

		wheels.
C1A95:02	Wheel Speed Sensor: General Signal Failure	This DTC is set if there is low power to the wheel speed sensors or reverse current on the wheel speed sensor supply is detected.
C1A95:2F	Wheel Speed Sensor: Signal Erratic	This DTC sets when multiple wheel speed sensors simultaneously exhibit suspicious failure type behavior for more than 500 milliseconds.
C1A95:62	Wheel Speed Sensor: Signal Compare Failure	This DTC is set when the ABS module detects one wheel speed sensor mounted in the wrong direction.
C1A95:64	Wheel Speed Sensor: Signal Plausibility Failure	This DTC is set when the ABS module monitoring determines an implausible ABS control activation has been requested for more 1 second.

Possible Causes

- Underinflated tires
- Incorrect or mismatched tires
- Wiring, terminals or connectors
- Wheel bearings
- Wheel speed sensor tone rings
- Wheel speed sensors
- ABS module

DIAGNOSIS AND TESTING > ANTI-LOCK BRAKE SYSTEM (ABS) AND STABILITY CONTROL > PINPOINT TESTS > PINPOINT TEST B : WHEEL SPEED SENSOR ERRATIC SIGNAL FAULTS > PINPOINT TEST B : WHEEL SPEED SENSOR ERRATIC SIGNAL FAULTS



NOTE: Use the correct probe adapter(s) when making measurements. Failure to use the correct probe adapter(s) may cause damage to the connector.

B1 CHECK FOR ABS (ANTI-LOCK BRAKE SYSTEM) MODULE DIAGNOSTIC TROUBLE CODES (DTCS)

Ignition ON.

Using a diagnostic scan tool, carry out the ABS module self-test.

Retrieve and record all ABS module Diagnostic Trouble Codes (DTCs).

Is DTC C0031:01, C0031:12, C0031:14, C0032:11, C0034:01, C0034:12, C0034:14 or C0035:11 present?

Yes	GO to Pinpoint Test I
No	If DTC C0037:01, C0037:12, C0037:14, C0038:11, C003A:01, C003A:12, C003A:14 or C003B:11 is present, GO to Pinpoint Test J If one or more of the Diagnostic Trouble Codes (DTCs) shown in the DTC Fault Trigger Conditions table is present, GO to B2 For all other ABS module Diagnostic Trouble Codes (DTCs), GO to the ABS Module DTC Chart .

B2 CHECK THE TIRES SIZE AND PRESSURE

Ignition OFF.

Verify all the tires and wheels are the same size and the tire size and inflation pressures are correct as indicated on the VC label.

Are the tires and wheels OK?

Yes	GO to B3
No	INSTALL the correct size tire or wheel or ADJUST tire pressure as necessary.

B3 CHECK THE WHEEL SPEED SENSOR ELECTRICAL CONNECTOR FOR DAMAGE

With the transmission in NEUTRAL, position the vehicle on a hoist. REFER to: Jacking and Lifting - Overview .

Disconnect the suspect wheel speed sensor electrical connector.

Using a good light source, inspect the wheel speed sensor and electrical connector for the following:

corrosion - install new connector or terminal and clean the module pins

damaged or bent pins - install new terminals or pins

pushed-out pins - install new pins as necessary

spread terminals - install new terminals as necessary

water intrusion - clean and dry the connector, install a new connector as necessary

Inspect the wheel speed sensor and harness for abrasions, broken connector tabs or water intrusion.

Is the wheel speed sensor and harness OK?

Yes	For rear wheel speed sensor Diagnostic Trouble Codes (DTCs), GO to B4 For front wheel speed sensor Diagnostic Trouble Codes (DTCs), GO to B5
No	INSTALL a new wheel speed sensor. REFER to: Front Wheel Speed Sensor . REFER to: Rear Wheel Speed Sensor .

B4 INSPECT THE WHEEL SPEED SENSOR MOUNTING

Inspect the rear wheel speed sensor and fastener for looseness.

Inspect the rear wheel speed sensor installation.

Is the wheel speed sensor installed correctly and are the wheel speed sensor and fastener tight?

Yes	GO to B5
No	REINSTALL or TIGHTEN the wheel speed sensor fastener to specification.

B5 CHECK THE FRONT WHEEL BEARINGS AND REAR TONE RINGS FOR DAMAGE

Inspect the front wheel bearings for abnormal wear or roughness, deformation or contamination of the seal and tone ring.

Inspect the front wheel speed sensor for signs of damage.

Inspect the rear wheel speed sensor tone rings for signs of damage, deformation and missing teeth.

Are the front wheel bearings, front wheel speed sensors and rear tone rings OK?

Yes	If DTC C003x:24, C003x:25, C003x:29, C003x:38 or C003x:76 is present, GO to B6 If DTC C003x:07, C003x:65 or C1A95:2F is present, GO to B7
No	INSTALL new components as necessary. For the front wheel speed sensor, REFER to: Front Wheel Speed Sensor . For the front wheel hub, REFER to: FRONT WHEEL BEARING AND WHEEL HUB - RWD . REFER to: Front Wheel Bearing and Wheel Hub - 4WD . For the rear tone ring, REFER to: Wheel Speed Sensor Ring .

Be CHECK THE WHEEL SPEED SENSOR SIGNAL RETURN CIRCUIT FOR AN OPEN

Ignition OFF.

Disconnect the suspect wheel speed sensor electrical connector (if not previously disconnected).

Disconnect ABS module C15 .

For the LH front wheel speed sensor, measure:

Positive Lead	Measurement / Action	Negative Lead
C0585	Ω	C1225

For the RH front wheel speed sensor, measure:

Positive Lead	Measurement / Action	Negative Lead
C1225	Ω	C0620

For the LH rear wheel speed sensor, measure:

Positive Lead	Measurement / Action	Negative Lead
C1232	Ω	C0620

For the RH rear wheel speed sensor, measure:

Positive Lead	Measurement / Action	Negative Lead
C1232	Ω	C1226

Is the resistance less than 3 ohms?

Yes	GO to Be
No	REPAIR the circuit.

Be CHECK FOR RETURNING DIAGNOSTIC TROUBLE CODES (DTCS)

Connect the suspect wheel speed sensor electrical connector.

Connect ABS module C15 .

Ignition ON.

Using a diagnostic scan tool, clear all ABS module Diagnostic Trouble Codes (DTCs).

Test drive the vehicle under normal driving conditions above 60 km/h (37 mph) for a minimum of 2 minutes.

Using a diagnostic scan tool, carry out the ABS module self-test.

Is one or more of the Diagnostic Trouble Codes (DTCs) shown in the DTC Fault Trigger Conditions table present?

Yes	GO to Be
No	The system is operating correctly at this time. The concern may have been caused by a

	loose or corroded connector. ADDRESS the root cause of any connector or pin issues.
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Be VERIFY ALL WIRING CONNECTIONS

Ignition OFF.

Disconnect ABS module C15 .

Disconnect the suspect wheel speed sensor electrical connector.

Disconnect all in-line electrical connectors between the ABS module and the suspect wheel speed sensor.

Using a good light source, inspect all disconnected electrical connectors for the following:

corrosion - install new connector or terminal and clean the module pins

damaged or bent pins - install new terminals or pins

pushed-out pins - install new pins as necessary

spread terminals - install new terminals as necessary

Is the connector free of corrosion, damaged pins, bent pins, pushed-out pins and spread terminals?

Yes	GO to B9
No	REPAIR the affected connectors or terminals. Refer to Connector Repair Procedures for schematic and connector information.

B9 CHECK FOR CORRECT SYSTEM OPERATION

Connect ABS module C15 . Make sure it seats and latches correctly.

Connect the suspect wheel speed sensor electrical connector. Make sure it seats and latches correctly.

Connect all in-line electrical connectors between the ABS module and the suspect wheel speed sensor. Make sure they seat and latch correctly.

Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW the TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new wheel speed sensor. REFER to: Front Wheel Speed Sensor . REFER to: Rear Wheel Speed Sensor .
No	The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. ADDRESS the root cause of any connector or pin issues.