Für Modellreihen
for Series
pour les séries

RO*810 D

Manuelle Anhängekupplung mit Fahrstuhllager
Non-automatic trailer coupling with lift bearing
Attelage de remorque verrouillage avec palier à hauteur variable
Note:
When fitting the trailer coupling the Council Directive 89/173 EEC and the relevant national regulations must be observed. The coupling must be fitted in accordance with these assembly and operating instructions.

If the installation of the trailer coupling should alter the load values of the vehicle (e.g. permissible axle load, total weight, permissible vertical load) the vehicle documents must be altered accordingly.

We reserve the right to make technical alterations.
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 trailer couplings, tractor vehicles and trailers, the relevant safety regulations in the respective country must be observed. 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 trailer coupling may only be operated by authorised persons.
- The installation and operating instructions of the respective trailer coupling retain their validity and must be observed.
- Only use the trailer coupling 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.
- Never reach into the opened coupling.

**Safety instructions for maintenance**

- For maintenance work, only use the specified 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 ROCKINGER 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 injury!**
- The trailer coupling must be installed in accordance with these installation and operation instructions and may only be carried out on agricultural or forestry tractor machines in accordance with Directive 74/150/EEC.
- Type plates and warnings must be clearly visible before the coupling or drawbar eye are used and must not be rendered illegible in any way. Paint residues or protective foils must be removed.

**Trailer couplings are vehicle connection parts 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 model approval, which in turn invalidates the vehicle operation permit.
1. Fitting

The coupling is supplied in a ready-to-use condition. The relevant regulations must be observed for installation (UVV (German accident protection regulations) 3.2 for agricultural and forestry vehicles)

- Inspection of the anti-slip device in the trailer block
- Insert the coupling from above into the guide rails
- **Attention: Keep a good grip on the coupling!**
- Turn hand grip (H) of the cam plate upwards and press to the left: the arresting bolts (A) move inwards (see Fig. 1)
- Place the coupling at the desired height in the trailer block
- Hold the coupling in place and at the same time turn the hand grip (H) back to the right to allow it to engage
- Release the hand grip in the resting position (see Fig. 1)

**Inspection:** In the secured position it should only be possible to move the hand grip (H) about 4 mm to the left

**Attention:** Do not use any aids to operate the height adjustment and avoid impact on the cam plate: Risk of damage!

**Attention:** Only use ROCKINGER single hand pins and Fendt pins according to the general operation permit! In the case of non-observance, the model permit lapses.
2. Operation

The legal regulations must be observed for hitching and unhitching.

2.1 Hitching

- Place the drawbar eye at the centre of the funnel.
- Remove the single hand pin to open the coupling.
- Release the brake on the front axle of the articulated drawbar trailer.
- When connecting with a rigid drawbar trailer, the drawbar eye must be as close to the centre of the funnel as possible: Failure to observe this can lead to damage!
- Reverse the tractor vehicle slowly until the drawbar eyes and the body boring are aligned.
- Close the coupling by inserting the single hand pin.

***Inspection: The single hand pin must be secured after hitching.***

2.2 Unhitching

- Secure the trailer against rolling away or extend support feet.
- Release the one-hand plug and remove it.
- Move the tractor vehicle forwards.

***Note:*** During operation without a trailer, close the coupling with the single hand pin to protect the lower sleeve against dirt.
3. Maintenance

To reduce wear on the coupling and the drawbar eye apply multipurpose grease at regular intervals according to the conditions of use and after cleaning with pressure washers:

- at the lubrication nipple (N)
- drawbar eye seat (A)

3.1 Inspection

- **Body boring**
  
at top and bottom in the driving position **max. 35 mm oval**

- **Bearing** (articulated joint)
  
  Gap width at the articulated joint
  
between the funnel and the flange collar with alight load on the lower edge in the driving position: **max. 3 mm**
3. Maintenance

- **Single hand pin**
  - Diameter
    
    | Nominal dimension | Minimum wear limit |
    |-------------------|-------------------|
    | 30–31.5 mm        | 28 mm             |

- Lock:
  - No deformation of the lock parts

- Permissible height clearance:
  - max. 6 mm

- **Lift bearing**
  - Maximum play in the guide parts in the push and pull direction:
    - max. 2.4 mm (Nominal value new 0.4 mm at an installation dimension of 330 mm)
  - Maximum wear on the groove in the trailer block 1.2 mm
  - Wear on the guide for the trailer coupling or vice versa 0.8 mm
4. Technical data

RO*810D

RO*810D 00–70
4. Technical data

RO*810 D

RO*810 D10 – 90

A

B

C

D10 – 36

D12

D90

M

ROCKINGER
Member of JOST-World
### 4. Technical data

<table>
<thead>
<tr>
<th>RO</th>
<th>A Track width (mm)</th>
<th>B Bearing (mm)</th>
<th>C Fixing bolt (mm)</th>
<th>Vertikal load (t)</th>
<th>D-value (kN)</th>
<th>ABG M</th>
<th>EG e1</th>
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* with long bearing

**ATTENTION!** Observe data on type plate.
**Drawbar eyes / Single hand pins**

**Drawbar eyes**

<table>
<thead>
<tr>
<th>DIN</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>turn-angle</th>
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<td></td>
<td></td>
<td></td>
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<td>horizontal</td>
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<tr>
<td>11026</td>
<td>100</td>
<td>40</td>
<td>42</td>
<td>min. 70°</td>
</tr>
<tr>
<td>74053</td>
<td>115</td>
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<td>45</td>
<td>min. 78°</td>
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<td>min. 76°</td>
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<td>120</td>
<td>50</td>
<td>30</td>
<td>min. 60°(^1)</td>
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Do not use any other towing eyes: **risk of accident!**

**Single hand pins**

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<th>Length (l) (mm)</th>
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**Fig. 6**

**Fig. 7**