

# **N** **TIMIDATOR** **PURGE SYSTEM**®

## **LED PURGE VALVE KITS P/N 16033NOS & 16037NOS**

### **Instruction Sheet P/N 199R10311**

#### **INTRODUCTION:**

Purge Valve Kits, P/N 16033NOS & 16037NOS are intended for use on competition and street vehicles, using NOS nitrous oxide injection systems. The purpose of these kits is to ensure that liquid nitrous oxide is available at the nitrous system solenoid immediately upon system activation. The LED system allows you to show other vehicles that you are armed and ready.

**NOTE:** When nitrous solenoids and feed lines are exposed to high temperatures, the liquid nitrous oxide in them may phase change to a gaseous state. Upon system activation, only gaseous nitrous oxide may be available to the engine for a very short period of time. The effect of this will be a slight decrease in performance from optimum. By purging the system of any gaseous nitrous oxide just prior to system activation, this slight "delay" in performance can be avoided.

#### **16033NOS PARTS LIST:**

| <b>Item</b> | <b>Quantity Required</b> | <b>Description</b>              | <b>NOS P/N</b> |
|-------------|--------------------------|---------------------------------|----------------|
| 1           | 1                        | Purge Adapter                   | 19R905         |
| 2           | 1                        | 1/8" NPT x 1/8" NPT Filter      | 15574NOS       |
| 3           | 1                        | N <sub>2</sub> O Purge Solenoid | 16025NOS       |
| 4           | 1                        | 90° 1/8" NPT Fitting            | 16434NOS       |
| 5           | 1                        | Blow-Down Tube                  | 16300-SNOS     |
| 6           | 1                        | Activation Button               | 15610NOS       |
| 7           | 2                        | Electrical Connector            | 15885B-SNOS    |
| 8           | 2                        | T-Tap Connector                 | 204R247        |
| 9           | 2                        | Insulated Spade Connector       | 204R307        |
| 10          | 1                        | LED Purge Assembly              | 34R12434A      |
| 11          | 1                        | 4 AN Red Cap Plug               | A1001-SNOS     |

**\*This parts list pertains to the 16033NOS kit only.**

#### **INSTALLATION:**

**HINT:** For optimum performance, the purge valve should be mounted as close to the system nitrous solenoid as possible, upstream of the solenoid.

1. Turn off the nitrous bottle valve.
2. Relieve the pressure at the nitrous solenoid by cracking loose the main nitrous feed line at the solenoid inlet port.

**WARNING!** Be sure the main nitrous feed line is completely empty before removing the hose. Nitrous oxide can cause death, if inhaled. It can also cause severe frostbite, if allowed to contact skin.

3. Disconnect the main nitrous feed line from the nitrous solenoid.
4. Install the purge adapter (1) on the nitrous filter in the nitrous solenoid. Be sure to orient the purge adapter nut, so that the N<sub>2</sub>O purge solenoid will not interfere with the engine or nitrous system components.
5. Connect the main nitrous feed line to the purge adapter nut.

6. Install the 1/8" NPT x 1/8" NPT adapter filter (2) in the purge adapter.
7. Install the N<sub>2</sub>O purge solenoid (3) on the 1/8" NPT x 1/8" NPT adapter fitting.
8. Install the 90° 1/8" NPT x 1/8" NPT fitting (4) in the N<sub>2</sub>O purge solenoid outlet port.
9. Install the blow-down tube (5) in the outlet port of the 90° 1/8" NPT fitting.

**WARNING: The nitrous blow-down tube must be vented away from humans. Nitrous oxide can cause death, if inhaled. It can also cause severe frostbite, if allowed to contact skin.**

### PURGE SOLENOID WIRING:

1. Install the activation button (6) in a location convenient to the driver.
2. Connect one solenoid lead to a ground.
3. Connect the remaining solenoid lead to the activation button using the spade connector (7)(This will be your positive Lead for LED installation).
4. Connect the open lead of the activation button to a switched +12V power source with the remaining spade connector.

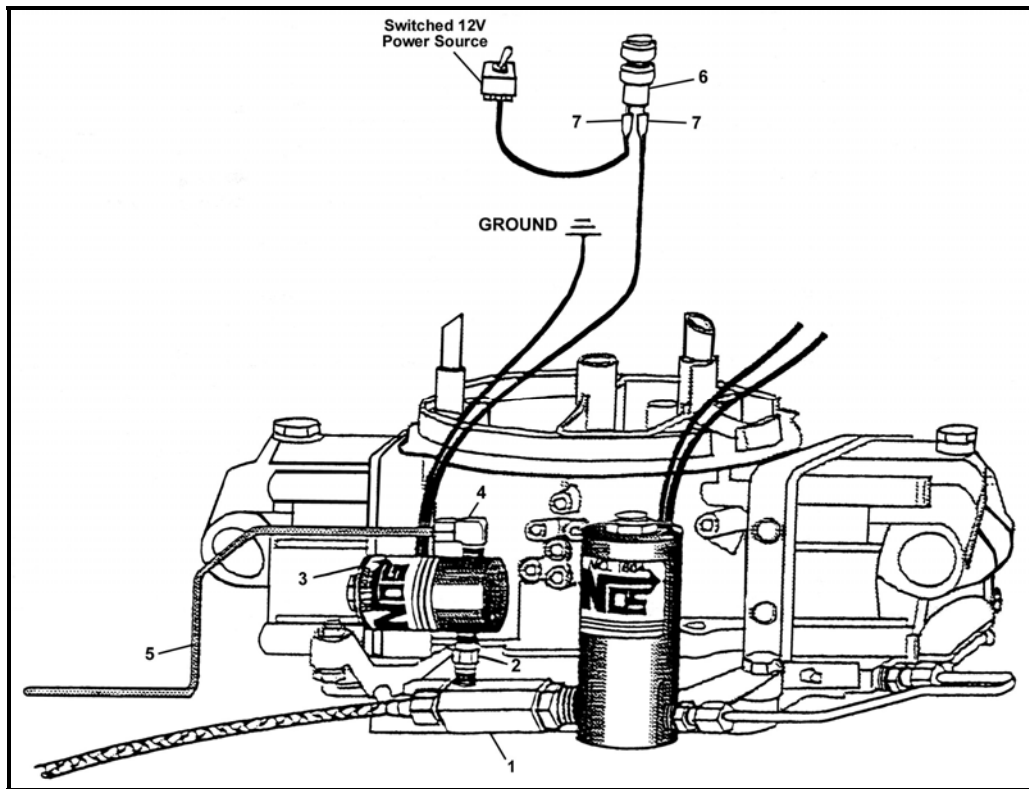


Figure 1

**WARNING! Never point the LED assembly directly towards your face. The brightness of the LED assembly can potentially cause damage to your eyes. Holley recommends mounting the LED on the passenger's side to not interfere with the driver's view.**

### LED INSTALLATION:

1. Slip the LED over the end of the purge tube through the center hole. (NOTE: The LED must be mounted at an angle to avoid moisture build up in the LED assembly).
2. Place the LED so the top of the purge tube and the top of the LED are approximately even.
3. Using a 1/16 Allen wrench snug the set screw on the LED assembly (Figure 2).

## LED WIRING:

1. Route the LED wires to the purge solenoid in the engine compartment. (Figure 3).

**WARNING! Avoid any potential objects that could damage the LED wires.**

2. Crimp one of the supplied spade connectors (9) on each of the LED wires.
3. Install the supplied T-Tap connectors (8) one each on the purge solenoid wires (Figure 4&5).
4. Connect the Red wire from the LED to the positive wire of the purge valve (Noted in step 3), (Figure 1).
5. Connect the black wire from the LED to the ground wire of the Purge solenoid. (This is the wire connected in step 2).

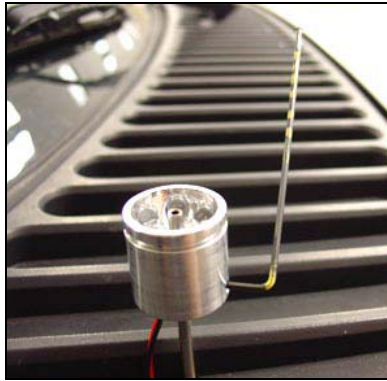


Figure 2 (Tighten set screw)

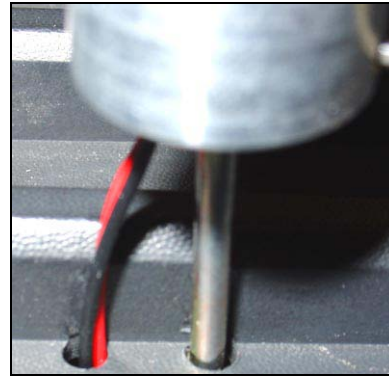


Figure 3 (LED wire routing)



Figure 4 (T-Tap connector installation)



Figure 5 (Close T-Tap connector)

## 16037NOS Parts List

| Item | Quantity Required | Description                     | NOS P/N     |
|------|-------------------|---------------------------------|-------------|
| 1    | 1                 | Purge Adapter                   | 19R905      |
| 2    | 1                 | 1/8" NPT x 1/8" NPT Filter      | 15574NOS    |
| 3    | 1                 | N <sub>2</sub> O Purge Solenoid | 16025NOS    |
| 4    | 1                 | Jet Y Fitting (Blue)            | 17255NOS    |
| 5    | 2                 | Blow-Down Tube                  | 16300-SNOS  |
| 6    | 1                 | Activation Button               | 15610NOS    |
| 7    | 2                 | Electrical Connector            | 15885B-SNOS |
| 8    | 2                 | T-Tap Connector                 | 204R247     |
| 9    | 2                 | Insulated Spade Connector       | 204R307     |
| 10   | 2                 | LED Purge Assembly              | 34R12434A   |
| 11   | 1                 | 4 AN Red Cap Plug               | A1001-SNOS  |
| 12   | 2                 | 1/8" Cone Ferrule               | 16404-SNOS  |
| 13   | 2                 | 3AN x 1/8" NPT Tube Nut         | 17540NOS    |
| 14   | 2                 | Funnel Jet .028                 | 13765-28NOS |

\*This parts list pertains to the 16037NOS kit only.

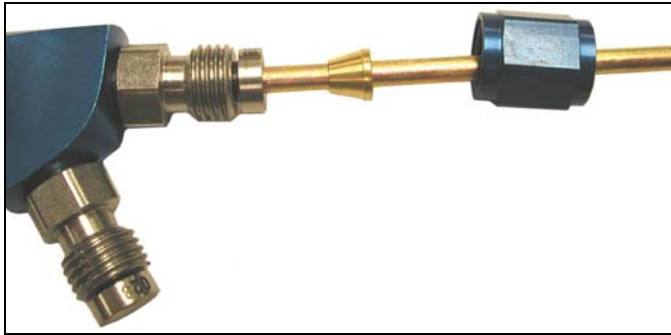
## INSTALLATION:

**NOTE:** Follow the installation instructions above for the 16033NOS with the following revisions.

1. Install the jet Y fitting into the outlet side of the purge solenoid. **(Figure 6)**
2. Install the funnel jet into the Y fitting.
3. Slip one blue tube nut onto the 1/8" tubing.
4. Slip the 1/8" cone ferrule onto the tubing.
5. Install the assembly into the jet adapter, making sure the 1/8" tube bottoms out in the jet. **(Figure 7)**
6. Tighten the assembly using a 7/16" wrench.
7. Repeat steps 1-6 for the other vent tube.
8. Route the vent tubes to purge away from the engine and not obstruct the driver's view.
9. Enjoy!!



**Figure 6**



**Figure 7**



**Figure 8**

**NOS Technical Support  
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**For online help, please refer to the Tech Service section of our website: [www.holley.com](http://www.holley.com)**

**199R10311  
Date: 3-28-05**