C1142 PRESS SENSOR

Description

The pressure sensor converts the brake fluid pressure to an electric signal and transmits it to the ABS actuator and electric unit (control unit). [The pressure sensor is integrated in the ABS actuator and electric unit (control unit).]

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible cause
C1143	ST ANG SEN CIRCUIT	Neutral position of steering angle sensor is dislocated, or the steering angle sensor is malfunctioning.	Harness or connector Steering angle sensor ABS actuator and electric unit (control unit)

DTC CONFIRMATION PROCEDURE

- 1). Turn the ignition switch ON.
- Perform ABS actuator and electric unit (control unit) self-diagnosis.
- 3).Is DTC "C1143" detected?

YES >> Proceed to diagnosis procedure.

NO >> INSPECTION END

Diagnosis Procedure

- 1).CHECK CONNECTOR
 - A). Turn the ignition switch OFF.
 - B).Disconnect ABS actuator and electric unit (control unit) connector.
 - C).Disconnect steering angle sensor connector.
 - D). Check terminal for deformation, disconnection, looseness, etc.
 - E).Is the inspection result normal?

YES >> GO TO 2

NO >> Replace or repair damaged parts.

2).CHECK STEERING ANGLE SENSOR HARNESS

- A). Turn the ignition switch ON.
- B).Check the voltage between steering angle sensor harness connector and ground.
- C). Turn ignition switch OFF.
- Check the continuity between steering angle sensor harness connector and ground.
- E).Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace damaged parts.

3).CHECK STEERING WHEEL PLAY

- A). Check steering wheel play.
- B) Is the inspection result normal?

YES >> GO TO 4.

NO >> Adjust steering wheel play.

4).CHECK DATA MONITOR

- A).Connect the steering angle sensor connector and ABS actuator and electric unit (control unit) connector.
- B). Check steering angle sensor signal.
- C) Is the inspection result normal?

YES >> Replace ABS actuator and electric unit (control unit).

NO >> Adjust neutral position of steering angle sensor.

Component Inspection

- 1).CHECK ACTIVE TEST
- On "ACTIVE TEST", select "ABS MOTOR".
- Touch "On" and "Off" on screen. Make sure motor relay and actuator relay operates as shown in table below.
- 4).Is the inspection result normal?

YES >> INSPECTION END

NO >> Proceed to diagnosis procedure.

Special Repair Requirement

- 1).ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION, CALIBRATION OF YAW RATE/SIDE/DECEL G SENSOR AND CALIBRATION OF PRESSURE SENSOR.
- After removing/replacing an ABS actuator and electric unit (control unit), be sure to perform the following procedure.