Seat sleeve replacement

Important information

- On bikes produced after October 2002 a sleeve with an upstanding key (fig. 1) should be used, bikes produced before this date should use a sleeve without the upstanding key, when ordering a sleeve both variants are supplied.
- Two types of sleeve are available, pre-reamed (QSTSLV) and unreamed (QSTSLV-UR).
- A specific reaming tool kit (part QSTSLV-REAMKIT) is needed when fitting the unreamed sleeve.
- The replacement sleeve needs to be fitted with a specific rubberised adhesive (QGLUESS) to secure it in place.

Should you require more information, please contact **tech@brompton.co.uk**

Removing the existing sleeve

Fig. 1

When a sleeve is worn or damaged it will need replacing. If the seatpost is slipping or the seatpost quick release clamp nut has to be over tightened to clamp the post it could be that the sleeve is worn excessively and needs replacing. In order to check the condition of the sleeve remove the seatpost from the bike: with the bike unfolded, remove the saddle. Undo the clamp SCQRA on the main frame and allow the seat pillar to drop down through the main frame. If the bike is fitted with a telescopic seatpost please refer to datasheet *ds-spta* for removal instructions.

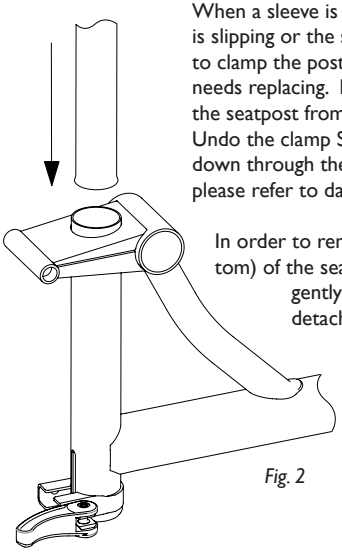


Fig. 2

In order to remove the existing sleeve from the bike you will need to insert the flared end (bottom) of the seatpost into the underside of the seat tube until it contacts the sleeve (fig. 2) and gently knock the top of the seatpost with a mallet or plastic hammer until the sleeve detaches from the inside of the seat tube.

Clean the inside of the tube and remove any remaining traces of the sleeve or adhesive with a wire brush or abrasive paper. At this stage check also for any cracks or damage inside the seat tube at the junction with the main frame tube.

Fitting the new sleeve

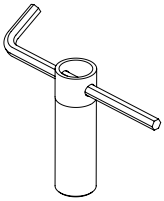
Before fitting the new sleeve it's important to ensure the top of the seat tube has not been damaged or distorted by over tightening of the clamp; the sides of the slot at the back of the tube should be parallel and there should be no signs of cracking at the base of the slot. If the tube is deformed (where the slot in the tube tapers in towards the top) you should try to gently prise open the slot with a suitable lever.

The replacement sleeve should be fitted into the frame with cyanoacrylate glue applied to the raised surfaces of the sleeve, do not use excessive glue. We recommend wearing latex gloves or similar when carrying out this procedure to prevent getting the glue on your skin.

Once the glue has been applied to the sleeve carefully push the sleeve into the frame (ensuring that the slot in the sleeve is aligned with the slot in the tube), holding the sleeve at the recessed channel with two fingers and closing the sleeve slightly will make this easier. In order to get the raised lip at the top of the sleeve to locate in the channel inside the top of the seat tube you may need to gently tap the sleeve with a plastic hammer.

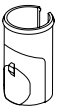
Once the sleeve is installed use a cloth or rag to wipe away any remaining adhesive from the top of the seat tube.

To ensure that the sleeve is correctly positioned insert a large flat screwdriver or tyre lever into the slot at the back of the seat tube and twist this to align the sleeve with the slot in the frame. If a sleeve with an upstanding key is fitted you should hear a loud click as this key aligns with the corresponding hole in the tube.



Push the mandrel into the frame (fig. 3) and close the seat clamp lever to apply pressure to the sleeve (fig. 4), this will ensure the glue is spread evenly between the sleeve and seat tube. If the seat clamp lever does not feel very tight it might be necessary to adjust the nut at the other side of the clamp band.

The mandrel should be left in the frame for 20-30 minutes in order to allow the glue to set.



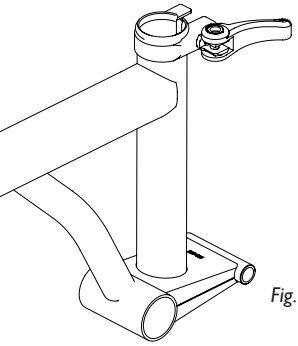


Fig. 3

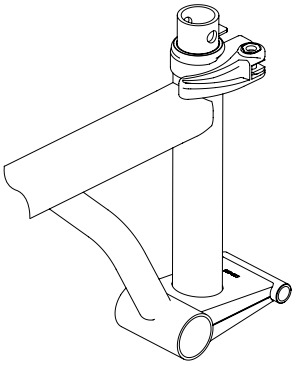
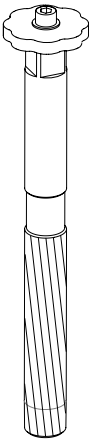
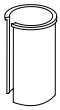
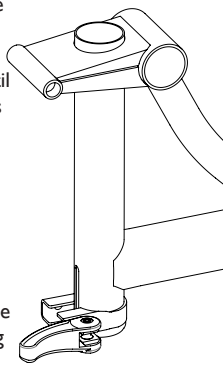


Fig. 4

Fig. 5







Reaming the sleeve

Once the sleeve has been glued in place release the seatpost quick release and remove the mandrel from the frame. Check that when the seatpost quick lever is in the open position the lever is putting no pressure on the clamp band, loosen the nut on the opposite side of the clamp band until the clamp band is no longer loaded.

The reaming tool should be inserted from the underside of the seat tube (fig. 5), in order to make this stage easier it is recommended that you remove the driveside crankarm. The supplied plastic sleeve should be fitted to the plain shank of the reamer (with the lip uppermost) and acts as a guide to ensure the reamer is parallel with the seat tube when cutting the seat sleeve.

Using the handle or an 8mm hex key rotate the reamer clockwise and feed it into the seat tube until the cutting surface has passed through the sleeve completely and the handle of the reamer bottoms out on the end of the seat tube.

Continue to turn the reamer clockwise and lift it slowly from the seat tube; do not attempt to remove the reamer without continuing to turn the reamer in a clockwise direction and at no time should the reamer be turned in an anti-clockwise direction. Once the reamer has been removed clean away any plastic shavings that remain in the frame.

Refit the seatpost and check that it moves through the sleeve smoothly. The seat clamp quick release nut will need adjusting at this stage to ensure it clamps the post securely when closed without using excessive force to close the lever.