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FRONT BRAKE OVERHAUL

Often criticised for lack of bite, the brakes on your Bullet can be made to work well provided you're prepared to spend a little time and effort on them.

Bullets have been fitted with a variety of 6" and 7" full and half-width front hubs since the late 1940s. Here we concentrate on the 7" twin-leading shoe which has been fitted to most Bullets from 1990 to the present date. This is the most common and the most powerful of the drum brakes. It can be retro fitted to any Indian made Bullet. It can also be fitted to most English made Bullets and Twins, it is probably one of the best and most important modifications you can make. You will need: spanners, a tin of brake

cleaner, high melting point grease, a wire brush, some abrasive paper and thin oil to lubricate the cable.





With your machine on its centre stand place a strong box or jack securely under the front of the engine to raise the front wheel off the ground. Slacken the brake cable adjuster on the forks and remove the brake cable from the brake lever on the wheel. Now is a good time to check and lubricate the cable by passing light oil through the top of the cable until it starts dripping out of the bottom. (Nylon lined cables do not require lubrication, only something like WD40 to displace moisture. Standard cables need to be lubricated with a light oil to prevent rust). You can get a special cable oiler for these jobs, (Part E0009 or E0010).

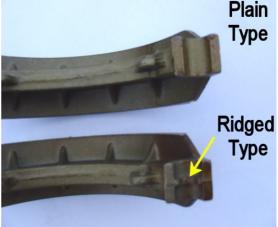
Unscrew and remove the Speedo cable from the hub. Now remove the four nuts and washers which hold on the fork spindle cap. The wheel should now fall out under its own weight. bringing the end caps with it. Remove the brake plate assembly by first undoing the centre retaining nut. Apply pressure to the brake lever to prevent the spindle from turning. You may need to gently hold the spindle in the vice if this is not enough. These nuts can be very tight and it may require gentle tapping with a hammer and punch on the hexagon. (A replacement nut is relatively cheap).

Now you have the brake plate on the bench you must clean, examine and lubricate all the components. (*Early models used asbestos linings, so be careful of harmful brake dust*). Use the brake cleaner to dampen the inevitable dust and clean and deglaze the drum and shoes with the wire brush and abrasive paper.

If you have had problems with brake judder (after first ruling out a problem in the steering head races or fork bushes/maintubes), have an experienced engineer check for ovality or a "bell-mouthed" drum. A good engineering shop will lightly skim your drum with just the tyre removed. Make sure that the rim is true and the spokes are tight before this work is done. Do not skim a drum without the rim as it may get distorted during wheel building.

Most owners will need to replace only the worn brake shoes, preferably with modern high-grip linings. Check, clean and grease the brake cams, seals, springs and wheel bearings and replace any "tired" or damaged parts. (Note: On these twin leading front brakes, there are different styles of brake shoes. If ordering replacements, be sure to give the year of your Bullet and mention if you have the style with the central ridge or not).

Reassemble the complete brake plate and replace in the drum, not forgetting to re-fit the distance piece between the bearing and brake plate. Hold the brake



on to centralise the brake plate and tighten the conical-faced retaining nut. Replace the wheel. Make sure that the slotted anchor lug on the forks locates fully into the brake plate. Be careful not to over-tighten the four fork cap nuts which might cause the cap to break. Refit and adjust the brake cable and also refit the Speedo cable.

Drill this trunnion

Fit locknut here



The reason for a poor front brake can often be traced to glazed linings and poor adjustment. Both shoes must contact the drum together but this can be difficult to do with the standard linkage with its left and right hand threaded link rod. You can improve this situation by simply ensuring that the left hand threaded end of the rod is at the bottom, drill out the top trunnion's righthand thread so that the threaded part of the rod passes through freely. Refit the trunnion and nut with an added 5mm lock nut. This then allows adjustment of each shoe independently. Hold the handlebar brake lever on firmly, to do this wrap a bungee round the lever or temporarily over-adjust the cable. Then with the link rod locked in the bottom arm trunnion, adjust the top nut down until this shoe is hard against the drum and then tighten the extra locknut.

Check the brake is functioning correctly before taking to the road.

Do all this carefully and you should have a powerful brake suitable for modern day traffic conditions, but please note: new linings will take some time to "bed-in".

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