

A. Cleaning and Pressure-Testing of Crankcase and if necessary, Surface-Grinding

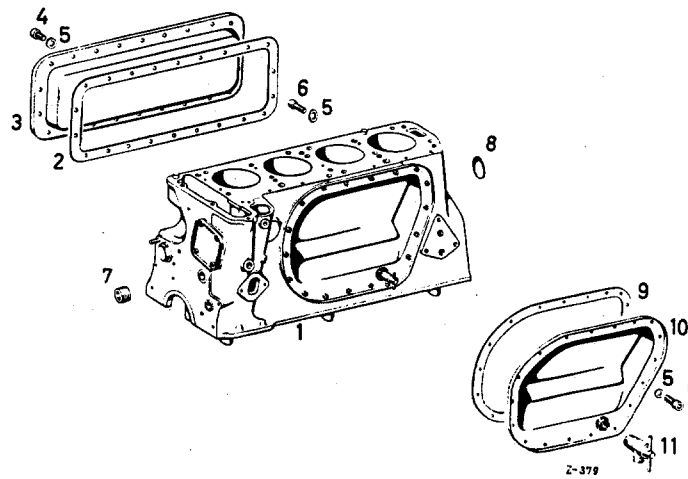


Fig. 01 — 5/1

1 Crankcase

2 Gasket

3 Cylinder cover

4 Hexagon socket screw M 6×18 DIN 912-8 G,
also for carburetor linkage bearing support

5 Washer

6 Hexagon socket screw M 6×12 DIN 912 8 G

7 Screw plug

8 Plug

9 Gasket

10 Cylinder cover

11 Drain valve

Cleaning:

1. The water passages and connecting canals must be thoroughly cleansed of scale and other impurities.

In the course of time, dirt and other deposits can collect between the wall of the case and the cylinder covers. Both cylinder covers should then be taken off if any doubt exists and the deposits between case and covers removed.

2. Carefully clean the sealing surfaces of the covers and of the crankcase. New gaskets, with sealing compound applied, should be put on and the cylinder covers screwed down. The cylinder covers must make a perfect seal with the crankcase and for this reason it is absolutely necessary to carry out a leakage test.
3. Clean the oil passages. Remove the screw plugs at the front and the rear of the crankcase. The oil passages should then be cleaned with brushes and wire cleaners and blown out with compressed air.

The oil passages which lead to the bearing for the horizontal and vertical distributor drive shaft and those which lead to the cylinder head must also be cleaned.

After cleaning, new screw plugs must be used and these must first be coated with sealing compound (e. g., Starryt) on the rear three threads before they are screwed in. Care must be taken to ensure that no sealing compound enters the oil passage when this is done.

The upper oil passage has no screw plug at the front. The opening is for the oil relief valve.

Surface-grinding:

4. Check whether the upper separating surface of the crankcase is perfectly even. Maximum permissible departure from plane is 0.03 mm in a longitudinal direction and 0 in a lateral direction. If there is any unevenness in excess of this, the separating surface must be surface-ground or milled.

The overall thickness of stock machined off must not exceed 0.3 mm.

Departure from parallelity between the upper separating surface and the middle of

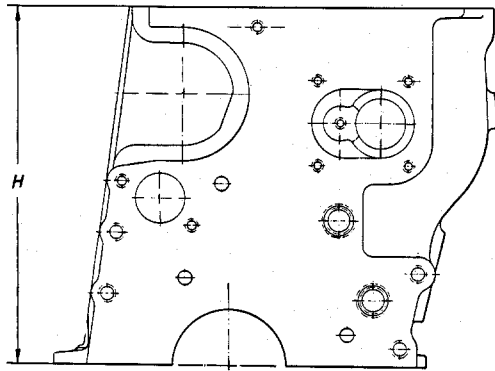


Fig. 01 — 5/2

the crankshaft bearing must not exceed 0.1 mm over the whole length.

The height H of the crankcase is normally 238.4 to 238.5 mm, measured from the separating surface for the oil pan (middle of crankshaft bearing) to the separating surface for the cylinder head (Fig. 01 — 5/2).

Pressure-testing:

5. The crankcase is tested for leakage by subjecting it to a pressure-test with hot water (approx. 70° C) at a pressure of 2 atmospheres.

Before pressure-testing, the sealing compound must be allowed to dry for a sufficient period of time (at least 4—6 hours).