

SB-10056697-7185

FORD:

2013-2014 C-MAX

This article supersedes TSB 13-7-10 to update the model years, Title, Issue Statement and Service Procedure.

ISSUE

Some 2013-2014 C-MAX Hybrid and Energi vehicles may experience a concern with a discharged 12 volt battery.

ACTION

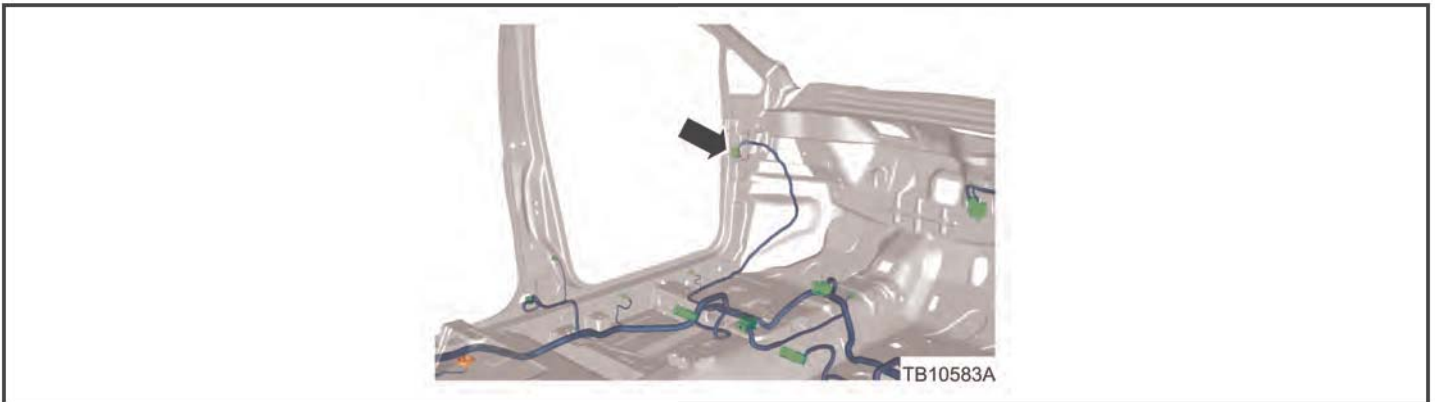
Follow the Service Procedure steps to correct the condition.

SERVICE PROCEDURE

1. Disconnect the 12-volt battery. Refer to Workshop Manual (WSM), Section 414-01.
2. Connect the Rotunda Midtronics GR1-190 or GRX-3590 Diagnostic Battery Charger to the vehicle's battery terminal posts only. Battery cables must be removed and no other connections, such as body ground, can be in the circuit during testing.
 - a. Select diagnostic fast charge.
 - b. On GR1-190 only - select above 400 km (250 miles) or below 400 km (250 miles) based on vehicle mileage.
 - c. Select battery type Lead Acid.
 - d. Enter cold cranking amp (CCA) rating of 390 CCA.
3. Did the battery pass the load test?
 - a. Yes - allow battery to fully charge. After charging is complete, reconnect the 12-volt battery. Refer to WSM, Section 414-01. Proceed to Step 4.
 - b. No - record the failure code. Replace the battery. Refer to WSM, Section 414-01. Make sure the 12-volt battery is fully charged. Using Integrated Diagnostic System (IDS) service tool, perform the battery monitoring system (BMS). Reset after the new battery is connected. Proceed to Step 4.
4. Reprogram the powertrain control module (PCM), DC/DC converter (DCDC), instrument panel cluster (IPC), gateway module (GWM) and, if equipped with the 4.2-inch display, the front control / display interface module (FCDIM) using IDS release 91.05 or higher. Make sure you are connected to the internet when entering module programming to guarantee you will receive the latest updates. Calibration files may also be obtained at www.motorcraftservice.com.
 - a. Inspect vehicle communication module (VCM) and cables for any damage. Make sure scan tool connections are not interrupted during programming.
 - b. Turn off all accessories (radio, heated/cooled seats, head lamps, interior lamps, HVAC system, etc.) and close doors.
 - c. Disconnect or depower any aftermarket accessories.
 - d. Disable IDS scan tool sleep mode, screen saver and hibernation modes.
 - e. Create all sessions key on engine off (KOEO). Starting the vehicle before creating a session will cause errors within the programming inhale process.
 - f. Connect a battery charger to the 12-volt battery.
5. Is the vehicle an Energi built on or before 9/12/2013?

NOTE: The information contained in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford, Lincoln, or Mercury dealership to determine whether the bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

- a. Yes - replace telematics control unit (TCU) Module. Refer to WSM, Section 415-00. Proceed to Step 6.
 - b. No - proceed to Step 6.
6. Is the vehicle built on or before 6/3/2013?
- a. Yes - proceed to Step 7.
 - b. No - proceed to Step 8.
7. Inspect wiring for damage or chafing in rear liftgate area, driver door connector wire harness C339, and front passenger door connector wire harness C340 (Figures 1, 2, 3 and 4). Is damage or chafing present?



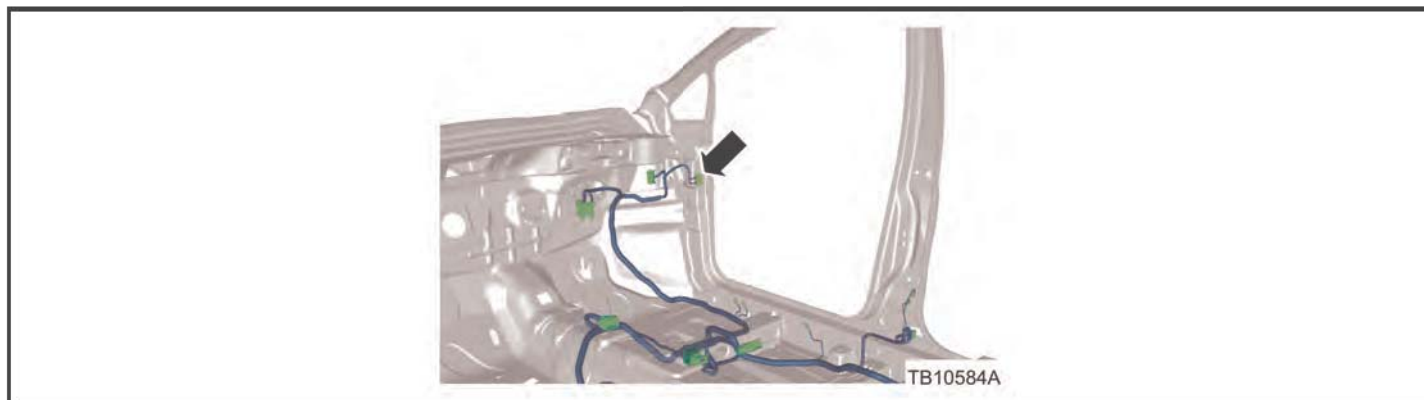


Figure 3 - Article 14-0155



Figure 4 - Article 14-0155

- a. Yes - repair circuits as needed. Refer to Wiring Diagram (WD), Section 5-1. After repair, wrap affected area with 3M™ Temflex™ Cotton Friction Tape or equivalent to prevent future concerns. Proceed to step 8.
 - b. No - wrap affected area with 3M™ Temflex™ Cotton Friction Tape or equivalent to prevent future concerns. Proceed to step 8.
8. Print information sheet and provide to customer. Communicate to customer that Ford recommends disconnecting any devices attached to the auxiliary power port, USB port and OBDII port when the vehicle is turned off (e.g. cell phone chargers, USB devices, insurance company snapshot devices, etc.). (Figure 5)

Obtain Locally	
Part Number	Part Description
1755	3M™ Temflex™ Cotton Friction Tape

PART NUMBER	PART NAME
DM5Z-19K350-B	TCU Module
BXT-67R	12-V Battery

OTHER APPLICABLE ARTICLES: 13B12

OPERATION	DESCRIPTION	TIME
140155A	2013-2014 C-MAX Hybrid: Diagnose And Charge Battery, Reprogram Modules, Inspect Wiring Pass (Do Not Use With Any Other Labor Operations)	1.0 Hr.
140155B	2013-2014 C-MAX Hybrid: Diagnose And Replace Battery, Reprogram Modules, Inspect Wiring Pass (Do Not Use With Any Other Labor Operations)	1.1 Hrs.
140155C	2013-2014 C-MAX Hybrid: Diagnose And Charge Battery, Reprogram Modules, Inspect And Repair Wiring (Do Not Use With Any Other Labor Operations)	1.7 Hrs.
140155D	2013-2014 C-MAX Hybrid: Diagnose And Replace Battery, Reprogram Modules, Inspect And Repair Wiring (Do Not Use With Any Other Labor Operations)	1.8 Hrs.
140155E	2013-2014 C-MAX Energi: Diagnose And Charge Battery, Reprogram Modules, Inspect Wiring Pass (Do Not Use With Any Other Labor Operations)	1.2 Hrs.
140155F	2013-2014 C-MAX Energi: Diagnose And Replace Battery, Reprogram Modules, Inspect Wiring Pass (Do Not Use With Any Other Labor Operations)	1.5 Hrs.
140155G	2013-2014 C-MAX Energi: Diagnose And Charge Battery, Reprogram Modules, Inspect And Repair Wiring (Do Not Use With Any Other Labor Operations)	1.9 Hrs.
140155H	2013-2014 C-MAX Energi: Diagnose And Replace Battery, Reprogram Modules, Inspect And Repair Wiring (Do Not Use With Any Other Labor Operations)	2.1 Hrs.
140155J	2013-2014 C-MAX Energi: Diagnose And Charge Battery, Reprogram Modules, Replace The TCU, Inspect Wiring Pass (Do Not Use With Any Other Labor Operations)	1.7 Hrs.
140155K	2013-2014 C-MAX Energi: Diagnose And Replace Battery, Reprogram Modules, Replace The TCU, Inspect Wiring Pass (Do Not Use With Any Other Labor Operations)	1.9 Hrs.
140155L	2013-2014 C-MAX Energi: Diagnose And Charge Battery, Reprogram Modules, Replace The TCU, Inspect And Repair Wiring (Do Not Use With Any Other Labor Operations)	2.3 Hrs.
140155M	2013-2014 C-MAX Energi: Diagnose And Replace Battery, Reprogram Modules, Replace The TCU, Inspect And Repair Wiring (Do Not Use With Any Other Labor Operations)	2.6 Hrs.

WARRANTY STATUS:

Eligible Under Provisions Of New Vehicle Limited Warranty Coverage

Warranty/ESP coverage limits/policies/prior approvals are not altered by a TSB. Warranty/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

DEALER CODING

BASIC PART NO.	CONDITION CODE
2013 Energi - 19K350 (TCU) All Other Vehicles - 14F642 (SDLC)	04



Ford Motor Company

Technical Service Bulletin Title: 2013-2014 C-MAX – Discharged 12 Volt Battery

Technical Service Bulletin #:

Advisor to Customer

Dear C-MAX Customer:

Your vehicle has received updates to address potential concerns with 12 volt battery draw when the vehicle has been turned off and parked for an extended period of time. Ford recommends that you remove all devices that use 12 volt power before exiting the vehicle. Below is a list of the charge ports and types of devices that should be unplugged / removed when the vehicle is not in use.

1. Auxiliary Power Points – unplug cellphone chargers, GPS chargers and similar power devices from the vehicle's auxiliary power outlets.
2. 110 Volt AC Power Point (If Equipped) – unplug anything plugged into this power point.
3. USB Port – unplug USB devices that draw power from the USB port. Thumb drives do not need to be unplugged as they do not draw power.
4. OBDII Connector Port (located under a panel to the left of the steering wheel) – unplug anything plugged into this power point such as tracking devices provided by your insurance company as they may use 12 volt battery power when the vehicle is turned off.

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Figure 5 - Article 14-0155