

**PLEASE** study these instructions carefully before beginning this installation. This installation can be accomplished with common tools and procedures. However, a familiarity with working on automotive fuel systems is highly recommended. If you do not feel comfortable performing this installation or have never worked with automotive fuel systems before, it is highly recommended to have the installation completed by a Professional Mechanic. Proper installation is the responsibility of the installer. Improper installation will void the manufacturer's warranty and may result in poor performance and engine or vehicle damage. If you have any questions, please call our **Technical Hotline at: 1-800-416-8628**, Monday - Friday, 7:00 am - 5:00 pm, Pacific Standard Time.

**WARNING!**

**Make sure to perform the installation in a well ventilated area away from any potential fire hazards. Gasoline fumes are toxic and are highly flammable. Prior to starting the installation, make sure to eliminate all potential fire hazards as fuel leakage can occur when loosening the fuel system connections.**

**DESCRIPTION**

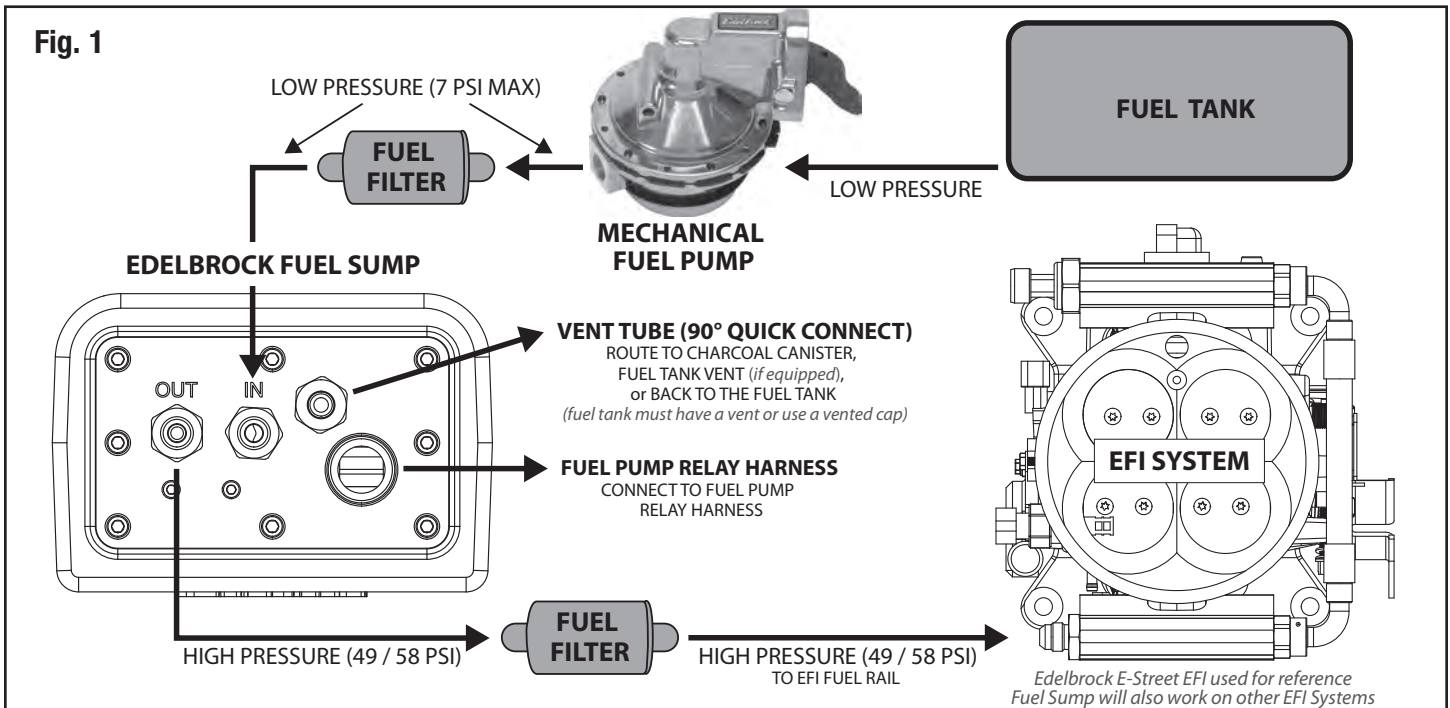
This universal fuel sump system will provide the necessary high fuel pressure required for most EFI applications in vehicles originally designed with carbureted fuel systems. For ease of installation, the factory carbureted fuel system will be used in conjunction with the universal fuel sump system. This works by feeding the fuel sump, at standard Carb pressure (**7 PSI max**), using the factory fuel tank and mechanical fuel pump or low pressure electric fuel pump. The sump will house a high pressure fuel pump, regulator and internal bypass. This will allow the desired fuel pressure (#3605/36052 - 58 PSI, #3607 - 49 PSI) necessary to adequately operate EFI systems; all without the need for a fuel return line.

**CAUTION: Due to the high fuel pressure used by the E-Street EFI system, the supplied 3/8 inch high pressure rubber fuel line MUST be used as the primary fuel line. If supplying your own high pressure fuel line, a minimum of SAE J30R9 (100PSI) working pressure must be used. Additional fuel fittings will be required.**

P/N 3605, 3607 Includes (#36052 will only include the Sump Tank, harness pigtail and a 90° quick connect fitting):

- |                                       |   |
|---------------------------------------|---|
| 1. Fuel Sump Tank                     | 6. -6 AN Twist-Lok Hose Fitting (1 - Straight, 2 - 90°) |
| 2. Mounting Bracket w/ Bolts          | 7. Brass Compression Nut/Sleeve (1 - 3/8", 1 - 5/16")   |
| 3. Fuel Filter w/ Mounting Clamps (2) | 8. Brass Tube Adapter Fitting (1 - 3/8", 1 - 5/16")     |
| 4. Fuel Sump Adapter Harness Pigtail  | 9. 90° Quick Connect Fitting                            |
| 5. -6 AN Twist-Lok Fuel Hose (8 Ft)   | 10. Hose Clamps (5)                                     |

**INSTALLATION DIAGRAM**



## FUEL SUMP INSTALLATION

This is a general guideline for installing the Edelbrock Fuel Sump System #3605 and #3607. **If using #36052, additional hardware mentioned in these instructions (i.e. fuel lines, fuel filters, mounting brackets, harnesses and fittings) will have to be supplied.**

Make sure to perform the installation in a well ventilated area away from any potential fire hazards. Gasoline fumes are toxic and highly flammable.

**NOTE:** Depending on your application and specific routing needs, additional fuel fittings may be required. These fittings are available at your local Russell Performance dealer.

1. With the ignition off and the engine cool, disconnect the NEGATIVE (-) terminal on the battery.
2. Release the fuel pressure in the fuel system by removing the gas cap.
3. Determine the ideal mounting location for the Fuel Sump using the supplied mounting hardware and brackets. The universal mounting brackets included in this kit can be mounted horizontally or vertically as shown below (see fig. 2).

**NOTE:** In addition to the universal bracket provided in this kit, additional mounting brackets may be required to securely mount the Fuel Sump.

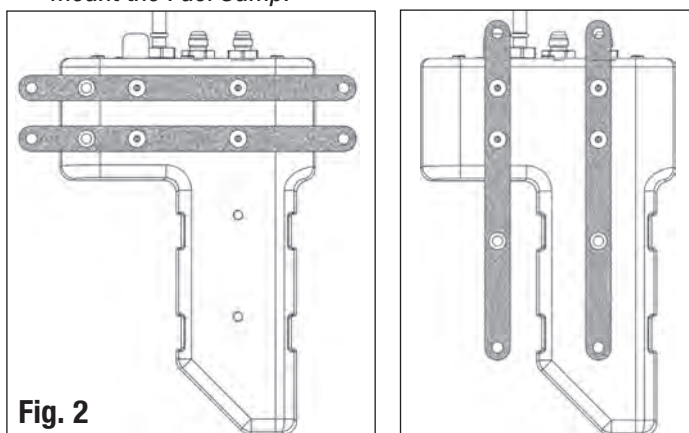


Fig. 2

4. Remove the fuel output line (mechanical pump to carburetor) from the factory mechanical fuel pump and carburetor (if applicable).

**NOTE:** The mechanical fuel pump needs to be configured with a 3/8" barb fitting that will route to the primary fuel filter. Brass compression nuts and tube adaptors are provided for your convenience. Depending on your mechanical fuel pump configuration, additional fittings may be required.

If using a low pressure (**7 PSI MAX**) electric fuel pump, the fuel output will route and connect to the primary fuel filter.

5. Determine the ideal mounting location for the primary fuel filter, secure using the provided mounting clamp. Attach the provided 3/8" fuel line to the 3/8" barb on the mechanical fuel pump (fuel output), secure with a hose clamp. Route the fuel line towards the primary fuel filter, trim the fuel line to length as needed and secure with a hose clamp.

**NOTE:** DO NOT route the fuel lines around sharp objects, moving components or exhaust manifolds/headers.

6. Assemble the Fuel Sump input line using one 90° Twist-Lok fitting and the 3/8" fuel line. Install the 90° Twist-Lok fitting onto the "IN" fitting on top of the Fuel Sump and route the fuel line towards the primary fuel filter. Cut fuel line to length as needed and secure the fuel input line to the primary fuel filter with a hose clamp.

**NOTE:** The Twist-Lok fittings do not require additional hose clamps.

7. Determine the ideal mounting location for the secondary fuel filter and secure using the provided mounting clamp.

**NOTE:** The primary and secondary fuel filters must be used in conjunction to avoid contaminating the Fuel Sump and EFI System. Any failures associated with contaminates will void the warranty of the Fuel Sump and EFI System (if applicable).

8. Assemble the Fuel Sump output line using one 90° Twist-Lok fitting and the 3/8" fuel line. Install the 90° Twist-Lok fitting onto the "OUT" fitting on top of the Fuel Sump and route the fuel line towards the secondary fuel filter. Cut fuel line to length as needed and secure the fuel output line to secondary fuel filter with a hose clamp.

9. Attach the 3/8" fuel line to the Straight Twist-Lok fitting and connect to the fuel rail fitting on the EFI system.

**NOTE:** Additional fittings may be required depending on the EFI application used. These are available at your local Russell Performance dealer.

10. Route the fuel line from the EFI fuel rail to secondary fuel filter, cut fuel line to length as needed and secure with a hose clamp.

11. Attach a 3/8" fuel hose (not supplied) to the 90° quick connect fitting and secure with a hose clamp.

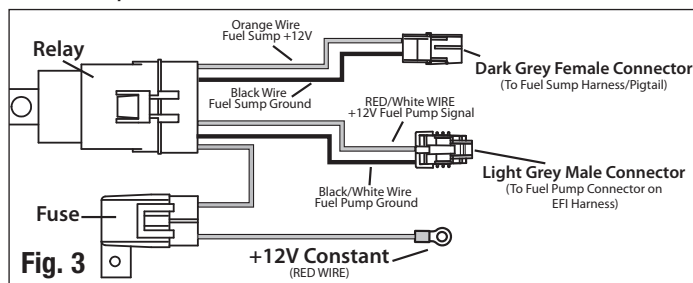
**NOTE:** The supplied 3/8" fuel hose is Twist-Lok and is not recommended for use on the quick connect fitting.

12. Connect the 90° quick connect fitting to the Vent Tube barb on top of the Fuel Sump. The vent line must be routed to a charcoal canister, fuel tank vent (if equipped), or back to the fuel tank (fuel tank must have a vent or use a vented cap).

**NOTE:** If charcoal canister has been removed, the existing hard line from the canister to the tank is convenient for use as a vent line.

- If using the Edelbrock E-Street EFI system, a Fuel Pump Relay Harness #36054 (*supplied in #3606 kits only*) will connect to the Fuel Pump connector on the E-Street main harness. The power lead on the relay harness connects to a Constant +12v source (see figure 3). **DO NOT connect the relay harness to the Fuel Sump at this time.**

**NOTE:** A Fuel Pump Relay harness is required to properly operate the Fuel Sump. If using on other EFI systems, the relay harness will connect to the fuel pump leads on the EFI harness. Modifications to the relay harness connector may be required.



**NOTE:** The following steps must be performed to properly fill the Fuel Sump prior to starting the vehicle. Failure to do so will damage the fuel pump inside the sump and void your warranty.

- Reconnect the NEGATIVE (-) terminal on the battery. Verify that the Fuel Pump Relay Harness **IS NOT** connected to the fuel sump. Turn the key to the "ON" position and crank the engine for 10 seconds. Turn the key to the "OFF" position and wait for 30 seconds. Repeat this procedure one more time to properly fill the fuel sump.

**NOTE:** The engine will not start. If it does, it will stall as there is no fuel going into the engine. This is normal.

- Once the Fuel Sump has been filled, connect the supplied Fuel Sump pigtail to the Fuel Sump power connector (see figure 1). Then connect the Fuel Sump pigtail to the Fuel Pump Relay harness. Modifications to the relay harness may be required (see figure 3).

**NOTE:** If using E-Street system #3606, the Fuel Sump Harness included, can connect directly to the Fuel Sump and Fuel Pump Relay harness.

- Turn the key to the "ON" position but DO NOT start the vehicle. With the key in the "ON" position, check all fuel connections for leaks. If leaks are present, immediately turn the key off and repair all leaks before continuing.
- If leaks are not present, turn the key off and back to the "ON" position to verify the Fuel Sump is priming.

**NOTE:** Fuel Sump will make a pumping/priming noise for 5-8 seconds when the key is first turned on (when using the Edelbrock E-Street EFI system). If Fuel Sump is not priming, verify that the Fuel Sump harness is installed correctly.

- If the Fuel Sump is priming, the Fuel Sump installation is complete.

**NOTE:** It is not advised to start the vehicle until the installation of the EFI system is complete. Please refer to the EFI System's Installation Manual for details.



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