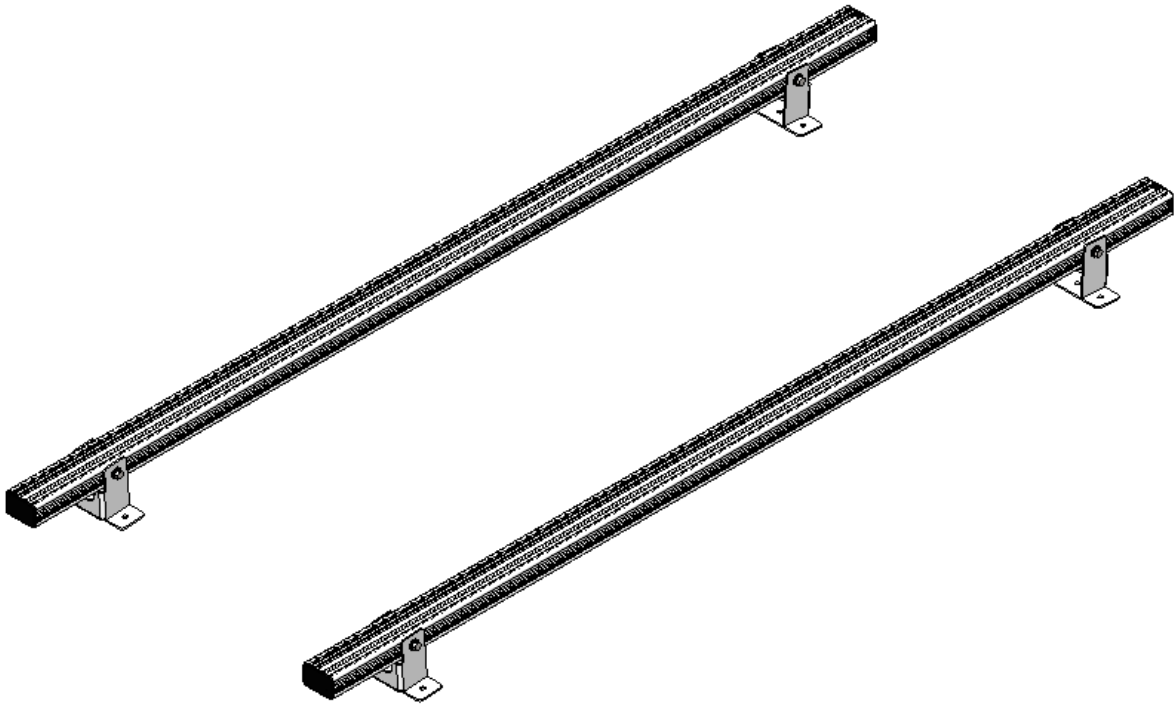


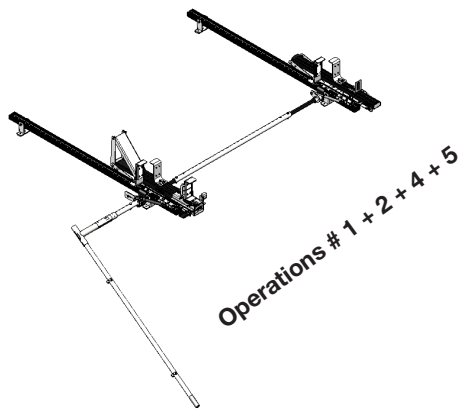
# INSTALLATION GUIDE



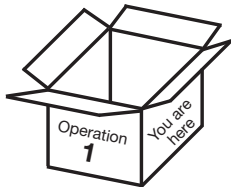
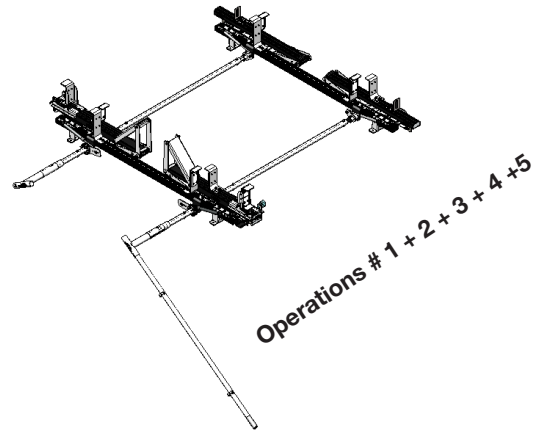
**18-U1806 Max Rack Crossbar**  
( Max Rack )

# ORDER OF OPERATION

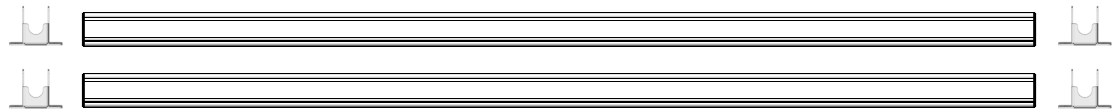
## MAX RACK SINGLE SIDE



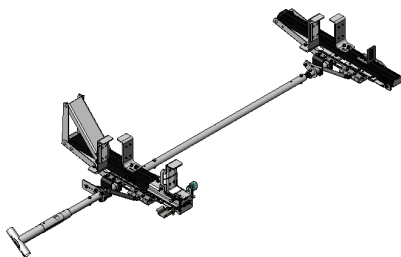
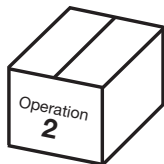
## MAX RACK DOUBLE SIDE



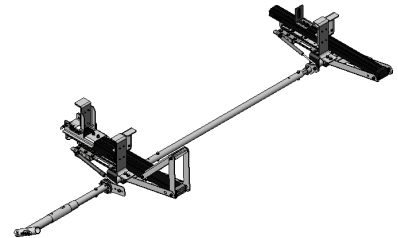
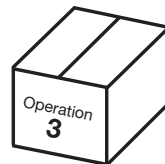
18-U1806



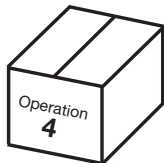
18-U1810



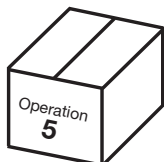
18-U1815



**OPTIONAL:** Applicable only for Max Rack Double Side.



**MOUNTING TRACK**

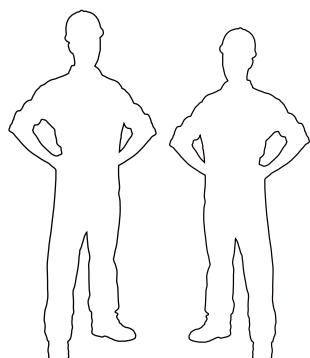


18-U1807



# REQUIRED ITEMS FOR COMPLETE MAX RACK

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



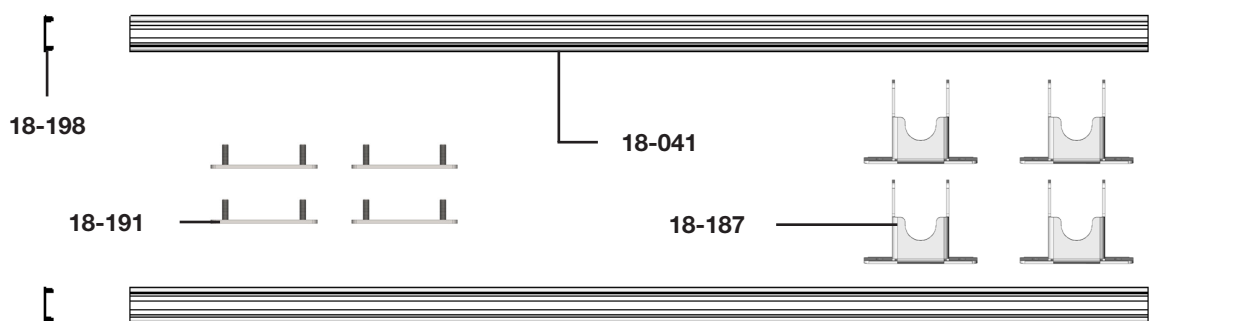
**2  
PERSONS**

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

## 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.

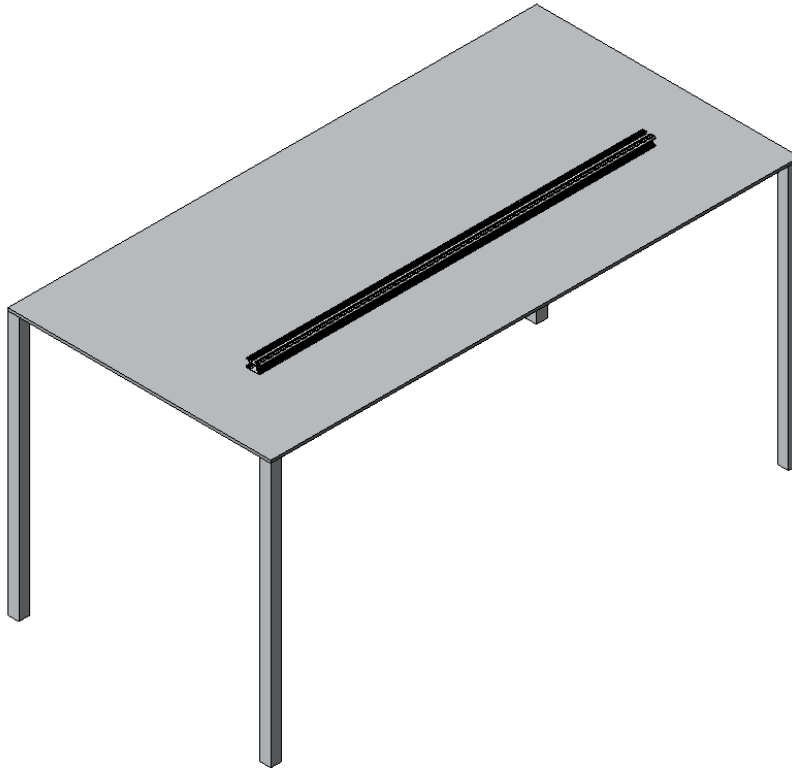
#### BILL OF MATERIALS

Item No.	Description	Qty.
18-187	Foot	4
18-041	Max Rack Crossbar	2
18-198	End Plastic Plug	4
18-191	Stud Plate	4
94-1806	Fastener kit	1

# PHASE 1 – ASSEMBLY

## 1.2 MAX RACK PREPARATION

**1.2.1** Pull one Crossbar on the box 18-U1806 and put the Crossbar on the table.



**“You have successfully completed Operation 1  
Max Rack Crossbar!  
Open the passenger side mechanism (18-U1810) box to continue  
assembling the Max Rack**

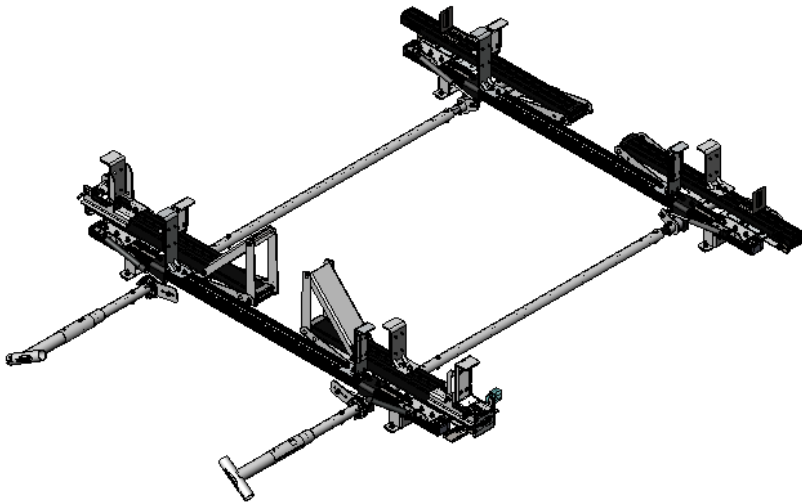
**Thank you for doing business with us.”**

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

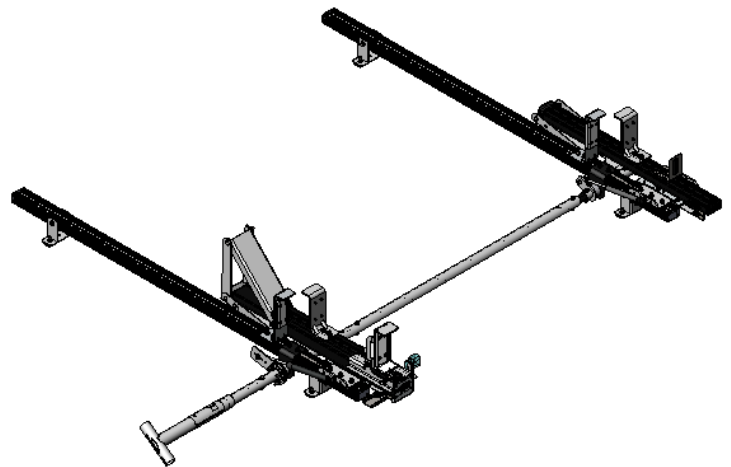


# INSTALLATION GUIDE

## MAX RACK DOUBLE SIDE



## RACK SINGLE SIDE



## 18-U1810 Max Rack

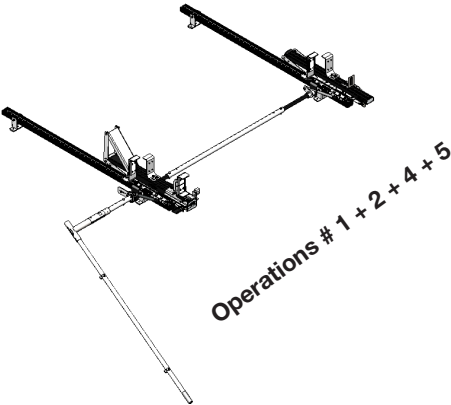
Passenger Side

39" Drop Height From The Roof

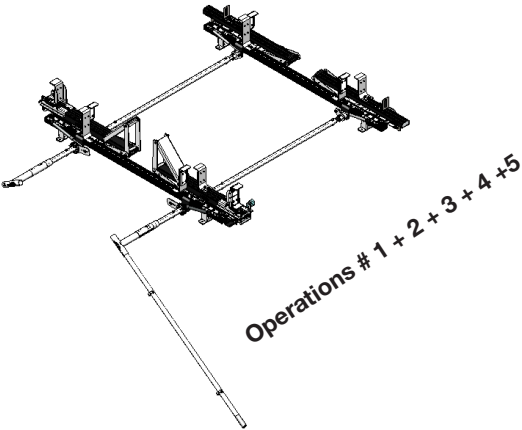


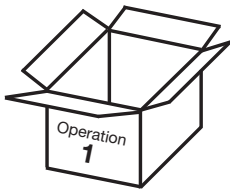

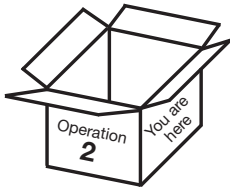
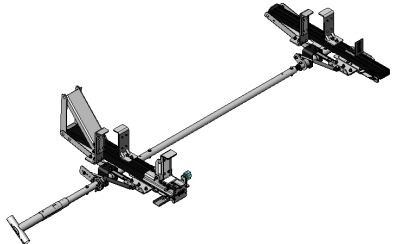
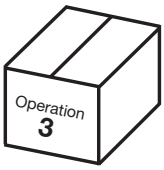
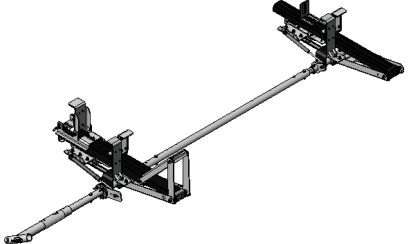
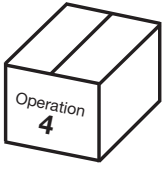

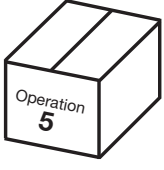

# ORDER OF OPERATION

## MAX RACK SINGLE SIDE



## MAX RACK DOUBLE SIDE



 <p>Operation 1</p>	<p>18-U1806</p> 
<p>18-U1810</p>  <p>Operation 2 You are here</p> 	<p>18-U1815</p>  <p>Operation 3</p>  <div data-bbox="824 1465 1200 1554"><p><b>OPTIONAL:</b> Applicable only for Max Rack Double Side.</p></div>
 <p>Operation 4</p>	<p>MOUNTING TRACK</p> 
 <p>Operation 5</p>	<p>18-U1807</p> 

# QUICK START GUIDE

## Phase 1 - Assembly

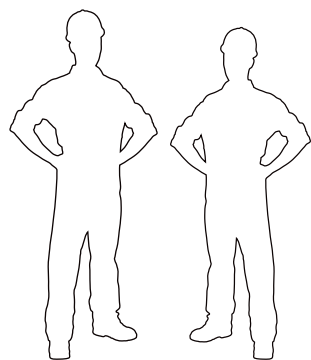
❑ 1.1 Setup.....	4 - 5
❑ 1.2 Front Crossbar Assembly.....	6 - 11
❑ 1.3 Rear Crossbar Assembly.....	12 - 20
❑ 1.4 For Assembly With Overhead Lift.....	21
❑ 1.5 Assembly Validation.....	22

## Phase 2 - Ladder Installation

❑ 2.1 Extension Ladder Installation.....	23
❑ 2.2 Step Ladder Installation.....	24

## REQUIRED ITEMS FOR COMPLETE MAX RACK

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



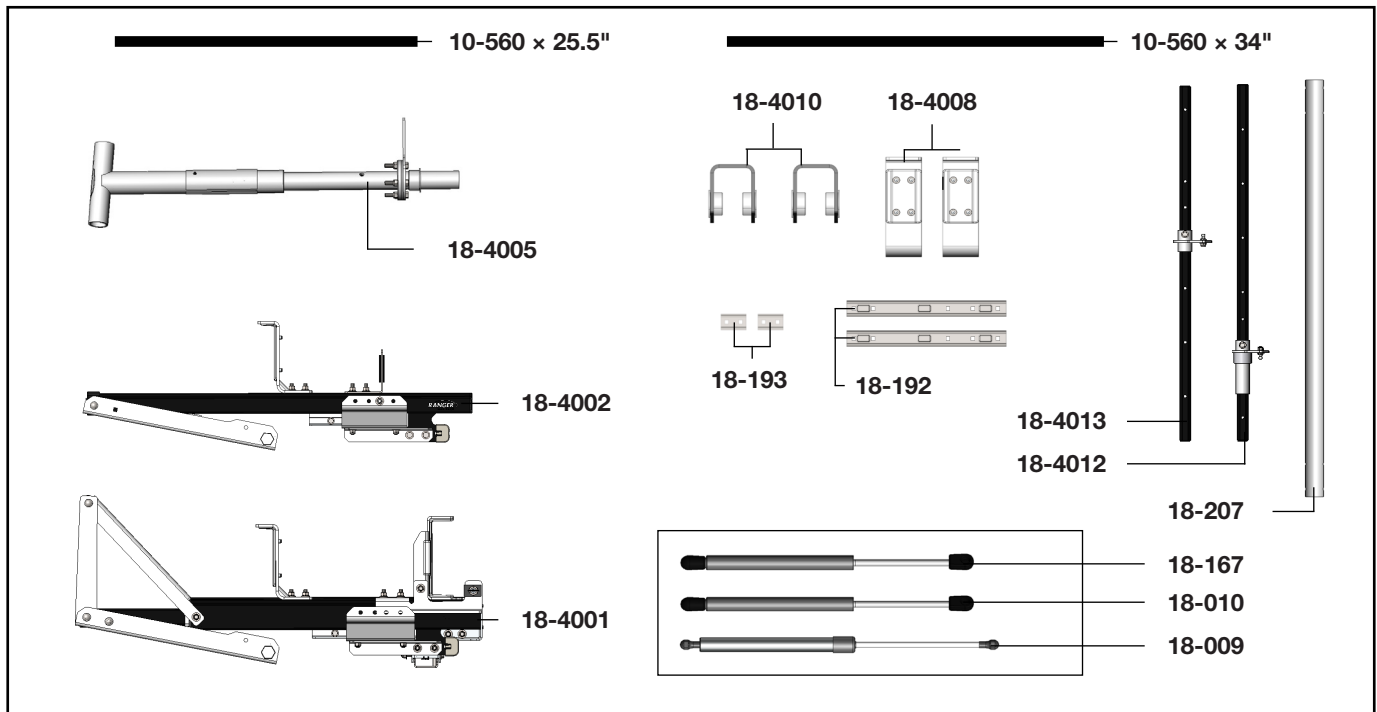
**2  
PERSONS**

- ❑ Cordless Impact
- ❑ Ratchet
- ❑ Tape Measure
- ❑ Marker
- ❑ Ladder
- ❑ 1/2" Wrench
- ❑ 1/2" Socket
- ❑ Sawhorse ( Optional )
- ❑ Box
- ❑ 1/8" Slot Screwdriver or Pick

# PHASE 1 – ASSEMBLY

## 1.1 SETUP

1.1.1 Unpack components; compare with the bill of materials.



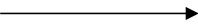
1.1.2 Verify all parts are present.

Item No.	Description	Qty.
18-009	Damper	1
18-010	Gas Spring	1
18-207	Center Tube	1
18-167	Gas Spring Combo	1
18-192	Insert Plate, 5 Bolts	2
18-193	Insert Plate, 2 Bolts	2
18-4013	PS - Rear Linkage	1
18-4012	PS - Front Linkage	1
18-4001	Passenger Side Rear Mechanism	1
18-4002	Passenger Side Front Mechanism	1
18-4005	Passenger Side Damper kit	1
18-4008	Long Hook	2
18-4010	Shaft Support Bracket	2
10-560x25.5"	Track Plug ( 25.5" )	1
10-560x34"	Track Plug ( 34" )	1
94-0810	Customer Assembly Fastener Kit	1



1.1.3 Fastener kits.

94-0810



Fastener Assembly

1x



# 40-665

Ball Stud  
3/4"  
Zinc Plated

5x



# 90-225

Hex Bolt  
5/16" - 18 x 2"  
SS304

14x



# 90-491

Carriage Bolt  
5/16" - 18 x 1"  
SS304

17x



# 94-111

Lock Nut  
5/16"  
SS304 WAX

24x



# 98-117

Flat Washer  
5/16", 3/4" O.D.  
SS18 - 8

1x



#40-665 Ball Stud 3/4"



#98-117 Flat Washer 5/16"



#98-117 Flat Washer 5/16"



#94-111 Lock Nut 5/16"

5x



#90-225 Hex Bolt 2"



#98-117 Flat Washer 5/16"



#98-117 Flat Washer 5/16"



#94-111 Lock Nut 5/16"

12x



#90-491 Carriage Bolt 1"



#98-117 Flat Washer 5/16"

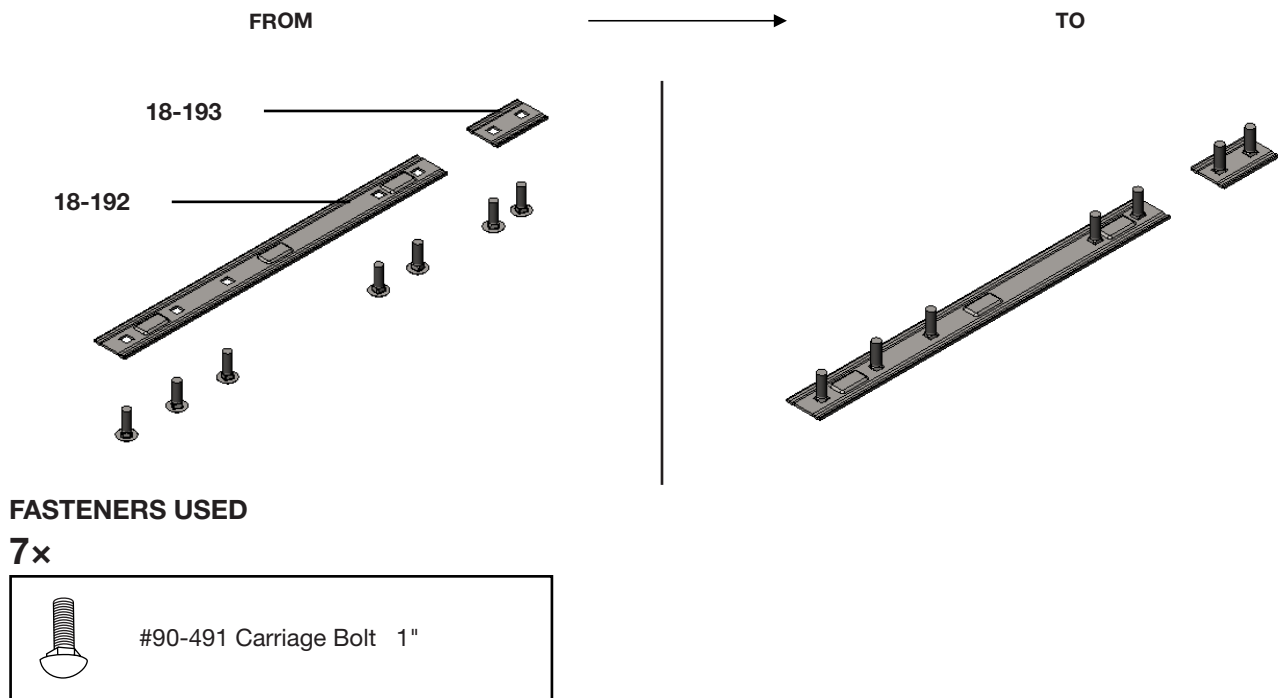


#94-111 Lock Nut 5/16"

# PHASE 1 – ASSEMBLY

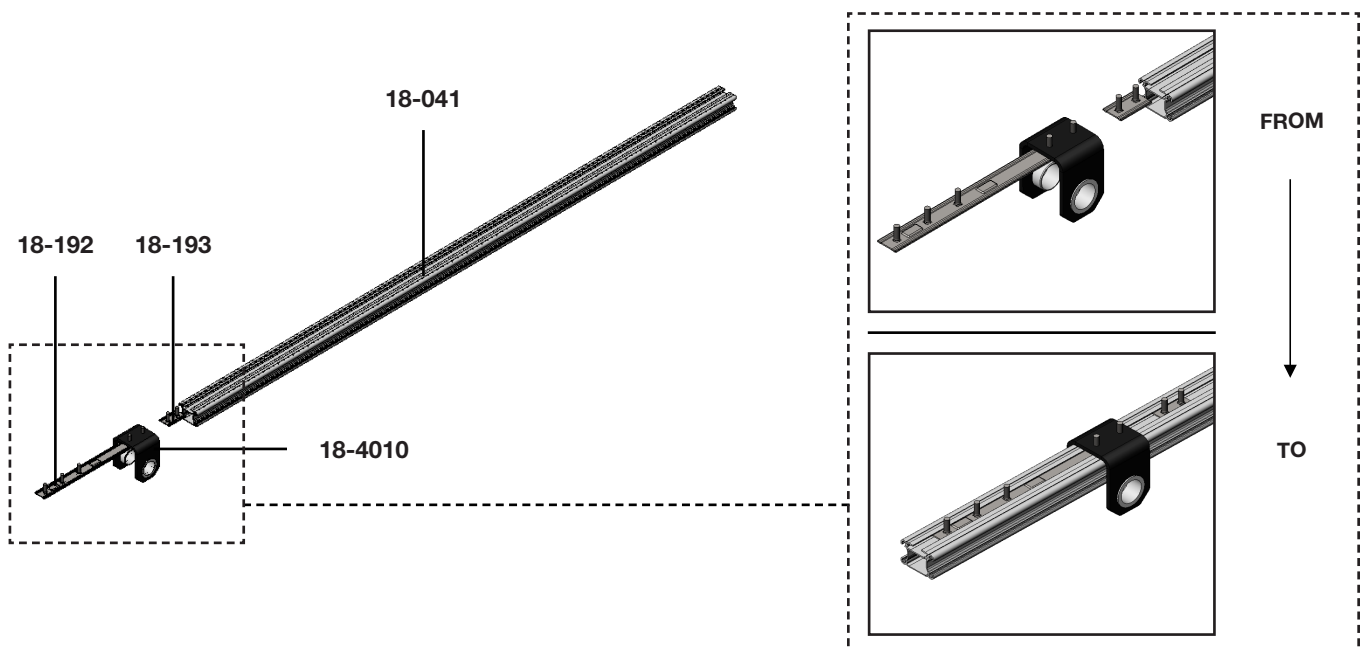
## 1.2 FRONT CROSSBAR ASSEMBLY

1.2.1 Attach carriage bolts to the insert plate.



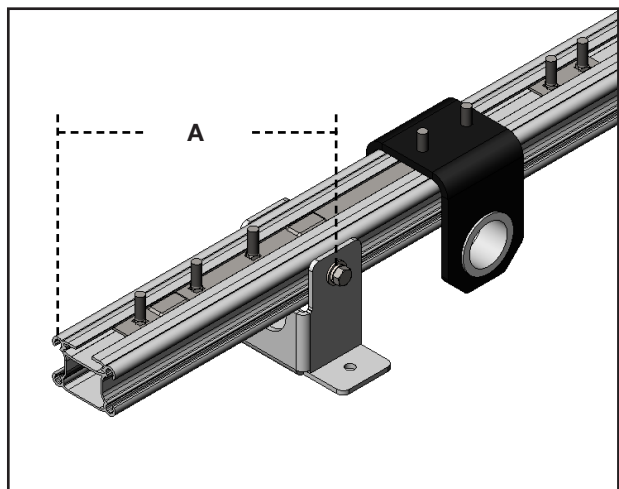
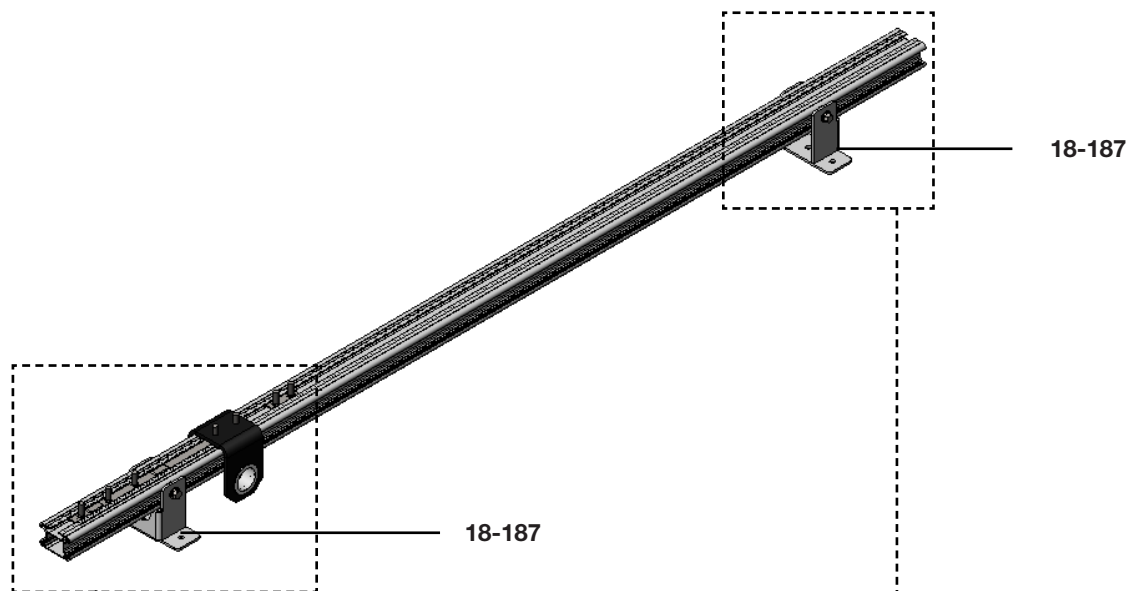
1.2.2 Slide the insert plate to the crossbar w/ shaft support bracket.

**NOTE:** Repeat this step on the other side of the crossbar if you are assembling a double sided rack.



**1.2.3** Attach the 2 feet to the crossbar.

FOOT PLACEMENT GUIDE	
VEHICLE	DIMENSION ( A )
NISSAN NV	7"
SPRINTER	10" HIGH ROOF, 6 - 1/2" STANDARD ROOF
TRANSIT	8 - 7/8"
PROMASTER	7 - 1/16"



**TOOLS**

- ☐ Cordless Impact
- ☐ 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"

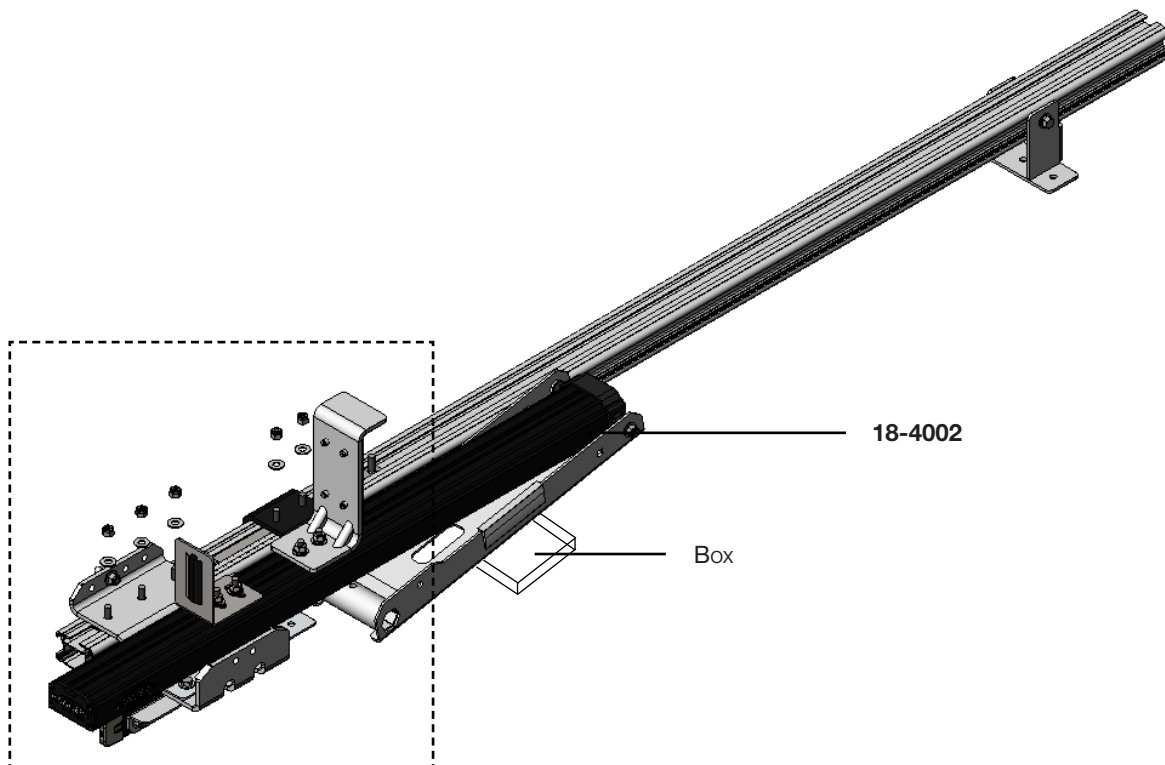


#98-117 Flat Washer 5/16"

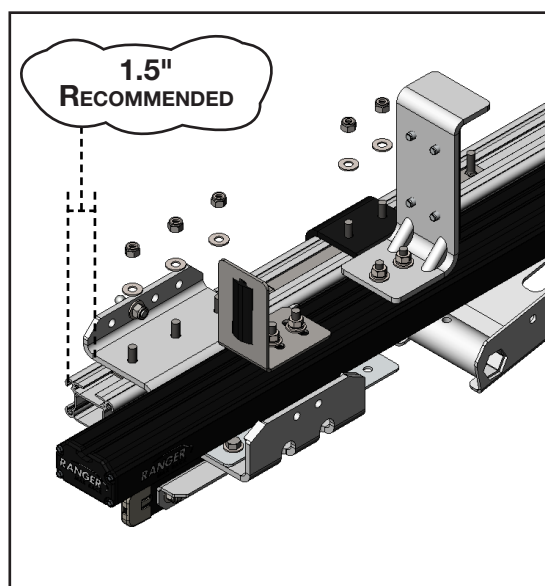


#Channel Nut 5/16"

**1.2.4** Attach the passenger side front mechanism to the crossbar using the insert plate w/ 5 holes, then add flat washers and lock nuts to the shaft support bracket.



**TIPS:** • Use a box to support the mechanism to facilitate assembly.



#### TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket

#### FASTENERS USED

**5x ( 17 ft • lbs )**



#94-111 Lock Nut 5/16"



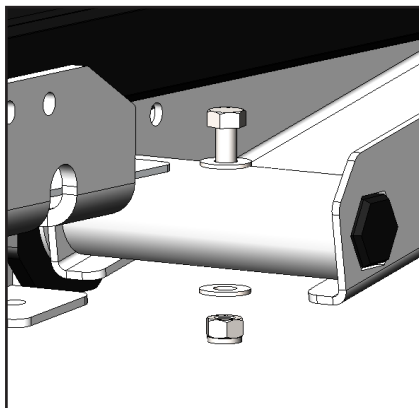
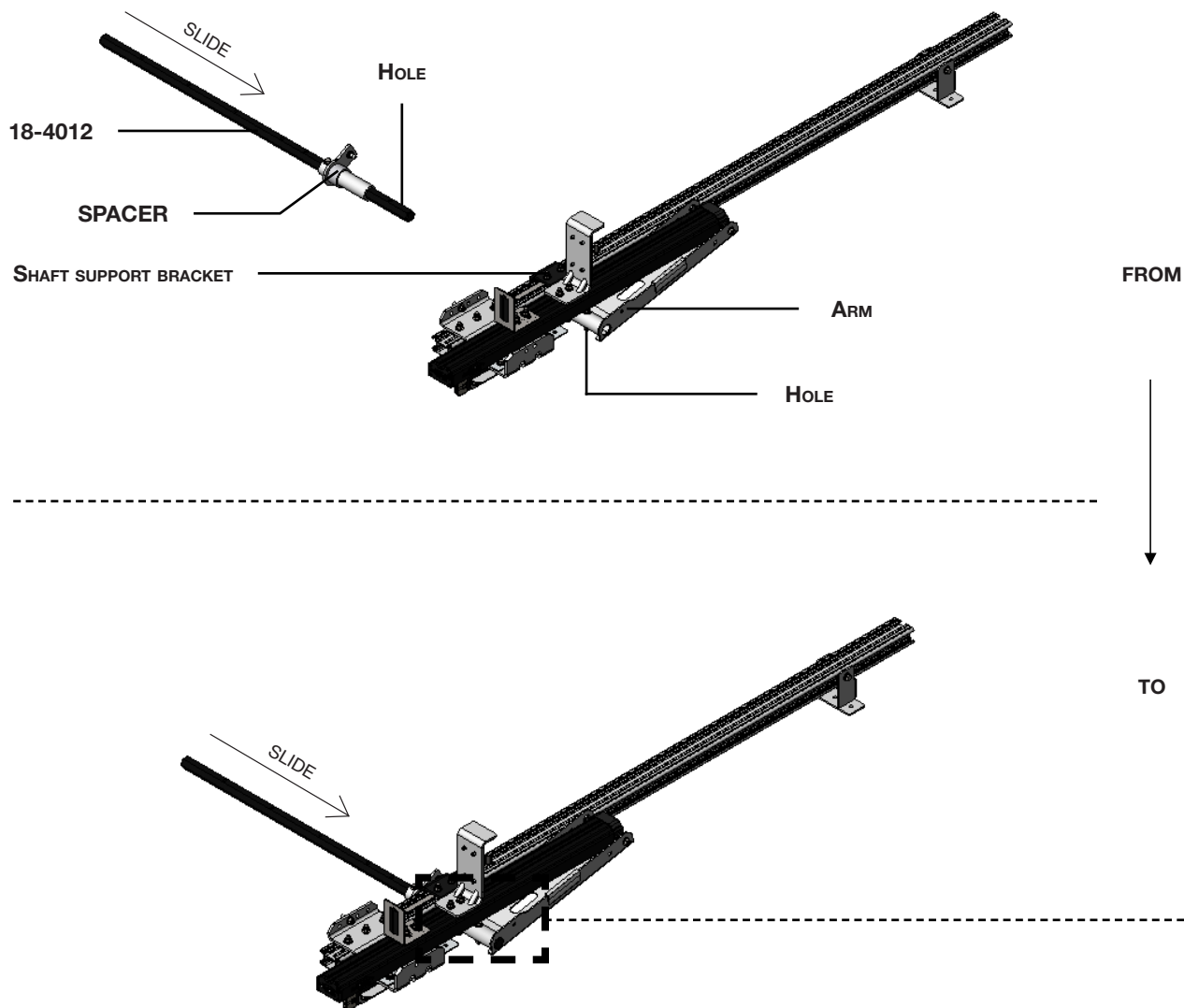
#98-117 Flat Washer 5/16"



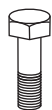
#90-491 Carriage Bolt 1"

**1.2.5** Slide the pivot bar with front linkage and spacer through the shaft support bracket and arm, then attach the pivot bar to the arm.

**NOTE:** Line up the hole of the front pivot bar to the hole of the arm.



**FASTENERS USED**  
**1x ( 17 ft • lbs )**



#90-225 Hex Bolt 2"



#98-117 Flat Washer 5/16"



#98-117 Flat Washer 5/16"



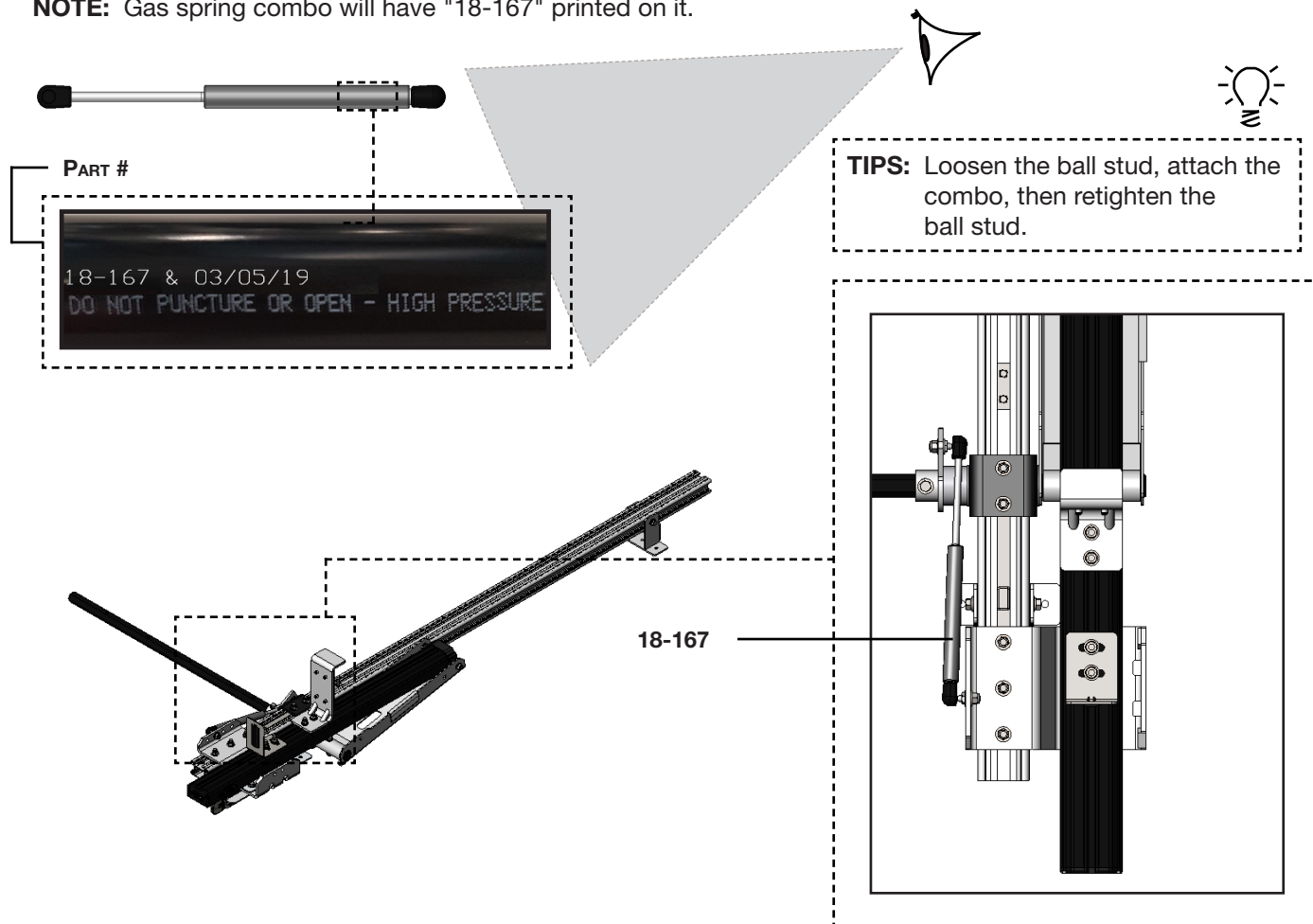
#94-111 Lock Nut 5/16"

**TOOLS**

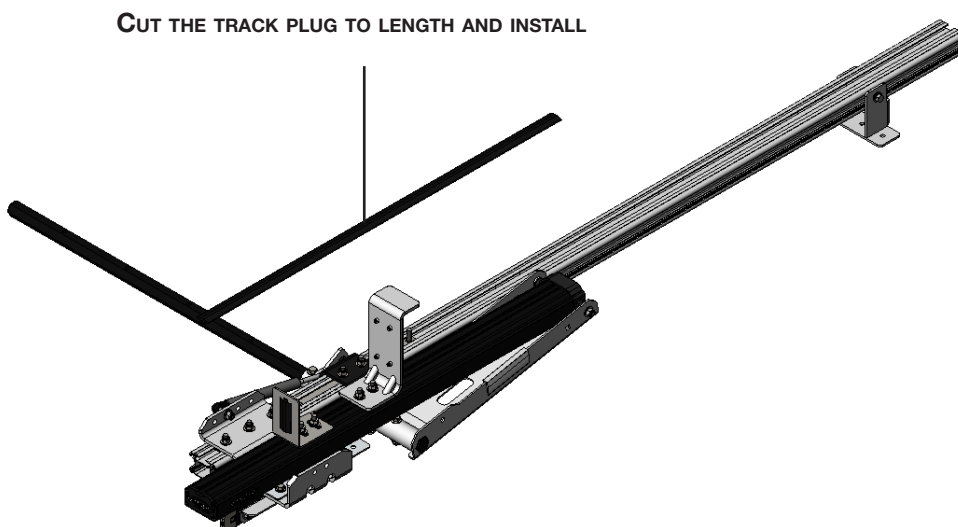
□ 1/2" Wrench 2x

### 1.2.6 Attach the gas spring combo to the ball studs.

**NOTE:** Gas spring combo will have "18-167" printed on it.

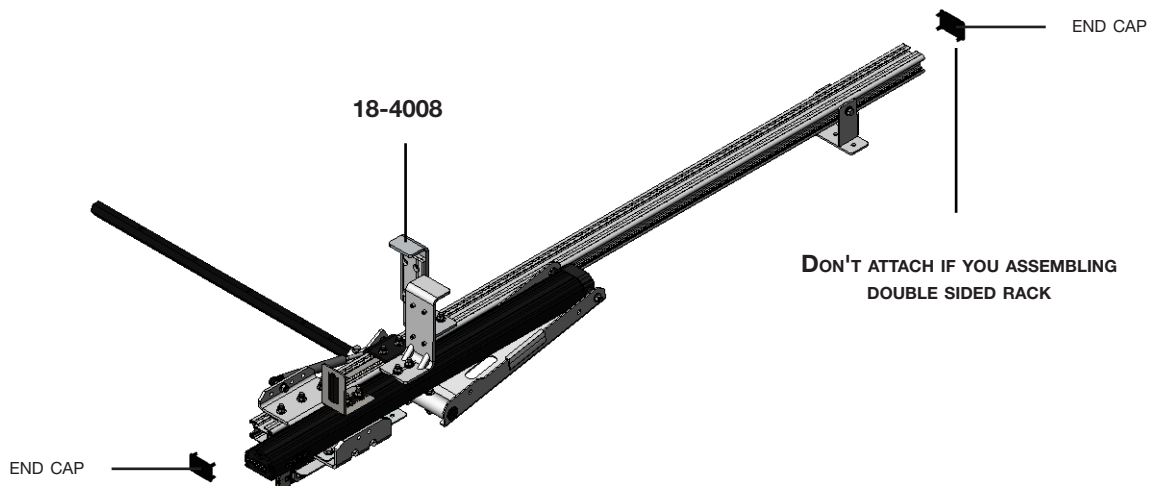


- ### 1.2.7
- Attach one small hook and front ladder retainer to the front mechanism.
  - Cut the track plug to length and install.

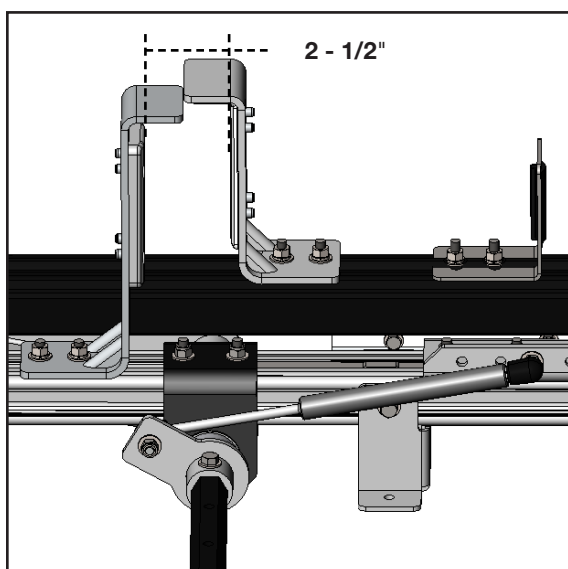
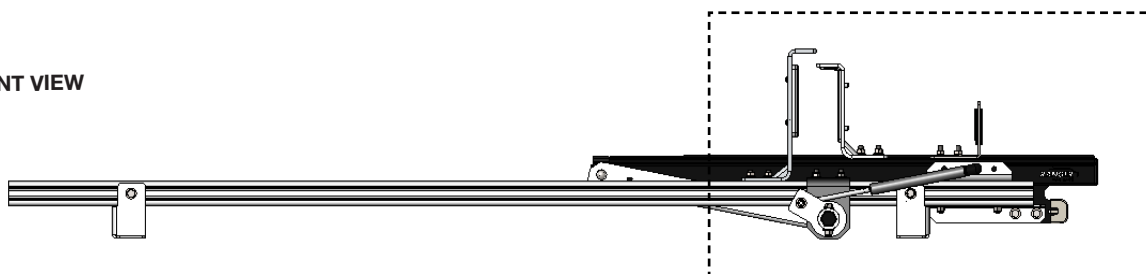


**1.2.8** Attach the long hook to the crossbar, facing to the small hook.

**NOTE:** If you are using a step ladder, the hook position will need to be adjusted.  
(Follow the mounting track installation guide).



**FRONT VIEW**



**NOTE:** Use the insert plate w/ 2 holes.

**TOOLS**

- ☐ Cordless Impact
- ☐ 1/2" Socket

**FASTENERS USED**

**2x ( 17 ft • lbs )**

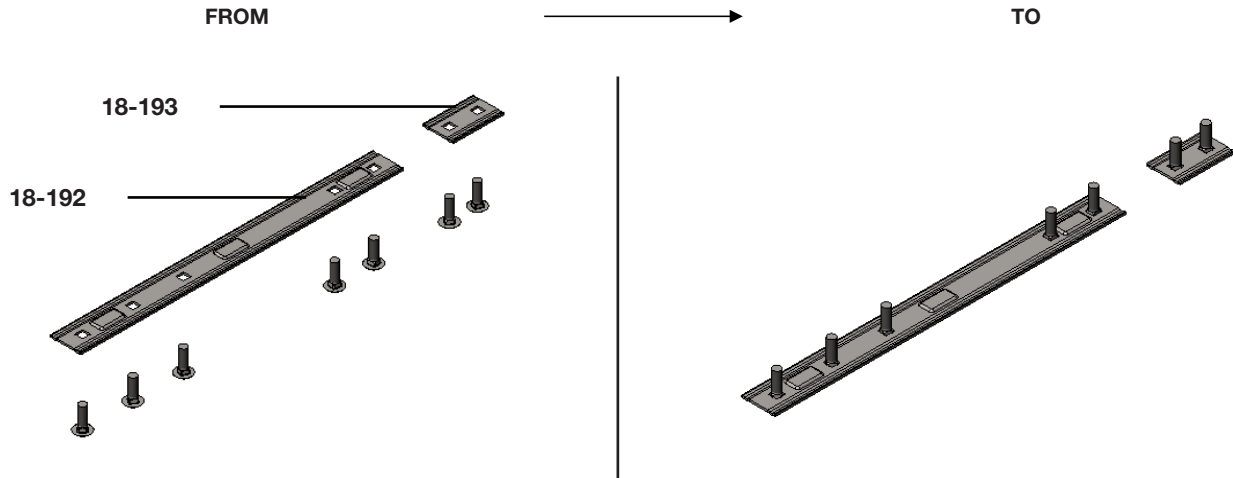


- #94-105 Hex Nut 5/16"
- #98-123 Lock Washer 5/16"
- #98-117 Flat Washer 5/16"
- #90-491 Carriage Bolt 1"

# PHASE 1 – ASSEMBLY

## 1.3 REAR CROSSBAR ASSEMBLY

1.3.1 Attach carriage bolts to the insert plate.



### FASTENERS USED

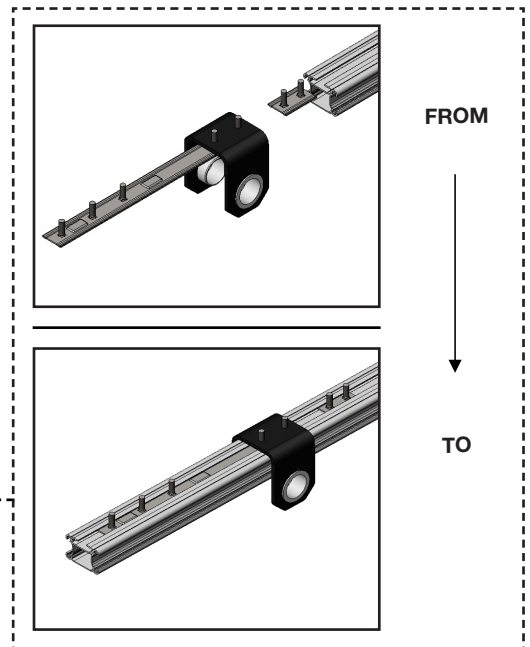
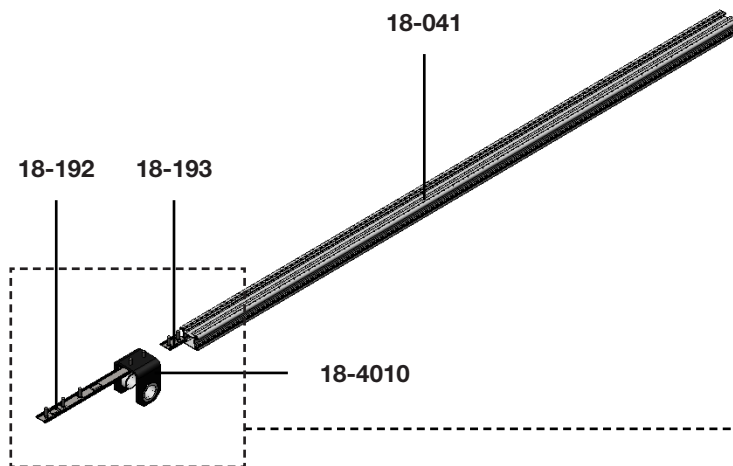
7x



#90-491 Carriage Bolt 1"

1.3.2 Slide the insert plate to the crossbar w/ shaft support bracket.

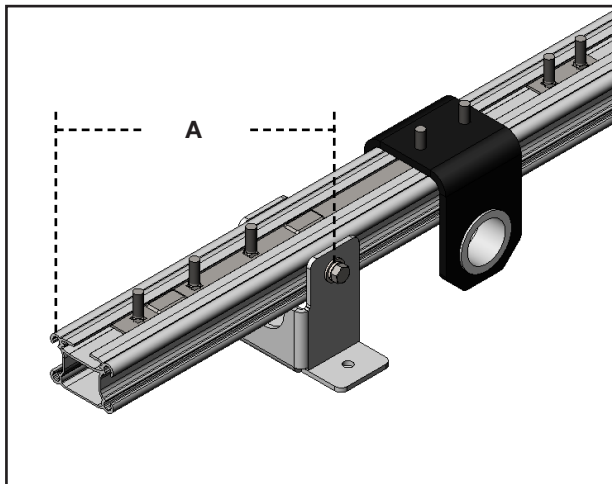
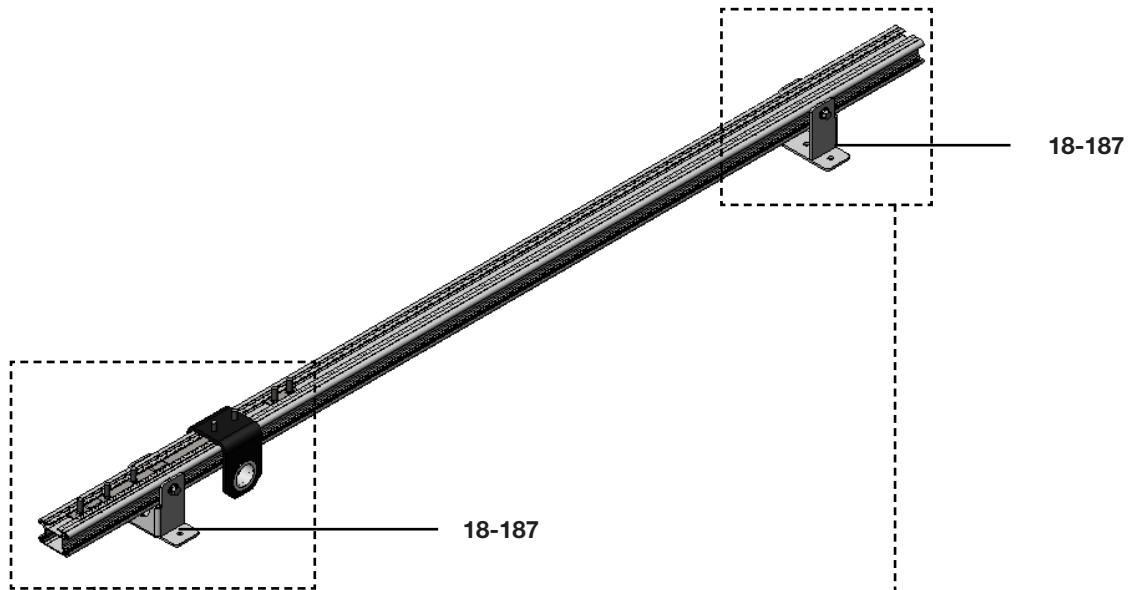
**NOTE:** Repeat this step on the other side of the crossbar if you are assembling a double sided rack.





**1.3.3** Attach the 2 feet to the crossbar.

FOOT PLACEMENT GUIDE	
VEHICLE	DIMENSION ( A )
NISSAN NV	7"
SPRINTER	10" HIGH ROOF, 6 - 1/2" STANDARD ROOF
TRANSIT 130" WB	8 - 7/8"
TRANSIT 148" & 148" EXT. WB	8 - 7/8"
PROMASTER 118" WB	7 - 1/16"
PROMASTER 136" WB	7 - 1/16"
PROMASTER 159" WB	7 - 1/16"
PROMASTER 159" EXT. WB	7 - 1/16"



**TOOLS**

- ☐ Cordless Impact
- ☐ 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"

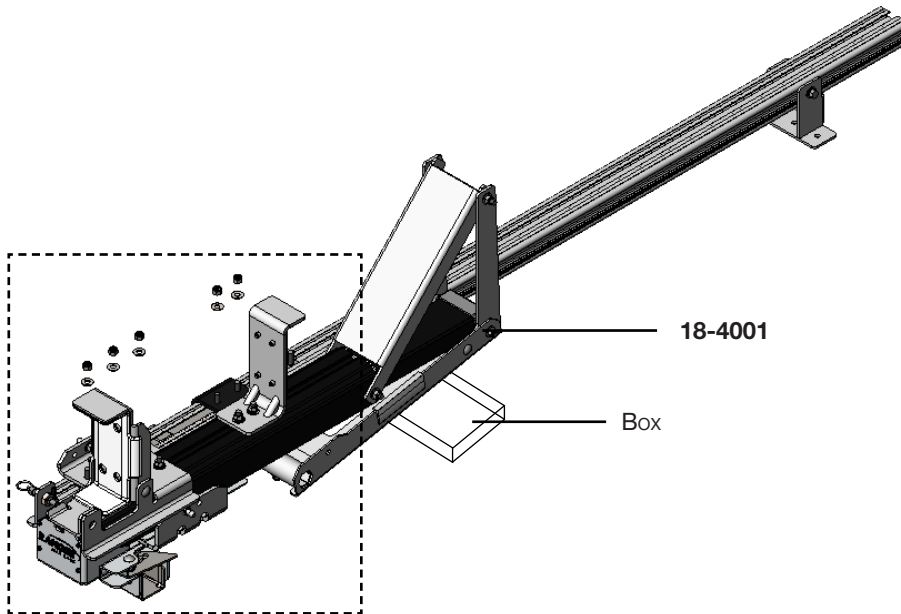
#98-117 Flat Washer 5/16"

#Channel Nut 5/16"

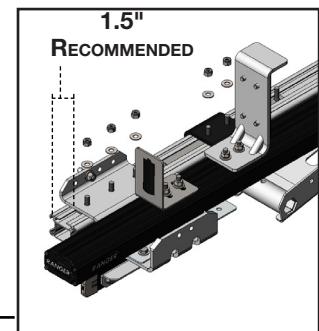
**1.3.4** Attach the passenger side rear mechanism to the crossbar using the insert plate w/ 5 holes, then add flat washers and lock nuts to the shaft support bracket.



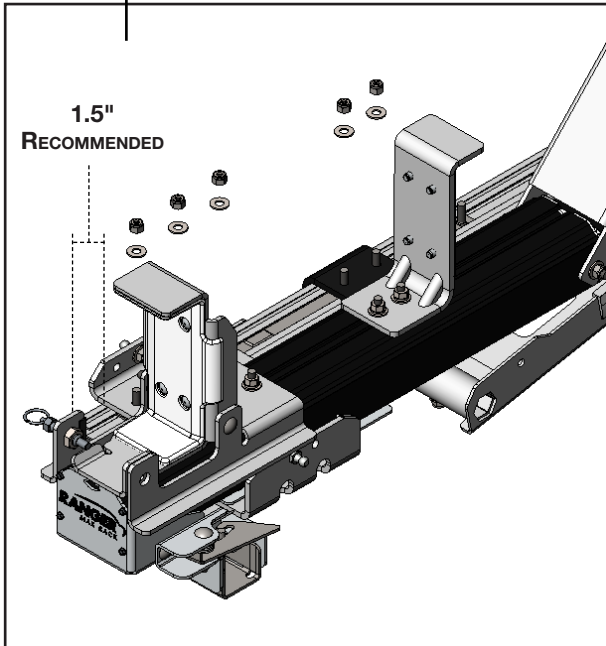
**TIPS:** • Use a box to support the mechanism to facilitate assembly.



**NOTE:** Front & rear should have same dimension.



**1.5"**  
**RECOMMENDED**



#### TOOLS

- Cordless Impact
- 1/2" Socket

#### FASTENERS USED

**5x ( 17 ft • lbs )**



#94-111 Lock Nut 5/16"



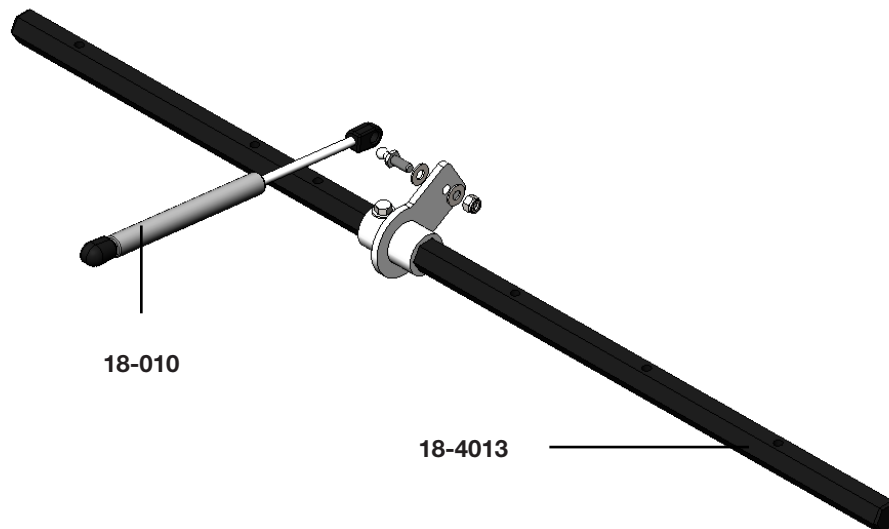
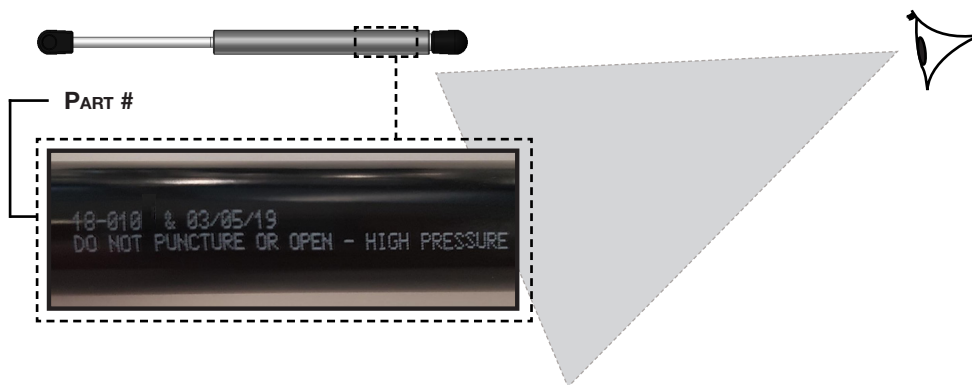
#98-117 Flat Washer 5/16"



#90-491 Carriage Bolt 1"

**1.3.5** Attach the gas spring to the rear linkage.

**NOTE:** Gas spring will have "18-010" printed on it.



#### TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket
- ☐ 1/2" Wrench

#### FASTENERS USED

**1x ( 17 ft • lbs )**



#40-665 Ball Stud 3/4"



#98-117 Flat Washer 5/16"

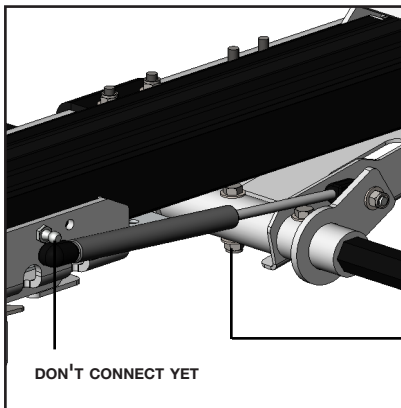
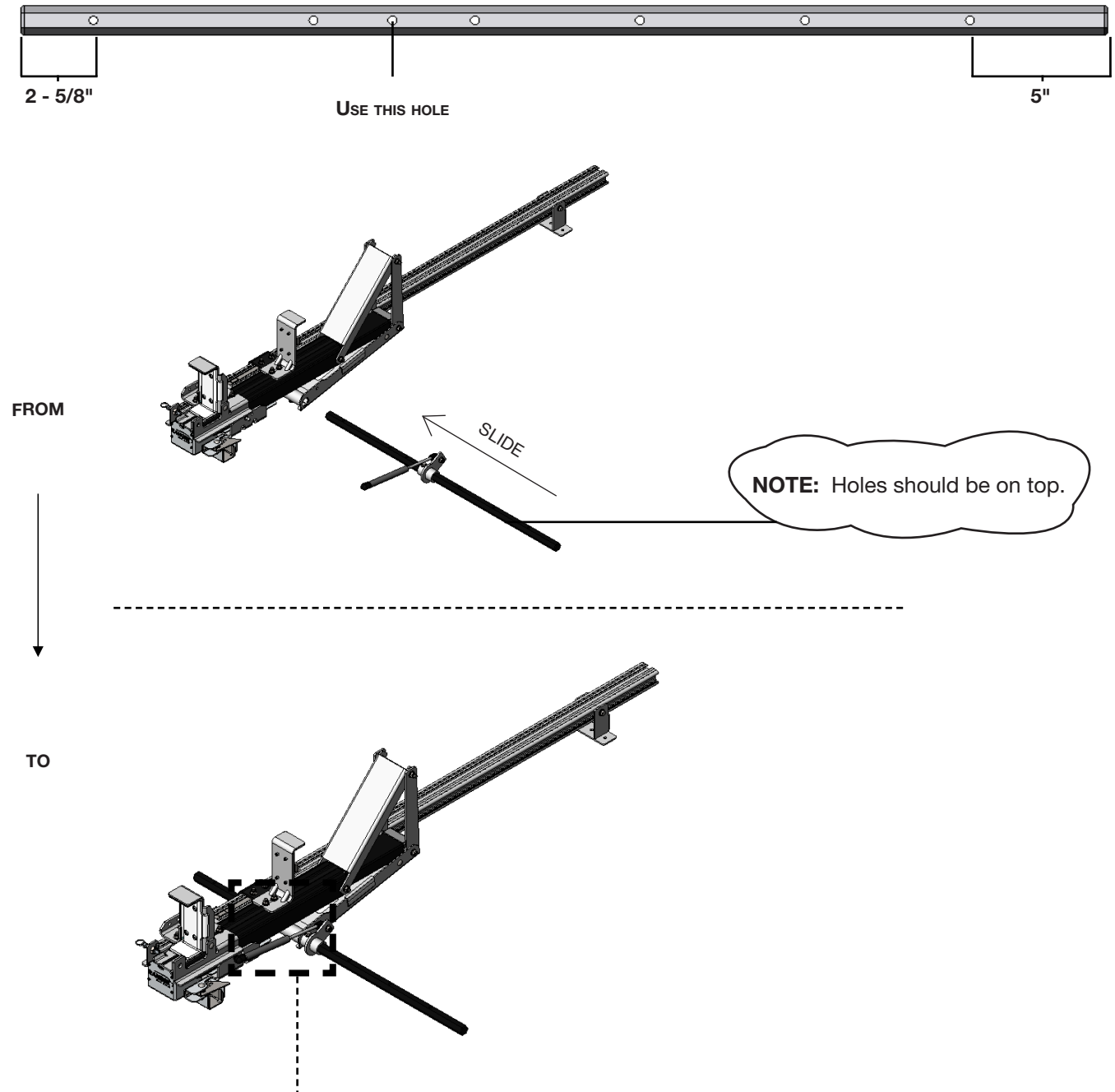


#98-117 Flat Washer 5/16"

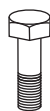


#94-111 Lock Nut 5/16"

**1.3.6** Slide the pivot bar with rear linkage through the arm and shaft support bracket, then attach the pivot bar to the arm.



**FASTENERS USED**  
1x ( 17 ft • lbs )



#90-225 Hex Bolt 2"



#98-117 Flat Washer 5/16"



#98-117 Flat Washer 5/16"

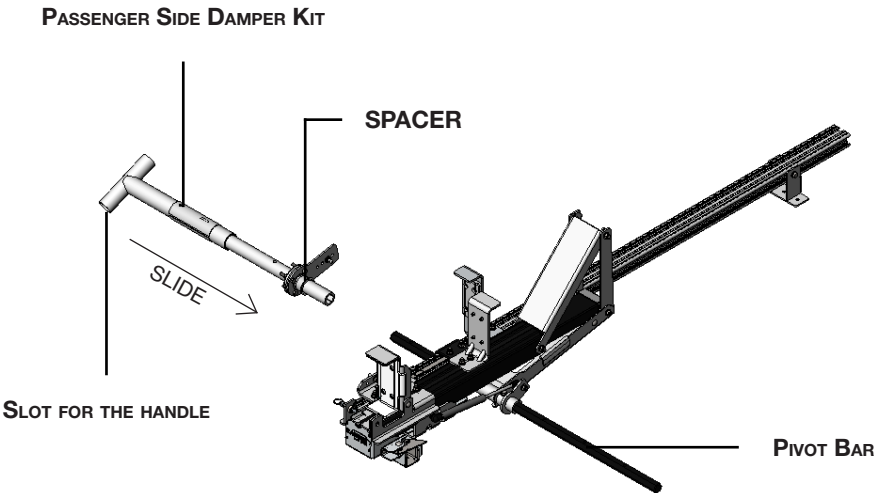


#94-111 Lock Nut 5/16"

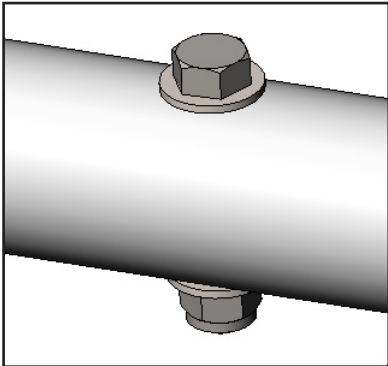
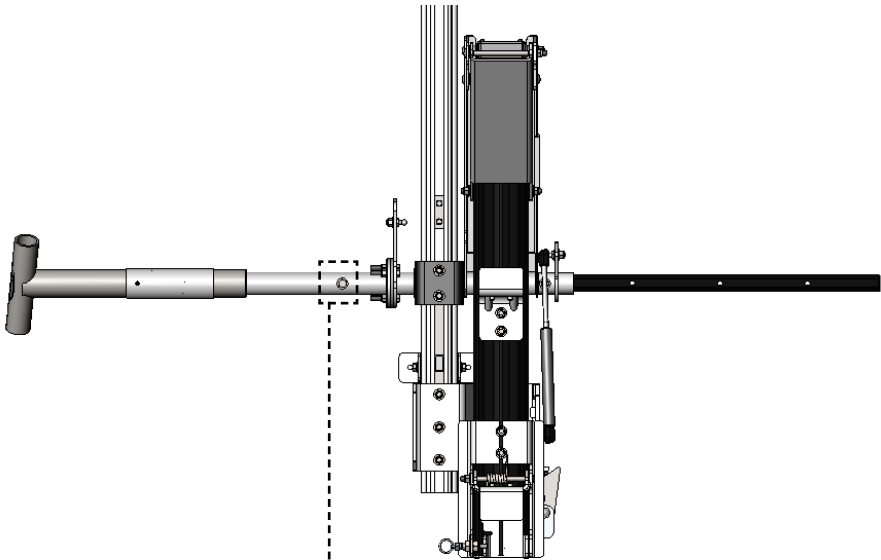
**TOOLS**

□ 1/2" Wrench 2x

**1.3.7** Slide the passenger side damper kit to the pivot bar, then attach the passenger side damper kit to the pivot bar.



**TOP VIEW**



**FASTENERS USED**  
**1x ( 17 ft • lbs )**

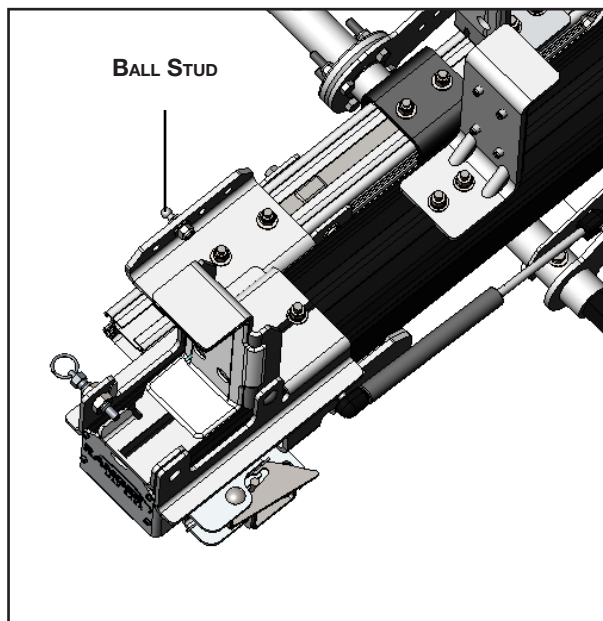
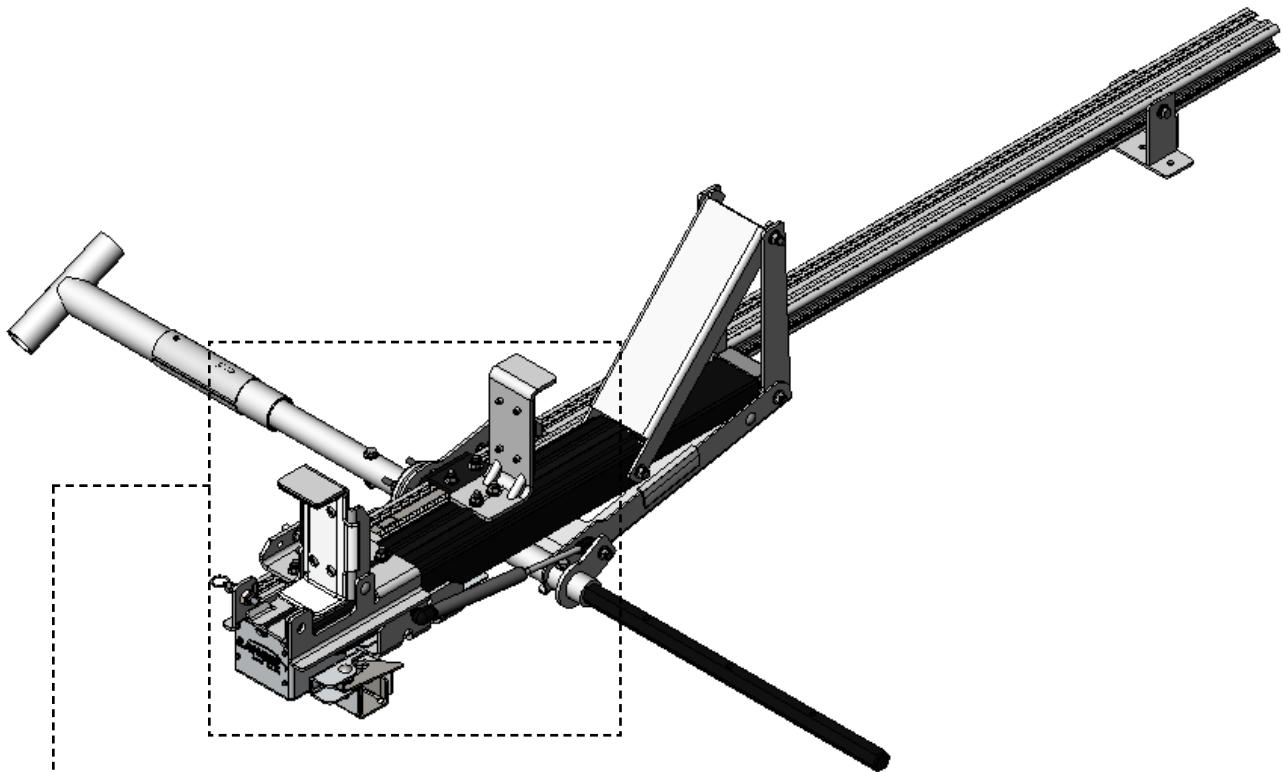


- #90-225 Hex Bolt 2"
- #98-117 Flat Washer 5/16"
- #98-117 Flat Washer 5/16"
- #94-111 Lock Nut 5/16"

**TOOLS**

- ☐ Cordless Impact
- ☐ 1/2" Socket
- ☐ 1/2" Wrench

**1.3.8** Attach ball stud to the passenger side damper kit and rear mechanism frame.



**TOOLS**

- ☐ Cordless Impact
- ☐ 1/2" Socket
- ☐ 1/2" Wrench x2

**FASTENERS USED**

**2x ( 17 ft • lbs )**



#40-665 Ball Stud 3/4"

#98-117 Flat Washer 5/16"

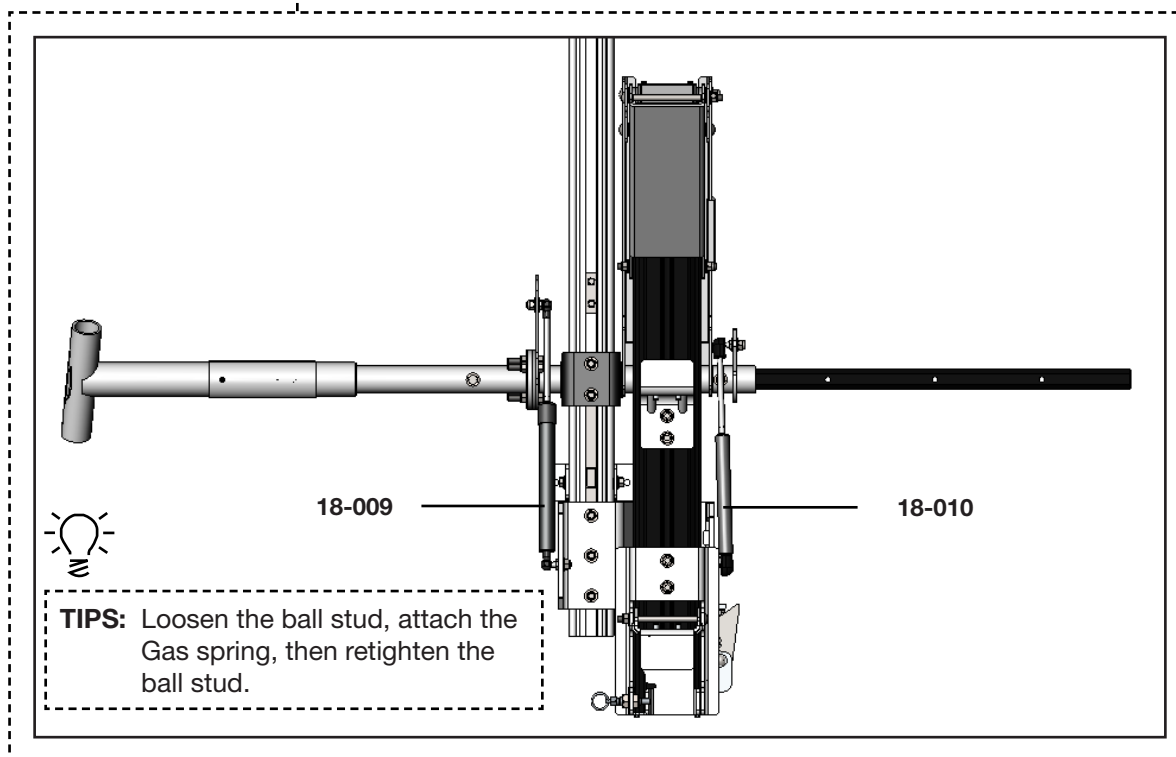
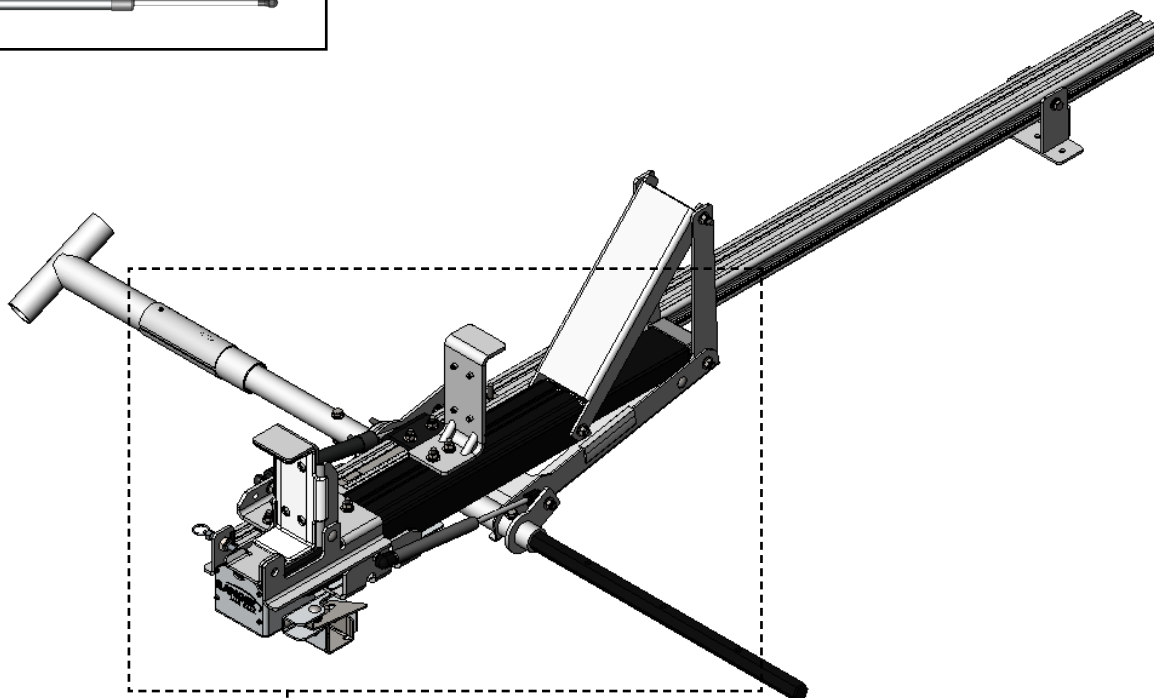
#98-117 Flat Washer 5/16"

#94-111 Lock Nut 5/16"

### 1.3.9 Attach the damper and gas spring to the ball stud.

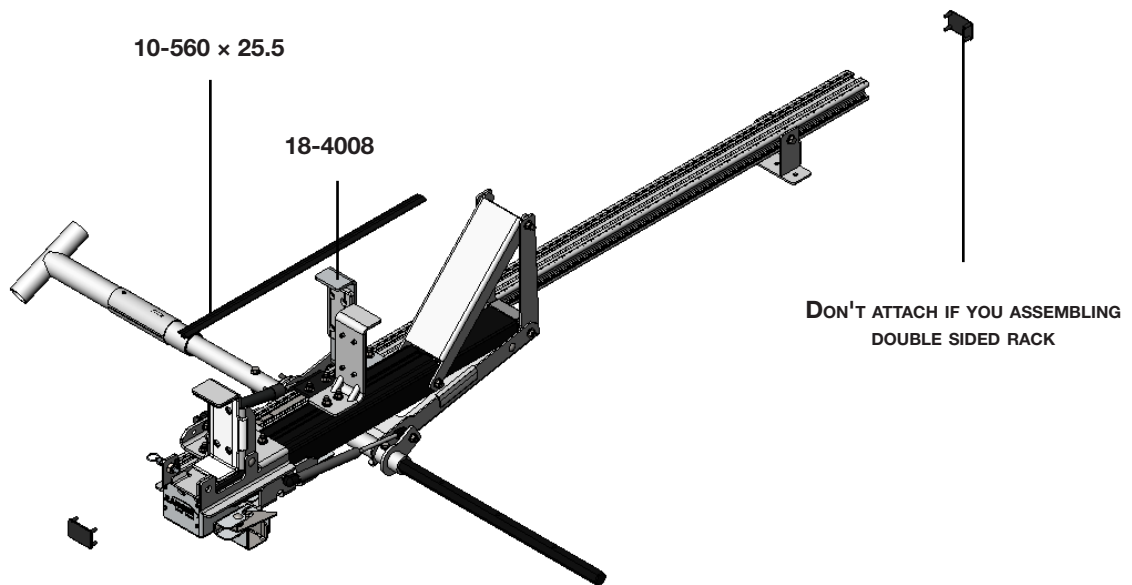
#### NOTE:

**DAMPER: YOU CAN COMPRESS**

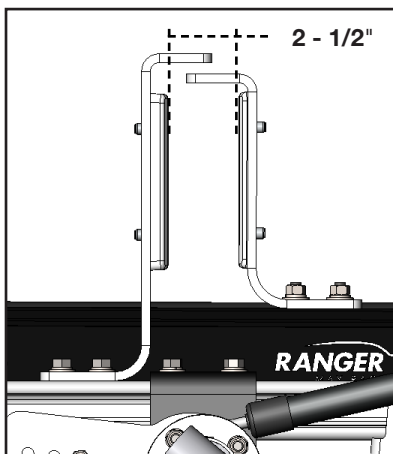
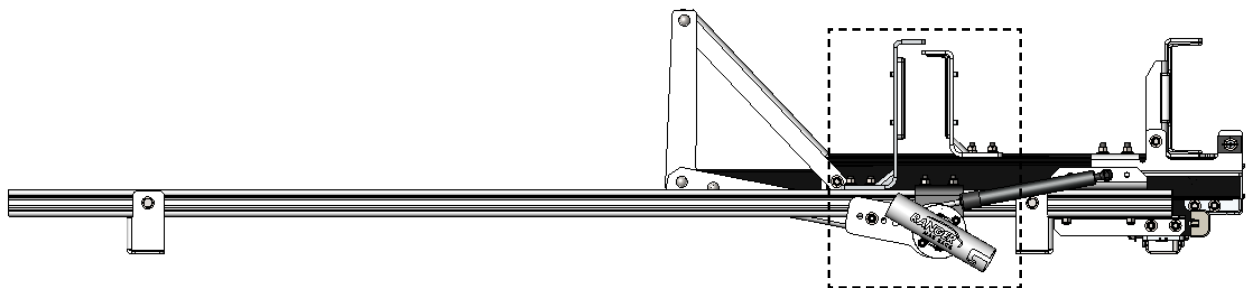


- 1.3.10** • Attach the long hook to the crossbar, facing to the small hook.  
• Cut the track plug to length and install.

**NOTE:** If you are using a step ladder, the hook position will need to be adjusted.  
(Follow the mounting track installation guide).



#### FRONT VIEW



#### TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket

#### FASTENERS USED

**2x ( 17 ft • lbs )**



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

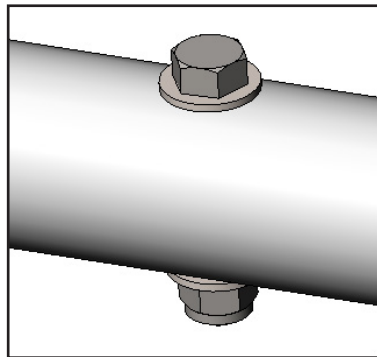
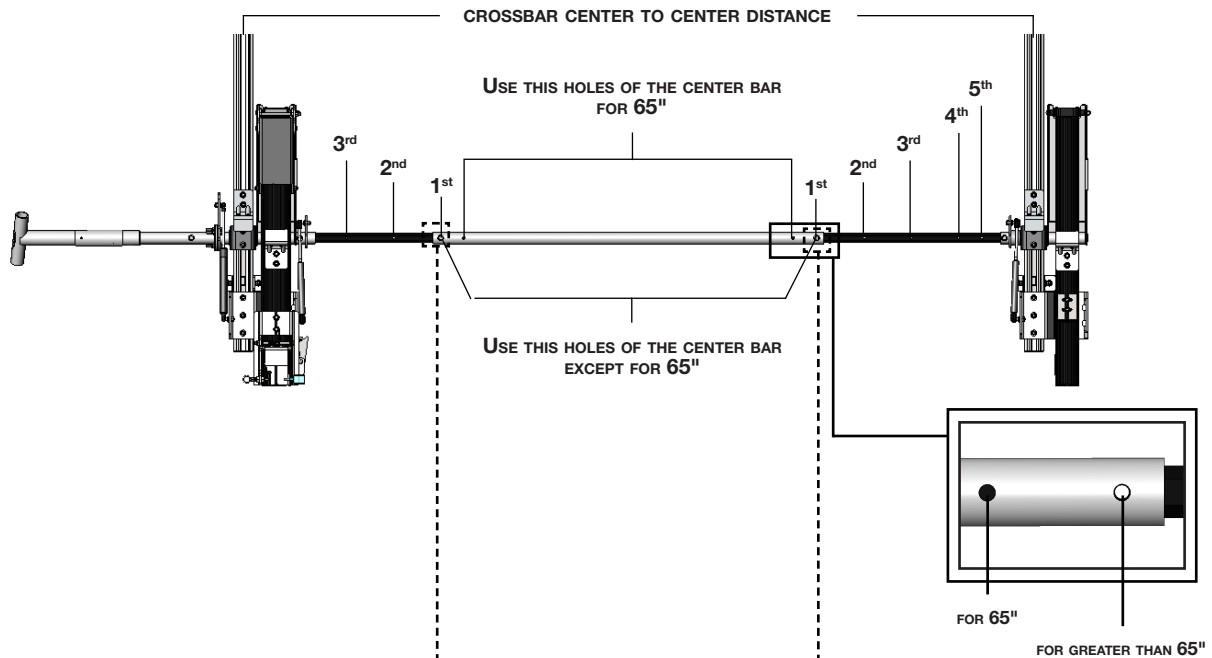


# PHASE 1 – ASSEMBLY

## 1.4 FOR ASSEMBLY WITH OVERHEAD LIFT

1.4.1 Attach the ends of the front and rear bars to the center tube.

**NOTE:** Skip this step if you don't have an overhead lift or if you have a Max Rack double side.



### FASTENERS USED 2x ( 17 ft • lbs )



- #90-225 Hex Bolt 2"
- #98-117 Flat Washer 5/16"
- #98-117 Flat Washer 5/16"
- #94-111 Lock Nut 5/16"

### TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket
- ☐ 1/2" Wrench

### RECOMMENDED SET-UP

VEHICLE	CROSSBAR CENTER TO CENTER DISTANCE	LADDER SIZE
NISSAN NV	65" ( 3 <sup>RD</sup> & 4 <sup>TH</sup> HOLES )	UP TO EXTENSION 24' & STEP 8' TO 10' ONLY
FORD TRANSIT	65" ( 3 <sup>RD</sup> & 4 <sup>TH</sup> HOLES )	UP TO EXTENSION 24' & STEP 8' TO 10' ONLY
Mercedes-Benz SPRINTER	65" ( 3 <sup>RD</sup> & 3 <sup>RD</sup> HOLES )	UP TO EXTENSION 24' & STEP 8' TO 10' ONLY
RAM PROMASTER	65" ( 3 <sup>RD</sup> & 3 <sup>RD</sup> HOLES )	UP TO EXTENSION 24' & STEP 8' TO 10' ONLY

### FOR LONGER EXTENSION LADDER SET-UP

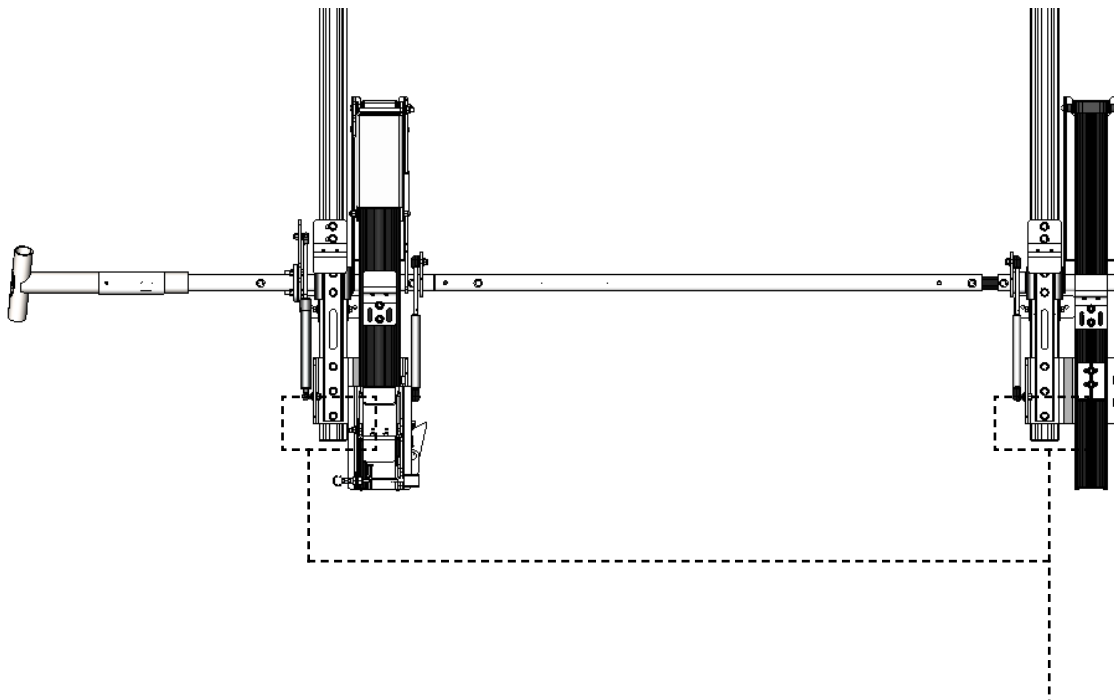
WORKS ONLY ON: FORD TRANSIT ( 148" & 148" EX. WB ), RAM PROMASTER ( 136", 159" & 159" EX. WB ) & MERCEDES-BENS SPRINTER.

CROSSBAR CENTER TO CENTER DISTANCE	LADDER SIZE
89" ( 2 <sup>ND</sup> & 2 <sup>ND</sup> HOLES )	UP TO EXTENSION 32'

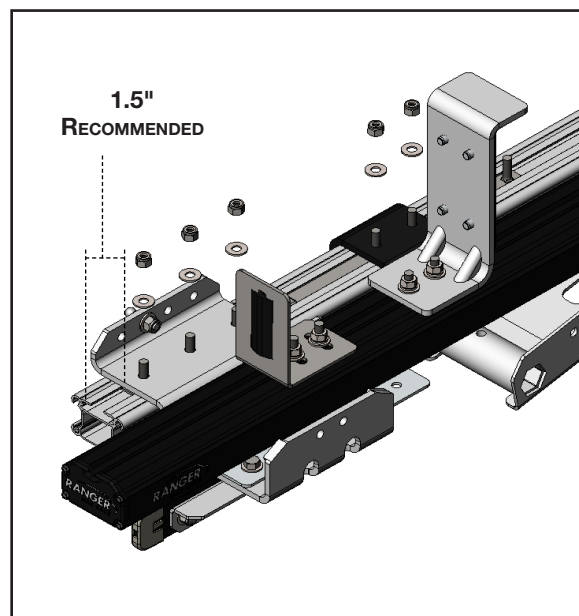
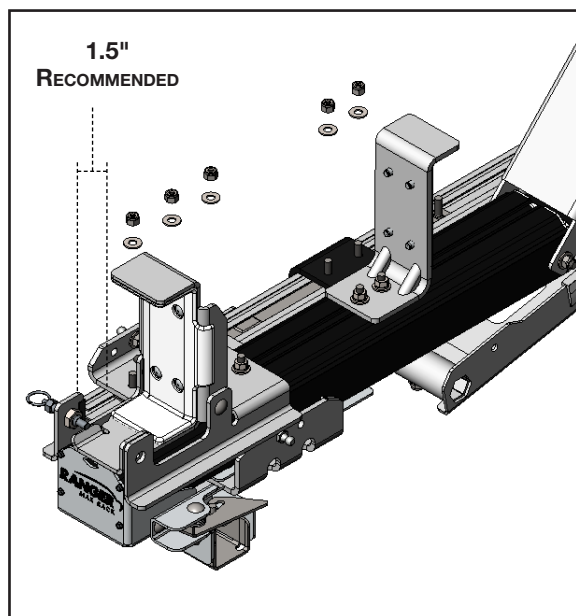
# PHASE 1 – ASSEMBLY

## 1.5 ASSEMBLY VALIDATION

**1.5.1** Validate your assembly to ensure smooth operation of your Max Rack.



**NOTE:** Front & Rear Should have same dimension.



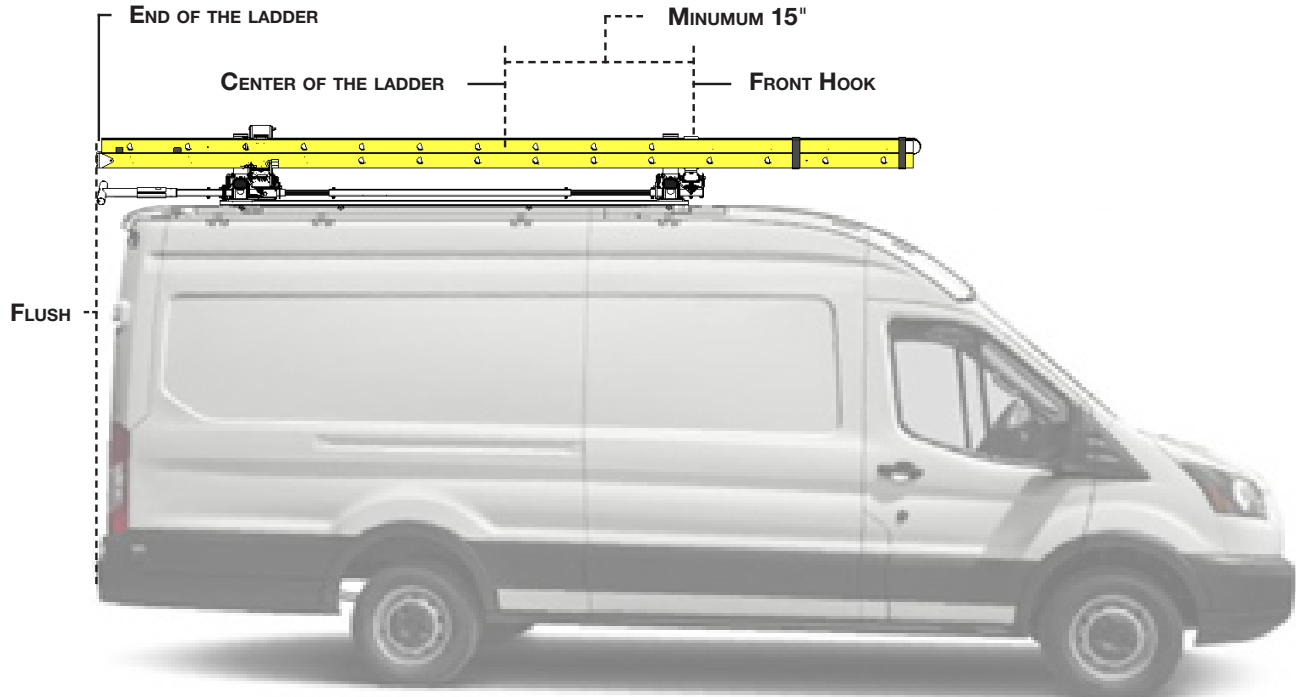
# PHASE 2 – LADDER INSTALLATION

## 2.1 EXTENDED LADDER INSTALLATION

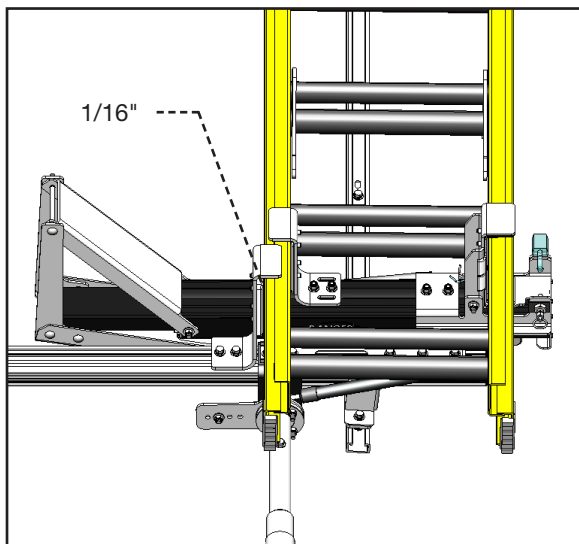
- STEP**
- Place the Max Rack in the down position.
  - Load the ladder onto the Max Rack.

**NOTE:** These conditions must be respected:

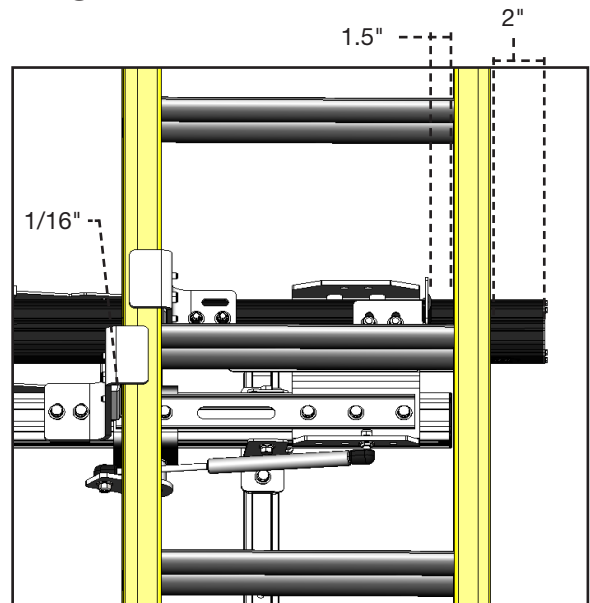
- The arm socket and the ladder cannot extend beyond the rear bumper of the vehicle.
- The center of the ladder must be behind the front hook when the ladder is loaded.



**REAR**



**FRONT**

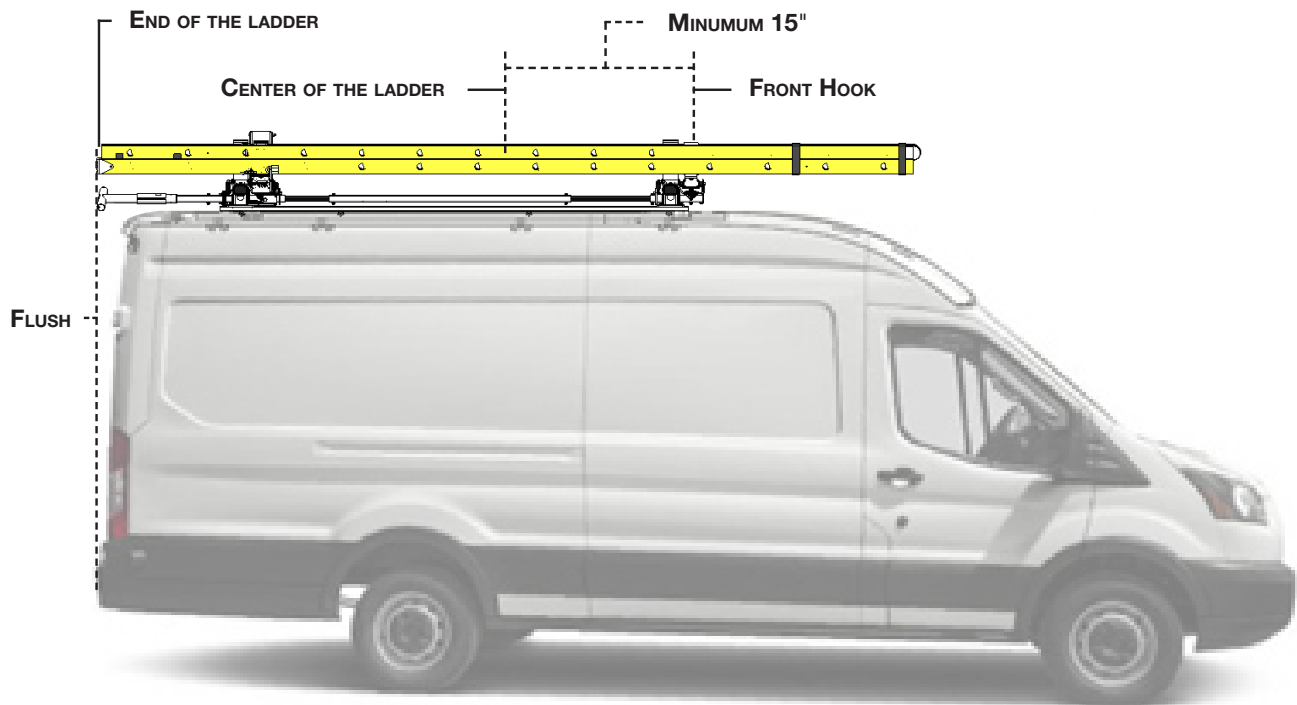


# PHASE 2 – LADDER INSTALLATION

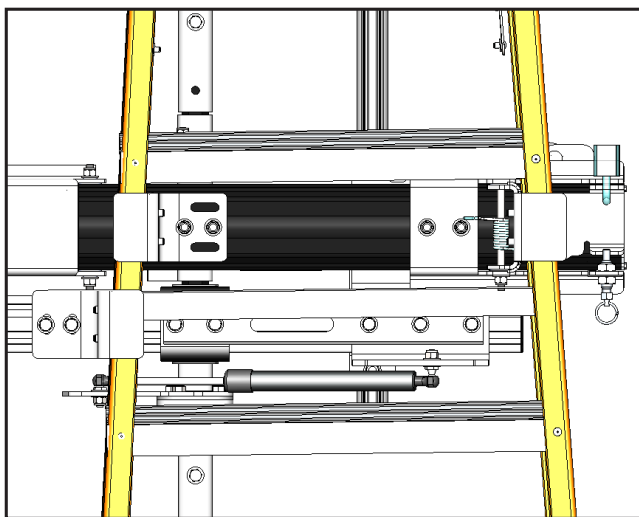
## 2.2 STEP LADDER INSTALLATION

**NOTE:** These conditions must be respected:

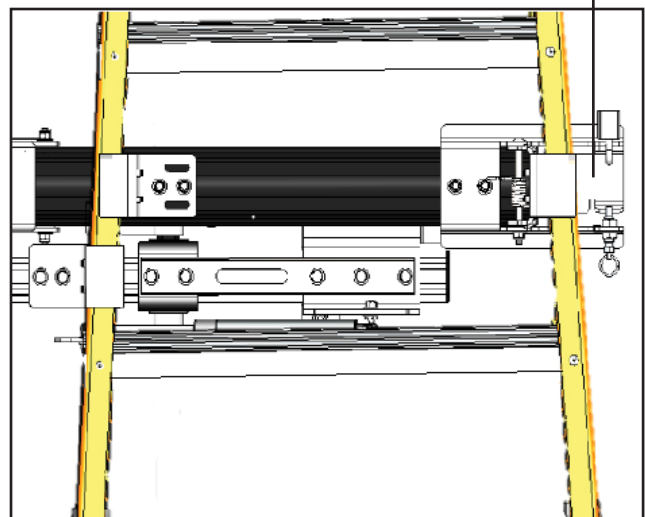
- The arm socket and the ladder cannot extend beyond the rear bumper of the vehicle.
- The center of the ladder must be behind the front hook when the ladder is loaded.



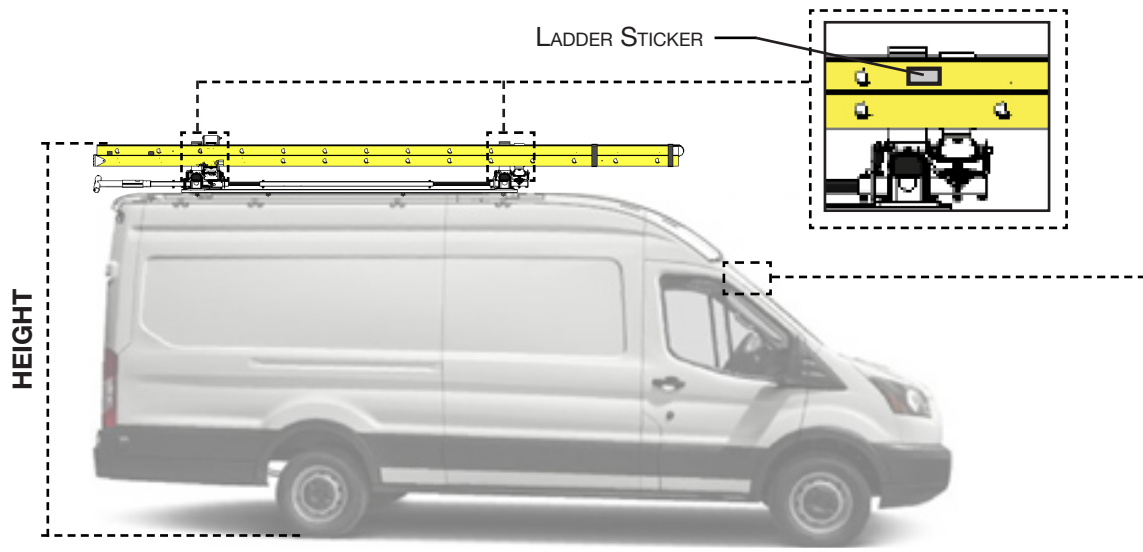
### 8' STEP LADDER



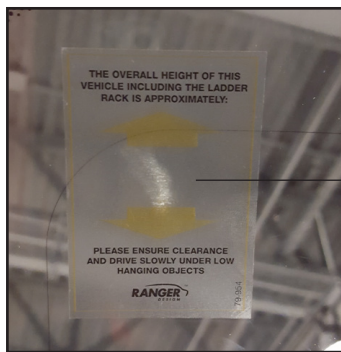
### 10' STEP LADDER



- NOTE:
- After installation be sure to put the **Operator's Manual** in the cab for the end user.
  - If you don't have the ladder of the end user, explain to end user where to put the **Ladder sticker**.



#### MAX RACK HEIGHT LABEL INSTALLATION INSIDE



**NOTE:** Make sure that the label doesn't block the driver's visibility while driving.

Write the height of the vehicle with the Max Rack here.

**“You have successfully completed Operation 2  
Max Rack Passenger Side Mechanism!”**

**Open the driver side mechanism (18-U1815) box or follow the Install Guide of the mounting track to install the Max Rack on your vehicle.**

**Thank you for doing business with us.”**

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

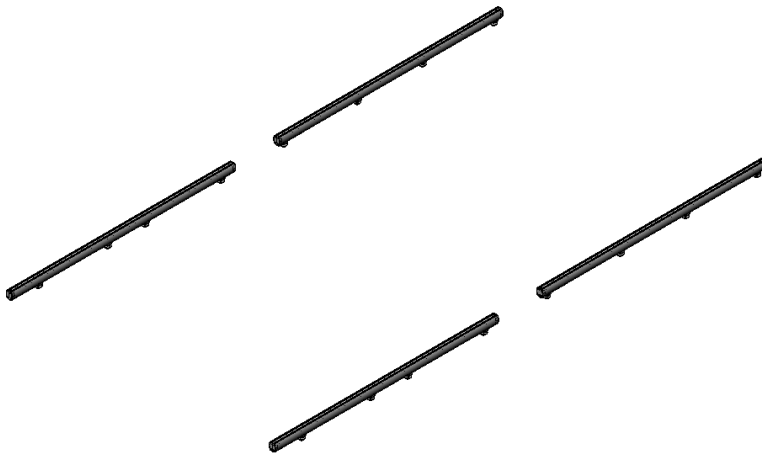


# INSTALLATION GUIDE

WITH OEM TRACKS



WITH RANGER DESIGN TRACKS



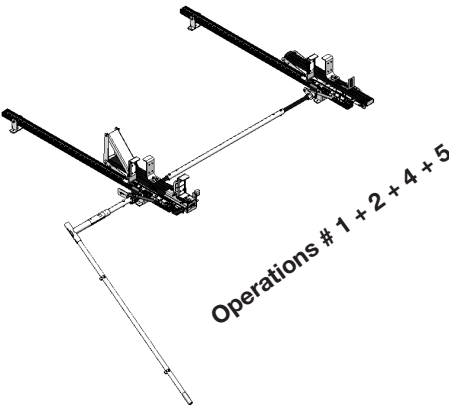
## 18-U0018 Mounting Tracks

Mercedes Sprinter ( Standard & High Roof )

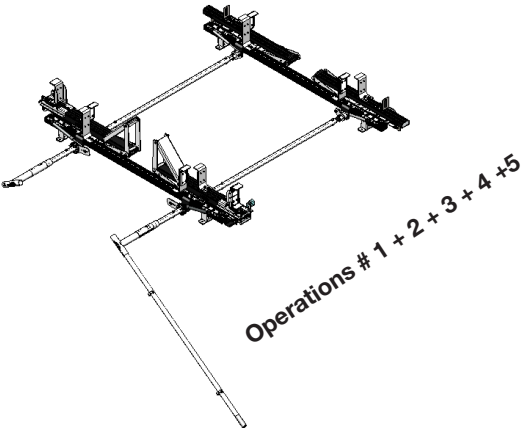


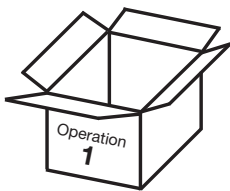

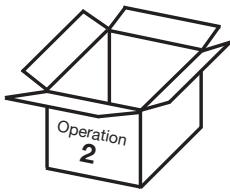
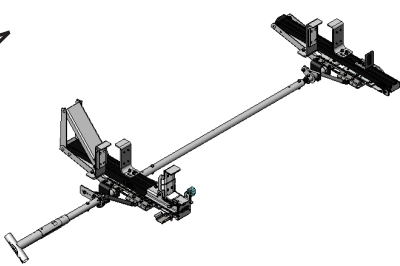
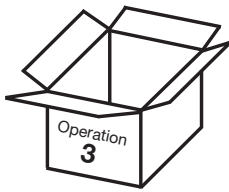
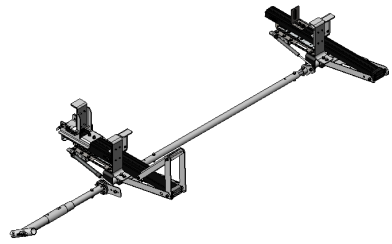
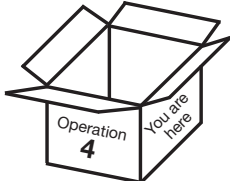
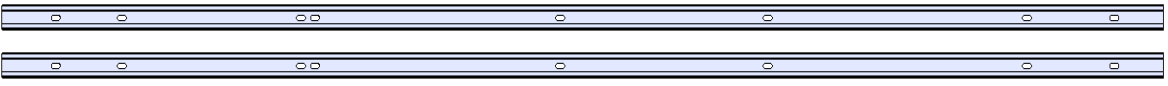
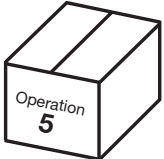

# ORDER OF OPERATION

## MAX RACK SINGLE SIDE



## MAX RACK DOUBLE SIDE



 <p>Operation 1</p>	<div>18-U1806</div> 
<div>18-U1810</div>  <p>Operation 2</p> 	<div>BOX 5 OF 5</div> <div>18-U1815</div>  <p>Operation 3</p>  <div>OPTIONAL: Applicable only for Max Rack Double Side.</div>
 <p>Operation 4</p> <p>You are here</p>	<div>MOUNTING TRACK</div> 
 <p>Operation 5</p>	<div>18-U1807</div> 

# QUICK START GUIDE

## Phase 1 - Assembly

❑ 1.1 Setup..... 4 TO 5

## Phase 2 - Installation

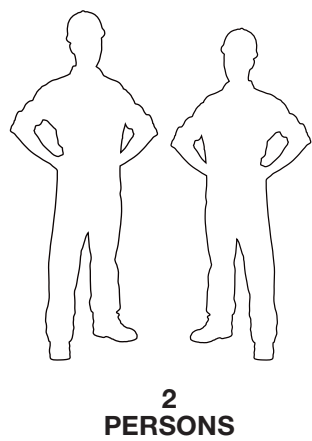
❑ 2.1 Mounting Tracks installation..... 6

❑ 2.2 Max Rack installation..... 7 - 10

## Phase 3 - Adjustment

❑ 3.1 Adjustment for Max Rack..... 11 - 12

# REQUIRED ITEMS FOR COMPLETE MAX RACK & LADDER RACK



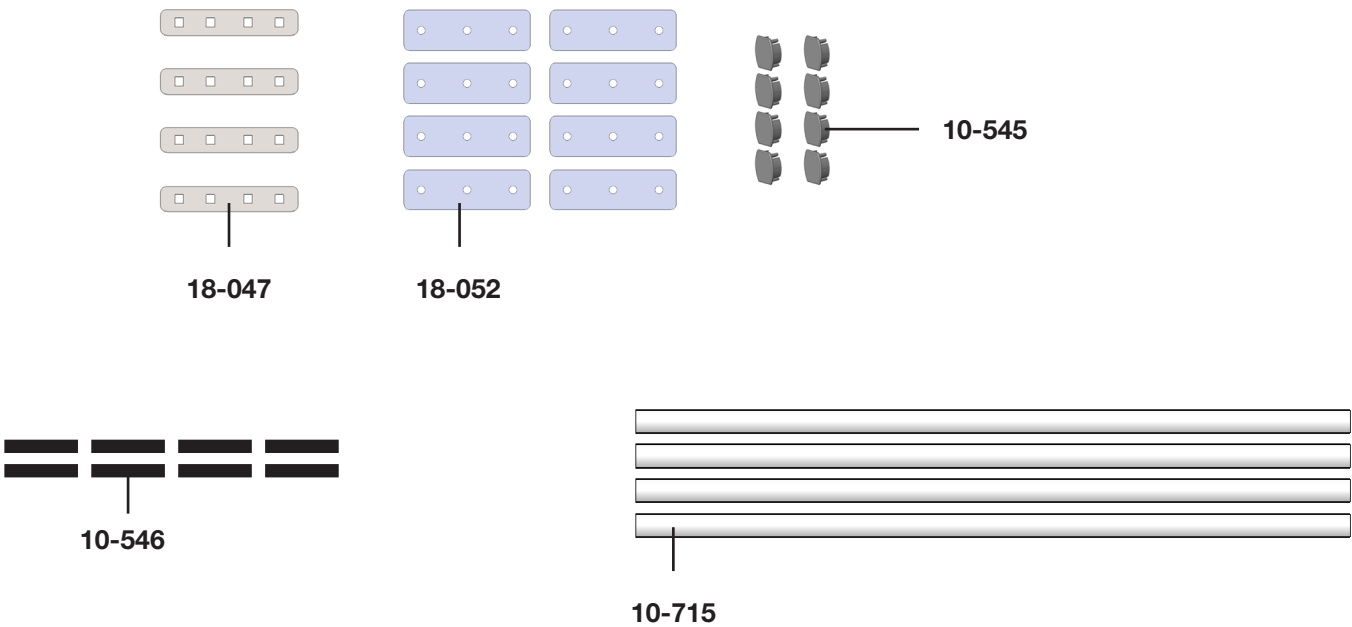
- ❑ Cordless Impact
- ❑ Ratchet
- ❑ Tape Measure
- ❑ Marker
- ❑ Ladder
- ❑ 9/16" Wrench
- ❑ 1/2" Wrench
- ❑ 7/16" Socket
- ❑ 1/2" Socket
- ❑ Sawhorse ( Optional )
- ❑ Box
- ❑ Cutter



# 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.

### WITH OEM TRACKS

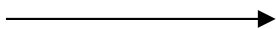
Item No.	Description	Qty.
18-047	Sprinter Support Plate	4
18-052	Shim - Foot	8
96-0018	Installation Fastener Bag	1

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

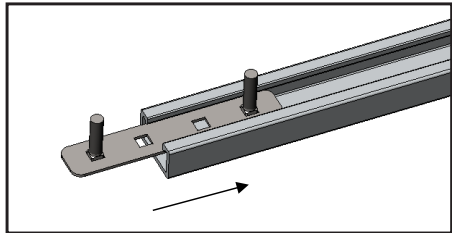
- |   |                              |
|---|------------------------------|
|  | #90-495 Carriage Bolt 1-1/4" |
|  | #98-109 Flat Washer          |
|   | #98-149 Neoprene Spacer      |
|   | #98-169 Flat Washer          |
|  | #98-123 Lock Washer          |
|  | #94-105 Hex Nut              |

# PHASE 2 – INSTALLATION

## 2.1 MOUNTING TRACKS INSTALLATION

2.1.1 Install the hardware onto the mounting tracks.

### WITH OEM TRACKS



#### FASTENERS USED

8x

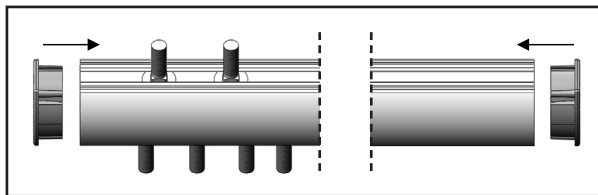


Support  
Plate



#90-503 Carriage Bolt 5/16" x 1-3/4"

### WITH RANGER DESIGN TRACKS



#### FASTENERS USED

8x



#90-495 Carriage Bolt 5/16" x 1-1/4"

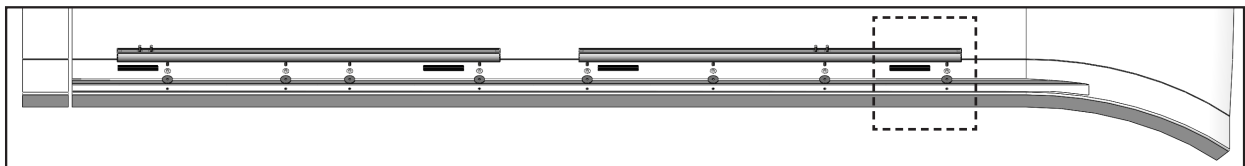
16x



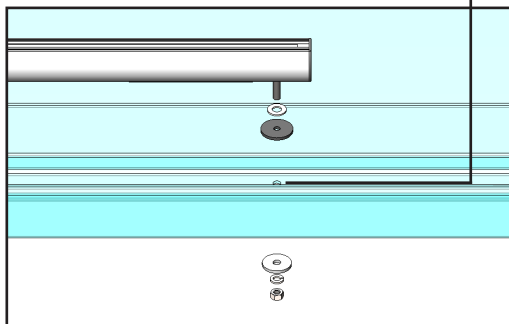
#90-495 Carriage Bolt 5/16" x 1-1/4"

- 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



#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

#### TOOLS

- ☐ Cordless Impact
- ☐ 1/2" Socket



INSIDE

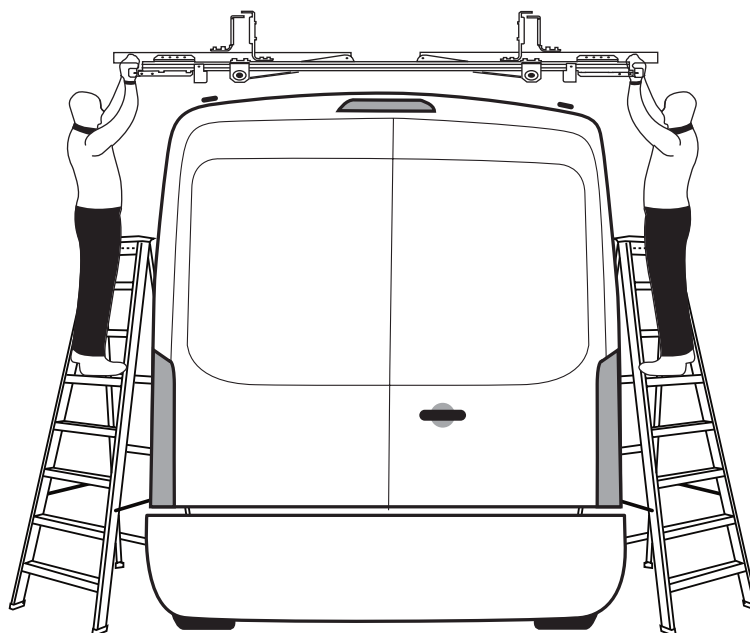
# PHASE 2 – INSTALLATION

## 2.2 MAX RACK INSTALLATION

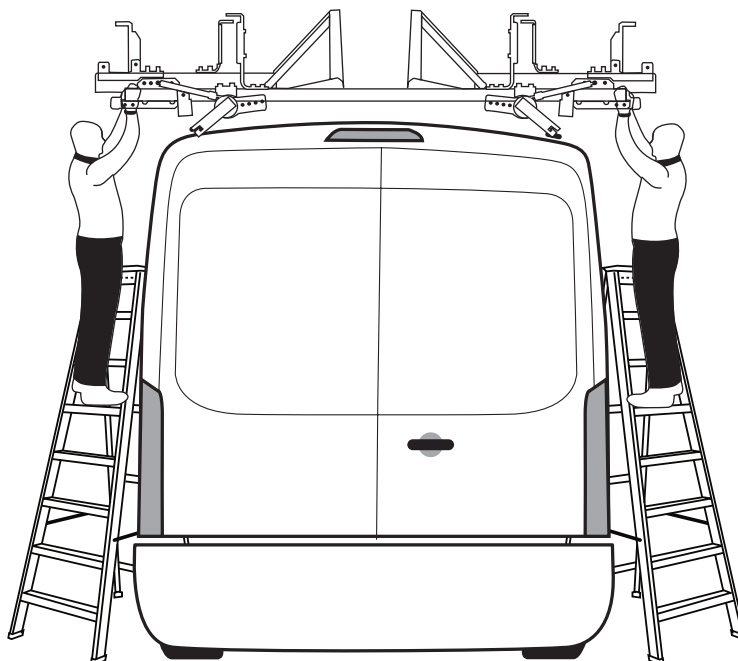
**2.2.1** Position the Max Rack ( **minimum two persons** ) on the vehicle so that the feet are on the tracks.

**NOTE:** If you do not have an overhead lift, lift the front crossbar onto the roof first then the rear crossbar.

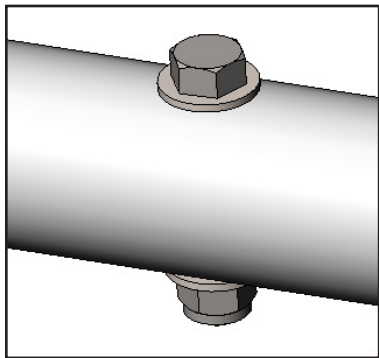
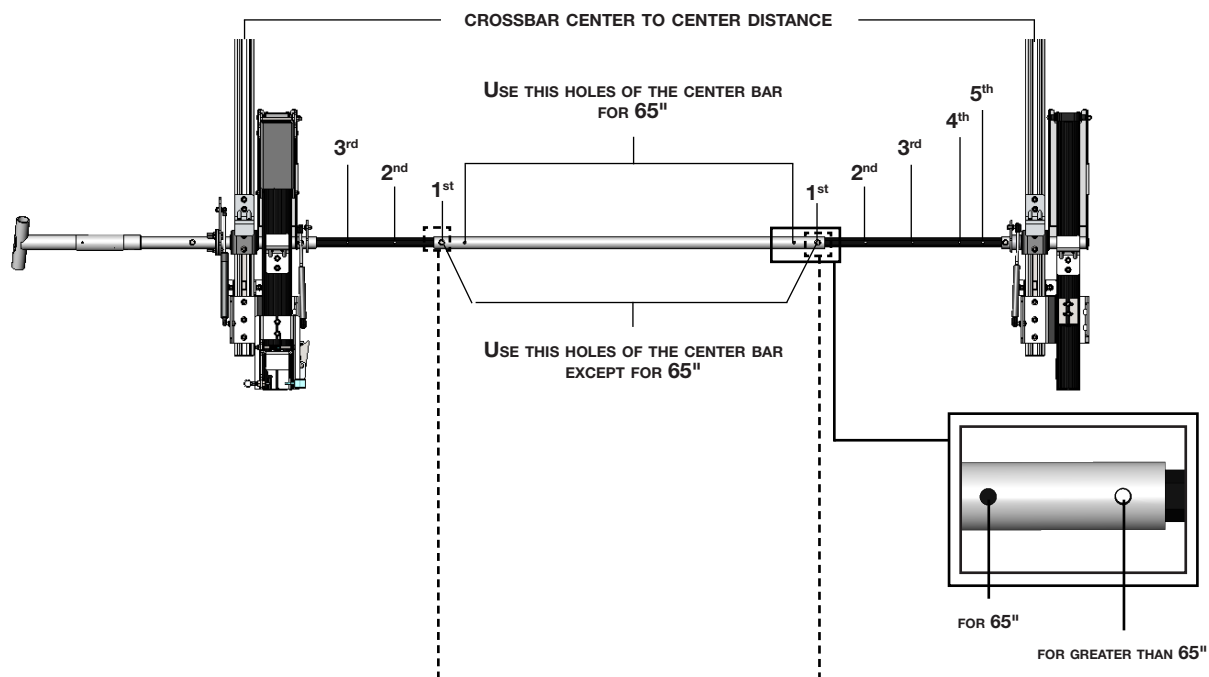
**FRONT CROSSBOW**



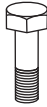



**REAR CROSSBOW**



2.2.2 Attach the ends of the front and rear bars to the center tube.



**FASTENERS USED**  
**2x ( 17 ft • lbs )**

-  #90-225 Hex Bolt 2"
-  #98-117 Flat Washer 5/16"
-  #98-117 Flat Washer 5/16"
-  #94-111 Lock Nut 5/16"

- TOOLS**
- ☐ Cordless Impact
  - ☐ 1/2" Socket
  - ☐ 1/2" Wrench

RECOMMENDED SET-UP

VEHICLE	CROSSBAR CENTER TO CENTER DISTANCE	LADDER SIZE
Mercedes-Benz SPRINTER	65" ( 3 <sup>RD</sup> & 3 <sup>RD</sup> HOLES )	UP TO EXTENSION 24' & STEP 8' TO 10' ONLY

FOR LONGER EXTENSION LADDER SET-UP

WORKS ONLY ON: FORD TRANIT ( 148" & 148" EX. WB ), RAM PROMASTER ( 136", 159" & 159" EX. WB ) & MERCEDES-BENS SPRINTER.

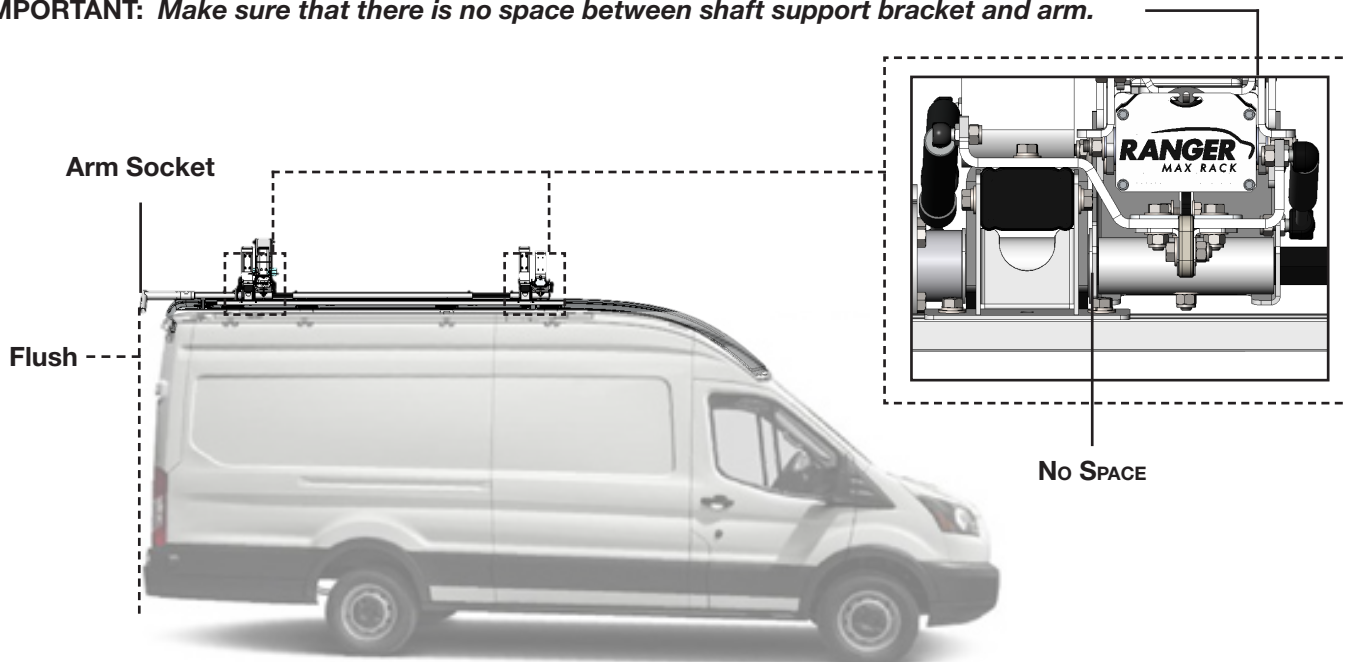
CROSSBAR CENTER TO CENTER DISTANCE	LADDER SIZE
89" ( 2 <sup>ND</sup> & 2 <sup>ND</sup> HOLES )	UP TO EXTENSION 32'

- 2.2.3** • Align the arm socket to the rear bumper of the vehicle.  
 • Attach all the feet w/ shim to the mounting tracks.

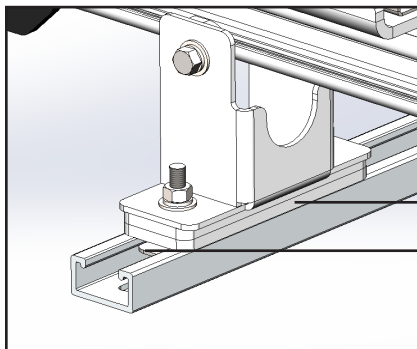
**NOTE:** These conditions must be respected:

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

**IMPORTANT:** *Make sure that there is no space between shaft support bracket and arm.*



### WITH OEM TRACKS



#### TOOLS

- ☐ Ratchet
- ☐ 1/2" Socket

18-052

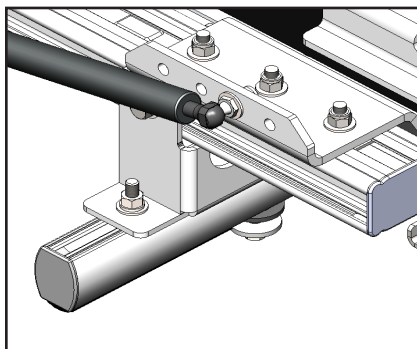
18-047

#### FASTENERS USED

**8x ( 17 ft • lbs )**

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

### WITH RANGER DESIGN TRACKS



#### TOOLS

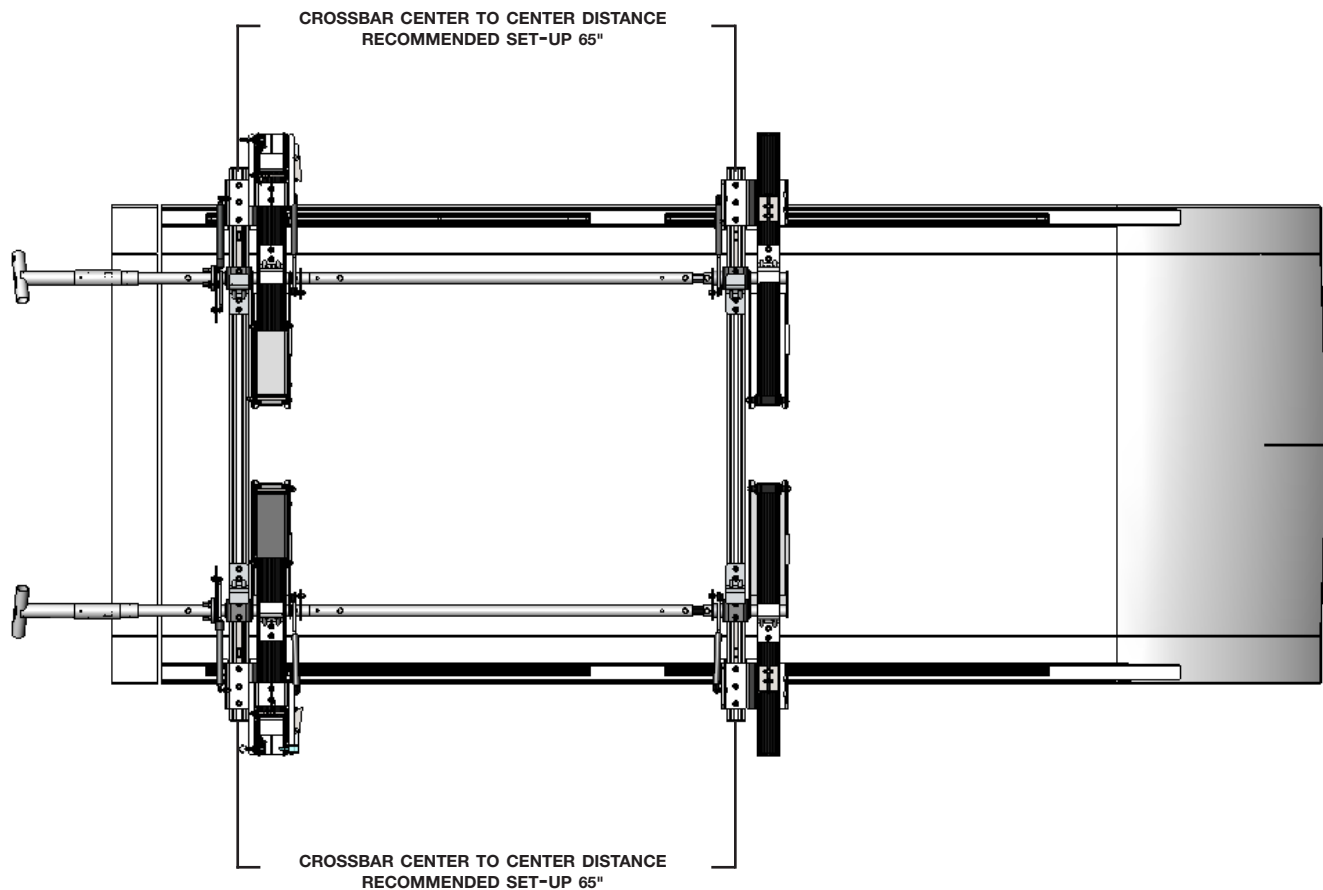
- ☐ Ratchet
- ☐ 1/2" Socket

#### FASTENERS USED

**8x ( 17 ft • lbs )**

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

2.2.4 Before tightening the feet to the mounting track make sure that the 2 crossbar is parallel.



RECOMMENDED SET-UP

VEHICLE	CROSSBAR CENTER TO CENTER DISTANCE	LADDER SIZE
Mercedes-Benz SPRINTER	65" ( 3 <sup>RD</sup> & 3 <sup>RD</sup> HOLES )	UP TO EXTENSION 24' & STEP 8' TO 10' ONLY

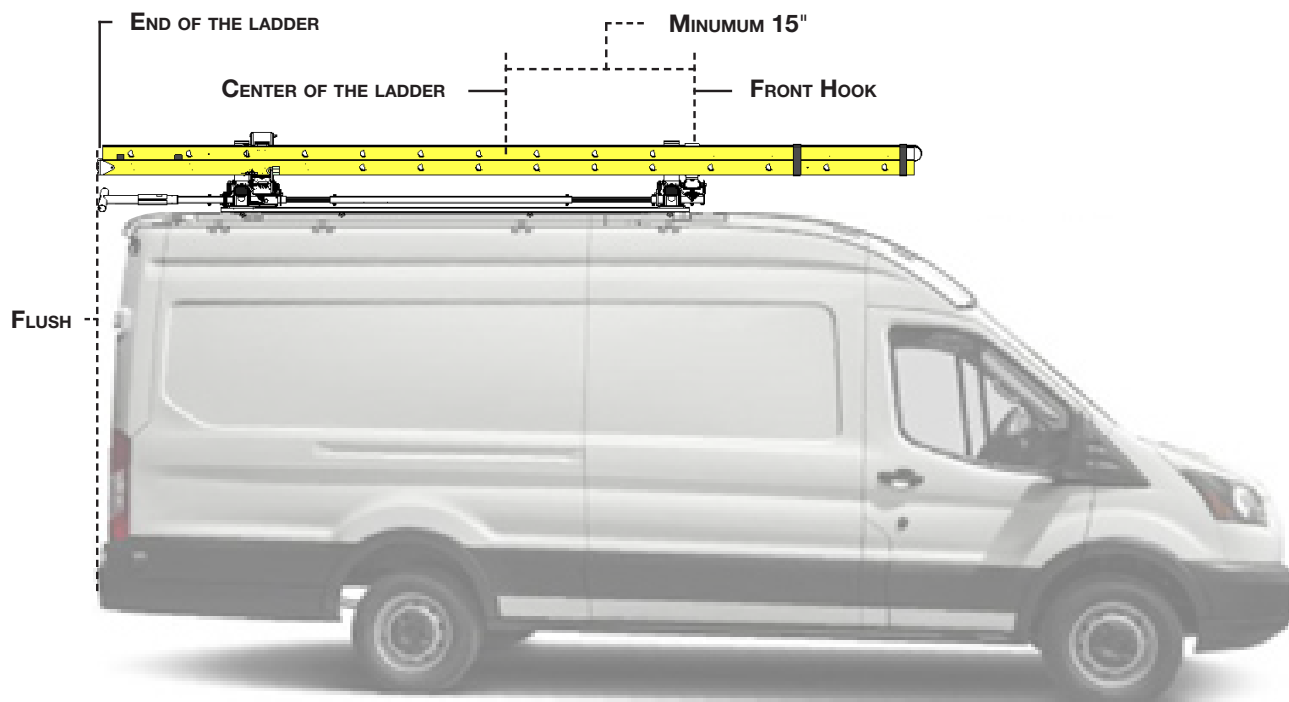
# PHASE 3 – ADJUSTMENT

## 3.1 ADJUSTMENT FOR MAX RACK

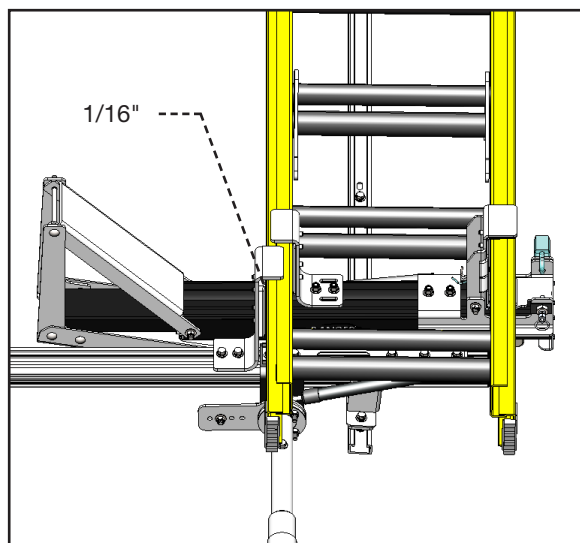
- 3.1.1** • Place the Max Rack in the down position.  
• Load the ladder onto the Max Rack.

**NOTE:** These conditions must be respected:

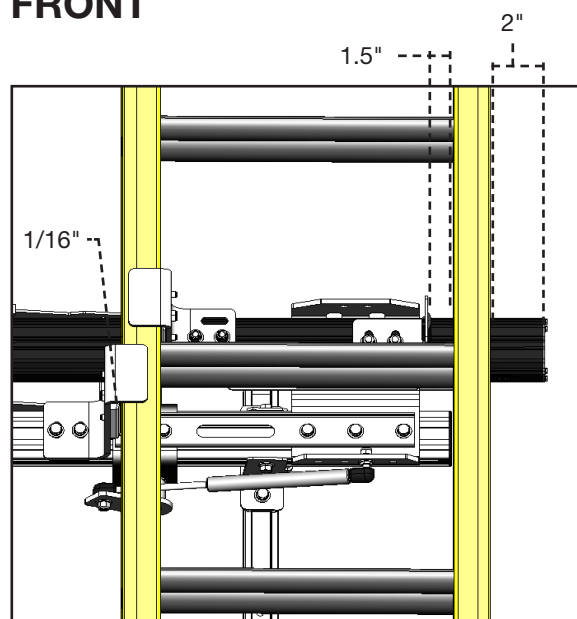
- The arm socket and the ladder cannot extend beyond the rear bumper of the vehicle.
- The center of the ladder must be behind the front hook when the ladder is loaded.



### REAR



### FRONT

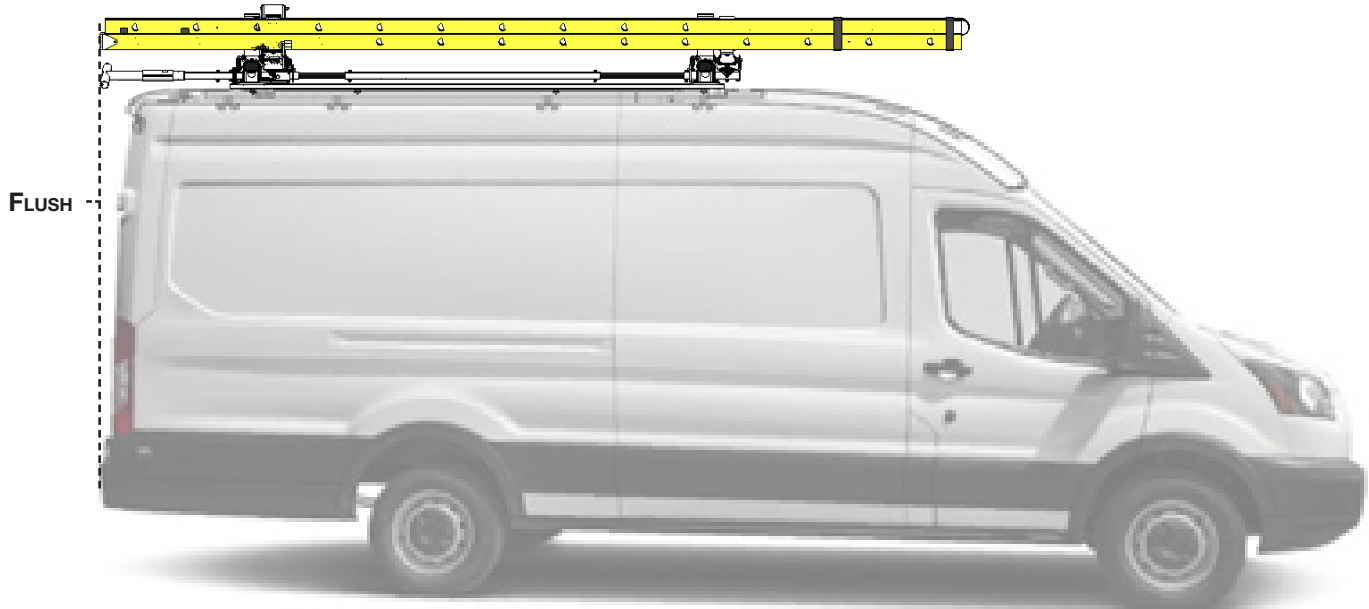




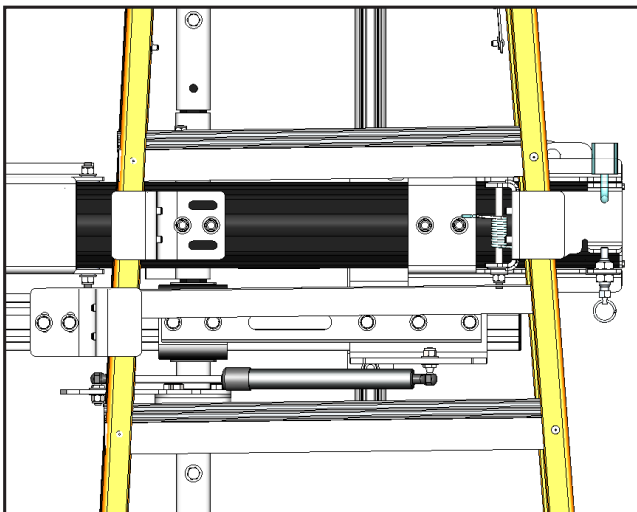
## STEP LADDER INSTALLATION

**NOTE:** These conditions must be respected:

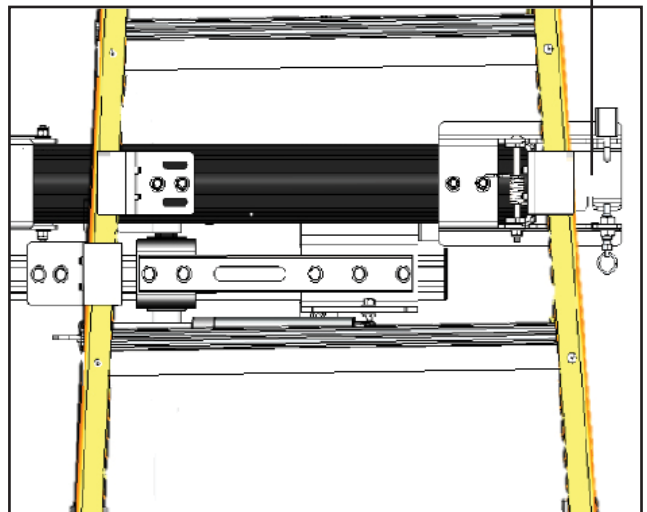
- The arm socket and the ladder cannot extend beyond the rear bumper of the vehicle.
- The center of the ladder must be behind the front hook when the ladder is loaded.



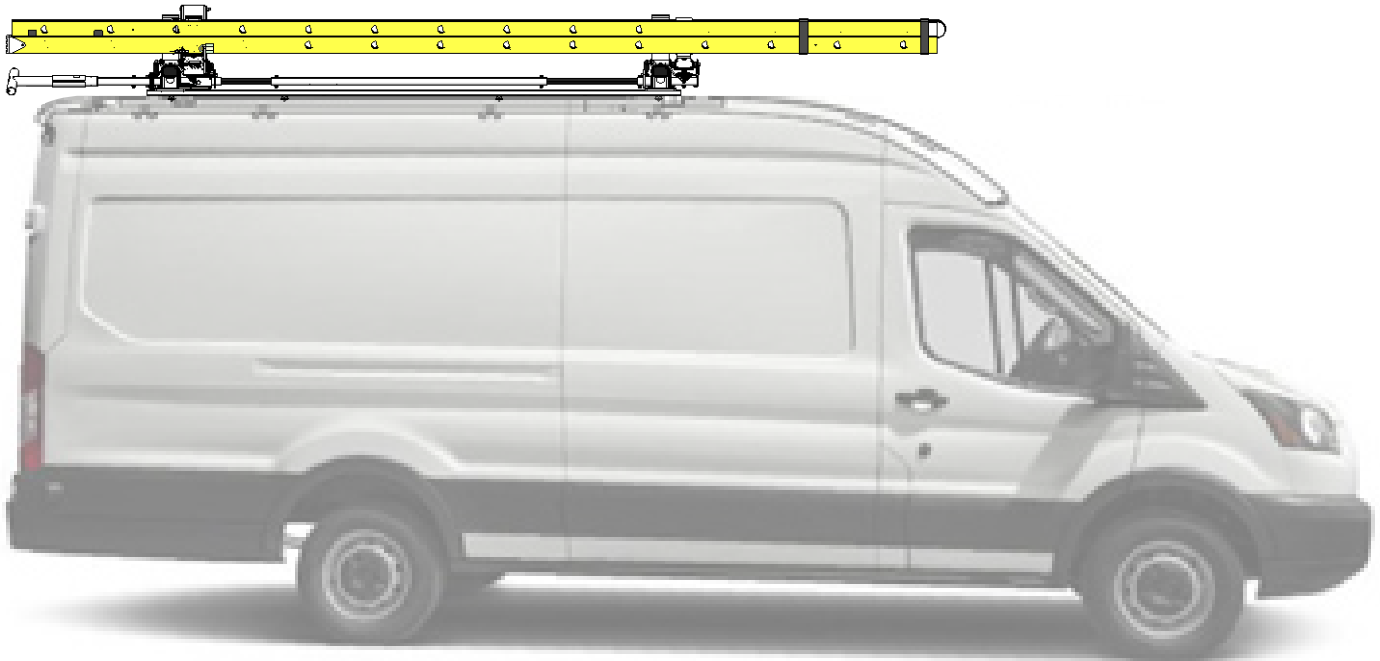
### 8' STEP LADDER



### 10' STEP LADDER



- NOTE:**
- Ensure that everything is safely assembled and fastened.
  - With the ladder locked, operate your Max Rack a few times, while carefully observing the moving parts.



**“Congratulations, you have successfully installed your  
Mounting Tracks and your completed Max Rack on your vehicle!**

**Thank you for doing business with us.”**

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

