

Technical Service Information

FORD AODE/4R70W PRESSURE REGULATOR SCREEN LOCATION CHECKBALL LOCATIONS AND CHECKBALL DESCRIPTION

PRESSURE REGULATOR SCREEN:

The Pressure Regulator Screen goes into the valve body, with the screen standing up and goes from corner to comer in the cavity, as it is shown in Figure 1.

The OEM part number for the Pressure Regulator Screen is F2VY-7H 187-A.

CHECKBALL LOCATIONS:

There are eight (8) checkballs in the AODE/4R70W transmissions and the locations in the valve body are shown in Figure 1. We have also numbered the checkballs and provided descriptions below.

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CHECKBALL DESCRIPTIONS:

- NO. 1 This checkball seats during a 2-3 shift to force 2-3 accumulator backpressure to go past the 2-3 capacity modulator valve. During a 3-2 downshift or forward clutch engagement, forward clutch oil lmseats the checkball and flows to the 2-3 accumulator piston.
- NO. 2 This checkball seats during forward clutch engagement to force oil flow to go through an orifice. During a 3-4 upshift or OD to Neutral disengagement, forward clutch oil unseats the checkball and the oil flows around all orifices.
- NO. 3 This checkball seats during a 2-3 upshift to force direct clutch oil at the 2-3 backout valve to go through one of two orifices. During a 3-2 downshift, the checkball unseats and direct clutch exhaust oil bypasses the orifices.
- NO. 4 This checkball seats during a 3-4 upshift to force OD servo release oil to flow past the 3-4 capacity modulator valve. During a 4-3 dowinshift, oil flows freely past the checkball.
- NO. 5 This checkball seats during reverse engagement to force reverse clutch feed oil through an orifice. The checkball unseats during reverse disengagement to allow free exhaust of the reverse clutch.
- NO. 6 Allows low/reverse servo apply oil to flow from either the 1-2 shift valve or the reverse circuit, depending on which circuit is pressurized.
- NO. 7 Unseats to prevent the converter clutch from applying in 1st gear, in case of an MCCC Solenoid malfunction allowing MCCC pressure in 1st gear. This checkball is seated in all other forward gears.
- NO. 8 This checkball seats during a 1-2 upshift to force intermediate clutch apply oil through an orifice. On a 2-1 downshift, the checkball unseats to allow an additional exhaust path.



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