For any service procedures that require USB and SPS programming, there are several critical steps that should be followed in order to ensure successful programming. Always refer to the appropriate Service Information for the vehicle being repaired to review the proper programming procedures. Before starting any programming event, here are a few tips to follow.

**USB Flash Drive**

When choosing a USB flash drive, the recommended USB size is 8–16 GB unless a specific size is called out on in a Bulletin, Preliminary Information (PI), or Service Information procedure. This size range was determined through GM engineering field research as well as feedback from dealerships.

**Powertrain**

The Envision is equipped with an Ecotec 2.0L turbocharged engine (RPO LTG) with DOHC, continuously variable valve timing and direct injection. It produces 252 horsepower and 260 lb.-ft of torque. It also features Stop/Start technology that turns off the engine when, under certain conditions, the brakes are applied and the vehicle is at a complete stop.

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The twin-scroll turbocharger generates up to 20 pounds (138 kPa) of boost. Each of the two scrolls on the turbine is fed by a separate exhaust passage, one from cylinders one and four and the other from cylinders two and three, which virtually eliminates turbo lag at low engine speeds.

The 2.0L engine is paired with a Hydra-Matic™ 6T50 6-speed automatic transaxle (RPO M2D). The transmission features Gen 3 upgrades implemented to enhance efficiency. The pump has been moved off-axis, which allows better sealing of the torque converter, reducing pump flow demands and enhancing fuel economy. Additionally, the pump is now a binary vane-type, which allows lower power consumption during times of lower flow demands and at higher engine speeds.

Vehicle aerodynamics and fuel efficiency are enhanced with upper grille shutters that open and close at highway speeds.

Active Twin Clutch AWD

The Active Twin Clutch All-Wheel-Drive (AWD) system electronically splits torque between the rear wheels when needed to provide additional control versus a 50/50 split in a single clutch system. It provides enhanced traction, stability and performance during vehicle acceleration and cornering as well as improved traction in wet or slippery conditions.

The Active Twin Clutch with active torque bias has increased capability to add stability across all driving conditions. In addition, fuel economy is enhanced by reducing the amount of torque sent to the rear wheels when not needed.

Infotainment

The Envision comes standard with the Buick IntelliLink® infotainment system with an 8-inch (203 mm) diagonal color touchscreen.

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USB Flash Drive Size and other Service Programming Tips continued from page 1

were downloaded to the USB flash drive. When this happens, an error message may appear stating that the module can’t find the files.

In addition, always use a “Brand Name” USB drive that is formatted Fat32 when downloading from the TIS2Web database.

Service Programming Checks

Battery Maintenance – Install the Midtronics® PSC 550 Battery Maintainer (SPS Programming Support Tool EL-49642) before starting any type of programming event. Battery chargers and jump boxes are not recommended for use during module programming as they can provide a voltage surge during the programming event and cause programming to fail.

Wired Connection – Whenever possible, use a USB\Ethernet wired connection between the MDI\MDI 2 and the computer being used for the programming event.

Off-Peak Hours – Whenever possible, try to schedule programming events during off-peak Internet times at the dealership.
New 2016 Envision Hits the Compact Mark
continued from page 2

Available OnStar 4G LTE and Wi-Fi connects up to seven devices (smartphones, tablets and laptops) to high-speed Internet through the vehicle’s built-in Wi-Fi hotspot.

Additional features designed to provide comfort and convenience for passengers include heated and ventilated front seats and heated outboard rear seats, a panoramic moonroof, keyless access and keyless (pushbutton) start, and a programmable power liftgate with hands-free operation. The sensor location for the hands-free feature is located under the left (driver’s side) of the rear bumper, between the license plate and the corner of the bumper. Kick your foot under the bumper at this location to operate the power liftgate.

Safety Features
Available driving and parking assistance systems on the Envision include Adaptive Cruise Control, Automatic Parking Assist, Forward Collision Alert, Front Automatic Braking, Lane Change Alert with Side Blind Zone Alert, Lane Keep Assist with Lane Departure Warning, Rear Cross Traffic Alert, Rear Vision Camera, and the Safety Alert Seat.

An image of the area surrounding the vehicle is provided by the available Surround Vision system. The front camera is in the grille or near the front emblem, the side cameras are on the bottom of the outside rearview mirrors, and the rear camera is above the license plate.

Special Tools
The following new tools were released for the 2016 Envision:

<table>
<thead>
<tr>
<th>Special Tools — Tool Number and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT-50087</td>
</tr>
<tr>
<td>DT-51329-A</td>
</tr>
<tr>
<td>DT-51466</td>
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<tr>
<td>DT-51467-A</td>
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</tbody>
</table>

For additional information on the all-new 2016 Envision, refer to Bulletin #16-NA-149.

Thanks to Sherman Dixon and Doug Daugherty

Time-Out Settings
– Check the screen saver time-out settings on the computer being used. Avoid letting the computer go to sleep during a programming event. If it does, there is the possibility of a failed event.

Clear DTCs — Before any service programming event is attempted, all vehicle DTCs should be cleared. If there are DTCs present in any modules at the time of programming, it can affect successful programming.

Do Not Swap Modules — Module swapping between Global “A” vehicles should not be done. There are new security programs and systems in these modules. If modules are swapped, and reprogramming the swapped module is attempted, a failed programming event and a no start condition may result. Refer to PIP4670D (Doc ID: 3688954) for additional information.

Error Codes – Always document any error codes that come up during a programming event. These codes will help with diagnosis when contacting the Techline Customer Support Center (TCSC) for programming help.

Administrative Rights – When contacting TCSC for programming help, please make sure you have administrative rights to the computer you are using for programming. Some computer settings and security features may be blocking SPS program(s) from loading and blocking the connection to the TIS2Web database.

More Programming Info
Refer to the following documents for more information on Service Programming:

• Service Programming System (SPS) (Document ID: 2223856)
• #PIP4670D: Do Not Swap Modules in Vehicles with Global Electrical Systems (Document ID: 3688954)
• #PI0592D: Service Programming System (SPS) Errors (E4398, E4399, E4403, M4404 M4413, E4414, E4423 or E4491) (Document ID: 4517565)

Thanks to Mike Magyar
Accelerator Pedal Detent

The accelerator pedal on the 2016 Malibu and 2017 LaCrosse and XT5, equipped with the 8-speed AF50 transmission (RPO MRC), features a detent approximately 3/4 of the way through pedal travel. As the accelerator pedal is applied, the built-in detent or click may be noticed with a feel of increased resistance in the pedal.

The accelerator pedal design on these vehicles equipped with the 8-speed automatic transmission provides the operator with tactile feedback near the last 1/4 of pedal travel in order to help minimize transmission downshifting, allowing for improved fuel economy and smoother operation. Applying the accelerator pedal down to the detent will allow a more relaxed acceleration rate. When pressing the pedal through the detent, the transmission will downshift aggressively, enabling an increased acceleration rate.

Do not replace any parts for this condition. This is a normal operating characteristic of the vehicle and no repair attempts should be performed.

Thanks to Aaron Huston

V8 Engine Surge Sensation during Highway Driving

A surge or misfire sensation during steady-state highway driving may be felt on some 2014-2016 Corvette and 2016 Camaro and CTS-V models equipped with the 6.2L V8 engine (RPOs LT1, LT4) and the 8-speed automatic transmission (RPO MU5). The sensation may be noticed most often in 6th, 7th, or 8th gear, in manual or automatic mode, with an engine speed between 1,000 and 2,500 rpm under load. The Torque Converter Clutch (TCC) will be engaged and there will not be any misfire data or P0300 (Engine Misfire) DTCs set.

TCC slip with this condition present may show on a scan tool of +/- 6–0 rpm. This occurs at about 30–60% throttle. This sensation, or chuggle, with the TCC locked is a normal condition.

Full-size trucks equipped with the Gen 5 V8 engine (RPOs L83, L86) may not exhibit this condition because they usually have 15-50 rpm of TCC slip speeds, which absorbs any engine chuggle sensation.

The normal operation of engines and transmissions generate various vibrations and the engine and transmission mounts are designed to isolate these vibrations from the rest of the vehicle. While the mounts do a great job of isolating most vibrations, there still may be certain engine loads and rpms that generate vibrations that drivers may feel in the vehicle. Changes in engine load or rpm will change the vibrations produced, making it more or less apparent to occupants in the vehicle.

When issues of this nature are encountered, like equipped vehicles should be compared and, if consistent results are identified, should be considered a normal characteristic of vehicle operation.

Thanks to Tracy Lucas

Seatback Recliner Handle Now Available

New parts are now available for a broken front seatback recliner handle on 2015-2016 Colorado and Canyon models. The newly designed part applies to models built from start of production until April 18, 2016.

When removing the broken handle, use a flat-bladed tool to release the recliner handle retainer from the handle assembly and to release the handle from the cushion outer finish panel cover.

Refer to Bulletin #16-NA-184 for additional information and part numbers. When ordering parts, be sure to order the correct color and LH or RH side handle for the vehicle being repaired.

Thanks to Charles Hensley
Corvette Ground Effects Shipped Separately

The process of delivering the ground effects and other loose-shipped parts for 2016-2017 Corvette models to dealerships has changed.

Due to the size of the ground effects — such as the front fascia splitter, rocker moldings and rear spoiler — the parts will be shipped from the Corvette assembly plant directly to the dealership separately from the vehicle. This new delivery process went into effect starting with VIN 1G1YS2D61G5613323, which was built on June 16, 2016.

The carbon fiber and carbon flash-painted ground effects will be shipped separately for both the coupe and convertible models. In the past, only the convertible models had the ground effects shipped separately.

The box containing the ground effects may also include additional loose-shipped parts. The list of parts in the package, including part numbers and the corresponding VIN, is included on the shipping label and in a document inside the package.

Parts Arrive First

Please make sure your dealership parts department is aware of this parts shipment change. The parts should arrive at the dealership before the car.

Refer to the Pre-Delivery Inspection (PDI) form for additional information. Check the Special Inspection Items box on the form for details about exterior parts installation for specific Corvette models.

Thanks to Jeff Strausser