

Installation

1. *Mountain-drive* housing with torque lever



Insert the **mountain-drive** unit in the empty bottom bracket shell. Use shims, which are included in the basic package, to make up for small difference in diameter.

mountain-drive doesn't need the threads of the bottom bracket shell. Therefore: no matter, if the bottom bracket has left hand, right hand or no threads.



The torque lever is fitted to the rear chainstay with a clamp (included in the shipment).

If using the torque lever, you don't have to modify the bottom bracket at all.



If there is a substantial difference in diameter, use a pair of adapters. They are available in all diameters.



For Brompton folders we offer a special torque lever for **mountain-drive**, which makes the installation even easier.

If possible, we still recommend to chamfer the bottom bracket, but you can also use shims as explained above.

With this solution there is less torque, which prevents from damaging the thin walled bottom bracket shell of the Brompton, when the nut of the **mountain-drive** is being tightened. And the torque lever prevents from spinning under heavy load, if the friction due to the thin walled bottom bracket shell wasn't sufficiently high.

2. Installation with conical rings



If you want to fit the **mountain-drive** unit without the anti-twisting bracket (torque lever), you must prepare the bottom bracket tube as shown on the left.

The diameter of the conical part should be 39 - 39.5mm.

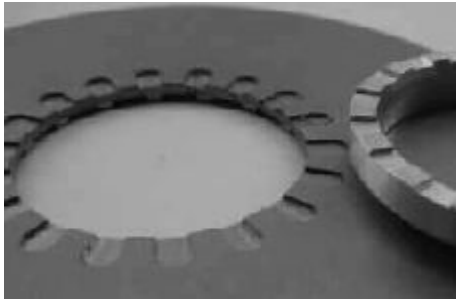


The conical rings center the gear housing perfectly.



Use aluminum cones for steel bottom brackets, but a knurled steel cone on the right side for aluminum bottom brackets.

Do not use the cone installation with thin aluminum bottom bracket shells. The conical rings exert considerable force that could damage the shell.



The black plate of the gear housing has milled grooves for the "teeth" of the cone ring. This makes sure, that the cone ring can't spin under heavy load.



Cones are available in the following widths:
0.5mm / 2mm / 4mm / 6.5mm

Material: steel for aluminum bottom bracket shells, aluminum for steel and titanium b.b. shells.

Please notice: 4 and 6.5mm wide cones need a wider nut on the left side!



The milling cutter is available as an accessory.

In most countries, we have a rental service.
Please ask us.



To tighten the lockring, please use the box spanner of tool set "installation and maintenance".

It's the easiest way to tighten it with the high torque of 100 lb ft, which is required to hold the gear housing against the reaction torque. The spanner is guided by the spindle, and provides a safe tightening without the danger of slipping.



This box spanner can be combined with a 1/2" torque wrench.

3. Mounting left crankarm and tightening left gear shift button



Next step is tightening the left crankarm with a standard 14mm box wrench and a torque of 50-55Nm (40 lbft)...



... finally tighten the left gear shift button: hold it with the wrench of our tool set and tighten it with 1.1 Nm.



Never lose a gear shift button, if you tighten it with the torque screw driver, which is preadjusted for 1.1Nm.

We grant a lifelong warranty against loss of gear shift button, if you use this tool!