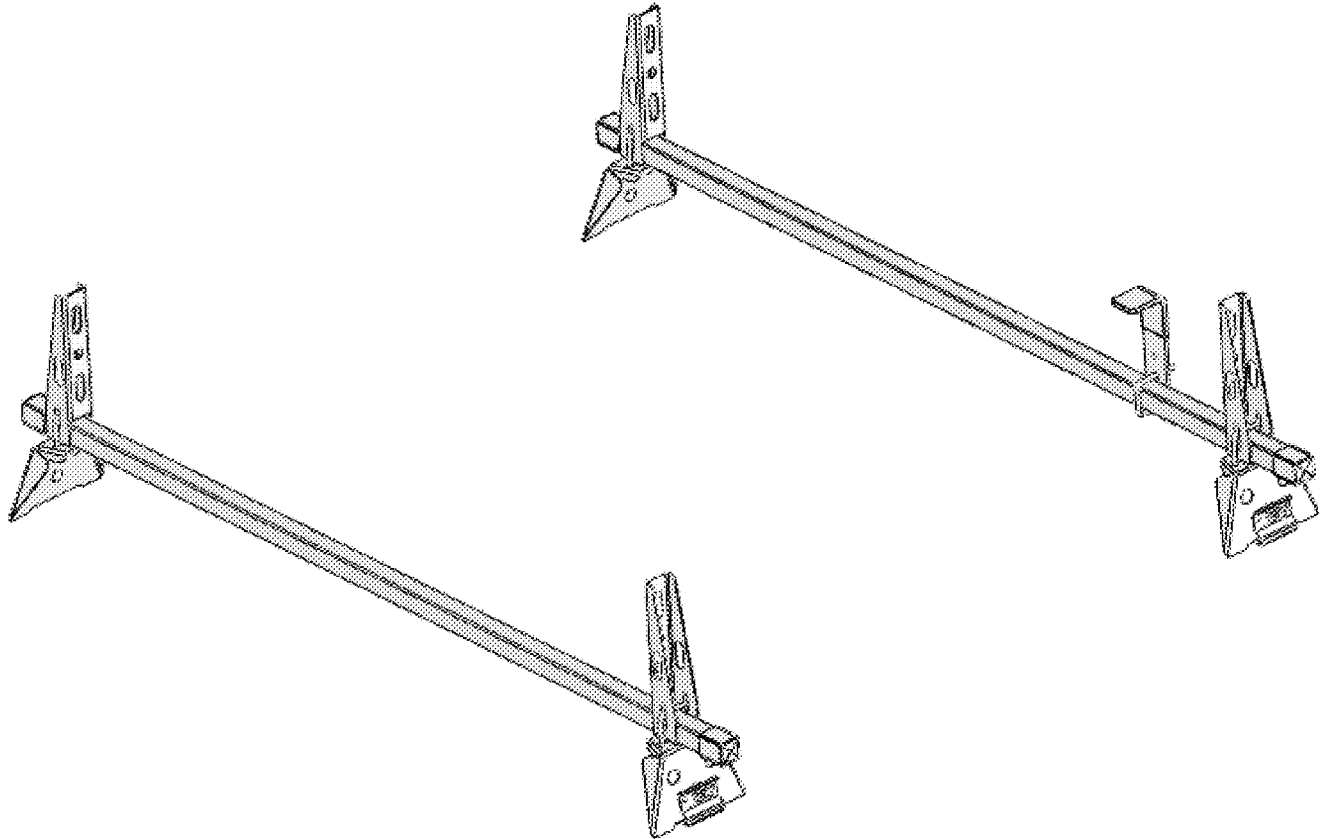




ADRIAN STEEL

Cargo Management Solutions for Commercial Vehicles

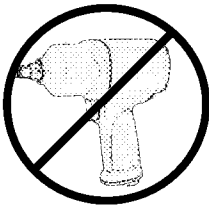
Assembly/Installation Instructions and Owners Manual



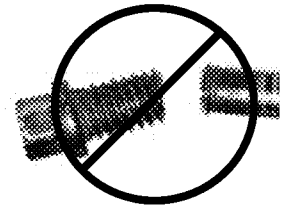
2BRS-W SHOWN

1BRS-B, -W, 2BRS-B, -W
UTILITY RACKS FOR FULL SIZE 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.

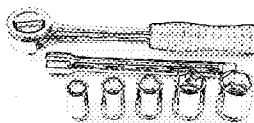
THE BASIC TOOLS NEEDED FOR MOST INSTALLATIONS



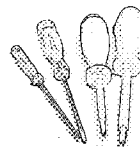
DRILL



DRILL BIT WITH
STOP



RATCHET, SOCKETS
AND/OR WRENCHES



SCREWDRIVERS


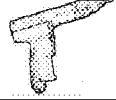
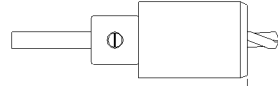


MEASURING TAPE

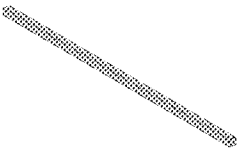

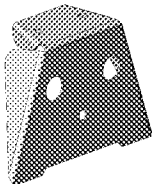

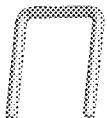
ADDITIONAL TOOLS MAY BE NEEDED FOR THIS INSTALLATION AND THEY WILL BE IDENTIFIED IN THE STEPS THAT FOLLOW.



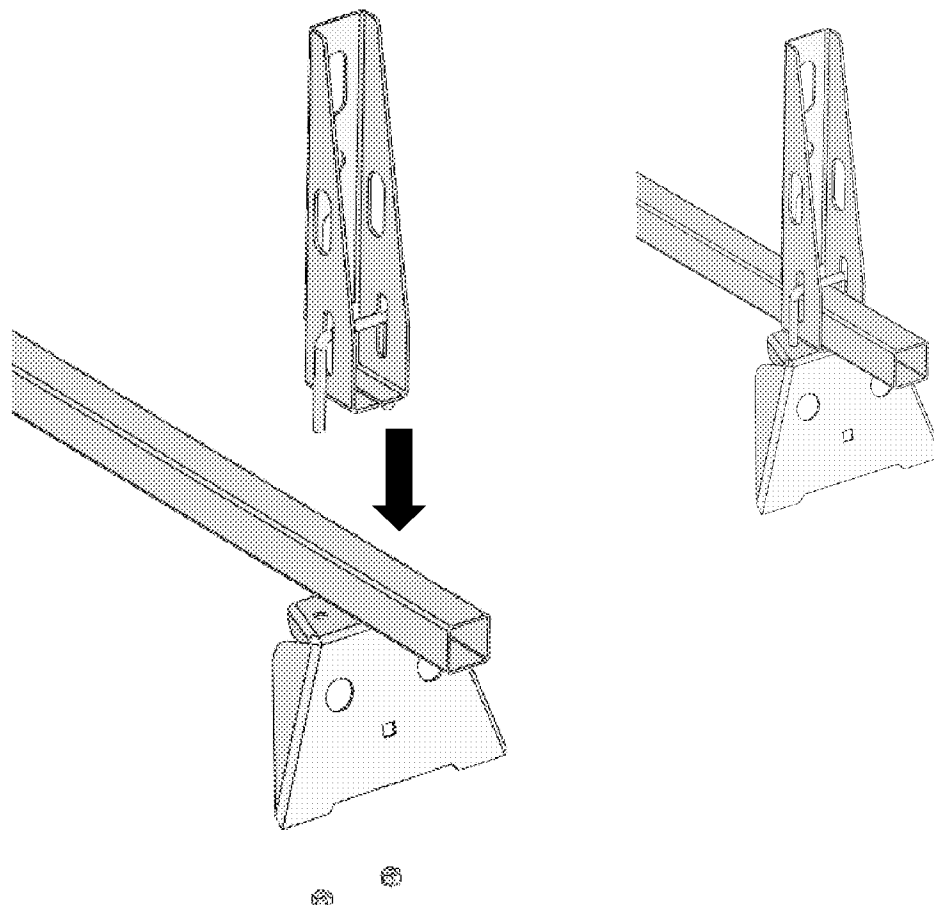
WHEN INSTALLING PLUSNUTS MAKE SURE YOU USE THE CORRECT DRILL BIT WITH A STOP!

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  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.	
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.	
1-3/16" DIAMETER CARPET CUTTER P.N. 31183-0. 	

	<h2>Step 01</h2> <p>Optional</p>	<p>If your vehicle contains carpet or a rubber floor mat you will need to prepare the mounting locations. (if not, skip to STEP 02)</p> <p>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.</p> <p>Once you have prepared the carpet/floor mat for</p>
	<h2>Step 02</h2> <p>Prepare Mounting Locations</p>	<p>Using a drill and drill bit (<i>see table at top of page for correct size</i>) drill the mounting holes in the vehicle sheet metal to prepare for installing the plusnuts.</p> <p>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.</p> <p>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.</p>
	<h2>Step 03</h2> <p>Setting Plusnuts</p>	<p>Use a Air Powered Plusnut Setting Gun to "set the plusnut" or if installing manually with hand tools, assembly the following.</p> <p><u>1/4-20UNC Plusnut (FAS0052)</u> FAS0080 SCREW, HXHD, 1/4-20UNCx2.00", G8 FAS0067 WASHER, FLAT, 1/4"ID 22200-0 PLUSNUT TOOL</p> <p><u>5/16-18UNC Plusnut (FAS0091)</u> FAS0095 SCREW, HXHD, 5/16-18UNCx2.00", G8 FAS0086 WASHER, FLAT, 5/16"ID 22200-0 PLUSNUT TOOL</p> <p>Place barrel of the plusnut body in sheet metal thru hole until flange is flush with sheet metal.</p> <p>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).</p> <p>Remove hex bolt, washer, and plusnut. Inspect installation.</p>

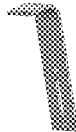
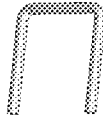
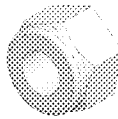
PARTS YOU WILL USE FOR STEP 04	CROSSBAR TUBE (1) REQUIRED	UPRIGHT (2) REQ'D PER BAR	FOOT (2) REQ'D PER BAR	FAS0248 5/16-18 LOCK- NUT (4) REQ'D PER BAR
				
	FAS0598 U-BOLT (2) REQ'D PER BAR			
				

Instructions for Step 04

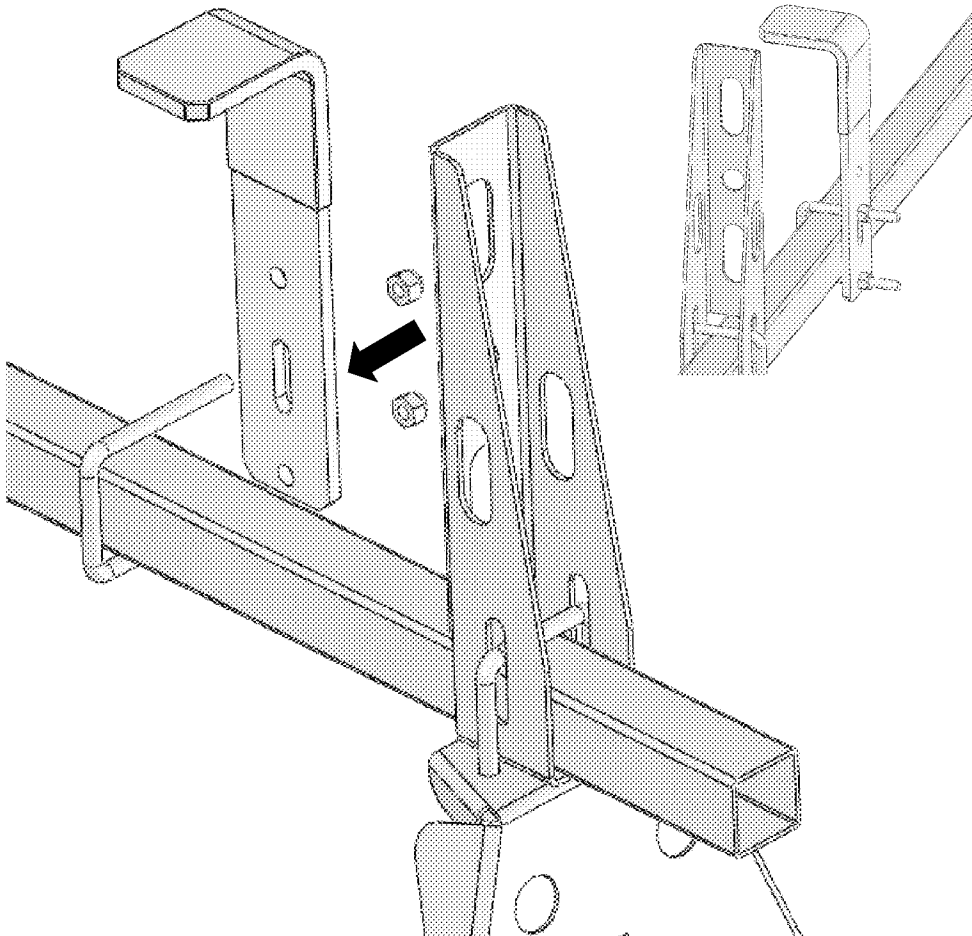


INSERT U-BOLT INTO UP-
RIGHT AND SLIDE ONTO
BAR. PLACE FOOT ONTO
U-BOLT AND INSTALL
LOCKNUTS (DO NOT
FULLY TIGHTEN AT THIS
TIME).

REPEAT ON BOTH ENDS
OF THE CROSSBAR(S).

PARTS YOU WILL USE FOR STEP 05	LADDER STOP (1) REQUIRED	FAS0598 U-BOLT (1) REQ'D PER STOP	FAS0248 5/16-18 LOCKNUT (2) REQ'D PER STOP	
				

Instructions for Step 05

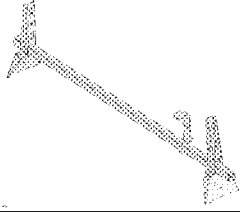
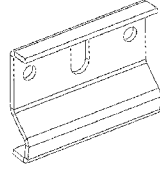
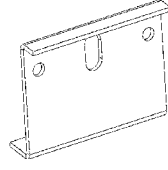

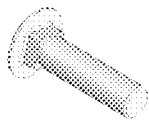



THIS STEP APPLIES TO 2 AND 3 BAR RACKS ONLY.

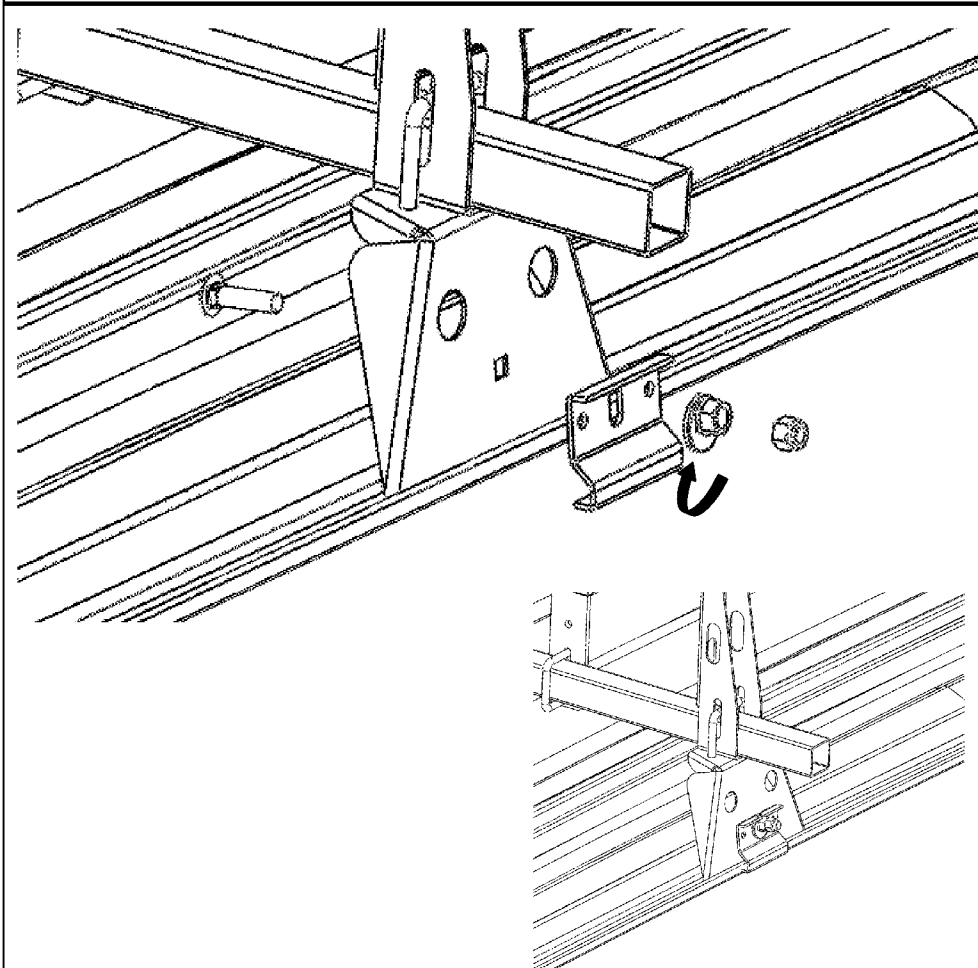
ADDITIONAL LADDER STOPS ARE AVAILABLE THROUGH YOUR DISTRIBUTOR.

IF DESIRED, ATTACH LADDER STOP TO FRONT CROSSBAR USING U-BOLT AND LOCKNUTS AS SHOWN. LOCATION AND HEIGHT ARE ADJUSTABLE. TORQUE NUTS TO 12 FT.LBS.

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PARTS YOU WILL USE FOR STEP 06	CROSS BAR ASSEMBLY	22856-0 GM FOOT CLAMP (2) REQUIRED PER BAR	11427-0 FORD FOOT CLAMP (2) REQUIRED PER BAR	FAS0249 3/8-16 NYLOCK NUT (2) REQUIRED PER BAR
				
	FAS0117 3/8-16 CARRIAGE BOLT (2) REQ'D PER BAR	07466-0 CAM ADJUSTING NUT (2) REQ'D PER BAR		
				

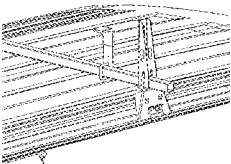
Instructions for Step 06



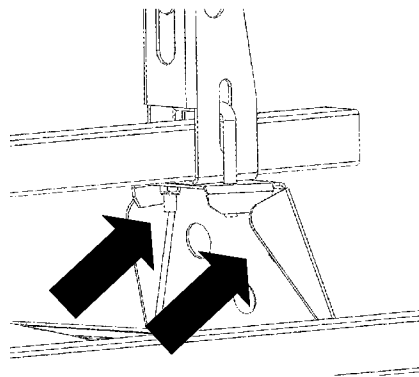
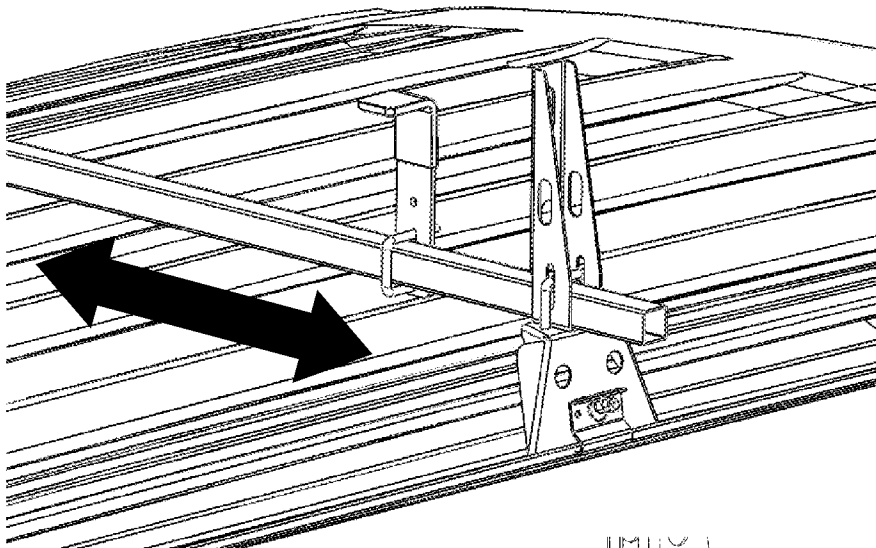
POSITION CROSS BAR ASSEMBLY(IES) ON VEHICLE AS SHOWN.

NOTE: THE RECOMMENDED POSITION FOR THE FRONT CROSS BAR IS ABOVE THE B-PILLAR OF THE VEHICLE.

ATTACH THE CORRECT FOOT CLAMP FOR YOUR VEHICLE (GM or FORD) (GM SHOWN) AS SHOWN. ROTATE THE CAM NUT CLOCKWISE TO TIGHTEN THE FOOT CLAMP AGAINST THE DRIP RAIL. NOW FIRMLY TIGHTEN THE 3/8" LOCK NUT TO SECURELY ANCHOR THE ASSEMBLY. REPEAT THIS PROCESS FOR ALL (2 PER CROSS BAR) FOOT CLAMP ASSEMBLIES.

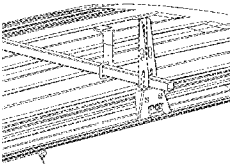

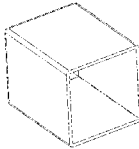
PARTS YOU WILL USE FOR STEP 07	PARTIALLY INSTALLED CROSS BAR ASSEM- BLY			
				

Instructions for Step 07

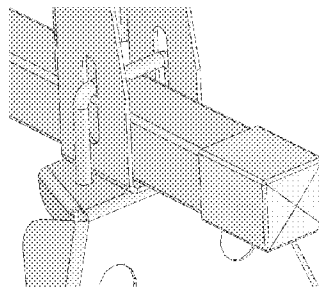
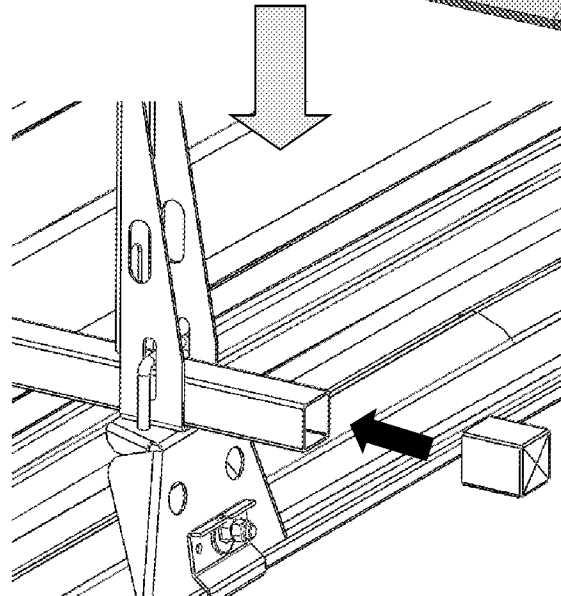
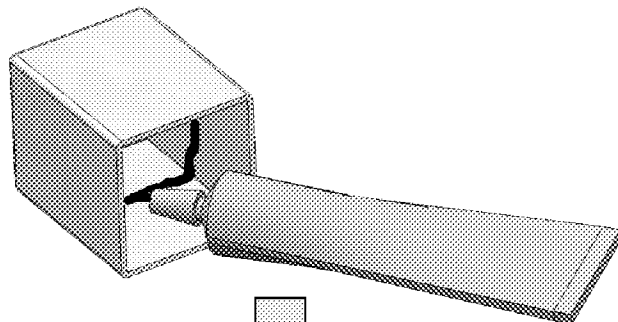


POSITION CROSS BAR (LEFT or RIGHT) IN ORDER TO CENTER IT ACROSS THE VEHICLE. ONCE THE CROSS BAR IS CENTERED, TIGHTEN THE 5/16" NYLOCK NUTS TO FULLY CLAMP THE U-BOLT TO THE CROSS BAR. REPEAT THIS PROCESS FOR ALL FOOT ASSEMBLIES.

RECOMMENDED POSITION FOR REAR CROSS BOW IS 7' FROM THE FRONT BOW POSITIONED ABOVE B-PILLAR.

PARTS YOU WILL USE FOR STEP 08	PARTIALLY INSTALLED CROSS BAR ASSEM- BLY	26618-0 SILICONE SEALANT (1) REQ'D PER INSTALL	29427-0 TUBE COVER (2) REQ'D PER BAR	
				

Instructions for Step 08



APPLY A BEAD OF SILI-
CON SEALANT TO THE
INSIDE (ALL FOUR SIDES)
OF THE END CAP AP-
PROXIMATELY 1/2" IN
FROM THE EDGE. PUSH
THE END CAP ONTO THE
CROSS BAR TUBE AND
ENSURE THAT IT IS FULLY
SEATED. REPEAT THIS
PROCESS FOR ALL ENDS
OF THE TUBE(S).