#### KMN-PB-FME21A



# **Push Bumper**

**Installation Manual** 

Ford Mach-E 2021+





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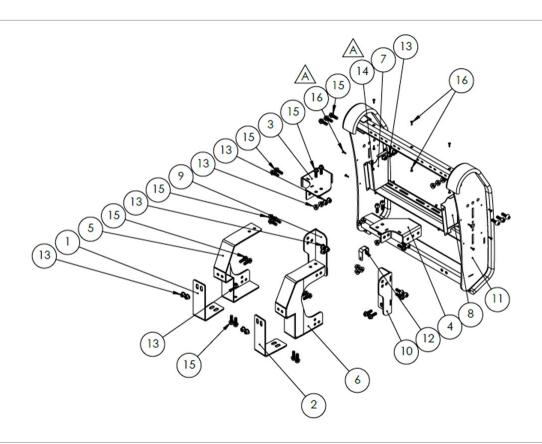


# 1 WORK TIME

Installation time	5 hours
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# **2 EXPLODED VIEW**





# **3 PARTS INCLUDED**

#	N° / SKU	DESCRIPTION	QT	IMG
1	FA00007648-M-10127-1	Main L support (driver- side)	1	
2	FA00007648-M-10127-2	Main L support (passenger- side)	1	
3	FA00007648-M-10128-1	Upper attachment (driver- side)	1	
4	FA00007648-M-10128-2	Upper attachment (passenger-side)	1	
5	FA00007648-M10129-1	Main support (driver-side)	1	



#	N° / SKU	DESCRIPTION	QT	IMG
6	FA00007648-M-10129-2	Main support (passenger- side)	1	
7	FA00007648-M-10131-1	Wire cover (driver-side)	1	
8	FA00007648-M-10131-2	Wire cover (passenger- side)	1	
9	FA00007648-M-10133-1	Lower attachment (driver- side)	1	
10	FA00007648-M-10133-2	Lower attachment (passenger-side)	1	



#	N° / SKU	DESCRIPTION	QT	IMG
11	FA00007648-M-10132	Push bumper	1	
12	FA00007648-M-10136	Temperature sensor bracket	1	
Α	KMN-OPT-PBUNI-FME21A	Option A: Top channel (solid)	1	
В	KMN-OPT-PBFS-FME21A	Option B: Top channel (Federal Signal)	1	
	KMN-HB-PB-FME21A	Hardware bag	1	



# **4 HARDWARE BAG**

#	N° / SKU	DESCRIPTION	QТ	IMG
13	MCMASTER_99908A103	Nut M10x1.5, CL10, flanged, zinc yellow chromate	32	6
14	MCMASTER_96194A201	Nut M4x0.7, CL8, flanged, zinc plated	8	0
15	MCMASTER_95735A631	Hex Head Cap Screw M10x1.5x30, CL10.9, flanged, zinc plated	32	
16	MCMASTER_96660A208	Button-Head Cap Screw M4x0.7x16 mm, flanged, zinc plated	14	O



# **5 PREPARING TO INSTALL**

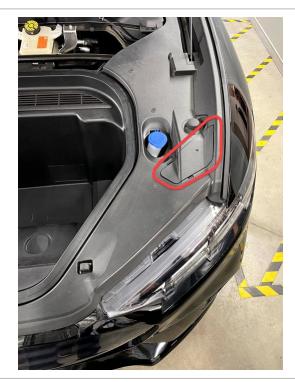
Remove the front trim using a suitable plastic tool.







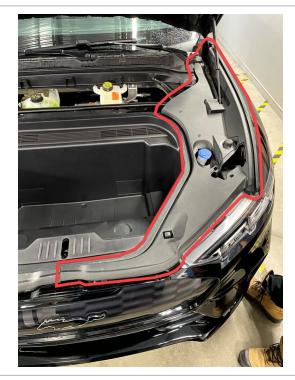
Remove the hatch circled on the first photo.

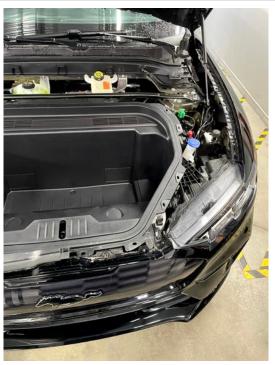






Using a plastic tool, carefully remove the side trim by unclogging it.







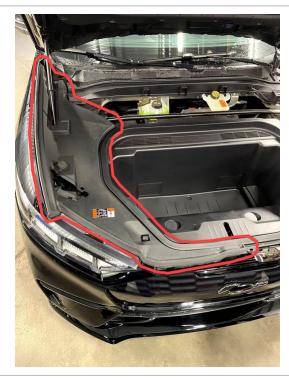
4 Remove the hatch circled on the first photo.

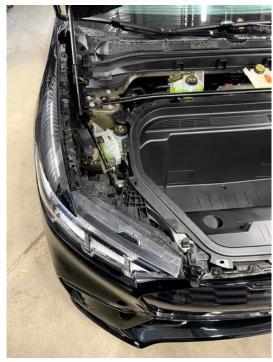






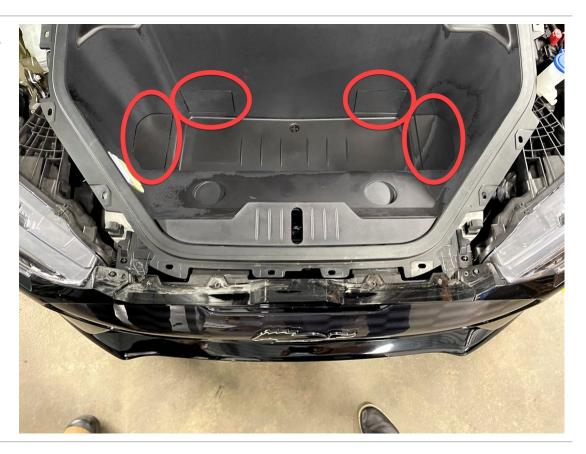
Using a plastic tool, carefully remove the side trim by unclogging it.







Using a plastic tool, carefully remove the access hatches by unclogging them.





Remove the 1-8 bolts using a 10 mm socket.





Remove the 2 front screws using a T30 Torx bit.





Remove the two passenger side connectors by lifting the trunk slightly for access.





Using a 10 mm socket, remove the 6 screws securing the top of the bumper.

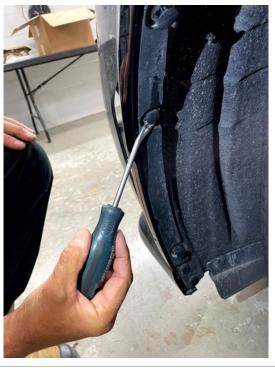




To remove the trim, turn the wheels of the vehicle to give access to the clips holding the trim around the wheel.

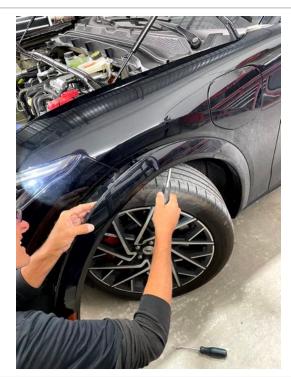
Using a tool, remove them.







Gently remove the filling using a tool to prevent damage to the filling.







Remove the 4 clips securing the false wing to the bumper.





Use a 7 mm socket to remove the 2 screws holding the unzipped part in the previous step.







Locate the 2 screws securing the bumper corner and remove them using a 10 mm socket.





Repeat steps 11-15 on the other side of the vehicle (passenger).

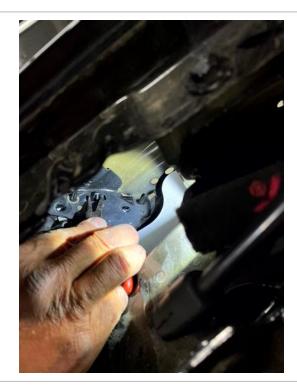


Use a 7 mm socket to remove the 4 screws under the bumper.





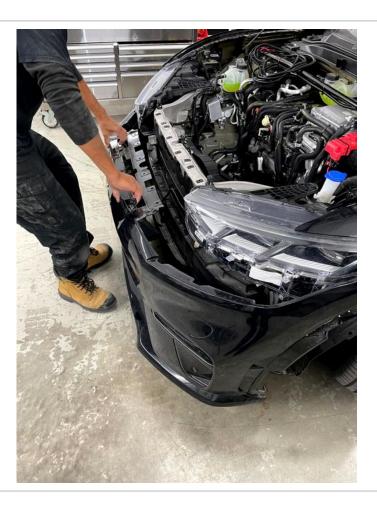
Use a plier to disengage the anchors on each side of the bumper (*located between the screws removed in step 15*) and remove it.







Gently lower the bumper to the ground.





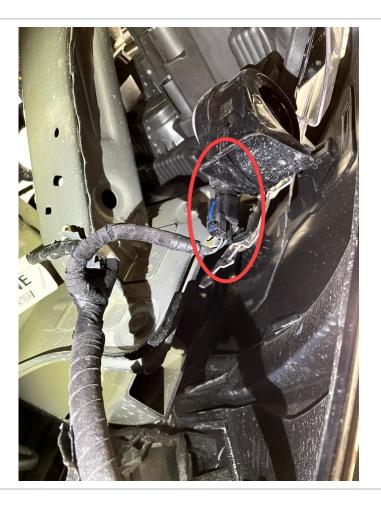
On passenger side, disconnect grey harness.

Undo harness attachment to vehicle metal shown with arrow.





Near the harness disconnected in step 20, disconnect the horn.





Place the bumper on a suitable stand or on a work table, taking care not to scratch it.





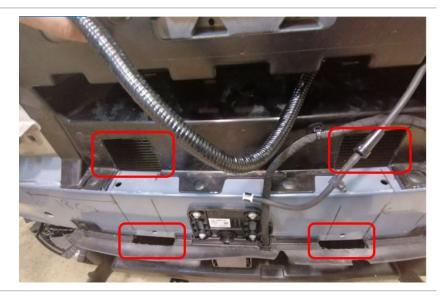
### **6 INSTALLATION**

- 1
- Using a felt-tip pen, mark with a dotted line the position of the first mark (driver-side) on the bumber rebar, as in the photo.
- From the dotted line, measure 7-3/32" (18 cm) toward the center of the vehicle.
- Mark the location with a marker.
- Repeat the marking on the passenger side.





Cut 2 openings respecting the width of the main L supports (items #1 and #2) as shown in the photo.





3 Slide the main L support (driver-side) (item #1) behind the bumper rebar.







Secure the main support (driver-side) (item #5) using 4 screws (item #Q15) and 4 nuts (item #Q13) from the hardware bag.







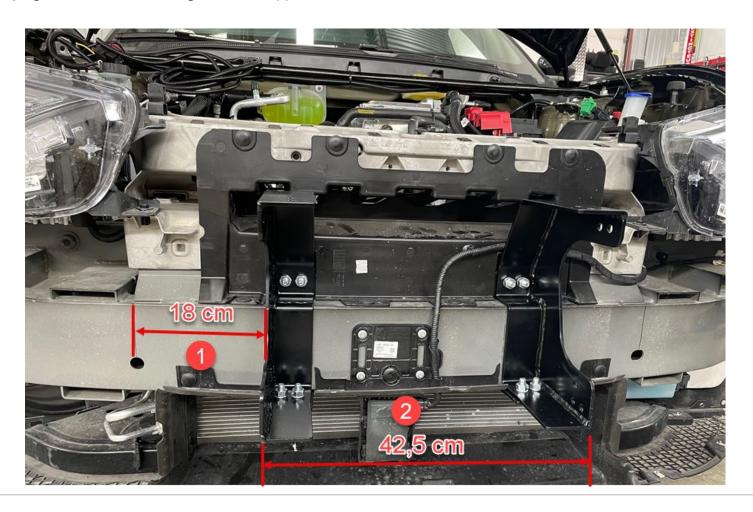
Repeat the operation on the passenger side using items #2 and 6, as well as 4 screws (item #Q15) and 4 nuts (item #Q13) from the hardware bag.







- Make sure there is 18 cm (7-3/32") between each of the main supports and the dotted reference lines.
- Make sure the outsides of the 2 main supports are 42.5 cm (16-3/4") apart, as in the photo.
- Firmly tighten the 8 nuts holding the main supports.





Place the 4 templates as shown in the photo (showing a Mustang Mach-E GT 2022):

#### • Driver-side top openings:

Press the bottom of the template to the bottom of the OEM bumper trim overhang and press the left side of the sheet to the Mustang emblem.

#### · Passenger-side top openings:

Press the bottom of the template to the bottom of the OEM bumper trim overhang and press the right side of the sheet to the Mustang emblem.

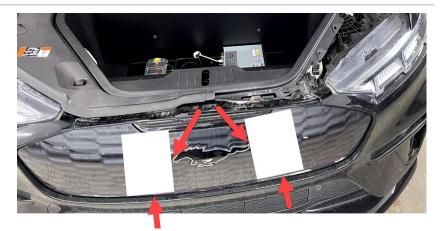


Fig. 1: Top openings

**Note:** Some models may not have the same bumper shape.

In this case, it is recommended to measure the top openings without using the templates and to mark the bottom ones which are standard.



the left corner of the hatch.

8

• **Driver-side lower openings:**Insert the template in the slot near the ventilation hatches. Align the lower left corner of the template with

- An optional cutout is indicated on the template to pass a harness if required.
- Passenger-side lower openings:
  Insert the template in the slot near the ventilation hatches. Align the lower right corner of the template with the right corner of the hatch.



Fig. 2: Bottom openings



9 Cut out the inside of the original bumper to allow the passage of the push bumper.



Fig. 3: Standard 2021 Mustang Mach-E



Fig. 4: 2022 Ford Mustang GT



Fig. 5: 2022 Ford Mustang GT



- Insert the OEM bumper onto the anchors.
- Reverse the steps of the *Preparing to install* procedure to reinstall the OEM bumper.





- 11
- Screw the upper attachment (driver-side) (item #3) to the side of the push bumper (item #11) using 3 screws (item #Q15) and 3 nuts (item #Q13) from the hardware bag, as in the photo.
- Repeat the operation on the other side using item #4.









- Screw the lower attachment (driver-side) (item #9) to the push bumper (item #11) using 2 screws (item #Q15) and 2 nuts (item #13) from the hardware bag.
- Repeat the operation on the other side using item #10.







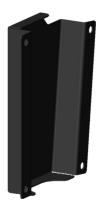


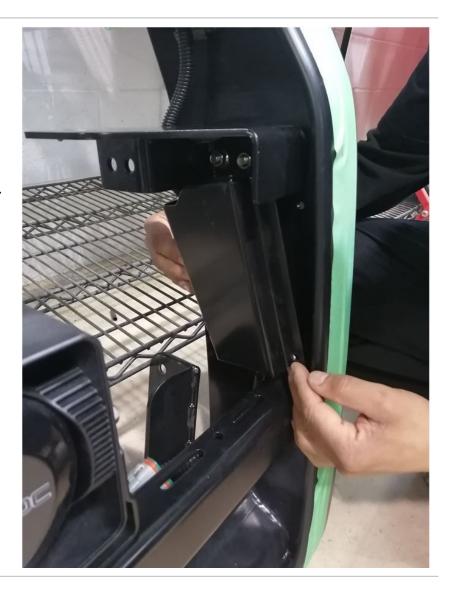
- Lift the push bumper and align the 4 attachments (item #3, 4, 9 and 10) with the 2 main supports (item #5 and #6).
- Screw the bumper to the supports (4 screws at the top and 3 at the bottom, on each side) using 14 screws (item #Q15) and 14 nuts (item #Q13) from the hardware bag.





- Install side lights (optional, not included).
- Place the wire cover (item #7) on the driver's side, as in the photo.
- Screw the wire cover in place using 4 screws (item #Q14) and 4 nuts (item #Q16) from the hardware bag.
- Repeat the operation on the passenger side using item #8.







### Option A: KMN-OPT-PBUNI-FME21A

 Screw the top channel (solid) (item #13) to the push bumper using 6 screws (item #Q16) from the hardware bag.

#### Option B: KMN-OPT-PBFS-FME21A

- Install the front lights (Federal Signal, not included) on the Federal Signal top channel (item #14).
- Screw the *Federal Signal* top channel to the push bumper using 6 screws (item #Q16) from the hardware bag.



Locations are also available on the push bumper middle bar to install 1 or 2 siren speakers (optional).

Reverse the steps of the *Preparing to install* procedure to reinstall the trims previously removed.



### **7 TECHNICAL SUPPORT**

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Installation Manual (rev. 3)

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