RE4F02A & RL4F02A Shift Kit®
With Hi-Temp Low-Shrink Sealing Rings
This kit is about

Falls out of gear at stop sign HOT.
Delayed forward engagement.
No 3rd after a 3-2 or 4-2 kickdown.
4-3 or 4-2 Kickdown runaway.
Burns up the 3-4 clutches.

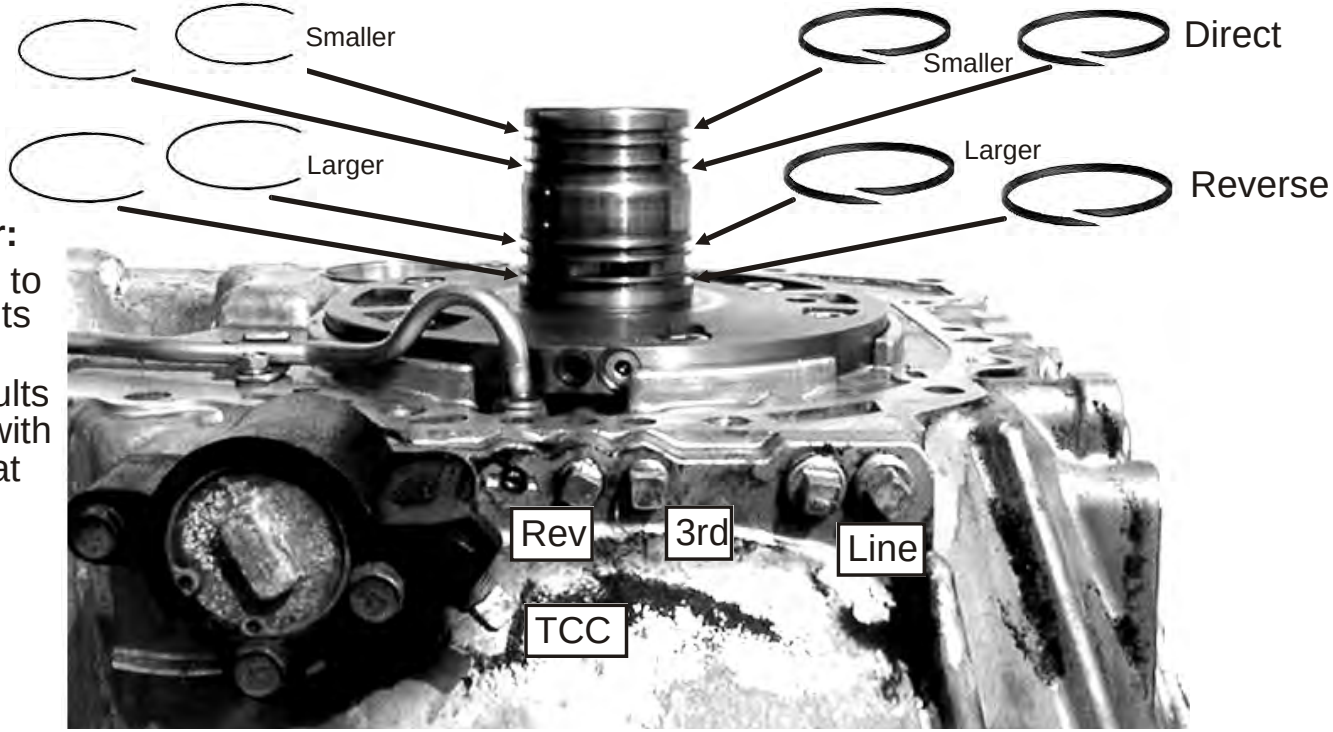
Direct clutch (3rd) Inner seal leak;
Wears flat or opens up.
Soft 1-2 and 2-3.
HI-Temp Low-Shrink rings assure quality shifts & extended durability.

SK RE4F02A®

Maxima: 1985-96
Pulsar: 1988-90
Stanza: 1986-92

1. Fill each groove with some assembly Jel. Install the larger, then the smaller expander wires.

2. Install two of the larger, then two smaller plastic rings into the grooves with assembly Jel.



Hello Mechanic and Shop Owner:

We'll admit it. It took a long time to find the real cause of the complaints with this trans, but it was worth it.

We are really happy with the results and believe you can ship this job with full confidence that it will work great and stay out the door.

Thanks for listening,

TransGo Tech Team

Put assembly Jel in fridge at night.

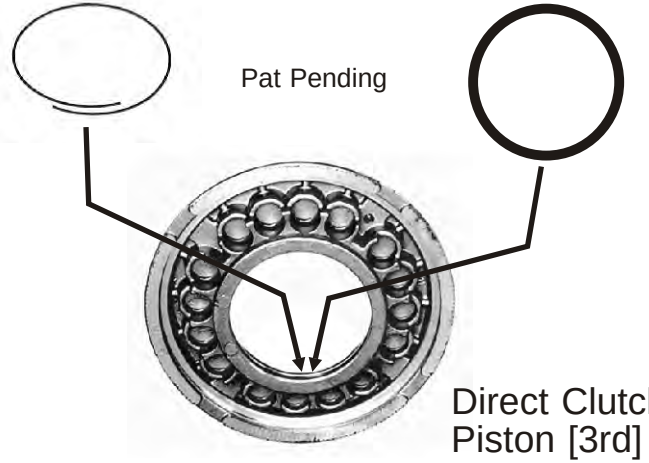
Inner Direct Piston Seal

On the road original seal would get hot and soft, the centrifugal force expands it outward into the piston so it wont seal after 3-2 or 4-2 kickdown.

The compression spring constantly makes seal tight by cancelling centrifugal force. The harder seal resists wear even if the drum is not smooth.

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

B. Start the solid seal into the groove at 6 o'clock.

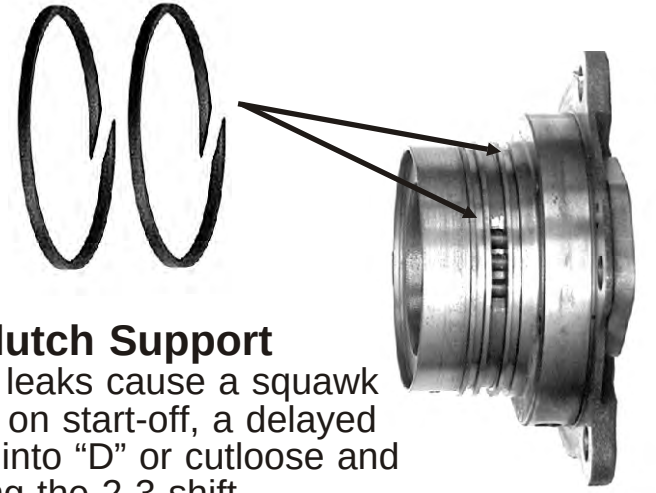


Direct Clutch Piston [3rd]

Direct Drum

Install **RINGS** with some assembly-Jel. Ends of ring should just touch or have a small gap. If pushed together **FIRMLY** they may **BIND** in the groove and **WON'T SEAL.** Be *GENTLE,* OK.

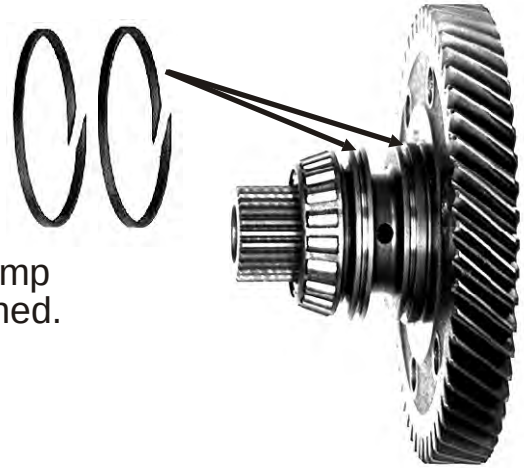
HOW TO AIR CHECK: Pump 10-12 squirts of fluid into the feed circuit and apply with full shop pressure. Then reduce to 30-40 psi and recheck apply.



Forward Clutch Support

Forward ring leaks cause a squawk or a shudder on start-off, a delayed engagement into "D" or cutloose and squawk during the 2-3 shift.

You just fixed it.



Output Shaft

Install special Hi-temp **Lube Rings** furnished.

RE4F02A
IDENTIFY VB

2nd Band Adjustment

Tighten just snug with a short wrench. Then back off 4 turns.

A new or relined band might have a soft 1-2 or slide bump during break in. Go beat on it for 30-40 shifts and it will heal.

Pressure Rise Concern?

A 2-3 cutloose on road test is often from a bad pressure control solenoid.

Attach pressure gauge. Pressure should go up instantly when you add throttle and max pressure during start off must be 140 to 170 psi.

Install **WHITE** PR Spring

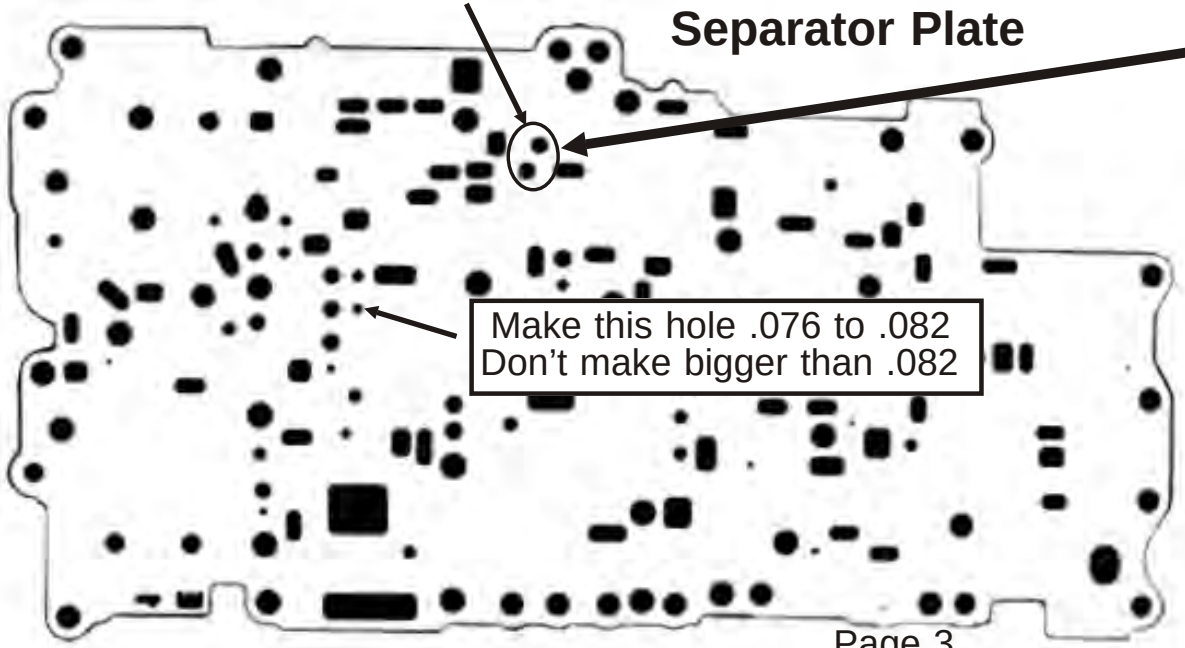
Reuse

Install ball first then retainer.

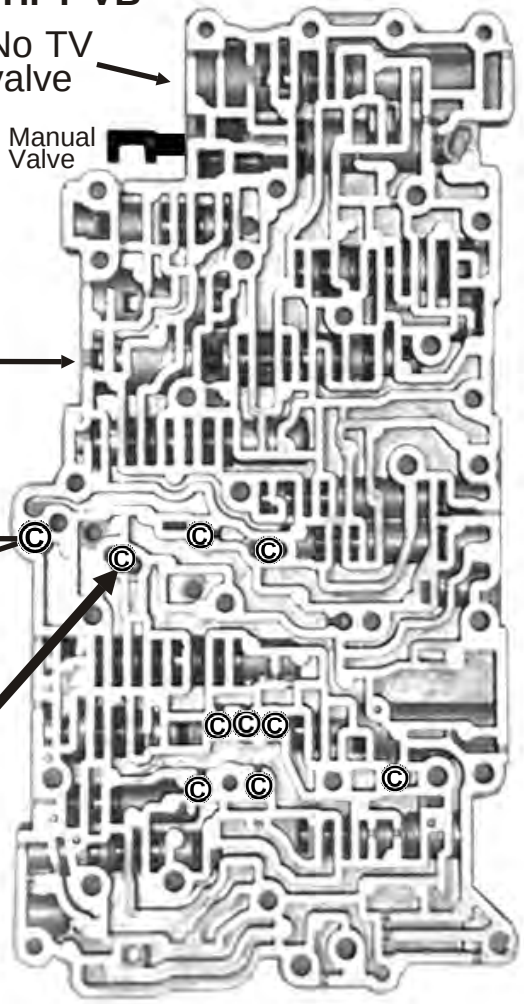
One .187 Ball

If the plate has two holes at circled location--install ball in the bathtub. Only one hole, no ball in bathtub.

Separator Plate



Make this hole .076 to .082
Don't make bigger than .082



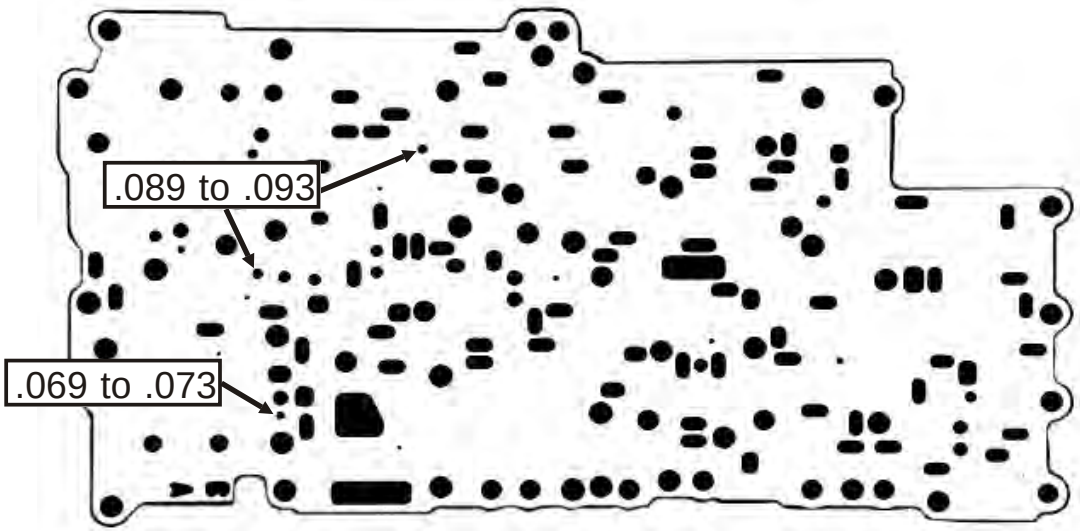
Valve Body

One Ball .187.----8 or 9 Balls .217

Some extra balls are furnished just in case some of them get lost

RL4F02A

IDENTIFY VB



Separator Plate

Plate holes should be the sizes shown. Resize if necessary.

Install **ORANGE** PR Spring

"You'll love how it

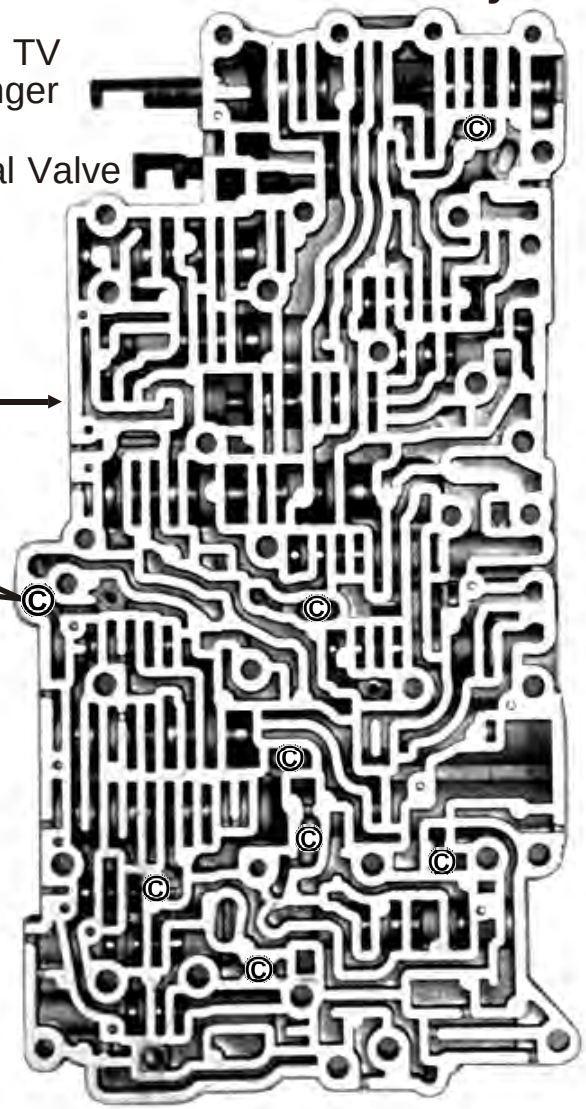
Install ball first, then retainer.

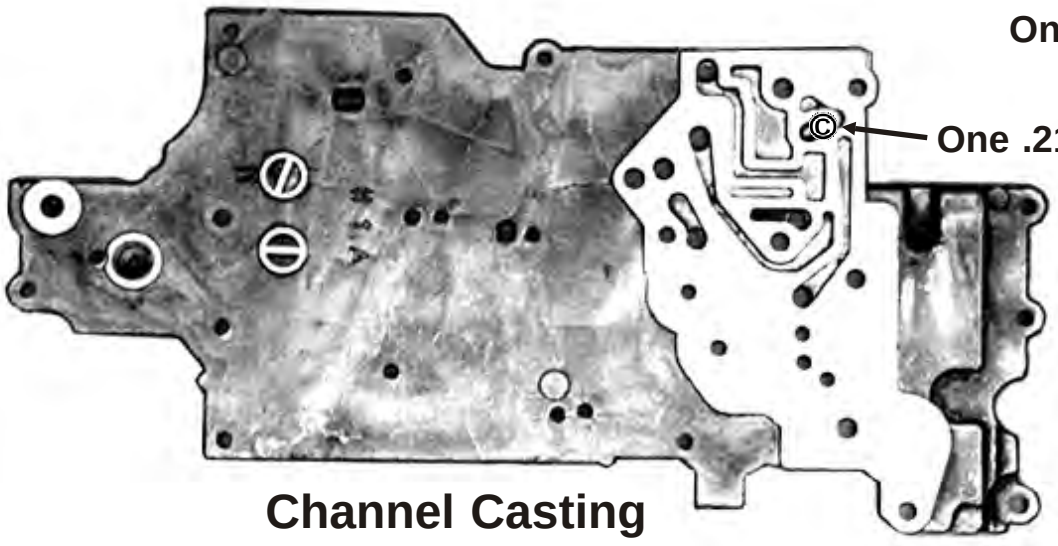
One .187 Ball

Valve Body

Has TV plunger

Manual Valve





One .217 Ball

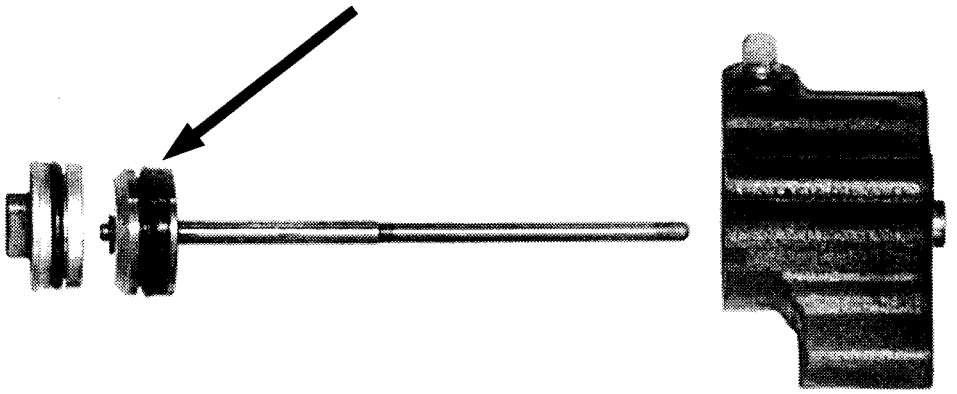
Channel Casting

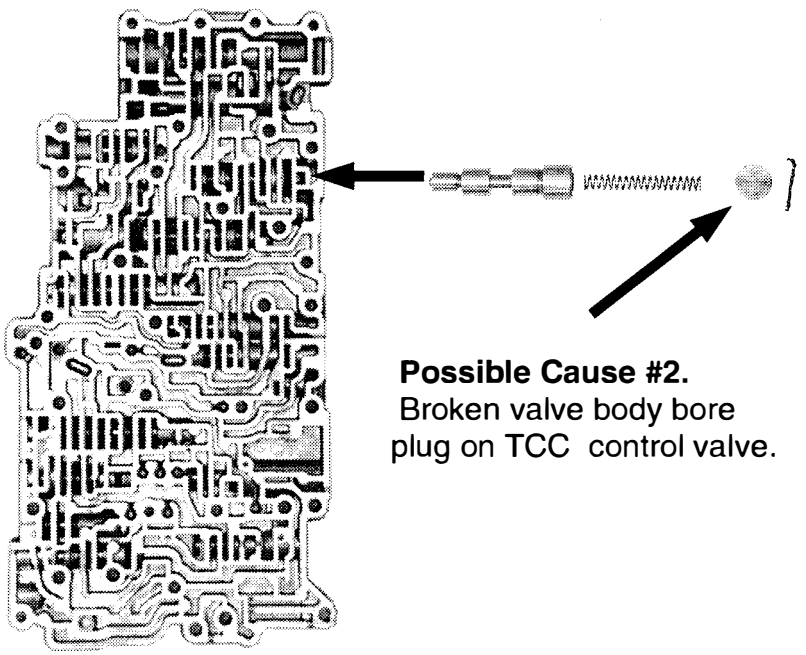
One Ball .187----Seven Balls .217

RE4F02A/RL4F02A
Kills Engine in Gear

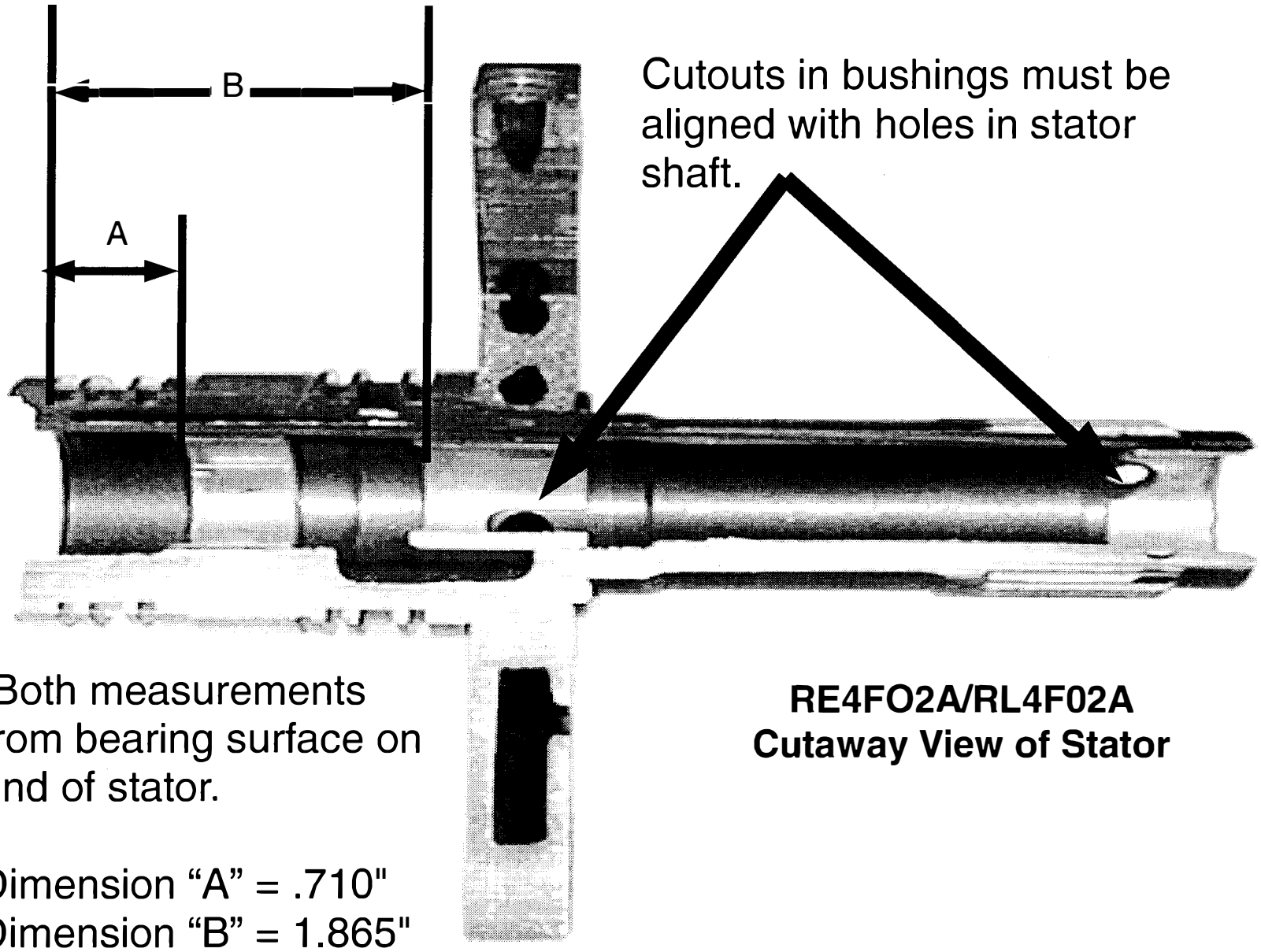
There are several possible causes of complaints associated with killing the engine (TCC Applying) when the shifter is placed in gear. The identifiable causes are described below and on the following page.

Possible Cause #1. Control cylinder rubber seal hard/flat/shrunken. Commonly the cause if the complaint is "cold only" and the unit is a high mileage original job.





Possible Cause #2.
Broken valve body bore plug on TCC control valve.



Both measurements from bearing surface on end of stator.

Dimension “A” = .710"
Dimension “B” = 1.865"

RE4FO2A/RL4F02A
Cutaway View of Stator

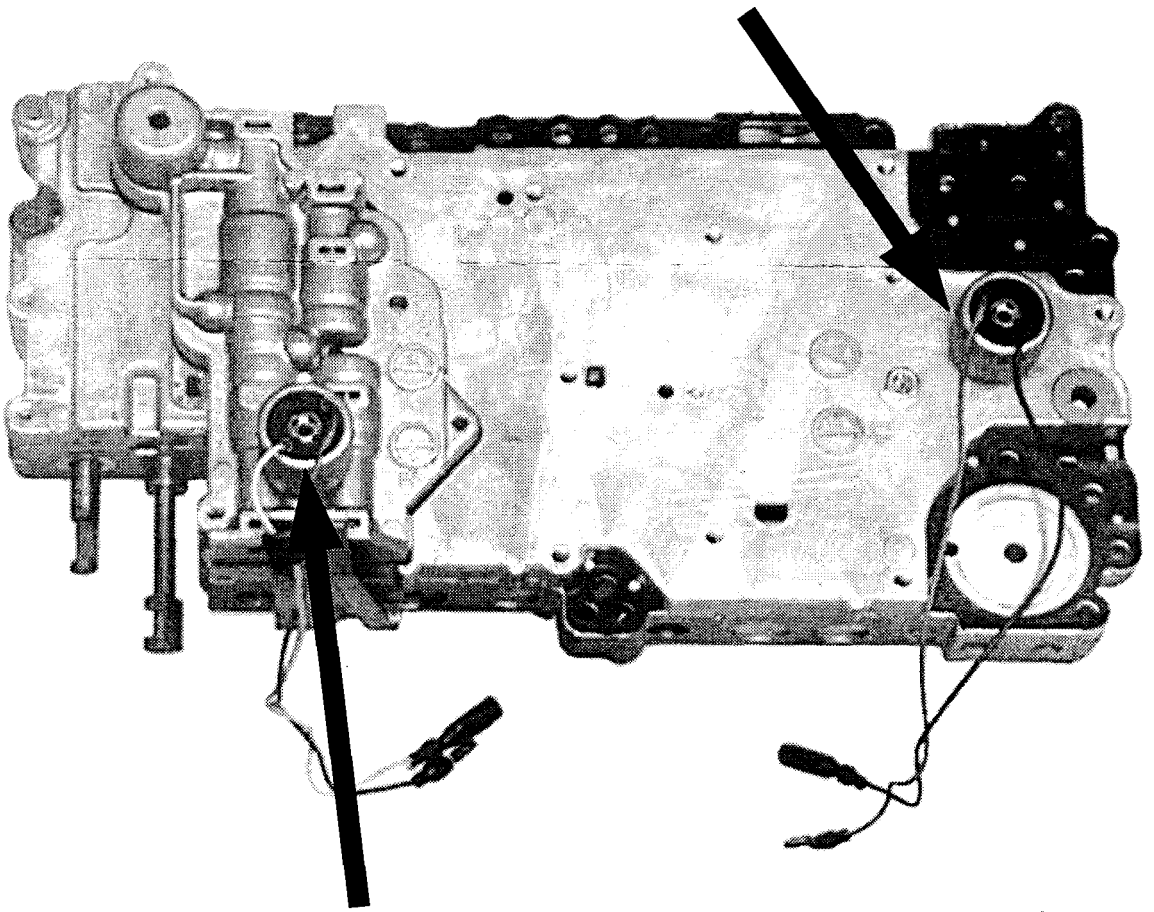
RL4F02A

Falls Out of Fourth Gear

A complaint of falls out of 4th gear EXCEPT on lift throttle may be experienced after overhaul or valve body service. The transaxle may shift into 4th only when the throttle is released, then downshift to 3rd as the throttle is applied. Another related symptom may be abnormal TCC apply/release. One cause of these complaints may be the TCC and OD Cancel solenoids installed into the wrong positions on the valve body. Solenoids must be installed as shown below.

The correct locations and wire color codes are shown in the picture below.

The OD Cancel Solenoid installs here. Wires are Black and Red.



The TCC Solenoid installs here. Wires are Blue and White.

RL4FO2A/RE4FO2A
Pump Pocket Wear

It is normal for a certain amount of pump pocket wear to occur over time on these units. The wear is usually worse in the location opposite the slide spring. Some shops are having the cases machined and resetting geartrain endplay by replacing the selective washers. This is a satisfactory repair if done correctly. However, there have been some incidences of mismachined pockets that result in line pressure problems after reassembly.

While this wear is not technically correct, it has not been proven to create any operational or durability concerns either. The complaints and failures these units come in for are almost **NEVER** a result of this pump pocket wear.

Pump pocket wear here is not a major concern. It does not require a new/repaired case to provide a durable rebuilt unit.