Easier-to-Use Service Information

CONSOLIDATES INFORMATION AND REDUCES LINKS

MDI 2 Required for Next Generation Digital Vehicle Platform
see page 4

Bolt EV Wiring Harness Connection
see page 5

Easier-to-Use Service Information
Consolidates Information and Reduces Links ................. 2

Cold Weather Power Steering Hose Upgrade Kit ............... 4

SiriusXM Radio ID on 2020 Infotainment 3 Systems ............. 6

New 2020 GM STC Course Catalog Now Available ............... 7

TechPRO Professional Aftermarket Diagnostic Application Free Trial ................. 8

Power Folding Trailer-Tow Mirror Movement ..................... 9
Technicians using the GM Service Information (SI) will soon find updated Removal/Installation and Replacement procedures with more detailed steps and fewer procedure links to other SI documents. The updated procedures have been optimized to only include the specific steps necessary to complete the repair. Many procedures may appear to be longer, but the added steps already existed in previously linked procedures.

The procedure links that remain in the Removal/Installation and Replacement procedures will be limited to content that contains steps that will always be performed, regardless of where they are used. Examples of these types of links include SIR Disable/Enable, Lifting and Jacking, Fuel Pressure Relief, and others.

The new authoring style is being implemented for the 2020 Cadillac CT4 and new or major vehicle program updates for the 2021 model year. Most existing vehicle programs will not be changed to the new style until the next major redesign of that particular model.

In addition to the updated service procedures, users will notice a few other changes that have been made to the Service Information. These changes in authoring style and content only affect Removal/Installation and Replacement procedures in SI. Other areas, such as Diagnostics and Schematics are not affected by these changes.

**SINGLE USE FASTENERS AND COMPONENTS**

All procedures will begin with a list of all single use fasteners and components and the quantity required to complete the repair. The goal is to provide an initial list of replacement components that the technician will need to complete the repair and avoid repair delays.

**ENHANCED SPECIAL TOOL LISTS**

Special tool lists have always appeared in service procedures. Due to the change in authoring style, there will be an increase in the number of special tools used within certain service procedures.
Because of the increase, the special tool list at the beginning of the procedure will be organized to show the subsection title and include the “Special Tools” link for the subsection where the tool originates.

**FASTENER SPECIFICATIONS**

In the new authoring style, torque specifications have been removed from the service procedures. In place of the specifications, a link will appear to “Fastener Specification.” Previously, torque specifications appeared in the procedure and in the Fastener Specification table. Now, the specifications will only appear in the Fastener Specification table. The service procedures will include a link to the appropriate “Fastener Specifications” for the component being installed and tightened.

**FASTENER SPECIFICATION TABLES**

As part of the new authoring style, fastener specification tables are being changed to a visual format. With the addition of graphics, the tables will more clearly identify the location of the fasteners being tightened. Tightening sequence graphics have also been added. In most cases, the graphics will only include callouts for fasteners and components mentioned in the tables.

Columns have been added to the table to indicate single use or the need for thread locking adhesive. The last column in the table will contain a link to the procedure where the component or fastener was first removed.

**SINGLE USE FASTENER AND COMPONENT IDENTIFICATION**

In current service procedures, single use fasteners and components are identified in the respective steps with the use of “Remove and DISCARD” and “Install NEW” in the text. They were also shown in specific tables within Fastener Specifications. In the new authoring style, the use of “Remove and DISCARD” and “Install NEW” text will continue, but two additional enhancements are being implemented.

As mentioned earlier, a list of “Single Use Fasteners and Components” will appear at the beginning of every procedure that includes components that require replacement. In addition, graphics that show the single use fastener or component will include a “trash can” icon next to the callout. The trash can will appear in the procedure and fastener table graphics.

Thanks to Kevin Jakobiak
MDI 2 Required for Next Generation Digital Vehicle Platform

The Next Generation Digital Vehicle Platform, GM’s all-new electronic platform that will power the next generation of GM models and systems, including electric vehicles, active safety systems, infotainment systems, and a variety of connectivity features, will first be used on the new 2020 Chevrolet Corvette, Cadillac CT5 and CT4.

The Next Generation Digital Vehicle Platform can incorporate up to nine high-speed CAN buses. Programming and scan tool data information is provided using CAN buses 6 and 7, which only run between the DLC and the Serial Data Gateway Module, and are used by GDS 2 to provide system data from the other CAN networks.

For diagnosis and programming a vehicle with a Next Generation Digital Vehicle Platform, the EL-52100 MDI 2 (Multiple Diagnostic Interface) must be used. Module programming, configuration or setup using the EL-47955 MDI 1 cannot be completed on Next Generation Digital Vehicle Platforms because it does not have the capability to complete programming or setup procedures on the new electronic platform. Using an MDI on these vehicles could result in erroneous data or failed programming events that could lead to unnecessary module replacement.

**TIP:** The Next Generation Digital Vehicle Platform requires the vehicle to be in a Key Off power mode in order to successfully perform an SPS event. Be sure to follow the onscreen vehicle programming prompts closely while performing an SPS event.

An GM MDI 2 kit (EL-52100) is available for purchase at the Special Service Tools website, gmtoolsandequipment.com, or by calling 1-800-GM-TOOLS.

The EL-52100 MDI 2 kit includes:
- MDI 2 Unit
- SAE J1962 DLC Cable
- 10-ft. USB A to USB B Cable
- Ethernet Cable
- D-Link Wireless USB Adapters (Dongles) (Optional; for wireless connection)

Thanks to Chris Henley

Cold Weather Power Steering Hose Upgrade Kit

2015-2020 Silverado 2500HD/3500HD and Sierra 2500HD/3500HD trucks driven regularly in extreme cold climates may require use of upgraded power steering hoses. Extreme cold may affect the pliability of the power steering hoses, leading to a possible power steering fluid leak.

If the power steering hoses need to be replaced due to extreme cold weather operation, a Cold Weather Power Steering Hose Upgrade Kit is available from the GM Accessory Group. The power steering hose upgrade replacement is a customer pay option.

The upgrade kit provides enhanced protection against power steering system leaks under cold start conditions, with extensive testing and validation at temperatures of -40°F (-40°C). The kit contains both booster inlet and gear inlet hoses.

For more information on the available Cold Weather Power Steering Hose Upgrade Kit, access the Accessory Information Center through GlobalConnect, go to https://aic.gm.com/cms/home/tools/accessory-portfolio-search.html (U.S.) or https://ca-aic.autopartners.net/cms/home.html (Canada), or refer to Bulletin #20-NA-006.

Thanks to Bob Hartman
Some 2017-2020 Bolt EV models may have a loss of propulsion, an illuminated Malfunction Indicator Lamp (MIL) and DTCs P0A3F (Drive Motor Position Sensor Circuit) and/or P1B03 (Drive Motor Position Sensor Circuit Tracking Lost) set in the Hybrid/EV Powertrain Control Module. The vehicle may operate normally after the vehicle is restarted at a later time.

These conditions may be caused by a spread terminal on the vehicle harness connection X2 on the T12 transmission assembly. The terminals may not have been properly aligned during installation. The terminals do not need to have visible damage in order to set DTCs P0A3F and P1B03.

If these conditions are found, replace the vehicle harness. Due to the sensitivity of the resolver (motor position sensor) circuits, replacing the connector with a terminated lead is not recommended.

When connecting the new harness to X2 on the transmission, use care to align the connector bodies and that the connector is fully seated.

Do not attempt to install the connector at an angle.

Refer to Bulletin #19-NA-220 for additional information and part numbers.

Thanks to Lane Rezek
For 2020 Silverado 1500, Silverado 2500HD/3500HD, Traverse, Acadia, Sierra 1500, Sierra 2500HD/3500HD, XT4, XT5, and XT6 models equipped with Infotainment 3 systems (RPO IOR, IOS, IOT, IOU), technicians may no longer find the SiriusXM (SXM) Radio ID on channel 0 (zero). The SXM Radio ID will be needed, for example, if there are missing SXM channels or no audio on certain SXM channels and it’s necessary to verify channel status with SXM.

To view the SXM Radio ID on certain 2020 Infotainment 3 systems that do not display channel 0, tune in the SXM band and then select Settings on the right side of the screen below Browse. Next, select Manage under System Settings to view the Radio ID.

**SXM SERVICE**

The SXM digital radio signal is broadcast from two satellites and, where necessary, terrestrial repeaters receive the satellite signal and re-broadcast them at much higher power levels in order to ensure reception in areas with densely packed tall buildings. Keep in mind that even with repeaters the signal can be compromised, resulting in loss of the SXM signal.

In addition, some channels may be moved or deleted by SXM, may be package specific, or are listed as Online listening only.

► Thanks to Jeremy Richardson
New 2020 GM STC Course Catalog Now Available

The new 2020 GM Service Technical College (STC) Course Catalog (U.S.) is now available on the Service Technician Training, Recruiting, Retention, and Recognition App on GlobalConnect and on GMSTC.com. Each year, the course catalog is updated with the current GM STC course curriculum and divisional training requirements along with a variety of other training information, including a list of GM STC training locations and GM-approved training resources.

In addition, the 2020 catalog features an overview of GM STC training, the current Service Training Standards (STS), the recommended path to 100% STS, and how to achieve GM Master Technician Certification (MTC) and GM World Class Technician certification.

The 2020 Dealer Divisional STS and MTC Requirements include the following training categories:
1. Emerging Issues
2. Fundamentals
3. Engine Repair
4. Automatic Transmission/Transaxle
5. Steering and Suspension
6. Electrical/Electronics Systems
7. Heating, Ventilation and Air Conditioning
8. Brakes
9. Engine Performance
10. Diesel Engine Performance
11. Manual Drivetrain and Axle
12. Mechanical /Electrical Body Repair
13. Advanced Technology Vehicles
14. Body Structural Repair
15. Paint and Refinish
16. Medium Duty Vehicles

DOWNLOAD THE CATALOG

To download the 2020 catalog, launch the Service Technical Training, Recruiting, Retention, and Recognition App from GlobalConnect. Next, select the Communications tab and the Training Materials category. Select the 2020 GM STC Course Catalog to download it.

Thanks to Eric Kenar
GM Customer Care and Aftersales recently introduced the MAHLE TechPRO Professional Aftermarket Diagnostics application for diagnosing non-GM vehicles in dealerships’ used car departments and collision repair centers. Now dealerships have an opportunity to try the software diagnostics app for free for a limited time.

A 3-day free trial is currently being offered after downloading the software from mahletechpro.com/gm. The link is also in the Help section of TIS2Web.

To begin the free trial:
1. Download the software from mahletechpro.com/gm.
2. Select Create New Account.
3. Select Start Free Trial.
4. Enter a valid BAC code, email address, and create a password.
5. Select Activate Subscription.

The TechPRO software enables dealerships to use their current Techline computer and MDI/MDI 2 to scan, analyze, diagnose and repair most non-GM makes and models with functionality similar to GDS 2. The software decodes a VIN within seconds and reports all DTCs from the vehicle. It also has snapshot replay and graphing functions to assist with reviewing and analyzing vehicle data.

One subscription covers the entire dealership. The diagnostic app can be installed and run on any Techline-supported dealership computer.

For more information, go to mahletechpro.com/gm or call MAHLE Service Solutions at 1-800-468-2321.

Thanks to Chris Henley
Power Folding Trailer-Tow Mirror Movement

The optional trailer-tow mirrors on 2020 Silverado HD and Sierra HD models feature a power folding function (RPO DWI) and an available power extending function (RPO DZC), which makes it easy to adjust the mirrors for better visibility when towing. Some customers may notice that when folding or unfolding the power mirrors, the passenger-side mirror will fold slightly faster than the driver-side mirror. When comparing the two side mirrors, the passenger-side mirror will finish folding or unfolding a split-second before the driver-side mirror. It may be more noticeable when folding the mirrors inward.

POWER OPERATION

The passenger-side mirror will always finish the folding or unfolding operation slightly faster as the driver-side mirror has farther to travel. The mirrors will fold or unfold at the same speed; however, the angle of travel is less for the passenger-side mirror. This folding functionality of the trailer-tow mirrors is a normal operating condition and no repairs should be made.

RESETTING THE MIRRORS

Reset the power extending mirrors (if equipped) when:

- The mirrors are accidentally obstructed while extending/retracting.
- The mirrors are accidentally manually extended/retracted.
- The mirrors vibrate at normal driving speeds.

**TIP:** Manually fold both mirrors if they are out of sync. Fold and unfold the mirrors three times using the mirror controls to reset them to their normal position. If a popping noise from the mirror is heard, this sound is normal as the manual detents are aligning after a manual extend/retract operation has occurred.

Thanks to Kevin Minor and Scott Fibranz

---

Power folding trailer-tow mirror

---

General Motors service tips are intended for use by professional technicians, not a "do-it-yourselfer." They are written to inform those technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions and know-how to do a job properly and safely. If a condition is described, do not assume that the information applies to your vehicle or that your vehicle will have that condition. See a General Motors dealer servicing your brand of General Motors vehicle for information on whether your vehicle may benefit from the information. Inclusion in this publication is not necessarily an endorsement of the individual or the company.

Copyright © 2020 General Motors. All rights reserved.