

TFOD-Jr Shift Kit[®]

Prevents/Corrects/Reduces
Drain-back--Converter Shudder--Soft shifts
Leak out vent or side seal--OD planet burn-up
Power loss in reverse hot



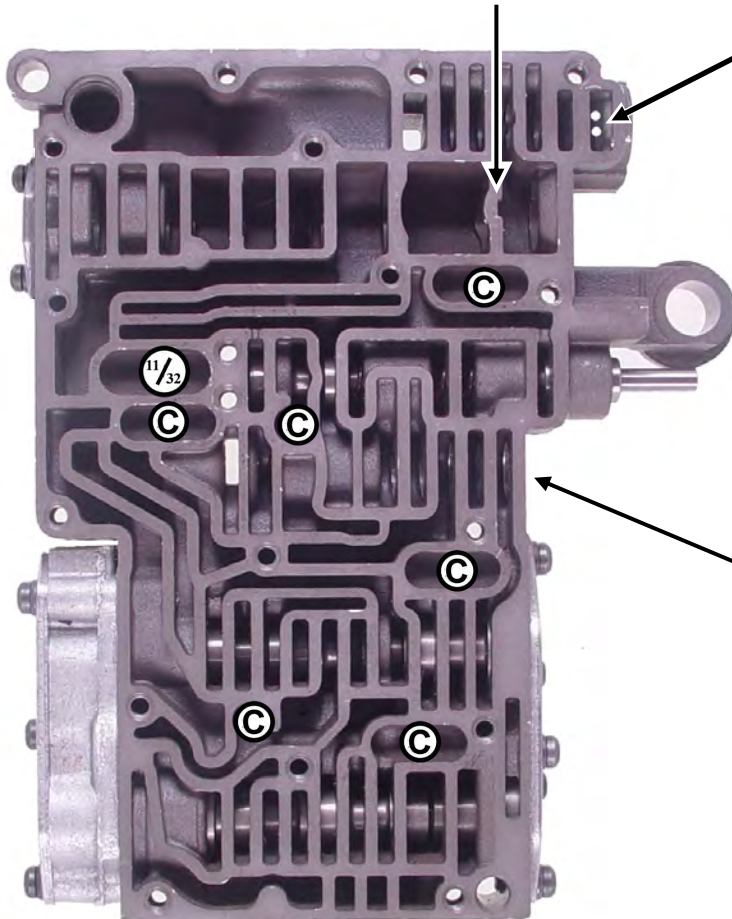
Non lockup Models **SKIP** step one.

1. Drill one or two .076 to .096 holes down through the bottom of the most outboard passage.
One Hole = Slightly firmer lockup
Two Holes = Much firmer Lockup

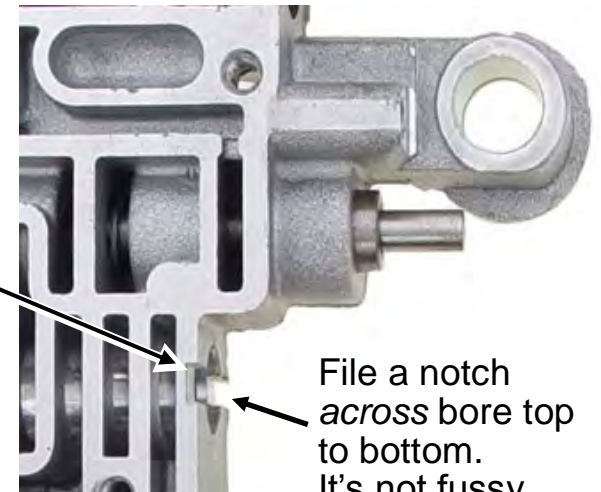
No lube cross drilling required. If VB has cross drilled hole here from previous repair plug it.



Updated Product- Watch for changes!
Adds cross leak protection!

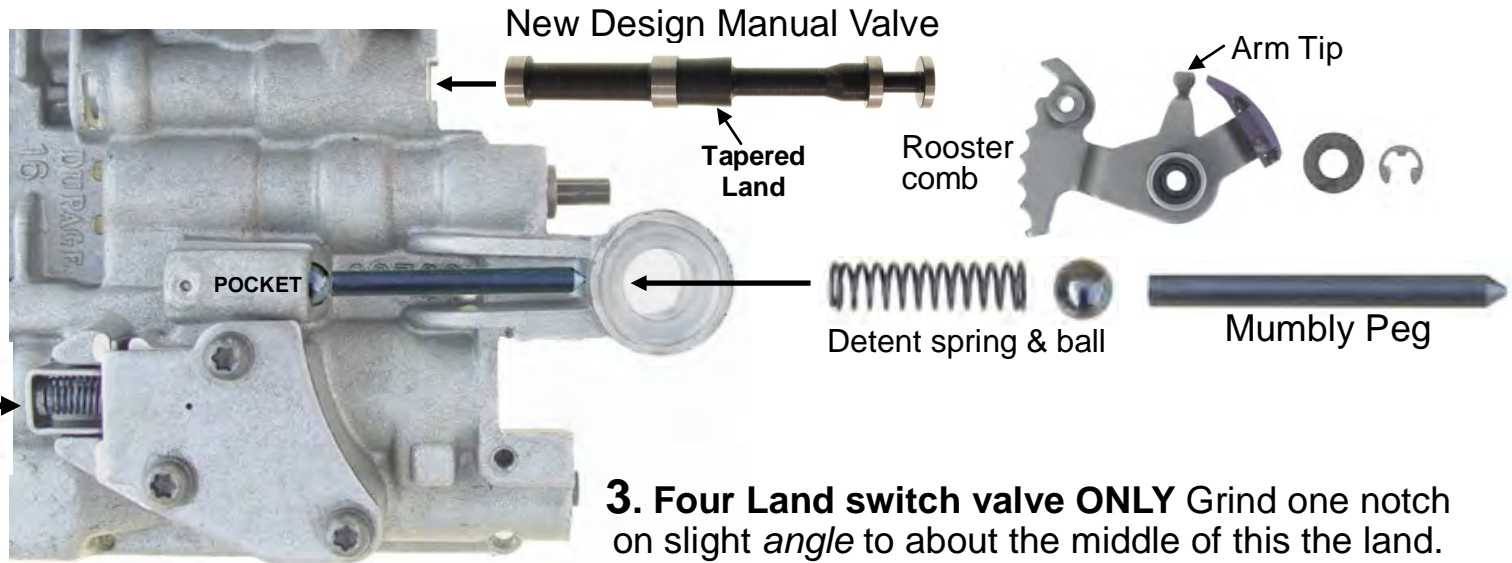


2. Turn the valve body over. Using the edge of a large file, file a notch about *halfway* thru the thickness of this partition.

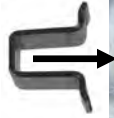


File a notch
across bore top
to bottom.
It's not fussy.

1. Insert spring and ball into VB pocket using the Mumbly Peg to hold the ball in place. Insert new Manual Valve and reassemble the rooster comb. Remove peg.



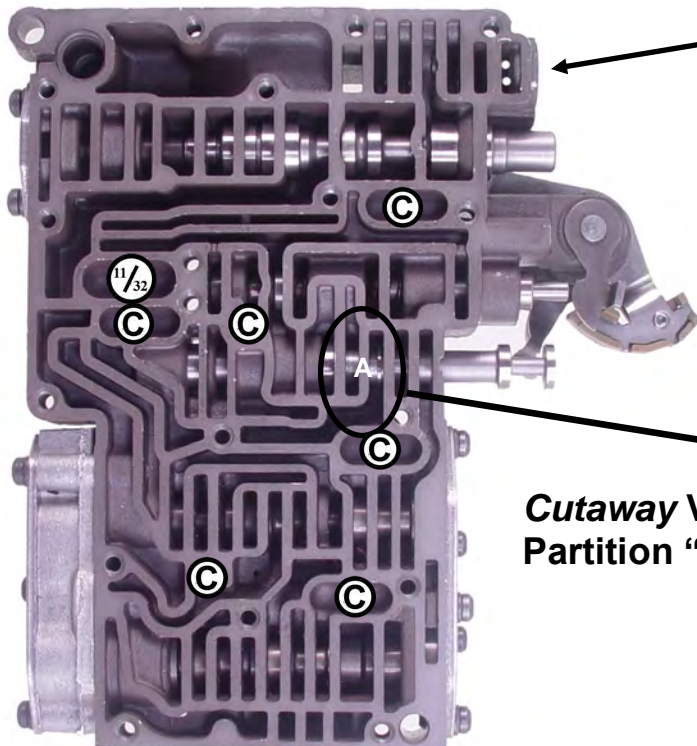
2. Replace the weak retainer located here with **New Stronger** one provided.



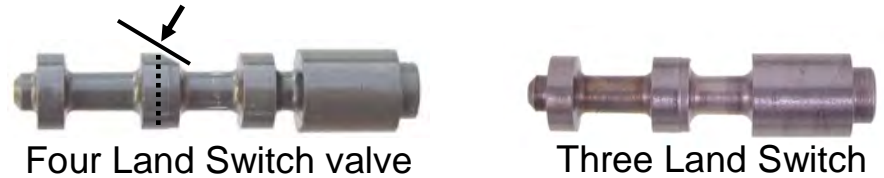
3. Four Land switch valve ONLY Grind one notch on slight *angle* to about the middle of this the land. Don't Grind three land switch valve.

Seven Check-balls

© Six 1/4" (.250)
© One 11/32" (.343)



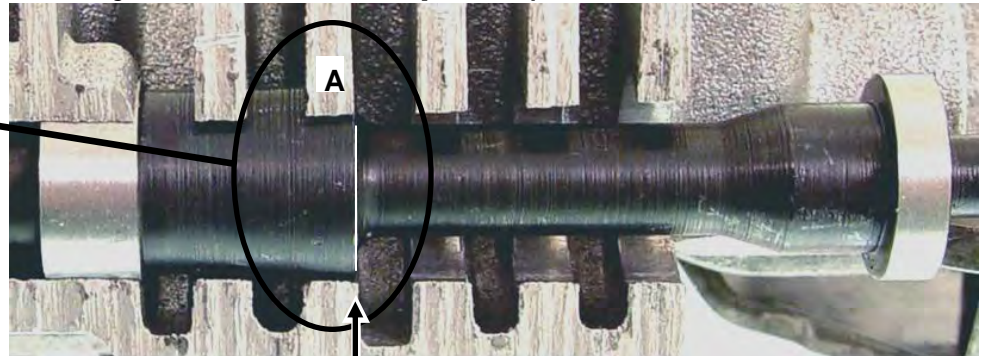
Cutaway View Partition "A"



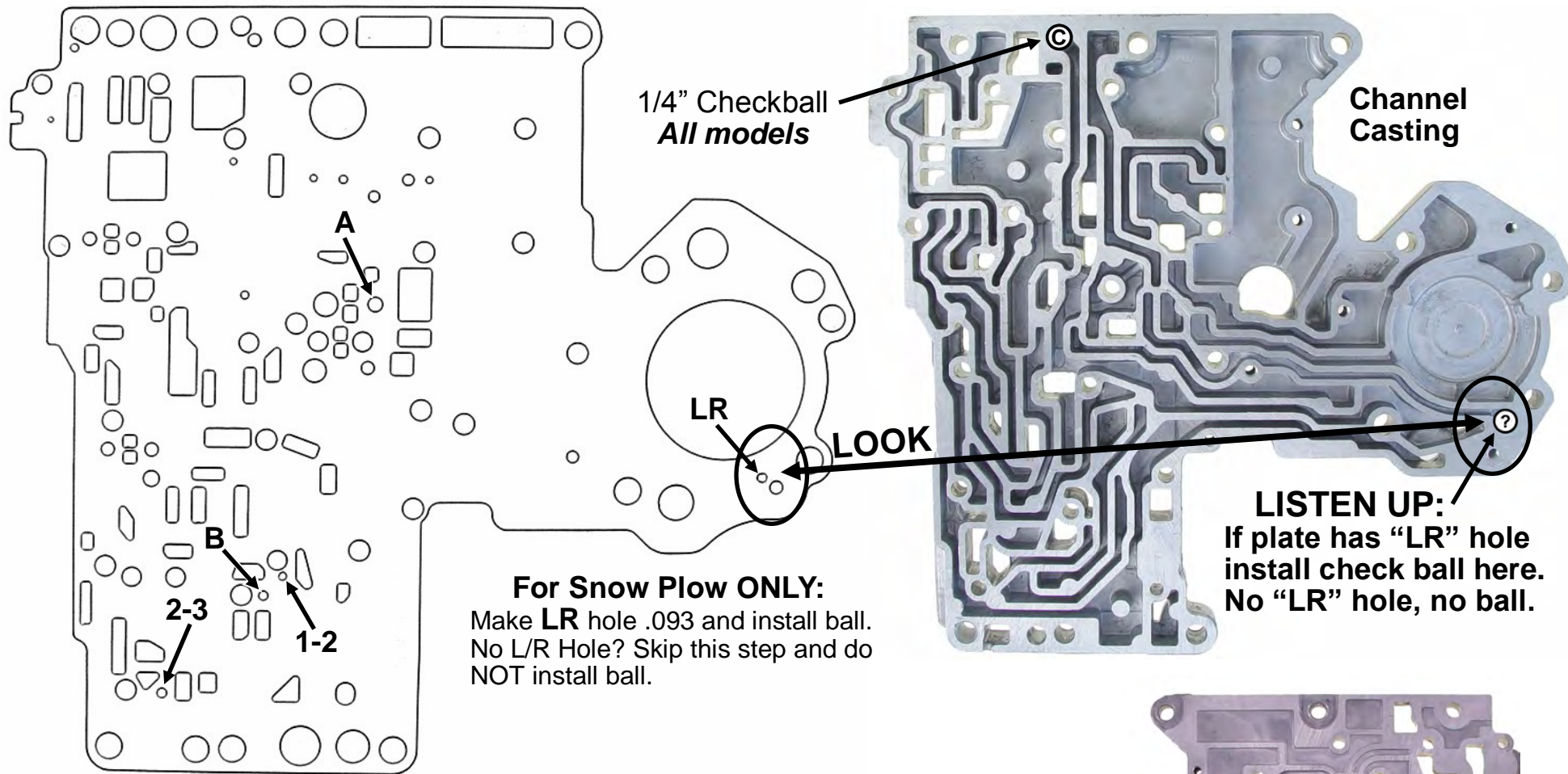
4. Manual Valve position.

With valve all the way inboard (Park position) the *right edge* of the Tapered land must be flush with *right edge* of partition "A". (.030" from flush either way is ok.)

To Adjust: Bend **Arm tip** with pliers.



Tapered Land flush with right edge of Partition "A"



For Snow Plow ONLY:
 Make LR hole .093 and install ball.
 No L/R Hole? Skip this step and do NOT install ball.

LISTEN UP:
 If plate has "LR" hole
 install check ball here.
 No "LR" hole, no ball.

Separator Plate

A & B Drill .110, OK if already larger.

Hole 1-2

V6: Drill .073 to .076

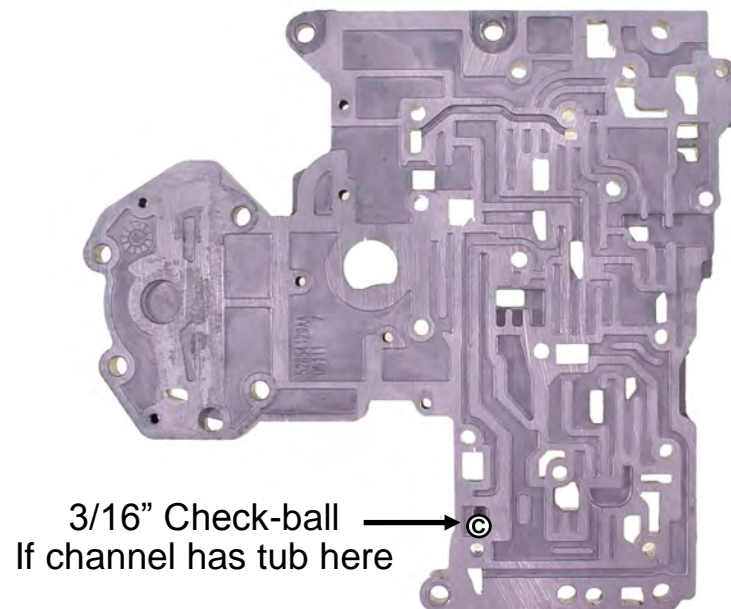
V8: Drill .076 to .086

V8 : Heavy loads Drill .093 to .096.

Hole 2-3

Light duty vehicles: Drill .082 to .086

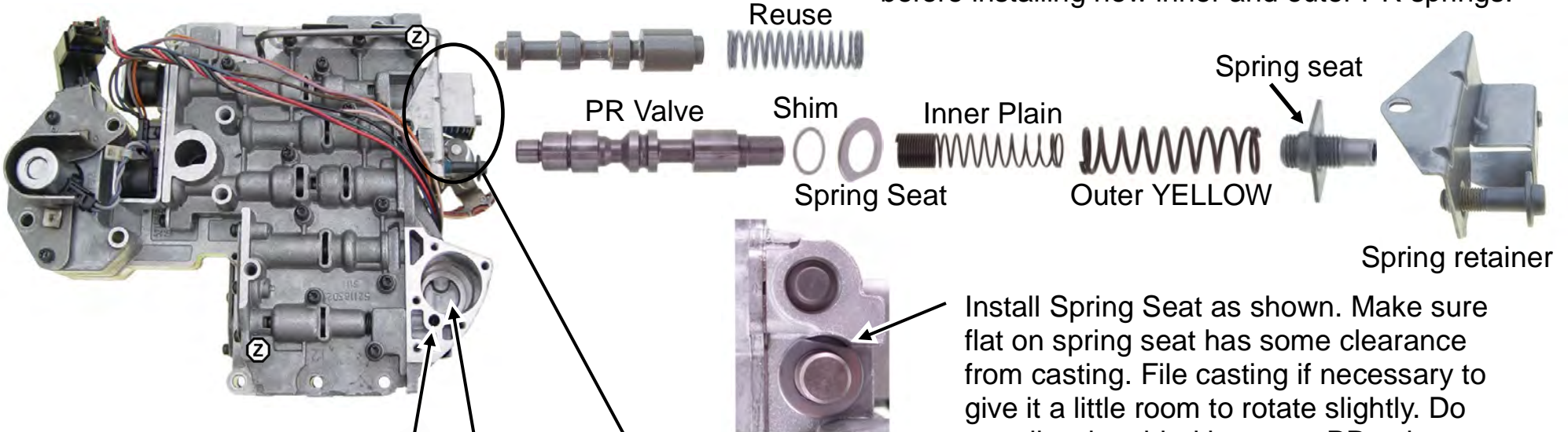
Heavy loads: Drill .093 to .096.



Assemble Valve Body

Start "Z" bolts first.

1. Install New shim and spring seat on PR valve before installing new inner and outer PR springs.



4. Install **Tapered Bushing** into hole. With long VB bolt, drive bushing into hole about 1" down. It's not fussy. Reinstall cover.

OD accum piston

3. Remove & discard the original OD Accum spring. Install new **YELLOW** spring furnished.

YELLOW

Install Spring Seat as shown. Make sure flat on spring seat has some clearance from casting. File casting if necessary to give it a little room to rotate slightly. Do not allow it to bind between PR valve and casting!

2. PR Adjustment

With 3/16" allen wrench, turn adjusting screw *clockwise* until spring seat is just *flush* against the inside edge of spring retainer.

Flush Here

Fluid level checking: 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.

Optional: Gas Only---Not for Diesel

Increase lube flow to OD planet. Decrease planet failure on hot trips with heavy loads.

LISTEN UP: Shaft is hard and *requires a carbide drill*. If you do not have a 3/16" carbide drill skip step 1 thru 3.

Step 2 Grind thru surface hardening about 1/16" deep and 3/8" wide in four spots above and below hole "C" and "D". [Even if shaft doesn't have hole "D".] Then drill four .187 to .200 holes into shaft.

Step 1 Enlarge Hole A .187 to .200.

Wrap shop rag here to hold in vise for drilling.

Best results always use carbide drill

Grind surface, then drill hole

It's OK, some models don't have hole D just grind & drill as shown.



Short spline

Step 3 Dunk shaft in solvent and drain with short spline end downward to exit any chips. Blow thru all the holes to clear out any chips.

Grind surface, then drill hole

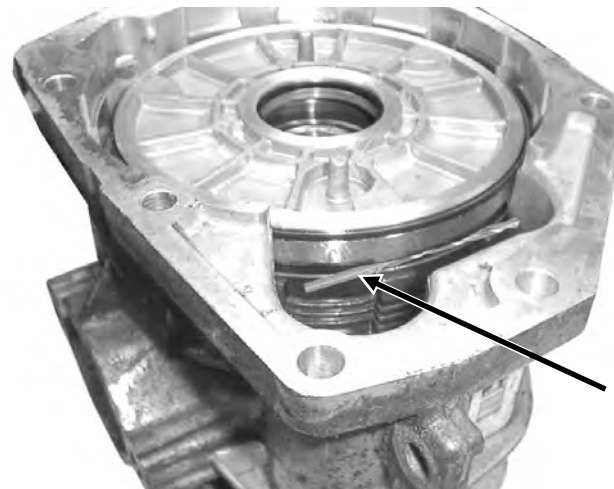
Long spline

Additional Repair Data

Shims available.

- .109 = 4431730
- .124 = 4431585
- .139 = 4431731
- .154 = 4431586
- .169 = 4431732
- .184 = 4431587
- .199 = 4431733
- .214 = 4431588
- .229 = 4431734
- .244 = 4431590

To reduce OD planetary failure use synthetic ATF



Adjusting OD Clutch Clearance: Assemble OD housing, except do not install the top round snap ring. Insert drill in gap where shown between piston and 4th apply plate. Desired clearance. 0.095 to .110.

Check clearance with drill bit .095 to .110.

Additional information from TransGo Tech Department.

Connector in the case

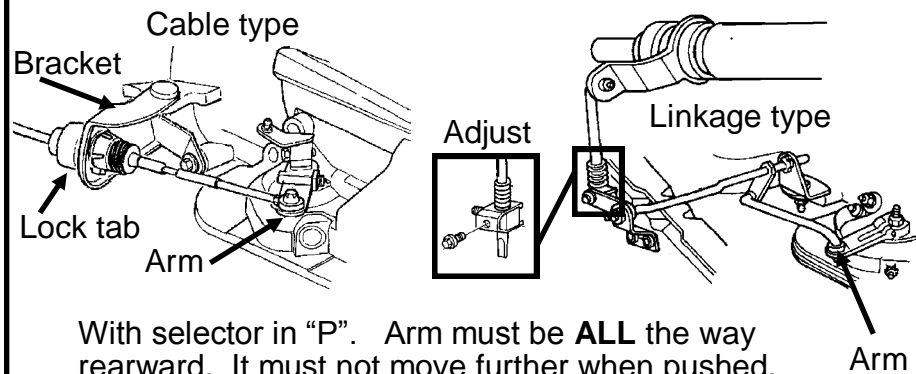


1. TCC, Gov,& OD Sol common 12V+
2. 5V+ Transducer (gov pressure sender)
3. Ground, transducer & thermistor
4. Gov pressure signal to TCM
5. Variable ground to Gov Solenoid
6. Ground from TCM for OD Solenoid
7. Ground from TCM for TCC Solenoid
8. Temp signal (thermistor) to TCM

Prevent forward clutch burnup & reduce *drainback*

ALWAYS check/adjust shift linkage.

Here's How: Place the selector in reverse. Then gently move selector to "P". Now, check Shifter Arm on side of trans by trying to move it rearward. If it moves *rearward*, adjust the linkage.



With selector in "P". Arm must be **ALL** the way rearward. It must not move further when pushed. Cable type: You may find it necessary to bend the bracket slightly to get a perfect adjustment.

Good News!

Instant FIX for wrong gear starts

Saves big \$\$\$\$. Takes 5 minutes.

Governor Solenoid Repair Kit

2nd Design TF-GOV-SOL

Hello Mechanic: This kit fixes complaint way better than new. You will just love it. Gil



Fits: 42RE to 48RE

All you need to **FIX** six solenoids.

