

**Thomas McCarthy**  
Head, Vehicle Safety Compliance and Product  
Analysis

November 13, 2020

Mr. James C. Owens, Deputy Administrator  
National Highway Traffic Safety Administration  
1200 New Jersey Ave. SE  
Washington, DC 20590

**Re: Recall 20V-649 (2019-2020 MY Ram 4500/5500 Cab Chassis Brake Hose Constriction Noncompliance per Federal Motor Vehicle Safety Standard ("FMVSS") 106) and Recall 20E-080 (Replacement Ram 4500/5500 Cab Chassis Brake Hose Constriction Noncompliance per FMVSS 106) Petition for Determination of Inconsequential Noncompliance**

Dear Mr. Owens:

FCA US LLC (f/k/a Chrysler Group LLC) ("FCA US") is a Delaware limited liability company with its principal place of business at 1000 Chrysler Drive, Auburn Hills, MI 48326.

Pursuant to 49 CFR Part 556, FCA US is petitioning for an exemption from the notification and remedy requirements of the National Traffic and Motor Vehicle Safety Act because the noncompliance described below is inconsequential to motor vehicle safety.

This petition relates to FCA US' safety noncompliance vehicle recall W75 (NHTSA recall 20V-649) and equipment recall W76 (NHTSA recall 20E-080), which involves rear brake lines built with an out of specification orifice that does not meet the constriction requirements of S5.3.1 of FMVSS 106. The Noncompliance Information Reports were submitted to the National Highway Traffic Safety Administration ("NHTSA") after FCA US determined that 26,961 Ram 4500/5500 Cab Chassis vehicles and 182 rear brake line service parts built between February 10, 2019 and August 26, 2020, were built with a noncompliant rear brake hose orifice. Three copies of the 49 CFR Part 573 Defect Information Report for W75 (NHTSA recall 20V-649) filing are attached as Enclosure A and three copies of the 49 CFR Part 573 Defect Information Report for W76 (NHTSA recall 20E-080) filing are attached as Enclosure B.

**Description of the Noncompliance**

FCA US has determined that some 2019-2020 MY Ram 4500/5500 Cab Chassis vehicles have rear brake hoses that do not fully comply with the constriction requirements specified in FMVSS 106.

The Ram 4500/5500 Cab Chassis vehicles have a braking system that is designed to apply 60% of the total braking force to the front wheels and 40% to the rear wheels. The out of specification orifice only impacts the rear brake hose assemblies. Ram 4500/5500 Cab Chassis vehicles are manufactured with rear brake hoses that have a brass fitting crimped to the end of the brake hose. The brass fitting is located where the rear brake hose attaches to the rear brake calipers. It is at this crimp, that the constriction noncompliance exists for this population of vehicles and parts. During the normal manufacturing process, a mandrel is used to control the

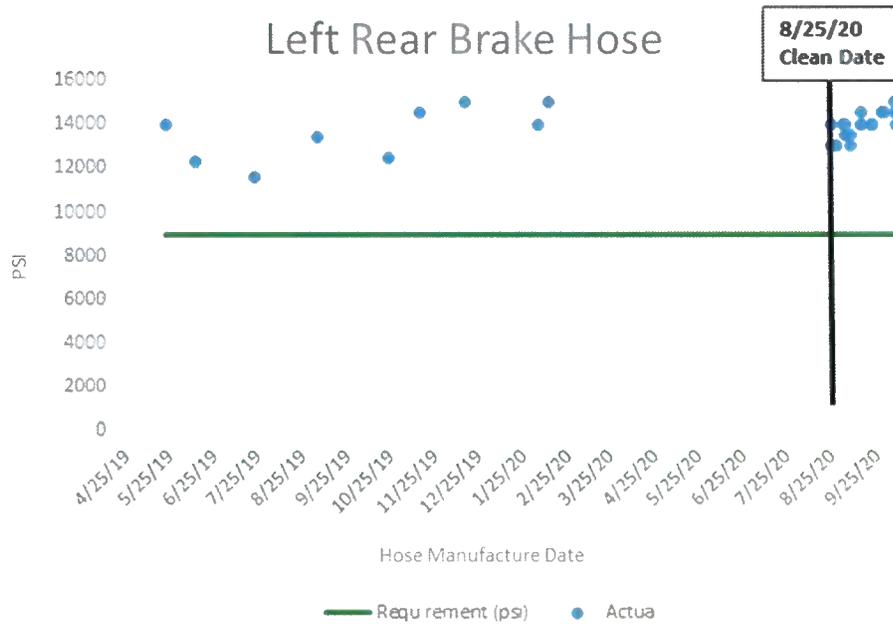
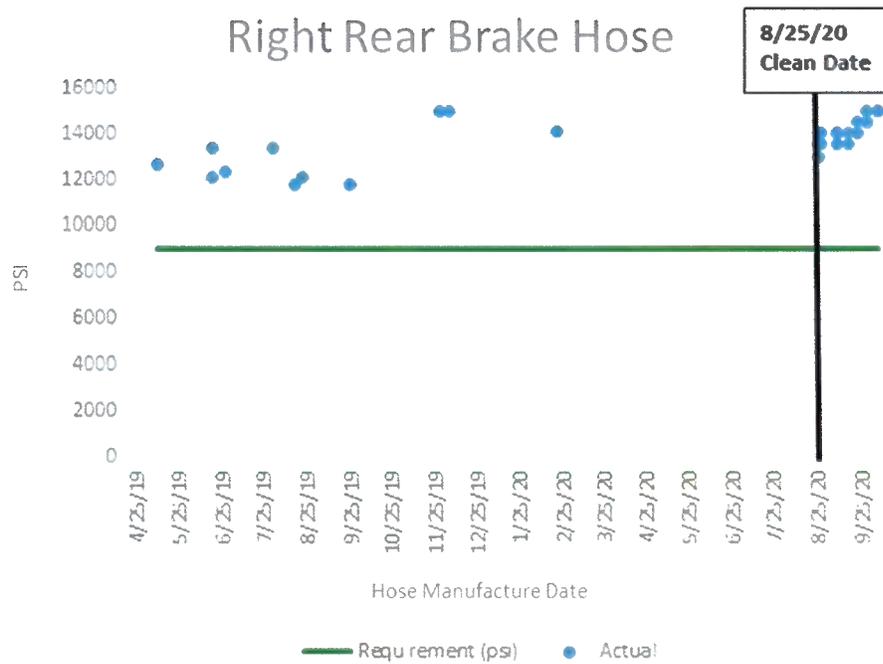
inside diameter of the hose inside the brass end fitting during the crimping process. In the suspect period, due to a manufacturing process change at the supplier, the mandrel was not used, and the crimping process caused the inside diameter of the hose at the fitting to be smaller than designed. On the affected vehicles and parts, the inner diameter of this brass fitting does not meet the 64% nominal inside diameter of the brake hose requirement, with worst case parts measured at 52.8% of the nominal inside diameter. The remaining length of the brake hose assembly is fully compliant with FMVSS 106. There is no issue or concern with the steel or rubber portion of the brake line assembly. The noncompliant condition exists only in the brass fitting on the end of the rear brake line where the rubber brake hose attaches to the rear brake caliper, and is crimped to the brass fitting.

#### **Justification for Petition for a Determination of Inconsequentiality**

FCA US believes this technical noncompliance is inconsequential to motor vehicle safety for the following reasons:

- FMVSS 106 S5.3.1 provides brake line constriction requirements as follows: **"Except for that part of an end fitting which does not contain hose, every inside diameter of any section of a hydraulic brake hose assembly shall be not less than 64 percent of the nominal inside diameter of the brake hose."** For reasons discussed below, and supported by FCA US test data, FCA US submits that its noncompliance with this requirement is inconsequential to motor vehicle safety.
- FMVSS 106 specifies labeling and performance requirements for motor vehicle brake hose, brake hose assemblies, and brake hose end fittings. The purpose of this standard is to reduce risks of deaths and injuries occurring as a result of brake system failure from pressure or vacuum loss due to hose or hose assembly rupture. FCA US has completed testing showing that, in this particular circumstance, there is no safety concern with the noncompliant brake hose assemblies that were built with an under-specification orifice size. FCA US testing shows there is no concern for hose rupture and no risk of brake system failure due to pressure loss. Testing also shows there is no meaningful effect on vehicle braking performance for vehicles built with the noncompliant brake hose assemblies. This testing is explained more fully below.
- Burst Performance: The Ram 4500/5500 Cab Chassis vehicle achieves no more than 2,500 pounds per square inch ("PSI") in the brake hose assemblies when performing FMVSS 105 testing for stopping distance. FMVSS 106 specifies a minimum burst strength requirement of 7,000 PSI for brake hoses of 1/8" or smaller diameter. (The subject brake hoses have a diameter of 1/8".) The FCA US internal specification requires the supplier to perform burst testing daily and the minimum requirement that all hose assemblies must meet is 9,000 PSI under the FMVSS 106 test conditions. The brake hose assemblies containing an out of specification orifice all surpassed the requirement and showed no difference from those containing a compliant orifice. This can be seen on the two charts below that compare the burst pressures of noncompliant and of compliant brake hose assemblies.

Charts below show Burst testing of small orifice parts (before clean point) and standard orifice parts (after clean point)

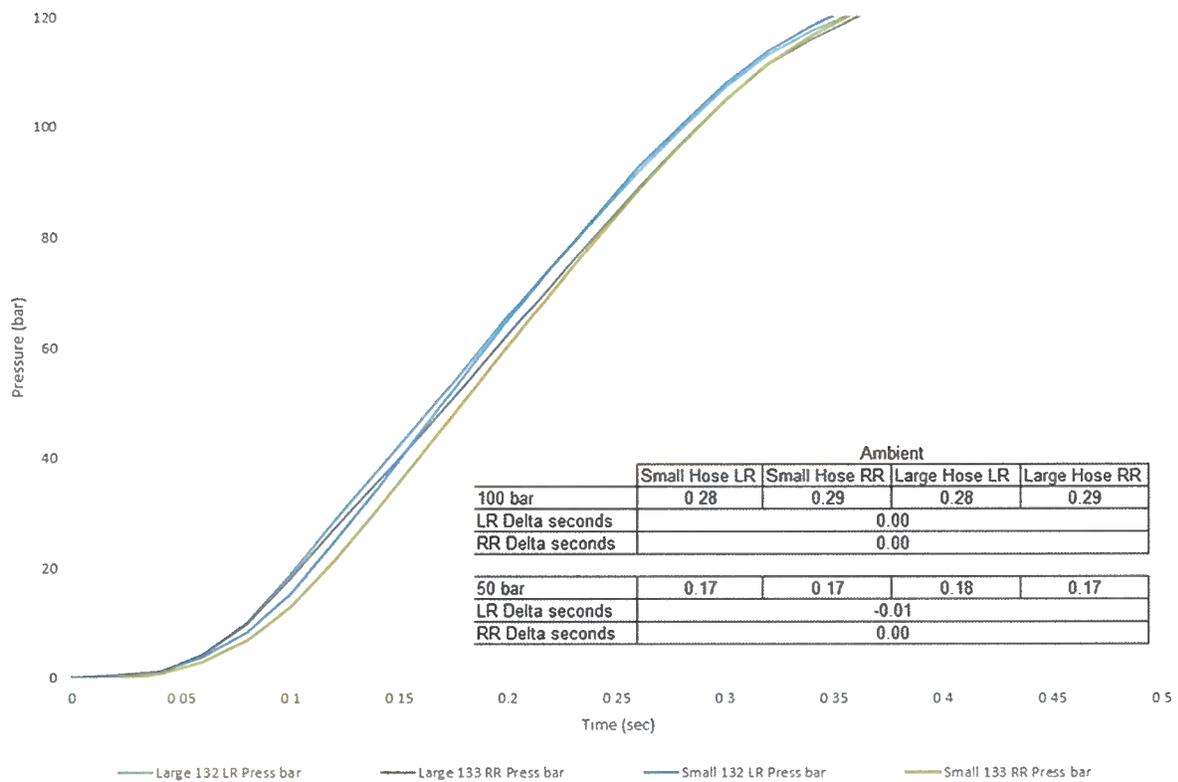


- Flow Testing Comparing Brake Hose Assemblies at Ambient and Cold: The viscosity of brake fluid at colder temperatures increases, thus the flow rate of brake fluid will be reduced at colder temperatures, making cold temperature testing the worst case scenario. Ram 4500/5500 Cab Chassis vehicle brake hose assemblies containing an out of specification orifice and these with a compliant orifice were tested for flow

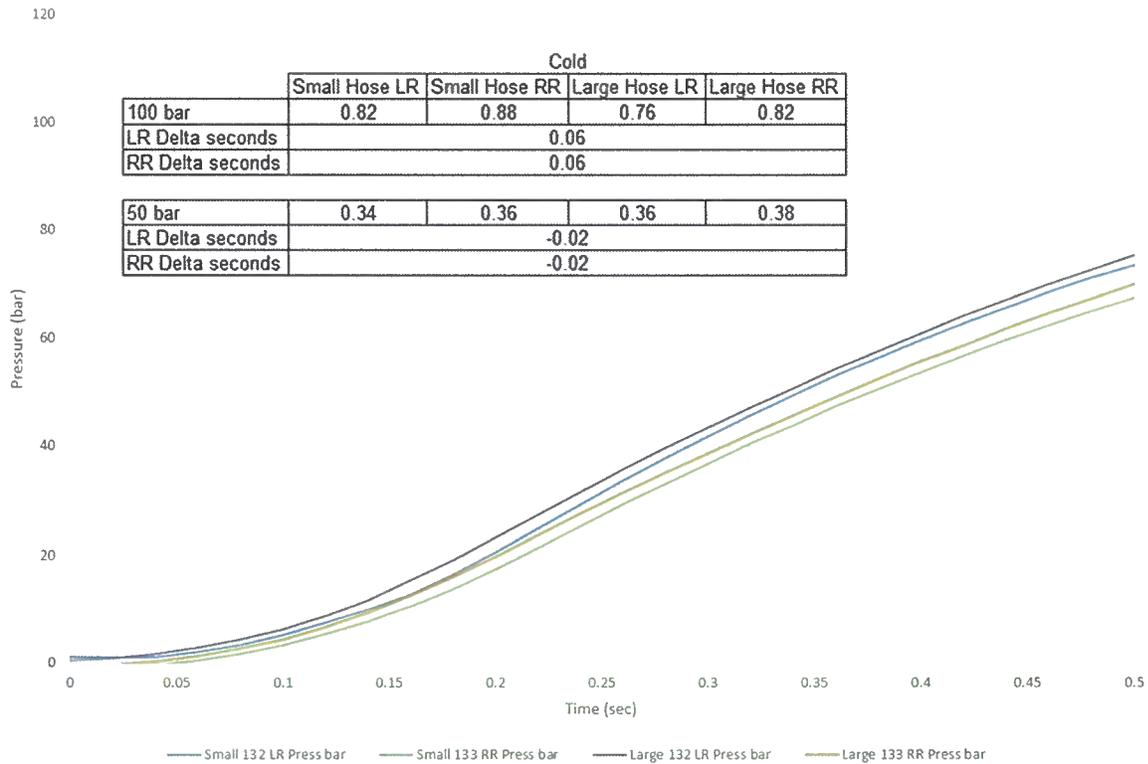
at ambient and a cold temperature. The cold temperature test included an overnight soak at -30° C. The test was conducted using a panic brake application of 500 Newtons in 0.5 seconds per FMVSS 105 pedal force requirements and then held for an additional 5 seconds to ensure fluid flow to the wheel end. The compliant and noncompliant brake hose assemblies showed no meaningful difference in the time they each took to reach 50 bar and 100 bar at either ambient or cold.

Charts below show flow testing for both small orifice and standard orifice parts at both ambient and -30 degrees Celsius.

### Rear Brake Hose Test Comparison: Ambient



## Rear Brake Hose Test Comparison: -30 C



- Stopping Distance: The Ram 4500/5500 Cab Chassis vehicle was tested for stopping distance according to FMVSS 105 testing procedures for vehicles over 10,000 pounds (“lbs”) Gross Vehicle Weight, which is the worst case scenario. The test was conducted on a vehicle that was slowed from a speed of 60 mph with a maximum pedal effort of 150 lbs to determine if it could meet the required stopping distance requirements. The test was conducted six times, and FCA US focused on 2<sup>nd</sup> effectiveness and 3<sup>rd</sup> effectiveness results. The best distance was used to calculate the Best Stop % Margin. The test results showed no meaningful difference between the 2<sup>nd</sup> effectiveness and the 3<sup>rd</sup> effectiveness government specifications or the more stringent FCA US internal stopping requirements between a brake hose with an out of specification orifice and a brake hose with a compliant orifice. FCA US completed two tests with brake hose assemblies with compliant orifice sizes and one test with the subject out of specification orifice size. A summary of the test results is shown in the table below and the complete test reports are attached as Enclosure C, Enclosure D, and Enclosure E.

Table below shows test stopping distance comparisons of small orifice parts and standard orifice parts, comparable to an FMVSS 105 certification test.

				Standard orifice Test #190063AB	Small orifice Test #200087AB	Standard orifice Test #180128AA
TEST SECTION	TEST LIMITATIONS			BEST STOP % MARGIN	BEST STOP % MARGIN	BEST STOP % MARGIN
	SPEED	PF lbs	DIST. (ft.)			
2nd EFF. GVW	60 mph	15/150#	310	57.60%	63.10%	56.60%
<b>STABILITY and CONTROL (LLVW-F)</b>				Yes	Yes	Yes
3rd EFF. (LLVW-R)	60 mph	15 150#	335	47.40%	49.40%	46.10%
LLVW-R	SEC. FAIL	15.150#	613	39.90%	41.40%	38.60%
LLVW-F	PRI. FAIL	15.150#	613	65.70%	70.90%	66.80%
GVW	PRI. FAIL	15/150#	613	46.20%	50.50%	45.20%
GVW	SEC. FAIL	15/150#	613	62.40%	70.20%	61.30%
<b>FAILED ABS GVW</b>		15 150#	613	37.90%	37.00%	35.20%
<b>FAILED EVBP + ABS GVW</b>		15 150#	613	34.80%	33.60%	25.50%
INOPERATIVE	Warm	15 150#	613	78.40%	67.90%	73.70%
POWER GVW	Post Soak	15 150#	613	79.20%	68.10%	75.70%
				<b>Hold?</b>	<b>Hold?</b>	<b>Hold?</b>
Parking Brake 20% GRADE	GVW	150	Foot	Yes	Yes	Yes
	LLVW	lb-f	operated	Yes	Yes	Yes
				<b>Hold?</b>	<b>Hold?</b>	<b>Hold?</b>
Parking Brake 30% GRADE	GVW	No Force	Foot	Yes	Yes	Yes
	LLVW	Limit	operated	Yes	Yes	Yes

- FCA US is not aware of any crashes, injuries, or customer complaints associated with the condition.

In consideration of the foregoing demonstration that subject noncompliant condition is inconsequential as it relates to motor vehicle safety, FCA US petitions to be exempt from the notification and remedy provisions of the Motor Vehicle Safety Act as provided in 49 CFR Part 556.

Sincerely,



Thomas McCarthy

Enclosures

CC: Mr. Joshua Neff  
Chief, Recall Management Division



Chrysler (FCA US LLC)

## Vehicle Report

NHTSA ID: 20V649 Transaction ID: 20-00273-25173-10 (Original Report)

Required fields indicated with \*

**Manufacturer: Chrysler (FCA US LLC)**

800 Chrysler Drive  
Auburn Hills MI 48326-2757

[FCA VSO/NHTSA](#) [FCA VSO/NHTSA](#)  
2485762579,

This is a Noncompliance Report. Filing a petition pursuant to [49 CFR 556](#)

### Vehicle Information

**Ram 4500/5500 Cab Chassis 2019 - 2020**

\* **Model Yr. Start:** 2019 \* **Model Yr. End:** 2020

\* **Make:** Ram

\* **Model:** 4500/5500 Cab Chassis

**Type:**

**Body Style:** OTHER

**Powertrain:**

**Descriptive Information:**

Some 2019-2020 MY Ram 4500/5500 Cab Chassis vehicles may have a rear brake hose with an out of specification orifice diameter. The suspect period began on February 10, 2019, when suspect rear brake hose assemblies were introduced into vehicle production, through August 26, 2020, when suspect rear brake hose assemblies were no longer used in vehicle production. The suspect population was determined using part shipment information and vehicle production records. Similar vehicles not included in the recall were built outside of the suspect period or with rear brake hose assemblies that do not have an out of specification orifice diameter.

**Production Dates** Begin: 02/10/2019

End: 08/26/2020

**VIN Range(s):** Begin: End:

**Number potentially involved:** 26961

**Estimated percentage of involved with defect:** 100%

### Defect / Noncompliance Description

For this Defect/Noncompliance:

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

FMVSS No. 106 S5.3.1 Constriction requirement states: "[ ] except for that part of an end fitting which does not contain hose, every inside diameter of any section of a hydraulic brake hose assembly shall be not less than 64 percent of the nominal inside diameter of the brake hose." Brake lines included in this recall that have an out of specification orifice diameter have an inside diameter that is less than 64 percent of the nominal inside diameter of the brake hose.

\* **Describe the safety risk:**

FCA US believes that the noncompliance with FMVSS 571.106, in this instance, is inconsequential as it relates to motor vehicle safety, and intends to petition the NHTSA, pursuant to CFR Part 556, for exemption from the notification and remedy requirements.

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

None

**If a noncompliance, provide the applicable FMVSS:**

106 - Brake hoses

**If applicable, provide any further FMVSS affected:**

**Describe the cause:**

**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:** Hitachi Cable America

**Country:** Mexico

**Address 1:** Av Manantiales No 18

**Address 2:**

**City:** Prq Ind Bernardo Quintana

**State:** FOREIGN STATES

Company Contact Information

**First Name:** David

**Last Name:** Bellus

**Position:** Engineering Director

**Email:** david.bellus.ut@hca.hitachi-cable.com

**Phone:** 5025529319

NHTSA-201118-010

Zip/Postal Code: 76240

### Involved Components

If the defect or noncompliance involves a specific component(s), identify that component(s) below.

**Component Name:** Hose, Brake - Right Rear  
**Component Description:** Right rear brake hose  
**Component Part Number:** 68371722AA / 68371722AB

**Component Name:** Hose, Brake - Left Rear  
**Component Description:** Left rear brake hose  
**Component Part Number:** 68371723AA / 68371723AB

### Chronology of Defect / Noncompliance Determination

**Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.:**

• On August 28, 2020, the FCA US LLC ("FCA US") Vehicle Safety and Regulatory Compliance ("VSRC") organization opened an investigation based on information from the FCA US Chassis Engineering group of a potential noncompliance for the rear brake hose assembly on 2019 and 2020 MY Ram 4500/5500 cab chassis vehicles. • On September 23, 2020, the FCA US VSRC organization confirmed that rear brake hose assemblies with an orifice diameter that is out of specification may have been assembled into vehicles. • On October 15, 2020, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.

### Identify the Remedy

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

FCA US intends to timely petition the NHTSA, pursuant to 49 CFR Part 556, for exemption from the notification and remedy requirements due to the inconsequentiality of the noncompliance as it relates to motor vehicle safety.

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

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

### Identify the Recall Schedule

**Describe the recall schedule for notifications.:**

\*\*10/22/2020: FCA US plans to submit a petition for inconsequentiality on or before 11/16/2020.

**Planned Dealer Notification Begin Date:**

**Planned Dealer Notification End Date:**

**Planned Owner Notification Begin Date:**

**Planned Owner Notification End Date:**

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

W75

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.

1200 New Jersey Avenue, SE, West Building Washington DC 20590 USA 1.888.327.4236 TTY 1.800.424.9153  
This application works best in IE9 and above and recent versions of Firefox, Chrome and Safari



Chrysler (FCA US LLC)

## Equipment Report

NHTSA ID: 20E080 Transaction ID: 20-00273-25179-10 (Original Report)

Required fields indicated with \*

**Manufacturer: Chrysler (FCA US LLC)**

800 Chrysler Drive  
Auburn Hills MI 48326-2757

[FCA VSO/NHTSA](#) [FCA VSO/NHTSA](#)  
2485762579,

This is a Noncompliance Report. Filing a petition pursuant to [49 CFR 556](#)

### Equipment Information

#### Mopar Right rear brake hose 68371722AA

\* **Brand/Trade:** Mopar

\* **Model:** Right rear brake hose

**Production Dates** Begin: 01/29/2019  
End: 03/21/2020

\* **Part No.:** 68371722AA

**Size:**

**Function:**

**Descriptive Information:**

Some right rear brake hoses may have been manufactured with an orifice diameter that is not within specification. The scope was determined by supplier shipment information and by sales records of the suspect parts. Similar brake hoses not included in the recall were manufactured with an orifice diameter that is not out of specification or outside of the suspect period. The total affected parts for this part number is 20.

#### Mopar Right rear brake hose 68371722AB

\* **Brand/Trade:** Mopar

\* **Model:** Right rear brake hose

**Production Dates** Begin: 06/09/2020  
End: 08/20/2020

\* **Part No.:** 68371722AB

**Size:**

**Function:**

**Descriptive Information:**

Some right rear brake hoses may have been manufactured with an orifice diameter that is not within specification. The scope was determined by supplier shipment information and by sales records of the suspect parts. Similar brake hoses not included in the recall were manufactured with an orifice diameter that is not out of specification or outside of the suspect period. The total affected parts this part number is 39.

#### Mopar Left rear brake hose 68371723AB

\* **Brand/Trade:** Mopar

\* **Model:** Left rear brake hose

**Production Dates** Begin: 04/01/2020  
End: 08/19/2020

\* **Part No.:** 68371723AB

**Size:**

**Function:**

**Descriptive Information:**

Some left rear brake hoses may have been manufactured with an orifice diameter that is not within specification. The scope was determined by supplier shipment information and by sales records of the suspect parts. Similar brake hoses not included in the recall were manufactured with an orifice diameter that is not out of specification or outside of the suspect period. The total affected parts for this part number is 123.

**Number potentially involved:** 182

**Estimated percentage of involved with defect:** 100%

### Defect / Noncompliance Description

For this Defect/Noncompliance:

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

FMVSS No. 106 S5.3.1 Constriction requirement states: "[ ] except for that part of an end fitting which does not contain hose, every inside diameter of any section of a hydraulic brake hose assembly shall be not less than 64 percent of the nominal inside diameter of the brake hose." Brake lines included in this recall that have an out of specification orifice diameter have an inside diameter that is less than 64 percent of the nominal inside diameter of the brake hose.

**If a noncompliance, provide the applicable FMVSS:**

106 - Brake hoses

**If applicable, provide any further FMVSS affected:**

**NHTSA-201118-010**

\* **Describe the safety risk:**

FCA US believes that the noncompliance with FMVSS 571.106, in this instance, is inconsequential as it relates to motor vehicle safety, and intends to petition the NHTSA, pursuant to CFR Part 556, for exemption from the notification and remedy requirements.

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

None

**Describe the cause:**

**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:** Hitachi Cable America  
**Country:** Mexico  
**Address 1:** Av Manantiales No 18  
**Address 2:**  
**City:** Prq Ind Bernardo Quintana  
**State:** FOREIGN STATES  
**Zip/Postal Code:** 76240

**Company Contact Information**

**First Name:** David  
**Last Name:** Bellus  
**Position:** Engineering Director  
**Email:** david.bellus.ut@hca.hitachi-cable.com  
**Phone:** 5025529319

**Involved Components**

If the defect or noncompliance involves a specific component(s), identify that component(s) below.

**Component Name:** Hose, Brake - Right Rear  
**Component Description:** Right rear brake hose  
**Component Part Number:** 68371722AA / 68371722AB

**Component Name:** Hose, Brake - Left Rear  
**Component Description:** Left rear brake hose  
**Component Part Number:** 68371723AB

**Purchaser Information**

**Chronology of Defect / Noncompliance Determination**

**Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.:**

• On August 28, 2020, the FCA US LLC ("FCA US") Vehicle Safety and Regulatory Compliance ("VSRC") organization opened an investigation based on information from the FCA US Chassis Engineering group of a potential noncompliance for the rear brake hose assembly on 2019 and 2020 MY Ram 4500/5500 cab chassis vehicles. • On September 23, 2020, the FCA US VSRC organization confirmed that rear brake hose assemblies with an orifice diameter that is out of specification may have been shipped to dealers as service parts. • On October 15, 2020, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected brake hose assemblies.

**Identify the Remedy**

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

FCA US intends to timely petition the NHTSA, pursuant to 49 CFR Part 556, for exemption from the notification and remedy requirements due to the inconsequentiality of the noncompliance as it relates to motor vehicle safety.

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

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

**Identify the Recall Schedule**

**Describe the recall schedule for notifications.:**

\*\*10/22/2020: FCA US plans to submit a petition for inconsequentiality on or before 11/16/2020.

**Planned Dealer Notification Begin Date:**

**Planned Dealer Notification End Date:**

**Planned Owner Notification Begin Date:**

**Planned Owner Notification End Date:**

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

W76

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.



**FMVSS 105 DATA SUMMARY - TRUCKS OVER 10,000 LBS GVW**

MY Family											<b>TEST # 200087AB</b>				
MODEL SIM.	2021	DP	Line	Series	Body	BSC	W.B. (in.)	Market:	CPG Veh#	REQUEST #	BK200087				
MODEL TESTED	2021	DP	4	L	63	BRT	144.5	NAFTA	079M100	VIN:	3C7WRKAJ5MG500078				
Manuf. Pistons/Whl BORE (mm) Wheel Size Type:										Purpose: Certification					
FRONT BRAKE	TRW	66	2	19	Pin Slider	LINING: FM	2255	FM2255EE							
REAR BRAKE	TRW	66	2	19	Pin Slider	LINING: FM	2255	FM2255EE	Test Wt.	LLVW-R	LLVW-F	GVW			
PARKING BRAKE	Dura	Foot	Adjustment:	Bent Nail	DIH	LINING: Doublelink	'DBL	DBL 039FF	FRONT:	4617	5073	5531			
Manuf. Bore (mm) Stroke (mm) Pedal Ratio Pedal Type										P/B P.R.:		REAR:	3398	3095	14149
MASTER CYL.	Bosch	38.1	42	5	Auto				2.2-14.8 :1	TOTAL:	8015	8168	19680		
BOOSTER	Bosch	Hydraulic	1.56"							% REAR:	42.4%	37.9%	71.9%		
ABS	TRW	EBC-460			Features:				Software:						
Manufacturer SIZE NAME											SET TO (psi)		Rear Axle:		
TIRES:	Fr:	Michelin	225/70/R19.5		XDS2					95			DRW		
	Rr:		225/70/R19.5		XDS2					95					
TEST SECTION	TEST LIMITATIONS			DISTANCE RESULT (feet)			BEST STOP			Min PF(lb)	Max PF (lb)	comments	BEST STOP % MARGIN		
2nd EFF. GVW	SPEED	PF lbs	DIST. (ft.)	DIST. (%0%)	MIN	MAX				83.7	104.1	6C	63.1%		
STABILITY and CONTROL (LLVW-F)											Compliant	Yes			
3rd EFF. (LLVW-R)	60 mph	15/150#	335	302	165.5	171.3				81.8	127.2	6C	49.4%		
LLVW-R	SEC. FAIL	15/150#	613	552	253.7	269.7				82.5	105.7	4C	41.4%		
LLVW-F	PRI. FAIL	15/150#	613	552	434.9	452.0				82.9	135.1	4C	70.9%		
GVW	PRI. FAIL	15/150#	613	552	309.5	352.6				88.8	106.8	4C	50.5%		
GVW	SEC. FAIL	15/150#	613	552	430.6	450.4				86.1	107.7	4C	70.2%		
FAILED ABS GVW		15/150#	613	552	226.7	281.5				33.4	71.6	4C	37.0%		
FAILED EVBP + ABS GVW		15/150#	613	552	206.0	309.5				36.2	66.5	4C	33.6%		
INOPERATIVE	Warm	15/150#	613	552	416.2	489.6				119.8	147.3	4C	67.9%		
POWER GVW	Post Soak	15/150#	613	552	417.6	474.9				128.1	148.3	4C	68.1%		
<b>Hold?</b>															
Parking Brake	GVW	150	Foot	Up	101	lbs	Down	98	lbs			Yes			
20% GRADE	LLVW	lb-f	operated	Up	94	lbs	Down	92	lbs			Yes			
<b>Hold?</b>															
Parking Brake	GVW	No Force	Foot	Up	100	lbs	Down	98	lbs			Yes			
30% GRADE	LLVW	Limit	operated	Up	95	lbs	Down	91	lbs			Yes			
COMMENTS:															
Test Requester: Ken Stempien											Start Date: 10/23/20		End Date: 11/04/20		
Test Engineer: Matt Gaurapp											Test D/M(s):		Wireman		
"SR" means: Skid Rear biased (both axles may demonstrate skid, but rears first)															
"SF" means: Skid Front biased (both axles may demonstrate skid, but fronts first)															
<b>Reviewer:</b>		Ben Monroe					<b>Date:</b>		4-Nov						

**FMVSS 105 DATA SUMMARY - TRUCKS OVER 10,000 LBS GVW**

MY Family										<b>TEST #</b> 190063AB			
MODEL SIM.	2019	DP	Line	Series	Body	BSC	W. B. (in.)	Market:	CPG Veh#	<b>REQUEST #</b> BK190063			
MODEL TESTED	2019	DP	5	L	64	BRT	168.7	NAFTA	052M207	VIN: 3C7WRMBJ2KG500613			
	Manuf.	Pistons/Whl	BORE (mm)	Wheel Size	Type:		Manuf.	I.D.	Edge Code	Purpose: Certification			
FRONT BRAKE	TRW	66	2	19	Pin Slider	LINING: FM	2255	FM2255EE					
REAR BRAKE	TRW	66	2	19	Pin Slider	LINING: FM	2255	FM2255EE	Test Wt.	LLVW-R	LLVW-F	GVW	
PARKING BRAKE	Dura	Foot	Adjustment:	Bent Nail	DIH	LINING: Doublelink	'DBL	DBL 039FF	FRONT:	4324	5626	6211	
	Manuf.	Bore (mm)	Stroke (mm)	Pedal Ratio	Pedal Type		P/B P.R.:		REAR:	3688	3437	13521	
MASTER CYL.	Bosch	38.1	42	5	Auto		2.2-14.8 :1		TOTAL:	8012	9063	19732	
BOOSTER	Bosch	Hydraulic	1.56"						% REAR:	46.0%	37.9%	68.5%	
ABS	TRW	EBC-460	Features:				Software:		18.42.3				
Tires:		Frt:	SIZE		NAME		SET TO (psi)		Rear Axle:				
		Rr:	Hankook		Smart Flex AHR - Traction		95		DRW				
			275/70R19.5		Smart Flex AHR - Traction		95						
			275/70R19.5		Smart Flex AHR - Traction		95						
<b>TEST SECTION</b>	<b>TEST LIMITATIONS</b>			<b>DISTANCE RESULT (feet)</b>			<b>BEST STOP</b>			<b>comments</b>		<b>BEST STOP % MARGIN</b>	
	<b>SPEED</b>	<b>PF lbs</b>	<b>DIST. (ft.)</b>	<b>DIST. (90%)</b>	<b>MIN</b>	<b>MAX</b>	<b>Min PF(lb)</b>	<b>Max PF (lb)</b>					
2nd EFF. GVW	60 mph	15/150#	310	279	178.6	188.6	80.3	141.8	6C		57.6%		
<b>STABILITY and CONTROL (LLVW-F)</b>										<b>Compliant</b>		<b>Yes</b>	
3rd EFF. (LLVW-R)	60 mph	15/150#	335	302	158.7	166.0	78.8	140.4	6C		47.4%		
LLVW-R	SEC. FAIL	15/150#	613	552	244.6	250.7	77.1	104.1	4C		39.9%		
LLVW-F	PRI. FAIL	15/150#	613	552	402.9	406.8	82.6	136.2	4C		65.7%		
GVW	PRI. FAIL	15/150#	613	552	283.0	310.2	88.8	105.1	4C		46.2%		
GVW	SEC. FAIL	15/150#	613	552	382.3	391.8	76.9	114.5	4C		62.4%		
FAILED ABS GVW		15/150#	613	552	232.1	270.9	31.5	68.4	4C		37.9%		
FAILED EVBP + ABS GVW		15/150#	613	552	213.2	260.5	32.1	71.8	4C		34.8%		
INOPERATIVE	Warm	15/150#	613	552	480.6	507.1	112.3	148.3	4C		78.4%		
POWER GVW	Post Soak	15/150#	613	552	485.8	522.8	117.6	146.7	4C		79.2%		
<b>Hold?</b>													
Parking Brake	GVW	150	Foot	Up	116	lbs	Down	120	lbs	<b>Yes</b>			
20% GRADE	LLVW	lb-f	operated	Up	102	lbs	Down	103	lbs	<b>Yes</b>			
<b>Hold?</b>													
Parking Brake	GVW	No Force	Foot	Up	128	lbs	Down	128	lbs	<b>Yes</b>			
30% GRADE	LLVW	Limit	operated	Up	104	lbs	Down	105	lbs	<b>Yes</b>			
<b>COMMENTS:</b>													
Pads and tires new at beginning of test. Rotors were were from test 190063AA.													
Test Requester: Ken Stempien								Start Date: 08/01/19		End Date: 08/13/19		"SR" means: Skid Rear biased (both axles may demonstrate skid, but rears first)	
Test Engineer: Brian Bass								Test D/M(s): George Wireman					
<b>Reviewer:</b>								<b>Date:</b>		"SF" means: Skid Front biased (both axles may demonstrate skid, but fronts first)			

**FMVSS 105 DATA SUMMARY - TRUCKS OVER 10,000 LBS GVW**

MY Family											<b>TEST # 180128AA</b>		
MODEL SIM.	2019	DP	Line	Series	Body	BSC	W.B. (in.)	Market:	CPG Veh#	REQUEST #	BK180128		
MODEL TESTED	2019	DP	0	L	64	BRT	168.5	NAFTA	030M923	VIN:	KG500401		
Manuf. Pistons/Whl BORE (mm) Wheel Size Type:										Purpose: Certification			
FRONT BRAKE	TRW	2	66	19	Pin Slider	LINING: FM	2255	FM2255EE					
REAR BRAKE	TRW	2	66	19	Pin Slider	LINING: FM	2255	FM2255EE	Test Wt.	LLVW-R	LLVW-F	GVW	
PARKING BRAKE	Dura	Foot	Adjustment:	Bent Nail	DIH	LINING: Doublelink	039	DBL 039FF	FRONT:	4528	5610	6020	
Manuf. Bore (mm) Stroke (mm) Pedal Ratio Pedal Type										P/B P.R.:			
MASTER CYL.	Bosch	38.1	42	5.4	Auto				REAR:	3859	3425	13504	
BOOSTER	Bosch	Hydraulic	1.56"					TOTAL:		8387	9035	19524	
										% REAR:	46.0%	37.9%	69.2%
ABS	TRW	EBC-445			Features:			Software: 68334977AE V06_3_Final 18_34_02					
Manufacturer SIZE NAME										SET TO (psi)		Rear Axle:	
TIRES:	Frt:	Continental	P225/70R19.5		HSR / HDR			95				DRW	
	Rr:		P225/70R19.5		HSR / HDR			95					
TEST SECTION	TEST LIMITATIONS			DISTANCE RESULT (feet)			BEST STOP					BEST STOP % MARGIN	
	SPEED	PF lbs	DIST. (ft.)	DIST. (90%)	MIN	MAX	Min PF(lb)	Max PF (lb)	comments				
2nd EFF. GVW	60 mph	15/150#	310	279	175.4	195.8	87.2	105.5	6C	56.6%			
STABILITY and CONTROL (LLVW-F)										Compliant		Yes	
3rd EFF. (LLVW-R)	60 mph	15/150#	335	302	154.6	168.8	82.1	135.4	6C	46.1%			
LLVW-R	SEC. FAIL	15/150#	613	552	236.9	244.9	84.6	103.3	4C	38.6%			
LLVW-F	PRI. FAIL	15/150#	613	552	409.6	417.4	84.3	128.8	4C	66.8%			
GVW	PRI. FAIL	15/150#	613	552	277.0	318.3	98.0	116.6	4C	45.2%			
GVW	SEC. FAIL	15/150#	613	552	376.0	392.1	78.0	107.7	4C	61.3%			
FAILED ABS GVW		15/150#	613	552	215.9	264.9	36.2	68.1	4C	35.2%			
FAILED EVBP + ABS GVW		15/150#	613	552	156.1	246.7	32.9	49.8	4C	25.5%			
INOPERATIVE	Warm	15/150#	613	552	451.7	511.2	111.8	148.4	4C	73.7%			
POWER GVW	Post Soak	15/150#	613	552	463.8	504.8	112.1	147.4	3C 1I	75.7%			
<b>Hold?</b>													
Parking Brake	GVW	150	Foot	Up	138.2	lbs	Down	138.6	lbs	Yes			
20% GRADE	LLVW	lb-f	operated	Up	120.5	lbs	Down	125.5	lbs	Yes			
<b>Hold?</b>													
Parking Brake	GVW	No Force	Foot	Up	138.9	lbs	Down	138.1	lbs	Yes			
30% GRADE	LLVW	Limit	operated	Up	120.5	lbs	Down	119.4	lbs	Yes			
COMMENTS:													
										"SR" means:			
Test Requester:	Stempien			Start Date:	08/28/18	End Date:	09/07/18		Skid Rear biased (both axles may demonstrate skid, but rears first)				
Test Engineer:	Stempien			Test D/M(s):	G. Wireman			"SF" means:					
										Skid Front biased (both axles may demonstrate skid, but fronts first)			
<b>Reviewer:</b>					<b>Date:</b>								

# Part 573 Safety Recall Report

# 20V-649

**Manufacturer Name :** Chrysler (FCA US LLC)**Submission Date :** OCT 22, 2020**NHTSA Recall No. :** 20V-649**Manufacturer Recall No. :** W75**Manufacturer Information :**

Manufacturer Name : Chrysler (FCA US LLC)

Address : 800 Chrysler Drive  
CIMS 482-00-91 Auburn Hills MI  
48326-2757

Company phone : 1-800-853-1403

**Population :**

Number of potentially involved : 26,961

Estimated percentage with defect : 100 %

**Vehicle Information :**

Vehicle 1 : 2019-2020 Ram 4500/5500 Cab Chassis

Vehicle Type :

Body Style : OTHER

Power Train : NR

**Descriptive Information :** Some 2019-2020 MY Ram 4500/5500 Cab Chassis vehicles may have a rear brake hose with an out of specification orifice diameter.

The suspect period began on February 10, 2019, when suspect rear brake hose assemblies were introduced into vehicle production, through August 26, 2020, when suspect rear brake hose assemblies were no longer used in vehicle production. The suspect population was determined using part shipment information and vehicle production records.

Similar vehicles not included in the recall were built outside of the suspect period or with rear brake hose assemblies that do not have an out of specification orifice diameter.

Production Dates : FEB 10, 2019 - AUG 26, 2020

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**Description of Noncompliance :**

**Description of the Noncompliance :** FMVSS No. 106 S5.3.1 Constriction requirement states: "[ ] except for that part of an end fitting which does not contain hose, every inside diameter of any section of a hydraulic brake hose assembly shall be not less than 64 percent of the nominal inside diameter of the brake hose." Brake lines included in this recall that have an out of specification orifice diameter have an inside diameter that is less than 64 percent of the nominal inside diameter of the brake hose.

FMVSS 1 : 106 - Brake hoses

FMVSS 2 : NR

Description of the Safety Risk : FCA US believes that the noncompliance with FMVSS 571.106, in this instance, is inconsequential as it relates to motor vehicle safety, and intends to petition the NHTSA, pursuant to CFR Part 556, for exemption from the notification and remedy requirements.

Description of the Cause : NR

Identification of Any Warning that can Occur : None

## Involved Components :

Component Name 1 : Hose, Brake - Right Rear

Component Description : Right rear brake hose

Component Part Number : 68371722AA / 68371722AB

Component Name 2 : Hose, Brake - Left Rear

Component Description : Left rear brake hose

Component Part Number : 68371723AA / 68371723AB

## Supplier Identification :

### Component Manufacturer

Name : Hitachi Cable America

Address : Av Manantiales No 18

Prq Ind Bernardo Quintana FOREIGN STATES 76240

Country : Mexico

## Chronology :

- On August 28, 2020, the FCA US LLC ("FCA US") Vehicle Safety and Regulatory Compliance ("VSRC") organization opened an investigation based on information from the FCA US Chassis Engineering group of a potential noncompliance for the rear brake hose assembly on 2019 and 2020 MY Ram 4500/5500 cab chassis vehicles.
- On September 23, 2020, the FCA US VSRC organization confirmed that rear brake hose assemblies with an

orifice diameter that is out of specification may have been assembled into vehicles.

- On October 15, 2020, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected vehicles.

## Description of Remedy :

Description of Remedy Program : FCA US intends to timely petition the NHTSA, pursuant to 49 CFR Part 556, for exemption from the notification and remedy requirements due to the inconsequentiality of the noncompliance as it relates to motor vehicle safety.

How Remedy Component Differs from Recalled Component : NR

Identify How/When Recall Condition was Corrected in Production : NR

## Recall Schedule :

Description of Recall Schedule : \*\*10/22/2020: FCA US plans to submit a petition for inconsequentiality on or before 11/16/2020.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : NR - NR

\* NR - Not Reported

# Part 573 Safety Recall Report

## 20E-080

**Manufacturer Name :** Chrysler (FCA US LLC)

**Submission Date :** OCT 22, 2020

**NHTSA Recall No. :** 20E-080

**Manufacturer Recall No. :** W76



### Manufacturer Information :

**Manufacturer Name :** Chrysler (FCA US LLC)

**Address :** 800 Chrysler Drive  
CIMS 482-00-91 Auburn Hills MI  
48326-2757

**Company phone :** 1-800-853-1403

### Population :

**Number of potentially involved :** 182

**Estimated percentage with defect :** 100 %

### Equipment Information :

**Brand / Trade 1 :** Mopar

**Model :** Right rear brake hose

**Part No. :** 68371722AA

**Size :** NR

**Function :** NR

**Descriptive Information :** Some right rear brake hoses may have been manufactured with an orifice diameter that is not within specification.

The scope was determined by supplier shipment information and by sales records of the suspect parts.

Similar brake hoses not included in the recall were manufactured with an orifice diameter that is not out of specification or outside of the suspect period.

The total affected parts for this part number is 20.

**Production Dates :** JAN 29, 2019 - MAR 21, 2020

Brand / Trade 2 : Mopar  
Model : Right rear brake hose  
Part No. : 68371722AB  
Size : NR  
Function : NR

**Descriptive Information :** Some right rear brake hoses may have been manufactured with an orifice diameter that is not within specification.

The scope was determined by supplier shipment information and by sales records of the suspect parts.

Similar brake hoses not included in the recall were manufactured with an orifice diameter that is not out of specification or outside of the suspect period.

The total affected parts this part number is 39.

**Production Dates :** JUN 09, 2020 - AUG 20, 2020

Brand / Trade 3 : Mopar  
Model : Left rear brake hose  
Part No. : 68371723AB  
Size : NR  
Function : NR

**Descriptive Information :** Some left rear brake hoses may have been manufactured with an orifice diameter that is not within specification.

The scope was determined by supplier shipment information and by sales records of the suspect parts.

Similar brake hoses not included in the recall were manufactured with an orifice diameter that is not out of specification or outside of the suspect period.

The total affected parts for this part number is 123.

**Production Dates :** APR 01, 2020 - AUG 19, 2020

**Description of Noncompliance :**

Description of the Noncompliance : FMVSS No. 106 S5.3.1 Constriction requirement states: "[ ] except for that part of an end fitting which does not contain hose, every inside diameter of any section of a hydraulic brake hose assembly shall be not less than 64 percent of the nominal inside diameter of the brake hose." Brake lines included in this recall that have an out of specification orifice diameter have an inside diameter that is less than 64 percent of the nominal inside diameter of the brake hose.

FMVSS 1 : 106 - Brake hoses

FMVSS 2 : NR

Description of the Safety Risk : FCA US believes that the noncompliance with FMVSS 571.106, in this instance, is inconsequential as it relates to motor vehicle safety, and intends to petition the NHTSA, pursuant to CFR Part 556, for exemption from the notification and remedy requirements.

Description of the Cause : NR

Identification of Any Warning that can Occur : None

**Involved Components :**

Component Name : Hose, Brake - Right Rear

Component Description : Right rear brake hose

Component Part Number : 68371722AA / 68371722AB

Component Name : Hose, Brake - Left Rear

Component Description : Left rear brake hose

Component Part Number : 68371723AB

**Supplier Identification :****Component Manufacturer**

Name : Hitachi Cable America

Address : Av Manantiales No 18

Prq Ind Bernardo Quintana FOREIGN STATES 76240

Country : Mexico

## Chronology :

- On August 28, 2020, the FCA US LLC ("FCA US") Vehicle Safety and Regulatory Compliance ("VSRC") organization opened an investigation based on information from the FCA US Chassis Engineering group of a potential noncompliance for the rear brake hose assembly on 2019 and 2020 MY Ram 4500/5500 cab chassis vehicles.
- On September 23, 2020, the FCA US VSRC organization confirmed that rear brake hose assemblies with an orifice diameter that is out of specification may have been shipped to dealers as service parts.
- On October 15, 2020, FCA US determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall of the affected brake hose assemblies.

## Description of Remedy :

Description of Remedy Program : FCA US intends to timely petition the NHTSA, pursuant to 49 CFR Part 556, for exemption from the notification and remedy requirements due to the inconsequentiality of the noncompliance as it relates to motor vehicle safety.

How Remedy Component Differs from Recalled Component : NR

Identify How/When Recall Condition was Corrected in Production : NR

## Recall Schedule :

Description of Recall Schedule : \*\*10/22/2020: FCA US plans to submit a petition for inconsequentiality on or before 11/16/2020.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : NR - NR

## Purchaser Information :

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name : NR  
Address : NR  
NR  
Country : NR  
Company Phone : NR

\* NR - Not Reported