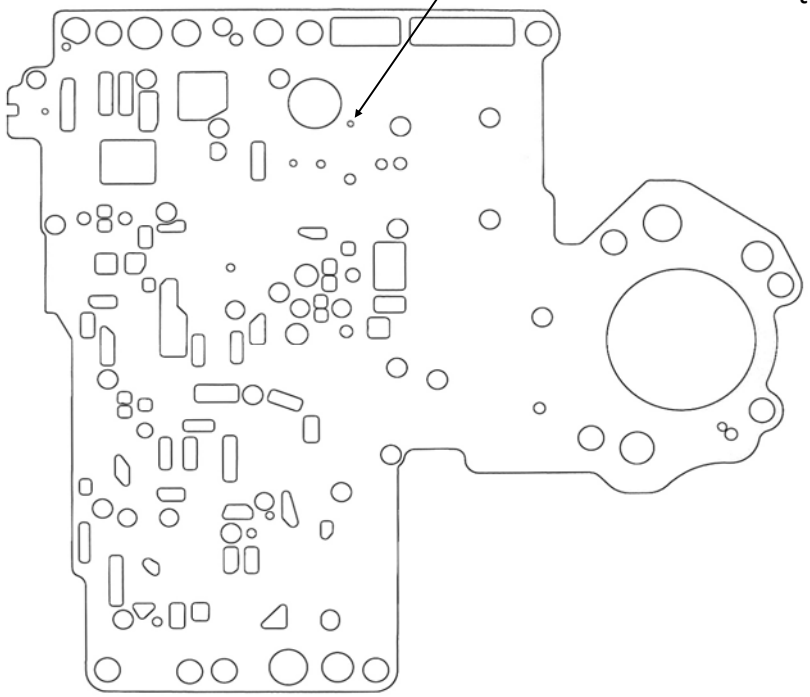
48RE-HD2 Reprogramming Kit

Fits All 48RE's Except hybrid Converted VB's
Features Faster & More Line Rise
More Line Boost in 4th & Lockup
Increased Flow to Direct Clutch & Band Release
Shifts that are Clean & Hold the Power.

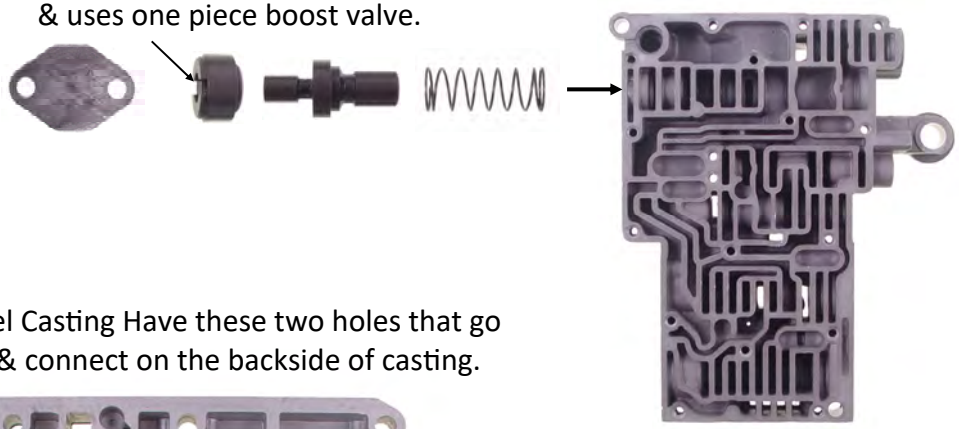
48-RE Application
8th vin digit = C Should be 48RE Trans
8th vin digit = 6 Should be 47RE Trans

Just a little caution on swapping parts around.
48-RE Channel casting must use a 48-RE Separator Plate & **only** be used in a truck that came with a 48RE.
This Kit only fits OE 48-RE VB"s.

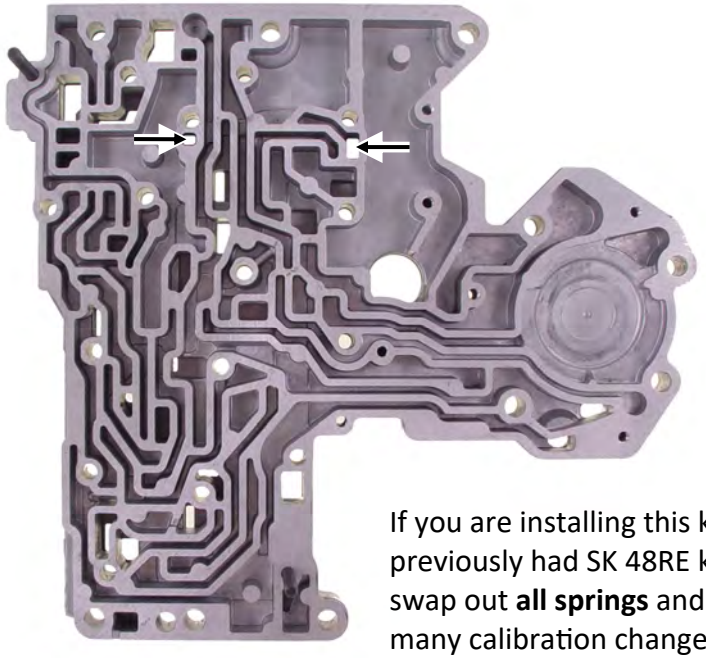
48RE Separator plates have small balance hole here.



48RE's Have Notched bushing & uses one piece boost valve.

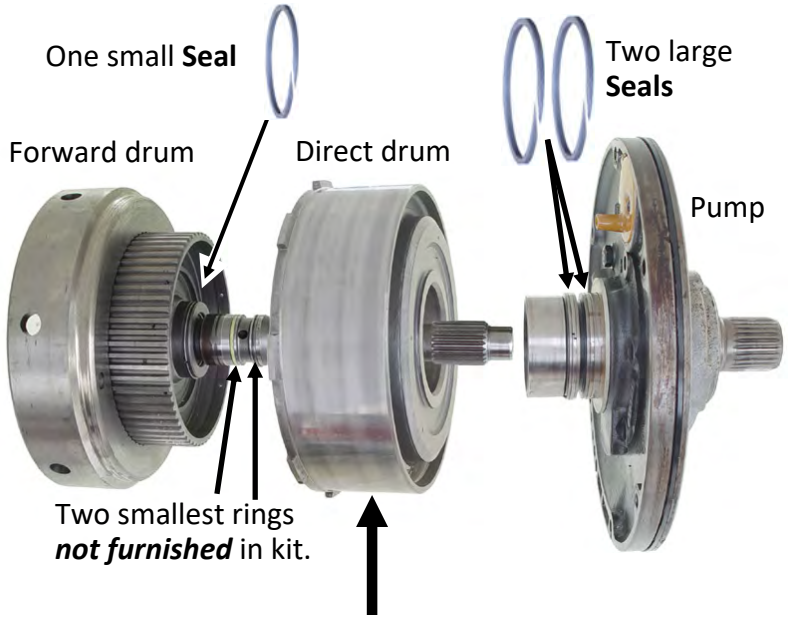


48RE Channel Casting Have these two holes that go thru casting & connect on the backside of casting.



If you are installing this kit into a VB that has previously had SK 48RE kit installed, be sure to swap out **all springs** and **plates** as there are many calibration changes.

Step 1. If trans is apart, install Seal Rings.



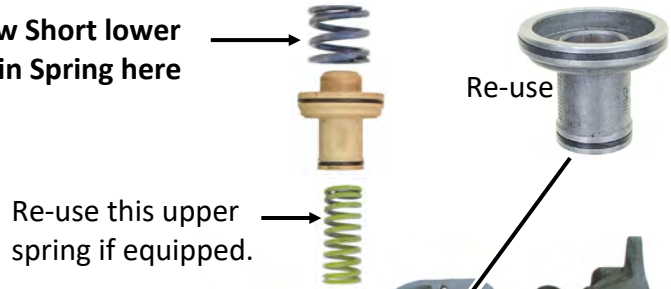
High Clutch Clearance less than .085" can cause a 2-3 Bind-up! .085" to .095" is perfect. Adding plates by reducing clearance is a step in the wrong direction. Its been this way for 57 years.

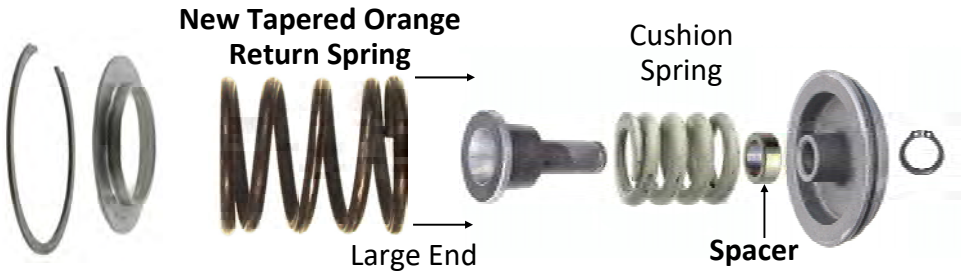
Step 2. Stock Front Servo piston with all apply levers, Install **new** Thick washer as shown. Reuse original Return spring.

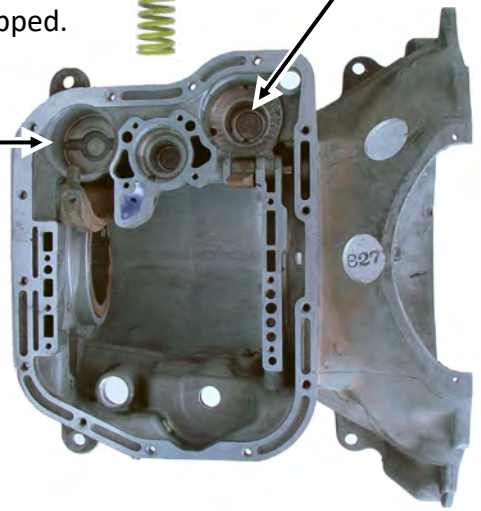
**Only If Using aftermarket oversized Front Servo with apply lever greater than 4.2-*
Discard original servo return spring and use **new** White spring without new Thick washer.

Front Band Adjustment snug with a short wrench & back off 1 1/4 turns.

Step 3. 2nd Accumulator
Install **new** short plain lower 1-2 Accum spring as shown. Some models use upper spring-reuse if it had one.





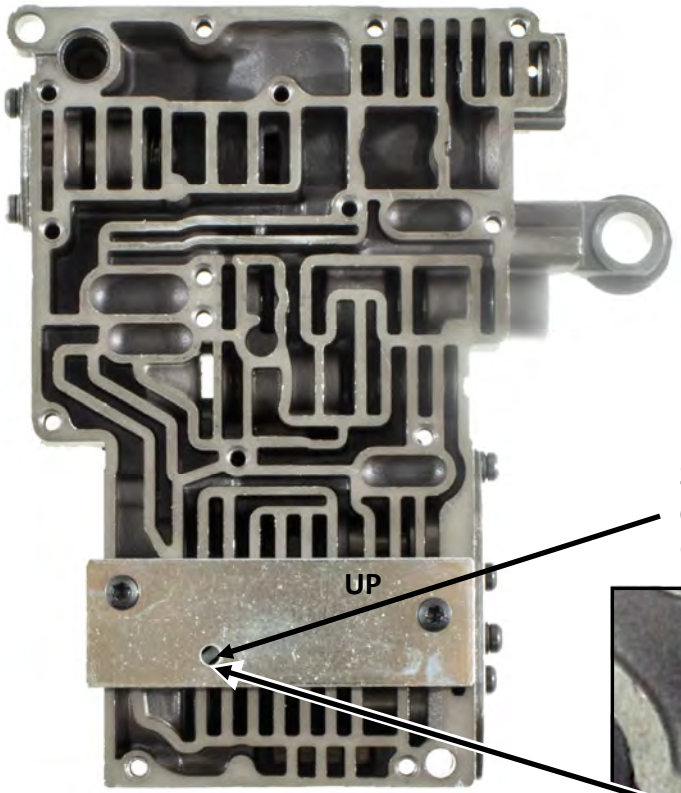


Step 4. Optional Rear Servo Only if maximum 1-2 firmness is desired. Install Tapered **Orange** return spring with large OD end into servo piston and install new spacer inside cushion spring as shown. Also see Page 7 Step 4. **Not for Towing or Work Trucks.**
New Orange spring only fits original 48RE's smaller rear servo with matching double wrap band.

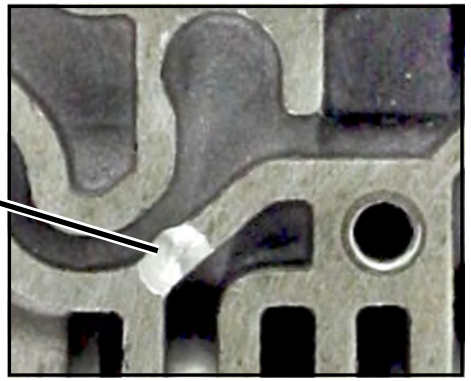
Step 1. Borrow 2 short screws from the VB, & mount drill guide plate to VB with the word “UP” facing **UP** and on the upper right hand side as shown. You will be removing a small portion of the VB wall with a drill bit and a drill “depth-stop” spacer.

Tighten the screws to prevent plate from moving while drilling.

Step 2. Using Wound **Spacer** furnished adjust 3/16” drill into drill chuck until only .435” of drill is sticking out of spacer. This will stop the drill from going too deep. Do not drill thru the VB.



Step 3. Using **Spacer** as a stop, drill **straight down** into this hole with the 3/16” drill. Your done when the drill stop spacer hits the guide.

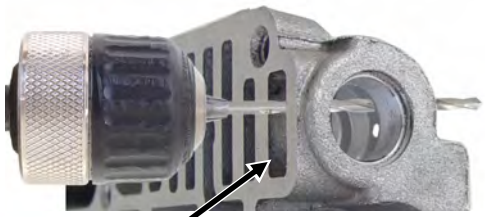


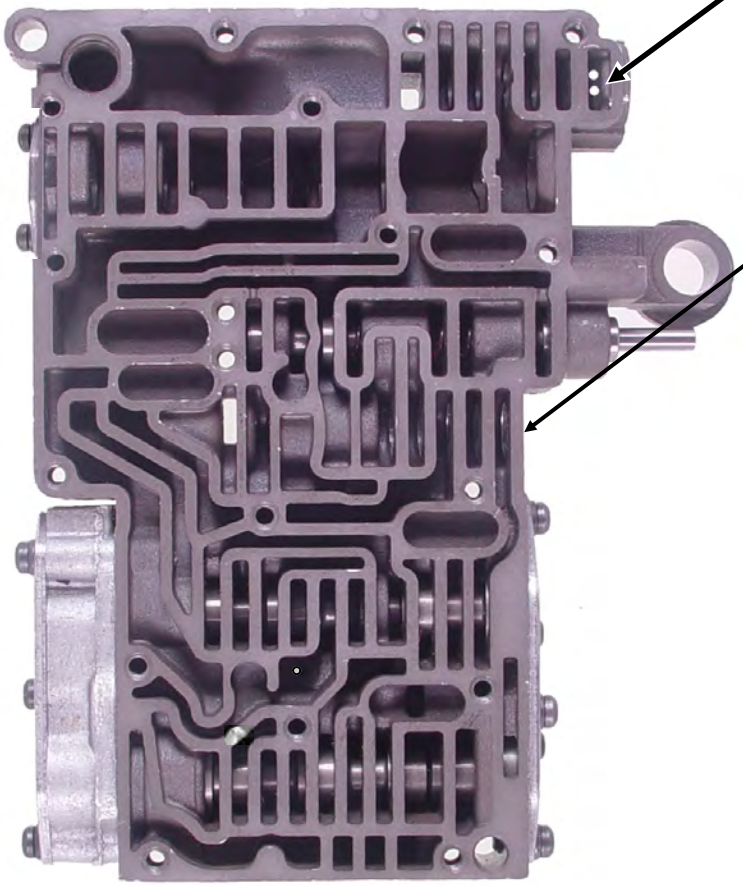
Drilling completed showing wall removed.

Step 4. Remove **Drill Plate** & put back the borrowed screws.

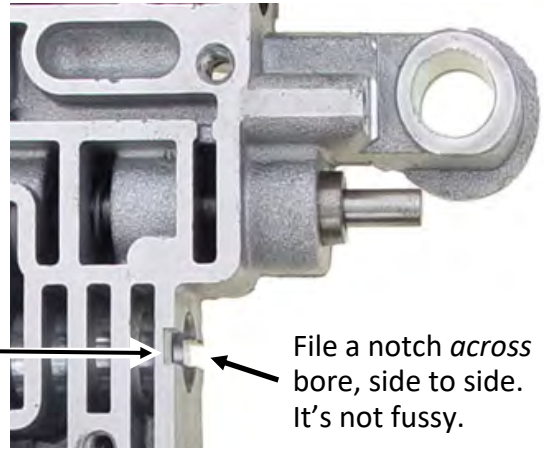
Installing Multi-Disc Converter?
If so, SKIP Step 1.

Step 1. Drill one or two .076 -.082 holes down through the bottom of the most outboard passage.
One Hole = Slightly firmer lockup
Two Holes = Much firmer Lockup





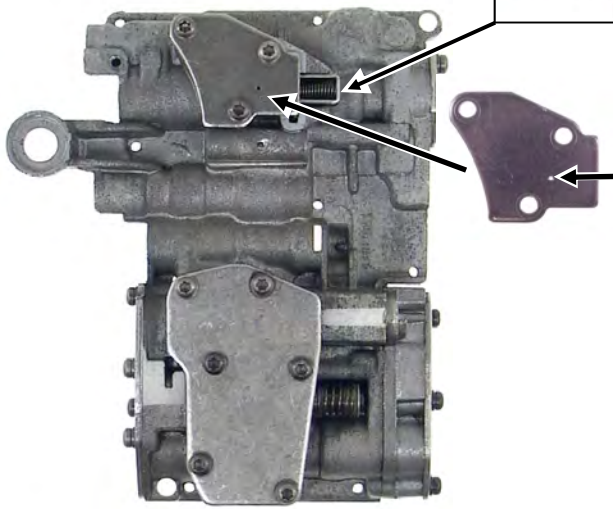
Step 2. Turn the valve body over. Using the edge of a large file, file a notch about *halfway* thru the thickness of this partition. Clean VB of all drill & filing debris.



File a notch *across* bore, side to side. It's not fussy.

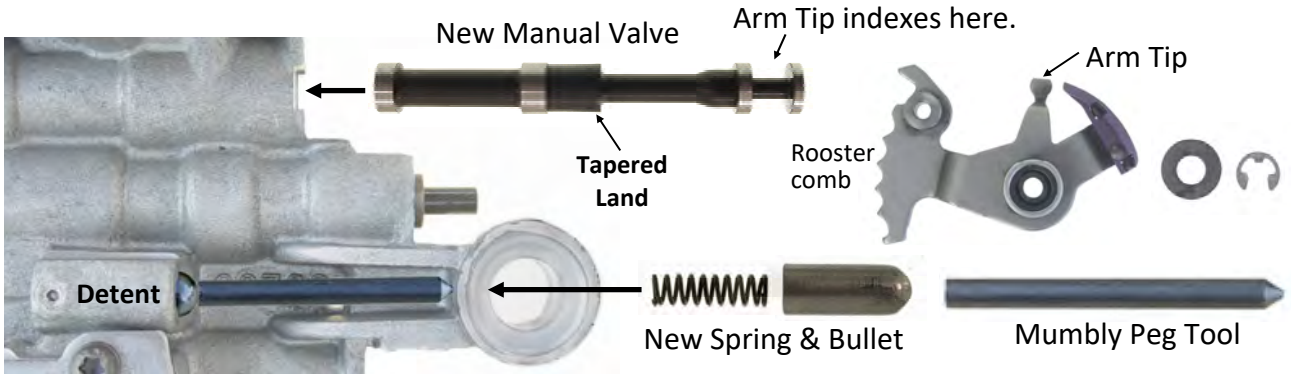
Tip: Large countersink bit in a cordless drill works well also and looks a little nicer if you prefer. Do not go past 1/2 the casting Web thickness. **DO NOT** use a drill bit in place of a countersink!

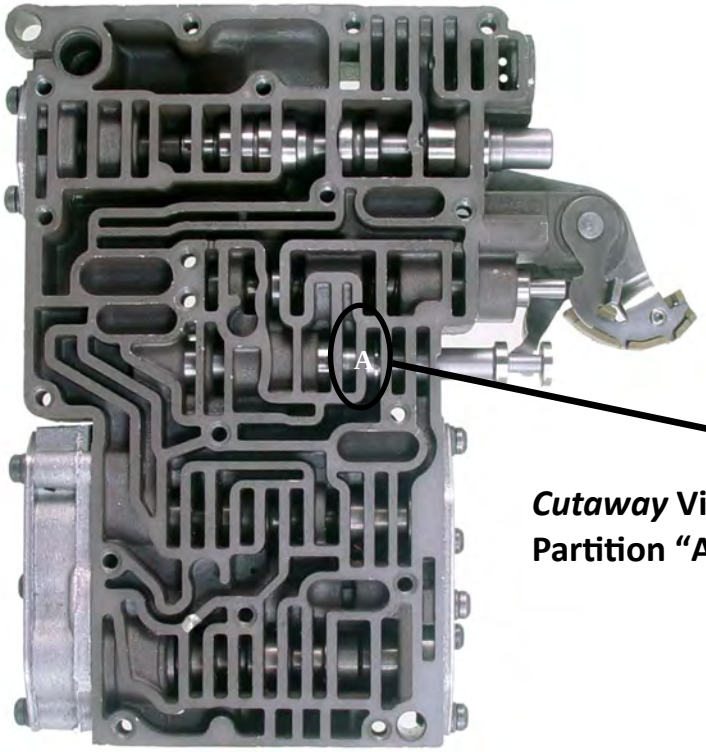
Step 3. Install the new Lockup Bracket.



Step 4.
Check Original Plate. Make hole .082 if its smaller. Ok if its already bigger

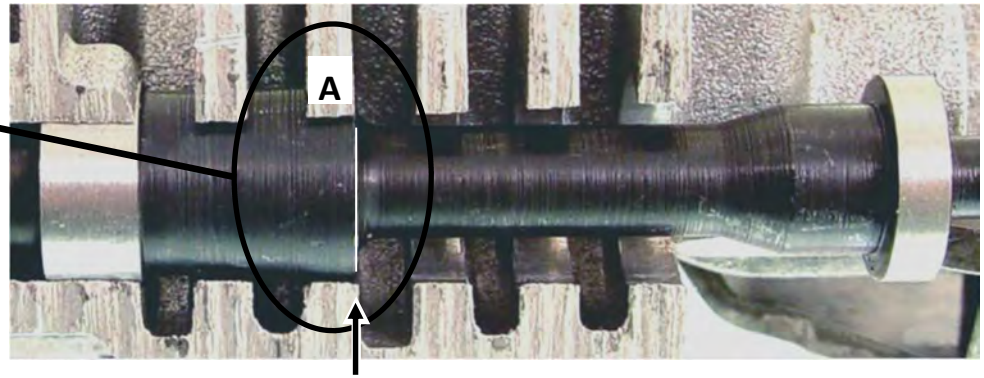
Step 1. Remove Rooster Comb. Discard original manual valve, detent ball & spring. Test fit new bullet & spring in VB for free movement. If necessary, remove any burr inside bore created by wear from original ball. Insert New Spring and Bullet into VB bore using the *Mumbly Peg* to hold the bullet in place. Insert New Manual Valve and reassemble the Rooster Comb. Make sure Arm Tip is indexed into manual valve. Remove Mumbly peg tool.





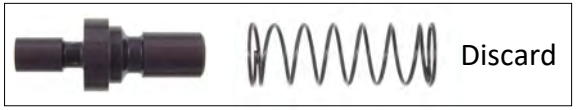
***Cutaway* View Partition "A"**

Step 2. 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.

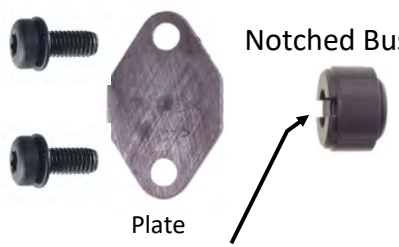


Tapered Land flush with right edge of Partition "A".

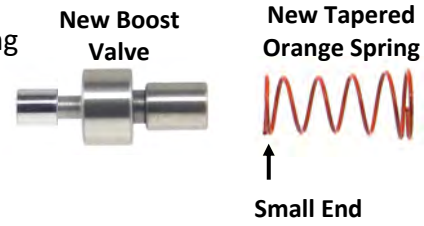
Step 1. Remove & Discard original Boost Valve & spring. Save bushing.



Step 2. Install **SMALL** end of tapered **Orange** spring onto **New Boost Valve** & install into VB. Reuse original bushing & install it with the notches facing the plate. Be sure boost valves moves freely before reinstalling plate.

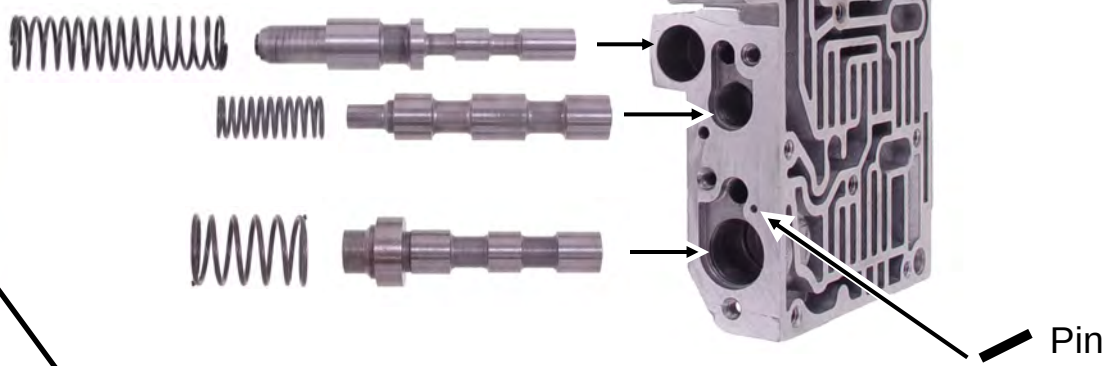


48RE Bushings have Notches.
They must face the plate.



Step 3.
Discard original spring & install New Small **Orange** Spring here.

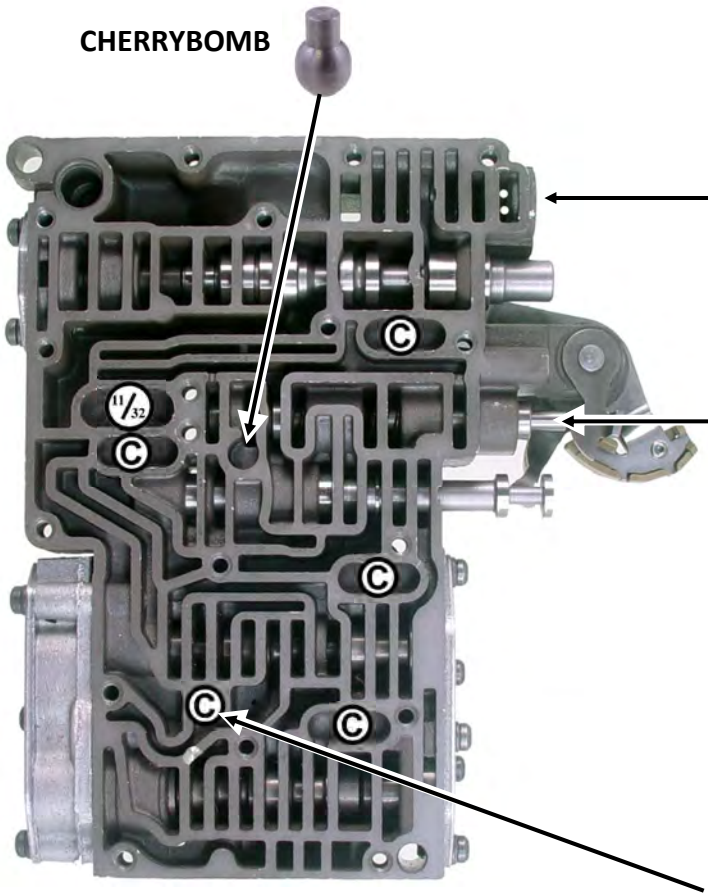
Step 4. Install the gold spacer into the part throttle body. Then install the part throttle (PT) valve.



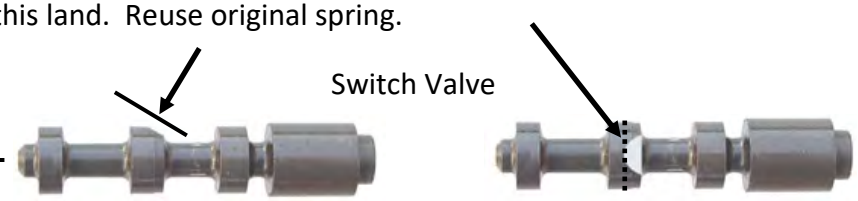
Step 5. Install new transfer plate between **Cover and part throttle body.**

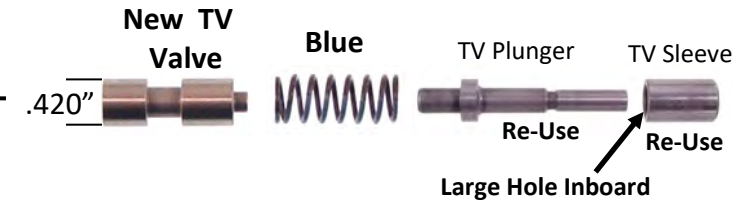
Transfer plate does NOT go on spring side!

Step 6. Using a pick and small hammer, taper the top of this hole to help start the pin. Install pin furnished into this hole, using needle nose pliers and small hammer. File flush if needed. PT Body must sit flush against VB. *If this hole is already plugged from a previous SK 48RE Kit Skip step 6.*



Step 1. Grind one notch on slight angle to about the middle of this land. Reuse original spring.





Step 2. With .420" OE TV Valve & bore **only**:
Install NEW **TV Valve** & **Blue Spring**.
Re-Use your original TV Plunger and Sleeve.

Got an aftermarket Oversized Valve & Bore?
Reinstall TV lineup, With a factory Orange TV Spring.

Step 3. Install **CHERRYBOMB** Careful to align stem UP through hole in plate when putting VB together.

One Cherrybomb

Six Check-balls

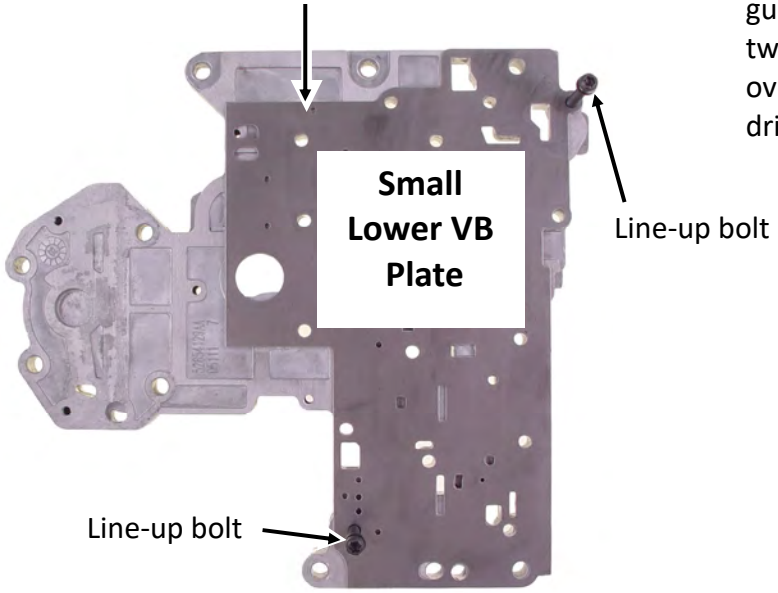
© Five 1/4" (.250)
11/32 One 11/32" (.343)

Step 4. Optional 1-2 firmness 2nd gear feed ball.
Only if maximum 1-2 firmness is desired & rear servo parts are installed on page 2 step 4. Remove this ball. **Not for Towing or Work Trucks.**

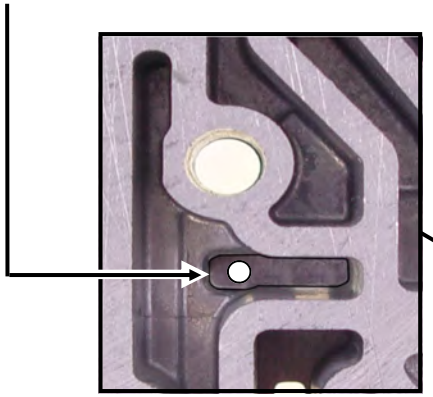
A few words about shift feel.
With this kit correctly installed in a good trans & using a Torque Converter properly setup for efficiency, the **hard throttle shifts** are **short** with a quick drop in engine RPM, engine Tone, or have a slight forward acceleration feeling. Nothing more is required for long term durability.

If the truck LACKS a noticeable RPM drop, tone change or slight forward acceleration feeling on the shifts, (described like you are accelerating thru a bucket of warm butter), and feeling only the firmness of Lockup- **Question the Torque Converter efficiency.** Not the Trans!
FYI: Hammering the gear train on shifts creates the need for high dollar parts.

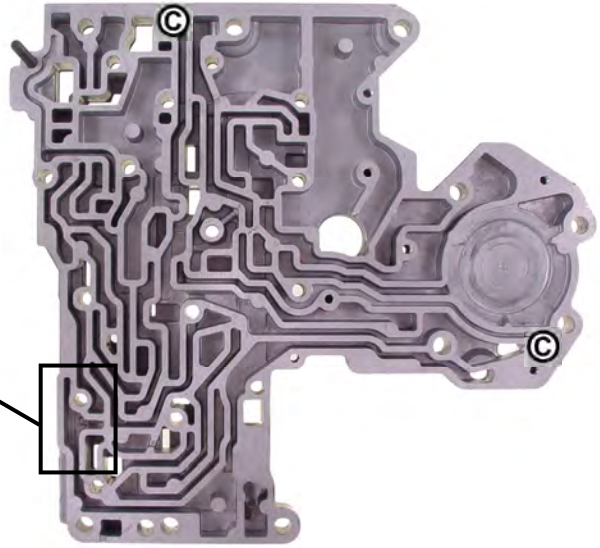
Step 1. Place Lower VB Plate on bottom of Channel Casting using these two VB bolts to line it up.

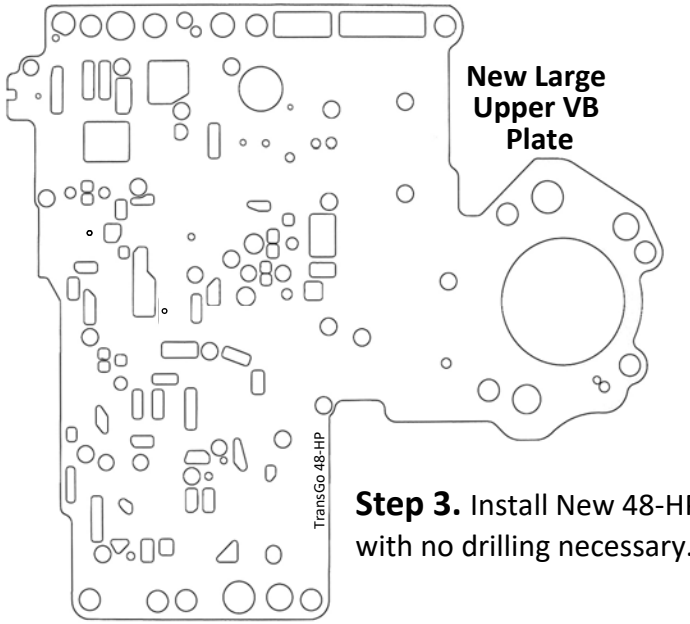


Step 2. We need to add a hole to the **small Lower VB Plate.** Use channel casting as drill guide. Place plate on bottom of channel using two VB bolts to line it up as shown, then flip it over. Use this rectangle passage as guide to drill .101 hole through **lower** plate as shown.



© Two 1/4" Check-balls





Step 3. Install New 48-HP Plate with no drilling necessary.

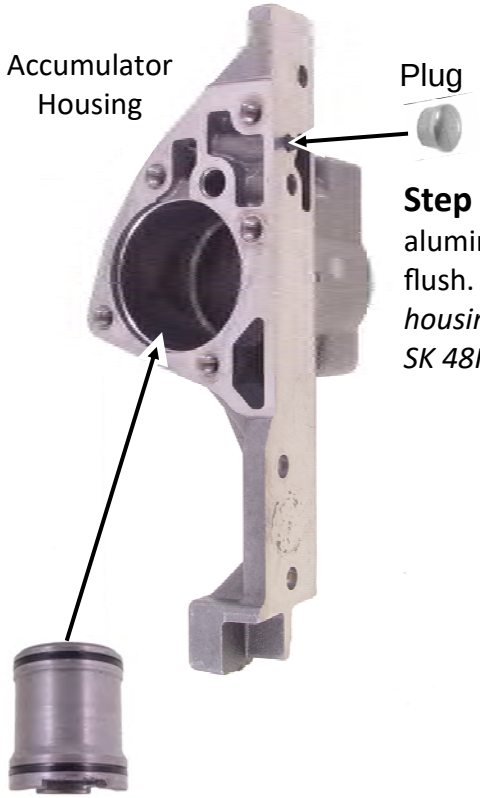
Lower Body

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 .020" paper staple fits even in the smaller of the 3 holes & will clean any debris out.

Step 4. Install new **ORANGE** spring here.

No need to Remove

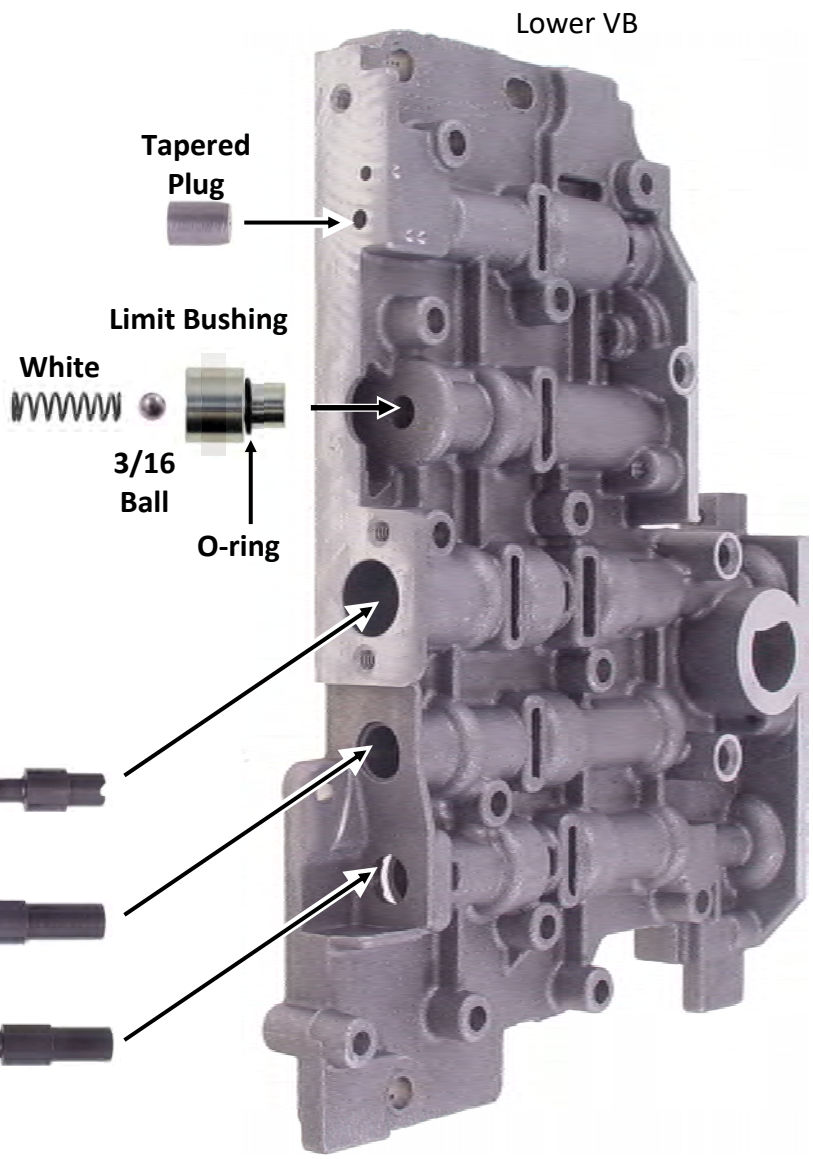


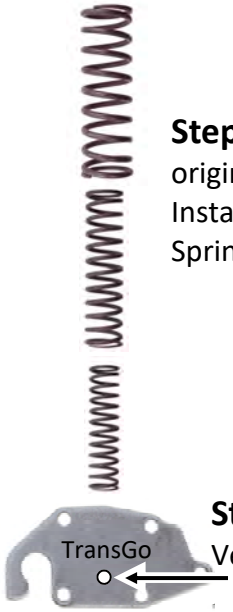
Step 1. With small punch drive aluminum **Plug** into hole just below flush. *If this hole is already plugged and housing crossed drilled from a previous SK 48RE Kit Skip Step 1.*

Step 2. With small punch drive tapered **PLUG** just below flush into the hole. *If this hole is already plugged from a previous SK 48RE Kit, Skip Step 2.*

Step 3. Install the New O-ring on small end of **Limit Bushing as shown** , **3/16 Ball** and **White** spring as shown. O-ring is not to seal, it's a shim to make up for casting variations.

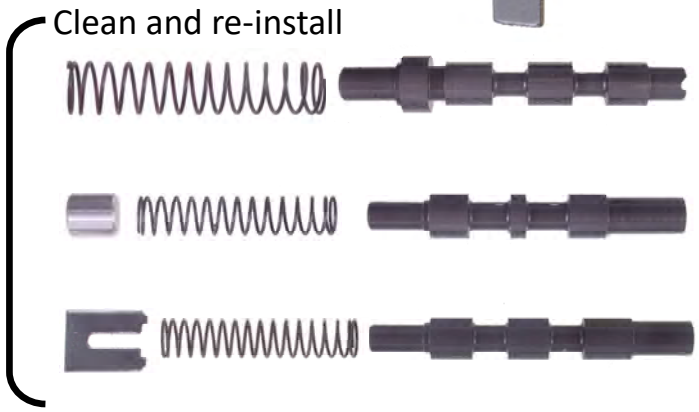
Step 4. Install new transfer plate as shown between lower VB & Accumulator housing.



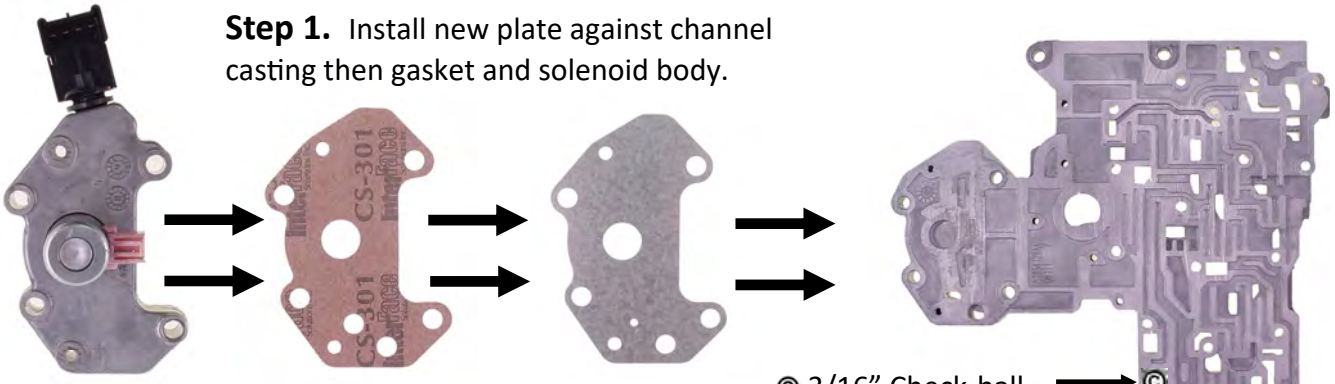


Step 5. Discard original spring Install new **Red** Springs.

Step 6. Install the new Vented cover provided.

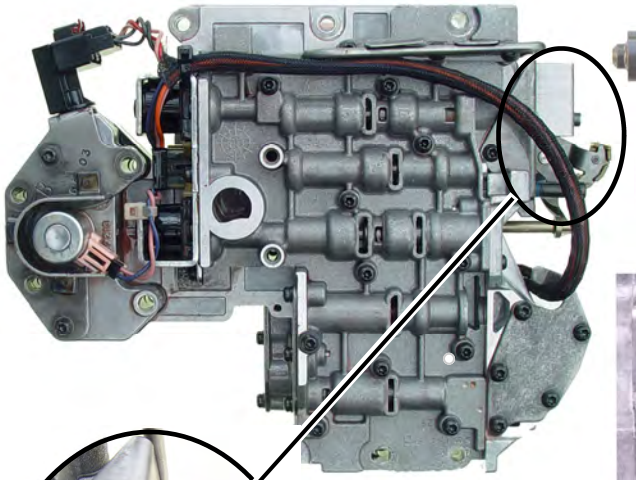


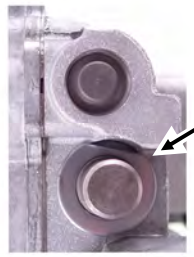
Step 1. Install new plate against channel casting then gasket and solenoid body.



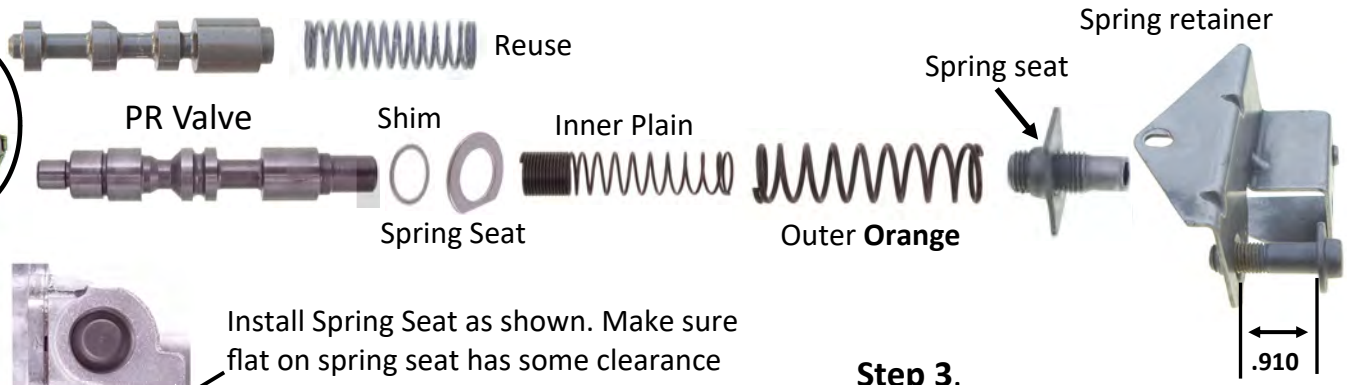
Solenoid Body Gasket **New Plate**

Step 2. Install New shim and spring seat on PR valve before installing new inner and outer PR springs.



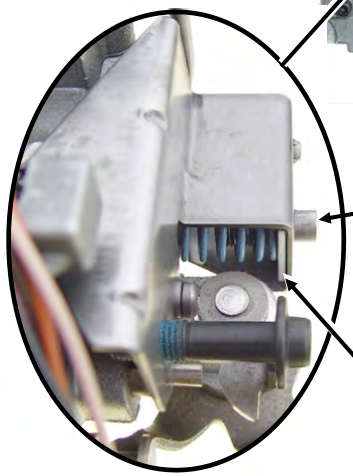


Install Spring Seat as shown. Make sure flat on spring seat has some clearance from casting. File casting if necessary to give it a little room to rotate slightly. Do not allow it to bind between PR valve and casting!



Step 3.

TV Back Stop Adjustment from Plate to inside of bolt shoulder .910 with new TransGo TV Valve.



Step 4. PR Adjustment

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

Just Flush Here

48RE-HD2 Kit & PR Set to Flush Max Line Specs 1st-3rd 145-Psi at WOT , 4th & or Lock-up 185-Psi at WOT Reverse 310 WOT Yes they will all go up from there but **not recommended!** 3 turns in with PR puts Max pressure in 4th & Lock just over 200Psi. This is enough to hurt things, leave it flush.