

## N-TERCOOLER SYSTEM

### INSTALLATION INSTRUCTIONS

The most important thing to do now is READ... UNDERSTAND...AND...FOLLOW...these instructions. If there is something you don't understand, STOP!

The installation procedures are divided into 5 sections. Please pay particular attention to each one:

1. Mounting the bottle
2. Routing the supply line.
3. Mounting the cooler ring
4. Wiring the system
5. Testing the system.

Before starting any installation steps:

1. Disconnect the negative battery terminal.
2. Never use Teflon tape on any system fittings. Tape debris will cause numerous problems ranging from fouled solenoids to blocked jets. Use a thread sealer such as Permatex 14AR or equivalent Teflon based sealant.
3. Have your bottle filled by a reliable source, being sure it is filled to capacity with filtered "Nytrox +<sup>+</sup>" nitrous oxide or CO<sub>2</sub>.

### MOUNTING THE BOTTLE

The bottle should be mounted in the trunk area or outside of the passenger compartment. If this is not possible or practical a NHRA approved blow down tube and vent fitting (PN's 11708, 11709) must be installed. The positioning of the bottle should be as shown in diagram "A". This will allow the siphon tube to be covered at all times.

The mounting brackets should be assembled on the bottle with the short bracket approx. 2" from the bottom.. Use this mock up as a template to locate the four mounting bolt holes. The bottle should be secured by a minimum of 4 "Grade 5" 5/16 bolts. Note: Before drilling holes be sure to check for clearance beneath the mounting surface i.e.: fuel tank, fuel lines, brake lines.

DIAGRAM A



### ROUTING THE FEED LINE

NOTE: Place a piece of tape over both ends of the hose to prevent debris from entering the feed line during the routing process.

The feed line may be routed to the engine compartment either through the passenger compartment or under the vehicle. Route the line carefully to prevent the possibility of restricting nitrous flow. If routed under vehicle, locate and drill a 3/4 inch diameter hole in a suitable area near the bottle valve for the main line. Starting at the bottle nipple route the line to the engine compartment. Following the factory fuel lines is usually the best path. Note: Keep maximum clearance between all moving parts, suspension components and hot engine components, securing the supply line where possible ("Zip-Ties" work best here). Tighten the line to the bottle nipple securely. Be especially careful of the feed line being near any "HOT" electrical leads a spark will cause a permanent leak in the feed line.

### MOUNTING THE COOLING RING

Assemble the solenoid to the cooling ring, the 1/8 NPT discharge port on the bottom of the solenoid mounts directly to the cooling ring. Thread the xD-4 filter fitting into the inlet port of the solenoid, the supply line will connect here. Teflon based sealant should be used to avoid leaks. Mount the NX cooler ring on your intercooler using the supplied zip ties, do not over tighten, intercooler damage may result. Connect the supply line to the inlet port on the solenoid at this time, tighten securely.

### WIRING THE SOLENOIDS

1. Mount the red arming switch within easy reach, and plain sight of the driver.

- The supplied wide-open throttle switch is universal in design and can be mounted in a variety of positions. The mounting plate is designed to be easily bent cut or twisted to work in any application. The trigger arm on the micro switch may be bent twisted or cut to aid in ease of installation.
- The best power source for the system is the “Positive” post on the battery. Do not try to “Splice” into the factory wiring harness for a power supply, this will not have adequate amperage to operate the solenoid.
- Follow diagram “C” when wiring the system, the relay must be used in all applications.
- Solder all connections for a permanent trouble free installation.
- The solenoid is rated only for intermittent duty. Do not engage solenoid for more than 20 continuous seconds. Solenoids that have “burned or scorched” electro-magnets will not be replaced under warranty.

### COMPLETING AND TESTING THE SYSTEM

- After all components have been assembled on the vehicle and each piece has been verified for correct installation and the wiring has been rechecked and verified to be correct, it is time to test the system.
- Do not open the bottle valve at this time.
- Reconnect the negative battery cable.
- Using the red, lighted toggle switch “Arm” the nitrous system.
- Test the solenoid operation by “Engaging” the activation or WOT switch. The solenoid should “Click”. If it does not, re-verify all electrical connections and wiring diagrams.
- Open the bottle and check all connections for leaks. If “ice” appears on any connection this indicates a leak. Retighten any fitting or connection that leaks and recheck.
- Choose a suitable testing area, your local racetrack is the best choice. Drive the vehicle to verify all operations are normal and the throttle linkage is operating properly.
- Pre-stage the vehicle, arm the system, purge the air from the supply line, if an optional purge valve is used, using 3 one-second bursts from the purge button. Stage and launch the vehicle.
- Make a full throttle pass and shut the engine off, check all spark plugs to be sure the decrease in inlet temperature has not resulted in a lean condi-

tion. If a lean condition is detected adjustments must be made in the engine fuel curve.

