SPARES for ROYAL ENFIELD & AMAL

EMAIL: info@hitchcocksmotorcycles.com
WEB: www.hitchcocksmotorcycles.com

HITCHCOCK'S MOTORCYCLES LTD
ROSEMARY COURT
OLDWICH LANE WEST
CHADWICK END
SOLIHULL
B93 0EY ENGLAND

TELEPHONE: 01564 783 192
FAX: 01564 783 313

ROYAL ENFIELD ROLLER BIG END FITTING

The correct fitting of the big end bearing is essential to ensure the longest service life. Below we outline some fitting guidelines, these may be useful even for more experienced fitters.

1. The con rod side float is normally expected to be 0.012" to 0.015"and is very much determined by the correct fitting of a suitable crankpin.

2. Separate the flywheels and remove the crankpin. The connecting rod liner or bearing outer race can then be pressed out.

3. Measure the diameter of the con rod big end eye, then measure the outside diameter of the replacement outer race. There should be 0.0022 to 0.0025" of interference.

4. With the correct interference fit, press the liner into the con rod – taking care to ensure that the liner is square to the con rod face.

5. Fit the crankpin thrust washer with the internal chamfered against the crankpin, align the crankpin oil feed hole with the timing side flywheel oil hole and press home. Inspect the fit and note the crankpin/washer should be fully home up to the flywheel. Secure this by fitting the crankpin nut.

6. Place the cage and rollers around the crankpin and then measure over the crankpin and rollers to determine the diameter required for the outer race. The inside diameter of the outer race should be measured and checked for ovality and parallelism. The bearing requires between 0.0008" and 0.0012"of diametric clearance and this should only be obtained by using a honing bar or fine lapping tool. Great care should be taken not to introduce barrelling or taper to the outer race bore.

7. Change the small end in the rod if this is required and check the rod for truth and straightness.

8. Fit the connecting rod over the crankpin and check it runs freely.

9. Fit the drive side thrust washer, flywheel half and nut, trying to ensure that the flywheels are pressed together with the flywheels in line as much as possible this minimising the alignment work required later.

10. Check the end float is as required.

11. Commence the process of alignment and truth of the flywheels.

12. Tighten crankpin nuts to 100ft/lbs (135 Nm).