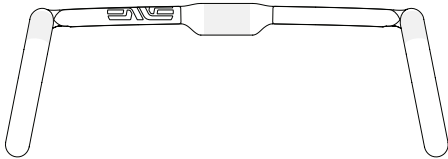




ENVE® Composites LLC
Ogden, UT 84404, USA

ENVE® SES AERO ROAD BAR MECHANICAL & ELECTRIC CABLE ROUTING INSTRUCTIONS



YOU WILL NEED:

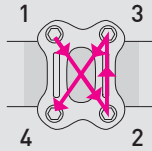
- ENVE SES Aero Road Bar
- Hacksaw w/ fine tooth carbon blade
- Emory cloth
- Cutting guide
- ENVE bar end replacements
- Shimano EW-RS910
- Shimano EW-JC130-SM
- Shimano EW-WU111
- Shimano EW-SD50 350mm E-Tube wire
- 4mm, 5mm allen wrench
- Derailleur cable (x2)
- 5mm Brake housing ferrule (x2)
- Pick tool
- Electrical tape

MECHANICAL SHIFTER INSTALLATION

1. Install Handlebar

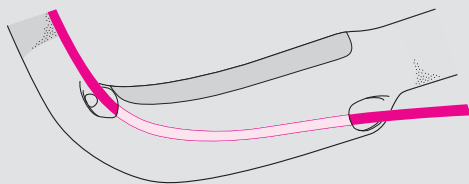
- Install the handlebar by centering the bar to the stem and rotate to the desired position.
- Install the stem faceplate over the handlebar and tighten the bolts to 5Nm.

*NOTE: Tighten bolts alternating opposite corners



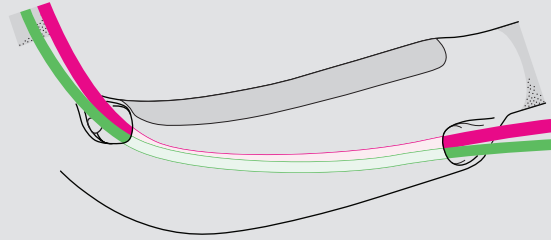
2. Install Shifters and Housing

- Install shifters to desired location and tighten to shifter-specified torque ratings.
- Route **brake housing** in through the port near the shifter, and out through the port near the stem.



2. Install Shifters and Housing (Cont'd)

- Route the **derailleur housing** behind the **brake housing** towards the back of the handlebar on both sides. Use a pick tool if necessary.



*NOTE: Make sure housings are seated into shifters properly.

3. Complete Standard Installations

- Install brake and derailleur cables by standard procedure, and make any necessary adjustments.

SHIMANO DI2 JUNCTION BOX AND WIRING INSTALLATION

****Follow these steps before installing handlebar on bike****

1. Cut Bar Ends at Specified Guide lines (25mm from ends of bar)

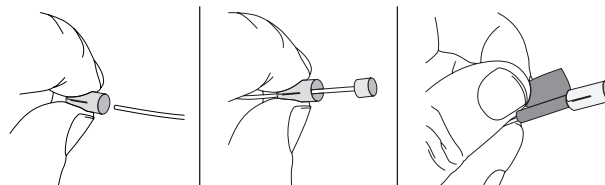
- Clean and prepare handlebar for cutting with isopropyl alcohol.
- Using a cutting guide, cut the bar at the specified cut lines with a fine-tooth carbon blade hacksaw.
- Clean the cut edges with an emory cloth.

2. Install Di2 Shifters

- Install shifters to desired location and tighten to shifter-specified torque ratings.

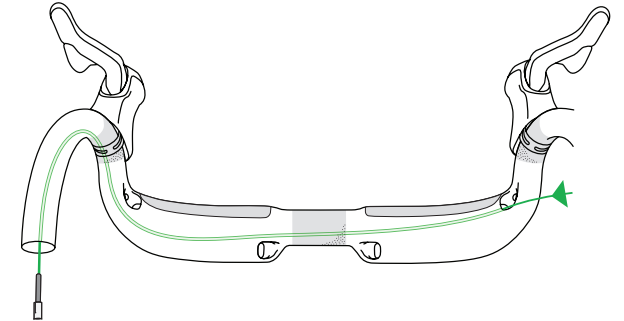
3. Route Shimano split harness EW-JC130-SM

- Create a routing tool by sliding a 5mm brake housing ferrule over a derailleur cable so that the head of the cable hides inside the ferrule. Wrap tape around the cable just below the ferrule. (x2)

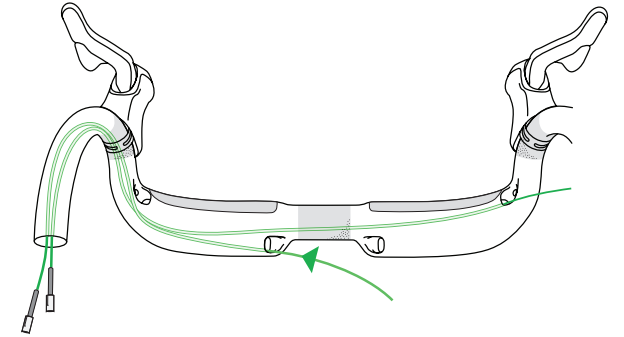


3. Route Shimano split harness EW-JC130-SM (Cont'd)

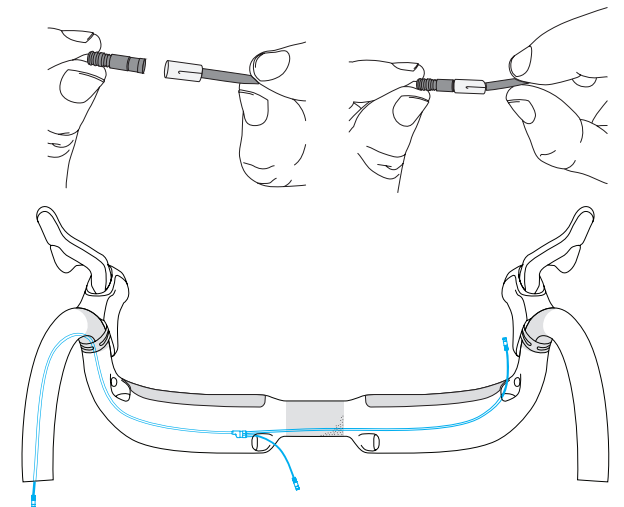
- Insert one cable (ferrule end first) through the port near the left-shifter and push through the handlebar until it exits out of the right-side bar end. A pick tool may be necessary to guide cable through clamp area.



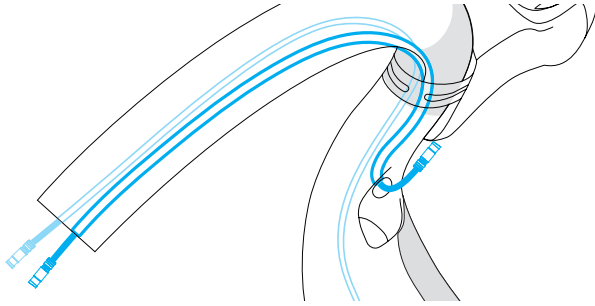
- Insert the second cable through the port on the right-shifter side of the clamp area until it also exits out of the right-side bar end.



- Attach the shortest and longest lengths of **EW-JC130-SM** to the ferrules and pull them through the bar.



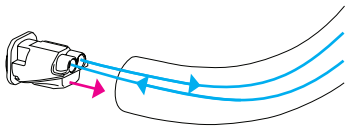
- e. Route a separate, short E-tube wire from the right-hand shifter through the small hole in the housing port and out the bar end.



SHIMANO DI2 JUNCTION BOX AND WIRING (CONT'D)

4. Install Shimano EW-RS910 Handlebar Junction

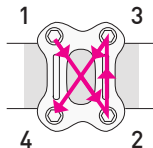
- Connect EW-RS910 to the two wires exiting the right-side bar end.
- Using the Shimano suggested bracket for EW-RS910, insert the assembly into the bar.
- Cut the opposite side of the bar to match, and use a standard bar end plug to finish.
- Connect both shifters to their respective E-tube wires.



5. Install handlebar, brake housing, and cables

- Install the handlebar by centering the bar to the stem and rotate to the desired position.
- Install the stem faceplate over the handlebar and tighten the bolts to 5Nm.

***NOTE:** Tighten bolts alternating opposite corners



- Connect the remaining E-tube wire near the stem to the wire running through the frame of the bike using EW-WU111.
- Route the brake housing and cables, and adjust as needed.

***NOTE:** Make sure housings are seated into shifters properly.

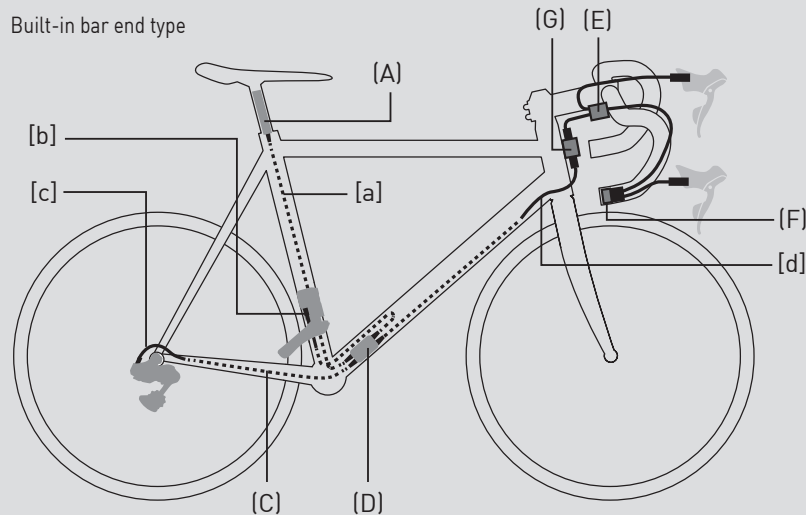
Refer to Shimano Installation guides for further information:
(<http://si.shimano.com/pdfs/dm/DM-R9150-03-ENG.pdf>)

EXCERPT FROM SHIMANO DURA-ACE R9150 SERIES DEALER MANUAL

(<http://si.shimano.com/pdfs/dm/DM-R9150-03-ENG.pdf>)

EW-RS910

Built-in bar end type



- (A) Lithium ion battery (built-in type) SM-BTR2/BT-DN110
- (B) Junction A SM-EW90-A/B
- (C) Electric wire EW-SD50-I
- (D) Junction B SM-JC41
- (E) EW-JC130
- (F) EW-RS910 (Built-in bar end type)
- (G) EW-WU111
- (H) EW-RS910 (Built-in frame type)

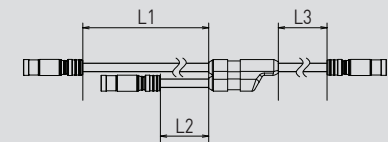


• Cable length (EW-SD50)

- [a] + [b] ≤ 1500mm
- [a] + [c] ≤ 1700mm
- [d] ≤ 1400mm
- [e], [f] ≤ 500mm

Cable length (EW-JC130)

EW-JC130 is available in three variations of differing length. Refer to the table and select the appropriate variation.



	L1 (mm)	L2 (mm)	L3 (mm)
EW-JC130-SS	350	50	250
EW-JC130-SM	350	50	450
EW-JC130-MM	550	50	550

- If using EW-WU111, use it in combination with BT-DN110 or BM-DN100.