SK® 48RE-CV Patent # 10,724,628

46-47RE to SK 48RE valve body conversion kit

Fits 2003-2008 Diesel and V10

- **Increases torque capacity**
- **Lockup and shift firmness**
- **Reduces drainback**
- **Perfect for diesel trucks**

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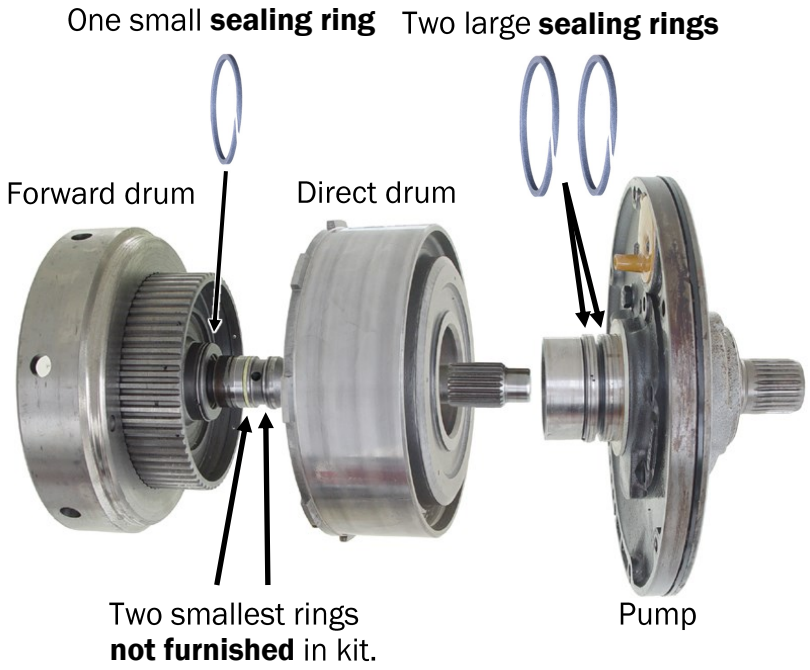
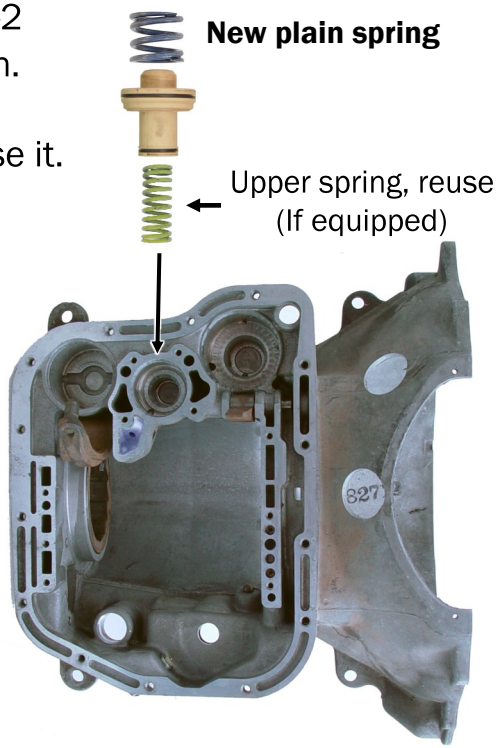
This Kit Converts a 46RE or 47RE that **has a boost tube, 4 land switch valve, and a 3/16" checkball in the lower channel casting** to a 48RE valve body with SK 48RE in it.

Note: 48RE rooster comb *(Not supplied)* is also different then 46-47RE rooster comb and **must be used** when using a converted valve body in a 48RE application.

1. If trans is apart, install **new provided seal rings.**

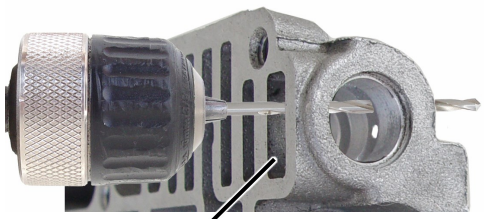


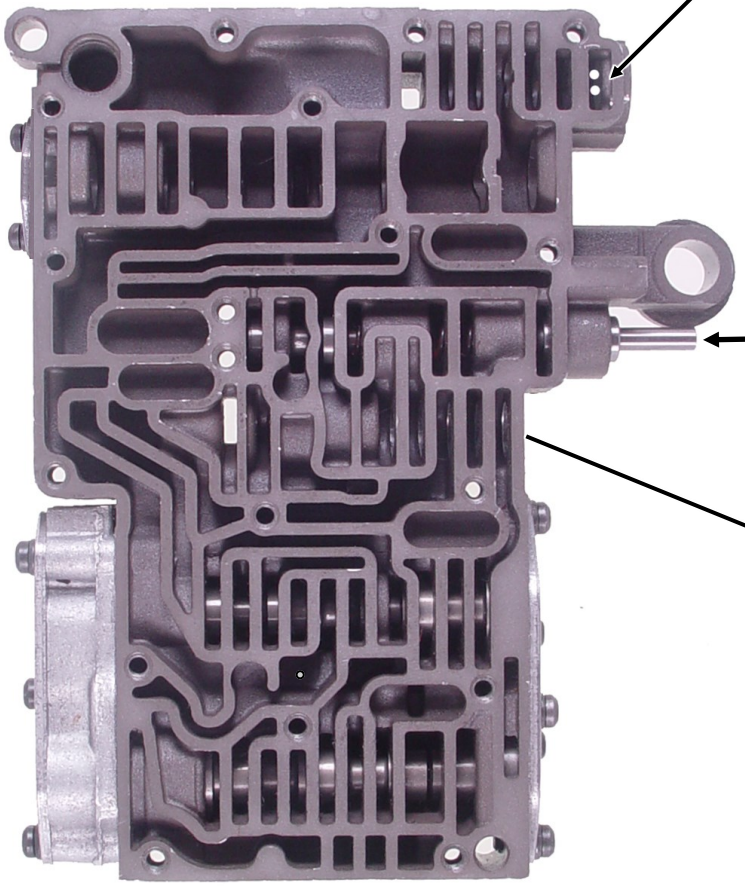
2. Install **new plain** lower 1-2 accumulator spring as shown. Some models use an upper spring, if yours had one, reuse it.



When installing multi clutch converter SKIP step 3.

3. Drill one or two 0.076” - 0.083” holes down through the bottom of the most outboard passage.
One hole = Slightly firmer lockup
Two holes = Much firmer lockup

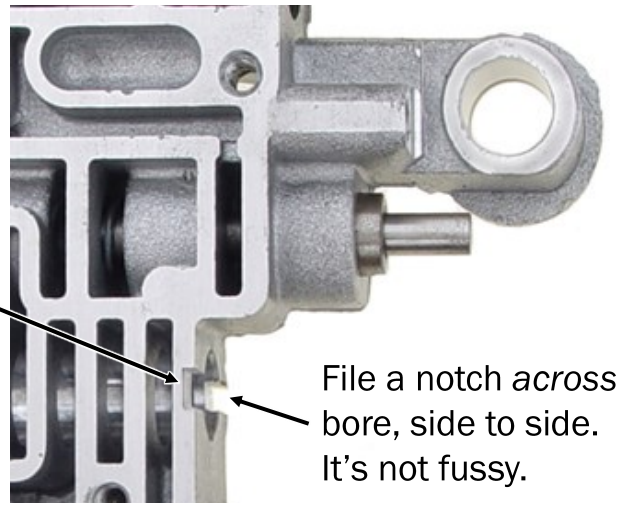




4. For NORMAL USE skip this step.
If later throttle on up-shifts are desired, install **new green TV spring**.
No need to grind TV valve.

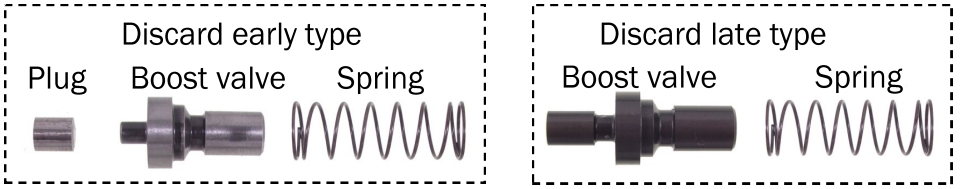
*Got a worn TV valve bore? Order part # **TF-TV***
A redesigned TV valve that’s a “drop-in” fix.
No special tools required!

5. Turn the valve body over. Using the edge of a large file, file a notch about *halfway* through the thickness of this partition.

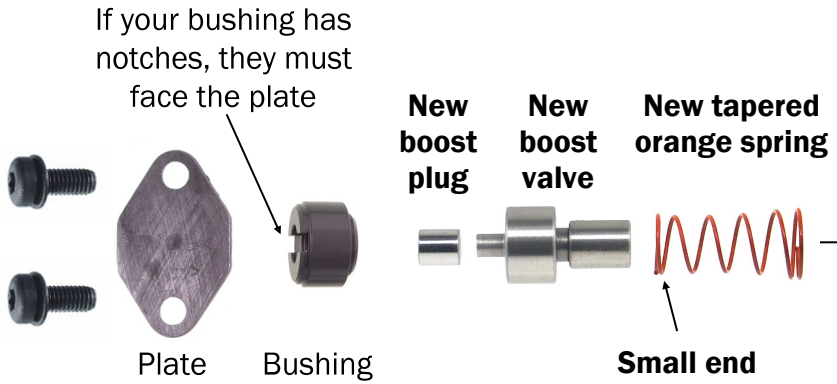


Skip this page if the valve body has been modified with oversized boost valve.

6. Remove and discard the original plug, boost valve and spring. **Late type note:** the plug is part of the boost valve.



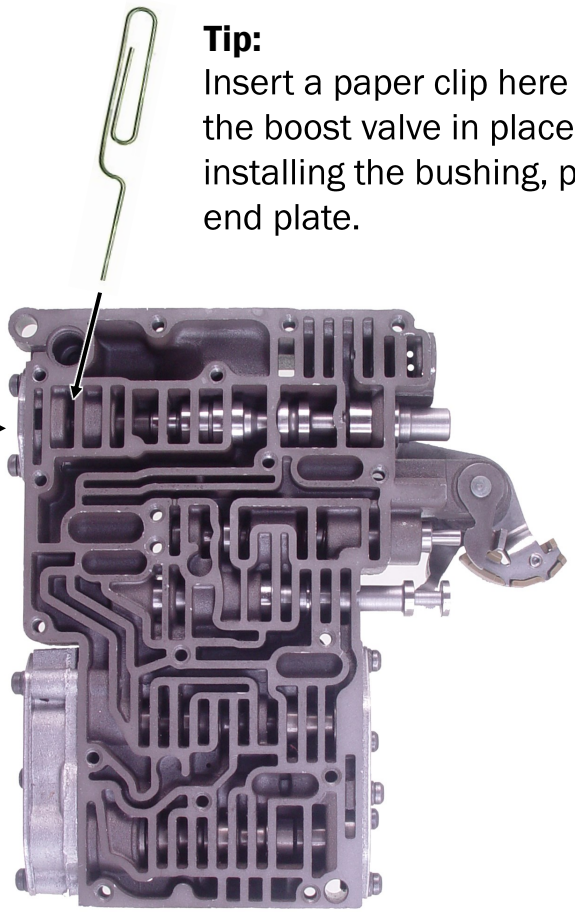
7. Install the **small end** of the **new tapered orange** spring onto the **new boost valve.** Use a paper clip to hold the boost valve in place after inserting it into the valve body.



Heads Up. There are a few early valve bodies out there with a 0.200” diameter boost plug. If you run across one of these, just find another bushing that the **new** 0.264” plug fits into and use it.

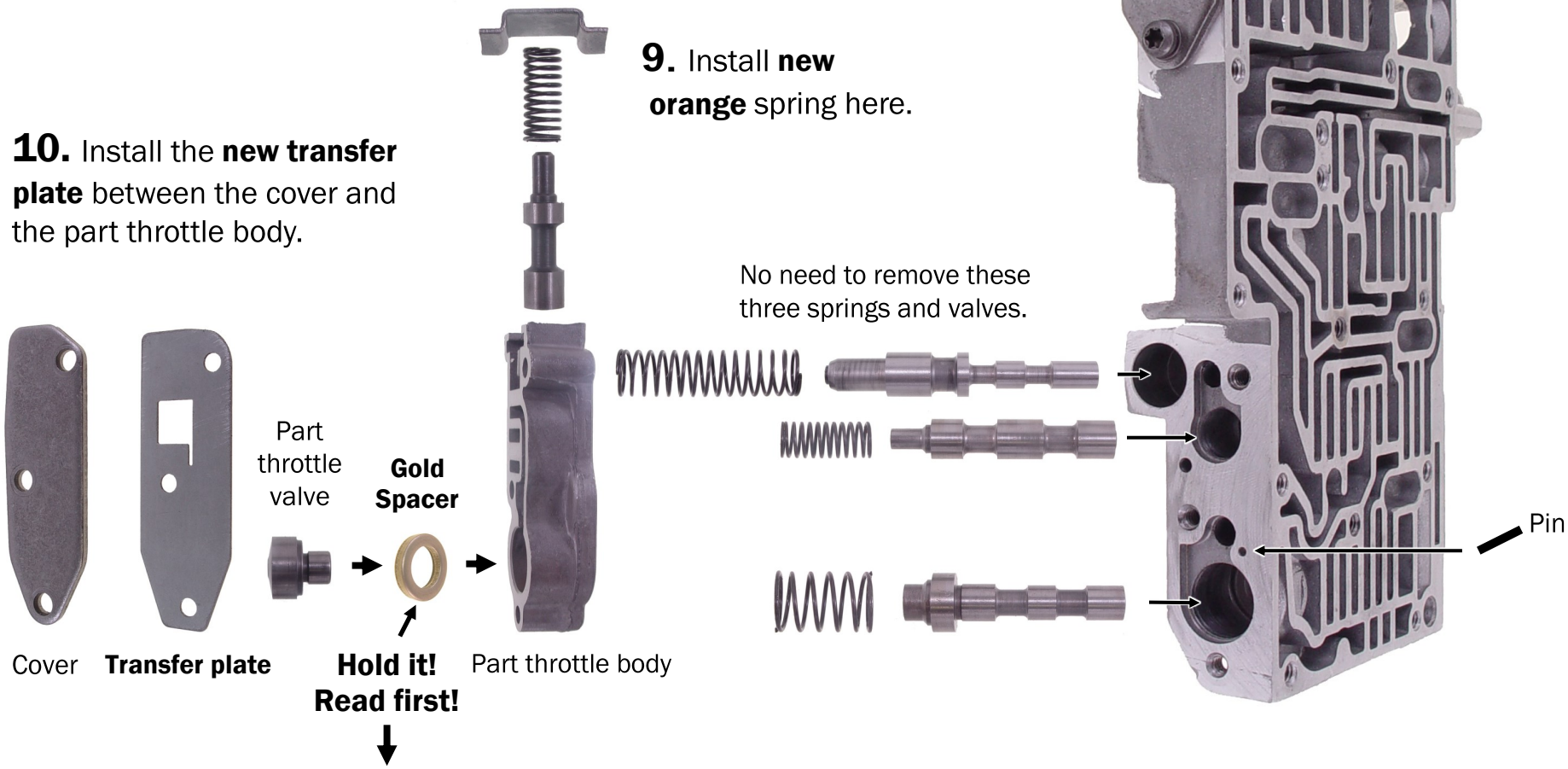
8. Insert the **new boost plug** into original bushing, then insert the bushing into the valve body. If the bushing has notches on one side, the notches on the bushing should face the plate. Install the plate and bolts.

Tip:
Insert a paper clip here to hold the boost valve in place while installing the bushing, plug and end plate.



9. Install **new orange** spring here.

10. Install the **new transfer plate** between the cover and the part throttle body.

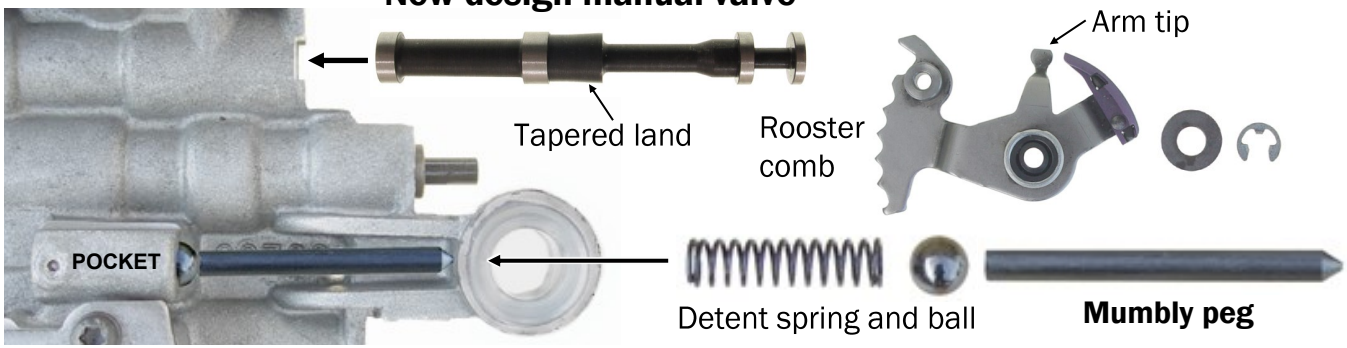


11. For models **without a TV cable (uses a throttle motor) AND equipped with a engine power chip or programmer:**
Install the gold spacer into the part throttle body. Then install the part throttle valve. This will reduce the possibility of a **light throttle** 2-3-2-3-2-3 shuttle shift condition. This condition has not been found on TV cable equipped models.

12. Use a pick and a small hammer to taper the top of the hole to help start the pin.
Install pin furnished into this hole, using needle nose pliers and small hammer. File flush if needed. The part throttle body must sit flush against the valve body.

13. Insert the spring and ball into valve body pocket. Use the provide **Mumbly peg** to hold the ball in place. Insert the **new manual valve** and reassemble the rooster comb. Remove Mumbly peg.

New design manual valve

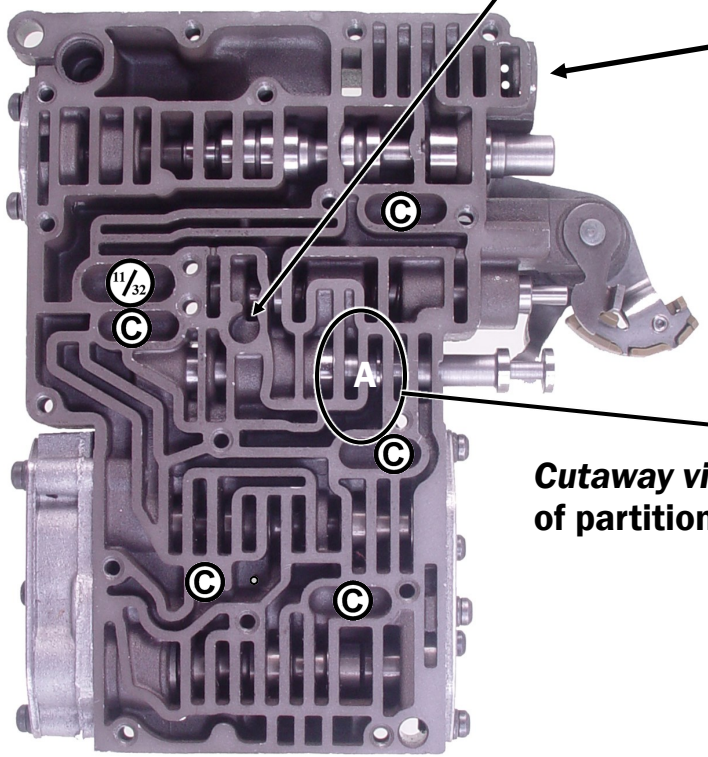


*Detent Ball sloppy in the pocket? Order part # **TF-Detent***
"Drop-In" design keeps manual valve indexed correctly!

14. Install the **cherry bomb** here.
Careful to align stem **up** through hole in the plate when putting the valve body together.

Six checkballs
One cherry bomb

Ⓒ Five 1/4" (0.250")
11/32 One 11/32" (0.343")

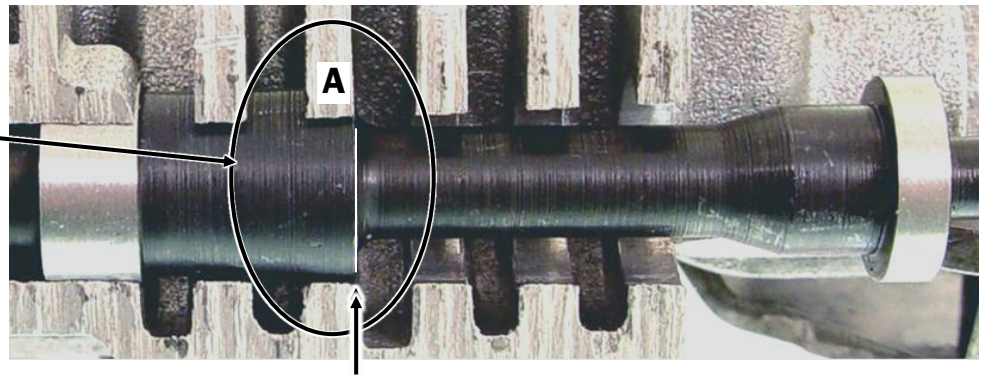


***Cutaway view* of partition "A"**

15. Grind one notch on slight angle to about the middle of this land. Reuse the original spring.

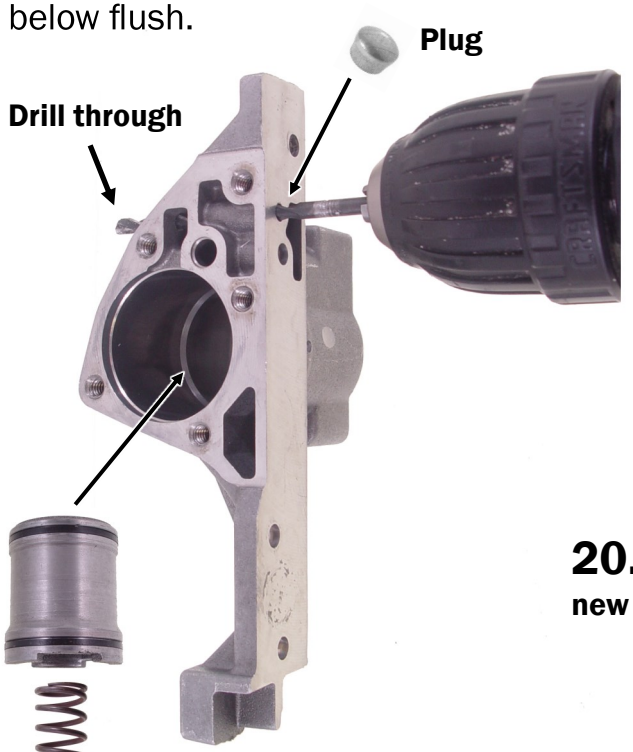
16. Manual Valve position

With valve all the way inboard (park position), the **right edge** of the tapered land, must be flush with **right edge** of partition "A" (0.030" from flush either way is ok). To adjust: bend arm tip with pliers.



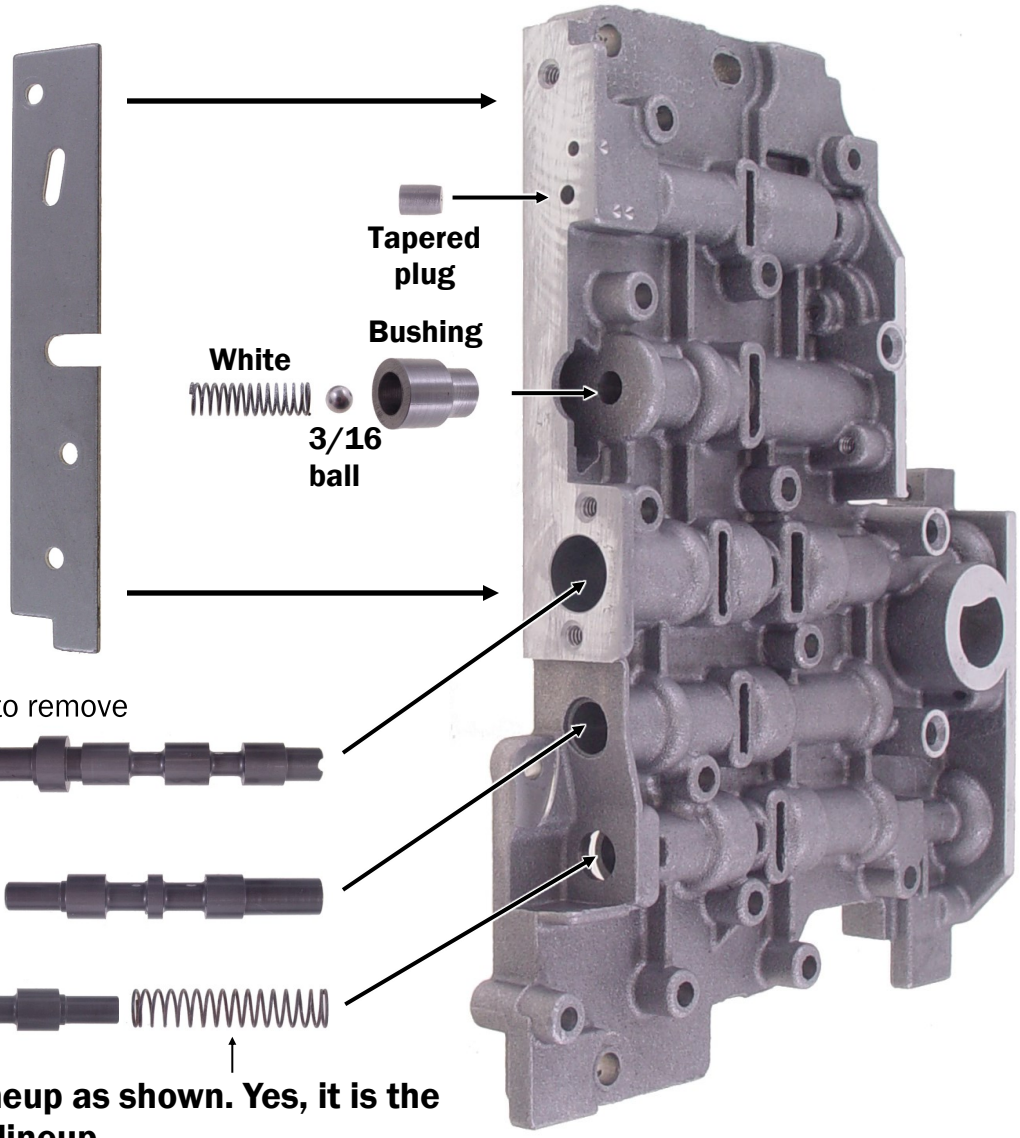
Tapered land **flush** with right edge of partition "A"

17. Place the provide 0.156” drill into the hole shown and drill all the way through the accumulator housing. With a small punch, drive the **plug** into the hole just below flush.



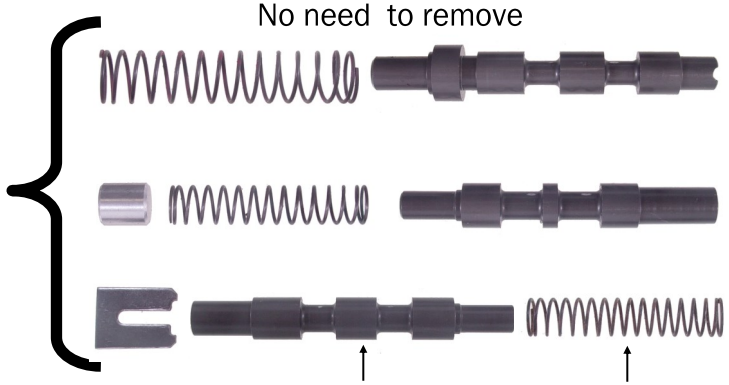
18. With small punch drive the **tapered plug** just below flush into the hole.

19. Install the new **limit bushing, 3/16” ball** and **white spring** as shown.



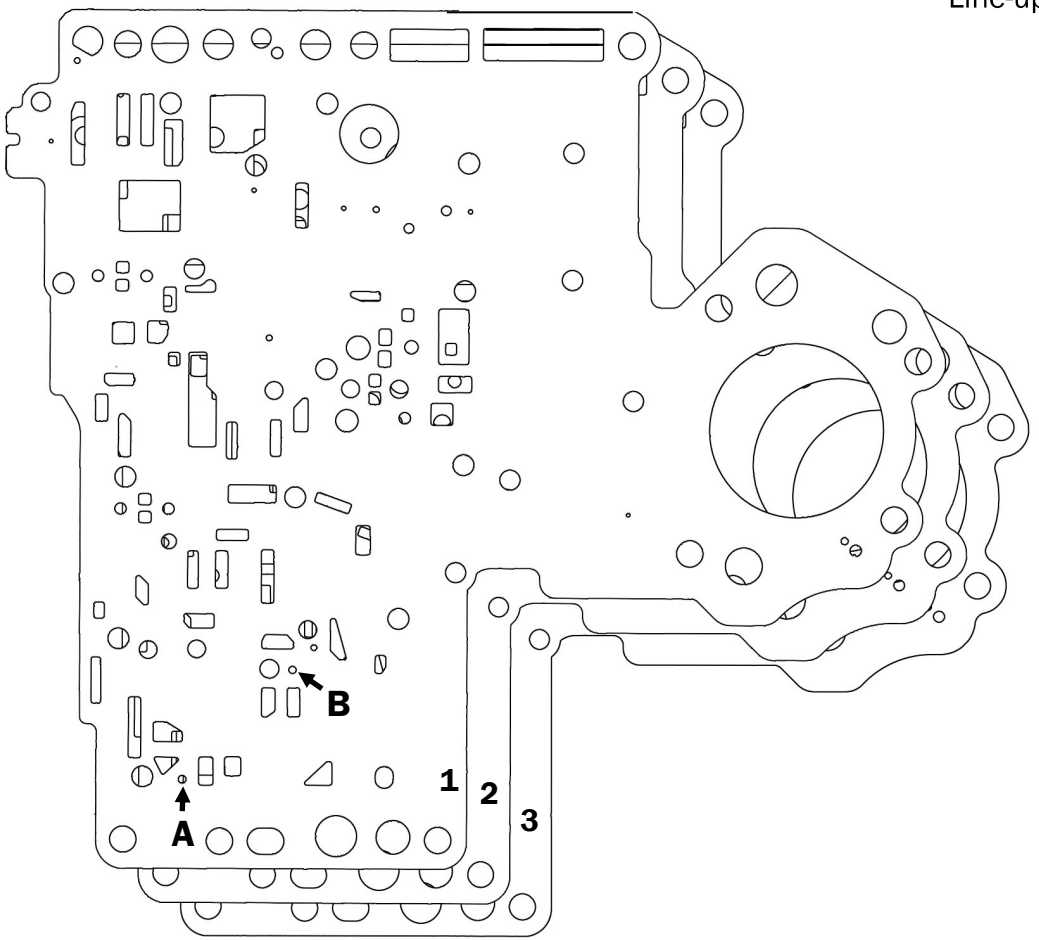
20. Install the **new transfer plate**

21. Discard the original spring and install the **three new red springs**.

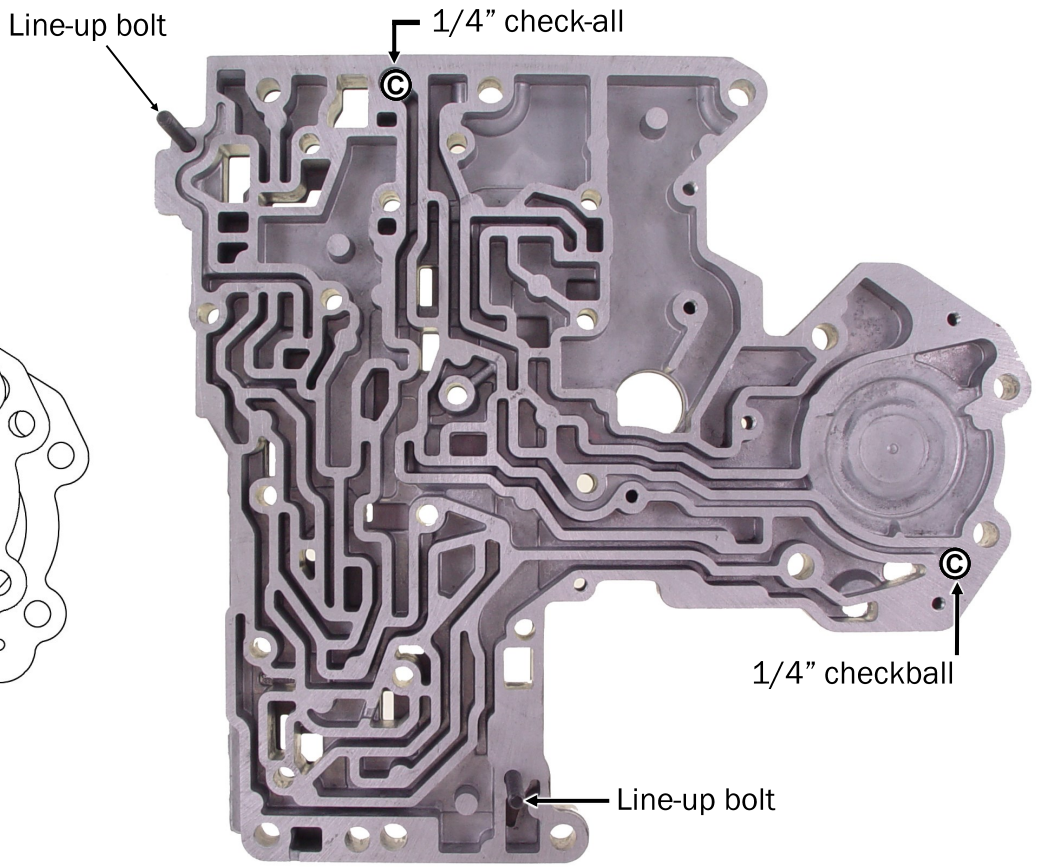


Install this valve lineup as shown. Yes, it is the opposite of the OE lineup.

22. Enlarge holes A and B in **all three plates** with 0.106” drill furnished.



23. Install two 1/4” checkballs

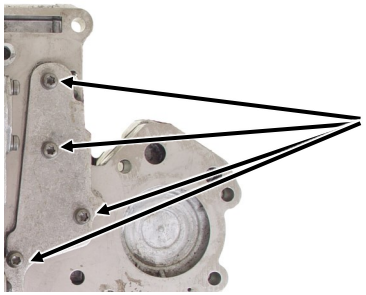


24. Plate stack-up:
Use lineup bolts in holes shown. Only stack plates in the order listed below. (Plates are number stamped as illustrated.)

Plate # 3 Thin plate with no slot: first against the channel casting.

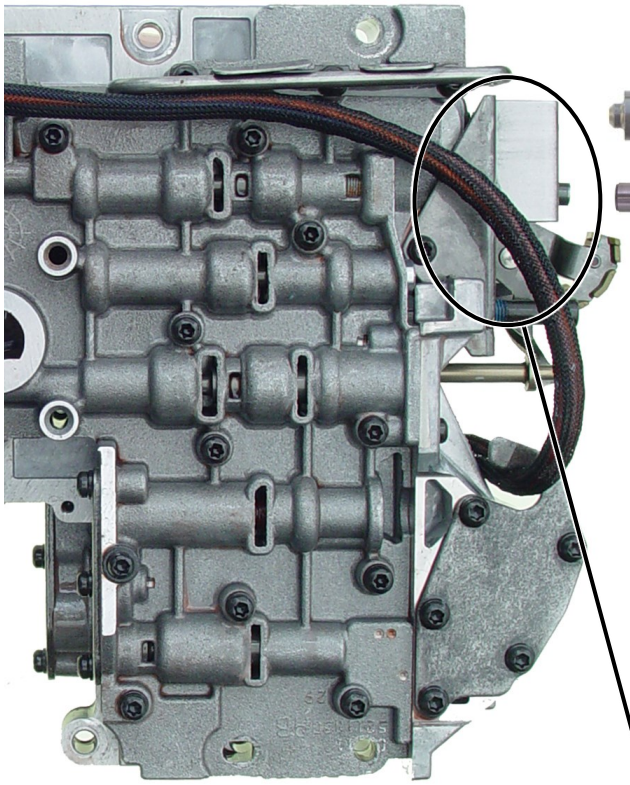
Plate # 2 Thin plate with slot: middle plate.

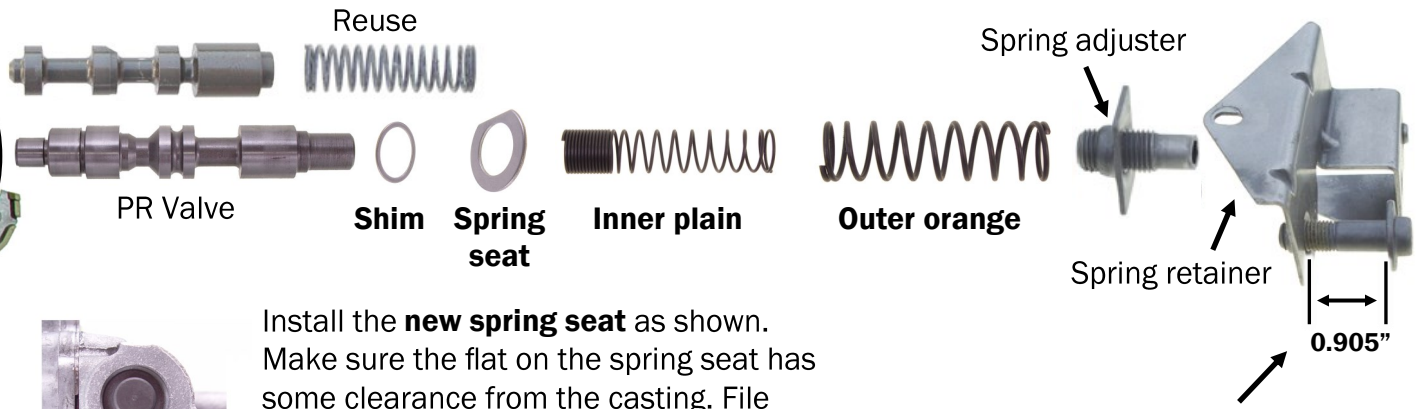
Plate # 1 Thick plate: last plate fits against the main valve body.

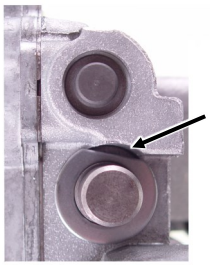


25. Use the **four new longer bolts and washers** supplied here for the hold down plate. Make sure that **all three main plates** are **lined up** using plate line-up bolts shown, **before** tightening any of the bolts.

26. Install **new shim** and **spring seat** on the PR valve before installing the **new inner and outer PR springs**. Reinstall the spring adjuster and retainer.



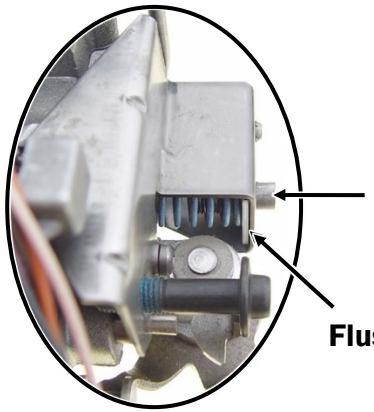




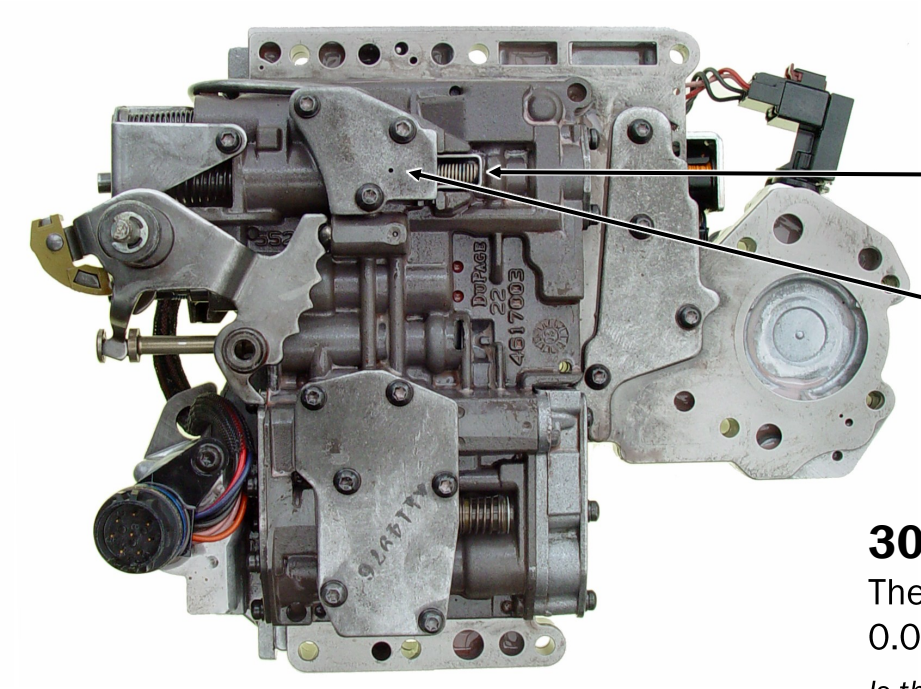
Install the **new spring seat** as shown. Make sure the flat on the spring seat has some clearance from the casting. File the casting if necessary to give it a little room to be able to rotate slightly. Do not allow it to bind between the PR valve and the casting! Recheck this **just before** installing the valve body in the case.

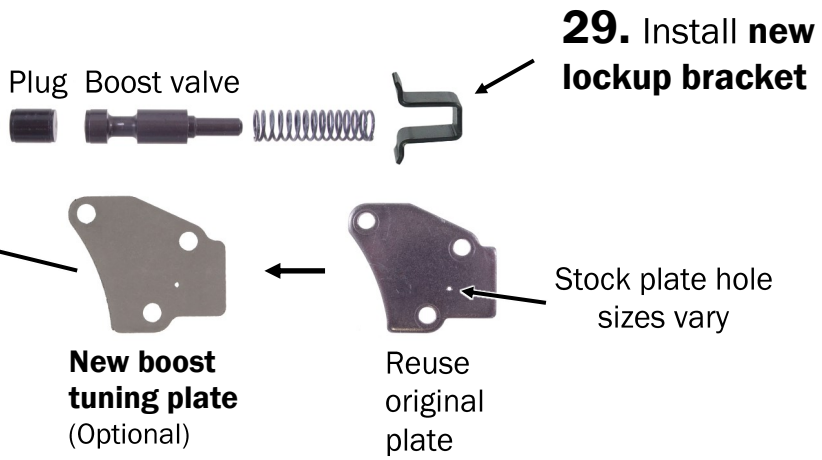
27. TV back stop adjustment:
From the plate to inside of bolt shoulder adjust it to 0.905”

Checking fluid level:
While the new manual valve provides oil to the converter in park, **do** check fluid level in **neutral** for accuracy as the converter is charged **more** in neutral.



28. Pressure regulator spring adjustment
With a 3/16” Allen wrench, turn the adjusting bolt **clockwise** until the spring adjuster is **just flush** against the inside edge of spring retainer.





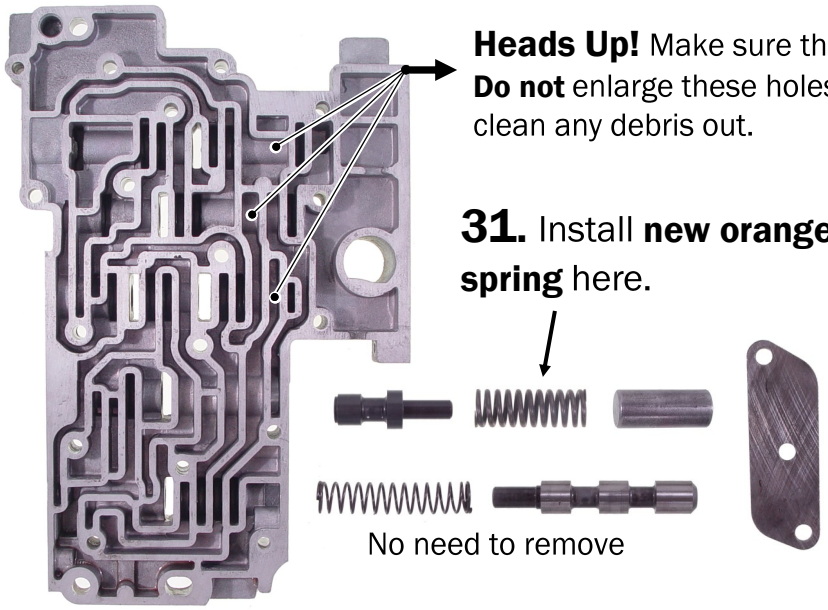
30. Optional new boost tuning plate

The factory 48RE boost hole size in the original plate ranged from 0.052” to 0.073” and it is plenty. Bigger hole = more pressure.

Is the hole already drilled too BIG?
(Leads to rough 3-4 or TCC apply)

The new tuning plate lets you start over. Drill to desired size from the range above and install it **under** the original plate, being sure to line up the hole in **both** plates as you tighten the retaining bolts.

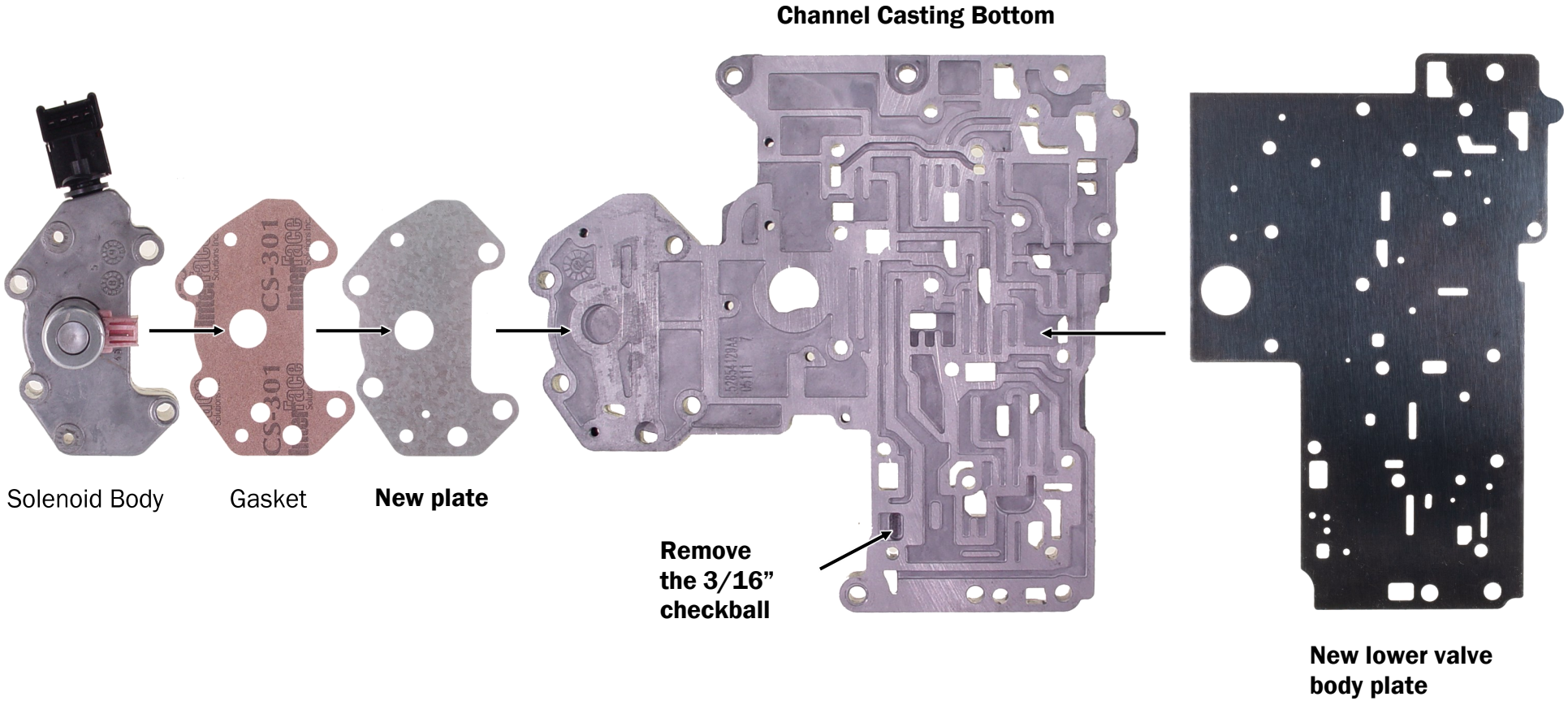
Lower Body



Heads Up! Make sure these small holes are clean or **no 4th and/or no TCC** will be the result. **Do not** enlarge these holes! A 0.020” paper staple fits even in the smaller of the 3 holes and will clean any debris out.

32. Install the **new plate** against channel casting then gasket and solenoid body.

33. Discard the 3/16” checkball, and Install the **new lower valve body plate** against the lower channel casting



Have a great day!

Mr. Shift