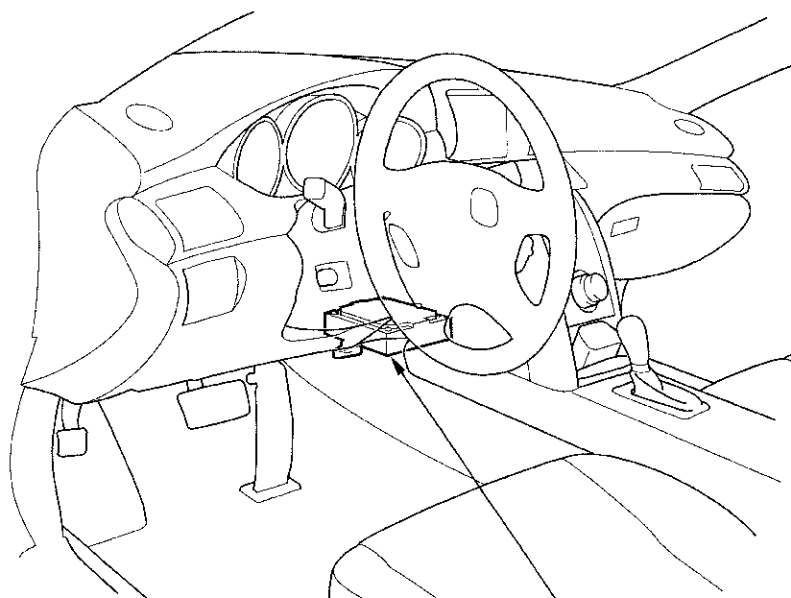
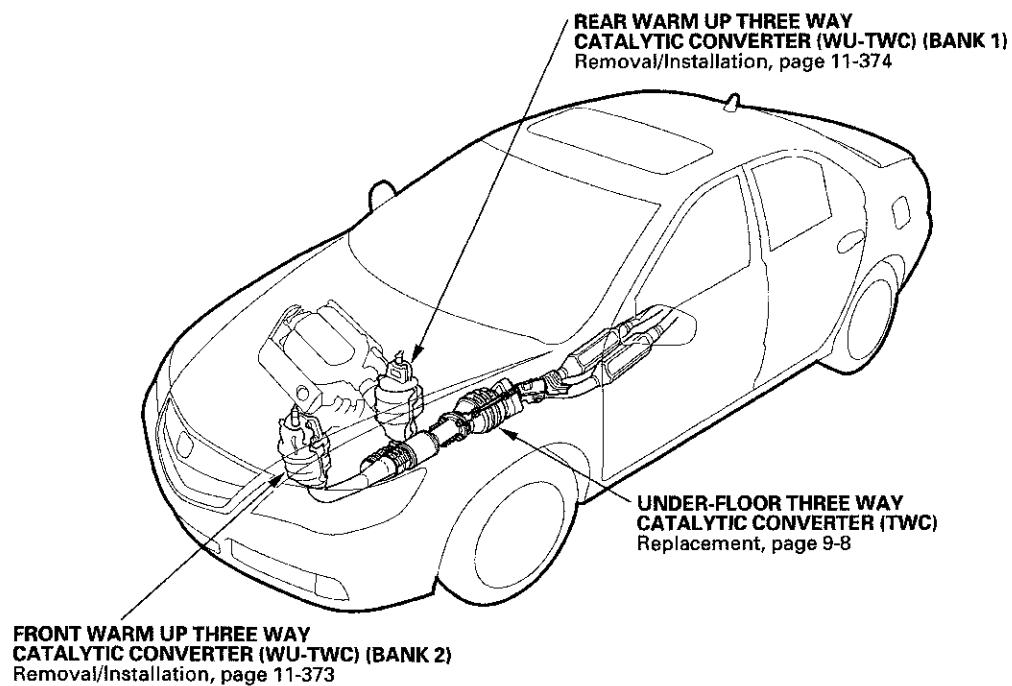


Catalytic Converter System

Component Location Index



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DTC Troubleshooting

DTC P0420: Rear Bank Catalyst System Efficiency Below Threshold (Bank 1)

DTC P0430: Front Bank Catalyst System Efficiency Below Threshold (Bank 2)

NOTE:

- Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see page 11-3). Also, make sure the PCM has the latest update (see page 11-230).
- If some of the DTCs listed below are stored at the same time as DTC P0420 and/or P0430*, troubleshoot those DTCs first, then recheck for DTC P0420 and/or P0430*.
P0137, P0138, P0157, P0158: Secondary HO2S (Sensor 2)
P0141, P0161*: Secondary HO2S (Sensor 2) heater
- Poor quality fuel can cause these DTCs.
- Information marked with an asterisk (*) applies to the front bank (Bank 2).

1. Turn the ignition switch to ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in P or N) 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)
 - Transmission in D
 - Vehicle speed between 45—75 mph (72—120 km/h) for 5 minutes or more with cruise control set
 - Vehicle speed between 55—75 mph (88—120 km/h) for 10 seconds, then decelerate (with throttle fully closed). Repeat this 3 times or more
 - Maintain the vehicle speed at 55 mph (88 km/h) for 5 minutes or more with cruise control set

5. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

Does the screen indicate EXECUTING?

YES—Go to step 6.

NO—If the screen indicates OUT OF CONDITION, go to step 4 and recheck. If the screen indicates PASSED, intermittent failure, the system is OK at this time. If the screen indicates FAILED, go to step 8 and recheck.

6. Continue test driving until a result comes on.
7. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

Does the screen indicate FAILED?

YES—Go to step 8.

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

8. Turn the ignition switch to LOCK (0).
9. Replace the WU-TWC:
 - For DTC P0420, replace the rear WU-TWC (Bank 1) (see page 11-374).
 - For DTC P0430, replace the front WU-TWC (Bank 2) (see page 11-373).
10. Turn the ignition switch to ON (II).
11. Reset the PCM with the HDS.
12. Do the PCM idle learn procedure (see page 11-313).

(cont'd)

Catalytic Converter System

DTC Troubleshooting (cont'd)

13. Start the engine. Hold the engine speed at 3,000 rpm without load (in P or N) until the radiator fan comes on, then let it idle.
14. Test-drive for about 10 minutes, continually changing the vehicle speed.
15. Check the CATA MONITOR CONDITION B1 (B2)* in the DATA LIST with the HDS.

Is the condition OK?

YES—Go to step 16.

NO—Go to step 13 and recheck.

16. Test-drive under these conditions:
 - Engine coolant temperature (ECT SENSOR 1) above 158 °F (70 °C)
 - Transmission in D
 - Vehicle speed between 55—75 mph (88—120 km/h) for 10 seconds, then decelerate (with throttle fully closed). Repeat this 3 times or more
 - Maintain the vehicle speed at 55 mph (88 km/h) for 5 minutes or more with cruise control set
17. Continue test-driving until a result comes on.
18. Check for Pending or Confirmed DTCs with the HDS.

Is DTC P0420 and/or P0430 indicated?*

YES—Check the fuel quality, then go to step 1.

NO—Go to step 19.

19. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES—Troubleshooting is complete. If any other Pending or Confirmed DTCs were indicated in step 19, go to the indicated DTC's troubleshooting. ■

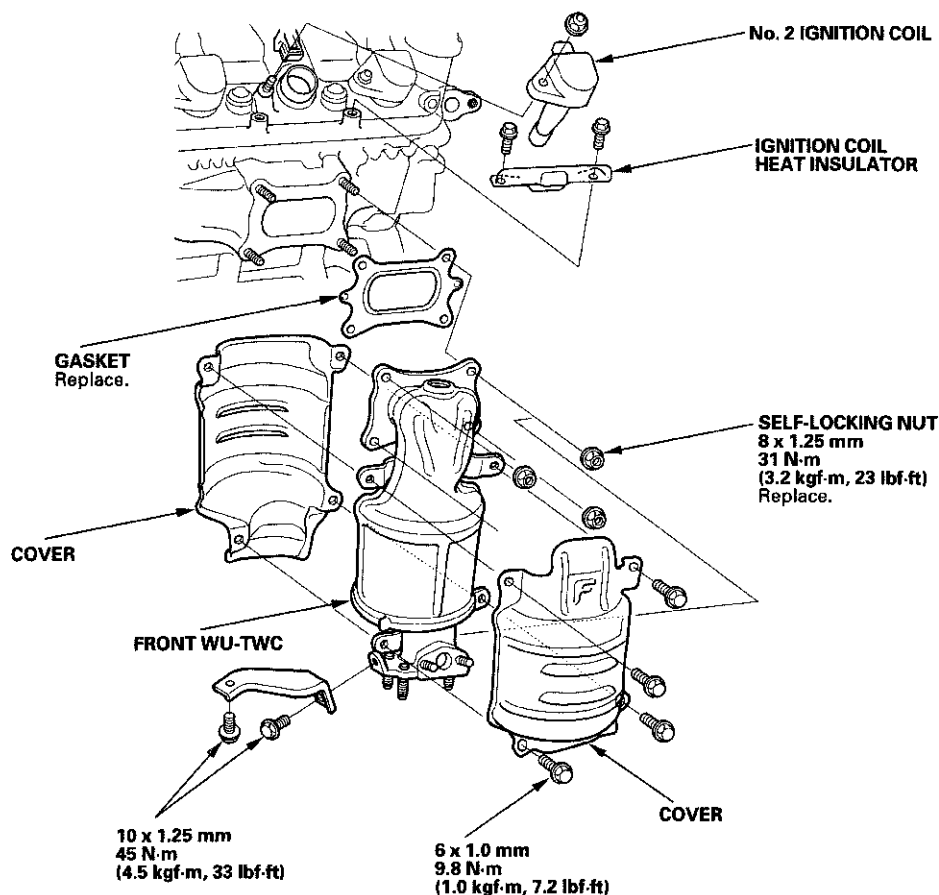
NO—If the screen indicates FAILED, check the fuel quality, then go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 16.



Warm Up TWC Removal/Installation

FRONT

1. Remove the engine cover (see step 2 on page 9-3).
2. Remove the condenser fan shroud (see page 10-11).
3. Remove the No. 2 ignition coil and the ignition coil heat insulator.
4. Remove the front A/F sensor (Sensor 1) (see page 11-227) and the front secondary HO2S (Sensor 2) (see page 11-228).
5. Remove the exhaust pipe A mounting nuts (front WU-TWC side) (see page 9-8).
6. Remove the EGR pipe (see page 11-388).
7. Remove the front WU-TWC bracket, then carefully remove the front WU-TWC.



8. Carefully install the front WU-TWC with a new gasket and new self-locking nuts. Tighten the nuts in a crisscross pattern in two or three steps.
9. Install the parts in the reverse order of removal.

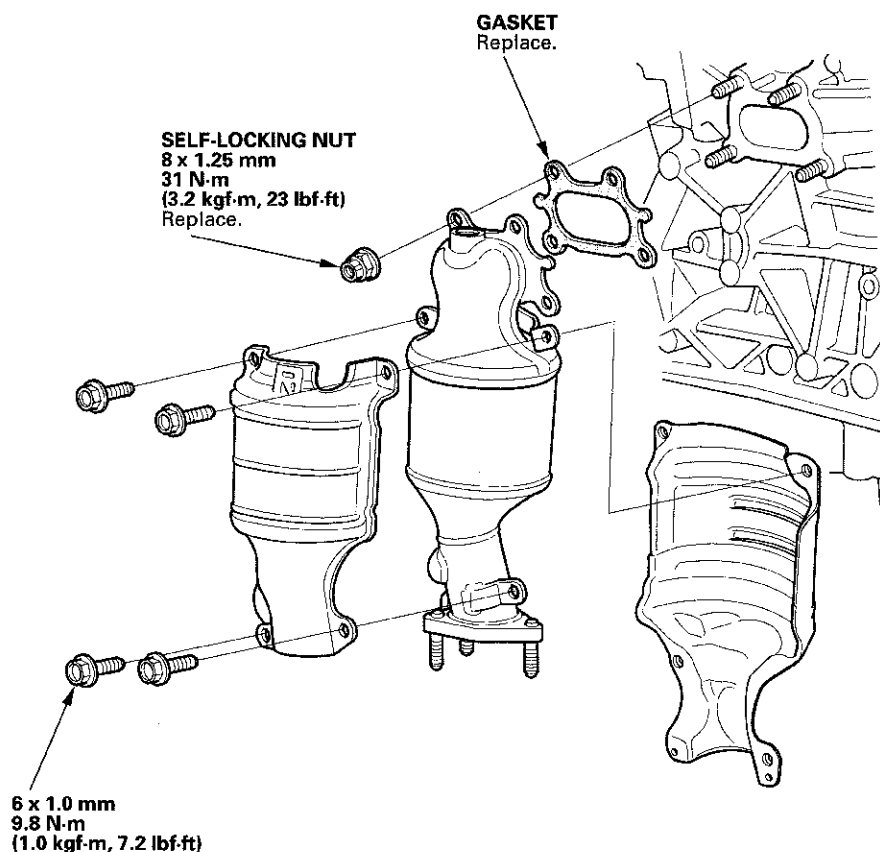
(cont'd)

Catalytic Converter System

Warm Up TWC Removal/Installation (cont'd)

REAR

1. Raise the vehicle on a lift.
2. Remove the intermediate shaft (see page 16-22).
3. Remove the rear A/F sensor (Sensor 1) (see page 11-227) and the rear secondary HO2S (Sensor 2) (see page 11-228).
4. Remove the exhaust pipe A mounting nuts (rear WU-TWC side) (see page 9-8).
5. Carefully remove the rear WU-TWC.



6. Carefully install the rear WU-TWC with a new gasket and new self-locking nuts. Tighten the nuts in a crisscross pattern in two or three steps.
7. Install the parts in the reverse order of removal.