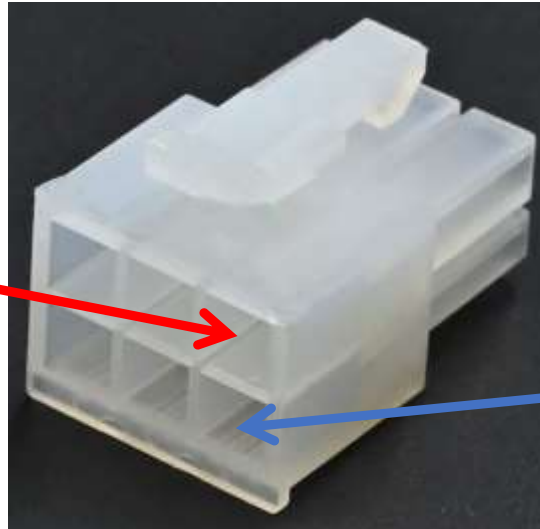


Swap – Smart

Performance Shift Module – Wired Request (P01/P59 PCM)

Before you begin installing this module or making any connections, you will notice there is a RED wire labeled ‘Lamp’ that has been included in this device wiring harness but has not been inserted into the connector. This has been done to allow you do configure the signal polarity this module will output when your dash light is active. This module is capable of supplying your dash light with either a 12-volt signal or a ground signal depending upon where this wire is inserted into the connector. Make sure you verify your dash light polarity BEFORE you insert this wire.

12 Volt Output
If you insert the LAMP wire into this cavity, this connection will provide a 12-volt signal to your dash indicator light when the alternative shift tables are active.



Grounded Output
If you insert the LAMP wire into this cavity, this connection will provide a ground signal to your dash indicator light when the alternative shift tables are active.

On the next page you will find instructions on where to connect the wires on this device. Each wire is also labeled to make installation of this device as simple as possible.

NOTE - PCM PROGRAMMING IS REQUIRED IN ORDER TO USE THIS DEVCICE

This device will not function with stock PCM programming. You must activate the Performance mode option in your PCM’s calibration using suitable tuning software.

If you do not have access to the required tuning software, or the skill required to enable this setting in the PCM yourself then you will need to seek help from a professional tuner in your area. This is an example of how your tuning software may display this setting, however, depending on what tuning software you use it may be displayed differently but will have similar choices to what is shown here.

Possible values:	Description	User notes
<input type="button" value="No Switch"/>	These options enable the various shift pattern modes within the PCM. Note: J1 is the 'BLUE' connector on the PCM. Switch types used must be momentary connect to ground. 'No Switch' = Performance mode via a switch is not functional. 'One Switch' = Performance mode via a switch can be activated (J1 - pin71). 'Two Switches' = Performance mode via a switch can be activated (J1 - pin71) 'C2 Data Bus' = Shift pattern modes are sent on the data bus to the PCM from	Only the following values may be entered into this table: - No Switch - One Switch - Two Switches - C2 Data Bus
<input checked="" type="radio"/> One Switch		
<input type="button" value="Two Switches"/>		
<input type="button" value="C2 Data Bus"/>		

You will also need to populate values in multiple tables throughout the calibration, the exact tables where this option may be used will depend on what operating system your PCM is using. The values entered for Performance Mode should be different enough that you will be able to “feel” the changes in order to verify operation. Using values that are very similar to what is used in the “Normal” mode will not provide you with any benefit while using this device.

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Below is an outline of where each wire should be connected, failure to follow these instructions may result in erratic behavior or damage to this device.

Pink – Switched 12 V+

This device's power connection should be connected to the same power source as the PCM's 12 volt switched power, this device must have power anytime the PCM is powered on including while the engine is cranking. Using any power source for this device may cause the module to lose sync with the PCM's current shift table state.

Note: *This device must be protected with an inline 5-amp fuse or you may use a fuse T-tap, provided the circuit you are "tapping into" is not overloaded. During normal use the typical current draw of this device will be less than 1 amp.*

Black – Ground

Connect this wire to a good ground on your vehicle. If you will be chassis grounding this wire, make sure your connection is done so using a clean surface that is free of any paint.

Gray – PCM C1 #71

Connect this wire to terminal 71 of the Blue PCM connector.

Green – Switch

This wire will connect to your dash switch, when your switch is pressed it must supply a ground signal to this wire. You MUST use a "momentary" style switch in order for this module to function correctly. You can not use a toggle switch.

NOTE: *This wire has a 12 volts pullup resistor built into the device.*

RED – Lamp

Where you connect this wire will depend on where you have inserted the wire into the connector.

Note: *The indicator light used must not draw more than 500ma or the module may be damaged.*

Device operation - LED Color Matrix

LED's have been built into this device to assist in understanding its operation.

Flashing Green LED – the device is functioning normal and is waiting for the switch to be pressed(grounded). The transmission will be using the standard shift tables.

Performance Mode Activating – When the switch is grounded, the device will begin to activate the alternating shift tables. The LED will stop flashing green and illuminate a solid Yellow LED for approximately 1 second and will be followed by an aqua colored LED for up to 3.5 seconds. During this time while the LED is NOT flashing, the device will not respond to commands from your switch. Once the LED resumes flashing, it will now be flashing an aqua color and will recognize commands from your switch again.

Flashing Aqua Colored LED – the device is functioning normal and is waiting for the switch to be pressed(grounded). The transmission will be using the alternative shift tables.

Performance Mode Deactivating – While the alternative shift tables are active, when the switch is pressed the device will switch the PCM back to using the normal shift tables. While the shift tables are being returned to normal operation, The LED will stop flashing its aqua color and turn to a solid white color for approximately 1 second and will be followed by a solid green color LED for up to 3.5 seconds. During this time while the LED is NOT flashing, the device will not respond to commands from your switch.

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Performance Shift Module – Wired Request (P01/P59 PCM)

Trouble Shooting Device Operation

The status LED on the device does not light up

Verify your power and ground connections to this device. This device requires at least 9.5 volts while the engine is being cranked to prevent it from restarting.

Nothing happens when I press my button/switch

- A) Verify your button is applying ground to the modules “Switch” wire ONLY when the button is pressed. The module requires a “normally open” type of momentary switch type to function correctly.
- B) Try holding your button down longer, the module requires the button to be pressed for at least ¼ of a second, and the activate does not occur until after the button is released.

The module only activates when I turn my button/switch OFF

The module requires a normally open, Momentary contact type of switch. Toggle switches do not work with this device.

The module LED’s show it’s doing something but nothing changes

- A) With the PCM unhooked, verify the modules PCM output connection is supply a GROUND when the status light turns Red/Pink.
- B) Using a suitable scan tool, check if the PCM is seeing a request for either a “Tow/Haul” OR Performance mode.
- C) Verify PCM programming has been performed correctly.
- D) Verify the Performance mode tables are correctly populated and the values are set differently than your primary tables.

Modules State displays incorrectly

This device was designed to simulate the factory control for activation of the alternative shift mode tables. Because this device is only emulating the original function. There is no type of feedback circuit from the PCM when using this input mode and it is possible (although highly unlikely) that you may encounter a situation where the module has lost it’s “sync” from the PCM’s actual state. If this occurs, simply shut the vehicle off and restart it to resync the states.

If you continue to experience issues you should carefully inspect the circuit you are using to power this device and make sure you are using a good, clean ground connection. If no issues are found with your wiring, then you should connect a scan tool capable of reading advanced transmission data and determine why the PCM is either reverting to the normal tables on its own or what is preventing you from activating the alternative shift mode.

Operational use and disclaimer notice.

This device was designed for operation between 9.5 and 16.5 volts. Using this device with an electrical system that is operating outside of that range may damage this device and is not covered by any type of warranty. If you reverse the polarity of the devices power and ground connections you will damage this device and it will not be covered by any type of warranty. If you connect the PCM’s connection directly to a 12 volt power source you will damage this device and it will not be covered by any type of warranty. If this device is exposed to moisture it may be damage and is not covered by any type of warranty. Directly shorting either of the “Lamps” output channels will cause damage to this device and is not covered by any type of warranty. Any type of use or connection other then what has been outlined in this guide may damage your device and is not covered by any type of warranty.