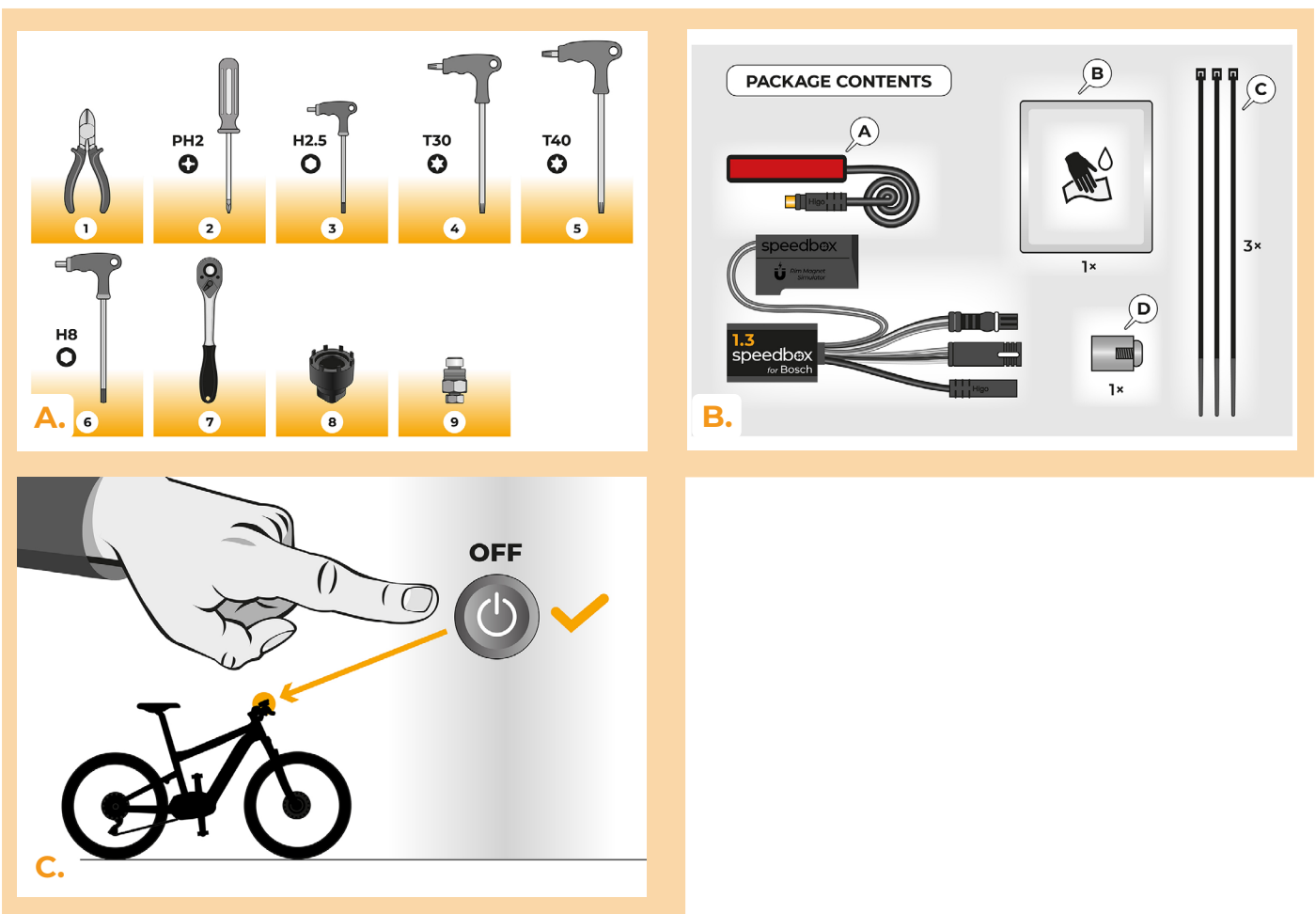


SpeedBox 1.3 for Bosch

STEP 1: Preparation for installation

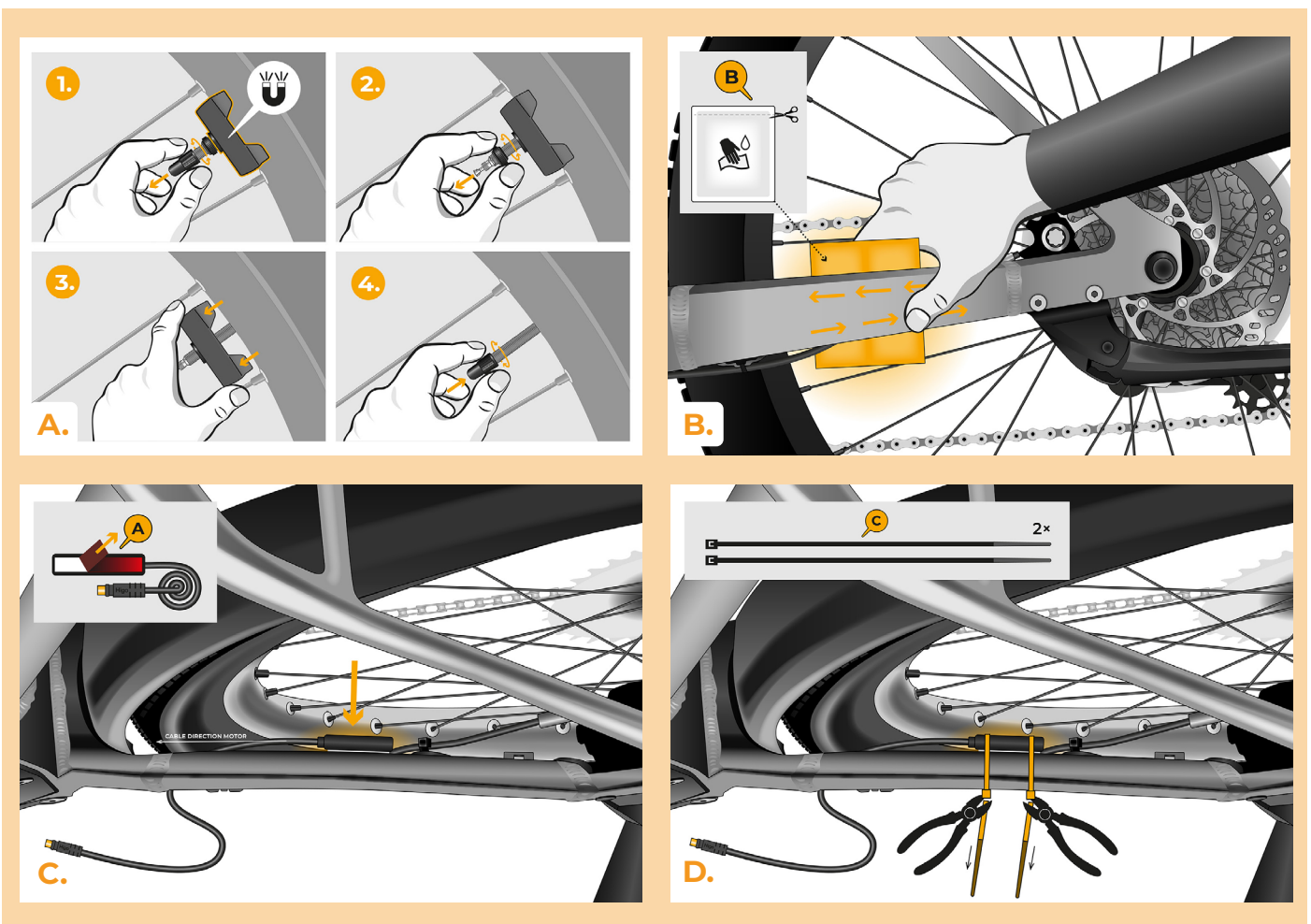
We recommend using bike repair stand during tuning installation.

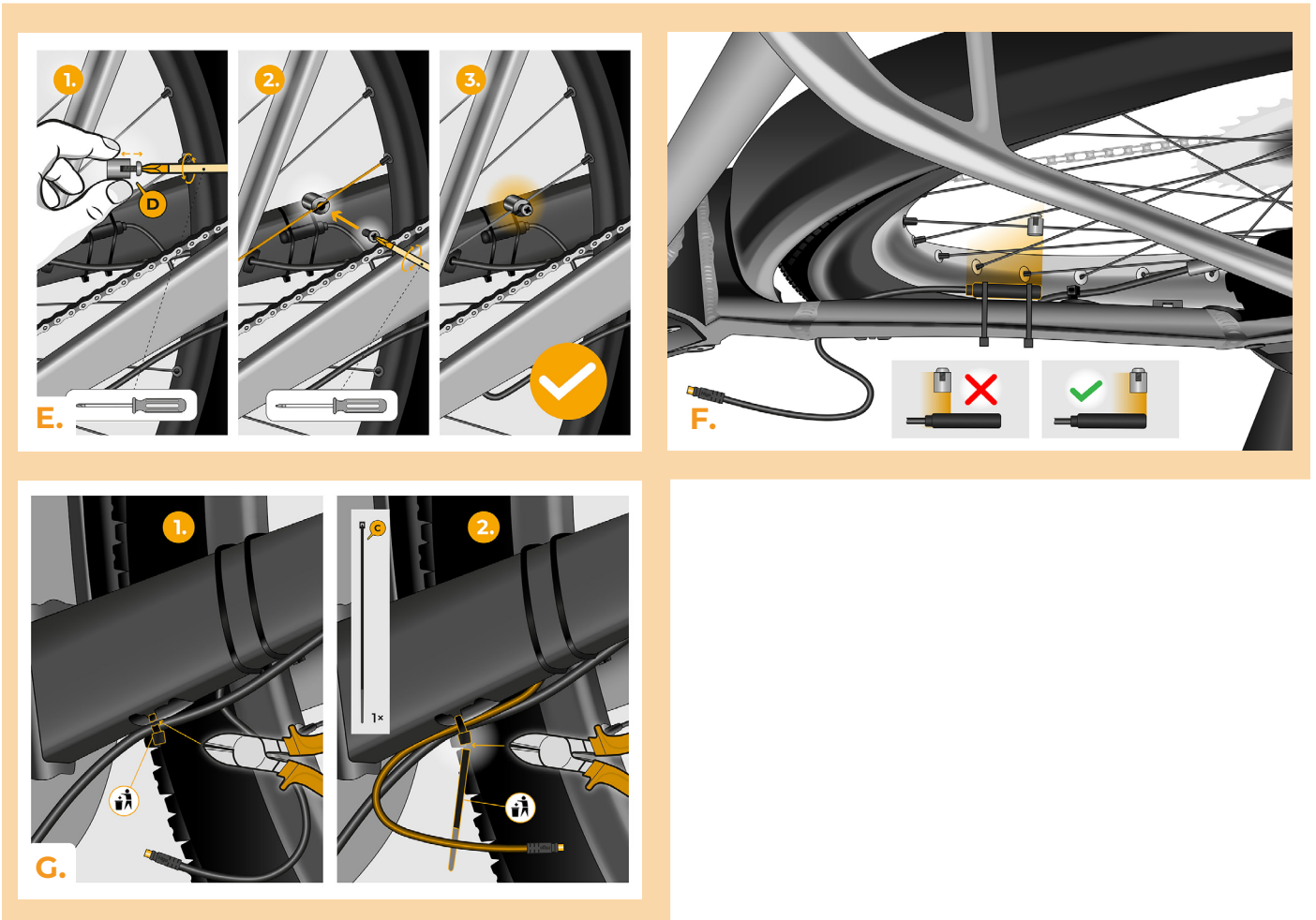
- A.** Prepare the following tools:
(tools may vary depending on the type of e-bike)
1. Cutting Pliers
 2. Cross-head screwdriver PH2
 3. Hex key 2.5
 4. Torx screwdriver T30
 5. Torx screwdriver T40
 6. Hex key 8
 7. Ratchet Handle 1/2" - socket 22 mm
 8. Lockring Tool for Bosch TB-1069
 9. Crank Puller
- B.** Check the contents of the package according to the picture.
C. Turn off the e-bike.



STEP 2: Rim Magnet removal and installation of the speed sensor

- A.** Remove the original Rim Magnet from the rear wheel valve. Keep it for the reinstallation (step 13).
- B.** Clean the inner side of the chainstay with a wet wipe (B).
- C.** Using double-sided tape, attach the speed sensor cable (A) to the cleaned inner side of the chainstay. The other end of the cable with the connector should point towards the motor.
- D.** Fix the speed sensor (A) firmly with two plastic tightening tapes (C). Trim off any overhanging remnants of the tape with side cutting pliers.
- E.** Using the Phillips screwdriver PH2, attach the magnet (D) to one of the spokes of the rear wheel. Place the magnet with the smooth side facing the end of the speed sensor.
- F.** Check the position of the speed sensor and the magnet relative to each other.
- G.** Secure the speed sensor with a plastic tightening tape (C) to the inner side of the chainstay, closer to the motor, to prevent any unwanted contact of the cable with the rotating rear wheel. Trim off any overhanging remnants of the tape with side cutting pliers.

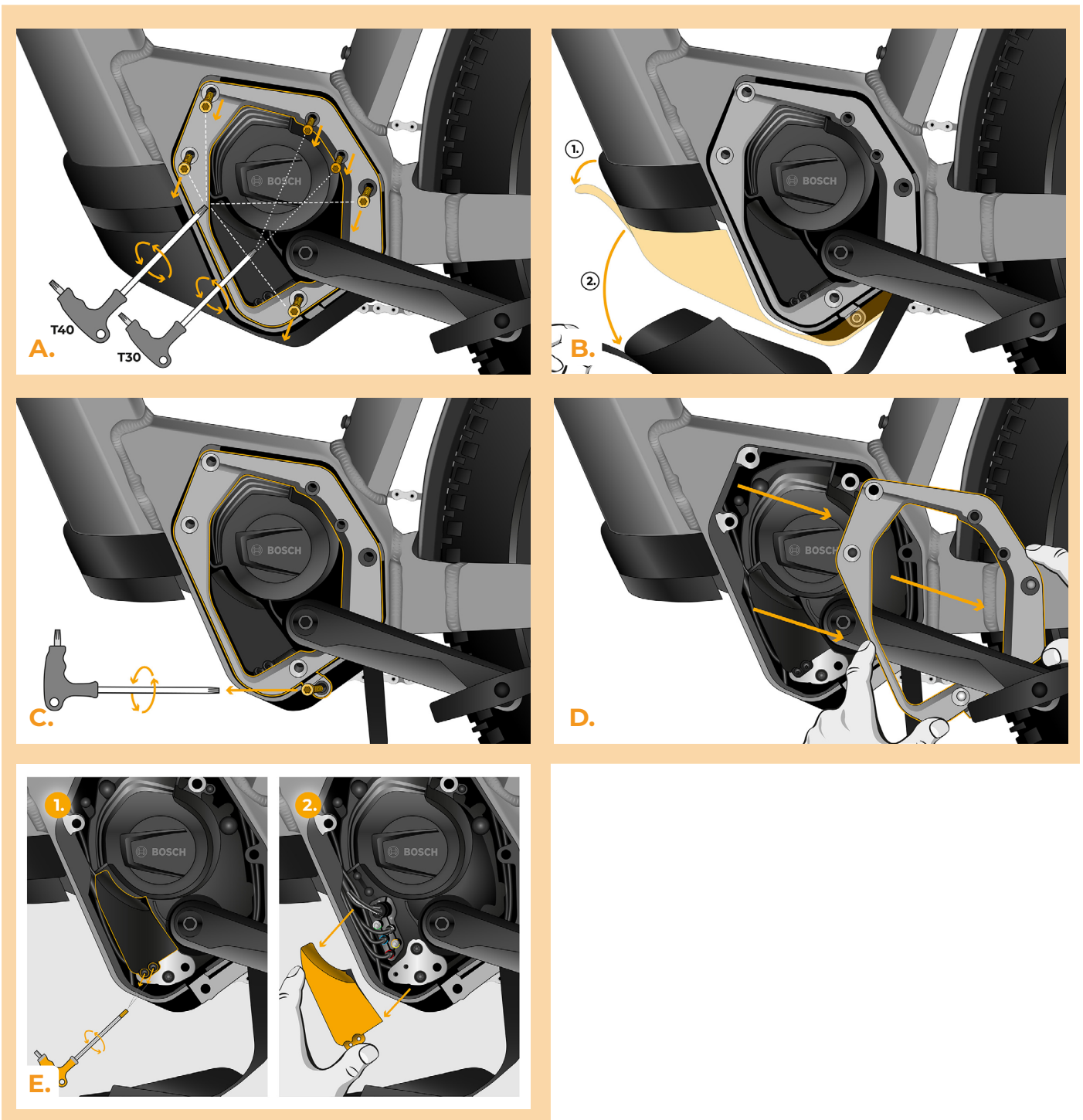




STEP 3: Motor cover removal

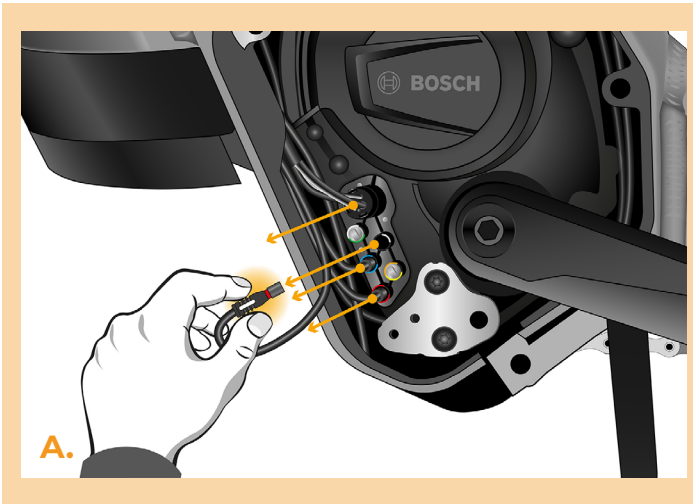
The process of removing the motor cover may differ depending on the e-bike design.

- A.** Unscrew all the screws holding the motor cover with the T30 and T40 Torx screwdrivers.
- B.** Flip off the lower plastic motor cover to access the last screw securing the motor cover.
- C.** Unscrew the last screw with the T40 Torx screwdriver.
- D.** Remove the motor cover.
- E.** Using the hex key H2.5, unscrew the 2 screws holding the side connector cover and remove it.



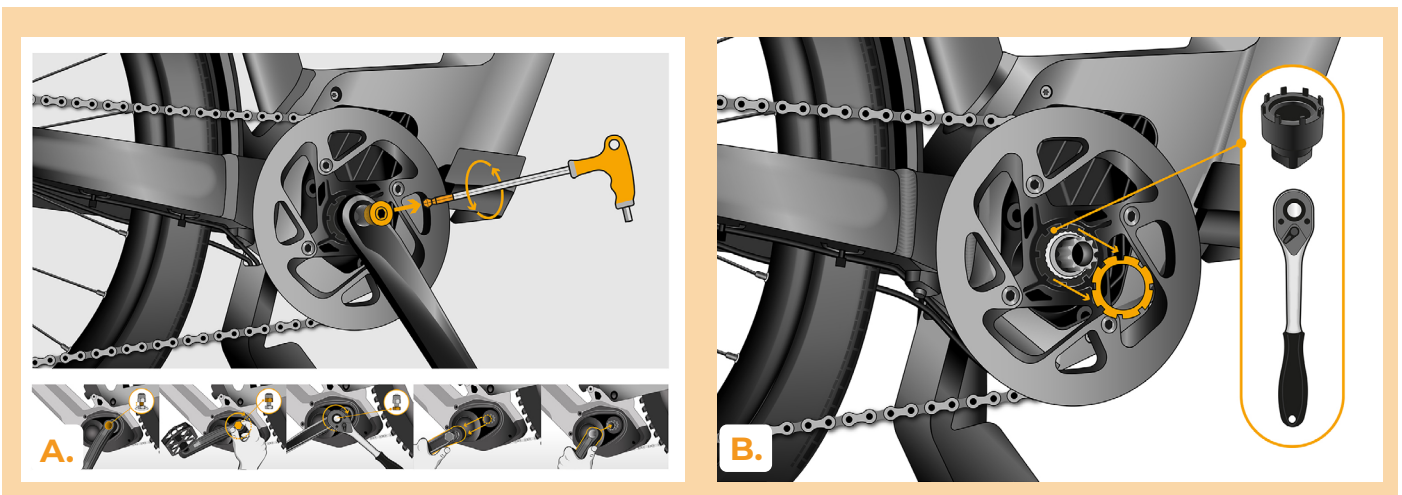
STEP 4: Disconnecting the connectors from the motor

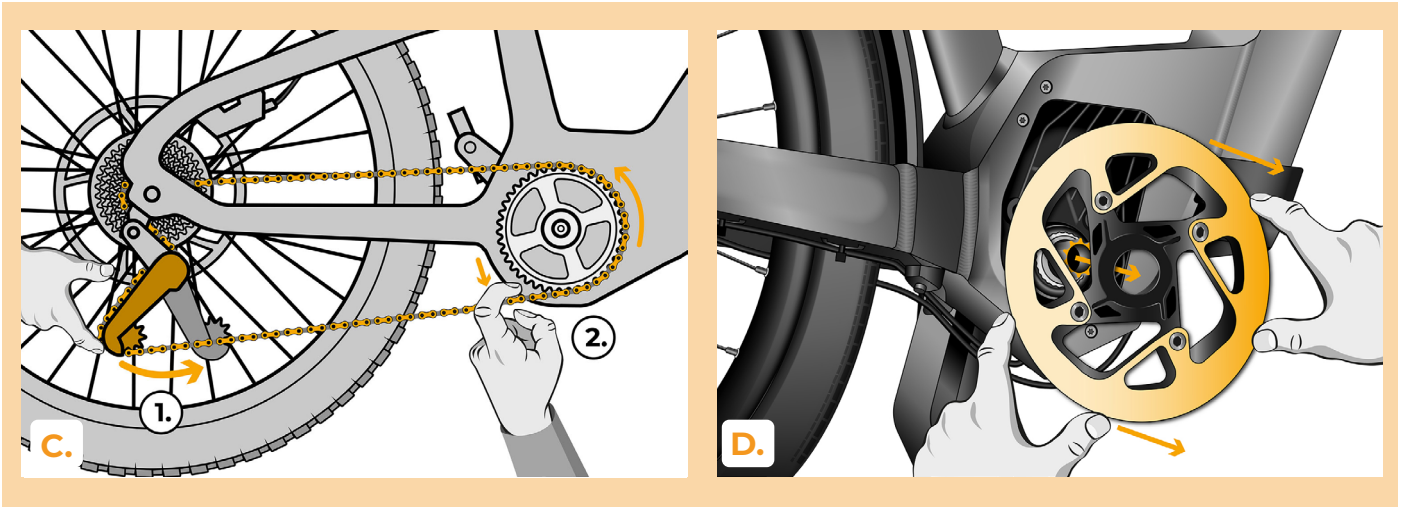
- A.** Disconnect all cables from the motor, including the battery power cable.



STEP 5: Crank and chainring removal

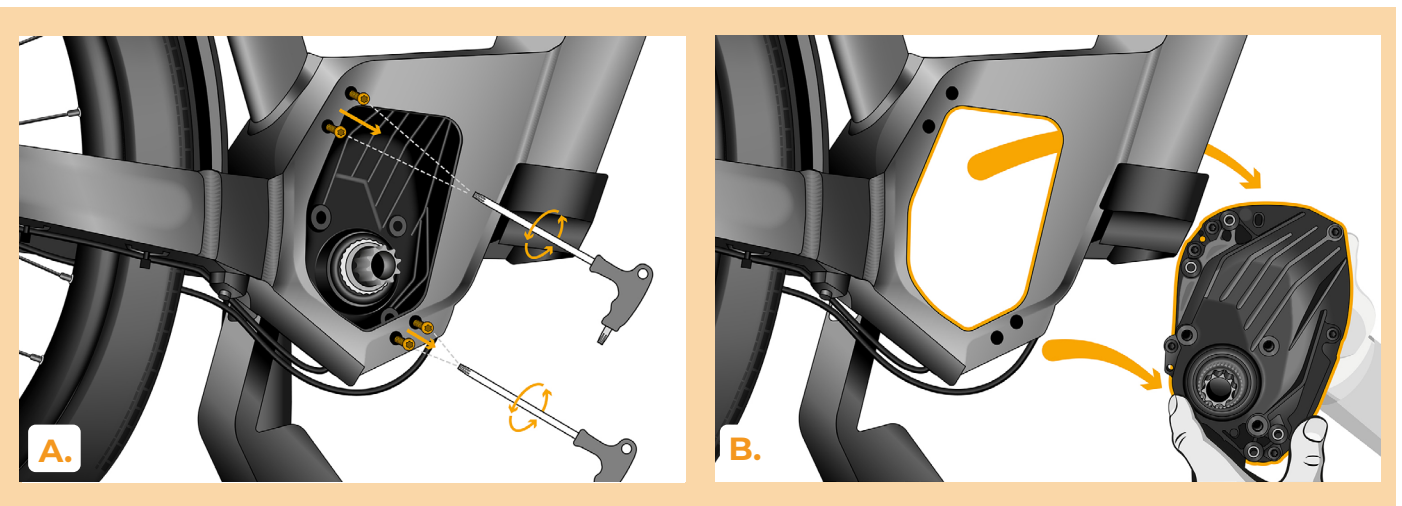
- A.** On the chain side, remove the locking bolt of the right crank and take off the crank. If the locking bolt is not self-tightening, use a crank puller (see the "User Manual" on the website) and a 1/2" ratchet with a 22 mm socket. Plug the e-bike connector, disconnected from the motor (step 4), into the SpeedBox connector. Make sure that the locks on the connector are seated properly.
- B.** Using a 1/2" ratchet and the Bosch TB-1069 crank puller, loosen the chainring but leave it in place.
- C.** Remove the chain.
- D.** Remove the chainring.





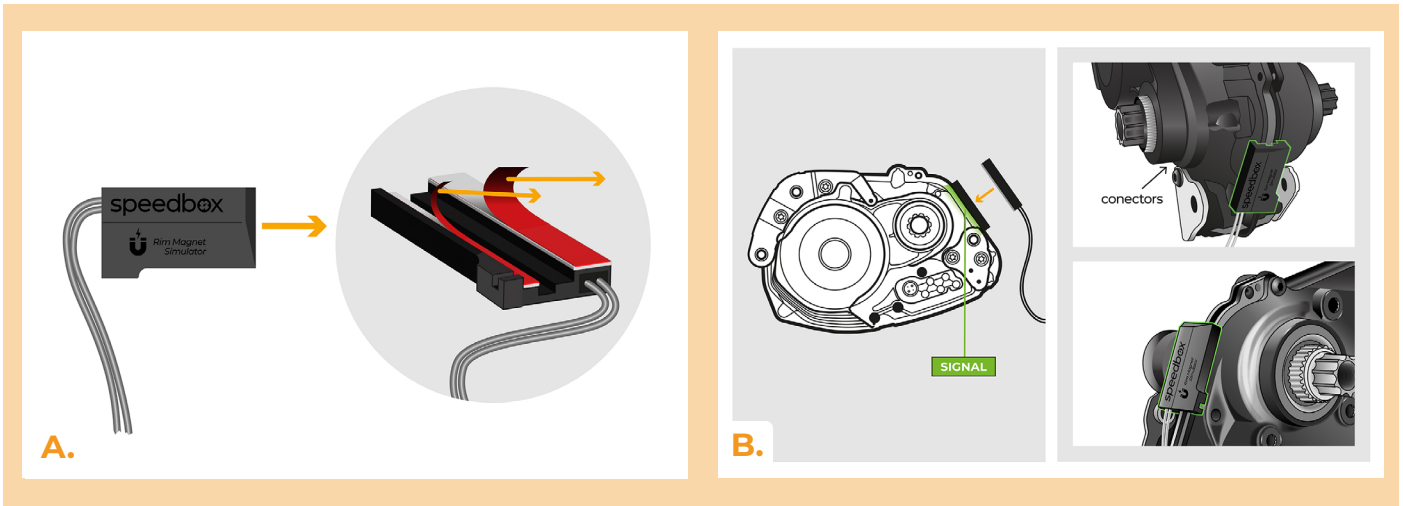
STEP 6: Motor removal from the bike frame

- A.** Unscrew all bolts securing the motor to the e-bike frame using a T30 Torx screwdriver.
- B.** Remove the e-bike motor from the frame.



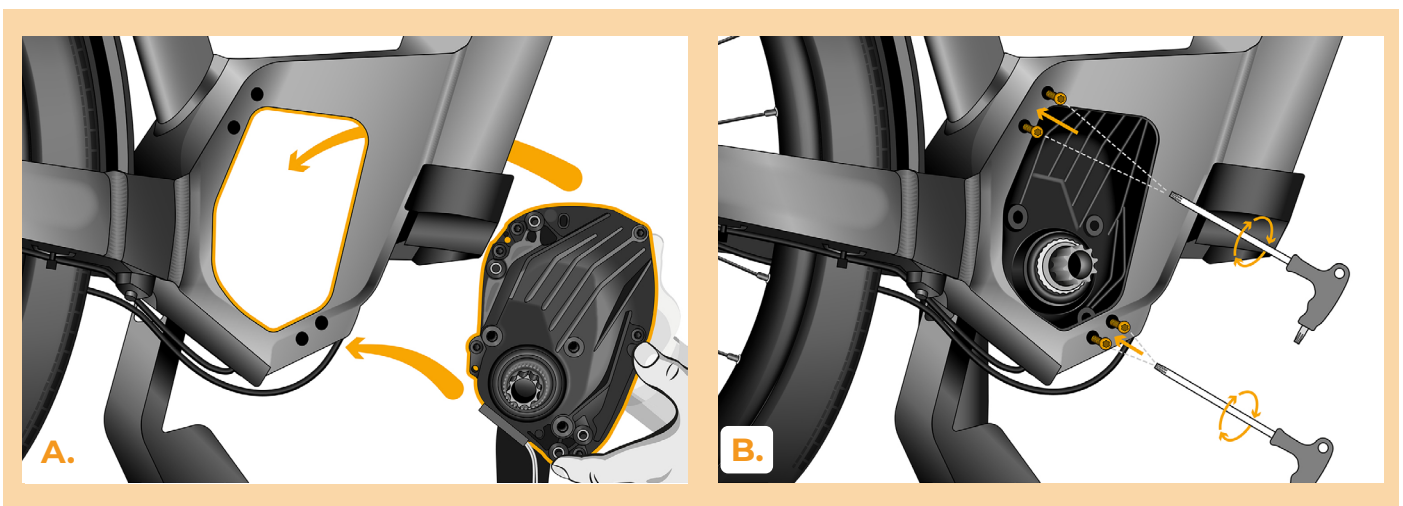
STEP 7: Attaching the Rim Magnet Simulator to the Motor

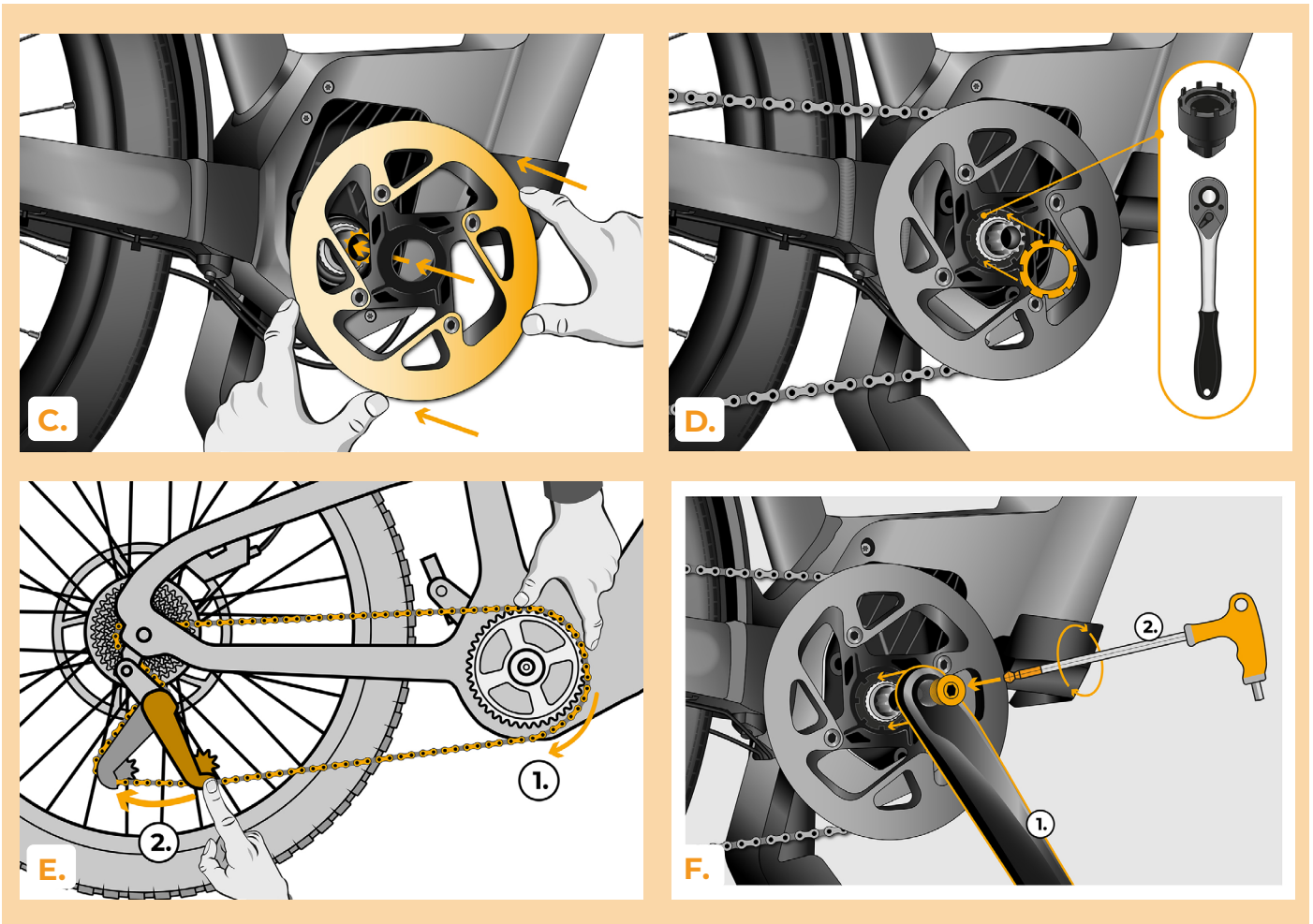
- A.** Remove the protective backing from the double-sided adhesive tape on the Rim Magnet Simulator.
- B.** Attach the Rim Magnet Simulator to the designated spot on the motor using the double-sided tape.



STEP 8: Motor Reinstallation and Crank and Chaining Assembly

- A.** Reinstall the motor with the Rim Magnet Simulator into the e-bike frame.
- B.** Screw back in all bolts securing the motor.
- C.** Put the chainring back in place.
- D.** Tighten the chainring using a 1/2" ratchet and the Bosch TB-1069 crank puller.
- E.** Reinstall the chain onto the chainring.
- F.** Reinstall the crank and tighten it again.



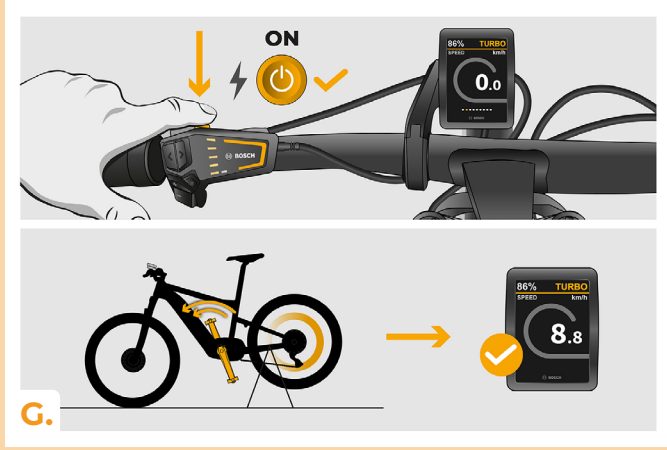
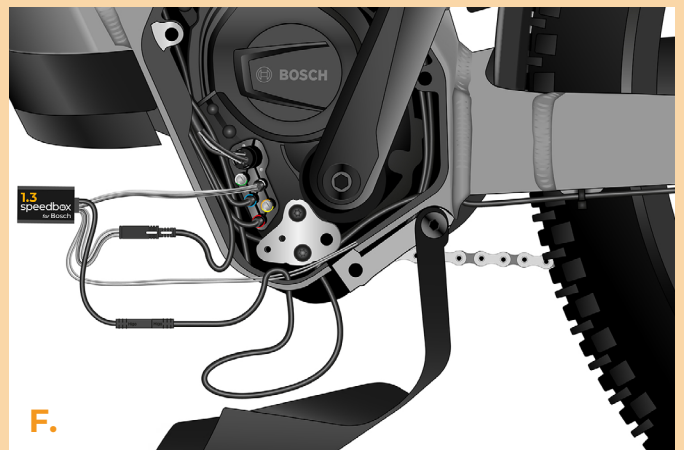
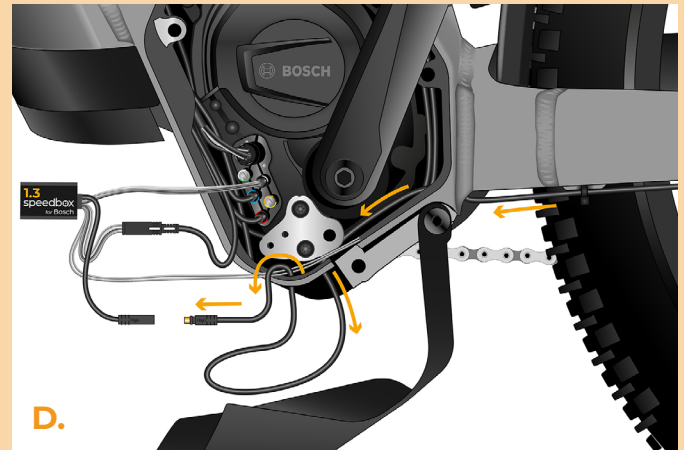
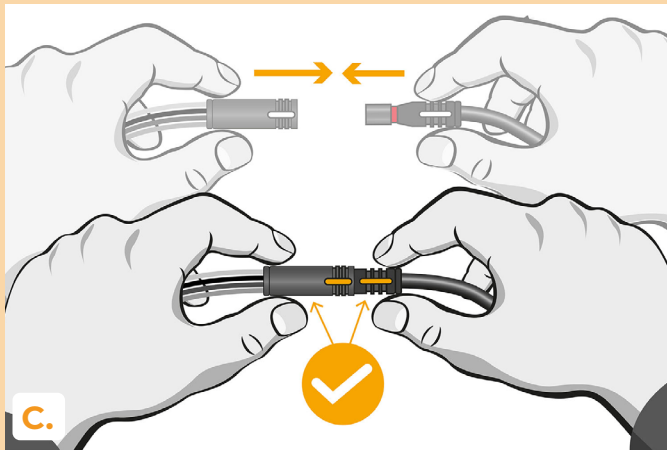
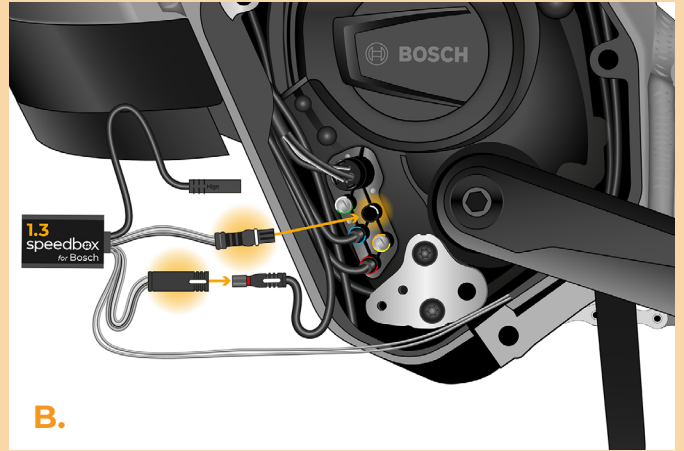
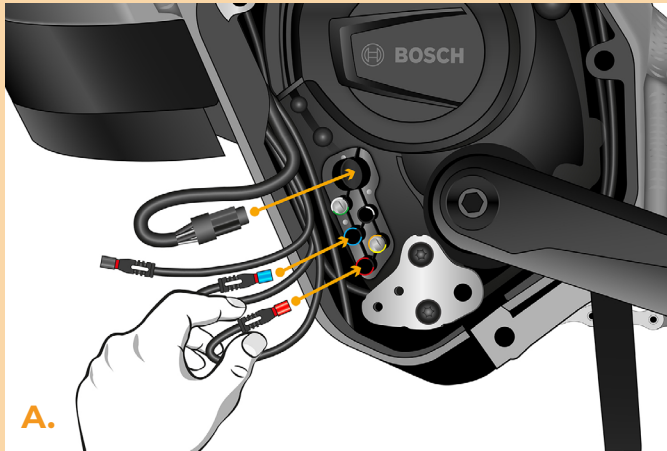


STEP 9: SpeedBox tuning installation

- A.** Now reconnect all cables except for the cable to the display, which can be identified by its black end connector.
- B.** Connect the SpeedBox Tuning device cable to the motor in place of the original display cable. Then connect the display cable to the largest connector on the SpeedBox Tuning device.
- C.** Make sure that the locks on the connector are seated properly.
- D.** Thread the speed sensor cable to the motor.
- E.** Connect the speed sensor cable to the SpeedBox.
- F.** Check the correct wiring as shown in the figure.
- G.** Check the functionality of the SpeedBox Tuning device.

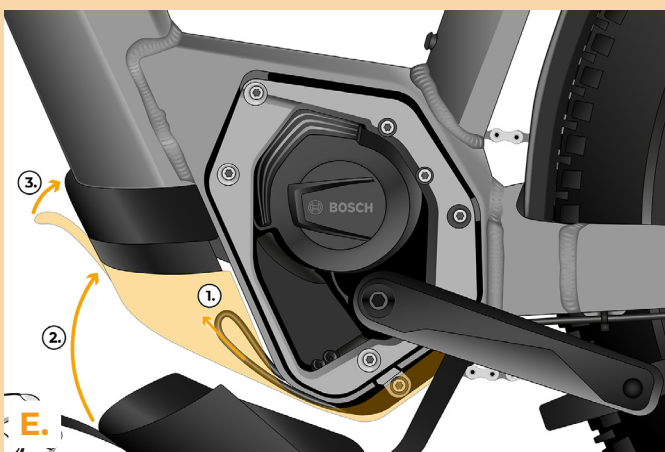
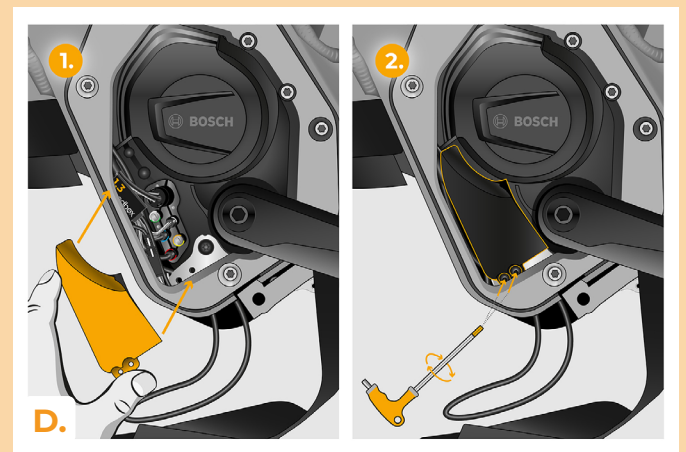
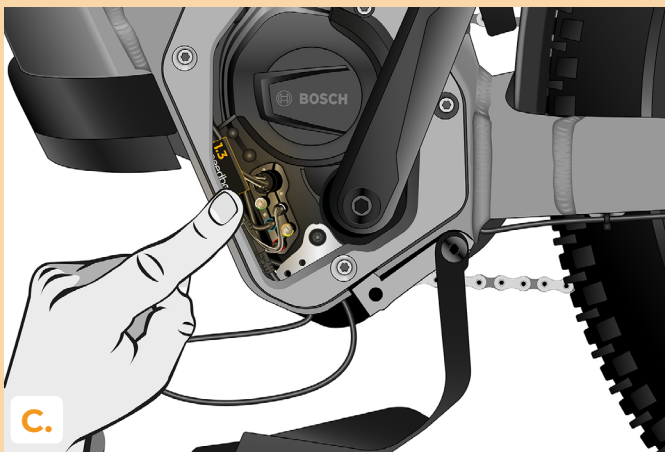
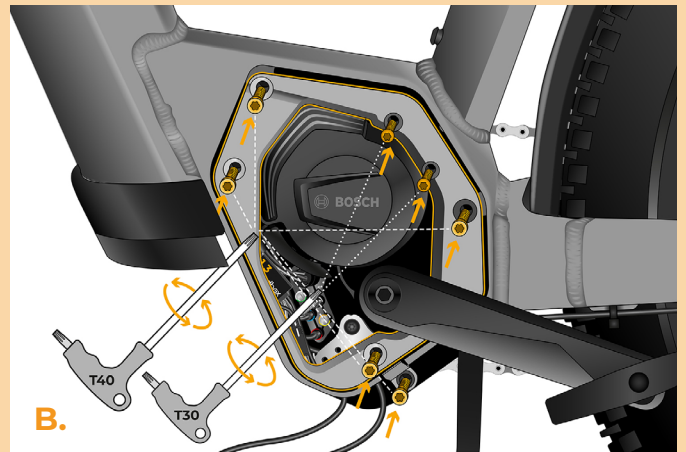
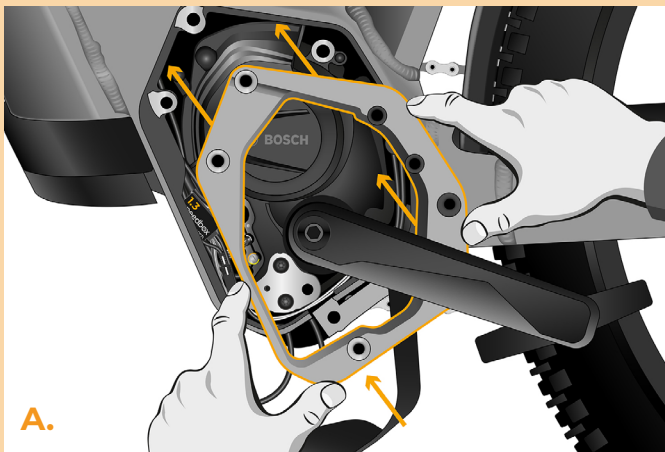
speedbox

break the limits



STEP 10: Motor cover assembly

- A.** Place the motor cover back.
- B.** Tighten all the screws holding the motor cover back in using the T30 and T40 Torx screwdrivers. Check that all screws are tight.
- C.** Fit the SpeedBox and all connectors and wires leading from the motor into the free space in the motor.
- D.** Place the side connector cover in its original place and fasten it with two screws using the hex key H2.5.
- E.** Pull the speed sensor cable under the lower plastic cover of the motor, place the motor cover into its original place and secure it.



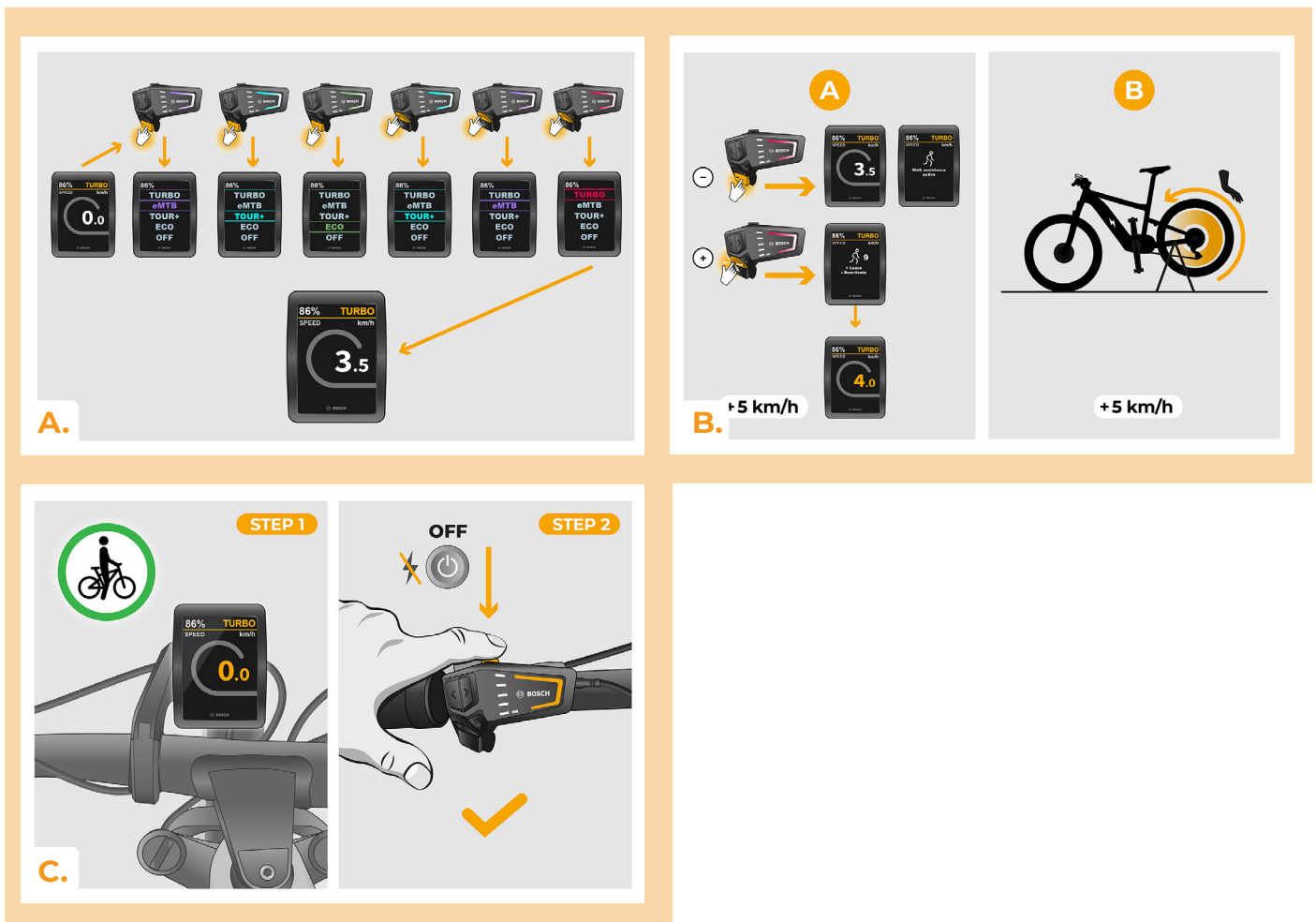
STEP 11: Tuning function check

- A. Turn the e-bike on.
- B. **Note: This step may not apply to all types of displays.** When activating for the first time, go to the display settings and check the wheel circumference: "Settings" > "My eBike" > "Wheel circumference". Then return to the home screen.
- C. Activate/deactivate tuning by brief activation of the WALK function or by switching between two assistance modes twice (- + - +). The value of 3.5 or 2.5 indicating the maximum speed in km/h will be displayed. Warning: Activate/deactivate the tuning before the ride (when the e-bike is standing still), not during riding.



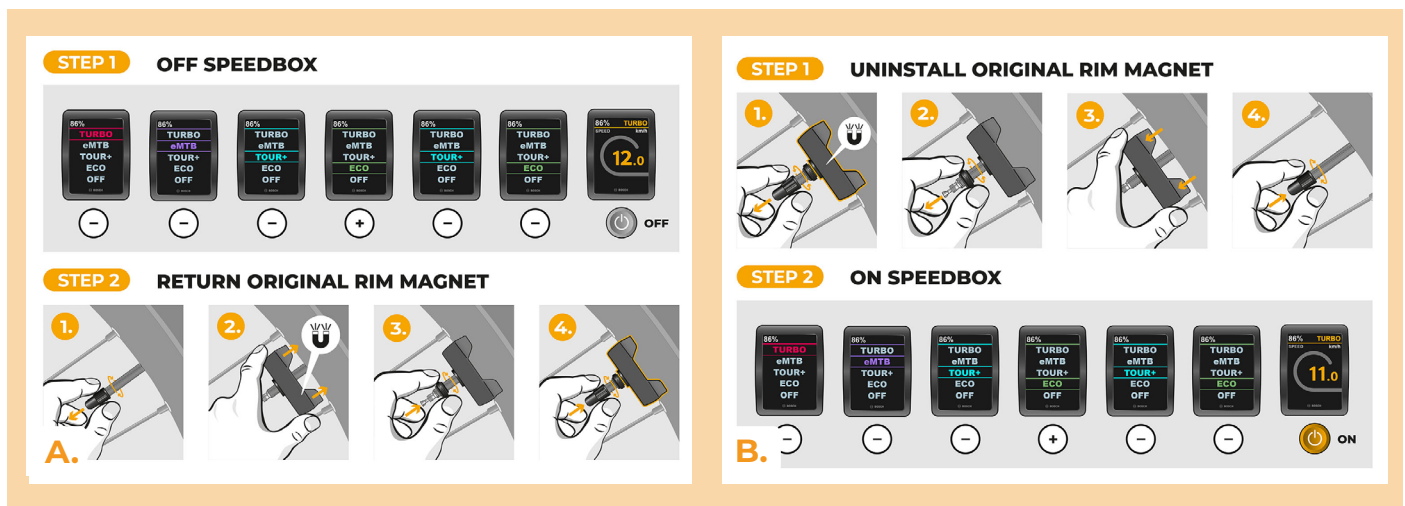
STEP 12: Setting the speed limit

- A.** You can set the maximum speed limit by changing modes from TURBO to eMTB - TOUR+ - ECO - TOUR+ - EMTB - TURBO (- - - + +). An actual speed limit will be displayed after that.
- B.** The maximum speed can be changed by activating/deactivating the WALK assist function (in this case by pressing „-“ and „+“) or by turning the rear wheel 360°. The last displayed limit will be saved after 15 seconds of inactivity.
- C.** To prevent tuning detection on your e-bike, it is necessary to leave the e-bike on after finishing the ride until a value of 0.0 km/h is displayed.



STEP 13: Deactivation and reassembly of Rim Magnet on the wheel valve

- A.** In case you want to reinstall the original Rim Magnet, first deactivate the SpeedBox by switching the modes from TURBO to eMTB – TOUR+ – ECO – TOUR+ – ECO – OFF (--- + --). The display will show a speed of 12.0 km/h. Turn off the e-bike and return the original Rim Magnet to the rear wheel valve. Then turn on the e-bike and take a short ride. While riding, change gears until the real speed is shown on the display.
- B.** To reactivate SpeedBox, uninstall the Rim Magnet and then switch the modes again from TURBO to eMTB – TOUR+ – ECO – TOUR+ – ECO – OFF (--- + --). The display will show a speed of 11.0 km/h which indicates that SpeedBox is activated again.



www.speedbox-tuning.com

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