3-SPEED GEAR SHIFTER

IMPORTANT INFORMATION

- 3-speed shifters are used on 3 and 6 speed bikes
- These shifters were introduced on 2017 bikes
- This shifter is not compatible with older brake levers or pre-2017 M/H Type bars
- If you are unsure about any fitting or operation instructions please contact a Brompton dealer

USING THE SHIFTER

The 3-speed shifter uses a self-returning lever to change between the three gears. Pushing it down with your thumb will shift into an easier gear and flicking the lever upwards with the back of the thumb will shift into a harder gear (fig.1). It is important to stop pedalling or back pedal slightly when changing gear, if you do not do this it is possible to damage the hub internals. The indicator window (fig. 1, 2) shows you which gear is selected.

Fig. 1

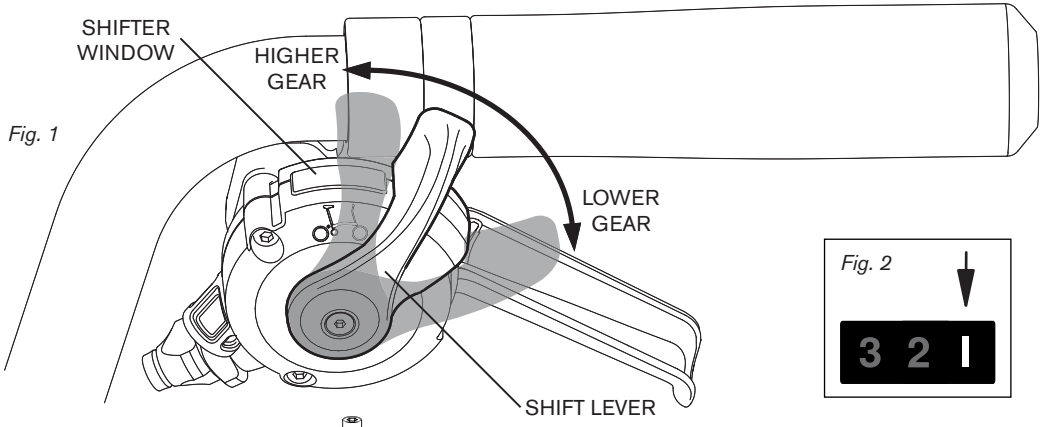
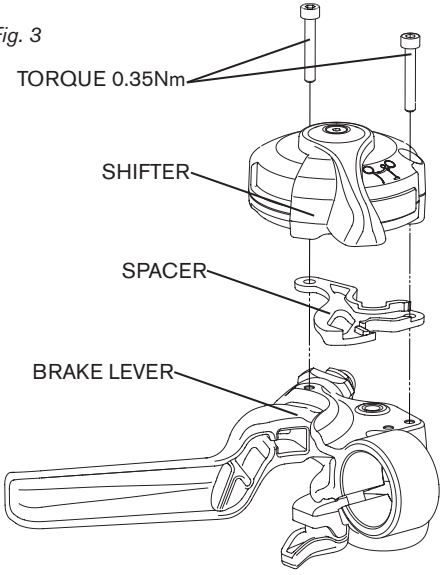


Fig. 2

Fig. 3



FITTING THE SHIFTER

The shifter mounts to the right hand brake lever, it is held in place by two M3 screws, these should be tightened to **0.35Nm**. Do not overtighten the screws as this can reduce the performance of the shifter and damage the parts.

As standard a spacer (fig. 3) is fitted between the shifter and brake lever. This spacer is vital to ensure clearance between the shift lever and the grip.

On P-Type bikes and also on M, H & S-type bikes using non-standard grips, the locking collar or grip material can interfere with the lever operation, if the spacer is not fitted.

BROMPTON

REMOVING THE GEAR CABLE

- Select gear 3 on the shifter, backpedal to engage the hub
- Unscrew the indicator chain locknut (fig. 4)
- Unscrew the indicator chain from the gear cable anchor
- Undo the gear cable anchor clamp nut and release the inner gear cable
- If there is a cable crimp fitted to the cable end you will need to remove this, then pull the cable out of the clamp
- Pull the cable housing away from the shifter
- Remove the inner cable from the cable housing
- Select gear 1 and then press the shift lever downward so it does not obscure the cable entry hole
- Feed the gear cable through the shifter so that the cable nipple ejects from the cable entry hole
- If there is resistance pushing the cable through the bush pull the cable back a little and try again
- Keep feeding the cable through until the cable can be fully removed from the shifter

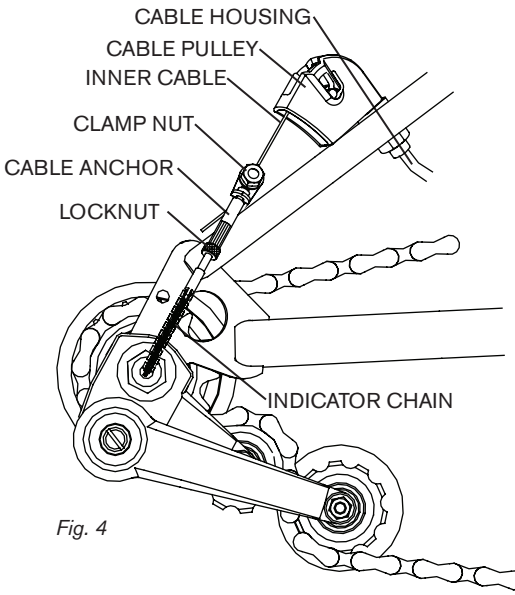


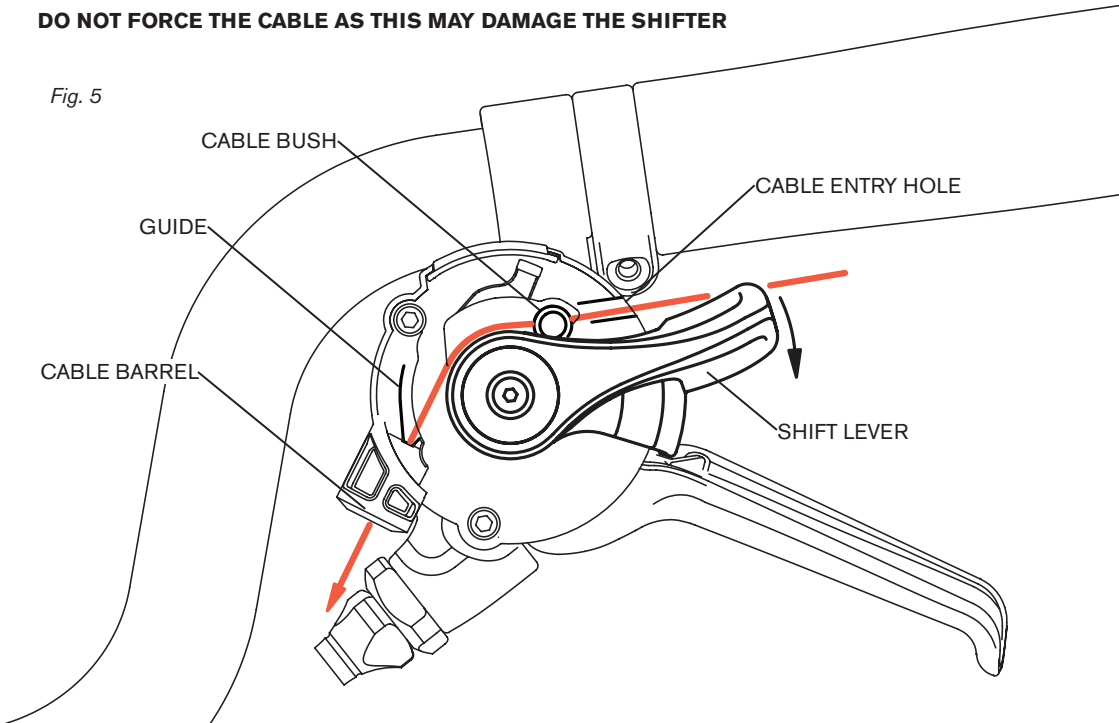
Fig. 4

FITTING A NEW CABLE

- Select gear 1 and then press the shift lever downward so it does not obscure the cable entry hole (fig. 5)
- Feed the gear cable into the shifter and through the cable bush
- If there is resistance pushing the cable through the bush pull the cable back a little and try again
- Once you can feel the cable pass through the bush keep feeding it until you feel slight resistance
- Keep feeding it through so that it follows around the guide inside the shifter and exits through the cable barrel

DO NOT FORCE THE CABLE AS THIS MAY DAMAGE THE SHIFTER

Fig. 5



REFITTING THE GEAR CABLE

- Thread the inner cable through the housing and around the cable pulley (fig. 4)
- Thread the cable through the clamp on the cable anchor and pull through before tightening the clamp nut
- Screw the indicator chain into the gear cable anchor

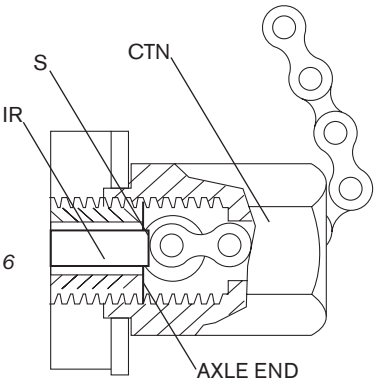


Fig. 6

HUB-GEAR ADJUSTMENT

Adjustment must be carried out with the bike fully unfolded and with the indicator rod screwed into the hub (backed off not more than half a turn to align with the cable). The aim is to make sure that the indicator rod & chain move to the correct position in response to moving the trigger. For this the cable has to be running free of kinks or sharp bends, with the cable pulley rolling freely.

While setting gears, keep the wheel spinning forwards, and pedal back and forwards, to ensure the gear engages. It's easiest, when altering the setting, to have the cable slack: select top gear and back and forward pedal.

Adjustment is carried out by slackening the lock nut, turning the cable anchor barrel (fig. 4) to obtain correct setting, and relocking the nut.

The indicator chain is correctly adjusted (fig. 6) when the shoulder S on the indicator rod IR is proud of the axle end by no more than 1mm (this can be seen by looking through the hole in the chain tensioner nut CTN) when in the middle position on the shifter is selected.