

## Introduction

Thank you for choosing Smittybilt accessories for your Vehicle. If you would like to view our full range of available accessories, please visit us at *www.smittybilt.com* 







## Important Notes Before Starting

# IMPORTANT NOTE

Carefully read through this entire instruction manual thoroughly before attempting to install this part.

# 

Serious injury can occur when working on vehicles alone.

When possible, work with another person to reduce risk of injury from strain or other dangers that can occur when working alone.

The following tools will be required to complete the installation of this part:

TOOLS REQUIRED				
6mm Hex Key Wrench	Measuring Tape	13mm Wrench		
13mm Socket	Socket Wrench			

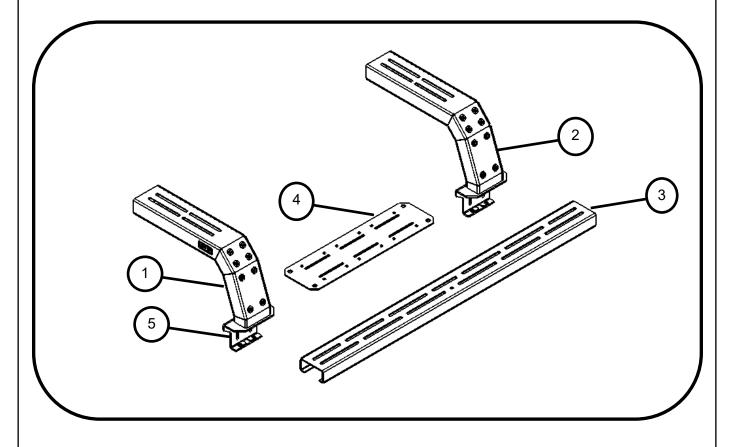


## **Box Contents**



## **IMPORTANT NOTE**

Note: Confirm all box contents against the provided bill of materials.



Defender Low Pro Bed Rack			
Item	DESCRIPTION	QTY	
1	TOWER W/ HEX RIVETS W/ LOGO	1	
2	TOWER W/ HEX RIVETS	5	
3	C CHANNEL CROSSMEMBER	3	
4	SIDE PANEL MULTIPLE SLOTS	4	
5	NEOPRENE FOAM SHEET	6	



### **Box Contents**

90-60869 CROSS MEMBER HARDWARE			
QTY	DESCRIPTION		
48	M8 GR8.8CZ FLAT WASHER		
24	M8X1.25 G8.8CZ NYLOCK NUT		
24	HHCS M8X1.25X20MM G8.8CZ FT		

90-60870 CLAMPING HARDWARE			
QTY	DESCRIPTION		
12	M8X1.25MM FT T-SLOT NUT		
12	EXTRUDED CLAMP M8X1.25 THREAD		
24	HHCS M8X1.25X30 G8.8CZ FT		
12	M8 GR8.8CZ FLAT WASHER		
12	M8X1.25 G8.8CZ HEX NUT		
2	ND-12102-1.0ML BLUE THREAD LOCKER		

90-60871 PANEL HARDWARE			
QTY	DESCRIPTION		
16	BHCS M10X1.5X20 G8.8 CZ FT		
16	M10 SPLIT WASHER G8.8CZ		
16	M10 FLAT WASHER G8.8 CZ		



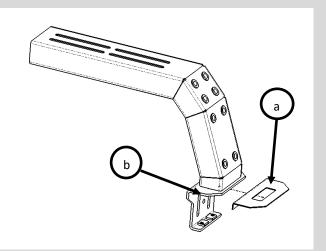
For Technical Support / Warranty Information please call 800-776-0767 EXT 1317

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# Installation Instructions: Mechanical Installation

## WARNING

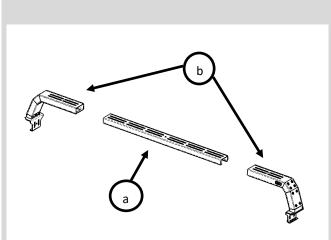
Chock all four wheels and make sure parking brake is engaged before starting this install. Failure to do so could result in serious injury. Place masking tape on the areas of the body that could possibly be scratched.



### Step 1:

Install 6X foam padding (a) onto all towers at the mounting location (b) align the rectangular cutout.

Note: The foam padding may already be installed.



### Step 2:

Slide C Channel (a) into towers (b)

Center the C channel best you can between the two towers.



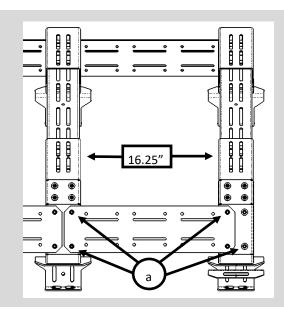
## Installation Instructions: Mechanical Installation

### Step 3:

Mount the assembly from step 2 onto the truck bed rails. Adjust the towers to the width of the vehicle bed and install 8X hex head M8x1.25x20mm bolts with the corresponding locknuts and flat washers. Apply blue thread locker from supplied hardware pack. Keep the C channel centered within the two towers.

Repeat steps 2-3 two more times until you have three assemblies on the vehicle bed.

Note: Leave hardware loose for now.



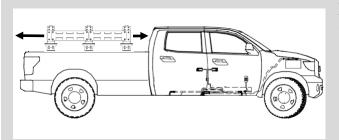
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### Step 4:

Space the assemblies such that they are about 16.25 inches apart from the next. Install the connecting panels to the towers using 16X Button Head Bolts M10X1.5X20 at location (a).

Apply blue thread locker from supplied hardware pack.

Note: Leave hardware loose for now.



### Step 5:

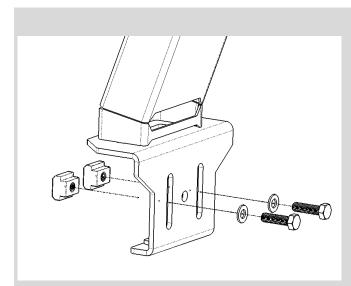
Move your loosely secured structure backward or forward as needed.



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## Installation Instructions: Mechanical Installation

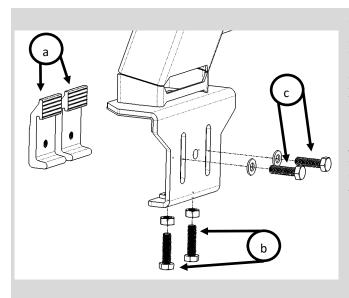


### Step 6:

If your vehicle has bed rails install the supplied T-Nuts 2X per tower. Loosely install 12X Hex bolts M8X1.25X30mm into each T-Nut location. Apply Blue thread locker from supplied hardware pack.

**Note:** Use the vertical slots to ensure your bolt is perpendicular to your T-nut.

If your vehicle is not equipped with bed rails skip to step 7.



### Step 7:

If your vehicle is not equipped with bed rails fasten the 12X supplied clamps (a) using 2X Hex Bolts 1X M8X1.25 Hex nut and 1X M8 Flat Washer per clamp. Apply blue thread locker from supplied hardware pack.

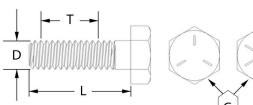
Note: Be sure to fasten bolt (b) and (c) evenly to ensure bolt remains horizontal and clamp stays vertical.

**Step 5:** Torque all bolts to the spec referred to on page 8.



Use this only as a guide for hardware without a called out torque specification in the instruction manual.

Bolt Torque and ID						
Decimal System		Metric System				
All Torques in Ft. Lbs. Maximums						
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 9.8	Class 10.9	Class 12.9
5/16	15	20	M6	5	9	12
3/8	30	45	M8	18	23	27
7/16	45	60	M10	32	45	50
1/2	65	90	M12	55	75	90
9/16	95	130	M14	85	120	145
5/8	135	175	M16	130	165	210
3/4	185	280	M18	170	240	290
1						



Grade 5 Grade 8 (No. of Marks +2)

G= Grade (Bolt Strength)

1/2-13x1.75 HHCS

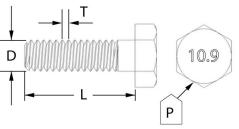
D

Т

D= Nominal Diameter (Inches)

Х

- T= Thread Count (Threads per Inch)
- L= Length (Inches)
- X= Description (Hex Head Cap Screw)



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M12-1.25x50 HHCS
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- P= Property Class (Bolt Strength)
- D= Nominal Diameter (Millimeters)
- T= Thread Pitch (Thread Width, mm)
- L= Length (Millimeters)
- X= Description (Hex Head Cap Screw)



## Notes and Disclaimers

### Product cleaning and maintenance instructions

Stainless Steel Finish – Aluminum polish may be used to polish small scratches and scuffs on the finish. Mild soap, window or glass cleaner may be used to clean the finish. Dual state powder coat finish – Mild soap, window or glass cleaner may be used to clean the finish. In order to protect the finish, you may wax your product on a regular basis with pure carnauba automotive wax. Do not use any types of soap, polish or was that contains abrasive that could damage the finish. Textured coated finishes should be cleaned with a mild soap on a damp sponge. Do not apply polish or was that requires to be removed by means of buffing. This type of wax is commonly used at car wash facilities. Chrome Finish – Mild soap, window or glass cleaner may be used to clean the finish. In order to protect the finish, you should wax your product on a regular basis with pure carnauba automotive wax. Do not use any types of soap, polish or was that contains abrasive the finish. Chrome Finish – Mild soap, window or glass cleaner may be used to clean the finish. In order to protect the finish, you should wax your product on a regular basis with pure carnauba automotive wax. Do not use any types of soap, polish or was that contains abrasive that could damage the finish.

### **Limited Warranties**

Smittybilt's products are covered under the following limited warranties only. Note that the duration of the limited warranty differs according to the material and finish of the product purchased. Subject to the duration and conditions of the limited warranty stated below, Smittybilt warrants to the original retail purchaser that its products are free from defects in material and workmanship. All other warranties and representations express or implied, are hereby disclaimed, including fitness for merchantability and buyer's intended use or purpose. All parts are sold "AS IS" except for the limited warranties granted herein. Buyer assumes all risks as to the selection, suitability and performance of all goods and products selected. This limited warranty does not cover damage or impairment in any part due to misuse, improper installation, accident or contact with on-road or off-road hazards, product modification, improper or inadequate cleaning and/or maintenance. Smittybilt is not responsible for items damaged during shipping. This warranty is not transferable from the original buyer. For the original Buyer to be eligible for the limited warranty coverage, the Buyer must provide proof of purchase. Smittybilt strongly recommends returning the warranty registration card. Customer's remedy hereunder shall be limited only to repair or replacement (at Smittybilt's option) of any defective part(s) returned to Smittybilt at customer's expense. The determination of whether or not a returned part is defective or subject to coverage under the limited warranties stated herein shall be made at Smittybilt's sole discretion. To assure product quality, Smittybilt reserves the right to change product design, material, specification and finishes without prior notice to customers. This limited warranty gives you specific legal rights and you may also have other rights, which may vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply as to you. Also, some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Smittybilt reserves the right to discontinue product lines and substitute products or provide other remedies than those listed in this limited warranty for those discontinued products.

#### Warning

Rollover and other types of vehicle accidents may result in serious injury or death to you, your passengers and others sharing the road. Smittybilt accessories are decorative and are not intended to reduce or avoid injury or damage in the event of an accident. The weight and location of Smittybilt accessories may affect your vehicles' handling, stability and performance, creating an increased risk of accident or rollover. Before installing any accessory, check state laws and assure that the accessory will not obscure any lights or interfere with proper operation on your vehicle's safety equipment. Consult your owner's manual and the Smittybilt instructions, or additional safety information. Smittybilt products, nor the warnings contained herein, are not a substitute for your safe driving. Don't drink and drive, always use seat belts and don't drive faster than conditions permit.



