

DTC U1305

Circuit Description

Modules connected to the Class 2 serial data circuit monitor for serial data communications during normal vehicle operation. Operating information and commands are exchanged among the modules. In addition, Node Alive and State of Health messages are transmitted by each module on the Class 2 serial data circuit about once every 2 seconds. When a module does not detect a message on the Class 2 serial data circuit for approximately 3 seconds. Without low or high voltage detected, the U1305 is set. The setting of all other Class 2 serial communication DTCs is inhibited.

Conditions for Running the DTC

- Voltage supplied to the rear wheel steering control module is in the normal operating voltage range of approximately 9 to 16 volts.
- The rear wheel steering control module operation, the vehicle power mode, or the ignition switch position require serial data communication to occur.

Conditions for Setting the DTC

- Valid Class 2 messages are not detected on the Class 2 serial data circuit.
- The above condition is met for approximately 3 seconds.
- The vehicle harness line, Class 2 serial data circuit, short to battery or ground or open circuit.

Action Taken When the DTC Sets

- The Service 4 Wheel Steer indicator in IPC will be displayed.
- The output to the motor is ramped down slowly, at a rate of 2° per second, to 0° and held.
- The code is displayed on the scan tool as DTC U1305.
- The rear wheel steering control module inhibits the setting of all other Class 2 DTCs.
- The rear wheel steering control module uses default values for all parameters received on the Class 2 serial data circuit.

Conditions for Clearing the DTC

- Conditions for the DTC are not currently present.
- The module receives a clear code comm and from the scan tool.
- The DTC clears after 100 malfunction free ignition cycles.
- A current U1305 will clear when a valid Class 2 message is detected on the Class 2 serial data circuit or at the end of the current ignition cycle.

Diagnostic Aids

- The diagnosis of U1305 is accomplished via the symptom. Refer to Scan Tool Does Not Communicate with Class 2 Device .
- An intermittent condition is likely to be caused by a short to ground, or voltage on the Class 2 serial data circuit. Refer to Scan Tool Does Not Communicate with Class 2 Device .