



Technical Service Information

DODGE 68RFE

VALVE BODY AND SOLENOID ASSEMBLY CHANGES FOR LATE 2010 AND UP

CHANGE: Sometime late in the 2010 model year, the 68RFE transmission acquired a new valve body and Solenoid assembly that has eliminated the Overdrive Solenoid. See Figure 1 for quick identification by casting date.

REASON: The reason for the change was for simplified hydraulic control. The previous design solenoid assembly was capable of controlling the Overdrive Clutch from the Multi Select solenoid or the Overdrive solenoid, dependant on Manual Valve position. The elimination of the Overdrive solenoid changed the hydraulic control of the Manual Valve and the PCM strategy for shift/solenoid control, and now eliminates Manual 2/1 position, as the shifter now has a manual mode with Electronic Range Select. This change has now also eliminated a Manual 2 Limp mode. Limp mode is now 4th gear only.

PARTS AFFECTED:

- **SPACER PLATE-** The Spacer plate changed in the area of the Number 6 and number 7 Check ball, as these check balls have been eliminated. **Note:** one hole over the bathtub area of the valve body has been eliminated and an exhaust passage was added. See Figures 2 and 3 for spacer plate comparison from previous design to new design.
- **MAIN VALVE BODY-** The Main Valve body was anodized to help prevent Solenoid Switch Valve wear out. An exhaust passage was added in the top of the casting and the Manual Valve had a new land added to it with a small notch. Number 6 and 7 Check balls were eliminated. Refer to Figures 4 and 5 for a comparison of these changes from previous to new design. See Figures 6 and 7 for a comparison of the previous design oil circuit diagram using check ball 6 and 7 and compare it to the new design oil circuit diagram with the number 6 and 7 check balls eliminated and the Overdrive Solenoid eliminated.
- **SOLENOID ASSEMBLY-** The Solenoid assembly had the Overdrive Solenoid eliminated. The Multi-function solenoid is now used for Overdrive clutch apply solely. Refer to Figure 8 and 9 for identification and exploded view.
- **PCM-** The Powertrain Control Module has had the Overdrive Solenoid control eliminated .

INTERCHANGEABILITY:

The valve body and solenoid assembly are not interchangeable with any previous applications. Note: the previous design white connector solenoid assembly can be used on the 2010 and up valve body as it is the same other than this solenoid assembly has the Overdrive solenoid in it.

*Special thanks to
Robbie at Alto*

IDENTIFICATION

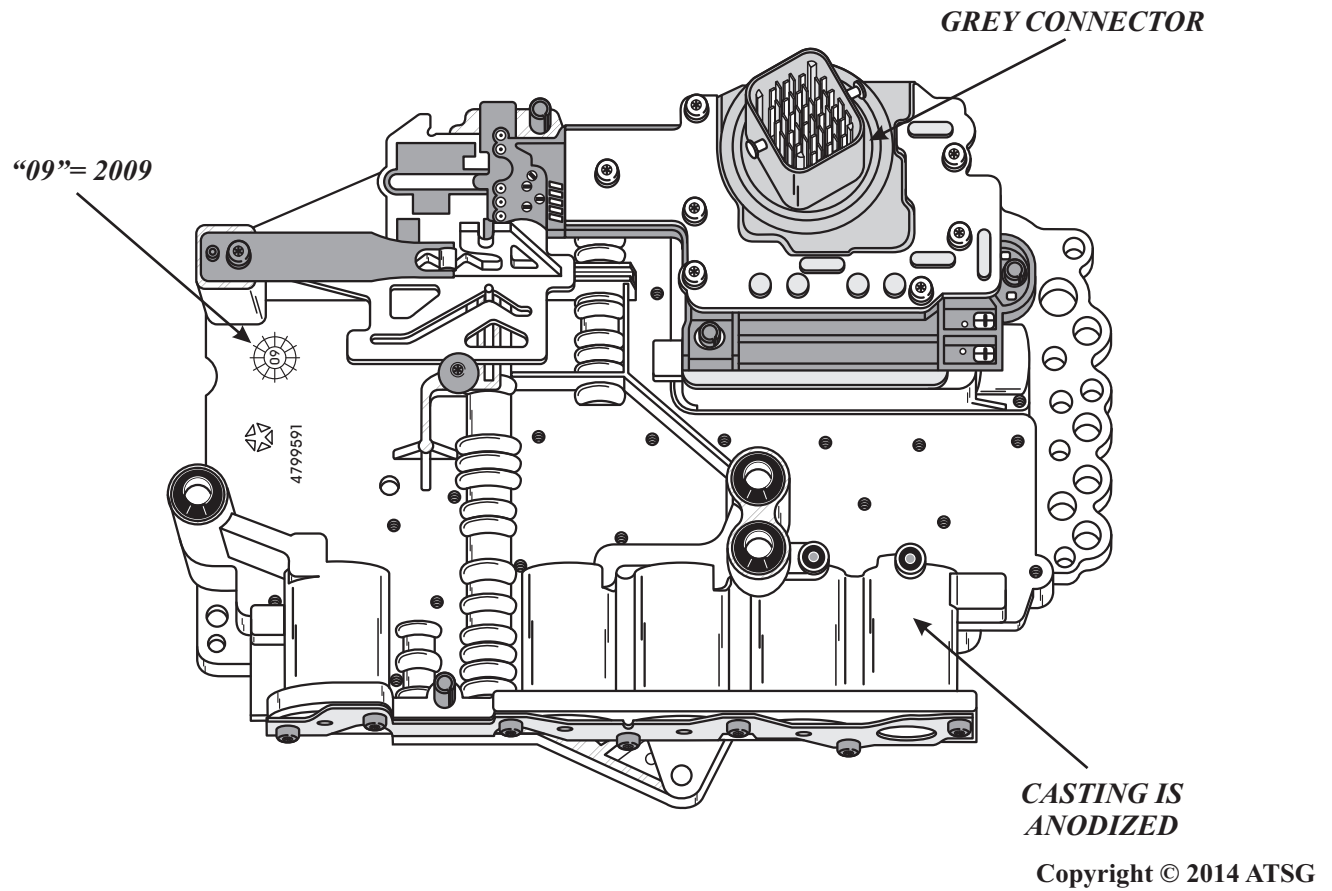
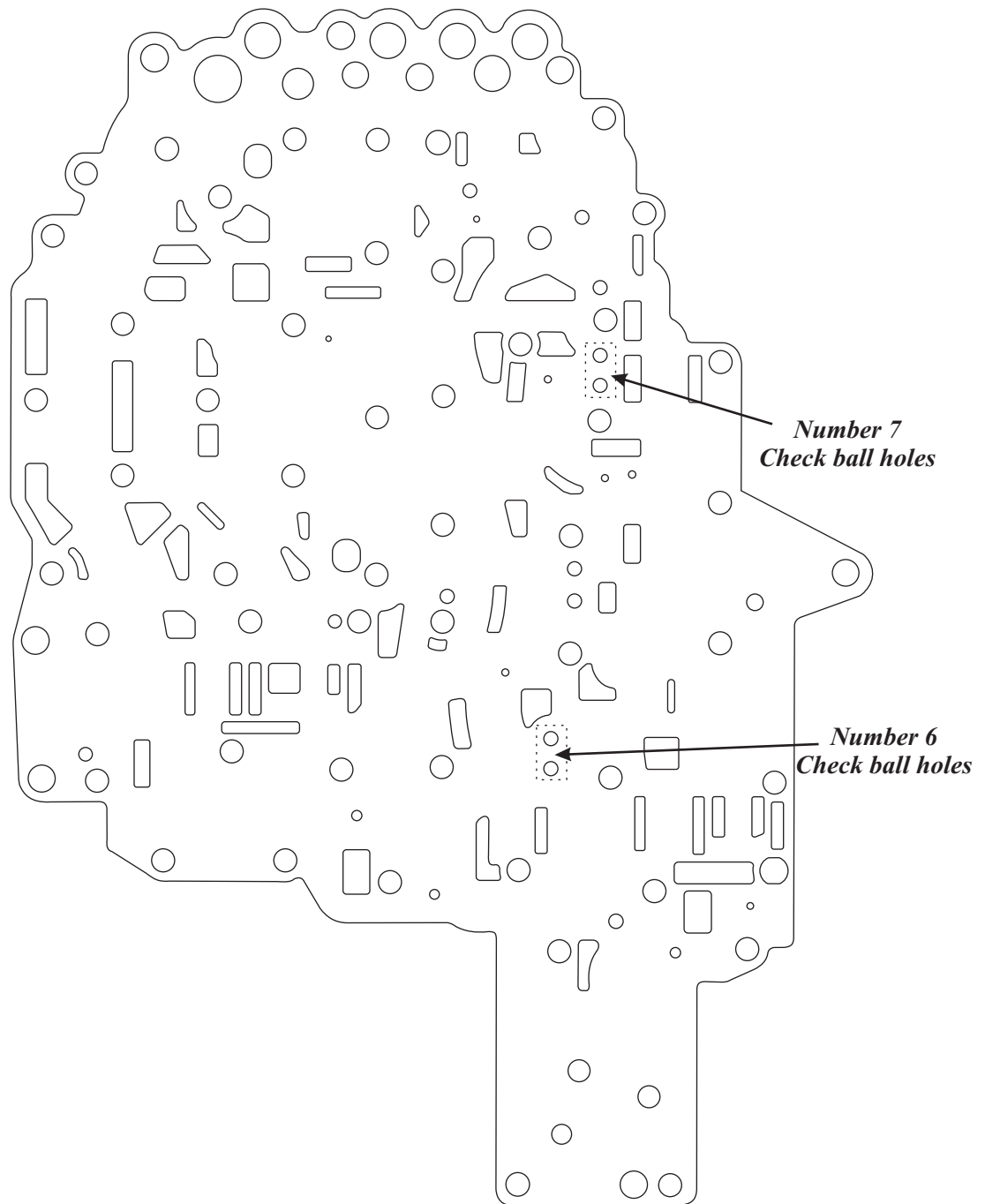


Figure 1

PREVIOUS DESIGN SPACER PLATE

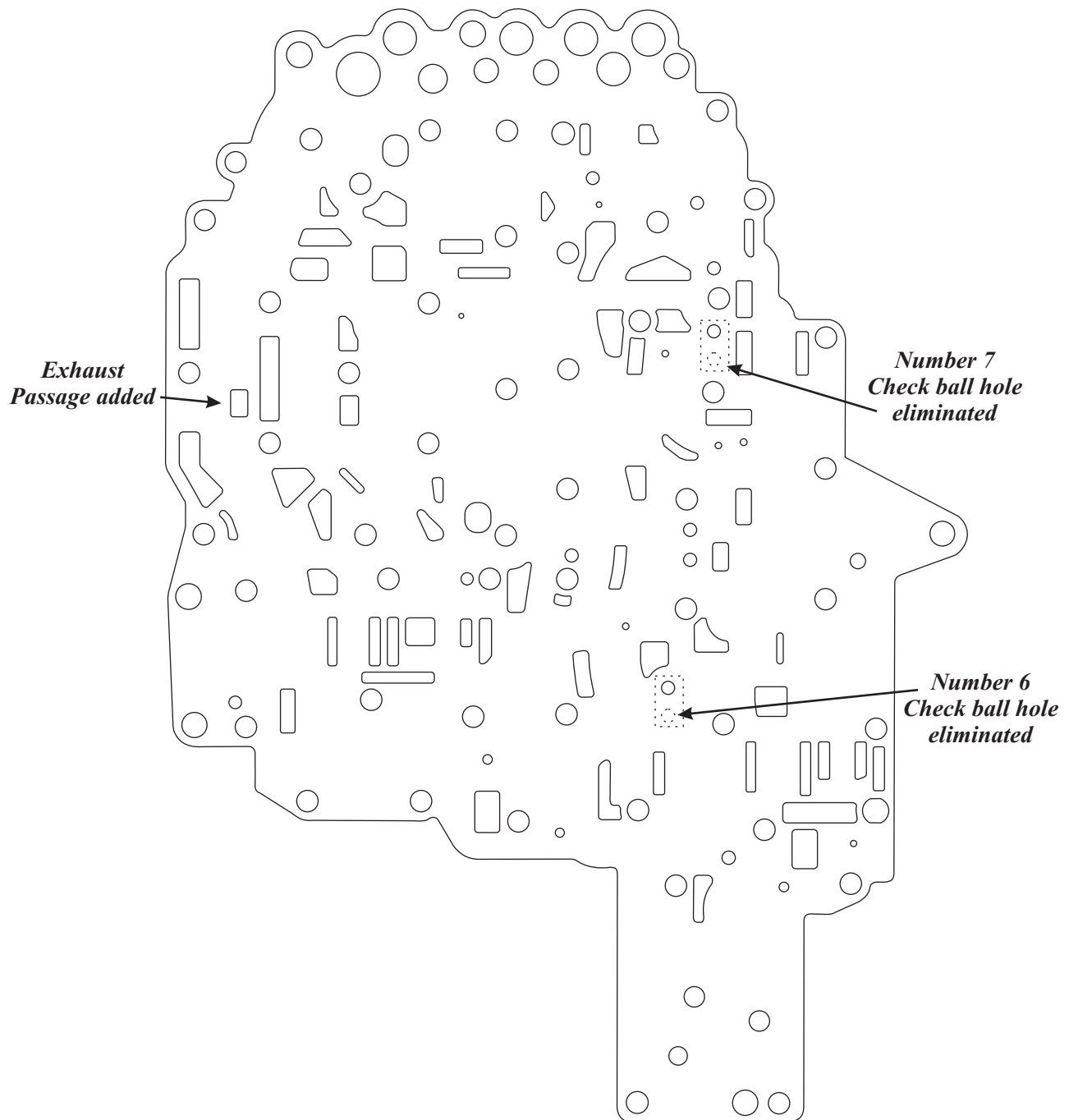


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Figure 2

AUTOMATIC TRANSMISSION SERVICE GROUP

NEW DESIGN SPACER PLATE



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Figure 3

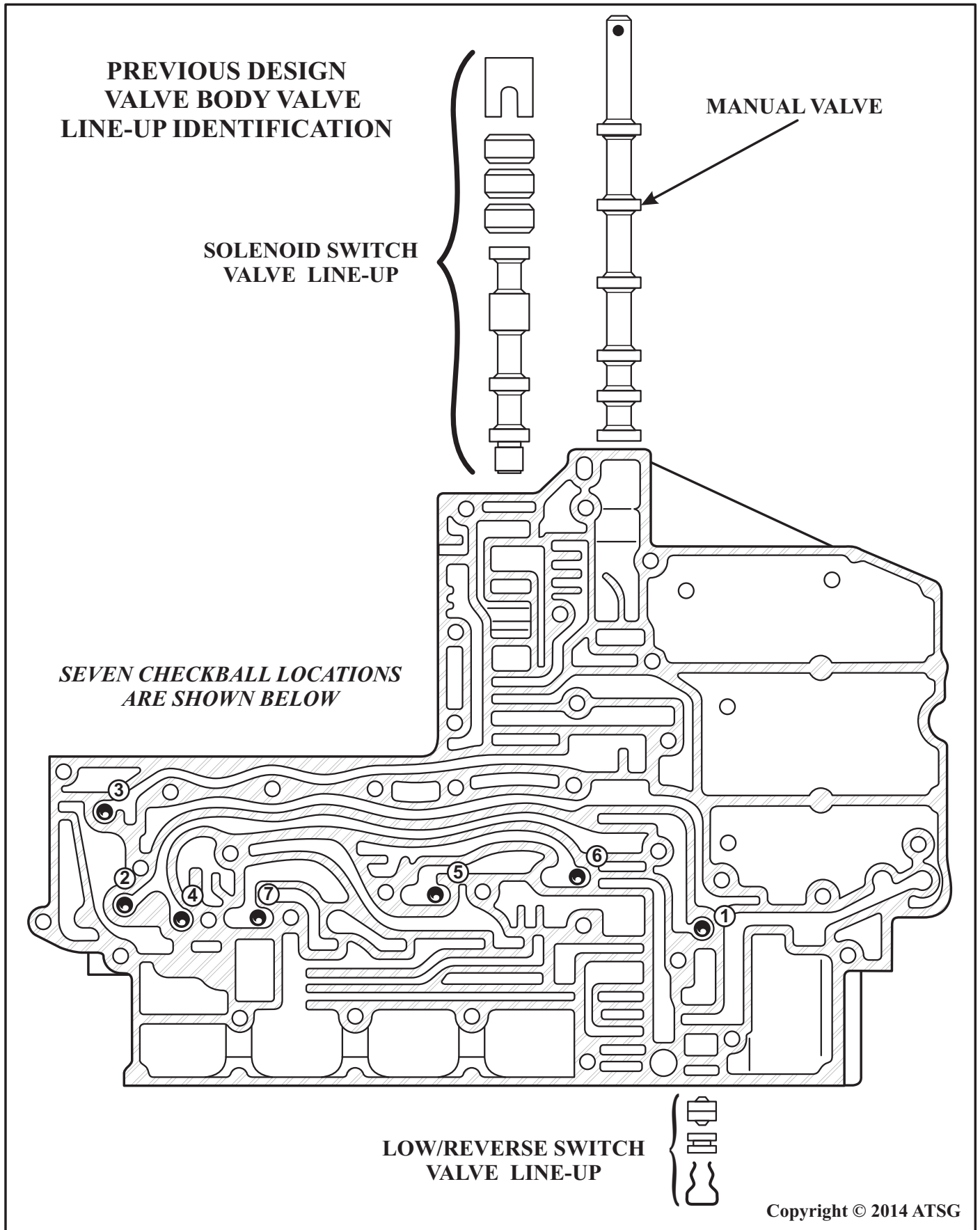


Figure 4

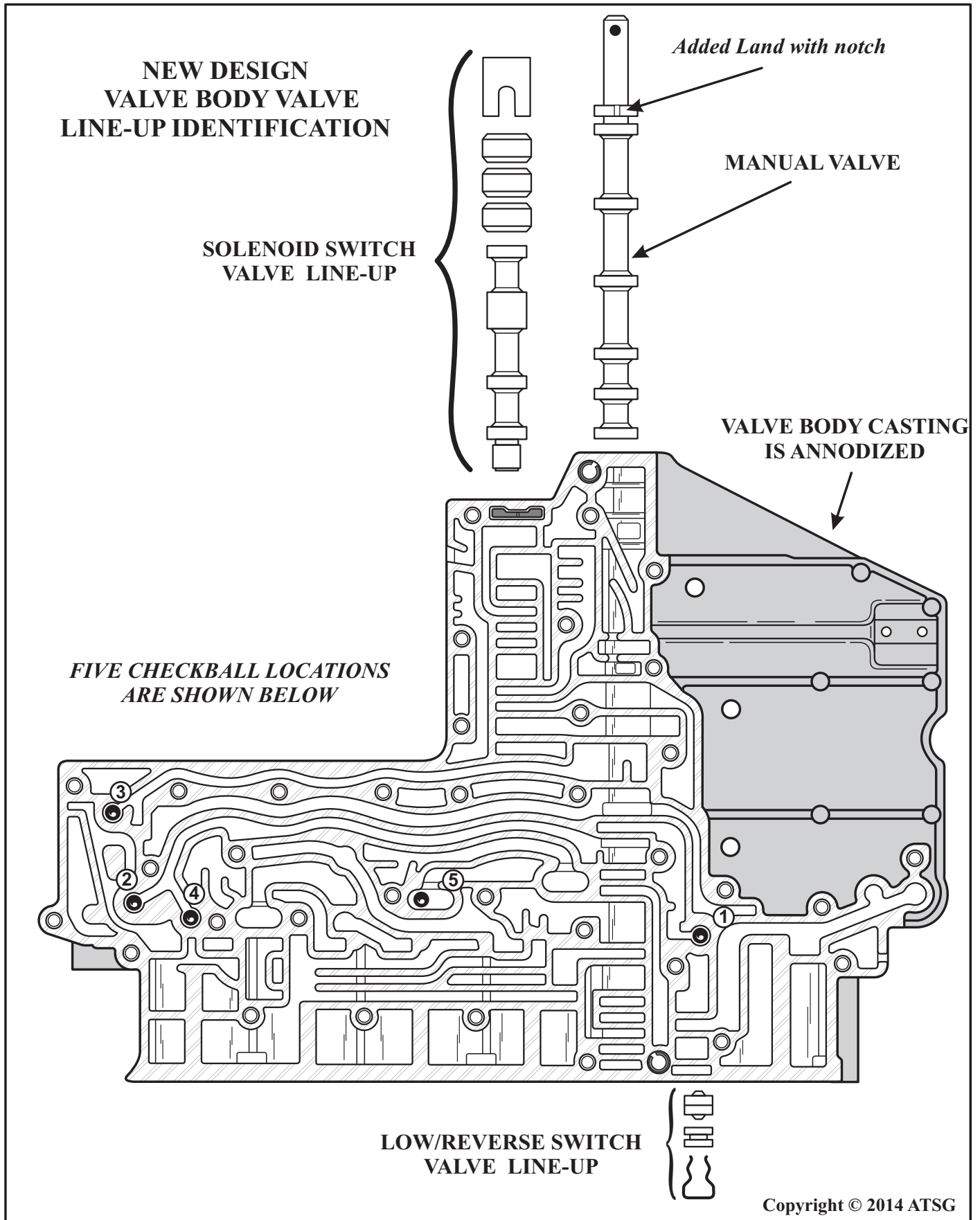


Figure 5

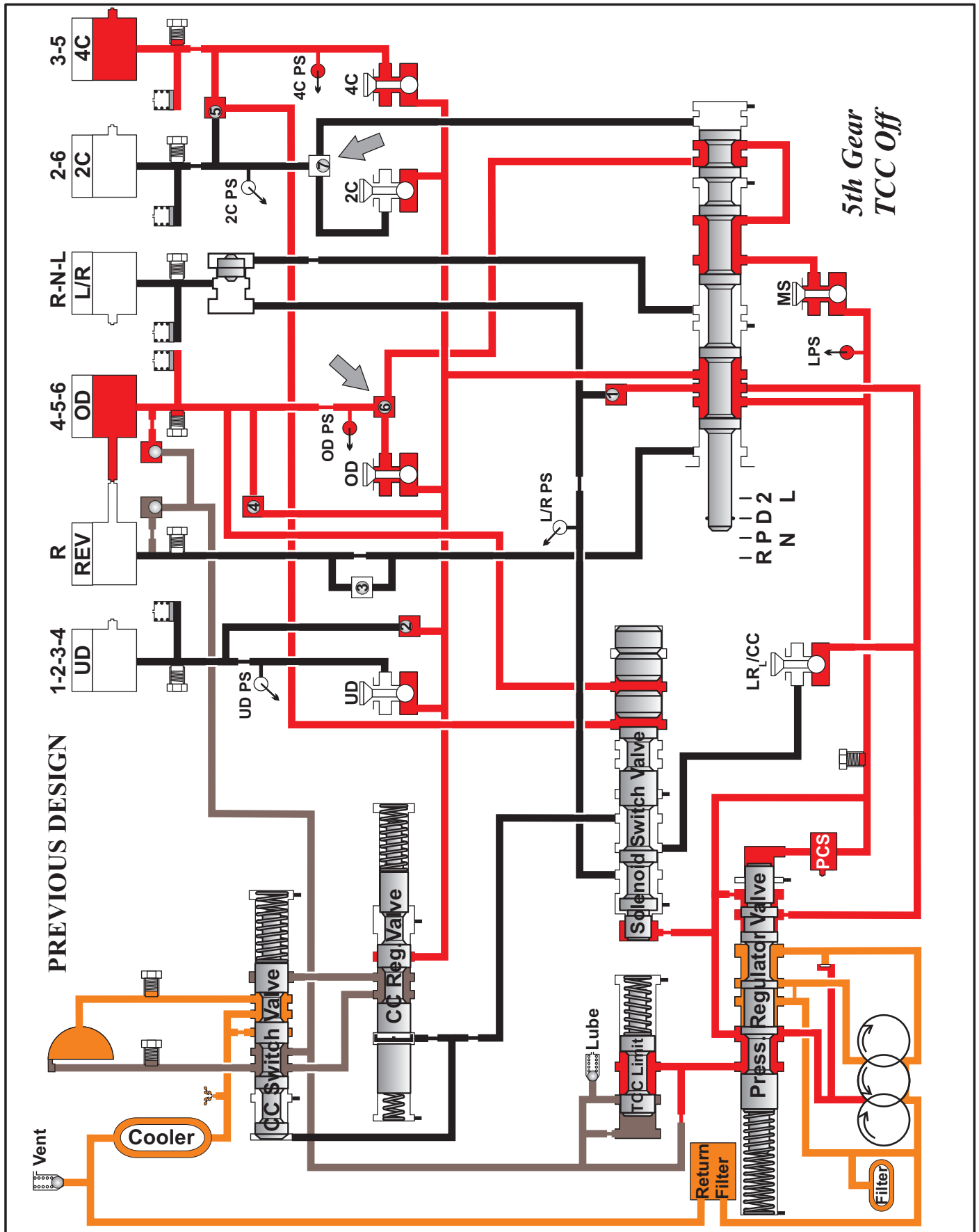


Figure 6

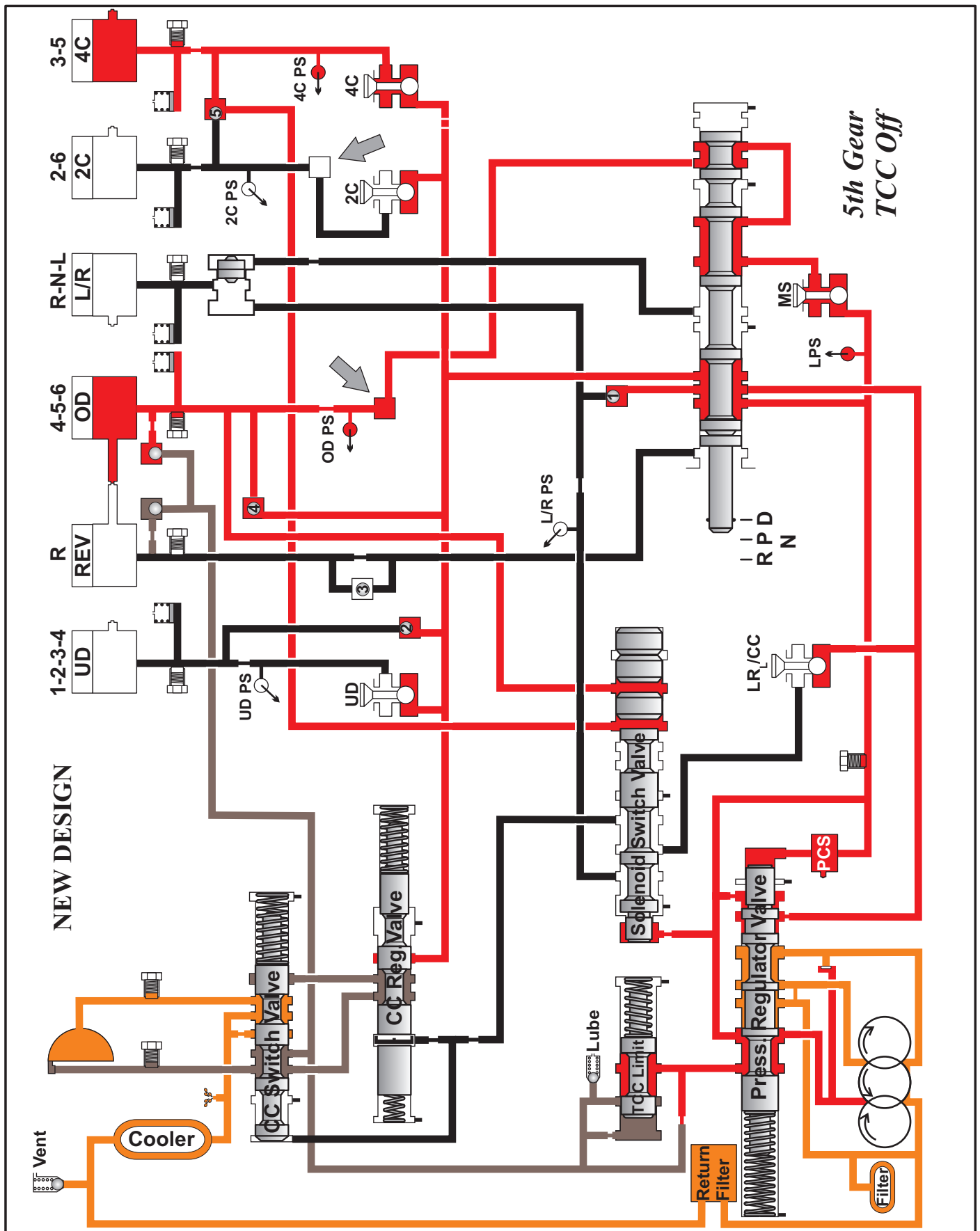
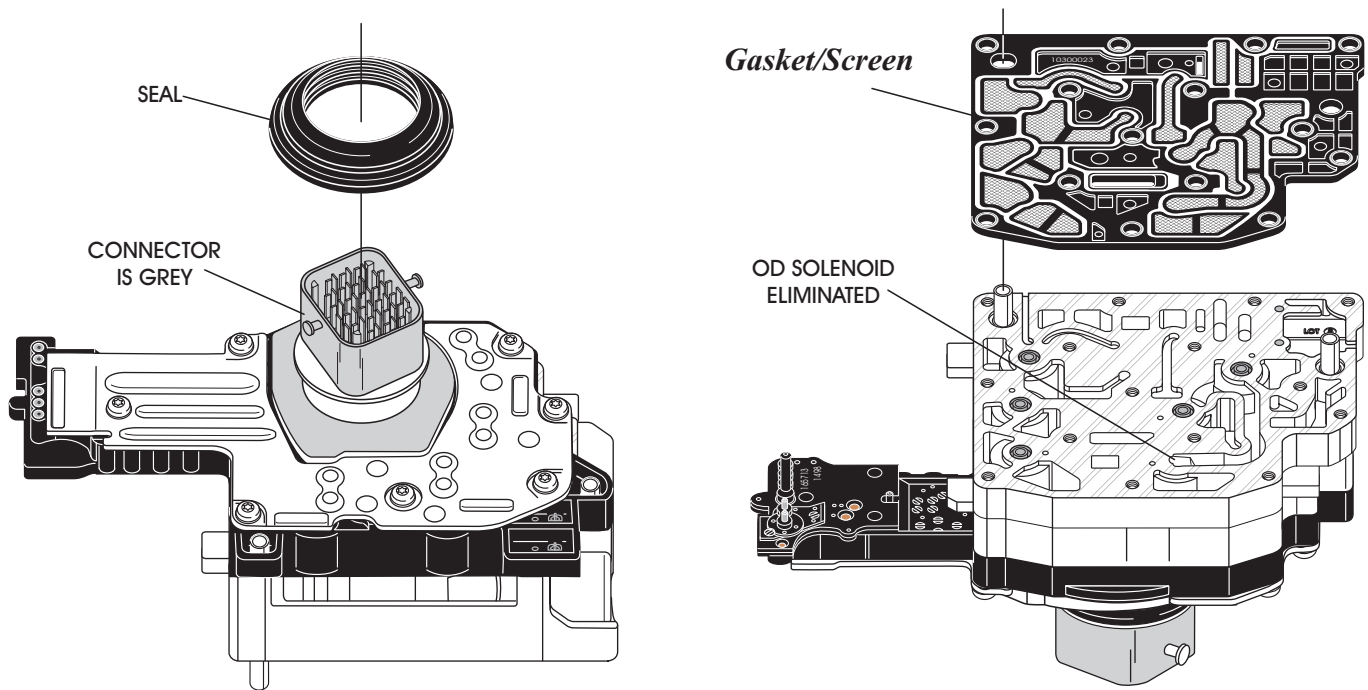
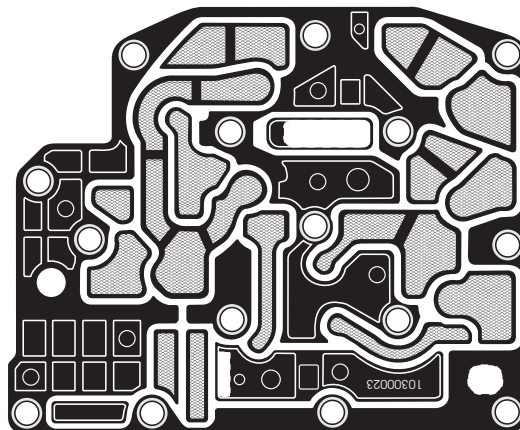


Figure 7

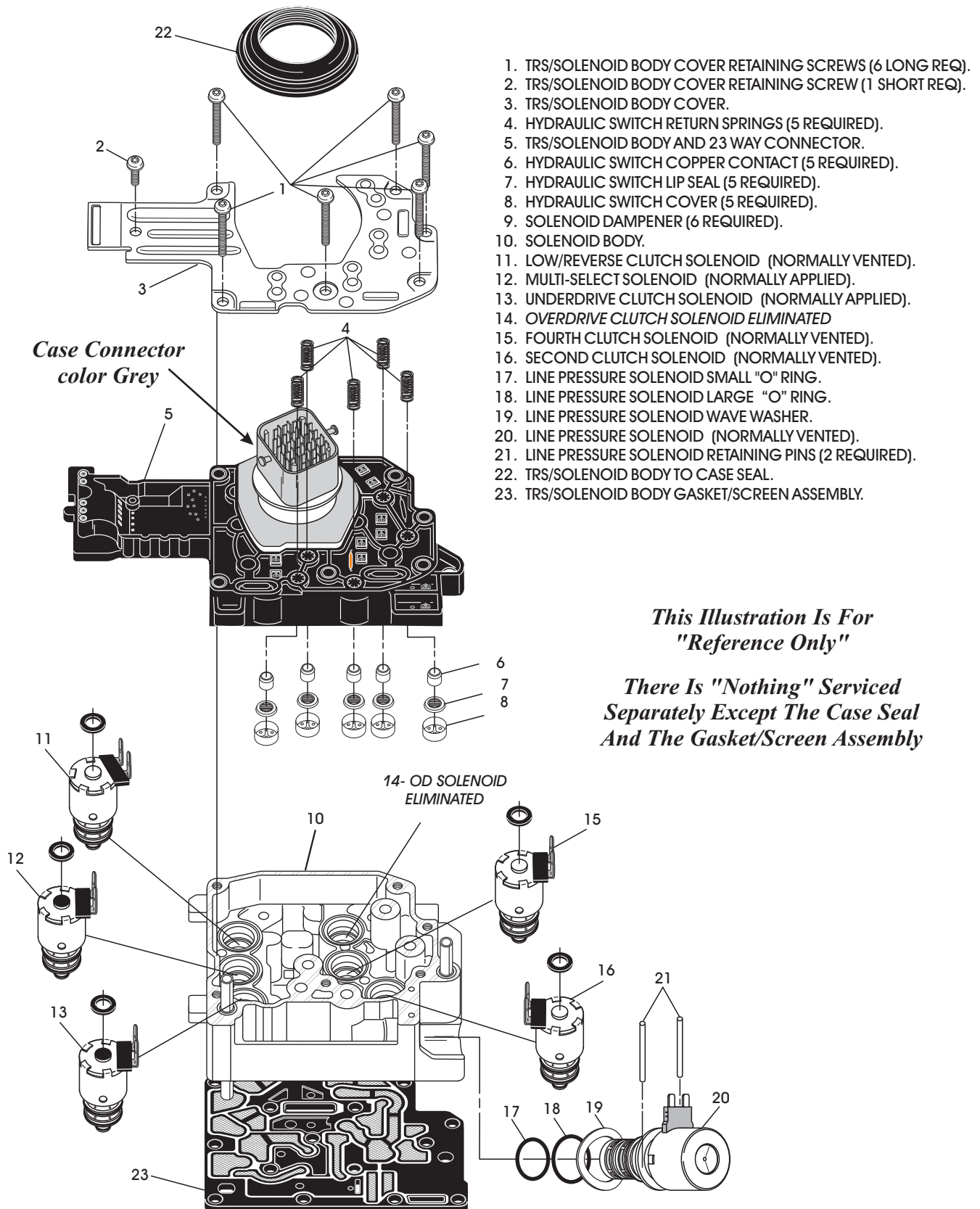
NEW DESIGN TRANSMISSION RANGE SENSOR/SOLENOID BODY, EXPLODED VIEW



68RFE Gasket/Screen
The same as previous design with White Connector



NEW DESIGN TRANSMISSION RANGE SENSOR/SOLENOID BODY, EXPLODED VIEW



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Figure 9