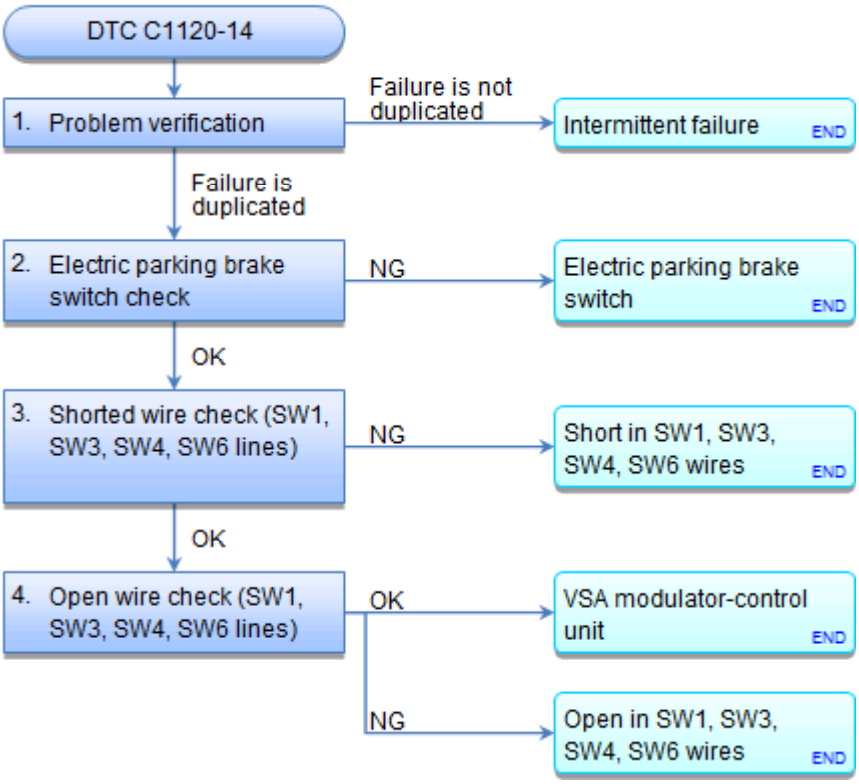
DTC Troubleshooting: C1120-14



DTC C1120-14: Electric Parking Brake Switch Circuit Malfunction

NOTE: Before you troubleshoot, review the general troubleshooting information.

DTC Description	DTC	Freeze Frame
C1120-14 Electric Parking Brake Switch Circuit Malfunction		

DTCs (VSA)

1. Problem verification:

-1. Turn the vehicle to the ON mode.

-2. Clear the DTC with the HDS.

Clear DTCs

-3. Turn the vehicle to the OFF (LOCK) mode, then to the ON mode.

-4. Check the parameter(s) below with the HDS.

Signal	Current conditions	
	Values	Unit
Electric Parking Brake Switch Status		

Is there INVALID indicated?

YES The failure is duplicated. Go to step 2.

NO Intermittent failure, the system is OK at this time. Refer to intermittent failures troubleshooting. If the freeze data/on-board snapshot of this DTC is recorded, try to reproduce the failure under the same conditions with the Freeze data/on-board snapshot.■

2. Electric parking brake switch check:

-1. Turn the vehicle to the OFF (LOCK) mode.

-2. Check the electric parking brake switch.

Is the electric parking brake switch OK?

YES Go to step 3.

NO Replace the electric parking brake switch.■

3. Shorted wire check (SW1, SW3, SW4, SW6 lines):

-1. Disconnect the following connectors.
Electric parking brake switch 8P connector
VSA modulator-control unit 46P connector

-2. Check for continuity between the following test points and body ground individually.
Test condition Vehicle OFF (LOCK) mode
Electric parking brake switch 8P connector: disconnected
VSA modulator-control unit 46P connector: disconnected

Connector	Test circuit	Terminal
VSA modulator-control unit 46P connector	SW1	No. 26
	SW3	No. 27
	SW4	No. 28
	SW6	No. 29

Is there continuity?

YES Repair a short to body ground in the wires between the VSA modulator-control unit and the electric parking brake switch.■

NO The SW1, SW3, SW4, SW6 wires are not shorted. Go to step 4.

4. Open wire check (SW1, SW3, SW4, SW6 lines):

-1. Check for continuity between test points 1 and 2.
Test condition Vehicle OFF (LOCK) mode
Electric parking brake switch 8P connector: disconnected
VSA modulator-control unit 46P connector: disconnected
Test point 1 Electric parking brake switch 8P connector No. 1
Test point 2 VSA modulator-control unit 46P connector No. 26

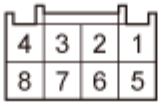
Test point 1 Electric parking brake switch 8P connector No. 4
Test point 2 VSA modulator-control unit 46P connector No. 27

Test point 1 Electric parking brake switch 8P connector No. 8
Test point 2 VSA modulator-control unit 46P connector No. 28

Test point 1 Electric parking brake switch 8P connector No. 5

Test point 2 VSA modulator-control unit 46P connector No. 29

ELECTRIC PARKING BRAKE SWITCH 8P CONNECTOR



Wire side of female terminals

Is there continuity?

YES Check for loose terminals and poor connections in the VSA modulator-control unit 46P connector. Check for any authorized service information related to the DTCs or symptoms you are troubleshooting. If they are OK, replace the VSA modulator-control unit.■

NO Repair an open in the wires between the VSA modulator-control unit and the electric parking brake switch.■