

# C1109 POWER AND GROUND SYSTEM

## Description

Supplies electric power to the ABS actuator and electric unit (control unit).

## DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible cause
C1109	BATTERY VOLTAGE [ABNORMAL]	When the ABS actuator and electric unit (control unit) power supply is lower than normal. Power supply is greater than normal limits.	<ul style="list-style-type: none"> <li>• Harness or connector</li> <li>• ABS actuator and electric unit (control unit)</li> <li>• Fuse</li> <li>• Vehicle electrical power system</li> </ul>

## DTC CONFIRMATION PROCEDURE

- 1). Turn the ignition switch OFF to ON.
- 2). Perform ABS actuator and electric unit (control unit) self-diagnosis.  
Is DTC "C1109" 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). Check terminal for deformation, disconnection, looseness, etc.
  - D). Is the inspection result normal?  
YES >> GO TO 2.  
NO >> Repair or replace damaged parts.

- 2).CHECK ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)  
POWER SUPPLY CIRCUIT AND GROUND CIRCUIT
- A).Turn ignition switch ON or OFF and check voltage between ABS actuator and electric unit (control unit) harness connector terminal and ground.
  - B).Check 10A fusible link (45).
  - C).Check continuity between ABS actuator and electric unit (control unit) harness connector terminals and IPDM E/R.
  - D).Is the inspection result normal?
    - YES >> GO TO 3.
    - NO >> Repair or replace malfunctioning components.
- 3).CHECK ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)  
GROUND CIRCUIT
- A).Check the continuity between ABS actuator and electric unit (control unit) harness connector and ground.
  - B).Is the inspection result normal?
    - YES >> Check battery for terminal looseness, low voltage, etc. if any malfunction is found, repair damaged parts.
    - NO >> Repair or replace damaged parts. (Check ABS earth bolt for tightness and corrosion.)

## Special Repair Requirement

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