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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: ADVANCED DRIVER ASSISTANCE SYSTEM: FRONT CAMERA SYSTEM: U030051,U030057,U030157; Internal Control Module Software Incompatibility Not Programmed; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

DTC	U030051	Internal Control Module Software Incompatibility Not Programmed
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DTC	U030057	Internal Control Module Software Incompatibility Invalid/Incompatible Software Component
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DTC	U030157	Software Incompatibility with ECM/PCM Invalid/Incompatible Software Component
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DESCRIPTION

- Forward recognition camera receives Powertrain Information from the hybrid vehicle control ECU via CAN communication line.
- If the forward recognition camera cannot confirm the Powertrain Information based on Powertrain Information sent from the hybrid vehicle control ECU, the forward recognition camera stores DTC U030051.
- When the Powertrain Information value sent from the hybrid vehicle control ECU does not match the value stored in the forward recognition camera, the forward recognition camera stores DTC U030057.
- When the value of the engine type information sent from the hybrid vehicle control ECU does not match the value stored in the forward recognition camera, the forward recognition camera stores DTC U030157.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
U030051	Internal Control Module Software Incompatibility Not Programmed	When the forward recognition camera cannot confirm the Powertrain Information based on Powertrain Information sent from the hybrid vehicle control ECU	<ul style="list-style-type: none"> • Hybrid control system • Forward recognition camera 	Front Recognition Camera	B
U030057	Internal Control Module Software Incompatibility Invalid/Incompatible Software Component	When the Powertrain Information value sent from the hybrid vehicle control ECU does not match the value stored in the forward recognition camera	<ul style="list-style-type: none"> • Hybrid control system • Forward recognition camera 	Front Recognition Camera	B

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
U030157	Software Incompatibility with ECM/PCM Invalid/Incompatible Software Component	When the powertrain information sent from the hybrid vehicle control ECU does not match the value stored in the forward recognition camera	<ul style="list-style-type: none"> Hybrid control system Forward recognition camera 	Front Recognition Camera	B

CAUTION / NOTICE / HINT

NOTICE:

- When replacing the forward recognition camera, always replace it with a new one. If a forward recognition camera which was installed to another vehicle is used, the information stored in the forward recognition camera will not match the information from the vehicle and a DTC may be stored.
- When the forward recognition camera has been replaced with a new one, make sure to clear all stored vehicle control history of each system and the forward recognition camera beam axis alignment data.

HINT:

Forward recognition camera beam axis alignment can be performed by using "One Time Recognition", "Driving Adjustment" or "Camera Axis Adjustment Value Write".

One Time Recognition: [Click here](#) INFO

Driving Adjustment: [Click here](#) INFO

Camera Axis Adjustment Value Write: [Click here](#) INFO

- If the forward recognition camera has been replaced with a new one, make sure to perform Software Version Confirmation.

[Click here](#) INFO

- Before replacing the hybrid vehicle control ECU, refer to registration.

[Click here](#) INFO

PROCEDURE

1.	CHECK FOR DTCs (Hybrid Control)
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(a) Check for DTCs.

Powertrain > Hybrid Control > Trouble Codes

HINT:

If DTC U030051, U030057 or U030157 is output, inspect the hybrid control system first as a hybrid control system DTC may be stored.

RESULT	PROCEED TO
Hybrid control system DTC is not output	A
Hybrid control system DTC is output	B

B ▶ GO TO HYBRID CONTROL SYSTEM

for 2ZR-FXE: Click here [INFO](#)

for M20A-FXS: Click here [INFO](#)

for PHEV Model: Click here [INFO](#)



2.	CHECK FOR DTCs (HEALTH CHECK)
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(a) Using the GTS, perform a health check.

OK:

ECUs other than the forward recognition camera do not output specification information mismatch DTCs related to the hybrid vehicle control ECU.

RESULT	PROCEED TO
DTC is not output	A
DTC is output	B

B ▶ REPLACE HYBRID VEHICLE CONTROL ECU



3.	READ VALUE USING GTS (Powertrain Information)
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(a) Using the GTS, read the Data List.

Chassis > Front Recognition Camera > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Powertrain Information	Powertrain information	Conventional, SS, HV, PHV, EV, 1MHV, FCV or Default Value	Conventional: Conventional vehicle SS: w/ Stop and start vehicle HV: HEV PHV: PHEV	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			EV: BEV 1MHV: 1MHV FCV: FCEV Default Value: Vehicle information not confirmed	

Chassis > Front Recognition Camera > Data List

TESTER DISPLAY
Powertrain Information

HINT:

- When the specification stored by the forward recognition camera and the vehicle specification do not match, there is a malfunction in the specification information stored by the forward recognition camera. Therefore, replace the forward recognition camera.
- When the specification stored by the forward recognition camera and the vehicle specification match, a hybrid vehicle control ECU with different specifications may be installed. Therefore, replace the hybrid vehicle control ECU.

RESULT	PROCEED TO
<ul style="list-style-type: none"> • Vehicle information stored in the forward recognition camera and actual vehicle specifications do not match • Not confirmed is displayed 	A
Vehicle specification information stored in forward recognition camera and actual vehicle specifications match	B

A ► REPLACE FORWARD RECOGNITION CAMERA

B ► REPLACE HYBRID VEHICLE CONTROL ECU

