

**FEATURES**

- Uses Level 10 Hydrosystem™ Technology
- Reduces transmission heat build-up and wear
- Improves transmission durability
- Improves shift feel
- Dual application kit:
  - RV's, Sport Utilities, or vehicles used for towing or carrying heavy loads.
  - High performance street/strip vehicles. Needed when installing supercharger or high-horsepower engines.

**NOTICE**

- This is **NOT** a repair kit! The transmission must be in good working order prior to installation.
- These instructions are designed for use by individuals who are familiar with the proper procedures for disassembly, repair, and reassembly of the General Motors 700-R4 transmission.
- **Work safely!** Wear safety glasses and support the vehicle properly on a lift or by using jackstands.
- **Overheating** causes 9 out of 10 transmission failures.

**INSTALLATION INSTRUCTIONS**

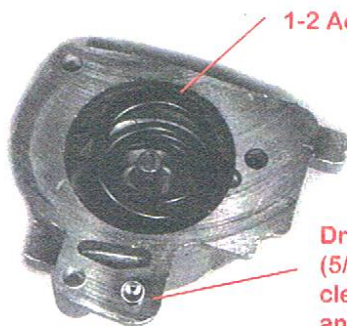
**NOTE:** Installation of the Valve Body Recalibration Kit is very simple and may be performed with the transmission in the vehicle. As you disassemble the valve body, keep track of which bolts came from where - they are of different lengths! Installation of a bolt of the wrong length will cause SEVERE damage to the transmission.

**TOOLS:** Other than normal hand tools, you will need a 10 mm socket, a 13 mm socket, and an inch-pound torque wrench.

1 Allow the transmission to cool down. Drain the fluid and remove the pan and the filter. Be careful you don't get a fluid bath!

2 Remove the Valve Body, the Auxiliary Valve Body (only in some 700-R4's), the 1-2 Accumulator Assembly, and the Separator Plate from the Case. Be sure to catch and save the Checkballs that will fall out (from the Valve Body, The Auxiliary Valve Body, and from the Case).

3 Remove the original Spring from the 1-2 Accumulator and discard it. Install the Orifice (drill 0.25 (1/4") dia. x 0.31 (5/16") to 0.38 (3/8") deep, clean out all the drilling chips, and press or tap in place) into the hole indicated. NOTE: this Orifice MUST be installed below the surface so it does not interfere with the Gasket! Install the New Spring (BLACK).

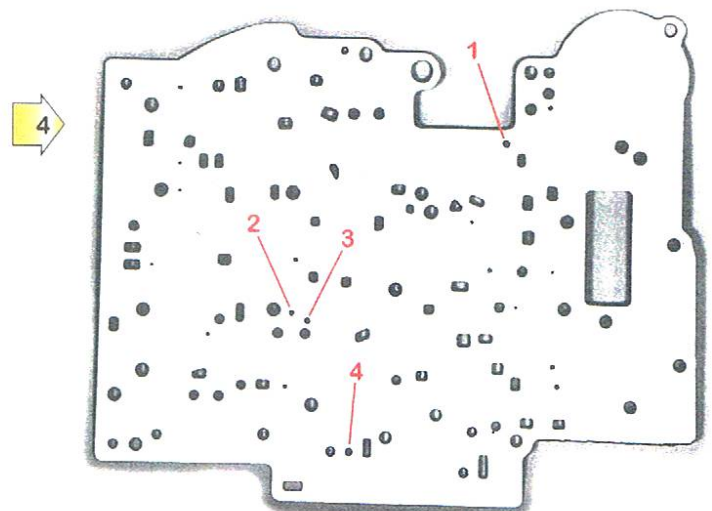


1-2 Accumulator Spring

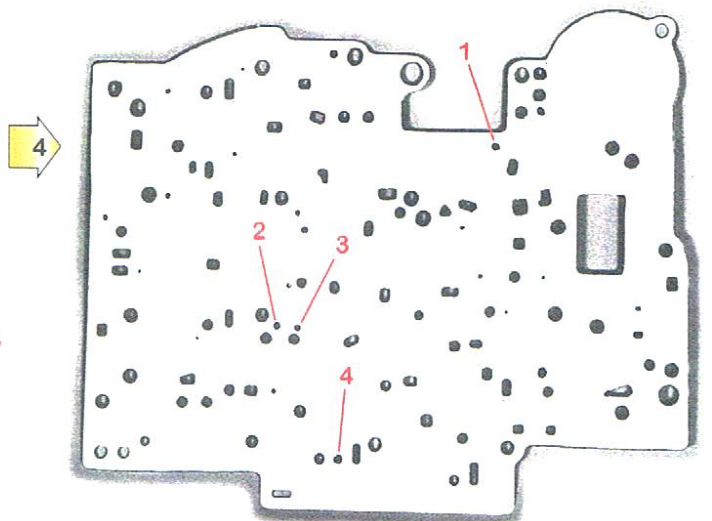
Drill 0.25 (1/4") dia. x 0.31 (5/16") to 0.38 (3/8") deep, clean out all the drilling chips, and press or tap the Orifice into this hole!

4 For Normal Duty, leave the Separator Plate as-is! For other applications, drill the Separator Plate, as follows:

- | HOLE | DESCRIPTION  |
|------|--|
| 1    | .140 (9/64") for Heavy Duty and Towing Applications<br>.156 (5/32") for High Performance and Racing Applications                             |
| 2    | .125 (1/8") for Heavy Duty and Towing Applications<br>.140 (9/64") for High Performance Applications<br>.156 (5/32") for Racing Applications |
| 3    | .125 (1/8") for Heavy Duty and Towing Applications<br>.140 (9/64") for High Performance Applications<br>.156 (5/32") for Racing Applications |
| 4    | .093 (3/32") for Heavy Duty and Towing Applications<br>.109 (7/64") for High Performance Applications<br>.125 (1/8") for Racing Applications |



Separator Plate  
Units WITHOUT Auxiliary Valve Body



Separator Plate  
Units WITH Auxiliary Valve Body

5 Referring to the figure on the next page, remove the MTV Upshift Valve. Remove the Existing Spring and discard it. Reinstall the MTV Upshift Valve into the Valve Body.

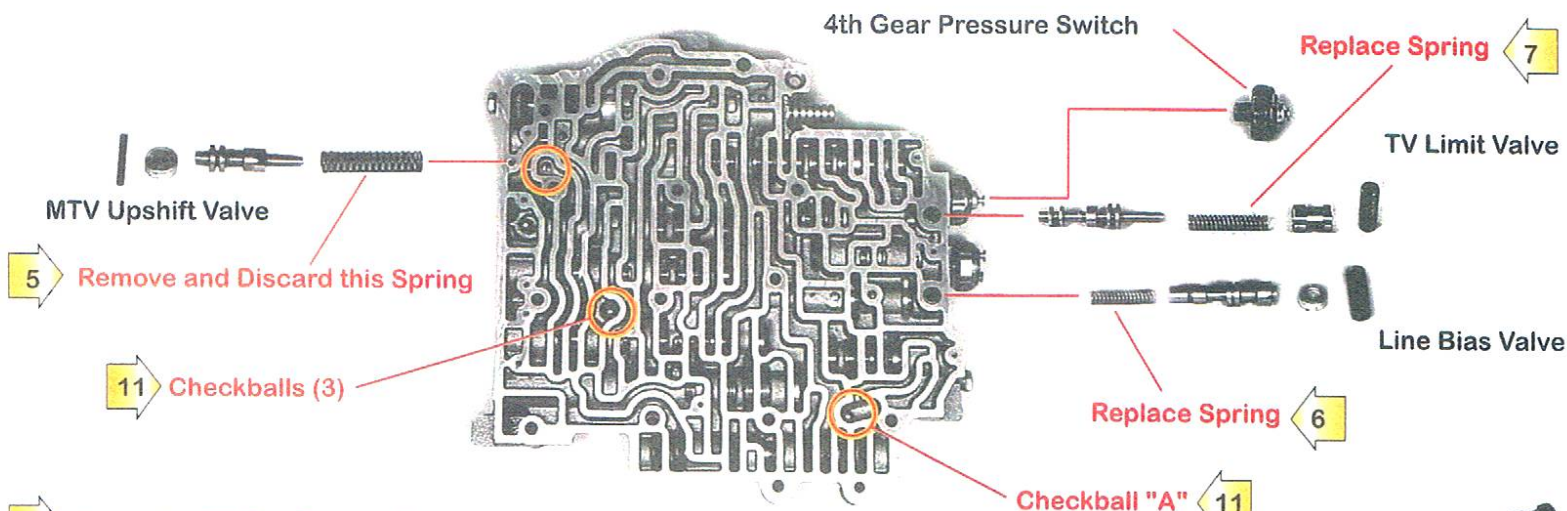
6 Referring to the figure on the next page, remove the Line Bias Valve and the Existing Spring. Discard the Existing Spring. Reinstall the Line Bias Valve into the Valve Body, using the New Spring (RED).

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**7** Remove the 4th Gear Pressure Switch. Remove the TV Limit Valve. Discard the original Spring. Reinstall the TV Limit Valve, using the New Spring (GREEN). Reinstall the 4th Gear Pressure Switch.

**8** Remove the Retaining Ring and remove the original Pressure Regulator Valve Train from the Case and discard it. Install the new Pressure Regulator Valve Train - the New Spring is PURPLE in color. Reinstall the Retaining Ring.

**9** Using small dabs of Transmission Assembly Lube to hold them in place, install four (4) Checkballs into the Case. **NOTE:** For Model Years 1988 and newer, do NOT install Checkball "B".

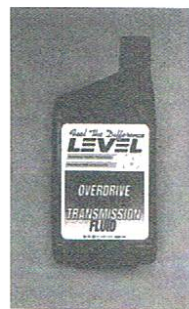
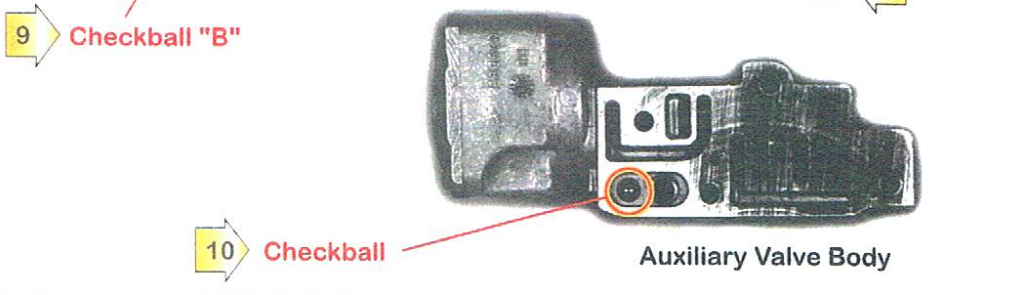
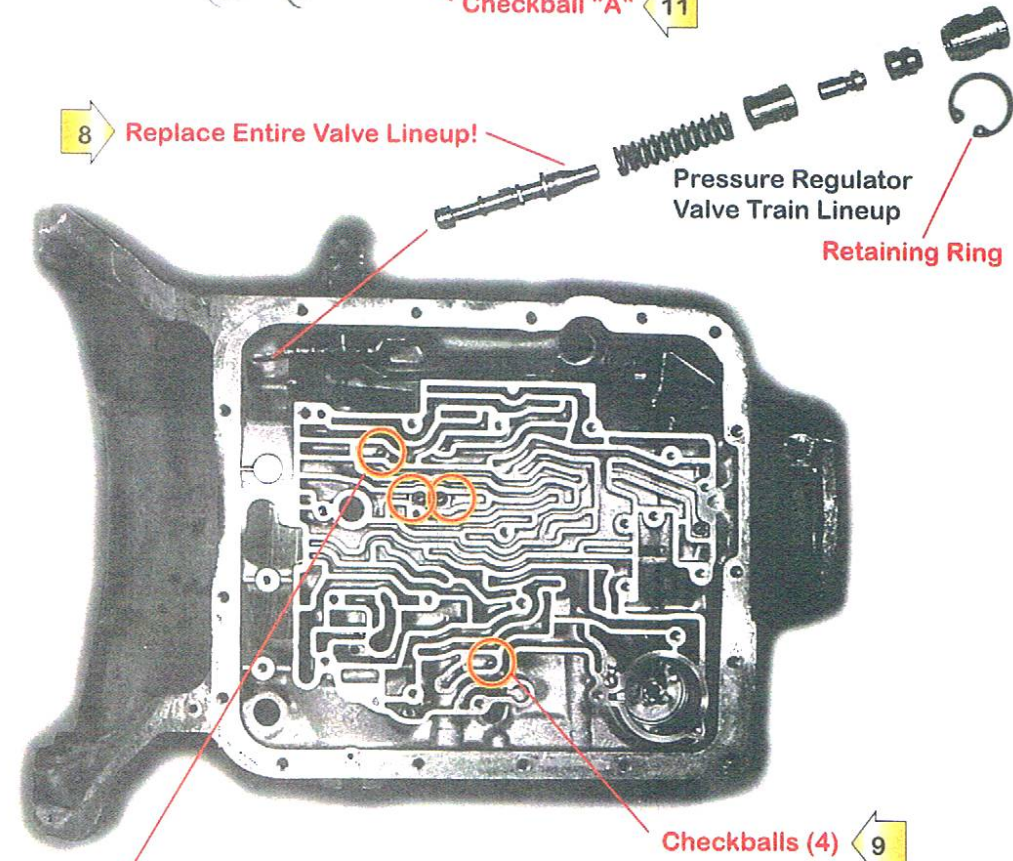
**10** Install the Separator Plate to the case. Install the 1-2 Accumulator Assembly to the Case. Torque the bolts to 110 in-lb. If your transmission has an Auxiliary Valve Body, install a Checkball as shown and install it. Torque the bolts to 110 in-lb.

**11** Install three (3) Checkballs into the Valve Body. If your transmission has an Auxiliary Valve Body, eliminate Checkball "A" and only install the other two (2) Checkballs. Install the Valve Body to the Case. Torque the bolts to 110 in-lb.

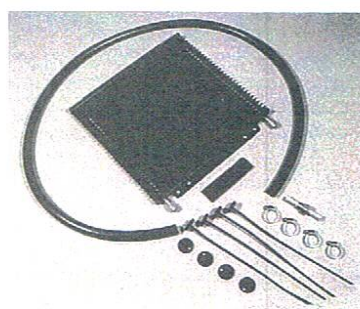
**12** Install a new Filter. **CAUTION:** be sure remove the rubber seal from the old filter - it probably is stuck in the Case! To further protect your transmission, we suggest that you install a new Level 10 High Performance Filter. Install the Pan, using the supplied Gasket

**13** Add 4-5 quarts of ATF and a container of Level 10 Transmission Concentrate, or use Level 10 High Performance ATF. Start the engine - check for leaks and check the fluid level.

**14** Road test the vehicle and Feel the Difference™. Be sure to check for leaks and check the fluid level again, as soon as the transmission warms up.



To provide the utmost protection for your transmission, use Level 10 ATF or Level 10 Transmission Concentrate!



If you haven't already installed a Level 10 Transmission Cooler, now would be a good time to do it! Excess heat causes 9 out of 10 transmission failures!

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