Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM100000002AQOV
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [03/2023 -]
Title: HEATING / AIR CONDITIONING: AIR CONDITIONING SYSTEM (for PHEV Model): P0EE314; A/C High Pressure Magnetic Valve Circuit Short to Ground or Open; 2023 - 2024 MY Prius Prime [03/2023 -]		

DTC	**P0EE314**	**A/C High Pressure Magnetic Valve Circuit Short to Ground or Open**

DESCRIPTION

The high pressure magnetic valve (No. 2 magnet valve assembly) is installed to the accumulator assembly.

The high pressure magnetic valve (No. 2 magnet valve assembly) is open when the ignition switch is turned off.

When the ignition switch is turned to ON, the high pressure magnetic valve (No. 2 magnet valve assembly) opens and closes according to heat pump air conditioning control.

When heat pump air conditioning control is performing cooling/serial dehumidification heating/cooling battery cooling/single battery cooling/heating/defrosting, the high pressure magnetic valve (No. 2 magnet valve assembly) is closed according to signals from the heat pump ECU assembly.

When heat pump air conditioning control is performing parallel dehumidification heating, the high pressure magnetic valve (No. 2 magnet valve assembly) is open.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	MEMORY	DTC OUTPUT FROM	PRIORITY	NOTE
P0EE314	A/C High Pressure Magnetic Valve Circuit Short to Ground or Open	Diagnosis condition: Ignition switch ON Malfunction status: Open or short in high pressure magnetic valve (No. 2 magnet valve assembly) circuit Detection time: Continuously for 4 seconds or more	• High pressure magnetic valve (No. 2 magnet valve assembly) • Heat pump ECU assembly • Harness or connector	Does not come on	Memorized	Air Conditioner	A	-

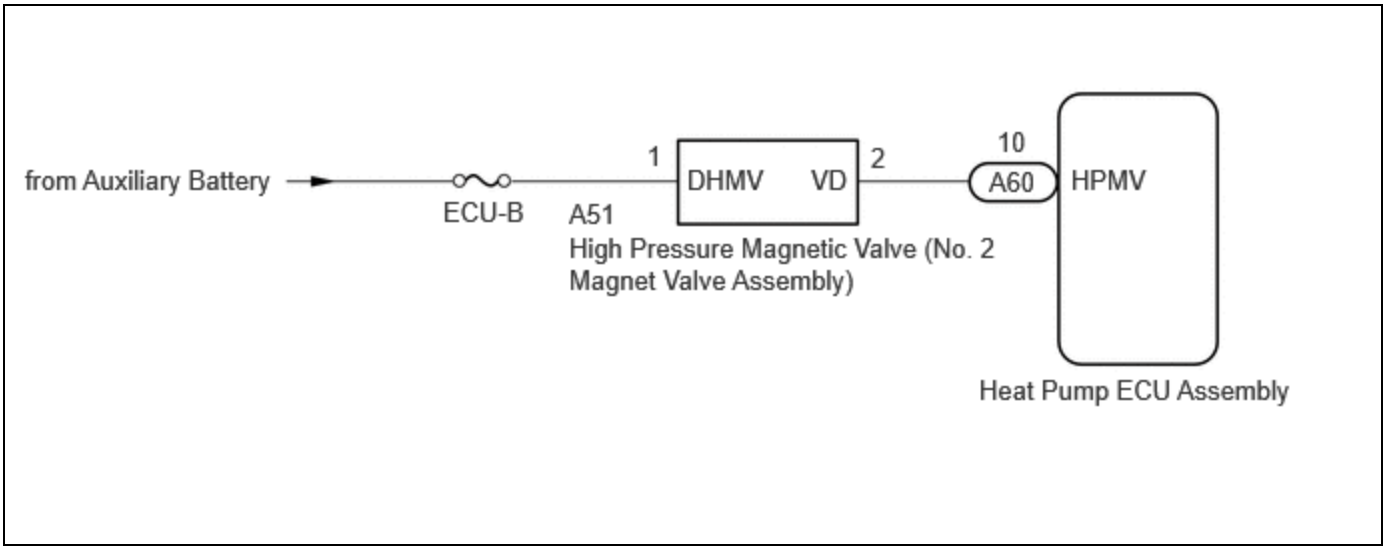
DTC Detection Condition Combination Table

		VEHICLE CONDITION	
		PATTERN 1	PATTERN 2
Diagnosis Condition	Ignition switch ON	○	○
Malfunction	Open in high pressure magnetic valve (No. 2 magnet valve assembly) circuit	○	-
	Short in high pressure magnetic valve (No. 2 magnet valve assembly) circuit	-	○
Detection Time		Continuously for 4 seconds or more	Continuously for 4 seconds or more
Trip Count		1 trip	1 trip

HINT:

If the conditions of either of these patterns are detected, a DTC will be stored

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

Inspect the fuses for circuits related to this system before performing the following procedure.

PROCEDURE

1.	**INSPECT HIGH PRESSURE MAGNETIC VALVE (NO. 2 MAGNET VALVE ASSEMBLY)**

Click here INFO

NG ▶ **REPLACE HIGH PRESSURE MAGNETIC VALVE (NO. 2 MAGNET VALVE ASSEMBLY)**

OK

2.	**CHECK HARNESS AND CONNECTOR (HIGH PRESSURE MAGNETIC VALVE (NO. 2 MAGNET VALVE ASSEMBLY) - POWER SOURCE)**

Pre-procedure1

(a) Disconnect the A51 high pressure magnetic valve (No. 2 magnet valve assembly) connector.

Procedure1

(b) Measure the voltage according to the value(s) in the table below.

Standard Voltage:

EWD INFO

Click Location & Routing(A51)
Click Connector(A51)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
A51-1 (DHMV) - Body ground	Always	11 to 14 V	V

Post-procedure1

(c) None

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

3.	**CHECK HARNESS AND CONNECTOR (HIGH PRESSURE MAGNETIC VALVE (NO. 2 MAGNET VALVE ASSEMBLY) - HEAT PUMP ECU ASSEMBLY)**

Pre-procedure1

(a) Disconnect the A51 high pressure magnetic valve (No. 2 magnet valve assembly) connector.

(b) Disconnect the A60 heat pump ECU assembly connector.

Procedure1

(c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

EWD INFO

Click Location & Routing(A51,A60)
Click Connector(A51)
Click Connector(A60)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
A51-2 (VD) - A60-10 (HPMV)	Always	Below 1 Ω	Ω
A51-2 (VD) or A60-10 (HPMV) - Body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(d) None

OK ▶ **REPLACE HEAT PUMP ECU ASSEMBLY**

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**