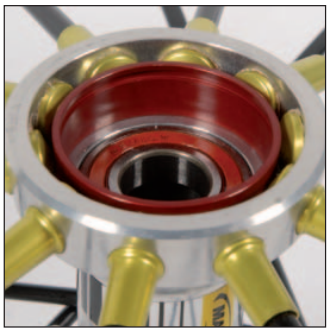
IMPORTANT NOTE FOR FITTING TRACOMP SPOKES

With the R-Sys Tracomp concept, the nipple and the tubular spoke are fixed together. Thus, when turning the nipple of a tubular spoke, the spoke itself turns along its entire length (nipple, tube and head).

In the Tracomp concept, the heads of the tubular spokes are held fixed inside the hub body by the Tracomp ring in order to withstand the compression. This prevents the spokes from turning freely.

CONSEQUENTLY, BEFORE TURNING THE NIPPLE OF A TUBULAR SPOKE (TRUING, REPLACING A SPOKE, REPLACING A RIM), THE TRACOMP RING MUST FIRST BE REMOVED FROM THE HUB.



IDENTIFYING A DAMAGED CARBON TRACOMP SPOKE

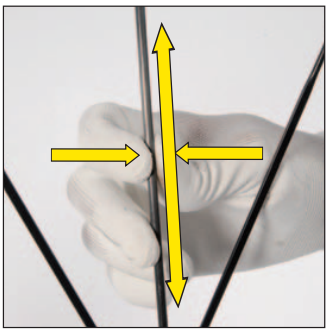
Tools needed

- Safety gloves

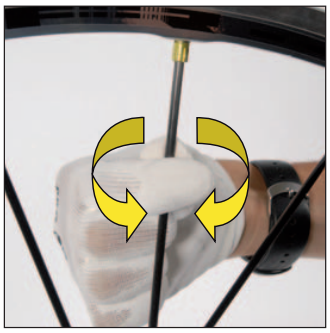
Because of their unidirectional carbon construction, and particularly after a shock, the carbon Tracomp spokes may split: if this happens, they are no longer able to support compression forces, but they continue to support the traction forces associated with spoke tension.

In this case, the wheel does not go out of true and the shape of the spoke stays the same, making it difficult to detect a damaged spoke.

To identify a damaged spoke, proceed as follows:



Press the carbon Tracomp spoke with your fingers along its entire length.



Carry out rotational movements around the carbon Tracomp spoke, along its entire length, using your fingers.

If a cracking can be heard or if the spoke feels elastic when rotated, then the spoke is broken and must be replaced.

When a spoke is broken, it is impossible to center or laterally and radially true the wheel because the head of the spoke does not turn at the same time as the nipple.

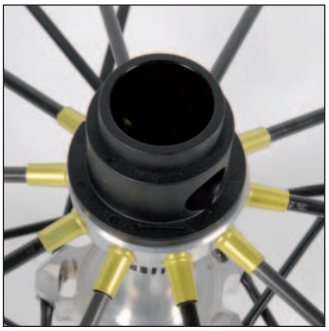
REMOVING / REFITTING THE TRACOMP RING

Tools needed

- Tracomp ring tool 996 080 01
- 1 x 4/5 mm flat screwdriver
- A mallet
- 1 x 5 mm Allen wrench and 1 x hub wrench M40123 (front wheel) or 2 x 5 mm Allen wrenches (rear wheel)

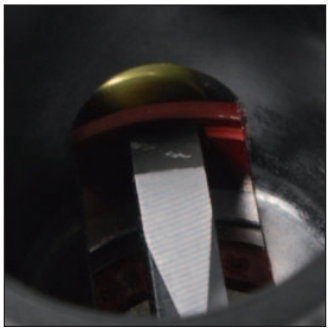
Removing the Tracomp ring:

Remove the axle in accordance with the procedure for the hub in question (refer to **www.tech-mavic.com** or previous years' technical manuals).

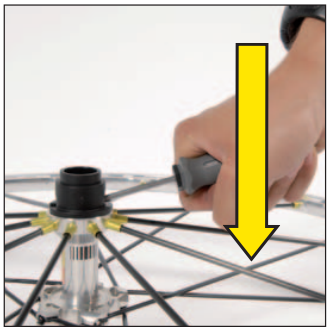


Place the Tracomp ring tool 996 080 01 onto the hub in such a way the picture of the screwdriver is visible.

Pass the tip of the screwdriver through the hole in the Tracomp ring tool.



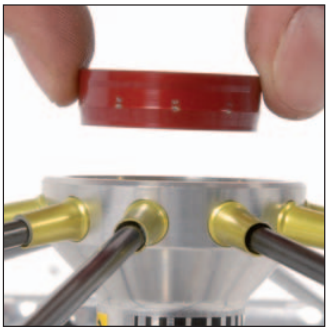
Insert the tip of the screwdriver through the slot in the Tracomp ring tool and into the groove of the Tracomp ring.



Push the screwdriver handle downwards to lever out the Tracomp ring.

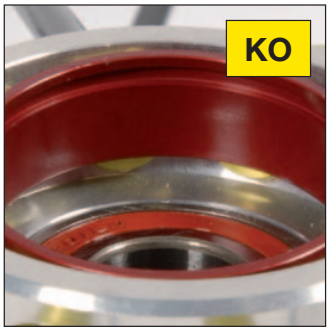
The spokes are now able to turn freely and can be extracted.

Refitting the Tracomp ring:



Present the Tracomp ring to the spoke heads with the conical side downwards and the inside groove facing upwards.

Place the Tracomp ring tool 996 080 01 against the ring in such a way the picture of the mallet is visible.



Forcefully fit the Tracomp ring into the hub using a mallet. The entire surface of the bottom side of the Tracomp ring must be in contact with the hub body.

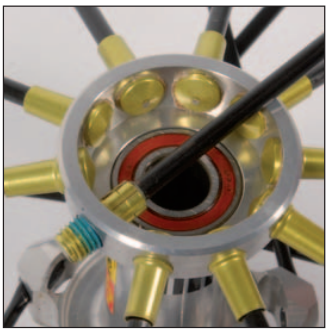
Refit the axle in accordance with the procedure for the hub in question (refer to **www.tech-mavic.com** or previous years' technical manuals).

TRUING, REPLACING A TRACOMP SPOKE OR THE FRONT RIM ON THE R-SYS WHEEL

Tools needed

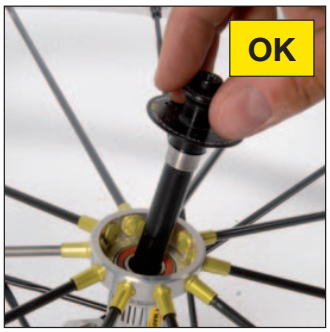
- Tracomp spoke wrench 996 079 01
- Tracomp ring tool 996 080 01
- A flat screwdriver
- A mallet
- 1 x 5 mm Allen wrench and 1 x hub wrench M40123 (front wheel) or 2 x 5 mm Allen wrenches (rear wheel)

Remove the Tracomp ring in accordance with the appropriate procedure (see page 29 or consult the **www.tech-mavic.com** website);



Once the Tracomp ring has been removed, fully unscrew the nipple and slide the spoke along the hole in the hub to remove it. Refit the new spoke in the same way.

Screw the nipples into the rim using spoke wrench 996 079 01 until the thread lock has disappeared.



Without refitting the Tracomp ring, replace the axle so as to be able to place the wheel in the centering unit.

Set the final tension and center the wheel taking care to respect appropriate spoke tensions;

Remove the axle once again in order to refit the Tracomp ring in accordance with the appropriate procedure (see page 29 or consult the **www.tech-mavic.com** website);

Refit the axle in accordance with the appropriate procedure (see page 23 or consult the **www.tech-mavic.com** website);

If you have to replace the spoke with the integrated magnet, you should first of all unclip the plastic clips that hold the magnet in place in order to thread the spoke through the hole in the hub.