#### **DEFECT INFORMATION REPORT**

573.6(c)(1)

Name of manufacturer: Honda of America Mfg., Inc.

Honda Manufacturing of Alabama, LLC

Manufacturer's agent: John Turley

American Honda Motor Co., Inc.

1919 Torrance Blvd.

Torrance, CA 90501-2746

## 573.6(c)(2)

# Identification of potentially affected vehicles:

Make/Model	<u>Description</u>	Dates of Manufacture
Acura MDX	2016 model year	08/27/2014 to 06/20/2016
Acura MDX	2017 model year	08/06/2015 to 10/26/2017
Acura MDX	2018 model year	04/26/2017 to 08/02/2018
Acura TLX	2015 model year	09/17/2013 to 09/22/2015
Acura TLX	2016 model year	09/24/2015 to 07/15/2016
Acura TLX	2017 model year	07/15/2016 to 03/27/2017
Acura TLX	2018 model year	03/28/2017 to 03/23/2018
Acura TLX	2019 model year	03/23/2018 to 12/03/2018
Honda Accord	2015 model year	03/11/2014 to 08/05/2015
Honda Accord	2016 model year	12/10/2014 to 06/25/2016
Honda Accord	2017 model year	06/25/2016 to 09/28/2017

## Description of the basis for the determination of the recall population:

The recall population was determined based on manufacturing records. The production range reflects all possible vehicles that could potentially experience the problem.

# Description of how the vehicles being recalled differ from similar vehicles not included in the recall:

Vehicles affected by this recall were equipped with a 3.5 L V6 engine and a specific fuel pump module. Other model years of the listed vehicles, as well as other trims of the listed vehicles during the affected model years, are not included in the recall because they were not equipped with a 3.5 L V6 engine and the specific fuel pump module. The recall only includes certain 2019 model year Acura TLX vehicles equipped with a 3.5 L V6 engine because, starting with vehicles produced on December 11, 2018, fuel injection (FI)-ECU software no longer supported a low-voltage fuel pump operating mode necessary for the defect to occur.

## **Identification of affected component:**

Component: Fuel Pump Module

Part No.: Acura TLX and Honda Accord: 17045-T2B-A10

Acura MDX: 17045-TZ5-A10

Country of Origin: U.S.

Manufacturer: KYOSAN DENSO Manufacturing Kentucky, LLC

## 573.6(c)(3)

# Total number of potentially affected vehicles: 437,032

Make/Model	Model Year	Number of Vehicles
Acura MDX	2016	78,987
Acura MDX	2017	69,431
Acura MDX	2018	40,252
Acura TLX	2015	37,308
Acura TLX	2016	17,584
Acura TLX	2017	11,246
Acura TLX	2018	20,399
Acura TLX	2019	15,714
Honda Accord	2015	48,465
Honda Accord	2016	44,227
Honda Accord	2017	53,419

#### 573.6(c)(4)

Percentage of affected vehicles that contain the defect: 100%

# 573.6(c)(5)

## **Defect description:**

Sodium particulates contained in low quality fuels can adhere to certain internal components in the fuel pump, increasing electrical and mechanical resistance and reducing fuel pump performance. If a vehicle is operated in high ambient temperature, reduced fuel pump performance can restrict vehicle acceleration and/or cause an engine stall, which increases the risk of a crash.

#### 573.6(c)(6)

#### **Chronology:**

#### January 2016

Honda received the first report of an engine stall. As the frequency of claims was minimal, Honda decided to continue monitoring the market.

August to September 2017

After receipt of additional engine stall reports, Honda launched an investigation. Failed return parts were sent to the fuel pump supplier and the supplier was able to re-create the engine stalling condition with operating the fuel pump in 10 V mode. Fuel pump operating voltage can vary between 10 V-13 V.

#### October to November 2017

Sodium deposits were found on the brush and commutator components in the failed fuel pumps.

#### December 2017 to June 2018

Honda conducted additional tests and determined the source of sodium was from low quality fuels. No correlation between fuel and sodium content was found in any particular geographic region. Re-creation tests confirmed that fuel containing greater than one part per million of sodium could result in restricted vehicle acceleration and/or engine stall.

#### July to November 2018

Continued testing confirmed that fuel pump operation in 10 V mode allowed for the accumulation of sodium in the fuel pump, which resulted in increased mechanical and electrical resistance and reduction in fuel pump performance. Depending on ambient temperatures, reduced fuel pump performance can lead to restricted/rough acceleration and/or an engine stall. The spark in higher voltage operation in the 11.2 V-13 V range was also confirmed to dissolve sodium accumulation, allowing for full fuel pump rotation speed and flow rate.

#### December 11, 2018

Fuel injection ECUs with software that eliminated low voltage operating modes began to be used in mass production.

## January 22, 2019

Honda determined that a defect related to motor vehicle safety existed and decided to conduct a safety recall.

As of January 22, 2019, Honda has received 731 warranty claims, 102 field reports, and no reports of crashes or injuries related to this issue.

# 573.6(c)(8)

#### **Program for remedying the defect:**

Registered owners of all affected vehicles will be contacted by mail and asked to take their vehicle to an authorized Acura or Honda automobile dealer, as applicable. The dealer will update the FI-ECU with software programming that eliminates 10V fuel pump operation and the potential for sodium accumulation, for free. If the vehicle owner informs the dealer of an engine stall occurrence, and the engine stall is confirmed by a diagnostic scan, the fuel pump will also be replaced for free.

Owners who have paid to have these repairs completed at their own expense will be eligible for reimbursement, according to the recall reimbursement plan on file with NHTSA.

The estimated date to start notification to dealers: January 30, 2019
The estimated date to start notifications to owners: March 25, 2019

#### 573.6(c)(10)

#### Representative copies of all notices, bulletins and other communications:

A copy of the dealer service bulletin, the final owner notification letter and other dealer communication will be submitted to your office as soon as possible.

A draft of the owner notification letter will be submitted to your office as soon as possible.

573.6(c)(11)

Manufacturer's campaign number: N3X, P3W