Assembly Instruction SCHMOLKE Carbon Wheels

Maximum total weight 110 Kg

Introduction and disclaimer: building wheels is the most striking yet complex task when working on a road bike and is thus reserved for professional mechanics. If you are in doubt looking at the steps below, refer directly to www.schmolke-carbon.com or your local bike shop. SCHMOLKE Carbon is not responsible for any damages caused by a wheel not being built correctly and thoroughly.

Recommended components: In order to meet the SCHMOLKE Carbon rim quality we recommend similar quality components as listed in "Manual SCHMOLKE Carbon Wheels" on page 2.

Rimbrake	HUB	FW 20 PIECES	BW NON DRIVE 12 PIECES	FW DRIVE SIDE 12 PIECES
30 TLO	MIG45/MAG150	286 mm CX-Super straight	286 mm CX-Super straight radial	286 mm CX-Ray bent
45 TLO	MIG45/MAG151	272 mm CX-Super straight	274 mm CX-Super straight radial	272 mm CX-Ray bent
30 SL	MIG70/MAG170	282 mm CX-Ray bent	292 mm CX-Ray bent crossed	286 mm CX-Ray bent
45 SL	MIG70/MAG170	266 mm CX-Ray bent	276 mm CX-Ray bent crossed	272 mm CX-Ray bent
30 TLO	SL/SL2	286 mm CX-Super bent	292 mm CX-super bent crossed	286 mm CX-Ray bent
45 TLO	SL/SL2	272 mm CX-Super bent	274 mm CX-super bent radial	272 mm CX-Ray bent
Disc Brake	HUB	FW 24 PIECES	BW NON DRIVE 12 PIECES	FW DRIVE SIDE 12 PIECES
30 SL	King/Kong	284 mm CX-Ray bent	286 mm CX-Ray bent	282 mm CX-Ray bent
45 TLO	SPD2	274/280 CXRay straight	272 mm CX Ray straight	280 mm CX Ray straight
45 TLO	Prince/Princess	274/276 mm CX-Super straight	280 mm CX-Ray straight	282 mm CX-Ray straight

Maximum spoke tension 1100 N

Tools

ParkTool truing stand TS 2.2
Tune TT01 DT Swiss Square spoke nipple spanner, or DT Swiss
ParkTool spoke fixation tool for aero blade spokes BSH-4
ParkTool tension meter TM-1
Titanium grease

Building the wheel: The assembly process starts on a workbench with the radial side of the wheel. For the rear rim, the spokes must not be on the side of the drivetrain sticker. Insert the spoke nipples in the spoke spanner and apply a little bit of grease to hold the washer. Mind the fact that the spoke nipples – as opposed to commonly built wheels – are upside down. A headlamp may simplify matters inserting the nipple including the washer into the rim and fixating it on the spoke thread. Start with three revolutions for each spoke. In the following, the spokes are tightened medium firm while truing the wheel for the first time both laterally and as to their height. The *absolute* spoke tension should be 1100 N. Also refer to the maximum tension of the hub manufacturer. The *relative*

spoke tension can be evaluated and visualized with the *Wheel Tension App* provided by ParkTool (http://www.parktool.com/wta).

Final confirmation: Without a skewer mounted, the assembled wheel is to be laid down flat on the ground (a piece of wood protects the hub) and stressed with a maximum of 1000 N in order to have the spokes set. True the wheel again thereafter and repeat the process if necessary.

Manual SCHMOLKE Carbon Wheels

Maximum total weight 110 Kg

Recommened components

Spoke nipple:	DT Swiss Pro Lock 12 mm
Washer:	Sapim HM Washer
Tire width:	23 - 28 mm
Tire pressure:	72 - 116 PSI

Mount the tire on one side of the rim and insert the tube (minimum valve length 60 mm) in the valve hole. Mount the second side of the tire; use a tire lever if necessary, yet non made of metal as it might harm the carbon fiber. Mind the tube not being bruised between the rim and the tire. Inflate the tire to the recommended tire pressure as stated by the tire manufacturer and confirm that it sits evenly. Mount the cassette on the freehub. The HG slots guarantee for it to sit in the correct position. Tighten the cassette screw with approximately 40 Nm. Eventually mount the rear skewer minding the manufacturer's manual. A quick release skewer that is not closed correctly can cause a crash and lead to hazardous injury or death. Align the break pads with the top end of the rim being 1 mm below it. This way you protect the rim decals from being damaged. Do not ride with tire pressures below 58 PSI to protect the rim from punches. A carbon fiber rim is on principle more vulnerable than an Alloy rim.

Warranty SCHMOLKE Carbon Wheels

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We offer a two-years warranty on our rims. For complete wheels, this includes broken spokes as well as the individual components of our hubs. On top of this, we offer a crash replacement policy that exceeds the two years. In case of damabe please contact us info@schmolke-carbon.de with a detailed description and a proof of purchase and we take care of your wheels.