




FOREWORD

This landing gear is not an independent functional unit. It is designed for mounting on a trailer.

It must not be used until it has been established that the trailer on which the landing gear has been mounted complies with the national regulations for road traffic.

The landing gear is only allowed to be taken into operation in conjunction with the owner's manual for the tractor unit and trailer as well as for the landing gear

 **The safety information is collated in one section. Where the user of the landing gear is in danger, the safety information is repeated in the individual sections and marked with the danger symbol shown here on the left.**

SAFETY INFORMATION

The following safety instructions apply to operation, servicing and installation. The safety instructions of the tractor and trailer vehicle remain in force.

Safety instructions directly linked to the activity are listed again in the individual sections

 **Safety information in the following sections is shown with the warning triangle symbol. You must comply with this safety information without fail.**

1.1 Safety information for operation

- The landing gear may only be operated by authorised personnel.
- The landing gear may only be operated if the trailer vehicle has been secured to prevent it rolling away.
- When releasing the crank, remember that it may recoil.
- Low or high gear must always be engaged.
- When the trailer vehicle is in motion, always place the crank in the crank mounting.
- The crank must always be installed.
- When the vehicle is in motion, the landing gear must be fully retracted.
- When supporting the vehicle, ensure that the ground is sufficiently firm and/or position a suitable base underneath.
- When supporting, the supporting feet must be freely mobile or the castors must be able to spin.
- The function area of the foot must be clear and flat.
- Do not support landing gear, e.g. in order to even out height differences.
- Do not exceed the upper or lower lifting limit of the landing gear.
- Driving with damaged landing gear is forbidden.
- Repair the landing gear or remove it as necessary.
- No-one must be allowed to be under the trailer during coupling and uncoupling manoeuvres.
- No-one may remain under the trailer vehicle when supported

1.2 Safety information for servicing

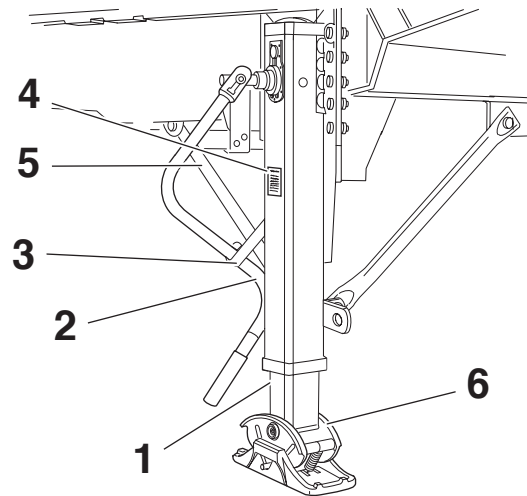
- Only use the specified lubricants for servicing work.
- Servicing must be carried out by skilled personnel.

1.3 Safety information for installation

- Landing gears must be mounted on the trailer vehicle according to the installation guidelines.
- If the landing gear is not installed correctly, all warranty claims against the manufacturer and the supplier of the landing gear will be rendered void.



PROPER USAGE



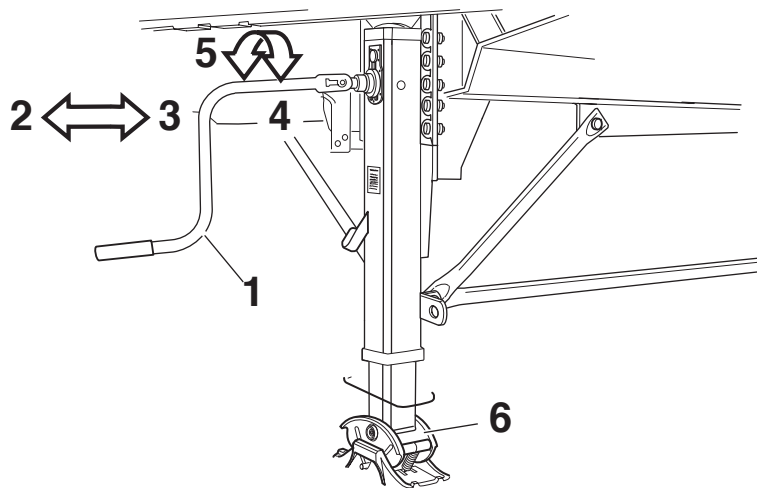
- | | | |
|-----------------|-------------------|--------------------|
| 1. Landing Gear | 3. Crank Mounting | 5. Bracing |
| 2. Crank | 4. Type Plate | 6. Supporting Feet |

The landing gear is intended for use with trailer vehicles such as semi-trailers and single-axle trailers.

The landing gear supports the uncoupled trailer. For coupling and uncoupling, use the height adjustment function to set the laden or unladen trailer to the coupling height of the towing device.

The landing gear can be used on laden and unladen trailers. Furthermore, it is permitted to load a parked up trailer providing the appropriate safety regulations are complied with.

OPERATION



- | | | |
|--------------|-------------|----------------------|
| 1. Crank | 3. Low Gear | 5. Lower |
| 2. High Gear | 4. Lift | 6. Landing Gear Foot |

! When you have finished turning the crank handle, slowly relieve the strain on the crank. There is the risk of recoil by the crank.

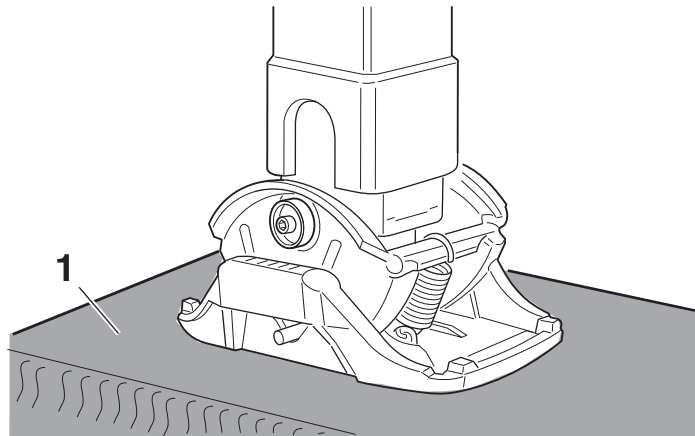
High Gear (2) To extend and retract the landing gear quickly and to bridge ground clearance.
Low Gear (3) For raising and lowering the laden and unladen trailer.



Gear Change

- High Gear (2) Remove the crank from the parking hook and pull out until the gear engages. A slight turning motion will facilitate gear change. The gear must engage.
- Low Gear (3) Remove the crank from the parking hook and push in until the gear engages. A slight turning motion will facilitate gear change. The gear must engage.

Disconnecting the semi-trailer



⚠ When you have finished turning the crank handle, slowly relieve the strain on the crank. There is the risk of recoil by the crank. Do not exceed the full lifting travel.

- Park the trailer on firm, flat and level ground (see the "Trailer" owner's manual). Put a suitable base (1) underneath the landing gear if necessary.
- Check the landing gear for damage and have any damage repaired before use.
- Engage high or low gear and wind down the landing gear.
- Change over from high gear to low gear before the foot makes contact with the ground.
- Disconnect the tractor vehicle (see "Tractor" and "Towing device" owners' manuals).
- Hook the crank into the crank holder

⚠ The disconnected trailer must not be moved, even with the "R-foot".

Connecting the semi-trailer

⚠ When you have finished turning the crank handle, slowly relieve the strain on the crank. There is the risk of recoil by the crank.

- Engage low gear and adjust the coupling height (see "Tractor vehicle" and "Towing device" owners' manuals).
- Completely retract the landing gear after hitching up.
- Hook the crank into the crank holder with a gear engaged

Loading the supported trailer

⚠ The supported trailer is allowed to be loaded providing the appropriate safety regulations are complied with. The permitted loading work involves:

- Loading with a crane
- Loading with a forklift.

Do not exceed the centre of gravity otherwise the trailer will tip.



SERVICING

Cleaning

The landing gear is cleaned along with the vehicle. No special cleaning is required.

Do not direct a high-pressure cleaner directly at the gear opening.

Service intervals

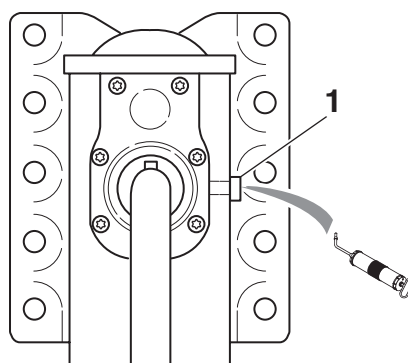
Servicing Work	Service Interval	Note
Grease spindle and spindle nut	After 3 years	1st service interval
Grease spindle and spindle nut	Annually	After the 1st service interval
Check for wear on the spindle and spindle nut	Annually	After the 1st service interval
Visual check of the landing gear for cracks and deformation	Whenever the landing gear is used	Repair the damaged landing gear immediately

LUBRICANTS

To lubricate the gears:

- Lubricating grease, standard type.

To lubricate the spindle and spindle nut:



- High-performance EP lubricating grease with lithium-saponified base with good adhering and corrosion-protection properties, and temperature range adapted to the application in question.
- Wind the winch out as far as possible on the shaft.
- Remove the plug (1) to open the lubricating hole.
- Fill the grease trough in the spindle nut with approx. 200 g of special grease.
- Wind the spindle in to the stop, then out again and back in.
- Seal the lubrication hole again with the plug (1).



Using other parts can result in damage to the landing gear.



SERVICING DISPOSAL

Disposal instructions for lubricants

The manufacturer of the lubricant will supply the disposal instructions for the lubricants used.

Special grease

- Disposal as special waste, disposal key No. 120 112 EAK
- PCB content: free of PCB
- Halogen content: free of halogen

Disposal instructions for lubricants

The mounted parts are valuable raw materials that can be recycled. They can be split into plastics, rubber and metallic materials.

Plastics and rubber materials are identified according to VDA recommendation 260.

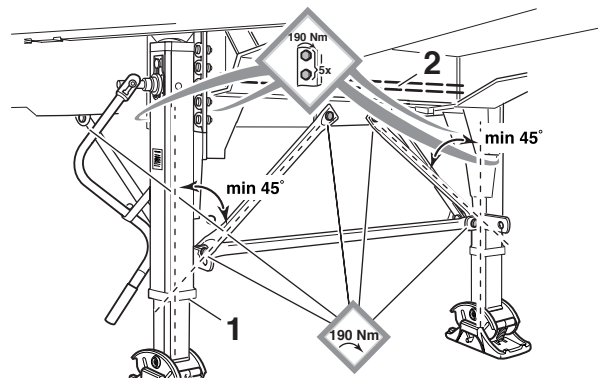
All oil and grease must be cleaned off the parts before disposal where necessary.

TROUBLESHOOTING

Fault	Cause	Remedy
Landing gear cannot be extended	Connection shaft too long. Support or inside tube bent. Spindle or gear defective.	Shorten the connection shaft. Repair landing gear.
Landing gear can only be extended until it touches the ground.	Incorrect gear engaged.	Engage low gear before leg touches ground.
Changing gear not possible.	Gear defective.	Repair landing gear.
Landing gear cannot be retracted.	Spindle or gear defective. Support or inside tube bent.	Repair landing gear.



INSTALLATION



! During installation, make sure that both supports touch the ground at the same time when the landing gear is lowered. Having different loads on the supports leads to damage.

Material required:

28 x Hexagonal screws M16 8.8. Determine length according to vehicle chassis.
28 x Hexagonal nuts M16 8.8
28 x Washers

- Retract supports (1) to stop.
- Check the length of the connection shaft (2) and adapt it if necessary.
- Align the supports at a right-angle to the chassis of the trailer vehicle.
- Align supports parallel to each other.
- Insert the connection shaft (2).
Maintain an adjusting play of 8 ± 3 mm.
- Secure the bracing of landing gear at an angle of at least 45 as shown in the drawing.