

2012 - Mazda6 - Brakes

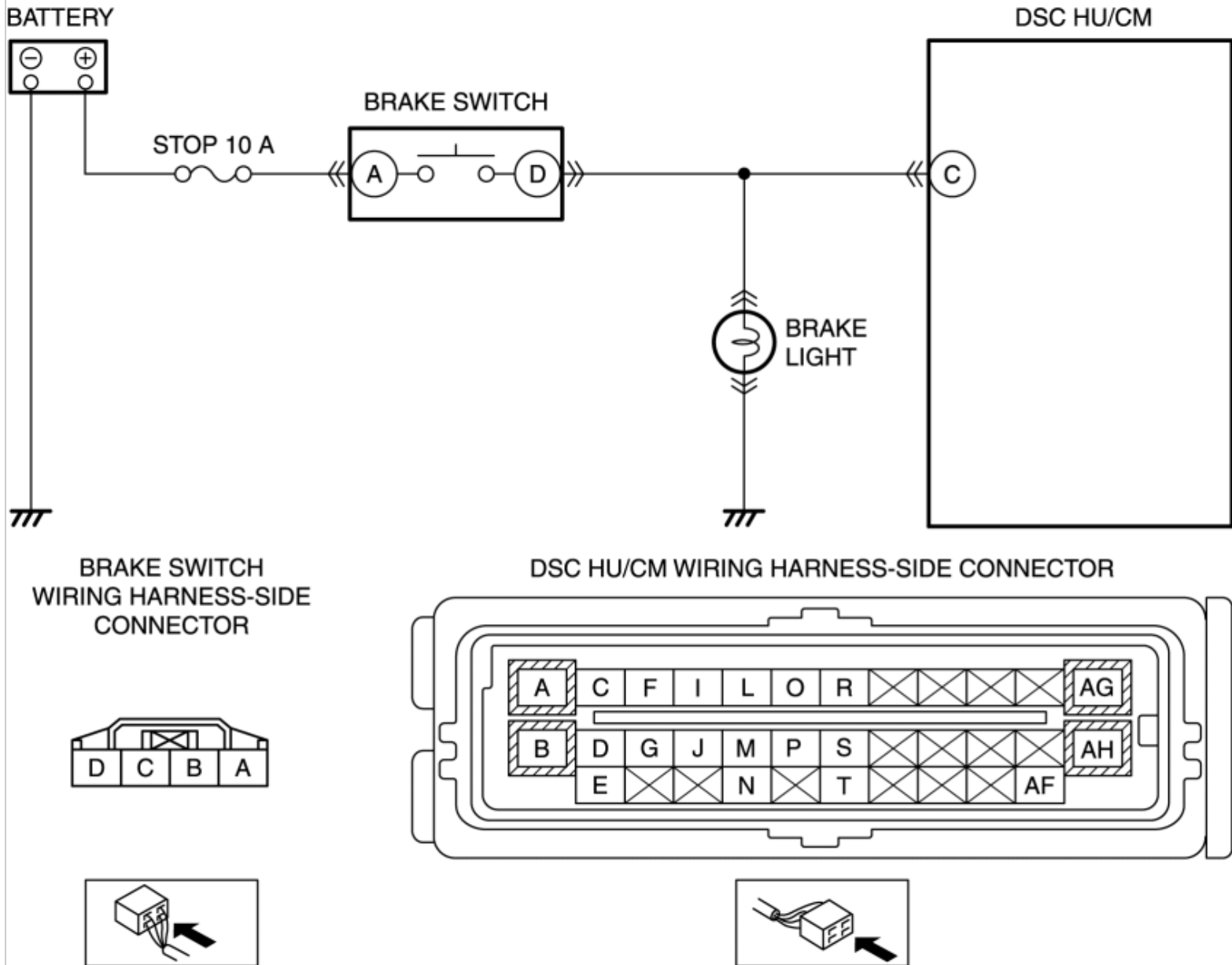
DTC C0044:14/ C0044:1C/ C0044:65/ C0044:66/ C0044:67 [DYNAMIC STABILITY CONTROL (DSC)]

C0044:14	Brake fluid pressure sensor
C0044:1C	
C0044:65	
C0044:66	
C0044:67	
DETECTION CONDITION	C0044:14 • With the ECU terminal voltage within the normal range, the brake fluid pressure sensor power supply voltage is 4.4V or less, or 5.6 V or higher for a continuous 1.2 s, or the brake fluid pressure sensor output value is less than the specified value or exceeds 19.94 MPa for a continuous 1.2 s. C0044:1C • 0-point output ▪ The brake fluid pressure sensor output value is less than the specified value or it exceeds 1.76 MPa for a continuous 5 s with the brake switch in the off condition. • Output increase ▪ The following condition is detected 9 times continuously (one detection period is when ignition is switched from ON to off): • While the vehicle is traveling at a speed of 7 km/ h { 4 mph} or more, the deceleration rate calculated from the brake fluid pressure sensor signal value is detected 5 times or more at 1/4 or less than the normal value for a continuous 1 s. C0044:65/ C0044:67 • Sticking ▪ While the vehicle is traveling at a speed of 7 km/ h { 4 mph} or more, no fluctuation in the output value at 24.5 kPa or higher is detected with the brake fluid pressure sensor output value exceeding 1.76 MPa. • Sticking during braking ▪ While the vehicle is traveling at a speed of 40 km/ h { 25 mph} or more, the amount of fluctuation in the brake fluid pressure sensor

value is detected **5 times** to be **0.048 MPa or less** until the vehicle speed reaches **0 km/h { 0 mph}** and the brake switch ON.

C0044:66

- While the vehicle is traveling at a speed of **10 km/h { 6.2 mph}** or more, a brake fluid pressure sensor signal value of **1,000 MPa/s or more** is detected **7 times or more** during a **5 s** period.
- POSSIBLE CAUSE**
- STOP 10 A fuse malfunction
 - Open or short circuit in wiring harness between the brake switch and DSC HU/CM terminal C
 - Brake switch malfunction
 - DSC HU/CM malfunction
 - Brake fluid pressure sensor malfunction
 - Short or open circuit in brake fluid pressure sensor circuit



Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT FUSE - Switch the ignition to off. - Remove the STOP 10 A fuse. - Inspect the fuse. - Is there any malfunction?	Yes Replace the fuse, then go to Step 6.
		No Install the fuse, then go to the next step.
2	VERIFY OPEN OR SHORT CIRCUIT IN BRAKE SWITCH SIGNAL - Switch the ignition to ON. - Measure the voltage between the DSC HU/CM terminal C and body ground when the brake pedal is depressed and released: Voltage Brake pedal depressed: B+ Brake pedal released: 1 V or less - Is the voltage normal?	Yes Go to Step 6.
		No If it is B+ under any condition, then go to the next step. If it is 1 V or less under any condition, then go to Step 4.
3	INSPECT BRAKE SWITCH SIGNAL FOR SHORT TO POWER SUPPLY CIRCUIT - Disconnect the brake switch connector. - Measure voltage between the brake switch connector terminal D (vehicle harness-side) and body ground. - Is the voltage 1 V or less?	Yes Go to Step 5.
		No Repair or replace the wiring harness between the DSC HU/CM and brake switch, then go to Step 6
4	INSPECT BRAKE SWITCH SIGNAL FOR OPEN CIRCUIT - Disconnect the DSC HU/CM connector. - Disconnect the brake switch connector. - Inspect continuity between the DSC HU/CM connector terminal C (vehicle harness-side) and brake switch terminal D. - Is there continuity?	Yes Go to the next step.
		No Repair or replace the wiring harness between the DSC HU/CM and brake switch, then go to Step 6.
5	INSPECT BRAKE SWITCH - Inspect the brake switch. (See BRAKE SWITCH INSPECTION.) - Is the brake switch normal?	Yes Go to the next step.
		No Replace the brake switch, then go to the next step. (See BRAKE PEDAL REMOVAL/ INSTALLATION .)

6	VERIFY NO ABNORMALITY ON BRAKE FLUID PRESSURE SENSOR • Reconnect all disconnected connectors. • Clear the DTCs from the memory. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • Start the engine and drive the vehicle at 40 km/ h { 25 mph} or more. • Gradually slow down and stop the vehicle. • Perform the DSC DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • Are the same DTCs present?	Yes	Repeat the inspection from Step 1.
		No	Go to the next step.
7	VERIFY THAT NO OTHER DTCS ARE PRESENT • Are any other DTCs output?	Yes	Go to the applicable DTC inspection.
		No	DTC troubleshooting completed.

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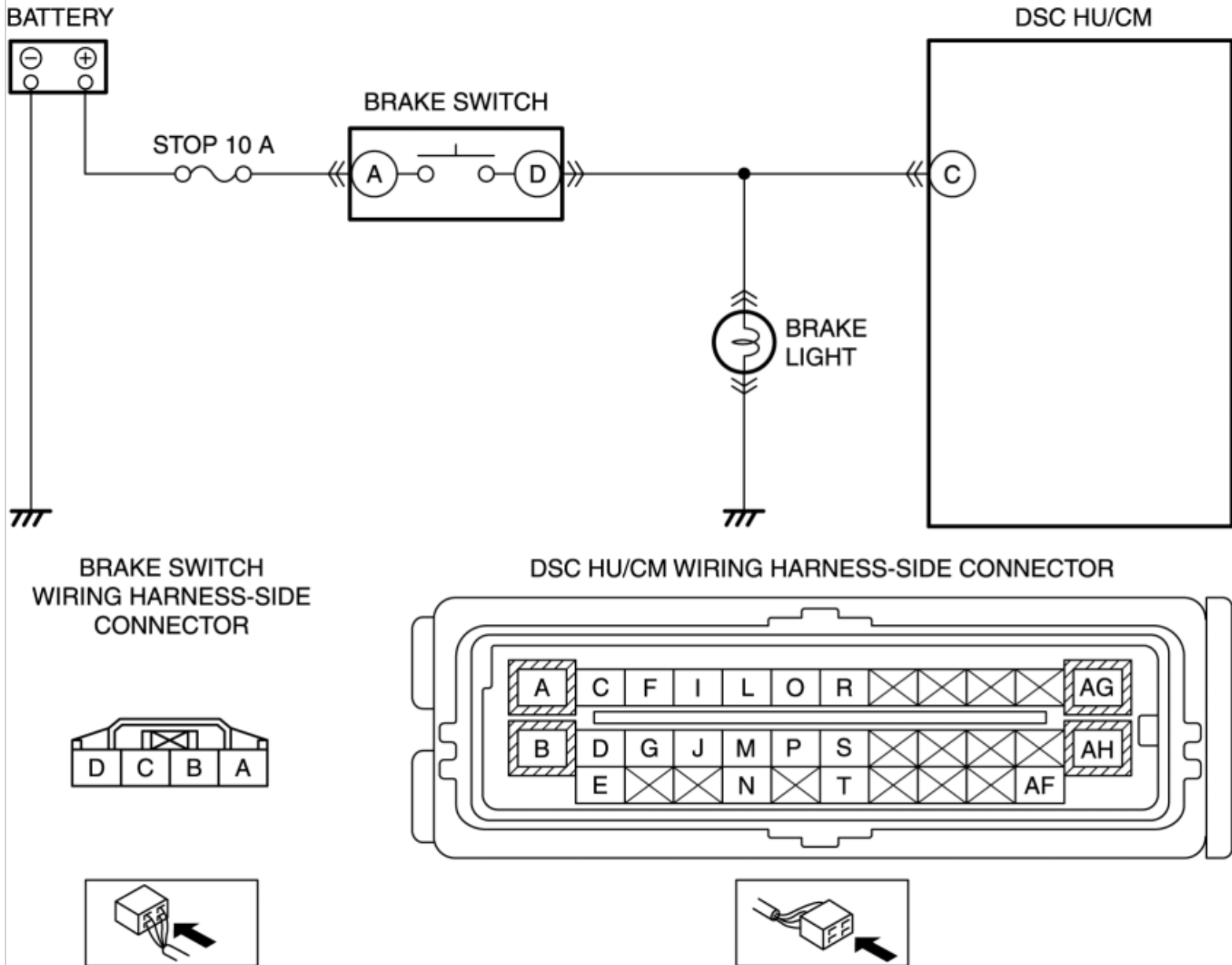
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