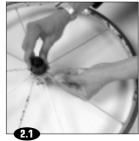
## 3.2.2.3 Replacing the rear rim

## **Tools** needed:

- 1 spoke wrench alu M40494 or M40652
- 1 aerodynamic spoke maintenance wrench M40567
- 1 tensiometer + tension-reading conversion chart adapted to the tensiometer used.
- Start on the free wheel side.
- 2 Turn the rim facing you to have the 2 raised indicator bumps to the right of the valve hole (valve hole near you) and prepare the free wheel side:
  - 2.1 Put a spoke in the first hole to the right of the valve hole (hole near the raised indictor bumps) tightening the integrated nipple in the rim one turn and proceed in the same manner, 1 hole out of 2 for all the spokes on the free wheel side (radial spokes).
  - 2.2 Put the spokes in the hub on the free wheel side. Pivot the spokes around themselves until they can't turn anymore. Starting from the valve hole, the 1st and 3rd spokes go in the same slot. The other spokes on this side are positioned in the same manner: by groups of 2 in the same slot.
  - 2.3 Mount the spoke retention clip and make sure you don't bend it.
- 3 Turn the wheel over to prepare building the side opposite the free wheel:
  - Tighten a spoke in the first hole to the right of the valve hole one turn and mount this spoke in the inside slot on the hub on the side opposite the free wheel. This is a pulling spoke. Pivot it around itself and make sure it can't turn anymore.
  - **3.2** Proceed in the same manner for all the pulling spokes: 1 hole out of 4 in the rim and always in the inside slots on the hub on the side opposite the free wheel.
  - 3.3 Then mount the braking spokes in the outside slots on the hub on the side opposite the free wheel and tighten them 1 turn in the remaining rim holes. Pivot them around themselves and make sure they can't turn anymore.
- Tighten every spoke evenly (1/2 turn for every spoke on the wheel) to put tension on the wheel.
- Adjust the definitive tension and centering of the wheel (130 140 kg for the rear wheel on the free wheel side).

Since the brake ring locks the nipples in place, it is not necessary to use thread lock.













CAUTION : manipulating the integrated nipples greatly affects the spoke tension and consequently the wheel adjustment.

In the final phase of adjusting the tension, 1/4 turn of the nipple corresponds to about 0.3 mm of lateral rim movement.