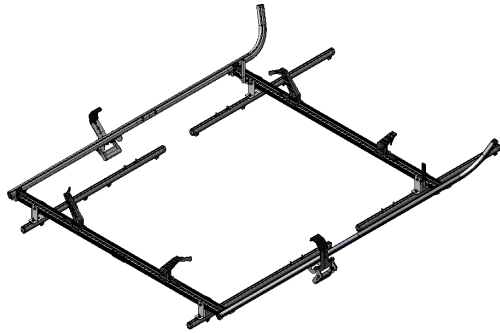
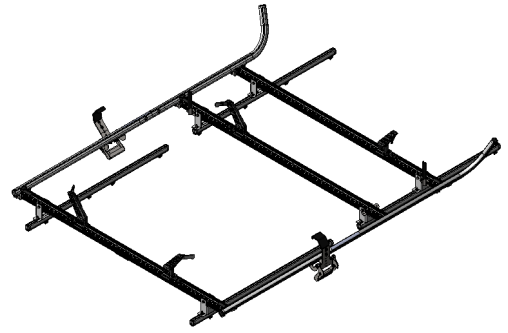


INSTALLATION GUIDE

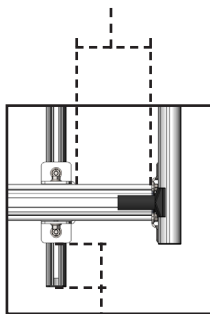
1630-DH



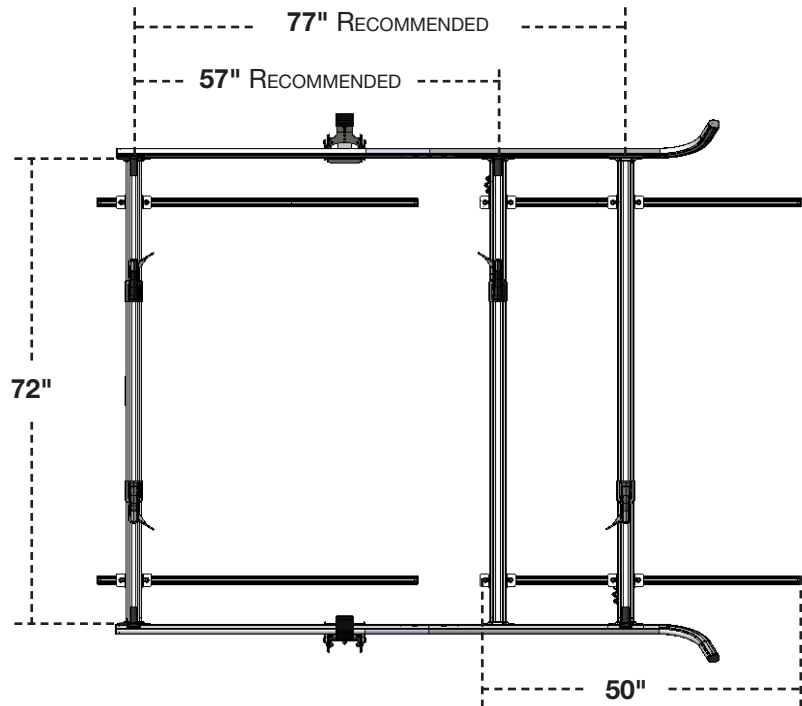
1630-DH3



8 - 3/4" HR, 5 - 1/4" LR



3"

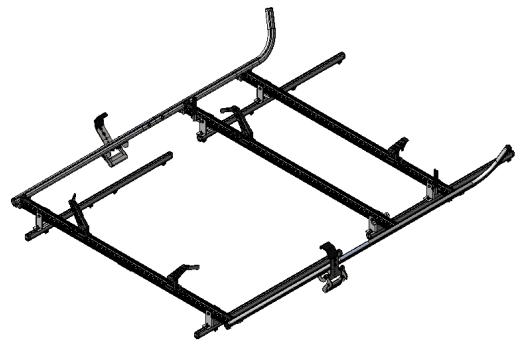


1630-DH OR 1630-DH3 DOUBLE CLAMP OR DOUBLE CLAMP 3 BARS
Sprinter

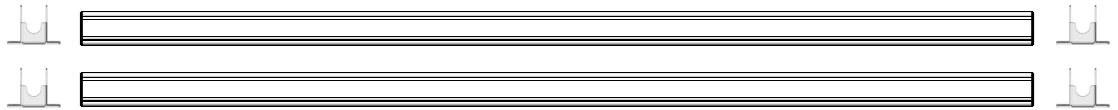
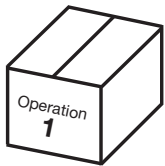
1630-DH



1630-DH3

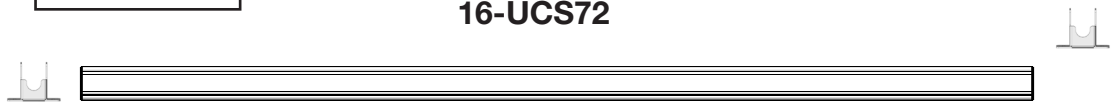
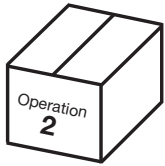


16-UCD72



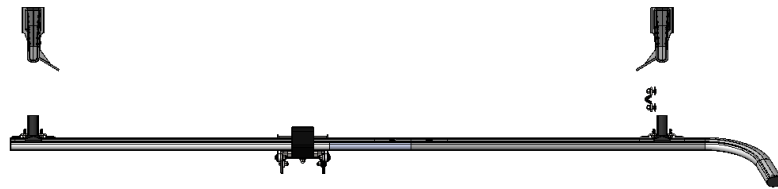
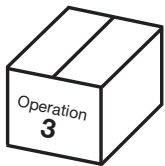
For 1625-DH3

16-UCS72

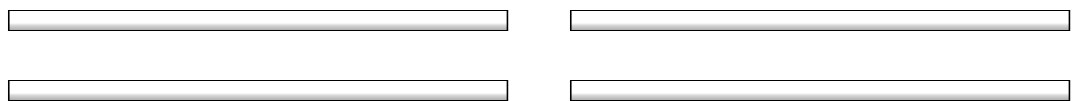
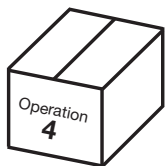


2x

16-UCL77

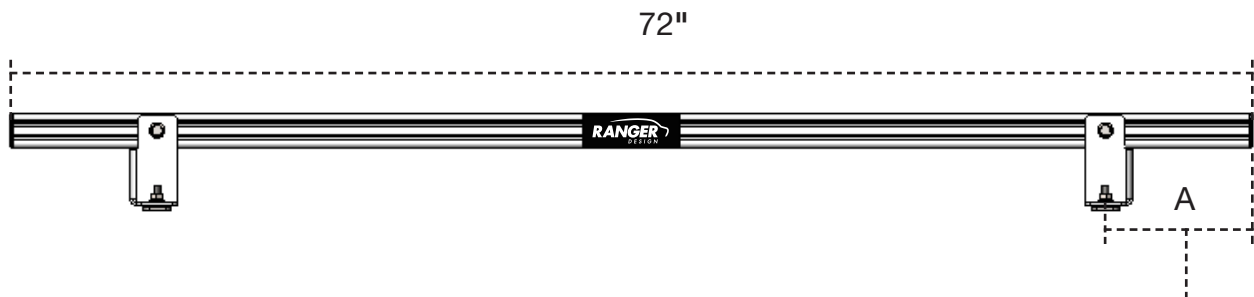
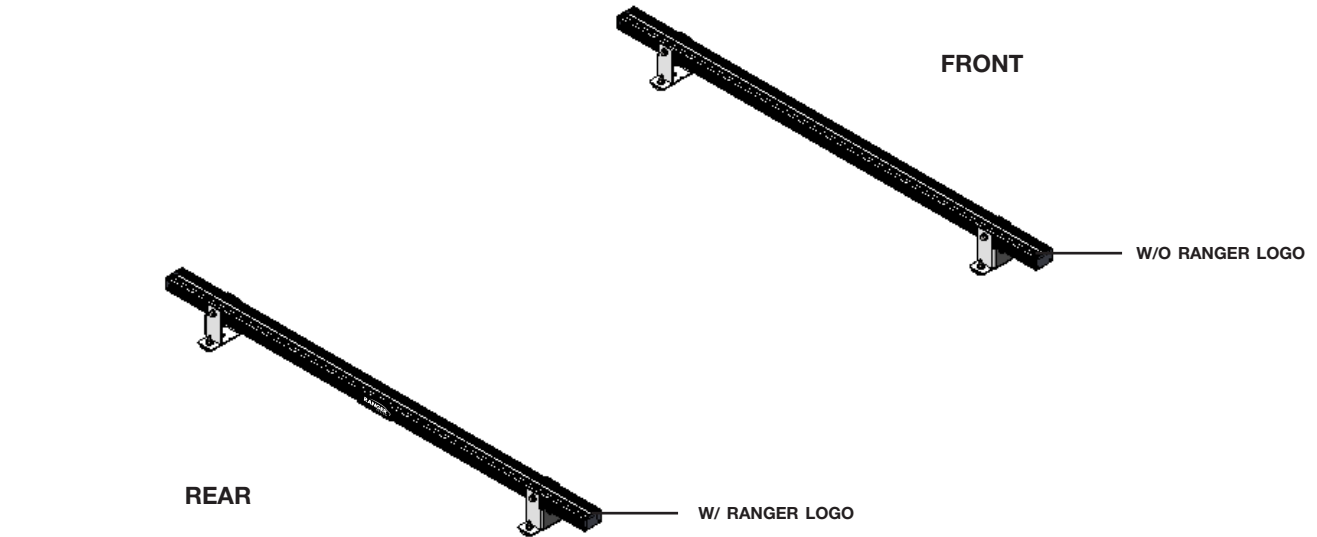


18-U0018



If the van has OEM mounting you need 18-U0019 to install your rack

INSTALLATION GUIDE



FOOT PLACEMENT GUIDE

VEHICLE	DIMENSION (A)
NISSAN NV	7"
SPRINTER	10" ^{HR} , 6 - 1/2" ^{LF}
TRANSIT	8 - 7/8"
PROMASTER	7 - 1/16"

16-UCD72 Crossbar

2 BARS (72")



QUICK START GUIDE

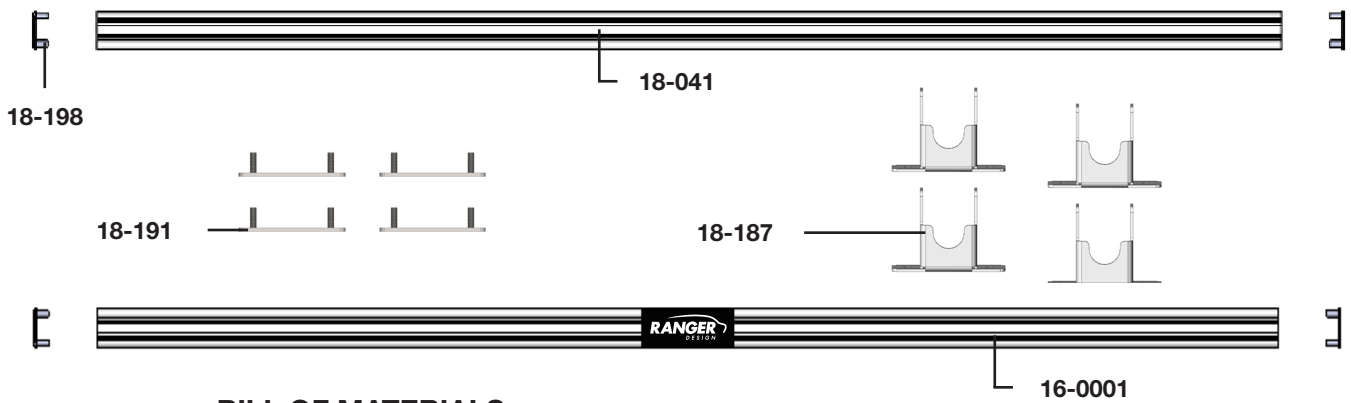
Phase 1 - Assembly

- ☐ 1.1.1 SETUP (VERIFY ALL PARTS ARE PRESENT)..... 2
- ☐ 1.2.1 ASSEMBLY (PUT THE CROSSBAR IN THE TABLE)..... 3

PHASE 1 – ASSEMBLY

1.1 SETUP

1.1.1 Verify all parts are present.



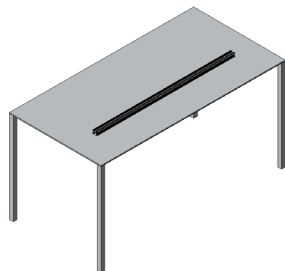
BILL OF MATERIALS

Item No.	Description	Qty.
18-187	Foot	4
18-041	Crossbar 72"	1
16-0001	Crossbar 72" w/ Ranger Logo	1
18-198	End Plastic Plug	4
18-191	Stud Plate	4
94-1806	Fastener kit	1

PHASE 1 – ASSEMBLY

1.2 PREPARATION

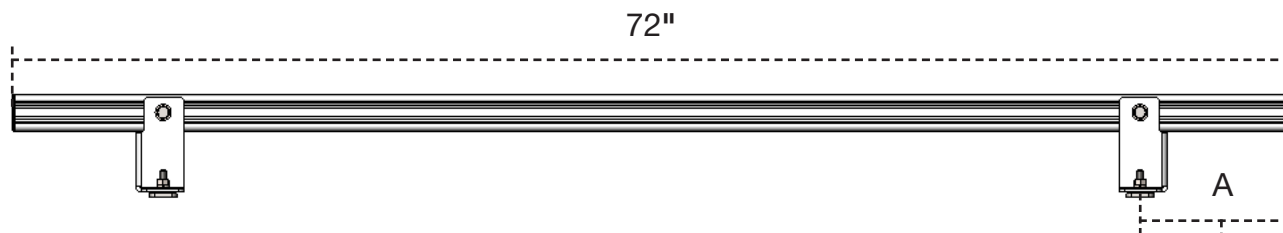
1.2.1 Remove one crossbar from the box and put the crossbar on the table.



NOTE:

OPEN THE NEXT BOX AND FOLLOW THE INSTALL GUIDE INSIDE THE BOX ON HOW TO ASSEMBLED YOU RACK.

INSTALLATION GUIDE



FOOT PLACEMENT GUIDE	
VEHICLE	DIMENSION (A)
NISSAN NV	7"
SPRINTER	10" ^{HR} , 6 - 1/2" ^{LF}
TRANSIT	8 - 7/8"
PROMASTER	7 - 1/16"

16-UCS72 Crossbar

1 BAR (72")



QUICK START GUIDE

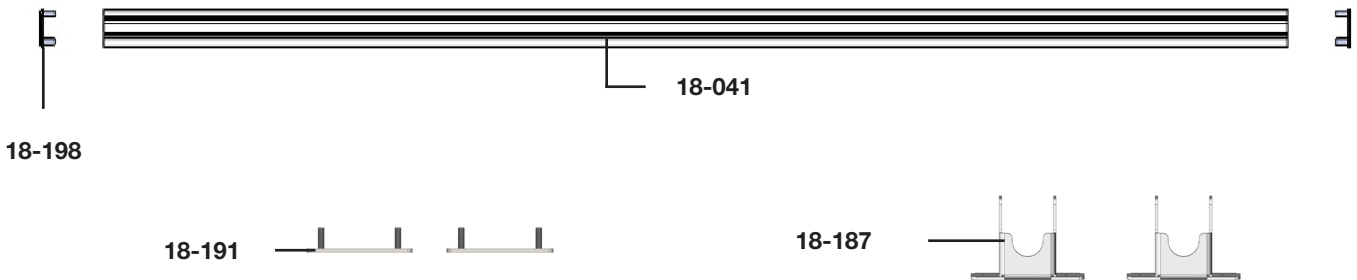
Phase 1 - Assembly

- 1.1.1 SETUP (VERIFY ALL PARTS ARE PRESENT)..... 2
- 1.2.1 ASSEMBLY (PUT THE CROSSBAR IN THE TABLE)..... 3

PHASE 1 – ASSEMBLY

1.1 SETUP

1.1.1 Verify all parts are present.



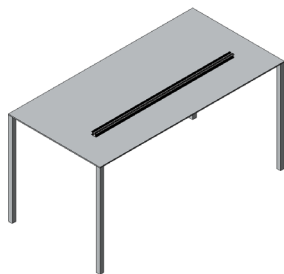
BILL OF MATERIALS

Item No.	Description	Qty.
18-187	Foot	2
18-041	Crossbar 72"	1
18-198	End Plastic Plug	2
18-191	Stud Plate	2
96-1805	Fastener kit	1

PHASE 1 – ASSEMBLY

1.2 PREPARATION

1.2.1 Remove crossbar from the box and put the crossbar on the table.

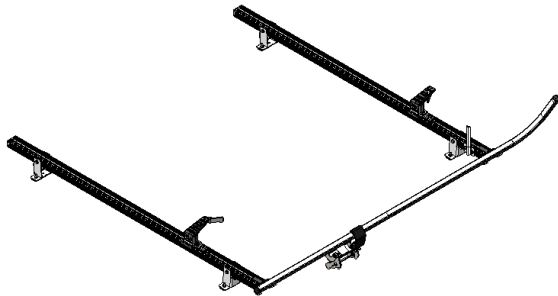


NOTE:

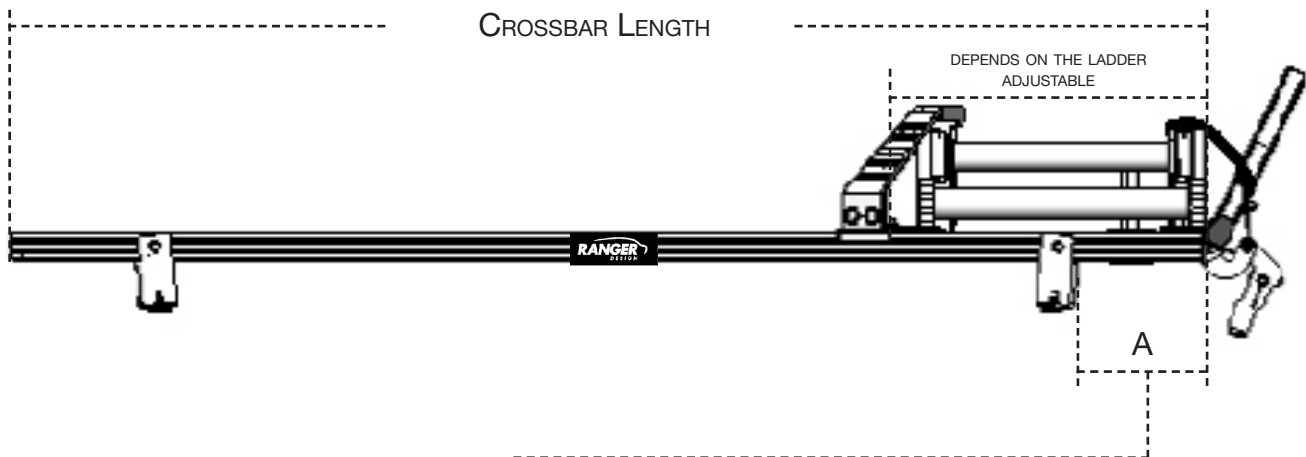
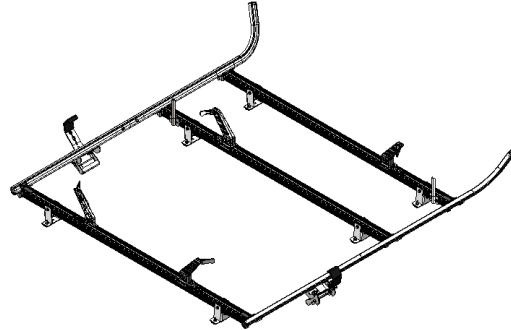
OPEN THE NEXT BOX AND FOLLOW THE INSTALL GUIDE INSIDE THE BOX ON HOW TO ASSEMBLED YOU RACK.

INSTALLATION GUIDE

WITHOUT 3RD CROSSBAR



WITH 3RD CROSSBAR



FOOT PLACEMENT GUIDE	
VEHICLE	DIMENSION (A)
NISSAN NV	5 - 3/4"
SPRINTER	8 - 3/4" HR, 5 - 1/4" LF
TRANSIT	7 - 5/8"
PROMASTER	5 - 13/16"

FOOT PLACEMENT GUIDE	
VEHICLE	DIMENSION (A)
METRIS	5"
PROMASTER CITY	5 - 5/8"
TRANSIT CONNECT	5 - 1/2"
NV200	6 - 1/2"

16-UCL77 UNIVERSAL SIDE LONG SKI AND MECHANISM KIT

Crossbars are not included in the Kit

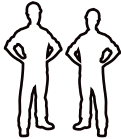


QUICK START GUIDE

Phase 1 - Assembly

- 1.1.1 SETUP (VERIFY ALL PARTS ARE PRESENT)..... 2 TO 3
- 1.2.1 ASSEMBLY..... 4 TO 12

REQUIRED ITEMS



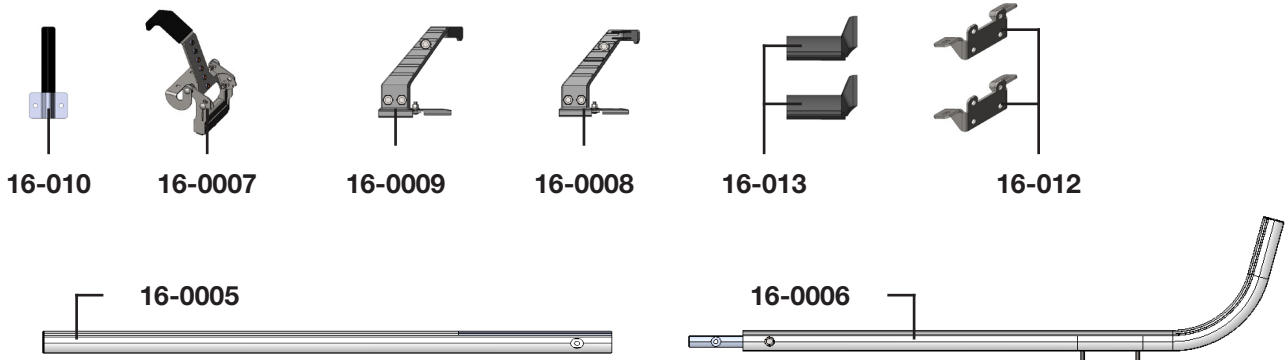
2
PERSONS

- Knife
- Tape Measure
- Marker
- Ladder
- Ratchet 2x
- 1/2" Wrench
- 1/2" Socket 2x
- Cordless Impact

PHASE 1 – ASSEMBLY

1.1 SETUP

1.1.1 Verify all parts are present.



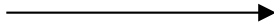
BILL OF MATERIALS

Item No.	Description	Qty.
16-010	RUNG STOPPER	1
16-012	CROSSBAR-TO-SKI MOUNT	2
16-013	LADDER HOLDER	2
16-0005	LONG STRAIGHT SKI (49")	1
16-0006	FRONT SKI	1
16-0007	THROTTLE LATCH	1
16-0008	LADDER HOOK (PASSENGER FRONT, DRIVER REAR)	1
16-0009	LADDER HOOK (PASSENGER REAR, DRIVER FRONT)	1
94-1600	CUSTOMER ASSEMBLY FASTENER KIT	1
96-1600	CUSTOMER INSTALL FASTENER KIT	1

VERIFY ALL PARTS ARE PRESENT

FASTENER BAGS.

94-1600



- 1x  # 90-211 Hex Bolt
5/16" - 18 x 1-1/8"
SS304
- 4x  # 90-491 Carriage Bolt
5/16"-18 x 1"
SS304
- 1x  # 94-251 Low Profile Lock Nut
5/16"
SS304 WAX
- 6x  # 94-105 Hex Nut
5/16"
SS316 WAX
- 9x  # 98-117 Flat Washer
5/16" OD, 3/4"
SS18-8
- 6x  # 98-123 Lock Washer
5/16"
SS304

Fastener Assembly

1x



- #90-211 Hex Bolt 1 - 1/8"
- #98-117 Flat Washer 5/16"
- #98-117 Flat Washer 5/16"
- #98-117 Flat Washer 5/16"
- #94-251 Low Profile Lock Nut 5/16"

4x



- #90-491 Carriage Bolt 1"
- #98-117 Flat Washer 5/16"
- #98-123 Lock Washer 5/16"
- #94-105 Hex Nut 5/16"


96-1600



- 2x  # 90-491 Carriage Bolt
5/16"-18 x 1"
SS304
- 8x  # 90-998 Hex Bolt
5/16" - 18 x 3/4"
SS304
- 2x  # 94-105 Hex Nut
5/16"
SS316 WAX
- 2x  # 98-117 Flat Washer
5/16" OD, 3/4"
SS18-8
- 2x  # 98-123 Lock Washer
5/16"
SS304
- 2x  # 16-011 Insert Plate


Fastener Install

2x



- #90-491 Carriage Bolt 1"
- #16-011 Insert Plate
- #98-117 Flat Washer 5/16"
- #98-123 Lock Washer 5/16"
- #94-105 Hex Nut 5/16"

8x



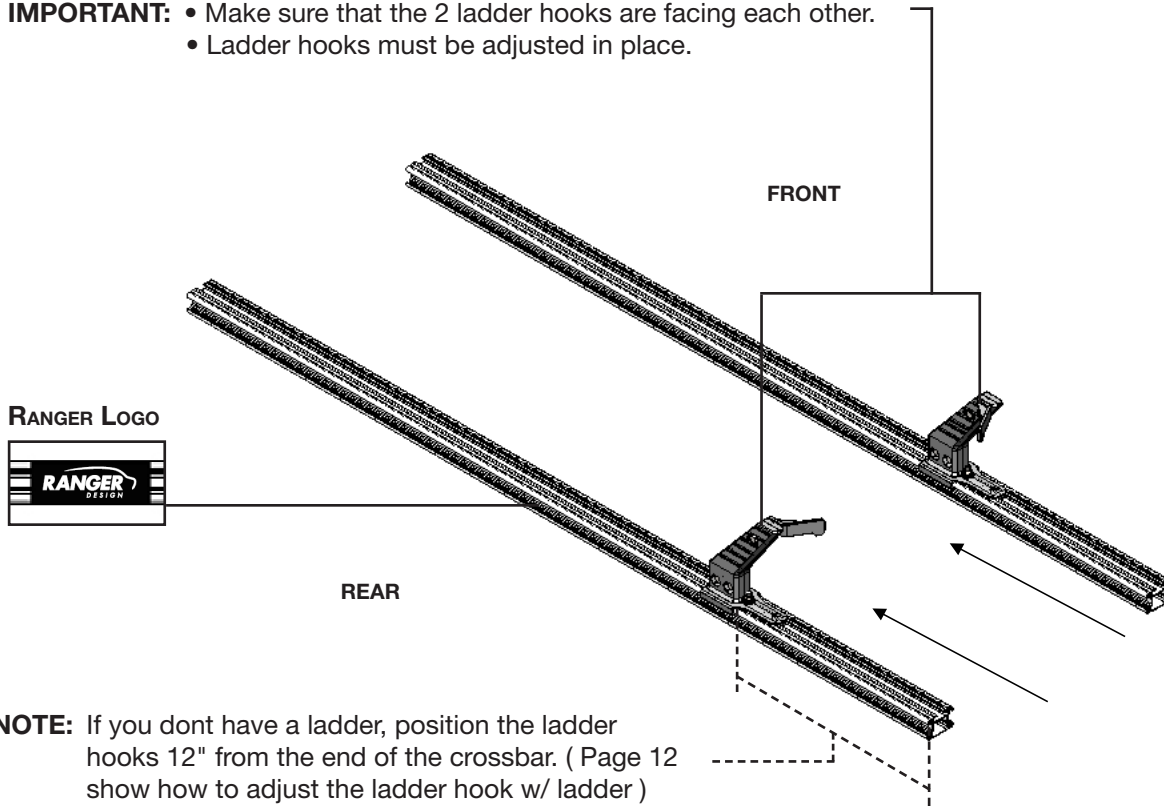
- #90-998 Hex Bolt 3/4"

PHASE 1 – ASSEMBLY

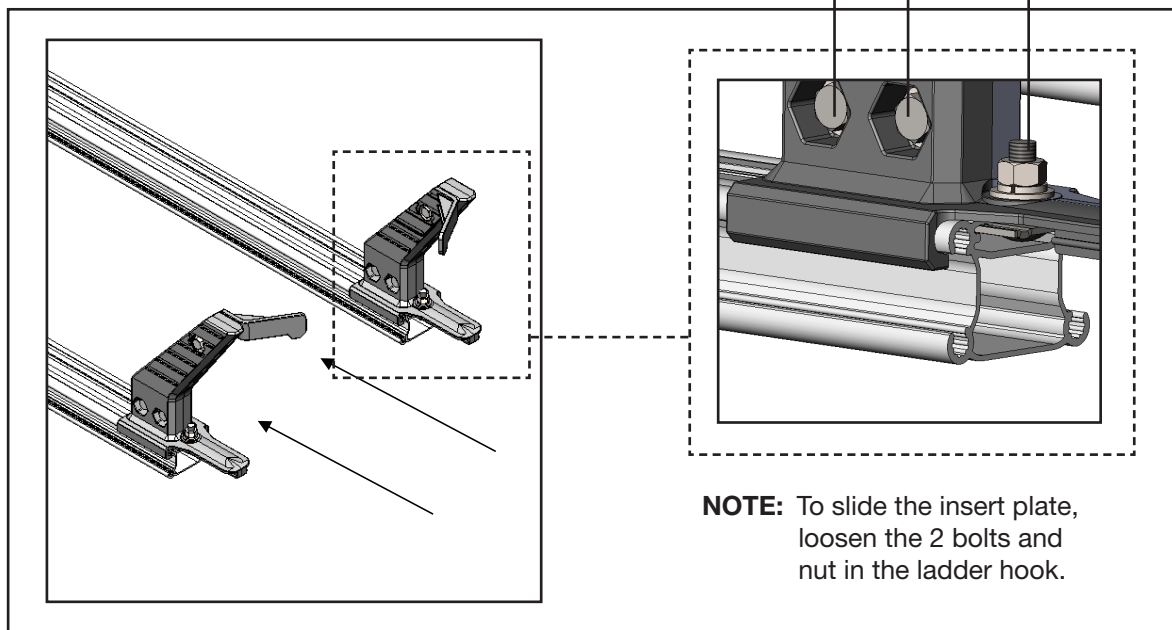
1.2 ASSEMBLY

1.2.1 Slide the ladder hook onto the crossbars.

- IMPORTANT:**
- Make sure that the 2 ladder hooks are facing each other.
 - Ladder hooks must be adjusted in place.



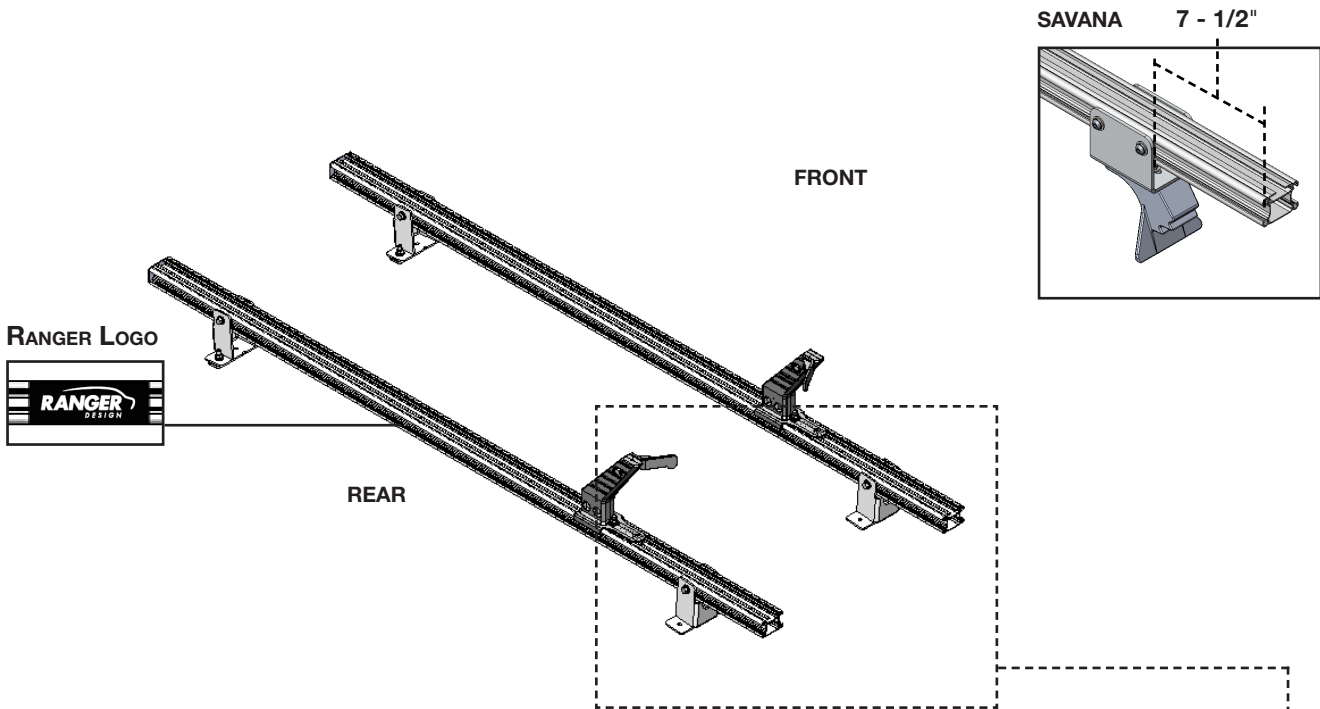
LOOSEN THESE 2 BOLTS AND NUT TO SLIDE



1.2.2 Attach the feet to the crossbars.

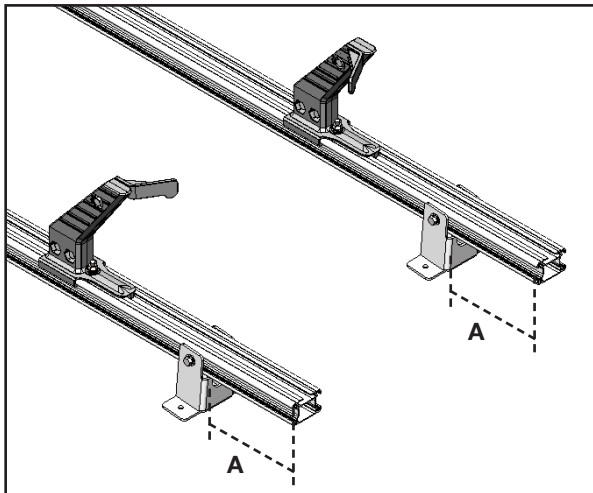
NOTE:

- Crossbars, feet and necessary hardware are not included in this kit.
- Savana has different feet.



FOOT PLACEMENT GUIDE	
VEHICLE	DIMENSION (A)
NISSAN NV	5 - 3/4"
SPRINTER	8 - 3/4" HR, 5 - 1/4" LF
TRANSIT	7 - 5/8"
PROMASTER	5 - 13/16"

FOOT PLACEMENT GUIDE	
VEHICLE	DIMENSION (A)
METRIS	5"
PROMASTER CITY	5 - 5/8"
TRANSIT CONNECT	5 - 1/2"
NV200	6 - 1/2"



TOOLS

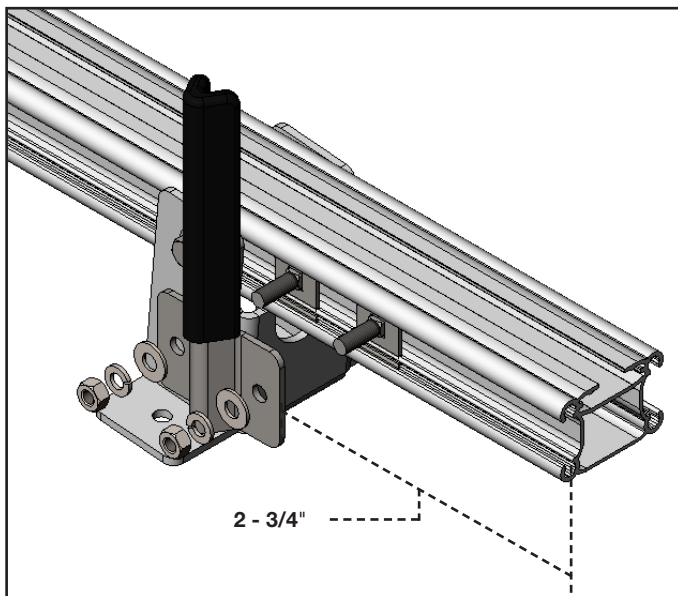
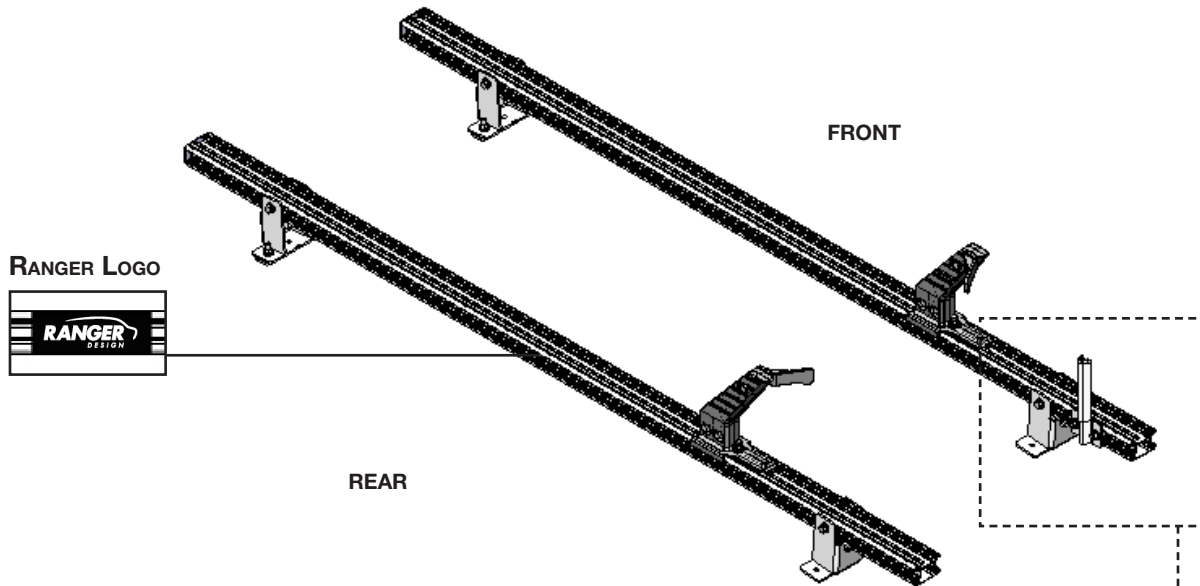
- Ratchet
- 1/2" Socket
- 1/8" Slot Screwdriver or Pick

FASTENERS USED

4x (CROSSBAR FASTENER KIT) (17 ft • lbs)

	#90-203 Hex Bolt 5/8"
	#98-123 Lock Washer 5/16"
	#98-117 Flat Washer 5/16"
	#94-250 Channel Nut 5/16"

1.2.3 Attach the rung stopper to the front crossbar.








TOOLS

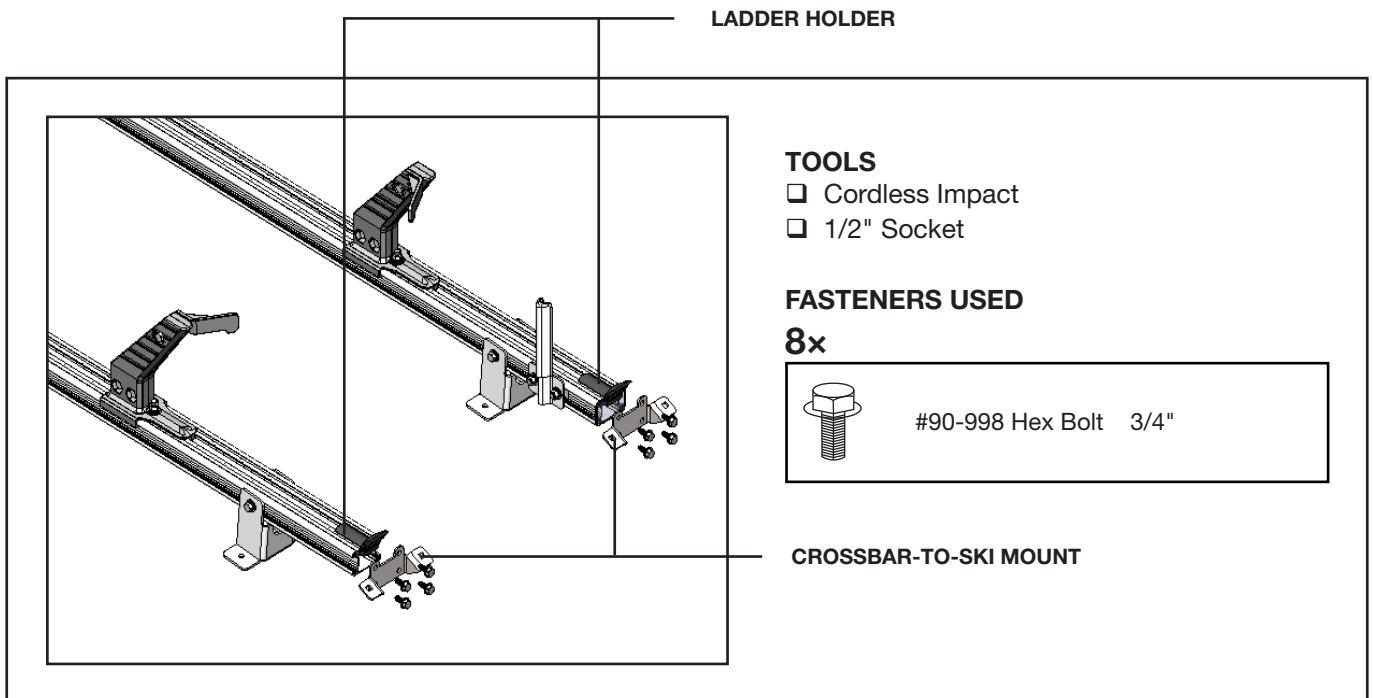
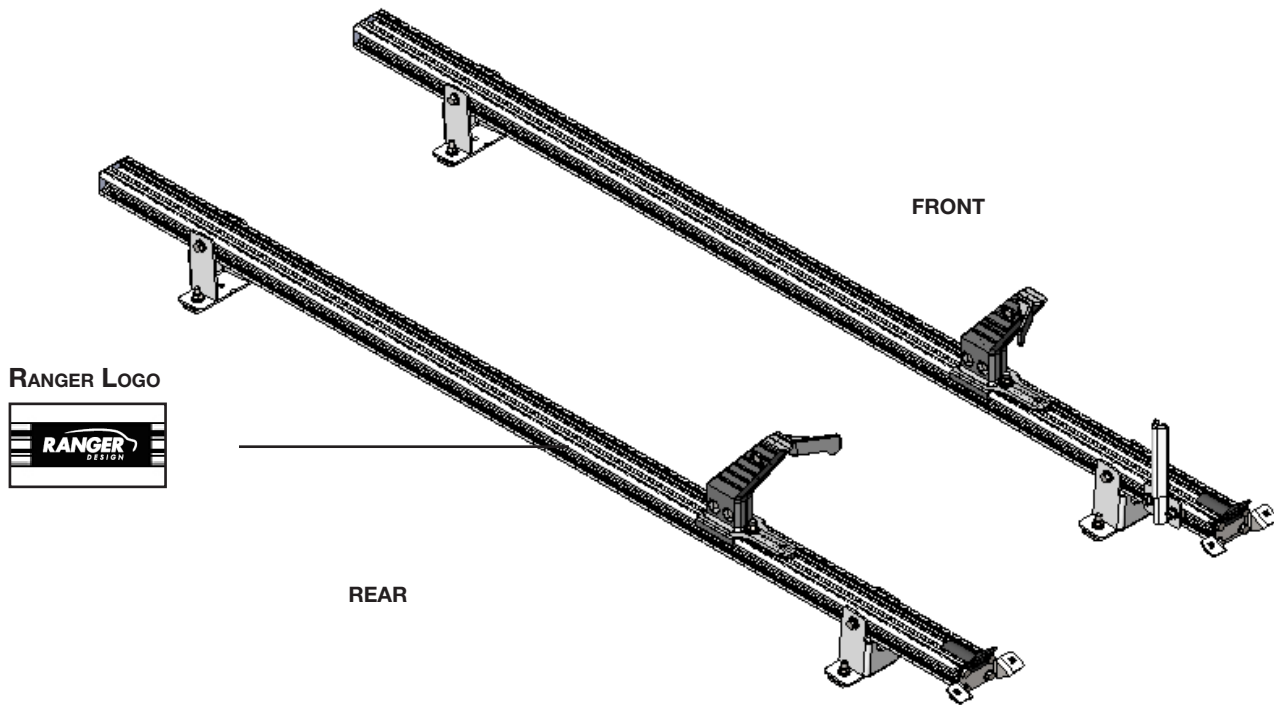
- Ratchet
- 1/2" Socket

FASTENERS USED

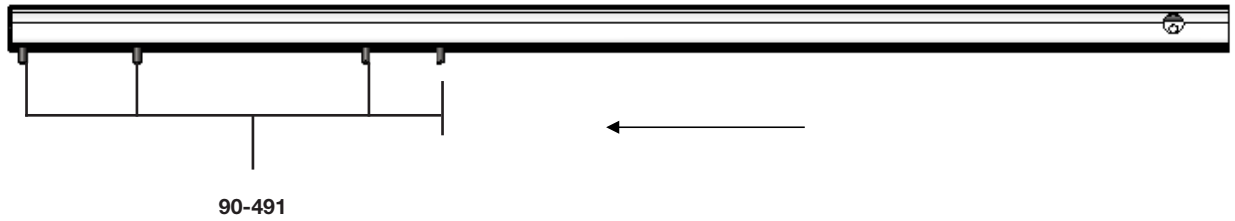
2x (17 ft • lbs)

	#90-491 Carriage Bolt 1"
	#16-011 Insert Plate
	#98-117 Flat Washer 5/16"
	#98-123 Lock Washer 5/16"
	#94-105 Hex Nut 5/16"

1.2.4 Slide the ladder holder onto the crossbar, then attach the crossbar-to-ski mount to the crossbar.

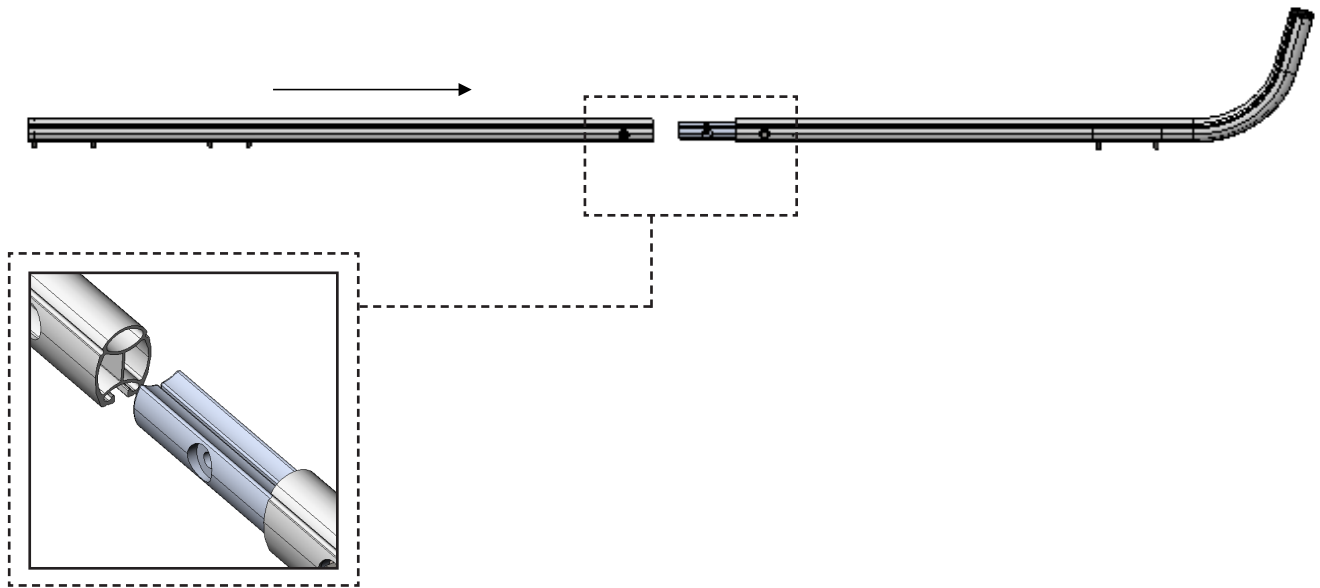


1.2.5 Slide 4 carriage bolts to the bottom of long straight ski.

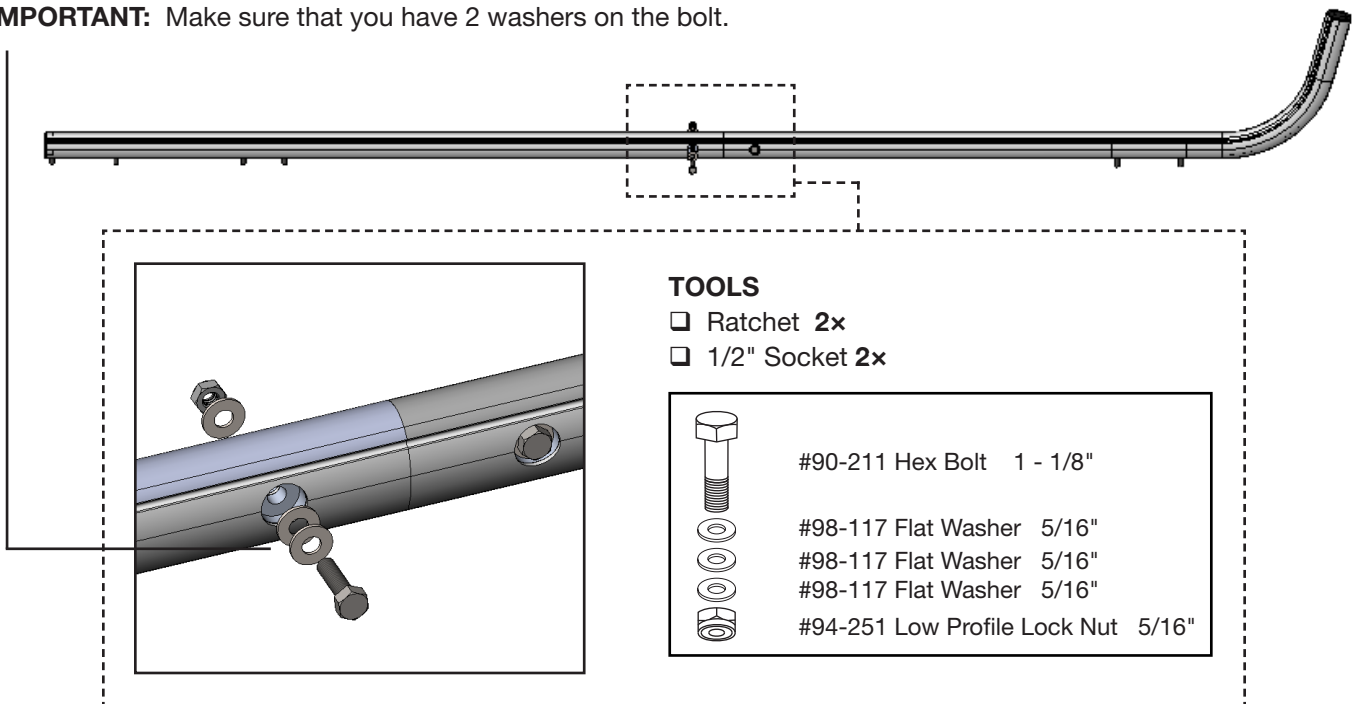


1.2.6 Connect the long straight ski to the front ski, then bolt them together.

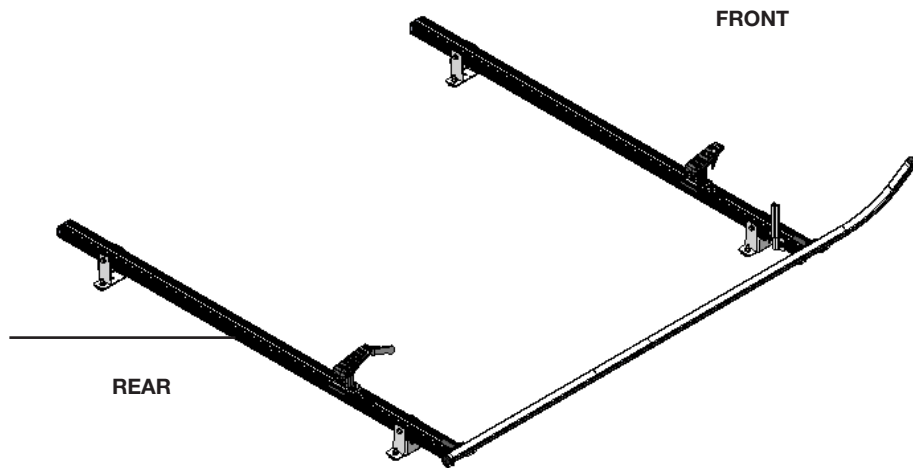
NOTE: If you have 3RD crossbar, slide 2 carriage bolts to the bottom of front ski before connecting both skis.



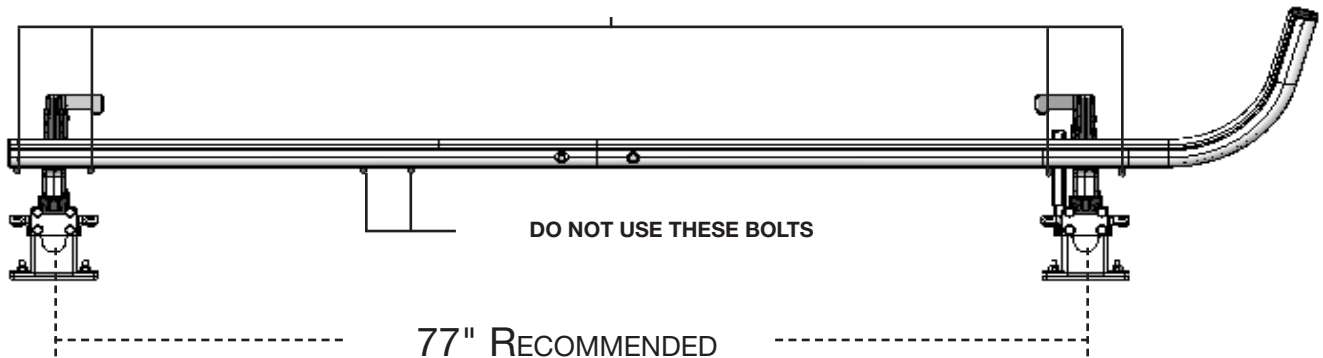
IMPORTANT: Make sure that you have 2 washers on the bolt.



1.2.7 Attach the ski to the crossbar.



USE THESE BOLTS







DO NOT USE THESE BOLTS

TOOLS

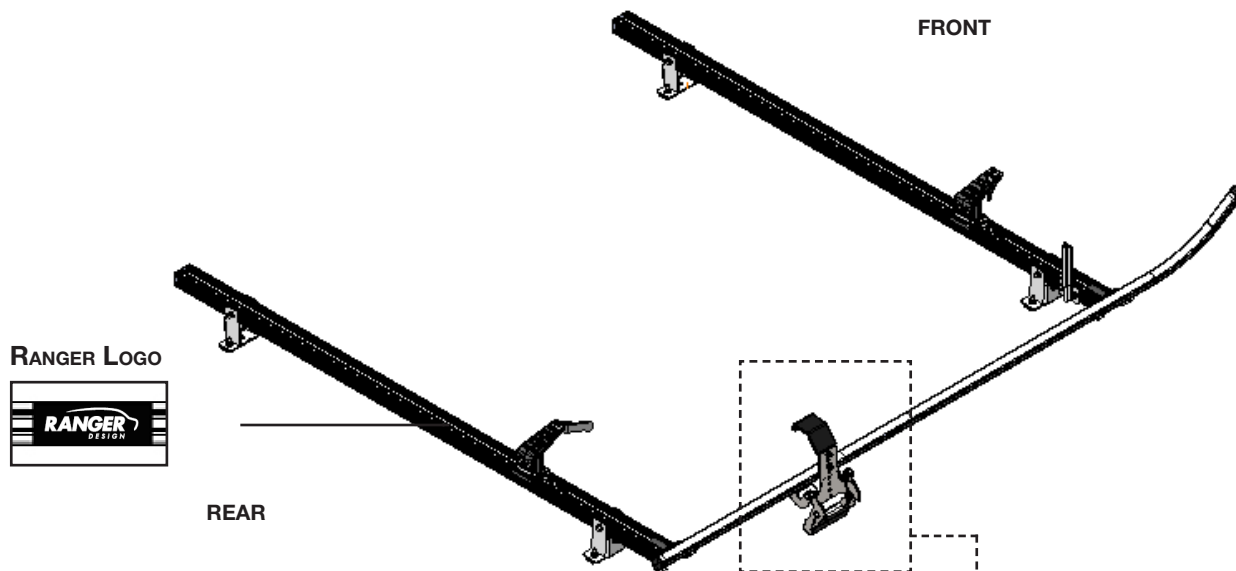
- Ratchet
- 1/2" Socket

FASTENERS USED

4x (17 ft • lbs)

	#90-491 Carriage Bolt 1"
	#98-117 Flat Washer 5/16"
	#98-123 Lock Washer 5/16"
	#94-105 Hex Nut 5/16"

1.2.8 Attach the throttle latch to the ski.







APPROXIMATE 10"

TOOLS

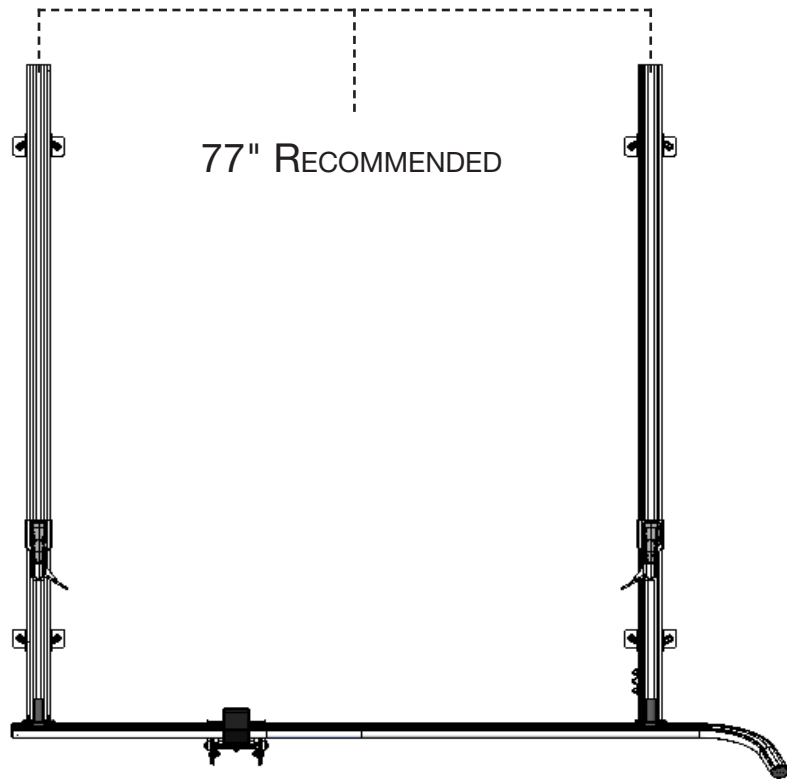
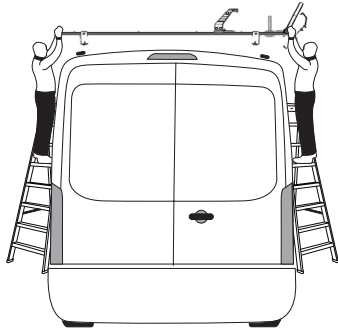
- Ratchet
- 1/2" Socket

FASTENERS USED

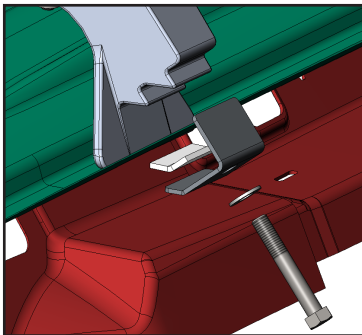
2x

	#90-491 Carriage Bolt 1"
	#98-117 Flat Washer 5/16"
	#98-123 Lock Washer 5/16"
	#94-105 Hex Nut 5/16"

1.2.9 Attach the ladder rack to the mounting tracks.



SAVANA






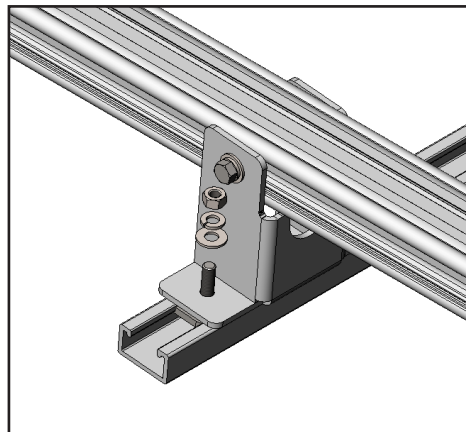
TOOLS

- Ratchet
- 1/2" Socket

FASTENERS USED

4x ONE CROSSBAR (17 ft • lbs)

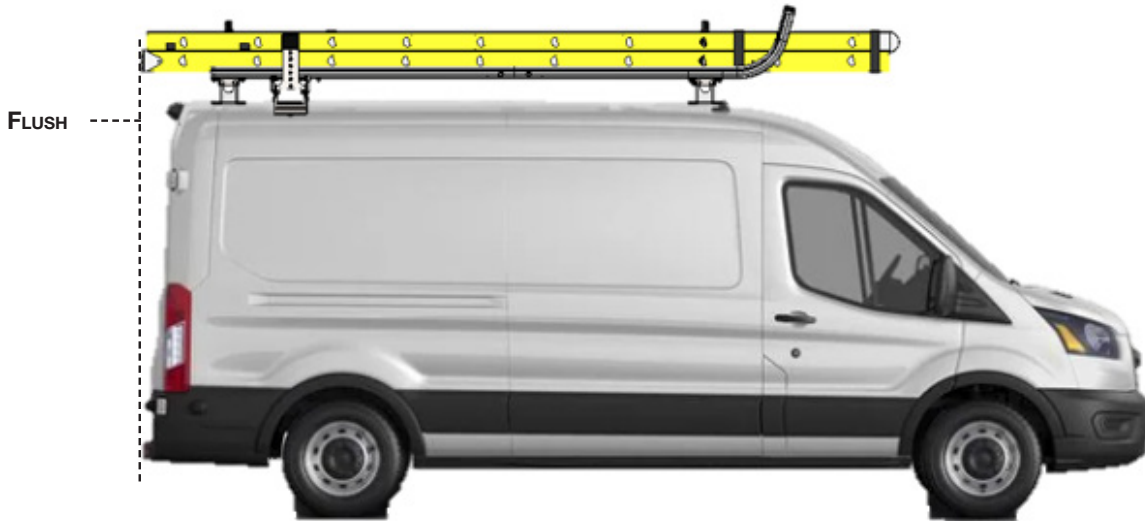
	#94-105 Hex Nut 5/16"
	#98-123 Lock Washer 5/16"
	#98-117 Flat Washer 5/16"



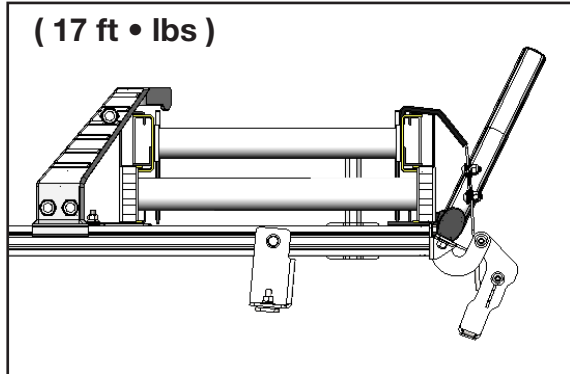
1.2.10 Load the ladder in the ladder rack, then place the hooks and throttle latch in the right position and tighten all the bolts.

TOOLS

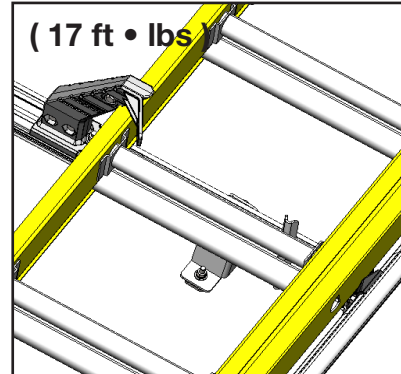
- Ratchet
- 1/2" Socket



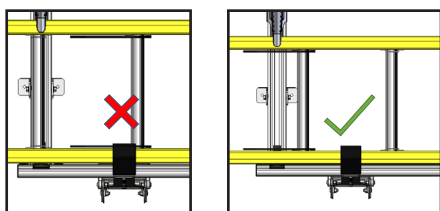
NOTE: Move the ladder hook until it touches the ladder, then tighten the ladder hook bolts.



NOTE: Make sure that the rung stopper is inside the ladder, then tighten the bolts in the rung stopper.

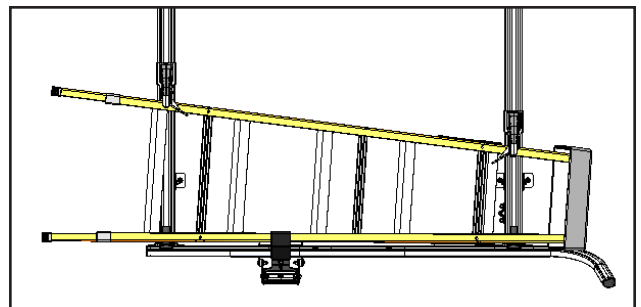


(17 ft • lbs)



NOTE: Make sure that the throttle latch is not hitting the ladder lock or ladder rung, then tighten the nuts under the throttle latch.

LADDER RACK W/ STEP LADDER





**“Congratulations, you have successfully installed your
Ladder Rack on your vehicle!**

Thank you for doing business with us.”

For any feedback or suggestions you might have, please contact: cs@rangerdesign.com

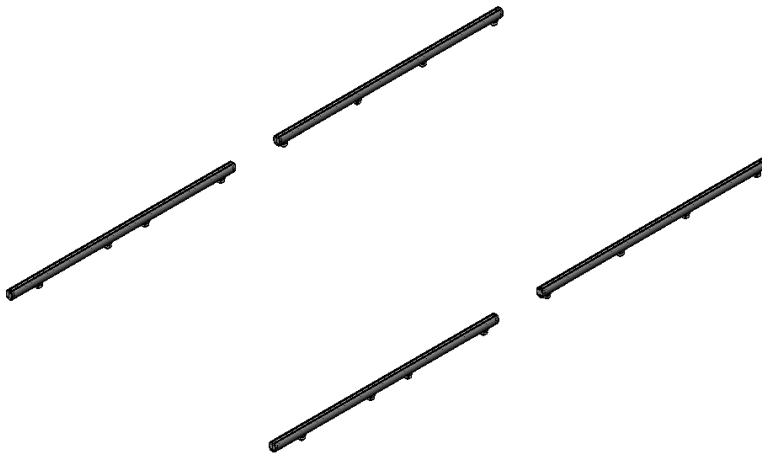


INSTALLATION GUIDE

WITH OEM TRACKS



WITH RANGER DESIGN TRACKS



18-U0018 Mounting Tracks

Mercedes Sprinter (Standard & High Roof)



QUICK START GUIDE

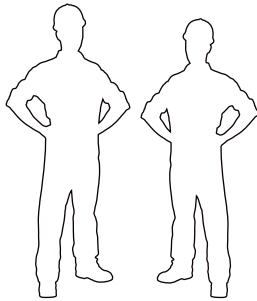
PHASE 1 - ASSEMBLY

- 1.1.1 SETUP (VERIFY ALL PARTS ARE PRESENT)..... 2 TO 3

PHASE 2 - INSTALLATION

- 2.1.1 INSTALLATION (INSTALL THE MOUNTING TRACK WITH PADS ON THE ROOF)..... 4

REQUIRED ITEMS



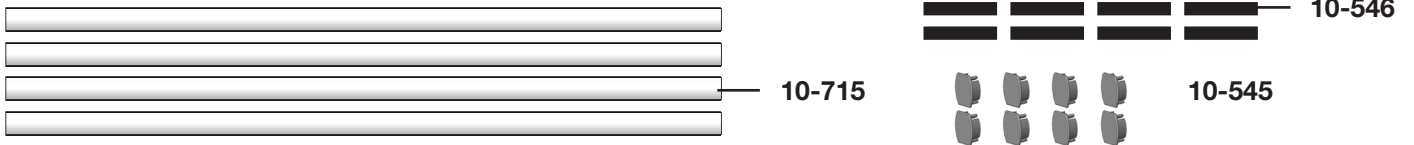
**2
PERSONS**

- Cordless Impact
- Tape Measure
- Ladder
- 1/2" Socket

PHASE 1 – ASSEMBLY

1.1 SETUP

1.1.1 Verify all parts are present.



WITH OEM TRACKS

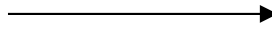
Item No.	Description	Qty.
18-047	Sprinter Support Plate	4
18-052	Shim - Foot	8
96-0018	Installation Fastener Bag	1

WITH RANGER DESIGN TRACKS









Item No.	Description	Qty.
10-545	Plastic Plug	8
10-546x6	Track Plug	8
10-715	Mounting Track 50"	4
96-0018	Installation Fastener Bag	1

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





Installation Fastener Bag







Fastener Assembly

- 24x**  **# 90-495** Carriage Bolt
5/16"-18 x 1-1/4"
SS304
- 8x**  **# 90-503** Carriage Bolt
5/16"-18 x 1-3/4"
SS304
- 24x**  **# 94-105** Hex Nut
5/16"-18
SS316wax
- 16x**  **# 98-109** Flat Washer
SAE 3/8"
SS304
- 8x**  **# 98-117** Flat Washer
5/16" OD, 3/4"
SS18-8
- 8x**  **# 98-123** Lock Washer
5/16"
SS304
- 16x**  **# 98-149** Spacer
0.290" ID x 1.375" OD x 0.125" L
NEOPRENE
- 16x**  **# 98-169** Flat Washer
External Shake Proof Washer
ZINC







8x w/ OEM TRACK

-  #94-105 Hex Nut
-  #98-123 Lock Washer
-  #98-117 Flat Washer
-  #90-503 Carriage Bolt 1-3/4"

8x w/ RANGER DESIGN TRACK

-  #94-105 Hex Nut
-  #98-123 Lock Washer
-  #98-117 Flat Washer
-  #90-495 Carriage Bolt 1-1/4"

16x w/ RANGER DESIGN TRACK

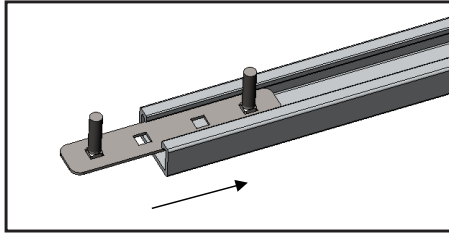
-  #90-495 Carriage Bolt 1-1/4"
-  #98-109 Flat Washer
-  #98-149 Neoprene Spacer
-  #98-169 Flat Washer
-  #98-123 Lock Washer
-  #94-105 Hex Nut

PHASE 2 – INSTALLATION

2.1 MOUNTING TRACKS INSTALLATION

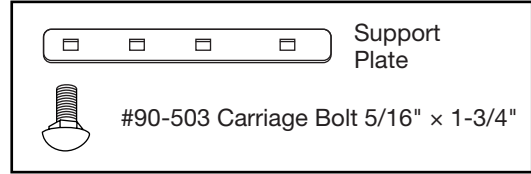
2.1.1 Install the hardware onto the mounting tracks.

WITH OEM TRACKS

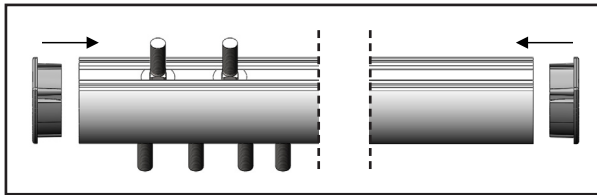


FASTENERS USED

8x



WITH RANGER DESIGN TRACKS



FASTENERS USED

8x (2 PER MOUNTING TRACK)

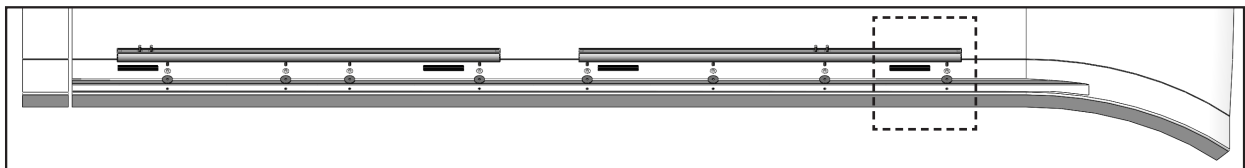


16x (4 PER MOUNTING TRACK)

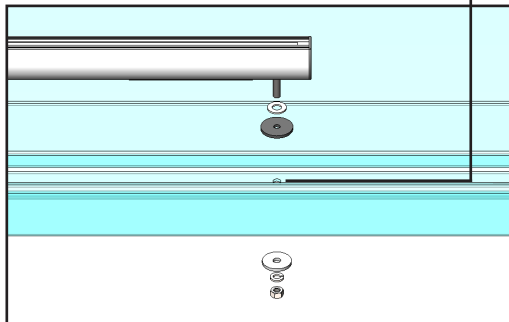


- 2.1.2
- Align the bottom bolts to the roof holes.
 - Attach the plug extrusions on both ends of the mounting tracks.
 - Install the mounting tracks onto the roof.
 - **Apply a bead of silicone around each hole**, then fasten the tracks to the roof.

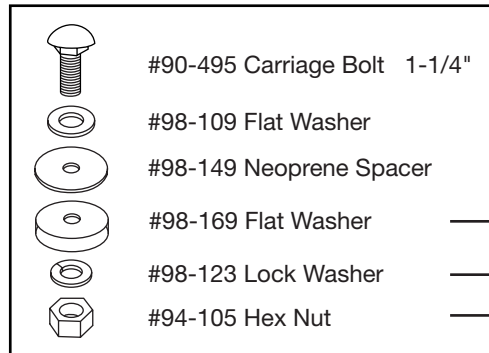
WITH RANGER DESIGN TRACKS



IMPORTANT: Apply a bead of silicone around each hole.

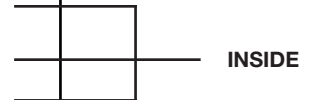


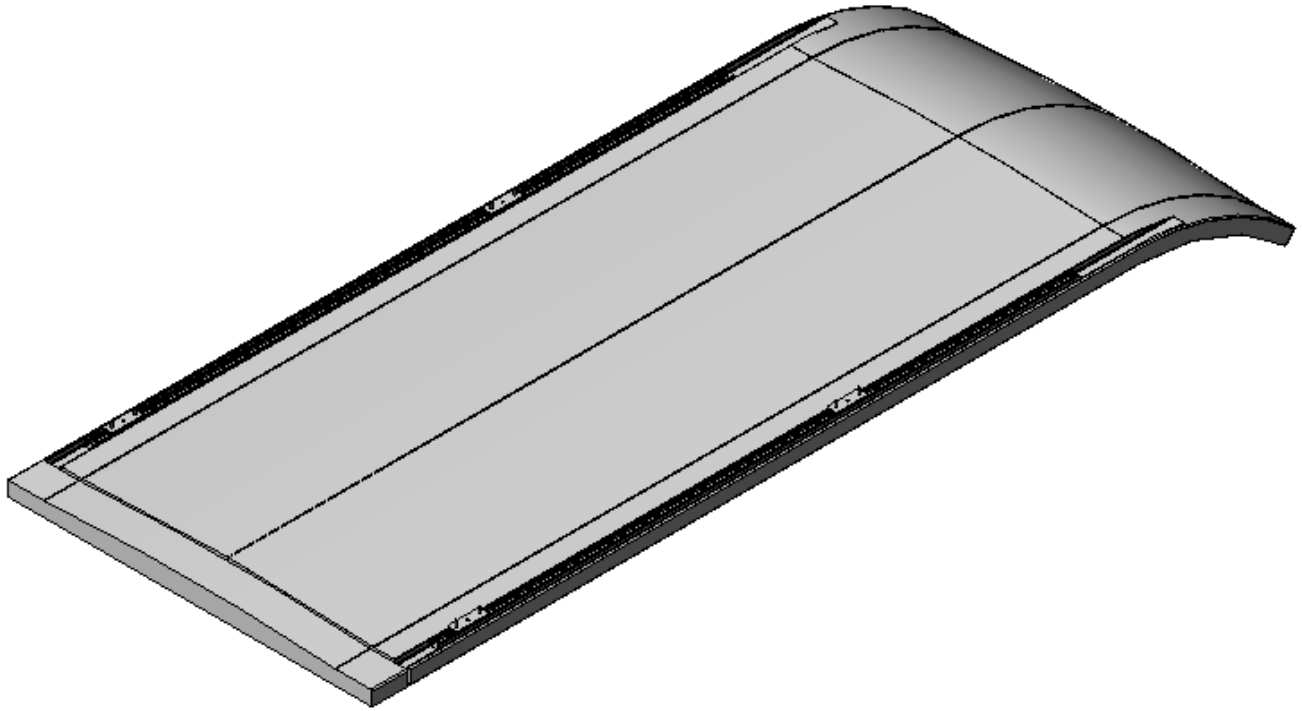
16x



TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket





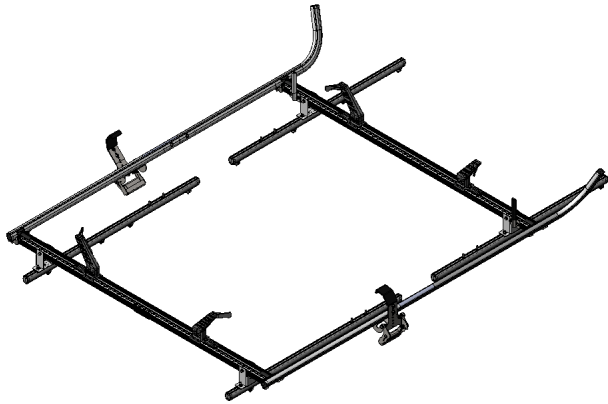
**“Congratulations, you have successfully installed your
Mounting Tracks**

Thank you for doing business with us.”

For any feedback or suggestions you might have, please contact: cs@rangerdesign.com



1630-DH



1630-DH3



“Congratulations, you have successfully installed your Double Clamp or Double Clamp 3 bars on your vehicle!”

Thank you for doing business with us.”

For any feedback or suggestions you might have, please contact: cs@rangerdesign.com

