prestolite SERVICE MANUAL

STARTING MOTOR SECTION

(Issued 3-16-78)

VOLTS 12 ROTATION CWDE BRUSHES 4 POLES 4

LUBRICATION

At overhaul, all bronze bearings should be well lubricated with medium engine oil.

Cover armature shaft at Drive End with a film of lubricant before assembling drive.

STARTING SWITCH

Solenoid. Mounted on motor.

BRUSH SPRING TENSION

32 to 48 ounces with new brushes. This tension is measured with the scale hooked under the brush screw and the reading is taken just as the brush leaves the commutator. The pull of the spring scale is to be at right angles to the line of force exerted by the brush spring.

TRANSMISSION

Overrunning clutch

COMMUTATOR END HEAD

Be sure felt oiling pad is in the outer end of the commutator end bearing before assembling the commutator end head on the motor.

POLE SHOE ASSEMBLY

Install pole shoes so that the long tip is the trailing edge.

END PLAY

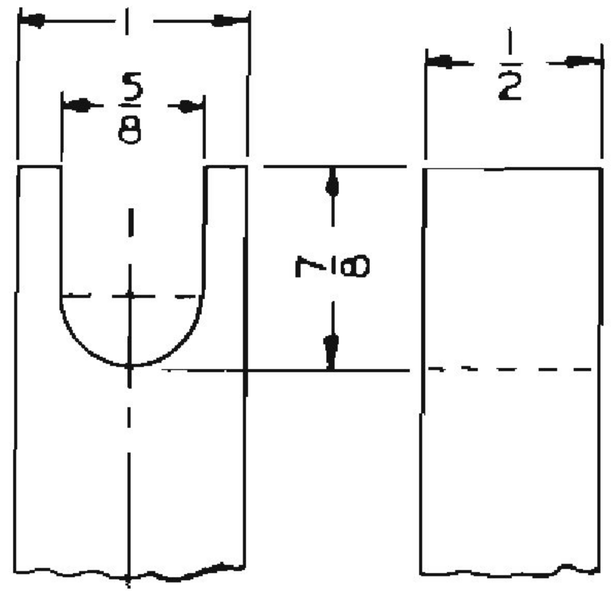
Adjust to .005" to .030" Refer to Parts & Equipment List for thrust washer package.

MAGNETIC SHIFT CLUTCHES

With plunger sealed, pinion pushed toward commutator end, and pinion stop pushed toward drive end bearing, a clearance of 1/64" to 15/64" between the pinion and pinion stop should be obtained. There are no provisions for adjusting this dimension. If dimension does not check to these limits, the shift fork is excessively worn or the motor is improperly assembled. The pinion will be against the pinion stop when cranking.

SWITCH ACTION TEST

To test switch action on clutch type motors, slip a steel spacer (See Illustration for dimensions) over the armature shaft between the pinion and the pinion stop. With this spacer in place, the magnetic switch should bottom and the switch contact should close under normal voltages.



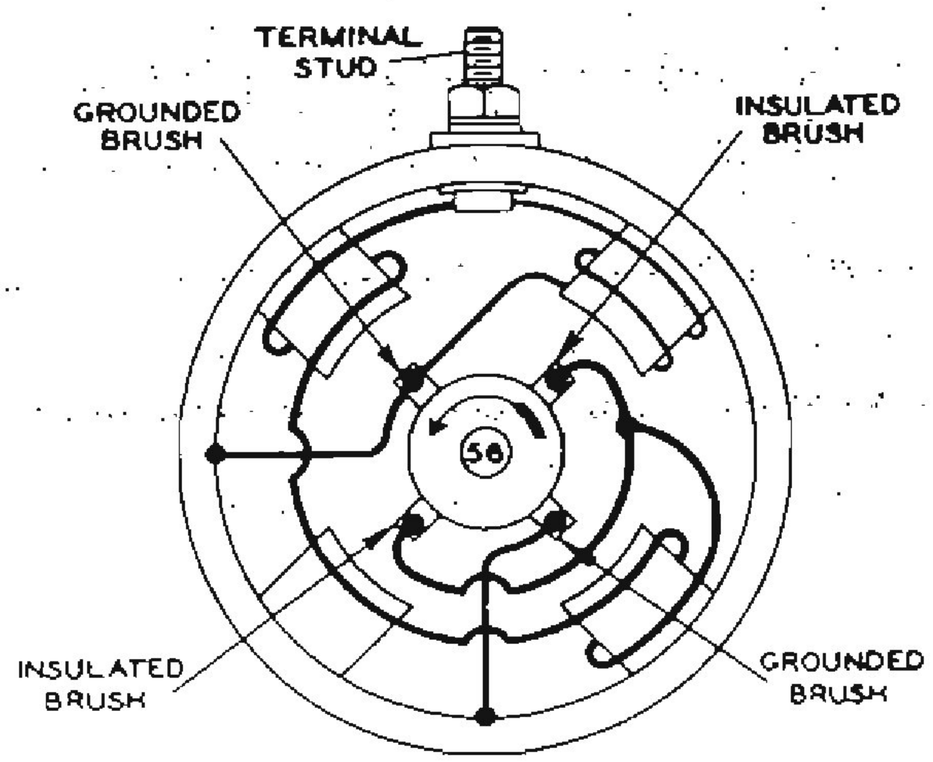
PINION HOUSING — Bearing must be flush with the bearing bore on the inside of the housing.

SHUNT FIELD DRAW — (70°F.) 4.4 to 5.1 amperes at 10.0 volts.

TEST SPECIFICATIONS

No Load Draw	10.0 volts, 48 maximum amperes, 5300 minimum RPM.
Stall Torque	4.0 volts, 285 maximum amperes, 6.5 minimum Ft. Lbs.

Unit	Pinion Position*
MEC-6001	45/64"-55/64"
MEC-6002	41/64"-51/64"
MEC-6003	45/64"-55/64"
MEC-6101	41/64"-51/64"
MEC-6102	41/64"-51/64"
MEC-6103	41/64"-51/64"



VIEWED FROM COMMUTATOR END

Figure 1