SECTION C5

VALVE GUIDE RENEWAL

The cast iron valve guides are a tight interference fit in the cylinder head and can be removed and refitted only after heating the cylinder head to a temperature of 150° to 200°C. A special Service Tool 063964 is available for removing and refitting the valve guides. Proceed as follows:

1 Place the tool adaptor marked "Remover" hollow end down over the valve guide.

2 Place the cranked and threaded stem through the valve guide from the hemisphere.

3 Hold the cranked stem to prevent it turning and screw on the handle (see *Fig.* C6). As the handle is tightened the guide and cranked stem will be pulled through into the remover body.

Caution: If guides seem difficult to remove, ensure head is heated evenly. Do not force guides in or out of their bores.

New valve guides are available in oversizes : +0·002 in. and +0·010 in. for the 850 engine. The valve guide to cylinder head interference should be ·0015 in. — ·0025 in. and if there is ovality and oversize guides are to be fitted the valve guide bores in the head must be reamed to suit. As a matter of course use the improved inlet guides with valve guide-to-stem seals during re-assembly.

Fit new valve guides as follows :

4 Place the new guide in line with the bore in the cylinder and place the adaptor marked "Replacer" from Service Tool 063964 over the guide.

5 Place the replacer stem through the cylinder head and bore of the valve guide and locate the abutment to the valve seat.

6 Fit the handle and turn to pull the guide fully home into the head. If necessary the abutment can be prevented from turning by the use of a suitable key in the socket provided. Be careful not to crush circlips on guides, just pull down tightly enough to seat.

7 Recut the valve seats at the points where new guides have been fitted. This operation is described in Section C6.

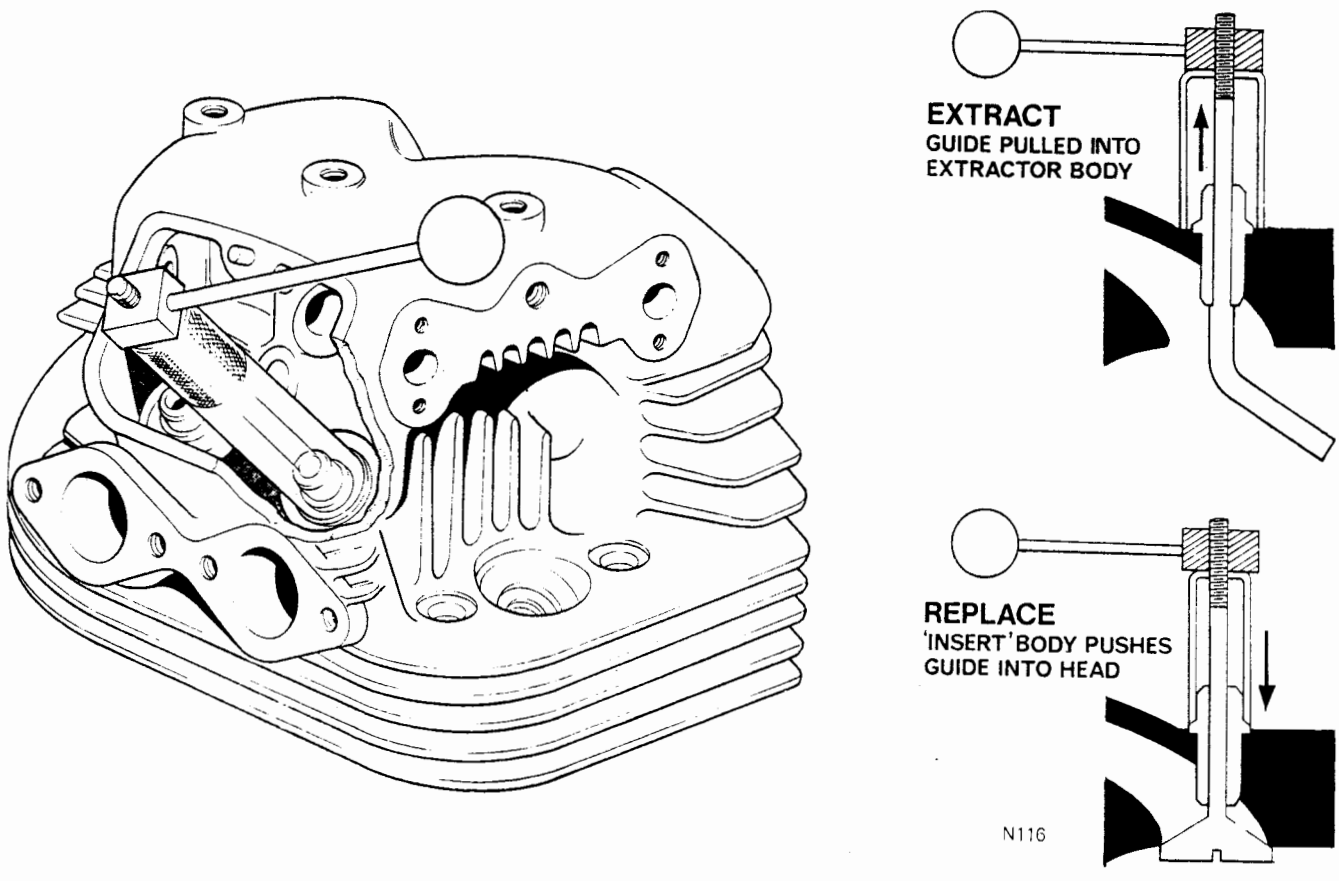

Fig. C6 Using valve guide tool 063964 to remove a valve guide