OEM Bulletin

Carrier Corporation | Carlyle Compressor Sales

Carlyle Compressor Sales, 6376 Wavel Street, Syracuse, New York 13206

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NEW 5H120, 126 OIL PUMP

Carlyle Compressor will be converting the oil pump on the 5H120 and 5H126 compressor to standardize on the same oil pump that has been used in the 6L semi-hermetic compressors for the past 10 years. This oil pump standardization will result in several improvements in performance when installed in the 5H120/126 compressors:

(1) The oil pump is automatically reversible. This eliminates the requirement of ensuring the oil pump operates in the same direction as the compressor driver (motor, diesel engine, etc.).

(2) The oil pump has a higher gpm capacity and will deliver greater flow to the bearings. It will maintain proper oil pressure at even lower operating speeds.

The complete oil pump and bearing head assembly are interchangeable between the new 06L assembly and the old 5H120 assembly. Either complete assembly could be installed on a 5H120/126 compressor interchangeably. The new 06L oil pump (by itself--see Figure 2) can not be installed in an old 5H120 bearing head assembly and vise versa. For service purposes, shown below are the parts involved:

CHART I

- SERVICE OIL PUMP PACKAGE HISTORY & SPECS -

Oil Pump Replacement Pkg.:	06LA660-008	5H120-A773
Complete Bearing Head Assy.:	6L120-223	5H120-837
Compressor	5H120/126	5H120/126
Date Manufactured	1960-1968 AND Starting March, 1986	1969-1986
Serial Number Break: 1960/68:	Starting 0447119 to A901765 AND	Starting A901765 to 1086J
1986:	Starting 1086J01967	
Oil Pump Specs		
Oil Pump Package	6L120-397 Pump Assy. (2) 6L120-2672 Gasket (1) 6L120-2032 Adapter (½ thick)	5H120-A773 Pump Assy.

Oil Pump Type:	Spenex Gear Rotor	Gear Rotor
Oil Flow:	6 GPM	5 GPM
Reverseability:	Automatically	Manually
I.D. Bearing Head @ Pump	1 3/4	2 - 1/8
Appearance	See Figures 1 & 2	See Figure 3

Shown below are service instructions for replacing the new 06LA660-008 oil pump package:

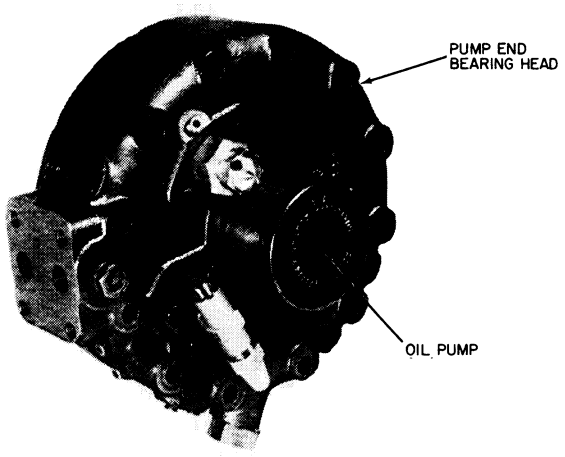

Figure 1: New 06LA660-008 Bearing Head Assy. for 5H120/126 Compressors (starting S/N 1086J01967)

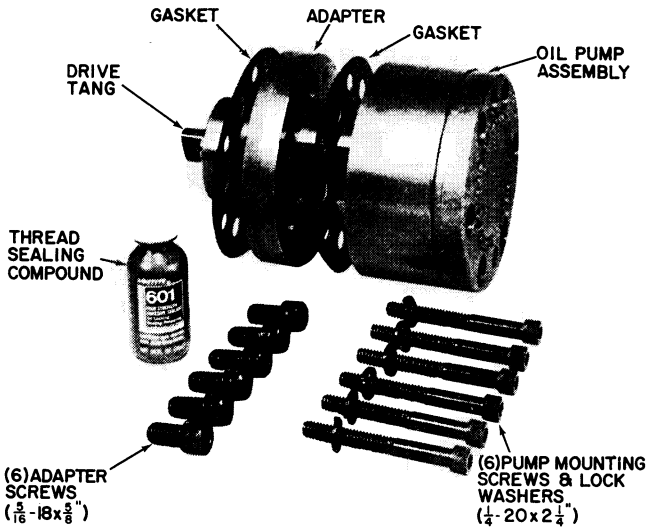

Figure 2: New 6L120 Oil Pump for 5H120/126 Compressors (starting S/N 1086J01967)

A. Disassembly of Oil Pump Shown in Fig. 1

If the pump shown in Fig. 1 is being replaced, only steps 1, 2 and 4 apply. Also, remove the adapter from the bearing head.

1. Drain oil level below level of bearing head.
2. Remove bearing head from compressor.
3. Remove oil pump cover and gasket.
4. Remove oil pump from bearing head.
5. Press out the oil pump bushing toward the main bearing to avoid scoring the bore in the bearing head. Note that this new 6L120 oil pump can not be installed on older 5H120 bearing head assemblies (prior S/N 1086J01967).

B. Inspection

1. Check the bearing head bore for scoring. If the bore is scored, the bearing head must be replaced. Be sure there are no nicks or burrs on the edge of the bore.

2. Check the main bearing for wear (see 5F,H Installation, Start-Up & Service Instructions). If wear has exceeded the maximum allowable, the compressor must be overhauled as the condition of this bearing is an indication of the general condition of the compressor.

C. Pump Installation

1. Using a new gasket, mount the bearing head on compressor. Tighten the ½ - 13 cap screws to 80 lb.-ft.

2. Put a drop of thread sealing compound (Loctite 601 or equivalent) on each of the 5/16 - 18 X 5/8 adapter mounting screws and on the threads of each mounting hole in the bearing head. Position one of the supplied gaskets over the holes in the adapter and assemble the adapter loosely to the bearing head.

   Be sure there are no nicks or burrs on the oil pump or the bores in the adapter and bearing head. Slide the oil pump thru the adapter and into the bearing head bore, allowing enough clearance to tighten the adapter mounting screws with an Allen wrench. The clearance between the oil pump housing and the bores in the adapter and bearing head is necessarily very close. DO NOT USE FORCE and do not attempt to change the clearance.

4. Hold the pump with one hand and rotate it while equally tightening the adapter mounting screws. Proper alignment between the pump and the bearing head bore is extremely important. THERE MUST BE NO BINDING.

5. When the adapter is secure, remove the pump assembly and place the second gasket on the pump housing. Insert two ¼ - 20 X 2-¼ mounting screws and lock washers, one on either side of the word TOP on the pump end cover, and position the gasket on the screws. For the remaining operations, be sure the word TOP is at the top.

6. Turn the pump shaft to align the drive tang with the slot in the end of the crankshaft. Holding the pump assembly with the thumbs on the 2 screws, slide the assembly into the bearing head until the tang engages the slot. A slight rotation should align the screws with the tapped holes in the adapter. Start the screws to hold the alignment and then install the balance of the screws to hold the alignment and then install the balance of the screws and lock washers. Tighten all the screws (¼ - 20) to a torque of 12 - 15 lb.-ft.).

7. Start the compressor and check the oil pressure. This oil pump operates in either direction of rotation. The correct oil pressure for compressors using this pump is 40 to 60 psi above suction pressure.

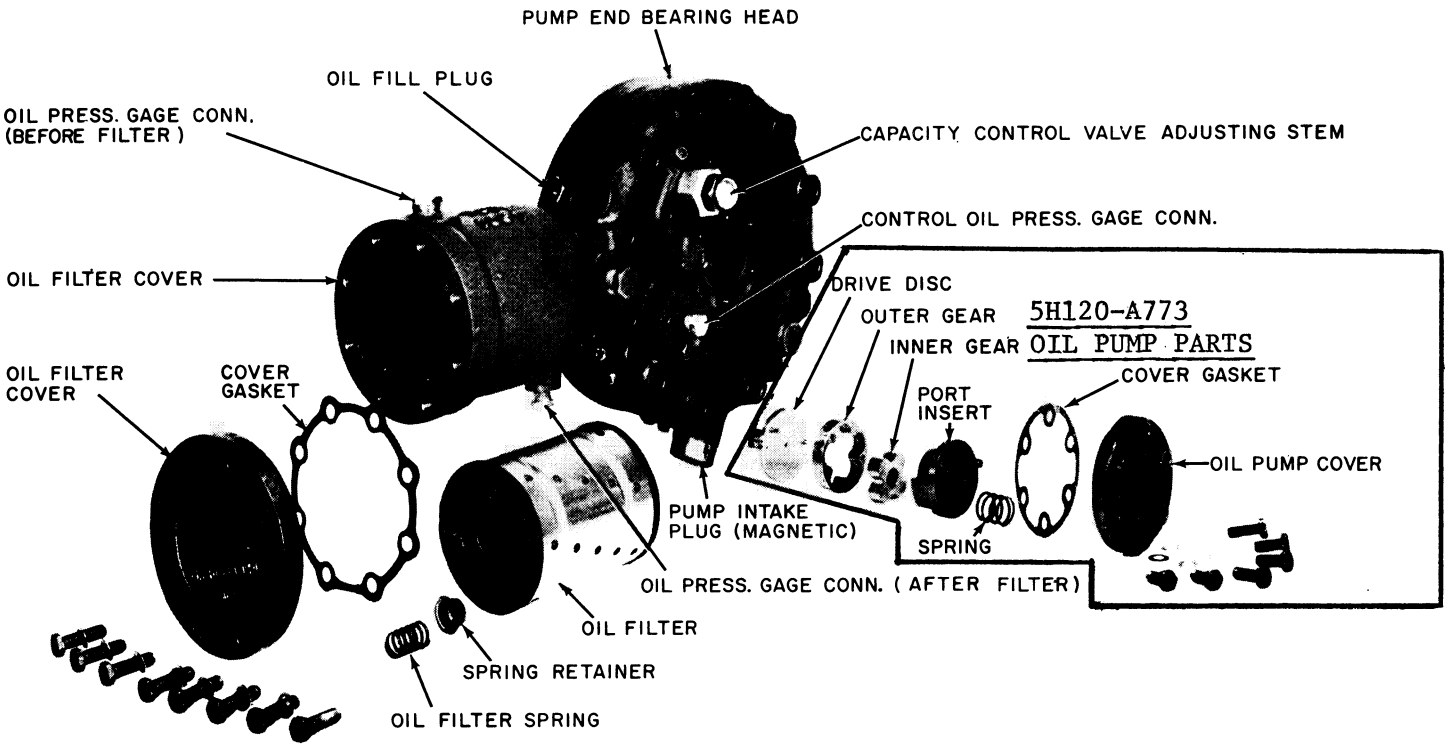

Figure 3: Oil Pump & Filter Assembly (5H120/126, used 1969 - 1986)