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FORK OIL SEAL REPLACEMENT **(Indian built Bullets after 1988)**

First obtain the new parts that you will need.

4 x fork seals, part 144468

400ml of fork oil. (20/50 for normal use or Automatic transmission fluid (ATF) for a softer fork action).

Tools needed:

Whitworth ring spanners ($\frac{1}{4} + \frac{3}{8}$)

Thin nosed pliers

Rubber Mallet (Can be found in most owner's toolkit!)

Tyre lever or strong screwdriver

Special tool part 2078 Fork seal removal sleeve (essential)

Special tool part 2077 Fork seal drift (not essential, but makes life easier)

Special tool part 2076 Fork oil seal expander (not essential)

Start by loosening the domed "spring stud nuts" at the bottom of each fork end, before putting the machine on its centre stand. The reason for starting here is that the weight of the machine will be pressing down on the "spring stud" via the springs this will hopefully prevent it turning in the alloy fork ends while unscrewing this nut. If the stud starts to turn, then a second person pushing down on the forks along with a sharp tap with a mallet on the spanner should be sufficient to free the nut.

Place the Bullet on its centre stand and support the front of the engine on a strong box to lift the front wheel clear of the ground. Disconnect the speedo and brake cables. Unscrew the 4 shouldered nuts and remove the 2 "fork spindle clamps" followed by the wheel. Unscrew the 6 nuts that hold the mudguard stays to the alloy fork ends. Pull the stays off the studs, twist and drop the mudguard out of the forks. Place an oil tray under the forks and finish removing the domed "spring stud nuts" and washers. The alloy fork ends should then pull down and off, but you may need to give them a little encouragement with a rubber mallet if the spring stud is a tight fit in the alloy. Once removed be aware that there is a loose "oil control collar" on the end of the fork spring stud. This may drop off, or may have already fallen down in the alloy fork end.

The fork seals can now be seen in the top of the alloy fork end. With a pair of pliers, pull out the retaining circlip. **We strongly recommend the use of the special tool, part 2078 "Fork oil seal removal sleeve" for the next step.**





This slips over the top of the alloy fork end and prevents excess leverage cracking the alloy whilst removing the seals, (see photo on left). The cost is about £15.00, but it is far cheaper than a new fork end. With this sleeve in place (see photo on right), use an old tyre lever or strong screwdriver to lever out the 1st fork seal, then the nylon spacer and finally the 2nd fork seal. These fork seals can be a little tight, so a bit of heat or hot water applied locally to the fork end may help.



Please note that 1988 to late 1990's use a dust seal that is no longer required. These are replaced with the 2nd oil seal. You will also need to order 2 x nylon spacers, part 144469.

Before reassembly, clean out the fork ends, removing all the old oil. Now is a good time to check for play between the fork end and the main tube. There are no bushes fitted to this type of fork so if the play is excessive, then you will need to replace the fork ends. Also make sure the main tube is not scratched or rusty, this will prematurely damage the fork seals if left unattended. Smooth out any imperfections using 1000 grade wet & dry paper with a little oil.

Now would also be a good time to check your fork springs for sag. 20½” is the correct new length; if they are shorter than 19½” then it is time to replace them. You may want to replace them with a softer and more progressive spring (Part 144219A)

Grease the new seals to aid assembly and tap them in to place. There is a special tool (Part 2077) for this, but a socket or similar, of the correct diameter can be used as a drift. These seals must be fitted the correct way up, i.e. the open end pointing downwards. Fit the 1st seal on each fork end, followed by the spacer, then the 2nd seal and then the circlip.



If the “oil control collar” needs to be re-fitted on the spring stud, now is the time with taper facing upwards. Again a little grease will help to hold it in place on the spring stud.

The fork end now needs to be pushed on to the main tube. Special tool 2076 “fork oil seal expander” will make the job easier and prevent damaging the seals on the edges of the main tube and castellated valve port. If you do not have this tool then a good substitute can be made from a piece of strong polythene coated in grease, pulling this out as the seals slide over the end of the main tubes. Push the fork end up until the fork spring stud protrudes through the bottom, (it may be necessary to help guide this stud into the hole by means of a screwdriver from underneath). Replace the nut and washer and tighten. If the stud feels as though it is turning before the nut is tight, you will need to put some weight on the forks in the same way as when you disassembled them.

Remove the slotted fork plug screws from the top of the fork legs and refill with 200ml of oil in each. Refit the mudguard. Refit the front wheel ensuring that the brake plate anchor lug is fully located in to the brake plate. Replace the 4 spindle clamp nuts; do not over-tighten, or you will break the alloy clamps. (The correct torque is 1.30 Kg-m or 112 LB-inch). Reconnect the speedo cable. Reconnect the brake cable and adjust correctly. Check the brake and fork action before going back on the road.