

Adjustment and readjustment of the overrun braking system

I. Adjusting the braking system

Preparations:

- Jack up the trailer
- Release the handbrake
- Pull out the drawbar [5] of the overrun - system as far as it will go

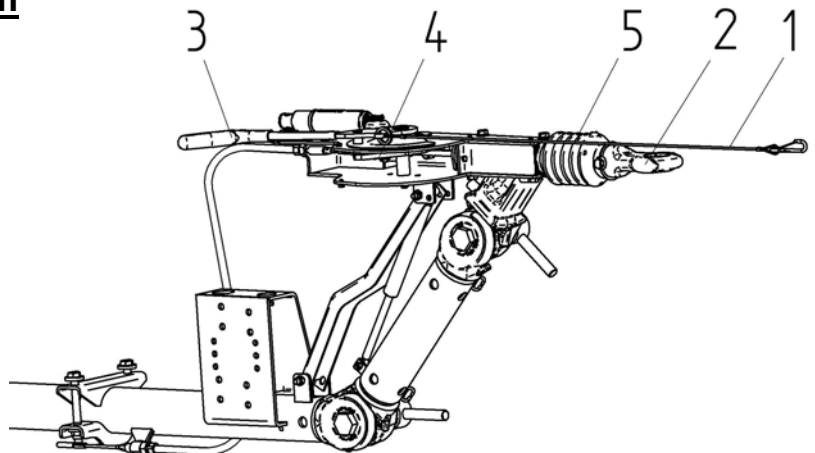


Fig. 1: KNOTT overrun brake

- 1 Contact-breaking cable
- 2 Trailer coupling ring (varies by type)
- 3 Handbrake lever
- 4 Transmission lever
- 5 Drawbar and bellows

Preliminary requirements:

- When carrying out adjustments, always start with the wheel brakes.
- When carrying out adjustments, turn the wheel only in the direction of forward travel.
- **Do not pre-tension** the expanding locking mechanism in the brake. If necessary, loosen the brake linkage [6] at the brake compensator [8].
Check the expanding locking mechanism and control cable [11] for ease of movement.

Caution!

Never readjust the braking system or brakes by the brake linkage [6] or turnbuckles (if fitted) in the linkage!

The compression spring [7] may only be lightly pre-tensioned and must not become fully compressed when activated!

Adjustment procedure:

1. Brake

Wrench sizes for adjusting screws [12]	
Brake size	Wrench size
160x35 / 200x50	SW 17
250x40	SW 19
300x60	SW 22

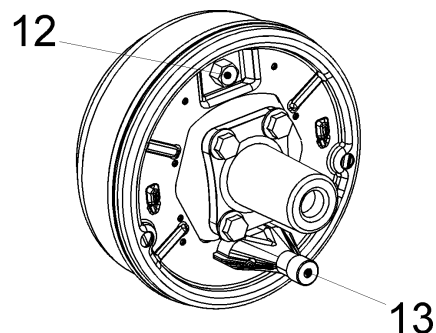


Fig. 2: KNOTT wheel brake

- 12 Adjusting screw
- 13 Cable entry

Loosen the linkage [6].!

Tighten the adjusting screw [12] (on the outside of the brake plate, opposite the cable entry [13]), turning clockwise until the wheel can only be turned with difficulty or not at all.

Ease off the adjusting screw [12] in the anticlockwise direction (approx. 1/2 turn) until the wheel turns freely. Slight rubbing noises, which do not effect the free turning of the wheel, are permitted.

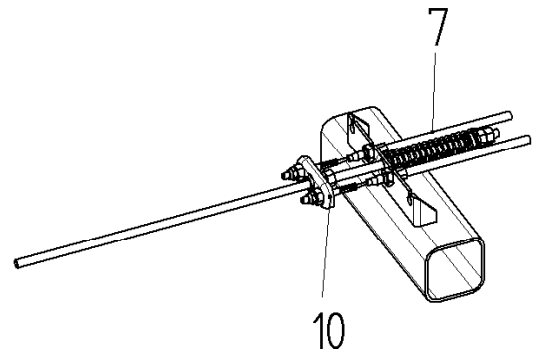
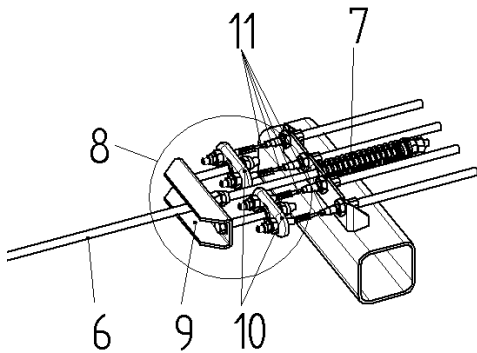
When the brake is correctly adjusted, the actuating travel of the control cable [11] will be 5-8 mm.

Carry out the adjustment procedure, as described, on all the wheel brakes in succession.

Fig. 3: KNOTT transmission system for tandem and single-axle chassis.

- 6 Brake linkage
- 7 Compression spring

2. Brake compensating system [8]



Preadjust the length of the brake linkage [6] (slight play permitted).

Operate the handbrake lever [3] and check the position of the compensating balances [9 and 10].

→ They should be at right angles to the direction of towing.

If necessary, adjust the position of the balance [10] and control cables [11]; in the case of tandem trailers, also adjust the master compensator [9] on the linkage [6].

The compression spring [7] may only be lightly pre-tensioned and must not become fully compressed when activated!

3. Brake linkage [6]

Adjust the brake linkage [6] so that it is free of play longitudinally, **without** initial tension (reversing lever [4] free of play).

Readjustment: Operate the handbrake lever [3] powerfully several times in order to settle the braking system. Check the position of the brake compensating balances [9 and 10] → which should be at right angles to the direction of towing
Check the play in the linkage [6]; if necessary, adjust the linkage [6] again so that it is free of play, but **without** initial tension
Check the position of the handbrake lever [3];
when checking the dead centre of the lever, resistance starts 10-15 mm above dead centre
Check that the wheels rotate freely with the brake released.

Final check: Check fastenings for security (secure the hexagon locking nuts of the screw fastenings for the transmission system, control cables, brake compensators, turnbuckle, linkage, etc.).
Check the compression spring [7] for initial tension.

Test run: If necessary, carry out 2-3 brake tests

Brake test: Recheck the play in the brake linkage [6] and, if necessary, readjust the linkage [6] for length free of play → during operating braking with empty trailer should be used maximally 1/2 of the overrun travel

II. Readjusting the braking system

In general, readjusting the wheel brakes adequately serves to readjust the braking system, i.e. to compensate for brake lining wear. To readjust the wheel brakes, proceed as described under 'Adjusting the braking system'.
Check the play in the linkage [6] and readjust if necessary.

Caution! **Check the expanding locking mechanism and control cable [11]**
The expanding lock compensator must not be pre-tensioned in the brake
Do not attempt to compensate for ease of movement caused by brake lining wear by readjusting (shortening) the brake linkage [6], e.g. by way of the linkage screw fastenings

Readjustment: Operate the handbrake lever [3] powerfully several times in order to settle the braking system
Check the position of the brake compensating balances [9 and 10] (which should be at right angles to the direction of towing).
Recheck the play in the linkage [6];
if necessary, adjust the linkage [6] again so that it is free of play, but **without** initial tension.
Check the positions of the handbrake lever [3] and compression spring [7] (only light initial tension);
when checking the dead centre of the lever, resistance starts 10-15 mm above dead centre

Final check:

Check the screw fastenings for the transmission system (control cables
brake compensators, linkage, etc.).

➔ during operating braking with empty trailer should be used maximally 1/2 of the overrun
travel