



Mid-September:, Volume 23, No. 19

Latest GM Global Electronic Parts Catalog Release

GENERAL MOTORS

IDENTIFIES SINGLE USE PARTS, ADDS LINKS TO SI AND LABOR CODES

The latest update to the GM Global Electronic Parts Catalog (EPC) features additional identifiers for single use parts along with a number of links to related Service Information procedures and the Labor Time Guide.

CONTINUED ON PAGE 2



Inspecting High Voltage Insulation Gloves

see page 6

Latest GM Global Electronic Parts Catalog Release Identifies Single Use Parts, Adds Links to SI and Labor Codes 1 Warning Lamps Illuminate During Vehicle Turns 5 FSE Technician Recognition Awards – 3rd Quarter 2021 8 Squeak Sound When Turning Steering Wheel..... 10



Latest GM Global Electronic Parts Catalog Release

IDENTIFIES SINGLE USE PARTS, ADDS LINKS TO SI AND LABOR CODES

These enhancements are designed to make the parts department more efficient by providing additional information about specific parts and repairs, helping ensure that all the parts for a repair are identified. Single use parts have begun to be identified in the service procedures and displayed with the part numbers in the EPC. The latest EPC release has a limited number of vehicles with the single use parts identification feature. More vehicles with single use parts will be added in future releases.

While these new features of the EPC have been implemented for a number of models and model years in the October web and November media EPC releases, additional models will be added in future EPC releases.

The new GM Global EPC was released last year and runs on the advanced HTML5 platform, which provides improved stability, helping to deliver an increase in the levels of up-time and performance. The GM Global EPC link is available on your GlobalConnect Parts Workbench.

SERVICE INFORMATION AND LABOR TIMES

For part numbers with related Service Information (SI) documents, links are being added to the EPC search results that connect to the associated SI procedures, making it easier to find the correct parts for the service procedure as well as helping ensure that all necessary parts are ordered for a complete repair. The link to Service Information feature will be available in the November web and media releases.

To access the related Service Information, right-click the part number in the parts list. A pop-up menu will display a number of options, including a link to Display Labor/Service Information, which will display the Labor/Service tab on the Part Details dialog.



New links add to the utility of the EPC.





From the Part Details dialog screen, the Labor/ Service tab shows the Publication Section, Sub-Section, and Labor Code menu options for the selected part number.

TIP: Entering the VIN for the vehicle being repaired provides more detailed search results, with the menu options narrowed by the selected make, year, model and engine/transmission RPOs for the given VIN.

Next, select the desired Labor Code to view the corresponding Service Information. All Labor Codes associated with the specific part number will be available.

Once a Labor Code is selected, a list of service procedures associated with that Global Labor Code will be displayed along with the SI document ID and any available add-on title information. From here, users can click the Service Procedure link to launch the Service Information application and display the selected service procedure or select the Global Labor Code to view the labor time data. If there is not an active Service Information session, it will be necessary to sign in.

SINGLE USE PARTS

The latest Global EPC update includes several additional ways to help identify single use parts when searching and ordering parts.

In the parts illustration, look for the circled callouts (A) to find single use parts. The single use icon is shown at the top of the illustration. (B)

In the parts list, the single use + icon (C) is shown for any part number that is linked to a service procedure that has single use parts. The + icon indicates there are multiple single use parts in the service procedure.







Hovering over the icon will display a tool tip stating the service procedure includes single use parts. Clicking the icon will display the Labor tab on the Part Details dialog.

In the Description column of the parts list, single use parts are designated with the text "SINGLE USE." (D)

SWITCHING VIEWS

After selecting a Labor Code from the Part Details dialog, new radio buttons can be selected that will switch the parts list grid between Labor-Time data and Single Use Parts data. Clicking the Single Use Parts button will show the single use parts for the selected Global Labor Code.

For questions or support when using the Global EPC, contact Snap-on support at 1-888-994-6372.

Thanks to Mary Daly





- A. Circled callout identifies individual single use part
- B. Single use part icon
- C. Single use + icon identifies that multiple single use parts are included in the service procedure
- D. "Single Use" text identifies single use parts in the Description text





Warning Lamps Illuminate During Vehicle Turns

Some 2020 Trax models may have airbag, theft (security) and tire pressure warning lamps that turn on/off along with an illuminated Check Engine lamp during vehicle turns. DTCs U0078 (Control Module Communication Low Speed CAN Bus Off), U0140 (Lost Communication with Body Control Module), U0184 (Lost Communication with Radio), U0151 (Lost Communication with Inflatable Restraint Sensing and Diagnostic Module), and/or U0073 (Control Module Communication Bus A Off) also may be set.

If these conditions are present, check the instrument panel wiring harness retainer, which may have come loose from the tie bar assembly. A loose retainer may allow the wiring harness to rub against the power steering motor, resulting in the electrical conditions that cause the illuminated warning lamps.

Access the instrument panel wiring harness by removing the instrument panel from the vehicle. Complete all steps in the Instrument Panel Assembly Replacement procedure in the appropriate Service Information to remove the instrument panel.

Inspect the wiring harness for any evidence of chafing, wear or damage. Repair the wiring as necessary. Add conduit over the damaged area to help protect the repaired harness and secure the harness to the tie bar assembly.

For more information, refer to Bulletin #21-NA-213.

Thanks to Frank Jakubiec



Remove the instrument panel to access the wiring harness.



Repair any wiring damaged from rubbing against the power steering motor.

INSPECTING

High Voltage Insulation Gloves

When working on any high voltage system on a GM vehicle, certified and tested high voltage insulation gloves must be worn. Certified and up-to-date Class "0" insulation gloves rated at 1000V with leather protectors provide an insulative barrier between an electrical point and the skin of an individual.



Wear the insulation gloves at all times when working with the high voltage battery assembly, wires and components, whether the system is energized or not. It's recommended to use the "one-hand rule" whenever possible, which involves working with only one hand while the other hand is behind your back.

INSPECTION PROCEDURE

Before each use, the insulation gloves should be removed from their leather protector gloves and visually and functionally inspected. Refer to the High Voltage Insulation Glove Inspection Procedure in the appropriate Service Information.

TIP: The leather protector gloves by themselves do not offer any protection against high or low voltage. Always wear the outer leather protector gloves over the inner rubber insulator gloves.

Rubber insulating gloves include a stamped date indicating when the gloves were "originally or last tested electrically." Rubber insulating gloves must be re-tested electrically by a certified lab 6 months after first use. The lab will re-stamp the gloves with the new "tested" date.

- New gloves and sleeves are marked with the date of manufacture/electrical test and are acceptable for use 12 months from that date.
- If new gloves are first used within 12 months of the manufacture/electrical test date, re-certification must occur 6 months from first use. The first use date should be recorded.
- If the first use date is not known, the gloves/sleeves must be retested 6 months from the electrical test date stamped on the glove/sleeve.

If the gloves certification age range has expired, do not use the gloves. The gloves should be tested and recertified or replaced. For the North America region, visit www.nail4pet.org to find an accredited re-certification laboratory.

If the gloves are within the certification age range, inspect the gloves by trapping air in the glove and sealing the opening to prevent any air loss. While pressing the glove to increase pressure, check for any pin holes, air leaks, wear or abrasions as well as any swelling that could indicate exposure to chemicals.

If glove damage is observed, do not use the gloves and have them tested and recertified or replaced.

Properly store both the insulator gloves and leather protector gloves when not in use. Do not fold the gloves. The gloves should be kept out of sunlight, excessive heat and humidity.

CONTINUED ON PAGE 5

HV GLOVE AND LEATHER PROTECTOR SET

New HV Glove and Leather Protector Sets can be ordered from GMDEsolutions.com. A 6-month insulating glove replacement program also is available that automatically orders and ships replacement insulating glove sets in 6-month intervals.



EL-48900-A HEV SAFETY KIT

The EL-48900-A HEV Safety Kit is available from the gmtoolsandequipment.com website. The kit includes:

- 3 pair (S-M-L) Class-0 rubber electrical insulation gloves.
- 3 pair (S-M-L) leather protective sleeves.
- 4 collapsible-orange safety cones.



Each glove set consists of a pair of rubber insulation gloves and a pair of leather protector gloves. The safety cones should be used to properly mark off the area around an HEV vehicle so others are aware that there is a HEV in the service bay.

TRAINING COURSES

To learn more about high voltage insulation glove use, look for 59500.04V Class 0 High Voltage Insulation Glove Inspection course on the GM Center of Learning.

For additional information about EV technology, safety and diagnosis, check out the new 18440.21D Electric Vehicles: Updates course. The course covers typical EV components and their function, important electrical safety measures, and service procedures for EVs. For details, go to centerlearning.com.

Thanks to Zach Winters

FSE Technician

RECOGNITION AWARDS

3RD QUARTER 2021

The GM Field Service Engineer (FSE) Technician Recognition Awards (U.S.) celebrate the skill and dedication of dealership technicians who have recently worked with FSE's on challenging repairs.

Technicians at GM dealerships are selected for recognition based on their focus on safety, customer satisfaction, personal accountability, training achievements, diagnostic abilities, and the level of repair documentation.

Each recognized technician receives a Service Excellence magnetic plaque and an Excellence in Service Award certificate.

3RD QUARTER 2021 TECHNICIAN RECOGNITION AWARDS





Technician: Matthew Bearcroft

Dealership: Mohawk Chevrolet, Ballston Spa, New York

FSE: Gustav Cariglio

Service Excellence: Matthew is a dedicated and knowledgeable GM World Class Technician who recently assisted on a 2020 Silverado with the 3.0L diesel engine (RPO LM2) that had DTC P04CF set for EGR temperature sensor 3 (aka temp sensor 2).

Matthew had followed Service Information diagnostics and did everything the TAC consultant had instructed, including sensor replacement, ECM replacement and a very professional job of restringing the circuit. Ultimately, after asking for assistance from GM Engineering, it was suggested to replace the ECM and sensor at the same time, which finally corrected the condition.

Throughout the repairs, Matthew demonstrated safety first by positioning an improvised test lamp in a safe location with an

inline fuse, and he worked diligently as if the vehicle was the most important one in the shop. Matthew makes no excuses and is very focused on finding solutions for success.



Technician: Jess Anderson

Dealership: Kolar Chevrolet Buick GMC, Hermantown, Minnesota

FSE: Reuben Gosewisch

Service Excellence: There were two cases recently where GM World Class Technician Jess Anderson provided very detailed information to GM on current product concerns.

One case was an A/C refrigerant leak on a 2020 Bolt EV. Jess had already isolated the leak and provided the information to TAC. All the details on the condition Jess had discovered were documented and verified for GM Engineering, and she was great in helping to get the necessary information. The other case was an exhaust rattle on a 2021 Acadia. Jess had already diagnosed the condition and helped obtain the needed videos and pictures, which were used to submit a highly detailed FPR. In turn, GM Engineering was able to work with the supplier to correct the exhaust rattle.

In all her work, Jess goes above and beyond with her customers to make sure they are satisfied. Many times, she will talk with customers and take them on test drives to duplicate and understand their concerns. Jess sets an example in providing world class service and satisfaction for our GM customers.



Shop Foreman: Taylor Seales

Dealership: Wilson Chevrolet, Stillwater, Oklahoma

FSE: Greg Brinlee

Service Excellence: Taylor recently worked on two difficult vehicle concerns. He refused to give up when little progress was made on resolving an echo on the receiving end of phone calls in a vehicle. He tried different speakers and microphones from a known good vehicle, but nothing made any change in the condition. After trying several different repairs, the Brand Quality Manager suggested programming the radio again even though it had just been replaced. Taylor did not question what was asked of him and programmed the radio software and calibrations, which finally resolved the issue.

Taylor also had a new vehicle with only 52 miles on it that was showing a Service Door Latch message. Taylor found a fuel door lock actuator that was not plugged in. He also submitted a Service Information feedback because this fuel door latch was not found in the wiring schematics. During both cases, Taylor worked hard to get the vehicles back to the customers in a timely manner and to make sure they were happy with the service they received.



Technician: Derrick Calandra

Dealership: Chevrolet Buick GMC of Sanger, California

FSE: Leonard Tunstall

Service Excellence: Derrick was recently working on a difficult case with a diesel engine (RPO LM2) with an extended crank condition. With extensive diagnostics, troubleshooting, and waiting for parts, there had been a lot of work involved in trying to get this vehicle back on the road. Derrick was very patient throughout the entire process, which led to the replacement of the camshaft exciter wheel, requiring removal of the engine assembly. Unfortunately, the exciter wheel can be installed 180 degrees out of phase, even when using the correct tools. As frustrating as this was, Derrick maintained his professionalism and dedication as he removed the engine once again and was able to properly position the exciter wheel. We appreciate Derrick's willingness to demonstrate his "It's On Me" attitude through this difficult repair. Derrick really went to bat when his help was needed most.



Technician: Adam Schrepel

Dealership: Bud Clary Chevrolet, Longview, Washington

FSE: Corey Smith

Service Excellence: Adam assisted with a high-visibility vehicle inspection procedure and, throughout the process, displayed absolute professionalism. He was instrumental in ensuring the procedures were performed properly, thoroughly, and safely. The inspection could not have been done without Adam's support and cooperation, and his help was very much appreciated during this in-depth process.



Technician: Justin Ma

Dealership: Honolulu Buick GMC, Honolulu, Hawaii

FSE: Wade Hanna

Service Excellence: A recent case with Justin covered the top LED strip above the driver's headlamp illuminating purple/ blue when it should have been bright white. The customer had already replaced both headlamp assemblies for this condition. Justin was extremely diligent when diagnosing the concern and accurately tested all headlamp assembly electrical terminals for proper tension, noting exact loaded voltage drops for each power and ground circuit. He also inspected all related circuits and components for water intrusion and possible corrosion. Justin was unable to find any issues with all the tests he performed, and it was obvious the headlamps were still the cause of the condition even after having them replaced.

Instead of just installing two more very expensive headlight assemblies, Justin reached out for assistance. After some research with the headlamp supplier, the issue inside of the headlamp assembly was identified. A service bulletin will be released soon with instructions on correcting the condition. Instead of just replacing the headlamp assemblies again, Justin tested everything involved and reached out for help before throwing more parts at the vehicle. The supplier was able to provide updated headlamp assemblies to fix the issue and satisfy the customer. The difficult repair is a great example of Justin's dedication and hard work.

Thanks to Hank Poelman

Squeak Sound When Turning Steering Wheel

A squeak sound may be heard from the steering system when making turns in either direction on some 2017-2022 Bolt EV and 2022 Bolt EUV models. The sound may be caused by contact between the steering gear pinion shaft and the plastic top cap housing on the steering gear.

To confirm the contact as the source of the squeak sound, disconnect the intermediate shaft, remove the intermediate shaft inner boot and observe the contact. If contact between the pinion shaft and plastic top cap housing is verified, lubricate the area of contact with GM Super Lube. Be sure to apply the lubricant to the inner area of the plastic top cap.

If there is not any contact observed between the pinion shaft and the plastic top cap, follow the diagnostics in the appropriate Service Information.

Refer to Bulletin #21-NA-213 for additional information and part numbers.

Thanks to Jonathan Johnson



Contact between the steering gear pinion shaft and the plastic top cap housing.



Intermediate steering shaft inner boot



GM TechLink is published for all GM retail technicians and service consultants to provide timely information to help increase knowledge about GM products and improve the performance of the service department.

Publisher:

Michael O'Hare GM Customer Care and Aftersales

Editor: Lisa G. Scott GM Customer Care and Aftersales

Technical Editor: Mark Spencer mspencer@gpstrategies.com Production Manager: Marie Meredith

Creative Design: 5by5 Design LLC dkelly@5by5dzign.com

Write to: TechLink PO Box 500, Troy, MI 48007-0500

GM TechLink on the Web: GM GlobalConnect

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. All information contained herein is based on the latest information available at the time of publication and is subject to change without notice. Copyright © 2021 General Motors. All rights reserved.