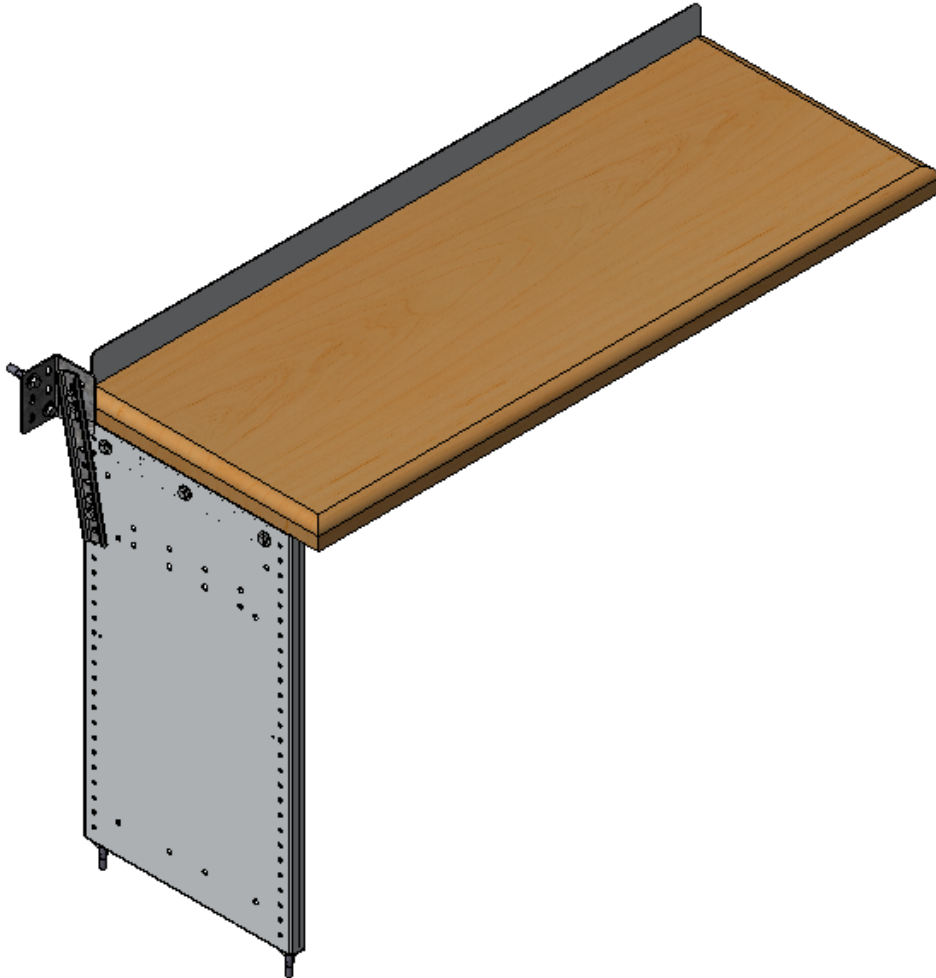


INSTALLATION GUIDE



S2-WA48-0 WORKBENCH

Assembled On 5067-6

w/ Hardwood Top (Aluminum)



Scan the QR for the latest Install-Guide.

RANGER
DESIGN

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.

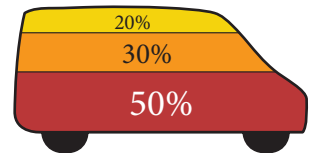
- Any materials, padding, or glazing installed in the vehicle must comply with FMVSS/CMVSS 201/205/302, as applicable.

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

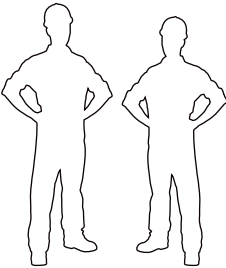
Phase 1 - Assembly

- 1.1 Setup..... 3 - 5
- 1.2 Workbench Assembly..... 5 - 7

Phase 2 - Installation

- 2.1 Attaching Workbench To Drawer Unit..... 8 - 9
- 2.2 Attach Wall Brackets To The End Panels..... 10
- 2.3 Mark Holes For Plus Nuts..... 11
- 2.4 Attach Plus Nut..... 12 - 13
- 2.5 Attach Partskeeper Cabinet To the Floor..... 14 - 15
- 2.6 Attach Wall Brackets..... 16 - 17

REQUIRED ITEMS



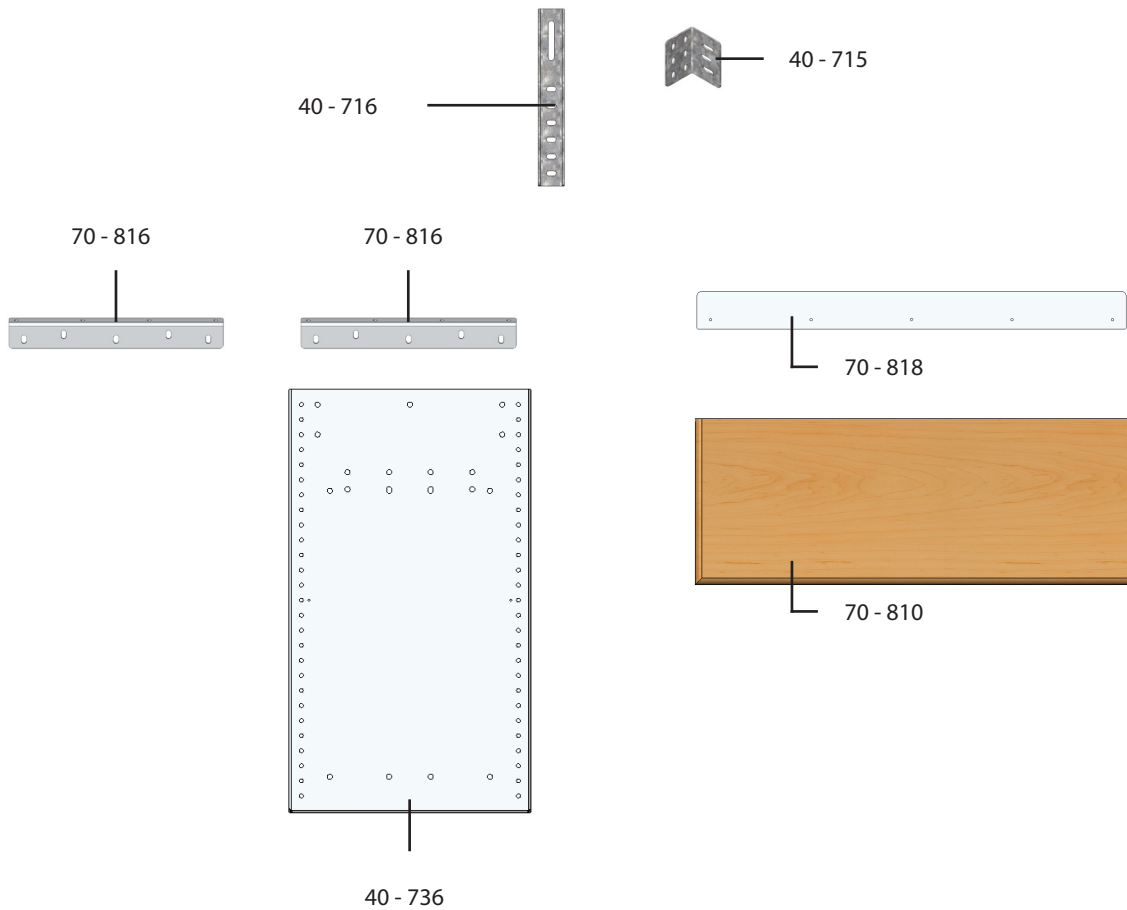
2
PERSONS

- 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.



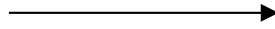
1.1.2 Verify all parts are present.

BILL OF MATERIALS












Item No.	Description	Qty.
40-715	Bracket - Shelving	1
40-716	Bracket - Shelving	1
40-736	End - Panel	1
70-810	Hardwood Top	1
70-816	Side Panel Bracket	2
70-818	Straight Backsplash	1
96-4803	Install Fastener Kit	1
94-4803	Assembly Fastener Kit	1

1.1.3 Fastener kits.




96 - 4803 Fastener Kit






Fastener Assembly

2x		# 90-011	Hex Bolt 5/16"-18 x 1-3/4" ZINC
2x		# 90-110	Hex Bolt 1/4"-20 x 3/4" ZINC
2x		# 90-204	Hex Bolt 5/16"-18 x 3/4" ZINC
2x		# 90-212	Hex Bolt 5/16"-18 x 1-1/4" ZINC
2x		# 94-112	Serrated Nut 1/4"-20 ZINC
2x		# 94-116	Serrated Nut 5/16"-18 ZINC
4x		# 94-132	Plusnut
2x		# 98-112	Flat Washer 1/4" ZINC
2x		# 98-116	Flat Washer 5/16", O.D. 7/8" ZINC
4x		# 98-122	Lock Washer 5/16" ZINC
2x		# 98-157	Spacer 0.375" ID, x 1.0" OD x 0.25" LONG NYLON





2x

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






2x

 #90-110 Hex Bolt 1/4" x 3/4"
 #98-112 Flat Washer
 #94-112 Serrated Nut

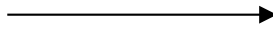
2x

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

2x

 #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




94-4803 Fastener Kit




Fastener Assembly

- 3x  # 90-204 Hex Bolt 5/16"-18 x 3/4" ZINC
- 13x  # 92-102 Screw HWH #14 x 1" ZINC
- 3x  # 94-116 Serrated Nut 5/16"-18 ZINC
- 3x  # 98-116 Flat Washer 5/16" - 18 x 1" ZINC

3x

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

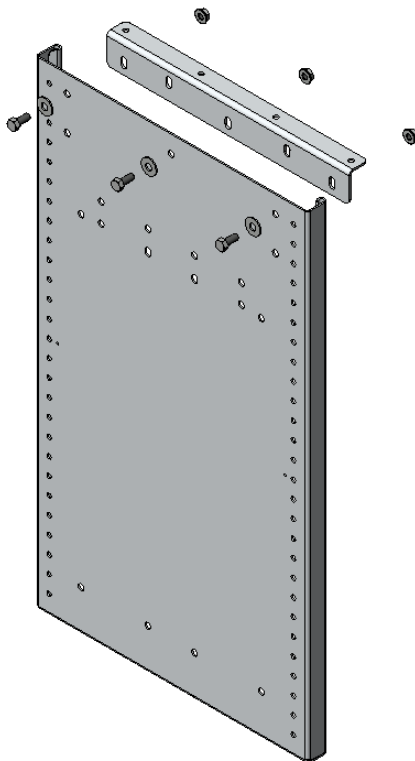
13x

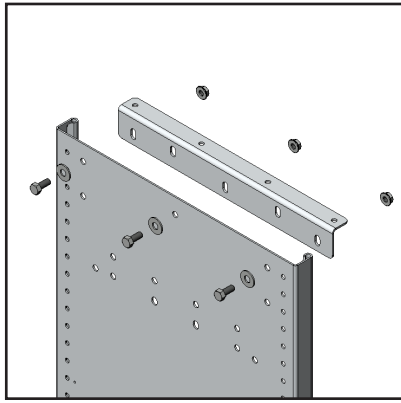
-  #92-102 Screw #14 x 1"

PHASE 1 – ASSEMBLY

1.2 WORKBENCH ASSEMBLY

1.2.1 Attach side panels bracket to the end panel.








TOOLS

- Cordless Impact
- 1/2" Socket

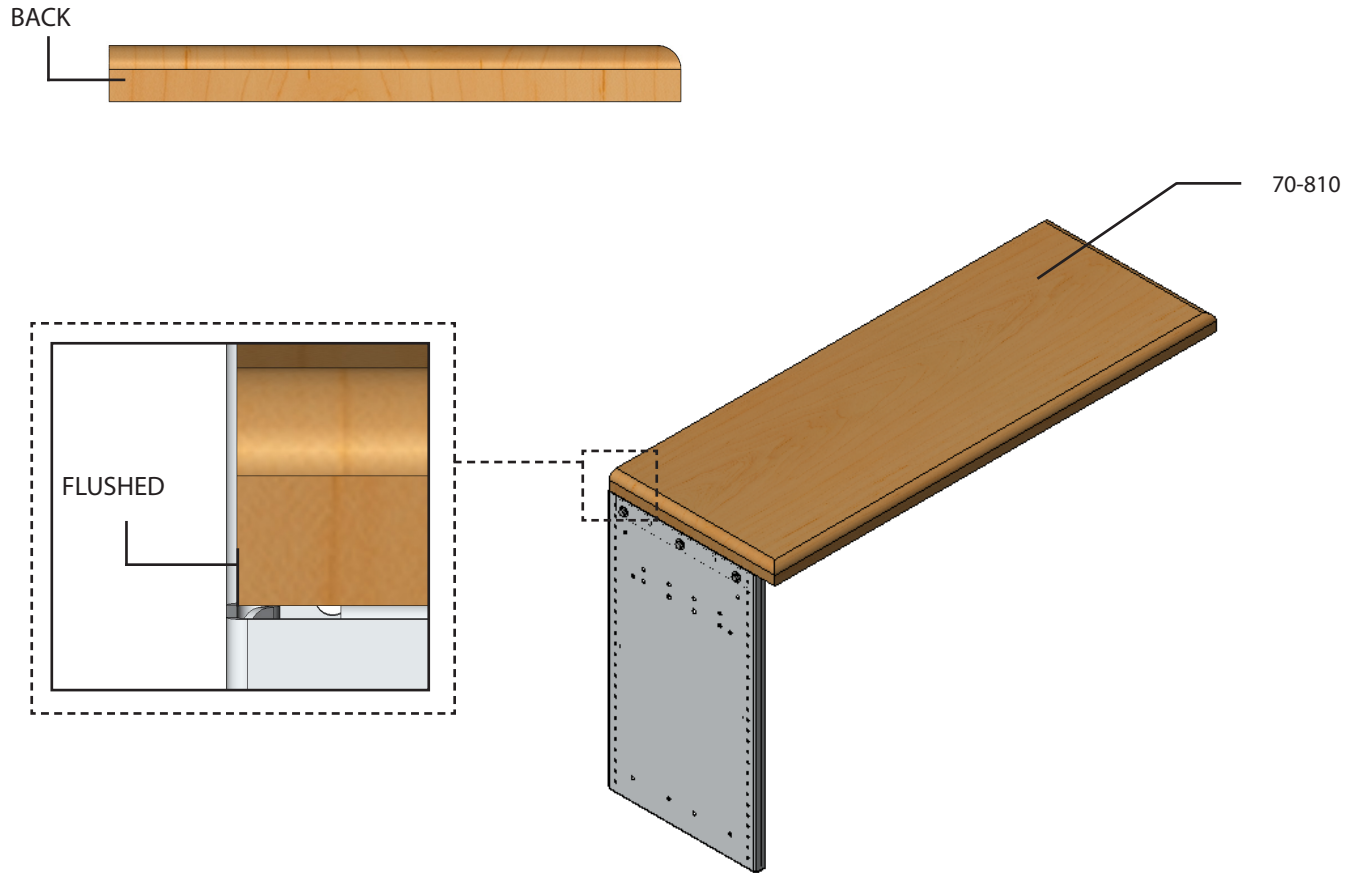
HARDWARE USED

3x

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

1.2.2 Screw the hardwood top on the side panel bracket 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 bracket to the hardwood to prevent splitting the wood.



NOTE: Use slots to avoid screwing into the splits in the hardwood top.

A close-up diagram shows the hardwood top being attached to the side panel bracket. The top is being secured with screws into the bracket. The diagram highlights the need to use slots to avoid screwing into the splits in the hardwood top.

TOOLS

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

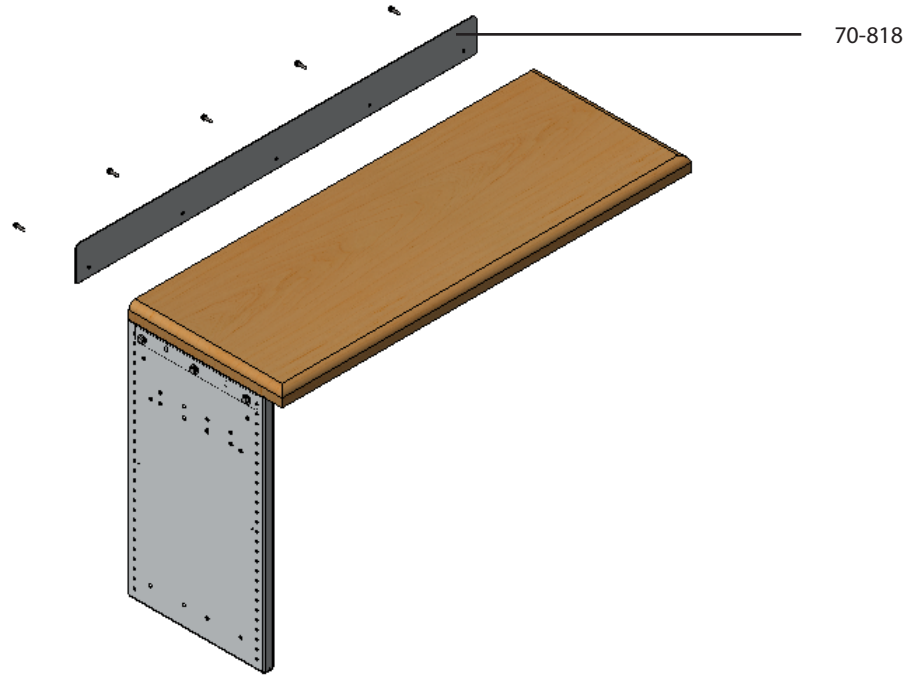
HARDWARE USED

4x

#92-102 Screw #14 x 1"

1.2.3 Screw the backslash on the back end of the workbench.

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



A close-up photograph showing the grey metal backslash being secured to the wooden workbench top. A silver screw is being driven into the backslash, passing through the wood. The workbench top is a thick, light-colored wooden board. The backslash has a curved top edge and a hole for the screw. The workbench is mounted on a grey metal base.

TOOLS

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

HARDWARE USED

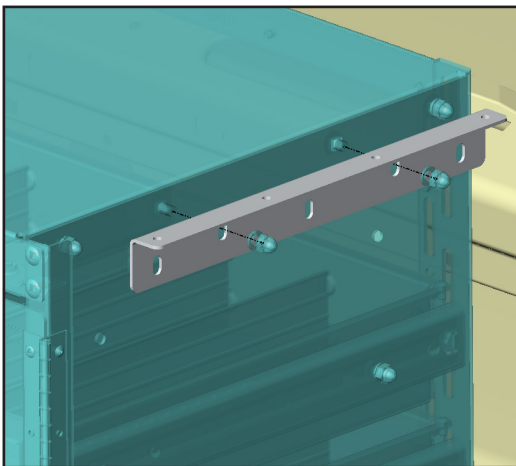
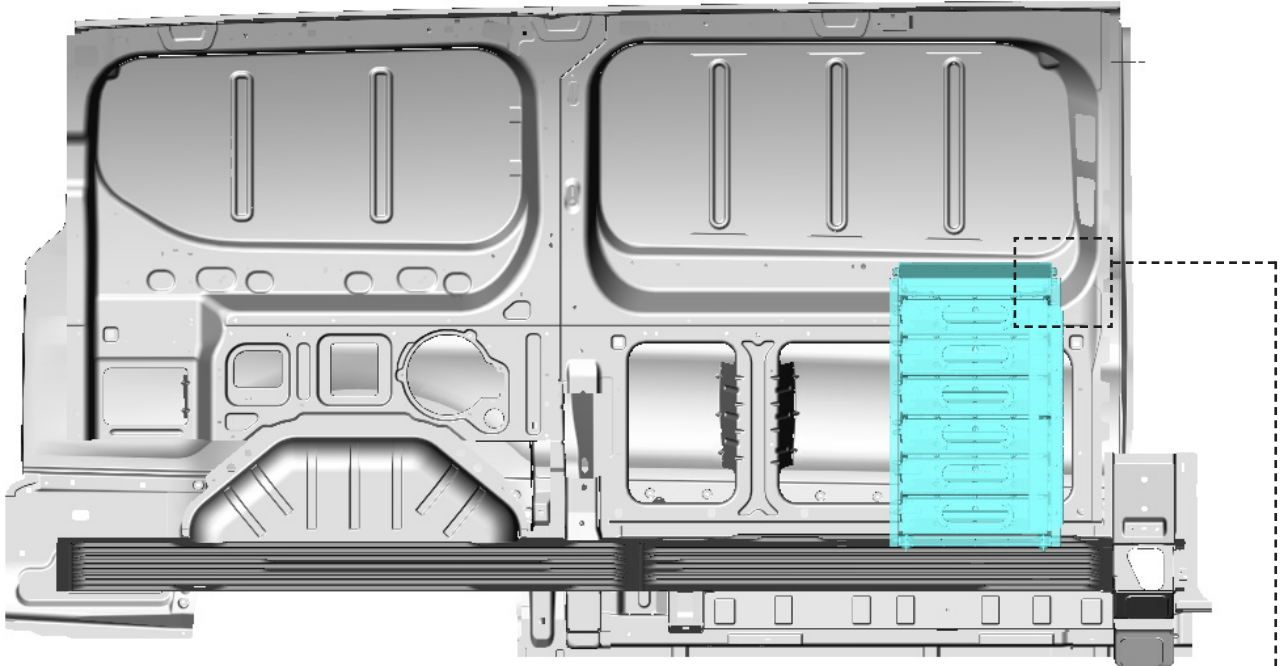
5×

#92-102 Screw #14 × 1"

PHASE 2 – INSTALLATION

2.1 ATTACHING WORKBENCH TO DRAWER UNIT

2.1.1 Remove the top drawer of the installed drawer unit, then attach the side panel bracket to the side panel of the drawer unit.



TOOLS

- ❑ Cordless Impact
- ❑ 1/2" Socket

HARDWARE USED

2X DRAWER HARDWARE



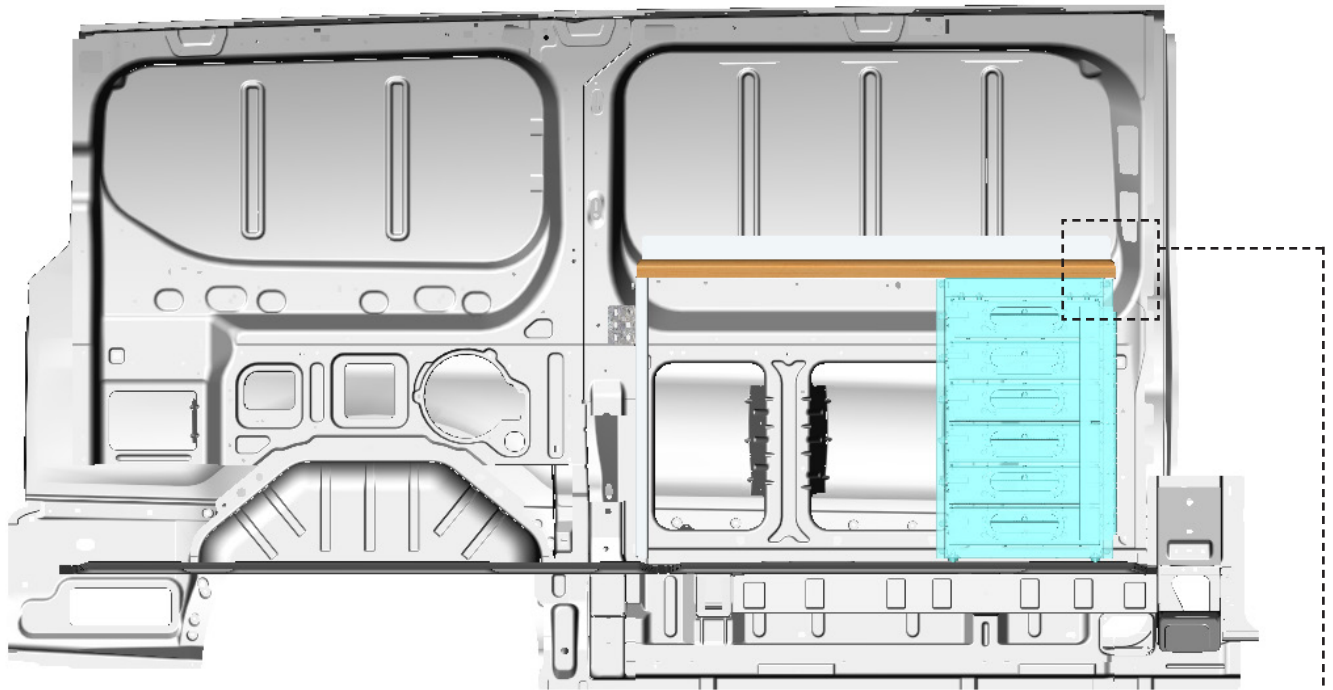
Carriage Bolt 1/2" & 5/8"

Lock Washer 5/16"

Acorn Nut 5/16"

- 2.1.2 • Lift the assembled workbench to the vehicle, then put it in place.
- Attach the side panel bracket to the hardwood top, then slide the top drawer back.

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



TOOLS

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

HARDWARE USED

4X

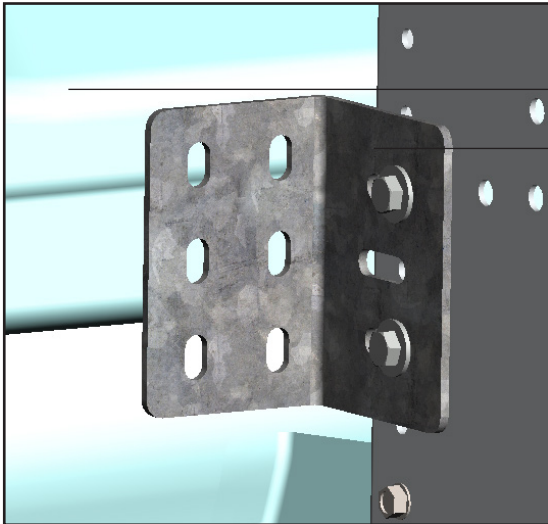
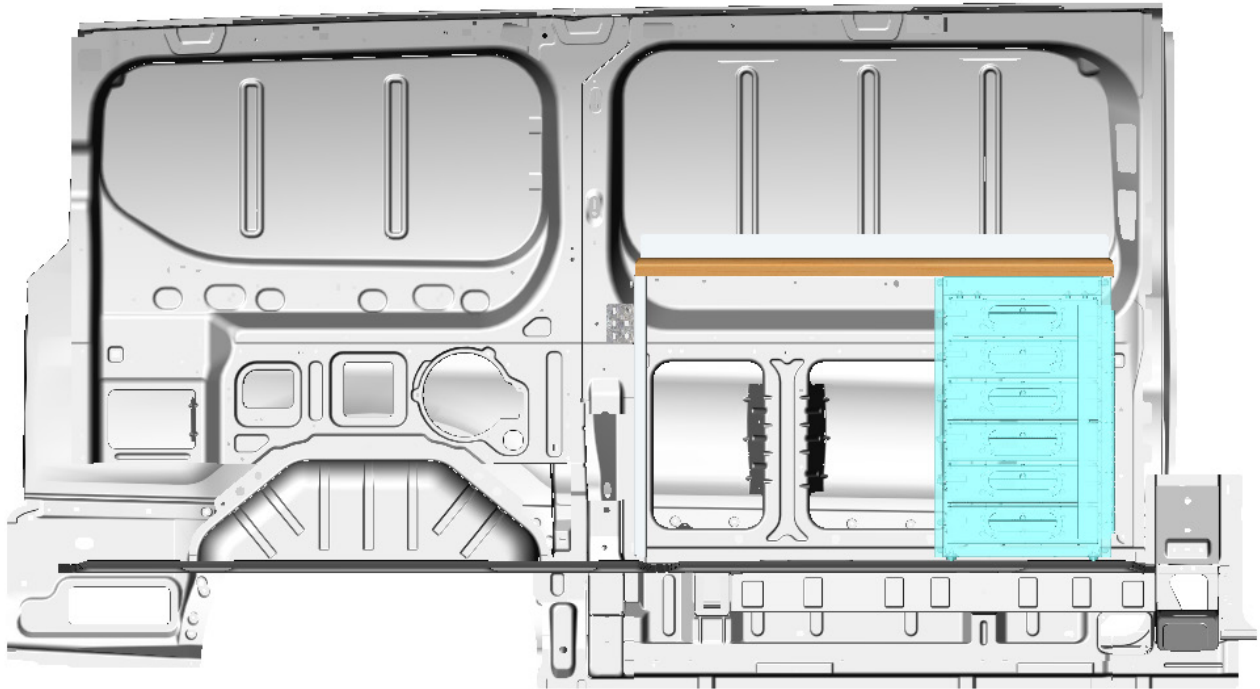


#92-102 Screw #14 x 1"

PHASE 2 – INSTALLATION

2.2 ATTACH WALL BRACKETS TO THE END PANELS

2.2.1 Attach the wall bracket to the panels aligning the bracket to the horizontal rim of the vehicle.



HORIZONTAL RIM




BRACKET HEAD

TOOLS

- Cordless Impact
- 1/2" Socket

HARDWARE USED

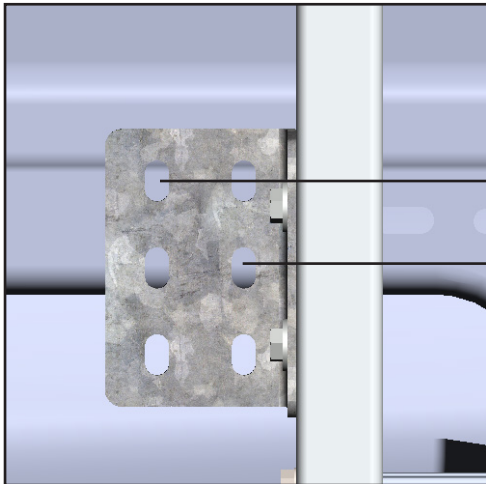
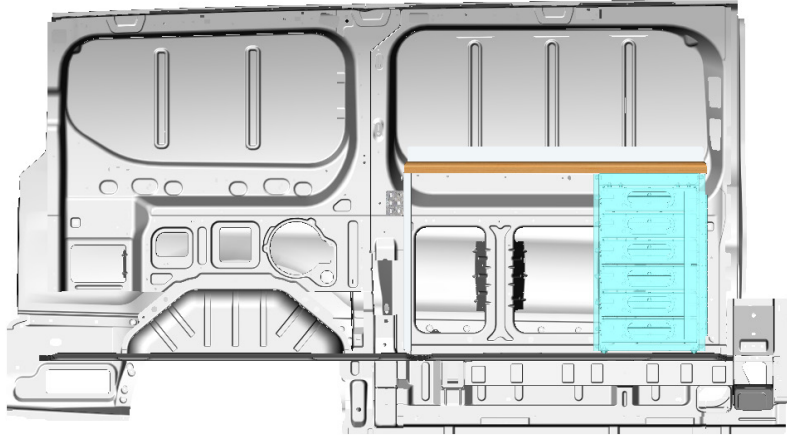
2× HAND-TIGHTEN THE BOLTS

	#90-110 Hex Bolt 1/4" x 3/4"
	#98-112 Flat Washer
	#94-112 Serrated Nut

PHASE 2 – INSTALLATION

2.3 MARK HOLES FOR PLUS NUTS

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

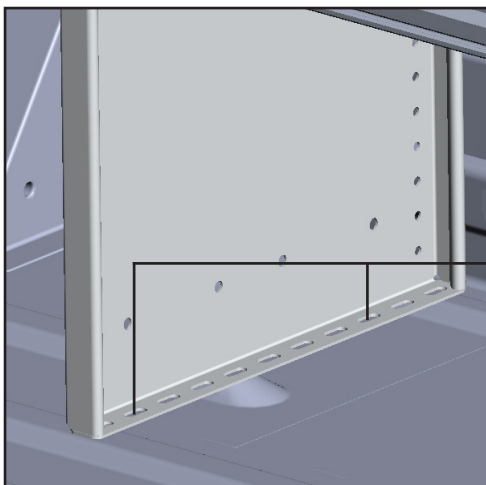


Mark 2 holes of the brackets head on the vehicle horizontal rim.

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

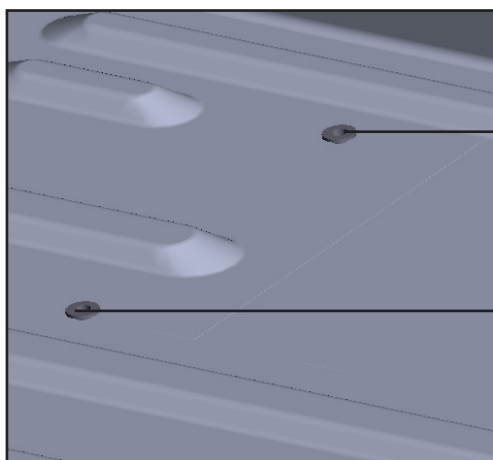
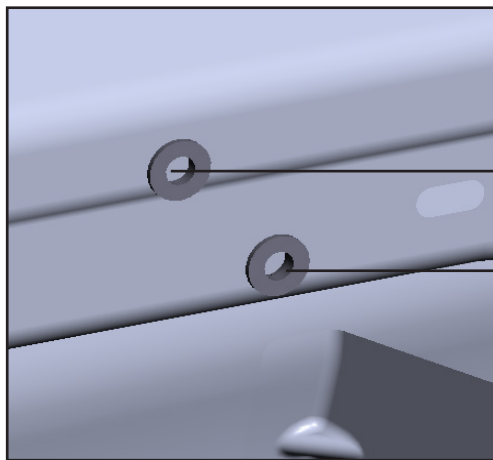
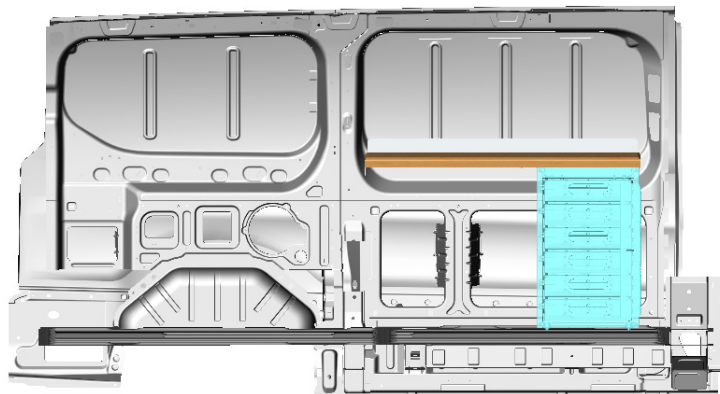
2.4 ATTACH PLUS NUTS

2.4.1 • Remove the workbench side panel.

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

HARDWARE USED

4x



#94-132 Plus Nut

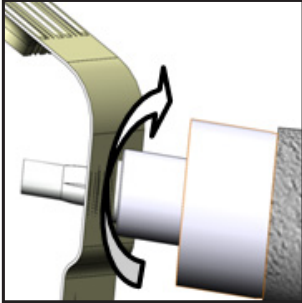


DRILL COLLAR
(SET AT 1/2")

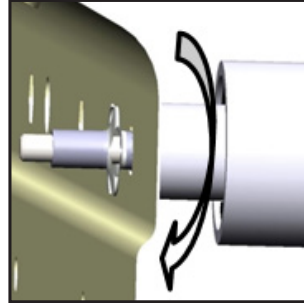
2.4.2 How to attach plus nut.

• 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.



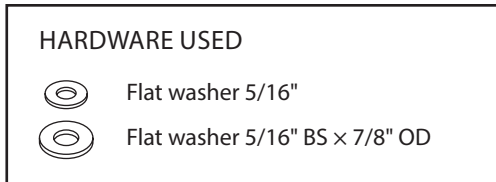
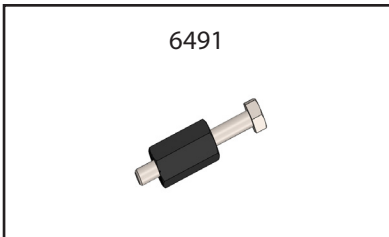
FORWARD



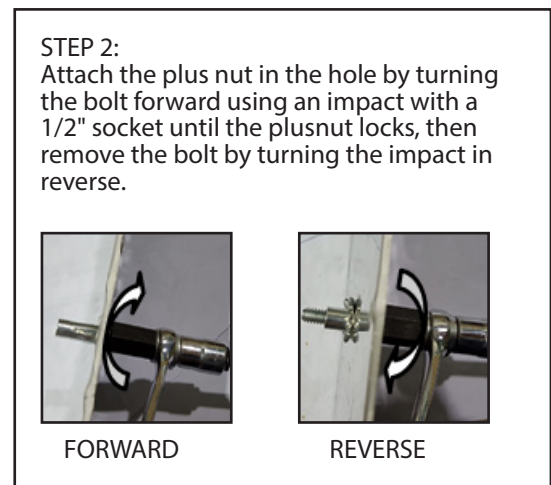
REVERSE

• USING THE 6491 PLUSNUT TOOL

NOTE: The hardware used for the 6490 plusnut tool is not included in the fastener bag.
The 6491 plusnut tool can be ordered separately upon demand at no charge.



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

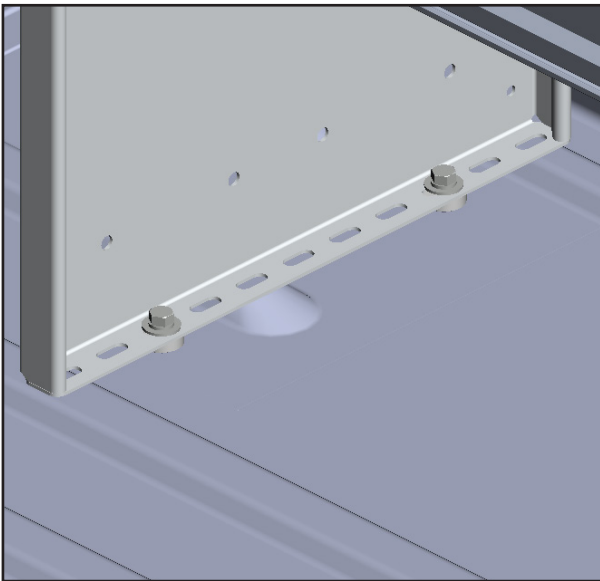
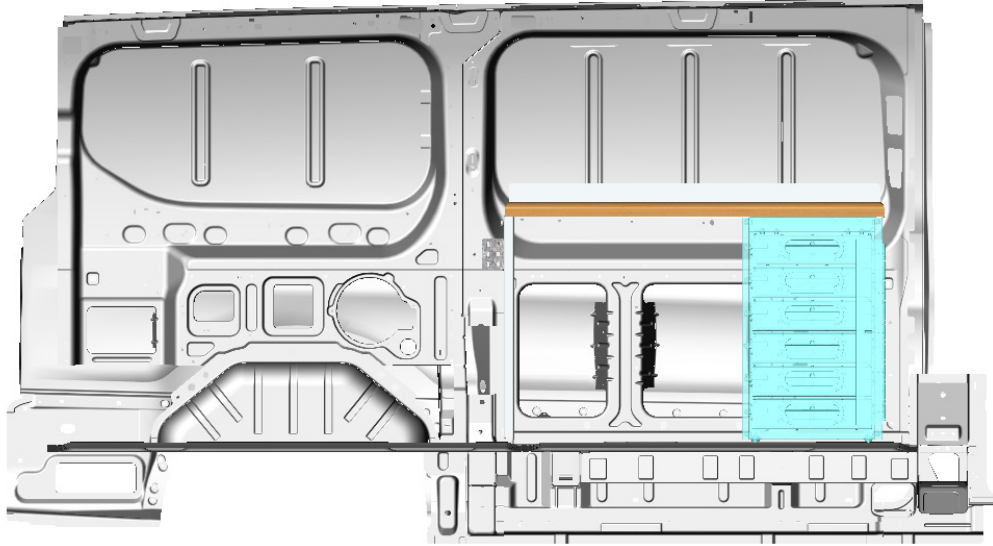


PHASE 2 – INSTALLATION

2.5 ATTACH SHELF UNIT TO THE FLOOR

WITHOUT RANGER FLOOR

2.5.1 Reinstall the workbench side panel to the side panel bracket, then attach the bottom of the workbench side panel to the plusnut.



TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket

HARDWARE USED

2X



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



#98-122 Lock Washer



#98-116 Flat Washer



#98-157 Spacers

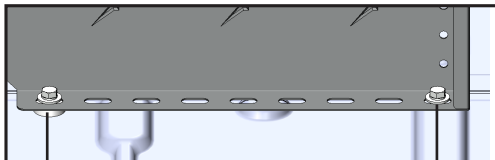
(QTY = GAP BETWEEN FLOOR AND END PANEL)



#94-132 5/16" Plusnut

TIPS WHEN TO USE SPACER:

MOST VEHICLE USE 1 SPACER WHEN NOT OVER RIBS

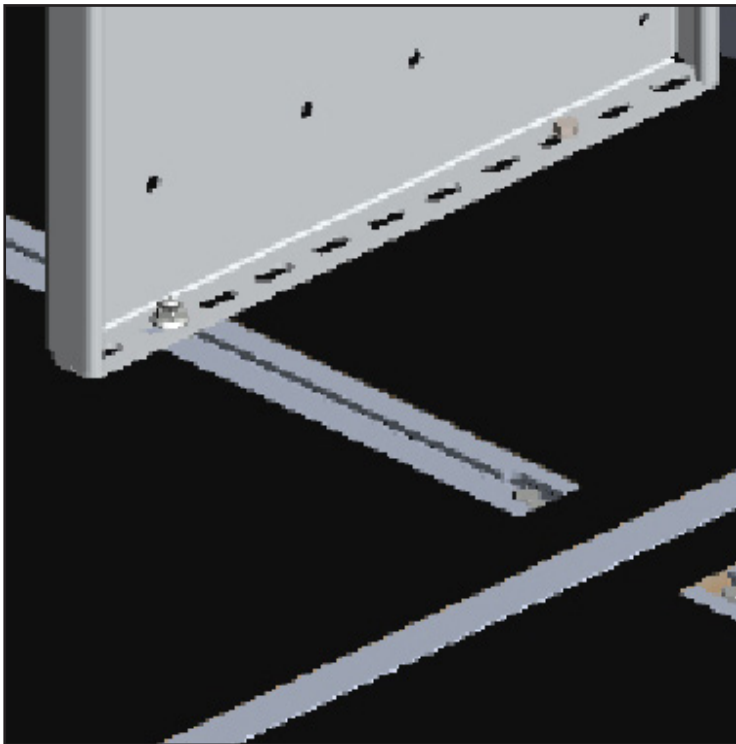
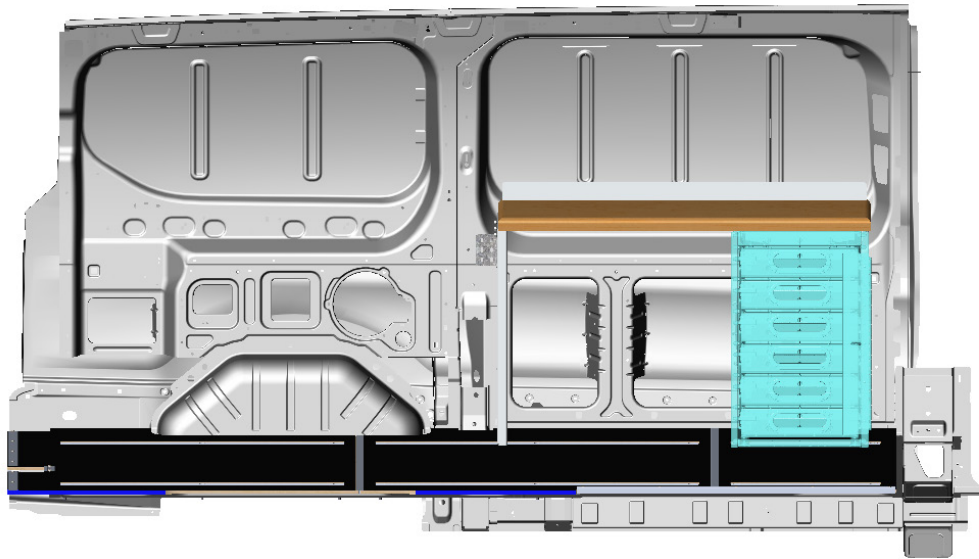


W/ Spacer

W/O Spacer

WITH RANGER FLOOR

2.5.2 Reinstall the workbench side panel to the side panel bracket, then attach the bottom of the workbench side panel to the floor.



TOOLS

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

HARDWARE USED

1X FLOOR FASTENER KIT



#92-102 Screw 1"

HARDWARE USED

1X 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

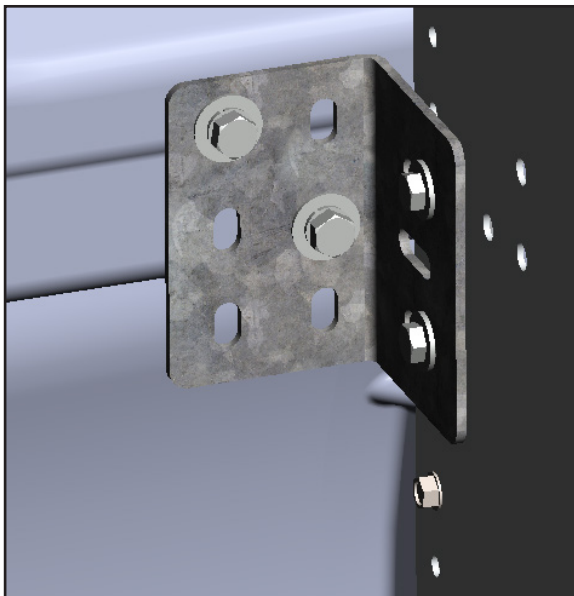
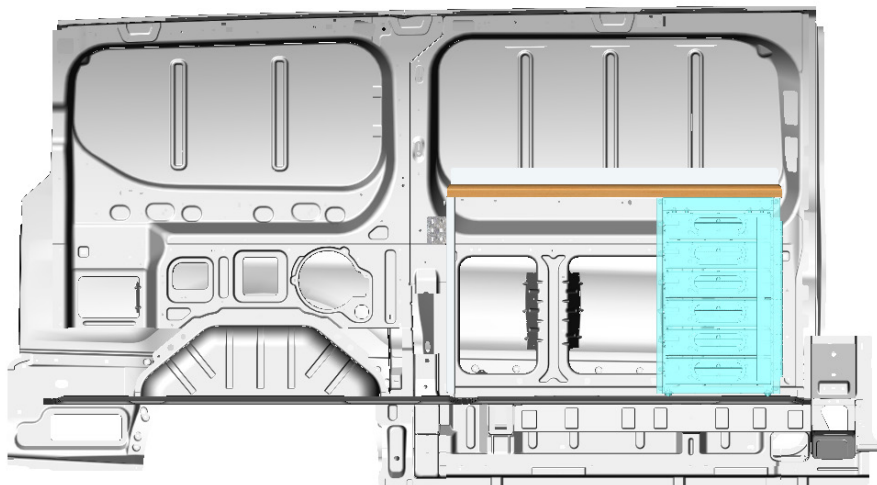
2.6 ATTACH WALL BRACKETS

WITHOUT RANGER WALL KITS

2.6.1 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

2x



#90-212 Hex Bolt 5/16" × 1-1/4"

#98-122 Lock Washer

#98-116 Flat Washer

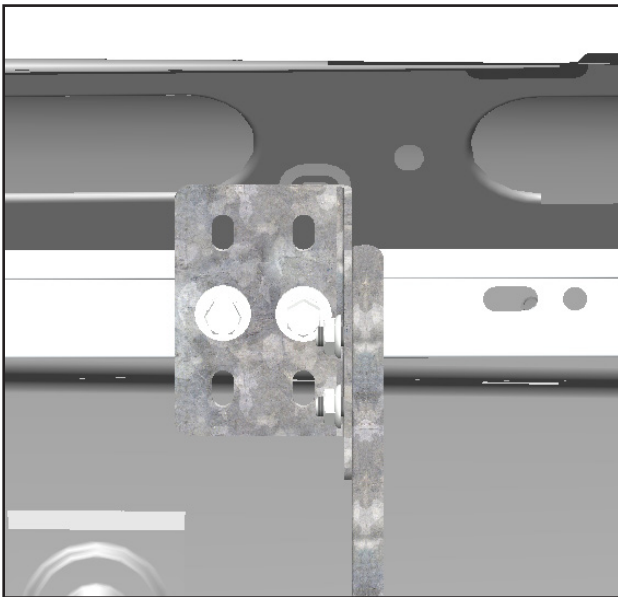
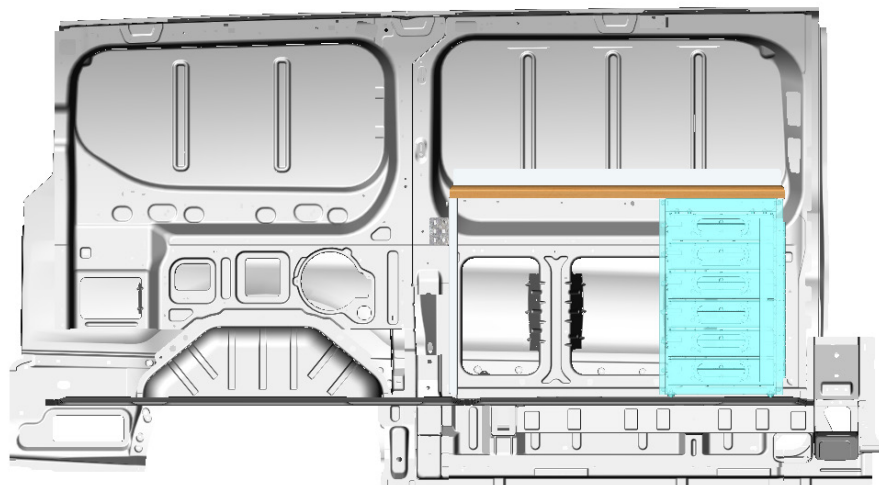
#94-132 5/16" Plusnut

WITH RANGER WALL KITS

2.6.2 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.







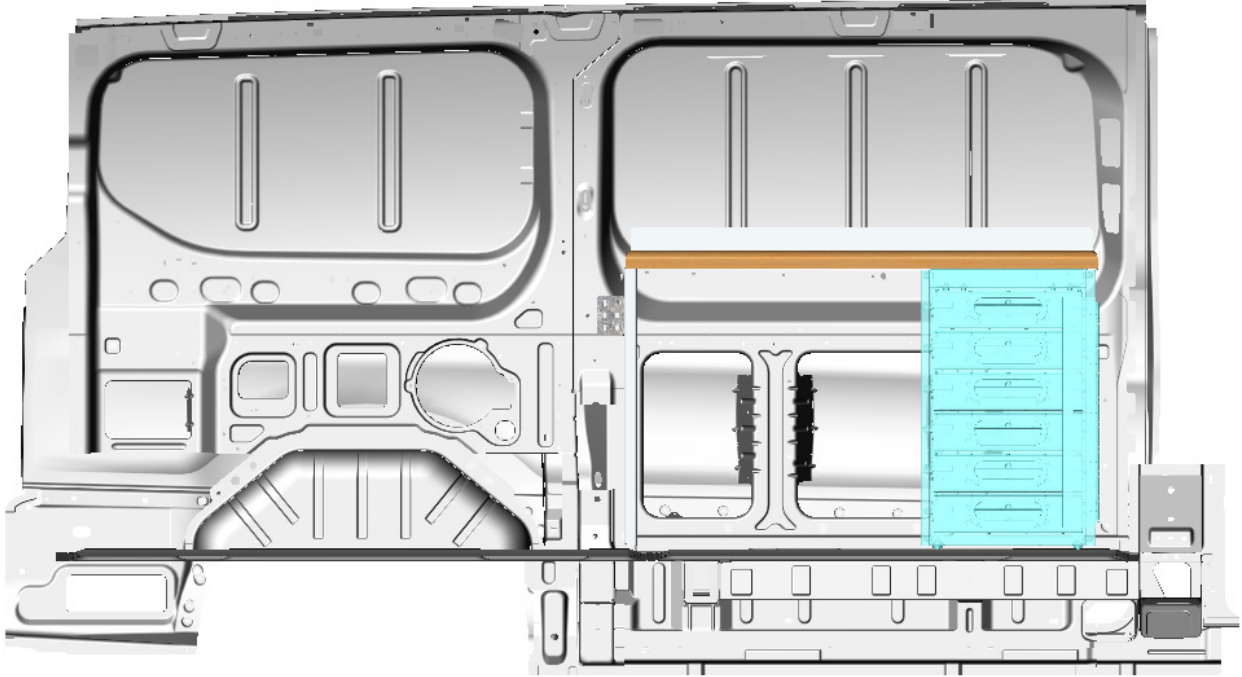
TOOLS

- ❑ Cordless Impact
- ❑ 1/2" Socket

FASTENERS USED

2X WALL KITS FASTENER KIT

	#90-208 Hex Bolt 5/16" x 1"
	#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

