

The exchange of a CF300 combination valve for a control valve 02, B control

This set contains a complete replacement set in order to exchange a CF300 combination valve with a control valve 02, B controlled.

Article number	Description	Number	Remark
8370046	Control valve 02, B-operation (complete)	1	
7371014	Cover for control valve 02	1	
	Wing nuts M8x12	3	
6401047	Wire Deutsch G(S)02 connector, 30 cm	1	
5348023	Mounting plate control valve 02	1	
	Nut M8x25	4	
	Spring washer M8	4	
5156002	Commandlip 40x20mm (l=200mm)	2	
5355003	Threaded rod complete (1000mm)	1	
70043/420	Straight screw-in coupling 3/4" x 20 mm	9	(5x Valve, 4x cylinder)
7004125	Straight screw-in coupling 1" x 25 mm	1	Connection T
	Hose 20-20 HH 180° L=1.000 mm	2	Valve – cylinder
	Hose 20-20 HH L=1.000 mm	1	Valve – cylinder
	Hose 20-20 HR L=1.000 mm	1	Valve – cylinder
	Hose 20-20 RR L=1.300 mm	1	Filter – connection P
	Hose 25-25 RR L=1.300 mm	1	Connection T - return

Important information:

- **The guarantee** is only valid if Cargo Floor B.V. has given permission in advance! When using the guarantee, the system number must be quoted on all correspondence;
- The pump and electrical installation must always be switched off, in addition the tubes and/or pipes between the pump and the Cargo Floor drive unit must be disconnected;
- After fitting, check the oil level;
- Check/replace the pressure filter element Cargo Floor;

Warning!!!

Before starting all the cylinders need to be pulled in completely, this in order to prevent damages of the piston rods in the stroke area of the piston rods. Such a damage will cause irreparable damages.

- Tools required
 - 2x Open-end spanners 10 (M6)
 - 1x Open-end spanner 13 (M8)
 - 2x Open-end spanners 17 (M10)
 - 1x Open-end spanner 32
 - 1x Open-end spanner 36
 - 1x Open-end spanner 41
 - 1x Open-end spanner 46
 - Hammer
 - Grinder
 - Welding machine
 - Measuring tape
 - Trough
 - Primer and paint.

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 a resident expert 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 force them open, which may cause some of the cargo to fall out of the vehicle. That is why it is always advisable to use the pneumatic lock, if provided.
- B) 1. Check that the vehicle's (quick-detachable) couplings are properly connected to the P (Pressure line, min. 20mm) and the T (tank/return line, min. 25mm). 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 to 250 bar. 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 10m 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 (150L). 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 Powerspeed 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 to distribute the pressure more evenly.

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.

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

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

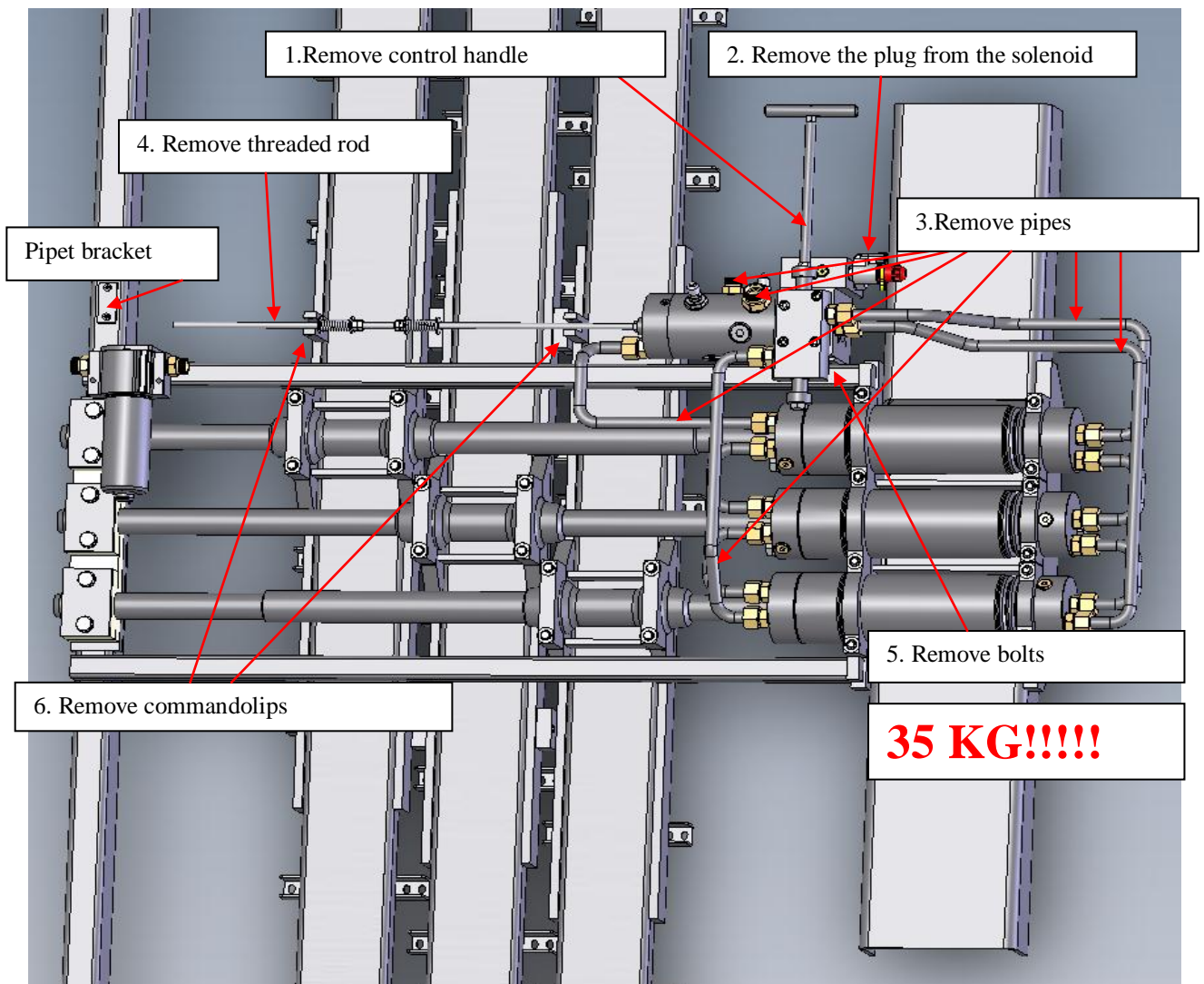
The WARNING STICKER is attached to the outside of the control cabinet.

<p>NL</p>  <p>D</p>  <p>GB</p> 	<p>Belangrijke aanwijzing voordat het Cargo Floor-systeem in gebruik mag worden genomen:</p> <ul style="list-style-type: none">- 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) positie terugzetten- Bij onderhoudswerkzaamheden; alles uitschakelen en de hydrauliek loskoppelen <p>Wichtige Anweisung vor der Inbetriebnahme des Cargo Floor Systems:</p> <ul style="list-style-type: none">- 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 <p>Important tips before the Cargo Floor system can be put into operation:</p> <ul style="list-style-type: none">- 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.	<p>F</p>  <p>I</p>  <p>E</p> 	<p>Indications importantes avant de pouvoir utiliser le système Cargo Floor:</p> <ul style="list-style-type: none">- Commencez toujours par consulter le manuel d'utilisation.- Commencez toujours par déterminer et contrôler la direction de transport souhaitée.- Tenez-vous toujours à au moins 10 mètres de distance d'un système Cargo Floor en fonctionnement.- Après utilisation, remettez toujours le système Cargo Floor en position neutre (0) non activée- Pour tous travaux de maintenance, tout déconnecter et débrancher l'hydraulique <p>Prima di mettere in funzione il sistema Cargo Floor, prendere nota delle seguenti indicazioni importanti:</p> <ul style="list-style-type: none">- Consultare sempre prima il manuale operativo.- Stabilire sempre prima la direzione di trasporto desiderata e controllare.- Quando il sistema Cargo Floor è in funzione, le persone devono sempre mantenere una distanza di almeno 10 metri- Dopo l'uso, riportare sempre il sistema Cargo Floor nella posizione neutra (0).- In caso di manutenzione, spegnere il sistema e scollegare l'impianto idraulico <p>Instrucciones importantes a seguir antes de poner en funcionamiento el sistema Cargo Floor:</p> <ul style="list-style-type: none">- Siempre consulte primero el manual de instrucciones.- Siempre determine y controle primero el sentido de transporte deseado.- Cuidado de que las personas siempre se mantengan a por lo menos 10 metros de distancia de un sistema Cargo Floor en movimiento.- Una vez concluida la operación, siempre retorne el sistema Cargo Floor a las posiciones neutras no activadas (0)- Por trabajos de mantenimiento, apagar todo y desconectar los hidráulicos.
 <p>CARGO FLOOR® HORIZONTAL LOADING / UNLOADING SYSTEM</p>		 <p>www.cargofloor.nl</p>	
<p>S.006</p>			

Demounting the CF300 combination valve, incl. the hydraulic hoses

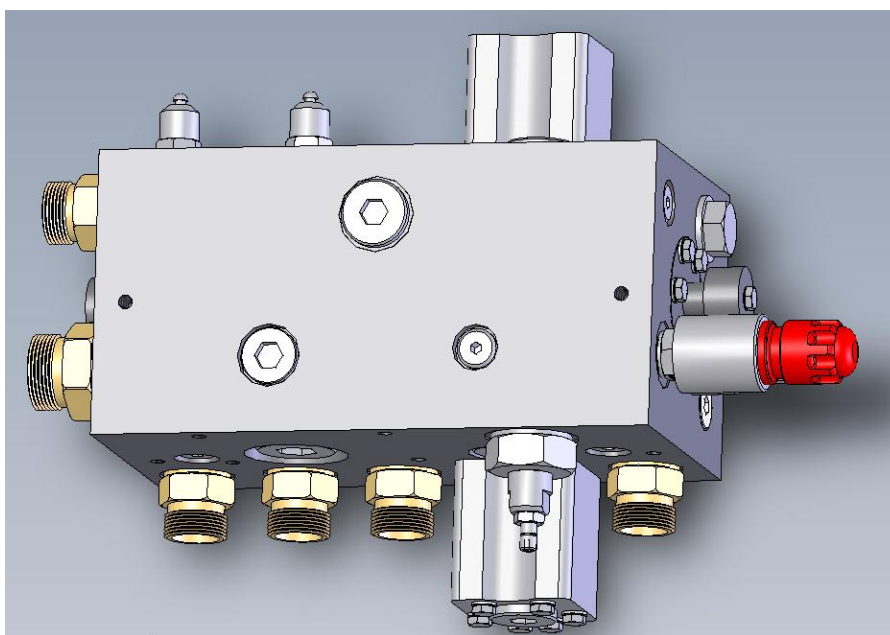
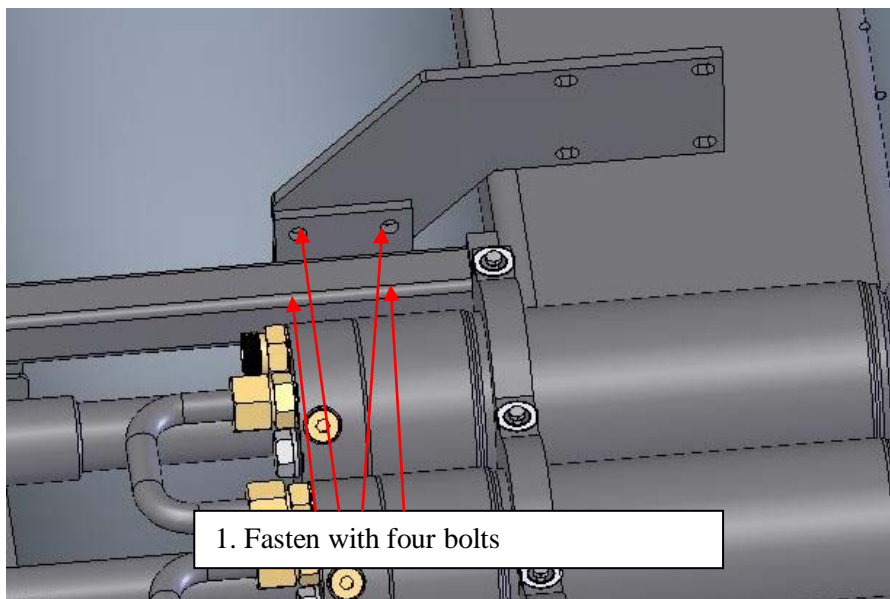
- Step 1. Remove the control handle out of the control valve by unscrewing it out of the plunger by putting a spanner 17 mm on the nut directly near the plunger. To prevent rotating of the plunger another bolt is on the other side on which a second spanner 17 mm can be placed.
- Step 2. Remove the plug from the solenoid
- Step 3. Remove all pipes that run to the valve. Collect the oil that comes out of the valve and the pipes. The 20 mm pipes and hose you can unfasten with spanner 32 mm and 36 mm. The hose 25 mm is unfastened with spanners 41 mm en 46 mm. This hose also has a pipe bracket, by removing the bolts of this with spanner 13 mm this will loosen and the hose can be removed.
- Step 4. Remove the threaded rod by unscrewing the M6 bolts of the command lips with two 10 mm spanners. Now the threaded rod can be screwed out of the control valve with 2 spanners 17 mm by unscrewing the nut on the front side and on the rear side of the plunger at the same time stop the bolt in order to prevent the turning from the plunger.
- Step 5. Remove the combination valve, support it with at least two people! **(The weight is about 35 kg).** Demount the four M10 bolts with which the combination valve is mounted.
- Step 6. Take angled grinder and grind the two command lips from the moving cross members.

The filter does not have to be demounted.

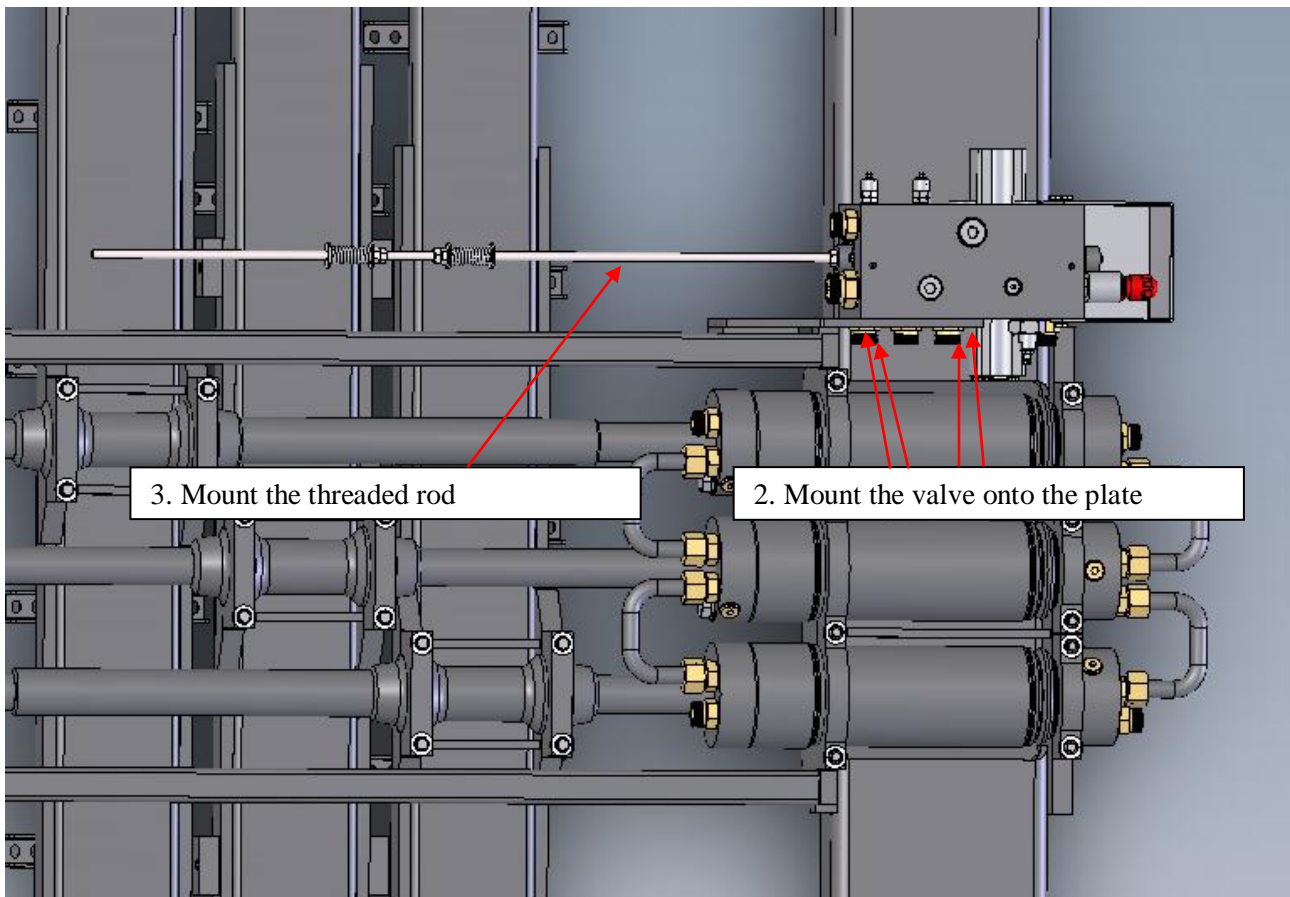


Mounting the control valve 02, B control

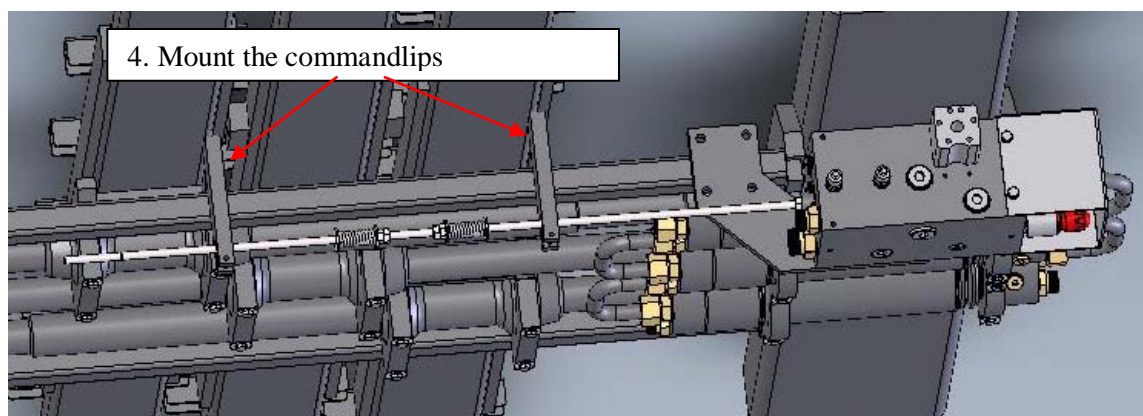
1. Mount the mounting plate control valve on the spot were the CF300 combination valve was. Use for this the four M10 bolts with rings. The M10x60 bolts are placed on the topside and the M10x40 will be placed at the bottom side.



2. Mount control valve with the 4 M8x25 bolts with the spring washers to the mounting plate.
3. Mount the threaded rod into the control valve.



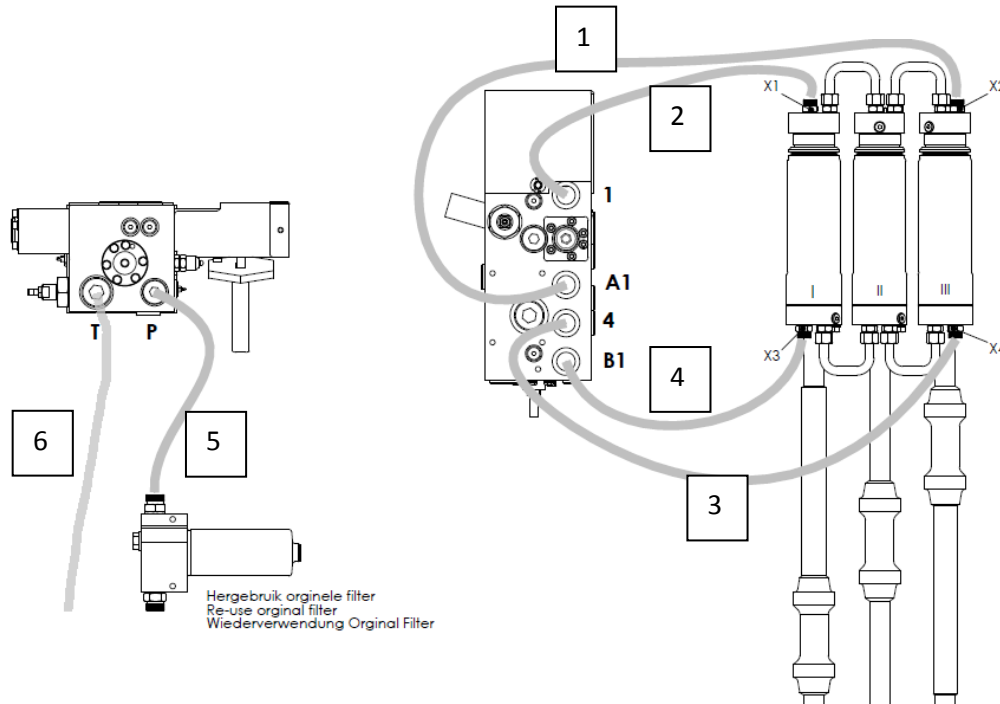
4. Determine by using the threaded rod the position and the length of the command lips and weld these. The command lips are being placed on the other side of the moving cross member compared to the old command lips.
Attention: remove the paint on the spot and make sure that the earth clamp of the welding machine is placed onto the moving cross member that is being welded on. Preserve the welded parts when finished welding.



5. Mount the hoses between the cylinder and the valve. Mount the hose between the valve and the return conduit and mount the hose between the valve and the pressure filter.

If possible mount the hoses so that they run over the chassis and do not touch any moving parts, also mount the hoses so that they are not bent. Fasten the hoses. Hoses that comes in contact with the chassis must be protected against wear. Because of the space needed for the tools we advise the following:

1. Mount hydraulic hose connection A1 – X2 Hose 20-20 1000mm HH 180°
2. Mount hydraulic hose connection 1 – X1 Hose 20-20 1000mm HH
3. Mount hydraulic hose connection 4 – X4 Hose 20-20 1000mm HH 180°
4. Mount hydraulic hose connection B1 – X3 Hose 20-20 1000mm HR
5. Connect hydraulic hose 20-20 RR 1.300mm from the pressure filter to P.
6. Connect hydraulic hose 25–25 RR 1.300mm from connection T to the return.

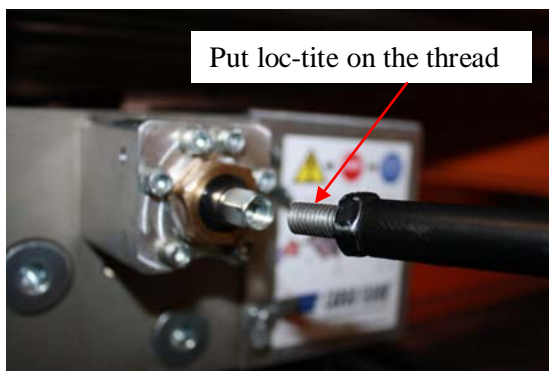


Finishing works

If no Deutsch plug is connected to the wiring for the new solenoid the old plug needs to be removed from the cable.

Connect the supplied Deutsch plug incl. cable in a reliable way with the cable with a watertight connection. Plug the Deutsch plug into the solenoid.

Drill a hole into the chassis on the spot where the operation handle needs to be placed. Screw the handle into the operation plunger as deep as possible with Loc-tite on the thread. Put a spanner 13 mm on the extender of the plunger to prevent rotating of the plunger during fastening the operation handle.

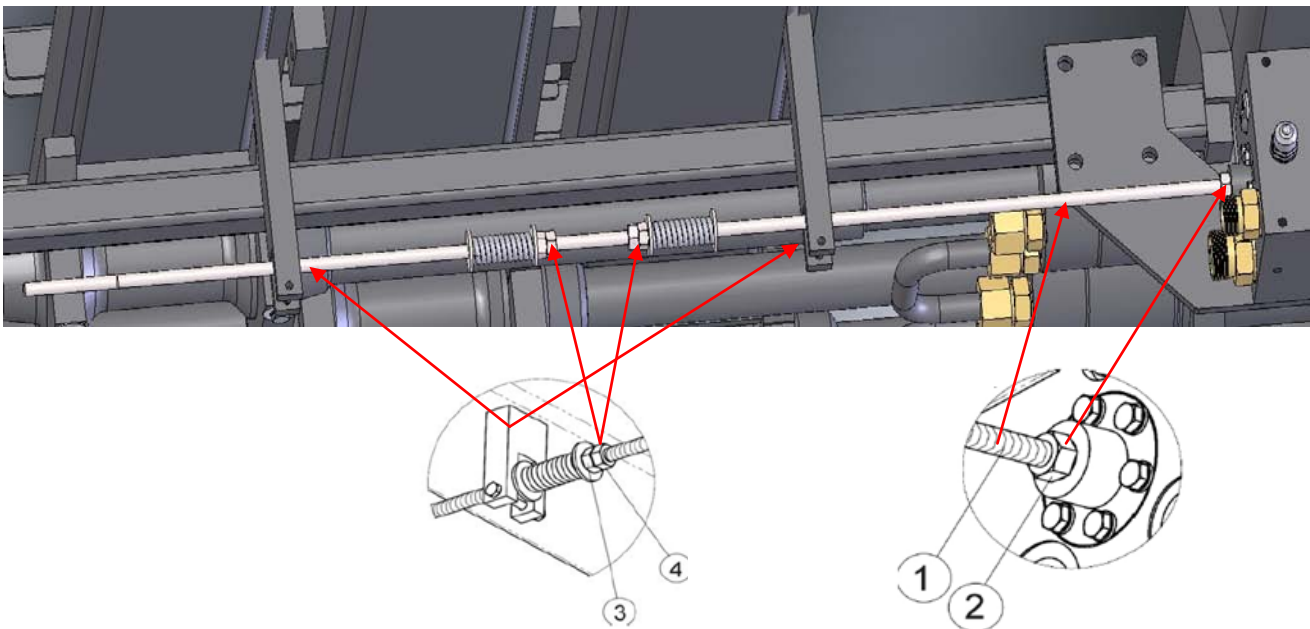


Check the pressure filter cartridge and replace it if it has any defects or is polluted.
Check the oil level of the tank and give it a refill if needed.
Next connect the pump and electrical installation.

Adjusting the threaded rod

Check again that the threaded rod is fastened securely to the steering valve, the stroke should be exactly 12 mm. If not, then screw the wire rod (1) as far as possible into the plunger and secure this with the contra nut (2) (spanner size 17). Loosen nuts (3 and 4, spanner size 17) and move these about 3 cm in the direction of the steering valve. Now switch the pump on. The system will stop now at the point where the command lip no longer operates the switching valve. Switch off the pump. Now push the threaded rod (1) in until the spacer ring touches the control valve. Tighten nuts (3 and 4) so that the spring is **fully** pushed in, and secure them by tightening them against one another. Repeat this procedure for the other side.

N.B. It is worthwhile spreading some copper grease on the wire rod (1) in order to protect it extra against corrosion.



If any questions remain after reading this instruction do not hesitate to contact us.