

# SK® 604 Non-VLP

## 604/41TE & 606/42LE 1989-2006

### Also fits 42RLE 2003-2006

#### Corrects / Prevents / Reduces

Delay or No Forward or Reverse, Rough Coast Down  
4-3, Stabilizes Clutch Pressure & CVI's.

Working on **604 or 42RLE VLP** model that has a Pressure Control Solenoid?  
Order P/N **SK 42RLE-VLP** Fits: 2006up 604 and 42RLE **VLP** Models

#### Hello Mechanic -- We LOVE this trans.

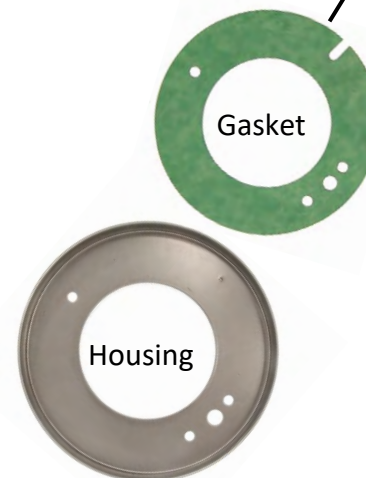
From 1989 we got hundreds of calls--The trans would go to **Limp** or **burn** OD clutches. At first we thought there must be **BIG errors** in the system that we could **find/fix**. We bought a van, installed 6 gauges, a scan tool. While installing dozens of parts we received from shops we managed to **burn** it up **20 times** in 60,000 miles of road testing.

For the first time in 35 years we had a trans control system that was *Intelligent & adaptive*. It took us two years to catch up with it. It had **no BIG** system **er-rors**, but it does have about ten things that **need** your careful **attention**. This trans loves the little things you do for it, so that it will shift good, stay out of **Limp** and please your **customer**.

If trans is in vehicle skip Step 1.

#### Step 1

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



This kit *does not* fit models with  
a **Pressure Control Solenoid!**

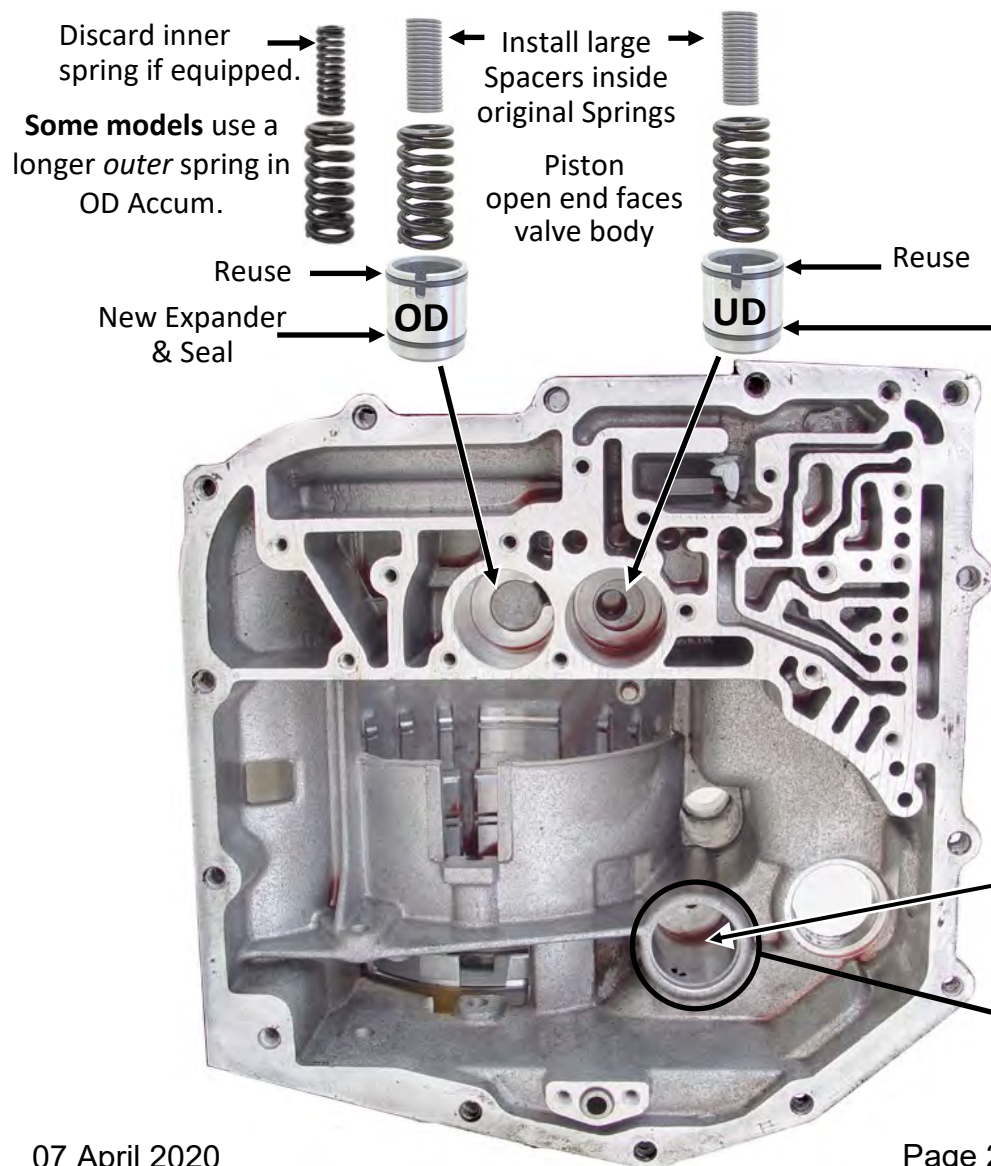
Models with Pressure  
Control Solenoid  
(VLP Models)  
Use **SK 42RLE-VLP**  
Fits 42RLE & 604 VLP  
Models.



## This Page 604/41TE, 606/42LE & 42RLE

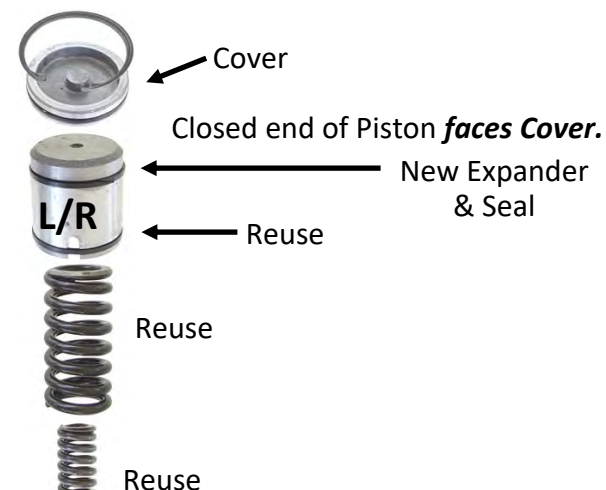
**Do NOT use Plastic Accumulator Pistons! All 1989-2006 must have aluminum pistons!**

**Step 1** Install new Expanders & Seals on the **CLOSED END** of **Aluminum** Accumulator Pistons.



**Step 2** Install Large Spacers into OD & UD Springs.

**Tech:** Installing Spacers causes shifts to be shorter and cleaner. It does this by allowing the releasing Clutch to exhaust faster.



**Step 3** Install small Spacer in Low/Rev inner Spring.

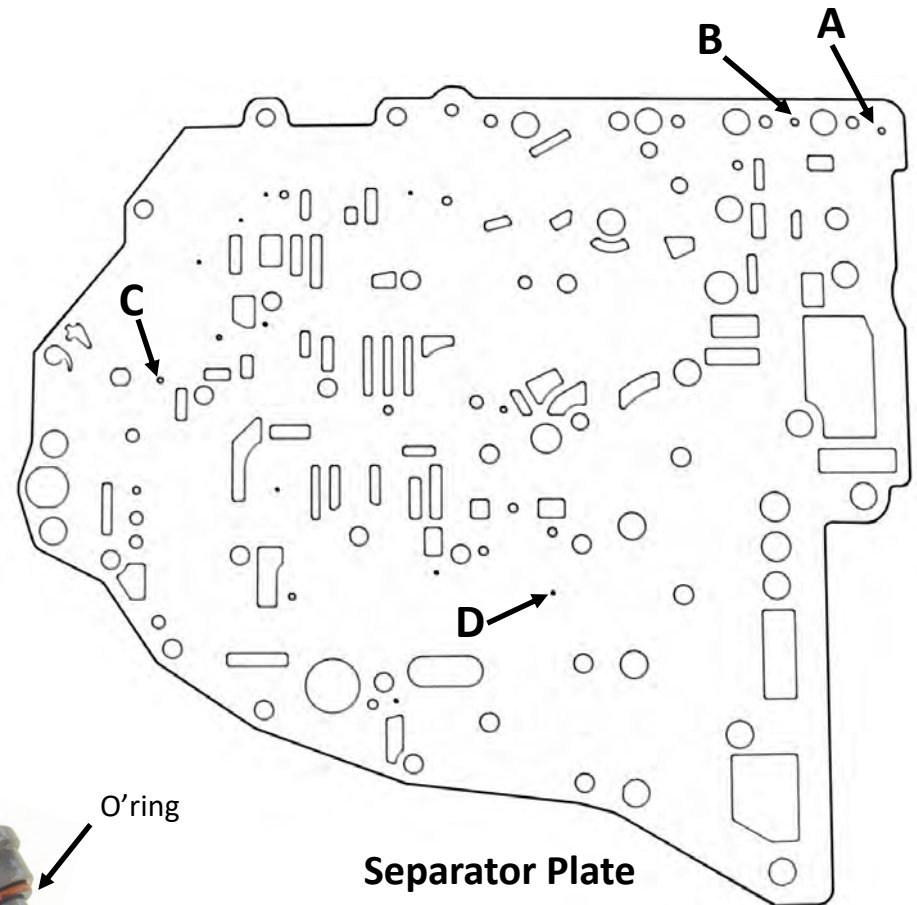
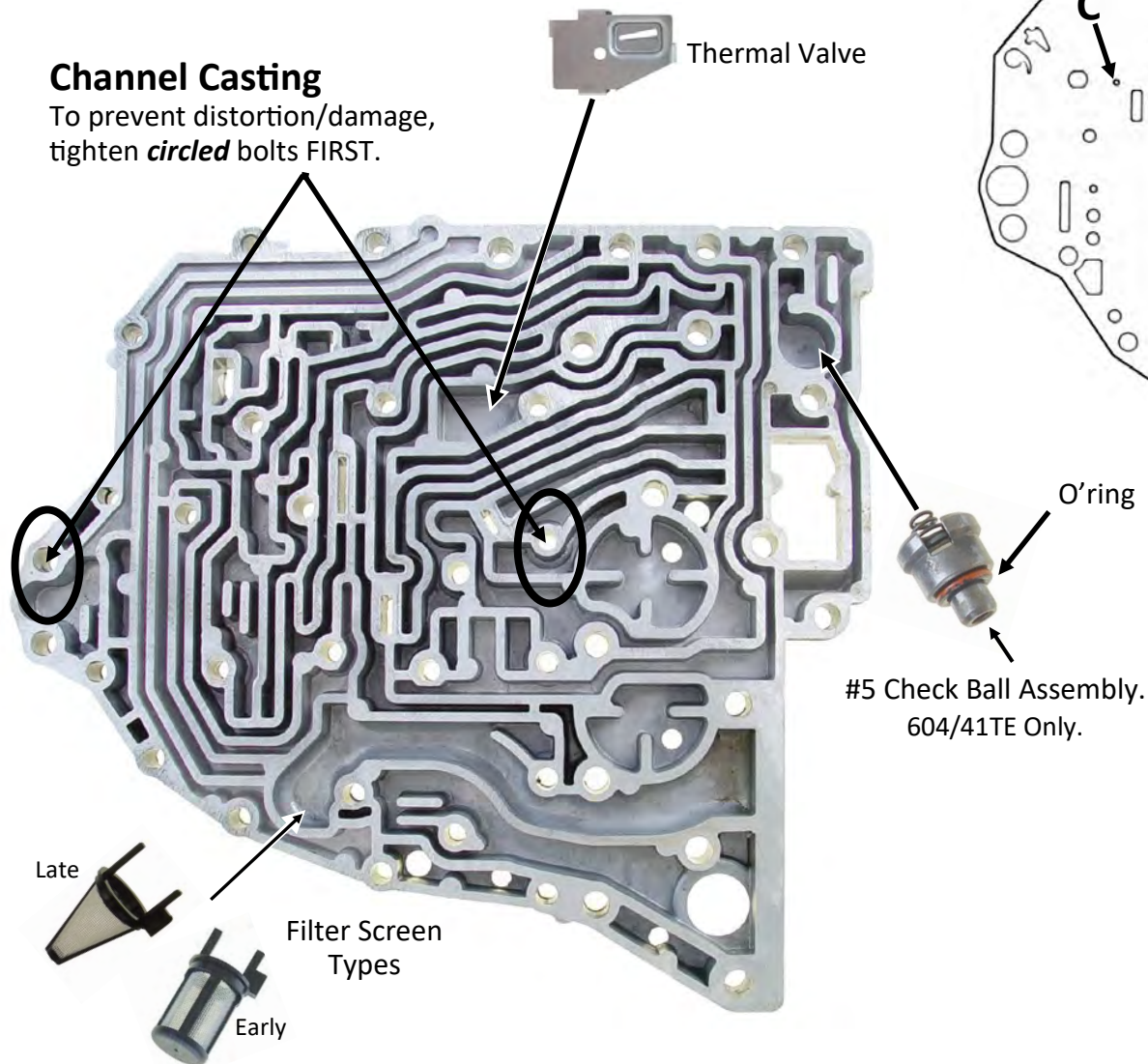
**LOOK: Don't damage seal.**

When installing the L/R Accum hold a .002 to .005 feeler blade across feed hole so the sharp edge of hole won't cut the seal.





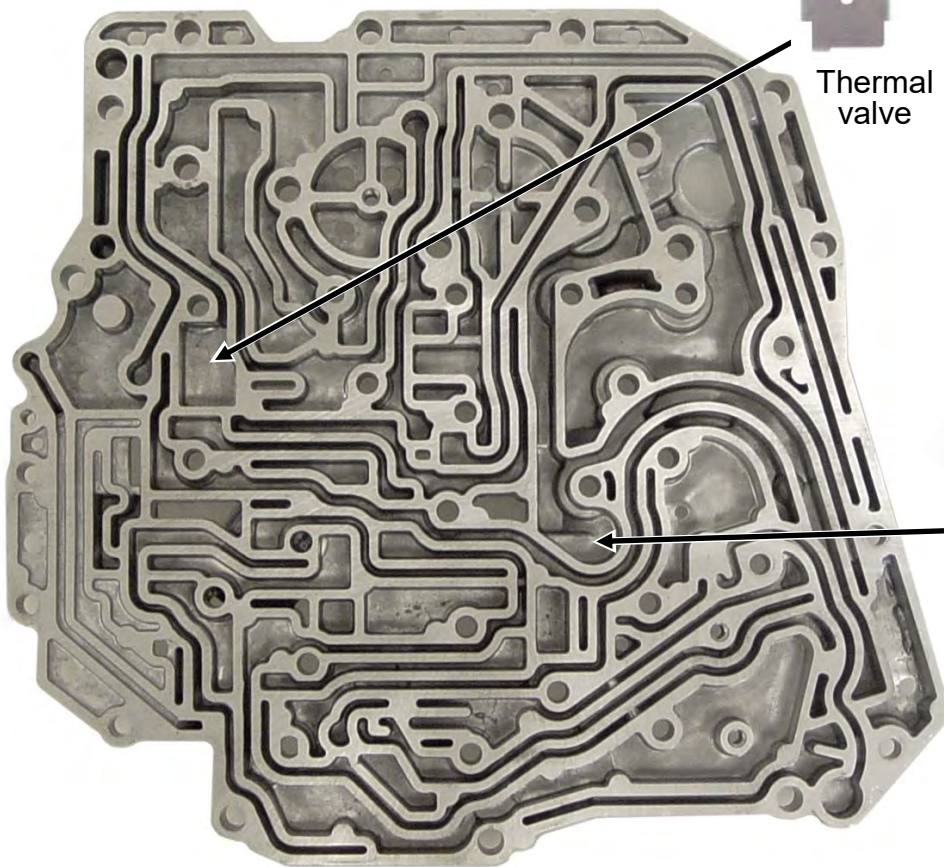
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**Hole A&B**  
Should be: .101 to .107.  
Resize as needed.  
**Hole C: *Optional Shift feel***  
Shorter high throttle 1-2  
and cleaner 2-3 and 2-1.  
Enlarge hole .076 to .078

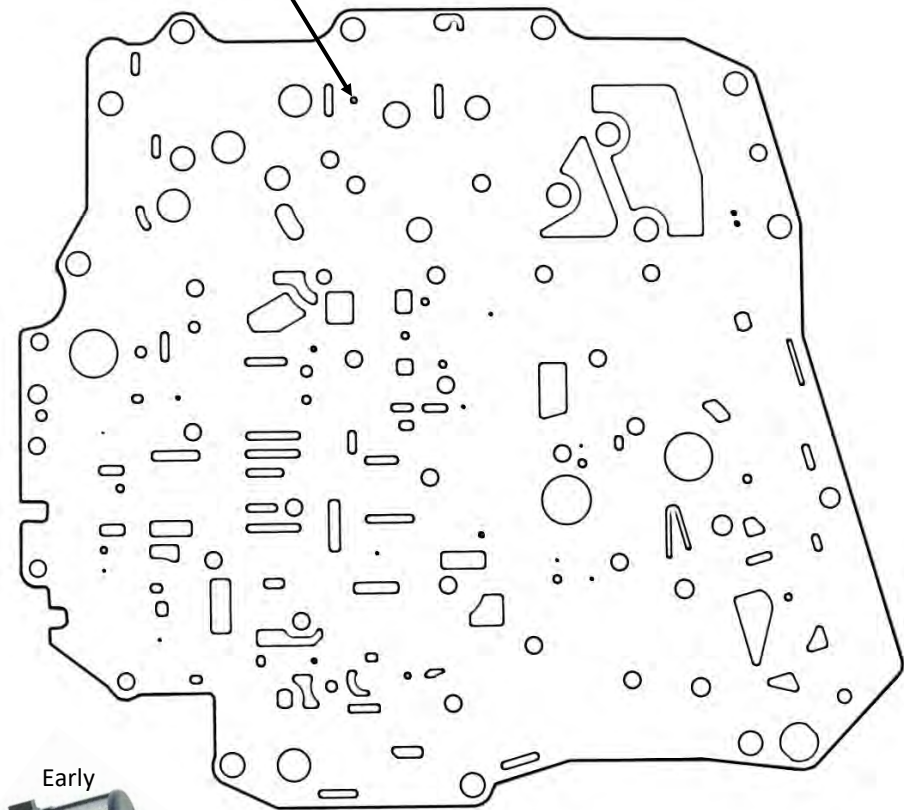
# This Page: 606/42LE & 42RLE Only

606/42LE Channel Casting



Drill this hole  
To .101 to .106

Separator Plate



Filter Screen  
Types







## 604/42RLE 4th Type\*\* Stack-up

**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

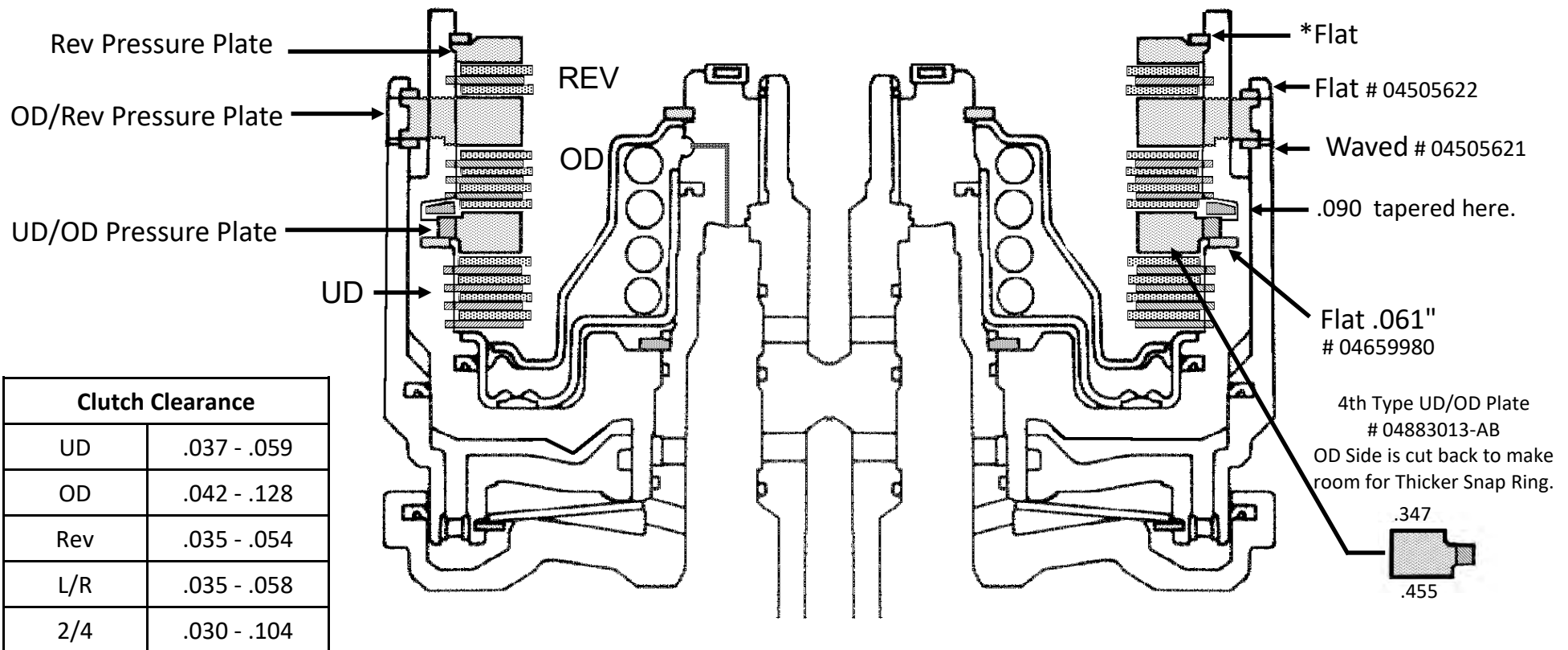
**UD stack-** Start with .068 steel plate, alternate .073 clutch plates, the stack will end with a friction. Install .061" flat snap-ring, 4th design UD/OD Pressure plate then tapered .090 snap-ring.

**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**



**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.