

## 2.2.2.2. Replacing the rear rim on Cosmic Elite and Cosmic Carbone SL wheels

### Tools needed

- 1 traditional spoke wrench (Cosmic Elite)
- 1 spoke wrench M40001 (Cosmic Carbone SL)
- 1 spoke wrench for aerodynamic spokes M40567
- 1 tensiometer + tension-reading conversion chart adapted to the tensiometer used

The references and lengths of spokes to be used are given in the product pages (pages 7, 8 and 9).

For the Cosmic Carbone SL wheel, the hub axle must be removed (see procedure in the 2003 technical manual, page 19). The free wheel body does not need to be removed. Nevertheless, do not manipulate it so as not to knock it out of position.

1. Start with the free wheel side and place the rim so it faces you with the valve hole near you;

**Warning: For the Cosmic Carbone SL wheel, the rim must be turned such that the traceability label (bar code) cannot be seen.**

2. Prepare for building the **1st half of the free wheel side (non-traction spokes):**

**2.1.** Thread the spokes into the **inside slots** of the hub:

- For the Cosmic Elite, such that the head of the spoke locates into the oblong hole;
- For the Cosmic Carbone, from the largest hole side;

**2.2.** Put one of these spokes in the **1st hole to the right of the valve hole** and screw the nipple until braking;

**2.3.** Do the same for all the spokes in this half, 1 hole in 4 on the rim;

3. Then build the **2nd half (traction spokes):**

**3.1.** Thread the spokes into the **outside slots** of the hub:

- For the Cosmic Elite, such that the head of the spoke locates into the oblong hole;
- For the Cosmic Carbone SL, from the largest hole side;

**3.2.** Put one of these spokes in the **3rd hole to the right of the valve hole** and screw the nipple until braking;

**3.3.** Do the same for all the spokes in this half, 1 hole in 4 on the rim;

4. Turn the wheel over to prepare for building the non-drive side (radial lacing):

**4.1.** Put the spokes in the hub:

- Cosmic Elite: unclip the hub cap, insert the spokes and clip the hub cap back on;
- Cosmic Carbone SL: thread the spokes from the inside of the hub;

**4.2.** Put the spokes into the remaining holes of the rim and tighten the nipple until braking;

5. Tighten each nipple evenly to tension the wheel;

6. Set the final tension and center the wheel (refer to pages 6 and 7 for the tension adapted to the wheel).

