1 - V2 POWER UNIT (SOLUTION 3)

1.1 - INSTALLATION INSIDE DIAGONAL FRAME TUBE

Recommended for frames with a seat tube with an excessively small diameter. The head tube must be wide enough for the power unit to pass through and into the diagonal frame tube.

Tools and accessories:

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<th>UT-CG010EPS</th>
<th>R1318001</th>
<th>cable guide magnet kit SR-RE EPS</th>
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<td>UT-CG010ATEPS</td>
<td>R1318003</td>
<td>cable guide magnet kit ATH EPS</td>
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<td>UT-PU030</td>
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<td>diagonal frame tube installation tool for EPS V2 Power Unit</td>
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Options available:

| AC14-CAADBCEPS |          | charging cable extension for EPS V2 Power Unit |
1) Remove the power-off magnet from the power unit (Fig. 2).

Check that the anti-vibration O-ring is fitted correctly around the power unit (Fig. 3).

2) If it is necessary to fit the charging cable extension to the power unit, follow the instructions below, otherwise proceed to step 3.

• Undo the nut from the power unit connector and fit the O-ring included with the extension onto the connector (Fig. 4).
• Apply and re-tighten the nut (Fig. 5).

• Gently turn the male connector of the extension in the female connector of the power unit to find the correct alignment between the two connectors, then push the male connector into the female connector (Fig. 6).

• Fully tighten the outer knurled bush of the extension connector (Fig. 7).
3) To hold the 4 cables of the power unit together and facilitate routing of the cables through frame, fit one of the two spiral wraps near the front derailleur connectors and the battery charger connector, and fit the other near the rear derailleur connector (Fig. 8).

4) Feed the long cable of the cable run magnets kit into the head tube and route down into the diagonal frame tube near the lower rivet, then insert the first cable with the ferrule into the rivet itself (Fig. 9). Once connected to the long cable, feed the cable out of the head tube and screw into the lower seat (Fig. 10).

5) Insert the cables into the tube, taking care not to damage them against the edge of the tube itself, then feed them out from the bottom bracket shell (Fig. 10). If the bottom bracket shell is closed, use more than one cable guide kits simultaneously to feed the individual cables directly out of the respective 4 holes in the frame. In this case, it will be necessary to feed the cables out of the holes as the power unit moves along the interior of the diagonal frame tube.

6) Partially tighten the drilled head screw onto the upper insert and feed one rear derailleur control cable through the hole, so that the screw is situated halfway along the cable (Fig. 11). Do not tighten the screw too tightly as later it must be possible to undo the screw by simply twisting the ends of the cable.

7) Pull the cable of the tool so that the ferrule protrudes from the rivet by at least 2 mm, and simultaneously pull on the two ends of the cable from the steering side to align the seats of the screws with the rivets in the frame. Tighten the short screw (L = 19.2 mm) into the upper hole to a torque of 2 Nm (18 in.lbs) (Fig. 12). If the screw is too shorts and cannot be tightened into the hole, use the medium length screw (L =21.2 mm).

IMPORTANT: follow the procedure exactly as described and observe the correct tightening torque to prevent the risk of tightening the screw through its seat and damaging the power unit.
8) Undo the lower grub screw (Fig. 13) and tighten the longest screw provided (L = 27.2 mm) to a torque of 2 Nm (18 in.lbs), taking advantage of the fact that the lower screw seat is capable of moving by +/- 1 mm vertically. If necessary, use the short or medium length screw (Fig. 14).

9) Twist the two ends of the cable anticlockwise from the steering side to undo the drilled head screw (Fig. 15).

10) Apply the power-off zone indicator label, matching the two holes with the two rivets in the frame, and with power-off zone rectangle at the top (Fig. 16). Remove the label backing off from the bottom so that only the upper rectangle remains on the frame (Fig. 17).
11) Switch the system off by placing the magnetic power-off clamp on the seat tube, with the Campagnolo logo above the rectangle of the label (Fig. 18). The excess length of clamp may be cut off across the indentations in the perforated section (Fig. 19).

12) If a bottle holder is to be fitted, install now. Fit any shims supplied underneath the bottle holder itself to prevent the fastener screws of the power unit from damaging or impeding removal of the bottle. Fit the bottle holder with one shim and one nut per screw. Tighten the nuts included to a torque of 1,2 Nm (11 in.lbs).

13) If a bottle holder is not to be fitted, fit the protective rubber caps on the two screws (Fig. 20).

14) Remove the spiral wraps holding the cables together (Fig. 21).

15) Fit the threaded metal insert onto the battery charger connector (Fig. 22).
- Insert the long cable of the cable guide magnet kit into the exit hole for the battery charger connector, then connect it to the battery charger connector with the magnet.
- Feed the connector partially out of the hole in the frame and leave the cable with magnet attached to stop the connector from returning back into the frame (Fig. 23).
- Fit the washer and the nut and tighten to a torque of 1,5 Nm (13 in.lbs) (Fig. 24).

⚠️ WARNING!
If your frame is made of carbon fiber, contact the frame manufacturer to insure that the frame will not be damaged by this 1,5 Nm (13 in.lbs) tightening torque, or to determine what actions need to be taken to protect the frame from damage.
Even slight damage to a carbon fiber frame can result in an unexpected failure, resulting in an accident, personal injury or death.

18) Remove the threaded metal insert (Fig. 25) and fit the connector cover cap, screwing correctly into place.

Continue installation by routing the cables for the rear derailleur, the front derailleur and the interface, following the instructions given in the chapter “Assembly: cable routing” available on the website www.campagnolo.com.