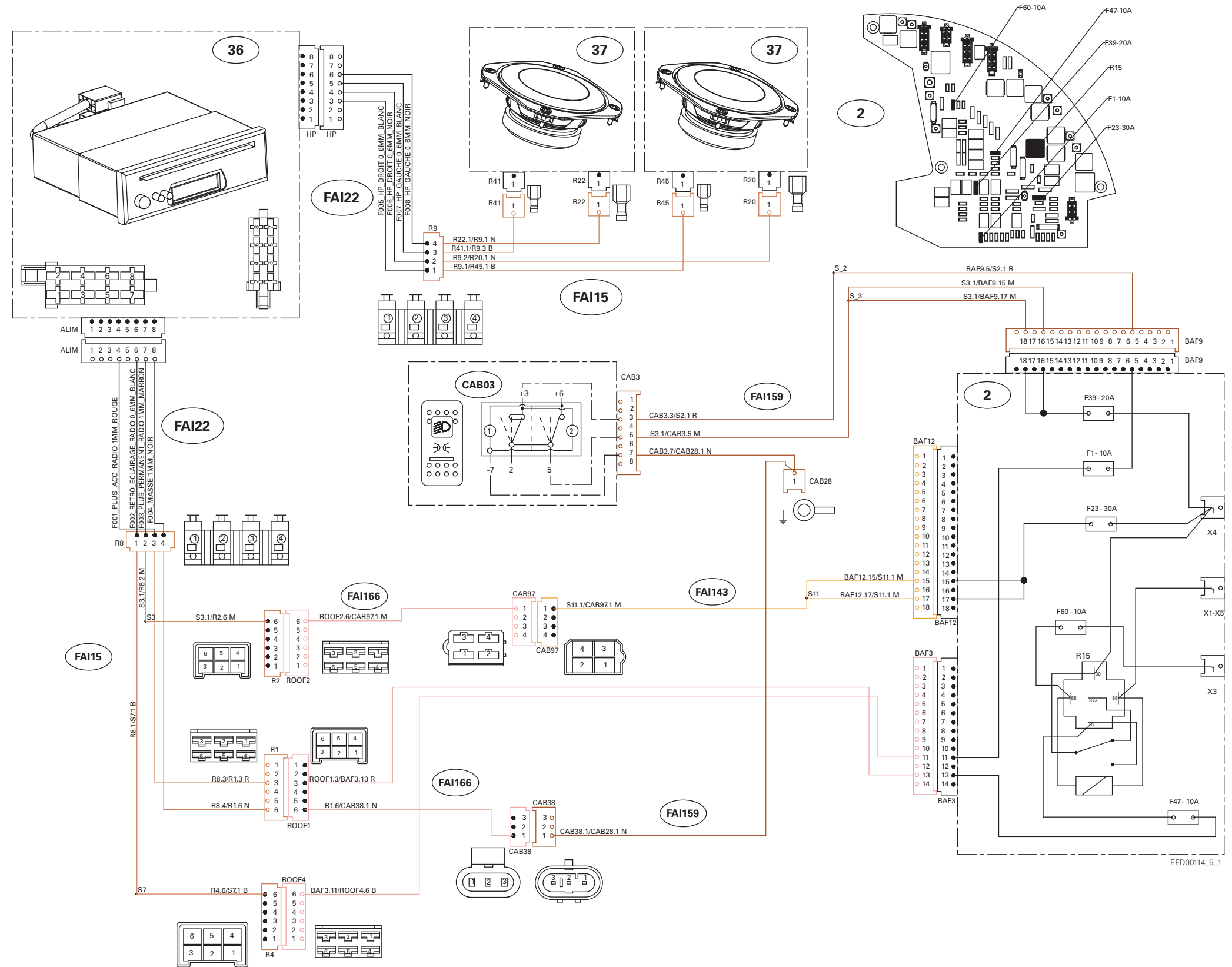
Radio—North America (GBA20 and GBA10)

- 2 Fuse box
- 36 CD/radio
- 37 Speaker
- FAI 14 Pillar harness
- FAI 15 Roof harness
- FAI 10 Dynashift with EEM—instrument panel harness
- FAI 03 Dynashift console harness
- CAB3 Road lights switch



Radio—Germany (GBA25 and GBA10-Auto5)

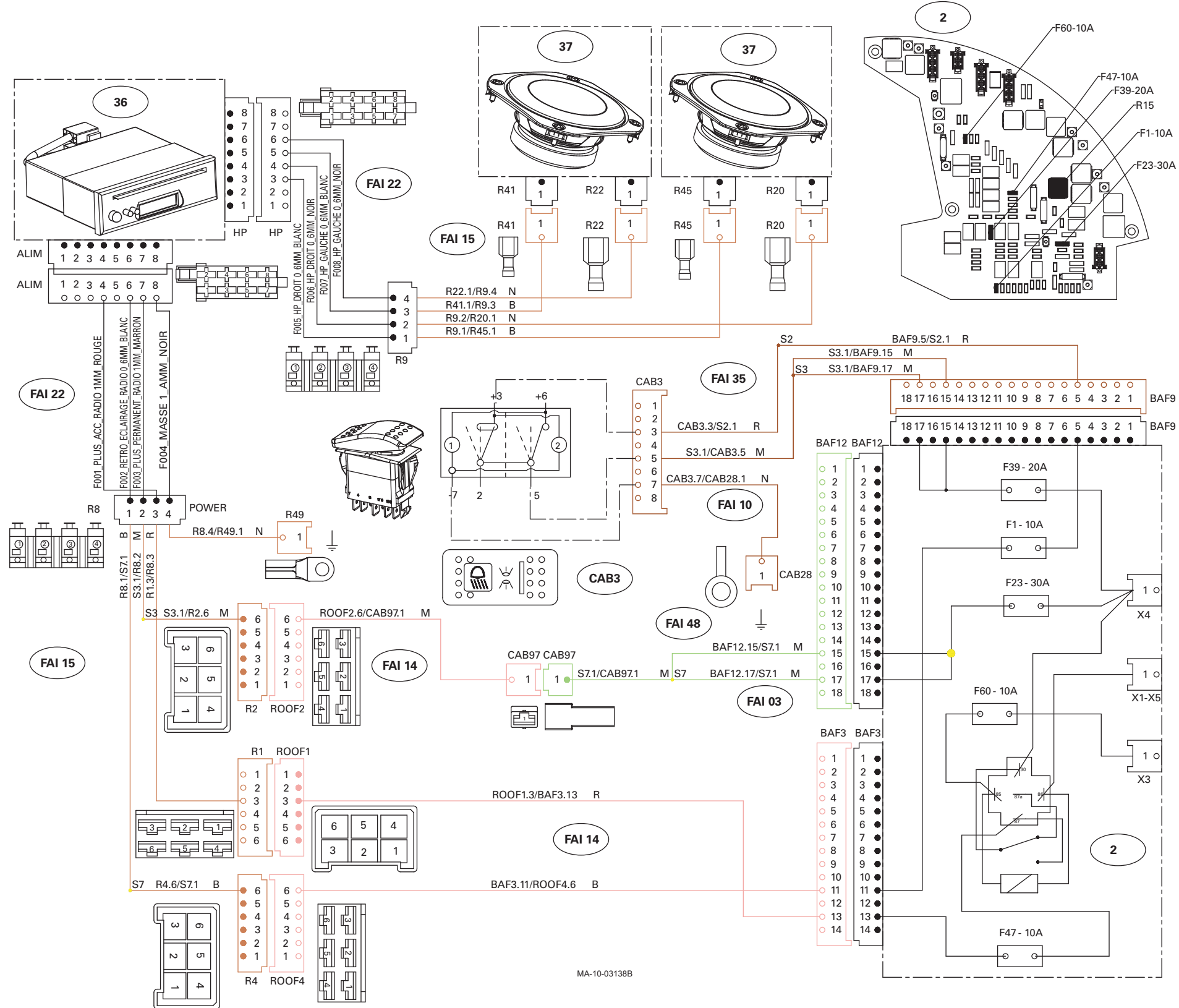
- 2 Fuse box
- 36 CD/radio
- 37 Speaker
- FAI 15 Roof harness
- FAI 22 Radio harness
- FAI 143 Cab transmission harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB03 Road lights switch



ELECTRICAL DIAGRAMS - Cab equipment

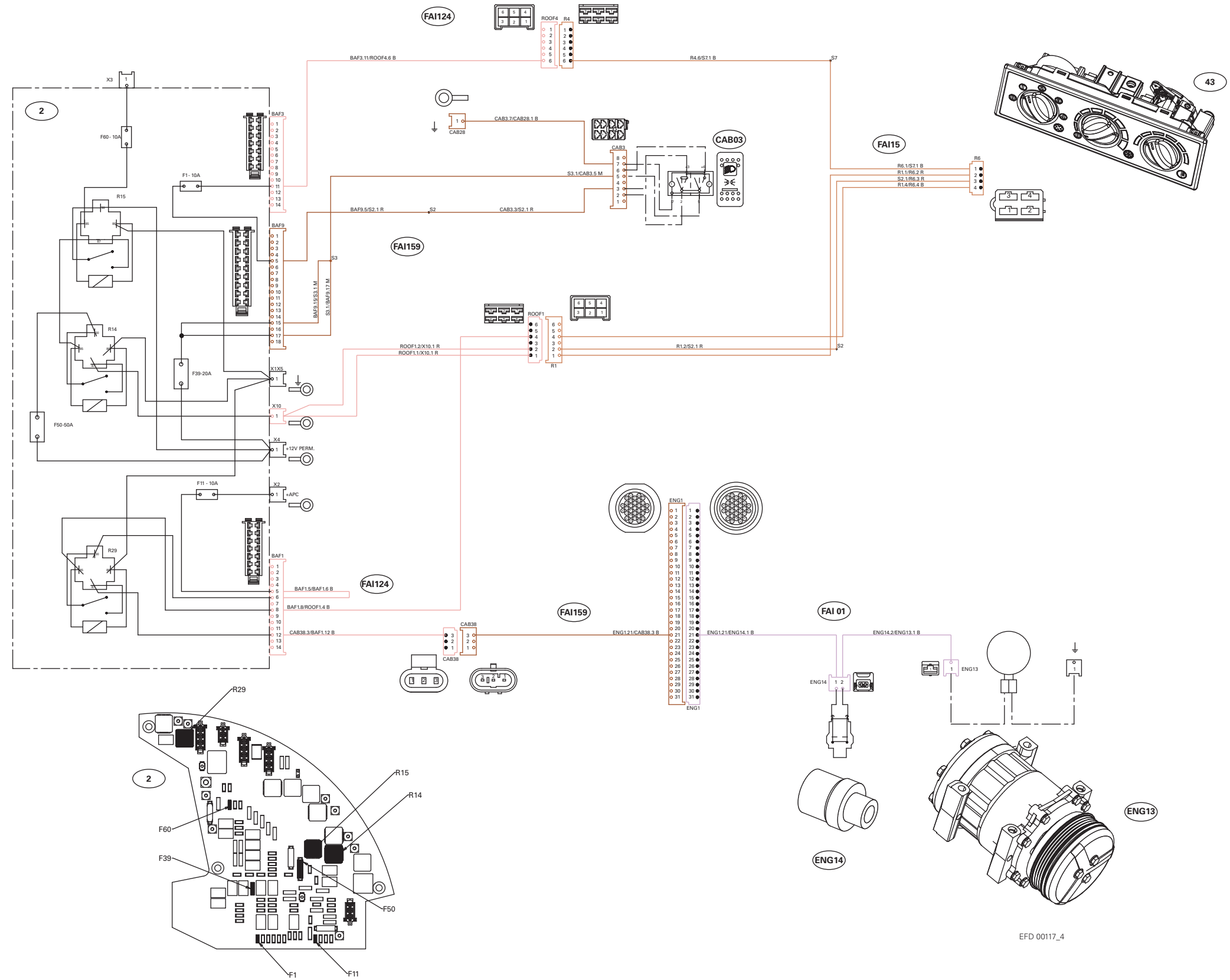
Radio—Germany (GBA20 and GBA10)

- 2 Fuse box
- 36 CD/radio
- 37 Speaker
- FAI 14 Pillar harness
- FAI 15 Roof harness
- FAI 22 Radio harness
- FAI 10 Dynashift with EEM instrument panel harness
- FAI 03 Dynashift console harness
- CAB3 Road lights switch



**Manual air conditioning—standard roof
(GBA25 and GBA10-Auto5)**

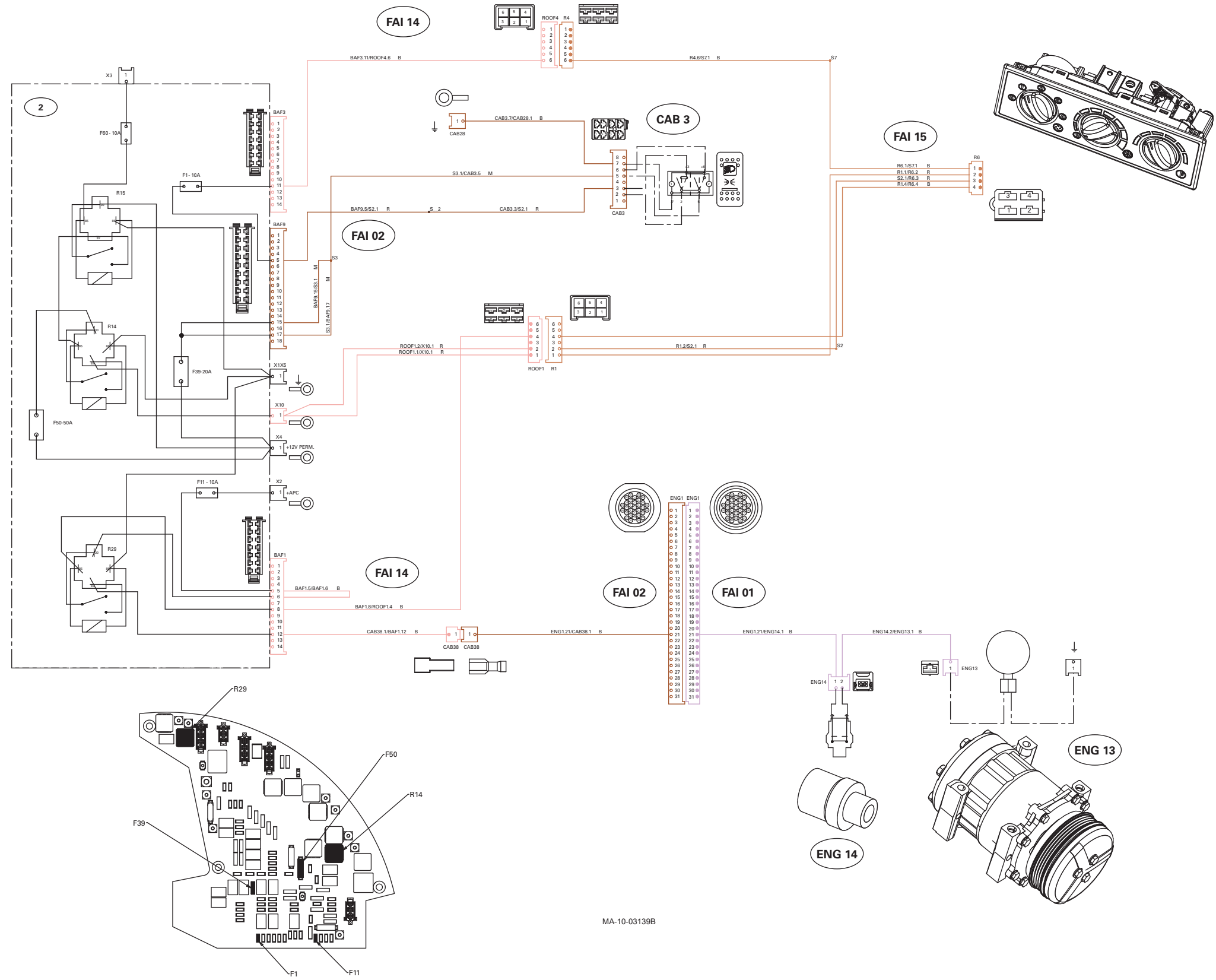
- 2 Fuse box
- FAI 01 Engine harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- ENG13 Compressor electromagnetic clutch
- ENG14 Air conditioning condenser pressure switch
- R6 Air conditioning control



ELECTRICAL DIAGRAMS - Cab equipment

Manual air conditioning—standard roof (GBA20 and GBA10)

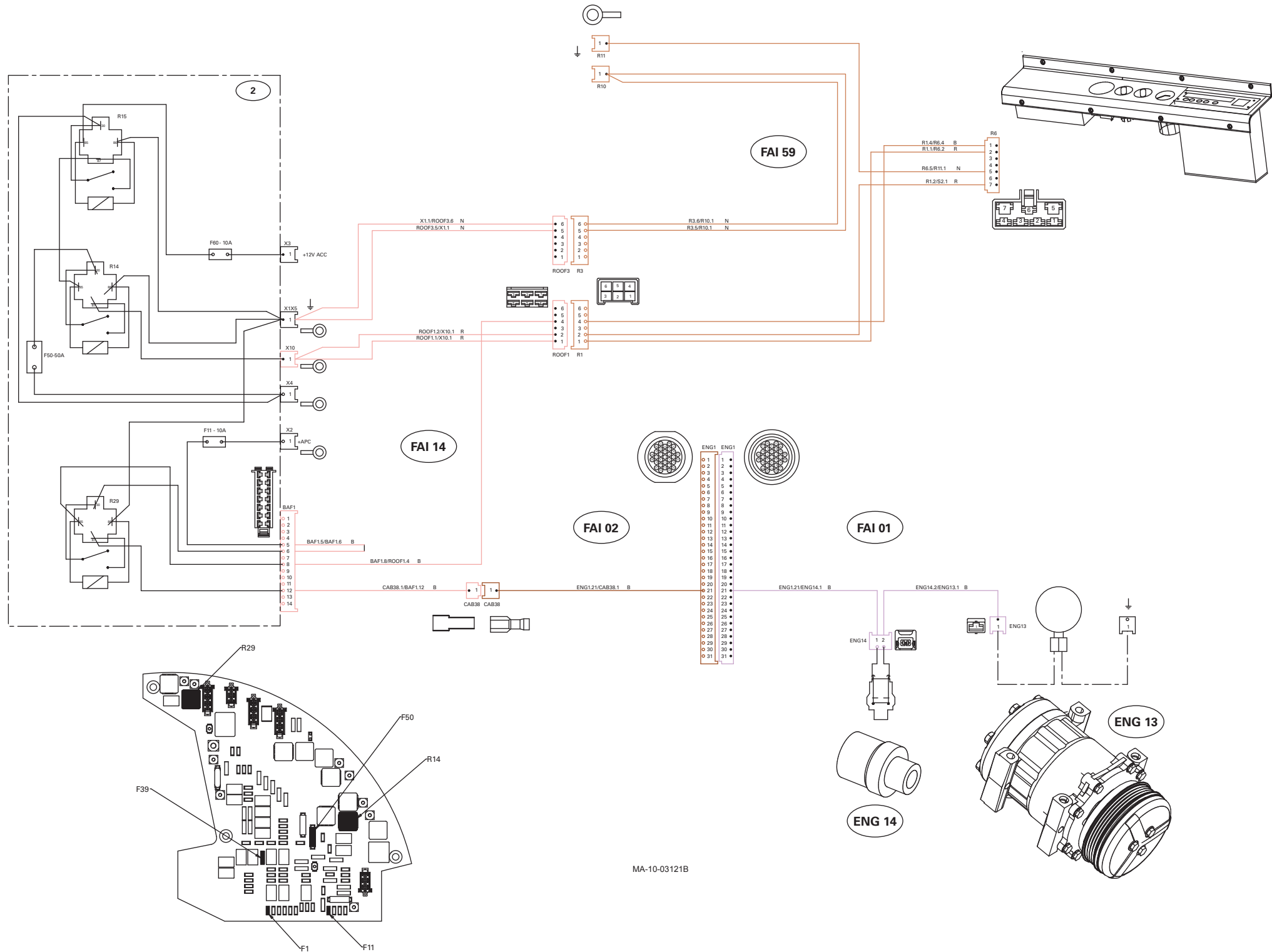
- 2 Fuse box
- 43 Manual air conditioning box
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- FAI 14 Pillar harness
- FAI 15 Roof harness
- CAB3 Road lights switch
- ENG13 Compressor electromagnetic clutch
- ENG14 Air conditioning condenser pressure switch



ELECTRICAL DIAGRAMS - Cab equipment

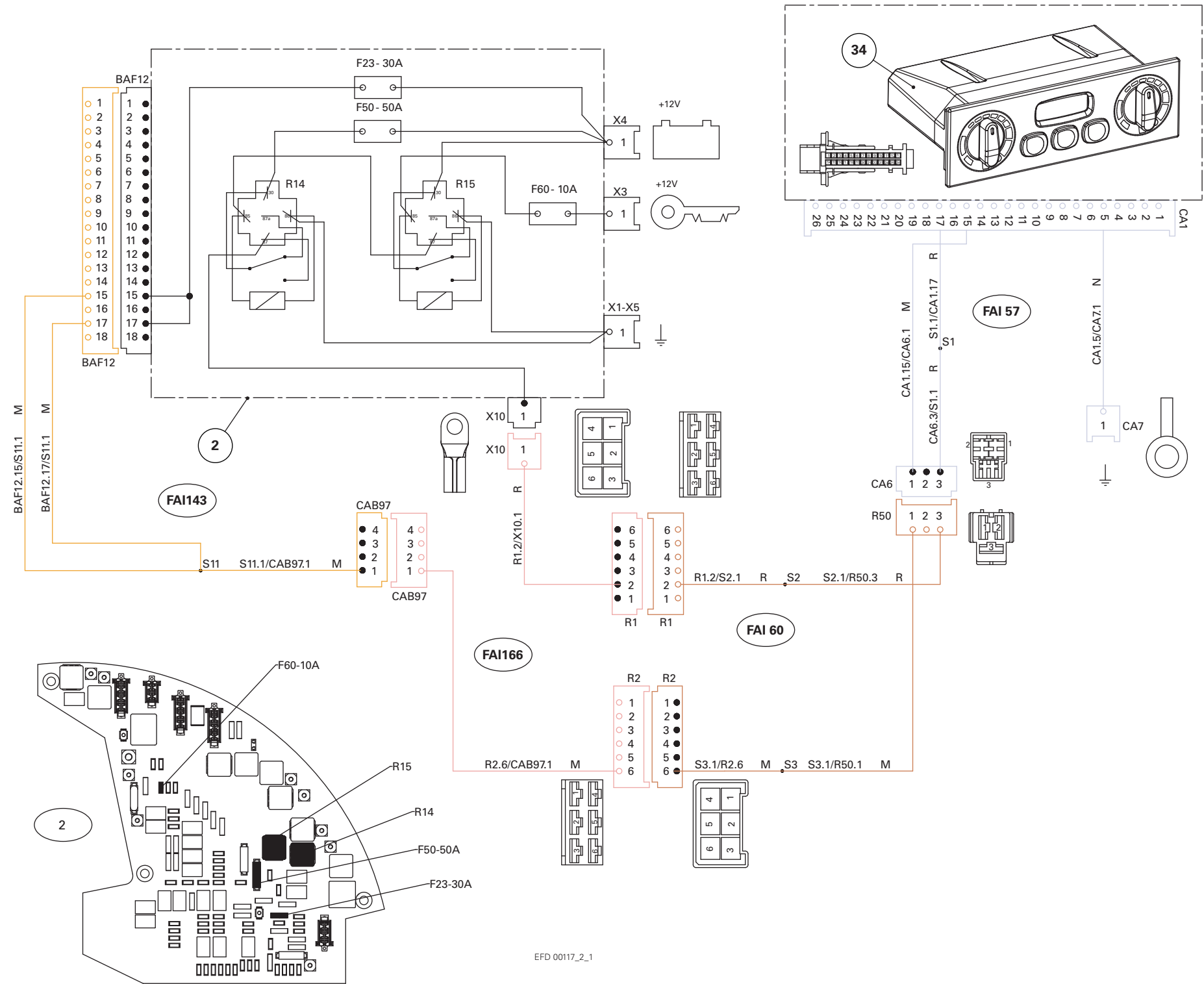
Manual air conditioning—high-visibility roof (GBA20 and GBA10)

- 2 Fuse box
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- FAI 14 Pillar harness
- FAI 59 High-visibility roof harness
- CAB3 Road lights switch
- ENG13 Compressor electromagnetic clutch
- ENG14 Air conditioning condenser pressure switch



**Automatic air conditioning unit supply
(GBA25 and GBA10-Auto5)**

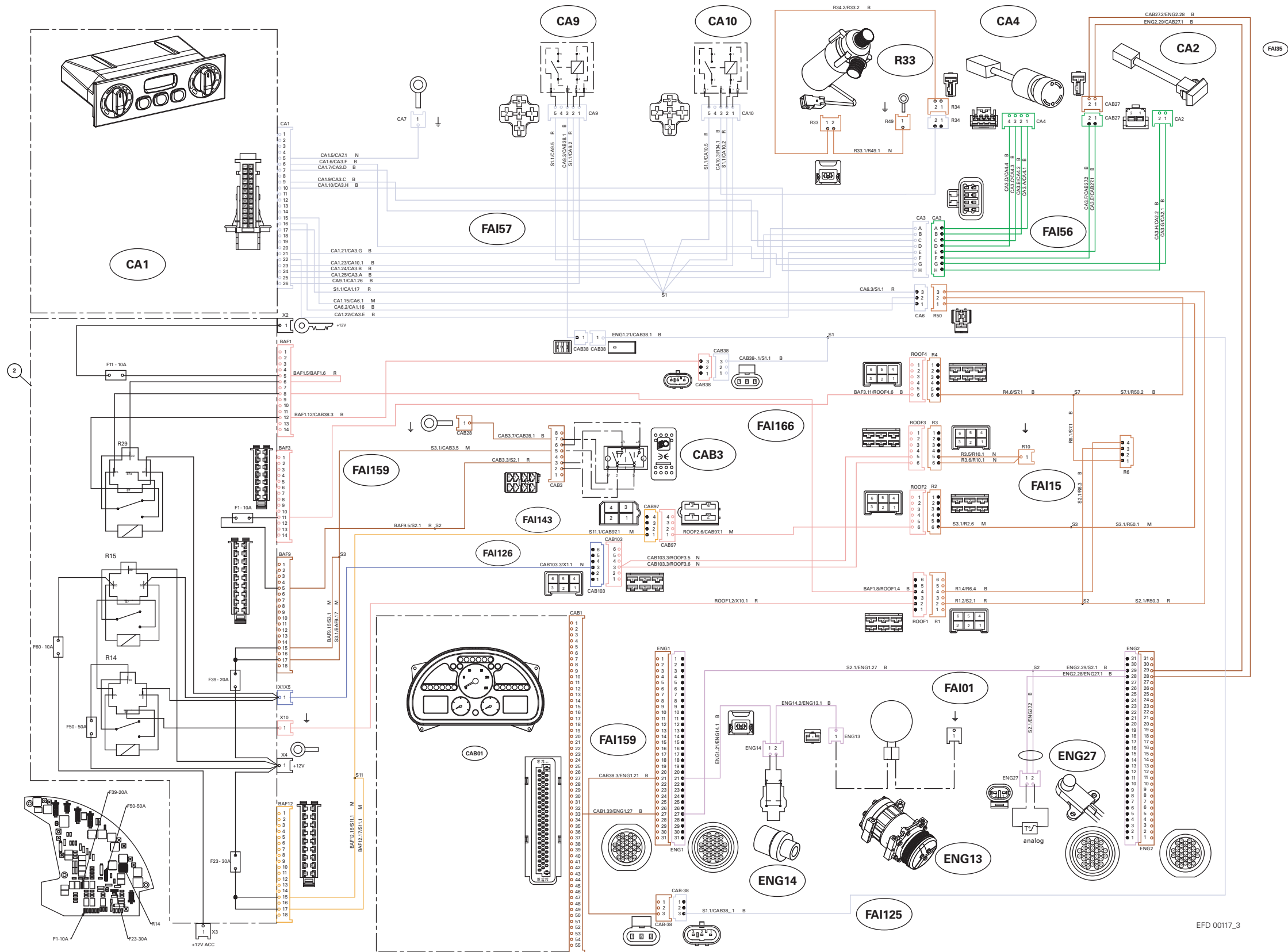
- 2 Fuse box
- 34 Automatic air conditioning control unit
- FAI 57 Automatic air conditioning harness—roof
- FAI 60 Roof harness (all countries except US)
- FAI 143 Cab transmission harness
- FAI 166 Pillar harness



ELECTRICAL DIAGRAMS - Cab equipment

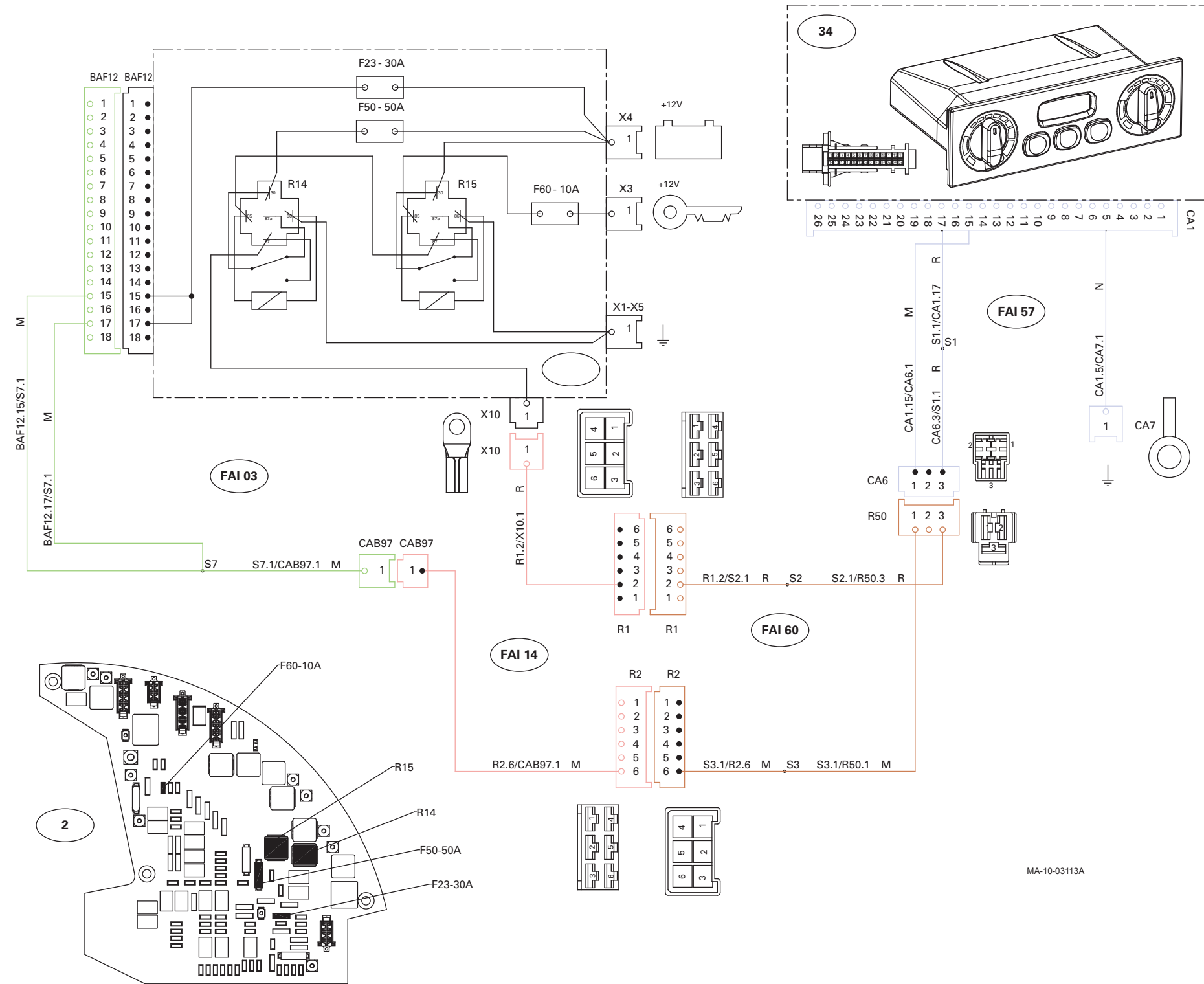
Automatic air conditioning (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 34 Automatic air conditioning control unit
- FAI 01 Engine harness
- FAI 15 Roof harness
- FAI 56 Automatic air conditioning harness—instrument panel
- FAI 57 Automatic air conditioning harness—roof
- FAI 60 Roof harness (all countries except US)
- FAI 125 Automatic air conditioning adapter harness
- FAI 126 Cab interior lighting harness (all countries except US)
- FAI 143 Dyna-6 cab transmission harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB01 DCC2 instrument panel
- ENG13 Compressor electromagnetic clutch
- ENG14 Air conditioning condenser pressure switch
- ENG27 Outside temperature sensor



Automatic air conditioning without circuit breaker (GBA20 and GBA10)

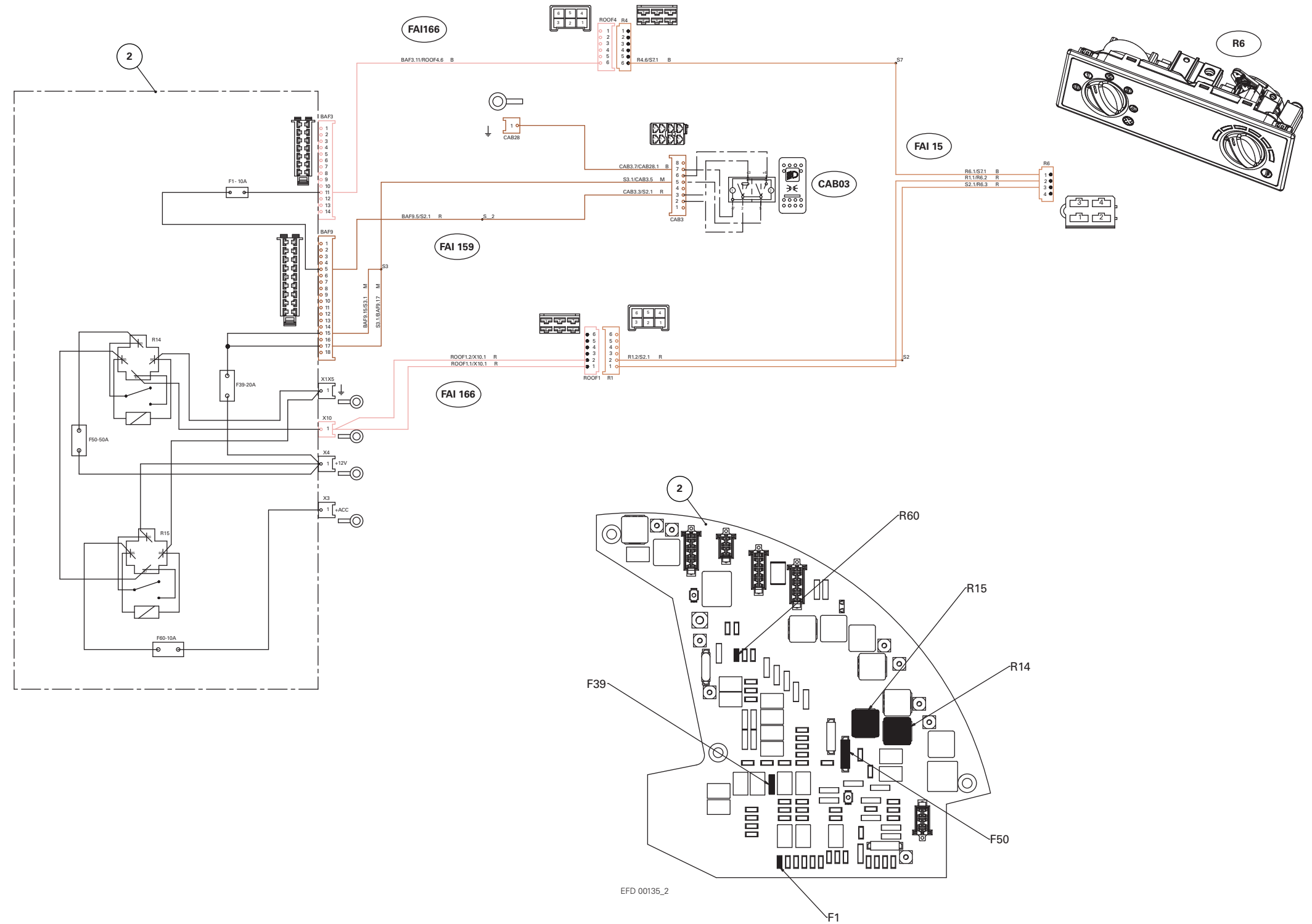
- 2 Fuse box
- 34 Automatic air conditioning control unit
- FAI 03 Dynashift console harness
- FAI 14 Pillar harness
- FAI 57 Automatic air conditioning harness—roof
- FAI 60 Roof harness (all countries except US)



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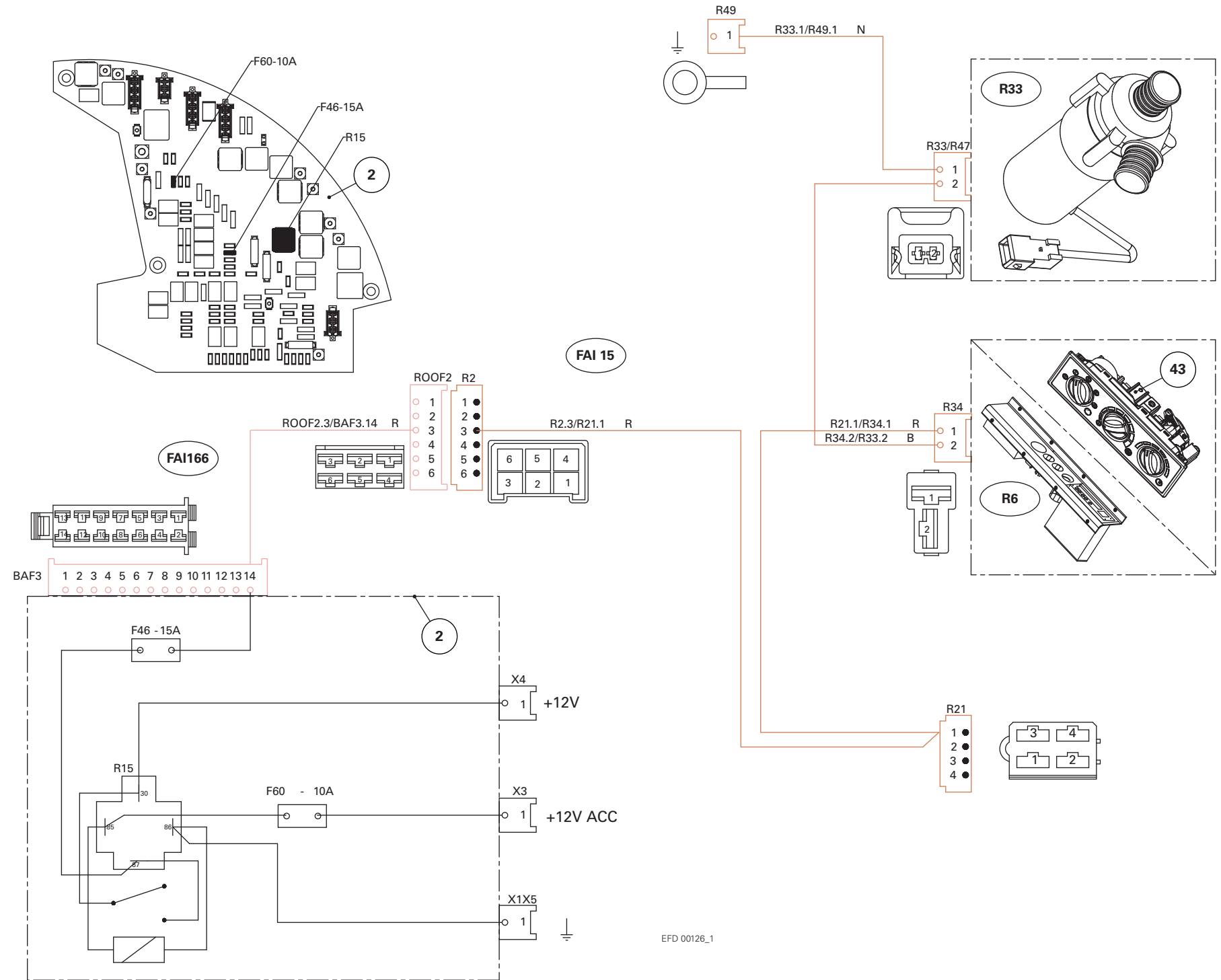
**Standard ventilation—standard roof
(GBA25 and GBA10-Auto5)**

- 2 Fuse box
- FAI 15 Roof harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB03 Road lights switch
- R6 Ventilation control



Extreme cold weather ventilation (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 43 Manual air conditioning control unit
- FAI 15 Roof harness
- FAI 166 Pillar harness
- R6 Ventilation control
- R33 Water pump motor

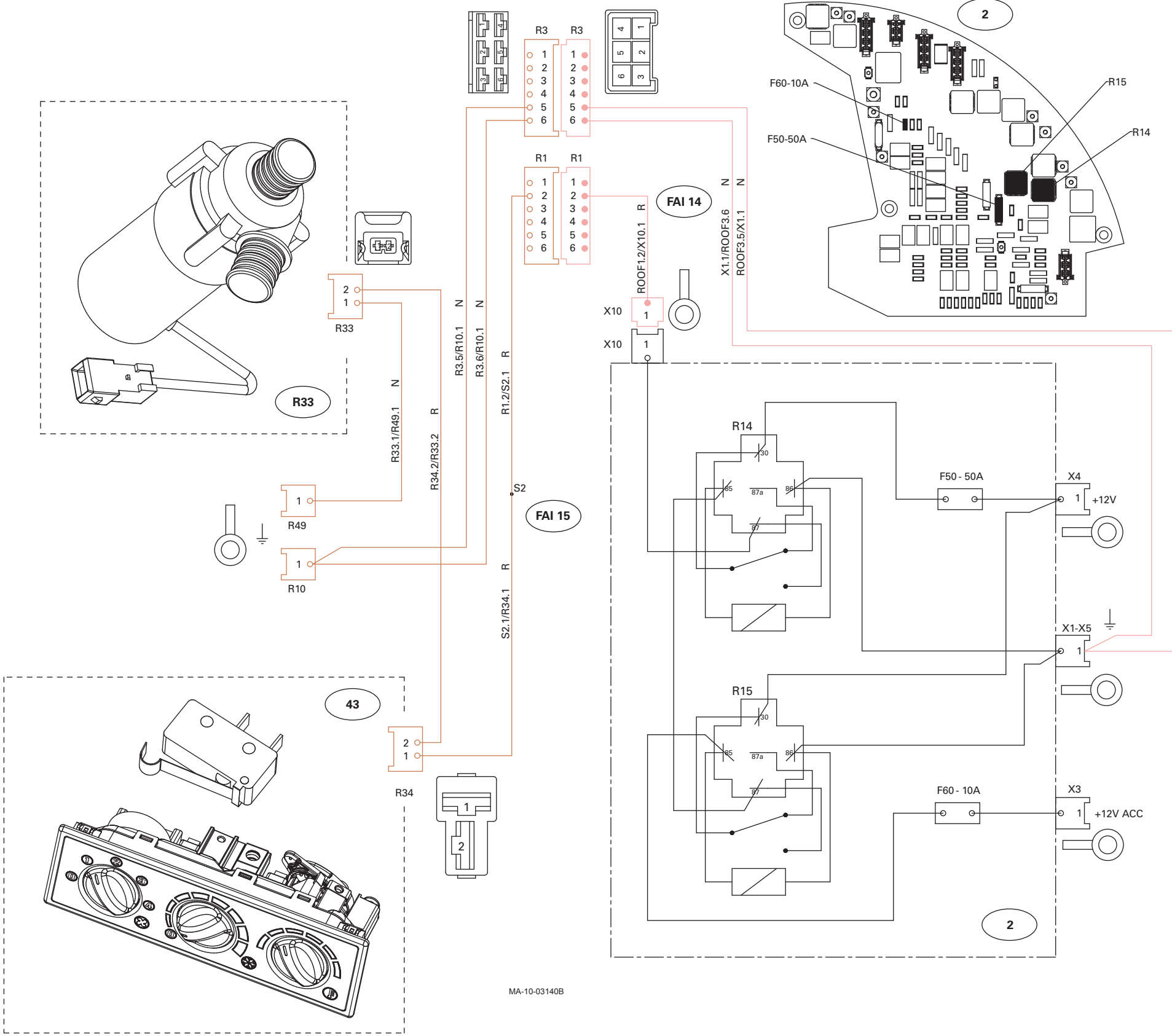


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ELECTRICAL DIAGRAMS - Cab equipment

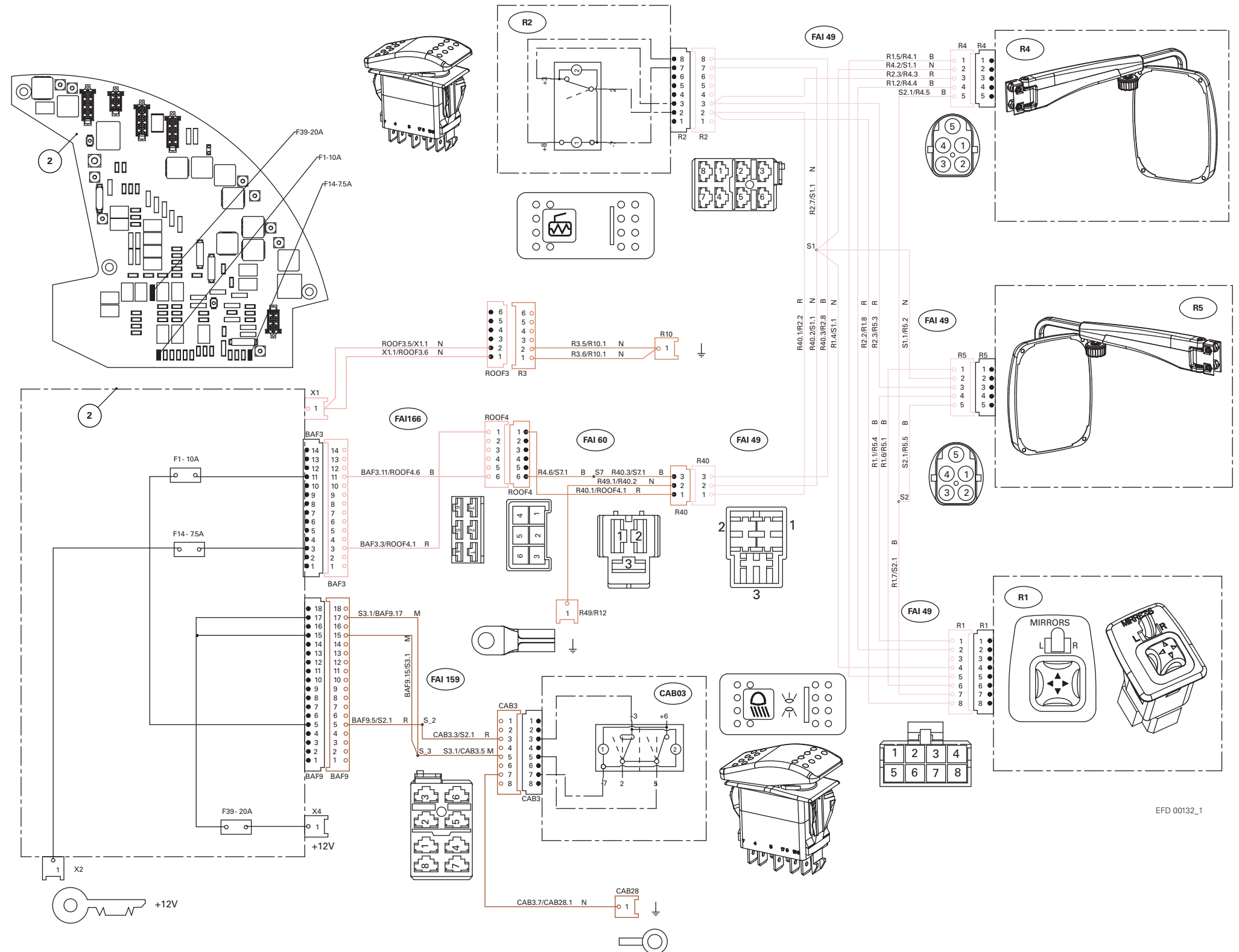
Extreme cold weather ventilation (GBA20 and GBA10)

- 2 Fuse box
- 43 Manual air conditioning box
- FAI 14 Pillar harness
- FAI 15 Roof harness
- R33 Water pump motor



Electric rear view mirrors (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 49 Electric rear view mirror harness
- FAI 60 Roof harness (all countries except US)
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB03 Road lights switch
- R1 Rear view mirror adjustment switch
- R2 Rear view mirror defroster switch
- R4 Right-hand rear view mirror
- R5 Left-hand rear view mirror

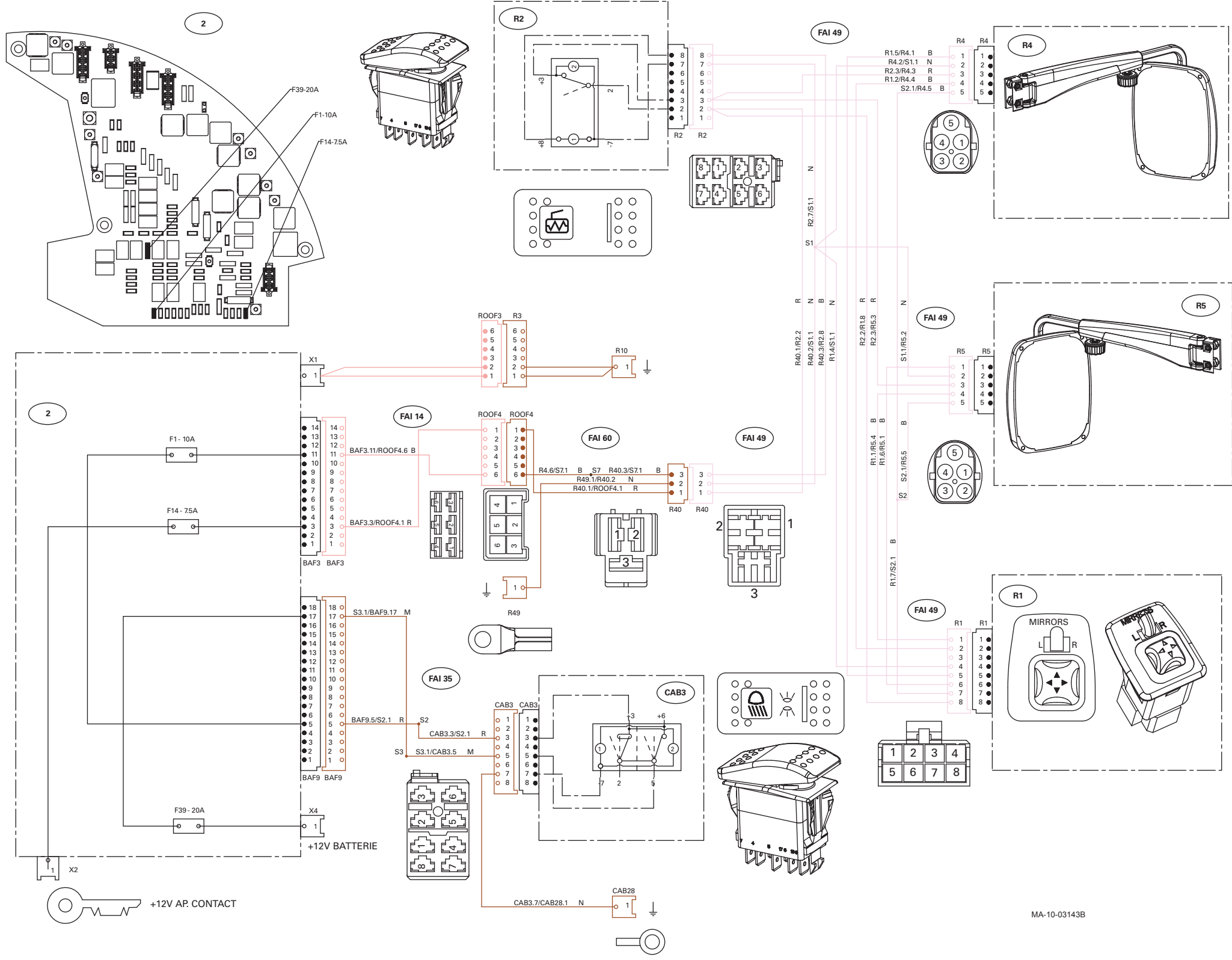


EFD 00132_1

ELECTRICAL DIAGRAMS - Cab equipment

Electric rear view mirrors (GBA20 and GBA10)

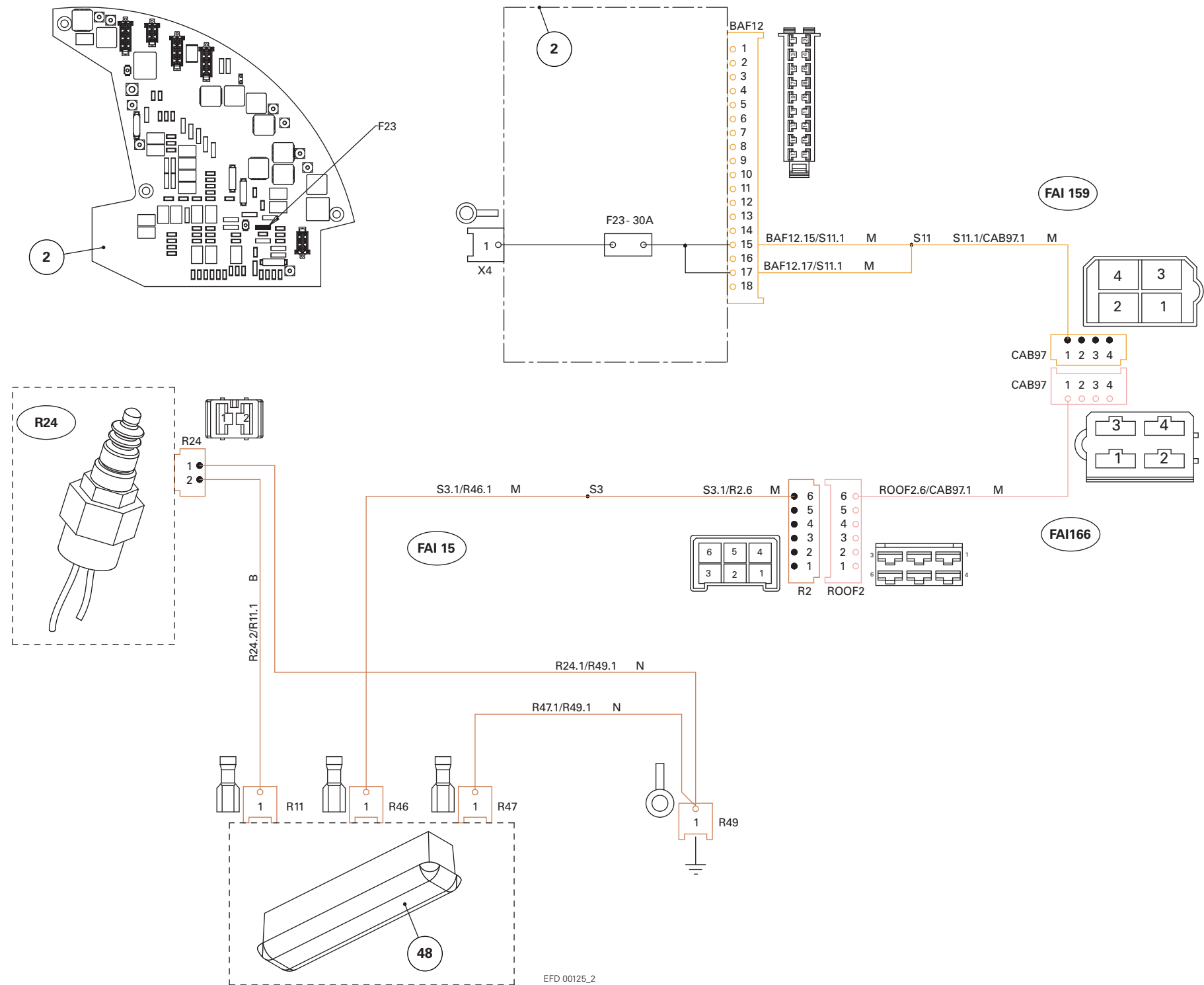
- 2 Fuse box
- FAI 14 Pillar harness
- FAI 10 Dynashift with EEM—instrument panel harness
- FAI 49 Electric rear view mirror harness
- FAI 60 Roof harness (all countries except US)
- CAB3 Road lights switch
- R1 Rear view mirror adjustment switch
- R2 Rear view mirror defroster switch
- R4 Right-hand rear view mirror
- R5 Left-hand rear view mirror



MA-10-03143B

Door switch (GBA25 and GBA10-Auto5)

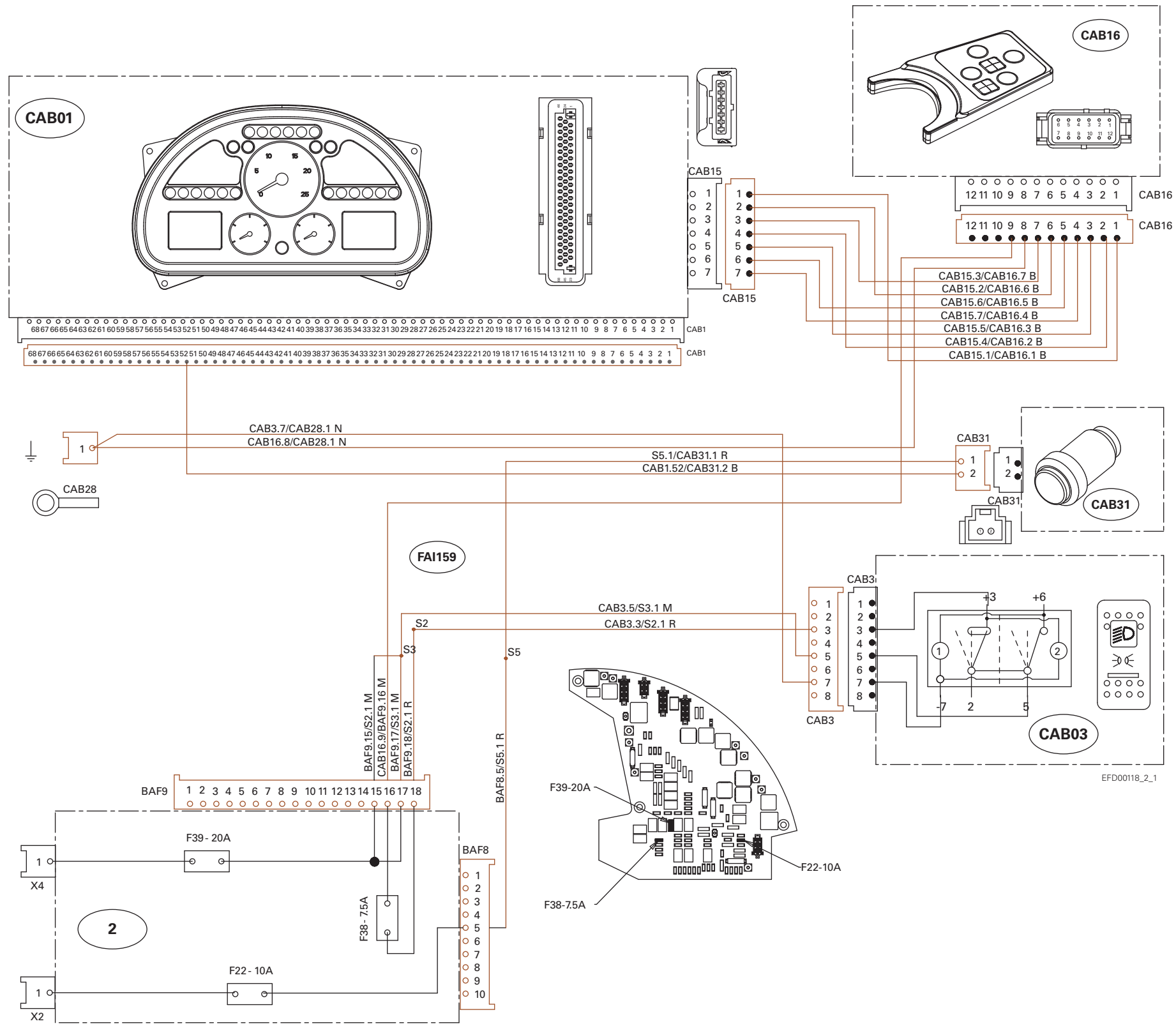
- 2 Fuse box
- 48 Roof light
- FAI 15 Roof harness
- FAI 143 Cab transmission harness
- FAI 166 Pillar harness
- R24 Door switch



ELECTRICAL DIAGRAMS - Cab equipment

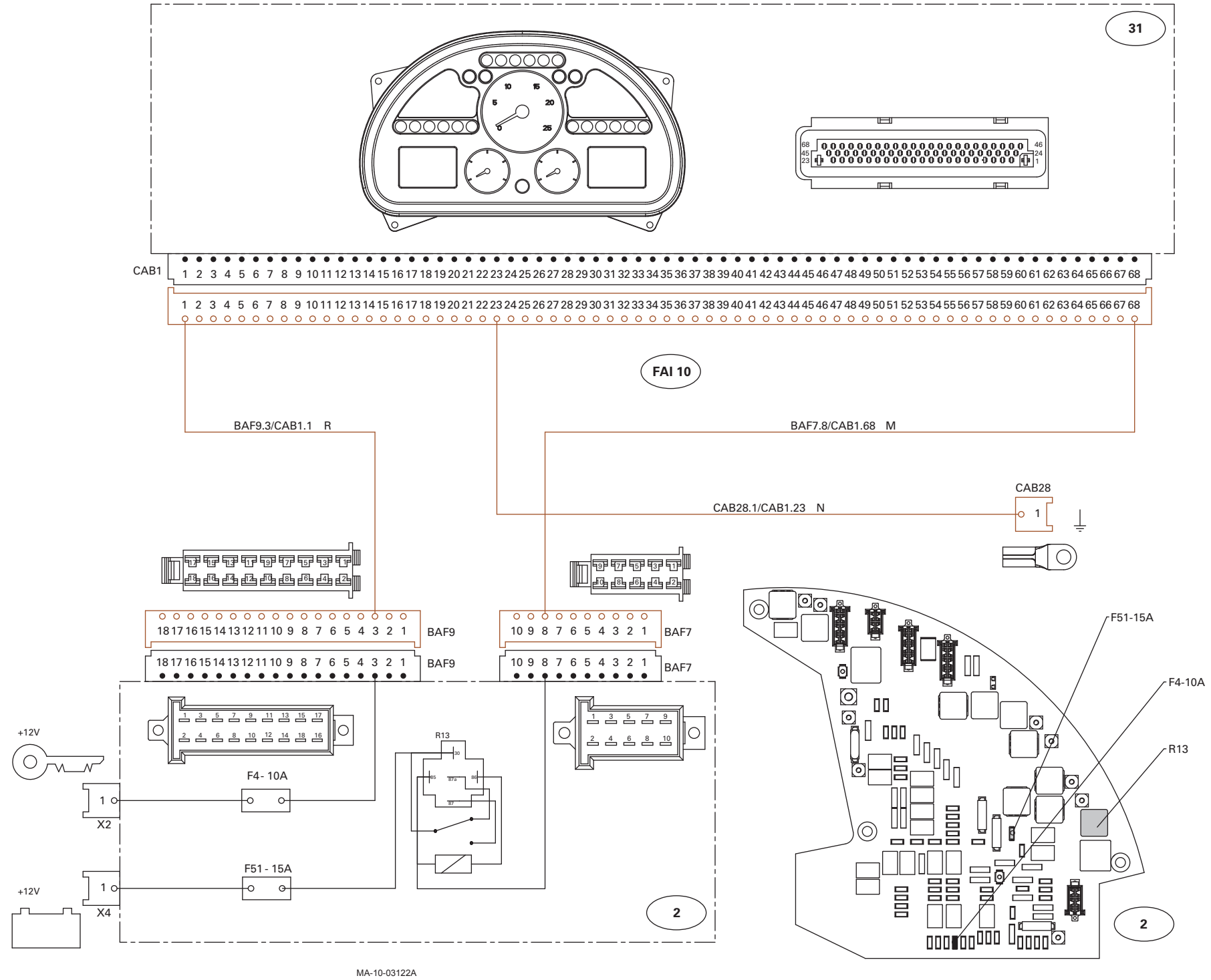
Instrument panel controls (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- CAB16 DOT MATRIX control keyboard
- CAB31 Display selector switch



Instrument panel (GBA20 and GBA10)

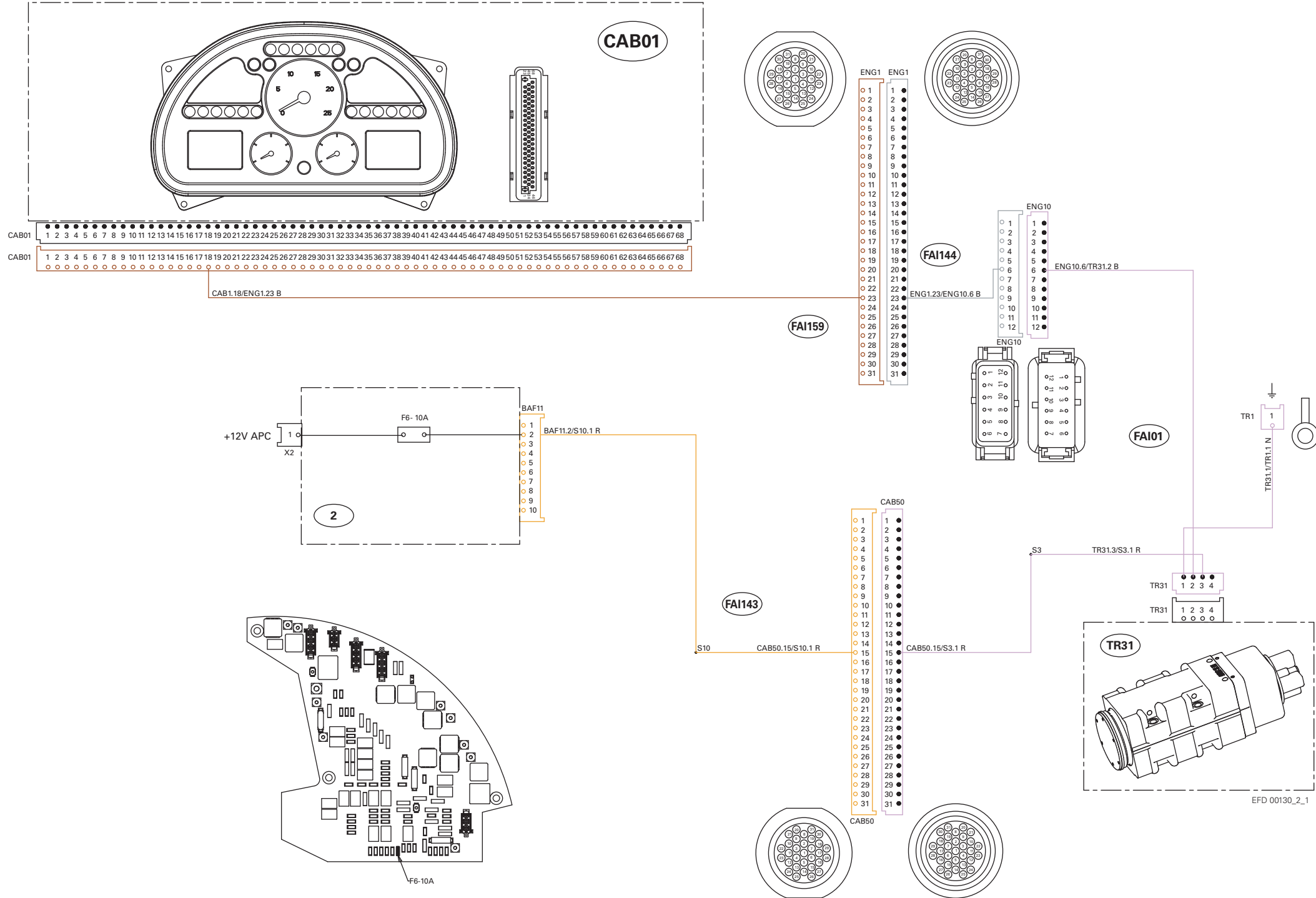
- 2 Fuse box
- 31 DCC2 instrument panel
- FAI 10 Dynashift with EEM—instrument panel harness



ELECTRICAL DIAGRAMS - Cab equipment

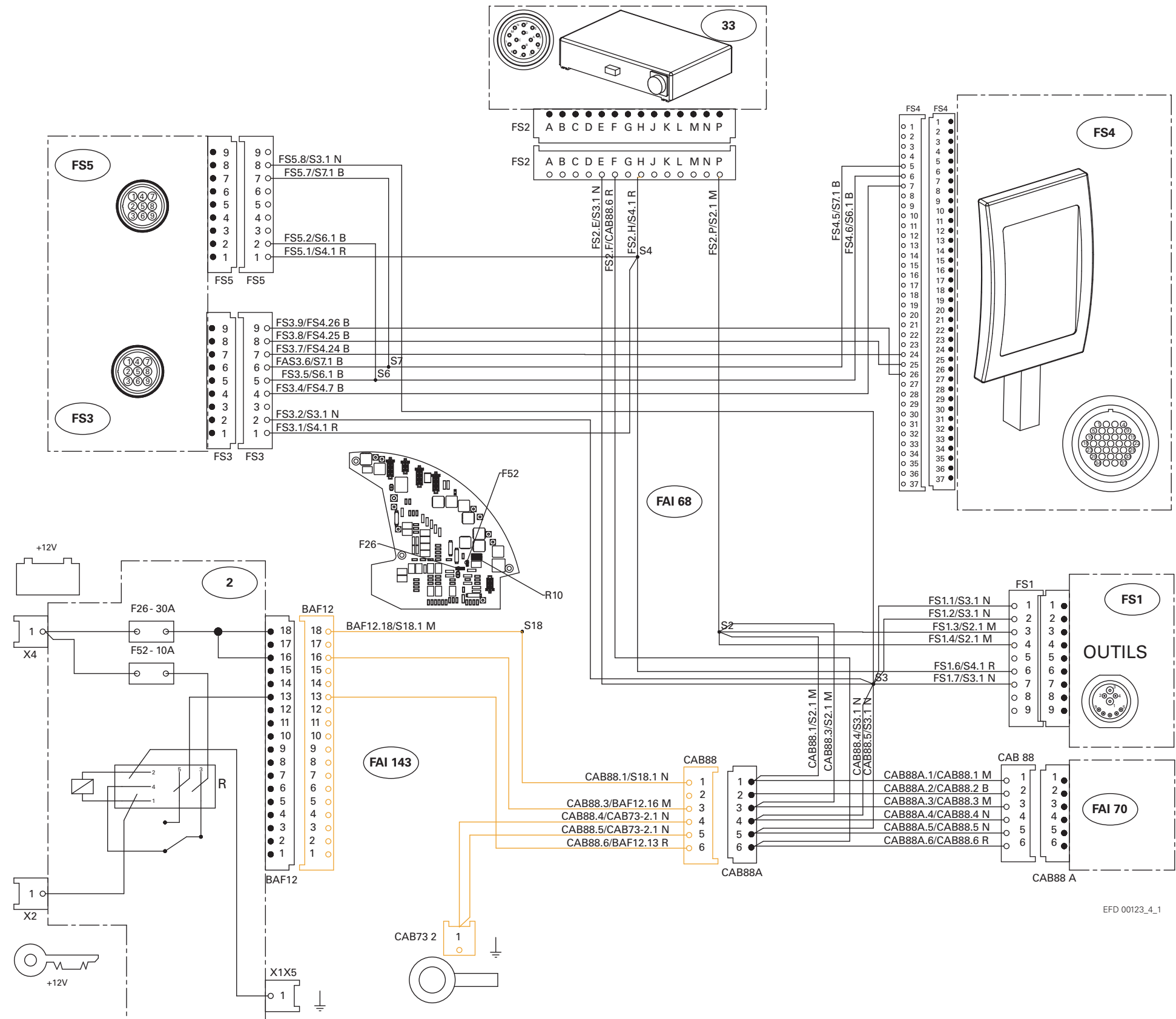
Radar (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 01 Engine harness
- FAI 143 Cab transmission harness
- FAI 144 Cab linkage harness
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- TR31 Radar



Fieldstar (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 33 Fieldstar terminal
- FAI 68 Fieldstar harness
- FAI 70 Cab interior power socket harness
- FAI 143 Cab transmission harness
- FS1 Fieldstar LBS+ connector
- FS2 Fieldstar com unit
- FS3 Fieldstar RS232 connector
- FS4 Fieldstar GPS connector

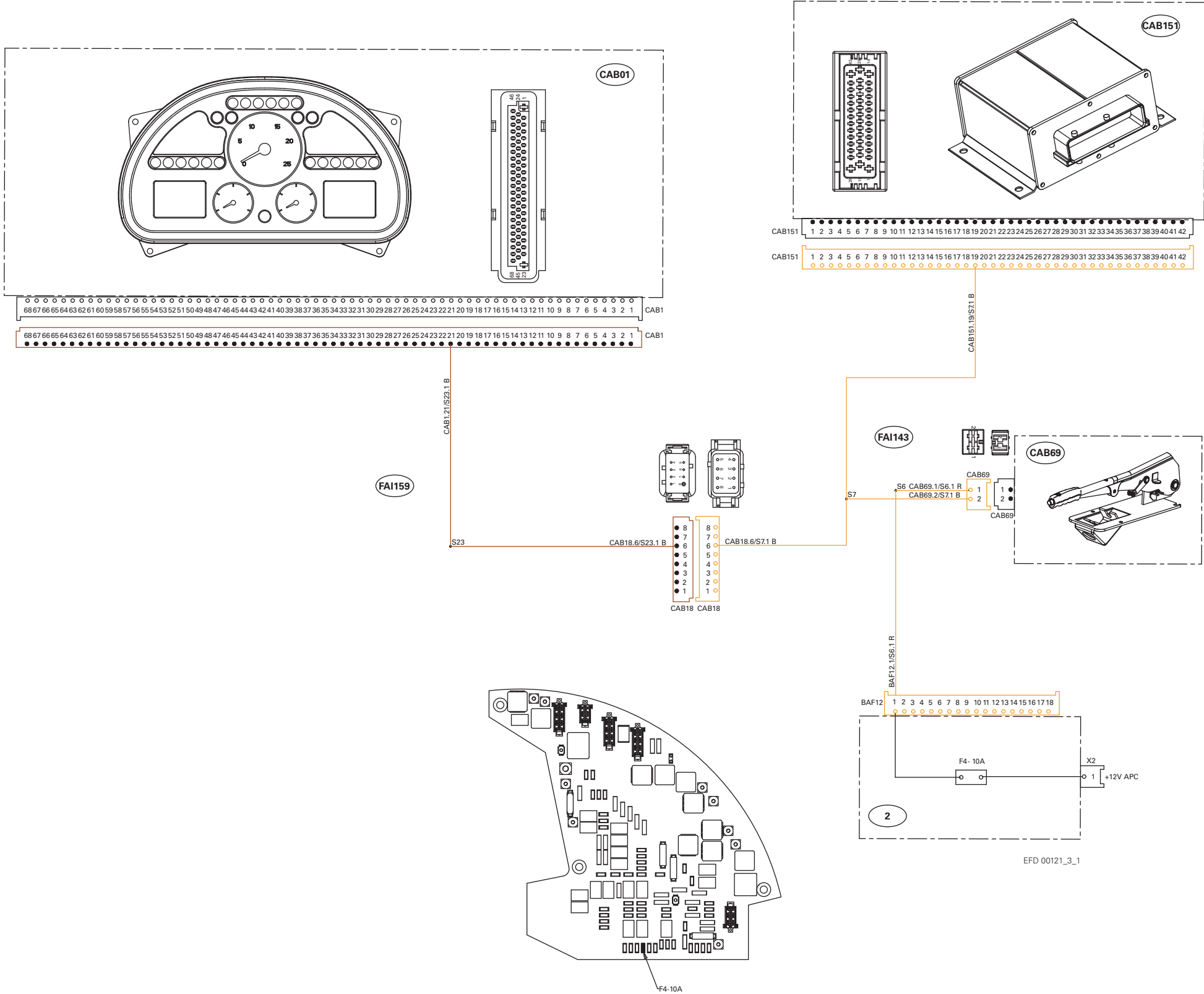


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ELECTRICAL DIAGRAMS - Cab equipment

Parking brake (GBA25 and GBA10-Auto5)

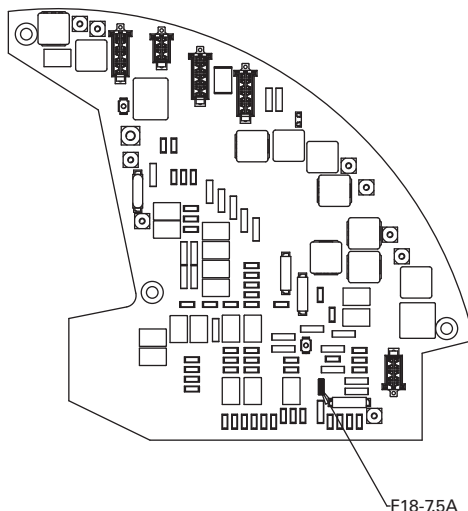
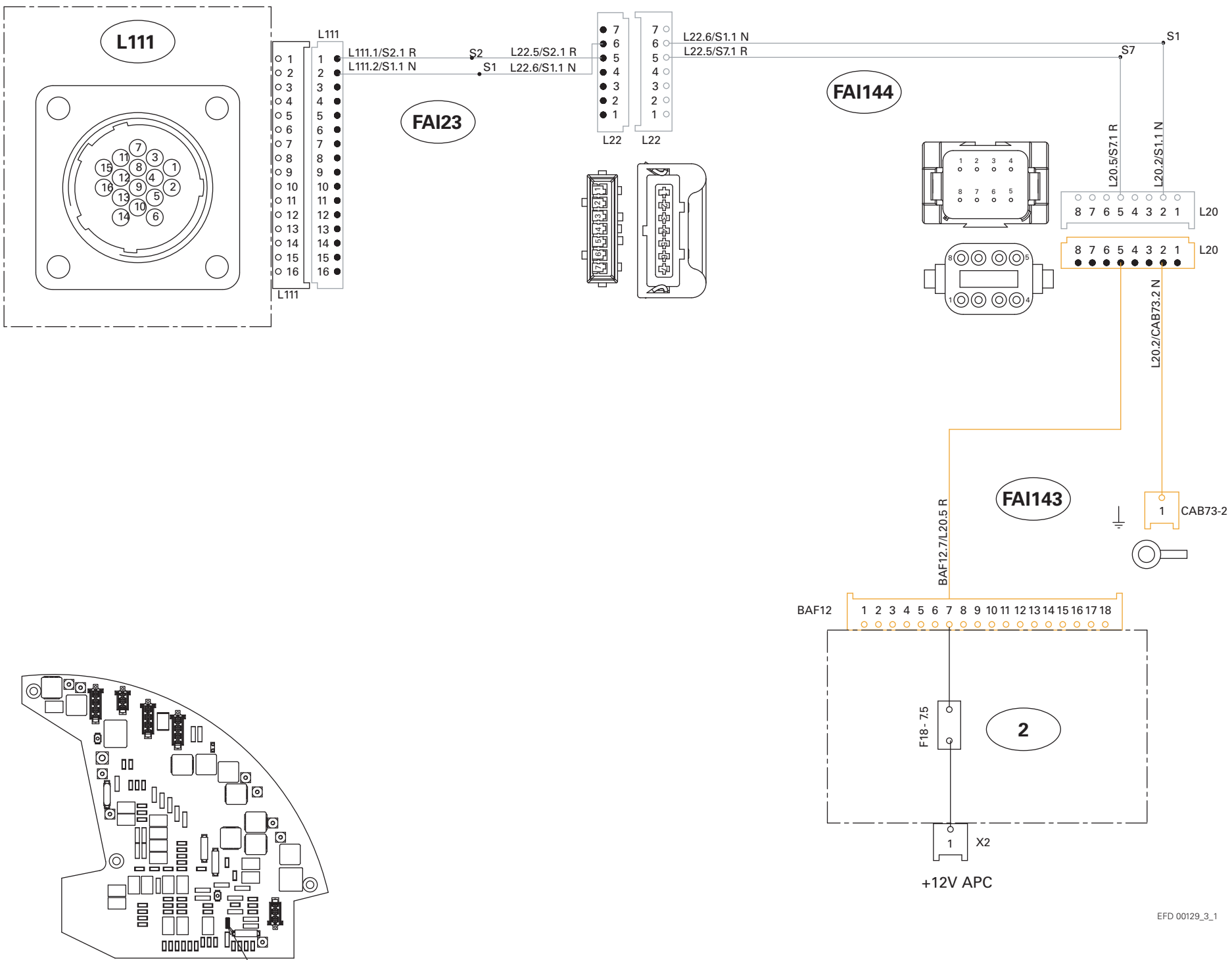
- 2 Fuse box
- FAI 143 Cab transmission harness
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- CAB69 Handbrake switch
- CAB151 Autotronic 5 transmission No.1



ELECTRICAL DIAGRAMS - Cab equipment

Diagnostics connector power supply (GBA25 and GBA10-Auto5)

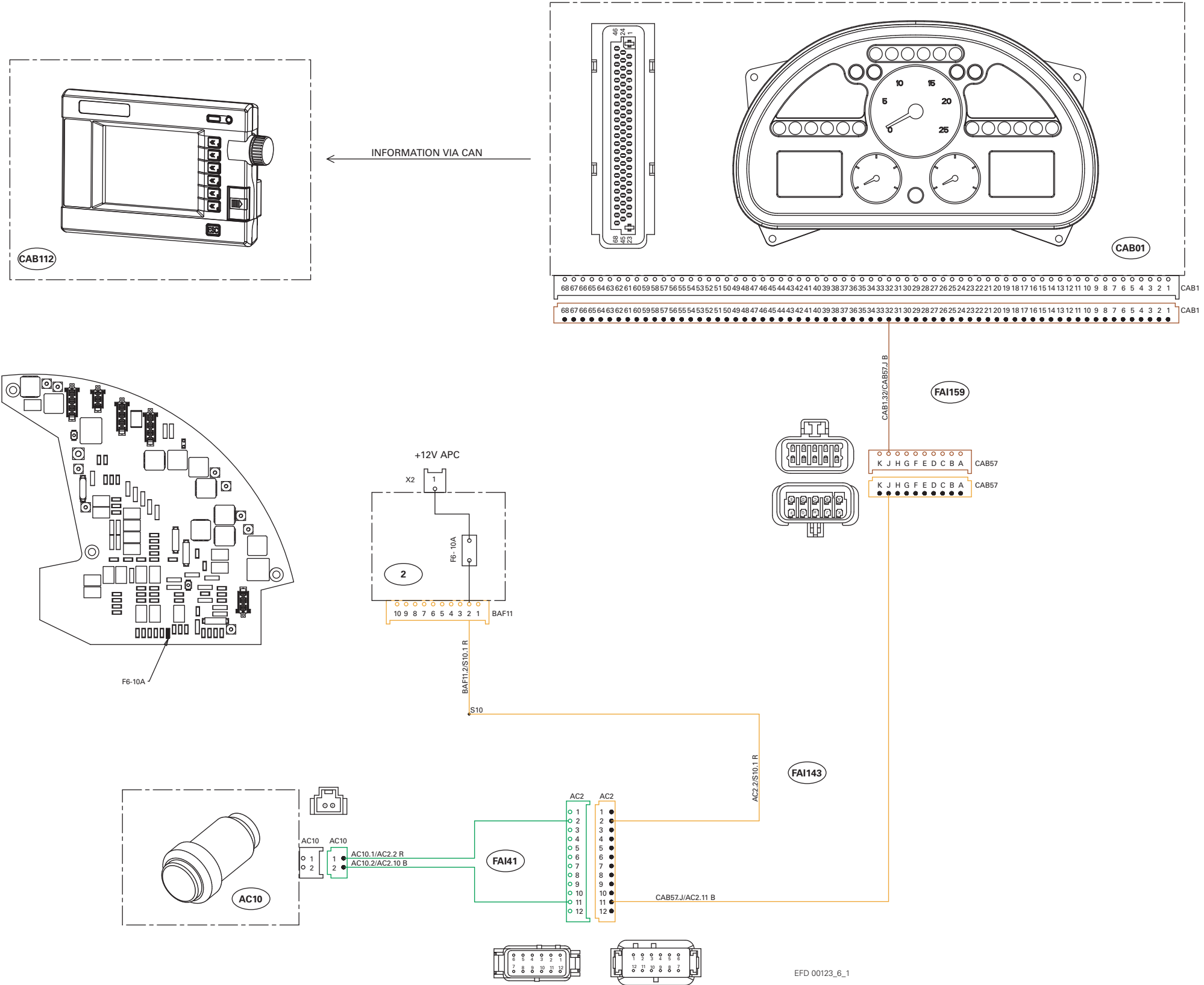
- 2 Fuse box
- FAI 23 Cab linkage harness
- FAI 143 Cab transmission harness
- FAI 144 Cab linkage harness
- L111 16-pin diagnostics connector



EFD 00129_3_1

Headland mode switch (GBA25 and GBA10-Auto5)

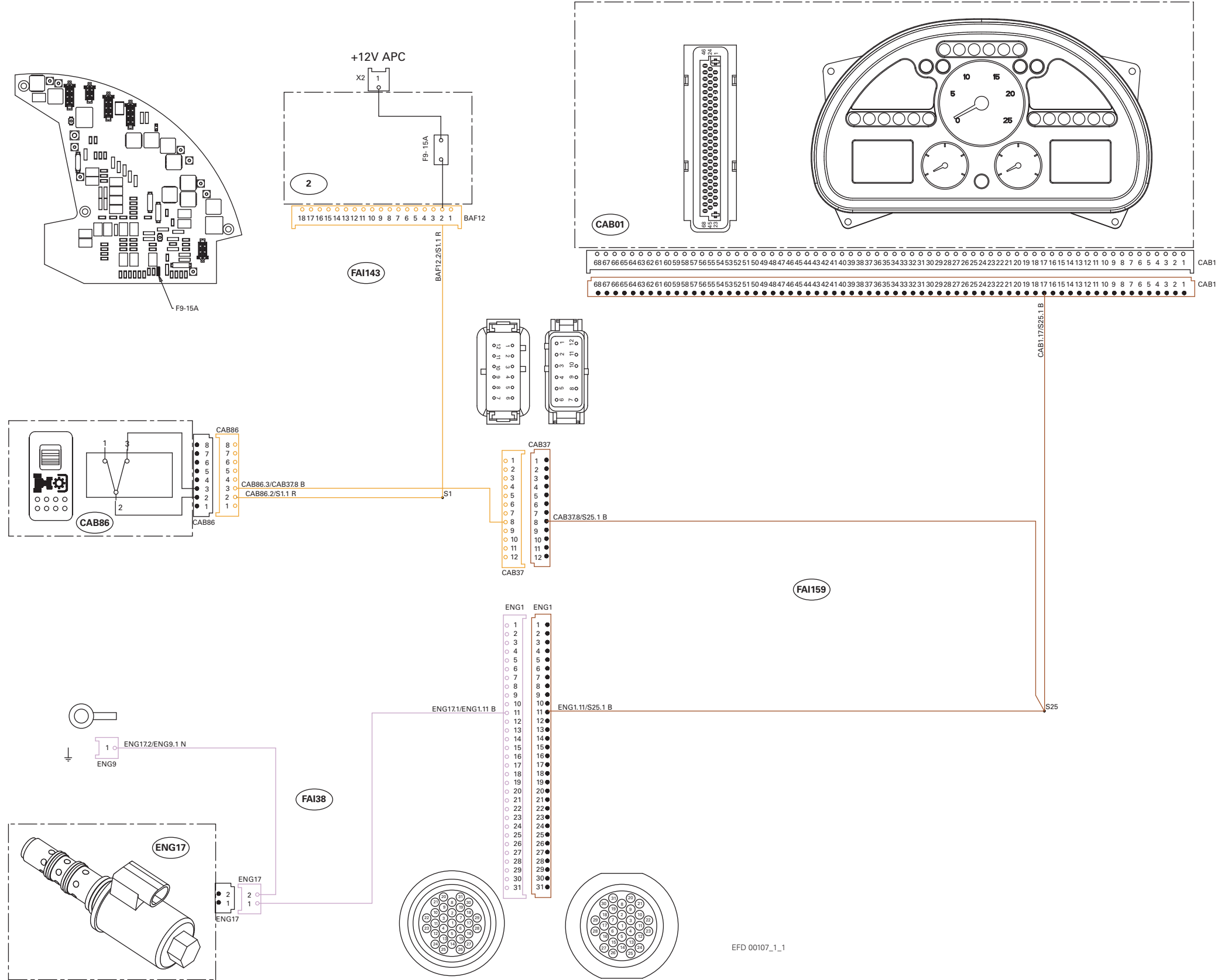
- 2 Fuse box
- FAI 41 Armrest harness
- FAI 143 Cab transmission harness
- FAI 159 Instrument panel harness
- AC10 Headland mode switch
- CAB01 DCC2 instrument panel
- CAB112 Datatronic 3



ELECTRICAL DIAGRAMS - Cab equipment

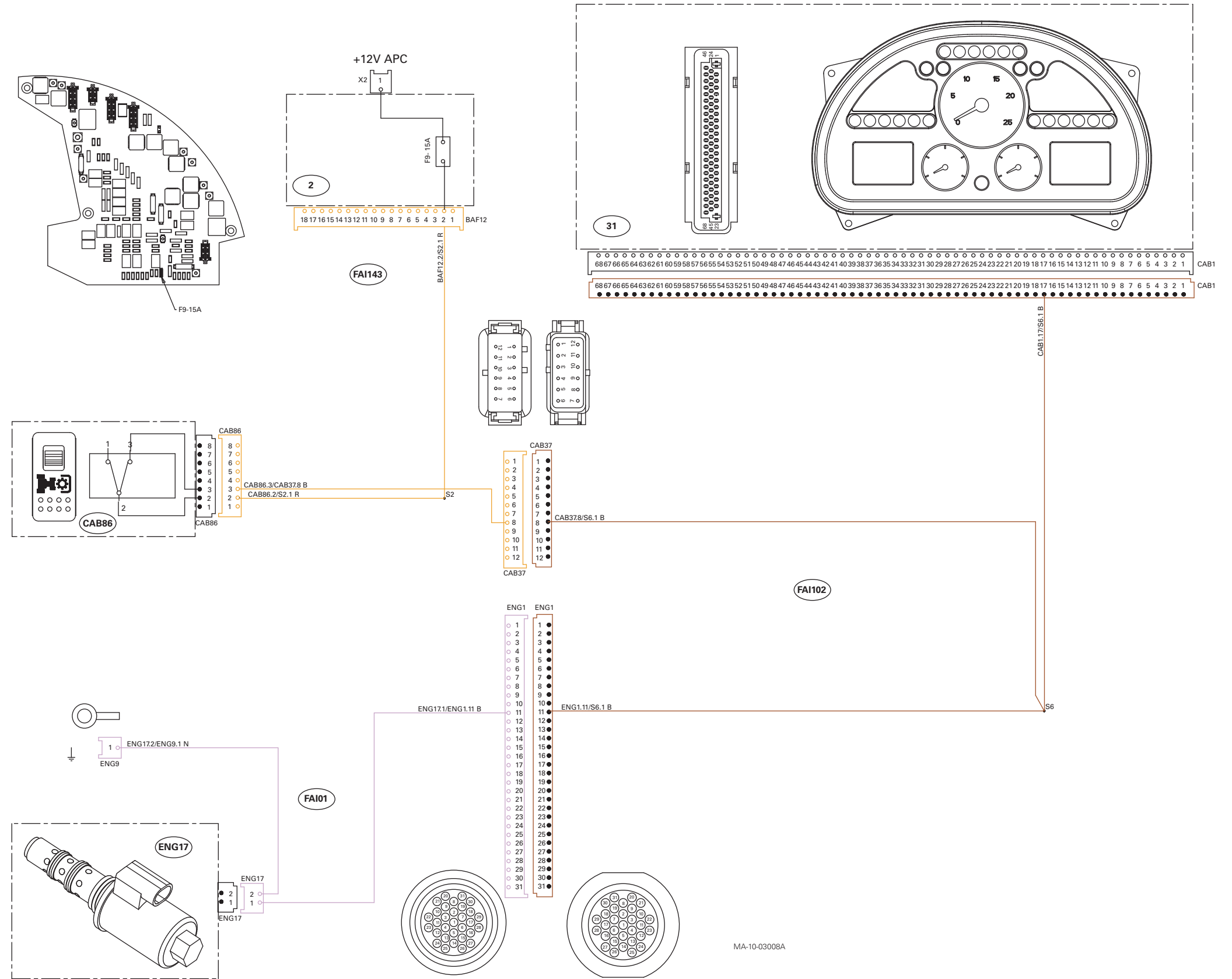
Front power take-off (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 01 Engine harness
- FAI 143 Cab transmission harness
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- CAB86 Front PTO switch
- ENG17 Front PTO solenoid valve



Front power take-off (GBA20 and GBA10)

- 2 Fuse box
- 31 DCC2 instrument panel
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- FAI 03 Console harness
- CAB86 Front PTO switch
- ENG17 Front PTO solenoid valve



ELECTRICAL DIAGRAMS - Cab equipment

10B11 - ELECTRICAL DIAGRAMS - Engine equipment

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A . General	3
B . Electrical panels	5

ELECTRICAL DIAGRAMS - Engine equipment

ELECTRICAL DIAGRAMS - Engine equipment

A . General

Description

The harnesses fitted on the tractor allow data to be exchanged and power to be supplied to the electrical and electronic systems.

The tractor is fitted with 3 different types of power supply:

- +12V Battery (Permanent)
- +12V APC (Ignition key ON)
- +12V ACC (Accessories)

Most harnesses have a maximum of six different wire colours:

- Black: Ground
- Brown: +12V Permanent
- Red: +12V APC (Ignition key ON) and Accessories
- White: Information
- Yellow: CAN High
- Green: CAN Low

The CAN network wires (yellow and green) are twisted together.

- Components with only one connector are identified by the connector name:

CAB03 - Road lights switch (Fig. 1).

- All wires can be identified by the pins of the outgoing and incoming connectors of the harness:

CAB3.7/CAB28.1 : The wire connects pin 7 of the CAB03 connector to pin 1 of the CAB28 connector

- The detail of pins allocation for each connector is shown on the harness side

- The wire colour is indicated: CAB3.7/CAB28.1 N, the wire is black.

List of colours:

- N: Black
- M: Brown
- R: Red
- B: White
- J: Yellow
- V: Green

- The splices inside the harnesses are indicated by a dot and the letter S (S2).

In general, the components or connectors are named in order to indicate the corresponding elements of the tractor:

AC##	Armrest
BAF##	Fuse box
CA##	Automatic air conditioning
CAB##	Cab
ENG##	Engine
FA##	Suspended front axle
L##	Linkage - ParkLock (HA)
LIG##	Lighting
R##	Linkage and roof
ROOF##	Roof
TR##	Transmission
V#	Electrohydraulic spool valve
X#	Round battery cable terminal on fuse box

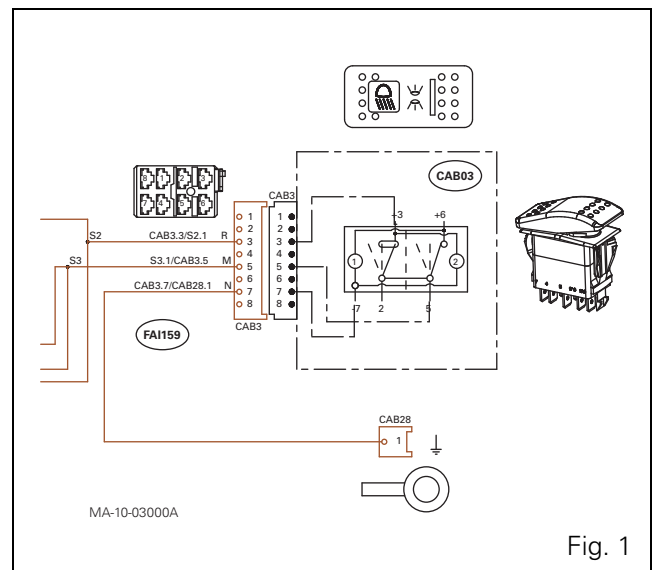


Fig. 1

ELECTRICAL DIAGRAMS - Engine equipment

Layout

5 Deutsch connectors (31-way) are connected to the cab:

- 2 on the front panel Fig. 2)
- 3 at the bottom rear right-hand side of the cab (Fig. 3).

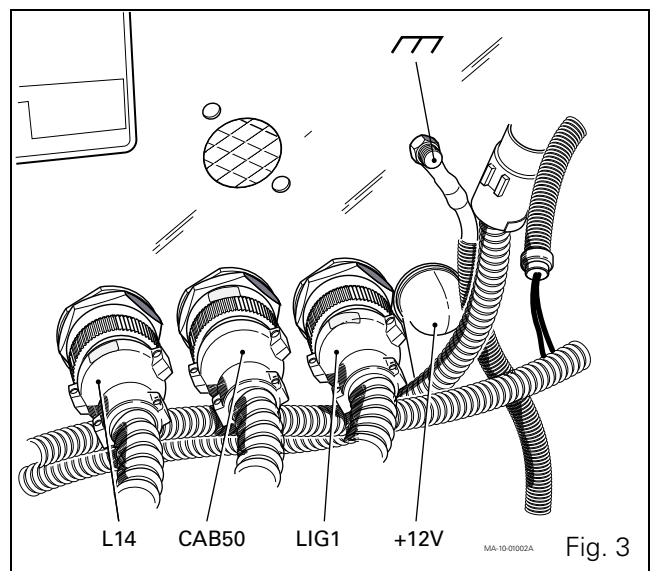
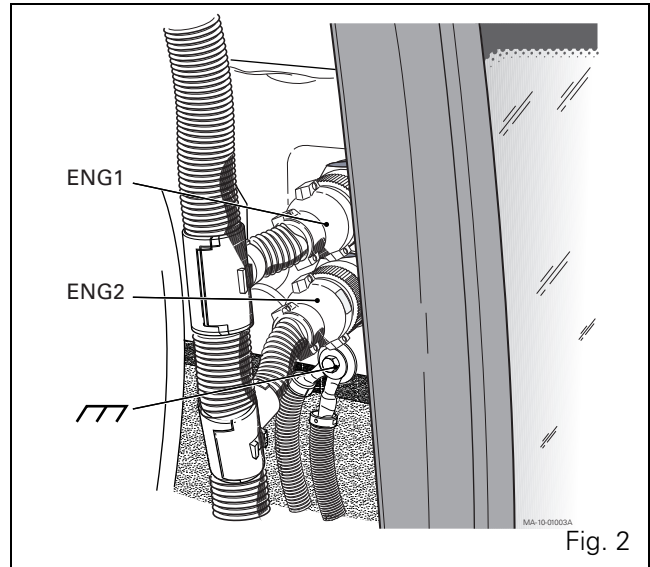
Fig. 2 :

All these connectors belong to the engine harness. ENG2 is dedicated to information concerning the electronic injection.

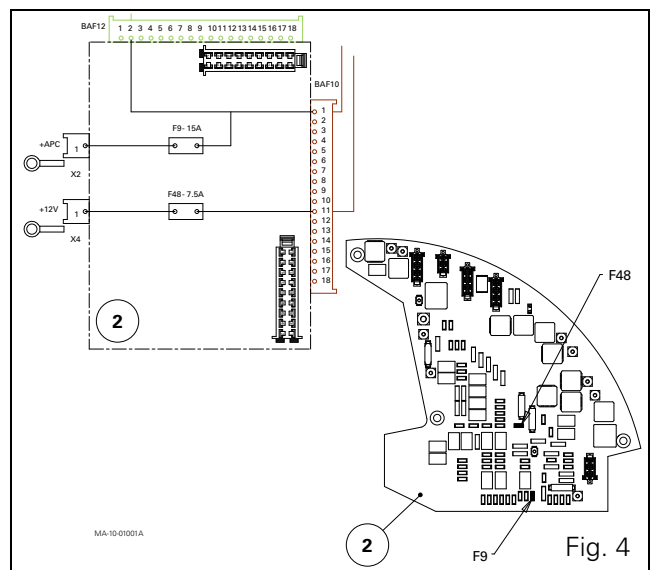
Fig. 3 :

Always in the following order (regardless of tractor configuration and options), from left to right:

- L14 Linkage harness junction
- CAB50 Transmission harness junction
- LIG1 Lighting harness junction



The fuses and relays of the electrical or electronic board (Fig. 4) are indicated by a black mark on their locations on the fuse box (2).



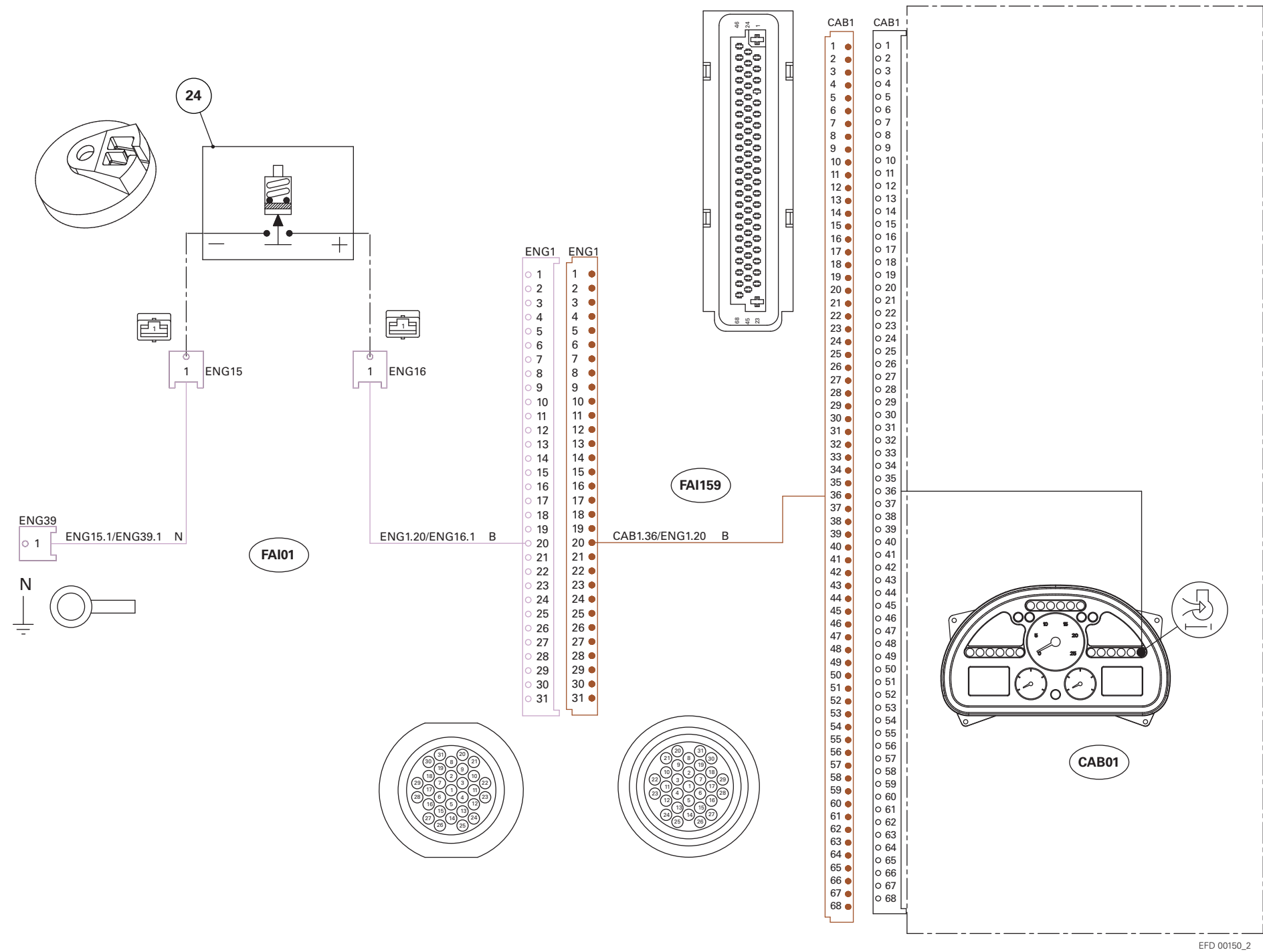
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Air filter vacuum sensor (GBA25 and GBA10-Auto5)

- 24 Air filter vacuum sensor
- FAI 01 Engine harness
- FAI 159 Instrument panel harness

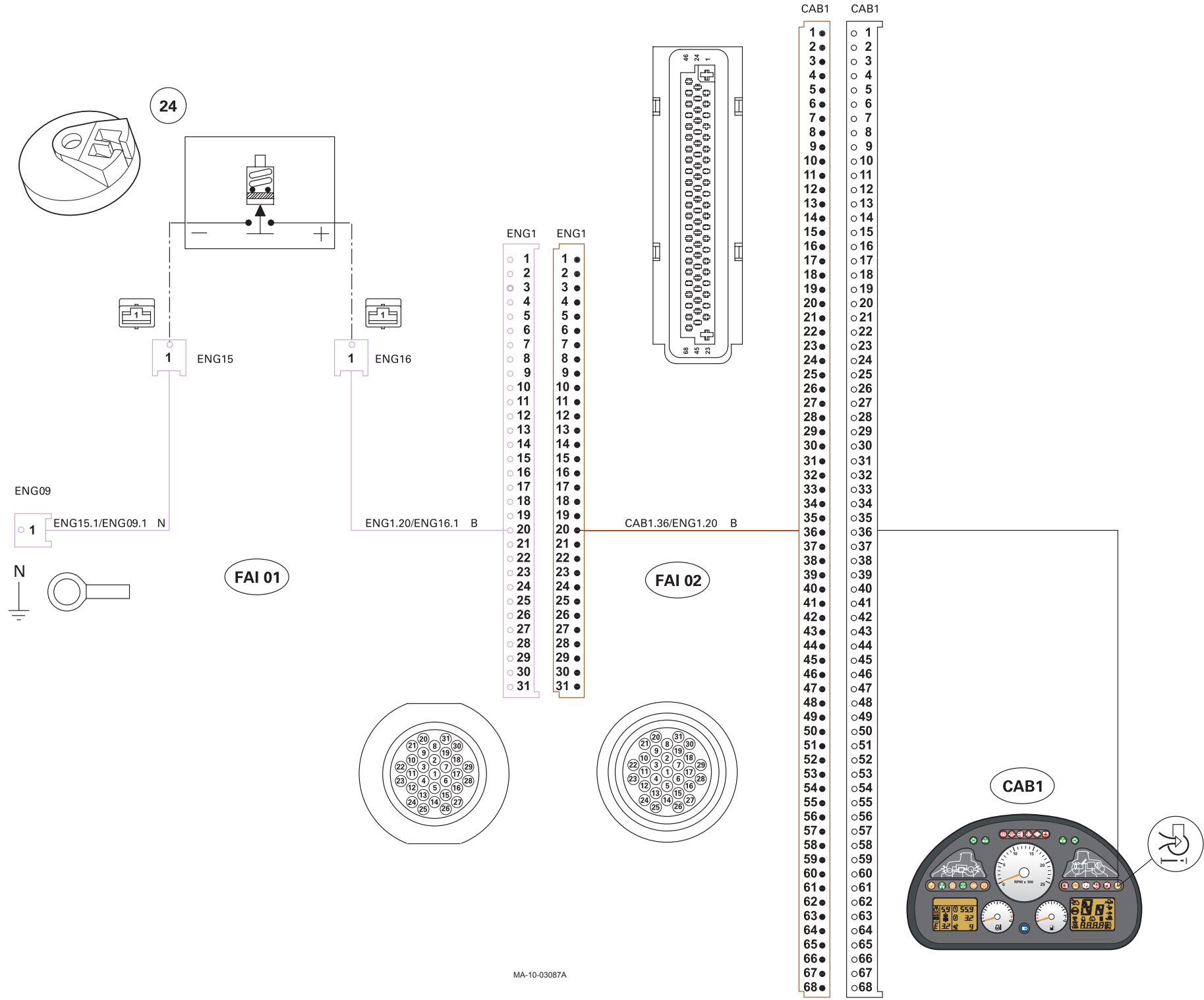


EFD 00150_2

ELECTRICAL DIAGRAMS - Engine equipment

Air filter vacuum sensor (GBA20 and GBA10)

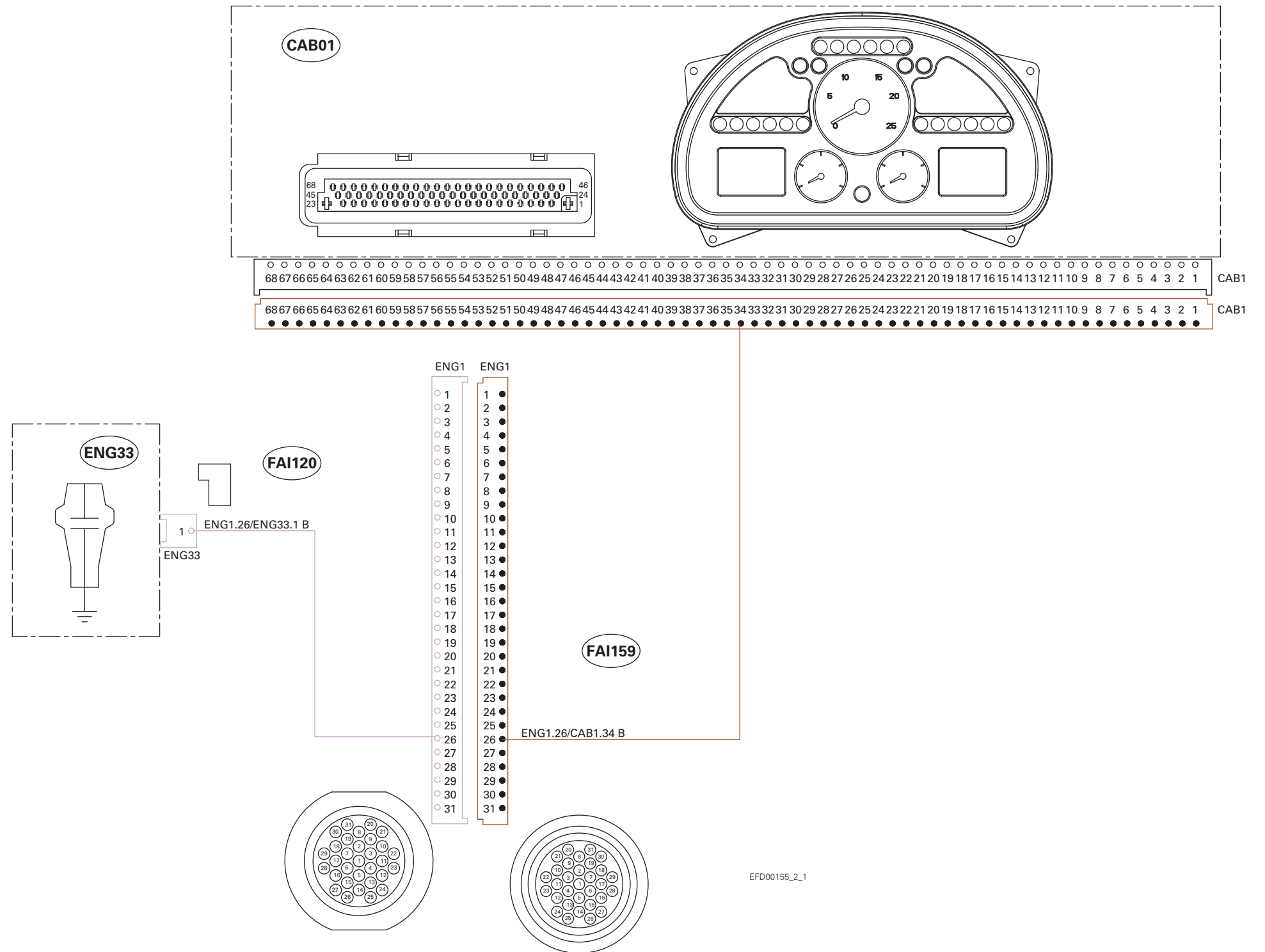
- 24 Air filter vacuum sensor
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- CAB1 Instrument panel (DCC2)



MA-10-03087A

Engine oil pressure—four-cylinder Perkins engine with mechanical injection (GBA25)

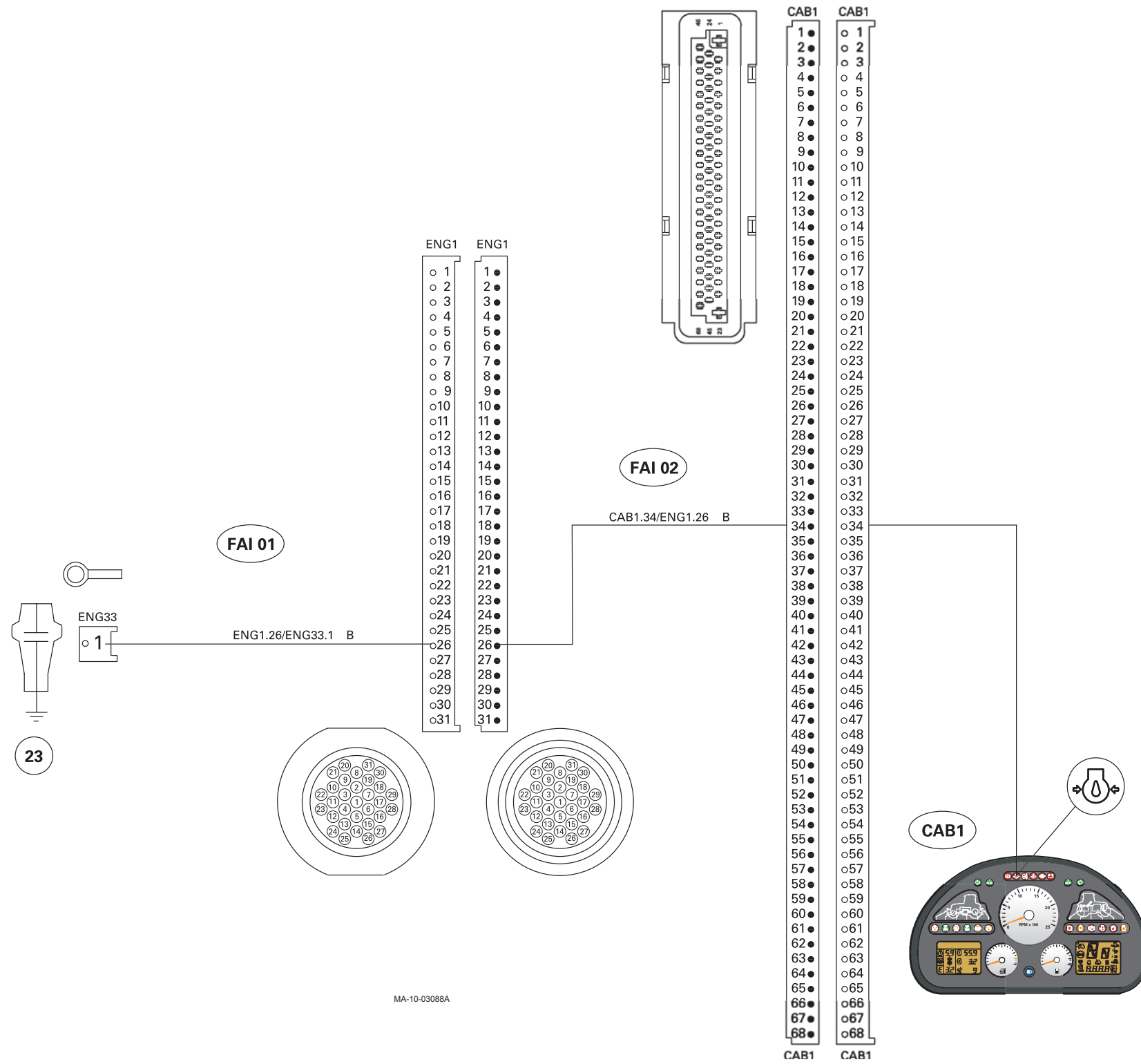
- FAI 120 Perkins engine harness
- FAI159 Instrument panel harness
- CAB01 DCC2 instrument panel
- ENG33 Engine oil pressure sensor



ELECTRICAL DIAGRAMS - Engine equipment

Engine oil pressure sensor (GBA20 and GBA10)

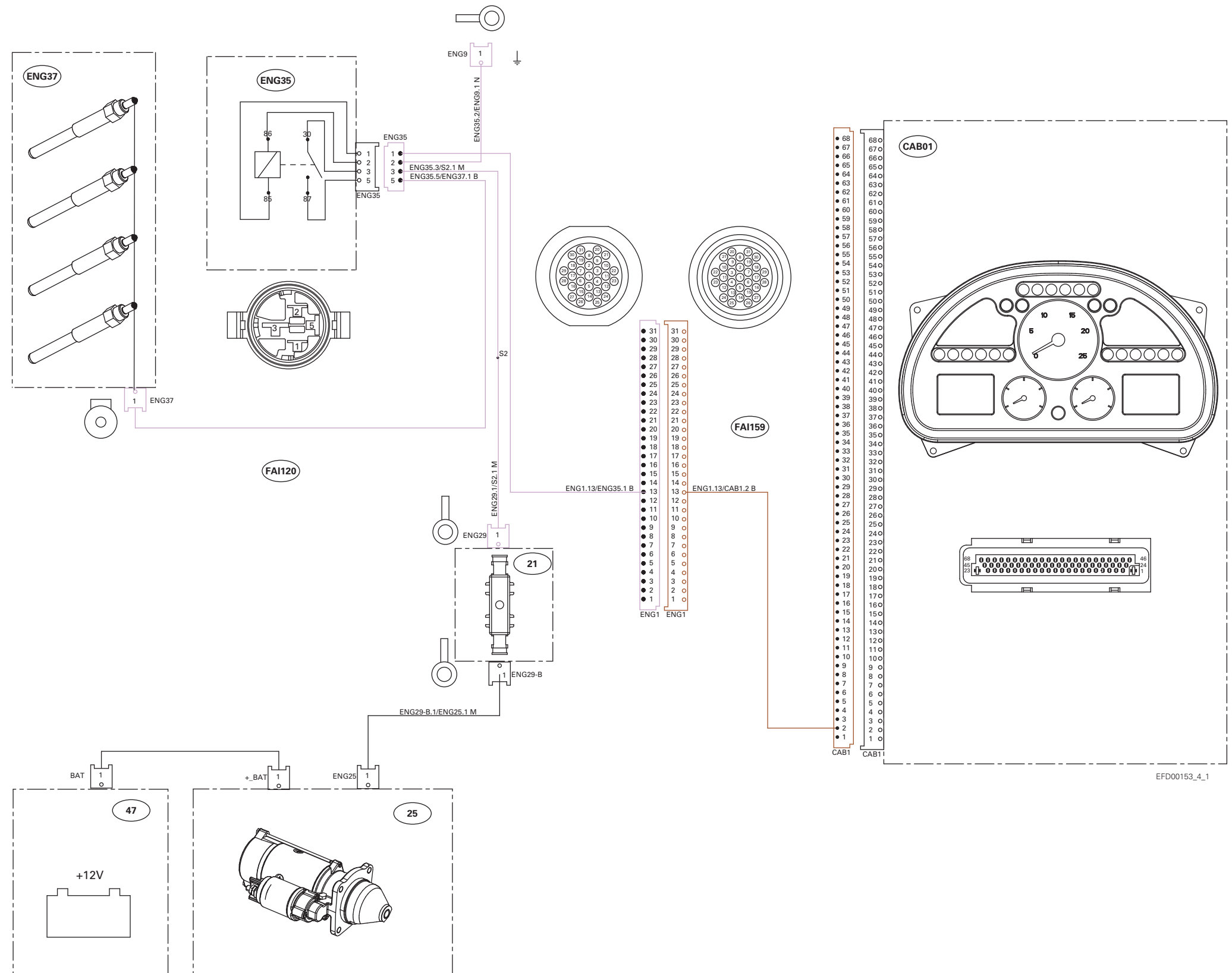
- 23 Oil pressure sensor
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- CAB1 Instrument panel (DCC2)



MA-10-03088A

Thermostart—Perkins engine with mechanical injection (GBA25)

- 21 Line fuse
- 25 Starter
- 47 Battery
- FAI 120 Perkins engine harness
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- ENG35 Preheater relay
- ENG37 Preheater glow plugs

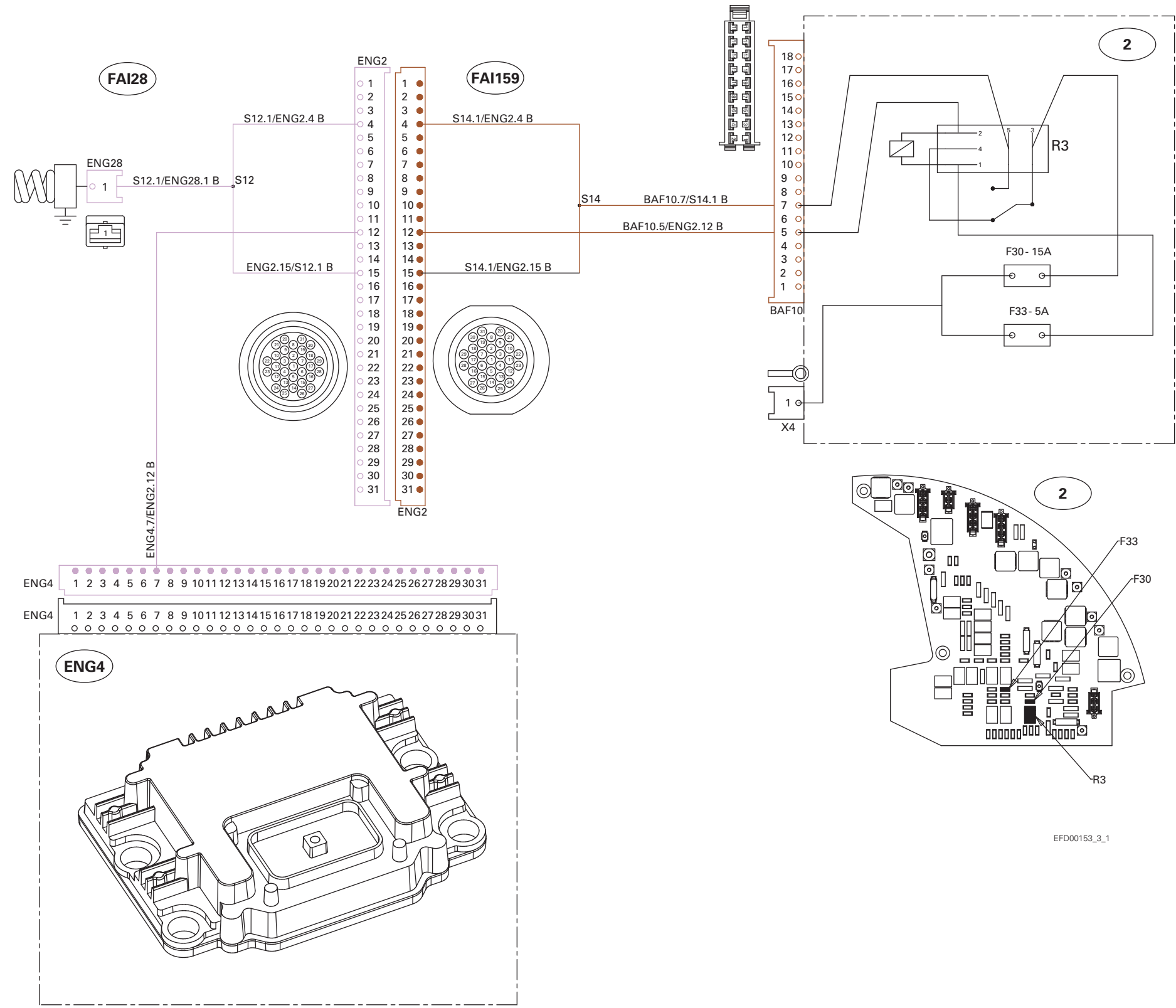


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ELECTRICAL DIAGRAMS - Engine equipment

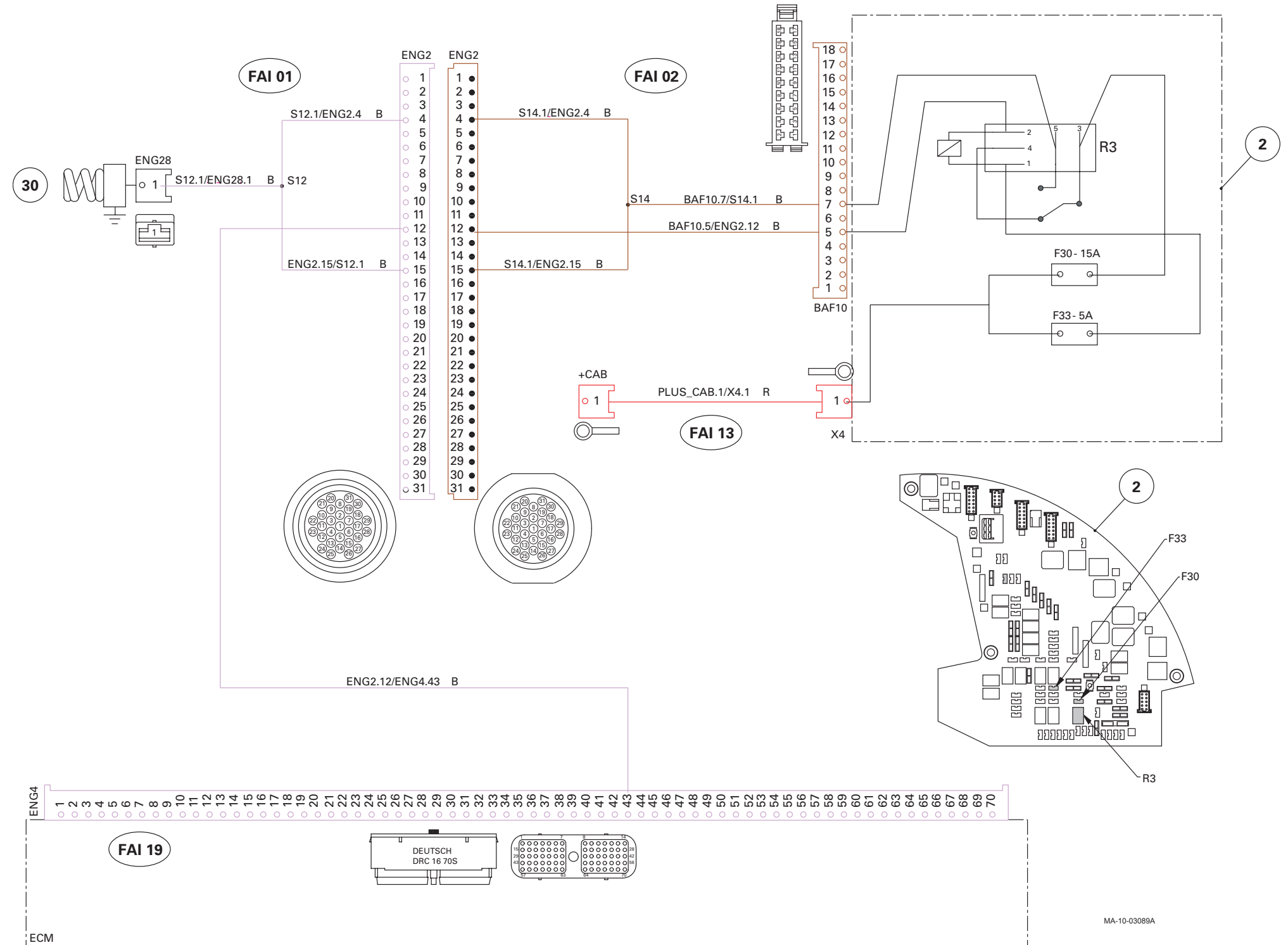
Thermostart—Perkins electronic injection (GBA25)

- 2 Fuse box
- FAI 28 Perkins EEM engine harness
- FAI 159 Instrument panel harness
- ENG4 Electronic injection harness junction



Thermostart—Perkins (GBA20) engine

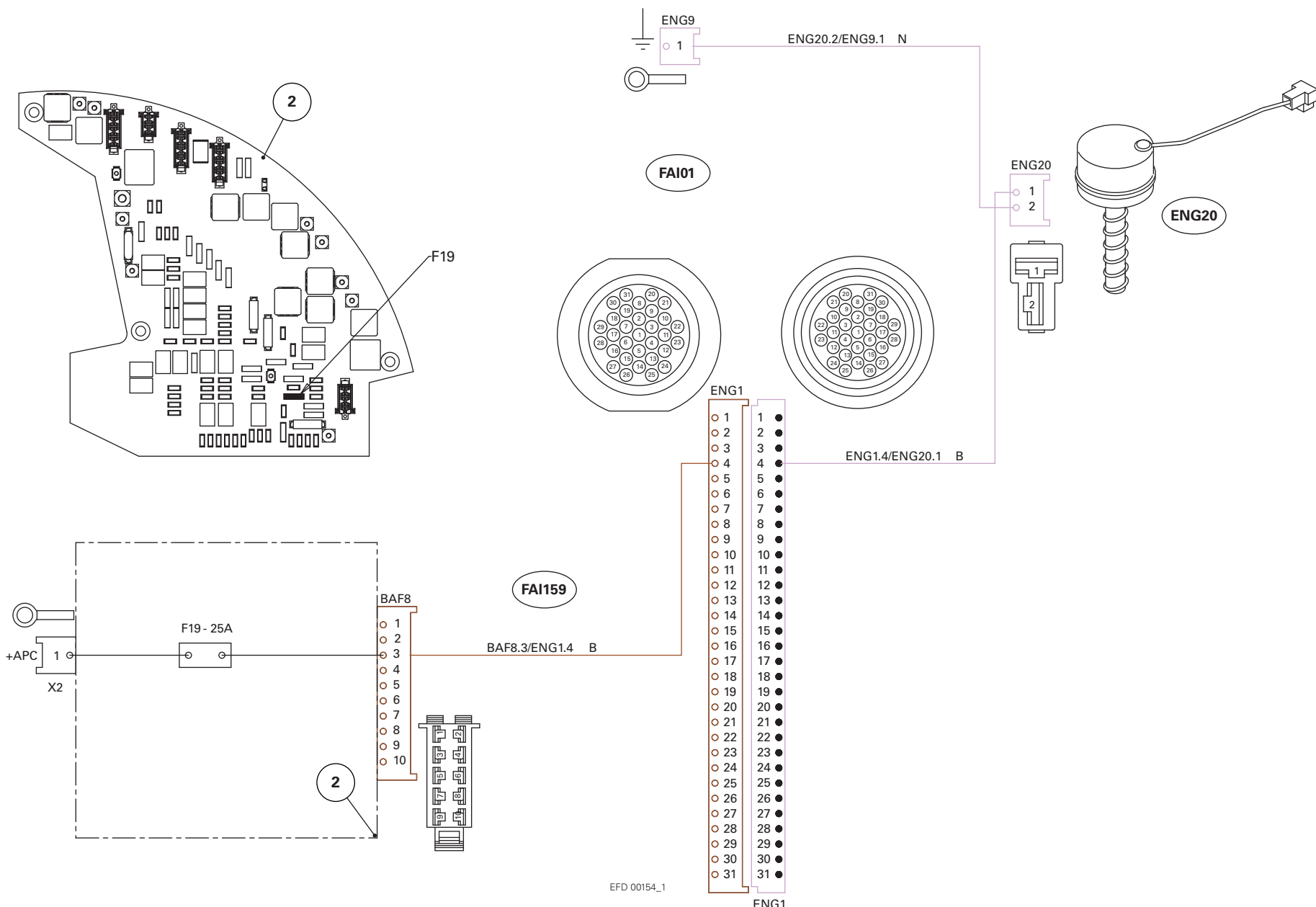
- 2 Fuse box
- 30 Thermostart
- FAI 01 Perkins EEM engine harness
- FAI 02 Instrument panel harness
- FAI 13 Fuse box supply harness
- FAI 19 Electronic injection harness connection



ELECTRICAL DIAGRAMS - Engine equipment

Fuel preheater (GBA25 and GBA10-Auto5)

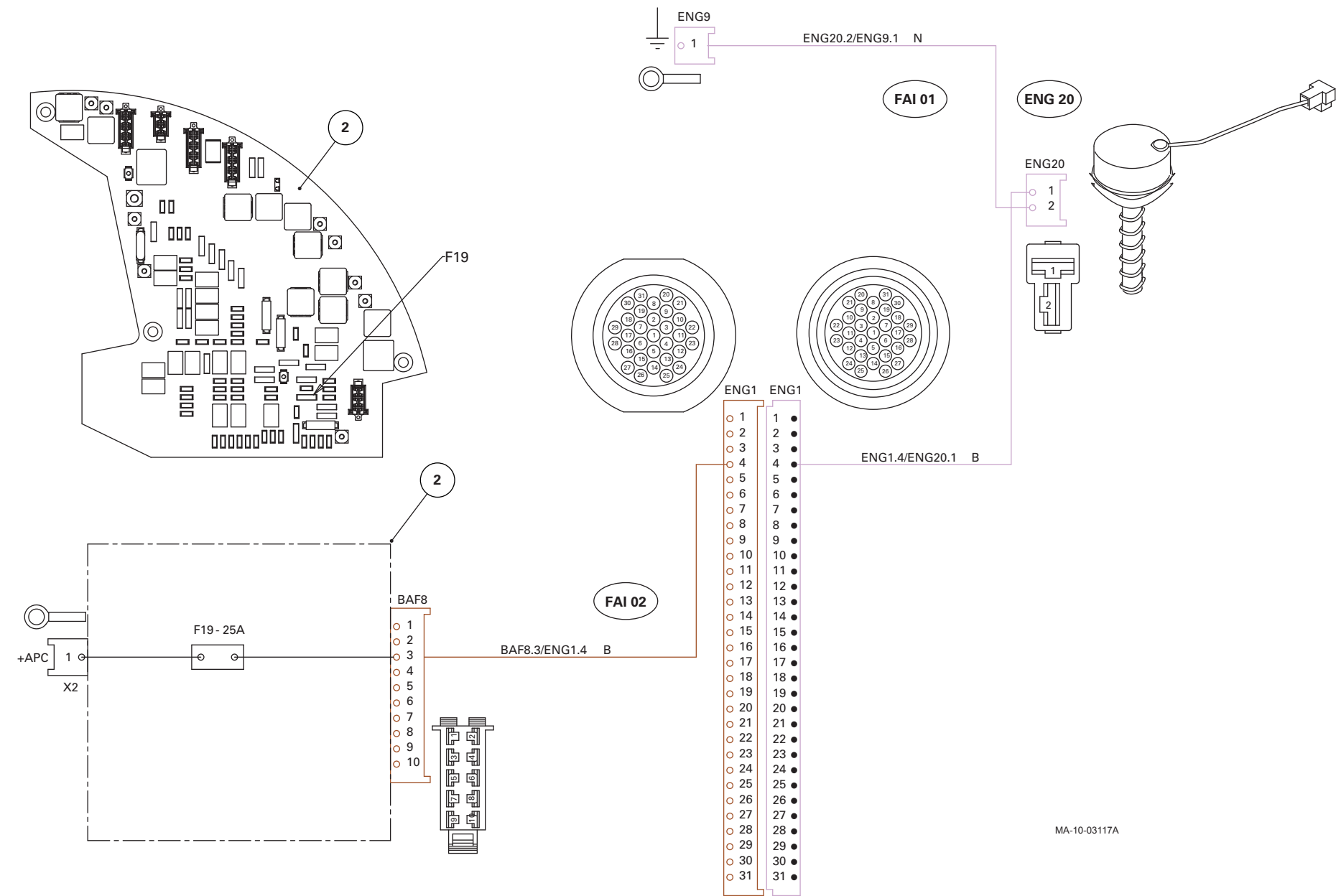
- 2 Fuse box
- FAI 01 Engine harness
- FAI 159 Instrument panel harness
- ENG20 Fuel preheater



EFD 00154_1

Fuel preheater (GBA20 and GBA10)

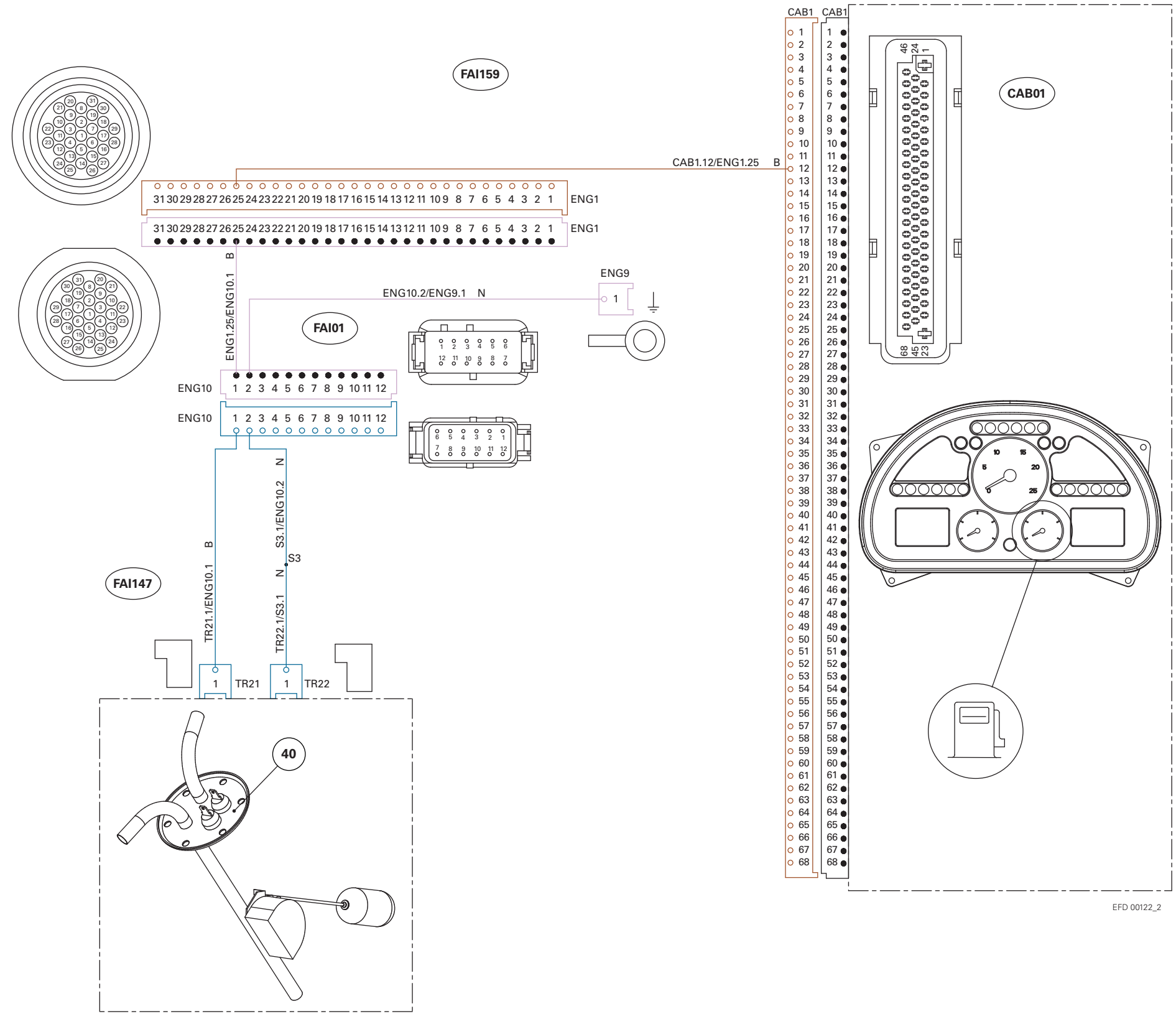
- 2 Fuse box
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- ENG20 Fuel preheater



ELECTRICAL DIAGRAMS - Engine equipment

Fuel gauge (GBA25 and GBA10-Auto5)

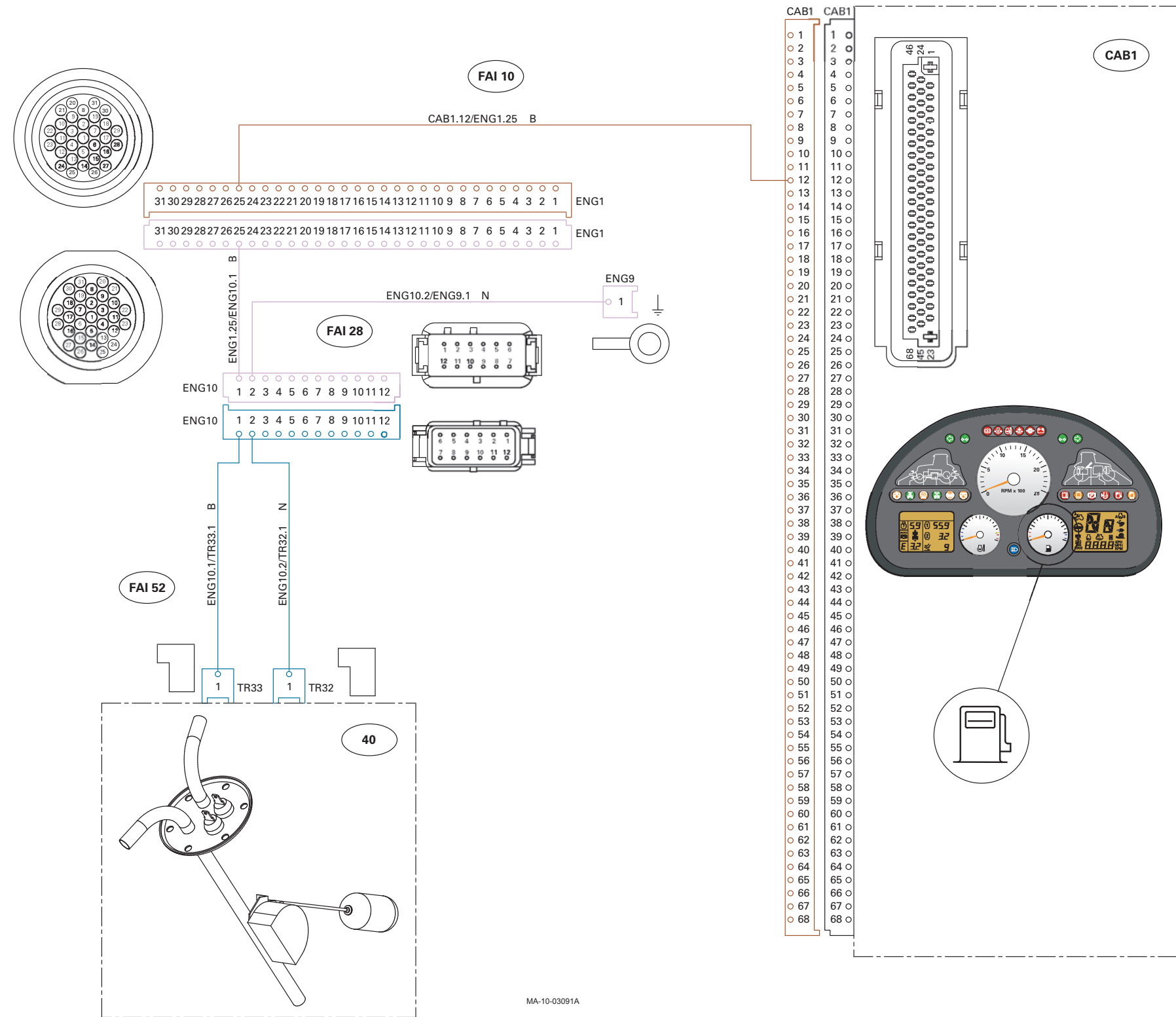
- 40 Fuel gauge
- FAI 01 Engine harness
- FAI 147 Transmission harness
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel



EFD 00122_2

Fuel gauge (GBA20 and GBA10)

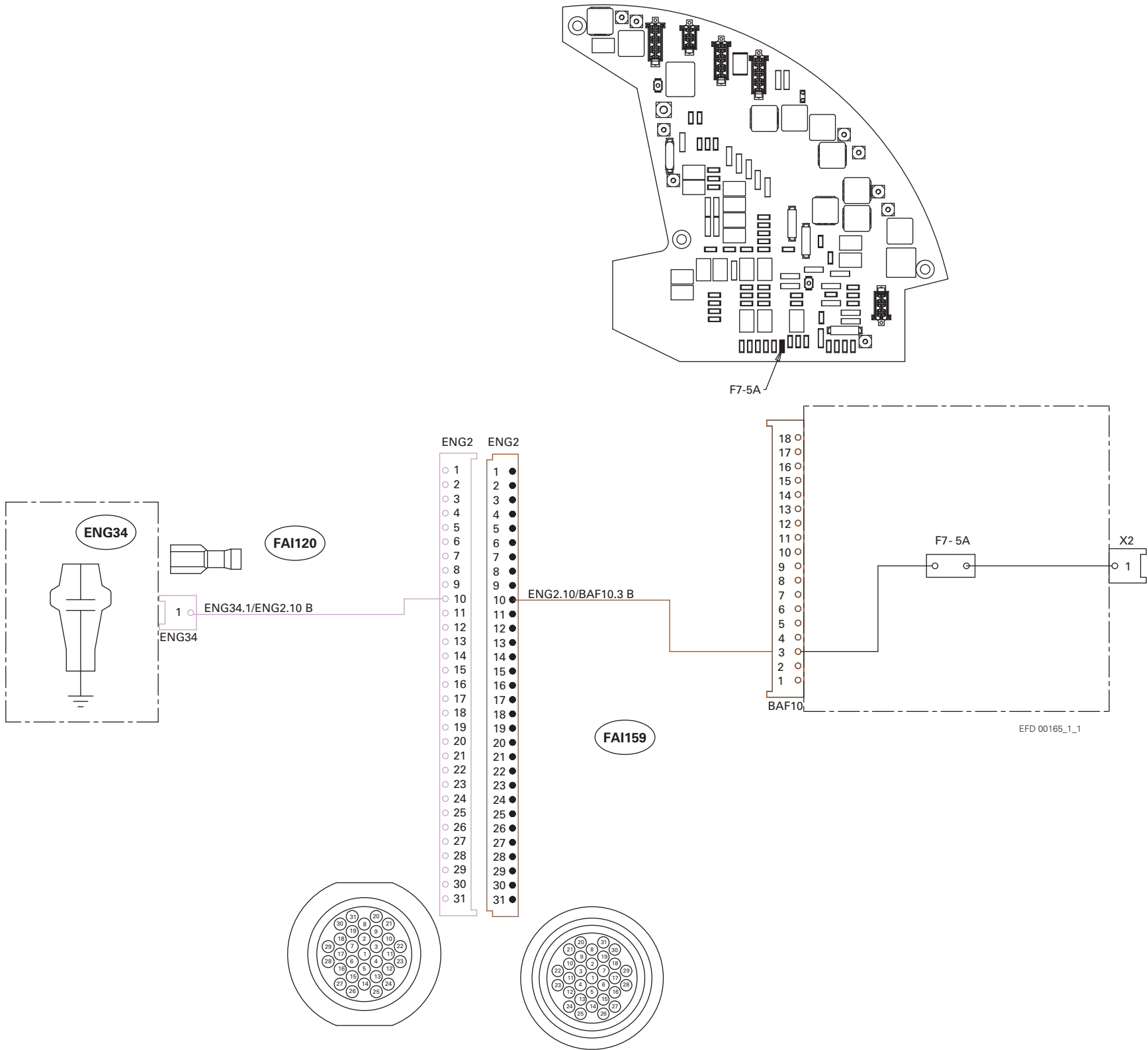
- 40 Fuel gauge
- FAI 10 Dynashift with EEM—instrument panel harness
- FAI 28 Perkins EEM engine harness
- FAI 52 GPA40 and GPA 30 transmission harness—LS hydraulics without Parklock (GPA40)
- CAB1 Instrument panel (DCC2)



ELECTRICAL DIAGRAMS - Engine equipment

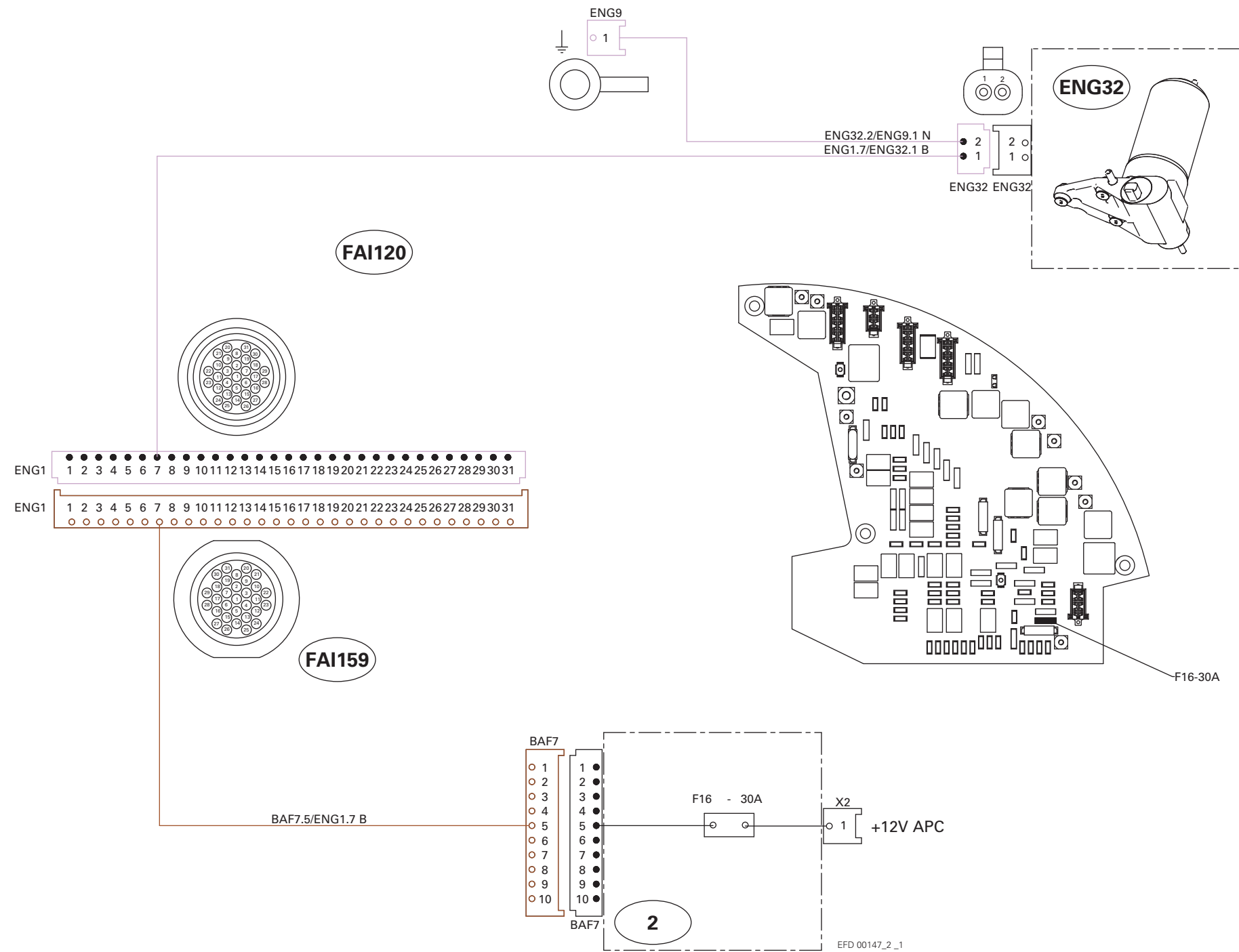
Temperature switch—four-cylinder Perkins engine with mechanical injection (GBA25)

- 2 Fuse box
- FAI 120 Perkins engine harness
- FAI 159 Instrument panel harness
- ENG34 Temperature switch



Booster pump—four-cylinder Perkins engine with mechanical injection (GBA25)

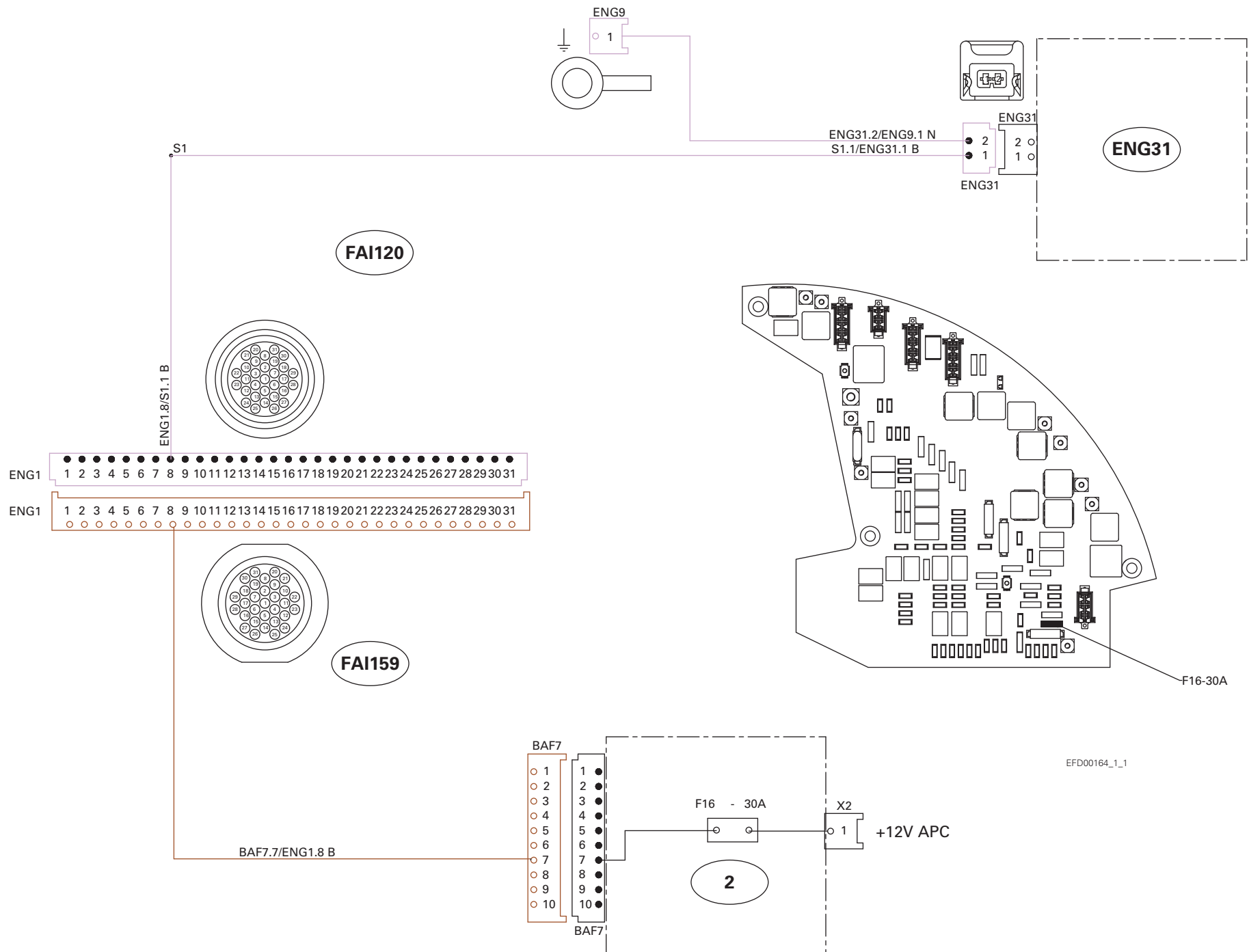
- 2 Fuse box
- FAI 120 Perkins engine harness
- FAI 159 Instrument panel harness
- ENG32 Booster pump



ELECTRICAL DIAGRAMS - Engine equipment

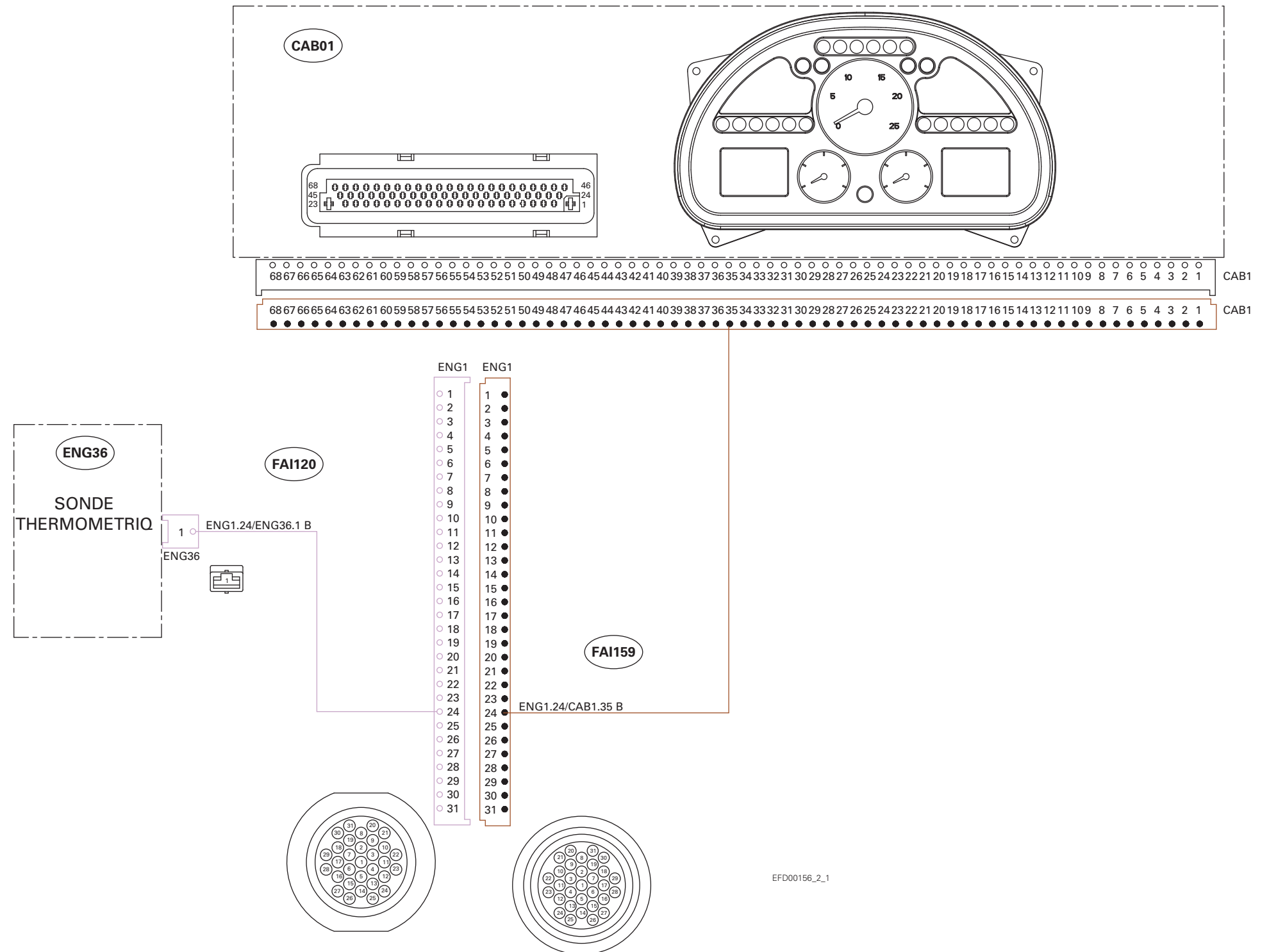
Mechanical injection pump solenoid valve—four-cylinder Perkins engine (GBA25)

- 2 Fuse box
- FAI 120 Perkins engine harness
- FAI 159 Instrument panel harness
- ENG31 Injection pump solenoid valve



Engine coolant temperature—four-cylinder Perkins engine with mechanical injection (GBA25)

- FAI 120 Perkins engine harness
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- ENG36 Coolant temperature sensor

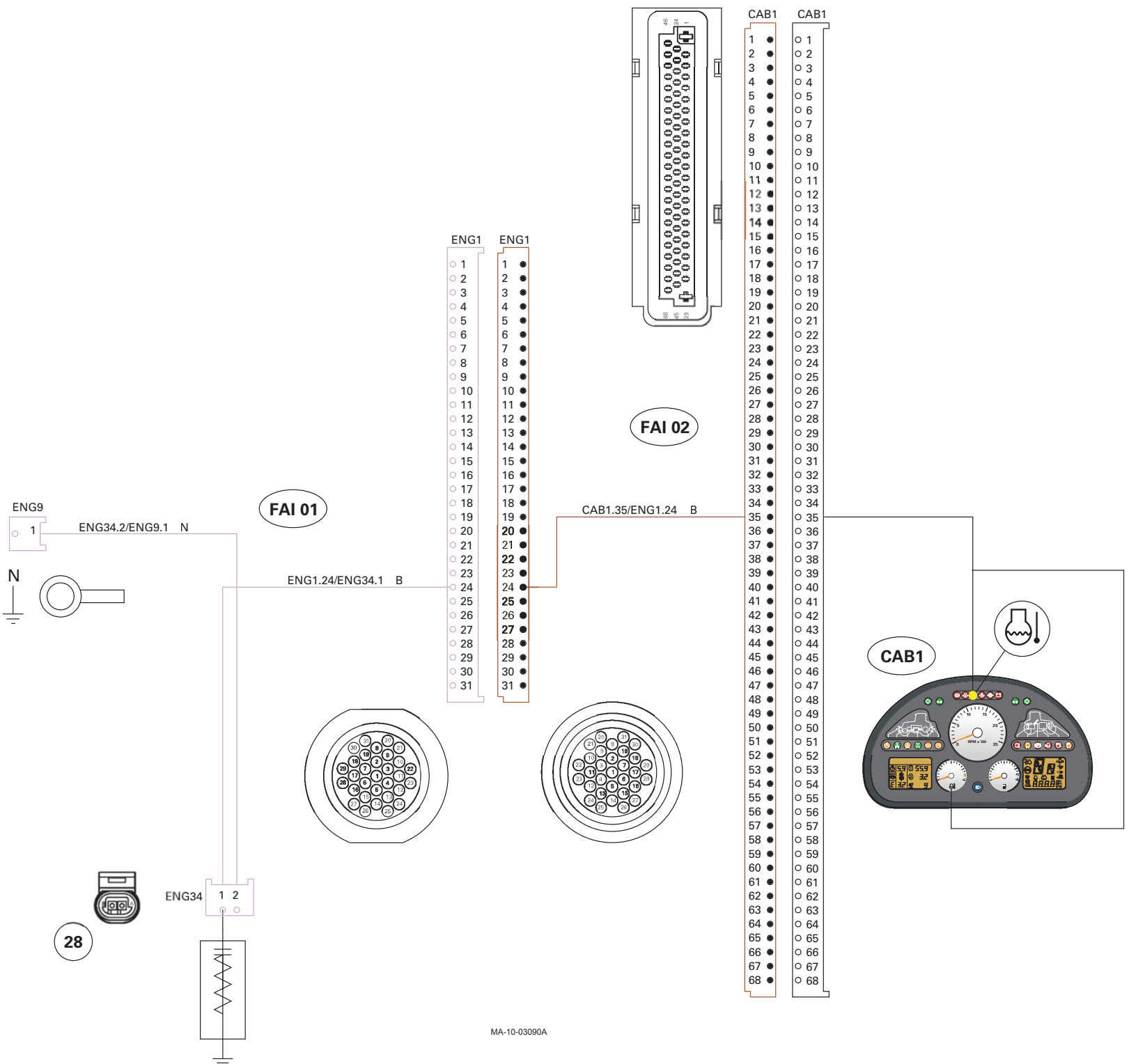


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ELECTRICAL DIAGRAMS - Engine equipment

Engine coolant temperature—four-cylinder Perkins engine with mechanical injection (GBA20)

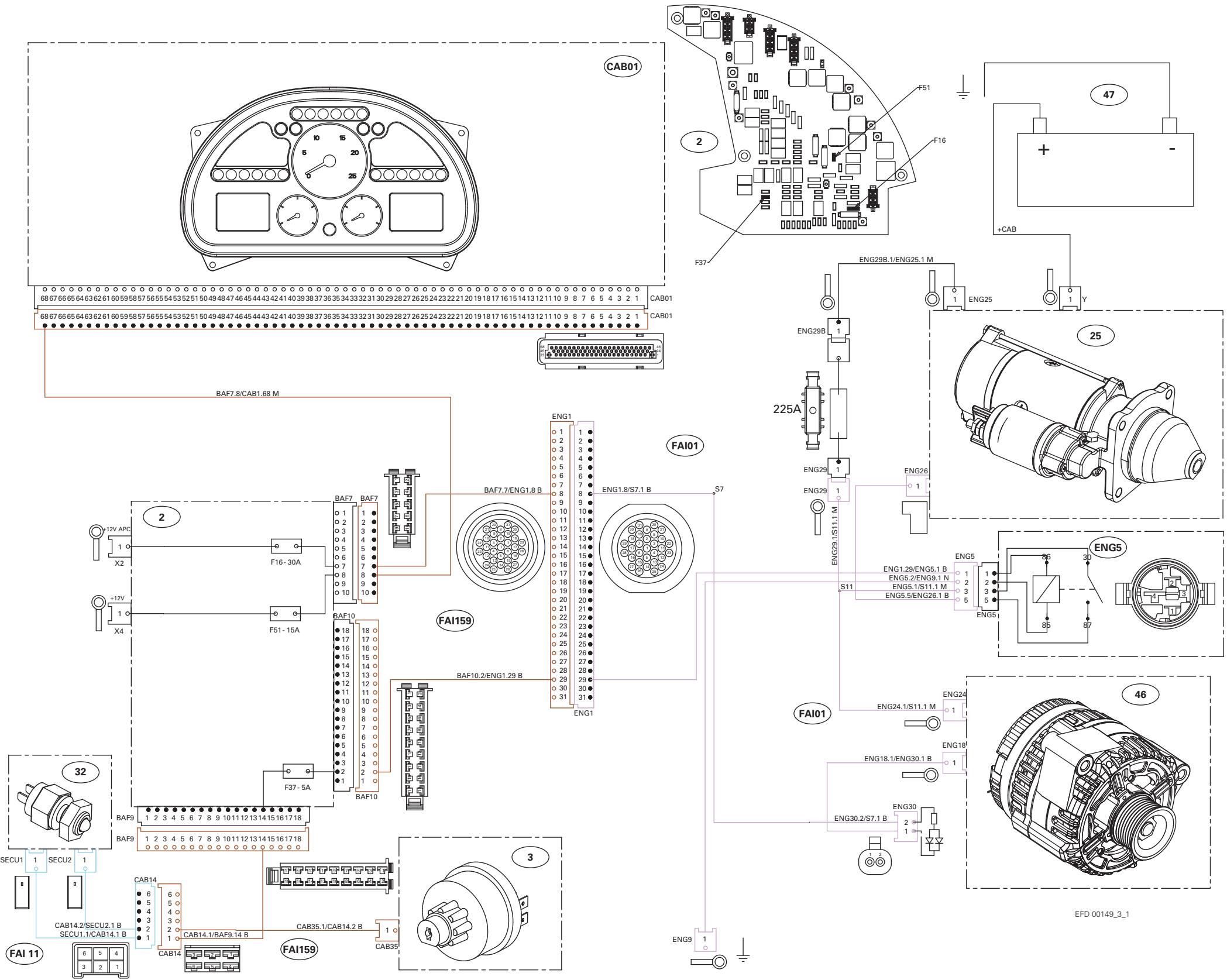
- 28 Coolant temperature sensor
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- CAB1 Instrument panel (DCC2)



ELECTRICAL DIAGRAMS - Engine equipment

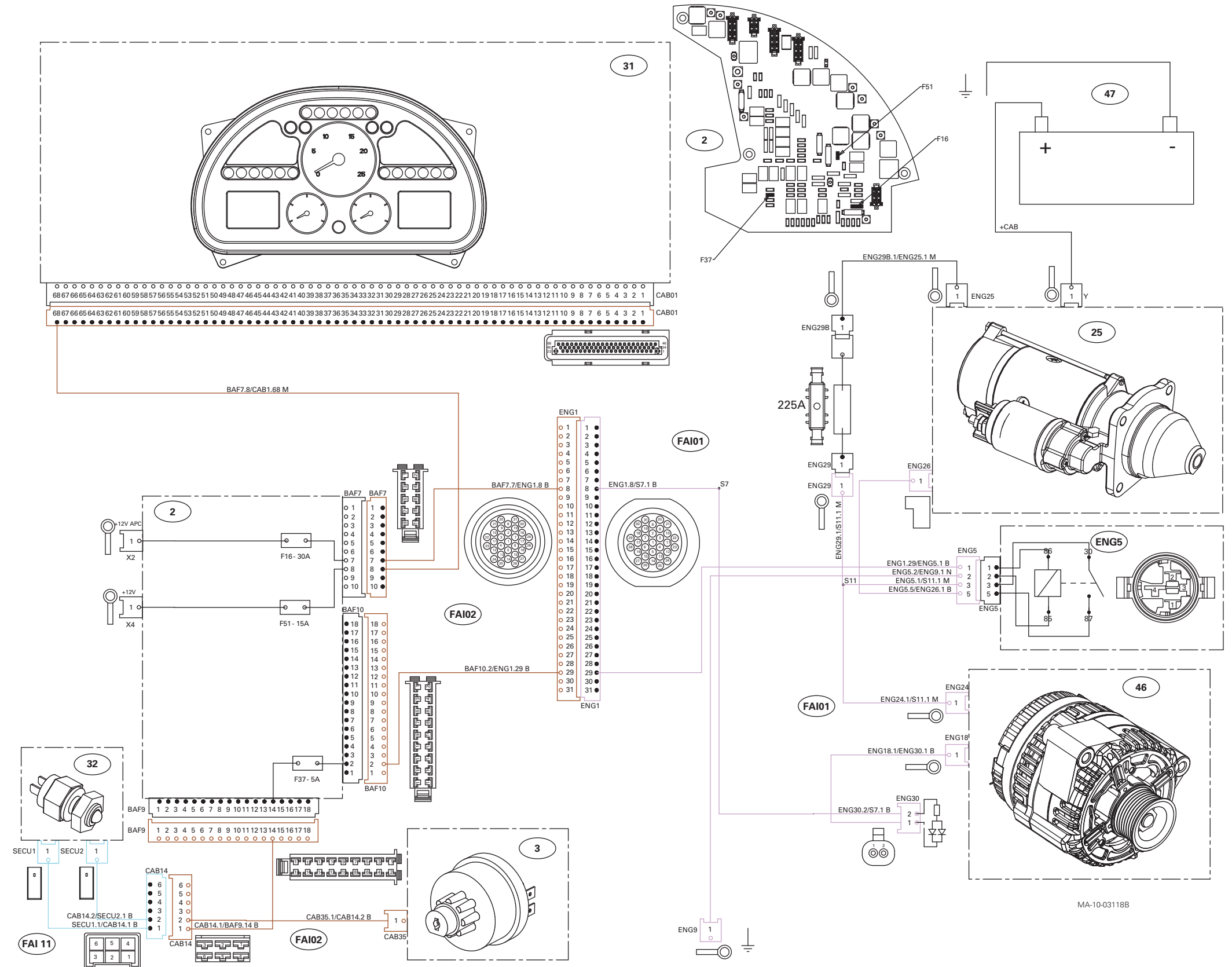
Battery charge and starting (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 3 Start switch
- 25 Starter
- 32 Safety switch
- 46 Alternator
- 47 Battery
- FAI 01 Engine harness
- FAI 11 BOC harness—safety switch
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- ENG5 Start relay



Battery charge and starting (GBA20 and GBA10)

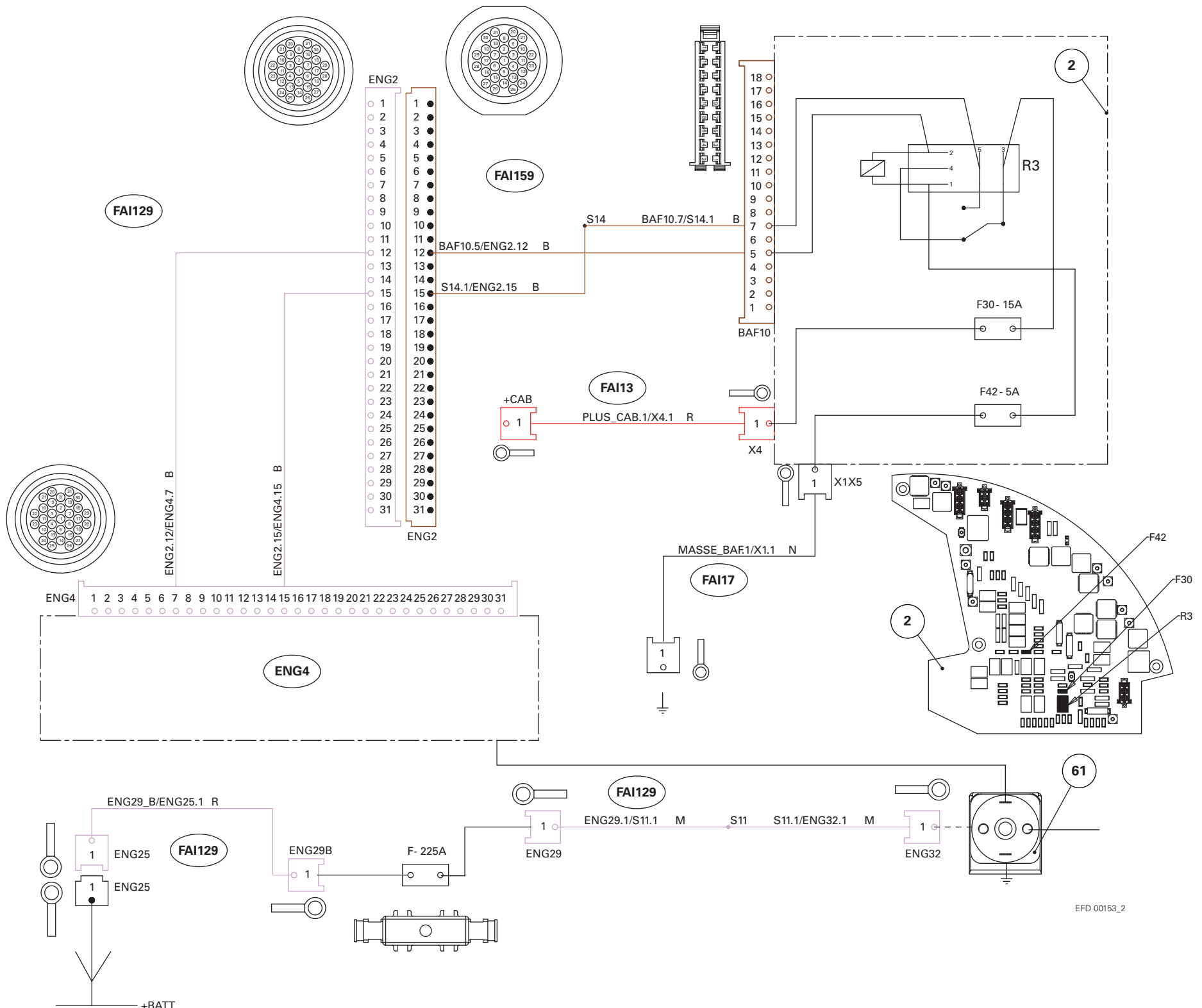
- 2 Fuse box
- 3 Start switch
- 21 Line fuse
- 25 Starter
- 31 DCC2 instrument panel
- 46 Alternator
- 47 Battery
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- FAI 11 BOC harness—safety switch
- ENG5 Start relay



ELECTRICAL DIAGRAMS - Engine equipment

SISU engine power relay (GBA10)

- 2 Fuse box
- FAI 13 Fuse box supply harness
- FAI 17 BAF fuse box earth harness
- FAI 129 EEM SisuDiesel engine harness
- FAI 159 Instrument panel harness
- ENG4 Electronic harness junction
- ENG32 Grid heater relay



EFD 00153_2

10B12 - ELECTRICAL DIAGRAMS - Lighting

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B . Types of bulbs	5
C . Trailer connector plug	8
D . Electrical panels	11

ELECTRICAL DIAGRAMS - Lighting

A . General

Description

The harnesses fitted on the tractor allow data to be exchanged and power to be supplied to the electrical and electronic systems.

The tractor is fitted with 3 different types of power supply:

- +12V Battery (Permanent)
- +12V APC (Ignition key ON)
- +12V ACC (Accessories)

Most harnesses have a maximum of six different wire colours:

- Black: Ground
- Brown: +12V Permanent
- Red: +12V APC (Ignition key ON) and Accessories
- White: Information
- Yellow: CAN High
- Green: CAN Low

The CAN network wires (yellow and green) are twisted together.

- Components with only one connector are identified by the connector name:

CAB03 - Road lights switch (Fig. 1).

- All wires can be identified by the pins of the outgoing and incoming connectors of the harness:

CAB3.7/CAB28.1 : The wire connects pin 7 of the CAB03 connector to pin 1 of the CAB28 connector

- The detail of pins allocation for each connector is shown on the harness side

- The wire colour is indicated: CAB3.7/CAB28.1 N, the wire is black.

List of colours:

- N: Black
- M: Brown
- R: Red
- B: White
- J: Yellow
- V: Green

- The splices inside the harnesses are indicated by a dot and the letter S (S2).

In general, the components or connectors are named in order to indicate the corresponding elements of the tractor:

AC##	Armrest
BAF##	Fuse box
CA##	Automatic air conditioning
CAB##	Cab
ENG##	Engine
FA##	Suspended front axle
L##	Linkage - ParkLock (HA)
LIG##	Lighting
R##	Linkage and roof
ROOF##	Roof
TR##	Transmission
V#	Electrohydraulic spool valve
X#	Round battery cable terminal on fuse box

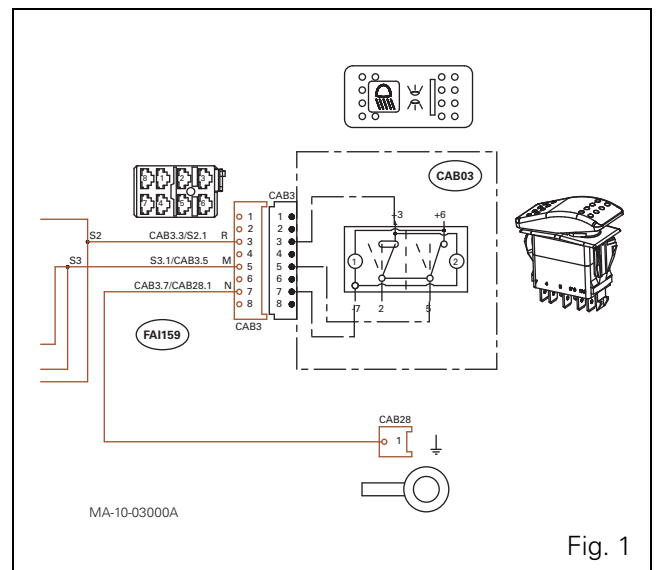


Fig. 1

ELECTRICAL DIAGRAMS - Lighting

Layout

5 Deutsch connectors (31-way) are connected to the cab:

- 2 on the front panel Fig. 2)
- 3 at the bottom rear right-hand side of the cab (Fig. 3).

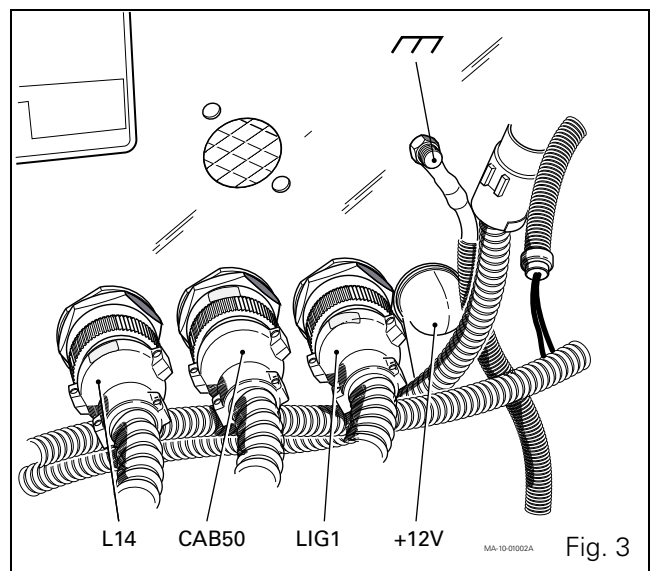
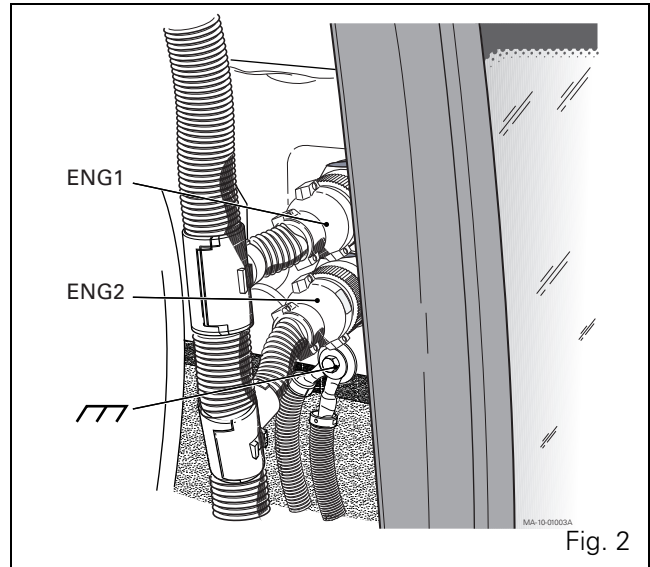
Fig. 2 :

All these connectors belong to the engine harness. ENG2 is dedicated to information concerning the electronic injection.

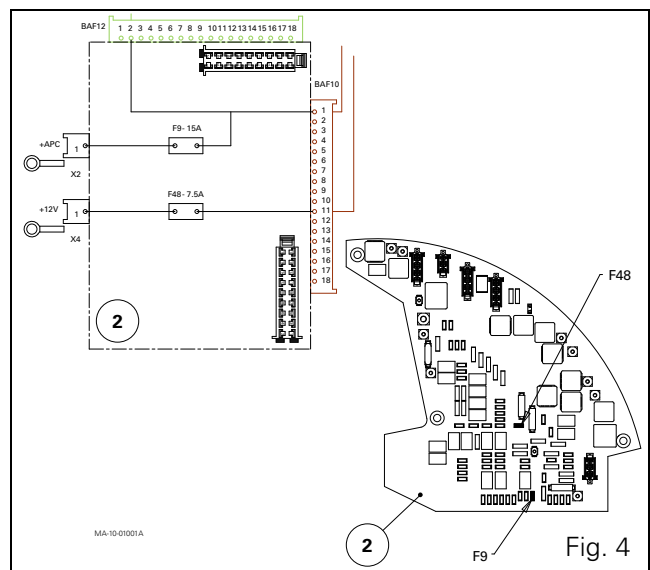
Fig. 3 :

Always in the following order (regardless of tractor configuration and options), from left to right:


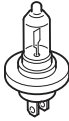

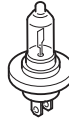



- L14 Linkage harness junction
- CAB50 Transmission harness junction
- LIG1 Lighting harness junction







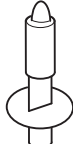


The fuses and relays of the electrical or electronic board (Fig. 4) are indicated by a black mark on their locations on the fuse box (2).




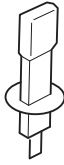



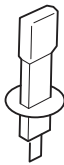

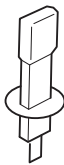
B . Types of bulbs

Main road lights – Europe		
Lighting	Bulb(s)	Type
Main beam and dipped lights on grille 		H4 12V/60W/55W
Main beam and dipped lights on guard rail 		H4 12V/60W/55W
Front side lights and indicators 	Indicator 	12V/21W
	Side light 	12V/5W


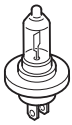


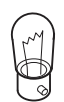
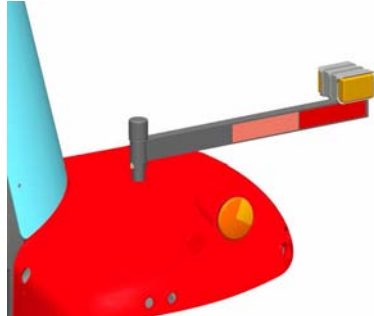



ELECTRICAL DIAGRAMS - Lighting

<p>Side lights/stop lights and rear indicators</p> 	<p>Indicator</p> 	<p>12V/21W</p>
	<p>Side light/stop light</p> 	<p>12V/21W/5W</p>
<p>Rotating beacon(s)</p> 	<p>Rotating beacon</p> 	<p>H1 12V/55W</p>
<p>Reversing light</p> 	<p>Reversing light</p> 	<p>12V/21W</p>






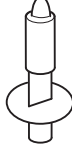
ELECTRICAL DIAGRAMS - Lighting

Work headlights—Europe models			
Lighting	Description	Bulb(s)	Type
	Single bulb		H3 12V/55W
	Double bulbs		H3 12V/55W
	Xenon bulb		Xenon bulb GDL D2S/35W
	Double bulbs		H3 12V/55W
	Xenon bulb		Xenon bulb GDL D2S/35W
	Single bulb		H3 12V/55W
	Double bulbs		H3 12V/55W
	Single bulb		H3 12V/55W
	Single bulb		H3 12V/55W


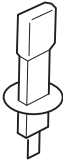

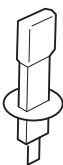

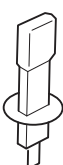

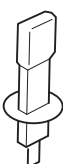

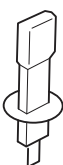
ELECTRICAL DIAGRAMS - Lighting

Road Lights—North America		
Lighting	Bulb(s)	Description
Main beam and dipped lights 	Headlight 	H4 12V/60W/55W
Front side lights and indicators 	Indicator 	12V/21W
	Side light 	12V/5W
Rear side lights/stop lights and indicators with extension (North America) 	Indicator 	12V/21W
	Extension 	12V/21W
	Side light/stop light 	12V/21W/5W


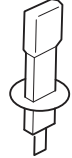

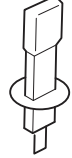
ELECTRICAL DIAGRAMS - Lighting

<p>Front roof indicators</p> 	<p>Indicator</p> 	<p>12V/21W</p>
<p>Rear roof indicators</p> 	<p>Indicator</p> 	<p>12V/21W</p>
<p>Rotating beacon(s)</p> 	<p>Rotating beacon</p> 	<p>H1 12V/55W</p>

ELECTRICAL DIAGRAMS - Lighting

Work headlights—North America			
Lighting	Description	Bulb(s)	Type
<p>Two front roof headlights</p> 	Single bulb	<p>Work headlight</p> 	H3 12V/55W
	Double bulbs		H3 12V/55W
	Xenon bulb		Xenon bulb GDL D2S/35W
<p>Two rear roof headlights</p> 	Double bulbs	<p>Work headlight</p> 	H3 12V/55W
	Xenon bulb		Xenon bulb GDL D2S/35W
<p>Headlights on guard rail</p> 	Single bulb	<p>Work headlight</p> 	H3 12V/55W
	Double bulbs		H3 12V/55W
<p>Fender headlights</p> 	Single bulb	<p>Work headlight</p> 	H3 12V/55W
<p>Footplate headlights</p> 	Single bulb	<p>Work headlight</p> 	H3 12V/55W

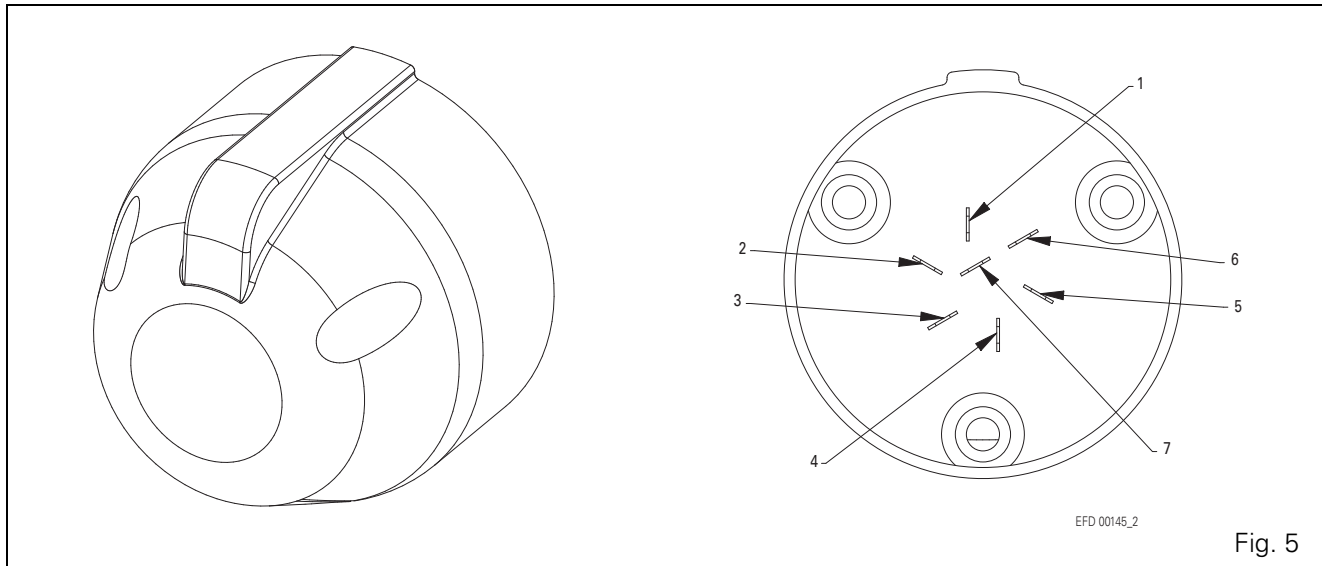
ELECTRICAL DIAGRAMS - Lighting

Work headlights—high-visibility model			
Lighting	Description	Bulb(s)	Type
Two front roof headlights 	Single bulb	Work headlight	H3 12V/55W
	Double bulbs		H3 12V/55W
Two rear roof headlights 	Single bulb	Work headlight	H3 12V/55W
	Double bulbs		H3 12V/55W

ELECTRICAL DIAGRAMS - Lighting

C . Trailer connector plug

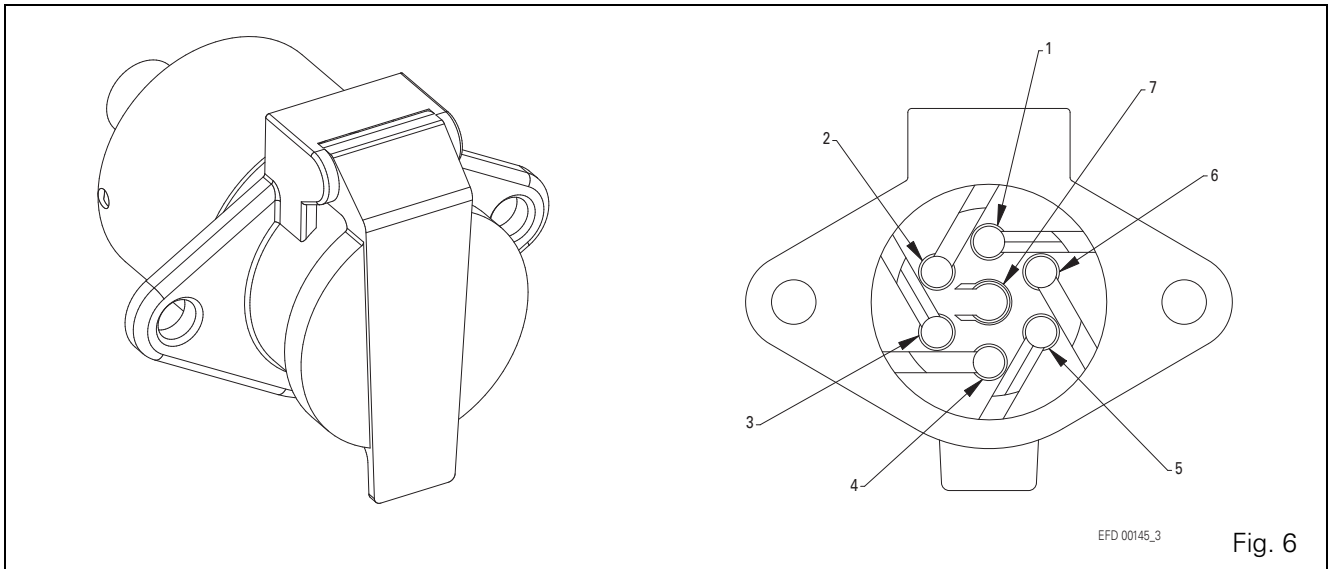
Trailer connector—Europe (Fig. 5)



Plug		Function	Code on wire	Wire colour
1	L	Rear left-hand indicator	LIG19-1/S10-1	White
2	54G	Reversing light/accessories	LIG22-1/S12-1	White
3	31	Earth	LIG21-1/LIG3-1	Black
4	R	Rear right-hand indicator	LIG18-1/S9-1	White
5	58R	Rear right-hand side light	LIG16-1/S7-1	White
6	54	Stop lights	LIG20-1/S11-1	White
7	58L	Rear left-hand side light	LIG17-1/S8-1	White

ELECTRICAL DIAGRAMS - Lighting

Trailer connector—North America (Fig. 6)



Plug	Function	Code on wire	Wire colour	
1	31	Earth	LIG21-1/LIG3-1	Black
2	58L	Work headlight	LIG20-1/S13-1	White
3	L	Rear left-hand indicator	LIG18-1/S9-1	White
4	54	Rear left-hand side light	LIG17-1/S8-1	White
5	R	Rear right-hand indicator	LIG19-1/S10-1	White
6	58R	Rear right-hand side light	LIG16-1/S7-1	White
7		+ accessories	LIG22-1/S12-1	Brown

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D . Electrical panels

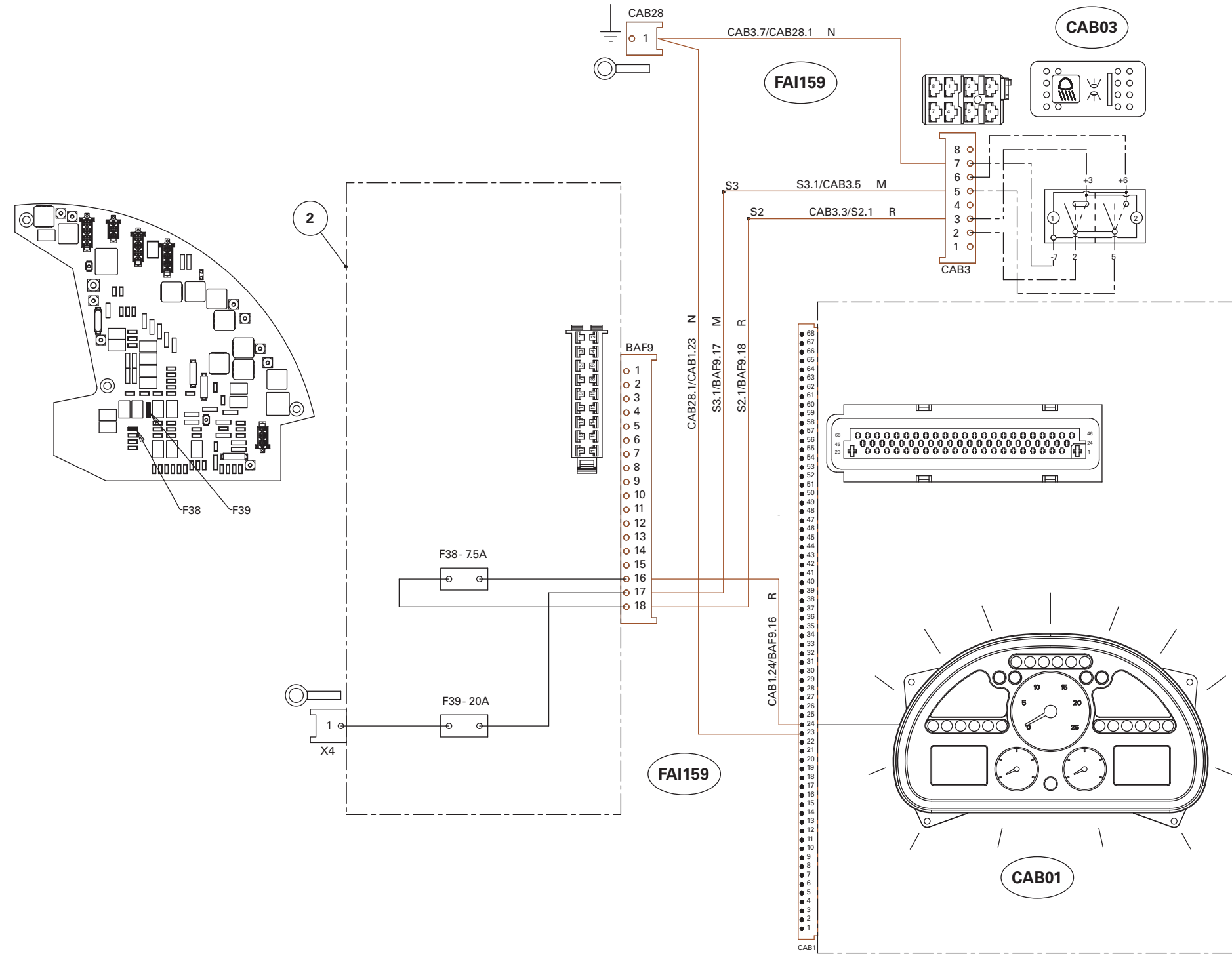
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Instrument panel lighting (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- CAB03 Road lights switch

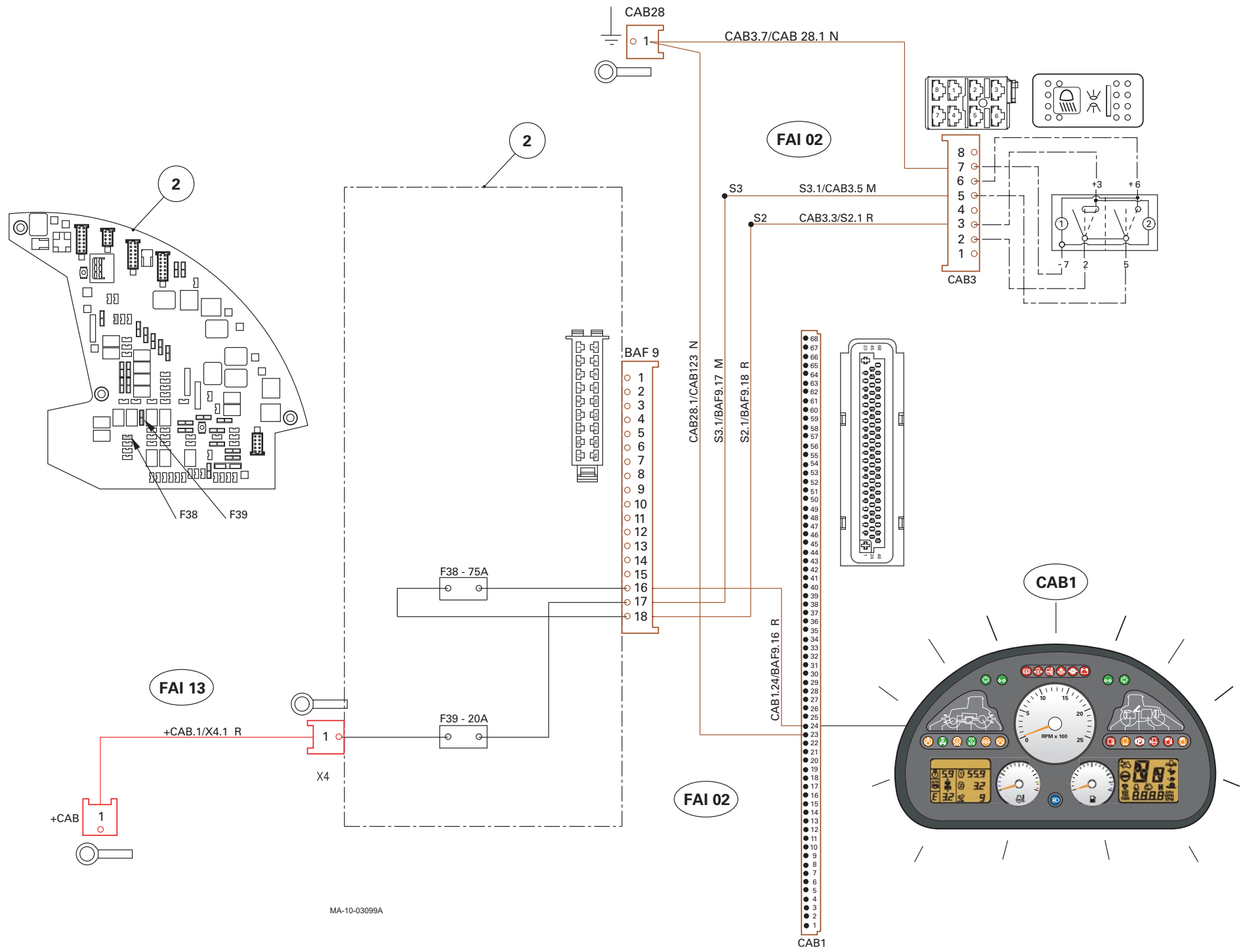


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ELECTRICAL DIAGRAMS - Lighting

Instrument panel lighting (GBA20 and GBA10)

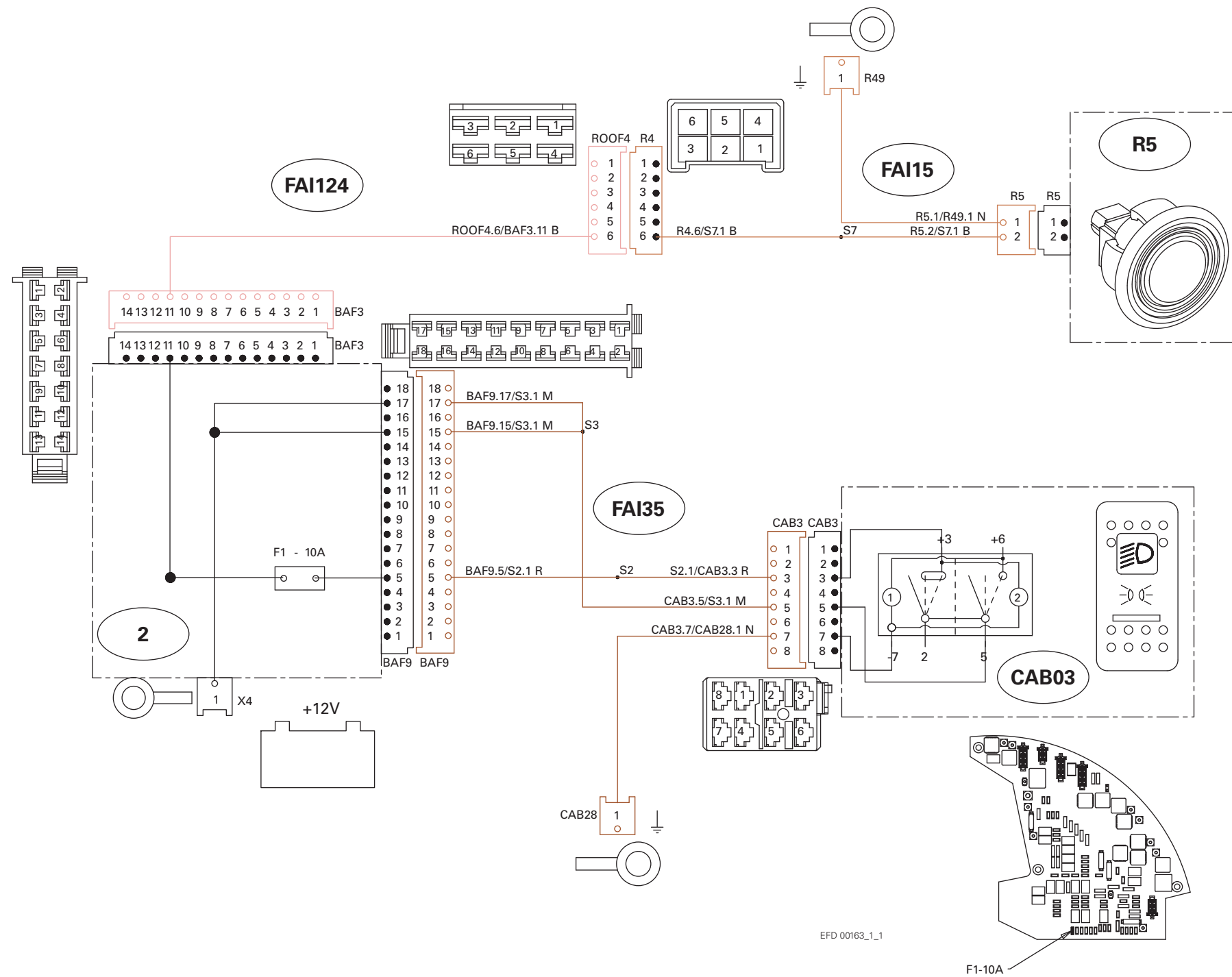
- 2 Fuse box
- FAI 02 Instrument panel harness
- FAI 13 Fuse box supply harness
- CAB1 Instrument panel (DCC2)



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Console lighting—standard roof (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 15 Roof harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB03 Road lights switch
- R5 Console lighting



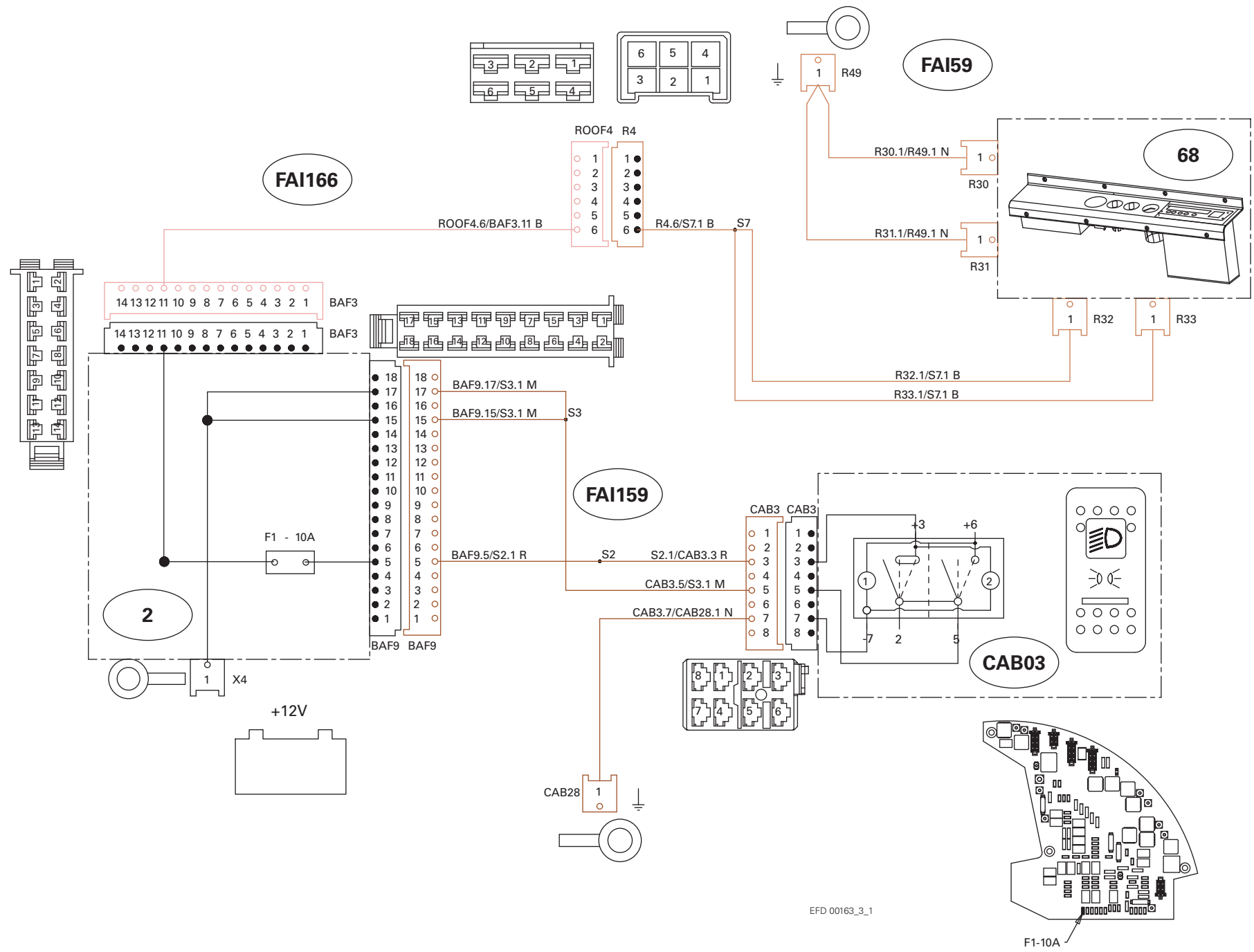
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ELECTRICAL DIAGRAMS - Lighting

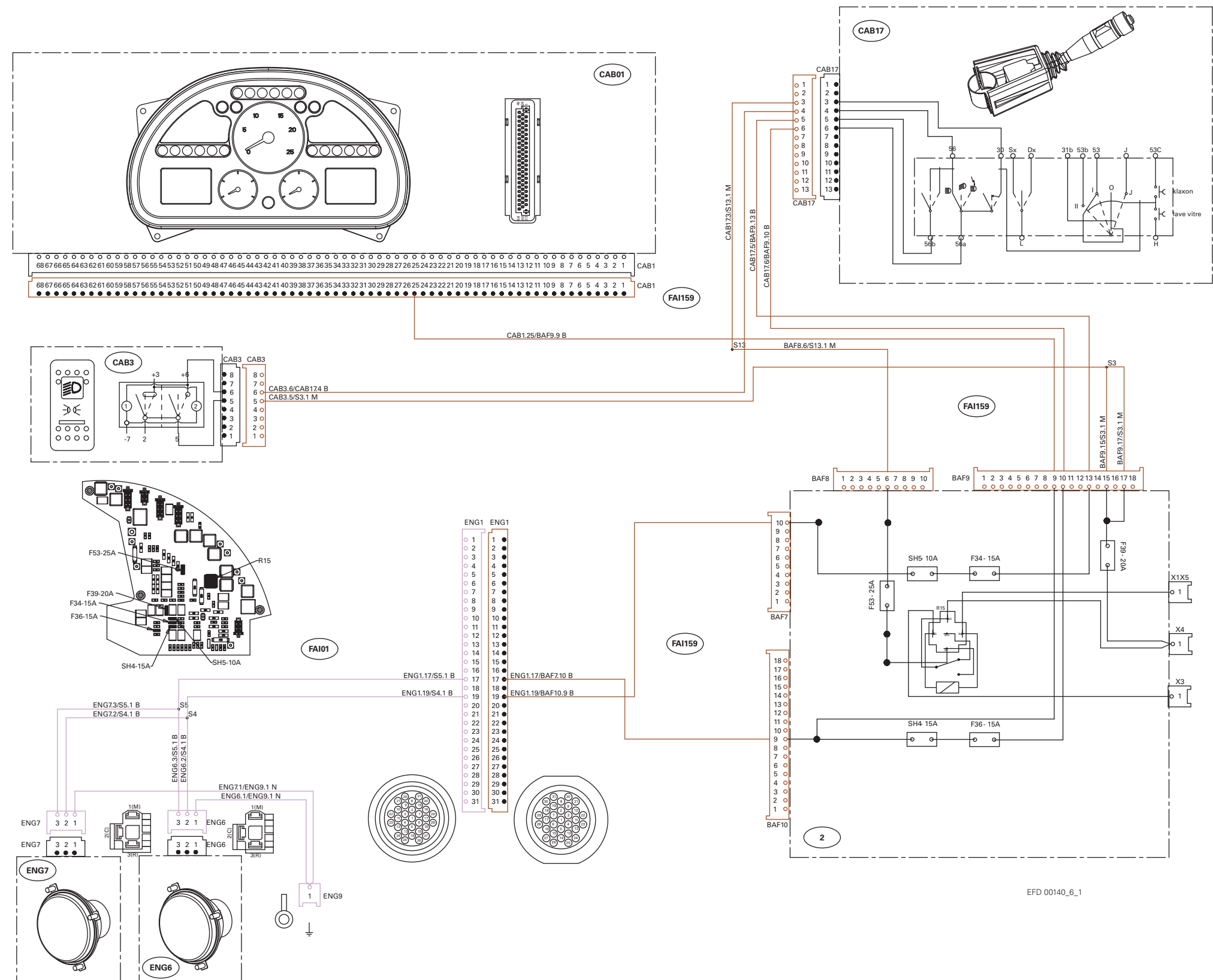
Console lighting—high-visibility roof (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 68 Console lighting—high-visibility roof
- FAI 59 High-visibility roof harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB03 Road lights switch



Main beams and dipped lights—Europe and North America (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 01 Engine harness
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- CAB17 Windscreen wiper controls
- ENG6 Right-hand main beam and dipped light
- ENG7 Left-hand main beam and dipped light

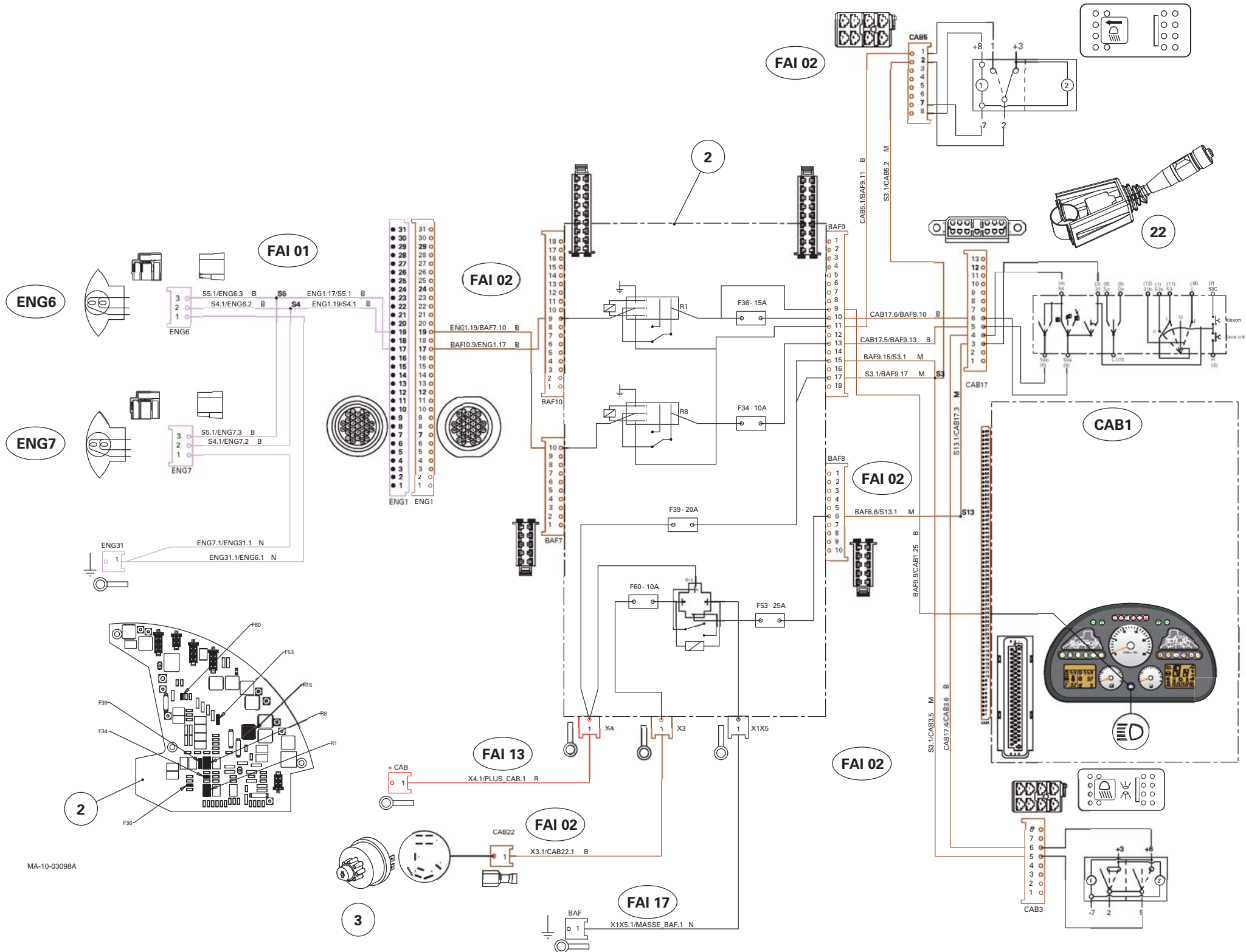


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ELECTRICAL DIAGRAMS - Lighting

Main beams and dipped lights—Europe and North America (GBA20 and GBA10)

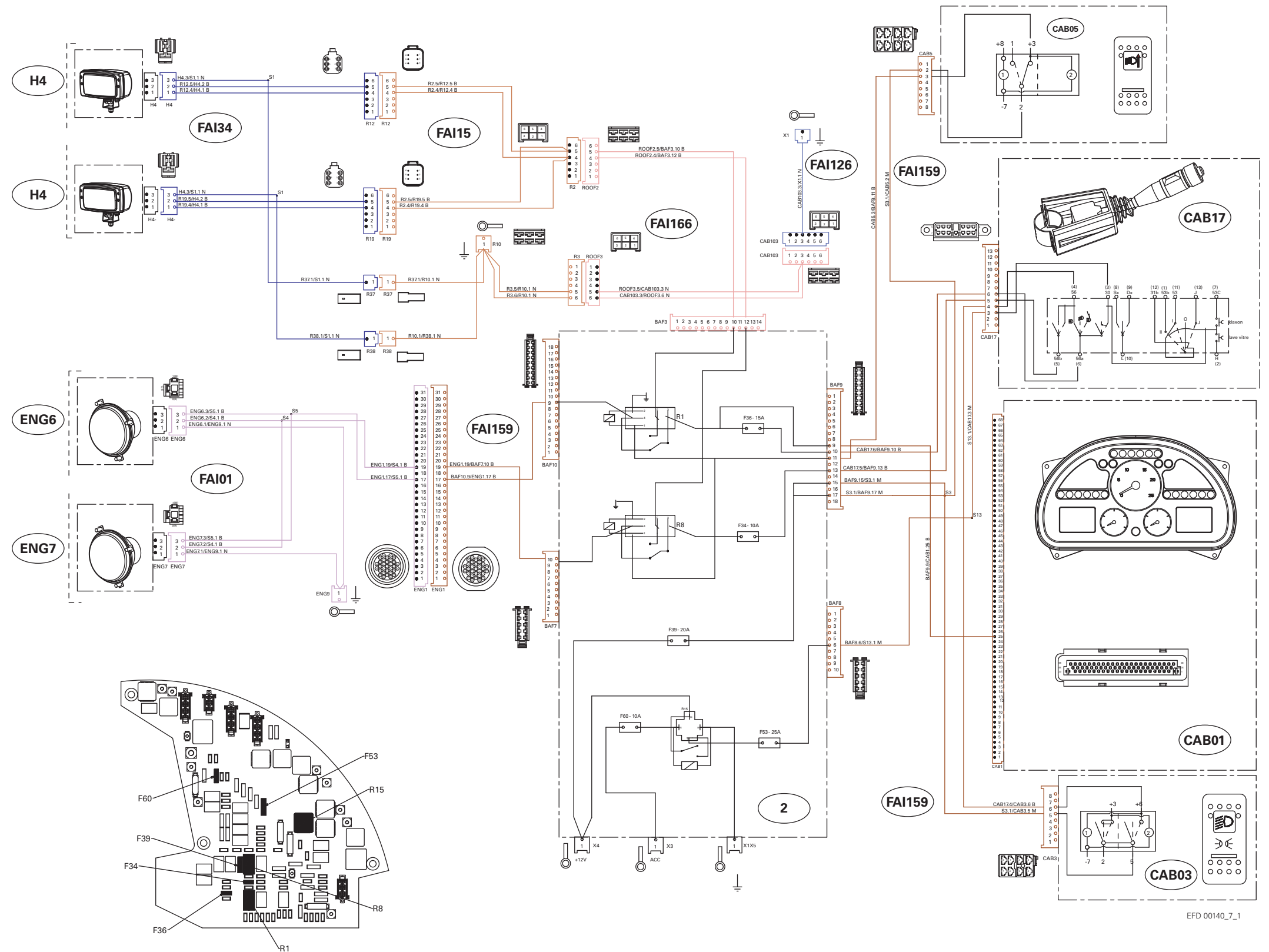
- 2 Fuse box
- 22 Windscreen wiper controls
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- FAI 13 Fuse box supply harness
- FAI 17 BAF fuse box earth harness
- ENG6 Right-hand main beam and dipped light
- ENG7 Left-hand main beam and dipped light
- CAB1 Instrument panel (DCC2)



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Main beams and dipped lights—Germany (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 01 Engine harness
- FAI 15 Roof harness
- FAI 34 Guard rail lighting harness
- FAI 126 Cab interior lighting harness (all countries except US)
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB01 DCC2 instrument panel
- CAB03 Road lights switch
- CAB05 Guard rail main beam light switch
- CAB17 Windscreen wiper controls
- ENG6 Right-hand main beam and dipped light
- ENG7 Left-hand main beam and dipped light
- H4 Main beam lights on guard rail

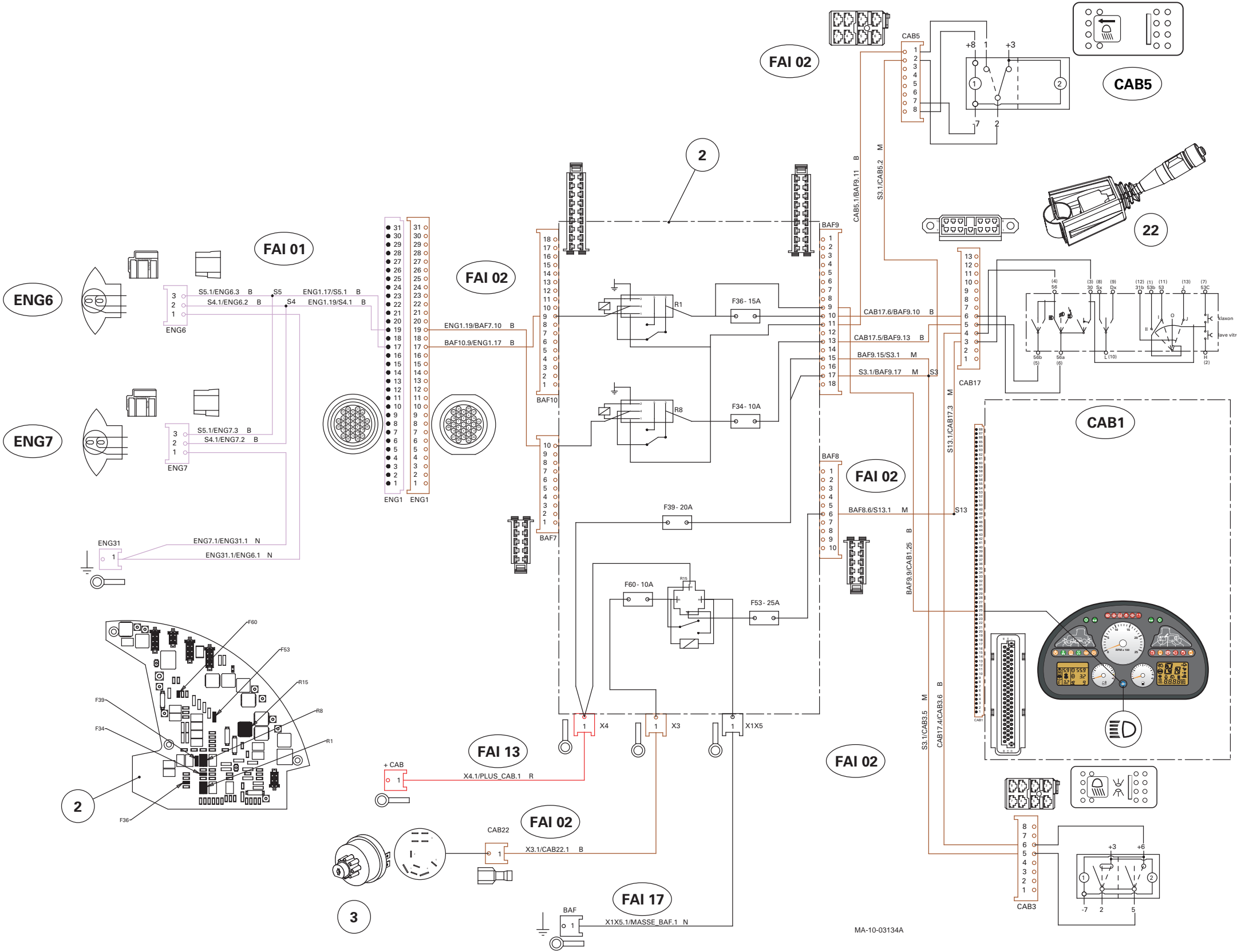


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ELECTRICAL DIAGRAMS - Lighting

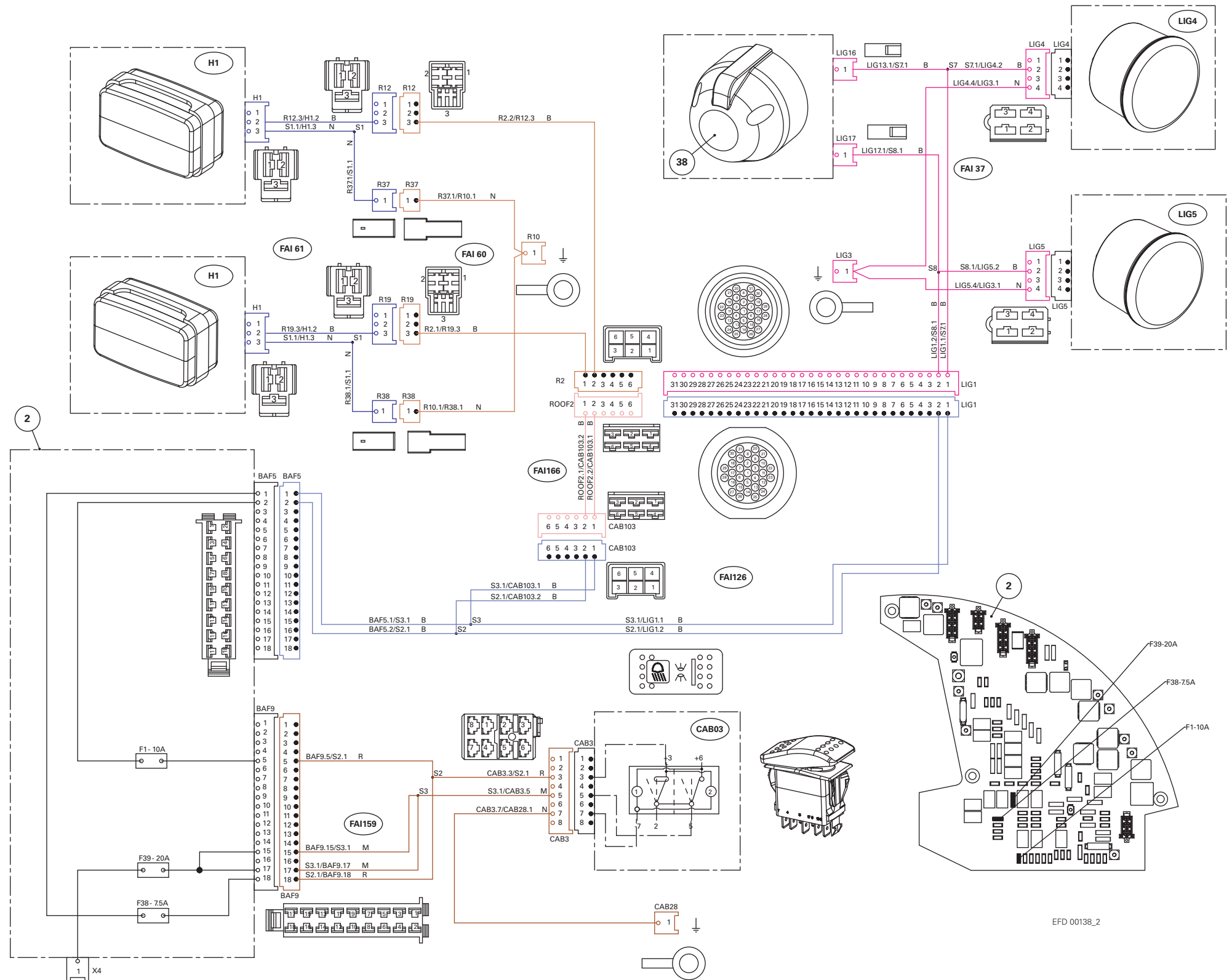
Main beams and dipped lights—Germany (GBA20 and GBA10)

- 2 Fuse box
- 3 Start switch
- 22 Windscreen wiper controls
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- FAI 13 Fuse box supply harness
- FAI 17 BAF fuse box earth harness
- ENG6 Right-hand main beam and dipped light
- ENG7 Left-hand main beam and dipped light
- CAB1 Instrument panel (DCC2)
- CAB5 Guard rail main beam light switch



Side lights—Europe (GBA25 and GBA10-Auto5)

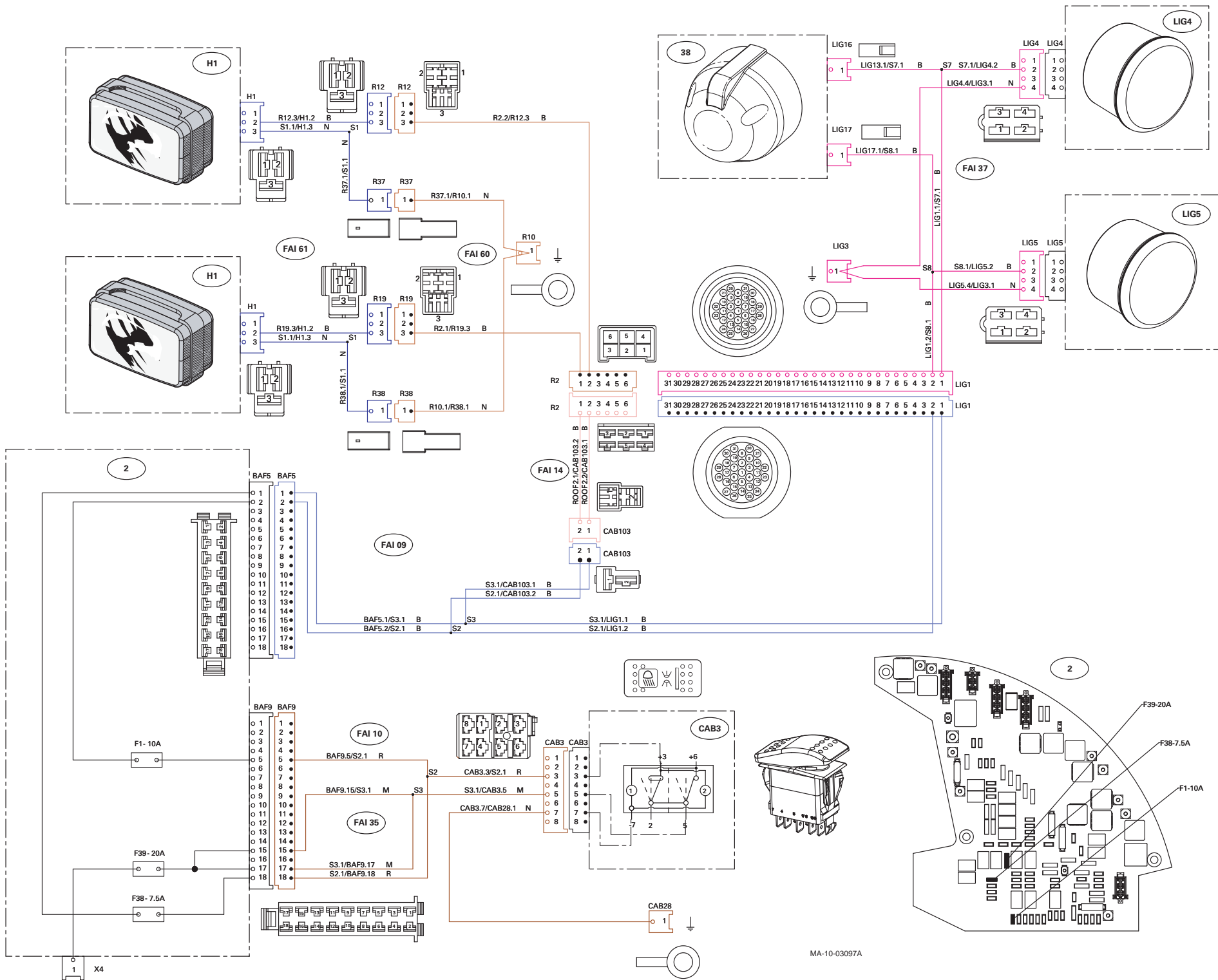
- 2 Fuse box
- 38 Trailer connector—Europe
- FAI 37 Fender lighting harness (all countries except US)
- FAI 60 Roof harness (all countries except US)
- FAI 61 Guard rail harness (all countries except US)
- FAI 126 Lighting harness—Europe
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB03 Road lights switch
- LIG4 Right-hand rear light
- LIG5 Left-hand rear light
- H1 Front side lights



ELECTRICAL DIAGRAMS - Lighting

Side lights—Europe (GBA20 and GBA10)

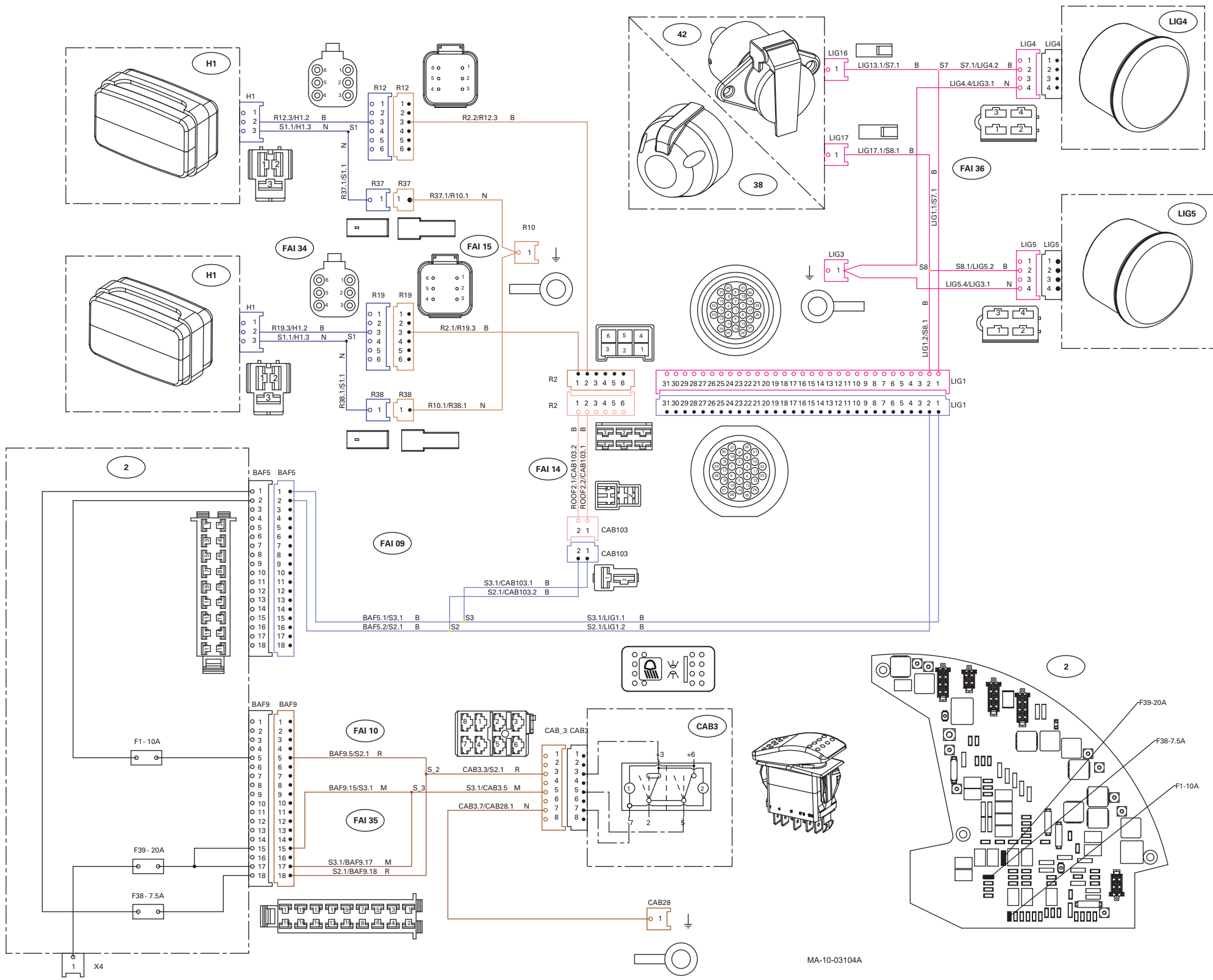
- 2 Fuse box
- 38 Trailer connector—Europe
- FAI 09 Cab interior lighting harness
- FAI 14 Pillar harness
- FAI 10 Dynashift with EEM instrument panel harness
- FAI 37 Fender lighting harness (all countries except US)
- FAI 60 Roof harness (all countries except US)
- FAI 61 Guard rail lighting harness (all countries except US)
- CAB3 Road lights switch
- H1 Left and right-hand front side lights
- LIG4 Right-hand rear side lights
- LIG5 Left-hand rear side lights



ELECTRICAL DIAGRAMS - Lighting

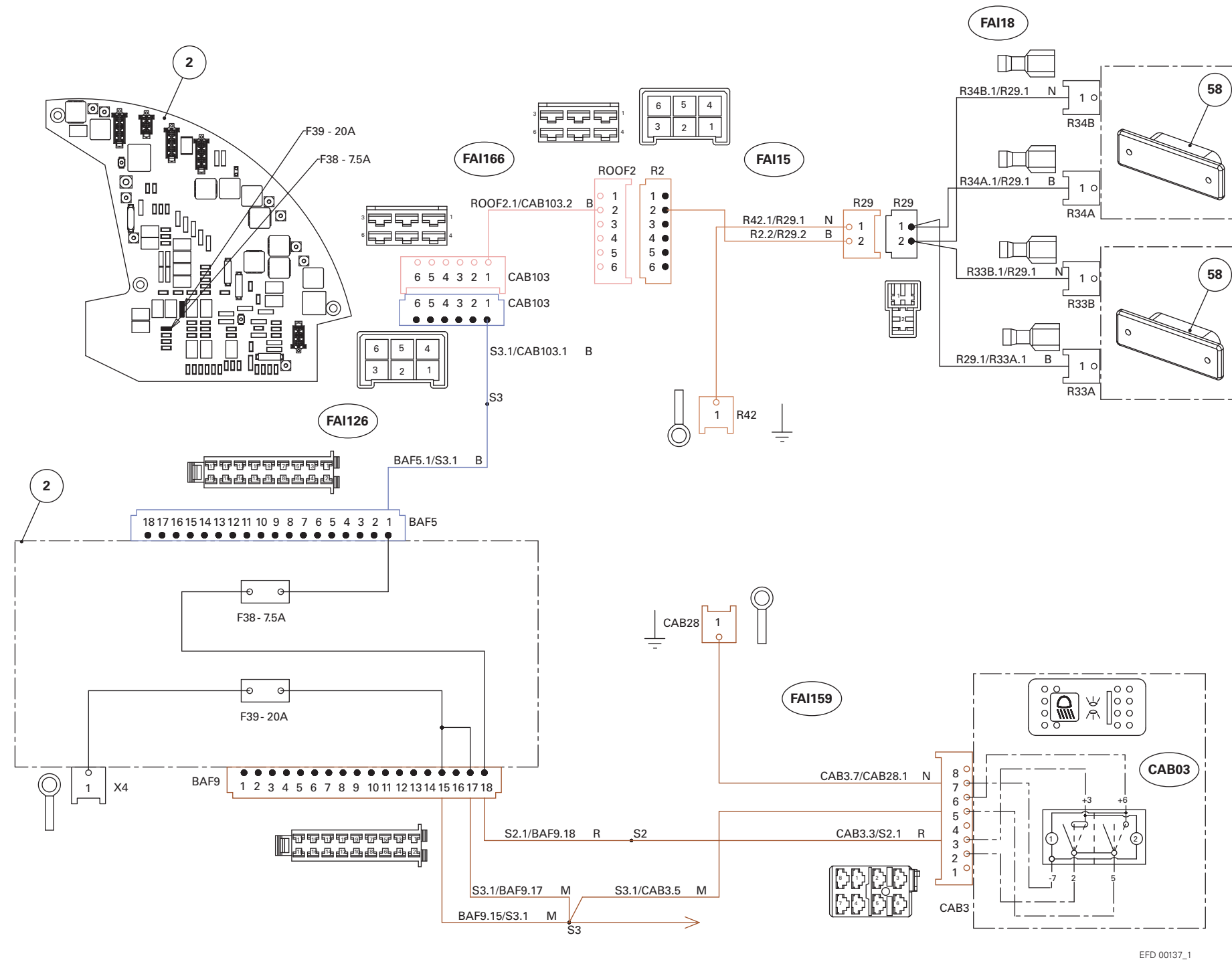
Side lights—high-visibility roof and North America (GBA20 and GBA10)

- 2 Fuse box
- 38 Trailer connector—Europe
- 42 Trailer connector—North America
- FAI 09 Cab interior lighting harness
- FAI 14 Pillar harness
- FAI 15 Roof harness
- FAI 34 Guard rail lighting harness
- FAI 10 Dynashift with EEM instrument panel harness
- FAI 36 Fender lighting harness (US)
- CAB3 Road lights switch
- H1 Left and right-hand front side lights
- LIG4 Right-hand rear side lights
- LIG5 Left-hand rear side lights



**Number plate lighting—standard roof
(GBA25 and GBA10-Auto5)**

- 2 Fuse box
- 58 Number plate lighting
- FAI 15 Roof harness
- FAI 18 Number plate lighting harness
- FAI 126 Lighting harness—Europe
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB03 Road lights switch

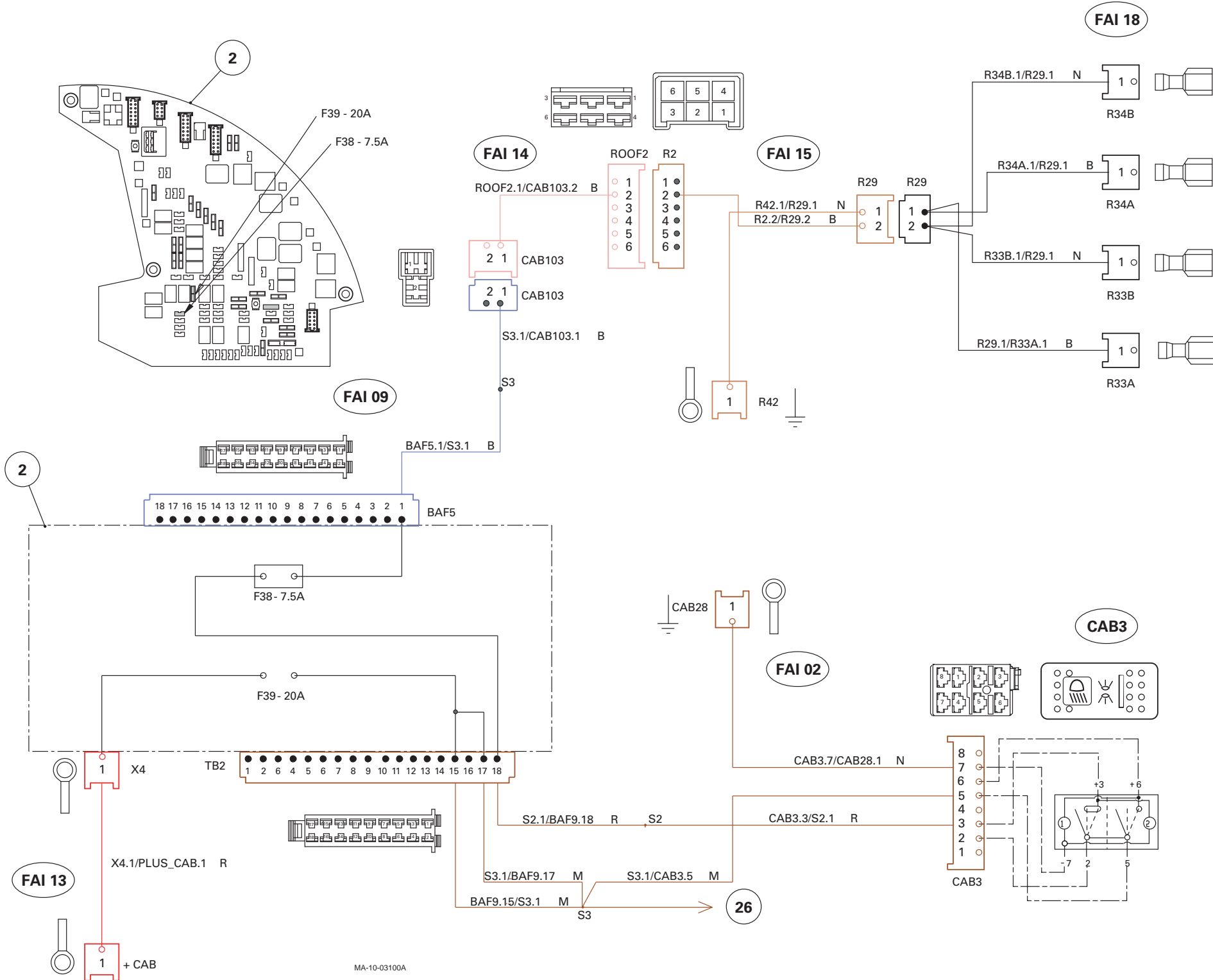


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ELECTRICAL DIAGRAMS - Lighting

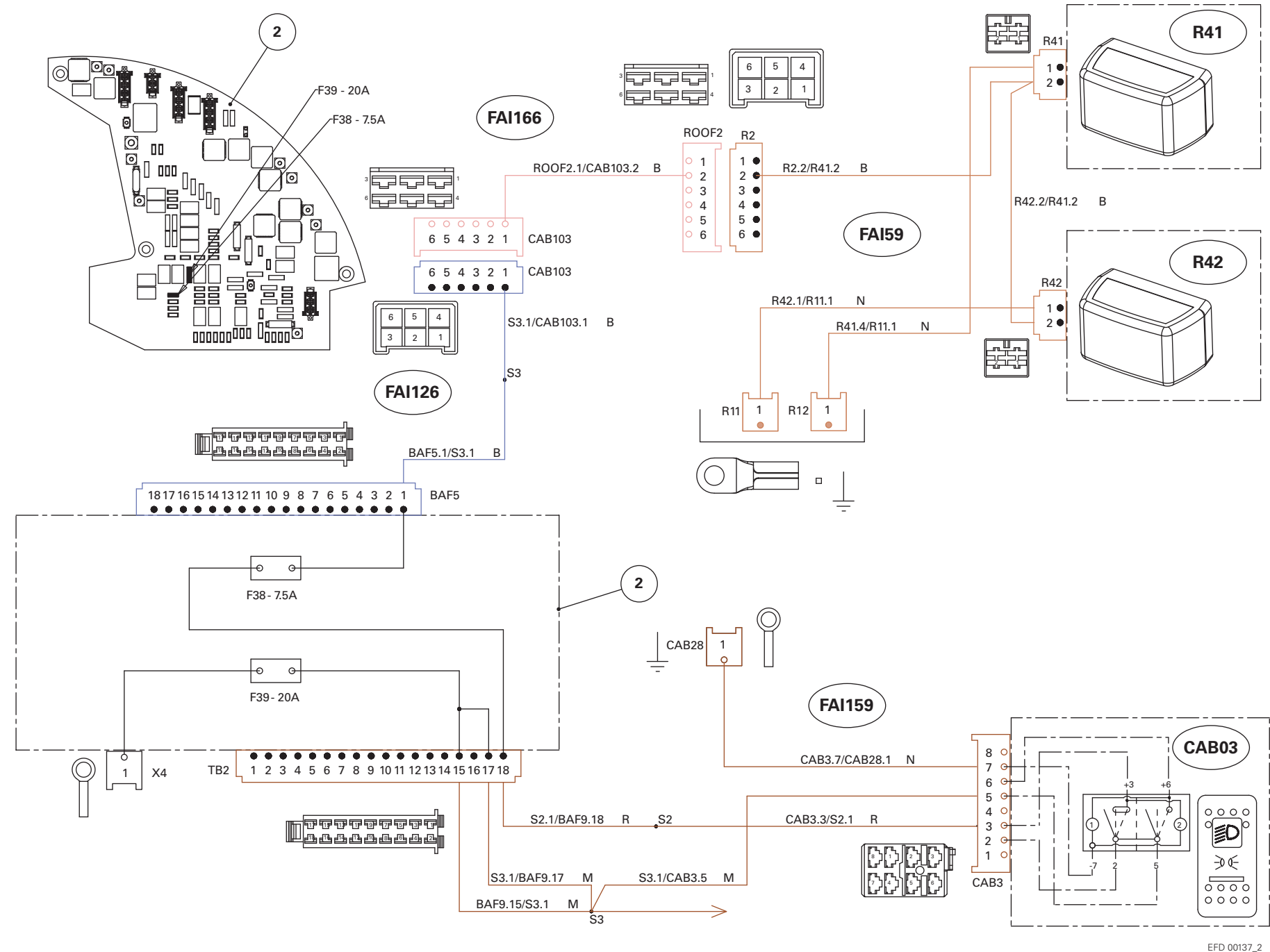
Number plate lighting—standard roof (GBA20 and GBA10)

- 2 Fuse box
- 26 Guard rail lighting switch
- FAI 02 Instrument panel harness
- FAI 09 Cab interior lighting harness
- FAI 13 Fuse box supply harness
- FAI 14 Pillar harness
- FAI 15 Roof harness
- FAI 18 Number plate lighting harness
- CAB3 Road lights switch



**Number plate lighting — high-visibility roof
(GBA25 and GBA10-Auto5)**

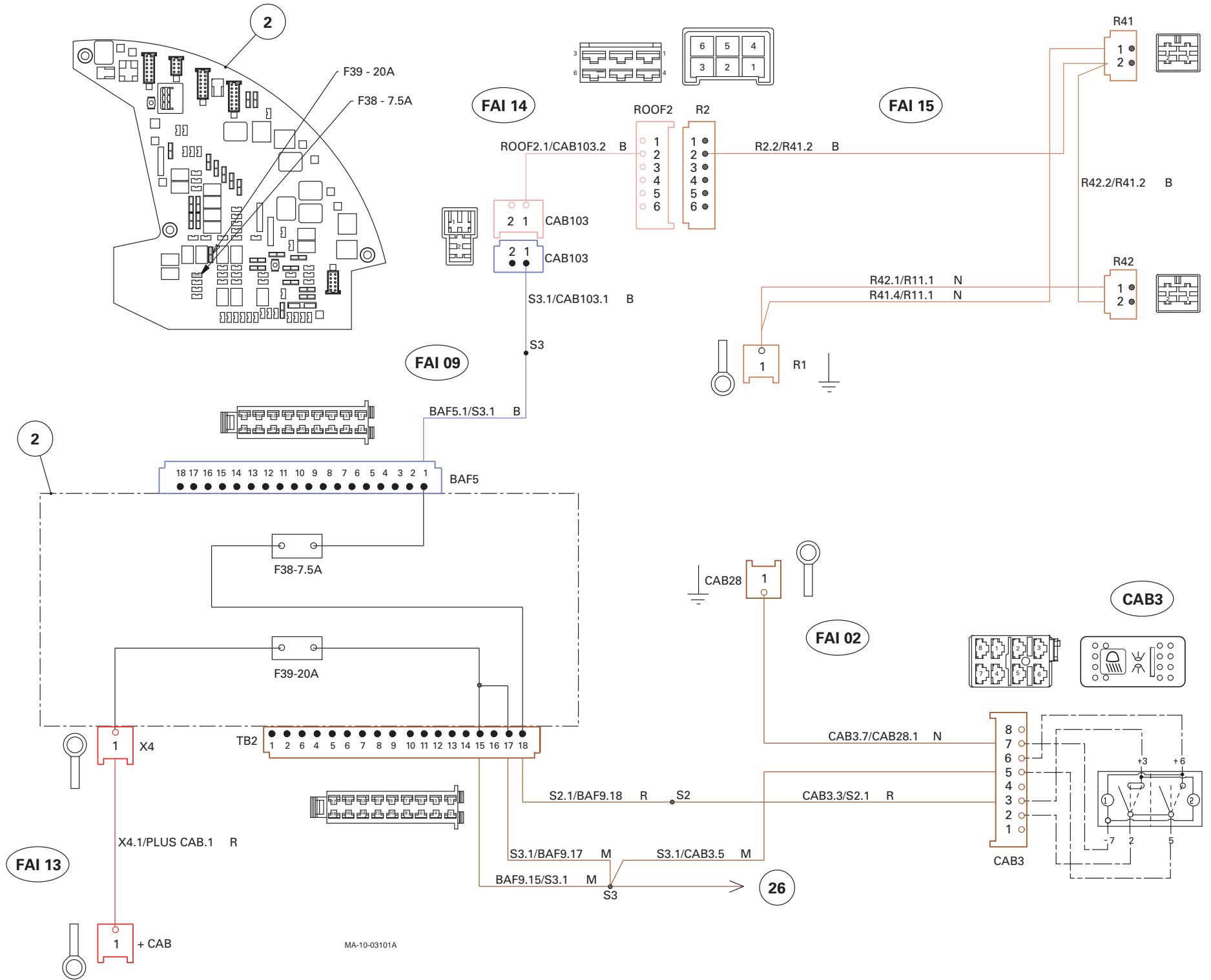
- 2 Fuse box
- FAI 59 High-visibility roof harness
- FAI 126 Lighting harness—Europe
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB03 Road lights switch
- R41 Number plate lighting—high-visibility roof
- R42 Number plate lighting—high-visibility roof



ELECTRICAL DIAGRAMS - Lighting

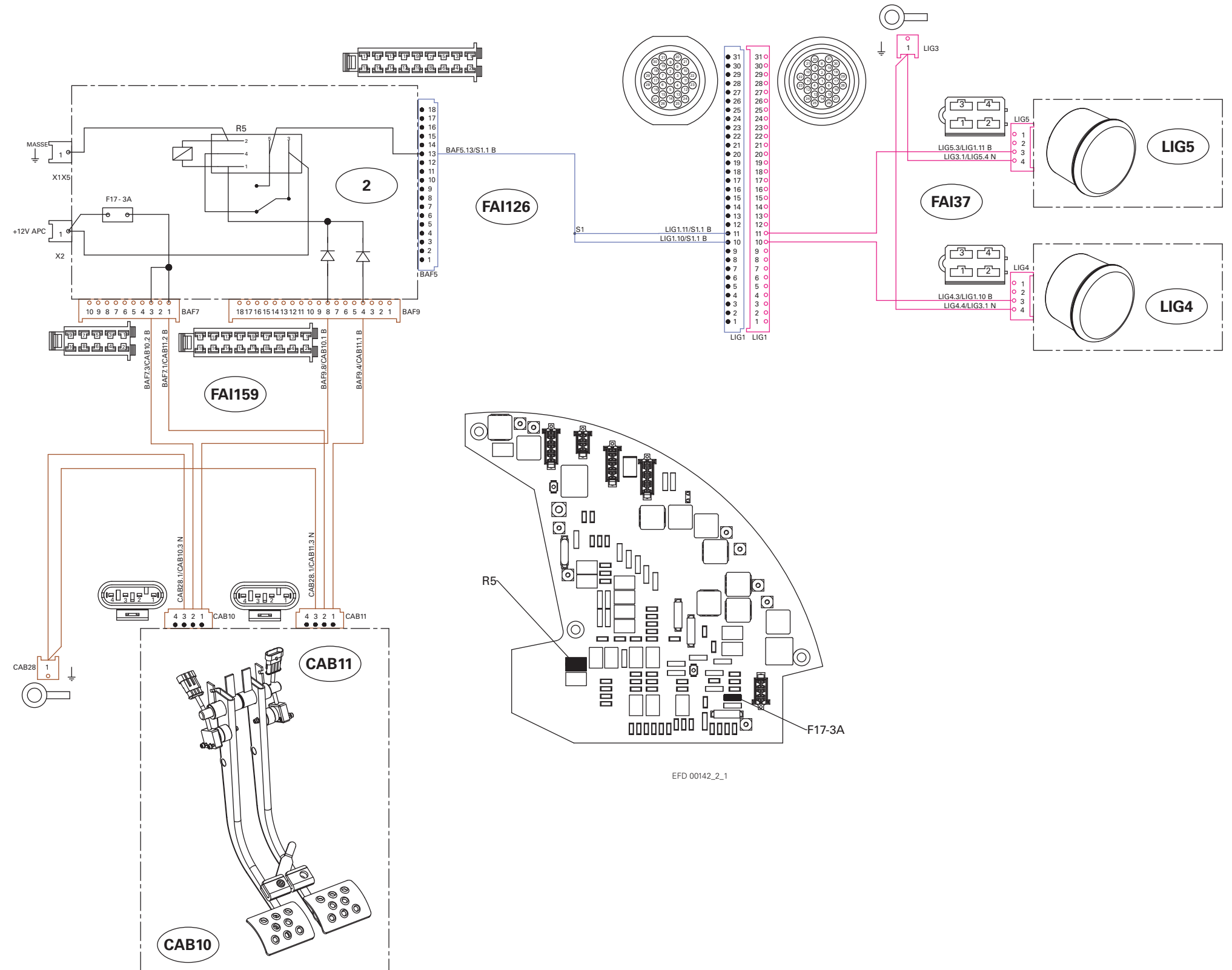
Number plate lighting—high-visibility roof (GBA20 and GBA10)

- 2 Fuse box
- 26 Guard rail lighting switch
- FAI 02 Instrument panel harness
- FAI 09 Cab interior lighting harness
- FAI 13 Fuse box supply harness
- FAI 14 Pillar harness
- FAI 15 Roof harness
- CAB3 Road lights switch



Stop lights (GBA25 and GBA10-Auto5)

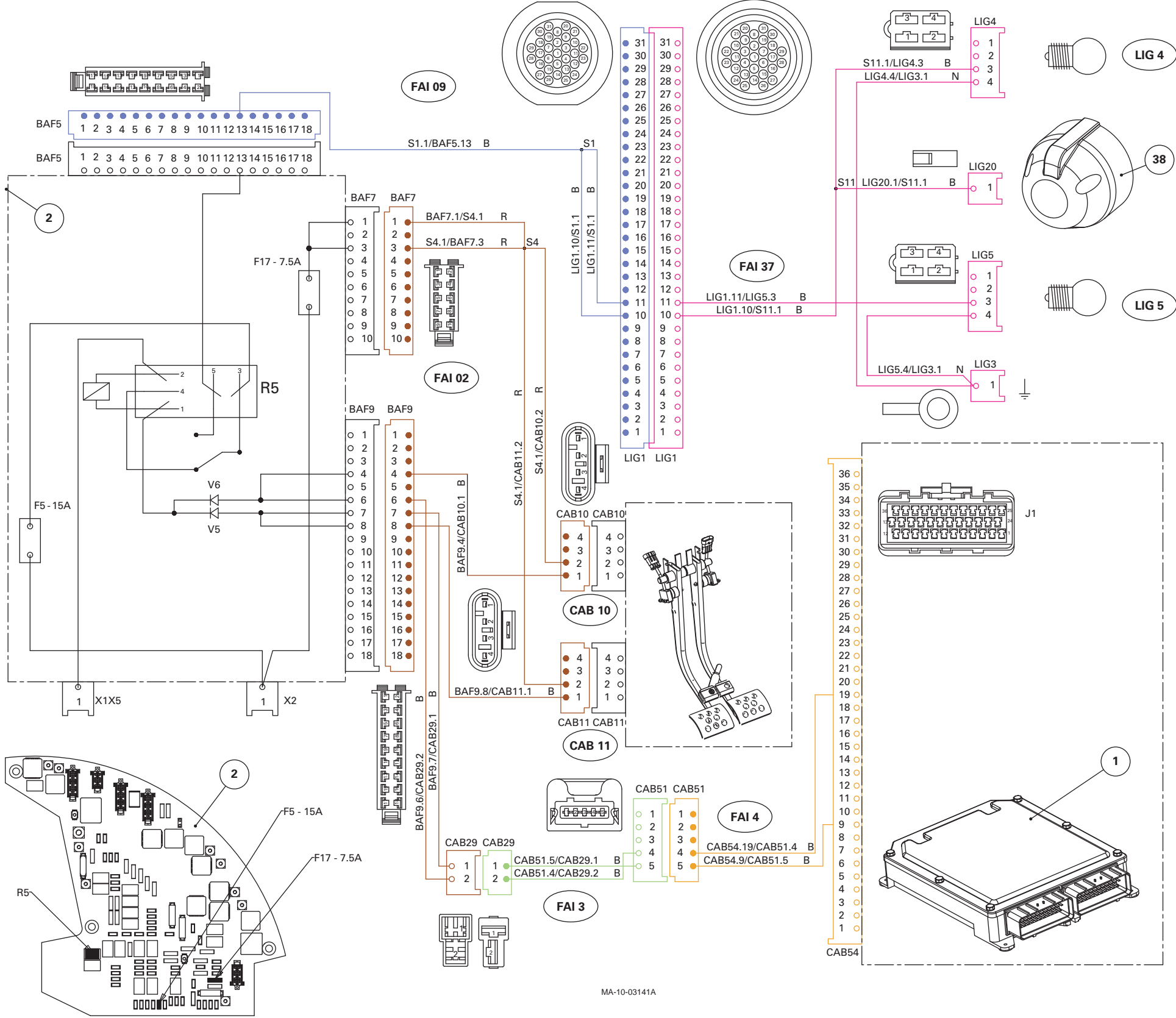
- 2 Fuse box
- FAI 37 Fender lighting harness (all countries except US)
- FAI 126 Cab interior lighting harness (all countries except US)
- FAI 159 Instrument panel harness
- CAB10 Right brake switch
- CAB11 Left brake switch
- LIG4 Right-hand rear light
- LIG5 Left-hand rear light



ELECTRICAL DIAGRAMS - Lighting

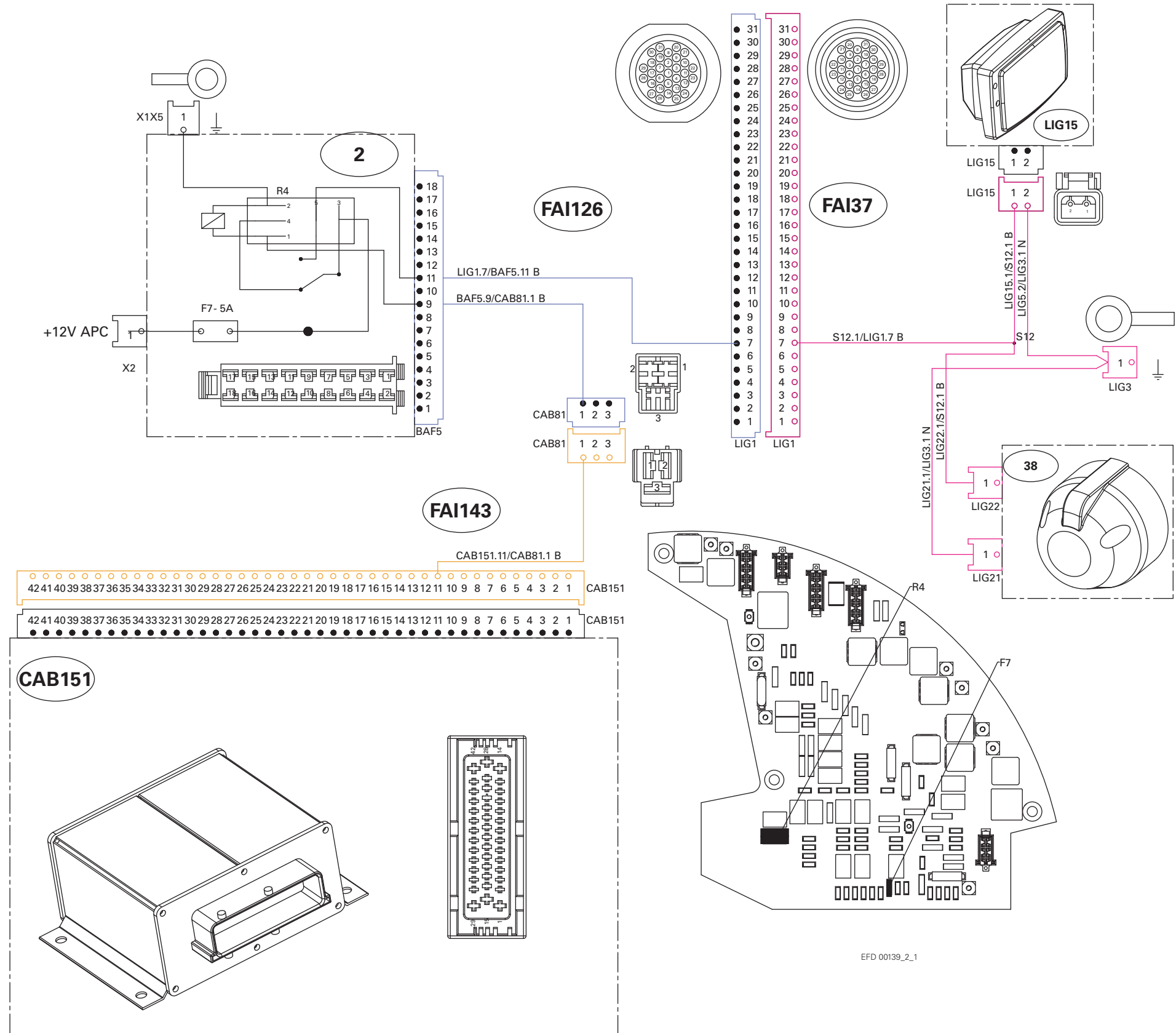
Stop lights (GBA20 and GBA10)

- 1 Autotronic 3
- 2 Fuse box
- 38 Trailer connector—Europe
- FAI 02 Instrument panel harness
- FAI 03 Dynashift console harness
- FAI 04 Cab Autotronic 3 harness
- FAI 09 Cab interior lighting harness
- FAI 37 Fender lighting harness (all countries except US)
- CAB10 Right brake switch
- CAB11 Left brake switch
- LIG4 Right-hand rear side lights
- LIG5 Left-hand rear side lights



Reversing light (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 38 Trailer connector—Europe
- FAI 37 Fender lighting harness (all countries except US)
- FAI126 Cab interior lighting harness (all countries except US)
- FAI 143 Cab transmission harness
- CAB151 Autotronic 5 transmission No.1
- LIG15 Reversing light

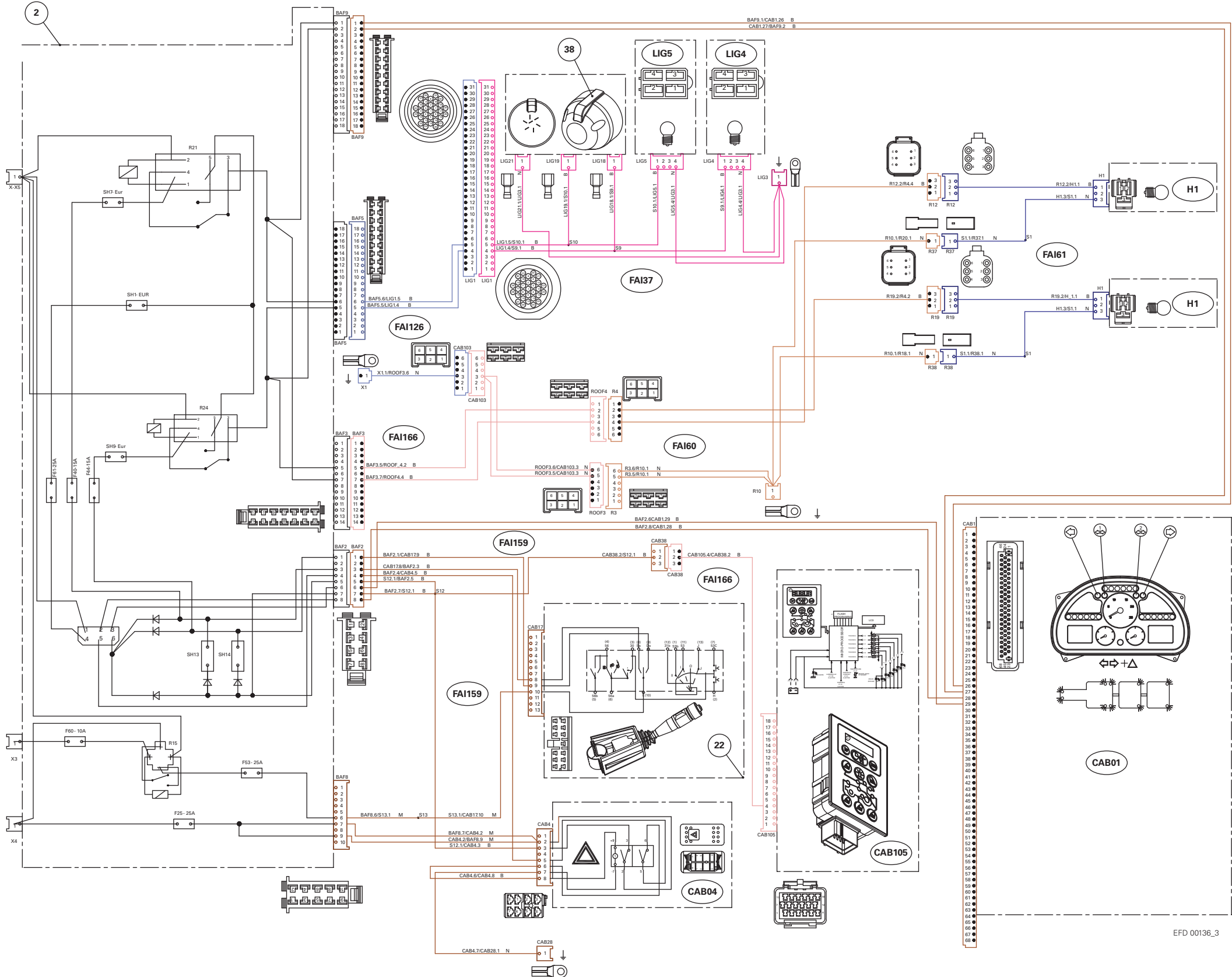


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ELECTRICAL DIAGRAMS - Lighting

Indicator and warning lights on standard roof—Europe (GBA25 and GBA10-Auto5)

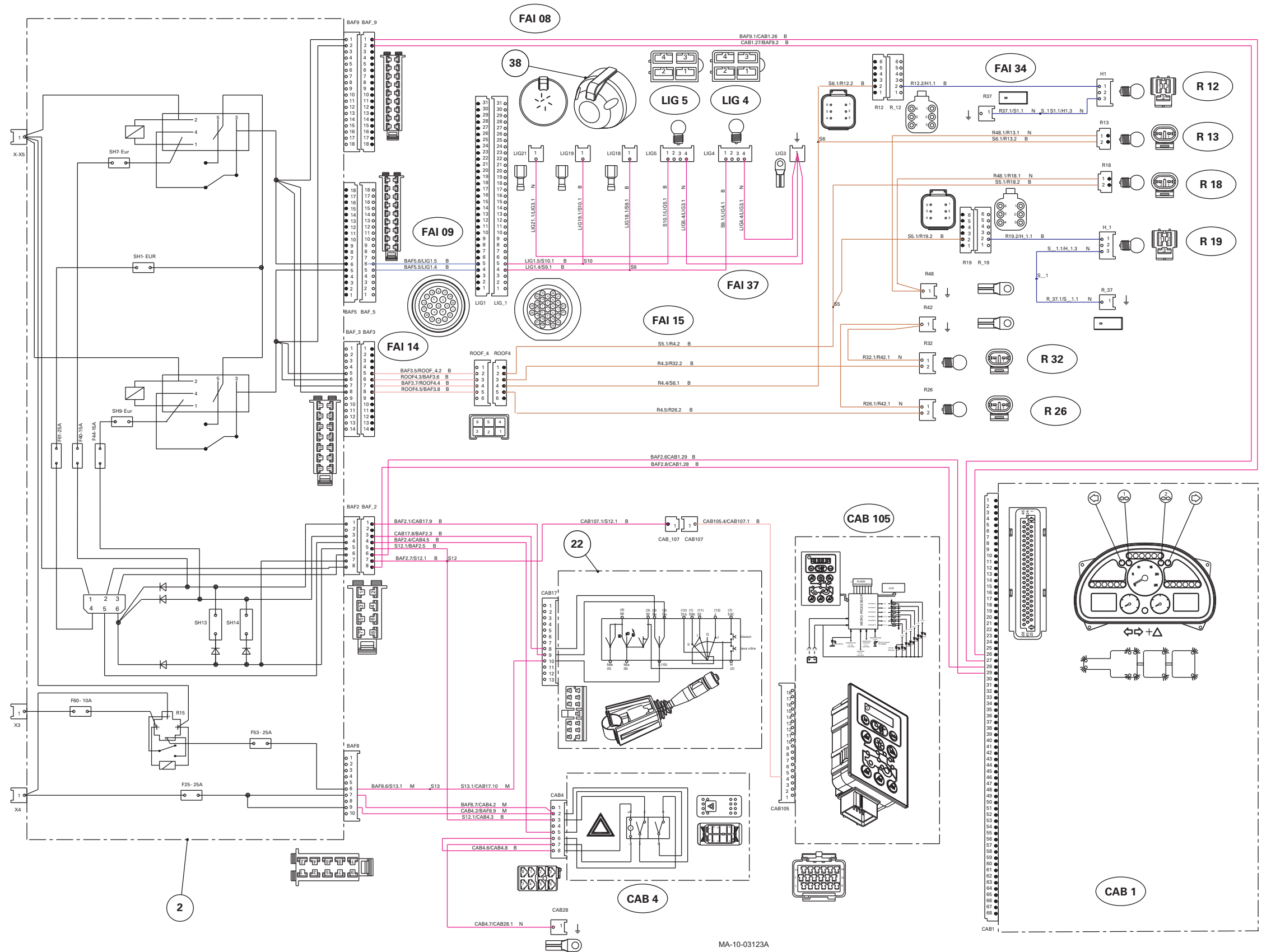
- 2 Fuse box
- 22 Windscreen wiper controls
- 38 Trailer connector—Europe
- FAI 34 Guard rail lighting harness
- FAI 37 Fender lighting harness (all countries except US)
- FAI 60 Roof harness (all countries except US)
- FAI 61 Guard rail lighting harness (all countries except US)
- FAI 126 Lighting harness—Europe
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB01 DCC2 instrument panel
- CAB04 Warning switch
- CAB105 Headlights module
- LIG4 Right-hand rear light
- LIG5 Left-hand rear light
- H1 Front lights



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Roof indicators and warning lights—Europe—up to number N145024 (GBA20 and GBA10)

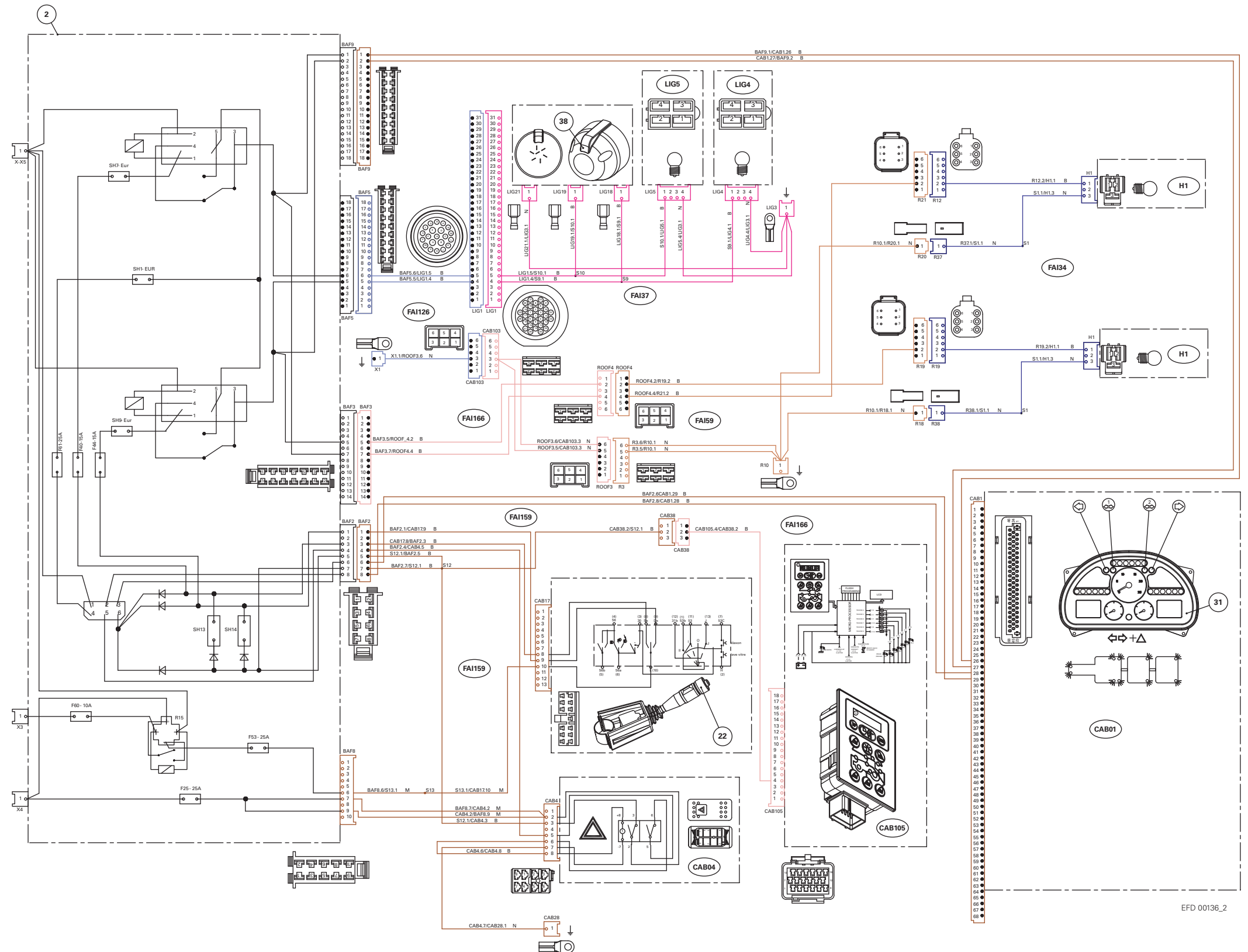
- 2 Fuse box
- 22 Windscreen wiper controls
- 38 Trailer connector—Europe
- FAI 09 Cab interior lighting harness
- FAI 14 Pillar harness
- FAI 15 Roof harness
- FAI 34 Guard rail lighting harness
- FAI 37 Fender lighting harness (all countries except US)
- CAB1 Instrument panel (DCC2)
- CAB4 Warning switch
- CAB105 Lighting module—NA and Europe
- LIG4 Right-hand rear side lights
- LIG5 Left-hand rear side lights
- R12 Guard rail left-hand indicator
- R13 Front left-hand indicator
- R18 Front right-hand indicator
- R19 Guard rail right-hand indicator
- R26 Rear right-hand roof indicator
- R32 Rear left-hand roof indicator



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Indicator and warning lights on high-visibility roof—Europe (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 22 Windscreen wiper controls
- 38 Trailer connector—Europe
- FAI 34 Guard rail lighting harness
- FAI 37 Fender lighting harness (all countries except US)
- FAI 59 High-visibility roof harness
- FAI 126 Lighting harness—Europe
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB01 DCC2 instrument panel
- CAB04 Warning switch
- CAB105 Headlights module
- LIG4 Right-hand rear light
- LIG5 Left-hand rear light
- H1 Front lights

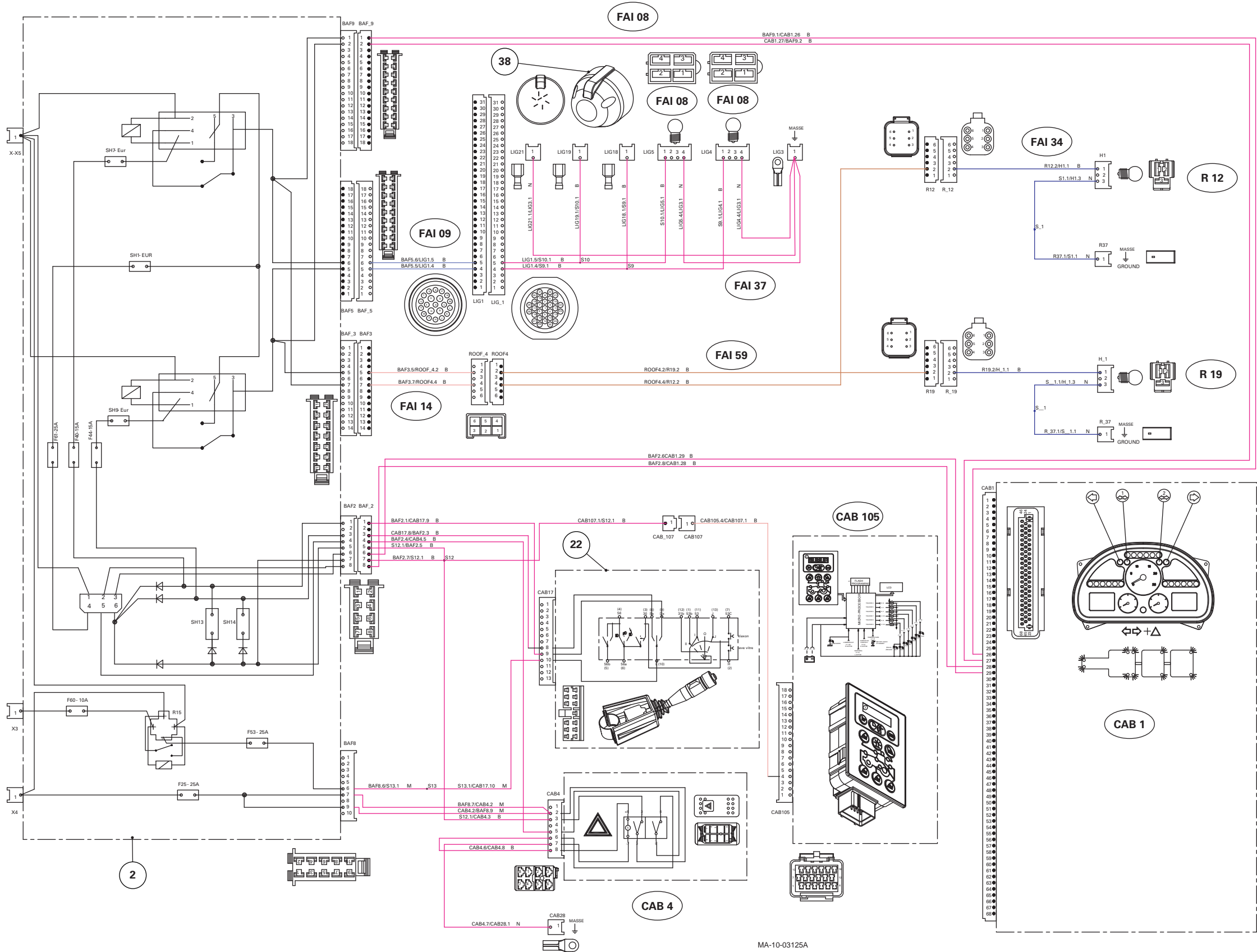


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ELECTRICAL DIAGRAMS - Lighting

Indicator and warning lights on high-visibility roof—Europe (GBA20 and GBA10)

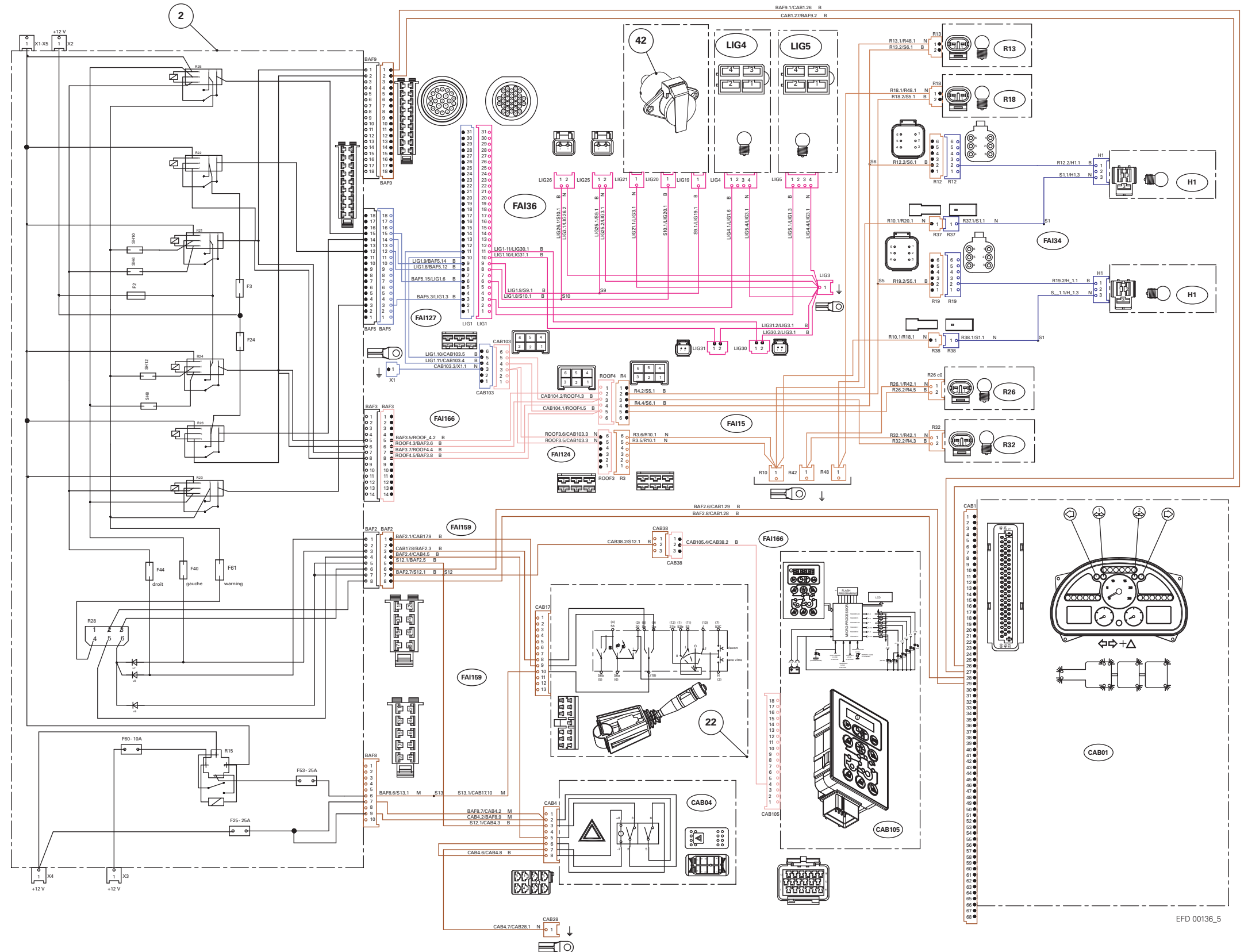
- 2 Fuse box
- 22 Windscreen wiper controls
- 38 Trailer connector—Europe
- FAI 09 Cab interior lighting harness
- FAI 14 Pillar harness
- FAI 34 Guard rail lighting harness
- FAI 37 Fender lighting harness (all countries except US)
- FAI 59 High-visibility roof harness
- CAB1 Instrument panel (DCC2)
- CAB4 Warning switch
- CAB105 Lighting module—NA and Europe
- LIG4 Right-hand rear side lights
- LIG5 Left-hand rear side lights
- R12 Guard rail left-hand indicator
- R19 Guard rail right-hand indicator



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Indicator and warning lights on standard roof—North America (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 22 Windscreen wiper controls
- 42 Trailer connector—North America
- FAI 15 Roof harness
- FAI 34 Guard rail lighting harness
- FAI 36 Fender lighting harness (US)
- FAI 127 Lighting harness—US
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB01 DCC2 instrument panel
- CAB04 Warning switch
- LIG4 Right-hand rear light
- LIG5 Left-hand rear light
- LIG25 Right fender extension indicator
- LIG26 Left fender extension indicator
- LIG30 Additional left-hand indicator—NA
- LIG31 Additional right-hand indicator—NA
- H1 Front lights
- R13 Front left-hand roof indicator
- R18 Front right-hand roof indicator
- R26 Rear right-hand roof indicator
- R32 Rear left-hand roof indicator

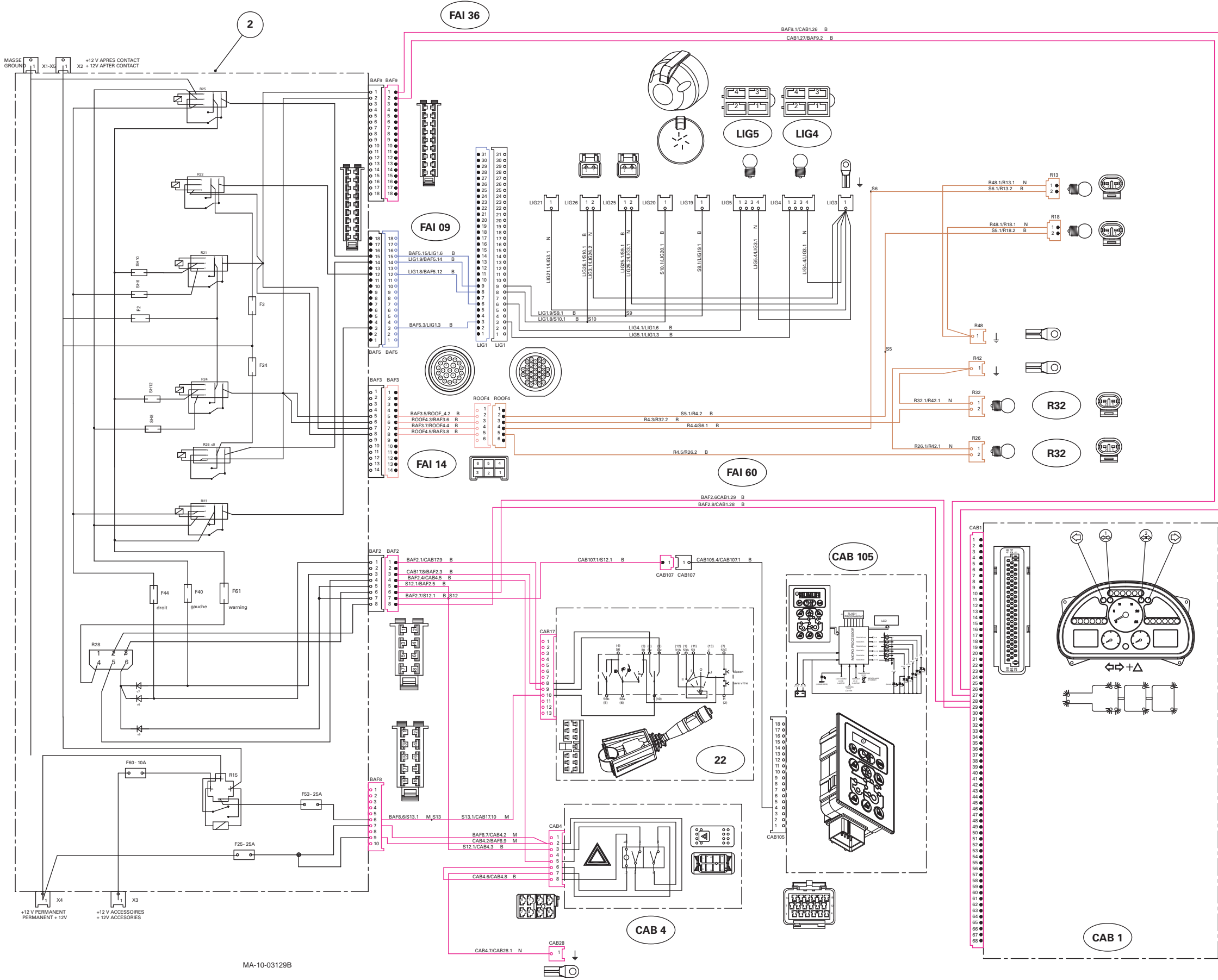


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ELECTRICAL DIAGRAMS - Lighting

Roof indicators and warning lights—North America—up to number N145024 and fender extensions (GBA20 and GBA10)

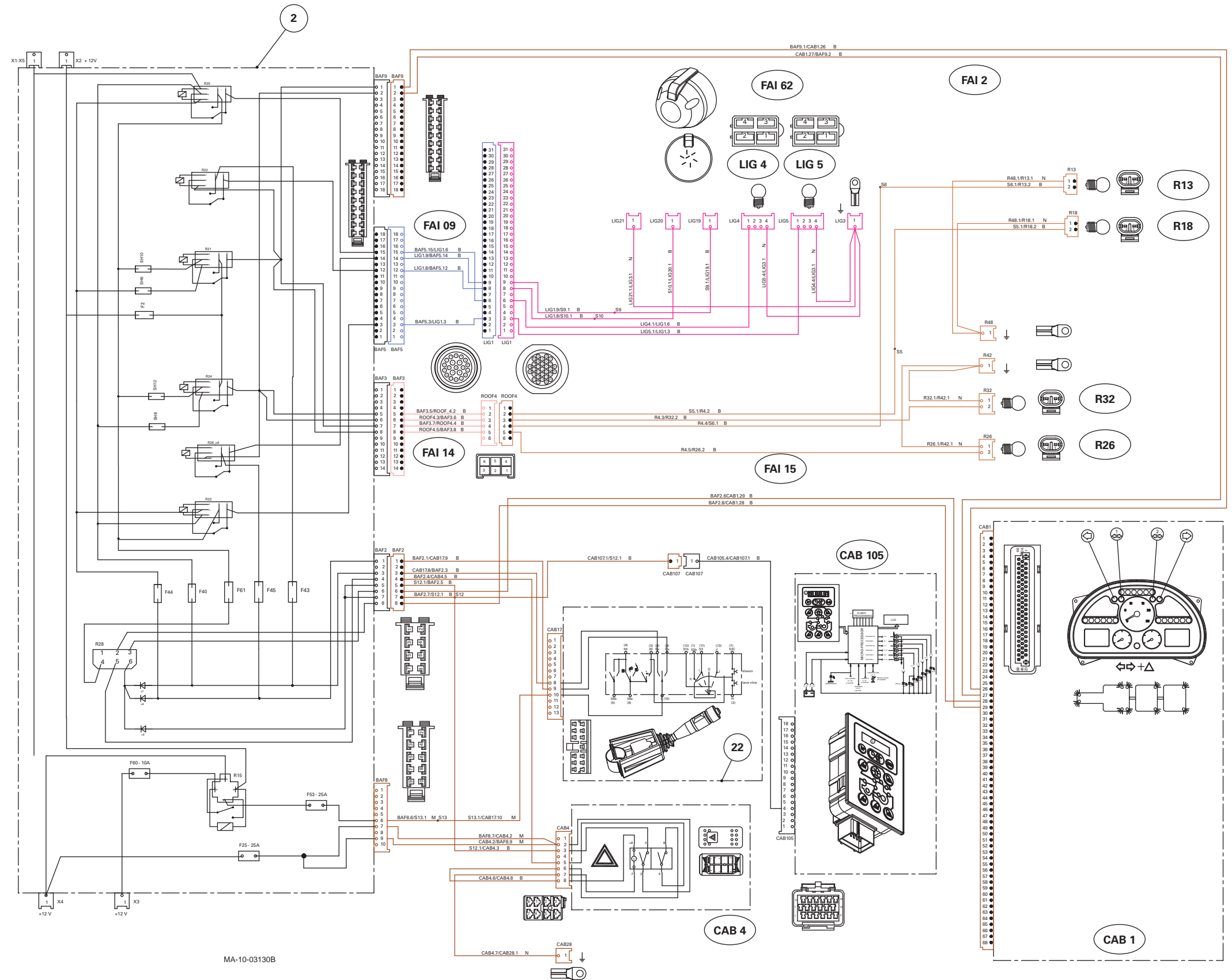
- 2 Fuse box
- 22 Windscreen wiper controls
- 42 Trailer connector—North America
- FAI 09 Cab interior lighting harness
- FAI 14 Pillar harness
- FAI 15 Roof harness
- FAI 34 Guard rail lighting harness
- FAI 62 Fender lighting harness—US (150A)
- CAB1 Instrument panel (DCC2)
- CAB4 Warning switch
- CAB105 Lighting module—NA and Europe
- LIG4 Right-hand rear side lights
- LIG5 Left-hand rear side lights
- LIG25 Fender extension right-hand indicator
- LIG26 Fender extension left-hand indicator
- R12 Guard rail left-hand indicator
- R13 Front left-hand indicator
- R18 Front right-hand indicator
- R19 Guard rail right-hand indicator
- R26 Rear right-hand roof indicator
- R32 Rear left-hand roof indicator



MA-10-03129B

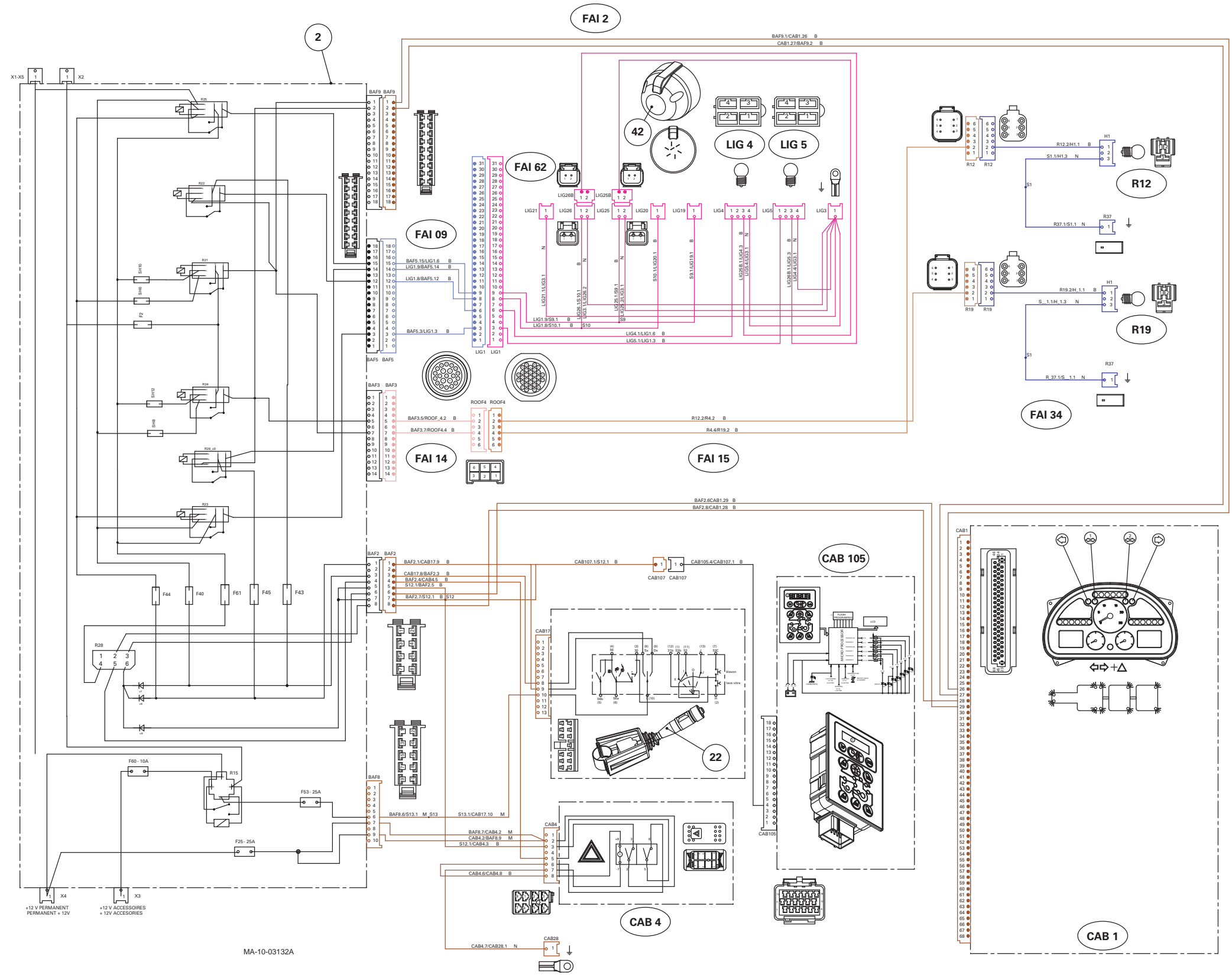
Roof indicators and warning lights—North America—up to number N145024 without fender extensions (GBA20 and GBA10)

- 2 Fuse box
- 22 Windscreen wiper controls
- 42 Trailer connector—North America
- FAI 09 Cab interior lighting harness
- FAI 14 Pillar harness
- FAI 15 Roof harness
- FAI 34 Guard rail lighting harness
- FAI 62 Fender lighting harness—US (150A)
- CAB1 Instrument panel (DCC2)
- CAB4 Warning switch
- CAB105 Lighting module—NA and Europe
- LIG4 Right-hand rear side lights
- LIG5 Left-hand rear side lights
- R13 Front left-hand indicator
- R18 Front right-hand indicator
- R26 Rear right-hand roof indicator
- R32 Rear left-hand roof indicator



Roof indicators and warning lights—North America—from number N145025 without fender extensions (GBA20 and GBA10)

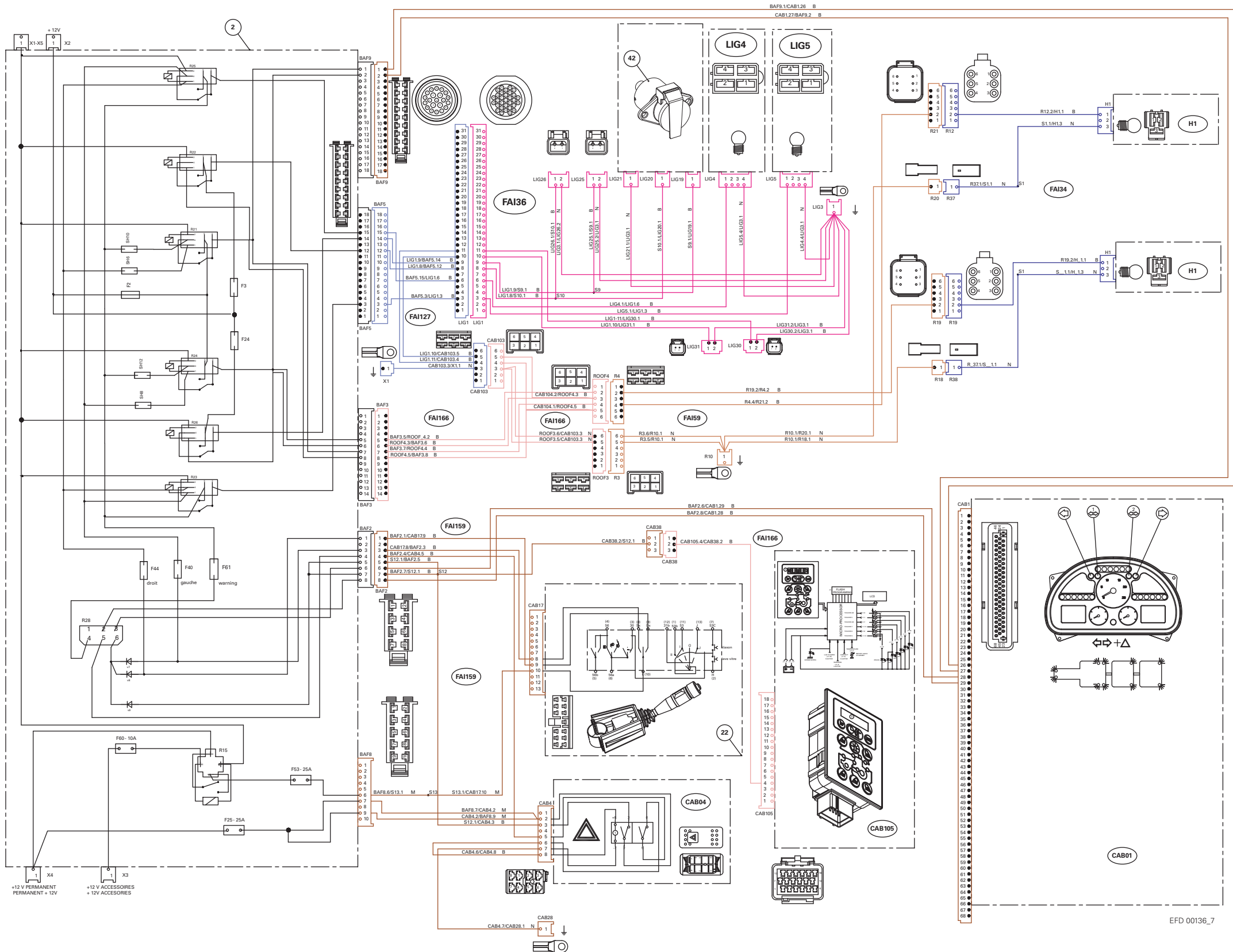
- 2 Fuse box
- 22 Windscreen wiper controls
- 42 Trailer connector—North America
- FAI 09 Cab interior lighting harness
- FAI 14 Pillar harness
- FAI 15 Roof harness
- FAI 34 Guard rail lighting harness
- FAI 62 Fender lighting harness—US (150A)
- CAB1 Instrument panel (DCC2)
- CAB4 Warning switch
- CAB105 Lighting module—NA and Europe
- LIG4 Right-hand rear side lights
- LIG5 Left-hand rear side lights
- R12 Guard rail left-hand indicator
- R19 Guard rail right-hand indicator



ELECTRICAL DIAGRAMS - Lighting

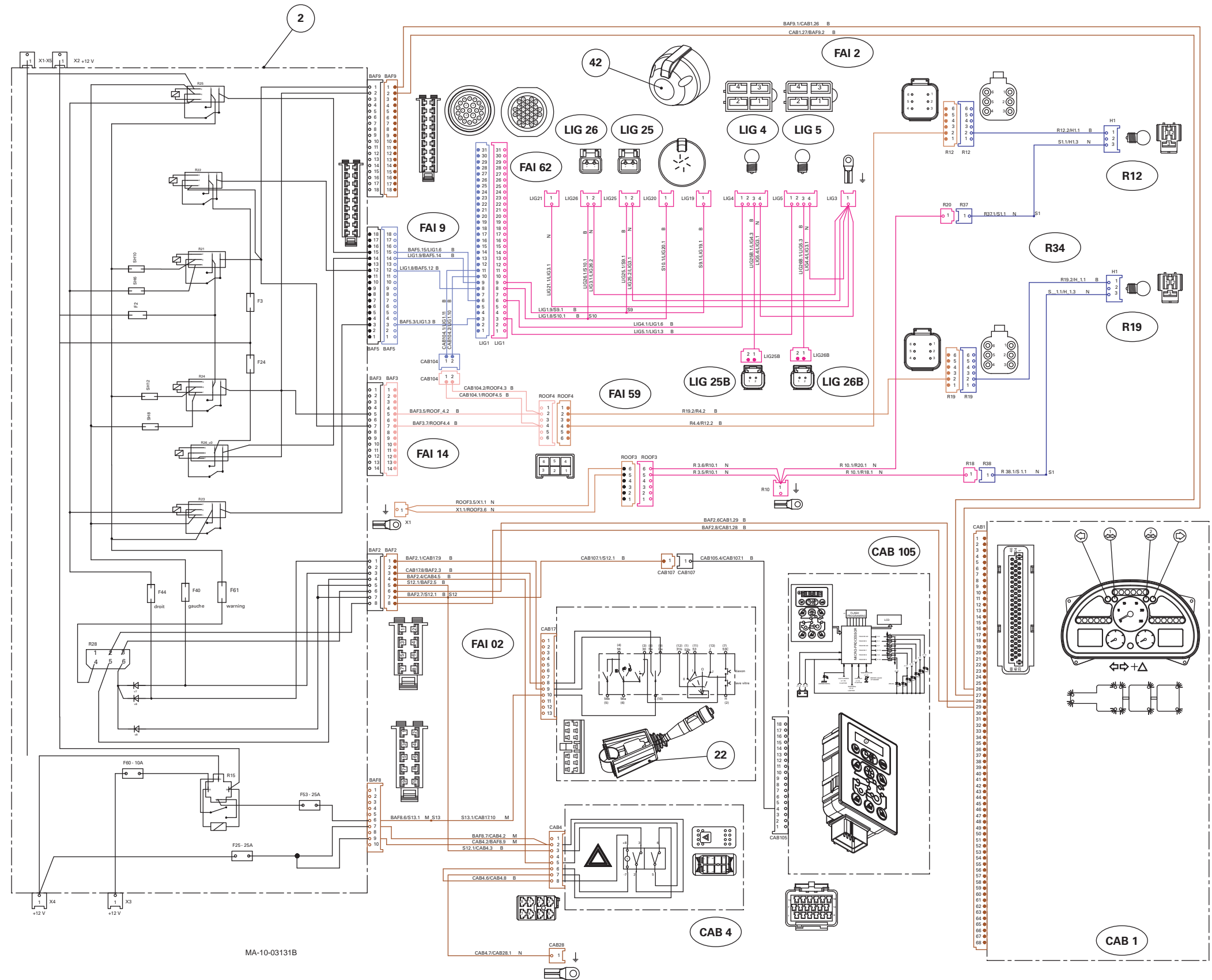
Indicators and warning lights on high-visibility roof—North America (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 22 Windscreen wiper controls
- 42 Trailer connector—North America
- FAI 34 Guard rail lighting harness
- FAI 36 Fender lighting harness (US)
- FAI 59 High-visibility roof harness
- FAI 127 Lighting harness—US
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB01 DCC2 instrument panel
- CAB04 Warning switch
- CAB105 Headlights module
- LIG4 Right-hand rear light
- LIG5 Left-hand rear light
- LIG25 Right fender extension indicator
- LIG26 Left fender extension indicator
- LIG30 Additional left-hand indicator—NA
- LIG31 Additional right-hand indicator—NA
- H1 Front lights



Indicators and warning lights on high-visibility roof—North America—and fender extensions (GBA20 and GBA10)

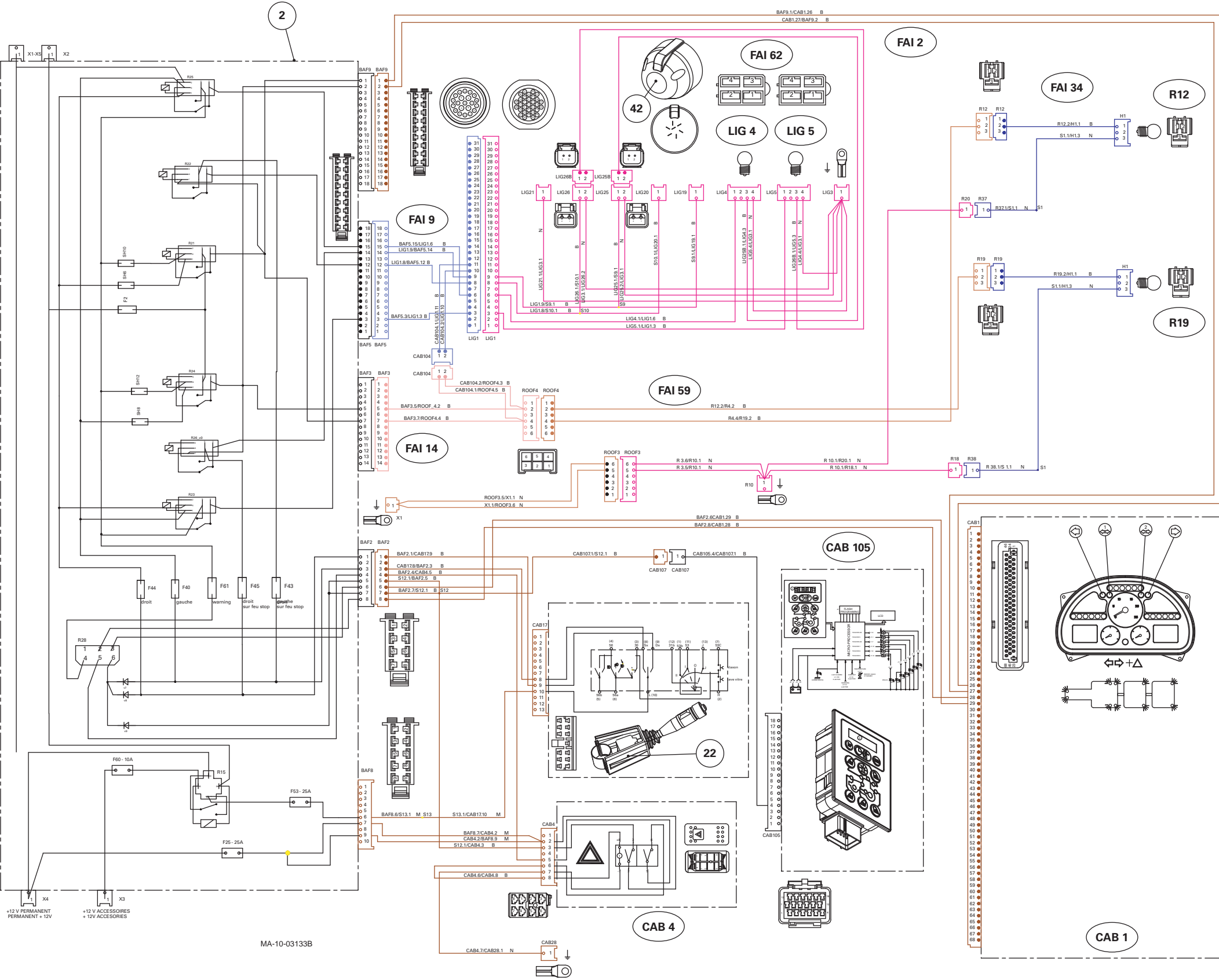
- 2 Fuse box
- 22 Windscreen wiper controls
- 42 Trailer connector—North America
- FAI 09 Cab interior lighting harness
- FAI 14 Pillar harness
- FAI 34 Guard rail lighting harness
- FAI 59 High-visibility roof harness
- FAI 62 Fender lighting harness—US (150A)
- LIG4 Right-hand rear side lights
- LIG5 Left-hand rear side lights
- LIG25 Fender extension right-hand indicator
- LIG26 Fender extension left-hand indicator
- LIG25B Outside right-hand indicator
- LIG26B Outside left-hand indicator
- R12 Guard rail left-hand indicator
- R19 Guard rail right-hand indicator



ELECTRICAL DIAGRAMS - Lighting

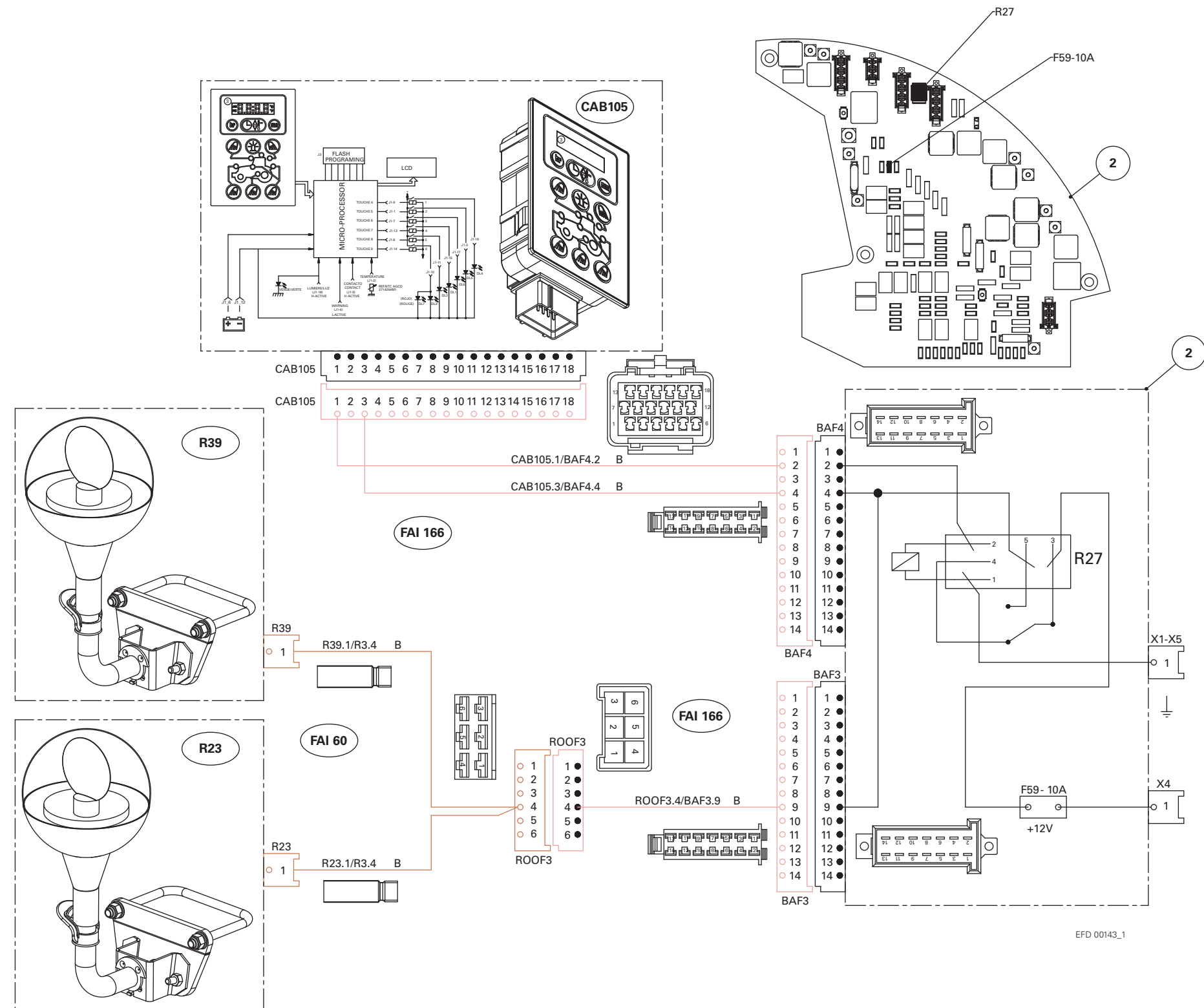
Indicators and warning lights on high-visibility roof without fender extensions (GBA20 and GBA10)

- 2 Fuse box
- 22 Windscreen wiper controls
- 42 Trailer connector—North America
- FAI 09 Cab interior lighting harness
- FAI 14 Pillar harness
- FAI 34 Guard rail lighting harness
- FAI 59 High-visibility roof harness
- FAI 62 Fender lighting harness—US (150A)
- CAB1 Instrument panel (DCC2)
- CAB4 Warning switch
- CAB105 Lighting module—NA and Europe
- LIG4 Right-hand rear side lights
- LIG5 Left-hand rear side lights
- R12 Guard rail left-hand indicator
- R19 Guard rail right-hand indicator



Rotating beacons (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 60 Roof harness (all countries except US)
- FAI 166 Pillar harness
- CAB105 Headlights module
- R23 Left-hand rotating beacon
- R39 Right-hand rotating beacon

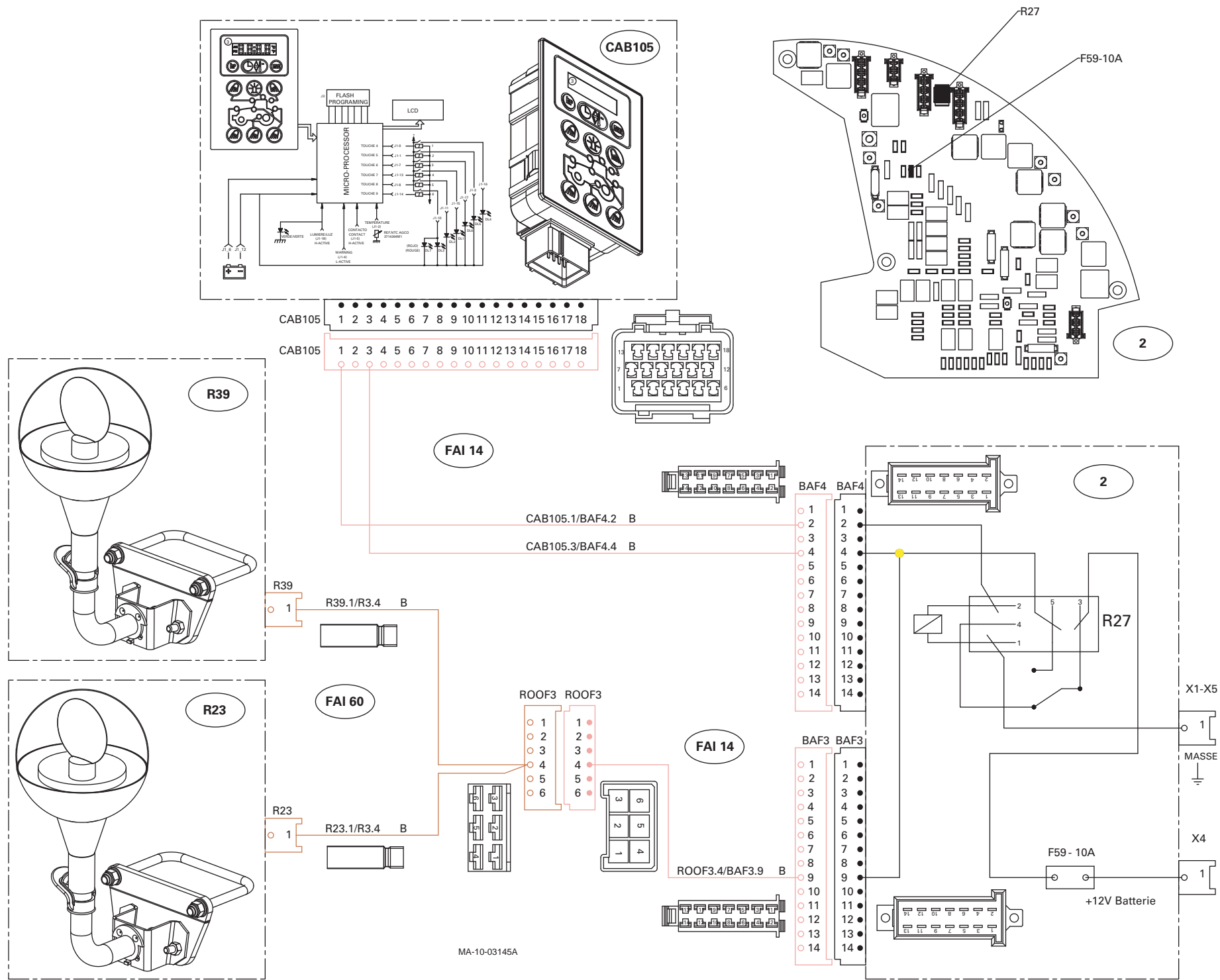


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ELECTRICAL DIAGRAMS - Lighting

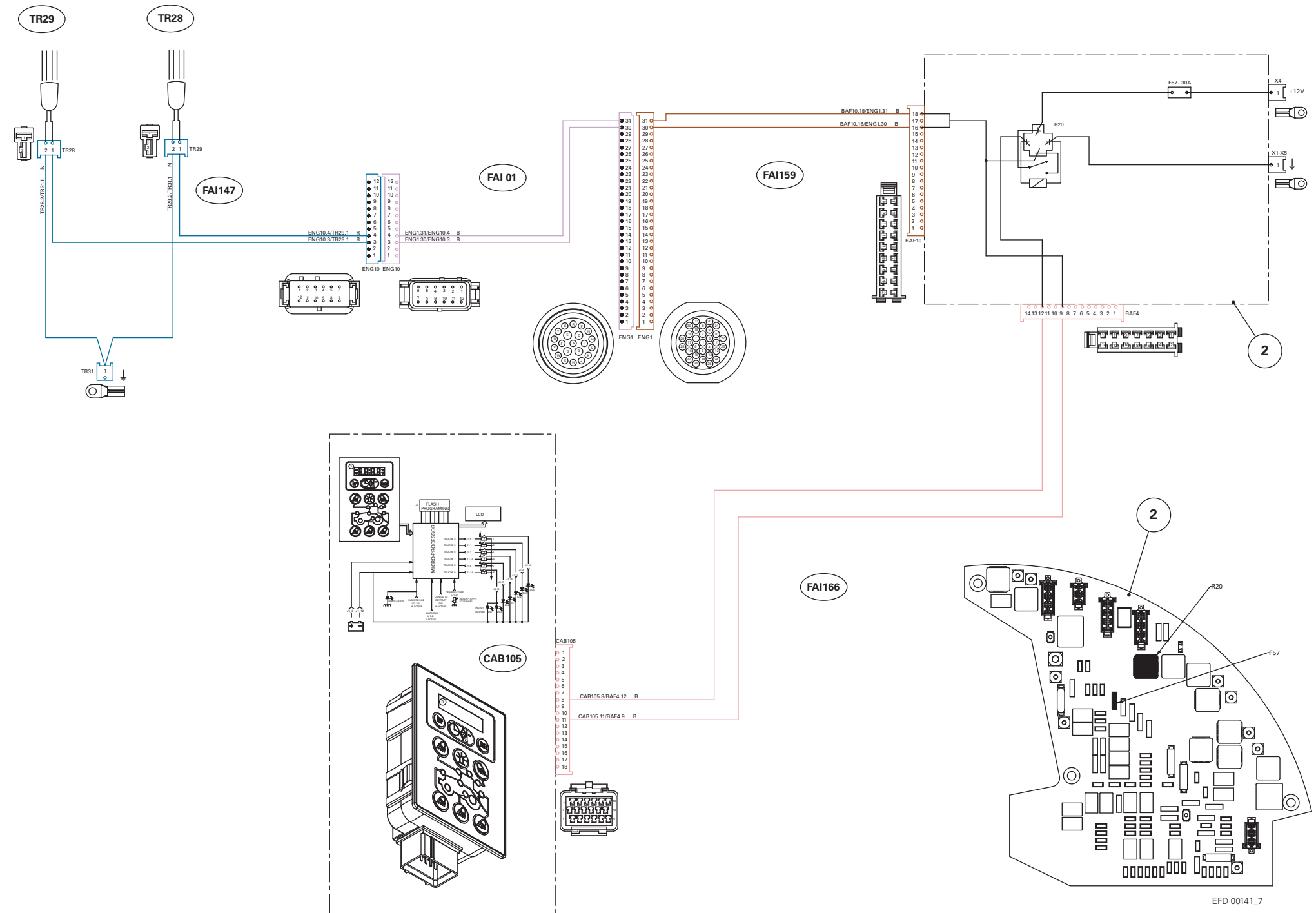
Rotating beacons (GBA20 and GBA10)

- 2 Fuse box
- FAI 14 Pillar harness
- CAB105 Lighting module—NA and Europe
- FAI 60 Roof harness (all countries except US)
- R23 Left-hand rotating beacon
- R39 Right-hand rotating beacon



Footplate lighting—Europe (GBA25 and GBA10-Auto5)

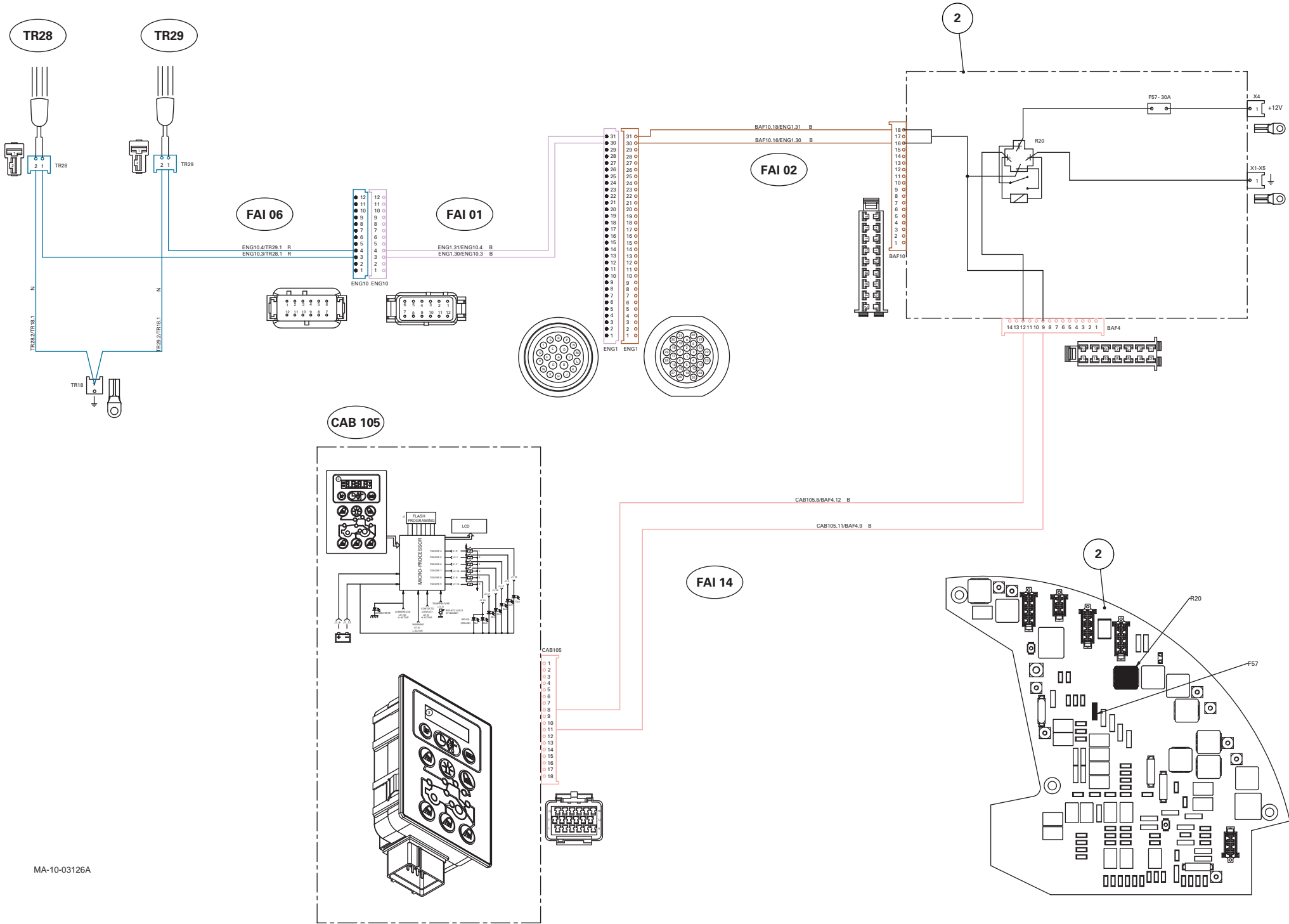
- 2 Fuse box
- FAI 01 Engine harness
- FAI 147 Transmission harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB105 Headlights module
- TR28 Left footplate lighting
- TR29 Right footplate lighting



ELECTRICAL DIAGRAMS - Lighting

Footplate lighting—Europe (GBA20 and GBA10)

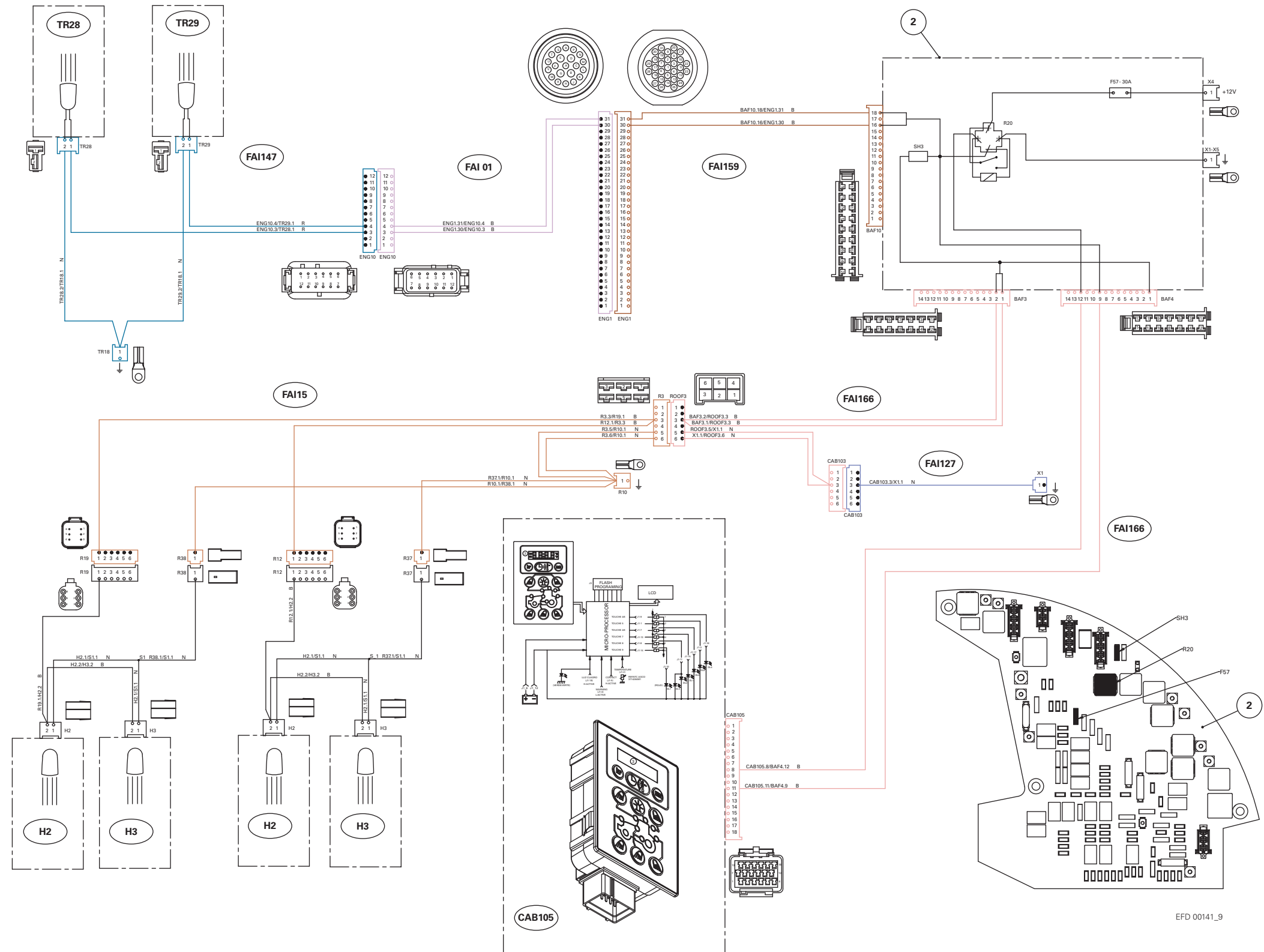
- 2 Fuse box
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- FAI 06 Transmission harness
- FAI 14 Pillar harness
- CAB105 Lighting module—NA and Europe
- TR28 Left footplate lighting
- TR29 Right footplate lighting



MA-10-03126A

Footplate lighting—North America (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 01 Engine harness
- FAI 15 Roof harness
- FAI 127 Lighting harness—US
- FAI 147 Transmission harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB105 Headlights module
- H2 Left guard rail lighting
- H3 Right guard rail lighting
- TR28 Left footplate lighting
- TR29 Right footplate lighting

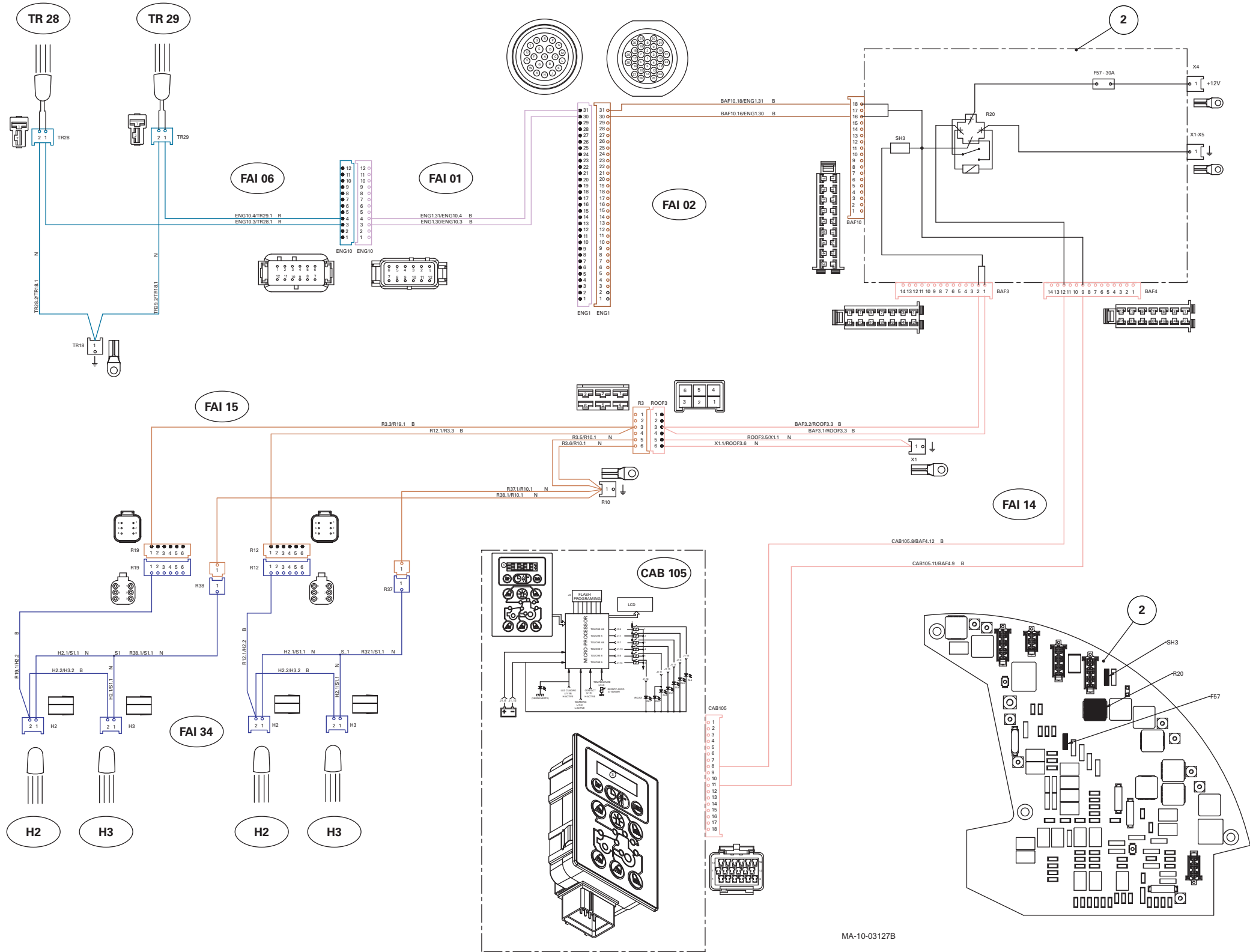


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ELECTRICAL DIAGRAMS - Lighting

Footplate lighting – North America (GBA20 and GBA10)

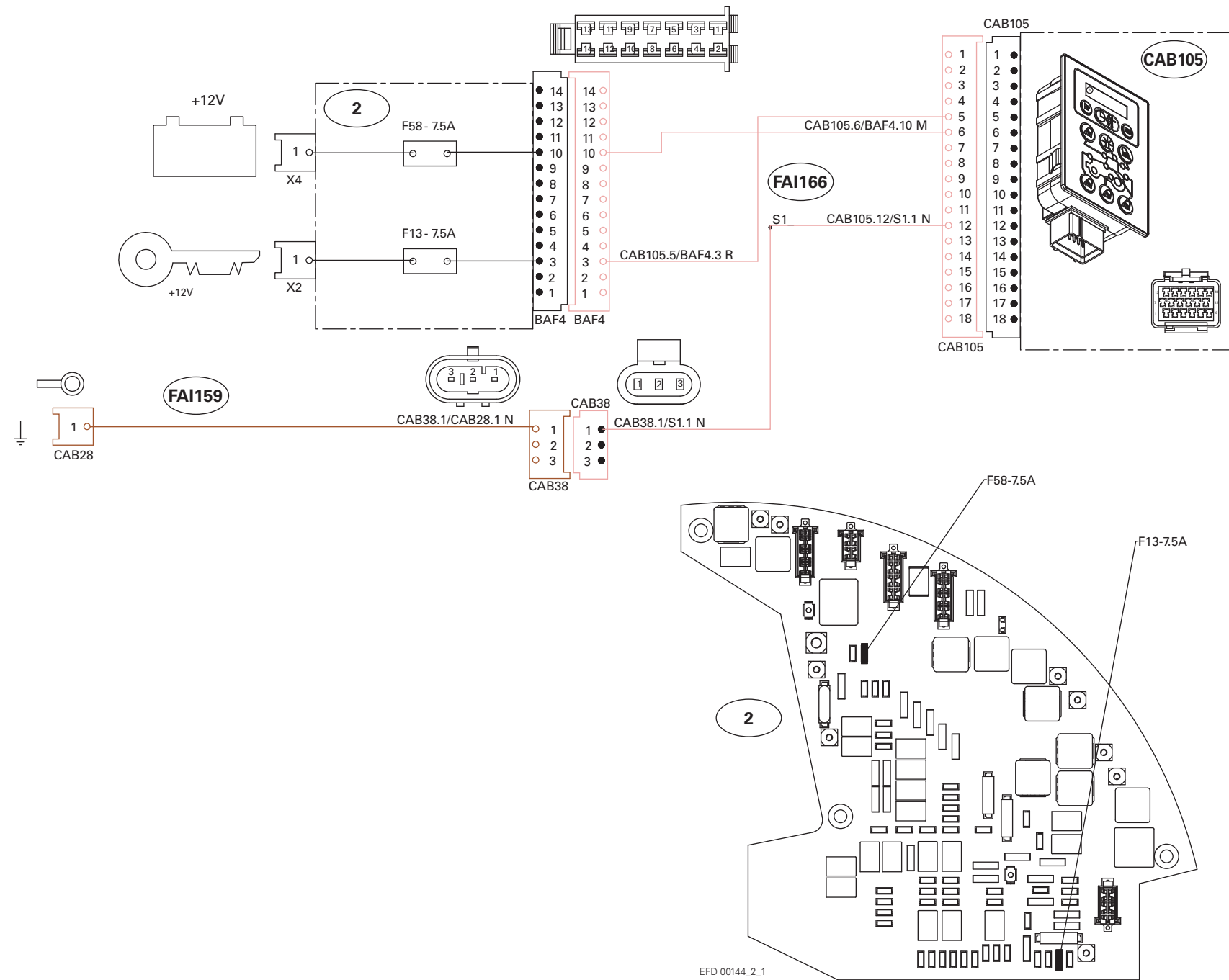
- 2 Fuse box
- FAI 01 Engine harness
- FAI 02 Instrument panel harness
- FAI 06 Transmission harness
- FAI 14 Pillar harness
- FAI 15 Roof harness
- FAI 34 Guard rail lighting harness
- CAB105 Lighting module—NA and Europe
- TR28 Left footplate lighting
- TR29 Right footplate lighting
- H2 Left guard rail lighting
- H3 Right guard rail lighting



MA-10-03127B

**Work headlights power supply module
(GBA25 and GBA10-Auto5)**

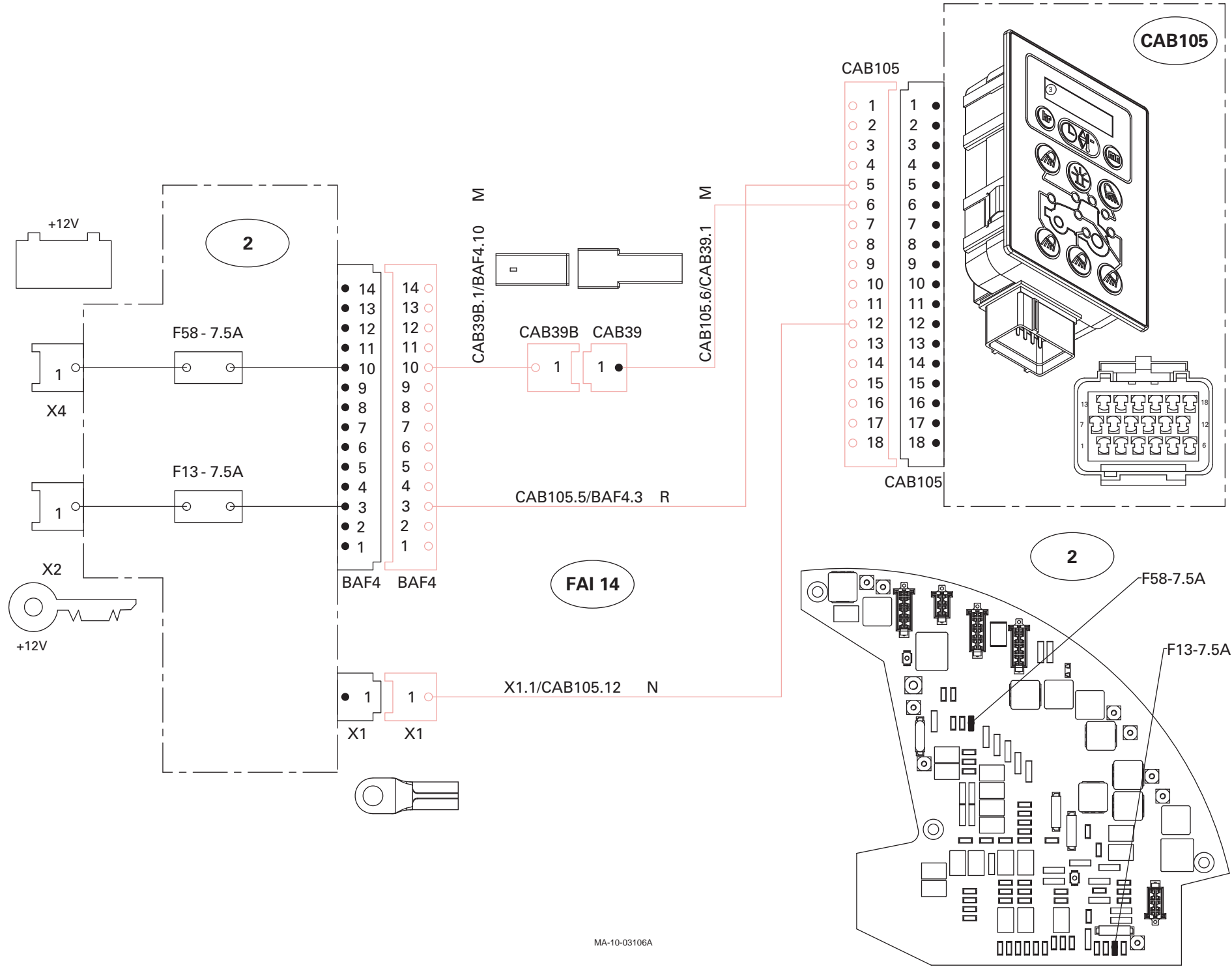
- 2 Fuse box
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB105 Headlights module



ELECTRICAL DIAGRAMS - Lighting

Work headlights module without circuit breaker—Europe (GBA20 and GBA10)

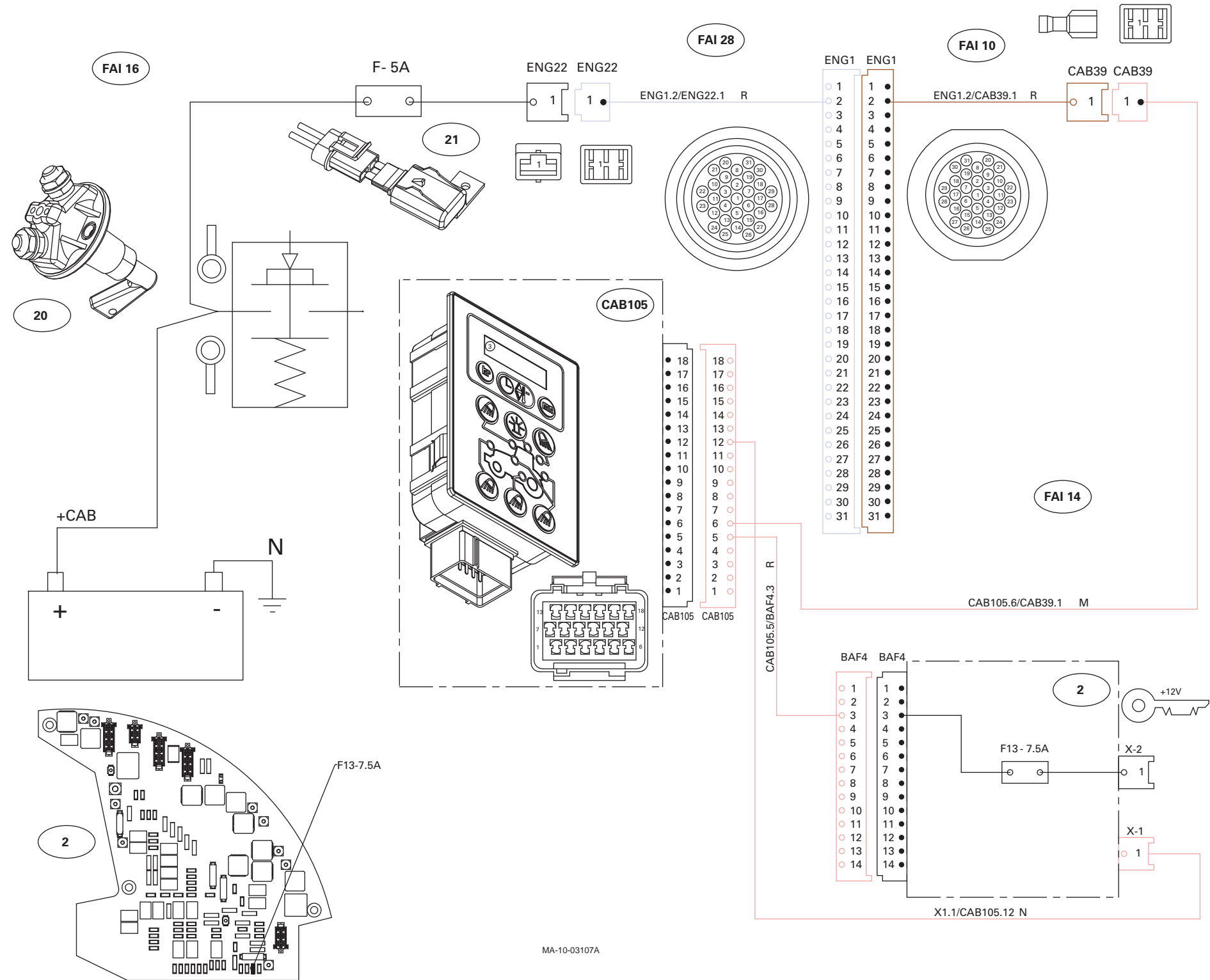
- 2 Fuse box
- FAI 14 Pillar harness
- CAB105 Lighting module—NA and Europe



MA-10-03106A

Work headlights module with circuit breaker—Europe (GBA20 and GBA10)

- 2 Fuse box
- 20 Circuit breaker
- 21 Line fuse
- FAI 10 Dynashift with EEM instrument panel harness
- FAI 14 Pillar harness
- FAI 16 Circuit breaker harness
- FAI 28 Perkins EEM engine harness
- CAB105 Lighting module—NA and Europe

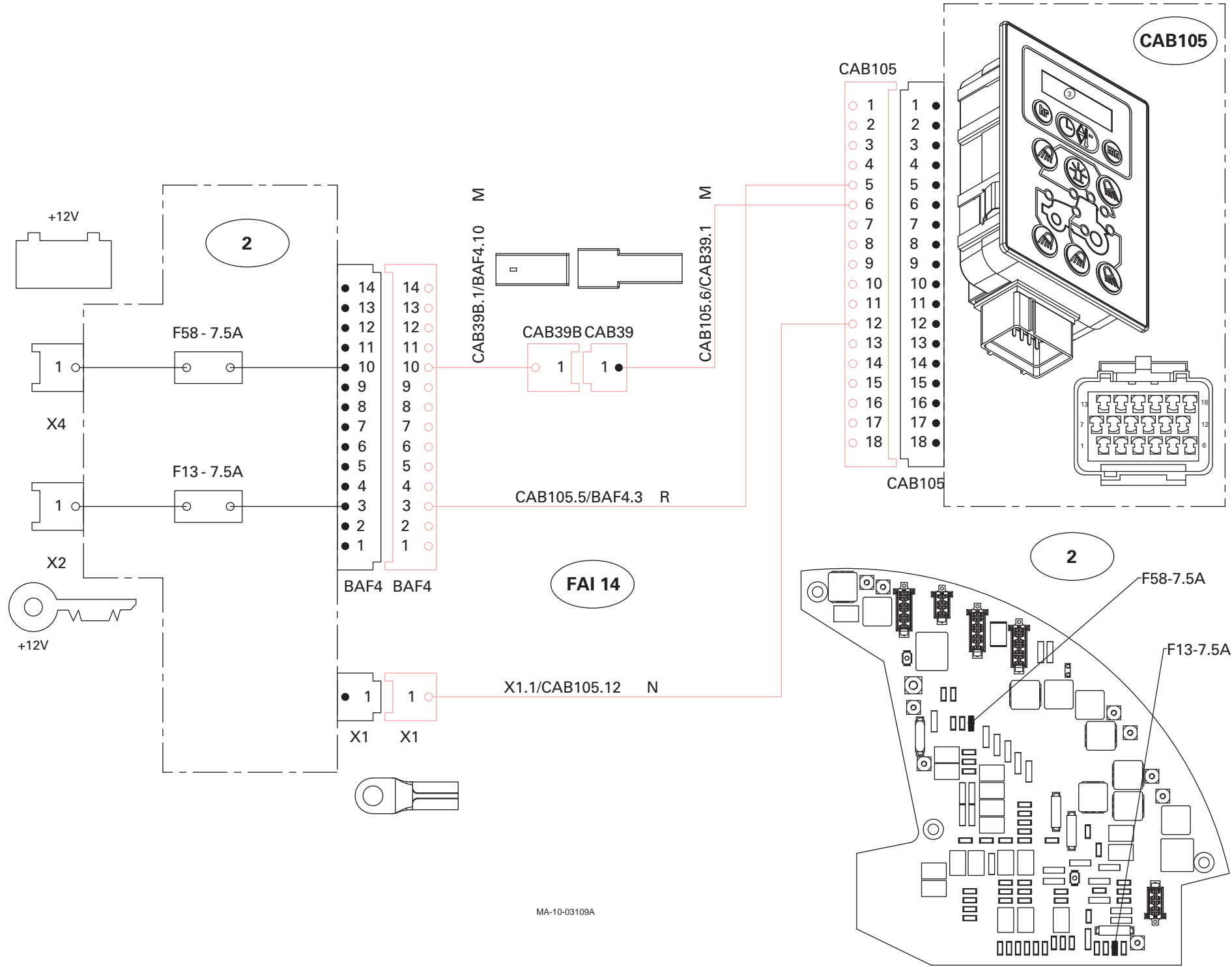


MA-10-03107A

ELECTRICAL DIAGRAMS - Lighting

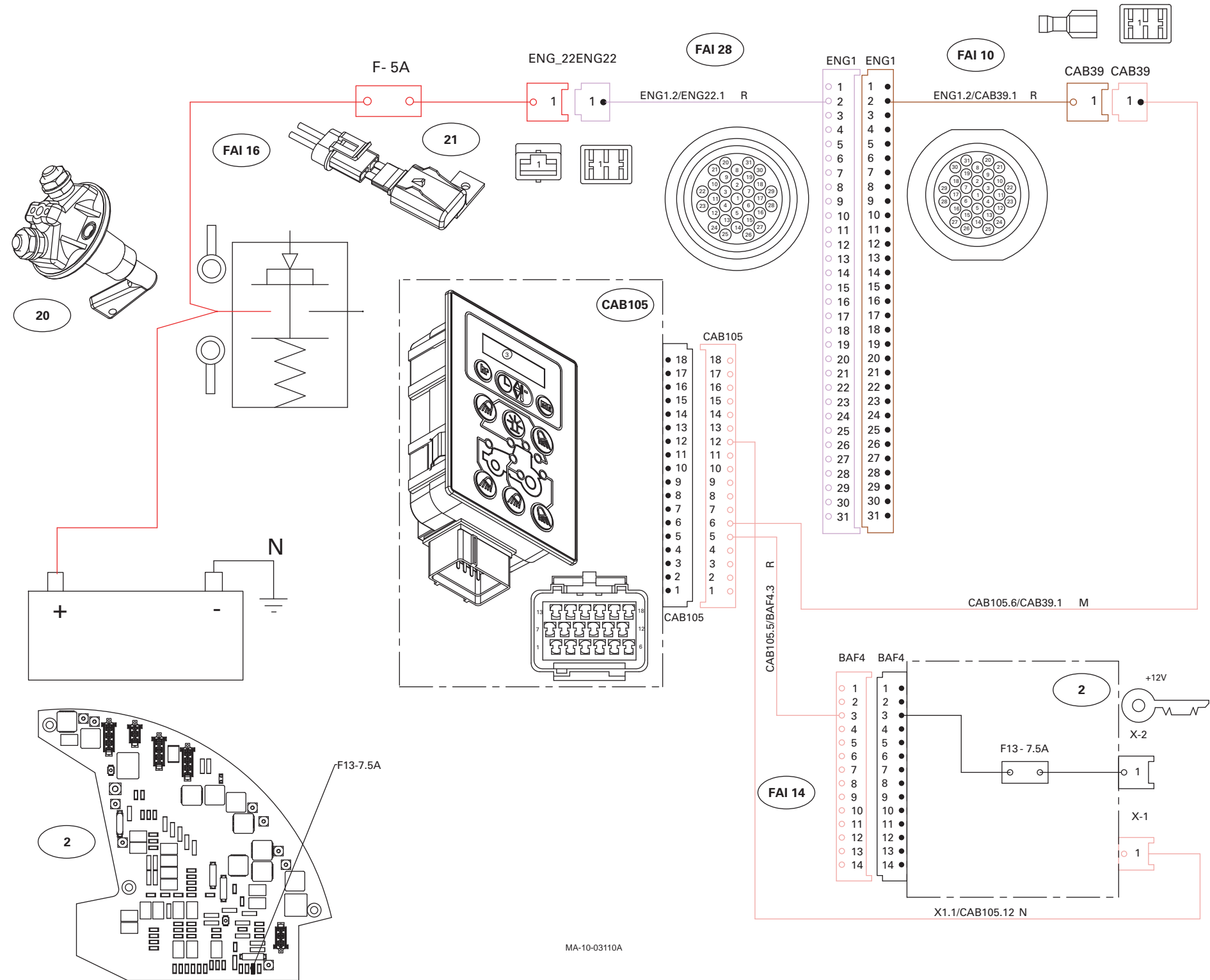
Work headlights module without circuit breaker—North America (GBA20 and GBA10)

- 2 Fuse box
- FAI 14 Pillar harness
- CAB105 Lighting module—NA and Europe



Work headlights module with circuit breaker—North America (GBA20 and GBA10)

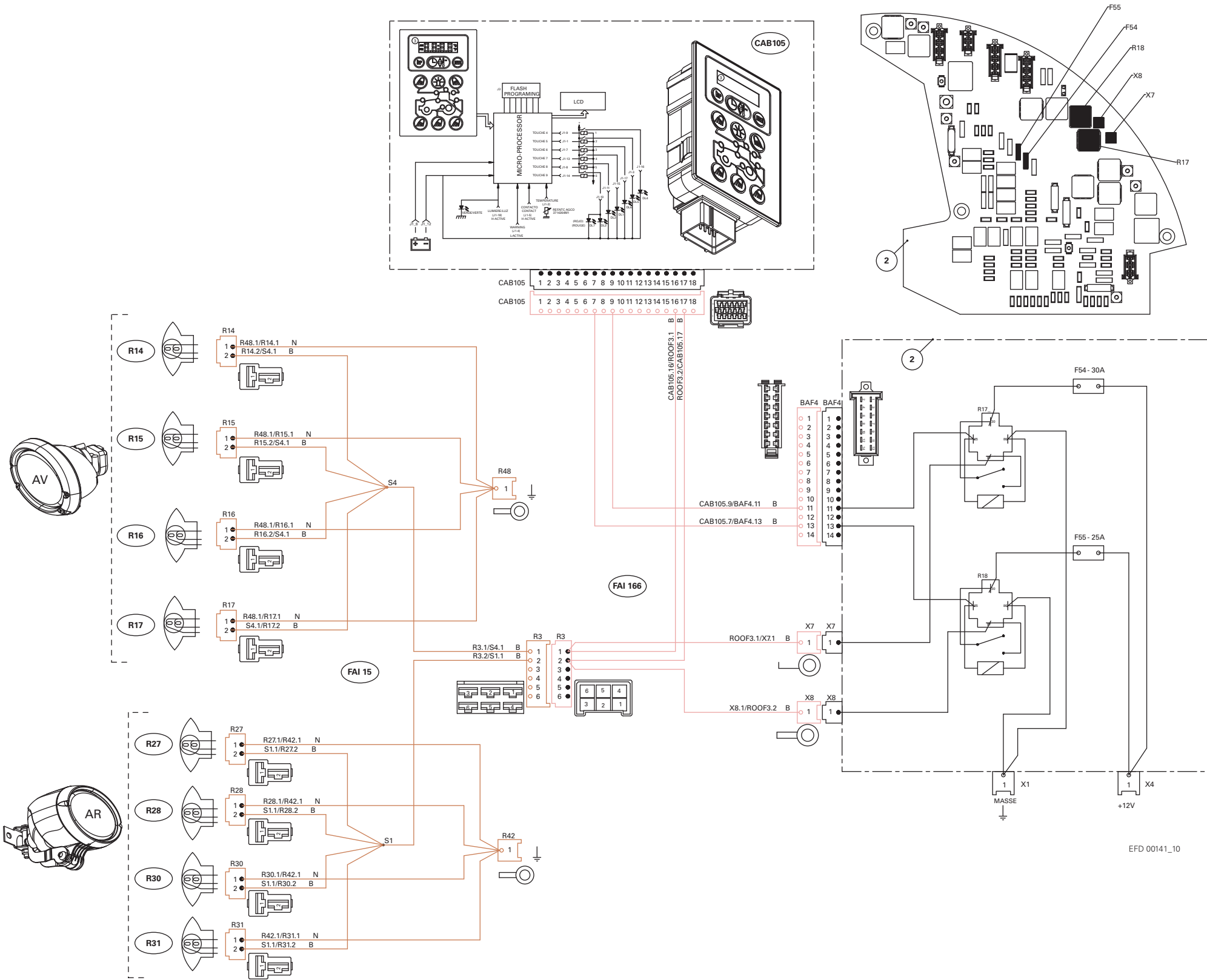
- 2 Fuse box
- 20 Circuit breaker
- 21 Line fuse
- FAI 10 Dynashift with EEM instrument panel harness
- FAI 14 Pillar harness
- FAI 16 Circuit breaker harness
- FAI 28 Perkins EEM engine harness
- CAB105 Lighting module—NA and Europe



ELECTRICAL DIAGRAMS - Lighting

Work headlights on roof—Europe (GBA25 and GBA10-Auto5)

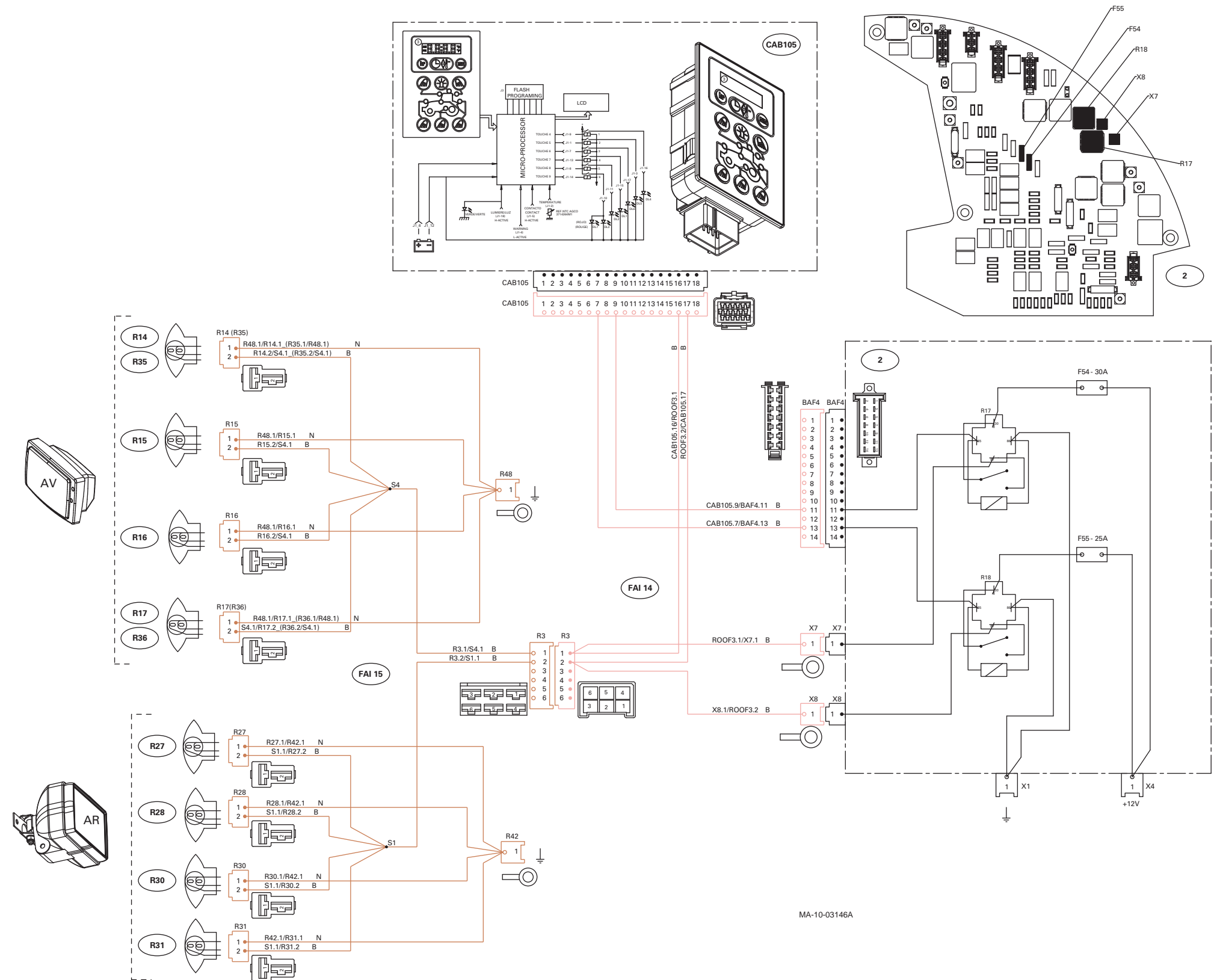
- 2 Fuse box
- FAI 15 Roof harness
- FAI 166 Pillar harness
- CAB105 Headlights module
- R14 Front work headlight
- R15 Front work headlight
- R16 Front work headlight
- R17 Front work headlight
- R27 Rear work headlight
- R28 Rear work headlight
- R30 Rear work headlight
- R31 Rear work headlight



EFD 00141_10

Standard work headlights on roof (GBA20 and GBA10)

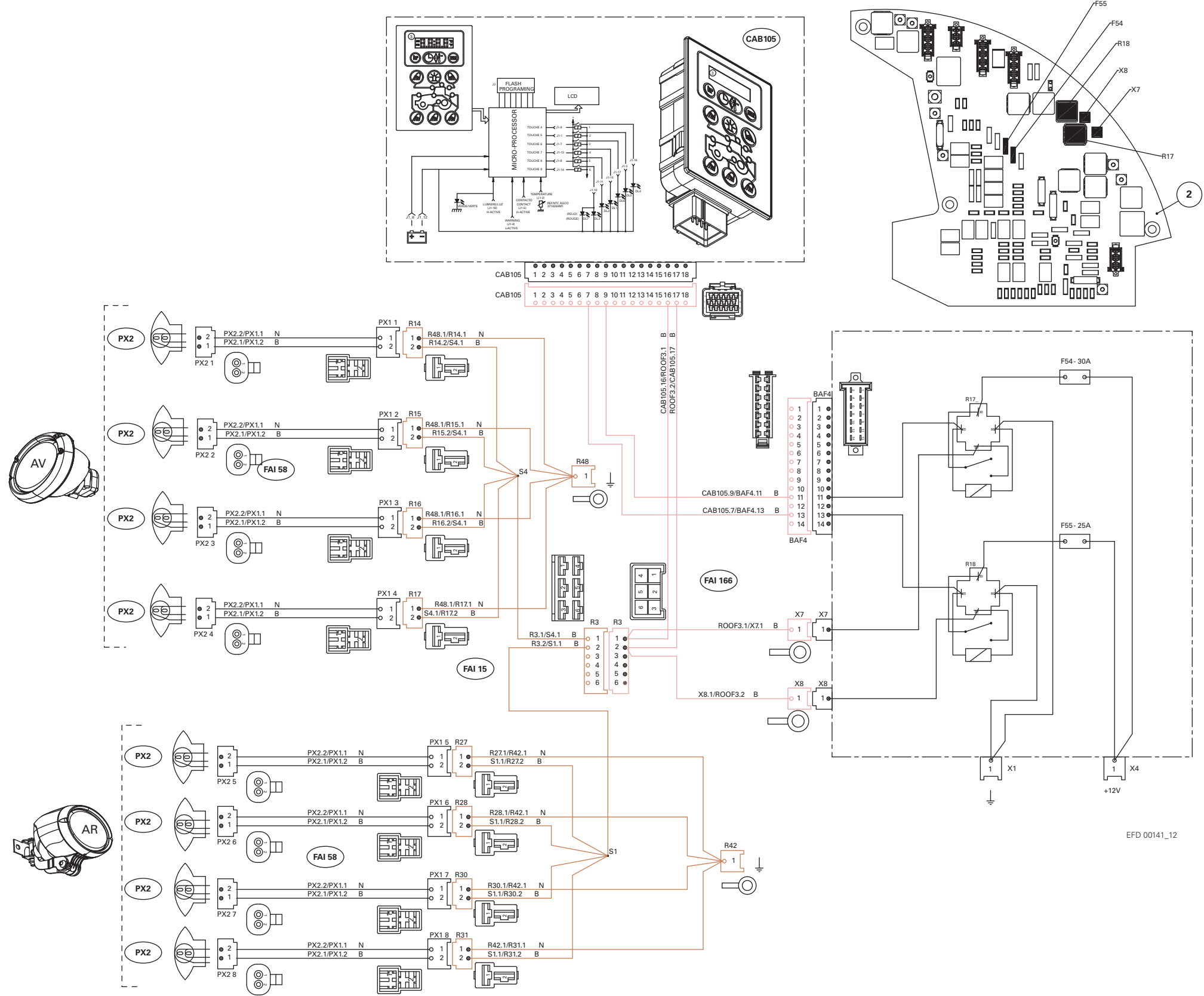
- 2 Fuse box
- FAI 14 Pillar harness
- FAI 15 Roof harness
- CAB105 Lighting module—NA and Europe
- R14 Front work headlight
- R15 Front work headlight
- R16 Front work headlight
- R17 Front work headlight
- R35 Front work headlight
- R36 Front work headlight
- R27 Rear work headlight
- R28 Rear work headlight
- R30 Rear work headlight
- R31 Rear work headlight



ELECTRICAL DIAGRAMS - Lighting

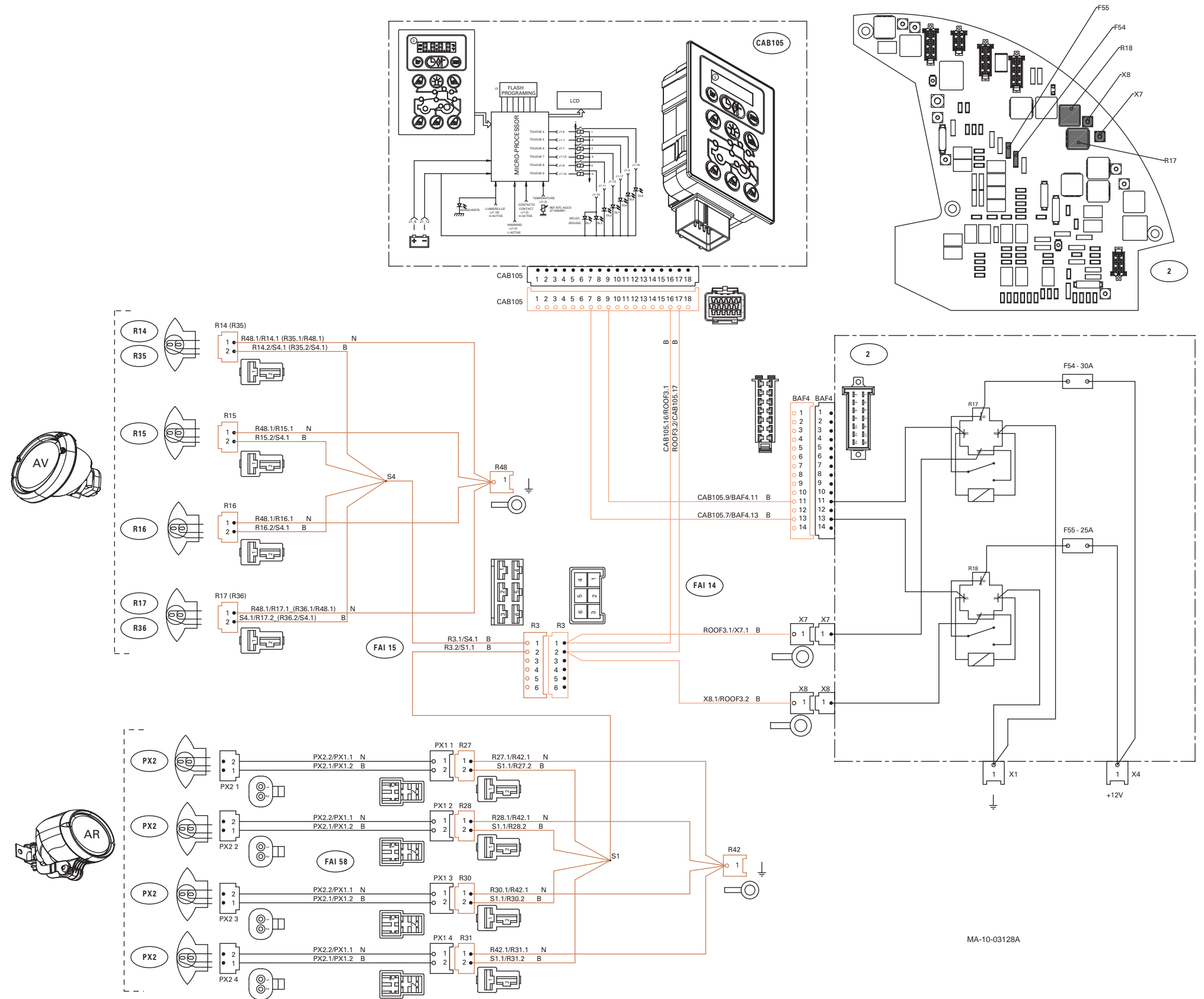
Xenon work headlights on roof—Europe (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 15 Roof harness
- 1FAI 58 Xenon headlight adapter harness
- FAI 166 Pillar harness
- CAB105 Headlights module
- PX2 Xenon work headlights



Xenon work headlights on roof (GBA20 and GBA10)

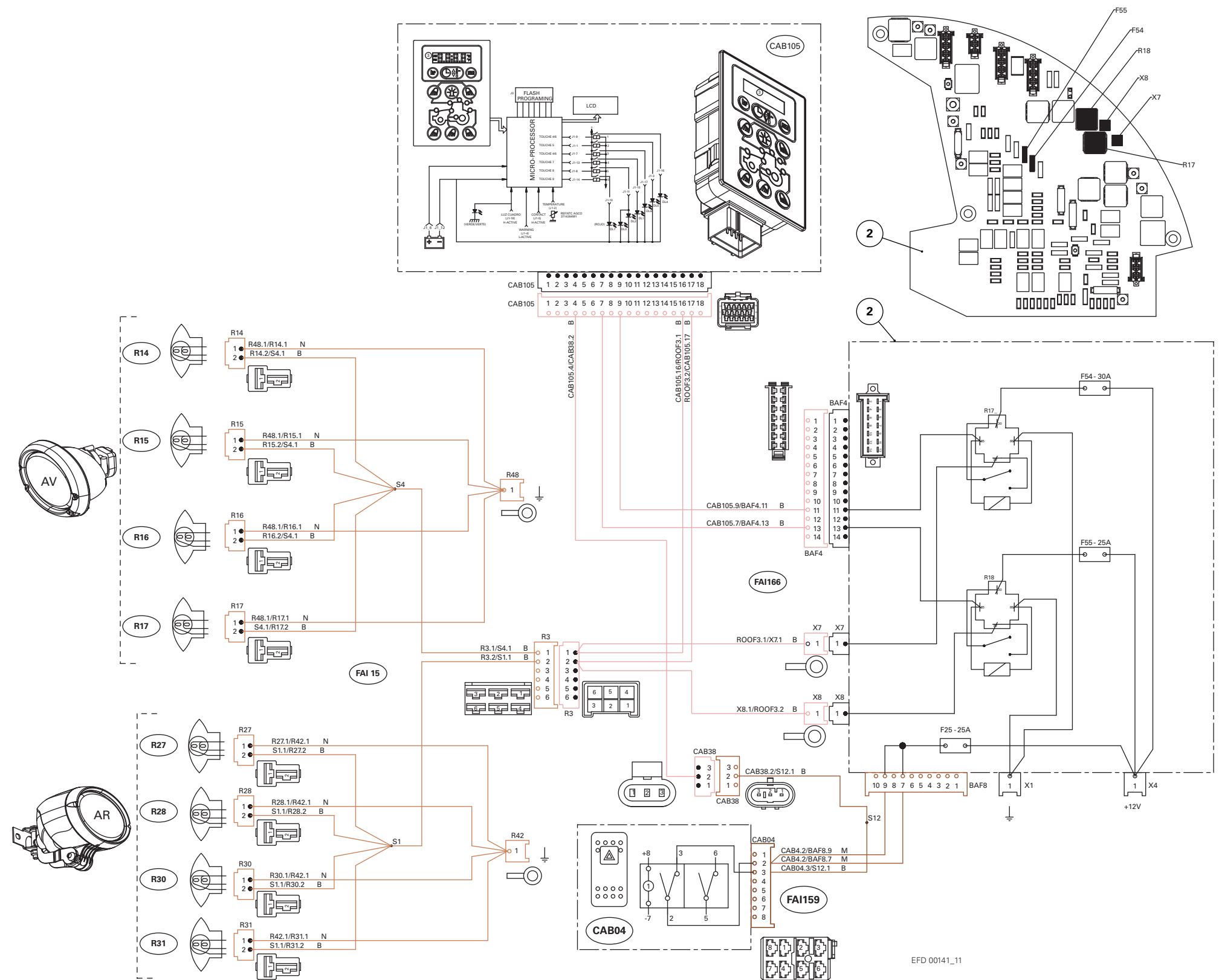
- 2 Fuse box
- FAI 14 Pillar harness
- FAI 15 Roof harness
- FAI 58 Xenon headlight adapter harness
- CAB105 Lighting module—NA and Europe
- R14 Front work headlight
- R15 Front work headlight
- R16 Front work headlight
- R17 Front work headlight
- R35 Front work headlight
- R36 Front work headlight
- PX2 Rear xenon work headlights



ELECTRICAL DIAGRAMS - Lighting

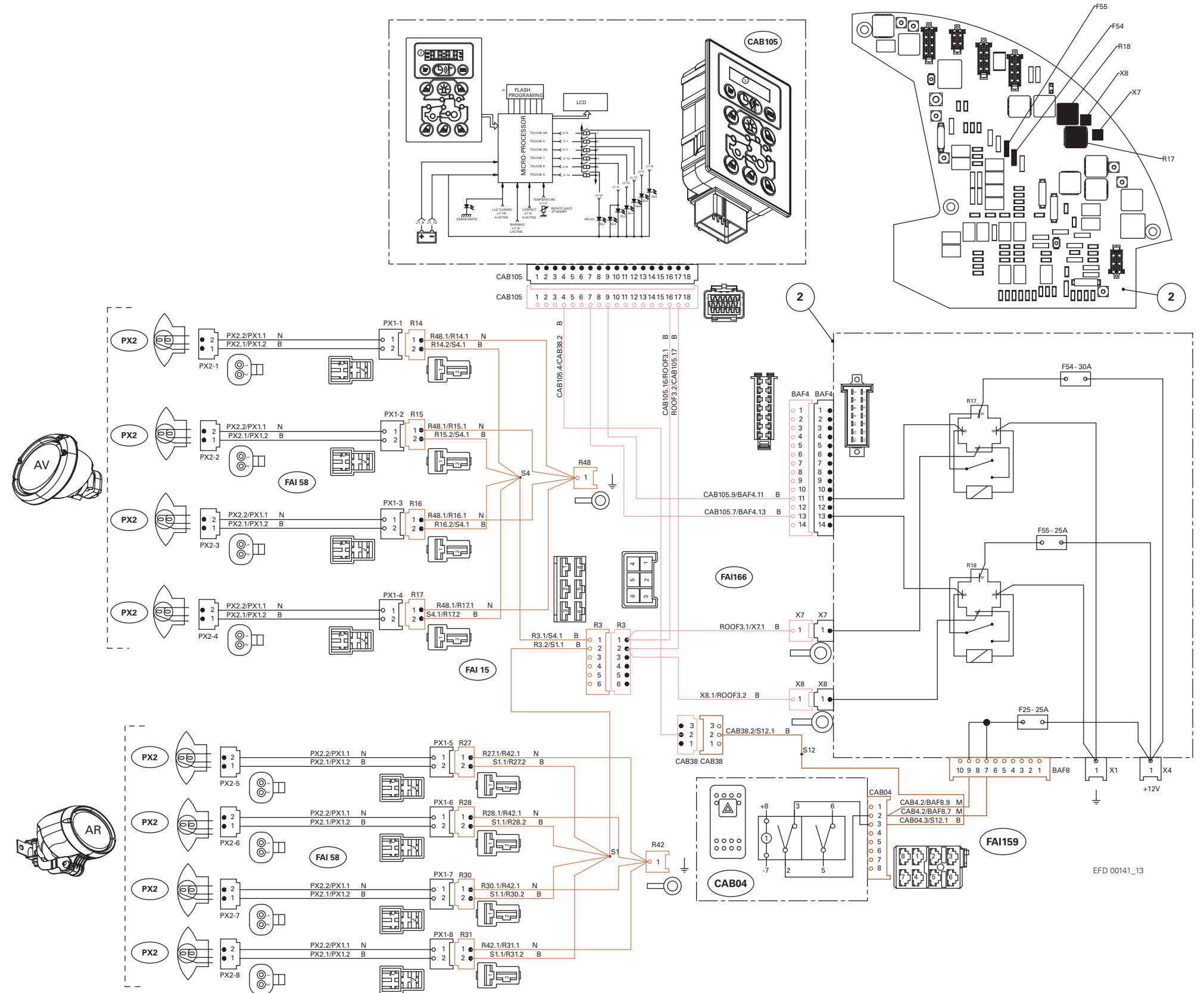
Work headlights on roof—North America (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 15 Roof harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB04 Warning switch
- CAB105 Headlights module
- R14 Front work headlight
- R15 Front work headlight
- R16 Front work headlight
- R17 Front work headlight
- R27 Rear work headlight
- R28 Rear work headlight
- R30 Rear work headlight
- R31 Rear work headlight



Xenon work headlights on roof—North America (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 15 Roof harness
- FAI 58 Xenon headlight adapter harness
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB04 Warning switch
- CAB105 Headlights module
- PX2 Xenon work headlights

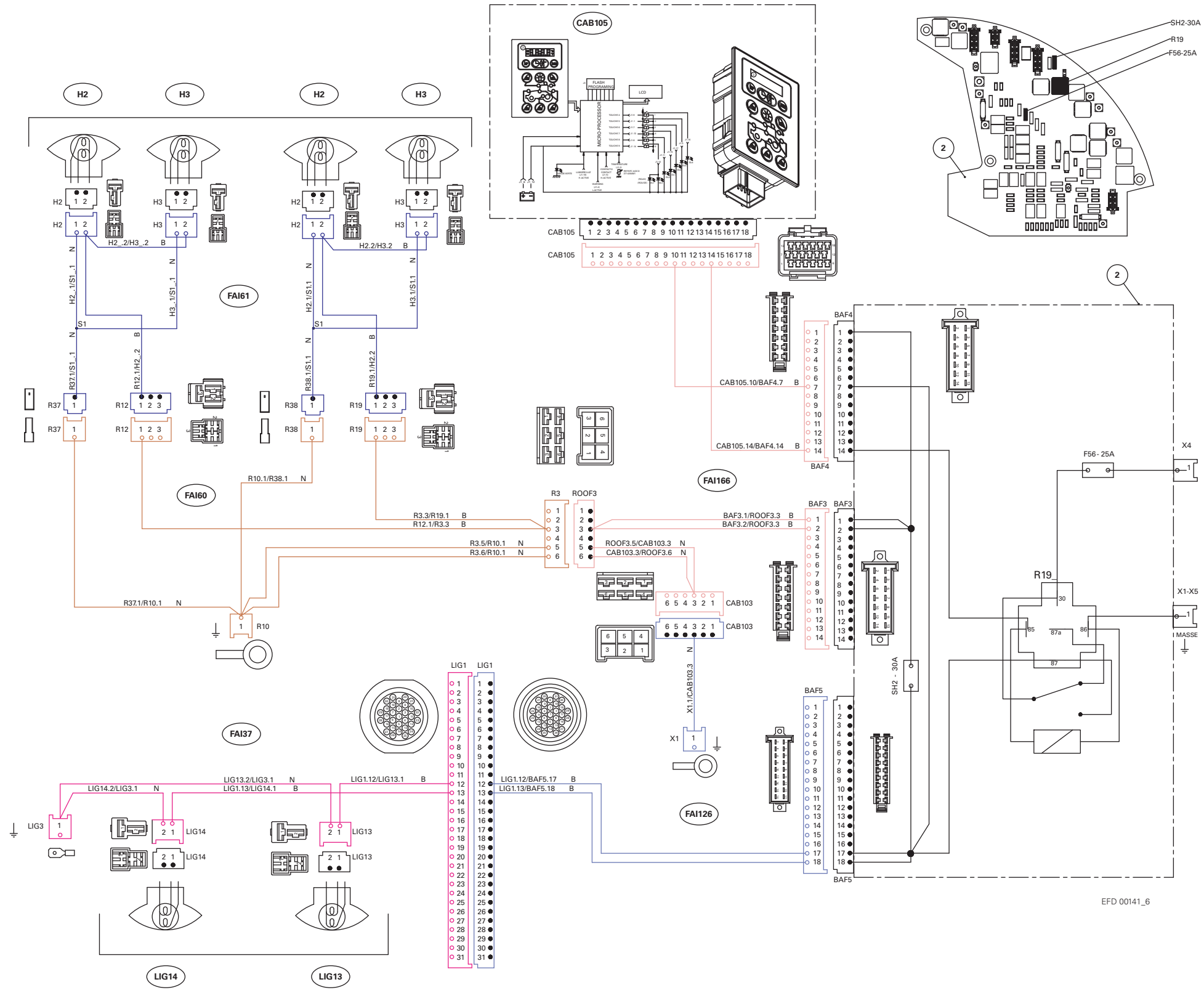


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ELECTRICAL DIAGRAMS - Lighting

Work headlights on fenders and guard rails—Europe (GBA25 and GBA10-Auto5)

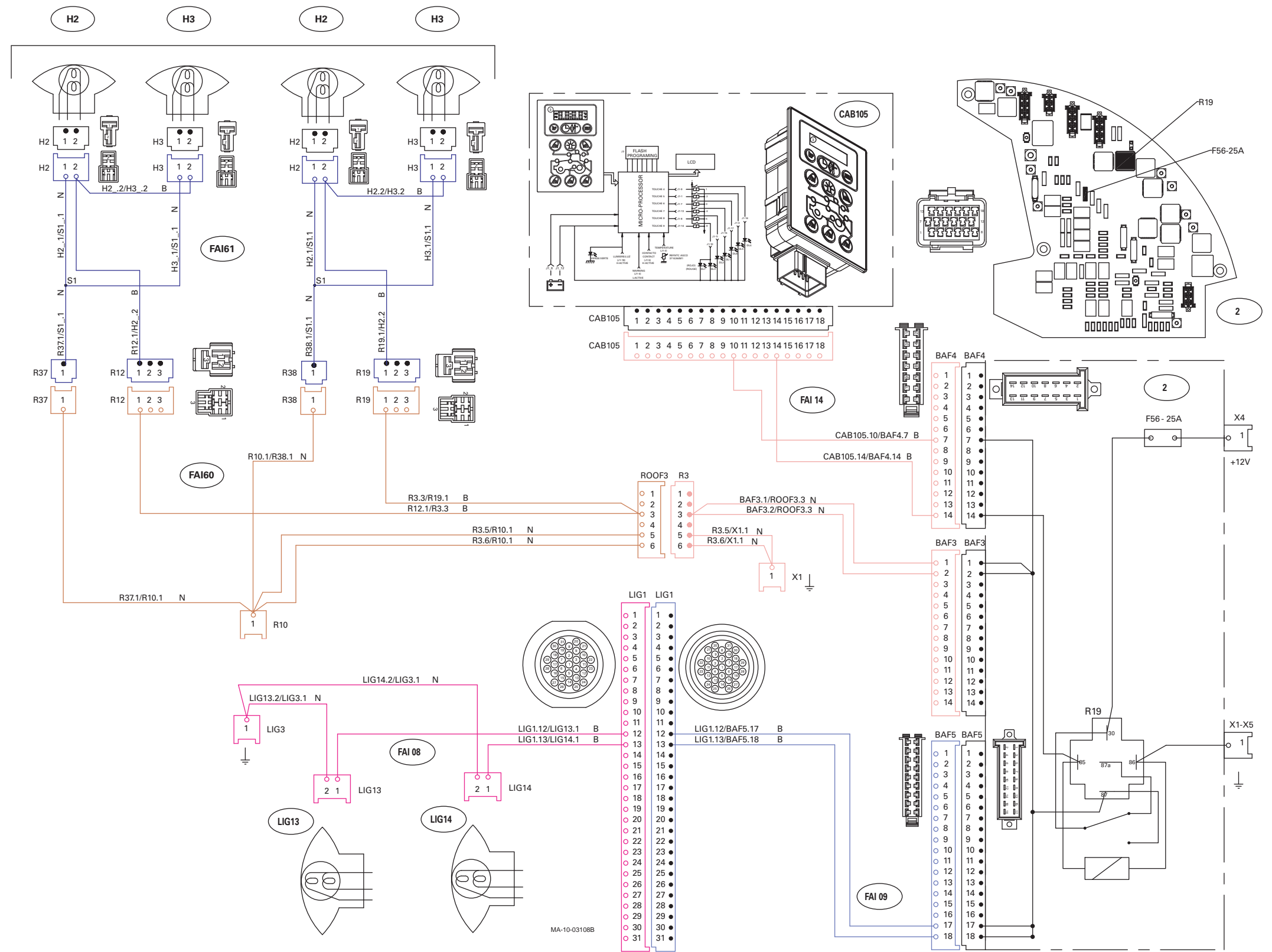
- 2 Fuse box
- FAI 37 Fender lighting harness (all countries except US)
- FAI 60 Roof harness (all countries except US)
- FAI 61 Guard rail lighting harness (all countries except US)
- FAI 126 Lighting harness—Europe
- FAI 166 Pillar harness
- CAB105 Headlights module
- H2 Left guard rail lighting
- H3 Right guard rail lighting
- LIG13 Right fender work headlight
- LIG14 Left fender work headlight



EFD 00141_6

Work headlights on fenders and guard rails (GBA20 and GBA10)

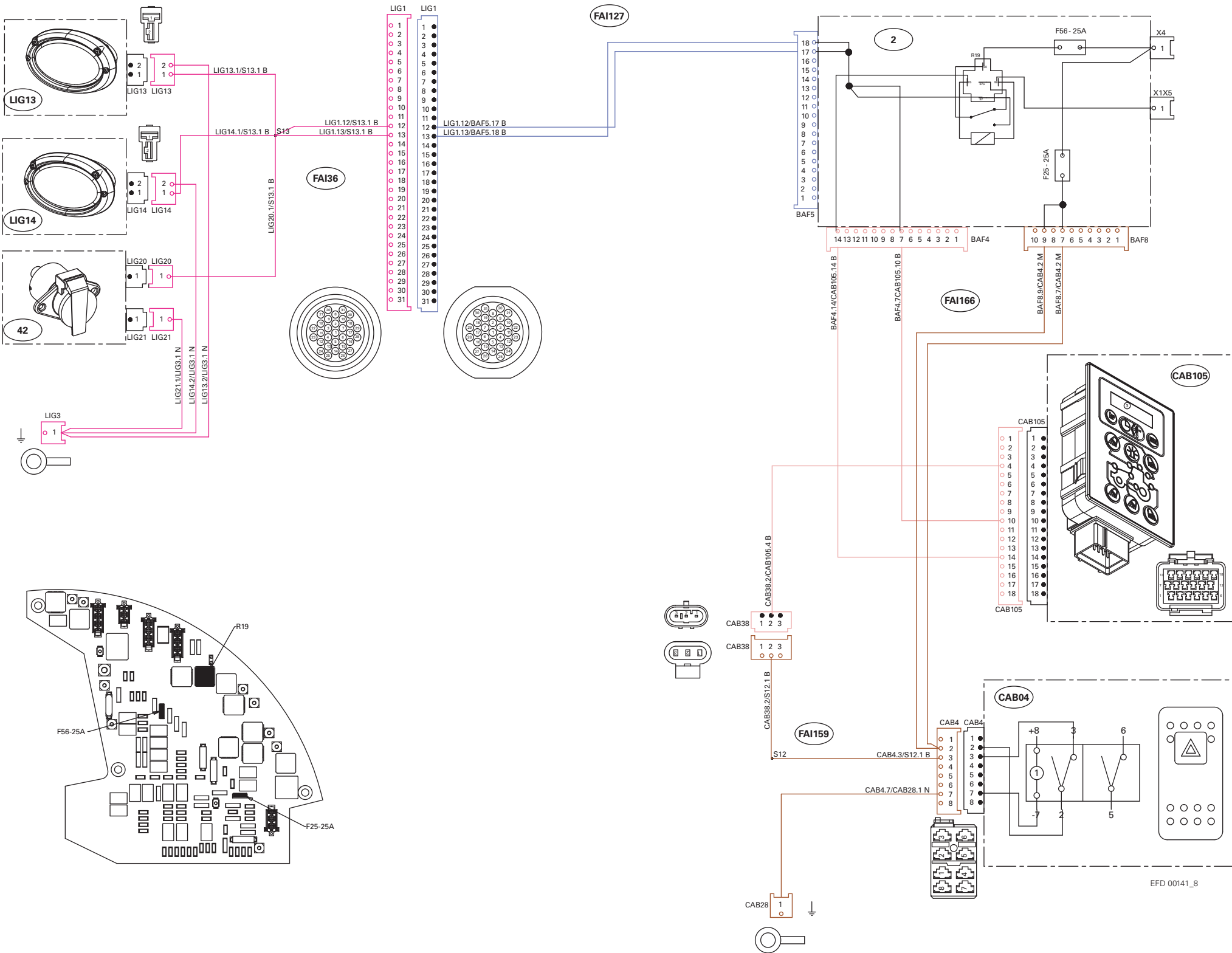
- 2 Fuse box
- FAI 08 Lighting harness
- FAI 09 Cab interior lighting harness
- FAI 14 Pillar harness
- CAB105 Lighting module—NA and Europe
- LIG13 Right fender arc light
- LIG14 Left fender arc light



ELECTRICAL DIAGRAMS - Lighting

Work headlights on fenders—North America (GBA25 and GBA10-Auto5)

- 2 Fuse box
- 42 Trailer connector—North America
- FAI 36 Fender lighting harness (US)
- FAI 127 Cab interior lighting harness—US
- FAI 159 Instrument panel harness
- FAI 166 Pillar harness
- CAB04 Warning switch
- CAB105 Headlights module
- LIG13 Right fender work headlight
- LIG14 Left fender work headlight



10B13 - ELECTRICAL DIAGRAMS - Supply of electronic boxes

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B . Electrical panels	5

ELECTRICAL DIAGRAMS - Supply of electronic boxes

ELECTRICAL DIAGRAMS - Supply of electronic boxes

A . General

Description

The harnesses fitted on the tractor allow data to be exchanged and power to be supplied to the electrical and electronic systems.

The tractor is fitted with 3 different types of power supply:

- +12V Battery (Permanent)
- +12V APC (Ignition key ON)
- +12V ACC (Accessories)

Most harnesses have a maximum of six different wire colours:

- Black: Ground
- Brown: +12V Permanent
- Red: +12V APC (Ignition key ON) and Accessories
- White: Information
- Yellow: CAN High
- Green: CAN Low

The CAN network wires (yellow and green) are twisted together.

- Components with only one connector are identified by the connector name:

CAB03 - Road lights switch (Fig. 1).

- All wires can be identified by the pins of the outgoing and incoming connectors of the harness:

CAB3.7/CAB28.1 : The wire connects pin 7 of the CAB03 connector to pin 1 of the CAB28 connector

- The detail of pins allocation for each connector is shown on the harness side

- The wire colour is indicated: CAB3.7/CAB28.1 N, the wire is black.

List of colours:

- N: Black
- M: Brown
- R: Red
- B: White
- J: Yellow
- V: Green

- The splices inside the harnesses are indicated by a dot and the letter S (S2).

In general, the components or connectors are named in order to indicate the corresponding elements of the tractor:

AC##	Armrest
BAF##	Fuse box
CA##	Automatic air conditioning
CAB##	Cab
ENG##	Engine
FA##	Suspended front axle
L##	Linkage - ParkLock (HA)
LIG##	Lighting
R##	Linkage and roof
ROOF##	Roof
TR##	Transmission
V#	Electrohydraulic spool valve
X#	Round battery cable terminal on fuse box

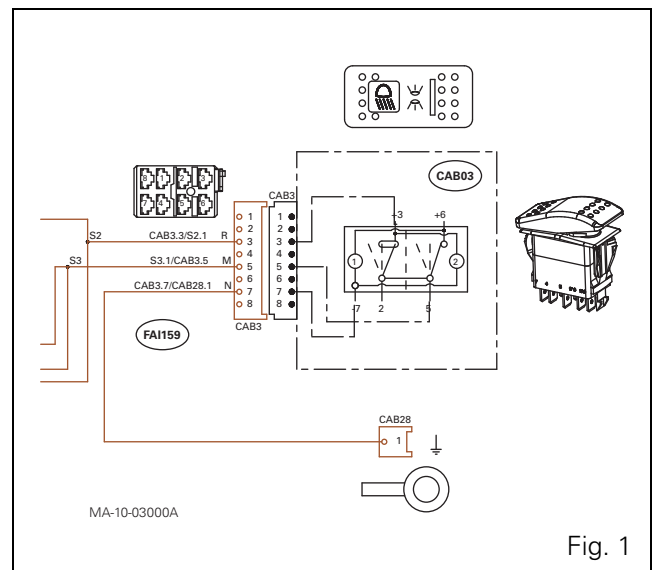


Fig. 1

ELECTRICAL DIAGRAMS - Supply of electronic boxes

Layout

5 Deutsch connectors (31-way) are connected to the cab:

- 2 on the front panel (Fig. 2)
- 3 at the bottom rear right-hand side of the cab (Fig. 3).

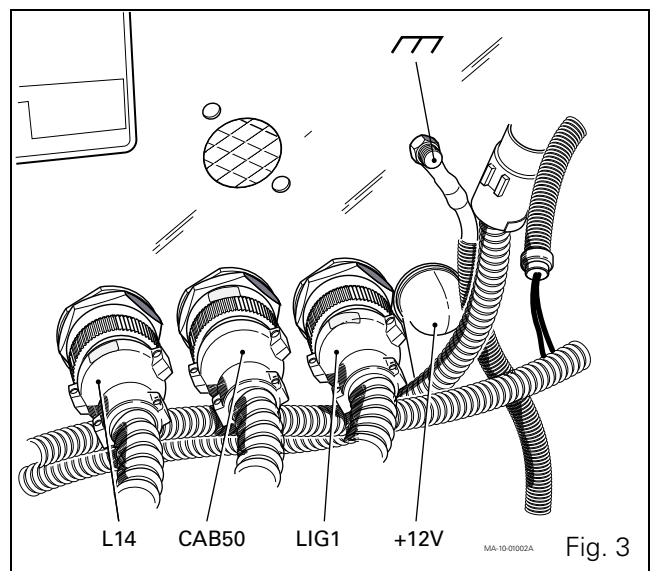
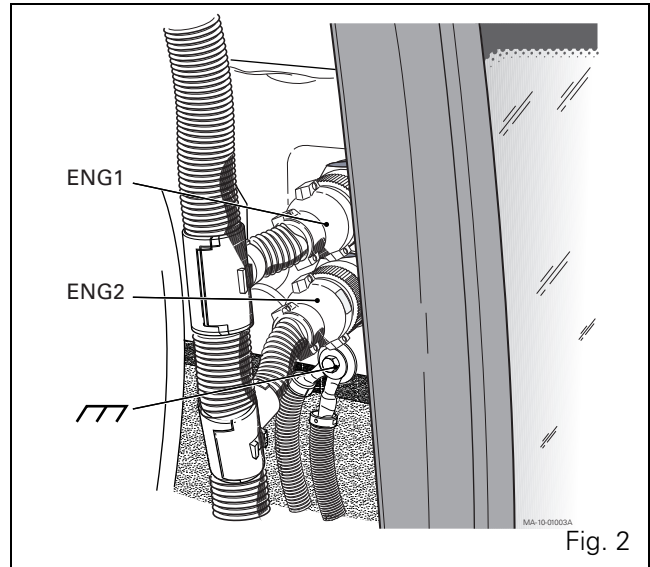
Fig. 2 :

All these connectors belong to the engine harness. ENG2 is dedicated to information concerning the electronic injection.

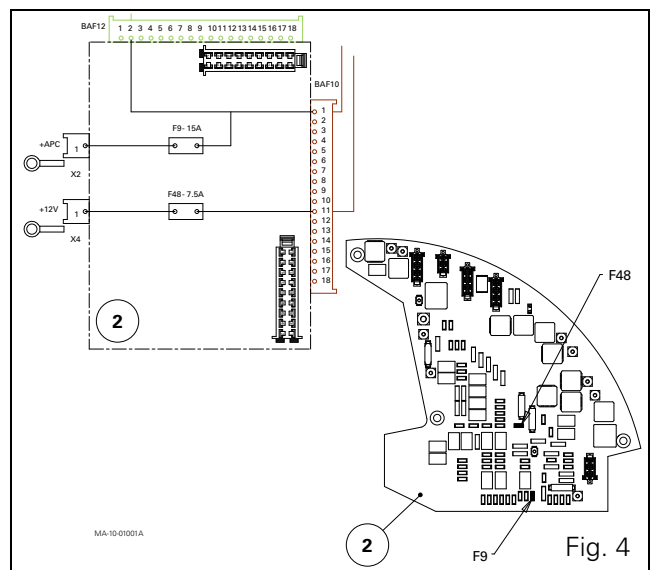
Fig. 3 :

Always in the following order (regardless of tractor configuration and options), from left to right:

- L14 Linkage harness junction
- CAB50 Transmission harness junction
- LIG1 Lighting harness junction



The fuses and relays of the electrical or electronic board (Fig. 4) are indicated by a black mark on their locations on the fuse box (2).



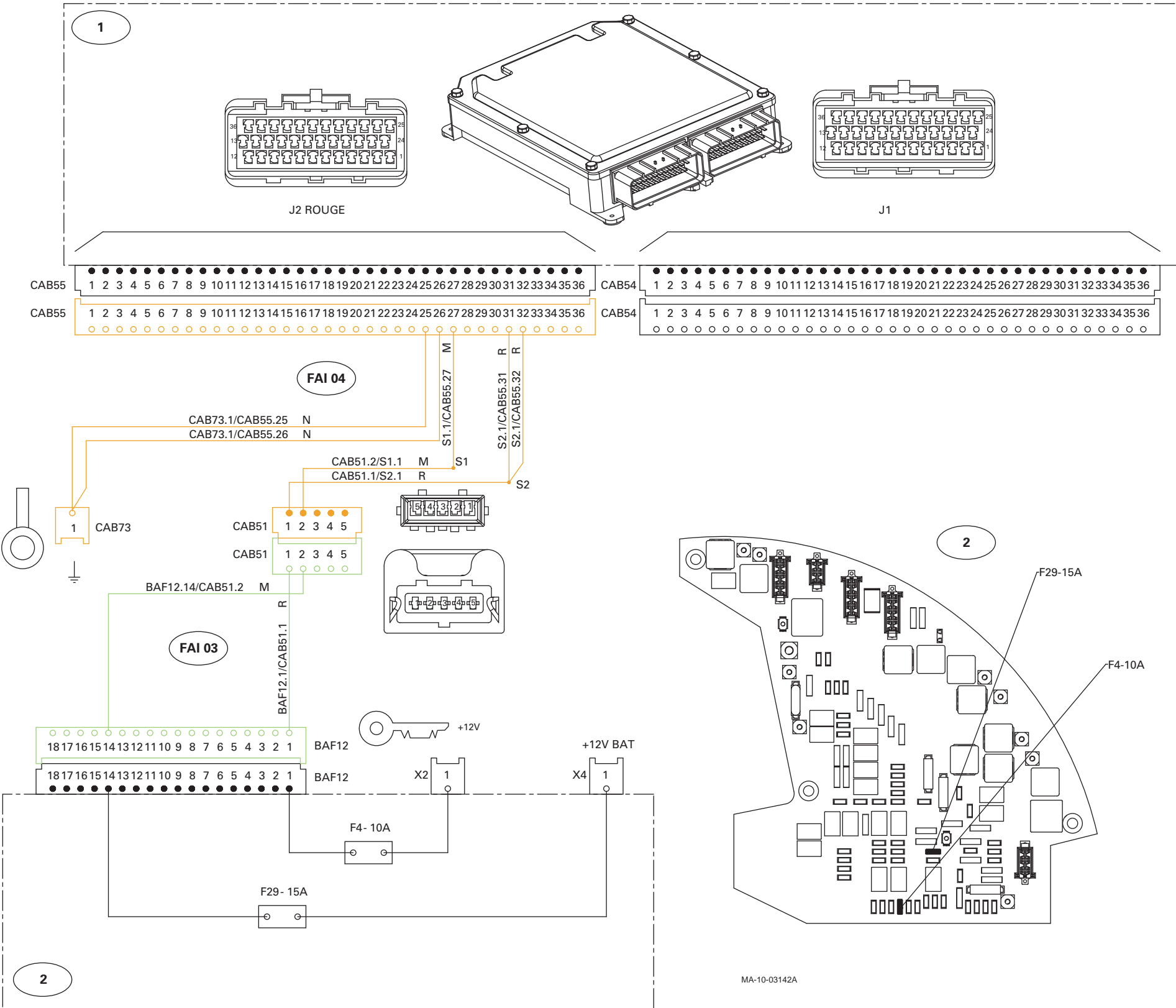
B . Electrical panels

AUTOTRONIC 3 electronic unit power supply (GBA20 and GBA10)	7
AUTOTRONIC 5 Parklock electronic unit power supply.....	8
Autotronic 5 transmission supply (GBA25)	9
Autotronic 5 transmission supply (GBA10-Auto5)....	10
ELC electronic unit power supply (GBA20 and GBA10).....	11
Autotronic 5 linkage supply (GBA25).....	12
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Dana suspended front axle Autotronic 5 power supply.....	14
Carraro suspended front axle electronic unit power supply.....	15
Perkins EEM electronic unit power supply	16
EEM Sisu electronic unit power supply	17
Datatronic 2 electronic unit power supply.....	18
Datatronic 3 power supply	19

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AUTOTRONIC 3 electronic unit power supply (GBA20 and GBA10)

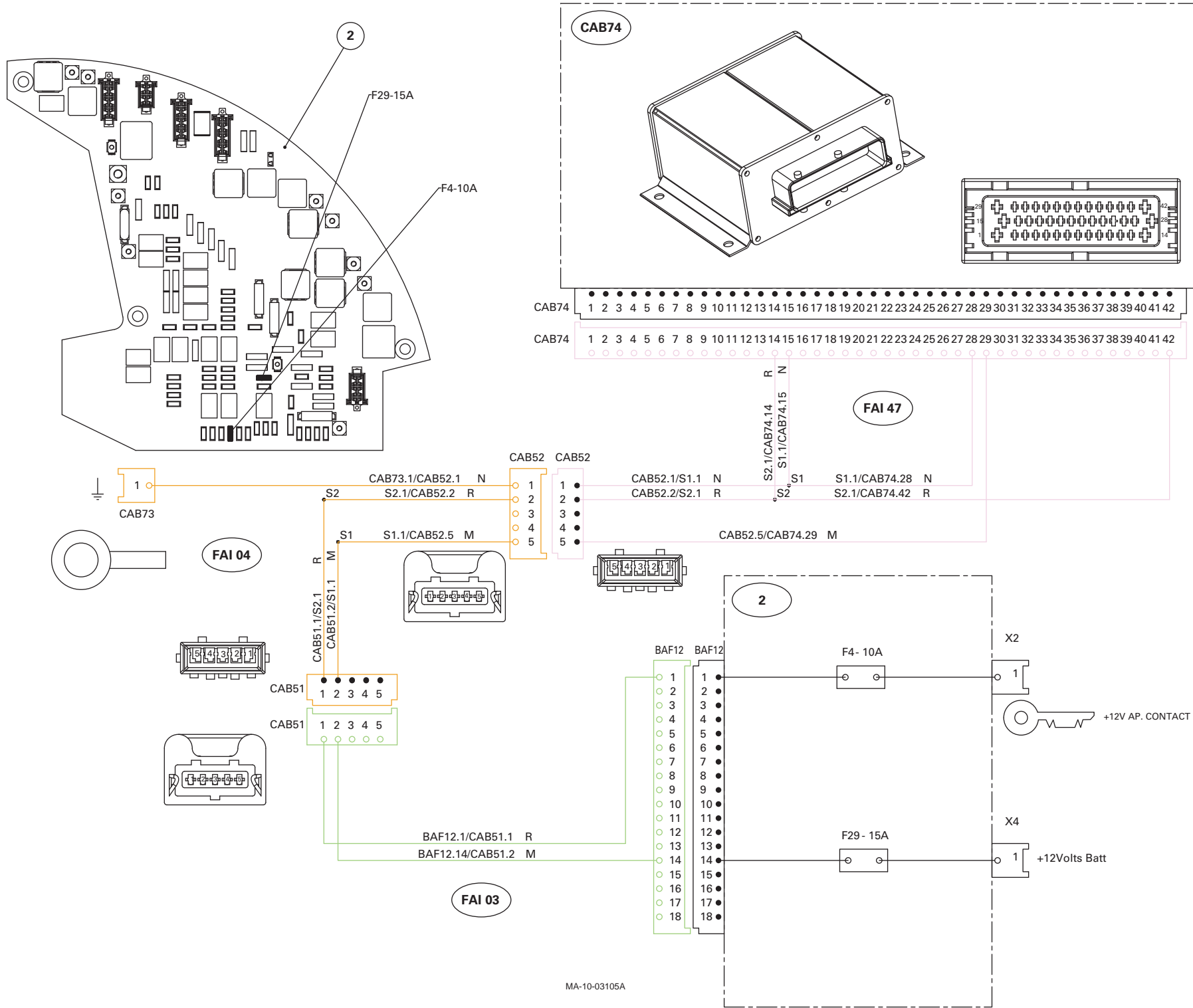
- 1 Autotronic 3
- 2 Fuse box
- FAI 03 Dynashift console harness
- FAI 04 Cab Autotronic 3 harness



ELECTRICAL DIAGRAMS - Supply of electronic boxes

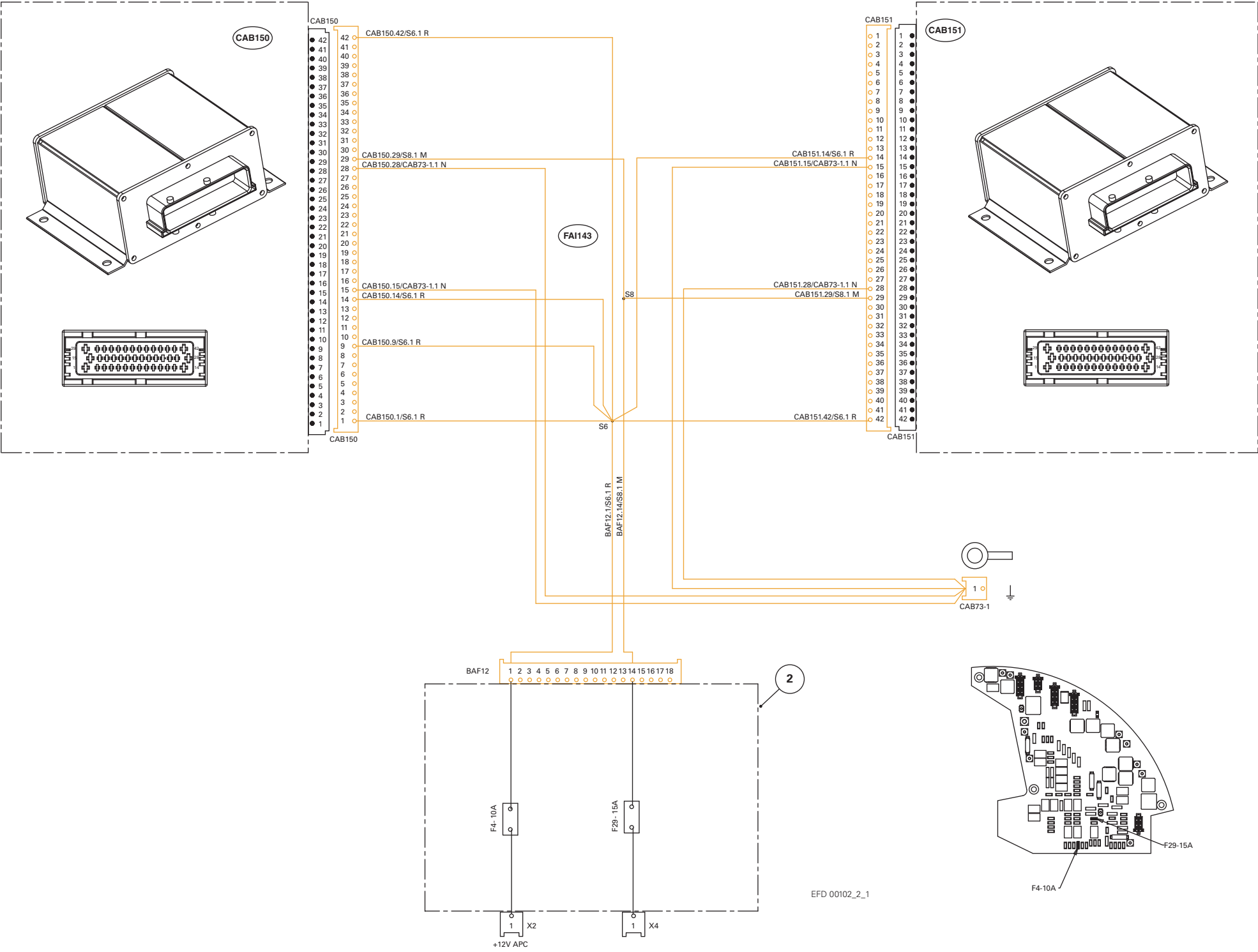
AUTOTRONIC 5 Parklock electronic unit power supply

- 2 Fuse box
- FAI 03 Dynashift console harness
- FAI 04 Cab Autotronic 3 harness
- FAI 47 Parklock Autotronic 5 harness
- CAB74 Autotronic 5—Parklock



Autotronic 5 transmission supply (GBA25)

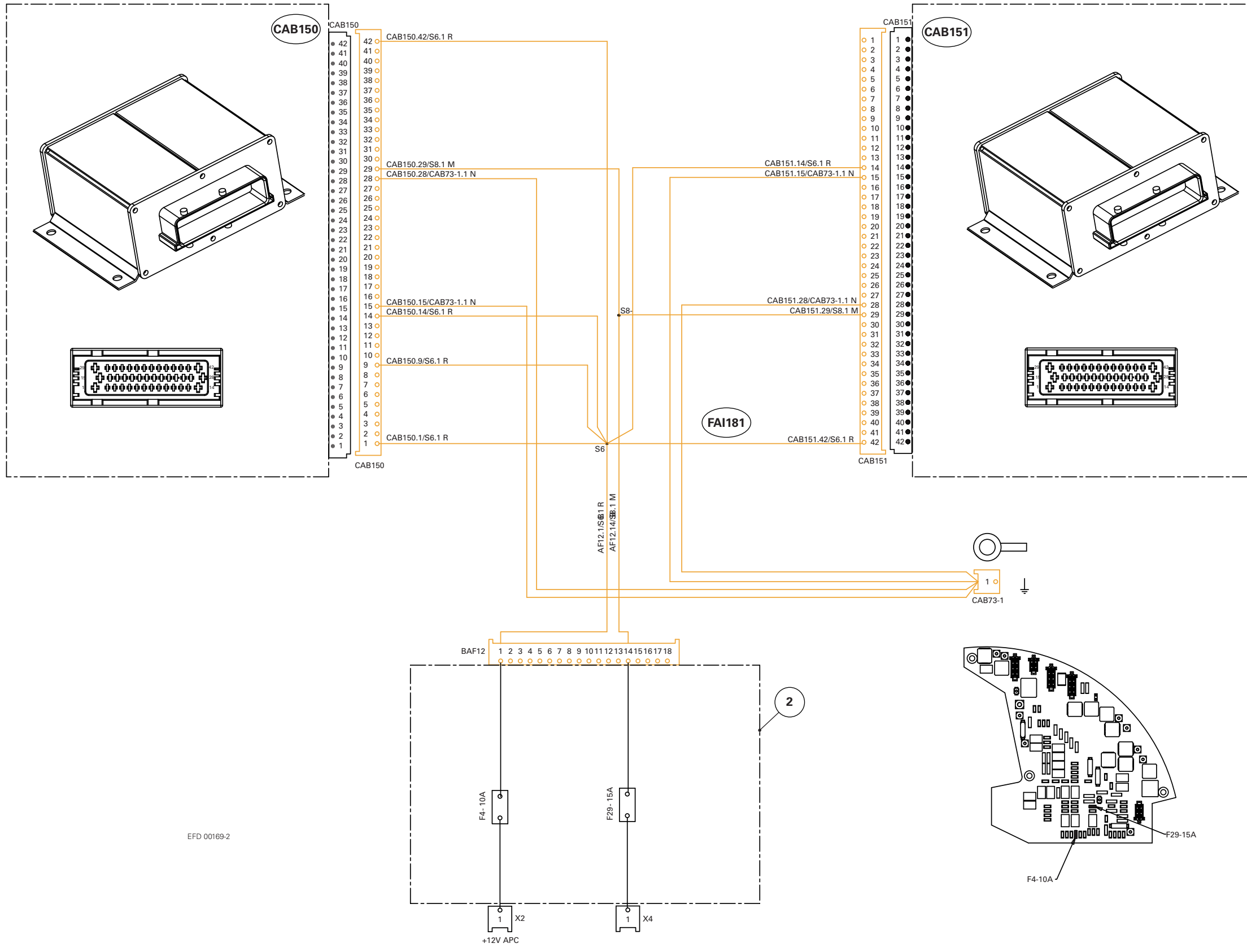
- 2 Fuse box
- FAI 143 Cab transmission harness
- CAB150 Autotronic 5 transmission No.2
- CAB151 Autotronic 5 transmission No.1



ELECTRICAL DIAGRAMS - Supply of electronic boxes

Autotronic 5 transmission supply (GBA10-Auto5)

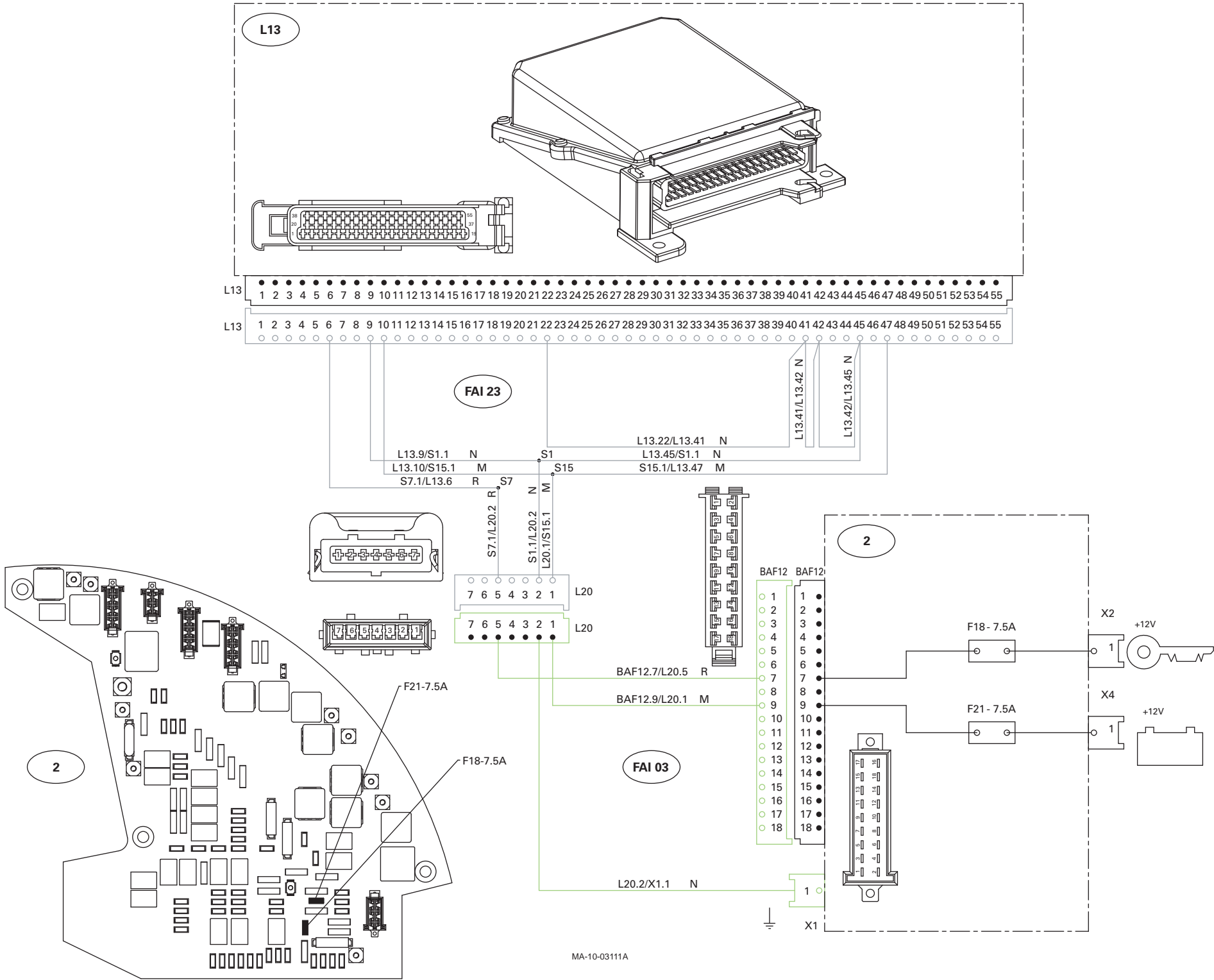
- 2 Fuse box
- FAI 181 Cab transmission harness
- CAB150 Autotronic 5 transmission No.2
- CAB151 Autotronic 5 transmission No.1



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ELC electronic unit power supply (GBA20 and GBA10)

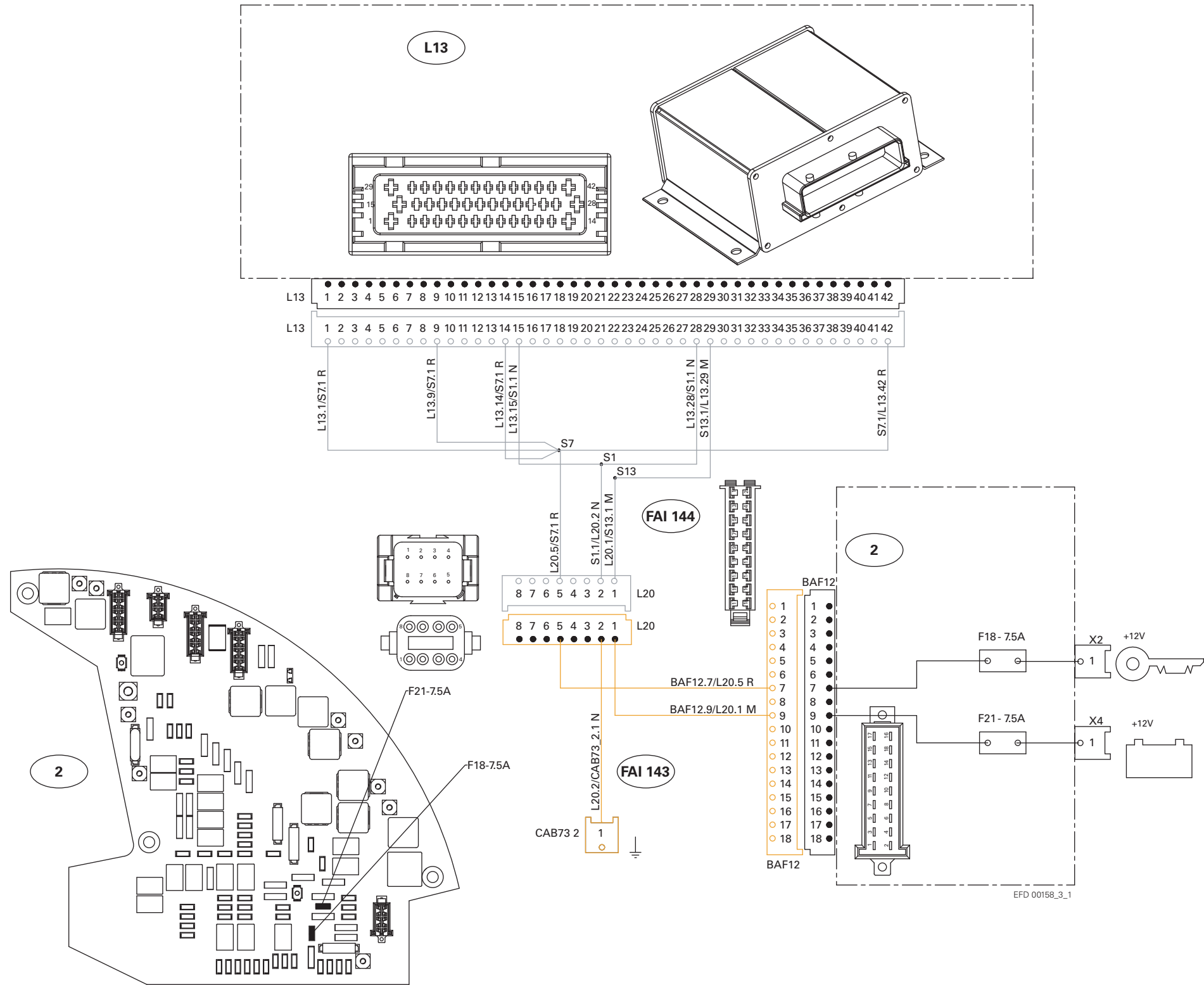
- 2 Fuse box
- FAI 03 Dynashift console harness
- FAI 23 Cab linkage harness
- L13 Electronic linkage controller (ELC)



ELECTRICAL DIAGRAMS - Supply of electronic boxes

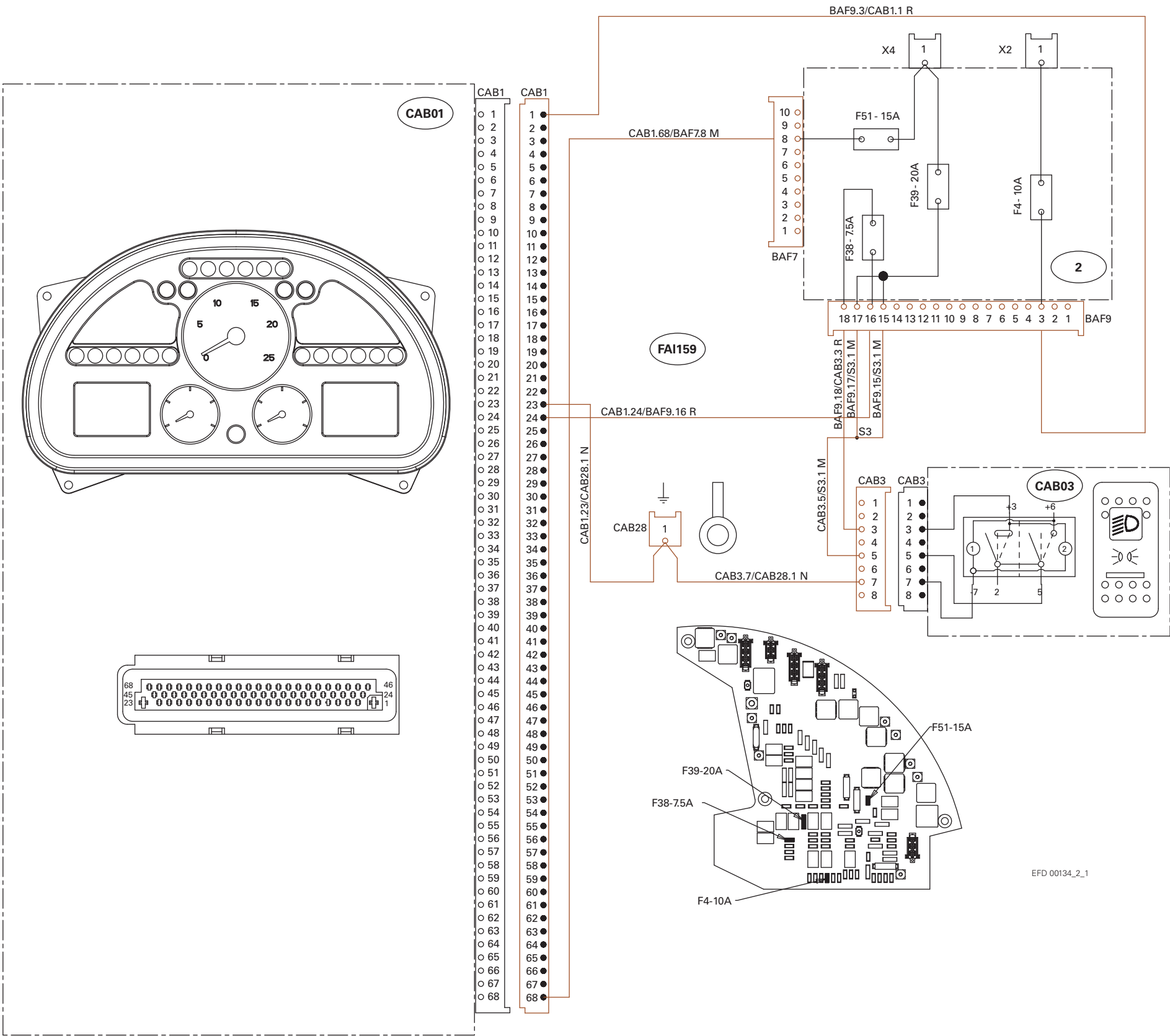
Autotronic 5 linkage supply (GBA25)

- 2 Fuse box
- FAI 143 Cab transmission harness
- FAI 144 Cab linkage harness
- L13 Autotronic 5 electronic linkage controller



DCC2 power supply (GBA25 and GBA10-Auto5)

- 2 Fuse box
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- CAB03 Road lights switch

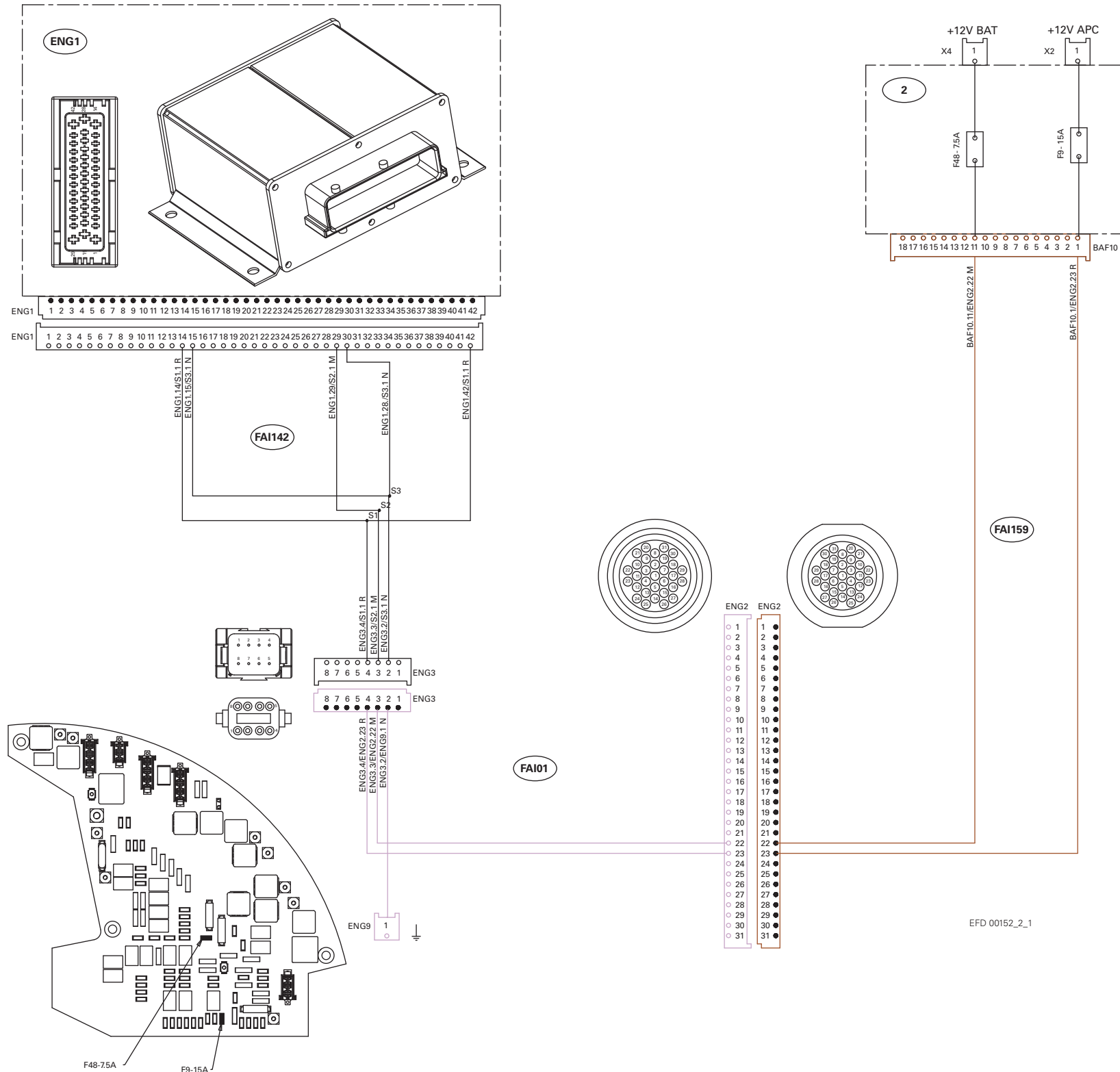


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ELECTRICAL DIAGRAMS - Supply of electronic boxes

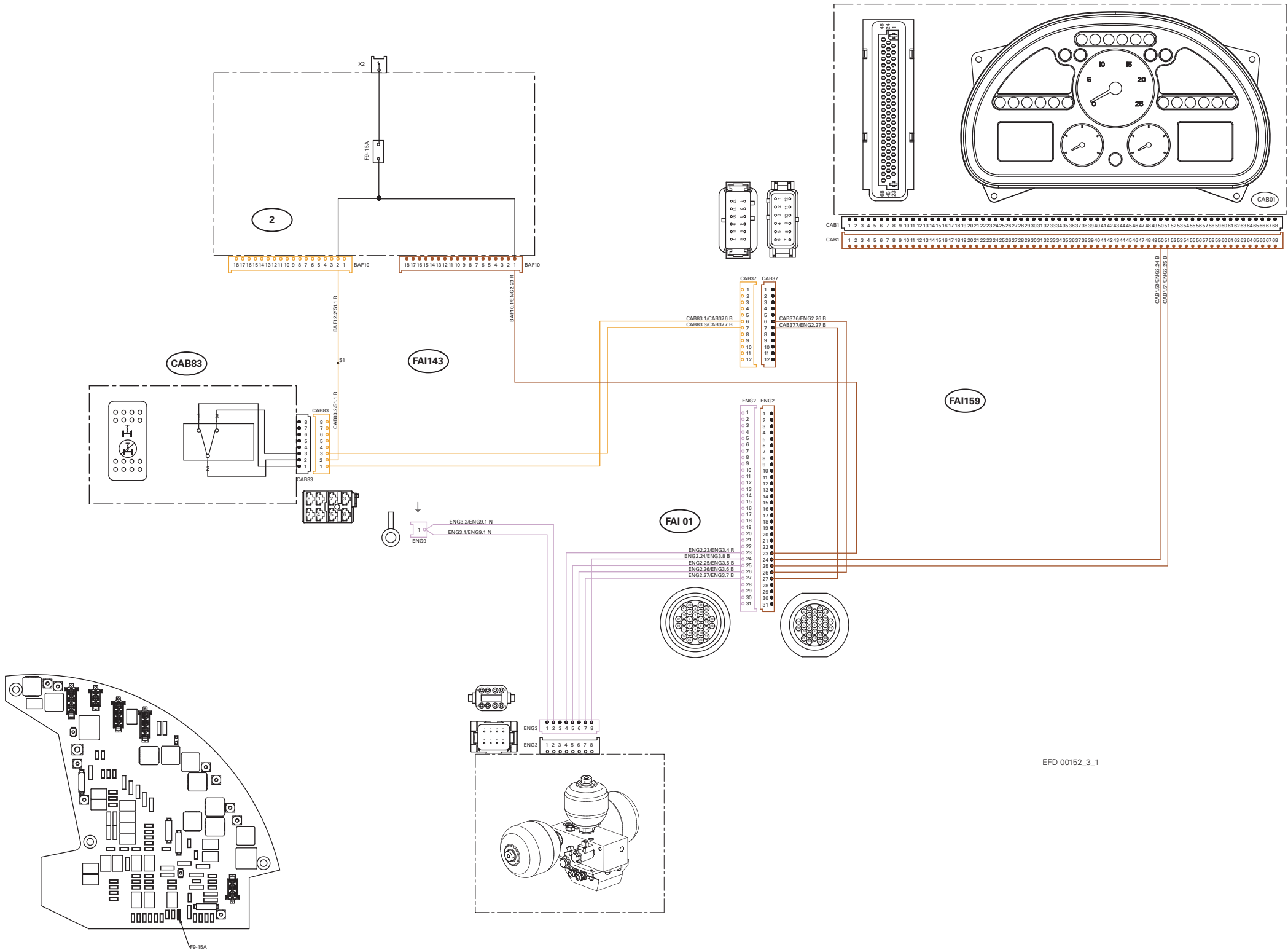
Dana suspended front axle Autotronic 5 power supply

- 2 Fuse box
- FAI 01 Engine harness
- FAI 142 Suspended front axle harness
- FAI 159 Instrument panel harness
- ENG1 Dana suspended front axle Autotronic 5 controller



Carraro suspended front axle electronic unit power supply

- 2 Fuse box
- FAI 01 Engine harness
- FAI 143 Cab transmission harness
- FAI 159 Instrument panel harness
- CAB01 DCC2 instrument panel
- CAB83 Suspended front axle switch

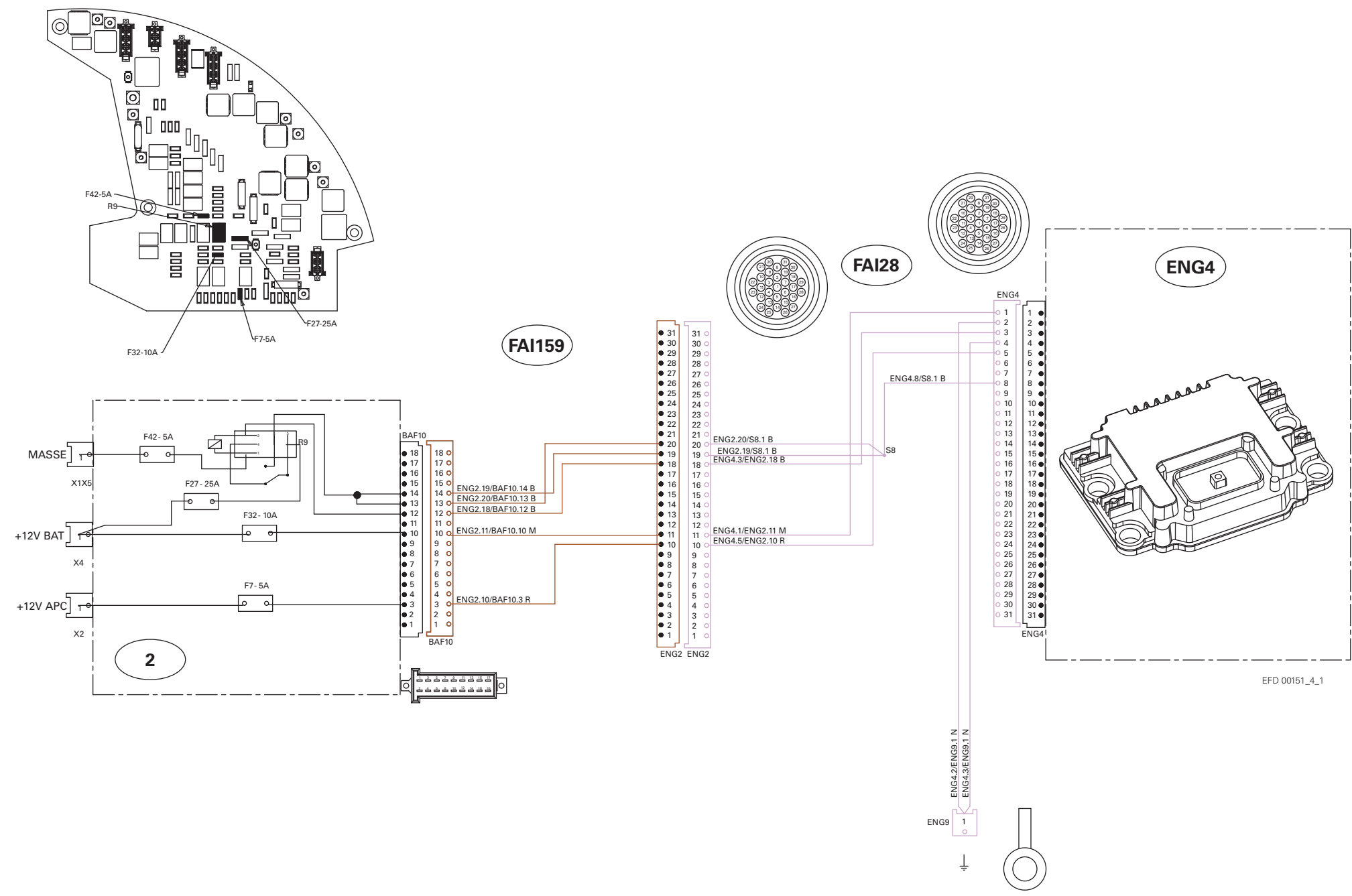


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ELECTRICAL DIAGRAMS - Supply of electronic boxes

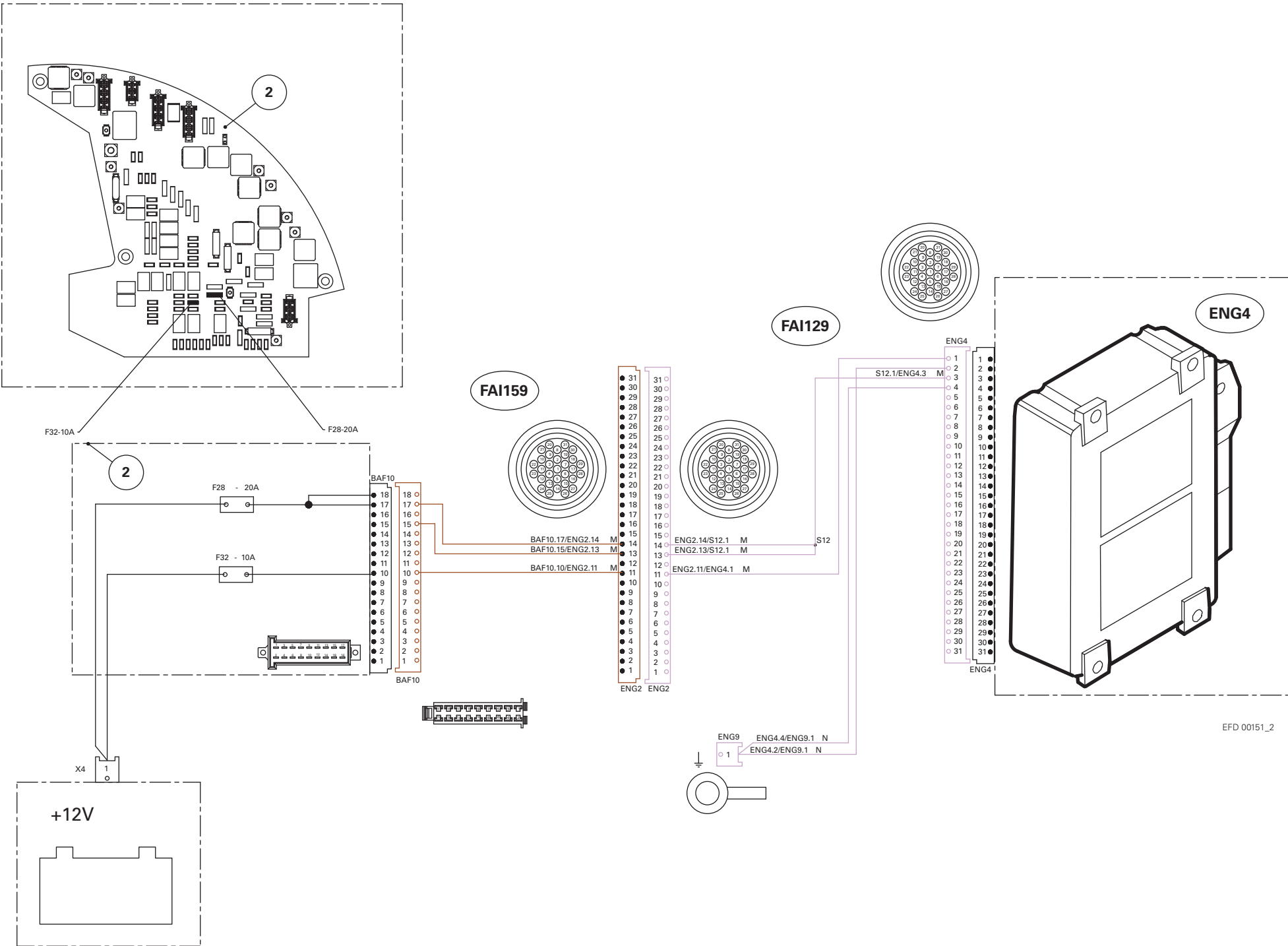
Perkins EEM electronic unit power supply

- 2 Fuse box
- FAI 28 Perkins EEM engine harness
- FAI 159 Instrument panel harness
- ENG4 Electronic injection harness junction



EEM Sisu electronic unit power supply

- 2 Fuse box
- FAI 129 EEM SisuDiesel engine harness
- FAI 159 Instrument panel harness
- ENG4 Electronic injection harness junction

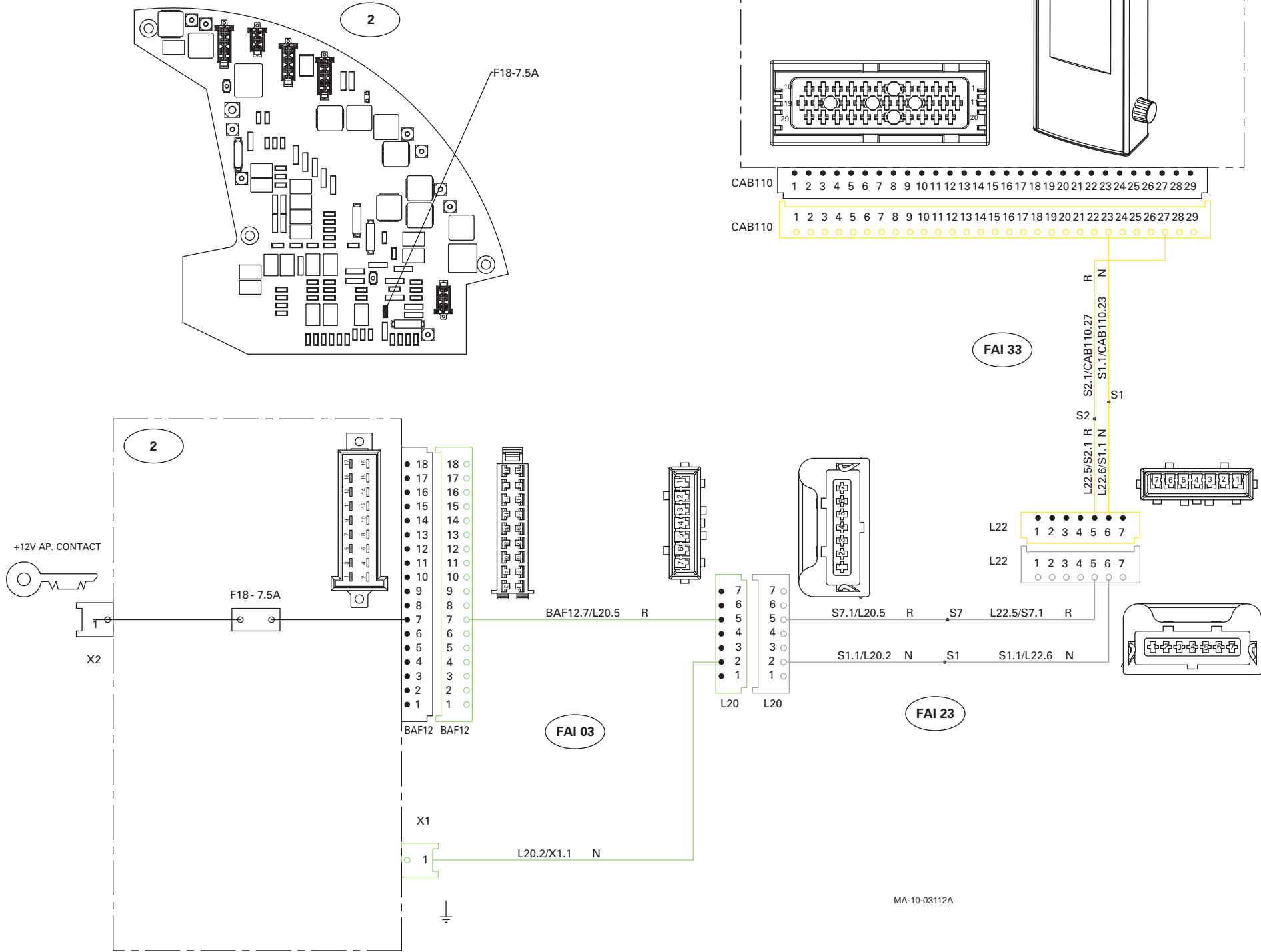


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ELECTRICAL DIAGRAMS - Supply of electronic boxes

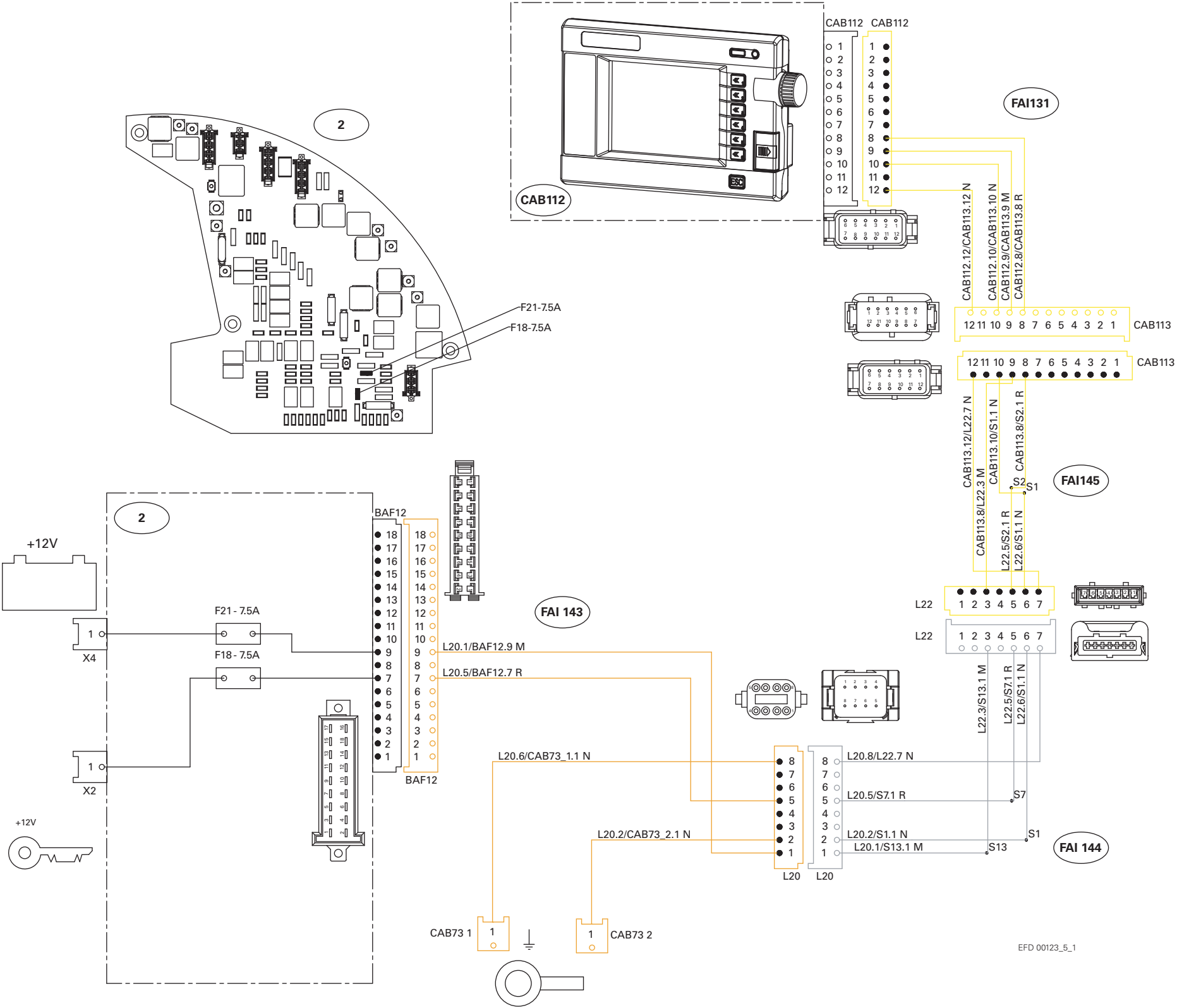
Datatronic 2 electronic unit power supply

- 2 Fuse box
- FAI 03 Dynashift console harness
- FAI 23 Cab linkage harness
- FAI 33 Datatronic 2 harness



Datatronic 3 power supply

- 2 Fuse box
- FAI 131 Datatronic 3 harness
- FAI 143 Cab transmission harness
- FAI 144 Cab linkage harness
- FAI 145 Diagnostics connector harness
- CAB112 Datatronic 3



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