SK® 62TE

Fits: 62TE 2007-on

Corrects / Prevents / Reduces

Overheating, Drainback, Delay or No Forward or Reverse, Coasting 6-5 UD Apply Clunk or 3-2 L/R Apply Clunk

Install New ***Non Shrinking*** Gasket.

If housing is bent or has damaged holes from over tightening of retaining screws. Replace it!

TCC Control Solenoid often fails causing “Chugs” or “Kills” engine at stop. Replace it.

After every repair: Always clear codes and reset the VLP Line Pressure Counter which is found under the Special Functions tab.

Pressure Transducer

If Trans is in Vehicle Skip Step 1

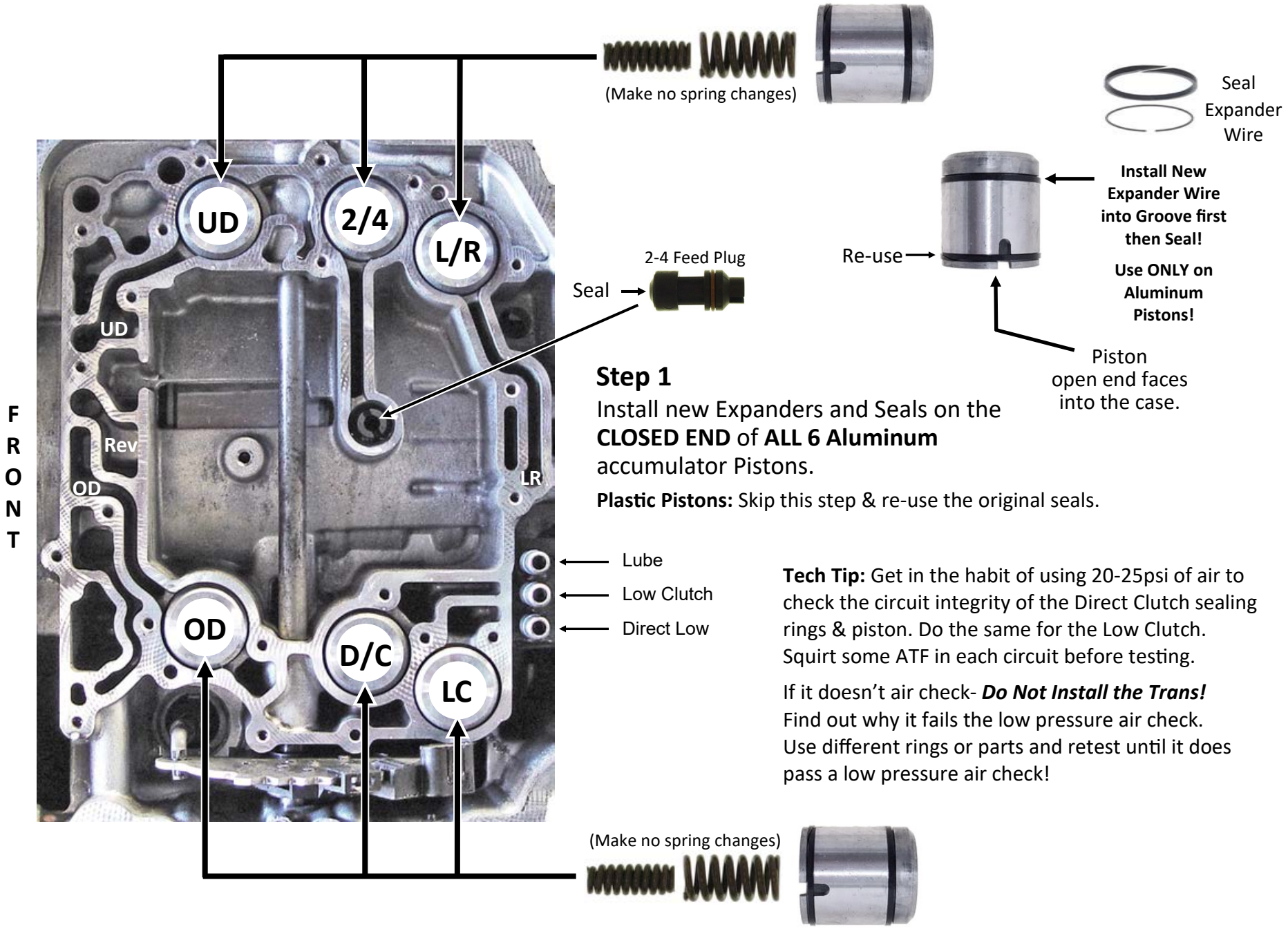
Step 1

Discard OE L/R Housing Gasket. Install new ***Non Shrinking Gasket*** under Piston Housing. Gasket works great with all L/R piston housings.

Accumulators

Do not make any changes to the Accumulator springs!

Plastic Pistons: Skip **Step 1** and re-use the original seals.
(Plastic Pistons get damaged from spring contact. Look inside where springs touch.)



Step 1

Install new Expanders and Seals on the **CLOSED END** of **ALL 6 Aluminum** accumulator Pistons.

Plastic Pistons: Skip this step & re-use the original seals.

Tech Tip: Get in the habit of using 20-25psi of air to check the circuit integrity of the Direct Clutch sealing rings & piston. Do the same for the Low Clutch. Squirt some ATF in each circuit before testing.

If it doesn't air check- ***Do Not Install the Trans!*** Find out why it fails the low pressure air check. Use different rings or parts and retest until it does pass a low pressure air check!

Valve Body Repairs

The repair work on this page will improve the overall **stability** of the **main pressure system** to **reduce shift complaints** as well as **correct** the malfunctioning Torque Converter Regulator to **improve** lubrication, cooling and **prevent** drainback from bore wear. An easy and effective **drop-in** solution. Saves **$$$** and time. We love it! You and your customer will too.

Step 1.

Install **New TC** Regulator Valve checking that it travels freely then **New Orange** Spring & reuse retainer.

Step 2.

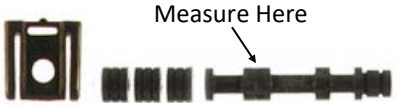
Install **New PR Valve** checking that it travels freely then **New White** PR Spring. Re-use Retainer.

62TE Valve Body Additional Data

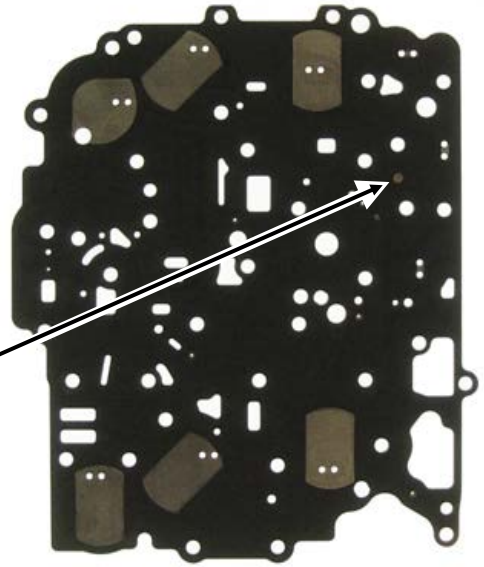
Typical 62TE Layout for reference only. Clean VB and reassemble. Return VB parts to their original locations.

New Product Available Now!

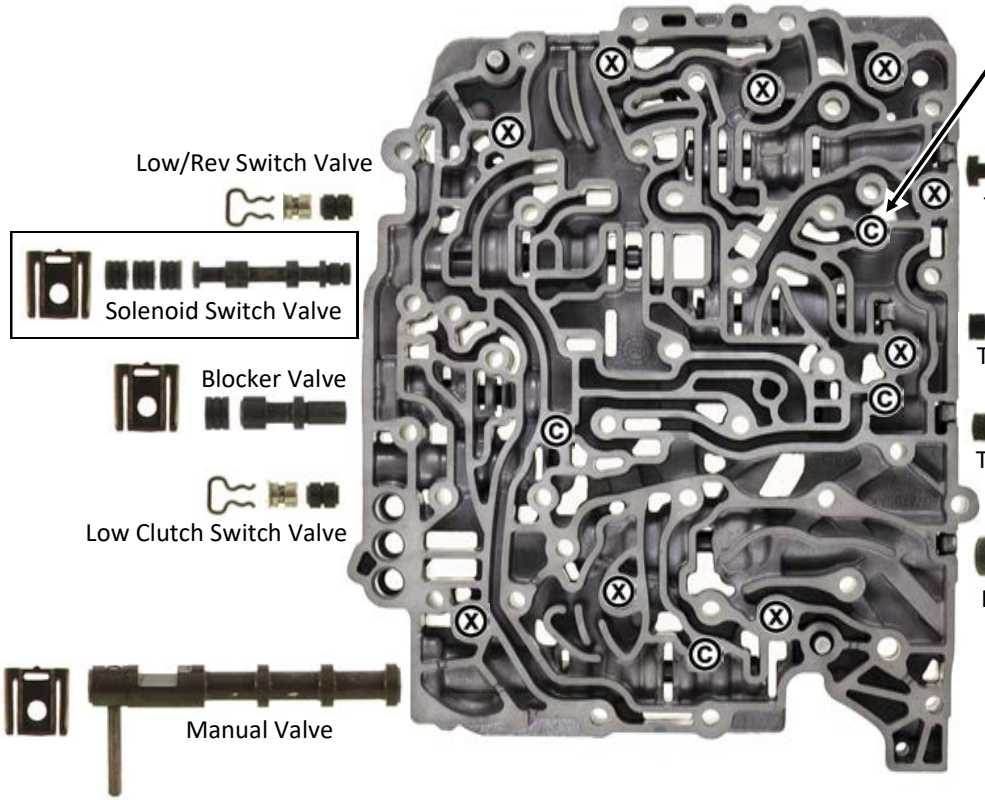
TCC Slip, Pressure Switch Rationality codes?
Could be a worn **Solenoid Switch Valve** Bore.
Measure your solenoid switch valve and order:
p/n **RFE-SV420-WT** for **.420** diameter valve.
p/n **RFE-SV453-WT** for **.453** diameter valve.
Refills available just replace the WT with NT.



Solenoid Switch Valve



Install ball here only if plate has this hole.



Low/Rev Switch Valve

Solenoid Switch Valve

Blocker Valve

Low Clutch Switch Valve

Manual Valve

TCC Switch Valve

TCC Control

TC Limit

Pressure Regulator Valve

Ⓒ 3 or 4 Check balls Depending on plate type.

Ⓧ 9 Check ball plugs-**Do not remove!**

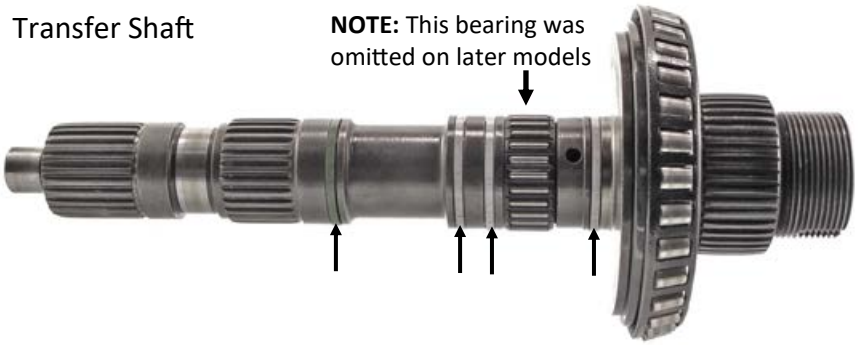
Additional Data

The 62TE is a 6 speed transaxle. It has a 7th speed that is only used during a 6-4 kickdown, this 7th speed is known as 4th prime.

62TE Clutch Application									
Gear	**Ratio**	**UD**	**OD**	**REV**	**2-4**	**L-R**	**LC**	**DC**	**ORC**
1	4.127	On				On	On		Hold
2	2.842	On				On		On	
3*	2.284	On			On		On		Hold
4^	1.573	On			On			On	
4	1.452	On	On				On		Hold
5	1.000	On	On					On	
6	.0689		On		On			On	
Reverse	3.215			On		On	On		

3* Is failsafe/limp mode.
4^ Is 4th Prime, used only on kick down.
Clutch's on the transfer shaft are: Low clutch, Direct clutch & the One Way clutch (ORC).

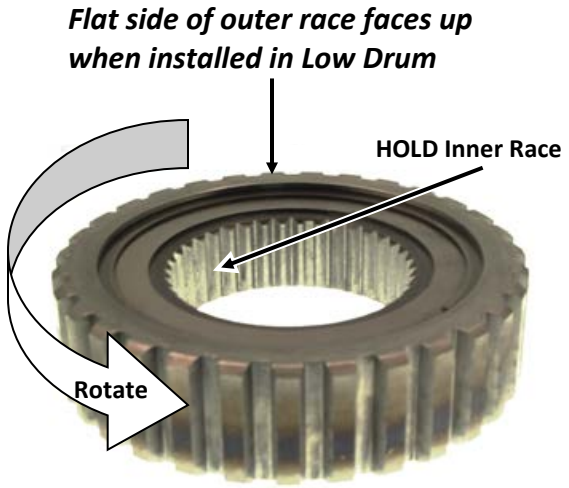
Transfer Shaft

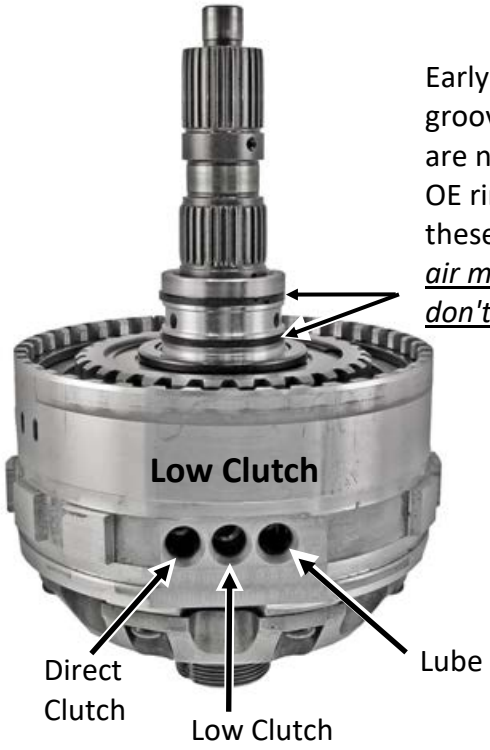


These 4 rings like to shrink dumping lube oil that can lower main line and accelerate ring land wear on the low clutch housing. 68018615AA

Compounder One-Way Clutch

The **stepped side** of the outer race faces **into** the Low Drum. When sprag assembly is installed in the Low drum, the Outer **Race** must rotate Counter Clockwise while the drum held stationary.





Early rotating rings usually destroy the ring grooves on low clutch housing. Later housings are notched for non rotating rings 05078800AB OE rings air check great and work excellent in these notched housings. *20-25 psi of regulated air must apply direct clutches on the bench, don't assemble unit until they do!*

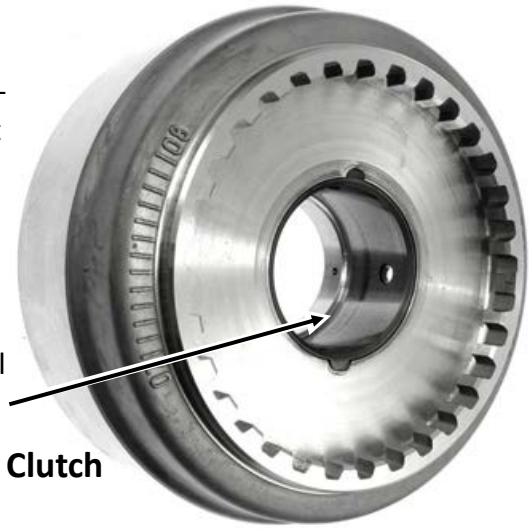
Flat side of outer race faces up when installed in Low Drum

Check Sprag rotation by holding here and rotate race in direction of arrow.

Compounder Wear Areas

Loss of lube from shrunk sealing rings on the transfer shaft will accelerate wear on the ring tower causing Direct Drum rings to leak.

With severe wear, the top sealing ring may be found still in the drum here.



Direct Clutch

Updating the Low Clutch Housing to the latest Non-Rotating Ring type housing during overhaul is an great way to prevent rework due to ring groove damage. Even though it may not be damaged at time of overhaul, be warned, it does have a known high failure rate.
Remember the customer pays for the parts now, you have to pay for them later.

Have a Great Day.
Gil

Underdrive Ring

Fits: 62TE/604/606/42RLE (Including VLP models)

Corrects / Prevents / Reduces

Delay or No Forward, Rough Coast Down 4-3,
Limp-in coming to a stop.

Read this first:

Close inspection of Underdrive piston bore will often show wear and a ridge where the piston has rubbed against the seal groove in the input hub. This ridge nibbles the seal and the wear causes a cold leak.

With a worn piston or a cut seal there will be a delay or no forward cold and sometimes limp-in on cold startup into drive until the seal warms and becomes more pliable.

Also, during a long run in 4th the seal relaxes and can fail to re-seal quickly on a 4-3 coast downshift between 28 and 19mph. The computer sees the delayed apply by watching the speed sensors and places trans in limp.

A temporary solution is a new piston. A better fix is to install this quality self expanding seal that is pliable enough to seal into worn area and tough enough that the ridge won't cut it. Install it with confidence.

Inspect piston here for wear and ridge.

PLEASE: Don't hone, sand, scrape, polish or try to fix the piston in anyway. Leave it as-is. If it's really bad, replace it and use the new expander & seal for a long term fix.

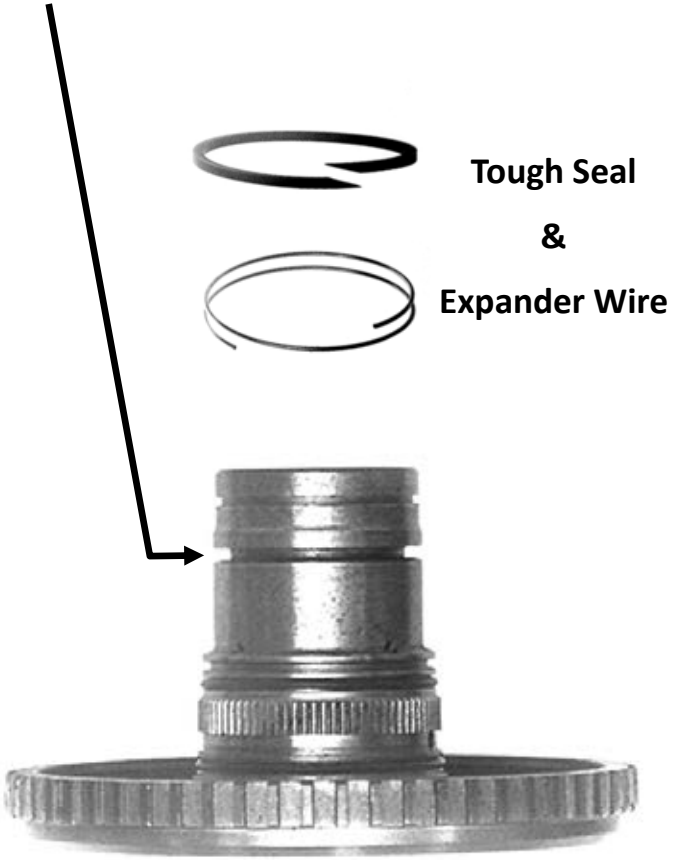
Note: Seal does not air check very well, but works great in the trans, even with a badly worn piston.

UD-Ring Installation

Tough Self-Expanding Seal:

A. Install wire expander into groove.

B. Then install the seal.



604/42RLE/62TE 4th Type** Stack-up

Note: Some small engine models can come equipped with only 3 OD clutches & 1 Reverse clutch. This stack-up is not covered here. Use your specific vehicle data when ordering replacement parts.

UD clutch: Has four .073 thick frictions. High Energy/Brown Paper

OD clutch: Has four .073 thick frictions Should be High Energy.

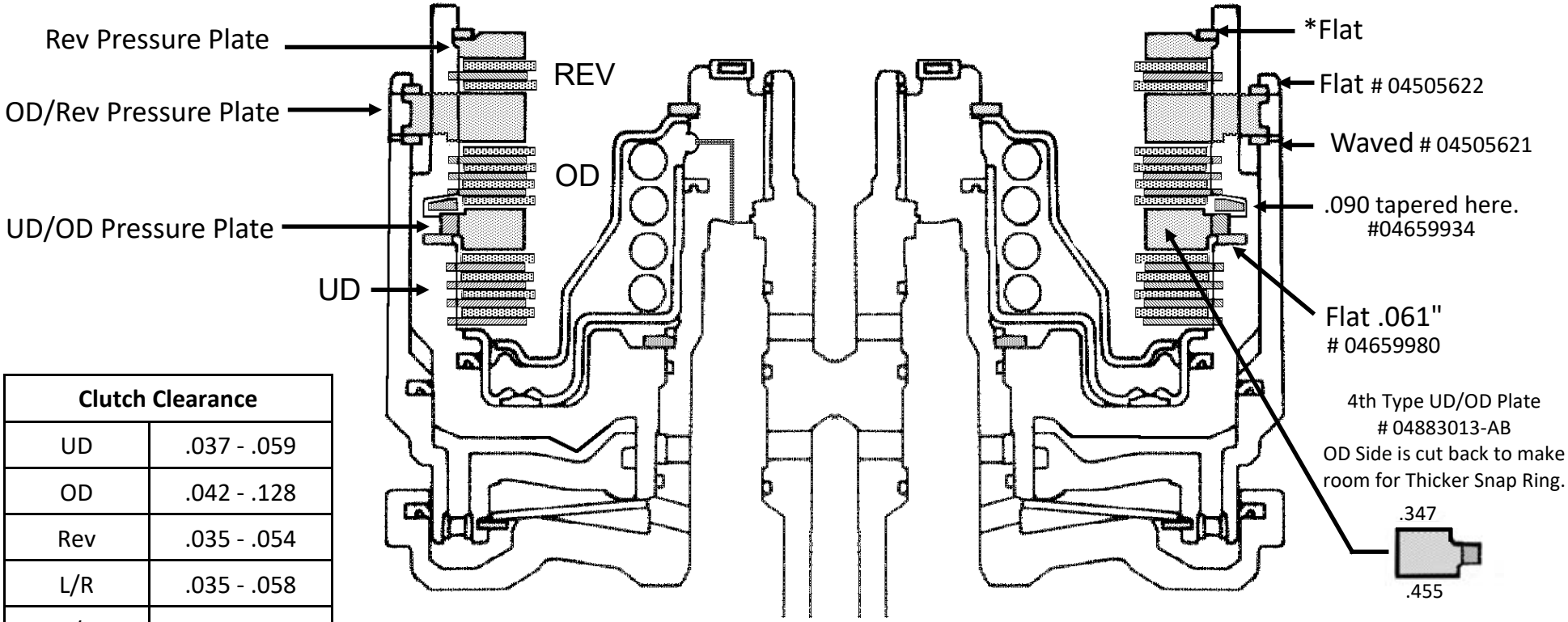
Reverse clutch: Has two .073 frictions High Energy/Brown Paper

UD stack- Start with .068 steel plate, alternate .073 clutch plates, the stack will end with a friction. Install .061" flat snap-ring, 4th design UD/OD Pressure plate then tapered .090 snap-ring.

OD stack- Start with .073 friction plate, alternate with .068 steel plate. The stack will end with a friction plate. Install waved snap-ring, OD/Rev Pressure Plate then install flat snap-ring.

***Rev stack-** Start with .073 friction, .068 steel, .073 friction, Pressure Plate and flat selective snap-ring.
Selective Rev Snap Rings: 1.53-1.58mm- # 04377195, 1.77-1.83mm- # 04412871, 2.02-2.07mm- # 04412872, 2.27-2.32mm- # 04412873.

****Earlier stack-up- Types 1 through 3 can be found in the SK 604 kit Additional Information Lesson 3A



Clutch Clearance	
UD	.037 - .059
OD	.042 - .128
Rev	.035 - .054
L/R	.035 - .058
2/4	.030 - .104