

## 2.4.2. REPLACING THE REAR RIM

### Tools needed

- 1 spoke wrench
- 1 tensiometer + tension-reading conversion chart adapted to the tensiometer used

Rear wheel spokes must be fitted crossed 3 on both sides:

- **free wheel side**, the **traction spokes** are to be placed in the **slots' external holes**;
- **non drive side**, the **traction spokes** are to be placed in the **slots' internal holes**;

Start by preparing the spokes: screw the nipples onto the spokes until they lock.

Start with the free wheel side:



Insert a spoke complete with its nipple into the first hole to the right of the valve hole (with the valve hole near you).



Fix the head of this spoke into an inside slit of a slot on the free wheel side. This spoke must pass to the right of the wheel axle.

Repeat these 2 operations for all the spokes in this layer (1 rim hole in 4) by fitting the spokes into the slots in an anti-clockwise direction.

**These are non-traction spokes.**



Insert a new spoke complete with its nipple into the 3rd hole to the right of the valve hole (with the valve hole near you).



Fix the head of this spoke into an outside slit of a slot on the free wheel side. This spoke must pass to the left of the wheel axle.

Repeat these 2 operations for all the spokes in this layer (1 rim hole in 4) by fitting the spokes into the slots and rim in an anti-clockwise direction.

**These are traction spokes.**

Turn the wheel round and repeat all the operations described above in an identical manner for the non drive side:

- the spokes of the 1st layer fitted must be traction spokes (inside slits of the slots);
- the spokes of the 2nd layer fitted must be braking spokes (outside slits of the slots).

Then tighten each nipple uniformly in the rim (1 turn of the spoke wrench for each spoke and per wheel rotation) to tension the wheel.

Set the final tension and center the wheel (115 to 155 kg).