

File In Section: Product Recalls
Bulletin No.: 07204C
Date: March 2008











# **PRODUCT SAFETY RECALL**

SUBJECT: Drive Axle Pinion Seal Leak – Replace Seal

MODELS: 2005-2007 Cadillac CTS, CTS-V, SRX, STS

2006-2007 Cadillac STS-V

2007 Daewoo G2X 2007 Opel GT

2006-2007 Pontiac Solstice

2007 Saturn SKY

#### The following changes have been made to this bulletin:

- Parts Information section: In the event that a pinion seal is damaged during installation, replacement seals are now available through the PQC. Threadlocker has also been added.
- Service Procedure section: An axle identification procedure has been added.
- Claim Information section: Two new labor codes have been added for AWD vehicles to allow the pinion seal replacement of only one axle.

Please review this new information before submitting claims. Discard all copies of bulletin 07204B, issued February 2008.

#### CONDITION

General Motors has decided that a defect, which relates to motor vehicle safety, exists in certain 2005-2007 model year Cadillac CTS, CTS-V, SRX, STS; 2006-2007 model year Cadillac STS-V; 2007 model year Daewoo G2X and Opel GT; 2006-2007 model year Pontiac Solstice; and 2007 model year Saturn SKY vehicles. The drive axle differential seal (two on all-wheel drive vehicles) may leak because it does not meet GM's specifications. If a seal is leaking, there will be fluid on the ground where the vehicle is parked. If enough fluid leaks, the differential will become noisier because of reduced lubrication. After about two-thirds of the differential fluid is lost, the bearings may no longer be lubricated and may start to overheat. Damage to the bearings and other differential components could then occur. Damaged bearings will create noise that may be heard by the vehicle occupants. If the vehicle is not repaired and damage progresses, three conditions can occur: (1) When the vehicle is stopped and shifted to reverse, the differential may jam and prevent vehicle movement; (2) the damage can cause drag that will feel like the brake is applied; or (3) the differential could jam and lock the drive wheels while the vehicle is in motion. If (3) occurs, the driver may not be able to control the vehicle and a crash could occur without warning.

## **CORRECTION**

Dealers/retailers are to install a new drive axle differential seal (two on all-wheel drive vehicles).

#### **VEHICLES INVOLVED**

Involved are **certain** 2005-2007 model year Cadillac CTS, CTS-*V*, SRX, STS; 2006-2007 model year Cadillac STS-*V*; 2007 model year Daewoo G2X and Opel GT; 2006-2007 model year Pontiac Solstice; and 2007 model year Saturn SKY vehicles built within these VIN breakpoints:

Year	Division	Model	From	Through
2005	Cadillac	CTS	50207119	50237751
2006	Cadillac	CTS	60100001	60213969
2007	Cadillac	CTS	70100002	70198445
2005	Cadillac	CTS-V	50207126	50234392
2006	Cadillac	CTS-V	60102809	60209495
2007	Cadillac	CTS-V	70100001	70197204
2005	Cadillac	SRX	50207077	50237338
2006	Cadillac	SRX	60100011	60222963
2007	Cadillac	SRX	70105009	70193999
2005	Cadillac	STS	50207130	50237744
2006	Cadillac	STS	60100019	60222184
2007	Cadillac	STS	70100056	70197027
2006	Cadillac	STS-V	60104156	60217940
2007	Cadillac	STS-V	70100060	70195959
2007	Daewoo	G2X	7Y136494	7Y140874
2007	Opel	GT	7Y111678	7Y142685
2006	Pontiac	Solstice	6Y000001	6Y120195
2007	Pontiac	Solstice	7Y103375	7Y142882
2007	Saturn	SKY	7Y100001	7Y142740

**Important:** Dealers/retailers are to confirm vehicle eligibility prior to beginning repairs by using the system(s) below. Not all vehicles within the above breakpoints may be involved.

- GM dealers and Canadian Saturn retailers should use GMVIS.
- Saturn US retailers should use the "Investigate Vehicle History" link on the Global Warranty Management application within DealerWorld.

For dealers/retailers 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 through the applicable system listed below. Dealers/retailers will not have a report available if they have no involved vehicles currently assigned.

- US GM dealers/Saturn retailers GM DealerWorld Recall Information
- Canadian GM/Saturn dealers/retailers GMinfoNet Recall Reports
- Export dealers sent directly to dealers

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.

#### PARTS INFORMATION

**GM and Saturn Canada Only:** Parts required to complete this program are to be obtained from General Motors Service and Parts Operations (GMSPO). 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.

**Saturn US Only:** A pre-shipment of the required parts (except the threadlocker) to perform this repair has been sent to involved Saturn US retailers from Saturn Service Parts Operations (SSPO).

Part Number	Description	Quantity/ Vehicle
19179933*	Seal Kit, Diff Drv P/Gr (CTS, STS, SRX, Solstice, SKY, GT)	1
	(Note: STS AWD & SRX AWD will also require P/N 19179936)	
19179934*	Seal Kit, Diff Drv P/Gr (STS-V, CTS-V)	1
19179936*	Seal Kit, Frt Diff Drv P/Gr (STS AWD, SRX AWD)	1
	(Note: STS AWD & SRX AWD will also require P/N 19179933)	
89021677 – US	Lubricant, Gr Synthetic, SAE 75W-90	1-2 (RWD)
89021678 – CN		1-4 (AWD)
		(as needed)
01052358 – US	Lubricant, Limited-Slip Differential	1
00992694 - CN		(if needed)
89021297	Adhesive/Sealant, Threadlocker Hi Strength	As Needed
Or Obtain Locally		
12345382	Compound, Adhesive/Sealant, Thread Med Strength	As Needed
Or Obtain Locally		

<sup>\*</sup> To avoid pinion seal damage, use the required special tools. Refer to SI for special tool and procedure information. In the event that a pinion seal is damaged during installation, a replacement seal can be obtained by contacting the Product Quality Center at 1-866-654-7654. DO NOT order replacement seals from GMSPO or SSPO.

## SERVICE PROCEDURE

#### **Inspection Procedure**

**Important:** If the vehicle history or repair orders are not available, refer to Axle Assembly Identification in this bulletin for axle identification information.

- 1. Check the vehicle history for an axle replacement.
  - If the axle has not been replaced, proceed to the Pinion Seal Replacement Procedure below.
  - If the axle has been replaced, check for the part number of the new axle using GMVIS or the repair order.
    - If the axle part number is listed in the table below, the axle has the new design seal. No further action is required.
    - If the axle part number is NOT listed in the table below, proceed to the *Pinion Seal Replacement Procedure* below.

#### **Rear Axles**

19178776	19178783	19181230		19181710	25862517	25873496
19178777	19178784	19181231		25858218	25862518	25873497
19178778	19181225	19181232		25858219	25862519	25873498
19178779	19181226	19181233	-	25858220	25862520	25873499
19178780	19181227	19181234	-	25858221	25862521	25873500
19178781	19181228	19181235	-	25858222	25862522	_
19178782	19181229	19181709		25858223	25862523	

## **Front Axles**

25868432 25873547

#### **Axle Assembly Identification**

The axle part number is on an adhesive label on the top side of the axle. It can be read in the vehicle using a small mirror. Another means of identifying an axle that has the new design pinion seal is by referring to Technical Service Bulletin (TSB) 07-04-20-003. A service axle that uses the 2008 production pinion seal can be identified by a casting number that is visible on the pinion cartridge casting immediately behind the yoke. The new design casting number for the rear axle is 6457038590. The new design casting number for the front axle is 6507022390. Refer to TSB 07-04-20-003 for illustrations and more information. Use the "Inspect – New Axle Previously Installed – No Further Action Required", V1794 labor operation code for inspection only claims.

#### **Pinion Seal Replacement:**

Notice: To avoid pinion seal damage, use the required special tools. Refer to SI for special tool and procedure information.

**Important:** When replacing the pinion seal, make sure that the pinion bore is free of excess fluid that could get trapped before the yoke is installed. Install the new seal and yoke promptly, before excess fluid seeps into the area. It may be necessary to drain some or all of the axle fluid to assure that the pinion bore remains free of fluid during seal installation. This should prevent the lube from being trapped behind the dust shield.

**Important: DO NOT** reuse the flange and nut as instructed in the service procedure in SI. Use the new flange and nut provided in the kit.

- 1. Remove the pinion seal. Refer to the appropriate pinion replacement procedure in SI.
- 2. Replace the pinion seal. Refer to the appropriate pinion seal replacement procedure in SI.

#### CUSTOMER REIMBURSEMENT – For GM US

All customer requests for reimbursement of previously paid repairs for the recall condition will be handled by the Customer Assistance Center, not by dealers.

A General Motors Customer Reimbursement Procedure and Claim Form is included with the customer letter.

**IMPORTANT**: (For GM US Only) Refer to the GM Service Policies and Procedures Manual, section 6.1.12, for specific procedures regarding customer reimbursement and the form.

#### CUSTOMER REIMBURSEMENT - For Canada and Export

Customer requests for reimbursement of previously paid repairs for the recall condition are to be submitted to the dealer by February 28, 2009.

All reasonable customer paid receipts should be considered for reimbursement. The amount to be reimbursed will be limited to the amount the repair would have cost if completed by an authorized General Motors dealer.

When a customer requests reimbursement, they must provide the following:

- Proof of ownership at time of repair.
- Original paid receipt confirming the amount of repair expense(s) that were not reimbursed, a description of the repair, and the person or entity performing the repair.

Claims for customer reimbursement on previously paid repairs are to be submitted as required by WINS.

**IMPORTANT**: Refer to the GM Service Policies and Procedures Manual, section 6.1.12, for specific procedures regarding customer reimbursement verification.

## <u>CUSTOMER REIMBURSEMENT</u> – For Saturn US Only

All customer requests for reimbursement for previous repairs for the recall condition are handled by submitting a recall reimbursement claim form directly to Saturn retailers for processing; however, if customers choose, they may file a claim through the Saturn Customer Assistance Center.

A Saturn Customer Reimbursement Procedure and Claim Form are included with the customer letter.

#### 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 Warranty. 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. US dealers/retailers should refer to the General Motors Service Policies and Procedures Manual for Courtesy Transportation guidelines. Saturn Canada retailers should refer to applicable Home Office letter on this subject.

# <u>CLAIM INFORMATION</u> – GM and Saturn Canada Only

Submit a Product Recall Claim with the information indicated below:

Repair Performed	Part Count	Part No.	Parts Allow	CC-FC	Labor Op	Labor Hours	Net Item
Inspect – New Axle Previously Installed – No Further Action Req'd	N/A	N/A	N/A	MA-96	V1794	0.2	N/A
Replace Rear Differential Seal Only			*	MA-96	V1777		**
<ul> <li>CTS, SRX, STS (inc. AWD vehicles)</li> </ul>	2-3					1.3	
GT, Solstice, SKY	2-3					2.0	
Add: w/Driveline Support Bracket w/RPO MA5						1.6	
Replace Front Differential Seal Only (SRX AWD, STS AWD)	2-3				V1797	1.6	**
Replace Front and Rear Differential Seal (SRX AWD, STS AWD)	4-7				V1798	2.8	**
Courtesy Transportation for vehicles within the New Vehicle Limited Warranty (US & Canadian GM Dealers)	N/A	N/A	N/A	MA-96	***	N/A	***
Customer Reimbursement (Canadian & Export Dealers/US CAC)	N/A	N/A	N/A	MA-96	V1778	0.2	****

- \* The "Parts Allowance" should be the sum total of the current GMSPO Dealer net price plus applicable Mark-Up or Landed Cost Mark-Up (for Export) for seal kit(s) and fluids needed to complete the repair.
- \*\* The amount identified in the Net Item column should represent the actual sum total of the current GMSPO Dealer net price for the threadlocker needed to perform the required repairs, not to exceed \$1.40 USD/CAD, plus applicable Mark-Up or Landed Cost Mark-Up (for Export).
- \*\*\* Submit courtesy transportation using normal labor operations for courtesy transportation as indicated in the GM Service Policies and Procedures Manual for vehicles within the New Vehicle Limited Warranty.
- \*\*\*\* The amount identified in the "Net Item" column should represent the actual dollar amount for courtesy transportation.
- \*\*\*\*\* The amount identified in the "Net Item" column should represent the dollar amount reimbursed to the customer.

Refer to the General Motors WINS Claims Processing Manual for details on Product Recall Claim Submission.

#### <u>CLAIM INFORMATION</u> – Saturn US Only

1. To receive credit, submit a claim with the information below:

Repair Performed	Parts Allow.	Sale Type	Case Type	Labor Op.	Labor Hrs.	Admin Hrs.**
Inspect – New Axle Previously Installed – No Further Action Req'd	N/A	WC	VC	V1794	0.2	0.1
Replace Rear Differential Seal	*	WC	VC	V1777	2.0	0.1
- Add: w/Driveline Support Bracket w/RPO MA5					1.6	

- \* The parts allowance should be the sum total of the current SSPO retailer net price plus 40% of all parts required for the repair.
- \*\* Administrative allowance
- 2. Refer to the GM Messenger bulletins SAG20060292/SAG20060295 for Courtesy Transportation guidelines.

Service Performed		Case	Labor	Net Item	Net Item	# Days
		Type	Op.	Amount	Code	Rental
Customer Reimbursement		VC	V1778	***	R	N/A

<sup>\*\*\*</sup> Customer requests for reimbursement of previously paid repairs to replace the drive axle differential seal.

## **Customer Reimbursement Claims - Special Attention Required**

Customer reimbursement claims must have entered into the "technician comments" field the CSO # (if repair was completed at a Saturn Retail Facility) date, mileage, customer name, and any deductibles and taxes paid by the customer.

# <u>CUSTOMER NOTIFICATION</u> – For US and Canada

General Motors will notify customers of this recall on their vehicle (see copy of customer letter included with this bulletin).

# **CUSTOMER NOTIFICATION** – For Export

Letters will be sent to known owners of record located within areas covered by the US National Traffic and Motor Vehicle Safety Act. For owners outside these areas, dealers should notify customers using the attached sample letter.

# <u>DEALER RECALL RESPONSIBILITY</u> – For US and Export (US States, Territories, and Possessions)

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 <u>must</u> be held and inspected/repaired per the service procedure of this recall bulletin <u>before</u> 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.

February 2008

#### Dear General Motors Customer:

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

General Motors has decided that a defect that relates to motor vehicle safety exists in certain 2005-2007 model year Cadillac CTS, CTS-V, SRX, STS; 2006-2007 model year Cadillac STS-V; 2007 model year Daewoo G2X and Opel GT; 2006-2007 model year Pontiac Solstice; and 2007 model year Saturn SKY vehicles. 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

- Your vehicle is involved in safety recall 07204.
- Schedule an appointment with your GM dealer/retailer.
- This service will be performed for you at **no charge**.

Why is your vehicle being recalled?

The drive axle differential seal (two on all-wheel drive vehicles) may leak because it does not meet GM's specifications. If a seal is leaking, there will be fluid on the ground where the vehicle is parked. If enough fluid leaks, the differential will become noisier because of reduced lubrication. After about two-thirds of the differential fluid is lost, the bearings may no longer be lubricated and may start to overheat. Damage to the bearings and other differential components could then occur. Damaged bearings will create noise that may be heard by the vehicle occupants. If the vehicle is not repaired and damage progresses, three conditions can occur: (1) When the vehicle is stopped and shifted to reverse, the differential may jam and prevent vehicle movement; (2) the damage can cause drag that will feel like the brake is applied; or (3) the differential could jam and lock the drive wheels while the vehicle is in motion. If (3) occurs, the driver may not be able to control the vehicle and a crash could occur without warning.

# What will we do?

Your GM dealer/retailer will install a new drive axle differential seal (two on all-wheel drive vehicles). This service will be performed for you at **no charge**. Because of service scheduling requirements, it is likely that your dealer/retailer will need your vehicle longer than the actual service correction time of approximately 1 hour and 20 minutes to 2 hours and 50 minutes.

If your vehicle is within the New Vehicle Limited Warranty your dealer/retailer may provide you with shuttle service or some other form of courtesy transportation while your vehicle is at the dealership/facility for this repair. Please refer to your Owner's Manual and your dealer/retailer for details on courtesy

transportation.

# What should you do?

You should contact your GM dealer/retailer to arrange a service appointment as soon as possible. Bring the enclosed customer reply form with you when you visit your dealer/retailer. The form identifies the repairs required. If you no longer own this vehicle, please let us know by completing the form and mailing it back to us.

# Did you already pay for this repair?

The enclosed form explains what reimbursement is available and how to request reimbursement if you have paid for repairs for the recall condition.

# Do you have questions?

If you have questions or concerns that your dealer/retailer is unable to resolve, please contact the appropriate Customer Assistance Center at the number listed below. More information about this recall can be found at the Owner Center at MyGMLink, http://www.gm.com/recall

Division	Number	Text Telephones (TTY)		
Cadillac	1-866-982-2339	1-800-833-2622		
Pontiac	1-800-620-7668	1-800-833-7668		
Saturn	1-800-972-8876	1-800-833-6000		
Hummer	1-866-964-8663			
Guam	1-671-648-8450			
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/retailer 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.

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

Scott Lawson General Director, Customer and Relationship Services