Part 573 Safety Recall Report 19V-613

Manufacturer Name : McLaren Automotive Incorporated
Submission Date : AUG 21, 2019
NHTSA Recall No. : 19V-613
Manufacturer Recall No. : NR

Manufacturer Information :

Manufacturer Name : McLaren Automotive Incorporated
Address : 750 Third Avenue, Suite 2400
NEW YORK NY 10017
Company phone : 646-429-8916

Population :

Number of potentially involved : 129
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2018-2019 McLaren Senna
Vehicle Type : LOW VOLUME VEHICLES
Body Style : 2-DOOR
Power Train : GAS
Descriptive Information : All Senna vehicles sold in the United States prior to 8 August 2019 are included in the recall population.
Production Dates : JUN 15, 2018 - JUN 26, 2019
VIN Range 1 : Begin : SBM15ACA4KW800002 End : SBM15ACA4KW800499 ☑ Not sequential

Description of Defect :

Description of the Defect : A branch of the vehicle engine harness can potentially come into contact with a metal link pipe heatshield. If there is contact, there may over time be chafing of the engine harness. If this chafing breaches the harness heatshield wrap and the harness outer sleeve, this could lead to damage to the wires contained within the engine harness bundle.
McLaren's sample testing (of 61 vehicles) showed that 15% of vehicles had marking on the outer cover of the engine harness as a result of chafing. Although 0% of vehicles tested had any damage to the wiring contained within the engine harness, it is possible that, over time, damage may occur.
McLaren is not aware of any incidents in the field, warranty claims or customer complaints involving engine harness chaffing

FMVSS 1 : NR
FMVSS 2 : NR

Description of the Safety Risk : In the event that chafing of the engine harness bundle results in damage to the wires contained within, there are a number of possible consequences, depending on the wire(s) that are damaged. Potential consequences are: the car entering idle limp mode (significant engine power reduction), torque limitation (slight engine power reduction), engine stall, engine misfire, and

	unburnt fuel in the catalyst that could lead to increased temperature of the catalyst. In the event of unburnt fuel in the catalyst, if the driver does not turn the engine off, unburnt fuel would continue to enter the catalyst, resulting in overheating of the catalyst. If the catalyst overheats, rupture to the exhaust system cannot be ruled out. This would lead to hot gas escaping into the engine bay. Depending on the location of such a rupture, the gas would either vent safely, or it could cause consequential damage to the car.
Description of the Cause :	The engine harness fastening design is such that the proximity of the engine harness to the link pipe heatshield may vary. This results in potential for the engine harness to touch the link pipe heatshield in some vehicles.
Identification of Any Warning that can Occur :	The driver will receive a warning prior to any of the potential safety risks occurring. The type of warning will vary depending on the nature of the consequence. Ahead of an engine stall or unburnt fuel in the catalyst, the driver will receive a dashboard warning light, a dashboard warning message and an audio alert signal. In addition to the vehicle warning alerts aimed at alerting the driver, the driving characteristics of the vehicle would also change to the extent that a driver would become aware of an issue – reduction of engine power, and a change in engine/exhaust noise and misfiring.

Supplier Identification :

Component Manufacturer

Name :	NR
Address :	NR
	NR
Country :	NR

Chronology :

Following notification of a potential engine harness foul on the McLaren Senna production line, a customer vehicle was inspected on 1st August 2019. This inspection revealed that damage could occur as a result of the engine harness bundle touching a link pipe heatshield. The customer vehicle showed evidence of chafing of the outer sleeve of the engine harness bundle, although no wires were exposed, and the vehicle had experienced no faults.

On 2nd August 2019 McLaren launched a full investigation to assess the whether the issue was isolated, and to identify possible consequences of chafing to the engine harness bundle.

During a follow-up meeting on 5th August 2019 to review initial findings, it was confirmed that the issue was not isolated, and that the engine harness bundle was proximate to or touching a link pipe heatshield in other vehicles in production. It was also confirmed that driver warnings would be generated if the wires in the engine harness bundle were damaged. It was confirmed that there were no warranty claims associated with engine harness chafing for vehicles in the field.

On 6th August 2019, further analysis and tests were requested relating to the consequences and the system response in the event that damage to the harness wires in the engine harness bundle occurs.

On 13th August 2019 it was confirmed that damage to certain specific wires in the engine harness bundle that results in continued fuelling of the engine would lead to increased catalyst temperatures.
On 14th August 2019 the decision was made to conduct a voluntary safety recall to correct the harness fastening in all affected vehicles as a precaution.

Description of Remedy :

Description of Remedy Program :	The remedy is a simple and quick procedure that can be carried out in the field by McLaren's authorised dealers and technicians. This rework will be carried out at no charge to the customer.
How Remedy Component Differs from Recalled Component :	All components will remain as per the production design. However, the fastening and routing of the harness will be modified so that it will not touch the link pipe heatshield.
Identify How/When Recall Condition was Corrected in Production :	Since 8th August 2019, all vehicles in production and awaiting sale have been modified so that the fastening and routing of the harness avoids the link pipe heatshield, as per the recall remedy. No Senna vehicles were sold since this issue was identified without the remedy being applied.

Recall Schedule :

Description of Recall Schedule :	NR
Planned Dealer Notification Date :	NR - NR
Planned Owner Notification Date :	NR - NR

* NR - Not Reported