



## CONVERSION OF M-type to S-type, P-type or H-type.

To carry out the conversion, you should also be familiar with Brompton cable routing, the way a handlebar folds alongside the front wheel, and the constraints on control positions. The correct tightening torque for the expander bolt is 20NM, and for the clip bolt for the lug at the top of the stem it's 18NM.

Handlebar stem and hinge: this is not supplied with the kit, and you need to have a stem of the correct colour and type (S P or H).

Hub-Gear Trigger and Brake levers on H-type S-type or P-type. For these models, it's essential to use "new" brake levers (with 30 degree cable-exit angle, introduced on M-types only in 2010): if these are not on the bike being converted, you should fit Parts QBRLEV30LH & QBRLEV30RH. Also, if the bike has hubgears, but does not have the Brompton trigger, you should fit QGTRIGB3A.

### Cables:

The cables supplied are the correct length either for "standard-configuration" where the right-hand lever controls the *front* brake, or for "reversed-configuration" where the right-hand lever controls the *rear* brake. Check the application sheets provided to make sure that you have the correct cables.

The cables for an S-type, P-type or H-type handlebar are designed for a long-wheel-base Brompton. If you are converting a short-wheel-base bike, you may well find that, because the cables are too long, they can snag on folding or unfolding, or more dangerously, hook up on the h'bar-stem-hinge-handle while steering: you should check after fitting that there is no risk of this, and if necessary shorten the cables by approx 16mm (the rear gear-cables (inners and outers), the rear-brake-cable-outer and the lower front-brake-cable-outer). The brake cable inners may also have to be trimmed to length before fitting the protective end-cap.

The cable fender loop supplied (a tab-washer with wire-loop): this is needed for any P-type with hubgears, to prevent the gear-cable from snagging on the RH front-wheel nut during folding. For these bikes, replace the existing tab-washer at the RH end of the axle with the cable-fender-loop.

### Grips:

You must use suitable adhesive when fitting, except for a P-type. The long foam grips on the P-type are most easily assembled using compressed air to help keep them from gripping as you slide them on.

### Handlebar catch:

A new handlebar catch and new nipple are supplied as part of the kit.

If the bike is fitted with one of the earlier, pre-2003, catches (these early ones are obviously different, as at right), then replace it with the new type provided.

The new nipple in the kit must anyway be fitted to the stud on the stem, screwed on the right distance and set at the correct angle.



### Controls, angle of h'bar and position of controls.

As stated above, it's essential to use the new brake levers (with 30 degree cable-exit angle) on an S-type or P-type h'bar: these levers are handed left and right. For control of a 3-sp'd hub-gear, you must use the Brompton 3-position trigger (proprietary Sturmey Archer or Sram 3-sp'd triggers are not suitable). If the bike is a 5-speed, you will need to change the angle of the trigger to suit, and also make a cable of the correct length.

The plane of the slight bends on an S-type bar should be horizontal, with the grips inclined aft. The uprights of the P-type bar should be near enough vertical when unfolded. The controls should be fitted so as not to interfere with the front tyre or spokes when folded (and also so that the cables are not unduly distorted by the RH fork-blade).

You can of course use an alternative setting for the bars and controls, but bear in mind that the folded package may end up wider, and also that you will have to adjust the nipple position to suit.