

**MONTAGE- UND BETRIEBSANLEITUNG
INSTALLATION AND OPERATING INSTRUCTIONS
INSTRUCTIONS DE MONTAGE ET D'UTILISATION**

30.08.2021

**AUTOMATISCHE ANHÄNGEKUPPLUNG SERIE 2000 UND
2000X**
BESCHREIBUNG, BEDIENUNG, WARTUNG

**AUTOMATIC TRAILER COUPLING SERIES 2000 AND
2000X**
DESCRIPTION, OPERATION, MAINTENANCE

**ATTELAGE DE REMORQUE AUTOMATIQUE SERIE 2000
ET 2000X**
DESCRIPTION, UTILISATION, MAINTENANCE

WICHTIGE HINWEISE:

siehe separates Dokument BA_TASC_400002, www.walterscheid.com/downloads/

IMPORTATANT NOTES:

see separate document BA_TASC_400002, www.walterscheid.com/downloads/

NOTES IMPORTANTES:

voir document séparé BA_TASC_400002, www.walterscheid.com/downloads/

AUTOMATIC TRAILER COUPLING SERIES 2000 AND 2000X

Non-automatic couplings can be supplied as flange couplings or as height-adjustable sliders. See also assembly and operating instructions for the flange coupling or the height-adjustable sliders (internal parts).

1. DESCRIPTION:

The coupling is an automatic trailer coupling, its clevis dimensions and field of application complying with DIN 11028 as well RREG 2009/144/EC, VO (EU) 2015/208 and regulation UN ECE R147, class c40.

Its design incorporates the lever trigger system, i.e. the coupling procedure is triggered by moving a trailer ring into the clevis and pressing back the trigger lever. In its normal state, the coupling is in closed and locked position.

The automatic trailer coupling can be pivoted through 360°, the torque required for this purpose being 100 - 150 Nm.

A remote control can be used, see separate document BA_TASC_400039, www.walterscheid.com/downloads/.

OPERATING RANGE:

For use on agricultural or forestry vehicles, self-propelled work machines or trailers.

TRAILER RINGS:

Only for connection to trailer rings according to ISO 5692-1, ISO 8755 und ISO 5692-2.



IMPORTANT:

To avoid injury, protective gloves, safety glasses and safety shoes must be worn during all dismantling/ assembly actions described in this chapter.

Environment:

Lubricants can enter the environment. Environmental pollution: Collect, store and correctly dispose of lubricants in suitable containers.

2. OPERATION:

(see Figure 1 and 2)



WARNING:

The pertinent safety regulations must be observed when coupling and uncoupling.

No one may stand between the vehicles. The coupling may only be operated in locked condition.

When coupling and uncoupling, the drawbar must be as horizontal as possible relative to the coupling. For a 37 mm pin, the maximum possible inclination of the drawbar in the axial direction when coupling or uncoupling is 10°. A 32 mm pin can be coupled or uncoupled at a maximum possible inclination of 20°.

2.1 UNCOUPLING AND OPENING THE COUPLING:

Use supporting jacks or similar to stop the trailer rolling away. Push up the hand lever (1) until it engages. This releases the locked position and presses outwards the two locking/safety pins (2) located on either side, as well as pushing up the coupling pin (5) and locking it in the upper position. The lateral locking pins now protrude noticeably, the coupling connection is released and the coupling disengaged.

Readiness for coupling is achieved by moving the trailer ring completely out of the clevis.



CAUTION:

Never uncouple if the trailer is under tension or pressure. Forcing the handle may damage the mechanism.



CAUTION:

The trailer ring of the drawbar must always hit the cone of the clevis when backing-up the tractor. Otherwise, the clevis, the trailer ring and the coupling mechanism may be damaged.

2.2 OPENING THE COUPLING AND AUTOMATIC COUPLING:

Open the coupling as described under 2.1. The hand lever is in its top position, the coupling is ready for connecting, and the safety pins project laterally from the housing. If a trailer ring is now moved into the coupling, the trailer ring presses against the trigger in the clevis and the automatic coupling procedure is triggered, i.e. the coupling pin is instantaneously forced down through the trailer ring and into the seat of the saddle sleeve. The safety pins lie above the coupling pin and secure it, as indicated by the safety pins retracting completely into the housing.



WARNING (see figure 2):

Correct locking of the coupling is only ensured if the laterally projecting safety pins (2) disappear completely in the housing of the coupling mechanism. Only then has the coupling pin moved completely into the saddle sleeve and is a secure connection guaranteed. This must be checked after every coupling procedure.

3. MAINTENANCE:

(see Figure 1)

3.1 CARE:



IMPORTANT:

The care instructions must be followed to prevent damage to the coupling.

- > Any dirt and corrosion must always be cleaned off the coupling in order to guarantee correct operation. All moving parts of the coupling must be lubricated regularly (depending on the length of use) and checked for easy movement.
- > Before putting into service and following prolonged use, lubricate the coupling pin (5), the saddle sleeve (3) and the trailer ring with high-viscosity, water-resistant grease.
- > The grease reservoir of the coupling mechanism is filled at the factory, meaning that there is no need for constant re-greasing. Too much grease in the coupling mechanism can impair the function of the coupling, particularly at low ambient temperatures.
- > The clevis bearing is lubricated through the grease nipple (7) on the flange or on the slider. This should be done twice per year, or more often in the event of frequent use.
- > If possible, avoid cleaning with a pressure washer. If this is unavoidable, re-grease the coupling.
- > In the event of repairs (e.g. replacement of the coupling pin), remove the old grease and lubricate the coupling mechanism with fresh grease. The coupling mechanism must be lubricated with water-resistant, multi-purpose grease (Grease type: lithium saponified, consistency class: NL-GI2).

3.2 CHECKS:

**IMPORTANT:**

The checks must be carried out at the appropriate intervals to prevent damage to the coupling.

1. Clevis bearing (6):
The maximum permissible wear in the pivot is 2 mm. The coupling must be replaced if the axial play is greater. The adjusting bolt (8) is used to set the maximum torque. If there is no movement when the locking torque (100 - 150 Nm) is exceeded, the coupling must be repaired. This must be checked at regular intervals.
2. Coupling pin (5):
Clean the coupling pin and measure its diameter in the middle of the crowned area. Wear limits: 32 mm pin = 30 mm, 37 mm pin = 35 mm. The coupling pin must be replaced if the dimensions are below the limits. However, the rotating coupling pin prevents excessive wear and contributes significantly to prolonging the service life of the coupling. Separately available Walterscheid test gauges can be used to comfortably control the wear limits.
3. Vertical play:
Should the vertical play on the coupling pin exceed 2 mm in closed state, the coupling mechanism must be replaced, including the coupling pin.
4. Saddle sleeve (3):
The saddle sleeve must be replaced before the saddle of the sleeve is so worn that the trailer ring rests directly on the bottom lip of the clevis. The same applies if the hole in the saddle sleeve is so damaged (deformed or widened) that, when dropping, the coupling pin strikes the edge of the saddle sleeve and no longer engages. The inside dimension of the saddle sleeve may not exceed 25.5 mm. The opening must be clear at all time, so that any dirt can fall through.
5. Guide sleeve (4):
If, when coupling, the pin has so much play in the towing direction that it does not drop into the saddle sleeve, its lower end instead coming to rest on the saddle sleeve, the guide sleeve is worn and the coupling must be repaired. On Version B and NB couplings, the guide sleeve is provided with a saddle. Such guide sleeves must also be replaced before the saddle is so worn that the trailer ring rests directly on the clevis.

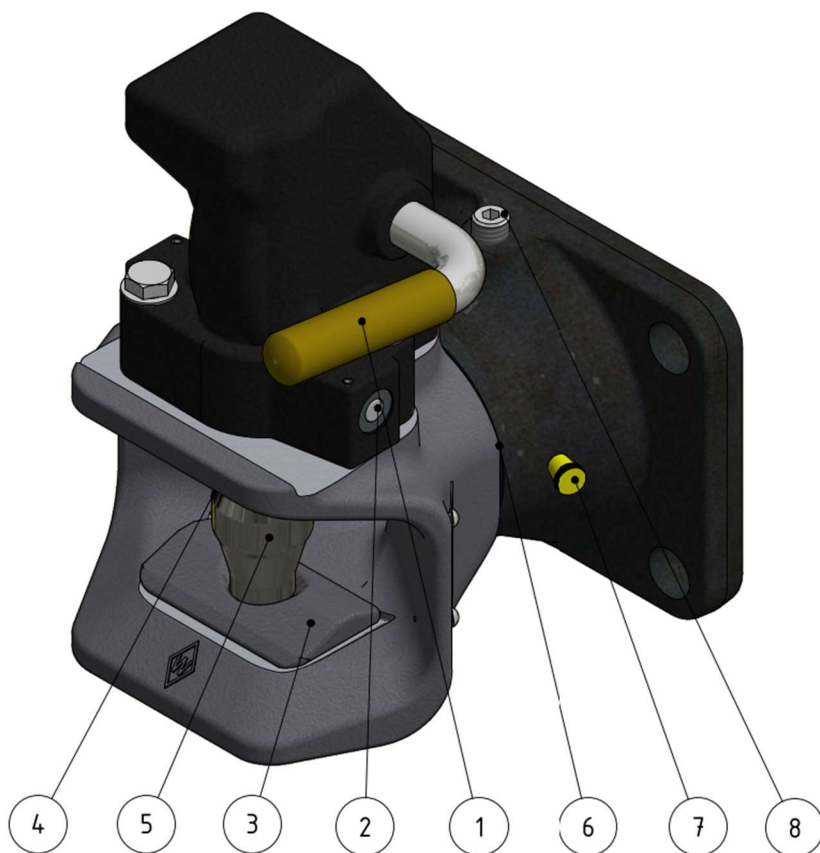
**IMPORTANT:**

Use only original Walterscheid spares when replacing parts. If the vehicle owner does not have the appropriate skilled workers and the necessary technical equipment, the replacement may only be performed by a specialist workshop.

**WARNING:****SAFETY NOTES:**

- > The user is obliged to always operate the coupling in perfect condition and to forbid its use by unauthorised persons.
- > The loads indicated on the type plate may not be exceeded.
- > Unauthorised conversion or modification of the coupling is not permitted.

Bild 1
Figure 1



Legende:

- 1..... Handhebel
- 2..... Sicherungsbolzen
- 3..... Sattelhülse
- 4..... Führungshülse
- 5..... Kuppelbolzen
- 6..... Drehgelenk
- 7..... Schmiernippel
- 8..... Stellschraube 150 Nm

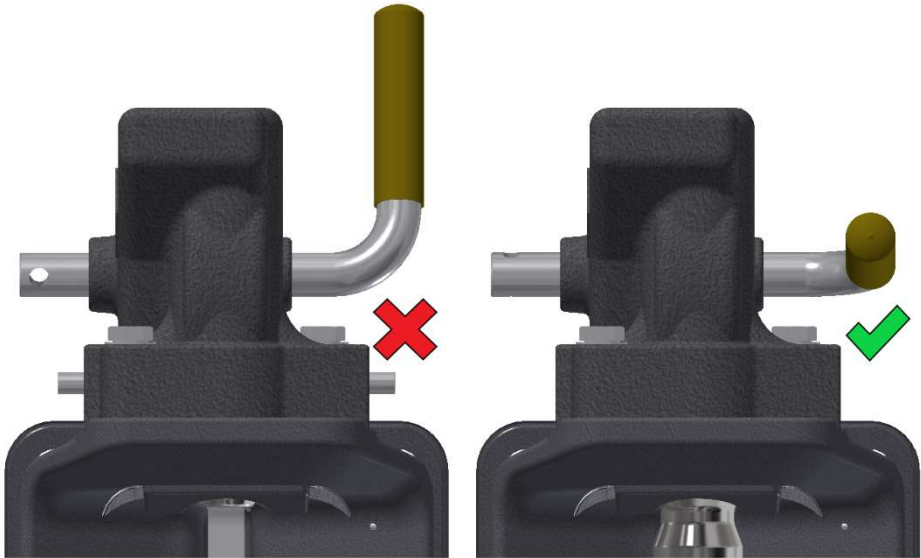
Legend:

- 1..... Hand lever
- 2..... Safety pins
- 3..... Saddle sleeve
- 4..... Guide sleeve
- 5..... Coupling pin
- 6..... Clevis bearing
- 7..... grease nipple
- 8..... adjusting bolt

Légende:

- 1..... Levier manuel
- 2..... Boulon de verrouillage
- 3..... Plaque d'appui
- 4..... Douille de guidage
- 5..... Axe de couplage
- 6..... Pivot
- 7..... moyen du graisseur
- 8..... vis de réglage

Bild 2
Figure 2



Kupplung geöffnet
Coupling open
Attelage ouvert

Kupplung geschlossen und gesichert
Coupling closed and locked
Attelage fermé et sécurisé