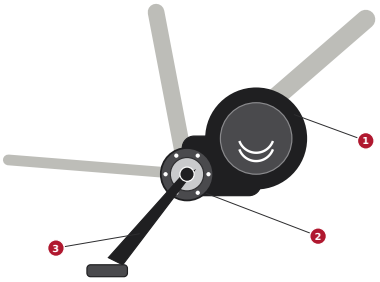
INSTALLATION GUIDE

Fitting the Bewo mid-drive motor

For the Bewo mid-drive conversion kit with Van Beijck display and battery. Read this guide completely before you start.



In the box

- Bewo mid-drive motor with chainring (1)
- Cranks left and right (3) with crank bolts
- Anti-slip washer and lock nut
- Pedal sensor with 2 Phillips screws M3 (2)
- Long M5 bolt for the mounting plate
- Special wrench for the lock nut
- Cable set with waterproof connectors
- Speed sensor with spoke magnet
- Brake sensors (2×, optional)
- Display: Slim V2, Lyra V3 or Dewi V3
- Throttle (optional)
- Battery with luggage carrier or frame tube rail

What you need

- Crank puller and bottom bracket tool (for the old bottom bracket)
- Allen keys
- Rubber mallet
- Phillips screwdriver
- Cable ties and side cutters

Safety first
Disconnect the battery before working on cables, the controller or the motor. Make sure the bike stands firmly, preferably in a work stand. In doubt? Have the installation done by a bike shop or a Van Beijck dealer.

Not for the G3 system
The displays in this kit (Slim V2, Lyra V3 and Dewi V3) do **not** work with the G3 system.

Only for a 68 mm bottom bracket shell
The Bewo mid-drive motor **only** fits a frame with a **68 mm** wide bottom bracket shell. Measure the width of the bottom bracket shell before you start.

Preparation

1 Check the parts
Unpack everything and use the *In the box* list to check that everything is there.

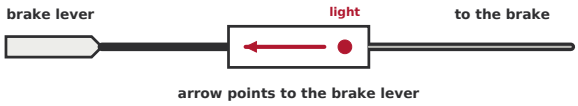
2 Remove the cranks and old bottom bracket
Take the chain off the chainring. Remove both cranks with a crank puller and unscrew the old bottom bracket from the frame. Clean the bottom bracket shell.

Handlebar

3 Fitting the display
Fit the display on the left of the handlebar so you can operate the buttons with your thumb (see guide *VB-HL-06 Fitting the display*).

4 Brake sensors (optional)

Do you have brake sensors? Fit them in both brake cables (see *VB-HL-08 Fitting the brake sensors*).



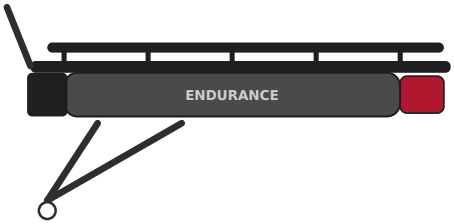
5 Throttle (optional)

Do you have a throttle? Fit it on the right of the handlebar (see *VB-HL-07 Fitting the throttle*).

Battery: choose A or B

6 A: Luggage carrier with battery

Fit the Van Beijck luggage carrier with battery rail in place of your old carrier (see *VB-HL-11 Fitting the luggage carrier*).



7 B: Frame battery

Fit the battery rail to the bottle cage holes on the down tube (see *VB-HL-12 Fitting the bottle or frame battery*).

Fitting the motor

8 Remove the lock nut and anti-slip washer

Unscrew the lock nut from the motor and remove the anti-slip washer. You will need them again shortly.

9 Slide the motor into the bottom bracket shell

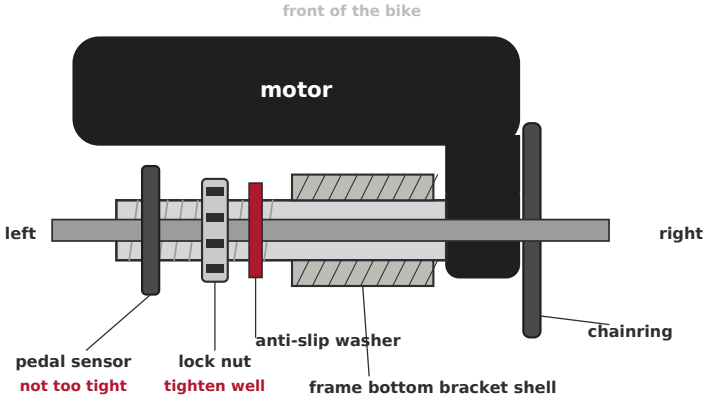
Slide the motor axle through the bottom bracket shell. The chainring is on the **right** (chain side); the motor housing is on the **left**, under the down tube.

10 Secure the mounting plate

Secure the mounting plate to the frame with the long M5 bolt. This stops the motor from turning.

11 Fit the anti-slip washer and lock nut

On the **left side**, slide the anti-slip washer over the axle and screw on the lock nut. Tighten the lock nut well with the special wrench.



> **Lock nut tight**
> If the lock nut is loose, the motor can turn and the cable will tear.

12 Fit the pedal sensor

Place the pedal sensor on the lock nut and secure it with the 2 Phillips screws M3. Tighten them, but **not too tight**.

13 Fit the cranks

Fit both cranks on the axle and tighten the crank bolts firmly. The crank marked **R** goes on the right (chain side), the crank marked **L** on the left.

Chain

14 Fit the chain

Put the chain on the motor chainring. Shift through all gears: the chain must not come off or rub against the frame.

> **Chain too short or too long?**
> The motor chainring may be larger than your old one. Adjust the chain length if needed.

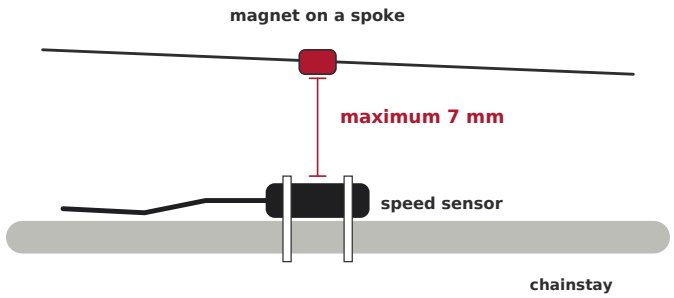
Speed sensor

15 Fit the sensor

Peel the film off the adhesive strip and stick the speed sensor to the inside of the left chainstay. Secure it with cable ties as well.

16 Fit the magnet

Fit the magnet on a spoke, directly opposite the sensor.

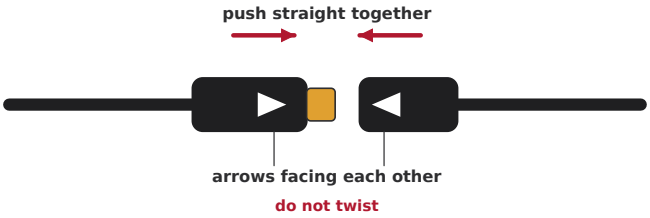


> **Maximum 7 mm gap**
> The gap between the magnet and the sensor must be no more than about **7 mm**. If the gap is larger, the sensor does not detect the magnet. The motor then does not receive the correct speed and keeps running into the limiter.

Connect the cables

17 Connect the plugs

Connect the plugs of the display, brake sensors, throttle, pedal sensor and speed sensor to the cable set and the motor. Line up the arrows on both plugs and push them straight together.



> **Do not force**
> Plug will not go together? Check that the arrows line up. Do not twist or force it, or the pins will bend.

18 Connect the battery

Connect the battery cable to the motor.

19 Finish the cables

Route the cables neatly along the frame and secure them with cable ties (see *VB-HL-13 Finishing the cables neatly*).

> **No tension on the cables**
> Turn the handlebar fully left and right: the cables must not become tight anywhere.

Test

20 Switch on the display

Switch on the battery and then the display. Operation is described in your display guide (Slim V2: *VB-HL-21*, Dewi V3: *VB-HL-23*).

21 **Test**
Lift the rear wheel and pedal gently: the motor assists and the display shows the speed. Do you have brake sensors? Then squeeze a brake: the motor stops immediately.

Important when riding

Always pull away in a low gear
Before you stop, shift to a **low (easy) gear** and pull away in it. Pulling away in a high gear puts too much force on the motor; this makes it likely that the bearings will fail.

Check after fitting

- ☐ Lock nut tight, pedal sensor fitted
- ☐ Chain runs smoothly in all gears
- ☐ Display shows the speed when the wheel turns
- ☐ Cables secured and cannot get into the wheel or chain
- ☐ Customer knows: always pull away in a low gear
- ☐ Cranks tight
- ☐ Speed sensor: maximum 7 mm to the magnet
- ☐ With brake sensors: motor stops when braking
- ☐ Test ride: assistance works in all levels

After the first 50–100 km
Check that the lock nut and crank bolts are still tight and retighten them if needed.