

**Repairs may only be carried out by skilled staff!**

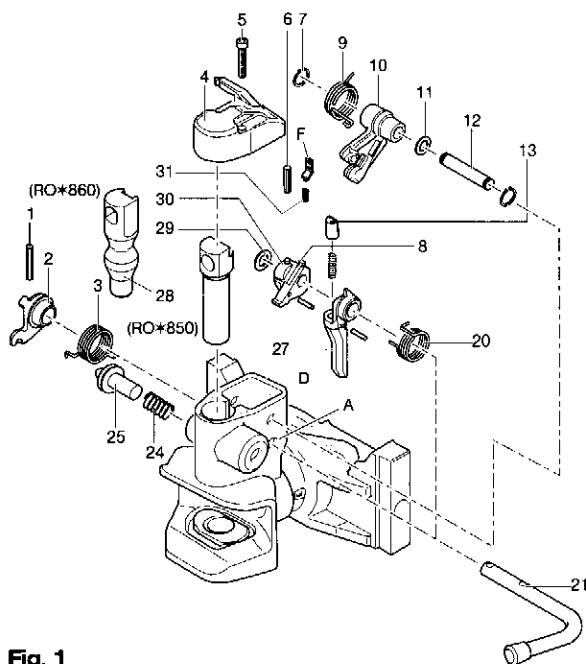


Fig. 1

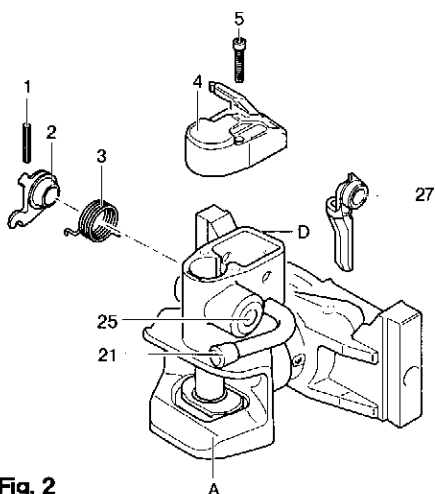


Fig. 2

## 1. Repair/cleaning of the automatic unit (D)

### 1.1 Disassembly (see Fig. 1)

- Open the coupling (in case of version with the remote control) with the hand lever (21)
- Pull the Bowden cable out of the slot in the sealing cap (4) and detach it from the cable lever (2)
- Close the coupling with the hand lever (21)
- Knock the locking sleeve (1) through and pull off the cable lever (2) with the recuperating spring (3)
- Loosen the screws (5)
- Take off the sealing cap (4)
- Remove the circlip (7)
- Push the axle (12) out
- Remove the lifting lever (10) with the closing spring (9) and washers (11) (if available; make a note of their positions). **Caution, risk of injury!**
- Knock the locking sleeve (6) through from the top (do not twist the hand lever (21))
- Pull out the hand lever (21)
- Remove the loose parts – locking sleeve (6) **replace**, release lever (27), control washer (8), catch (30), compression spring (31), torsion spring (20), and spacers (29), (if available; make a note of their positions).
- Remove the coupling pin (28). The compression spring (24), and check pin (25) drop inwards

### 1.2 Assembly (see Fig. 1)

- Clean all parts, replace damaged or worn parts and lubricate with universal grease.
- At the release lever (27), check the free movement of the catch pin (13) by pressing it in
- Preload the release lever (27), catch (30), control washer (8), torsion spring (20) (feed the straight leg into the locking sleeve on the catch, press the curved leg over the lug on the release lever), pre-mount on the auxiliary assembly pin ( $\varnothing 17.8$  mm, length 46 mm, not included in supplied parts) and insert
- Return the spacers (29) to their original position (necessary for central position)
- Push the hand lever (21) through the holes of the pre-centred parts, thus pushing the assembly pin out at the same time. The control washer (8) must rest against the sunk surface of the coupling head (A)
- The lug of the control washer (8) must point upward for the compression spring (31)
- Knock in the **new** locking sleeve (6) from above when the holes of the catch (30) and hand lever (21) are lined up
- Insert the compression spring (31) between the control washer (8) and spring bracket (F) into the automatic unit (D). Make sure that the compression spring (31) is firmly seated and that the control washer (8) moves freely
- Grease the hole lightly for the check pin (25) in the coupling head (A)
- Insert the check pin (25) with the compression spring (24) from inside and hold in place from the outside with a vice-grip wrench
- Insert the coupling pin (28) from above and remove the wrench
- Insert lifting lever (10) with the closing spring (9). In doing so press down the lifting lever (10) against the force of the closing spring (9) until the holes of the coupling head (A) and the lifting lever (10) are lined up
- Insert axle (12)
- Fit the washers (11) in their original positions (necessary for central position)
- Secure the axle (12) with the circlip (7)

### 1.3 Function test (see Fig. 2)

- Hold the release lever (27) with a suitable tool in the recess of the coupling head (A) and at the same time open the coupling with the hand lever (21)  
The hand lever (21) must be roughly vertical and engage
- Loosen the release lever (27). A single or double click should be audible
- Close the coupling. **Press back the release lever (27) with a suitable tool**  
**The check pin (25) must not project from the check sleeve. Accident risk!**

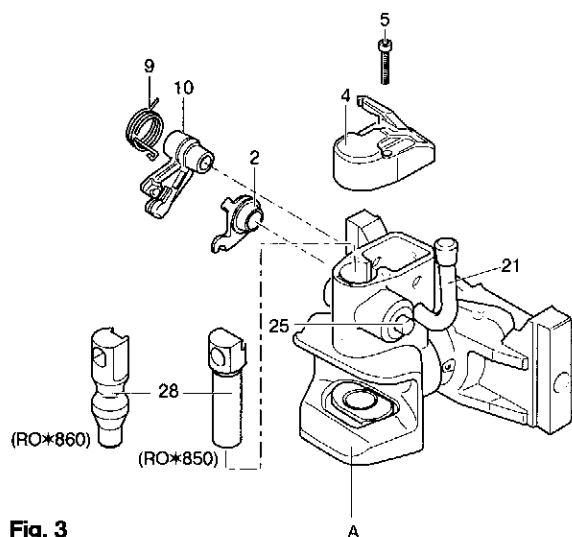


Fig. 3

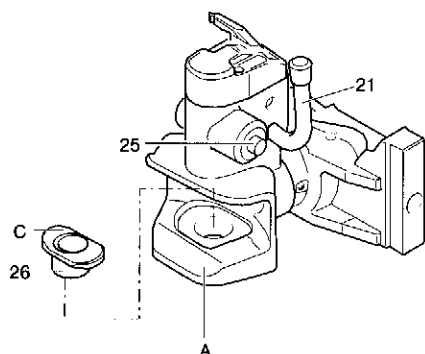


Fig. 4

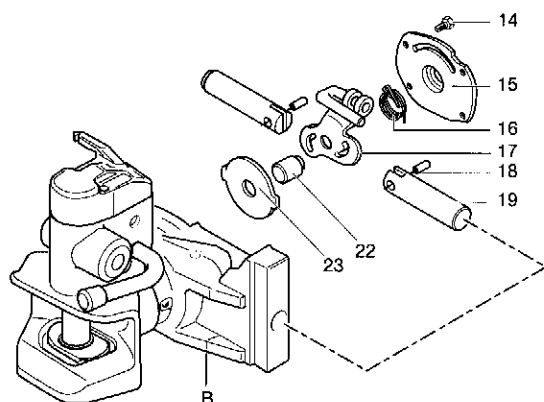


Fig. 5

For parts lists, see collection of parts lists on p. 64/65

- Repeat the coupling-up process
- Mount the sealing cap (4) and secure with screws (5)
- Grease the hole lightly of the cable lever (2) and hand lever (21)
- Mount the cable lever (2) and recuperating spring (3) on the hand lever (21)
- Knock in the locking sleeve (1)
- Check the cable lever (2) (in the version with the remote control) for freedom of movement and attach the Bowden cable

**Note:** Grease the automatic unit only in its open state!  
**Excessive greasing can impair function!**

## 2. Replacing the coupling pin (28, see Fig. 3)

**RO\*850:** Order No. 70516; **RO\*860:** Order No. 70973

- Pull the Bowden cable (in the version with the remote control) out of the slot in the sealing cap (4) and detach it from the cable lever (2)
- Loose the screws (5)
- Take off the sealing cap (4)
- Open the coupling with the hand lever (21)
- Hold the check pin (25) in place with a vice-grip wrench (**take care not to damage it**)
- Twist the lifting lever (10) upwards against the force of the closing spring (9) with a suitable tool and hold in place
- Remove the coupling pin (28) pregrease a **new** one and insert in the correct position
- Insert the lifting lever (10) in the opening of the coupling pin (28) and release
- Fasten the sealing cap (4) with the screws (5)

### Check

- Open and close the coupling several times with the hand lever (21)  
**When the coupling is in its closed state, the check pin (25) must not project from the check sleeve! Accident risk!**
- The vertical play of the coupling pin (28) with the coupling in its closed state must be about 2 mm

## 3. Replacing the bottom sleeve (26 in case of wear of the drawbar eye support surface (C see Fig. 4)

**RO\*850:** Order No. 70512; **RO\*860:** Order No. 70972

- Open the coupling with the hand lever (21)
- Press the bottom sleeve (26) out from below with a suitable device
- Press the new bottom sleeve (26) into the right position (ball in groove)
- Secure the bottom sleeve (26) at the bottom on the semicircular hole of the coupling head (A) with a powerful blow of a centre punch

## 4. Repair of the adjustment facility on couplings with elevator bearing (14-19, 22, 23 see Fig. 5)

- Take the coupling out of the trailer bracket
- Loose the screws (14)
- Turn the sealing cap (15) in the direction of rotation of the torsion spring (16)
- Remove the sealing cap (15), bearing pin (22), torsion spring (16), two straight pins (18), cam plate (17), locking pin (19) and, if damaged, bearing washer (23)
- Clean the parts, check the correct function of the cam plate (17), check the holes in the mounting plate (B) for the locking pin (19)
- Replace and grease worn parts, and fit them in reverse order.
- Feed the legs of the torsion spring (16) into the opening of the sealing cap (15)
- Turn the sealing cap (15) against the force of the torsion spring (16) and at the same time push the bearing hole over the lug of the bearing pin (22)
- Secure **new** screws (14) with a suitable adhesive, insert and **tighten to 10 Nm**

## Function test

- Turn the handle of the cam plate (17) upwards and press to the left: the locking pin (19) moves inwards.
- Release the handle: the cam plate (17) must return to its initial position, the locking pins (19) are pushed out, and the cam plate (17) is automatically secured against accidental displacement. When secured, it must only be possible to press the handle on the cam plate (17) about 4 mm in the opening direction.