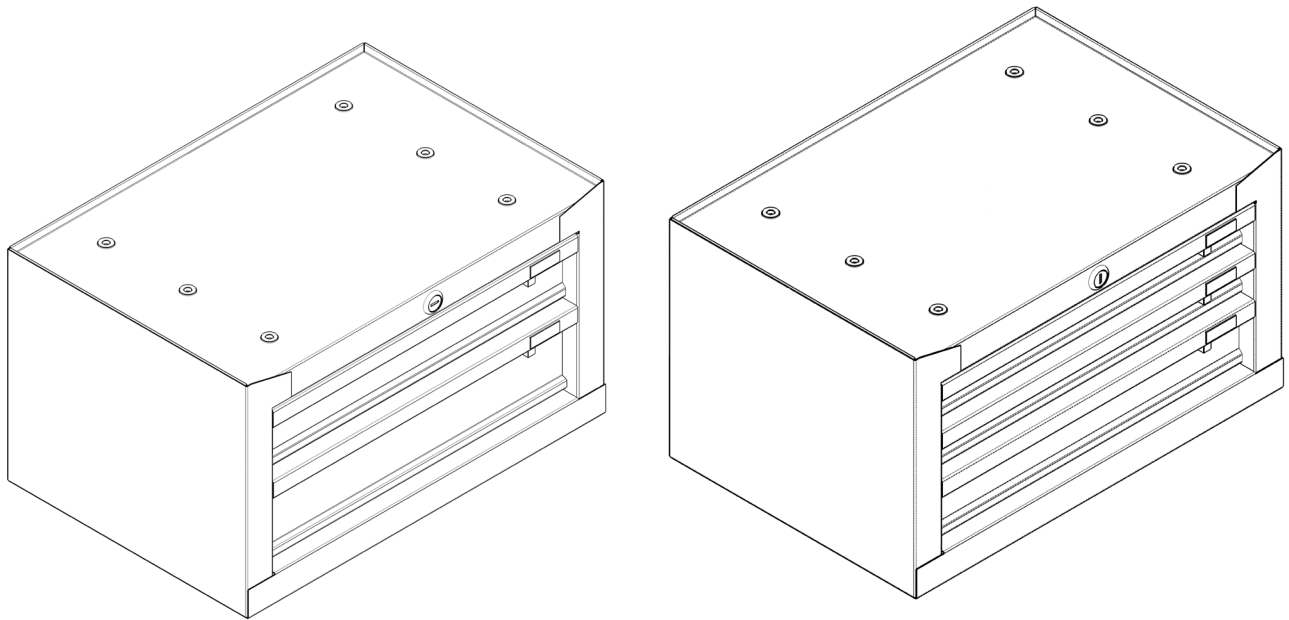


INSTALLATION GUIDE



X50-B or X50-C Van Drawer Cabinet (STEEL)



Scan the QR for the
latest Install-Guide.
(X50-B)



Scan the QR for the
latest Install-Guide.
(X50-C)

RANGER
DESIGN



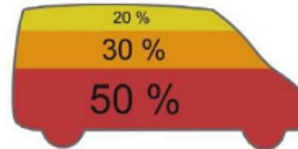
BEFORE YOU BEGIN

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

<input type="checkbox"/> 1.1 Setup.....	6
<input type="checkbox"/> 1.2 Optional Assembly.....	4

Phase 2 - Installation

<input type="checkbox"/> 2.1 On-shelf Install.....	7
<input type="checkbox"/> 2.2 Under-shelf Install.....	8

REQUIRED ITEMS

- ☐ Ratchet
- ☐ Marker
- ☐ Cordless Drill
- ☐ 13mm Wrench
- ☐ 13mm Socket
- ☐ 5/16" Drill Bit
- ☐ 1/2" Drill Bit

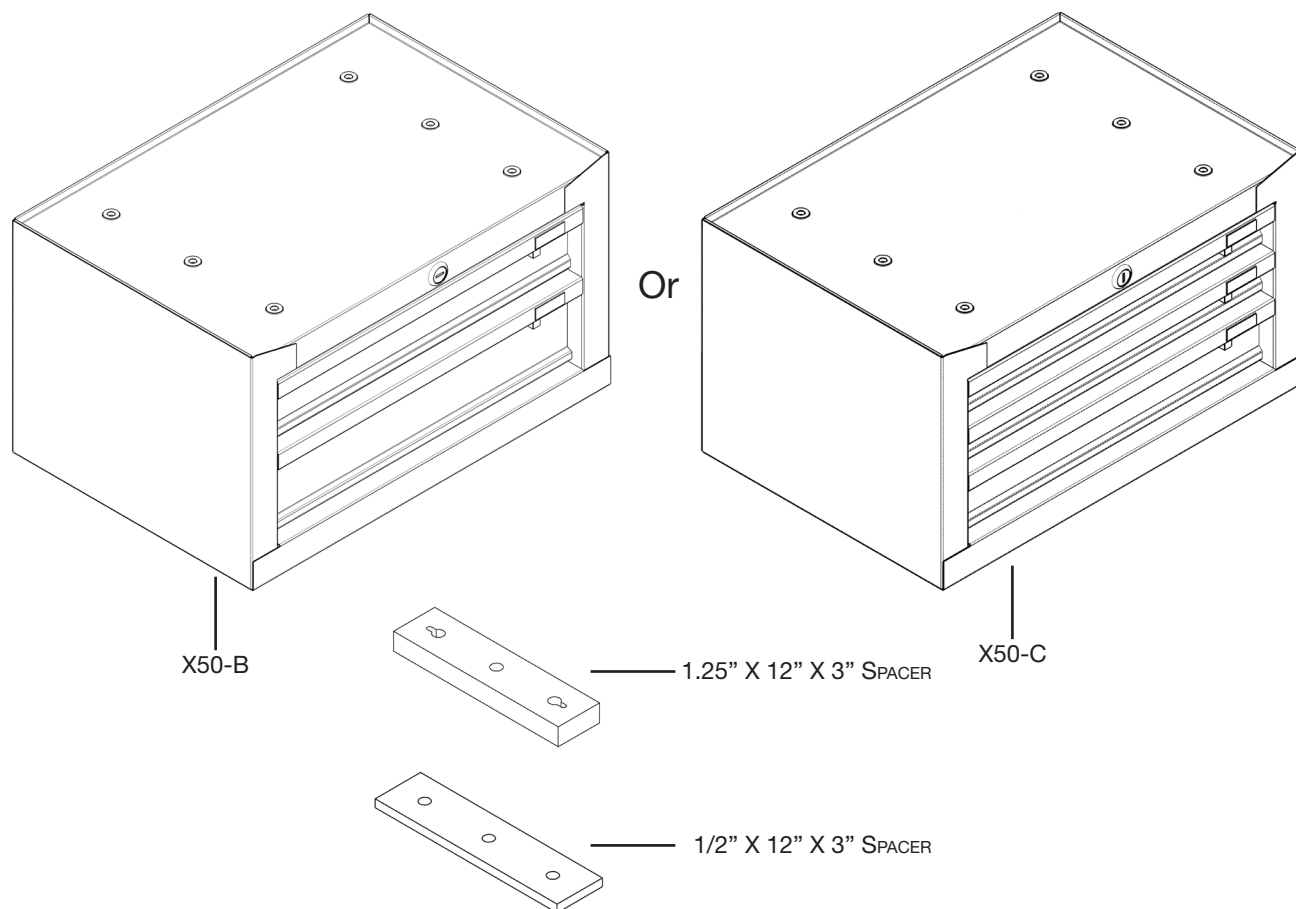


1
PERSON

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.
X50-B or X50-C	Compact Drawer Unit	1
1/2 x 12" x 3	Spacer	2
1 1/4 x 12" x 3	Spacer	2
90-6501	Install Fastener Kit	1
70-086	Pair of Keys	1

1.1.3 Hardware.

6x		# 90-668	Bolt Hex Head M8-1.25 x 40mm
6x		# 90-985	Bolt Carriage M8-1.25 x 70mm, Zinc, Partial Thread
6x		# 94-146	Hex Nut M8-1.25 Black Oxide
12x		# 98-116	Flat washer USS 5/16" O.D. 7/8" Zinc
6x		# 98-122	Washer Lock Spring Regular 5/16" Zinc
6x		# 98-191	Nylon Spacer 0.318" ID x 15/32" OD x 3/8" LONG







6x

FOR PLYWOOD INSTALL



6x



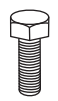
FOR OVER-SHELF INSTALL



#90-985 Bolt Carriage
#98-116 Washer
#98-191 Nylon Spacer
#98-116 Washer
#98-122 Lock Washer
#94-146 Hex Nut




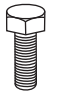
6x

FOR PLYWOOD INSTALL



6x




FOR UNDER-SHELF INSTALL



#90-668 Hex Bolt
#98-122 Lock Washer
#98-116 Washer
#98-191 Nylon Spacer

6x

FOR STACKING

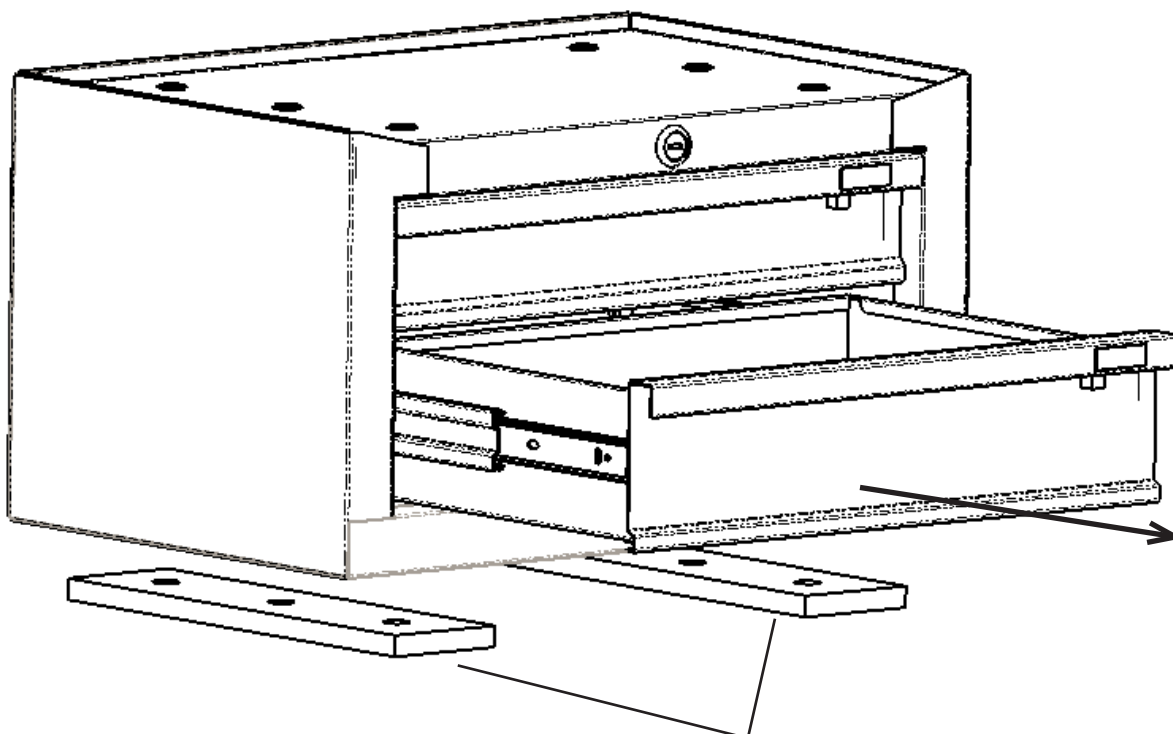


#90-668 Hex Bolt
#98-122 Lock Washer
#98-116 Washer

PHASE 1 – ASSEMBLY

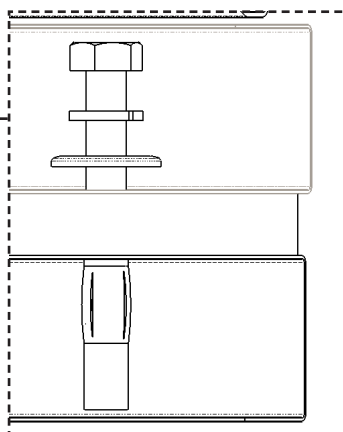
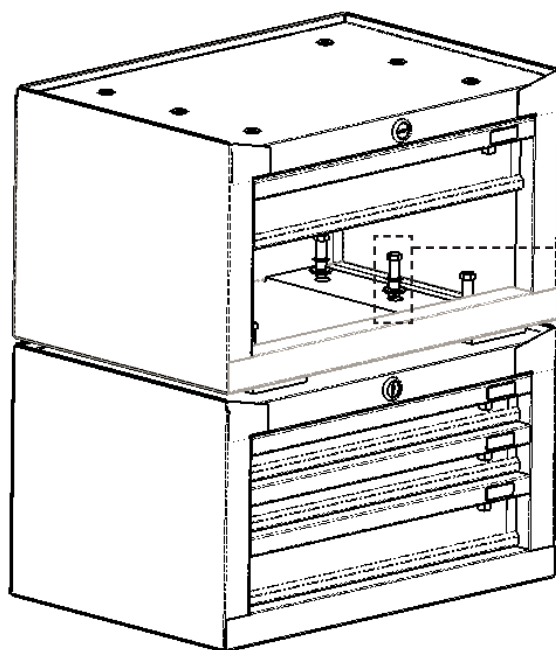
1.2 OPTIONAL UNIT STACKING

1.2.1



1/2" X 12" X 3" SPACER

1.2.2



TOOLS

- 13mm Socket
- Ratchet
- 13mm Wrench

HARDWARE USED

6x



#90-668 Hex Bolt



#98-122 Lock Washer

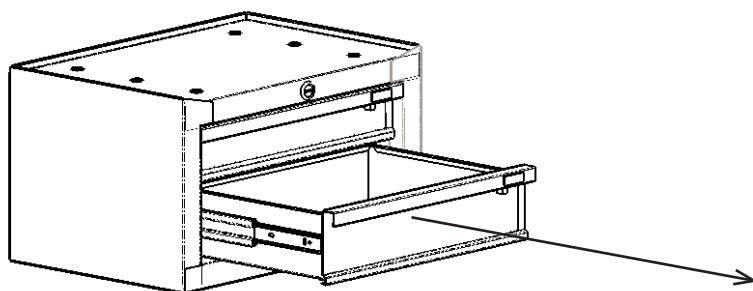


#98-116 Washer

PHASE 2 – INSTALL

2.1 OVER-SHELF INSTALL

2.1.1



- 2.1.2**
- Place the X50 Unit on top of 14" deep shelf or deeper.
 - Mark the holes from the X50 Unit to the shelf panel, then drill the marks.

NOTE: Ensure minimum distance of 14" between shelf trays to clear X50 Unit.

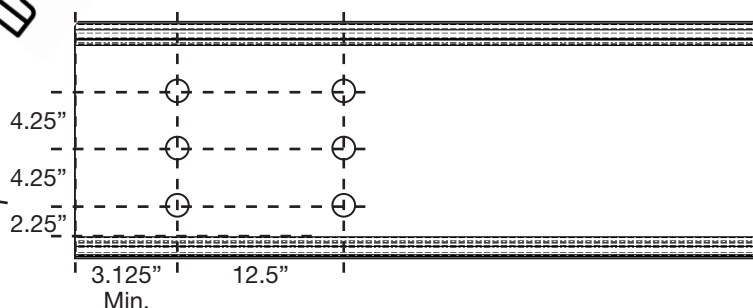
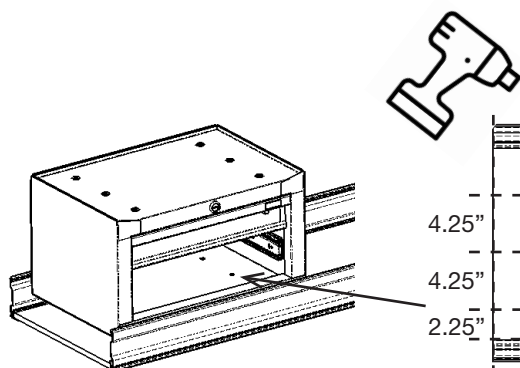
FOR WOOD SHELF FOR COMPOSITE SHELF

TOOLS

- ☐ Cordless Drill
- ☐ Marker
- ☐ 5/16" Drill Bit

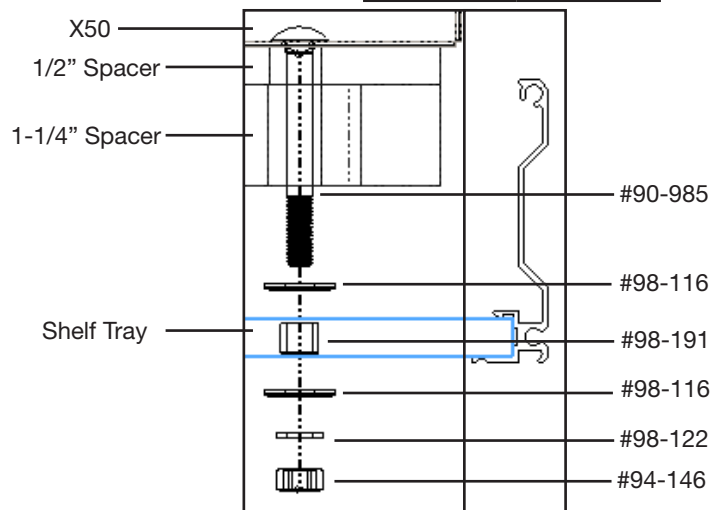
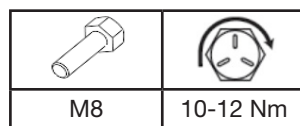
TOOLS

- ☐ Cordless Drill
- ☐ Marker
- ☐ 1/2" Drill Bit



2.1.3

NOTE: Do not use the nylon spacer (98-191) and the first washer (98-116) for Plywood install.

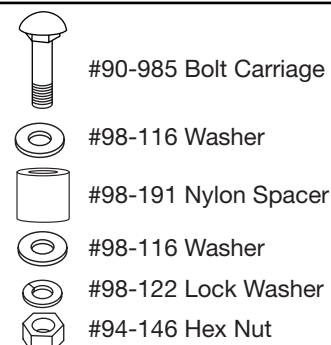


TOOLS

- ☐ 13mm Socket
- ☐ Ratchet
- ☐ 13mm Wrench

HARDWARE USED

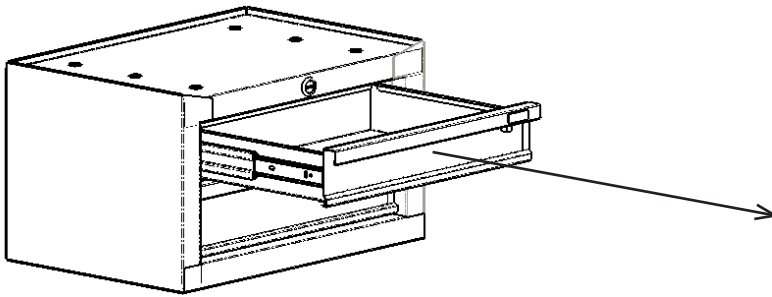
6x



PHASE 2 – INSTALL

2.2 UNDER-SHELF INSTALL

2.2.1



- 2.2.2**
- Place the X50 Unit on top of 14" deep shelf or deeper.
 - Mark the holes from the plusnuts on the X50 Unit to the shelf panel, then drill the marks.

NOTE: Ensure minimum distance of 14" between shelf trays to clear X50 Unit.

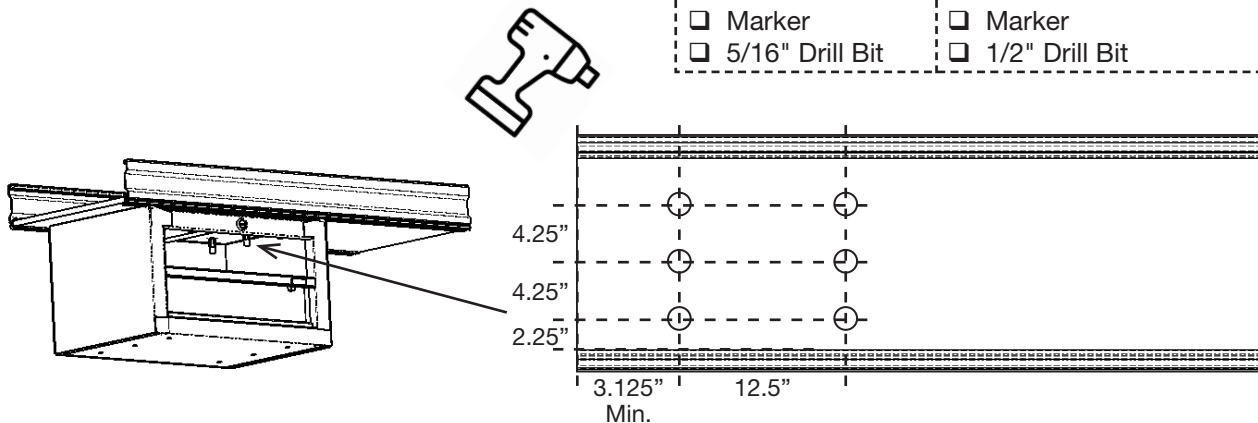
FOR WOOD SHELF FOR COMPOSITE SHELF

TOOLS

- ☐ Cordless Drill
- ☐ Marker
- ☐ 5/16" Drill Bit

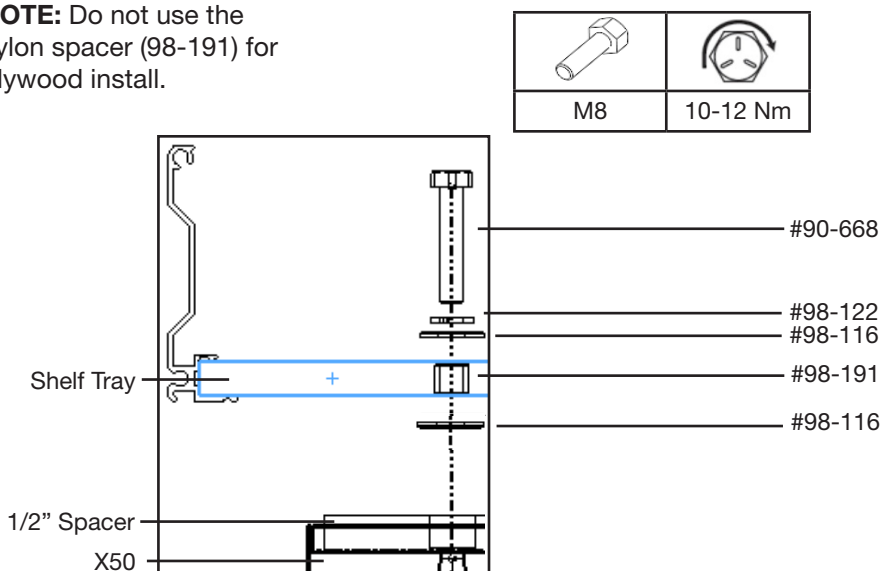
TOOLS



- ☐ Cordless Drill
- ☐ Marker
- ☐ 1/2" Drill Bit



2.2.3

NOTE: Do not use the nylon spacer (98-191) for Plywood install.



	
M8	10-12 Nm

TOOLS

- ☐ 13mm Socket
- ☐ Ratchet
- ☐ 13mm Wrench

HARDWARE USED

6x



#90-668 Hex Bolt



#98-122 Lock Washer



#98-116 Washer



#98-191 Nylon Spacer



#98-116 Washer

**“You have successfully installed your X50 Unit
Thank you for doing business with us.”**