

INSTALLATION GUIDE



1510-PH Standard Ladder Rack

ProMaster (Aluminum)



QUICK START GUIDE

Phase 1 - Assembly

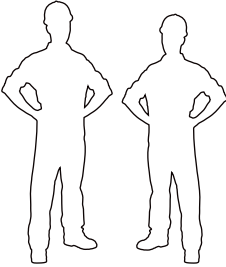
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Phase 2 - Installation

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REQUIRED ITEMS

NOTE: Use Sawhorses if possible, or use the box as a flat protective surface on the ground or table.



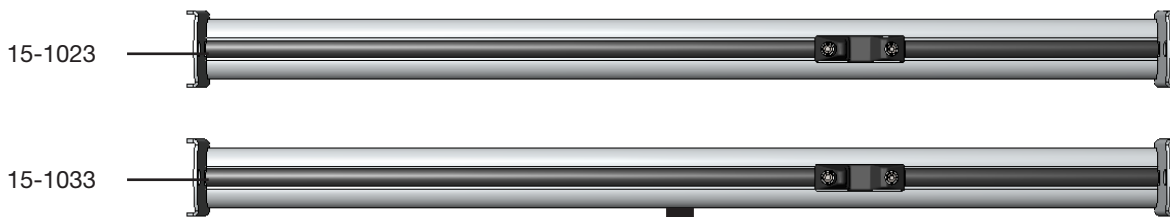
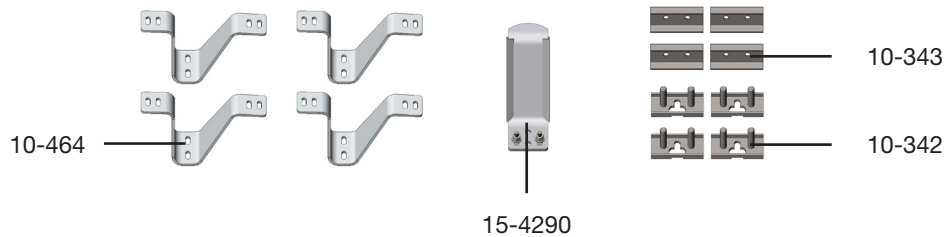
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PERSONS**

- Cordless Impact
- Ratchet
- Tape Measure
- Marker
- Ladder
- Cutter
- 1/2" Socket
- Sawhorse (Optional)
- Box
- Knife
- 1/2" Wrench

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.
10-342	Roof Clamp	4
10-343	Top Roof Clamp	4
10-464	"V" Foot	4
15-1023	Front Crossbow	1
15-1033	Rear Crossbow	1
15-4290	Front Hook	1
94-1007	Assembly Fastener Kit	1
96-1017	Install Fastener Kit	1

1.1.3 Fastener kits.





94-1007 Fastener Kit



Fastener Assembly

- 16x  # 90-491 Carriage Bolt
5/16"-18 x 1"
SS304
- 16x  # 94-105 Hex Nut
5/16"-18
SS316wax
- 16x  # 98-117 Flat Washer
5/16", O.D 3/4"
SS18-8
- 16x  # 98-123 Lock Washer
Regular 5/16"
SS304

16x

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




96-1017 Fastener Kit



Fastener Assembly

- 8x  # 94-105 Hex Nut
5/16"-18
SS316wax
- 8x  # 98-117 Flat Washer
5/16", OD 3/4"
SS18-8
- 8x  # 98-123 Lock Washer
5/16"
SS304

8x

 #98-117 Flat Washer
 #98-123 Lock Washer
 #94-105 Hex Nut

PHASE 1 – ASSEMBLY

1.2 LADDER RACK ASSEMBLY

1.2.1 Slide carriage bolts on the bottom face of the crossbows.

NOTE: The track plug must be removed from the underneath of the front crossbow, and reinstalled after the feet have been installed in the final position.

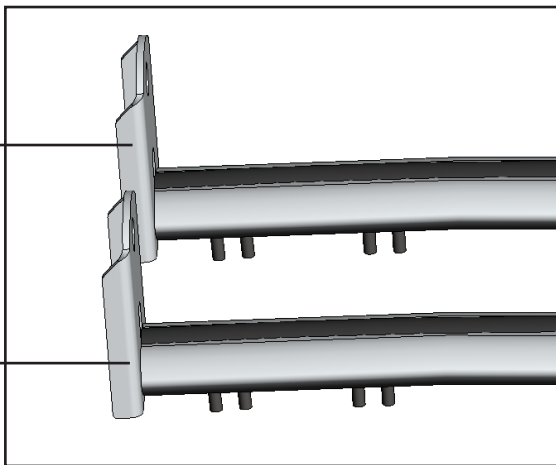
TIPS: Use tape to keep the bolts from sliding off.



DRIVER SIDE

Front crossbow

- Slide 4 pcs. of 1" carriage bolts.



Rear crossbow

- Slide 4 pcs. of 1" carriage bolts.

HARDWARE USED

8x

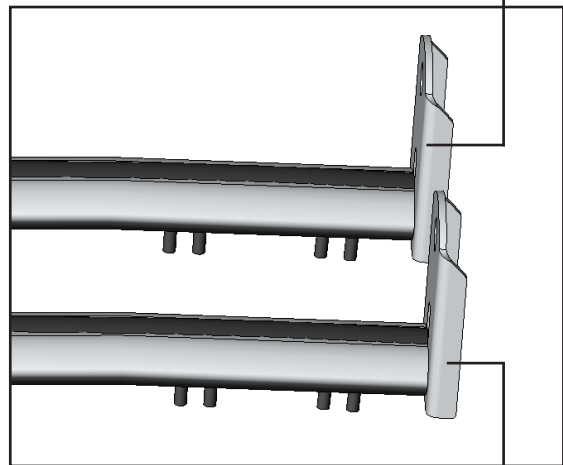


#90-491 Carriage Bolt
5/16" x 1" SS304

PASSENGER SIDE

Front crossbow

- Slide 4 pcs. of 1" carriage bolts.



Rear crossbow

- Slide 4 pcs. of 1" carriage bolts.

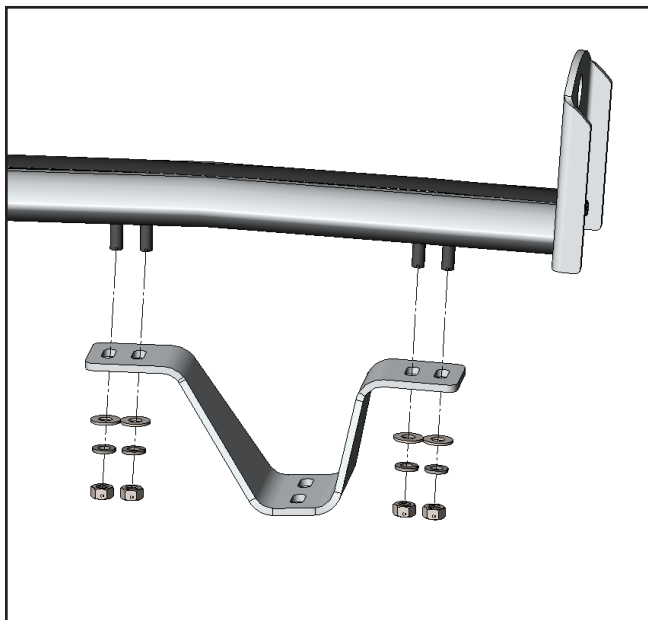
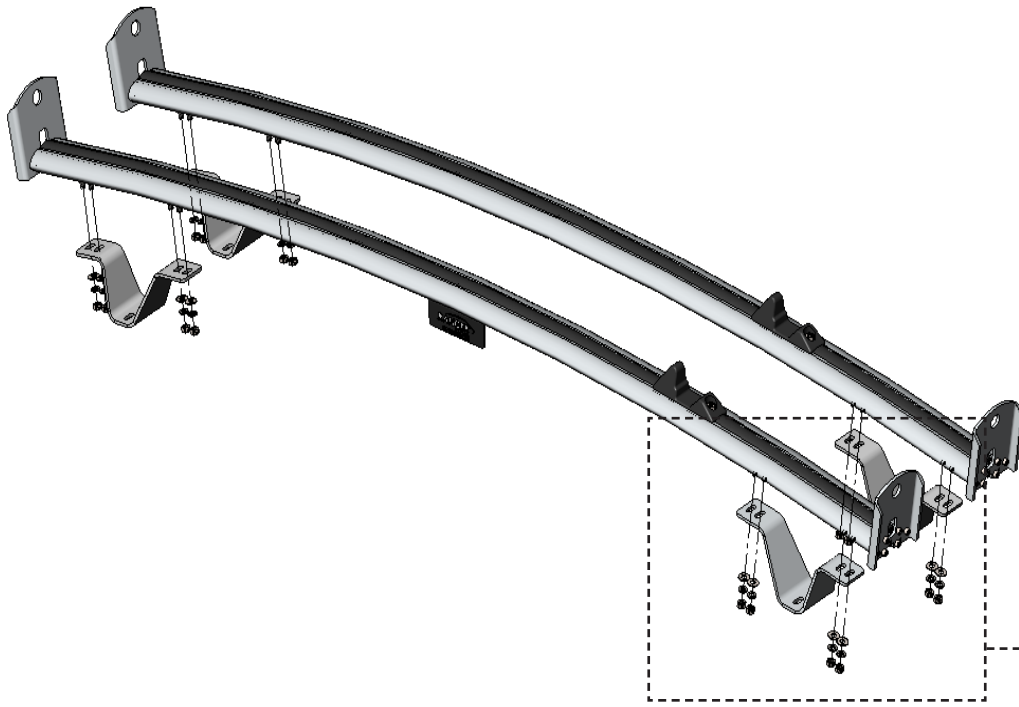
HARDWARE USED

8x



#90-491 Carriage Bolt
5/16" x 1" SS304

1.2.2 Install the feet on the Front, and Rear Crossbows.



HARDWARE USED

16x HAND-TIGHTEN THE NUTS.



Carriage bolts are already on the crossbows.



#98-117 Flat Washer

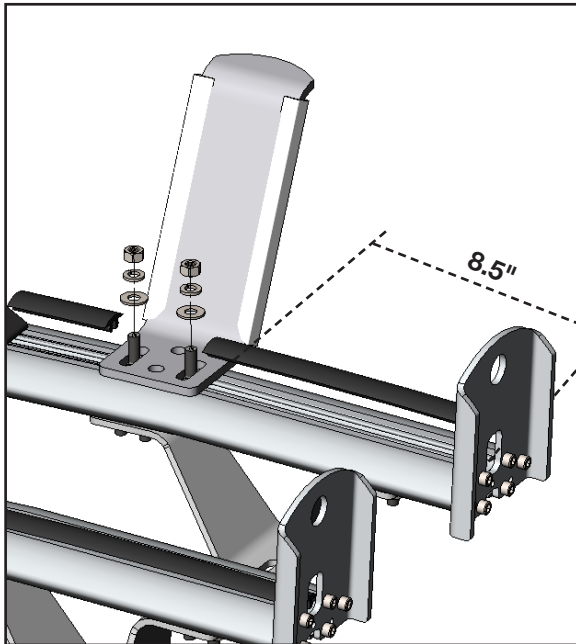
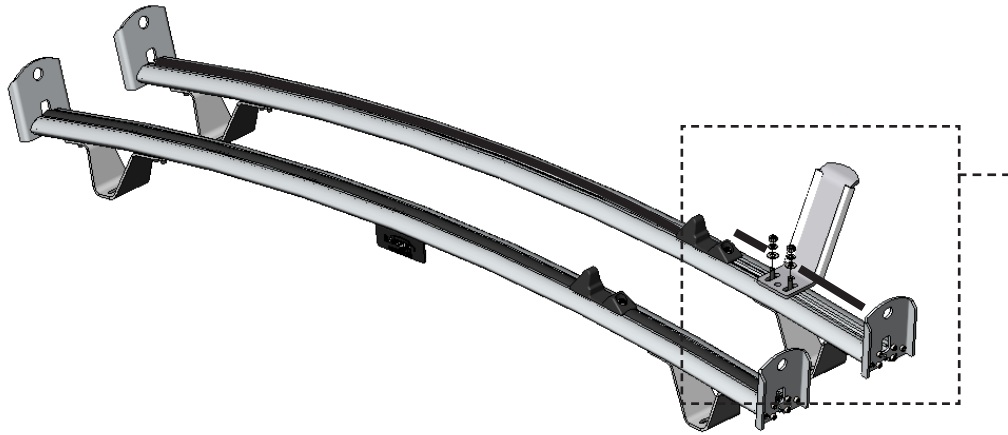


#98-123 Lock Washer



#94-105 Hex Nut

- 1.2.3**
- Pull out the 14.5" track plug on the passenger side of the front crossbow.
 - Remove the pre-assembled hardware on the front hook and slide the bolts onto the passenger side of the front crossbow, and attach the front hook in the position shown below.
 - Cut the track plug, then attach it back to the crossbow.



TOOLS

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

HARDWARE USED

2x HARDWARE IS PRE-ASSEMBLED.

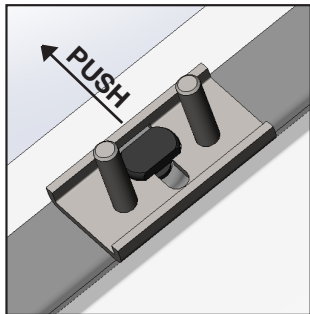
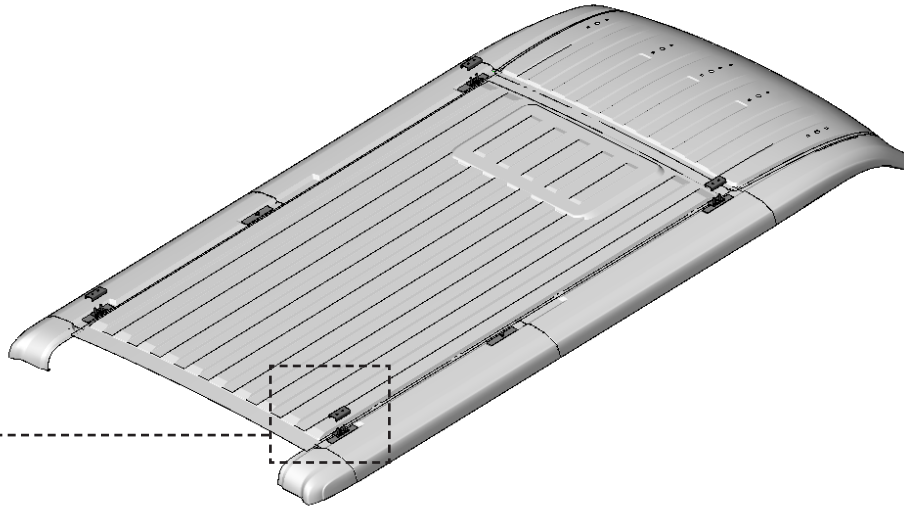
- | | |
|---|----------------------------------|
|  | #90-491 Carriage Bolt 5/16" x 1" |
|  | #98-117 Flat Washer |
|  | #98-123 Lock Washer |
|  | #94-105 Hex Nut |

PHASE 2 – INSTALLATION

2.1 ROOF CLAMPS INSTALLATION

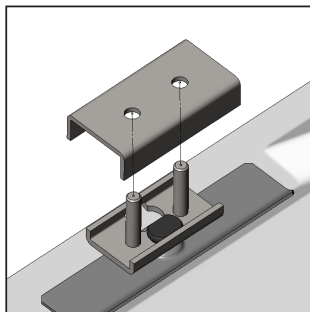
2.1.1 Attach the roof clamps and top roof clamp onto the roof.

NOTE: Picture show 130" wheelbase promaster roof, for all size of promaster vehicle use the mounting points that are appropriate for your length of cargo.



Attach the roof clamps to the roof.

4x



Add the top roof clamps on the roof clamps.

NOTE: The top roof clamp should lay flat on the roof clamp and not slant.

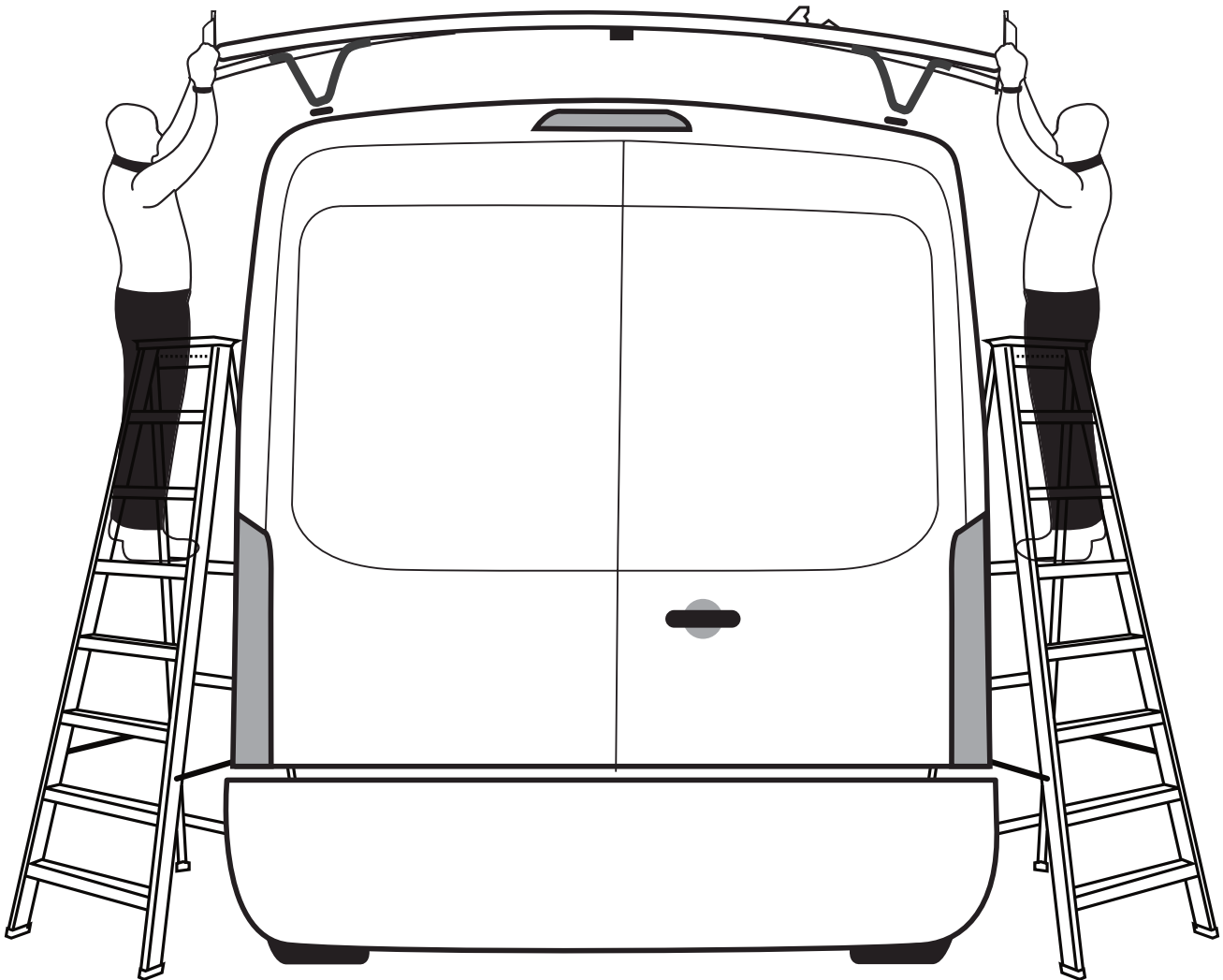
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PHASE 2 – INSTALLATION

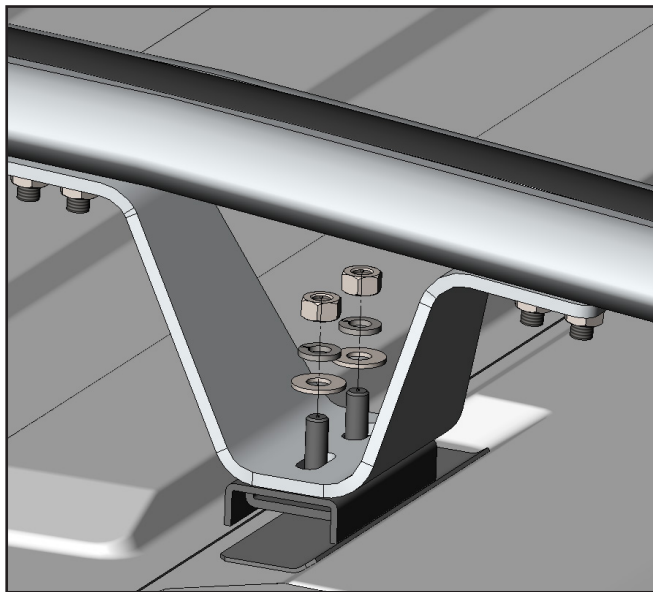
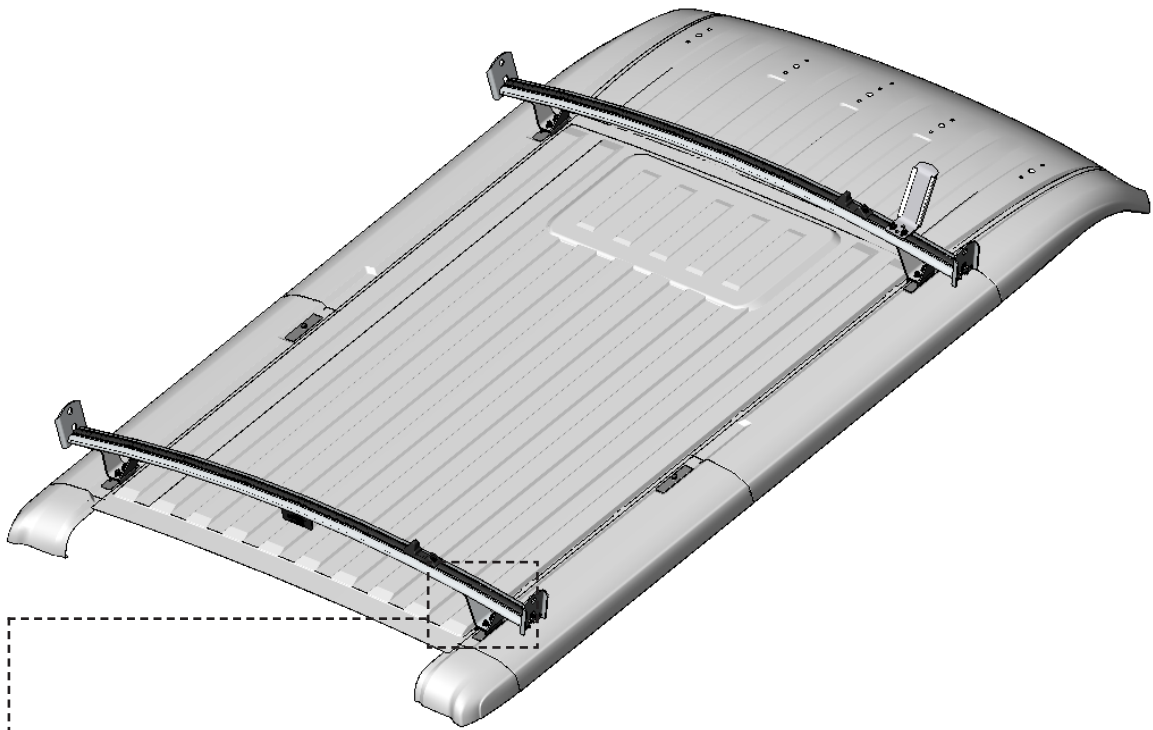
2.2 LADDER RACK INSTALLATION

2.2.1 Position the front and rear crossbows (**minimum two persons**) on the vehicle so that the feet are on the clamps.

Ladder Rack



2.2.2 While making sure the crossbows are parallel to each other, attach all the “V” feet to the roof clamps.






TOOLS

- Ratchet
- 1/2" Socket

FASTENERS USED

8x

- | | |
|---|---------------------|
|  | #98-117 Flat Washer |
|  | #98-123 Lock Washer |
|  | #94-105 Hex Nut |

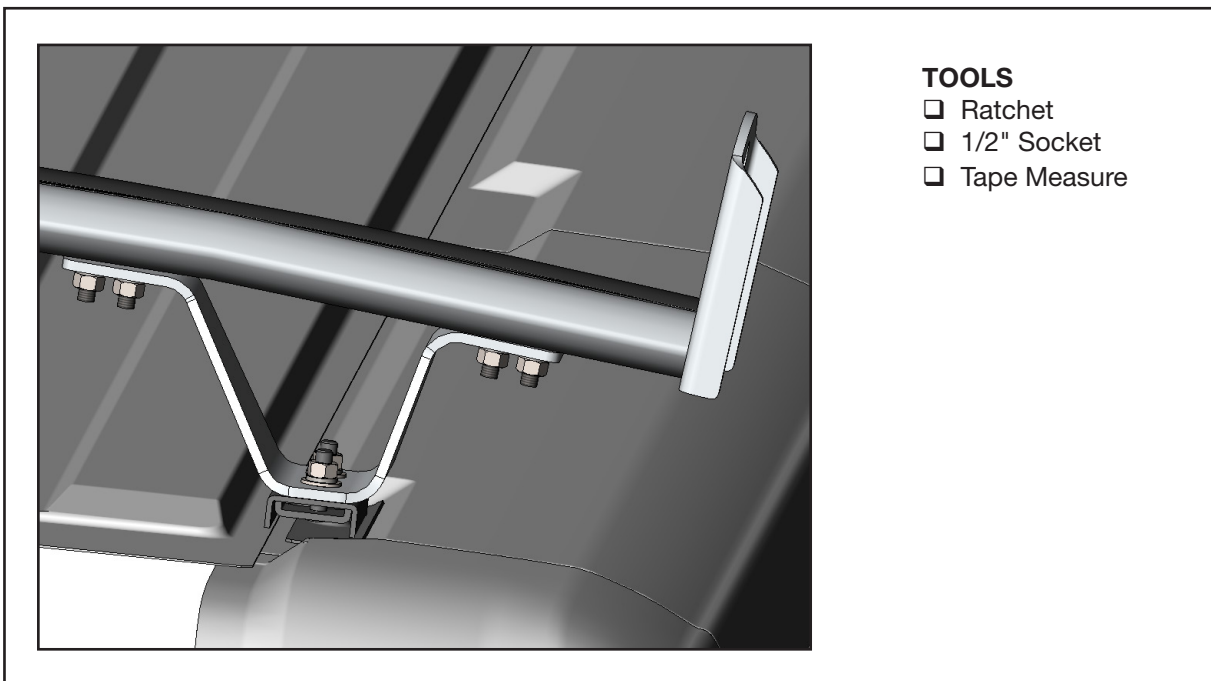
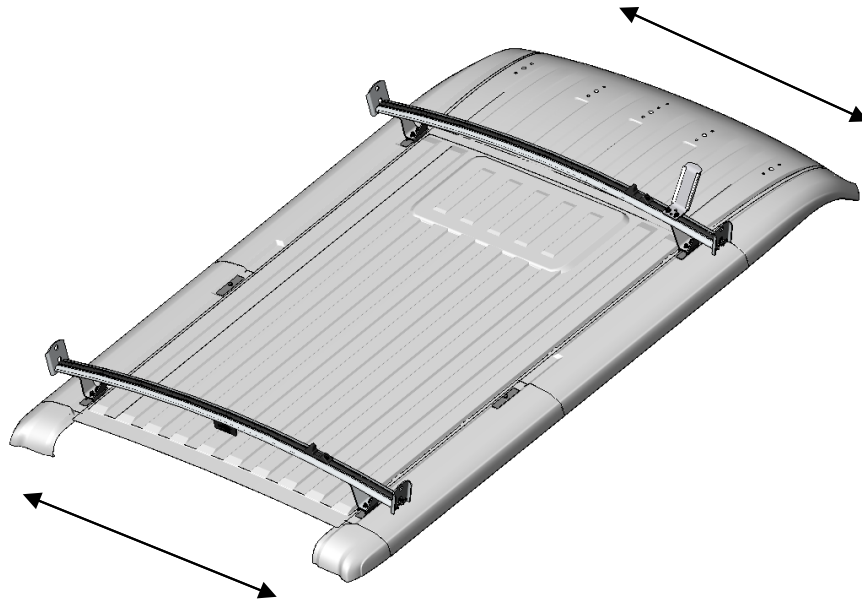
2.2.3 Center the crossbows on the vehicle, then tighten all the “V” feet to the crossbows.

NOTE:

- The ladder cannot extend beyond the rear bumper of the vehicle.
- The center of the ladder must be behind the front crossbow when the ladder is loaded.

IMPORTANT:

- After installation is complete, cut the track plug underneath the front crossbow to fill all the unused space.
- Place the ladder rack warning label on a visible area, recommended on a partition.





**“You have successfully installed your
1510-PH Ladder Rack**

Thank you for doing business with us.”

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

