



## **CHRYSLER 31TH (A670) NEW DESIGN COOLER BY-PASS SYSTEM**

**CHANGE:** The Chrysler 31TH (A670) transaxle has been revised to include a cooler by-pass system and was changed during the 1999 model year as a running change (See Figure 1).

**REASON:** This new system will allow lube oil to by-pass the transaxle oil cooler in the vehicle under extreme cold conditions and feed oil directly back into the lube circuit. This will improve durability at extreme cold conditions, instead of restricting lube oil to the transaxle and possibly resulting in a failure.

### **PARTS AFFECTED:**

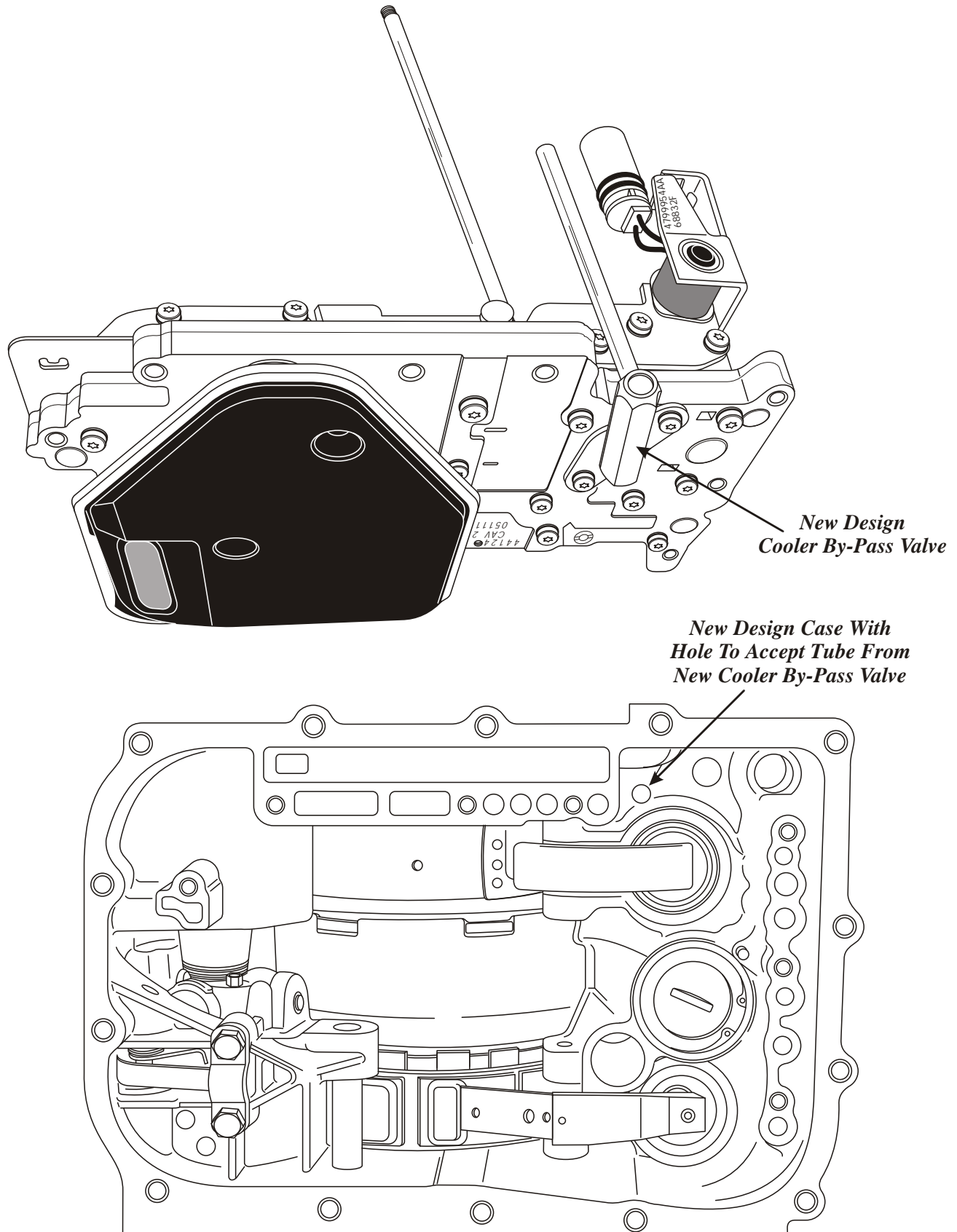
- (1) **TRANSAXLE CASE** - A new drilled hole has been added in the valve body face area, as shown in Figure 265, to the cooler return circuit of the case. The pump face cooler return hole has also been made larger and relocated, to align with case lube circuit.
- (2) **PUMP GASKET** - The hole in the pump gasket for the cooler return circuit has been relocated in the gasket to accommodate the relocated hole in the case.
- (3) **VALVE BODY TRANSFER PLATE** - The transfer plate has a drilled through hole and a pocket to accept the by-pass valve seal, and two added screw holes to accommodate the added cooler by-pass valve assembly (See Figure 1).
- (4) **COOLER BY-PASS SEAL** - The new seal locates in the pocket of the transfer plate and seals against the new cooler by-pass valve assembly.
- (5) **COOLER BY-PASS VALVE ASSEMBLY** - The valve assembly consists of a spring loaded ball inside of a body/tube that is attached to the transfer plate with two new screws and inserted into the new case lube circuit hole, as shown in Figure 1.

### **INTERCHANGEABILITY:**

None of the parts listed above can be used with any previous design transaxles, unless they are used as a service package together.

### **SERVICE INFORMATION:**

Transfer Plate (New Design) .....	4377811AD
Cooler By-Pass Valve Assembly .....	4800018AA
Cooler By-Pass Seal .....	4800019AA
Pump Gasket (New Design) .....	4269661AB
Transaxle Case (New Design) .....	Model Dependent On Engine Size



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Figure 1