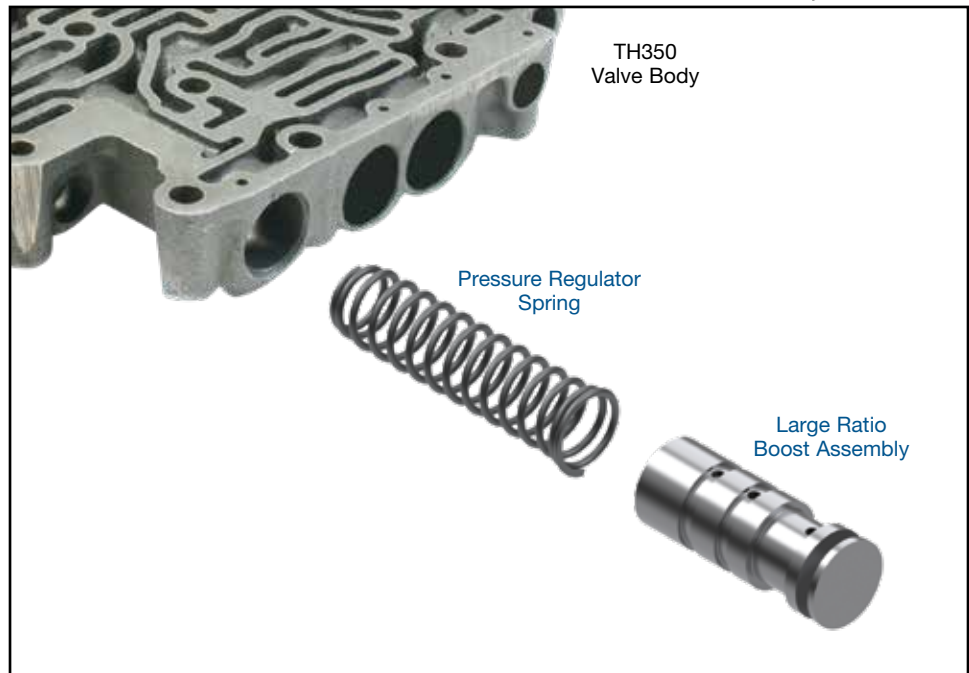


Line Pressure Booster Kit

Part No.
350-LB1

- Large Ratio Boost Assembly
- Pressure Regulator Spring

GM TH350, TH350C



1. Disassembly

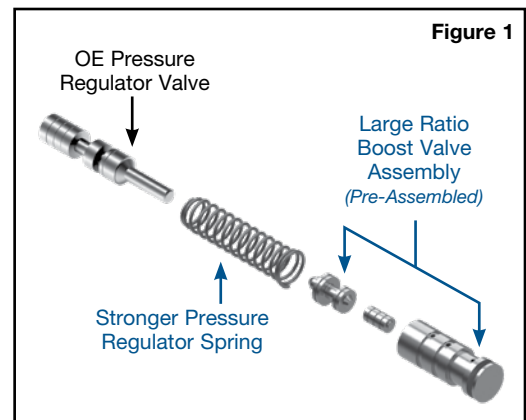
- Remove OE retaining pin and save for reuse.
- Discard OE pressure regulator spring and boost valve assembly.
- Keep OE pressure regulator valve for reuse.

2. Bore Preparation

Lubricate all pieces of the Sonnax line pressure booster kit.

3. Installation **Figure 1**

- Reinstall OE pressure regulator valve.
- Install Sonnax pressure regulator spring.
- Carefully push Sonnax large ratio boost valve assembly into the valve body, open end toward spring.
- Reinstall OE retaining pin.

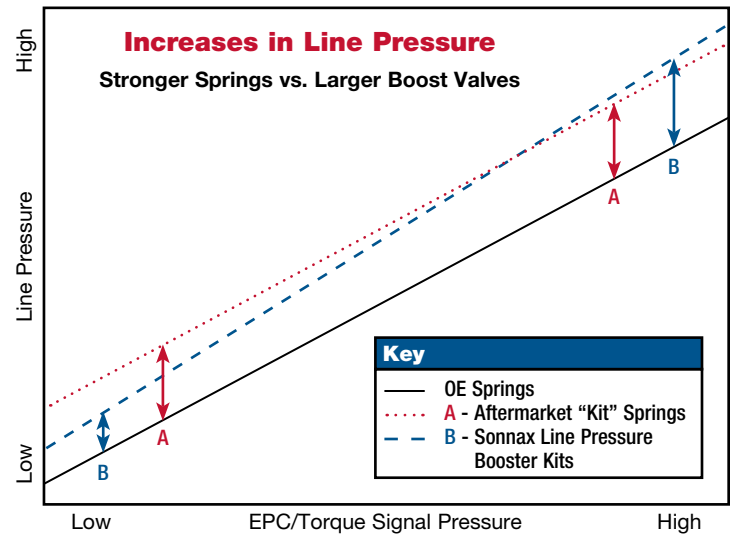


The Prescription for Optimum Pressure

Stronger pressure regulator springs raise pressure equal amounts at idle and maximum pressure. Many aftermarket “kit” springs are a compromise, raising pressure too much at idle and not enough at maximum pressures (**A** in graph). Larger boost valves, on the other hand, have a progressive effect on pressure, changing the rate of pressure increase (**B** in graph).

The Sonnax large ratio boost valves and stronger pressure regulator springs are designed to work together. This is an ideal combination: smooth engagements and lower load on the pump at idle, but a greater increase in pressure as the transmission is worked harder.

For a more in-depth look at raising line pressure, read *The Prescription for Optimum Pressure* in the Sonnax online technical library at www.sonnax.com.



Pump Tech

Good Pressure Depends on a Good Pump

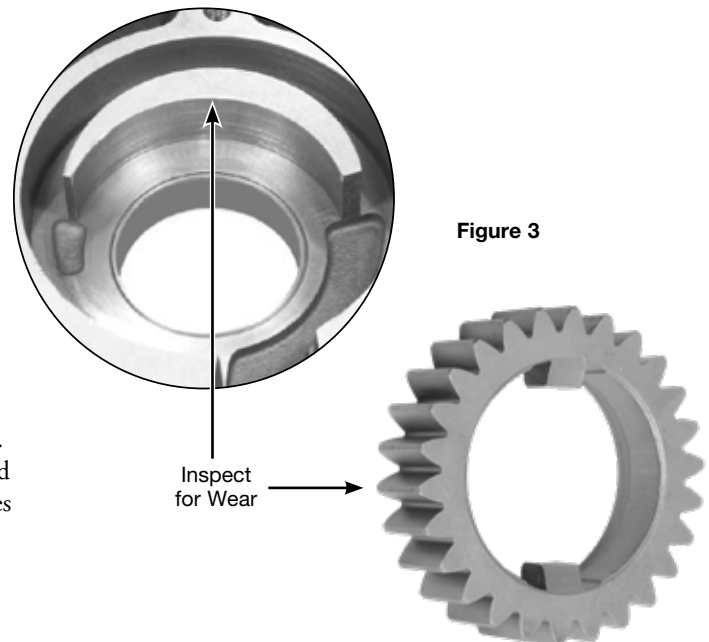
Verify Pump Specifications

Excess clearance equals low pump volume and pressure.

Gear Pocket Clearance	.0007" to .0026" Check with feeler gauge and straight edge over pump face, or with Plastigauge and bolt complete pump together.
Outer Gear to Pump Body	.005" max.

Check for Wear

Wear on tips of inner gear teeth or on the crescent means low pressure. Inspect inside of crescent, area between suction and discharge ports and tips of gear teeth, for wear (**Figure 3**). Wear and excess clearance reduces pump efficiency.



Shift Tech

For detailed information on drilling separator plate orifices, read *Drilling Orifices the Smart Way* in the Sonnax online technical library at www.sonnax.com.