



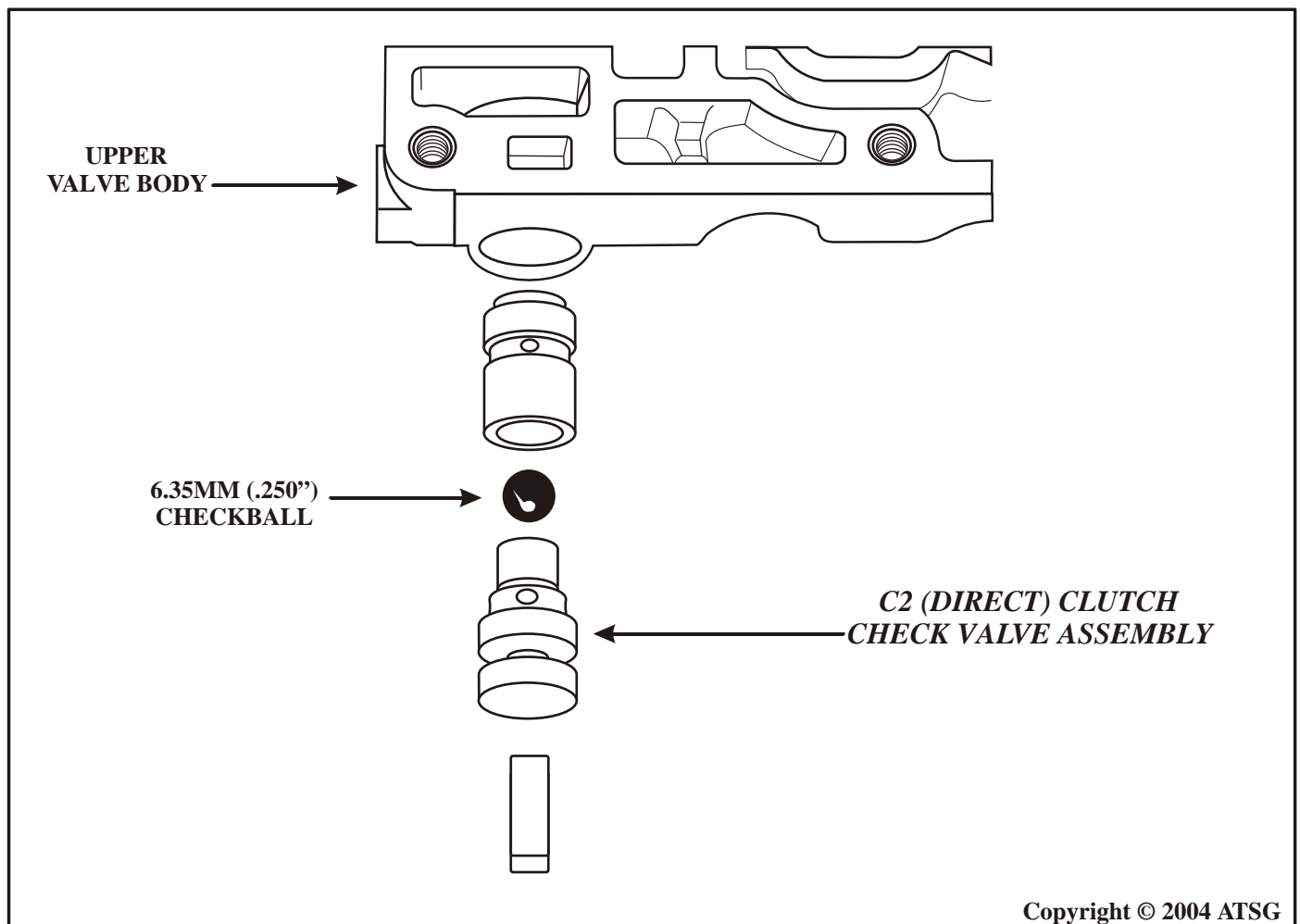
# Technical Service Information

## ATSG AISIN SEIKI 450-43LE NO THIRD OR REVERSE

**COMPLAINT:** After rebuild, the transmission exhibits no movement in reverse and no third gear.

**CAUSE:** The cause may be, the C2 (Direct) Clutch check valve missing. This check valve is actually a 6.35mm (.250") checkball, as shown in Figure 1, and switches C2 (Direct) Clutch apply oil between the 3rd gear circuit and reverse circuit. If left out both circuits are exhausted.

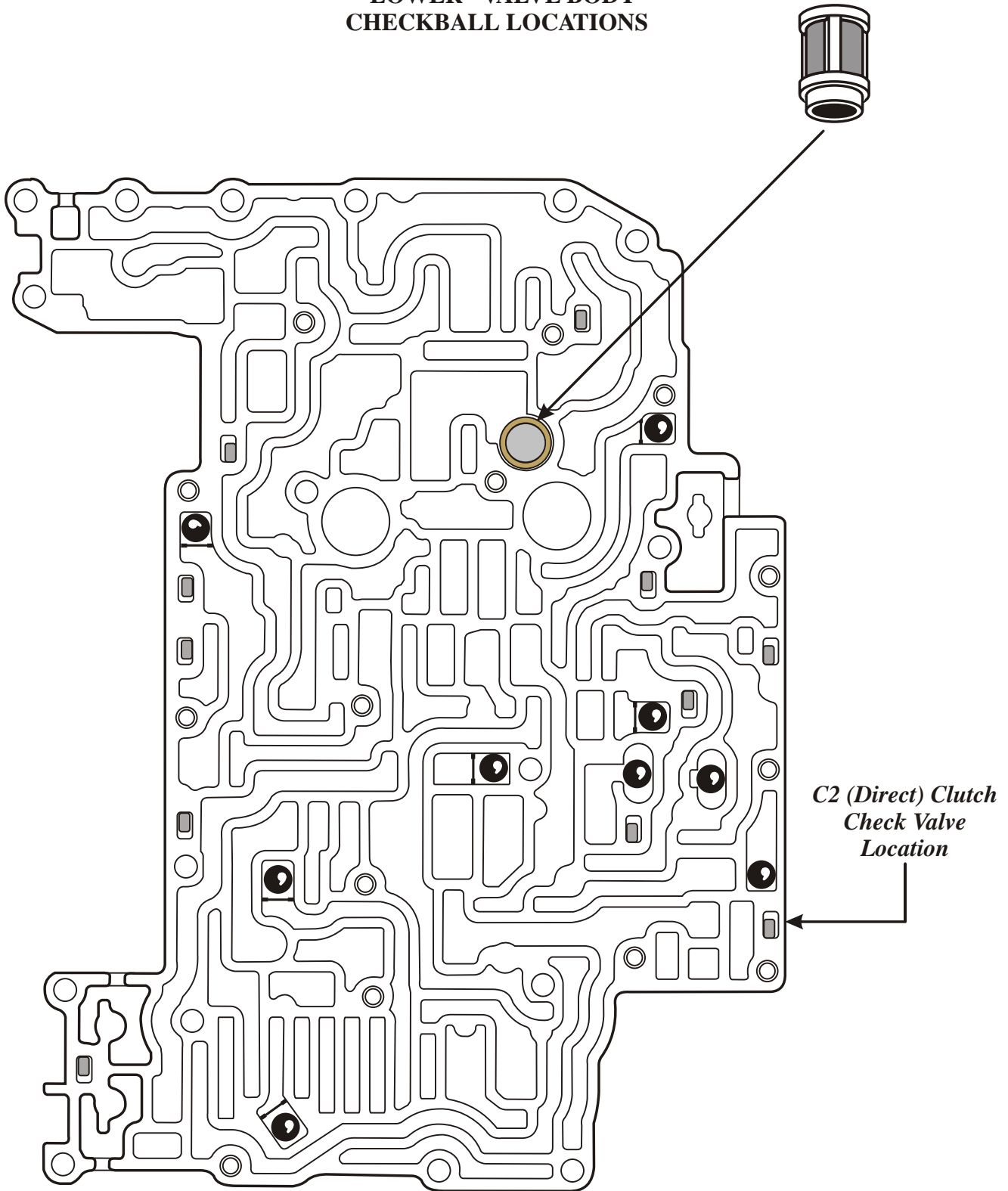
**CORRECTION:** Install the correct C2 (Direct) Clutch check valve line-up, as shown in Figure 1. The steel checkball in the C2 Clutch check valve assembly is 6.35mm (.250") in diameter. We have also provided you with the other checkball locations for both the upper and lower valve bodies in Figure 2 and 3.



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Figure 1

## AISIN SEIKI 450-43LE "LOWER" VALVE BODY CHECKBALL LOCATIONS



**THE UPPER VALVE BODY REQUIRES NINE 6.35MM (.250") STEEL CHECKBALLS IN THE WORM TRACK AREA, PLUS THE "C2" CLUTCH CHECK VALVE ASSEMBLY.**

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Figure 2

## AISIN SEIKI 450-43LE "LOWER" VALVE BODY CHECKBALL LOCATIONS

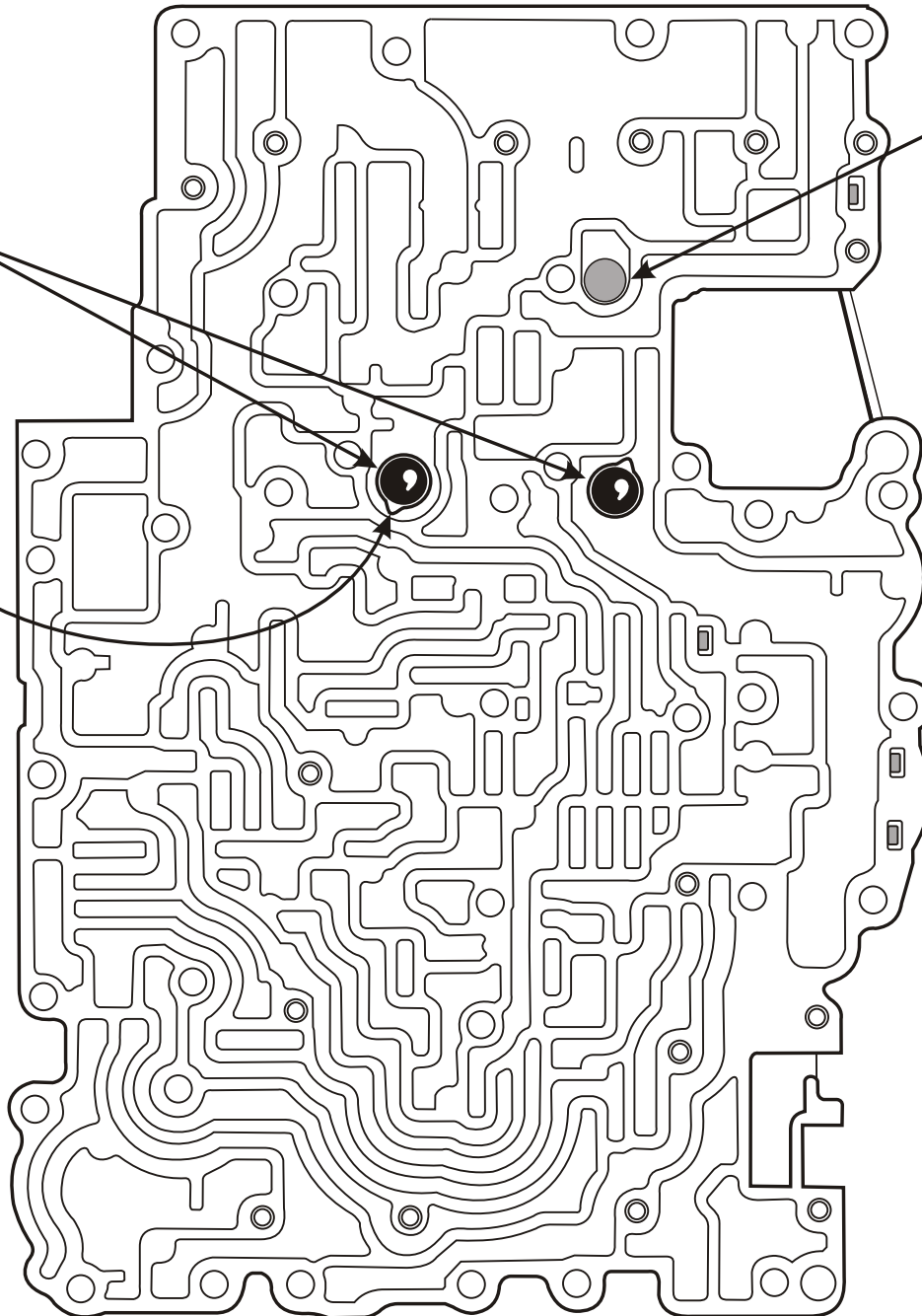
*Cooler Pressure  
Relief Valve*



*Cooler  
Check Valves*



*Make Certain  
This Raised Leg  
Fits Into The  
Notch In The  
Valve Body*



**THE LOWER VALVE BODY HAS TWO 10.00MM (.394")  
STEEL CHECKBALLS ON BARREL SPRINGS AND CAPSULES**

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Figure 3