3.2 CYLINDER HEAD AND CYLINDER

1. CYLINDER HEAD, COVER AND BREATHER

A. Construction

The cylinder head is a cast aluminum twin head construction of a semi-spherical combustion chamber with a squish area for better combustion efficiency. **(Fig. 3–136)**

The single piece overhead camshaft, rocker arms and valve mechanisms are all incorporated in the valve chamber above the combustion chamber.

Cylinder head cover incorporates a breather passage for dissipating the pressure build up.

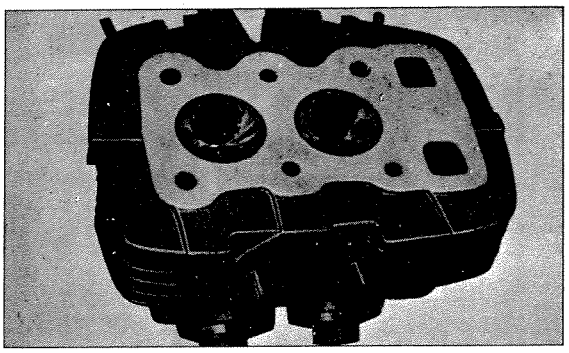
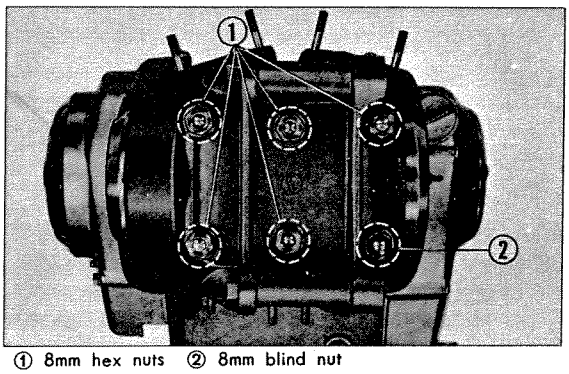


Fig. 3–136. Cylinder head

B. Disassembly

1. Drain oil from the engine.
2. Remove the 8 mm blind nut and five 8 mm hex. nuts, and then remove the cylinder head cover. **(Fig. 3–137)**
3. Remove the left and right cylinder head side covers by unscrewing the long bolt from the left side
4. Rotate the crankshaft so that the cam chain joint is toward the top of the cam sprocket and then remove the cam sprocket mouuting bolts.
5. Attach a wire ① to both ends of the chain ② and then disconnect the cam chain, this will simplify the reassembly task later. **(Fig. 3–138)**
6. Separate the cylinder head from the cylinder.

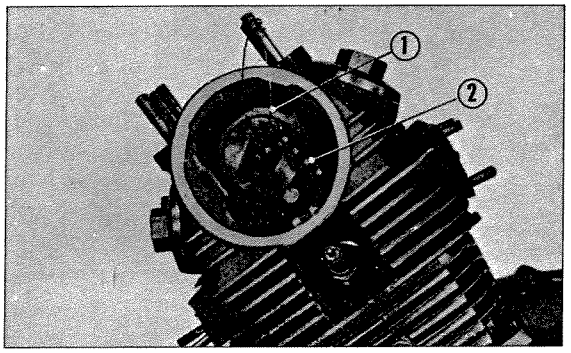


① 8mm hex nuts ② 8mm blind nut

Fig. 3–137. Removing the cylinder head cover.

C. Inspection

1. Disassemble and clean all the parts before inspection. Carbon, should be removed with care, using a carbon scraper to prevent damaging the head. **(Fig. 3–139)**
2. Refer to section 3.2 C on page 21.
3. Inspect the combustion chamber, inlet and exhaust ports for cracks.
4. Inspect the valve guide and valve stem. Check the valve guide diameter at the top, center and bottom in both the X and Y axes, using a precision cylinder gauge. Check the valve stem with micrometer.



① Wire ② Cam chain

Fig. 3–138. Attaching the wire to the cam chain

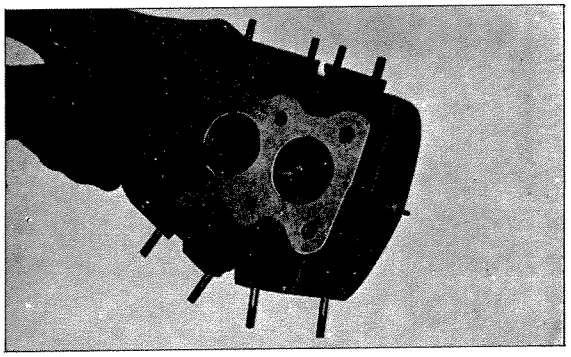


Fig. 3–139. Scraping carbon from combustion chamber