THROTTLE & RPM-ACTIVATED NITROUS CONTROL SYSTEM
P/N 15879NOS

Installation Instructions
A5096-SNOS

INTRODUCTION:

Congratulations on the purchase of your NOS throttle and RPM-activated nitrous control system. This package is intended to provide increased convenience and safety in the operation of your NOS nitrous oxide injection system. It allows hands-free, totally automatic activation of the nitrous system only at WOT and within the selected RPM range, freeing the driver to concentrate on the task of driving the race car.

The NOS throttle-activated microswitch eliminates the need for an awkward pushbutton switch. It also prevents the nitrous system from being used when the throttle is closed, such as while shifting. Under no circumstances should any nitrous oxide injection system be used at less than wide-open throttle.

The NOS RPM-activated switch is designed to serve as a valuable race vehicle tuning aid. When installed and used properly, it will govern the entire RPM range in which the nitrous system will operate. The RPM switch will not allow the nitrous system to operate outside of its pre-selected RPM range. In this way, it acts as two RPM switches in one, first turning on and then off the nitrous system. In some cases, an RPM switch may be used to aid in starting line traction by delaying the activation of a single stage nitrous system, until the vehicle is in motion.

As a safety device, the NOS RPM switch serves several valuable functions, if both high and low RPM limits are correctly adjusted. First, it will prevent the nitrous system from accidentally being activated while the engine is not running since a reading of zero RPM is below the low limit. Secondly, it will prevent the nitrous from being injected at an RPM that is too low, such as when a driver accidentally shifts from first to fourth gear. Finally, it will act as a nitrous “rev limiter”, shutting off the flow of nitrous and fuel at the high limit point. (This should not be confused with an engine rev limiter, which momentarily turns off the ignition if the engine goes over speed.)

RPM levels, at which nitrous is switched on and off, can easily be changed by pulling out the existing chip and replacing it with a unit set for the desired RPM. The available RPM chips range from 2000 RPM up to 8000 RPM.

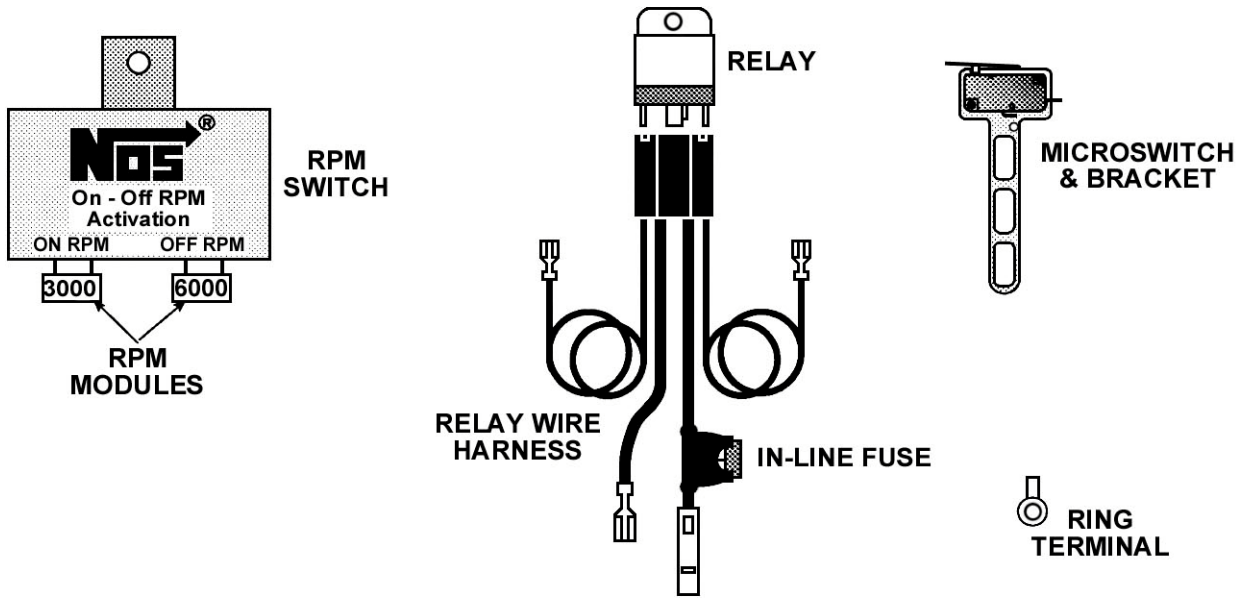
KIT COMPONENTS:

Before beginning installation, compare the pieces you received with the component list below. If any pieces are missing or damaged, contact the NOS technical department at 1-866-GOHOLLEY for assistance.

Item	Description	Qty.	P/N
(1)	RPM Switch	1	15879NOS
(2)	RPM Modules	1	15800-30NOS
		1	15800-60NOS
(3)	Microswitch	1	15640NOS
(4)	Bracket	1	15645-SNOS
(5)	Screw	2	15647-SNOS
(6)	Nut	2	15648-SNOS
(7)	.250 Connector	2	15885B-SNOS
(8)	Relay	1	15618NOS
(9)	Harness	1	15604-SNOS
(10)	Fuses (15, 20, & 25 amp)	3	*
(11)	Ring Terminal	1	204R241-9

* Varies with application

Figure 1 Component Identification



INSTALLATION OF MICROSWITCH & UNIVERSAL BRACKET FOR THROTTLE ACTIVAITON OF NITROUS SYSTEM:

1. Remove engine inlet air ducting assembly.
2. Examine throttle linkage to determine an appropriate mounting location. Refer to Figure 2 for additional guidance.
3. Note that the mounting bracket may be bent to facilitate mounting.
4. Loosely secure the microswitch in place.
5. Adjust the microswitch position to ensure that the actuation arm has “clicked” open at the same point your throttle linkage has reached W.O.T.
6. Tighten the microswitch mounting bolts.

NOTE: At this point, you should perform the finishing the microswitch installation.

7. Reinstall the engine inlet air ducting.

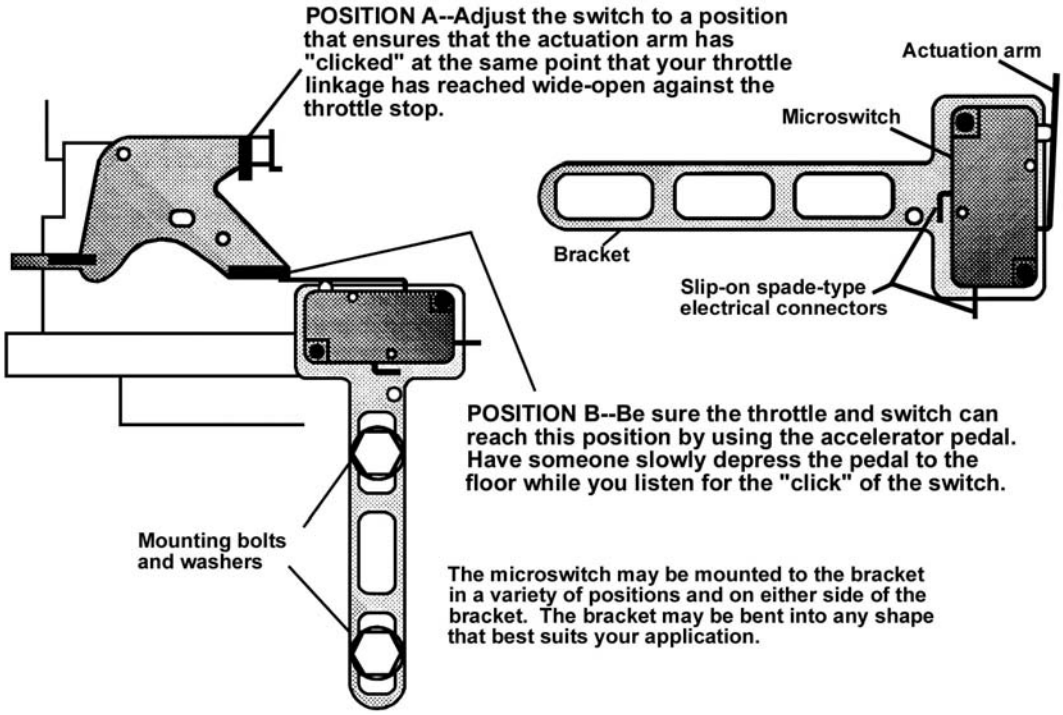
CAUTION! Pay strict attention to the switch wiring. If you have previously installed an NOS nitrous kit, you will note that the switches are connected differently. If you are upgrading your existing system, do not follow the wiring diagram from your original instructions. Use only the diagram shown in this instruction booklet.

The NOS power relay is designed to prevent high amperage current from damaging the control components, such as switches, microswitches, shift handle buttons, etc. The power contacts in the relay will carry a maximum of 30 amps.

MOUNTING:

Begin by mounting the relay close enough to the battery to allow the heavy 10 gauge orange wire that contains the fuse to be attached directly to the positive terminal of the battery. The ring terminal I.D. is 3/8” to accommodate the attachment bolt of side terminal batteries. The battery post of Ford style starter relays may also be used, just to be sure that the terminal that is directly connected to the positive post of the battery is used. Complete the wiring by following the diagram.

Figure 2 Microswitch Installation



1. Select a mounting location for the RPM activation switch.

NOTE: This unit may be mounted inside the vehicle or in the engine compartment.

2. Mount the RPM switch using either double-sided tape or a #8 sheet metal screw.

Cylinder Selection - red and blue wire loops

8 cylinder – do not cut any loops
6 cylinder – cut red loop only
4 cylinder – cut red and blue wire loops

Selecting RPM Range

The left side plug in module will control the low (ON) RPM.
The right side plug in module will control the high (OFF) RPM.

WIRING:

1. Connect the red wire to a 12-volt switched source, such as the ignition or nitrous arming switch.

2. Connect the black wire to a ground. (This wire must be connected to a ground at all times.)

3. Connect the white wire to a triggering source. On standard point type or factory electronic ignitions (except HEI), use the negative side of the coil. On HEI and aftermarket ignitions, use the TACH terminal.

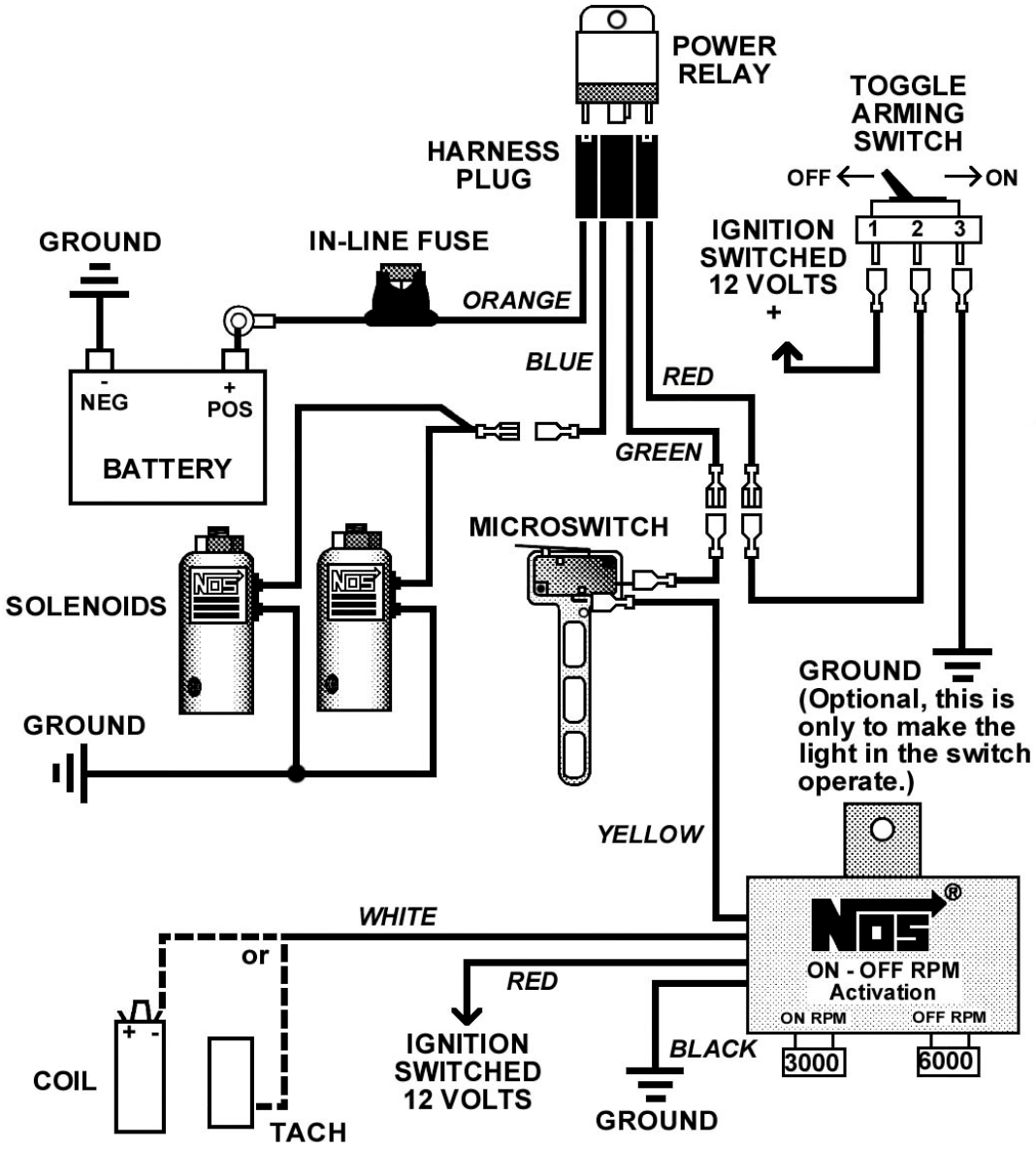
4. Connect the yellow wire to the ground side of the activation circuit of your NOS relay. Be sure that the arming switch and throttle switches are left in the circuit.

RPM MODULES:

The plug-in modules used to control the RPM limits of this switch are available in a variety of RPM values. The race car tuner may use any combination of those modules listed below to suit his specific needs. They may be obtained under the following part numbers:

15800-20-SNOS	2000 RPM
15800-22-SNOS	2200 RPM
15800-24-SNOS	2400 RPM
15800-26-SNOS	2600 RPM
15800-28-SNOS	2800 RPM
15800-30-SNOS	3000 RPM
15800-32-SNOS	3200 RPM
15800-34-SNOS	3400 RPM
15800-36-SNOS	3600 RPM
15800-38-SNOS	3800 RPM
15800-40-SNOS	4000 RPM
15800-42-SNOS	4200 RPM
15800-44-SNOS	4400 RPM
15800-46-SNOS	4600 RPM
15800-48-SNOS	4800 RPM
15800-50-SNOS	5000 RPM
15800-52-SNOS	5200 RPM
15800-54-SNOS	5400 RPM
15800-56-SNOS	5600 RPM
15800-58-SNOS	5800 RPM
15800-60-SNOS	6000 RPM
15800-66-SNOS	6600 RPM
15800-70-SNOS	7000 RPM
15800-76-SNOS	7600 RPM
15800-80-SNOS	8000 RPM

WIRING DIAGRAM:



Fuse Values	
Powershot	15 amp
Super Powershot	15 amp
EFI Series	20 amp
Cheater Series	15 amp
Pro Shot Series	25 amp

Relay Wiring Color Key	
Orange	To battery positive terminal
Blue	To one wire from each solenoid
Green	Through microswitch then to yellow wire from RPM switch
Red	To ignition-switched 12 volts through arming switch

RPM Switch Wiring Color Key	
Red	To a 12V switched source
Black	To a chassis ground
White	To a TACH signal, such as the negative side of the coil or the TACH output of ignition module
Yellow	To one side of throttle microswitch

TROUBLESHOOTING:

PROBLEM	POSSIBLE CAUSES	DIAGNOSTIC PROCEDURE	CORRECTIVE ACTION
Nitrous system does not operate at any time	Blown fuse.	Check fuse.	Replace fuse and inspect wiring for a short.
	Loose ground wires.	Check all ground wires for continuity to negative side of battery.	Tighten / repair loose wires.
	Malfunctioning arming switch.	Make sure that terminal #1 is connected to power. With arming switch in "ON" position, check terminal #2 for power.	Replace switch.
	Malfunctioning relay.	Disconnect blue and green relay wires, turn on arming switch, and ground the green wire. The relay should click and the blue wire should have power.	Replace relay.
	Malfunctioning microswitch.	Disconnect blue relay wire from solenoids and yellow RPM switch wire from microswitch. Connect jumper wire from open terminal of microswitch to ground. With arming switch ON, operating the microswitch should cause the relay to click.	Replace throttle microswitch.
	Malfunctioning RPM switch.	Make sure red RPM switch wire has power. Disconnect yellow wire from microswitch. Bring the engine up to the speed indicated on the "ON RPM" module. The yellow wire should have continuity to ground at this time.	Replace RPM switch.
System operates at less than WOT.	Maladjusted microswitch.	Observe throttle linkage and switch while operating throttle linkage.	Readjust microswitch.

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NOS Technical Support
Toll-Free Phone: 1-866-GOHOLLEY
Phone: 1-270-781-9741
Fax: 1-270-781-9772
For online help, please check the Tech Service section of our website: www.holley.com

A5096-SNOS
Revision Date: 4-13-04