DTC TROUBLESHOOTING > DTC U0100: GAUGE CONTROL MODULE LOST COMMUNICATION WITH PCM (2013-15)

DTC Description	DTC
U0100 Gauge Control Module Lost Communication With PCM	
DTC (Gauge Control Module)	·
NOTE: • f you have any loss of communication DTCs for the PCM, troubleshoot those DTCs first. • f you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A - Refer to:Body Electrical Troubleshooting - B-CAN System Diagnosis Test Mode A - Initial Communication and DTC Checks (2013-15).	
 Problem verification: Clear the DTCs with the HDS. Clear DTCs 2. Press the engine start/stop button to select the OFF mode ONmode. 3. Wait for at least 6 seconds. 4. Check for DTCs with the HDS. 	and then the
DTC Description	DTC
U0100 Gauge Control Module Lost Communication With PCM	

Is DTC U0100 indicated?

YES

Go to step 2.

NO

Intermittent failure, the system is OK at this time. Check for loose or poor connections.

2. Open wire check (F CAN lines):

Press the engine start/stop button to select the OFF mode.

- 2. Jump the SCS line with the HDS.

SCS short

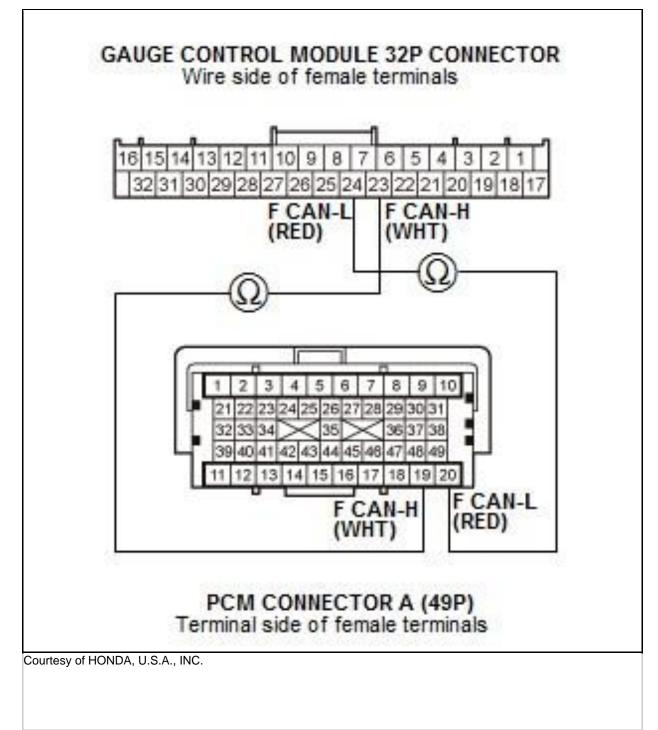
- 3. Disconnect the following connectors.

PCM connector A (49P) - Refer to: How to Troubleshoot the Fuel and Emissions Systems (2013-15), or How to Troubleshoot the A/T System (2013-15)

Gauge control module 32P connector

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

Test condition	OFF modePCM connector A (49P): disconnectedGauge control module 32P connector: disconnected
Test circuit	F CAN-H
Test point 1	Gauge control module 32P connector No. 23 (WHT)
Test point 2	PCM connector A (49P) No. 19 (WHT)
Test circuit	F CAN-L
Test point 1	Gauge control module 32P connector No. 24 (RED)
Test point 2	PCM connector A (49P) No. 20 (RED)



YES

The F CAN wires are OK. Replace the gauge control module .

NO

An open or poor connection in the F CAN wires between the PCM and the gauge control module.

DTC TROUBLESHOOTING > DTC U0100, U0104, U0114, U0122, U0127, U0131, U0151, U1100: GAUGE CONTROL MODULE LOST COMMUNICATION (2016-18)

DTC Troubleshooting: U0100, U0104, U0114, U0122, U0127, U0131, U0151, U1100 DTC U0100 : Gauge Control Module Lost Communication With ENG/AT DTC U0104 : Gauge Control Module Lost Communication With Driving Support System Control Unit DTC U0114 : Gauge Control Module Lost Communication With All Wheel Drive Control

Module **DTC U0122** : Gauge Control Module Lost Communication With VSA Modulator-

Control Unit **DTC U0127** : Gauge Control Module Lost Communication With TPMS Control Unit **DTC U0131** : Gauge Control Module Lost Communication With EPS Unit **DTC U0151** : Gauge Control Module Lost Communication With SRS Unit **DTC U1100**

Gauge Control Module Lost Communication With Driving Support System Control Unit

DTC Description	DTC
U0100 Gauge control module lost communication with ENG/AT	
U0104 Gauge Control Module Lost Communication With Driving	
Support System Control Unit	
U0114 Gauge control module lost communication with All Wheel Drive Control Module	
U0122 Gauge control module lost communication with VSA modulator-control unit	
U0127 Gauge control module lost communication with TPMS control unit	
U0131 Gauge control module lost communication with EPS Unit	
U0151 Gauge control module lost communication with SRS unit	
DTC Description	DTC
U1100 Gauge Control Module Lost Communication With Driving Support System Control Unit	
Support System Control Onit	

NOTE:

Before you troubleshoot, review the general troubleshooting information .
According to the detected DTC(s), check for the power circuit and the ground circuit of the control unit which cannot communicate with the gauge control module.

 Refer to the DTC shown on the display, then inspect the connectors and terminals based on the instructions.

DTC (Gauge Control Module)

1. Problem verification:

Press the engine start/stop button to select the ON mode.

- 2. Clear the DTC with the HDS.

Clear DTCs

- 3. Press the engine start/stop button to select the OFF mode and then the ONmode.
- 4. Check for Pending or Confirmed DTCs with the HDS.

DTC Description	DTC
U0100 Gauge control module lost communication with ENG/AT	
U0104 Gauge Control Module Lost Communication With Driving Support System Control Unit	
U0114 Gauge control module lost communication with All Wheel Drive Control Module	
U0122 Gauge control module lost communication with VSA modulator-control unit	
U0127 Gauge control module lost communication with TPMS control unit	
U0131 Gauge control module lost communication with EPS Unit	

U0151 Gauge control module lost communication with SRS unit	
U1100 Gauge Control Module Lost Communication With Driving Support System Control Unit	

Are any DTCs indicated?

YES

The failure is duplicated. Go to step 2.

NO

Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the transmitting control units and the gauge control module. 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 (F CAN-H line, F CAN-L line):

Press the engine start/stop button to select the OFF mode.

- 2. U0100: Jump the SCS line with the HDS, and wait for at least 1 minute. SCS Short

U0151: Do the battery terminal disconnection procedure , and wait for at least 3 minutes.

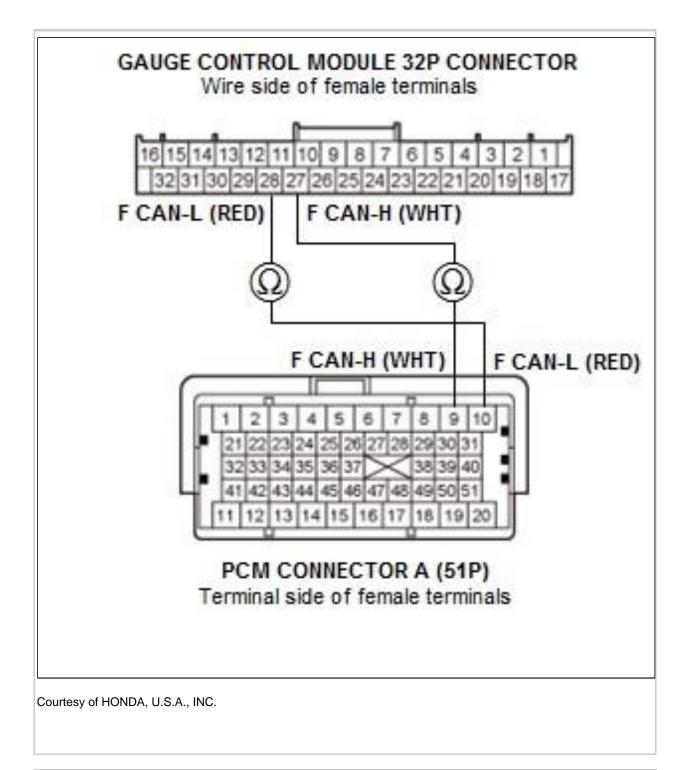
- 3. According to the detected DTC on the following table, disconnect the transmittingcontrol unit connector(s).

	-
DTC	Connector
-	Gauge control module 32P connector
U0100	PCM connector A (51P)
U0104	Multipurpose camera unit 20P connector
U0114	AWD control unit 24P connector
U0122	VSA modulator-control unit 38P connector
U0127	Keyless access/TPMS control unit connector C (20P)
U0131	EPS control unit connector A (11P)
U0151	SRS unit connector A (39P)
U1100	Multipurpose camera unit 20P connector
	or continuity between the receiving control unit and the transmitting

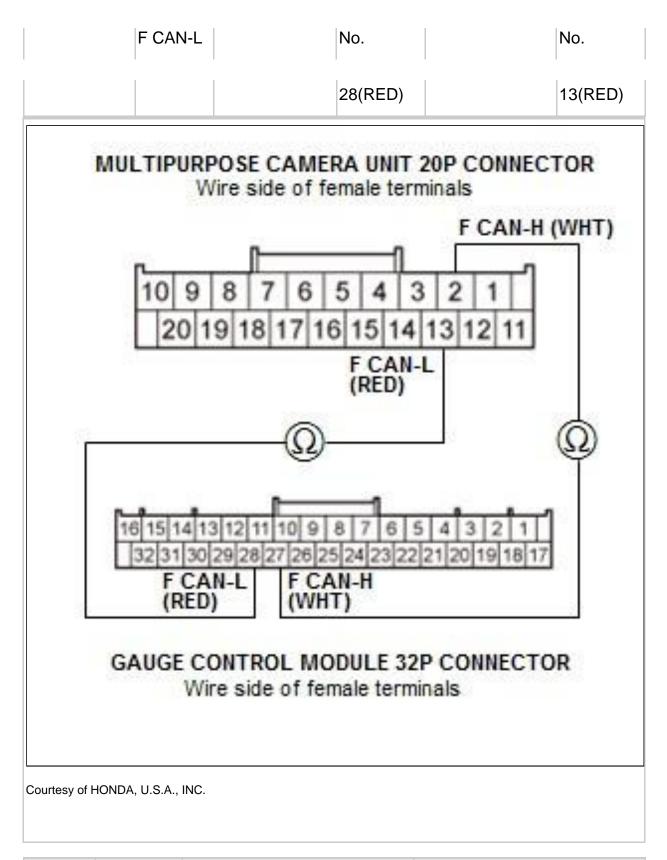
controlunit on the F CAN-H circuit and the F CAN-L circuit.

Test condition	OFF mode
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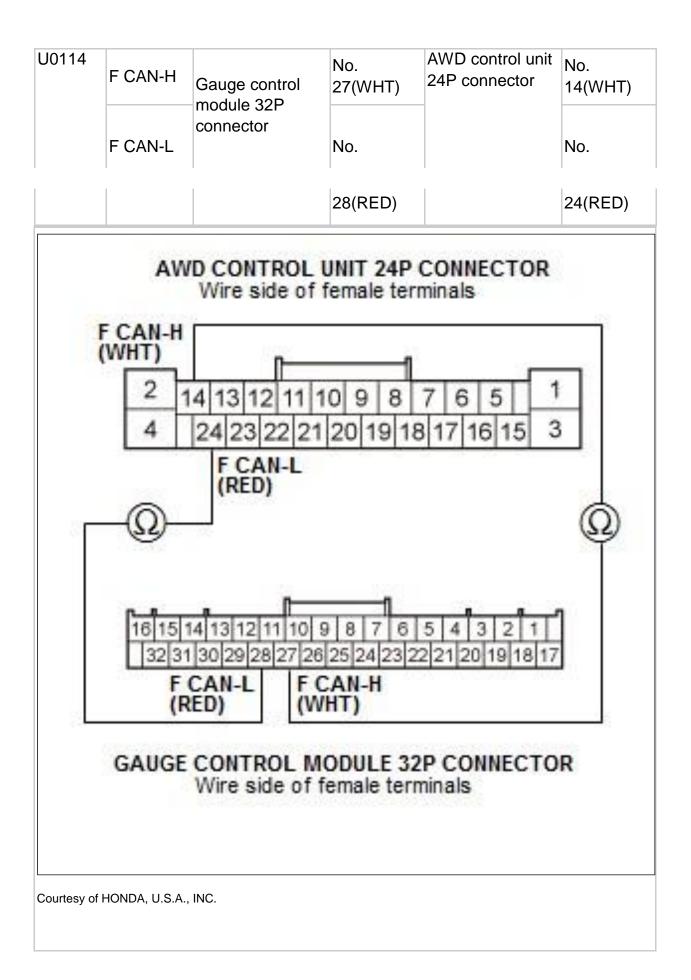
		Gau	Gauge control module 32P connector: disconnected					
Transmitting control unit connector(s) for ind disconnected					(s) for indicated DT	Cs:		
DTO Circu		it	Receiving control unit		Transmitting control unit			
DTC name	9	Connector	Terminal	Connector	Terminal			
U0100 F CAN	F CAN	I-H	Gauge control	No. 27(WHT)	PCM connector A (51P)	No. 9(WHT)		
	I-L	module 32P connector	No.		No.			
				28(RED)		10(RED)		



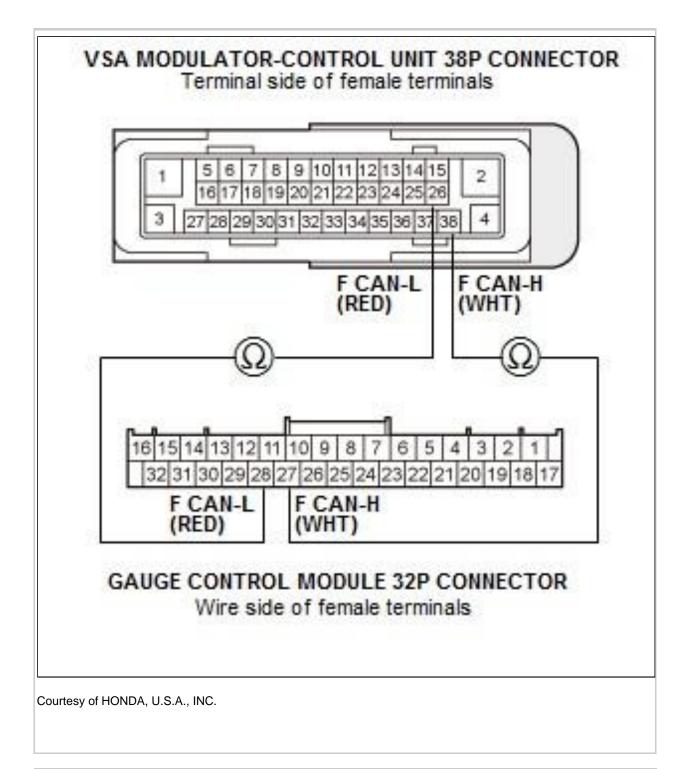
DTC	Circuit name	Receiving control unit		Transmitting control unit	
		Connector	Terminal	Connector	Terminal
U0104U1100	F CAN-H	Gauge control module 32P connector	No. 27(WHT)	Multipurpose camera unit 20P connector	No. 2(WHT)



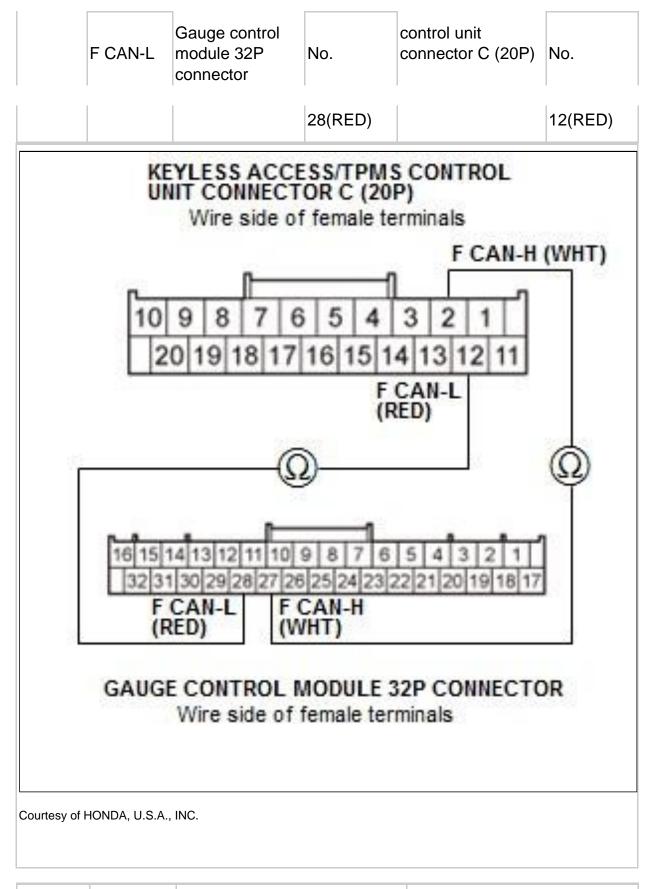
DTC	Circuit	Receiving control unit		Transmitting control unit	
DIC	name	Connector	Terminal	Connector	Terminal



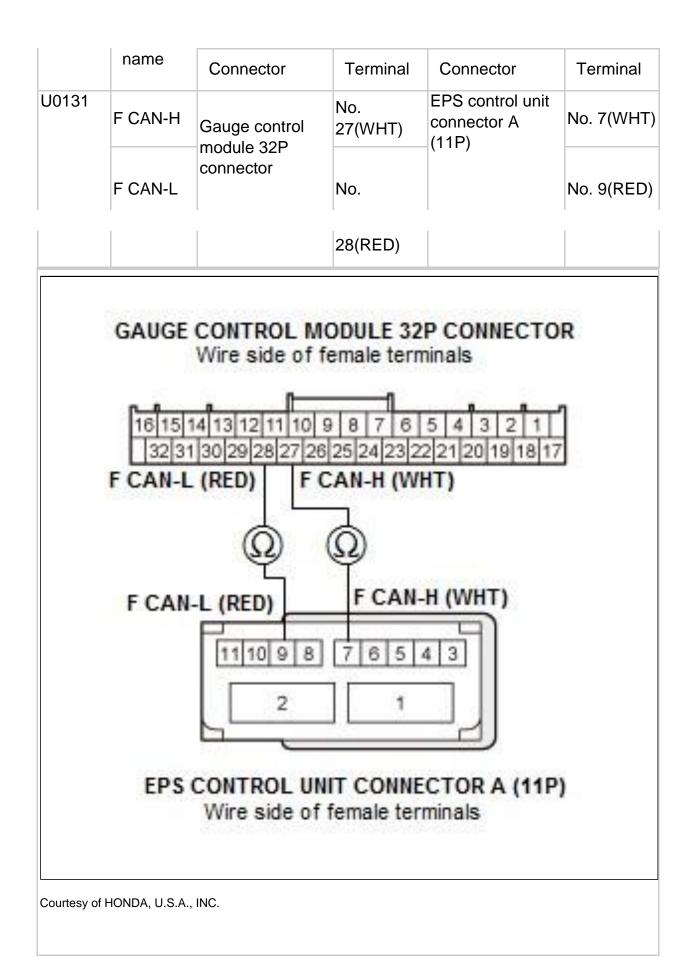
DTC Circuit name	Circuit	Receiving contro	ol unit Transmitting control uni		trol unit
	Connector	Terminal	Connector	Terminal	
U0122	F CAN-H	Gauge control module 32P	No. 27(WHT)	modulatorcontrol	No. 38(WHT)
F C	F CAN-L	connector	No.	unit 38P connector	No.
			28(RED)		26(RED)



DTC Circuit name	Circuit	Receiving control unit		Transmitting control unit	
	Connector	Terminal	Connector	Terminal	
U0127	F CAN-H		No. 27(WHT)	Keyless access/TPMS	No. 2(WHT)

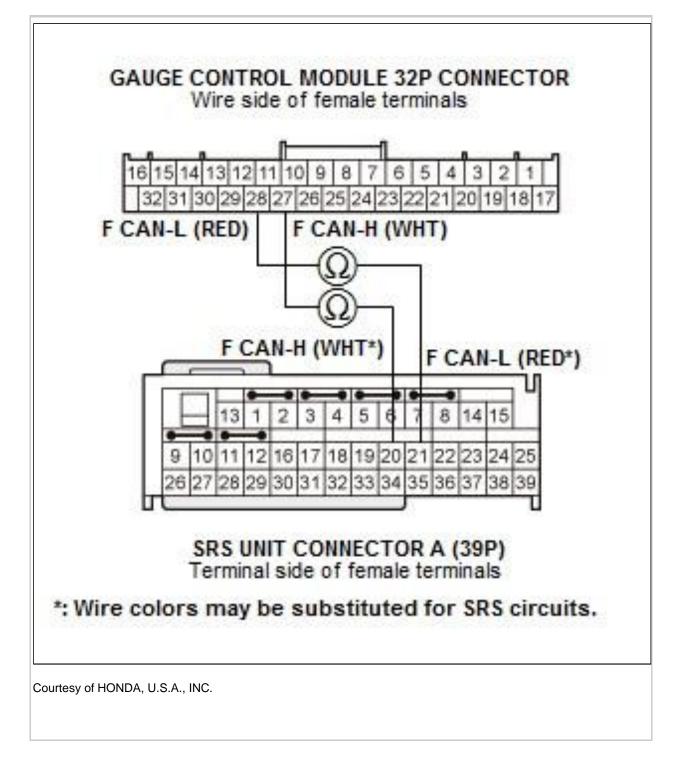


DTC	Circuit	Receiving control unit	Transmitting control unit
		······	



DTC	Circuit	Receiving control unit		Transmitting con	control unit	
DIC	name	Connector	Terminal	Connector	onnector Terminal	
U0151	F CAN-H	Gauge control module 32P connector	No. 27(WHT)	connector A (39P)	No. 20(WHT [*])	
00151	F CAN-L		No. 28(RED)		No. 21(RED [*])	

*: Wire colors may be substituted for SRS circuits.



YES

The F CAN-H wire and the F CAN-L wire are OK.Refer to the DTC shown on the display, then update, substitute, or replace the control unit based on the instructions (see table).

DTC	Operation for transmitting control unit	
U0100 Check for poor connections or loose terminals at the gauge control		

so U(co	odule and the PCM. Update the PCM if it does not have the latest ftware, or substitute a known-good PCM, then recheck. If DTC 0100 goes away and the PCM was updated, troubleshooting is mplete. If DTC U0100 goes away and the PCM was substituted, place the original PCM.
DTC	Operation for transmitting control unit
U0104U1100	Check for poor connections or loose terminals at the CAN gateway and the multipurpose camera unit. Update the multipurpose camera unit if it does not have the latest software, or substitute a known- good multipurpose camera unit, then recheck. If DTC U0104 or U1100 goes away and the multipurpose camera unit was updated troubleshooting is complete. If DTC U0104 or U1100 goes away a the multipurpose camera unit was substituted, replace the original multipurpose camera unit.
U0114	Check for poor connections or loose terminals at the gauge contro- module and the AWD control unit. Update the AWD control unit if i does not have the latest software, or substitute a known-good AW control unit , then recheck. If DTC U0114 goes away and the AWD control unit was updated, troubleshooting is complete. If DTC U01 goes away and the AWD control unit was substituted, replace the original AWD control unit .
U0122	Check for poor connections or loose terminals at the gauge control module and the VSA modulator-control unit. Update the VSA modulator-control unit if it does not have the latest software, or substitute a known-good VSA modulator-control unit , then rechec If DTC U0122 goes away and the VSA modulator-control unit was updated, troubleshooting is complete. If DTC U0122 goes away ar the VSA modulator-control unit was substituted, replace the origina VSA modulator-control unit .
U0127	Check for poor connections or loose terminals at the gauge control module and the keyless access/TPMS control unit. Substitute a known-good keyless access/TPMS control unit , then recheck. If DTC U0127 goes away and the keyless access/TPMS control unit was updated, troubleshooting is complete. If DTC U0127 goes awa and the keyless access/TPMS control unit was substituted, replace the original keyless access/TPMS control unit .

U0131	Check for poor connections or loose terminals at the gauge control module and the EPS control unit. Update the EPS control unit if it does not have the latest software, or substitute a known-good EPS control unit , then recheck. If DTC U0131 goes away and the EPS control unit was updated, troubleshooting is complete. If DTC U0131 goes away and the EPS control unit was substituted, replace the original EPS control unit .
U0151	Check for poor connections or loose terminals at the gauge control module and the SRS unit. Update the SRS unit if it does not have the latest software, or substitute a known-good SRS unit , then recheck. If DTC U0151 goes away and the SRS unit was updated, troubleshooting is complete. If DTC U0151 goes away and the SRS unit unit was substituted, replace the original SRS unit .

NO

Repair an open in the F CAN-H wire and/or the F CAN-L wire between the gauge control module and the transmitting control unit.

DTC TROUBLESHOOTING > DTC U0100, U0114, U0122, U0127, U0131, U0151: GAUGE CONTROL MODULE LOST COMMUNICATION (2016-18)

DTC U0100 : Gauge Control Module Lost Communication With ENG/AT **DTC U0114** : Gauge Control Module Lost Communication With All Wheel Drive Control Module **DTC U0122** : Gauge Control Module Lost Communication With VSA Modulator-Control Unit **DTC U0127** : Gauge Control Module Lost Communication With TPMS Control Unit **DTC U0131** : Gauge Control Module Lost Communication With EPS Unit **DTC U0151**

Gauge Control Module Lost Communication With SRS Unit

DTC Description	DTC
U0100 Gauge control module lost communication with ENG/AT	
U0114 Gauge control module lost communication with All Wheel Drive Control Module	
U0122 Gauge control module lost communication with VSA modulator-control unit	
U0127 Gauge control module lost communication with TPMS control unit	

U0131 Gauge control module lost communication with EPS Unit	
U0151 Gauge control module lost communication with SRS unit	

NOTE:

- Before you troubleshoot, review the general troubleshooting information .
- According to the detected DTC(s), check for the power circuit and the ground circuit of the control unit which cannot communicate with the gauge control module.
- Refer to the DTC shown on the display, then inspect the connectors and terminals based on the instructions.

DTC (Gauge Control Module)

1. Problem verification:

Press the engine start/stop button to select the ON mode.

- 2. Clear the DTC with the HDS.

- **Clear DTCs**
- 3. Press the engine start/stop button to select the OFF mode and then the ONmode.
- 4. Check for Pending or Confirmed DTCs with the HDS.

DTC Description	DTC
U0100 Gauge control module lost communication with ENG/AT	
U0114 Gauge control module lost communication with All Wheel Drive Control Module	
U0122 Gauge control module lost communication with VSA modulator-control unit	
U0127 Gauge control module lost communication with TPMS control unit	
U0131 Gauge control module lost communication with EPS Unit	

U0151 Gauge control module lost communication with SRS unit

Are any DTCs indicated

YES

The failure is duplicated. Go to step 2.

NO

Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the transmitting control units and the gauge control module. 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 (F CAN-H line, F CAN-L line):

Press the engine start/stop button to select the OFF mode.

- 2. U0100: Jump the SCS line with the HDS, and wait for at least 1 minute. SCS Short

U0151: Do the battery terminal disconnection procedure , and wait for at least 3 minutes.

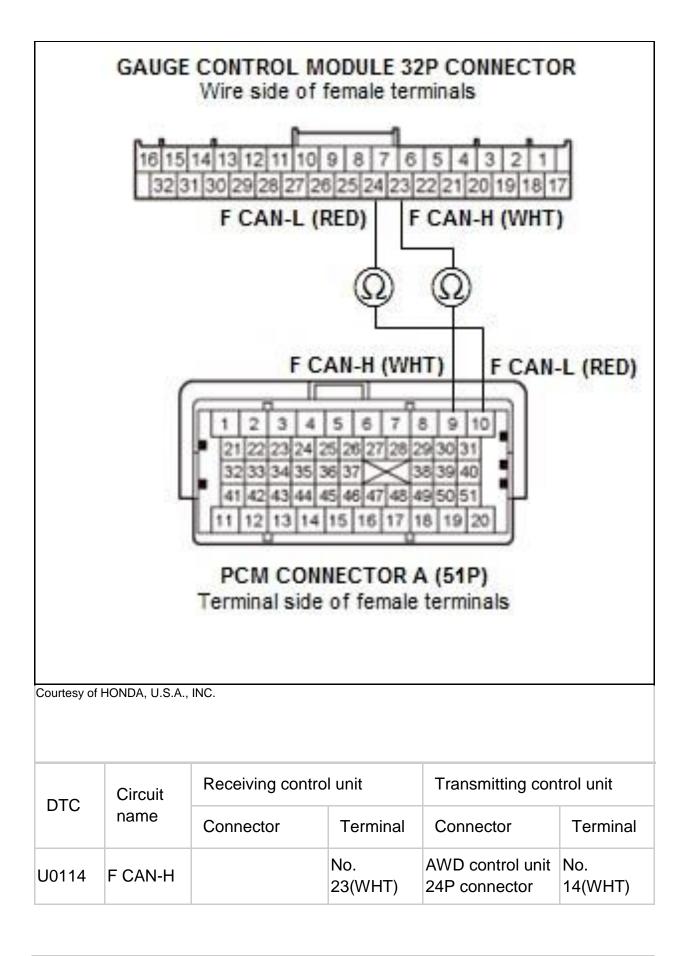
- 3. According to the detected DTC on the following table, disconnect the transmittingcontrol unit connector(s).

DTC	Connector	
-	Gauge control module 32P connector	
U0100	PCM connector A (51P)	
U0114	AWD control unit 24P connector	
U0122	VSA modulator-control unit 38P connector	
U0127	Keyless access/TPMS control unit connector C (20P)	
U0131	EPS control unit connector A (11P)	
U0151	SRS unit connector A (39P)	

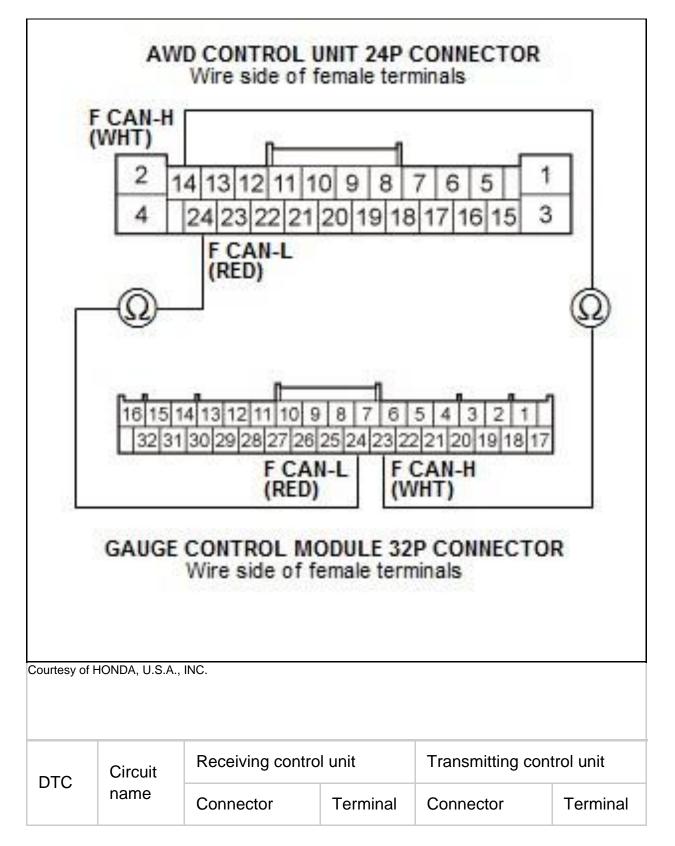
- 4. Check for continuity between the receiving control unit and the transmitting controlunit on the F CAN-H circuit and the F CAN-L circuit.

Test condition		OFF mode		
		Gauge control module 32P connector: disconnected		
			smitting control unit connector(s) for indicated DTCs:
DTC	Circu	lit	Receiving control unit	Transmitting control unit

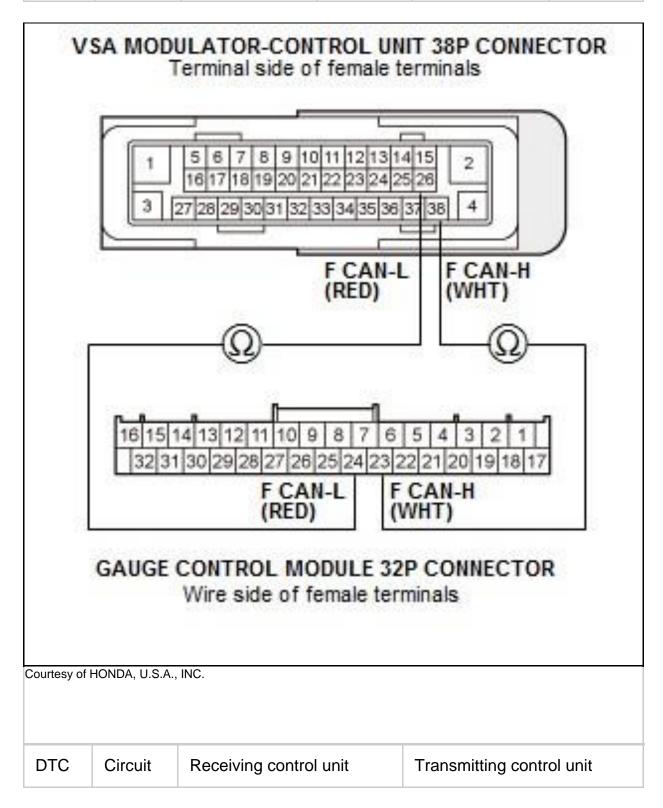
	name	Connector	Terminal	Connector	Terminal
110400	F CAN-H	No. Gauge control 23(WHT) PCM connector A	No. 9(WHT)		
U0100	F CAN-L	module 32P connector	No. 24(RED)	(51P)	No. 10(RED)



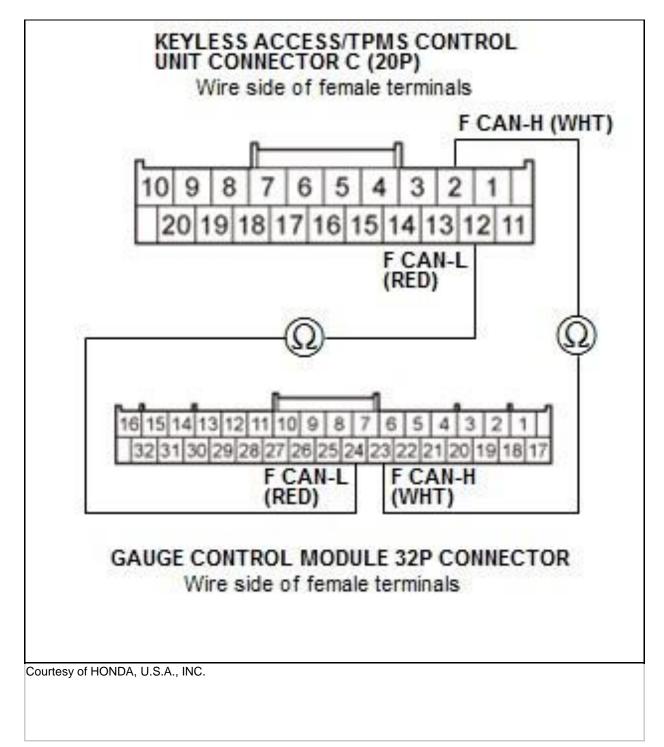
F CAN-L Gauge control F CAN-L module 32P connector	No. 24(RED)	No. 24(RED)
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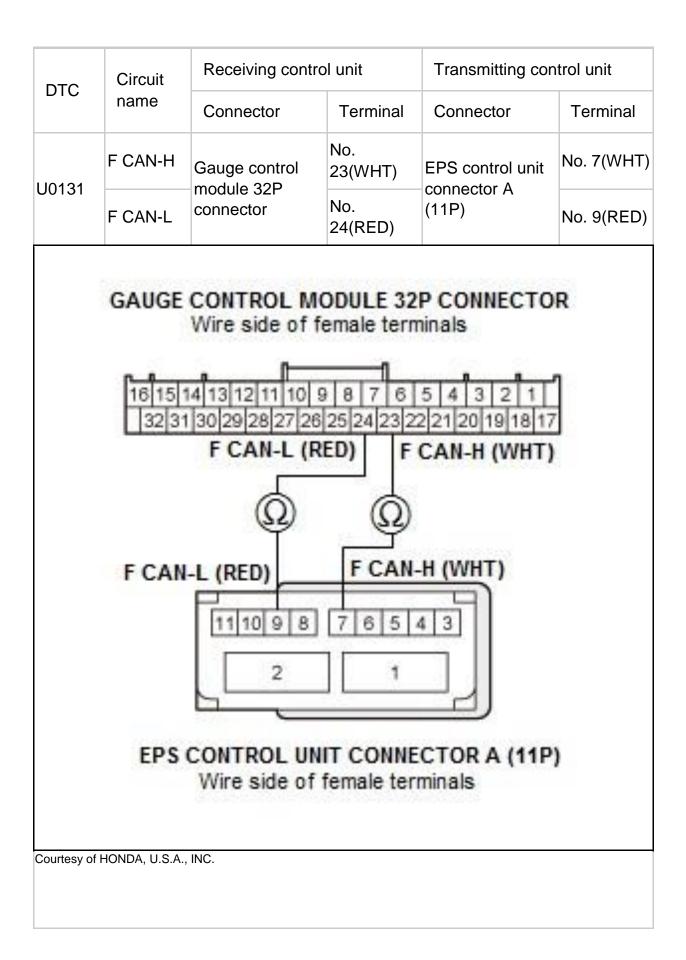


U0122	F CAN-H	Gauge control module 32P	No. 23(WHT)	wodulatorcontrol unit 38P	No. 38(WHT)
00122	F CAN-L	connector	INO.		No. 26(RED)



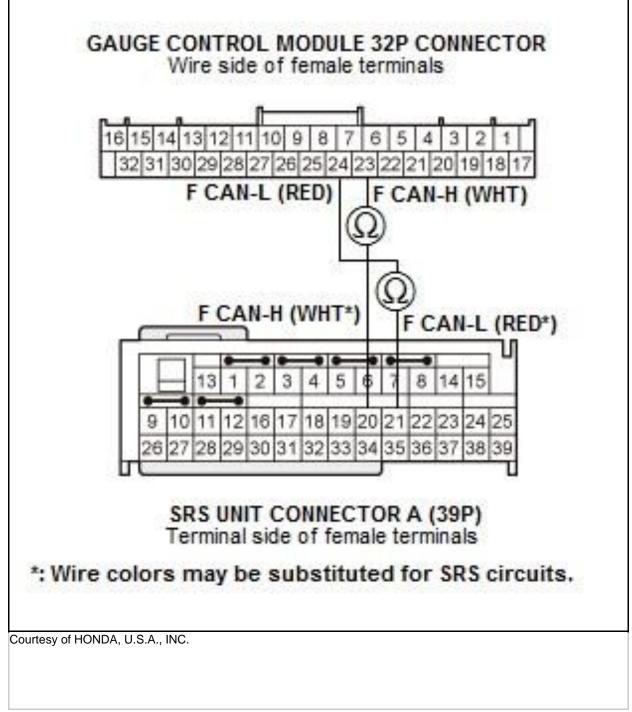
		name	Connector	Terminal	Connector	Terminal
	110407	F CAN-H	Gauge control	No. 23(WHT)	Keyless access/TPMS	No. 2(WHT)
U0127	F CAN-L	module 32P connector	No. 24(RED)	a = m m = a + a m O (OOD)	No. 12(RED)	





DTC	Circuit	Receiving control unit		Transmitting con	ntrol unit	
	name	Connector	Terminal	Connector	Terminal	
U0151	F CAN-H	Gauge control module 32P	No. 23(WHT)	SRS UNIT connector A	No. 20(WHT [*])	
	F CAN-L	connector	No. 24(RED)	(39P)	No. 21(RED [*])	

*: Wire colors may be substituted for SRS circuits.



YES

The F CAN-H wire and the F CAN-L wire are OK.Refer to the DTC shown on the display, then update, substitute, or replace the control unit based on the instructions (see table).

|--|

U0100	Check for poor connections or loose terminals at the gauge control module and the PCM. Update the PCM if it does not have the latest software, or substitute a known-good PCM, then recheck. If DTC U0100 goes away and the PCM was updated, troubleshooting is complete. If DTC U0100 goes away and the PCM was substituted, replace the original PCM.	
U0114	Check for poor connections or loose terminals at the gauge control module and the AWD control unit. Update the AWD control unit if it does not have the latest software, or substitute a known-good AWD control unit , then recheck. If DTC U0114 goes away and the AWD control unit was updated, troubleshooting is complete. If DTC U0114 goes away and the AWD control unit the AWD control unit was substituted, replace the original AWD control unit .	
U0122	Check for poor connections or loose terminals at the gauge control module and the VSA modulator-control unit. Update the VSA modulatorcontrol unit if it does not have the latest software, or substitute a knowngood VSA modulator-control unit , then recheck. If DTC U0122 goes away and the VSA modulator-control unit was updated, troubleshooting is complete. If DTC U0122 goes away and the VSA modulator-control unit was substituted, replace the original VSA modulator-control unit .	
U0127	Check for poor connections or loose terminals at the gauge control module and the keyless access/TPMS control unit. Substitute a knowngood keyless access/TPMS control unit , then recheck. If DTC U0127 goes away and the keyless access/TPMS control unit was updated, troubleshooting is complete. If DTC U0127 goes away and keyless access/TPMS control unit was substituted, replace the origin keyless access/TPMS control unit .	
U0131	Check for poor connections or loose terminals at the gauge control module and the EPS control unit. Update the EPS control unit if it does not have the latest software, or substitute a known-good EPS control unit , then recheck. If DTC U0131 goes away and the EPS control unit was updated, troubleshooting is complete. If DTC U0131 goes away and the EPS control unit was substituted, replace the original EPS control unit .	

U0151 Check for poor connections or loose terminals at the gauge control module and the SRS unit. Update the SRS unit if it does not have the latest software, or substitute a known-good SRS unit , then recheck. If DTC U0151 goes away and the SRS unit was updated, troubleshooting is complete. If DTC U0151 goes away and the SRS unit was substituted, replace the original SRS unit .

NO

Repair an open in the F CAN-H wire and/or the F CAN-L wire between the gauge control module and the transmitting control unit.

DTC TROUBLESHOOTING > DTC U0114: GAUGE CONTROL MODULE LOST COMMUNICATION WITH ALL WHEEL DRIVE CONTROL MODULE (2013-15)

DTC Description	DTC
U0114 Gauge Control Module Lost Communication With All Wheel Drive Control Module	

DTC (Gauge Control Module)

NOTE:

f you have any loss of communication DTCs for the PCM, troubleshoot those DTCs first.
f you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A - Refer to: Body Electrical Troubleshooting - B-CAN System Diagnosis Test Mode A - Initial Communication and DTC Checks (2013-15).

1. Problem verification:

Clear the DTCs with the HDS. Clear DTCs

- 2. Press the engine start/stop button to select the OFF mode and then the ONmode.
- 3. Wait for at least 6 seconds.
- 4. Check for DTCs with the HDS.

DTC Description

U0114 Gauge Control Module Lost Communication With All Wheel Drive Control Module

Is DTC U0114 indicated?

YES

Go to step 2.

NO

Intermittent failure, the system is OK at this time. Check for loose or poor connections.

2. Fuse check:

Check the following fuse.

Fuse	No. B6 (7.5 A)
Location	Under-dash fuse/relay box

Is the fuse OK?

YES

Go to step 3.

NO

Replace the fuse. If the fuse blows again, repair a short to ground in the No. B6 (7.5 A) fuse circuit.

3. Open wire check (IG1 OPTION line):

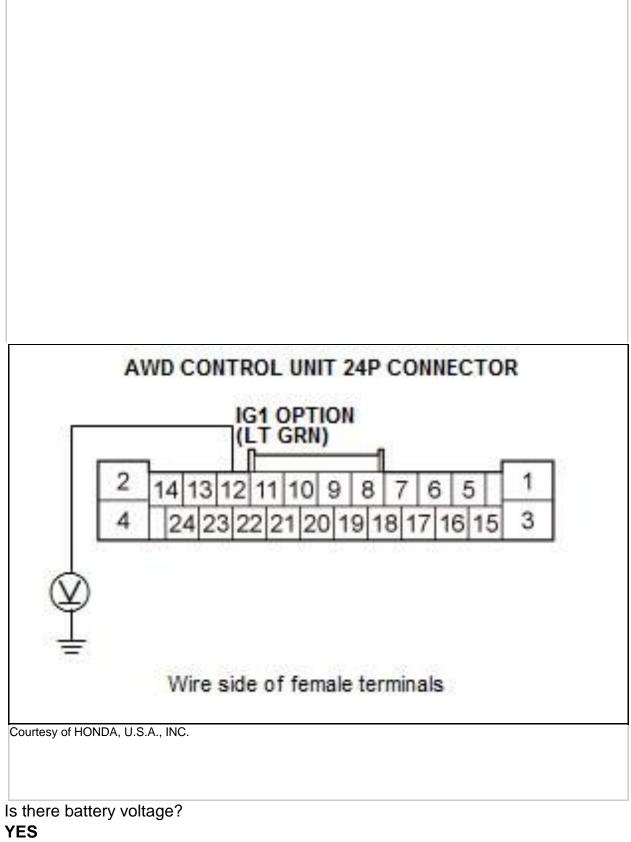
Press the engine start/stop button to select the OFF mode. - 2. Disconnect the following connector.

AWD control unit 24P connector

- 3. Press the engine start/stop button to select the ON mode.

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

Test condition	ON modeAWD control unit 24P connector: disconnected
Test circuit	IG1 OPTION
Test point 1	AWD control unit 24P connector No. 12 (LT GRN)
Test point 2	Body ground



The IG1 OPTION wire is OK. Go to step 4.

NO

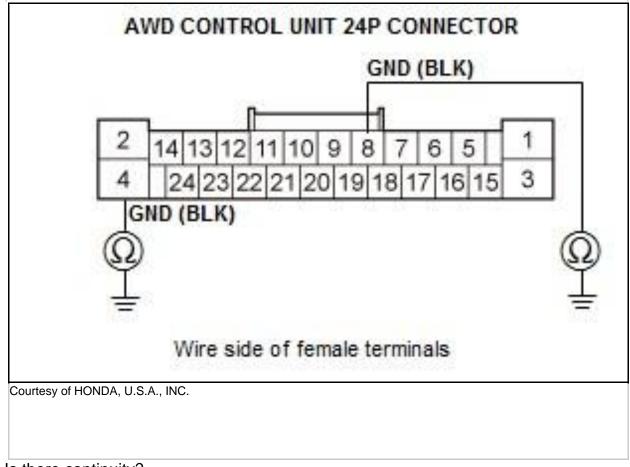
Repair an open or high resistance in the wire.

4. Open wire check (GND lines):

Press the engine start/stop button to select the OFF mode.

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

Test condition	OFF modeAWD control unit 24P connector: disconnected
Test circuit	GND
Test point 1	AWD control unit 24P connector No. 4 (BLK)
Test point 2	Body ground
Test circuit	GND
Test point 1	AWD control unit 24P connector No. 8 (BLK)
Test point 2	Body ground



Is there continuity?

YES

The GND wires are OK. Go to step 5.

NO

Repair an open or high resistance in the ground wire or poor ground (G603).

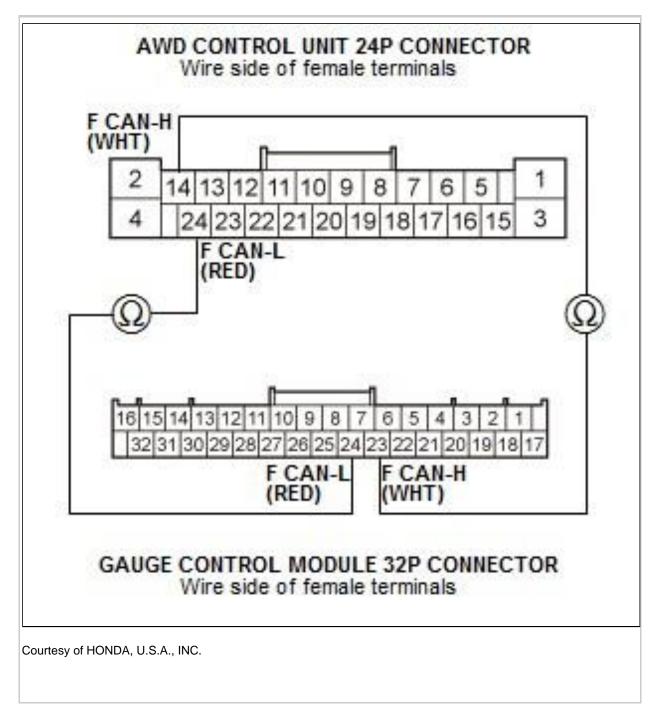
5. Open wire check (F CAN lines):

Disconnect the following connector.

Gauge control module 32P connector

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

Test condition	OFF modeAWD control unit 24P connector: disconnectedGauge control module 32P connector: disconnected
Test circuit	F CAN-H
Test point 1	AWD control unit 24P connector No. 14 (WHT)
Test point 2	Gauge control module 32P connector No. 23 (WHT)
Test circuit	F CAN-L
Test point 1	AWD control unit 24P connector No. 24 (RED)
Test point 2	Gauge control module 32P connector No. 24 (RED)



YES

The F CAN wires are OK. Replace the gauge control module .

NO

An open or poor connection in the F CAN wires between AWD control unit and the gauge control module.

DTC TROUBLESHOOTING > DTC U0122: GAUGE CONTROL MODULE LOST COMMUNICATION WITH VSA MODULATOR-CONTROL UNIT (VSA MESSAGE) (2013-15)

DTC Description	DTC
U0122 Gauge Control Module Lost Communication With VSA Modulator-Control Unit (VSA Message)	

DTC (Gauge Control Module) **NOTE:**

NOTE:

If you have any loss of communication DTCs for the PCM, troubleshoot those DTCs first.
If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System
Diagnosis Test Mode A - Refer to: Body Electrical
Troubleshooting - B-CAN System Diagnosis Test
Mode A - Initial Communication and DTC Checks
(2013-15).

1. Problem verification:

Clear the DTCs with the HDS.

- Clear DTCs
- 2. Press the engine start/stop button to select the OFF mode and then the ONmode.
- 3. Wait for at least 6 seconds.
- 4. Check for DTCs with the HDS.

DTC Descri	otion	DTC
U0122 Gauge VSA	e Control Module Lost Communication With	
Modulator-Co	ontrol Unit (VSA Message)	

Is DTC U0122 indicated?

YES

Go to step 2.

NO

Intermittent failure, the system is OK at this time. Check for loose or poor connections.

2. Fuse check:

Check the following fuse.

Fuse	No. B24 (7.5 A)
Location	Under-dash fuse/relay box

Is the fuse OK?

YES

Go to step 3.

NO

Replace the fuse. If the fuse blows again, repair a short to ground in the No. B24 (7.5 A) fuse circuit.

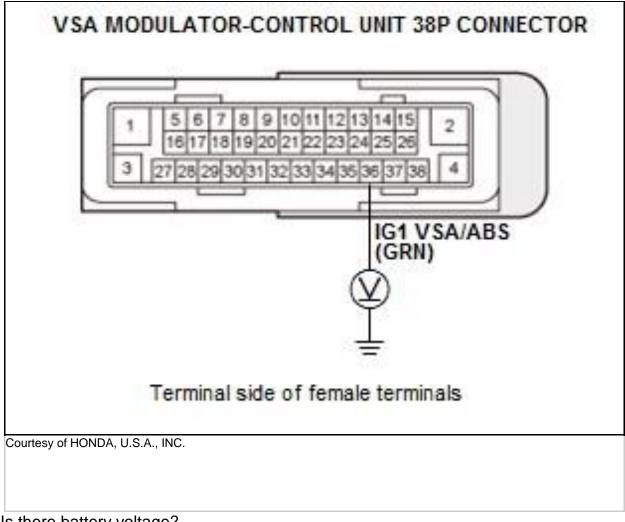
3. Open wire check (IG1 VSA/ABS line):

Press the engine start/stop button to select the OFF mode. - 2. Disconnect the following connector.

VSA modulator-control unit 38P connector

- 3. Press the engine start/stop button to select the ON mode.
- 4. Measure the voltage between test points 1 and 2.

Test condition	ON modeVSA modulator-control unit 38P connector: disconnected
Test circuit	IG1 VSA/ABS
Test point 1	VSA modulator-control unit 38P connector No. 36 (GRN)
Test point 2	Body ground



Is there battery voltage?

YES

The IG1 VSA/ABS wire is OK. Go to step 4.

NO

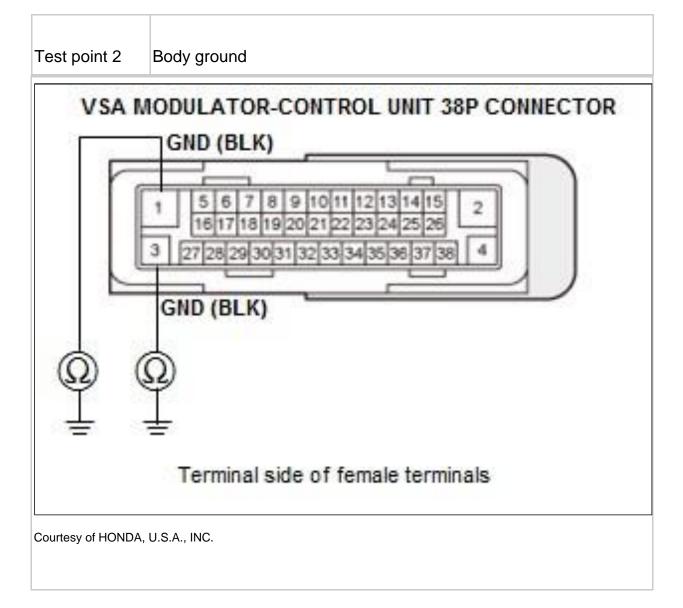
Repair an open or high resistance in the wire.

4. Open wire check (GND line):

Press the engine start/stop button to select the OFF mode.

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

Test condition	OFF modeVSA modulator-control unit 38P connector: disconnected
Test circuit	GND
Test point 1	VSA modulator-control unit 38P connector No. 1 (BLK)
Test point 2	Body ground
Test circuit	GND
Test point 1	VSA modulator-control unit 38P connector No. 3 (BLK)



Is there continuity? YES The GND wires are OK. Go to step 5. NO

Repair an open or high resistance in the ground wire or poor ground (G404).

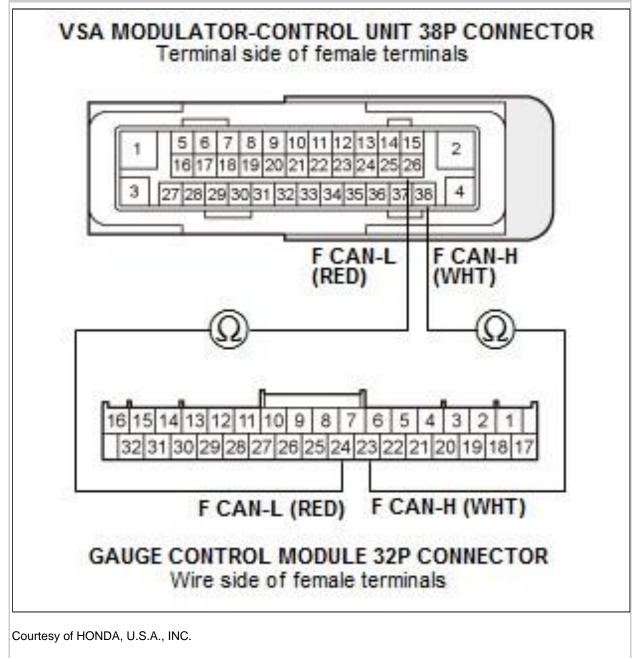
5. Open wire check (F CAN lines): Disconnect the following connector.

Gauge control module 32P connector

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

Test conditionOFF modeVSA modulator-control unit 38P connector:
disconnectedGauge control module 32P connector: disconnected

Test circuit	F CAN-H
Test point 1	VSA modulator-control unit 38P connector No. 38 (WHT)
Test point 2	Gauge control module 32P connector No. 23 (WHT)
Test circuit	F CAN-L
Test point 1	VSA modulator-control unit 38P connector No. 26 (RED)
Test point 2	Gauge control module 32P connector No. 24 (RED)



Is there continuity? YES The F CAN wires are OK. Replace the gauge control module . NO

An open or poor connection in the F CAN wires between the VSA modulator-control unit and the gauge control module.

DTC TROUBLESHOOTING > DTC U0127: GAUGE CONTROL MODULE LOST COMMUNICATION WITH TPMS CONTROL UNIT (TPMS MESSAGE) (2013-15)

DTC Description	DTC
U0127 Gauge Control Module Lost Communication With TPMS Control Unit (TPMS Message)	

DTC (Gauge Control Module)

NOTE:

If you have any loss of communication DTCs for the PCM, troubleshoot those DTCs first.
If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System
Diagnosis Test Mode A - Refer to: Body Electrical
Troubleshooting - B-CAN System Diagnosis Test
Mode A - Initial Communication and DTC Checks
(2013-15).

1. Problem verification:

Clear the DTCs with the HDS.

Clear DTCs

- 2. Press the engine start/stop button to select the OFF mode and then the ONmode.
- 3. Wait for at least 6 seconds.
- 4. Check for DTCs with the HDS.

DTC Description	DTC
U0127 Gauge Control Module Lost Communication With TPMS Control Unit (TPMS Message)	

Is DTC U0127 indicated?

YES

Go to step 2. **NO**

Intermittent failure, the system is OK at this time. Check for loose or poor connections.

2. Fuse check:

Check the following fuse.

Fuse	No. B5 (7.5 A)
Location	Under-dash fuse/relay box
Is the fuse OK?	

YES

Go to step 3.

NO

Replace the fuse. If the fuse blows again, repair a short to ground in the No. B5 (7.5 A) fuse circuit.

3. Open wire check (IG1 METER line):

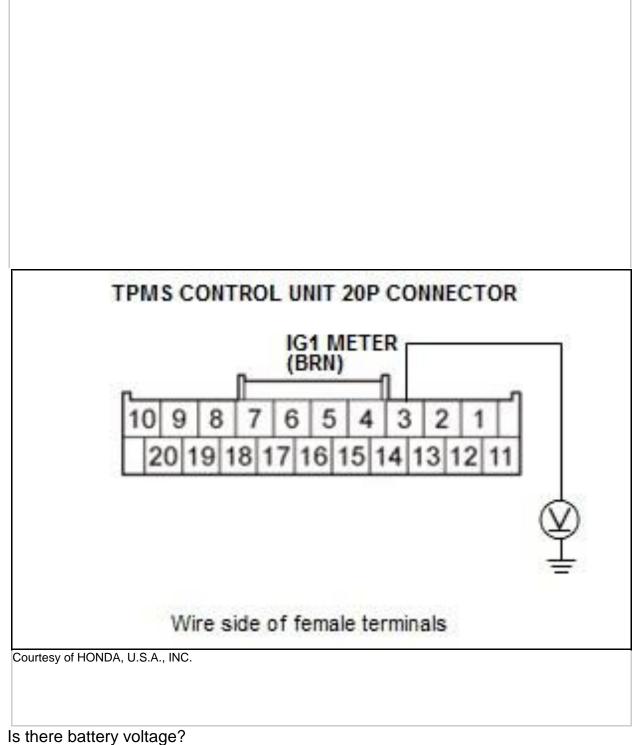
Press the engine start/stop button to select the OFF mode. - 2. Disconnect the following connector.

TPMS control unit 20P connector

- 3. Press the engine start/stop button to select the ON mode.

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

Test condition	ON modeTPMS control unit 20P connector: disconnected
Test circuit	IG1 METER
Test point 1	TPMS control unit 20P connector No. 3 (BRN)
Test point 2	Body ground



YES

The IG1 METER wire is OK. Go to step 4.

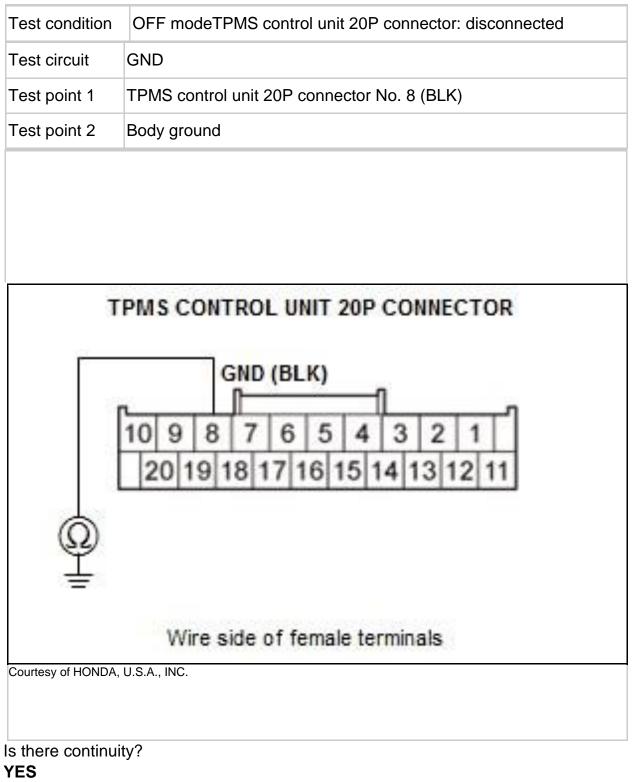
NO

Repair an open or high resistance in the wire.

4. Open wire check (GND line):

Press the engine start/stop button to select the OFF mode.

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



The GND wires are OK. Go to step 5.

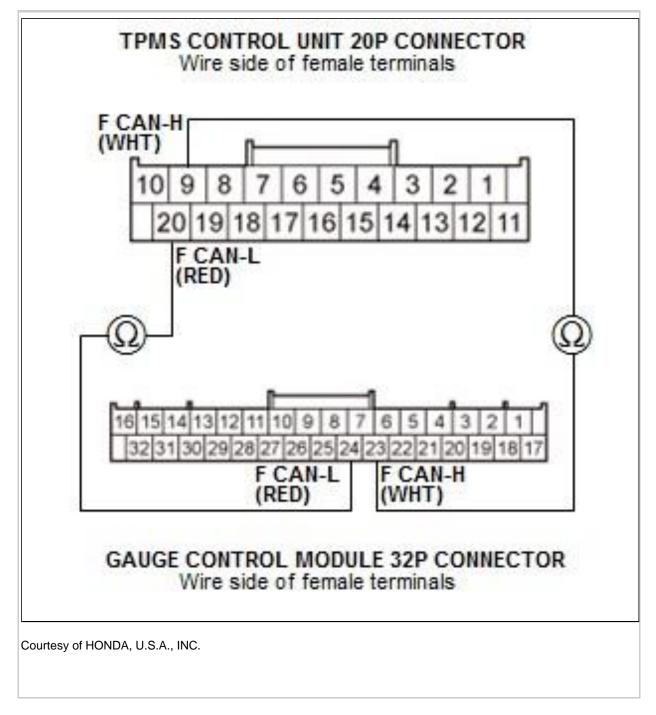
NO

Repair an open or high resistance in the ground wire or poor ground (G401).

5. Open wire check (F CAN lines): Disconnect the following connector. Gauge control module 32P connector

Test condition	OFF modeTPMS control unit 20P connector: disconnectedGauge control module 32P connector: disconnected
Test circuit	F CAN-H
Test point 1	TPMS control unit 20P connector No. 9 (WHT)
Test point 2	Gauge control module 32P connector No. 23 (WHT)
Test circuit	F CAN-L
Test point 1	TPMS control unit 20P connector No. 20 (RED)
Test point 2	Gauge control module 32P connector No. 24 (RED)

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



Is there continuity?

YES

The F CAN wires are OK. Replace the gauge control module .

NO

An open or poor connection in the F CAN wires between the TPMS control unit and the gauge control module.

DTC TROUBLESHOOTING > DTC U0131: GAUGE CONTROL MODULE LOST COMMUNICATION WITH EPS CONTROL UNIT (2013-15)

DTC Description	DTC
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U0131 Gauge Control Module Lost Communication With EPS Control Unit

DTC (Gauge Control Module)

NOTE:

f you have any loss of communication DTCs for the PCM, troubleshoot those DTCs first.
f you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System
Diagnosis Test Mode A - Refer to: Body Electrical
Troubleshooting - B-CAN System Diagnosis Test
Mode A - Initial Communication and DTC Checks
(2013-15).

1. Problem verification:

Clear the DTCs with the HDS.

Clear DTCs

- 2. Press the engine start/stop button to select the OFF mode and then the ONmode.
- 3. Wait for at least 6 seconds.
- 4. Check for DTCs with the HDS.

DTC Description	DTC
U0131 Gauge Control Module Lost Communication With EPS Control Unit	

Is DTC U0131 indicated?

YES

Go to step 2.

NO

Intermittent failure, the system is OK at this time. Check for loose or poor connections.

2. Fuse check:

Check the following fuse.

Fuse	No. B24 (7.5 A)
Location	Under-dash fuse/relay box
le the fuee OK2	

Is the fuse OK? YES Go to step 3. NO

Replace the fuse. If the fuse blows again, repair a short to ground in the No. B24 (7.5 A) fuse circuit.

3. Open wire check (IG1 VSA/ABS line):

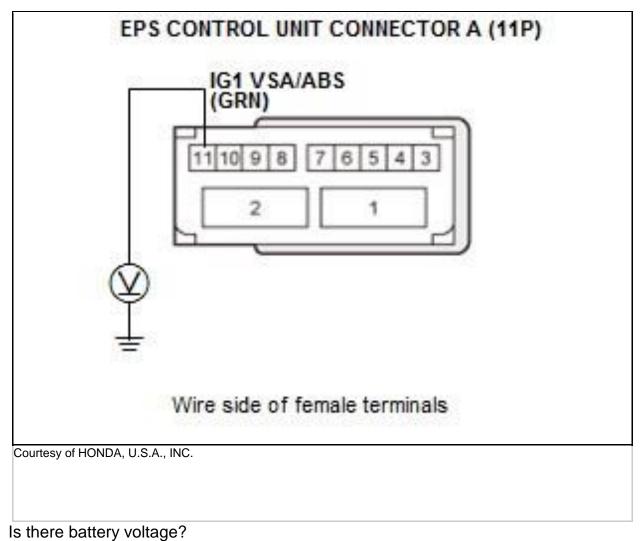
Press the engine start/stop button to select the OFF mode. - 2. Disconnect the following connector.

EPS control unit connector A (11P)

- 3. Press the engine start/stop button to select the ON mode.

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

Test condition	ON modeEPS control unit connector A (11P): disconnected
Test circuit	IG1 VSA/ABS
Test point 1	EPS control unit connector A (11P) No. 11 (GRN)
Test point 2	Body ground



YES

The IG1 VSA/ABS wire is OK. Go to step 4.

NO

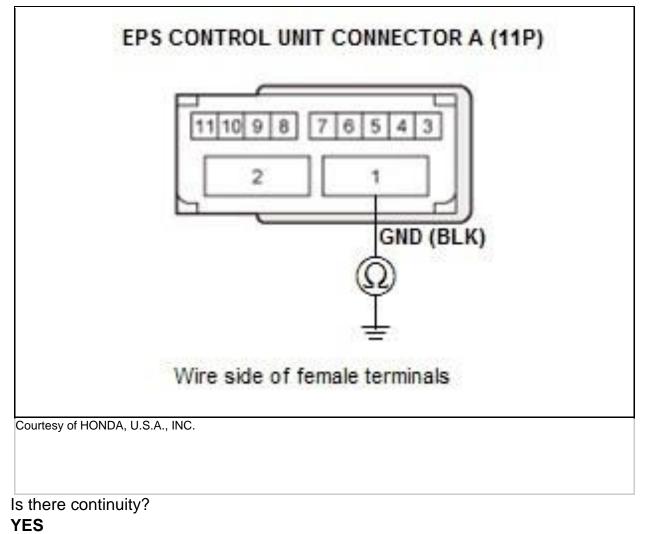
Repair an open or high resistance in the wire.

4. Open wire check (GND line):

Press the engine start/stop button to select the OFF mode.

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

Test condition	OFF modeEPS control unit connector A (11P): disconnected
Test circuit	GND
Test point 1	EPS control unit connector A (11P) No. 1 (BLK)
Test point 2	Body ground



The GND wire is OK. Go to step 5.

NO

Repair an open or high resistance in the ground wire or poor ground (G402).

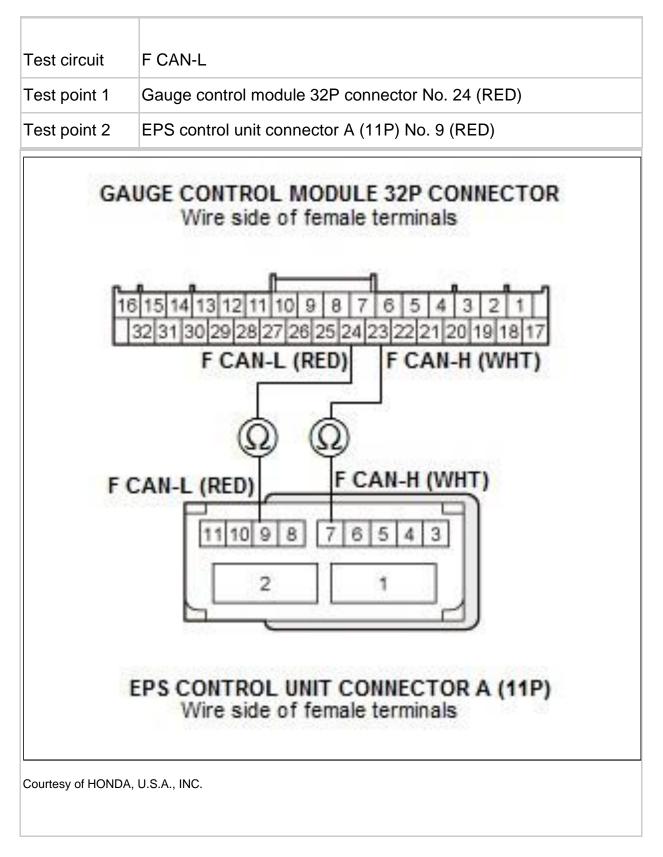
5. Open wire check (F CAN lines):

Press the engine start/stop button to select the OFF mode. - 2. Disconnect the following connector.

Gauge control module 32P connector

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

Test condition	OFF modeEPS control unit connector A (11P): disconnectedGauge control module 32P connector: disconnected
Test circuit	F CAN-H
Test point 1	Gauge control module 32P connector No. 23 (WHT)
Test point 2	EPS control unit connector A (11P) No. 7 (WHT)



Is there continuity? YES The F CAN wires are OK. Replace the gauge control module . NO

An open or poor connection in the F CAN wires between the EPS control unit and the gauge control module.

DTC TROUBLESHOOTING > DTC U0151: GAUGE CONTROL MODULE LOST COMMUNICATION WITH SRS UNIT (SRS MESSAGE) (2013-15)

DTC Description	DTC
U0151 Gauge Control Module Lost Communication With SRS Unit (SRS Message)	

DTC (Gauge Control Module)

NOTE:

If you have any loss of communication DTCs for the PCM, troubleshoot those DTCs first.
If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System
Diagnosis Test Mode A - Refer to: Body Electrical
Troubleshooting - B-CAN System Diagnosis Test
Mode A - Initial Communication and DTC Checks
(2013-15).

*: Wire colors may be substituted for SRS circuits.

1. Problem verification:

Clear the DTCs with the HDS.

Clear DTCs

- 2. Press the engine start/stop button to select the OFF mode and then the ONmode.
- 3. Wait for at least 6 seconds.
- 4. Check for DTCs with the HDS.

DTC Description	DTC
U0151 Gauge Control Module Lost Communication With SRS	
Unit (SRS Message)	
Is DTC U0151 indicated?	

YES

Go to step 2.

NO

Intermittent failure, the system is OK at this time. Check for loose or poor connections.

2. Open wire check (F CAN lines):

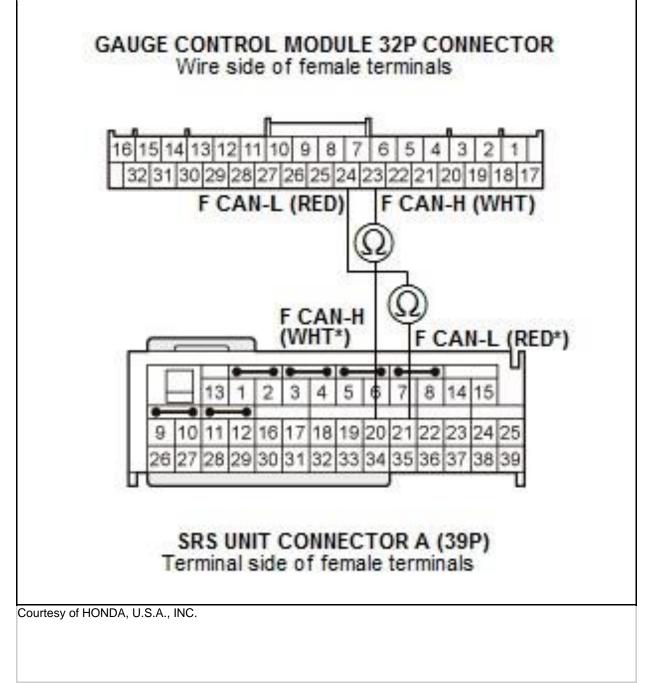
Press the engine start/stop button to select the OFF mode. - 2. Disconnect the following connectors.

Gauge control module 32P connector

SRS unit connector A (39P)

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

Test condition	OFF modeGauge control module 32P connector: disconnectedSRS unit connector A (39P): disconnected
Test circuit	F CAN-H
Test point 1	Gauge control module 32P connector No. 23 (WHT)
Test point 2	SRS unit connector A (39P) No. 20 (WHT*)
Test circuit	F CAN-L
Test point 1	Gauge control module 32P connector No. 24 (RED)
Test point 2	SRS unit connector A (39P) No. 21 (RED*)



Is there continuity?

YES

The F CAN wires are OK. Replace the gauge control module .

NO

An open or poor connection in the F CAN wires between the SRS unit and the gauge control module.

DTC TROUBLESHOOTING > DTC U0230, U1288, U128F: GAUGE CONTROL MODULE LOST COMMUNICATION (2016-18)

DTC U0230 : Gauge Control Module Lost Communication With PTG DTC U1288 :

Gauge Control Module Lost Communication With PARKSR **DTC U128F** : Gauge Control

Module Lost Communication With BSI Unit

NOTE: According to the detected DTC(s), check for the power circuit and the ground circuit of the control unit which cannot communicate with the gauge control module.

DTC Description	DTC
U0230 Gauge control module lost communication with PTG	
U1288 Gauge control module lost communication with PARKSR	
U128F Gauge control module lost communication with BSI unit	

DTC (Gauge Control Module)

- 1. Problem verification: Clear the DTCs with the HDS. Clear DTCs
 - 2. Turn the vehicle to the OFF mode and then the ON mode.
 - 3. Wait for at least 6 seconds.
 - 4. Check for DTCs with the HDS.

DTC Description	DTC
U0230 Gauge control module lost communication with PTG	
U1288 Gauge control module lost communication with PARKSR	
U128F Gauge control module lost communication with BSI unit	

Are DTC U0230, U1288, or U128F indicated?

YES

Go to step 2.

NO

Intermittent failure, the system is OK at this time. Check for loose or poor connections.

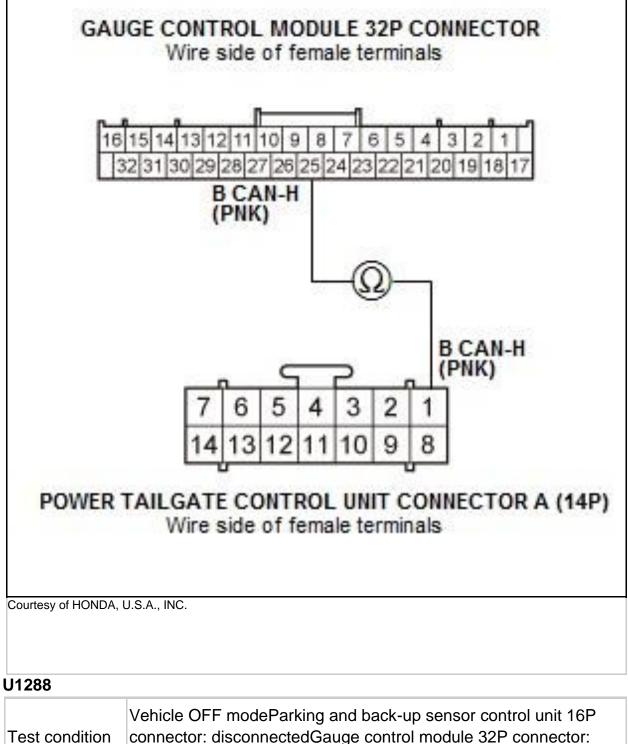
2. Open wire check (B CAN lines): Turn the vehicle to the OFF mode. - 2. According to the detected DTC on the following table, disconnect the transmittingcontrol unit connector(s).

DTC	Connector
-	Gauge control module connector A (32P)
U0230	Power tailgate control unit connector A (14P)
U1288	Parking and back-up sensor control unit 16P connector
U128F	Left side BSI radar unit 6P connector

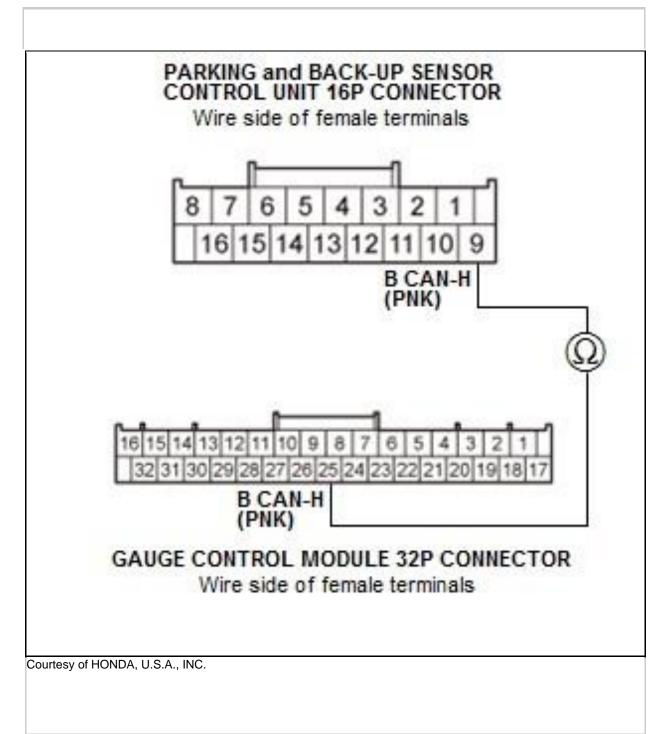
- 3. Check for continuity between test points 1 and 2.

U0230

Test condition	Vehicle OFF modePower tailgate control unit connector A (14P): disconnectedGauge control module 32P connector: disconnected
Test circuit	B CAN-H
Test point 1	Power tailgate control unit connector A (14P) No. 1 (PNK)
Test point 2	Gauge control module 32P connector No. 25 (PNK)

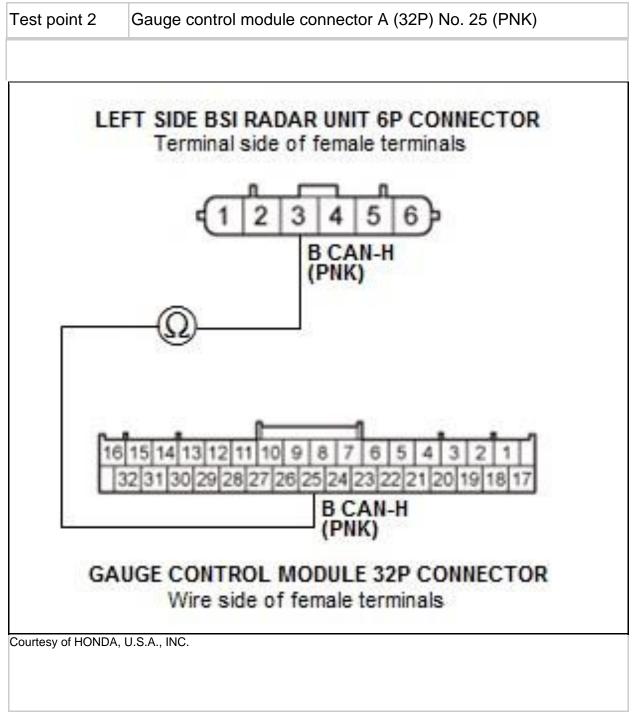


Test condition	connector: disconnectedGauge control module 32P connector: disconnected
Test circuit	B CAN-H
Test point 1	Parking and back-up sensor control unit 16P connector No. 9 (PNK)
Test point 2	Gauge control module connector A (32P) No. 25 (PNK)



U128F

Test condition	Vehicle OFF modeLeft side BSI radar unit 6P connector: disconnectedGauge control module connector A (32P): disconnected
Test circuit	B CAN-H
Test point 1	Left side BSI radar unit 6P connector No. 3 (PNK)



Is there continuity?

YES

An open or poor connection in the B CAN-L wire between the transmitting control unit and the gauge control module.

NO

An open or poor connection in the B CAN-H wire between the transmitting control unit and the gauge control module.

DTC TROUBLESHOOTING > DTC U0230, U128F: GAUGE CONTROL MODULE LOST COMMUNICATION (2016-18)

DTC U0230 : Gauge Control Module Lost Communication With PTG **DTC U128F** : Gauge Control Module Lost Communication With BSI Unit

NOTE: According to the detected DTC(s), check for the power circuit and the ground circuit of the control unit which cannot communicate with the gauge control module.

DTC Description	DTC
U0230 Gauge control module lost communication with PTG	
U128F Gauge control module lost communication with BSI unit	

DTC (Gauge Control Module)

1. Problem verification:

Clear the DTCs with the HDS.

Clear DTCs

- 2. Turn the vehicle to the OFF mode and then the ON mode.

- 3. Wait for at least 6 seconds.
- 4. Check for DTCs with the HDS.

DTC Description	DTC
U0230 Gauge control module lost communication with PTG	
U128F Gauge control module lost communication with BSI unit	

Are DTC U0230, U1288, or U128F indicated?

YES

Go to step 2.

NO

Intermittent failure, the system is OK at this time. Check for loose or poor connections.

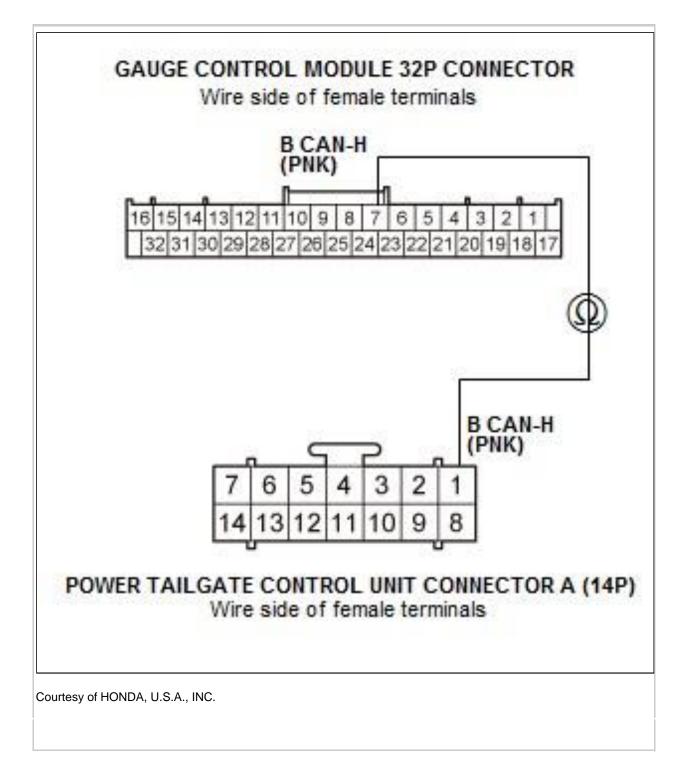
2. Open wire check (B CAN lines):

Turn the vehicle to the OFF mode.

- 2. According to the detected DTC on the following table, disconnect the transmittingcontrol unit connector(s).

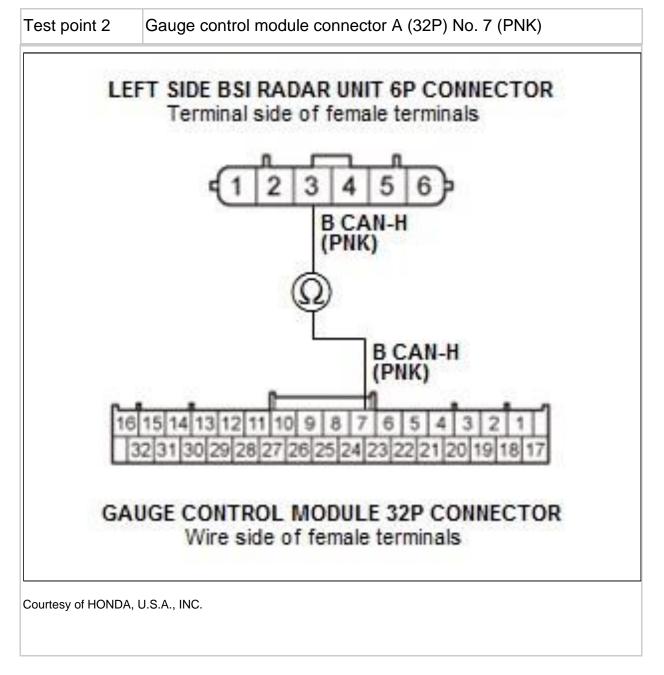
DTC	Connector	
-	Gauge control module connector A (32P)	
U0230	Power tailgate control unit connector A (14P)	
U128F	Left side BSI radar unit 6P connector	
- 3. Check for continuity between test points 1 and 2. U0230		

Test condition	Vehicle OFF modePower tailgate control unit connector A (14P): disconnectedGauge control module 32P connector: disconnected	
Test circuit	B CAN-H	
Test point 1	Power tailgate control unit connector A (14P) No. 1 (PNK)	
Test point 2	Gauge control module 32P connector No. 7 (PNK)	



U128F

Test condition	Vehicle OFF modeLeft side BSI radar unit 6P connector: disconnectedGauge control module connector A (32P): disconnected
Test circuit	B CAN-H
Test point 1	Left side BSI radar unit 6P connector No. 3 (PNK)



Is there continuity?

YES

An open or poor connection in the B CAN-L wire between the transmitting control unit and the gauge control module.

NO

An open or poor connection in the B CAN-H wire between the transmitting control unit and the gauge control module.

DTC TROUBLESHOOTING > DTC U1280: COMMUNICATION BUS LINE ERROR (BUS-OFF) (2013-18)

DTC Description	DTC
U1280 Communication Bus Line Error (BUS-OFF)	

DTC (Gauge Control Module) **NOTE:**

NOTE:

If you have any loss of communication DTCs for the PCM, troubleshoot those DTCs first.
If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A - Refer to: Body Electrical Troubleshooting - B-CAN System Diagnosis Test Mode A - Initial Communication and DTC Checks (2013-15), or Body Electrical Troubleshooting - B-CAN System Diagnosis Test Mode A - Initial Communication and DTC Checks (2013-15), or Body Electrical Troubleshooting - B-CAN System Diagnosis Test Mode A - Initial Communication and DTC Checks (2016-18),

1. Problem verification:

Clear the DTCs with the HDS.

- Clear DTCs
- 2. Press the engine start/stop button to select the OFF mode and then the ONmode.
- 3. Wait for at least 6 seconds.
- 4. Check for DTCs with the HDS.

DTC Description	DTC
U1280 Communication Bus Line Error (BUS-OFF)	

Is DTC U1280 indicated?

YES

Go to MICU DTC U1280 troubleshooting - Refer to: DTC Troubleshooting: U1280(MICU) (2013-15), or DTC Troubleshooting: U1280(MICU) (2016-18).

NO

Intermittent failure, the system is OK at this time.

DTC TROUBLESHOOTING > DTC U1281: LOST COMMUNICATION WITH MICU (MICU FRAME) (2013-18)

DTC Description	DTC
U1281 Lost Communication With MICU (MICU frame)	

DTC (Gauge Control Module)

1. Problem verification:

Clear the DTCs with the HDS.

- Clear DTCs
- 2. Press the engine start/stop button to select the OFF mode and then the ONmode.
- 3. Wait for at least 6 seconds.
- 4. Check for DTCs with the HDS.

DTC Description	DTC
U1281 Lost Communication With MICU (MICU frame)	
a DTC 11291 indicated?	

Is DTC U1281 indicated?

YES

Go to MICU DTC U1280 troubleshooting - Refer to: DTC Troubleshooting:

U1280(MICU) (2013-15), or DTC Troubleshooting: U1280(MICU) (2016-18).

NO

Intermittent failure, the system is OK at this time.

DTC TROUBLESHOOTING > DTC U3000-49: ECU INTERNAL CIRCUIT MALFUNCTION (2016-18)

DTC Description	DTC
U3000-49 ECU Internal Circuit Malfunction	
 DTC (Gauge Control Module) 1. Problem verification: Clear the DTCs with the HDS. Clear DTCs 2. Turn the vehicle to the OFF mode and then the ON mode 3. Check for DTCs with the HDS. 	
DTC Description	DTC

U3000-49 ECU Internal Circuit Malfunction

Is DTC U3000-49 indicated?

YES Replace the gauge control module . NO Intermittent failure, the system is OK at this time.

DTC TROUBLESHOOTING > DTC U3000-51: REPROGRAMMING ERROR (2016-18)

DTC Description	DTC
U3000-51 Reprogramming Error	
DTC (Gauge Control Module)	
 NOTE: Before reprogramming the gauge control module, make sure the 12 volt battery in the vehicle is fully charged, and connect a 12 volt jumper battery (not a battery charger) to maintain system voltage. Never press the engine start/stop button to select the ACC or OFF mode, during the reprogramming. 	
If there is a problem with the reprogramming, press the engine start/stop button to select the ON mode.	
 Problem verification: Clear the DTCs with the HDS. Clear DTCs 2. Turn the vehicle to the OFF mode and then the ON mode. 3. Check for DTCs with the HDS. 	

DTC Description	DTC
U3000-51 Reprogramming Error	
Is DTC U3000-51 indicated? YES	

Reprogramming the gauge control module.

NO

Intermittent failure, the system is OK at this time.