



## **FORD E4OD NEW "SPECIAL" CASE ASSEMBLY FROM FORD MOTOR CO.**

**CHANGE:** Currently, the "*only*" new case available from Ford Motor Company, for replacement in any E4OD equipped vehicles, is a modified 4R100 case. Ford has machined out the dam in the case that separates center and rear lube, near the rear of the case, as shown in Figure 1.

**CAUTION:** This case *requires* special main spacer plate, spacer plate gaskets, speed sensor plugs and extension housing, that *do not* come with the new case from Ford Motor Company.

We have provided you with a list of additional parts that will be required to use this case, under "Parts Affected", depending on the model year that you are repairing. The older the unit, the more parts required.

**REASON:** Cost savings due to not having to maintain separate dies for the case assemblies.

### **PARTS AFFECTED:**

#### ***REQUIREMENTS FOR 1996 THRU 1998 MODELS ONLY:***

- (1) SPACER PLATE - Ford Motor Co. part number F81Z-7A008-EA or F8UZ-7A008-CA, as shown in Figure 2.
- (2) CASE TO SPACER PLATE GASKET - Ford Motor Co. part number F81Z-7C155-AA, with "White" stripe for identification, as shown in Figure 3.
- (3) SPACER PLATE TO V.B. GASKET - Ford Motor Co. part number F81Z-7D100-AB, with "Blue" stripe for identification, as shown in Figure 3.
- (4) COOLER BYPASS ASSEMBLY - Ford Motor Co. part number F81Z-7H322-AA for 1996 models only, as shown in Figure 4. 1997 and 1998 models came with cooler bypass.
- (5) SPEED SENSOR PLUG - Ford Motor Co. part number F81Z-7H183-AA, and 2 are required, as shown in Figure 5.
- (6) LUBE ORIFICE PLUG - Ford Motor Co. part number F81Z-7E380-AA, which should come with the new case from Ford, as shown in Figure 6.
- (7) EXTENSION HOUSING - A4R100 style with boss in the extension housing to retain the lube plug in the new design case, as shown in Figure 6.

**Continued on next Page**



# Technical Service Information

## PARTS AFFECTED (Cont'd):

### REQUIREMENTS FOR 1989 THRU 1995 MODELS ONLY:

- (1) SPACER PLATE - Ford Motor Co. part number F81Z-7A008-EA or F8UZ-7A008-CA, as shown in Figure 2.
- (2) CASE TO SPACER PLATE GASKET - Ford Motor Co. part number F81Z-7C155-AA, with "White" stripe for identification, as shown in Figure 3.
- (3) SPACER PLATE TO V.B. GASKET - Ford Motor Co. part number F81Z-7D100-AB, with "Blue" stripe for identification, as shown in Figure 3.
- (4) COOLER BYPASS ASSEMBLY - Ford Motor Co. part number F81Z-7H322-AA, as shown in Figure 4.
- (5) SPEED SENSOR PLUG - Ford Motor Co. part number F81Z-7H183-AA, and 2 are required, as shown in Figure 5.
- (6) LUBE ORIFICE PLUG - Ford Motor Co. part number F81Z-7E380-AA, which should come with the new case from Ford, as shown in Figure 6.
- (7) EXTENSION HOUSING - A4R100 style with boss in the extension housing to retain the lube plug in the new design case, as shown in Figure 6.
- (8) MAIN VALVE BODY - Requires 1996 hydraulics which is identified by RF-F6 cast into the valve body, in location shown in Figure 7, and checkball locations are shown in Figure 8.
- (9) LOWER VALVE BODY - Requires 1996 hydraulics which is identified by RF-F6 cast into the lower valve body, in location shown in Figure 7.
- (10) LOWER VALVE BODY SPACER PLATE - The 1996 hydraulics version which is identified by the 2 holes for bathtub checkball and 3 small holes, as shown in Figure 7.
- (11) ACCUMULATOR VALVE BODY - Requires 1996 hydraulics which is identified by RF-F6 cast into the accumulator valve body and slot cast shut, as shown in Figure 7.
- (12) CASE CHECKBALL LOCATIONS - Requires the 1996 and later case checkball locations, which is eight checkballs in locations shown in Figure 9.

## INTERCHANGEABILITY:

*Parts that have been mis-matched, depending on what you have done, can create;*

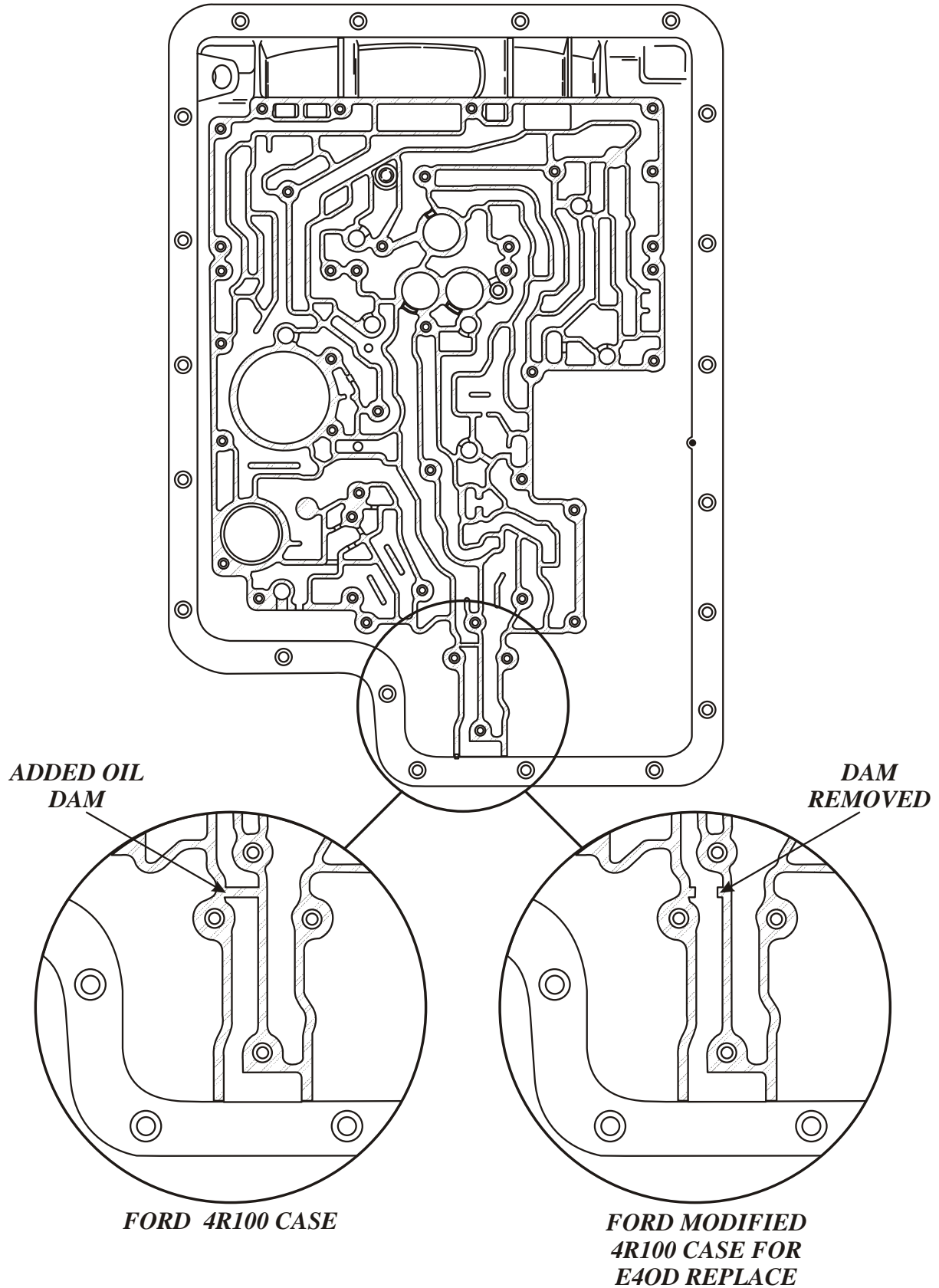
- Harsh Shifts    ●No Overdrive    ●Bind in Manual 1
- Lack of Lube    ●Bind in Reverse    ●Slip in Reverse

## SERVICE INFORMATION:

Main Valve Body Spacer Plate .....	F81Z-7A008-EA
Main Valve Body Spacer Plate (Optional) .....	F8UZ-7A008-CA
Case To Spacer Plate Gasket (White Stripe) .....	F81Z-7C155-AA
Spacer Plate To Valve Body Gasket (Blue Stripe) .....	F81Z-7D100-AB
Cooler Bypass Assembly .....	F81Z-7H322-AA
Speed Sensor Plugs (2 Required) .....	F81Z-7H183-AA
Lube Orifice Plug (Comes with new case) .....	F81Z-7E380-AA

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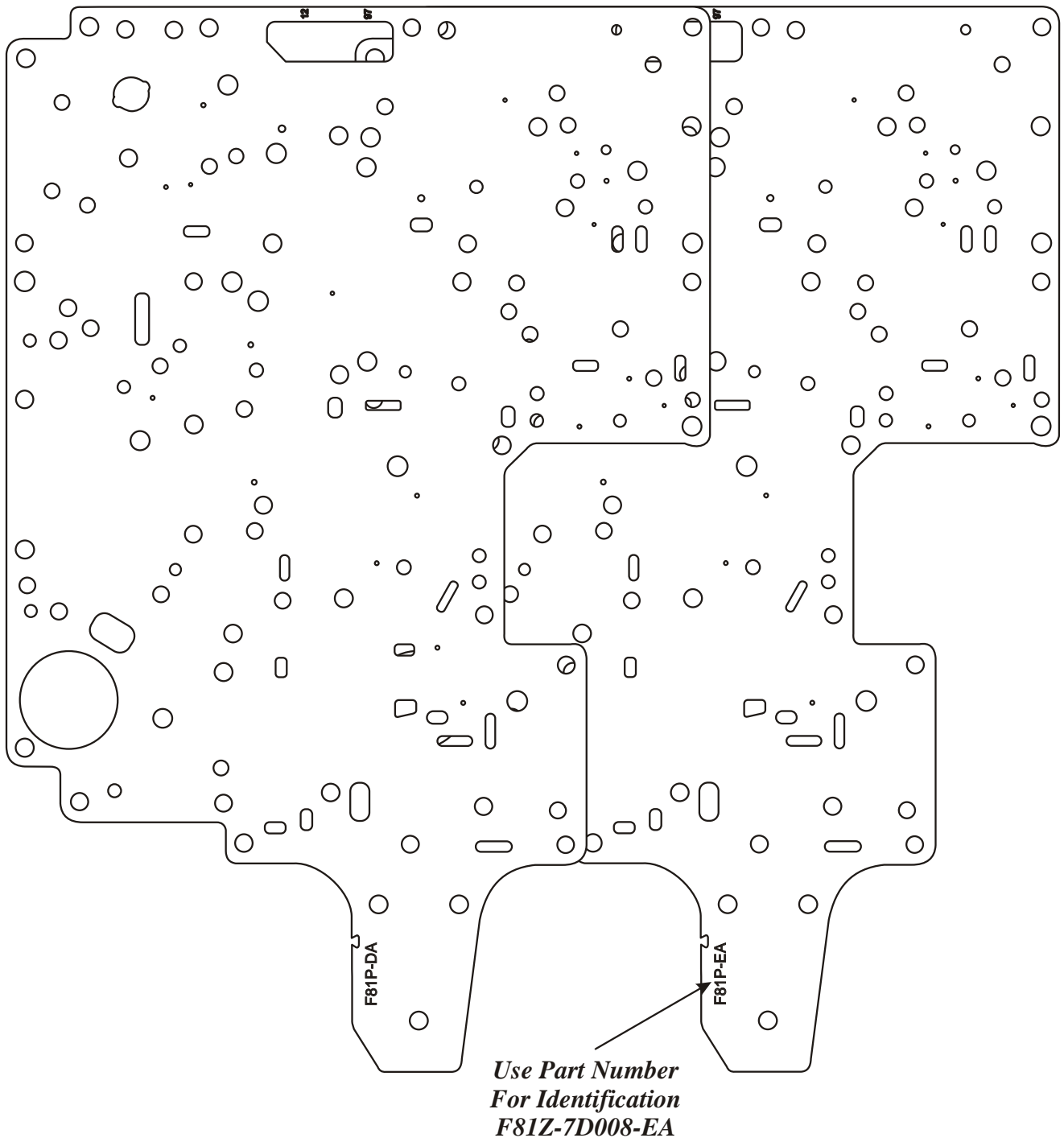
## FORD 4R100 MODIFIED CASE FOR USE IN E4OD MODELS



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Figure 1

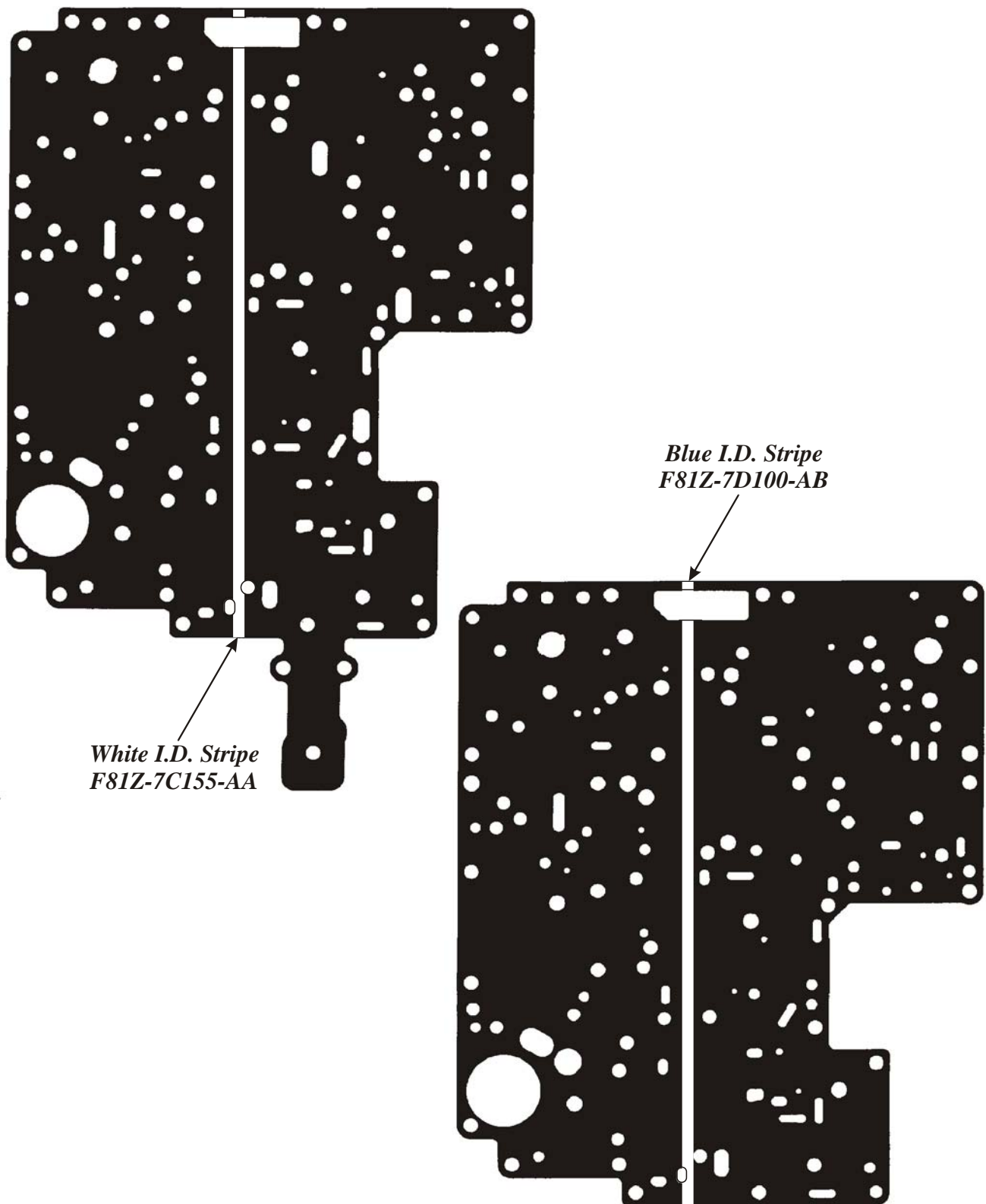
## "SPECIAL" MAIN SPACER PLATE REQUIRED FOR MODIFIED 4R100 CASE



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Figure 2

## CASE AND VALVE BODY GASKETS REQUIRED FOR MODIFIED 4R100 CASE



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Figure 3

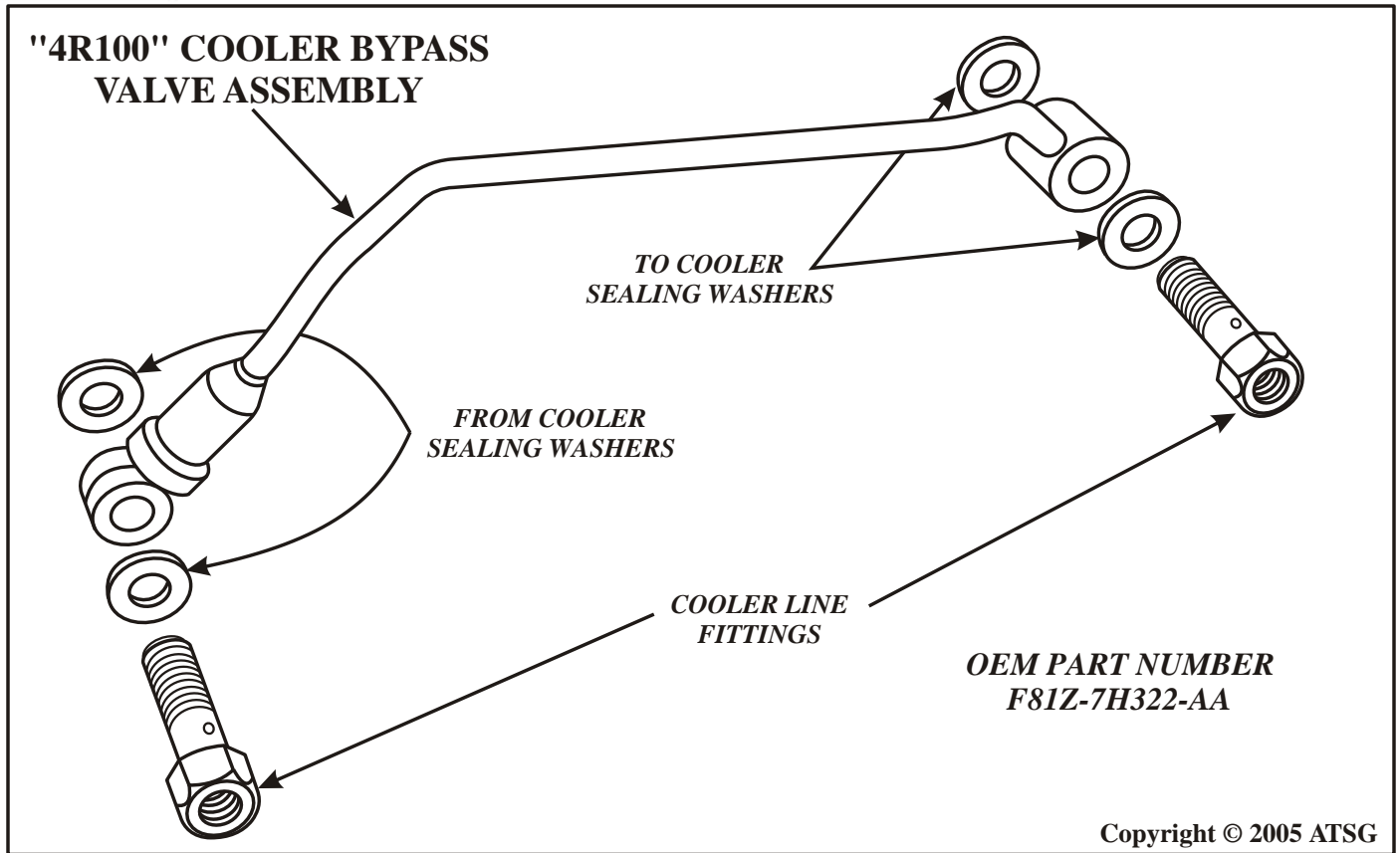


Figure 4

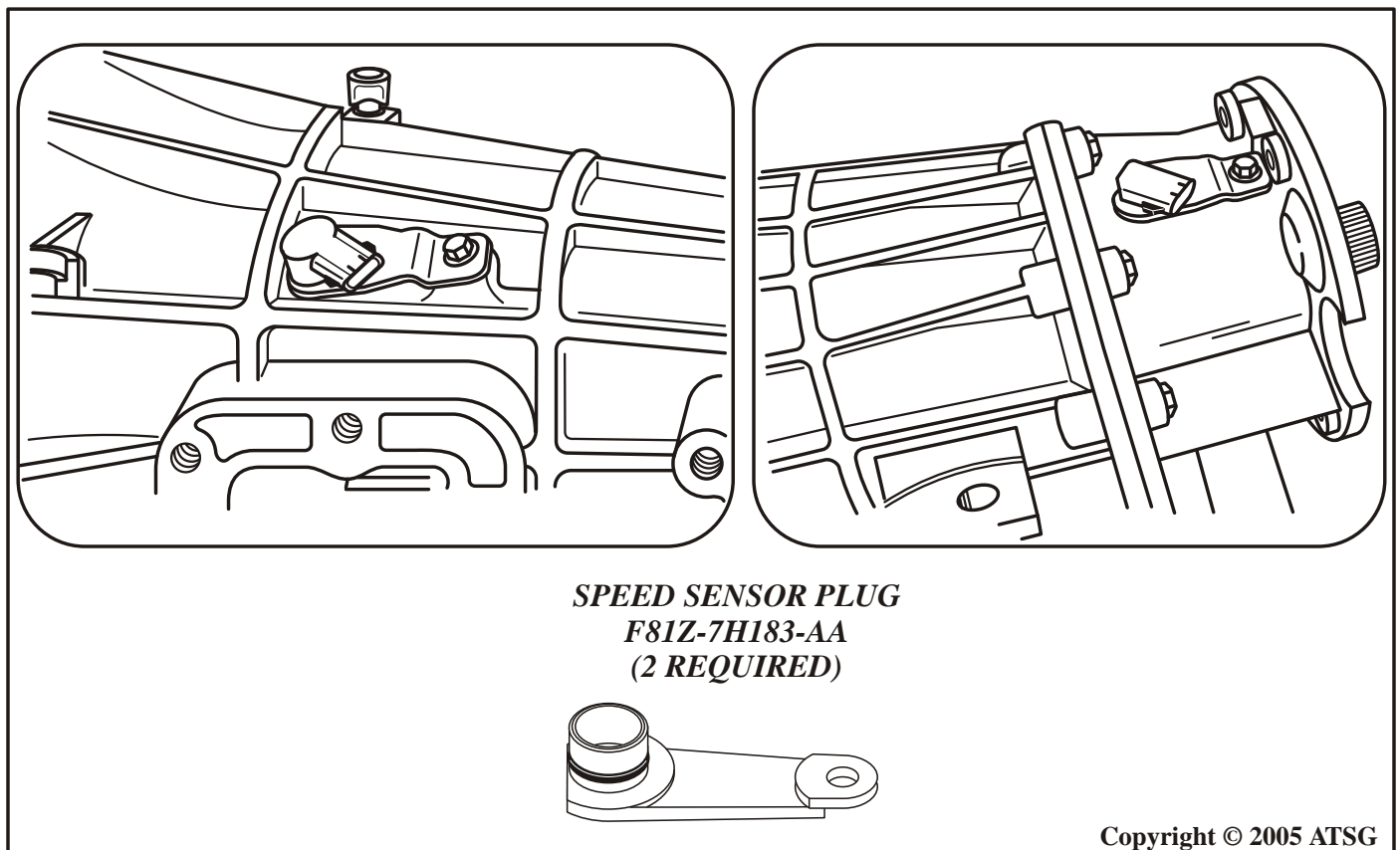
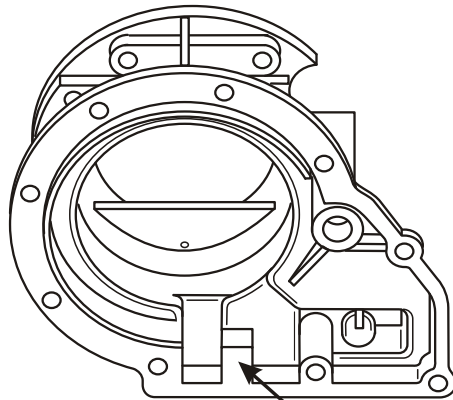


Figure 5

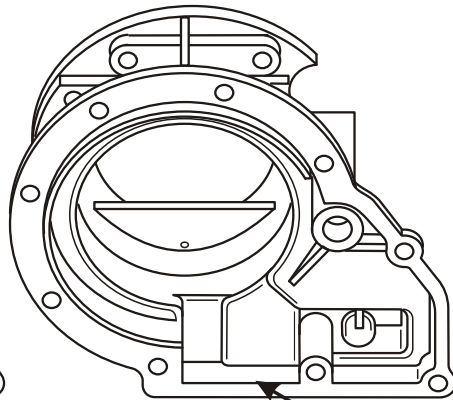


## TYPICAL 4 WHEEL DRIVE



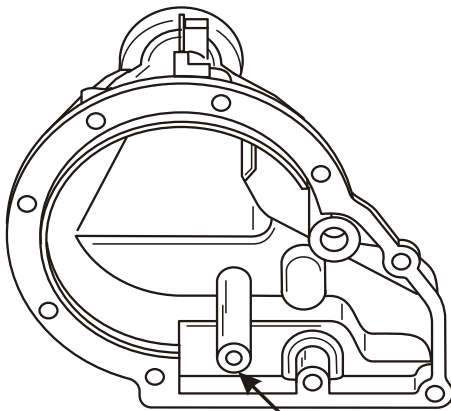
*With Shoulder*

## E4OD 4X4 WITHOUT LUBE PLUG



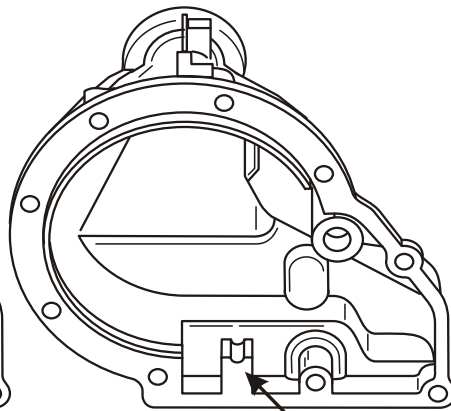
*No Shoulder*

## FORD 4R100 6.8L AND 7.3L 2 WHEEL DRIVE



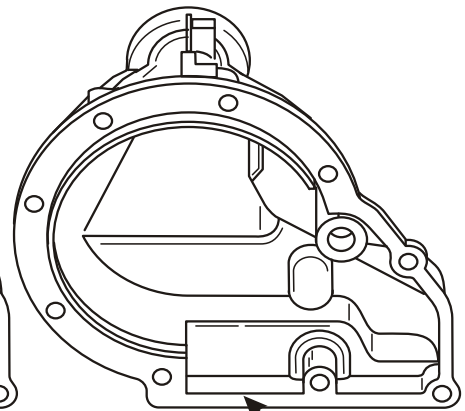
*Added Boss*

## ALL OTHER 2 WHEEL DRIVE APPLICATIONS

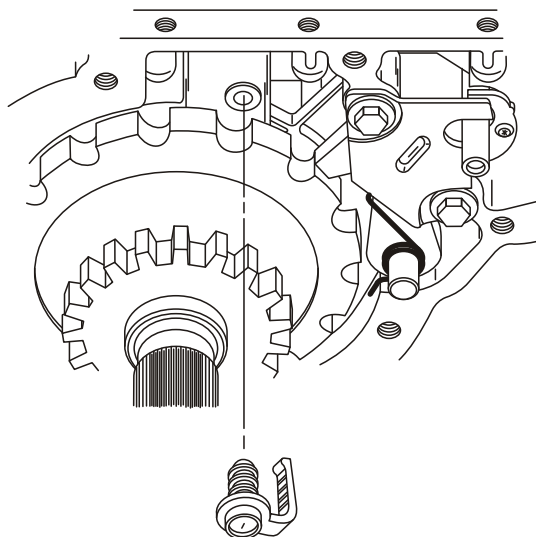


*With Shoulder*

## E4OD WITHOUT LUBE PLUG



*No Shoulder*



*Must use extension housing with shoulder or boss,  
to retain the lube orifice plug in the new case*

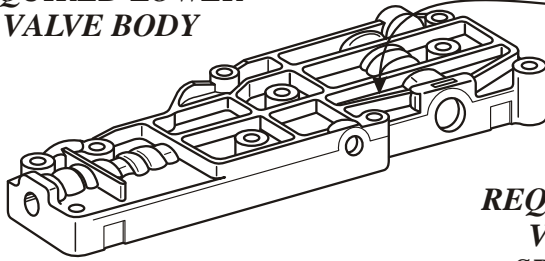
**LUBE ORIFICE PLUG  
FORD PART NUMBER  
F81Z-7E380-AA**

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Figure 6

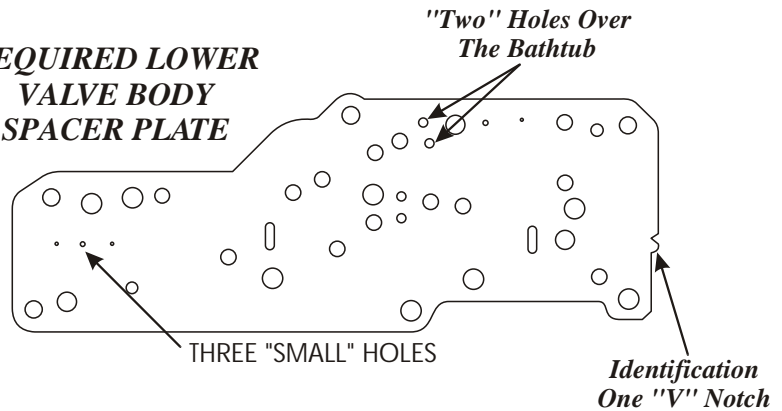
## VALVE BODY CASTINGS REQUIRED FOR MODIFIED 4R100 CASE

**REQUIRED LOWER  
VALVE BODY**

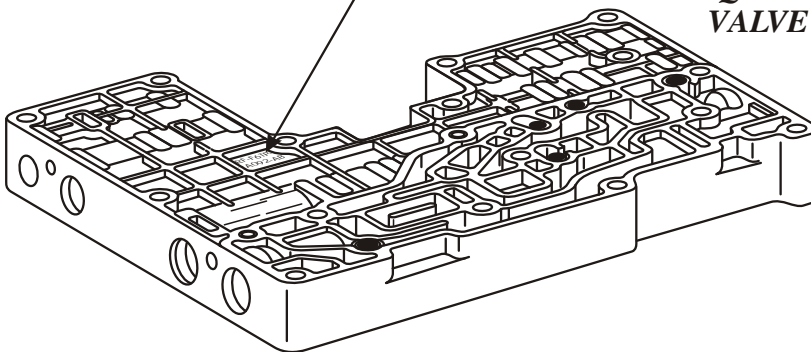


**I.D.-ROUGH FORGING  
NUMBER OF "RF-F6" WHICH  
INDICATES "96" MODEL**

**REQUIRED LOWER  
VALVE BODY  
SPACER PLATE**

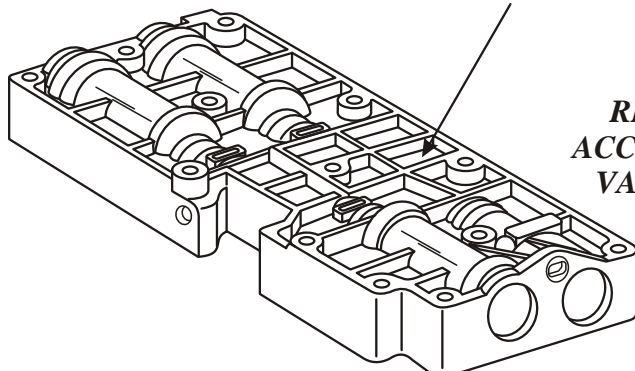


**I.D.-ROUGH FORGING  
NUMBER OF "RF-F6" WHICH  
INDICATES "96" MODEL**



**REQUIRED MAIN  
VALVE BODY**

**I.D.-ROUGH FORGING  
NUMBER OF "RF-F6" WHICH  
INDICATES "96" MODEL**



**REQUIRED  
ACCUMULATOR  
VALVE BODY**

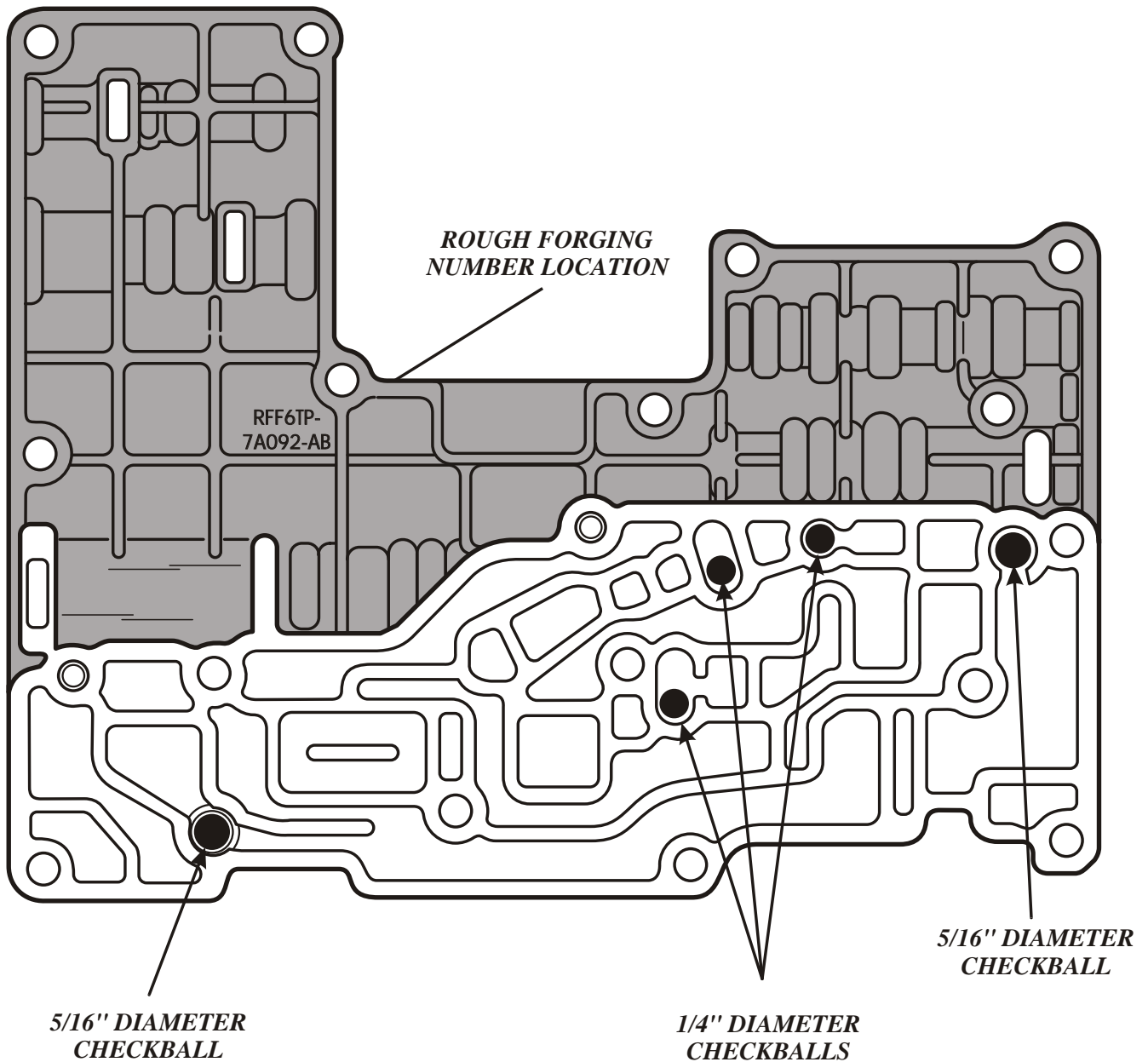
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Figure 7



## VALVE BODY CHECKBALL LOCATIONS REQUIRED FOR MODIFIED 4R100 CASE

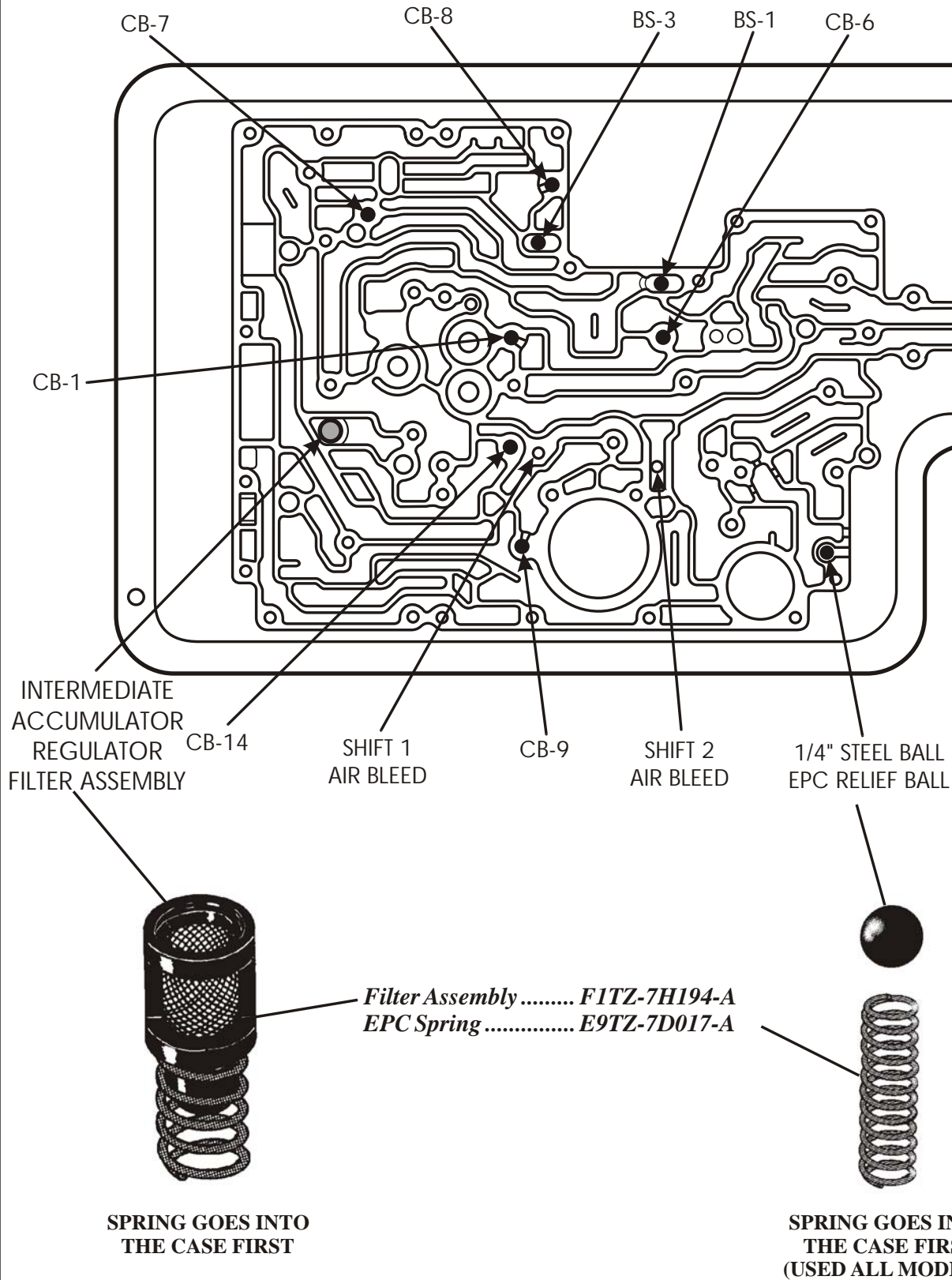
VALVE BODY CHECKBALL LOCATIONS  
REQUIRES THREE 1/4" RUBBER BALLS,  
AND TWO 5/16" RUBBER BALLS



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Figure 8

## 4R100 "MODIFIED" CASE CHECKBALL LOCATIONS REQUIRES EIGHT (5/16") RUBBER BALLS



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Figure 9