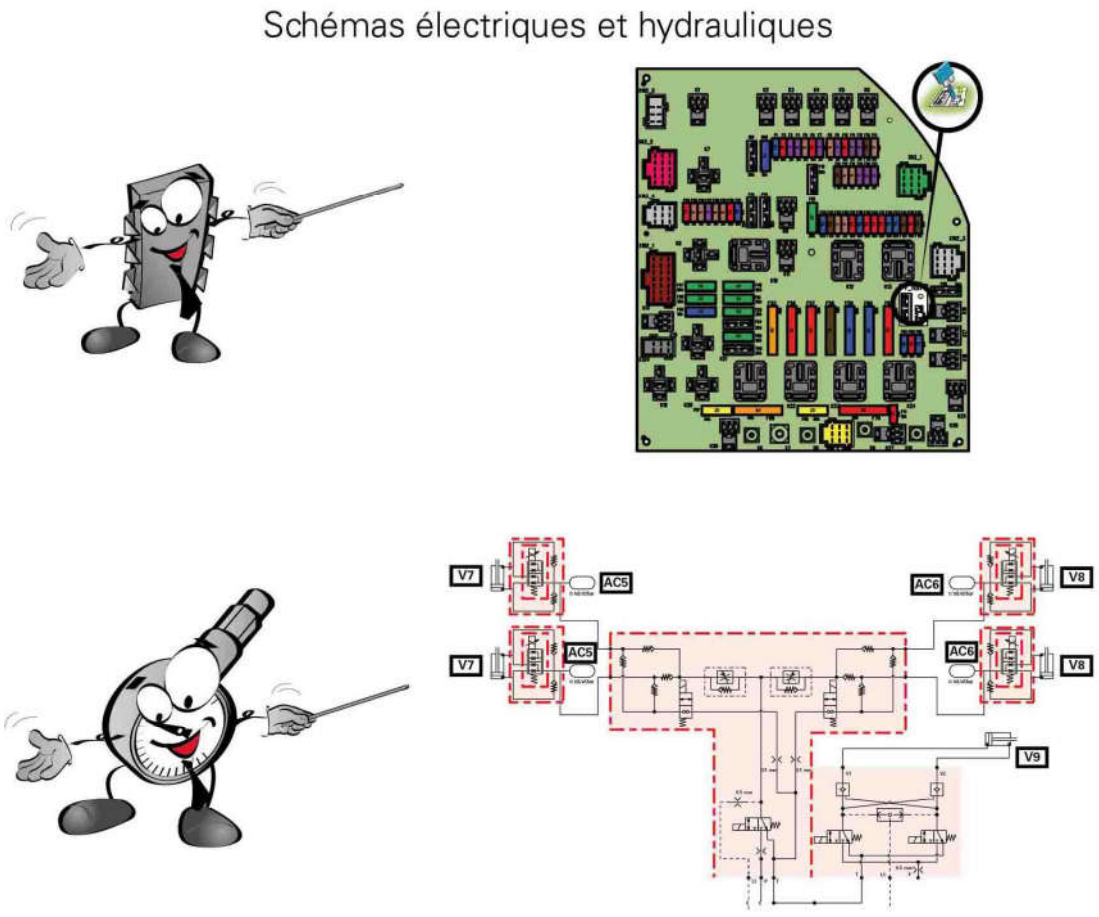
Workshop Service Manual

MASSEY FERGUSON

Technician Service Book - MF 5700 S series tractors



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Four-wheel drive front axle	
Number of pinion/crown wheel teeth	14/34
Maximum steering angle	4-wheel drive: 55°
	2-wheel drive: 52°
Oscillation angle	± 9°
Type of oscillation stop	Mechanical
Suspension type	Hydraulics
Suspension ram diameter	2 mm x 45 mm/35 mm
Suspension ram stroke	140 mm
Hydraulic control unit brand	Husco
Hydraulic control unit nominal pressure	190 bar
Number of accumulators	2
Volume/pressure of accumulators	0,75 l: 70 bar
	2 l: 40 bar
Suspension sensor type	Angular potentiometer.
Steering sensor type	Angular potentiometer.
Brake type	Combined with the rear brake
Factor K	1.339

Spool valves	
System type	Open Center (OC) 57 l/min or 100 l/min Closed Center Load Sensing (CCLS) 110 l/min
Flow rate	57 l/min or 100 l/min (OC) 110 l/min (CCLS)
High-pressure pump type	Bosch Rexroth gear pump(s) (OC) Bosch Rexroth piston pump (CCLS)
High-pressure pump displacement	19 cm3 (OC 57 l/min) 19 cm3 + 14 cm3 (OC 100 l/min) 45 cm3 (CCLS)
High-pressure pump rotational speed	3042 rpm (OC)
	865 rpm (CCLS)
High-pressure pump maximum flow rate	57 l/min or 100 l/min (OC) 110 l/min (CCLS)
High-pressure pump maximum pressure	200 bar

Reference	Measured specification	140 CP front axle
(J)	Screw length	NC
(K)	Screw diameter	M16 x 1.5
(L)	Number of screws	6

Rear Axle

Reference	Measured specification	GPA54 rear axle
(G)	Distance between flanges for GPA 54	1680 mm
(H)	Center-to-center distance between studs	203,20 mm
(I)	Centring diameter	149,35 mm
(J)	Stud length	41 mm
(K)	Stud diameter	M18 x 1.5
(L)	Number of studs	8

IMPORTANT:
The unions for pipes must not be tightened using a pipe wrench or a torque wrench. Special pipe wrenches, flat open-end wrenches and Allen keys of the appropriate size must be used to avoid crushing the pipes and unions and tearing the threads.

2 - Tightening torques: EO2 hydraulic unions

Pipe dimension	**Torque +10%**
mm	
6 x 1	17 Nm
8 x 1	25 Nm
10 x 1	35 Nm
12 x 1	45 Nm
12 x 1.5	48 Nm
15 x 1.5	70 Nm
18 x 2	105 Nm
22 x 2	160 Nm
25 x 2	210 Nm
28 x 2	205 Nm

3 - Tightening torques: hydraulic unions with metric straight thread

Tensile grade ISO 6149-3	
Thread	**Torque +10% / 0%**
mm	Nominal
M8 x 1	8 Nm
M10 x 1	15 Nm
M12 x 1.5	25 Nm
M14 x 1.5	35 Nm
M16 x 1.5	40 Nm
M18 x 1.5	45 Nm
M22 x 1.5	60 Nm
M27 x 2	100 Nm
M33 x 2	160 Nm
M42 x 2	210 Nm
M48 x 2	260 Nm
M60 x 2	315 Nm

4 - Tightening torques: hydraulic unions with straight thread in inches

No display on the digital display	
Cause	**Solution**
Electrical failure.	Check the fuses and connections. Replace faulty fuses.
Other	Contact the dealer.

Significant noise from the hydraulic system	
Cause	**Solution**
The hydraulic oil is still cold.	Operate the engine at average speed for several minutes before operating the hydraulics.
No oil inside the hydraulic system.	Top up in accordance with the specifications.
Other	Contact the dealer.

Heater air-blowing function not working	
Cause	**Solution**
The air is not delivered to the fan.	Check the condition of the cab air filters.
Other	Contact the dealer.

The air conditioning is not working	
Cause	**Solution**
The refrigeration compressor is not working: the magnetic clutch is not engaging and the belt is slack or split.	Check the fuses
No liquid refrigerant R134a in the system.	Contact the dealer.
Check the drive belt.	Contact the dealer.
Other	Contact the dealer.

Air conditioning system lacks efficiency	
Cause	**Solution**
Radiator blocked.	Clean the radiator.
Fresh air filter/ambient air filter blocked.	Shake the fresh air filter. Blow air through the ambient air filter and replace it if necessary.
No liquid refrigerant R134a in the system.	Contact the dealer.
Other	Contact the dealer.

Error codes

If there is a problem, all of the error codes can be displayed in the Setup and Information Screen list on the instrument panel.

When a problem is detected by the electronic systems, an error code and an icon appear on the screen.

Under certain conditions, in addition to the error code displayed, a corresponding indicator light flashes and an audible signal can be heard.

Depending on the error displayed, you are advised to check certain major service operations or to contact your dealer (see tables of error codes below).

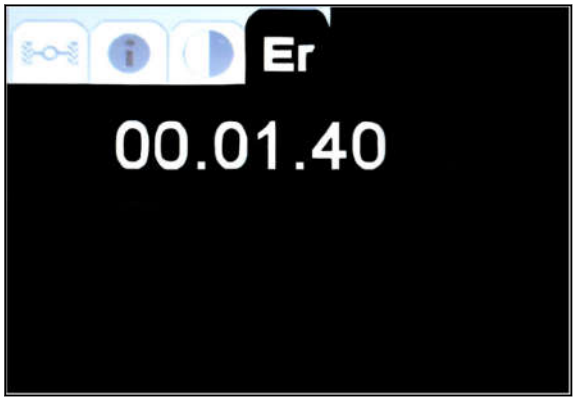
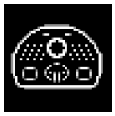


Fig. 2

NOTE:
Only error codes relating to the automatic air conditioning system are not displayed on the Setup and Information Screen screen. Error codes relating to the air conditioning system are displayed on the air conditioning control module only.

Icon	Function
	Instrument panel
	Engine
	Armrest
	Transmission
	4-wheel drive and differential lock
	Rear power take-off
	Front power take-off

No.	FMI	Components concerned	Causes	Standard modes	modes
1485	31	Starter relay	Advanced opening at previous starting		
1639	19	Vistronic fan	Fan speed request CAN signal absent		
1761	1	Tank gauge	Tank empty		X
1761	3	Tank gauge	Voltage above normal or open circuit		X
1761	4	Tank gauge	Voltage below normal		X
1761	11	Tank gauge	General error		
1761	15	tank gage	Level error		
1761	(17)	tank gage	Level error		
1761	18	tank gage	Low level		X
1761	31	tank gage	CAN message lost		
2659	1	EGR valve	Quantity of exhaust gas below the normal level	1	
2791	0	EGR valve	Temperature alarm		
2791	9	EGR valve	Communication error	2	
2791	10	EGR valve	Torque limit	2	
2791	31	EGR valve	Absent	2	
2882	8	CAN bus	CAN message lost		
3031	2	Diesel Exhaust Fluid (DEF) tank temperature sensor	Abnormal temperature change		X
3031	3	Diesel Exhaust Fluid (DEF) tank temperature sensor	Voltage above normal or open circuit		X
3031	4	Diesel Exhaust Fluid (DEF) tank temperature sensor	Voltage below normal		X
3031	10	Diesel Exhaust Fluid (DEF) tank temperature sensor	Abnormal rate change during heating cycle		
3031	11	Diesel Exhaust Fluid (DEF) tank temperature sensor	General error		
3031	14	Diesel Exhaust Fluid (DEF) tank temperature sensor	Deicing time exceeded		X
3031	15	Diesel Exhaust Fluid (DEF) tank temperature sensor	Temperature error		
3031	16	Diesel Exhaust Fluid (DEF) tank temperature sensor	Temperature above normal		
3031	(17)	Diesel Exhaust Fluid (DEF) tank temperature sensor	Temperature error		
3216	19	NOx sensor before DOC	Sensor not present		X
3218	14	NOx sensor before DOC	Supply voltage outside of tolerances		X

2.1.7 Transmission error codes Dyna-4/Dyna-6

No.	Components concerned	Causes
4.X.04	**X68** - Clutch pedal sensor	Output signal outside limit
4.X.09	**X556** - Forward solenoid valve	Variable value between two different current measurements
4.X.0A	**X556** - Forward solenoid valve	Short circuit to +12 V
4.X.0B	**X556** - Forward solenoid valve	Measured current > 40 mA in relation to specified value
4.X.0C	**X556** - Forward solenoid valve	Current measured > maximum possible (1.4 A)
4.X.0D	**X556** - Forward solenoid valve	Open circuit
4.X.0E	**X556** - Forward solenoid valve	The setpoint for the current cannot be reached
4.X.0F	**X557** - Reverse solenoid valve	Variable value between two different current measurements
4.X.10	**X557** - Reverse solenoid valve	Short circuit to +12 V
4.X.11	**X557** - Reverse solenoid valve	Measured current > 40 mA in relation to specified value
4.X.12	**X557** - Reverse solenoid valve	Current measured > maximum possible (1.4 A)
4.X.13	**X557** - Reverse solenoid valve	Open circuit
4.X.14	**X557** - Reverse solenoid valve	The setpoint for the current cannot be reached
4.X.15	**X494** - Low-pressure switch	No signal when engine speed is > 500 rpm
4.X.16		Electrical power supply (+APC < 7 V)
4.X.21	PowerShuttle	The thermal safety mechanism of the PowerShuttle is activated and the clutch goes into downgraded mode.
4.X.40	**X483** - Intermediate speed sensor**X482** - Theoretical forward speed sensor	Difference in value between the intermediate speed sensor and the forward travel speed sensor, depending on the range engaged
4.X.54	**X19** - Transmission hydraulic oil temperature sensor	Value > 150 °C or < -24 °C
4.X.61	**X484** - Range solenoid valve 1	Open circuit or short circuit to +12 V or 0 V
4.X.62	**X485** - Range solenoid valve 2	Open circuit or short circuit to +12 V or 0 V
4.X.69	**X486** - Range solenoid valve 3	Open circuit or short circuit to +12 V or 0 V
4.X.6A	**X487** - Range solenoid valve 4	Open circuit or short circuit to +12 V or 0 V
4.X.6B	**X488** - Range switch 1	Short circuit to 0 V
4.X.6C	**X489** - Range switch 2	Short circuit to 0 V
4.X.6D	**X490** - Range switch 3	Short circuit to 0 V
4.X.6E	**X491** - Range switch 4	Short circuit to 0 V

No.	Component(s) concerned	Cause(s)
10.X.22	**X453** - Extreme cold weather pump motor	Water pump relay output error
10.X.23	**X436** - Left-hand side fan switch/**X437** - Relay for left-hand side fan	Fault with fan output
10.X.24	**X439** - Air conditioning control module (blue connector) **X440** - Air conditioning control module (yellow connector)	Engine speed error
10.X.25	**X439** - Air conditioning control module (blue connector) **X440** - Air conditioning control module (yellow connector)	Vehicle speed error
10.X.26	**X439** - Air conditioning control module (blue connector) **X440** - Air conditioning control module (yellow connector)	Engine water temperature error
10.X.27	**X445** - Left-hand fan adapter module	Fan speed controller output error
10.X.28	**X439** - Air conditioning control module (blue connector) **X440** - Air conditioning control module (yellow connector)	Overvoltage
10.X.29	**X439** - Air conditioning control module (blue connector) **X440** - Air conditioning control module (yellow connector)	Undervoltage
10.X.30	**X444** - Right-hand fan adapter module (signal)	The signal is outside its operating range
10.X.31	**X445** - Left-hand fan adapter module	The return signal is outside its operating range
10.X.32	**X444** - Right-hand fan adapter module (signal)	The return signal is outside its operating range
10.X.33	**X450** - Motor for right-hand heating shutter	The input signal from the right-hand recirculation actuator is outside its operating range

2.1.17 Error codes of the keypad in the pillar

No.	Components concerned	Causes
1B.X.01	**X717** - Power lift and PTO keypad on pillar	Configuration error
1B.X.02	**X717** - Power lift and PTO keypad on pillar	Error while writing parameters in the memory
1B.X.03	**X717** - Power lift and PTO keypad on pillar	Configuration error

Number	Amperage	Size	Protected function
F44	5 A	Small	+ APC • **X345** - Power supply for additional terminal (Mitron unit) • Aerial Auto-Guide™
F45	5 A	Small	Not used
F46	15 A	Small	K24 relay power circuit supplying the + APC to the brake lights and to **X339** - Progressivity solenoid valve for pneumatic trailer braking (only on Dyna-4)
F47	20 A	Average	Not used
F48	30 A	Average	+ BAT • **X58** - Windscreen wiper and direction indicator control unit • **X250** - In-cab power socket(on the front right-hand wheel arch)
F49	30 A	Average	Trailer connector (NA) + BAT
F50	25 A	Average	+BAT **X271** - Front attachments connection socket (+12 V battery)
F51	30 A	Average	+ BAT • **X157** - Left-hand power socket (power) • **X395** - Radio power supply • **X407** - Interior light • **X439** - Air conditioning control module (blue connector)
F52	15 A	Small	+ BAT • **X138** - Hazard warning lights indicator light and switch • **X155** - Cigarette lighter socket (power) • **X169** - Power-socket control switch • **X687** - Auto-Guide™ screen harness/pillar harness connection • **X717** - Power lift and PTO keypad on pillar • K16 relay control circuit
F53	10 A	Small	+ BAT • **X218** - External Isobus implement connector • **X344** - Isobus connector in cab
F54	3 A	Small	Not used
F55	7.5 A	Small	**X255** - Horn
F56	5 A	Small	**X68** - Clutch pedal sensor (start switch)

This isolator is programmed for automatic cut-off after a delay of 60 minutes after switching off the ignition. Therefore, the operator does not have to activate the device; this system is self-managed in terms of activation and cut-off, depending on the position of the ignition key.

The isolator timer control can vary according to the tractor configuration.

The temporary control conditions for the closed isolator are as follows:

1. the time required to drain the Diesel Exhaust Fluid (DEF) system
2. the Datatronic CCD standby time
3. power supply maintained on an ISOBUS or Auto-Guide™ implement

Whatever the status of the above conditions, the isolator will always open after a maximum period of 60 minutes after the ignition key has been set to the OFF position.

The permanent control condition for the closed isolator is as follows:

1. Activation of the hazard warning lights

   NOTE:
   The battery isolator will open once the hazard warning lights have been deactivated.

IMPORTANT:
In the event of electrical faults on the tractor or the implement, emergency cut-off of the isolator is possible via a switch located under the controllers housing cover plate in the cab, but only if the ignition key is in the OFF position. The Diesel Exhaust Fluid (DEF) system is drained even after pressing the switch for the emergency cut-off of the battery isolator.

1. Open the cover plate (A) located on the cab floor (right-hand side).

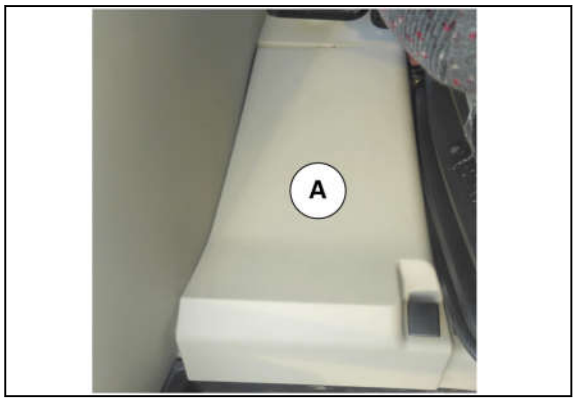


Fig. 7

1. Press the switch (B) to execute an emergency cut-off of the battery isolator.

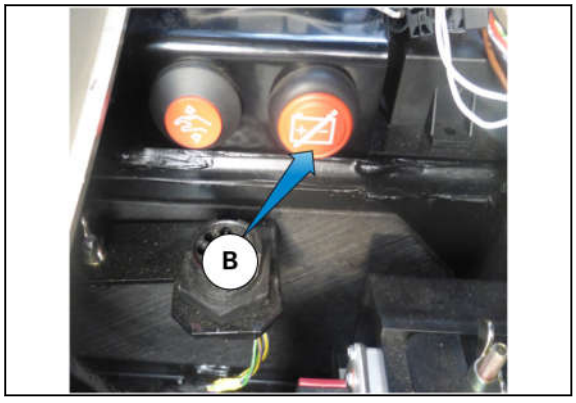


Fig. 8

X174 - EXT Lite transmission controller (96-pin)

X175 - Emergency control switch

X176 - Earth (transmission controller)

X177 - Power lift controller

X179 - Main lighting, side light/low beam lamp activation switch

X180 - Front windscreen washer pump

X183 - Diagnostics connector

X184 - Diagnostics connector

X185 - Engine controller

X186 - Starter

X187 - Engine start relay

X188 - Engine identification module (ID module)

X189 - Fuel lift pump

X190 - Vistronic

X191 - Fuel preheater

X192 - B + alternator 1

X193 - B + alternator 2

X194 - D + alternator 1

X195 - D + alternator 2

X196 - In-line fuse (225 A)

X197 - Diesel fuel gauge

X198 - Pneumatic trailer brake sensor

X199 - Work light on left-hand step

X200 - Work light on right-hand step

X201 - Engine harness earth

X202 - Front accessory connection socket harness/front function harness junction

X203 - Engine harness/front headlights harness junction

X204 - Cooling unit harness/engine harness junction

X205 - Front-axle harness/engine harness junction

X206 - Sensor detecting water in the diesel fuel

X207 - Pneumatic seat adjustment control

X209 - Switch for lowering the rear power lift (pickup hitch)

X210 - Orbitrol steering sensor (SASA sensor)

X211 - Rear Dual Control connector

X212 - Instrument panel harness/armrest harness junction

X213 - Power socket for additional heating

X214 - Multifunction armrest

X215 - Trailer connection (right-hand side light)

X575 - Main relay for SCR technology

X576 - Main relay supply fuse

X577 - Diesel Exhaust Fluid (DEF) pressure lines heater

X578 - Diesel Exhaust Fluid (DEF) return lines heater

X579 - Diesel Exhaust Fluid (DEF) suction line heater

X580 - Link connector

X581 - NOx sensor – downstream

X582 - NOx sensor – upstream

X584 - + battery

X585 - Earth

X586 - + ignition on

X589 - Spool-valve lever position sensor

X590 - Spool-valve lever position sensor

X591 - Membrane switches keypad

X593 - Connection between the cab interior harness and the Datatronic CCD harness

X594 - AgCommand™ unit

X595 - AgCommand™ reserve

X596 - Engine power supply relay

X597 - Diesel Exhaust Fluid (DEF)Diesel Exhaust Fluid (DEF) suction line heater relay

X598 - EXT Lite transmission controller (58-pin)

X599 - PTO speed solenoid valve (540 rpm)

X600 - Adflow sensor

X601 - Provision

X602 - GSPTO switch

X602 - Earth (engine controller)

X603-E - Creeper switch (electric control)

X604 - Position switch for the economy PTO lever (signal)

X605 - Engine harness/exhaust harness connection

X606 - Secondary fuse box connector 1

X607 - Secondary fuse box connector 2

X608 - Connection between the cab exterior harness and the right-hand work light harness

X609 - Connection between the cab exterior harness and the left-hand work light harness

X610 - Connection between the pillar harness and the roof harness

X611 - Connection between the pillar harness and the roof harness

X612 - Position switch for the creeper range (snail) lever (supply)

X613 - Connection between the cab transmission harness and the cab linkage control harness

X614 - Connection between the cab transmission harness and the cab lighting harness

X615 - Connection between the cab transmission harness and the cab lighting harness

4.1.5 Electrical diagrams

4.1.5.1 EFD00000_14 - Battery 12 V power supply points

EFD00000_14 - Battery 12 V power supply points

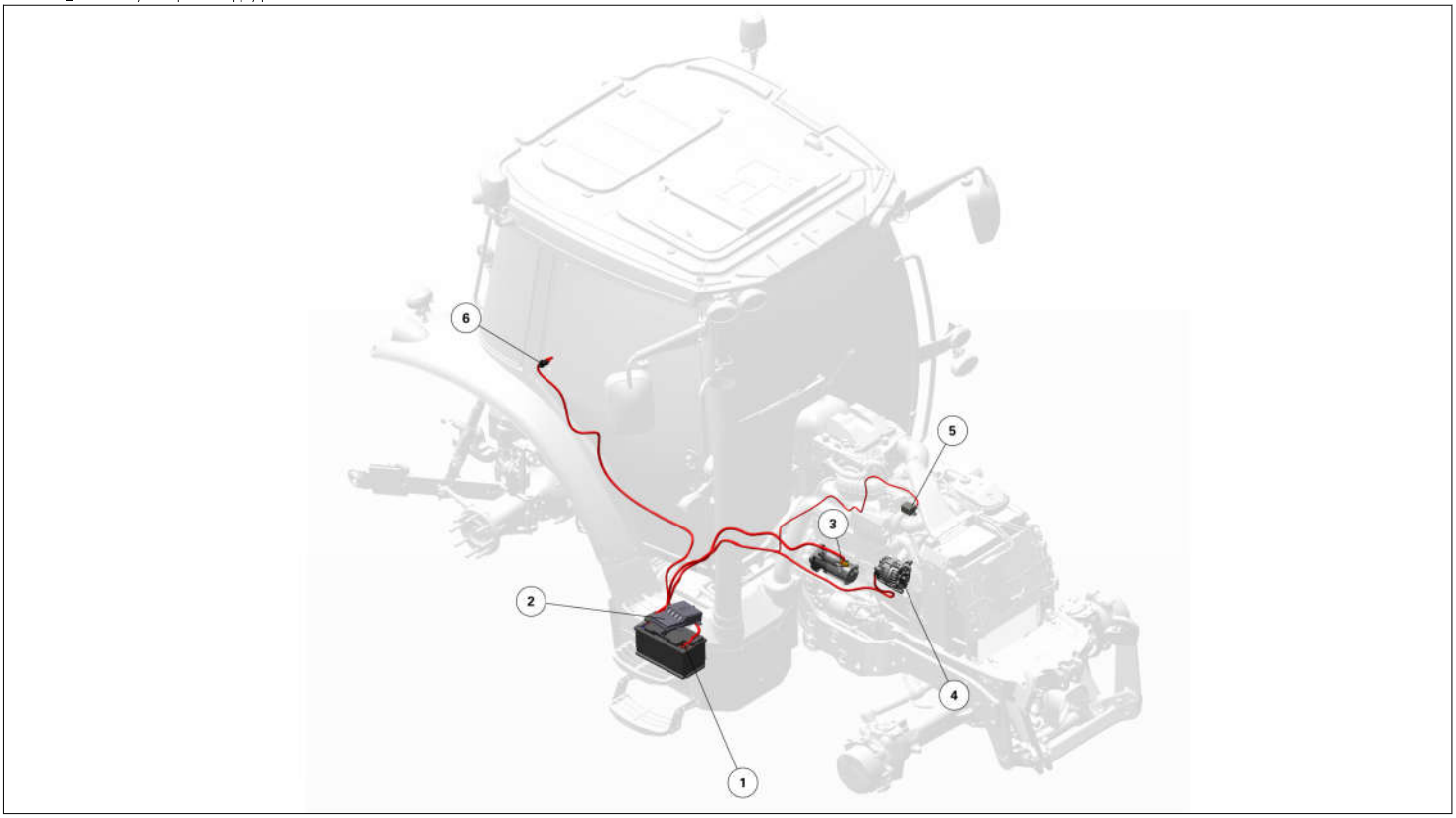


Fig. 1

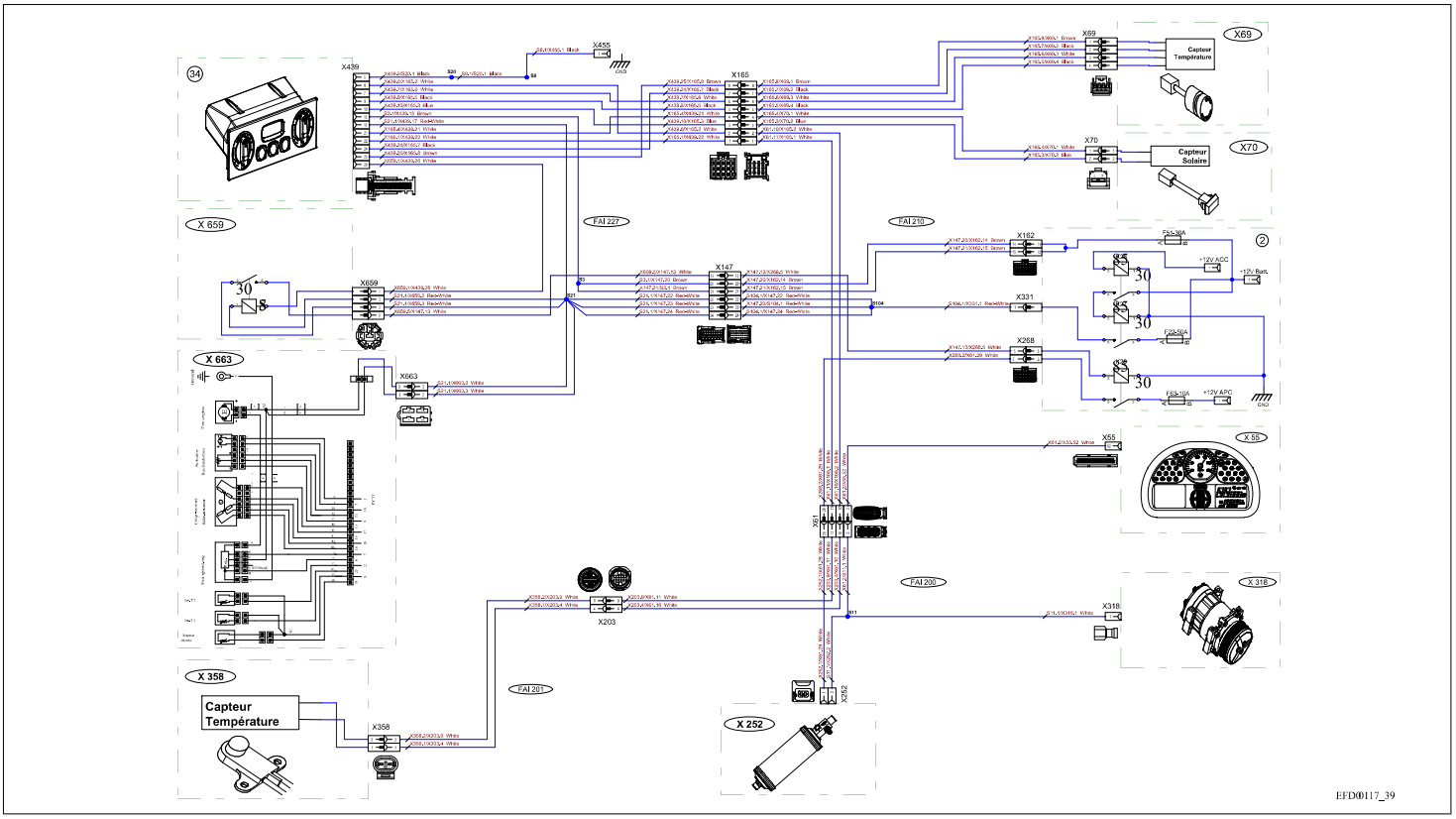


Fig. 10

4.1.5.11 EFD00117_40 - Manual air conditioning for standard roof
EFD00117_40 - Manual air conditioning for standard roof

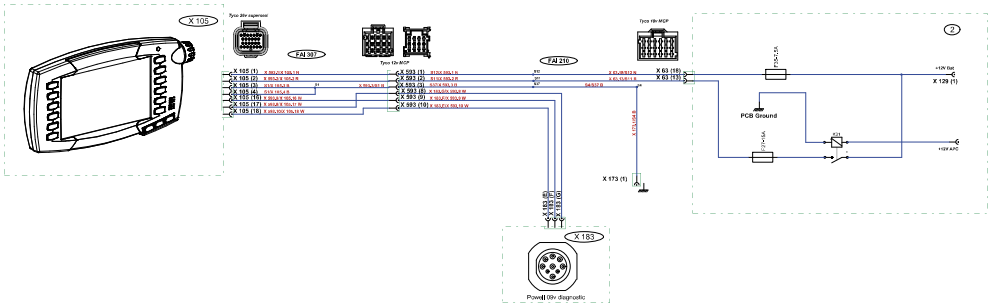


Fig. 20

4.1.5.21 EFD00125_10 - Cab light
EFD00125_10 - Cab light

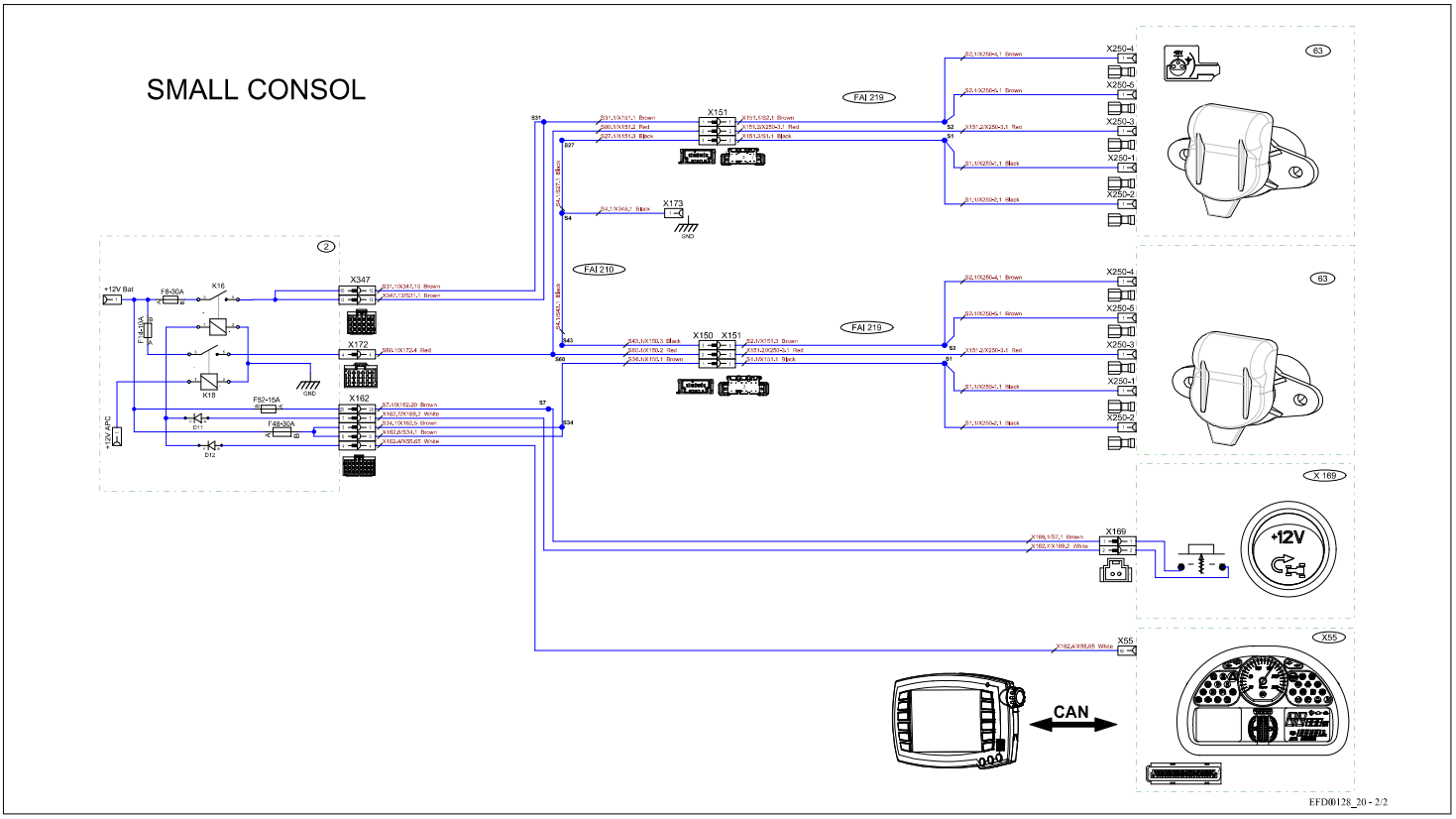


Fig. 30

4.1.5.31 EFD00128_21 - NA/SAE cab current socket_1/2
EFD00128_21 - NA/SAE cab current socket_1/2

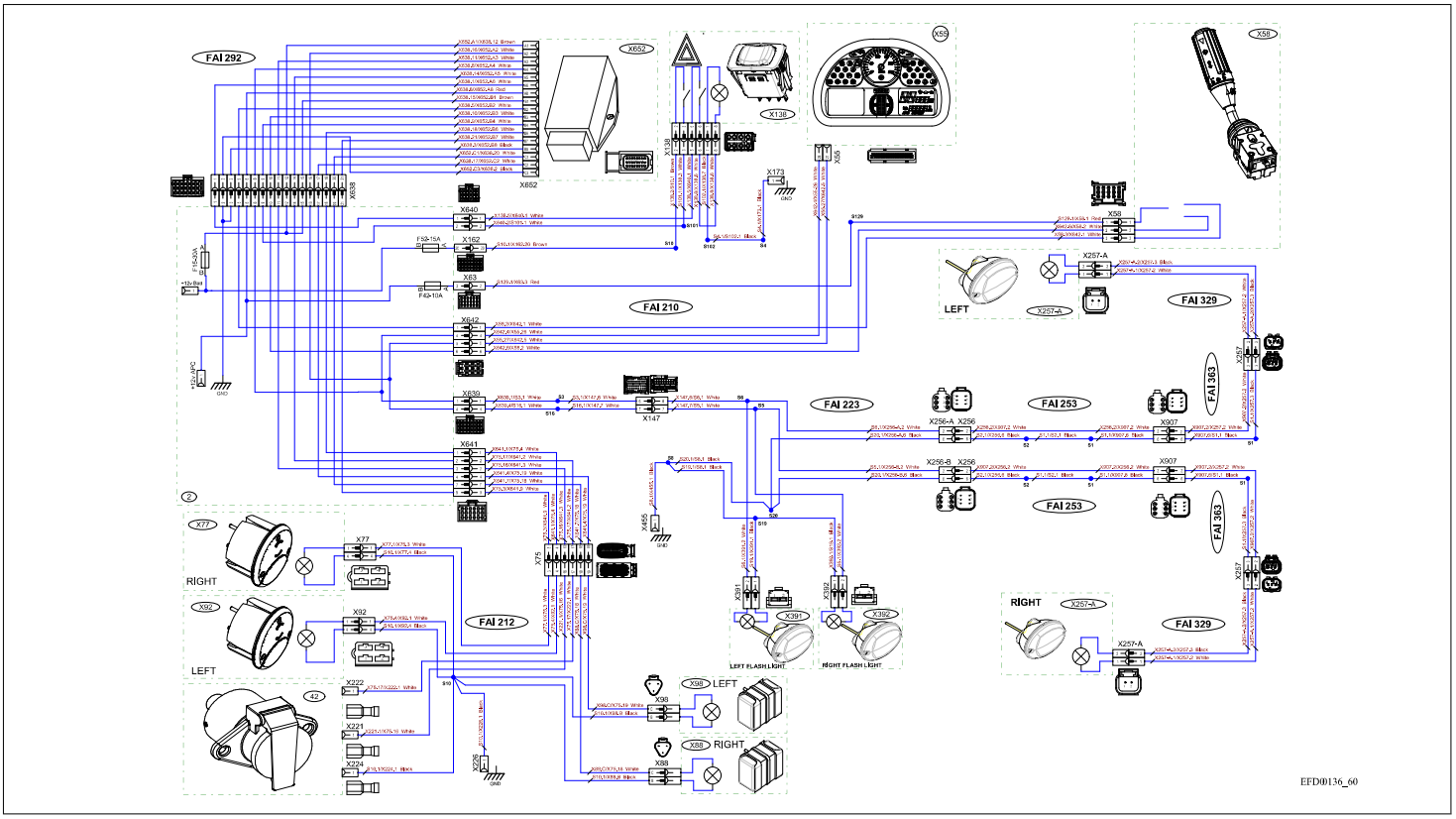


Fig. 40

4.1.5.41 EFD00136_61 - EAME direction indicators and flashing warning lights - high-visibility roof
EFD00136_61 - EAME direction indicators and flashing warning lights - high-visibility roof

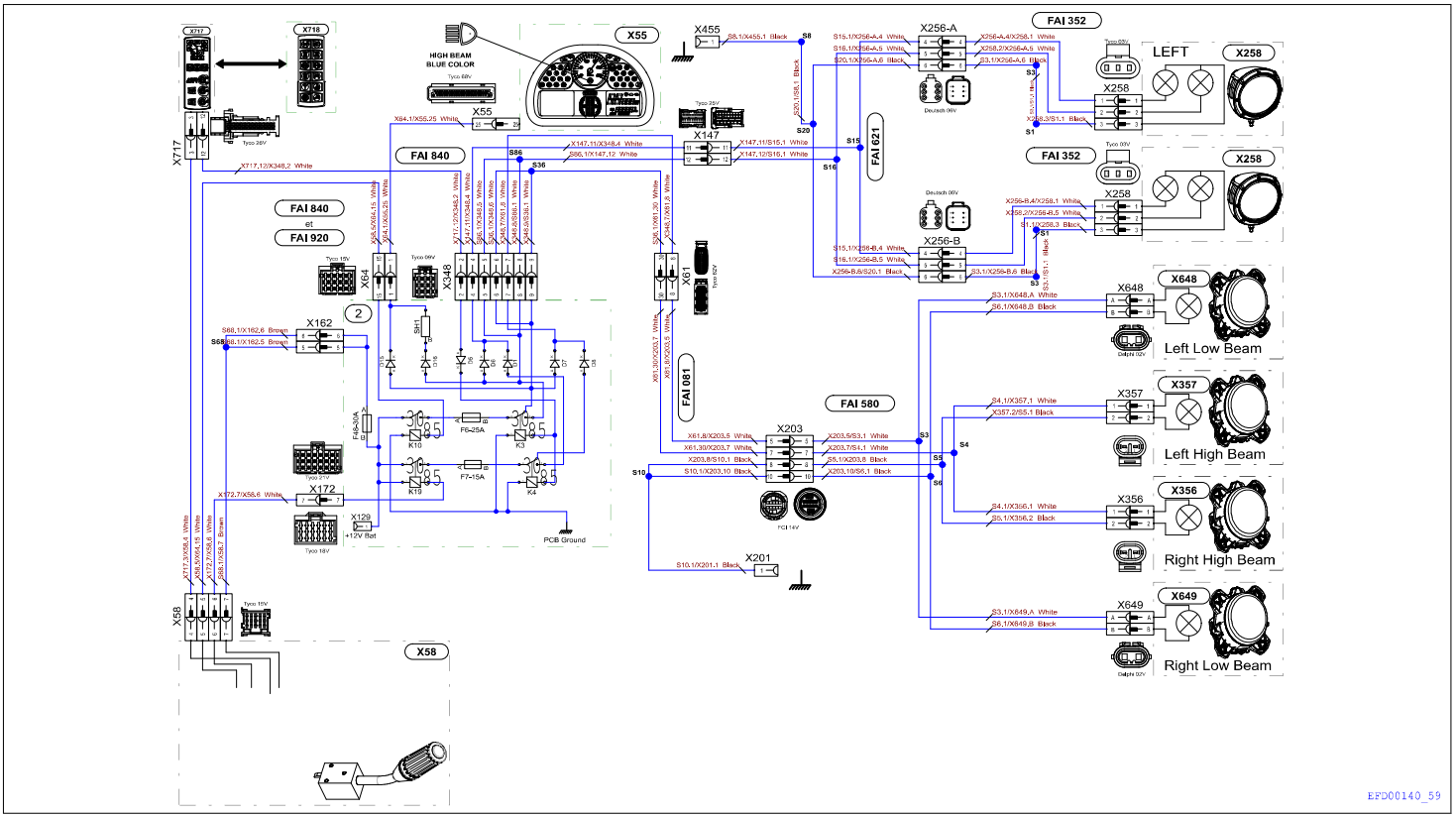


Fig. 50

4.1.5.51 EFD00141_83 - Work lights
EFD00141_83 - Work lights

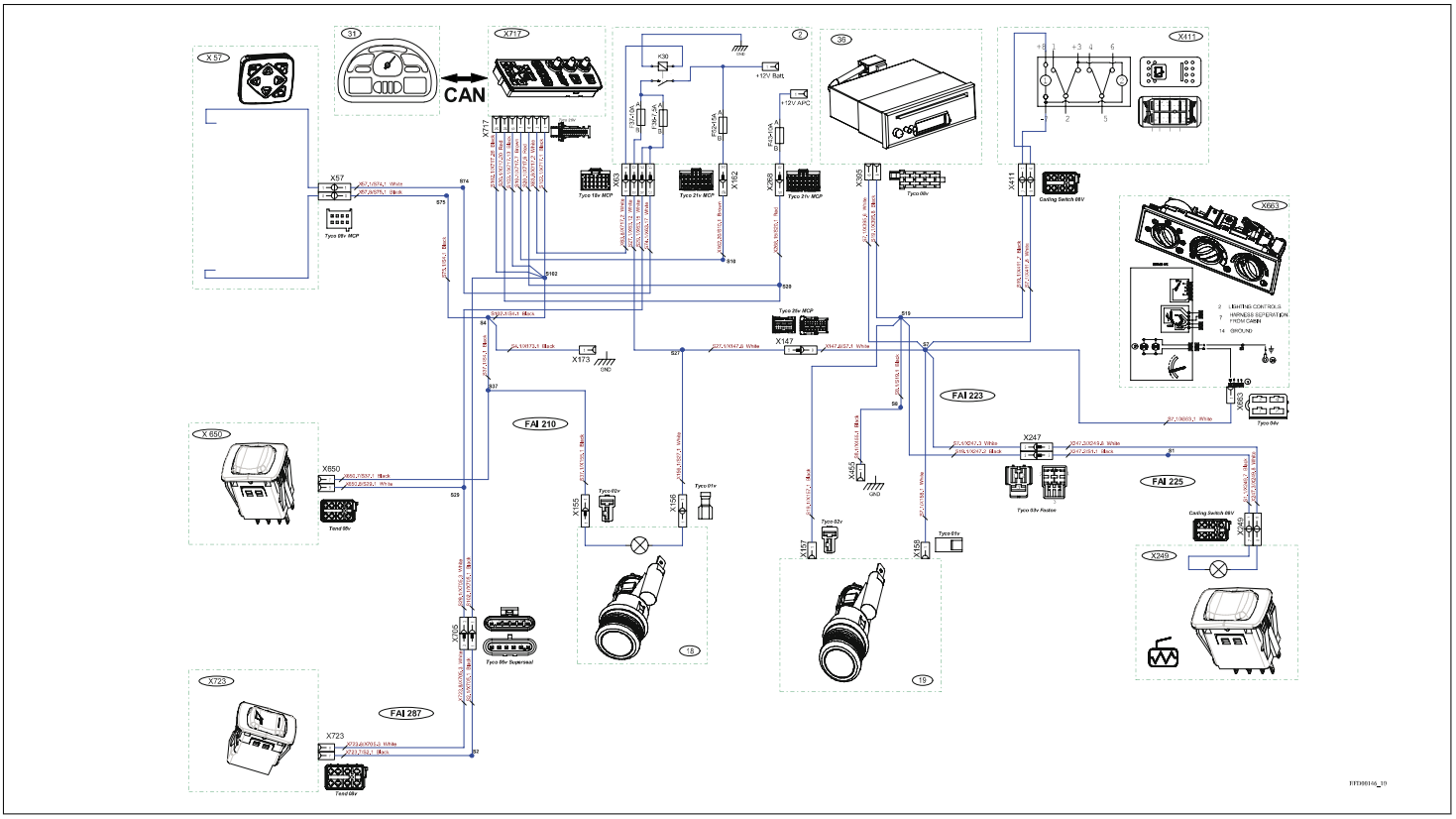


Fig. 60

4.1.5.61 EFD00146_11 - Manual air conditioning back-lighting for tractors with high-visibility roof
EFD00146_11 - Manual air conditioning back-lighting for tractors with high-visibility roof

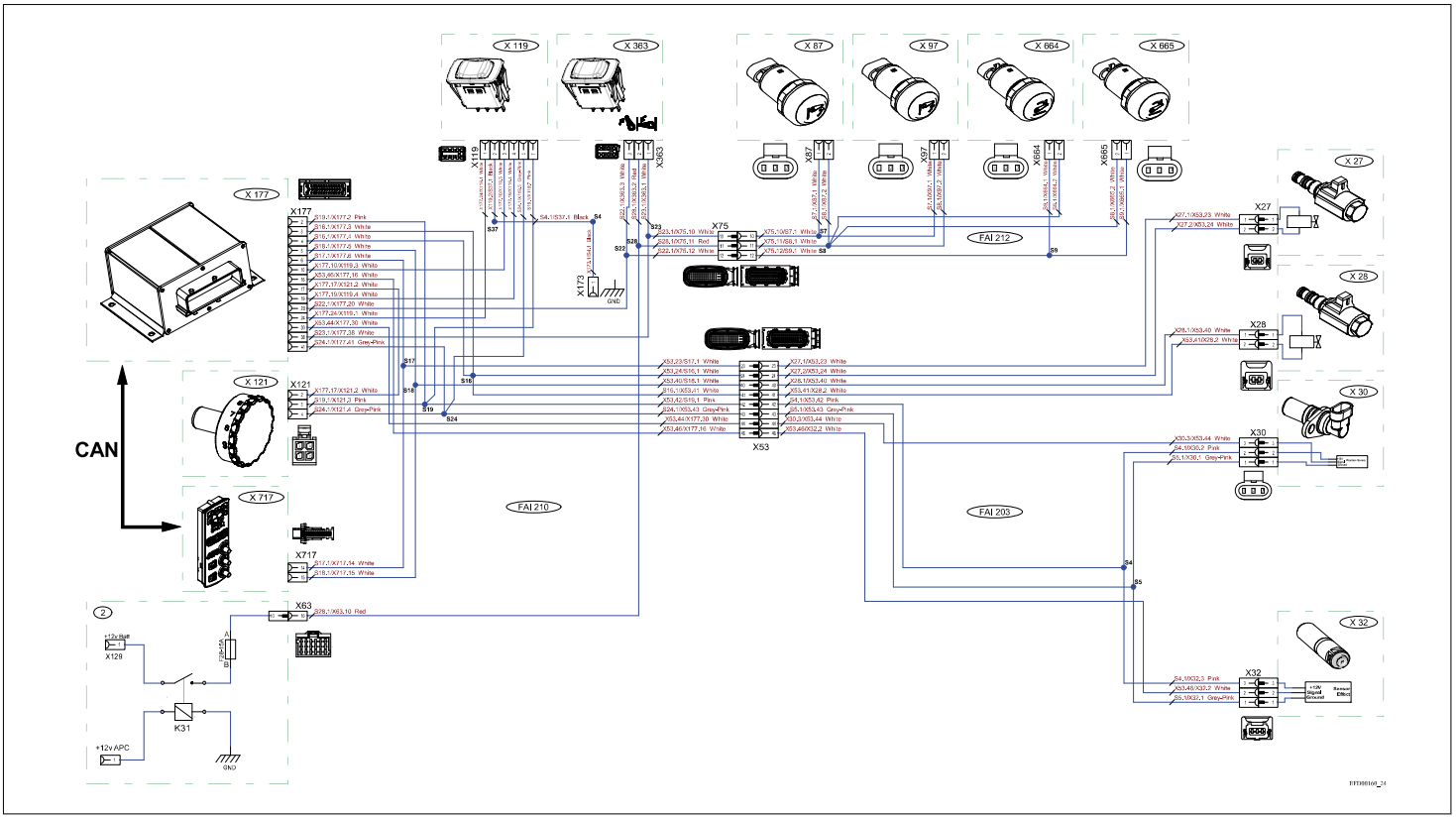


Fig. 70

4.1.5.71 EFD00160_25 - 100 l/minOpen Center rear linkage
EFD00160_25 - 100 l/minOpen Center rear linkage

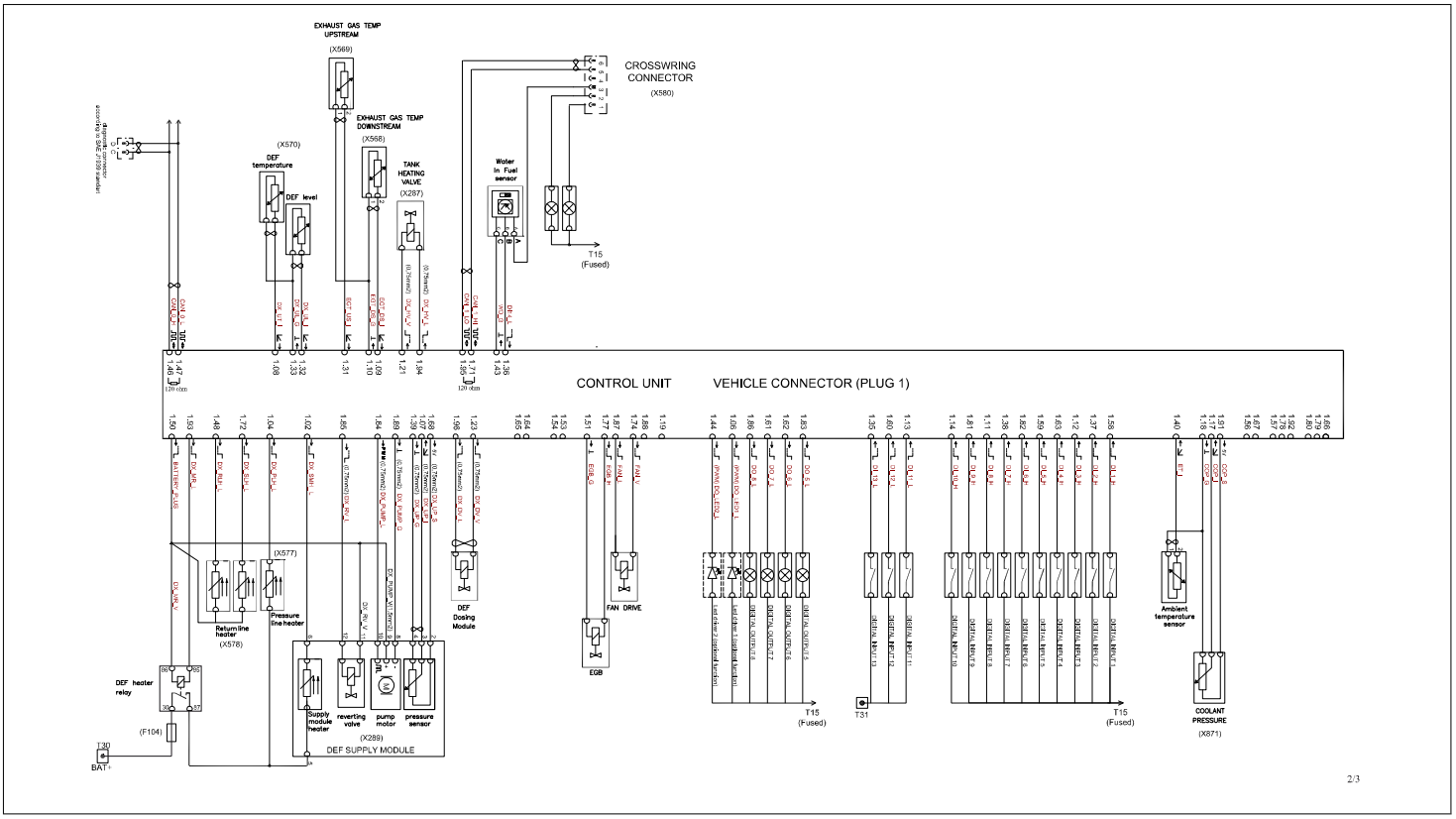


Fig. 80

4.1.5.81 EFD00175 - AGCO Power engine 49/66/74/84 AWF_3/3
EFD00175 - AGCO Power engine 49/66/74/84 AWF_3/3

5.1 Harnesses

5.1.1 Identification of harnesses

FAI200 - Engine harness

FAI201 - Front headlights harness

FAI202 - Suspended front axle harness

FAI203 - Drive train harness

FAI204 - Cab/platform external linkage harness

FAI205 - Electrohydraulic valves harness

FAI206 - Drive train harness - power take-off (PTO)

FAI207 - Front Dual Control harness

FAI208 - Linkage with Dual Control and TIC harness

FAI209 - Instrument panel harness

FAI210 - Cab drive train harness

FAI211 - Cab linkage harness

FAI212 - Lighting harness

FAI213 - Cab interior lighting harness

FAI214 - Armrest harness

FAI215 - Pillar harness

FAI216 - Diagnostics connector harness

FAI218 - Fieldstar harness

FAI219 - Cab interior current socket harness

FAI220 - BOC harness - safety switch

FAI221 - Instrument panel automatic air conditioning harness

FAI222 - Autotronic 5 ParkLock/suspended front axle harness

FAI223 - Roof harness

FAI224 - Hand rail lighting harness

FAI225 - Electric rear-view mirror harness

FAI226 - External/roof harness

FAI227 - Automatic air conditioning harness - roof

FAI228 - Number plate lighting harness

FAI229 - Xenon headlamp adapter harness

FAI230 - GSPTO harness

FAI231 - Drive train harness - ParkLock

FAI232 - Radio harness

FAI233 - Instrument panel automatic air conditioning harness

FAI234 - Automatic air conditioning harness - roof

FAI235 - Front accessory connection socket harness

5.1.3.5 FAI201 - Front headlights harness - ACW030858_1/2

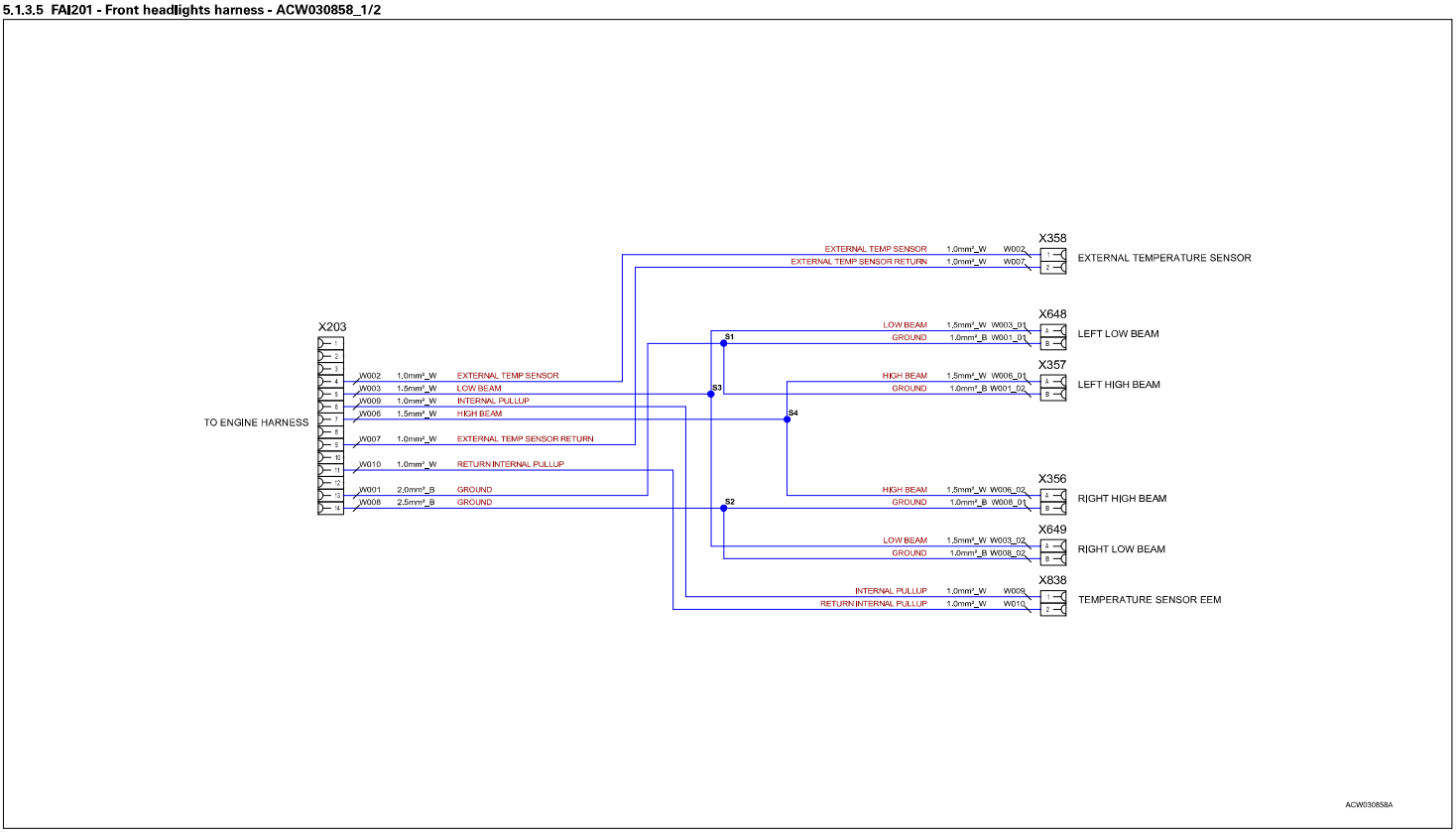


Fig. 5

5.1.3.15 FAI203 - Drive train harness external GTA2550 - ACW076051_2/3

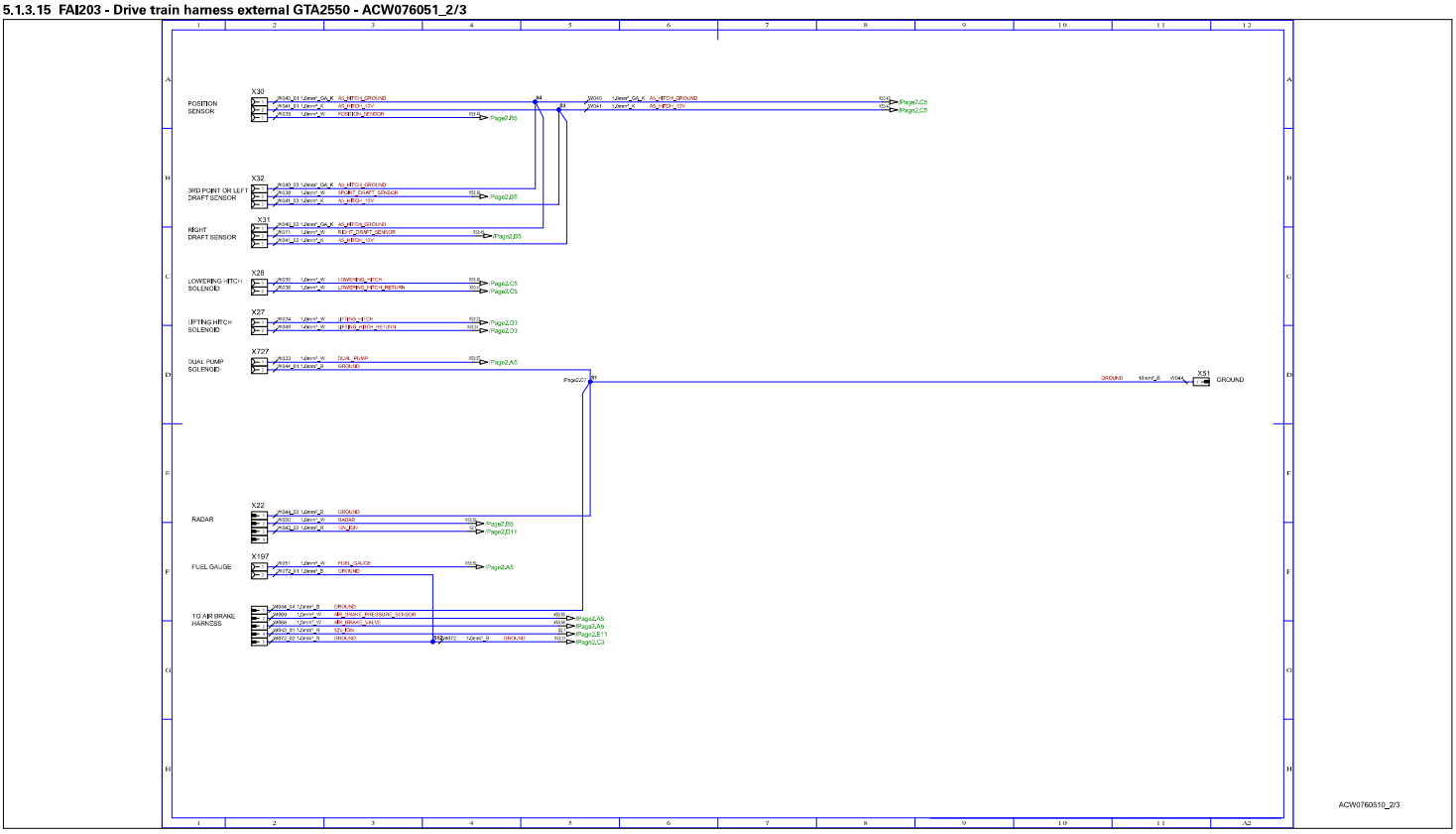


Fig. 15

5.1.3.25 FAI210 - Cab drive train harness Dyna-6 short console - ACW005780_7/8

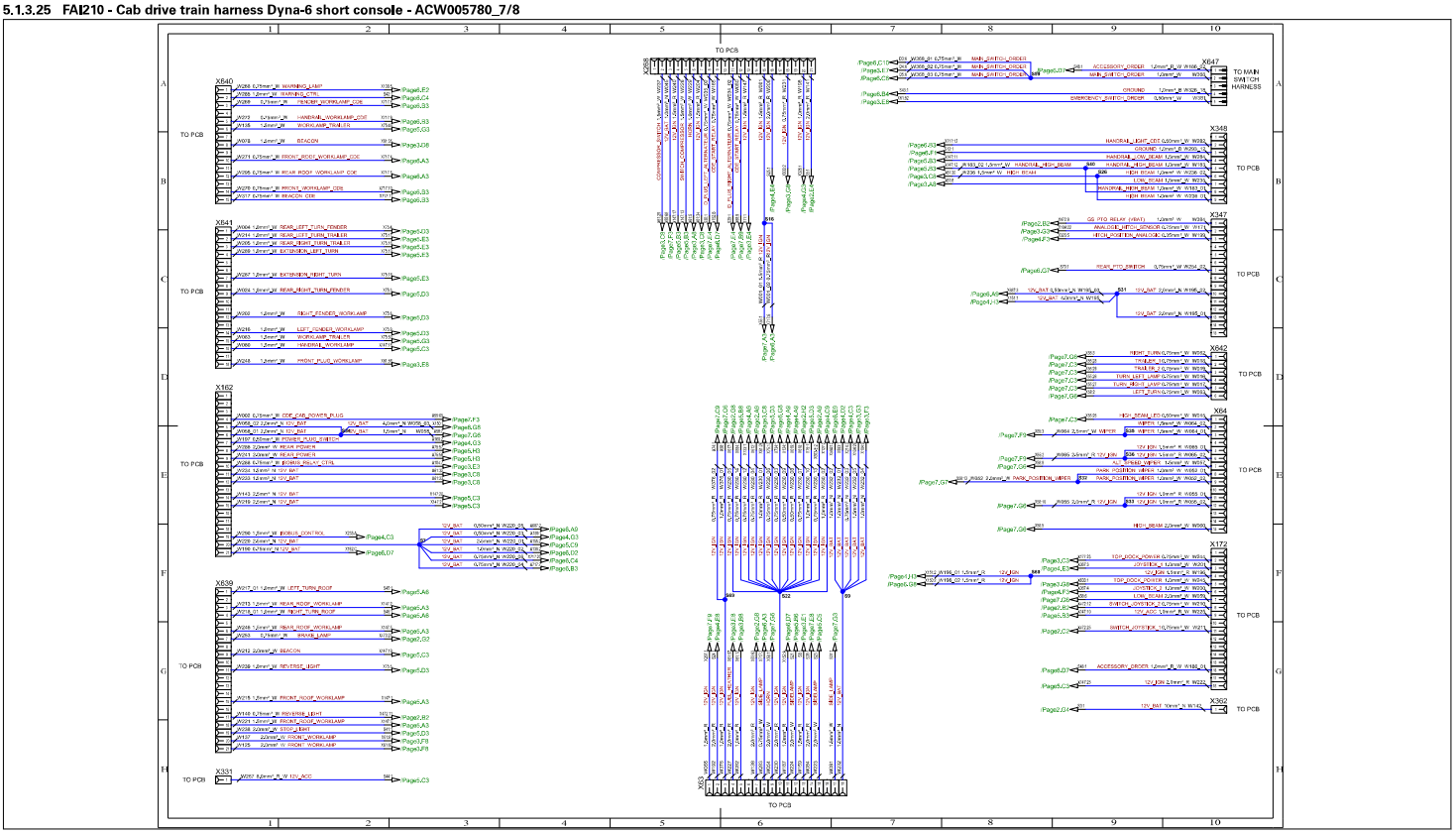


Fig. 25

5.1.3.35 FAI210 - Cab drive train harness Dyna-4 short console - ACW021492_1/8

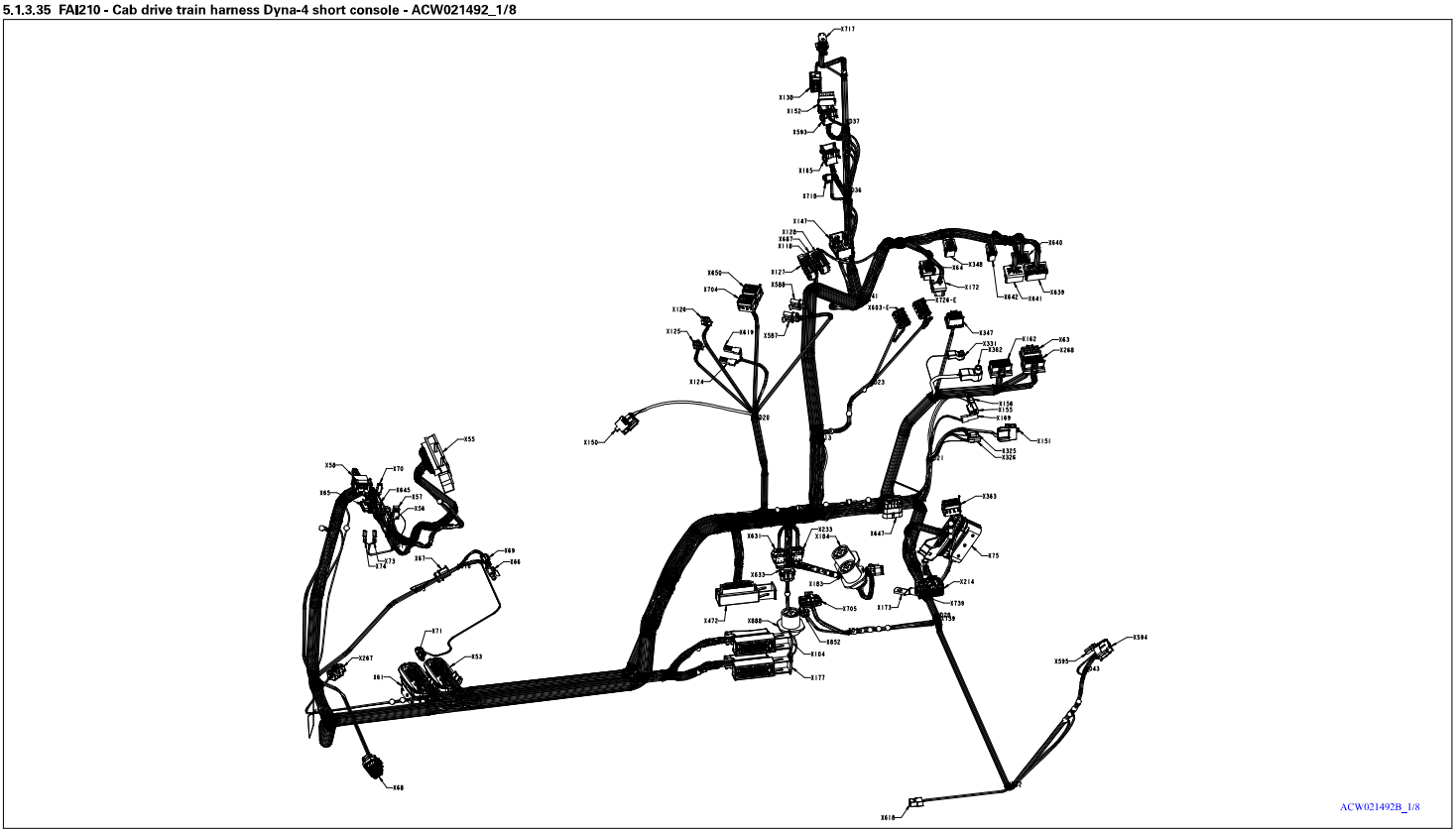


Fig. 35

5.1.3.45 FAI210 - Cab drive train harness Dyna-4 long console - ACW022303_3/7

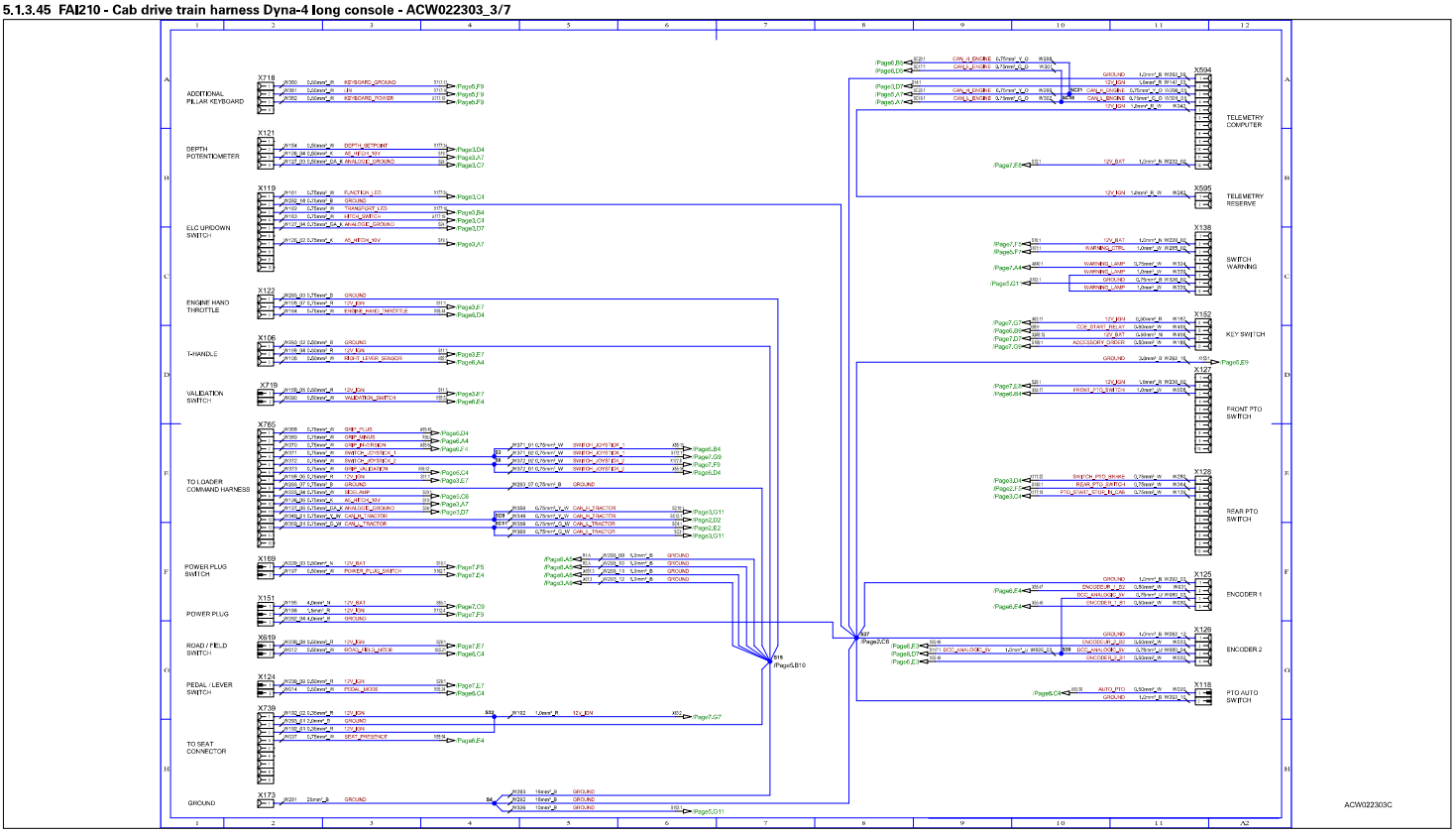


Fig. 45

5.1.3.55 FAI210 - Cab drive train harness Dyna-6 short console - ACW234544_6/10

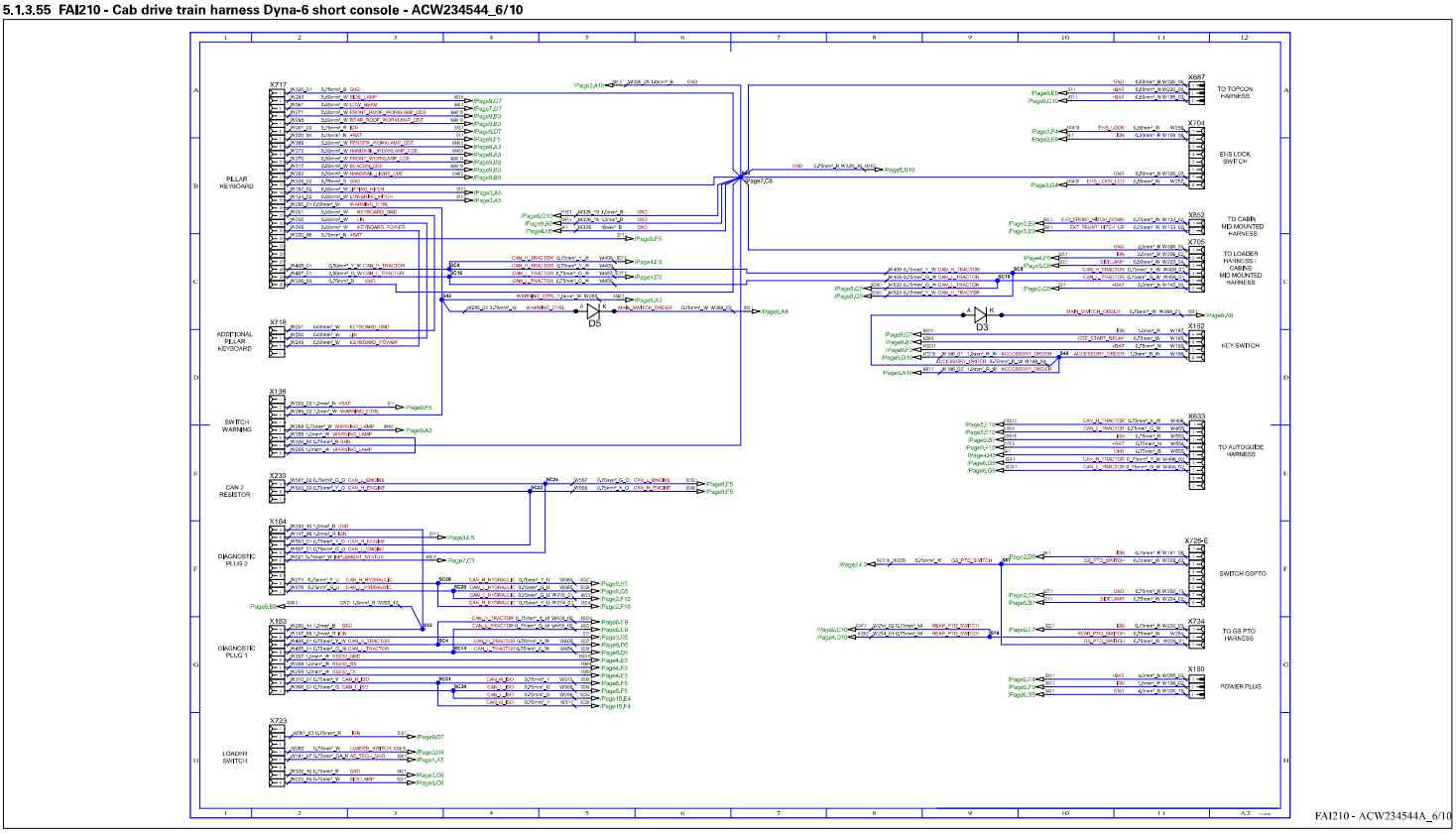


Fig. 55

5.1.3.65 FAI210 - Cab drive train harness Dyna-4 municipal - ACW242339_6/10

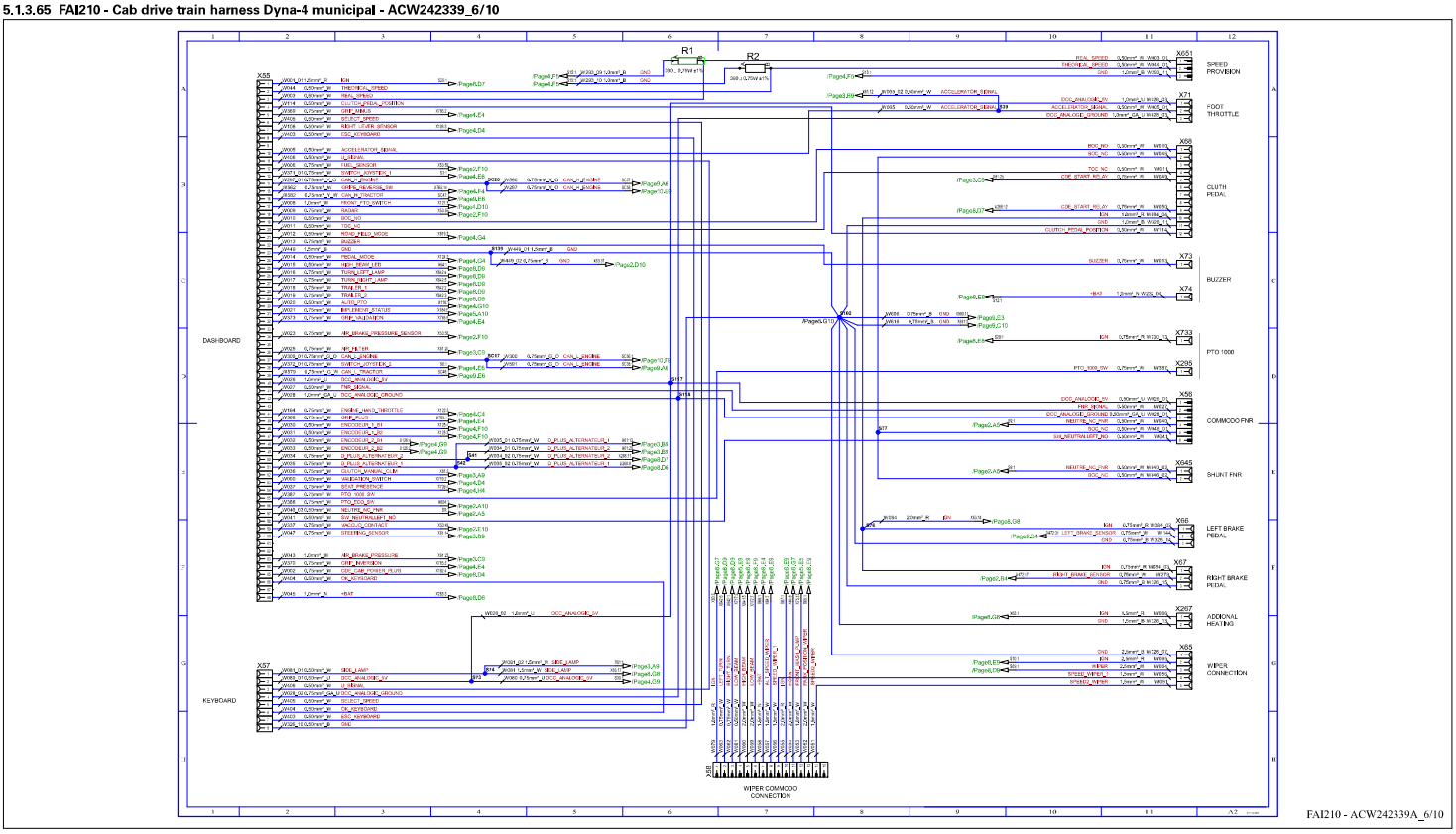


Fig. 65

5.1.3.75 FAI210 - Cab drive train harness Dyna-4 long console - ACW250513_6/9

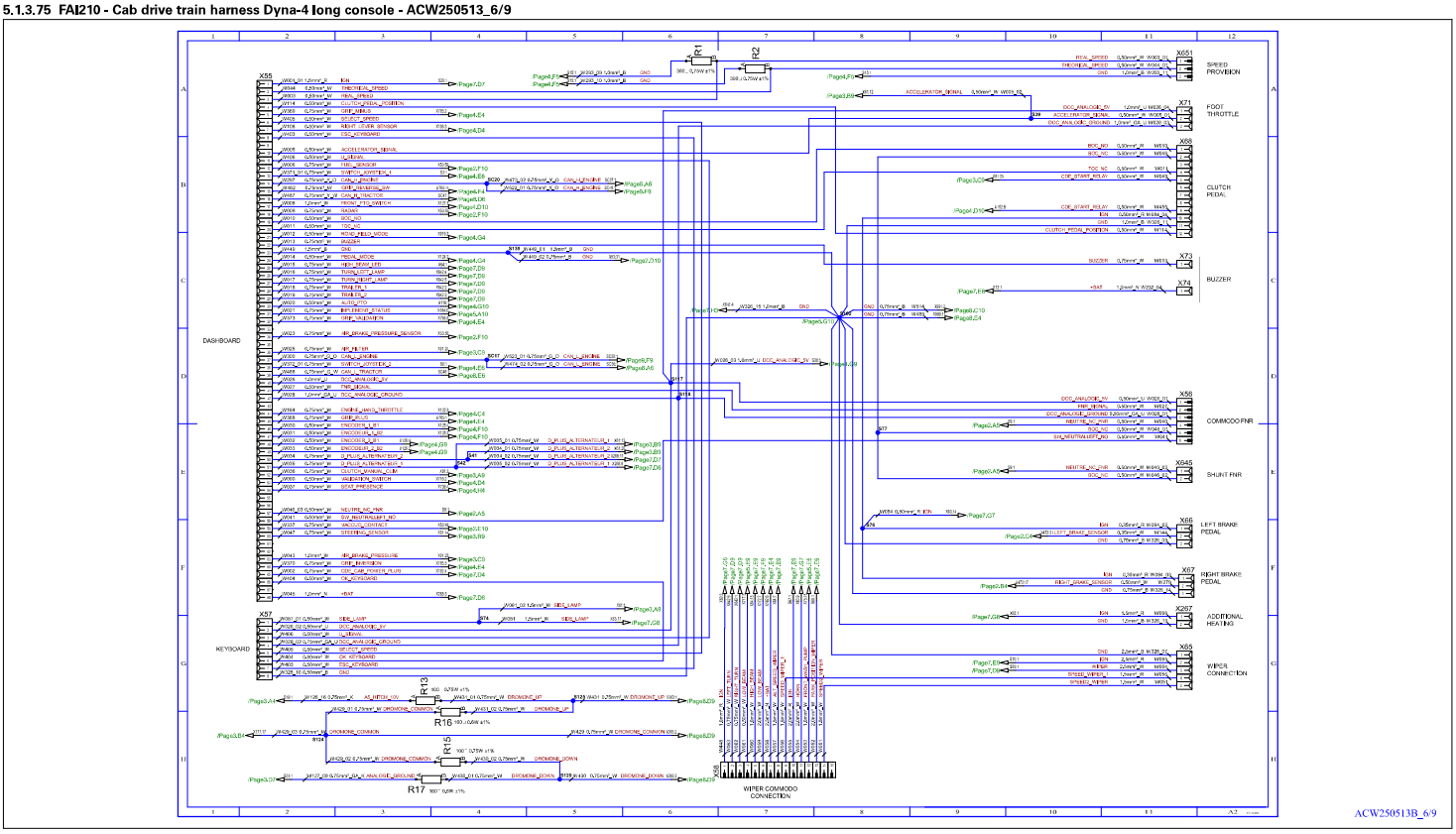


Fig. 75

5.1.3.85 FAI210 - Cab drive train harness Dyna-4 short console - ACW277796_7/10

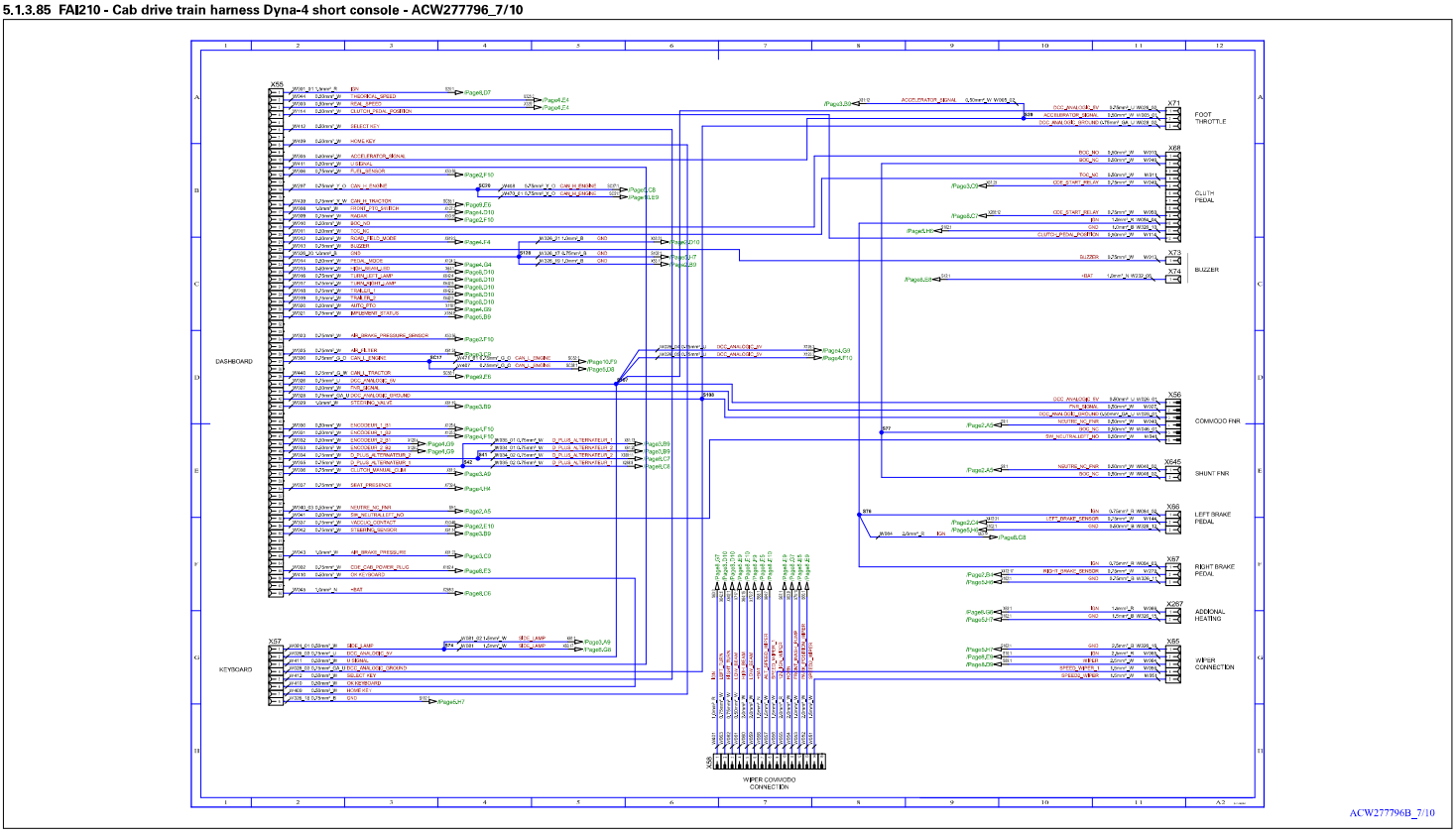


Fig. 85

5.1.3.95 FAI210 - Cab drive train harness Dyna-6 municipal - ACW281070_7/11

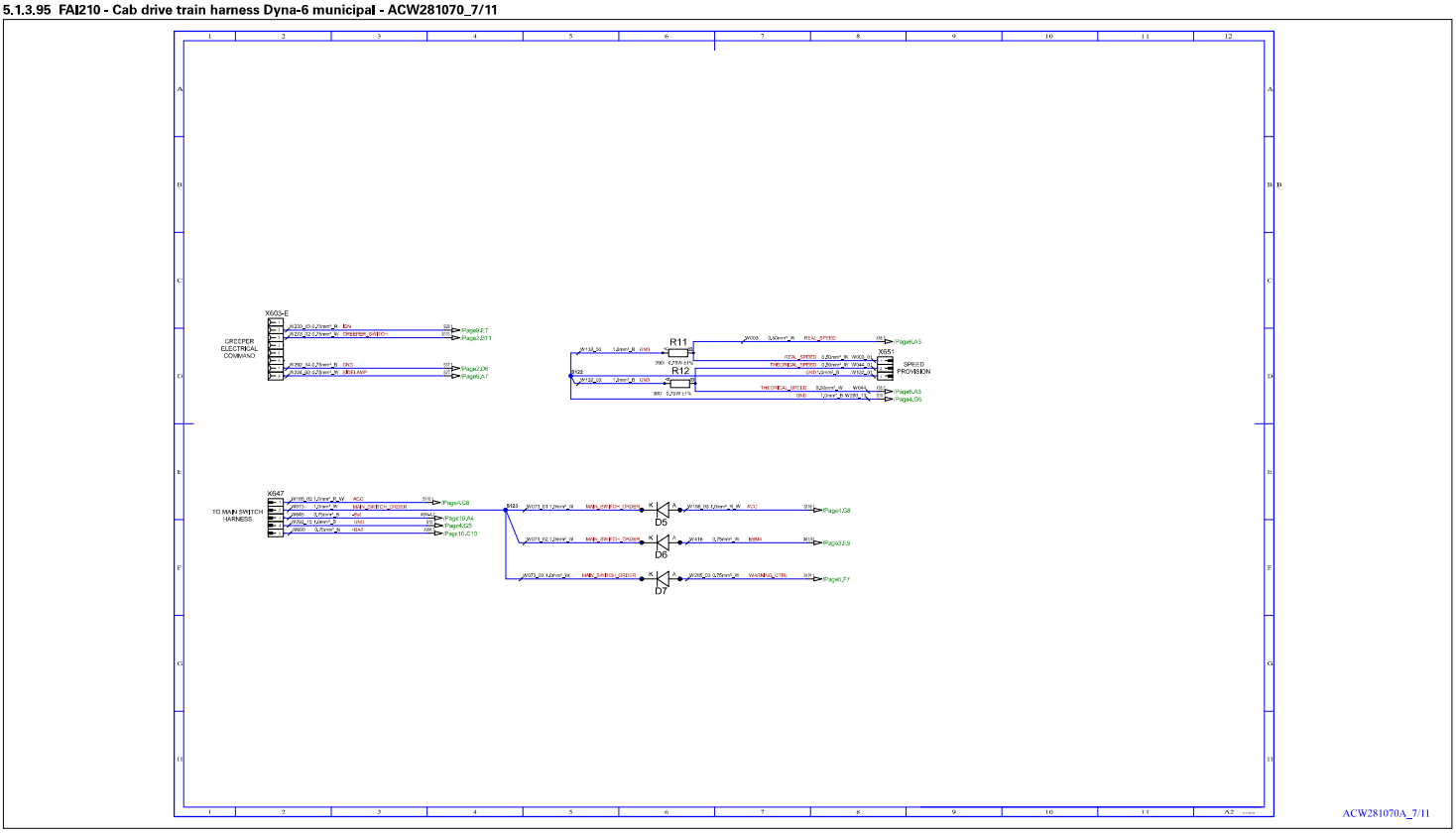


Fig. 95

5.1.3.105 FAI210 - Cab drive train harness Dyna-6 long console - ACW285998_6/9

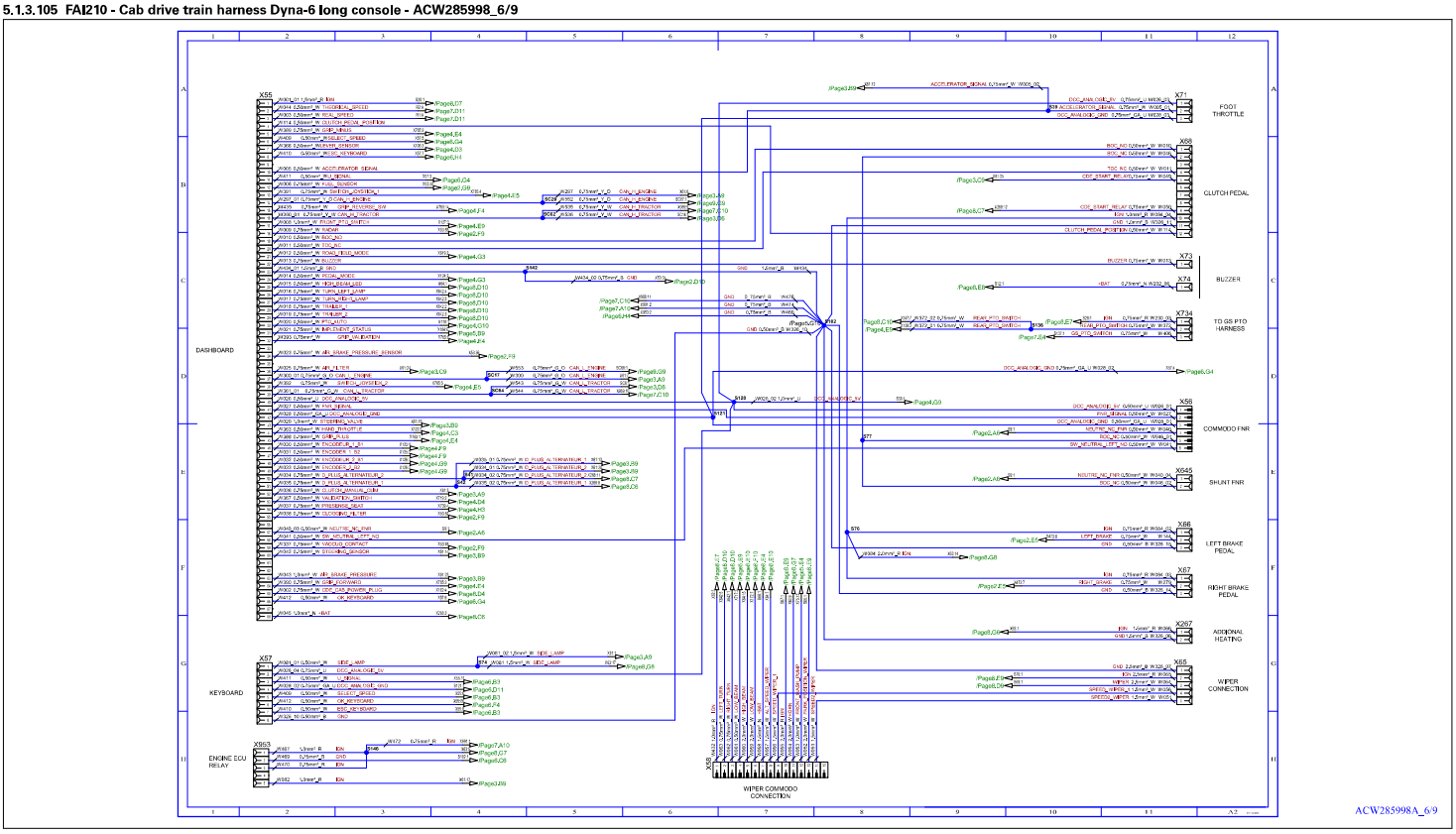


Fig. 105

5.1.3.115 FAI212 - Lighting harness EAME - ACW125945_1/3

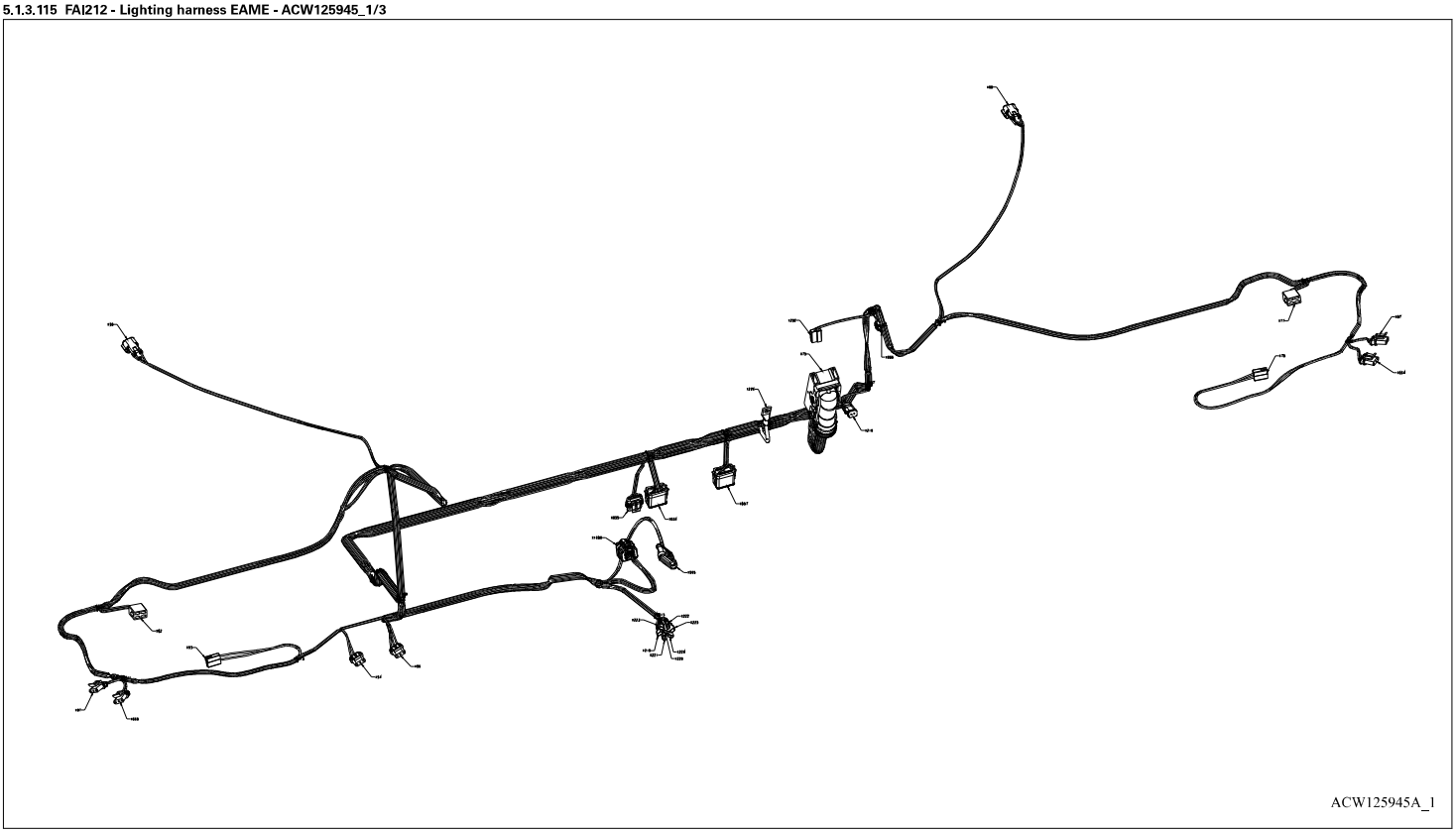


Fig. 115

5.1.3.125 FAI223 - Roof harness standard with manual air conditioning - 4353057_1/3

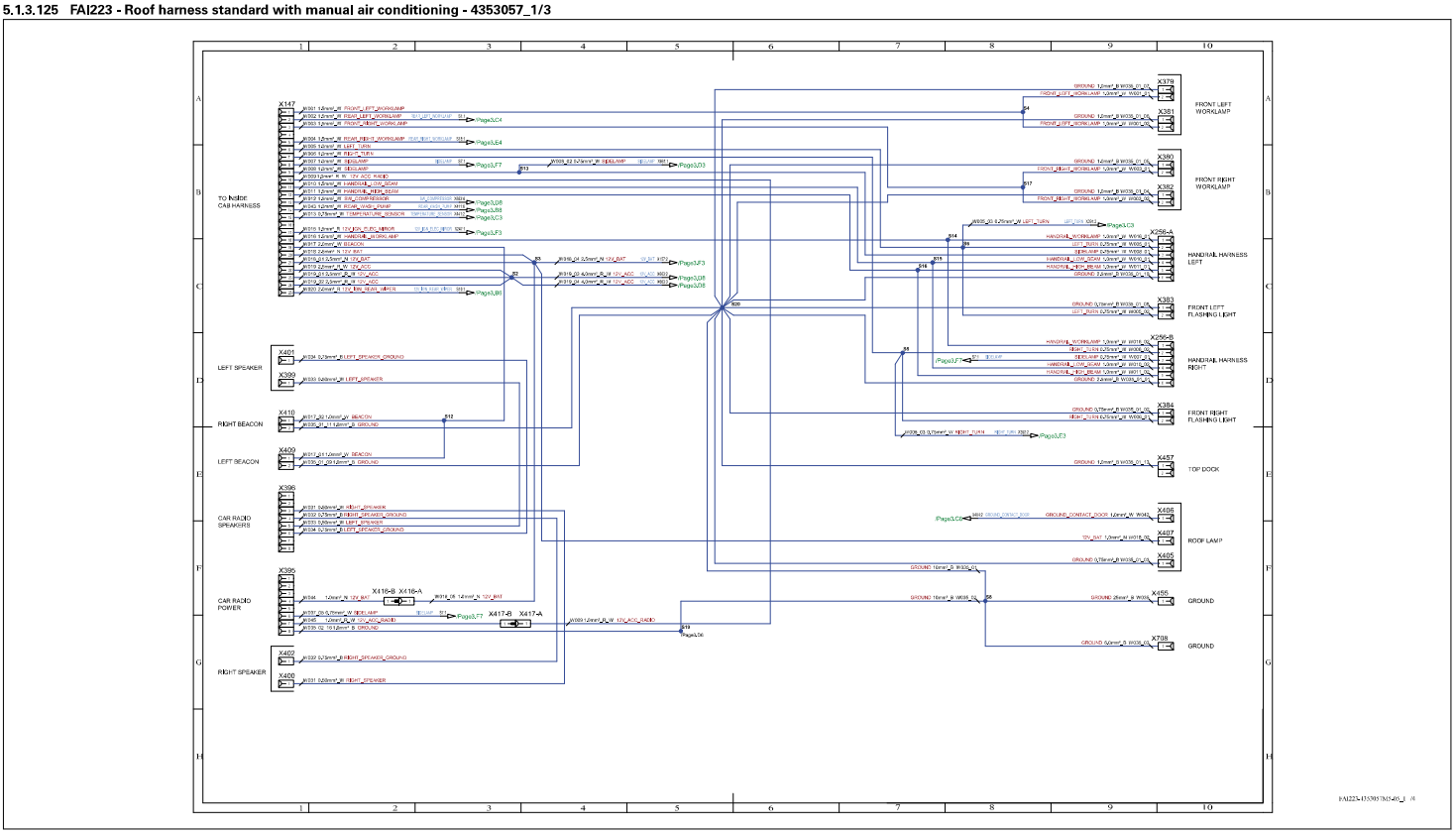


Fig. 125

5.1.3.135 FAI228 - Number plate lighting harness number plate on flat roof - 4382234_1/2

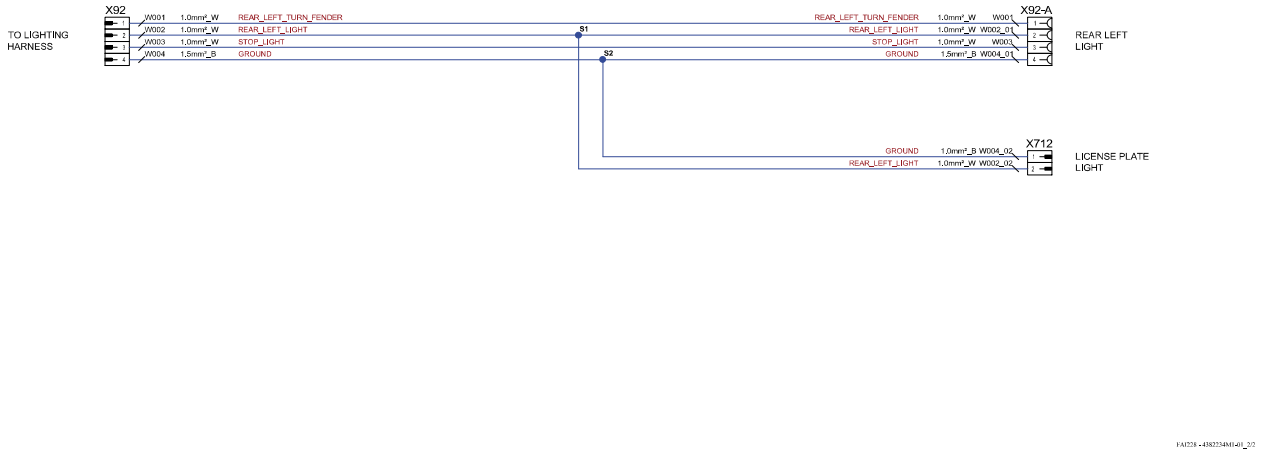


Fig. 135

5.1.3.145 FAI262 - Auto-Guide™ engine harness - 4296810_1/2

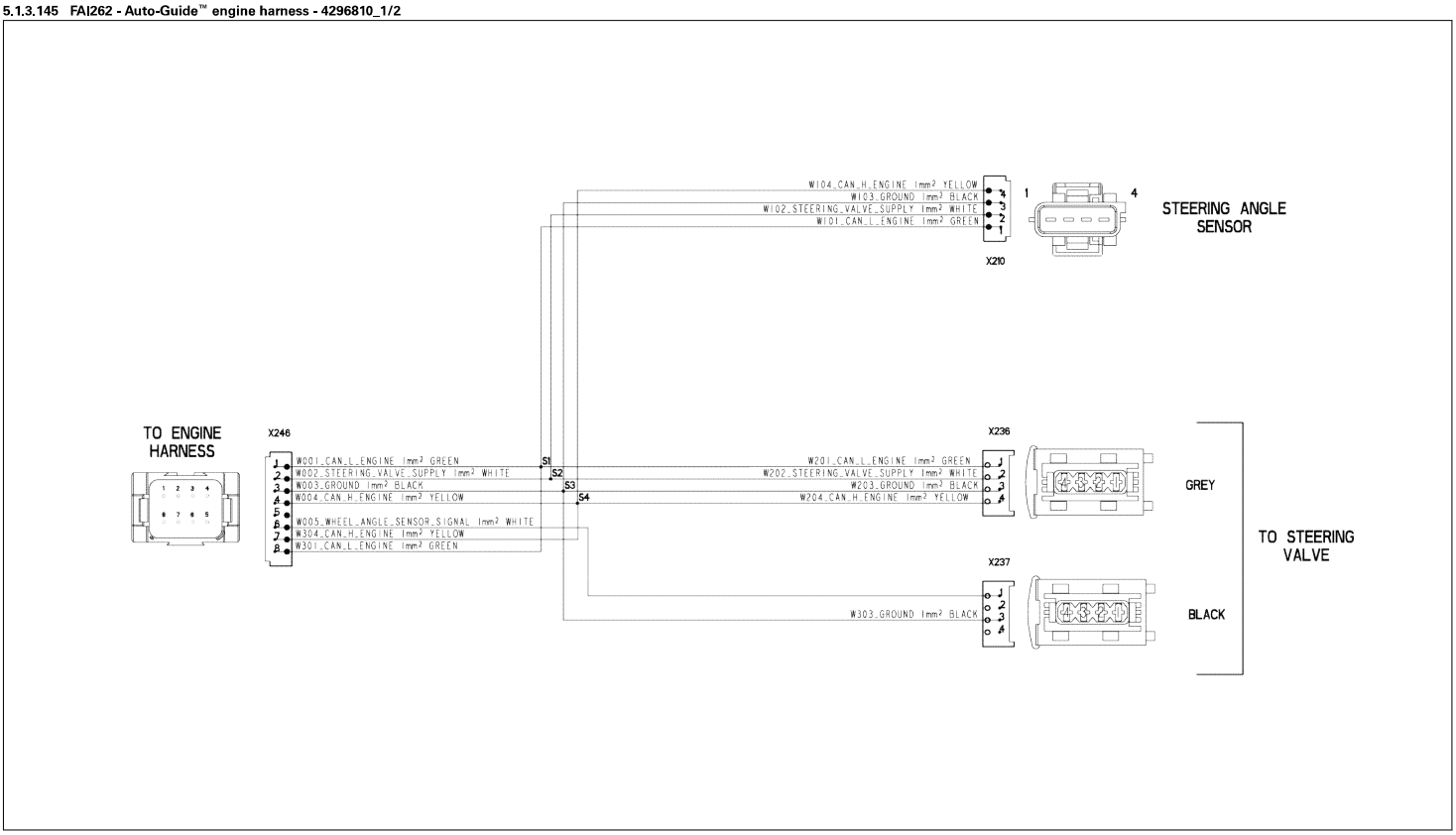


Fig. 145

5.1.3.155 FAI265 - Air brake harness Dyna-6- ACW034317_1/2

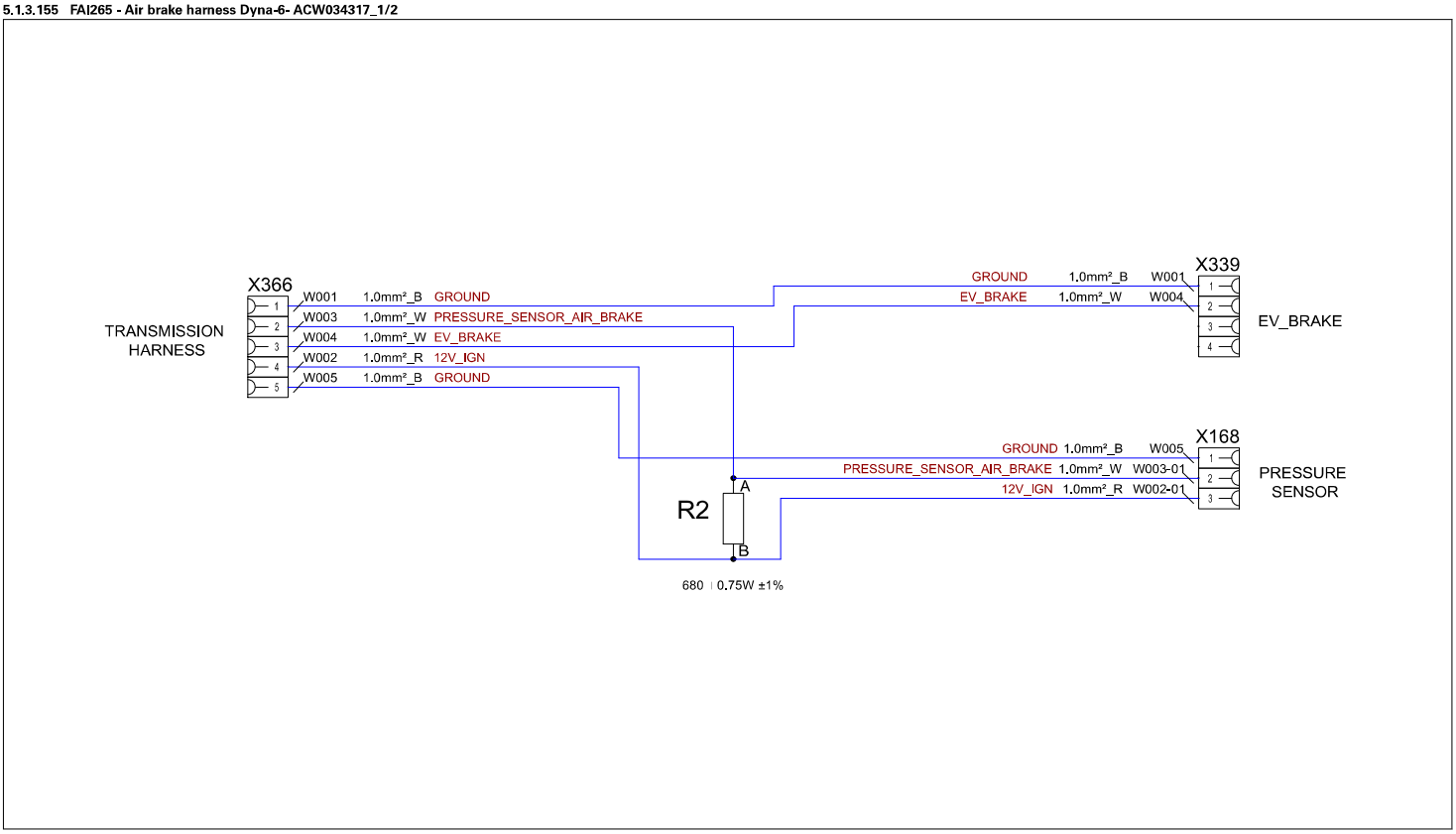


Fig. 155

5.1.3.165 FAI287 - ALO loader harness internal without multi-function armrest - 4378879_1/2

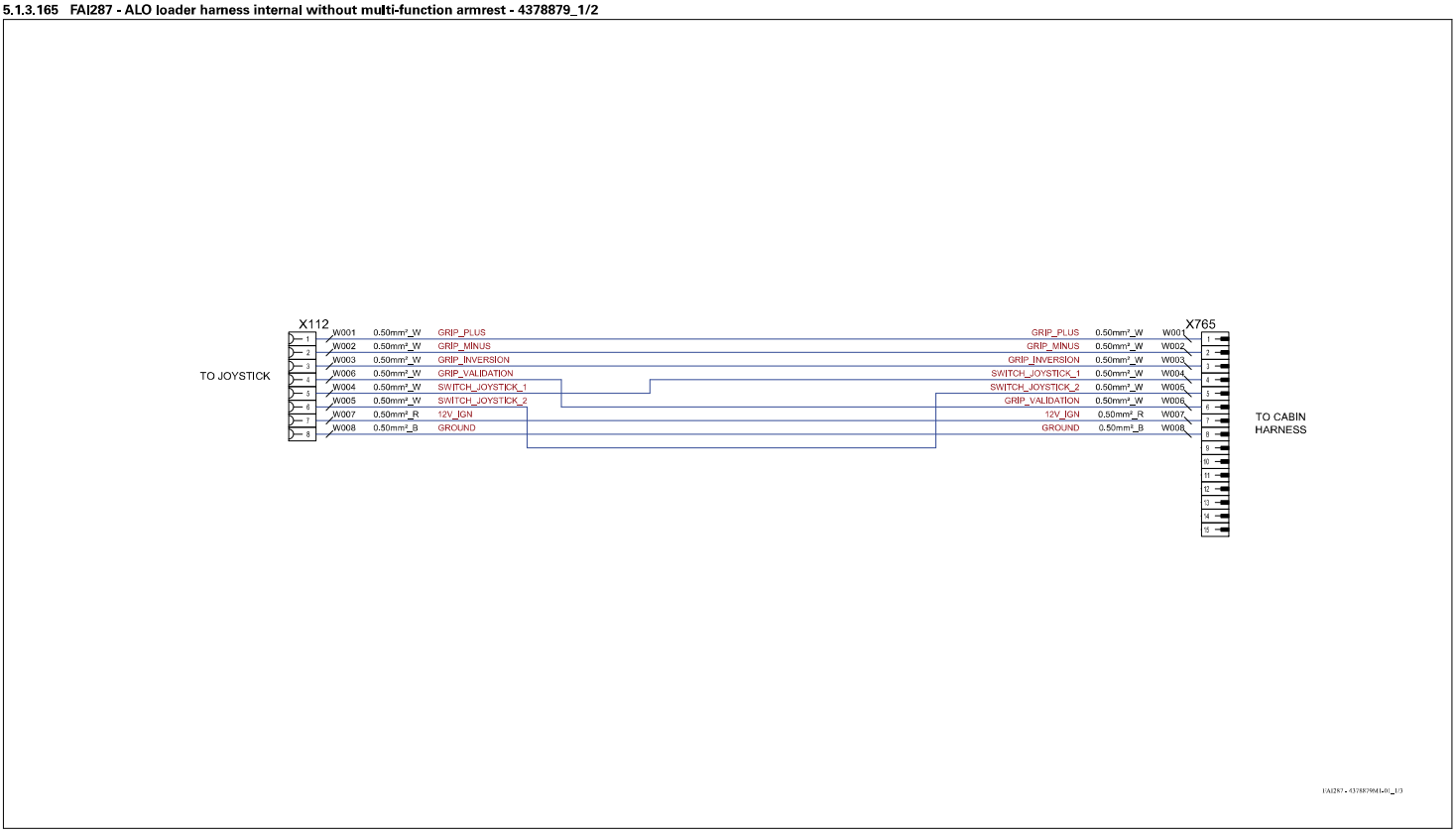


Fig. 165

5.1.3.175 FAI294 - Additional heater harness - 4299327_1/2

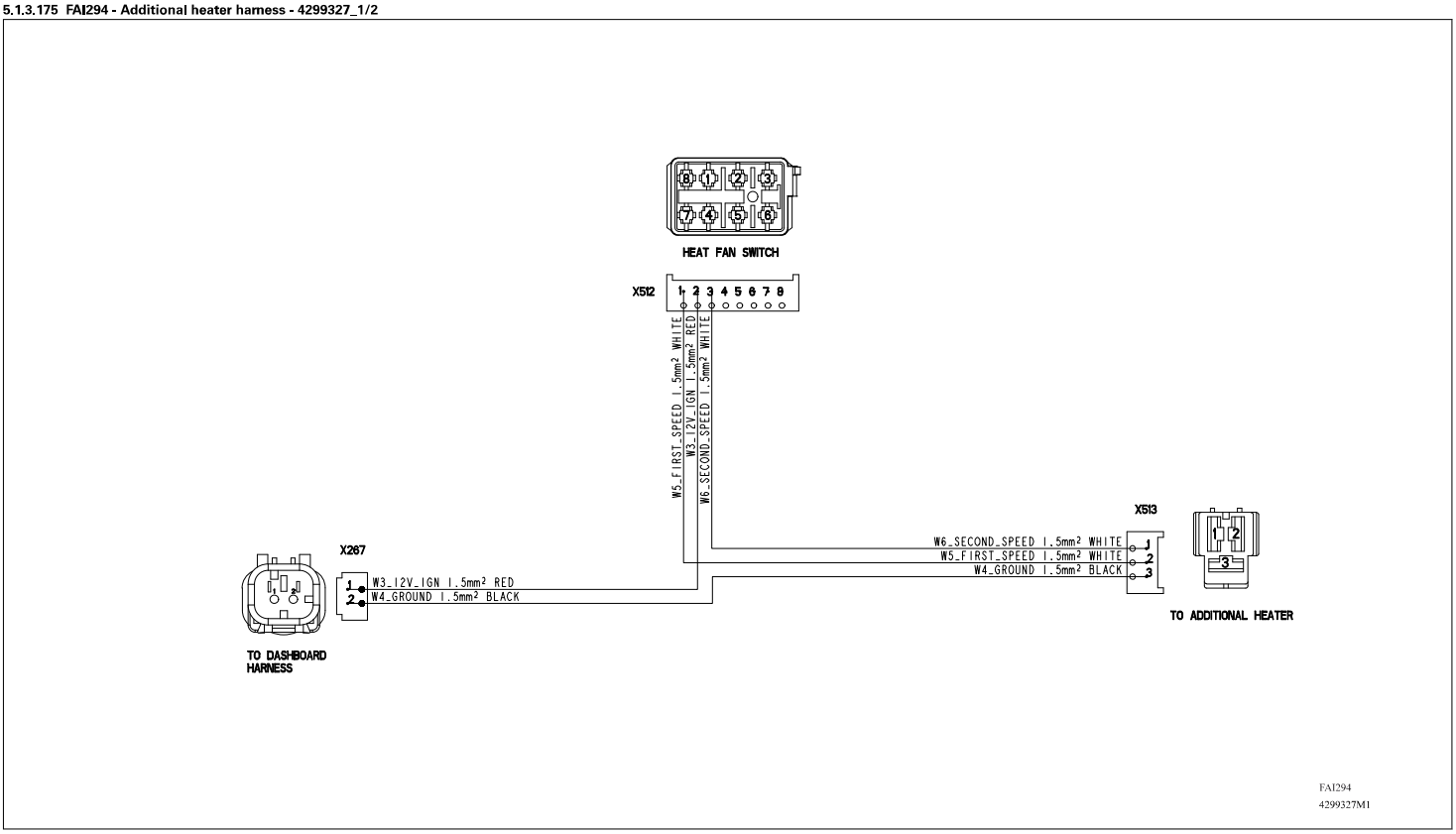


Fig. 175

5.1.3.185 FAI300 - Air conditioning shunt harness - 4353106

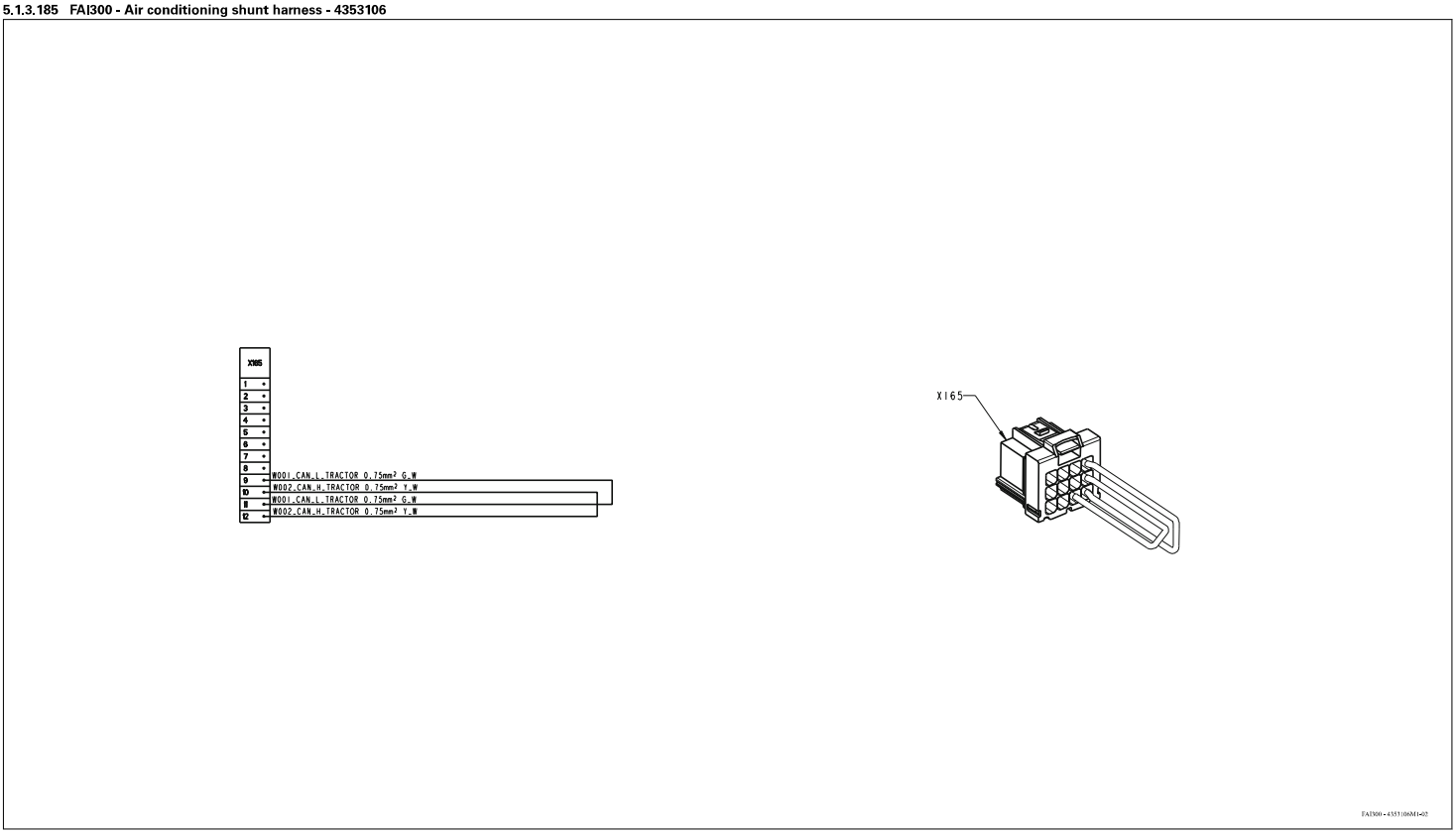


Fig. 185

5.1.3.195 FAI317 - Vistronic harness - ACW025338_2/2

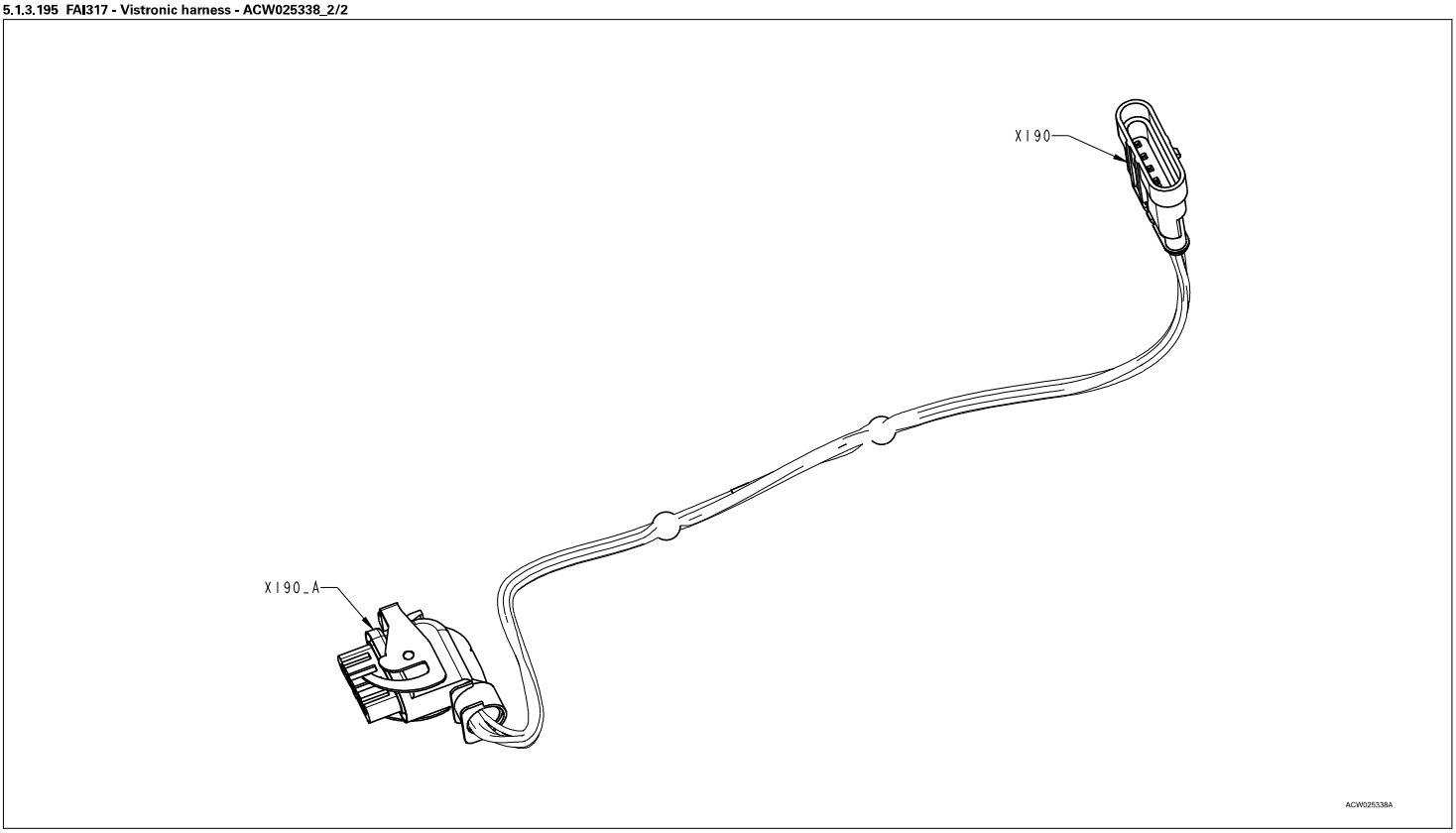


Fig. 195

5.1.3.205 FAI356 - Mid Mounted cab harness - 4353915_2/2

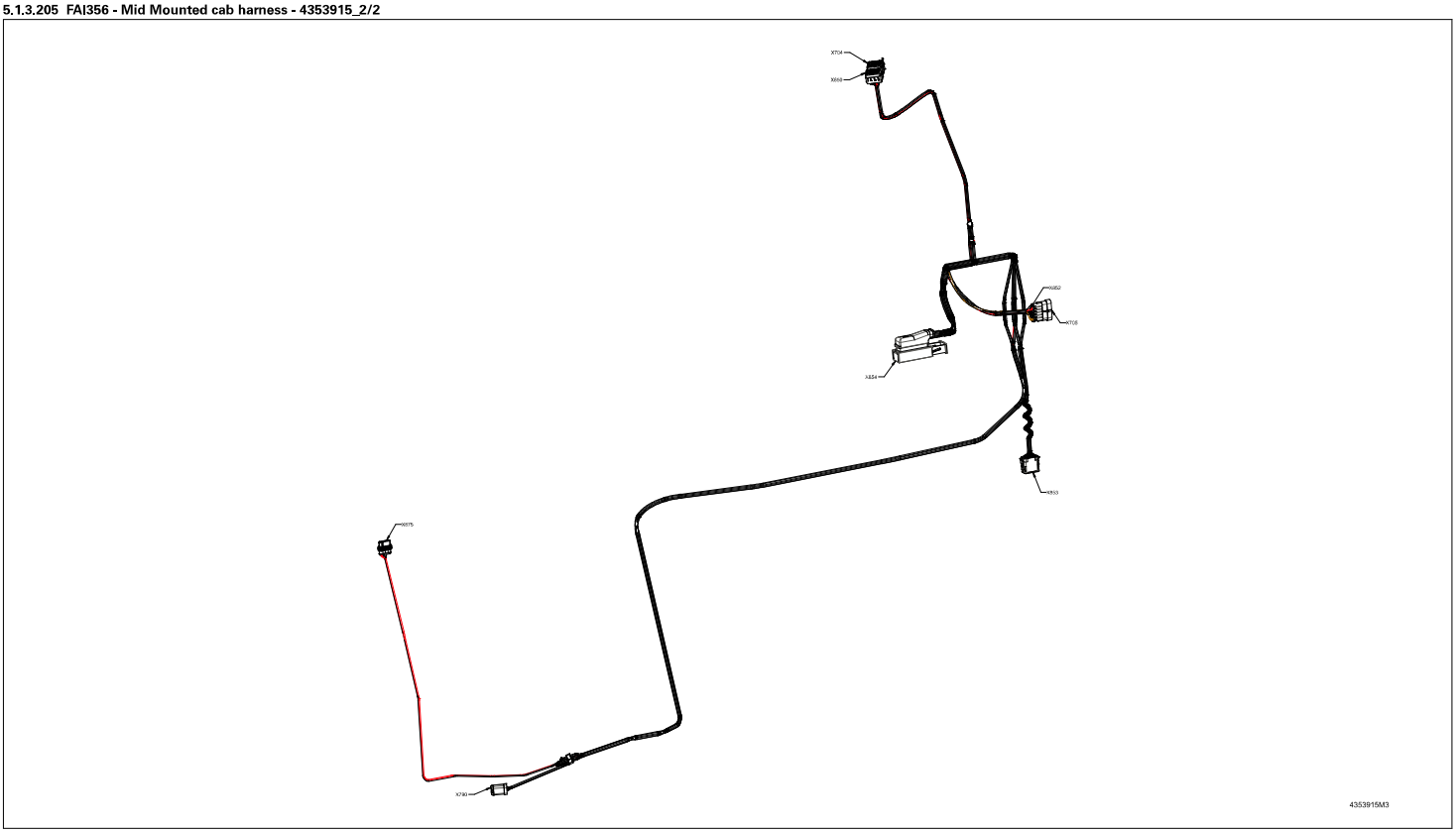


Fig. 205

6. Hydraulics diagrams

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6.1.1.7 HFD01074 - Auxiliary hydraulics diagram with all options, with Mid Mounted Open Center 57 L/min Mother Regulation

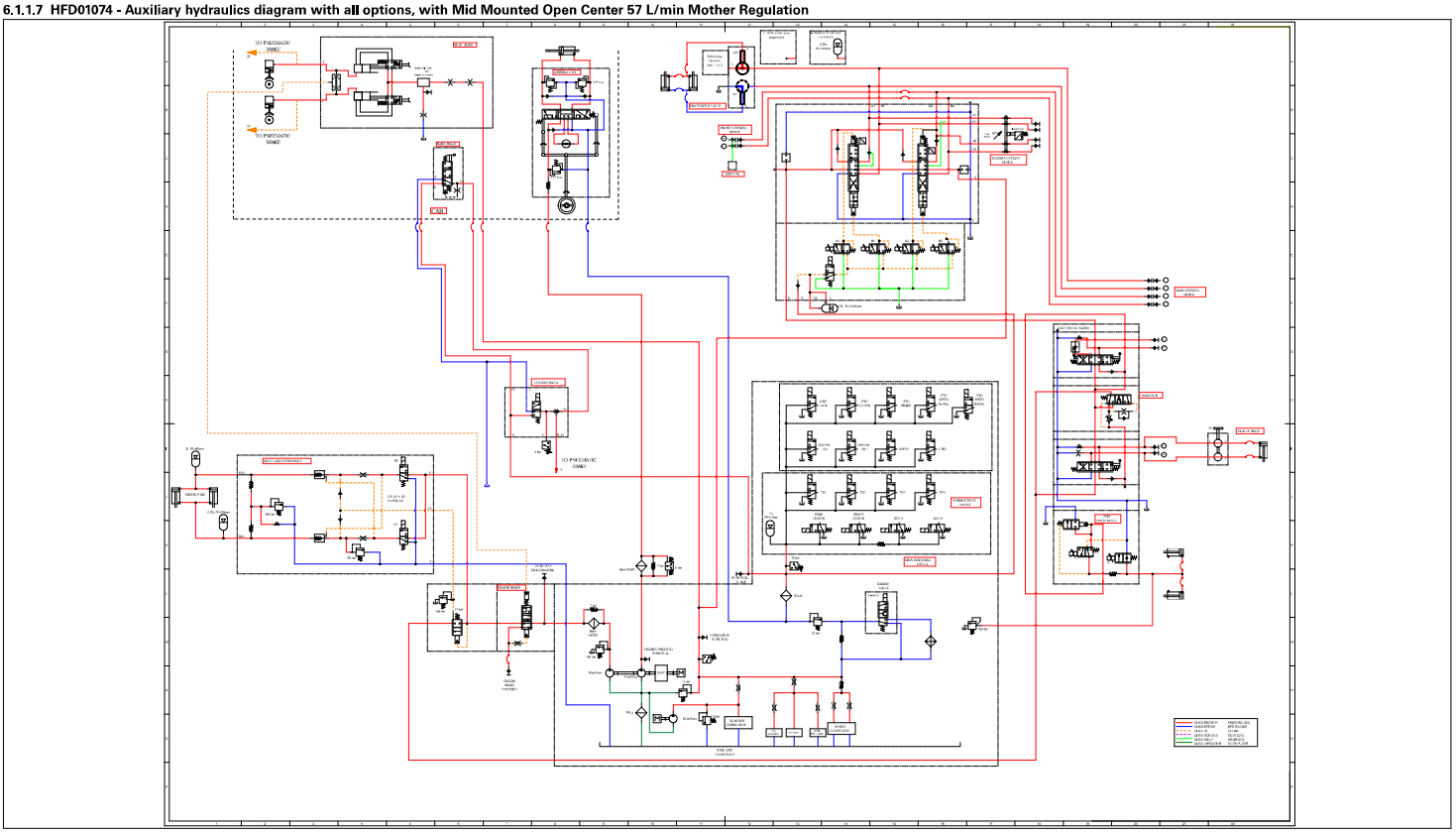


Fig. 7

6.1.1.17 HFD03069 - Hydraulics diagram: Load Sensing tractor braking with trailer brake

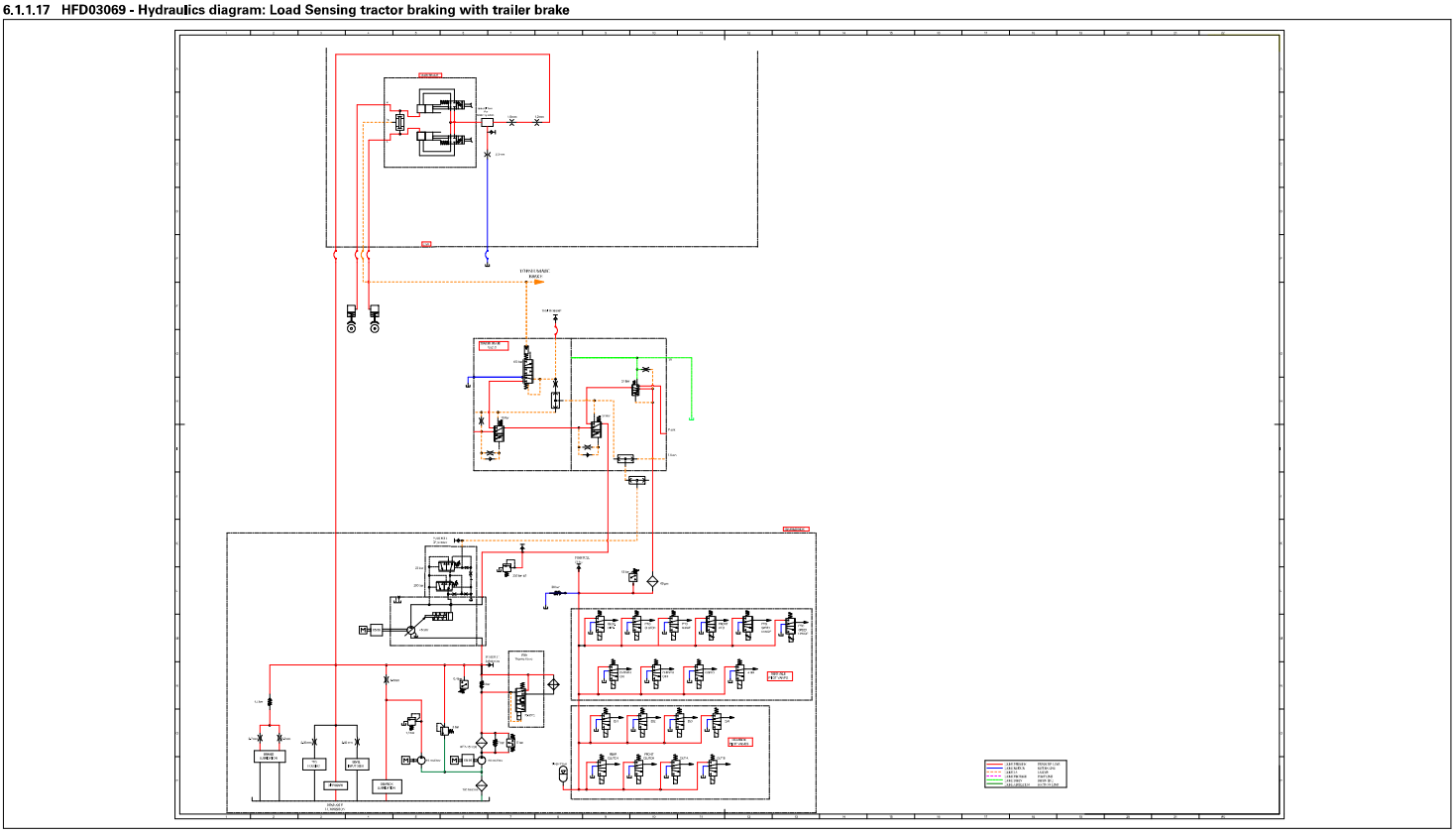


Fig. 17

8.1 Bleeding

8.1.1 Bleeding the main brake system

Installation

NOTE: *A male quick connector is fitted as standard on the right-hand hydraulic cover plate for pressure tests. The pressure on this line makes it easier to bleed the brake system.*

Open Center version

1. Join the connector (P9) to the connector (1) with a makeshift hose (2) fitted at each end with a female connector ref. 3582045M1 see Fig. 1 .

2. Using a clamp fitted with protective jaws, pinch the return hose (4) without flattening it excessively.

NOTE: *Some hoses may be difficult to pinch due to their rigid sheath. Consequently, it will be necessary to disconnect the union* (4) *and to replace it temporarily with a plug.*

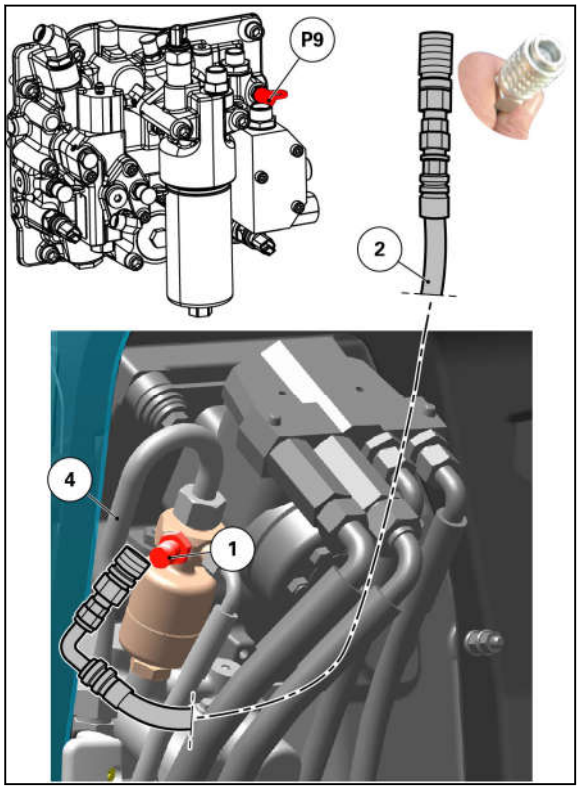


Fig. 1

11. Operate the following at the same time for at least 10 seconds:

- the PowerShuttle arm to raised position (manual declutching)
- the differential lock switch

NOTE: *The transmission temperature must be between 35 °C and 45 °C in order for the calibration to start.*

12. The right-hand screen of the instrument panel displays **Ct**, indicating that the calibration is ready to start.

13. Place the PowerShuttle lever in forward position to begin the calibration.

14. During calibration, **Ct** remains displayed on the right-hand screen of the instrument panel.

Calibration takes approximately 10 minutes.

Fig. 15

15. Calibration is complete when the right-hand screen of the instrument panel alternately displays **1A/2A**.

16. Calibration is complete when the right-hand screen of the instrument panel alternately displays **1C/2C**.

17. Place the PowerShuttle lever in neutral and switch off the engine to confirm the calibration.

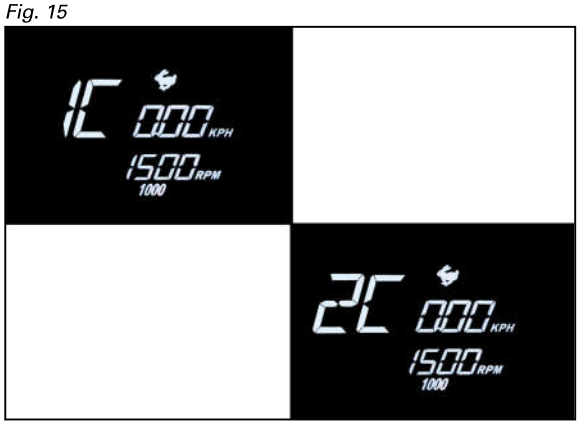


Fig. 16

Immediate validation after calibration

NOTE: ***Take the PowerShuttle progressivity setting into account. A zero setting will allow the calibration to be validated correctly.***

NOTE: ***Ensure the differential lock and front axle are disengaged before carrying out any maneuvers.***

18. Carry out 10 forward/reverse PowerShuttle maneuvers.

19. Carry out 10 neutral to forward and neutral to reverse PowerShuttle maneuvers.

20. Assess the quality of the shifting, which should be deft and smooth.

Validation of a tractor that has already been calibrated

NOTE: ***The transmission temperature must be above 15 °C.***

NOTE: ***Take the PowerShuttle progressivity setting into account. A zero setting will allow the calibration to be validated correctly.***

21. Start the engine

NOTE: *Ensure the differential lock and front axle are disengaged before carrying out any maneuvers.*

22. Carry out 10 forward/reverse PowerShuttle maneuvers.

23. Carry out 10 neutral to forward and neutral to reverse PowerShuttle maneuvers.

24. Assess the quality of the shifting, which should be deft and smooth.

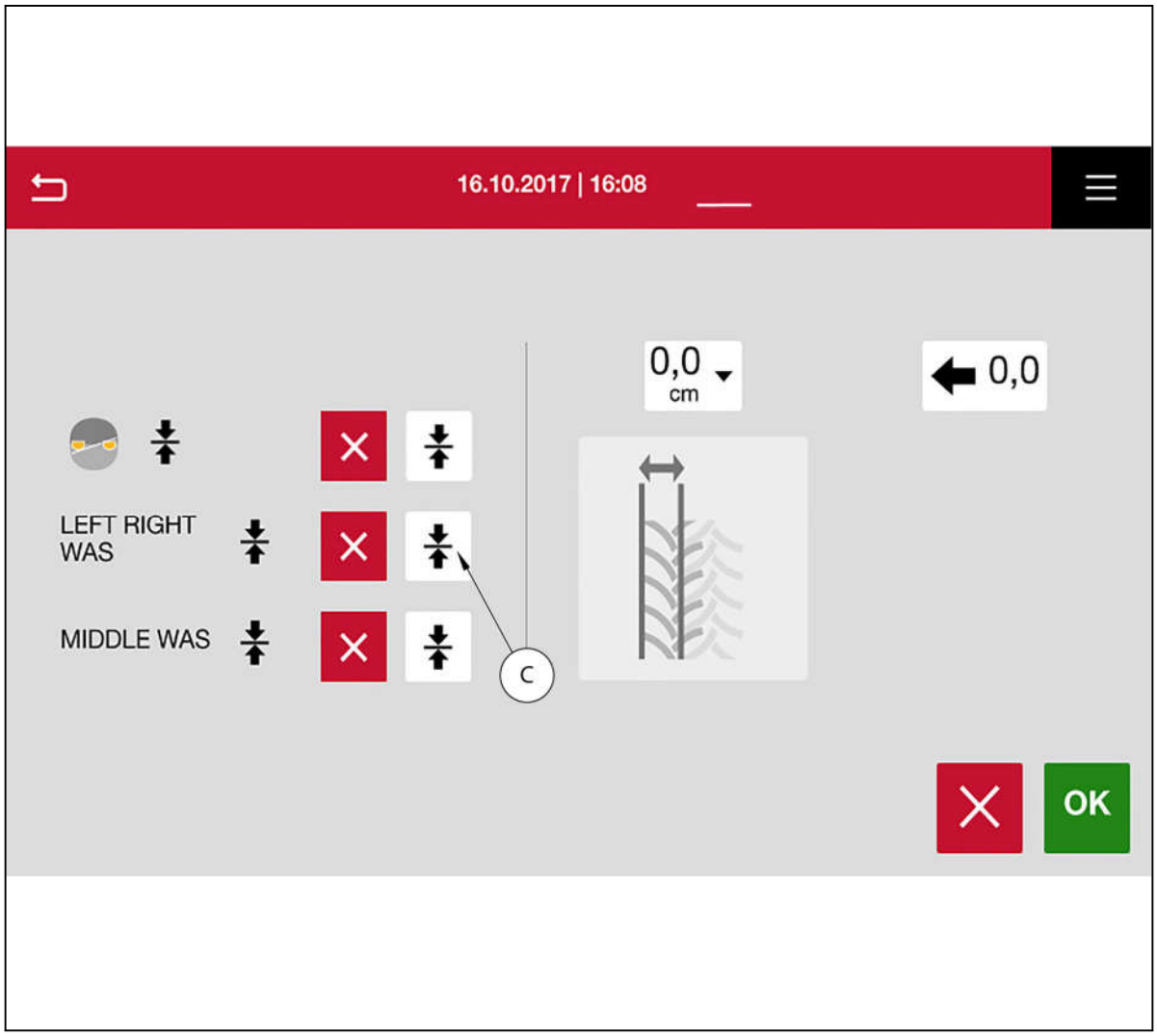


Fig. 26

6. Press "LEFT RIGHT WAS" (C) to access the calibration of the steering angle sensor.

Calibration

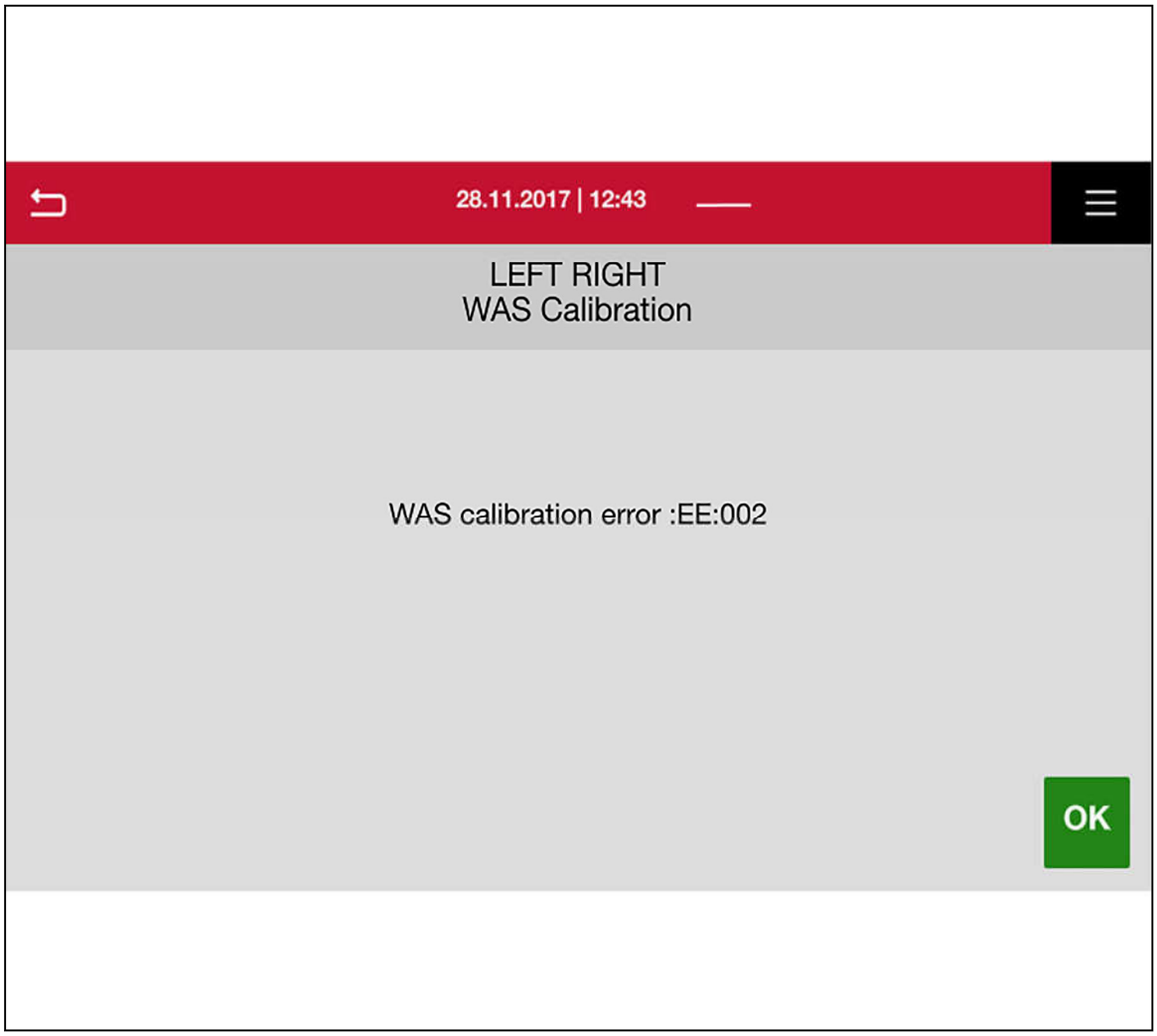
- 

Fig. 36

Calibration has failed.

8.2.13 Left/right steering angle sensor (WAS) calibration error code

Left/right steering angle sensor (WAS) calibration error code

Error code:	Description
Err 0001	Calibration is interrupted by the user.
Err 0002	Calibration is not authorized.
Err 0003	The calibration values have been rejected by the **X236** - Electrohydraulic Orbitrol (gray connector)/**X237** - Electrohydraulic Orbitrol (black connector) check
Err 0004	Failure of the calibration data transmission.
Err 0006	Time elapsed (2 minutes without any feedback on the status of one of the calibration steps).
Err 0008	Measured value incorrect after calibration of the right steering angle.
Err 0009	Measured value incorrect after calibration of the left steering angle.