

9-2 STARTING MOTOR

a. Description

The starting motor is mounted in the upper crankcase behind the cylinder and drive the crankshaft through the starting clutch gear.

The primary reduction is accomplished by the starting motor reduction gear and the secondary reduction is by the starting clutch gear. (Fig. 9-2)

b. Disassembly

1. Remove the left side cover and disconnect the starting motor cable from the magnetic switch. (Fig. 9-3)
2. Remove the starting motor cover from the upper crankcase and detach the starting motor. (Fig. 9-4)
3. Remove the starting motor side cover.
4. Unscrew the brush mounting screws and remove the brushes from the brush holders. (Fig. 9-5)

c. Inspection

1. Checking the carbon brush length
Measure the length of the starting motor brush using a vernier caliper to determine amount of wear. If it is less than 0.217 in. (5.5 mm), the brush should be replaced (Fig. 9-6)

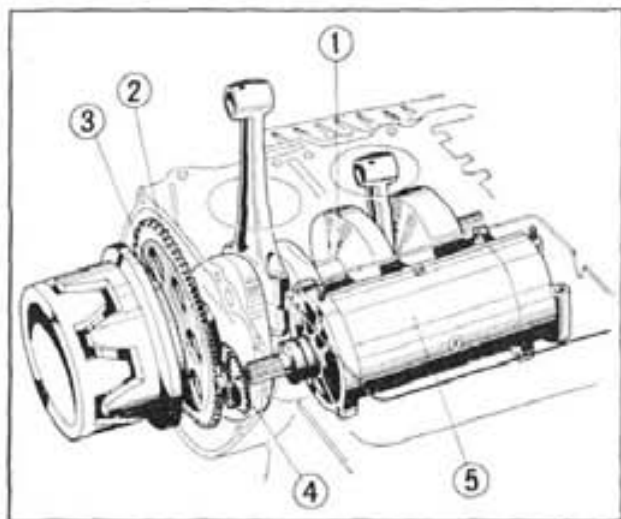


Fig. 9-2 ① Crankshaft
② Starting clutch gear
③ Starting clutch
④ Starting motor reduction gear
⑤ Starting motor

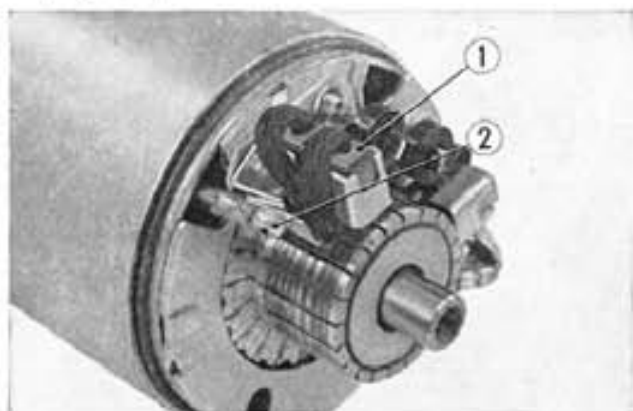


Fig. 9-5 ① Brush ② Brush mounting screw

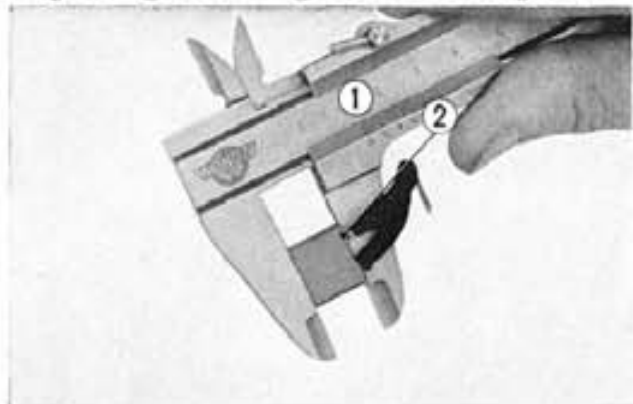


Fig. 9-6 ① Vernier caliper ② Carbon brush



Fig. 9-3 ① Magnetic switch
② Starting motor cable

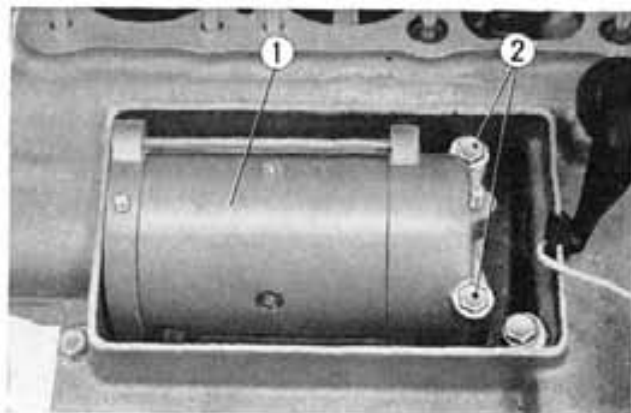


Fig. 9-4 ① Starting motor
② Motor setting bolts