

Failure Description	Symptom
<u>HS-CAN</u> (+) open	Unreliable communication possible to all network modules
<u>HS-CAN</u> (-) open	Unreliable communication possible to all network modules

The following chart describes the specific CAN messages broadcast by each module, and the module(s) that receive the message:

HS-CAN Module Communication Message Chart

Broadcast Message	Originating Module	Network Type	Receiving Module(s)
ABS control indicator request	PCM	<u>HS-CAN</u>	• <u>IC</u>
ABS event in process	ABS module	<u>HS-CAN</u>	• PCM
ABS warning indicator request	ABS module	<u>HS-CAN</u>	• <u>IC</u>
A/C clutch request [always=off]	<u>IC</u>	<u>HS-CAN</u>	• PCM
A/C clutch status	PCM	<u>HS-CAN</u>	• <u>IC</u>
Accelerator pedal position	PCM	<u>HS-CAN</u>	• <u>IC</u>
Brake fluid level low	<u>IC</u>	<u>HS-CAN</u>	• ABS module
Brake lamp switch status	PCM	<u>HS-CAN</u>	• ABS module
Brake warning request	ABS module	<u>HS-CAN</u>	• <u>IC</u>
Engine coolant temperature	PCM	<u>HS-CAN</u>	• <u>IC</u>
Engine fail-safe cooling mode status	PCM	<u>HS-CAN</u>	• <u>IC</u>
Engine fuel consumption data	PCM	<u>HS-CAN</u>	• <u>IC</u>
Engine Malfunction Indicator Lamp (MIL) request	PCM	<u>HS-CAN</u>	• <u>IC</u>
Engine RPM	PCM	<u>HS-CAN</u>	• <u>IC</u> • ABS module

Broadcast Message	Originating Module	Network Type	Receiving Module(s)
Fail-safe Electronic Throttle Control (ETC) status	PCM	<u>HS-CAN</u>	• <u>IC</u>
Fuel level input status (instant)	<u>IC</u>	<u>HS-CAN</u>	• PCM
Ignition switch position	<u>IC</u>	<u>HS-CAN</u>	• PCM • ABS module
Navigation rolling wheel count	ABS module	<u>HS-CAN</u>	• <u>IC</u>
Output shaft speed signal	PCM	<u>HS-CAN</u>	• ABS module
Odometer count	PCM	<u>HS-CAN</u>	• <u>IC</u>
Parking brake status	<u>IC</u>	<u>HS-CAN</u>	• PCM
PATS start request target data	<u>IC</u>	<u>HS-CAN</u>	• PCM
PATS status enable/disable target data	PCM	<u>HS-CAN</u>	• <u>IC</u>
Speed control indicator request	PCM	<u>HS-CAN</u>	• <u>IC</u>
Stability control indicator request	PCM	<u>HS-CAN</u>	• <u>IC</u>
Tire size information	ABS module	<u>HS-CAN</u>	• PCM
Tow-haul mode status	PCM	<u>HS-CAN</u>	• <u>IC</u>
Transmission fluid temperature	PCM	<u>HS-CAN</u>	• <u>IC</u>
Transmission selector (PRNDL) mode	<u>IC</u>	<u>HS-CAN</u>	• PCM
Transmission service required	PCM	<u>HS-CAN</u>	• <u>IC</u>
Transmission selector (PRNDL) range	PCM	<u>HS-CAN</u>	• <u>IC</u>
Vehicle speed	PCM	<u>HS-CAN</u>	• <u>IC</u>

Broadcast Message	Originating Module	Network Type	Receiving Module(s)
Wheel rotation count	ABS module	<u>HS-CAN</u>	• <u>IC</u>
Wheel speed sensor data	ABS module	<u>HS-CAN</u>	• PCM

Inspection and Verification

1. Verify the customer concern.
2. Visually inspect for obvious signs of electrical damage.

Visual Inspection Chart

Electrical
• Battery Junction Box (BJB) fuse(s): ▪ 4 (5A) (no communication with PCM) ▪ 5 (20A) (no communication with PCM) ▪ 20 (30A) (no communication with PCM) ▪ 22 (20A) (no power to the scan tool) • Central Junction Box (CJB) fuse(s): ▪ 4 (10A) (no communication with <u>IC</u>) ▪ 10 (10A) (no communication with <u>IC</u>) ▪ 13 (10A) (no communication with 4-channel ABS module) ▪ 14 (10A) (no communication with <u>IC</u> and 3-channel ABS module) ▪ 23 (10A) (no communication with <u>IC</u>) • Data Link Connector (DLC) • Wiring, terminals or connectors

3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step.

4. **NOTE:** Make sure to use the latest scan tool software release.

If the cause is not visually evident, connect the scan tool to the DLC .

NOTE: The Vehicle Communication Module (VCM) LED prove-out confirms power and ground from the DLC are provided to the VCM .

If the scan tool does not communicate with the VCM :

- Check the VCM connection to the vehicle.
 - Check the scan tool connection to the VCM .
 - [GO to Pinpoint Test E](#) to diagnose no power to the scan tool.
5. **NOTE:** During the network test, the scan tool will first attempt to communicate with the PCM, after establishing communication with the PCM, the scan tool will then attempt to communicate with all other modules on the vehicle.

Carry out the network test.

- If the network test passes, retrieve and record the continuous memory DTCs and proceed to Step 6.
- If the network test fails, GO to [Symptom Chart](#) to identify the module not communicating.