

PRODUCT WEIGHT

**12 LBS.**

WIDTH x DEPTH x HEIGHT

**79" x 5" x 14"**

CAPACITY

**100 LBS**

COLOR

**WHITE OR BLACK**

CATALOG NUMBER

**1BARRPM-W**

**1BARRPM-B**

**PRODUCT FEATURES**

**1 BAR ADD-ON TO CONVERT 2 BAR RACK TO 3 BAR OR 3 BAR RACK TO 4 BAR FOR EXTRA SUPPORT FOR LOAD BEING CARRIED. NOTE : ADDING AN ADDITIONAL BAR ASM TO THE PROMASTER VAN DOES NOT INCREASE THE WEIGHT CAPACITY BEYOND 150 Kg OR 330 LBS. VEHICLE ROOF RATING!**

**SEE PAGE 2 FOR APPLICATION NOTES AND ACCESSORIES, OTHER PRODUCTS THAT WORK WITH THIS UNIT.**

**PAGE 1 of 2**

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*CATALOG NUMBER*      **1BARRPM-W**  
**1BARRPM-B**

*PRODUCT APPLICATION*

**THIS PRODUCT IS DESIGNED FOR THE DODGE PROMASTER STANDARD ROOF VANS. IT IS INTENDED AS AN ADD-ON FOR THE 2BARRPM AND 3BARRPM UTILITY RACKS.**

*ACCESSORIES THAT WILL WORK WITH THIS PRODUCT*

*CATALOG NUMBER*                      *DESCRIPTION*

*SPECIAL APPLICATION NOTES*

**Additional accessories may be compatible with this product. Please consult with ADRIAN STEEL ENGINEERING to review specific applications not listed here.**



## Assembly/Installation Instructions and Owners Manual



**3BARRPM-W SHOWN**

**3BARRPM-B, -W, 2BARRPM-B, -W, and 1BARRPM-B, -W  
Utility Racks for Dodge ProMaster Std Roof Vans**

## - PRECAUTIONS -





 **CAUTION**   
**THE USE AIR IMPACT TOOLS CAN  
OVER-TORQUE FASTENERS AND  
CAUSE FASTENER FAILURE!**



 **CAUTION**   
**ALL INSTALLATION HOLES SHOULD BE SEALED  
WITH SILICON OR BUTYL SEALANT TO PREVENT  
EXHAUST FUMES FROM ENTERING THE VEHICLE!**



 **DANGER**   
**INSPECT FOR FUEL TANK, FUEL LINES, BRAKE LINES, HIGH  
VOLTAGE BATTERIES AND ELECTRICAL LINES PRIOR TO  
DRILLING TO AVOID DAMAGING CRITICAL VEHICLE SYSTEMS  
OR INJURY TO INSTALLER DURING INSTALLATION PROCESS!**



 **CAUTION**   
**TO AVOID DAMAGING THE VEHICLE ALWAYS  
USE DRILL STOPS WHEN DRILLING ANY IN-  
STALLATION HOLES!**



## - IMPORTANT WARRANTY REQUIREMENTS -

1. SUBSTITUTING ADRIAN STEEL SPECIFIED FASTENERS FOR ASSEMBLY AND/OR INSTALLATION WILL VOID YOUR PRODUCT WARRANTY.
2. ALL HOLES DRILLED INTO VEHICLE SHOULD HAVE THE RAW METAL EDGES SEALED WITH A SELF-ETCHING PRIMER TO RESIST CORROSION AND POTENTIAL FASTENER POINT FAILURE.
3. ALL FASTENERS USED IN THE INSTALLATION OF THIS PRODUCT SHOULD BE TIGHTENED TO THE TORQUE(S) SPECIFIED IN THESE INSTRUCTIONS.
4. THESE INSTRUCTIONS SHOULD BE KEPT WITH THE VEHICLE.

### THE BASIC TOOLS NEEDED FOR MOST INSTALLATIONS



DRILL



DRILL BIT WITH  
STOP



RATCHET, SOCKETS  
AND/OR WRENCHES



SCREWDRIVERS



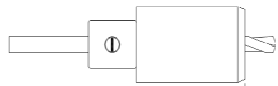


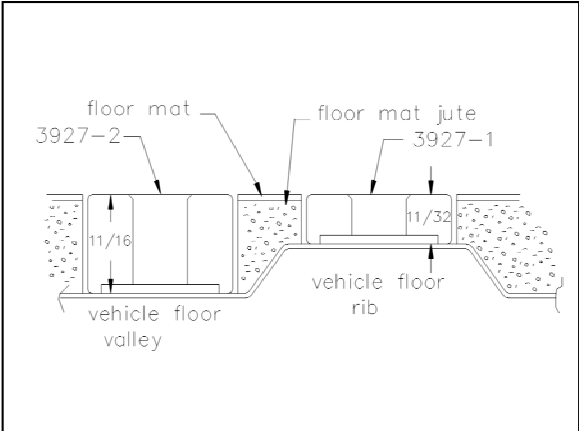
MEASURING TAPE

ADDITIONAL TOOLS MAY BE NEEDED FOR THIS INSTALLATION AND THEY WILL BE IDENTIFIED IN THE STEPS THAT FOLLOW.



**WHEN INSTALLING PLUSNUTS MAKE SURE YOU USE THE CORRECT DRILL BIT WITH A STOP!**

PLUSNUT SIZE	DRILL BIT SIZE
1/4-20 PLUSNUT, FAS0052	USE A 3/8" DIAMETER DRILL BIT WITH A STOP.
5/16-18 PLUSNUT, FAS0091	USE A 1/2" DIAMETER DRILL BIT WITH A STOP.
 OR 	<b>NOTE: A PLUSNUT SETTING TOOL IS REQUIRED FOR PLUSNUT INSTALLATION AND IS NOT SUPPLIED WITH THIS KIT. ORDER PLUSNUT TOOLS FROM ADRIAN STEEL (P.N. 22200-0)OR USE AN AIR POWERED PLUSNUT SETTING GUN.</b>
<b>NOTE: If your vehicle contains carpet or a rubber floor mat you will need to prepare the mounting locations using a 1-3/16" carpet cutter.</b>	<b>1-3/16" DIAMETER CARPET CUTTER P.N. 31183-0.</b> 

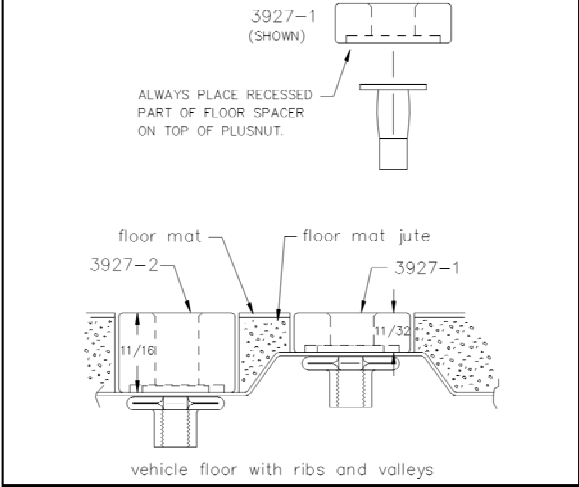


**Step 01**  
**Optional**

If your vehicle contains carpet or a rubber floor mat you will need to prepare the mounting locations. **(if not, skip to STEP 02)**

Position the product to be installed into the vehicle and once you are satisfied with the mounting locations, mark the mounting locations. Using a 1-3/16" diameter carpet cutter. Select the appropriate floor spacers as shown in the illustration to the left. Set those aside for use later into the installation process.

Once you have prepared the carpet/floor mat for

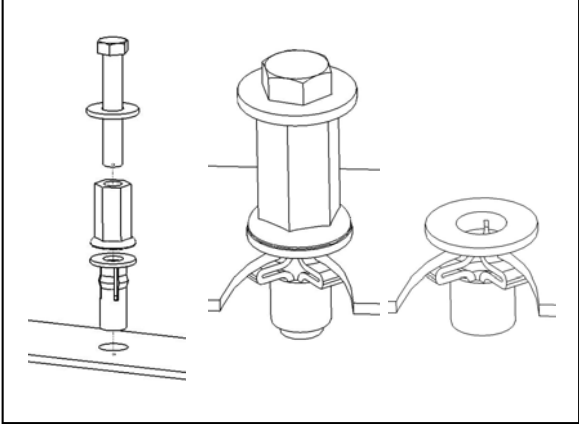


**Step 02**  
**Prepare Mounting Locations**

Using a drill and drill bit (see table at top of page for correct size) drill the mounting holes in the vehicle sheet metal to prepare for installing the plusnuts.

If you are thru-bolting at any of the locations simply drill a hole that is 1/16" larger than the bolt size(s) for those locations.

Once you have drilled the holes into the vehicle, the raw metal edges should be sealed using a self-etching primer to resist corrosion and potential fastener point failure.



**Step 03**  
**Setting Plusnuts**

Use a Air Powered Plusnut Setting Gun to "set the plusnut" or if installing manually with hand tools, assembly the following.





**1/4-20UNC Plusnut (FAS0052)**  
FAS0080 SCREW, HXHD, 1/4-20UNCx2.00, G8  
FAS0067 WASHER, FLAT, 1/4"ID  
22200-0 PLUSNUT TOOL

**5/16-18UNC Plusnut (FAS0091)**  
FAS0095 SCREW, HXHD, 5/16-18UNCx2.00", G8  
FAS0086 WASHER, FLAT, 5/16"ID  
22200-0 PLUSNUT TOOL

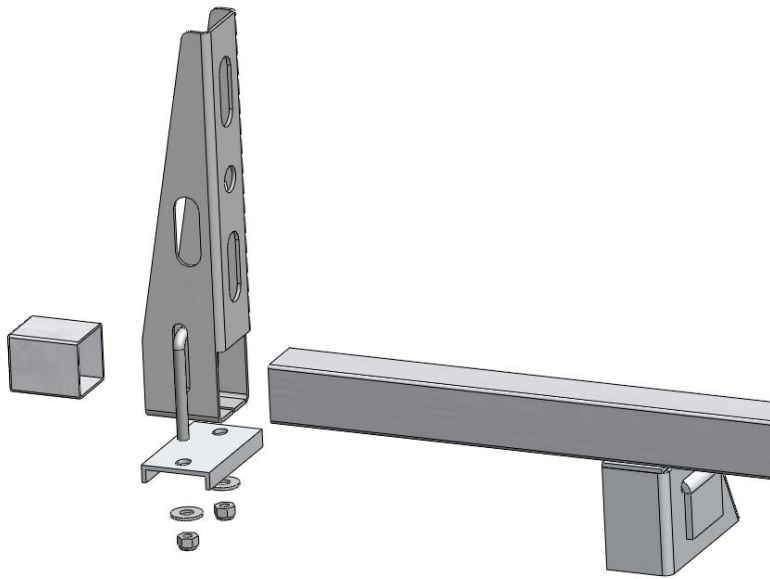
Place barrel of the plusnut body in sheet metal thru hole until flange is flush with sheet metal.

Using a 9/16" combination wrench of plusnut tool body and a second hand wrench, ratchet, or air tool, rotate the hex bolt head CW to draw plus nut flanges up (set the plusnut).





Remove hex bolt, washer, and plusnut. Inspect installation.

<b>PARTS YOU WILL USE FOR</b>  <b>STEP 01</b>	CROSSBAR ASM. (1) REQUIRED	UPRIGHT (2) REQ'D PER BAR	BOLT PLATE (2) REQ'D PER BAR	FAS0598 U-BOLT (2) REQ'D PER BAR
				
	FAS0248 5/16-18 LOCK-NUT (4) REQ'D PER BAR	FAS0552 5/16 FLAT WASHER (4) REQ'D PER BAR	48939 BLUE VINYL COVER (2) REQ'D PER BAR	
				

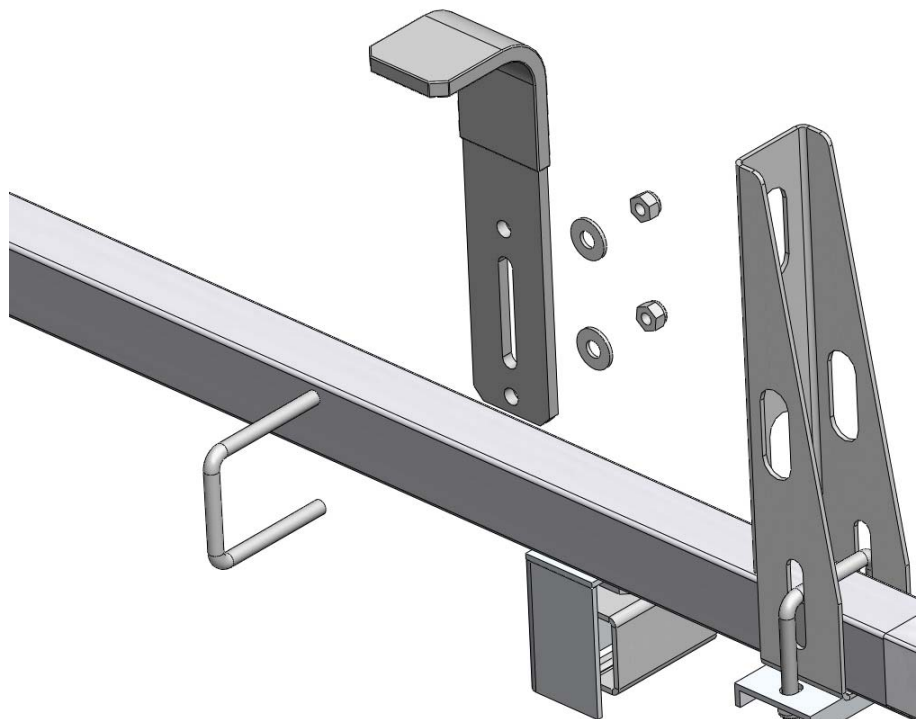
# Instructions for Step 01



INSERT U-BOLT INTO UPRIGHT AND SLIDE ONTO BAR. PLACE BOLT PLATE ONTO U-BOLT AND INSTALL FLAT WASHERS AND LOCKNUTS. TIGHTEN TO 12 FT.LBS. TORQUE. PLACE BLUE COVER OVER END OF BAR AND SLIDE COMPLETELY ON. COVER MAY HAVE TO BE WARMED IF COLD AS IT IS A STRETCH FIT ONTO BAR. REPEAT ON ALL ENDS OF ALL CROSSBARS.

<b>PARTS YOU WILL USE FOR</b>  <b>STEP 02</b>	LADDER STOP (1) REQUIRED	FAS0598 U-BOLT (1) REQUIRED	FAS0248 5/16-18 LOCK-NUT (2) REQUIRED	FAS0552 5/16 FLAT WASHER (2) REQUIRED
				

## Instructions for Step 02



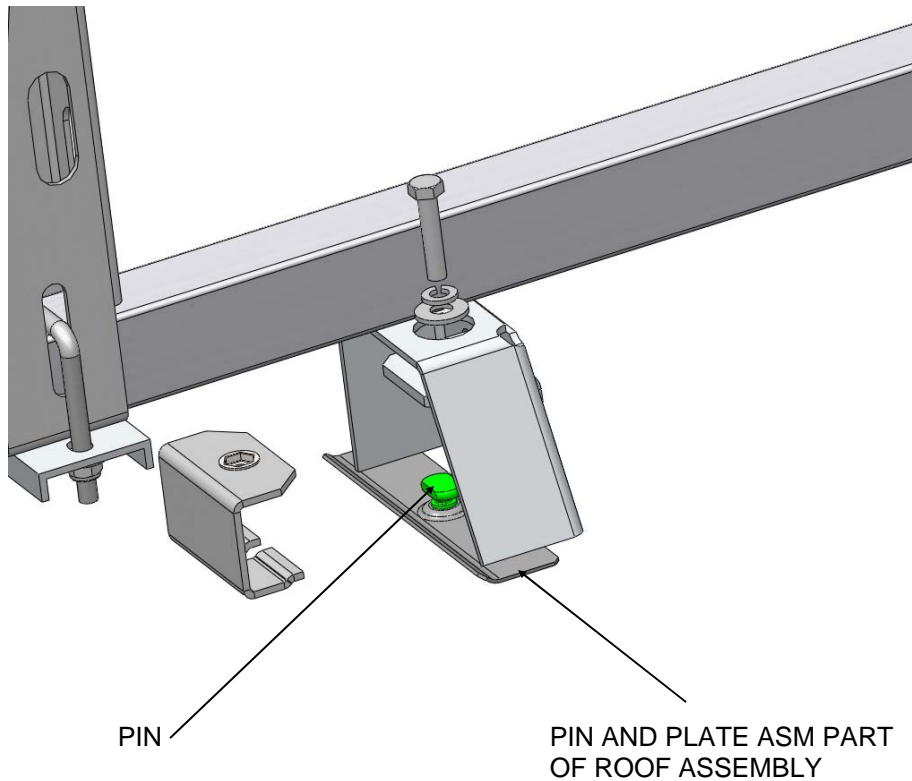
THIS STEP APPLIES TO 2 AND 3 BAR RACKS ONLY.

ADDITIONAL LADDER STOPS ARE AVAILABLE THROUGH YOUR DISTRIBUTOR.

IF DESIRED, ATTACH LADDER STOP TO FRONT CROSSBAR USING U-BOLT, FLAT WASHERS AND LOCKNUTS AS SHOWN. LOCATION AND HEIGHT ARE ADJUSTABLE. TORQUE NUTS TO 12 FT.LBS. **NOTE :** **REAR CROSSBAR HAS HOLES NEAR FEET FOR ATTACHMENT OF REAR ROLLER ASM!!!**

<b>PARTS YOU WILL USE FOR</b>  <b>STEP 03</b>	45168-W, -B, FOOT CLAMP (2) REQ'D PER BAR	FAS0242 5/16-18x 1.50 HEX HEAD SCREW (2) REQ'D PER BAR	FAS0588 5/16 LOCK WASHER (2) REQ'D PER BAR	FAS0552 5/16 FLAT WASHER (2) REQ'D PER BAR
				

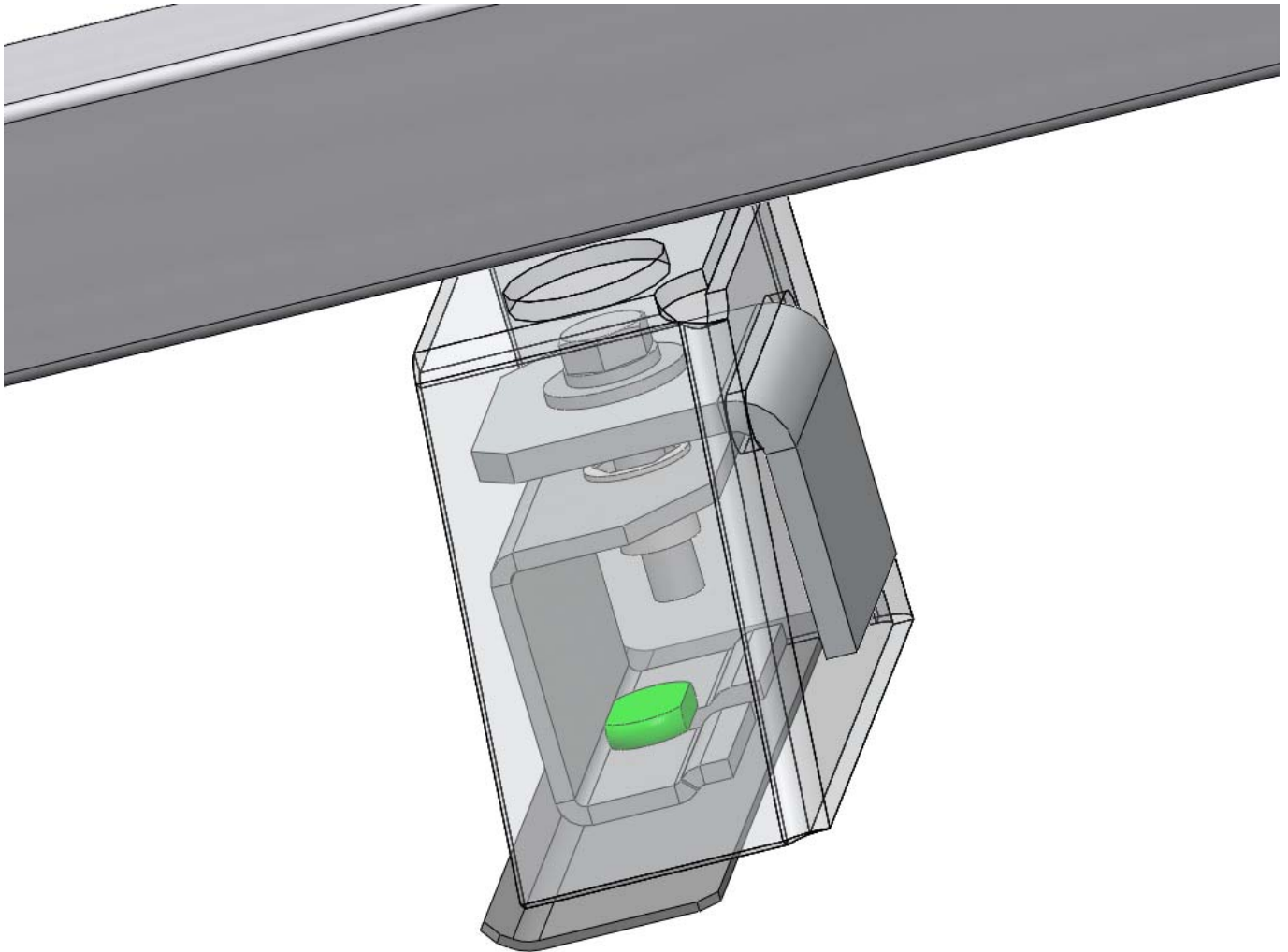
## Instructions for Step 03



PLACE CROSSBAR OVER ATTACHMENT PINS AS SHOWN. SLIP LOWER LEG OF FOOT CLAMP UNDER HEAD OF PIN. INSTALL HEX SCREW AND WASHERS AS SHOWN. IT IS IMPORTANT THAT PIN IS IN CLAMP SLOT AND HEAD OF PIN IS CAPTURED BETWEEN VERTICAL WALL AND OFFSET OF CLAMP. TORQUE TO 12 TO 15 FT LBS. REPEAT FOR ALL CROSSBAR ASSEMBLIES. SEE NEXT PAGE FOR COMPLETED ARRANGEMENT AND FURTHER CLARIFICATION. **NOTE: REAR CROSSBAR HAS HOLES NEAR FEET FOR ATTACHMENT OF REAR ROLLER ASM!!!!**



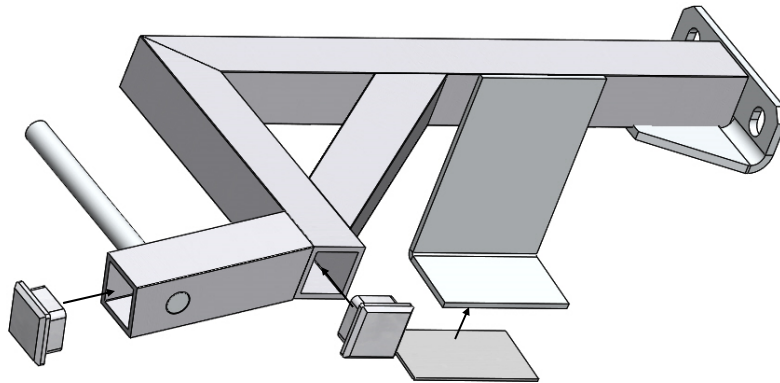
## STEP 03 CONTINUED



FASTENING COMPLETE. FOOT SHOWN TRANSPARENT FOR CLARITY. TYPICAL ALL ATTACHMENTS.




<b>PARTS YOU WILL USE FOR</b>  <b>STEP 04</b>	45170-B, -W ROLLER ARM, CS	45171-B, -W ROLLER ARM, SS	43417 TAPE (2) REQ'D	35017-0 CAP (4) REQ'D
				

## Instructions for Step 04

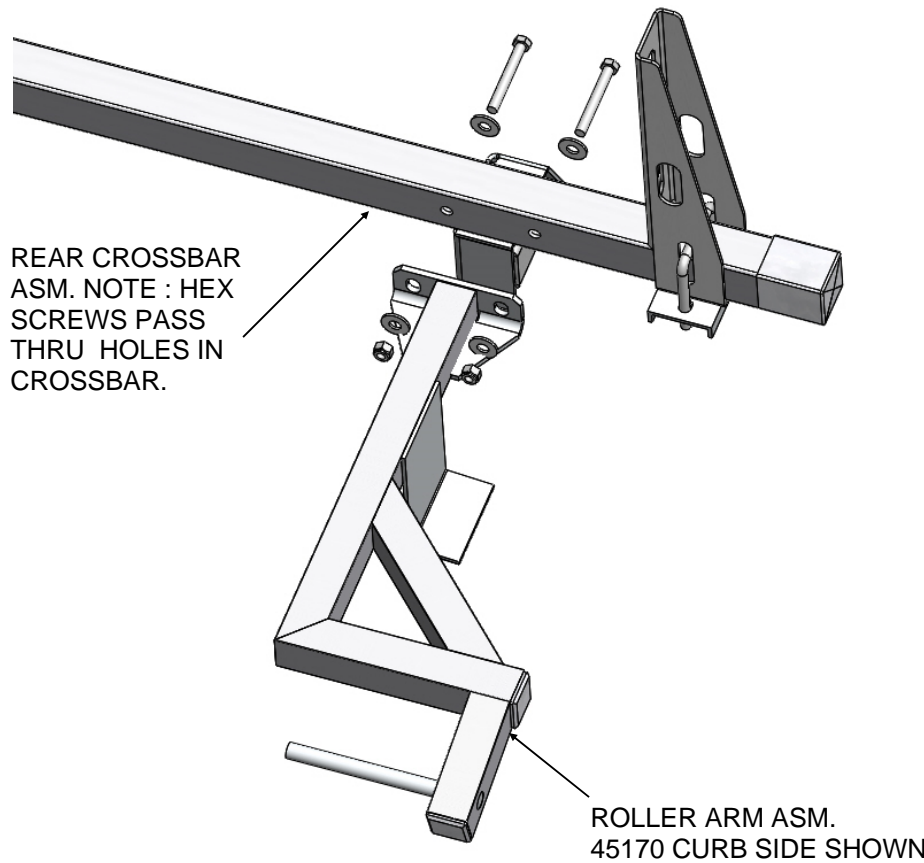


45170, CURB SIDE SHOWN

INSERT CAPS INTO OPEN TUBES, 2 PER ARM ASSEMBLY. REMOVE ONE SIDE OF BACKING ON 43417 TAPE AND APPLY TO BOTTOM OF LOWER LEG OF ARM ASSEMBLIES.




<b>PARTS YOU WILL USE FOR</b>  <b>STEP 05</b>	FAS0243 5/16-18 X 2.50 HEX SCREW (2) REQ'D	FAS0552 5/16" FLAT WASHER (4) REQ'D	FAS0248 5/16-18 HEX NUT (2) REQ'D	
				

## Instructions for Step 05

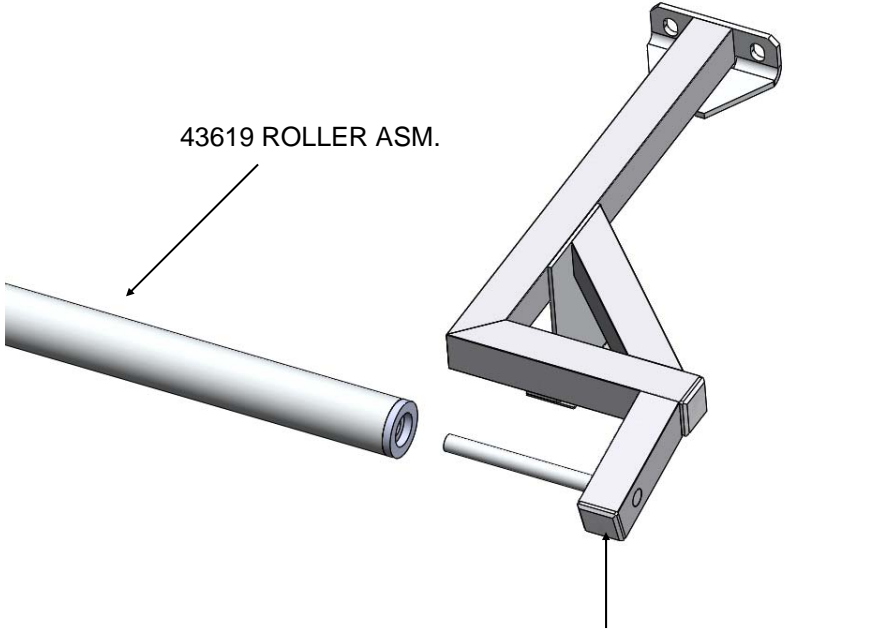


ASSEMBLE ONE ROLLER ARM ASM TO REAR CROSSBAR AS SHOWN. CLEAN ROOF AREA WHERE LOWER LEG OF ROLLER ARM WILL CONTACT. PEEL BACKING FROM TAPE ON UNDER-SIDE OF ROLLER ARM LEG SO IT WILL STICK TO ROOF. TORQUE FASTENERS TO 12 FT LBS.

**NOTE: ENSURE ARM ASSEMBLY IS FLUSH OR BELOW CROSS BOW WHEN FASTENERS ARE TIGHTENED.**

<b>PARTS YOU WILL USE FOR</b>  <b>STEP 06</b>	FAS0243 5/16-18 X 2.50 HEX SCREW (2) REQ'D	FAS0552 5/16" FLAT WASHER (4) REQ'D	FAS0248 5/16-18 HEX NUT (2) REQ'D	
				

## Instructions for Step 06



43619 ROLLER ASM.

ROLLER ARM ASM.  
45170 CURB SIDE SHOWN

ASSEMBLE ONE END OF ROLLER OVER PIN ON INSTALLED ARM ASM. ASSEMBLE OPPOSITE SIDE ARM ASM SAME AS FIRST.


# Instructions for Step 07



YOUR INSTALLATION IS NOW COMPLETE. THE 3BARRPM IS SHOWN INSTALLED AT LEFT. MAKE SURE ALL FASTENERS ARE PROPERLY TORQUED. CHECK FASTENERS AFETR 2 WEEKS AND AGAIN EVERY FEW WEEKS TO ASSURE PROPER PERFORMANCE OF YOUR RACK.

**NOTE : ALL CARGO MUST BE PROPERLY TIED DOWN TO RACK PRIOR TO TRANSPORT.**