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FORK OIL SEAL REPLACEMENT

(Bullets from 1954 to 1988)

First obtain the new parts that you will need.

2 x fork seals c/w holders, part 45297

2 x seal holder fibre washers, part 37923

Fork oil. (We use SAE20 for normal use or Automatic transmission fluid (ATF) for a softer fork action).

Tools needed:

Whitworth ring spanner (1/4)

Small wedge or flat bladed screwdriver

Large flat bladed screwdriver

Car type oil filter chain wrench

PVC tape

Special tool part 2036 Fork main tube spanner

There are several types of forks fitted to the Bullets. This article covers the alloy bottomed models from 1954 to 1962 and also the Indian built models up to the late 1980's. (Please note that the rare unit construction Bullet built between 1963 and 1965 used the Crusader style forks which did not have any damping, bushes or seals). These forks differ from the later model Indian forks, the 2 main differences being that they have removable bushes, 1 on the bottom of each main tube and 1 on top of each alloy slider. Also the oil seals are fixed in a steel housing that screws on to the top of the alloy slider.

Place the machine on its centre stand and prop up the engine below the front engine plates. Disconnect the front brake cable from the wheel. If you have a front wheel speedo drive, also disconnect the drive cable.

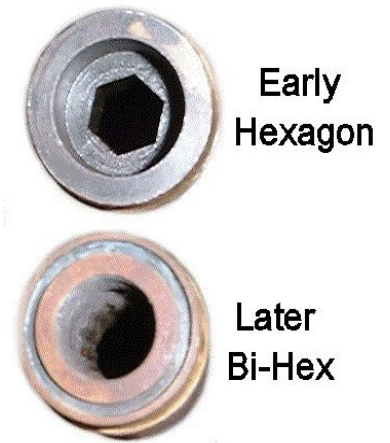


Unscrew the two shrouded nuts holding each of the two wheel spindle clamps. Remove the clamps, followed by the complete wheel. Unscrew the 4 or 6 nuts (depending on the exact model) holding the front mudguard stays to the alloy fork sliders and drop the complete mudguard assembly out.

Loosen and remove the two lower main tube pinch bolts. Insert a small wedge in the steering stem (see photo on left), to release the grip on the main tubes. Remove the 2



plug screws in the top of each main tube. This will expose a hexagon or bihexagon hole. Using special tool part number 2036. (If you do not have this, you can use your footrest bar and a 1/2" AF spanner. Be careful not to let this drop in). Unscrew the fork tube, this is a normal right hand thread. These can be very tight, so you may need to spray some penetrating oil all round and leave over night. If this fails then a bit of heat will be needed on the casquette. Each fork leg assembly should now drop out.



The fork seals which are encased in the fork seal holders will now be seen, threaded on the top of the alloy fork slider. You will notice that there are 2 flats on each seal holder. However I have found that these are not normally wide enough to fit a spanner, and even if they are, the pressure exerted by the spanner normally clamps the seal holder on to the alloy thread even harder. If you are lucky, a bit of old inner tube and a strong grip will unscrew the seal holders, but normally a chain fitter wrench (as used on car oil filters) will be needed. This, no doubt will damage the surface area of the seal holder, but as these are throw away items, it will not matter.

Now is the time to check for wear on the bushes (if fitted). If you need to replace the bushes, please refer to the manual.



Early models had a single oil seal fitted in each holder. Later models have 2 separate seals fitted in a deeper holder. The later type, are far superior and can be fitted without problems to the early models. Most spares dealers will supply the later type as a matter of course.

When fitting the new fork seal holders, ensure that the fibre washer (part no 37293?) is fitted between the alloy slider and seal holder. Use electrical pvc tape

over the threads on the top of the main tube with a bit of grease. This will prevent any damage to the seals when sliding them on. Screw the holders on to the alloy sliders, and using the inner tube and a strong hand grip, tighten them up. You can if you wish, give them a final nip with the chain wrench, but be careful not to cause damage.

Before testing make sure that the fork oil level is correct. All that is necessary is to keep sufficient oil in the fork to ensure that the top end of the bottom spring stud is never uncovered even in the full rebound position. The level of oil in the fork can be gauged by removing the top plug screw and inserting a long rod about 5/16" or 3/8" diameter. (The rear brake rod can be used for this purpose). If slightly tilted the rod will ledge against the nut at the upper end of the bottom spring stud and indicate the level of oil above the stud. If the fork is empty to start with the quantity required is approximately 7.1/2 fluid ounces (220ml) in each leg.

Replace the mudguard, wheel, brake cable etc. and check the fork and brake action before going back on the road.

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