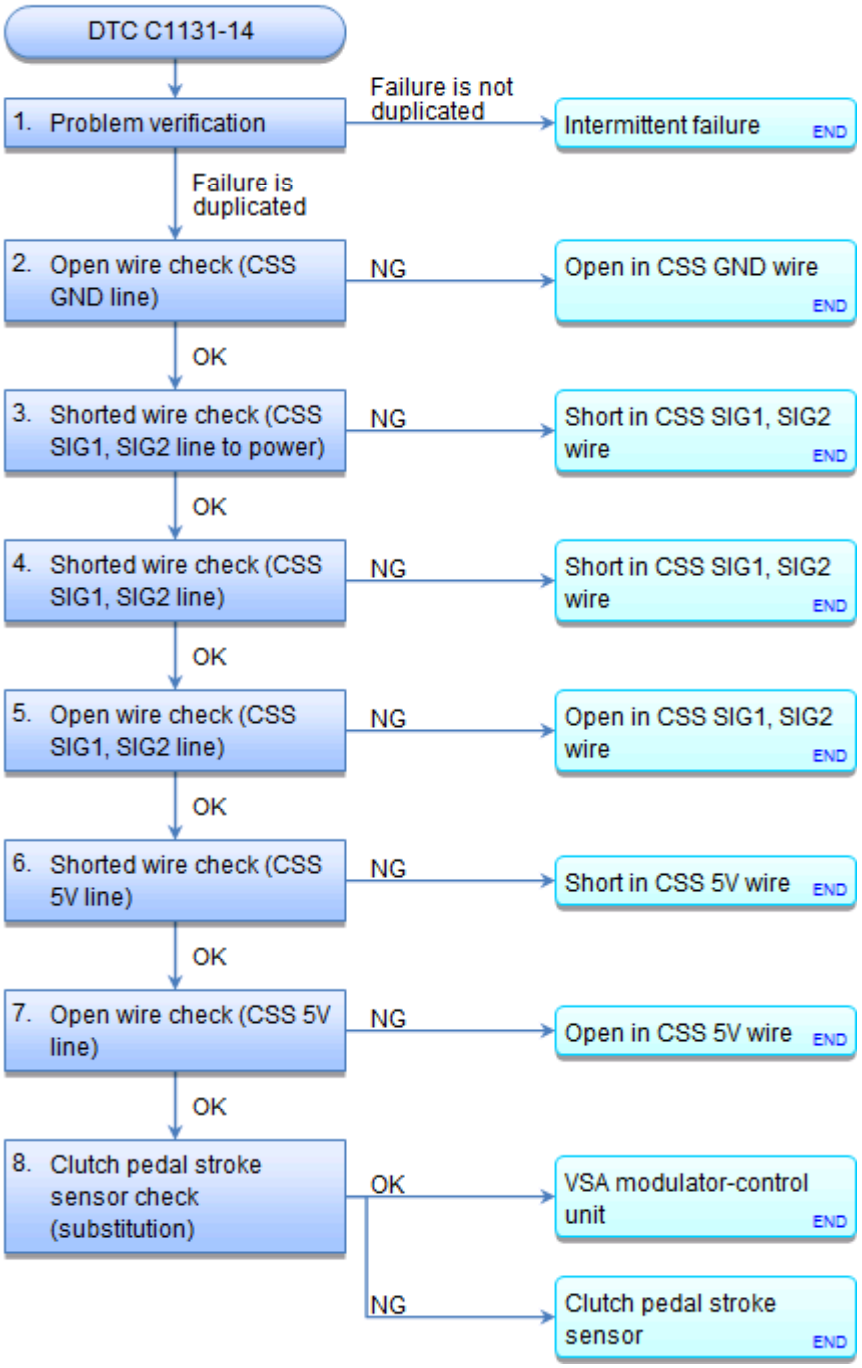
DTC Troubleshooting: C1131-14



DTC C1131-14: Clutch Pedal Stroke Sensor CPS1/CPS2 Open or Short

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

DTC Description	DTC	Freeze Frame
C1131-14 Clutch Pedal Stroke Sensor CPS1/CPS2 Open or Short		

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 for DTCs with the HDS.

DTC Description	DTC	Freeze Frame
C1131-14 Clutch Pedal Stroke Sensor CPS1/CPS2 Open or Short		

Is DTC C1131-14 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. Open wire check (CSS GND line):

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

-2. Disconnect the following connector.
Clutch pedal stroke sensor 4P connector

-3. Check for continuity between test points 1 and 2.

Test condition	Vehicle OFF (LOCK) mode Clutch pedal stroke sensor 4P connector: disconnected
Test point 1	Clutch pedal stroke sensor 4P connector No. 4
Test point 2	Body ground

CLUTCH PEDAL STROKE SENSOR 4P CONNECTOR

Terminal side of female terminals

Is there continuity?

YES Go to step 3.

NO Repair an open in the wire between the VSA modulator-control unit and the clutch pedal stroke sensor.■

3. Shorted wire check (CSS SIG1, SIG2 line to power):

-1. Turn the vehicle to the ON mode.

-2. Measure the voltage between test points 1 and 2.

Test condition	Vehicle ON mode Clutch pedal stroke sensor 4P connector: disconnected

CSS SIG1

Test point 1	Clutch pedal stroke sensor 4P connector No. 2
Test point 2	Body ground

CSS SIG2

Test point 1	Clutch pedal stroke sensor 4P connector No. 3
Test point 2	Body ground

CLUTCH PEDAL STROKE SENSOR 4P CONNECTOR

Terminal side of female terminals

Is there 4.85 V or more?

YES Repair a short to power in the wire between the VSA modulator-control unit and the clutch pedal stroke sensor.■

NO Go to step 4.

4. Shorted wire check (CSS SIG1, SIG2 line):

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

-2. Disconnect the following connector.
VSA modulator-control unit 46P connector

-3. Check for continuity between test points 1 and 2.

Test condition	Vehicle OFF (LOCK) mode VSA modulator-control unit 46P connector: disconnected Clutch pedal stroke sensor 4P connector: disconnected

CSS SIG1

Test point 1	VSA modulator-control unit 46P connector No. 18
Test point 2	Body ground

CSS SIG2

Test point 1	VSA modulator-control unit 46P connector No. 22
Test point 2	Body ground

Is there continuity?

YES Repair a short to body ground in the wire between the VSA modulator-control unit and the clutch pedal stroke sensor.■

NO Go to step 5.

5. Open wire check (CSS SIG1, SIG2 line):

-1. Check for continuity between test points 1 and 2.

Test condition	Vehicle OFF (LOCK) mode VSA modulator-control unit 46P connector: disconnected

Clutch pedal stroke sensor 4P connector: disconnected

CSS SIG1

Test point 1	VSA modulator-control unit 46P connector No. 18
Test point 2	Clutch pedal stroke sensor 4P connector No. 2

CSS SIG2

Test point 1	VSA modulator-control unit 46P connector No. 22
Test point 2	Clutch pedal stroke sensor 4P connector No. 3

CLUTCH PEDAL STROKE SENSOR 4P CONNECTOR

Terminal side of female terminals

Is there continuity?

YES Go to step 6.

NO Repair an open in the wire between the VSA modulator-control unit and the clutch pedal stroke sensor.■

6. Shorted wire check (CSS 5V line):

-1. Check for continuity between test points 1 and 2.

Test condition	Vehicle OFF (LOCK) mode Clutch pedal stroke sensor 4P connector: disconnected VSA modulator-control unit 46P connector: disconnected
Test point 1	VSA modulator-control unit 46P connector No. 33
Test point 2	Body ground

Is there continuity?

YES Repair a short to body ground in the wire between the VSA modulator-control unit and the clutch pedal stroke sensor.■

NO Go to step 7.

7. Open wire check (CSS 5V line):

-1. Check for continuity between test points 1 and 2.

Test condition	Vehicle OFF (LOCK) mode VSA modulator-control unit 46P connector: disconnected Clutch pedal stroke sensor 4P connector: disconnected
Test point 1	VSA modulator-control unit 46P connector No. 33
Test point 2	Clutch pedal stroke sensor 4P connector No. 1

CLUTCH PEDAL STROKE SENSOR 4P CONNECTOR

Terminal side of female terminals

Is there continuity?

YES Go to step 8.

NO Repair an open in the wire between the VSA modulator-control unit and the clutch pedal stroke sensor.■

8. Clutch pedal stroke sensor check (substitution):

-1. Substitute a known-good clutch pedal assembly.

-2. Reconnect the following connectors.
VSA modulator-control unit 46P connector
Clutch pedal stroke sensor 4P connector

-3. Turn the vehicle to the ON mode.

-4. Clear the DTC with the HDS.

Clear DTCs

-5. Turn the vehicle to the OFF (LOCK) mode, then to the ON mode.

-6. Check for DTCs with the HDS.

DTC Description	DTC	Freeze Frame
C1131-14 Clutch Pedal Stroke Sensor CPS1/CPS2 Open or Short		

Is DTC C1131-14 indicated?

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 Replace the original clutch pedal assembly.■