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# Single Mode Shift Light

1 YEAR LIMITED WARRANTY. IN NO EVENT WILL RAPTOR PERFORMANCE OR ANY OF ITS AFFILIATES BE RESPONSIBLE FOR DAMAGES OF ANY NATURE WHATSOEVER RESULTING FROM THIS PRODUCT. NO OTHER CLAIMS ARE MADE ABOUT THIS PRODUCT, EXPLICIT OR IMPLIED.

INSTRUCTIONS FOR INSTALLATION AND SWITCH SETTINGS:

- REMOVE NEGATIVE BATTERY CABLE.
- CONNECT BLACK WIRE OF THE SHIFT LIGHT TO A SUITABLE GROUND ON THE VEHICLE CHASSIS.
- CONNECT RED WIRE OF THE SHIFT LIGHT TO A SWITCHED AND FUSED +12 VOLT SOURCE.
- CONNECT THE GREEN WIRE OF THE SHIFT LIGHT TO THE TACH OUTPUT LEAD OF THE VEHICLE OR THE SWITCHED SIDE OF THE IGNITION COIL (NEGATIVE SIDE).
- SET DESIRED RPM ACTIVATION POINT USING THE TWO ROTARY SWITCHES WITH A SMALL SCREWDRIVER. <u>EXAMPLE</u>: FOR 5800 RPM = "RPM X1000" TO "5" AND "RPM X100" TO "8" (SEE FIGURE 1).

NOTE: THE RPM RANGE CAN BE DOUBLED TO A MAXIMUM OF 19,800 RPM BY DOUBLING THE CYLINDER SELECT SWITCHES FOR YOUR VEHICLE AND SETTING THE RPM TO 1/2 OF THE DESIRED RPM ACTIVATION POINT).

\*\* CARE MUST BE USED WHEN SETTING SWITCHES. THE SLOT CAN BE DAMAGED IF THE CORRECT SCREWDRIVER IS NOT USED. FULLY INSERT BEFORE TURNING.

- SET "CYLINDER SETTING" TO MATCH THE VEHICLE (SEE FIGURE 2).
- FOR VEHICLE SPECIFIC INFORMATION (IF AVAILABLE), PLEASE CHECK THE RAPTOR WEBSITE.
- RESTORE BATTERY CABLE CONNECTION.
  <u>NOTE: TO CHANGE SETTINGS, TURN IGNITION OFF, CHANGE SWITCH SETTINGS AND TURN IGNITION</u>
  <u>BACK ON. THE SHIFT LIGHT READS THE SWITCH SETTINGS UPON POWER UP ONLY.</u>



Figure 1

#### VERIFY MODE

VERIFY MODE DISPLAYS THE SWITCH SETTINGS, IF THEY HAVE BEEN CHANGED FROM THE LAST VALUE STORED IN MEMORY.

TURN IGNITION ON AND THE SHIFTLIGHT WILL FLASH THE SETTINGS TO YOU:

- A- 4 LEDS WILL FLASH THE NUMBER OF TIMES WHICH IS REPRESENTATIVE OF THE "RPM X1000 SETTING".
- B- THERE WILL BE A PAUSE (NO LEDS ON FOR ABOUT 2 SECONDS).
- C- 3 LEDS WILL FLASH THE NUMBER OF TIMES WHICH IS REPRESENTATIVE OF THE "RPM X100 SETTING".
- D- THERE WILL BE ANOTHER PAUSE (NO LEDS ON FOR ABOUT 2 SECONDS).
- E- ALL LEDS WILL FLASH THE NUMBER OF TIMES WHICH IS REPRESENTATIVE OF THE "CYLINDER SETTING"., AND FINALLY THE SHIFTLIGHT WILL DO AN LED TEST AND BE READY FOR USE.

#### NORMAL MODE

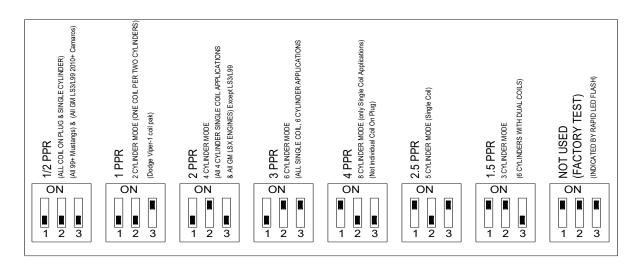
NORMAL MODE IS WHEN THE SWITCH SETTINGS HAVE NOT BEEN CHANGED FROM THE PREVIOUS VALUES STORED IN MEMORY.

• UPON TURNING ON IGNITION, THE SHIFTLIGHT WILL TEST THE LEDS AND NO SWITCH SETTINGS WILL BE DISPLAYED. THE SHIFTLIGHT IS READY FOR USE AT THIS POINT.

#### ERROR MODE

IN ERROR MODE, ALL LEDS FLASH AT A RAPID RATE TO INDICATE THE RPM ACTIVATION POINT IS SET BELOW THE MINIMUM SETTING OF 1000 RPM OR THE "FACTORY TEST" SWITCH SETTINGS WERE SELECTED.

• TURN OFF IGNITION AND CHANGE THE SWITCHES TO A SETTING ABOVE 1000 RPM OR SET THE CYLINDER SELECT SWITCH TO THE CORRECT SETTING (NOT FACTORY TEST).



### **FIGURE 2**

(PPR = Pulses PER Revolution)

For 99+ Mustangs (4.6L), the preferred setting is 1/2 PPR (signal off one of the 8 coil drivers).

For 2010+ Camaros (LS3/L99), the preferred setting is ½ PPR (signal off one of the 8 coil drivers).

For Dodge Viper, the preferred setting is 1 PPR (signal off one of the 5 coil drivers).

All GM LS1/LS2/LS6/LS7 applications, (except LS3/L99) the preferred setting is 2 PPR while connected to "tach out" signal of PCM. <u>\*\*\*\*NOTE\*\*\* The single mode shift light must be programmed for high</u> sensitivity to be able to read off smart coils (usually with more than 2 wires on the coils). The 2010+ Camaro has smart coils and has no tach out. Therefore, to use on this car you have to have version V2.4 Firmware (high sensitivity mode).