

**Part 573 Safety Recall Report****15V-568****Manufacturer Name :** Hyundai Motor America**Submission Date :** SEP 10,2015**NHTSA Recall No. :** 15V-568**Manufacturer Recall No. :** 132**Manufacturer Information :**

Manufacturer Name : Hyundai Motor America

Address : 10550 Talbert Avenue  
Fountain Valley CA 92708

Company phone : 1-855-671-3059

**Population :**

Number of potentially involved : 470,000

Estimated percentage with defect : 2

**Vehicle Information :**

Vehicle : 2011-2012 Hyundai Sonata

Vehicle Type : LIGHT VEHICLES

Body Style :

Power Train : GAS

Descriptive Information : Model Year 2011 and 2012 Hyundai Sonata vehicles manufactured at Hyundai Motor Manufacturing Alabama equipped with 2.0 liter and 2.4 liter Gasoline Direct injection engines.

Production Dates : DEC 11, 2009 - APR 12, 2012

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

 Not sequential VINs**Description of Defect :**

Description of the Defect : Hyundai has determined that metal debris may have been generated from factory machining operations as part of the manufacturing of the engine crankshaft during the subject production period. As part of the machining processes, the engine crankshaft is cleaned to remove metallic debris. If the debris is not completely removed from the crankshaft's oil passages, it can be forced into the connecting rod oiling passages restricting oil flow to the bearings. Since bearings are cooled by oil flow between the bearing and journal, a reduction in the flow of oil may raise bearing temperatures increasing the potential of premature bearing wear. A worn connecting rod bearing will produce a metallic, cyclic knocking noise from the engine which increases in frequency as the engine rpm increases. A worn connecting rod bearing may also result in illumination of the oil pressure lamp in the instrument cluster. If the vehicle continues to be driven with a worn connecting rod bearing, the bearing can fail, and the vehicle could stall while in motion.

FMVSS 1 :NR

FMVSS 2 :NR

Description of the Safety Risk : An engine stall at higher speeds can increase the risk of a crash.

Description of the Cause : NR

Identification of Any Warning that can Occur : 1) Knocking noise from engine  
2) Illumination of engine warning lamp

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

Name : NR

Address : NR

NR

Country : NR

**Chronology :**

The 2011 Hyundai Sonata was the first Hyundai vehicle to use an engine manufactured in Hyundai's Alabama engine factory. As is the case with any production process, revisions were made to the manufacturing processes. Of note, Hyundai initially used a mechanical deburring process to remove machining debris from the crankshaft. In April of 2012, Hyundai incorporated a high pressure "wet blast" process to remove metallic debris from the component.

As the subject vehicles gained field experience, Hyundai became aware of engine-related warranty claims in the field. The vast majority of those claims evidenced that customers were responding to substantial noise, or the vehicle's check engine light, and bringing their vehicles to service as a result of those warnings. Many customers also complained after the warranty was no longer available. In a relatively smaller number of instances, customers reported stalling events. However, the majority of those customers did not mention the speed at which the vehicle was moving at the time of the reported stalling event. These customers were also able to restart their vehicles and/or move the vehicles to the side of the road.

In June, 2015, NHTSA raised the issue with Hyundai. Hyundai explained that, as of that time, it did not consider the issue to be safety-related due to the substantial warnings and the evidence that customers were responding to the warnings, among other reasons. Upon reviewing Hyundai's information, the Office of Defects Investigation informed Hyundai of its concern over the potential for higher speed stalling events. These discussions occurred throughout August, 2015. On September 2, 2015, this issue was discussed at HMA's Technical Committee meeting. At that time, Hyundai decided to conduct the field action as a safety recall and to file this Defect Information Report.

To date, there have been no reports of accidents or injuries attributed to this condition.

**Description of Remedy :**

Description of Remedy Program : 1) Hyundai Motor America will notify owners of affected vehicles to return their vehicles to their Hyundai dealers to inspect, and if necessary, replace the engine assembly.

2) Hyundai Motor America will increase the warranty for the engine

sub-assembly (short block) to 10 years/120,000 miles for both original and subsequent owners of 2011 and 2012 Sonatas manufactured at Hyundai Motor Manufacturing Alabama equipped with 2.0 liter and 2.4 liter Gasoline Direct injection engines.

3) Hyundai will provide reimbursement to owners for repairs according to the plan submitted on November 2, 2014.

How Remedy Component Differs from Recalled Component : NR

Identify How/When Recall Condition was Corrected in Production : The cleaning process was revised in April 2012 to utilize a hydraulic pressure “wet blast” process to clean the crankshaft oil passages.

**Recall Schedule :**

Description of Recall Schedule : NR

Planned Dealer Notification Date : NOV 09, 2015 - NOV 09, 2015

Planned Owner Notification Date : NOV 09, 2015 - NOV 09, 2015

\* NR - Not Reported