SUPERCHARGER REGULATOR
P/N 512-505

The **Holley SUPERCHARGER REGULATOR (SR*)*** is a supplemental fuel pressure regulator designed to increase the fuel pressure on supercharged engines during boost conditions. A Supercharger Regulator is used on supercharged engines as a method to maintain a safe air-fuel ratio during boost without the need for larger injectors or ECU recalibration. It is designed to work in conjunction with the stock regulator. The stock regulator controls fuel system pressure when the manifold vacuum is present. When boost occurs, the SR increases fuel pressures as the manifold boost increases.

NOTE: You, the installer, must read completely through these installation instructions BEFORE you begin installation and carefully follow the instructions. Failure to do so may result in product/system and/or engine failure.

INTRODUCTION

Holley Performance Products has written this manual for the installation of the **Supercharger Regulator**. This manual contains all the information needed to install this product. Please read all the **WARNINGS, NOTES,** and **TIPS**, as they contain valuable information that can save you time and money. It is our intent to provide the best possible products for our customer; products that perform properly and satisfy your expectations. Should you need information or parts assistance, please contact our technical service department at 1-270-781-9741, Monday through Friday, 7 a.m. to 5 p.m. Central Time. Please have the part number of the product you purchased when you call.

The **Holley Supercharger Regulator (SR*)*** is a supplemental fuel pressure regulator designed to increase the fuel pressure on supercharged engines during boost conditions. A Supercharger Regulator is used on supercharged engines as a method to maintain a safe air-fuel ratio during boost without the need for larger injectors or ECU recalibration. It is designed to work in conjunction with the stock regulator. The stock regulator controls fuel system pressure when manifold vacuum is present. When boost occurs, the SR increases fuel pressures as the manifold boost increases.

NOTE: Since all engines have different fuel requirements, it is highly advised to use equipment that can monitor the air/fuel ratio after this component is installed.

WARNING! FAILURE TO DO SO MAY RESULT IN PRODUCT/SYSTEM AND OR ENGINE FAILURE!

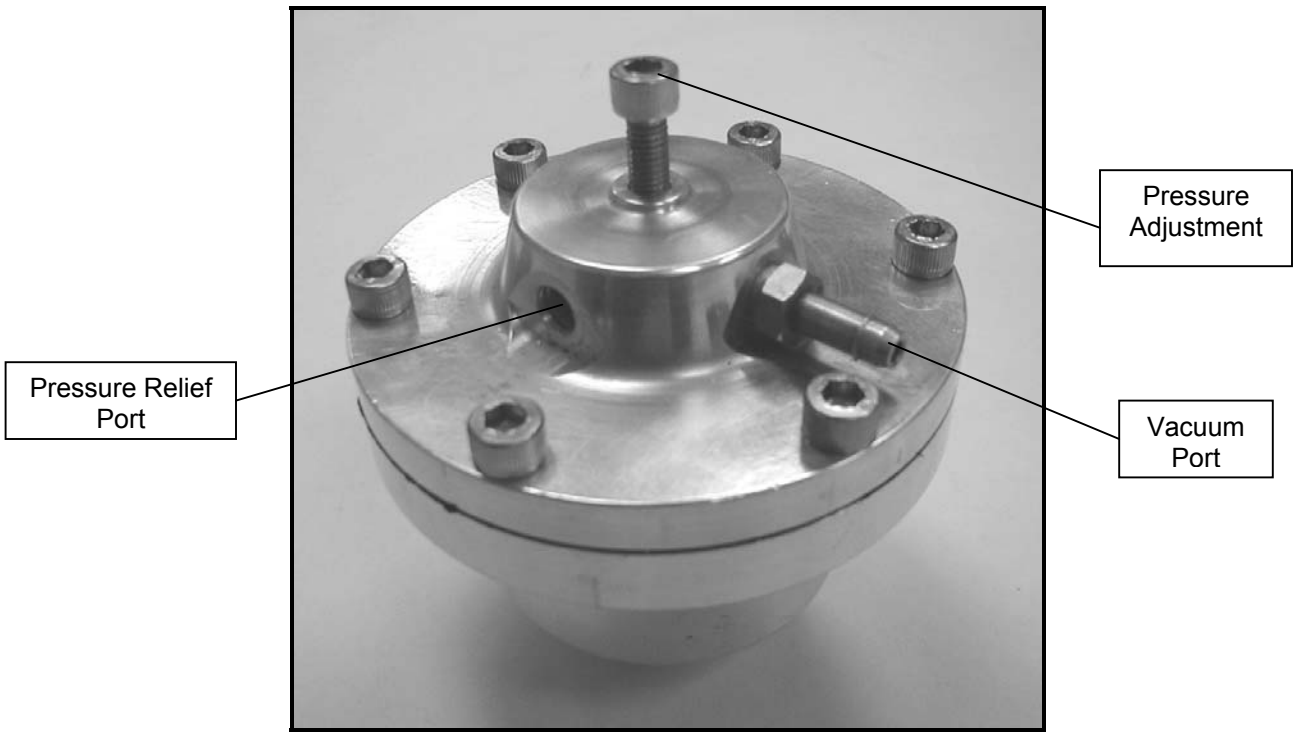

Figure 1

INSTALLATION

1. Using the supplied bracket, mount the **Supercharger Regulator** as close as possible after the existing regulator.

2. The **SR** has two inlets and one outlet port. They are machined for a –06 fitting and require an O-ring for proper sealing. Connect one or two inlet lines to the sides of the **SR**. The bottom fitting is for the return to the fuel tank. Three fittings are included to attach –06 lines. Hardline to AN fittings are available from plumbing supply houses and fitting manufacturers that can be used to connect the regulator to the steel return line.

3. Attach a vacuum line from the intake manifold to the 3/16” hose barb on the **SR**.

STATIC FUEL PRESSURE ADJUSTMENT

The **Supercharger Regulator** comes preset from the factory at 40±1 PSI. Unless another setting is desired, this does not have to be changed.

NOTE: Maximum static pressure setting for this unit is 60 PSI.

WARNING! DO NOT SET STATIC PRESSURES ABOVE 60 PSI, AS DAMAGE TO THE REGULATOR FUEL SYSTEM COMPONENTS MIGHT OCCUR.

TUNING THE SYSTEM

The Holley **Supercharger Regulator (SR)** comes with one additional pair of plates that changes the fuel pressure/boost pressure curve. The **SR** comes with a baseline setup, which contains no plates. The baseline setup will provide a larger increase in fuel pressure as boost increases. If a lower slope is desired, the additional disks can be installed. The graph below indicates the increase in fuel pressure as boost increases with and without the plates installed.

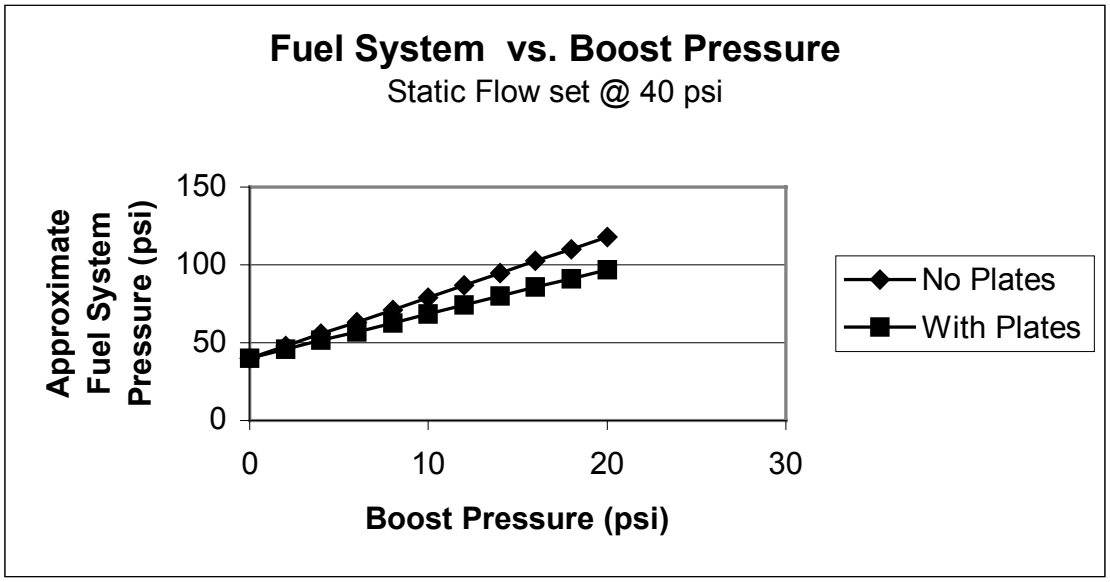

Figure 2

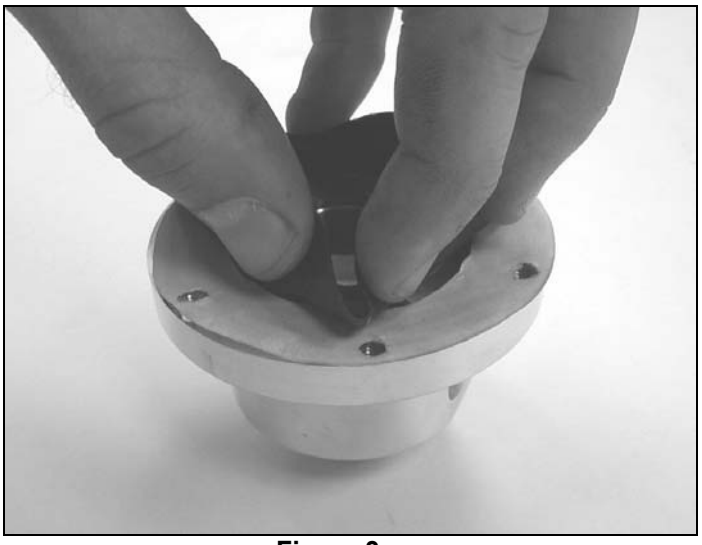

Figure 3

Figure 4

PLATE INSTALLATION

To install the plates, remove the six 5/32 allen-head screws from the regulator. Carefully remove the top cover, and put the first plate under the diaphragm, as indicated in Figure 3. Install the second plate on top of the diaphragm, as shown in Figure 4. A very small amount of RTV silicon should be put around the top, outer edge of the top plate. Install the top cover, and tighten the six all-head screws.

PRESSURE RELIEF PORT

On the topside of the **SR** is a port that can be used to lower the slope of the curve and dampen transitions. It comes with a “jet” that has no opening. If desired, this jet can be drilled out to decrease the slope of the fuel pressure/boost curve.

Printed in U.S.A.

Performance Products Inc

199R-10101
Date: 9-9-99