

May 10, 2016

02991 Version 3

Transmission Function Improvements: Sensation of Surge While Braking, Slow Downshift Response at Low Engine Speeds, and Other Listed Symptoms

Supersedes 15-054, dated January 12, 2016, to revise the information highlighted in **yellow**

AFFECTED VEHICLES

Year	Model	Trim	VIN range
2016	MDX	2WD Base	5FRYD3H2.GB000001 thru 5FRYD3H2.GB012656
2016	MDX	2WD Technology	5FRYD3H4.GB000001 thru 5FRYD3H4.GB012723
2016	MDX	2WD Technology and Entertainment	5FRYD3H6.GB000001 thru 5FRYD3H6.GB012711
2016	MDX	2WD Advance	5FRYD3H9.GB000001 thru 5FRYD3H9.GB012787
2016	MDX	AWD Base	5FRYD4H2.GB000001 thru 5FRYD4H2.GB039814
2016	MDX	AWD Technology	5FRYD4H4.GB000001 thru 5FRYD4H4.GB039727
2016	MDX	AWD Technology and Entertainment	5FRYD4H6.GB000001 thru 5FRYD4H6.GB040204
2016	MDX	AWD Advance	5FRYD4H9.GB000001 thru 5FRYD4H9.GB039756

REVISION SUMMARY

Under BACKGROUND, a symptom was added.

BACKGROUND

American Honda has made several shift quality improvements in the 2016 MDX.

SYMPTOM	UPDATE
There is a sensation of acceleration while coasting down a hill.	Engine mapping has been changed to better manage 8-7 and 5-4 downshifts with the throttle closed.
There is a sensation of a surge while braking.	
The transmission feels like it stays in the gear too long.	Transmission mapping on the 5-4-3 downshift when accelerating at low engine speeds was changed to a 5-3 downshift to provide a quicker acceleration response.
During slight acceleration, there is a surge or hesitation from a stop.	Low speed acceleration feel in 1-3 gears has been improved.
The transmission feels rough at low speeds.	
There is a hesitation from a stop (with idle stop canceled).	
There is poor acceleration or bogging noise at slow engine speeds.	Torque converter lock up strategy has been improved for low speed drivability (parking lot speeds).
P2638 (Does not turn on the MIL)	Improved torque accuracy monitoring.

CLIENT INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Acura automobile dealer.

CORRECTIVE ACTION

Update both the PCM and the TCM software. Clear all codes created during both updates and do the idle learn procedure.

NOTE: Failure to update both the PCM and the TCM software at the same time will result in poor shift quality and a comeback.

This software update will change the way the transmission shifts.

After the update it may take up to 30 miles for the transmission to adapt to the client's driving habits.

WARRANTY CLAIM INFORMATION

The normal warranty applies.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1255D7	Update the PCM and the TCM software. Do the idle learn procedure.	0.5 hr	03214	03217	15-054N	37820-5J6-A05

Skill Level: Repair Technician

SOFTWARE INFORMATION

NOTE: Unnecessary or incorrect repairs resulting from a failure to update the HDS or MVCI are not covered under warranty.

MVCI Control Module (CM) Update:

Application Version: **3.01.50 or later**

Database update: **23-Nov-2015 or later**

HDS Software Version:

3.017.012 or later

Before beginning the update, make sure that both the HDS and the MVCI are updated as listed above.

Do only the update listed in this service bulletin.

Check that the MVCI indicates the applicable program ID listed below (or a later program ID) as the **Available Update** when the update begins.

If the MVCI displays **This vehicle does not need an update at this time** during the update, the software for this service bulletin is already installed.

For more information about updating the HDS, the MVCI, and vehicle systems, refer to Service Bulletin 01-026, *Updating Control Units/Modules*.

PCM

Year/Model/Trim	Program ID (or later)	Program P/N (or later)
2016 2WD Base, Technology	J6A060	37805-5J6-A060
2016 2WD AcuraWatch	J6A160	37805-5J6-A160
2016 2WD Advance	J6A460	37805-5J6-A460
2016 AWD Base, Technology	J6A260	37805-5J6-A260
2016 AWD AcuraWatch	J6A360	37805-5J6-A360
2016 AWD Advance w/Auto Stop	J6A960	37805-5J6-A960

TCM

Year/Model/Trim	Program ID (or later)	Program P/N (or later)
2016 2WD Base, Technology	NBA570	28101-5NB-A570
2016 2WD AcuraWatch	NBA670	28101-5NB-A670
2016 2WD Advance	NBA770	28101-5NB-A770
2016 AWD Base, Technology	NCA580	28101-5NC-A580
2016 AWD AcuraWatch	NCA680	28101-5NC-A680
2016 AWD Advance w/Auto Stop	NCA780	28101-5NC-A780

REPAIR PROCEDURE

1. Update the TCM and the PCM software. Refer to Service Bulletin 01-026, *Updating Control Units/Modules*.
2. Do the idle learn procedure. Refer to the service information.

END