



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 16-010
Date Opened: 09/03/2016
Investigator: John Abbott
Approver: Stephen Ridella
Subject: Electronic Parking Brake

Date Closed: 02/22/2017
Reviewer: Evan Frings

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Hyundai Motor America
Products: 2016 Hyundai Sonata
Population: 7,742

Problem Description: Rear brake pads remain in contact with the rotors causing the rear brakes to overheat and/or smoke

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	5	69	74
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	42	42

*Description of Other: Warranty Claims

ACTION / SUMMARY INFORMATION

Action: Close investigation

Summary:

The Office of Defects Investigation opened this investigation on September 3, 2016 based on four reports alleging the rear brakes locked or applied while driving without brake pedal application. One of the reports alleged a fire in the right rear wheel area.

The vehicles subject to the investigation are equipped with an optional Electronic Parking Brake (EPB). In this system, an electric motor applies the parking brake by moving the rear brake pads (pads) against the brake rotors (rotors) when activated by the EPB control switch. The EPB is released by the control switch or by selecting a drive gear with the transmission shifter when the ignition is on.

If the EPB has not been used within 1000 kilometers (621 miles) the system is designed to perform an Automatic Adjustment Function (AAF) of the pads to check for proper clearance. This function is a pad adjustment only and is performed with the vehicle in park with the ignition off. It does not set the parking brake or turn the brake indicator light on. Hyundai has identified an error within the EPB control logic that can cause the pads to remain in contact with the rotors at various levels of force after the AAF is completed. This condition could cause the rear brakes to drag at the next drive cycle and may generate some levels of heat and smoke. The EPB control logic error affects model year 2016 vehicles produced from the start of production through March 16, 2016. Vehicles produced from March 17, 2016 incorporate an updated EPB control logic to prevent brake pad drag. On May 11, 2016 Hyundai notified its dealer network of Service Campaign TFF to update the EPB control logic in the affected vehicle population. Dealers will reflash the EPB software to prevent brake pad drag.

There are no reports of accidents or injuries as a result of this issue. The incident that alleged fire could not be confirmed as there were no repairs to the vehicle other than replacement of the rear brake rotors and pads.

ODI is closing this investigation based on the manufacturer's Service Campaign of the affected vehicles and in consideration that the the effect of brake drag in this instance does not appear to present an unreasonable risk to motor vehicle safety.

The ODI reports cited above can be viewed at www-odi.nhtsa/complaints under the following identification (ODI) numbers: 10820359, 10854476, 10875764, 10892736, and 10928478