

## Performance PROGRAMMER

General Motors Gasoline Programmer





#### INSTALLATION INSTRUCTIONS OVERVIEW

Your vehicle has an onboard computer that controls the engine and transmission. The JET programmer reprograms your factory computer according to your specifications with JET Performance Products Tuning.

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. It will then identify your vehicle and ask a series of questions on its LCD screen.

When completed, turn the key to OFF and disconnect the cable from the diagnostic connector. Now you're "*Engineered for Power*".

JET Performance Product's tuning can be stored in only one vehicle. When you install JET Performance Product's tuning program into your vehicle, the programmer reads and stores your vehicle's factory programming. You can use the Programmer to restore your stock programming if it should ever become necessary.

You may also reconnect your programmer at any time to modify the programming. Simply reconnect the JET Performance programmer, answer the necessary questions, and program your vehicle.

#### PROGRAMMING INSTRUCTIONS

- Locate the Data Link Connector (DLC) under the driver's side of the dash panel.
- 2. Plug the Programmer cable into the DLC. Make sure the cable is plugged in completely to ensure a good connection.
- 3. Set the parking brake to turn off the DRLs (Daytime Running Lamps) or turn off head lamps.

#### **IMPORTANT:**

- DO NOT LEAVE THE VEHICLE WHILE PROGRAMMING IS IN PROGRESS.
- MAKE SURE THE VEHICLE BATTERY IS FULLY CHARGED BEFORE PROGRAMMING.
- IF THE VEHICLE HAS BEEN PROGRAMMED USING ANOTHER MANUFACTURERS PROGRAMMER, YOU <u>MUST</u> RETURN THE VEHICLE TO <u>STOCK</u> PROGRAMMING <u>BEFORE</u> USING THE JET PROGRAMMER.
- DO NOT DISTURB OR UNPLUG THE CABLE UNTIL THE PROGRAMMER INSTRUCTS YOU TO DO SO.
- DO NOT OPERATE ELECTRICAL ACCESSORIES (RADIO, WINDOWS, WIPERS, ETC.) WHILE PROGRAMMING.

- DO NOT ATTEMPT PROGRAMMING WHILE THE VEHICLE IS CONNECTED TO A BATTERY CHARGER.
- **4.** The programmer will perform some self tests and then the following will appear on the screen:

#### TURN IGNITION ON, PRESS ANY KEY

Now turn the ignition key to the RUN position (BUT DO NOT START THE VEHICLE).

Note: During the programming process you will be required to cycle the key on/off several times.

Press any key and the following screen will appear:

## PROGRAMMING DTC READER

- Use the UP/DOWN <u>Arrow Keys</u> and press <u>ENTER</u> to <u>select</u> Programming Functions and continue with <u>step 6 UNLESS THE FOLLOWING</u> <u>MESSAGES APPEAR</u>:
- "NOT FOR THIS VEHICLE" Call JET Customer Service
- <u>"SOFTWARE NEEDS TO BE UPDATED"</u> Call JET Customer Service
- <u>RESTORE FACTORY PROGRAMMING</u> This message will appear after you
  have previously updated your vehicle with the JET Programmer, answer Y
  to this option to return your vehicle to its stock programming answer N to
  continue.

Use the UP/DOWN <u>Arrow Keys</u> or press **ENTER** to select DTC Reader Functions

### **ENGINE TUNING**

6. Use the UP/DOWN <u>Arrow Keys</u> and press ENTER to select **JET EZ Programming** (The JET EZ Programming option is engineered to give you the best performance with the easiest installation. By selecting this option the JET Performance Programmer will download the most up to date JET Performance tuning software to increase horsepower and torque based on your fuel grade selection. In addition, automatic transmission equipped vehicles will get improved shifting patterns and increased shift firmness. JET EZ Tuning is a great choice when you want more power without the need for custom tuning.) OR FOR CUSTOM PROGRAMMING See Page 3

Use the UP/DOWN <u>Arrow Keys</u> and press ENTER to select **Custom Programming** Options (The Custom Programming option on the JET Performance Programmer allows the user to install JET Performance Engine tuning based on your fuel grade selection. In addition it allows the user to select custom changes such as shift points, shift firmness, rev limits, and speed limiters based on tire ratings. If you have changed the tires or gears on your vehicle and need to correct the speedometer because of the changes this is the program you will want to use.)

#### **MODIFY ENGINE TUNING? YES or NO**

 Use <u>Arrow keys</u> to scroll through fuel grade options and press <u>ENTER</u> to select. <u>NOTE</u>: All of the fuel selections will provide performance gains, for maximum results the use of premium fuel is recommended.

# NOTE: NOT ALL OF THE FOLLOWING OPTIONS ARE AVAILABLE ON ALL VEHICLES IF THE OPTION IS NOT AVAILABLE FOR YOUR VEHICLE IT WILL NOT APPEAR ON THE SCREEN

#### AUTOMATIC TRANSMISSION

8. Select **YES** if you have an automatic transmission; if you had previously selected **JET EZ** Programming, programming will begin immediately see <u>step</u> <u>23</u>, if you are doing Custom Programming continue with <u>step 9</u>.

Select **NO** if you have a manual transmission and please note the following; If you had previously selected **JET EZ** Programming, programming will begin see <a href="step 23">step 23</a>, If you are doing Custom Programming continue with <a href="step 12">step 12</a>.

#### SHIFT POINTS

This allows you to change the Wide Open Throttle (WOT) shift points in your Automatic transmission for the 1-2, 2-3 and 3-4 shift points. You can select to increase or decrease your shift points based on the mile per hour you want raise or lower the shift points.

NOTE: If you raise your shift points more than 1 or 2 MPH it may be necessary to raise the RPM Limiter also.

- Select YES to modify shift points and continue with step 10, Select NO to leave shift points stock and continue with step 11
- 10. Select YES to modify 1-2 shift, use <u>Arrow Keys</u> to move mph up or down and press ENTER to select, do the same for 2-3, 3-4 shifts. Select NO to leave stock.

#### **SHIFT FIRMNESS**

**11.** Select **YES** to increase shift firmness, Select **NO** to leave stock.

#### RPM LIMITER

Allows you to change the Factory programmed RPM limiter in your vehicle by increasing the limit 100 RPM at a time up to the maximum change of 800 RPM. As noted in the shift point section it may be necessary to change this if you change the shift points.

- 12. Select YES to modify RPM limiter and continue with <u>step 13</u>, Select NO to leave RPM limits stock and continue with <u>step 14</u>
- 13. Press Arrow Keys to select RPM limit change and press ENTER to select.

#### SPEED LIMITER

This allows you to modify the factory speed limit that is programmed into your computer. Most vehicles have speed limiters based on the tires that are installed on the vehicle from the factory. Each tire has a speed rating that is indicated by a letter designation. For your safety and the safety of others never exceed the speed rating on your tires or the posted legal speed limit at any time.

- **14.** Select **YES** to Modify Speed Limiter and continue with <u>step 15</u>, Select **NO** to leave stock and continue to <u>step 16</u>
- Press <u>Arrow Keys</u> to modify speed limiter based on tire rating and press ENTER to select.

#### **MODIFIED THERMOSTAT Y/N?**

This option changes the temperature that the electric fans turn on/off based on the thermostat that you are using. Included are options for 160 degree, 180 degree and 195 degree thermostats.

- 16. Select YES to modify Thermostat temperature and continue with <u>step 17</u>, Select NO to leave stock and continue with <u>step 18</u>.
- Press <u>Arrow Keys</u> to select correct thermostat temperature and press ENTER to select.

#### **MODIFIED TIRE SIZE**

Use this selection to fix your speedometer and shift points if you have changed your tire size. You can select from 24 to 44 inch tire sizes in half inch increments.

<u>NOTE:</u> If your vehicle is equipped with traction control, exceeding 34 inch tire sizes may cause the traction control to not work correctly. In ALL vehicles: Some tire sizes, depending on what gear is in the vehicle, may cause shifting problems even with the correct setting on the programmer. This usually occurs with tires larger than 38 inches.

- Select YES to correct for tire size changes and continue with <u>step 19</u>, Select NO for no changes and continue with <u>step 20</u>.
- 19. Press Arrow Kevs to select correct tire size and press Enter to select.

#### MODIFIED GEAR RATIO

Use this selection if you have changed the gear ratio in the differential. The selections include both factory and aftermarket gear ratios that may or may not be available for your vehicle.

20. Select YES to correct for gear ratio changes and continue with step 21,

Select NO for no changes and continue with step 22.

21. Press Arrow Keys to select correct gear ratio and press Y

#### **MODIFY CHOICES**

22. Select <u>YES</u> to return to the begining and Modify Choices to this Custom Tune.

Select  $\underline{\text{NO}}$  if choices are correct and programming will begin.

 Programming has begun, do not disturb the cable, key position or operate anything in the vehicle during the programming process.

NOTE: During programming, vehicles equipped with driver information centers will display various service messages - these are nothing to be concerned about and will go away when programming is complete.

- **24.** When programming is complete, the Programmer will display Programming Complete, turn the ignition key off and unplug the cable from the Data link connector (DLC).
- 25. That's it! Programming is now complete. Please store your JET Performance Programmer in a safe dry place in its original packaging. You will need the programmer in the future to return your vehicle to stock or modify your settings.
- **26.** Start the vehicle and verify that the service engine light is **NOT** on. If your vehicle will not start, see page 6 for details on what to do if your vehicle won't start after programming.

## What To Do If Your Vehicle Won't Start After Programming

In some vehicles with the Vehicle Anti-Theft System (VATS), the programming process will set an error in the VATS module which will prevent vehicle from starting. To clear this error disconnect the ground(-) cable from your battery for one half hour. Then re-connect the ground cable to the battery and start the vehicle.

# WHAT TO DO BEFORE TAKING YOUR VEHICLE IN FOR SERVICE

If a problem occurs that may require you to take your vehicle to a mechanic or dealership for service, first remove the JET Program and program the vehicle back to stock. If the problem goes away when you remove the JET Performance Product, call JET and we will troubleshoot the product. However, if returning to stock does *not* cure your problem, there is nothing wrong with your JET Performance Product and you will need to have your vehicle serviced.

Anytime a diagnostic machine is to be used, the vehicle must be back to stock. Diagnostic machines expect to find the original stock program and often cannot correctly analyze the problem if other devices are installed. Failure to reinstall your system back to stock can result in unnecessary and costly repairs not covered by JET.

### JET SCAN TOOL INSTRUCTIONS

The JET Performance Programmer also functions as a Scan Tool for OBDII equipped vehicles. This allows the user to read and clear any stored data trouble codes in the system and monitor 15 different outputs from the vehicle.

Please NOTE: The Scan Tool included in the JET Performance Programmer is included as a convenience only. The interpretation of these codes and their effects are best left to an experienced automotive technicians. The JET technical department WILL NOT help you interpret or diagnose any codes, please see your local dealer or technician.

Connecting the JET Programmer Scan Tool:

- 1. Locate the Data Link Connector (DLC) under the driver's side of the dash panel.
- Plug the Programmer cable into the DLC. Make sure the cable is plugged in completely to ensure a good connection.
- 3. The programmer will perform some self tests and then the following will appear on the screen.

#### TURN IGNITION ON PRESS ANY KEY

Now turn the ignition key to the **RUN** position but **do not start** the vehicle and the following screen will appear:

# PROGRAMMING DTC READER

Press N to continue to the Scan Tool section of the JET Programmer and the following screen will appear:

## DTC READER MONITORING

Select DTC READER OR MONITORING.

If you selected **DTC READER** and there are any **DTC's** stored in the system they will be disp layed in numerical order, use the arrow keys to scroll through any stored codes. If no **DTC's** are found the message on the screen will read **NO DTCS** stored. You can press any key to continue to the **CLEAR DTCS** screen.

If there are DTC's stored and you want to clear them continue to the CLEAR DTCS YES or NO screen and select YES.

If you selected MONITORING you now will be in the real time monitoring mode

7. You will now need to start the vehicle to get the readings. After you have started the vehicle you can access and view the information by using the UP and DOWN arrow keys to get to the next parameter. You can exit the monitoring anytime by pressing the ENTER key. After you are finished with your monitoring session simply turn the vehicle off and unplug the programmer.

**Limited Warranty** 

JET Performance Products warrants Chips, Modules and Programmers to be free from defects in material and workmanship under normal use and if properly installed. This 2 year warranty is to the original purchaser for as long as he or she owns the vehicle on which the product was originally installed, provided all information requested is furnished. If found to be defective as mentioned above, it will be replaced or repaired at the sole discretion of JET if returned prepaid along with proof of date of purchase.

All other products and services performed by JET are warranted in defects in material and workmanship for a period of 6 months from date of purchase. This warranty is to the original purchaser for as long as he or she owns the vehicle on which the product was originally installed. Repair, Replacement, or Credit will be based on the date of purchase. Costs for labor are specifically excluded and are the sole responsibility of the purchaser.

This warranty does not apply to Custom Programming or any product incorrectly installed, modified by the purchaser, or to any product that has been subjected to misuse, negligence or accident.