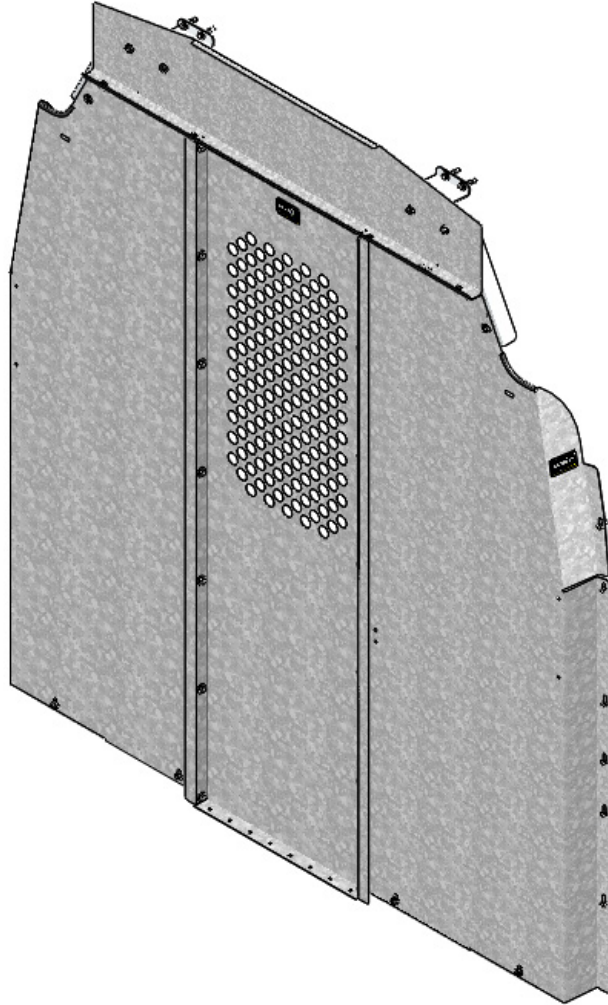


# INSTALLATION GUIDE



## C20-FTH STRAIGHT PARTITION

Transit Partition ( Perforated Window, No Access, Steel )



Scan the QR for the  
latest Install-Guide.





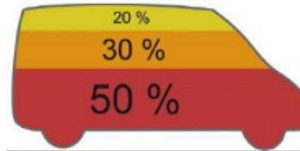
# BEFORE YOU BEGIN

READ, UNDERSTAND, AND FOLLOW ALL WARNINGS AND INSTRUCTIONS BEFORE USING THIS PRODUCT. FAILURE TO FOLLOW THESE DIRECTIONS MAY RESULT IN PROPERTY DAMAGE, SERIOUS BODILY INJURY, AND/OR DEATH. RANGER DESIGN IS NOT RESPONSIBLE FOR ANY PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH THAT OCCURRED WHILE USING ANY RANGER DESIGN PRODUCTS.



## WARNING

- Failure to use Ranger Design-provided fasteners, brackets, and proper installation guidelines could increase risk of serious personal injury and/or death.
- If drilling is required to complete this installation: improper drilling can cause property damage to vehicles and could lead to electric shock, fire, or even death.
- If drilling is required to complete this installation: Ensure that drilling is only performed on areas of the vehicle allowed by the vehicle's Original Equipment Manufacturer's Body Builders Layout Book (or equivalent document).
- Prior to installation, inspect the vehicle to ensure that installation will not interfere with, or cause obstruction of, any critical components such as electrical wiring, fuel tanks, fuel-cells, locks, latches, etc.
- The installer or manufacturer is responsible for ensuring anchorages are installed onto suitable wall and floor structures; wall and floor strength must meet applicable performance requirements.
- Do not install systems into any weak or unsound materials such as plastics, woods, thin-walled metals, etc. without proper reinforcement.
- Do not install this product where it could interfere with the deployment of airbags. Failure to comply could result in death or serious injury.
- Do not install this product where it could ingress on the Transit Occupant Protection Zone. Failure to comply could result in death or serious injury.
- Incorrect installation could cause water leaks, electric shock or fire.
- Any cargo vehicle with any cargo or equipment should use a certified partition. See Ranger Design website for some partition options. (<https://rangerdesign.com/>)
- Mountings rails are recommended for any attachment to the vehicle walls.
- All items in the cargo area should be properly secured and partition doors closed while the vehicle is in motion.
- Check your vehicle's tare weight and remaining load capacity with all the equipment installed. Never exceed the maximum Gross Vehicle Weight Rating (GVWR), Gross Axle Weight Ratings (GAWRs), or other maximum loads permitted by the vehicle's Original Equipment Manufacturer (OEM) and required by law.
- The heaviest items must be placed towards the bottom of the vehicle, while the lightest ones can be arranged upwards. Vehicle cargo loading weight proportion should follow the following guidelines:



- The final alterer and/ or modifier should review the warning sheet with the customer before the vehicle is released to the customer or for general use. These instructions should remain with the vehicles a all times.
- Any modification or unintended use of this product voids any warranty and could create a hazardous condition.
- Ranger Design provides recommended assembly and installation instructions which should be followed to ensure correct operation. Failure to do so could result in invalidating the product's compliance, warranty and cause injury. Notwithstanding, the final stage vehicle alterer and/or modifier is responsible for the integration, installation, and compliance of the product in its final location to all applicable regulations and standards. Failure to maintain compliance of the vehicle to applicable regulations and standards could be punishable by law. Alterers and/or modifiers should consult with all local authorities prior to commissioning.



## CAUTION

- Drilling is required to complete this installation. Before drilling, ensure that you will not hit any critical parts of the vehicle like the gas tank, wiring harness, or hose. Consult the vehicle OEM documentation as necessary. When drilling, use a drill collar to reduce the risk of damage to the vehicle.
- Any materials, padding, or glazing installed in the vehicle must comply with FMVSS/CMVSS 201/205/302, as applicable.
- In the event of a motor vehicle accident or collision where a Ranger system has been installed, especially ones where the vehicle structure is damaged and/or the air bags deploy and/or the vehicle has been towed, the system must be inspected to ensure continued soundness and safety before returning the vehicle to service. Damaged components should be replaced as necessary.
- All system components should be regularly inspected, cleaned, and maintained pursuant to Ranger guidelines.

# QUICK START GUIDE

## Phase 1 - Assembly

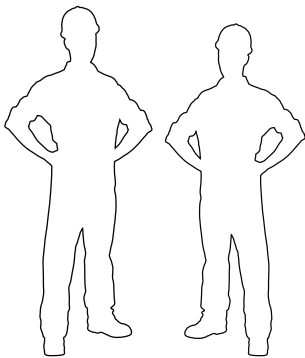
❑ 1.1 Setup.....	4
❑ 1.2 Partition assembly.....	6

## Phase 2 - Installation

❑ 2.1 Tips on how to attach a plusnut.....	8
❑ 2.2 Vehicle preparation.....	9
❑ 2.3 Straight partition installation.....	12

# REQUIRED ITEMS

- ❑ Cordless Impact
- ❑ Cordless Drill
- ❑ Cutter
- ❑ Mallet
- ❑ Marker
- ❑ Plusnut Tool
- ❑ Socket Wrench
- ❑ Tape Measure
- ❑ 3/8" Drill Bit
- ❑ 7/16" Socket
- ❑ 1/2" Socket
- ❑ 9/16" Wrench
- ❑ 10mm Socket
- ❑ 13mm Socket
- ❑ T50 Torx Bit
- ❑ Drill Stop

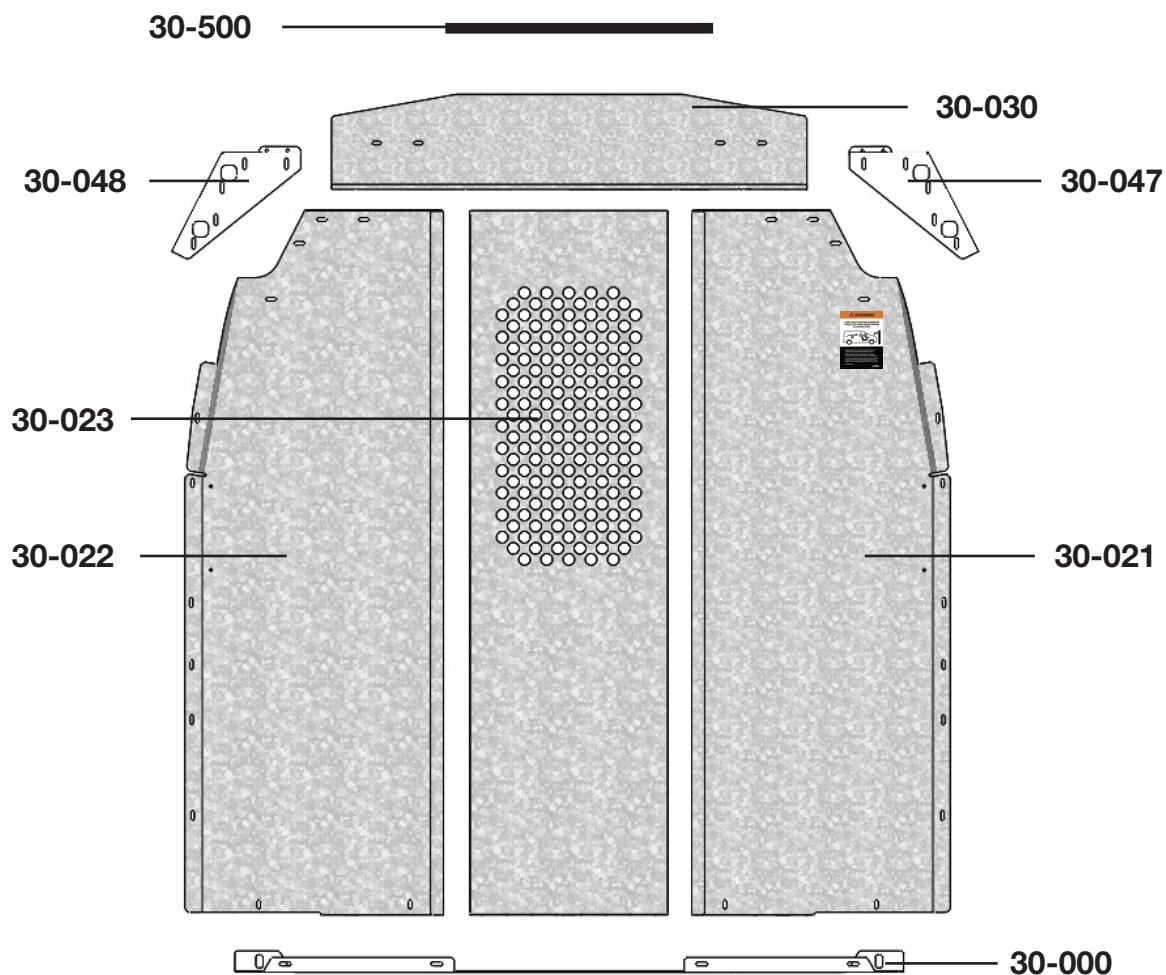


2  
PERSONS

# PHASE 1 – ASSEMBLY

## 1.1 SETUP

1.1.1 Unpack components; compare with the bill of materials.







1.1.2 Verify all parts are present.

Item No.	Description	Qty.
30-000	Floor Bracket	1
30-021	Passenger Side Panel	1
30-022	Driver Side Panel	1
30-023	Perforated Panel	1
30-030	Upper Panel	1
30-047	Passenger Side Ceiling Bracket	1
30-048	Driver Side Ceiling Bracket	1
30-500	Edge Trim ( QTY in Inches )	18
79-932	Warning Label ( Bilingual )	1
94-3028	Assembly Fastener Bag	1
96-3010	Installation Fastener Bag	1

1.1.3 Identify the **Assembly** and **Installation** fastener bags.

### Assembly Fastener Bag

18x		# 90-200	Hex Bolt 5/16"-18 x 1/2" GR-5 ZINC
12x		# 90-482	Carriage Bolt 5/16"-18 x 1/2"
30x		# 94-116	Serrated Nut 5/16"-18 ZINC
18x		# 98-116	Flat Washer 5/16", 7/8" OD ZINC

### Hardware Assembly

18x



#90-200 Hex Bolt 5/16" x 1/2"



#98-116 Flat Washer



#94-116 Serrated Nut

12x












#90-482 Carriage Bolt 5/16" x 1/2"



#94-116 Serrated Nut

### Installation Fastener Bag

2x		# 90-010	Screw, Torx 7/16"-20 x 1" GR-10.9 ALLOY STL
4x		# 90-118	Hex Bolt 1/4"-20 x 1-1/4" GR-5 ZINC
6x		# 90-971	Hex Bolt Serrated Bolt Type 23 M6-1.00 x 20mm BO
10x		# 94-130	Plusnut .250
6x		# 94-100	Hex Nut 1/4"- 20 ZINC
10x		# 98-112	Flat Washer 1/4", 3/4" OD ZINC
10x		# 98-118	Lock Washer Regular 1/4" ZINC
2x		# 98-141	Square Flat Washer 0.438" ID, x 1.000" SQUARE
6x		# 90-983	Double-Ended Screw 1/4-20 UNC

### Hardware Assembly

4x



#90-118 Hex Bolt 1/4" x 1-1/4"



#98-118 Lock Washer



#98-112 Flat Washer



#94-130 Plusnut .250

6x



#94-100 Hex Nut



#98-118 Lock Washer



#98-112 Flat Washer



#90-983 Double Ended Bolt



#94-130 Plusnut

6x



#90-971 Hex Bolt M6-1.0 x 20mm

2x



#90-010 Screw, Torx 7/16" x 1"



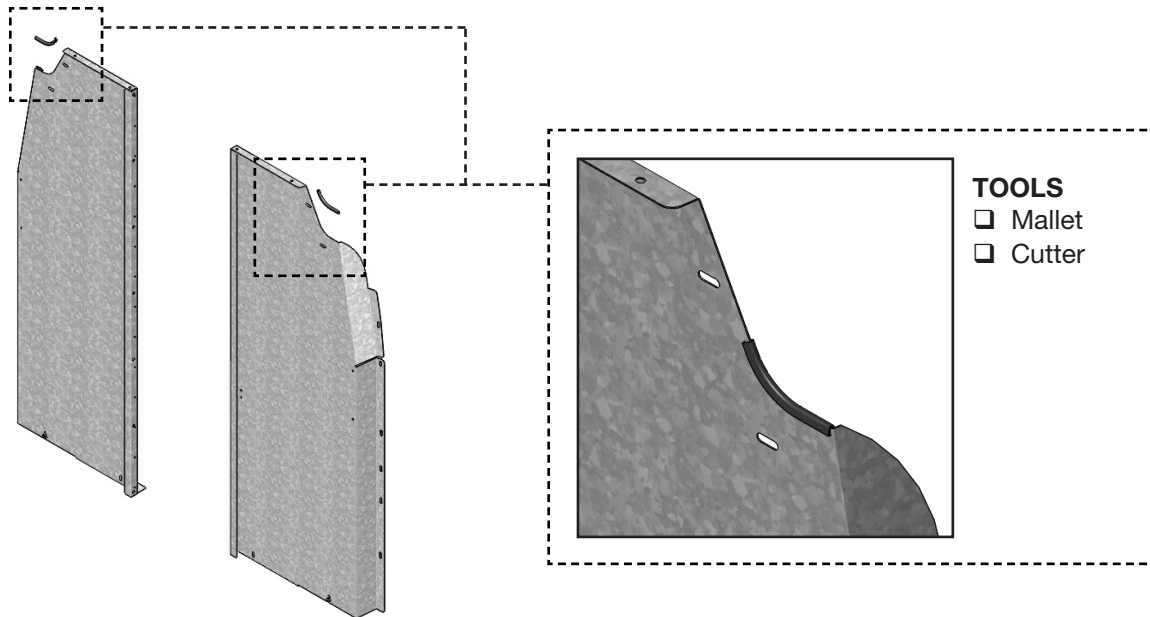
#98-141 Square Flat Washer



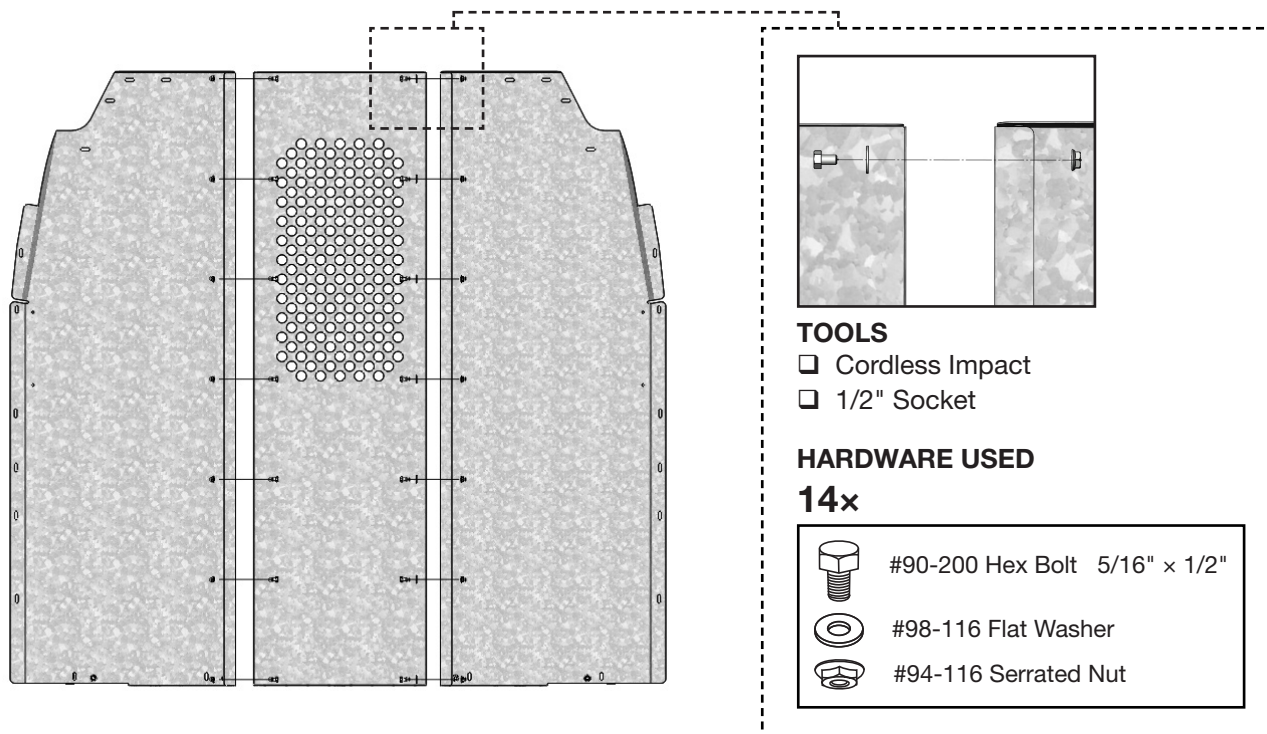
# PHASE 1 – ASSEMBLY

## 1.2 PARTITION ASSEMBLY

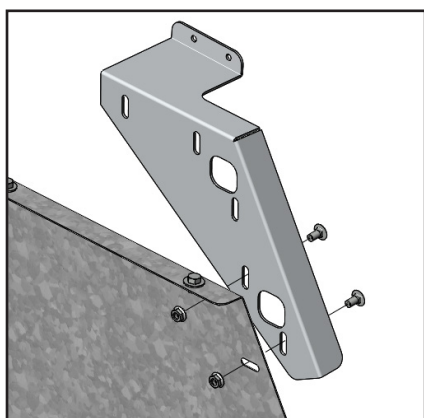
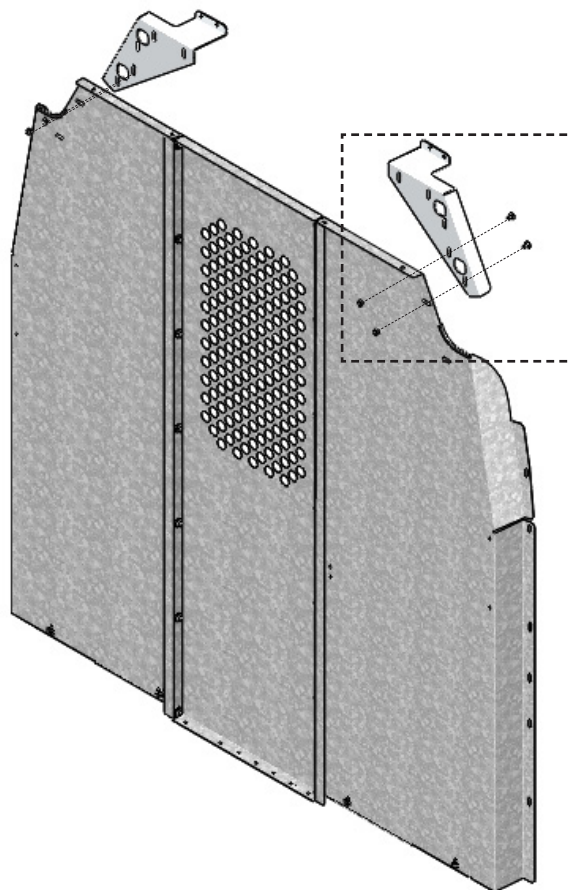
1.2.1 Remove all the PVC from all the parts, then attach the edge trims on these locations.



1.2.2 Attach the driver & passenger side panels to the perforated panel.



**1.2.3** Attach the driver and passenger side ceiling brackets to the driver and passenger side panels.



#### TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket

#### HARDWARE USED

**4x**



#90-482 Carriage Bolt 5/16" x 1/2"



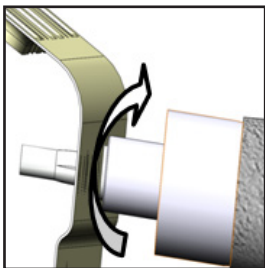
#94-116 Serrated Nut

# PHASE 2 – INSTALLATION

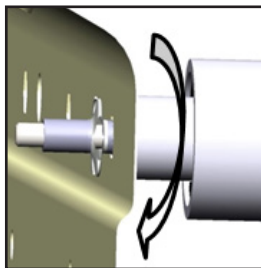
## 2.1 TIPS ON HOW TO ATTACH A PLUSNUT

### 2.1.1 Attach the plusnut using the plusnut gun.

**TIPS:** Put the plusnut on the plusnut gun, then attach the plusnut in the hole by turning the gun forward until the plusnut locks, then remove the gun by turning in reverse.



**FORWARD**

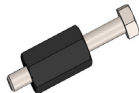


**REVERSE**



### 2.1.2 Attach the plusnut using the 6490 plusnut tool.

**NOTE:** The hardware used for the 6490 plusnut tool is not included in the fastener bag. The 6490 plusnut tool can be ordered separately upon demand at no charge.

**6490**



#### HARDWARE USED

-  Flat washer 1/4"
-  Flat washer 1/4" BS x 3/4" OD

#### TOOLS

- ☐ Cordless Impact
- ☐ 7/16" Socket
- ☐ 9/16" Wrench

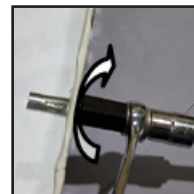
#### TIPS STEP 1:

Assemble the 6490 plusnut tool with the hardware needed, plusnut and the 9/16" wrench as shown.



#### TIPS STEP 2:

Attach the plusnut in the hole by turning the bolt forward using an impact with a 7/16" socket until the plusnut locks, then remove the bolt by turning the impact in reverse.



**FORWARD**



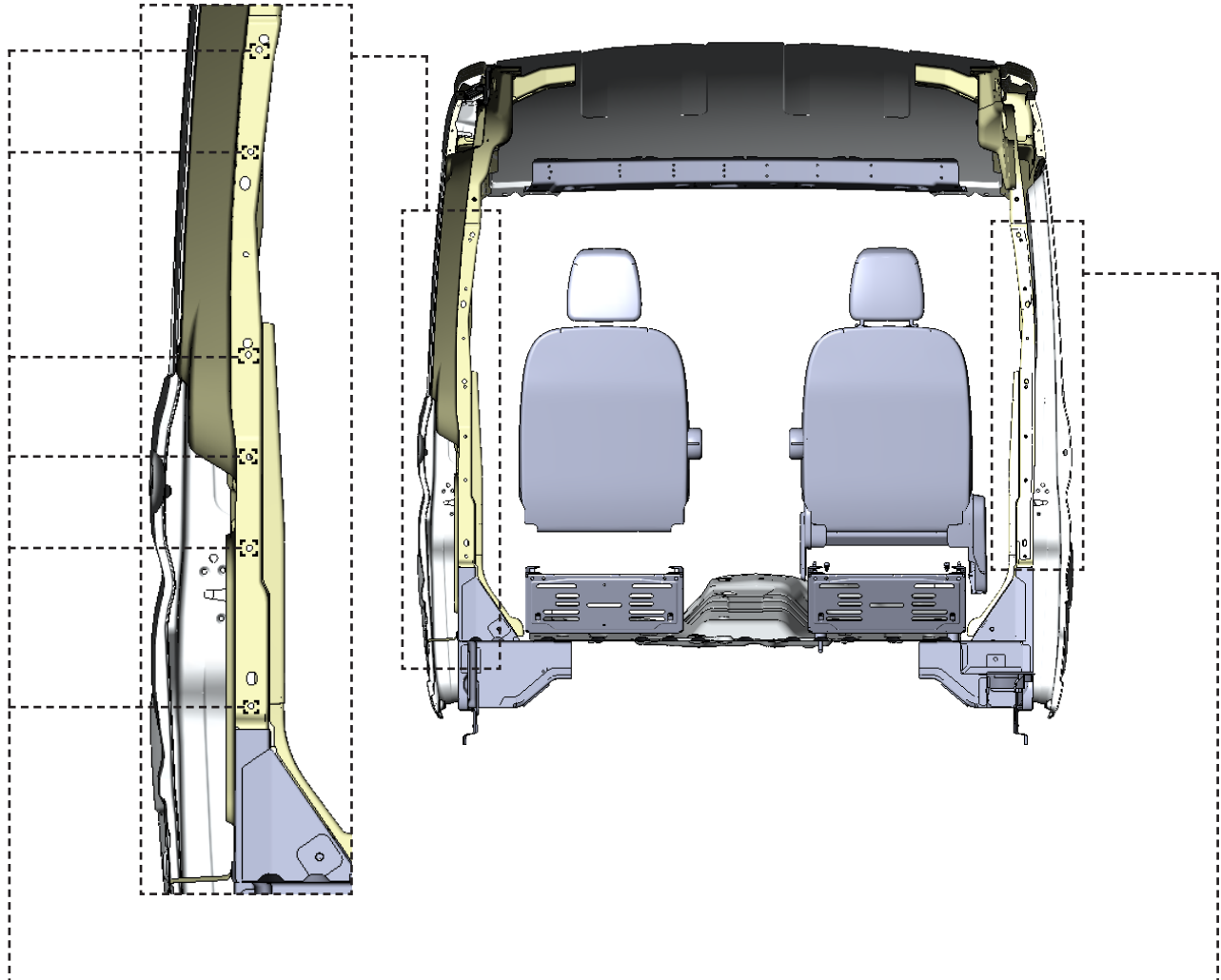
**REVERSE**



# PHASE 2 – INSTALLATION

## 2.2 VEHICLE PREPARATION

### 2.2.1 Driver and passenger sides preparation.



Attach plusnuts on the six factory holes.



#### TOOLS

- Plusnut Tool

#### HARDWARE USED

6x



# 94-130  
Plusnut .250

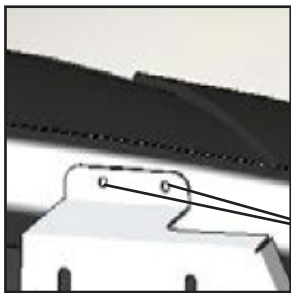
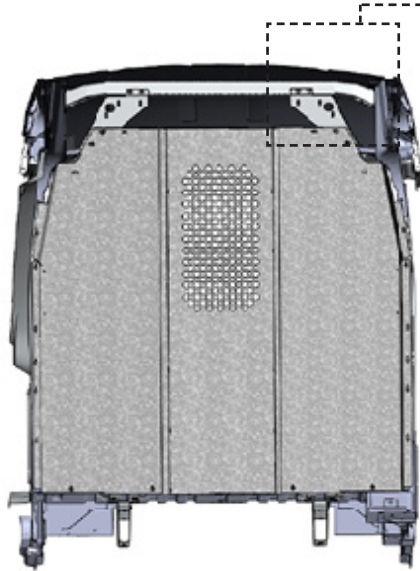
Remove the factory handle in the van.



#### TOOLS

- Cordless Impact
- 10mm Socket

### 2.2.2 Ceiling preparation.



Lift the assembled partition inside the van and put it in place, then put 4 marks on the van through the holes of the driver and passenger side ceiling brackets.

#### TOOLS

- ☐ Marker



Put the assembled partition on the side, then drill the 4 marks using the 3/8" drill bit or step drill.

#### TOOLS

- ☐ Cordless Drill
- ☐ 3/8" Drill Bit or Step Drill
- ☐ Drill Stop



Attach plusnuts in the 4 holes.

#### TOOLS

- ☐ Plusnut Tool

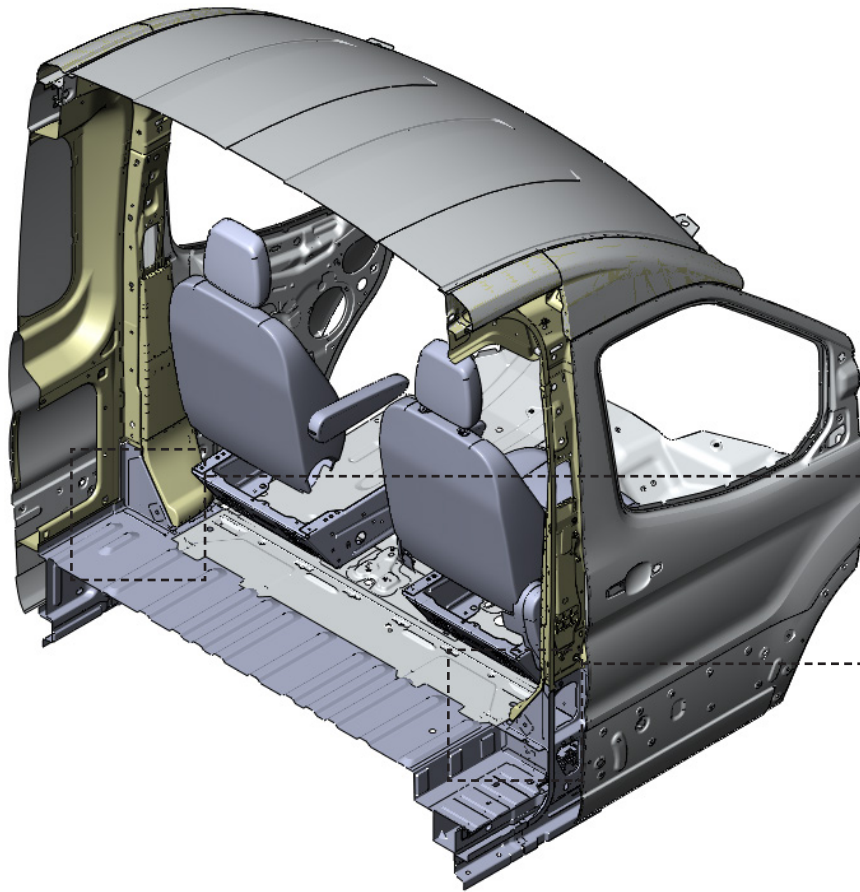
#### HARDWARE USED

4x



# 94-130  
Plusnut .250

### 2.2.3 Floor preparation.



Remove the two D-rings in the floor, for re-use.

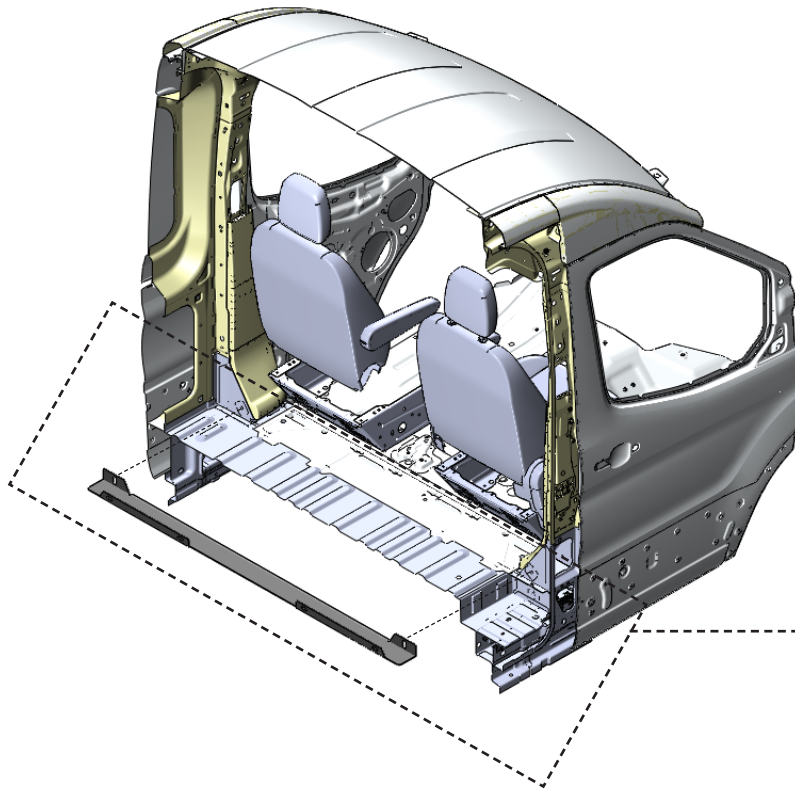
#### TOOLS

- ☐ Cordless Impact
- ☐ 13mm Socket

# PHASE 2 – INSTALLATION

## 2.3 STRAIGHT PARTITION INSTALLATION

### 2.3.1 Floor bracket installation.



Attach the floor bracket to the floor re-using the 2 D-ring bolts with the addition of the square washers, in between the D-rings and floor bracket.

**Note:** Use 90-010 if D-rings are not available.

#### TOOLS

- ☐ Socket Wrench
- ☐ 13mm Socket
- ☐ T50 Torx Bit

#### HARDWARE USED

**2x**



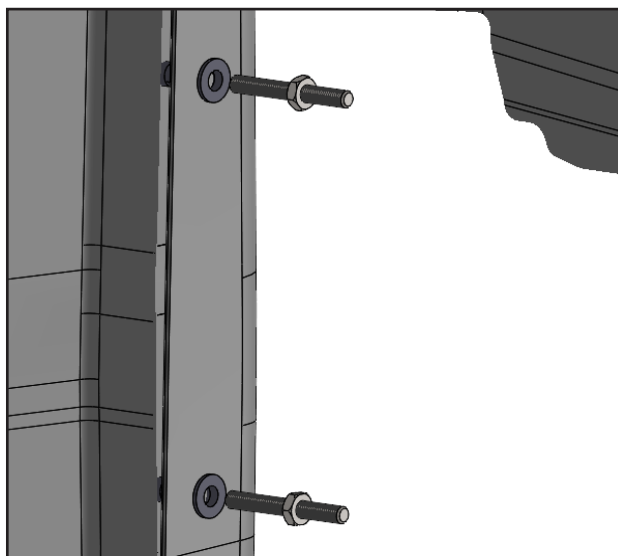
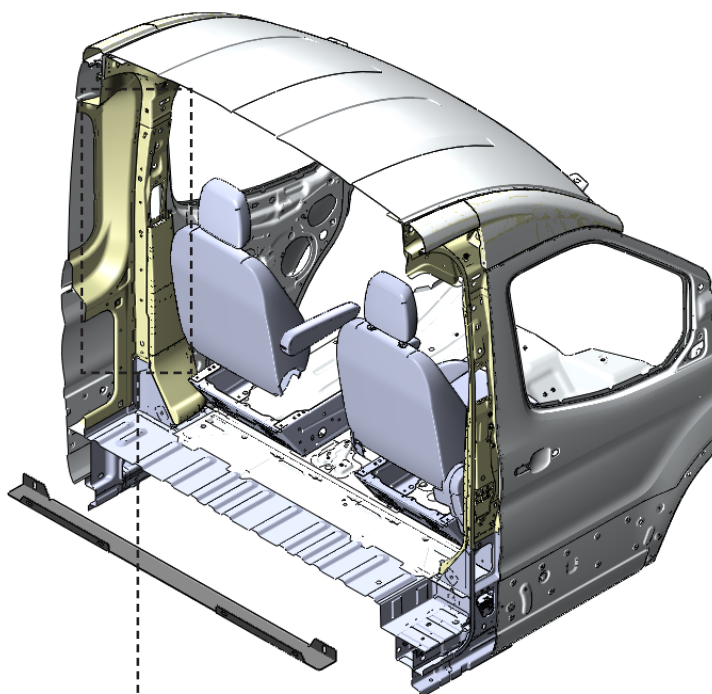
**2x**



#90-010 Screw, Torx 7/16" x 1"

#98-141 Square Flat Washer

### 2.3.2 Install double ended bolt into B-Pillar



#### TOOLS

- Cordless Impact
- 7/16" Socket

#### HARDWARE USED

**6x**

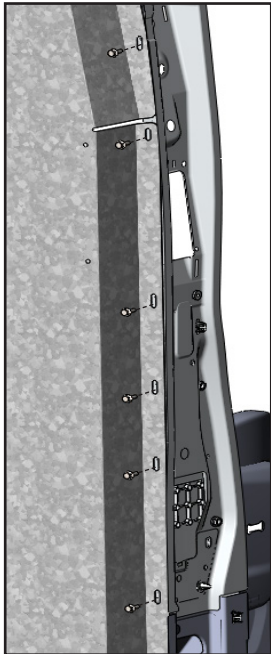
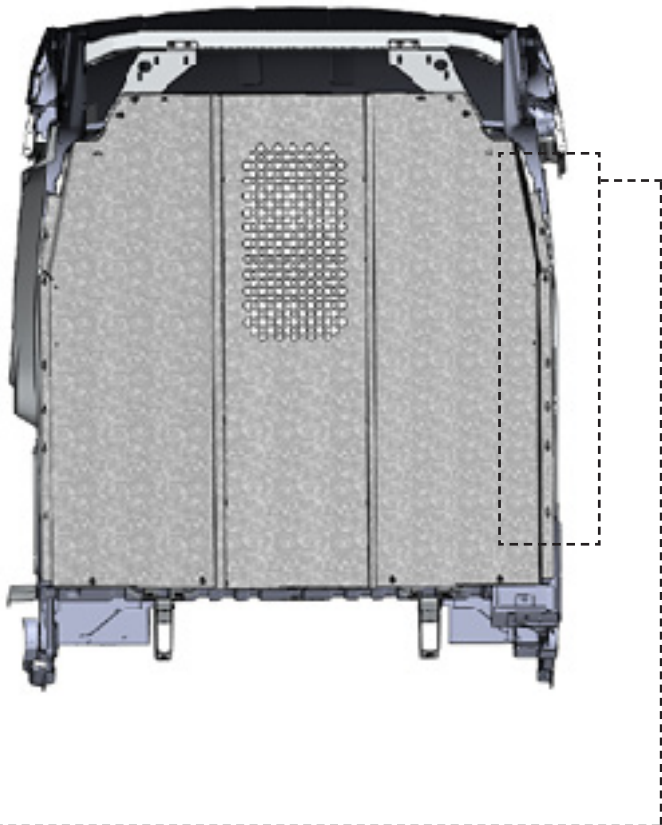


#90-983 Double Ended Bolt



**2.3.3** Put the assembled partition in place, then bolt the passenger side panel to the van.

**NOTE:** Do not tighten the bolt too much to prevent breakage.



**TOOLS**

- ☐ Cordless Drill
- ☐ 10mm Socket

**HARDWARE USED**

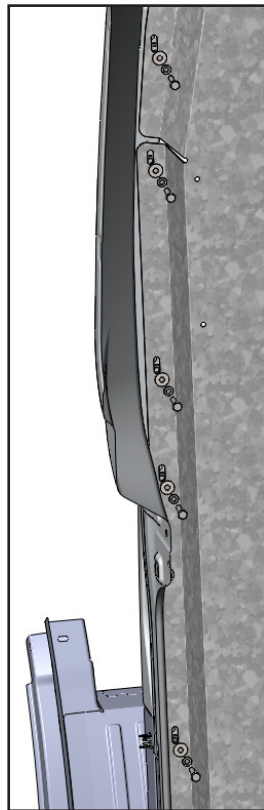
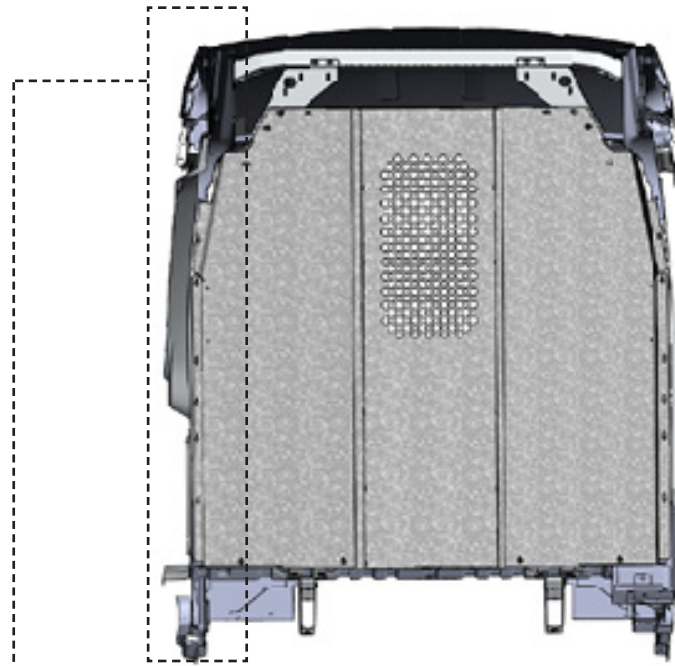
**6x**



#90-971 Hex Bolt M6-1.0 x 20mm



### 2.3.4 Attach the driver side panel to the van.



#### TOOLS

- Cordless Impact
- 7/16" Socket

#### HARDWARE USED

6x



#94-100 Hex Nut

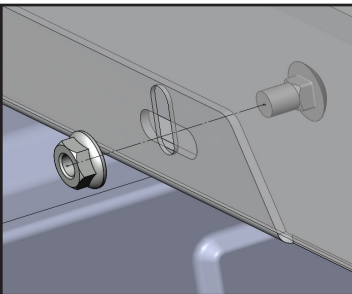
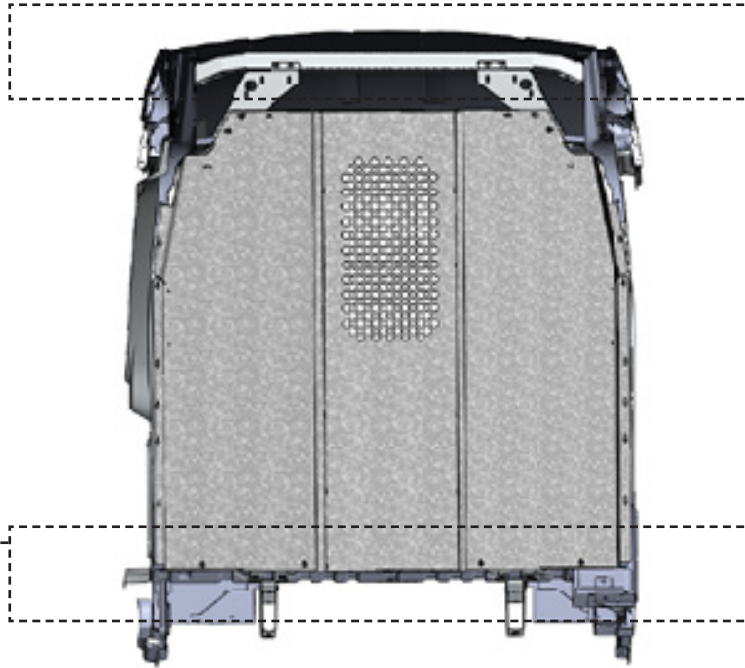


#98-118 Lock Washer



#98-112 Flat Washer

**2.3.5** Attach the driver and passenger side ceiling brackets to the van, then attach the driver and passenger side panels to the floor bracket.



**TOOLS**

- ☐ Cordless Impact
- ☐ 1/2" Socket

**HARDWARE USED**

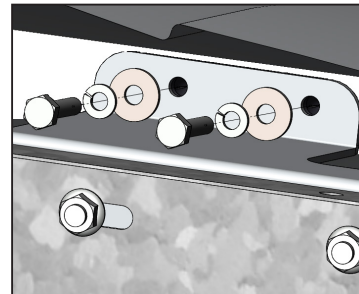
**4x**



#90-482 Carriage Bolt 5/16" x 1/2"



#94-116 Serrated Nut



**TOOLS**

- ☐ Cordless Impact
- ☐ 7/16" Socket

**HARDWARE USED**

**4x**



#90-118 Hex Bolt 1/4" x 1-1/4"

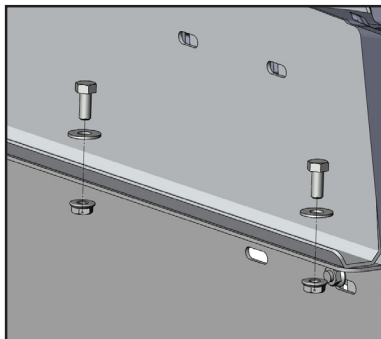
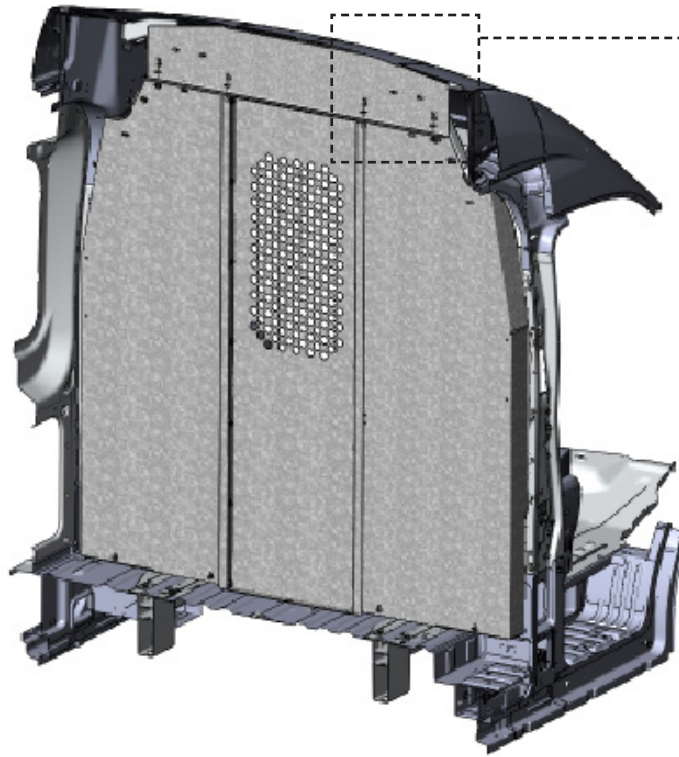


#98-118 Lock Washer



#98-112 Flat Washer

**2.3.6** Attach the upper panel to the driver and passenger side panels.



#### TOOLS

- Cordless Impact
- 1/2" Socket

#### HARDWARE USED

**4x**



#90-200 Hex Bolt 5/16" x 1/2"

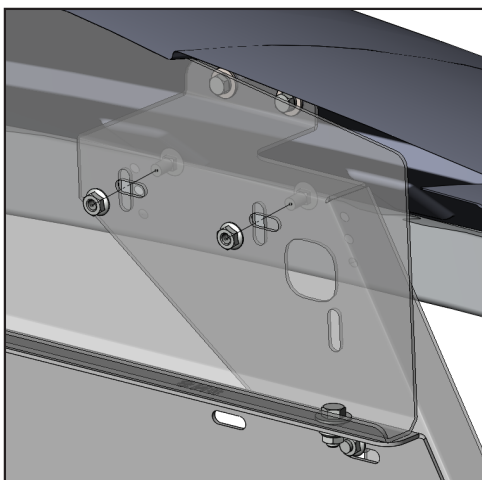
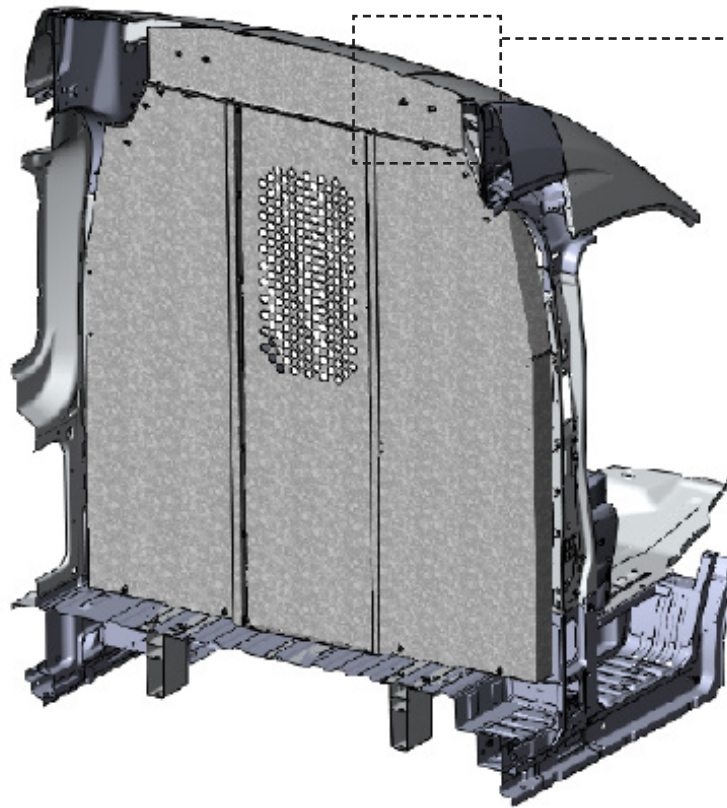


#98-116 Flat Washer



#94-116 Serrated Nut

**2.3.7** Attach the upper panel to driver and passenger side ceiling brackets.



**TOOLS**

- ☐ Cordless Impact
- ☐ 1/2" Socket

**HARDWARE USED**

**4x**

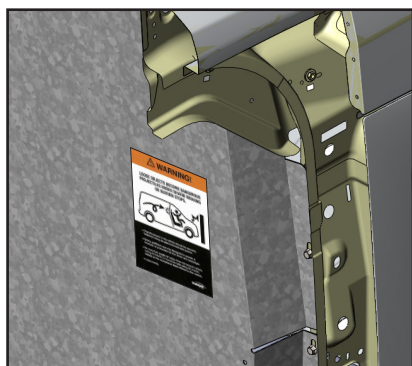
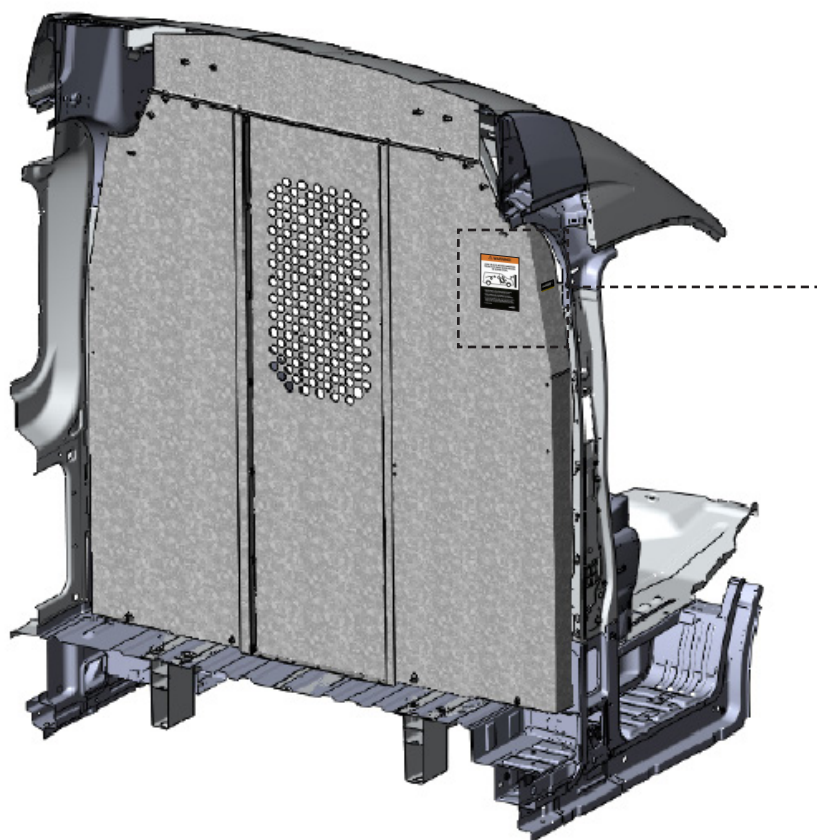


#90-482 Carriage Bolt 5/16" x 1/2"



#94-116 Serrated Nut

**2.3.8** Apply the warning label on the passenger side panel.



**NOTE:** English warning label is already attached on the passenger side panel.

**“You have successfully installed your partition,  
Thank you for doing business with us.”**

For any feedback or suggestions, you may have, please contact: [cs@rangerdesign.com](mailto:cs@rangerdesign.com)