

Installation Instructions

Thanks for your purchase!

The staff at SP Diesel Performance thanks you for your recent purchase of the SP Power Box. We are sure you will find all SP products to be an exceptional value for your dollar. We have designed all SP products to be easy to install, while offering you the same results of similar, higher dollar products.

Before you begin

Before you begin installation you should make sure you have at least a basic understanding of wiring. You don't need to be an expert with our instructions but if you aren't comfortable, try and find a knowledgeable friend there to lend support, or if all else fails we are available by email and phone. On a scale of technical difficulty, installation of the SP Power Box is a 3 on a scale of 10. Also as with any electronic modification to your truck, **remove the key from the ignition**. Pictures are supplied at the end so you can print them out and keep them next to the text directions for easy reference. All picture references will be noted in the instructions.

Parts List

See the below chart for a complete list of parts. Optional parts are noted as such in the list.

- (1)SP Power Module with SP Power Dial
 - Installation Instructions (may be provided via email instead of print)
 - Zip-Tie Assortment
 - SP Overboost Eliminator (optional)
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Tools

See the below chart of tools recommended for installation.

Tool	Purpose
Long-Nose Pliers	
Metric hex bits (6-10mm)	Used to loosen hex screws once you have identified a suitable ground.
Screwdriver	Used to open dash cover, and to help pry the blue/green trace wire on ICP lead loose from wiring bundle.
Electrical Tape	Used as protective covering on ICP connection
Zip Ties	To clean up wiring runs and organize under the dash or under hood.
Drill /drill bits	For drilling hole in plastic access ports to engine bay from passenger cabin.
Straight bent coat hanger or fish tape	For fishing the wire through the firewall of the engine bay.

Remove the Dash Cover

Remove the Panel Cover directly below the steering column by loosening the four catch screws at the corners. A penny, flat-head screwdriver, or good fingernail works well for this. Place it out of the way for now.

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New Stage I Installation Instructions (continued)

**New Stage I
Power Module
Instructions**

Connect to the ICP using the supplied harness with your module. Pass all three wires through the firewall using your preferred location. Connect red to red, green to green, and white to white with the box. Male and female connectors have been supplied. It is up to you to decide which side gets which, we usually put the female connectors on the box side.

**Trimmer
Adjustment**

The trimmer adjustment is in place to help tune the module to your truck. This trimmer on the board (exposed by the hole in the box) can be accessed with a mini-flathead screwdriver. Use the trimmer in the following manner:

Clockwise = more throttle response more top end fueling boost.

Counter-clockwise = less throttle response, less top end fueling boost.

For 99 and up PowerStrokes, start with the trimmer **full** up or clockwise.

For 94-97 PowerStrokes start ½ turn.

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Original Power Module Installation Instructions (continued)

Find a location to ground and mount your SP Power Module

Find a location to mount the box under the dash located near a suitable ground. A ground is shown in the picture for you to use if you like. Remember when using the illustrated ground to mount it behind the plastic decorative cover and not on top of it. Ground the unit using the black wire with ring terminal.

Find a location to tap through the firewall

Now that you have grounded your SP power module, rest it on the dash frame cross-member, and use a flashlight to locate a suitable location to pass a wire through the firewall. If you have an automatic transmission the clutch port is an ideal location, as the port cover can be easily removed, drilled and replaced and the wire can be easily passed through it. If you have a manual transmission, you might find a port nearby. You can also use the customer access wiring port in the upper right hand corner of the back of the dash.

Run your Wire through the firewall

Now route the green wire through the firewall into the engine compartment. This is where your fish tape or clothes hanger might come in handy. Just tape the end of the yellow wire to the coat hanger or fish tape and pass it through. You are almost there!

Make your tap splice to the Blue/Green ICP wire

Locate the ICP (Ignition Control Pressure) sensor. The sensor is located on the top front drivers side of the engine and it has three wires coming from it.(see picture) Follow the wire loom connecting to the ICP sensor, find a convenient spot to tap into it and separate the loom. Once the loom is spread apart locate the BL/LG (blue wire with a light green stripe) and tap into it with the tap splice provided. Now route the green wire from the firewall to your tap location, making sure not to route the wire near the fan belt or other moving parts. Connect the green wire to your tap and you're almost ready to roll.

Tap your Accelerator Pedal

Use the provided tap splice to connect into the RD/GN wire(red wire with green stripe) coming from the accelerator pedal assembly. 99-early 01 will have two separate connectors on the pedal assembly and late 01-03 will have one connector. Both types have the RD/GN wire.(see picture) Connect the white wire from the box to the IVS tap splice. Be sure to route the wire going to the accelerator pedal in such a manner so as to not effect the movement of the brake or accelerator pedal.

Clean up your installation and mount your dial

Check to make sure all your connections are of good quality, that all wires are neatly tucked out of the way of the brake/accelerator and that the SP Module is where you want it under the dash...you can use Velcro tape strips to secure it by a side of the box to a location under the dash. Using a 1/4 inch (approximate) drill bit, drill a hole in the dash panel if you wish and mount your switch in that location. It is secured to the dash with the hex nut already on the dial.

Place cover back on dash

Again, we are perfectionists, but take a look around your install area, make sure there are no loose electronics or tools and then button the dash panel back up.

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Installation Instructions (continued)

**OverBoost
Eliminator
(OBE)**

Find the MAP sensor wire shown in the picture. It is green. Use a supplied tap splice and tap into that wire. Connect the male connector of the OBE to that tap splice and ground the other end of the OBE to the strap ground location shown in the picture.

**Crank it up and
test our your
new found
horsepower!**

Start your testing with the dial in the full counter clockwise position. This is the minimal setting. As your vehicle warms up, add some power by moving the dial clockwise. 1/8th to 1/4 turn should provide noticeable gains.

Disclaimers

Like any other products SP Diesel cannot be held liable for incorrect installation. Installation of performing enhancing products is solely at your own risk. Check your local diesel emissions laws prior to installation. Except in cases of gross negligence the buyer holds SP Diesel Performance harmless.

**Gauges are
Recommended**

Due to the variances in Fords stock engine and transmission programming, the SP Power Module can have varying results on Exhaust Gas Temperatures (EGTs). For that reason we recommend the use of a pyrometer on your truck. If you choose to not install gauges prior to using your SP box, do not use more than 3/4 turn during heavy towing, and avoid spending more than 2-3 seconds at redline to avoid spiking EGTs.

**Remove before
servicing**

SP Diesel recommends you remove the SP Power box and/or any other SP Diesel product prior to visiting the dealer. This avoids confusion from the dealer who may not be familiar with these products. These products can also interfere with the normal troubleshooting procedures that are used in fixing some common engine problems where injector timing and pressure are related.

**Contact
Information**

You may contact SP Diesel in case of technical assistance, orders, or questions through the following:

spdiesel@comcast.net

SP Diesel Hotline: 410-375-9570

SP Diesel Performance Products SP Power Box

Installation Pictures

Ground Location



IVS Connection



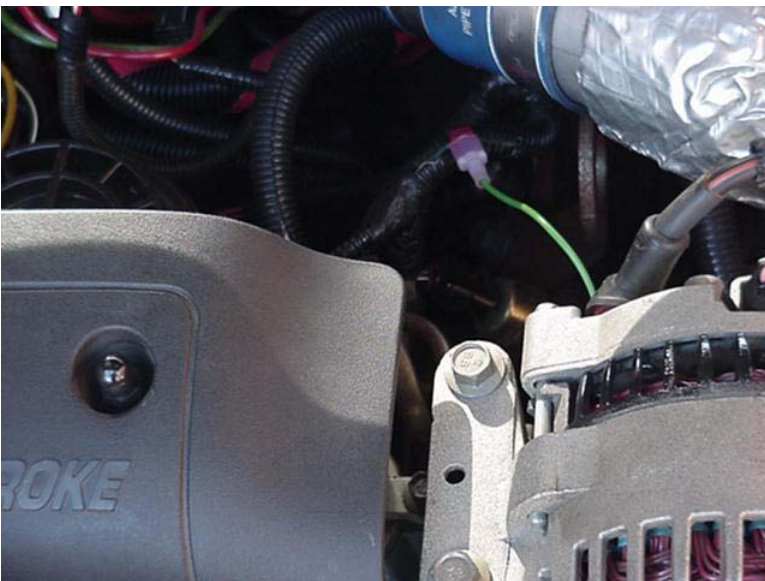
Installation Pictures

**Overboost
eliminator**

Ground is the left side of yellow wire, and tap is the right side onto the green map wire



ICP Location



Installation Pictures

ICP Closeup



Knob Location

