

ELECTRICAL CONNECTIONS, WINDINGS

Inspect for loose or contaminated connections. Check wires for cracked or frayed insulation. Tighten connections and replace defective or oil soaked insulation.

If inspection shows that varnish coatings on the windings have deteriorated, they should be coated with insulating varnish. Please refer to Marathon Electric for insulation system requirements.

LUBRICATION

All generators are lubricated before leaving the factory and are ready for operation. As a general rule, bearings should be re-lubricated annually or at the indicated intervals in table 5-3, whichever occur first.

Unusually severe operating conditions, such as high ambient or dusty environments, require more frequent lubrication (every six months or one half the table intervals, whichever occurs first).

Use Chevron SRI or equivalent anti-friction type high quality, grease with a lubrication temperature range of -22° to +350° F (-30° to +175° C)

To add or renew grease, proceed as follows:

1. Stop unit.
2. Wipe the grease plugs and surrounding parts to insure they are clean.
3. Remove both the fill and drain plugs.
See figure 5-2
4. Insert 1/8" N.P.T. grease fitting in fill pipe.
5. Free the drain holes of any hard grease, using a piece of wire if necessary.
6. Using a low-pressure grease gun, add grease according to the amounts in table 5-3.
7. Start unit with drain plug removed - fill pipe may be open or closed. Allow unit to run 15 minutes to allow excess grease to drain.
8. Stop unit, wipe off any drained grease, and replace filler and drain plugs.

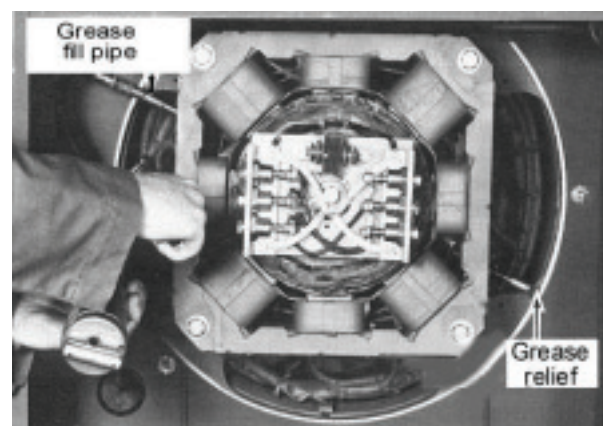


Figure 5-2

The amount of grease added is very important! Only enough grease should be added to replace the grease used by the bearing.

CAUTION: TOO MUCH GREASE CAN BE AS HARMFUL AS INSUFFICIENT GREASE. USE THE PROPER AMOUNT.

Type	Frame Size	Bearing Size	Amount of Grease			Intervals --- Max. hours or annually	
			Ounces	Cubic Inches	Teaspoons	60 Hz	50 Hz
Single Bearing Units	431,432, 433 571,572, 573, 574	314	1.2	2.1	7.0	6500	8400
		316	1.5	2.6	8.3	5600	7200
		322	2.4	4.2	14.0	3000	4500
Double Bearing Units	431,432 571, 572, 573, 574	318	1.7	3.0	9.9	4600	6200
		318	1.7	3.0	9.9	4600	6200
		322	2.4	4.2	14.0	3000	4500

TABLE 5-3

During an overhaul, the grease reservoir should be thoroughly cleaned and new grease added. The reservoir should be 1/3 to 1/2 filled with new grease