

September 21, 2022

Version 1

MIL Is On with DTC P0420

AFFECTED VEHICLES

Year	Model	Trim	VIN Range
2014–16	CRZ	ALL	ALL

SYMPTOM

The MIL is on with P0420 (Catalyst System Efficiency Below Threshold).

POSSIBLE CAUSE

Sensors on the vehicle may misinterpret the catalyst as deteriorated or it may have deteriorated.

CORRECTIVE ACTION

Update the PGM-FI software, test drive the vehicle, and determine if the warm-up three-way catalytic converter (WU-TWC) is in range or needs replacing.

PARTS INFORMATION

A need for parts replacement will be unlikely following the software update and test drive. Please confirm there is a need for parts before ordering them by following the procedure within this bulletin.

Part Name	Part Number	Quantity
Converter Gasket (Nippon)	18115-RB0-004	1
Flexible Exhaust Gasket	18229-TF0-013	1
EGR Pipe Gasket A	18716-RB0-G01	1
EGR Pipe Gasket B	18719-RNA-A01	1
Converter	18190-RTW-A00	1

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 normal warranty applies.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1255H3	Update the PGM-FI software, and test drive the vehicle.	0.9 hr	03214	03217	A22040A	37805-RTW-A73
1255H3	Update the PGM-FI software, and test drive the vehicle.	0.9 hr	03214	03217	A22040B	37805-RTW-A73
A	Replace the warm-up TWC - Add	0.9 hr				

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	1.007.013 or later
HDS Software Version	3.104.064 or later
J2534 Rewrite Software Information	
PC Application Version	1.00.0034
Database Update	23-AUG-2022 or later
NoticeDB Version	23-AUG-2022 or later

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 ECU Reprogramming Application*.

Year/Model	Trans	Vehicle System	Program ID (or later)
2014–15 Base, EX, EX Navi	6 M/T	PGM-FI	37805-RTW-A130
2014–15 Base, EX, EX Navi	CVT	PGM-FI	37805-RTW-A730
2016 LX, EX, EX-L Navi	6 M/T	PGM-FI	37805-RTW-A240
2016 LX, EX, EX-L Navi	CVT	PGM-FI	37805-RTW-A840

SOFTWARE UPDATE PROCEDURE

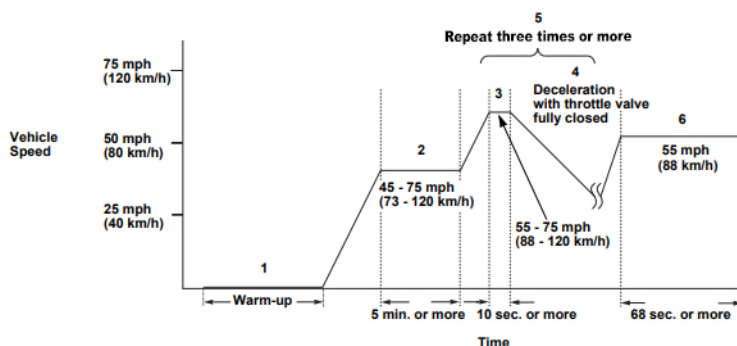
NOTICE

- Make sure the 12-volt battery is fully charged before starting an update.
 - Connect a fully charged jumper battery to the vehicle, and leave it connected during the entire procedure to maintain steady voltage.
 - Do not use the GR8 because the vehicle requires a steady electrical current.
 - 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.
1. When prompted, enter this service bulletin's number.
 2. Update the PGM-FI software. Refer to service bulletin 22-100, *Updating Control Units/Modules with the ECU Reprogramming Application*.

INSPECTION PROCEDURE

NOTE: Make sure the software is updated prior to Inspection Procedure.

1. Turn the ignition switch to ON.
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (A/T in P or N, M/T in neutral) until the radiator fan comes on, then let it idle.
4. Test-drive under these conditions:
 - Engine coolant temperature (ECT SENSOR 1) above 158 °F (70 °C).
 - A/T in D, M/T in 4th or 5th.
 - Vehicle speed between 45-75 mph (70-120 km/h) for 5 minutes or more with cruise control set.
 - Vehicle speed between 55-75 mph (90-120 km/h) for 10 seconds or more, then decelerate for 10-15 seconds (with the throttle fully closed). Repeat this at least three times.
 - Maintain the vehicle speed at 55 mph (88 km/h) for 5 minutes or more with the cruise control set.



5. Monitor the OBD STATUS for DTC P0420 in the DTCs MENU with the HDS.

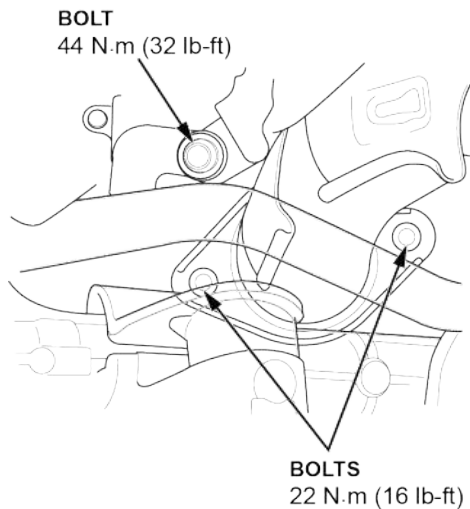
Does the HDS indicate FAILED?

YES —Go to REPAIR PROCEDURE.

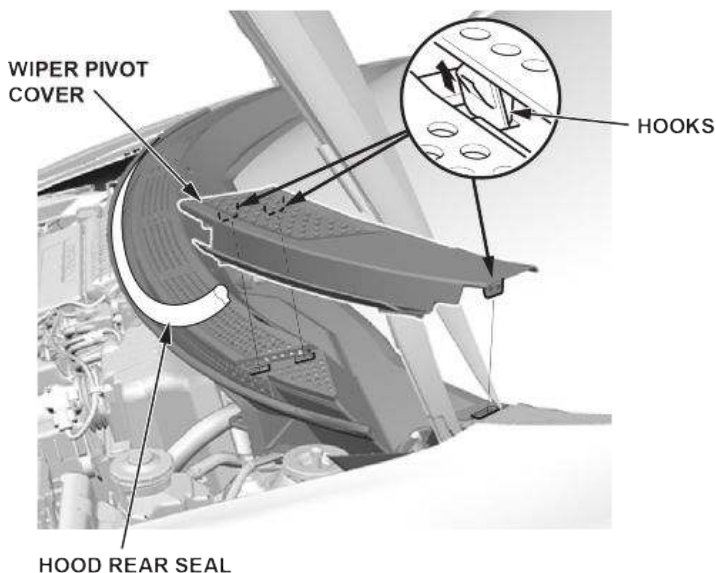
NO —If the HDS indicates PASSED or intermittent failure, the system is OK at this time. If the HDS indicates EXECUTING, keep driving until a result comes on. If the HDS indicates OUT OF CONDITION, go to step 4 and recheck.

REPAIR PROCEDURE

1. Raise the vehicle on a lift.
2. Remove the bolts from the lower portion of the WU-TWC.

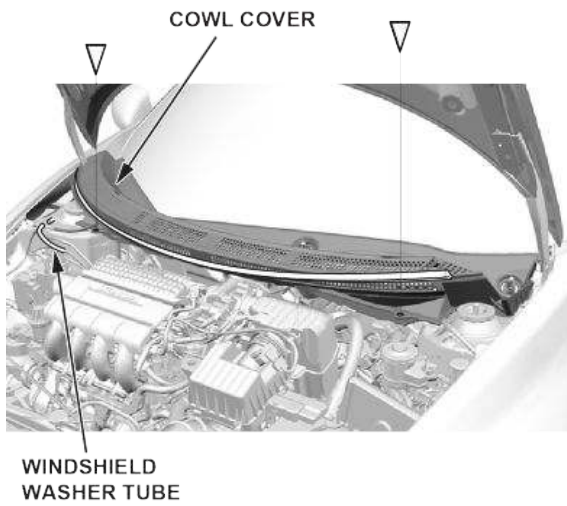


3. Remove the wiper pivot cover.

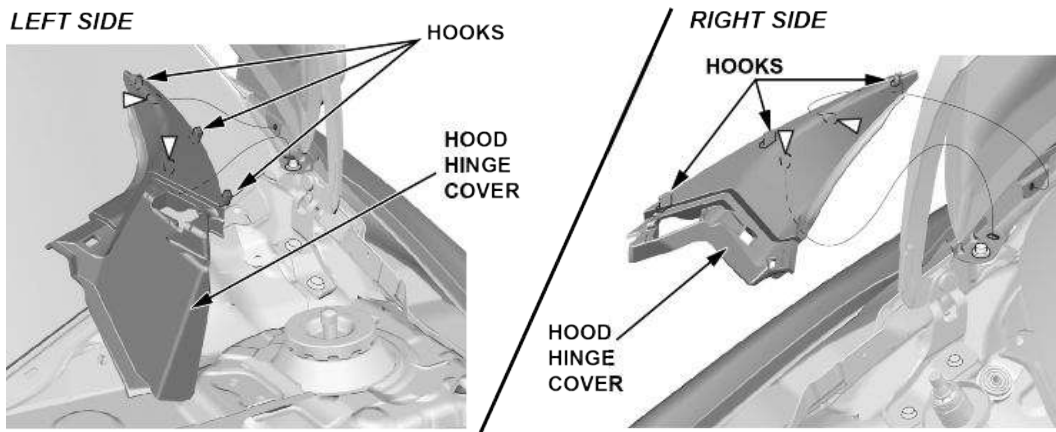


4. Remove the windshield wiper arms.

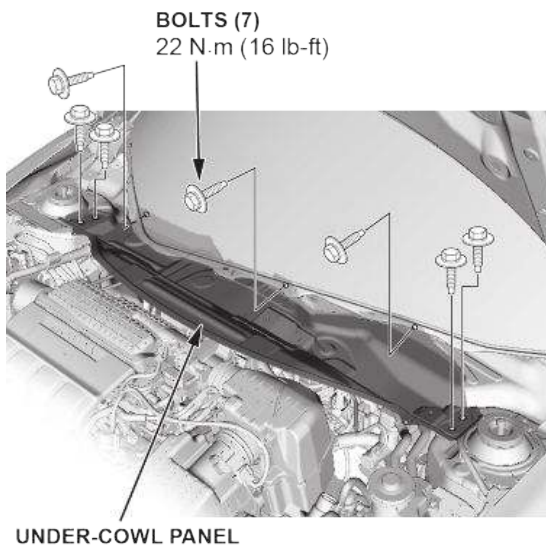
5. Disconnect the windshield wiper tube, and remove the cowl cover.



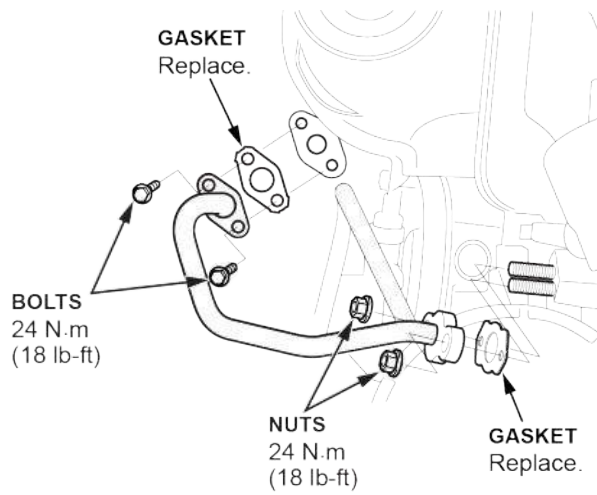
6. Remove the left and right side hood hinge covers.



7. Remove the under-cowl panel.

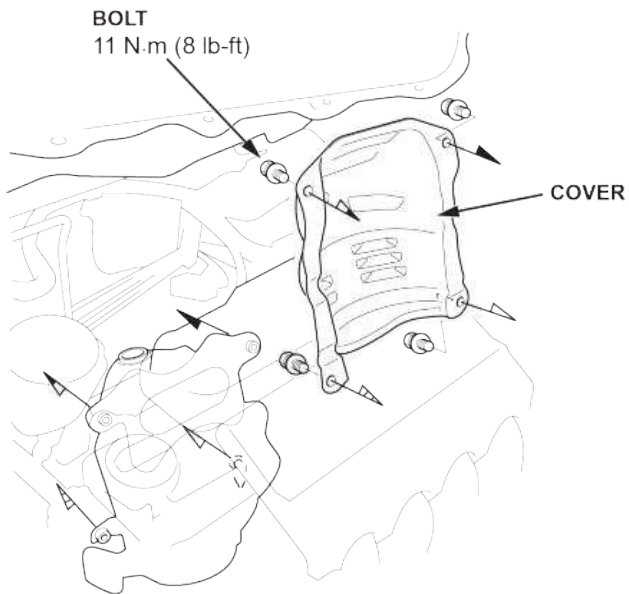


8. Remove the EGR pipe.

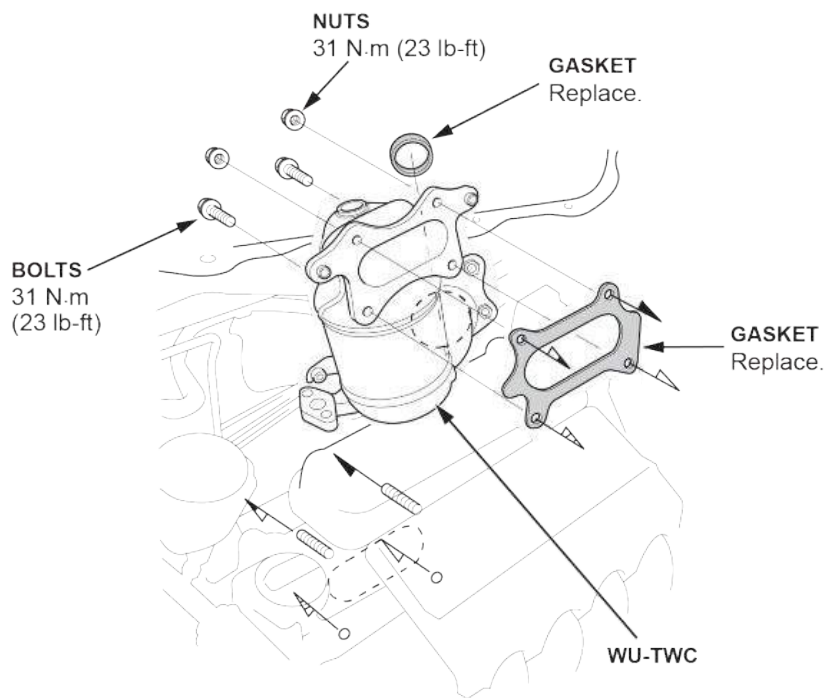


9. Remove the A/F sensor (Sensor 1).

10. Remove the cover.



11. Remove the bolts and the nuts.



12. Remove the WU-TWC.

13. Install the new WU-TWC converter, gaskets, and all remaining parts in the reverse order of removal.

END