

Fuel Dampers/Regulators

Part Number	Description
12-1000	Standard Range Regulator/Damper (40-70 PSI)
12-1001	Extended Range Regulator/Damper (40-100 PSI)

<u>CAUTION</u>: It is imperative that extreme caution be taken when working with the fuel system. Do not smoke or expose the working area to any spark or flame. Work in a well-ventilated area. Clean up any spilled fuel immediately and dispose cleaning materials in a sealed metal trash container. To prevent premature failure, all O-rings MUST be lubricated prior to assembly.

<u>CAUTION:</u> The fuel system is under pressure! Be sure to relieve the fuel system pressure before loosening any connections. If necessary, consult a service manual for instructions on how to relieve fuel pressure safely.

<u>CAUTION:</u> These products are designed for off-highway and racing use only. Fuel system components may not be legal for sale or for use on emissions-controlled vehicles. Please consult local, state, and federal laws.

Kit Contents:

- Damper/Regulator Assembly
- Mounting Bracket
- Two 8AN ORB to 6AN Male Flare Adapters
- Two 8AN ORB to 8AN Male Flare Adapters
- Installation Kit
 - o 1FT 5/32 Vacuum Hose
 - o 5/32 Vacuum Wye
 - o 4 ¼-20 Mounting Bolts (Bracket to Car)
 - 4 ¼-20 Lock Washers (Bracket to Car)
 - o 4 ¼-20 Nuts (Bracket to Car)
 - o 2 ¼-20 Flat Head Screws, 5/32 Hex Drive (Bracket to Damper/Regulator)

Notes on Damper/Regulators:

- I/O Port Size: -8AN ORB
- The In-Line Dampers come with included fittings to both 6AN and 8AN male flare. If other fittings are required, they must be purchased separately.
 - If other fittings are purchased, make sure that the side that threads into the bodies are -8AN ORB, not standard conical fittings. These will not work properly.



Note on Mounting:

- The Holley fuel Regulator/Dampers can be mounted using the supplied bracket or directly via the two ¼-20 threaded holes in the body. Also, the Regulator/Dampers can be mounted in any direction, even upside down if required.
 - o Standard Range







• Extended Range







Note on Plumbing:

• The Holley Regulator/Damper must be plumbed after the fuel rail(s). The diagram below shows a couple of sample installations.



Notes on Vacuum Referencing:

- There are two vacuum barbs on the Holley Regulator/Dampers one for the regulator (cap w/ set screw) and one for the damper. Both are for a 1:1 vacuum reference and can be used with 5/32" rubber vacuum hose.
- If your vehicle used a vacuum reference from the factory, it is recommended that you reference both the regulator and damper using the included vacuum wye.
- If no pressure reference is needed, leave the barbs open to atmosphere. Do not plug them.
- For optimal damping efficiency, we recommend that the static fuel pressure be set within the pressure range etched on the cap. Overall fuel pressure can exceed those values, but only if the unit is referenced.

Fuel Pressure Adjustment:

- A gauge or pressure transducer is needed to set the static pressure. If there is one already installed in your system, then it can be used for this process. If not, then one can be installed in the 1/8" NPT port on the body of the Holley damper/regulator. NOTE: It is best to monitor the system pressure as close to the fuel rails as possible.
- The Holley Damper/Regulators are **NOT** pre-set to a pressure from the factory and **MUST** be set by the user. Below is the procedure to set the static fuel pressure on the unit. Typical static pressures for many applications are either 3 BAR (44 PSI) or 4 BAR (58 PSI). It is recommended that you either match the factory static pressure for your application or consult your tuner.
 - Disconnect the vacuum line to the regulator cap (the one with the set screw). Plug the line to prevent a vacuum leak. Leave the regulator barb open to atmosphere.
 - Turn the pump on, ideally with the engine off.
 - Loosen the jam nut on the set screw.
 - Using an Allen wrench Turn the screw clockwise to increase pressure or counter-clockwise to decrease pressure.
 - Once the fuel pressure has reached the target pressure, tighten the jam nut.
 - Re-install the vacuum line to the regulator cap barb.

General Notes:

- Fuel pulse dampers are mainly used to dampen the local pressure drops/spikes associated with injectors opening and closing. For this reason, the closer you can mount the damper to the source of these pulsations, (i.e. Fuel Rail) the better.
- The damper and regulator caps can be clocked to an alternate location, if necessary. Pay close attention to the diaphragm and make sure that it is seated properly before reassembling. **Diaphragm damage from reassembly error voids the warranty.** Torque screws to 40-45 in./lbs. in an alternating pattern.
- Lubricate all O-rings before assembly ideally with an O-ring lubricant.
- The mounting bracket can be used as a drill template.
- All included mounting hardware is ¼-20 thread.
- When choosing a mounting location, be mindful of excessive temperature areas that could preheat the fuel or damage the internal components of the unit.

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