

HYPERTECH® POWER PROGRAMMER III™



FOR 1996-2003 FORD 7.3L POWER STROKE DIESEL VEHICLES

STEP-BY-STEP INSTALLATION INSTRUCTIONS

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IMPORTANT

- The Power Programmer for 1996-2003 Ford Power Strokes are legal for sale or use on California pollution-controlled motor vehicles according to the CARB Executive Order process. In the interest of improved air quality, the California Air Resources Board (CARB) requires new vehicle and manufacturers of aftermarket parts to develop engine and emissions equipment that either reduce or maintain specific air pollutants affected by vehicle use. Both the California Vehicle Code (section 27156) and Federal Clean Air Act (administered by the Environmental Protection Agency) prohibit modifications that increase vehicle emissions. Aftermarket parts manufacturers, particularly in the high-performance segment, are required to obtain CARB approval in the form of executive Orders (E.O.s) for any product not qualifying as a direct replacement for an original equipment part. Hypertech includes meeting all E.O. requirements in its product development process. This guarantees that users of Hypertech "Power Tuning" products will meet certification requirements when registering, selling, or needing to pass various emissions tests or Inspection and Maintenance (I&M) programs administered by state or local enforcement agencies. Make sure that any emissions-related product you buy and install carries an E.O. number or is pending an E.O. Without this verification you are at risk, in potential violation of regulations and may incur unnecessary financial obligations during vehicle inspections or emissions tests. A CARB E.O. sticker is supplied. Keep this sticker in your vehicle or attach it inside the door jam as proof that the Power Programmer is street legal.
- Your vehicle's computer will not be programmed at the end of the programming menus until you select "TO CONTINUE, PRESS 'Y"", on page 8. Feel free to experiment with the programming choices without the fear of accidentally programming the wrong information into your vehicle's computer. You can make any choice that you want, change it again and again, without programming it into your vehicle's computer until you are absolutely ready.
- While the programmer is programming:
 - * DO NOT leave the vehicle while programming is in process.
 - * DO NOT program your vehicle without a fully charged battery. If after you have programmed your vehicle's computer with the Hypertech Power Programmer and you decide to change the tuning, <u>It is recommended that you recharge your vehicle's battery</u>. You may either drive the vehicle to charge the battery or use a battery charger. But either way, <u>MAKE SURE</u> that the battery holds a full charge.
 - * DO NOT disturb the cable while programming.
 - * The <u>ONLY</u> time you may remove the programmer cable from the DLC safely is <u>PRIOR</u> to pressing 'Y' to program your entries. However, any programming choices you have made <u>WILL NOT</u> be saved. *NOTE: It is <u>NOT</u> safe to unplug the programmer cable any time <u>AFTER</u> you have pressed 'Y' to program.*
 - * DO NOT turn the key off <u>UNLESS</u> instructed by the programmer.
 - * DO NOT start the engine.

Any of these actions will interrupt the programming process. The programmer is designed to recover from these actions, but they should be avoided.

HYPERTECH POWER PROGRAMMER III INSTALLATION INSTRUCTIONS OVERVIEW

Congratulations! You are the owner of the Power Programmer III, the latest in high-performance tuning technology. Now you can optimize your engine's tuning, as well as adjust other vehicle parameters (see table of contents), all at the touch of a button.

Your vehicle has an onboard computer that controls the engine and transmission. Inside your vehicle's computer is a FLASH memory chip which contains the vehicle's programming. The programmer actually reprograms this FLASH computer chip, according to your specifications, with Hypertech's Power Tuning. This is the only way an individual can reprogram some 1994-1995 and all 1996 and newer vehicles sold in the United States.

To reprogram your vehicle's computer, simply plug the programmer cable into the vehicle's diagnostic connector located under the dash panel on the driver's side. Set the parking brake. Next, turn the ignition key to RUN but do not start the engine. Press the ▲ arrow on the programmer. It will then identify your vehicle and display a series of options on its screen. When completed, turn the key to OFF and disconnect the cable from the diagnostic connector. Now you're ready to *Feel the Power!*

Hypertech's Power Tuning can be stored in only one (1) vehicle at a time. The Power Programmer can be reconnected to remove the Power Tuning and return the vehicle to the factory programming at any time. After you have performed this step, your vehicle will be in its stock configuration.

You may also reconnect your programmer at any time to change the programming. For example, if you have replaced your factory tires with different diameter tires, you will want to correct your speedometer, odometer, and automatic transmission shift points. Simply reconnect your programmer, answer the necessary option(s), and reprogram your vehicle. You do not have to return to stock first.

SECTION 1: PROGRAMMING INSTRUCTIONS

• Connect one (1) end of the provided cable to the programmer, as in Figure A, and tighten the two (2) thumbscrews.



• To locate the Data Link Connector (DLC) for the 1999-up Power Stroke, look under the driver's side of the dash panel near the right knee (Figure B) or on the passenger side under the dash panel for the 1996-1997 Power Stroke (Figure C).





- Plug the programmer cable into the DLC. Make sure the cable is plugged in completely to ensure a good connection.
- Set the parking brake and turn the ignition key to the RUN position, but do not start the engine.

IMPORTANT: -DO NOT LEAVE THE VEHICLE WHILE PROGRAMMING IS IN PROCESS. -MAKE SURE THE VEHICLE BATTERY IS FULLY CHARGED BEFORE PROGRAMMING. -DO NOT OPERATE ELECTRICAL ACCESSORIES (RADIO, WINDOWS, WIPERS, ETC.), AND DISCONNECT ANYTHING PLUGGED INTO THE CIGARETTE LIGHTER OR ACCESSORY PLUGS UNDER THE DASH WHILE PROGRAMMING. - DO NOT ATTEMPT PROGRAMMING WHILE THE VEHICLE IS CONNECTED TO A BATTERY CHARGER. Press the ▲ arrow on the programmer. The programmer will perform a system test. If the POWER and STATUS LEDs do not come on and the programmer does not perform the system test, make sure both ends of the cable are securely attached and press the the ▲ arrow again. These screens will now appear:



• The programmer will show copyright information. Then, this screen should appear:

COMMUNICATING WITH THE VEHICLE

 The programmer will check to see if any diagnostic trouble codes (DTCs) are found in the vehicle computer. Please note the DTC feature applies only to the 1999-2003 Power Strokes. This screen will now appear:

CHECKING FOR DIAGNOSTIC TROUBLE CODES (DTCS)

• If no DTCs are found, this screen will appear:

NO DTCS REPORTED

- If no DTCs are found, the Power Programmer will then go to Step A (Engine Tuning). If any DTCs are found, this screen will appear:
 - "X" DTCS REPORTED
- "X" represents the number of DTCs found in the vehicle. This screen will now appear:

VIEW	DTCS = Y
CLEAR	DTCS = N

• Press 'Y' to view the DTC(s) found in the vehicle. Press 'N' to clear the DTC(s) without viewing them. If you press 'Y', these screens will appear:

WRITE DOWN THE FOLLOWING DTCS AND REFER TO FACTORY MANUALS FOR EXPLANATION

```
DTC #1 --- PXXXX
NEXT DTC = N
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IMPORTANT NOTE

Hypertech, Inc. recommends proper diagnosis and repair of reported DTCs prior to programming. For Diagnostic Trouble Code (DTC) interpretations, refer to factory manuals, see your local parts dealer, or visit internet sites that provide this type of information. An example of such a website is:

www.bentleypublishers.com/tech/vw/vw.dtc.table.htm

• Press the 'N' button to view the next DTC (If any). Once you

NO MORE DTCS, TO VIEW AGAIN, PRESS Y TO CONTINUE, PRESS N

• Press 'Y' to view the DTC(s) again. Press 'N' to continue.

DTCS MUST BE CLEARED BEFORE CHANGING PROGRAM. TO CLEAR DTCS PRESS Y TO KEEP DTCS AND EXIT PROGRAM PRESS N

> TURNING POWER PROGRAMMER OFF

• Press 'Y' for the Power Programmer to clear the DTC(s).

CLEARING DTCS
ALL DTCS HAVE
BEEN CLEARED

• The Power Programmer has now successfully cleared the DTC(s)

TO ENTER POWER PROGRAMMER MODE, PRESS Y TO EXIT PROGRAM, PRESS N

- This screen shows if the VIN number is recognized as the VIN of the vehicle programmed.
- The programmer will display a series of options. For each option, press the 'Y' button to make a change. Press the 'N' button to make no change and proceed to the next option. For some options, you will use the ▲ and ▼ arrows to point to a particular selection. Pressing the 'Y' button will then lock in your selection. Please note the tire size option applies only to the 1999-2003 Power Strokes.

A. ENGINE TUNING

TO INSTALL HYPERTECH POWER TUNING, PRESS Y TO KEEP FACTORY ENGINE TUNING, PRESS N

• Press the 'Y' button to install Power Tuning. Press 'N' to keep the stock vehicle tuning.

USE UP/DOWN ARROWS TO CHOOSE PERFORMANCE TUNING. THEN PRESS Y TO SELECT OR N TO EXIT STAGE X

The programmer will then allow you to select from 3 stages of tuning to match your individual driving/towing needs. Most people prefer Stage 3 for maximum power and performance. Use the ▲ and ▼ arrows to scroll through the available stages and press 'Y' when the desired tuning is reached.

IF TIRE HEIGHT HAS BEEN CHANGED FROM ORIGINAL, PRESS Y IF TIRE HEIGHT HAS NOT BEEN CHANGED, PRESS N

• Press 'Y' if you have installed tires with an overall height that is different than the original factory tires. This feature will allow you to adjust your speedometer and part-throttle shifting (for automatic transmissions) for the new tire height. Press the 'Y' button to lock in the desired value. Pressing 'Y' will

USE UP/DOWN ARROWS TO SELECT CORRECT TIRE HEIGHT. THEN PRESS Y TO SELECT OR N TO EXIT XX.XX IN

• Use the ▲ and ▼ arrows to adjust the tire height in 1/4" increments between 29" and 34".

If you do not know your tire height, ask your tire dealer or measure a tire as follows:

- 1. Place a chalk mark on the tire where it contacts the pavement and also mark the pavement. These marks should be at the center of the tire footprint pointing straight down to the pavement.
- Roll the vehicle in a straight line until the chalk mark makes one revolution and is pointing straight down at the pavement again. Mark the pavement again at this new spot.
- 3. Measure (in inches) the distance between the two (2) marks on the pavement. Divide the measurement by 3.1416. This will give you the tire height in inches.

C. TRANSMISSION SHIFT FIRMNESS (AUTOMATICS ONLY)

Ear 1006 1007 Device Charles this senses will appear & IF VEHICLE HAS AN AUTOMATIC TRANSMISSION, PRESS Y IF VEHICLE HAS A MANUAL TRANSMISSION, PRESS N

For all Power Strokes, this screen will be displayed IF YOU HAVE INSTALLED AN AFTERMARKET SHIFT KIT, PRESS Y IF THERE IS NO AFTERMARKET SHIFT KIT INSTALLED, PRESS N

- Press 'Y' if you have installed an aftermarket shift kit into your automatic transmission. The shift kit has already firmed up your shifts. You DO NOT want your programmer to make them even firmer because transmission damage may occur.
- Press 'N' if you have not installed an aftermarket shift kit into your automatic transmission. For 1999-2003 Power Strokes, pressing 'N' will automatically install increased transmission shift firmness.

TO INCREASE TRANSMISSION SHIFT FIRMNESS, PRESS Y TO KEEP STOCK SHIFT FIRMNESS, PRESS N

D. REPORT

· After your last choice has been made, this screen will appear

YOU HAVE CHOSEN: TUNING: STAGE X.....TO CONTINUE, PRESS Y TO CANCEL, PRESS N

PLEASE WAIT...

• Press 'Y' to continue with programming, Press 'N' to return to Step A (Engine Tuning).

PLEASE TURN IGNITION BACK ON

· The programmer will now read the calibration of your vehicle

READING COMPUTER
Х%

NOTE: This Step may take up to twenty (20) minutes to complete.

F. PROGRAMMING

coroon will now

PLEASE TURN OFF IGNITION AND PRESS Y

0.01

Next this screen will annear:

PLEASE TURN IGNITION BACK ON

Х%

NOTE: Programming may take up to thirty (30) minutes to complete.

- While the unit is programming, the following is EXTREMELY IMPORTANT:
 - * DO NOT LEAVE THE VEHICLE WHILE PROGRAMMING IS IN PROCESS.
 - * DO NOT DISTURB THE CABLE.
 - * DO NOT TURN THE KEY OFF.
 - * DO NOT START THE ENGINE.
- Any one of these actions will disturb the programming process. The programmer is designed to recover from these actions, but they should be avoided.

• When programming reaches 100%, the following screens will appear:

PLEASE TURN OFF IGNITION AND PRESS Y

PLEASE WAIT...

PLEASE TURN KEY TO RUN POSITION, BUT DO NOT CRANK ENGINE WHEN FINISHED, PRESS Y

• **NOTE**: If the vehicle is equipped with a factory-installed anti-theft system (PATS), the following screen will appear:

RESETTING PCM X%

• Programming is complete when the following screen appears:

SUCCESSFULLY PROGRAMMED VEHICLE! TO QUIT, PRESS Y

- Press 'Y' and the programmer will turn itself off. Turn the ignition key to OFF for at least ten (10) seconds. Remove the programmer cable from the DLC under the dash panel.
- Start the engine and make sure the Check Engine light on your instrument cluster goes out (If it stays on or flashes, call Hypertech at 901-382-8888). Warm up the engine and make sure it is running smoothly.

SECTION 2: PROGRAMMING BACK TO STOCK OR CHANGING OPTIONS

You may return your vehicle's computer to the stock programming at any time after using your programmer. Follow these steps to return your vehicle to the stock tuning or change your option settings.

• Reconnect the programmer to the DLC. Next, turn the ignition key to RUN but do not start the engine. Press the ▲ arrow and wait for the programmer to identify your vehicle, just as before. Since the programmer has programmed your vehicle's computer, this screen will appear:

POWER	PROGRAMMER
HAS	BEEN USED

• The programmer will then check again for any diagnostic trouble codes in the vehicle computer (see Section 1 on page 5). Then, this screen will appear:

TO ACCESS POWER PROGRAMMER FEATURES, PRESS Y TO RETURN VEHICLE TO FACTORY SETTINGS, PRESS N

• If you press 'Y', the programmer will return to Step A (Engine Tuning). If you press 'N', the following screen will appear:

RETURNING TO THE STOCK CALIBRATION TO CONTINUE, PRESS Y. TO CANCEL, PRESS N

- If the 'Y' button is pressed, programming back to stock will begin. The screens shown will be just like those shown in Section E (Programming). After the programmer reaches 100%, press the 'Y' button to quit and remove the DLC cable as before. (See NOTE on page 10.)
- Your vehicle's computer will be in a completely stock tuning configuration.

SECTION 3: TROUBLESHOOTING GUIDE

The programmer will notify you of incidents that are out of the ordinary. Here are some of the screens that may be encountered.

1. CABLE REMOVED WHILE PROGRAMMING

• The programmer will lose power during programming, if the cable is removed for any reason. If this happens, leave the ignition in the OFF position, reconnect the cable and press the ▲ arrow. The programmer will identify your vehicle and then display:

POWER	PROGRAMMER
HAS P	ROGRAMMED.

• The programmer will then check for any diagnostic trouble codes (DTCs), then ask if you wish to enter programming mode. If you enter programming mode, these screens will appear:

TURN IGNITION ON AND PRESS Y.

PROGRAMMING WAS INTERRUPTED! TO CONTINUE, PRESS Y.

RETURNING TO STOCK CALIBRATION. PRESS Y TO CONTINUE. TO CANCEL, PRESS N.

PLEASE TURN OFF IGNITION AND PRESS Y.

PLEASE TURN THE IGNITION BACK ON.

• The programmer will then program the vehicle back to stock. The following screen will appear:

WRITING COMPUTER

NOTE: If the programmer was interrupted during the Reading stage, programming will NOT be considered interrupted.

2. ATTEMPTING TO PROGRAM A DIFFERENT VEHICLE

• If you attempt to program the computer in another vehicle without first programming the original vehicle back to stock, the following screen will appear:

ERROR: 93	
PRESS Y	

• The VIN number of the vehicle does not match the VIN number that is stored in the programmer from the last vehicle programmed.

3. CALIBRATION NOT FOUND

• If your vehicle has a factory program that is not recognized by the programmer, it cannot continue. This screen will appear:

ERROR: 6D	
PRESS Y	

• Call Hypertech at the provided phone number on the programmer screen. Please have your vehicle VIN number ready. The Hypertech technical staff will instruct you what to do.

4. SOMEONE REPROGRAMS YOUR COMPUTER

 If a service facility reprograms your vehicle's computer with an update, your Hypertech Power Tuning will be erased. However, all you need to do is reconnect the programmer and press the ▲ arrow. The following screen will appear:

WARNING: HYPERTECH WARRANTY WILL BE VOIDED IF THIS POWER PROGRAMMER IS NOT BEING USED ON THE ORIGINAL VEHICLE IT WAS PURCHASED AND YOU PROCEED. TO CONTINUE, PRESS Y.

• If you press 'N', the programmer turns itself off. If you press 'Y', you get the following screen:

IF THE VEHICLE'S CALIBRATION HAS BEEN UPDATED BY A SERVICE FACILITY, PRESS Y IF VEHICLE HAS NOT BEEN UPDATED, PRESS N

- Press 'Y' and the programmer will read the new calibration and then go through the programming options in Section 1.
- If the service facility does not load a VIN number into the calibration, after the programmer reads the calibration this screen will appear:

ERROR: 95 PRESS Y

• Call Hypertech at the provided phone number on the programmer screen. The programmer will need to be sent in to evaluate the new calibration of the vehicle.

5. BLANK SCREEN

If the programmer does not turn on when the ▲ arrow is pressed, make sure that both ends of the cable are fully inserted. Press the ▲ arrow again. If the programmer still does not turn on, check for a blown fuse in the vehicle fuse panel for either the cigarette lighter or the accessory circuit. Replace with the proper amperage fuse. Call Hypertech at 901-382-8888, if this does not correct the problem.

6. CHECK ENGINE (CE) OR SERVICE ENGINE (SES) LIGHT

• CE & SES lights are to alert the driver when abnormal conditions occur. If the vehicle's computer senses excessive turbocharger boost when operating at high power levels, or under heavy load, the CHECK ENGINE or SERVICE ENGINE light will come on and *stay* on <u>until</u> the boost pressure returns to an acceptable level for those driving conditions. If you *frequently* experience this condition under <u>your</u> normal driving conditions, it is advised that you reduce the Stage of tuning that you have programmed into your vehicle. For example, if you programmed Stage 3 tuning, reprogram the vehicle to Stage 2 tuning and see if the condition still exists. If so, reprogram the vehicle to Stage 1 tuning. However, it is not necessary to reduce your tuning stage unless you experience this condition on a regular basis.

NOTE: A vehicle that sets the CHECK ENGINE or SERVICE ENGINE light with the stock tuning may indicate other problems and should be evaluated by an authorized service center prior to using the Power Programmer.

IF YOU HAVE ANY PROBLEMS OR QUESTIONS, PLEASE CALL OUR TECHNICAL STAFF AT 901-382-8888

HOURS: 8AM - 5PM Central Time, Monday - Friday Hypertech, Inc. 3215 Appling Road Bartlett, TN. 38133-3999 Visit our website at www.hypertech.com or e-mail us at sales@hypertech.com

What To Do Before Taking Your Vehicle In For Service

If you take your vehicle to a dealer or mechanic for service, you must first remove the Hypertech Power Tuning and restore the stock programming. This is because diagnostic devices expect to find stock calibrations and will often overwrite the program if the latest calibration is not found in the computer memory. This will result in the loss of your Hypertech Power Tuning data. The Hypertech Power Programmer has an internal security system that allows its Power Tuning program to be installed in only one vehicle at a time. In order to maintain the most current stock calibrations for your vehicle, the Power Programmer is designed to allow you to restore the stock tuning before you take your vehicle in for service so that the service technician can upgrade your stock calibrations. After the service is complete, you can reinstall your Hypertech Power Tuning. If you have any questions related to service issues, please call Hypertech at 901-382-8888.

PRODUCT WARRANTY

Factory Direct Limited Lifetime Warranty

All HYPERTECH Power Tuning Products* are warranted against defects in materials or workmanship. Hypertech's liability under this warranty shall be limited to the prompt correction or replacement of any defective part of the product which HYPERTECH determines to be necessary. This Limited Lifetime Warranty is to the original purchaser for as long as he or she owns the vehicle on which the product is originally installed, providing all the information requested is furnished. You must retain a copy of your original sales invoice or receipt. Without proper documentation, a service fee will be applied. **Resold units are <u>NOT</u> covered under this warranty.**

* Power Tuning products are Power Chips, Power Modules, Power Tuning Modules, HyperPACs, and Power Programmers.

Typical Performance Gains

NOTE: All dynamometer tests are performed under controlled conditions. Results may vary, depending on the specific vehicle, altitude, temperature, fuel used, and various other conditions that affect vehicle performance. Power gains shown are specific to the vehicle tested and representative of the average gains verified. For a color, printable power graph of your particular application, check out our website at www.hypertech.com.



Hypertech Merchandise

T-Shirts

Available in long or short sleeve, these T-shirts are high-quality, printed in full-color and display the Hypertech Power Tuning logo. Available in sizes ranging from Small to XXX-large.

Polo Shirts

These short-sleeve polo shirts available in blue, red, white, or black are high-quality 100% cotton and have a full-color Hypertech logo embroidered on the left chest. Available in sizes ranging from medium to XX-large.

T-Shirts

Short Sleeve - Small
Short Sleeve - Medium
Short Sleeve - Large
Short Sleeve - X-Large
Short Sleeve - XX-Large
Short Sleeve - XXX-Large
Long Sleeve - Medium
Long Sleeve - Large
Long Sleeve - X-Large
Long Sleeve - XX-Large
Long Sleeve - XXX-Large



#	T-Shirts (cont'd)	Part #
	Long Sleeve - Medium	606
	Long Sleeve - Large	607
	Long Sleeve - X-Large	608
	Long Sleeve - XX-Large	609
	Long Sleeve - XXX-Large	610
	Polo Shirts (Order part# &	color)
	Medium	638
	Large	639
	X-Large	640
	XX-Large	641

Baseball Caps

Hypertech baseball caps are available in three styles and come with a full-color Hypertech logo embroidered on the front. All baseball caps are one-size-fits-all.

	Part #
Solid Navy Blue	633
Denim w/Khaki Bill	634
Khaki w/Navy Blue Bill	635

Coffee Mugs

Enjoy your morning coffee with the Hypertech coffee mug, displaying the Hypertech logo and engine icon in full color on both sides - **Part #626**.





To Place An Order, Call Hypertech at 901-385-1888.



Make Tracks To Our Website

If you'd like to see how much horsepower and torque Hypertech Power Tuning[™] can deliver for your car or truck, visit our website for the latest dyno charts for the most popular Dodge, Ford, & GM vehicles. If you don't find the dyno chart for your application listed on our website, please send us an email (sales@hypertech.com) for the horsepower and torque gains of your particular application.

www.hypertech.com

