

# **TRI-RIM® System mounting instruction**

# 1) Components of the TRI-RIM®-wheel

#### Single tyre:

1 wheel adaptor



6 M20x2-TRI-RIM®-bolts with collar nuts (SW 27) and spring clips





1 rim (3 segments)



6 clamping plates





#### Twin tyre:

1 wheel adaptor 2 rims (2 x 3 segments) 1 spacer ring 6 M20x2-TRI-RIM®-bolts with 6 clamping sockets collar nuts (SW 27), washers and spring clips

Item numbers must be indicated on orders of spare parts; these can be found on the individual parts or in our TRI-RIM® brochure.



### 2) Mounting the TRI-RIM® wheel rims on tyres

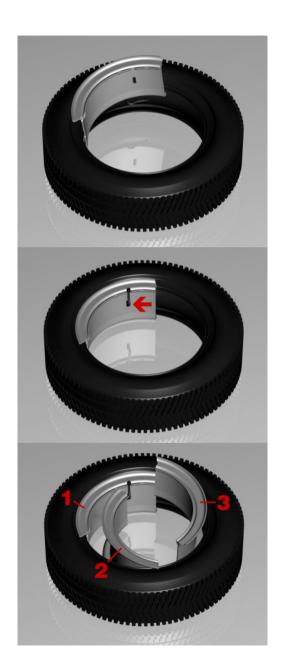
- Coat he tyre beads and clincher band with tyre mounting paste.

  This facilitates mounting and removal as well as preventing the tyre from sticking.
- Clean rusty wheel rims in the tyre seat and coat in rust-proofing paint.
- · Carefully de-burr the segment ends.
- Hollow the transition between the wheel rim base and the wheel rim flange.
- Insert the valve segment (1) diagonally.

- Insert the valve with arrow facing the groove.

  The wheel rim base must touch the tyre along the entire segment length.
- If necessary, squeeze re-rubbered tyres where the bead width is generally wide..

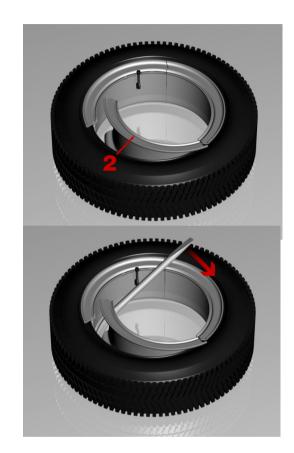
- Position the second segment (2) in front of the valve segment providing space for the third segment.
- Insert in the third segment (3) and connect to the valve segment.





- Now slide the segment (2) to off position.
- Check the valve position!

- Close the wheel rim using the closing lever 105 800 006 by attaching it to the opening lever 105 800 007 (as an extension) by exerting consistent force along the edge of the rim flange.
   Do not pull lever upwards! The valve must be in the centre of the valve groove when the wheel rim is mounted!
- Careful: Do not damage the hose!!!
- Fill the tyre with air in accordance with the manufacturer's instructions. Ensure the three wheel rim segments are positioned correctly.



# 3) Removing TRI-RIM® wheel rims from tyres

- Deflate the tyre fully and use the tube-purging valve if necessary.
- Before opening the wheel rim, it is advisable to press off or release the tyre beads from the edge of the tyre.
- Open the wheel rim using the opening lever 105 800 007 by attaching it to the closing lever 105 800 006 (as an extension). Use the mounting slot on the valve segment (1) for this.



## 4) Mounting of the TRI-RIM® wheel rims with tyres on the wheel adapter

## 4a) General

 Carefully clean the functional areas of all parts such as adapter heads, wheel rim bases, screws, clamping sockets and clamping plates.

To achieve perfect bracing and centricity of the wheel rim, the contact points on the adapter heads and the wheel rim base must not be coated with paint.

- Compensate for any damage to the adapter heads by filing over.
- Observe the specified toque when using the impact screwdriver.
- The nuts on the securing screws must always be tightened consecutively several times i.e. not diagonally.

Permissible torque for the M20-screws: 320 - 350 Nm

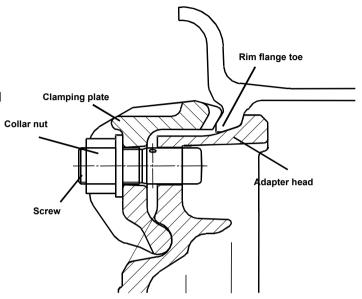
After a brief test drive as well as after another 100km or so the nuts must be examined for the specified torque.

## 4b) Mounting single TRI-RIM® tyres

- When sliding on the rim, ensure that both valve locks are between 2 adapter heads.
- Mount the top and bottom plates first.
- Attach the remaining clamping plates and tighten the nuts one at a several times, i.e. not diagonally.

Permissible torque for the M20-screws: 320 – 350 Nm

After a brief test drive as well as after another 100km or so the nuts must be examined for the specified torque.





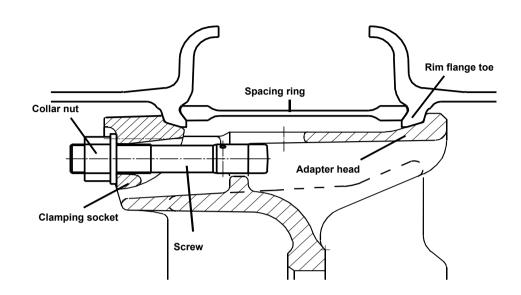


## 4c) Mounting dual TRI-RIM® tyres

- Slide on the inner tyre. The valve faces towards the outside of the vehicle.
   When sliding on the wheel rim, ensure that both valve locks are between 2 adapter heads.
- Slide on spacer ring. It is important here that both anti-twist devices are between 2 adapter heads.
- Slide on outer wheel rim.
- Mount the two top clamping sockets first, tighten the nuts a little.
- Attach the remaining clamping sockets. Tighten the nuts one at a time several Times, i.e. not diagonally.

Permissible torque for the M20-screws: 320 – 350 Nm

After a brief test drive as well as after another 100km or so the nuts must be examined for the specified torque.











# 5) Removing TRI-RIM® wheel rims with tyre from the wheel adapter

#### Single TRI-RIM® tyres

• Release the nuts, remove the clamping plates and lift off the wheel rim.

#### Twin-tired TRI-RIM®-wheel

- Loosen the nuts.
- Use the hook on the opening lever (105 800 007) to press off the clamping sockets.
- Release the nuts and clamping sockets fully and remove.
- Lift the outside wheel rim, spacer ring and inside wheel rim off the adapter.