

DEFENDER HALF DOORS

P/N: TF041701



Thumper Fab
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Customer Service: 903-472-0928

www.thumperfab.com

TOOLS REQUIRED

- 10mm wrench
- 10mm socket
- 13mm wrench
- 13mm socket
- 15mm wrench
- 15mm Socket
- Wire Cutters
- 11/32" Wrench or Socket
- 5mm Allen
- 3/16" Allen
- 3/32" Allen
- T20 Torx
- T30 Torx
- Push Pin Removal Tool

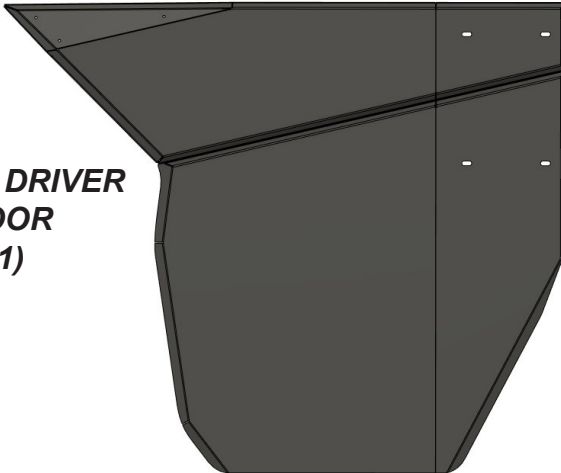
HARDWARE LIST FOR FRONT DOORS (2 & 4-SEAT MODELS)

Description	Quantity
M6 x 20mm long, Flanged Hex Head Screw	4
M6 x 55mm long, Flanged Hex Head Screw	2
M6 x 1.0 Nylon Insert Locknut	2
Long Spacer (TF041701-19)	2
Short Spacer (TF041701-20)	4
M8 x 20mm long, Flanged Hex Head Screw	22
M8 Flanged Locknut	20
M8 Button Head, Hex Drive Screw	4
5/16" x 3.0" long, Flanged Head Bolt	4
5/16" Flanged Locknut	4
5/16" Bronze Flanged Bushing	8
8-32 x 3/4" Button Head, Hex Drive Screw	6
8-32 Locknut	6
#8 Flat Washer	12
1/4" x 1" long, Button Head, Hex Drive Screw	6
M10 x 80mm long, Flanged Hex Head Bolt	4
M10 Flanged Locknut	4
M8 Load Rated Rubber Bumper	2
Locking Plastic Panel Plug	2

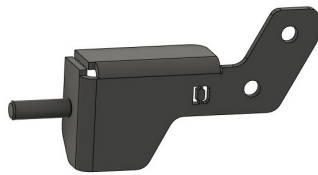
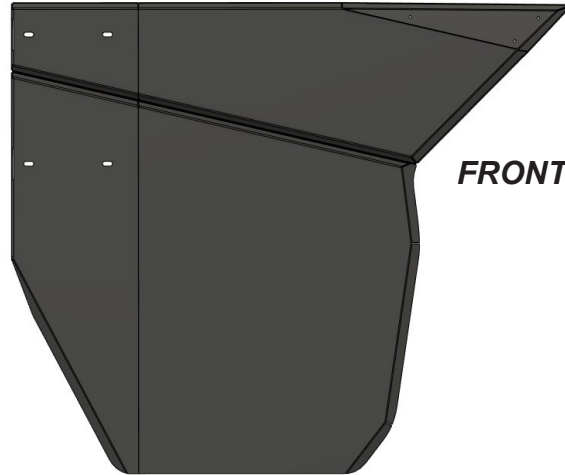
*****QUANTITIES LISTED ARE FOR 2-SEAT DOORS. QUANTITIES ARE DOUBLED FOR 4-SEAT DOOR KIT. WILL HAVE EXTRA 8-32 HARDWARE WITH THE REAR DOORS.*****

FRONT DOOR COMPONENTS

**FRONT DRIVER
DOOR
(1)**



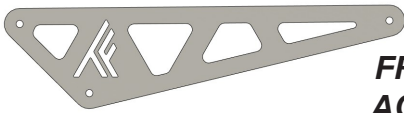
**FRONT PASSENGER
DOOR
(1)**



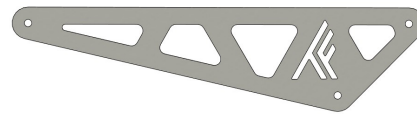
**FRONT DRIVER
STRIKER BRACKET
(1)**



**FRONT PASSENGER
STRIKER BRACKET
(1)**



**FRONT DRIVER
ACCENT PANEL
(1)**



**FRONT PASSENGER
ACCENT PANEL
(1)**



**DRIVER REAR MOUNT
BRACKET
(1)**



**PASSENGER REAR
MOUNT BRACKET
(1)**



**DRIVER 2023+
BRACE ATTACHMENT
BRACKET
(1)**



**PASSENGER 2023+
BRACE ATTACHMENT
BRACKET
(1)**



**DRIVER HINGE
MOUNT BRACE
(1)**

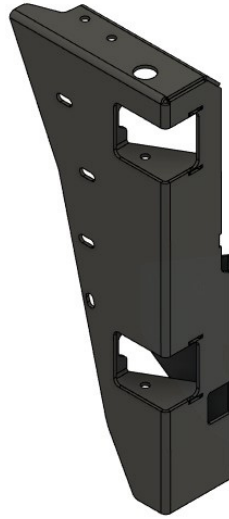


**PASSENGER
HINGE MOUNT
BRACE
(1)**

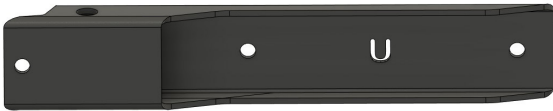
FRONT DOOR COMPONENTS (CONT.)



**DRIVER HINGE
MOUNT BRACKET
(1)**



**PASSENGER
HINGE MOUNT
BRACKET
(1)**



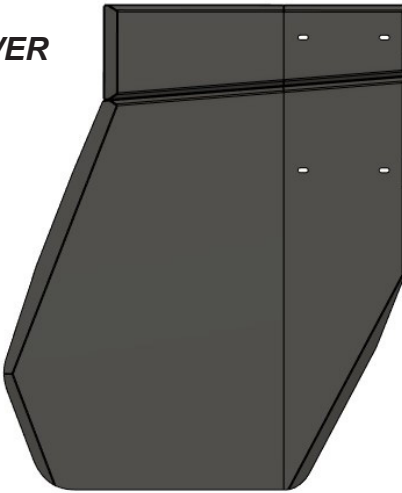
**UPPER PIVOT
ARM
(2)**



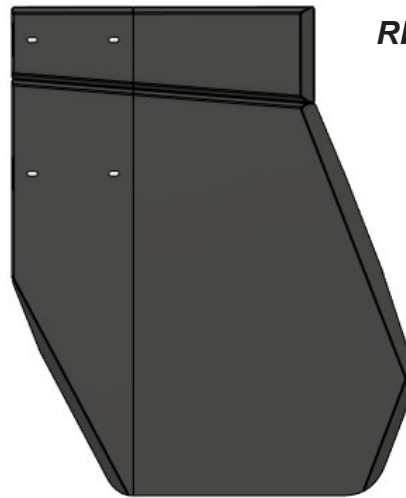
**LOWER PIVOT
ARM
(2)**

REAR DOOR COMPONENTS

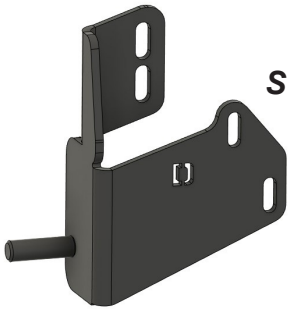
**REAR DRIVER
DOOR
(1)**



**REAR DRIVER
DOOR
(1)**



**REAR DRIVER
STRIKER BRACKET
(1)**



**REAR PASSENGER
STRIKER BRACKET
(1)**



**DRIVER REAR
MOUNT BRACKET
(1)**



**PASSENGER REAR
MOUNT BRACKET
(1)**



**DRIVER 2023+
BRACE ATTACHMENT
BRACKET
(1)**



**PASSENGER 2023+
BRACE ATTACHMENT
BRACKET
(1)**



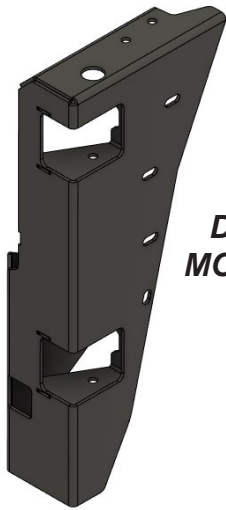
**DRIVER HINGE
MOUNT BRACE
(1)**



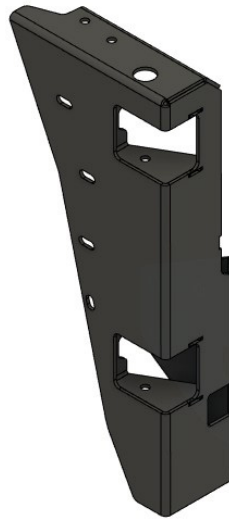
**PASSENGER HINGE
MOUNT BRACE
(1)**



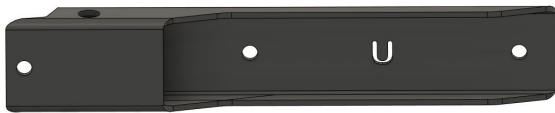
REAR DOOR COMPONENTS (CONT.)



**DRIVER HINGE
MOUNT BRACKET
(1)**



**PASSENGER
HINGE MOUNT
BRACKET
(1)**



**UPPER PIVOT
ARM
(2)**



**LOWER PIVOT
ARM
(2)**

REMOVAL OF DOOR NETS AND PLASTICS

1. Remove torx screws (using T20 & T30 torx) and push pins shown in order to remove OEM door net retention clips, OEM door nets, and plastic B-pillar cover (and C-pillar cover for 4-DOOR models).
2. Replace torx screws along floor after net has been removed.



REMOVAL OF DOOR NETS AND PLASTICS (CONT.)

2. After door nets and plastic pillar cover are removed, then remove the safety bar using a 10mm socket and T30 torx.



3. **(2023+ MODELS ONLY)** The 2023+ model's safety bar is designed differently than year models before. For 2023+, there is not a welded extrusion with M6 threads on the cage. Instead, the bar has a bracket that is welded to it and is fastened to the cage with (1) M6 button head torx screw. Remove this screw and the same M6 hex screws at the bottom to remove the bar. See page 17 for further instructions regarding the 2023+ models. See below for photos.



REPLACING 10MM CAGE BOLTS

1. Using the 15mm wrench and socket, loosen the stock 10mm cage bolts ONE AT A TIME. Replace each with the longer 10mm bolts and short spacers supplied and flip them the opposite direction (from outside, inward) that the OEM bolts were originally installed (from inside, outward). After one bolt is replaced, slip short spacer onto end of bolt and tighten it so that the cage is held in place while the second bolt is loosened and replaced. The cage can spring if both bolts are loosened and removed at the same time. This process ensures that the bolts holes remain aligned for easier installation of the longer 10mm bolts.

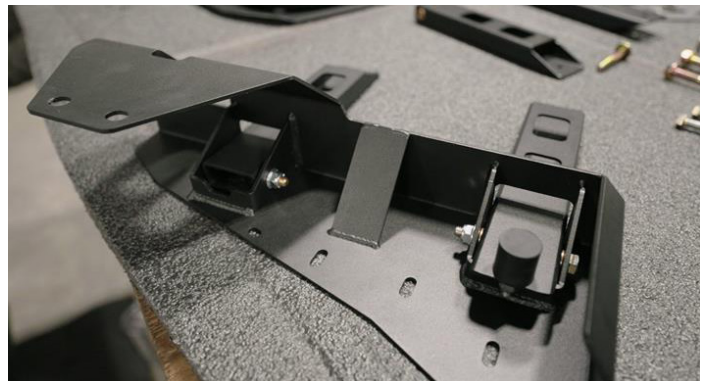


HINGE PRE-ASSEMBLY

1. Press bronze bushings into hinge pivot arms. 2 bushings per arm. Be sure that bushings are pressed in straight.
2. Install rubber bumper into upper pivot arm (U) as shown below and fasten with 8mm locknut.



3. After the pivot arms are assembled, insert each arm into the Hinge Mount Bracket from the inside, outward. The upper arm with the rubber bumper is inserted into the top pocket of the hinge mount and the lower arm (L) is inserted into the lower pocket of the hinge mount. Then insert the 5/16 x 2 3/4" long bolt through the holes in the mount and through the bronze bushings. Fasten with a 5/16" locknut. Tighten bolt/nut until all slack has been taken out of the pivot arm. Ensure that the pivot arm swings freely and does not bind up. If so, slightly loosen the bolt/nut until desired tension is achieved.



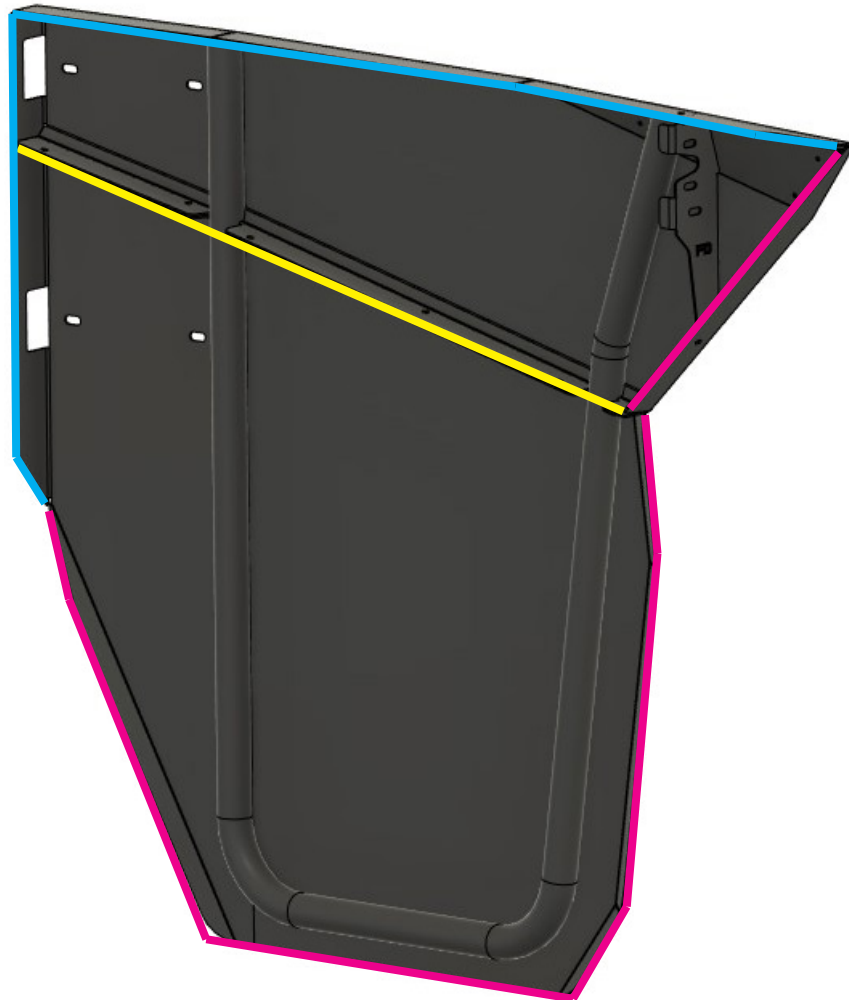
*****NOTE*****

Pivot arms in the 2 photos above are not identical to others due to prototype revisions to the pivot arm. Latest version shows "U" and "L" as indicators for upper and lower parts. Overall shape was also changed during the revision.

DOOR TRIM INSTALLATION

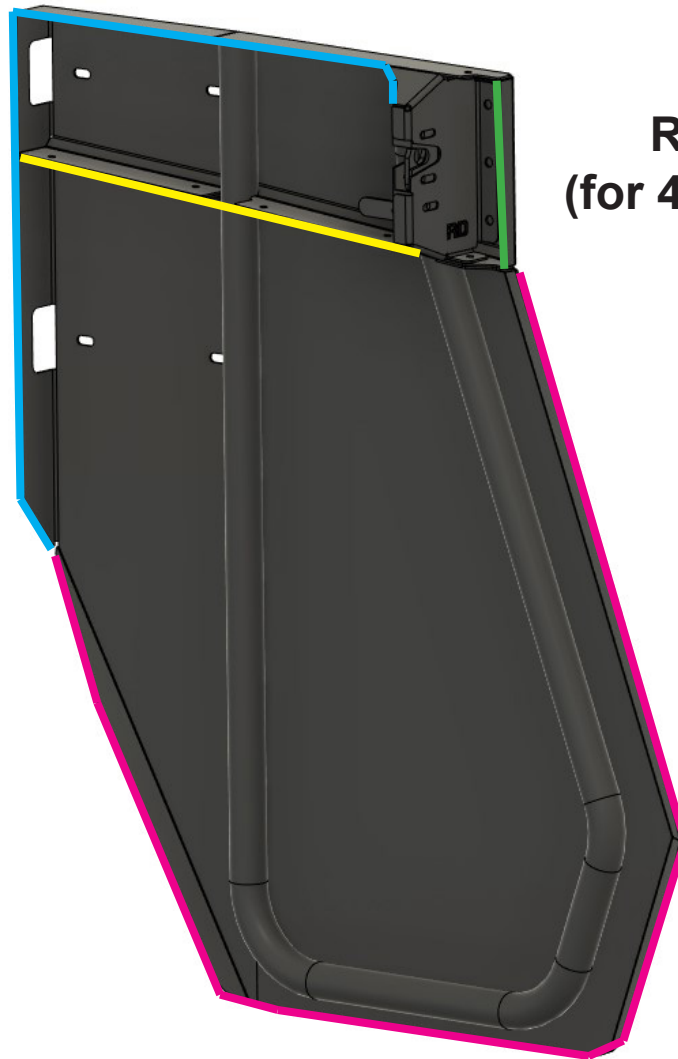
FRONT DOORS
Small Edge Trim
Medium Edge Trim
End Bulb Type Trim Seal

1. Install trim onto door BEFORE installing door onto vehicle.
2. As highlighted in the above table, each door, front and rear, use the same 3 types of edge trim and trim seal, though the lengths between front and rear will vary. The rear doors will require an additional piece of side bulb trim seal. The trim and seal comes in one roll and will need to be cut to length for each door. We recommend using wire cutters or tin snips to cleanly cut the trim and seal. See figures below for locations for each type of trim. DRIVER SIDE doors shown illustration. See video for additional instructions as well.

FRONT DOOR

DOOR TRIM INSTALLATION (CONT.)

REAR DOORS
Small Edge Trim
Medium Edge Trim
End Bulb Type Trim Seal
Side Bulb Type Trim Seal



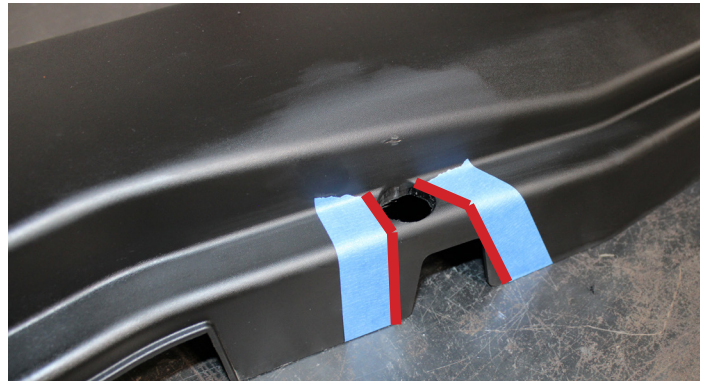
**REAR DOOR
(for 4-DOOR MODEL
ONLY)**

TRIMMING PLASTIC COVERS

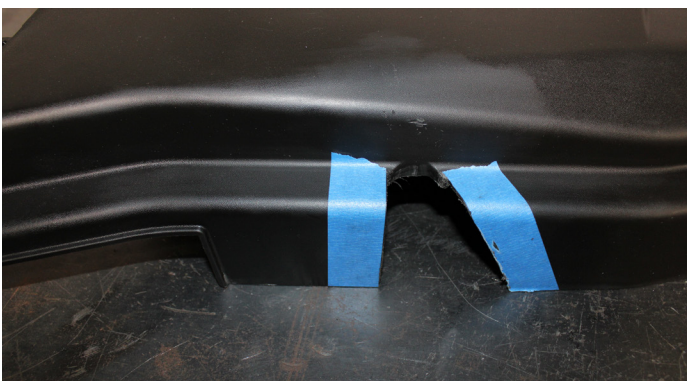
1. Using a dremmel, die grinder, or step bit, drill out the small slot out to edge of existing step in plastics. This slot is originally where one of 6mm torx screws were removed in order to remove the cover earlier in the installation. See photos below. (Plastic cover shown is for the CREW model. 3-seat model has some slight differences in overall shape and does not have the additional rectangular cut-out shown.)



2. After hole is drilled/ground out, tape or mark off the cut pattern shown below to use as a guide to make your cuts. Note where edges of tape fall along the newly cut hole, corners, and edges of existing plastic.

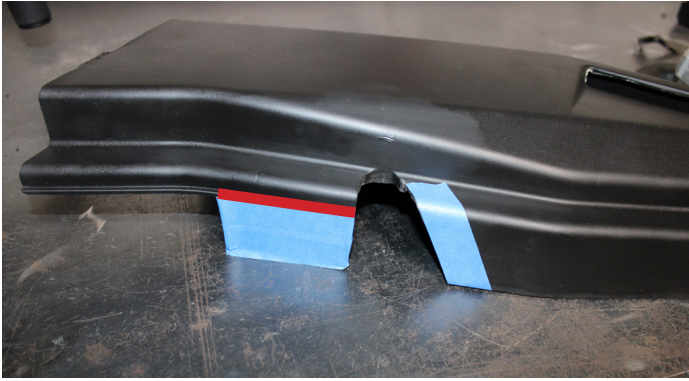


4. Make your cut along the inside edges of the tape and all the way into the edge of your drilled out hole. As shown below.



INSTALLATION

TRIMMING PLASTIC COVERS (CONT.)

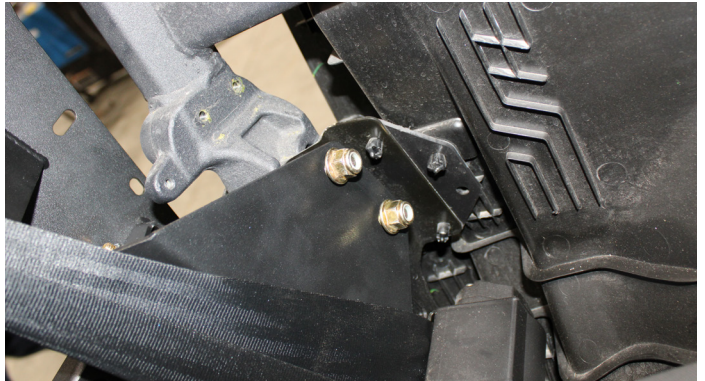
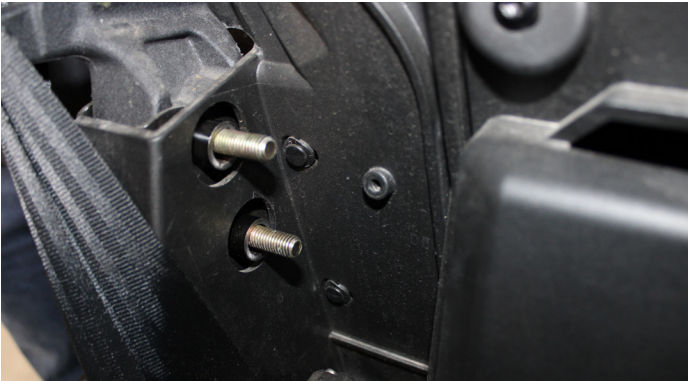


5. For the 4-Door model Defender, there will be an additional cut on the B-Pillar cover. Disregard this step if you have a 3-Seat/2-door Defender. The piece that needs to be cut out is already marked from the factory. We have found that a razer knife works well. Cut along the rectangular shaped groove, cutting the longer sides first, then finishing off the short ends. The rear mount bracket will pass through this cutout in order to mount to the rear of the B-pillar. See below.



HINGE MOUNT BRACKET INSTALLATION

1. Now that your new 10mm bolts have been installed along with the short spacers, place the Pre-assembled Hinge Mount Bracket over the ends of the bolts and thread on the 10mm Locknuts. Tighten most of the way in order to have enough slack to make any adjustments after the plastic is re-installed but be able to completely tighten easily after adjustments have been made.



2. Place the Long Spacer in behind the Hinge Mount Assembly, then insert M6 x 55mm bolt through the slot in the bracket, into the spacer, and thread into pre-existing threads in the cage, as shown below. The threads are located in the "tab" on the cage that the door net was previously fastened to.



3. Now, install the Hinge mount Bracket Brace using (1) 6mm x 20mm screw, (2) 8mm flange head bolts, and (2) 8mm Nylon Locknuts. Insert the 8mm bolts through the slots in the brace and into the 2 holes in the top of the previously installed Hinge Mount Bracket. Thread the 6mm bolt into the slot at the top of the brace and into the threaded hole in the cage. Shown below. For 2023 models, see page 12 for further instructions.

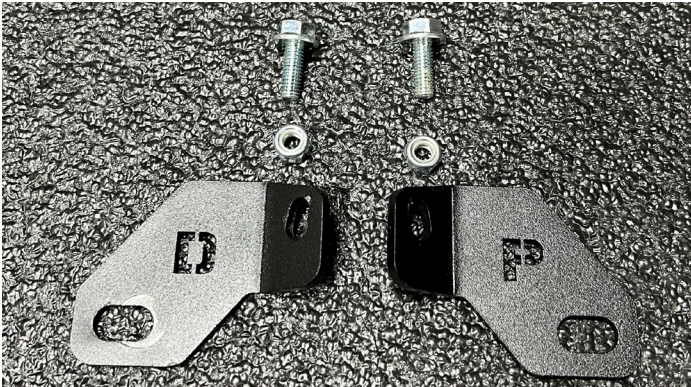


INSTALLATION

HINGE MOUNT BRACKET INSTALLATION (CONT.)

2023 Model Variation

1. On the 2023 model Defender, the design of the safety bar and how it mounted to the cage changed. Instead of the welded "slug" with threaded holes on the previous models, the 2023 model now has a bracket that is welded to the safety bar and a rivet-nut installed into the tube of the cage.
2. Remove the M6 torx screw at the top of the safety bar and also remove the same 2 hex bolts at the bottom, as noted previously, in order to remove the safety bar.
3. Using the 2023 Brace Attachment Bracket, (2) M6 Hex Head bolts, and (1) M6 locknut, fasten the bracket to the brace as shown below.

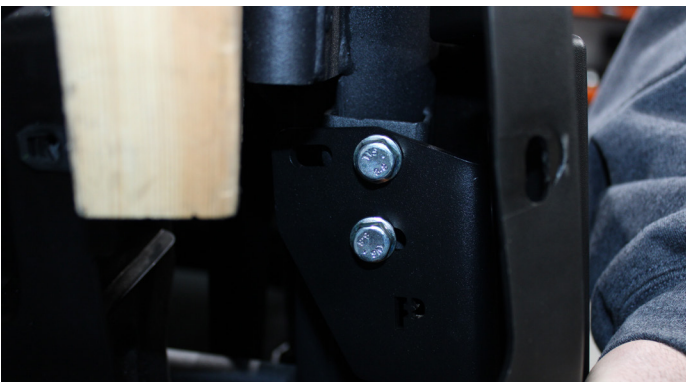
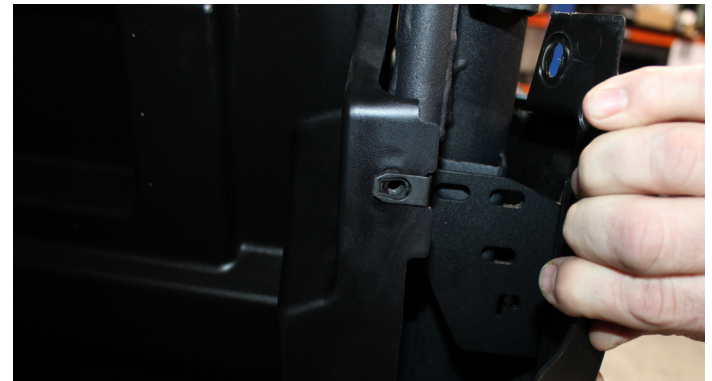


HINGE MOUNT BRACKET INSTALLATION (CONT.)

4. Install plastic back into place. See below.

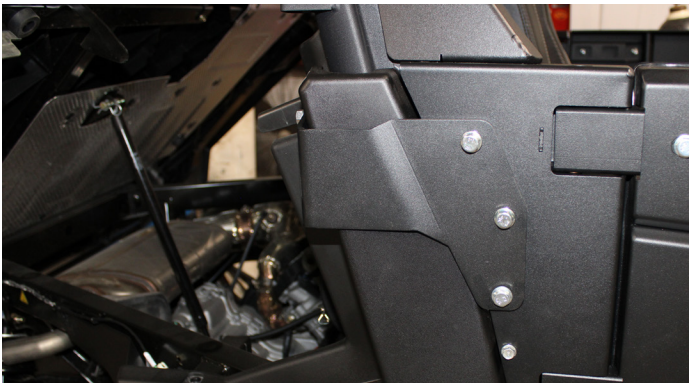
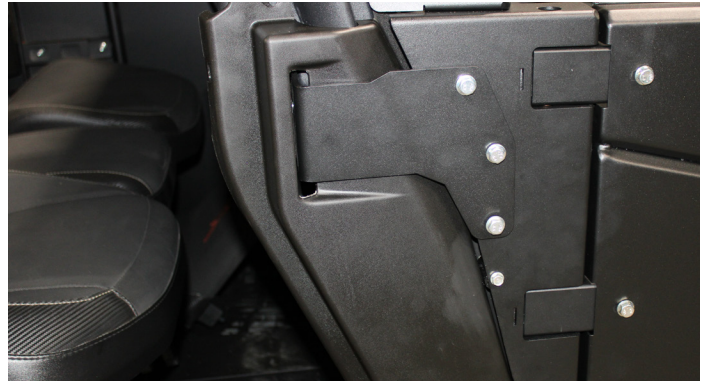


5. Install the Rear Mount Bracket into place using (2) M8 flange head bolts inserted into the existing threaded holes that are in the cage. Crew model requires you to insert into rectangular cutout that was made in previous steps and pull plastic outward in order to gain access to the 8mm bolts used to mount the bracket.



HINGE MOUNT BRACKET INSTALLATION (CONT.)

6. Using (3) 8mm flange head bolts and (3) 8mm flange head locknuts, fasten the rear mount bracket to the hinge mount bracket. See Below.



7. Replace all torx screws and push pins used to fasten plastic.

8. Insert plastic panel plugs into large holes on top of the hinge mount brackets to achieve a clean, finished appearance.

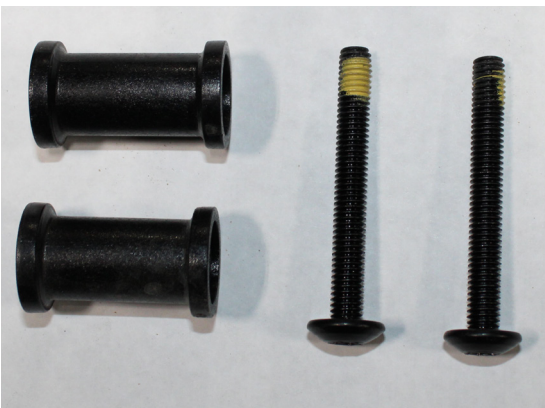


STRIKER BRACKET INSTALLATION (FRONT & REAR)

1. The front and rear striker brackets have "D" and "P" designations for Driver and Passenger side parts.
2. For the **FRONT STRIKER BRACKET** use (2) 8mm Button head screws. Insert the bracket into the cutout on the cage, then insert and thread the 8mm screws through the slots on the cage and into the bracket. Leave slightly loose for adjustment later. See photos below.



3. For the **REAR STRIKER BRACKET** use the stock hardware and spacers that were removed with the rear door net retainer clip (see photo below) and (2) 8mm flange head bolts.



(<<< STOCK HARDWARE
SHOWN)

INSTALLATION

STRIKER BRACKET INSTALLATION (FRONT & REAR) (CONT.)

4. Insert stock screws through the lower slots shown, then place spacer over threads on other side. Install bracket into place, loosely.

5. Insert 8mm bolts into upper slots and thread into threaded holes in cage.

(NOTE: These M8 hex head bolts were changed to the M8 Button Head Hex Drive Bolts, also used in the front striker bracket.)



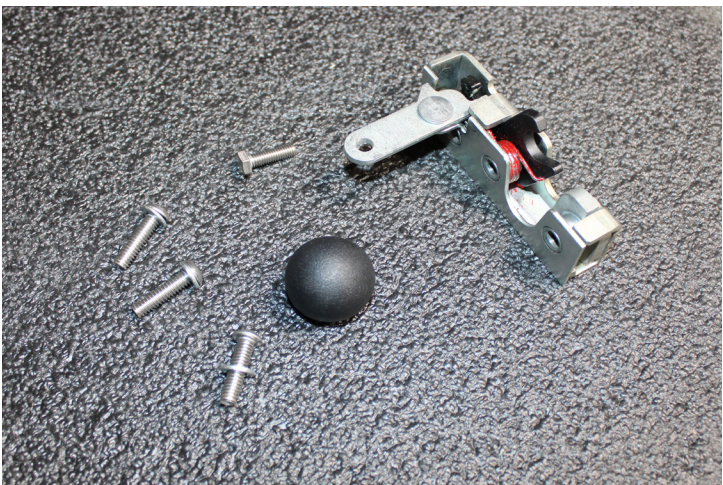
DOOR INSTALLATION (FRONT & REAR)

1. Install door by sliding the door over the pivot arms. Then pivot door into place as if closed.
2. Insert (4) 8mm bolts through the door skin and into the respective holes in the pivot arms. Thread on (4) 8mm Locknuts onto the bolts.



DOOR LATCH INSTALLATION

1. Door latches are color coded to indicate DRIVER or PASSENGER side latch. The DRIVER side latch will have a GREEN or SILVER Spring. The PASSENGER side latch will have a RED spring. Before installing the latches onto the door, install the knob onto the latch first using one of the M6 Hex Head Screw. Then mount the latch onto the back side of the latch bracket portion of the door using (3) 1/4-20 Button Head screws. Insert the screws from the front side of the bracket, through the slots, and into the threaded holes on the latch. Adjust the position of the latch and the striker brackets to acquire desired door fitment. Using a 3/16" Allen/Hex, tighten the screws. Latch should close past the "second click". (note: Passenger side latch shown in photos below)



ACCENT PANEL INSTALLATION

1. Place accent panel onto front end of the front door. Be sure that the "TF" logo can be read correctly and is not backwards. Using (3) 8-32 button head screws, (6) #8 SS Washers, and (3) 8-32 locknuts, install the hardware as shown and tighten with a 3/32" allen/hex and a 11/32" wrench or socket.
2. Repeat for the opposite side. (Passenger side shown in photos below)



FINAL FITMENT

1. Check all hardware to be sure it has all been tightened.
2. Make final adjustments to ensure clean and solid fitment of the doors. All latches should shut all the way to the "second click" of the latch. Proper adjustment can be achieved by loosening, adjusting, and tightening any/all hardware from the hinge assembly, to the door mount hardware, and the latches/striker brackets.



For additional help with installation, checkout out our
YouTube channel or send us an email to
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