

DTC C1141, C1142, C1143, C1144, C1233, C1234, C1235, C1236 [ABS]

B3E040243000W06

Note

- When only the driving wheels are rotated while the vehicle is jacked up, DTCs C1235 and C1236 are input to the memory.

DTC	C1141, C1142, C1143, C1144, C1233, C1234, C1235, C1236	ABS wheel-speed sensor/ABS sensor rotor
DETECTION CONDITION	<ul style="list-style-type: none">• C1141, C1142, C1143, C1144<ul style="list-style-type: none">- Periodic abnormality is detected in the signal wave pattern from the ABS wheel-speed sensors.• C1234, C1233, C1235, C1236<ul style="list-style-type: none">- Wheel speed signal is not input or extremely low wheel speed signal is input from any of the four wheels when driving at a vehicle speed of 10 km/h {6.2 mph} or more.- A large, sudden change in wheel speed signal is detected.- ABS control operates for 28 s or more.	
POSSIBLE CAUSE	<ul style="list-style-type: none">• ABS wheel-speed sensor malfunction• ABS sensor rotor malfunction (foreign material adhering)• Improper installation of ABS wheel-speed sensor and/or sensor rotor• Excessive clearance between the ABS wheel-speed sensor and sensor rotor• Continuous ABS operation	
<div><div><div>RF ABS WHEEL-SPEED SENSOR</div><div>LF ABS WHEEL-SPEED SENSOR</div><div>RR ABS WHEEL-SPEED SENSOR</div><div>LR ABS WHEEL-SPEED SENSOR</div></div><div><p>ABS HU/CM</p></div><div><div>ABS WHEEL-SPEED SENSOR WIRING HARNESS-SIDE CONNECTOR</div><div>ABS HU/CM WIRING HARNESS-SIDE CONNECTOR</div></div><div></div><div></div></div>		

Diagnostic procedure

STEP	INSPECTION	ACTION	
1	INSPECT PID FOR ABS WHEEL-SPEED SENSOR OUTPUT ERROR USING WDS OR EQUIVALENT <ul style="list-style-type: none"> Turn the ignition switch off. Connect the WDS or equivalent to the DLC-2. Select the following PIDs using the WDS or equivalent: LF_WSPD LR_WSPD RF_WSPD RR_WSPD 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 <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> - 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 6.
3	INSPECT IF MALFUNCTION OCCURRED DUE TO IMPROPER SENSOR CLEARANCE. <ul style="list-style-type: none"> 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.) Is the clearance normal? <p>Clearance Front: 2.1 mm {0.082 in} or less Rear: 1.46 mm {0.057 in} or less</p>	Yes	Go to the next step.
		No	Replace the ABS wheel-speed sensor, then go to Step 6. (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 <ul style="list-style-type: none"> Is the result normal? 	Yes	Go to Step 6.
		No	Replace the wheel hub component, then go to Step 6. (See WHEEL HUB, STEERING KNUCKLE REMOVAL/INSTALLATION.) (See WHEEL HUB COMPONENT REMOVAL/INSTALLATION.)
5	INSPECT IF MALFUNCTION OCCURRED DUE TO INTERNAL MALFUNCTION OF HYDRAULIC UNIT (CLOGGING IN PIPING) <ul style="list-style-type: none"> Perform the ABS system operation inspection. (See ABS SYSTEM INSPECTION.) Is the system normal? 	Yes	Go to the next step.
		No	Replace the hydraulic unit, then go to the next step. (See ABS HU/CM REMOVAL/INSTALLATION.)

6	VERIFY THAT THE SAME DTC IS NOT PRESENT <ul style="list-style-type: none"> • Clear the DTCs from the memory. (See Clearing DTCs Procedures.) • Start the engine and drive the vehicle at 10 km/h {6.2 mph} or more. • Are the same DTCs present? 	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the ABS HU/CM, then go to the next step. (See ABS HU/CM REMOVAL/INSTALLATION .)
		No	Go to the next step.
7	VERIFY THAT NO OTHER DTCS ARE PRESENT <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.