

4.2.2.2. Replacing the rear rim on the Crossland and Crossmax Enduro Disc wheels

The 2 main principles of building the rear Crossland and Crossmax Enduro Disc wheels are the following :

- **Free wheel side** : The **braking spokes** are placed **in the inside slots** on the hub, and the **pulling spokes in the outside slots**.
- **Disc side** : The **braking spokes** are placed **in the outside slots** on the hub, and the **pulling spokes in the inside slots**.

**Tools needed**

- 1 alu spoke wrench M40494 or M40652 (for the Crossmax Enduro Disc wheel)
- 1 classic spoke wrench (for the Crossland wheel)
- 1 tensiometer + tension-reading conversion chart adapted to the tensiometer used

1. Start on the free wheel side.
2. Turn the rim in front of you so the 2 raised indicator bumps are to the right of the valve hole (valve hole near you) and prepare to build the 1st half of the free wheel side :
  - 2.1. Put a spoke in the first hole to the right of the valve hole (hole near the raised indicator bumps). Then put a spoke in 1 out of every 4 holes :
    - For the Cosmos and Ksyrium Equipe wheels : Tighten the nipples on the spokes until they start breaking.
    - For the Crossmax Enduro wheel : Tighten the nipple on the rim until the red brake ring disappears.
  - 2.2. Insert these spokes in the inside slots on the hub free wheel side. These are braking spokes.
3. Prepare building the 2nd half of the free wheel side :
  - 3.1. Put a spoke in the 3rd hole to the right of the valve hole tr. Then put a spoke in 1 out of every 4 holes, following the nipple adjustment instructions above.
  - 3.2. Insert these spokes in the outside slots on the hub free wheel side. These are pulling spokes. The free wheel side is ready.
4. Turn the wheel over to prepare building the 1st half of the side opposite the free wheel.
  - 4.1. Put a spoke in the 1st hole to the right of the valve hole. Then put a spoke in 1 out of every 4 holes, following the nipple adjustment instructions above
  - 4.2. Insert these spokes in the inside slots on the hub on the side opposite the free wheel. These are pulling spokes.
5. Prepare building the 2nd half of the side opposite the free wheel.
  - 5.1. Put a spoke in the 3rd hole to the right of the valve hole. Then put a spoke in 1 out of every 4 holes, following the nipple adjustment instructions above.
  - 5.2. Insert these spokes in the outside slots on the hub on the side opposite the free wheel. These are braking spokes. The side opposite the free wheel is ready.
6. Tighten every spoke in the rim evenly to adjust the tension of the wheel.
7. Set the final tension and center the wheel (refer to product pages to know which tension is adapted to each wheel).

The spokes have an anti-rotation system, which prevents them from turning in the hub. When setting the tension of the spokes, they will automatically lock in the hub.

Since they are an ABS type of nipple (Crossland) or integrate a brake ring (Crossmax Enduro Disc), it is not necessary to use thread lock.

**CAUTION** : Manipulating the spoke nipples on the Crossmax Enduro Disc wheel 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.

