NO.3 BRAKE SYSTEM WARNING LIGHT STAY ON [DYNAMIC STABILITY CONTROL (DSC)]

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3	Brake system warning lights stay on
POSSIBLE CAUSE	• Brake fluid amount is low. • Parking brake does not release. • Parking brake switch or brake fluid level sensor stuck on. • Short to ground in following circuit: — Between parking brake switch and instrument cluster — Between brake fluid level sensor and front body control module (FBCM) • No connection at DSC HU/CM connector (When DSC HU/CM connector comes off, ABS warning light, brake system warning light, TCS/DSC indicator light, and TCS OFF indicator light illuminate.) • DSC HU/CM detected malfunction. (Input and output device malfunction) • DSC HU/CM detects low voltage in power supply. • DSC HU/CM ground malfunction (When DSC HU/CM ground is not securely connected, ABS warning light, brake system warning light, TCS/DSC indicator light, and TCS OFF indicator light illuminate but diagnostic trouble code does not display.) • DSC HU/CM does not operate. • Front body control module (FBCM) detected malfunction. • DSC HU/CM internal malfunction • Instrument cluster detected malfunction

Diagnostic procedure

STEP	INSPECTION		ACTION
1	**INSPECT BRAKE FLUID AMOUNT AND VERIFY THAT PARKING BRAKE RELEASED** • Inspect the brake fluid amount and verify that the parking brake released. • Is the brake fluid amount normal? • Is the parking brake lever released?	Yes	Go to the next step.
		No	Add the brake fluid or release the parking brake lever. If the brake fluid refilled: • Inspect and repair the brake line for leakage.
2	**CONFIRM DSC HU/CM DTC** • Retrieve the DSC HU/CM DTC using the M-MDS (IDS). (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].)
		No	If communication error message is displayed on the M-MDS (IDS) screen: • Go to the next step. If communication error message is not displayed: • Go to Step 4.
3	**INSPECT CONNECTION OF DSC HU/CM CONNECTOR** • Inspect for connection of the DSC HU/CM connector. • Is the DSC HU/CM connector connected securely?	Yes	Go to the next step.
		No	Connect the DSC HU/CM connector securely, then go to the next step.
4	**CONFIRM INSTRUMENT CLUSTER OPERATION RECORD** • Retrieve the warning system operation history using the M-MDS (IDS). (See INSTRUMENT CLUSTER OPERATION RECORD.) • Is the brake system warning light illumination history recorded?	Yes	If the Brake Waning Lamp recorded: • Go to Step 5. If the Brake Waning Lamp (Brake fluid low) recorded: • Go to Step 6. If the Brake Waning Lamp (Parking Brake ON over 20 km/h or 12.4 mile/h) recorded: • Go to Step 8.
		No	Go to Step 10.
5	**VERIFY WHETHER MALFUNCTION IS IN INSTRUMENT CLUSTER OR ELSEWHERE** • Connect the M-MDS (IDS) to the DLC-2. • Turn off and on all warning light and indicator lights using the instrument cluster PID WL+IL of active command modes. (See ACTIVE COMMAND MODES INSPECTION [INSTRUMENT CLUSTER].) • Do the ABS warning light, brake system warning light, TCS/DSC indicator light and DSC OFF indicator light turn on and off according to the active command modes?	Yes	Go to Step 10.
		No	Replace the instrument cluster. (See INSTRUMENT CLUSTER REMOVAL/ INSTALLATION.)

STEP	INSPECTION		ACTION
6	**INSPECT WHETHER MALFUNCTION IS IN BRAKE FLUID LEVEL SENSOR OR ELSEWHERE** • Inspect the brake fluid level sensor for continuity. (See BRAKE FLUID LEVEL SENSOR INSPECTION.) • Is the continuity condition normal?	Yes	Go to the next step.
		No	Replace the malfunctioning part. (See MASTER CYLINDER REMOVAL/INSTALLATION.)
*7	**INSPECT FOR SHORT TO GROUND IN WIRING HARNESS BETWEEN FRONT BODY CONTROL MODULE (FBCM) AND BRAKE FLUID LEVEL SWITCH** • Inspect for short to ground in the following circuit: — Between brake fluid level switch and front body control module (FBCM) terminal 2Q • Is the short to ground detected?	Yes	Repair or replace the wiring harness for a possible short to ground.
		No	Retrieve the front body control module (FBCM) DTC using the M-MDS (IDS). (See DTC INSPECTION [FRONT BODY CONTROL MODULE (FBCM)].) If the DTC remains: • Go to the applicable DTC inspection. (See DTC TABLE [FRONT BODY CONTROL MODULE (FBCM)].) If the DTC does not remain: • Replace the front body control module (FBCM). (See FRONT BODY CONTROL MODULE (FBCM) REMOVAL/INSTALLATION.)
8	**INSPECT WHETHER MALFUNCTION IS IN PARKING BRAKE SWITCH OR ELSEWHERE** • Inspect the following parts for continuity: — Parking brake switch (See PARKING BRAKE SWITCH INSPECTION.) • Is the continuity condition normal?	Yes	Go to the next step.
		No	Replace the malfunctioning part. (See PARKING BRAKE LEVER REMOVAL/INSTALLATION.)
*9	**INSPECT FOR SHORT TO GROUND IN WIRING HARNESS BETWEEN INSTRUMENT CLUSTER AND PARKING BRAKE SWITCH** • Inspect for short to ground in the following circuit: — Between parking brake switch and instrument cluster terminal 2X • Is the short to ground detected?	Yes	Repair or replace the wiring harness for a possible short to ground.
		No	Retrieve the instrument cluster DTC using the M-MDS (IDS). (See DTC INSPECTION [INSTRUMENT CLUSTER].) If the DTC remains: • Go to the applicable DTC inspection. (See DTC TABLE [INSTRUMENT CLUSTER].) If the DTC does not remain: • Replace the instrument cluster. (See INSTRUMENT CLUSTER REMOVAL/INSTALLATION.)
10	**INSPECT DSC HU/CM POWER SUPPLY FUSE** • Inspect the DSC HU/CM ignition power supply fuse. • Is the fuse normal?	Yes	Go to the next step.
		No	Inspect the blown fuse's circuit for short to ground. Repair or replace the wiring harness for a possible short to ground as necessary. Install appropriate amperage fuse.
*11	**VERIFY WHETHER MALFUNCTION IS IN WIRING HARNESS (BETWEEN DSC HU/CM POWER SUPPLY AND DSC HU/CM FOR CONTINUITY) OR ELSEWHERE** • Switch the ignition to ON. • Measure the voltage at the DSC HU/CM terminal Q (wiring harness-side). • Is the voltage **approx. 12 V**?	Yes	Go to the next step.
		No	Inspect for open circuit between DSC HU/CM and ignition. Repair or replace the wiring harness for a possible open circuit as necessary.
*12	**VERIFY WHETHER MALFUNCTION IS IN WIRING HARNESS (BETWEEN DSC HU/CM AND GROUND FOR CONTINUITY) OR ELSEWHERE** • Switch the ignition to off. • Disconnect the DSC HU/CM connector. • Inspect for continuity between DSC HU/CM terminal AL (wiring harness-side) and body ground. • Is there continuity?	Yes	Replace the DSC HU/CM. (open circuit in the DSC HU/CM) (See DSC HU/CM REMOVAL/INSTALLATION.)
		No	Repair or replace the wiring harness for a possible open circuit and poor contact in ground point.

- When performing an asterisked (*) troubleshooting inspection, shake the wiring harness and connectors while doing the inspection to discover whether poor contact points are the cause of any intermittent malfunctions. If there is a problem, check to make sure connectors, terminals and wiring harness are connected correctly and undamaged.