

High Performance TRANSMISSION Parts

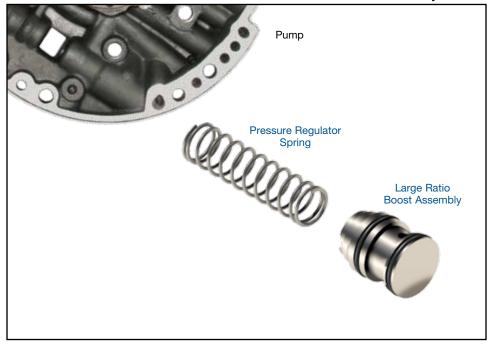
Instructions

GM 200-4R, 4L60

Line Pressure Booster Kit

Part No. 700R4-LB1

- Large Ratio Boost Assembly
- Pressure Regulator Spring
- O-Rings (2)



1. Disassembly

- a. Remove OE retainer and set aside for reuse.
- b. Remove and discard OE boost valve and sleeve.
- c. Remove OE Reverse boost valve and sleeve, set aside for reuse.
- d. Remove and discard OE pressure regulator spring.

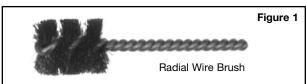
2. Bore Preparation

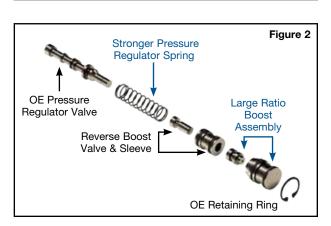
O-rings included in this kit provide extra insurance toward preventing cross leaks and should always be installed.

- a. Carefully inspect snap ring grooves, feed holes or bore edges and de-burr if necessary to reduce cutting. A non-abrasive tool such as a radial wire brush (**Figure 1**) works best, but the bore should always be thoroughly cleaned after any de-burring.
- b. Place the two O-rings into the grooves on boost sleeve, roll sleeve over bench to resize the O-rings, then pre-lube O-rings. Sonnax Slippery Stick™ (O-LUBE) or Door Ease® are ideal for this purpose.

3. Installation

- a. Install Sonnax pressure regulator spring.
- b. Reinstall OE Reverse boost valve/sleeve assembly.
- c. Install Sonnax boost valve/sleeve just far enough to secure with OE retainer.





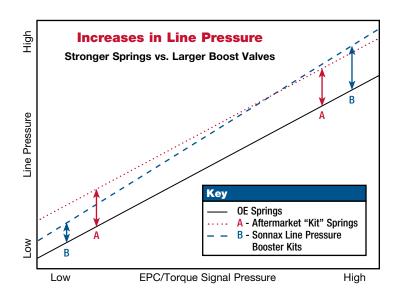
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The Prescription for Optimum Pressure

Stronger pressure regulator springs raise pressure equal amounts at both idle and maximum load. Many aftermarket "kit" springs are a compromise, raising pressure too much at idle and not enough at maximum loads (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

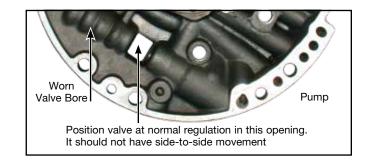
Excess clearance equals low pump volume and pressure.

Rotor, slide and vanes

.0005" to .002"

Check with feeler gauge and straight edge over pump face, or with Plastigauge and bolt complete pump together.

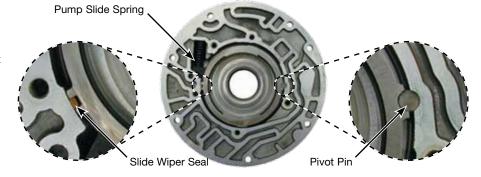
Too Loose = low pressure. Too Tight = no line rise, slide is stuck. To check, remove all pump parts and seals, assemble halves with just the pump slide and shake. You should hear pump slide moving inside.



Check for Wear

- If pivot is worn, replace with Sonnax pivot pin 65797.
- If vane has visible wear, replace with Sonnax pump vane 1280.





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.

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