(10) VALVE GRINDING

If it is found that the cylinder does not require reboring, the valves can then be removed for examination of the valve seats and a check made of diameter of the guide hole for valve stem. The operation of valve removal will be much easier if the carburetter with elbow, and silencer, is first removed. After removal of valve chest cover, the valve springs should be compressed using tool ST.2630B, Fig. 6, and the valve collars pulled away with tool ST.371.

The original diameter of valve guide hole is .2505″/.2495″ and maximum clearance of valve stem in hole is .0035″. When the clearance becomes excessive the hole can be reamered out to take a replacement valve .005″ oversize on the stem. To facilitate this operation a Guide Block, SST.638B, is available, together with a suitable reamer SST.487, see Fig. 4. To use the guide block, insert the bush in the valve port to centralise the fixture and secure by two of the cylinder head studs. When one valve guide has been opened out, turn the block over and locate the bush in the other port.

The valve seats will require re-cutting whether original or oversize valve stems are to be used. The included angle for the seats is 89° and cutters are available for both sizes of valve stem, ST.374, original size, ST.374 oversize. Fig. 5.

Afterwards grind the seats with a new valve in position, using No. 360 fine grade of carborundum. All traces of carbon and grinding compound must be removed before re-assembly of valve with spring and collar. If original valves are used again, it is desirable to replace in original positions.

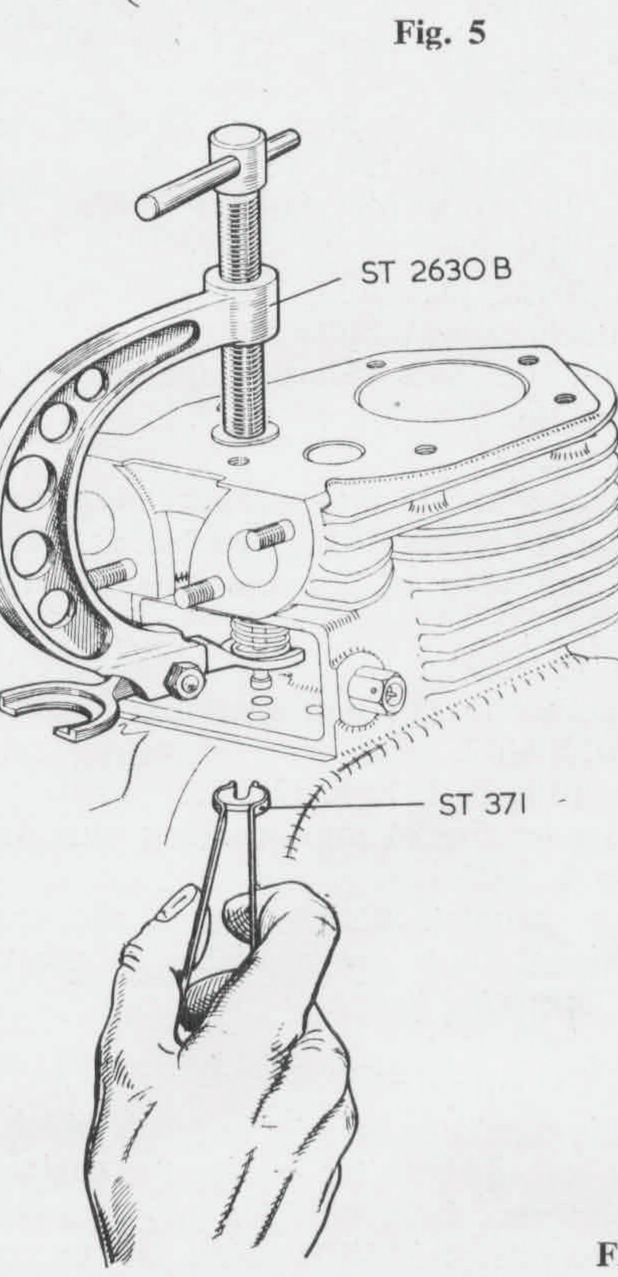

Fig. 5

Fig. 6

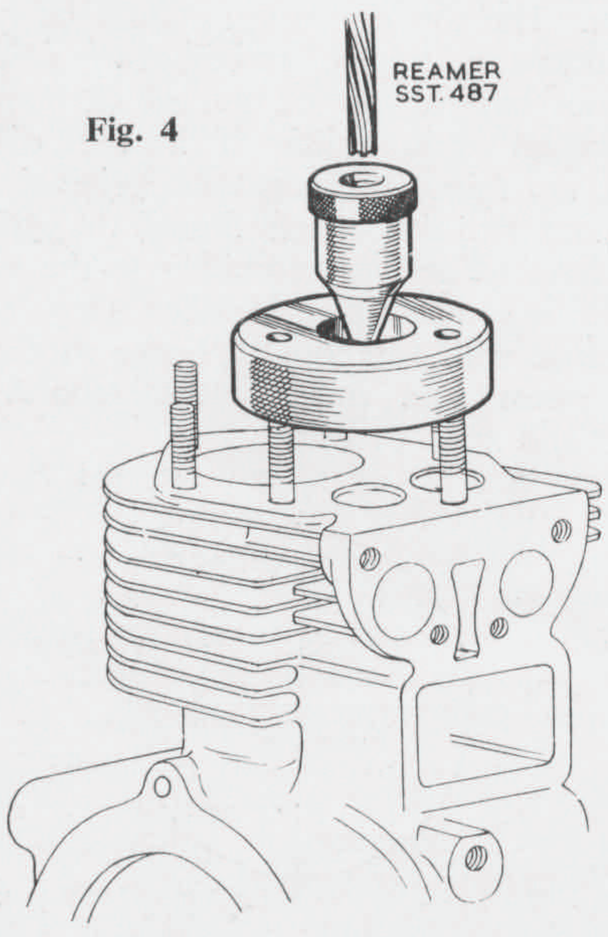

Fig. 4