sonnax®
PERFORMANCE

High Performance TRANSMISSION Parts

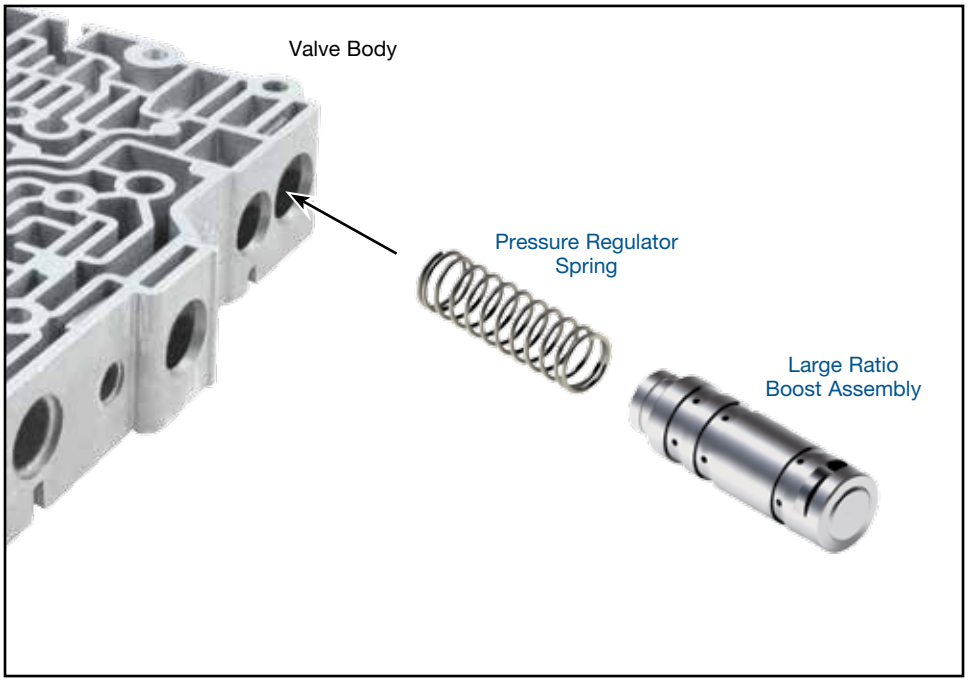
Instructions

GM 4T65-E

Line Pressure Booster Kit

Part No.
4T65E-LB1

- Large Ratio Boost Assembly
- Pressure Regulator Spring



1. Disassembly

Discard the original boost sleeve/valves and large diameter pressure regulator spring. Retain the OE pressure regulator valve, bumper spring and retaining clip.

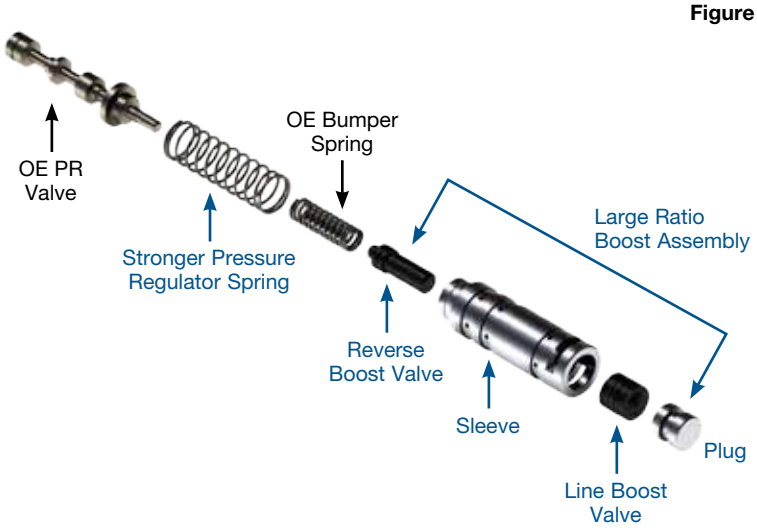
2. Installation

a. Install the original small bumper spring and the Sonnax stronger pressure regulator spring.

b. Install the Sonnax boost assembly with the open end toward the two springs, carefully push the sleeve assembly into the valve body **(Figure 1)**.

c. Install the retaining clip.

Figure 1

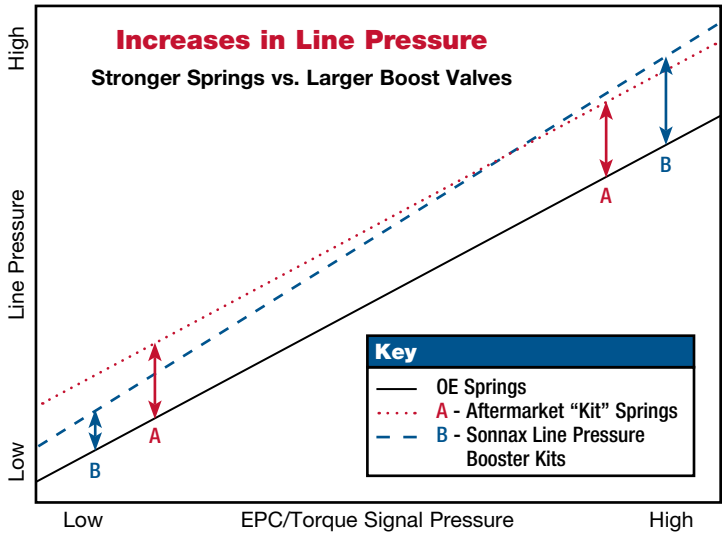


The Prescription for Optimum Pressure

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.

Slide End Play	.0003" to .0016"
Rotor & Vane Endplay	.0020" to .0033"

Check for Wear

- Check with feeler gauge and straight edge over pump face, or with Plastigauge and bolt complete pump together. Too loose = low pressure. Too tight = no line rise, slide is stuck. To check, remove all pump parts and seals, assemble halves with just the pump slide and shake. You should hear pump slide moving inside.
- Carefully check torque signal regulator valve under EPC solenoid. Sticking, binding or wear will cause low line pressure.