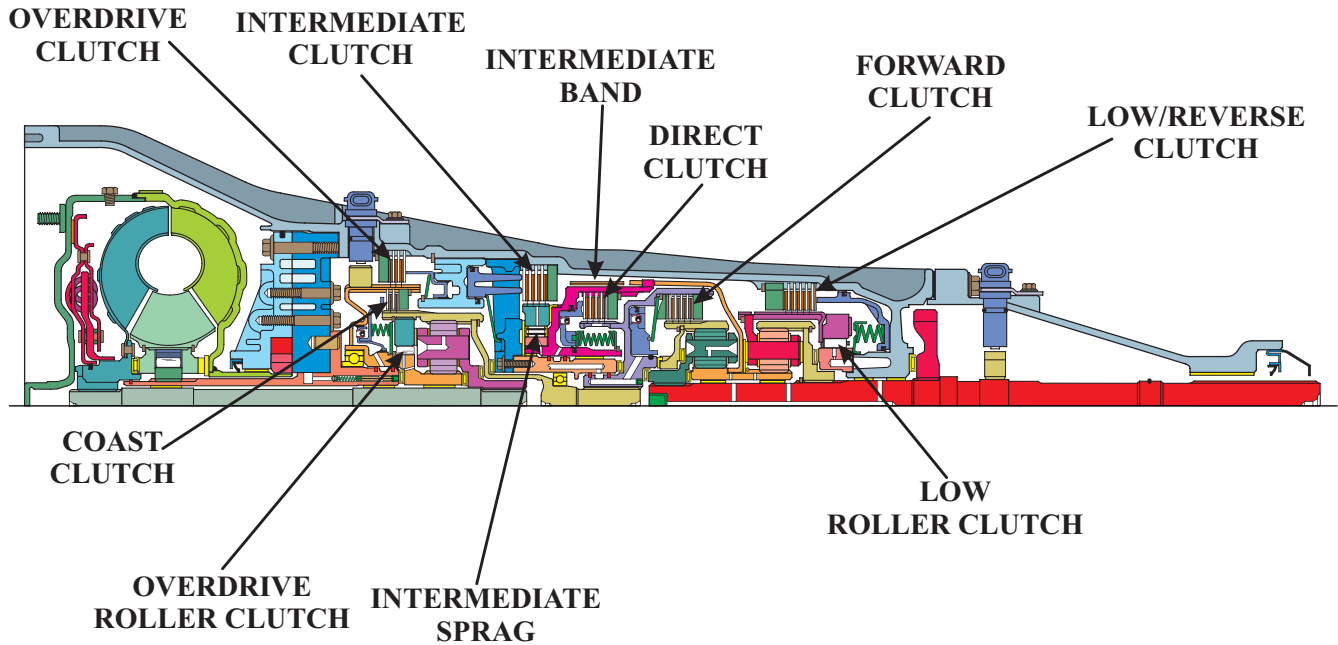


**E4OD/4R100**

**COMPONENT LOCATION AND I.D.**



**COMPONENT AND SOLENOID APPLICATION CHART**

GEAR	Fwd Clut	Int Clut	Dir Clut	O.D. Clut	Cst Clut	Int Band	L/R Clut	O.D. Roller	Int Sprag	Low Roller	SOLENOIDS				
											SS1	SS2	CCS	TCC	EPC
Park/Neut											On	Off	Off	Off	Mod
Reverse			ON		ON		ON	Hold			On	Off	Off	Off	Mod
OD-1st	ON							Hold		Hold	On	Off	*Off	*On	Mod
OD-2nd	ON	ON						Hold	Hold		On	On	*Off	*On	Mod
OD-3rd	ON	ON	ON					Hold			Off	On	*Off	*On	Mod
OD-4th	ON	ON	ON	ON							Off	Off	Off	*On	Mod
OD-3rd**	ON	ON	ON		ON			Hold			Off	On	On	*On	Mod
M-2nd	ON	ON			ON	ON		Hold	Hold		On	On	On	*On	Mod
M-1st	ON				ON		ON	Hold		Hold	On	Off	On	Off	Mod

OD-3rd\*\* = TCS "On" with TCIL illuminated showing "Off"

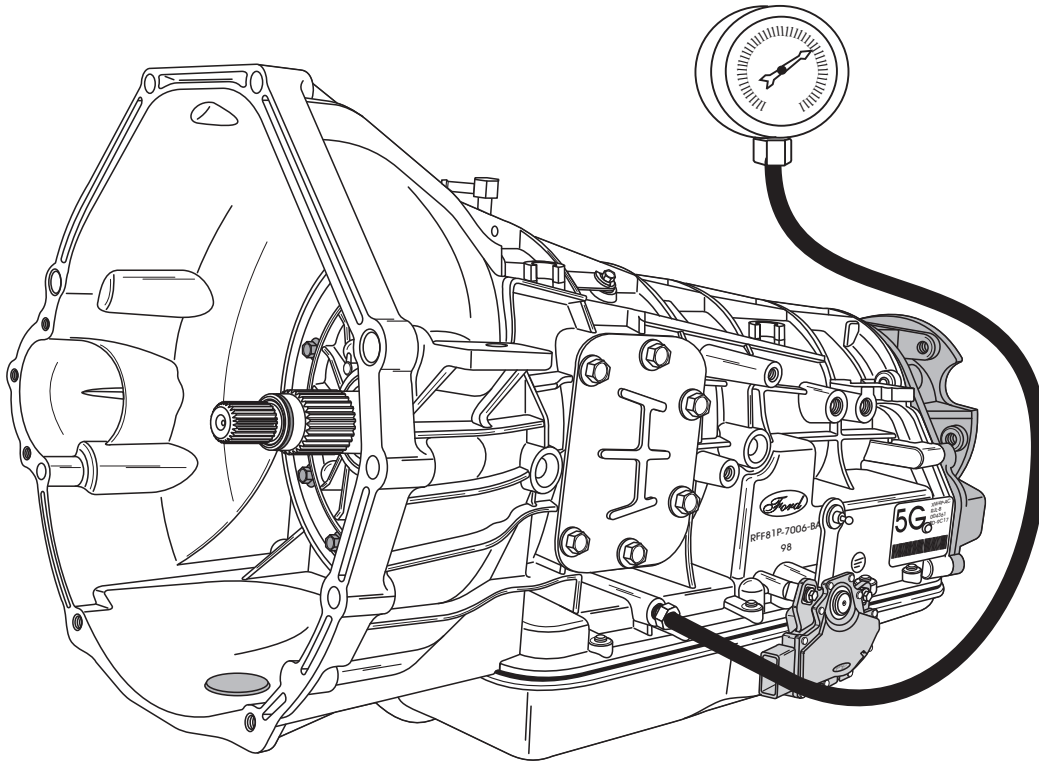
\*On = If the PCM determines that powertrain operating conditions exist for TCC apply, the TCC solenoid may be On (Modulating with PWM TCC units) in any forward gear except Manual 1st.

\*Off = Will be "On", if the TCS switch is pushed.

Mod = Modulating at all times by the PCM and line pressure will be regulated based on throttle position, engine load and vehicle speed.

**E4OD/4R100**

**PORT LOCATION AND I.D.**

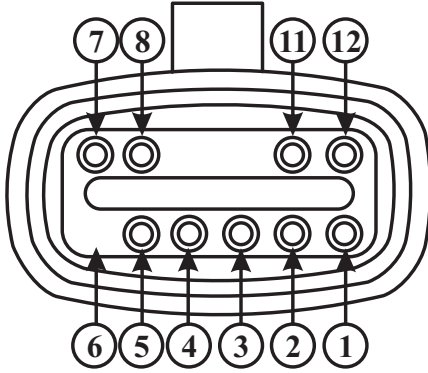


<b>LINE PRESSURE SPECIFICATION CHART</b>		
<b>Gear</b>	<b>Idle</b>	<b>Stall</b>
<b>P, N</b>	<b>50-65 psi</b>	<b>—</b>
<b>R</b>	<b>70-100 psi</b>	<b>220-240 psi</b>
<b>OD, M2</b>	<b>50-65 psi</b>	<b>136-156 psi</b>
<b>M1</b>	<b>70-115 psi</b>	<b>175-210 psi</b>

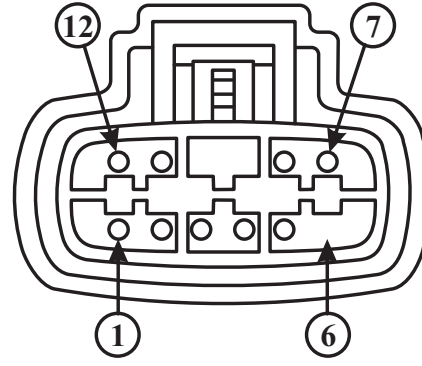
**E4OD/4R100**

**SOLENOID BODY PIN IDENTIFICATION AND FUNCTION**

**SOLENOID BODY CONNECTOR**



**VEHICLE HARNESS CONNECTOR**



**Solenoid Resistance Chart**

Solenoid	Solenoid Body Pin Numbers	Resistance
Shift Solenoid "B" (2)	1 and 2	20-30 Ohms
Shift Solenoid "A" (1)	1 and 3	20-30 Ohms
TCC Solenoid, (On-Off)	1 and 4	20-30 Ohms
TCC Solenoid, (PWM)	1 and 4	10-20 Ohms
Coast Clutch Solenoid	1 and 5	20-30 Ohms
Electronic Pressure Control Solenoid	11 and 12	3.0-5.0 Ohms
Transmission Fluid Temp Sensor	7 and 8	See Chart Below

**Solenoid Connector Pin Identification and Function**

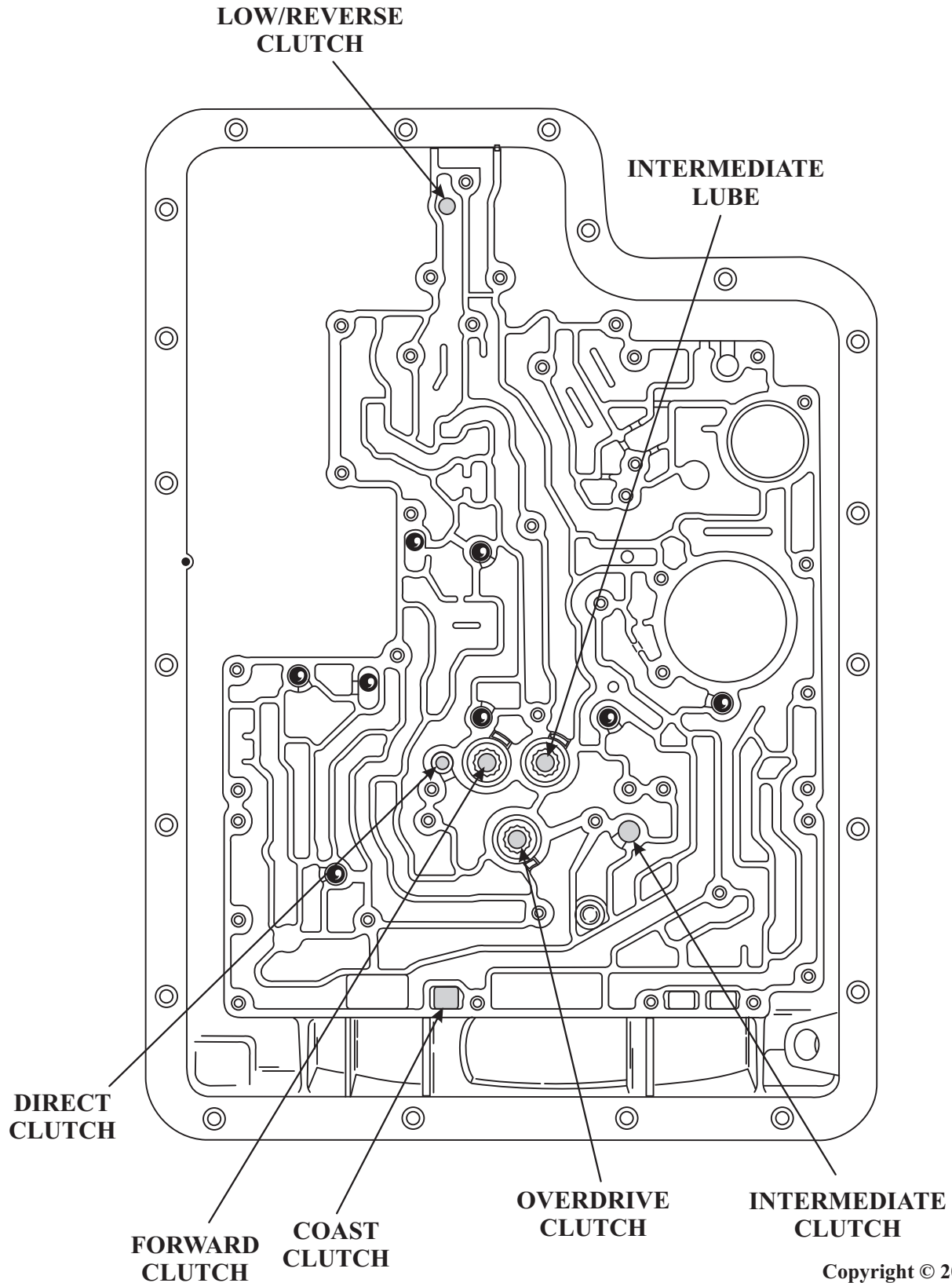
Pin No.	Description
1	Vehicle Power In For Solenoids (VPWR)
2	Shift Solenoid "B" (2) Ground from PCM
3	Shift Solenoid "A" (1) Ground from PCM
4	Converter Clutch Solenoid Ground from PCM
5	Coast Clutch Solenoid Ground from PCM
6	Not Used
7	Transmission Fluid Temp Sensor
8	Transmission Fluid Temp Sensor (Signal Return)
9	Not Used
10	Not Used
11	Electronic Pressure Control (EPC)
12	Vehicle Power In For EPC Solenoid (VPWR)

**Transmission Fluid Temperature**

°C	°F	Resistance
-40 to -20	-40 to -4	1062k - 284k Ω
-19 to -1	-3 to 31	284k - 100k Ω
0 - 20	32-68	100k - 37k Ω
21-40	69-104	37k - 16k Ω
41-70	105-158	16k - 5k Ω
71-90	159-194	5k - 2.7k Ω
91-110	195-230	2.7k - 1.5k Ω
111-130	231-266	1.5k - 0.8k Ω
131-150	267-302	0.8k - 0.54k Ω

**E4OD/4R100**

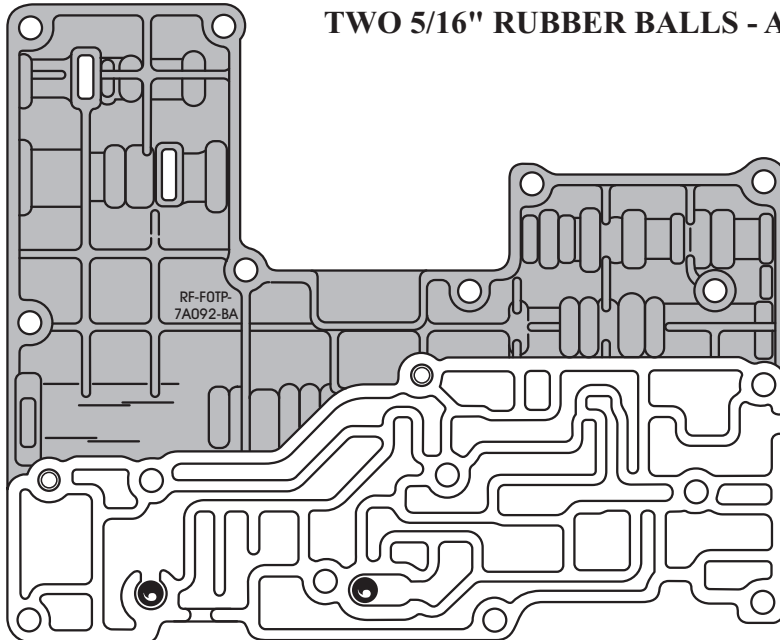
**CASE PASSAGE IDENTIFICATION**



**E4OD/4R100**

**E4OD CHECKBALL LOCATION**

**1989-1995 VALVE BODY CHECKBALL LOCATIONS  
TWO 5/16" RUBBER BALLS - ALL MODELS**



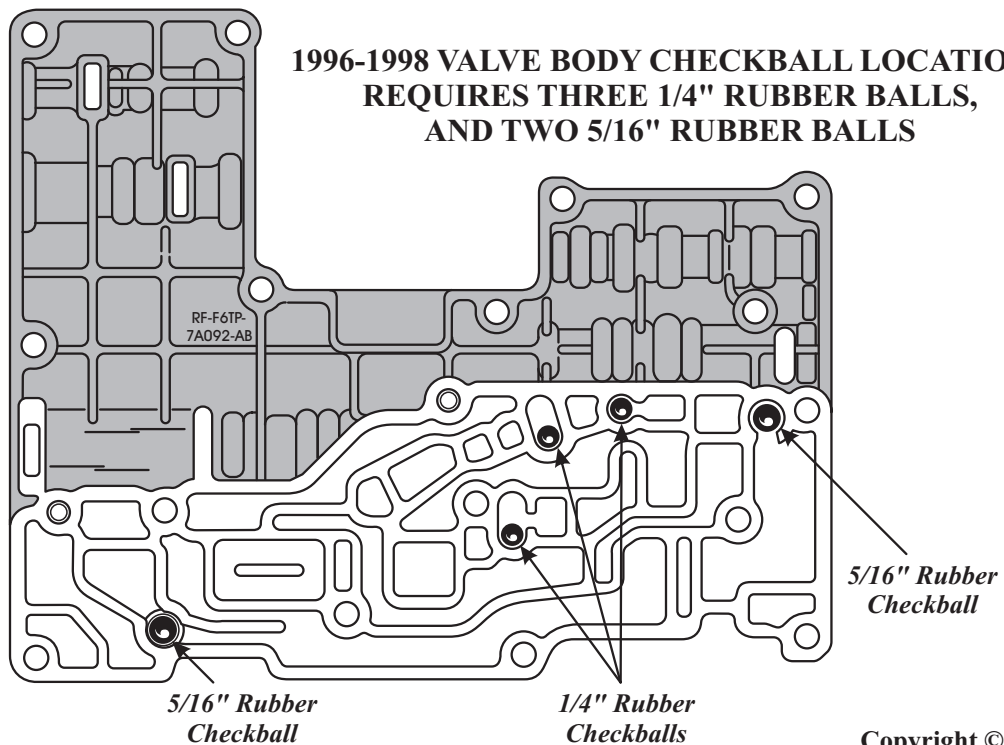
**SPECIAL NOTE:**

*Some 1995 models were built with 1996 production valve body, spacer plate, and valve body gaskets. Be very careful to identify the parts on any 1995 model properly.*

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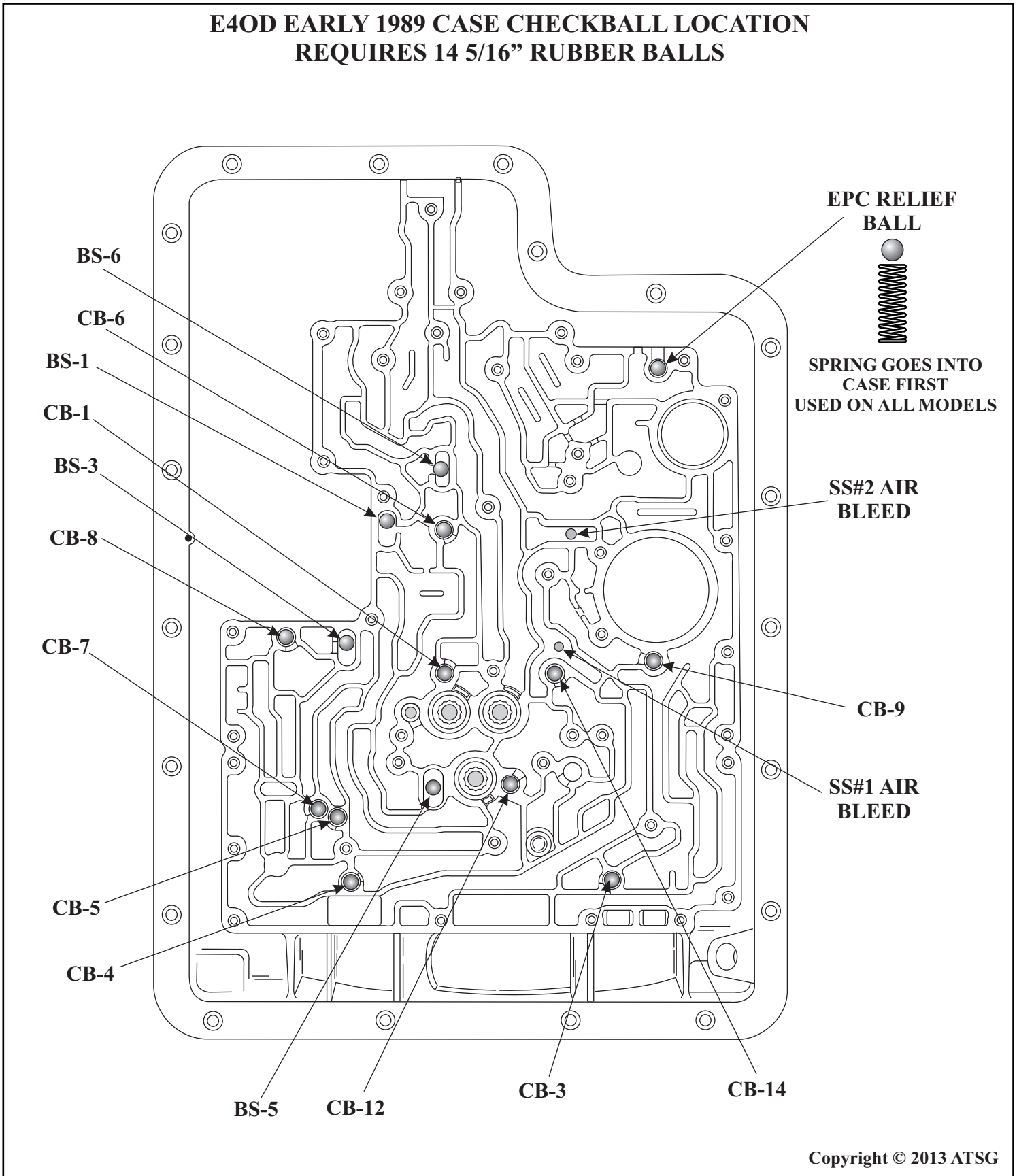
**FORD E4OD**

**1996-1998 VALVE BODY CHECKBALL LOCATIONS  
REQUIRES THREE 1/4" RUBBER BALLS,  
AND TWO 5/16" RUBBER BALLS**



**E4OD/4R100**

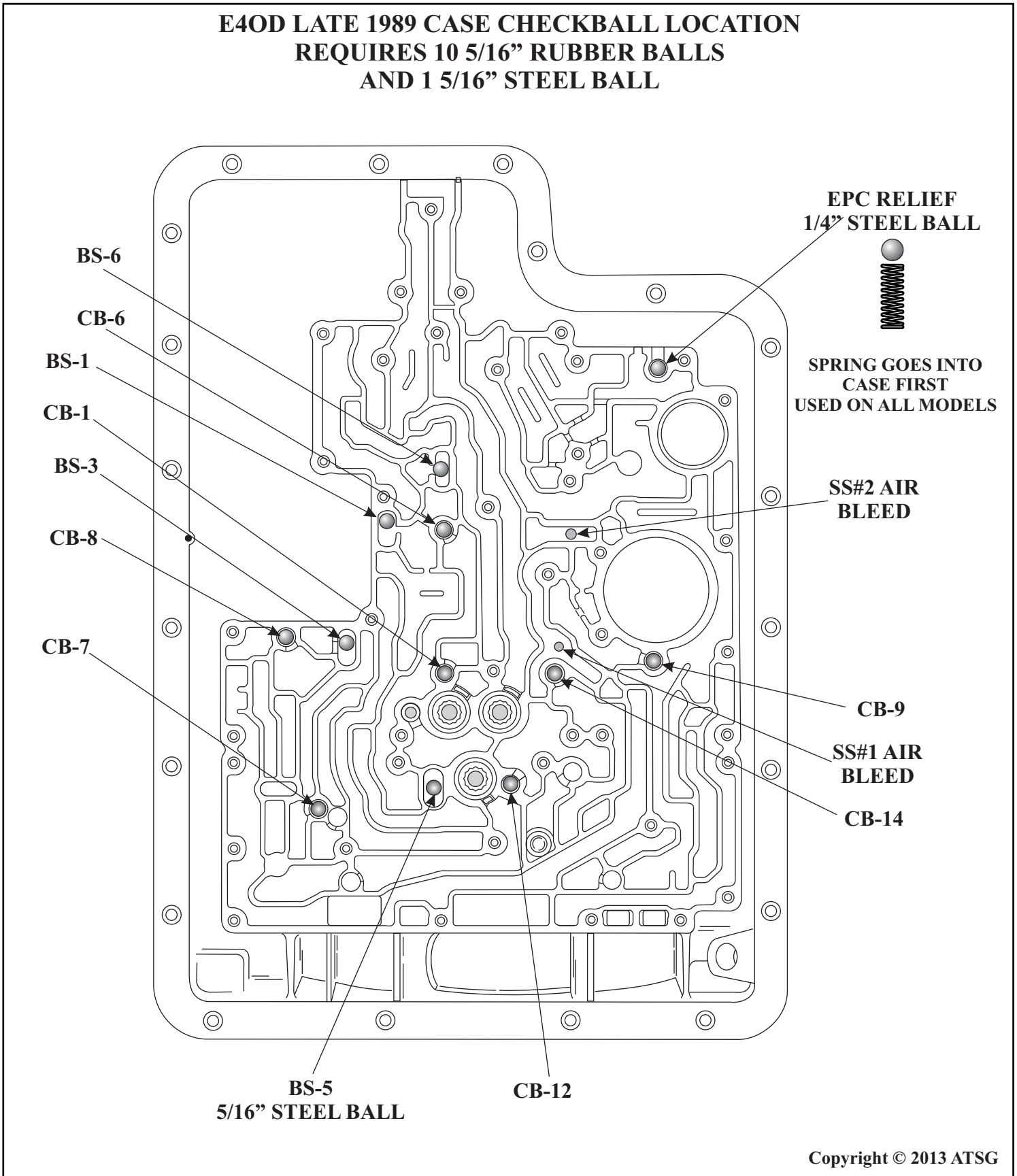
**E4OD EARLY 1989 CASE CHECKBALL LOCATION  
REQUIRES 14 5/16" RUBBER BALLS**



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**E4OD/4R100**

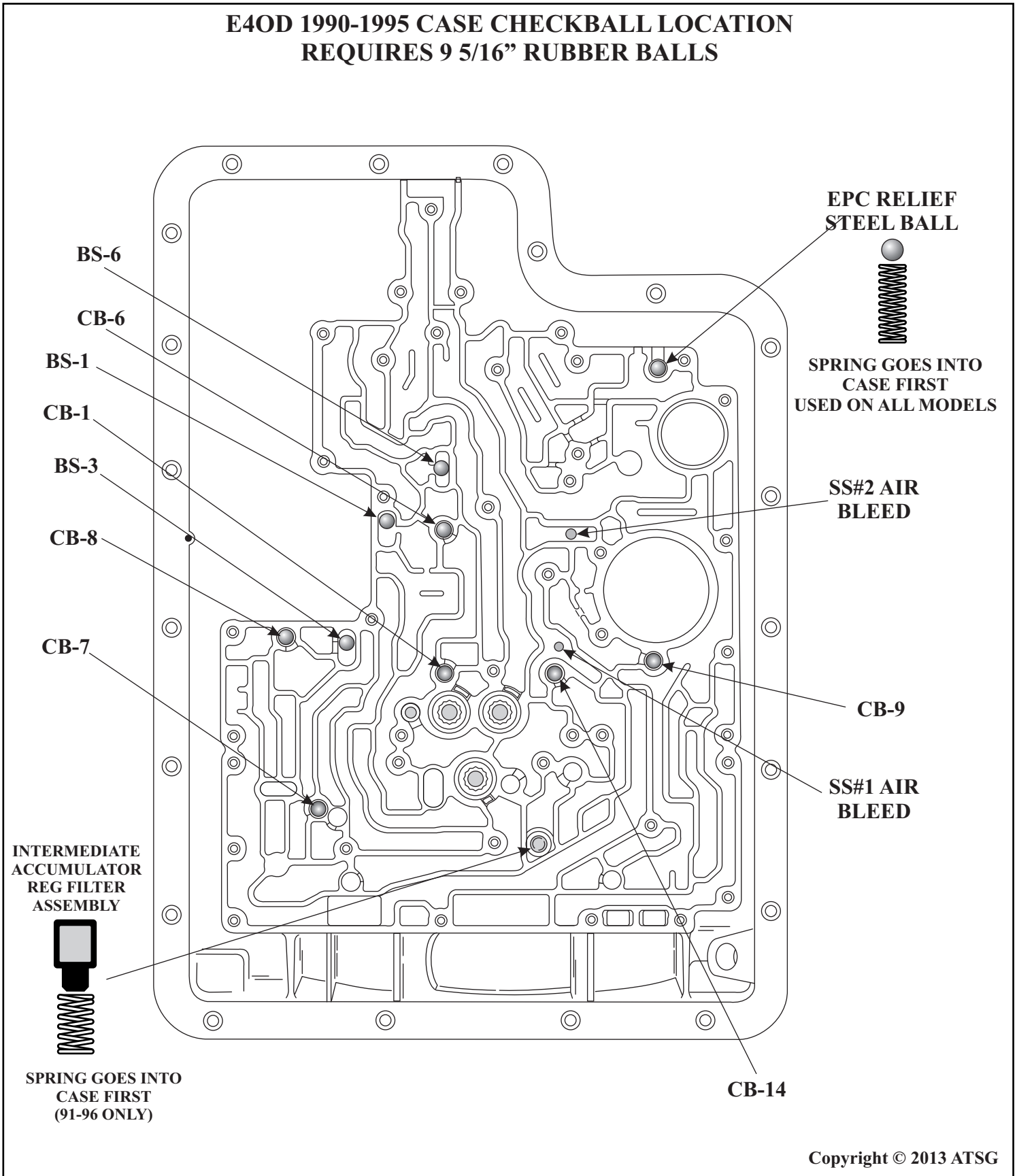
**E4OD LATE 1989 CASE CHECKBALL LOCATION  
REQUIRES 10 5/16" RUBBER BALLS  
AND 1 5/16" STEEL BALL**



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**E4OD/4R100**

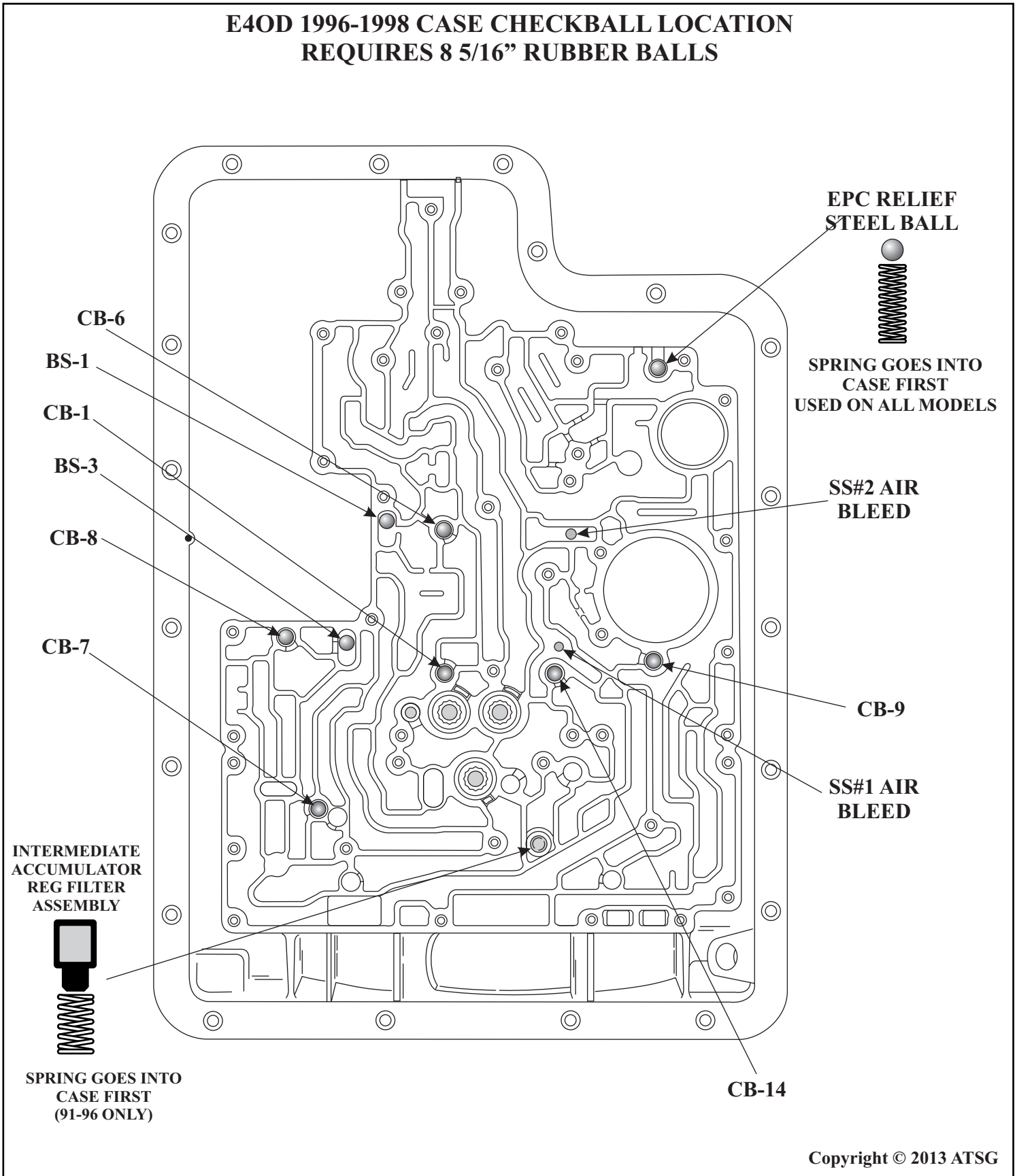
**E4OD 1990-1995 CASE CHECKBALL LOCATION  
REQUIRES 9 5/16" RUBBER BALLS**





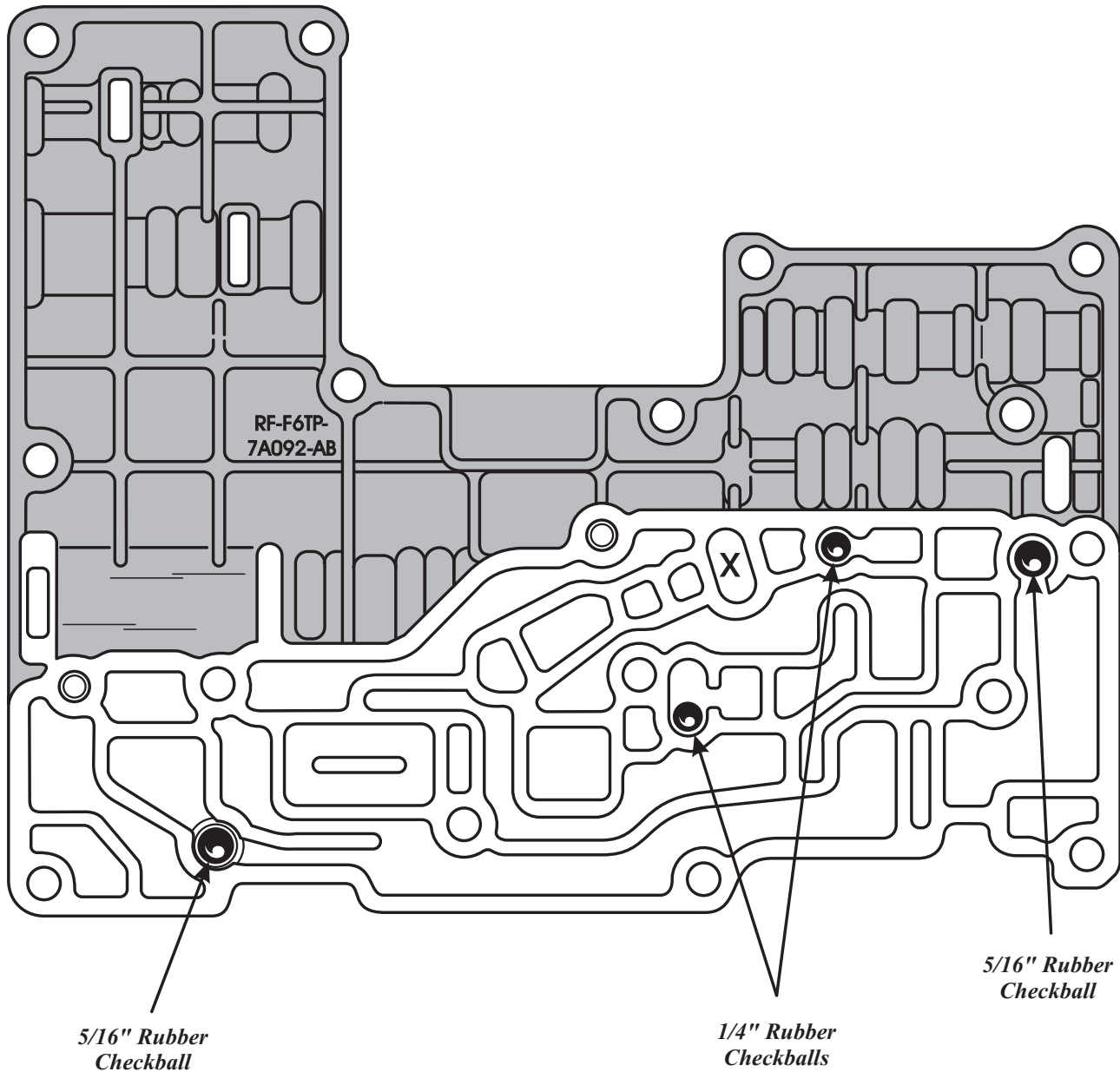
**E4OD/4R100**

**E4OD 1996-1998 CASE CHECKBALL LOCATION  
REQUIRES 8 5/16" RUBBER BALLS**



**E4OD/4R100**

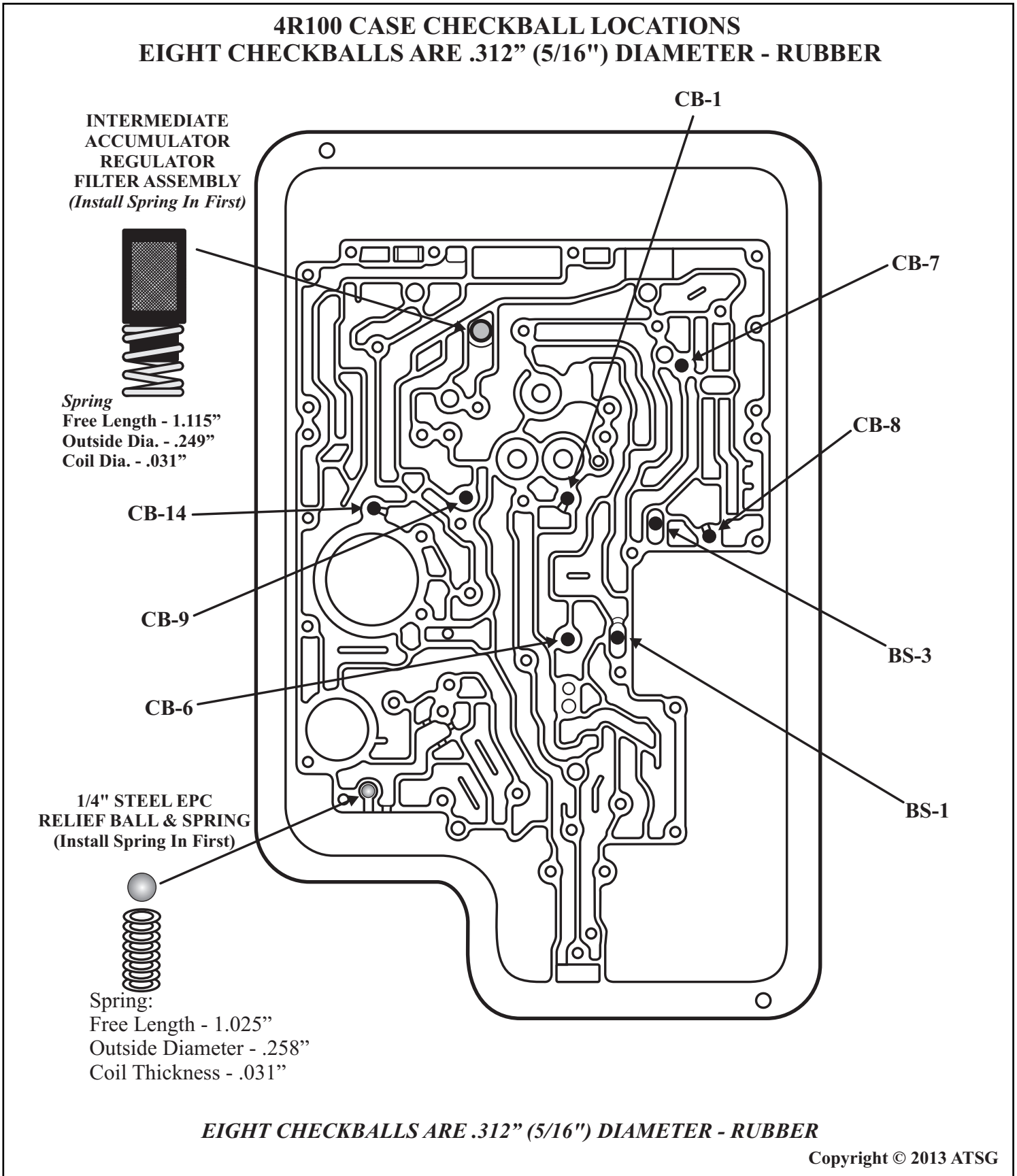
**4R100 1998-2003 VALVE BODY CHECKBALL LOCATIONS  
REQUIRES "TWO" 1/4" RUBBER BALLS,  
AND "TWO" 5/16" RUBBER BALLS**



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**E4OD/4R100**

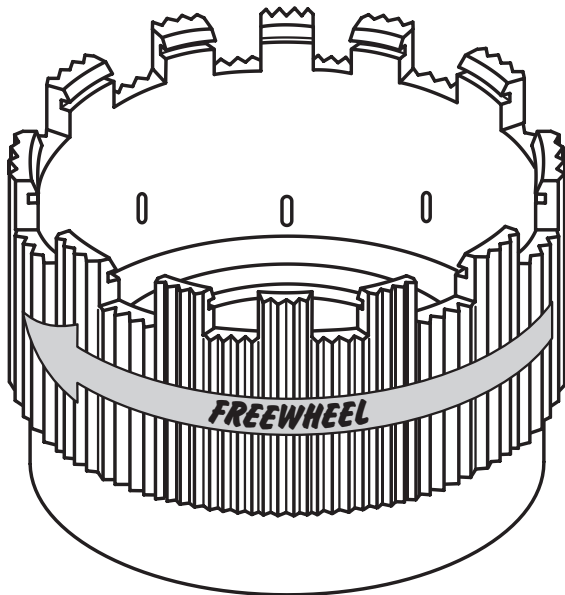
**4R100 CASE CHECKBALL LOCATIONS  
EIGHT CHECKBALLS ARE .312" (5/16") DIAMETER - RUBBER**



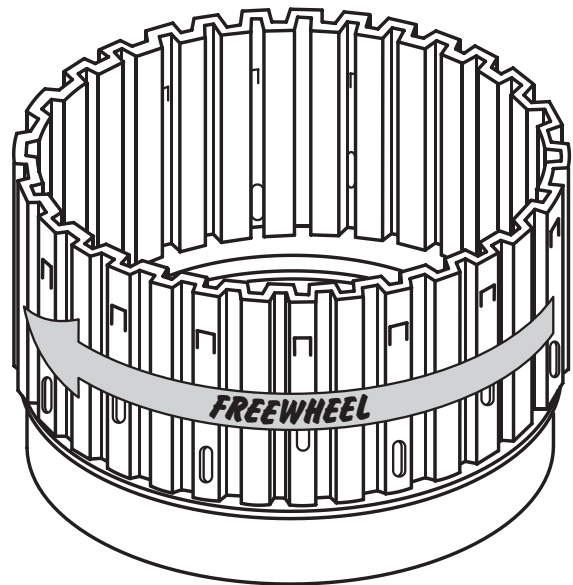
**E4OD/4R100**

**THE LOW AND REVERSE CLUTCH HUB MUST FREEWHEEL CLOCKWISE  
AND LOCK COUNTER CLOCKWISE WHEN INSTALLED IN THE CASE**

**E4OD  
1989-1996  
LOW/REVERSE HUB**



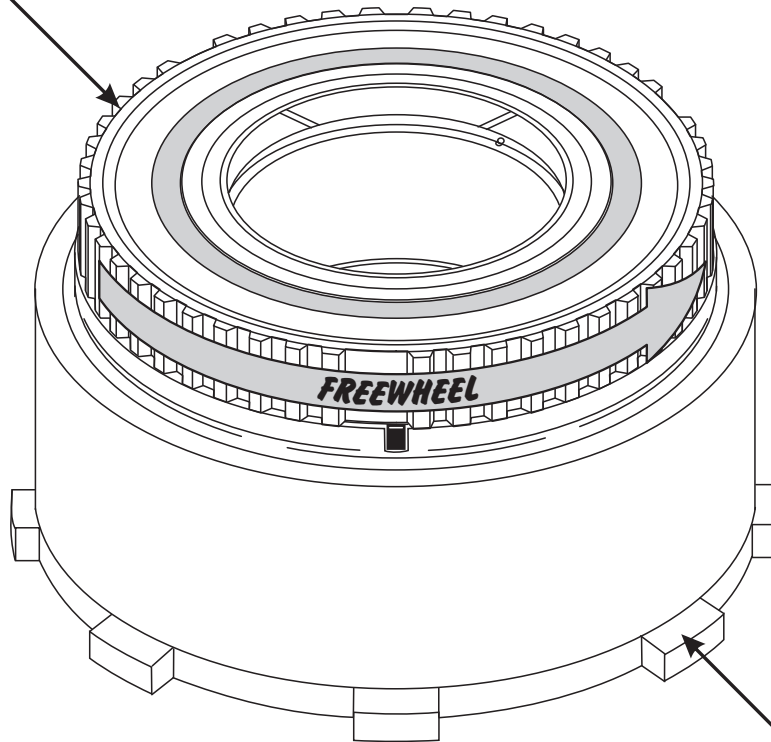
**1997 AND LATER  
E4OD AND 4R100  
LOW/REVERSE HUB**



**E4OD/4R100**

**THE INTERMEDIATE OUTER SPRAG RACE MUST FREEWHEEL  
COUNTERCLOCKWISE AND LOCK CLOCKWISE WHEN HOLDING  
THE DIRECT CLUTCH DRUM**

**FREEWHEEL  
INTERMEDIATE SPRAG  
OUTER RACE**

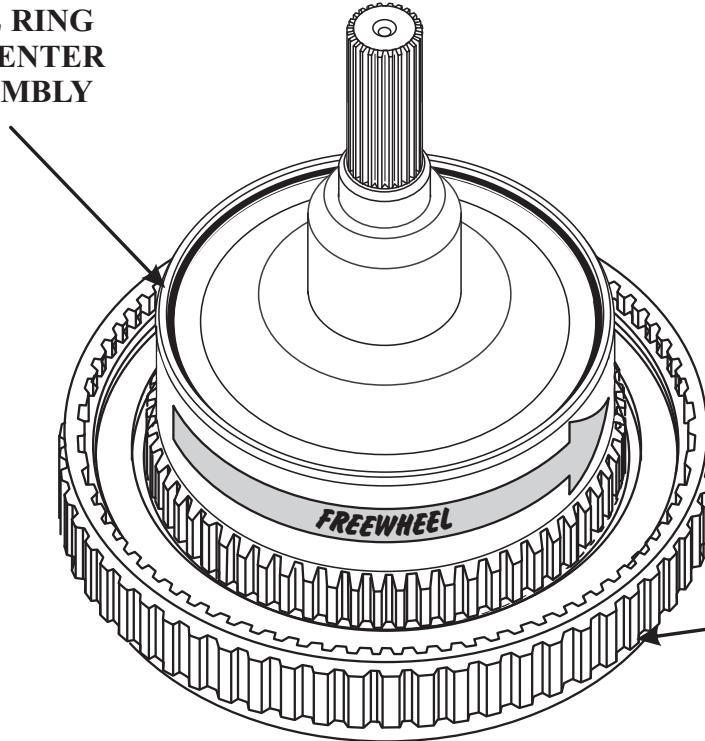


**HOLD  
DIRECT CLUTCH  
HOUSING**

**E4OD/4R100**

**THE OVERDRIVE RING GEAR AND CENTER SHAFT ASSEMBLY MUST  
FREEWHEEL COUNTER CLOCKWISE AND LOCK CLOCKWISE  
WHEN HOLDING THE COAST CLUTCH DRUM**

**FREEWHEEL  
OVERDRIVE RING  
GEAR AND CENTER  
SHAFT ASSEMBLY**



**HOLD  
COAST CLUTCH  
HOUSING**

**FLUID CAPACITY**

**REFILL AFTER SERVICE.....17 QUARTS  
DRY FILL..... 6.4 QUARTS**

**GEAR RATIOS**

1ST.....2.71  
2ND.....1.54  
3RD.....1.00  
4TH.....0.71  
REVERSE.....2.18