

SP Diesel Performance Engine Shutdown Timer

Thanks for your purchase!

The staff at SP Diesel Performance thanks you for your recent purchase of the SP EST. 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 or nearly 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 tools and items in and around your engine bay. 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 Performance EST Kit is a 3 on a scale of 10 (10 being the highest). Also as with any 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 Diesel EST
 - Parts kit with wire, connectors, and knob
-

Tools List

See the below chart of tools recommended for installation.

Tool	Purpose
Long-Nose Pliers	Used for making tap splices
Screwdriver	Used for securing terminal strip positions.
Zip Ties	Used for neatening up your install
Wire Cutter Crimper	Used for tap splices, cutting wire, and stripping wire.

Continued on next page

SP Diesel Performance Engine Shutdown Timer (continued)

Pop the dash panel cover, take a gander

Pop the dash panel of your truck and take a look at the driver's side of the truck, and familiarize yourself with the area just under the steering column. This is where your install will take place.

Terminal Positions

Use the below chart to reference the terminal positions on the EST as they relate to the wires you need to tap or make connections to.

Terminal Position	Is connected with the ____ wire provided with the EST to...	Which connects to ____ wire on the truck.
1	The black wire with a spade connector to the terminal strip	A suitable ground under the dash using the ring terminal.
2	The green (may use other color wire) with a spade connector to the terminal strip	A 12v Key-on source.
3	Not used in this application	Not used in this application
4	Not used in this application	Not used in this application
5	Large red wire with the spike connector or wrap around the terminal	In most/all model years, you will tap the LARGEST red/black Be sure you are tapping the larger of the two red/blk wires because there are two in the ignition wire assembly under the steering column.
6	Large yellow wire with the spike connector or wrap bare wire around the terminal.	The battery HOT. Tap into the Large Yellow wire

Secure your terminal strip

Secure your terminal strip connections with a flat blade or Phillips screwdriver. Nice and snug.

Recheck your connections after a few drive cycles

Recheck your connections after a few drive cycles just to be sure the terminals are securely fastened. You don't want a loose 30 amp ignition wire floating around under your dash!

SP Diesel Performance Engine Shutdown Timer (continued)

Key On Test Procedure

Once you have connected, double checked and are satisfied with your connections, it is time to test your new EST. Turn your EST adjuster to full counterclockwise. Key on for 30 seconds (don't start the engine), and then key off and remove the key. You should be able to see a LED light then go out almost immediately. If this test procedure works, add 1/8 turn and test again. The LED should remain lit for a minute or so and then turn off. If the test procedures check out, then you are ready to mount your adjuster knob, and button things back up. Your EST is now ready to work when your engine is running

Fuse Replacement

If at any time should your EST fail, check the fuses. Make sure you check this with the unit disconnected from the vehicle. If either fuse is blown, replace with exact amperage match.

Keyless entry issue

If your vehicle experiences an issue with the keyless entry operation after your engine has **turned off**, you may need a keyless entry jumper. This consists of a fusible link run from the large green/black wire, to the #5 terminal position on the EST. Use a 30 amp for this fusible link.

Note: It is normal for keyless entry to be deactivated when the engine is running. This jumper wire will not solve this issue.

Operation Instructions

Use the below chart to help estimate your runtime with the EST based on the season of the year.

Season	Runtime
Winter	30 seconds-2 minutes
Spring	1-3 minutes
Summer	3-5 minutes
Fall	1-3 minutes

The hotter the temperature outside the more runtime you will need. Under most circumstances the EGTs will reduce to 400 degrees pre-turbo almost immediately following parking the vehicle. The ideal shutdown temperature is generally considered to be 300 degrees pre-turbo. During extremely hot summer days, this may take up to 5 mins (maybe even a little longer).

SP Diesel Performance Engine Shutdown Timer (continued)

Keyless Run If you want to run in the store and grab a Super Big Gulp without shutting off your truck, you can crank the knob full open, and then remove the keys. If you install the supplied keyless entry jumper, your accessory controls will also work. So on that hot summer day, you can run in grab your soda and still have a chilled cabin when you come back. Same for winter months and heating the cabin.

Check Local Laws Check your local laws concerning leaving your car running while unattended.

Contact us for help You can contact us for technical help in the following ways:

- <http://www.spdiesel.com>
 - spdiesel@comcast.net
 - 410-375-9570
-

Install pictures Install pictures will be added to this document as soon as is humanly possible.
