

<b>DTC</b>	<b>P0450</b>	<b>EVAPORATIVE EMISSION CONTROL SYSTEM PRESSURE SENSOR MALFUNCTION</b>
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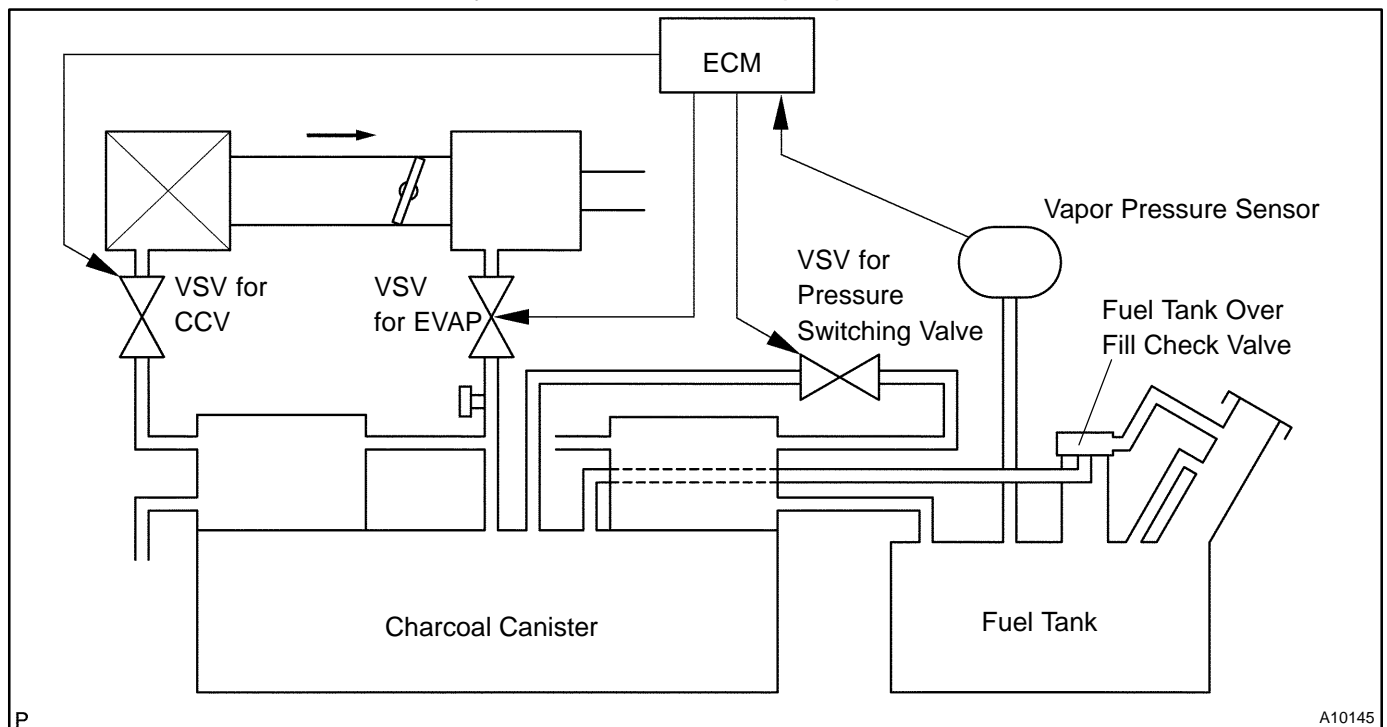
<b>DTC</b>	<b>P0451</b>	<b>EVAPORATIVE EMISSION CONTROL SYSTEM PRESSURE SENSOR RANGE/PERFORMANCE</b>
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## CIRCUIT DESCRIPTION

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 or not there is an abnormality in the evaporative emission control system by the vapor pressure sensor signal.

DTC P0450 or P0451 is recorded by the ECM when the vapor pressure sensor malfunctions.



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DTC No.	DTC Detecting Condition	Trouble Area
P0450	10 seconds or less after engine starting condition (a) or (b) continues for 7 seconds or more: (2 trip detection logic) (e) Vapor pressure sensor value $< -4.0$ kPa ( $-30$ mmHg, $-1.2$ in.Hg) (f) Vapor pressure sensor value $\geq 2.0$ kPa (15 mmHg, 0.6 in.Hg)	<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>
P0451	Vapor pressure sensor output extremely changes under conditions of (a) or (b): (2 trip detection logic) (g) Vehicle speed: 0 km/h (0mph), Engine speed: Idling and VSV for pressure switching valve is OFF (h) High vapor pressure sensor	

## WIRING DIAGRAM

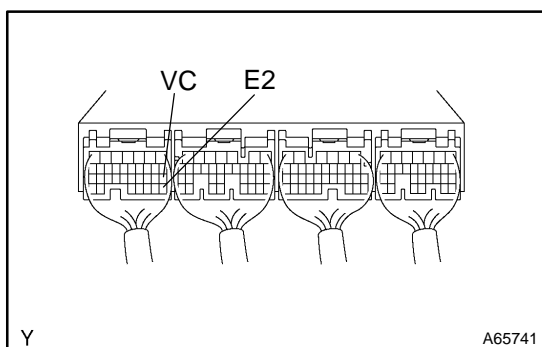
Refer to DTC P0440 on page [05-84](#).

## INSPECTION PROCEDURE

### HINT:

- If DTC P0441, P0446, P0450 or P0451 is output after DTC P0440, first troubleshoot DTC P0441, P0446 P0450 or P0451. If no other malfunctions than them are detected, troubleshoot DTC P0440 next.
- Read freeze frame data using the hand-held tester or OBD II scan tool, as freeze frame data 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.

### 1 INSPECT ECM(CHECK VOLTAGE)



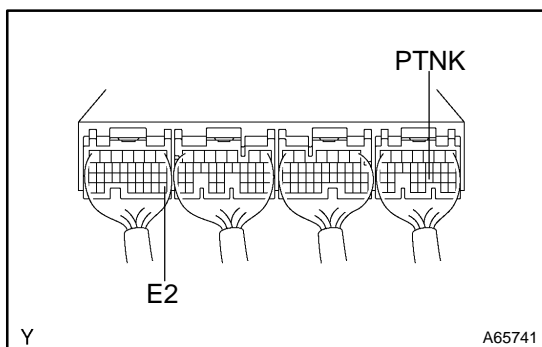
- Turn the ignition switch ON.
- Measure voltage between terminals VC and E2 of ECM E3 connector.  
**Voltage: 4.5 – 5.5 V**

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CHECK AND REPLACE ECM

OK

### 2 INSPECT ECM(CHECK VOLTAGE)



- Remove the fuel tank cap.
- Turn the ignition switch ON.
- Measure the voltage between terminals PTNK of the ECM E6 connector and E2 of the ECM E3 connector.  
**Voltage: 3.0 – 3.6 V**

OK

CHECK AND REPLACE ECM

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### 3 CHECK HARNESS AND CONNECTOR(VAPOR PRESSURE SENSOR-ECM)

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REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE VAPOR PRESSURE SENSOR ASSY