

DTC C1145, C1155, C1165, C1175 [DSC]

B3E040243000W19

DTC	C1145, C1155, C1165, C1175	ABS wheel-speed sensor
DETECTION CONDITION	<ul style="list-style-type: none">• Open circuit or short to ground has been detected in the ABS wheel-speed sensor wiring harness on any of the four vehicle wheels.	
POSSIBLE CAUSE	<ul style="list-style-type: none">• Open circuit or short to ground in the wiring harness between the following DSC HU/CM terminals and the ABS wheel-speed sensor terminals:<ul style="list-style-type: none">- DSC HU/CM terminal AP-RF ABS wheel-speed sensor terminal A- DSC HU/CM terminal AS-RF ABS wheel-speed sensor terminal B- DSC HU/CM terminal I-LF ABS wheel-speed sensor terminal A- DSC HU/CM terminal F-LF ABS wheel-speed sensor terminal B- DSC HU/CM terminal O-RR ABS wheel-speed sensor terminal A- DSC HU/CM terminal R-RR ABS wheel-speed sensor terminal B- DSC HU/CM terminal AJ-LR ABS wheel-speed sensor terminal A- DSC HU/CM terminal AG-LR ABS wheel-speed sensor terminal B• ABS wheel-speed sensor malfunction• Poor connection at connectors (female terminal)	

Diagram illustrating the wiring connections for the ABS wheel-speed sensors to the DSC HU/CM (Host Unit/Control Module).

The diagram shows four ABS wheel-speed sensors (RF, LF, RR, LR) connected to the DSC HU/CM terminals. Each sensor has two terminals (A and B) and is connected to the DSC HU/CM terminals via a wiring harness.

ABS WHEEL-SPEED SENSOR WIRING HARNESS-SIDE CONNECTOR

DSC HU/CM WIRING HARNESS-SIDE CONNECTOR

The DSC HU/CM connector shows the following terminal assignments:

- RF ABS WHEEL-SPEED SENSOR: A to AP, B to AS
- LF ABS WHEEL-SPEED SENSOR: A to I, B to F
- RR ABS WHEEL-SPEED SENSOR: A to O, B to R
- LR ABS WHEEL-SPEED SENSOR: A to AJ, B to AG

Additional terminals shown in the DSC HU/CM connector include: D, G, J, M, P, S, V, Y, AB, AE, AH, AK, AN, AQ, C, E, H, K, N, Q, T, W, Z, AC, AF, AI, AL, AO, AR, F, I, L, O, R, U, X, AA, AD, AG, AJ, AM, AP, AS, AT, AU.

Diagnostic procedure

STEP	INSPECTION	ACTION
	INSPECT ABS WHEEL-SPEED SENSOR FOR SHORT TO GROUND <ul style="list-style-type: none"> Turn the ignition switch off. Disconnect the DSC HU/CM connectors. Inspect for continuity between the following DSC HU/CM connector terminals (vehicle harness-side) and body ground: 	Yes Go to the next step.

1	<ul style="list-style-type: none"> - RF ABS wheel-speed sensor(+): AP - RF ABS wheel-speed sensor(-): AS - LF ABS wheel-speed sensor(+): I - LF ABS wheel-speed sensor(-): F - RR ABS wheel-speed sensor(+): O - RR ABS wheel-speed sensor(-): R - LR ABS wheel-speed sensor(+): AJ - LR ABS wheel-speed sensor(-): AG <p>• Is there continuity?</p>	No	Go to Step 3.
2	<p>INSPECT ABS WHEEL-SPEED SENSOR WIRING HARNESS FOR SHORT TO GROUND</p> <ul style="list-style-type: none"> • Disconnect the ABS wheel-speed sensor connectors. • Inspect for continuity between the following DSC HU/CM connector terminals (vehicle harness-side) and body ground: <ul style="list-style-type: none"> - RF ABS wheel-speed sensor(+): AP - RF ABS wheel-speed sensor(-): AS - LF ABS wheel-speed sensor(+): I - LF ABS wheel-speed sensor(-): F - RR ABS wheel-speed sensor(+): O - RR ABS wheel-speed sensor(-): R - LR ABS wheel-speed sensor(+): AJ - LR ABS wheel-speed sensor(-): AG <p>• Is there continuity?</p>	Yes	Repair or replace the wiring harness, then go to Step 4.
		No	Replace the ABS wheel-speed sensor, then go to Step 4. (See FRONT ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION.) (See REAR ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION.)
3	<p>INSPECT ABS WHEEL-SPEED SENSOR WIRING HARNESS FOR OPEN CIRCUIT</p> <ul style="list-style-type: none"> • Inspect for continuity between the DSC HU/CM connectors (vehicle harness-side) and the following vehicle harness-side terminals of ABS wheel-speed sensors: <ul style="list-style-type: none"> - RF ABS wheel-speed sensor(+): AP-A - RF ABS wheel-speed sensor(-): AS-B - LF ABS wheel-speed sensor(+): I-A - LF ABS wheel-speed sensor(-): F-B - RR ABS wheel-speed sensor(+): O-A - RR ABS wheel-speed sensor(-): R-B - LR ABS wheel-speed sensor(+): AJ-A - LR ABS wheel-speed sensor(-): AG-B <p>• Is there continuity?</p>	Yes	Go to the next step.
		No	Replace the ABS wheel-speed sensor, then go to the next step. (See FRONT ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION.) (See REAR ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION.)
4	<p>VERIFY THAT THE SAME DTC IS NOT PRESENT</p> <ul style="list-style-type: none"> • Reconnect all disconnected connectors. • Clear the DTCs from the memory. (See Clearing DTCs Procedures.) • Are the same DTCs present? 	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the DSC HU/CM, then go to the next step. (See DSC HU/CM REMOVAL/INSTALLATION.)
		No	Go to the next step.
5	<p>VERIFY THAT NO OTHER DTCs ARE PRESENT</p> <ul style="list-style-type: none"> • Are any other DTCs output? 	Yes	Go to the applicable DTC inspection. (See DTC Table.)
		No	DTC troubleshooting completed.