

# Part 573 Safety Recall Report

# 19V-497

**Manufacturer Name :** Mazda North American Operations**Submission Date :** JUN 27, 2019**NHTSA Recall No. :** 19V-497**Manufacturer Recall No. :** 3719F**Manufacturer Information :**

Manufacturer Name : Mazda North American Operations

Address : 1025 Connecticut Avenue, NW

Suite 910 Washington DC 20036

Company phone : 800-222-5500

**Population :**

Number of potentially involved : 262,220

Estimated percentage with defect : NR

**Vehicle Information :**

Vehicle 1 : 2018-2019 Mazda CX-5

Vehicle Type : LIGHT VEHICLES

Body Style : SUV

Power Train : GAS

Descriptive Information : – Recall population was determined by the production record of vehicles which may have had the subject Power Control Module installed.  
 – Vehicles not included in the recall have improved software programming already installed.

The following is the affected number by MY/Make/Model:

MY 2018 Mazda CX-5 built at Mazda Motor Corporation: 143,004 units.

MY 2019 Mazda CX-5 built at Mazda Motor Corporation: 81,236 units.

Production Dates : OCT 03, 2017 - APR 23, 2019

VIN Range 1 : Begin : JM3KFBDMXJ0300038 End : JM3KFBCM5J0476254  Not sequentialVIN Range 2 : Begin : JM3KFBBM7K0500024 End : JM3KFACM5K0622857  Not sequential

Vehicle 2 : 2018-2019 Mazda Mazda6

Vehicle Type : LIGHT VEHICLES

Body Style : ALL

Power Train : NR

Descriptive Information : – Recall population was determined by the production record of vehicles which may have had the subject Power Control Module installed.  
 – Vehicles not included in the recall have improved software programming already installed.

The following is the affected number by MY/Make/Model:

MY 2018 Mazda Mazda6 built at Mazda Motor Corporation: 18,295 units.

MY 2019 Mazda Mazda6 built at Mazda Motor Corporation: 2,551 units.

Production Dates : JAN 15, 2018 - APR 22, 2019

VIN Range 1 : Begin : JM1GL1UM9J1300026 End : JM1GL1VM4J1336737  Not sequentialVIN Range 2 : Begin : JM1GL1VM2K1500004 End : JM1GL1VM2K1505526  Not sequential

Vehicle 3 : 2019-2019 Mazda Mazda3

Vehicle Type : LIGHT VEHICLES

Body Style : 2-DOOR

Power Train : GAS

Descriptive Information : – Recall population determined by the production record of vehicles which may have had the subject Power Control Module installed.  
– Vehicles not included in the recall have improved software programming already installed.

The following is the affected number by MY/Make/Model:

MY2019 Mazda Mazda3 built at Mazda de Mexico Vehicle Operation: 2,651 units

MY2019 Mazda Mazda3 built at Mazda Motor Corporation in Japan: 14,483 units.

Production Dates : SEP 25, 2018 - MAY 11, 2019

VIN Range 1 : Begin : 3MZBPAEM7KM100048 End : 3MZBPAEM9KM112251  Not sequential

VIN Range 2 : Begin : JM1BPACM2K1100042 End : JM1BPAMM4K1139973  Not sequential

## Description of Defect :

Description of the Defect : Loss of engine power and/or engine stall may occur during certain driving conditions due to a software error in the computer that controls engine operation.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Loss of engine power or engine stall without the ability to be restarted can occur while driving, which may increase the risk of a crash. No accidents, injuries, or deaths have been reported from the field to date as a result of this defect.

Description of the Cause : On certain Powertrain Control Modules (PCM), the software controlling the hydraulic valve clearance adjuster may operate improperly when transitioning from cylinder deactivation to full cylinder activation modes. As a result, an intake valve rocker arm may come out of position and make contact with internal engine parts, which may cause an engine misfire, loss of engine power, and/or Malfunction Indicator Light (MIL) illumination.

Identification of Any Warning that can Occur : There is no preceding warning prior to occurrence of lack of power, engine stall, and/or MIL illumination.

## Supplier Identification :

### Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

## Chronology :

January 31, 2018: Mazda received a first field report "Engine noise and cylinder intake valve rocker arm fallen off" from U.S. market.

April 25, 2018: Mazda received a second field report that claimed engine running roughness and MIL illumination. Detailed investigation started because there were differences in the investigation result of these vehicles.

November 2, 2018; Mazda determined a possible root cause was an inappropriate specification of oil pressure control signal response.

January 24, 2019: Mazda was considering whether any other factors caused this issue, reviewing the electronic engine operation recording data. As a result, Mazda found out another root cause was the programming of the transition between all four cylinder operation and two cylinder deactivation modes was not robust.

March 29, 2019: Design change of PCM software was issued.

May 13, 2019: PCM with improved software was implemented in production.

June 24, 2019: Mazda held a Quality Audit Committee to review all available information to date and determined to conduct a proactive field action on certain MY 2019 Mazda3, MY2018-2019 Mazda6 and MY 2018-2019 CX-5 vehicles.

## Description of Remedy :

**Description of Remedy Program :** Owners will be notified by mail and instructed to take their vehicle to a Mazda dealer.  
Dealers will reprogram the PCM with improved hydraulic valve adjustment control software. There will be no charge for this service to vehicle owners. Copies of the reimbursement plan will be submitted as a supplemental report when available.

**How Remedy Component Differs from Recalled Component :** The original PCM will have improved software installed, therefore a remedy component is not used.  
Recalled Parts name: Powertrain Control Module  
Part number: PYFA18881,PYFB18881,PYFC18881,PYFD18881, PX4218881,PX4318881,PX4418881,PX4518881, PXD818881,PYH318881,PX0518881,PX0718881,PX5818881,PX0618881, PX0818881,PX5918881,PX1318881,PX1418881.

**Identify How/When Recall Condition was Corrected in Production :** PCM software was improved on May 13, 2019.

## Recall Schedule :

**Description of Recall Schedule :** Notification to dealers is expected to occur on July 1, 2019. Mailing of owner notification letters is expected to be completed on or before August 26, 2019.

Planned Dealer Notification Date : JUL 01, 2019 - JUL 01, 2019  
Planned Owner Notification Date : AUG 26, 2019 - AUG 26, 2019

\* NR - Not Reported