

Thank You....

...for purchasing an Edelbrock Nitrous Oxide Injection System.

Nitrous Oxide injection is one of the most exciting performance enhancements for the dollar invested on the market today. With the use of nitrous oxide come some important safety considerations. This manual has been written to help you during the installation and use of your Edelbrock Nitrous System. Please read it completely before you install and use your system. Please pay close attention to the safety information at the beginning of each section. The information contained there specifically pertains to each of the components and installation methodologies within the section.

Please take the time to read and understand the following....

By installing your Edelbrock Nitrous System, you indicate you have read this document and you agree with the terms stated below.

It is the responsibility of the purchaser to follow all installation instruction guidelines and safety procedures supplied with the Edelbrock Nitrous Systems. It is also the responsibility of the purchaser to determine the compatibility of the product with the vehicle or the device on which the purchaser intends to install it.

Edelbrock Corporation assumes no responsibility for damages occurring from misuse, abuse, improper installation, improper operation, lack of responsible care, or all previously stated reasons resulting from incompatibility with other manufacturers products and/or systems.

Edelbrock Corporation neither recommends nor condones the use of products manufactured or sold by Edelbrock Corporation for use on vehicles, which may be driven on public roads or highways, and assumes no responsibility for damages incurred by such use.

Edelbrock Corporation assumes no responsibility for damages incurred by the use of products manufactured or sold by Edelbrock Nitrous Systems on vehicles used for competition or racing.

Edelbrock General Warranty

It is the constant endeavor of Edelbrock Corporation to give our customers the highest quality products obtainable. Edelbrock warrants each new product, except Performer Series Carburetors, Race Division Parts, Tubular Exhaust Systems, RPM Series Mufflers, Cat-Back Systems and Performer IAS Shock Absorbers which are warranted separately, to be free from defects in both workmanship and material for a period of one (1) year from the date of purchase, provided that the product is properly installed, subjected to normal use and service and that the product is not modified or changed in any way, negligence by customer or installer or used for racing or competition purposes.

Our warranty service and repair facility is located at 2700 California Street, Torrance, California 90503. Customers who believe they have a defective product should either return it to the dealer from which it was purchased or ship it directly to Edelbrock along with proof of purchase and a complete description of the problem. The product must be returned freight pre-paid. If a thorough inspection of the product by the factory indicates defects in workmanship or material, our sole obligation shall be to repair or replace the product. Warranty covers only the product itself and not the cost of installation or removal.

Edelbrock Corporation shall not be liable for any and all consequential damages occasioned by the breach of any written or implied warranty pertaining to this sale in excess of the purchase price of the product sold.

If you have any questions regarding a product or installation, please contact our Technical Department, toll free at 1-800-416-8628 from 7:00am to 5:00pm PST, Monday through Friday.

Thank you again for choosing Edelbrock Nitrous Systems.



PERFORMER RPM SINGLE TO DUAL-STAGE UPGRADE KIT CATALOG #70005 INSTALLATION INSTRUCTIONS

- 1. Disconnect both the nitrous and fuel lines leading from the solenoids to the plate. Be careful not to lose the nitrous and fuel jet that you currently have installed in the system when removing these lines.
- 2. Using a 7/16" wrench or socket remove both the nitrous inlet fitting and the fuel inlet fitting.
- 3. Thoroughly clean the threaded holes of the plate that are exposed after removal of the inlet fittings. Make sure that there is no metal debris in these holes and that they are free of thread sealant or locking compound. Make sure that no debris falls into the nitrous or fuel spray bars. After cleaning the area, use a shop vacuum or other vacuum to suction any remaining debris from the inlet areas.
- 4. Place a small bead of Teflon Paste, **NOT TEFLON TAPE**, around the thread of each of the supplied Y-Fittings.
- 5. Carefully thread the new Y-Fittings into the inlet ports of the plate. Make sure that the blue Y-Fitting gets installed in the port labeled 'Nitrous' and the red Y-Fitting gets installed in the port labeled 'Fuel'. Using a 7/16" wrench, tighten these fitting into the plate while being careful not to over-tighten and strip the threads out of the plate. The Teflon Paste should form a nice bead completely around the port to help ensure a good seal.
- 6. Place a small bead of Teflon Paste around the threads on the blue 3AN to 1/8"NPT fitting supplied in the kit. Thread this fitting into the OUTLET port of the supplied Performer Nitrous Solenoid.
- 7. Place a small bead of Teflon Paste around the threads on the blue 4AN to 1/8"NPT fitting supplied in this kit. Thread this fitting into the INLET port of the supplied Performer Nitrous Solenoid.
- 8. Secure the Performer Nitrous Solenoid in a bench vise and tighten both the inlet and outlet fittings being careful not to over-tighten and strip the threads.
- 9. Place a small bead of Teflon Paste around the threads on the red 3AN to 1/8"NPT fitting supplied in this kit. Thread this fitting into the OUTLET port of the supplied Performer Fuel Solenoid.
- 10. Place a small bead of Teflon Paste around the threads on the red 4AN to 1/8"NPT fitting supplied in this kit. Thread this fitting into the INLET port of the supplied Performer Fuel Solenoid.
- 11. Secure the Performer Fuel Solenoid in a bench vise and tighten both the inlet and outlet fittings being careful not to overtighten and strip the threads.
- 12. Using the supplied solenoid brackets and solenoid mounting screws, mount the solenoids within reach of the jet fittings on the plate using the supplied 3AN 12" hose for nitrous and 3AN 8" hose for fuel.
- 13. Choose your intended horsepower settings from the jetting chart on page 3. Find the first stage jetting that you intend to run in the supplied jet bag that comes with this kit. Use the jets supplied in the jet pack for your Performer RPM Nitrous System for the second stage jets.
- 14. Place the first stage nitrous jet in 1 of the inlet ports of the blue nitrous Y-Fitting of the plate closest to the Performer Nitrous Solenoid. Install one of the 12" Blue 3AN lines from the outlet fitting of the Performer Nitrous Solenoid to the fitting containing the first stage nitrous jet. Snug down both ends of this line but do not overtighten to prevent stripping.
- 15. Place the first stage fuel jet in 1 of the inlet ports of the red fuel Y-Fitting of the plate closest to the Performer Fuel Solenoid. Install one of the 8" Red 3AN lines from the outlet fitting of the Performer Fuel Solenoid to the fitting containing the first stage fuel jet. Snug down both ends of this line but do not overtighten to prevent stripping.





- 16. Place the second stage nitrous jet in the remaining open inlet fitting of the blue nitrous Y-Fitting. Install the line as described in step 14 but to the Performer RPM Nitrous Solenoid.
- 17. Place the second stage fuel jet in the remaining open inlet fitting of the red fuel Y-Fitting. Install the line as described in step 15 but to the Performer RPM Fuel Solenoid.
- 18. Using the two red 4AN fuel lines and red 4AN Y-Fitting supplied with this kit, connect each solenoid to the Y-Fitting.
- 19. Connect the fuel line that was originally connected to your Performer RPM Solenoid to the inlet of the red 4AN Y-Fitting.
- 20. Repeat steps 18 and 19 using the blue lines for the nitrous solenoids.
- 21. Wire per the diagram on the following page.

SQUARE-FLANGE JET MAP

Square-Flange 1st Stage Jet Map					
Nitrous Jetting	Fuel Jetting	Approx. HP Gain	Timing Adjustment Footnotes	Footnotes	
38	46	50hp	2 Degrees Retard	3	
46	53	75hp	3 Degrees Retard	3	
55	61	100hp	4 Degrees Retard	3	

Square-Flange 2nd Stage Jet Map				
Nitrous Jetting	Fuel Jetting	Approx. HP Gain	Timing Adjustment	Footnotes
71	75	150hp	6 Degrees Retard	03
78	82	175hp	7 Degrees Retard	23
85	89	200hp	8 Degrees Retard	245
99	102	250hp	10 Degrees Retard	245

SPREAD-BORE JET MAP

Spread-Bore 1st Stage Jet Map					
Nitrous Jetting	Fuel Jetting	Approx. HP Gain	Timing Adjustment	Footnotes	
40	45	50hp	2 Degrees Retard	3	
50	55	75hp	3 Degrees Retard	3	
59	65	100hp	4 Degrees Retard	3	

Spread-Bore 2nd Stage Jet Map				
Nitrous Jetting	Fuel Jetting	Approx. HP Gain	Timing Adjustment	Footnotes
71	75	150hp	6 Degrees Retard	03
81	86	175hp	6 Degrees Retard	23

Jet Map Footnotes

The jet map above has footnotes that offer the following instructions and technical information.

- ① Spark Plugs use Champion RC-12-YC or equivalent.
- ② Spark Plugs use Champion C-614-C or equivalent.
- ③ Fuel use 92 octane pump gasoline or better.
- ④ Fuel use 110 octane race gasoline or better.
- ⑤ Single Plane manifold only. **DO NOT** use a dual plane manifold at this horsepower level.



ELECTRICAL SYSTEM INSTALLATION



Item #	Quantity	Description		
1	1 ea.	Activation microswitch		
2	1 ea.	Activation microswitch bracket (not shown)		
3	2 ea.	Activation microswitch mounting nut		
4	2 ea.	Activation microswitch mounting screw		
5	1 ea.	2 Stage 30 amp relay		
6	1 ea.	Wire harness with integral relay/fuse holders		
7	1 ea.	Red lighted toggle switch		
8	6 ea.	18/22g female spade connector, Nylon insulated		
9	2 ea.	14/16g female spade connector, Nylon insulated		
10	2 ea.	14-16g male spade connector, Nylon insulated		
11	3 ea.	16/18, splice connector		
12	5 ea.	14/16g 3/8" ring terminal, Nylon insulated		
13	1 ea.	Male blade fuse tap		
14	1 ea.	14/16g male spade connector, Nylon insulated		
15	1 ea.	Nitrous 2nd stage push button		
16	1 ea.	20 amp ATO blade fuse		
17	2 ea.	18/22g female spade connector, Nylon insulated		

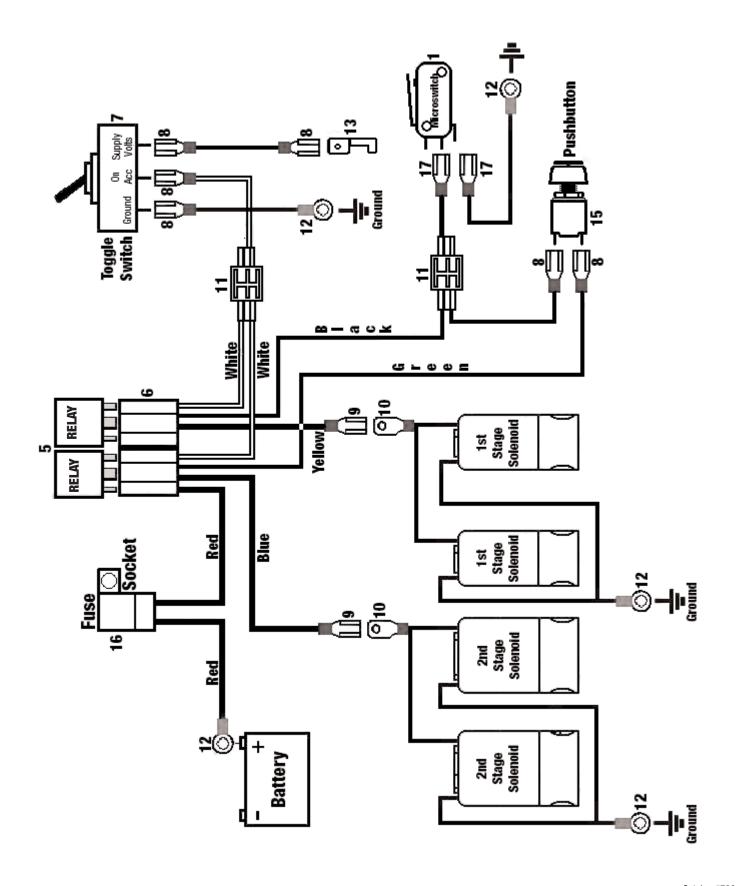
Nomenclature Descriptions:

ATO... the fuse configuration is ATO. When replacing this fuse, ask for an ATO fuse.

"a"... Amperage.

Important: The wiring hardware and instructions included with this kit are intended for 12-volt electrical systems only. Before attempting to wire your Edelbrock Performer nitrous oxide system, examine and follow the wiring diagram on the following page. Please call the Edelbrock Technical department with any questions concerning electrical wiring.







NITROUS ELECTRICAL SYSTEM INSTALLATION PROCEDURES

Determine the location of the 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 harness close to the battery. However, these connectors are water-resistant not waterproof, so care is required when mounting this assembly under the hood of your vehicle.

WIRE SCHEMATIC ORIGIN AND DESTINATION MAP

Wire Color	System	Origin	Destination	Terminal Used
Red	Main System Bat.	Relay Harness	Bat. Volt. Signal	Ring
	Voltage Arming Switch			
Blue	2nd Stage Functions	Relay Harness	2nd Stage Solenoids	M/F Spades
Yellow	1st Stage Functions	Relay Harness	1st Stage Solenoids	M/F Spades
Green	2nd Stage Functions	Relay Harness	2nd Stage Pushbutton	Female Spade
Black	1st Stage Functions	Relay Harness	Microswitch	Female Spade
White	Main System Arming	Relay Harness	Toggle Switch	Female Spade
White	Main System Arming	Relay Harness	White Sys. Arm Wire	Splice Connector
Red	Main System Arming	Arming Switch	Switched 12V Power	2 F Spades,
				Blade Conn.
Black	Main System Arming	Arming Switch	Ground	F Spade, Ring
Black	1st Stage Functions	Microswitch	Ground	F Spade, Ring
Black	1st Stage Functions	Microswitch Splice	Pushbutton	Splice, F Spade
Black	1st Stage Functions	1st Stage Solenoids	Yellow Wire	Male Spade
Black	2nd Stage Functions	2nd Stage Solenoids	Blue Wire	Male Spade
Black	1st Stage Functions	1st Stage Solenoids	Ground	Ring Terminal
Black	2nd Stage Functions	2nd Stage Solenoids	Ground	Ring Terminal

The wire harness attached to the relay and fuse holder includes 8 feet of color-coded wires to make the electrical system installation for your Edelbrock Nitrous System as easy as possible. We recommend not cutting 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.

Once all of the solenoids and switches are placed, 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 to prevent wire damage.

After you have accounted for the routing of your wires, follow the Wire Harness Schematic on page 15 and use the Origin and Destination Map as a guide for which electrical connectors are used in each circuit.

Once you have decided the location of the relay and fuse holder, secure them with fasteners (not included with kit) such as sheet metal screws, bolts and nuts, etc. Allow for some slack in the red wire that connects the relay and fuse holders together.

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.

The fuse is covered by the fuse mount housing. The relay for the Performer system is rated for 30 amps, and the fuse is 15 amps.