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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: POWER ASSIST SYSTEMS: POWER STEERING SYSTEM: C05D604,....,C15D362; Power Steering Control Module Processor System Internal Failure; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

DTC	C05D604	Power Steering Control Module Processor System Internal Failure
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DTC	C05D646	Power Steering Control Module Processor Calibration / Parameter Memory Failure
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DTC	C05D649	Power Steering Control Module Processor Internal Electronic Failure
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DTC	C10001C	Control Module Internal Temperature Sensor "A" Circuit Voltage Out of Range
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DTC	C152A18	Power Steering Motor "A" Circuit Current Below Threshold
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DTC	C152A19	Power Steering Motor "A" Circuit Current Above Threshold
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DTC	C152B18	Power Steering Motor "B" Circuit Current Below Threshold
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DTC	C152B19	Power Steering Motor "B" Circuit Current Above Threshold
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DTC	C153A00	Malfunction of Power Steering Motor "A" Inverter Pre-Driver
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DTC	C153A19	Power Steering Motor "A" Inverter Circuit Current Above Threshold
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DTC	C153B00	Malfunction of Power Steering Motor "B" Inverter Pre-Driver
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DTC	C153B19	Power Steering Motor "B" Inverter Circuit Current Above Threshold
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DTC	C154A7E	Power Supply & Contrary Connection Protection Relay "A" Actuator Stuck On
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DTC	C154A7F	Power Supply & Contrary Connection Protection Relay "A" Actuator Stuck Off
DTC	C154B7E	Power Supply & Contrary Connection Protection Relay "B" Actuator Stuck On
DTC	C154B7F	Power Supply & Contrary Connection Protection Relay "B" Actuator Stuck Off
DTC	C156A9E	Power Steering Motor "A" Shut Down Relay Stuck On
DTC	C156A9F	Power Steering Motor "A" Shut Down Relay Stuck Off
DTC	C156B9E	Power Steering Motor "B" Shut Down Relay Stuck On
DTC	C156B9F	Power Steering Motor "B" Shut Down Relay Stuck Off
DTC	C157A11	Power Steering Motor "A" Current Sensor Circuit Short to Ground
DTC	C157A62	Power Steering Motor "A" Current Sensor Signal Compare Failure
DTC	C157B11	Power Steering Motor "B" Current Sensor Circuit Short to Ground
DTC	C157B62	Power Steering Motor "B" Current Sensor Signal Compare Failure
DTC	C159A49	Power Steering Motor "A" Terminal Voltage Detect Circuit Internal Electronic Failure
DTC	C159B49	Power Steering Motor "B" Terminal Voltage Detect Circuit Internal Electronic Failure
DTC	C15D11C	Power Steering Motor Position Sensor "A" Circuit Voltage Out of Range

DTC	C15D162	Power Steering Motor Position Sensor "A" Signal Compare Failure
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DTC	C15D21C	Power Steering Motor Position Sensor "B" Circuit Voltage Out of Range
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DTC	C15D262	Power Steering Motor Position Sensor "B" Signal Compare Failure
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DTC	C15D31C	Power Steering Motor Position Sensor "C" Circuit Voltage Out of Range
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DTC	C15D362	Power Steering Motor Position Sensor "C" Signal Compare Failure
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DESCRIPTION

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	RETURN-TO-NORMAL CONDITION
C05D604	Power Steering Control Module Processor System Internal Failure	ECU internal malfunction (CPU malfunction)	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C05D646	Power Steering Control Module Processor Calibration / Parameter Memory Failure	ECU internal malfunction (EEPROM error)	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C05D649	Power Steering Control Module Processor Internal Electronic Failure	ECU internal malfunction (Peripheral circuit malfunction)	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C10001C	Control Module Internal Temperature Sensor "A" Circuit Voltage Out of Range	ECU temperature sensor "A" range malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	The ECU judges the system has returned to normal
C152A18	Power Steering Motor "A" Circuit	Motor "A" low current malfunction	Power steering	EPS warning	EMPS	B	Ignition switch ON again

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	RETURN-TO-NORMAL CONDITION
	Current Below Threshold		ECU assembly	light: Comes on			
C152A19	Power Steering Motor "A" Circuit Current Above Threshold	Motor "A" overcurrent	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C152B18	Power Steering Motor "B" Circuit Current Below Threshold	Motor "B" low current malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C152B19	Power Steering Motor "B" Circuit Current Above Threshold	Motor "B" overcurrent	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C153A00	Malfunction of Power Steering Motor "A" Inverter Pre-Driver	Inverter "A" pre-driver circuit malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C153A19	Power Steering Motor "A" Inverter Circuit Current Above Threshold	Inverter "A" short circuit malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C153B00	Malfunction of Power Steering Motor "B" Inverter Pre-Driver	Inverter "B" pre-driver circuit malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C153B19	Power Steering Motor "B" Inverter Circuit Current Above Threshold	Inverter "B" short circuit malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C154A7E	Power Supply & Contrary Connection Protection Relay "A" Actuator Stuck On	Contrary connection protection relay "A" short circuit malfunction (initial check)	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	RETURN-TO-NORMAL CONDITION
C154A7F	Power Supply & Contrary Connection Protection Relay "A" Actuator Stuck Off	Contrary connection protection relay "A" open circuit malfunction (initial check)	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C154B7E	Power Supply & Contrary Connection Protection Relay "B" Actuator Stuck On	Contrary connection protection relay "B" short circuit malfunction (initial check)	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C154B7F	Power Supply & Contrary Connection Protection Relay "B" Actuator Stuck Off	Contrary connection protection relay "B" open circuit malfunction (initial check)	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C156A9E	Power Steering Motor "A" Shut Down Relay Stuck On	Motor "A" shut down relay malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C156A9F	Power Steering Motor "A" Shut Down Relay Stuck Off	When there is an internal malfunction in the ECU	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C156B9E	Power Steering Motor "B" Shut Down Relay Stuck On	Motor "B" shut down relay malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C156B9F	Power Steering Motor "B" Shut Down Relay Stuck Off	When there is an internal malfunction in the ECU	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	RETURN-TO-NORMAL CONDITION
C157A11	Power Steering Motor "A" Current Sensor Circuit Short to Ground	Motor "A" current sensor low voltage malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C157A62	Power Steering Motor "A" Current Sensor Signal Compare Failure	Motor "A" current sensor correlation malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C157B11	Power Steering Motor "B" Current Sensor Circuit Short to Ground	Motor "B" current sensor low voltage malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C157B62	Power Steering Motor "B" Current Sensor Signal Compare Failure	Motor "B" current sensor correlation malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C159A49	Power Steering Motor "A" Terminal Voltage Detect Circuit Internal Electronic Failure	Motor "A" terminal voltage detection circuit malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C159B49	Power Steering Motor "B" Terminal Voltage Detect Circuit Internal Electronic Failure	Motor "B" terminal voltage detection circuit malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C15D11C	Power Steering Motor Position Sensor "A" Circuit Voltage Out of Range	Rotation angle sensor "A" range malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C15D162	Power Steering Motor Position Sensor "A" Signal Compare Failure	Rotation angle sensor "A" correlation malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	RETURN-TO-NORMAL CONDITION
C15D21C	Power Steering Motor Position Sensor "B" Circuit Voltage Out of Range	Rotation angle sensor "B" range malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C15D262	Power Steering Motor Position Sensor "B" Signal Compare Failure	Rotation angle sensor "B" correlation malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C15D31C	Power Steering Motor Position Sensor "C" Circuit Voltage Out of Range	Rotation angle sensor "C" range malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again
C15D362	Power Steering Motor Position Sensor "C" Signal Compare Failure	Rotation angle sensor "C" correlation malfunction	Power steering ECU assembly	EPS warning light: Comes on	EMPS	B	Ignition switch ON again

PROCEDURE

1.	CLEAR DTC
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(a) Clear the DTCs.

Chassis > EMPS > Clear DTCs

NEXT



2.	CHECK FOR DTC
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(a) Check for DTCs.

Chassis > EMPS > Trouble Codes

RESULT	PROCEED TO
Only C05D604, C05D646, C05D649, C10001C, C152A18, C152A19, C152B18, C152B19, C153A00, C153A19, C153B00, C153B19, C154A7E, C154A7F, C154B7E, C154B7F, C156A9E, C156A9F, C156B9E, C156B9F, C157A11, C157A62, C157B11, C157B62, C159A49, C159B49, C15D11C, C15D162, C15D21C, C15D262, C15D31C or C15D362 is output	A
C05D604, C05D646, C05D649, C10001C, C152A18, C152A19, C152B18, C152B19, C153A00, C153A19, C153B00, C153B19, C154A7E, C154A7F, C154B7E, C154B7F, C156A9E, C156A9F, C156B9E, C156B9F, C157A11, C157A62, C157B11, C157B62, C159A49, C159B49, C15D11C, C15D162, C15D21C, C15D262, C15D31C or C15D362 and other DTCs are output	B
DTCs are not output	C

A ▶ REPLACE POWER STEERING ECU ASSEMBLY

Click here [INFO](#)

B ▶ GO TO DIAGNOSTIC TROUBLE CODE CHART

Click here [INFO](#)

C ▶ USE SIMULATION METHOD TO CHECK

