



FORD E4OD/4R100 NEW FRONT PUMP ASSEMBLY FOR 1997-1998 MODELS

CHANGE: Ford Motor Company for the 1999 Model Year, has renamed the E4OD transmission when they added the PTO window to the case. Many changes were made to the internal parts including the Oil Pump Assembly. These new oil pumps have now been found in some models of the 1997-1998 E4OD transmissions, from the factory assembly line.

REASON: Preparing the Oil Pump Assembly to accommodate two different converter clutch valve line-ups, and two different coast clutch housings.

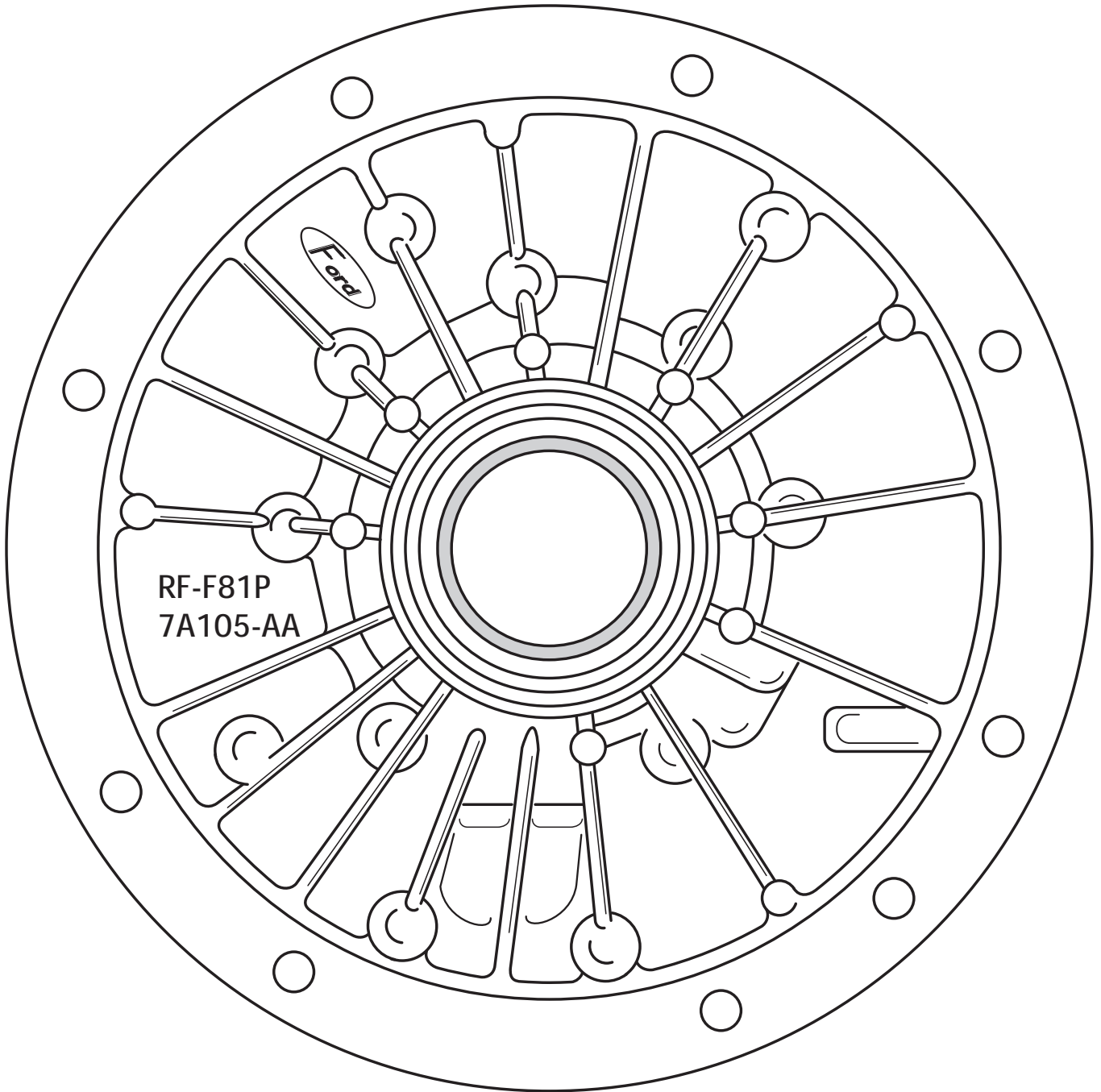
PARTS AFFECTED:

- (1) OIL PUMP BODY - Now has different worm tracks to accommodate the new pump cover assembly and is identified by the rough forging number RF-F81P-7A105-AA, and is cast into the pump body in the location shown in Figure 82. The worm track side of the new pump body and the previous pump body are shown in Figure 83.
- (2) OIL PUMP COVER - Now has different worm tracks to accommodate two different styles of converter clutch valve line-ups, and has one added bolt to clamp the pump halves together. The worm track side of the new pump cover and the previous pump cover are illustrated in Figure 84, and casting number on new pump cover is RF-F81P-7B324-AA for identification.
- (3) TCC LINE-UP - There are now two different Converter Clutch Control Valve Line-Ups in the oil pump cover depending on whether it is gasoline or diesel engine. Both of these valve line-ups are illustrated in Figure 85.
- (4) STATOR SHAFT ASSEMBLY - There are now two different Stator Shaft Assemblies with different sealing ring configurations, to accommodate the new coast clutch housing, as illustrated in Figure 86, and are model dependent.
- (5) COAST CLUTCH HOUSING - There is now a "stamped Steel" coast clutch housing that may or may not have a PTO gear pressed onto the housing, that is used in addition to the previous cast iron coast clutch housing, depending on the model and engine size, and is illustrated in Figure 87. This also changes the coast clutch steel plates and the fourth clutch friction plates, as shown in Figures 87 and 88.

INTERCHANGEABILITY:

This new Oil Pump Assembly will retro-fit back to previous models, as long as you have the proper valve line-up in the converter clutch control valve bore. The pump halves **cannot** be inter-mixed because of the major worm track differences. All other parts listed above are model dependent and **great care must be used** when parts replacement is necessary.

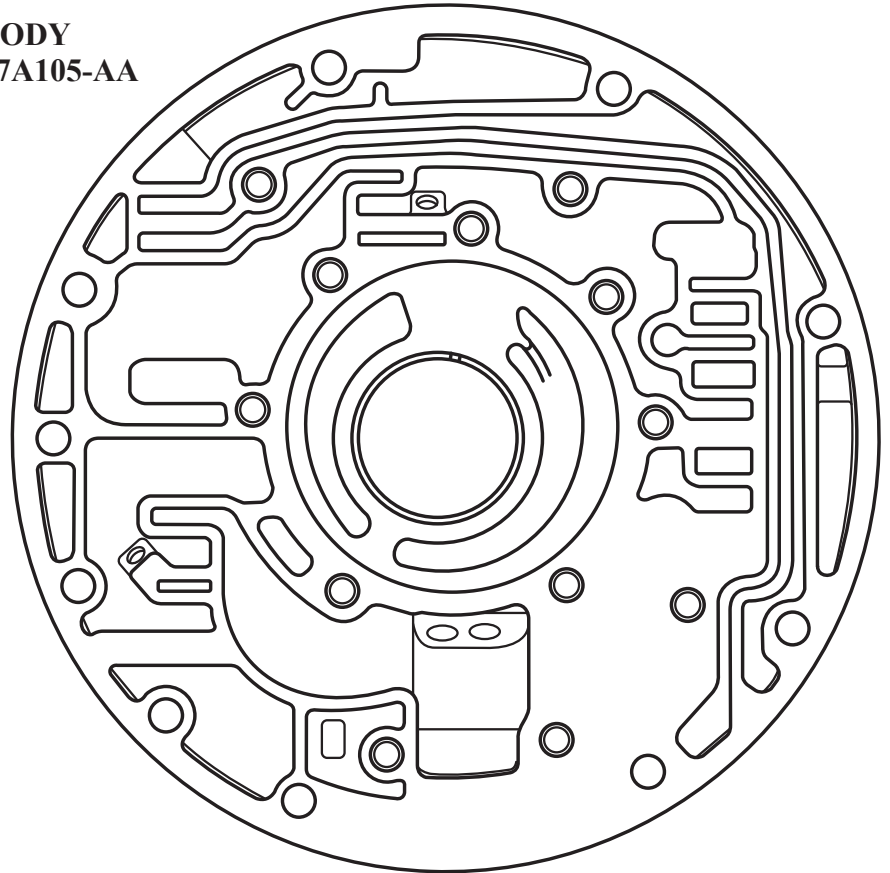
1998 E4OD PUMP BODY
FRONT SIDE



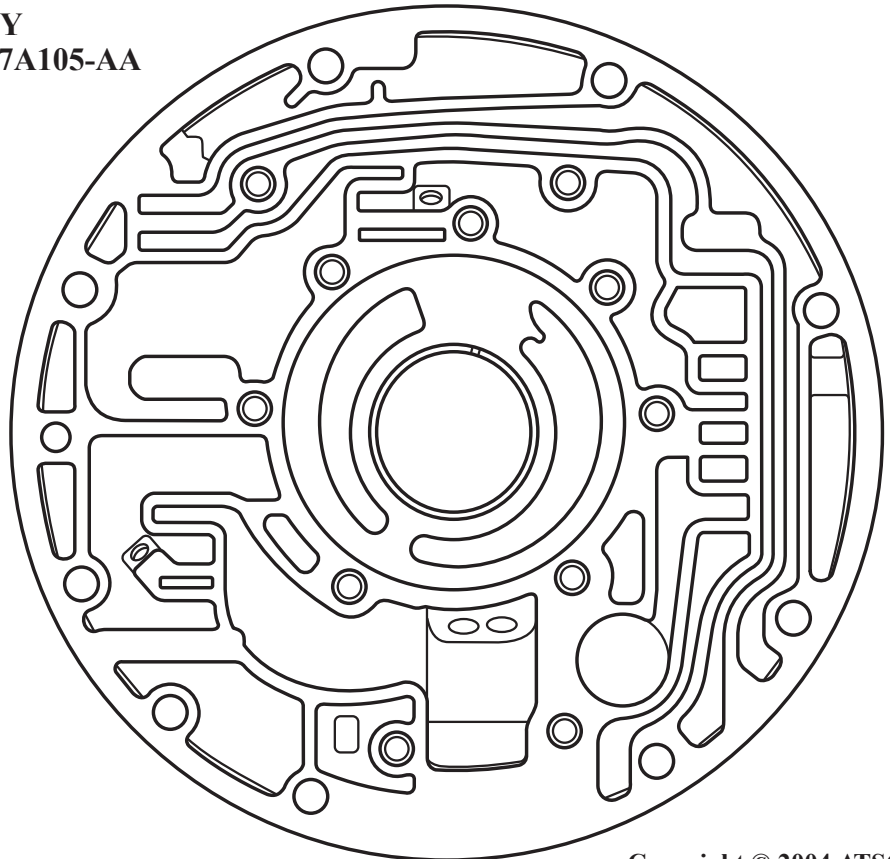
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Figure 82
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1998 E4OD/4R100 PUMP BODY
CASTING NUMBER RF-F81P-7A105-AA
WORM TRACK SIDE



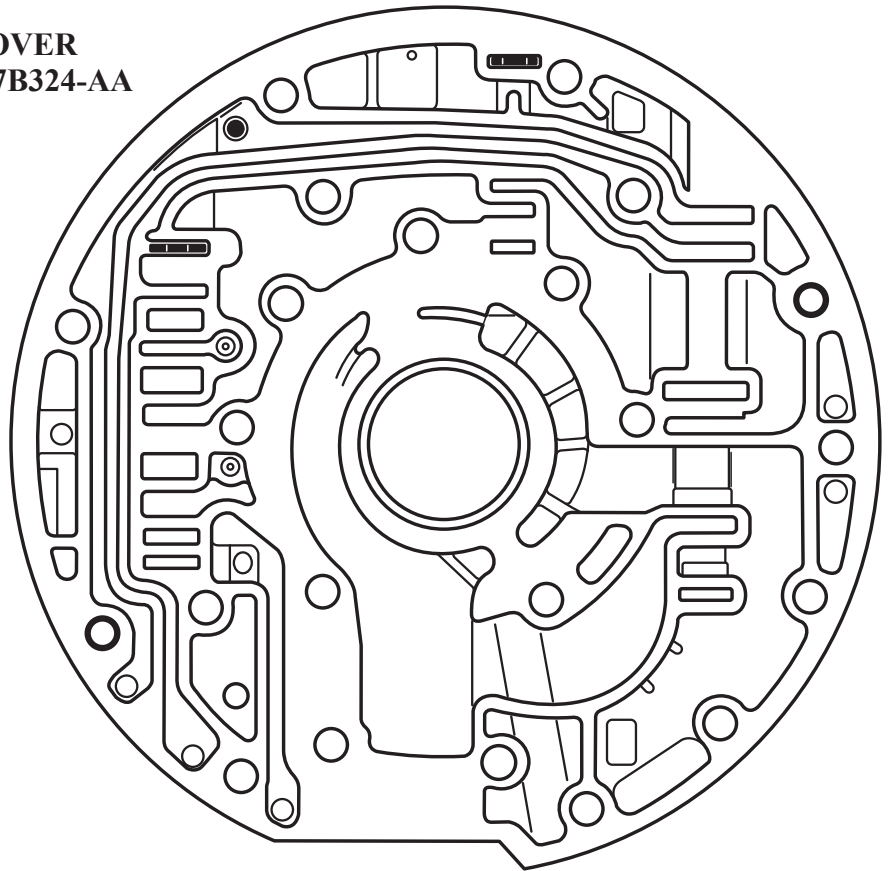
1995 E4OD PUMP BODY
CASTING NUMBER RF-F5TP-7A105-AA
WORM TRACK SIDE



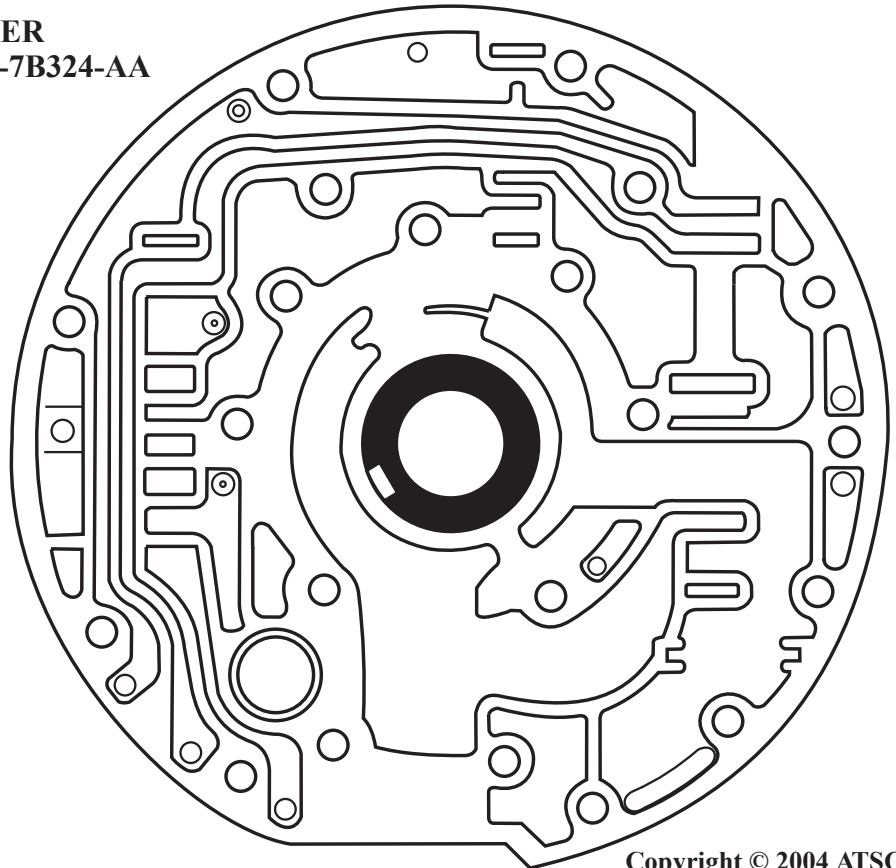
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Figure 83
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1998 E4OD/4R100 PUMP COVER
CASTING NUMBER RF-F81P-7B324-AA



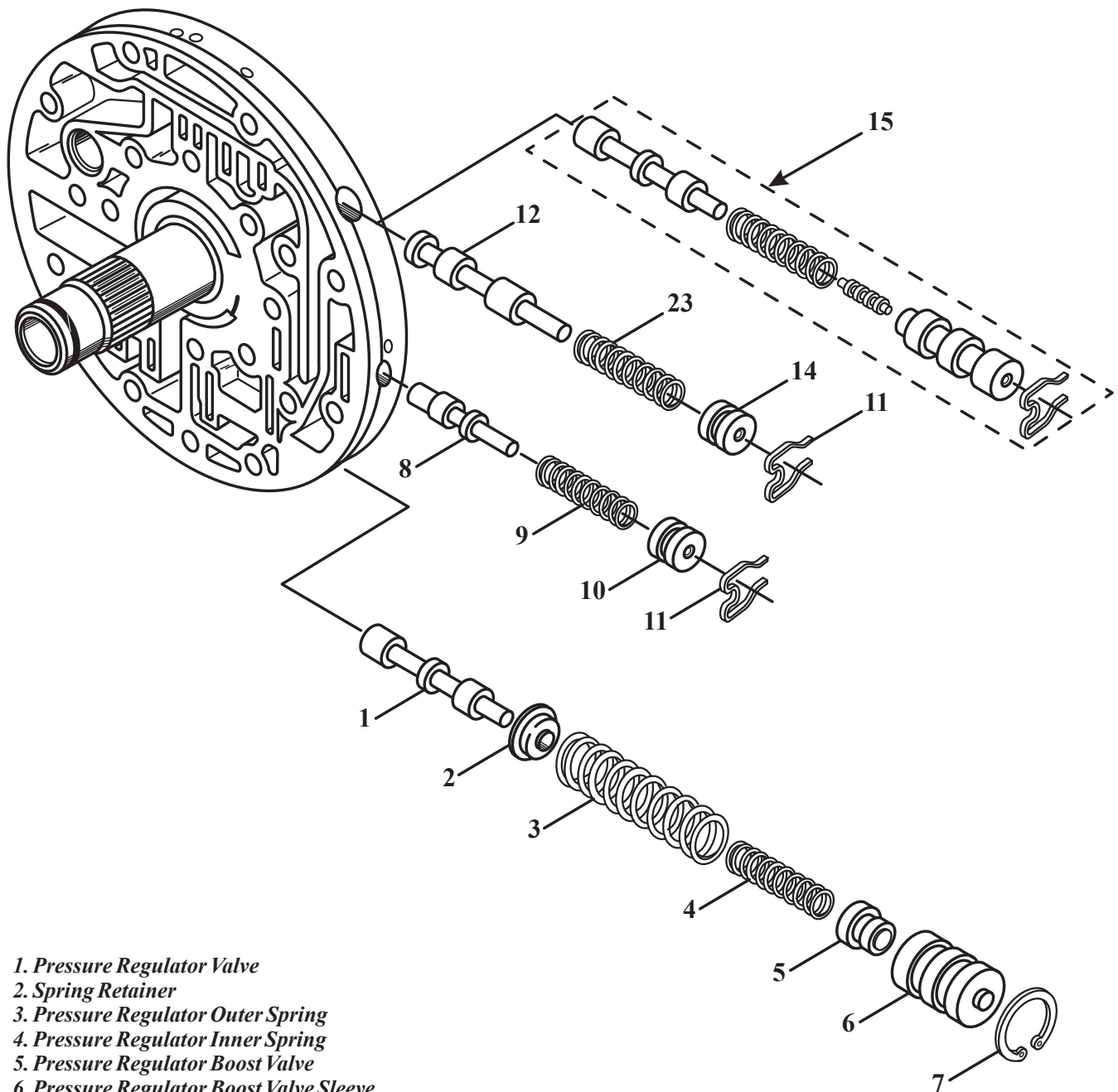
1995 E4OD PUMP COVER
CASTING NUMBER RF-F5TP-7B324-AA



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Figure 84
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FORD E4OD/4R100 VALVE LINE-UPS IN PUMP ASSEMBLY



1. Pressure Regulator Valve
2. Spring Retainer
3. Pressure Regulator Outer Spring
4. Pressure Regulator Inner Spring
5. Pressure Regulator Boost Valve
6. Pressure Regulator Boost Valve Sleeve
7. Snap Ring
8. Converter Clutch Regulator Valve
9. Converter Clutch Regulator Spring
10. Converter Clutch Regulator Bore Plug
11. Bore Plug Retainer
12. Converter Clutch Control Valve (Gas "On-Off" Only)
13. Converter Clutch Control Spring (Gas "On-Off" Only)
14. Converter Clutch Control Bore Plug
15. Converter Clutch Control Line-up (Diesel "PWM" Only)

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Figure 85

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