prestolite SERVICE MANUAL

STARTING MOTOR SECTION

(Issued 3-16-78)

VOLTS 24 ROTATION CWDE BRUSHES 8 POLES 4

LUBRICATION

At overhaul, soak new bearings in SAE #20 oil before installing in the bearing bore. Lubricate the bearing surfaces of the armature shaft with SAE #10 oil when assembling motor. Lubricate the armature shaft and splines with a light grade graphite grease before installing the drive assembly.

STARTING SWITCH

Shifting solenoid. Coaxially mounted inside the pinion housing.

BRUSH SPRING TENSION

52 to 65 ounces with new brushes. Measure with a spring scale hooked under the brush spring as near to the brush as possible. Pull the scale on a line opposite the line of force exerted by the brush spring and take the reading just as the spring leaves the brush.

TRANSMISSION

Overrunning clutch.

COMMUTATOR END HEAD

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

ARMATURE END PLAY

Adjust to .005" to .030" with thrust washers on the commutator end of the shaft. Refer to Parts and Equipment List for thrust washer package.

SWITCH CONTACT HEIGHT

Adjust to .50" to .55" using the PT-1 gauge or a gauge cut to the dimensions shown in Figure 1. Make sure the cover gasket is removed. Adjust by bending the contact support. (Refer to service bulletin SM-11).

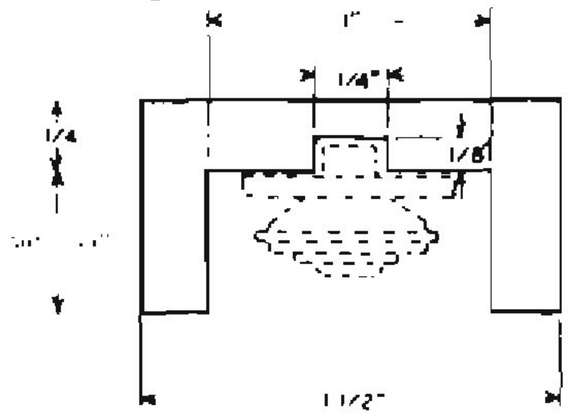


Figure 1.

TEST SPECIFICATIONS (77°F.)

No Load Draw*	20.0 volts, 78 maximum amperes, 5000 minimum RPM.
Stall Torque*	4.0 volts, 423 maximum amperes, 22.0 minimum Ft. Lbs.

*Includes solenoid current draw.

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SOLENOID SPECIFICATIONS (77°F.)

Coil draw — 11.4 to 12.9 amperes at 20.0 volts.

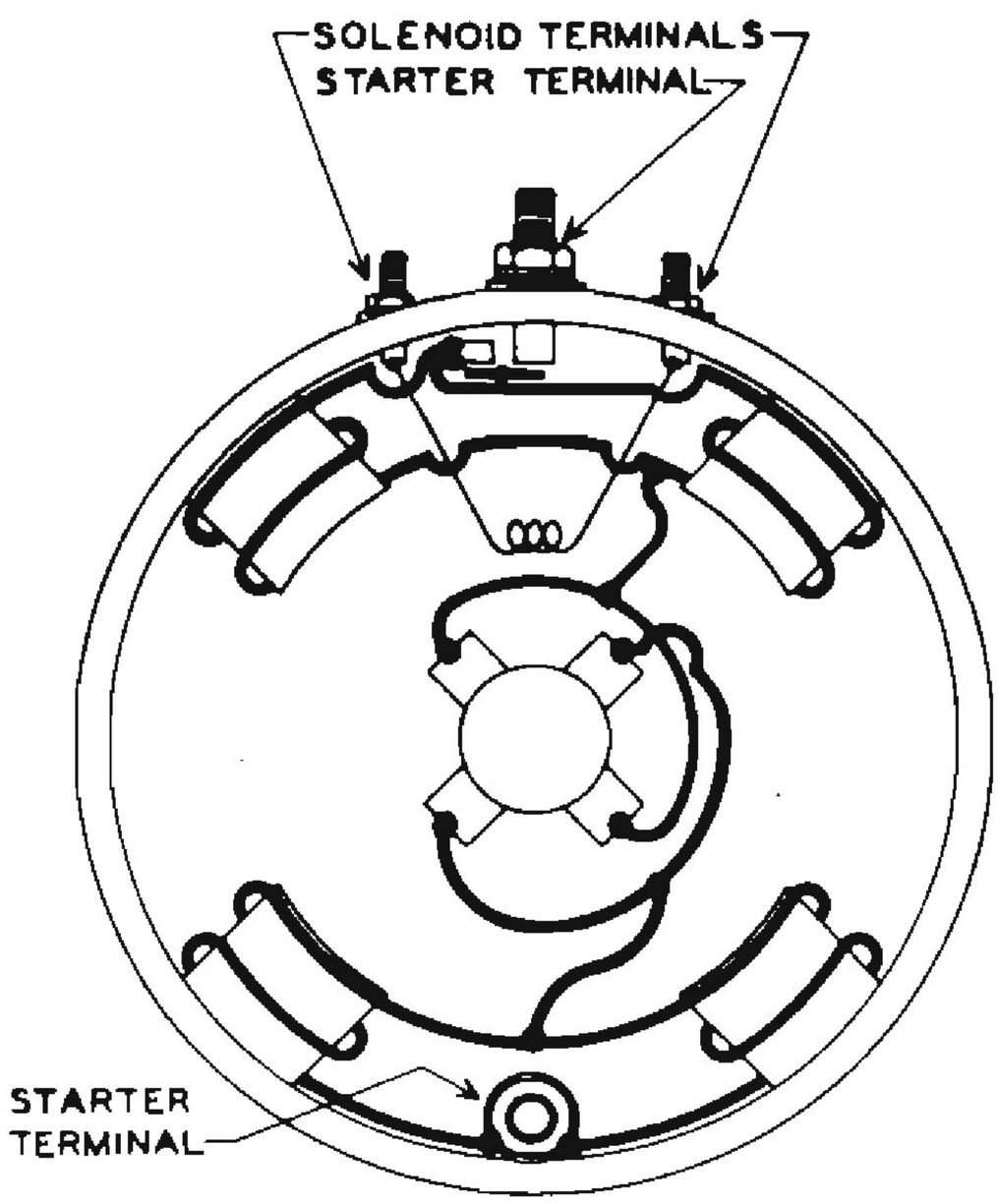
Closing Voltage — The contacts should close at 16.0 volts maximum with a 1/2" interference block between the drive pinion and pinion stop.

SWITCH COVER

After the motor has been completely assembled and tested, seal the end of the switch cover adjacent to the frame and field assembly, and around the switch cover base with a good grade sealant.

Unit	Pinion Position**
MEW-8001B	1 53/64" to 1 61/64"

**This dimension is measured from the face of the mounting flange to the outside edge of the pinion when in the "at rest" position. However, this dimension cannot be adjusted and is to be used as a reference dimension to assure correct starting motor assembly.



VIEWED FROM C.E HEAD

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