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2007 FORD Mustang Convertible OEM Service and Repair Workshop Manual

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DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
WACM (wireless accessory charging module) U3000:41	Control Module: General Checksum Failure	This DTC (diagnostic trouble code) sets due to incomplete or improper PMI (programmable module installation) procedures.
WACM (wireless accessory charging module) U3000:42	Control Module: General Memory Failure	This DTC (diagnostic trouble code) sets due to incomplete or improper PMI (programmable module installation) procedures.
WACM (wireless accessory charging module) U3000:49	Control Module: Internal Electronic Failure	This DTC (diagnostic trouble code) sets in the WACM (wireless accessory charging module) Field-Effect Transistor (FET) protective circuit strategy for its actuator outputs has reached 100%.

Possible Sources

- Vehicle communication bus
- Incomplete or improper PMI (programmable module installation) procedures
- WACM (wireless accessory charging module)

F1 RECHECK THE WACM (WIRELESS ACCESSORY CHARGING MODULE) DTCS (DIAGNOSTIC TROUBLE CODES)

NOTE

If new modules were installed prior to the DTC (diagnostic trouble code) being set, the module configuration may be incorrectly set during the PMI (programmable module installation) or the PMI (programmable module installation) may not have been carried out.

NOTE

Every effort should be made to not trigger a key search by opening a door, stepping on the brake pedal. The triggering of a key search temporarily disables the WACM by design to avoid interference between the BCM (body control module) and Key fob. This can cause confusion and the unnecessary replacement of perfectly good modules. While no key searches are being conducted while running the test results in no DTCs. This needs to be understood for the true DTCs setting and symptoms to be diagnosed.

WACM (wireless accessory charging module) U201A:51	Control Module Main Calibration Data: Not Programmed	This DTC (diagnostic trouble code) sets due to incomplete or improper PMI (programmable module installation) procedures.
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Possible Sources

- Vehicle communication bus
- Incomplete or improper PMI (programmable module installation) procedures
- WACM (wireless accessory charging module)

G1 CHECK FOR RECENT SERVICE ACTIONS RELATED TO THE WACM (WIRELESS ACCESSORY CHARGING MODULE)

NOTE

Every effort should be made to not trigger a key search by opening a door, stepping on the brake pedal. The triggering of a key search temporarily disables the WACM by design to avoid interference between the BCM (body control module) and Key fob. This can cause confusion and the unnecessary replacement of perfectly good modules. While no key searches are being conducted while running the test results in no DTCs. This needs to be understood for the true DTCs setting and symptoms to be diagnosed.

- CHECK vehicle service history for recent service actions related to the WACM (wireless accessory charging module) .

Has there been recent service issues against the WACM?

Yes	GO to G2
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No	<p>INSTALL a new WACM (wireless accessory charging module) to correct the failure to retain configuration data.</p> <p>REFER to: Wireless Accessory Charging Module (WACM) (414-06 Accessory Charging, Removal and Installation).</p>
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G2 RECHECK THE WACM (WIRELESS ACCESSORY CHARGING MODULE) DTCS (DIAGNOSTIC TROUBLE CODES)

NOTE



Wireless Accessory Charging Module (WACM) - Vehicles With: 15.5 Inch Center Display Screen

414-06 Accessory Charging	2022 F-150
Removal and Installation	Procedure revision date: 02/2/2022

Wireless Accessory Charging Module (WACM) - Vehicles With: 15.5 Inch Center Display Screen

Removal

NOTE

Removal steps in this procedure may contain installation details.

1. NOTE

If installing a new module, it is necessary to upload the module configuration information to the scan tool prior to removing the module. This information must be downloaded into the new module after installation. If installing a new module, it is necessary to upload the module configuration information to the scan tool prior to removing the module. This information must be downloaded into the new module after installation.

Using a diagnostic scan tool, begin the PMI (programmable module installation) process for the WACM (wireless accessory charging module) following the on-screen instructions.

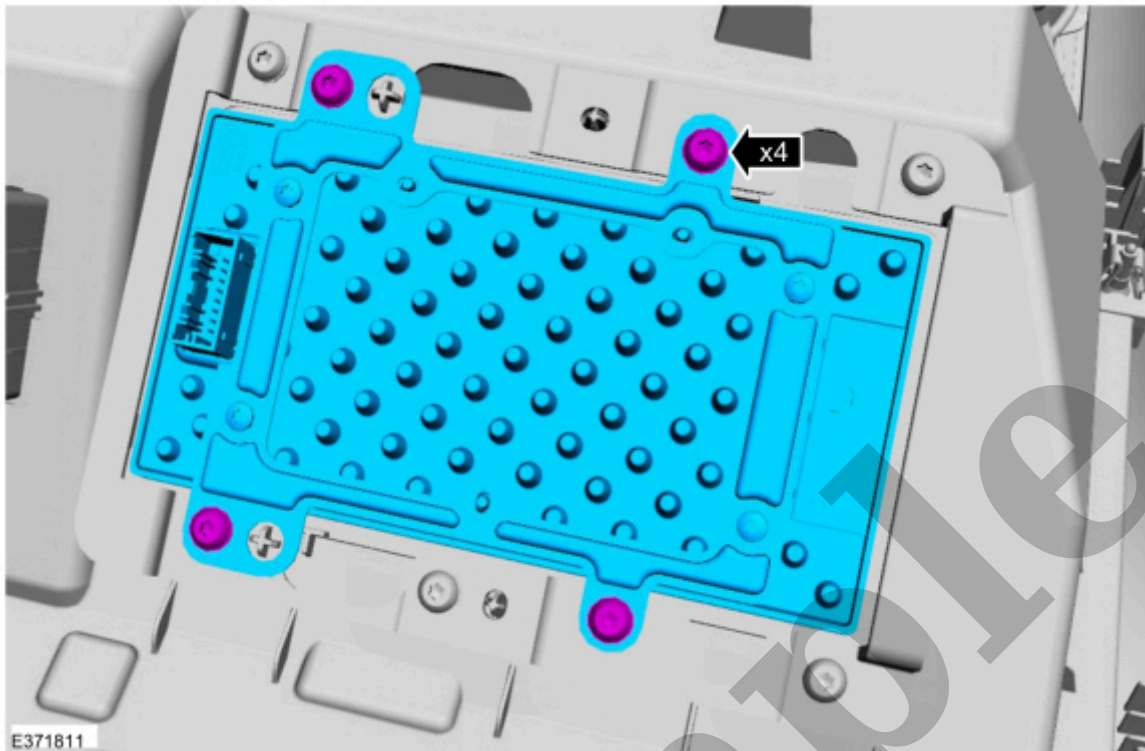
2. Remove the floor console.

Refer to: [Floor Console - Vehicles With: 15.5 Inch Center Display Screen](#)(501-12 Instrument Panel and Console, Removal and Installation).

3. Release the clips and remove the floor console upper trim panel.

[Click here to learn about symbols, color coding, and icons used in this manual.](#)

5. Remove the screws and remove the WACM (wireless accessory charging module) .



[Click here to learn about symbols, color coding, and icons used in this manual.](#)

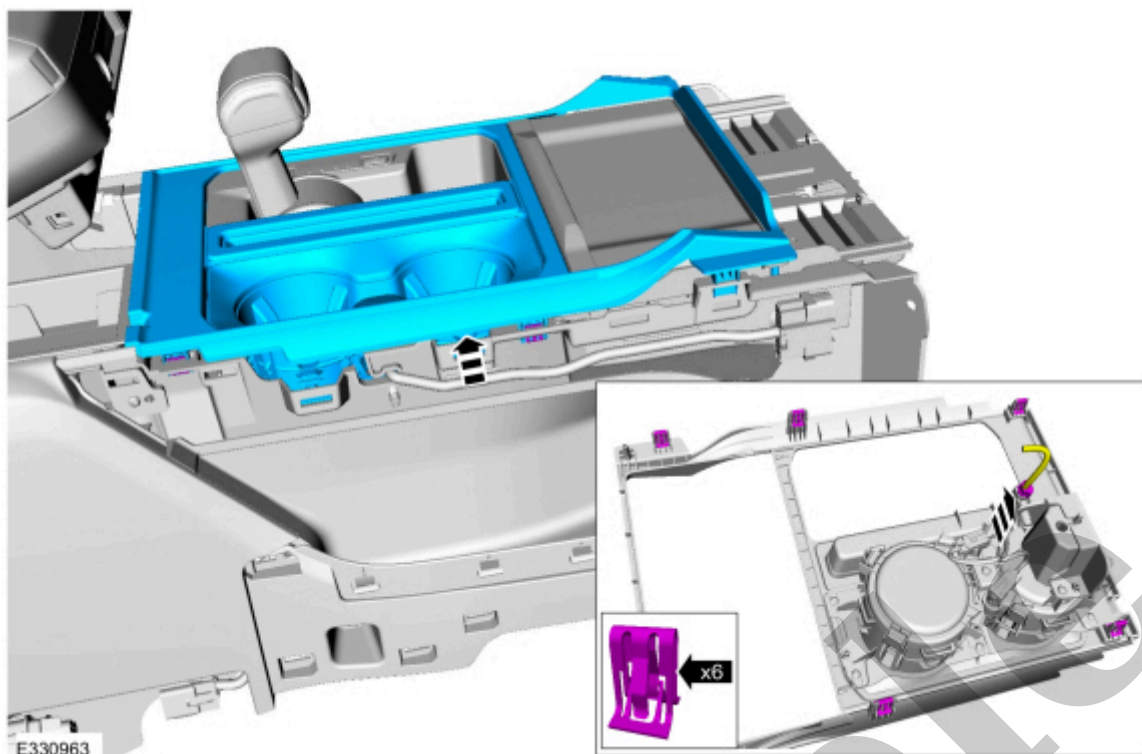
Installation

1. To install, reverse the removal procedure.

2. NOTE

This step is only necessary if replacing the WACM (wireless accessory charging module) .This step is only necessary if replacing the WACM (wireless accessory charging module) .

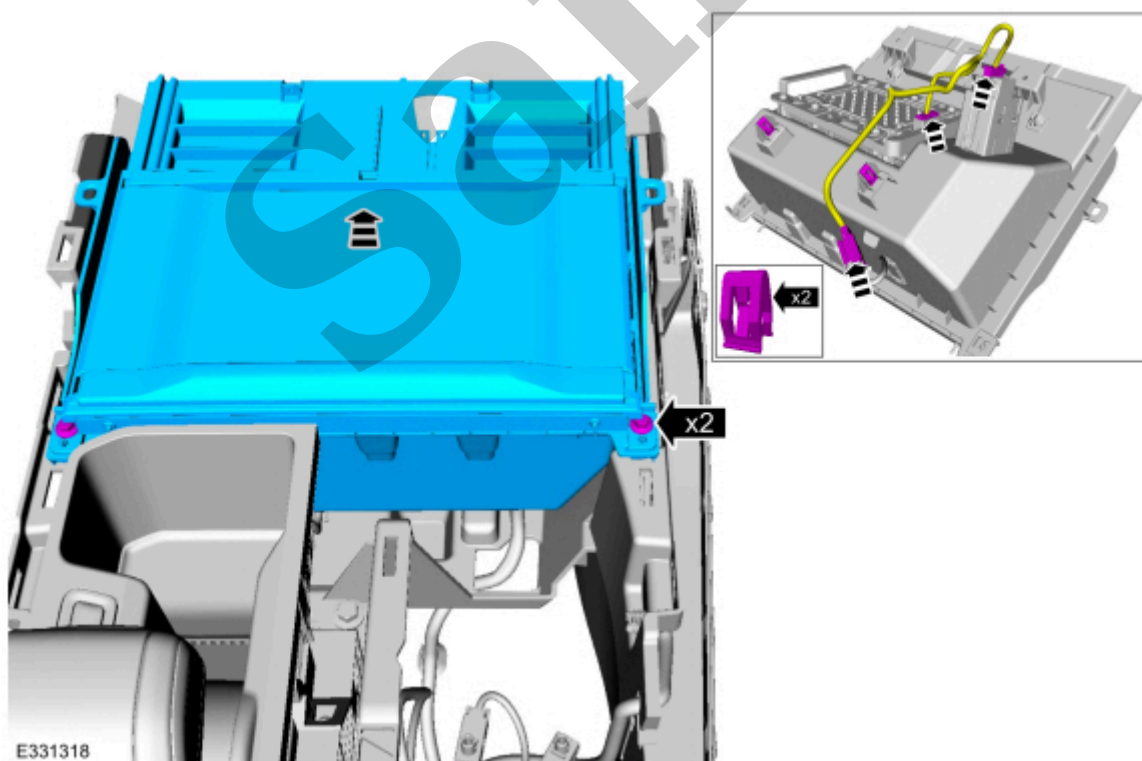
Using a diagnostic scan tool, complete the PMI (programmable module installation) process for the WACM (wireless accessory charging module) following the on-screen instructions.



[Click here to learn about symbols, color coding, and icons used in this manual.](#)

4. Remove the bolts release the clips and remove the storage bin.

- Disconnect the electrical connector.



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Battery and Cables - Electric - System Operation and Component Description

414-01 Battery, Mounting and Cables	2022 F-150
Description and Operation	Procedure revision date: 03/8/2022

Battery and Cables - Electric - System Operation and Component Description

System Operation

Battery and Cables

The battery and cable system consists of the following components:

- Battery (Located in the center rear of the underhood storage compartment)
- Battery cable assembly (both negative and positive cable serviced as an assembly)
- Battery monitoring sensor
- Battery tray
- High current BJB (battery junction box)

This vehicle is equipped with 12 volt battery where the high voltage battery has a high voltage to low voltage energy transfer feature that keeps the 12 volt battery charged.

When the 12 volt battery's voltage is low the high voltage battery transfers the energy to charge the 12 volt battery when the vehicle is off. The high voltage battery needs to be de-energized when servicing the 12 volt battery.

Vehicles are equipped with a 12-volt, Absorbent Glass Mat (AGM) maintenance-free battery. The battery is a 12V DC (direct current) source connected in a negative ground system and is a voltage stabilizer for the 12V electrical system.

A battery monitoring sensor is attached to the negative battery cable and is serviced as an assembly.



Battery and Cables - System Operation and Component Description

414-01 Battery, Mounting and Cables	2022 F-150
Description and Operation	Procedure revision date: 11/16/2021

Battery and Cables - System Operation and Component Description

System Operation

Battery and Cables

The battery and cable system consists of the following components:

- Auxiliary batteries (2 required) (Non-Hybrid vehicles with pickup bed power outlet)
- Auxiliary battery (hybrid vehicles)
- Auxiliary battery isolator (hybrid vehicles)
- Auxiliary battery cable (hybrid vehicles)
- Battery
- Battery cable assembly (both negative and positive cable serviced as an assembly)
- Battery current sensor (hybrid vehicles)
- Battery monitoring sensor
- Battery tray
- High current BJB (battery junction box)

Vehicles are equipped with a 12-volt, Absorbent Glass Mat (AGM) maintenance-free battery. The battery is a 12V DC (direct current) source connected in a negative ground system and is a voltage stabilizer for the 12V electrical system.

(414-03A High Voltage Battery, Mounting and Cables, Description and Operation).

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Sample

BCM (body control module)	B1616:04	Electrical System High Key Off Load: System Internal Failure	GO to Pinpoint Test C
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Symptom Chart

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.

REFER to: [Diagnostic Methods](#)

(100-00 General Information, Description and Operation).

Symptom Chart: Battery

Condition	Action
Battery is not fully charged	GO to Pinpoint Test A

Pinpoint Test

PINPOINT TEST A : BATTERY CONDITION TEST

Normal Operation and Fault Conditions

Battery condition is determined by measuring battery terminal voltage after a specific discharge current is applied for a specified time period.

Possible Sources

- Battery
- Wiring, terminals or connectors

Visual Inspection and Pre-checks

- Inspect wiring, terminals and connectors.
- Inspect the battery.
- Inspect the battery mounting.
- Inspect high current BJB (battery junction box) connections.

A1 TEST THE BATTERY CONDITION

NOTE

Failure to fully charge the battery before retesting may cause false readings.

- Using the Diagnostic Battery Charger and the battery cables removed from the battery, verify the battery condition.

Is the battery OK?