DTC C1290/66 Steering Angle Sensor Zero Point Malfunction

DESCRIPTION

The skid control ECU acquires steering angle sensor zero point every time the ignition switch is turned to the ON position and the vehicle is driven at 35 km/h (22 mph) or more for approximately 5 seconds. The ECU also stores the previous zero point.
If front wheel alignment or steering wheel position is adjusted without disconnecting the negative battery terminal, or if yaw rate and deceleration sensor zero point is not acquired after the adjustments have been completed, the skid control ECU detects the difference between the previous zero point and newly acquired zero point and outputs this DTC to indicate a poor adjustment.
Warning of the steering angle sensor zero point malfunction will be cancelled by turning the ignition switch off.

DTC Code	DTC Detection Condition	Trouble Area
C1290/66	The steering angle sensor zero point calibration position vastly differs from the recorded value	• Yaw rate and deceleration sensor zero point calibration incomplete • Poor adjustment of the centered position of the steering wheel • Poor adjustment of front wheel alignment

INSPECTION PROCEDURE

NOTICE:
When replacing the brake actuator assembly, perform zero point calibration (See page BC-70).

1	PERFORM ZERO POINT CALIBRATION OF YAW RATE AND DECELERATION SENSOR

(a) Perform zero point calibration of the yaw rate and deceleration sensor (See page BC-70).
HINT:
- When the stored zero point of the yaw rate and deceleration sensor is erased, steering angle sensor zero point will also be erased.
- If the zero point and output value of the yaw rate and deceleration sensor and the output value of the speed sensors are not normal, steering angle sensor zero point cannot be acquired normally even if the vehicle is driven straight ahead at 35 km/h (22 mph) or more.

NEXT

2	CHECK STEERING ANGLE SENSOR ZERO POINT CALIBRATION

(a) Drive the vehicle straight ahead at 35 km/h (22 mph) or more for at least 5 seconds.
(b) Check that the centered position of the steering wheel is correctly set while driving straight ahead.
HINT:
If front wheel alignment and steering position are adjusted as a result of abnormal centered position of the steering wheel, acquire yaw rate and deceleration sensor zero point again after the adjustments are completed.

OK:
The centered position of the steering wheel is correctly set.

NG → **ADJUST FRONT WHEEL ALIGNMENT OR STEERING POSITION**

OK ↓

3	RECONFIRM DTC

(a) Turn the ignition switch off.
(b) Clear the DTC (See page BC-82).
(c) Start the engine.
(d) Drive the vehicle and turn the steering wheel to the right and left at the speed of 35 km/h (22 mph) or more.
(e) Check if the same DTC is recorded (See page BC-82).

Result

Result	Proceed to
DTC (C1290/66) is not output	A
DTC (C1290/66) is output	B

B → **REPLACE BRAKE ACTUATOR ASSEMBLY**

A ↓

END