FILE IN THE

prestolite SERVICE MANUAL

GEO

GENERATOR SECTION

(Issued 3-16-78)

VOLTS 6 **RATED OUTPUT** See Tabulation **VENTILATED** See Tabulation

ROTATION See Tabulation **BRUSHES** 3 **POLES** 2

CONTROL See Tabulation

GROUND POLARITY See Tabulation **BEARINGS** Ball at drive end. Absorbent bronze at commutator end.

LUBRICATION

Periodically add 5 drops of medium engine oil to end head oilers. At overhaul, pack open ball bearings 1/4 to 1/2 full with a good ball bearing lubricant. NOTE - Some ball bearings are sealed, these units are prelubricated and require no additional lubrication.

BRUSH SPRING TENSION

35 to 53 ounces with new brushes. Measure brush spring tension with the scale hooked in the hole in the end of the brush arm and pulled on a line perpendicular to the top of the brush. Take the reading just as the arm leaves the brush.

FIELD COIL DRAW (70°F.)

1.5 to 1.7 amperes at 5.0 volts.

MOTORING DRAW (70°F.)

(Test 1) 3.0 to 3.4 amperes at 5.0 volts.
(Test 2) 3.9 to 4.4 amperes at 5.0 volts.
(Have field lead or terminal grounded to frame.)

OUTPUT TESTS (70°F.)

(Test 1) 7.6 volts, 4.0 amperes at 950 RPM.
8.0 volts, 19.0 amperes maximum output.
(Test 2) 7.6 volts, 8.0 amperes at 1050 RPM.
8.0 volts, 25.0 amperes maximum output.

THIRD BRUSH POSITION

(Test 1) Third brush to be set 2 1/4 bars to 2 1/3 bars from the insulated main brush.
(Test 2) Third brush to be set 1 bar to 1 bar and 1 mica from the insulated main brush.

Unit	Rated Output (Amperes)	Vent.	Rot.	Control	Grd. Pol.	Test No.	Internal Wiring	Special Instructions
GEO-4801-3	19	No	CCW	3rd Br.	Neg.	1	Fig. 1	
GEO-4802-3	19	No	CW	3rd Br.	Neg.	1	Fig. 2	
GEO-4804-3	19	No	CCW	3rd Br.	Neg.	1	Fig. 1	
GEO-4805-3	19	No	CW	3rd Br.	Pos.	1	Fig. 2	
GEO-4806-3	19	No	CCW	3rd Br.	Pos.	1	Fig. 1	
GEO-4807-3	19	No	CCW	3rd Br.	Neg.	1	Fig. 1	
GEO-4808-3	19	No	CCW	3rd Br. & TC Reg.	Neg.	1	Fig. 3	
GEO-4809-3	19	No	CW	3rd Br.	Neg.	1	Fig. 2	
GEO-4810, A	25	Yes	CW	3rd Br. & TC Reg.	Pos.	2	Fig. 4	
GEO-4810T	25	Yes	CW	3rd Br. & TC Reg.	Pos.	2	Fig. 4	Note 1
GEO-4811	25	Yes	CW	3rd Br. & TC Reg.	Pos.	2	Fig. 4	
GEO-4811T	25	Yes	CW	3rd Br. & TC Reg.	Pos.	2	Fig. 4	Note 1
GEO-4813	25	Yes	CW	3rd Br. & TC Reg.	Pos.	2	Fig. 4	
GEO-4814	19	No	CCW	3rd Br.	Pos.	1	Fig. 1	
GEO-4815	25	Yes	CCW	3rd Br. & TC Reg.	Neg.	2	Fig. 3	
GEO-4816A	25	Yes	CW	3rd Br. & TC Reg.	Pos.	2	Fig. 4	
GEO-4818A-3	19	No	CW	3rd Br.	Pos.	1	Fig. 5	Note 2
GEO-4819	25	Yes	CW	3rd Br. & TC Reg.	Pos.	2	Fig. 4	

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Note 1 - After inspection of the various parts, paint terminal stud 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; then drain and dry thoroughly before assembling generator.

Note 2 - Assemble drive end bearing with shielded side toward outside of generator.

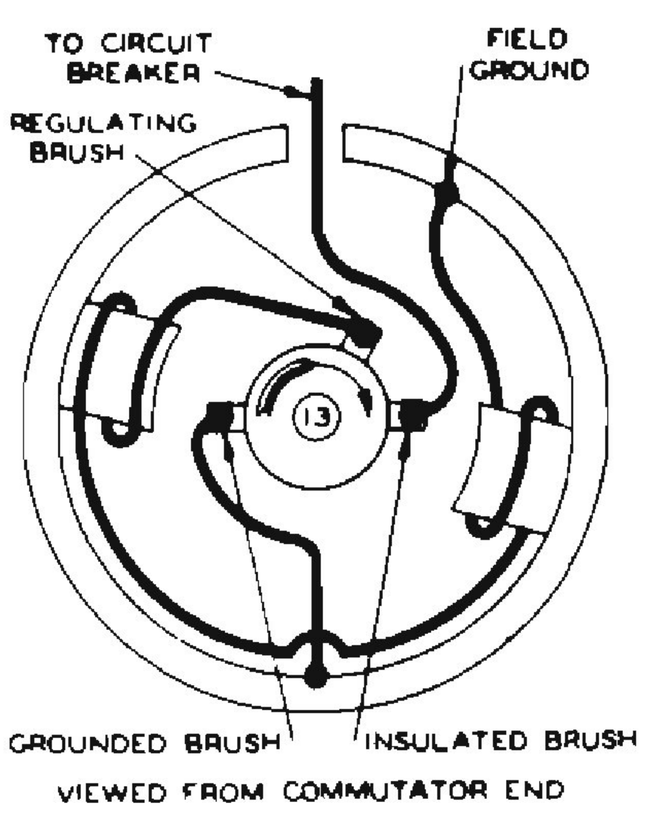

Figure 1

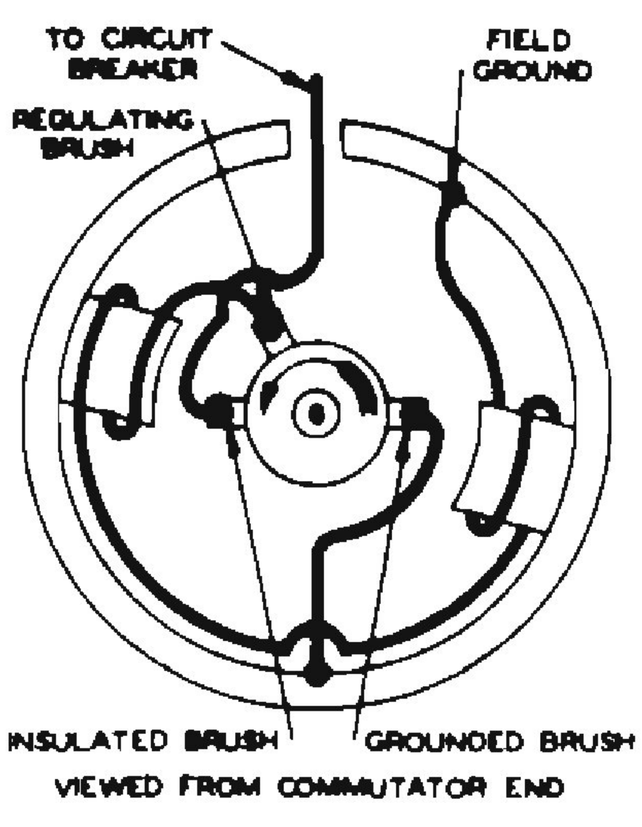

Figure 2

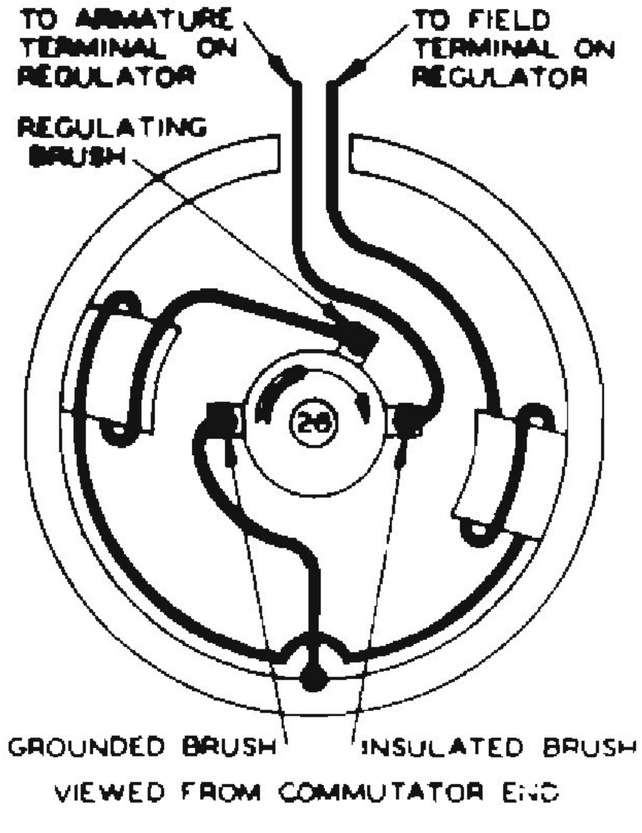

Figure 3

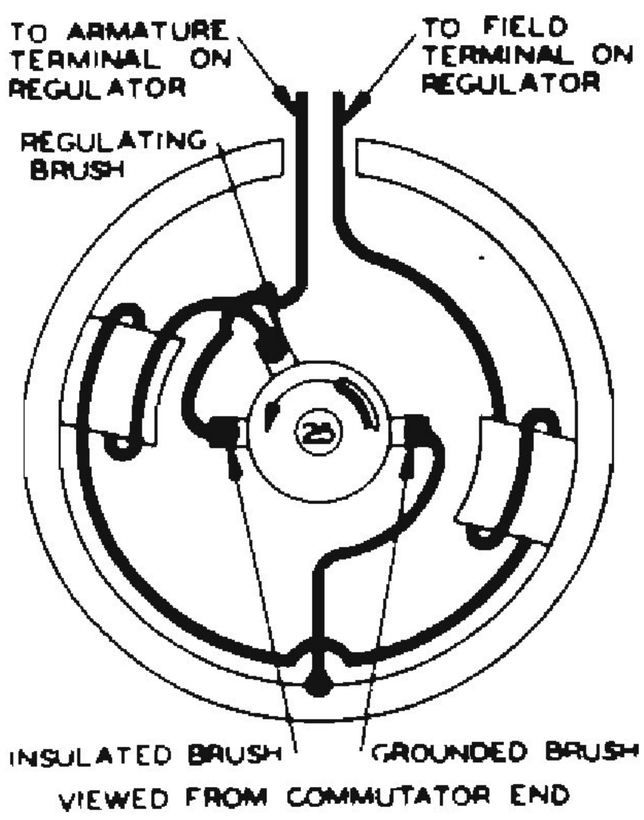

Figure 4

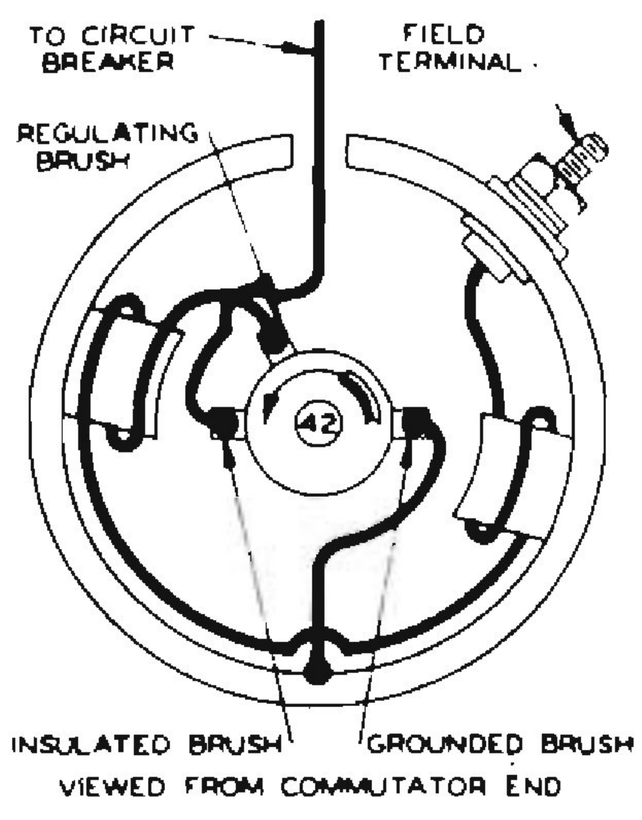

Figure 5

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