

DIAGNOSTIC TROUBLE CODES

P1272 APP Sensor 2-3 Correlation	P1626 Pass-Lock enable failure.
P1273 APP Sensor 1-3 Correlation	P1626 Theft Deterrent Fuel Enable Lost
P1275 APP Sensor 1 Circuit	P1629 Theft Deterrent Fuel Enable Not Received
P1276 APP Sensor 1 Performance	P1631 Pass-Lock enable failure.
P1280 APP Sensor 2 Circuit	P1635 5 Volt Reference 1 Circuit
P1281 APP Sensor 2 Performance	P1637 Pass-Lock enable failure.
P1285 APP Sensor 3 Circuit	P1637 Generator L-Terminal Circuit
P1286 APP (APP) Sensor 3 Performance	P1639 5 Volt Reference 2 Circuit
P1336 CKP System Variation Not Learned	P1658 FICM internal circuit fault.
P1351 Ignition Coil Control Circuit High Voltage	P1689 Torque Output Circuit
P1352 Ignition Bypass Circuit High Voltage	P1810 TFP Valve Position Switch Circuit
P1361 Ignition Control (IC) Circuit Low Voltage	P1860 TCC PWM Solenoid Circuit Electrical
P1362 Ignition Bypass Circuit Low Voltage	P1870 Transmission Component Slipping
P1374 CKP Resolution Frequency Correlation	P2066 Secondary fuel sender signal is stuck.
P1380 Misfire Detected	P2067 Primary fuel sender signal is stuck.
P1381 Misfire Detected	P2068 Secondary fuel sender signal is high.
P1404 EGR is not closing.	P2122 APP sensor Out of Range condition.
P1404 EGR Closed Position Performance	P2123 APP sensor Out of Range to ECM.
P1415 Secondary AIR System Bank 1	P2127 APP sensor Out of Range to ECM.
P1416 Secondary AIR System Bank 2	P2128 APP sensor Out of Range to ECM.
P1441 EVAP System Flow During Non-Purge	P2132 APP sensor Out of Range to ECM.
P1514 Throttle Body Performance	P2133 APP sensor Out of Range to ECM.
P1515 Throttle Actuator Position Performance	P2138 APP sensor Out of Range to ECM.
P1516 TAC Module Performance	P2139 APP sensor Out of Range to ECM.
P1517 TAC Module Performance	P2140 APP sensor Out of Range to ECM.
P1518 TAC Module Serial Data Circuit	P2141 EGR throttle valve vacuum low voltage.
P1519 TAC Module Internal Circuit	P2142 EGR throttle valve vacuum high voltage.
P1523 Throttle Closed Position Performance	P2144 EGR vacuum vent control low voltage.
P1539 A/C Clutch Feedback Circuit High Voltage	P2145 EGR vacuum vent control high voltage.
P1546 A/C Clutch Feedback Circuit Low Voltage	P2146 FICM circuit fault.
P1546 A/C Clutch Relay Control Circuit	P2149 FICM circuit fault.
P1550 FICM low voltage condition.	P2227 BARO sensor low reference circuit.
P1571 Traction Control Torque Request Circuit	P2228 BARO sensor Out of Range
P1574 Stop lamp Switch Circuit	P2229 BARO high voltage circuit.
P1586 Cruise Control Brake Switch 2 Circuit	P2279 MAF sensor detects an air intake leak.
P1621 ECM is not programmed.	P2610 ECM is not programmed.

MOTORVATION CORPORATION

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X-Celerator Plus Installation Manual

**The Most Powerful and Advanced
Flash Tuner and Code Reader Available
For Your GM Diesel Vehicle.**



**IMPORTANT!
KEEP THESE INSTRUCTIONS!**

*Read this instruction booklet first before
programming your computer. You have
purchased the most advanced Tuner available.*

X-CELERATOR PLUS HAND-HELD FLASH TUNER

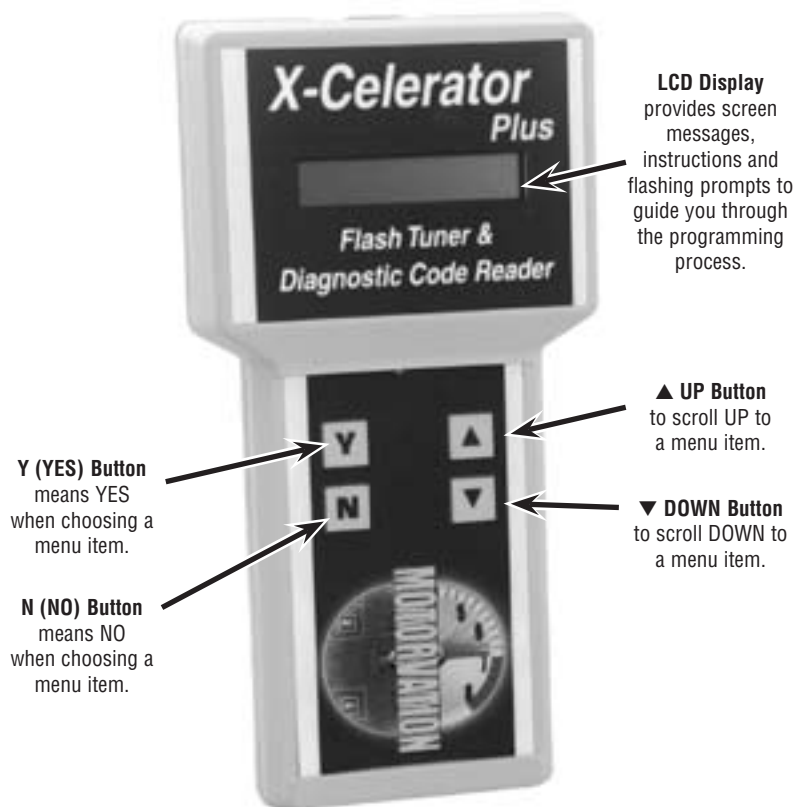


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DIAGNOSTIC TROUBLE CODES

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P0430 Catalyst System Low Efficiency Bank 2	P0711 TFT Sensor Circuit Range/Performance
P0440 Evaporative Emission (EVAP) System	P0712 TFT Sensor Circuit Low Input
P0442 EVAP System Small Leak Detected	P0713 TFT Sensor Circuit High Input
P0443 EVAP Purge Solenoid Control Circuit	P0719 Brake Switch Circuit Low Input
P0446 EVAP Vent System Performance	P0724 Brake Switch Circuit High Input
P0449 EVAP Vent Solenoid Control Circuit	P0740 TCC Enable Solenoid Circuit Electrical
P0452 Fuel Tank Pressure Sensor Low Voltage	P0742 TCC System Stuck On
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P0461 Fuel Level Sensor Performance	P0752 1-2 Shift Solenoid
P0462 Fuel Level Sensor Circuit Low Voltage	P0753 1-2 Shift Solenoid Circuit Electrical
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P0480 Cooling Fan Relay 1 Control Circuit	P0757 2-3 Shift Solenoid
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P0489 EGR valve low voltage condition.	P0785 3-2 Shift Solenoid Circuit Electrical
P0490 EGR valve high voltage condition.	P0801 Reverse Inhibit Solenoid Control Circuit
P0500 VSS assembly no signal.	P0802 TCM is requesting MIL.
P0502 VSS Circuit Low Input	P0803 Skip Shift Solenoid Control Circuit
P0503 VSS Circuit Intermittent	P0833 Clutch switch transition failure.
P0506 Idle Speed Low	P1093 FRP sensor circuit malfunction.
P0507 Idle Speed High	P1094 FRP sensor low circuit voltage.
P0522 Engine oil pressure (EOP) sensor low.	P1106 MAP Intermittent High Voltage
P0523 Engine oil pressure (EOP) sensor high.	P1107 MAP Intermittent Low Voltage
P0530 A/C Refrigerant Pressure Sensor Circuit	P1111 IAT Intermittent High Voltage
P0540 Intake air heater (IAH) incorrect voltage.	P1112 IAT Intermittent Low Voltage
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P0560 System Voltage	P1115 ECT Intermittent High Voltage
P0562 PCM excessively low voltage.	P1120 Throttle Position (TP) Sensor 1 Circuit
P0563 PCM excessively high voltage.	P1121 TP Sensor Intermittent High Voltage
P0567 Cruise Control Resume Switch Circuit	P1122 TP Sensor Intermittent Low Voltage
P0568 Cruise Control Set Switch Circuit	P1125 APP circuit voltage Out of Range
P0571 Cruise Control Brake Switch Circuit	P1125 APP System Performance
P0601 ECM is not programmed.	P1133 HO2S Switching Bank 1 Sensor 1
P0602 ECM is not programmed.	P1134 HO2S Transition Ratio Bank 1 Sensor 1
P0603 ECM is not programmed.	P1153 HO2S Switching Bank 2 Sensor 1
P0604 ECM is not programmed.	P1154 HO2S Transition Ratio Bank 2 Sensor 1
P0604 Control Module RAM	P1172 Fuel transfer pumps voltage Out of Range
P0606 Control Module Internal Performance	P1220 Throttle Position (TP) Sensor 2 Circuit
P0608 Vehicle Speed Output Circuit	P1221 TP Sensor 1- 2 Correlation
P0611 FICM performance.	P1223 FICM cylinder 1.
P0612 Ignition relay control circuit high voltage.	P1226 FICM cylinder 2.
P0620 Generator Performance	P1229 FICM cylinder 3.
P0641 APP sensor 3, FRP, EOP Out of Range	P1232 FICM cylinder 4.
P0645 A/C Clutch Relay Control Circuit	P1235 FICM cylinder 5.
P0650 MIL has improper voltage on circuit.	P1238 FICM cylinder 6.
P0650 MIL Control Circuit	P1241 FICM cylinder 7.
P0651 APP sensor 2, EGR, Out of Range	P1244 FICM cylinder 8.
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P0651 APP sensor 2, EGR, Out of Range	P1270 APP low sensor function.
P0700 TCM is requesting MIL.	P1271 APP Sensor 1-2 Correlation

DIAGNOSTIC TROUBLE CODES

P0131 CKP and the CMP signals failure.	P0203 Injector 3 Control Circuit
P0087 Fuel rail pressure (FRP) too low.	P0204 Injector 4 Control Circuit
P0088 Fuel rail pressure (FRP) too high.	P0205 Injector 5 Control Circuit
P0089 FRP sensor indicates high pressure.	P0206 Injector 6 Control Circuit
P0090 Fuel rail pressure (FRP) circuit failure.	P0218 Transmission Fluid Over temperature
P0101 MAF sensor signal is low or high.	P0230 Fuel Pump Relay Control Circuit
P0102 MAF sensor voltage signal is low.	P0234 Boost sensor signal is high.
P0103 MAF sensor voltage signal is high.	P0236 Boost sensor signal is low.
P0107 MAP Sensor Circuit Low Voltage	P0237 Boost sensor voltage that is low.
P0108 MAP Sensor Circuit High Voltage	P0238 Boost sensor voltage that is high.
P0112 IAT sensor has low signal voltage.	P0300 Fuel delivery excessive.
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P0116 ECT sensor failure.	P0301 through P0308 Fuel delivery per cylinder __ excessive.
P0117 ECT sensor too high.	P0325 Knock Sensor (KS) Circuit
P0118 ECT sensor too low.	P0325 Knock Sensor Module Performance
P0121 TP Sensor Circuit Insufficient Activity	P0327 Knock Sensor (KS) 1 Circuit
P0122 TP Sensor Circuit Low Voltage	P0327 Knock Sensor (KS) Circuit Bank 1
P0123 TP Sensor Circuit High Voltage	P0332 Knock Sensor (KS) 2 Circuit
P0125 ECT Insufficient	P0332 Knock Sensor (KS) Circuit Bank 2
P0128 ECT sensor low/high temperature.	P0335 CKP Sensor Signal Out of Range
P0131 HO2S Low Voltage Bank 1 Sensor 1	P0335 Crankshaft Position (CKP) Sensor Circuit
P0132 HO2S High Voltage Bank 1 Sensor 1	P0336 CKP Sensor Signal Out of Range
P0133 HO2S Slow Response Bank 1 Sensor 1	P0336 Crankshaft Position (CKP) Sensor Circuit
P0134 HO2S Circuit Activity Bank 1 Sensor 1	P0336 CKP Sensor Performance
P0135 HO2S Heater Bank 1 Sensor 1	P0340 CMP Out of Range
P0137 HO2S Low Voltage Bank 1 Sensor 2	P0341 CMP Out of Range
P0138 HO2S Slow Response Bank 1 Sensor 2	P0342 CMP Sensor Circuit Low Voltage
P0140 HO2S Circuit Activity Bank 1 Sensor 2	P0343 CMP Sensor Circuit High Voltage
P0141 HO2S Heater Bank 1 Sensor 2	P0351 Ignition Coil 1 Control Circuit
P0151 HO2S Low Voltage Bank 2 Sensor 1	P0352 Ignition Coil 2 Control Circuit
P0152 HO2S High Voltage Bank 2 Sensor 1	P0353 Ignition Coil 3 Control Circuit
P0153 HO2S Slow Response Bank 2 Sensor 1	P0354 Ignition Coil 4 Control Circuit
P0154 HO2S Circuit Activity Bank 2 Sensor 1	P0355 Ignition Coil 5 Control Circuit
P0155 HO2S Heater Bank 2 Sensor 1	P0356 Ignition Coil 6 Control Circuit
P0157 HO2S Low Voltage Bank 2 Sensor 2	P0357 Ignition Coil 7 Control Circuit
P0158 HO2S High Voltage Bank 2 Sensor 2	P0358 Ignition Coil 8 Control Circuit
P0160 HO2S Activity Bank 2 Sensor 2	P0370 through P0374 FICM signal failure.
P0161 HO2S Heater Bank 2 Sensor 2	P0380 Federal RPO FE9, NG1
P0168 Fuel temperature circuit failure.	The glow plug system performance.
P0171 Fuel Trim System Lean Bank 1	California RPO YF5, NE1
P0172 Fuel Trim System Rich Bank 1	The glow plug voltage is out of range.
P0174 Fuel Trim System Lean Bank 2	P0381 Ignition Voltage Circuit Performance
P0175 Fuel Trim System Rich Bank 2	P0401 EGR valve vacuum sensor performance
P0181 Fuel temperature too high.	P0403 EGR Solenoid Control Circuit
P0182 Fuel temperature too low.	P0404 EGR valve vacuum sensor signal is low.
P0183 High fuel temperature sensor voltage.	P0405 EGR vacuum sensor voltage is low.
P0193 FRP sensor low signal.	P0406 EGR vacuum sensor voltage is high.
P0200 Injector Control Circuit	P0410 Secondary Air Injection (AIR) System
P0201 Injector 1 Control Circuit	P0412 AIR Solenoid Control Circuit
P0201 through P0208 FICM circuit failure.	P0418 Secondary AIR Relay Control Circuit
P0202 Injector 2 Control Circuit	

BEFORE YOU BEGIN

CAUTION!

Unless these directions are followed step-by-step, the vehicle and/or the computer may be rendered inoperable!

X-Celerator Plus Features:

The X-CELERATOR PLUS hand-held programmer will allow you to tune your engine and transmission combination to your necessary needs of power, torque and economy. This can be done quickly, easily and as often as you desire, by following these step-by-step instructions. With the X-Celerator Plus you can:

- Calibrate speed limiter to match the speed rating of your tires
- Improve horsepower and torque
- Re-calibrate the speedometer for gear and tire changes
- Calibrate for gear ratio changes from 2.73-5.13
- Calibrate for under/oversize tires from 25" to 44.75"
- Improve the throttle response

Before you begin the programming process:

- Read this entire instruction booklet carefully. The step-by-step directions will make using your X-Celerator Plus much easier. X-Celerator Plus will perform many steps automatically.
- Be sure the vehicle's battery is fully charged before using the X-Celerator Plus. **DO NOT ATTEMPT TO REPROGRAM YOUR COMPUTER IF YOUR BATTERY IS LOW OR WHILE CONNECTED TO A BATTERY CHARGER.**
- **Turn off all electrical systems — lights, radio, air conditioning, CD/DVD players, power amplifiers, cellular phones, etc.**
- Set the parking brake. This turns the Daytime Running Lights (DRL) off. If left on, this may interfere with programming.
- Disable all necessary equipment by removing the appropriate fuses as described on pages 5-6.
- Pre-determine your choices before starting your programming session (measure tires and determine gear ratio).
- **BEFORE YOU BEGIN DOING ANYTHING**, make certain the key is turned off! Make sure all doors are closed. The door chime can interrupt the programming process.

FUSE INSTRUCTIONS

Note:

This X-Celerator Plus hand-held programmer with the DTC reader is intended for the vehicle it programs only. Use on any other vehicle may render the other vehicle inoperable or damage the X-Celerator Plus hand-held programmer, which is not covered by any MOTORVATION Corporation warranty policy or procedures.

Begin:

The first step in the programming process requires the removal of certain fuses. Some fuses govern special equipment options and will interfere with the programming process. All fuses will be re-inserted after the programming process is complete. To remove the required fuses, locate your application on pages 4-7 and follow the instructions. **ALL REQUIRED FUSES MUST BE REMOVED BEFORE PROGRAMMING YOUR COMPUTER. FAILURE TO DO SO CAN RENDER THE VEHICLE AND COMPUTER INOPERABLE.**

Fuse Panel Locations:



The interior fuse panel is located on the end of the dash just inside the driver's side door (pictured left).

The exterior fuse panel is located under the hood on the driver's side. (pictured right).



PROGRAMMING YOUR VEHICLE

Getting DTC's

Please wait for 15 Seconds

Tuning Installed Remove X-Celerator

- Using the ▲ UP and ▼ DOWN scroll buttons place the blinking cursor beside "GETTING DTC'S" then press the Y (YES) button to activate your selection.
- X-Celerator Plus will retrieve the trouble codes for you to review and record. DTC codes are listed on the following pages 14-16.
- After recording the code the code(s) are cleared by pressing the Y (YES) button. Removing the code will cause the check engine light to go off.
- With the code reading procedure complete the X-Celerator Plus may be removed.

*NOTE: Code reading is a diagnostic tool, not a conclusive problem solver. Further research is required before replacing parts. Full diagnosis should be done by an authorized dealer. **MAKE SURE YOU RETURN YOUR VEHICLE TO STOCK SETTINGS BEFORE IT IS TAKEN IN FOR SERVICE.***

WARRANTY

MOTORVATION Corporation wants you to be happy with your purchase.

Our products come with a LIFETIME WARRANTY. We will repair or replace any defective product to the original purchaser. We guarantee complete satisfaction.

We stand behind our products 100%, however, we cannot be responsible for any vehicle downtime or any expenses that may be incurred in the process. We also cannot be responsible for any damages occurring from improper installation.

Our products will not void your vehicle's factory manufacturer's warranty as our products meet or exceed C.A.R.B. requirements.

RETURNS

All products returned to MOTORVATION must state reason for return and have a RGA number attached. Call MOTORVATION tech to check any problems you may have with your X-Celerator Plus. We are happy to assist you in any way with your purchase. We hope you enjoy the X-Celerator Plus. Tell your friends about MOTORVATION.

PROGRAMMING YOUR VEHICLE

**Installing Tune
DO NOT Disturb 20**

23. This screen message tells you the tuning data is being downloaded to the OBDII computer. This takes a few seconds.

**Please wait for
15 Seconds**

24. This screen message tells you the Computer is verifying all changes and selections. This will take a few seconds.

**Tuning Installed
Remove X-Celerator**

25. This message tells you the programming is complete. Turn the key off and unplug X-Celerator Plus from the OBDII connector.

With X-Celerator Plus removed from the OBDII computer, replace all of the fuses that were removed at the beginning of the programming process.

SERVICING YOUR VEHICLE

At some point, you may have to take your vehicle to a mechanic or a dealership for service. You must remove the X-Celerator Plus programming and restore your vehicle to its stock settings. Failure to program the vehicle back to stock can result in unnecessary and costly repairs not covered by MOTORVATION Corporation. Before you have any work done on the vehicle make sure the X-Celerator Plus tuning is removed. If you have failed to return the vehicle back to its stock condition and the vehicle is re-flashed, due to updates, your X-Celerator Plus may not work correctly, which is not covered by the MOTORVATION Corporation warranty.

Diagnostic Code Reading Procedure

X-Celerator Plus must initialize the computer at least one time before the DTC code function is operable, see page 9, step 12 for details.

**Tune Car or
■ Get DTC Codes**

1. Plug X-Celerator Plus cable into the DLC (pulling fuses is not necessary to check for codes). Follow steps 1-12 listed on pages 7-9 arrive at the choices on the LCD shown at left.

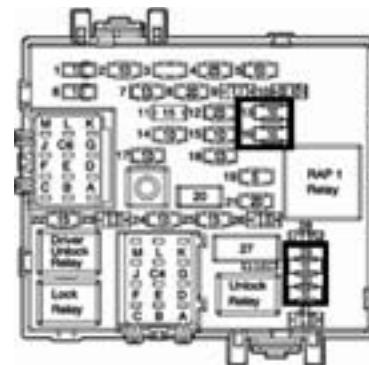
FUSE INSTRUCTIONS

2001–2002 GM C/K Models equipped DuraMax Diesel engines

NOTE: Your vehicle may not have all fuses shown. Remove all required fuses that are present in your vehicle.

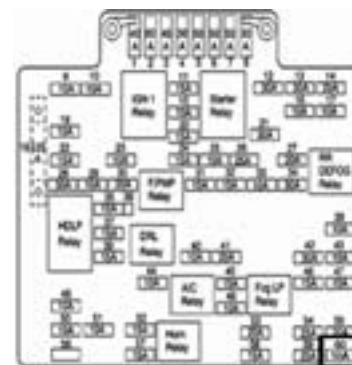
Interior Fuse Removal

1. Locate the fuse panel in the interior (inside the driver's door on the end of the dash) and remove the cover.
2. Remove the following fuses:
#13 SEO ING (Special Equipment Options / Ignition)
#16 SEO ACCY (Special Equipment Options / Accessories)
#29 RDO1 (Radio)
#30 RAP2 (Relay Power)



Under Hood Fuse Removal

3. Locate the fuse panel under the hood on the driver's side and remove the cover.
4. Remove the following fuse:
#60 TBC (Body Computer)



FUSE INSTRUCTIONS

For 2003-2004 GM Models DuraMax Diesel (Engines with Vin code 1 and 2)

NOTE: Your vehicle may not have all fuses shown. Remove all required fuses that are present in your vehicle.

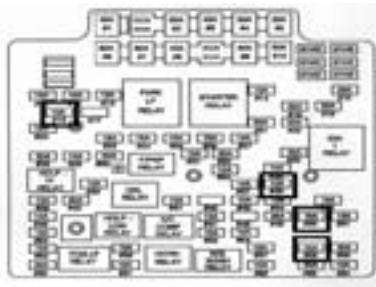
Interior Fuse Removal

1. Locate the fuse panel in the interior (inside the door on the end of the dash) and remove the cover.
2. Remove the following fuses:
 - #12 SEO ACCY (Upfitter Provisions)
 - #17 TBC 2B (Body Control Module)
 - #18 TBC 2C (Body Control Module)
 - #20 TBC ACCY (Body Control Module)
 - #23 TBC 2A (Body Control Module)



Under Hood Fuse Removal

3. Locate the fuse panel under the hood (drivers side) and remove the cover.
4. Remove the following fuses:
 - #16 TBC BATT (Body control Module)
 - #38 TBC IGN 1 (Body control Module)
 - #50 Radio (Entertainment system components)
 - #58 INFO (Vehicle communication Interface Module)



PROGRAMMING YOUR VEHICLE

Tire Height from Ground — 25.00

18. This screen message provides choices for tire height so the speedometer will be calibrated properly. Using the ▲ UP and ▼ DOWN buttons, scroll to your selection and press the Y (YES) screen message to activate your selection. Tire height selections range from 25.00 to 44.75 and are offered in 1/4 inch increments.

Note: Tire height measurements should be made from the ground to the top of the tire with the tire inflated to its proper pressure on level ground.

Engine Tune Org. Stock

19. The Engine Tune screen message has two modes: Original Stock and High Performance. Original Stock leaves the engine in the stock configuration. The High Performance mode provides varying degrees of torque management and injector timing to deliver optimum performance in the High Performance setting. At the flashing cursor prompt, use the ▲ UP and ▼ DOWN buttons to scroll the selections. Then use the Y (YES) button to activate your selection.

Install Tuning? Select Y or N

20. Install Tuning screen message is a fail-safe choice. If you are ready to download the selected changes, use the Y (YES) button to activate and download your new configuration. If however, you do not want your vehicles existing computer configuration changed, use the N (NO) key and the data will NOT be downloaded to your computer.

Restoring to Stock

21. X-Celerator Plus is putting the stock data back into the computer in preparation for receiving the selected changes.

Making Changes to Stock

22. This automatic prompt tells you the changes are being made to the stock data.

PROGRAMMING YOUR VEHICLE

■ Tune Return to Stock

14. The next prompt provides choices to custom tune the vehicle or return it to a stock configuration. Using the ▲ UP or ▼ DOWN button make your selection. If the Tune selection is made, go to the next prompt. If the RETURN TO STOCK option is selected the vehicle will be returned to stock configuration and programming will end.

Speed Limiter ■ Stock 98 MPH

15. The first custom choice is the vehicle speed limiter. When the screen message appears, the flashing cursor will be beside the Stock 98 MPH selection. Using the ▲ UP and ▼ DOWN buttons, scroll to your selection and press the Y (YES) to activate your choice.

Each selection offered has a specific tire rating that must be used:

Stock	98MPH	SR rated tires or better must be used.
130 MPH	130 MPH	HR rated tires or better must be used.

16. Next you can choose to calibrate the speedometer. Use the Y (YES) or N (NO) button to activate your selection.
17. This screen message is to select a gear ratio. Make the selection for the ratio you have in your vehicle. Using the ▲ UP and ▼ DOWN buttons, scroll to your selection and press the Y (YES) button to activate your selection. Confirm your correct stock ratio, by checking the GM RPO code sheet inside the glove box lid.

Calibrate Speedometer Y/N

Rear Axle Ratio ■ 3.08

NOTE: Choosing a gear ratio that is different from what is in your vehicle does not change the gear in the axle. For example, If you have 3.08 gears, selection of a gear ratio other than 3.08 will not change the gear. An actual gear change is a manual process that is made in the axle, not in the programmer.

PROGRAMMING YOUR VEHICLE

WARNING!

Failure to follow the directions can cause engines not to start! Do not attempt to stop downloading or programming process at any time by removing the cable, turning the ignition key off or disconnecting the battery power! Wait for the remove X-Celerator Plus prompt before disconnecting programmer cable from the OBDII link connector. Keep all doors closed during the program process. The door chime can interrupt the programming process. Re-check that the correct fuses have been removed. Refer to pages 4-6. Before any action is taken in this process make certain the ignition key is turned off!

Programming Process



1. Plug the cable small end into the top of the X-Celerator Plus (pictured left).

2. Plug the cable large end into the OBDII link connector under the lower edge of the dash (pictured right).



PROGRAMMING YOUR VEHICLE

**Duramax
7/01/04**

3. The first screen message, (as shown at left) will appear in the LCD window after X-Celerator Plus has been plugged into the OBDII link connector. It tells you the application and hardware version of your unit, along with the date the program was loaded into the unit.

**X-Celerator Plus
V1.00**

4. The next screen message appears automatically. It gives the X-Celerator Plus software version.

**Current tuning
is stock**

5. The next screen message appears automatically telling you your vehicle is tuned at factory stock settings.

**This tuning is for
Accept Y/N**

6. You are required to accept or decline. If you accept it moves to the next prompt, if you decline the programming process ends. Make the choice by pressing Y (YES) or N (NO) button. If you select Y (YES) programming proceeds. With the selection of N (NO) the programming ends.

**Turn Ign. Key On
Do Not Start Engine**

7. The next screen message tells you to turn the ignition key on but DO NOT start the engine. Twenty seconds is provided to take this action. If the key is not turned on in the time provided, a "No communication with car error" message will be displayed and the program process must begin again at step 1.

**Leave Key On
Do Not Start Engine**

8. The next screen message appears telling you to leave the key on while you are programming but DO NOT start the engine.

PROGRAMMING YOUR VEHICLE

Checking VIN #

9. Next, the VIN number is being verified and locks it into the computer. Only your vehicle can use this X-Celerator Plus.

Unlocking PCM

10. Next the PCM is being unlocked. Do not disturb, unplug or push any X-Celerator Plus buttons during this function.

Do Not Disturb

11. Next the stock settings are being saved and stored. Do not disturb, unplug or push any X-Celerator Plus buttons during this function.

**■ Tune Truck or
Get DTC Codes**

12. Next the prompt gives you the choice to tune the truck or retrieve the DTC codes. To make your desired selection, scroll the flashing cursor to your choice by using the ▲ UP or ▼ DOWN buttons. Then push the Y (YES) button to enter your selection. (This process for selecting your choices is used throughout the programming process.) If you press the N (NO) button, programming ends. If the Tune option is selected proceed to the next screen message. If you select the GET DTC CODES option go to page 13 and follow the instructions.

NOTE: If you select the "Get Codes" option and this is the first time you have used X-Celerator Plus, you must unplug the unit and begin the process from step 1 again. X-Celerator Plus must initialize the computer at least one time before the DTC code function is operable.

13. This automatic screen message is a reading that identifies the engine and transmission in your vehicle.

6.6L-Eng. Year XX