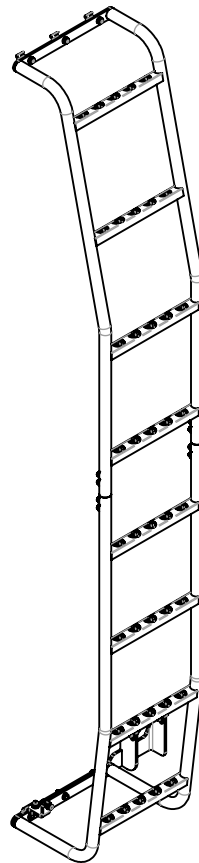




FORD TRANSIT LADDER INSTALLATION INSTRUCTIONS



WARNING

- Ladders are dangerous and should only be used with appropriate training.
- Incorrect use of ladders can result in injury or death.
- The persons that purchase and now own the Unaka Transit ladder are responsible for putting together and enforcing an appropriate safety procedure that outlines how the ladder is used, what fall protection is required, what other personal protective equipment is required, and who has access to the ladder.
- The Unaka Transit ladder is a service ladder used to help access the roof of the van in order to help clean or work on solar panels. If frequent roof access is required or access to other parts of the van roof not safely accessible using this ladder in the location it is installed, additional ladders or methods of access should be used.
- Fall Protection: Accessing the roof of your van will put you at extreme risk to potential falls which can result in injury or death. Appropriate fall protection should be used when accessing your van roof.
- For general use situations, OSHA requires that fall protection be provided at elevations of four feet in general industry workplaces.
- The list below outlines a few times when the ladder should not be used. These should be included in addition to any rules documented and put in place by the owner of the ladder:
 - Without appropriate fall protection and personal protective equipment
 - During storms
 - When wet from any source
 - Under the influence of drugs or alcohol
 - While the van is in motion

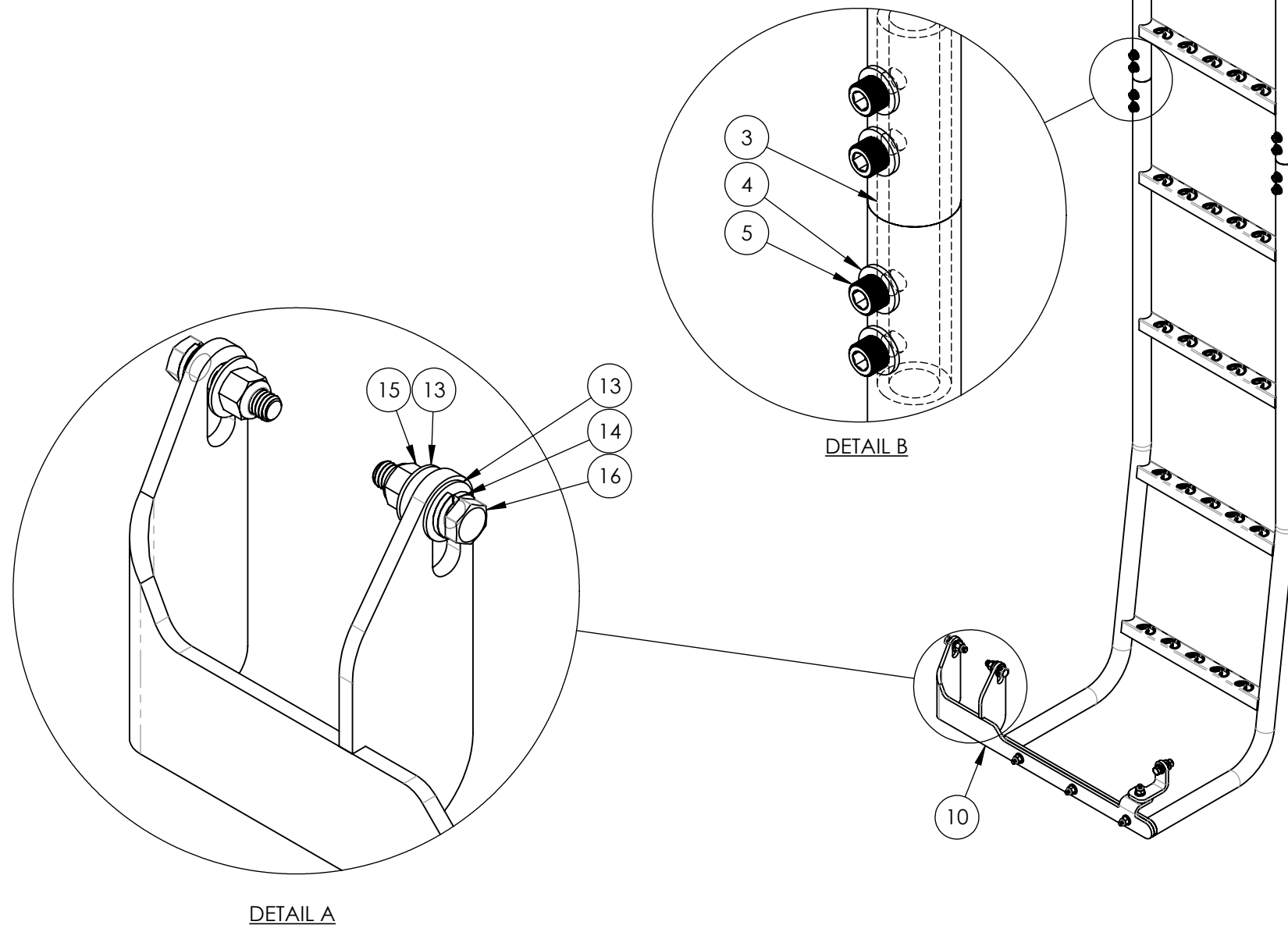
ADDITIONAL NOTES

- Ladders: All ladders are extremely dangerous if used improperly. The installation of the Transit Ladder requires the use of a separate ladder. Anyone using any ladder should follow the manufactures guidelines with respect to proper usage.
- Initial Loose Fit: Due to manufacturing tolerances of the Transit vans and these ladders, some hardware may need to be left loose initially to make installing the hardware easier. This is generally noted but, in some cases, other hardware may need to be loosened up so that all hardware can be installed, then tightened up.

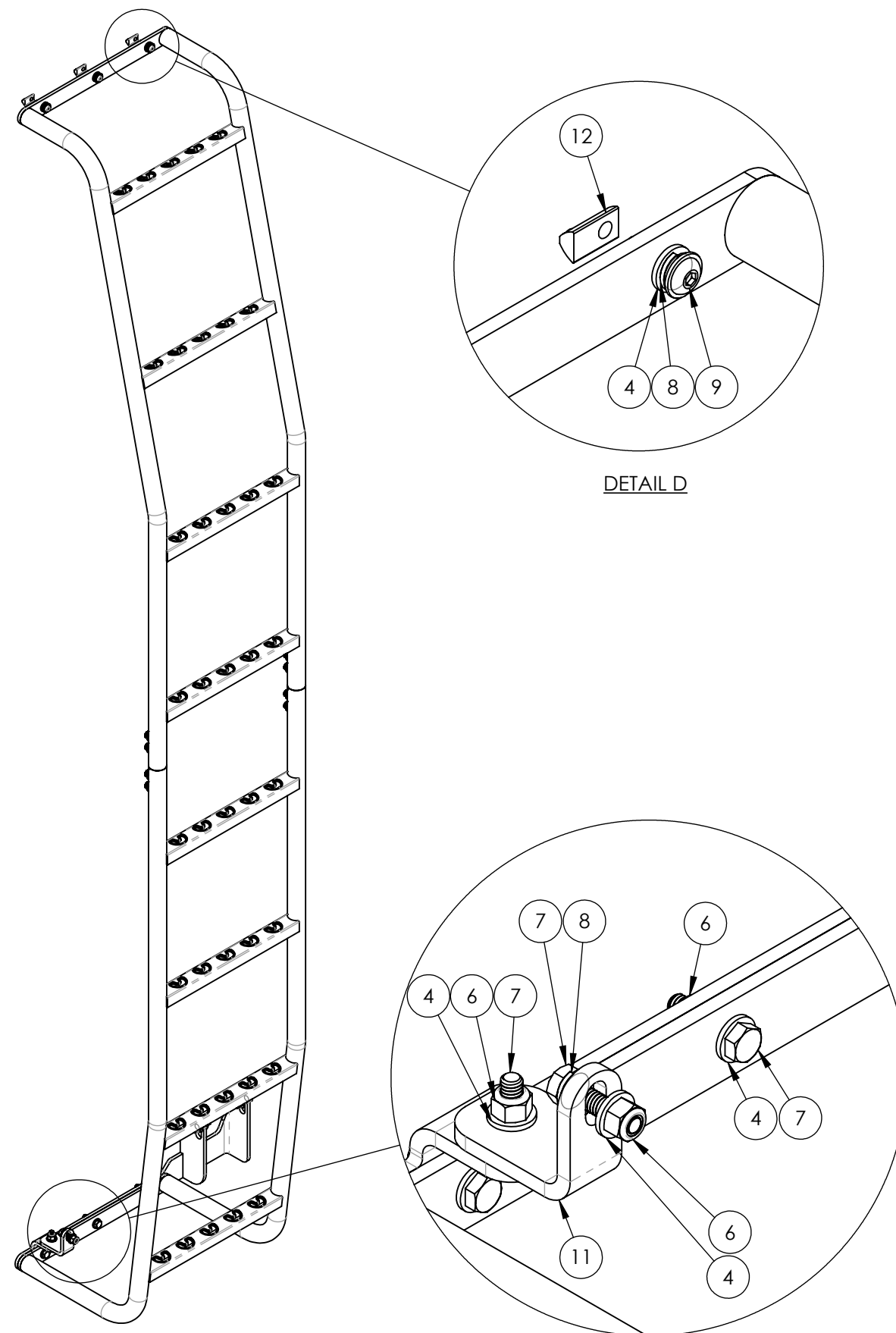
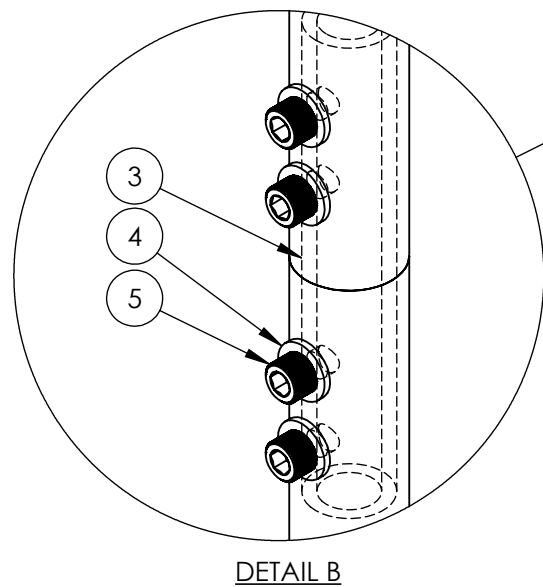
REQUIRED TOOLS

- A separate ladder
- Standard set of box wrenches
- Standard socket set
- Hand Drill, with 1/8" Drill Bit, and a 9/32 or 5/16" bit
- Metal file and or sandpaper (for cleaning holes in rib after drilling)
- Primer and paint (to protect holes after drilling)
- Torque Wrench
- Anti-Seize to apply to all bolts during installation

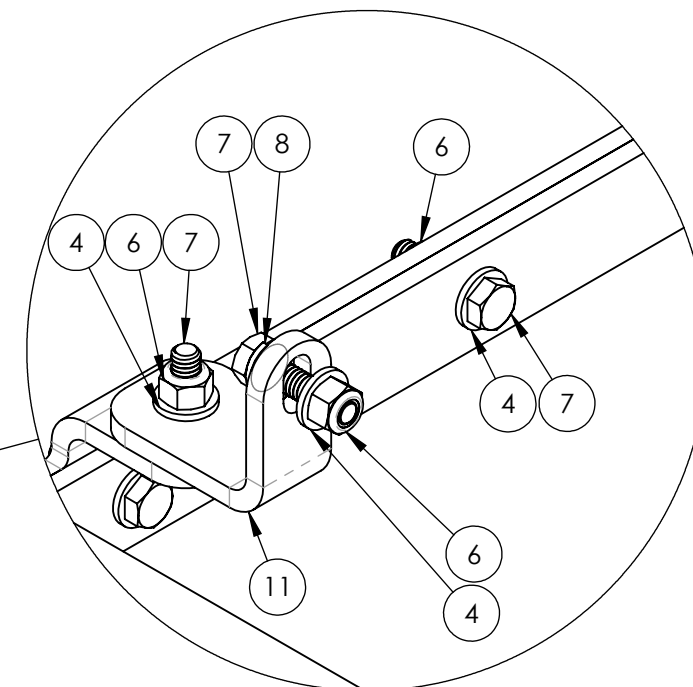
ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	1	---	Transit Ladder Upper Half
2	1	---	Transit Ladder Lower Half
3	2	---	CONNECTOR
4	21	96659A107	STAINLESS WASHER - 5/16in
5	8	92196A967	STAINLESS SHCS - 5/16-24 L=3/8in
6	5	91831A030	STAINLESS LOCKNUT - 5/16-18
7	5	92240A585	STAINLESS HEX SCREW - 5/16-18 L=1.25in
8	4	92146A030	STAINLESS SPLIT LOCK WASHER - 5/16in
9	3	97654A306	STAINLESS FLANGE BHCS - 5/16-18 L=1in
10	1	---	SUBFRAME MOUNTING BRACKET
11	1	---	PINCH WELD BRACKET
12	3	13021	ROLL IN T-NUT, 5/16-18 THREAD
13	4	92141A031	STAINLESS WASHER - 3/8in
14	2	92146A031	STAINLESS SPLIT LOCK WASHER - 3/8in
15	2	91831A127	STAINLESS LOCKNUT - 3/8-16
16	2	92198A628	STAINLESS HEX SCREW - 3/8-16 L=1-1/2in



DETAIL A



DETAIL D

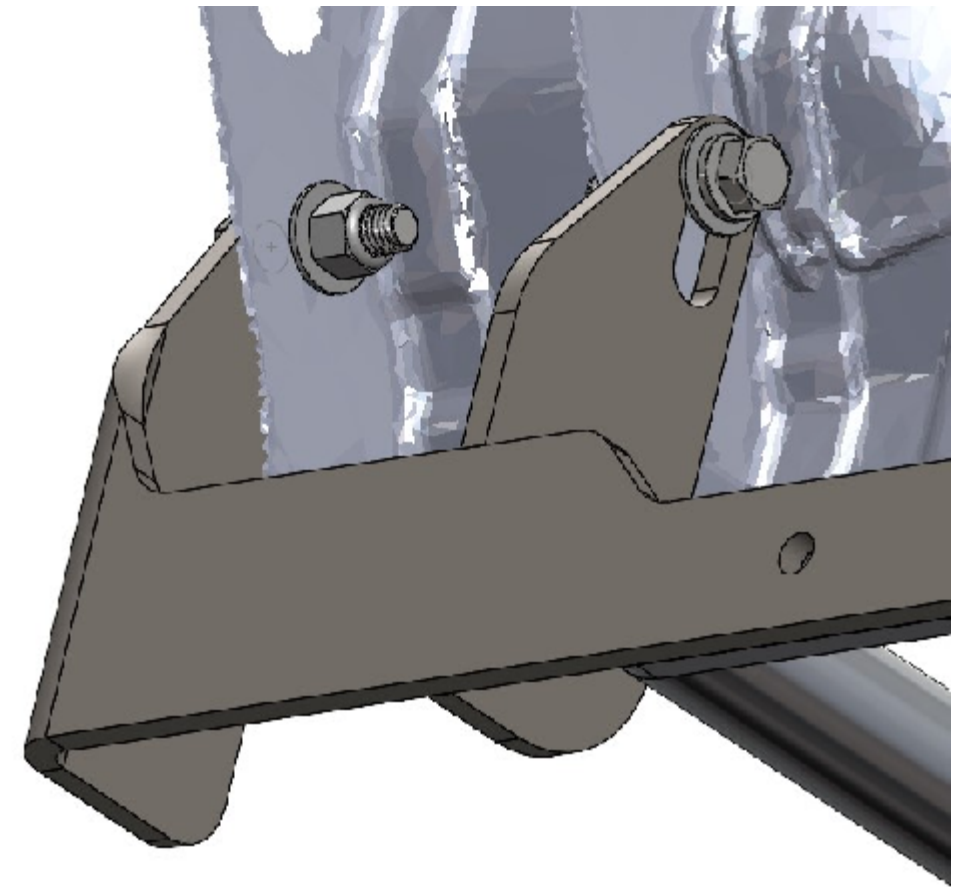
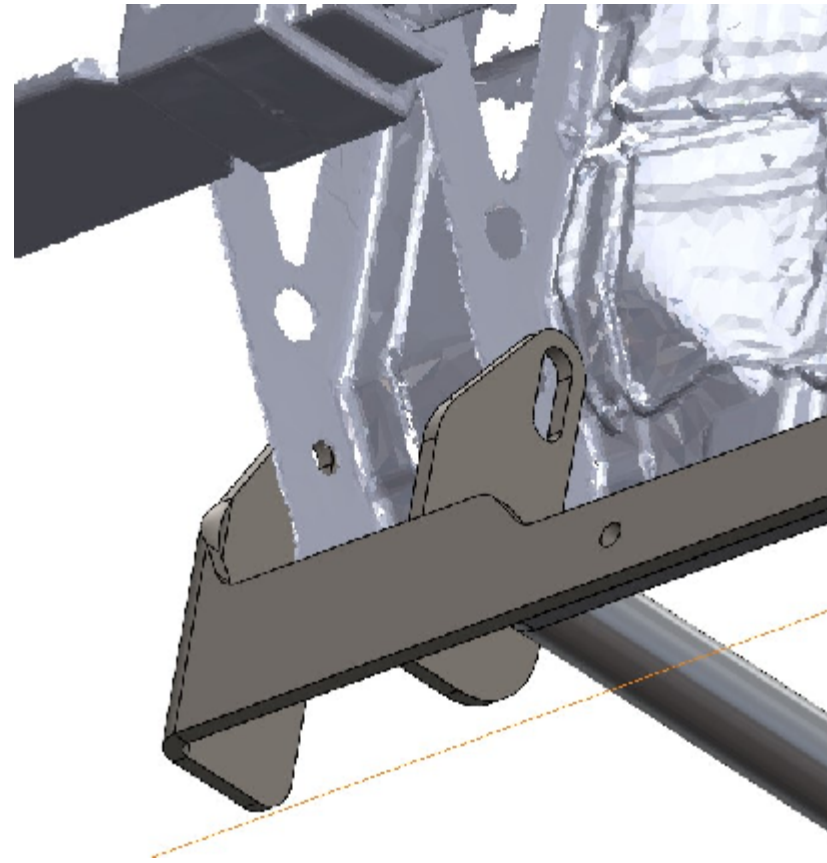
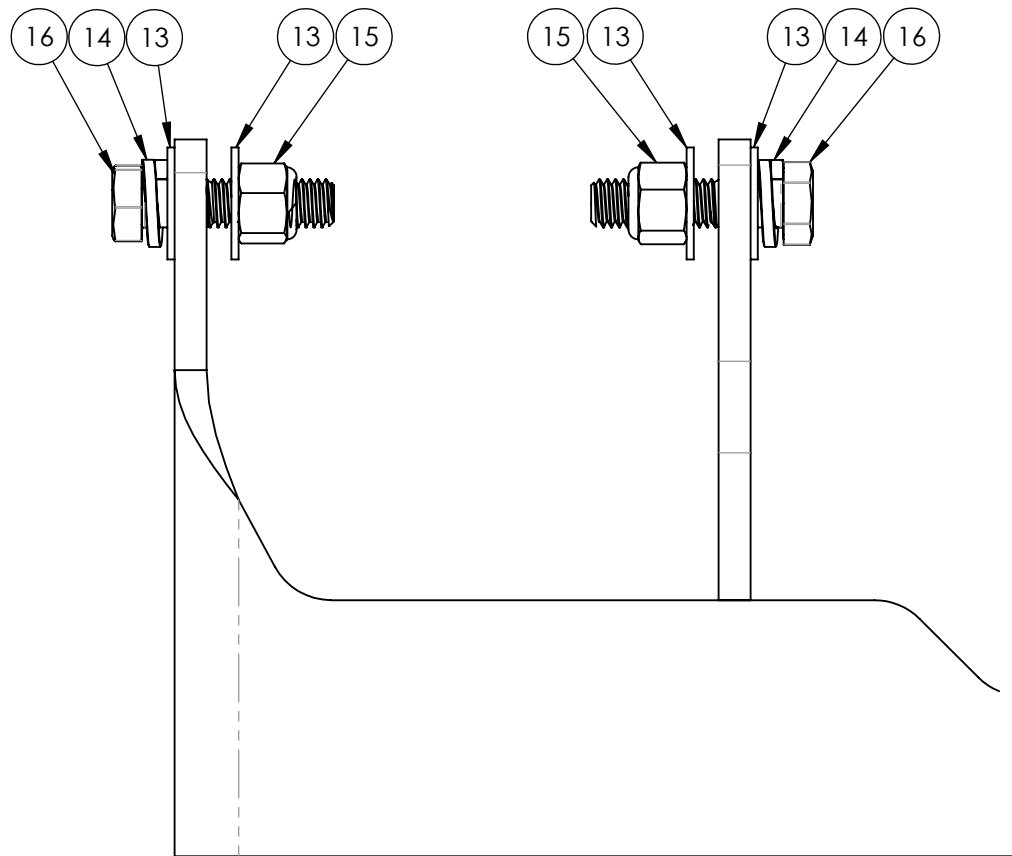


DETAIL C

STEP 1

INSTALL SUBFRAME MOUNTING BRACKET ON TO THE VAN

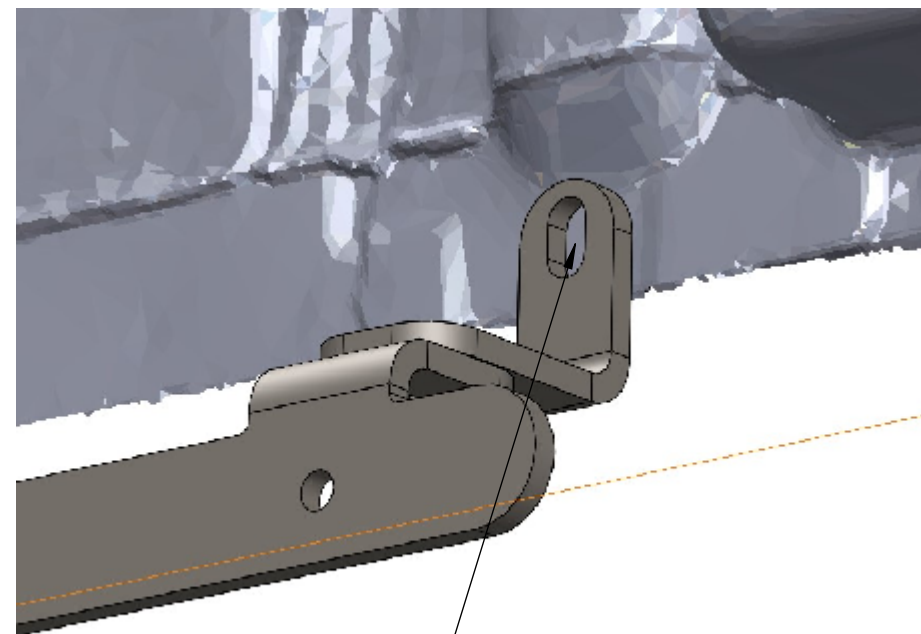
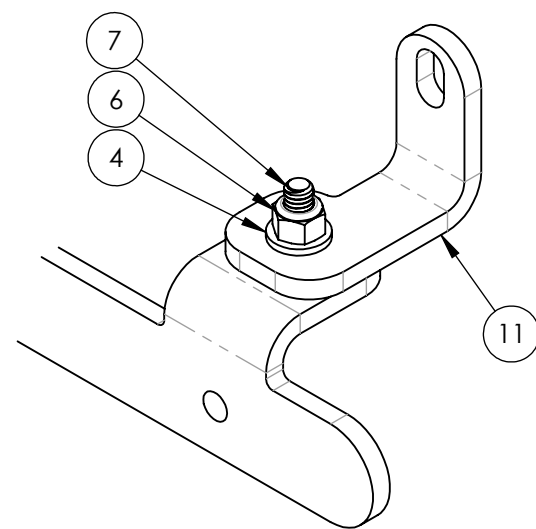
- LINE UP THE EARS OF THE MOUNTING BRACKET WITH THE SHEET METAL ON THE VAN LOCATED ON THE DRIVER SIDE BEHIND THE PINCH WELD NEAR THE BACK WHEEL
- LINE UP THE SCREW HOLES, INSTALL SUPPLIED HARDWARE AS SHOWN
- LEAVE HARDWARE LOOSE UNTIL THE END OF THE INSTALLATION



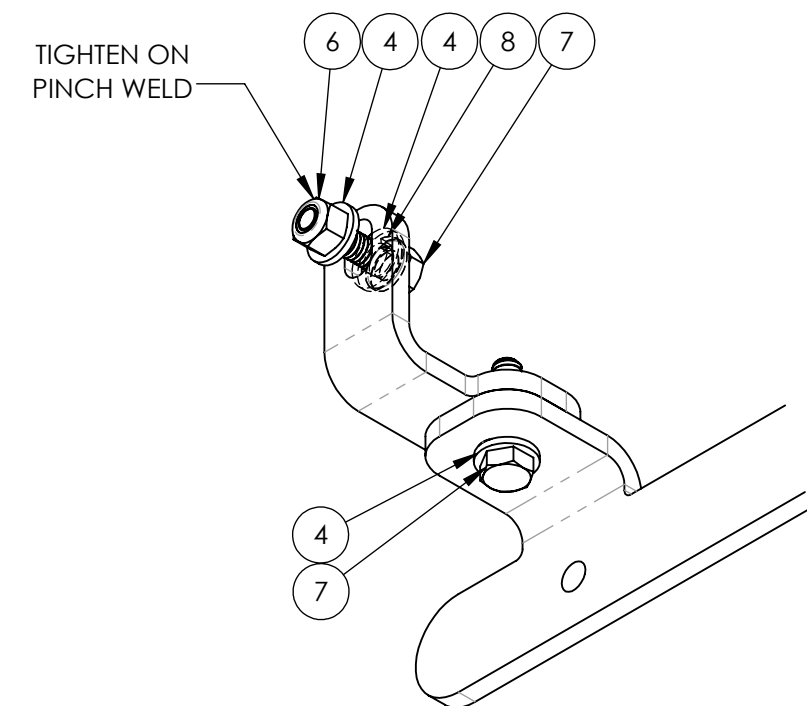
STEP 2

INSTALL THE PINCH WELD MOUNTING BRACKET

- USING THE SUPPLIED HARDWARE, ATTACH THE PINCH WELD MOUNTING BRACKET TO THE SUBFRAME BRACKET
- SQUARE UP THE PINCH WELD BRACKET UP TO THE PINCH WELD OF THE VAN
- MARK THE DRILLING LOCATION FOR THE MOUNTING HOLE
- REMOVE THE PINCH WELD BRACKET
- DRILL 1/8in PILOT HOLE
- DRILL 3/8in HOLE FOR SCREW
- CLEAN HOLE OF ANY SHARP EDGES AND BURRS
- RE-ATTACH THE PINCH WELD BRACKET TO THE SUBFRAME BRACKET USING THE SUPPLIED HARDWARE
- ATTACH THE PINCH WELD BRACKET TO THE VAN PINCH WELD USING THE SUPPLIED HARDWARE
- LEAVE ALL HARDWARE SLIGHTLY LOOSE UNTIL THE END OF THE INSTALLATION



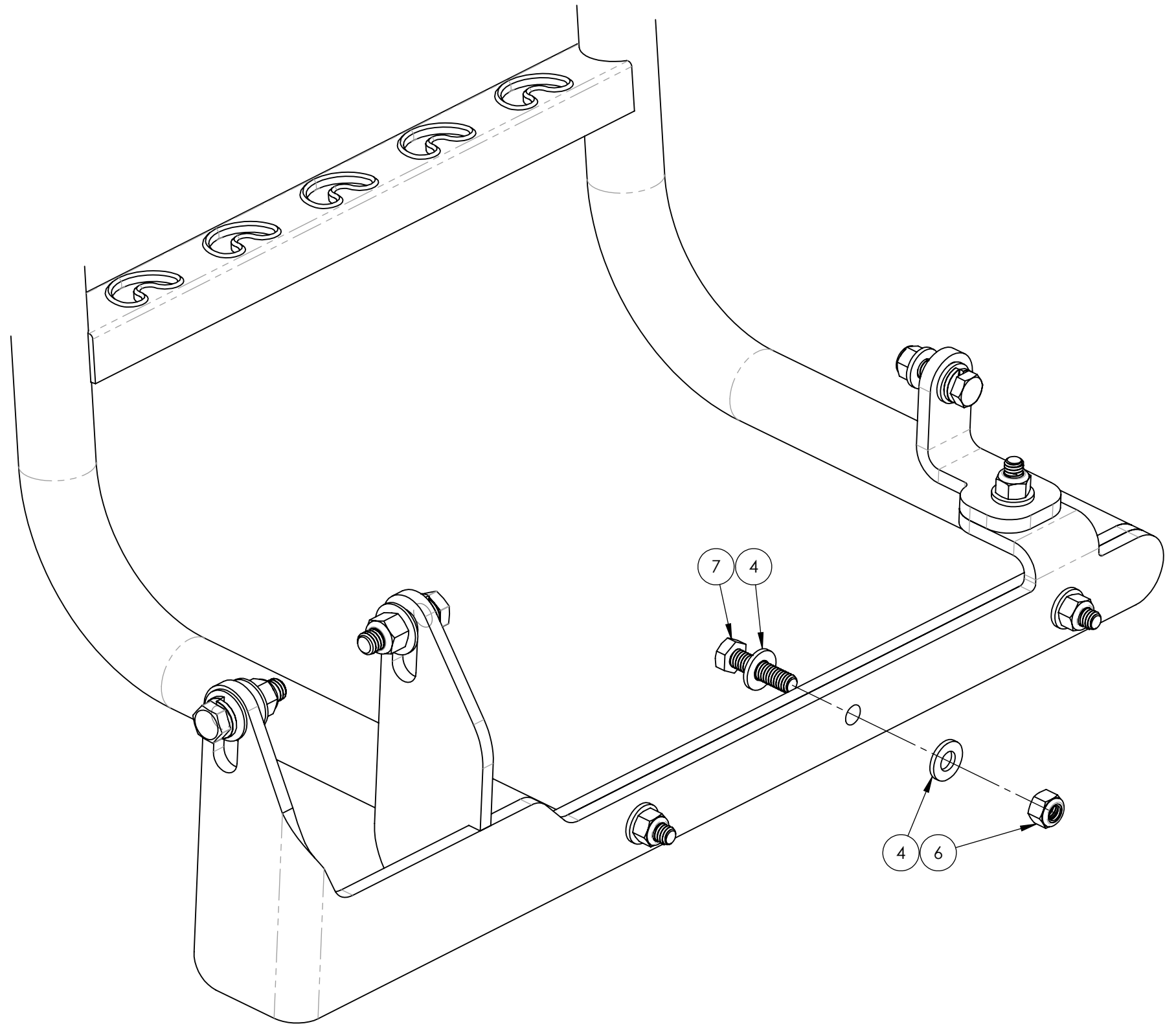
MARK AND DRILL CENTER OF BRACKET SLOT



STEP 3

INSTALL THE LADDER LOWER HALF ON TO THE SUBFRAME MOUNTING BRACKET

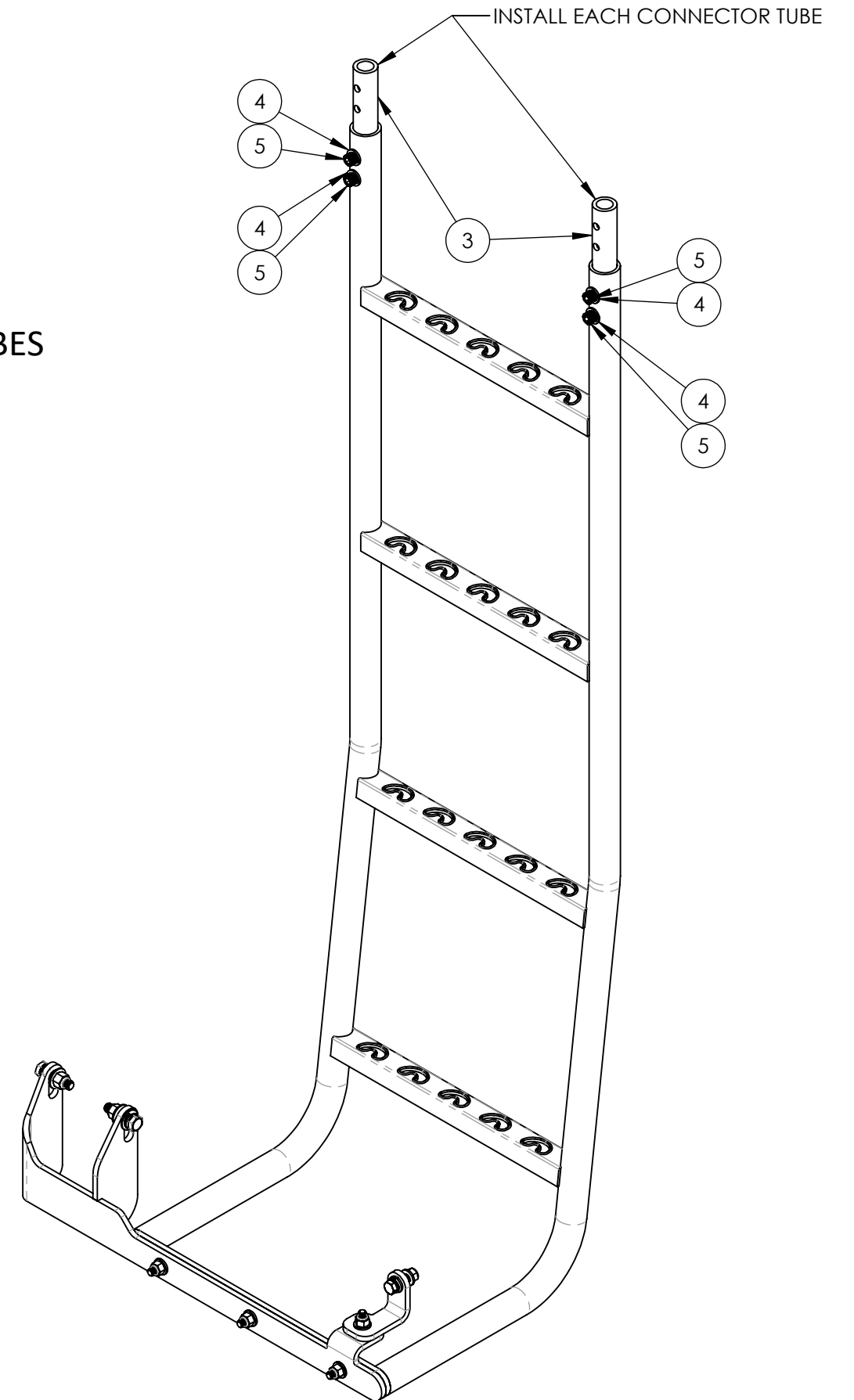
- LINE UP THE LOWER LADDER HALF SCREW HOLES WITH THE SUBFRAME BRACKET HOLES
- ATTACH THE LADDER TO THE SUBFRAME BRACKET USING THE SUPPLIED HARDWARE
- LEAVE ALL HARDWARE SLIGHTLY LOOSE UNTIL THE END OF THE INSTALLATION



STEP 4

INSTALL THE UPPER/LOWER HALF CONNECTORS INTO THE LOWER LADDER HALF

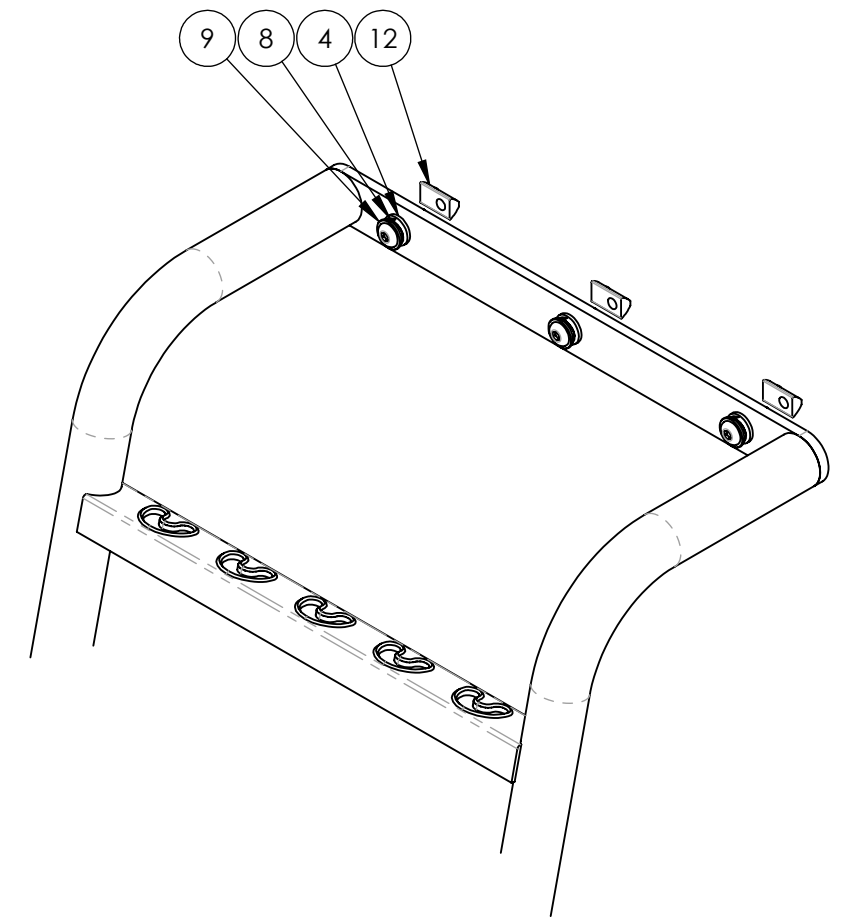
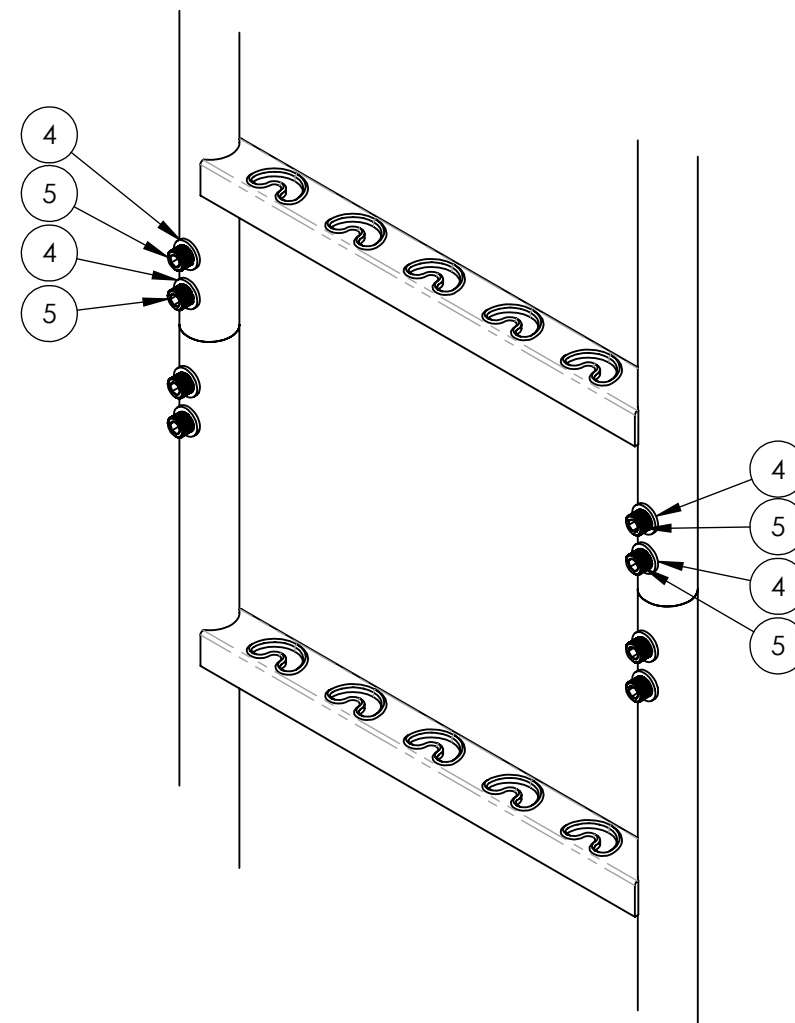
- VERY CAREFULLY HOLD AND INSERT EACH CONNECTOR TUBE INTO THE LOWER LADDER TUBES
- SECURE THE CONNECTOR TUBES USING THE SUPPLIED HARDWARE
- LEAVE SLIGHTLY LOOSE UNTIL THE END OF THE INSTALLATION



STEP 5

INSTALL THE UPPER LADDER HALF

- INSTALL THE ROLLING T-NUTS INTO THE ROOF RACK GROOVES OF THE 80/20
- POSITION THE NUTS ROUGHLY WHERE THE TOP OF THE LADDER WILL BE LOCATED
- VERY CAREFULLY HOLD AND INSTALL THE UPPER LADDER ON TO THE CONNECTORS
- INSTALL THE SUPPLIED HARDWARE TO ATTACH THE UPPER LADDER/CONNECTORS
- INSTALL THE SUPPLIED HARDWARE TO ATTACH THE LADDER TO THE HSLD SIDE PLATES
- LEAVE HARDWARE SLIGHTLY LOOSE UNTIL THE END OF THE INSTALLATION



STEP 6

TIGHTEN ALL HARDWARE

- RECOMMENDED TORQUE FOR ALL FASTENERS IS 20 LB-FT
- FIRST, FULLY TIGHTEN THE CONNECTOR HARDWARE CONNECTING THE LADDER HALVES
- NEXT, TIGHTEN THE HARDWARE AT THE TOP ON THE HSLD SIDE PLATE
- ONCE THE TOP IS TIGHT FINISH THE TIGHTENING ON THE BOTTOM OF THE VAN
- ENJOY!

