

PP3

HYPERTECH® POWER PROGRAMMER III™



**FOR LS1 CAMARO/FIREBIRD &
LS1/LS6 CORVETTE**

STEP-BY-STEP INSTALLATION INSTRUCTIONS

TABLE OF CONTENTS

Important Information	2
Overview	3
Section 1: PowerStat™ Installation	4
Section 2: Programming Instructions	6
Diagnostic Trouble Code (DTC) Information ...	8-9
Engine Tuning	10
Rev Limiter	10
Electric Cooling Fan Operating Range	11
Top-Speed Limiter	12
Tire Size	12
Rear Gear Ratio	13
Transmission Shift Point RPM	14
Transmission Shift Firmness	16
Report	17
Programming	17
Section 3: Programming Back To Stock/Changing Options	19
Section 4: Troubleshooting Guide	20

IMPORTANT

- The Power Programmer for GM LS1 vehicles 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 BEGIN PROGRAMMING” on page 17. 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 to, change it again and again, without programming it into your vehicle 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.

- You will achieve best performance if you replace your stock thermostat with a Hypertech 160° or 180° PowerStat. The programmer will work with a stock thermostat but our best performance tuning was specifically developed for a cooler running engine. **The Hypertech Powerstat is NOT available for 2004 LS1/LS6 vehicles.**
- Hypertech Power Tuning was developed for premium grade gasoline (the highest octane rating available in your area). Make sure you have premium gasoline in your vehicle ***before*** installing Hypertech's engine Power Tuning.

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: POWERSTAT INSTALLATION

Tools needed:

10mm socket, ratchet, and extension

Slip joint pliers

DEX-COOL anti-freeze coolant (GM part #1234-6290)

- **WARNING: NEVER ATTEMPT TO CHANGE A THERMOSTAT ON A HOT ENGINE**
- **SERIOUS INJURY CAN OCCUR IF THE RADIATOR CAP IS REMOVED WHILE THE COOLING SYSTEM IS HOT**
- **THE ENGINE SHOULD ALWAYS BE COLD WHEN INSTALLING THE POWERSTAT**

NOTE: After installing the PowerStat, if any coolant needs to be added to the vehicle, **make sure you put the same color coolant back into the vehicle.** If your vehicle has orange coolant, replace with orange coolant. If green, replace with green.

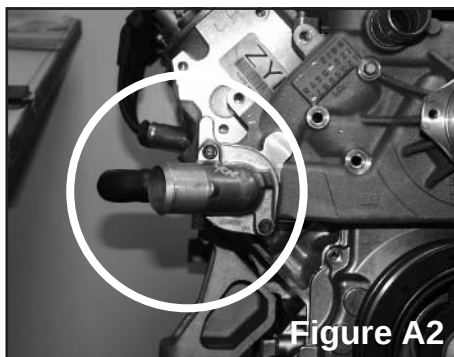
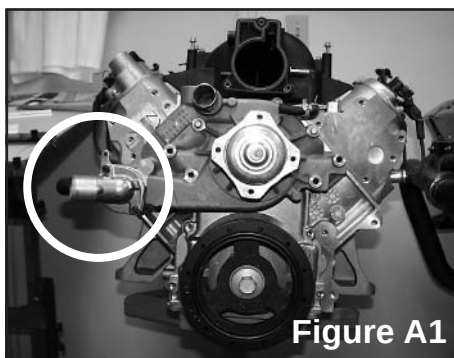
NOTE: The thermostat in this engine is a “housing” style thermostat. It is located on the front of the water pump assembly at the bottom edge of the passenger side cylinder head. (See Figure A1 & A2)

Part #1014 - 160° PowerStat (1997-2003 LS1/LS6 ONLY)

Part #1015 - 180° PowerStat (1997-2003 LS1/LS6 ONLY)

1. Make sure that the vehicle is parked on a level surface before installing the Hypertech PowerStat.
2. Allow the vehicle coolant to cool.
3. Turn the surge tank cap counter-clockwise very slowly to remove the pressure from the cooling system. If you hear a hissing or spurting sound, stop and let the pressure bleed off. When the hissing or spurting sound goes away, finish removing the surge tank cap.
4. Open the radiator drain plug and drain the coolant from the vehicle.
5. Remove the radiator hose from the stock thermostat.
6. Remove the two (2) 10mm bolts holding the stock thermostat to the engine. (You may want to use an extension on the socket wrench for easier access.)
7. Lift out the stock thermostat. Use a flathead screwdriver to gently pry, if necessary. Clean all the sealing surfaces.
8. Install the Hypertech PowerStat, making sure the O Ring is sealed properly. For ease of installation, you may want to apply a small amount of grease to the PowerStat™ to help retain the O Ring.
9. Reinstall the thermostat bolts and any hoses removed. Torque the bolts to 7 ft.-lbs.
10. Close the radiator drain plug.
11. Fill the cooling system with the proper water/coolant mixture. Refer to the owners manual for the correct ratio. Pour the coolant into the surge tank.
12. Start the engine and let it idle for approximately one (1) minute.
13. Reinstall the surge tank cap.

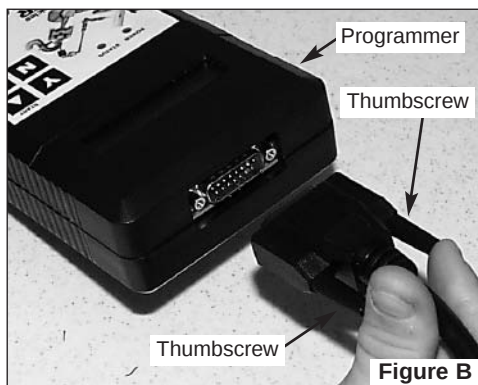
14. Cycle the engine from idle to 3000 RPM in thirty (30) to forty (40) second intervals. This needs to be done until the engine coolant temperature reaches 210°F or 99°C.
15. When the cooling system is at the proper temperature, shut off the engine. Remove the surge tank cap as described in Step 3.
16. Leaving the surge tank cap off, start the engine and let it idle for one (1) minute. Then, fill the surge tank with the coolant mixture to 1/2" above the "Fill Cold" mark on the surge tank. Now reinstall the surge tank cap.
17. Repeat Step 14 once more, then shut off the engine.
18. Allow the vehicle coolant to cool, then remove the surge tank cap again as described in Step 3. Top off the coolant system to 1/2" above the "Fill Cold" mark on the surge tank, then tighten the surge tank cap.



IMPORTANT:
NEVER MIX ORDINARY ANTI-FREEZE (GREEN)
WITH DEX-COOL ANTI-FREEZE (ORANGE)
OR YOU MAY DAMAGE THE COOLING SYSTEM

SECTION 2: PROGRAMMING INSTRUCTIONS

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



- See Figures C & D. Locate the Data Link Connector (DLC) under the driver's side of the dash panel near the right knee position.



CORVETTE

- For Corvette, the DLC is centered with the steering wheel under the dash. The Data Link Adapter plugs in vertically.



CAMARO/FIREBIRD

- For Camaro/Firebird, the DLC is near the driver's right knee. The Data Link Adapter plugs in horizontally.
- 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.**
- THE KEY MUST REMAIN IN THE RUN POSITION, WITHOUT THE ENGINE RUNNING, DURING THE ENTIRE PROGRAMMING PROCESS.**
- 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 LS1 AND LS6
GM CARS

- 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 identify your vehicle and perform a self-test. A few seconds after the self-test is complete, the VIN number of the vehicle will be shown and a screen should appear with a description of your vehicle:

YOUR VEHICLE IS:
XXXX CHEVROLET CORVETTE LS1

- If this screen does not appear, make sure that the key is in the RUN position with the engine NOT running.

- 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 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 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

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 refer to 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 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 DTC(s) 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 DTC(s). These screens will now appear:

CLEARING DTCs

ALL DTCs HAVE
BEEN CLEARED

- The Power Programmer has now successfully cleared the DTC(s) found in the vehicle computer. This screen will now appear:

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

IMPORTANT NOTE: The Power Programmer for the LS6 Corvette offers engine tuning (93 octane fuel), rev limiter, cooling fan, top-speed limiter, and tire size options ONLY.

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 based on premium gasoline (the highest octane rating available). Press ‘N’ to keep the stock vehicle tuning. **On 1997-1999 LS1 vehicles**, use the ▲ and ▼ arrows to select RFG or non-RFG tuning. These tuning options are designed for areas that may have RFG fuel (see below for details).

Do You Know What You’re Pumping Into Your Vehicle?

For purposes of improved air quality, availability of Reformulated gas (RFG) is being required in some parts of the country. Hypertech is including Power Tuning for select vehicles using this gasoline, sometimes called “oxygenated fuel”. We encourage our customers to identify the type of gasoline being used and select the Hypertech Power Tuning accordingly.



B. REV LIMITER

TO ADJUST ENGINE REV LIMITER, PRESS Y
TO KEEP 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 limiter.

USE UP/DOWN ARROWS TO ADJUST ENGINE REV LIMITER, THEN PRESS Y TO SELECT OR N TO EXIT.

— — — RPM

- Use 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.

NOTE: If you are changing your RPM “rev” limiter, you must also adjust your shift points accordingly (See chart below). Not doing so may result in damage to your engine or powertrain.

<u>Rev Limit</u>	<u>Shift Points</u>	<u>Rev Limit</u>	<u>Shift Points</u>
-500	-500	+100	+100 or lower
-400	-400 or lower	+200	+200 or lower
-300	-300 or lower	+300	+300 or lower
-200	-200 or lower	+400	+400 or lower
-100	-100 or lower	+500	+500 or lower
Stock	Stock or lower		

C. ELECTRIC COOLING FAN OPERATING RANGE

TO PROGRAM ENGINE COOLING FAN TEMPERATURE RANGE, PRESS Y
TO LEAVE COOLING FAN TEMPERATURE UNALTERED, PRESS N

- Press ‘N’ if you do not wish to change the temperature at which the electric cooling fans turn on and turn off.
- Press ‘Y’ if you want to lower the temperature at which the electric cooling fans turn on and turn off, even with the stock thermostat. A cooler combustion chamber will produce more power. By making this selection, you will now go to the next screen to pick the operating temperature range of the cooling fans. This screen will appear:

USE UP/DOWN ARROWS TO SELECT THERMOSTAT TEMP, THEN PRESS Y TO SELECT OR N TO EXIT.

_ _ _ F

- Use the ▲ and ▼ arrows to select between optimizing the cooling fan temperature settings for:

Stock 195° thermostat

Fan 1 on/off at: 209°F/200°F

Fan 2 on/off at: 219°F/210°F

180° Hypertech PowerStat

Fan 1 on/off at: 194°F/185°F

Fan 2 on/off at: 204°F/195°F

160° Hypertech PowerStat

Fan 1 on/off at: 184°F/175°F

Fan 2 on/off at: 194°F/185°F

Stock Cooling Fan Temperatures:

Fan 1 on/off at: 227°F/218°F

Fan 2 on/off at: 235°F/228°F

D. TOP-SPEED LIMITER

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

- Press the 'N' button to keep your vehicle's stock top-speed limiter and skip to the next option.

USE UP/DOWN ARROWS TO ADJUST TOP SPEED LIMIT, THEN PRESS Y TO SELECT OR N TO EXIT.
_ _ _ _ _ MPH

- 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. Here are the corresponding symbols and maximum top-speed limits that can be programmed into your vehicle:

S - 110 MPH	V - 147 MPH
T - 116 MPH	W - 166 MPH
U - 122 MPH	Y - 184 MPH
H - 128 MPH	ZR - 255 MPH

E. TIRE SIZE

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

NOTE: If you select 'Y', you will automatically be asked to enter a gear ratio **AFTER** you have selected your tire height. You will not be allowed to enter 'N' for stock gear ratio. If you have not changed the tire height, you should select 'N' for tire height.

- Press 'N' if the original size tires are being used.

USE UP/DOWN ARROWS TO CHOOSE CORRECT TIRE HEIGHT, THEN PRESS Y TO SELECT OR N TO EXIT.
_ _ _ _ _"

- Press 'Y' if you have installed tires with an overall height that is different than the original factory tires. This feature will recalibrate your speedometer/odometer readings and part-throttle shifting for automatic transmissions for the new tire height. The ▲ and ▼ arrows will allow adjustments of 1/4" increments between 24"-30". Press the 'Y' button to lock in the desired value. At any time you may press 'N' to allow you to either try again or skip to the next option.

HOW TO DETERMINE TIRE HEIGHT

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.
2. 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.

F. REAR GEAR RATIO

IF REAR AXLE RATIO HAS BEEN CHANGED FROM ORIGINAL, PRESS Y
IF REAR AXLE RATIO HAS NOT BEEN CHANGED, PRESS N

- Press 'N' if the rear gear ratio has not been changed from the factory installed gear. Making this choice will skip to the next option.

USE UP/DOWN ARROWS TO SELECT CORRECT REAR AXLE RATIO, THEN PRESS Y TO SELECT OR N TO EXIT.

--- --_--:1

- Press 'Y' if you have installed a rear gear with a ratio that is different than the original factory gear. This feature will recalibrate your speedometer/odometer readings and part-throttle shifting for automatic transmissions for the new gear ratio. Press the ▲ and ▼ arrows to see all of the gear ratios available for your vehicle. Press 'Y' to lock in the gear ratio that you have installed.

NOTE: For automatic transmissions, a selection of any of the available rear gear ratios will automatically set wide-open throttle shifts similar to original factory RPM settings for the new rear gear ratio.

G. TRANSMISSION SHIFT POINT RPM (AUTOMATICS ONLY)

Be sure to read and understand this entire section before attempting to re-program your shift points.

The shift point option allows you to change the RPM at which your transmission shifts at wide-open throttle to find the very best shift points for maximum acceleration. You can *try* optimizing the shift points using the seat-of-your-pants technique, but how will you know if your e.t.'s improved or not? The only accurate method for this optimization is at the track with timing slips as the measuring device.

In order to optimize the performance of any vehicle, consistent test results are necessary. If a vehicle varies plus or minus 1/10th of a second in the quarter, run to run, with *no* changes, it is impossible to test any product (shift point, starting line RPM, etc.) that has the potential to gain 1/10th or 2/10ths of a second, because the gains or losses on any one (1) run could be due to inconsistency rather than the variable being tested. Therefore, before testing *anything*, make the vehicle consistent.

Wheel-spin, if present, is the overwhelming cause of inconsistency. You *must* develop a starting line technique that gives you the best repeatable elapsed times. Tires are the most important product you need to cure wheel-spin. For street driven vehicles, we recommend D.O.T. approved street slicks as large as you can fit under the wheel wells of your vehicle. In any case, before testing shift points, arrive at the starting line technique that gives you the best repeatable results, with or without slicks.

Throw out *any* run with excessive wheel-spin, and try to get at least three (3) runs that are within 4 or 5 hundredths of a second. Then average them and **use this average value (not just your best run) for all testing comparisons.** Your best e.t.'s will occur when you leave as hard as you can without wheel-spin. Confirm this by practicing and observing the results.

And finally, a very important point for any and all high-performance testing...always test only one (1) variable at a time until it is optimized. For shift point optimization, this means test only one (1) shift point at a time until the best RPM is found, leaving all other shift points alone. Once the best 1-2 shift point is found, program it in and leave it. Then repeat the same optimization procedure for the 2-3 shift point.

It is not usually necessary to optimize the 3-4 shift point (unless the gearing in the vehicle causes the shift to occur during the 1/4-mile run) because it will occur at a speed so high that it is out of range, even on a race track. However, if gearing is causing either the 2-3 or the 3-4 shift to occur *just before the end of the 1/4*, you should try raising the shift point enough to allow the vehicle to cross the finish line without making that last shift.

The highest shift point RPM you can use must always be less than the rev limiter RPM. If you do hit the rev limiter, the computer will shut the fuel off until RPMs drop sufficiently, so let off the throttle and abort that test run. The rev limiter is there to protect your valve-train and the engine from damage. Even if you went quicker every time you raised the shift point RPM, stop at 100 RPM below the rev limiter. That's the *most* RPM you can use safely for that shift point.

- This is the first screen you will see:

TO ADJUST TRANSMISSION SHIFT POINTS, PRESS Y
TO KEEP STOCK SHIFT POINTS, PRESS N

- If you press 'Y', you will see the following screen:

USE UP/DOWN ARROWS TO ADJUST SHIFT POINT. THEN PRESS Y TO SELECT OR N TO EXIT
1-2 SHIFT _ _ _ RPM

- Press the ▲ arrow once for 100 RPM, twice for 200 RPM, etc. and then press the 'Y' button to enter your 1-2 shift point choice. If you don't want to change the 1-2 shift point, enter a zero, and press 'Y'.

The automatic transmission shift point adjustment range is:

1-2 shift: +/-500 RPM (In approximately 100 RPM increments)

2-3 shift: +/-500 RPM (In approximately 100 RPM increments)

3-4 shift: +/-500 RPM (In approximately 100 RPM increments)

After downloading the 1-2 shift point you want to test, disconnect the programmer and make your test runs (At least three (3), but as many as needed to get three (3) good runs for averaging.). If you've seen a gain, continue moving in that direction until you begin to slow down or until you are within 100 RPM of the rev limiter. You can now review all of your test results, select the best 1-2 shift point for your vehicle, and program it in. If two (2) different shift points run the same average e.t.'s, use the lower RPM to save wear and tear on the vehicle. Repeat the same procedure for the 2-3 shift and the 3-4 shift (**See next page for Important Note**).

NOTE: If you are changing your shift points, you must also adjust your RPM “rev” limiter accordingly (See chart below). Not doing so may result in damage to your engine or powertrain.

<u>Rev Limit</u>	<u>Shift Points</u>	<u>Rev Limit</u>	<u>Shift Points</u>
-500	-500	+100	+100 or lower
-400	-400 or lower	+200	+200 or lower
-300	-300 or lower	+300	+300 or lower
-200	-200 or lower	+400	+400 or lower
-100	-100 or lower	+500	+500 or lower
Stock	Stock or lower		

H. TRANSMISSION SHIFT FIRMNESS (AUTOMATICS ONLY)

IF YOU HAVE INSTALLED AN AFTERMARKET SHIFT KIT, PRESS Y
TO CONTINUE, 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.

NOTE: Pressing ‘Y’ lets your programmer know that it is not to program shift firmness and you will skip to the Report.

- Press ‘N’ if you have not installed an aftermarket shift kit into your automatic transmission. Pressing ‘N’ will give you the following choice:

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

- Press ‘N’ to keep the stock shift firmness. Press ‘Y’ to increase the firmness of shifts. Firmer and quicker shifts reduce the loss of power to friction as the clutch packs “lock-up” during shifts, allowing more power to the rear wheels.

USE UP/DOWN ARROWS TO CHOOSE AMOUNT OF SHIFT FIRMNESS TO ADD, THEN PRESS Y TO SELECT OR N TO EXIT.
---%

- You can select between 25%, 50%, 75%, and 100% for the degree to which you desire to enhance shifting firmness. 100% indicates the maximum shift firmness increase allowable. **It does not indicate 100% firmer!** 75%, 50%, and 25% are percentages of the maximum shift firmness increase.

I. REPORT

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

YOU HAVE CHOSEN
.....

- Watch the screen as your choices scroll by on the bottom line. Now these two (2) alternating screens will appear:

PRESS Y TO BEGIN
PROGRAMMING

PRESS N TO
CHANGE OPTIONS

- If all choices are correct, press ‘Y’ to start programming. If you want to make a change to your choices, press the ‘N’ button to start over from the beginning.

J. PROGRAMMING

IMPORTANT NOTE: On certain applications, the dash message center may display random code information such as REDUCED ENGINE POWER. This is a NORMAL step during the programming process for certain applications.

- First, the programmer will read out your vehicle’s stock program.

READING COMPUTER
XX%

- When the programmer has finished this, it will wait a few seconds and then begin programming the changes into your vehicle.

WRITING COMPUTER
XX%

- This display will show percentage completion while the programming is taking place. 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.**
 - * **IF THE UNIT STOPS PROGRAMMING OR IS INTERRUPTED, PLEASE MAKE A NOTE OF ANY MESSAGE(S) THAT APPEAR ON THE PROGRAMMER SCREEN. THIS WILL BE HELPFUL TO OUR TECHNICAL DEPARTMENT.**
- Any one of these actions will disturb the programming process. The programmer is designed to recover from these conditions, but they should be avoided.

IMPORTANT NOTE: If during the reading and/or programming stage, the Power Programmer does not show an increase in percentage for at least five (5) minutes, **LEAVE THE KEY IN THE 'ON' POSITION** and unplug the Power Programmer from the diagnostic port. Then, reinsert the cable into the diagnostic port and press the **▲** button. This will allow the programming to continue. If the problem continues, call Hypertech at 901-382-8888.

- Programming is complete when the unit reaches 100%. (Programming takes approximately 5 minutes). The following screens will appear:

HYPERTECH POWER
TUNING INSTALLED

TURN KEY OFF
FOR 30 SECONDS

TO END, PRESS Y
AND UNPLUG CABLE

- Turn the ignition key to OFF for at least thirty (30) seconds. Press the 'Y' button and remove the programmer cable from the DLC under the dash panel.
- Start the engine and make sure the Service Engine Soon light on your instrument cluster goes out (If it stays on or flashes, call Hypertech at 901-382-8888). Warm the engine up 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 3: PROGRAMMING BACK TO STOCK OR CHANGING OPTIONS

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

HYPERTECH POWER
TUNING INSTALLED

- Then this screen will appear:

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

- Press ‘Y’ to return to the original factory program.
- Press ‘N’ to allow you to see the options in Section 2.

- If the ‘Y’ button is pressed, programming back to stock will begin. These screens will appear:

WRITING COMPUTER
XX%

FACTORY PROGRAM
IS NOW INSTALLED

TURN KEY OFF
FOR 30 SECONDS

TO END, PRESS Y
AND UNPLUG CABLE

- Turn the key off for thirty (30) seconds, press the ‘Y’ button, and remove the cable as before. Your vehicle’s computer will now be in a completely stock tuning configuration.

SECTION 4: 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. LOSS OF COMMUNICATION

COMMUNICATION LOST:
RETRYING

- This screen will appear if the programmer is unable to communicate with your vehicle’s computer. If the problem is corrected, the programmer will automatically restart the programming process. 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 five (5) minutes for the programmer to re-establish communication and program the vehicle.
 4. If the three (3) 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. The programmer will identify your vehicle and then display:

PROGRAMMING WAS
INTERRUPTED...

PROGRAMMING WILL
CONTINUE NOW

- The programmer will then continue programming from where it was interrupted.

NOTE: If the programmer was interrupted during the Reading stage, programming will NOT be considered interrupted, and the programmer will proceed to Section 2 on page 7.

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:

CODE 91: PROGRAM YOUR VEHICLE BACK TO STOCK BEFORE
PROGRAMMING ANOTHER VEHICLE

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:

CODE 6D:
CAL NOT FOUND

- 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.

5. 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 to reconnect the programmer and press the ▲ arrow.
- If the new vehicle computer calibration is identified by the programmer, the options in Section 2 will be shown. If the new vehicle computer calibration can not be identified by the programmer, this screen will appear:

CODE 6D:
CAL NOT FOUND

- 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.

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. 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.

**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 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, HyperPACs, and Power Programmers.

SPECIALTY AUTO PARTS CONSUMER'S BILL OF RIGHTS

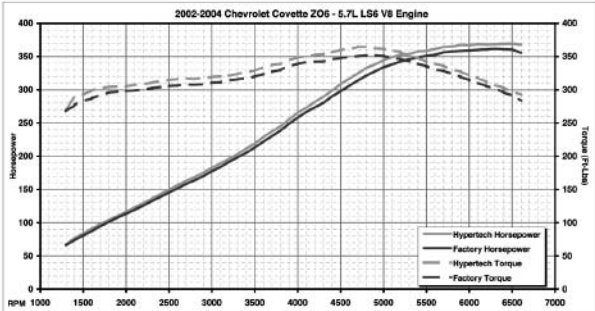
Your Rights To Personalize Your Vehicle

- 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)

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.**



MAX Horsepower	MAX Torque
369 HP @ 6500 RPM	365 Ft-Lbs @ 4700 RPM
362 HP @ 6300 RPM	362 Ft-Lbs @ 4900 RPM

Hypertech Premium Fuel
Factory

MAX Horsepower Gain	MAX Torque Gain
+12 HP @ 6600 RPM	+14 Ft-Lbs @ 4700 RPM
—	—

Premium Fuel Power Tuning
Transmission Shift Firmness: 25, 50, 75, 100%
Cooling Fan (160, 180, 195 Degrees)
Tire Size Correction for 24"-36"

Power Programmer Features

Adjustable Rev Limiter (+/- 500 RPM in 100 RPM increments)
Reads and Clears Factory Diagnostic Trouble Codes (DTC's)

Adjustable Top Speed Limiter for speed rated tires: 110, 116, 122, 128, 147, 166, 184, & 205 MPH

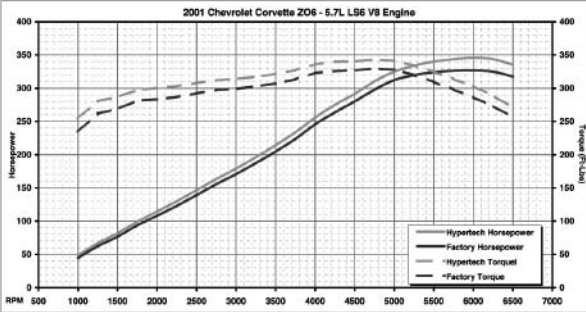
HYPERTECH
3215 Appling Pk., Bartlett, TN 38133 www.hypertech.com
(901) 352-8888 © Hypertech, Inc. 2005

Vehicle Tested: 2003 Chevrolet Corvette Z06
Engine: 5.7L LS6 V8
Transmission: 6-Speed Manual
Gear Ratio: Stock
Tire Size: Stock
Test Date: 2/28/2005

Power Programmer Part #:

30025

Typical Performance Gains (cont'd)



MAX Horsepower	MAX Torque	Hypertech Premium Fuel	MAX Horsepower Gain	MAX Torque Gain
346 HP @ 6000 RPM	343 Ft-Lbs @ 4750 RPM	Hypertech Premium Fuel	+19 HP @ 6000 RPM	+20 Ft-Lbs @ 1000 RPM
327 HP @ 6000 RPM	329 Ft-Lbs @ 4750 RPM	Factory	-	-

Power Programmer Features

Premium Fuel Power Tuning
Tire Size Correction for 24"-36"
Transmission Shift Firmness - 25, 50, 75, 100%
Adjustable Top Speed Limiter for speed rated tires: 110, 116, 122, 128, 147, 166, 184, & 205 MPH

Adjustable Rev Limiter (+/- 500 RPM in 100 RPM increments)
Reads and Clears Factory Diagnostic Trouble Codes (DTC's)
Cooling Fan (160, 180, 195 Degrees)

HYPERTECH
3215 Apple Rd., Bartlett, TN 38133 www.hypertech.com
(601) 382-6888 © Hypertech, Inc. 2006

Vehicle Tested: 2001 Chevrolet Corvette Z06
Engine: 5.7L LS6 OHV V8
Transmission: 6-Speed Manual
Gear Ratio: Stock
Tire Size: Stock
Test Date: 12/1/2001

Power Programmer Part #:

30025

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	Polo Shirts (Order part# & color)	
Long Sleeve - Medium	606	Medium	638
Long Sleeve - Large	607	Large	639
Long Sleeve - X-Large	608	X-Large	640
Long Sleeve - XX-Large	609	XX-Large	641
Long Sleeve - XXX-Large	610		

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

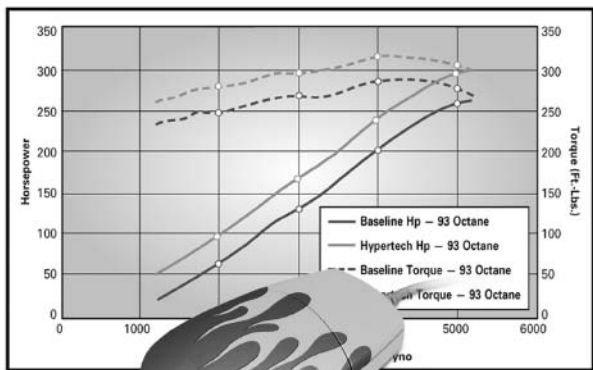
Enjoy your morning coffee with the Hypertech coffee mug, displaying the Hypertech logo and engine icon in full color on both sides - **Part #626**.



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 Leader In High-Performance Engine Tuning Products