

Technical Information

Stoll Frontlader

Grounding

Scope: Front loader with Base Control, Standard Hydraulics, Comfort Hydraulics and other variants with traction controls

Symptom: Misfiring of additional functions (e.g. 3rd control circuit, RTL etc.)

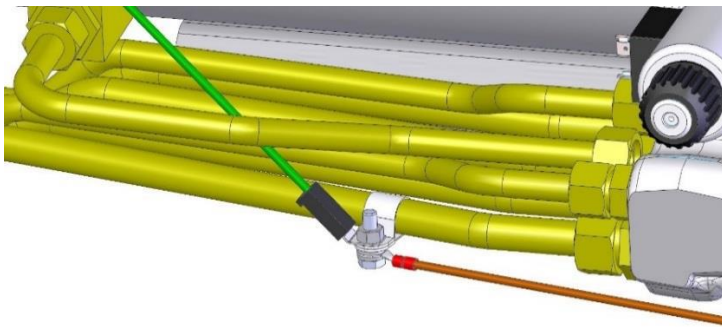
Possible cause: Insufficient grounding

To date, Stoll front loaders have been grounded through the frame.

Since the beginning of 2017, they have also been grounded through PIN 7 of the connector or Pin 7 of the DEUTSCH connector.

On the loader side, the green cable is installed on the ground point of the lifting arm at the front under the cover plate. If it is not, then connect it with the grounding strap (Part No. 1439670).

Ensure the cross section of the ground line is big enough (2.5 mm²). The order number for the corresponding cable of the lifting arm is 3654980.



With the Pro Control controls, the grounding connection is integrated in the wiring harness and is an important component of the system's automatic supervision. This line is needed, for example, to identify short circuits or cable breaks in the system and to deactivate specific functions in the case of any faults.

The versions with Base Control, Standard Hydraulics, Comfort Hydraulics and other variants with traction control units are not fitted with a grounding connection on the tractor side.

To establish the best possible grounding connection, it is advised that you create an additional connection with workshop tools.

There are 2 variants:

1. with a 7-pole standard connector
2. 8-pole DEUTSCH connector (Hydro-Fix with integrated electrical connection)

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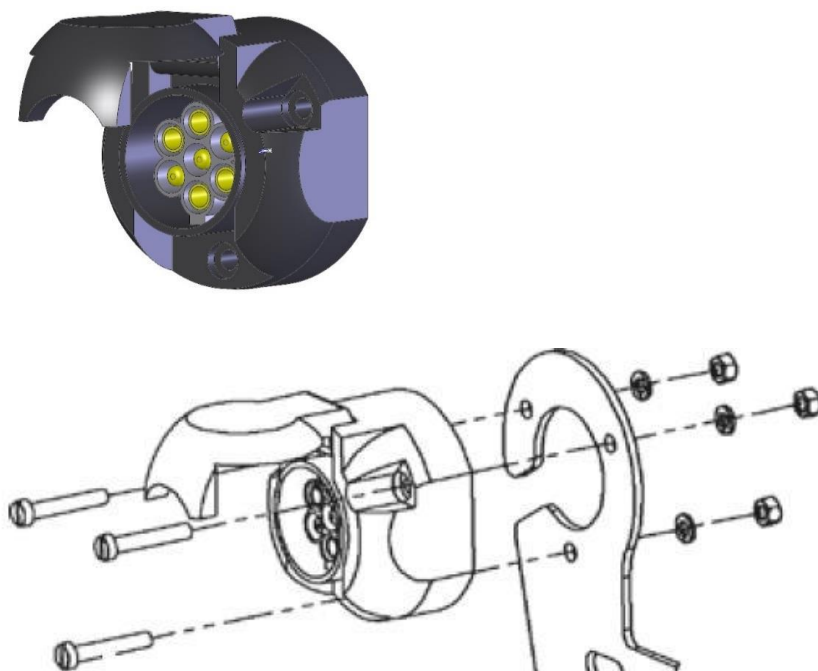
Version with a 7-pole connector

This option offers two ways to establish the grounding.

On the one hand, a cable with a sufficient number of cores (optimum 7-pole) can be selected for the installation. The recommended cross-section for the 2.5 mm² grounding cable must be observed.

In this case, the cable is routed from the socket to the area of the right ascent/battery, where the other connections for the grounding are attached to the **negative** battery terminal and to the buttons of the operating lever and/or the relay outputs.

The other variant for setting up the grounding is set up by routing an approximately 8 cm long grounding line (2.5 mm²) from the socket. The socket is connected in PIN 7. It is connected to the grounding point with a ring cable lug (M5) via one of the fixing screws of the socket. You must make sure that the paint has been fully removed in this area and also around the retaining plate to the attachment component so that the line and the socket come into sufficient contact to connect properly.



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Version with an 8-pole DEUTSCH connection

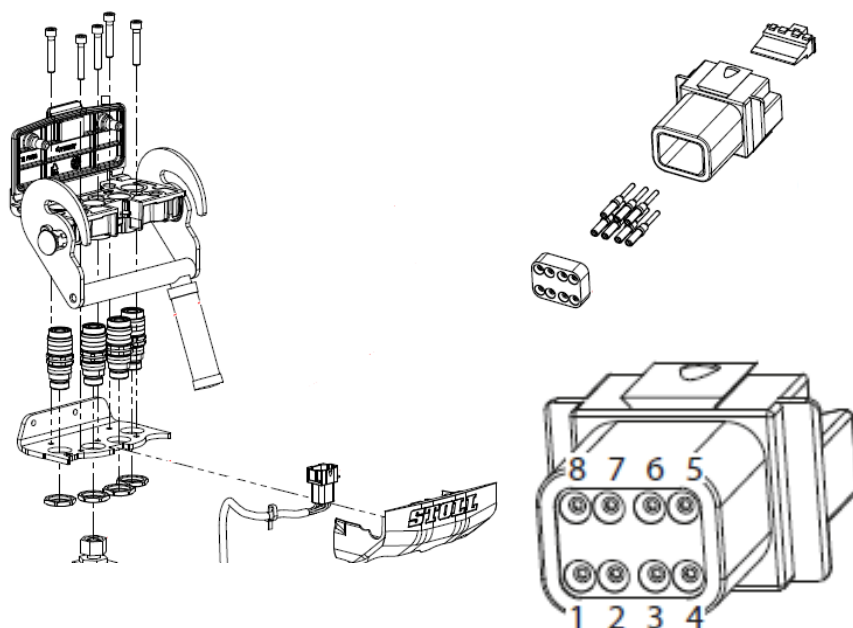
This option offers two ways to establish the grounding.

On the one hand, a cable with a sufficient number of cores (optimum 7-pole) can be selected for the installation. The recommended cross-section for the (2.5 mm²) grounding cable must be observed. The female connector Part no. 1435940 (7x) is required to make the connection.

In this case, the cable is routed from the DEUTSCH socket to the area of the right ascent/battery box, where the other connections for the grounding are attached to the **negative** battery terminal and to the buttons of the operating lever and/or the relay outputs.

The other variant for setting up the grounding is set up by routing an approximately 30 cm long grounding line (2.5 mm²) from the DEUTSCH socket. It is attached to the socket with a female connector (Part No. 1435940) on PIN 7. It is connected to the grounding point with a ring cable lug (M8) using a screw on the retaining plate of the Hydro-Fix. You must make sure that the paint has been fully removed in this area and also around the retaining plate to the attachment component so that the line and the socket come into sufficient contact to connect properly.

The green securing wedge in the middle of the socket must be pulled out with suitable pliers in order to insert the plug contacts. After the contact are plugged in, the securing wedge is inserted again.










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Pin assignment of the connector

Front loader function	Core colour (Stoll wiring)	DEUTSCH connector (8- pole) contact no.	7-pole connector Contact no.
4th control circuit	Brown (BR) 	1	1
3rd control circuit	Black (BK) 	2	2
Rapid traverse / Rapid emptying	Blue (BU) 	3	3
Rescooping / RTL	White (WH) 	4	4
Comfort Drive	Yellow (YE) 	5	5
Hydro-Lock	Red (RD) 	6	6
Earth	Green (GN) 	7	7

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