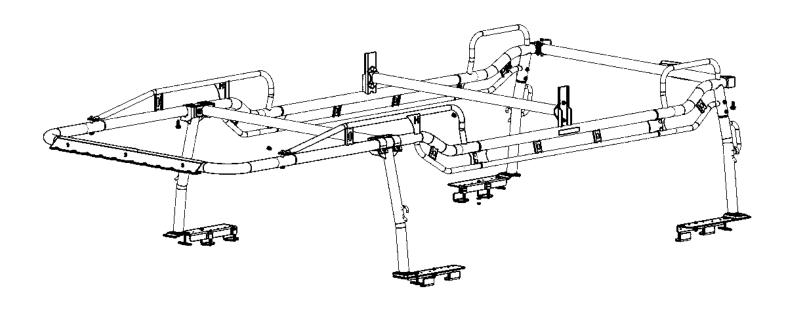
# Holman

# Installation Guide Pro Forklift Loadable Truck Rack



Holman Rancho Cordova, CA 95742 800-343-7486

InstallationSupport@Holman.com

20230526R1 DATE:



# PLEASE READ ALL INSTRUCTIONS AND WARNINGS PRIOR TO ASSEMBLING, INSTALLING, AND USING THIS PRODUCT.

#### **Warning**



Always check for wires, fuel tanks and lines, brake lines and other important vehicle functionality items prior to drilling and installing all products.



Too much weight will greatly reduce the stability of your vehicle. The manufacturer makes no representation or warranty as to the amount of weight your vehicle can safely carry. For guidance, we recommend that you consult the vehicle manufacturer. At no time should the weight of the vehicle, rack, driver, passengers and cargo loaded on a rack exceed either the Gross Vehicle Weight Ratio (GVWR) or the Gross Axle Weight Ratio (GAWR) as specified by the vehicle manufacturer.



Do not use your rack with the rear cross bar removed. Removal of rear crossbar will affect structural integrity of the rack.



Secure all payloads properly for safe transportation.



A large area is required to assemble rack. Be sure to keep area clear of trip and fall hazards.

## STOP

#### **Before You Begin**

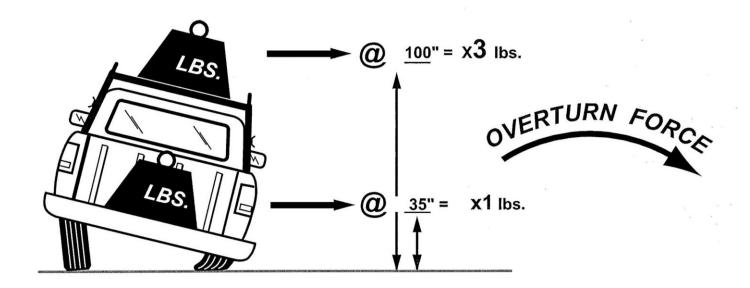
- Read all instructions carefully, and follow each step in proper sequence, for ease and speed in assembling your rack.
- PROPER SEALANT APPLICATION IS CRITICAL TO PREVENTING WATER PENETRATION INSIDE THE RACK. Apply a healthy bead of sealant entirely around every swaged joint and every bolt going through tubing. Improper sealing can lead to water penetration and rust on inside surfaces.

#### **Tools Needed**

9/16", 3/4" Box Wrenches	9/16", 1/2", 3/4" Sockets and Wrench
7/32", 5/16" Allen Wrenches	Drill
1732 , 3/10 Allen Wienches	Dilli
13/32" Drill Bit	Hammer
Center Punch	



### DON'T OVERLOAD YOUR VEHICLE!



WEIGHT CARRIED ABOVE THE FLOOR OF THE TRUCK BED (E.G. ON AN OVERHEAD TRUCK RACK) WILL SIGNIFICANTLY INCREASE THE VEHICLE'S TENDENCY TO OVERTURN. ALWAYS KEEP HEAVY LOADS EVENLY DISTRIBUTED AND AS LOW AS POSSIBLE. IT IS IMPORTANT TO NOTE THAT THE HOLMAN RACK LOAD BEARING CAPACITY OF 1700 LBS. MAY BE GREATER THAN YOUR TRUCK'S GAWR OR GVWR CAPACITY, AND IS PROBABLY GREATER THAN THE WEIGHT THAT CAN BE SAFELY CARRIED OVERHEAD. RETIGHTEN ALL BOLTS AFTER FIRST USE, PERIODICALLY CHECK BOLTS FOR TIGHTNESS.

For TECHNICAL SUPPORT Call:

1.800.343.7486

or email: InstallationSupport@Holman.com



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#### **Leg and Bar Kit Parts List**

NO.	ITEM	KIT: PART NUMBER	DESCRIPTION	QTY.
1		11-00000	FRONT TUBE	1
2		101210	REAR TAKE-OUT BAR	1
3		101215	NEXT GEN CENTER CROSSBAR	1
4		101370	NEXT GEN FOOT ASSEMBLY, RH PS	2
5		101369	NEXT GEN FOOT ASSEMBLY, LH DS	2
6		12000: 101362 12006: 101611	PRO RACK ADJUSTABLE LEG	2
7		12000: 101376 12006: 101614	PRO RACK REAR LEG, PS RH	1
8		12000: 101379 12006: 101615	PRO RACK REAR LEG, DS LH	1
9	<b>&gt;</b>	101670	MIDDLE CROSSBAR TUBE ASSEMBLY, 55.5"	1
10		101405	WIND DEFLECTOR ASSEMBLY, 42", 2" TUBING, STEEL	1
11	♦	101735	CENTER CROSSBAR SHIM	2
12		101572	MTG BRKT CLAMP	2
13		101404	WIND DEFLECTOR STRAP	3
14		18-12000	HARDWARE KIT	1
15		18-00001-GM	STAKE POCKET HARDWARE	1



#### **Side Channel Kit Parts List**

NO.	ITEM	KIT: PART NUMBER	DESCRIPTION	QTY.
1		12200, 12201: 101218 12202, 12203, 12204: 101193 12205, 12206: 101172	extension side Channel, 52"	2
2		12200, 12203, 12206: 101224 12201, 12204: 101693 12202, 12205: 101144	FRONT SIDE CHANNEL. MULTIPOSITION, RH, PS	1
3		12200, 12203, 12206: 101225 12201, 12204: 101692 12202, 12205: 101149	FRONT SIDE CHANNEL. MULTIPOSITION, LH DS	1
4		101163	REAR LEG CHANNEL, RH PS	1
5		101166	REAR LEG CHANNEL, LH DS	1
6	\$	31110 *	PRO II EXTRA CROSSBAR	1

<sup>\*</sup> Extra crossbar is included in extended and crew cab kits only.

#### **Hardware**

ITEM	HARDWARE TO SCALE <sub>1</sub>	PART NUMBER	DESCRIPTION	QTY.
1	1" NOT TO SCALE	11-00700	RAIL CLAMP	2
2	1 NOT TO SCALE	100578	RAIL CLAMP, FULL SIZE	6
3	NOT TO SCALE	11-00112	3/8"-16 T-NUT	4
4		-	SELF LEVELING ADHESIVE SEALANT - 100 ML	1



#### **Hardware (Continued)**

ITEM	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
5	TIANDWAKE TO SCALE	42KD91	1/2"-13 X 3" BUTTON HEAD CAP SCREW	2
6		0185355	1/2"-13 X 2-1/2" BUTTON HEAD BOLT	8
7		11241228	1/2-13 X 1-1/4" HEX HEAD BOLT	4
8	THREAD LOCK		1/2"-13 X 1-1/4" HEX HEAD WITH THREADLOCK	4
9		0171934	1/2" LOCKING WASHER	12
10		11541086	1/2" WASHER	10
11		37695	1/2"-13 THIN LOCKING JAM NUT	2
12		94718	3/8"-16 X 2-1/2" SOCKET CAP SCREW	4
13		11137260	3/8-16 X 2-1/2" HEX HEAD BOLT	5
14		0155062	GRADE 5	4



#### **Hardware (Continued)**

ITEM	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
15		94095	3/8"-16 X 1-3/4" BUTTON HEAD CAP SCREW	4
16		0123496	3/8" SPLIT LOCK WASHER	4
17		0159723	3/8" WASHER	22
18		78018	3/8" X 1"OD OVERSIZE WASHER	4
19			3/8"-16 JAM NYLOCK NUT	13
20		11241179	5/16-18 X 1" HEX HEAD BOLT	4
21		21810	5/16"-18 X 3/4" CARRIAGE BOLT	8
22		90126A030	5/16" FLAT WASHER	12
23		0169777	5/16"-18 NYLOC	8
24		11104019	5/16-18 FLANGED NYLOCK NUT	4
25	NOT TO SCALE	98416A575	3/8" X 2-7/8" WIRE LOCK CLEVIS PIN	1
26			#10-32 X 3/4" BUTTON SCREW	3
27			#10 WASHER	3



#### **Hardware Kit (18-00001-GM)**

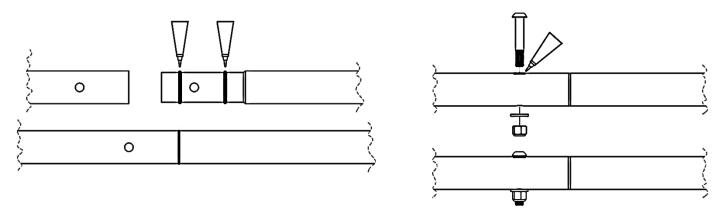
ITEM	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
1		-	3/8"-16 X 8" BH	2
2		33220	3/8" FENDER WASHER	2
3		0169791	3/8"-16 LOCK NUT	2
4	NOT TO SCALE	36315	T15 TORX WRENCH	1

#### **Sealant Application**



Proper sealant application is critical to preventing water penetration inside the rack.

 Apply a healthy bead of sealant entirely around every swaged joint as shown. Improper sealing can lead to water penetration and rust on inside surfaces.

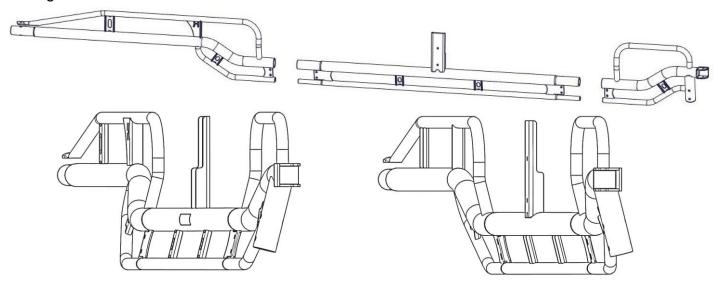


- Wipe any excess sealant off immediately with a plastic scraper or paper towel. Any smeared sealant can be rubbed off as soon as sealant dries.
- Maintain this seal throughout the life of your rack.



#### **Step 1 – Join Side Channels**

- Unpack side channels from box. Lay flattened box on ground and use for scratch protection while building rack. Be sure you have correct front and rear side channels paired.
- Apply sealant to both top and bottom swage joints.
- Insert rear side-channel swaged joints into middle side-channel tubes until splice plate holes align.



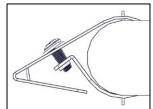
Driver-Side Side Channels

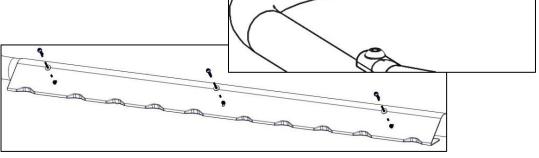
**Passenger-Side Side Channels** 

- Insert front side-channel swaged joints into middle side-channel tubes until holes in splice plates align.
- Using 5/16" x 3/4" carriage bolts, 5/16" washers, and 5/16" lock nuts, securely fasten channels together.
- Remove excess sealant.

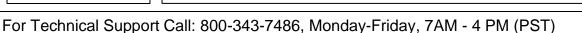
#### Step 2 - Attach Wind Deflector

- Position wind deflector on front U-tube.
- Insert wind deflector straps into slots on rear of wind deflector.
- Using #10 x 3/4" screws and #10 washers, bolt through top of wind deflector into press-in nuts on wind deflector straps.
- · Tighten.





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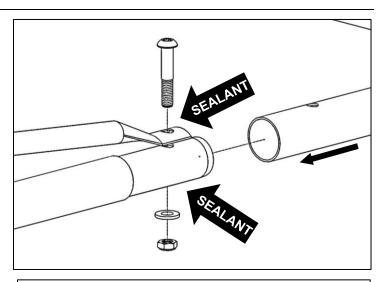
### Holman

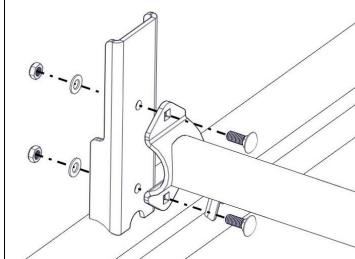
#### Step 3 - Attach Front Tube

- Apply sealant to front side-channel swaged joint.
- Insert front side-channel swaged joint into front tube until holes in tube and sidechannel align.
- Loosely fasten front tube to side channel using 1/2" x 3" partially threaded button head screw, 1/2" washer, and 1/2" lock nut.
- Remove excess sealant.
- Repeat process on opposite side.

#### **Step 4 – Attach Center Crossbar**

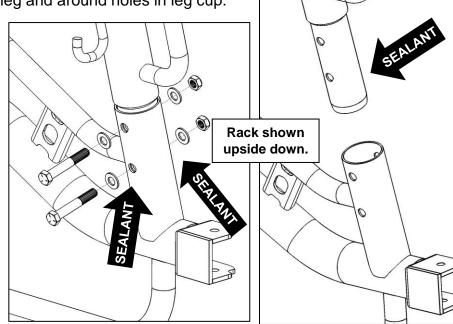
- Using two 3/8" x 1" carriage bolts, 3/8" flat washers, and 3/5" thin lock nuts, attach the center crossbar to the crossbar support.
- Repeat on opposite side of rack.
- Loosely tighten on both sides.





#### Step 5 - Attach Rear Legs

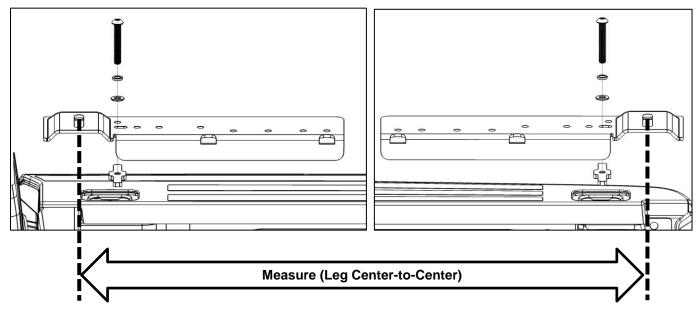
- Flip rack upside down.
- Apply sealant to swaged joint on leg and around holes in leg cup.
- Orient leg correctly with side channel, with rope hook away from center of rack, and then insert leg into leg cup until holes in leg and leg cup align.
- Lightly fasten leg to leg cup using, one 3/8" x 2-1/2" hex head bolt, two 3/8" washers, and one 3/8" lock nut.
  - Be sure to apply sealant around bolt between each washer and leg cup as you assemble.
- Remove excess sealant.
- Repeat process on opposite side.



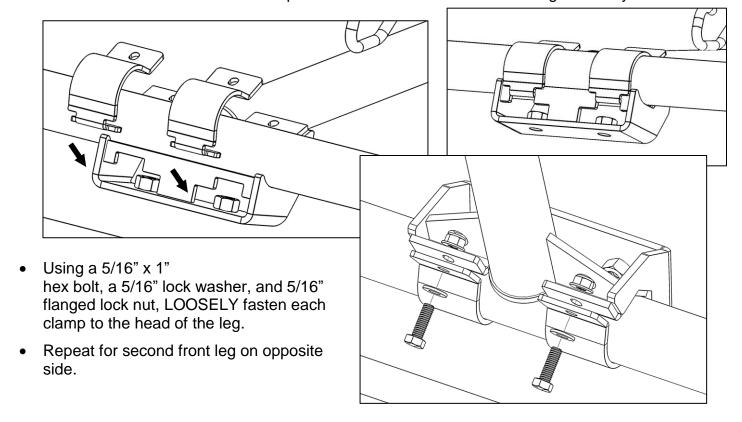


#### Step 6 - Attach Front Legs and Front Crossbar

- Set feet on truck bed in desired installation location.
- Determine the slot in the front foot that best aligns with the front stake pocket. The slots or holes closest to the raised form should be as near center of stake pocket as possible.
- Measure center-to-center distance between mounting slots in feet.



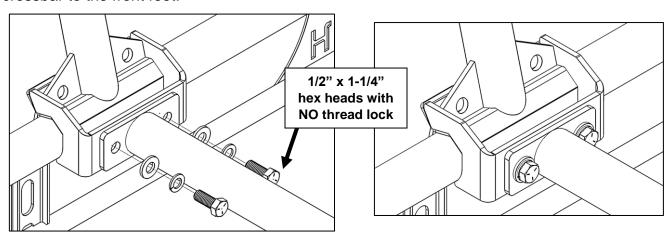
- Position a front leg against the 2" lower tube on the side channel, with the leg at the distance measured from center of the rear leg. The rope hook should be to the outside, away from truck.
- Hook two of the side channel clamps into the slots on the head of the leg assembly.





#### Step 7 - Attach Center Crossbar

• Using two 1/2" x 1-1/4" hex head bolts, 1/2" lock washers, and 1/2" flat washers, fasten the front crossbar to the front feet.



#### Step 8 - Attach Feet to Rack

 Using 1/2" x 1-1/4" hex heads with pre-applied thread lock, 1/2" flat washer, bolt a foot to the bottom of each leg. The flange on each foot faces downward and should be oriented towards the middle of the rack

middle of the rack.

Snug tighten but allow for movement. DO NOT TIGHTEN at this point.

1/2" x 1-1/4" hex heads with pre-applied thread lock



#### Step 9 - Install Rack to Truck Bed



It is recommended the feet are secured to the truck bed using the structural stake pockets incorporated into the bed. It is also recommended that more than one type of method of attachment is used for mounting each foot.

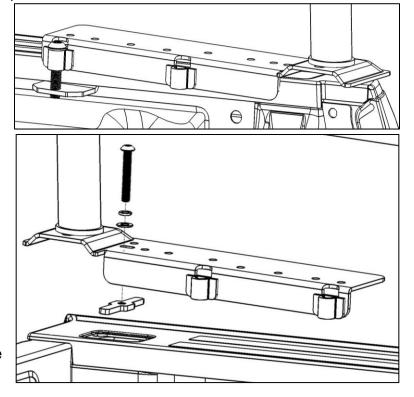
Recommended foot installation combinations are as follows:

- (GOOD) Stake pocket and rail clamp installation
- (BETTER) Stake pocket and permanent mounting installation
- (BEST) Stake pocket, rail clamp, and permanent mounting installation
- Flip truck rack over and set rack on truck bed.

#### <u>Step 9A – Front Foot Installation Using Stake Pockets</u>

NOTE: On some vehicles, the stake pockets are not exposed or do not have removable stake pocket covers. It is recommended to remove stake pocket covers and expose stake pockets prior to installation.

- Remove rear bed-rail stake pocket cover.
- Remove or cut out the front bed-rail stake pocket cover.
- For safety, to keep the rack from sliding off during installation, it is recommended loosely installing 1/2" x 2-1/2" button head screws and rail clamps into the saddles opposite the end you are working on, tightening just enough so the top of the rail clamp is beneath the bed rail.
- Lift front foot and insert a 3/8" x 2-1/2" button head screw, a 3/8" lock washer, and 3/8" flat washer through the best-fit slot or hole into a 3/8" t-nut.
- Install the front foot back onto the bed rail, inserting the 3/8" t-nut into the stake pocket hole.
- Repeat for opposite front side foot before continuing to rear.

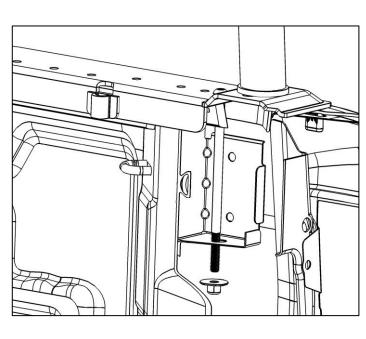


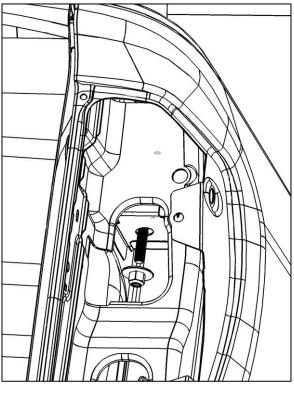


#### Step 9B - Rear Foot Long-bolt Installation

Long bolt installation directly ties your rack to the truck bed structure. This is the best-inclass installation and is the recommended method of installation for the rear feet.

- Remove rear tail lights.
- Using a 3/8" x 8" bolts, 3/8" fender washer, and 3/8" lock nut, bolt through the rear foot and hole in bottom of stake pocket.
- Loosely tighten but allow for movement.

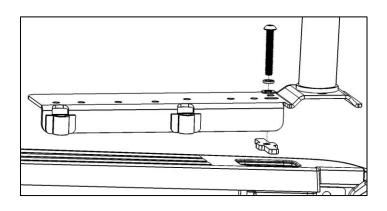




#### Step 9C - Rear T-nut Installation

It is recommended to only install rear t-nut only on older vehicles where stake pocket is too deep for using 8" bolt as prescribed above. Rear T-nut installation is not possible with many new vehicles. If using t-nut is desired, it may be necessary to cut some of the plastic covering stake pocket hole to gain access.

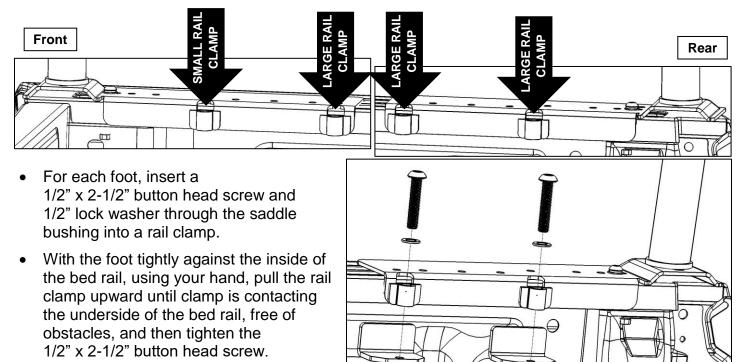
- Lift rear foot and insert a 3/8" x 2-1/2" button head screw, a 3/8" lock washer, and 3/8" flat washer through the best-fit slot or hole into a 3/8" t-nut.
- Install rear foot back onto the bed rail, inserting the 3/8" t-nut into stake pocket hole.
- With the foot held tightly against the bed rail, snug tighten the 3/8" x 2-1/2" button head screws until the t-nuts are bound beneath the metal stake pocket hole.





#### Step 9D - Installing Rail Clamps

There are two types of rail clamp included in the mounting hardware. For newer Ford, Chevy, and GMC models, the full-size rail clamp should provide a best fit for the rear foot and rear of front foot. The smaller rail clamp fits best on some vehicles at the forward most saddle bushing on the front feet. When installing the feet, it is best to verify the clamp that best fits at each location chosen for installation. Install at a minimum 3 rail clamps on each side of vehicle. If all rail clamps can be installed, do so.



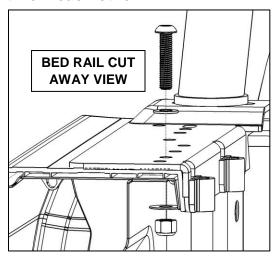
NOTE: Be sure to keep feet on opposing sides of the vehicle aligned front-to-back. The distance between the tailgate and end of foot should be the same on both sides of the vehicle.

#### <u>Step 9E – Foot Installation Using Permanent Mounting Locations</u>

- Verify each permanent mount location is accessible from inside the bed, below the bed rail.
   Different vehicles have different possible mounting locations. It is recommended to choose two locations on each foot that are farthest apart from each other.
- With foot in place, tight against the inside of the bed rail, mark on each bed rail the locations of permanent mounting holes.
- Remove rack from truck.

Repeat for remaining feet.

- Using a 13/32" drill bit, drill through the bed rail at the marked locations
- Reposition rack on vehicle.
- From above the foot, install a 3/8" x 1-3/4" button head screw and 3/8" flat washer through the foot and each drilled hole into a 3/8" oversize washer and 3/8" lock nut below the bed rail.

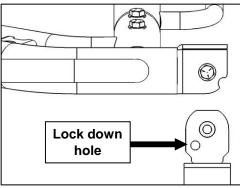


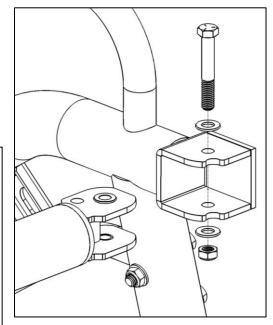


#### Step 10 - Attach Rear Take-out Bar

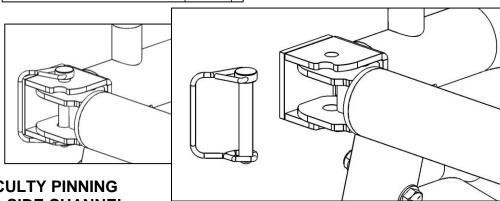
NOTE: The rear take-out bar can be installed to open in either direction. One end is bolted and the other side is secured with a removable pin.

- On the side to be bolted, slide end into rear side-channel receiver. Be sure the second lock-down hole in the end is towards the front of the vehicle.
- Using 3/8" x 2-1/2" hex head, two 3/8" washers, and a 3/8" lock nut, bolt the rear take-out bar to the receiver.





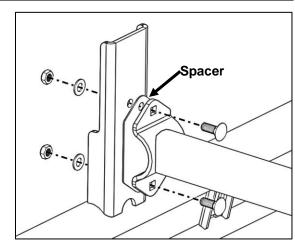
 On opposite side, insert 3/8" lock pin.



# IF YOU EXPERIENCE DIFFICULTY PINNING REAR TAKE-OUT BAR INTO SIDE CHANNEL

RECEIVER, it may be necessary to install one or two spacers between the center crossbar and the crossbar support.

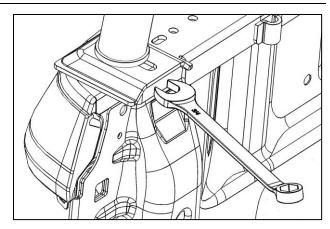
- Remove bolts fastening center crossbar to ONE of the side channel supports.
- Insert a spacer between the center crossbar and the crossbar support.
- Tighten hardware.
- Check pin alignment. If second spacer is required, install spacer on opposite side of crossbar than side previously spacer was installed.





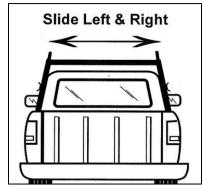
#### Step 11 - Tighten Rack to Truck

- Using a 3/4" open end wrench, tighten the 1/2" hex head leg bolts. This may require flipping the wrench multiple times. Some extra heavy duty wrenches may be too thick to fit beneath in the slot provided.
- Repeat for all four legs.
- Re-install taillights.
- GO BACK AND TIGHTEN ALL HARDWARE.



#### Step 12 - Take-out Bar Adjustment

 Verify rear crossbar lock-pin pulls in and out easily. If necessary, loosen center crossbar hardware, then slide rear crossbar hard left then right about 10 times to get lock-pins to seat properly.



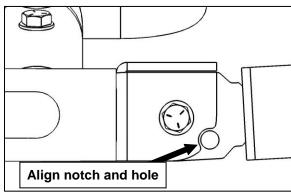
#### **Rear Take-out Bar Position Lock**

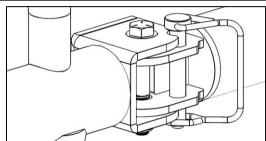
The rear take-out bar is able to be locked in an open position.



# DO NOT DRIVE VEHICLE WITH REAR TAKE-OUT BAR IN OPEN POSITION!

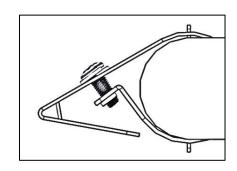
- Remove the pin from the pin from the rear take-out bar.
- Open the bar fully.
- Align the hole and notch in take-out bar receiver.
- Insert the pin in the hole and lock the pin in the lock position.





#### **Adjust Wind Deflector**

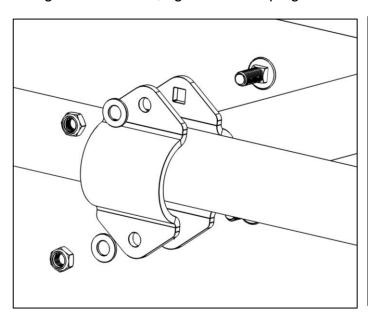
The best angle for the wind deflector will depend on the vehicle the rack is installed on. Small angle adjustments can make a big difference. The image shown is approximately the best angle to start with.

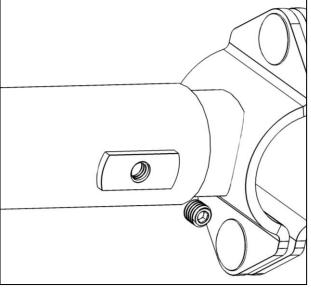




#### **Install Extra Crossbar**

- Using 3/8" x 1" carriage bolts, 3/8" washers, and 3/8" thin lock nuts, bolt each end of extra crossbar to bottom tube of side channels.
- Tighten.
- Using 3/8" set screw, tighten telescoping crossbars.





GO BACK AND TIGHTEN ALL HARDWARE. If cordless impact wrench was used to assemble, tighten all hardware using wrenches and sockets.

**INSTALLATION AND ASSEMBLY ARE COMPLETE.**