

March 09, 2018

08471 Version 2

2012–13 ZDX: Judder from the Torque Converter Lock-Up Clutch After Software Update (Snapshot Upload Required)

Supersedes 17-007, 2012–13 ZDX: Judder from the Torque Converter Lock-Up Clutch After Software Update, dated January 26, 2017, to revise the information highlighted in **yellow**

AFFECTED VEHICLES

Year	Model	Trim	VIN range
2012	ZDX	ALL	2HNYB1H...CH500541 thru 2HNYB1H...CH501142
2013	ZDX	ALL	ALL

REVISION SUMMARY

Added additional information under **CORRECTIVE ACTION**.

BACKGROUND

Some vehicles may still experience the shudder even after the PGM-FI software has been updated because the ATF has deteriorated. The problem is typically diagnosed as a bad torque converter. There is no damage to the torque converter, but because the ATF has deteriorated, the fluid needs to be changed even though the **ATF Service Due** message has not appeared. Make sure the vehicle is updated by referring to the INSPECTION PROCEDURE.

There are two service bulletins referring to this subject:

- 17-005, 2012–13 ZDX: *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.**
- 17-007, 2012–13 ZDX: *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 PGM-FI or A/T system. 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 three times 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)	90441-PK4-000	1

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.

REQUIRED MATERIALS

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

WARRANTY CLAIM INFORMATION

This warranty is for 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 three times (includes test drive).	1.4 hrs	01102	03505	17-007N	37806-RP6-4060

Skill Level: Repair Technician

INSPECTION PROCEDURE

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

PROGRAM PART NUMBER

The screenshot shows the i-HDS software interface with the AT Data List displayed. The program part number 37805-RK2-A960 is circled in red and pointed to by an arrow. The data list includes various signals and their values, such as Vehicle Speed (30 MPH), Output 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 °F), Battery Voltage (13.6 V), Shift Control (4th), A/T Shift Sol VLV. A (OFF), A/T Shift Sol VLV. B (OFF), A/T Shift Sol VLV. C (ON), Line Pressure Sol VLV. A (OFF), Shift Lock Solenoid (OFF), ETR (97 %), GEAR RATIO (4.000), and SHIFT MAP NUMBER (4).

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

Program P/N (or later)
37806-RP6-3080
37806-RP6-3090
37806-RP6-4060

- If the program P/N is not listed, the vehicle has not been updated. Go to service bulletin 17-005, 2012–13 ZDX: 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 the 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 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 13 through 16) four more times.
18. Turn off the engine.
19. Lower the vehicle, then 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 set while driving on the lift.

END