

DTC C1277, C1295, C1306, C1307 [DSC]

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DTC	C1277, C1295, C1306, C1307	Steering angle sensor																																																				
DETECTION CONDITION	<ul style="list-style-type: none">• C 1277<ul style="list-style-type: none">- The steering angle sensor detects signal modulation or steering angle that exceeds specification.• C 1295<ul style="list-style-type: none">- Output voltage from either steering angle sensors 1 or 2 is 4.75 V or more or 0.25 V or less.• C 1306<ul style="list-style-type: none">- The neutral position of the steering angle cannot be estimated from the signals from the ABS wheel-speed sensors and the combined sensor.• C 1307<ul style="list-style-type: none">- The signal from the steering angle sensor remains unchanged when the steering angle is turned to the right and left.																																																					
	<ul style="list-style-type: none">• Improper installation or positioning of the steering angle sensor• Open circuit in the wiring harness between DSC HU/CM terminal AB and steering angle sensor terminal A• Open circuit in the wiring harness between DSC HU/CM terminal AE and steering angle sensor terminal C, short to battery or to ground• Open circuit in the wiring harness between DSC HU/CM terminal AN and steering angle sensor terminal B, short to battery or to ground• Open circuit in the wiring harness between DSC HU/CM terminal AH and steering angle sensor terminal D• Signal error from the ABS wheel-speed sensor• Signal error from the combined sensor• Signal errors from sensors due to rough road driving• Steering angle sensor malfunction• Poor connection at connectors (female terminal)																																																					
<div><div><div><div>DSC HU/CM</div><div></div></div><div><div>DSC HU/CM WIRING HARNESS-SIDE CONNECTOR</div><div><table border="1"><tr><td>A</td><td>D</td><td>G</td><td>J</td><td>M</td><td>P</td><td>S</td><td>V</td><td>Y</td><td>AB</td><td>AE</td><td>AH</td><td>AK</td><td>AN</td><td>AQ</td><td>AT</td></tr><tr><td>B</td><td>C</td><td>E</td><td>H</td><td>K</td><td>N</td><td>Q</td><td>T</td><td>W</td><td>Z</td><td>AC</td><td>AF</td><td>AI</td><td>AL</td><td>AO</td><td>AR</td></tr><tr><td></td><td>F</td><td>I</td><td>L</td><td>O</td><td>R</td><td>U</td><td>X</td><td>AA</td><td>AD</td><td>AG</td><td>AJ</td><td>AM</td><td>AP</td><td>AS</td><td>AU</td></tr></table></div><div></div></div><div><div>STEERING ANGLE SENSOR WIRING HARNESS-SIDE CONNECTOR</div><div><table border="1"><tr><td>D</td><td>C</td><td>B</td><td>A</td></tr></table></div><div></div></div></div></div>			A	D	G	J	M	P	S	V	Y	AB	AE	AH	AK	AN	AQ	AT	B	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	AU	D	C	B	A
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Diagnostic procedure

STEP	INSPECTION		ACTION
1	INSPECT STEERING ANGLE SENSOR POWER SUPPLY FOR OPEN CIRCUIT <ul style="list-style-type: none"> Turn the ignition switch to the ON position. Measure the voltage between the steering angle sensor terminal A and body ground. Is the voltage B+? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to Step 8.
2	INSPECT STEERING ANGLE SENSOR GROUND FOR OPEN CIRCUIT <ul style="list-style-type: none"> Turn the ignition switch off. Inspect for continuity between the steering angle sensor terminal D and body ground. Is there continuity? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to Step 8.
3	INSPECT STEERING ANGLE SENSOR SIGNAL FOR OPEN CIRCUIT <ul style="list-style-type: none"> Disconnect the DSC HU/CM connectors. Inspect for continuity between the DSC HU/CM connectors (vehicle harness-side) and the following steering angle sensor connector terminals: <ul style="list-style-type: none"> Steering angle sensor (Sensor 1 system): AN-B Steering angle sensor (Sensor 2 system): AE-C Is there continuity? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to Step 8.
4	INSPECT STEERING ANGLE SENSOR SIGNAL FOR SHORT TO GROUND <ul style="list-style-type: none"> Disconnect the steering angle sensor connectors Inspect for continuity between the following steering angle sensor connector terminals (vehicle harness-side) and body ground: <ul style="list-style-type: none"> Steering angle sensor (Sensor 1 system): B- Body ground Steering angle sensor (Sensor 2 system): C- Body ground Is there continuity? 	Yes	Repair or replace the wiring harness, then go to Step 8.
		No	Go to the next step.
5	INSPECT STEERING ANGLE SENSOR SIGNAL FOR SHORT TO POWER SUPPLY CIRCUIT <ul style="list-style-type: none"> Measure voltage between the following steering angle sensor connector terminals (vehicle harness-side) and body ground: <ul style="list-style-type: none"> Steering angle sensor (Sensor 1 system): B- Body ground Steering angle sensor (Sensor 2 system): C- Body ground Is the voltage 1 V or less? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to Step 8.
6	INSPECT FOR IMPROPER INSTALLATION OF STEERING ANGLE SENSOR <ul style="list-style-type: none"> Is the installation normal? 	Yes	Go to the next step.
		No	Repair installation or replace the steering angle sensor, then go to Step 8. (See STEERING ANGLE SENSOR REMOVAL/INSTALLATION.)
	INSPECT STEERING ANGLE SENSOR	Yes	Go to the next step.

7	<ul style="list-style-type: none"> • Reconnect all disconnected connectors. • Inspect the steering angle sensor. (See STEERING ANGLE SENSOR INSPECTION .) • Is the steering angle sensor normal?	No	Replace the steering angle sensor, then go to the next step. (See STEERING ANGLE SENSOR REMOVAL/INSTALLATION .)
8	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 DSC HU/CM, then go to the next step. (See DSC HU/CM REMOVAL/INSTALLATION .)
		No	Go to the next step.
9	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.