



# 150HP Upgrade System for the 70205 80HP LT-1 Nitrous System Catalog #70206 INSTALLATION INSTRUCTIONS

Please study all instructions carefully before you install your new 150HP Upgrade System. If you have any questions or problems, please call our **Technical Hotline at: 1-800-416-8628**, 7:00 a.m. to 5:00 p.m., Monday through Friday, Pacific Standard Time or e-mail us at [edelbrock@edelbrock.com](mailto:edelbrock@edelbrock.com).

**Jet Map Information:** Edelbrock engineers have conducted extensive dyno testing with the Edelbrock LT-1 Performer EFI Nitrous System to ensure the horsepower increase is as intended. On a typically stock LT-1 engine, you can expect the following approximate power gain:

<u>Nitrous/Fuel Jetting</u>	<u>Approx. HP Gains</u>	<u>Final Air/Fuel Ratio</u>
.068 .042	150	13.5/1

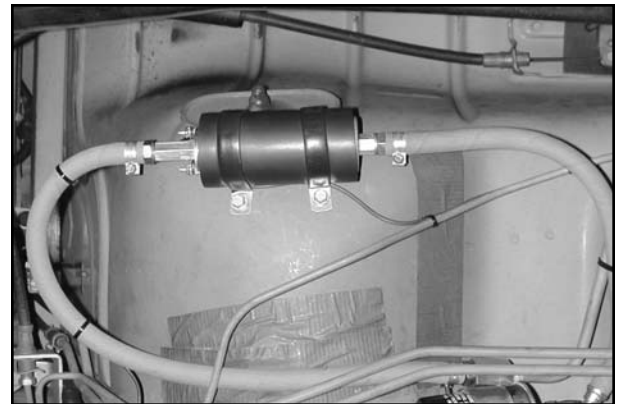
The dyno tests were conducted at Edelbrock using a stock LT-1 engine. These tests were conducted with 950 psi nitrous bottle pressure.

## INSTALLATION INSTRUCTIONS

### Fuel Pump Installation (Camaro, Firebird)

**Warning:** Before performing any of these steps, relieve the pressure in the fuel system.

1. Locate the fuel filter on the under-carriage of the car. Disconnect the hard fuel line from the filter.
2. Install the male O-Ring to -6AN male adapter fitting into the outlet of the fuel filter.
3. Mount the fuel pump to the under-carriage of the vehicle. Cut the supplied fuel line to size as pictured.
4. Install the hose fittings and tighten all hoses down with the supplied hose clamps.
5. Install the female O-Ring to -6AN male adapter to the end of the steel fuel line. Secure fitting to hose with supplied hose clamp and connect hard fuel line to this fitting. Check the fuel system for leaks by turning the ignition key to the "On" position. **Do not start the engine.** Inspect all fittings and lines for leaks. Also check wires from time to time for damage or leaks.



### Fuel Pump Installation (Impala)

**Warning:** Before performing any of these steps, relieve the pressure in the fuel system.

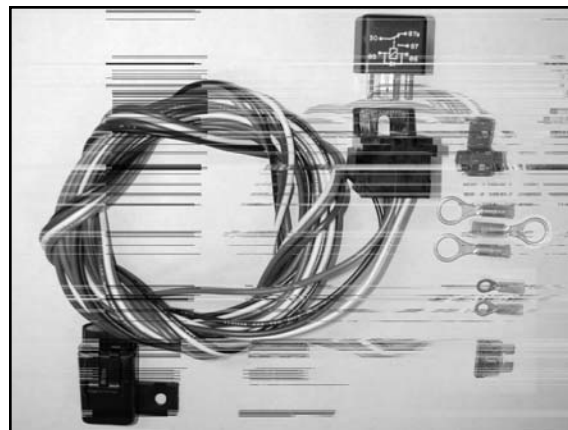
1. Locate the fuel lines under the vehicle. These should be 2 black plastic lines located on the driver's side of the vehicle by the frame rails. Determine which line is the main feed line by following them back to the fuel filter.
2. Determine the mounting location of the fuel pump and mount the pump. Be sure the pump will be mounted above the lowest parts of the car and out of danger from road debris. The pump must be mounted between the fuel filter and engine.
3. Be sure where you decide to cut the line is close to the booster pump. Cut the plastic fuel line using a sharp razor blade or other similar cutting tool.



4. Install the supplied compression fitting adapters to the cut plastic fuel line. Using the supplied fuel line, cut lengths that will reach from the booster pump to the hose barbs on the compression fittings.
5. Install cut fuel lines and secure using the supplied hose clamps.
6. Check the fuel system for leaks by turning the key to the "On" position. **Do not start the engine.** Inspect all fittings and lines for leaks. Also check wires from time to time for damage or leaks.

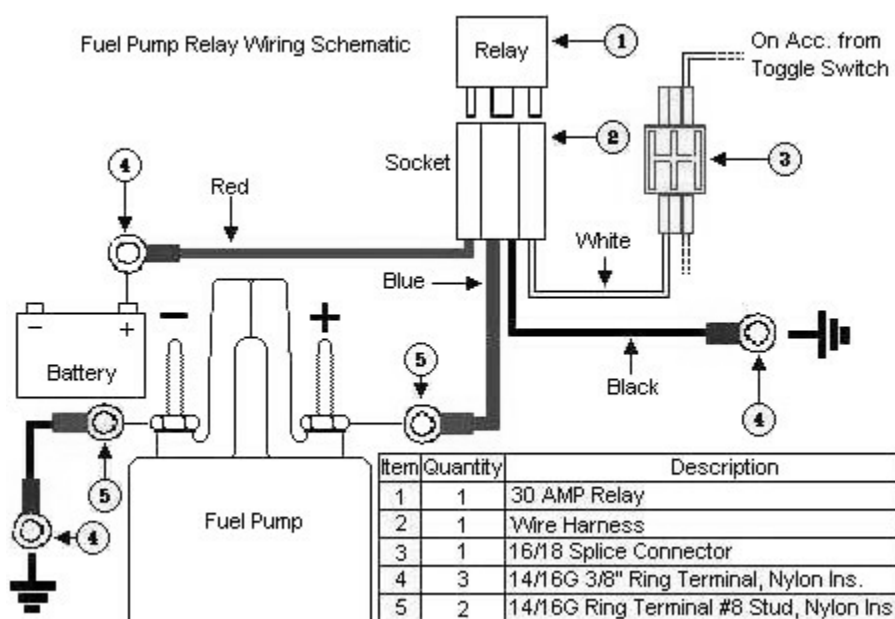
### Fuel Booster Pump Electrical Components Bill of Materials

Item #	Quantity	Description
1	1 ea.	30 amp relay
2	1 ea.	Wire harness with integral relay/fuse holder
3	1 ea.	16/18g splice connector
4	1 ea.	14/16g 3/8" ring terminal, Nylon insulated
5	1 ea.	14/16g ring terminal #8 stud, Nylon insulated
6	1 ea.	15 amp ATO blade fuse



### Fuel Booster Pump Electrical System Installation Procedures

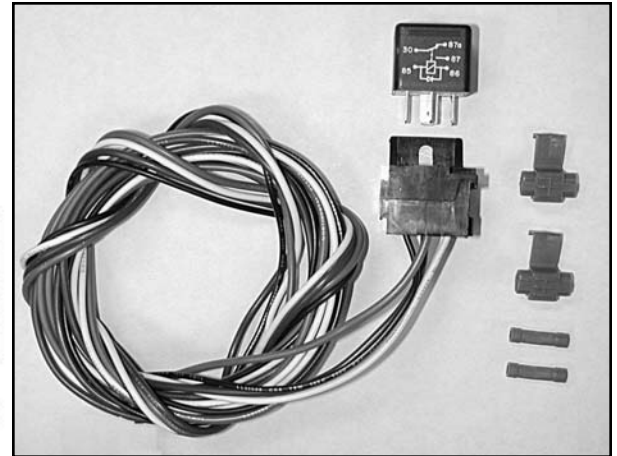
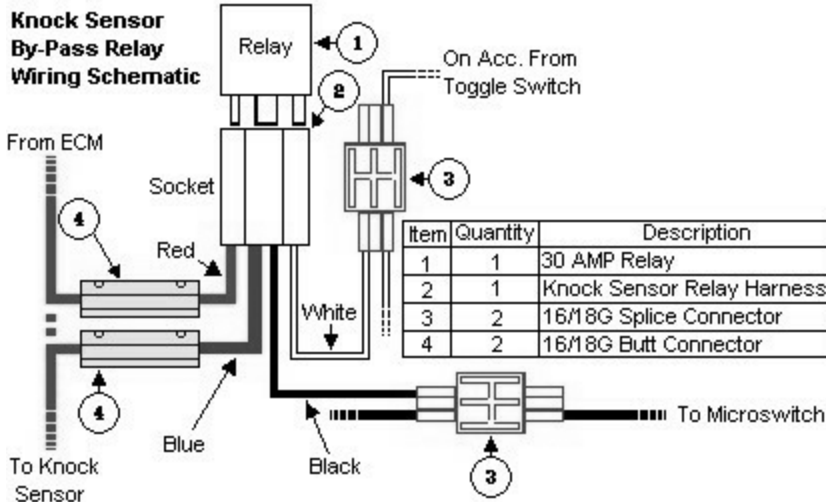
1. Determine the location of the Fuel Booster Relay and Fuse Holder Wire Harness. Most common installations locate these components inside the driver's compartment and close to the fuse panel under the dash. You can also mount the relay and fuse holder and harness close to the battery. However, these connectors are water-resistant, not water-proof, so care is required when mounting this assembly under the hood of your vehicle.



2. The wire harness attached to the relay and fuse holder includes 8 feet of color-coded wires to make the electrical system installation as easy as possible. We recommend that you do not cut any lengths of wires from the wire harness or complete the wiring of the fuel booster pump until all of the mechanical components are securely mounted in their permanent locations.
3. Use the Fuel Pump Relay Wiring Schematic located above along with the Origin and Destination Map on next page to determine the proper routing for the wires and their locations. Take caution as to not interfere with operating linkages, heat sources, brackets, etc. Pay particular attention to sharp edges along the route of your wire harness as they can chafe the wire and cause your system to fail.
4. Once all components have been securely mounted, decide the location of the relay and fuse holder. Secure them with fasteners (not included with kit) such as sheet metal screws, nuts and bolts, etc. Allow for some slack in the red wire that connects the relay and fuse holder together.
5. When mounting your relay and fuse holder, make sure the mounting surface is strong enough to support servicing the relay and fuse. Also, ensure you allow for some slack in the wire that joins the fuse holder to the relay mount. This will avoid any potential loss of power due to stress on the wire harness. Be sure to cover the fuse with the fuse mount housing.

Wire Color	System	Origin	Destination	Terminal Used
Red	Main Booster Pump Bat. Volt.	Relay Harness	Bat. Volt. Signal	3/8" Ring
Blue	Fuel Pump Power	Relay Harness	Fuel Booster Pump	#8 Ring
Black	Fuel Pump Ground	Fuel Booster Pump	Chassis Ground	#8 Ring / 3/8" Ring
White	Relay Power	Relay Harness	Arming Switch	Splice Conn.
Black	Relay Ground	Relay Harness	Chassis Ground	3/8" Ring

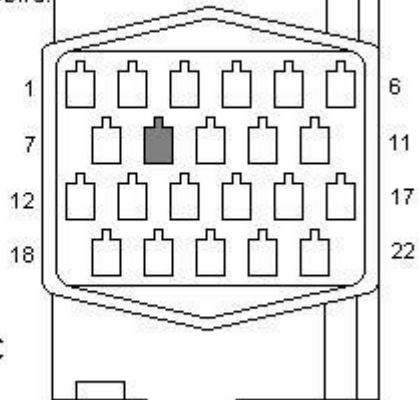
## Knock Sensor By-Pass Relay Components Bill of Material



## Knock Sensor By-Pass Relay Installation

1. Determine the location of the Knock Sensor By-Pass Relay. This should be as close to the ECM as possible. Since the connectors are water-resistant, not waterproof, mount the relay in a location with minimal chance of exposure to water.
2. The wire harness attached to the relay includes 4 feet of color-coded wires to make the electrical system installation as easy as possible. We recommend that you do not cut any lengths of wires from the wire harness or complete the wiring of the nitrous system until all of the mechanical components are securely mounted in their permanent locations. Do not exceed the 4 feet of wire to the ECM and the knock sensor, this could send a faulty signal and the system would not work at optimal power. You can extend the white and black wires beyond the 4 feet if necessary.
3. Once all of the system components have been mounted, route the un-cut wires from the harness to each location allowing enough wire length on each circuit to not interfere with operating linkages, heat sources, brackets, etc. Pay particular attention to sharp edges along the route of your wire harness as they can chafe the wires and cause your system to fail.
4. After you have accounted for the routing of your wires, follow the Knock Sensor By-Pass Relay Wiring Schematic above and use the Wire Schematic Origin and Destination Map below as a guide for which electrical connectors are used in each circuit. Note that the one wire from the ECM to the Knock Sensor needs to be cut and intercepted with the relay. This wire on 1994-1997 Camaros, Firebirds, and Impalas is located on the BLUE terminal in pin location #22. It is a blue wire. On 1993 Camaros and Firebirds, this wire is located on the GREEN ECM connector C terminal in pin location C8. It is a dark blue wire. Try to keep the Knock Sensor By-Pass Relay as close to this wire as possible.
5. Once you have decided the location of the relay, secure them with fasteners (not included with kit) such as sheet metal screws, nuts and bolts, etc.

Pin Location Diagram  
for the 1993 LT-1  
Camaro & Firebird.

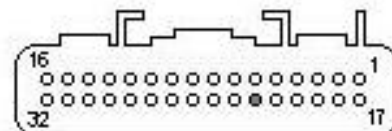


**Green ECM  
Connector C**

Pin Location is C8 (Dark Blue Wire) for the Knock Sensor Signal.

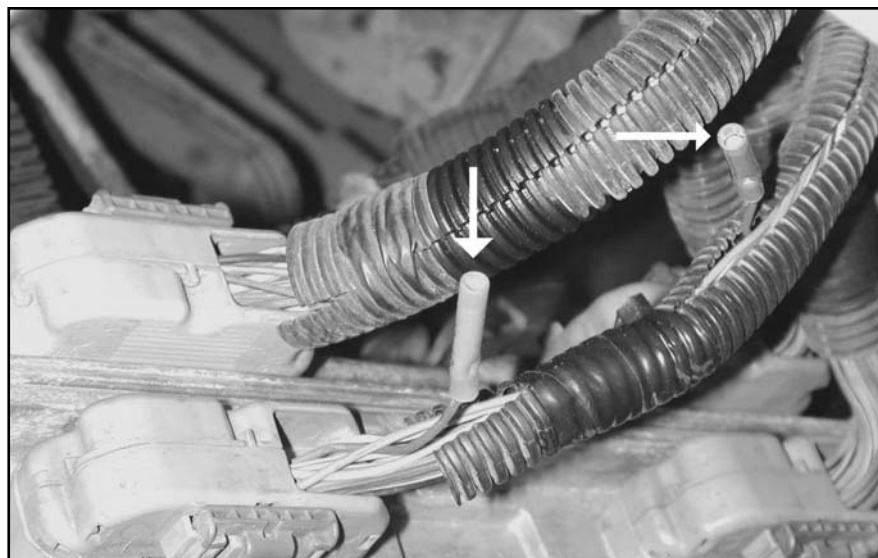
Pin Location Diagram for the  
1994-1997 Camaro, Firebird, & Impala

**Front View 32 Pin PCM  
Connector "D" (Blue)**



Pin Location is D22 (Blue Wire)  
for the Knock Sensor Signal.

Wire	System	Origin	Destination	Terminal
Red	K.S. By-Pass	Output of ECM	Relay Harness	Butt Conn.
Blue	K.S. By-Pass	Relay Harness	Knock Sensor	Butt Conn.
Black	Sensor Ground	Relay Harness	Non-Grounded Side of Microswitch	Splice Conn.
White	Relay Ground	Relay Harness	Arming Switch	Splice Conn.



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