

# **CARGO FLOOR®**

INSTALLATION MANUAL
WIRELESS REMOTE CONTROL CARGO FLOOR CF RX TX 3-FUNCTIONS
PARTS NO. 6104006

Cargo Floor B.V.

World's leading manufacturer and supplier of horizontal loading- and unloading transport conveyor systems.



With the following instruction, we would like to point out the proper operation of the Cargo Floor remote control and the steps that can be taken to quickly solve any malfunctions.

Please follow the instructions given carefully and read the maintenance instructions carefully, so that the Cargo Floor remote control guarantees you 100% operational reliability as well as a long and trouble-free service life.

If the Cargo Floor remote control does not, or not correctly, function after following the operating instructions, please contact your supplier, who will undoubtedly assist you in eliminating the fault.

Also, read the chapters "IMPORTANT ADVICE AND DIRECTIONS" and "IMPORTANT NOTES".

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#### **IMPORTANT RECOMMENDATIONS AND GUIDELINES**

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 is this has not been supplied, please contact your dealer or download it from the official Cargo Floor website: Cargofloor.com, download.

- A) Always open the vehicle's doors <u>before</u> 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.

# Set wireless remote control (CF RX TX) 3 functions



- 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!
  - Option: your Cargo Floor system could be equipped with an oil temperature safety switch which will switch off the system automatically when it starts to overheat.
- 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 your 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 <u>prior</u> approval by Cargo Floor B.V.! To request warranty coverage, visit 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.

### **EMERGENCY STOP**

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.



#### SET WIRELESS REMOTE CONTROL CARGO FLOOR CF RX TX 3-FUNCTIONS

A wireless remote control set (TX RX) is available as an option for the E- and B-controlled moving floor systems. This remote control can easily be built into new and existing Cargo Floor systems afterwards. This set is delivered plug and play.

In an E-controlled system, the wireless remote control replaces the CF8 wired remote control. In a B-controlled system, the wireless remote control replaces the CF4 wired remote control.



#### **CHECK BEFOREHAND!**

# BE CAREFUL: When the pump/PTO is switched on, the system can start moving immediately!

With certain versions, the functions can deviate from the standard situation, which is described below. It is therefore important to always test your version without cargo first. After using the system, always switch the control back to the non-activated 0 position.

#### **SCOPE OF SUPPLY**

Parts no. <u>6104006</u>: Set wireless remote control Cargo Floor CF RX TX (receiver + transmitter)

This set consists of:

- Parts no. 6104037: Wireless remote control Cargo Floor (CF-TX) 3-functions
- Parts no. 6104036: Receiver Cargo Floor (CF-RX) 3-functions



Remote control



Receiver



Mounting plate



Mounting materials



Sticker CF TX B-control



# MOUNTING THE RECEIVER (CF RX) 3 FUNCTIONS IN THE CONTROL BOX

Attention!

The screw holes in the corners of the mounting plate must be on the underside.

Mount the receiver with the 4 M4x15 bolts and locknuts on the mounting plate with the gland/cable entry of the receiver at the bottom.



Then screw the mounting plate with receiver onto the domes in the control box using the 4 4x14 screws. Then connect the Hirschmann plug to the fixed switch CF7 or CF3.





#### **REMOTE CONTROL (CF-TX) 3-FUNCTIONS**

#### Switching the remote control on/off

The I/O switch on the back of the remote control interrupts the power supply from the battery. This switch must be turned on only **once**.



#### E-control



The remote control for E-controlled Cargo Floor systems

It is has three buttons, which work as follows:

**Button 1 (load)**. By pressing this button the system will load, by releasing it the system will stop.

**Button 2 (unload)**. By pressing this button the system will unload. Pressing this button again will stop the system (or pressing button 3, stop).

Button 3 (stop). Stops the system.

#### **B-control**

The remote control for B-controlled Cargo Floor systems

If you have a Cargo Floor system with B-control, you can remove the E sticker from the control and replace it with the B sticker.



It is has three buttons, which work as follows:

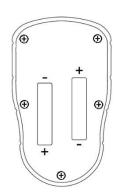
**Button 1 (ON PULSE as pulse contact).** By pressing this button the system will switch on, by releasing it the system will switch off.

**Button 2 (ON HOLD as hold contact).** By pressing this button the system will switch on, by pressing it again will deactivate the system (or press the stop button 3 to stop).

Button 3 (Stop). Stops the system.

#### Replacing remote control batteries

Remove the back of the remote control by unscrewing the 5 screws. Replace the 2x 1.5 V AAA batteries. Use alkaline batteries for optimal performance. Screw the back of the remote control back into place.

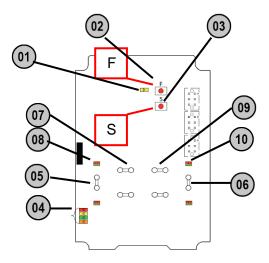




# PROGRAMMING THE REMOTE CONTROL TO THE RECEIVER

The cover of the receiver is fitted with four screws, which must be unscrewed completely before opening it. When the cover is put back, all screws must be screwed fully back in again.

# Receiver 3-function, inside view



(01) Power LED (yellow)

"Function" program button (chancel)

"Select" program button (OK)

Function LED's

Input power -

nput power +

77 Transistor output loading

Output relay LED's (red) loading

Transistor output unloading

Output relay LED's (red) unloading

# Programming the remote control to the receiver



If you have ordered a remote control and receiver as a set, they are already connected to each other. A set is "plug and play".

If a new, or second, remote control has to be used in combination with the receiver, you can connect them as follows:

Press the "Function" programming button once,

Press the "Select" programming button once (All output LEDs light up (02) and (12)),

Hold down buttons 1+2 on the remote control for at least 2 seconds.

Should you need further instructions, please contact Cargo Floor B.V.

#### **Technical data**

Connection voltage	12-24V
Operating temperature	-20+55°C
Frequency band	2405-2480 MHz



#### **IMPORTANT INSTRUCTIONS**

- When operating with the remote control, always stay in the vicinity (max. 10 metres) of the receiver mounted on the vehicle. During the unloading function, the Cargo Floor cannot be stopped with the remote control if you are out of range of the receiver.
- Prevent water and dirt getting into the plug when (de)mounting the plug.
- Check directly, after mounting, if the range of the remote is large enough to reach the receiver. In the unloading function, the Cargo Floor cannot be stopped with the remote control if you are outside its range.
- Do not drop the hand held transmitter.
- Store the remote control in a dry place
- Never use a high pressure cleaner on the electric components. So also do not use it on the Cargo Floor remote control.
- For optimum reception of the receiver, it is advisable to position the receiver as far as possible towards the outside of the trailer. Because of possible reception problems, we strongly advise against installing the receiver in a steel box.
- Prevent damages to the receiver. Therefore, do not use the plastic box, in which the receiver is mounted, as storage space.
- It is preferred that you carry the remote at its clip. If the remote is put in to the trouser pocket it is possible that the function buttons are pressed and the Cargo Floor system is unwittingly operated.
- When a malfunction occurs in the electrical system the standard present emergency control can be used to activate the on / off functions. For further details regarding this see the standard user's manual. You can also download it at our website: www.cargofloor.com.
- Make sure that the wiring for the external components to be controlled is properly sealed by the socalled PG-glands. Therefore, choose a multi core cable instead of loose wires at the bottom of the receiver housing.
- Place the receiver with the cable glands pointing downwards.
- Regularly perform careful checks on the following aspects:
  - Damages to the casing;
  - Damages to the wiring of the plugs.



### **CONTACT DATA**

# Postal and visiting address:

Cargo Floor B.V. Byte 14 7741 MK Coevorden The Netherlands

Phone number: +31 524 593 900 E-mail: info@cargofloor.com Website: Cargofloor.com

**Order spare parts:** 

E-mail address: sales2@cargofloor.com DID number: +31 524 593 922

After Sales (technical questions and malfunctions)

E-mail address: as@cargofloor.com

DID number: +31 524 593 981 / +31 524 593 991

Coevorden, The Netherlands

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