



# Technical Service Information

## CHRYSLER A604

### COOLER BYPASS CHECK VALVE ADDED TO CASE

**CHANGE:** Beginning in 1991 model A604 transaxles, there has been a "Cooler Bypass Check Valve Assembly" added in the transaxle case behind the oil pump. (See Figures 1 and 2).

**REASON:** Lack of cooler oil flow in extreme cold climates, because of transaxle fluid "Jelling" (0° Fahrenheit or Below).

#### PARTS AFFECTED:

**(1) COOLER BYPASS CHECK VALVE** - added into the case cooler passage behind the oil pump (See Figure 2). If cooler oil flow is restricted, or blocked, the new check valve will open, and allow cooler feed oil direct into the lube circuit to prevent transaxle damage. Normal operation is resumed after oil temperature is warm enough to again flow through the cooler. (See Figure 1).

**NOTE:** Customers should be advised to let the vehicle warm-up thoroughly before attempting to drive the vehicle, especially in the colder climates.

**(2) TRANSAXLE CASE** - The new case has added material between the two cooler line fittings, to accommodate the machining process needed for the new cooler bypass check valve assembly (See Figure 2).

**(3) VALVE BODY SPACER PLATE** - Lube feed hole in spacer plate has been enlarged to .112", as shown in Figure 3.

#### INTERCHANGEABILITY:

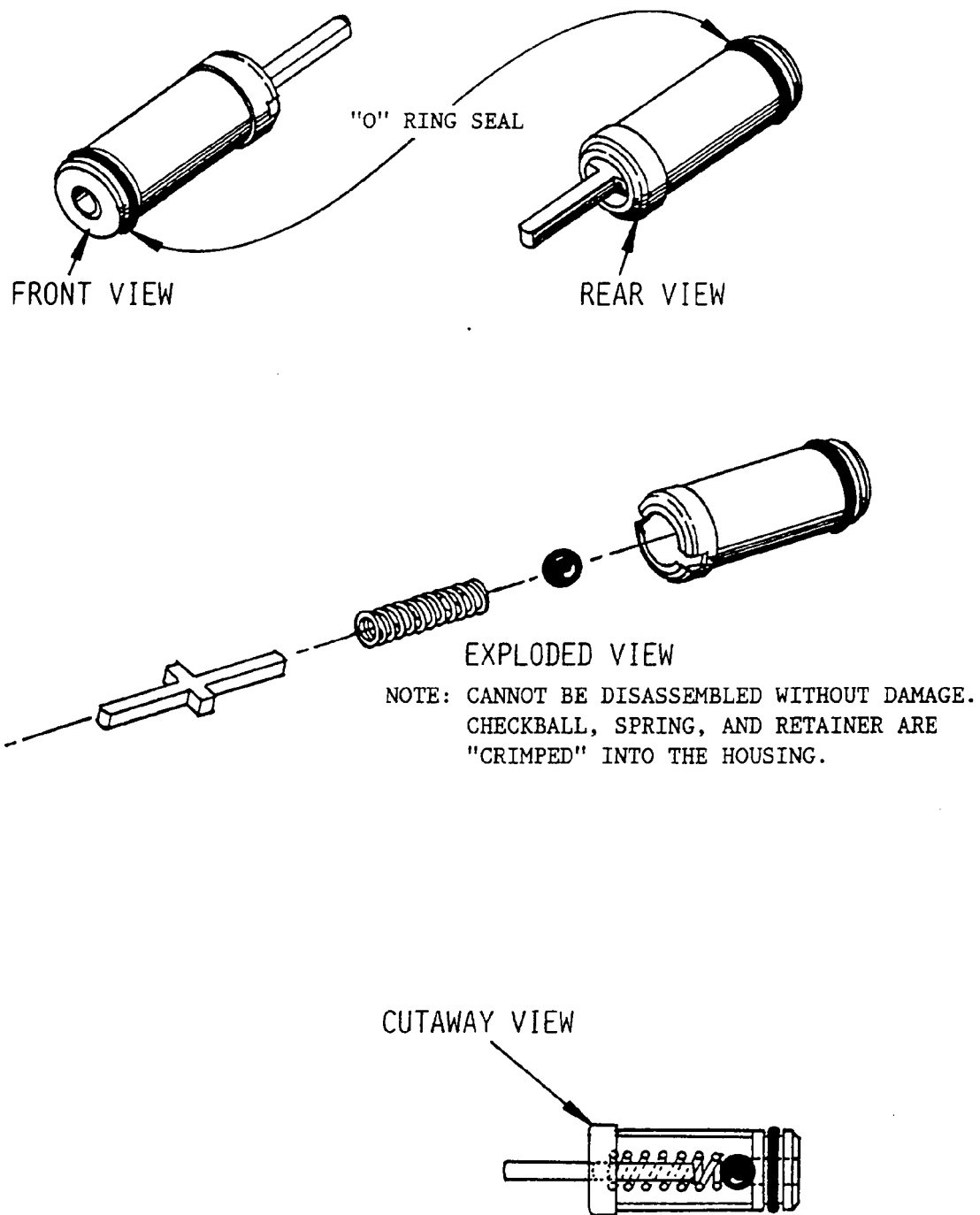
Cooler bypass check valve assembly "WILL NOT" retro-fit back to previous models, unless the new transaxle case is installed at the same time.

The lube feed hole in the spacer plate can be drilled to .112" on all models to improve lube oil flow (See Figure 3).

#### SERVICE INFORMATION:

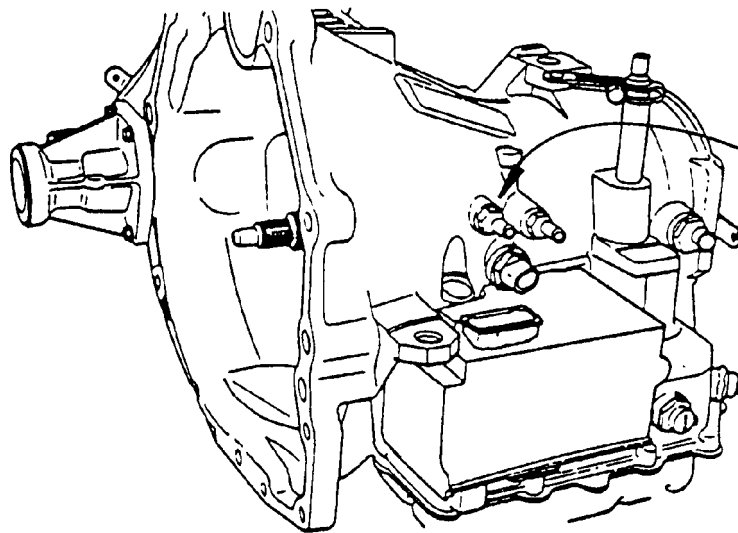
Cooler Bypass Check Valve Assembly .....	4539880
Transaxle Case Assembly, 3.0L (1991) .....	4567015
Transaxle Case Assembly, 3.3L (1991) .....	4567016
Transaxle Case Assembly, 2.5L (1991) .....	4567017

Copyright © 2000 ATSG



COOLER BYPASS CHECK VALVE ASSEMBLY

Figure 1



THE NEW CASE HAS ADDED MATERIAL  
BETWEEN COOLER LINE FITTINGS TO  
ACCOMMODATE MACHINING PROCESS FOR  
NEW COOLER BYPASS CHECK VALVE.

INSTALLS IN THE 1991 CASE PASSAGE,  
UNDER OIL PUMP IN THE DIRECTION SHOWN.

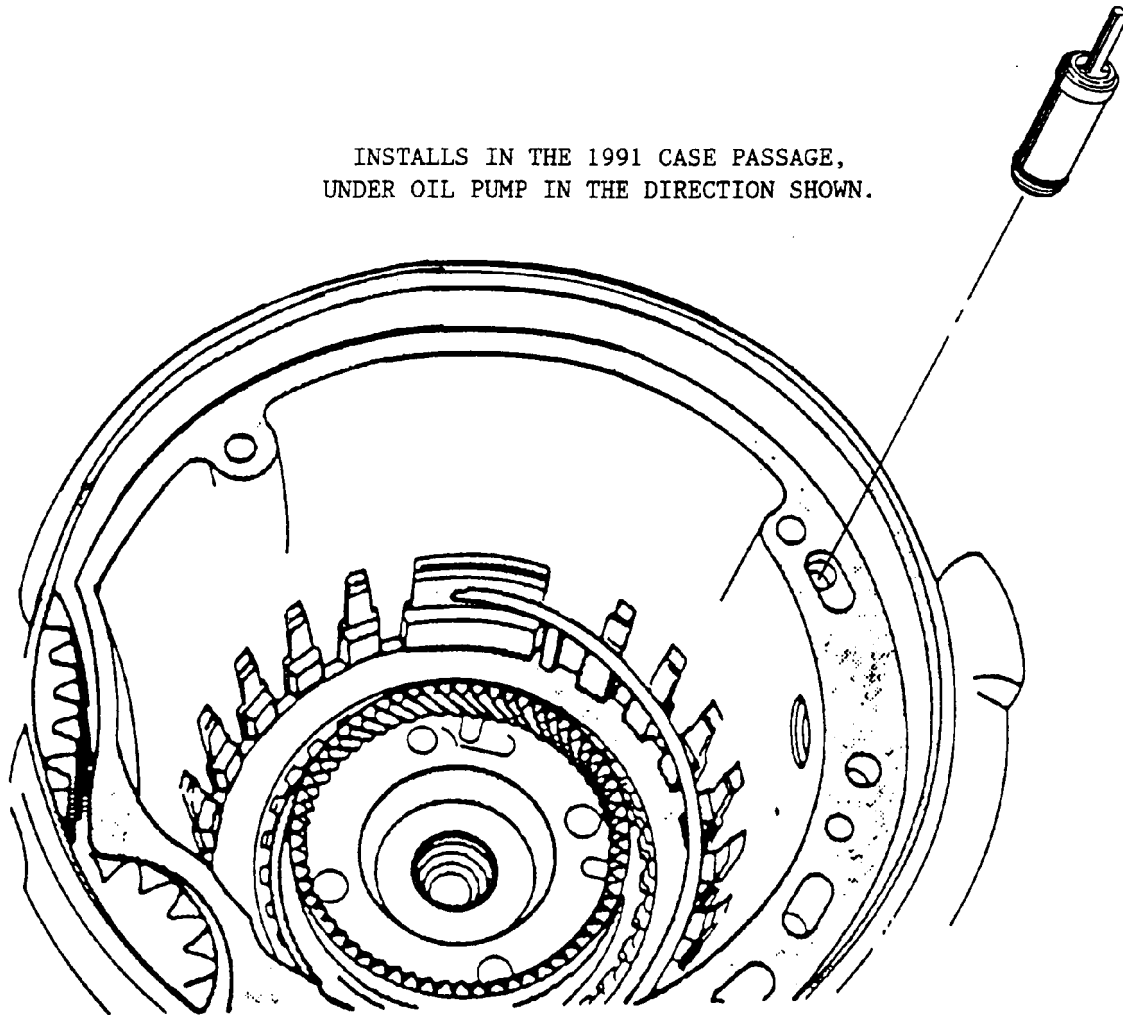
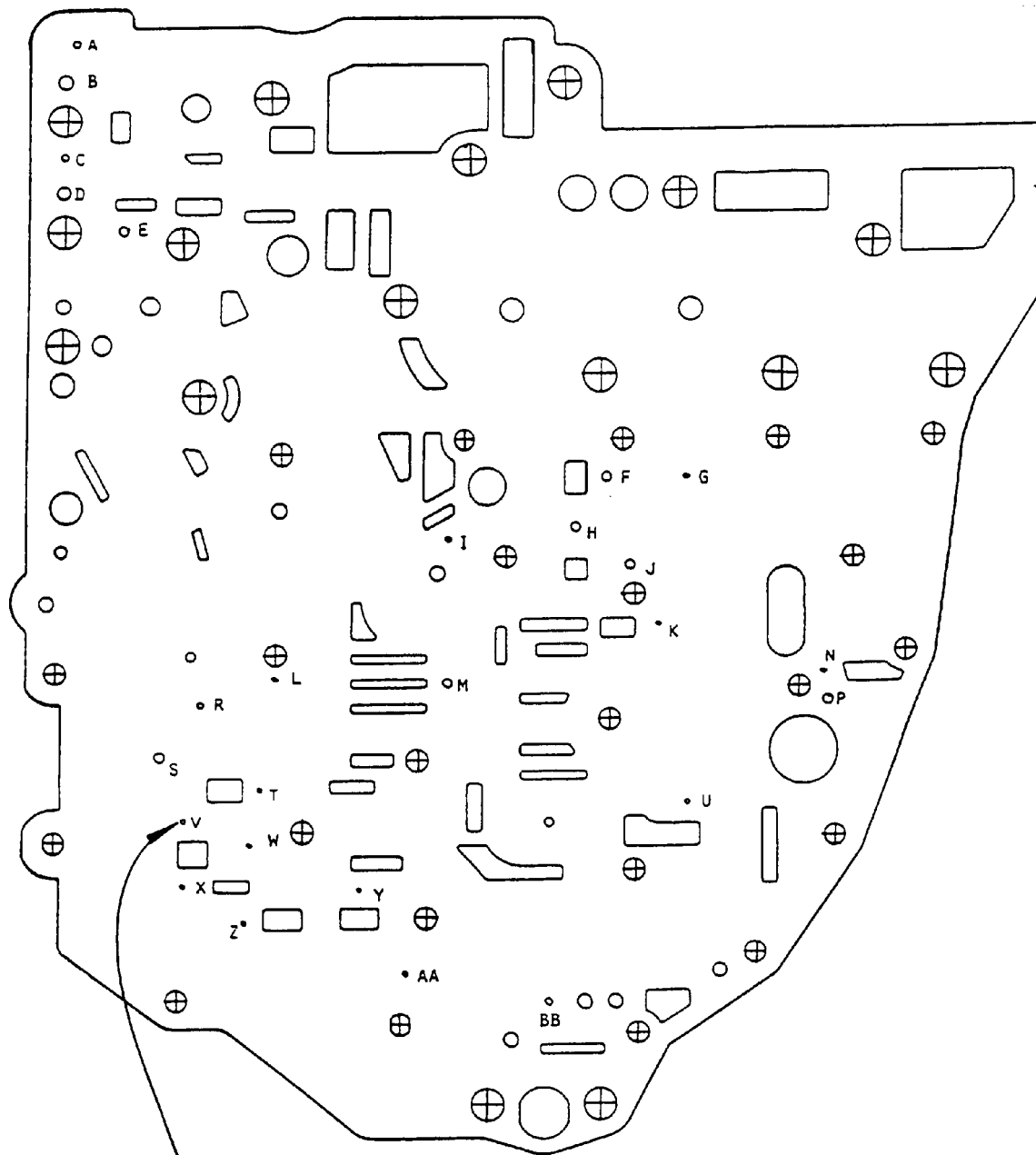


Figure 2



HOLE "V" WAS ENLARGED TO .112", AND CAN BE DRILLED  
ON ALL MODELS TO IMPROVE LUBE OIL FLOW.

## A604 SPACER PLATE

Figure 3

AUTOMATIC TRANSMISSION SERVICE GROUP