DTC C0030:07/C0031:07/C0031:29/C0031:2F/C0031:64/C0033:07/C0034:07/C0034:29/C0034:2F/C0034:64/C0036:07/C0037:07/C0037:29/C0037:2F/C0037:64/C0039:07/C003A:07/C003A:29/C003A:2F/C003A:64 [DYNAMIC STABILITY CONTROL (DSC)]

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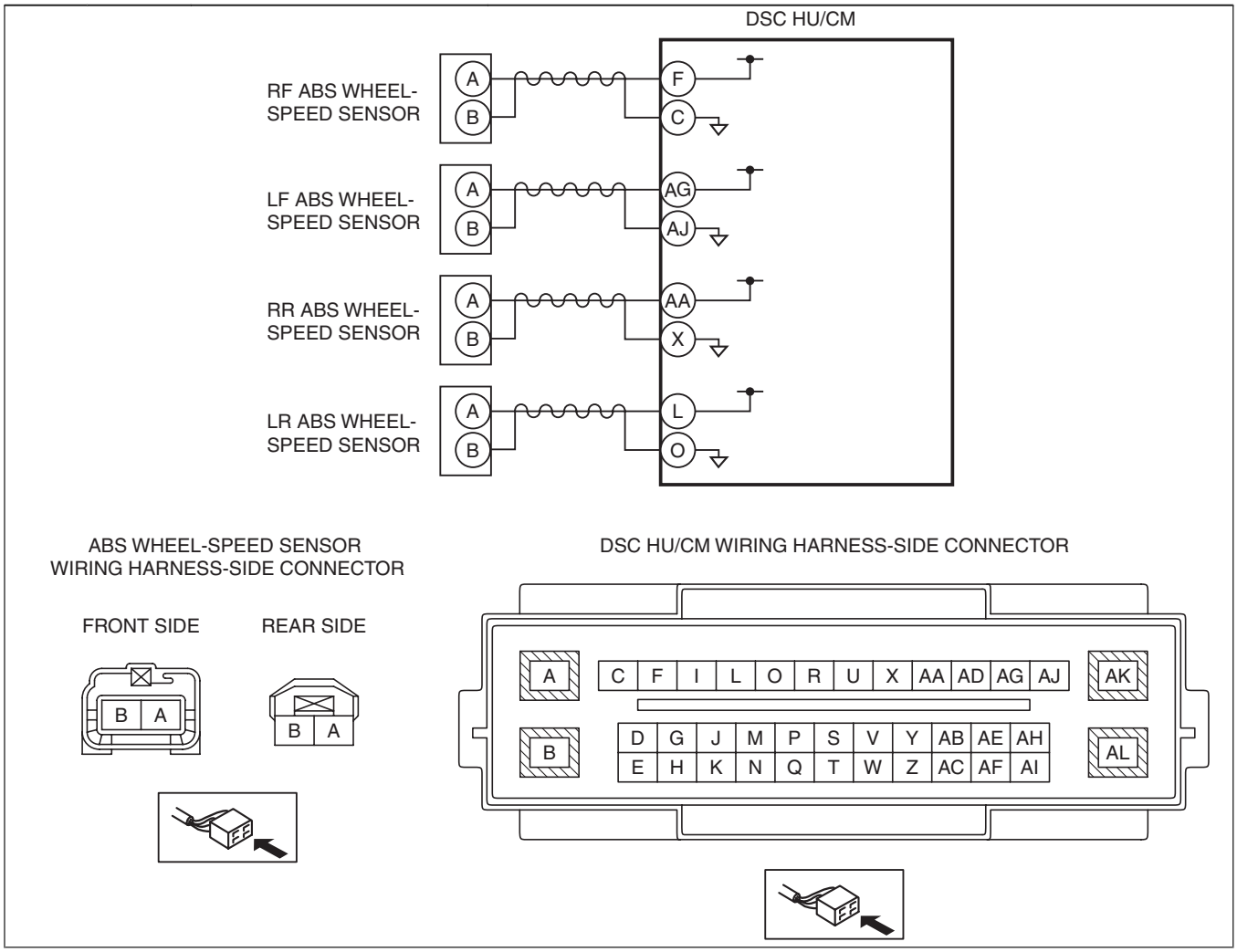
Note

- When only the driving wheels are rotated while the vehicle is jacked up, DTCs C0037:29 and C003A:29 are input to the memory.

DTC	**C0030:07**	**LF ABS sensor rotor**
	C0031:07, C0031:29, C0031:2F, C0031:64	**LF ABS wheel-speed sensor/ABS sensor rotor**
	C0033:07	**RF ABS sensor rotor**
	C0034:07, C0034:29, C0034:2F, C0034:64	**RF ABS wheel-speed sensor/ABS sensor rotor**
	C0036:07	**LR ABS sensor rotor**
	C0037:07, C0037:29, C0037:2F, C0037:64	**LR ABS wheel-speed sensor/ABS sensor rotor**
	C0039:07	**RR ABS sensor rotor**
	C003A:07, C003A:29, C003A:2F, C003A:64	**RR ABS wheel-speed sensor/ABS sensor rotor**
DETECTION CONDITION	• C0030:07, C0033:07, C0036:07, C0039:07 — Periodic abnormality is detected in the signal wave pattern from the ABS wheel-speed sensors. • C0031:07, C0034:07, C0037:07, C003A:07 — While the vehicle is traveling at a speed of **10 km/h {6.2 mph} or more**, no signal in any of the four wheels or an extremely low vehicle speed signal is detected. • C0031:29, C0034:29, C0037:29, C003A:29 — The wheel-speed signal is not input or an extremely low wheel-speed signal is detected from any of the four wheels when driving at a vehicle speed of **10 km/h {6.2 mph} or more** • C0031:2F, C0034:2F, C0037:2F, C003A:2F — The wheel speed or acceleration speed in any of the 4 wheels is not within the specification. — ABS control continues to operate for **28 s or more**. • C0031:64, C0034:64, C0037:64, C003A:64 — While the vehicle is traveling at a speed of **20 km/h {12 mph} or more**, an extremely high vehicle speed signal in any of the four wheels is detected.	
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	• ABS sensor rotor malfunction (missing ABS sensor rotor teeth due to foreign material obstruction) • ABS wheel-speed sensor or ABS sensor rotor installation malfunction (If the ABS sensor rotor is installed at an angle, it may cause output of abnormal wave pattern at high speeds.) • Excessive clearance between the ABS wheel-speed sensor and sensor rotor • ABS wheel-speed sensor malfunction • Continuous ABS operation	



Diagnostic procedure

STEP	INSPECTION		ACTION
1	**INSPECT PID FOR ABS WHEEL-SPEED SENSOR OUTPUT ERROR USING M-MDS** • Switch the ignition to off. • Connect the M-MDS to the DLC-2. • Select the following PIDs using the M-MDS: — WSPD_SEN_LF — WSPD_SEN_LR — WSPD_SEN_RF — WSPD_SEN_RR • Drive the vehicle. • Verify that the vehicle speeds detected by the four ABS wheel-speed sensors are approximately the same. • Are the vehicle speeds approximately the same?	Yes	Go to Step 3.
		No	Go to the next step.
2	**INSPECT FOR SHORT TO GROUND BETWEEN ABS WHEEL-SPEED SENSOR CONNECTORS AND GROUND** • Disconnect the ABS wheel-speed sensor connectors. • Inspect for no continuity between the following ABS wheel-speed sensor connector terminals (vehicle harness-side) and body ground: — ABS wheel-speed sensor (RF): B—Body ground — ABS wheel-speed sensor (LF): B—Body ground — ABS wheel-speed sensor (RR): B—Body ground — ABS wheel-speed sensor (LR): B—Body ground • Is the continuity normal?	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to Step 5.

STEP	INSPECTION		ACTION
3	**INSPECT IF MALFUNCTION OCCURRED DUE TO IMPROPER SENSOR CLEARANCE.** • Inspect the clearance between the ABS wheel-speed sensor and the ABS sensor rotor. (See FRONT ABS WHEEL-SPEED SENSOR INSPECTION.) (See REAR ABS WHEEL-SPEED SENSOR INSPECTION [2WD].) (See REAR ABS WHEEL-SPEED SENSOR INSPECTION [4WD].) • Is the clearance normal?	Yes	Go to the next step.
		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.)
4	**VISUALLY INSPECT ABS SENSOR ROTOR FOR FOREIGN MATERIAL ADHERING OR IMPROPER INSTALLATION** • Is the result normal?	Yes	Go to the next step.
		No	Repair or replace the ABS sensor rotor, then go to the next step. • Front ABS sensor rotor (front wheel hub) (See WHEEL HUB, STEERING KNUCKLE REMOVAL/INSTALLATION.) • Rear ABS sensor rotor (rear wheel hub (2WD) or shaft and ball joint component (4WD)) (See WHEEL HUB COMPONENT REMOVAL/INSTALLATION [2WD].) (See REAR DRIVE SHAFT DISASSEMBLY/ASSEMBLY.)
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)].) • Start the engine and drive the vehicle at **20 km/h {12 mph} or more**. • 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.