Remove the gearbox

1. Remove the drive pack
2. Remove the rear wheel.
3. Remove both crank arms.
4. Remove the front chainrings.
5. From inside the drive pack cavity, remove the BB stabilizer.
6. Remove the two screws from the gearbox cover and remove the cover.
7. Remove the two rear T30 gearbox screws.
8. Loosen — but do not remove — the two front T30 gearbox screws.
9. Pivot the rear of the gearbox down to access the sensor and controller connectors.
10. Unplug the sensor and the controller connectors from the gearbox.

CAUTION: Disconnecting these connectors will help to prevent accidental damage. Failure to unplug the connectors will risk damage to the gearbox connector sockets.

11. Remove the two front T30 gearbox screws and remove the gearbox.

NOTE: To help remove the gearbox, use a rubber mallet to lightly tap first on one end of the BB axle and then on the other.

CAUTION: The gearbox is heavy. Don’t let go of the gearbox while removing the last screw. Failure to do so may result in damage to the gearbox.
Install the gearbox

IMPORTANT: Use replacement Fazua screws if available. If reusing the same screws from removal, clean the screws, prepare them for threadlocker, then apply new threadlocker.

1. Loosely attach the gearbox with the two front T30 screws.
2. Plug the speed sensor and the controller cables into the proper connections.
3. Pivot the gearbox up and install the two rear T30 screws.
4. Torque the four gearbox screws to 8.0-8.5 Nm.
5. Re-install the gearbox cover.
6. Re-install the BB stabilizer inside the drive pack cavity.
7. Re-install the front chainrings.
8. Re-install both crank arms.
9. Re-install the drive pack.

Remove the speed sensor

1. Remove the rear wheel.
2. Remove the drive pack.
3. Remove the gearbox (see Remove the gearbox page 1).
4. Inside the down tube, remove the rear brake hose from the plastic guides for ease of sensor cable removal.
5. First note the zip tie application and the routing of the speed sensor cable, then cut off the zip tie.
6. Remove the mounting screw, sensor, and spacer from the dropout.
7. Before you remove the cable, make a note of how the excess sensor cable is arranged within the gearbox mount. You should try to recreate this arrangement during installation.
8. At the chainstay, pull the brake hose away from the sensor cable and gently pull the sensor cable out of the chainstay.
9. Push the cable from the bottom bracket and move the brake hose as needed to minimize resistance.

CAUTION: The brake hose can be easily damaged. Loosen or remove the brake caliper mounting bolts to help move the hose.
Install the speed sensor

1. With the rear wheel, drive pack, and gearbox removed, remove the rear brake hose from the plastic guides inside the down tube to ease the sensor cable installation.

2. At the chainstay, move the brake hose as needed and gently route the sensor cable forward through the chainstay.

3. Pull the sensor cable out at the bottom bracket with enough slack to connect to and install the gearbox.

4. Use the M4 mounting screw to attach the spacer and the sensor to the dropout. The spacer fits into the slot in the dropout.

5. Use a new zip tie to secure the cable to the dropout.

6. Install the gearbox (see Install the gearbox page 2).

7. When installing the gearbox, plug the speed sensor connector into the proper position.

8. Reattach the rear brake hose in the plastic guides inside the down tube.

Remove the controller

1. Remove the drive pack.

2. At the upper end of the down tube, mark the height of the locker mechanism.

3. Remove the locker mechanism.

4. On a 61cm bicycle frame, remove the front fork.

5. Remove the gearbox (see Remove the gearbox page 1).

6. Inside the down tube, make a note of the controller cable routing, then remove the controller cable from each plastic guide.
7. At the top tube, gently pry the controller module from its pocket.

⚠️ CAUTION: Exercise extreme caution when removing the controller. Tools may damage the paint around the top tube controller pocket.

8. Make a note how the excess cable is arranged within the top tube.

9. Gently push and pull the controller cable out through the access hole between the down and top tubes.

10. From inside the down tube, use the head end of a common spoke or a similar tool to carefully maneuver and push the connector out through the hole.

Install the controller

1. Insert the controller cable connector into the top tube pocket.

2. Route the cable down through the access hole between the top and down tubes.

3. On a 61cm bike, route the cable:
   a. Down through top tube pocket,
   b. Forward through the top tube access hole,
   c. Then down through the down tube access hole.

4. Use the head end of a common spoke (or similar tool) to help guide the connector into the down tube.

5. Push and pull enough cable into the down tube and through the locker mount to reach the back of the gearbox mount.

6. Install the gearbox (see Install the gearbox page 2).

7. When installing the gearbox, plug the controller connector into the proper position.

8. Starting at the bottom bracket end, remove slack from the cable while inserting it into the narrowest channels in the three down tube plastic guides.

9. At the controller pocket in the top tube, push the excess cable into the tube toward the seat tube.

10. Insert the controller firmly into the top tube pocket.

11. Using the height marks from step 2 in the removal procedure, reinstall the locker mechanism.

12. Torque the fasteners to 1.8-2.2Nm.

13. On a 61cm bicycle, reinstall the fork.
