DTC C0031:11/C0031:15/C0034:11/C0034:15/C0037:11/C0037:15/C003A:11/C003A:15 [DYNAMIC STABILITY CONTROL (DSC)]

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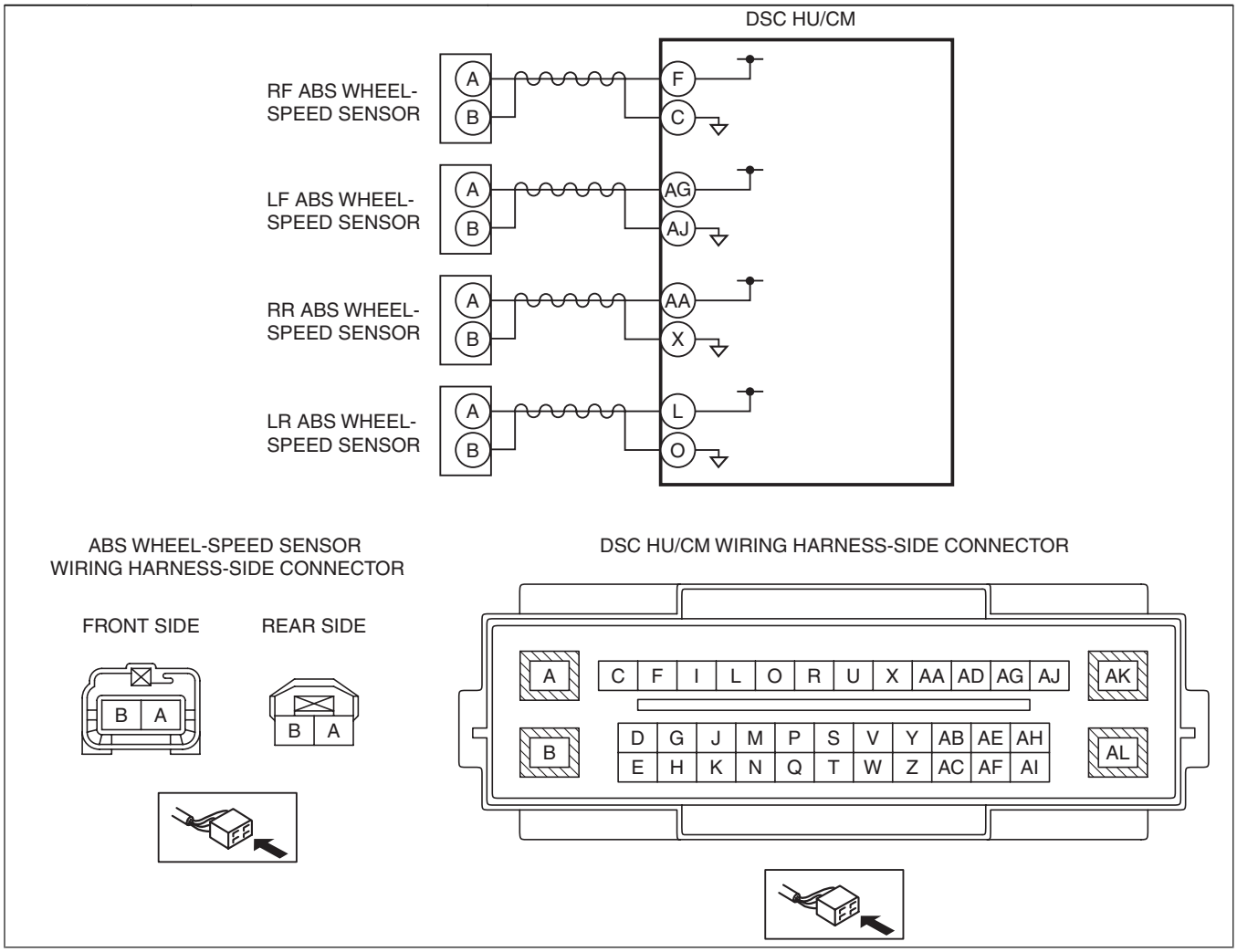
DTC	**C0031:11, C0031:15**	**LF ABS wheel-speed sensor**
	C0034:11, C0034:15	**RF ABS wheel-speed sensor**
	C0037:11, C0037:15	**LR ABS wheel-speed sensor**
	C003A:11, C003A:15	**RR ABS wheel-speed sensor**
DETECTION CONDITION	• C0031:11, C0034:11, C0037:11, C003A:11 — Short to ground has been detected in the ABS wheel-speed sensor wiring harness on any of the four vehicle wheels. • C0031:15, C0034:15, C0037:15, C003A:15 — Open circuit or short to power supply has been detected in the ABS wheel-speed sensor wiring harness on any of the four vehicle wheels.	
FAIL-SAFE FUNCTION	• Illuminates the ABS warning light, TCS/DSC indicator light, and master warning light*1. • Tire pressure monitoring system warning light illuminates after flashes. • Inhibits the ABS, TCS, DSC, roll over mitigation (ROM), brake assist control, vehicle roll prevention function*2, hill launch assist (HLA), TPMS, smart city brake support (SCBS)*1, and secondary collision reduction (SCR) controls. (Additionally, when any malfunction is detected in two wheels or more, EBD control is inhibited and the brake system warning light is illuminated.) *1: Vehicles with smart city brake support (SCBS) *2: ATX only	
POSSIBLE CAUSE	• Open circuit or short to ground/power supply in the wiring harness between the following DSC HU/CM terminals and ABS wheel-speed sensor terminals: — DSC HU/CM terminal F—RF ABS wheel-speed sensor terminal A — DSC HU/CM terminal C—RF ABS wheel-speed sensor terminal B — DSC HU/CM terminal AG—LF ABS wheel-speed sensor terminal A — DSC HU/CM terminal AJ—LF ABS wheel-speed sensor terminal B — DSC HU/CM terminal AA—RR ABS wheel-speed sensor terminal A — DSC HU/CM terminal X—RR ABS wheel-speed sensor terminal B — DSC HU/CM terminal L—LR ABS wheel-speed sensor terminal A — DSC HU/CM terminal O—LR ABS wheel-speed sensor terminal B • Malfunction in the ABS wheel-speed sensor • Poor connection at connectors (female terminal)	



Diagnostic procedure

STEP	INSPECTION		ACTION
1	**INSPECT ABS WHEEL-SPEED SENSOR FOR SHORT TO GROUND** • Switch the ignition to off. • Disconnect the DSC HU/CM connectors. • Inspect for continuity between the following DSC HU/CM connector terminals (vehicle harness-side) and body ground: — RF ABS wheel-speed sensor (+): F — RF ABS wheel-speed sensor (-): C — LF ABS wheel-speed sensor (+): AG — LF ABS wheel-speed sensor (-): AJ — RR ABS wheel-speed sensor (+): AA — RR ABS wheel-speed sensor (-): X — LR ABS wheel-speed sensor (+): L — LR ABS wheel-speed sensor (-): O • Is there continuity?	Yes No	Go to the next step. Go to Step 3.

STEP	INSPECTION		ACTION
2	**INSPECT ABS WHEEL-SPEED SENSOR WIRING HARNESS FOR SHORT TO GROUND** • Disconnect the ABS wheel-speed sensor connectors. • Inspect for continuity between the following DSC HU/CM connector terminals (vehicle harness-side) and body ground: — RF ABS wheel-speed sensor (+): F — RF ABS wheel-speed sensor (-): C — LF ABS wheel-speed sensor (+): AG — LF ABS wheel-speed sensor (-): AJ — RR ABS wheel-speed sensor (+): AA — RR ABS wheel-speed sensor (-): X — LR ABS wheel-speed sensor (+): L — LR ABS wheel-speed sensor (-): O • Is there continuity?	Yes	Repair or replace the wiring harness, then go to Step 5.
		No	Replace the ABS wheel-speed sensor, then go to Step 5. (See FRONT ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION.) (See REAR ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION.)
3	**INSPECT FOR OPEN CIRCUIT IN ABS WHEEL-SPEED SENSOR WIRING HARNESS** • Inspect for continuity between the DSC HU/CM connectors (vehicle harness-side) and the following vehicle harness-side connector terminals of the ABS wheel-speed sensors: — RF ABS wheel-speed sensor (+): F—A — RF ABS wheel-speed sensor (-): C—B — LF ABS wheel-speed sensor (+): AG—A — LF ABS wheel-speed sensor (-): AJ—B — RR ABS wheel-speed sensor (+): AA—A — RR ABS wheel-speed sensor (-): X—B — LR ABS wheel-speed sensor (+): L—A — LR ABS wheel-speed sensor (-): O—B • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to the next step.
4	**INSPECT ABS WHEEL-SPEED SENSOR WIRING HARNESS FOR SHORT TO POWER SUPPLY** • Inspect for voltage between the following DSC HU/CM connector terminals (vehicle harness-side) and body ground: — RF ABS wheel-speed sensor (+): F — RF ABS wheel-speed sensor (-): C — LF ABS wheel-speed sensor (+): AG — LF ABS wheel-speed sensor (-): AJ — RR ABS wheel-speed sensor (+): AA — RR ABS wheel-speed sensor (-): X — LR ABS wheel-speed sensor (+): L — LR ABS wheel-speed sensor (-): O • Is the voltage **1 V or less**?	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to the next step.
5	**VERIFY THAT THE SAME DTC IS NOT PRESENT** • Reconnect all disconnected connectors. • Clear the DTCs from the memory. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • 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.
6	**VERIFY THAT NO OTHER DTCS ARE PRESENT** • Are any other DTCs output?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].)
		No	DTC troubleshooting completed.