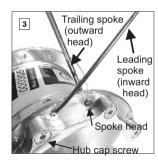
## 2. The wheel

### Wheel lacing

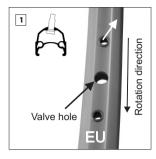
The number of times that the spokes are crossed over depends entirely upon the size of the rim. All rims <u>larger than 24"</u> in diameter <u>must be laced in a two</u> <u>cross</u> pattern. All <u>24" and smaller</u> <u>sized</u> wheels must be laced <u>up in a</u> <u>one cross</u> pattern.

Due to the high torsional strength of the hub casing, the use of a reversed lacing pattern on the brake disk side (DB versions) is not necessary.

Further detailed information with regards to wheel lacing can be found in the Appendix.



The leading spokes are laced so that the spoke head always faces inwards. The trailing spokes are laced so that the spoke head always faces outwards. All spokes should be crossed over each other.



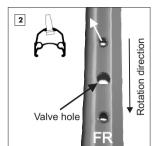
Rims are manufacturered in diferent ways. The type of nipple hole pattern must be determined before lacing the wheel as this will require a different lacing method to be followed. In picture 1 the European nipple hole pattern (EU) is shown. The first spoke hole behind the valve hole lies to the direction of the right hand hub flange (pay attention to the rotational direction of the rim).



The wheel lacing method is determined by the nipple hole pattern. The correct lacing method for both types of hole pattern can be found in the appendix.



Rotating the hub whilst wheelbuilding will be easier when the Rohloff SPEEDHUB 500/14 is in gear #11. This gear can be selected by pulling the hub cables (internal gear mech), or turning the hexagonal peg on the gear transfer box with an 8mm wrench (external ge-



In picture 2 the French nipple hole pattern (FR) is shown. The first spoke hole behind the valve hole lies to the direction of the left hand hub flange (pay attention to the rotational direction of the rim).

If the spoke holes of the rim are all centrally drilled, then the lacing method for a European nipple hole pattern should be followed (see appendix).



Spokes must not cross directly over the hub cap fixing screws on wheels which are 24" or smaller in diameter!

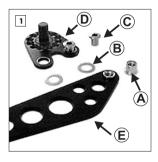
# Rohloff

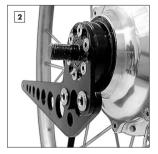
# 3. Mounting additional parts

The Rohloff SPEEDHUB 500/14 comes with additional parts according to the corresponding version. These parts must be mounted first.

#### 3.1 Standard long torque arm

All *Rohloff SPEEDHUB 500/14* versions not carrying the codes OEM or OEM2 come included with the long torque arm for supporting the torque. This must be mounted to the axle plate.

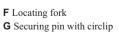




Push the threaded bushes through the torque arm from behind. Place a washer over each of the bushes and then the axle plate over these washers (pictures 1 and 2 show the TS version). Secure the two parts together with the mounting bolts. (M8x0.75 - 5mm allen key, tightening torque: 7Nm/61in.lbs.).

- A Threaded bush
- **B** Washer
- **C** Mounting bolt
- **D** Axle plate (CC or TS)
- E Long torque arm





**H** Circlip



On the CC versions, the locating fork must also be attached to the torque arm. Place the forked end over the torque arm, push the securing pin through the two parts and secure the other end in place with the circlip. TS Versions must have a torque arm clamp mounted instead of the locating fork.



Make sure that both circlips sit correctly onto the securing pin.

ar mech).