# March 09, 2018

ACURA

08469 Version 2

# 2013–17 RDX: Judder from the Torque Converter Lock-Up Clutch After Software Update (Snapshot Upload Required)

Supersedes 17-018, 2013-17 RDX: Judder from the Torque Converter Lock-Up Clutch After Software Update, dated April 4, 2017, to revise the information highlighted in yellow

## AFFECTED VEHICLES

Year	Model	Trim	VIN Range	
2013–17	RDX	ALL	ALL	

## **REVISION SUMMARY**

Added additional information under CORRECTIVE ACTION.

## BACKGROUND

After the software update, some vehicles based on how they are driven (extreme conditions) may still experience ATF deterioration after updating the A/T or PGM-FI system and the shudder may return. The problem is typically diagnosed as a bad torque converter (TC). There is no damage to the TC, but because the ATF has deteriorated, it needs to be changed even though the **ATF Service Due** message has not appeared. Make sure the software is updated by referring to the INSPECTION PROCEDURE.

There are two bulletins referring to this subject:

- 17-017 2013–17 RDX: Judder from the Torque Converter Lock-Up Clutch. Do this bulletin first to apply the software, and flush the transmission as indicated in the REPAIR PROCEDURE.
- 17-018 2013–17 RDX: Judder from the Torque Converter Lock-Up Clutch After Software Update. Some vehicles
  based on how they are driven may still experience ATF deterioration after updating the A/T or PGM-FI software. In
  these cases, do the inspection and, if necessary, flush the transmission as indicated in the REPAIR PROCEDURE.

## **CORRECTIVE ACTION**

Do the INSPECTION PROCEDURE, and check if the software has been updated. **If the software is updated**, take an automatic transmission snapshot, review the data, and confirm that the judder is coming from the torque converter. **Send the snapshot to Tech Line.** If the snapshot indicates the judder is coming from the torque converter, flush the transmission as indicated in the REPAIR PROCEDURE.

#### PARTS INFORMATION

Part Name	Part Number	Quantity
Drain Plug Washer (18 mm)	90471-PX4-000	1
ATF Fill Sealing Washer (24 mm)	11107-PWA-300	1

#### **REQUIRED MATERIALS**

Part Name	Part Number	Quantity
Acura ATF DW-1	08200-9008A	10

**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 warranty is 8 years or 80,000 miles, whichever comes first.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
2180A5	Flush the ATF (includes test drive).	1.4 hrs	01102	03505	17-018N	37805-R9P-A590

# **INSPECTION PROCEDURE**

1. Connect the i-HDS, and go to the **A/T Data List**. Check to see if the software has been updated by comparing the program P/N against the table below.

PROGRAM PART NUMBER

		F12
Standalone Mode SnapShot		
	19UUA9F53CA0	12536 EAT
Full List Menuel		
Signal	Value	Units
Vehicle Speed	30	MPH
Dutput Shaft (CounterShaft) Speed	30	MPH
Input Shaft (Mainshaft) Speed	30	MPH
Engine Speed	1603	RPM
Output Shaft (CounterShaft) Speed (rpm)	1468	RPM
Input Shaft (Mainshaft) Speed (rpm)	1563	RPM
Relative TP Sensor	10.2	%
TP Sensor 1	0.94	V
TP Sensor 2	1.76	V
APP Sensor (%)	18.5	%
APP Sensor A (V)	1.69	V
APP Sensor B (V)	0.84	V
ECT Sensor (V)	0.49	V
Engine Coolant Temperature	208.4	°F
MAP Sensor (V)	1.45	v
Manifold Absolute Pressure	48	kPa
BARO SENSOR (V)	4.00	V
Atmospheric Pressure	99	kPa
ATF Temp Sensor (V)	0.94	V
ATF Temperature	185.0	۴F
Battery Voltage	13.6	V
Shift Control	4th	
A/T Shift Sol VLV. A	OFF	
A/T Shift Sol VLV. B	OFF	Ó
A/T Shift Sol VLV. C	ON	
Line Pressure Sol VLV. A	OFF	
Shift Lock Solenoid	OFF	•
ETR	97	%
GEAR RATIO	4.000	
SHIFT MAP NUMBER	4	

• If the program P/N is listed below (or later), the software has been updated. Go to step 2.

37806-R8A-A540	37806-R8A-A640	37805-5ME-A530	37805-5ME-A630	
37805-5ME-A730	37805-5ME-A830	37805-5ME-A120	37805-5ME-A220	
37805-5ME-A320	37805-5ME-A420			

- If the program P/N is not listed, the software has not been updated. Go to Service Bulletin 17-017, 2013–17 RDX: Judder from the Torque Converter Lock-Up Clutch.
- 2. Take an automatic transmission snapshot, and forward it to Tech Line using the RO number. 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."
  - If the snapshot indicates there is a judder, go to REPAIR PROCEDURE.
  - If the snapshot does not indicate a judder, this bulletin does not apply. Continue with normal troubleshooting. NOTE: You do not need to contact Tech Line after sending the snapshot. However, if you do not send a snapshot, your claim may be subject to debit.

## **REPAIR 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 4th gear and the torque converter is locking up.
- 15. Apply the brakes to stop the wheels.
- 16. Shift to Reverse, then Neutral.
- 17. Repeat the shifting procedure (steps 13 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 drive 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.

Automatic Transmission Fluid Capacity

AWD: 3.3 US qts (3.1 L) at change

2WD: 3.3 US qts (3.1 L) at change

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. Clear any DTCs that were set while driving on the lift and confirm the judder is gone.
- 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