



Technical Service Information

CHRYSLER A670 (31TH) NEW DESIGN "DUAL CYCLOIDAL" OIL PUMP ASSEMBLY FOR 2000 MODEL YEAR

CHANGE: The Chrysler A670 (31TH) transaxle has received a new design oil pump assembly as a running 1999 model year change. The new oil pump design is called a "Dual Cycloidal" pump and replaces the current gear pump design, as illustrated in Figure 1.

REASON: The new design oil pump has increased flow and capacity at low idle speeds, also has reduced flow at high speeds which reduces the load on the engine resulting in improved fuel economy. The new design oil pump is also quieter than the current gear pump.

PARTS AFFECTED:

- (1) PUMP HOUSING - Revised (Larger) suction and pressure cavities, also revised machining in the pump rotor pocket area. The new design inner and outer rotor are smaller in diameter.
- (2) PUMP HOUSING BUSHING - The bushing material has been changed from bronze to aluminum, to help improve wear characteristics.
- (3) INNER ROTOR - Has a new outside diameter, 6 new thicknesses, and new tooth geometry, as shown in Figure 1.
- (4) OUTER ROTOR - Has a new outside diameter, 6 new thicknesses, and new tooth geometry, as shown in Figure 1.
- (5) STATOR SHAFT SUPPORT ASSEMBLY - Has revised (Larger) suction and pressure ports to accommodate the new design "Dual Cycloidal" pump rotors, as shown in Figure 1.

INTERCHANGEABILITY:

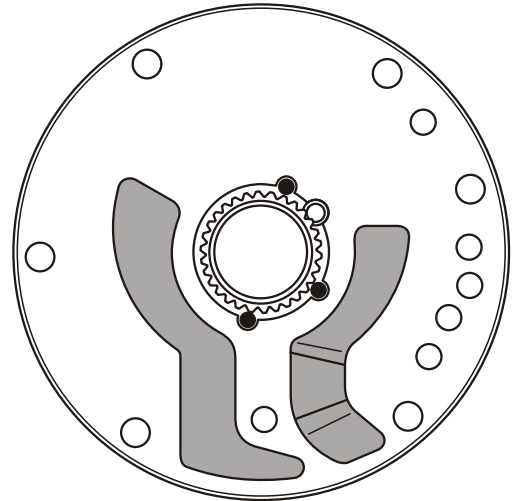
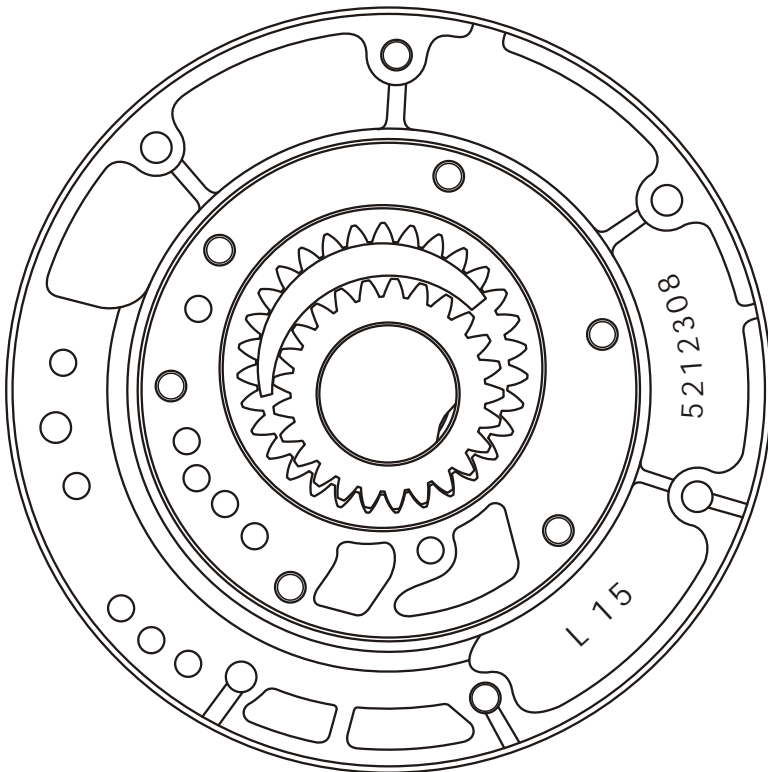
None of the parts listed above will interchange with previous design level parts. Even though the old and new parts will bolt together, they **will not** function properly. However, the complete "Dual Cycloidal" pump assembly when used as a service package, will retro-fit back for past model service.

SERVICE INFORMATION:

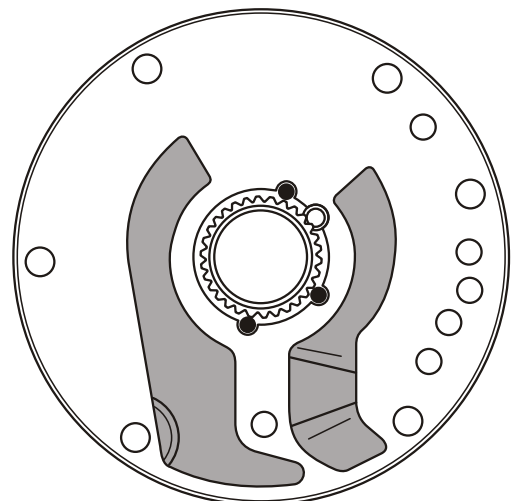
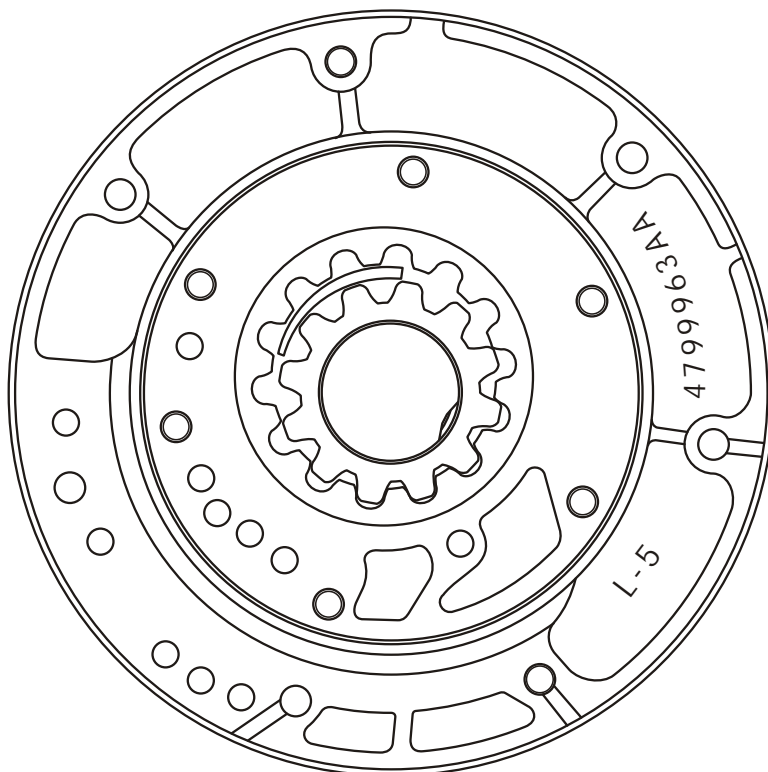
Dual Cycloidal Pump Assembly Complete	4799955AA
Pump Housing Bushing, Aluminum	4659515
Inner Rotor (6 Different Selectives)	4659719-724
Outer Rotor (6 Different Selectives)	4659725-730
Reaction Shaft Support Assembly (New Design)	4799957AA

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PREVIOUS DESIGN PUMP ASSEMBLY



NEW DESIGN "DUAL CYCLOIDAL" PUMP ASSEMBLY



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Figure 1