September 7, 2023   Version 1

2016-20 Pilot: Transmission Temp Too Hot Message on the MID

AFFECTED VEHICLES

Year	Model	Trim	VIN Range
2016–20	Pilot (with 6 speed A/T)	ALL	ALL

SYMPTOM

Transmission Temperature Too Hot on the MID and no related DTCs.

POSSIBLE CAUSE

ATF deterioration causes high foaming and low viscosity. During extended high load driving ATF will foam and cooler flow rate is reduced.

CORRECTIVE ACTION

Update the ECU software and flush the automatic transmission fluid (ATF) 3 times.

PARTS INFORMATION

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

REQUIRED MATERIALS

Part Name	Part Number	Quantity
ATF DW-1	08200-9008	12

WARRANTY CLAIM INFORMATION

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1255E4	Update the PGM-FI software.	0.2 hr	03214	03217	A23073A	37805-RLV-315
A	Flush the ATF 3 times.	1.4 hr	03214	03217	A23073A	37805-RLV-315

SOFTWARE INFORMATION

NOTE: Unnecessary or incorrect repairs resulting from a failure to update the diagnostic and reprogramming software are not covered under warranty.

Before beginning the repair, make sure all diagnostic and reprogramming software are updated as listed.

i-HDS Software Version	1.008.020 or later
HDS Software Version	3.105.009 or later
Honda ECU Reprogramming	3.6.0.0
J2534 Rewrite Version	1.00.0034
J2534 Rewrite Database Update	20230414_2492

Update only the systems and software listed in this service bulletin.

Do not use the MongoosePRO VCI for this service bulletin as it is not an American Honda-approved device.

For more information about updating vehicle systems, refer to service bulletin 22-100, *Updating Control Units/Modules with the Honda ECU Reprogramming Application*.

Year/Model	Vehicle System	Program ID (or later)
2016 Pilot 2WD RES/NAVI (LX, EX, EX-L)	PGM-FI	37805-RLV-3250
2016 Pilot AWD RES/NAVI (LX, EX, EX-L)	PGM-FI	37805-RLV-3260
2016 Pilot 2WD Sensing (EX, EX-L)	PGM-FI	37805-RLV-3270
2016 Pilot AWD Sensing (EX, EX-L)	PGM-FI	37805-RLV-3280
2017 Pilot 2WD RES/NAVI (LX, EX, EX-L)	PGM-FI	37805-RLV-C040
2017 Pilot AWD RES/NAVI (LX, EX, EX-L)	PGM-FI	37805-RLV-C140
2017 Pilot 2WD Sensing (EX, EX-L)	PGM-FI	37805-RLV-C240
2017 Pilot AWD Sensing (EX, EX-L)	PGM-FI	37805-RLV-C340
2018 Pilot 2WD RES/NAVI (LX, EX, EX-L)	PGM-FI	37805-RLV-A120
2018 Pilot AWD RES/NAVI (LX, EX, EX-L)	PGM-FI	37805-RLV-A520
2018 Pilot 2WD Sensing (EX, EX-L)	PGM-FI	37805-RLV-C620
2018 Pilot AWD Sensing (EX, EX-L)	PGM-FI	37805-RLV-C720
2019 Pilot AWD Sensing/NAVI (LX, EX, EX-L)	PGM-FI	37805-RLV-A740

Year/Model	Vehicle System	Program ID (or later)
2019 Pilot 2WD Sensing/NAVI (LX, EX, EX-L)	PGM-FI	37805-RLV-A940
2020 Pilot AWD Sensing/NAVI (LX, EX, EX-L)	PGM-FI	37805-RLV-B020
2020 Pilot 2WD Sensing/NAVI (LX, EX, EX-L)	PGM-FI	37805-RLV-B120

REPAIR PROCEDURE

1. Do an All DTC Check.

   - If any DTCs are present, this service bulletin does not apply, continue with normal troubleshooting.

   - If no DTCs are present, go to step 2 and update the PGM-FI software.

2. Update the PGM-FI software, see service bulletin 22-100, Updating Control Units/Modules with the Honda ECU Reprogramming Application

   NOTICE

   - Make sure the 12 volt battery is fully charged before starting an update.

   - Connect a fully charged jumper battery pack, the Midtronics GR8-110P AST in Power Supply Mode or the Midtronics DCA-8000 Dynamic Diagnostic Charging System in Reflash Mode directly to the vehicle's 12 volt battery. Leave it connected during the entire procedure to maintain a steady voltage.

   - If the vehicle's 12 volt battery drops below 10 volts during the update, the programming status bar may not present accurately, or the Honda ECU Reprogramming application may display an error message.

   - Control module failure caused by the improper completion of a software update (early key cycle, low battery voltage, disconnected DLC cable, etc.) is not covered by warranty.

   - If an error occurs during the update or the i-HDS freezes, do not disconnect the battery or turn the ignition to OFF. Reboot the i-HDS, and start over.

   - To prevent control unit damage, do not operate anything electrical (headlights, audio system, brakes, A/C, power windows, door locks, etc.) during the update.

   - Warranty reimbursement for technician labor is not allowed for routine checking/installation of any available software update.

3. Do an ALL DTC CHECK and clear any codes that may have set during the update, then go to step 4.

4. Flush the transmission fluid 3 times.

   ATF Flush Procedure

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

5. 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.

6. Position the vehicle on a lift and turn off the engine.

7. Remove the ATF filler bolt and sealing washer.

8. Raise the vehicle and make sure it is securely supported.

9. Remove the drain plug and drain the ATF.

10. Install the drain plug and original washer and torque it to **49 N·m (36 lb-ft)**.

11. Lower the vehicle and fill the transmission with **3.3 US qt (3.1 L)** of ATF-DW1 through the filler hole.

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

12. Install the ATF filler bolt and original sealing washer and torque it to **44 N·m (32 lb-ft)**.

13. Check that the fluid is filled to the proper level.

14. Raise the vehicle and make sure it is securely supported.

15. Start the engine.

16. Press the **VSA Off button**.

17. Press the brake pedal and shift to Drive.

18. Release the brake pedal. Then press the accelerator pedal until the speedometer is up to **50 mph**.

    NOTE: Make sure the transmission shifts through the first three lower gears and into fourth gear and the torque converter is locking up

19. Apply the brakes to stop the front wheels.

20. Shift to Reverse, then Neutral.

21. Repeat the shifting procedure (steps 17 through 20) four more times.

22. Turn off the engine.

23. Repeat the above drain, fill, and shifting procedure (steps 7 through 22) one more time.

24. After the second refill and drive cycle, drain the transmission.

25. Install the drain bolt with a new washer and torque to **49 N·m (36 lb-ft)**.

26. Fill the transmission with **3.3 US qt (3.1 L)** of ATF-DW1. Automatic Transmission Fluid Capacity.

    AWD: **3.3 US qt (3.1 L)** at change.

    2WD: **3.3 US qt (3.1 L)** at change.

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

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

28. Check the transmission fluid level.

    NOTE:

    - Once the flush is complete, advise that ATF level is critical. The level is designed to be checked at **80°C (176° F)**.

    - Overfilled transmission level can cause an overheat condition.

    - If the fluid level is checked at a colder temperature, it will read low or on the bottom dot of the dipstick.

    - If the transmission fluid is filled to the top dot when cold, the transmission will be overfilled. This increases foaming and contributes to the overheating problem.

COLD CHECK 20°C (68°F) / HOT CHECK 85°C (185°F)

    - 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