



General Motors LLC

## Vehicle Report

Transaction ID: 18-00540-21191-10 (Original Report)

Required fields indicated with \*

Your report has been submitted. Your Transaction No. is 18-00540-21191-10.

### Manufacturer: General Motors LLC

29427 Louis Chevrolet Road  
WARREN MI 48093

[Scott Dallos](#)  
734-516-9931,

This is a Safety Defect Report.

### Vehicle Information

#### Chevrolet Cruze 2018 - 2019

\* **Model Yr. Start:** 2018      \* **Model Yr. End:** 2019  
\* **Make:** Chevrolet  
\* **Model:** Cruze

**Type:**  
**Body Style:**  
**Powertrain:**

**Production Dates**    Begin: 03/19/2018  
                                  End: 06/19/2018

**Descriptive Information:**  
Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

#### Chevrolet Equinox 2018 - 2019

\* **Model Yr. Start:** 2018      \* **Model Yr. End:** 2019  
\* **Make:** Chevrolet  
\* **Model:** Equinox

**Type:**  
**Body Style:**  
**Powertrain:**

**Production Dates**    Begin: 03/19/2018  
                                  End: 06/19/2018

**Descriptive Information:**  
Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

#### Chevrolet Impala 2018 - 2019

\* **Model Yr. Start:** 2018      \* **Model Yr. End:** 2019  
\* **Make:** Chevrolet  
\* **Model:** Impala

**Type:**  
**Body Style:**  
**Powertrain:**

**Production Dates**    Begin: 04/18/2018  
                                  End: 06/21/2018

**Descriptive Information:**  
Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

#### Chevrolet Malibu 2018

\* **Model Yr. Start:** 2018      \* **Model Yr. End:** 2018  
\* **Make:** Chevrolet  
\* **Model:** Malibu

**Type:**  
**Body Style:**  
**Powertrain:**

**Descriptive Information:**

**Production Dates**    Begin: 03/27/2018  
    End: 06/19/2018

Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

#### Chevrolet Volt 2018 - 2019

\* **Model Yr. Start:** 2018                      \* **Model Yr. End:** 2019  
 \* **Make:** Chevrolet  
 \* **Model:** Volt

**Type:**

**Body Style:**

**Powertrain:**

**Production Dates**    Begin: 03/27/2018  
    End: 06/20/2018

**Descriptive Information:**

Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

#### GMC Terrain 2018 - 2019

\* **Model Yr. Start:** 2018                      \* **Model Yr. End:** 2019  
 \* **Make:** GMC  
 \* **Model:** Terrain

**Type:**

**Body Style:**

**Powertrain:**

**Production Dates**    Begin: 03/19/2018  
    End: 06/15/2018

**Descriptive Information:**

Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

#### Buick LaCrosse 2018 - 2019

\* **Model Yr. Start:** 2018                      \* **Model Yr. End:** 2019  
 \* **Make:** Buick  
 \* **Model:** LaCrosse

**Type:**

**Body Style:**

**Powertrain:**

**Production Dates**    Begin: 03/27/2018  
    End: 06/22/2018

**Descriptive Information:**

Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

#### Buick Regal 2018 - 2019

\* **Model Yr. Start:** 2018                      \* **Model Yr. End:** 2019  
 \* **Make:** Buick  
 \* **Model:** Regal

**Type:**

**Body Style:**

**Powertrain:**

**Production Dates**    Begin: 05/16/2018  
    End: 06/25/2018

**Descriptive Information:**

Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

#### Cadillac XTS 2018 - 2019

\* **Model Yr. Start:** 2018                      \* **Model Yr. End:** 2019  
 \* **Make:** Cadillac  
 \* **Model:** XTS

**Type:**

**Body Style:**

**Powertrain:**

**Production Dates**    Begin: 04/18/2018  
                                  End: 06/21/2018

**Descriptive Information:**

Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

**Cadillac XTS Professional 2018 - 2019**

\* **Model Yr. Start:** 2018                      \* **Model Yr. End:** 2019  
 \* **Make:** Cadillac  
 \* **Model:** XTS Professional

**Type:****Body Style:****Powertrain:**

**Production Dates**    Begin: 04/18/2018  
                                  End: 06/21/2018

**Descriptive Information:**

Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

**Chevrolet Bolt 2018 - 2019**

\* **Model Yr. Start:** 2018                      \* **Model Yr. End:** 2019  
 \* **Make:** Chevrolet  
 \* **Model:** Bolt

**Type:****Body Style:****Powertrain:**

**Production Dates**    Begin: 03/27/2018  
                                  End: 07/17/2018

**Descriptive Information:**

Supplier production information was used to identify the start and end date of the improper coating process which was then correlated with manufacturing data. Recalled parts were not properly coated during the manufacturing process.

**VIN Range(s):**    Begin:    End:

**Number potentially involved:** 210628

**Estimated percentage of involved with defect:** 1%

**Defect / Noncompliance Description**

For this Defect/Noncompliance:

**\* Describe the defect or noncompliance:**

General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2018–2019 model year GMC Terrain vehicles; 2018 model year Chevrolet Malibu vehicles; 2018–2019 model year Chevrolet Cruze, Equinox, Volt, Impala, and Bolt vehicles; 2018–2019 model year Buick Lacrosse and Regal vehicles; and 2018–2019 model year Cadillac XTS vehicles. In a small number of these vehicles, the rear-brake caliper pistons may contain trapped hydrogen gas that could be released into the vehicle's brake system.

**If a noncompliance, provide the applicable FMVSS:****If applicable, provide any further FMVSS affected:****Describe the cause:**

The manufacturer of the brake pistons failed to properly chrome and temper the brake pistons during the manufacturing process. In this condition, hydrogen gas can remain trapped in the piston body. When the vehicle is assembled and a piston that contains trapped gas contacts brake fluid, this gas can be released into the vehicle's brake system.

**\* Describe the safety risk:**

If gas is present in the brake system, rear-brake performance may be reduced, increasing the risk of a crash.

**Identify any warning which can precede or occur:**

If gas is present in the brake system, the customer will notice a soft or spongy feel when applying the brake pedal even though stopping distances may not be affected. According to GM's supplier, all trapped gas in a defective piston should be released within 23 days of vehicle assembly and will be noticeable to the driver within 15 days of assembly.

**This Recall affects all vehicles.**

If applicable, identify the manufacturer of the defective or noncompliant component. If the manufacturer of the component is unknown, provide the information for the company that supplied the subject component.

Component manufacturer

Company Information

**Company Name:** ZF  
**Country:** United States  
**Address 1:** 12025 Tech Center Drive

Company Contact Information

**First Name:** Ashwini  
**Last Name:** Balasubramanian  
**Position:**

**Address 2:**

**City:** Livonia  
**State:** MICHIGAN  
**Zip/Postal Code:** 48150

**Email:**

**Phone:** 7348553659

**Chronology of Defect / Noncompliance Determination****Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.:**

On May 7, 2018, a GM quality engineer filed a Speak Up For Safety submission based on dealer reports indicating that three GM vehicles failed pre-delivery inspection because of soft brake pedals. GM opened a formal product investigation into the issue on June 12, 2018. ZF, the supplier of the brake calipers at issue, was also investigating similar reports from other OEMs, although GM was not aware of this investigation. In its July 2018 part 573 report, ZF stated that: (i) Volkswagen/Audi notified ZF of a potential issue involving ZF-manufactured brake calipers in Volkswagen/Audi vehicles on May 18, 2018; (ii) ZF notified BMW, another purchaser of the brake calipers, of its investigation on May 23, 2018; and (iii) ZF concluded its root-cause analysis with its brake-piston supplier on May 29, 2018. ZF did not notify GM of the issue until June 14, 2018, and did not list GM as a purchaser of affected brake calipers in its part 573 filing. After receiving notice from ZF, GM worked with ZF to identify the vehicle population that may have been manufactured with a suspect brake caliper and assess the condition's impact on brake performance. On July 27, 2018, GM engineers at GM's Milford Proving Grounds conducted brake-performance testing on a Chevrolet Cruze vehicle equipped with hydraulic equipment that simulated the effect of five cubic centimeters of gas in one or both rear brake systems. On August 10, 2018, GM conducted additional brake-performance testing on a vehicle with seven cubic centimeters of gas in the left rear brake system. As of August 23, 2018, GM had received approximately 375 warranty claims relating to this condition; in 306 of these claims, the dealer was able to identify and correct the condition as part of routine pre-delivery inspection checks. GM is not aware of any crashes caused by this condition. On August 23, 2018, GM's Safety and Field Action Decision Authority (SFADA) decided to conduct a safety recall.

**Identify the Remedy****Describe the defect/noncompliance remedy program, including the manufacturer's plan for reimbursement.**

Dealers will "bleed" the brake system to remove any gas from the rear brake system. Pursuant to 49 C.F.R. § 573.13(d)(1), all covered vehicles are under warranty so reimbursement is not offered.

**Describe what distinguishes the remedy component from the recalled component.**

The brake system was properly manufactured and does not contain trapped hydrogen gas. Recalled Component Name: CALIPER ASM-RR BRK / CALIPER ASM-RL BRK  
 Recalled Component Description: Right Rear Brake Caliper Assembly / Left Rear Brake Caliper Assembly  
 Recalled Component Part Number: 39062769, 39062770, 84323160, 84323161, 84323158, 84323159, 84144904, 84144905, 13498176, 13498177

**Identify and describe how and when the recall condition was corrected in production.**

Vehicles produced after July 17, 2018 contain rear brake caliper pistons that were manufactured without the defect.

**Identify the Recall Schedule****Describe the recall schedule for notifications.:**

General Motors will provide dealer bulletin and owner letter notification dates when available.

**Planned Dealer Notification Begin Date:** 08/30/2018

**Planned Dealer Notification End Date:** 08/30/2018

**Planned Owner Notification Begin Date:**

**Planned Owner Notification End Date:**

**Manufacturer's identification code for this recall (if applicable):**

18279

Please be reminded that owner notification letters must be mailed no more than 60 days from submission of this report.

**Manufacturer Comments to NHTSA Staff****Document Upload**

There are 0 documents associated with this report.