

3-4 CYLINDER HEAD

a. Description

The engine being on overhead camshaft type, the valves are located in the combustion chamber in the head. The combustion chamber is semi-spherical design for greater power output and the valve guides are press-fitted into the head.

Remove the valves.

Compress the valve springs using the valve spring compressor (Tool No. 07957-3290000) and remove the valve cotters, springs and valve in this order.

CAUTION: Compress the valve springs with care attention paid not to damage the valve stem seal.

b. Disassembly

1. Remove the cylinder head in accordance with section 3-3 b on page 26~29.

2. Disassemble the cylinder head using the valve remover (Tool No. 07031-30001 and 07031-30010) and disassemble the following parts: cotter, retainer, valve spring (both inlet and exhaust), valve stem seal, spring seat in the order. (Fig. 3-46)

3. Remove the valve guide using a valve guide removing tool (Tool No. 07942-3000000). (Fig. 3-47)

c. Inspection

1. Measuring the clearance between valve and valve guide

Insert the valve into the valve guide in the cylinder head and measure the clearance in both the X and Y axes, using a small dial gauge. (Fig. 3-48)

If the measured clearance is greater than 0.003 in. (0.08 mm) for the inlet valve or 0.004 in. (0.1 mm) for the exhaust valve, both the valve and valve guide should be replaced. The replacement valve guide should be one that is oversize. Use a valve guide driving tool (Tool No. 07942-3000000) to drive the valve guide fully into the head. (Fig. 3-49) Complete the valve guide installation by reaming out the valve guide using a valve guide reamer (Tool No. 07984-6110000) to the standard dimension. Standard inlet and exhaust valve guide inside diameter is 0.2599~0.2603 in. (6.6~6.61 mm).

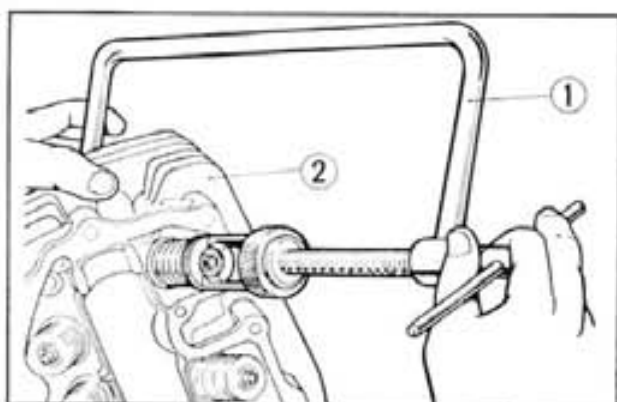


Fig. 3-46 ① Valve lifter
② Cylinder head

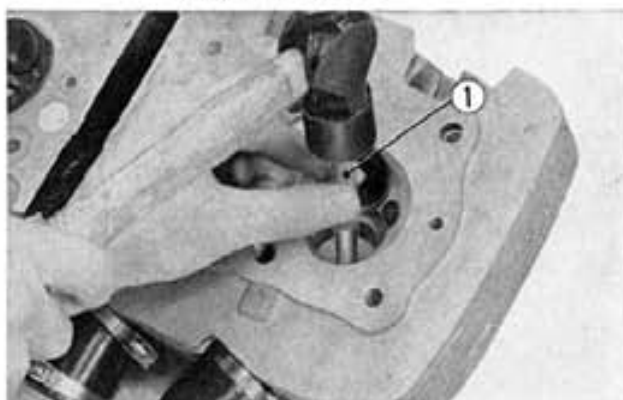


Fig. 3-47 ① Valve guide removing tool

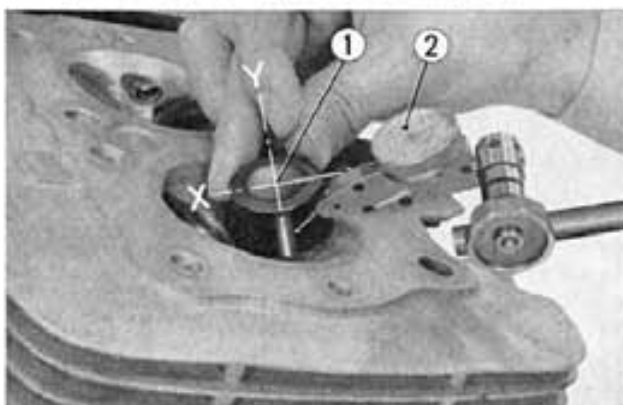


Fig. 3-48 ① Valve
② Dial gauge

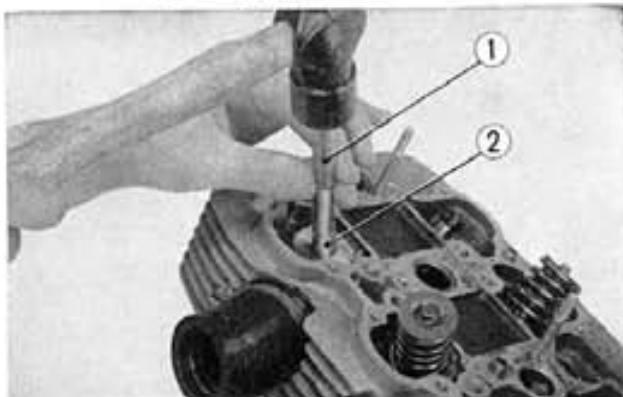


Fig. 3-49 ① Valve guide driving tool
② Valve guide