

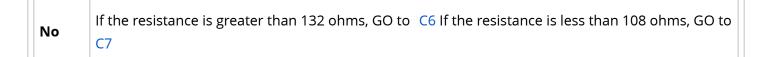
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2013 FORD Figo OEM Service and Repair Workshop Manual

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Is the resistance between 108 and 132 ohms? Yes GO to C3



C3 CHECK THE HS-CAN1 (HIGH-SPEED CONTROLLER AREA NETWORK 1) (+) AND HS-CAN1 (HIGH-SPEED CONTROLLER AREA NETWORK 1) (-) CIRCUITS FOR A SHORT TO GROUND

- Connect the negative battery cable.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C2431A-7	Ω	Ground
C2431A-20	Ω	Ground

Are the resistances greater than 1,000 ohms?

GO to	C4
	GO to

C4 CHECK THE HS-CAN1 (HIGH-SPEED CONTROLLER AREA NETWORK 1) (+) AND HS-CAN1 (HIGH-SPEED CONTROLLER AREA NETWORK 1) (-) CIRCUITS FOR A SHORT TO VOLTAGE

- Ignition ON.
- Measure:

INSTALL a new GWM (gateway module A).

If equipped with 8-inch center display screen/12.3-inch center display screen,

REFER to: Gateway Module A (GWM) - Electric, Vehicles With: 8 Inch Center Display Screen/12 Inch Center Display Screen

No

(418-00A Controller Area Network (CAN) Module Communications Network, Removal and Installation).

If equipped with 15-inch center display screen,

REFER to: Gateway Module A (GWM) - Electric, Vehicles With: 15.5 Inch Center Display Screen (418-00A Controller Area Network (CAN) Module Communications Network, Removal and Installation).

C6 CHECK THE HS-CAN1 (HIGH-SPEED CONTROLLER AREA NETWORK 1) CIRCUITS BETWEEN THE BCMC (BODY CONTROL MODULE C) [BJB (BATTERY JUNCTION BOX)] AND THE GWM (GATEWAY MODULE A) FOR AN OPEN

- Disconnect BCMC (body control module C) [BJB (battery junction box)] C1035E.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C1035E-2	Ω	C2431A-7
C1035E-6	U	C2431A-20

Are the resistances less than 3 ohms?

Yes CONNECT all disconnected connectors. GO to C9

No REPAIR the circuit in question.

C7 CHECK THE HS-CAN1 (HIGH-SPEED CONTROLLER AREA NETWORK 1) (+) AND HS-CAN1 (HIGH-SPEED CONTROLLER AREA NETWORK 1) (-) CIRCUITS FOR A SHORT TOGETHER WITH THE MODULES

board diagnostic control module A) (Battery Charging Control Module [BCCM]), GO to C34 For the SOBDMB (Secondary On-Board Diagnostic Control Module B (SOBDMB)), GO to C35

No

REPAIR the circuit in question. CONNECT all modules.

C8 CHECK THE HS-CAN1 (HIGH-SPEED CONTROLLER AREA NETWORK 1) (+) AND HS-CAN1 (HIGH-SPEED CONTROLLER AREA NETWORK 1) (-) CIRCUITS FOR A SHORT TO GROUND WITH THE MODULES DISCONNECTED

• Measure:

Positive Lead	Measurement / Action	Negative Lead
C2431A-7	Ω	Ground
C2431A-20	Ω	Ground

- Disconnect modules one at a time until the resistance to ground is greater than 1,000 ohms.
 - ACCM (air conditioning control module) C1803A
 - ACCMB (Air Conditioining Compressor Control Module B) C120 (if equipped)
 - BCM (body control module) C2280G
 - BCMC (body control module C) [BJB (battery junction box)] C1035E
 - High Voltage Battery C4238
 - DCACA (Direct Current/Alternating Current Converter Module A) C4632A
 - DCACB (Direct Current/Alternating Current Converter Module B) C4631A (if equipped)
 - DCDC (direct current/direct current converter control module) C1457B
 - FHCM (Front Hatch Control Module) C2332A
 - OBCC (Off-Board Charger Controller) C1012
 - PACM (pedestrian alert control module) C2828
 - SOBDM (secondary on-board diagnostic control module A) (Battery Charging Control Module [BCCM]) C1821A

C10 CHECK FOR RESTORED NETWORK COMMUNICATION WITH THE DCDC (DIRECT CURRENT/DIRECT CURRENT CONVERTER CONTROL MODULE) DISCONNECTED

NOTE

When re-running the network test, close the network test application first or the screen display reverts back to the prior network test results.

- Disconnect: DCDC (direct current/direct current converter control module) C1457B.
- Using a diagnostic scan tool, carry out the network test.

Do all other HS-CAN1 (high-speed controller area network 1) modules pass the network test?

Yes CONNECT the module. GO to Pinpoint Test T

No CONNECT the module. GO to C11

C11 CHECK FOR RESTORED NETWORK COMMUNICATION WITH THE ACCM (AIR CONDITIONING CONTROL MODULE) AND ACCMB (AIR CONDITIONING COMPRESSOR CONTROL MODULE B) DISABLED

NOTE

When re-running the network test, close the network test application first or the screen display reverts back to the prior network test results.

- Disconnect: BCMC (body control module C) [BJB (battery junction box)] fuse 8 (20A).
- Using a diagnostic scan tool, carry out the network test.

Do all other HS-CAN1 (high-speed controller area network 1) modules pass the network test?

Yes

INSTALL the removed fuse. If equipped with an ACCMB (Air Conditioining Compressor Control Module B), GO to C12 INSTALL the removed fuse. If not equipped with an ACCMB (Air Conditioining Compressor Control Module B), GO to Pinpoint Test J

No INSTALL the removed fuse. GO to C13

NOTE

When re-running the network test, close the network test application first or the screen display reverts back to the prior network test results.

- Disconnect: BCMC (body control module C) [BJB (battery junction box)] fuse 10 (10A).
- Using a diagnostic scan tool, carry out the network test.

Do all other HS-CAN1 (high-speed controller area network 1) modules pass the network test?

Yes

INSTALL the removed fuse. If equipped with a DCACB (Direct Current/Alternating Current Converter Module B), GO to C15 INSTALL the removed fuse. If not equipped with a DCACB (Direct Current/Alternating Current Converter Module B), GO to Pinpoint Test R

No

INSTALL the removed fuse. GO to C16

C15 CHECK FOR RESTORED NETWORK COMMUNICATION WITH THE DCACB (DIRECT CURRENT/ALTERNATING CURRENT CONVERTER MODULE B) DISCONNECTED

NOTE

When re-running the network test, close the network test application first or the screen display reverts back to the prior network test results.

- Disconnect: DCACB (Direct Current/Alternating Current Converter Module B) C4631A.
- Using a diagnostic scan tool, carry out the network test.

Do all other HS-CAN1 (high-speed controller area network 1) modules pass the network test?

Yes	CONNECT the module.	GO to Pinpoint Test S

No CONNECT the module. GO to Pinpoint Test R

C16 CHECK FOR RESTORED NETWORK COMMUNICATION WITH THE BECM (BATTERY ENERGY CONTROL MODULE) DISABLED

When re-running the network test, close the network test application first or the screen display reverts back to the prior network test results.

- Disconnect BCMC (body control module C) [BJB (battery junction box)] fuse 46 (10A).
- Using a diagnostic scan tool, carry out the network test.

Do all other HS-CAN1 (high-speed controller area network 1) modules pass the network test?

No INSTALL the removed fuse. GO to C19

C19 CHECK FOR RESTORED NETWORK COMMUNICATION WITH THE OBCC (OFF-BOARD CHARGER CONTROLLER) DISCONNECTED

NOTE

When re-running the network test, close the network test application first or the screen display reverts back to the prior network test results.

- Disconnect: OBCC (Off-Board Charger Controller) C1012.
- Using a diagnostic scan tool, carry out the network test.

Do all other HS-CAN1 (high-speed controller area network 1) modules pass the network test?

Yes	CONNECT the module.	GO to Pinpoint Test AD

No CONNECT the module. GO to C20

C20 CHECK FOR RESTORED NETWORK COMMUNICATION WITH THE FHCM (FRONT HATCH CONTROL MODULE) DISABLED

NOTE

When re-running the network test, close the network test application first or the screen display reverts back to the prior network test results.

- Reconnect the ACCM (air conditioning control module) connector. Make sure it seats and latches correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes

CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin), GSB (General Service Bulletin), SSM (special service message) or FSA (Field Service Action). If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new ACCM (air conditioning control module).

REFER to: Air Conditioning (A/C) Compressor - Electric

(412-00 Climate Control System - General Information, Removal and Installation).

No

The system is operating correctly at this time. The concern may have been caused by module connections. ADDRESS the root cause of any connector or pin issues.

C23 CHECK FOR CORRECT ACCMB (AIR CONDITIONING COMPRESSOR CONTROL MODULE B) OPERATION

- Ignition OFF.
- Disconnect and inspect the ACCMB (Air Conditioning Compressor Control Module B) connector.
- Repair:
 - corrosion (install new connector or terminals clean module pins)
 - damaged or bent pins install new terminals/pins
 - pushed-out pins install new pins as necessary
- Reconnect the ACCMB (Air Conditioining Compressor Control Module B) connector. Make sure it seats and latches correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes

CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin), GSB (General Service Bulletin), SSM (special service message) or FSA (Field Service Action). If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new ACCMB (Air Conditioining Compressor Control Module B).

- Reconnect the BCMC (body control module C) [BJB (battery junction box)] connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes

CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin), GSB (General Service Bulletin), SSM (special service message) or FSA (Field Service Action). If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new BCMC (body control module C) [BJB (battery junction box)].

REFER to: Body Control Module C (BCMC)

(419-10 Multifunction Electronic Modules, Removal and Installation).

No

The system is operating correctly at this time. The concern may have been caused by module connections. ADDRESS the root cause of any connector or pin issues.

C26 CHECK FOR CORRECT HIGH VOLTAGE BATTERY OPERATION

- Ignition OFF.
- Disconnect and inspect the high voltage battery connector.
- Repair:
 - corrosion (install new connector or terminals clean module pins)
 - damaged or bent pins install new terminals/pins
 - pushed-out pins install new pins as necessary
- Reconnect the high voltage battery connector. Make sure it seats and latches correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes

CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin), GSB (General Service Bulletin), SSM (special service message) or FSA (Field Service Action). If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new High Voltage Battery.

REFER to: High Voltage Battery - Electric

(414-03A High Voltage Battery, Mounting and Cables, Removal and Installation).

- Repair:
 - corrosion (install new connector or terminals clean module pins)
 - damaged or bent pins install new terminals/pins
 - pushed-out pins install new pins as necessary
- Reconnect the DCACB (Direct Current/Alternating Current Converter Module B) connector. Make sure it seats and latches correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes

CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin), GSB (General Service Bulletin), SSM (special service message) or FSA (Field Service Action). If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new DCACB (Direct Current/Alternating Current Converter Module B).

REFER to: Direct Current/Alternating Current (DC/AC) Inverter - Electric, Vehicles With: Pickup Bed Power Outlet

(414-05 Voltage Converter/Inverter, Removal and Installation).

No

The system is operating correctly at this time. The concern may have been caused by module connections. ADDRESS the root cause of any connector or pin issues.

C29 CHECK FOR CORRECT DCDC (DIRECT CURRENT/DIRECT CURRENT CONVERTER CONTROL MODULE) OPERATION

- Ignition OFF,
- Disconnect and inspect all the DCDC (direct current/direct current converter control module) connectors.
- Repair:
 - corrosion (install new connector or terminals clean module pins)
 - damaged or bent pins install new terminals/pins
 - pushed-out pins install new pins as necessary
- Reconnect the DCDC (direct current/direct current converter control module) connectors. Make sure they seat and latch correctly.
- Operate the system and determine if the concern is still present.

Is the concern still present?