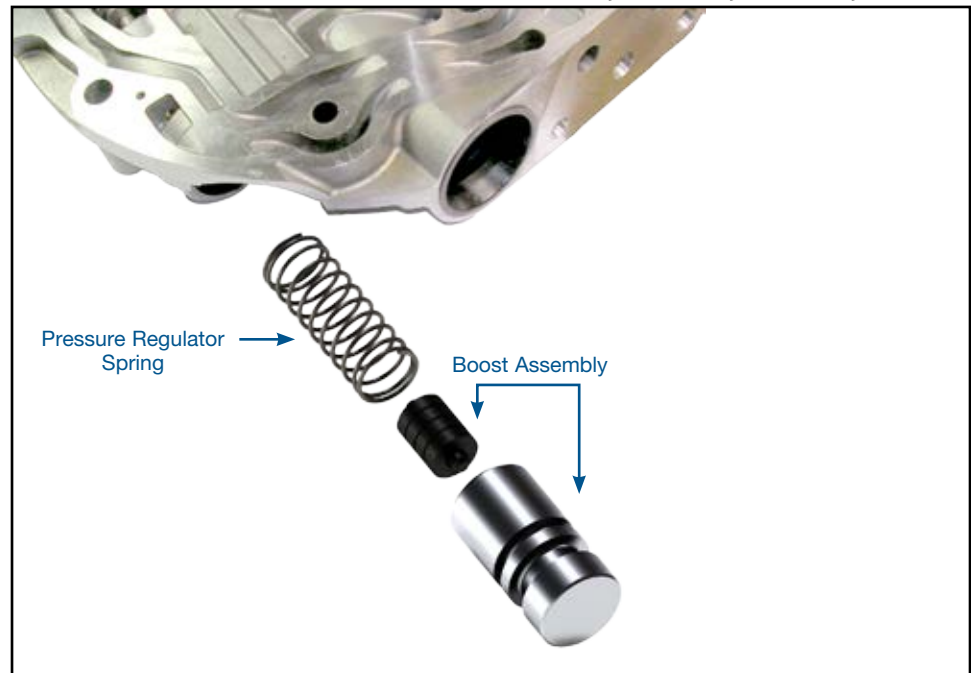


Line Pressure Booster Kit

Part No.
6L80-LB1

- Boost Assembly
- Pressure Regulator Spring

GM 6L45, 6L50, 6L80, 6L90



1. Disassembly

- Remove and discard the OE boost sleeve/valve and large diameter pressure regulator spring.
- Save the OE pressure regulator valve, small bumper spring and retaining pin for reuse.

2. Installation

- Install the OE small bumper spring and the Sonnax large ratio pressure regulator spring.
- With the open end toward the two springs, carefully push the Sonnax boost assembly into the pump body, but only deep enough to reinstall the OE retaining ring.

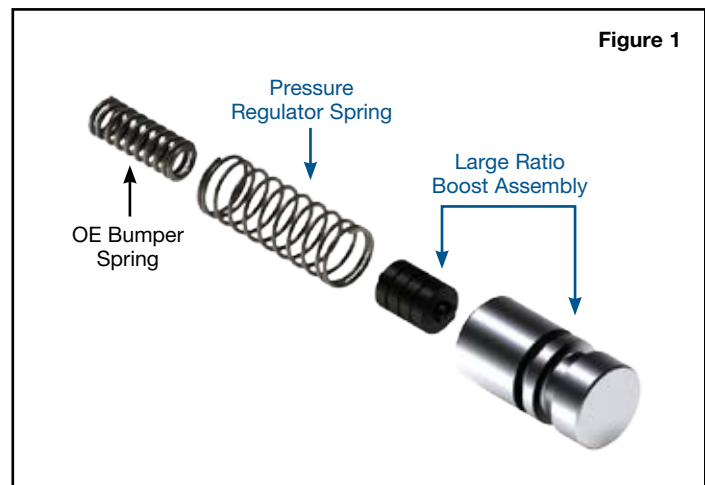


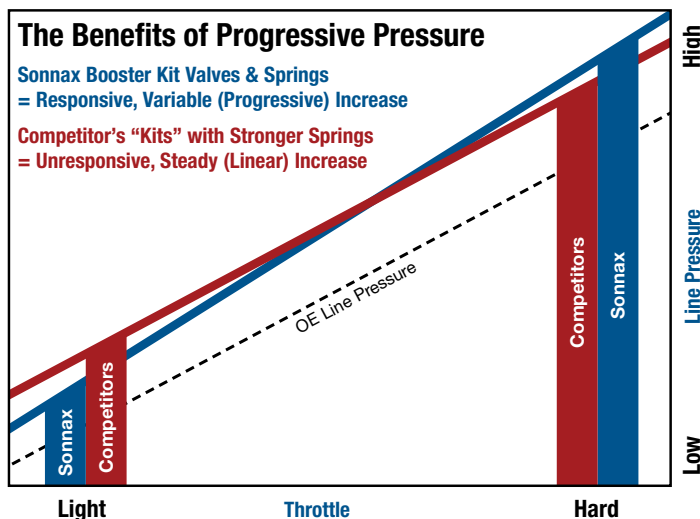
Figure 1

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. Larger boost valves, on the other hand, have a progressive effect on pressure, changing the rate of pressure increase.

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

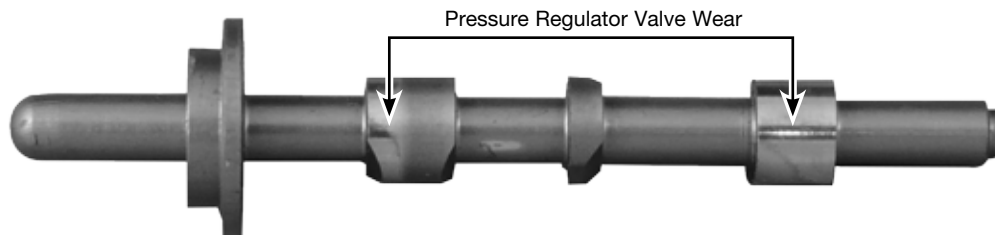
Verify Pump Specifications

Excess clearance equals low pump volume and pressure.

Rotor, slide and vanes
.0008" to .0020"
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.
Pump Cover to Converter Housing Bolts
97 in-lb

Check for Wear

- Check pressure regulator valve for wear. If the valve has visible wear, replace with Sonnax pressure regulator valve **104520-03K**.



- Check pump vanes for wear. If pump vane has visible wear, replace with Sonnax pump vane **76742**.

Recommended Sonnax Products

Part No.	Unit
Hydraulic Booster Kits	
4R100-LB1	E40D, 4R100
4L60E-LB1	4L60-E, 4L65-E, 4L70-E*
4L60E-LB2	4L60-E, 4L65-E, 4L70-E**
700R4-LB1	4L60 (700-R4), 200-4R
400-LB1	400
6L80-LB1	6L80-E
4L80E-LB1	4L80-E, 4L85-E
4T65E-LB1	4T65-E
350-LB1	350
4R70W-LB1	A0DE, 4R70W, 4R75W
Electronic Booster Kits	
44957-LB1	68RFE
44957-LB2	45/545RFE

*Early-style pump **Late-style pump

O-Ringed End Plug Kit 104740-23K



Compensator Feed Regulator Valve Kit 104740-09K



Pump Vane 76742



Oversized Clutch Boost Valve 104740-01



Line Pressure Booster Kits

Hydraulic Booster Kits Sonnax hydraulic line pressure booster kits contain stronger pressure regulator springs and large ratio boost valves designed to work together to provide progressive pressure increases as driving conditions become more demanding. Sonnax springs are approximately 10% stronger than OE and more conservative in impact than other aftermarket "kit" springs.

Electronic Booster Kits Chrysler 45RFE, 545RFE and 68RFE units are unique because they utilize a true closed-loop pressure control system: the computer reads line pressure at all times through a full range pressure sensor. This means traditional methods of raising line pressure will have no effect because the computer simply re-adjusts the pressure until the voltage signal from the pressure sensor matches what the computer wants to see. Sonnax electronic line pressure boosters alter the pressure signal sent to the computer, causing the computer to raise line pressure. These kits are ideal for heavy duty and modified vehicles and even stock transmissions when a little extra pressure is desired. The booster installs easily between the pressure sensor and vehicle harness using OE-style sealed connectors.

O-Ringed End Plug Kit

104740-23K

In GM 6L45, 6L50, 6L80, 6L90 valve bodies, loss of Reverse and latch pressure occurs at worn plugs at the clutch select valves, preventing proper control of circuits as line pressure is routed through these valves to feed various clutches depending upon gear selection. Sonnax O-ringed end plug kit **104740-23K** corrects these issues.

Compensator Feed Regulator Valve Kit

104740-09K

Installing the Sonnax compensator feed regulator valve kit **104740-09K**, with improved materials and valve support, will extend the service life of GM 6L45, 6L50, 6L80, 6L90 units beyond that of the OE casting.

Pump Vane

76742

Quality replacement Sonnax pump vanes **76742** are available for rebuilding GM 6L45, 6L50, 6L80 and 6L90 pump rotors, a cost-effective alternative to replacing the entire pump rotor assembly. Sold 100/bag.

Oversized Clutch Boost Valve

104740-01

GM 6L45, 6L50, 6L80, 6L90 boost valves provide feedback pressure to their respective clutch regulator valves, helping control apply and release of the clutch. Sonnax oversized clutch boost valve **104740-01** allows the bore to be refurbished and restores hydraulic integrity for proper control of the clutch feed circuit.