

SERVICE PROCEDURE INSTALLATION INSTRUCTIONS FOR ADD-ON PMG KITS MAGNAPLUS GENERATORS FRAMES 431, 432 and 433

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-779652-0A, Rev 2.

- 1 Remove louvered drip cover p/n 527259-01 from opposite drive end bearing carrier and discard. This cover will be replaced by louvered drip cover 527259-02. Set aside the 4, 3/8 16 1Hex Head retaining cap screws and washers. These will be used in step 7 below.
- 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. Install replacement louvered drip cover 527259-02 the opposite drive end bearing bracket using the original 4, 3/8 16 1 Hex Head retaining cap screws flat washer and lock washer.
- 8. Install the plastic PMG cover part number 527260 on the louvered drip cover securing with 4 Hex Head Whiz Lock $\frac{1}{4}$ 20 x 0.75" part number A-9646-75CC
- 9. Install the automatic voltage regulator and capacitor in the generator connection box as shown in DVR2000E/EC drawing B-779835-0A.

MARATHON ELECTRIC MFG. CORP.MAGNAPLUS 430 FRAME GENERATOR ADD-ON PMG PARTS LIST, REF MOUNTING KIT MK4215

Item	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 rotor	1	701991-01
5	Screw, Hex Hd Flg Lock 1/4 - 20 x 0.75	4	A-9646-75CC
6	Washer, Belleville, 1/4	4	A-9682-2CC
7	Hex Hd Cap Screw, ½ - 13 x 4"	1	801008-15
8	Washer, Belleville, 1/2	1	A-9682-1CC
9*	Roll Pin 0.25 x .88	1	811807-01
10	Drip Cover - PMG Add-on	1	527259-02
11	Screw, Hex Hd Whiz Lk 1/4 - 20 x 0.75	4	A-9646-75CC
12	PMG Cover	1	527260
13	Hex Hd Cap Screw, 3/8 - 16 x 1"	6	801004-05
14	Washer, flat - 3/8	6	801064-04
15	Washer, split lock - 3/8	6	801065-07
Α	PMG stator mounting bolts to be torqued to 6 Ft-Lbs.		
В	PMG rotor mounting bolt to be torqued to 52 Ft-Lbs.		

* For field installed service part, these parts are supplied preassembled.

