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CCN (CLAAS Component Number)

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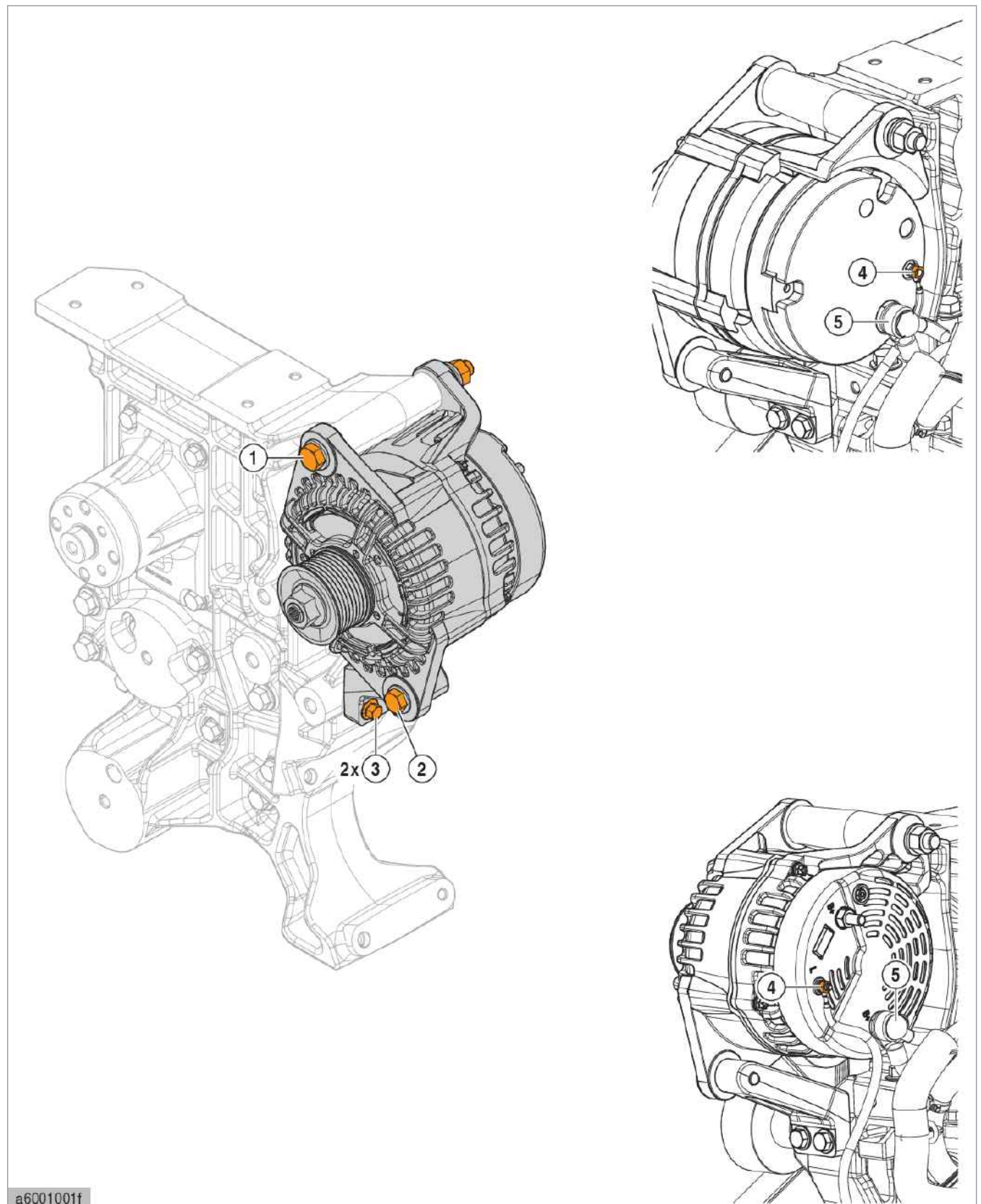
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Alternator

Technical specifications



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No.	Description/Note	Value
1	Retaining ring	
2	Retaining plate	
3	Retaining ring <i>Several retaining ring thicknesses are available in the spare parts catalogue.</i>	
4	Locating pin	
5	O-ring	
6	M16 bolt	280 N.m
J1	Adjusting the de-clutching play  Page 442	3.00 ↔ 3.30 mm
If no tightening torque is indicated, see the "Introduction/Tightening torques" section.		

144521-003

WARNING

Lifting heavy components.

Risk of death or serious injury.

- Use certified slings or chains in perfect working order.
- Use a certified hoist in perfect working order.
- Use a certified jack or stand which can support the load.
- Use the jack or stand on a flat, horizontal, sufficiently firm surface.
- Place the jack or stand in a suitable location.

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Environment

Lubricants and fuel are harmful to the environment.

Pollution

- Collect lubricants and fuel in appropriate containers; store and dispose of them in accordance with the regulations in force.



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- ▶ Slide the piston fully into position on the cylinder.



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- ▶ Apply oil to the O-ring.
- ▶ Fit the O-ring (1) into the annular groove in the cylinder.



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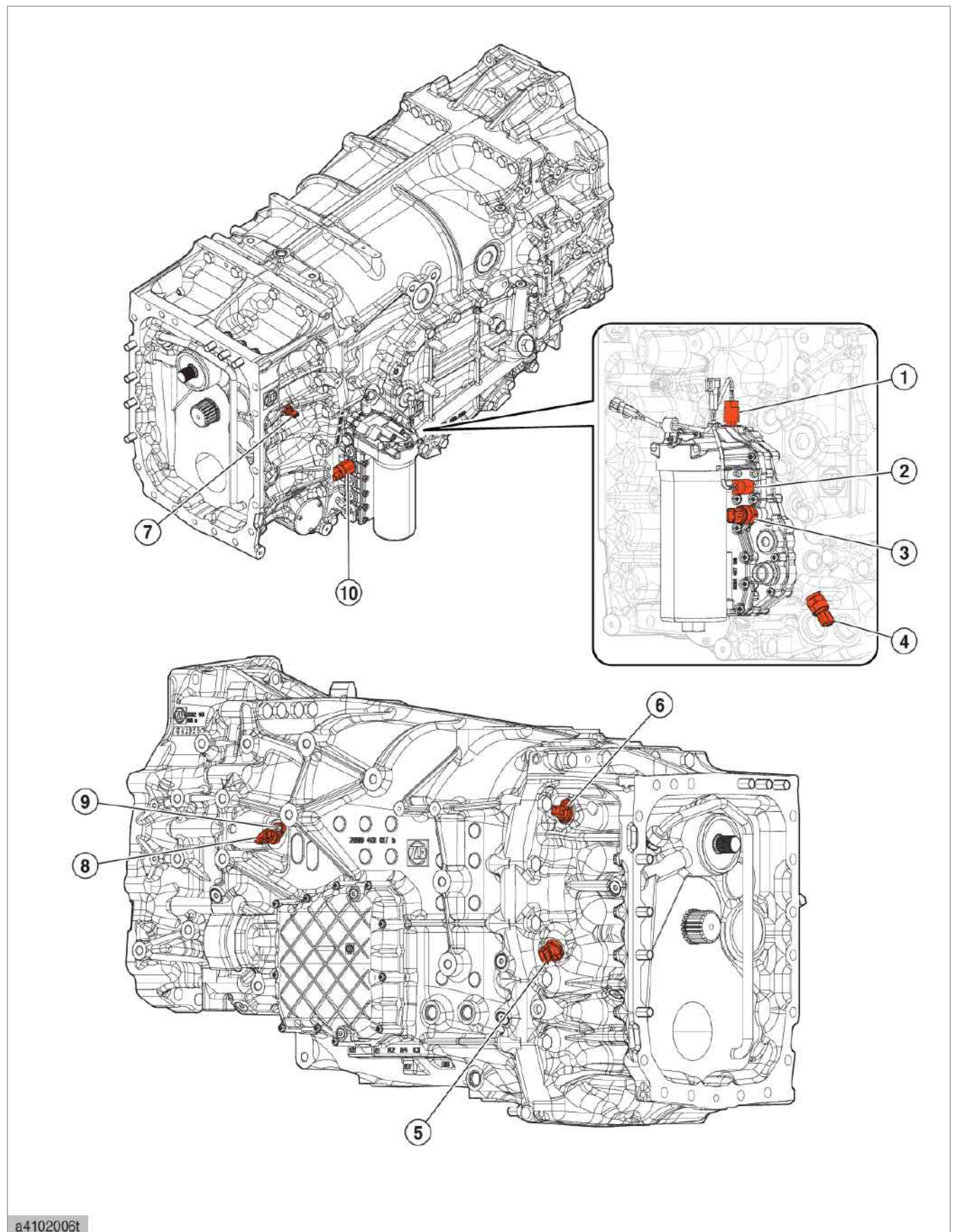
- ▶ Insert the cup springs (1) with the concave side facing downwards.



392304-001

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- ▶ Insert the piston into the cylinder.
- ▶ Preload the cup springs with the cylinder.
- ▶ Fit the retaining ring (1) into the groove in the cylinder.

Gearbox sensors (AXION 830-810)

a4102005t

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Preparation for work

Consumables to be used

- Sealing and glue product:
 Loctite (243) – 60 0571 153 1.
 Loctite (271) – 60 0571 153 2.
 Loctite (510) – 60 0500 935 5.
 Loctite (638) – 00 0136 585 0.

Special tool**Special tool – Reference no.**

Pressure reducer
 No. 60 0500 531 0



60 0500 531 0

174470-002

2778**Special tool – Reference no.**

Solenoid valve control tool
 No. 60 0500 615 5



60 0500 615 5

184724-001

2779**Auxiliary tool****Auxiliary tool****Quantity**

	Auxiliary tool	Quantity
1	Female quick connector	1
2	1/2 to 3/8 reduction socket	1
3	3/8 valve	1
4	DIN connector	1

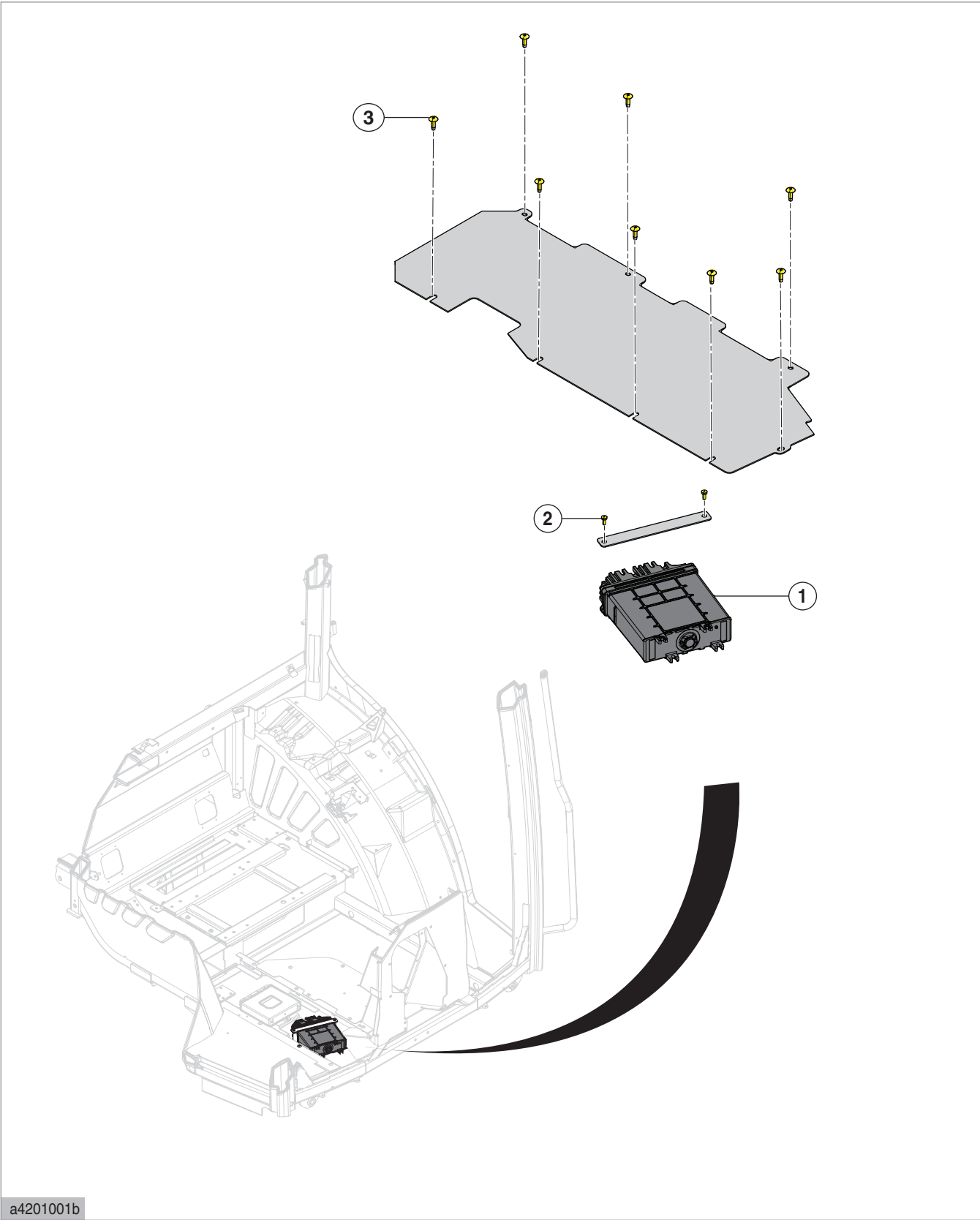


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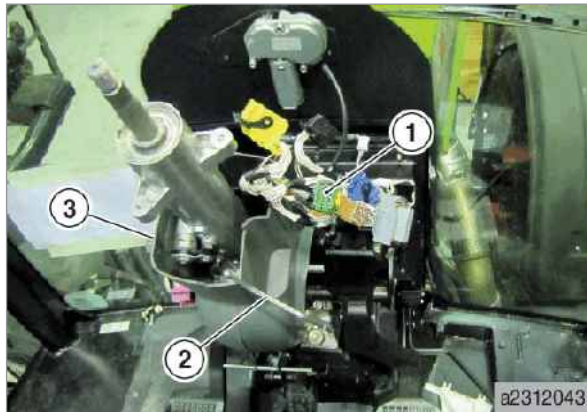
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Transmission control module
Technical specifications



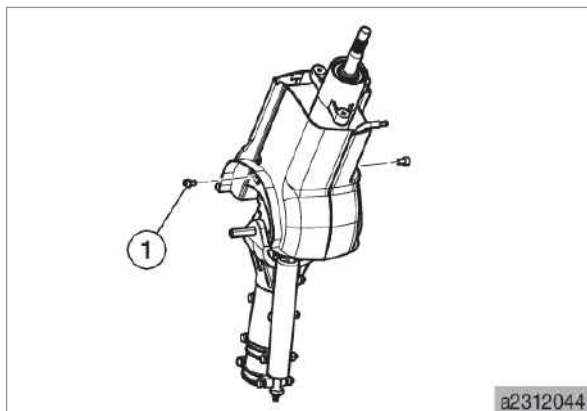
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Fitting

- Fit the trim (3), routing the cables (1) and the shaft (2).



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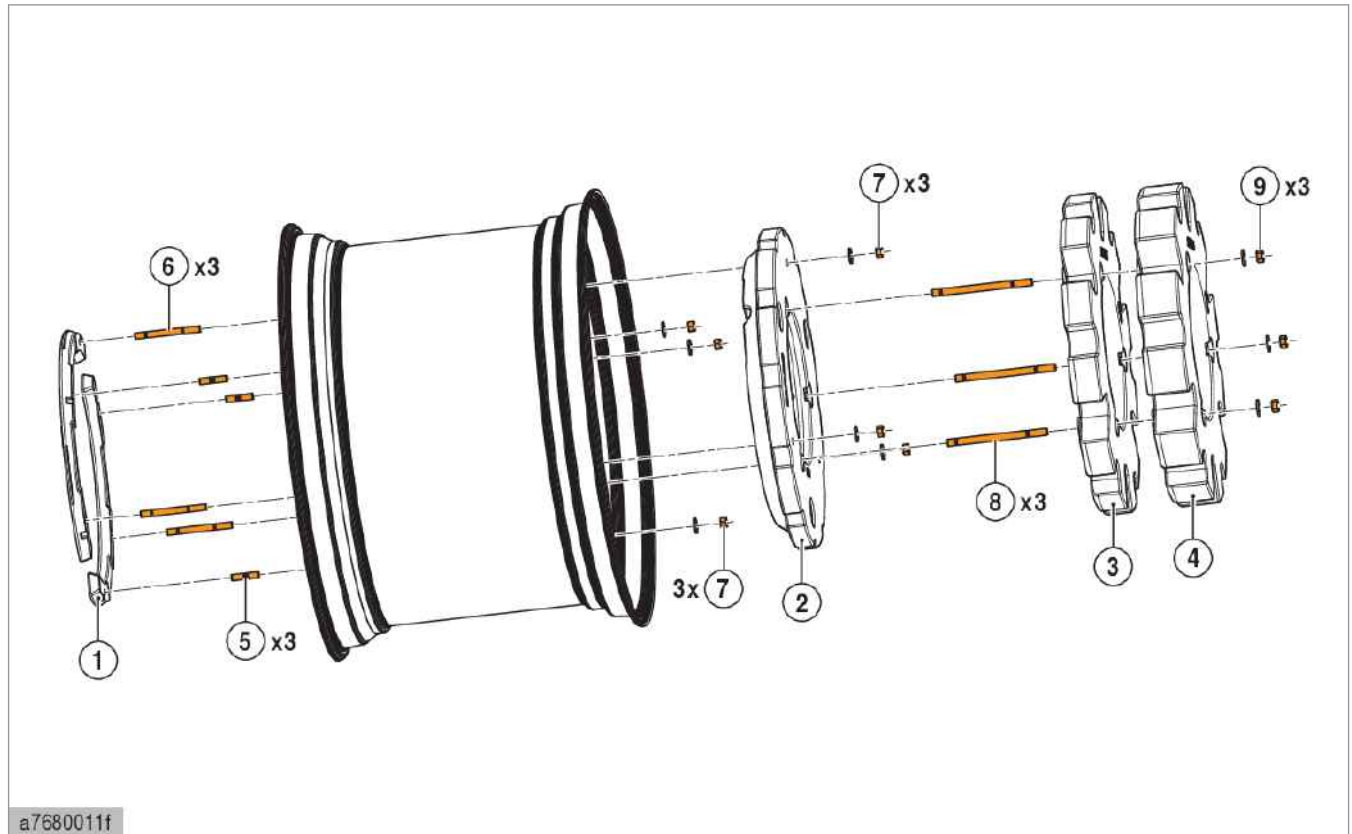
- Tighten the bolts (1).



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- Fit the trim (1).
- Affix the steering wheel adjustment control using the clip (2).

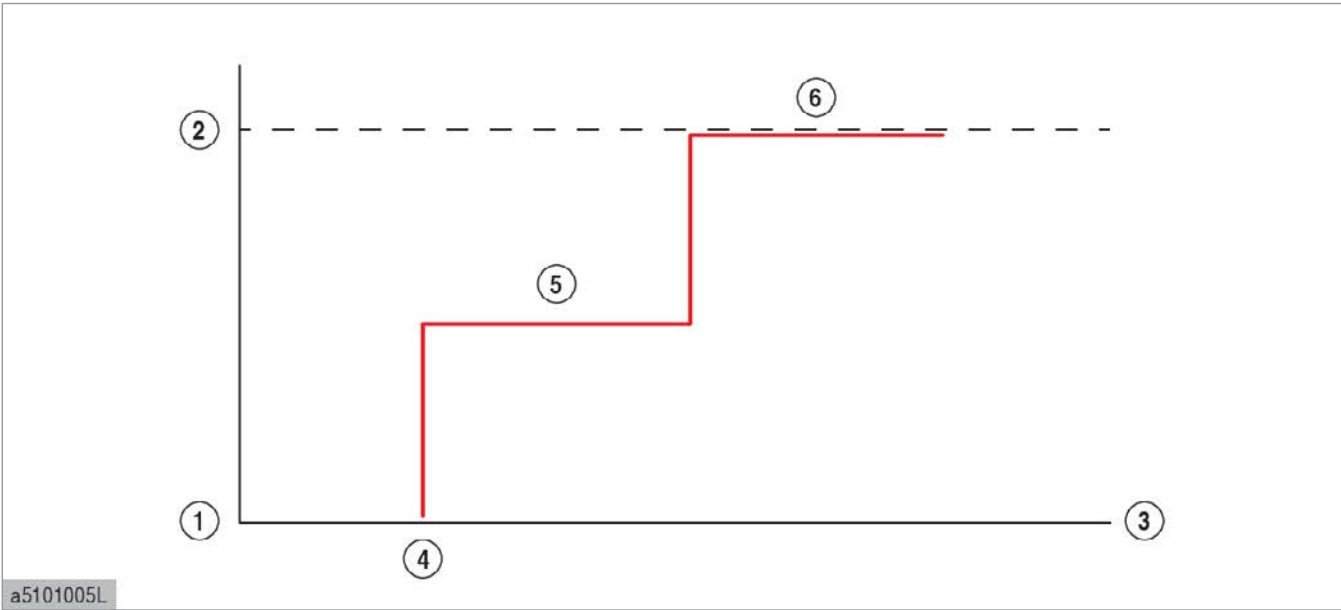
Rear wheel weights (42-inch)**Technical specifications**

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Number	Value	Note – Description
1	—	Weight mounting plate
2	200 kg	Earth
3	189 kg	Earth
4	267 kg	Earth
5	50 ± 10 N.m	M16 x 2.00 – 40 studs Coat the studs with Loctite (638) on the side of the thread nearest the weight mounting plate.
6		M16 x 2.00 – 140 studs Coat the studs with Loctite (638) on the side of the thread nearest the weight mounting plate.
7	232 ± 35 N.m	H M16 x 2.00 nuts
8	50 ± 10 N.m	M18 x 2.50 studs Coat the studs with Loctite (638) on the side of the thread nearest the weight.
9	321 ± 50 N.m	H M18 x 2.50 nuts
For unspecified tightening torques, refer to the section entitled: "Tightening torques".		

Functional logic for power restriction linked to the engine fan



418599-001

ID	Description
1	No power restriction
2	Full power restriction
3	Engine fan speed

Power restriction logic linked to the engine fan during acceleration:

	Engine fan speed		
	AXION 810	AXION 830	AXION 850
No power restriction (4)	< 1850 rpm	< 1910 rpm	< 1780 rpm
Partial power restriction (5)	> 1850 rpm	> 1910 rpm	> 1780 rpm
Full power restriction (6)	> 2320 rpm	> 2410 rpm	> 2230 rpm

The engine fan speed increases during acceleration. The more the fan speed increases, the greater the reduction in the engine power.

Example:

On the AXION 830, if the engine fan speed is less than 1910 rpm, there is no power restriction. When the engine fan speed exceeds 1910 rpm, the engine partially restricts the power. When the engine fan speed exceeds 2410 rpm, the power is fully restricted.

Power restriction logic linked to the engine fan during deceleration:

Step 28: Identifying the faulty injector

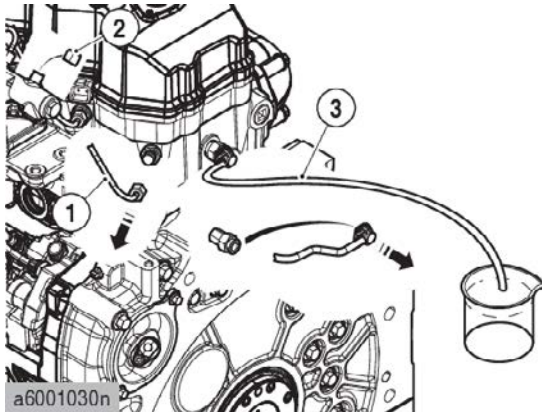
- 1 Leave the parts of tool 00 1166 739 0 used in the previous step mounted on the engine.
- 2 Remove the high-pressure pipe (1) from one of the injectors.
- 3 Fit the plug (2) of tool 00 1166 739 0 in place of the pipe (1) on the common rail.
- 4 Tighten the plug (2) to a torque of 24 ± 4 Nm.
- 5 Place the translucent pipe (3) in the 2 L container of tool 00 1166 739 0.
- 6 Start the engine.
- 7 Ensure a minimum coolant temperature of 50 °C.
- 8 Switch off the engine.
- 9 Place the translucent pipe (3) in the 100 ml container of tool 00 1166 739 0.
- 10 Ignition on, engine started.
- 11 Engine speed at 800 rpm at no load.
- 12 Collect the fuel for one minute.
- 13 Stop the engine for two minutes.

Caution: The fuel in the common rail is under extremely high pressure. Release the pressure before opening the rail. Using the CLAAS diagnostic system (CDS), make sure that the pressure in the common rail is zero.

Note: Replace the high-pressure pipes each time they are removed.

Repeat the above operations for each injector.

The fuel collected must not exceed 90 ml.



Example:

Injector removed	Result in ml
Cylinder 1 injector Y481	110 ml
Cylinder 2 injector Y482	25 ml
Cylinder 3 injector Y483	110 ml
Cylinder 4 injector Y484	110 ml
Cylinder 5 injector Y485	110 ml

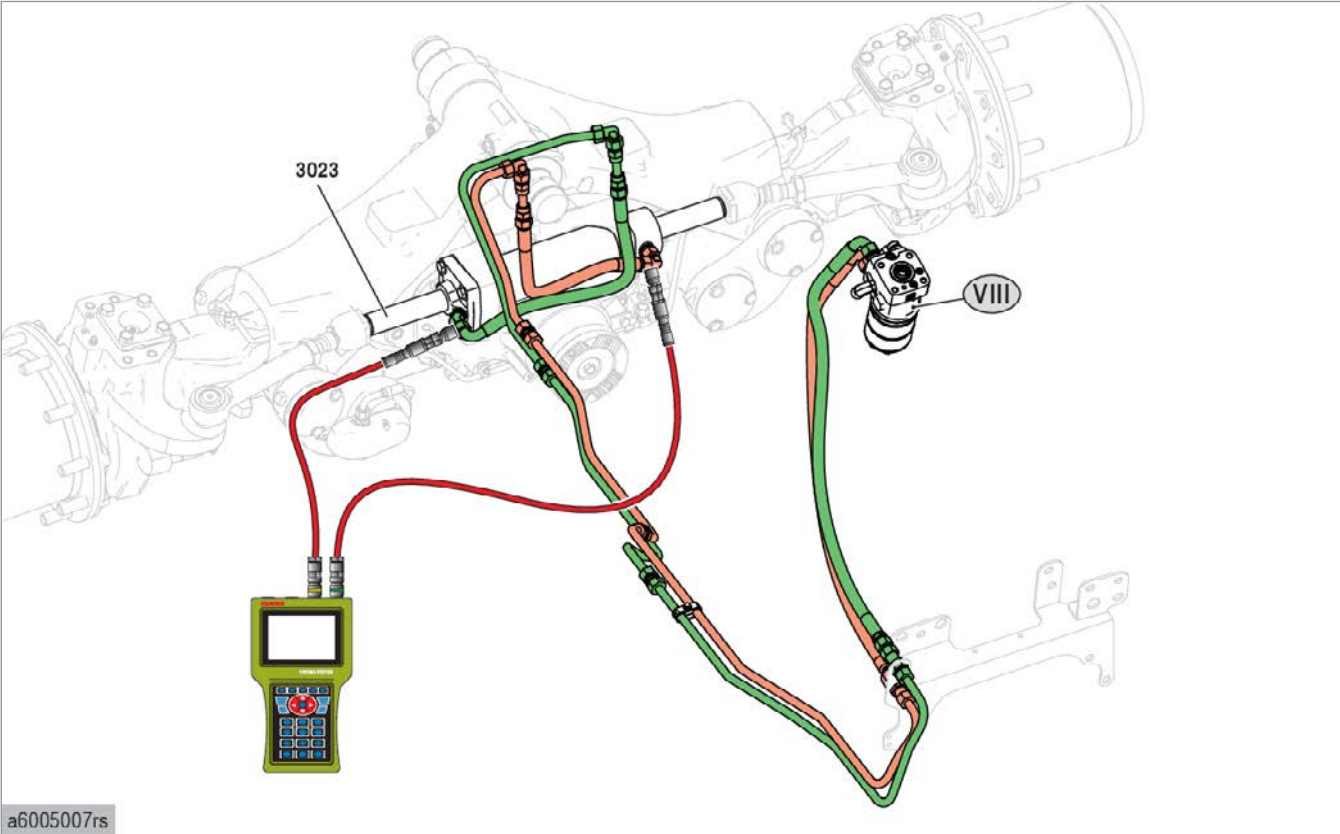
YES:

- Check and replace the faulty injector supply pipe(s).
- Replace the faulty injector(s).

Move on to step 37.

NO: Contact CLAAS product support for technical assistance.

Checking the pressure in the steering cylinder 3023



a6005007rs

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Prepare the tractor as follows:

- Check the high pressure at 9055 and the pressure of the LS signal at 9024. [Page 961](#)
- Connect tester no. 00 0178 310 1 to the two supply hoses located between the steering cylinder 3023 and the steering unit VIII.

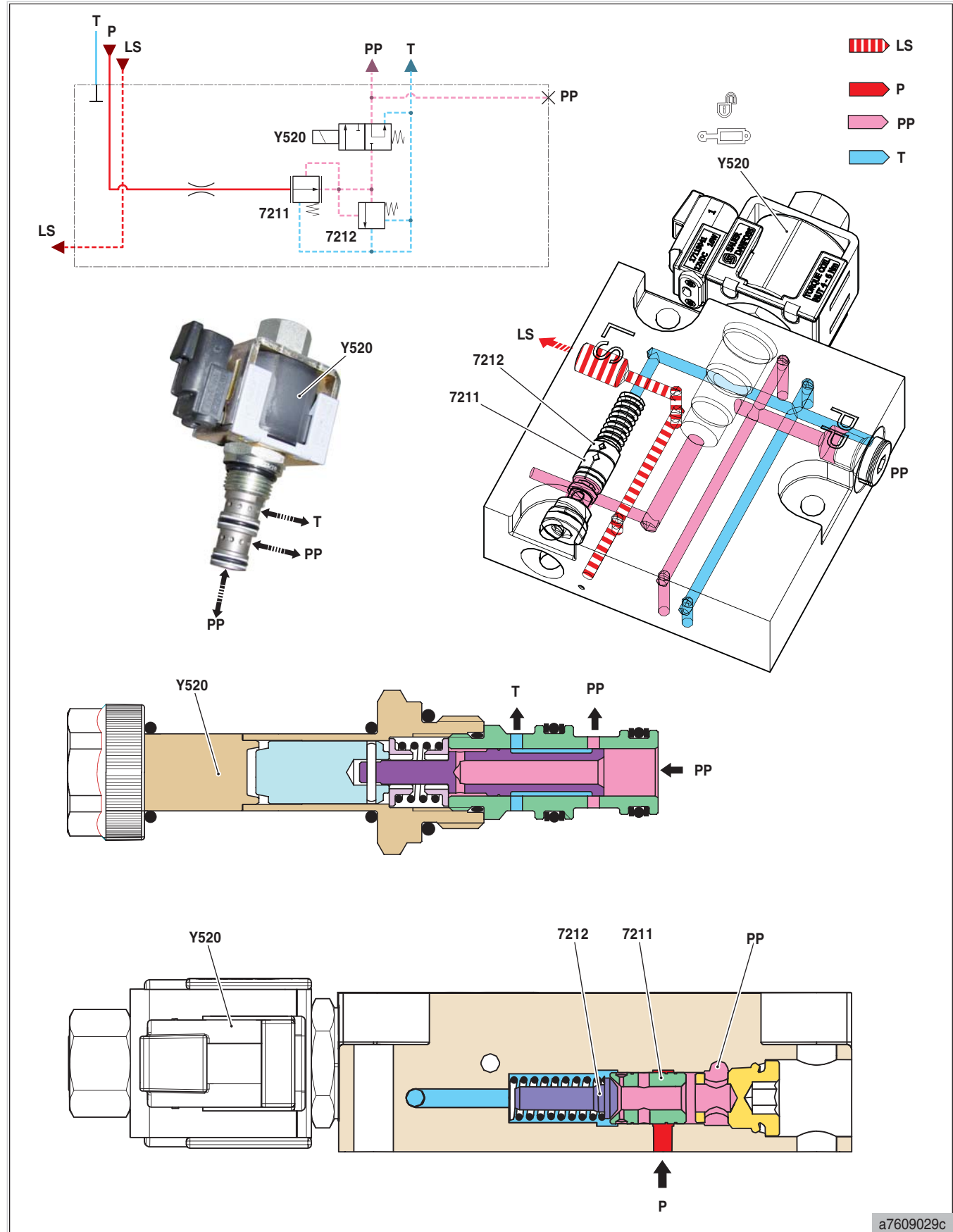
Test conditions:

- Oil temperature of 60°C.
- Do not actuate the rear linkage.
- Do not actuate the braking valve.
- Do not actuate the front axle suspension.
- Do not actuate the auxiliary control valve.
- Activate the steering in order to set the cylinder 3023 at full left or right lock.
- Measure the pressure in the two chambers.

Description	Hydraulic circuit (l/min)	Pressure (bar)
Tractor with standard Orbitrol "OSPD"	110, 150 and 205	182 ↔ 192 bar
Tractor with Orbitrol "OSPED**"	110 and 150	180 ↔ 190 bar
	205	170 ↔ 180 bar

* "OSPED": Orbitrol fitted on tractors equipped with the "GPS pilot" guidance system.

Supply plate for rear control valves



Description

Number	Description	Note
A058	Linkage module	REH
A147	Rear linkage control panel	RHP
B334	Rear linkage position sensor	—
B335	Rear linkage left-hand force sensor	—
B336	Rear linkage right-hand force sensor	—
C065	Rear linkage external switches	—
U071	Rear linkage raising rear left button	—
U072	Rear linkage raising rear right button	—
U073	Rear linkage lowering rear left button	—
U074	Rear linkage lowering rear right button	—
XEV	Event counter socket	—
Y345	Rear linkage raising solenoid valve	—
Y346	Rear linkage lowering solenoid valve	—

Module pin-outs

Module A058 <Linkage module (REH)>				
Module – Terminal	CCN	Function	Status – Measured value	Direction
1.01	F10	After ignition feed (+ 15)	12 V	Input
1.02	—	Reference voltage	10 V	Input
1.03	Y345	Rear linkage raising solenoid valve	1.2 A	Input
	Y346	Rear linkage lowering solenoid valve		
1.04	Y345	Rear linkage raising solenoid valve		
	Y346	Rear linkage lowering solenoid valve		
1.05	A147	Rear linkage control panel	Less than 6.5 V Less than 3.1 V	Output
	Y345	Rear linkage raising solenoid valve		
1.06	A147	Rear linkage control panel		
	Y345	Rear linkage raising solenoid valve		
1.07	RL-C2	UBM module supply relay	12 V	Output
1.08	A147	Rear linkage control panel (Slip management)	Active = 12 V Not active = 1.5 V	Output
1.09	F10	After ignition feed (+ 15)	12 V	Input
1.10	A147	Rear linkage control panel (Diagnostic warning light)	12 V	Output