INSTALLATION INSTRUCTIONS

WINDOW
RPM ACTIVATED SWITCH
PART NO. 628

Parts Included in this kit:

1 RPM Activated Switch Part No. 628
1 "U" shaped crimp-on wire terminal
1 #6 x 1⁄4" sheet metal screw
2 #8 x 1⁄2" sheet metal screws

CONTENTS

GENERAL INFORMATION

The Mallory 628 Window RPM Switch is an RPM switch that is triggered from the tach terminal available on most aftermarket performance ignitions. It will not only activate at a particular RPM, but can also be set to de-activate at a second, higher, RPM. It can be used on 4, 6 (even-fire only), and 8 cylinder engines. **NOTE: The Mallory 628 CANNOT be triggered from points or electronic distributor. It must be triggered from a tach output terminal.**

The 628 features two independent sets of switch contacts that switch other devices on or off when the selected RPM is reached. These contacts draw a maximum current of 5 amps. To switch more than 5 amps, you must use the RPM Activated Switch output to drive a high current relay, such as a horn or headlight (see illustrations). **NOTE: The switch contacts are NOT connected electrically. This allows you to turn one circuit on and another off at the same RPM.**

MOUNTING PROCEDURE

Step 1
Disconnect the battery (–) cable to cut power to the system.

Step 2
Mount the unit in an area away from hot engine components or extreme heat, such as exhaust manifolds, and away from moving parts, such as fans, belts, and linkages.

Step 3
Mount the unit using supplied #8 x 1⁄2" sheet metal screws.

WIRING PROCEDURE

Step 1

Connect the BLACK WIRE to engine or chassis ground. You can use the supplied "U" shaped terminal and #6 x 1/4" sheet metal screws to make this connection. If you are connecting the RPM Activated Switch to an aftermarket ignition system such as a Mallory HYFIRE®, use the same grounding location that the ignition uses. See Figures 4-9, pages 7-12.

Step 2

Connect the RED WIRE to a 12-volt power supply, such as the ignition switch. You can use the same wire that provides power for your ignition as long as a ballast resistor is not wired in series with it. ***NOTE: Do NOT connect the RED WIRE to the coil (+) terminal. Connect it to the wire coming directly from the ignition switch. If your vehicle is equipped with loom resistance wire, you must provide an alternate power connection to the red wire.***

Step 3

The GREEN WIRE must be connected to the ignition system tach output.

- When using a Mallory ignition system, connect the GREEN WIRE to the TACH terminal. See Figures 2, 3 and 4.
- When using an aftermarket ignition with a TACH output, connect the GREEN WIRE to the TACH terminal. Check manufacture's ignition instructions to find this location.
- Other aftermarket ignitions - Connect the GREEN WIRE to the tachometer lead terminal. Check manufacturer's ignition instructions to find this location.

Step 4

To connect a device that you want to switch ON at the RPM setting you've selected, such as a shift light, connect one ORANGE WIRE to the device and the other ORANGE WIRE to a 12-volt power supply. Connect the remaining wire from the device to a ground. See Figure 5, page 8.

Step 5

To connect a device that you want to switch OFF at the RPM setting you've selected, such as a nitrous solenoid, connect one PURPLE WIRE to the device and the other PURPLE WIRE to a 12-volt power supply. Connect the remaining wire from the device to a ground. See Figure 6, page 9.

Step 6

Secure all wires to prevent contact with extreme heat, sharp objects, or moving devices, such as fans, belts, and linkages.

Step 7

Recheck all wires and connections to ensure that they are correct before applying power.

Step 8

Reconnect the battery (–) terminal cable. Start engine and check operation of the RPM Activated Switch.

RPM AND CYLINDER SETTING PRODEDURE

The Mallory Window RPM switch has two RPM settings: a lower RPM to activate the switch, and a higher RPM to de-activate the switch. For example, suppose you have a nitrous system installed. You might want the nitrous to only come on above a certain RPM, but to protect the engine, you want to shut it off at an RPM just above your shift point.

Step 1

Remove the four screws that hold the top cover in place, and remove the cover.

Step 2

If you want 4 or 6 cylinder operation, click the 4 or 6 cylinder switch on the left side to the "ON" position. For 8 cylinder operation, both switches should be off.

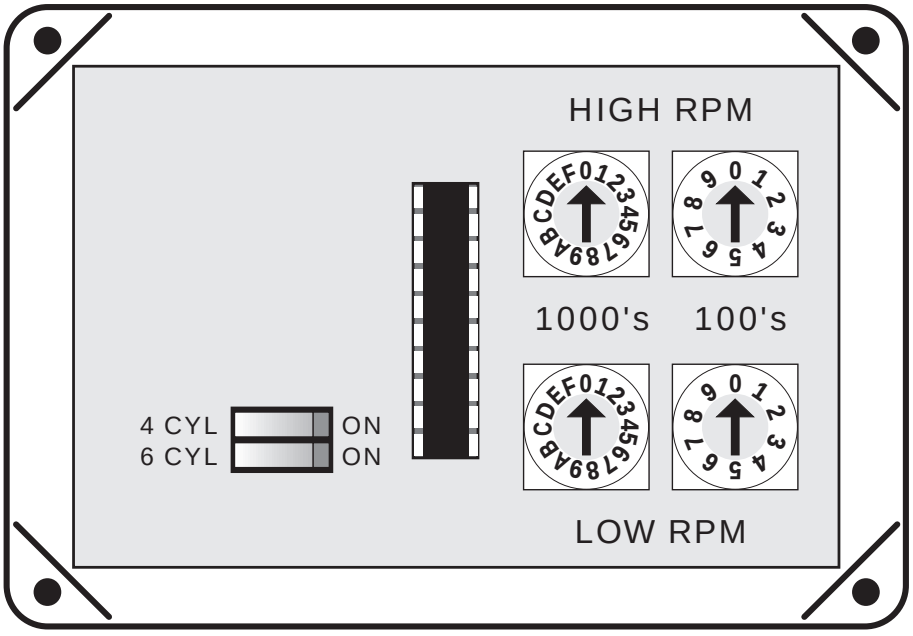
Step 3

Set the lower and upper RPM values by selecting an RPM value in the thousands (left-hand switch) and an RPM value in the hundreds (right-hand switch). Note that on the switch for the RPM value in the thousands A=10,000; B=11,000 and C=12,000. **NOTE: For proper operation, the upper RPM switch should be set at least 200 RPM higher than the lower RPM switch.** The RPM range is 1000 to 12,700 RPM for the low side, and 12,900 RPM for the high side. If you do not want to use the high-side deactivation feature, set the high-side switches to 12,900 (C9).

Step 4

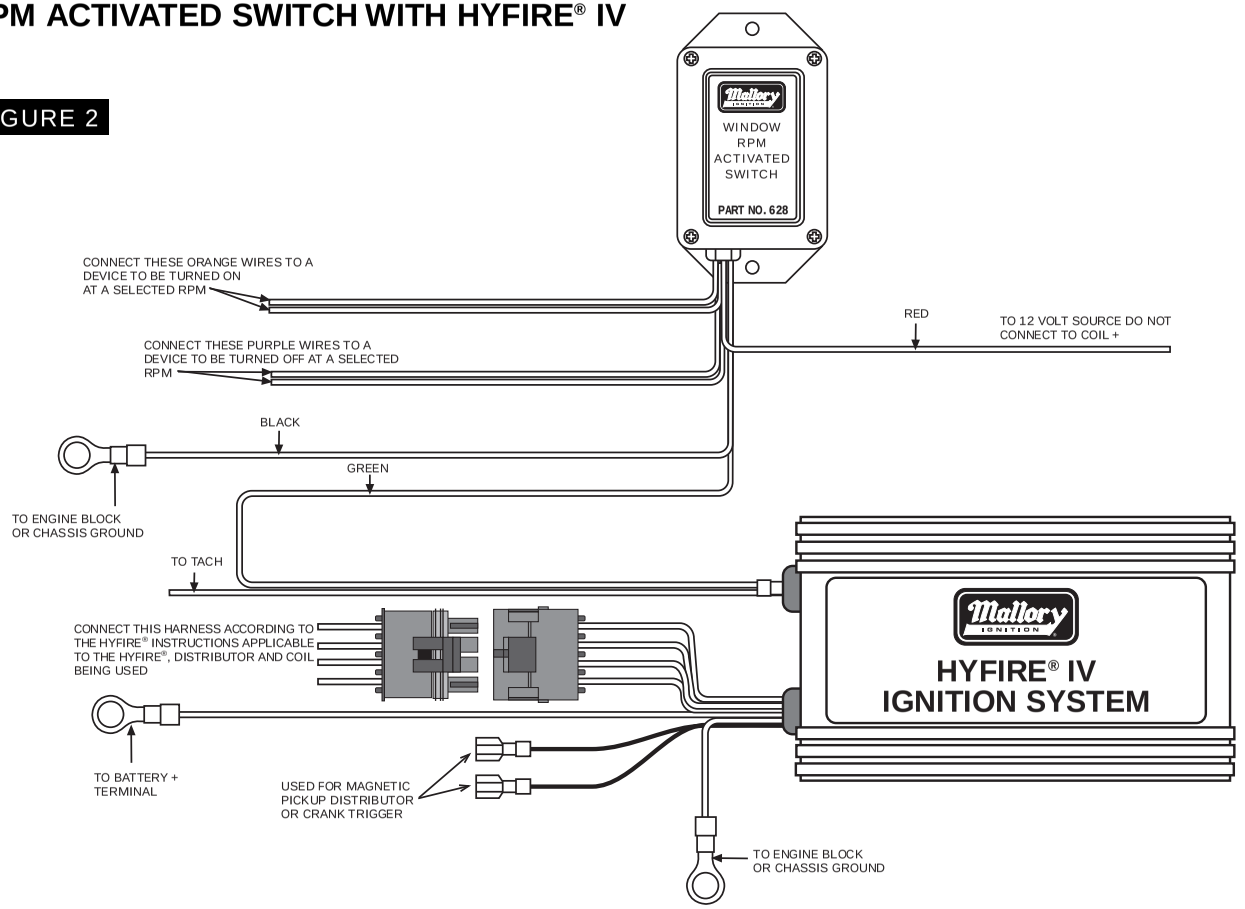
Replace the top cover and re-attach the screws.

FIGURE 1



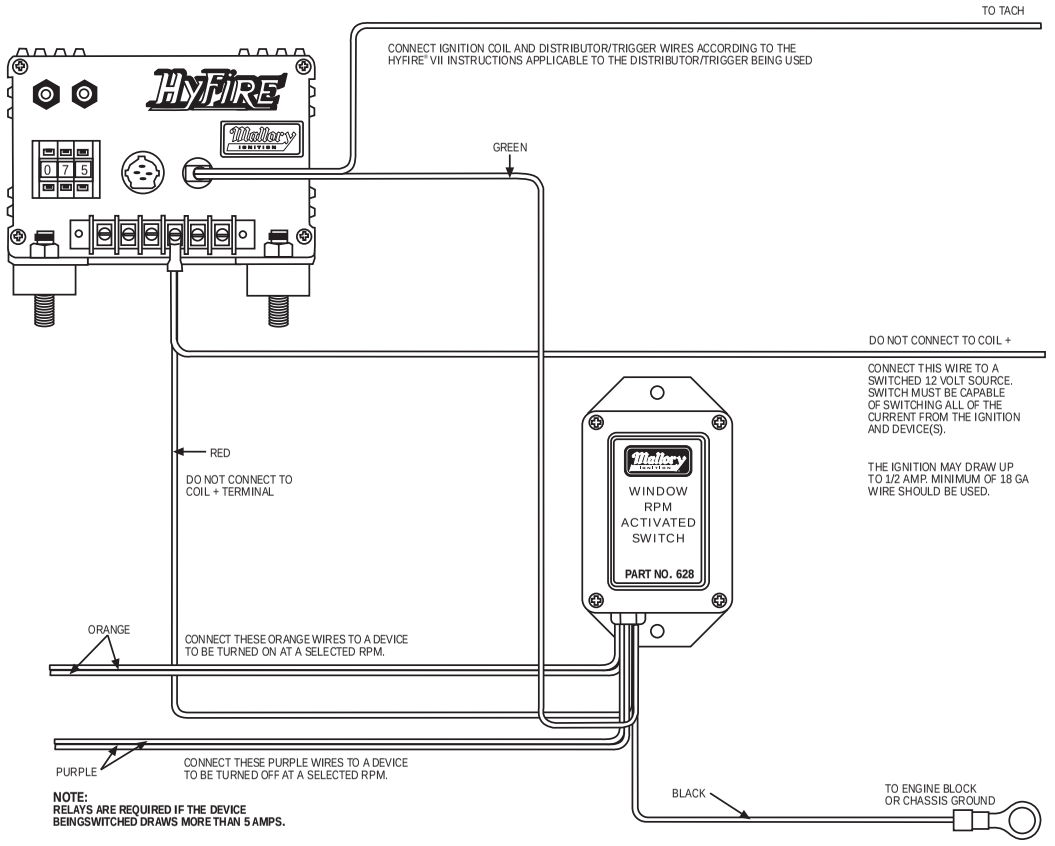
RPM ACTIVATED SWITCH WITH HYFIRE® IV

FIGURE 2



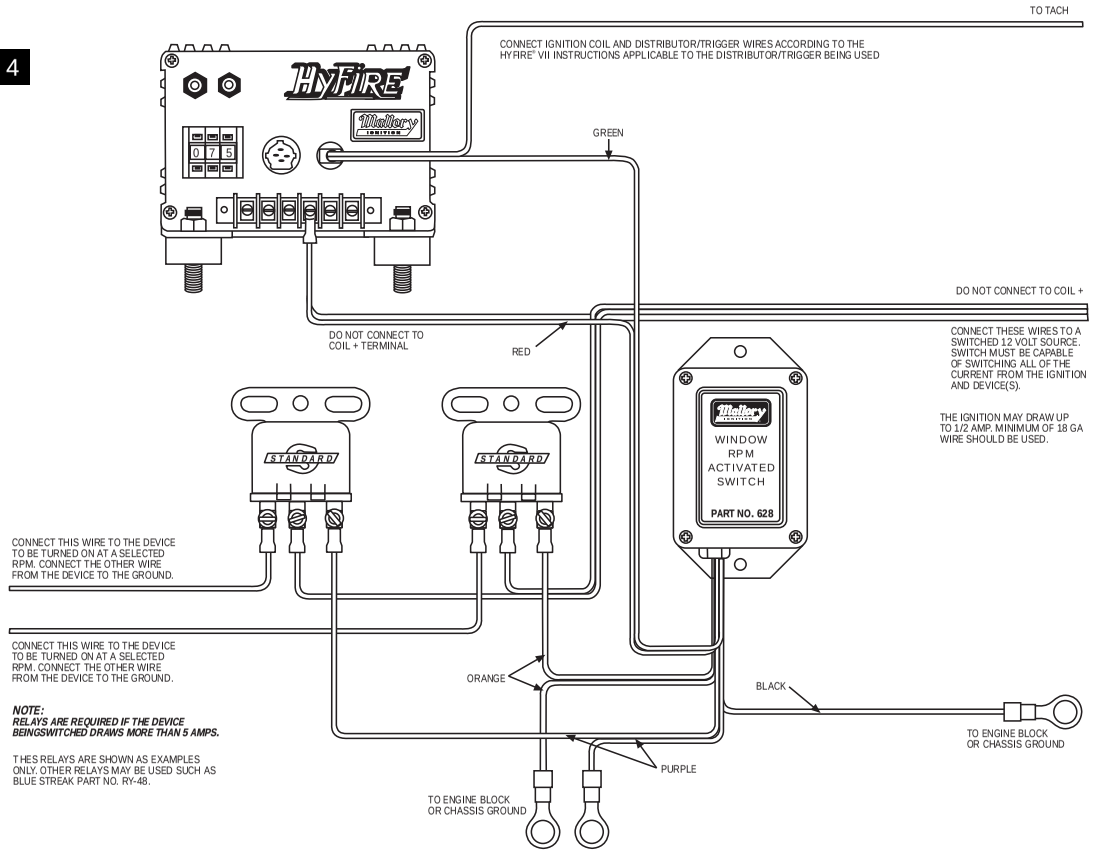
RPM ACTIVATED SWITCH WITH HYFIRE® VII

FIGURE 3



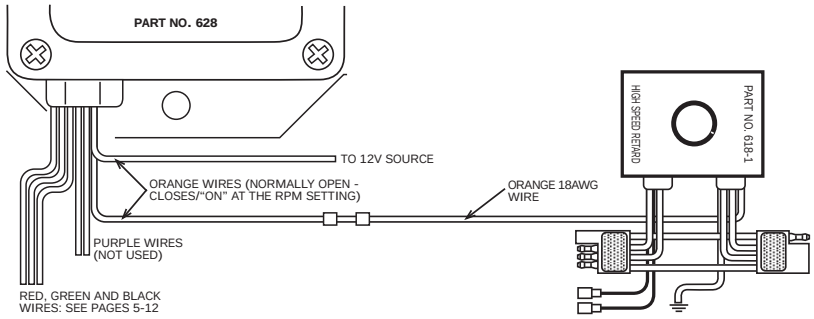
RPM ACTIVATED SWITCH AND RELAYS WITH HYFIRE® VII

FIGURE 4

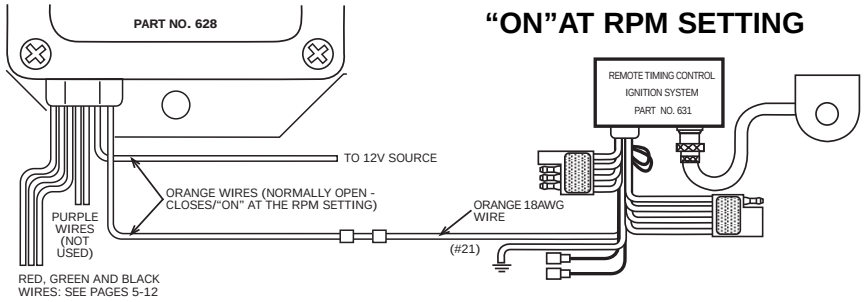


TIMING RETARD “ON”AT RPM SETTING

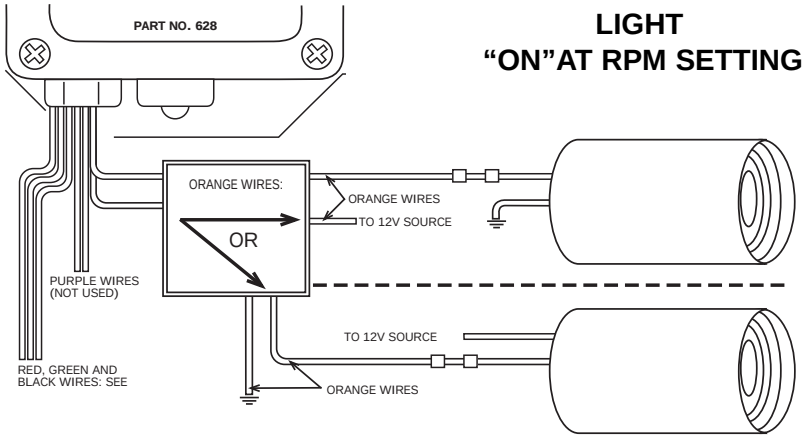
FIGURE 5



TIMING CONTROL “ON”AT RPM SETTING



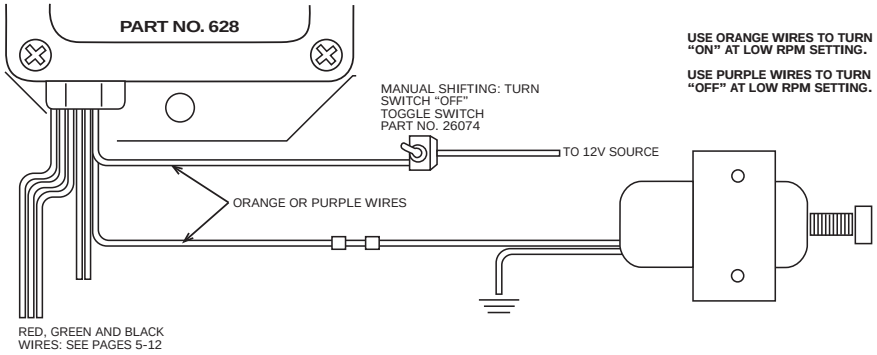
LIGHT “ON”AT RPM SETTING

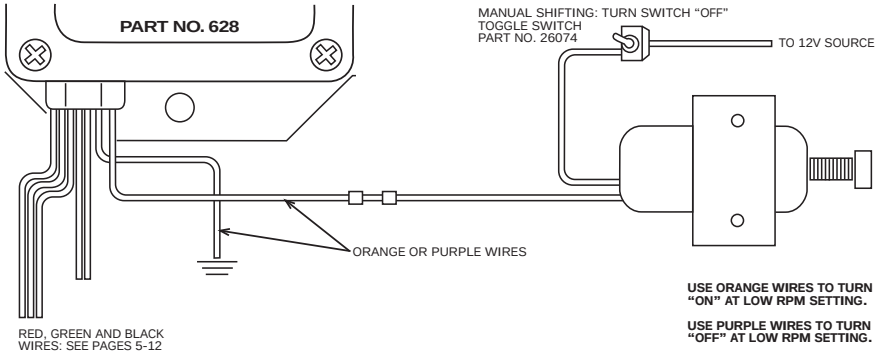


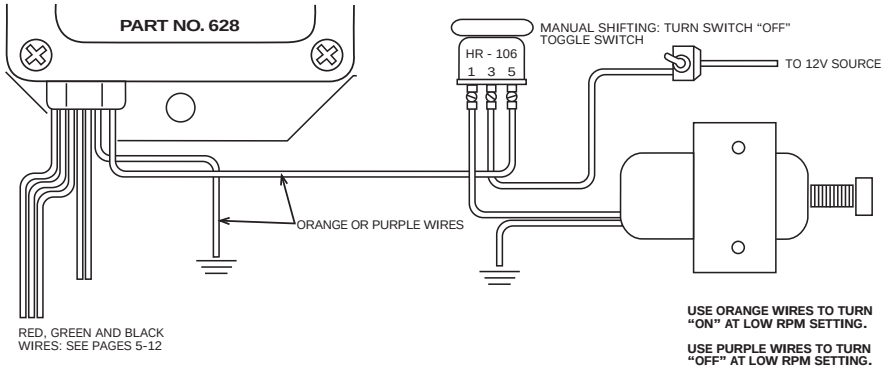
NOTE: TO TURN LIGHTS “OFF” AT RPM SETTING - EXCHANGE THE ORANGE WIRES AND THE PURPLE WIRES.

ELECTRIC (SHIFTER) SOLENOID

FIGURE 6

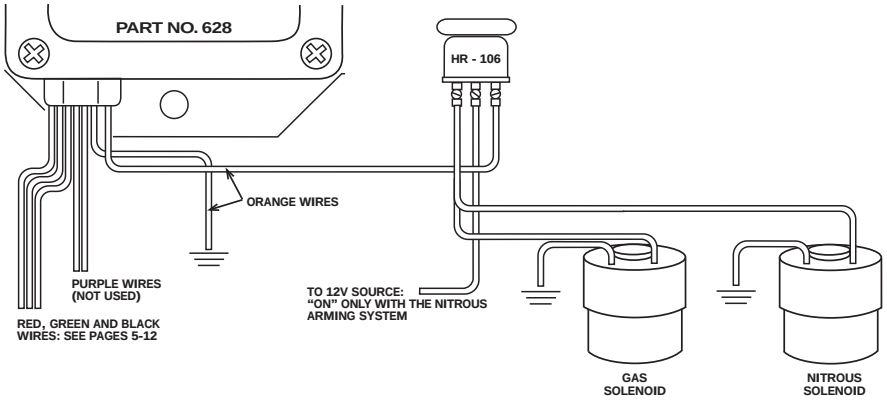






NITROUS SYSTEM “ON” AT RPM SETTING

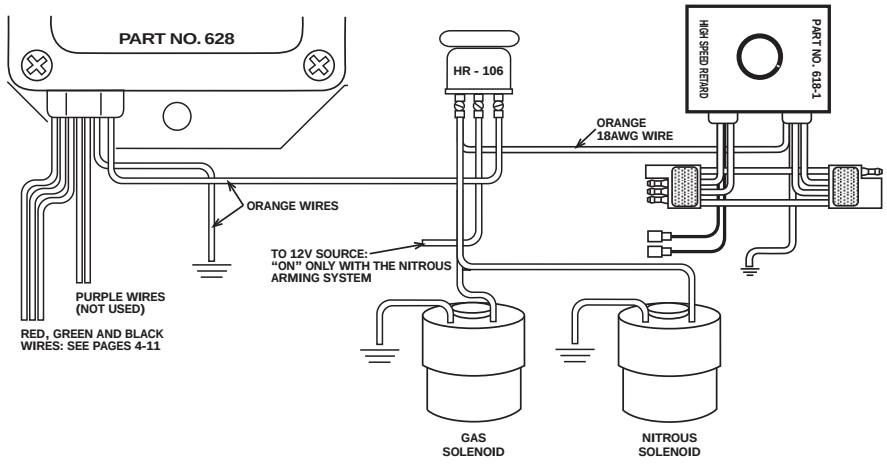
FIGURE 7



NOTE: THE NITROUS SYSTEM WILL TURN “OFF” AT UPPER RPM SETTING.

NITROUS SYSTEM AND TIMING RETARD “ON” AT RPM SETTING

FIGURE 8

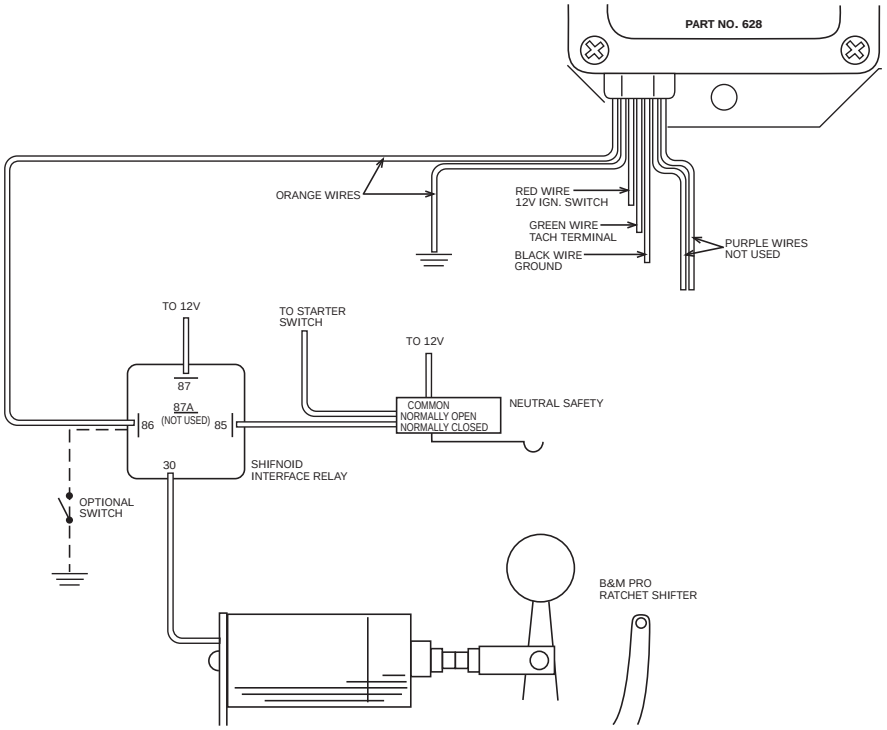


NOTE: THE NITROUS SYSTEM WILL TURN “OFF” AT UPPER RPM SETTING.

SHIFNOID WIRING

FOR A B & M RATCHET SHIFTER W/SN5070 SOLENOID

FIGURE 9



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550 MALLORY WAY, CARSON CITY, NV 89701
(775) 882-6600 FAX (775) 887-4326
www.mrgasket.com

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