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2013 FORD Mustang Shelby GT500 OEM Service and Repair Workshop Manual

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## Universal Serial Bus (USB) Hub

415-00 Information and Entertainm Information	ent System - General	2022 F-150
Removal and Installation		Procedure revision date: 09/18/2020
Universal Serial Bus (USB) Hub		
Removal		
NOTE		

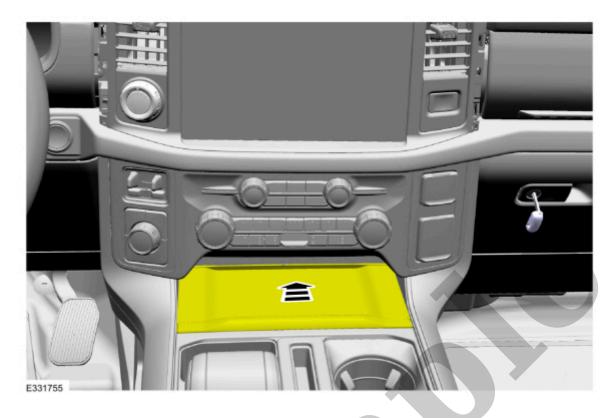
Removal steps in this procedure may contain installation details.

#### Vehicles without a floor console

1. Release the tabe and position the USB (universal serial bus) hub forward.

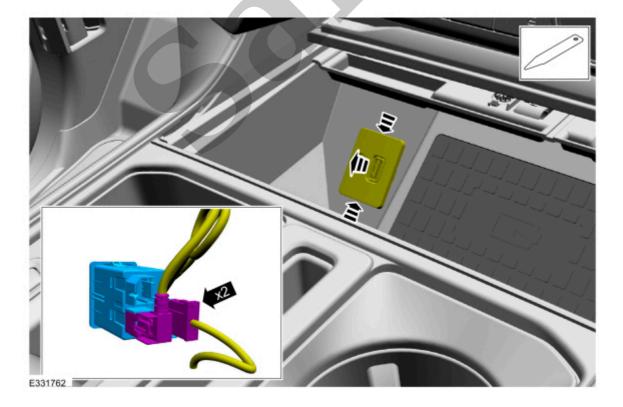
Use the General Equipment: Interior Trim Remover

#### 3. Open the media bin.



Click here to learn about symbols, color coding, and icons used in this manual.

- 4. Release the tabs and remove the USB (universal serial bus) hub.
  - Disconnect the electrical connectors.



# Voice Microphone

<i>415-00 Information and Entertainment System - General Information</i>	2022 F-150
Removal and Installation	Procedure revision date: 09/18/2020
Voice Microphone	

#### Removal

#### NOTE

Removal steps in this procedure may contain installation details.

#### NOTE

Super crew headliner shown, regular cab and supercab are similar.

1. Lower the headliner.

Refer to: Headliner - Lowering - Regular Cab(501-05 Interior Trim and Ornamentation, Removal and Installation).

Refer to: Headliner - Lowering - SuperCab(501-05 Interior Trim and Ornamentation, Removal and Installation).

Refer to: Headliner - Lowering - SuperCrew(501-05 Interior Trim and Ornamentation, Removal and Installation).

2. Disconnect the electrical connector.

1. To install, reverse the removal procedure.

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### Horn - Overview

413-06 Ho	orn	2022 F-150
Descriptio	on and Operation	Procedure revision date: 05/28/2015

#### Horn - Overview

#### Overview

The BCM (body control module) controls horn output by energizing the horn relay and sounding the horn.

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1	Horn Switch
2	Horn Relay
3	Horn(s)
4	BCM (body control module)
5	Clockspring
6	SCCM (steering column control module)

#### **Horn Operation**

The horn switch consists of 2 sets of contacts separated by springs. The lower set is connected to ground and the upper set is connected to the horn signal circuit. When the driver airbag module is pressed, it pushes down on the upper set of contacts, collapsing the springs and allowing the contacts to touch. When the contacts touch, it completes the circuit and provides the ground signal which is routed through the clockspring, SCCM (steering column control module) and then to the BCM (body control module) . The BCM (body control module) then energizes the non-servicable horn relay located in the BCMC (body control module C) . When energized, the horn relay provides voltage to the horn, enabling the horn to sound.

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ltem	Description
1	Horn Switch
2	Horn Relay
3	Horn(s)
4	BCM (body control module)
5	Clockspring

#### **Horn Operation**

The horn switch uses 2 sets of contacts separated by springs. The lower set is connected to ground and the upper set is connected to the horn signal circuit. When the driver airbag is pressed, it pushes down on the upper set of contacts, collapsing the springs and allowing the contacts to touch. When the contacts touch, it completes the circuit and provides a ground signal through the clockspring to the BCM (body control module) horn input. The BCM (body control module) then energizes the non-servicable horn relay located in the BCMC (body control module C). When energized, the horn relay provides voltage to the horn, enabling the horn to sound.

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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).

#### **Global Customer Symptom Code Chart**

Customer Symptom	Action
Safe & Secure > Horn > Performance > Inoperative	GO to Pinpoint Test A

#### Symptom Chart(s)

#### Symptom Chart: Horn

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

Condition	Actions
The horn is inoperative	• GO to Pinpoint Test A
The horn is always on	• GO to Pinpoint Test B

#### **Pinpoint Tests**

#### **PINPOINT TEST A : THE HORN IS INOPERATIVE**

Refer to Wiring Diagrams Cell 44for schematic and connector information.

**Normal Operation and Fault Conditions** REFER to: Horn - System Operation and Component Description (413-06 Horn, Description and Operation).

#### DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition	
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No	GO to A2	
2 СН		1 (BODY CONTROL MODULE) DTC (DIAGNOSTIC TROUBLE CODE) B1C55:12, OR
81C55:		
Ŭ	nition ON.	
		stic scan tool, carry out the BCM (body control module) self-test.
		stic scan tool, carry out the SCCM (steering column control module) self-test. crouble code) B1C55:12 or B1C55:14 present?
SDIC	(ulagnostic t	Touble code) BIC55.12 of BIC55.14 present:
For DTC (diagnostic trouble code) B1C55:12, GO to A3 For DTC (diagnostic		iagnostic trouble code) B1C55:12, GO to A3 For DTC (diagnostic trouble code)
Yes	B1C55:14,	GO to A5
Νο	GO to A8	
АЗ СНЕ	СК ТНЕ ВСМ	IC (BODY CONTROL MODULE C) HORN RELAY CONTROL CIRCUIT FOR A SHORT TO

#### VOLTAGE