



**Installation Instructions**

**DEI CryO2 Tank & Installation Kit™**

PART NO. 080100, 080102, 080105 through 080106

KIT CHECKLIST	
1	CryO2 Tank
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 Crimps
1	Wire Tap
2	Male Crimp Connectors
6	Female Crimp Connectors
2	Nut & Bolts for Microswitch
1	Prime Button
1	Activation Switch
1	Microswitch
1	Microswitch Bracket
1	CryO2 Sticker

NOTE
<b>DANGER</b> : Improper installation can result in injury or death.
<b>DANGER</b> : If CO2 is inhaled it can cause suffocation and/or death. Frostbite can occur if it comes in contact with skin.
<b>CAUTION</b> : Failure to comply with instructions may result in damage to equipment.
<b>NOTE</b> : Use minimum 14-gauge wire for electrical component wiring.
<b>NOTE</b> : Teflon Tape or Teflon Paste is required for installation on NPT fittings. If Teflon Paste is used, allow ample amount of drying time.
<b>NOTE</b> : Do <b>not</b> use Teflon Tape, Teflon Paste, or any other form of thread sealant on <b>any</b> -AN fittings.

*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 - Take Teflon tape and wrap the threads of the 1/2" NPT on the CGA-320 tank adapter.
- HINT** Use the vice to hold the CGA-320 adapter.



- 3 - Take the 1/2"NPT to -4AN Fitting and thread on to CGA-320 adapter. Tighten until a secure seal is made.



- 4 - Take the Teflon Washer and place inside of 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 towards the top of the tank and the shorter bracket towards 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 to where it is bare sheet metal. Find a flat location to mount the tank. Look underneath so that it does not interfere with any fuel lines, electrical wires, brake lines, or exhaust tubing. Once a desired location is found, mark the sheet metal with a marker in the holes of the mounting brackets. Make a mark of each of the four mounting holes.



- 7 - Remove the tank from the location, and using a 5/16" drill bit, drill holes where the Sharpie markings are. Also be sure to drill a hole where the stainless steel line can go through the trunk under the car. There should be a rubber grommet placed in this drilled hole for the line so that the sharp edges of the drilled hole do not puncture the stainless steel braided line under pressure.



- 8 - Replace the interior of the trunk and poke holes where the bolts can go through for mounting. Install the tank and mounting brackets with 5/16" bolts. You must have a 5/16" nut on the underside of the vehicle.

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



**DIRECTIONS - SUPPLY LINE INSTALLATION**

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- 9 - Install at 14' -4AN supply line by 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 towards the front of the vehicle. Make sure the area is clear from any moving suspension parts or exhaust piping. Use clamps, zip ties or any other form of securing the line. Secure the line and have the supply line enter the engine compartment from under the vehicle.

**NOTE** It is easy to route the supply line parallel to the brake and fuel lines and to use zip ties to



- 11 - Take the 1/8" NPT Male to -4AN Male fitting and apply thread sealant to the NPT side of the fitting. Thread the fitting into the marked 'IN' side of the CryO2 Solenoid using a 3/8" wrench to tighten the fitting.

**NOTE** It maybe helpful to secure the solenoid in a vice while tightening.



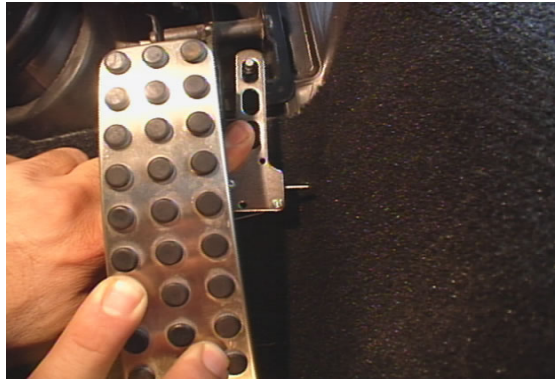
- 12 - Attach the -4AN supply line to the 'IN' side of the CryO2 Solenoid and secure with a 9/16" wrench while holding the fitting attached to the solenoid with a 7/16" wrench.



#### DIRECTIONS - MICROSWITCH / WIRING INSTALLATION

- 13 - Mount the microswitch to the bracket and use the long nuts and bolts provided in the kit to secure the microswitch to the bracket. Find a desired location where the switch will activate when the pedal is pressed all the way down. This can be either on your throttle body or vehicles that have Throttle-By-Wire, it will be mandatory to mount the switch behind the throttle pedal.

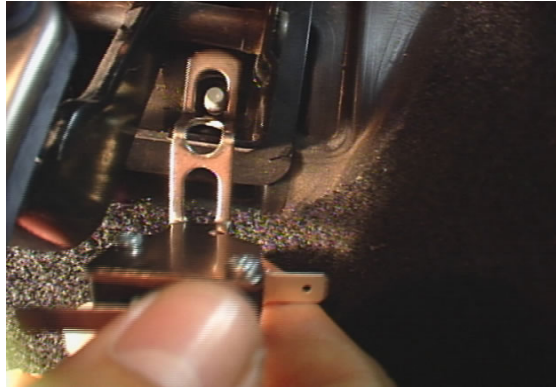
**WARNING** Binding or dragging of the throttle operation can create a potentially dangerous stuck-throttle condition. Ensure that the microswitch does not interfere with normal throttle operation.



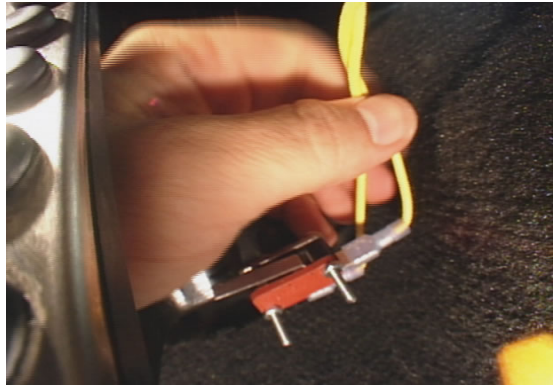
- 14 - Using a vice and pliers will be necessary for fabrication of the micro switch bracket. Bending the bracket will require personal judgment which is the best way to bend the bracket. A hammer is useful for bending the micro switch bracket as well.



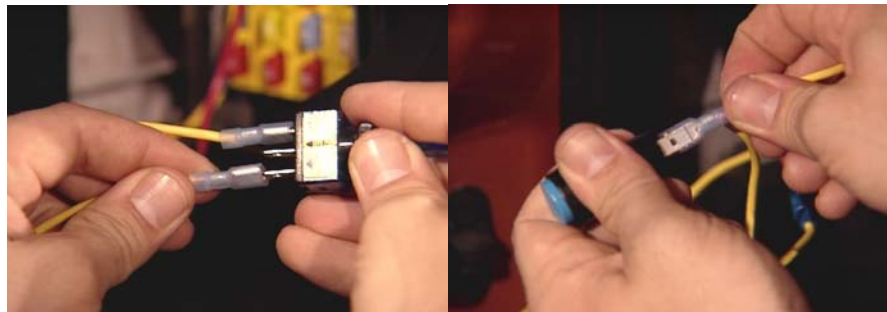
- 15 - Once the bracket is properly modified, mount it to an existing mounting bolt on the throttle body or the throttle pedal.



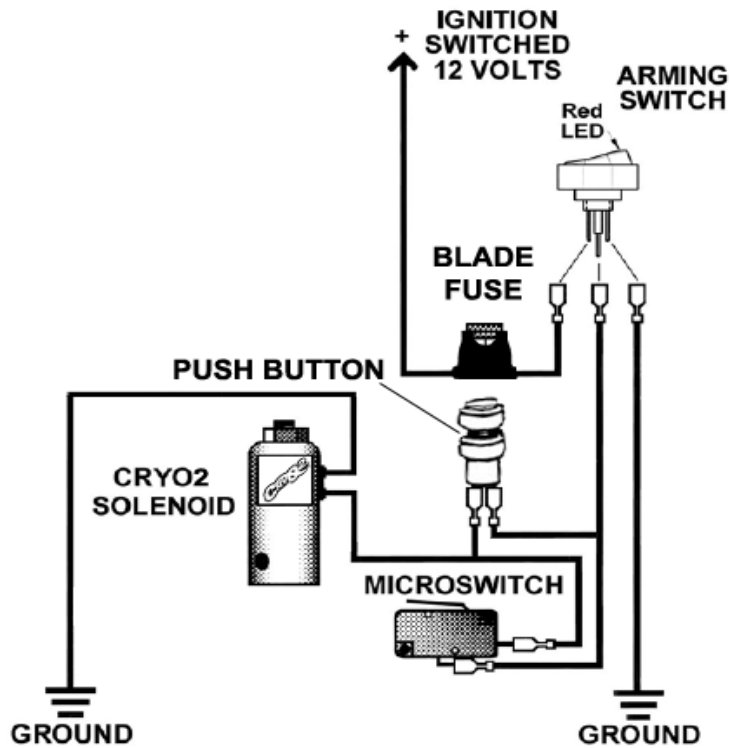
- 16 - Using two wire crimps, prepare two wires from the microswitch to go to the activation switch. Place the crimps over the terminals on the microswitch and route accordingly.



- 17 - Locate a desired location for the Push Button and Activation Switch in the interior of the vehicle. This should be easily accessible by the driver. Holes will need to be drilled to accommodate for the 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 in the staging lanes open the tank valve completely. Have tank securely fastened to the mounting brackets.
- 2- Before going into the staging light, switch the Activation Switch to the ON position, the red light should turn on. If light does not come on, refer to Troubleshooting Guide.
- 3- Using the push button, prime the CryO2 System to 'pre-freeze' the CryO2 Components. Hold the push button for approximately 5 to 7 seconds.
- 4- With the activation switch in the ON position, the microswitch will take control of the system during the race.

### AFTER USE

- 1- When you are finished using the CryO2 system, close the tank valve completely.
- 2- With the activation switch in the ON position, press the prime button to deplete any remains of CO2 left in the lines.
- 3- Switch the activation switch into the OFF position. The light should go off on the switch.

### WORDS FOR THE WISE

DEI does not recommend the use of its 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.**