



## SERVICE BULLETIN AND TECHNICAL DATA

29th April, 1960.

Reference 60/2. FWN/DD.

### SPARE PART PRICES

Owing to recent National Awards within the Industry, coupled with rising material prices, spare parts of our manufacture will be increased by 5% on existing prices. This increase will be effective on 2nd May, 1960.

#### 650cc. TWIN CYLINDER MODELS

The nominal cylinder bore size is 2.8345 ins. When a rebore is carried out by dealers or grinding specialists, the finished bore size in the instance of a first rebore (+.020") must be 2.8555 ins. In the case of a second rebore (+.040") the finished size must be 2.8755 ins.

#### 600cc. TWIN CYLINDER MODELS

The nominal cylinder bore size for this model is 2.8345 ins. Cylinders should be rebored to 2.8555 ins. (+.020" and to 2.8755 ins. (+.040")

NOTE: The dimensions given for both types of engine have a tolerance of plus and minus .0005 ins.

#### 1960 TWIN CYLINDER MODELS

The fabric type crankcase filter used on previous models is not adaptable to the current type engines, due to the use of the oil pump pressure relief valve piston 026133, which is located in the timing side end of the oil filter tunnel.

#### TWIN CYLINDER ENGINE OVERHAUL

During a complete engine overhaul, special precautions are essential to prevent premature wear on the big end bearings, also the cam gear. When crankshafts are re-ground away from the Factory both the big end and centre web journals must be directionally hand-lapped to give a mirror-like finish. The drive side, also centre web journals are lapped in the direction of engine rotation - the timing side journal in a reverse direction.

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Issued by:

ASSOCIATED MOTOR CYCLES LTD · LONDON S.E.18

MANUFACTURERS OF A.J.S. AND MATCHLESS MOTORCYCLES

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It is also imperative to restore the chamfer removed by grinding on the oil holes drilled in the crankshaft. These drillings must be flushed out under pressure to remove abrasive residue. The big end and centre web shells should be coated with a Molybdenum Disulphide preparation before assembly to prevent scruffing. Treat the bearing surfaces of both cam contours also the four cam followers in a similar manner. The four self-locking nuts for the con rod studs previously used should be discarded and replaced with new ones.

When the engine is assembled as far as refitting the cylinder heads, distribute a pint of engine oil equally down the push rod tunnels in each cylinder to flood the cam follower chamber.

Torque spanner settings are as follows:

Con rod stud nuts	...	22ft. lbs
Centre web journal nuts	.	11ft. lbs
Centre web to crankcase nuts		6ft. lbs
Cylinder head bolts	...	16ft. lbs

CRANKCASE RELEASE VALVE STATOR

The location and assembly sequence of this component can be seen in the exploded view of the engine unit issued with the Spares List. It will be observed that the release valve stator 042220 is located in the drive side bearing situ and retained by the release valve tube 042221. Should slight movement develop between the stator and its housing the stator will "flutter" and generate a noise that has often been associated with movement in the big end assembly. The noise is constant at all engine speeds and for this reason it can readily be identified. The stator movement can be absorbed by using a release valve tube that has been cadmium plated on the end that engages with the stator, thus avoiding the necessity to dismantle the engine. A modified release valve tube will be issued on application to the Service Department.

1960 Engines with a number after 6850 (250cc.) and after 1600 (350cc.) are assembled with a threaded end on the release valve tube and a threaded orifice in the stator for positive location.

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