

MODEL 50

PARTS AND LUBRICATION INFORMATION

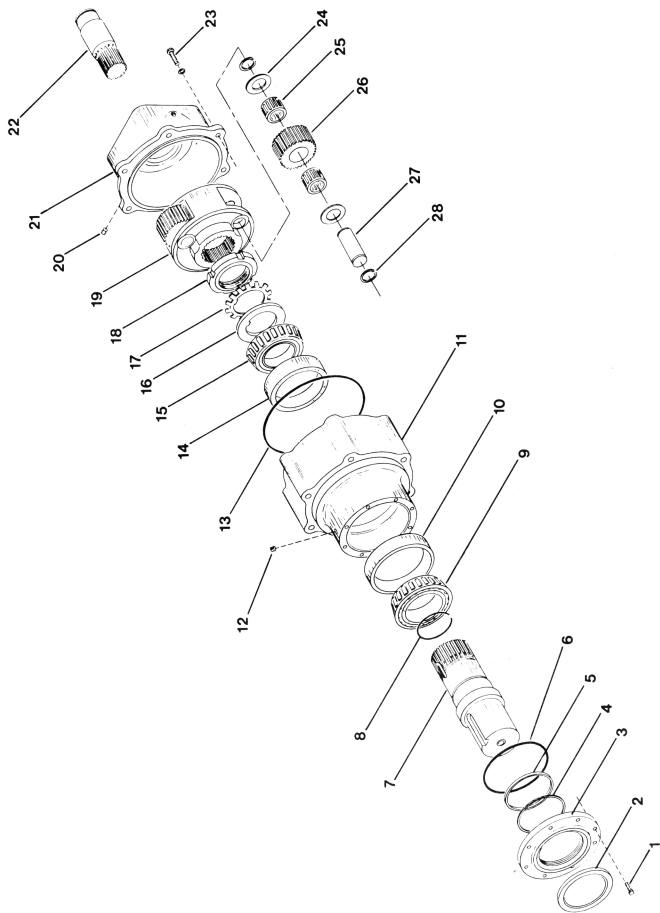


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MODEL 50

ITEM #	PART #	DESCRIPTION	QTY/ASSY	ITEM #	PART #	DESCRIPTION	QTY/ASSY
1.	50116	Bolt	8				
2.	50111	Shaft Seal	1				
3.	50010	Seal Carrier	1				
4.	50110	Backup Ring	1				
5.	50109	Quad Ring	1				
6.	50108	O Ring	1				
7.		Output Shaft	1				
	50007	3.875 Straight Keyed					
	50028	20T 8/12 Spline					
8.	50017	Retaining Ring	1				
9.	50101	Cone	1				
10.	50102	Cup	1				
11.	50020	Housing	1				
12.	15129	Pipe Plug	1				
13.	50107	O Ring	1				
14.	50103	Cup	1				
15.	50104	Cone	1				
16.	50123	Keyed Washer	1				
17.	50122	Lock Washer	1				
18.	50121	Locknut	1				
19.	50006	Planet Carrier	1				
20.	50120	Pipe Plug	2				
21.			1				
	50021	Motor Adapter					
	50019	SAE C 2 & 4-Bolt					
		SAE D 2 & 4-Bolt					
22.		Sun Gear Kit (Input Shaft Adapter)	1				
	50G	Charlynn 6000 Bearingless					
	50I	1 1/4"-14 Tooth 12/24 Dp					
	50J	Charlynn 10,000 Bearingless					
	50K	1 3/4"-13 Tooth 8/16 Dp					
	50L	1 1/2"-17 Tooth 12/24 Dp					
23.	50115	Bolt	6				
24.	50118	Thrust Washer	6				
25.	50119	Planet Bearing	6				
26.	50002	Planet Gear	3				
27.	50004	Planet Pin	3				
28.	50112	Retaining Ring	6				
	50910	Seal Kit - Buna					
	50920	Seal Kit - Viton					
		Seal Kits include items indicated by *					



LUBRICATION INSTRUCTIONS

HECO planetary speed reducers may be lubricated as a self-contained unit (standard hydraulic motor), or as an integral part of the hydraulic system (bearingless motor).

In applications where the speed reducer is lubricated as a self-contained, horizontal unit, it is recommended that the unit be half-filled with EP⁽¹⁾ oil (see chart for amount and proper grade gear oil). Self-contained, vertical installations (output shaft down) require the unit to be filled to the center line of the upper planetary gear train. For self-contained vertical installations (output shaft up) consult HECO. When installed as a self-contained unit, ensure adequate ventilation is provided to allow for lubricant expansion.

The oil should be changed after the first 50 hours and 100 hours of operation, and every 1000 hours thereafter. Oil should be drained while the unit is at operating temperature. The unit should be cleaned with flushing oil (use of solvents should be avoided). NOTE: The importance of a thorough gear case cleaning with flushing oil during the first lubricant change cannot be overemphasized. If the maximum oil operating temperature is exceeded, change oil immediately.

In applications where the speed reducer is lubricated by oil flow from the bearingless hydraulic motor, a petroleum based hydraulic oil with EP⁽¹⁾ additives should be used. Ensure that a minimum oil flow of 2 GPM is maintained, a separate case

drain line should be connected directly from the top of the reducer (ensure the reducer remains full) to the oil reservoir.

For maximum cooling and lubrication the case drain should be connected to the drain port at the opposite end of the reducer from the hydraulic motor. Reducer case pressure must not exceed 20 PSI with the standard shaft seal or 50 PSI with the optionally available high pressure seal installed.

(1) Extreme Pressure Lubricants — These lubricants are petroleum base liquids with chemical additives, such as, sulfur phosphorous or similar materials or soluble compounds which produce a protective film to withstand high pressures.

	HORIZONTAL OPERATION (1/2 FULL)	TOTAL CAPACITY
Model 16	20 oz. (6 dl.)	40 oz. (12 dl.)
Model 20	50 oz. (15 dl.)	105 oz. (31 dl.)
Model 20D	50 oz. (15 dl.)	105 oz. (31 dl.)
Model 50	100 oz. (30 dl.)	200 oz. (60 dl.)
Model 50D	85 oz. (25 dl.)	170 oz. (50 dl.)
Model 52D	85 oz. (25 dl.)	170 oz. (50 dl.)
Model 52T	115 oz. (34 dl.)	230 oz. (68 dl.)

OIL GRADE — Single Reduction (RPM Out)

0-25 RPM — AGMA #5
25-100 RPM — AGMA #3
100-200 RPM — AGMA #1
200 + — Consult HECO

OIL GRADE — Double Reduction (RPM Out)

0-40 RPM — AGMA #5
40-60 RPM — AGMA #1
60 + — Consult HECO

MAXIMUM OIL TEMPERATURE

140°F (60°C) continuous
170°F (76°C) intermittent
Consult HECO for higher temperatures