

MOUNTING INSTRUCTIONS

CARGO FLOOR OIL TEMPERATURE SAFETY SWITCH

This instruction will tell you the right way to mount the Cargo Floor oil temperature safety switch; article number 6104024.01.

To ensure the proper functioning of the Cargo Floor safety switch you need to follow the instructions mentioned in this manual carefully

The oil temperature safety switch offers your system protection against possible overheating of the hydraulic oil that could damage your system. This safety switch can be used with systems that have a control valve type E or B. A control valve with A control has no electrical switching and therefore no possibility to switch off.

The safety switch is screwed into opening T3A of the control valve. If the switch starts operating because the temperature is too high the connection between the power supply and the On/Off (GS02) coil will be cut. The system then will stop. In the DIN plug of the safety switch a red LED will light up that points out to the user that the temperature is too high.

If such a situation occurs, it is important to switch off the pump/PTO, find the malfunction and let the oil cool off.

The Cargo Floor temperature safety switch does not function in following cases:

1. If the temperature safety switch has been installed incorrectly
2. If the On/Off emergency control is operated (yellow clip has been removed and the red cap is screwed in).
3. If the pressure and return piping have been mounted/connected incorrectly
4. In case of an electrical malfunction

If the Cargo Floor oil temperature safety switch (after following this mounting instruction closely) does not – or not correctly – function, please contact your trailer builder, he will undoubtedly help you to fix the malfunction.

Further, we would like to point out the important recommendations and guidelines for the commissioning of the Cargo Floor loading and unloading system.

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IMPORTANT RECOMMENDATIONS AND GUIDELINES FOR THE COMMISSIONING

Before putting the Cargo Floor loading and unloading system into operation, follow the recommendations provided below and check the specified checkpoints to avoid damage to the Cargo Floor system and the vehicle.

Please review the important instructions before operating the Cargo Floor system and loading cargo into the vehicle. Likewise, before loading cargo, check the operation of the various control switches/valves to familiarise yourself with how the system works. We strongly recommend that you perform these checks when picking up the vehicle from the dealer so that your skilled supplier can answer your questions and provide you with any necessary advice or guidance you may require.

Important:

- Always check that the selected loading or unloading direction is actually activated and occurring!!
- If the system fails to start, turn off the Cargo Floor system and the hydraulic pump and follow the recommendations and guidelines provided below. Do not repeatedly try to start the system as this may result in damage to your Cargo Floor system and/or vehicle.
- After use, turn off the Cargo Floor system and hydraulic pump. Set switches to the "0" position and the lever in neutral.

In case of doubt or uncertainty about these recommendations and guidelines, always contact your dealer or an official workshop.

The Cargo Floor system comes standard with an operating manual, but if this has not been supplied, please contact your dealer or download it from the official Cargo Floor website: www.cargofloor.com

- A) Always open the vehicle's doors before turning on the hydraulic pump. Note! Build-up of pressure against the doors can open them with force. Also some of the cargo can fall out of the vehicle by itself after opening the doors, therefore KEEP CLEAR AT ALL TIMES, product could fall on top of you! Both could result in damages and/or injuries! It is always advisable to use the pneumatic door lock, if provided.
- B) 1. Check that the vehicle's (quick-detachable) couplings are properly connected to the P (Pressure line) and the T (tank/return line). Also check that the couplings are fully tightened or slid completely into each other.
IMPORTANT: the pressure and return line connectors may not be reversed or exchanged to prevent dirt or water from entering the lines when connecting them!
2. Before connecting, check that the non-return valves can open easily (check: the non-return valves should open easily when pressed with the finger, if not, potential pressure build-up in the hydraulic lines may be preventing the system from starting).
NOTE: Incorrectly connected or unopened hydraulic couplings will cause serious damage to the Cargo Floor system and the vehicle.
- C) The vehicle (pump) must be fitted with a pressure relief valve that is set at the maximum pressure according to the system, see the technical specs. If fitted, check that the dual-function lever (function: tipper/Cargo Floor) is in the Cargo Floor position. Pressure may not exceed the maximum adjusted and allowable operating pressure of the Cargo Floor system. An incorrectly adjusted pressure relief valve can cause damage to the Cargo Floor system and the vehicle.
- D) During operation, the (hand)brake of the vehicle must always be applied. You must, however, move the vehicle forward on time to unload it quickly in order to prevent unnecessary strain and wear to the floor and the vehicle.
- E) Use of a wireless remote control is permitted only if it is fully tested before the start of each loading or unloading operation. Always check if the function you have selected is actually activated and taking place. If, for example, you have accidentally pressed the load function when you actually meant to press the unload function, irreversible damage may occur to the Cargo Floor system and the vehicle.
- F) During operation of the Cargo Floor system, all existing STOP and control knobs/levers must be freely accessible.

- G) The pressure filter element needs to be replaced at least once a year. If the couplings between the vehicle and the Cargo Floor system are regularly removed, it is advisable to check the pressure filter for dirt build-up and replace the pressure filter element more often, if necessary. If provided, also check the return filter (not supplied with the Cargo Floor). Failure to replace a filter element on time may cause damage to or malfunctions in the Cargo Floor system and the vehicle.
- H) Moving parts must be shielded. Always maintain at least 10 meter [30'] distance from the Cargo Floor system when it is in operation.
- I) In the event of malfunctions/maintenance work, you may approach the Cargo Floor system only if all equipment, including the hydraulic pump, have been shut off, and the Cargo Floor system and the electro-hydraulic aggregate have been disconnected from the power supply and pump.
- J) Regularly check and, if necessary, tighten any loose bolts that secure the aluminium floor profiles to the Cargo Floor system. All such checks can simply be performed inside the vehicle itself by qualified personnel. The Cargo Floor system must, however, be turned on in unloaded condition and the person performing the check must place his finger half on the floor profile and half on the bolt. There should be no appreciable movement/space between the floor profile and bolt. Failure to check these bolts may lead to damage to the Cargo Floor system. During this check, a second person must also be present to switch off the Cargo Floor system.
- K) Check that the minimum required amount of oil is present 150 liter [40 US gallon]. Too little oil in the hydraulic tank will cause damage to both the pump and the Cargo Floor system.
- L) Do not allow the number of strokes to exceed the maximum allowable 16 power strokes per minute. Only a CF500 SLC Power Speed Cargo Floor system may deliver up to 23 beats per minute. A higher number of power strokes can cause damage to the Cargo Floor system and the vehicle.
- M) Hydraulic lines, couplings and hoses with very small diameters will cause damage.
- N) If the Cargo Floor system fails to start or operates incorrectly, the Cargo Floor system and the hydraulic pump must be shut down immediately. Subsequently, check all the checkpoints before switching the pump and the Cargo Floor system back on. To prevent the oil from overheating, regularly check the oil temperature by CAREFULLY and CAUTIOUSLY touching the line and or oil tank. If either is too hot to the touch, stop touching them right away. **WARNING: TOUCHING OVERHEATED OIL AND COMPONENTS CAN CAUSE BURNS!**
- O) The cause of failure or malfunctioning of the Cargo Floor system may also be due to other hydraulic components that may or may not be connected to the same hydraulic circuit of the Cargo Floor system.
- P) Jamming of the floor profiles caused by the transport of abnormal loads and or the freezing of the floor or of the product to the floor may result in damage to the Cargo Floor system and the vehicle. Recommendation: in the event of freezing, stop the system and try to find a hall (heated area) to allow the product to thaw.
- Q) Because the electrical power supply of the Cargo Floor system is often connected to the lighting circuit of the vehicle, it is advisable to turn on the lighting throughout the operation of the system.
- R) Maintenance and repairs to the Cargo Floor system may be only performed by qualified personnel. Use only original Cargo Floor components to ensure maximum reliability and long service life.
- S) Maximum cargo weight is subject to the limits set by law and applicable regulations. Even if the system can transport heavier loads, the law determines the maximum limit. Excessively heavy cargo can cause damage to the Cargo Floor system and the vehicle.
- T) Check that the correct type and quality of hydraulic oil is used. The use of incorrect oil type may cause damage to the Cargo Floor system and the pump.
- U) Check the vehicle for correct voltage. Make sure there are no open electrical connections. A faulty electrical system can cause damage to the Cargo Floor system and the vehicle.
- V) Check that the bulkhead, if present, is functioning smoothly and properly. A properly functioning bulkhead ensures that the product is unloaded in a clean and quick fashion. A malfunctioning bulkhead may extend the unloading time and cause damage to the vehicle.
- W) Use of the Cargo Floor system by unqualified personnel can cause damage to the Cargo Floor system and the vehicle.
- X) Excessively high oil temperatures will cause damage to the Cargo Floor system and other hydraulic components, such as the pump.

- Y) It is at all times advisable to stop the Cargo Floor system when all the piston rods are retracted. This is usually the case when the floor profiles are positioned towards the unloading end (vehicle doors). Unretracted piston rods may cause damage to the Cargo Floor system.
- Z) To prevent damage to the floor profiles, exercise caution and limit the dump height as much as possible. The transport of unauthorised goods, such as aggressive, corrosive, hot, hard, sharp and viscous materials may cause damage to the Cargo Floor system and the vehicle. Avoid loading and unloading sharp objects. Loads that are softer than the hardness of the floor profiles will extend the service life of your system; if in doubt, use a protective cloth or consult your dealer.
- AA) Forklift trafficable. In principle, the floors are completely trafficable and can be driven over by forklifts, but always consult your dealer for advice on the maximum loads allowed on your vehicle. Overloading will cause damage to the Cargo Floor system and the vehicle.
- BB) Always return emergency control(s) to their original non-activated position after use.
- CC) During the operation of the system, test the temperature of the oil by touching the side of the tank. If the oil is so hot that you cannot continue to touch the tank, switch off the pump to allow the oil to cool off and determine what is causing the overheating. Stop loading or unloading if the oil is too hot, as this will irreversibly cause damage to the Cargo Floor system and the other hydraulic components.
WARNING: TOUCHING OVERHEATED OIL AND COMPONENTS CAN CAUSE BURNS AND INJURIES!
- DD) During loading and unloading operations, the load should be spread to give an even weight distribution over the floor area, otherwise the load may stall. Tip: when transporting pallets, place softwood boards of 300 x 18 x 2350 mm. [12" x 0.75" x 92.5"] to distribute the pressure more evenly.
- EE) The constant pressing of the load against the head board or the doors can lead to extra wear of the complete system. Also the construction can be damaged. Please consult you supplier about the optimizing possibilities or in order to prevent problems occurring.
- FF) The user/operator/driver that is operating the Cargo Floor system is compelled to remain a safe distance from the Cargo Floor system at all times, from the time of switching on the hydraulic pump until turning it off. He should ensure that no dangerous situations can occur. When the process malfunctions or if other people are present he should shut down the Cargo Floor system, or hydraulic pump, immediately.
- GG) No unauthorized alterations/modifications/changes/adjustments may be made to any part of the Cargo Floor drive unit and system.

WARRANTY

Warranty is subject to prior approval by Cargo Floor B.V.! To request warranty coverage, visit www.cargofloor.com to fill out and submit the warranty application form provided there; do not forget to include your Cargo Floor system number on the form.

Warranty limitation (exclusion)

Although the temperature switch offers a large form of protection against the hydraulic oil overheating there is always a possibility that a situation occur in which this protection does not function and there could be damage to the Cargo Floor drive unit due to the overheating.

Possible resulting damages caused by the not – or not fully – functioning of the safety switch are not covered by any warranty whatsoever and no rights can be derived.

It is mandatory to always monitor an activated drive system if it operates correctly constantly and see to it that the oil temperature increase is not too great. It is also advisable to check the present LED indicator if it is lit (if it is it means that there is a malfunction).

EMERGENCY

In the event of an EMERGENCY, operation of the Cargo Floor system can be halted as follows:

- ◆ By pressing the red stop button on one of the control switches;
- ◆ By turning all switches to position “0”;
- ◆ By putting the handle of the control valve in the middle “0” position (only B and A control);
- ◆ Turning off the PTO pump/engine;
- ◆ Turning off the main switch of the power supply;
- ◆ Turning off the motor of the electro-hydraulic aggregate;

The WARNING STICKER/DECAL is attached near the control cabinet.

CAUTION

Eng

Important tips before the Cargo Floor system can be put into operation:

- Always consult the operation manual first.
- Always determine and check the direction of transport.
- People must always maintain a distance of at least 10 metres from a working Cargo Floor system.
- After use, always switch the Cargo Floor system back to the non-activated neutral (0) position.
- By **maintenance work**, switch off everything and disconnect the Hydraulics.

D

Wichtige Anweisung vor der Inbetriebnahme des Cargo Floor Systems:

- Immer erst die Bedienungsanleitung lesen.
- Zuerst immer die gewünschte Transportrichtung bestimmen und kontrollieren.
- Vom aktivierten Cargo Floor System müssen Personen mindestens 10 Meter Abstand halten.
- Nach dem Einsatz das Cargo Floor System in die nicht aktivierten, neutralen Null-Stellungen (0) zurücksetzen.
- Bei **Wartungsarbeiten**, alles ausschalten und die Hydraulik abkuppeln

NL

Belangrijke aanwijzing voordat het Cargo Floor-systeem in gebruik mag worden genomen:

- altijd eerst de bedieningshandleiding raadplegen.
- altijd eerst de gewenste transport richting bepalen en controleren.
- Personen moeten altijd tenminste 10 meter afstand houden van een werkend Cargo Floor systeem.
- Na gebruik altijd het Cargo Floor systeem in de niet geactiveerde neutrale (0) posities terugzetten
- Bij **onderhoudswerkzaamheden**; alles uitschakelen en de hydrauliek loskoppelen

CAUTION




KEEP CLEAR AT ALL TIMES !!






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CARGO FLOOR®

HORIZONTAL LOADING-/UNLOADING SYSTEM

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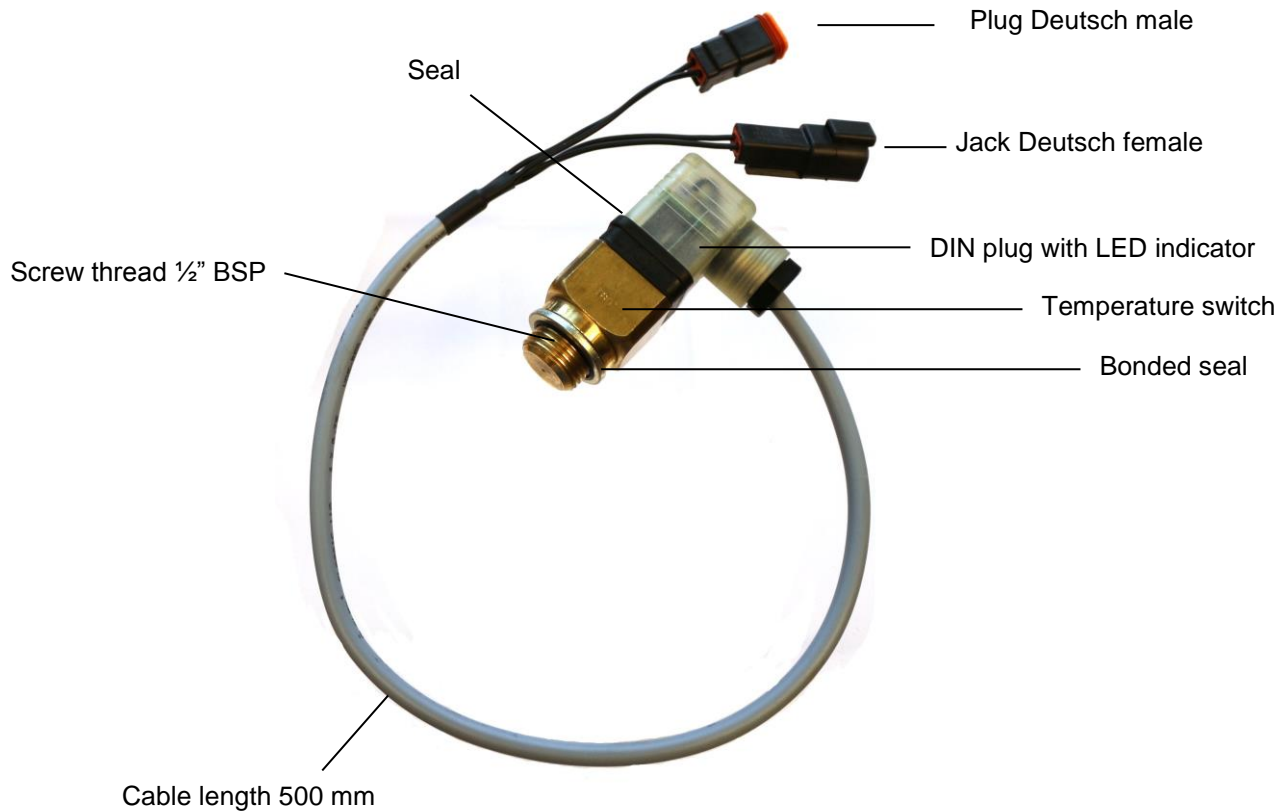
CAUTION

CAUTION

CONTENT STATEMENT OIL TEMPERATUR SAFETY SWITCH

The oil temperature safety switch is shipped fully assembled and needs to be installed in its whole as the part is put together.

Article number: 6104024.01



MOUNTING THE SAFETY SWITCH

Needed tools:

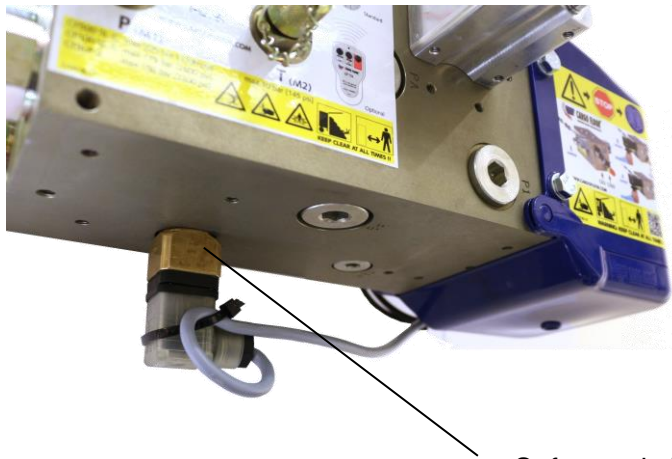
- Allen key 10 mm
- Fork spanner 30 mm
- Oil collection pan
- Cable binder
- Wire cutter

Before installing the Cargo Floor oil temperature safety switch, please check if the hydraulic and electric connections between the pulling vehicle and trailer are disconnected.
The switch will be installed in opening T3A on the bottom side of the control valve. The code mentioned will be engraved next to the opening.

Remove the plug out of opening T3A with allen key 10 mm.

ATTENTION: when removing this plug out of the control valve some oil will flow out of this opening. Catch this with the help of an oil collection pan.

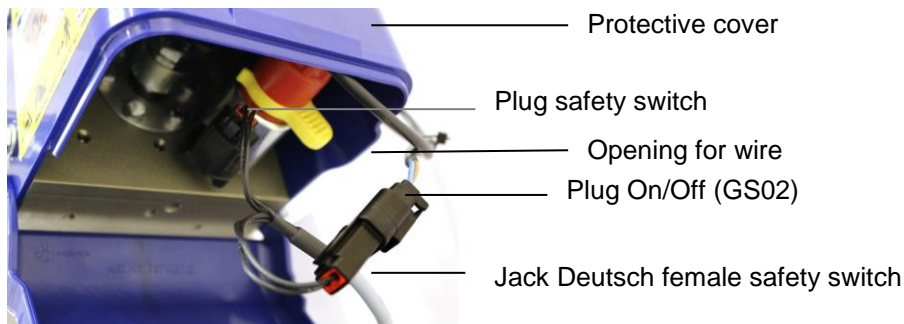
Screw the complete safety switch, by hand, as far as possible into opening T3A of the control valve. Then fasten it, max 22 Nm, with fork spanner 30 mm.



Safety switch in T3A

MOUNTING THE WIRING

A protective cover is mounted on the rear of the control valve; open the lid on the bottom side.



Pull the black plug out of the On/Off solenoid GS02 (the solenoid with the red emergency control). This can be done by pressing the locking clip of the plug and simultaneously pulling the plug.

This plug needs to be plugged into the black jack, female, of the safety switch cable until the locking clip has clicked into the locking. Now plug the remaining black safety switch plug in the jack of the On/Off solenoid GS02.

Place the wiring of the switch in such a way that it goes through the wire opening in the protective cover and close the cover.

Use a cable binder to fasten the wiring.



IMPORTANT!

If you have removed the sealant that was between the DIN plug and the cable you need to repair it. Use a waterproof sealant so moist does not get the chance to get into the DIN plug of the safety switch through the wiring.

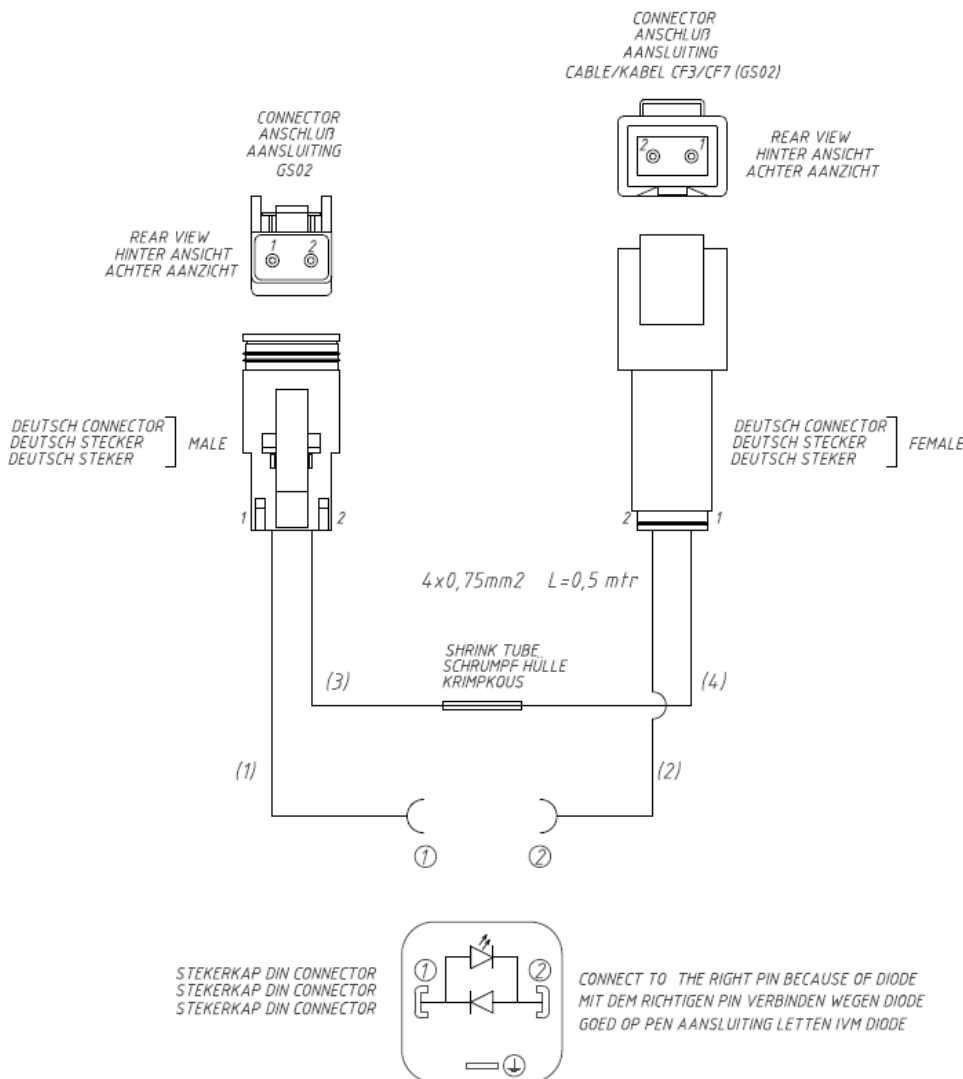
This concludes the installation of the Cargo Floor oil temperature safety switch.

Before the Cargo Floor system leaves the workshop check if it fully functions as it should.

MALFUNTION

If a situation does occur in which the Cargo Floor oil temperature safety switch is activated, it is very important that the pump/PTO is switched off directly and established why the oil has overheated. In addition, fitting measurements need to be taken to prevent overheating taking place again. Before putting the system into use again the oil needs to cool off.

ELECTRICAL PLAN



wire number
(4) = Kabelnummer
ader nummer

ATTENTION!
It's very important that the right wire is connected to the right pin. Otherwise mal function!

ACHTUNG!
Es ist sehr wichtig, daß das richtige Kabel auf dem richtigen Pin kommt. Sonst Störung!

LET OP!
Het is erg belangrijk dat de juiste kabel op de juiste pen komt. anders werkt de schakelaar niet.