

March 27, 2024

Version 2

## Software Update DTC P0300, P0301, P0302, P0303, P0304, or P0172

Supersedes 23-010, dated March 14, 2023, to revise the information.

### AFFECTED VEHICLES

Year	Model	Trim Level	VIN Range
2019–23	RDX	ALL	ALL
2021–23	TLX	ALL (Except Type S)	ALL

### REVISION SUMMARY.

This service bulletin has been revised extensively; American Honda recommends you read this bulletin in its entirety.

### SYMPTOM

Under certain circumstances, the vehicle may experience drivability concerns. This may result in the following DTC's to set:

- P0300 (Random Misfire Detected),
- P0301 (No. 1 Cylinder Misfire Detected),
- P0302 (No. 2 Cylinder Misfire Detected),
- P0303 (No. 3 Cylinder Misfire Detected),
- P0304 (No. 4 Cylinder Misfire Detected),
- P0172 (Fuel System Too Rich).

#### NOTE:

- This issue is most common in regions with cold weather.
- If this issue was experienced in a region that does not match the above description, please consider viewing SB 20-053, to see if it matches the customer contention and regional trend more closely.

### POSSIBLE CAUSE

During engine start in cold conditions, a miscalculation in the PCM causes the air-fuel ratio to exceed DTC rich criteria.

### CORRECTIVE ACTION

Reset the maintenance minder light and replace only the oil. Clear any DTC's and update the PGM-FI software with the latest version. Reset the throttle position learned values and do the PCM idle learn procedure.

### PARTS INFORMATION

Part Name	Part Number	Quantity
Drain Plug Washer (14mm)	94109-14000	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
0W-20 (Bulk Oil Participants) Gallon	FS020-BAS-N0L	RDX - 1.15 TLX - 1.05
0W-20 (Non-Bulk Oil Participants) Quarts	08798-9063	5

## WARRANTY CLAIM INFORMATION

The normal warranty applies.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1255D8	Update PGM-FI software (includes DTC clear)	0.2 hr	03214	03217	B23010A	37805-5YF-AH2
1255D8L	Reset the throttle position value and idle learn procedure.	0.2 hr	03214	03217	B23010A	37805-5YF-AH2
1255D8K	Replace the oil	0.3 hr	03214	03217	B23010B	37805-5YF-AH2

Skill Level: Repair Technician

## 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.**

<b>i-HDS Software Version</b>	1.008.024 or later
<b>HDS Software Version</b>	3.105.028 or later
<b>Honda ECU Reprogramming</b>	3.6.0.0 or later

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

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

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

## RDX

Year	Trim	Software System	Program ID (or later)
2019	ADV (SH-AWD)	PGM-FI	37805-5YF-C740
2019	ADV (2WD)	PGM-FI	37805-5YF-C540
2019	A-Spec (SH-AWD), Base (SH-AWD), Tech (SH-AWD)	PGM-FI	37805-5YF-C840
2019	A-Spec (2WD), Base (2WD), Tech (2WD)	PGM-FI	37805-5YF-A940
2020	ADV (SH-AWD)	PGM-FI	37805-5YF-A270
2020	ADV (2WD)	PGM-FI	37805-5YF-A170
2020	A-Spec (SH-AWD), Base (SH-AWD), Tech (SH-AWD)	PGM-FI	37805-5YF-A470

2020	A-Spec (2WD), Base (2WD), Tech (2WD)	PGM-FI	37805-5YF-A370
2021	ADV (2WD)	PGM-FI	37805-5YF-C150
2021	Advance (SH-AWD), LTD (PMC) (SH-AWD)	PGM-FI	37805-5YF-C250
2021	A-Spec (SH-AWD), Base (SH-AWD), Tech (SH-AWD)	PGM-FI	37805-5YF-C450
2021	A-Spec (2WD), Base (2WD), Tech (2WD)	PGM-FI	37805-5YF-C350
2022	ADV (SH-AWD)	PGM-FI	37805-5YF-AA30
2022	Base (SH-AWD), Tech (SH-AWD)	PGM-FI	37805-5YF-AB30
2022	Base (2WD), Tech (2WD)	PGM-FI	37805-5YF-AC30
2022	A-Spec ADV (SH-AWD), ADV (SH-AWD)	PGM-FI	37805-5YF-AD30
2022	A-Spec (SH-AWD)	PGM-FI	37805-5YF-AE30
2022	A-Spec (2WD)	PGM-FI	37805-5YF-AF30
2023	ADV (SH-AWD)	PGM-FI	37805-5YF-AG20
2023	Base (SH-AWD), Tech (SH-AWD)	PGM-FI	37805-5YF-AH20
2023	Base (2WD), Tech (2WD)	PGM-FI	37805-5YF-AJ20
2023	A-Spec ADV (SH-AWD), ADV (SH-AWD)	PGM-FI	37805-5YF-AK20
2023	A-Spec (SH-AWD)	PGM-FI	37805-5YF-AL20
2023	A-Spec (2WD)	PGM-FI	37805-5YF-AM20

**TLX**

<b>Year</b>	<b>Trim</b>	<b>Software System</b>	<b>Program ID (or later)</b>
2021	ADV (2WD)	PGM-FI	37805-6S8-A570
2021	ADV (SH-AWD)	PGM-FI	37805-6S8-A770
2021	A-Spec (SH-AWD), Base (SH-AWD), Tech (SH-AWD)	PGM-FI	37805-6S8-A870
2021	A-Spec (2WD), Base (2WD), Tech (2WD)	PGM-FI	37805-6S8-A670
2022	ADV (2WD)	PGM-FI	37805-6S8-A920
2022	Base (2WD), Tech (2WD), A-Spec (2WD)	PGM-FI	37805-6S8-AA20
2022	ADV (SH-AWD)	PGM-FI	37805-6S8-AB20
2022	A-Spec (SH-AWD), Base (SH-AWD), Tech (SH-AWD)	PGM-FI	37805-6S8-AC20
2023	ADV (2WD)	PGM-FI	37805-6S8-AH20
2023	A-Spec (2WD), Base (2WD), Tech (2WD)	PGM-FI	37805-6S8-AJ20
2023	ADV (SH-AWD)	PGM-FI	37805-6S8-AK20
2023	A-Spec (SH-AWD), Base (SH-AWD), Tech (SH-AWD)	PGM-FI	37805-6S8-AL20

## REPAIR PROCEDURE

1. Reset the maintenance minder light A.

NOTE: The maintenance minder light may not reset after the update is complete. Reset the maintenance minder first.

2. Drain and refill the engine oil. **Do not replace the oil filter.**

NOTE: RDX - **4.6 quarts** and TLX – **4.6 quarts**.

3. Connect the i-HDS to the vehicle.

NOTE:

- 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.
4. Update the PGM-FI software; see service bulletin 22-100, *Updating Control Units/Modules with the Honda ECU Reprogramming Application*.
  5. Do an **ALL DTC CHECK** to clear any codes that may have been set during the update.
  6. Reset the throttle position learned values then do the PCM idle learn procedure. Refer to the service information for additional instructions.

NOTE: More information on this procedure can be found in the Tech2Tech video titled, *A Look at PCM Idle Learn*.