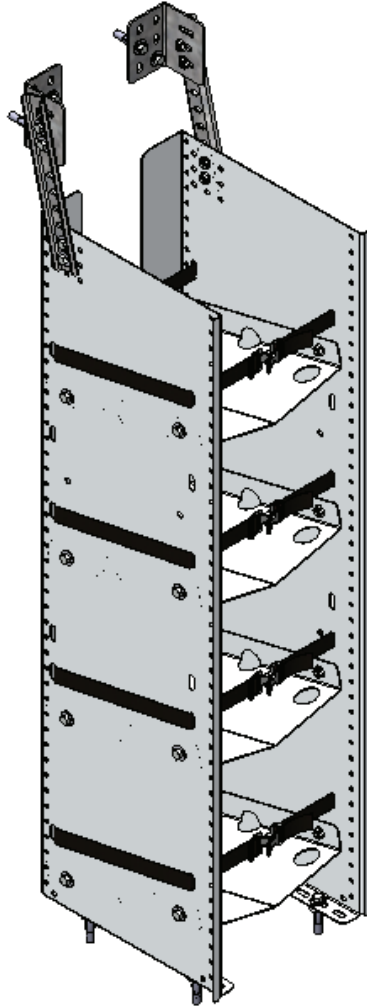


# INSTALLATION GUIDE

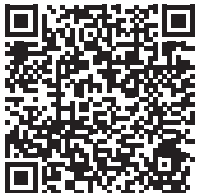


## C4-BA11-4 BOTTLE HOLDER

**Disclaimer:**

Please ensure that the materials being transported conform to all local regulations. If vertical storage of tanks is required, alternate options are available.

Contact us at 1-800-565-5321 for more information.



Scan the QR for the latest Install-Guide.



# Warnings

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 OCCURS WHILE USING ANY RANGER DESIGN PRODUCTS. THE FINAL ALTERER AND/OR MODIFIER SHOULD REVIEW THE WARNING SHEET WITH THE CUSTOMER BEFORE THE VEHICLE IS RELEASED TO THE CUSTOMER FOR GENERAL USE. THESE INSTRUCTIONS SHOULD REMAIN WITH THE VEHICLE AT ALL TIMES.

## **WARNINGS – Prior To Starting**

- Ranger Design products must be assembled and installed by individuals qualified to use the tools required and have experience with similar products. If there is any question as to competence or experience, please contact a professional alterer or modifier.
- Failure to use Ranger Design-provided fasteners, brackets, and proper installation guidelines could increase risk of serious personal injury and/or death.
- 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 final alterer and/or modifier is responsible for ensuring all equipment is sufficiently secured to wall and floor structures or suitable anchorages.
- 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 Vehicle 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 which can be found on the Ranger Design website. (<https://rangerdesign.com>)
- Mounting rails and floors are strongly recommended for any attachment to the vehicle and can be found on the Ranger Design website. (<https://rangerdesign.com>)
- 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 must be followed to ensure correct operation. Failure to do so could invalidate the product's compliance and/or warranty and cause injury.
- The final stage vehicle alterer and/or modifier is responsible for the integration, installation, and compliance of the product in its final location with all applicable regulations and standards. Failure to maintain compliance of the vehicle with applicable regulations and standards could be punishable by law. Alterers and/or modifiers should consult with all local authorities prior to commissioning.

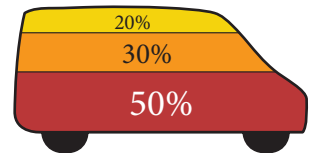
- Any materials, padding, or glazing installed in the vehicle must comply with FMVSS/CMVSS 201/205/302, as applicable.

## **WARNINGS – Prior To Drilling**

- Improper drilling can cause property damage to vehicles and could lead to electric shock, fire, or even death.
- 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).
- Ensure that you will not hit any critical parts of the vehicle like the gas tank, wiring harnesses, or hoses. Consult the vehicle's OEM documentation as necessary. When drilling, use a drill collar to reduce the risk of damage to the vehicle.

## **WARNINGS – Prior To Operating Vehicle**


- 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 guidelines shown here.
- Check your vehicle's tare weight and remaining load capacity with all 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.
- All items in the cargo area should be properly secured and partition doors closed while the vehicle is in motion.
- All system components should be regularly inspected, cleaned, and maintained pursuant to Ranger Design guidelines.



## **WARNING – In Event Of An Accident**

- In the event of a motor vehicle accident or collision where a Ranger Design system has been installed, especially ones where the vehicle's structure has been damaged and/or the air bags have deployed 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.

FR: Si vous avez besoin de ces instructions en français, s'il vous plait contacter notre service à la clientèle. +1-800-565-5321

ES: Si necesita estas instrucciones en español, comuníquese con el Servicio de atención al cliente de Ranger Design. +1-800-565-5321

# QUICK START GUIDE

## Phase 1 - Assembly

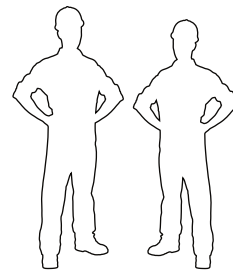
<input type="checkbox"/> 1.1 Setup.....	4
<input type="checkbox"/> 1.2 Bottle holder Assembly.....	7

## Phase 2 - Installation

<input type="checkbox"/> 2.1 Attach Wall Brackets To The End Panels.....	9
<input type="checkbox"/> 2.2 Mark Holes For Plus Nuts.....	10
<input type="checkbox"/> 2.3 Attach Plus Nuts.....	11
<input type="checkbox"/> 2.4 Attach Bottle holder To The Floor.....	13
<input type="checkbox"/> 2.5 Attach Wall Brackets.....	15

# REQUIRED ITEMS

- Cordless Impact
- Cordless Drill
- Tape Measure
- Marker
- 1/2" Socket
- 1/2" Drill Bit w/ Drill Collar ( Set at 1/2" )
- 3/8" Driver Bit
- Knife
- Plusnut Tool / Plusnut Gun ( 5/16" )

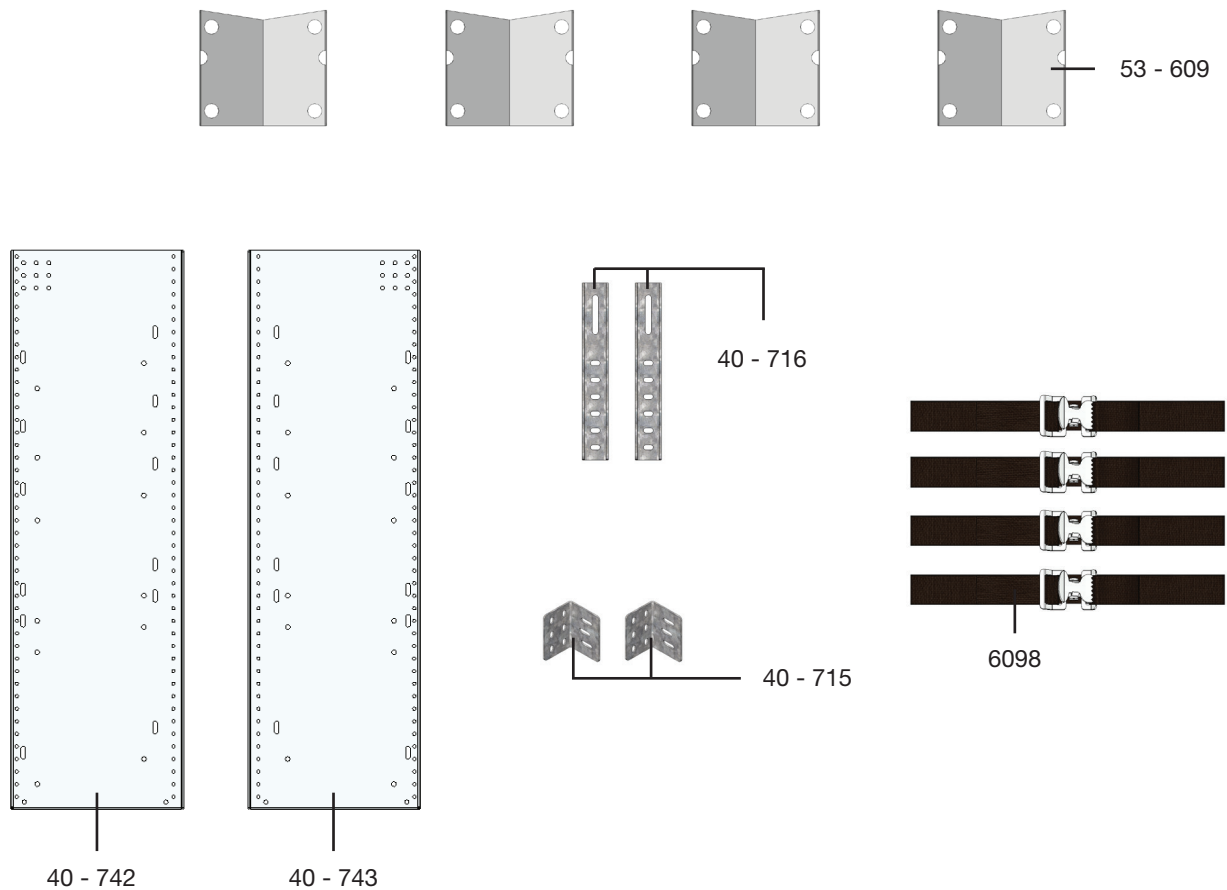


**2  
PERSONS**

# 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.

### BILL OF MATERIALS

Item No.	Description	Qty.
6098	Strap	4
40 - 715	Bracket Head	2
40 - 716	Bracket Arm	2
40 - 742	End Panel ( Left )	1
40 - 743	End Panel ( Right )	1
53 - 609	V Shelf	4
94- 5027	Assembly Fastener Kit	1
96 - 5022	Install Fastener Kit	1

1.1.3 Fastener kits.

94 - 5027 Fastener Kit



Fastener Assembly

16x



# 90-200

Hex Bolt  
5/16"-18 x 1/2"  
GR-5 ZINC

8x



# 90-204

Hex Bolt  
5/16"-18 x 3/4"  
GR-5 ZINC

24x



# 94-116

Serrated Nut  
5/16"-18  
ZINC

24x



# 98-116

Flat Washer  
5/16"  
ZINC

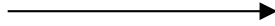
16x

	#90-200 Hex Bolt 5/16" x 1/2"
	#98-116 Flat Washer
	#94-116 Serrated Nut

8x

	#90-204 Hex Bolt 5/16" x 3/4"
	#98-116 Flat Washer
	#94-116 Serrated Nut

**96 - 5022 Fastener Kit**



**Fastener Assembly**

**4x**  **# 90-212** Hex Bolt  
5/16"-18 x 1 - 1/4"  
GR-5 ZINC

**4x**  **# 90-011** Hex Bolt  
5/16"-18 x 1-3/4"  
GR-5 ZINC





**8x**  **# 94-132** Plusnut

**8x**  **# 98-116** Flat Washer  
5/16", O.D. 7/8"  
ZINC






**8x**  **# 98-122** Lock Washer  
5/16"  
ZINC

**4x**  **# 98-157** Spacer  
0.375" ID, x 1.0" OD x 0.25" LONG  
NYLON

**4x**

	#90-212 Hex Bolt 5/16" x 1-1/4"
	#98-122 Lock Washer
	#98-116 Flat Washer
	#94-132 5/16" Plusnut

**4x**

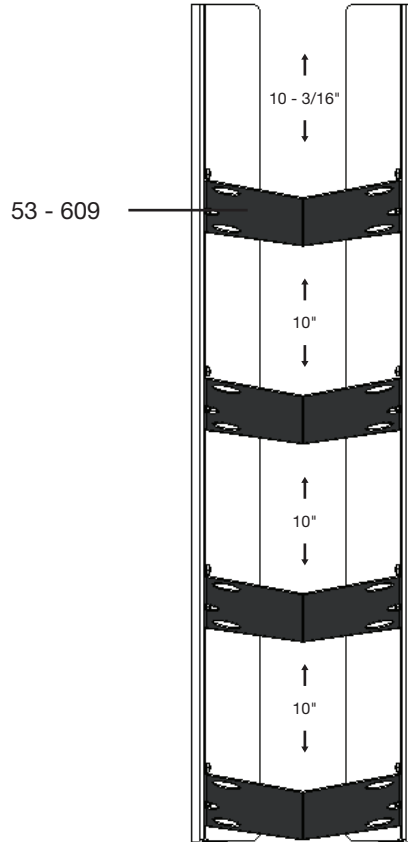
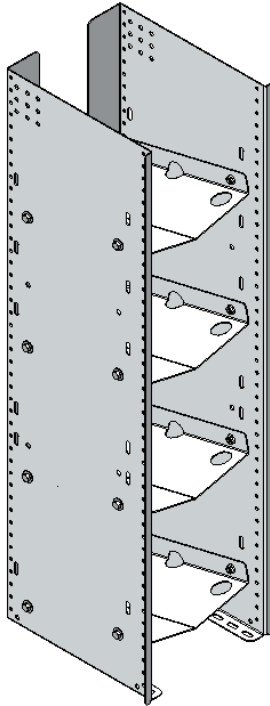
	#90-011 Hex Bolt 5/16" x 1-3/4"
	#98-122 Lock Washer
	#98-116 Flat Washer
	#98-157 Spacers ( QTY = GAP BETWEEN FLOOR AND END PANEL )
	#94-132 5/16" Plusnut

# PHASE 1 – ASSEMBLY

## 1.2 BOTTLE HOLDER ASSEMBLY

1.2.1 Attach both panels to the shelf trays.

**IMPORTANT:** Assemble the cabinet on a protected clean surface to avoid scratching.



A close-up diagram showing a panel being secured with hardware. A hex bolt is inserted through a hole in the panel, followed by a flat washer and a serrated nut.

**TOOLS**

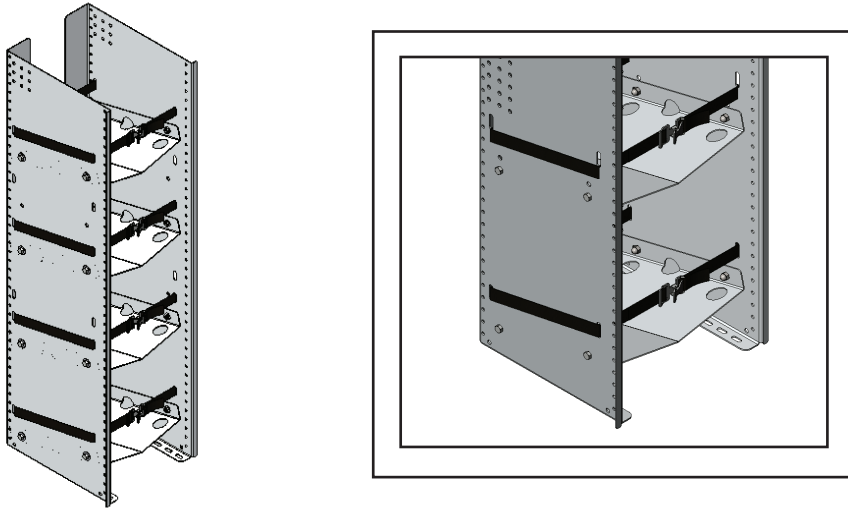
- Cordless Impact
- 1/2" Socket

**HARDWARE USED**

**16x** 94 - 5027

	#90-200 Hex Bolt 5/16" x 1/2"
	#98-116 Flat Washer
	#94-116 Serrated Nut

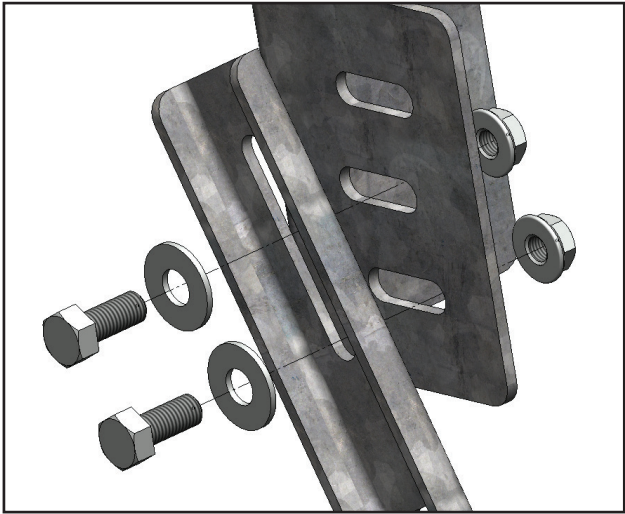
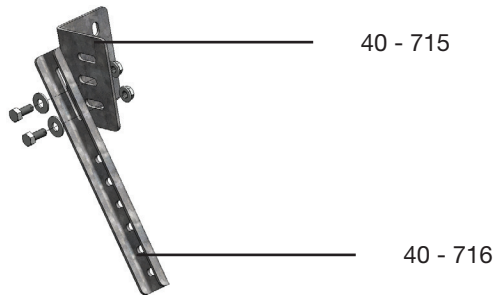
**1.2.2** Attach the straps to the end panels.



**1.2.3** Attach the bracket head to the bracket arm.

**NOTE:** Hand-tighten the bolts for adjustment.

**x2**






**TOOLS**

- Cordless Impact
- 1/2" Socket

**HARDWARE USED**

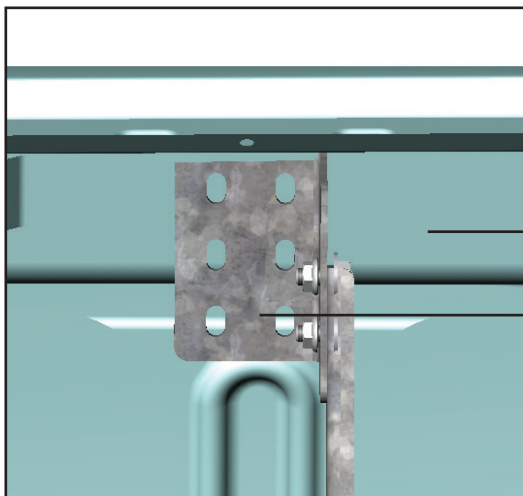
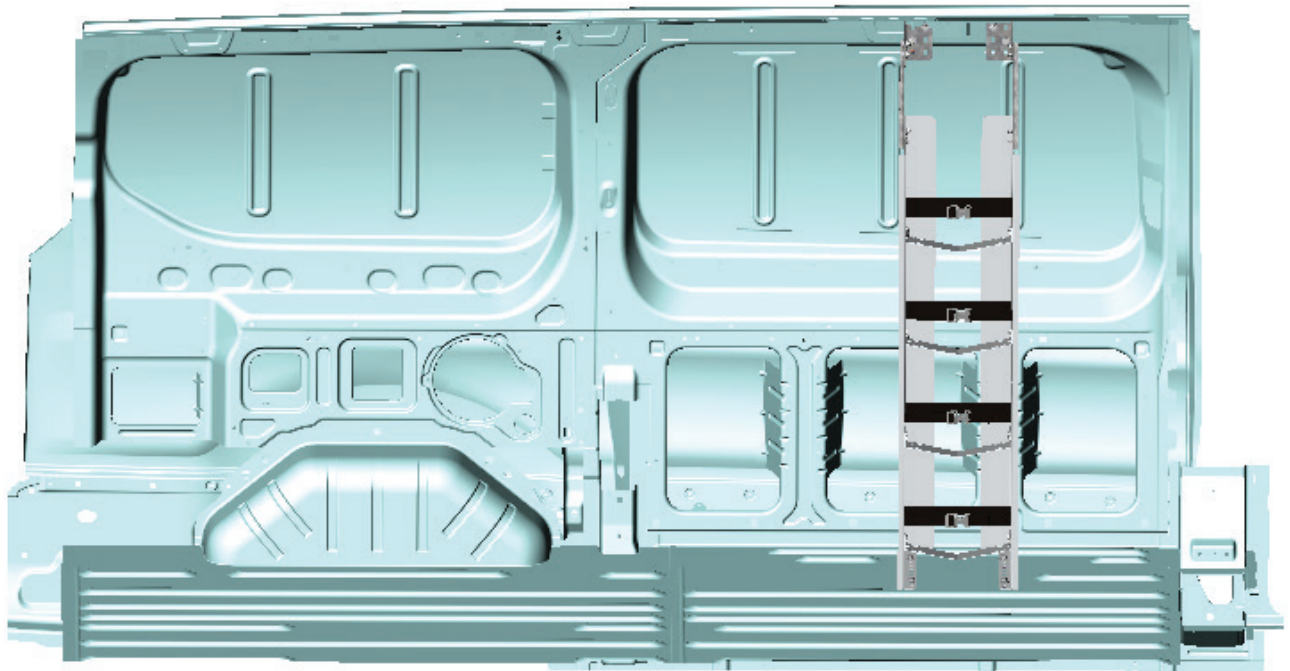
**4x** HAND-TIGHTEN THE BOLTS

	#90-204 Hex Bolt 5/16" x 3/4"
	#98-116 Flat Washer
	#94-116 Serrated Nut

# PHASE 2 – INSTALLATION

## 2.1 ATTACH WALL BRACKETS TO THE END PANELS

- 2.1.1
- Place the assembled bottle holder into the vehicle, at the desired location.
  - Attach the bracket arm to the panels aligning the bracket head along the horizontal rim of the vehicle.



HORIZONTAL RIM




BRACKET HEAD

### TOOLS

- Cordless Impact
- 1/2" Socket

### HARDWARE USED

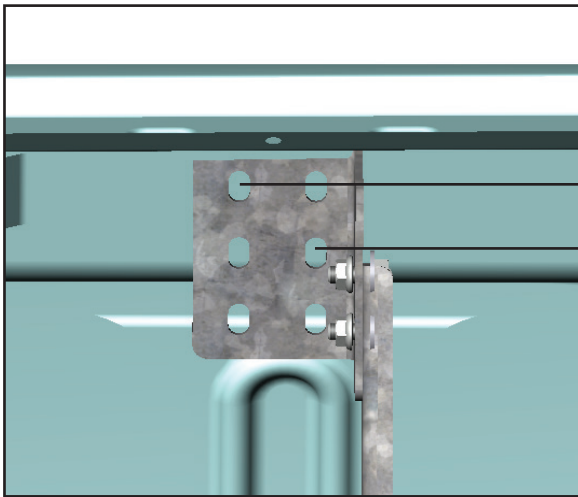
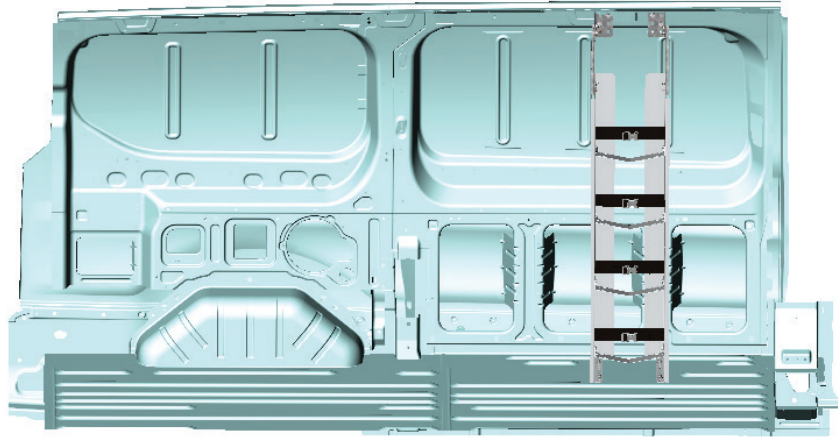
**4x** HAND-TIGHTEN THE BOLTS

-  #90-204 Hex Bolt 5/16" x 3/4"
-  #98-116 Flat Washer
-  #94-116 Serrated Nut

# PHASE 2 – INSTALLATION

## 2.2 MARK HOLES FOR PLUS NUTS

2.2.1 After attaching the brackets, mark the plus nut location on the vehicle rim.



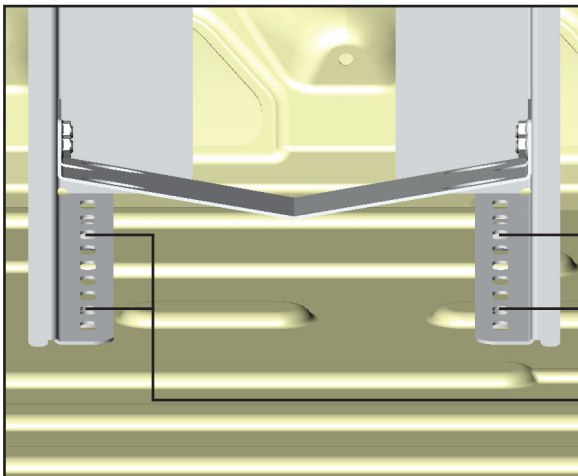
Mark the 2 holes locating bracket head on the vehicle horizontal rim.

**NOTE:** If you are using Ranger wall kit, please go to **PAGE 14**.

**TOOLS**

- Marker

MARK



Mark the 2 holes locating each end panel to the vehicle floor.

**NOTE:** If you are using Ranger floor, please go to **PAGE 12**.

**TOOLS**

- Marker

MARK

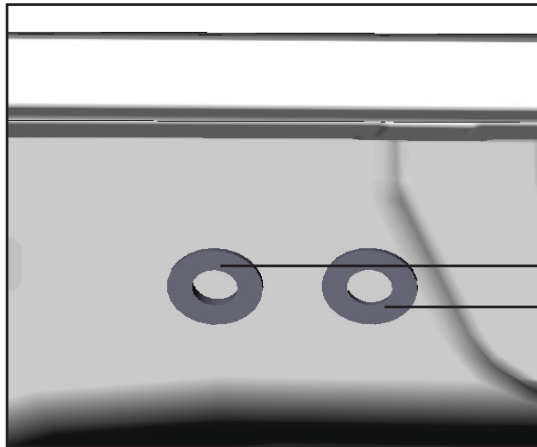
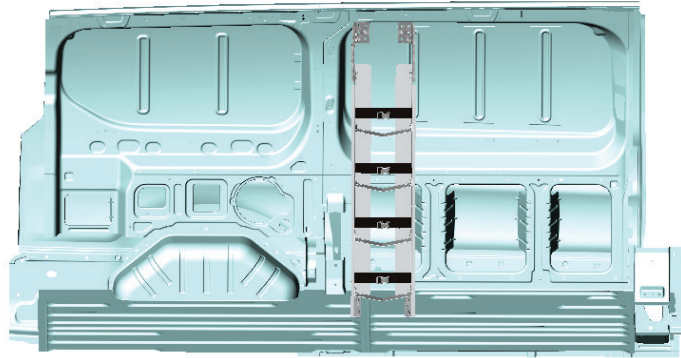
# PHASE 2 – INSTALLATION

## 2.3 ATTACH PLUS NUTS

- 2.3.1**
- Move the assembled bottle holder on the side.
  - Drill all the marks using 1/2" drill bit w/ drill collar, then insert the plus nuts.

**NOTE:** Use 1/2" drill bit with drill collar to stop drill at 1/2" depth.

**WARNING:** Before drilling, ensure that you will not hit any critical parts of the vehicle such as the **Gas tank**, **Wiring Harness** and **Hose**.



PLUSNUT

Drill all the marks then, attach plus nuts to the holes.

### TOOLS

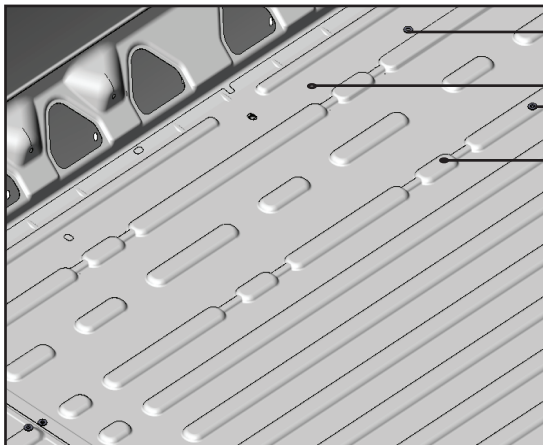
- Cordless Drill
- 1/2" Drill Bit w/ Drill Collar ( Set at 1/2" )
- Plus Nut Tool ( 5/16" )

### HARDWARE USED

8x



#94-132 Plus Nut

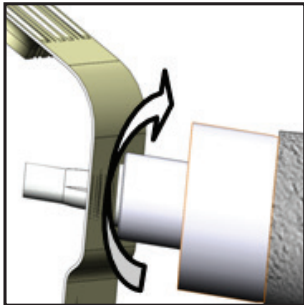


DRILL COLLAR  
( SET AT 1/2" )

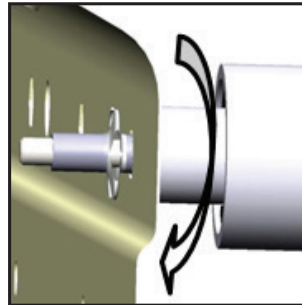
### 2.3.2 How to attach plus nut.

#### • USING PLUSNUT GUN

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



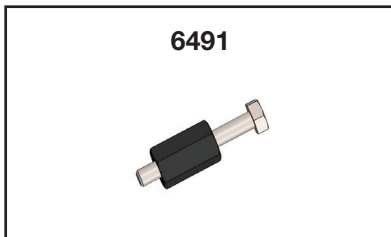
**FORWARD**



**REVERSE**



#### • USING THE 6491 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.



**6491**

#### HARDWARE USED

-  Flat washer 5/16"
-  Flat washer 5/16" BS x 7/8" OD

#### TOOLS

- Cordless Impact
- 1/2" Socket
- 9/16" Wrench

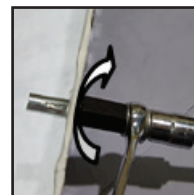
#### STEP 1:

Assemble the 6491 plusnut tool with the hardware needed, plus nut and the 9/16" wrench as shown.



#### STEP 2:

Attach the plus nut in the hole by turning the bolt forward using an impact with a 1/2" socket until the plusnut locks, then remove the bolt by turning the impact in reverse.



**FORWARD**



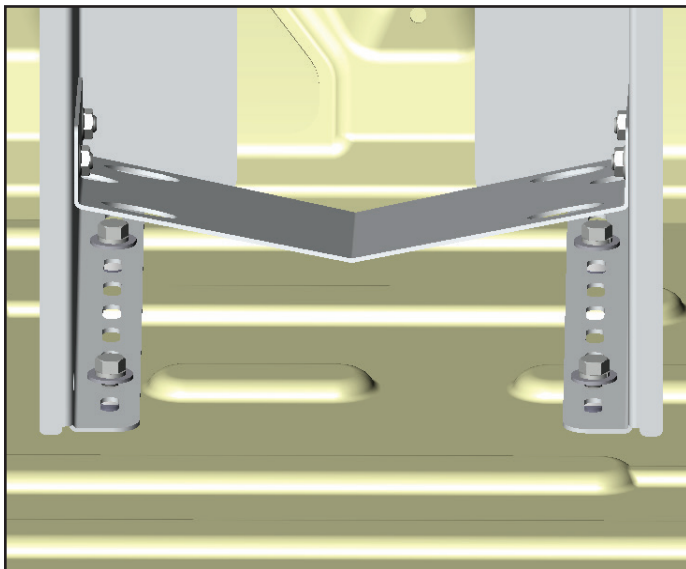
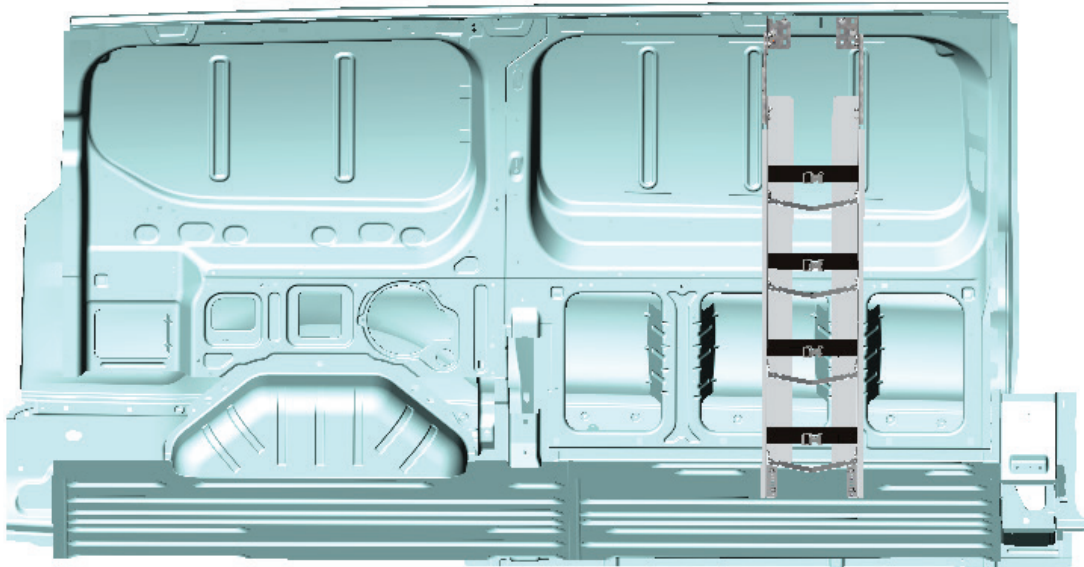
**REVERSE**

# PHASE 2 – INSTALLATION

## 2.4 ATTACH END PANEL TO THE FLOOR

### WITHOUT RANGER FLOOR

2.4.1 Place the assembled bottle holder back into the vehicle and fasten to the plus nut.



#### TOOLS

- Cordless Impact
- 1/2" Socket

#### HARDWARE USED

4x



#90-011 Hex Bolt 5/16" x 1-3/4"

#98-122 Lock Washer

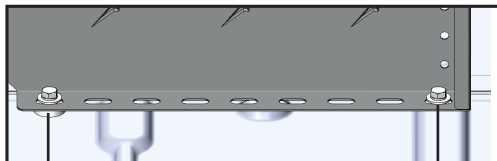
#98-116 Flat Washer

#98-157 Spacers

( QTY = GAP BETWEEN FLOOR AND END PANEL )

#94-132 5/16" Plusnut

MOST VEHICLE USE 1 SPACER WHEN NOT OVER RIBS

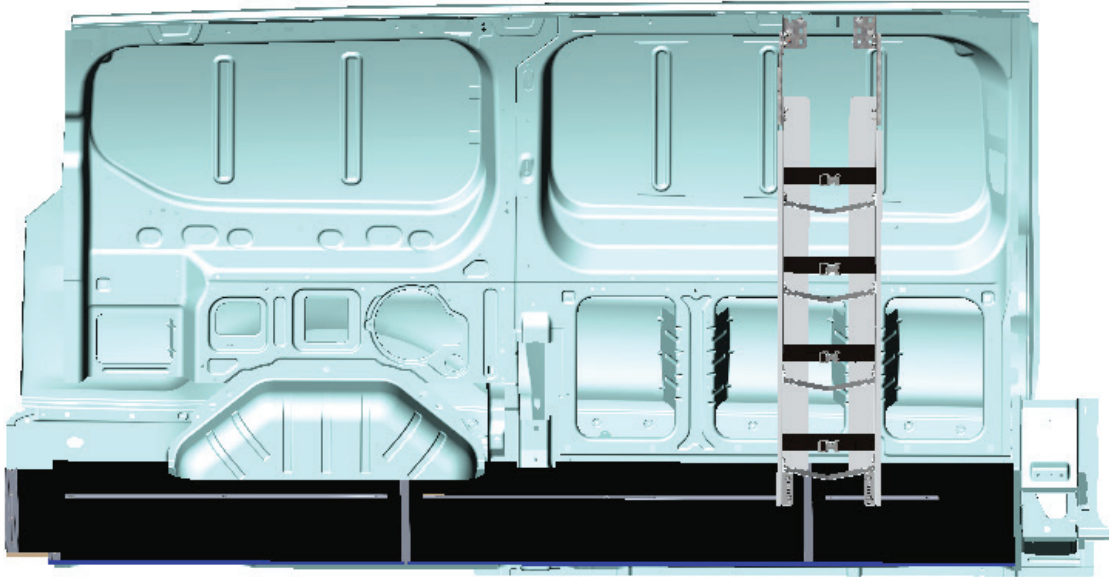


W/ Spacer

W/O Spacer

## WITH RANGER FLOOR

- 2.4.2**
- Lift the bottle holder unit inside the van, then put it in place.
  - Install the bottle holder unit to the floor mounting track by sliding bolts in the mounting tracks, and putting screw in the last rear slot of the end panels of the shelving unit.



### TOOLS

- Cordless Impact
- 3/8" Driver Bit
- 1/2" Socket

### HARDWARE USED

**2x** FLOOR FASTENER KIT



#92-102 Screw 1"

### HARDWARE USED

**2x** FLOOR FASTENER KIT



#90-490 Carriage Bolt 5/16" x 1"



#98-116 Lock Washer



#98-122 Flat Washer



#94-104 Hex Nut

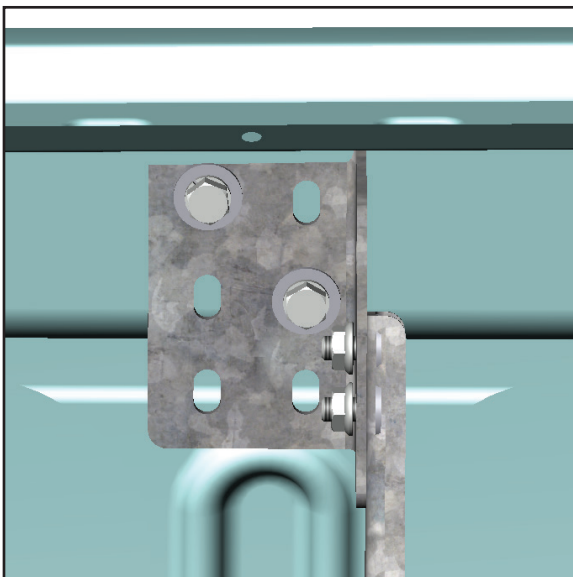
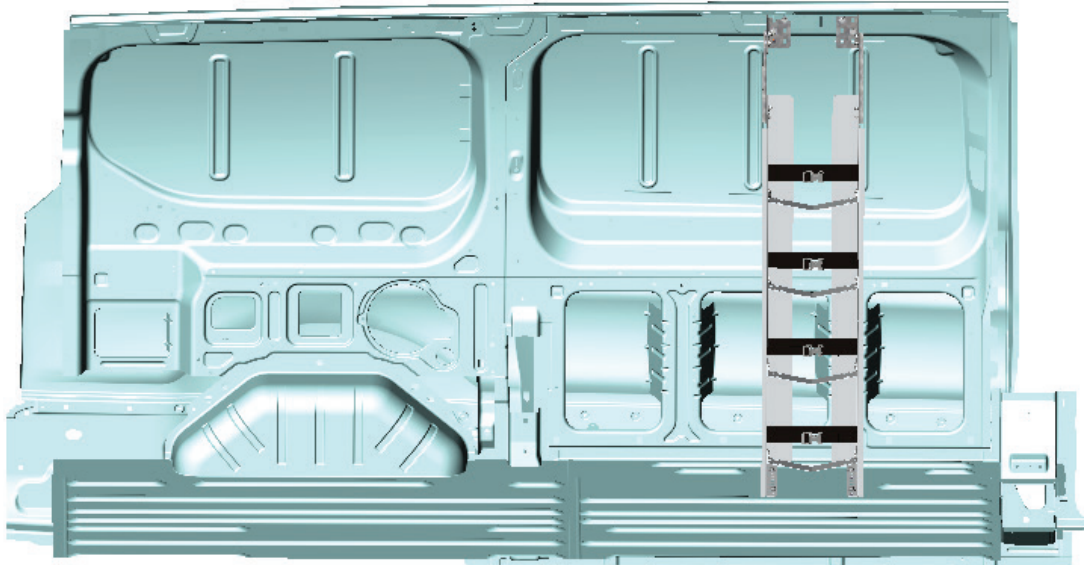
# PHASE 2 – INSTALLATION

## 2.5 ATTACH WALL BRACKETS

### WITHOUT RANGER WALL KITS

**2.5.1** First align and fasten the wall brackets to the plus nuts, then align and fasten the wall brackets to the end panels.

**IMPORTANT:** After installation is completed, ensure all bolts are tightened.



#### TOOLS

- Cordless Impact
- 1/2" Socket

#### HARDWARE USED

**4x**



#90-212 Hex Bolt 5/16" x 1-1/4"

#98-122 Lock Washer

#98-116 Flat Washer

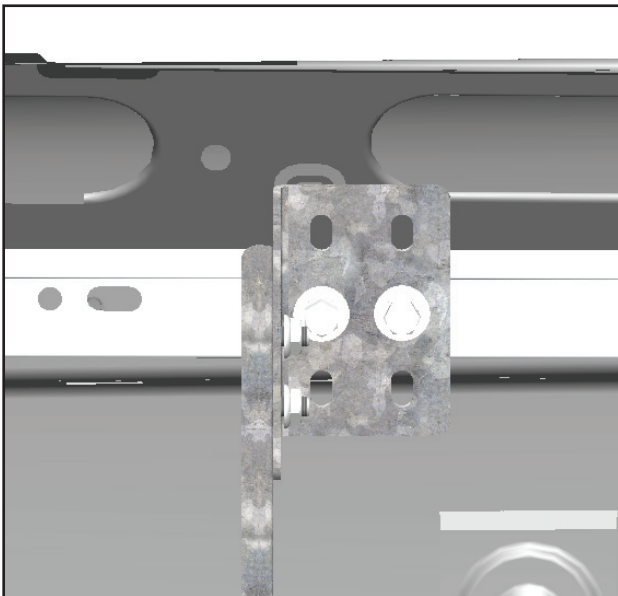
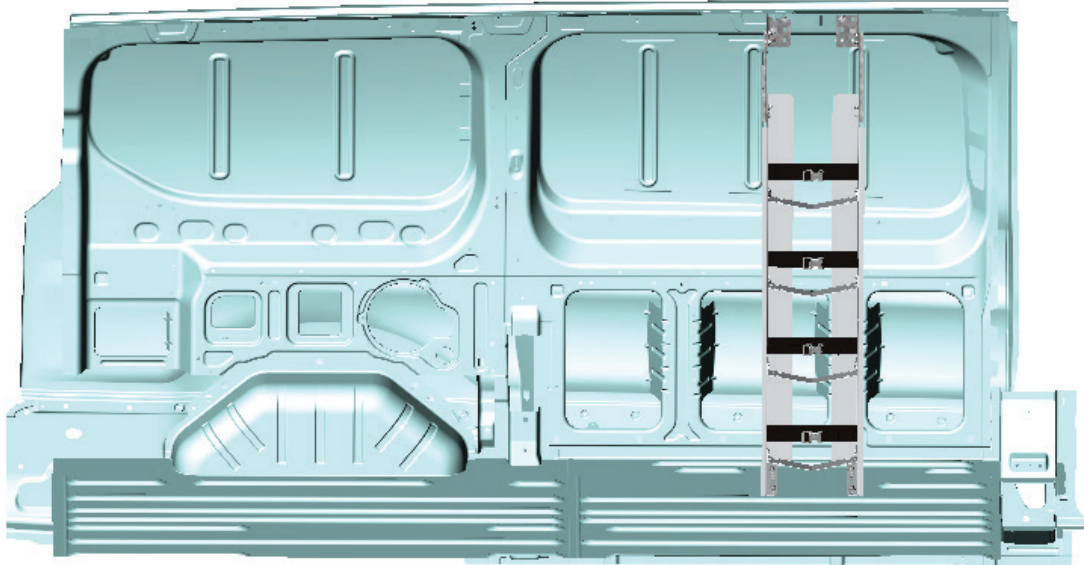
#94-132 5/16" Plusnut

## WITH RANGER WALL KITS

**2.5.2** First align the wall brackets to the wall mounting track kits, then install the wall brackets to the wall mounting track kits using channel nuts.

**NOTE:** Tighten the bolts that used to attached the wall bracket to the wall or wall kits 1<sup>st</sup> before the bolts that used to attached the wall bracket to the end panel.

**IMPORTANT:** After installation is completed, ensure all bolts are properly tightened.



### TOOLS

- Cordless Impact
- 1/2" Socket

### FASTENERS USED

**4x** WALL KITS FASTENER KIT



#90-212 Hex Bolt 5/16" x 1-1/4"



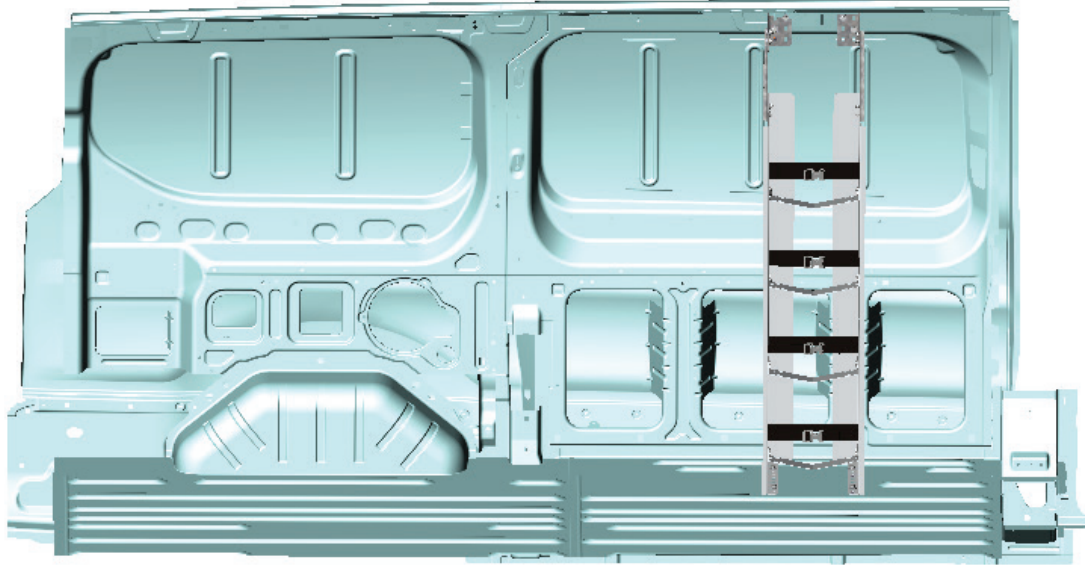
#98-122 Lock Washer



#98-116 Flat Washer



#94-150 Channel Nut



**“You have successfully installed your  
C4-BA11-4**

**Thank you for doing business with us.”**

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

