

November 17, 2016

05300 Version 3

## Judder from the Torque Converter Lock-Up Clutch

Supersedes 16-044, dated November 2, 2016, to revise the information highlighted in **yellow**

### AFFECTED VEHICLES

Year	Model	Trim	VIN range
2012	MDX	ALL	2HNYD2H...CH513517 thru 2HNYD2H...CH550713
2013	MDX	ALL	ALL

### REVISION SUMMARY

**Under WARRANTY CLAIM INFORMATION, some warranty information was updated.**

### BACKGROUND

A judder from the torque converter lock-up clutch may be felt while driving between 20 and 60mph. The problem is typically diagnosed as a bad torque converter. American Honda investigated the judder and found that the torque converter was not causing the judder, rather, it was caused by deteriorated transmission fluid. The transmission fluid deteriorates quicker than expected when it is exposed to intermittent high heat loads under specific driving conditions. American Honda is working on a software update that will maintain the transmission fluid temperature within the desirable range under all driving conditions and eliminate the potential for this judder. American Honda will revise this service bulletin when the software update is available.

Until the software is released, the judder can be fixed by flushing the transmission fluid as indicated in the FLUSH PROCEDURE. Make sure the customer is aware that this is a temporary fix and he or she will have to return once the software is available to make sure the transmission judder is resolved.

NOTE: American Honda defines flushing the transmission as draining and filling the transmission with a drive cycle three times to help make sure the deteriorated fluid is removed. **There are other aftermarket flush systems available, but American Honda does not recommend using them.**

### TEMPORARY CORRECTIVE ACTION

Take an automatic transmission snapshot and review the data. For more information about capturing and interpreting the data, refer to the job aid *Torque Converter Clutch Shudder and Vibration* and the *Tech2Tech@* video "Interpreting Torque Converter Judder Snapshot Data."

Once it is confirmed that the judder is coming from the torque converter, flush the transmission as indicated in the FLUSH PROCEDURE. This is a temporary fix until the software is developed. The judder does not affect the durability or life span of the torque converter.

NOTE: There is no need to call Tech Line before undertaking this ATF flush repair.

**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.

## WARRANTY CLAIM INFORMATION

The normal warranty applies.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
2181BP	ATF flush procedure. Includes test-drive.	1.4 hrs	01102	03505	16-044N	26000-5J7-305

Skill Level: Repair Technician

## PARTS INFORMATION

Part Name	Part Number	Quantity
Genuine Acura ATF DW1	08200-9008A	10
Washer, Drain plug (18 mm)	90471-PX4-000	1
Washer, Sealing (24 mm)	11107-PWA-300	1

## FLUSH PROCEDURE

NOTE: The term “flushing” refers to repeatedly draining and filling the transmission with Acura Genuine ATF-DW1. **Other aftermarket flush systems are available, but American Honda strongly recommends that you avoid using them on any Acura vehicles.**

1. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or Neutral) until the radiator fan comes on, then let it idle.
2. Position the vehicle on a lift and turn off the engine.
3. Remove the ATF filler bolt and sealing washer.
4. Raise the vehicle and make sure it is securely supported.
5. Remove the drain plug and drain the ATF.
6. Install the drain plug and original washer and torque it to **49 N·m (36 lb-ft)**.
7. Lower the vehicle and fill the transmission with **3.3 US qts (3.1 L)** of ATF-DW1 through the filler hole.

NOTE: Do not use non-Acura ATF because it can affect shift quality.

8. Install the ATF filler bolt and original sealing washer and torque it to **44 N·m (32 lb-ft)**.
9. Check that the fluid is filled to the proper level.
10. Raise the vehicle and make sure it is securely supported.
11. Start the engine.
12. Press the VSA Off button.
13. Press the brake pedal and shift to Drive.
14. Release the brake pedal. Press the accelerator pedal and bring the speedometer up to 50 mph. Make sure the transmission shifts through the first three lower gears and into fourth gear and the torque converter is locking up.
15. Apply the brakes to stop the front wheels.
16. Shift to Reverse, then Neutral.
17. Repeat the shifting procedure (steps 12 through 16) four more times.
18. Turn off the engine.
19. Repeat the above drain, fill, and shifting procedure (steps 3 through 18) one more time.
20. After the second refill and shift cycle, drain the transmission.
21. Install the drain bolt with a new washer and torque to **49 N·m (36 lb-ft)**.

22. Fill the transmission with **3.3 US qts (3.1 L)** of ATF-DW1.

NOTE: Do not use non-Acura ATF because it can affect shift quality.

23. Install the ATF filler bolt with a new sealing washer and torque the bolt to **44 N·m (32 lb-ft)**.

24. Confirm the judder is gone and clear any DTCs set while driving on the lift.

25. If the Maintenance Minder did not indicate the ATF needed replacement, reset the Maintenance Minder with the i-HDS. For more information about resetting individual maintenance items, refer to the service information. If the Maintenance Minder indicated the ATF needed replacement and a full service was done, reset the maintenance minder with the multi-information display.

END