Aufrüstsatz pneumatische Fernbedienung
Upgrade kit Pneumatic Remote Control
When installing the remote indicator, ECE Regulation R 55-01, in particular Annex 7, and the relevant national regulations must be observed. The fitting and operating instructions must be kept in the vehicle.

Subject to technical changes without prior notice
The safety instructions are summarised in a single chapter. In any situation where the user of the trailer coupling is at risk, the safety instructions are repeated in the individual sections and marked with the warning symbol shown here.

When handling hitches, prime movers and trailers the relevant safety regulations in the respective country must be observed (e.g. Berufsgenossenschaft in Germany). Any safety instructions in the operating manual of the tractor vehicle and the trailer remain valid and must be observed.

For operation, maintenance and assembly the safety instructions listed below must be observed. Further safety instructions are then given in the individual case which relate directly to the respective activity.

**Safety instructions for operation**

- The hitch may only be operated by authorised persons.
- The installation and operating instructions of the respective hitch retain their validity and must be observed.
- Only use the hitch and the towing eye of the trailer if they are in perfect technical condition.
- Only carry out hitching / unhitching operations on firm, level ground.
- During hitching, nobody may stand between the tractor vehicle and the trailer.
- After every hitching operation the correct locked status of the trailer coupling must be checked by means of the control pin or the remote indicator. Only drive the rig in the correctly locked status.
- The remote indicator does not exempt the driver from the obligation to check before driving off (Regulations Authorising the Use of Vehicles for Road Traffic). Before driving off, among other things, the coupling status of the mechanical connection device for the tractor vehicle and the trailer must be checked.

**Safety instructions for maintenance**

- For maintenance work, only use the prescribed lubricants.
- Maintenance work may only be carried out by qualified personnel.

**Safety instructions for installation**

- Installation may only be carried out by authorised workshops.
- Installation must be carried out in compliance with the relevant accident prevention regulations and the technical regulations for mechanical equipment.
- Only original components may be used.
- Instructions and installation guidelines of the vehicle manufacturer must be observed, e.g. type of fastening, clearances etc.
- All screwed connections must be tightened with the prescribed tightening torque.
- Work may only be carried out on the trailer coupling when it is closed. **Risk of injuries!**

The installation of the hitch on the prime mover must be carried out in accordance with Annex 7 of ECE R 55-01 and must be checked accordingly. As applicable, the relevant licensing regulations in the respective country must be observed.

The mechanical remote control and the mechanical remote indicator are equipment with safety components. This is why the installation must be documented.

**The hitch, the remote control and the remote indicator are connection devices which require model approval and are subject to the highest safety requirements.**

Alterations of any kind shall cause the warranty to lapse and invalidate the type approval, which in turn invalidates the vehicle operation permit.
1. Mounting

1.1 Before installation

Note: When installing the remote operation, please observe:

- applicable national regulations
- guidelines of the vehicle manufacturer
- the mounting instruction for the tow hitch
- the generally applicable regulations for the installation of pneumatic components in a truck
- possibility of axial rotation of the coupling head min. ±25°

Note: If a remote control device, as defined according Regulation ECE R55-01, is employed, there shall also be a remote indication device mounted!

There are different ROCKINGER Indicator solutions possible:

- Remote Indicator at the rear
  - RI-BR ROE71701

- Remote indicator in the cabin
  - RI-BC ROE71654
  - RI-E ROE71564

Check the components

- Does the upgrade kit match the towing hitch?
  - compare the Type on the type plates

- Check the supplied components for completeness (see fig.1)

A Mounting bracket
B Mounting bracket incl. Servo
C Screw set 3x M10 x 30 incl. 3 distance sockets
D Protection shield
E Adapter socket
F Duomatic-connector complete
G Pneumatic hose set
1. Mounting

1.2 Mounting of protection shield / mounting bracket (fig. 2)

- Close the Tow hitch (H) – see mounting instruction of the Tow hitch
  **Attention: Risk of injuries!**

- Push the adapter socket (E) onto the square of the servo (B)

- Lay the 3 distance sockets (C1) into the abatement of the automatic unit

- Lay the protection shield (D) onto the automatic unit and secure it with one of the three bolts (C2)

- Push the mounting bracket including the servo (B) and the adapter bracket (E) onto the open hand levers shaft end in this manner that the last two bores of the protection shield are in line with the bores of the bracket.

- Secure both parts with the 3 flange screws (C2)). **Tightening torque 85 Nm**.

* Setpoint, tighten the screw connection with a torque spanner according to DIN EN ISO 6789, class A or B (friction coefficient \( \mu = 0.08 - 0.14 \))
1. Mounting

1.3 mounting of the mounting bracket (fig. 3)

- Mount the bracket (A) at a suitable position at the rear nearby the Duomatic connector (D) of the truck.

1.4 Pneumatic connection (fig. 4)

It is essential for function of the pneumatic connections between the servo (P) and the breather (L) mount at the holder bracket to be **made exactly as shown**:

- servo-turn actuator (P) 6 mm to breather (L) with red hose (6 x1)
- servo-turn actuator (P) 8 mm to breather (L) with black hose (8 x1)

**Note:**

Pneumatic hoses shouldn’t be mounted with a kink or a sharp bend.

The pneumatic hoses must be mounted according technical regulations for the installation of pneumatic systems.
1.5 Connection of the Duomatic including the spiral coiled hose

Screw the free end of the spiral coiled hose (F) into the breather (L) see fig. 5 (Tightening torque 6 Nm).

Put the Duomatic-Connector (F) onto the two guidance pins of the bracket holder (A) and clap the red protection cap over the bracket holder (A). The Duomatic-Connector is now in his parking position.

Attention:
The Truck must not be driven, if the Duomatic-Connector of the Tow hitch is not in his save and **secured parking position**!
2. Operation  (hitching and unhitching, fig. 7)

For hitching and unhitching it is very important to observe the regulations laid down by professional trade association when hitching and unhitching.

No one must stand between the vehicles!

2.1 Opening of the Tow hitch  (hitch and unhitching)

To open the hitch move the Duomatic-Connector (D) from the parking position (A) (1.) to the Duomatic plug (Z) of the Truck (2.).

The hitch opens.

In the event of seizing between the hitch and trailer assist the unhitching process by moving the vehicle backwards and forwards or by using the air suspension system.

After the opening procedure must the Duomatic-Connector of the tow hitch always put back into its parking position (3.) at the bracket holder (A).

Attention:

The Duomatic-Connector of the towing hitch is not allowed to remain permanently at the Brake-pressure-system (duomatic) of the truck!

For hitching the truck follow steps 1 to 3.

Reverse prime mover very slowly.

Please observe: The drawbar eye must be inserted into the middle of the funnel. Otherwise the funnel, the drawbar eye or the drawbar support legs might be damaged.
2. Operation

2.2 Check

After each hitching procedure, it is essential to check that the hitch is correctly closed and locked. The lock-control pin must be flush with its guide bush after hitching (see fig. 8).

If the lock-control pin protrudes from its guide (in the dark detectable by touching it), the hitching procedure has been carried out incorrectly and there is the risk of an accident!

Driving a trailer in that condition is not allowed.

If not correctly coupled:

– move the prime mover forward (approximately 1 m)
– check again!