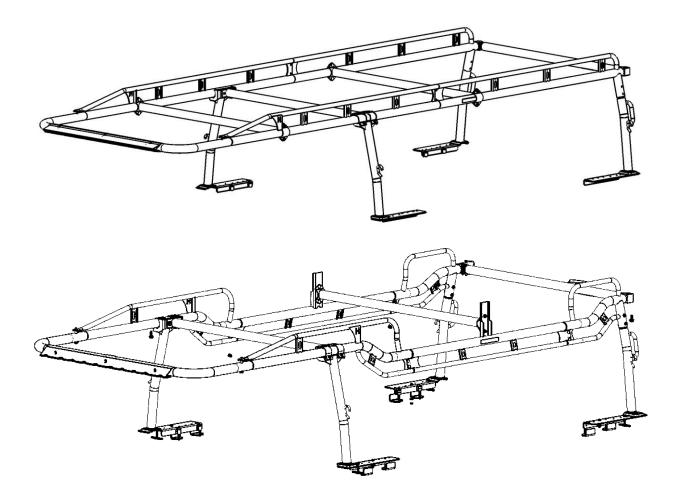
Holman Assembly and Installation

Assembly and Installation The Pro Rack Truck Rack

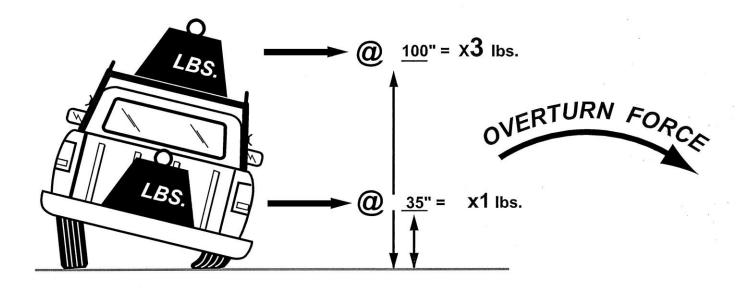


Holman Rancho Cordova, CA 95742 800-343-7486 InstallationSupport@Holman.com

20240123R2

DATE:

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 KARGO MASTER RACK LOAD BEARING CAPACITY 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** Monday-Friday, 7AM - 4 PM (PST)

www.Holman.com

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

<u>Warning</u>

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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.



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

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

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Wind Deflector Hardware (18-31571)

ITEM	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
1		0149489	10-32 X 3/4" PAN HEAD SCREW	3
2	\bigcirc	33074	#10 FLAT WASHER	3

Leg and Bar Kit Parts List

NO.	ITEM	PART NUMBER	DESCRIPTION	QTY.
1		11-00000	FRONT TUBE	1
2		101210	REAR TAKE-OUT BAR	1
3		101215	PRO RACK FRONT CROSSBAR	1
4		101370	NEXT GEN FOOT ASSEMBLY, RH PS	2
5		101369	NEXT GEN FOOT ASSEMBLY, LH DS	2
6		12000: 101362 OR 12006: 101611	PRO ADJUSTABLE LEG	2
7		12000: 101376 OR 12006: 101614	PRO RACK REAR LEG, PS RH	1
8		12000: 101379 OR 12006: 101615	PRO RACK REAR LEG, DS LH	1
9	\{	101670	MIDDLE CROSSBAR TUBE ASSEMBLY, 55.5"	1
10		101403	WIND DEFLECTOR, 42", 2" TUBING, STEEL	1
11	(101735	CENTER CROSSBAR SHIM	2
12	۹	101404	WIND DAMPENER STRAP FASTENER	3
13	E L.	101200	SIDE CHANNEL CLAMP	4
14		18-12000	HARDWARE KIT	1
15		18-00001-GM	STAKE POCKET HARDWARE	1

Standard Side Channel Parts List

NO.	ITEM	KIT: AND/OR PART NUMBER	DESCRIPTION	QTY.
1		12101: 101529 OR 12102: 101564 OR 12103: 101579	SIDE CHANNEL, FRONT PS RH	1
2		12101: 101531 OR 12102: 101568 OR 12103: 101626	SIDE CHANNEL, REAR PS RH	1
3	M Į į,	12101: 101530 OR 12102: 101565 OR 12103: 101580	SIDE CHANNEL, FRONT DS LH	1
4		12101: 101532 OR 12102: 101569 OR 12103: 101627	SIDE CHANNEL, REAR DS LH	1
5		101572	MTG BRKT CLAMP	2
6	¢¢	12103: 31110	EXTRA CROSSBAR	

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

Forklift Loadable Side Channel Parts List

NO.	ITEM	KIT: PART NUMBER	DESCRIPTION	QTY.
1		12200, 12201: 101218 OR 12202, 12203, 12204: 101193 OR 12205, 12206: 101172	extension side Channel, 52"	2
2		12200, 12203, 12206: 101224 OR 12201, 12204: 101693 OR 12202, 12205: 101144	FRONT SIDE CHANNEL. MULTIPOSITION, RH, PS	1
3		12200, 12203, 12206: 101225 OR 12201, 12204: 101692 OR 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	گ ¢	12200, 12201, 12203 12204, 12206: 31110	PRO II EXTRA CROSSBAR	1

Hardware (18-12000)

NO.	ITEM		PART NUMBER	DESCRIPTION	QTY.
1		NOT TO SCALE	11-00700	RAIL CLAMP	2
2		NOT TO SCALE	100578	RAIL CLAMP, FULL SIZE	6
3		NOT TO SCALE	11-00112	3/8"-16 T-NUT	4



Hardware (Continued)

NO.	ITEM	PART NUMBER	DESCRIPTION	QTY.
4		42KD91	1/2"-13 X 3" Button head Cap Screw	2
5		0185355	1/2"-13 X 2-1/2" BUTTON HEAD BOLT	8
6		11241379	1/2-13 X 1-1/4" HEX HEAD BOLT	4
7	THREAD	-	1/2"-13 X 1-1/4" HEX HEAD WITH THREADLOCK	4
8		0171934	1/2" LOCKING WASHER	12
9		11137086	1/2" WASHER	10
10		37695	1/2"-13 THIN LOCKING JAM NUT	2
11		94718	3/8"-16 X 2-1/2" Socket cap Screw	4
12		11241202	3/8-16 X 2-1/2" HEX HEAD BOLT	5
13		0155062	3/8-16 X 1" CARRIAGE BOLT	4

Hardware (Continued)

NO.	ITEM	PART NUMBER	DESCRIPTION	QTY.
14		94095	3/8"-16 X 1-3/4" BUTTON HEAD CAP SCREW	4
15		0123496	3/8" SPLIT LOCK WASHER	4
16		0159723	3/8" FLAT WASHER	22
17		78018	3/8" X 1"OD Oversize Washer	4
18		37691	3/8"-16 THIN LOCK NUT	13
19		11241180	5/16-18 X 1-1/4" HEX HEAD BOLT	4
20		21810	5/16"-18 X 3/4" CARRIAGE BOLT	8
21		90126A030	5/16" FLAT WASHER	12
22		0169777	5/16"-18 NYLOC	8
23		11104019	5/16-18 FLANGED NYLOCK NUT	4
24	NOT TO SCALE	98416A575	3/8" X 2-7/8" WIRE LOCK CLEVIS PIN	1
25		18-31571	HARDWARE KIT	1
26		-	SELF LEVELING ADHESIVE SEALANT	1

Wind Deflector Hardware (18-31571)

ITEM	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
1		0149489	10-32 X 3/4" PAN HEAD SCREW	3
2	\bigcirc	33074	#10 FLAT WASHER	3

Extra Crossbar Parts List

NO.	ITEM	PART NUMBER	DESCRIPTION	QTY.
1		13-00306	2" BAR ASSY, QUICK CLAMP	1
2		13-00305	1 3/4" BAR ASSY, QUICK CLAMP	1
3	e de la constante de la consta	101572	MTG BRKT CLAMP	2
4		18-31110	HARDWARE KIT	1

Extra Crossbar Hardware

ITEM	HARDWARE TO SCALE	PART NUMBER	DESCRIPTION	QTY.
1		74436	3/8-16 X 1" CARRIAGE BOLT	4
2		0135144	3/8"-16 x 3/8" SET SCREW	1
3		0159723	3/8" FLAT WASHER	4
4			3/8"-16 JAM NYLOCK NUT	4

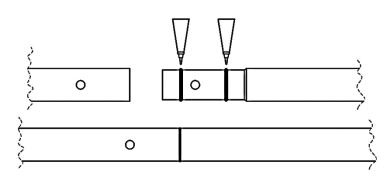
Sealant Application

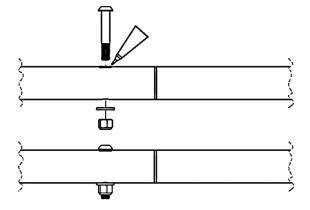
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Proper sealant application is critical to preventing water penetration inside the rack.

• 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.

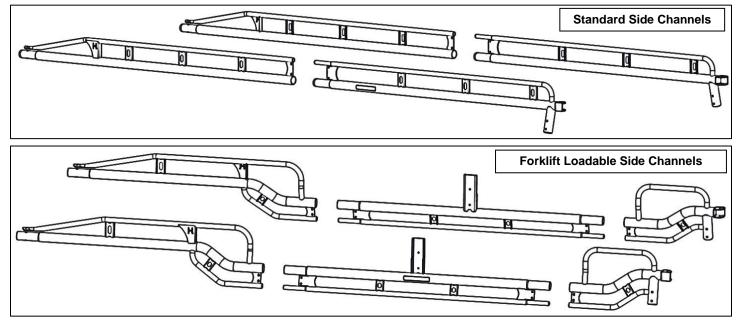




- Wipe any excess sealant off immediately with a plastic scraper or paper towel. Any smeared sealant can be rubbed off as soon as sealant dries.
- Maintain this seal throughout the life of your rack.

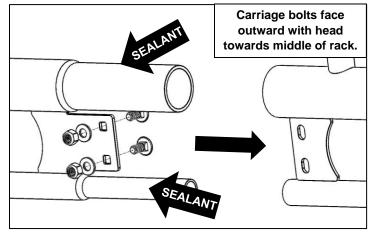
Step 1 – Join Side Channels

- 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 top and bottom swage joints.
- For forklift loadable side channels,

- insert middle side-channel swaged joints into rear side-channel tubes until splice plate holes align.
- insert front side-channel tubes into middle side-channel swaged joints until splice plate holes align.
- For standard side channels, insert rear side-channel swaged joints into front sidechannel tubes until splice plate holes align.



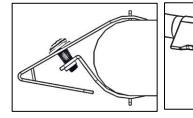
- Using 5/16" x 3/4" carriage bolts, 5/16" washers, and 5/16" lock nuts, securely fasten channels together. Carriage bolts face outward with head towards middle of rack.
- Remove excess sealant.

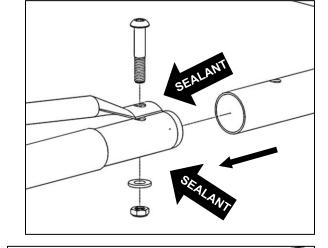
Step 2 – Attach Front Tube

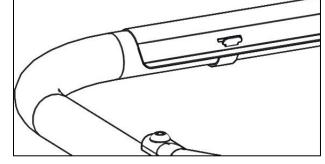
- Apply sealant to front side-channel swaged joint.
- Insert front side-channel swaged joint into front tube until holes in tube and side-channel align.
- Loosely fasten front tube to side channel using 1/2" x 3" partially threaded button head screw, 1/2" washer, and 1/2" lock nut.
- Remove excess sealant.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

Step 3 – 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.







Step 4 – Attach Center Crossbar

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<u>Step 4A – Forklift Loadable Side Channels</u>

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

Step 4B – Standard Side Channels

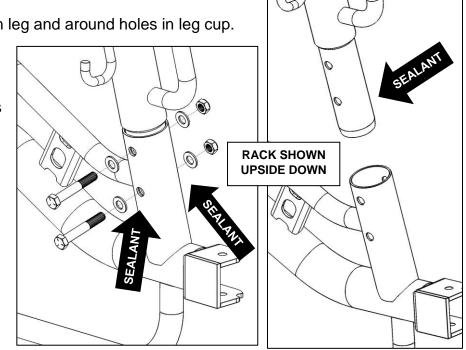
- Position center crossbar, mid-way between the front and rear crossbars, against the lower 2" side channel tubes.
- Using two 3/8" x 1" carriage bolts, 3/8" flat washers, and 3/8" thin lock nuts, LOOSELY fasten the MTG bracket clamp around the lower tube on each side. **Install carriage bolts with heads towards vehicle center.**
- Repeat on opposite side of rack.
- Snug tighten.

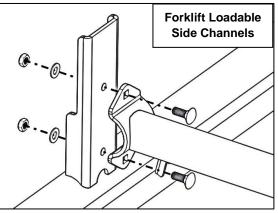
Step 5 – Attach Rear Legs

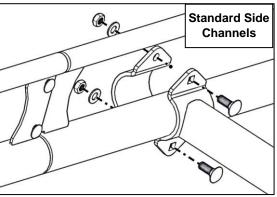
- Flip rack upside down.
- Apply sealant to swaged joint on leg and around holes in leg cup.
- Orient leg correctly with side channel, with rope hook away from center of rack, and then insert leg into leg cup until holes in leg and leg cup align.
- Lightly fasten leg to leg cup using, one 3/8" x 2-1/2" 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.





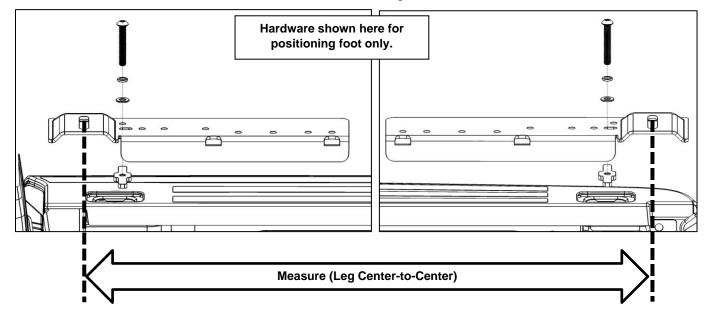


Step 6 – Attach Front Legs and Front Crossbar

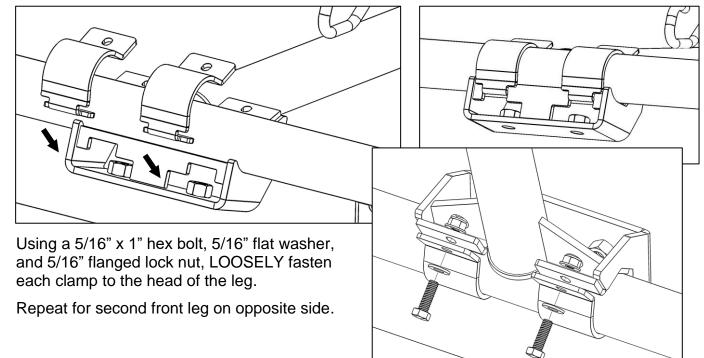
• Set feet on truck bed in desired installation location.

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- 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.

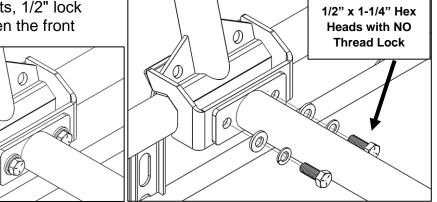


- Position a front leg against the 2" lower tube on the side channel, with the leg at the distance measured from center of the rear leg. The rope hook should be to the outside, away from truck.
- Hook two of the side channel clamps into the slots on the head of the leg assembly.



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 should be oriented as shown below. Snug tighten but allow for movement. DO NOT TIGHTEN at this point.

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:

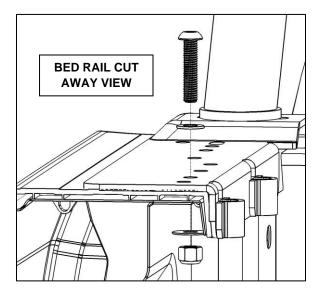
- (GOOD) Stake pocket/long-bolt and rail clamp installation
- (BETTER) Rail clamp and permanent mounting installation
- (BETTER) Stake pocket/long-bolt and permanent mounting installation
- (BEST) Stake pocket/long-bolt, rail clamp, and permanent mounting installation

Step 9A – Foot Installation Using Permanent Mounting Locations

- Flip truck rack over and set rack on truck bed.
- 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.
- Pivot foot inward to expose marked location.
- Using a 13/32" drill bit, drill through the bed rail at the marked locations.
- Reposition foot against bedrail.
- Repeat for 3 remaining feet.

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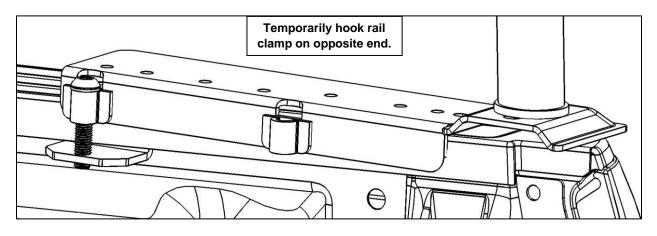
• After all other selected mounting methods are completed, install a 3/8" x 1-3/4" button head screw and 3/8" flat washer through the foot and each drilled hole into a 3/8" oversize washer and 3/8" lock nut below the bed rail.



Step 9B - Front Foot Installation Using Stake Pockets

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.
- Flip truck rack over and set rack on truck bed.
- 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 and 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.

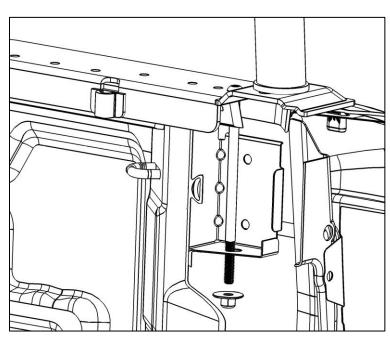
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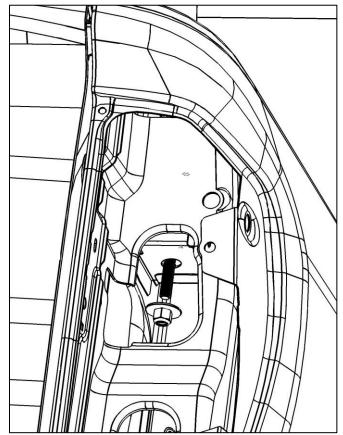
Step 9C - Rear Foot Long-bolt Installation

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.

A T15 Torx wrench has been supplied for removing the taillight from some vehicles.

- Remove rear taillights.
- 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 9D – Rear T-nut Installation

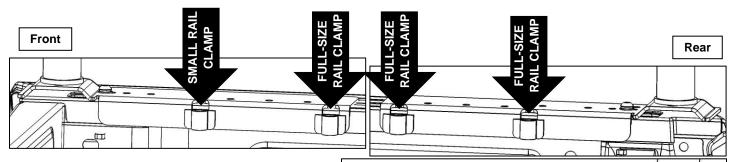
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It is recommended to only install rear t-nut only on older vehicles where stake pocket is too deep for using 8" bolt as prescribed above or rear t-nut installation is not possible. If installation using t-nut is desired, it may be necessary to cut 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 inside of 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.

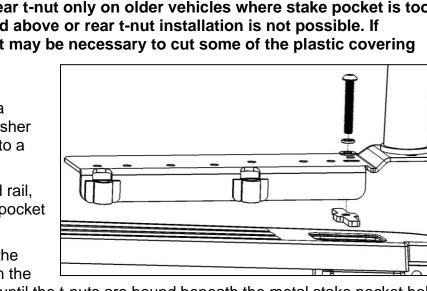
Step 9E – Installing Rail Clamps

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.



- For each mounting location, insert a 1/2" x 2-1/2" button head screw and 1/2" lock washer through the saddle bushing into a rail clamp.
- With the foot tightly against the inside of the bed rail, pull the rail clamp upward until clamp is contacting the underside of the bed rail, free of obstacles, and then tighten the 1/2" x 2-1/2" button head screw.
- Repeat for remaining feet.

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.

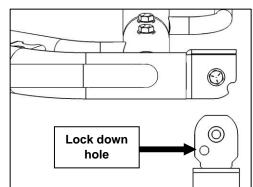


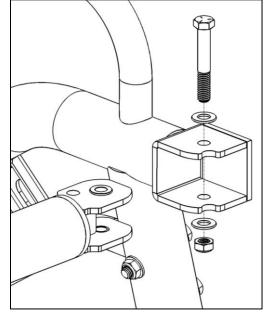
Step 10 – Attach Rear Take-out Bar

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.

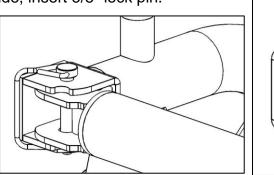
- On the side to be bolted, slide end into rear side-channel receiver. Be sure the second lock-down hole in the end is towards the front of the vehicle.
- Using 3/8" x 2-1/2" hex head, two 3/8" washers, and a 3/8" lock nut, bolt the rear take-out bar to the receiver.

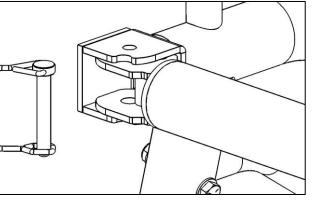
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• On opposite side, insert 3/8" lock pin.

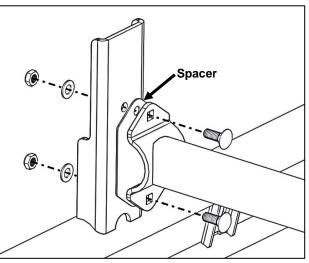




FORKLIFT LOADABLE TRUCK RACKS:

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.

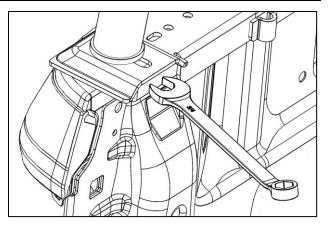


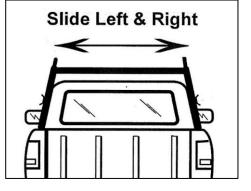
Step 11 – Tighten Legs to Feet

- 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

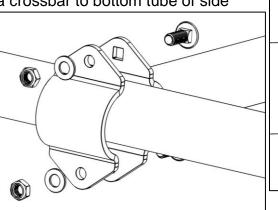
• Verify rear crossbar lock-pin pulls in and out easily. If necessary, loosen center crossbar hardware, then slide rear crossbar hard left then right about 10 times to get lock-pins to seat properly.

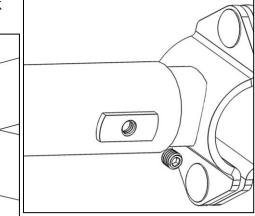




Step 13 – Install Extra Crossbar (Extended and crew cab kits only)

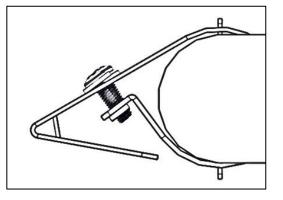
- Using 3/8" x 1" carriage bolts, 3/8" washers, and 3/8" thin lock nuts, bolt each end of extra crossbar to bottom tube of side channels.
- Tighten.
- Using 3/8" set screw, tighten telescoping crossbars.





Step 14 – 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.



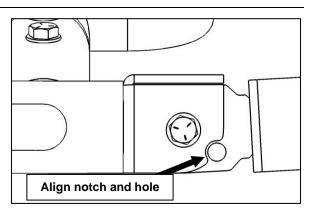
Using Rear Take-out Bar Position Lock

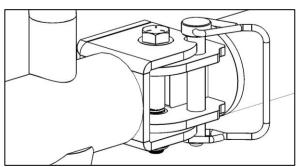
The rear take-out bar is able to be locked in an open position.



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.





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.