prestolite SERVICE MANUAL

TRACTION MOTOR SECTION

(Issued 3-16-78)

VOLTAGE 12 ROTATION Reversible BRUSHES 4 POLES 4

VENTILATED Yes FRAME DIAMETER 6 1/2"

LUBRICATION None required. Sealed ball bearings used at both ends of motor.

FIELD RESISTANCE (77°F.) Series Coils .0031 to .0035 ohms.
Measure between terminals S-1 and S-2.

Shunt Coils 1.78 to 1.98 ohms.
Measure between terminals F-1 and F-2.

ARMATURE TEST MEP-4001, S, 4004. The armature in these motors have equalizer connections on the commutator and cannot be tested on a growler for shorted windings. Test to light load specifications.

ALL OTHERS. These armatures have standard winding connections and can be tested on a growler using a metal strip or hacksaw blade to locate shorted windings.

COMMUTATOR Minimum diameter 2.875". Replace armature when commutator has worn to this dimension.

BRUSH REPLACEMENT Replace brushes when they have worn to a length of 9/16" or less.

SPRING TENSION 30 to 36 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.

TEST CONNECTIONS

CWDE Rotation	CCWDE Rotation
Connect S-2 and F-2 to battery positive	Connect S-2 and F-2 to battery positive
Connect S-1 to A-2	Connect S-1 to A-1
Connect F-1 and A-1 to battery negative	Connect F-1 and A-2 to battery negative

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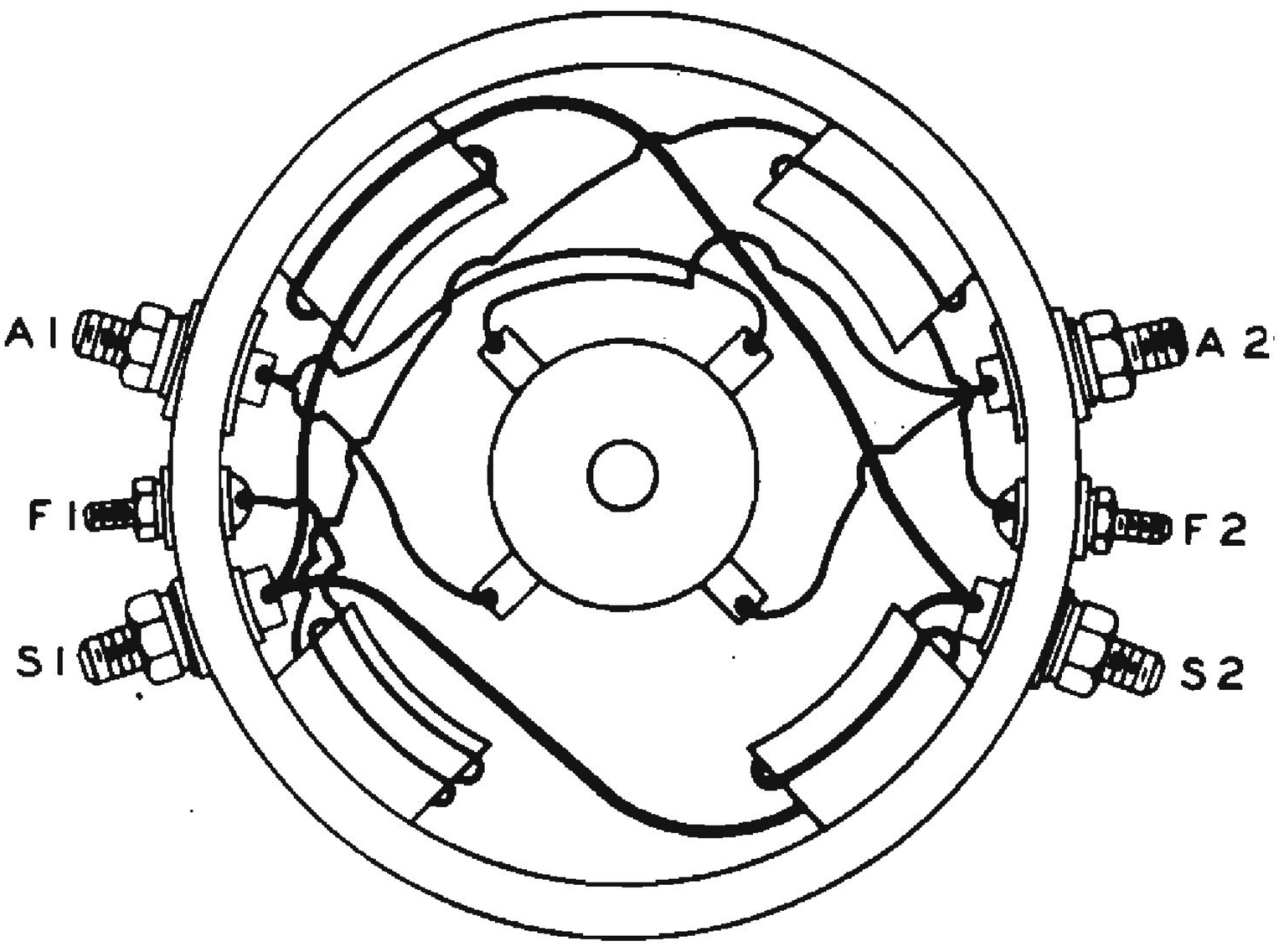
TEST SPECIFICATIONS (77°F.) Test in both directions of rotation.

	Terminal Voltage	Maximum Amperes	RPM	Torque Ft. Lbs.
No Load Test	12	18	1730 Min.	0
Light Load Test	11.5	58	1560-1730	1.5

Unit
MEP-4001,S
MEP-4002,S
MEP-4003
MEP-4004
MEP-4005



Internal Wiring Diagram