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## **DTC P0420**

DTC P0420			
Step	Action	Yes	No
4	Inspect the 3-way catalytic converter for the following damage:     Dents		,
	Severe discoloration caused by excessive temperatures     Holes		·
	Internal rattle caused by damaged catalyst substrate     Verify that the 3-way catalytic converter is a proper original equipment manufacturer part.		
	Did your inspection reveal a condition?	Go to Step 9	Go to Step 5
5	Inspect the exhaust system for leaks.		
	Test the exhaust system for restrictions. Refer to Restricted Exhaust in Exhaust System.		
	Did you find any of the conditions?	Go to Step 7	Go to Step 6
6	Inspect the oxygen sensors and the oxygen sensor wiring harness for damage.		
	Did you find any of the conditions?	Go to Step 8	Go to Step 9
7	Repair the exhaust system as necessary.		
	Did you complete the repair?	Go to Step 10	<u> </u>
8	Repair as necessary. Refer to Diagnostic Aids for Circuit Testing and Wiring Repair procedures.		
	Did you complete the repair?	Go to Step 10	
9	<b>Notice:</b> A misfiring condition may damage the replacement three-way catalytic converter. Check for a misfiring condition. If a misfire is present, repair the misfiring condition before replacing the three-way catalytic converter.		
	Replace the three way catalytic converter.		_
	Did you complete the replacement?	Go to Step 10	
10	1. Use a scan tool to clear the DTCs.		
	2. Turn the A/C OFF.		
	Important: If the A/C is left ON the following diagnostic may not run.		
	3. Start the engine. Allow the engine to warm for at least ten minutes, then above 1,500 RPM for 5 additional minutes. (One minute for each additional attempt at 1,500 RPM on same key cycle). The vehicle may be driven for the 5 minute run time.		
	4. Fully open hood.		
	<ol><li>Operate the vehicle within the Conditions for Running the DTC, as specified in the supporting text.</li></ol>		
	<b>Importent:</b> If more than 6 tests have been attempted and the DTC has not passed or failed this ignition cycle the test may be aborted. Refer to Diagnostic Aids.		·
	<ol><li>Test may need to be completed up to 6 times in order to pass or fall.</li></ol>		
<u>i</u>	Does the DTC reset?	Go to Step 4	Go to Step 11
11	With a scan tool, observe the stored information, Capture Info.  Does the scan tool display any DTCs that you have not	Go to <i>Diagnostic</i> Trouble Code (DTC)	
	diagnosed?	List	System OK

## Steps 4-11

The numbers below refer to the step numbers on the diagnostic table.

- 1. The Diagnostic System Check-Computers and Controls Systems prompts the technician to complete some basic tests and store the Freeze Frame/Failure Records data on the scan tool, if applicable.
- 2. If any component DTCs are set, diagnose those DTCs first. A fault in a component can cause the converter to appear degraded or may have caused the failure.
- 3. Clearing the DTCs allows the catalyst test to be tested up to 18 times and completed up to 6 times this ignition cycle. If the NC is not turned OFF the diagnostic may not run. The engine must be warm. Warm the converter by raising the engine speed above idle for the specified time prior to each attempted test. Has the DTC passed or failed this ignition cycle? If the DTC does not pass or fail look for a possible reason that would cause the test to abort.
- 4. This step includes tests for conditions that can cause the 3-way converter to appear degraded. Repair any conditions before proceeding with this table.
- 9. If the 3-way converter needs to be replaced, ensure that another condition which could damage the converter is not present. These conditions may include misfire, leaking or plugged fuel injectors, high engine oil or coolant consumption, retarded spark timing, or weak