

# 2011-2014 FORD DIGITAL SWITCH

## Installation Guide

Read the complete guide before beginning. Keep removed hardware organized, follow all safety precautions, and verify all connections before operating the vehicle.



11-14 Power Stroke

Digital Switch

## **TUNING**

### **Installation**

#### **TM**

This instruction manual covers installation of the gauge pod mount DSP/SOTF switch for 2011-2014 Ford Power Stroke trucks only.

, LLC will not be held responsible for any personal, property, truck, vehicle, engine/powertrain, or transmission damage/injury that may result with the use of this module. This is an aftermarket part; just like any other aftermarket performance truck parts, install/use it at your own risk. Be sure to use caution when working around yellow connectors or wiring as these can be related to the SIR (airbag) system.

## **STEP 1**

Unbolt the OBD2 plug.



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## **STEP 2**

Use a small screwdriver, Remove the BLUE pin lock by releasing the 2 clip locks



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### **STEP 3**

Remove the BLUE pin lock



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## **STEP 4**

Insert the OBD2 side wire into pin 8



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## **STEP 5**

Re-install the Blue Pinlock and re-attach the OBD2 Plug



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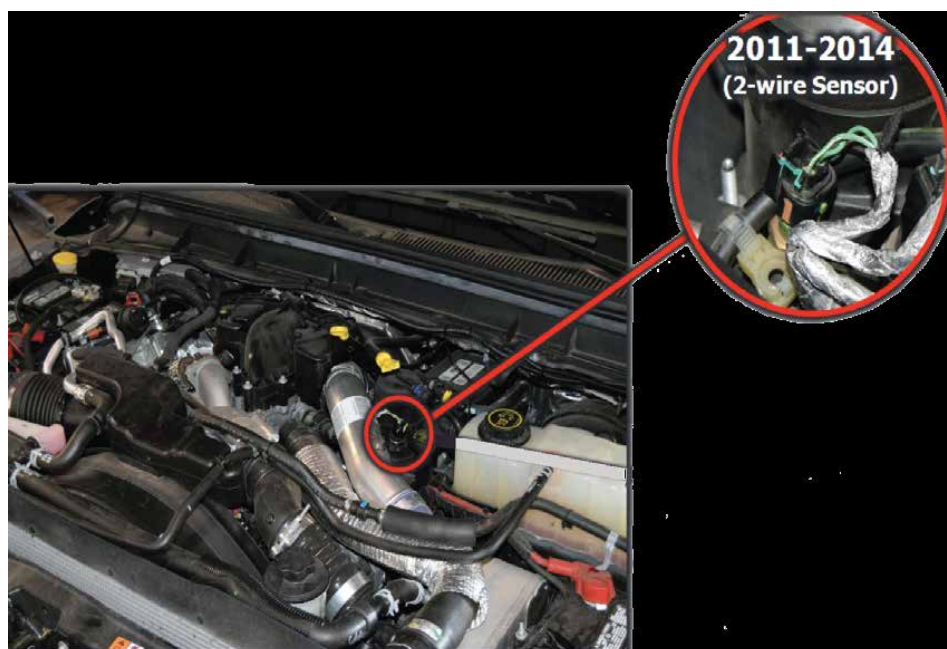
#### **TM**

### **STEP 1**

Route the OBD2 SOTF wire from the Digital SOTF switch through the firewall to the appropriate sensor as shown in the pictures. Be sure to route the wires carefully, away from hot surfaces or moving parts. Also be sure to secure wires so they will not rub on any sharp edges.

### **STEP 2**

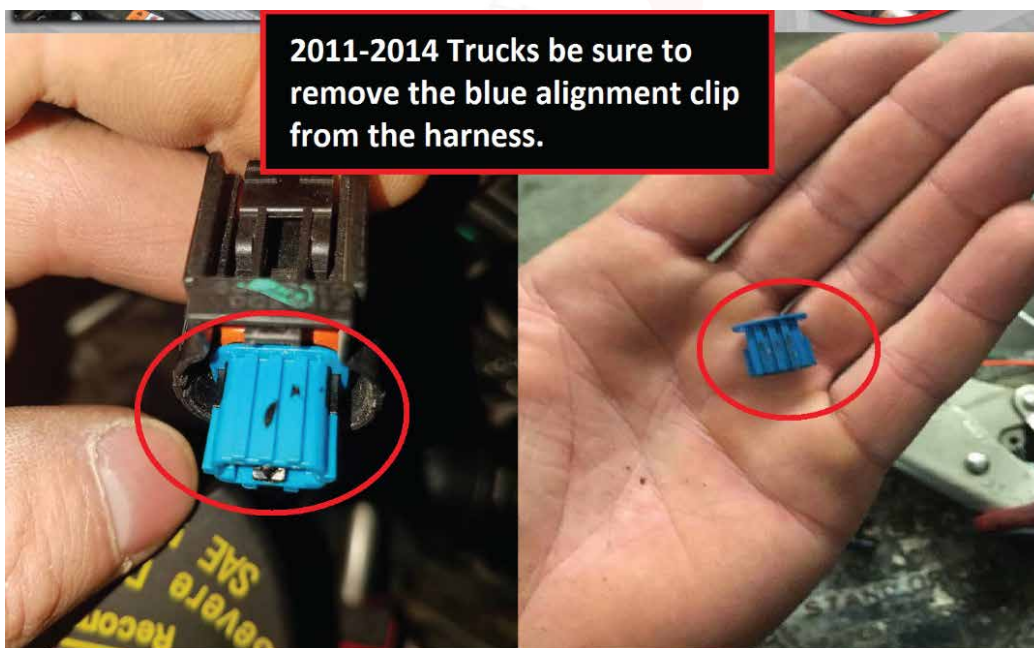
Unplug the sensor and carefully cut back approximately 1.5" of protective wire sheathing. Be sure to not cut into the actual wires when removing the protective sheathing!



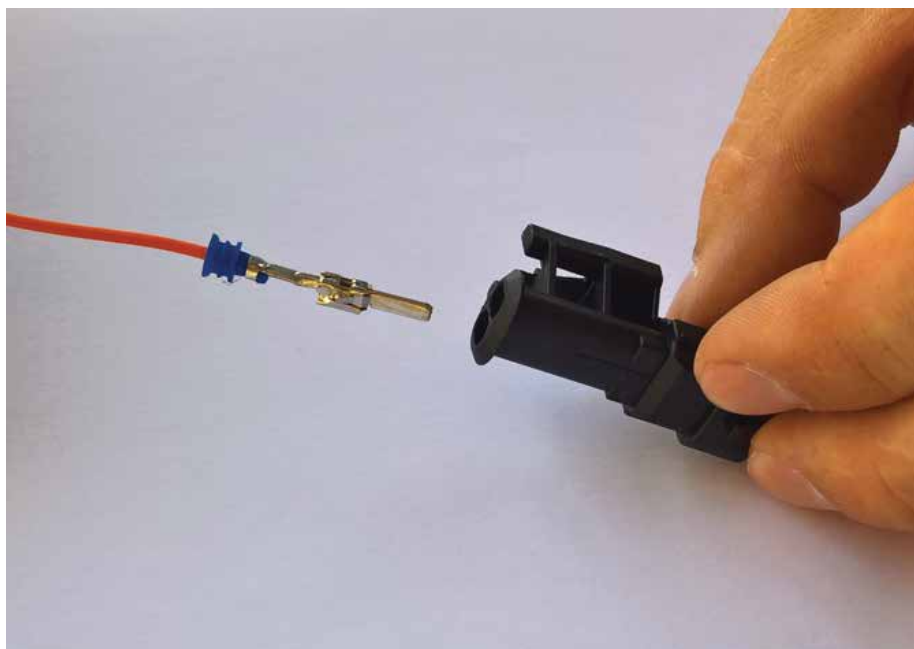
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### STEP 3

Be sure to remove the blue alignment clip from the harness.



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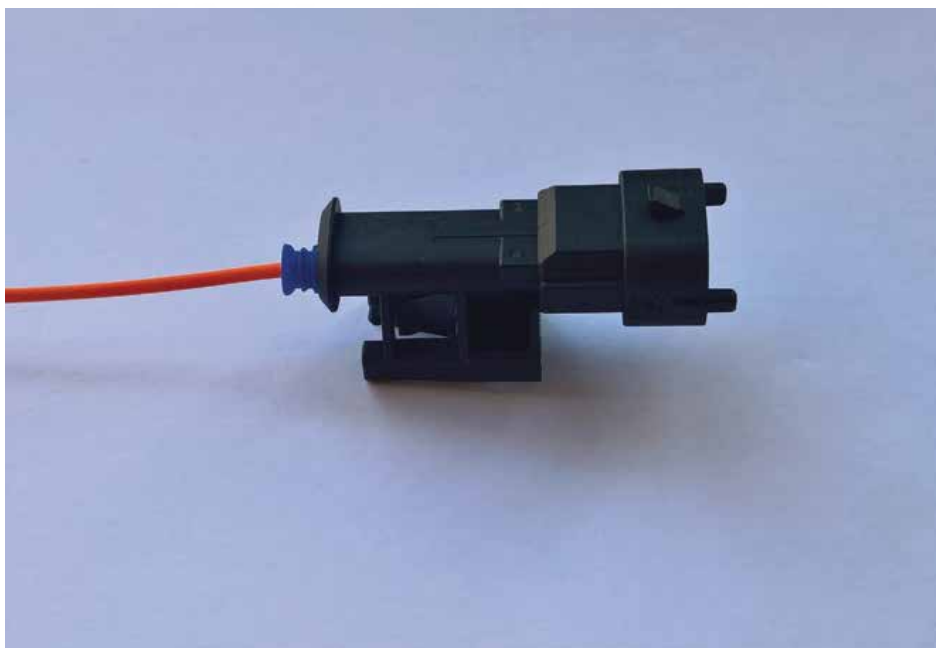
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## **STEP 4**

Insert the SOTF wire through the correct

## **STEP 5**

Lock the pin into the correct position that matches up with the GREEN OEM side wire.



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##### Programming/setup Procedure

NOTE: The switch is set to a default mode from the factory and must be configured/setup for your particular truck.

The "UP" arrow is for configuring the year/engine of truck.

The "DOWN" arrow is for configuring the switch wake-up/sleep source

Truck year/engine configuration

### STEP 1

Press and hold the "UP" arrow of the switch.

### STEP 2

While still holding the "UP" arrow, Plug in the OBD2 Plug from the switch will power on and show "P" (program). Once it shows "P", you can release the "UP" arrow.

### STEP 3

The switch display will then show either "H", "1", or "2" for a few seconds, go blank for a second, then return to regular operation. "H" is 2001-2005 LB7/LLY Duramax, "1" is 2006-2010 LBZ/LMM Duramax, "2" is 2011-2017 Power Stroke. (Repeat steps 1-2 to find your correct selectin)

### STEP 4

Each time programming mode is manually entered (following steps 1-3), the setting will step up one level (H, 1, 2), and then loop back around to "H". Once you have followed steps 1-4 the appropriate amount of times to get the "P" setting to H (LB7/LLY), you can turn the ignition OFF, wait a few seconds for the switch to turn off, and the year setting will be saved. You can re-enter programming mode (or example, if you are removing and installing the switch on a different truck) at any time by following steps 1-4.

Switch wake-up/sleep source

This programming mode is to setup the switch for automatic on/off based on CAN bus activity. When CAN traffic is detected by the switch (ie, when the ignition is turned on), the switch wakes up and turns on. When CAN traffic stops (ie, truck is shut off), the switch will wait an extra ~10 seconds, and then put itself to sleep so as not to drain the trucks battery.

The two settings on the switch are "C" for CAN bus wake up/sleep, and "D" for discrete wake up/sleep source. The "D" discrete power setting is only for 2001-2005 Duramax that does not have CAN pins wired into the OBD port and thus cannot be switched on/off automatically. "D" discrete setting for 2001-2005 Duramax simply turns the switch on/off with the ignition key.

## STEP 1

Press and hold the "DOWN" arrow of the switch.

## STEP 2

While still holding the "DOWN" arrow, Plug in the OBD2 Plug from the

## STEP 3

The switch will power on and show the current switch wake/sleep source. "D" (discrete, 01-05 Duramax only) or "C" (CAN, 2011-17 Power Stroke).

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Programming/setup Procedure (continued)

## STEP 4

The switch display will then go blank for a second, then return to regular operation.

## STEP 5

If the switch shows "D", and returns to normal operation, the switch is configured properly. You can unplug the OBD2 plug and repeat steps 1-2.

## STEP 6

Double check on/off operation of the switch, with the key ON, the switch should be on, and the switch should turn off within 15-20 seconds after turning the ignition OFF Setup complete Double check all connections, secure/tape any extra wire, reinstall trim panels, gauge pod digital DSP/SOTF switch!

### HIGH IDLE Installation

## STEP 1

Following the picture, locate the SEIC pass-through wires under the dash, near the OBD port.

F250/350/450/550 Cabin / Instrument Panel

The Digital SOTF switch also has the ability to enable manual high-idle on the 6.7 PowerStroke. This install is optional, if you do not wish to install high idle, skip the following steps and ignore the remaining four wires on the SOTF switch harness.



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-blunt-cut access wires for SEI, "customer access" signal circuits for CTO,VS\_out,PARK TRO-N, & 4 pass-thru wire, are bundled together at the harness above the parking brake pedal assembly behind the data link connector.

## STEP 2

Locate the yellow/green wire on the trucks SEIC Pass-Through harness. splice the yellow/green wire from the Digital switch to the yellow/green wire on the truck.

## STEP 3

Locate the green wire on the Digital switch. Splice the green wire from the Digital switch to the green wire on the truck.

## HIGH IDLE MODE

The gauge pod digital DSP/SOTF switch also has a manual high idle mode for faster winter warm up, jump starting other vehicles, etc. To activate the high idle mode, the truck must be in PARK and your foot must be OFF the brake pedal. Press the "DOWN" arrow several times until the switch display shows "1". When the display shows "1", press and hold the "DOWN" arrow for ~3 seconds, and the display will change to "H" (High idle). (park brake has to be set)

Once the display changes to "H", the engine will go to the base high idle of ~900rpm. To increase high idle rpm, press the "down" arrow. with each successive press of the "down" arrow, the engine will step up through 5 different high idle rpm presets (~1100, ~1500, ~1800, ~2100, ~2600).

To exit high idle mode, press the "UP" arrow, or press the brake pedal.

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### WIRE CHART



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**PURPLE: NOT CONNECTED**

**RED: NOT CONNECTED**

**GREEN: HIGH IDLE**

Yellow/Green: HIGH IDLE

**BLUE: NOT CONNECTED**



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