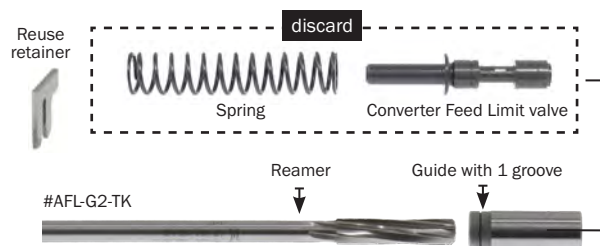


# SK 8L90

Fits 8L45, 8L90 2015-on

**This kit requires tool kit #AFL-G2-TK. This is the same tool used for all GM and Ford 6-SPD FWD GEN2 and GEN3 kits.**

**Corrects/Prevents/Reduces:** Casting breakage at secondary regulator due to uncontrolled high line pressure, erratic shifts, burnt frictions, low cooler flow, converter overheating, TCC shudder apply and release issues, shift complaints and ratio codes P0741 and P0218.



## STEP 1.

Remove and discard original converter feed limit valve and spring. Save original retainer.

## STEP 2.

Using the universal AFL-G2-TK reamer and guide: Select the guide with one groove. Insert the reamer and guide into the bore until it bottoms out. Using plenty of WD-40®, ream the converter feed limit bore

## STEP 3.

Remove and discard the TCC, S4, S3, S2 regulator valves and springs.

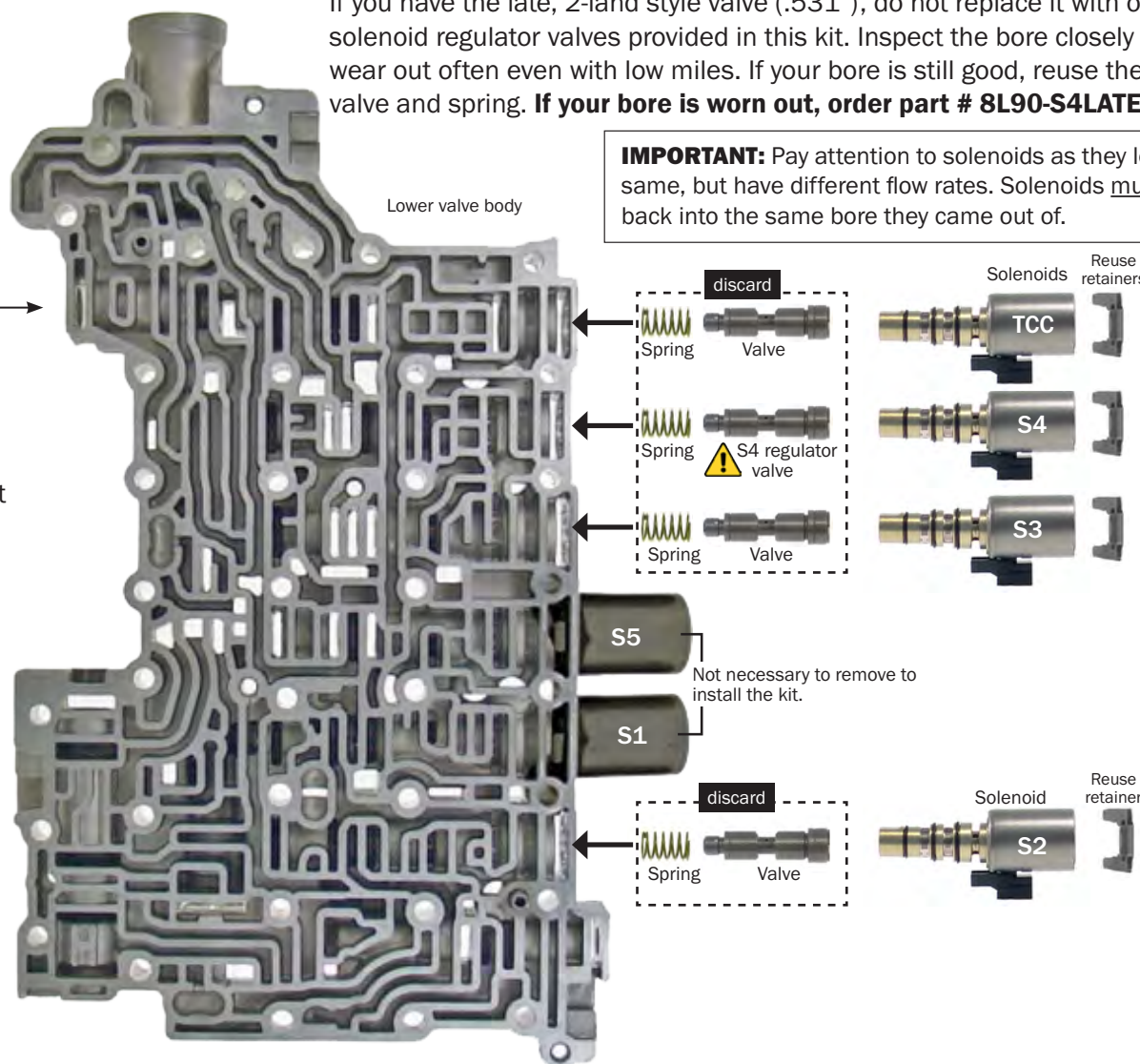
**If you have the late 2-land style S4 regulator valve (see info above), do not use the new valve in this kit.**

## ⚠ BEFORE YOU BEGIN: ID THE S4 REGULATOR VALVE

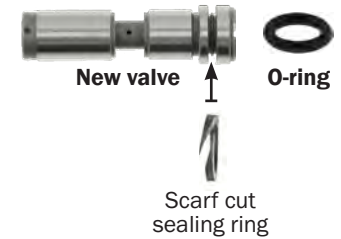


Sometime around 2018, there was a change to the S4 regulator valve. You can identify it by two or three lands, or measure the inboard land (closest to the spring). If you have the late, 2-land style valve (.531\"), do not replace it with one of the new solenoid regulator valves provided in this kit. Inspect the bore closely as it does wear out often even with low miles. If your bore is still good, reuse the original S4 valve and spring. **If your bore is worn out, order part # 8L90-S4LATE-OS.**

**IMPORTANT:** Pay attention to solenoids as they look the same, but have different flow rates. Solenoids must go back into the same bore they came out of.

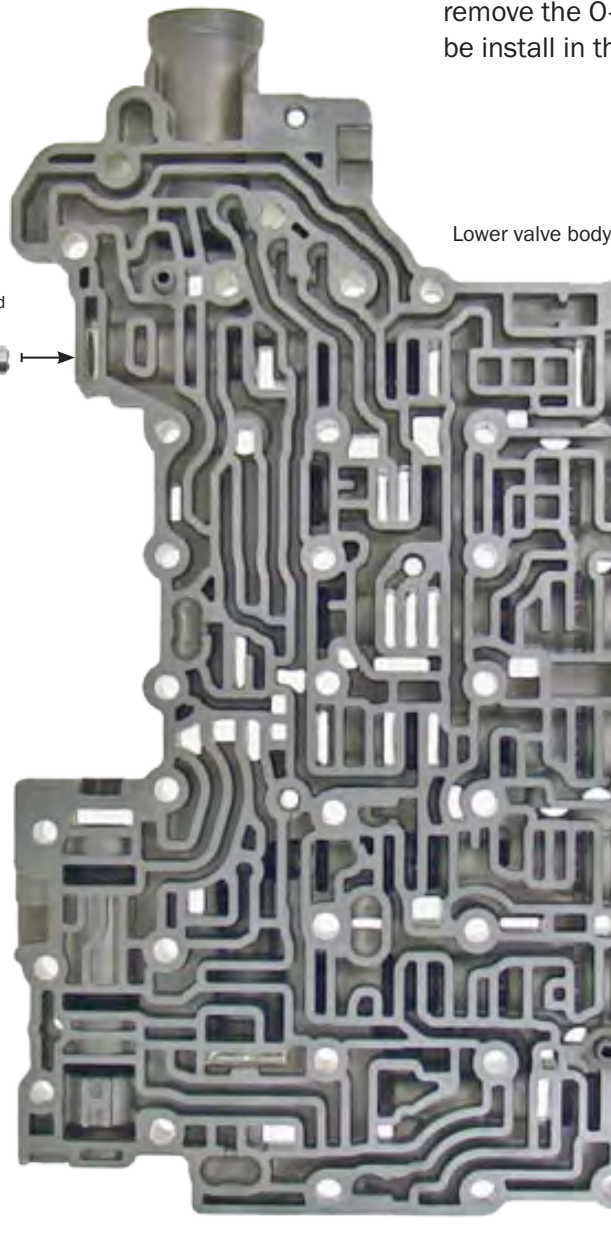
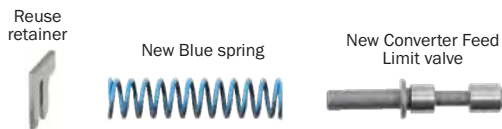


**HOW TO USE:** Insert assembly lube in the ring groove of the **new valve**. Next roll the **scarf cut sealing ring** into the groove. Lastly roll the **O-ring** on top of the sealing ring. Wait a few minutes, then remove the O-ring and the valve will now be ready to be install in the valve body.



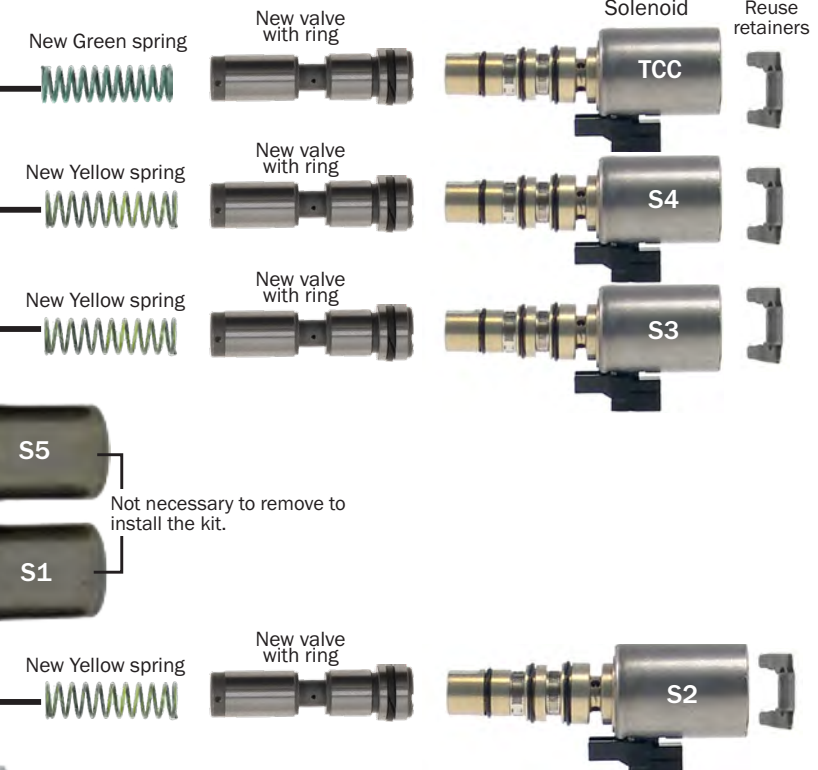
#### STEP 4.

Install new oversized Converter Feed Limit Valve and Blue spring, reusing the original retainer.

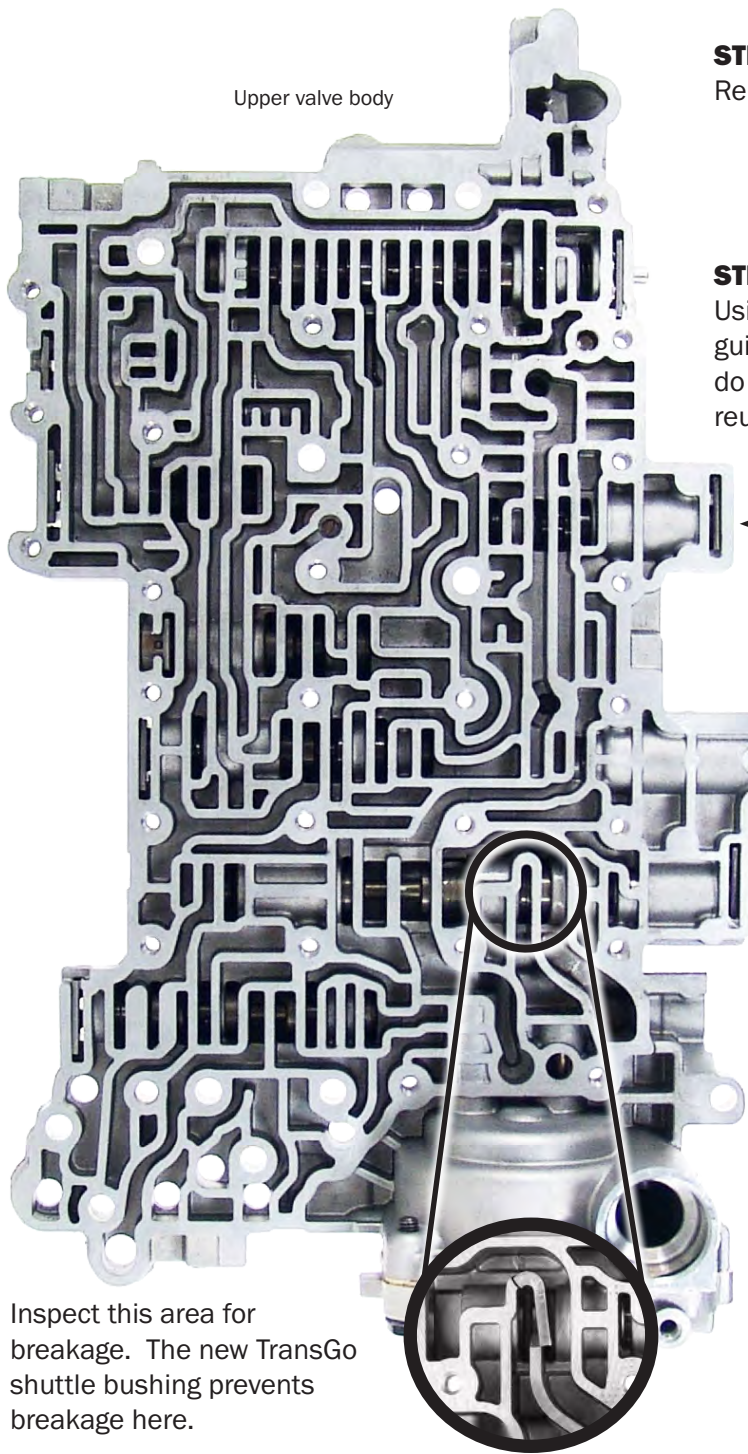


#### STEP 5.

Four small O-Rings are provided as an assembly aid, to help form and set the Teflon sealing rings, keeping them in place. **These O-Rings are not for sealing purposes.**

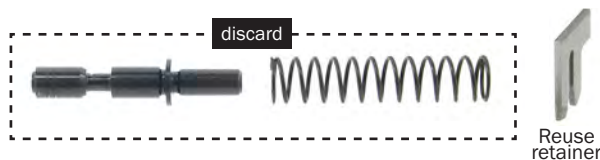






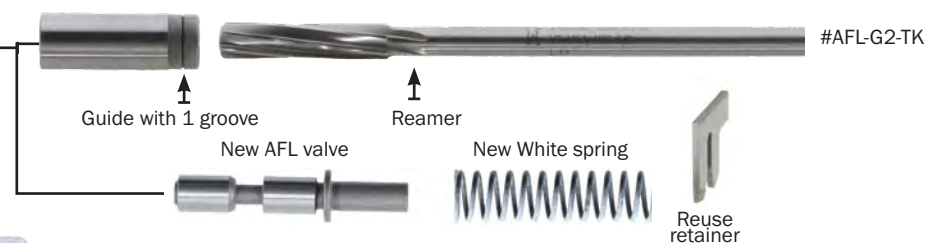
### STEP 6.

Remove and discard original AFL valve and spring. Keep original retainer.



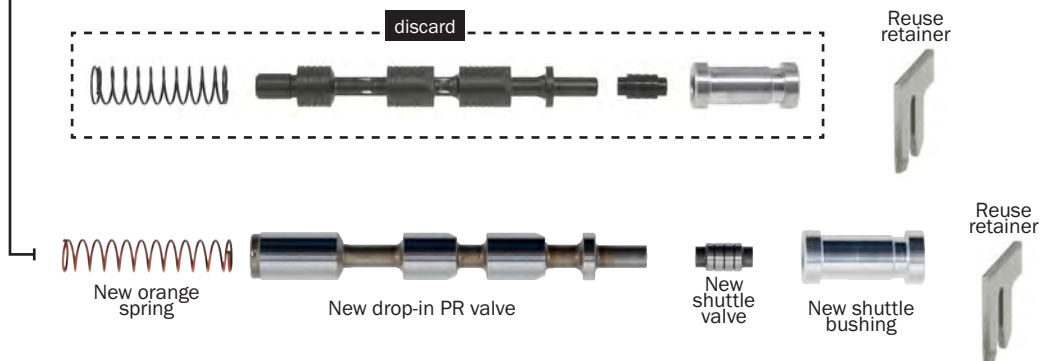
### STEP 7.

Using the universal AFL-G2-TK reamer and guide: Select the guide with one groove. Insert reamer and guide into the bore. Using plenty of WD-40®, ream the AFL bore using low speed and let the reamer do the cutting. Don't force it! Clean the bore and install the new oversized AFL valve and White spring, reusing the original retainer.



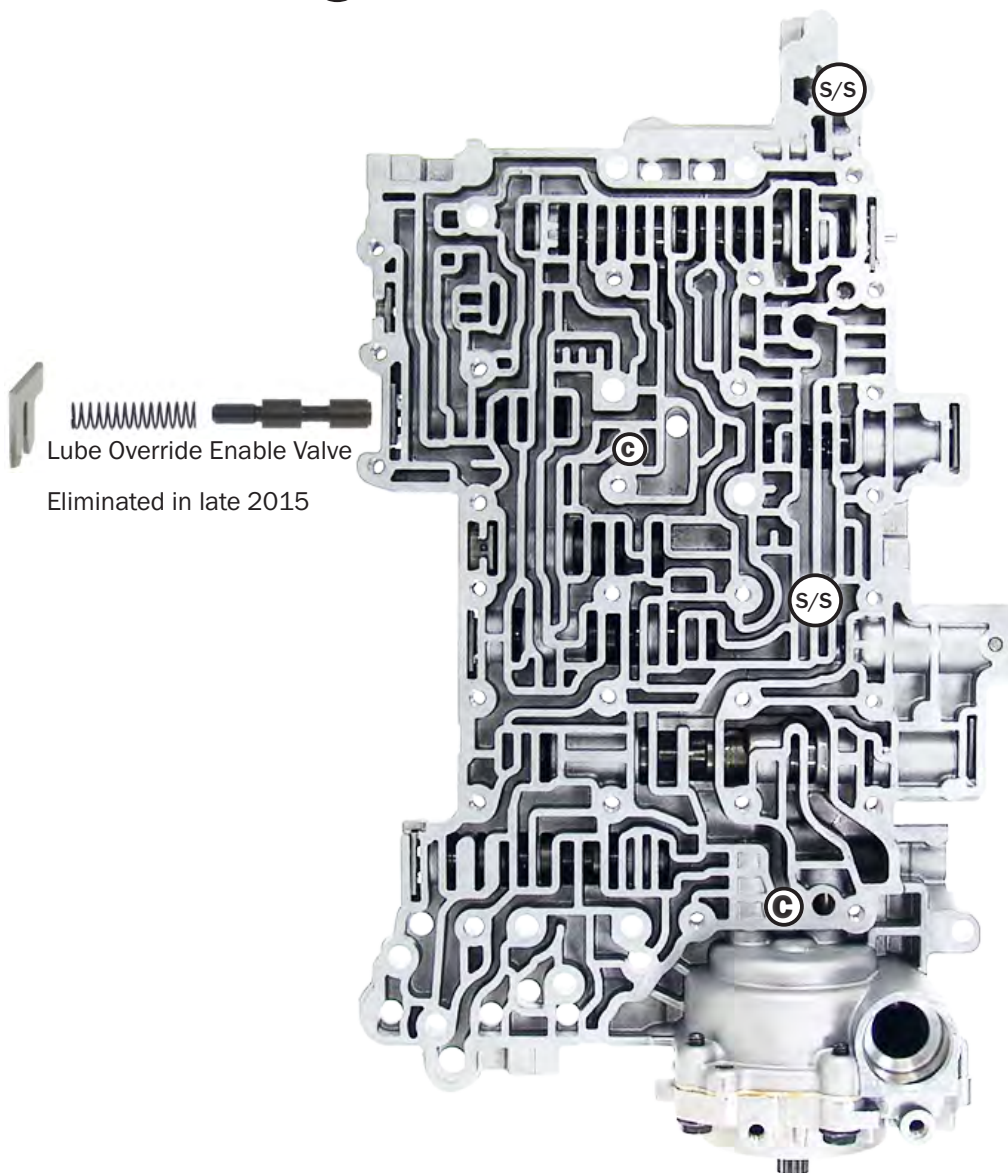
### STEP 8.

Remove and discard original PR lineup, keeping the original retainer. Install the new Orange spring and the drop-in PR valve. Ensure shuttle valve moves freely within shuttle bushing. Use a dab of assembly gel to hold new shuttle valve into bushing before installing.



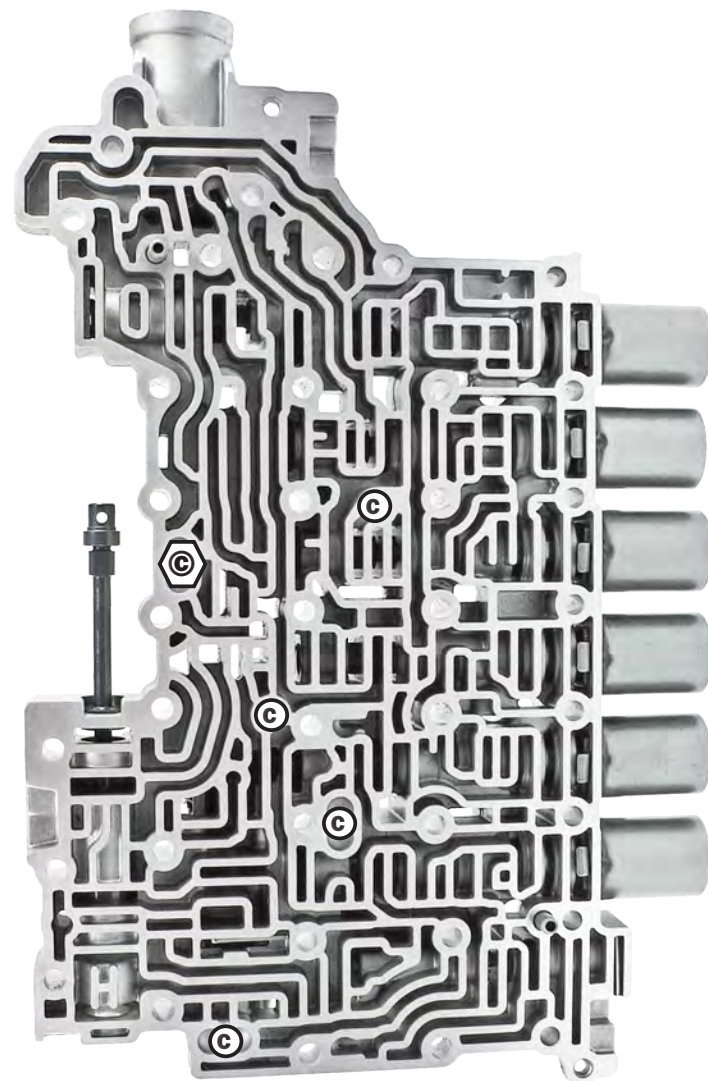
## Upper Control Valve body

- Ⓒ 0.250" Check Ball (1)
- Ⓒ 0.375" Check Ball (1)
- Ⓔ 0.375" Check Ball (2) Only use with stop/start accumulator



## Lower Control Valve body

- Ⓒ 0.250" Check Ball (4)
- Ⓔ 0.250" Check Ball (1) Eliminated in late 2015. No Lube Override Enable Valve in Upper Control Valve Body = **NO BALL**

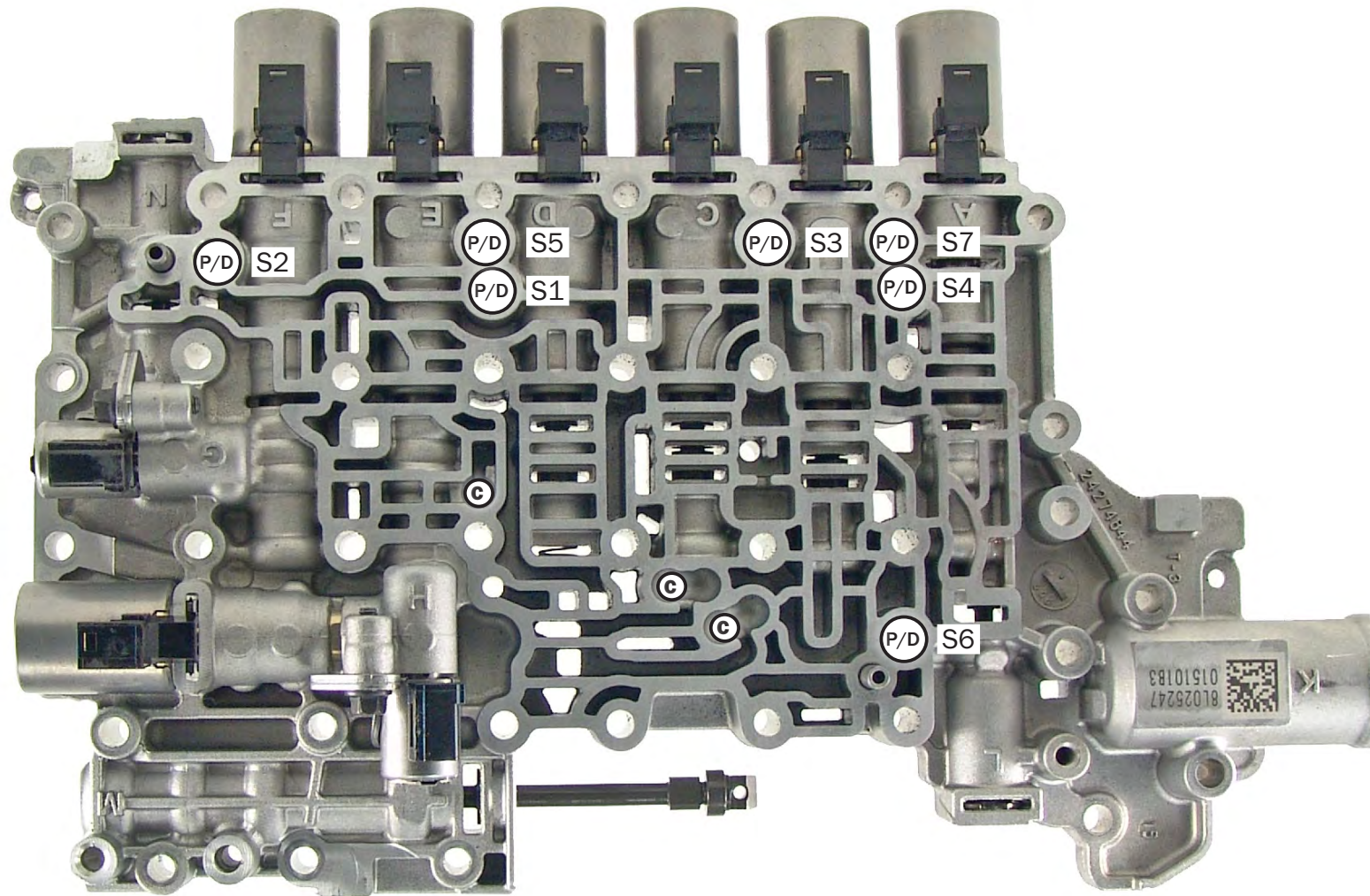




## Lower Control Valve body

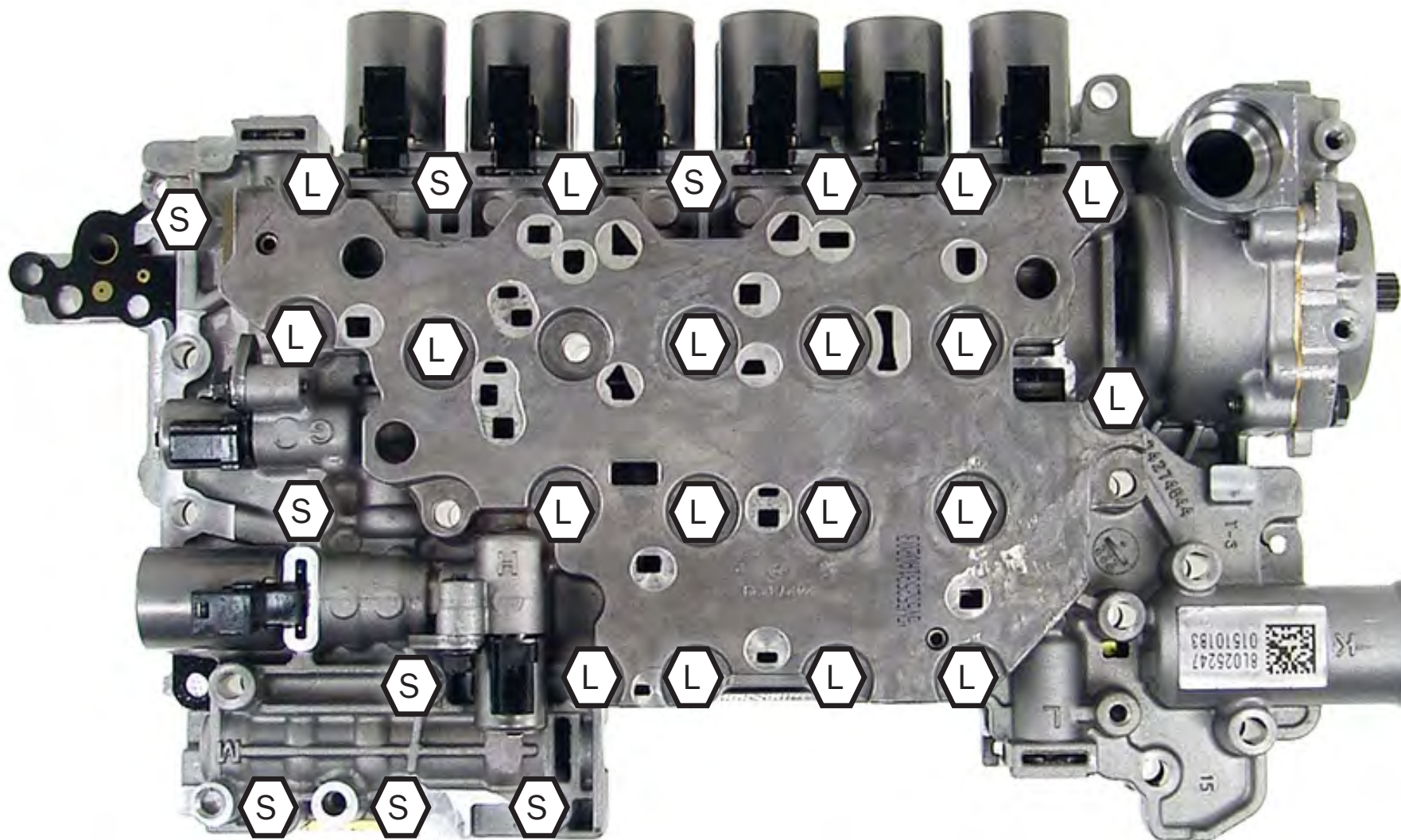
Ⓒ 0.250" Check Ball (3)

Ⓟ Solenoid Pulse Damper (7)



 Short 7mm head bolts (8)  Torque to 71 lb in

 Long 8mm head bolts (19)  Torque to 71 lb in





# A quick and easy solution to repair worn GM 8L45 and 8L90 pulse damper (accumulator) bores.

## Complaint

Even a little wear has an effect on solenoid pressure to the controlling clutch regulator valves. Flare, harsh and erratic shifts all are a result of poor clutch control. A worn damper bore must be corrected to provide a smooth solenoid signal to the clutch regulator it serves. The smoother the solenoid signal, the more consistent and cleaner the shifts and TCC will be.



## Pulse Damper Tool Kit with Carbide Reamer PART# 8L90-PDP-TKC

Eliminates the need to purchase a new valve body

**Includes:** Guide plate, (4) aluminum washers, (2) bolts with butterfly nuts, Pulse damper pocket guide pin and USA made **carbide reamer**.



## Pulse Dampers (Accumulators) PART# 8L90-PDP-OS

### Corrects/Prevents/Reduces:

- Delayed reverse
- 2-3 up-shift flare
- TCC shudder that is still present after a flush and refill with Mobile 1 LV ATF HP Fluid
- Erratic shifts
- Clunk on coast downshifts

**Includes:** (7) USA made hardened steel oversize pulse damper pistons (accumulators) and new springs calibrated to restore OE function. Requires: 8L90-PDP-TKC

## Pulse Damper Tool Kit

Place the TransGo guide plate with bushing over the lineup pin. Rotate until the two bolt holes lineup in the slots. Use the supplied washers to protect the valve body and guide plate. Tighten down the bolts, remove the pin and its ready to ream with our high quality **carbide reamer** to repair even the most worn bores.

## Pulse Dampers

The oversized accumulators include matching calibrated springs to maintain the same function as OE and repair higher mileage units with extreme bore wear.

