

B.S.A. CYCLES Ltd.

(Proprietors: The Birmingham Small Arms Co. Ltd.)

SERVICE SHEET No. 1.

"SERVICE."

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PISTON RINGS.

Piston rings should be perfectly bright and free in their grooves. Those showing brown patches, or having excessive butt end clearance, should be replaced by new ones.

When fitting replacement rings see that a clearance of not less than .006in. is allowed between the butt ends when cold for expansion purposes. In high-compression engines this clearance should be increased for the top rings to .008in.

For high-compression engines used for sprint work at maximum revs. the butt end clearance of the top rings should be about .020in. This particularly applies to Dirt Track models or the like.

To check the butt end clearance slide the piston into the cylinder barrel skirt first, insert the piston ring about half-way down the bore, and push the piston up either by hand, or in the case of a side valve cylinder by means of a rod or a piece of wood passed through the compression plug hole until the ring rests squarely on the crown of the piston. Allow the piston to fall away from the ring, hold it firmly, and check the butt end clearance by means of a feeler gauge.

Having fitted the rings on to the piston, make sure that the ring gaps are on opposite sides of the piston and smear the sides of the piston generously with engine oil to obviate any risk of damage when first running after assembly.

While sufficient butt end clearance is essential, excessive clearance will reduce the effective life of the rings.