FOIL FRAME KIT DI2 ASSEMBLY

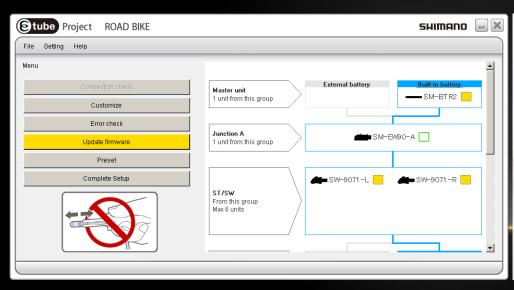






PREPARATION

- Connect all Shimano parts and connect via SM-PCE1 or SM-BCR2 to laptop
- update all components with e-tube software
- Check function of drivetrain





SPEC LIST SHIMANO DI2 WIRES



Install all Shimano components according to Shimano installation guidelines !!!!!!

Bar assembly

Start with the Combo setup

Easier access for cable routing, when not on the bike.



2x 350mm Di2 cable

Turn bar upside down

Push cable from outside entry to the center

Pull out with a hook (spoke head)

Please make sure you have a small loop of Di2 wire after the exit from the shifter to help prevent damage or over tensioning of the wire after the bar tape have been installed.



1x 1200mm Di2 cable

Push cable from right to the center Pull out with a hook (spoke head)

(English brake setup: use left hole)



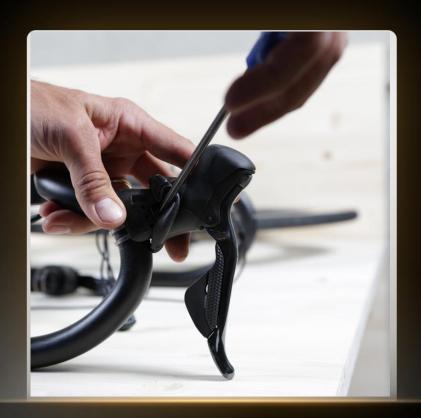
SM-EW-90-A 3 port Junction box

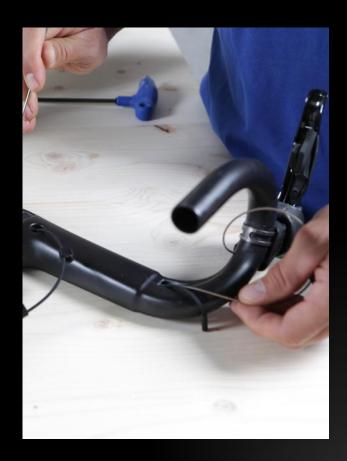
Connect all cables to 3 port junction
Use Shimano tool to ensure a firm click

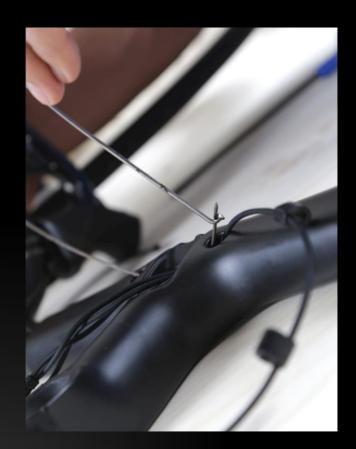


Mount brake leavers

Make sure the inner brake cable has been installed correctly to the brake lever







- Push inner brake cable from the outside through the bar
- Pull cable out with a hook (spoke head)
- Be careful to not damage the polimer coating



Shimano Direct mount Quick release

For rear brake adjustment, it is recommended to use the QR

Place either 5cm from bar

Or

In middle of the outer casing under BB.



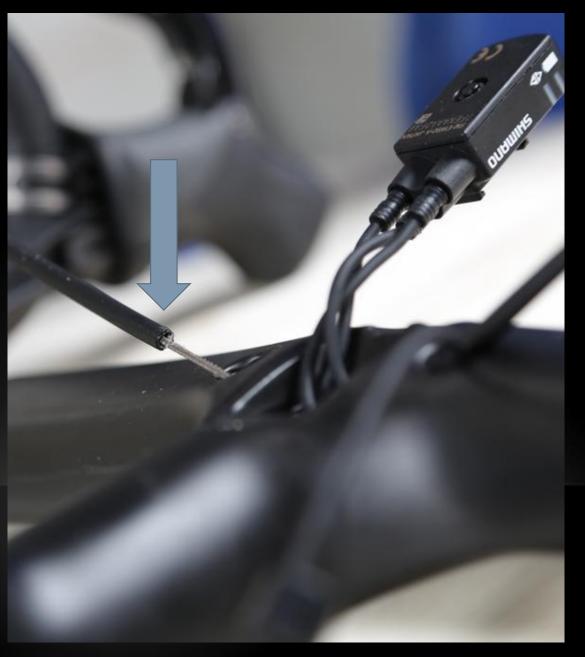
Install outer casing

Measure outer brake casing to right length

Slide over the end of inner cable and push through the bar

A little oil or grease on the outside, will help to slide the cable through

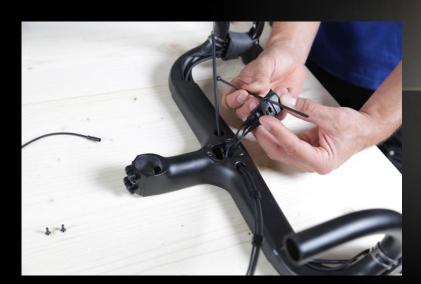
Ensure the outer casing sits tight in the brake leaver



Fix junction to cover

Fix junction box with a zip tie to the cover

Make sure the button is placed correctly under hole







Slide junction into combo

Slide junction box into the opening. From the front with a 45° angle

Make sure the button is place correctly under hole

Align correctly and fix with the correct sized Allen key 1-1,5Nm



Add Cable Guide

First insert the Di2 wire through the cable guide.

Pass the Brake inner cable through the cable guide were indicated.

Pull the inner brake cable through the guide until the brake outer casing meets the cable guide.



Install fork

Place bigger 1 ¼ bearing on fork crown and smaller 1 1/8 on top

Use assembly grease

Add compression ring and head set cover

Place needed spacer (2; 5; 10; 20mm)

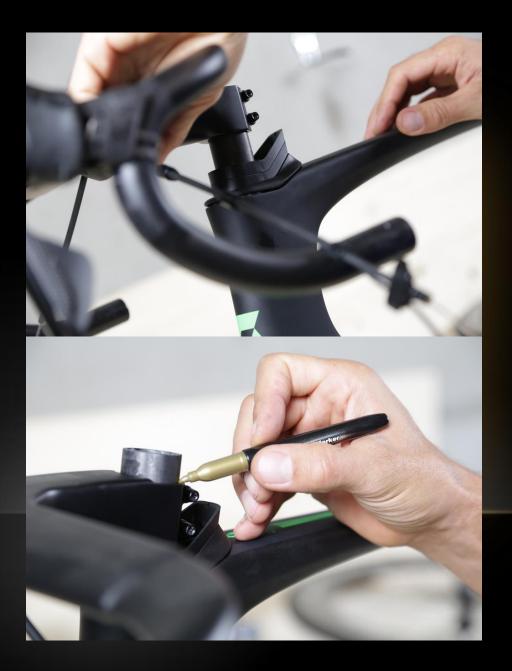




Cut fork

Measure correct bar/ stem high and cut fork to correct length

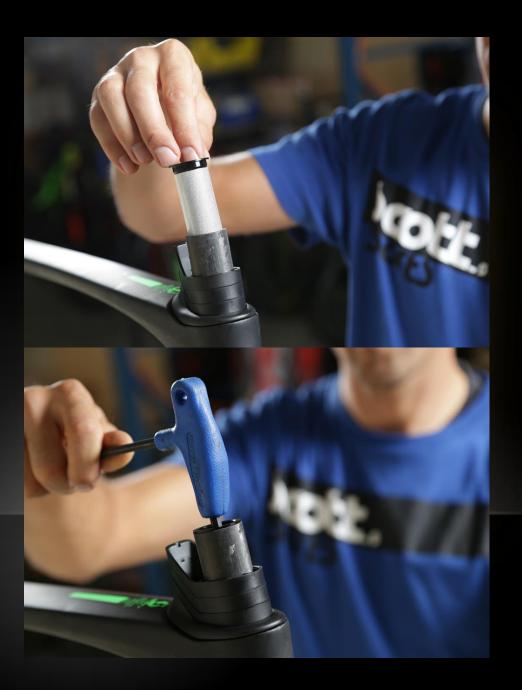
Cut fork 3-4mm shorter than top of the stem marking



Install head set expander

Pre tight the expander, so you can slide into the steerer under a little tension

Tighten expander with 8-10Nm



Place combo

Install stem and place stem cap with a loose bolt

Insert rear cap from the rear (to position, lift stem 1-2mm)

Tight top cap to adjust head set play

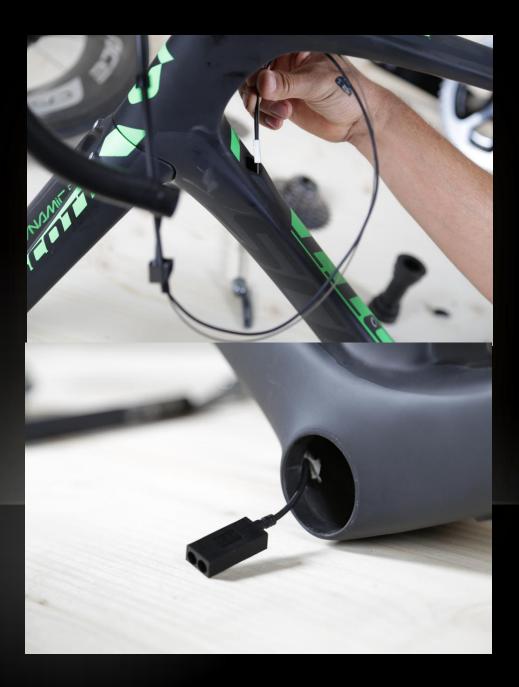
Fix stem with max 5Nm



Cable routing to BB

Fix Di2 cable to inner brake cable and push down to the BB

Add internal junction



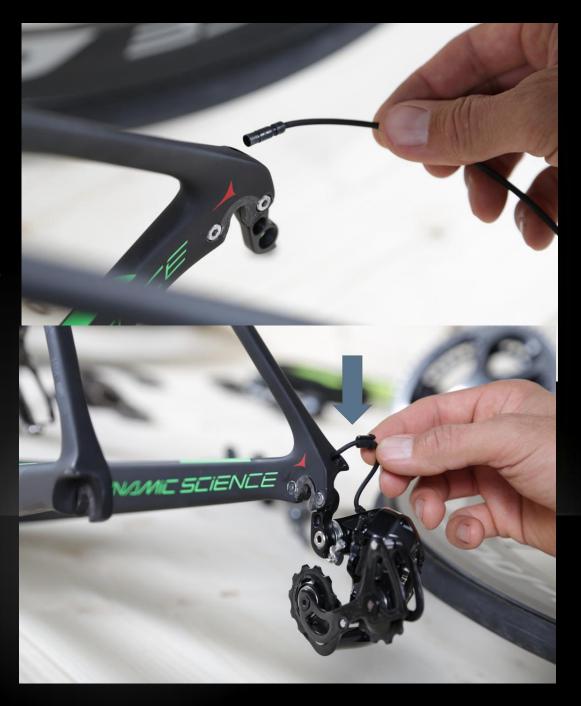
Rear Derailleur

Push 650mm cable from the rear dropout to BB

Exit and plug into junction

Mount RD

Place rubber seal over cable and push into dropout hole



Front Derailleur

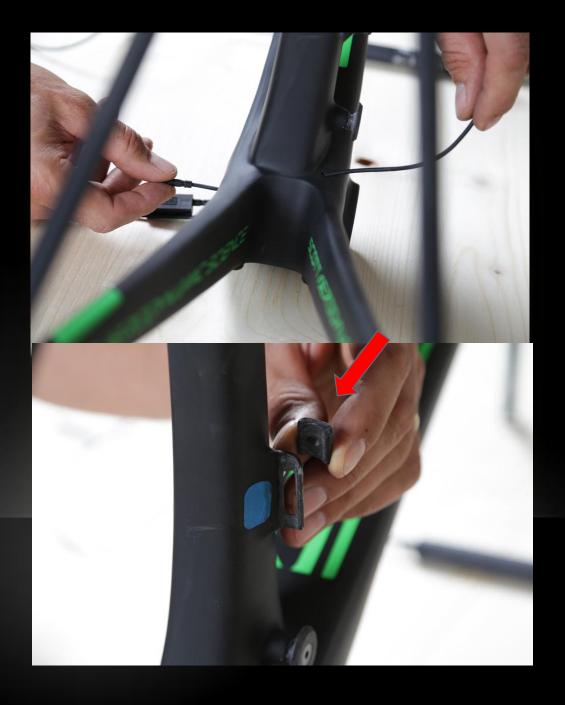
Push 250mm Di2 cable from the top side, through and out of the BB

Plug into junction

Install FD with the frame specific Carbon plate. Thicker edge to the outside

Remove the original Shimano part

Attention: Carbon hanger will be damaged with non correct parts



Front Derailleur

Tight FD and adjust the frame stopper to tension

Without stopper, the FD can damage the Carbon hanger, due to its very powerful engine

This also improve shift performance

Place rubber seal over cable and secure in the hole



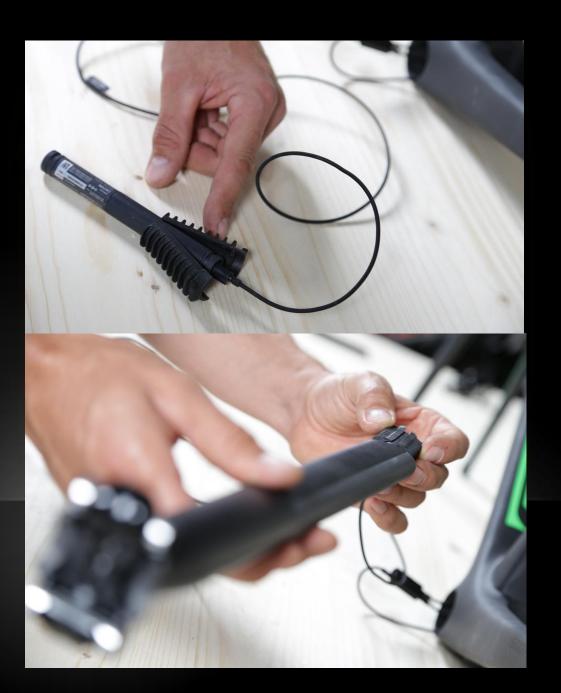
Internal battery

Place rubber seals over battery

Push into seat post till only few mm are outside

Make sure, to align rubber correctly

Front and rear specific pieces



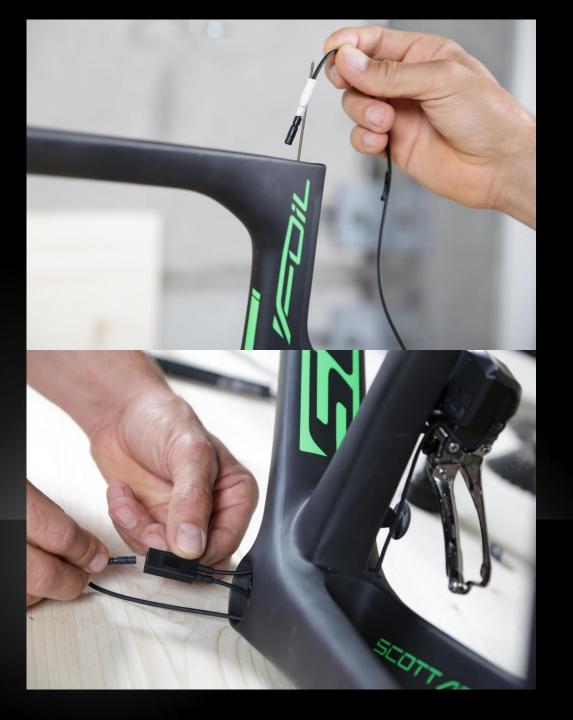
Battery cable

Push a inner brake cable from the BB up the seat post

Attention: the hole is very small from BB to downtube and the rivets of the bottle cage can make the cable stuck

Fix the Di2 cable to it and pull it down

Fix all 4 cables to junction and push into BB and downtube



Seat post clamp

Add grease to the bolt

Make sure no grease is getting on the concave contact area to the post

place fixation with front side forward into frame



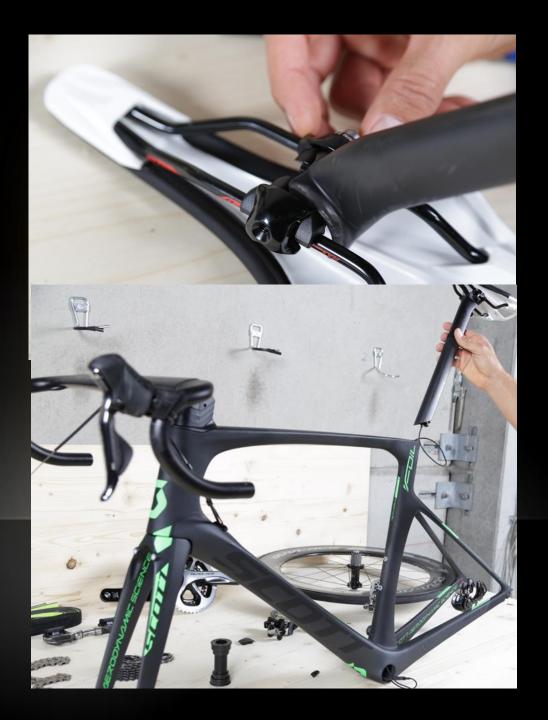
Seat post

Install saddle to the post

Attention: there are rail specific adapters to the fixation for steel and carbon rails

Wrong adapter can damage carbon rail and have saddle not secure in position

Slide post into frame. Watch not to damage Di2 cable. Pull cable slightly from the bottom



BB

Place cables securely into BB and press the pressfit BB with the Shimano tool into the frame

Close the BB hole with the rubber plug



Rear brake

Mount the rear brake

Pull the inner cable out of hole (hook)

Place the cable stop and measure the outer casing to the correct length

Make sure cable can move freely under full braking



Rear brake

Fix inner cable



Front brake

Fix both screws to the sockets

Make sure the brake spring stays in position.

Adjust cable length as usual



Drive train

Push axle through BB ad fix left crank arm with 13-15Nm

Fix chain with compatible chain tool

Make sure the orientation of the chain is correct.



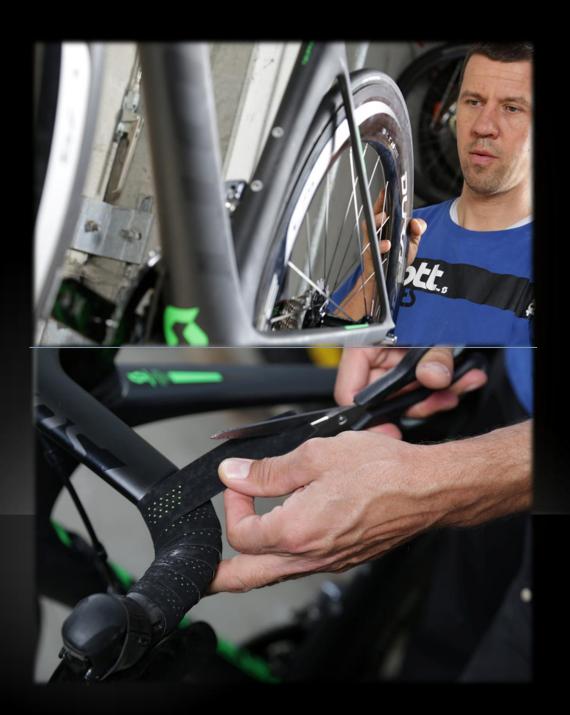


Final

Place wheels straight in the frame

Check brake adjustment and align brake pads correct to rim

Wrap handle bar tape and cut to length after the bend in the top of bar



Enjoy your ride

