2017 Ridgeline: Judder from the Torque Converter Lock-Up Clutch After Software Update

AFFECTED VEHICLES

<table>
<thead>
<tr>
<th>Year</th>
<th>Model</th>
<th>Trim</th>
<th>VIN Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Ridgeline</td>
<td>ALL</td>
<td>ALL</td>
</tr>
</tbody>
</table>

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 the judder and found that the torque converter was not causing the judder and the transmission is not damaged by this judder.

The judder is 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:
- 17-025 - 2017 Ridgeline: 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.
- 17-026 - 2017 Ridgeline: 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. Then, forward 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

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Part Number</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drain Plug Washer (18 mm)</td>
<td>90471-PX4-000</td>
<td>1</td>
</tr>
<tr>
<td>ATF Fill Sealing Washer (24 mm)</td>
<td>11107-PWA-300</td>
<td>1</td>
</tr>
</tbody>
</table>

REQUIRED MATERIALS

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Part Number</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honda ATF DW-1</td>
<td>08200-9008</td>
<td>10</td>
</tr>
</tbody>
</table>

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.
WARRANTY CLAIM INFORMATION

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

<table>
<thead>
<tr>
<th>Operation Number</th>
<th>Description</th>
<th>Flat Rate Time</th>
<th>Defect Code</th>
<th>Symptom Code</th>
<th>Template ID</th>
<th>Failed Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2180A5</td>
<td>Flush the ATF three times. Includes the test drives.</td>
<td>1.4 hrs</td>
<td>01102</td>
<td>03505</td>
<td>17-026A</td>
<td>37805-5MJ-A550</td>
</tr>
</tbody>
</table>

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 Table]

   - If the program P/N is listed below (or later), the vehicle has been updated. Go to step 2.
     - 37805-5MJ-A050
     - 37805-5MJ-A550
     - 37805-5MJ-A750
   
   - If the program P/N is not listed, the vehicle has not been updated. Go to service bulletin 17-025 2017 Ridgeline: Judder from the Torque Converter Lock-Up Clutch After Software Update.

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 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 3.3 US qts (3.1 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 fourth 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-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 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.