

# Part 573 Safety Recall Report

# 21V-301

**Manufacturer Name :** Hyundai Motor America**Submission Date :** APR 28, 2021**NHTSA Recall No. :** 21V-301**Manufacturer Recall No. :** 203**Manufacturer Information :**

Manufacturer Name : Hyundai Motor America

Address : 10550 Talbert Avenue

Fountain Valley CA 92708

Company phone : 800-633-5151

**Population :**

Number of potentially involved : 125,840

Estimated percentage with defect : 1 %

**Vehicle Information :**

Vehicle 1 : 2019-2020 Hyundai Elantra

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : 45,703 model year 2019-2020 Hyundai Elantra vehicles equipped with 2.0-litre "Nu" MPI engines and produced from November 1, 2018 through July 8, 2020 by Hyundai Motor Company in South Korea for sale in the U.S. market.

Production Dates : NOV 01, 2018 - JUL 08, 2020

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Vehicle 2 : 2019-2021 Hyundai Kona

Vehicle Type : LIGHT VEHICLES

Body Style : SUV

Power Train : GAS

Descriptive Information : 74,010 model year 2019-2021 Hyundai Kona vehicles equipped with 2.0-litre "Nu" MPI engines and produced from November 2, 2018 through September 1, 2020 by Hyundai Motor Company in South Korea for sale in the U.S. market.

Production Dates : NOV 02, 2018 - SEP 01, 2020

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Vehicle 3 : 2019-2021 Hyundai Veloster

Vehicle Type : LIGHT VEHICLES

Body Style : HATCHBACK

Power Train : GAS

Descriptive Information : 6,127 model year 2019-2021 Hyundai Veloster vehicles equipped with 2.0-litre "Nu" MPI engines and produced from November 2, 2018 through May 27, 2020 by Hyundai Motor Company in South Korea for sale in the U.S. market.

Production Dates : NOV 02, 2018 - MAY 27, 2020

VIN Range 1 : Begin :

NR

End : NR

Not sequential

## Description of Defect :

Description of the Defect : The engines in the subject vehicles may have been assembled using piston oil rings that were produced with inconsistent nitride heat treating by the piston oil ring supplier resulting in excessive oil ring hardness. Excessive hardness can cause chipping of the piston oil ring's outer periphery, which could lead to abnormal scuffing of the engine's cylinder bore. A damaged cylinder bore could create accelerated oil consumption, which may then cause abnormal knocking noise from the engine and/or illumination of the oil pressure warning light.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Continual operation of the vehicle in this condition could result in a seized connecting rod bearing, which could cause damage to the engine block and eventually stall the vehicle. In limited instances, a connecting rod could puncture the engine block and cause engine oil to leak, which, in the presence of hot surfaces, could increase the risk of a fire.

Description of the Cause : Intervals of low temperature during the nitride heat treatment process resulted in excessive hardness and decreased crack resistance of the oil ring.

Identification of Any Warning that can Occur :

- A. Abnormal (knocking) noise from engine
- B. Reduced motive power and/or hesitation
- C. Illumination of the "Check Engine" warning lamp
- D. Illumination of engine oil pressure warning lamp
- E. Burning smell, oil leaking, smoke

## Involved Components :

Component Name 1 : PISTON ASSEMBLY

Component Description : Piston assembly for 2019-2020 Elantra, 2019-2021 Kona/Veloster

Component Part Number : 23041-2E801

## Supplier Identification :

### Component Manufacturer

Name : Dongsuh Federal Mogul

Address : NR

NR

Country : NR

## Chronology :

Please see attachment A for the requested chronology.

## Description of Remedy :

Description of Remedy Program : Hyundai Motor America plans to notify owners of affected vehicles to return their vehicles to their Hyundai dealers for an engine inspection test to determine the presence of damage on the cylinder bore and piston skirt. If abnormalities relating to damage is found, the engine will be replaced with a new one.

As an added level of protection, all affected vehicles will receive an enhanced engine control software update containing a new Piston Noise Sensing System ("PNSS") program. The PNSS continuously monitors engine vibrations for unusual patterns potentially indicating an abnormal condition with the engine, such as a damaged cylinder bore and/or piston skirt, which could lead to an engine failure. The PNSS is currently under development and will be applied when available.

The remedy procedure will be performed at no charge. Hyundai will provide reimbursement to owners for repairs according to the plan submitted on May 16, 2018.

How Remedy Component Differs from Recalled Component : The oil ring has been properly heat treated.

**Identify How/When Recall Condition was Corrected in Production :** The temperature and timing of the nitride heat treatment process was revised on June 30, 2020 by the supplier.

**Recall Schedule :**

**Description of Recall Schedule :** Dealers and owners will be notified beginning in late June 2021.  
**Planned Dealer Notification Date :** JUN 25, 2021 - JUN 25, 2021  
**Planned Owner Notification Date :** JUN 25, 2021 - JUN 25, 2021

\* NR - Not Reported