FILE IN THE

prestolite SERVICE MANUAL

STARTING MOTOR SECTION

(Issued 3-16-78)

VOLTS 24 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

See Tabulation

BRUSH SPRING TENSION

42 to 53 ounces with new brushes. This tension is measured with the scale hooked under the brush spring near the brush and pulled on a line parallel to the face of the brush. Take the reading just as the spring leaves the brush.

TRANSMISSION

Bendix. R. H. Outboard Type

END PLAY

Not to exceed 1/16" maximum. Refer to Parts & Equipment List for thrust washer package.

TEST SPECIFICATIONS

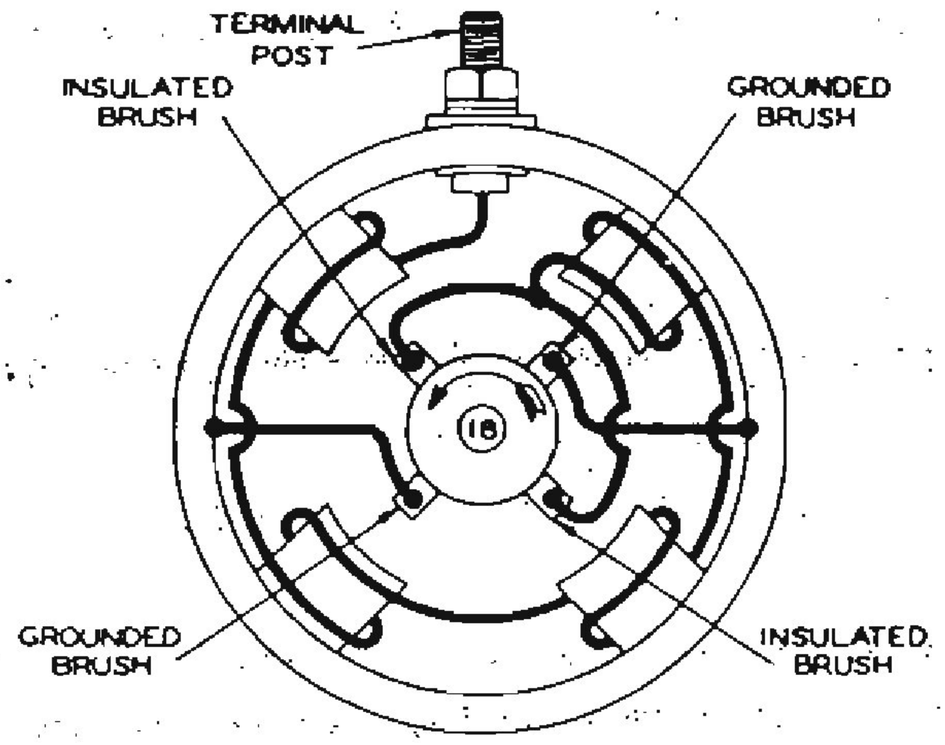
No Load Draw — 20 volts, 20 maximum amperes, 4200 minimum RPM.
Stall Torque — 8 volts, 125 maximum amperes, 9.0 minimum Ft. Lbs.

Unit	Starting Switch Type	Mounted	Special Instructions
MBY-4001		Separate	See Notes 1, 2
MBY-4002		Separate	See Note 2
MBY-4003	Solenoid	On Motor	See Notes 1, 2
MBY-4003T	Solenoid	On Motor	See Notes 1. 2, 3
MBY-4004		Separate	See Note 2
MBY-4004AT.T		Separate	See Notes 2, 3
MBY-4005	Solenoid	On Motor	See Notes 1, 2
MBY-4008	Solenoid	On Motor	See Note 2
MBY-4010	Solenoid	On Motor	See Note 2
MBY-4011T		Separate	See Notes 2, 3

NOTE 1 - The outer pinion housing bearing must be flush with the bearing bore on the inside of the housing.

NOTE 2 - The intermediate plate bearing must be flush with the bearing bore on the inside.

NOTE 3 - After inspection of the various parts, paint terminal studs and brush holder insulation with red glyptol. Cover glyptol and all metal surfaces except pilots, head seats, threads, commutator and bearing surfaces with air-drying, fungus-resistant insulating varnish. Allow varnish to soak into field coils and armature windings. Drain and dry thoroughly before assembling motor.



VIEWED FROM COMMUTATOR END

VOLTAGE 24 ROTATION CWDE BRUSHES 4 POLES 4

VENTILATED No FRAME DIAMETER 4-1/2"

BEARINGS Absorbent bronze bearings used at both ends.

LUBRICATION Soak absorbent bronze bearings and felt oiling pad with SAE 20 oil. Allow excess oil to drain out before assembling end head on motor.

BRUSH REPLACEMENT The brushes must be replaced when they have worn to a length of 1/4" of less.

SPRING TENSION 42 to 53 ounces with new brushes. Measure with a spring scale hooked under the brush spring at the brush. 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.

POLE SHOE INSTALLATION When replacing field coils, install the pole shoes so that the longer tip is pointing in the same direction as the armature rotation.

END PLAY Adjust to .06" maximum with thrust washers on the commutator end of the armature shaft. Refer to Parts & Equipment List for thrust washer package.

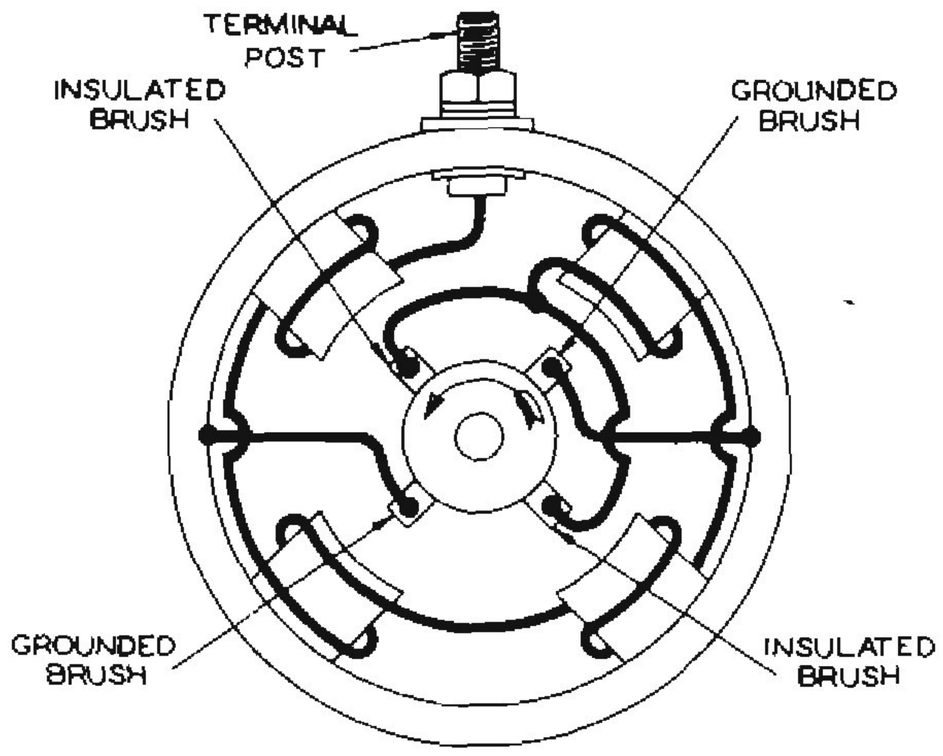
TEST SPECIFICATIONS ($77^{o}F$)

	Terminal Voltage	Maximum Amperes	RPM	Torque Ft. Lbs.
No Load Test	20	20	4200 Min.	- 0 -
Stall Torque Test	8	125	- 0 -	9.0

prestolite
SERVICE
INFORMATION

Unit	Special Notes
MBY-4006	
MBY-4007,T	See Note
MBY-4009	
MBY-4012	
MBY-4013	
MBY-4014	
MBY-4015	
MBY-4016	

Note - MBY-4007T - After inspection of various parts, paint terminal studs and brush holder insulation with red glyptol. Cover glyptol and all metal surfaces except pilots, head seats, threads, commutator and bearing surfaces with air-drying, fungus-resistant insulating varnish. All varnish to soak into field coils and armature windings. Drain and dry thoroughly before assembling motor.



Internal Wiring Diagram