



Installation Instructions

DEI CryO2 Tank & Installation Kit™

PART NO. 080100 through 080106

KIT CHECKLIST	
1	CryO2 Tank
1	CGA320 Tank Adapter
2	Tank Mounting Brackets
1	Solenoid Valve
1	1/8" Male NPT to -4AN Male Fitting
1	Fuse Holder w/ One 15 Amp Fuse
3	Electrical Loop Connectors
1	Wire Tap
2	Male Wire Connectors
6	Female Wire Connectors
2	Nuts & Bolts for Microswitch
1	Prime Button
1	Arming Switch
1	Microswitch
1	Microswitch Bracket
1	Nylon Washer
1	CryO2 Sticker

NOTE
DANGER : Improper installation can result in injury or death.
DANGER : If CO2 is inhaled it can cause suffocation and/or death. Frostbite can occur if it comes in contact with skin.
CAUTION : Failure to comply with instructions may result in damage to equipment.
NOTE : Use minimum 14-gauge wire for electrical component wiring.
NOTE : Teflon Tape or Teflon Paste is required for installation on NPT fittings. If Teflon Paste is used, allow ample amount of drying time.
NOTE : Do not use Teflon Tape, Teflon Paste, or any other form of thread sealant on any -AN fittings.
NOTE : Never leave Arming Switch in "ON" position when system not in use.

It is recommended to have the CryO2 Tank filled prior to installation.



DIRECTIONS - TANK INSTALLATION

- 1 - Before starting any part of the installation, remove the negative battery terminal cable.
 - 2 - Wrap the threads of the 1/2" NPT on the CGA-320 tank adapter with Teflon tape.
- HINT** Use a vice to hold the CGA-320 adapter.



- 3 - Thread the 1/2"NPT to -4AN fitting onto the CGA-320 adapter. Tighten until a secure seal is made.



- 4 - Place the Teflon Washer inside the large threads of the CGA-320 adapter. Then tighten securely to the CryO2 tank using a 11/16" wrench or an adjustable crescent wrench.



- 5 - Loosely install the tank mounting brackets to the tank. The tank will be mounted with the nozzle pointing downwards; taller bracket toward the top of the tank and the shorter bracket toward the bottom of the tank.

INFO The brackets provided will orient the bottle to the proper angle so that the liquid CO2 rests in the bottom of the bottle for the internal siphon tube to pick up.



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- 6 - Remove the trunk carpeting, exposing bare sheet metal. Find a flat location to mount the tank. Look under the vehicle, insuring desired tank location does not interfere with any fuel lines, electrical wires, brake lines, or exhaust tubing. Once a location is determined, mark the sheet metal with a marker through the holes of the mounting brackets. Make a mark of each of the four mounting holes.



- 7 - Remove the tank from the location. Using a 5/16" drill bit, drill holes through each mark. Also, be sure to drill a hole for the stainless steel line to go through the trunk, under the car. There should be a rubber grommet placed in this drilled hole so that the sharp edges of the drilled hole do not puncture the pressurized stainless steel supply line.



- 8 - Replace the trunk interior. Punch holes through the carpet for the mounting bracket bolts. Install the tank and mounting brackets with 5/16" bolts. Install 5/16" lock-nuts or use well-nuts to ease installation.

NOTE Have a friend hold the bolts on top while you tighten the nuts under the vehicle.



DIRECTIONS - SUPPLY LINE INSTALLATION

- 9 - Install the 14' -4AN supply line, routing it through the hole with the rubber grommet going underneath the vehicle. Thread the -4AN line onto the assembled CGA-320 adapter with attached fitting.

NOTE Do **NOT** use Teflon Tape, Teflon Paste, or any other form of thread sealant on **ANY** -AN fittings.



- 10 - Route the 14' supply line toward the front of the vehicle. Make sure the area is clear from any moving suspension parts or exhaust piping. Use clamps, zip ties, or other hardware to secure this line. Finish securing the supply line allowing it to enter the engine compartment from under the vehicle.

NOTE It is easy to route the supply line parallel to the brake and fuel lines utilizing zip ties to secure it.

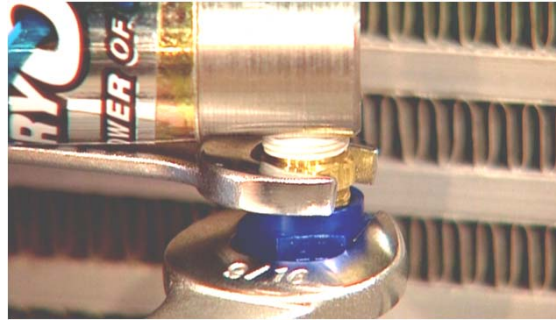


- 11 - Apply thread sealant to the NPT side of the the 1/8" NPT Male to -4AN Male fitting. Thread the fitting into the "IN" port of the CryO2 Solenoid using a 7/16" wrench to tighten the fitting.

NOTE It may be helpful to clamp the solenoid, port-end, into a vice while tightening.



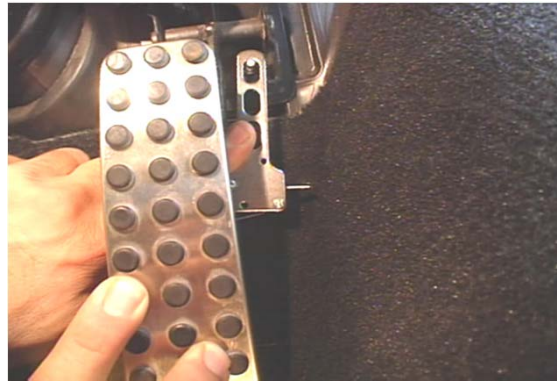
- 12 - Attach the -4AN supply line to the "IN" port fitting of the CryO2 Solenoid. Tighten it with a 9/16" wrench while holding the fitting with a 7/16" wrench.



DIRECTIONS - MICROSWITCH / WIRING INSTALLATION

- 13 - Use the long bolts and nuts provided in the kit to secure the microswitch to the bracket. Find a desired location where the switch will be activated when the throttle pedal is depressed fully. This should be on your throttle body. For vehicles equipped with Throttle-By-Wire, it will be mandatory to mount the switch behind the throttle pedal.

WARNING Binding or dragging of throttle operation can create a potentially dangerous stuck-throttle condition. Ensure that the microswitch does not interfere with normal throttle operation.



- 14 - A vice, locking pliers, and hammer will be useful in modification of the microswitch bracket. Bending the bracket will require some trial and error to determine the best fitment.



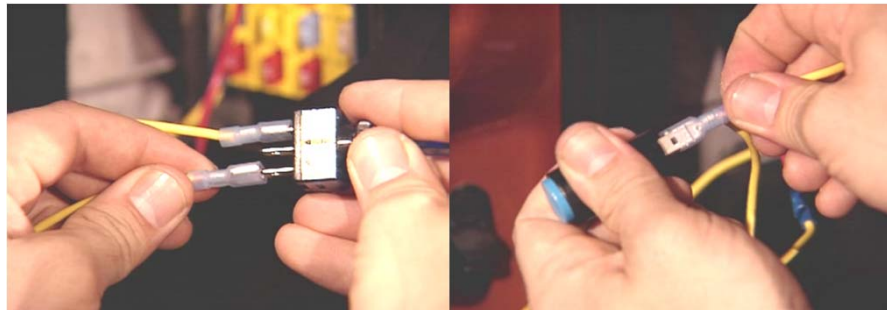
- 15 - Once the bracket is properly modified, mount it to an existing mounting bolt on the throttle body or the throttle pedal.



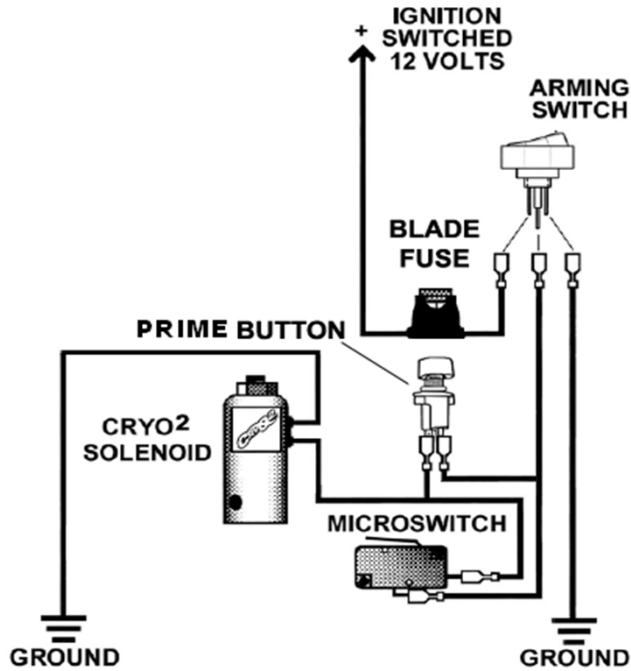
- 16 - Using two wire connectors, prepare two wires for the microswitch to activation switch circuit. Place the connectors over the terminals on the microswitch and route accordingly.



- 17 - Locate a desired location for the Push Button and Arming Switch in the interior of the vehicle. This should be easily accessible by the driver. Holes will need to be drilled to accommodate mounting. Once everything has been mounted, follow the wiring diagram to complete the electrical part of the installation.



Wiring Diagram



USING THE SYSTEM

- 1 - Before or while in the staging lanes, open the tank valve completely. Have tank securely fastened to the mounting brackets.
- 2 - Just before staging is complete, switch the Arming Switch to the ON position.
- 3 - Using the Prime Button, prime the CryO2 System to "pre-freeze" the CryO2 Components. Hold the Prime Button for approximately 5 to 7 seconds.
- 4 - With the Arming Switch in the ON position, the microswitch will take control of the system during the race.
- 5 - DO NOT activate solenoid valve for a duration over 20 seconds as this may burn internal seals in solenoid.

AFTER USE

- 1 - When you are finished using the CryO2 system, close the tank valve completely.
- 2 - With the Arming Switch in the ON position, press the Prime Button to deplete the supply lines of any remaining CO2.
- 3 - Switch the Arming Switch into the OFF position.

WORDS FOR THE WISE

DEI does not recommend the use of it's products in illegal racing activities. Nationwide statistics show that 49 people are injured for every 1,000 who participate in illegal street racing. California State DMV has over 40 deaths accounted for in 2001 due to illegal street racing. **Be smart and take it to the drag strip.**