



LS-1

Kit Number 05177NOS



OWNER'S MANUAL

P/N A5177-SNOS

CONGRATULATIONS on purchasing your NOS Nitrous Oxide Injection System! Your system is composed of the highest quality components available. It should provide many miles of trouble-free performance when used correctly. If you have any questions regarding the performance of your system, call NOS Technical Service at 1-866-GOHOLLEY.

NOTICE: Installation of Nitrous Oxide Systems Inc. products signifies that you have read this document and agreed to the terms stated within.

It is the purchaser's responsibility to follow all installation instruction guidelines and safety procedures supplied with the product as it is received by the purchaser to determine the compatibility of the product with the vehicle or the device the purchaser intends to install the product on.

Nitrous Oxide Systems Inc. assumes no responsibility for damages occurring from accident, misuse, abuse, improper installation, improper operation, lack of reasonable care, or all previously stated reasons resulting from incompatibility with other manufacturers' products.

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

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

NOS nitrous oxide is legal for use in most states when used in accordance with state and local traffic laws. NOS does not recommend or condone the use of its products in illegal racing activities.

Kit Number 05177NOS, when equipped with upgrade package P/N 15826, has received an Executive Order Exemption from the California Air Resources Board (EO #D-266). This exemption means that when equipped with this upgrade package, your vehicle will be "Smog Legal" in all 50 states.

NOTICE: This NOS kit is not intended for use on hatchback-type vehicles without the use of NOS P/N 16160NOS (External Aluminum Blow-Down Tube) and 16166NOS (Racer Safety Pressure Relief Cap).

HAZARDS DEFINED

This manual presents step-by-step instructions that describe the process of installing your NOS Nitrous Oxide Injection System. These procedures provide a framework for installation and operation of this kit. Parts are referenced by name and number to avoid confusion. Within the instructions, you are advised of potential hazards, pitfalls, and problems to avoid. The following examples explain the various hazard levels:

WARNING! Failure to comply with instructions may result in injury or death.

CAUTION! Failure to comply with instructions may result in damage to equipment.

NOTE: This information is important, needs to be emphasized, and is set apart from the rest of the text.

HINT: These special instructions provide a handy work tip.

NITROUS OXIDE INJECTION SYSTEM SAFETY TIPS

WARNINGS

Do not attempt to start the engine if the nitrous has been injected while the engine was not running. Disconnect the coil wire and turn the engine over with the throttle wide open for several revolutions before attempting to start. Failure to do so can result in extreme engine damage.

Never permit oil, grease, or any other readily combustible substances to come in contact with cylinders, valves, solenoids, hoses, and fittings. Oil and certain gases (such as oxygen and nitrous oxide) may combine to produce a highly flammable condition.

Never interchange nitrous and fuel solenoids. Failure to follow these simple instructions can result in extreme engine damage and/or personal injury.

Never drop or violently strike the bottle. Doing so may result in an explosive bottle failure.

Never change pressure settings of safety relief valve on the nitrous bottle valve. Increasing the safety relief valve pressure settings may create an explosive bottle hazard.

Identify the gas content by the NOS label on the bottle before using. If the bottle is not identified to show the gas contained, return the bottle to the supplier.

Do not deface or remove any markings, which are on the nitrous bottle.

Nitrous bottle valves should always be closed when the system is not being used.

Notify the supplier of any condition, which might have permitted any foreign matter to enter the valve or bottle.

Keep the valves closed on all empty bottles to prevent accidental contamination.

After storage, open the nitrous bottle valve for an instant to clear the opening of any possible dust or dirt.

It is important that all threads on the valves and solenoids are properly mated. Never force connections that do not fit properly.

TABLE OF CONTENTS

WHAT IS NITROUS OXIDE?	5
Do's and Don'ts of Nitrous Oxide	5
Chapter 1 Introduction to your NOS Nitrous Oxide Kit	5
1.1 General Information	5
1.2 System Requirements	6
1.3 Kit Components	6
Chapter 2 Kit Installation	7
2.1 Bottle Mounting Instructions	7
2.1.1 Street Vehicles	7
2.1.2 Racing Vehicles	7
2.2 Bottle Orientation	8
2.3 Bottle Installation	8
2.4 Spray Nozzle Installation	10
2.5 Solenoid Mounting	11
2.6 Nitrous Feed Line Mounting	12
2.7 Solenoid/Nozzle Nitrous Line Connection	12
2.8 Electrical System Installation	12
2.9 Preparing for Operation	15
Chapter 3 Tuning Suggestions	15
Appendix A Troubleshooting Guide	15
Nitrous Oxide Accessories	16

WHAT IS NITROUS OXIDE?

NITROUS OXIDE...

...Is a cryogenic gas composed of nitrogen and oxygen molecules

...Is 36% oxygen by weight

...Is non-flammable by itself

...Is stored as a compressed liquid

...Exists in two grades—U.S.P. and Nitrous Plus:

- ❑ U.S.P. is medical grade nitrous oxide; its common use is dental and veterinary anesthesia. It is also commonly used as a propellant in canned whipped cream. U.S.P. is not available to the public.
- ❑ Nitrous Plus differs from U.S.P. in that it contains trace amounts of sulphur dioxide added to prevent substance abuse. Nitrous Plus is intended for automotive applications and is available for sale to the public

In automotive applications, Nitrous Plus and fuel are injected into the engine's intake manifold, which produces the following results:

- ❑ Lowers engine intake air temperature, producing a dense inlet charge.
- ❑ Increases the oxygen content of the inlet charge (air is only 22 percent oxygen by weight).
- ❑ Increases the rate at which combustion occurs in the engine's cylinders.

Do's and Don'ts of Nitrous Oxide

Do's

- ❑ Read all instructions before attempting to install your NOS nitrous system.
- ❑ Make sure your fuel delivery system is adequate for the nitrous jetting you have chosen. Inadequate fuel pressure or flow will result in engine damage.
- ❑ Use 14 gauge (minimum) wire when installing electrical system components.
- ❑ Use high-quality connections at all electrical joints.
- ❑ Use Teflon-based paste on pipe style fittings.
- ❑ Make sure your engine and related components (ignition, carburetor, and driveline) are in proper working condition.
- ❑ **If nitrous is accidentally injected into the engine when it is not running, remove the engine coil wire, open the throttle, and crank the engine 10 to 15 seconds before starting. Failure to do so can result in an explosive engine failure.**
- ❑ **Use your NOS nitrous system only at wide-open throttle and at engine speeds above 3000 RPM.**
- ❑ **Install a proper engine to chassis ground. Failure to do so may result in an explosive failure of the main nitrous supply line.**
- ❑ Use a high-quality fuel, as suggested in Chapter 3, Tuning Suggestions.

Don'ts

- ❑ Engage your nitrous system with the engine off. Severe engine damage can occur.
- ❑ Modify NOS nitrous systems (if you need a non-stock item, call NOS Technical Service for assistance)
- ❑ Overtighten AN type fittings.
- ❑ Use Teflon Tape on any pipe threads. Pieces of Teflon tape can break loose and become lodged in nitrous or fuel solenoids or solenoid filters. Debris lodged in a nitrous or fuel solenoid can cause catastrophic engine failure.



- ❑ Use sealant of any kind on AN type fittings.
- ❑ Allow nitrous pressure to exceed 1100 psi. Excessive pressure can cause swelling or in extreme cases failure of the nitrous solenoid plunger. Solenoid plungers are designed so that pressure-induced failures will prevent the valve from operating. No leakage should occur with this type of failure.
- ❑ **Inhale nitrous oxide. Death due to suffocation can occur.**
- ❑ **Allow nitrous oxide to come in contact with skin. Severe frostbite can occur.**
- ❑ **Use octane boosters that contain methanol. Fuel solenoid failure may occur, producing severe engine damage.**

Chapter 1 Introduction to your NOS Nitrous Oxide Kit

1.1 General Information

Kit Number 05177NOS is intended for use on 1998 and up GM LS-1 Camaro/Firebird engines. Kit Number 05177NOS flows fuel through the factory GM fuel injectors. Necessary fuel flow is accomplished by nitrous flowing through the mass air flow sensor, which detects the cold dense air and adds the additional fuel as needed.

1.2 System Requirements

When used correctly, Kit Number 05177NOS will work with stock LS-1 internal engine components. To ensure proper performance and driveline longevity, the following is suggested:

➤ Automatic Transmissions

If the vehicle is to be exposed to severe operating conditions, such as dragstrip use, a reputable high performance transmission shop should service the automatic transmission.

➤ Manual Transmissions

If the vehicle is to be exposed to severe operating conditions, such as dragstrip use, the standard GM clutch should be replaced with a high performance unit.

1.3 Kit Components

Before beginning the installation of your NOS kit, compare the components in your kit with those shown in Figure 1, and listed in Table 1. If any components are missing, please contact NOS Technical Service at 1-866-GOHOLLEY.

Table 1 Kit Number 05177NOS Parts List

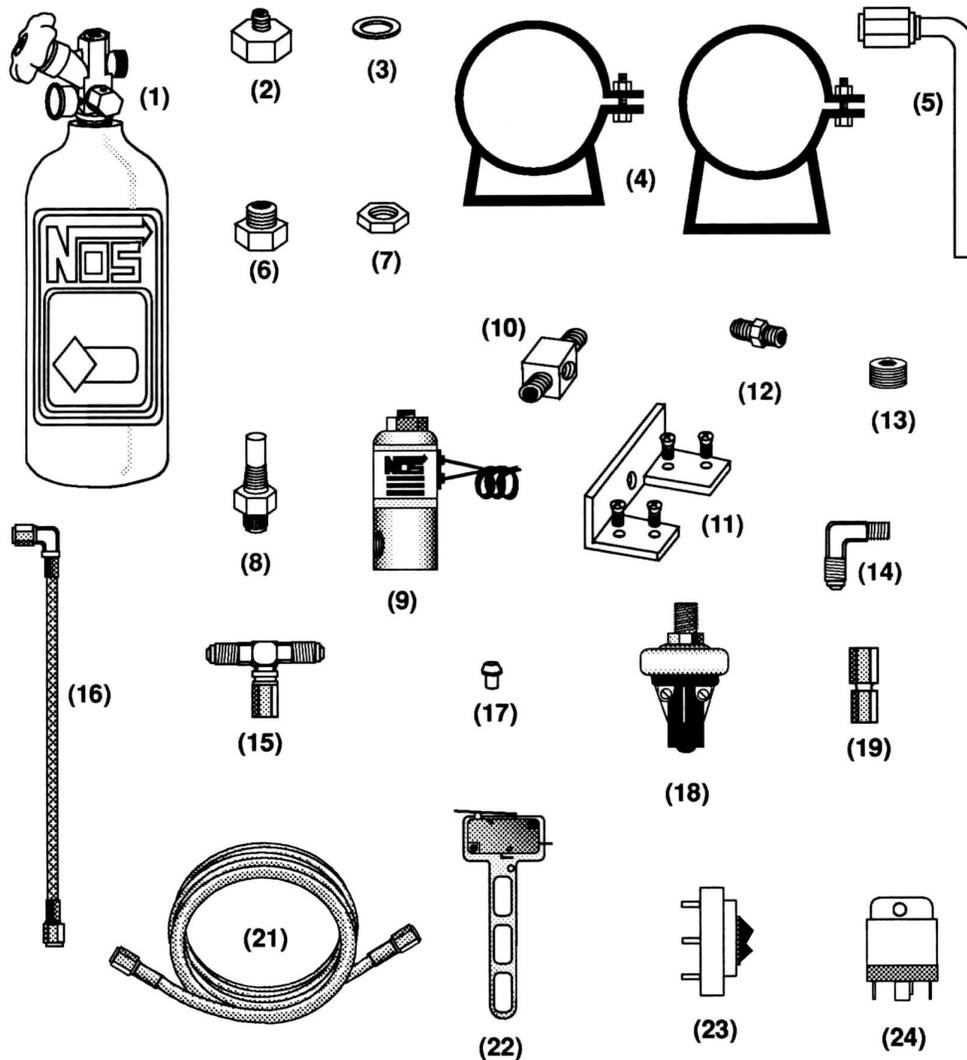
Item	Description	Quantity	NOS P/N
(1)	Bottle 15 lb.	1	14750-SHF-GNOS
(2)	Bottle Valve Adapter (4AN)	1	16220NOS
(3)	Bottle Valve Washer	1	16210NOS
(4)	Bottle Bracket Set	1	14125NOS
(5)	Blow-Down Tube	1	16160NOS
(6)	Nitrous Spray Nozzle Adapter	2	13715-SNOS
(7)	Nitrous Spray Nozzle Adapter Nut	2	13713-SNOS
(8)	LS-1 Spray Nozzle	2	13513-SNOS
(9)	Nitrous Solenoid	2	16020NOS
(10)	Nitrous Solenoid TEE	1	17242NOS
(11)	Solenoid Mounting Bracket	1	16509NOS
(12)	4AN Nitrous Filter Fitting	1	15570NOS
(13)	1/8" NPT Plug (Blue)	1	17210NOS
(14)	90° Adapter 3AN x 1/8 NPT	1	17650NOS
(15)	3AN Swivel TEE	1	17271-SNOS
(16)	3AN x 90° 1/4" Hose (Blue)	2	15035-SNOS
(17)	Jet Assortment	2 ea.	13760-28-SNOS 13760-30-SNOS 13760-32-SNOS
(18)	Fuel Pressure Switch	1	15685NOS
(19)	4AN Female x 1/8 NPT Female Swivel	1	17982NOS
(20)	Wire Pack	1	15612-VSNOS
(21)	Main N ₂ O Feed Line 4 AN 18 ft.	1	15302NOS
(22)	Microswitch*	1	15640NOS***
(23)	Arming Switch	1	15602NOS***
(24)	30 AMP Relay**	1	15618NOS**

*Includes Bracket and Screws.

**Includes Relay Harness.

*** Included in Wire Pack.

Figure 1 Kit Number 05177NOS Components



Chapter 2 Kit Installation

2.1 Bottle Mounting Instructions

NOTE: Disconnect the battery ground before beginning installation.

2.1.1 Street Vehicles

Accurate calibration of your NOS nitrous system depends on the bottle remaining at a stable temperature. Mount the bottle away from heat sources, such as the engine compartment or exhaust system, and away from windows, where the bottle is exposed to direct sunlight. In vehicles such as Camaros and Firebirds, it is impractical to mount the bottle away from direct sunlight. In these cases, the bottle should be covered or insulated, such as with an NOS bottle blanket.

NOS recommends that the bottle be environmentally separated from the driver's compartment. Vehicles such as Camaros and Firebirds do not have separate trunk compartments, so this kit includes an external blow-down tube. The safety blow-down tube should be routed to the exterior of the vehicle (preferably under the vehicle). This procedure will prevent filling the driver's compartment with a cloud of nitrous oxide if the safety pressure relief cap should happen to rupture for any reason.

2.1.2 Racing Vehicles

Before mounting a nitrous bottle in a racing vehicle intended for use in sanctioned events, check with the sanctioning association for any rules regarding this subject. Most associations require the bottle to be mounted within the confines of the safety roll cage, with the safety pressure relief cap vented away from the driver's compartment.

2.2 Bottle Orientation

Bottle placement is critical to the performance of your NOS nitrous system. It is important to understand how the bottle valve and siphon tube are assembled to properly orient the bottle in your vehicle and ensure that it picks up liquid nitrous while undergoing acceleration. All NOS nitrous bottles are assembled so that the bottom of the siphon tube is at the bottom of the bottle and opposite the bottle label (Figure 2).

Whenever the bottle is mounted in a lay-down position, the valve handle must be towards the front of the vehicle with the label facing up (Figure 3A).

If the bottle is mounted vertically, the valve handle and label must face toward the front of the vehicle (Figure 3B). This orientation will position the siphon tube at the back of the bottle where the liquid N₂O will be during acceleration.

WARNING! DO NOT attempt to remove the siphon tube without completely emptying the bottle of all nitrous and pressure.

A bottle mounted upside-down must have the siphon tube removed before use (Figure 3C). Non-siphon bottles can be specially ordered from NOS. If the bottle must be mounted parallel to the axles of the vehicle (sideways), the valve handle and label must be angled at approximately 45° toward the front of the vehicle (Figure 3D). This orientation will position the siphon tube toward the rear of the bottle.

NOTE: When using a bottle with a siphon tube, the tall bracket should be at the valve end of the bottle and the short bracket at the bottom (Figure 3E).

The most efficient mounting is the lay-down position (Figure 3A) with the valve handle toward the front of the vehicle. This position allows the greatest amount of liquid to be used before the siphon tube begins to pick up gaseous nitrous oxide.

Figure 2 Nitrous Bottle Siphon Tube Orientation

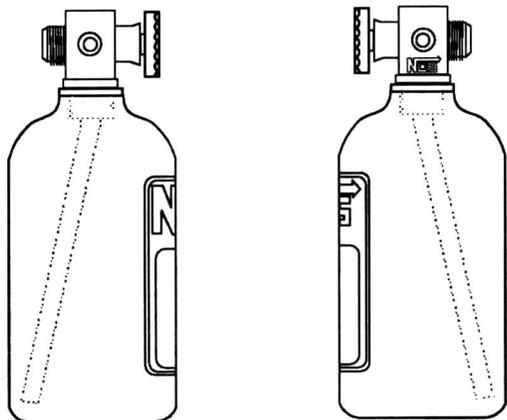
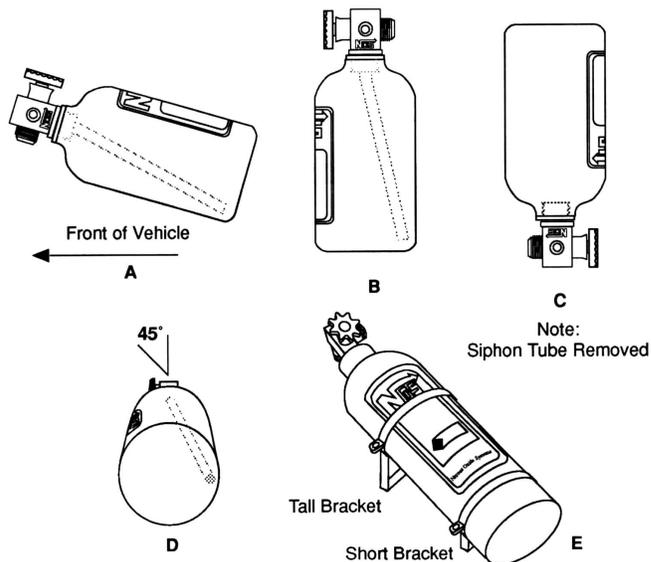


Figure 3 Nitrous Bottle Mounting Orientations



2.3 Bottle Installation

After you have determined the location and orientation of the nitrous bottle, use the following procedure to install the bottle:

NOTE: Numbers in parentheses () refer to the parts list /assembly drawing number for the component (Figure 1). Figure 4 shows the installation assembly for Kit Number 05177NOS.

1. Install the bottle nut adapter (2) and washer (3) on the nitrous bottle (1), and tighten securely.
2. Loosely install the bottle mounting brackets (4) and the vent tube (5) on the nitrous bottle.
3. Locate the bottle assembly in the desired mounting location, ensuring that the location will provide easy access to the bottle valve, hose connection, and bracket clamp bolts to facilitate bottle changing.

Figure 4 Kit Number 05177NOS Assembly Drawing

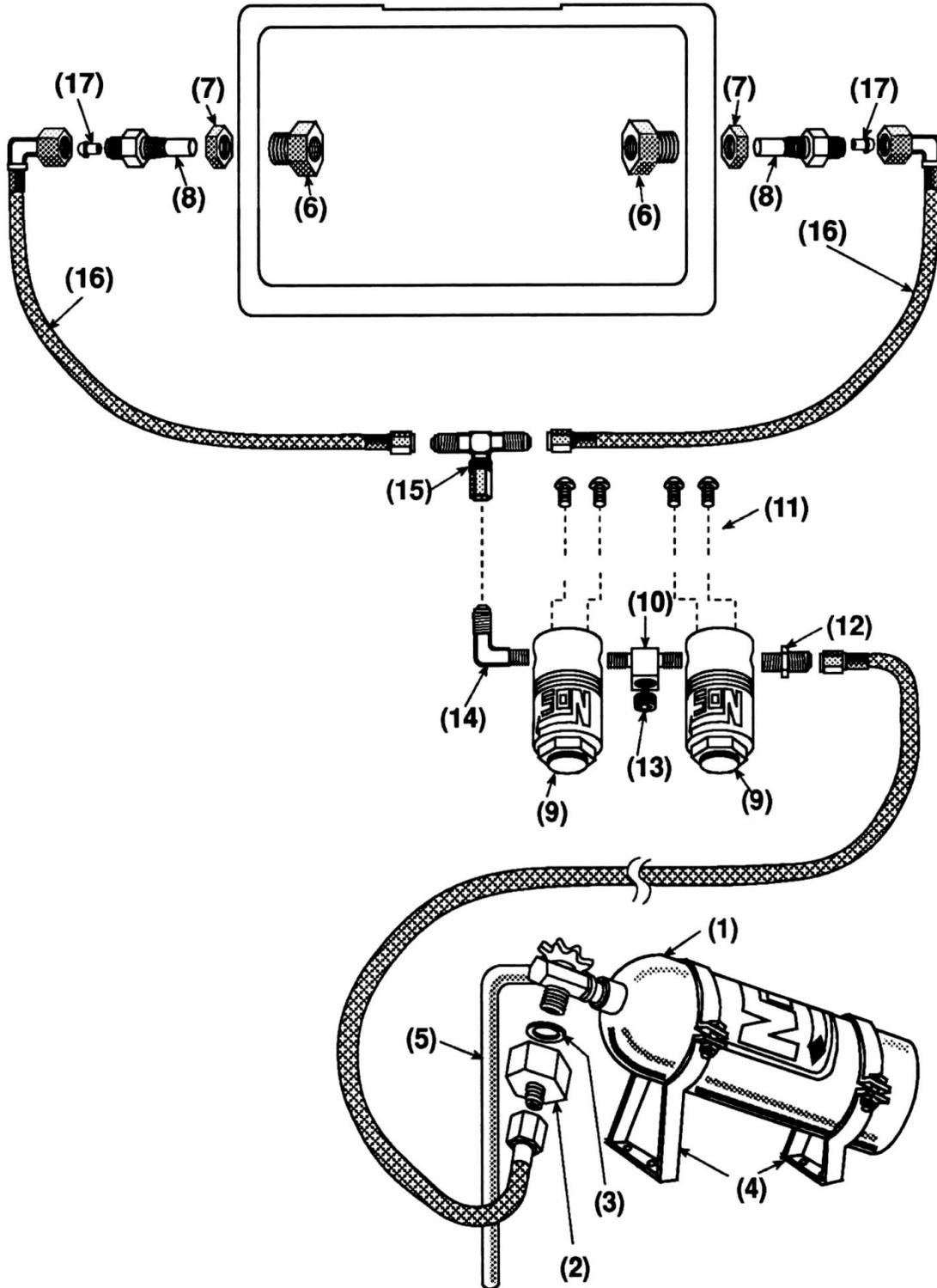
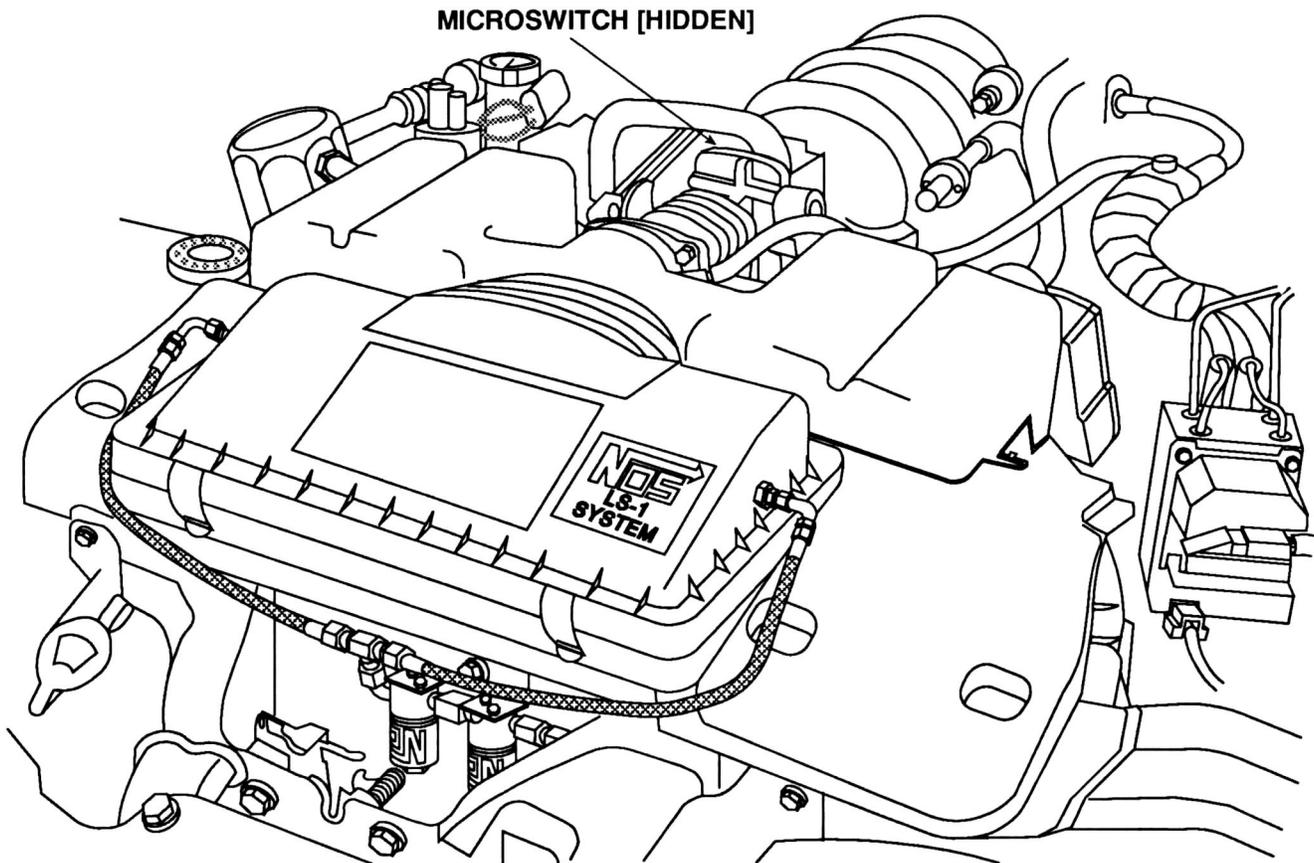


Figure 4A Kit Number 05177NOS Installed



4. Use the assembled bottle/bracket/blow-down tube unit as a pattern to mark for hole drilling. Drill four 5/16" holes for the bottle bracket bolts, a 1/2" hole for the blow-down tube, and an 11/16" hole for the nitrous supply tube.
5. Mount the brackets securely to the surface (recommended minimum of 5/16" bolts).
6. Tighten the bracket clamps on the bottle.

2.4 Spray Nozzle Installation

1. Remove the upper airbox cover.

CAUTION: Debris from drilling can severely damage the engine. When drilling the spray nozzle hole, position the rag carefully to prevent debris from contaminating your engine.

2. Measure from the back of the airbox on each side about 3", noting the location of the ribs on the inside of the airbox. Drill a 7/16" hole on each side. See Figure 5.
3. From the inside of the upper airbox, insert a Nitrous Spray Nozzle Adapter (6) into each of the holes previously drilled. See Figure 6.

CAUTION: Severe engine damage can occur if the spray adapter/nozzle assembly works loose from the air inlet duct. Ensure that the nitrous spray nozzle is securely tightened in the inlet duct.

4. Using Loctite or a similar thread-locking compound on the threads, install the Spray Nozzle Adapter nuts (7) on the outside of the airbox.
5. Install the Spray Nozzles (8) into the nozzle adapters, using Teflon past. Orient the spray nozzles to face the intake.

6. Remove all debris from the airbox before reinstallation.

Figure 5 Location of Spray Nozzle Holes in Airbox

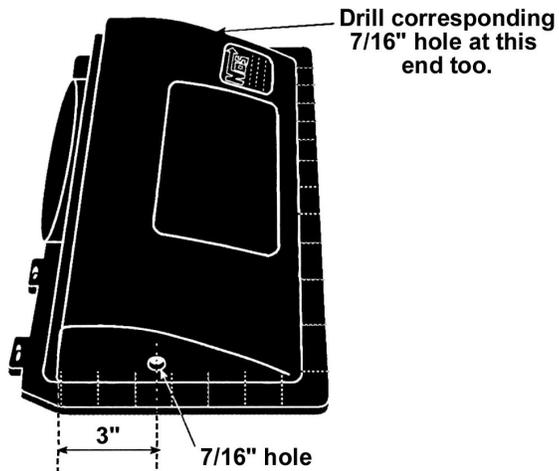
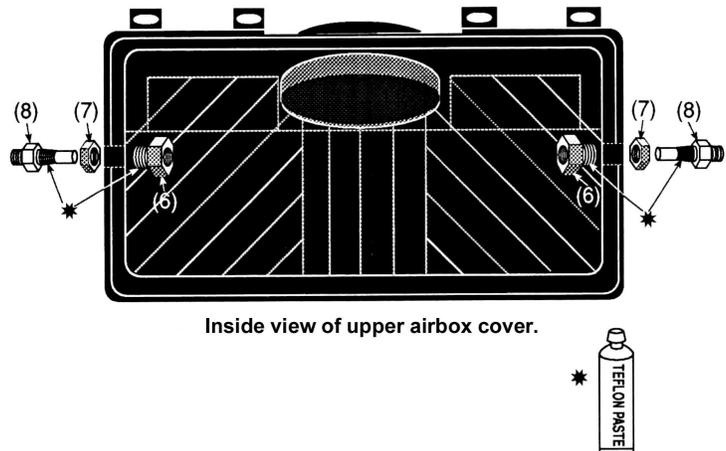


Figure 6 Spray Nozzle Assembly



2.5 Solenoid Mounting

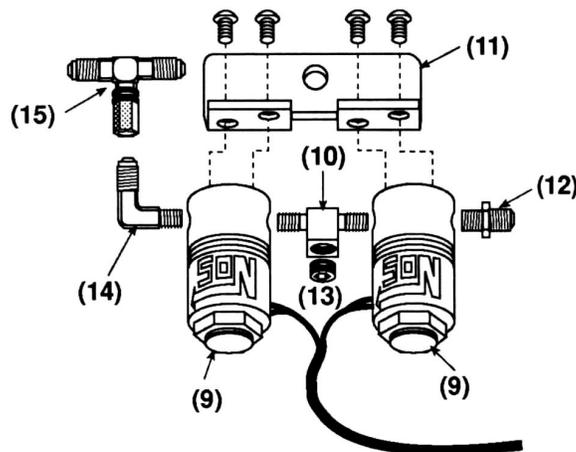
Use the following procedure to install the nitrous solenoids.

CAUTION: Do not overtighten the vise in the following procedure, or the solenoid will be damaged.

NOTE: Apply Teflon-based paste to all pipe fittings before assembling the solenoids and regulator.

1. Install a 1/8" NPT Plug (13) into the Solenoid TEE (10) open port.
2. Clamp one nitrous solenoid (9) in a bench vise.
3. Thread one side of the solenoid TEE into the outlet port.
4. Thread the open side of the solenoid TEE into the inlet port of the second nitrous solenoid. Rotate the second solenoid, so that it is parallel to the first.
5. Line up the bolt holes on both solenoids with the holes in the solenoid bracket (11).
6. Thread the 3AN x 90° fitting (14) into the second nitrous solenoid outlet port orienting it as per Figure 7.
7. Install the 3AN swivel TEE (15) onto the outlet of the 3AN x 90° fitting (14).
8. Install the Nitrous Filter Fitting (12) in the primary nitrous solenoid inlet port.
9. Attach the nitrous solenoid assembly using the existing hole in the radiator core support closest to the center of the vehicle using the self-tapping bolt provided. (See Figure 4A).

Figure 7 Solenoid Assembly



2.6 Nitrous Feed Line Mounting

HINT: Following the fuel lines along the left side of the vehicle and entering the engine bay near the master cylinder works well.

1. Determine the route for your nitrous feed line to follow. Ensure the path is clear of exhaust system, suspension, steering, wheels, electrical lines and components, and tires.
2. Feed the main nitrous supply line (21) along the proposed route.
3. If it is necessary to support the nitrous supply line under the vehicle, use 1/2" Tinnerman clamps or nylon tie-wraps to support the line securely.
4. Attach the nitrous supply line to the nitrous bottle valve adapter (2).

WARNING: Nitrous oxide is dangerous to humans if inhaled or comes in contact with the skin. Always point the nitrous line opening away from people when purging the line.

5. Purge the nitrous supply line.
 - A. Wrap the end of the nitrous line with a rag and hold securely.
 - B. Point the opening **away** from people.
 - C. Briefly open the bottle valve.
6. Attach the nitrous supply line to the nitrous filter fitting.

2.7 Solenoid/Nozzle Nitrous Line Connection

1. Place the desired jet (17) in each nozzle inlet. See Chapter 3 for tuning suggestions.
2. Connect the straight end of the two 14" x 3AN Hoses (16) to the TEE at the outlet of the nitrous solenoids.
3. Connect the other end of the hoses to the nozzles.

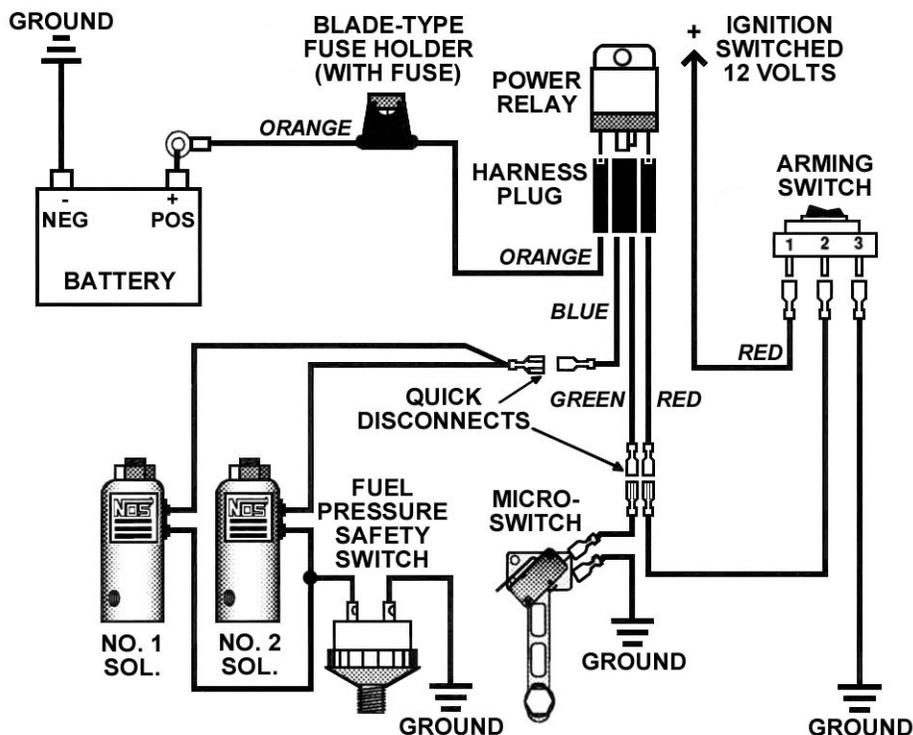
2.8 Electrical System Installation

Use the following procedure and refer to Figures 8 for the electrical system installation.

WARNING! Death or injury may occur from working on a charged electrical system.

1. Disconnect the car battery.

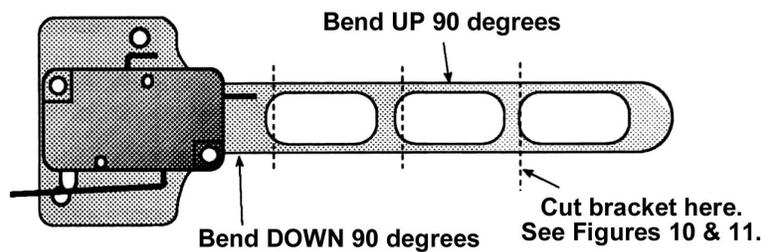
Figure 8 Wiring Schematic



WARNING: Be careful when removing the fuel rail test port fitting. The fuel rail may be pressurized. Always allow the engine to cool before performing this operation. Fuel sprayed onto hot engine components may start a fire.

2. Remove the cap over the fuel rail test port on the front of the driver's side fuel rail.
3. Bleed off the fuel pressure in the rail by covering the test port with rags and depressing the schraeder valve.
4. Remove the schraeder valve with a valve core tool.
5. Install the fuel safety switch on the test port using the 4AN x 1/8" NPT Female Adapter (19).
6. Install the microswitch (22) on the throttle body, so that the microswitch is triggered by the throttle linkage at wide-open throttle. Figure 9 shows the microswitch installation and Figure 10 shows the suggested mounting configuration.

Figure 9 Microswitch Template—Suggest Mounting Configuration



NOTE: The microswitch may be mounted to the bracket in a variety of positions and on either side of the bracket. The bracket may be bent to suit the application.

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

7. Adjust the microswitch to trigger at wide-open throttle, by adjusting the microswitch's position to ensure the actuation arm of the microswitch "clicks" at the same point the throttle linkage reaches wide-open throttle against the throttle stop (Figure 9). Ensure the throttle and switch can reach activation position shown in Figure 9 by using the accelerator pedal. Have an assistant slowly press the pedal to the floor while you listen for the "click" of the microswitch.
8. Install the NOS arming switch (23) inside the car, within easy reach of the driver.
9. Install the 30 amp Relay (24) in the engine compartment near the battery. The relay's orange wire should reach the battery (+) terminal.
10. Connect the orange relay wire to the battery (+) terminal.
11. Connect one wire from each solenoid together. Join the solenoid wires to the blue relay wire.
12. Connect the open second solenoid wire to either terminal on the fuel pressure switch (18).
13. Connect the open terminal on the fuel pressure switch to the ground.
14. Connect the green relay wire to either terminal on the microswitch.
15. Connect the open terminal on the microswitch to the ground.
16. Connect the red relay wire to the middle (#2) terminal on the arming switch (23).
17. Connect the (#1) terminal on the arming switch to the switched 12 volt power source.
18. Connect the (#3) terminal of the arming switch to the ground.
19. Reconnect the battery.

Figure 10 Microswitch Mounting Location—shown at idle.

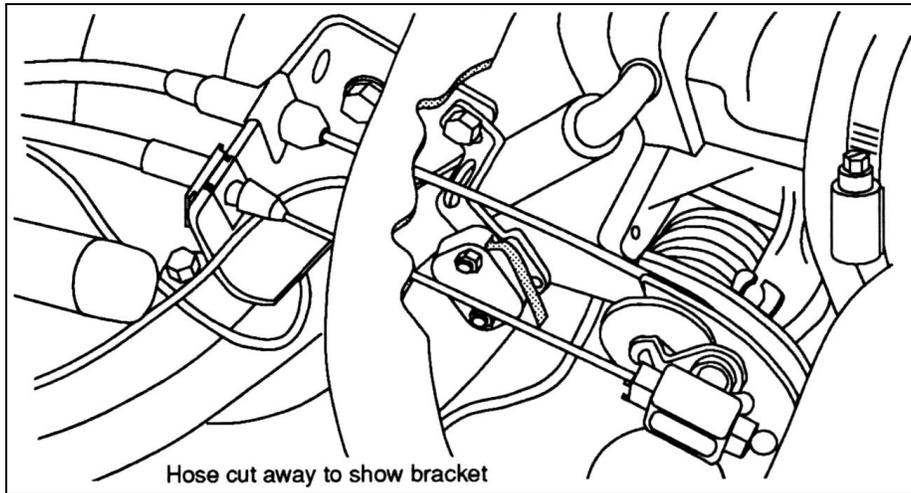
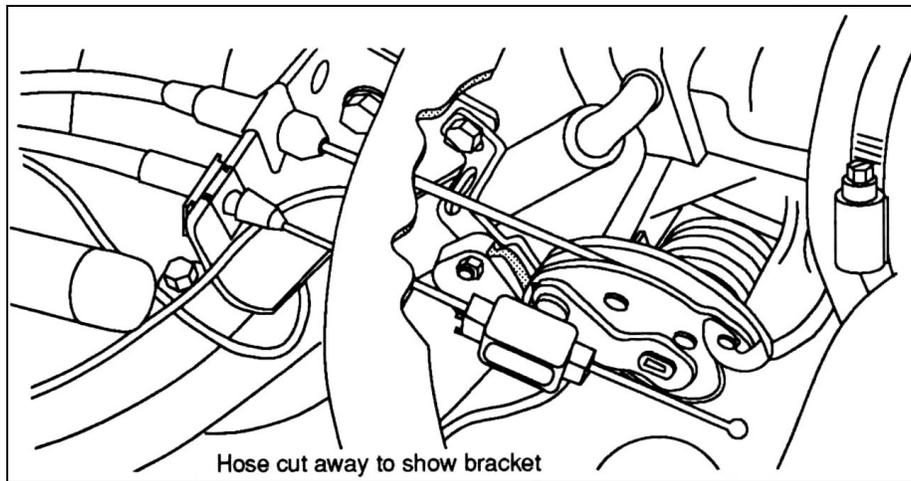


Figure 11 Microswitch Mounting Location—shown at W.O.T.



2.9 Preparing for Operation

1. Start the vehicle.
2. Open the nitrous bottle valve. There should be no change in the engine idle speed or exhaust tone. If either change is noted, refer to Appendix A, Troubleshooting Guide.
3. Inspect the nitrous lines and fittings for leaks.
4. ENJOY!!!

Chapter 3 Tuning Suggestions

Your NOS Kit Number 05177NOS is factory set to work with stock engine settings. For maximum performance, follow the settings listed in Table 2.

Table 2 Tuning Suggestions for NOS Kit Number 05177NOS

N ₂ O Jetting	HP	Fuel Quality	Ignition Timing	Plugs
.028	75	92+ Octane	Stock	Stock
.030	85	92+ Octane	Stock	Stock
.032	100	92+ Octane	Stock	Stock

Appendix A Troubleshooting Guide

The troubleshooting chart on the following pages should help determine and rectify most problems with your installed NOS system. If you still need assistance determining or fixing problems, call the NOS Technical Support at 1-866-GOHOLLEY.

PROBLEM	POSSIBLE CAUSES	DIAGNOSTIC PROCEDURE	CORRECTIVE ACTION
Engine runs rich when system is activated.	Bottle valve not fully opened.	Check bottle valve.	Open valve fully.
	Plugged nitrous filter.	Inspect filter.	Clean/replace filter.
	Low bottle pressure.	Check bottle temperature.	Set bottle temperature to 75° to 85°F.*
	Inadequate nitrous supply.	Weigh bottle.	Fill bottle. 1-800-99-REFILL
	Loose nitrous solenoid wiring.	Inspect the solenoid wiring.	Repair wiring.
No change in performance when system is activated.	Malfunctioning solenoid.	Disconnect solenoid/injector plug . Connect 12V test light to battery (-) terminal. Turn arming switch ON. Manually set microswitch ON. Use test light probe to check for continuity at blue wire on power relay.	Replace solenoid. *Below 70° F ambient, NOS Bottle Heater #14164 is recommended to maximize performance.
	Bottle valve closed.	Check bottle valve.	Open valve fully.
	In-line fuse blown.	Check fuse.	Replace fuse.
	Plugged nitrous filter.	Inspect filter.	Clean/replace filter.
	System wired incorrectly.	Compare nitrous wiring to schematic.	Wire system per instructions.
	Loose ground wire(s).	Connect 12V test light to battery (+) terminal. Check for continuity at grounds noted in schematic.	Tighten/repair loose grounds.
	Malfunctioning arming switch.	Turn arming switch ON. Connect 12V test light to battery (-) terminal. Check for power at red wire on power relay switch.	Replace arming switch.
Malfunctioning throttle microswitch.	Temporarily disconnect power relay green wire from microswitch. Connect 12V test light to battery (+) terminal. Manually set microswitch ON. Check for continuity at open terminal of microswitch (See wiring schematic).	Replace throttle microswitch.	
Engine detonates mildly when system is activated.	Excessive ignition timing.	Check ignition timing.	Set timing to factory settings.
	Inadequate octane fuel.		Use higher octane fuel.
	Spark plug heat range too high.		Reduce spark plug heat range (maximum two steps).

	Too much nitrous flow.		Reduce nitrous jetting.
Engine detonates heavily when system is activated.	Inadequate fuel delivery due to: Plugged fuel filter	Inspect fuel filter.	Clean or replace filter.
	Crimped fuel line.	Inspect fuel line.	Replace crimped line.
	Weak fuel pump.	Install fuel pressure gauge, such as NOS P/N 15931NOS in the fuel line. Run engine under load at wide-open throttle, with system activated.	Repair/replace fuel pump.
High RPM misfire when system is activated.	Excessive spark plug gap.	Inspect spark plugs.	Set spark plug gap at 0.030 to 0.035 inches.
	Weak ignition/ignition component failure.	Inspect components (plug wires, distributor cap, etc.)	Replace worn components.
Surges under acceleration when system is activated.	Inadequate supply of nitrous.	Check bottle weight.	Replace with full bottle.
	Bottle mounted incorrectly.	Compare bottle position and orientation to instructions.	Mount or orient bottle correctly.

Nitrous Oxide Accessories

NOS systems are calibrated for optimum performance with a bottle pressure of 900-950 psi. The pressure will change with temperature. Heater kits are thermostatically controlled to keep the bottle near 85° F to provide correct pressure. **Bottle Heater (P/N 14164NOS)** is available for 10 & 15 lb. bottles.

Insulating the bottle helps maintain pressure by keeping heat in the bottle when it's cold, or heat out when it's hot outside. The blankets are made of a rugged, easily cleaned Nylon outer shell with insulation. It's also an excellent "dress up" accessory and perfect for "covering" battle-scarred bottles. **Bottle Blanket (P/N 14167NOS)** is the blanket for the 15 lb. bottle.



P/N 14164NOS



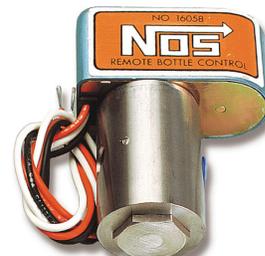
P/N 14167NOS

The **Throttle/RPM-Activated Switch (P/N 15879NOS)** allows hands-free nitrous operation and prevents nitrous from being injected at speeds above or below operator-set levels. It greatly reduces the chance of accidental engine damage. The ON/OFF levels adjust from 2000 to 9000 RPM. **NOTE:** P/N 15879NOS is not designed to work on vehicles with distributor-less ignition systems. Call NOS Technical Support for the right RPM-Activated switch for your particular vehicle.

The **Remote Bottle Valve (call NOS tech for P/N)** is the perfect convenience accessory—it electronically turns the nitrous bottle on and off with the flick of a switch—no more trips to the trunk. It is also great as a safety shut-off valve. It operates on 12V DC. The complete kit includes hardware and installation instructions.



P/N 15879NOS



P/N varies

The primary purpose of a **Purge Valve (P/N 16030NOS)** is to release trapped air or gaseous nitrous from the feed line(s). This helps to ensure consistent performances. And, purging looks cool too!

Nitrous Pressure Gauges (P/N 15910NOS) measure from 0-1500 psi (although recommended level is 900-950 psi) and are essential in monitoring the bottle.

The **Quick Release Hinged Aluminum Bracket (P/N 14140NOS)** is available for 10 lb. and 15 lb. bottles. **P/N 14147NOS** is available for the carbon fiber bottle.



P/N 16030NOS



P/N 15910NOS



P/N 14140NOS

For those who want the ultimate in appearance, NOS offers many popular bottles that are fully polished. **P/N 14750-PNOS** is our 15 lb. fully polished bottle.

For optimum weight reduction and distinctive high-tech looks, these DOT-approved NOS carbon fiber-wrapped bottles are it! Weighs about half of the standard bottle (empty). **P/N 14747NOS** has 12.5 lb. capacity.



P/N 14750-PNOS



P/N 14747NOS

To order, contact your local NOS dealer.



NOS Technical Support

Phone: 1-270-781-9741

Toll-Phone: 1-866-GOHOLLEY

Fax: 1-270-781-9772

**For online help, please check the Tech
Service section of our website:**

www.holley.com