

New GM Service Technical College App

PROVIDES QUICK ACCESS TO TRAINING INFORMATION



If you're looking for more information about World Class Technician certification, want to download the Automotive Technician Recruiting & Retention Dealer Playbook, or would like more details about the new 10L1000 Automatic Transmission Unit Repair Video On-Demand course, check out the new GM STC Service Technician Training, Recruiting, Retention, and Recognition App (U.S. only) that is now available through GlobalConnect. The new app is a convenient source of the latest training information for dealership service departments, providing quick access to a library of GM STC communications, training documents, job aids, best practices, links to supplementary programs, and much more.

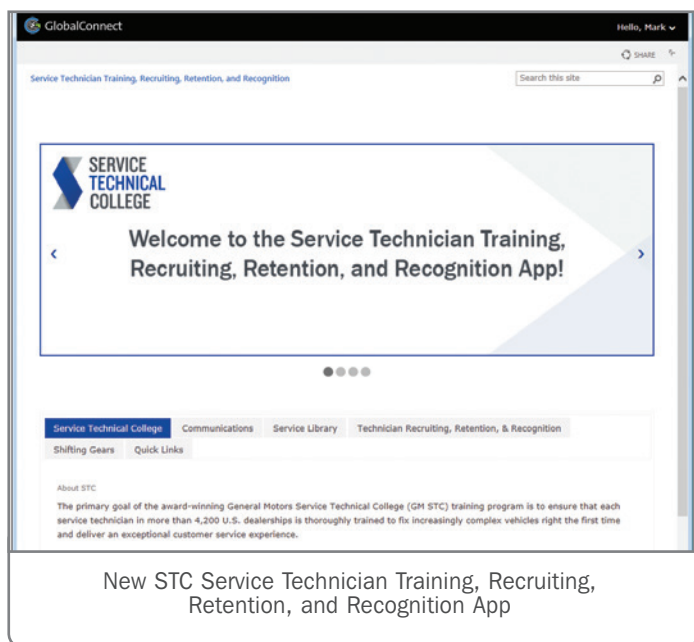
CONTINUED ON PAGE 2

Share Your Feedback on GM Service Information

see page 4

New GM Service Technical College App	1
Corvette ZR1 Rear Spoiler Adjustment.....	3
Proper GM Accessory Assist Step Installation	6
Whine Sound from Under Center of Vehicle	7
Viewing and Emailing GDS 2 Session Files	8
PCV Crankcase Pressure Control Diaphragm	9
Rattle Sound Near Front of Engine	10

New GM Service Technical College App Provides Quick Access

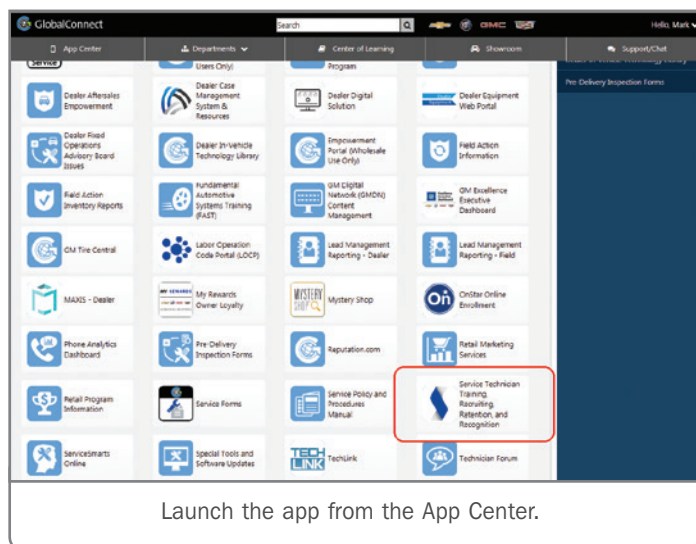


New STC Service Technician Training, Recruiting, Retention, and Recognition App

LAUNCH THE APP ON GLOBALCONNECT

The new Service Technician Training, Recruitment, Retention, and Recognition App can be launched in the App Center and saved as a shortcut.

Log in to GlobalConnect and select the App Center tab on the main menu bar. From there, use the search bar or scroll down until you find the GM STC logo and the app title: Service Technician Training, Recruiting, Retention, and Recognition.

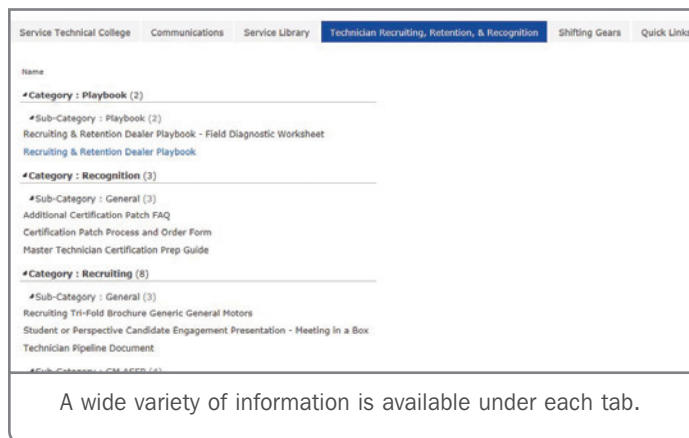


APP FEATURES

There are a number of different features available on the app, including:

- Service Technical College: Program description of the GM STC
- Communications: Course announcements, news articles, training materials, and Training Times newsletters
- Service Library: Frequently referenced documents and files
- Technician Recruiting, Retention, & Recognition: Best practices for attracting, developing, retaining, and rewarding technicians.
- Shifting Gears: Program details and upcoming events such as Dealer Days
- Quick Links: Links to GM STC, GM Center of Learning, GM ASEP, GM Technician Career Training, ASE Education Foundation as well as several video resources

For example, select the Technician Recruiting, Retention, & Recognition tab to learn how to participate in the GM Automotive Service Educational Program (ASEP). The GM ASEP Dealer Brochure and Student Brochure can be downloaded as well as other materials about the program, including how GM ASEP stacks up to other training providers. Or select the Service Library tab to view the Emerging Issues seminars, download the GM STC Course Catalog, or learn about some of the newest training courses now available.



Be sure to save the Service Technician Training, Recruiting, Retention, and Recognition App as a shortcut on GlobalConnect for one-click access to all the latest technical training information.

For more details about the GM Service Technical College and the technical courses available, visit gmstc.com or the GM Center of Learning at centeroflearning.com.

► Thanks to Eric Kenar

Corvette ZR1

REAR SPOILER ADJUSTMENT

The rear spoiler of the 2019 Corvette ZR1 is installed at the dealership during the Pre-Delivery Inspection (PDI). After installation of the rear spoiler, it may be noticeable that the spoiler has a crooked appearance. If this condition is evident, the Rear End Secondary Spoiler Bracket may be out of adjustment.

TIP: The rear spoiler (in both street and track configurations) is attached to the vehicle using unique fasteners. The vehicle is not shipped with the special bit that is needed to attach the spoiler to the vehicle. Obtain the appropriate bit to complete the installation. Refer to the Special Inspection Items box on the PDI form.

To correct the position of the rear spoiler, remove the rear fascia and adjust the Rear End Secondary Spoiler Bracket as needed until the spoiler is level.

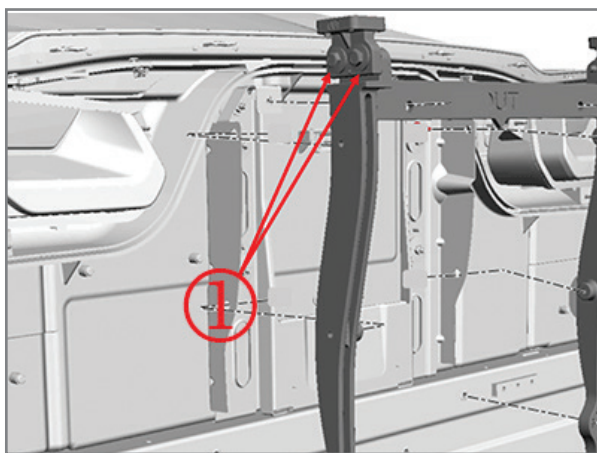
The bolts that need to be loosened to perform the adjustment are located on the left side of the bracket.

Adjust the spoiler so that the spoiler mounting piers are even left to right and are a minimum of 3 mm above the rear fascia.

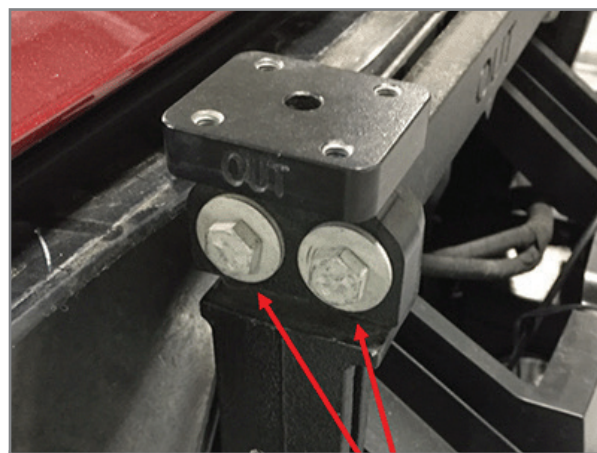
If the mounting piers are not positioned with the minimum 3 mm gap, the fascia paint may be damaged by the spoiler stanchions. Shown is the correct amount of clearance between the stanchions and the rear fascia.



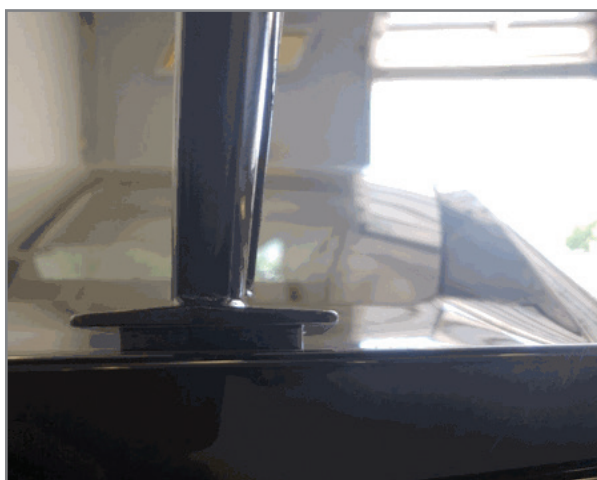
ZR1 high wing rear spoiler (track configuration)



Rear End Secondary Spoiler Bracket



The adjustment bolts are on the left side of the bracket.



Spoiler mounting piers



3 mm gap clearance between the stanchions and the rear fascia

► Thanks to Jeff Strausser

Share Your Feedback on GM Service Information

The GM Service Information is updated daily in order to provide technicians with the latest, most accurate information available to quickly and correctly service GM vehicles. By taking a moment to submit feedback on the Service Information (SI) — whether it's a note about a missing DTC or RPO that applies to a procedure, an incorrect reference, parameter or specification, or a suggestion for the diagnostic instructions — your comments can help ensure the SI application is user-friendly, working properly, and that the information is correct.

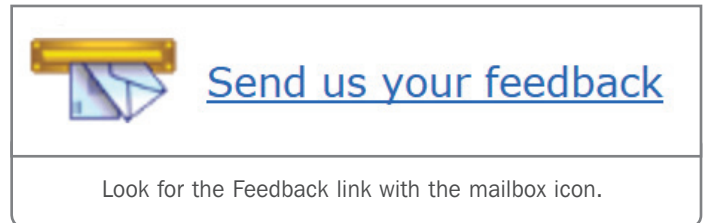


The Service Information includes the traditional information found in the Service Manuals, Bulletins and Unit Repair Manuals. In addition, depending on the model, SI includes Accessories Manuals, Labor Time Guides, Owner Manuals and Supplements, and Pre-Delivery Inspection Forms.

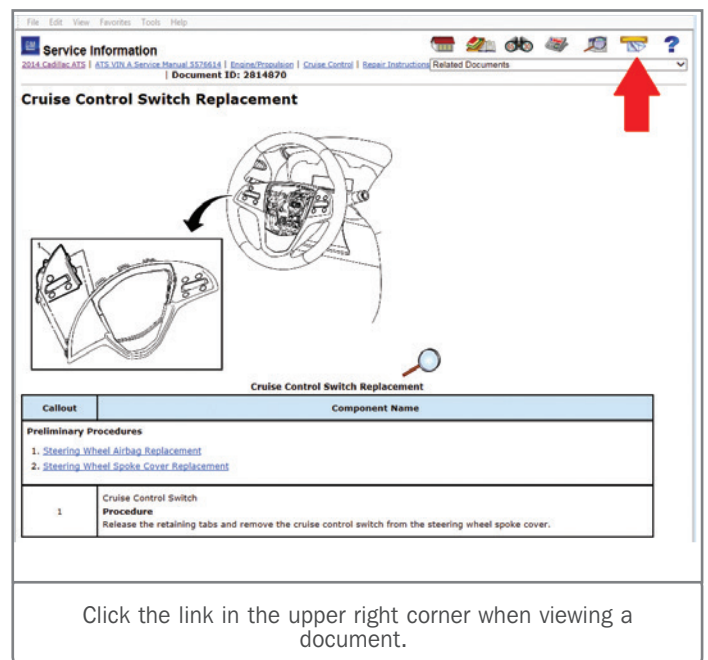
Feedback and suggestions for changes on any of these publications are welcome. For example, feedback recently noted the procedure for a Reductant System Malfunction Service Bay Test for an Exhaust Fluid Quality Poor message did not call out that the vehicle should be moved outside for proper ventilation during the test. The procedure was updated to add a warning statement to park the vehicle outside and to not connect any shop exhaust hoses to the tailpipe due to the exhaust temperature.

LOOK FOR THE MAILBOX ICON

Links to the Service Information feedback form can be found in several areas to make it easy to provide your comments.





- On the Service Information home page, select the "Send us your feedback" link next to the mailbox icon under the list of options.
- Once a vehicle is built, each menu page has a feedback link in the upper right corner of the page. It's the same mailbox icon. Click the icon to open the feedback form.
- On every document in the Service Information, the same feedback link (mailbox icon) can be found in the upper right corner. When selecting the link from this page, a portion of the form will be auto-filled based on the SI document, making it easy to comment on the information currently being viewed.



To view a publication, enter a VIN or select year, make and model, then click 'Next'.

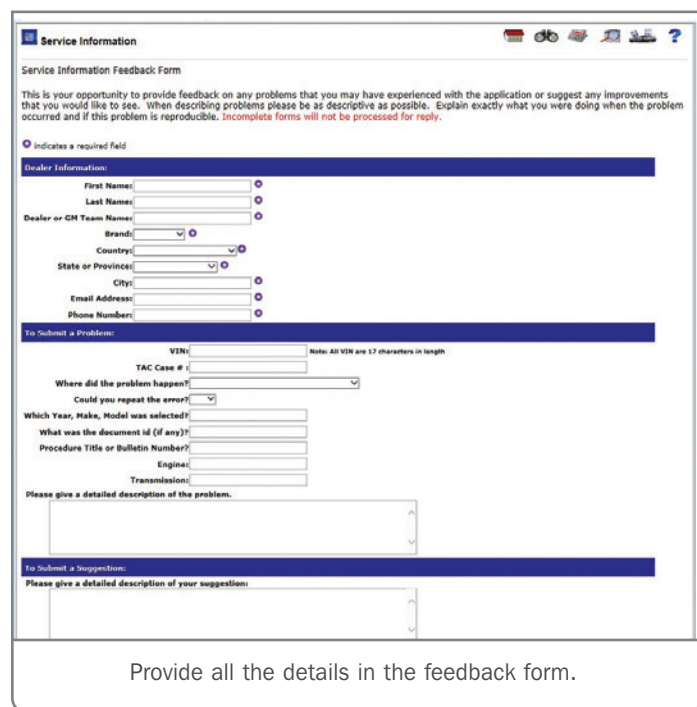
VIN: **Note: All VIN are 17 characters in length**
 Year: Make: Model:

Select other options:

-  [See the newest bulletins, campaigns and preliminary information in New Bulletins](#)
-  [Find a document by its ID, bulletin or campaign # in Number Search](#)

TIP: When in a service document, the feedback form covers Service Information issues. However, when in a Labor Time document, a more comprehensive feedback form is provided to request a labor time review.

FEEDBACK FORM DETAILS



In the feedback form, complete all of the fields under Dealer Information, To Submit a Problem or To Submit a Suggestion. An asterisk indicates the required fields. Incomplete forms will not be processed.

TIP: Be sure to include an email address and phone number. The Service Information team may want to contact you to gather additional information or reply to your feedback with a response.

SUBMIT A PROBLEM OR SUGGESTION

To submit a problem, fill in the requested information as thoroughly as possible. Provide a detailed description of the problem,

explaining exactly what happened and if the problem could be reproduced. Be sure to include the vehicle type and document ID if available.

If you have already built a vehicle, and are looking at a service document when you click the feedback button, the feedback form will automatically fill in the vehicle you've built and the document ID number.

To submit a suggestion, fill in the box provided using your own words to give a detailed description of your suggestion for any improvements you would like to see.

Once you have submitted your feedback, a confirmation screen will appear to let you know your submission has been sent.

After a submission is received, it's referred to the appropriate authoring team and engineering group for evaluation. If an error is confirmed, the Service Information will be reviewed, the new information will be verified, and SI will be updated. Typically, the process takes about two weeks to evaluate and publish a change to SI.

For example, a change was made recently to a procedure diagnosing the transmission range switches on the Electronic Transmission Range Select (ETRS) application. After feedback was submitted that pointed out the transmission range switches incorrectly listed scan tool parameters in volts instead of percentage, GM Engineering determined that there were two components that had incorrect units listed in the procedure. The SI document was updated for ETRS and non-ETRS applications with additional information about how the Transmission Internal Mode Switch uses a PWM signal to the TCM to identify the gear selection. The scan tool parameters for the transmission range switches also were corrected.

In addition to technical changes, suggestions for enhancements to the SI application also are reviewed by the appropriate authoring team in order to determine the feasibility and possible implementation of the suggestion. Functionality changes, for example, are made to SI after the new information is reviewed, tested and verified on all applicable platforms before being implemented.

► Thanks to Lisa Scott and Scott Barone

Proper GM Accessory Assist Step Installation

The GM Accessory Assist Steps available on 2014-2019 Silverado, Sierra; and 2015-2019 Tahoe, Suburban, Yukon, Colorado and Canyon models help make it easier to get in and out of the vehicle. Installation of the Assist Steps requires using the included brackets and mounting hardware and securing to the vehicle underbody. Here are a few tips to ensure a successful installation.



Several Assist Steps are available as GM Accessories.

TORQUE FASTENERS

One of the keys to successful installation of the Assist Steps is verifying fastener torque to the proper specification. Warranty claims for the Assist Steps being loose or a noise heard during vehicle operation often will identify that the bracket bolts were not tightened properly or that the brackets were not properly aligned during installation.

Use the correct fastener in the correct location and ensure that all fasteners are properly torqued to specification. There are a different number of bolts for installation on gasoline and diesel vehicles as well as regular and extended cab or crew cab models.

If power tools are used, it's recommended to verify the proper torque of the fasteners with a torque wrench. It also may be helpful to paint mark M8 bolts to make it easier to visually check that they are properly secured.

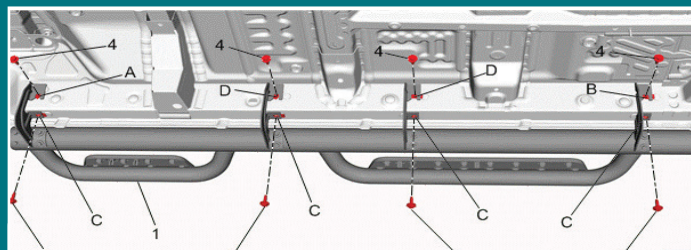
If an Assist Step was installed at your dealership, the repair for a loose step is not an acceptable warranty repair.



Paint mark after torque verification.

DIESEL MODELS

Installation of some Assist Steps may be more difficult on vehicles with a diesel engine due to the location of the Diesel Exhaust Fluid (DEF) tank.



Ensure all bolts are properly torqued.

To assist in the installation of the bracket near the DEF tank, it may be helpful to install and torque the bracket retaining bolt and then remove the bolt. The bracket should remain in place while securing the Assist Step.

For a look at the installation, view the August 2017 Emerging Issues seminar (10217.08V). In Canada, view the September 2017 edition of TAC Talk

BRACKET INSTALLATION

When installing the brackets for the Assist Steps, secure the vertical fasteners first. It may help to finger-start the horizontal fasteners and hang the Assist Steps on them during the installation procedure, but the vertical fasteners should be secured first.



Install and torque the bracket retaining bolt and then remove the bolt to aid Assist Step installation.

Begin installation with the forward-most bracket first followed by the rear bracket. The remaining brackets will then be easier to align while keeping the Assist Step properly positioned. For example, crew cab trucks use four brackets per side, so secure the #1 (front) and #4 (rear) brackets first, and then brackets #2 and #3.

For complete instructions and specifications for the accessory item being installed, always refer to the installation instructions in the Accessories manual in the appropriate Service Information.

► Thanks to Assist Step Team

Whine Sound from Under Center of Vehicle

Some 2016-2017 CT6 models may have an intermittent whine sound from under the vehicle. The sound may be more pronounced under acceleration.

The sound may be caused by contact between the center bearing slinger and the rubber bearing support in the rear driveshaft assembly. Inspect the bearing and slinger for contact between the slinger and the rubber. There should be enough clearance between the slinger and rubber to allow proper movement of the bearing.

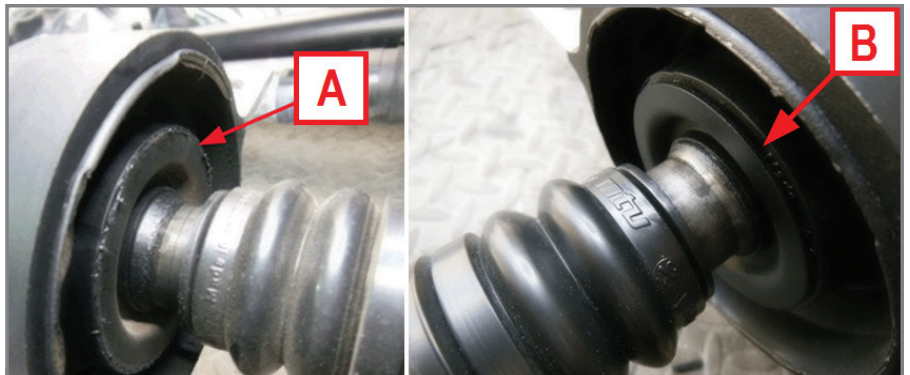
Also check the backside of the bearing. If the bearing is moving rearward, it allows the slinger to also move rearward. If the bearing is installed properly, there will not be any movement rearward.

If these conditions are found, replace the rear driveshaft assembly. Ensure that when the replacement shaft is installed, the bearing support is installed so it does not load the bearing in the rubber mount.

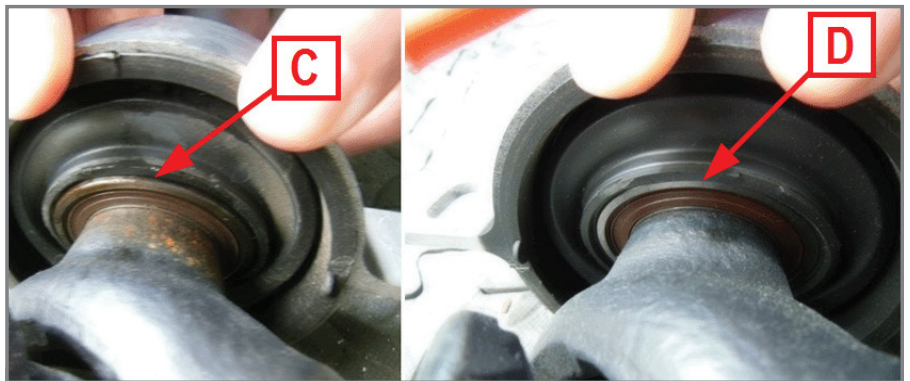
When properly installed, the clearance between the slinger and rubber support mount should be between 0.7 and 1 mm (0.027 – 0.040 in.).

When installing the driveshaft assembly, the bearing mount should be in the groove on both sides and centered in the left and right bolt holes.

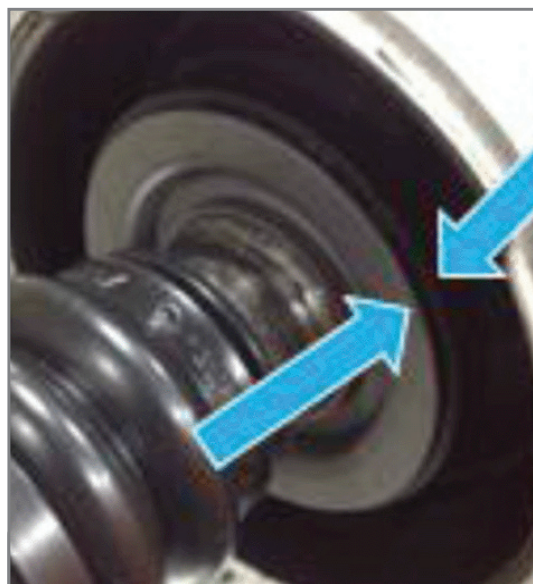
► Thanks to
Steve Schipansky



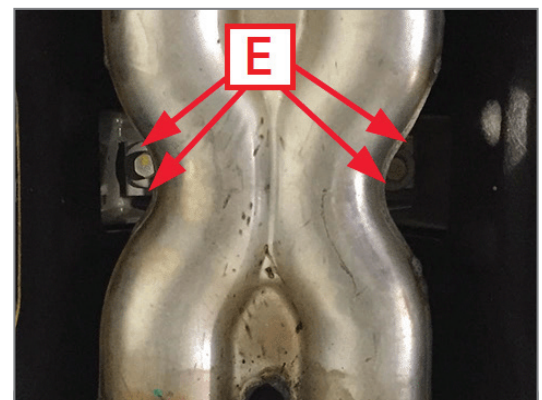
A. Contact between the slinger and rubber
B. Proper clearance between the slinger and rubber



C. Bearing moving rearward
D. Proper bearing installation



Proper clearance between the slinger and rubber support mount.



Driveshaft assembly centered in the left and right bolt holes.

S2

Manage Diagnostic Packages

New Stored Data

Yes

Name	Size	Date
S2	1.0 MB	2023-10-10 10:10:10

Cancel

Preferences

When assistance is needed from the Techline Customer Support Center (TCSC) or the Technical Assistance Center (TAC), the GDS 2 session files can be sent along with other vehicle data to help in diagnosis. The session files allow TCSC or TAC representatives to view what the technician is viewing on the vehicle.



TIP: When obtaining assistance from TCSC or TAC, an MDI or MDI 2 must be used with the GDS 2 or SPS applications. After-market scan tools do not always provide adequate support for all GM vehicle protocols. GM does not test or support aftermarket scan tools.

To email as GDS 2 session file:

2. Select the Edit button.



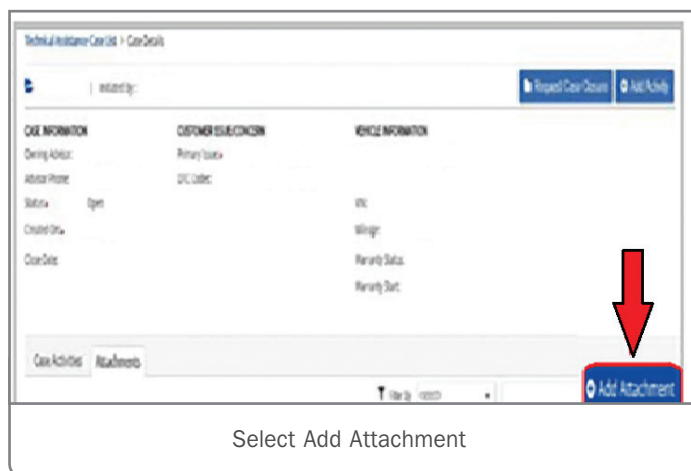
- Check the file and select the Email button.

- Enter the email address in the pop up window.

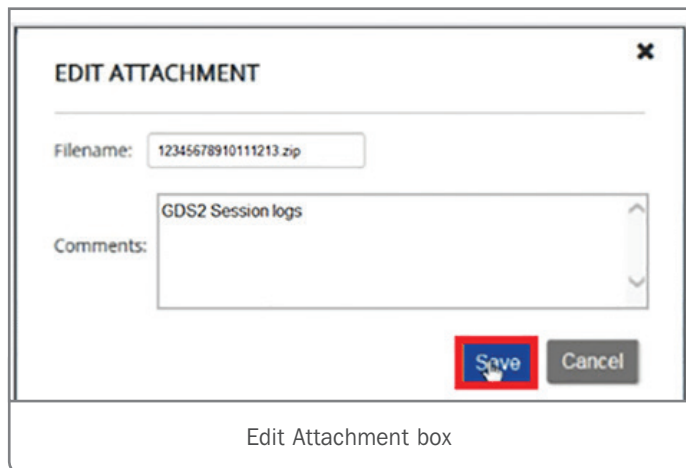
ATTACHING A SESSION FILE TO A DCM CASE

To attach a session file to a TAC case using the Dealer Case Management (DCM) system (U.S. only):

1. Select Review Stored Data in GDS 2.
2. Select the Edit button.
3. Check the box next to the desired session file to be sent and select the Export button. Do not use the Save As tab.
4. Save the session file to the PC.
5. From the PC, right click on the file name and select Rename in the drop-down menu.
6. Change the file extension from .zip to .piz. This allows the file to properly attach to the TAC case.



7. In the DCM system, select the Add Attachment tab.
8. Select the session file from the PC to upload.
9. The session file will load into the Edit Attachment box. Add any comments and select the Save button.



Refer to the latest version of Bulletin #08-00-89-014 for more information on using the DCM system when contacting TAC.

For assistance with GDS 2, contact the TCSC at 1-800-828-6860 (English) or 1-800-503-3222 (French).

► Thanks to Chris Henley

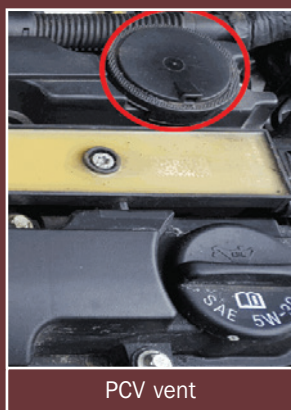
PCV Crankcase Pressure Control Diaphragm

DTC P0171 (Fuel Trim System Lean) may be set in the Engine Control Module (ECM) and the Check Engine MIL may be illuminated on some 2011-2016 Cruze; 2012-2015 Volt; 2012-2019 Sonic; 2013-2019 Encore, Trax; and 2014-2017 ELR models equipped with the 1.4L 4-cylinder engine (RPO LUJ, LUU, LUV). These conditions may be caused by a torn Positive Crankcase Ventilation (PCV) crankcase pressure control diaphragm, allowing un-metered air to enter the crankcase.

To determine if there is a tear in the PCV valve, first remove the engine cover, verify the engine oil dipstick is fully seated and that the oil fill cap is fully tightened, and then start the engine. With the engine running, listen for a noise from the PCV valve. If a noise is heard, check if the noise gets

quieter or stops with the engine oil dipstick removed.

Next, check to see if there is vacuum at the PCV vent at the front of the PCV valve by placing a piece of tissue near it. The tissue will be sucked against the vent and held there if vacuum is present. Smoke also can be used to see if it is drawn into the PCV vent port.



Normal operation of the PCV crankcase pressure control diaphragm would cause a tissue to flutter against the port (smoke would not be continuously drawn into the port). A torn crankcase pressure control diaphragm would cause the tissue to be held against the port (smoke would be continuously drawn in) due to internal engine vacuum leaking through the diaphragm.

If the PCV valve is making noise and there is vacuum present at the PCV valve vent, replace the camshaft cover following the appropriate Service Information.

If the PCV valve does not make noise or leak vacuum, the PCV system is not the cause of the condition. Follow the appropriate diagnostics for DTC P0171.

► Thanks to Jeff Kropp

Rattle Sound Near Front of Engine

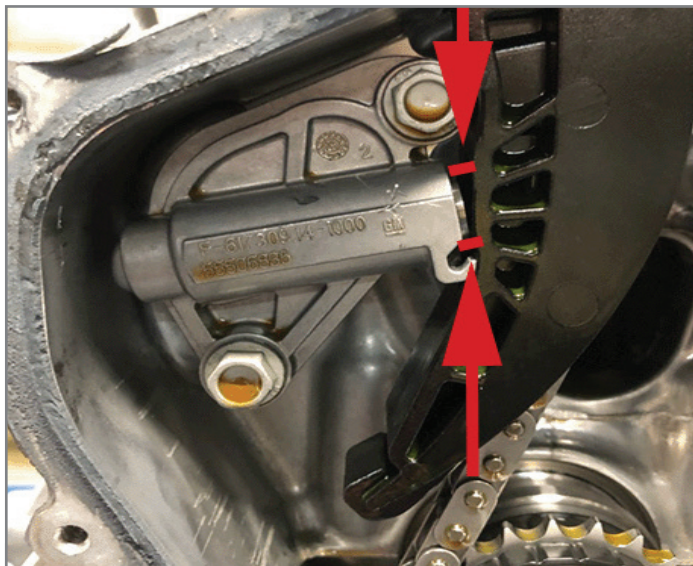
The 2019 XT4 may have a rattle sound heard near the front of the 2.0L 4-cylinder engine (RPO LSY) due to a stuck or collapsed timing chain tensioner and, as a result, a loose timing chain.

If the rattle sound is heard near the front of the engine, remove the lower engine front cover assembly and inspect the timing chain tensioner. A stuck timing chain tensioner plunger will allow an air gap to be present between the tensioner plunger and the timing chain guide.

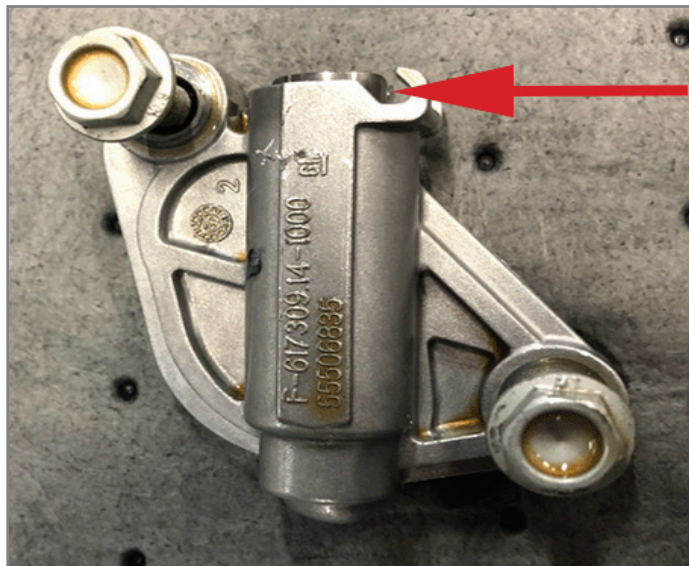
When viewing the timing chain tensioner removed from the engine, the plunger can be seen stuck in the body of the tensioner.

If these conditions are found, replace the timing chain tensioner following the appropriate Service Information.

► Thanks to Robert Halas



Air gap between the tensioner plunger and the timing chain guide



Plunger stuck in the body of the tensioner

TECH LINK

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:
John Meade
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@5by5dzn.com

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

GM TechLink on the Web:
GM GlobalConnect

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