

SERVICE PROCEDURE INSTALLATION INSTRUCTIONS FOR ADD-ON PMG KITS MAGNAPLUS GENERATORS FRAMES 361, 362, & 363

Note: For single bearing generators, this procedure should be done after the generator has been assembled to the engine to prevent the PMG rotor from binding in the PMG stator. Reference Assembly Drawing: B-779631-0A, Rev 8.

- 1 Remove louvered drip cover p/n 720526-03 from opposite drive end bearing carrier and set aside along with the 4, M6 x 1 x 20 Hex Head retaining cap screws. These parts will re-installed on exciter drip cover p/n 720528-01 during the final operation. (See step 9)
- 2 Inspect PMG stator adaptor and opposite drive end bearing carrier to assure the mating surfaces are free of foreign material. Clean these surfaces as necessary.
- 3 Install PMG stator adaptor p/n 712510-01 on opposite drive end bearing carrier, and secure with four (4) Hex head, flange lock cap screws p/n 801125-04.
- 4. Position PMG rotor assembly p/n A-526816 consisting of PMG rotor, shaft p/n 701991-01, and roll pin p/n 811807-01 on the generator shaft, inserting the roll pin into the predrilled hole in the generator shaft..
- 5. Secure PMG rotor assembly to shaft with Hex Head $\frac{1}{2}$ 13 x 4" bolt p/n 801112-15. Torque bolt to 84 foot pounds.
- 6. Install PMG stator assembly p/n A-525548-1 on stator adaptor. Secure with 4, ¼ 20 x 1.75" cap screws p/n 801000-08. Torque screws to 6 foot pounds. Pass the PMG stator leads through upper opening in the opposite drive end bearing carrier, and into the generator connection box. Inspect air gap between the PMG stator and the PMG rotor. You may have to loosen the PMG stator and stator adaptor bolts, to adjust the position of both the stator and adaptor to achieve a uniform air gap all around the exciter rotor. Nominal air gap is 0.040". A piece of cardboard, paper, or other non metallic material approximately 1/32" thick could be used as a feeler gauge in the process of alignment.
- 7. Loosen the opposite drive end bearing carrier retaining screws, install drip cover slotted holes over the bolt heads, and rotate the drip cover until it is in the proper position. Tighten the retaining bolts.
- 8. Install louvered drip cover on end of exciter cover with the original hex head screws.
- 9. Install the automatic voltage regulator and capacitor in the generator connection box as shown in DVR2000E/EC drawing B-779496-0A, or PM300 drawing B-779835-0A.

MARATHON ELECTRIC MFG. CORP

TYPE MAGNA PLUS FRAMES 361, 2 & 3 ADD-ON PMG PARTS LIST Reference Drawing: 779631-0A, Rev 8

PART LIST #	PART DESCRIPTION	QTY	PART NUMBER
1	PMG STATOR ASSEMBLY	1	A-525548-1
2	PMG ROTOR ASSEMBLY	1	A-526816
3	STATOR ADAPTOR	1	712510-01
4	SHAFT, PMG	1	701991-01
5	HEX HD CAP SCREW - 1/4 - 20 x 1.75" GR 5, ZN	4	801000-08
6	WASHER, BELLEVILLE - 1/4	4	A-9682-2CC
7	BOLT, HX HD - ½ - 13 x 4 GR 8, ZN	1	801112-15
8	WASHER, BELLEVILLE - ½	4	A-9682-1CC
9	ROLL PIN - 0.25 x 0.88	1	811807-01
10	DRIP COVER	1	720528-01
11	SCREW, HX FLG LOCK, M6 x 1 x 20	4	801125-04

- A PMG stator retaining bolts to be torqued to 6 foot pounds.
- B PMG rotor mounting bolt to be touqued to 84 foot pounds

