Tire maintenance

Tires are the only contact between the vehicle and the ground.
It is therefore of paramount importance that tires be maintained in good condition at all times and that, when the time comes to change them, the correct replacements are fitted.
The tires fitted to your vehicle as original equipment were selected by the vehicle and tire manufacturers taking into account all aspects of the vehicle's operation.
Changes in tire size, structure, load and speed rating should not be made without first seeking advice from the tire or vehicle manufacturer, as the effect on safety, vehicle behaviour and clearance must be considered.

Tire fitting and removal

General instructions

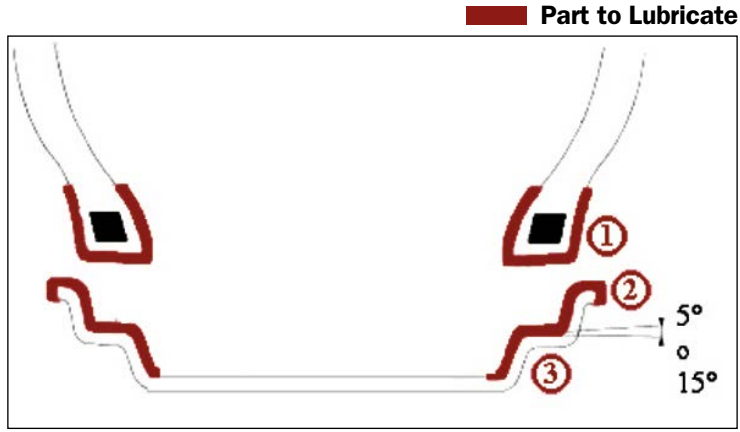
- Tire fitting and removal can be dangerous.
  Entrust these operations to specially trained experts only, using proper tools and procedures.
- If not performed by qualified personnel, these operations may cause visible or invisible damage to the tire and rim, which may result in breakage during subsequent use.
- In exceptional cases in which these operations cannot be carried out by an expert, fitting and removal must be performed by carefully following the instructions specially provided.
- Ensure that the tire to be fitted is the correct type and size for the vehicle concerned and the intended use.
- Particular attention must be paid to the compatibility of the rim and tire centring.
- For use of 5° rims on high powered tractors, check that the rims for the drive wheels feature a knurling in the bead seat, which is capable of stopping rotation of the tires on the rim during moments of high traction, thus avoiding the shearing of the valve.
- Avoid painting the bead seats of rims for drive wheels with epoxy resin paints.
  In the case of rims with a special finish, carefully rasp and renew the protection with a normal anti-rust treatment.
- Fit with the same structure, tread pattern and size on the same axle of the vehicle.

  For dual fitting, use only tires of the same size, structure and groove depth and comply with the dual spacing specified for the size used.
- With new tires, any other parts (inner tube, flap, valve sealing ring) must also be new.
- Check used tires both externally and internally for water, moisture, foreign bodies or any sign of rust. If damage is found and assessed to be irreparable, the tire should be scrapped.
- The rim must be clean and in good condition, especially if it has already been used.

- Discard rusty, deformed, damaged or re-welded rims and rim components.
- Be careful not to damage any parts of the tire or tube during fitting and removal.
- Always use the proper specialized equipment and tools and the approved type of lubricant (never use silicone or petroleum-base lubricants).
- Clean the tire bead area and the contact area between the rim and the tire.
- Check that the tire, tube and the flap are perfectly compatible.
- In the case of TUBE TYPE tires, ensure there is no air between the tire and inner tube.
- For correct fitting of tube type tires, it is advisable to lightly powder and partially inflate the tube before placing it inside the tires in order to avoid creasing.
- Ensure that the tire is centred on the rim.

Lubricant procedure

Lubricate the rim bead seat, rim flange and tire bead with an appropriate fitting lubricant (e.g. Eurometer or a thin solution of vegetable oil, soap and water, or water only). The lubricant has good lubricating characteristics and dries relatively fast, which reduces the risk of the tire slipping on the rim. If this advice is not followed, bead damage or fracture could occur during fitting and/or rim slippage during normal operation, which may cause premature tire failure.



1. Bead
2. Bead Seat
3. Bead Seat well

Fitting procedure

N.B.: Fit and remove tires on DW type rims on the flange nearer the lower well (irrespective of valve position).

- Tubeless
- Fasten the valve core housing in the valve hole.
- Fit the tire on the rim, placing the inner bead over the flange at the top. Be sure the bead is not “hung up”on the bead seat flange. It should move into the rim well.

- Tube type
- Pull the tire towards the outside of the rim as far as possible in order to make room for the tube.
- Before inserting the tube in the tire, ensure that the valve is positioned at the bottom of the wheel. Align the stem with the valve hole and place the tube in the tire, starting at the bottom. Place the valve in the valve hole and screw the rim nut in place. Be sure that the tube is well inside the rim.

- Starting at the top, use the fitting tools to lift the outer bead up and over the rim flange, then down into the rim well.
  After positioning the first section of the outer bead in the rim well,place one hand against the section to hold it in place and then use the other hand to pry the remainder of the bead over the flange with the fitting tools.

- Centre the tire on the rim. This is extremely important in order to prevent broken beads and assist the correct positioning the bead on the rim bead seat during inflation.

Inflation pressure procedure

During tire inflation:

- keep a safe distance, always use a safety cage, if possible anchored to the wall and/or the floor, or with retaining chains
- if no cage is available, the fitter must ensure that no part of his body is in the possible trajectory of the valve mechanism or the caps during inflation. (See the shaded area shown in figures 1,2,3)
- do not leave equipment on the sidewall of the tire laid flat
- the use of suitable pressure limitation gauges is recommended
- use a filter and dehumidifier (or drier) on the compressed air line in order to avoid the entry of humidity/dirt

figure 1

figure 2

figure 3

Inflation must be performed in three steps

Step 1

Max inflation pressure
- 1,5 bar for tires with tire diameter 15”or less
- 1,0 bar for all other tires
- For wheels with BLS (tire lock) separate instructions must be followed

Ensure that the beads are correctly positioned on the bead seat. If not, deflate the tire and centre it on the rim.

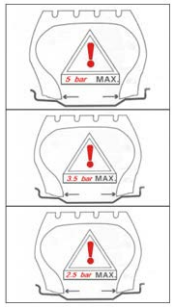
Step 2

Do not exceed the recommended maximum fitting pressure during inflation. In case of doubt or any difficulty, contact a specialist.
- Inflation up to max bead seating pressure with a safety device (blast cage or distance filling)

5 bar for tires fittes on 15-degree rims →

3.5 bar for Radial tractor tires →

2.5 bar for All other Agricultural tires fitted on 5-degree rims →



Note:
- It is important to inflate the tire to the max. bead seating pressure. This is to ensure the proper fit of the tire against the rim.
- If the beads are not correctly seated it is necessary to deflate, lubricate and inflate again. Repeat these operations until the beads are correctly seated.

Step 3

- After inflating up to max. bead seating pressure, the pressure must be adjusted to appropriate shipment or service pressure before removal from the safety device.
- Adjustment to service pressure with a safety device (safety cage or distance filling).
- In cases in which service pressure is higher than:
  - 4 bar for a tire with 5 bar - bead seating pressure
  - 3 bar for a tire with 3,5 bar - bead seating pressure
  - 2 bar for tire with 2,5 bar - bead seating pressure

the tire must firstly be inflated to a pressure 20% higher than the service air pressure and then adjusted to service pressure.

Removal procedure

- Deflate the tire by removing the valve core. After deflating, remove the rim nut and push the valve through the valve hole (for tube type tires).
- When the tire is completely deflated, place a hydraulic “bead unseating” tool between the tire bead and rim flange and force the bead off the bead seat.
- Carefully lubricate the tire bead and the rim flange area with an appropriate fitting lubricant.
- Push the outside bead at the bottom of the wheel into the well. Do not use excessive force. Insert tire lever under the bead at the top of the wheel and carefully pry the bead over the rim flange.
- Hold that bead section over the flange with a tire lever and use another to pry the next section over the flange.
- To remove the tire completely from the rim, insert the tire lever under the inside bead at the side of the tire. Carefully pry the rest of the inside bead over the rim flange, ensuring that the bead area at the top of the tire is down in the well of the rim.

Shipment pressure

Complete wheels shipped from the Trelleborg warehouse are usually inflated to the following shipment pressures:
- 1,0 bar for tractor and garden tractor wheels
- 1,5 bar for implement wheels
- 2,0 bar for other wheels

N.B.: These shipment pressures must be adjusted to the correct level according to the Technical Data tables, before use.