



Recall Bulletin



PRODUCT SAFETY RECALL

SUBJECT: Transmission Turbine Shaft Fracture

MODELS: 2012 Chevrolet Sonic
With 6 Speed Automatic Transmission (Model 6T30 - RPO MH9)
And 1.8L Engine (RPO LUW)

The parts information section in this bulletin has been revised due to recent Service Information procedure updates. As a result, part number 92139090 and 11516382 were removed from the part list since it is not necessary to remove the control arms from the frame. The quantities for part numbers 11517996, 13208672, and 11611963 were adjusted from quantity 1 to quantity 2 to account for disassembly on both sides of the vehicle. Part number 24231666 was adjusted from quantity 1 to quantity 3. Part number 13231667 (quantity 2) was also added for the steering gear bolts. Please discard all copies of bulletin 14234.

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

All involved vehicles that are in dealer inventory must be held and not delivered to customers, dealer traded, or used for demonstration purposes until the repair contained in this bulletin has been performed on the vehicle.

CONDITION

General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2012 model year Chevrolet Sonic vehicles equipped with a 6 Speed Automatic Transmission and 1.8L Four Cylinder Engine. These vehicles may have a condition in which the transmission turbine shaft may fracture. If this occurs while in first or second gear, there will be no effect on performance but no upshift to third through sixth gears will occur. If the fracture occurs while in third through sixth gears, the vehicle will coast until it slows enough for a downshift to first or second gear to occur, increasing the risk of a crash. In both instances, a MIL (Malfunction Indicator Lamp) may illuminate and all of the forward gears may become inoperative if operated in this manner for a long period of time (minutes or hours). The engine will continue to run and all power accessories will remain functional.

CORRECTION

Dealers are to replace the transmission turbine shaft.

VEHICLES INVOLVED

All involved vehicles are identified by Vehicle Identification Number on the Investigate Vehicle History screen in GM Global Warranty Management system. Dealership service personnel should always check this site to confirm vehicle involvement prior to beginning any required inspections and/or repairs. It is important to routinely use this tool to verify eligibility because not all similar vehicles may be involved regardless of description or option content.

For dealers with involved vehicles, a listing with involved vehicles containing the complete vehicle identification number, customer name, and address information has been prepared and will be provided to US and Canadian dealers through the GM GlobalConnect Recall Reports. Dealers will not have a report available if they have no involved vehicles currently assigned.

The listing may contain customer names and addresses obtained from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall is a violation of law in several states/provinces/countries. Accordingly, you are urged to limit the use of this report to the follow-up necessary to complete this recall.

PART INFORMATION

Parts required to complete this recall are to be obtained from General Motors Customer Care and Aftersales (GMCC&A). Please refer to your "involved vehicles listing" before ordering parts. Normal orders should be placed on a DRO = Daily Replenishment Order. In an emergency situation, parts should be ordered on a CSO = Customer Special Order.

When determining which parts will be necessary to complete this recall, assess the vehicle symptoms and/or condition of the turbine shaft. In the majority of cases, none of the symptoms above will be exhibited and the turbine shaft will not be broken/fractured so it will only be necessary to replace the turbine shaft using everything in Parts List # 1*. In some instances where the turbine shaft has broken/fractured, the vehicle will display the symptoms described above and additional components may have been damaged due to the related debris so it will be necessary to replace the turbine shaft using everything in Parts List # 2**.

Parts List # 1*

<i>*For Typical Shaft Replacement – No Symptoms Above and Turbine Shaft Not Broken/Fractured</i>		
Part Number	Description	Quantity/Vehicle
24231698	RING,TURB SHF RET	1
24231696	SHAFT,TURB	1
24269583	SEAL KIT, A/TRNS SERV	1
88861037 US / 19264717 CA	FLUID,A/TRNS DEXRON VI 1QT US / 1L Canada (9 Req'd US or Canada)	9
12346290 - US 10953464 - CA	Coolant, Engine (Dex-Cool) (1 Gallon Container in US / 4 L Container in Canada)	1
95017768	GASKET, EXH FRT PIPE	1
95017769	GASKET, EXH MUFFLER	1
11517996	NUT, FRT LWR CONT ARM BALL STUD	2
13208672	NUT, WHEEL DRIVE SHAFT	2
11611642	BOLT, TRANS MT STRUT BRKT	3
11589277	BOLT, HFH, TRANS MT STRUT	1
11570514	BOLT, TRANS MT	3

11611963	WASHER, WHEEL DRIVE SHAFT	2
13231667	BOLT, S/GR	2

Parts List # 2**

<i>**Only Used if Broken/Fractured Shaft if Found.</i>		
<i>*** 9 quarts/liters of transmission fluid are allowed for the standard repair. In the event of a broken/fractured turbine shaft, an additional 5 – 8 quarts/liters of transmission fluid are allowed for the required flushing and flow testing the transmission oil cooler and lines.</i>		
Part Number	Description	Quantity/Vehicle
24231788	HUB, OUTPUT CARRIER TRFER DRV GR	1
24231689	RING, INPUT SHF SPD SEN RELUCTOR RING RET	1
24259910	PISTON, 3-5-REV CLU	1
24231686	SPRING, 3-5-REV CLU PSTN RET	1
24231691	PLATE,3-5 REV CLU	1
24231692	PLATE,3-5 REV CLU (3 required per repair)	3
24261225	PLATE, 3-5-REV CLU (W/FRICT MATL)	1
24231694	PLATE, 3-5-REV CLU BKG	1
24231695	SPRING, 3-5-REV CLU BKG PLT RET	1
24231698	RING,TURB SHF RET	1
24231648	HOUSING,3-5-REV & 4-5-6 CLU	1
24258876	SPRING, 4-5-6 CLU PSTN RET	1
24231660	DAM, 4-5-6 CLU PSTN	1
24230752	RING, 4-5-6 CLU DAM RET	1
24231665	PLATE, 4-5-6 CLU (WAVED)	1
24237521	PLATE, 4-5-6 CLU APPLY	1
24231696	SHAFT,TURB	1
24261228	PLATE,4-5-6 CLU KIT (Contains 4 Friction Plates)	1
24231666	PLATE, 4-5-6 CLU (3 required per repair)	3
24231668	PLATE, 4-5-6 CLU BKG	1
24231699	BEARING,REACTION SUN GR THR	2
24231700	HUB, REACTION CARRIER	1
24231669	RING, 4-5-6 CLU BKG PLT RET	1
24231725	BEARING, INPUT CARR THR	1
24231726	BEARING, INPUT SUN GR THR	1
24231727	GEAR, INPUT SUN	1
24231742	BEARING, INPUT SUN GR THR	1
24231743	BEARING, OUTPUT CARRIER THR	1
24269583	SEAL KIT, A/TRNS SERV	1
88861037 US / 19264717 CA	FLUID,A/TRNS DEXRON VI 1QT US / 1L Canada (14 - 17 Req'd US or Canada)	14 – 17***
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13231667	BOLT, S/GR	2

SERVICE PROCEDURE

1. Remove the transmission from the vehicle. Refer to *Transmission Replacement (With 1.6L or 1.8L Engine)* in SI.
2. Inspect the condition of the turbine shaft and perform a turbine shaft replacement as instructed below.

TURBINE SHAFT IS NOT OBVIOUSLY BROKEN/FRACTURED:

If the turbine shaft **is not** obviously broken/fractured, perform a turbine shaft replacement by following SI procedures to replace all of the parts listed in Parts List # 1 above. In these instances, it **is not** necessary to flush and flow test the transmission oil cooler and lines as recommended in *Transmission Replacement* in SI because there should not be any related debris in the transmission if the shaft has not broken/fractured. For additional instruction, refer to *3-5-Reverse and 4-5-6 Clutch Housing Disassemble (6T30)* to remove the turbine shaft from the clutch housing and *3-5-Reverse and 4-5-6 Clutch Housing Assemble (6T30)* procedures in SI.

Important: To ensure proper alignment/installation of the low/reverse and 1-2-3-4 clutch components during reassembly, carefully review *Low and Reverse Clutch Assembly and Low and Reverse Clutch Plate Installation and Low and Reverse and 1-2-3-4 Clutch Housing, and 1-2-3-4 Clutch Plate Installation* procedures in SI. Also note the photos below that show proper alignment of the (543) Low and Reverse Clutch Assembly to prevent incorrect installation and transmission damage. It is also recommended that GM technicians log on to <https://www.centerlearning.com/> and view a related training video that is found at the 40 minute mark of 10214.07D July 2014 Emerging Issues Seminar by following this path: *Resources>> Video on Demand>> Enter 10214.07D in the "Search Videos" Field >> Click on the Magnifying Glass Icon to search for the video.* For Canada technicians, this video can be viewed on the GM Centre of Learning (LMS) web site, which can be accessed via the Single Sign-on process through Global Connect. Click on the "Resources" menu option, and then select "Video on Demand," "GM Pro – Centre of Learning" and "Service Technical." The video will be in the list displayed on the page.

TURBINE SHAFT IS OBVIOUSLY BROKEN/FRACTURED:

In some instances where the turbine shaft **is** obviously broken/fractured, perform a turbine shaft replacement and overhaul the 3-5 reverse and 4-5-6 clutch housing by following SI procedures to replace all of the parts listed in Parts List # 2 above. In these instances, it **is** also necessary to flush and flow test the transmission oil cooler and lines. For additional instruction, refer to *Transmission Fluid Cooler Flushing and Flow Test, 3-5-Reverse and 4-5-6 Clutch Housing Disassemble (6T30)* and *3-5-Reverse and 4-5-6 Clutch Housing Assemble (6T30)* procedures in SI.

Important: To ensure proper alignment/installation of the low/reverse and 1-2-3-4 clutch components during reassembly, carefully review *Low and*

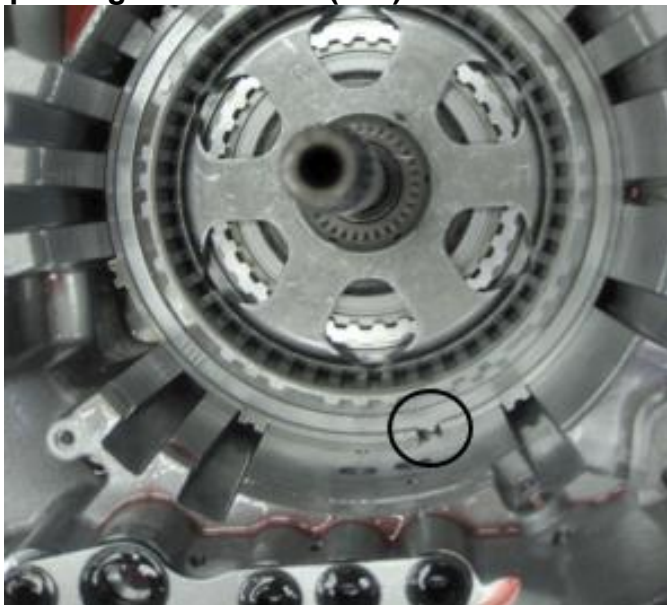
Reverse Clutch Assembly and Low and Reverse Clutch Plate Installation and Low and Reverse and 1-2-3-4 Clutch Housing, and 1-2-3-4 Clutch Plate Installation procedures in SI. Also note the photos below that show proper alignment of the (543) Low and Reverse Clutch Assembly to prevent incorrect installation and transmission damage. It is also recommended that GM technicians log on to <https://www.centerlearning.com/> and view a related training video that is found at the 40 minute mark of 10214.07D July 2014 Emerging Issues Seminar by following this path: *Resources>> Video on Demand>> Enter 10214.07D in the "Search Videos" Field >> Click on the Magnifying Glass Icon to search for the video.* For Canada technicians, this video can be viewed on the GM Centre of Learning (LMS) web site, which can be accessed via the Single Sign-on process through Global Connect. Click on the "Resources" menu option, and then select "Video on Demand," "GM Pro – Centre of Learning" and "Service Technical." The video will be in the list displayed on the page.

Proper Alignment of the (543) Low and Reverse Clutch Assembly (Zoomed In Below)



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Proper Alignment of the (543) Low and Reverse Clutch Assembly (Zoomed Out Below)



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3. Install the transmission in the vehicle. Refer to *Transmission Replacement (With 1.6L or 1.8L Engine)* in SI.

COURTESY TRANSPORTATION – For US and Canada

The General Motors Courtesy Transportation program is intended to minimize customer inconvenience when a vehicle requires a repair that is covered by the New Vehicle Limited Warranties. The availability of courtesy transportation to customers whose vehicles are within the warranty coverage period and involved in a product program is very important in maintaining customer satisfaction. Dealers are to ensure that these customers understand that shuttle service or some other form of courtesy transportation is available and will be provided at no charge. Dealers should refer to the General Motors Service Policies and Procedures Manual for Courtesy Transportation guidelines.

WARRANTY TRANSACTION INFORMATION

Submit a transaction using the table below. All transactions should be submitted as a ZFAT transaction type, unless noted otherwise.

Labor Code	Description	Labor Time
9100640	Turbine Shaft Replacement Using Parts List 1	8.3 *
9100662	Turbine Shaft Replacement & Overhaul 3-5 Reverse and 4-5-6 Clutch Housing Overhaul Using Parts List 2	10.3 **
* Labor Time Includes Wheel Alignment - Steering Wheel Angle and/or Front Toe Adjustment		
** Labor time includes 2.0 hours OLH and Wheel Alignment - Steering Wheel Angle and/or Front Toe Adjustment. Also includes time to flush and flow test the transmission oil cooler and lines in the event of a broken/fractured turbine shaft.		

CUSTOMER NOTIFICATION – For US and Canada

General Motors will notify customers of this recall on their vehicle starting 8/8/2014. However, the related notification letter will also advise them that the parts required to complete the recall will not be available until 8/18/2014 as shown in the example letter below.

DEALER RECALL RESPONSIBILITY – For US and Export (US States, Territories, and Possessions)

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

The US National Traffic and Motor Vehicle Safety Act provides that each vehicle that is subject to a recall of this type must be adequately repaired within a reasonable time after the customer has tendered it for repair. A failure to repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the customer may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation. To avoid having to provide these burdensome remedies, every effort must be

made to promptly schedule an appointment with each customer and to repair their vehicle as soon as possible. In the recall notification letters, customers are told how to contact the US National Highway Traffic Safety Administration if the recall is not completed within a reasonable time.

DEALER RECALL RESPONSIBILITY – All

All unsold new vehicles in dealers' possession and subject to this recall must be held and inspected/repaired per the service procedure of this recall bulletin before customers take possession of these vehicles.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided in this bulletin for your use in contacting customers. Recall follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this recall enters your vehicle inventory, or is in your dealership for service in the future, you must take the steps necessary to be sure the recall correction has been made before selling or releasing the vehicle.





IMPORTANT SAFETY RECALL

August 2014

Dear General Motors Customer:

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

General Motors recently announced that your 2012 model year Chevrolet Sonic was involved in GM recall 14234. This letter is to inform you that parts are expected to be available to repair your vehicle on August 18, 2014.

General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2012 model year Chevrolet Sonic vehicles equipped with a 6 Speed Automatic Transmission and 1.8L Four Cylinder Engine. As a result, GM is conducting a safety recall. We apologize for this inconvenience. However, we are concerned about your safety and continued satisfaction with our products.

IMPORTANT

- This notice applies to your 2012 Chevrolet Sonic.
- Your vehicle is involved in GM safety recall 14234.
- Schedule an appointment with your GM dealer.
- This service will be performed for you at **no charge**.

Why is your vehicle being recalled?

Your vehicle may have a condition in which the transmission turbine shaft may fracture. If this occurs while in first or second gear, there will be no effect on performance but no upshift to third through sixth gears will occur. If the fracture occurs while in third through sixth gears, the vehicle will coast until it slows enough for a downshift to first or second gear to occur, increasing the risk of a crash. In both instances, a MIL (Malfunction Indicator Lamp) may illuminate and all of the forward gears may become inoperative if operated in this manner for a long period of time (minutes or hours). The engine will continue to run and all power accessories will remain functional.

What will we do?

Your GM dealer will replace the transmission turbine shaft. This service will be performed for you at **no charge**. Because of service scheduling requirements, it is likely that your dealer will need your vehicle longer than the actual service correction time of approximately 10 hours and 20 minutes.

What should you do?

You should contact your GM dealer to arrange a service appointment as soon as possible.

Do you have questions?

If you have questions or concerns that your dealer is unable to resolve, please contact the appropriate Customer Assistance Center at the number listed below.

Division	Number	Text Telephones (TTY)
Chevrolet	1-800-222-1020	1-800-833-2438
Guam	65-6267-1752	
Puerto Rico – English	1-800-496-9992	
Puerto Rico – Español	1-800-496-9993	
Virgin Islands	1-800-496-9994	

If after contacting your dealer and the Customer Assistance Center, you are still not satisfied we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, DC 20590, or call the toll-free Vehicle Safety Hotline at 1.888.327.4236 (TTY 1.800.424.9153), or go to <http://www.safercar.gov>. The National Highway Traffic Safety Administration Campaign ID Number for this recall is 14V315.

Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Jim Moloney
General Director,
Customer and Relationship Services