

B.S.A. CYCLES LTD.

SERVICE SHEET No. 46.

Service, February 1936.

MOTOR CYCLE.

3-SPEED AND 4-SPEED GEARBOX.

When fitting a replacement mainshaft, mainshaft bush, layshaft or layshaft bush to three or four-speed gearboxes, ensure that the shaft has sufficient end clearance.

To test this, fit the end cover complete with bush or bushes to the gearbox shell with the following parts only in position.

4-speed gearbox.

Layshaft and low gear pinion.

3-speed gearbox.

Layshaft and second gear pinion with kickstarter quadrant.

3-speed gearbox.

Mainshaft with thrust washer and kickstarter ratchet assembly.

Remove the inspection cover and ascertain that the shaft is free to rotate and that the barest perceptible amount of end clearance is in evidence.

If the shaft cannot be rotated freely remove the end cover, make perfectly sure that the shaft is free to rotate in the bush, and if necessary reduce the thickness of the face of the bush to give the necessary end clearance which should amount to approximately .004in.