

## 5 Greasing:

### 5.1 greasing intervals.

PEER mounted unit insert bearings are pre-lubricated at the factory and are ready for operation. Under normal operating conditions it is normal for a small amount of grease to purge from the seals during initial start up. This condition will stop once optimum grease fill has been obtained. Re-lubrication of PEER insert bearings is determined by operating conditions and environment. Greases used in re-lubricating PEER bearings should be NLGI # 2 compatible with a lithium thickener, mineral base oil and a temperature range of -10 to +260 degrees F. General greasing intervals based on RPM and operating conditions are shown in table 19. However, experience is the preferred method of determining greasing intervals and fill amounts.

Table 19: Greasing intervals.

Type of unit	dn value	Environmental conditions	Operating temperature F	Relubrication Frequency	
				Hours	Period
Standard	40,000 and below	Ordinary	5 to 176	1500 to 3000	6 to 12 months
Standard	70,000 and below	Ordinary	5 to 176	1000 to 2000	3 to 6 months
Standard	70,000 and below	Ordinary	176 to 212	500 to 700	1 month
Heat-resistant	70,000 and below	Ordinary	212 to 284	300 to 700	1 month
Heat-resistant	70,000 and below	Ordinary	284 to 338	300 to 700	1 month
Heat-resistant	70,000 and below	Ordinary	338 to 392	100	1 week
Cold-resistant	70,000 and below	Ordinary	76 to 176	1000 to 2000	3 to 6 months
Standard	70,000 and below	Very Dusty	5 to 212	100 to 500	1 week to 1 month
Standard	70,000 and below	Exposed to water	5 to 212	30 to 100	Daily to weekly

$d$  = inner diameter of bearing (mm)

$n$  = speed in RPM

### 5.4 Grease types.

PEER bearings are pre-lubricated with standard grease suitable for a wide variety of applications, speeds, temperatures and environments. Special greases are readily available. Shown in table 23 is a small sampling of standard and special greases offered.

Table 23: Greases and operating temperatures.

Manufacturer trade name.	Recommended operating temperature range F	Properties				
		Thickener	Base oil	Water resistant	Viscosity CST @	
					40C	100C
Shell Alvania RL2	-10 to +260	Lithium	Mineral	Yes	98	9.4
Shell Alvania RL3	0 to +230	Lithium	Mineral	Yes	98	9.4
Exxon Polyrex EM	-40 to +350	Polyurea	Mineral	Yes	115	12.2
Chevron SRI #2	-20 to +350	Polyurea	Mineral	Yes	110	11
Chevron FM NLGI #2	-40 to +300	Polyurea	Mineral	Yes	220	18
Krytox 240AC / GPL	-30 to +550	Synthetic	Synthetic	Yes	270	26

Note: Operating temperature, environment, RPM and load all play a role in selecting the appropriate grease for each application. Experience and field data are the best method of selecting the correct grease.