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2008 FORD Mustang Convertible OEM Service and Repair Workshop Manual

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Are the	resistances greater than 10,000 ohms?
Yes	GO to A7
No	REPAIR the circuit.
A7 CHE	CK FOR CORRECT BCM (BODY CONTROL MODULE) OPERATION
<ul> <li>Dis</li> <li>Rep</li> <li>Rep</li> <li>Rep</li> <li>Rep</li> <li>Rep</li> <li>Rep</li> <li>Rep</li> <li>Op</li> </ul>	ition OFF. connect and inspect all the BCM (body control module) connectors. pair: 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 connect all BCM (body control module) connectors. Make sure they seat and latch correctly. erate the system and determine if the concern is 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 no service articles address this concern, Install a new BCM (body control module) . REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).
No	The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. ADDRESS the root cause of any connector or pin issues.

# PINPOINT TEST B : THE WACM (WIRELESS ACCESSORY CHARGING MODULE) IS INOPERATIVE

Refer to Wiring Diagrams Cell 12for schematic and connector information. **Normal Operation and Fault Conditions** REFER to: Wireless Accessory Charging Module (WACM) (414-06 Accessory Charging, Removal and Installation).

Possible Sources

				10
•	Using a diagnostic scan tool, carr	out the WACM (wireless accessory	/ charging module)	self-test.

# Are any diagnostic trouble codes (DTCs) present?

Yes	REFER to D section.	TC (diagnostic trouble co	de) Chart: WACM	l (wireless accessory charging module) in this
No	GO to B2			
B2 CI	НЕСК ТНЕ СОМ		К	
•		stic scan tool, carry out th i <b>reless accessory chargi</b>		s the network test?
Yes	GO to B3			
No	DIAGNOSE diagnostic		essory charging n	nodule) does not communicate with the
B3 CI VOLT		M (WIRELESS ACCESSOR	Y CHARGING MO	DDULE) STATUS CIRCUIT FOR A SHORT TO
•		/I (body control module) eless Accessory Charging		
	Positive Lead	Measurement / Action	Negative Lead	
	C390-3	ÿ	Ground	

Is there any voltage present?

WIR	ELESS ACCESSC	M (WIRELESS ACCESSOR		ODULE) VBAT CIRCUIT AND WACM IT FOR A SHORT TOGETHER
•	Measure:	1		1
	Positive Lead	Measurement / Action	Negative Lead	
	C390-1	Ω	C390-3	
re t Yes	GO to B7	s greater than 10,000 oh	ms?	
No	REPAIR the	e circuit.		
•	Ignition OFF. Disconnect and Repair: • corrosion ( • damaged ( • pushed-ou Reconnect all W correctly.	l inspect all the WACM (w (install new connector or or bent pins – install new ut pins – install new pins a /ACM (wireless accessory	ireless accessory terminals – clear terminals/pins as necessary charging module	e) connectors. Make sure they seat and latch
s th	e concern still	hiezelli:		
Yes				n System) for any applicable service articles e Bulletin) , SSM (special service message) o

- Charging system concern
- Battery
- WACM (wireless accessory charging module)

# Visual Inspection and Pre-checks

- Make sure the vehicle battery terminals and cables are free of any corrosion and other contaminants.
- Make sure the vehicle battery terminals are tightened to their correct torque specifications.
- Make sure BCM (body control module) fuse 3 (7.5A) is OK.
- Inspect for loose or corroded WACM (wireless accessory charging module) connections.

# NOTE

DTC (diagnostic trouble code) U3003:17 may be stored in the module memory due to past battery charging or vehicle jump starting events. Use the correct probe adapter(s) when making measurements. Failure to use the correct probe adapter(s) may cause damage to the connector.

# C1 CARRY OUT THE WACM (WIRELESS ACCESSORY CHARGING MODULE) SELF-TEST

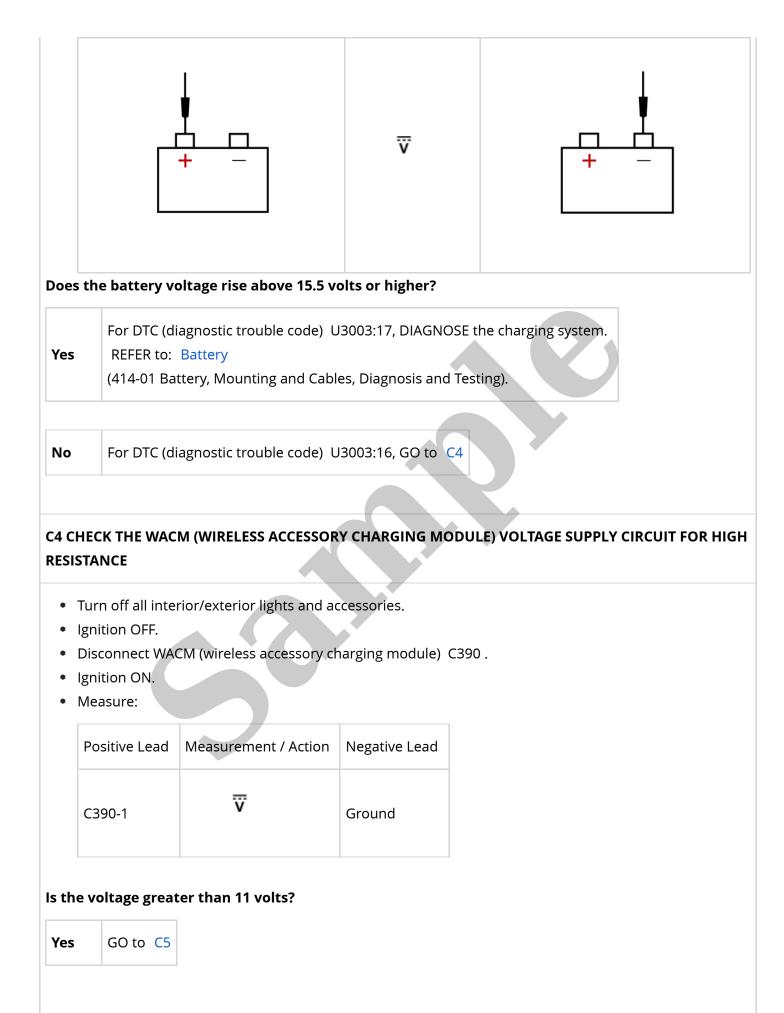
# NOTE

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.

- Start the engine.
- Using a diagnostic scan tool, perform the WACM (wireless accessory charging module) self-test.
- Using a diagnostic scan tool, clear the WACM (wireless accessory charging module) Diagnostic Trouble Codes (DTCs).
- Ignition OFF.
- Wait 10 seconds.
- Start the engine.
- Using a diagnostic scan tool, perform the WACM (wireless accessory charging module) self-test.

# Is DTC (diagnostic trouble code) U3003:16 or U3003:17 still present?

Yes	GO to C2
Νο	The system is operating normally at this time. The DTC (diagnostic trouble code) may have been



	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
	WACM (wireless accessory charging module) .
	REFER to: Wireless Accessory Charging Module (WACM)
	(414-06 Accessory Charging, Removal and Installation).
	The system is operating correctly at this time. The concern may have been due to incorrect parts
No	replacement procedures or incorrect module configuration.

#### **PINPOINT TEST D : U0140:00**

Refer to Wiring Diagrams Cell 12 for schematic and connector information.

#### **Normal Operation and Fault Conditions**

- REFER to: Wireless Accessory Charging Module (WACM) System Operation and Component Description(414-06 Accessory Charging, Description and Operation).
- Modules send messages on the vehicle communication networks. If data messages from the BCM (body control module) are missing for 5 seconds or longer, the WACM (wireless accessory charging module) sets a DTC (diagnostic trouble code).

# **DTC Fault Trigger Conditions**

DTC (diagnostic trouble code)	Description	Fault Trigger Condition	
WACM (wireless accessory charging module) U0140:00	Lost Communication With Body Control Module: No Sub Type Information	Sets in continuous memory in the WACM (wireless accessory charging module) if data messages received from the BCM (body control module) are missing for 5 seconds or longer.	

#### **Possible Sources**

- Wiring, terminals or connectors
- WACM (wireless accessory charging module)
- BCM (body control module)

# NOTICE

No	DIAGNOSE the WACM (wireless accessory charging module) does not communicate with the diagnostic scan tool. REFER to: Wireless Accessory Charging Module (WACM) (414-06 Accessory Charging, Diagnosis and Testing).
D3 PER	FORM THE WACM (WIRELESS ACCESSORY CHARGING MODULE) SELF-TEST
	ing a diagnostic scan tool, perform the WACM (wireless accessory charging module) self-test. <b>y non-network Diagnostic Trouble Codes (DTCs) present?</b>
Yes	REFER to DTC (diagnostic trouble code) Chart: WACM (wireless accessory charging module) in this section.
Νο	GO to D4
D4 CHE	CK THE GWM (GATEWAY MODULE A) DTCS (DIAGNOSTIC TROUBLE CODES)
Dia	ing a diagnostic scan tool, check the GWM (gateway module A) CMDTCs (Continuous Memory agnostic Trouble Codes). <b>y DTCS (Diagnostic Trouble Codes) recorded?</b>
No	GO to D5
D5 PER	FORM THE BCM (BODY CONTROL MODULE) SELF-TEST
	ing a diagnostic scan tool, perform the BCM (body control module) self-test. y non-network DTCS (Diagnostic Trouble Codes) present?
Yes	REFER to the Master DTC (diagnostic trouble code) Chart: in General Information Group 100.
L	

• Operate the system and determine if the observable symptom is still present.

# Is the observable symptom still present?

Yes	GO to D8	
	_	· · · · · · · · · · · · · · · · · · ·
No	-	is operating correctly at this time. The concern may have been due to incorrect parts It procedures or incorrect module configuration.
08 CH	ECK FOR COR	RECT WACM (WIRELESS ACCESSORY CHARGING MODULE) OPERATION
0	nition OFF. isconnect and	inspect all the WACM (wireless accessory charging module) connectors.
• Re	epair:	
	• corrosion (	install new connector or terminals – clean module pins)
	0011001011 (	
		r bent pins – install new terminals/pins
	damaged c	r bent pins – install new terminals/pins t pins – install new pins as necessary
• R	<ul><li> damaged c</li><li> pushed-ou</li></ul>	t pins – install new pins as necessary
	<ul><li> damaged c</li><li> pushed-ou</li></ul>	
СС	<ul> <li>damaged c</li> <li>pushed-ou</li> <li>econnect all W</li> <li>orrectly.</li> </ul>	t pins – install new pins as necessary
сс • О	<ul> <li>damaged c</li> <li>pushed-ou</li> <li>econnect all W</li> <li>orrectly.</li> </ul>	t pins – install new pins as necessary ACM (wireless accessory charging module) connectors. Make sure they seat and latch tem and determine if the concern is still present.
сс • О	<ul> <li>damaged of pushed-ou</li> <li>pushed-ou</li> <li>econnect all W</li> <li>porrectly.</li> <li>perate the sys</li> <li>concern still</li> </ul>	t pins – install new pins as necessary ACM (wireless accessory charging module) connectors. Make sure they seat and latch tem and determine if the concern is still present. present?
сс • О	<ul> <li>damaged c</li> <li>pushed-ou</li> <li>econnect all W</li> <li>porrectly.</li> <li>operate the sys</li> <li>concern still I</li> <li>CHECK OAS</li> </ul>	t pins – install new pins as necessary ACM (wireless accessory charging module) connectors. Make sure they seat and latch tem and determine if the concern is still present. <b>Dresent?</b> IS (Online Automotive Service Information System) for any applicable service articles:
сс • О	<ul> <li>damaged c</li> <li>pushed-ou</li> <li>econnect all W</li> <li>orrectly.</li> <li>operate the sys</li> <li>concern still I</li> <li>CHECK OAS</li> <li>TSB (Technick)</li> </ul>	t pins – install new pins as necessary ACM (wireless accessory charging module) connectors. Make sure they seat and latch tem and determine if the concern is still present. <b>Dresent?</b> IS (Online Automotive Service Information System) for any applicable service articles: cal Service Bulletin) , GSB (General Service Bulletin) , SSM (special service message) or
сс • О	<ul> <li>damaged of pushed-ou econnect all W orrectly.</li> <li>perate the sys concern still p</li> <li>CHECK OAS TSB (Techni FSA (Field S</li> </ul>	t pins – install new pins as necessary ACM (wireless accessory charging module) connectors. Make sure they seat and latch tem and determine if the concern is still present. <b>Dresent?</b> IS (Online Automotive Service Information System) for any applicable service articles:
cc • O s the	<ul> <li>damaged c</li> <li>pushed-ou</li> <li>econnect all W</li> <li>orrectly.</li> <li>operate the sys</li> <li>concern still p</li> <li>CHECK OAS</li> <li>TSB (Technick</li> <li>FSA (Field S)</li> <li>FOLLOW th</li> </ul>	t pins – install new pins as necessary ACM (wireless accessory charging module) connectors. Make sure they seat and latch tem and determine if the concern is still present. <b>Dresent?</b> AIS (Online Automotive Service Information System) for any applicable service articles: cal Service Bulletin) , GSB (General Service Bulletin) , SSM (special service message) or ervice Action) . If a service article exists for this concern, DISCONTINUE this test and
cc • O s the	<ul> <li>damaged of pushed-ou econnect all W perate the sys concern still p</li> <li>CHECK OAS TSB (Techni FSA (Field S FOLLOW th WACM (wire</li> </ul>	t pins – install new pins as necessary ACM (wireless accessory charging module) connectors. Make sure they seat and latch tem and determine if the concern is still present. <b>Dresent?</b> AIS (Online Automotive Service Information System) for any applicable service articles: cal Service Bulletin) , GSB (General Service Bulletin) , SSM (special service message) or ervice Action) . If a service article exists for this concern, DISCONTINUE this test and e service article instructions. If no service articles address this concern, INSTALL a new
cc • O s the	<ul> <li>damaged of pushed-ou econnect all W orrectly.</li> <li>perate the sys concern still p</li> <li>CHECK OAS TSB (Techni FSA (Field S FOLLOW th WACM (wire REFER to:</li> </ul>	t pins – install new pins as necessary ACM (wireless accessory charging module) connectors. Make sure they seat and latch tem and determine if the concern is still present. <b>Dresent?</b> AIS (Online Automotive Service Information System) for any applicable service articles: cal Service Bulletin) , GSB (General Service Bulletin) , SSM (special service message) or ervice Action) . If a service article exists for this concern, DISCONTINUE this test and e service article instructions. If no service articles address this concern, INSTALL a new eless accessory charging module) .
دد • O	<ul> <li>damaged of pushed-ou econnect all W perate the sys concern still p</li> <li>CHECK OAS TSB (Techni FSA (Field S FOLLOW th WACM (wire REFER to: (414-06 Acc</li> </ul>	t pins – install new pins as necessary ACM (wireless accessory charging module) connectors. Make sure they seat and latch tem and determine if the concern is still present. <b>Dresent?</b> AIS (Online Automotive Service Information System) for any applicable service articles: cal Service Bulletin), GSB (General Service Bulletin), SSM (special service message) or ervice Action). If a service article exists for this concern, DISCONTINUE this test and e service article instructions. If no service articles address this concern, INSTALL a new eless accessory charging module). Wireless Accessory Charging Module (WACM)

#### **PINPOINT TEST E : U0184:00**

E2 REC	HECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0184:00
<ul> <li>Us</li> <li>Igr</li> <li>Igr</li> <li>Wa</li> <li>Us</li> </ul>	nition ON. sing a diagnostic scan tool, clear all Continuous Memory Diagnostic Trouble Codes (CMDTCs). nition OFF. nition ON. ait at least 10 seconds. sing a diagnostic scan tool, retrieve all Continuous Memory Diagnostic Trouble Codes (CMDTCs). (diagnostic trouble code) U0184:00 set in the WACM (wireless accessory charging module) ?
Yes	GO to E3
No	The system is operating correctly at this time. The DTC (diagnostic trouble code) may have been set due to high network traffic or an intermittent fault condition.
E3 PER	FORM THE ACM (AUDIO FRONT CONTROL MODULE) SELF-TEST
	sing a diagnostic scan tool, perform the ACM (audio front control module) self-test. <b>y non-network DTCS (Diagnostic Trouble Codes) present?</b>
Yes	REFER to the Master DTC (diagnostic trouble code) Chart: General Information in Group 100.
Νο	GO to E4
E4 CHE	CK FOR BATTERY VOLTAGE OUT-OF-RANGE DTCS (DIAGNOSTIC TROUBLE CODES)
• Us	ing a diagnostic scan tool, perform the self-test for the following modules:
	ACM (audio front control module)
	WACM (wireless accessory charging module)
-	y low or high voltage Diagnostic Trouble Codes (DTCs) recorded in the ACM (audio front control e) , or WACM (wireless accessory charging module) ?
Yes	For DTCs (Diagnostic Trouble Codes)U3003:16 and U3003:17, GO to Pinpoint Test C