AEROMOTIVE
Part # 13015
INSTALLATION INSTRUCTIONS

This product is not legal for sale or use on emission-controlled vehicles except when used as a direct replacement part matching OEM specification.

WARNING!

Always be aware of flammable situations. Drilling and grinding can be potential ignition sources. Extinguish all open flames, prohibit smoking and eliminate all sources of ignition in the area of the vehicle and workspace before proceeding with the installation. Ensure you are working in a well ventilated area with an approved fire extinguisher nearby.

WARNING!

Installation of this product requires modification to a fuel tank/ the fuel system, failure to satisfy all safety considerations will result in fire, explosion, injury and/or loss of life to yourself and/or others. All fuel system components MUST be located as far from heat sources as possible, like exhaust, engine block, etc.

WARNING!

Mechanical and hydraulic lifting devices can tip over or lower accidentally due to incorrect maneuvering or technical errors. A falling object can cause injury and/or loss of life to yourself and/or others. When working under the vehicle, always use stands, and ensure that the ground or floor is stable and level. Never crawl under a vehicle which is only supported by a jack.

WARNING!

The fuel system is under pressure. Do not open the fuel system until the pressure has been relieved. Refer to the appropriate vehicle service manual for the procedure and precautions for relieving the fuel system pressure.

CAUTION!

When installing this product always wear safety glasses and other appropriate safety appeal. A drilling operation will cause flying metal chips. Flying metal chips can cause eye injury.

CAUTION:

Installation of this product requires detailed knowledge of automotive systems and repair procedures. We recommend that this installation be carried out by a qualified automotive technician. Careless installation of this product can result in damage to the product, injury or loss of life to yourself and/or others.

Compatible Fuels:
Pump Gas **Race Gas** **E85** **Alcohol/Ethanol**

Parts Included:

1ea p/n 14114 Fuel Rails	1ea p/n 15602 AN-06 Union Fitting
1ea p/n 13101 Fuel Pressure Regulator	1ea p/n 15606 ORB-06 to AN-06 Fitting
1ea p/n 18670 Fuel Pump Assembly	4ea p/n 15607 ORB-08 to AN-08 Fittings
1ea p/n 16307 Fuel Pump Wiring Kit	4ea p/n 15610 ORB-10 to AN-08 Fittings
1ea p/n 12305 Filter Bracket	1ea p/n 15674 Y-Block, AN-08
1ea p/n 12335 Filter Assembly, 40-micron	1ea p/n OR002-2910 AN-10 O-Ring
1ea p/n 15107 One-Way Check Valve	

Aeromotive system components are not legal for sale or use on emission controlled motor vehicles.
Fuel Systems are designed for use with gasoline based fuels only, up to 15% ethanol mix maximum with proper filter.

The enclosed Aeromotive Fuel System Kit is designed to give the end user a basic EFI fuel system, excluding the AN fuel lines and hose-ends. It is intended to support a return style, dual-fuel rail V-8 EFI application. The kit includes an AN-08 Y-Block in order to support dual fuel rail engines, plumbed in parallel, for optimum fuel flow and pressure control.

A return line of AN-06 or 3/8" equivalent diameter must be installed from the regulator back to the tank, after which base fuel pressure will be adjustable in a range between 30-120 PSI. The included regulator also provides 1:1 ratio vacuum/boost reference, making the system suitable for all EFI engines, both Naturally Aspirated and Forced Induction.

This installation instruction provides a diagram that outlines the overall layout of the fuel system intended with the enclosed components. The system diagram illustrates the components used, their locations relative to each other and in relation to fuel flow, including general fuel line routing and the AN fuel line sizes required. This is a system overview. Please refer to each individual component's installation instructions for detailed installation help with that particular component. Please contact Aeromotive for any recommendations on fuel line or additional fitting requirements.

Failure to follow the above recommendations may result in fuel leakage, bursting of the fuel lines, poor vehicle performance and/or decreased fuel pump life! Improper installation will void all warranties for this product!

Aeromotive Commonly Used Hose-Ends:

15650 - AN-06 Straight Hose End

15651 - AN-06 45-Deg. Hose End

15652 - AN-06 90-Deg. Hose End

15653 - AN-08 Straight Hose End

15654 - AN-08 45-Deg. Hose End

15655 - AN-08 90-Deg. Hose End

15663 - AN-08 180-Deg. Hose End

Aeromotive Commonly Used SS Braided Fuel Line;

15701 - AN-06 4' Length

15702 - AN-06 8' Length

15703 - AN-06 12' Length

15704 - AN-08 4' Length

15705 - AN-08 8' Length

15706 - AN-08 12' Length

15711 - AN-08 16' Length

Aeromotive Replacement Element Part Numbers;

12601 – 10-M Fabric Element (For all ORB-10 Filters)

12635 – 40-M SS Element (For all ORB-10 Filters)

12001 – Filter O-Ring, 10-Pack (For all ORB-10 Filters)

General Installation* Cautions *and Guidelines:

- **CAUTION: Insure all components are mounted, and fuel lines are routed through the chassis per the diagram, and in a manner to clear any exhaust system components, especially exhaust headers, turbo charger down-pipes, mufflers and tail-pipes, etc.**

- **CAUTION: Insure all components are mounted, and fuel lines are routed through the chassis per the diagram, and in a manner to safely clear any suspension components in the vehicle.**

- **CAUTION: Insure all components are mounted, and fuel lines are routed through the chassis per the diagram, and in a manner to safely clear any transmission, bell-housing and or drive-line components.**

- **CAUTION: Pressurize the fuel system and thoroughly check for fuel leaks, repairing any leaks found first, before cranking and/or starting the engine. Once the engine is running, again carefully check for fuel leaks, shutting down the vehicle immediately if necessary to perform any required repairs.**

- ***GUIDELINE:* Mount the fuel pressure regulator in the engine bay, as close to the fuel rail/carb as possible.**

- ***GUIDELINE:* Terminate the main, 10-gauge power for the included fuel pump wiring harness directly from the back of the alternator charging stud, or directly off the battery (+) post. Terminate the 10-gauge fuel pump ground wire to either end of the battery ground (-) cable, at the battery or chassis connection point.**

- ***GUIDELINE:* Acquire and install quality AN style hose and hose-ends. Teflon or PTFE based fuel line, though more costly, offers both long service life and resistance to permeation or vapor walk (where fuel vapors can "walk" through the line and contribute fuel smell to the area around where the car is stored).**

Installation Steps:

1. Disconnect the battery terminal.

2. Use the given diagram as an overview for the system installation.

3. Route the supply and return fuel lines over the driver side frame rail into the wheel well area.

4. Starting at the fuel pump assembly, install the 90 degree ORB-10 to AN-08 Fitting into the outlet port on the fuel pump outlet cap.

5. Mount the fuel filter on the driver side frame rail.

6. Connect an AN-08 fuel line from the outlet cap to the fuel filter using an AN-08 to ORB-10 fitting.

7. Install the one-way check valve after the fuel filter. Place the given ORB-10 O-ring on the male end of the check valve before attaching the check valve to the fuel filter.

8. Using an ORB-10 to AN-08 fitting, connect an AN-08 fuel line from the check valve to the AN-08 Y-Block. **Route the fuel line through the driver side lower rocker panel towards the front of the car.** The fuel line will then run up the wheel well into the engine bay, and will then be attached to the Y-Block.

9. Connect the two outlet ports on the Y-Block to each fuel rail using AN-08 fuel lines and AN-08 to ORB-08 fittings. Position the Y-Block near the brake booster.

10. From each fuel rail, attach AN-08 fuel lines using ORB-08 to AN-08 fittings.

11. Connect the two fuel lines coming from each rail to the two inlet ports on the fuel pressure regulator using ORB-10 to AN-08 fittings.

12. Using an ORB-06 to AN-06 fitting, connect the return fuel line to the return port on the pressure regulator.

13. Connect a separate AN-06 fuel line to the existing AN-06 return line using an AN-06 to AN-06 union fitting. This makes the return line easier to work with.

14. Finally, connect the AN-06 return line to the return port on the fuel pump outlet cap using a 90 degree AN-06 to ORB-06 fitting.