

SB/FS/11 HOME

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9GM PETROL INJECTION PUMP MOTOR

Instructions for replacing the Brushgear and Petrol Seals

Note: Before dismantling the pump motor, ensure that the work bench is clean, with no metal swarf etc.

Dismantling Procedure

1. Release the six bolts, which secure the pump motor to the pump housing and withdraw the pump motor.
2. Remove the "O" ring seal, which is situated at the end of the housing assembly.

(This seal should then be discarded).

3. Release the two through-bolts of the pump motor. Grip the armature tongue with a suitable pair of pliers, and gently withdraw the armature and housing assembly from the yoke.

Note: The interior of the yoke must be protected, to prevent foreign matter (metal swarf etc.) from being attracted inside by the exposed field magnets.

4. Lift the brushes clear of the commutator and the circlip on the armature shaft. Withdraw the armature from the pump motor housing.
5. Unscrew the three securing screws in the pump motor Housing, and remove the brushgear.

(Before disconnecting the leads, note the colour of each lead, and the position of the corresponding brushbox).

6. To remove petrol seal in the pump motor housing

Place a stout wire hook at the back of the seal, and withdraw it evenly.

7. Armature Commutator

Before re-assembling the motor check the surface of the armature commutator. If it is worn, lightly skim it and then remove dust and swarf from the segments.

Re-assembling Procedure

1. Secure the new brush box to the pump motor housing, and connect the coloured leads to the appropriate brush-boxes.

Note: If the leads are incorrectly connected, the rotation of the motor will be reversed.

2. Check that the necessary shims are positioned on the armature shaft. Re-assemble the pump motor housing and armature. (Ensure that the brushes are pushed back into the brush boxes to prevent obstruction during the re-assembly).

3. Grip the armature tongue by means of a pair of pliers, and gently slide the armature and pump motor housing into the yoke.

The armature must not be subjected to the sudden effects of magnetic attraction by the permanent magnets or the magnets and bearing may be damaged.

4. Line up the markings on the yoke and pump motor housing. Secure the pump motor housing with two through-bolts.

5. Smear the armature shaft with liquid paraffin, and place a protective bullet illustrated in Figure 1, over the armature tongue.

Soak the internal petrol seal in liquid paraffin, and place over the bullet.

A smooth ended piece of tube ($\frac{3}{4}$ " outside diameter) should be used to position the seal in the pump motor housing.

6. Fit new petrol seal at the end of the pump motor housing. Secure the pump motor to the pump housing by means of the six (6) fixing bolts.

7. Applicable only to models with an end-float adjuster

(a) Position the unit with the yoke vertical and the end-float adjuster uppermost.

(b) Slacken the lock nut of the end-float adjuster, and screw in the adjuster, until a slight resistance is felt.

(c) Screw the adjuster back $\frac{1}{4}$ of a turn. This ensures that the end-float is correct - 0.004" - 0.010" (0.106 mm - 0.254 mm) and lock in position.

8. Finally, check light running current.

Light running current	1.4A Max
Volts	13.5V
Speed	2,200 rev/min

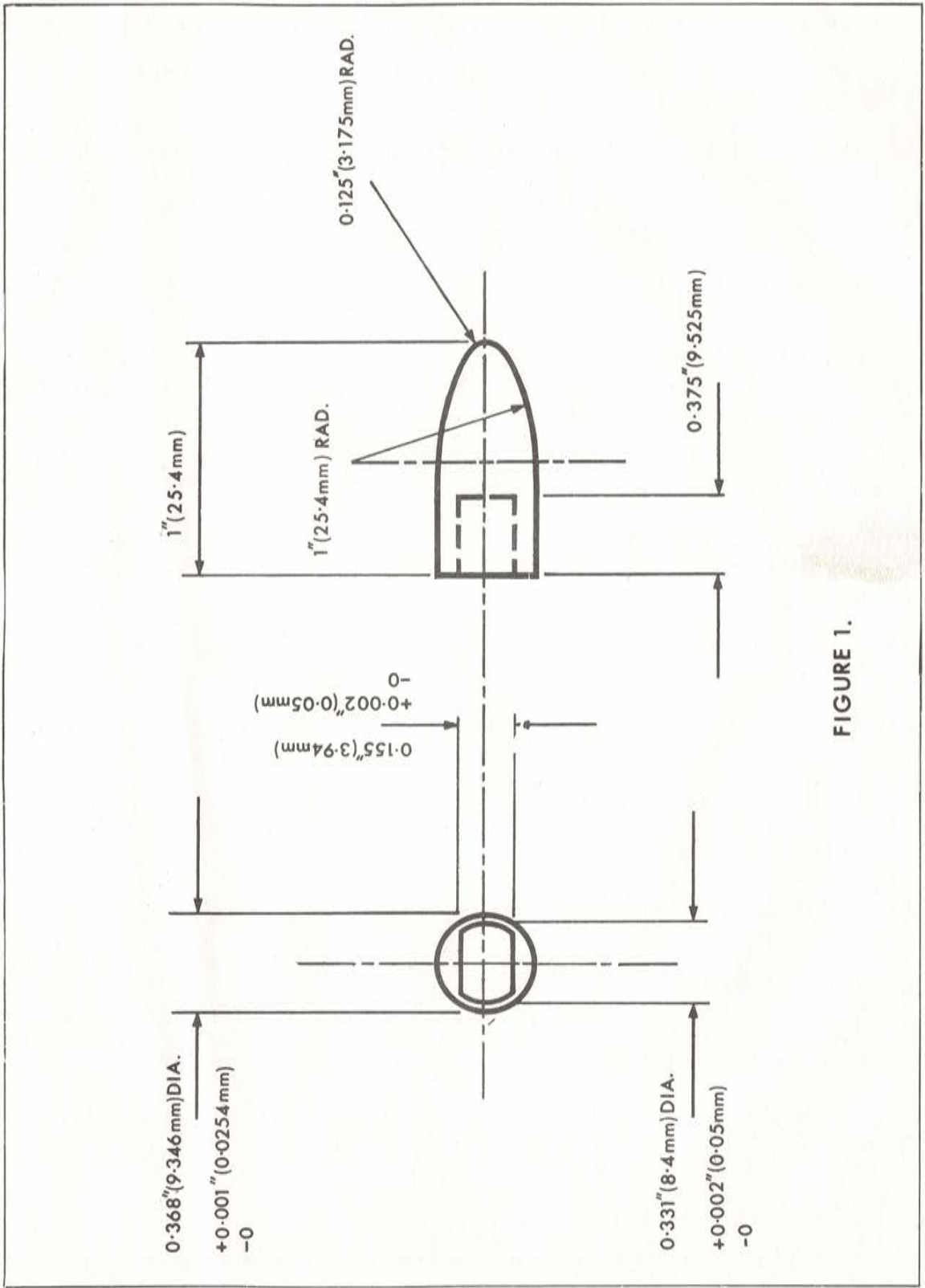


FIGURE 1.