

Trick Performance Products

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"It's only worth using if it's Trick"

DUAL STAGE RPM WINDOW SWITCH

Operation

The TRICK RPM WINDOW SWITCH is a 2 stage RPM activated window switch (RPMWS) with an integrated throttle-position activation switch (TPAS). The unit accepts most tach signals, including low-voltage and irregular signals such as those found on many V-10s. The TPAS accepts all analog throttle-position sensor signals as well as a "hot" or "grounded" wide-open-throttle (WOT) switch.

Both stages have their own settable ON and OFF points and multi-gear lockout feature. This delays a stage from turning ON until you have cycled through the RPM window (X times). The internal TPAS can be configured to prevent the RPMWS channels from activating until you are at WOT.

The TRICK RPM WINDOW SWITCH requires 9~18 volts to operate correctly. The output lines switch ground when activated (ON) and have a maximum current rating of 1 amp.

In run mode, the LEDs (A.B.C.) will show the unit's status.

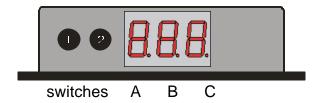
A = throttle position activation switch status [0 = OFF / 1 = ON]

B = gear lock out for channel 1 [0 = feature OFF / L = locked out]

C = gear lock out for channel 2 [0 = feature OFF / L = locked out]

Press and hold switch #1 and the unit will display the current RPM (AB.C). This will be very useful to verify your setting in STEP 1 of the configuration. *Example:* 12.5 = 12500 RPM

Programming the RPM Window Switch



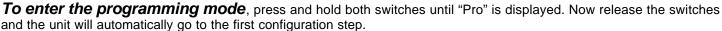
<u>Switch #1</u> - toggles through the configuration menu. As you toggle through the configuration menu, the stored value will be displayed. Each time you push Switch #1 will move the flashing character to the next digit. EXP. Space "B" will be flashing while making changes to this field (using switch 2), push switch 1 when you are ready to move to space "C" Each step is programmed the same way.

<u>Switch #2</u> - increments the flashing value that was selected by switch #1. Push Switch #2 to get the flashing character to the number you need for programming your application. EXP. Each time switch #2 is pushed the field that is flashing will rise 1 character.

<u>LED A.B C</u> displays the configuration step number and its setting

A: = configuration item. The Set up Number will show for a brief moment.

A B C = value for the current configuration step





STEP 1. TACH set-up



You will only see this screen for a brief moment.

B C is the number of cylinders. This setting is used by the RPMWS to calculate the correct RPM.

0 0 0 = individual coil per cylinder systems where the tach wire is connected to the coil. Connects to the

trigger

wire for the coil.



0 0 1 = coil packs that fire in pairs (waste spark systems) and the tach wire is connected to the coil



 $\mathbf{0}\ \mathbf{0}\ \mathbf{2} \sim \mathbf{0}\ \mathbf{1}\ \mathbf{2} = \text{cylinder combinations from 2 to 12 where the tach wire is connected to the tach from the}$

electronic controller or distributor EX. 002 would be for a 2 cylinder application. LS1 vehicles connecting to the tach wire at the pcm will use 004 here.

STEP 2. Gear Lockout

A = not used at this time

B = how many times you must pass the deactivation set point before channel 1 will activate. 0 turns this option off.

C = how many times you must pass the deactivation set point before channel 2 will activate. 0 turns this option off.

EXAMPLES BELOW



You will only see this screen for a brief moment.



0 0 0 = Both Channels 1 & 2 are off. So both Channels will activate at their Activation RPM.



0 1 0 = You must pass Channel 1's deactivation RPM 1 time, before that system will activate. Channel 2 is off, so Channel 2 will activate at its Activation RPM.



0 0 2 = Channel 1 is off so Channel 1 will activate at its Activation RPM. You must pass Channel 2's deactivation RPM 2 times, before that system will activate.

STEP 3. RPM set up for Channel 1 Activation.



You will only see this screen for a brief moment.

Channel 1 Activation RPM

A B C = RPM where 02.3 = 2300 RPM



STEP 4. RPM set up for Channel 1 Deactivation RPM



You will only see this screen for a brief moment.

Channel 1 Deactivation RPM

A B C = RPM where 06.6 = 6600 RPM



STEP 5. RPM set up for Channel 2 Activation RPM



You will only see this screen for a brief moment.

Channel 2 Activation RPM

A B.C = RPM where 03.9 = 3900 RPM



STEP 6. RPM set up for Channel 2 Deactivation RPM



You will only see this screen for a brief moment.

Channel 2 Deactivation RPM

A B.C = RPM where 10.5 = 10,500 RPM



STEP 7. TPAS Mode

A B C = throttle position activation switch mode



You will only see this screen for a brief moment.

0 0 0 = "grounded" WOT switch

_____0 0 1 = "hot" WOT switch

0.02 = TPS signal to PCM

chosen IF you have a WOT device controlling the relay. Using this feature will activate the relay anytime the system is armed and inside the Activation and Deactivation window. Primarily used for systems that are already wired and are wanting to have features of a window switch.



STEP 8. TPS WOT setting

Note: only applies if Step 7 is configured as 002

8:B.C = WOT voltage

While at IDLE, press switch #2 to read and display the TPS signal. Pop the throttle to open it all the way – the unit only needs to see WOT for a fraction of a second. Now press switch #1 to save the displayed value. (You do not have to be at WOT when you press switch #1 to save)

Fly By Wire cars should go for a test drive for step 8. Since the throttle blade may have some delay in throttle speed vs pedal speed.

Push Switch #1 and You will see **End** this shows the programming is complete. If at any point you see **Err**, the unit has had an internal malfunction. Turn the power off and back on and try again.

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