



TECHNICAL SERVICE BULLETIN

Soft Top Roof - Roof Scratches Sports Tube Paint During Open/Close

22-2146

02 May 2022

This bulletin supersedes 21-2339.

Model:

Ford 2021-2022 Bronco

Summary

This article supersedes TSB 21-2339 to update the Service Procedure with the latest production protection strategy.

Issue: Some 2021-2022 Bronco vehicles equipped with a soft top roof may experience paint scratches on the sports tube paint due to contact with the soft top roof frame during the open and close operation. This may be due to a lack of protective measures installed on the soft top roof frame. To correct this condition, follow the Service Procedure to install protective plates and hook and loop fasteners to sections of the soft top roof frame.

Action: Follow the Service Procedure steps to correct the condition on vehicles that meet all of the following criteria:

- 2021-2022 Bronco
- Equipped with a factory soft top roof
- Paint scratches present on the sports tube due to contact with the soft top roof frame

Parts

Service Part Number	Quantity	Description
Obtain Locally	As Needed	3M™ Loop Fastener SJ/TB 3571 With Acrylic Adhesive (Minimum Width: 1 Inch)
Obtain Locally	As Needed	Isopropyl Alcohol Wipes Or Equivalent

Parts

Parts To Inspect And Replace Only If Necessary

Service Part Number	Quantity	Description
M2DZ-7854703-A	1	Large Protective Plate, Right
M2DZ-7854703-B	1	Small Protective Plate, Right
M2DZ-7854703-C	1	Large Protective Plate, Left
M2DZ-7854703-D	1	Small Protective Plate, Left

Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

Labor Times

Description	Operation No.	Time
2021-2022 Bronco Soft Top: Inspect, Install Hook And Loop Cycle Following The Service Procedure (Do Not Use With Any Other Labor Operations)	222146A	0.8 Hrs.
2021-2022 Bronco Soft Top: Inspect, Install Protective Plate On Both Sides Of the Vehicle, Replace Hook And Loop Cycle Following The Service Procedure (Do Not Use With Any Other	222146B	1.7 Hrs.

Labor Operations)		
Additional Time to Install Extra Hook And Loop Where is Needed	222146C	0.2 Hrs.
Additional Time To Repair Any Damaged Paint Following The Service Procedure	MT222146	Actual Time

Repair/Claim Coding

Causal Part:	7853000
Condition Code:	01

Service Procedure

NOTE: The purpose of this article is to improve the protection level of earlier built factory soft top vehicles.

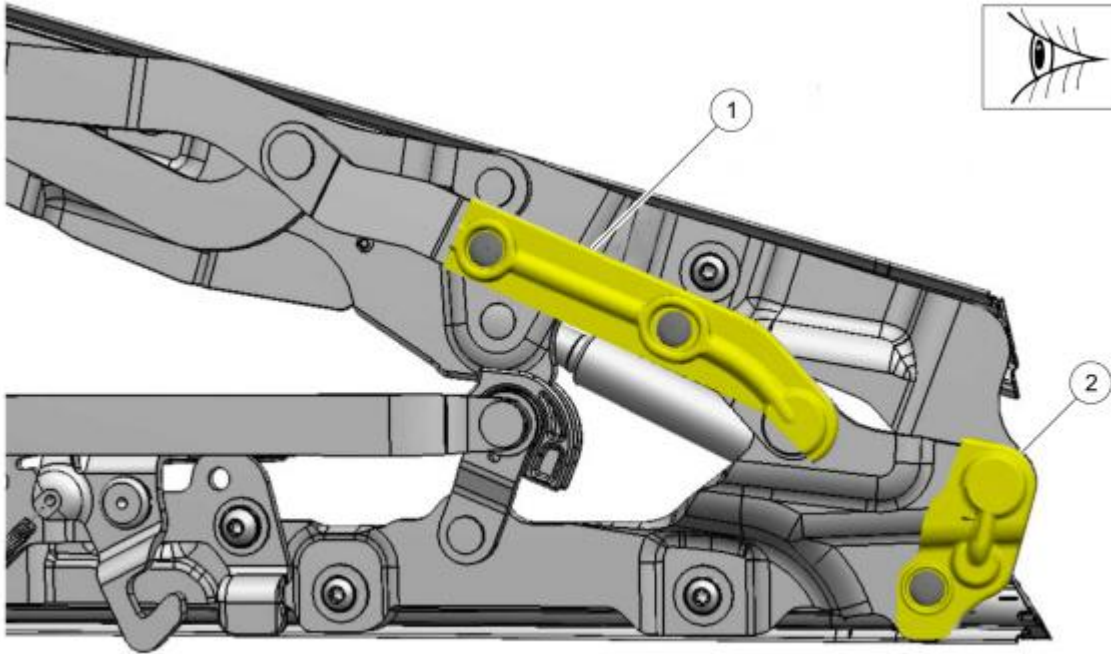
1. Remove the soft top rear window and rear quarter windows, then open the soft top roof so that it sits 12 in. (30 cm) above the partially open position. Place a rubber block or similar item between the soft top frame and the body to assist in maintaining roof position. Refer to the Digital Owner’s Manual, Removal Vehicle Components > Removable Soft Top > Opening and Closing the Soft Top. (Figure 1)

Figure 1



2. Inspect for the presence of the large protective plates (Figure 2, Callout 1) and smaller protective plates (Figure 2, Callout 2) on each side of the frame as shown.

Figure 2 - Left side shown, right side similar



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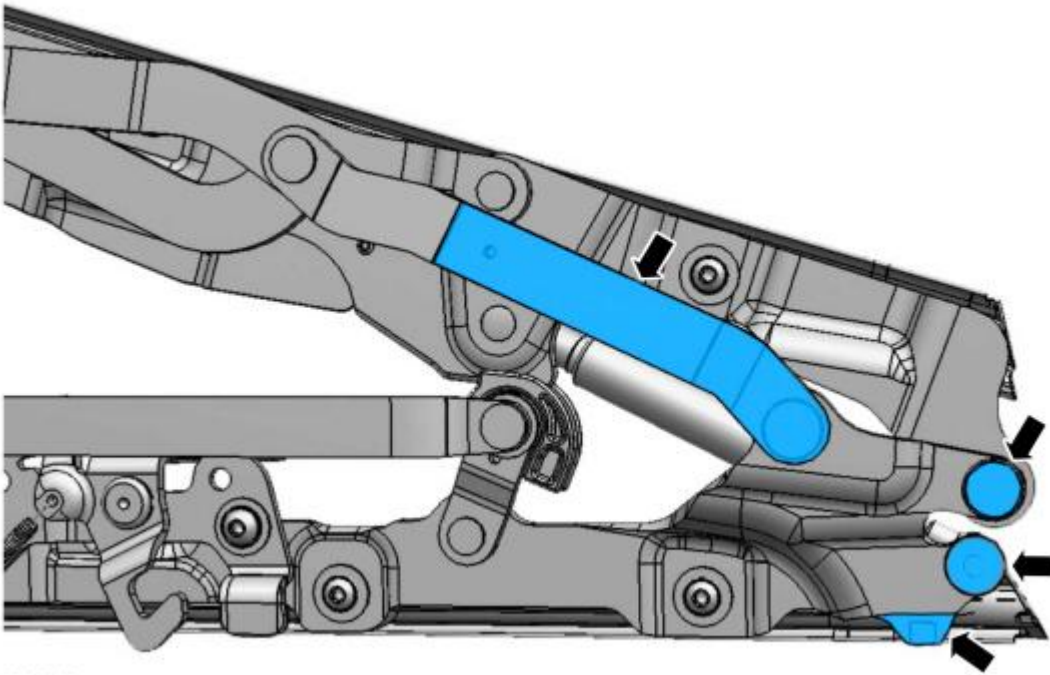
Item	Description
1	Large protective plate
2	Small protective plate

3. Are all 4 protective plates installed correctly on both sides of the frame as shown in Figure 2?

- (1). Yes - proceed to Step 9.
- (2). No - proceed to Step 4.

4. Remove all existing tape and/or hook and loop protective material from the areas highlighted in Figure 3. Perform this step on both the left and right sides of the soft top frame.

Figure 3 - Left side shown, right side similar

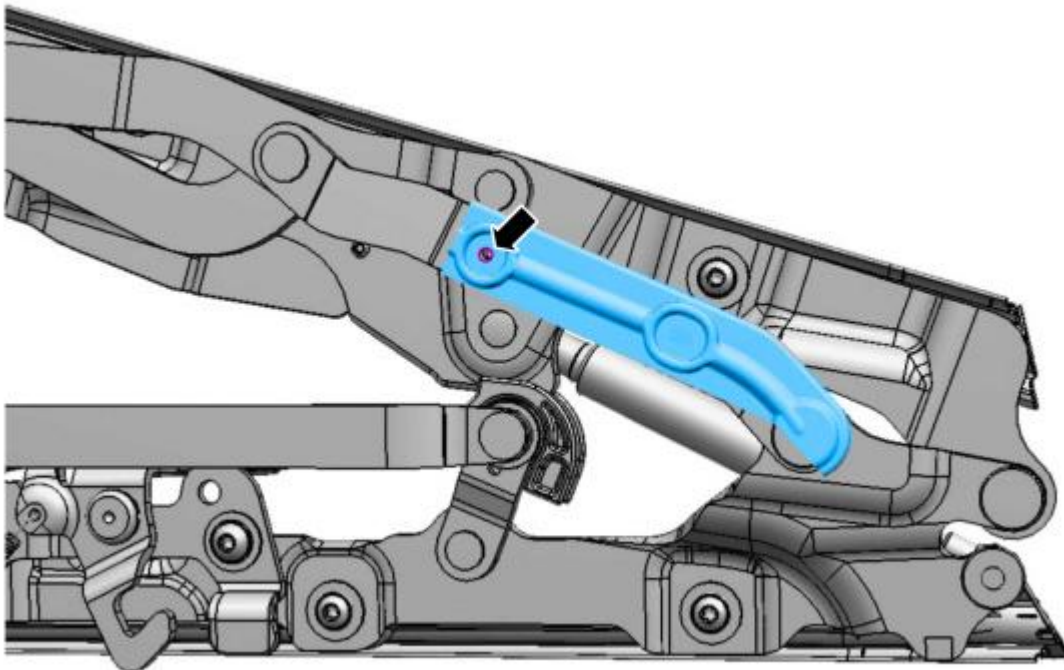


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5. Install the left large protective plate.

- (1). Place the left large protective plate in position as shown in Figure 4. Align the existing hole on the protective plate with the existing hole on the frame. Install one rivet into this location.

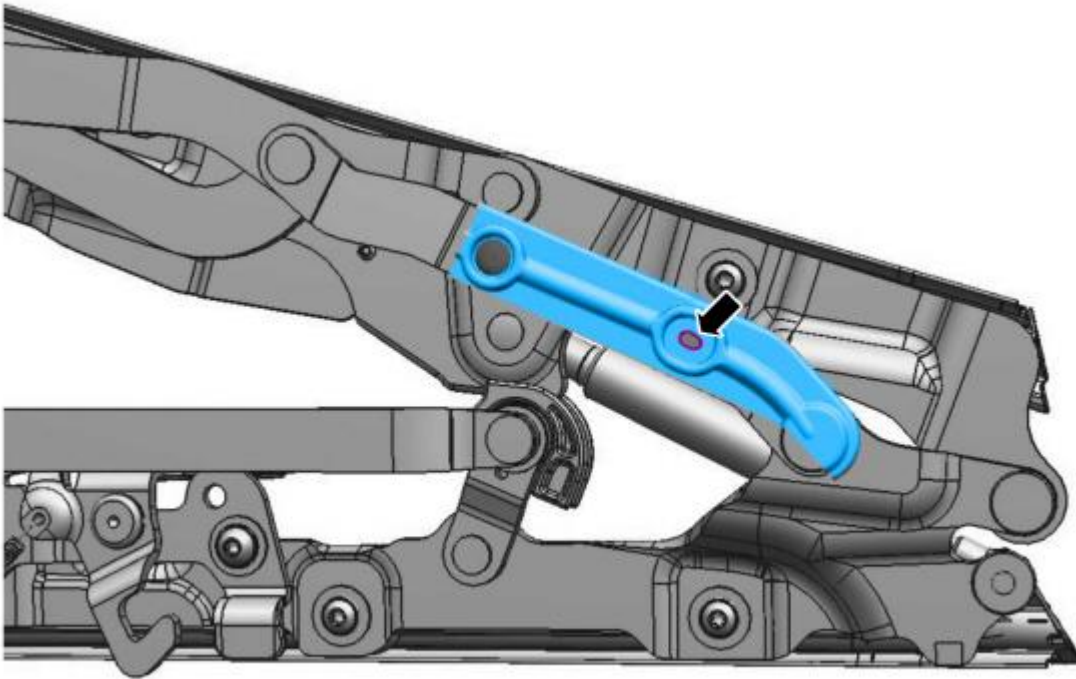
Figure 4 - Left side shown



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- (2). Rotate the large protective plate to its natural position on the frame then hold it in place using a clamp.
- (3). Using the last remaining hole in the large protective plate as a guide (refer to Figure 5), use a hammer and punch to create a mark in the frame.

Figure 5



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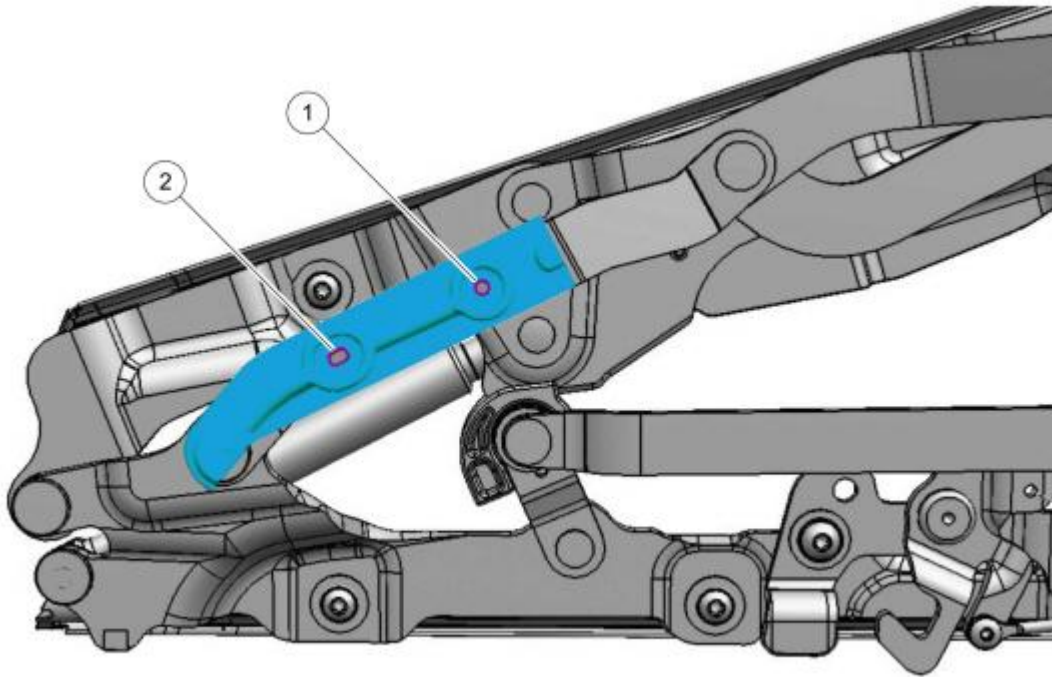
- (4). Place a protective cloth underneath the area to catch metal debris.
- (5). Drill a hole through the frame (where previously marked) using an 11/64" (4.2 mm) drill bit. Take care not to damage other components behind the frame arm while drilling.
- (6). Carefully remove any metal burrs from the hole using a small file.
- (7). Install a rivet into the hole. The left side large protective plate has been successfully installed. (Figure 5)

NOTE: The right side of the frame does not have an existing hole like the left side. Two brand new holes must be drilled to install the right large protective plate.

6. Install the right large protective plate.

- (1). Place the right side large protective plate in its natural position referencing the large protective plate on the left side.
- (2). Use a clamp to temporarily hold the large protective plate in place.
- (3). Use a hammer and punch to create a mark in the frame centered on each location (Figure 6, Callout 1 and 2).
- (4). Remove the clamp and large protective plate.
- (5). Place a protective cloth underneath the area to catch metal debris.
- (6). Drill through the frame in these two locations (Figure 6, Callout 1 and 2) using an 11/64" (4.2 mm) drill bit. Take care not to damage other components behind the frame arm while drilling.

Figure 6



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(7). Carefully remove any metal burrs from the hole using a small file.

(8). Install 1 rivet into each hole (Figure 6, Callout 1 and 2). Installation of the right side large protective plate is complete.

7. Install the small protective plates. (Figure 7)

Figure 7 - Left side shown, right side similar



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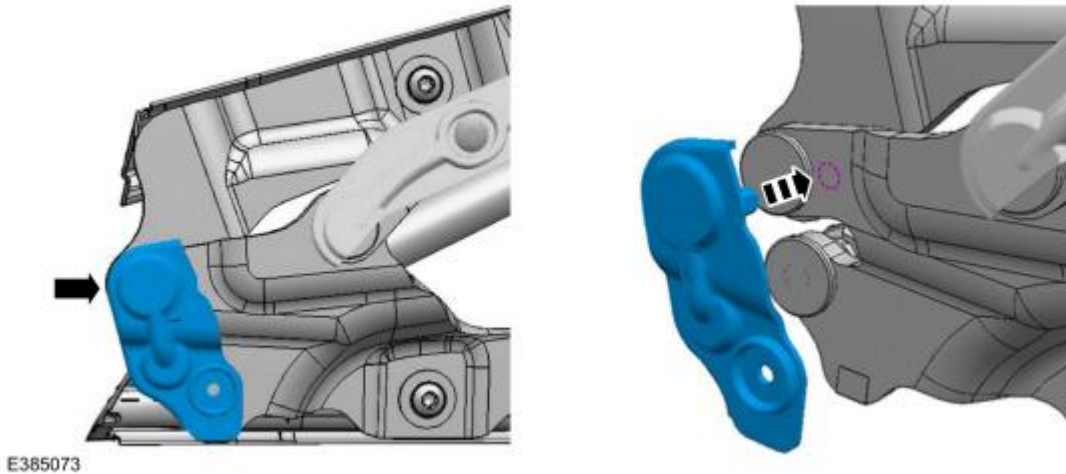
NOTE: Instructions for installing the small protective plate are identical from left to right.

(1). [Print the drilling template by clicking this link.](#) Use scissors to carefully cut out the template shape. Place the cut template on the frame as shown in Figure 7.

- If the cut template does not fit exactly as shown in Figure 7, adjust the scale of the printing properties to Actual Size to resize the image.

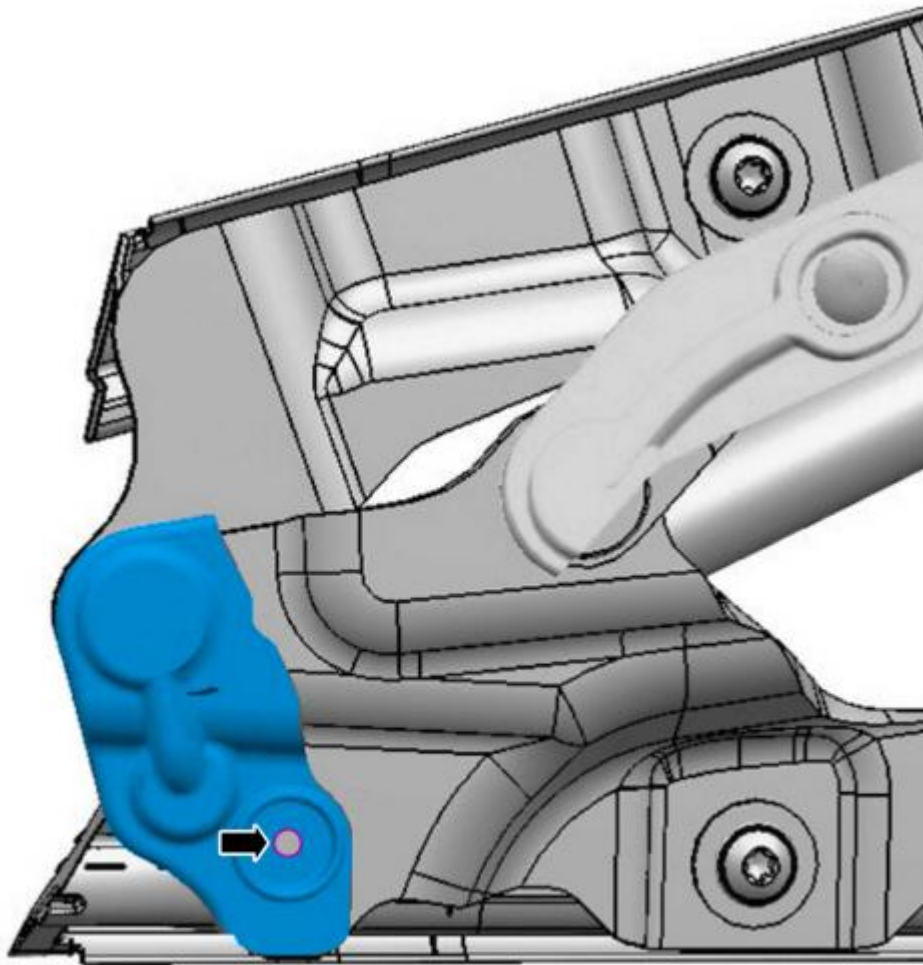
- (2). Center the front target on the cut template (Figure 7, Callout 1) directly on top of the frame arm hinge. Temporarily secure the cut template in place using tape.
- (3). Use a hammer and punch to create a dent in the frame centered on the rear target on the cut template (Figure 7, Callout 2).
- (4). Remove the cut template once a successful dent has been established.
- (5). Place a protective cloth underneath the area to catch metal debris.
- (6). Drill a hole through the dented spot using a 1/4" (6.2 mm) drill bit. Do not drill all the way through the frame for this location. Stop drilling when the drill bit starts to protrude through the opposite side. This hole will be at proper depth once the small protective plate is able sit flush on the frame with the locator pin inserted into the drilled hole. (Figure 8)

Figure 8 - Right side shown, left side similar



- (7). Be sure the small protective plate is sitting flush against the frame.
- (8). Use the existing hole on the bottom of the small protective plate as a guide to mark a spot on the frame using a marker then remove the small protective plate.
- (9). Use a hammer and punch to create a dent in the frame centered over the previous marked location.
- (10). Drill a hole through the frame arm through the dent using an 11/64" (4.2 mm) drill bit. Be careful to not cause damage to the rubber seal located directly behind the frame.
- (11). Place the small protective plate back into its natural position on the frame.
- (12). Install one rivet into the lower hole shown in Figure 9. Small protective plate installation is complete.

Figure 9 - Right side shown, left side similar



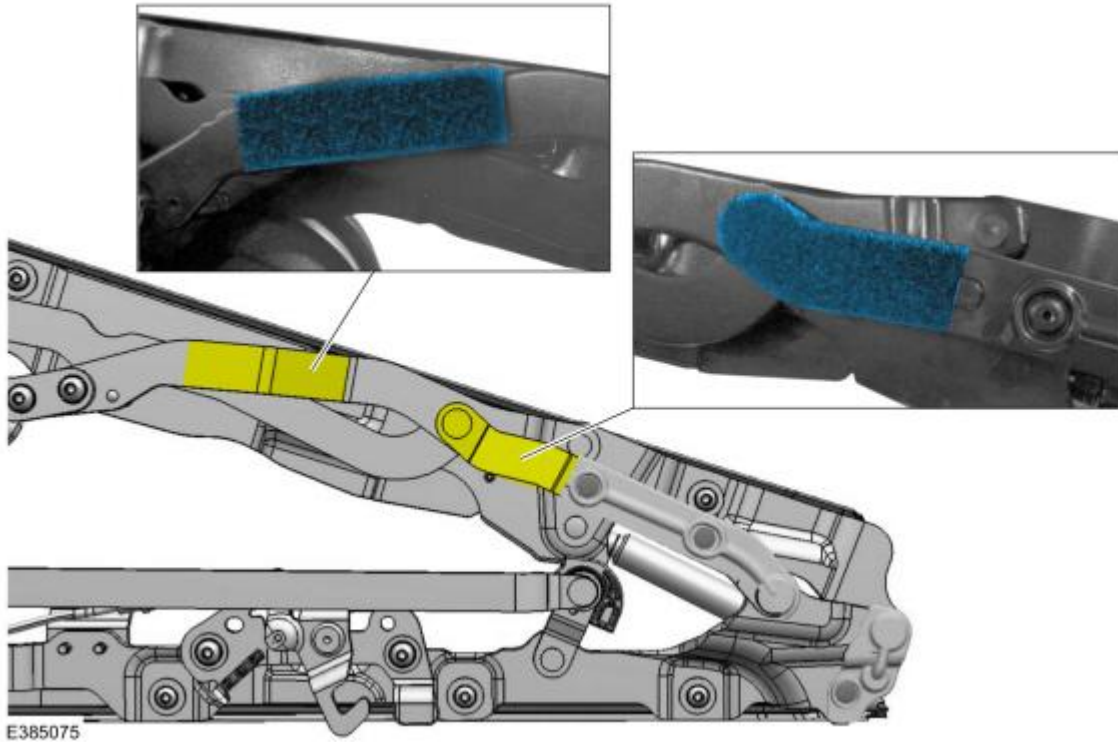
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8. Repeat Step 7 to install the small protective plate onto the opposite side of the frame then proceed to Step 9.
9. Install hook and loop fasteners on the soft top frame (as shown in Figure 10) using 3M™ Hook and Loop Fastener. Perform these steps on both the left and right sides of the frame.

NOTE: The hook and loop fastener system has 2 sides; the hook side, that is stiffer/more abrasive and the loop side, which is soft and fuzzy. This procedure will only use the loop side, which is soft and fuzzy, the hook side will not be used.

- (1). Clean the application areas of the frame using alcohol wipes or equivalent.
- (2). Cut the 3M™ Hook and Loop Fastener into the appropriate lengths to cover all areas shown in Figure 10. Do not leave excess material hanging over the edges of the frame to maintain a professional appearance. (Figure 10)
- (3). Repeat this step on the opposite side then proceed to Step 10. (Figure 10)

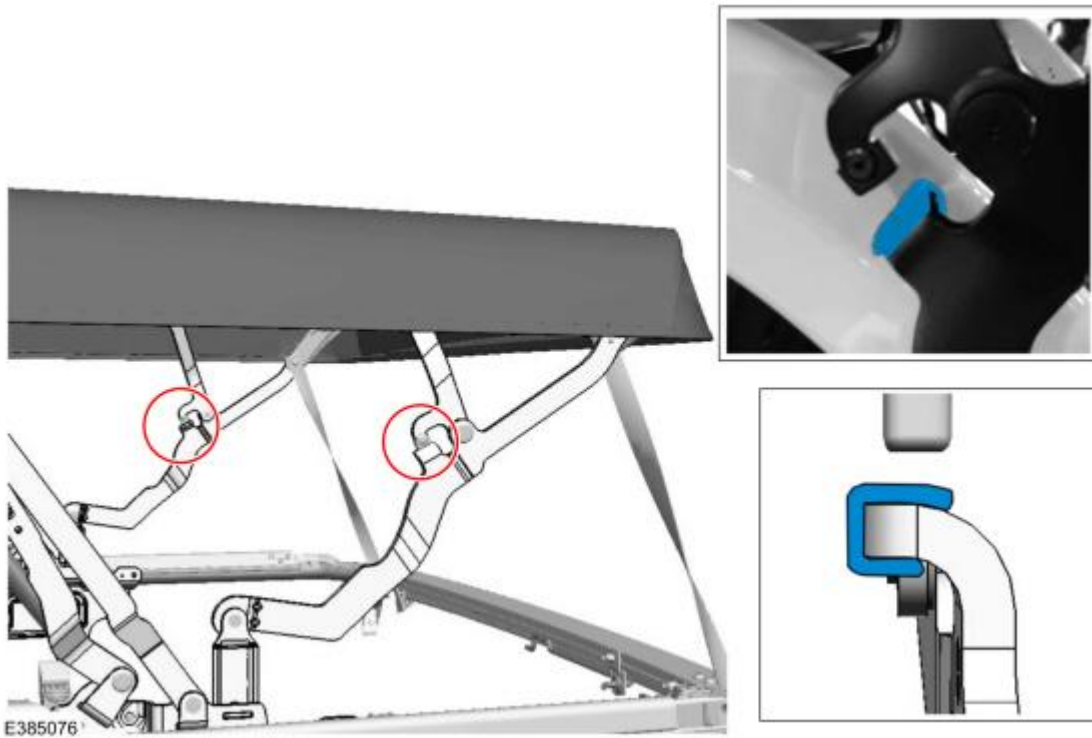
Figure 10 - Left side shown, right side similar



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10. Carefully remove all protective cloths and rubber blocks. Inspect the soft top lower frame and the vehicle interior for metal debris and vacuum/clean as necessary.
11. Place the soft top in the fully closed position and completely remove the rear window and both rear quarter windows. Refer to the Digital Owner's Manual, Removal Vehicle Components > Removable Soft Top > Opening and Closing the Soft Top.
12. Open the rear door to the fully open position.
13. Place the rear soft top section into the Rear Cargo Access Position so that the rear section of soft top assembly is slightly raised and supported by the prop rod. Refer to the Digital Owner's Manual, Removal Vehicle Components > Removable Soft Top > Opening and Closing the Soft Top > Accessing the Rear Cargo Area.
14. Install 3M™ Hook and Loop Fasteners on the soft top frame sections shown.
 - (1). Manipulate the soft top frame to gain separation between the bumper and the 90-degree bend in the frame.
 - (2). Clean the application area of the frame using alcohol wipes or equivalent.
 - (3). Cut the 3M™ Hook and Loop Fastener to approximately 0.78 x 1.18 inches (20 mm x 30 mm).
 - (4). Install the cut section of the 3M™ Hook and Loop Fastener exactly as shown in Figure 11.

Figure 11



(5). Repeat this step for the opposite side then proceed to Step 15. (Figure 11)

15. Slowly cycle the soft top roof through all 3 positions (fully closed, partially open, and fully open) while closely inspecting for contact with the sports tube. Do any potential contact points exist between the soft top frame and the sports tube that has not already been addressed in the previous steps?

- (1). Yes - proceed to Step 16.
- (2). No - proceed to Step 17.

16. Install additional 3M™ Hook and Loop Fastener to the soft top frame as needed. If 3M™ Hook and Loop Fastener is applied to one side of the soft top frame, install it in the same location on the opposite side.

- (1). Clean the application area of the frame using alcohol wipes or equivalent.
- (2). Cut the 3M™ Hook and Loop Fastener to the necessary dimensions.
- (3). Apply the prepared 3M™ Hook and Loop Fastener to the appropriate area of the soft top frame. Do not apply 3M™ Hook and Loop Fastener to the sports tube. Do not leave excess material hanging over the edges of the frame to maintain a professional appearance.
- (4). Repeat the above steps for the opposite side of the frame then proceed to Step 17.

17. Repair all paint damage on the sports tube that is a result of contact with the soft top roof frame, returning the paint to the original factory condition. Do not use touch-up paint.

18. During vehicle delivery, show the customer how to find the soft top tutorial video located within the vehicle's touchscreen. Find this video in the Digital Owner's Manual > Removable vehicle Components > Removable Soft Top > Opening and Closing the Soft Top.