

# NISSAN RE4F04A, FORD 4F20E

## COMPLAINT

SECONDARY COMPLAINTS

## High line pressure and harsh shifts

• Loss of reverse • Harsh forward/reverse engagement • Pump warpage • Poor line response

## CAUSE

Bore wear creates high line pressure, which can warp the pump or valve body and limit converter feed, which causes delayed engagement.

## CORRECTION

This oversized valve kit allows the valve body to be refurbished and restores the line pressure circuit to its proper clearances.

## Oversized Pressure Regulator Kit

### NEW PRODUCT!

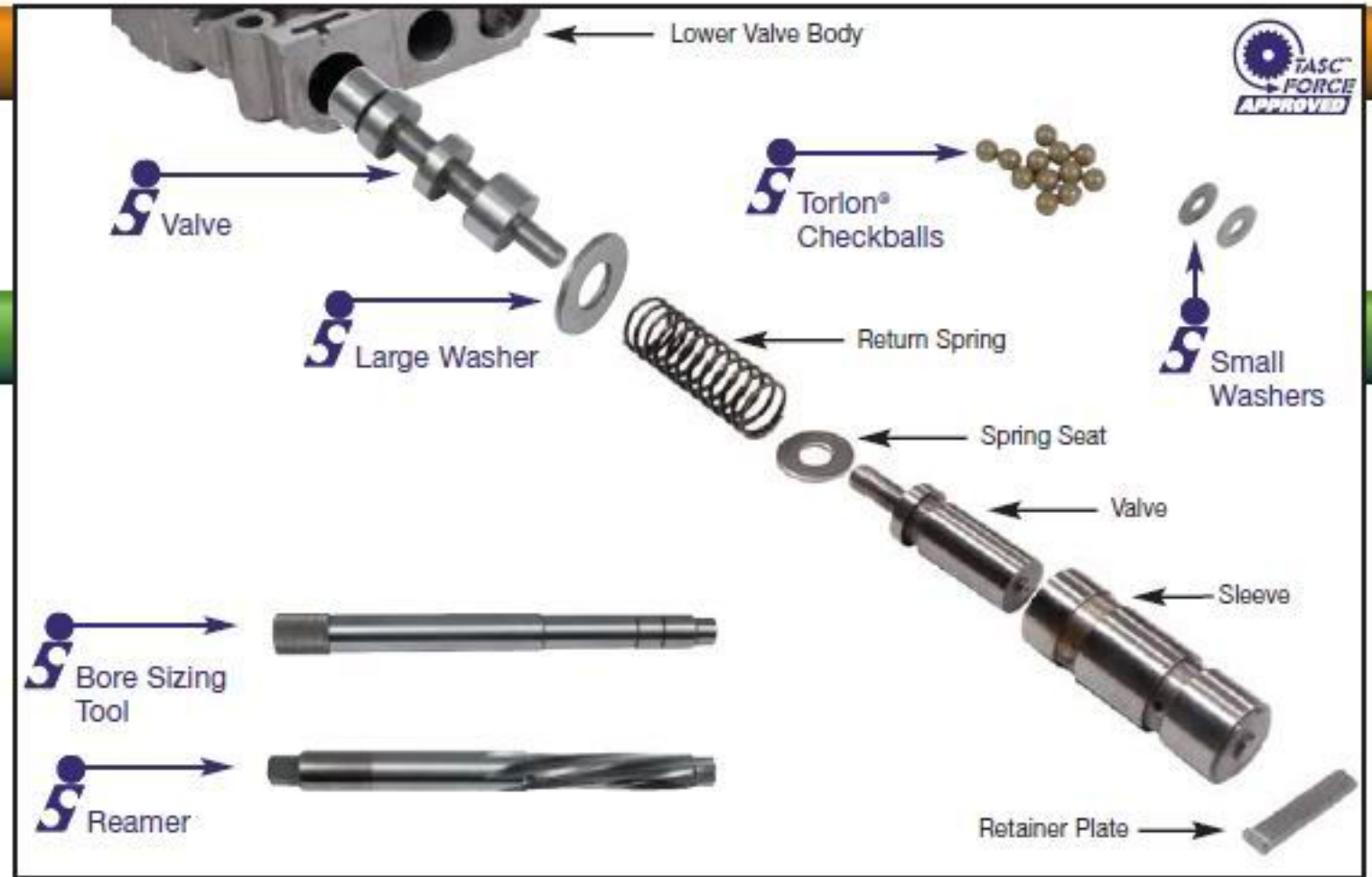
#### 63940-01K

1 Valve  
1 Large Washer  
2 Small Washers  
12 Torlon® Checkballs



#### 63940-TL

1 Reamer  
1 Bore Sizing Tool



### Sonnax Part Summary

The continuous oscillation of the pressure regulator valve wears the casting bore. If severe wear occurs at the balance line circuit, the pressure regulator valve won't stroke to reduce line pressure. This can result in high line pressure, harsh shifts and harsh engagements. Wear at the other pressure regulator valve circuits can allow line pressure to exhaust or go to sump, resulting in low line pressure, soft shifts and burned clutches and bands. Additionally, problems with the pressure modifier valve can decrease line response and result in soft shifts. Sonnax now offers an oversized pressure regulator valve kit, **63940-01K**, for the RE4FO4A and 4F20E applications, which allows the valve bore to be refurbished and the hydraulic integrity of the line pressure circuit to be restored.

### Features & Benefits

- Oversized valve allows proper hydraulic clearances to be restored to properly control line pressure.
- Parts kit includes three washers for optional line pressure tuning.
- Parts kit includes 12 replacement Torlon® checkballs.
- Tool kit includes easy-to-use, bench-style self-guiding reamer and a bore sizing tool for enhanced surface finish.

## COMPLAINT

No 2nd gear, slipping 2nd gear, soft 1-2

## CAUSE

A worn bore or sticky 1-2 accumulator valve causes a soft or loss of 2nd gear. A loose end plug on the accumulator control valve results in delayed engagements or loss of reverse.

## CORRECTION

This kit provides a slightly oversized 1-2 accumulator valve, replacement springs to re-establish correct accumulator valve function, and an o-ringed end plug for the accumulator control valve.

Accumulator  
Valve Kit

## NEW PRODUCT!

## 63940-02K

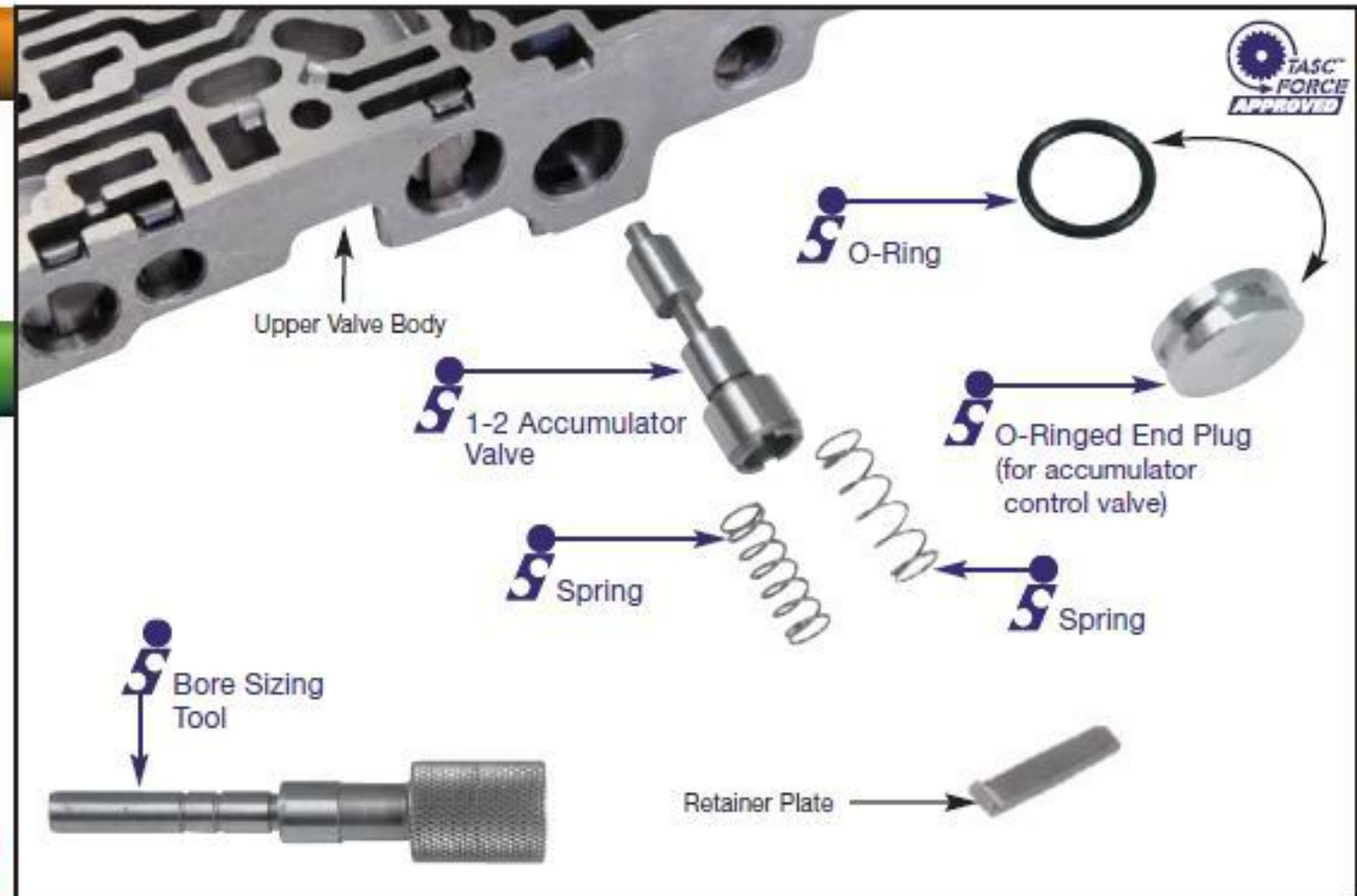
1 Accumulator Valve  
1 O-Ringed End Plug  
2 Springs



**Note:** Does not fit 2000 or later Maxima or any 2002-up valve bodies.

## 63940-BST

1 Bore Sizing Tool



## Sonnax Part Summary

Sonnax now offers an accumulator valve kit, 63940-02K, for RE4FO4A and 4F20E applications. The kit includes a slightly oversized 1-2 accumulator valve that allows the valve bore to be burnished to remove ridges and to restore hydraulic clearances. The kit also includes two stronger springs, which allow accumulator pressure to be increased and prevent valve stickiness. Also included in the valve kit is an o-ringed end plug for the accumulator control valve in the lower valve body. This plug prevents valuable EPC oil loss and properly positions the valve for maximum pressure control.

## Features &amp; Benefits

- Slightly oversized 1-2 accumulator valve restores hydraulic clearances.
- Bore sizing tool eliminates bore ridges that cause the 1-2 accumulator valve to stick.
- Two stiffer springs included for tuning accumulator pressure.
- O-ringed end plug at accumulator control valve gives improved accumulator pressure control and position.

## NISSAN RE4F04A, FORD 4F20E

**COMPLAINT**

SECONDARY COMPLAINTS

**Premature clutch/band failure, poor reverse boost**

• Soft shifts • Insufficient line rise • Erratic or uncontrollable pressure or buzz in reverse

**CAUSE**

An out-of-position accumulator shift valve creates soft or flared upshifts.

**CORRECTION**

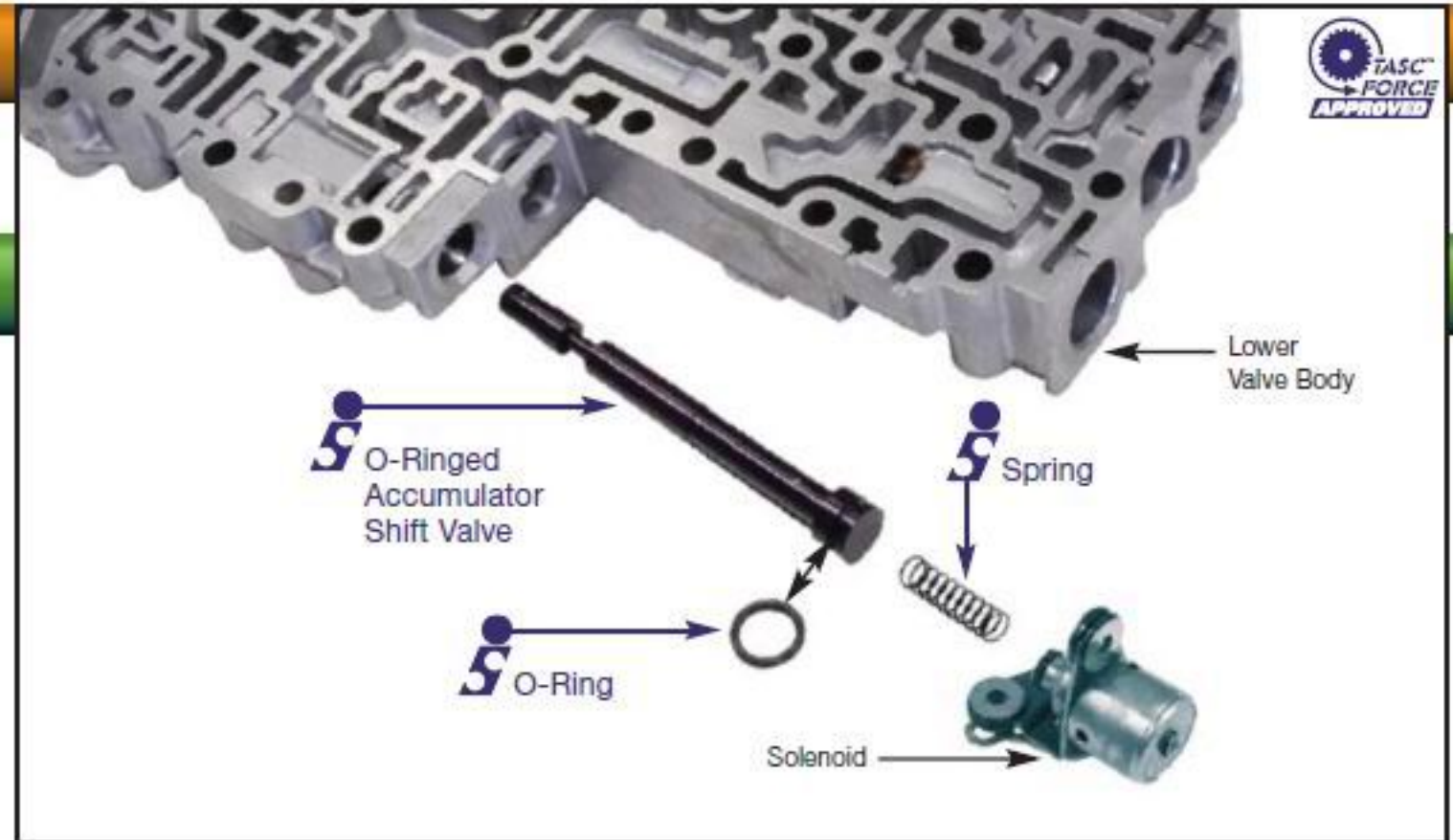
This updated design eliminates the OEM split valves and seals all circuits.

## Accumulator Shift Valve Kit

**NEW PRODUCT!****63940-03K**

1 Accumulator Shift Valve  
1 O-Ring  
1 Spring

**Note:** Replaces either early or late OEM line-ups in most valve bodies. Some late valve bodies do not have an accumulator shift valve.

**Sonnax Part Summary**

The accumulator shift valve line-up has been changed numerous times by OEM, and incorrect reassembly can result in soft or flared upshifts. This kit includes an accumulator shift valve that will be correctly positioned to prevent soft or flared upshifts.

**Features & Benefits**

- Shift valve provides proper circuit flow to prevent soft or flared upshifts.
- Sonnax design replaces all OEM line-ups that use an accumulator shift valve.