

B.S.A. CYCLES LTD.

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SERVICE SHEET No. 84.

MOTOR CYCLE.

1938

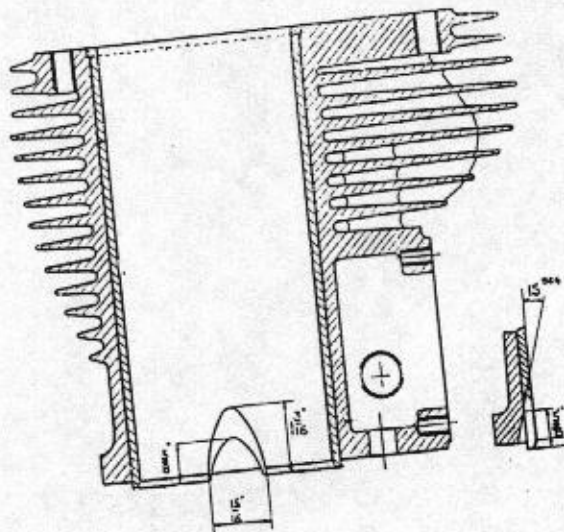
CYLINDER LINERS.

The Austenitic Cylinder Liners used on 1938 B23, M20, M21, and M24 Models are very hard wearing, but if and when the necessity arises they may be ground out to $\frac{1}{2}$ mm. or 1mm. oversize.

An important feature of austenitic iron is that it "work hardens"—in other words the burnishing occasioned by the passage of the piston or a boring tool causes a very hard surface to form making it almost impossible to machine even though use be made of a high duty boring tool. Therefore, the liner bore must be ground out to ensure an accurate and satisfactory finish.

During the pressing in of a liner to a cylinder the internal diameter of the former will be reduced by some .003in. and therefore between .015in. and .020in. is left on the internal diameter of the liner for finish grinding whilst located in the cylinder.

In the case of the cylinder liners for M20, M21 and B23 Models it is necessary to provide two scoops diametrically opposite one with the other in a direction at right angles to the gudgeon pin as clearance for the connecting rod. These must be ground in after the liner is pressed into the cylinder bore. For details see sketch below.



2 SCOPES
DIAMETRICALLY OPPOSITE
GROUND AFTER LINER
IS PRESSED IN.