

<b>DTC</b>	<b>P0451</b>	<b>Evaporative Emission Control System Pressure Sensor/Switch Range/Performance</b>
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<b>DTC</b>	<b>P0452</b>	<b>Evaporative Emission Control System Pressure Sensor/Switch Low Input</b>
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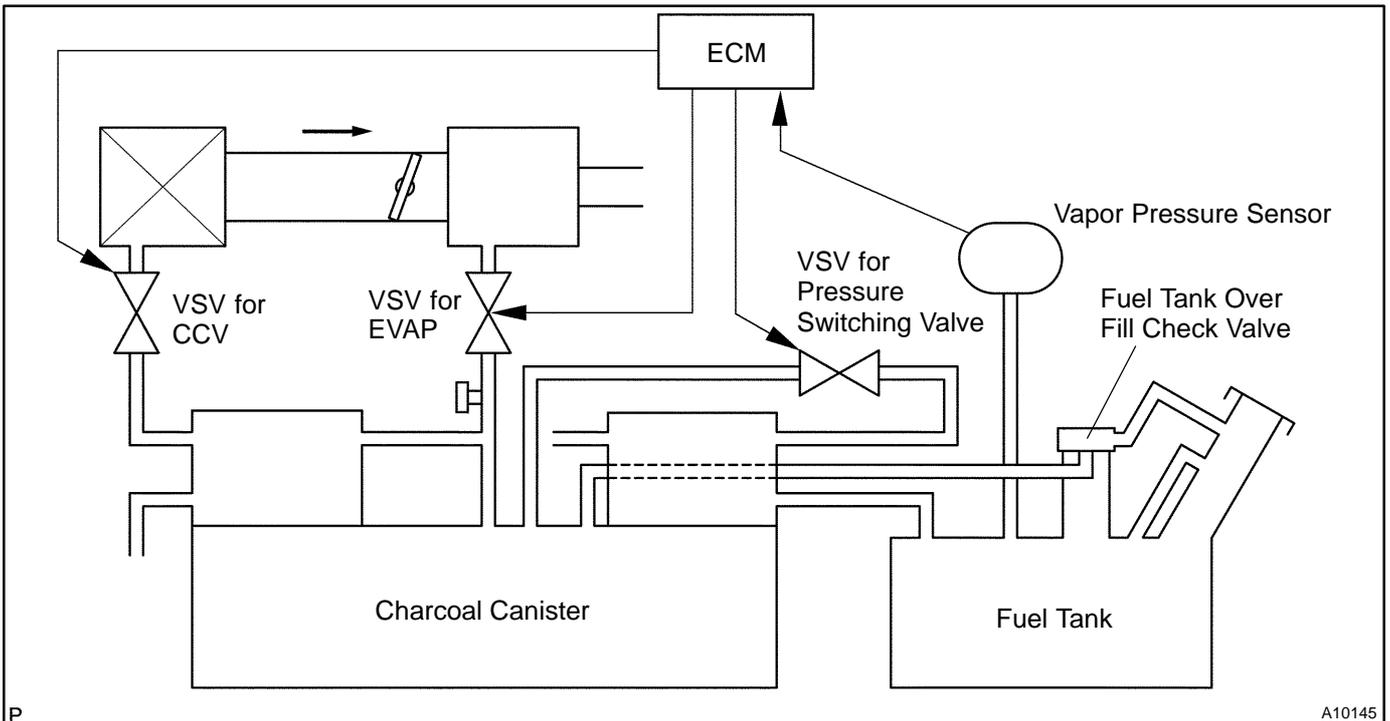
<b>DTC</b>	<b>P0453</b>	<b>Evaporative Emission Control System Pressure Sensor/Switch High Input</b>
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**CIRCUIT DESCRIPTION**

The vapor pressure sensor, VSV for canister closed valve (CCV) and VSV for pressure switching valve are used to detect abnormalities in the evaporative emission control system.

The ECM decides whether there is an abnormality in the evaporative emission control system based on the vapor pressure sensor signal.

DTC P0451, P0452 or P0453 is recorded by the ECM when the vapor pressure sensor malfunctions.



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DTC No.	DTC Detecting Condition	Trouble Area
P0451	Vapor pressure sensor output extremely changes under conditions of (a) and (b): (2 trip detection logic) (a) Vehicle speed: 0 km/h (0mph), Engine speed: Idling and VSV for pressure switching valve is OFF (b) vapor pressure sensor value $\geq$ opening pressure valve of charcoal canister	<ul style="list-style-type: none"> <li>• Open or short in vapor pressure sensor circuit</li> <li>• Vapor pressure sensor</li> <li>• ECM</li> </ul>
P0452	Open in vapor pressure sensor circuit	
P0453	Short in vapor pressure sensor circuit	

## WIRING DIAGRAM

Refer to DTC P0441 or P0446 on page [DI-328](#).

## INSPECTION PROCEDURE

### HINT:

- If DTC P0441 (Purge Flow), P0446 (VSV for CCV or VSV for Pressure switching valve), P0451 P0452 or P0453 (Evaporative Pressure Sensor) is output with DTC P0442 or P0456, first troubleshoot DTC P0441, P0446, P0451. P0452 or P0453. If no malfunction is detected, troubleshoot DTC P0442 or P0456 next.
- Read freeze frame data using OBD II scan tool or hand-held tester. Because freeze frame records the engine conditions when the malfunction is detected. When troubleshooting, it is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, the air-fuel ratio was lean or rich, etc. at the time of the malfunction.
- When the ENGINE RUN TIME in the freeze frame data is less than 200 seconds, carefully check the VSV for EVAP, charcoal canister and vapor pressure sensor.

<b>1</b>	<b>Check voltage between terminals VC and E2 of ECM connector (See page <a href="#">DI-361</a>, step 22).</b>
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Check and replace ECM (See page [IN-28](#)).

OK

<b>2</b>	<b>Check voltage between terminals PTNK and E2 of ECM connectors (See page <a href="#">DI-361</a>, step 23).</b>
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OK

Check and replace ECM (See page [IN-28](#)).

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<b>3</b>	<b>Check for open and short in harness and connector between vapor pressure sensor and ECM (See page <a href="#">IN-28</a>).</b>
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**Repair or replace harness or connector.**

**OK**

**Replace vapor pressure sensor.**