

## **DTC C0533**

### **Circuit Description**

The rear wheel steering control module controls a normally closed relay that shorts the motor phase leads. The relay is part of the rear wheel steering actuator motor assembly and cannot be serviced separately from the motor assembly. The motor assembly can be serviced separately from the rear wheel steering actuator.

### **DTC Descriptor**

This diagnostic procedure supports the following DTC:

DTC C0533 Rear Steering Motor Relay Circuit

### **Conditions for Running the DTC**

- The ignition is ON.
- The rear wheel steering control module is in START-UP/INITIALIZATION.

### **Conditions for Setting the DTC**

- The DTC is set when the shorting relay is stuck open, commanded vs. actual.
- The DTC is set when the shorting relay is stuck closed, commanded vs. actual.

### **Action Taken When the DTC Sets**

- The Service 4 Wheel Steer indicator in instrument panel cluster (IPC) will be displayed.
- The code is displayed on the scan tool as DTC C0533.
- The output command to the motor is zeroed. The motor drive circuits are disabled using commands to open the power relay, and to close the motor shorting relay.
- The rear wheels will be returned to the default centered position.

### **Conditions for Clearing the DTC**

- The conditions for setting the DTC are not currently present.
- The rear wheel steering control module receives a clear code command from the scan tool.
- The DTC clears after 100 malfunction free ignition cycles.

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<b>Step</b>	<b>Action</b>	<b>Yes</b>	<b>No</b>
<b>Schematic Reference: <u>Rear Wheel Steering Schematics</u></b> <b>Connector End View Reference: <u>Rear Wheel Steering Connector End Views</u></b>			
1	Did you perform the Diagnostic System Check - Vehicle?	Go to <b>Step 2</b>	Go to <b>Diagnostic System Check - Vehicle</b> in Vehicle DTC Information
2	Inspect for poor connections at the rear wheel steering control module and the rear wheel steering motor connector. Refer to <b><u>Testing for Intermittent Conditions and Poor Connections</u></b> and <b><u>Connector Repairs</u></b> in Wiring Systems. Did you find and correct the condition?	Go to <b>Step 5</b>	Go to <b>Step 3</b>
3	Replace the rear wheel steering motor. Refer to <b><u>Steering Gear Motor Assembly Replacement</u></b> . Did you find and correct the condition?	Go to <b>Step 5</b>	Go to <b>Step 4</b>
4	Replace the rear wheel steering module. Refer to <b><u>Control Module References</u></b> in Computer/Integrating Systems for replacement, setup, and programming. Did you complete the replacement?	Go to <b>Step 5</b>	
5	<ol style="list-style-type: none"> <li>1. Use the scan tool in order to clear the DTCs.</li> <li>2. Operate the vehicle within normal operating conditions.</li> </ol> Does the DTC reset?	Go to <b>Step 2</b>	System OK