

## COMPLAINT

### SECONDARY COMPLAINTS

## Line pressure instability

• Pump noise • Pump rotor and cover damage • Delayed engagements • Lube-related failures • Converter overheat

## CAUSE

The instability of the main pressure regulator valve, combined with the slide return spring, can cause extreme pressure spikes in the decrease (PC) oil circuit. When the inboard end of the pressure regulator valve wears, the CBY or bypass oil cannot flow past the regulator valve, causing delayed engagements and reduced converter fill and lube oil flow.

## CORRECTION

The Sonnax kit contains an oversized anodized valve with modified spool lengths which better regulates converter/lube flow and restores hydraulic stability.

## Oversized Pressure Regulator Valve Kit

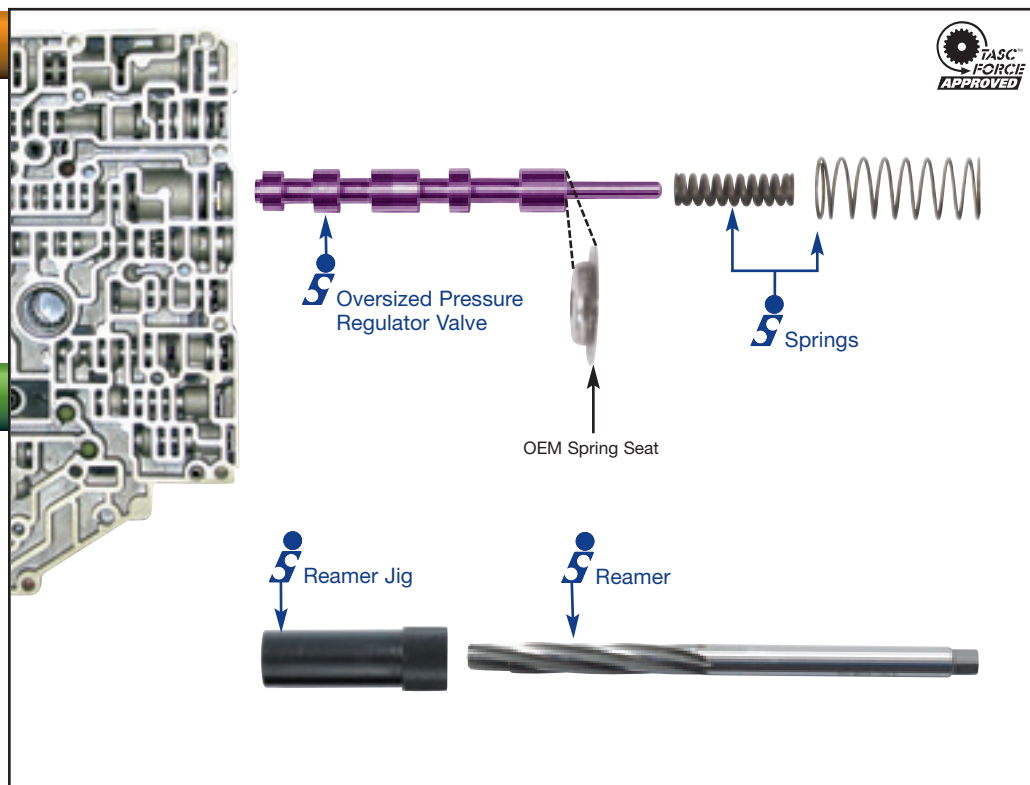
### 96206-10K

1 Oversized Pressure Regulator Valve  
2 Springs



### 96206-TL2

1 Reamer  
1 Reamer Jig



### Sonnax Part Summary

The main pressure valve regulates line by pushing the pump slide into a decrease or limiting position. The instability of the valve, combined with the slide return spring, causes pressure spikes in the decrease (PC) oil circuit of more than 500 psi. When the inboard end of the pressure regulator valve wears, the CBY or bypass oil cannot flow past the regulator valve. This causes delayed engagements and reduced converter fill and lube oil flow. In the 1998 and later AX4Ns, Ford changed the spool lengths on the pressure regulator valves at the converter/lube feed area. This change was to allow the converter circuit to be fed sooner. In the pre-1998 design, the converter/lube circuit is completely closed at high line pressure. The oversized Sonnax pressure regulator valve **96206-10K** mimics the later OEM design to prevent converter/lube-related problems at high line pressure.

### Features & Benefits

- Hard-coat anodized valve prevents wear.
- Modified spool lengths provide better converter/lube feed.
- Two springs included to re-establish correct regulating pressures.