

**Wheel lacing for rims with a European spoke-hole pattern**

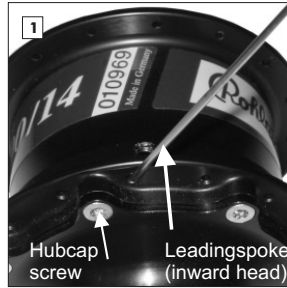
The following written wheel lacing method always concentrates itself around the directional rotation of the wheel, the method also only applies to wheels with a two cross lacing pattern. For simple one cross lacing patterns, pay attention to the numbers in brackets.

**POINTER**

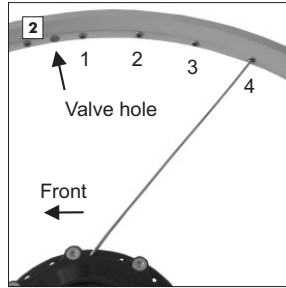
Trailing spokes cross in front of Leading spokes.  
Leading spokes cross behind the Trailing spokes.

**ATTENTION**

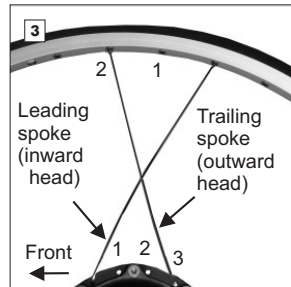
Further information on correct spoke lengths and tension (mind. 1000N with inflated tire) can be found in the section 'The Wheel' and also in the *Appendix*.



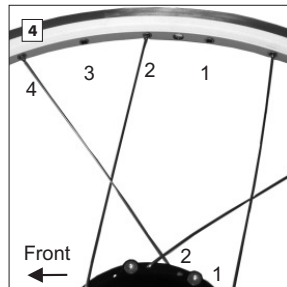
Start to lace up the wheel from the hubcap side of the hub. The first leading spoke should be inserted from the inside of the hub flange behind a hubcap screw (spoke head facing inwards).



The end of this spoke should be inserted into the nipple hole of the rim that is 4 holes away from the valve hole.



Three holes (one hole) behind this first spoke is where the trailing spoke should be inserted, this spoke is to be inserted from the outside of the hub flange (spoke head facing outwards). This spoke is to be crossed over the first spoke and inserted into the nipple hole of the rim that is two holes before that of the first spoke.



The next trailing and leading spokes are laced into the rim in exactly the same way. The only difference being that they enter the hub flange two holes away from the last respective leading or trailing spoke, and that they enter the rim four holes away from the last respective spokes. Continue this process in pairs of leading and trailing spokes until all the spokes have been laced into the hubcap side of the wheel. Turn the wheel

**Wheel lacing for rims with a French spoke-hole pattern**

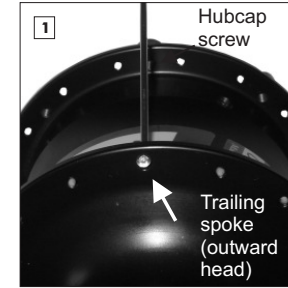
The following written wheel lacing method always concentrates itself around the directional rotation of the wheel, the method also only applies to wheels with a two cross lacing pattern. For simple one cross lacing patterns, pay attention to the numbers in brackets.

**POINTER**

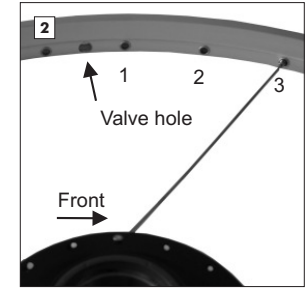
Trailing spokes cross in front of Leading spokes.  
Leading spokes cross behind the Trailing spokes.

**ATTENTION**

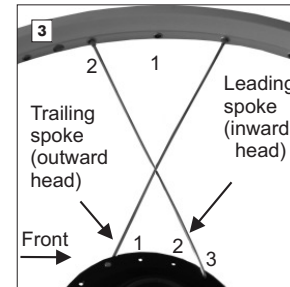
Further information on correct spoke lengths and tension (mind. 1000N with inflated tire) can be found in the section 'The Wheel' and also in the *Appendix*.



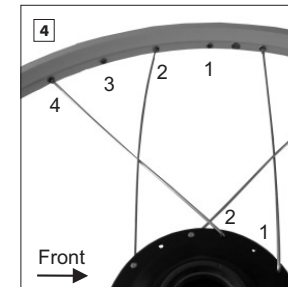
Start to lace up the wheel from the sprocket side of the hub. The first trailing spoke should be inserted from the outside of the hub flange opposite a hubcap screw (spoke head facing outwards).



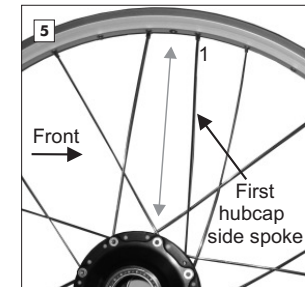
The end of this spoke should be inserted into the nipple hole of the rim that is 3 holes away from the valve hole.



Three holes (one hole) behind this first spoke is where the leading spoke should be inserted, this spoke is to be inserted from the inside of the hub flange (spoke head facing inwards). This spoke is to be crossed over the first spoke and inserted into the nipple hole of the rim that is two holes behind that of the first spoke.



The next trailing and leading spokes are laced into the rim in exactly the same way. The only difference being that they enter the hub flange two holes away from the last respective pull or cross spoke, and that they enter the rim four holes away from the last respective spokes. Continue this process in pairs of leading and trailing spokes until all the spokes have been laced into the sprocket side of the wheel. Turn the wheel



The valve hole is to be found opposite from a hubcap screw. The spoke hole of the flange that is two holes behind this, is where the first spoke on the hubcap side is to be inserted from the outside (spoke head facing outwards). This spoke is to be inserted into the first nipple hole of the rim that lies behind the valve hole. Lace all the remaining spokes in the same pattern as with the other side of the wheel (Fig. 3 and 4).