PRELIMINARY INFORMATION

Subject: Service Programming System (SPS) Errors (E4398, E4399, E4403, E4404 E4413, E4414, E4423 or E4491, E4494)

Models: 2014 and Prior GM Passenger Cars and Light Duty Trucks

> This PI is being revised to add the 2013 and 2014 model years. Please discard PI0592A.

Service Programming System (SPS) Errors

Reference the specific SPS programming error (E4398, E4399, E4403, E4404 E4413, E4414, E4423 or E4491, E4494) and follow the instructions, which will assist in understanding the cause and how to resolve the issue without replacing the control module. Most errors can be resolved by following the basic troubleshooting steps below.

If the programming error cannot be resolved using the following troubleshooting instructions, do not replace the control module. Contact the Techline Customer Support Center (TCSC) for assistance at:

TCSC: 1-800-828-6860 English or 1-800-503-3222 French, 8am-8pm (EST) Monday through Saturday

Information required when calling:
- Dealer BAC
- Call back phone number (close proximity to the Techline PC and vehicle)
- VIN
- Description of service procedure being performed, (ex: bulletin, etc)
- Error messages if any

Note: Using a Techline PC and programming device that meets the minimum specifications is essential to successful programming and required for full support.

E4398 – No Calibration Data
Cause:

This programming error is the result of a missing or incomplete data record. This error is not related to the module being programmed or a vehicle issue and cannot be repaired without obtaining a Vehicle Configuration Index (VCI) number.

Resolution:

Contact Techline Customer Support Center (TCSC).

E4399/E4403 – Severe Error

Cause:

These general programming errors are typically the result of a loss of communication between the programming device and module. The loss of communication can be caused by a drop in battery voltage, delay in communication with the module or a vehicle issue such as interruption on the BUS (wiring, connector issue, aftermarket components, etc.).

Resolution:

Maintain a minimum of 12.5 volts during programming.

Attempt to re-establish communication with the module. This should first be done with GDS2 or Tech 2. If communication can be established, reattempt programming using "Replace and Program ECU" as the programming method.

If communication cannot be re-established, deplete retained power by disconnecting the negative battery terminal for a minimum of 5 minutes. Re-establish and maintain battery power, attempt to communicate with the control module using MDI or Tech 2. Reattempt programming using "Replace and Program ECU."

Some late model vehicles (pre-2007) may require the use of the Tech2 and 'Legacy Tech 2' programming option in SPS in order to utilize a slower programming communication speed.

E4413/E4414 – Calibrations marked with an (*)

Cause:

An (*) indicates that the SPS application is not recognizing the calibrations being read from the control module. This can be caused by a non-GM calibration programmed into the control module or an incomplete SPS data record.

Resolution:

Refer to the latest version of Corporate Bulletin Number 08-06-04-006. If this bulletin does not apply, restart the SPS application and select "Replace and Reprogram" as the programming method. This procedure will overwrite the unidentified software and calibrations.

E4404/E4494 – No Communication with Diagnostic Tool

Cause:

This is a loss of communication between the programming device, (MDI or Tech 2) and Techline PC and not a module or vehicle problem.

Resolution:

Confirm the connection from the PC. If the programming device is connected by USB, select a different USB port on the Techline PC.

If using a wireless network for the MDI connection, confirm the wireless connection or switch to a USB connection (It is important to disable the MDI wireless connection in the MDI wireless manager when using a USB connection).

If programming with a Tech 2, perform a Tech 2 self-test found in SPS under 'Settings', 'Diagnostics' then 'Test Connections'. Try a known good Techline PC serial port connector and RS232 cable. A known good Tech 2 and Candi module can be used.

Confirm and maintain proper battery voltage before attempting programming.

E4491/E4423 – Programming Failed

Cause:

These errors are the result of an incompatibility between the software/calibrations and the module. If encountered on a service module, confirm the correct part number is being used and confirm programming is possible by attempting to program the original module.

Resolution:

This type of issue cannot typically be resolved without assistance from TCSC. Be sure to have the original and service module part numbers and error detail when contacting TCSC.

This can be confirmed by attempting to program the original module. Typically these errors cannot be resolved without the assistance of TCSC. Do not replace the module. Contact TCSC and be sure to have the original module part number and the service part number when calling.