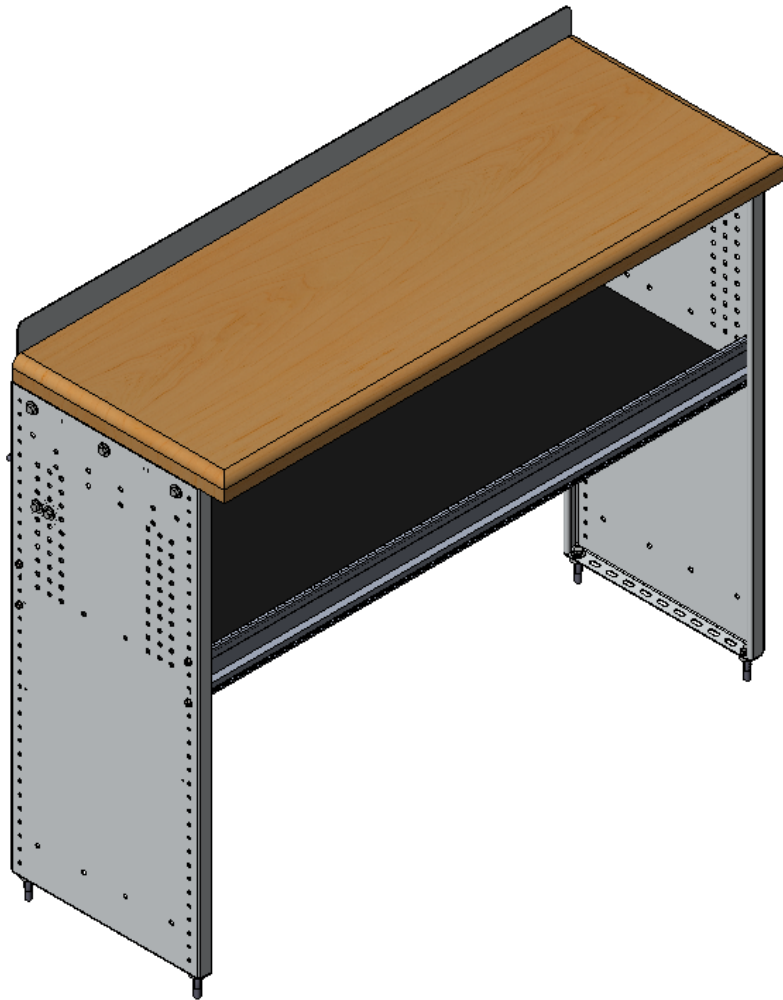


INSTALLATION GUIDE



S3-WA48-1 WORKBENCH

w/ Hardwood Top & One Shelf (Aluminum)



QUICK START GUIDE

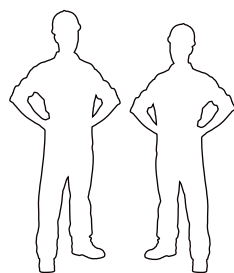
Phase 1 - Assembly

❑ 1.1 Setup.....	3 - 5
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Phase 2 - Installation

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REQUIRED ITEMS



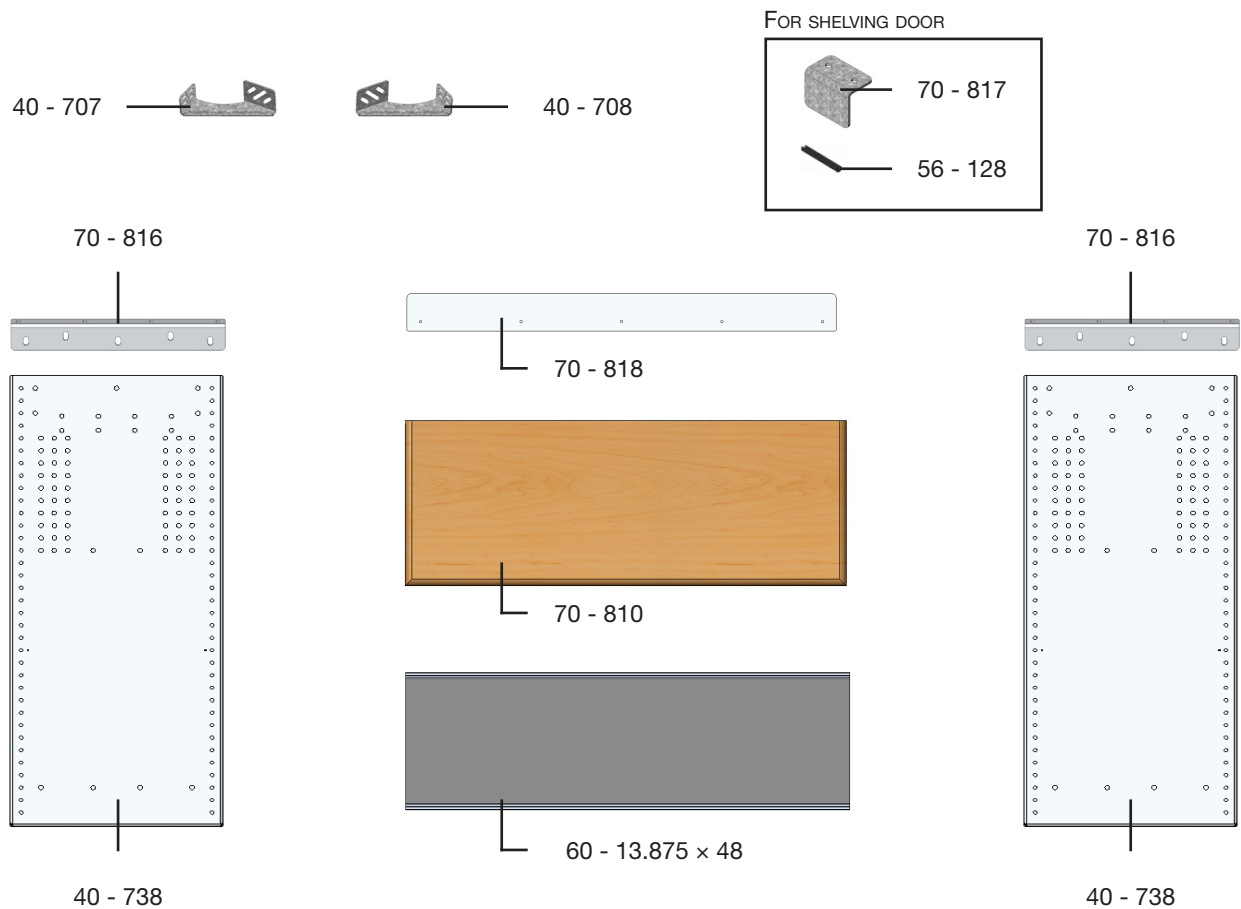
**2
PERSONS**

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

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.
40-707	Short Corner Cracket, Left	1
40-708	Short Corner Bracket, Right	1
40-738	End - Panel	2
56-128	Rubber Edge Trim (QTY IN INCHES)	2
60-13.875x48	Shelf Tray Plywood	1
70-810	Hardwood Top	1
70-816	Side Panel Bracket	2
70-817	Steel Striker Plate	1
70-818	Straight Backsplash	1
96-4802	Install Fastener Kit	1
94-4801	Assembly Fastener Kit	1

1.1.3 Fastener kits.




96 - 4802 Fastener Kit			Fastener Assembly
4x		# 90-204 Hex Bolt 5/16"-18 x 3/4" ZINC	4x <div>  #90-204 Hex Bolt 5/16" x 3/4"  #98-116 Flat Washer  #94-116 Serrated Nut </div>
8x		# 90-212 Hex Bolt 5/16"-18 x 1-1/4" ZINC	
4x		# 94-116 Serrated Nut 5/16"-18 ZINC	4x <div>  #90-212 Hex Bolt 5/16" x 1-1/4"  #98-122 Lock Washer  #98-116 Flat Washer  #94-132 5/16" Plusnut </div>
8x		# 94-132 Plusnut	
12x		# 98-116 Flat Washer 5/16", O.D. 7/8" ZINC	
8x		# 98-122 Lock Washer 5/16" ZINC	4x <div>  #90-212 Hex Bolt 5/16" x 1-1/4"  #98-122 Lock Washer  #98-116 Flat Washer  #98-157 Spacers <small>(QTY = GAP BETWEEN FLOOR AND END PANEL)</small>  #94-132 5/16" Plusnut </div>
4x		# 98-157 Spacer 0.375" ID, x 1.0" OD x 0.25" LONG NYLON	

94-4801 Fastener Kit


Fastener Assembly

6x		# 90-204	Hex Bolt 5/16"-18 x 3/4" ZINC
23x		# 92-102	Screw HWH #14 x 1" ZINC
6x		# 94-116	Serrated Nut 5/16"-18 ZINC
6x		# 98-116	Flat Washer 5/16" - 18 x 1" ZINC

6x

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

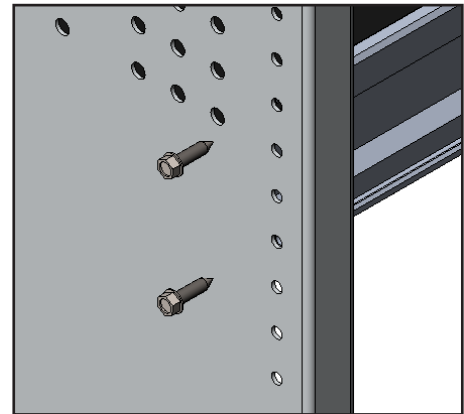
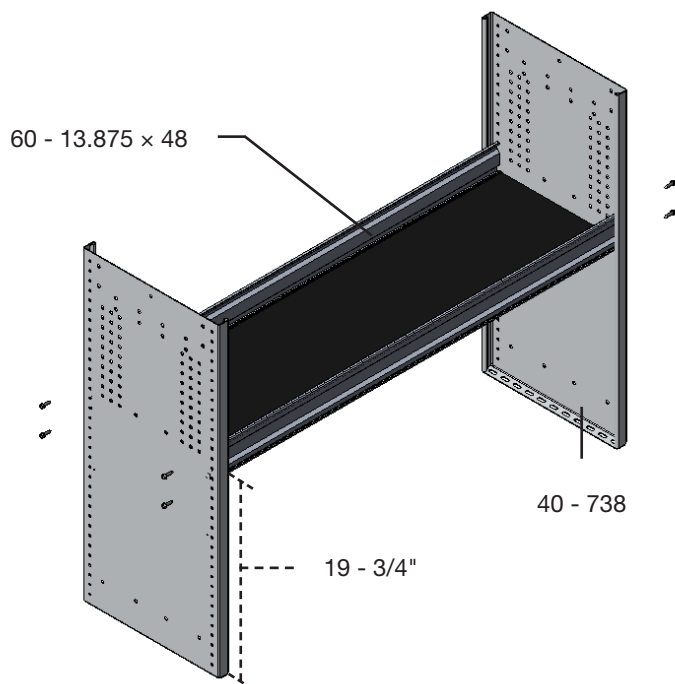
23x

	#92-102 Screw #14 x 1"
---	------------------------

PHASE 1 – ASSEMBLY

1.2 WORKBENCH ASSEMBLY

1.2.1 Attach both panels to the shelf tray.



TOOLS

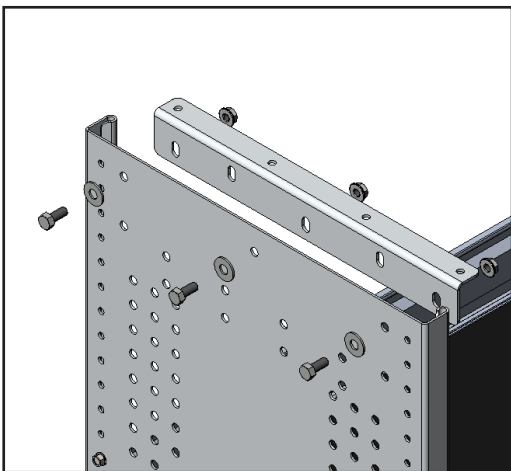
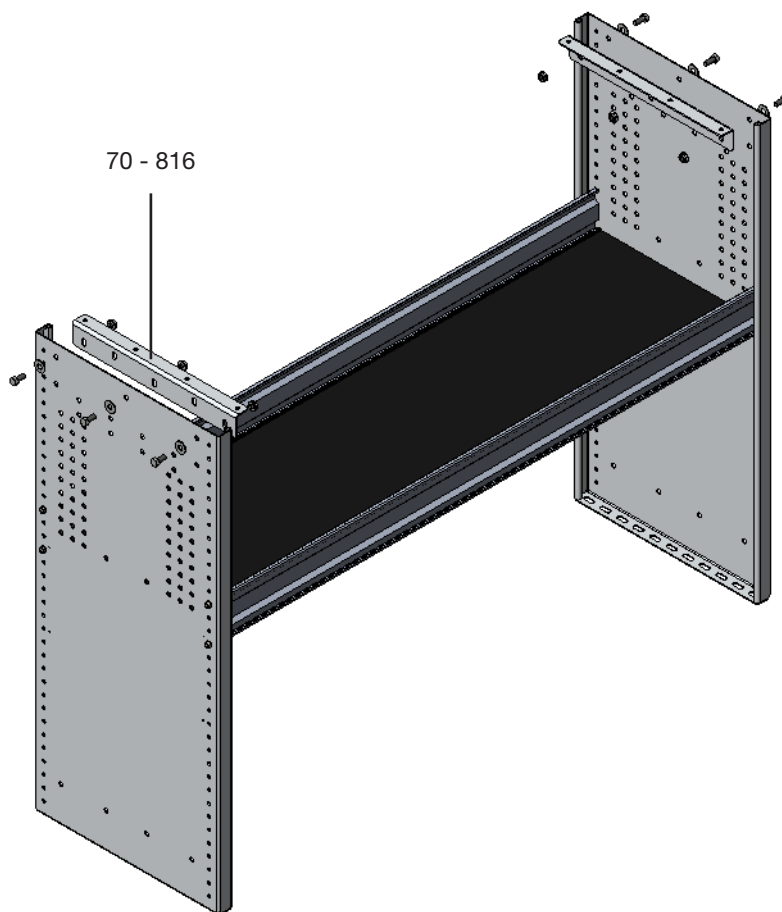
- ☐ Cordless Impact
- ☐ 3/8" Driver Bit

HARDWARE USED

8x

	#92-102 Screw #14 x 1"
---	------------------------

1.2.2 Attach side panels bracket to the end panel.



TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket

HARDWARE USED

6x



#90-204 Hex Bolt 5/16" x 3/4"



#98-116 Flat Washer

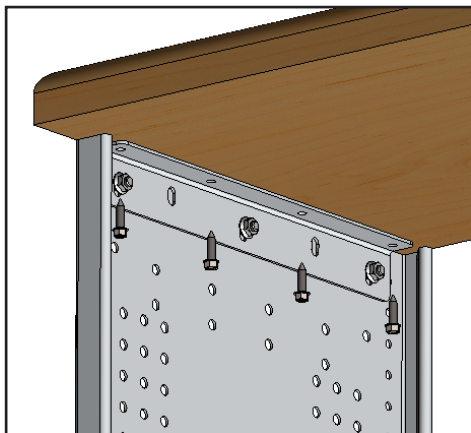
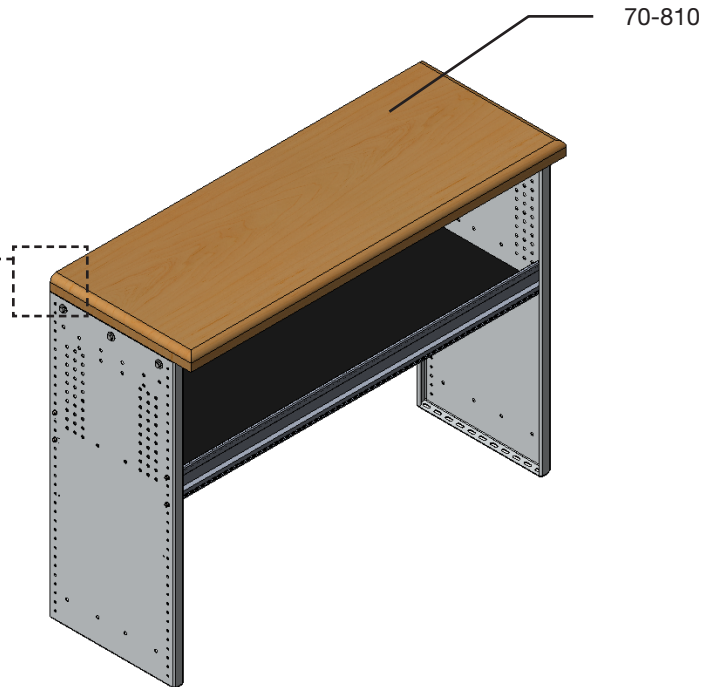
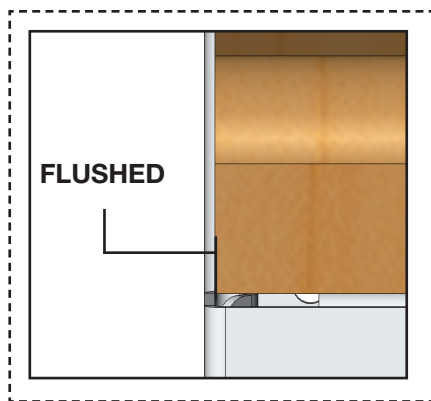
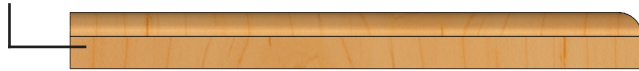


#94-116 Serrated Nut

1.2.3 Screw the hardwood top on the side panel brackets with the back of the hardwood top flushed against one end of the panels.

NOTE: Pre-drill the hardwood using 3/16" drill bit first before screwing the side panel brackets to the hardwood to prevent splitting the wood.

BACK



TOOLS

- ☐ Cordless Impact
- ☐ Cordless Drill
- ☐ 3/8" Driver Bit
- ☐ 3/16" Drill Bit

HARDWARE USED

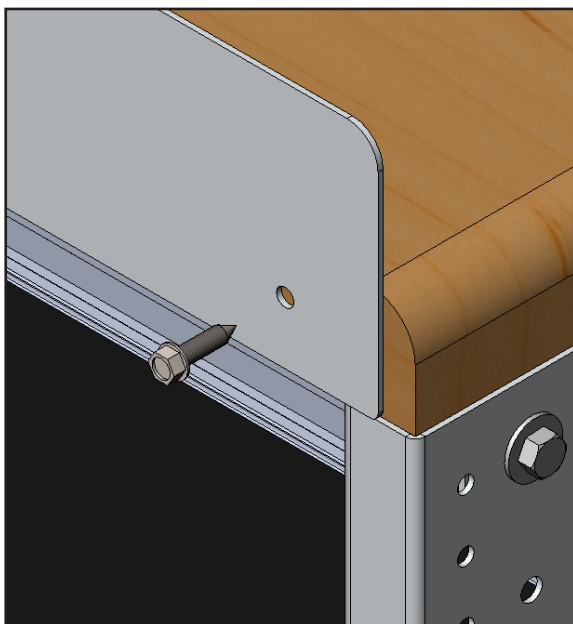
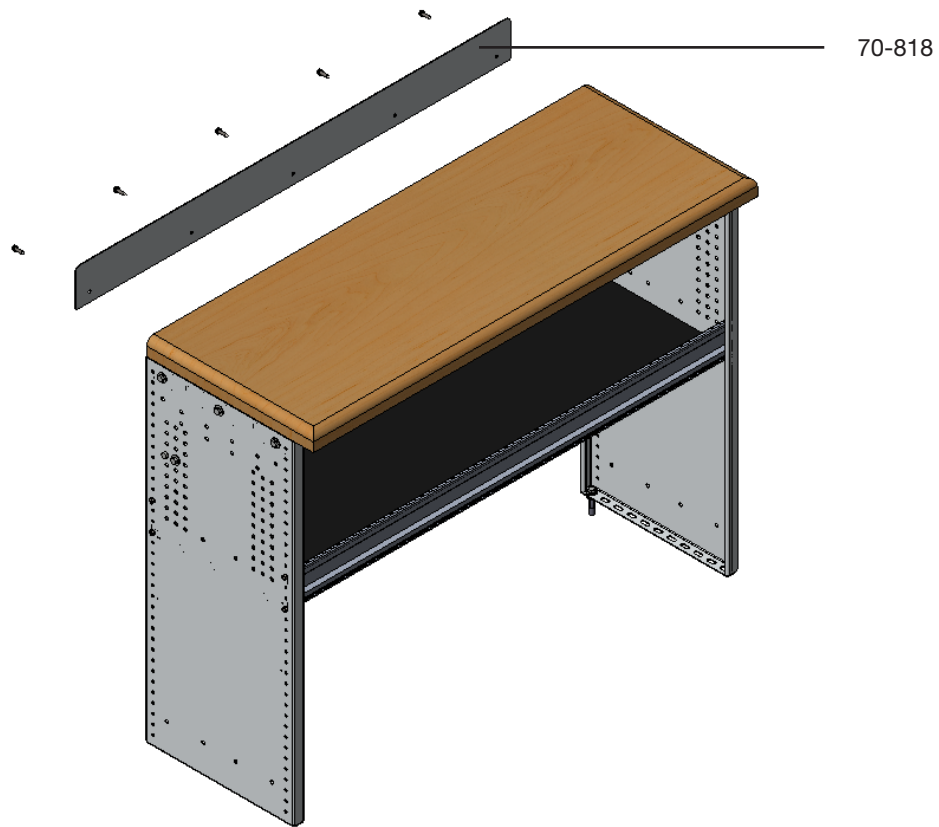
8x



#92-102 Screw #14 x 1"

1.2.4 Screw the backsplash on the back end of the workbench.

NOTE: Pre-drill the hardwood using 1/8" drill bit first before screwing the backsplash to the hardwood to prevent splitting the wood.



TOOLS

- ☐ Cordless Impact
- ☐ Cordless Drill
- ☐ 3/8" Driver Bit
- ☐ 3/16" Drill Bit

HARDWARE USED

5x

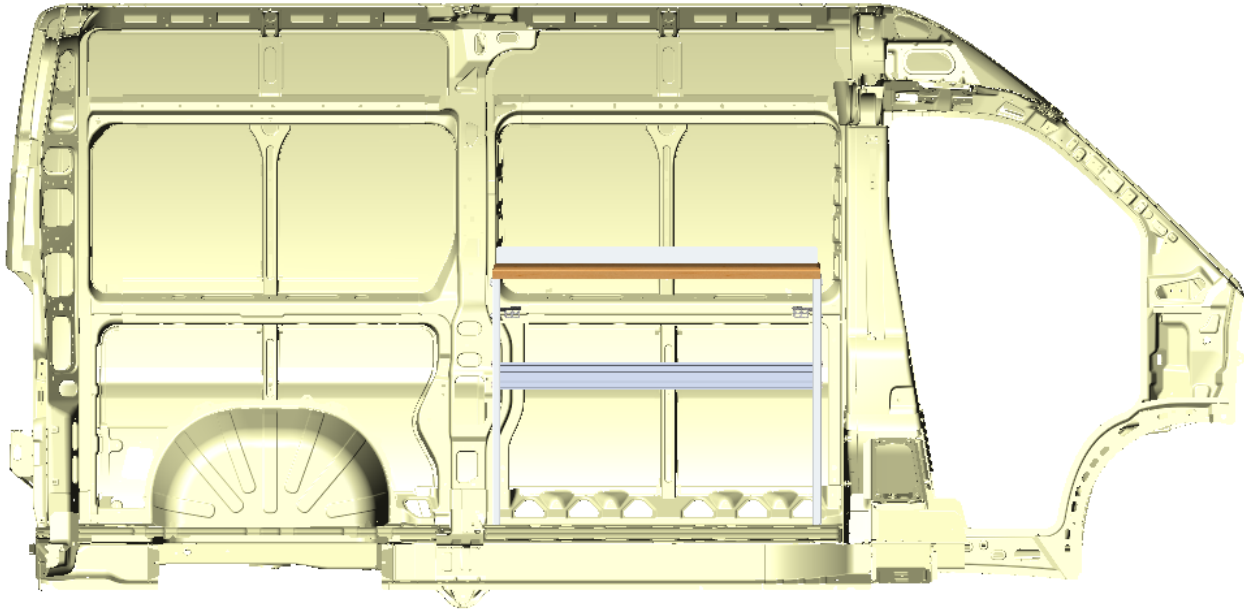


#92-102 Screw #14 x 1"

PHASE 2 – INSTALLATION

2.1 ATTACH WALL BRACKETS TO THE END PANELS

- 2.1.1**
- Lift the assembled workbench to the vehicle, then put it in place.
 - Attach the wall bracket to the panels aligning the brackets to the horizontal rim of the vehicle.



HORIZONTAL RIM

BRACKET

TOOLS

- Cordless Impact
- 1/2" Socket

HARDWARE USED

4x HAND-TIGHTEN THE BOLTS



#90-114 Hex Bolt 1/4" x 1"



#98-106 Flat Washer

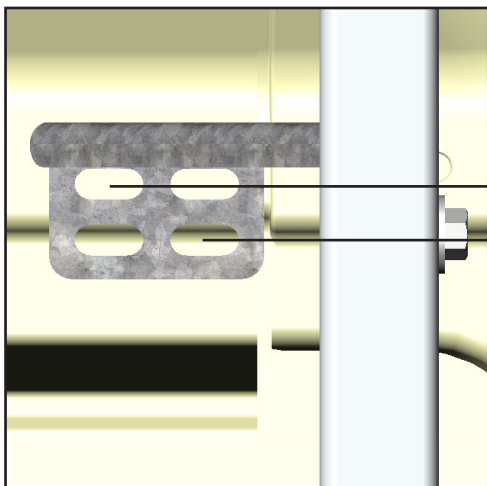
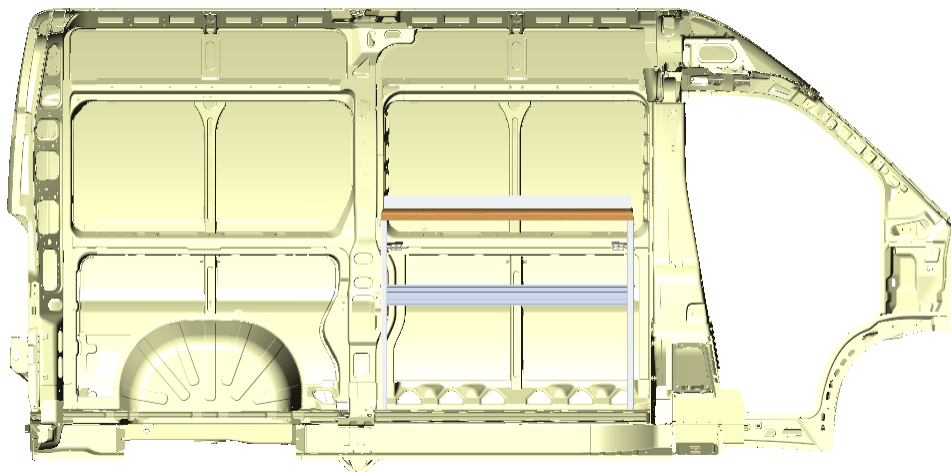


#94-112 Serrated Nut

PHASE 2 – INSTALLATION

2.2 MARK HOLES FOR PLUS NUTS

2.2.1 After attaching the brackets, mark the holes from the brackets and bottom shelf to the vehicle.



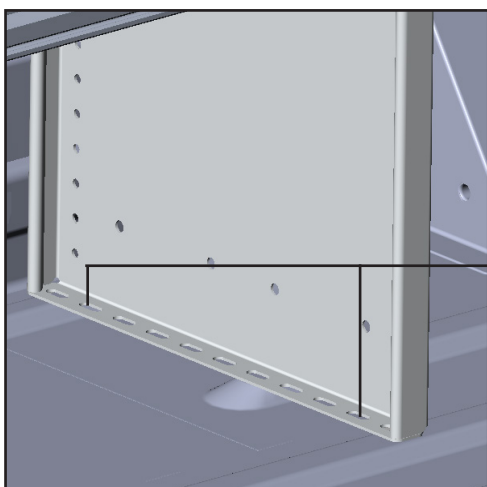
Mark 2 holes of the brackets head on the vehicle horizontal rim.

NOTE: If you are using Ranger wall kit, please go to **PAGE 16**.

TOOLS

☐ Marker

MARK



Mark 2 holes of each end panel on the vehicle floor.

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

TOOLS

☐ Marker

MARK

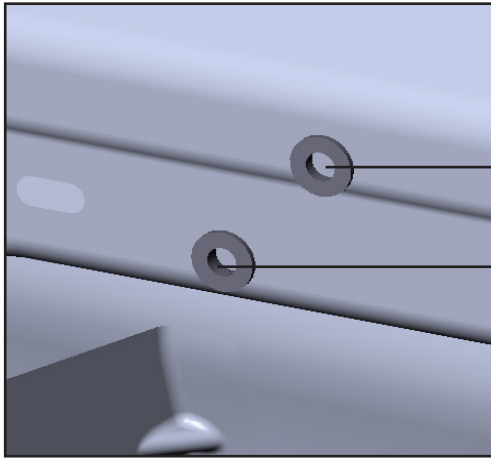
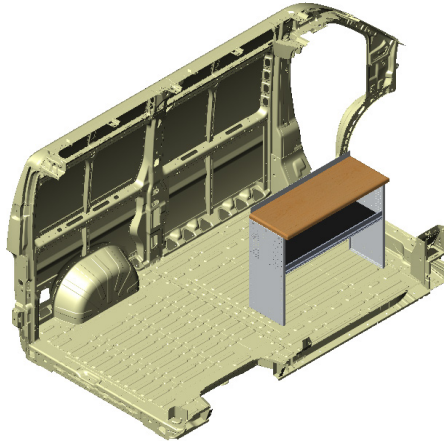
PHASE 2 – INSTALLATION

2.3 ATTACH PLUS NUTS

- 2.3.1** • Remove the assembled workbench and place on the side.
• Drill all the marks using 1/2" drill bit w/ drill collar, then attach plus nuts to the holes.

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 like the **Gas tank**, **Wiring Harness** and **Hose**.



PLUSNUT

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

TOOLS

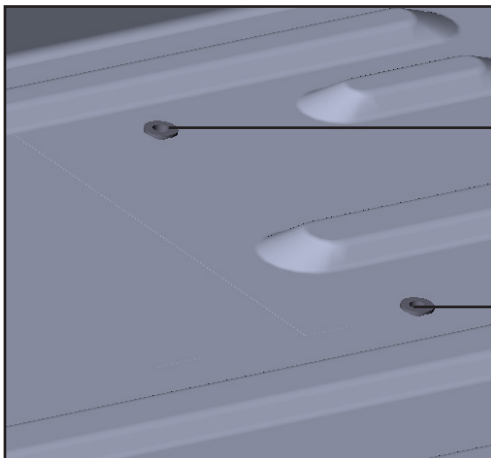
- ☐ Cordless Drill
- ☐ 1/2" Drill Bit w/ Drill Collar (Set at 1/2")
- ☐ Plus Nut Tool (5/16")

HARDWARE USED

8x



#94-132 Plus Nut

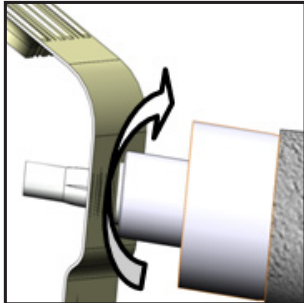


DRILL COLLAR
(SET AT 1/2")

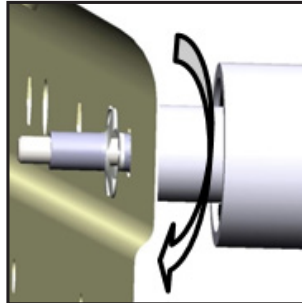
2.3.2 How to attach plus nut.

• 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

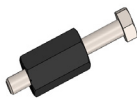


REVERSE



• 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

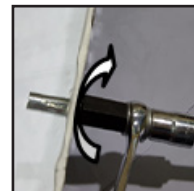
STEP 1:

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



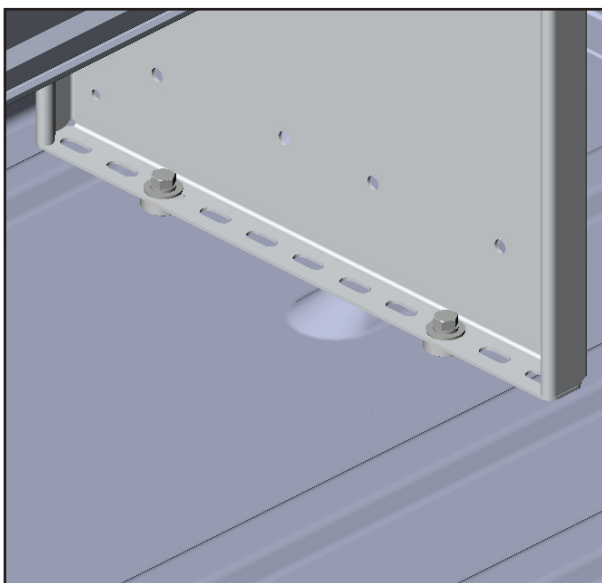
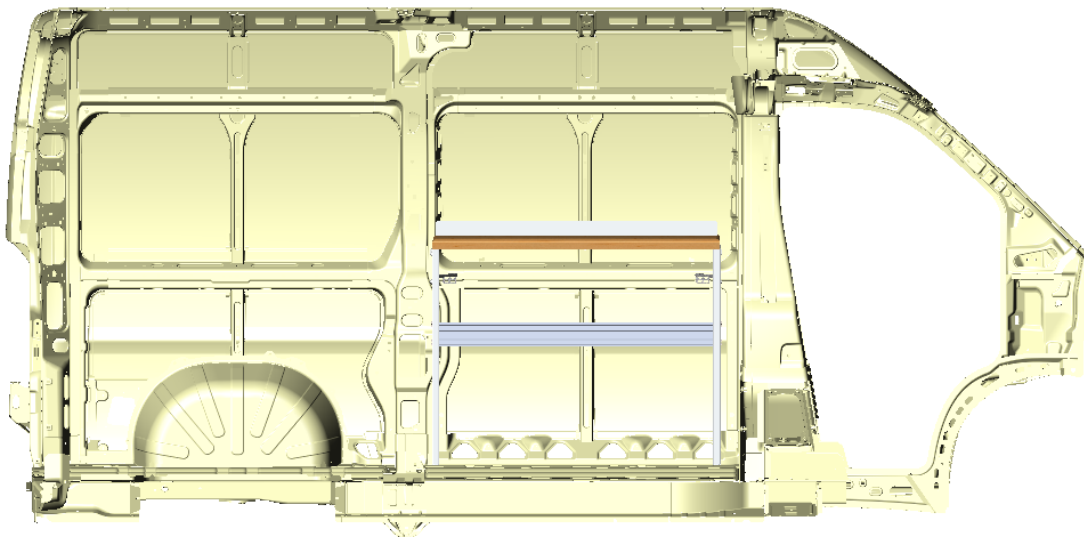
REVERSE

PHASE 2 – INSTALLATION

2.4 ATTACH SHELF UNIT TO THE FLOOR

WITHOUT RANGER FLOOR

2.4.1 Put the assembled workbench back in place aligning the holes to the plusnuts, then install the bottom shelf to the plus nuts.



TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket

HARDWARE USED

4x



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

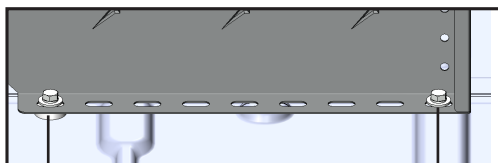
#98-122 Lock Washer

#98-116 Flat Washer

#98-157 Spacers
(QTY = GAP BETWEEN FLOOR AND END PANEL)

#94-132 5/16" Plusnut

TIPS WHEN TO USE SPACER:
MOST VEHICLE USE 1 SPACER WHEN NOT OVER RIBS

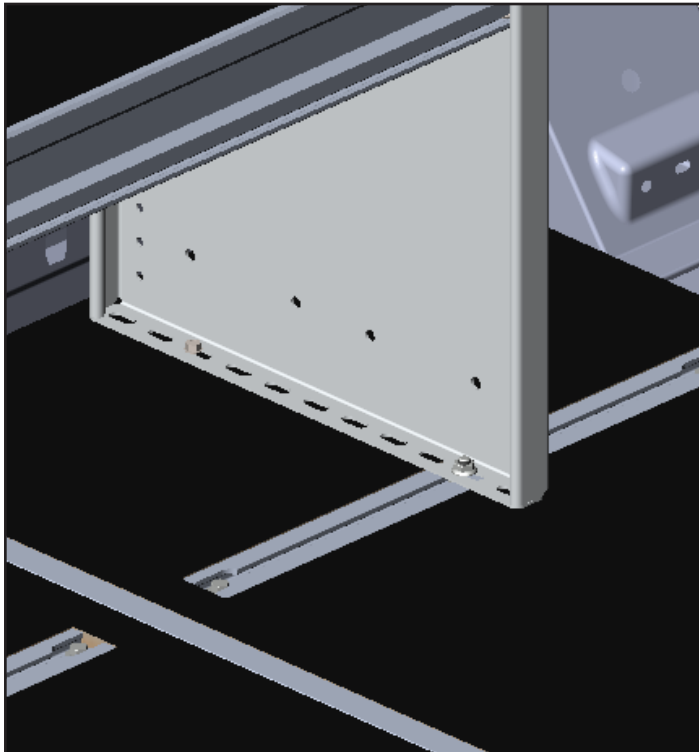
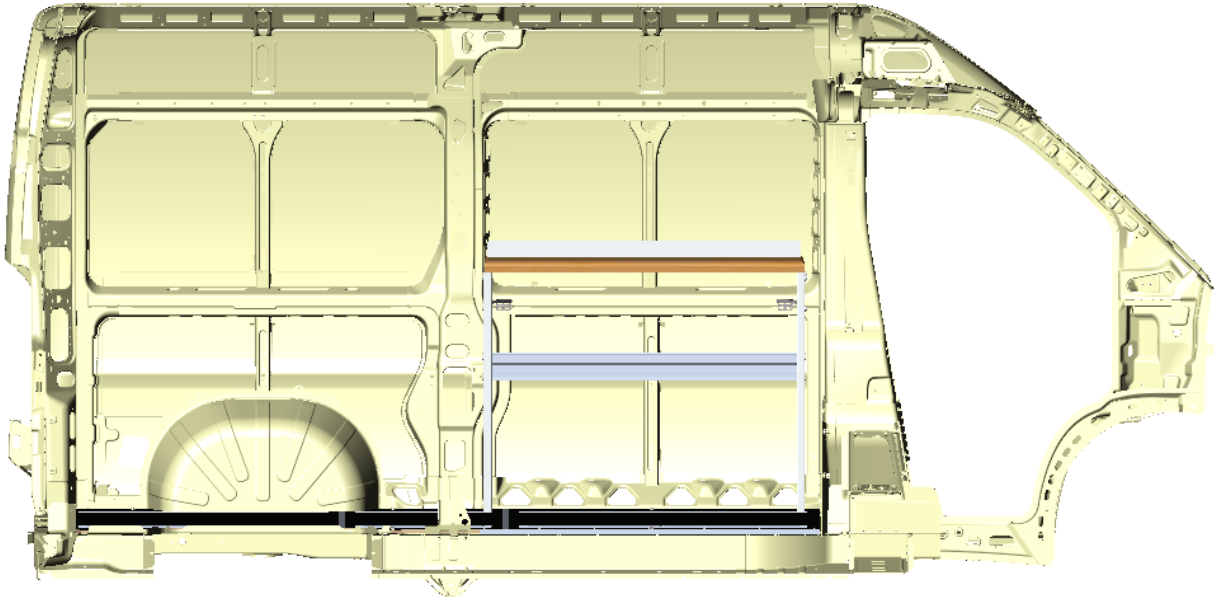


W/ Spacer

W/O Spacer

WITH RANGER FLOOR

- 2.4.2**
- Lift the workbench inside the van, then put it in place.
 - Install the workbench to the floor mounting track by sliding bolts in the mounting tracks, and screwing the bottom shelf to the floor.



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

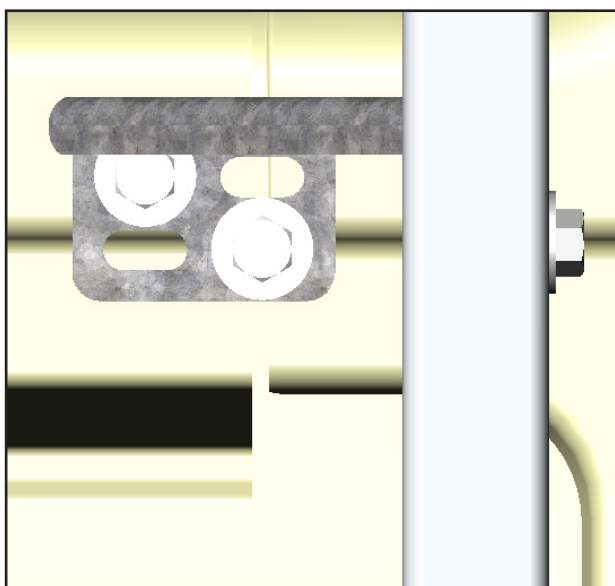
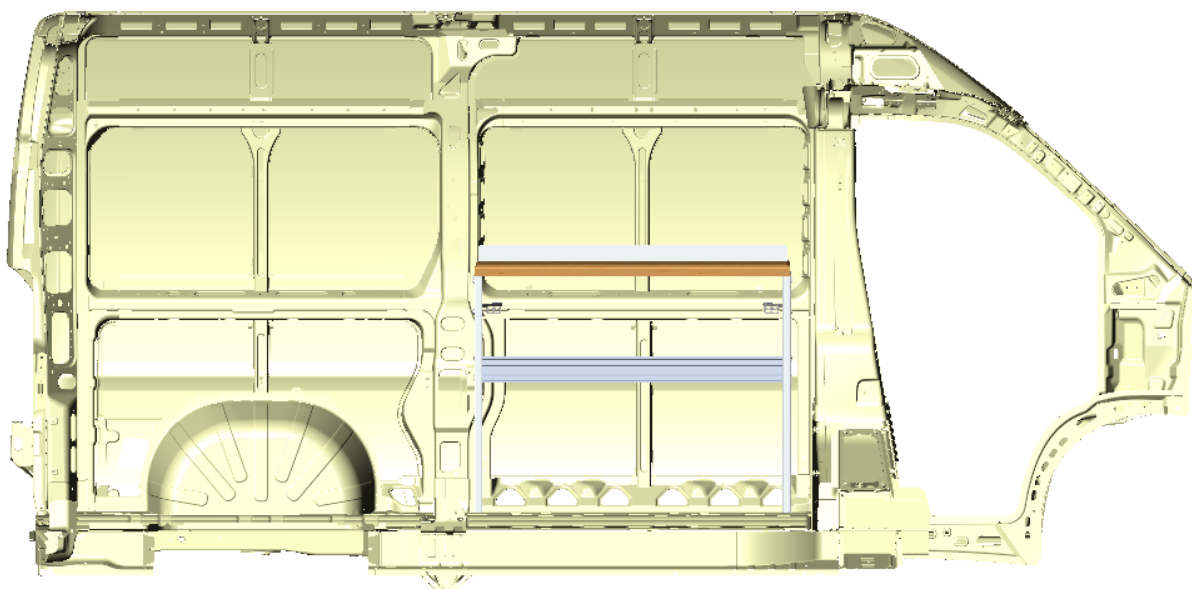
2.5 ATTACH WALL BRACKETS

WITHOUT RANGER WALL KITS

2.5.1 Align the wall brackets to the plus nuts, then install the wall brackets to the wall.

NOTE: Tighten the bolts that attach the bracket to the wall or wall rails 1st before tightening the bolts from the 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

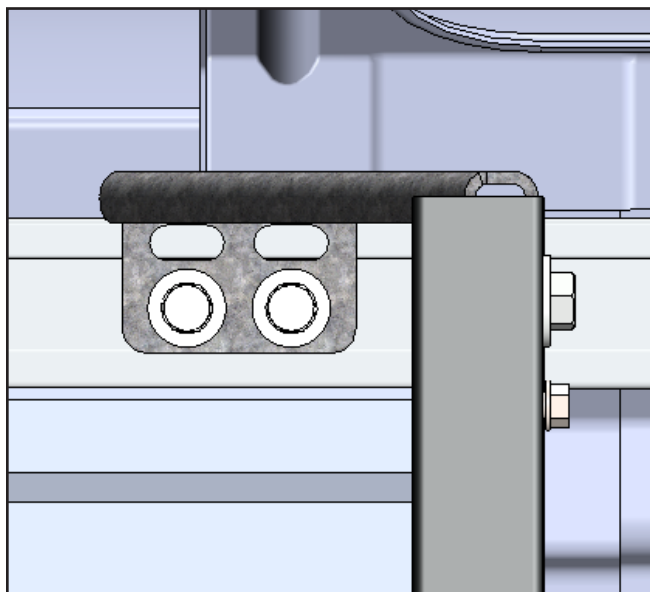
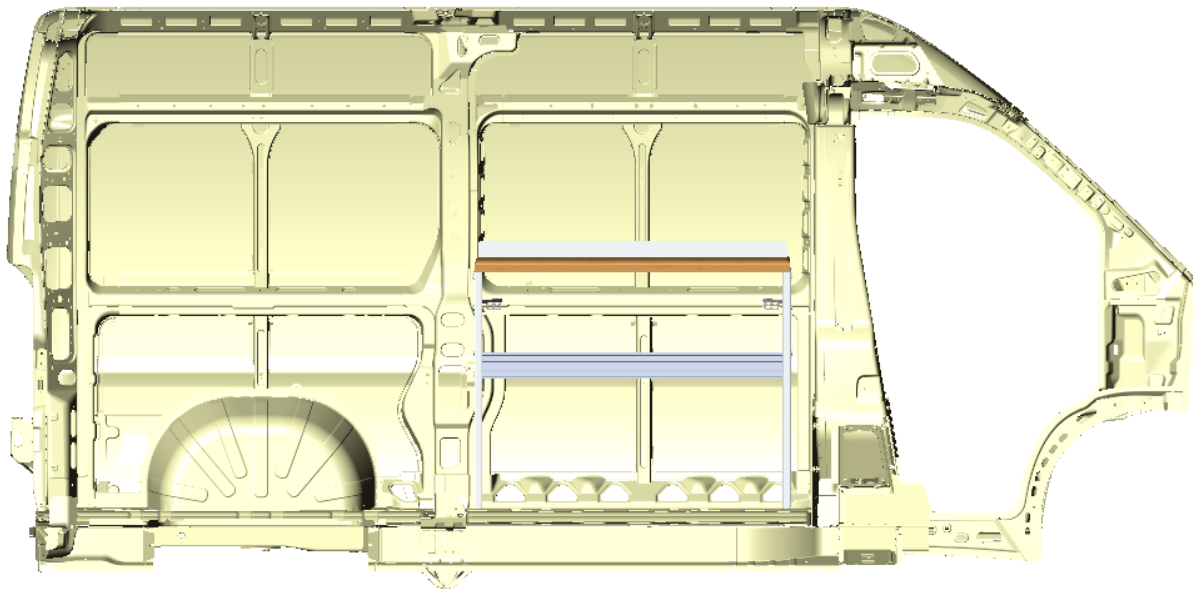
#94-132 5/16" Plusnut

WITH RANGER WALL KITS

2.5.2 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 attach the bracket to the wall or wall rails 1st before tightening the bolts from the brackets to the end panels.

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



TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket

FASTENERS USED

4x WALL KITS FASTENER KIT



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



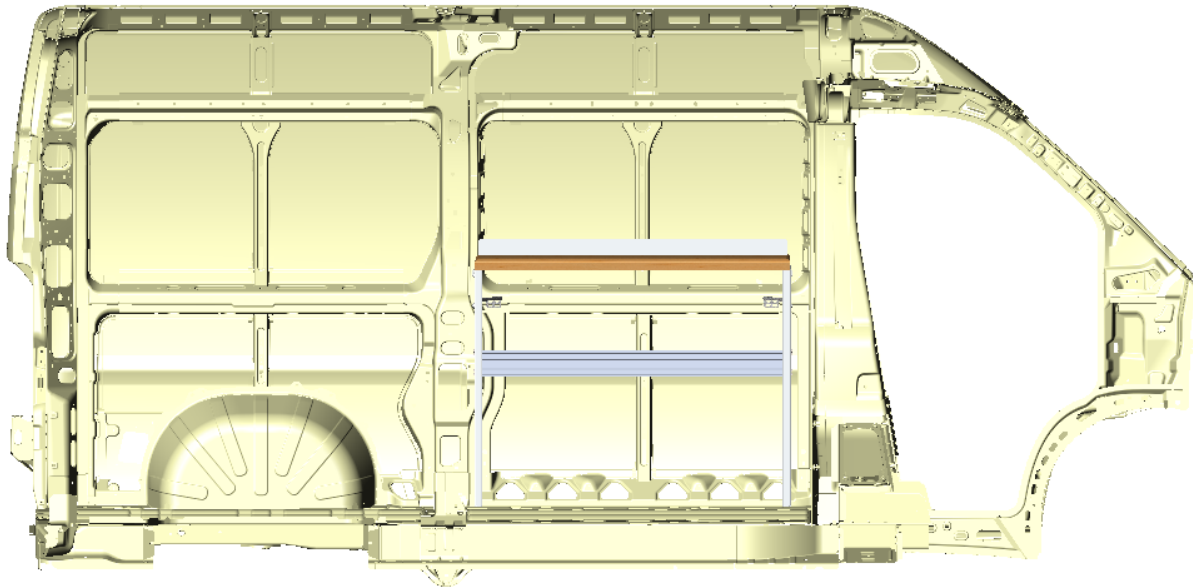
#98-122 Lock Washer



#98-116 Flat Washer



#94-150 Channel Nut



**“You have successfully installed your
Workbench**

Thank you for doing business with us.”

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

