

Service Manual Update: F-CAN Bus Connected Unit Check

AFFECTED VEHICLES

Year	Model	Trim
2019	MDX Sport Hybrid	ALL
2019	RDX	ALL
2019	TLX	ALL V6

BACKGROUND

Some troubleshooting procedures for a loss of communication or F-CAN malfunction DTC's require running the **F-CAN Bus Connected Unit Check** using the i-HDS. There are certain control units that may be reported as **Not Available** in the **Status** column even though they are properly communicating.

Unit	Status	Bus
PCM	Detected	A
PRECISION ALL WHEEL STEER CONTROL UNIT	Not Available	-
EPS CONTROL UNIT	Not Available	-
Active Damper Control Unit	Not Available	-
SRS UNIT	Detected	A
GAUGE CONTROL MODULE	Not Available	-
SBW Shifter	Detected	A
TCU	Detected	A
AWD	Not Available	-
TPMS CONTROL UNIT	Detected	A
VSA Modulator Control Unit	Detected	A
ACM	Detected	A
ELECTRIC PARKING BRAKE CONTROL UNIT	Not Available	-

F-CAN Bus Connected Unit Check

[Description]

- This test checks which ECUs are connected to the F-CAN bus. For each ECU in the results list.
- "Not Available" means that the ECU is not fitted to this vehicle or there is a problem with this ECU or its connection to the F-CAN bus.
- "Detected" means that the ECU is fitted and correctly connected to the F-CAN bus.
- This function does not work with the vehicle which equipped with only 1 F-CAN bus. In that case, HDS indicates "Not Available" about all ECUs.

This bulletin illustrates two scenarios that may be a concern, and how to proceed with troubleshooting in each case. Keep in mind that what you see can vary depending on the vehicle, the DTC, or the symptom being addressed.

CLIENT INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Acura automobile dealer.

PROCEDURE

Scenario 1: U0100/U0122 Troubleshooting: Affected control units reading **Not Available** are **not** needed for your troubleshooting.

4. F-CAN circuit communication check (Transmitting control unit):

- 1. Select the FUNCTION TEST in the CAN gateway with the HDS, then select the F-CAN Bus Connected Unit Check.

F-CAN Connection Check

- 2. According to the detected DTC on the following table, make sure that the transmitting control unit detects the CAN gateway Bus channel(s) normally.

DTC	Transmitting control unit	Detected CAN gateway Bus channel(s) at normal
U0100	PCM	A
U0122	VSA modulator-control unit	A

Is it detected normally?

Detected normal

Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the transmitting control unit and the CAN gateway. ■

U0100: PCM is Not Available for Bus A

Go to step 5.

U0122: VSA modulator-control unit is Not Available for Bus A

Go to step 5.

In this scenario, **EPS CONTROL UNIT** and **GAUGE CONTROL MODULE** read **Not Available** when the unit check is finished. These two units are not needed to complete PCM and VSA modulator-control unit troubleshooting, and the PCM and VSA modulator-control unit report as **Detected normal** at this time. Troubleshooting is finished at this point since there is no longer a communication failure.

F-CAN Bus Connected Unit Check		
Unit	Status	Bus
PCM	Detected	A
PRECISION ALL WHEEL STEER CONTROL UNIT	Not Available	-
EPS CONTROL UNIT	Not Available	-
Active Damper Control Unit	Not Available	-
SRS UNIT	Detected	A
GAUGE CONTROL MODULE	Not Available	-
SBW Shifter	Detected	A
TCU	Detected	A
AWD	Not Available	-
TPMS CONTROL UNIT	Detected	A
VSA Modulator Control Unit	Detected	A
ACM	Detected	A
ELECTRIC PARKING BRAKE CONTROL UNIT	Not Available	-

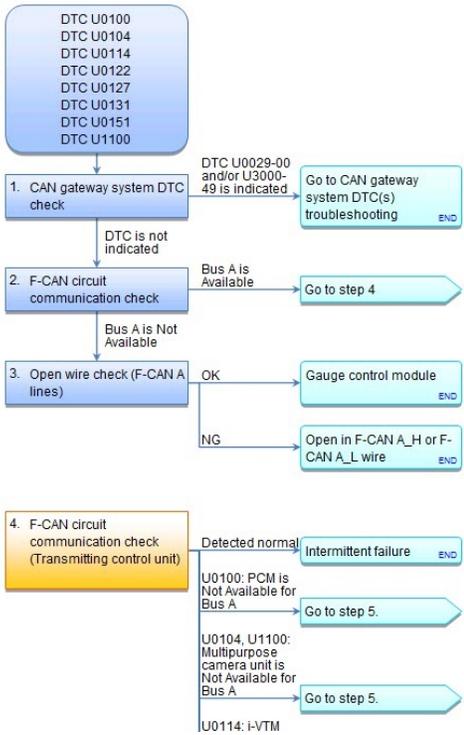
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F-CAN Bus Connected Unit Check

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- "Detected" means that the ECU is fitted and correctly connected to the F-CAN bus.
- This function does not work with the vehicle which equipped with only 1 F-CAN bus. In that case, HDS indicates "Not Available" about all ECUs.

Scenario 2: U0131 Troubleshooting: The affected control units reported as **Not Available** are needed for your troubleshooting.



4. F-CAN circuit communication check (Transmitting control unit):

- Select the FUNCTION TEST in the CAN gateway with the HDS, then select the F-CAN Bus Connected Unit Check.

F-CAN Bus Connected Unit Check

- According to the detected DTC on the following table, make sure that the transmitting control unit detects the CAN gateway Bus channel(s) normally.

DTC	Transmitting control unit	Detected CAN gateway Bus channel(s) at normal
U0100	PCM	A
U0104 U1100	Multipurpose camera unit	A
U0114	i-VTM control unit	A
U0122	VSA modulator-control unit	A
U0127	Keyless access/TPMS control unit	A
U0131	EPS control unit	A
U0151	SRS unit	A

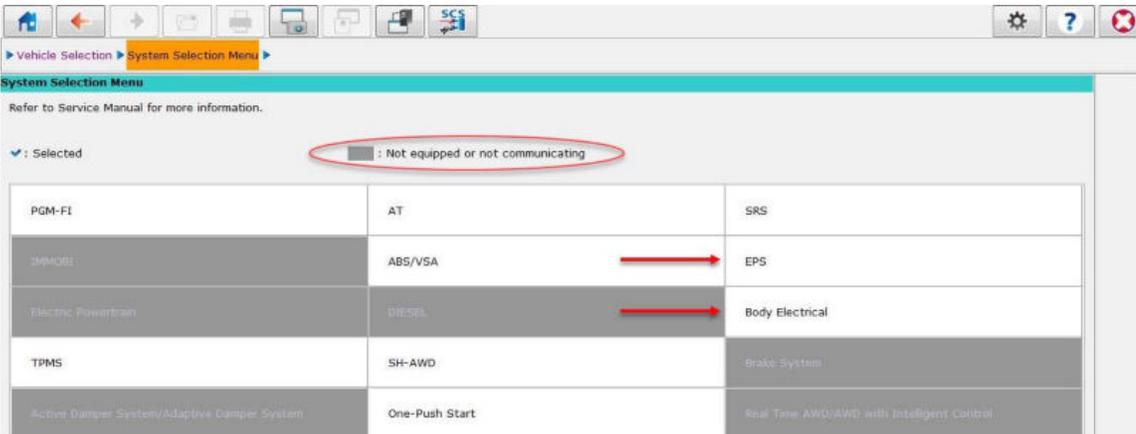
Is it detected normally?

Detected normal

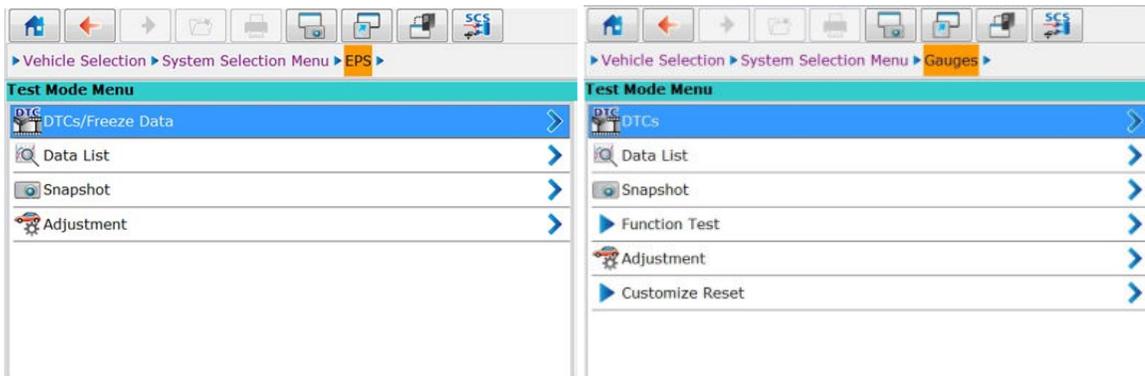
Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the transmitting control unit and the CAN gateway.

- U0100: PCM is Not Available for Bus A → Go to step 5.
- U0104, U1100: Multipurpose camera unit is Not Available for Bus A → Go to step 5.
- U0114: i-VTM control unit is Not Available for Bus A → Go to step 5.
- U0122: VSA modulator-control unit is Not Available for Bus A → Go to step 5.
- U0127: Keyless access/TPMS control unit is Not Available for Bus A → Go to step 5.
- U0131: EPS control unit is Not Available for Bus A → Go to step 5.
- U0151: SRS unit is Not Available for Bus A → Go to step 5.

In this scenario, communication with a control unit that is reporting as **Not Available** can be confirmed by selecting the applicable system from the **System Selection Menu** in the i-HDS. If the system is available and communicating, it will be highlighted. In this case, **EPS** and **Body Electrical** are available. If the system is not communicating, it will be grayed out as shown.



From here you can select either system and confirm the communication.



Once confirmed, keep following the service information troubleshooting. If the system is available and communicating, select **Detected normal**. If it is grayed out or not communicating, select the applicable **Not Available** response.

END