FREEZE FRAME DATA

1. FREEZE FRAME DATA

HINT:

- Whenever a DTC is detected or the ABS operates, the skid control ECU stores the current vehicle (sensor) state as freeze frame data.
- The skid control ECU stores the number of times (maximum: 31) the ignition switch has been turned from off to the ON position since the last time the ABS was activated. However, if the vehicle was stopped or at a low speed (4.3 mph (7 km/h) or less), or if a DTC is detected, the skid control ECU will not count the number since then.
- Freeze frame data at the time the ABS operates: The skid control ECU stores and updates data whenever the ABS system operates.
  When the ECU stores data at the time a DTC is detected, the data stored when the ABS operated is erased.
- Freeze frame data at the time a DTC is detected: When the skid control ECU stores data at the time a DTC is detected, no updates will be performed until the data is cleared.

(a) Connect the Intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) From the display on the tester, select the FREEZE FRAME DATA.

Intelligent tester display	Measurement Item	Reference Value
VEHICLE SPD	Vehicle speed	min.: 0, max.: 326.4 km/h
STOP LIGHT SW	Stop light switch signal	Stop light switch ON: ON, OFF: OFF
# IG ON	Numbers of operations of ignition switch ON after memorizing freeze frame data	0 to 31
SYSTEM	System status	ABS activated: ABS, NO SYS, FAIL SAFE
TROUBLE CODE	Freeze DTC	min.: 0, max.: 255
SPD GRADE	Vehicle speed grade	min.: -1.869, max.: 1.869
# CODES	Number of trouble code	min.: 0, max.: 255

FAIL-SAFE CHART

1. FAIL SAFE OPERATION

(a) If there is a problem with sensor signals or actuator systems, the skid control ECU prohibits power supply to the brake actuator and prohibits ABS control.
The ABS control will be prohibited, but EBD control continues as much as possible. If EBD control is impossible, the BRAKE warning light comes on to warn the driver.

Malfunction	Symptom
ABS system	ABS control prohibited
EBD system	ABS and EBD control prohibited

HINT:
If the ABS system encounters a malfunction, the brake system will operate normally without ABS control.