

<b>Last Modified:</b> 12-04-2024	6.11:8.1.0	<b>Doc ID:</b> RM100000028PG0
<b>Model Year Start:</b> 2023	<b>Model:</b> Prius Prime	<b>Prod Date Range:</b> [12/2022 - ]
<b>Title:</b> POWER ASSIST SYSTEMS: POWER STEERING SYSTEM: C151162,C151187,C151262,C151287; Power Steering Torque Sensor "A" Signal Compare Failure; 2023 - 2024 MY Prius Prius Prime [12/2022 - ]		

<b>DTC</b>	<b>C151162</b>	<b>Power Steering Torque Sensor "A" Signal Compare Failure</b>
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<b>DTC</b>	<b>C151187</b>	<b>Power Steering Torque Sensor "A" Missing Message</b>
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<b>DTC</b>	<b>C151262</b>	<b>Power Steering Torque Sensor "B" Signal Compare Failure</b>
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<b>DTC</b>	<b>C151287</b>	<b>Power Steering Torque Sensor "B" Missing Message</b>
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## DESCRIPTION

The power steering ECU assembly supplies a voltage of 5 V to the torque sensor (electric power steering column sub-assembly) and monitors the voltage value of the Hall IC inside the torque sensor (electric power steering column sub-assembly) which changes in response to changes in the magnetic flux density (steering torque) detected by the Hall IC, and calculates the assist torque.

While DTC C151162, C151187, C151262 or C151287 is detected, power assist is stopped due to fail-safe operation.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	RETURN-TO-NORMAL CONDITION
C151162	Power Steering Torque Sensor "A" Signal Compare Failure	Diagnosis Condition: IG ON  Malfunction Status: The difference between 1A and 1B of the TRQ1 output signal is more than a certain value.	<ul style="list-style-type: none"> <li>Torque sensor (Electric power steering column sub-assembly)</li> <li>Power steering ECU assembly</li> </ul>	EPS warning light: Comes on	EMPS	A	Ignition switch ON again
C151187	Power Steering Torque Sensor "A" Missing Message	Diagnosis Condition: IG ON  Malfunction Status: When the battery voltage is 9.0 V or more, the TRQ1	<ul style="list-style-type: none"> <li>Torque sensor (Electric power steering column</li> </ul>	EPS warning light: Comes on	EMPS	A	Ignition switch ON again

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	RETURN-TO-NORMAL CONDITION
		signal is not detected, breaks communication protocol, has a CRC error, or has an invalid rolling counter.	sub-assembly) <ul style="list-style-type: none"> <li>Power steering ECU assembly</li> </ul>				
C151262	Power Steering Torque Sensor "B" Signal Compare Failure	Diagnosis Condition: IG ON Malfunction Status: The difference between 2A and 2B of the TRQ2 output signal is more than a certain value.	<ul style="list-style-type: none"> <li>Torque sensor (Electric power steering column sub-assembly)</li> <li>Power steering ECU assembly</li> </ul>	EPS warning light: Comes on	EMPS	A	Ignition switch ON again
C151287	Power Steering Torque Sensor "B" Missing Message	Diagnosis Condition: IG ON Malfunction Status: When the battery voltage is 9.0 V or more, the TRQ2 signal is not detected, breaks communication protocol, has a CRC error, or has an invalid rolling counter.	<ul style="list-style-type: none"> <li>Torque sensor (Electric power steering column sub-assembly)</li> <li>Power steering ECU assembly</li> </ul>	EPS warning light: Comes on	EMPS	A	Ignition switch ON again

## **PROCEDURE**

<b>1.</b>	<b>REPLACE POWER STEERING ECU ASSEMBLY AND ELECTRIC POWER STEERING COLUMN SUB-ASSEMBLY</b>
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(a) Replace the power steering ECU assembly.

**HINT:**

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(b) Replace the electric power steering column sub-assembly.

**HINT:**

[Click here](#) 

**NEXT**  **END**

