

RE4R01A Shift Kit®

RE4R01A Nissan-----R4A-EL Mazda
R4AX-EL Mazda-----XT-4Sp Subaru

Reduces/Corrects/Prevents

Direct clutch [3rd] burnup 2-3 Cutloose
Long soft 3rd. Planet Burnup---Long,
soft or slide 1-2---band failure---Long 3-4
Lube failure, overheat and total burnup.

Listen Shop Owner: Even with a new radiator, this trans does not have adequate cooling or flow. Install at least a 14,000 lb GVW **multilayer or multitube** cooler and forget the radiator.

Planetary sets aren't FREE.

Each day your key tech person spends working on one that won't ship or is back for rework, reduces shop volume about \$1000, plus the parts.

TECHNICIAN: Start on page 2 then come back to this page when trans is apart on the bench.

This is a Coordinated Upgrade. Please don't do any other "Tech" you've heard about.

SUBARU--Front Seal Leak or Blowout: Enlarge drainback hole under front seal with .180 to .196 [3/16"] drill. Follow the passage to the cast iron pump support and enlarge the casted hole on the rear side of the support with 1/4" drill. Install the seal just deep enough to make four small stakes to hold it in. Best to use NOK seal.

Hello Technician, We need your feedback. Please Read page 8.

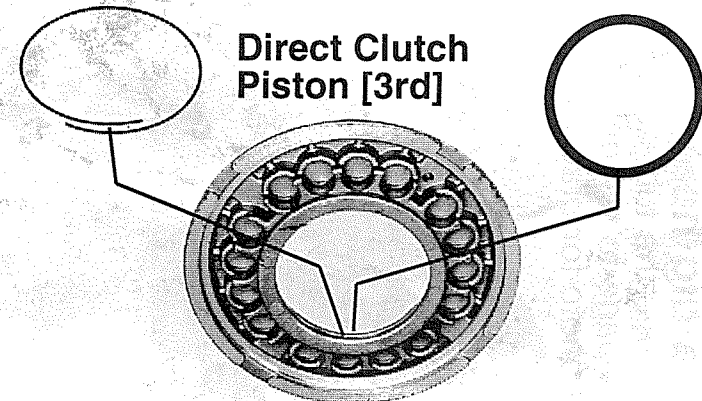


Product Support
(626) 443-7451
Tech Sales
(626) 443-0991

With Trans Apart: **Pucker Tite™** Pat Pending

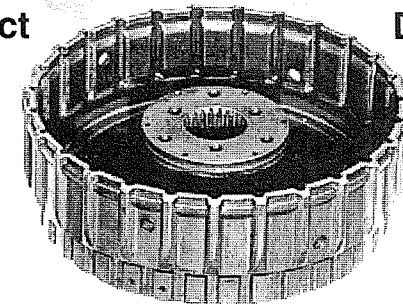
1. Insert the overlap part of the wire into groove at 6 o'clock.

2. Start seal into the groove at 6 o'clock.



Direct

Drum

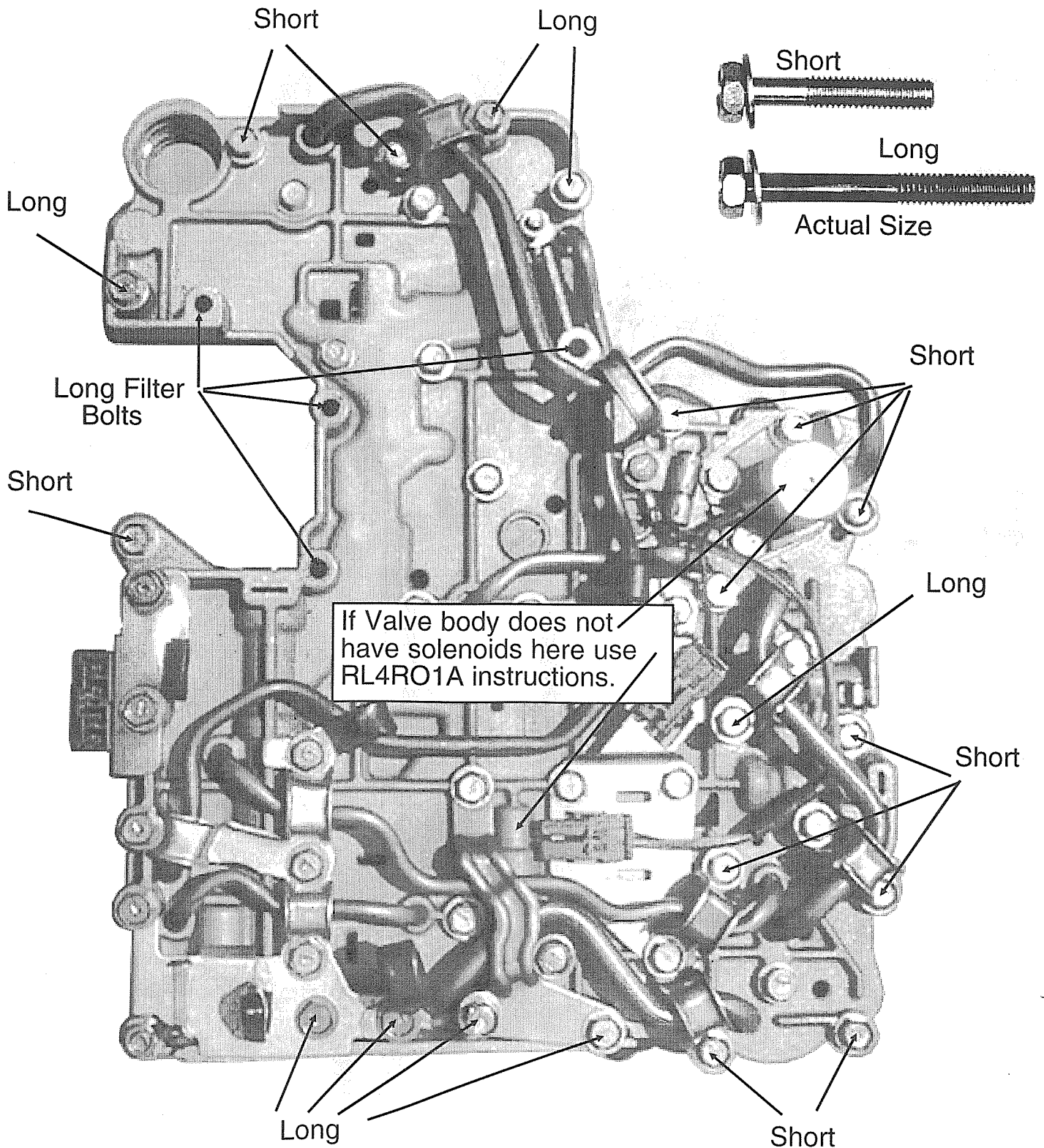


Please take the feedback sheet to bench to get data and return it to us. it's OK greasy.

RE4R01A Valve Body Removal and Installation

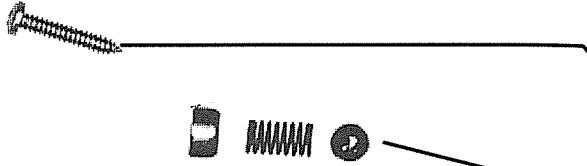
Save a big headache:

There is no need to remove the tubes at any time. Only remove the bolts shown on this page to remove valve body. When going back together use this photo for bracket locations and bolt lengths.



All EXCEPT Subaru.

Install sheet metal screw into cup plug 3 turns. With side cutter grab the screw and lever the plug out. Remove spring and ball. Clean and blow dry the hole

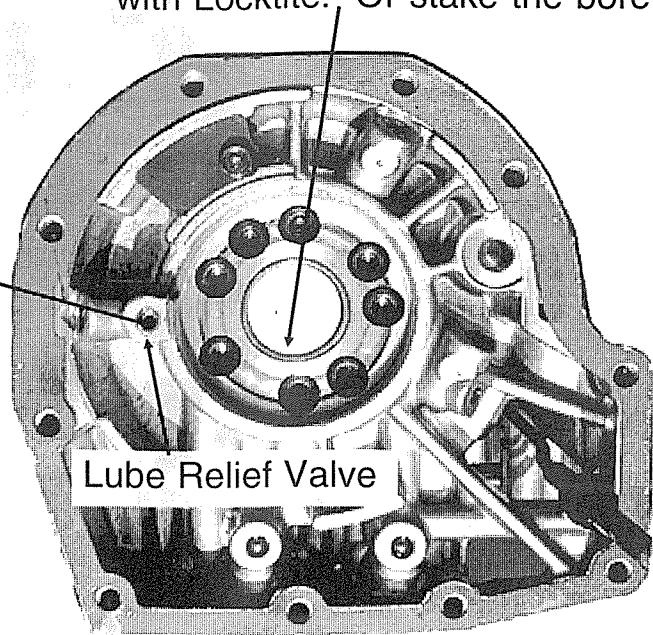


Install new 1/4" ball, spring and cup plug. Drive new cup plug in just flush. Peen case in two spots to keep plug from falling out.

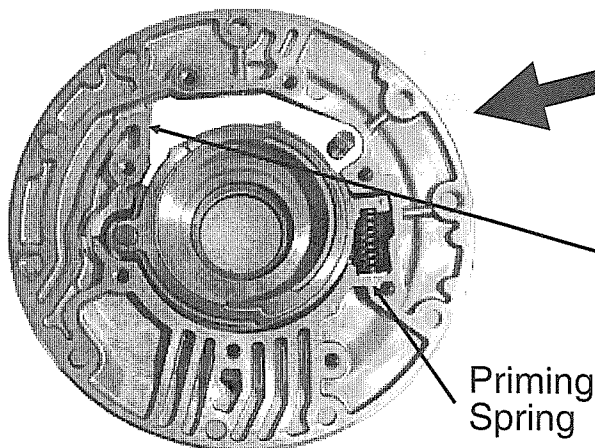
IMPORTANT: If relief hole has a ball, set screw or part of a bolt in it, leave it as it is.

Rear Case Bushings

Rear bushings often move and shut off the lube hole. Make sure case is clean and dry and install bushings with Locktite. Or stake the bore.



Pump Lever Function



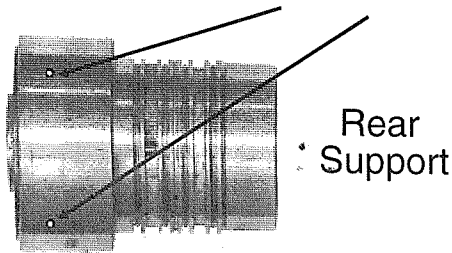
Lever



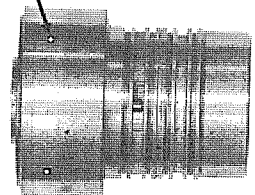
1. Remove End Seal and Priming Spring.
2. Grind about .010 off the end of the lever.
3. Install lever. While pushing lever leftward check clearance at left end. Must have .007 to .015.
4. **Re-use all of the original lever and slide seals.**
Re-Install Priming Spring

More Lube for Planet All Except Subaru

Early models had 4 lube holes to the sprag. Plug 3.



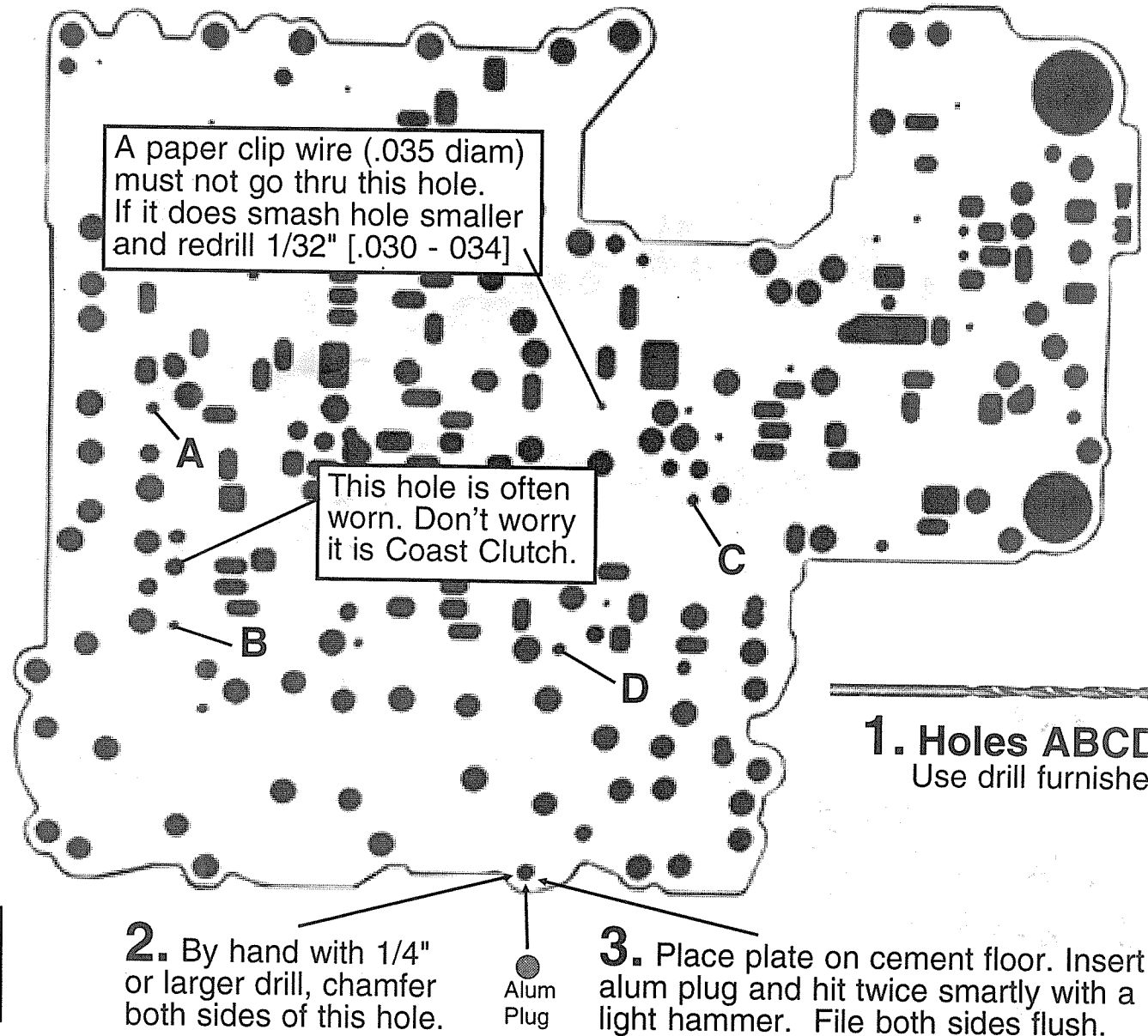
1. With light hammer install 3 tapered pins into holes until close to flush, but don't make them flush.



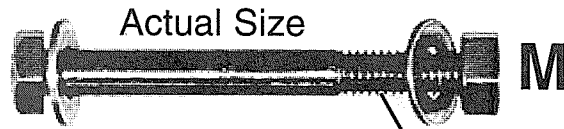
2. Then with a center punch tap them in to below flush. The sprag runs here, so be sure plugs are below flush.

If a checkball hole in plate is worn, use a 1/4" steel ball at that location in valve body.

All Models: Make Holes The Sizes Shown



Install S & M bolts first.

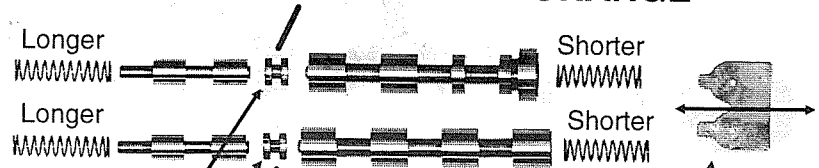
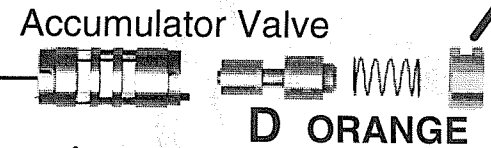
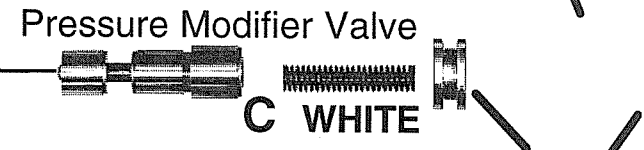
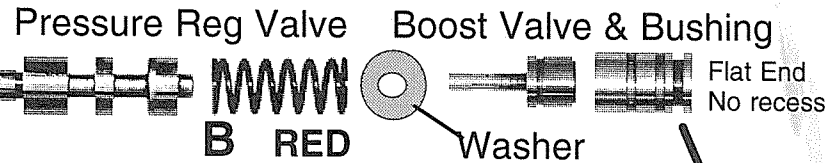
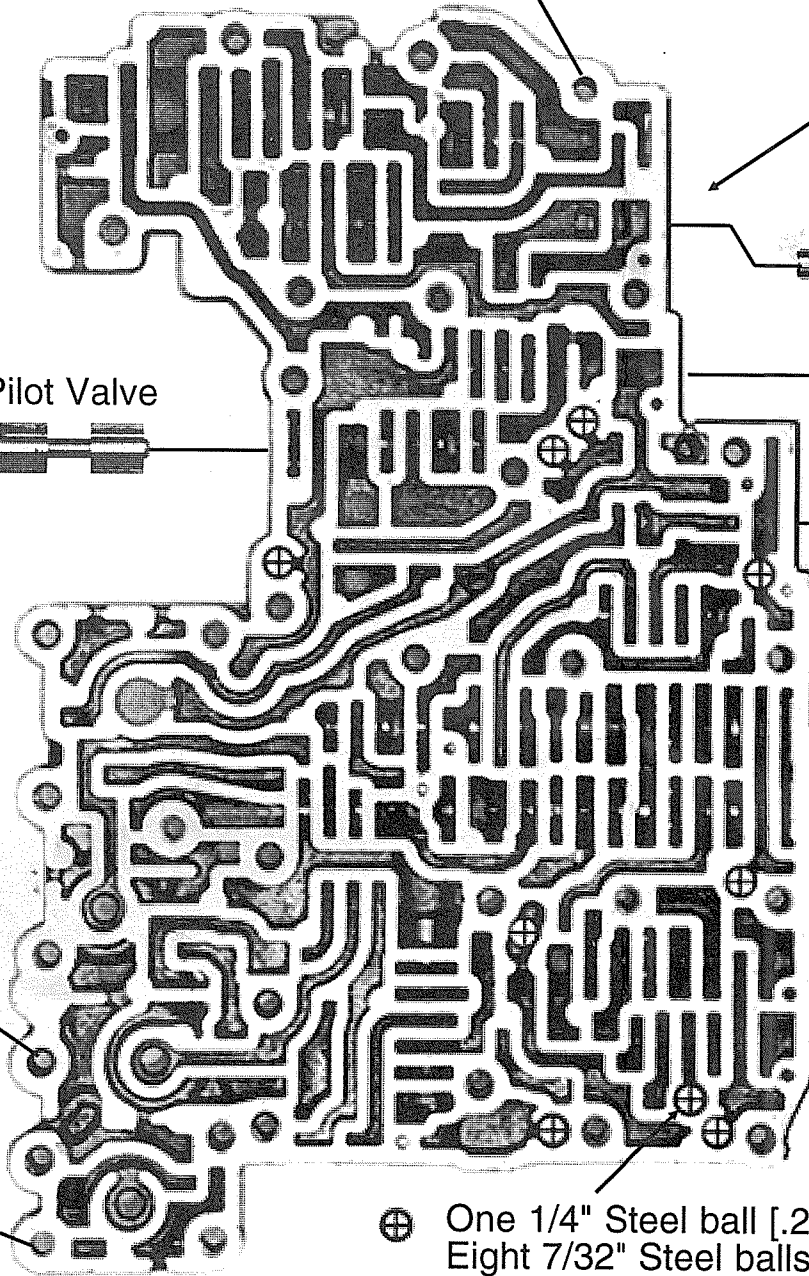


Give careful attention here:

Look at the PR Boost bushing. If it has recess **DO NOT REMOVE IT**. Recess type does not use RED spring.



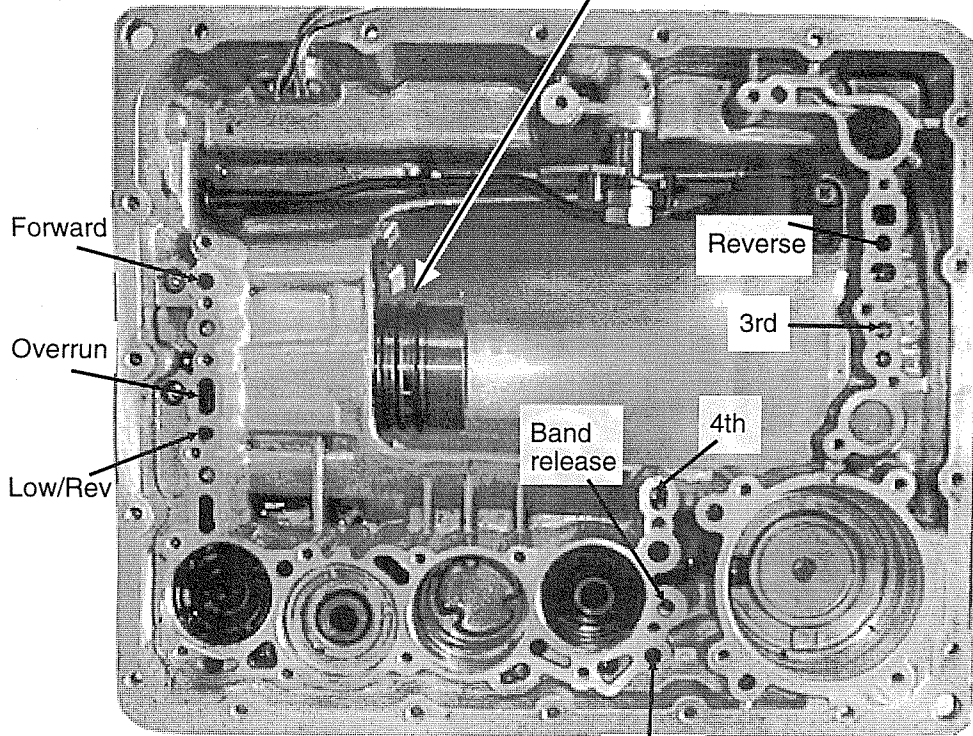
Main Valve Body



E Install the New Steel Plugs
Alum ones break

⊕ One 1/4" Steel ball [.250] here.
⊕ Eight 7/32" Steel balls [.215 to .219]

Custom Rings & 1-2 Accumulator



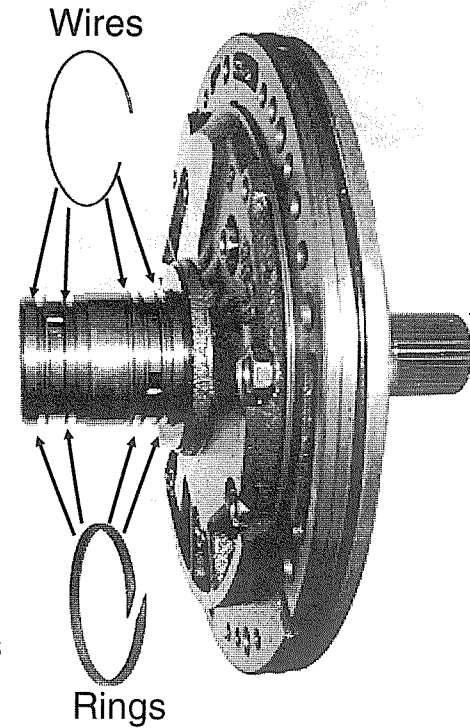
A. Install 4 rear support rings with Vaseline or Trans Jel. No expander wires.

Stator Rings--Pat Pending

C. Sort the slightly smaller 3rd rings and wire expanders to one side. They go on last.

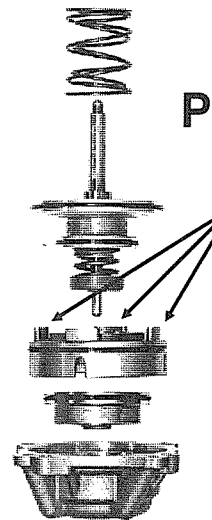
D. Put blob of Vaseline or Trans Jel into each groove in 3 or 4 places. Install the larger, then the smaller expander wires.

E. Install the larger, then smaller, plastic rings into the grooves with Trans Jel.



B. Discard the smaller 1-2 acm seal. Discard original spring. Use two new springs fur-

2nd and 4th Piston Assembly



Stands go inboard

Band Adjust
Tighten just snug with a short wrench. Then back off 1-1/2 turns.

LISTEN UP: This setup may not air check very well, but it works great in the vehicle. "You're going to love the road test. Your customer will KNOW you FIXED it." "Thanks for listening."

Gil

Additional Info

About This Trans

This kit does a lot, but there are other things that need your care. ORIGINAL FAILURE and COME-BACKS are, gear train burnup, and 3rd or Forward clutch failure.

CAUSES

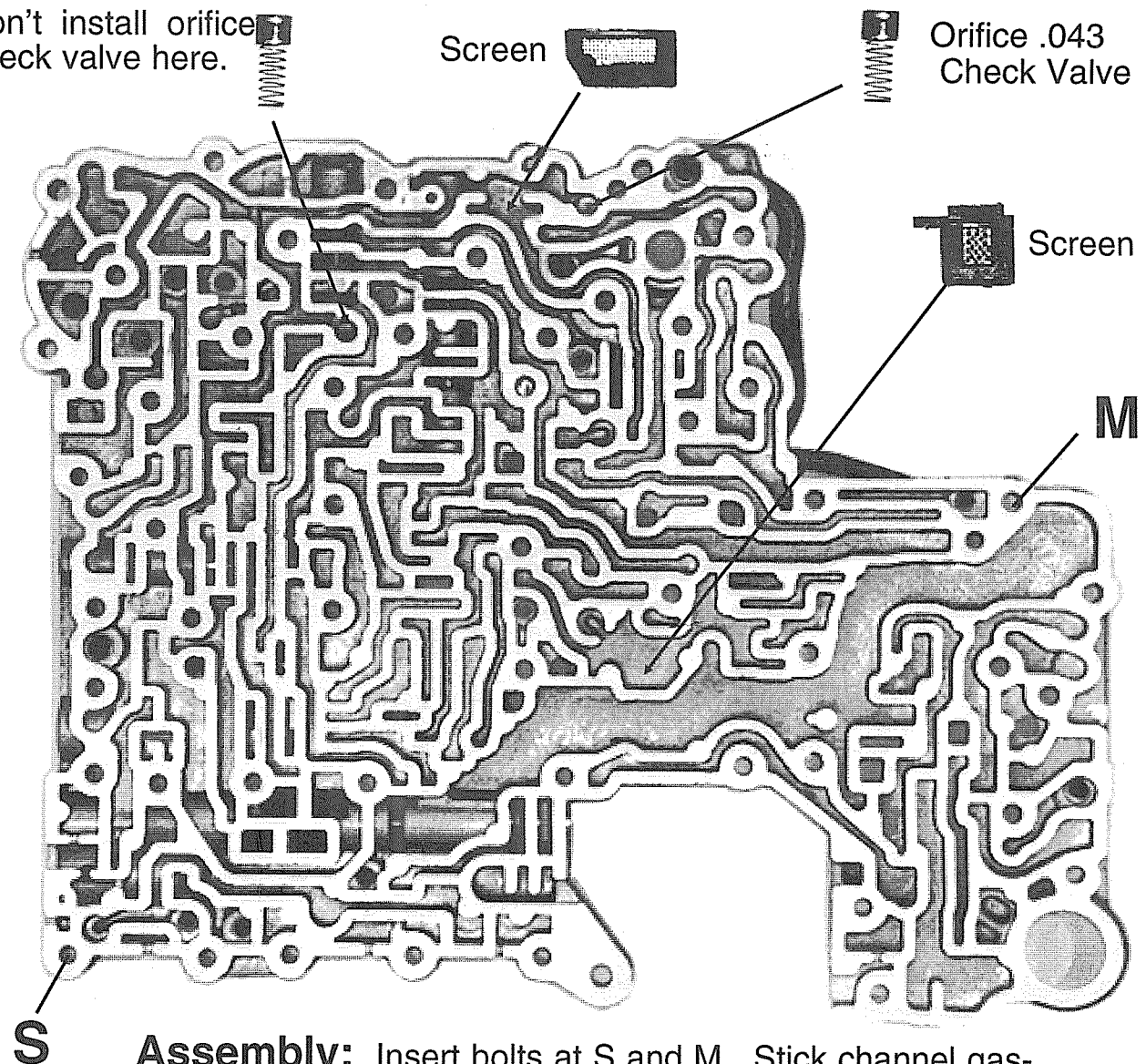
1. Lockup plate shreds and plugs up radiator, filter and/or screens.
2. Cooler return relief valve stuck or plugged off [kit fixes].
3. Inner 3-4 clutch seal leaks. Burns clutch, clogs filter and screens and radiator cooler tube.
4. Shrunken rings have same result as clutch seal leak. Burns friction, then stops up filter, screens or radiator. Oops to planet gears.
5. Listen up: This trans will not stand clutch plate or lockup plate shedding or fuzz. It plugs, filter and screens causing low line and complete burnup, including the planetary gears.
6. Even with a new radiator this trans does not have enough cooling--and it stops up way too easy. ALWAYS add a **multitube cooler** and forget the radiator.

Channel Casting

Don't install orifice check valve here.

Screen

Orifice .043
Check Valve



Assembly: Insert bolts at S and M. Stick channel gasket & VB gasket to the separator plate with some oil. While holding the separator plate and gaskets against the channel casting, turn it over carefully, set it on valve body. Thanks for listening. Let us know how it came out.

Hello, This kit was not some sudden event, we chased some of the complaints for several years. We are confident that these upgrades will reduce rework and comebacks, especially gear train failures. So that we can keep working on improvements send us feedback--get it to us.

If you had early type boost valve with RECESS as shown on page 5 and took it apart by accident, here is how to get it back into the valve body.

Clean and dry the valve spring and bushing. Assemble it by hand and "C" clamp it together. Hold it with valve end UP and run water on it. Place it in your freezer for an hour. When you install VB road test as soon as possible. If unit is for shelf or is not going to road test right away, place VB in oven at 250F for 45 minutes.

WE NEED YOUR FEEDBACK

FAX this report to (626) 401-2715

Make/type Vehicle? _____ Year? _____ Odometer _____

Customer's complaints? _____

What did you find broken or burned? _____

Was auxillary cooler installed? _____

CHECK PRESSURE BEFORE ROAD TEST: [EPC solenoids fail often]

In "D": At idle Line pressure should be 50-60 psi. What is it? _____

It should be: At 1/4 throttle about 100psi _____ At Stall 135 to 170psi _____

After installing the kit upgrades---What was your opinion of the shifts ?

1-2 _____ 2-3 _____ 3-4 _____ Lockup _____

Your Comments: _____

What else would you like to see in a kit for this trans? _____

Your Name _____ Name of Shop _____ Date _____

Street: _____ City/State/Zip _____

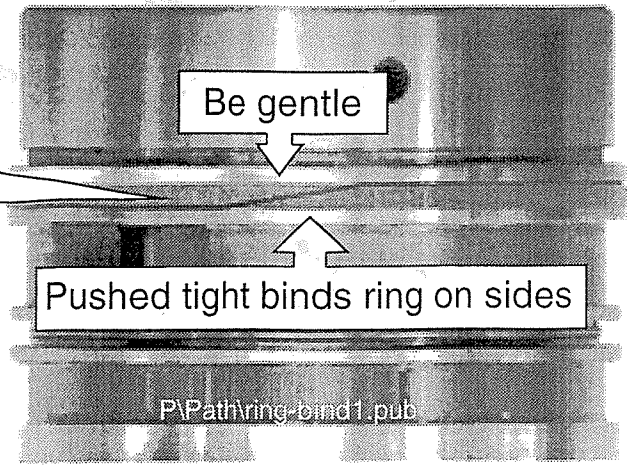
Shop phone number: (____) _____

ANGLE CUT RING INSTALLATION

Ends of rings should just touch or have small gap. If pushed together **FIRMLY** they **BIND** in groove & **WON'T SEAL**.

Air Checking Plastic Rings

1. Put 20 squirts oil into feed hole in the case.
2. Apply clutch will full shop air and hold it on while you count to twenty. If clutch does not apply rotate the drum and/or turn the input and output shaft. Clutch **MUST** apply.
3. Reduce pressure to 40 psi and give the feed hole another 20 squirts. Clutch **MUST** apply.



Thank YOU. © TransGo 2002