

Job No.
03-19

Grinding Clutch Surface of Flywheel

This operation is always necessary if the clutch surface of the flywheel shows scores, heat marks or heat cracks. The clutch surface must then be surface-ground or precision-turned on a suitable machine tool. The aim during this operation must always be to remove as little material as possible. If the cracks are deeper than the maximum permissible machining, the flywheel has to be replaced.

During machining the flywheel must be properly mounted, so that the permissible lateral deflection of 0.05 mm, calculated for a diameter of 230 mm, is not exceeded. The clutch surface "A" can be machined until the measurement "b" has been reached. In every case, the surface B must also be machined, so that the specified distance "a" is obtained (see Figure 03-19/1 and table on page 03-0/6 'dimensions of the flywheels').

The minimum permissible distance "b" must never be smaller than specified in the following table.

During the machining of the clutch surface make sure that the surfaces A and B are exactly parallel to the contact surface C which serves to seat the flywheel flange of the crankshaft. During machining the diameter (d) must be strictly adhered to.

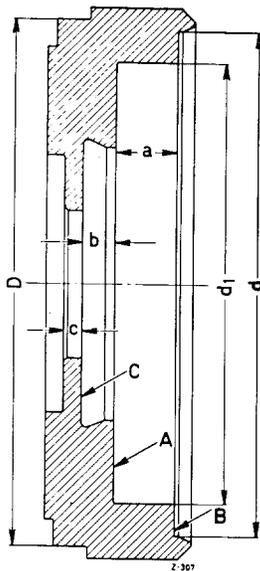


Figure 03-19/1

Flywheel without ring gear, OM 636

- A Clutch surface
- B Fixing surface of clutch pressure plate
- C Thrust surface for the hex nuts fixing flywheel to crankshaft
- D Diameter of shoulder seating starter ring gear
- a Distance between clutch surface and fixing surface of clutch pressure plate
- b Distance between clutch surface and mounting flange
- c Thickness of mounting flange
- d Diameter of fit for clutch pressure plate
- d₁ Diameter of clutch surface

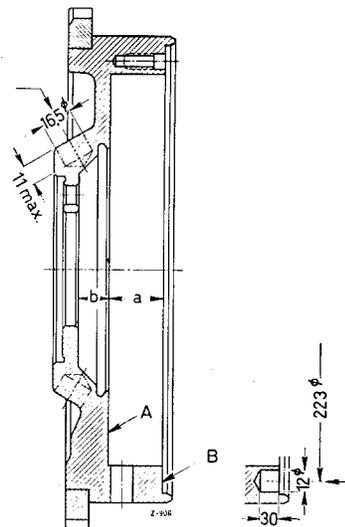


Figure 03-19/2

Flywheel with ring gear, OM 621