



HYPERTECH® POWER PROGRAMMER III™



**FOR JEEP WRANGLER/
CHEROKEE/GRAND CHEROKEE
WITH 4.0L I-6 ENGINE**

STEP-BY-STEP INSTALLATION INSTRUCTIONS

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IMPORTANT

- The Power Programmer for the Jeep 4.0L Wrangler/Cherokee/Grand Cherokee is 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 “PRESS ‘Y’ TO PROGRAM” on page 8. Feel free to experiment with the programming choices without the fear of accidentally programming the wrong information into your vehicle 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, you decide to change the tuning, It is recommended that you recharge your vehicle’s battery. You may either drive the vehicle to charge the battery or use a battery charger. But either way, **MAKE** sure that the battery holds a full charge.**
 - * **DO NOT disturb the cable while programming.**
 - * **The ONLY time you may remove the programmer cable from the DLC safely is **PRIOR** to pressing ‘Y’ to program your entries. However, any programming choices you have made **WILL NOT** be saved. *NOTE: It is **NOT** safe to unplug the programmer cable any time **AFTER** you have pressed ‘Y’ to program.***
 - * **DO NOT turn the key off UNLESS 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 conditions, 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.

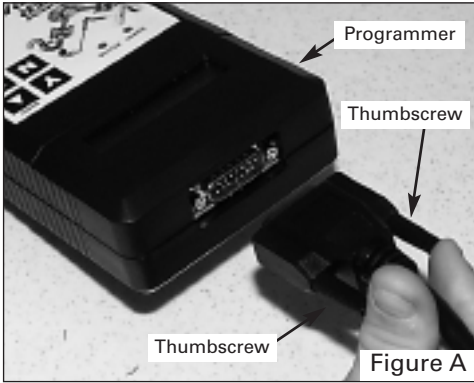
To reprogram your vehicle's computer, simply plug the programmer cable into the vehicle's diagnostic connector located under the dash panel on the driver's side. Set the parking brake. Next, turn the ignition key to RUN but do not start the engine. Press the ▲ arrow on the programmer. It will then identify 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. When you install Hypertech's Power Tuning program into your vehicle, the programmer reads and stores your vehicle's factory programming. Because your factory program is stored in the programmer, you can reconnect the programmer to your vehicle and use it to return to the factory programming at any time. After you have done this, your vehicle will be in its stock configuration.

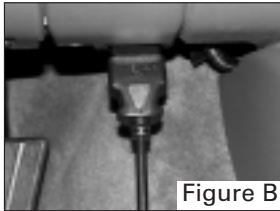
You may also reconnect your programmer at any time to change the programming. For example, if you want to raise your RPM "Rev" limiter, simply reconnect your programmer, answer the necessary option(s), and reprogram your vehicle. You do not have to return to stock first.

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.



- See Figure B. To locate the Data Link Connector (DLC), look under the driver's side of the dash panel near the right knee position.



- 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.) while programming.
- DO NOT** attempt programming while the vehicle is connected to a battery charger.

- Press the ▲ arrow on the programmer. The following displays should appear immediately on the LCD screen (where X.X.X.X is the version number):

HYPERTECH
POWER PROGRAMMER

VERSION
X.X.X.X

FOR XXXX-XXXX JEEP
4.0L I-6

- If these screens do not appear, make sure that both ends of the cable are securely attached and press the ▲ arrow again.
- The programmer will show applications and copyright information. The programmer will then 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 option. Pressing the ‘Y’ button will then lock in your selection. This screen will now appear:

CHECKING FOR DIAGNOSTIC
TROUBLE CODES (DTCs)

- The Power Programmer is checking the vehicle for any 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 DTCs found in the vehicle. Press 'N' to clear the DTCs 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

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.bentlypublishers.com/tech/vw/dtc.table.htm

- Press the 'N' button to view the next DTC (if any). Once you have viewed all the DTCs, this screen will appear:

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

- Press 'Y' to view the DTCs again. Press 'N' to continue. If you press 'N', this screen will appear:

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

- Press 'N' to exit the program. This screen will appear:

TURNING POWER
PROGRAMMER OFF

- Press 'Y' for the Power Programmer to clear the DTCs. These screens will now appear:

CLEARING DTCs

ALL DTCs HAVE
BEEN CLEARED

- The Power Programmer has now successfully cleared the DTCs found in the vehicle computer. This screen will now appear:

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

A. ENGINE TUNING

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

- Press the ‘Y’ button to include engine tuning. Press ‘N’ to keep the stock vehicle tuning. If ‘Y’ is pressed, this screen will appear:

TUNING:
XX OCTANE

- Use the ▲ and ▼ arrows to choose engine tuning for either regular or premium octane gasoline. Press ‘Y’ to lock in your choice.

B. TOP-SPEED LIMITER

TO ADJUST THE TOP SPEED LIMIT TO MATCH SPEED RATING OF HIGH-PERFORMANCE TIRES, PRESS Y.
TO KEEP STOCK SPEED LIMIT, PRESS N.

- Press the ‘N’ button to keep your vehicle’s stock top-speed limiter and skip to the next option.
- If you have installed factory-approved high-performance tires, press the ‘Y’ button to change your vehicle’s top-speed limiter to match the speed rating of those tires. The speed rating or speed symbol will be found on the sidewall of your tires. Use the ▲ and ▼ arrows to see the top-speed limits available for your vehicle. Press ‘Y’ to lock in the correct top-speed limit. Here are the corresponding symbols and maximum top-speed limits that can be programmed into your vehicle:

T - 116 MPH
H - 128 MPH

C. REV LIMITER

TO ADJUST THE ENGINE REV LIMIT, PRESS Y.
TO KEEP THE STOCK ENGINE REV LIMIT, PRESS N.

- Press ‘N’ to keep the stock engine rev limiter. Making this choice will skip to the next option.
- Press ‘Y’ to adjust the engine rev limiter to a value other than stock. The stock rev limiter may vary depending on year and engine size of the vehicle. Please refer to the owner’s manual for the stock engine rev limit. This screen will now appear:

REV LIMIT:
STOCK

- Press the ▲ and ▼ arrows to increase or decrease the engine rev limiter. The rev limiter can be increased or decreased in 100 RPM increments. Press ‘Y’ to lock in the desired value.

D. REPORT

- After your last choice has been made, this screen will appear and list all of your choices:

YOU HAVE SELECTED THE FOLLOWING OPTIONS...
PRESS Y TO PROGRAM, PRESS N TO CANCEL

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

E. PROGRAMMING

- The programming will begin. This display will show percentage completion while the programming is taking place:

PROGRAMMING
X%

NOTE: Programming may take up to four (4) minutes to complete.

- While the unit is programming, the following are **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 conditions, but they should be avoided.
- When programming reaches 100%, the following screens will appear:

TURN IGNITION OFF

PLEASE WAIT...

TURN IGNITION ON

- Programming is complete when the following screen appears:

SUCCESSFULLY PROGRAMMED VEHICLE
PRESS Y TO QUIT

- 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.
- **CHECK FOR DETONATION.** Whether you have selected Power Tuning for premium (the highest octane rating available in your area) or regular octane gasoline, you need to check for detonation. This is a “pinging” sound heard during heavy throttle acceleration, indicating the presence of detonation. Make certain you are using gasoline intended for the Power Tuning you have installed. If any “pinging” sound is heard, you should immediately back off the throttle. To discuss, call Hypertech at 901-385-1888.

SECTION 2: PROGRAMMING BACK TO STOCK OR CHANGING OPTIONS

You may return the vehicle’s computer back to stock programming at any time after using your programmer. Follow these steps to restore 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:

PROGRAMMER HAS BEEN USED
TO TUNE VEHICLE, PRESS Y. TO RETURN TO STOCK, 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 PROGRAM, PRESS Y. TO CANCEL, PRESS N.

- If the ‘Y’ button is pressed, programming back to stock will begin. After the programmer reaches 100%, press the ‘Y’ button to quit and remove the DLC cable as before.
- Your vehicle’s computer will now 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. UNABLE TO READ CALIBRATION

UNABLE TO RETRIEVE
VEHICLE IDENTIFICATION

- This screen will appear if the programmer is unable to read the calibration of your vehicle's computer. Take these steps to correct the problem:
 1. Make sure that the ignition key is in the RUN position and that the engine is not running.
 2. Make sure that both ends of the cable are securely attached.
 3. Wait at least thirty (30) seconds.
 4. Press the ▲ arrow.
 5. If the four (4) steps above do not correct the problem, call Hypertech at 901-382-8888.

2. CABLE REMOVED WHILE PROGRAMMING

- The programmer will lose power during programming if the cable is removed for any reason. If this happens, simply reconnect the cable and press the ▲ arrow. If at any time the cable is removed while programming, the programmer will return the vehicle computer to the stock tuning.

3. 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:

VEHICLE MISMATCH. RETURN TO STOCK BEFORE PROGRAMMING ANOTHER VEHICLE
PRESS Y

4. CALIBRATION NOT FOUND

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

VEHICLE NOT COMPATIBLE
PRESS Y

5. SOMEONE REPROGRAMS YOUR COMPUTER

- If a service facility reprograms your vehicle's computer with an update, your Hypertech Power Tuning will be erased. If this occurs, one of these screens will appear:

VEHICLE NOT COMPATIBLE

PRESS Y

VEHICLE CALIBRATION UPDATED BY SERVICE FACILITY

PRESS Y

6. 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. Call Hypertech at 901-382-8888, if this does not correct the problem.

**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

SPECIALTY AUTO PARTS CONSUMER'S BILL OF RIGHTS

Your Rights To Personalize Your Vehicle

- Article 1: You have the **Right** to buy high-quality, reliable aftermarket performance and specialty parts, accessories, and styling options.
- Article 2: You have the **Right** to use high-quality aftermarket parts and know that your new vehicle warranty claims will be honored. In fact, your vehicle dealer may not reject a warranty claim simply because an aftermarket product is present. A warranty denial under such circumstances may be proper only if an aftermarket part caused the failure being claimed.
- Article 3: You have the **Right** to install and use emissions-legal aftermarket performance parts without incurring hassles and onerous procedures during state vehicle emissions inspections.
- Article 4: You have the **Right** to actively oppose any proposed (or existing) laws or regulations that will reduce your freedom to use aftermarket automotive parts and service or will curtail your ability to take part in the automotive hobbies of your choice.
- Article 5: You have the **Right** to patronize independent retail stores and shops for vehicle parts and service. The U.S. aftermarket offers the world's finest selection of performance and specialty parts, accessories, and styling options. These aftermarket products satisfy the most discriminating customers seeking personalized vehicles for today's lifestyle.

The Consumer's Bill Of Rights courtesy of
Specialty Equipment Market Association (SEMA)

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 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

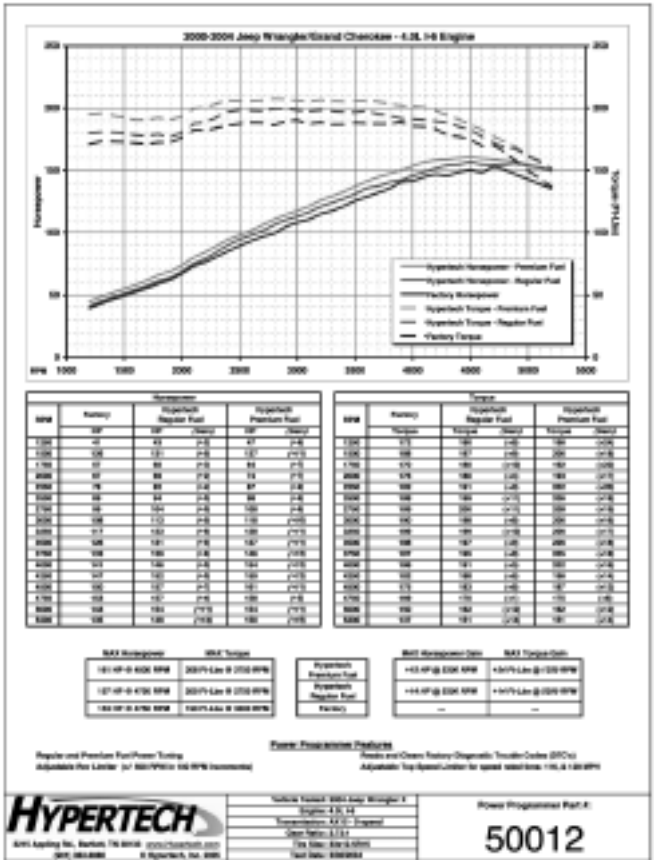
Factory Direct Limited Lifetime Warranty

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 NOT covered under this warranty.**

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

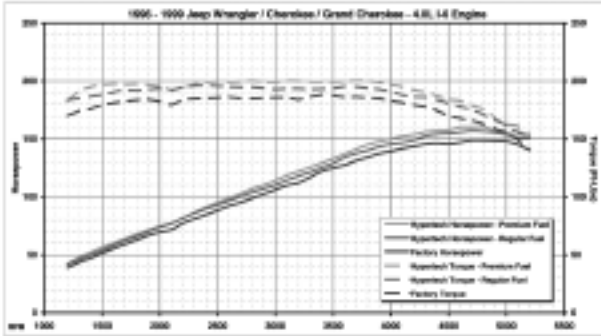
Typical Performance Gains

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.**



Typical Performance Gains

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RPM	Factory	Hypertech Regular Fuel		Hypertech Premium Fuel	
		Horsepower	Torque	Horsepower	Torque
1500	60	62	71.0	65	72.0
1750	67	69	77.0	70	77.0
2000	77	79	85.0	80	86.0
2250	87	89	93.0	88	94.0
2500	97	99	101.0	96	102.0
2750	107	109	109.0	104	110.0
3000	117	119	117.0	112	118.0
3250	127	129	125.0	120	126.0
3500	137	139	133.0	128	134.0
3750	147	149	141.0	136	142.0
4000	157	159	149.0	144	150.0
4250	167	169	157.0	152	158.0
4500	177	179	165.0	160	166.0
4750	187	189	173.0	168	174.0
5000	197	199	181.0	176	182.0
5250	207	209	189.0	184	190.0
5500	217	219	197.0	192	198.0

RPM	Factory	Hypertech Regular Fuel		Hypertech Premium Fuel	
		Torque	Torque	Torque	Torque
1500	100	102	115.0	105	118.0
1750	110	112	123.0	115	126.0
2000	120	122	131.0	125	134.0
2250	130	132	139.0	135	142.0
2500	140	142	147.0	145	150.0
2750	150	152	155.0	155	158.0
3000	160	162	163.0	165	166.0
3250	170	172	171.0	175	174.0
3500	180	182	179.0	185	182.0
3750	190	192	187.0	195	190.0
4000	200	202	195.0	205	198.0
4250	210	212	203.0	215	206.0
4500	220	222	211.0	225	214.0
4750	230	232	219.0	235	222.0
5000	240	242	227.0	245	230.0
5250	250	252	235.0	255	238.0
5500	260	262	243.0	265	246.0

MAX Horsepower 151 HP @ 4500 RPM 167 HP @ 4750 RPM 188 HP @ 5250 RPM	MAX Torque 197 Ft.Lb @ 3750 RPM 180 Ft.Lb @ 3500 RPM 180 Ft.Lb @ 3000 RPM	Supercast Premium Fuel Supercast Regular Fuel Factory	MAX Horsepower Gain +12 HP @ 4500 RPM +17 HP @ 4750 RPM +22 HP @ 5250 RPM	MAX Torque Gain +19 Ft.Lb @ 3750 RPM +16 Ft.Lb @ 3500 RPM +16 Ft.Lb @ 3000 RPM
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Power Programmer Features
 Registered Premium Fuel Power Tuning
 Adaptive Rev Limiter (if 2001 Model or 4.0L Performance Model)
 Reads and Clears Factory Diagnostic Trouble Codes (DTCs)
 Inductance Free Speed Limiter for speed retention (15, 0, 0, 0)

HYPERTECH
 2200 Harding Rd., Sparks, TN 38477 www.hypertech.com
 (901) 865-1000 © Hypertech, Inc. 2004

Vehicle Model: 1995-1999 Jeep Wrangler
Engine: 4.0L I4
Transmission: 5-Speed Manual
Year Model: 2004
Year Make: 2004
Year Code: 50012B

Power Programmer Part #:
50012

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	Part #	T-Shirts (cont'd)	Part #
Short Sleeve - Small	600	Long Sleeve - Medium	606
Short Sleeve - Medium	601	Long Sleeve - Large	607
Short Sleeve - Large	602	Long Sleeve - X-Large	608
Short Sleeve - X-Large	603	Long Sleeve - XX-Large	609
Short Sleeve - XX-Large	604	Long Sleeve - XXX-Large	610
Short Sleeve - XXX-Large	605		
Long Sleeve - Medium	606	Polo Shirts (Order part# & color)	
Long Sleeve - Large	607	Medium	638
Long Sleeve - X-Large	608	Large	639
Long Sleeve - XX-Large	609	X-Large	640
Long Sleeve - XXX-Large	610	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

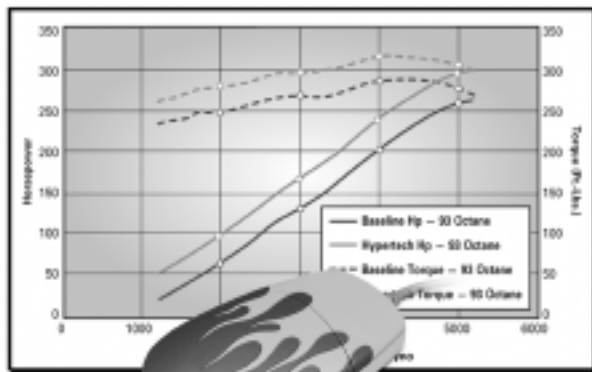
Enjoy your morning coffee with the Hypertech coffee mug, displaying the Hypertech logo and engine icon in full color on both sides - **Part #626**.



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

Notes

Notes



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

HYPERTECH

The World's Leader in High-Performance Engine Tuning For Computer-Controlled Vehicles