

# Service Bulletin

*17-052* 

September 28, 2018 Version 2

# 2012-13 Odyssey: Judder from the Torque Converter Lock-Up Clutch (Snapshot Required)

Supersedes 17-052, dated February 24, 2018 to revise the information highlighted in yellow

#### **AFFECTED VEHICLES**

Year	Model	Trim	VIN Range
2012	Odyssey	Touring, Touring Elite	5FNRL5HCB054365 thru 5FNRL5HCB148157
2013	Odyssey	Touring, Touring Elite	ALL

#### **REVISION SUMMARY**

- Added Continental PCM information to the Program IDs.
- Added additional directions under CORRECTIVE ACTION.

#### **BACKGROUND**

A judder from the torque converter lock-up clutch may be felt while driving between 20 and 60 mph. The problem is typically diagnosed as a bad torque converter. American Honda investigated this and found that the torque converter is not causing the judder and the transmission is not damaged by it.

The judder 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. A software update is available to maintain the transmission fluid temperature within the desirable range under all driving conditions and eliminate the potential for this judder.

There are two bulletins referring to this subject:

- 17-052, 2012–13 Odyssey: 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.
- 18-017, 2012–13 Odyssey: 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**

There are two types of PCM's in the 2012 Odyssey (Keihin and Continental).

If the program P/N starts with 37805 it is a Continental PCM.

If the program P/N starts with **37806** it is a Keihin PCM.

For 2013 model year, vehicles were only equipped with Keihin PCMs.

**CUSTOMER 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 Honda automobile dealer.

Check if the software has been updated. If the software has not been updated, take an automatic transmission snapshot, and review the data, and confirm the judder is coming from the torque converter. **Send the snapshot to Tech Line**. If the snapshot does not indicate the judder is coming from the torque converter, this service bulletin does not apply. If the snapshot indicates the judder is coming from the torque converter, update the PGM-FI or A/T system, then go to 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
Honda ATF DW-1	08200-9008	10

## **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
1255E4	Update the A/T software. (with Keihin PCM only)	0.2 hr	03214	03217	A17052A	37806-RV0-5050
А	Flush the ATF.	1.4 hrs				
2181BP	Flush the ATF. (with Continental PCM only)	1.4 hrs	01102	03505	A17052B	37806-RV0-5050

#### **SOFTWARE INFORMATION**

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

HDS Software Version 3.103.012 or later

J2534 Software Information:

- PC Application Version 1.1.0.7 or later
- Database update 14-SEP-2018 or later

Before beginning the repair, make sure that both the i-HDS and J2534 software are updated as listed above. Do only the update listed in this service bulletin.

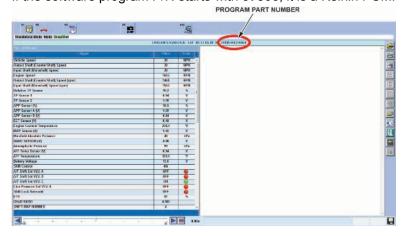
You cannot apply the updates with the MVCI as a standalone tool. To update the vehicle, you must use the MVCI or DST-i interface in conjunction with the J2534 Rewrite PC application on the i-HDS.

For more information about updating the i-HDS, MVCI or DST-i, and vehicle systems, refer to Service Bulletin 01-023, *Updating Control Units/Modules*.

Trim	Software System	Program ID (or later)	Program P/N (or later)
2012-13	Touring, Touring Elite (with Keihin PCM only)	V05050	37806-RV0-5050
2012-13	Touring, Touring Elite (with Continental PCM only)	V04060	37805-RV0-4060

#### **INSPECTION PROCEDURE**

- 1. Connect the i-HDS, and go to the **A/T Data List**. Check the program P/N.
  - If the software program P/N starts with 37805, it is a Continental PCM.
  - If the software program P/N starts with 37806, it is a Keihin PCM.



• If the program P/N (or later) is listed below, the vehicle has been updated. Go to Service Bulletin 18-017, 2012–13 Odyssey: Judder from the Torque Converter Lock-Up Clutch After Software Update.

Program P/N (or later) Keihin	Program P/N (or later) Continental
37806-RV0-5050	37805-RV0-4060

If the program P/N is not the same as above or higher, the vehicle has not been updated. Go to step 2.

- 2. **Take an automatic transmission snapshot, and forward it to Tech Line using the RO number**. To ensure you are getting the correct data, compare your snapshot to the one in 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 system 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**.

#### **VERIFICATION PROCEDURE**

- 1. **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 does not indicate a judder, this bulletin does not apply. Continue with normal system 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.

If the snap shot indicates there is a torque converter judder, go to the ATF FLUSH PROCEDURE.

## **REPAIR PROCEDURE**

1. Update the software using the i-HDS J2534 rewrite software with the MVCI or DST-i. Refer to Service Bulletin 01-023, *Updating Control Units/Modules*.

#### ATF FLUSH PROCEDURE

# NOTE

The term "flushing" refers to repeatedly draining and filling the transmission with Honda Genuine ATF-DW1. Other aftermarket flush systems are available, but American Honda strongly recommends that you avoid using them on any Honda 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 3.6 US qts (3.4 L) of ATF-DW1 through the filler hole.

#### NOTE

Do not use non-Honda 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 front wheels.
- 16. Shift to Reverse, then to 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 it to 49 N·m (36 lb-ft).
- 22. Fill the transmission with 3.6 US qts (3.4 L) of ATF-DW1.

# NOTE

The automatic fluid capacity is 3.6 US qts (3.4 L) Do not use non-Honda 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 that were set while driving on the lift.
- 25. If the Maintenance Minder<sup>™</sup> did not indicate the ATF needed replacement, reset it 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, reset the maintenance minder with the multi-information display.

**END**