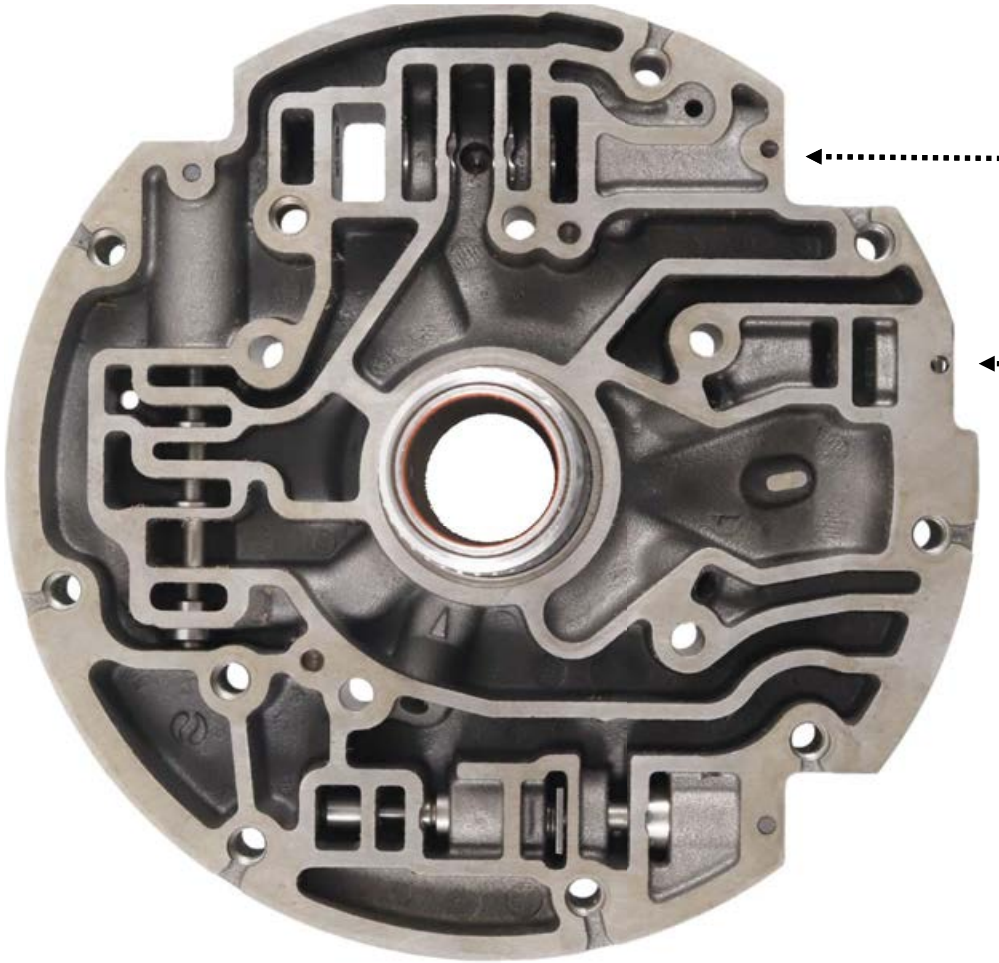
ALLISON-11UP Patent Pending

Fits: 2011-19 Allison 6 speed

The pump and valve body components in this kit will create shorter/firmer shifts and increases holding capacity in all clutch packs as well as lock-up. Corrects ratio codes and common complaints such as no forward movement, 3-4 slip, TCC slip and burnt frictions. **Transmission removal required.**

Customizable calibrations for stock, hard-working, street show-off and strip trucks.



Pump

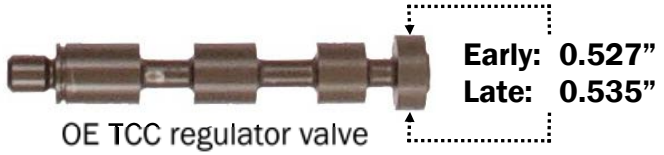
1. Remove and discard OE pressure regulator valve spring. Install original PR valve, **new yellow spring**, original plug with O-ring and pin.

Pressure regulator valve | **New yellow spring** | Plug | Pin

1-2-3-4 clutch backfill valve | Spring | **New billet retainer** | Pin

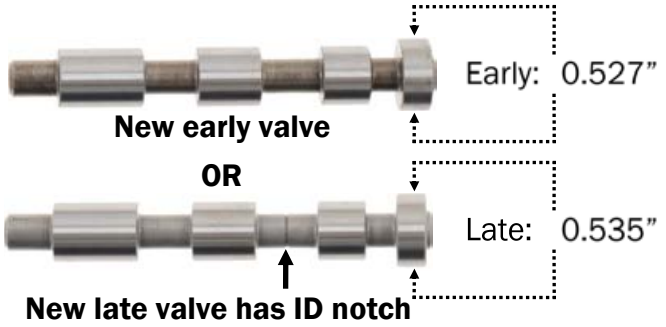
2. Remove and discard the original 1-2-3-4 back feed retainer that commonly breaks on air check, and Install our **new billet retainer** that will allow you to briefly air check the 1-2-3-4 drum without breaking the retainer. **This retainer is not found in all years.**

3. Remove the OE TCC regulator valve to identify it. Allison changed the diameter of the TCC regulator valve's big land around 2017. Measure the outside diameter of the largest land to identify what valve you have.

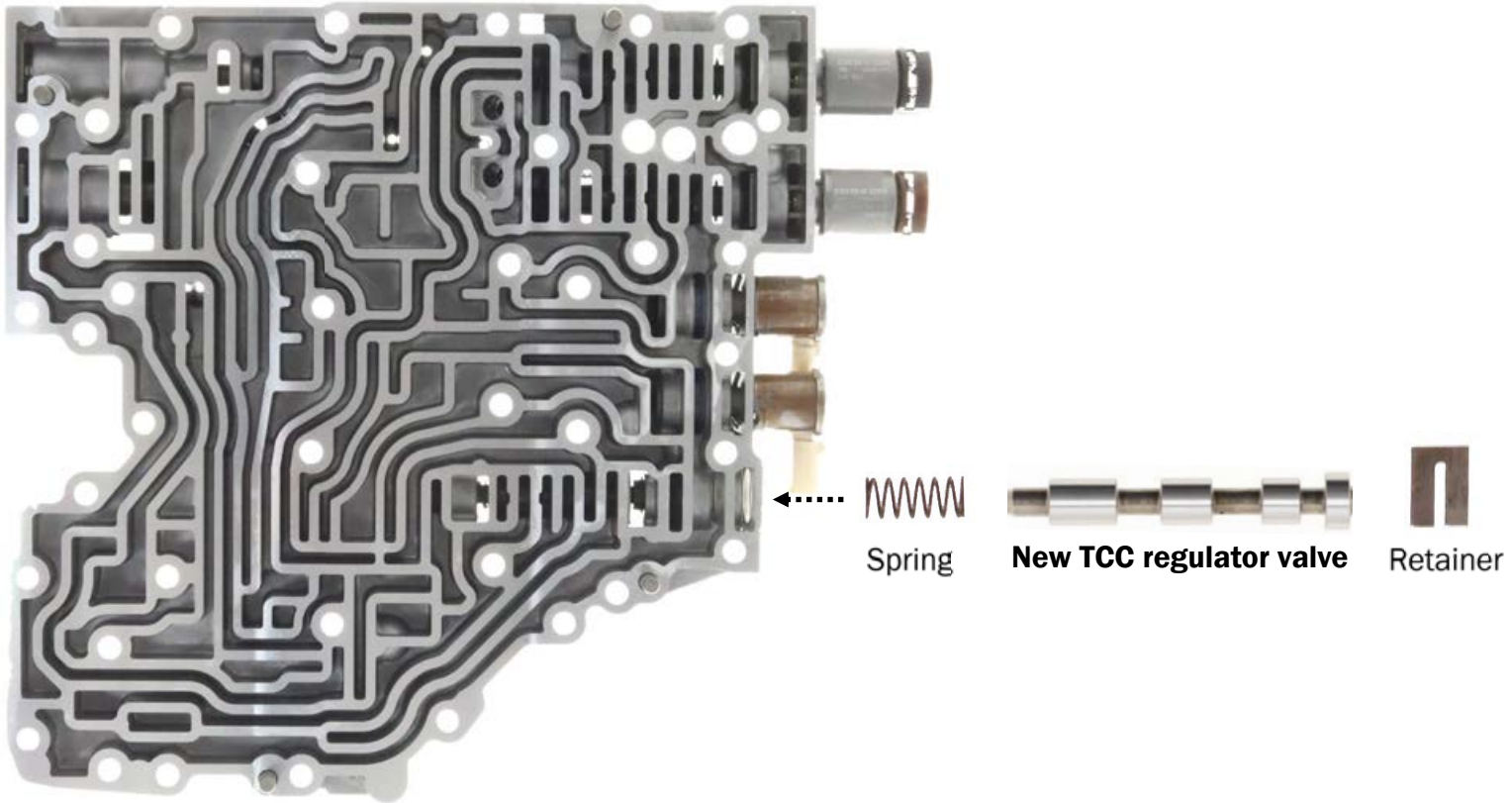


OE TCC regulator valve

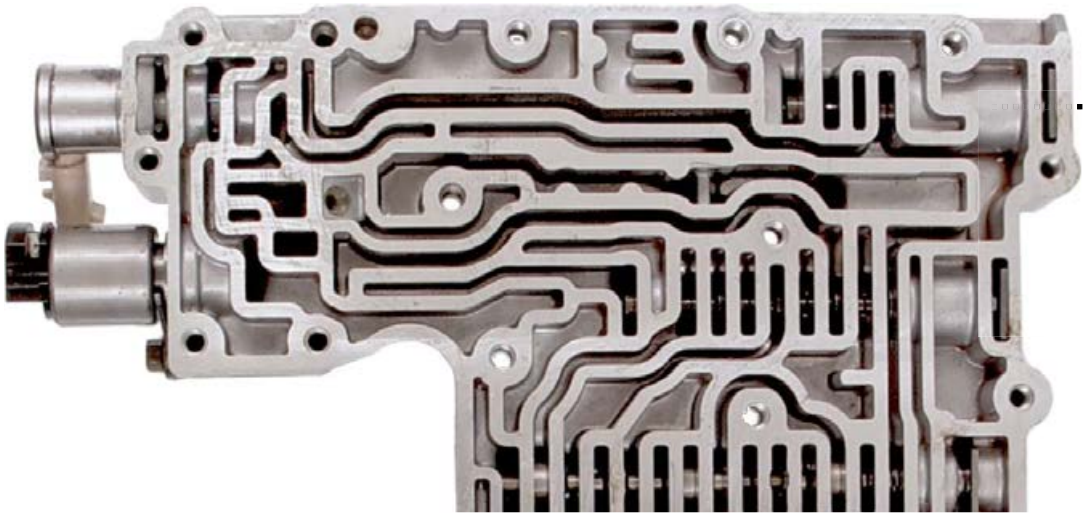
4. Select the correct **new TCC regulator valve** provided in the kit based on the measurement taken in step 3 above and discard the OE valve. ***Listen Up!*** **Installing the small valve where the large one belongs will result in no lock-up**.



5. Install the **new TCC regulator valve** selected above in step 4, reusing the original spring and retainer.

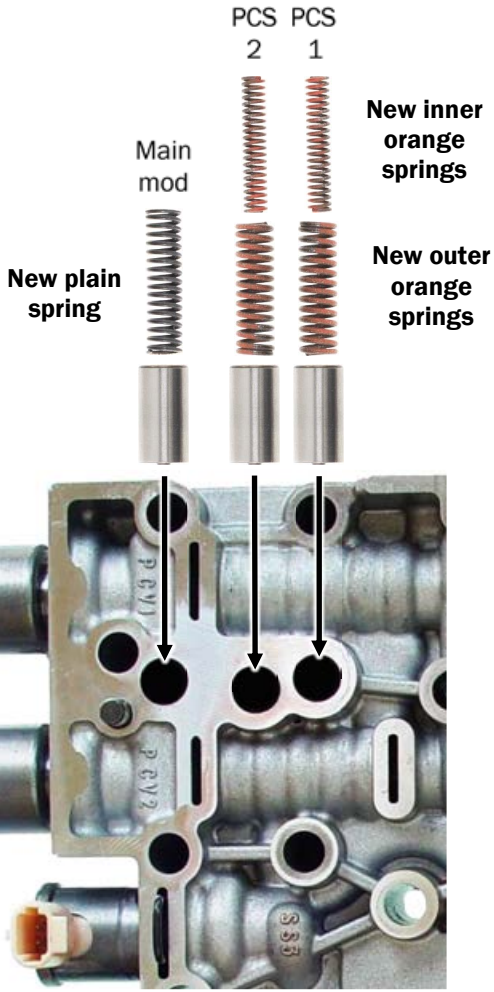


Shift valve body



Shift valve body (partial)

6. Remove and discard original control main valve and spring, keeping the retainer.



Main valve body (partial)

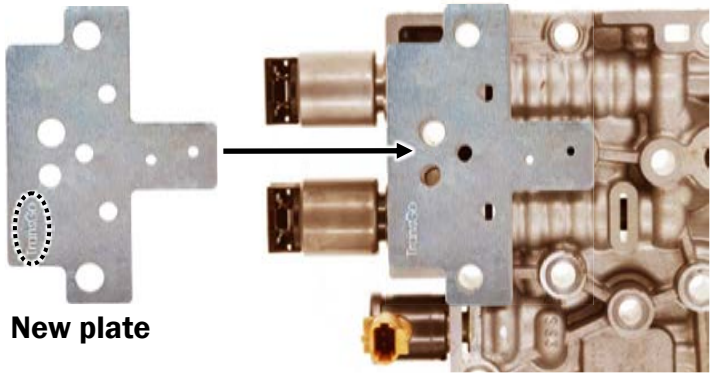
7. Select your shift feel:

Quick classy shifts: Install the **new control main valve, new white control main spring**, **both new inner and outer orange accumulator springs** for PCS1 and PCS2, and the **new plain spring** for the main mod accumulator.

Towing and hauling: Install the **new control main valve, new blue control main spring** with **only the outer orange accumulator springs** for PCS1 and PCS2, and the **new plain spring** for the main mod accumulator.

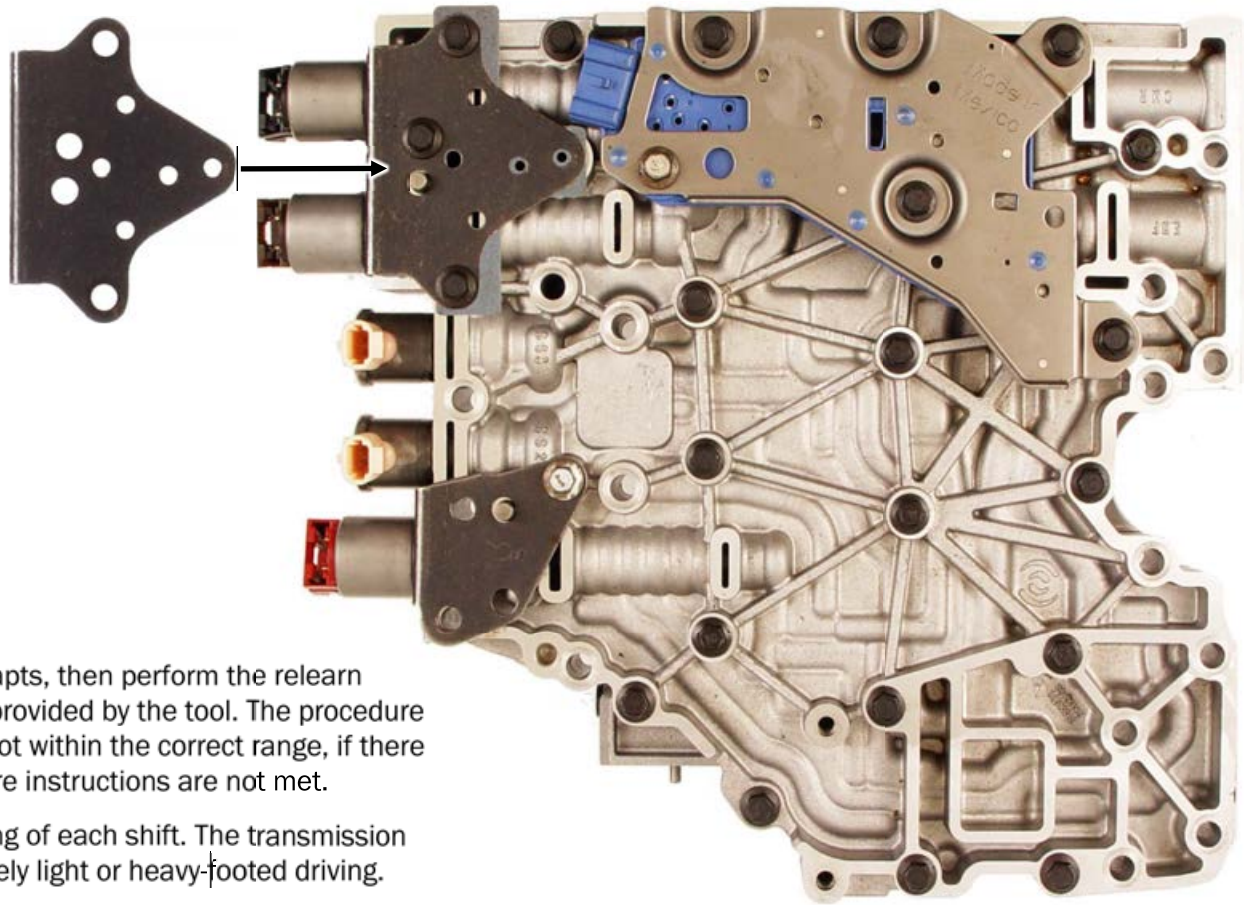
Strip and street show off: Install the **new control main valve, new blue control main spring, both new inner and outer orange accumulator springs** for PCS1 and PCS2, and the **new plain spring** for the main mod accumulator.

8. Install the **new plate provided first** with TransGo **facing up**.



New plate

9. Install the OE solenoid retainer over the **new plate** installed on step 8, using 3 short bolts torquing them to 106 lb•in.



10. Install all the manifold pressure switch assembly, other solenoid bracket and all the main valve body to shift valve body bolts torquing them to 106 lb•in.

Listen up!

Once done with the installation, always clear all DTCs and adapts, then perform the relearn procedure using a capable scan tool. Follow the instructions provided by the tool. The procedure will not be completed or will abort if the fluid temperature is not within the correct range, if there are any codes, or if any other conditions listed in the procedure instructions are not met.

Next, conduct an extensive road test to allow for the fine-tuning of each shift. The transmission adapts best under normal driving conditions, so avoid extremely light or heavy-footed driving.

If one or more gear changes do not smooth out, verify that the transmission is at normal operating temperature and that there are no engine, transmission, traction control, or anti-lock DTCs. Numerous codes can cause the computer to pause adaptation. Finally, ensure the vehicle is neither low on fuel nor has a completely full tank. Adaptation may not occur if the fuel level is not between 1/4 and 3/4 of a tank.