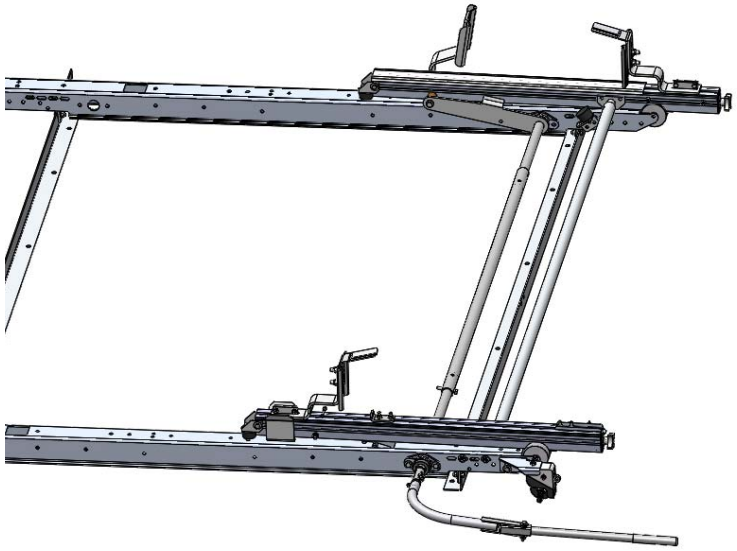
DROP DOWN, SINGLE, LOW ROOF TRANSIT



PRODUCT WEIGHT
94 lbs

WIDTH x DEPTH x HEIGHT
83”X113”X18”

CAPACITY
28 FOOT EXT

COLOR
Aluminum / Black

CATALOG NUMBER
DDLR61FTL

PRODUCT FEATURES

This drop down rack and roof cross-bow kit is designed to fit the Ford Transit, 130 and 148 wheel base. The drop down will carry 20 to 28 foot extension ladders, and 10-12 foot step ladders. Step ladders shorter than 10’ require DDLRSLK2 step ladder kit. Step ladders wider than 26” at the base require the wide step ladder add on, part 57107. Ladders with extensive gussets or platform step ladders may not be compatible with the rack.

The cross-bow kit is secured to the Ford Transit by OEM supplied fastening points.

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

The information contained in this document is the sole property of ADRIAN STEEL COMPANY. ADRIAN STEEL COMPANY retains the right to modify and/or change the product of its design at any time without prior notification.

CATALOG NUMBER DDLR61FTL

PRODUCT APPLICATION

This Drop down unit is designed to fit 2016 and newer Ford Transit, low roof vehicles.

ACCESSORIES THAT WILL WORK WITH THIS PRODUCT

CATALOG NUMBER	*DESCRIPTION*
DDLRSLK2	STEP LADDER KIT
DDLR61LSS	DROP DOWN, STREET SIDE, LOW ROOF (CONVERT TO DBL)
54628	GRIP LOCK, SINGLE, STREET SIDE (CONVERT TO COMBO)
69-DDCS	DDLR LADDER RACK EXTENSION,CS-32 FOOT EXTENSION LADDER
80-1LR 80-2LR	CONDUIT KIT, ALUMINUM
70-1LR 70-2LR	PVC CONDUIT KITS
57107	DDLR WIDE STEP LADDER KIT-ADD ON PIECE
65-GL	UTILITY ADD-ON KIT FOR LADDER RACKS

SPECIAL APPLICATION NOTES

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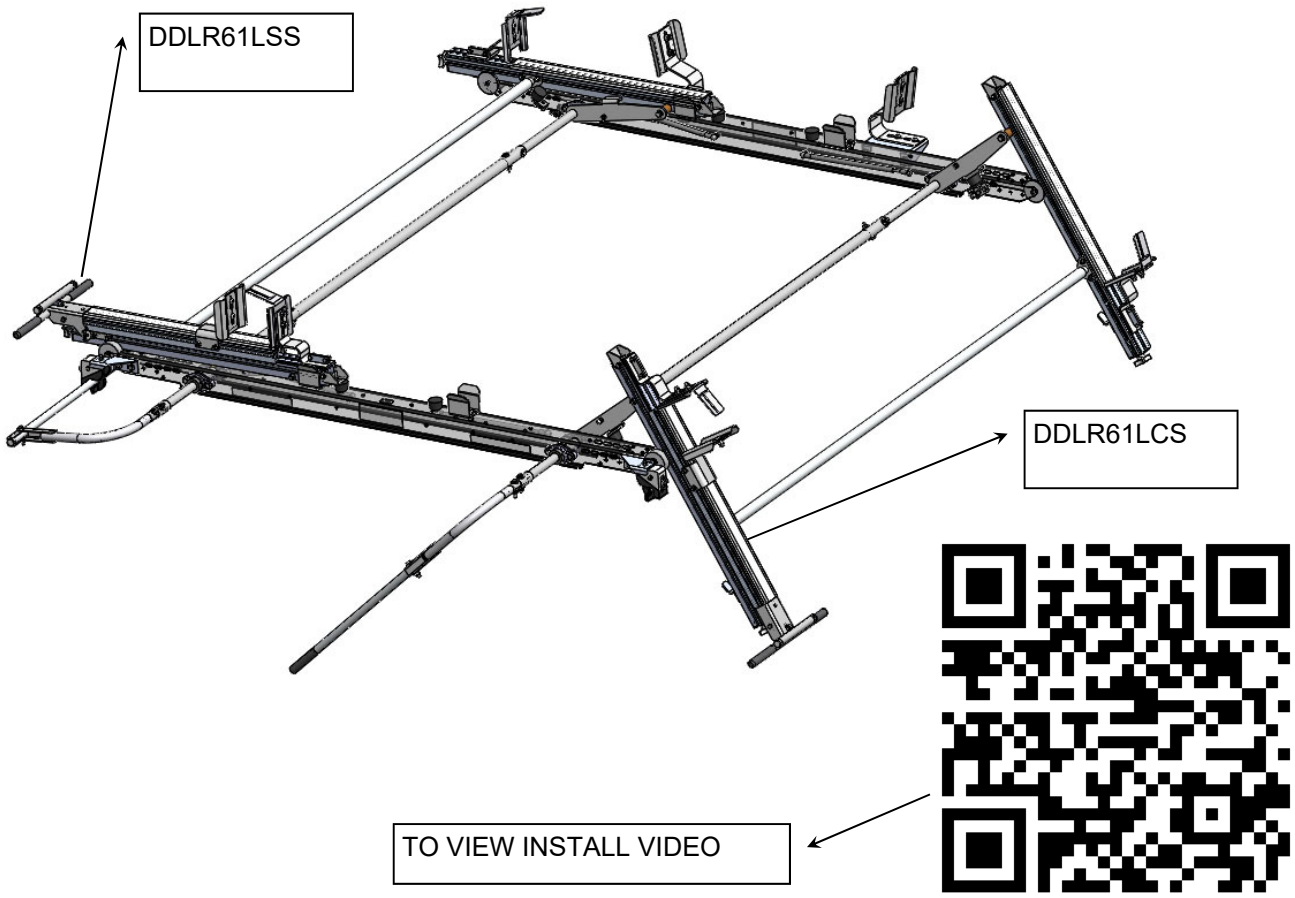
Introduction / Comments:

THIS DROP DOWN UNIT IS CURB SIDE, STREET SIDE SPECIFIC. THE DROP DOWN IS FOR LOW ROOF VEHICLES, THESE INSTRUCTIONS WILL BE SHOWING THE GM FSV AND SOME FORD TRANSIT PICTURES FOR THE VEHICLE REPRESENTATION. THIS DROP DOWN LADDER RACK IS DESIGNED TO ADAPT TO AN ADRIAN STEEL CROSS BOW KIT FOR VARIOUS STANDARD ROOF VEHICLES.

Note:
It is advised that all fasteners used in this assembly and installation of this Rack should be checked for tightness at the following intervals: @ 2-weeks and again @ 6-weeks of operation. This preventive maintenance step must be completed to ensure your package gives you long service life.



DDLR61GM / DDLR63GM
FINAL DROP DOWN LADDER RACK, STREET, CURB
GM FSV, LOW ROOF VAN

- PRECAUTIONS -

CAUTION

THE USE OF 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 DRILLINGTO 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

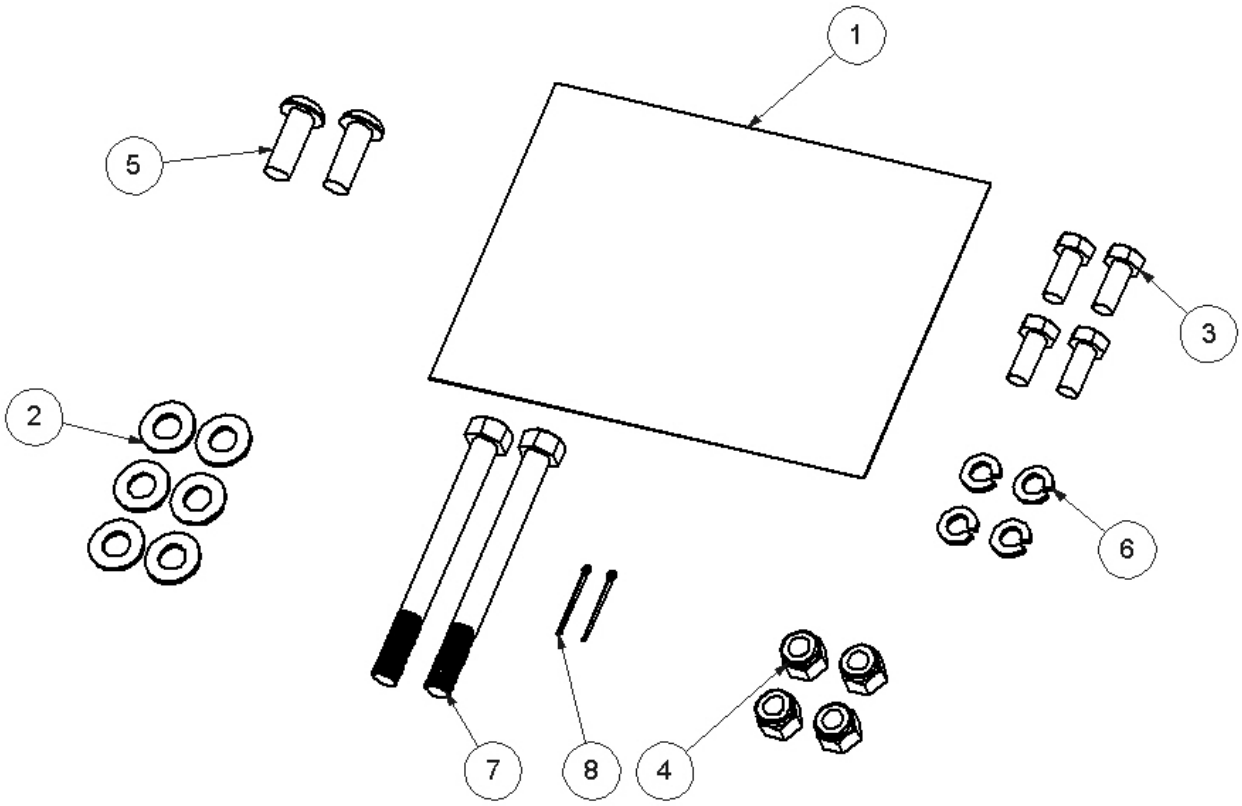
SCREWDRIVERS

MEASURING TAPE

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

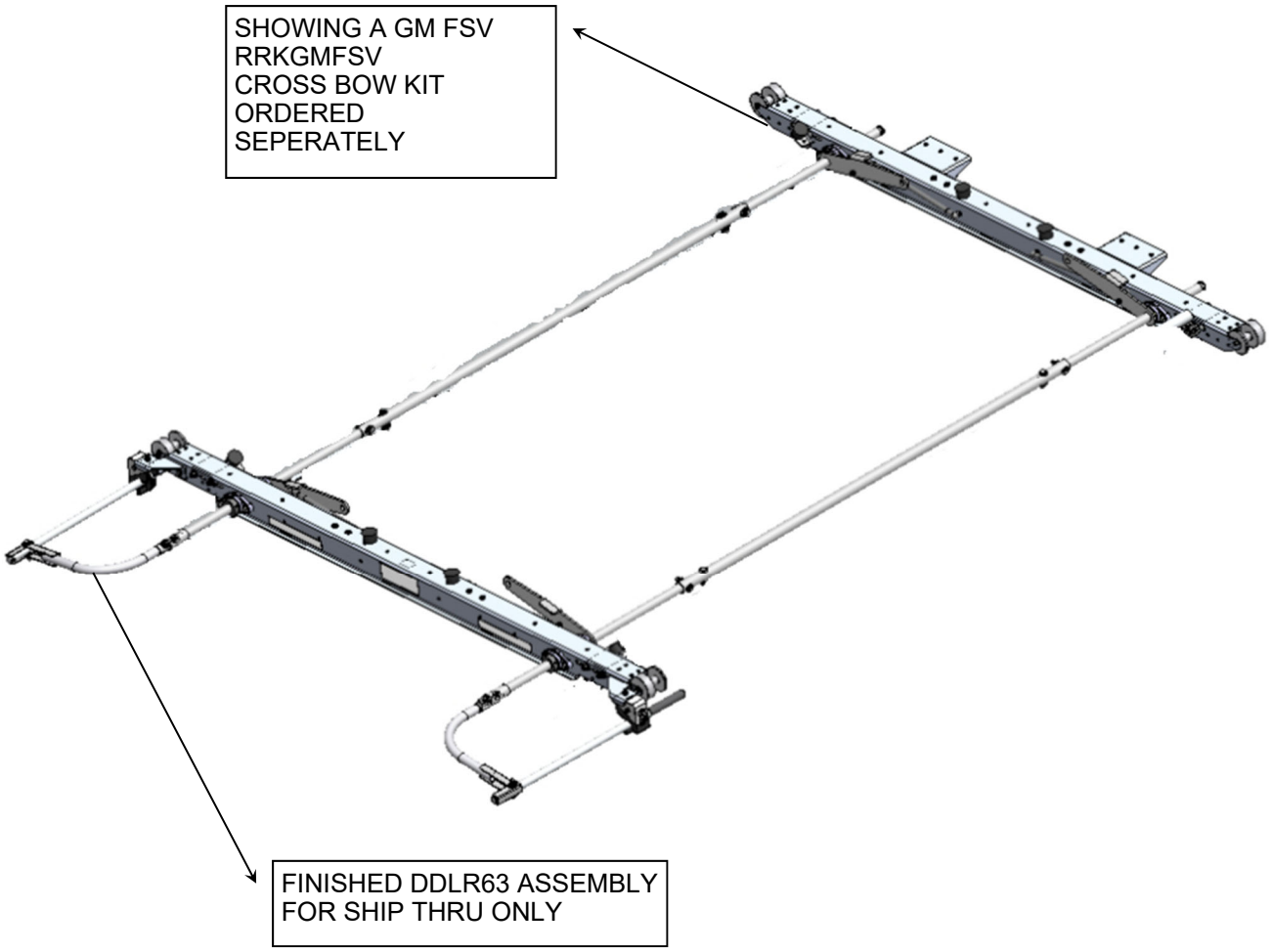
BAG51041—FINAL ASSEMBLY FASTENER BAG

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BAG0507-A	5" x 7" 3MIL AUTOBAG	1
2	FAS0246	Washer, Flat, 3/8, HRD, ZN	6
3	FAS0799	Screw, Hex Hd, 5/16-18x0.75 SS	4
4	FAS0110	Nut,Hex Nylk 3/8-16 SS W	4
5	FAS0572	Screw, Button Hd Hex Soc, 3/8-16x1.00 NI-ZN	2
6	FAS0588	Washer, Lock, Split, 5/16, SS	4
7	FAS0286	SCREW, HHCS, 3/8-16x4, SS	2
8	FAS0287	COTTER PIN, 1/16DIA X 1"LG, SS	2

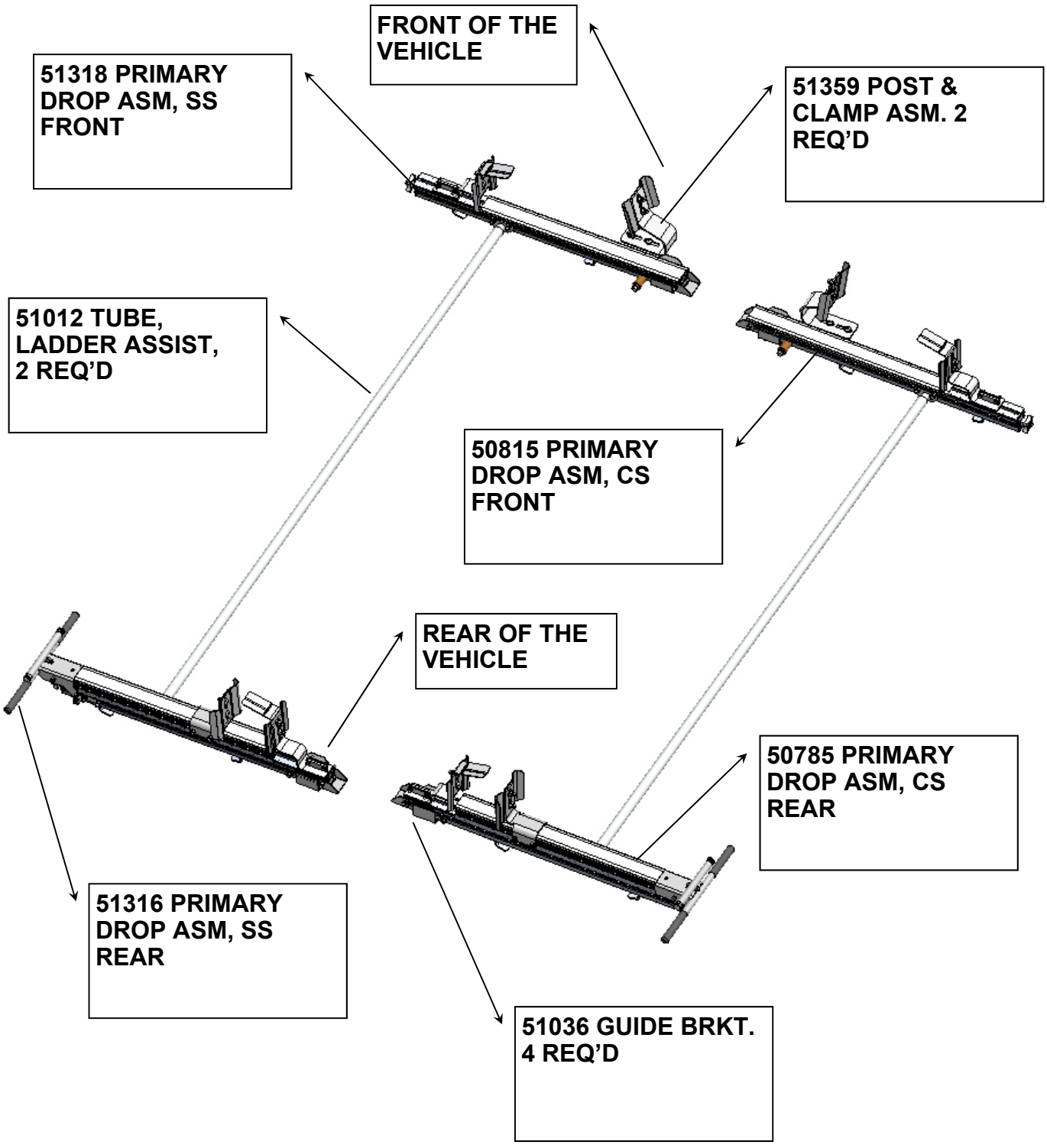


STEP 1A : THIS IS THE SHIP THRU SINGLE DROP DOWN AS YOU WOULD RECEIVE FOR FINAL DEALER ASSEMBLY. SEE STEP 1B FOR DOUBLE DROP DOWN.

STEP 1B : THIS IS THE SHIP THRU DOUBLE DROP DOWN AS YOU WOULD RECEIVE FOR FINAL DEALER ASSEMBLY

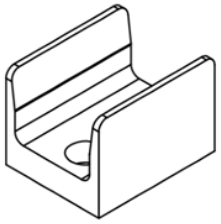


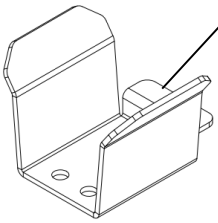
STEP 2 - THIS IS THE FINAL ASSEMBLY, SHOWING THE CURB AND STREET SIDE DROP DOWN COMPONENTS



STEP 3 : ASSEMBLE BRACKETS TO THE FRONT CROSS BOW

NOTE: ITEM 51036 WILL VARY APPEARANCE AS EITHER VIEW OF 54178 SHOWN BELOW.

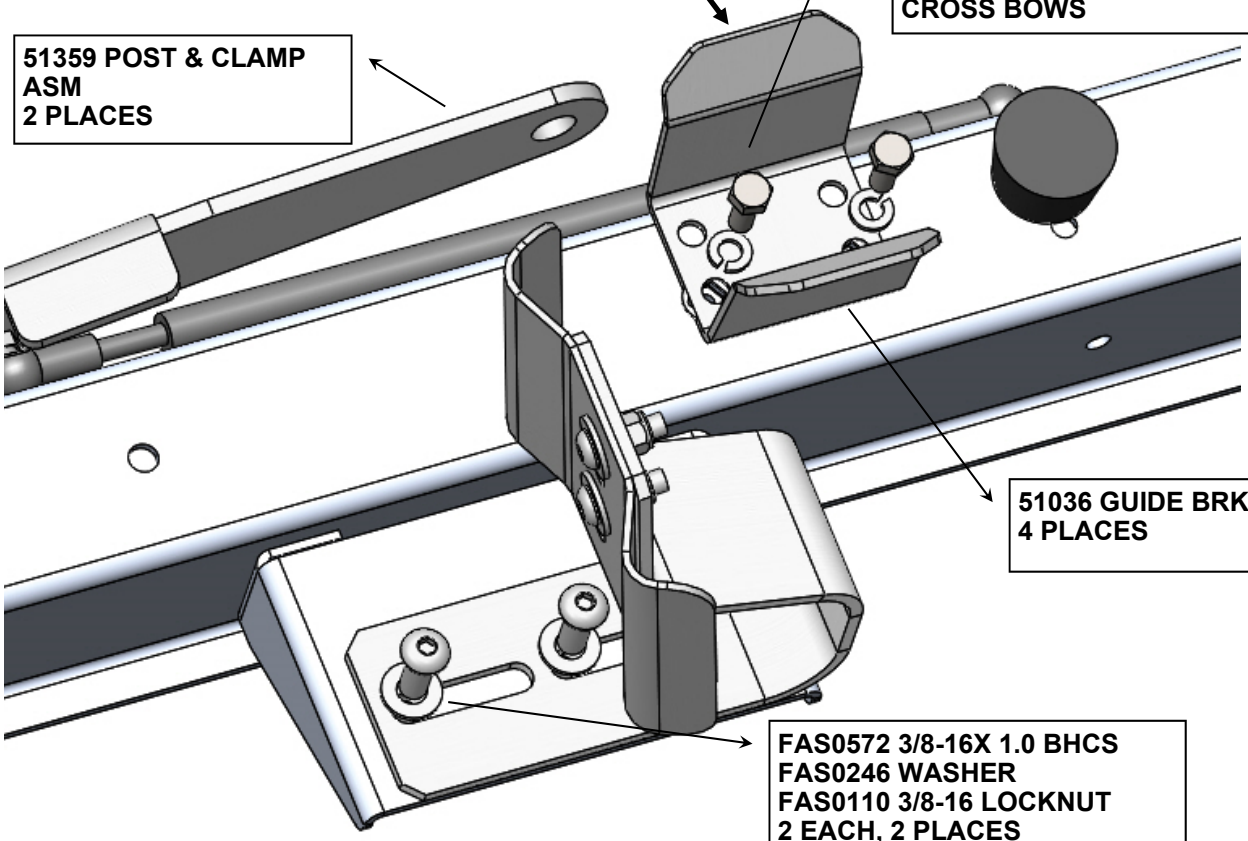




IF USING THIS STYLE, ENSURE THE REST FLANGE IS MOUNTING FACING TO THE OUTSIDE OF THE LADDER RACK! THIS WILL GIVE CLEARANCE FOR A CONDUIT KIT TO BE MOUNTED IN THE CENTER.

FAS0799— 5/16 X .75 HHCS
FAS0588— 5/16 LW
(2) EACH, 4 PLACES
THRU FRONT HOLES OF FRONT BRKTS AND REAR HOLES FOR REAR BRKTS INTO RIVNUTS IN CROSS BOWS

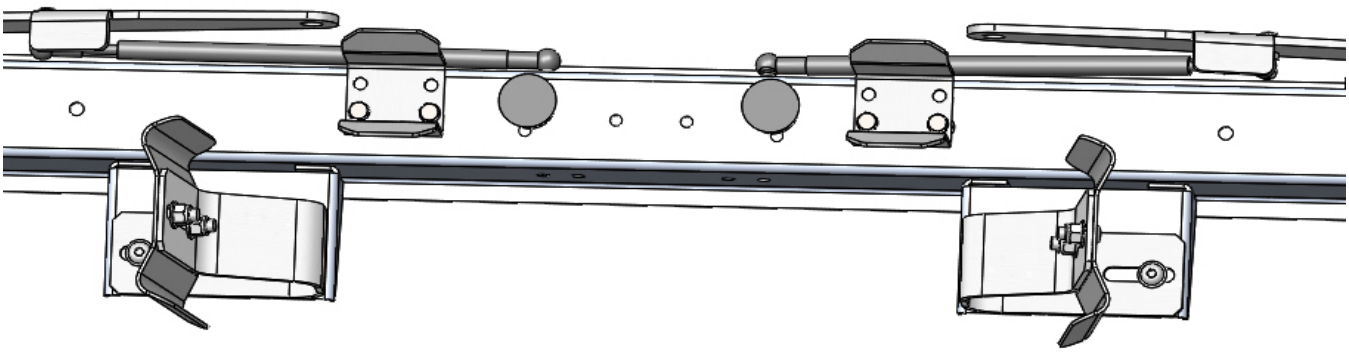
51359 POST & CLAMP ASM
2 PLACES



51036 GUIDE BRKT
4 PLACES

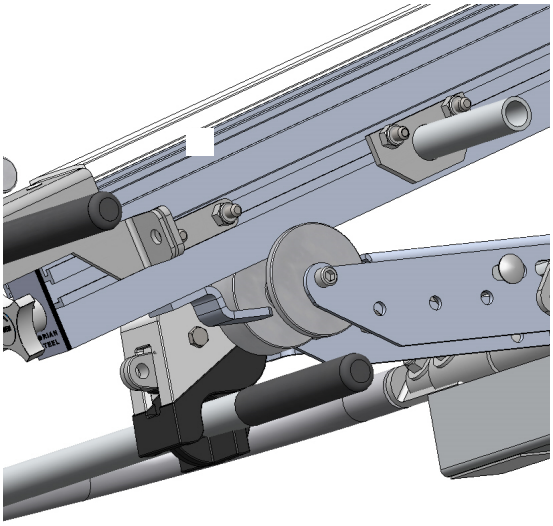
FAS0572 3/8-16X 1.0 BHCS
FAS0246 WASHER
FAS0110 3/8-16 LOCKNUT
2 EACH, 2 PLACES

COMPLETED VIEW OF THE FRONT CROSS BOW

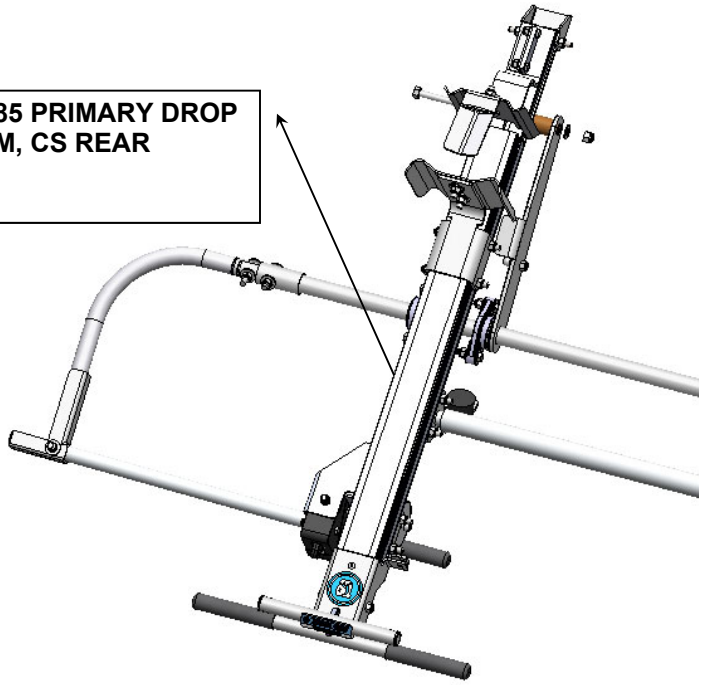


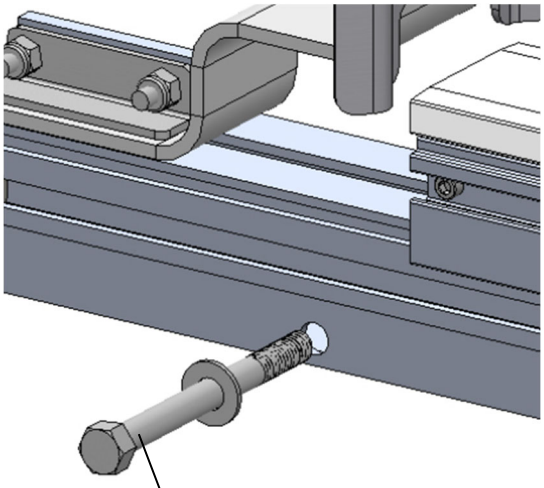
STEP 4 : ASSEMBLE REAR CURB SIDE PRIMARY DROP TO RACK

SET 50785 PRIMARY DROP ASM, REAR CS IN PLACE ON REAR CROSS BOW. USE GUIDE ROLLER TO HELP LOAD INTO POSITION

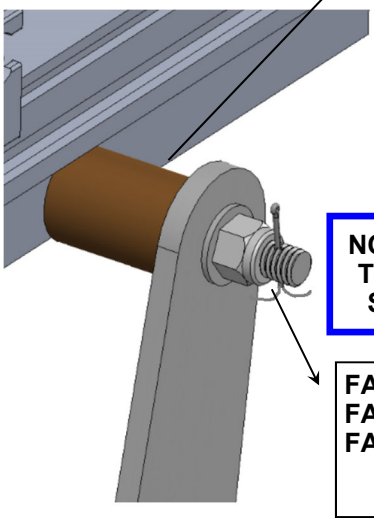


50785 PRIMARY DROP ASM CS REAR





FAS02826 3/8-16 X 4" HHCS
FAS0246 WASHER



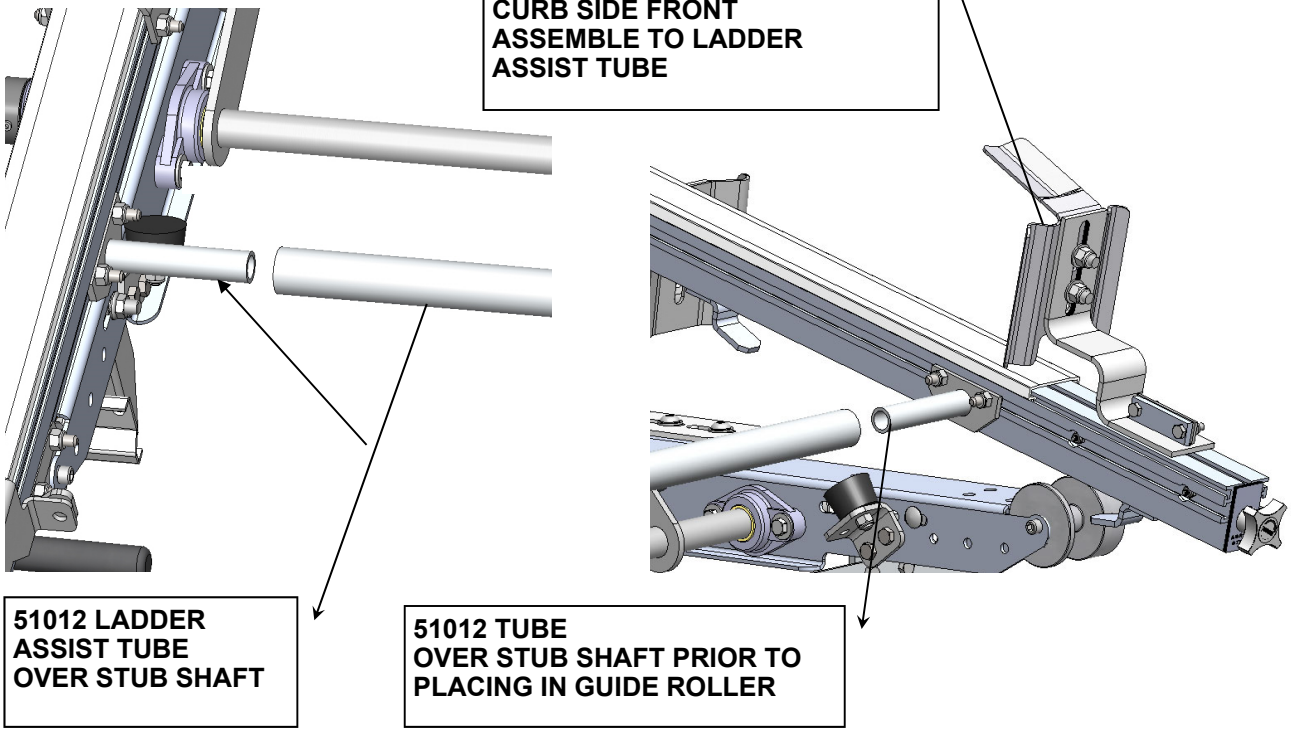
NOTE: TORQUE NYLOCK NUT TO 20FT.LBS, THEN INSERT/ SECURE THE COTTER PIN.

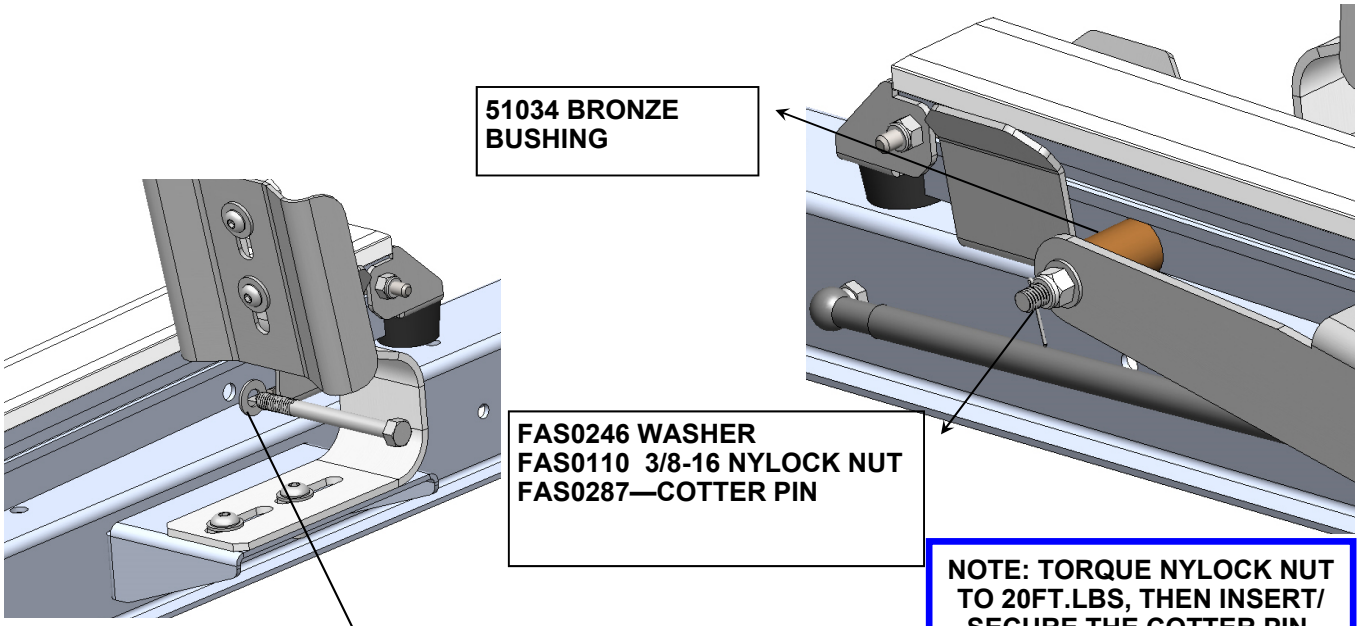
FAS0246 WASHER
FAS0110 3/8-16 NYLOCK NUT
FAS0287—COTTER PIN

NOTE: AFTER THE COTTER PIN IS INSERTED THROUGH THE BOLT, SPREAD THE PIN SO IT CAN NOT BE REMOVED.

STEP 5 : ASSEMBLE FRONT SIDE PRIMARY DROP TO RACK

SET 50815 PRIMARY DROP ASM, FRONT CS IN PLACE ON FRONT CROSS BOW. USE GUIDE ROLLER AFTER LADDER ASSIST TUBE IS ON BOTH STUB SHAFTS

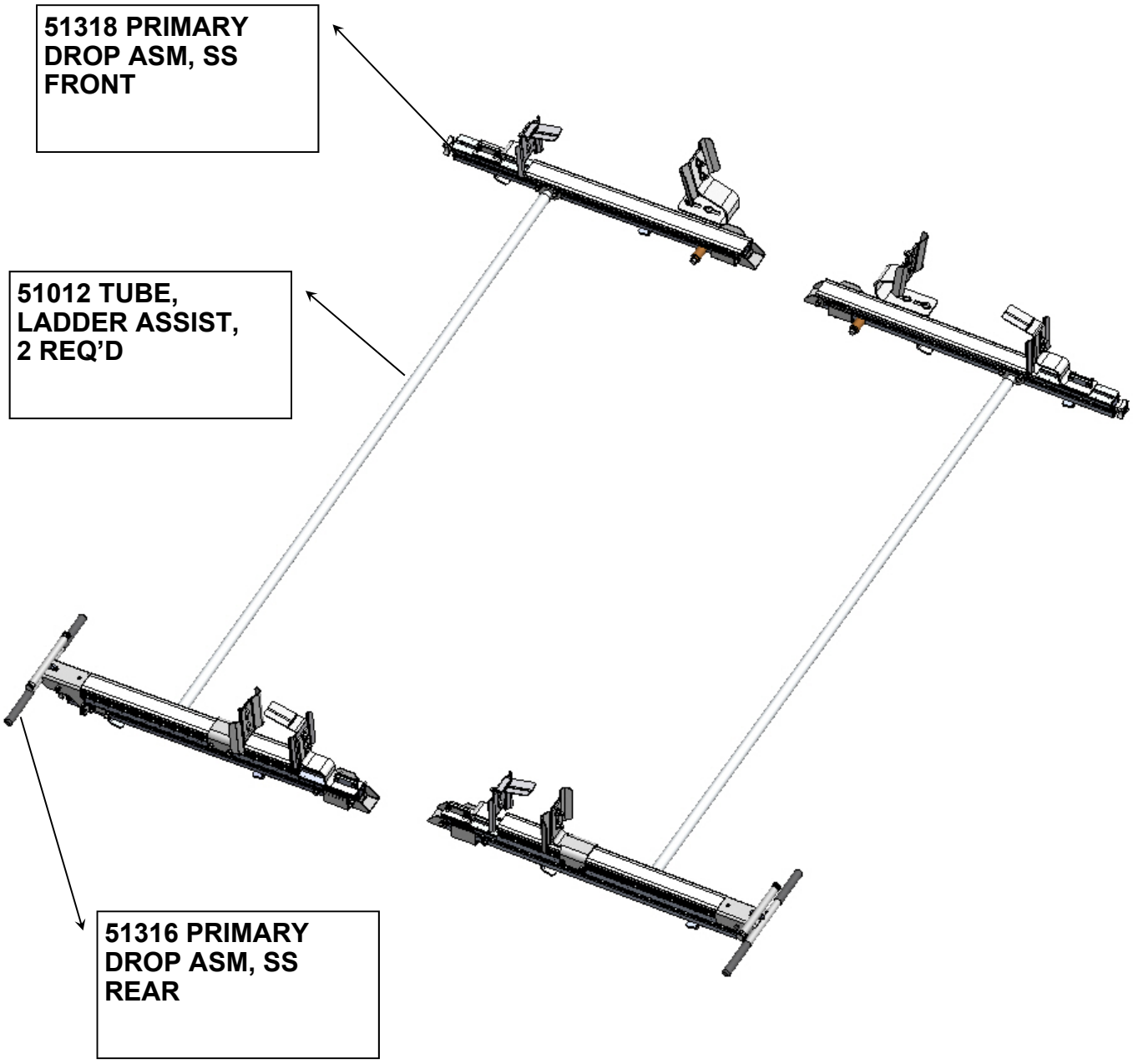




NOTE: TORQUE NYLOCK NUT TO 20FT.LBS, THEN INSERT/ SECURE THE COTTER PIN.

NOTE: AFTER THE COTTER PIN IS INSERTED THROUGH THE BOLT, SPREAD THE PIN SO IT CAN NOT BE REMOVED.

STEP #6 : FOR A DOUBLE DROP DOWN, INSTALL STREET SIDE USING STEPS #4 & #5 AS YOUR GUIDE.



DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS.
YOUR INSTALLATION IS NOW COMPLETE!
STOW THIS COPY IN THE VEHICLE FOR FUTURE REFERENCES!

STEP #7 : YOUR DOUBLE DROP DOWN INSTALLATION IS NOW COMPLETE FOR A COMBO RACK, GO TO STEP 8

DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS.
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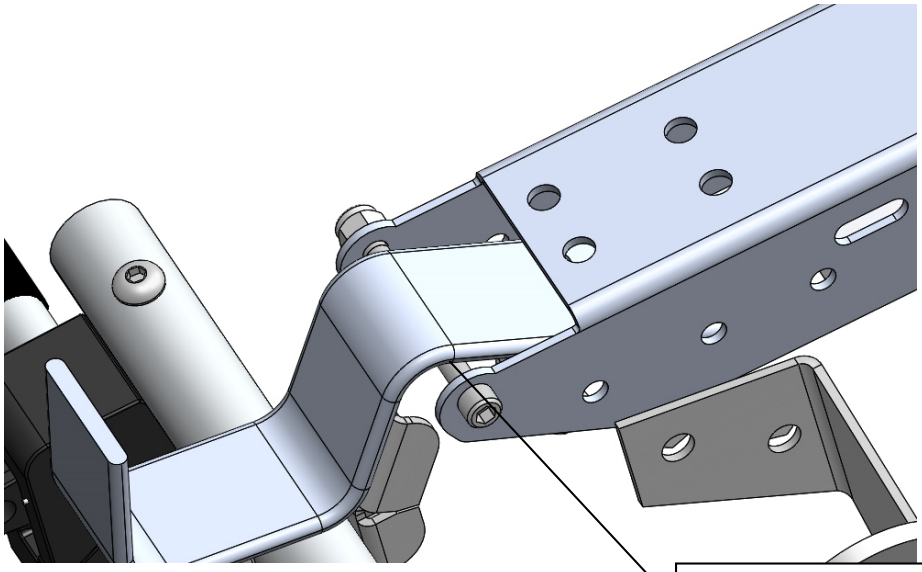
STEP #08 : COMBO RACK, FINAL INSTALL- STREET SIDE GRIP LOCK

STEP #9 : COMBO RACK, INSTALL STREET SIDE GRIP LOCK



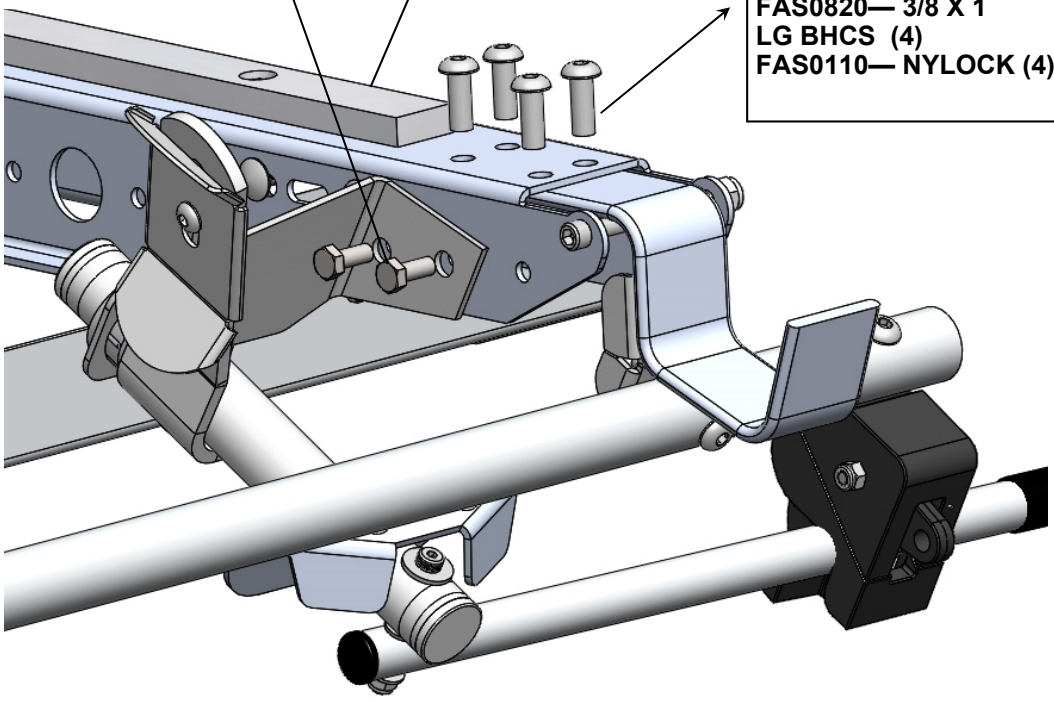
PIVOT OVER BOLT
AND PUT
GRIP LOCK HOOKS
INTO ROOF BOWS

SECOND AND THIRD HOLES !

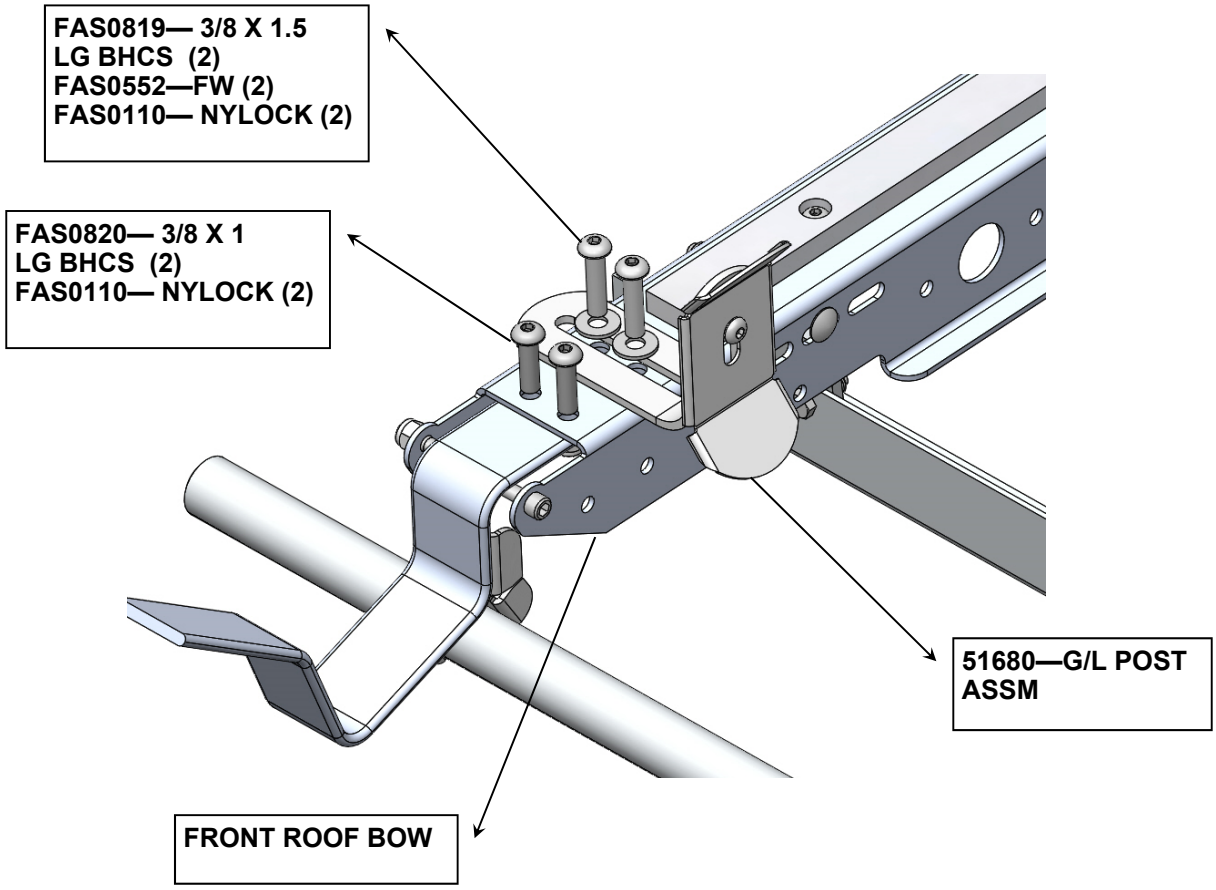
FAS0799— 5/16 x 3/4 HHCS (2)
FAS0248— NYLOCK (2)

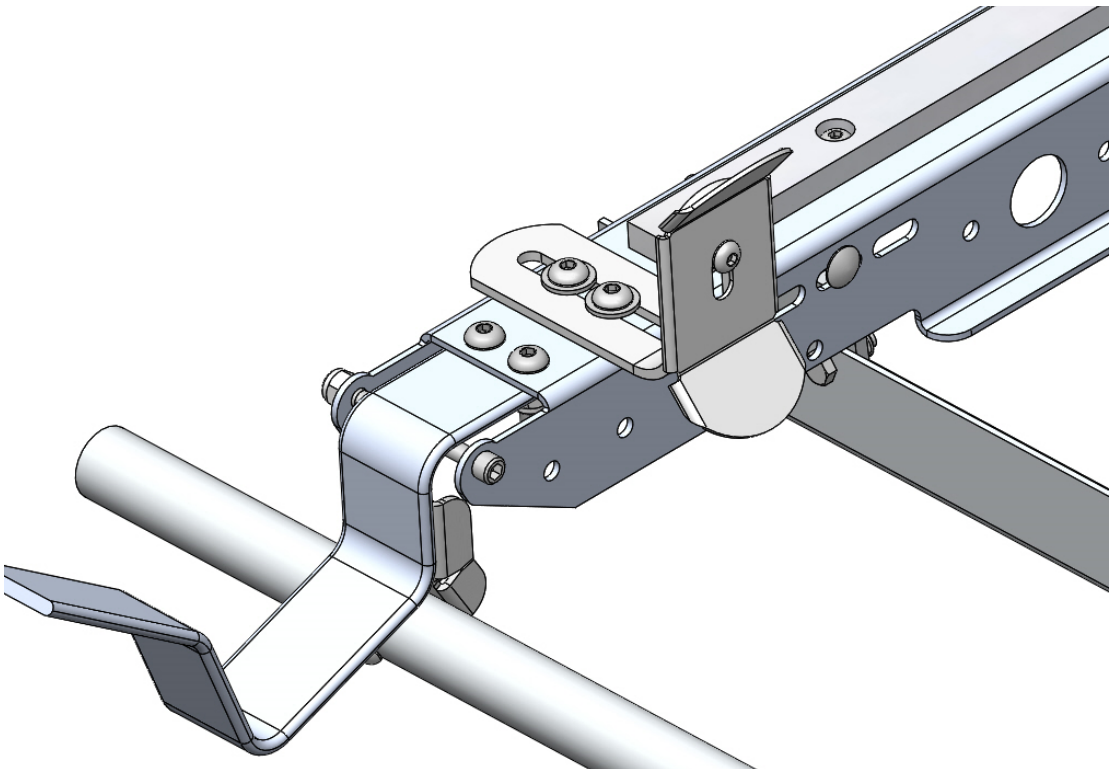
REAR ROOF BOW

FAS0820— 3/8 X 1
LG BHCS (4)
FAS0110— NYLOCK (4)



STEP #10: FRONT ROOF BOW ASSEMBLY –STREET SIDE





STEP #23 : YOUR DROP DOWN COMBO INSTALLATION IS NOW COMPLETE

DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS.
YOUR INSTALLATION IS NOW COMPLETE!
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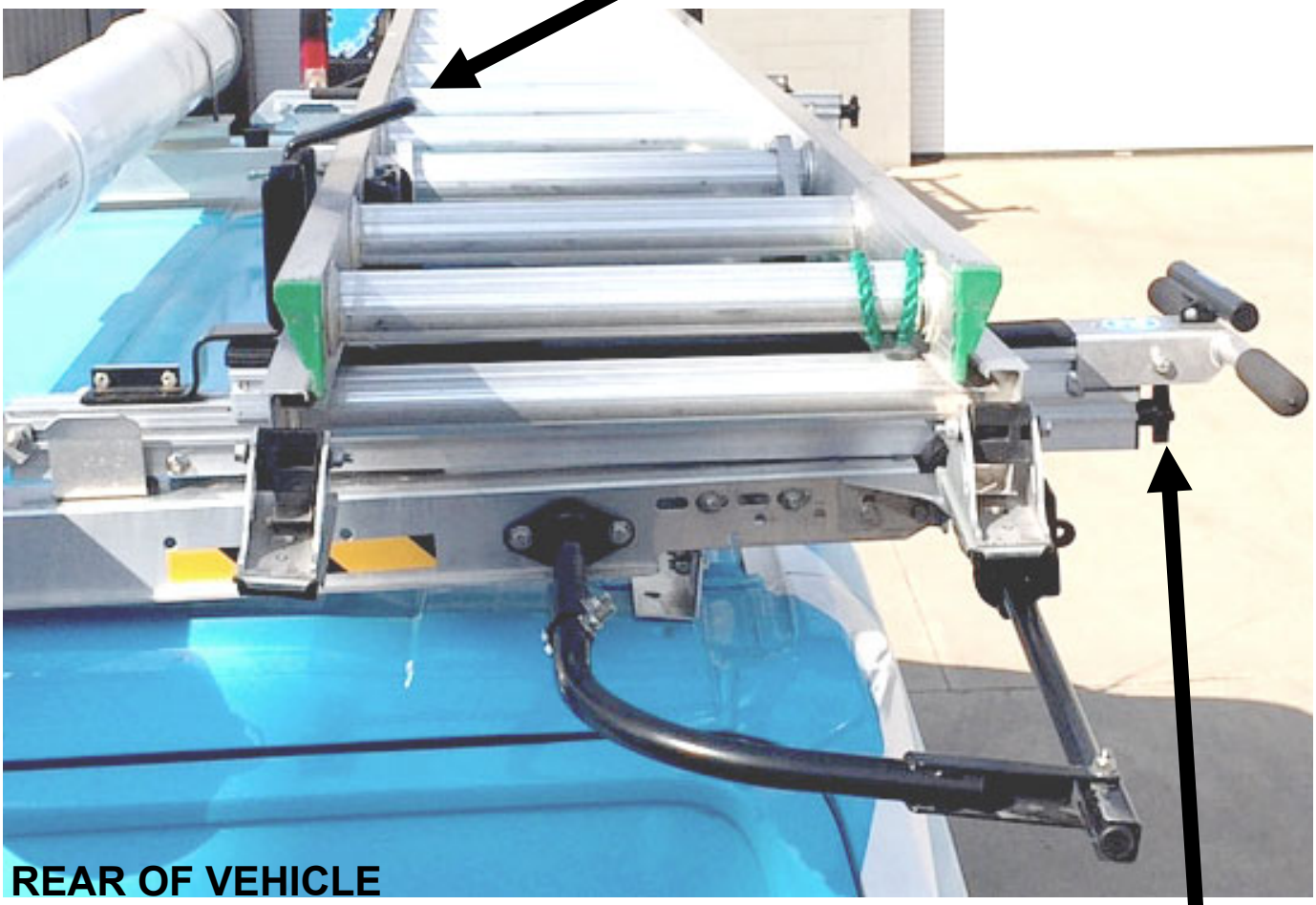
REAR CLAMP PAD MOVES TOWARDS CURB TO TIGHTEN LADDER TO RACK



TURN KNOB TO ADJUST TO YOUR LADDER.

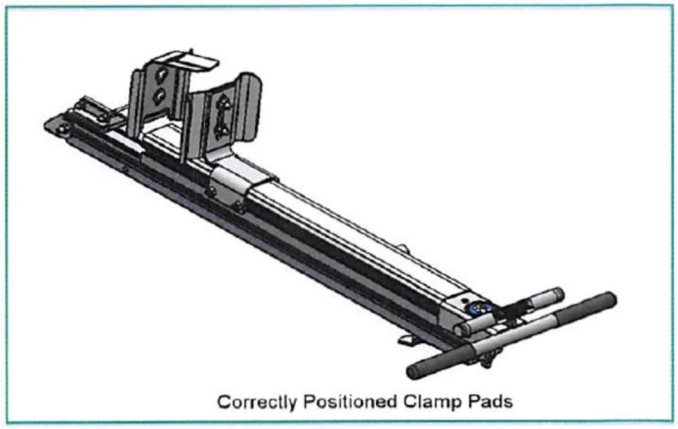
DO NOT OVER TIGHTEN! CLAMP PAD SHOULD JUST TOUCH THE LADDER.

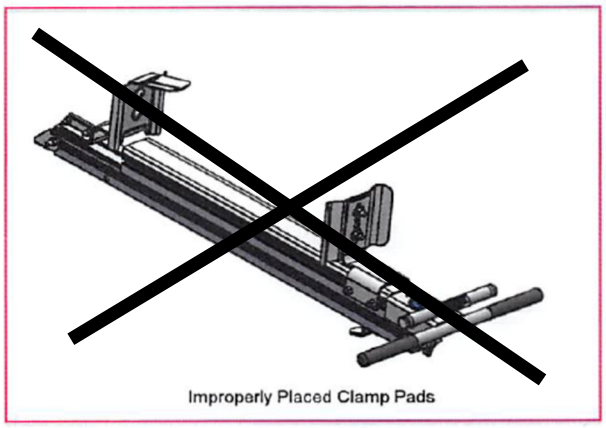
DDLR Series Final Adjustment Instruction (GMFSV / Ford Transit)

Proper Clamp Pad Locations

Below is the proper way to clamp the ladder to the vehicle (highlighted in green)

How to inspect for this: Properly placed clamp pads should be in close proximity to each other to allow the clamp pads to securely retain the ladder from side to side motion and front to back motion.


Correctly Positioned Clamp Pads


Improperly Placed Clamp Pads

Above is the wrong way to clamp the ladder to the vehicle

FRONT CLAMP PAD MOVES TOWARDS STREET TO TIGHTEN LADDER TO RACK

TURN KNOB TO ADJUST TO YOUR LADDER.

DO NOT OVER TIGHTEN! CLAMP PAD SHOULD JUST TOUCH THE LADDER.

DDLR Series Final Adjustment Instruction (GMFSV / Ford Transit)

DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS.
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STEP #10A: HOW TO ADJUST THE CLAMP PADS

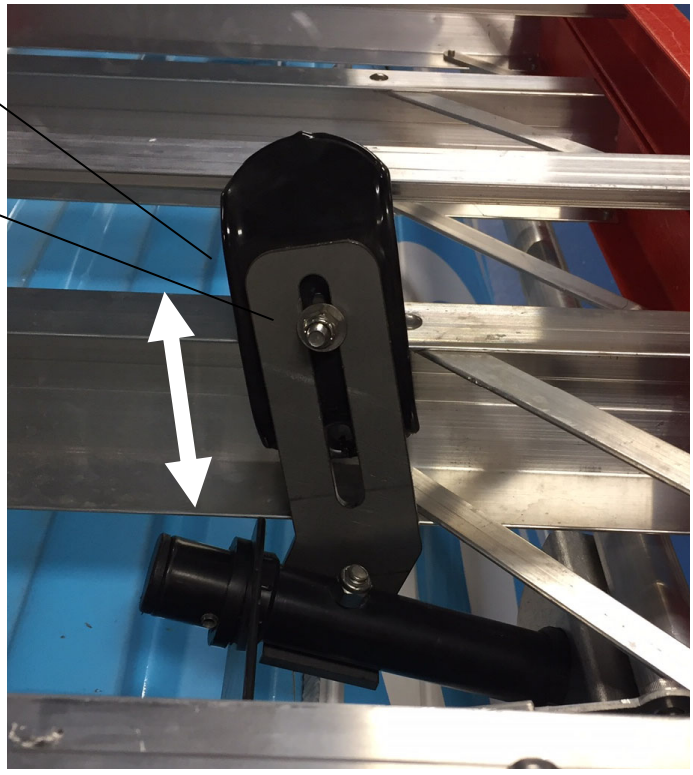
FRONT BRACKET

ADJUST VERTICALLY TO YOUR LADDER

ALL OF THE HORIZONTAL ADJUSTMENT IS IN THIS BRACKET.

REAR LOCKING PIVOT BRACKET

ADJUST VERTICALLY TO YOUR LADDER. SHOWING A STEP LADDER



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STEP #10B : HOW TO ADJUST THE CLAMP PADS

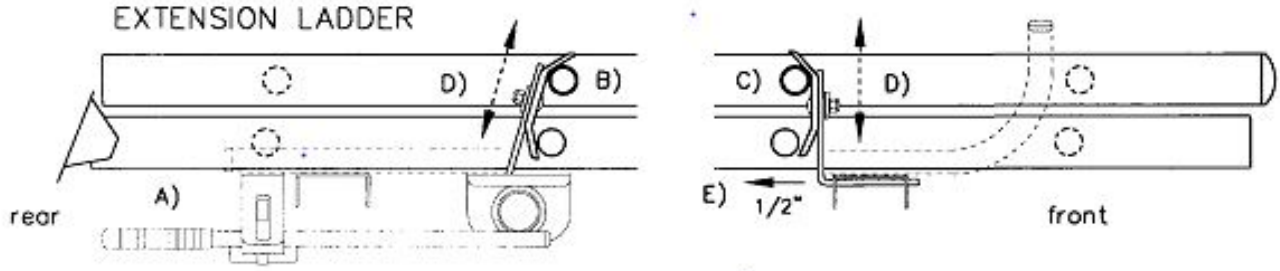
A) Load your ladder onto the ladder rack (see page 14) and latch the HANDLE BAR into the HANDLE LATCH.

B) Now slide the ladder back towards the rear of the vehicle and slide the rear CLAMP BRACKET to fit snug over and against the top ladder rung. ** See bottom illustration for STEP LADDERS ! **
SEE ILLUSTRATION BELOW.

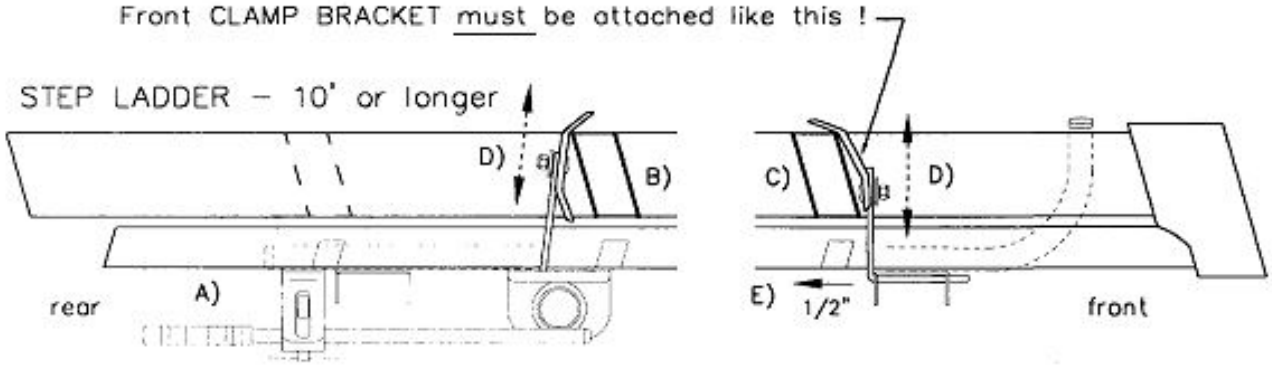
C) Next slide the FRONT STOP POST at the front of the ladder rack back towards the rear of the vehicle and fit the front CLAMP BRACKET to the top ladder rung the same as the rear.

D) Firmly tighten both front and rear CLAMP BRACKETS to their posts and tighten snug the FRONT STOP POST to the front CROSS SUPPORT.

E) Now unlatch the HANDLE BAR and unload your ladder. Next loosen the FRONT STOP POST and slide it out towards the rear of the vehicle 1/2" and FIRMLY RETIGHTEN !
YOUR LADDER RACK SHOULD NOW BE ADJUSTED FOR YOUR LADDER.



CAUTION: Never clamp up the first step and the head of the STEP LADDER !



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Introduction / Comments:

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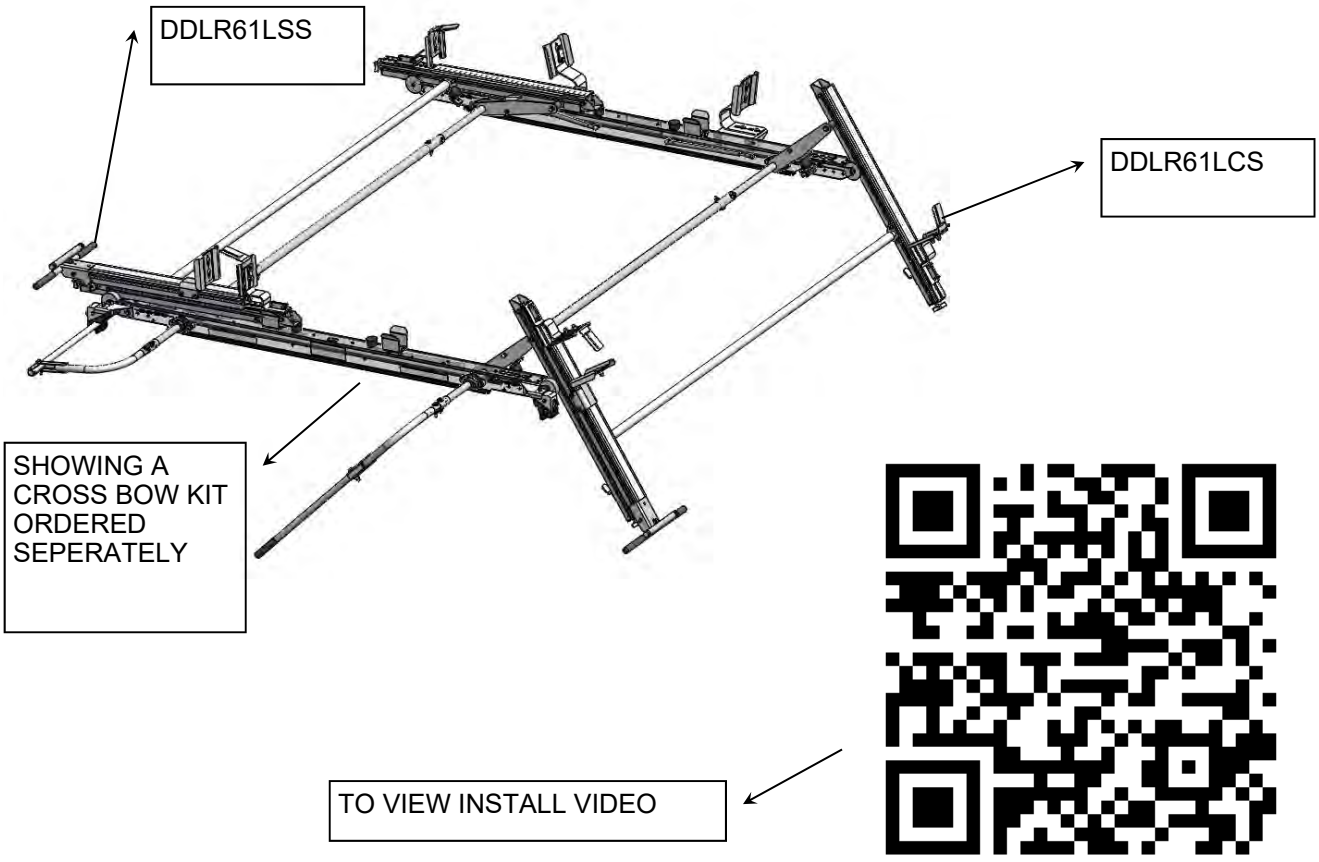
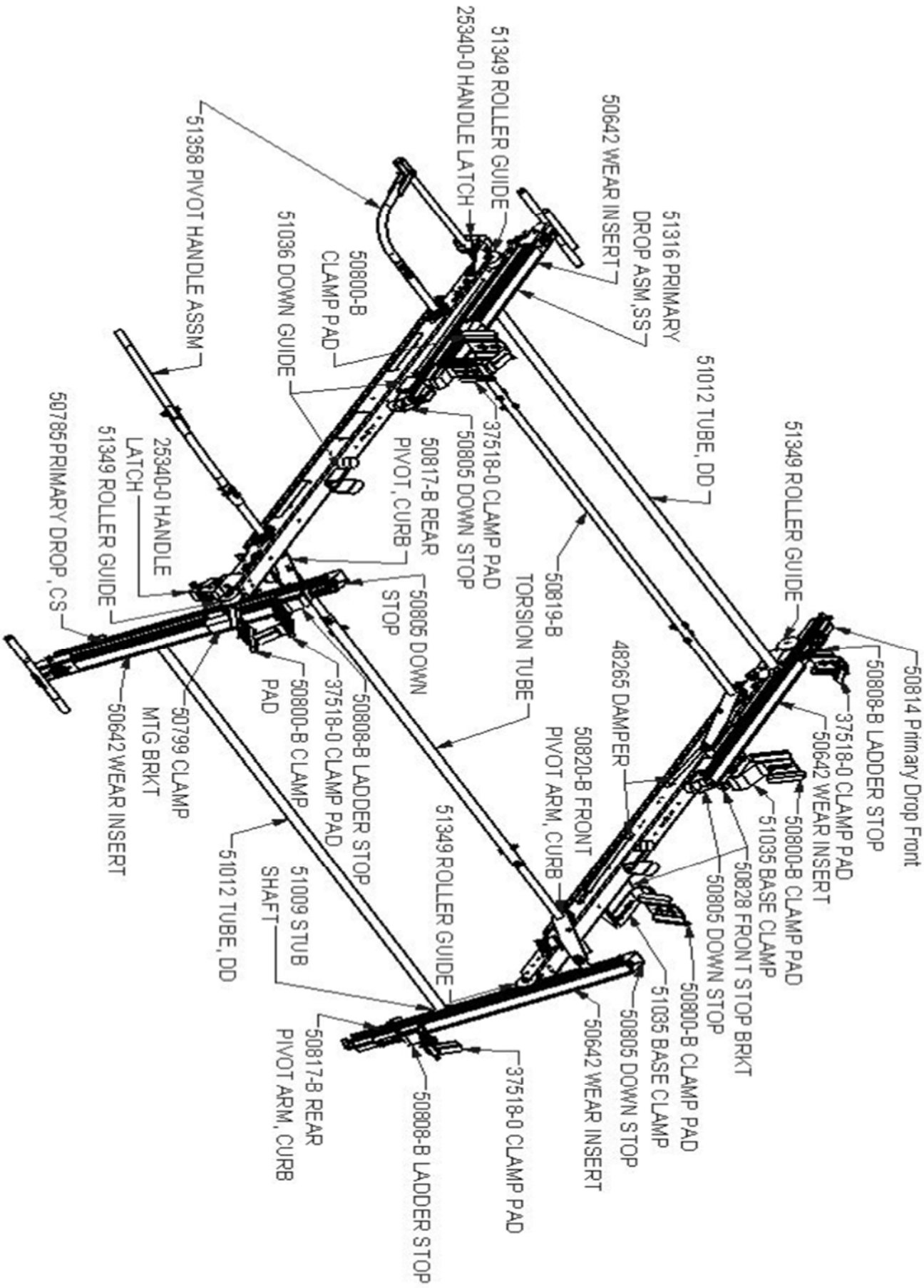
Note:
It is advised that all fasteners used in this assembly and installation of this Rack should be checked for tightness at the following intervals: @ 2-weeks and again @ 6-weeks of operation. This preventive maintenance step must be completed to ensure your package gives you long service life.



DDLR61FTL / DDLR63FTL
DROP DOWN LADDER RACK, STREET, CURB
VARIOUS LOW ROOF VANS


50814 Primary Drop Front
50808-B LADDER STOP
37518-0 CLAMP PAD
50642 WEAR INSERT
50800-B CLAMP PAD
51035 BASE CLAMP
50828 FRONT STOP BRKT
50805 DOWN STOP
50800-B CLAMP PAD
51035 BASE CLAMP
50805 DOWN STOP
50642 WEAR INSERT
37518-0 CLAMP PAD
50808-B LADDER STOP
50817-B REAR PIVOT ARM, CURB
51009 STUB SHAFT
51012 TUBE, DD
50642 WEAR INSERT
50799 CLAMP MTG BRKT
50800-B CLAMP PAD
37518-0 CLAMP PAD
50808-B LADDER STOP
50805 DOWN STOP
50785 PRIMARY DROP, CS
51349 ROLLER GUIDE
25340-0 HANDLE LATCH
50817-B REAR PIVOT, CURB
37518-0 CLAMP PAD
50805 DOWN STOP
51358 PIVOT HANDLE ASSM
51036 DOWN GUIDE
50800-B CLAMP PAD
51316 PRIMARY DROP ASM,SS
50642 WEAR INSERT
51349 ROLLER GUIDE
25340-0 HANDLE LATCH
51012 TUBE, DD
50819-B TORSION TUBE
48265 DAMPER
50820-B FRONT PIVOT ARM, CURB
51349 ROLLER GUIDE

- PRECAUTIONS -

CAUTION
THE USE OF 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 DRILLINGTO 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

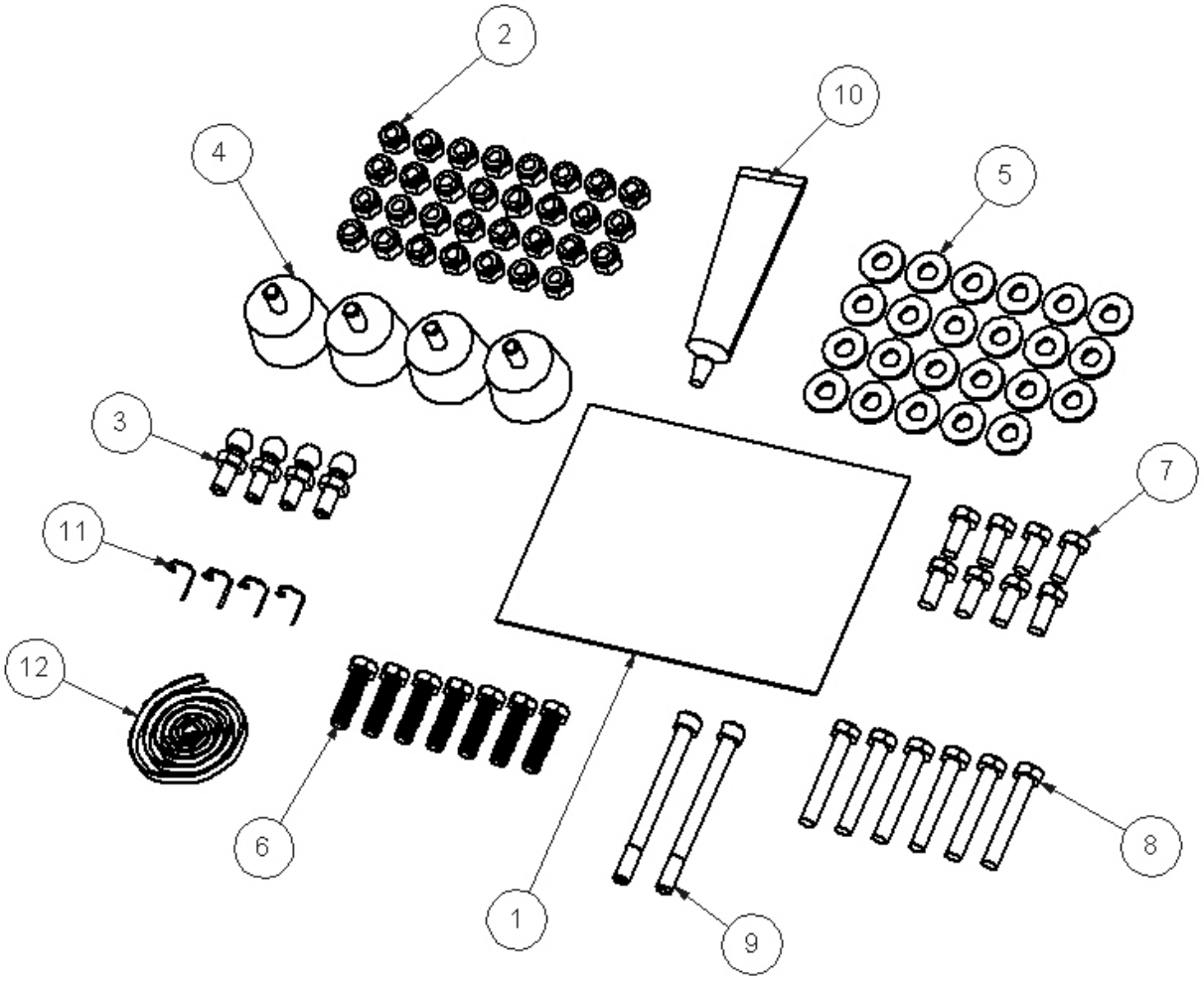
SCREWDRIVERS

MEASURING TAPE

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

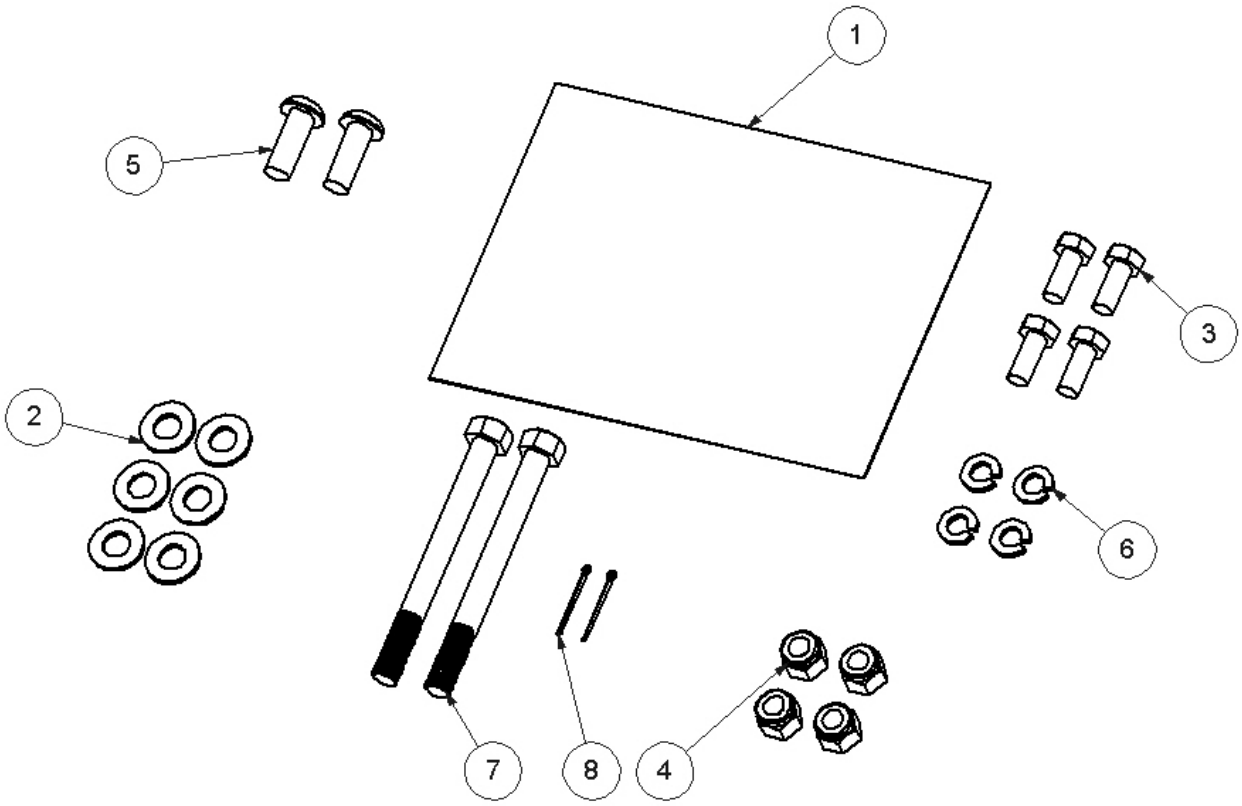
BAG51043 - DROP DOWN ASSEMBLY BAG

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BAG0507-A	5" x 7" 3MIL AUTOBAG	1
2	FAS0248	Nut, Nylon Insert Lock, 5/16-18 SST	31
3	34927-0	Ball Stud, Damper	4
4	34924-0	Neoprene Bumper	4
5	FAS0552	Washer, Flat, 5/16, SST	23
6	FAS0830	Screw, Hex Hd, 5/16-18 X 1.25 SS	7
7	FAS0799	Screw, Hex Hd, 5/16-18x0.75 SS	8
8	FAS0179	Screw, Hex Hd, 5/16-18x2.00 STAINLESS STEEL	6
9	FAS0811	SCREW,CAP, 5/16-18X3.50 SS	2
10	26618-0	Silicone Sealant	1
11	34928-0	Clip, Suspa P/N P68-00019	4
12	05586-0	Butyl Tape, T224 -1/2"X 1' Roll	1



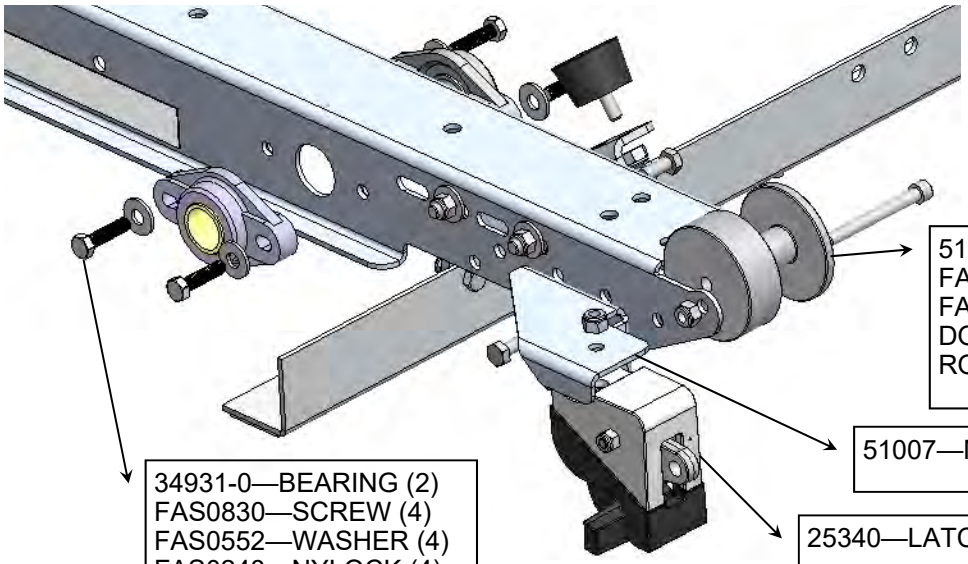
BAG51041—FINAL ASSEMBLY FASTENER BAG

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BAG0507-A	5" x 7" 3MIL AUTOBAG	1
2	FAS0246	Washer, Flat, 3/8, HRD, ZN	6
3	FAS0799	Screw, Hex Hd, 5/16-18x0.75 SS	4
4	FAS0110	Nut,Hex Nylk 3/8-16 SS W	4
5	FAS0572	Screw, Button Hd Hex Soc, 3/8-16x1.00 NI-ZN	2
6	FAS0588	Washer, Lock, Split, 5/16, SS	4
7	FAS0286	SCREW, HHCS, 3/8-16x4, SS	2
8	FAS0287	COTTER PIN, 1/16DIA X 1"LG, SS	2



STEP #1 : ASSEMBLE CURB SIDE REAR CROSS BOW

REAR OF THE VAN



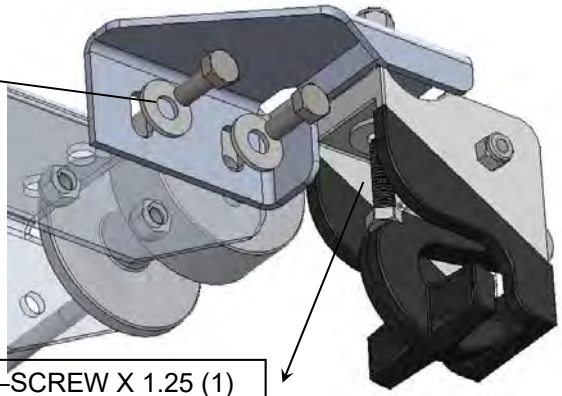
51349 –ROLLER GUIDE (1)
FAS0811—SCREW X 3.5 (1)
FAS0248—NYLOCK (1)
DO NOT FULLY TIGHTEN.
ROLLER MUST ROLL

51007—MTG BRKT

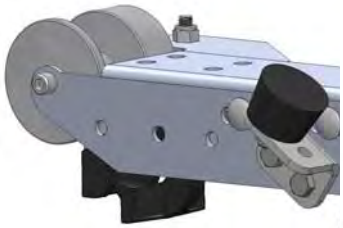
25340—LATCH

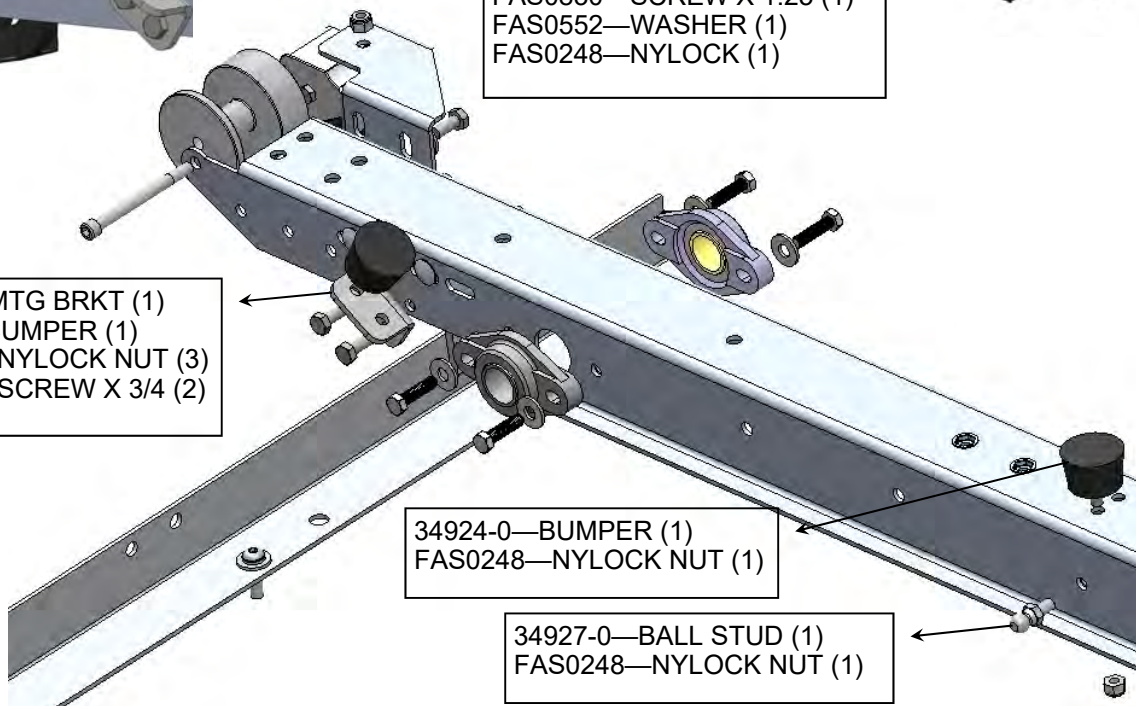
34931-0—BEARING (2)
FAS0830—SCREW (4)
FAS0552—WASHER (4)
FAS0248—NYLOCK (4)

FAS0799—SCREW X 3/4 (2)
FAS0552—WASHER (2)
FAS0248—NYLOCK (2)



FAS0830—SCREW X 1.25 (1)
FAS0552—WASHER (1)
FAS0248—NYLOCK (1)





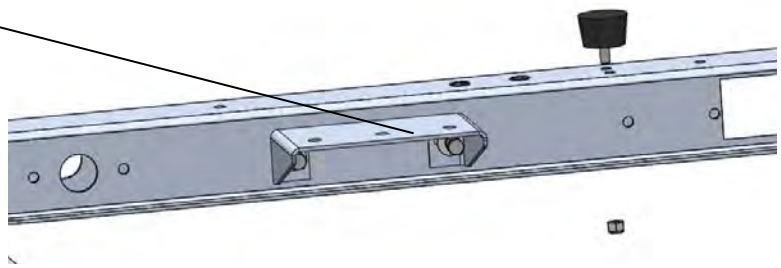
40419-B—MTG BRKT (1)
34924-0—BUMPER (1)
FAS0248—NYLOCK NUT (3)
FAS0799—SCREW X 3/4 (2)

34924-0—BUMPER (1)
FAS0248—NYLOCK NUT (1)

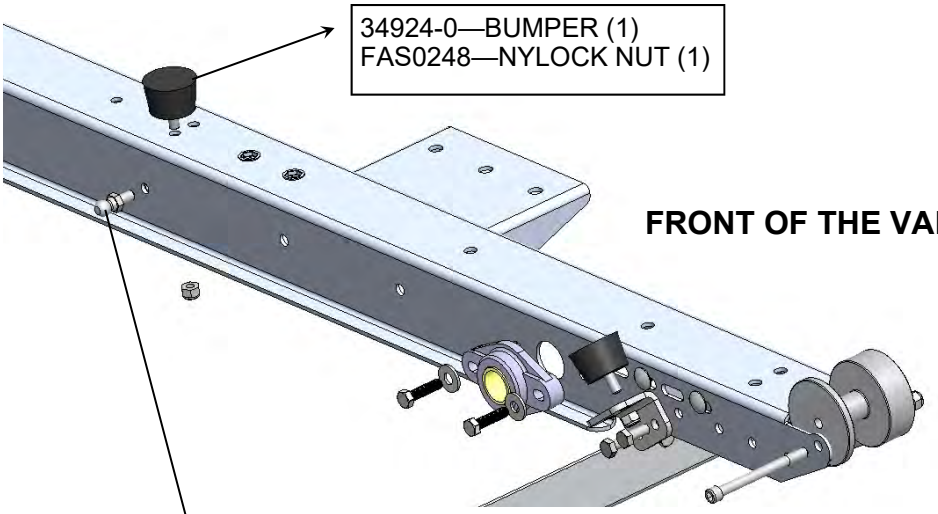
34927-0—BALL STUD (1)
FAS0248—NYLOCK NUT (1)

STEP #2 : ASSEMBLE CURB SIDE FRONT CROSS BOW. DO NOT ATTACH TO THE RAIL YET.

50828—MTG PLATE (1)
FAS0799 -SCREW X 3/4 (2)
FAS0552—WASHER (2)
FAS0248—NYLOCK (2)



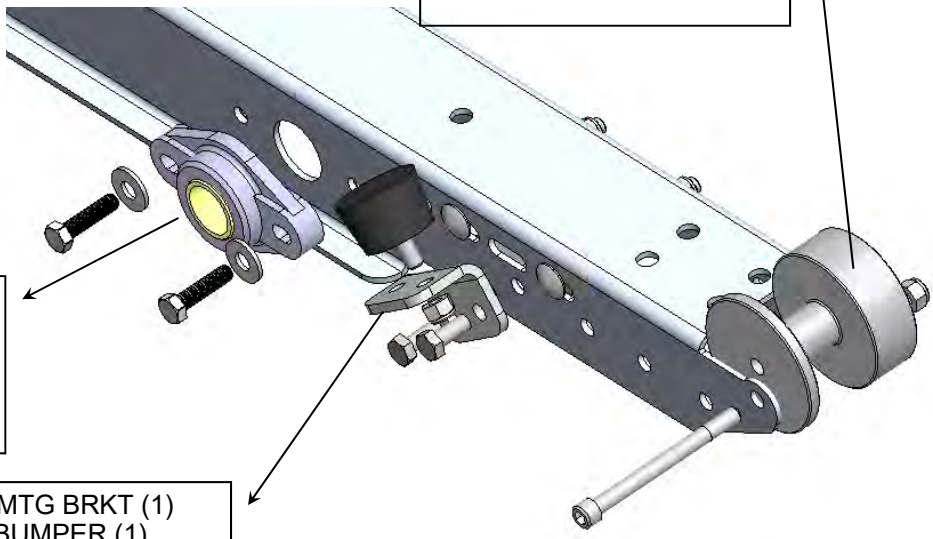
34924-0—BUMPER (1)
FAS0248—NYLOCK NUT (1)



FRONT OF THE VAN

34927-0—BALL STUD (1)
FAS0248—NYLOCK NUT (1)

51349 –ROLLER GUIDE (1)
FAS0811—SCREW X 3.5 (1)
FAS0248—NYLOCK (1)
DO NOT FULLY TIGHTEN.
ROLLER MUST ROLL

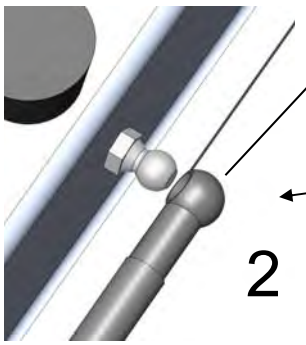


34931-0—BEARING (1)
FAS0830—SCREW (2)
FAS0552—WASHER (2)
FAS0248—NYLOCK (2)

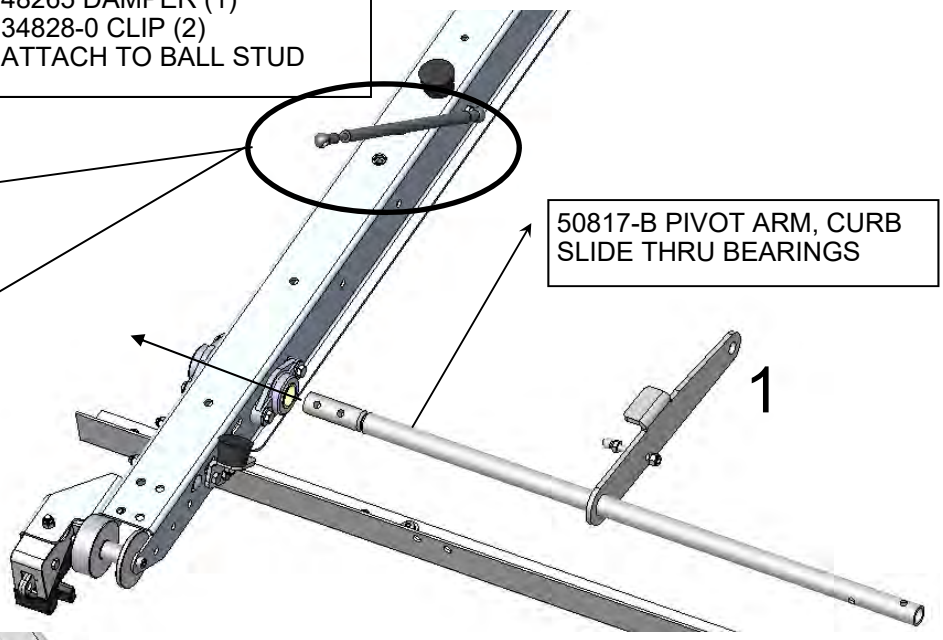
40419-B—MTG BRKT (1)
34924-0—BUMPER (1)
FAS0248—NYLOCK NUT (3)
FAS0799—SCREW X 3/4 (2)

STEP #3 : ASSEMBLE CURB SIDE PIVOT DRIVE TO THE CROSS BOWS

48265 DAMPER (1)
34828-0 CLIP (2)
ATTACH TO BALL STUD

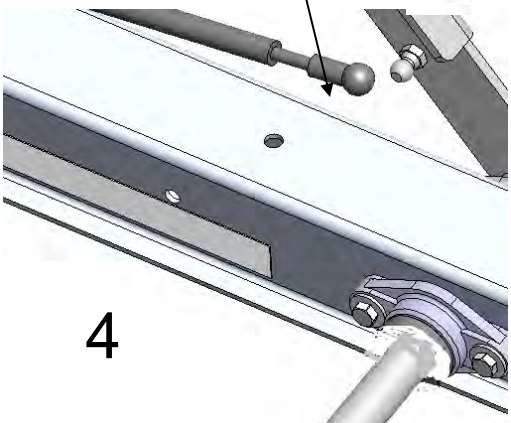


2



50817-B PIVOT ARM, CURB
SLIDE THRU BEARINGS

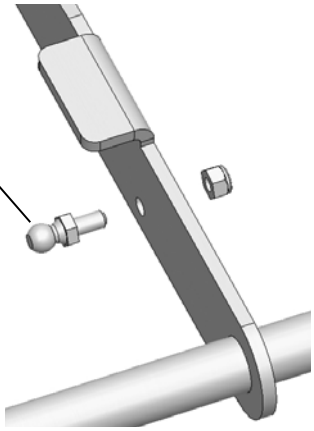
1



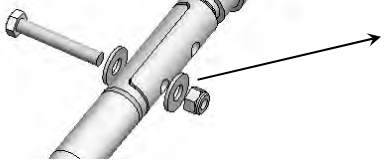
4

34927-0—BALL STUD (1)
FAS0248—NYLOCK NUT (1)

3

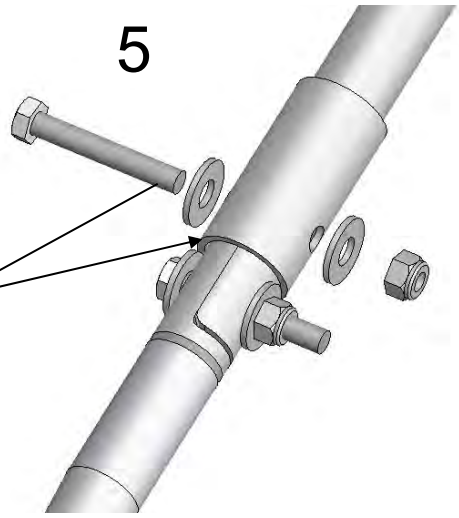


51394-B CONNECT TUBE
SLIDE OVER PIVOT ARM



FAS0179—SCREW X 2 (1)
FAS0552—WASHER (2)
FAS0248—NYLOCK (2)
05586-0—BUTYL TAPE
ALL AROUND

5



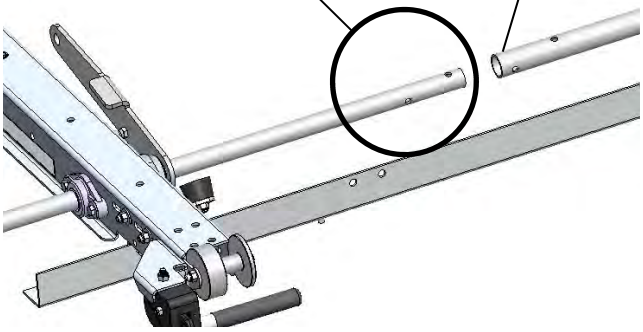
SLIDE TUBE DOWN
FAS0179—SCREW X 2 (1)
FAS0552—WASHER (2)
FAS0248—NYLOCK (2)
05586-0—BUTYL TAPE
ALL AROUND

STEP #4A : ASSEMBLE CURB SIDE PIVOT DRIVE AT REAR OF VEHICLE.

1

50819-B TORSION TUBE OVER BOTH TUBES

APPLY SILICONE BEAD (2) PLACES ALL AROUND ON EACH PIVOT ARM



2

3

05586-0 BUTYL TAPE ALL AROUND

FAS0179—SCREW X 2 (2)
FAS0552—WASHER (4)
FAS0248—NYLOCK NUT (2)

26618-0—SILOCONE ALL AROUND

4

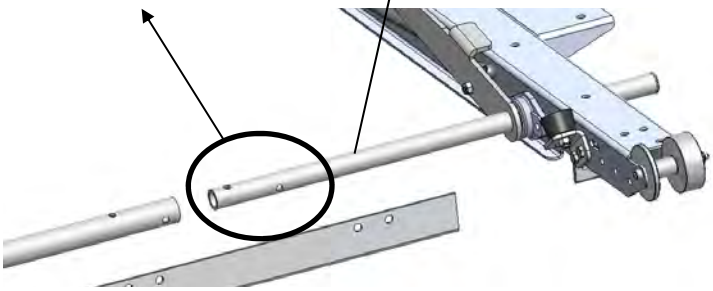
FINISHED CONNECTION

STEP #4B : ASSEMBLE CURB SIDE PIVOT DRIVE AT FRONT OF VEHICLE

5

50817-B—PIVOT ARM, CS

APPLY SILICONE BEAD (2) PLACES ALL AROUND ON EACH PIVOT ARM



6

7

05586-0
BUTYL TAPE
ALL AROUND

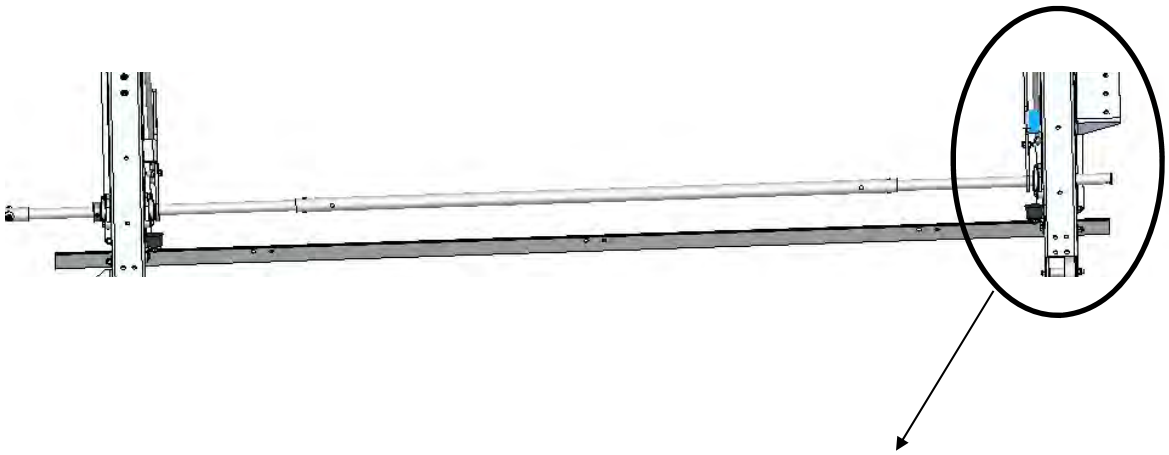
FAS0179—SCREW X 2 (4)
FAS0552—WASHER (8)
FAS0248—NYLOCK NUT (4)

26618-0—SILOCONE ALL AROUND

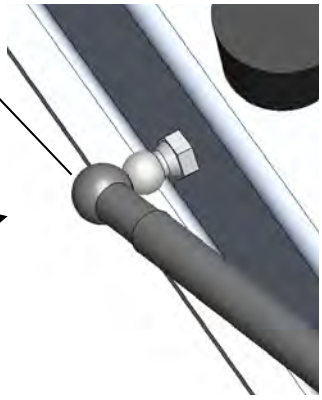
8

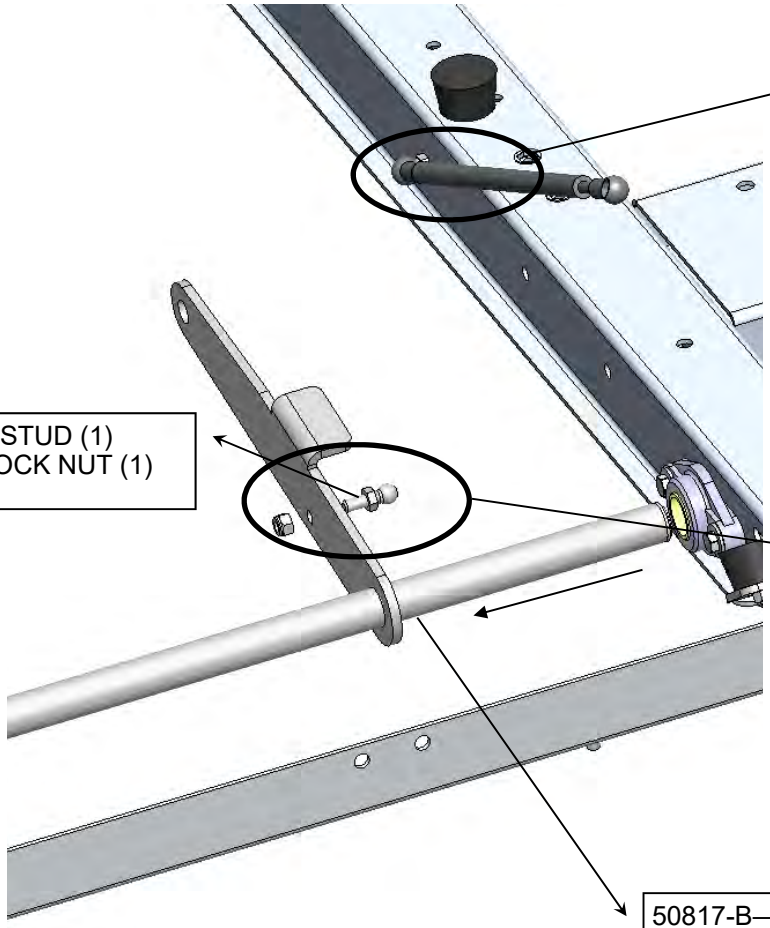
FINISHED CONNECTION

STEP #4C : ASSEMBLE CURB SIDE PIVOT DRIVE TO THE CROSS BOWS

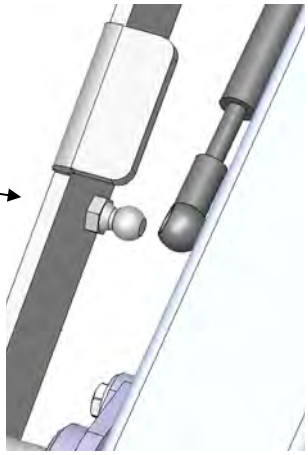


48265 DAMPER (1)
34928-0 CLIP (2)
ATTACH TO BALL STUD



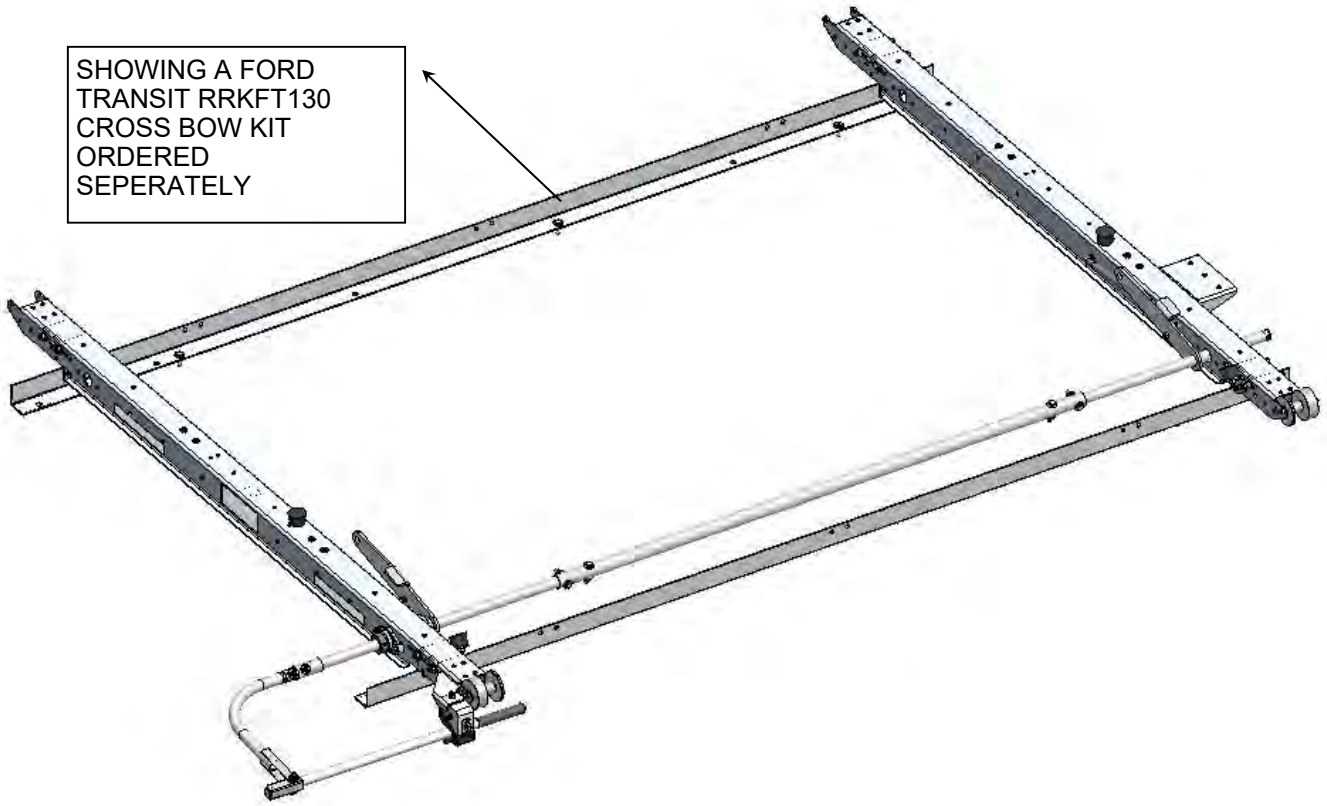


34927-0—BALL STUD (1)
FAS0248—NYLOCK NUT (1)



50817-B—PIVOT ARM, CS
THRU BEARING

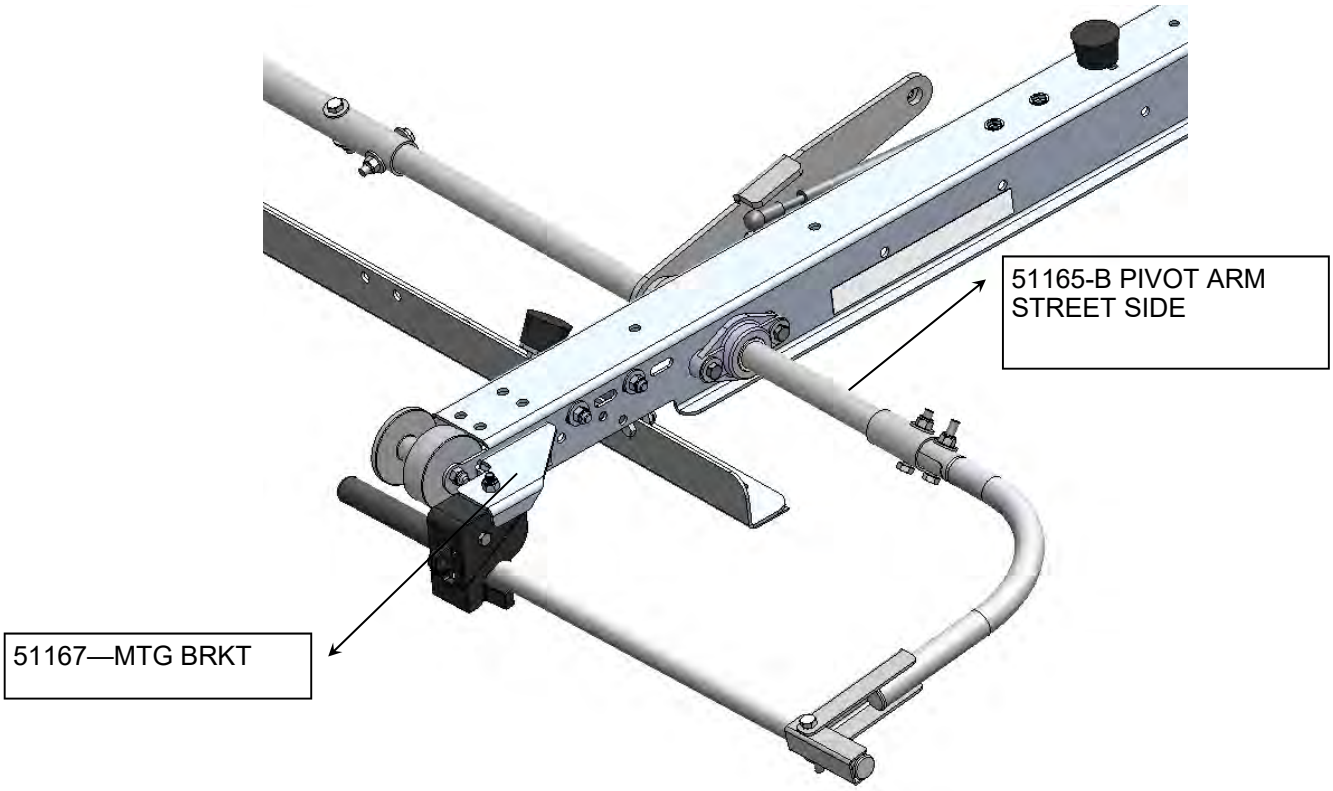
STEP #5 : THIS IS THE FINISHED CURB SIDE PIVOT DRIVE
-CONTINUE TO STEP #11 FOR A COMPLETE ASSEMBLY / INSTALL
-CONTINUE TO STEP #6 FOR THE STREET SIDE PIVOT DRIVE.

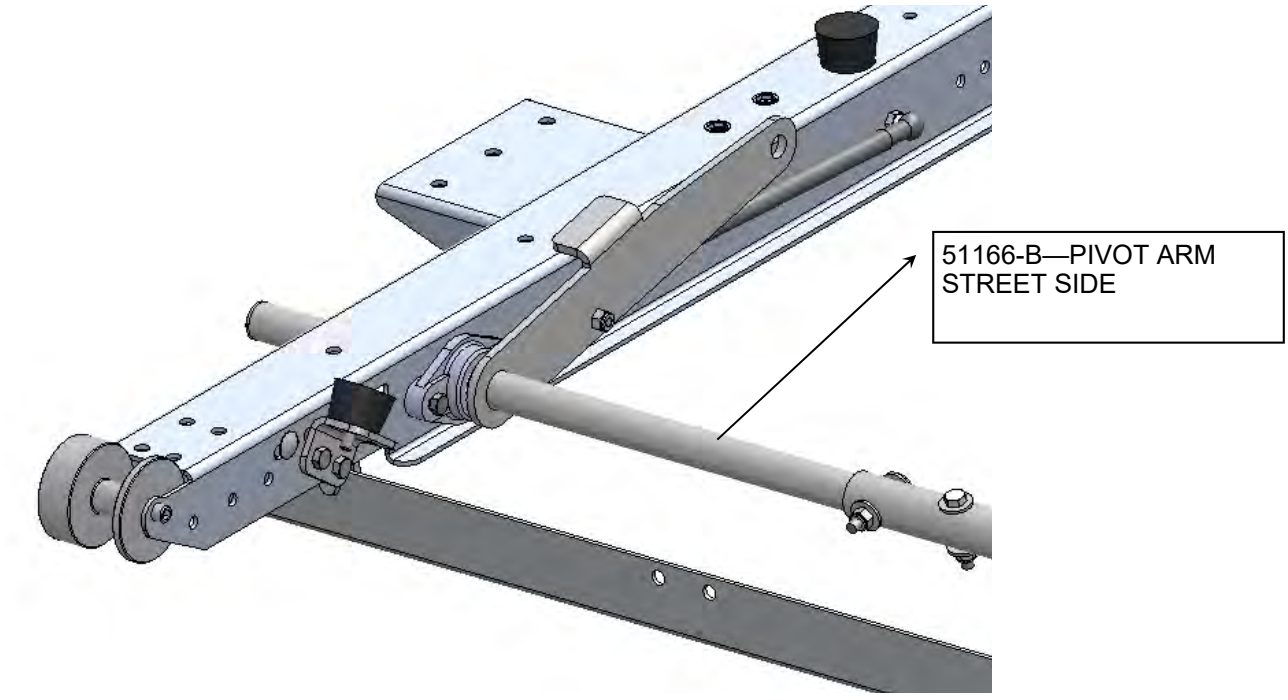


STEP #6 : THIS IS THE FINISHED CURB SIDE PIVOT DRIVE.
-CONTINUE TO STEP #7 FOR A COMPLETE ASSEMBLY / INSTALL
-CONTINUE TO STEP #9 FOR THE STREET SIDE PIVOT DRIVE

STEP #6 THRU #9: ASSEMBLE STREET SIDE REAR CROSS BOW

USE STEPS #1 THRU #4 AS YOUR GUIDE—FINAL SHIP THRU STREET SIDE ASSEMBLY SHOWN BELOW

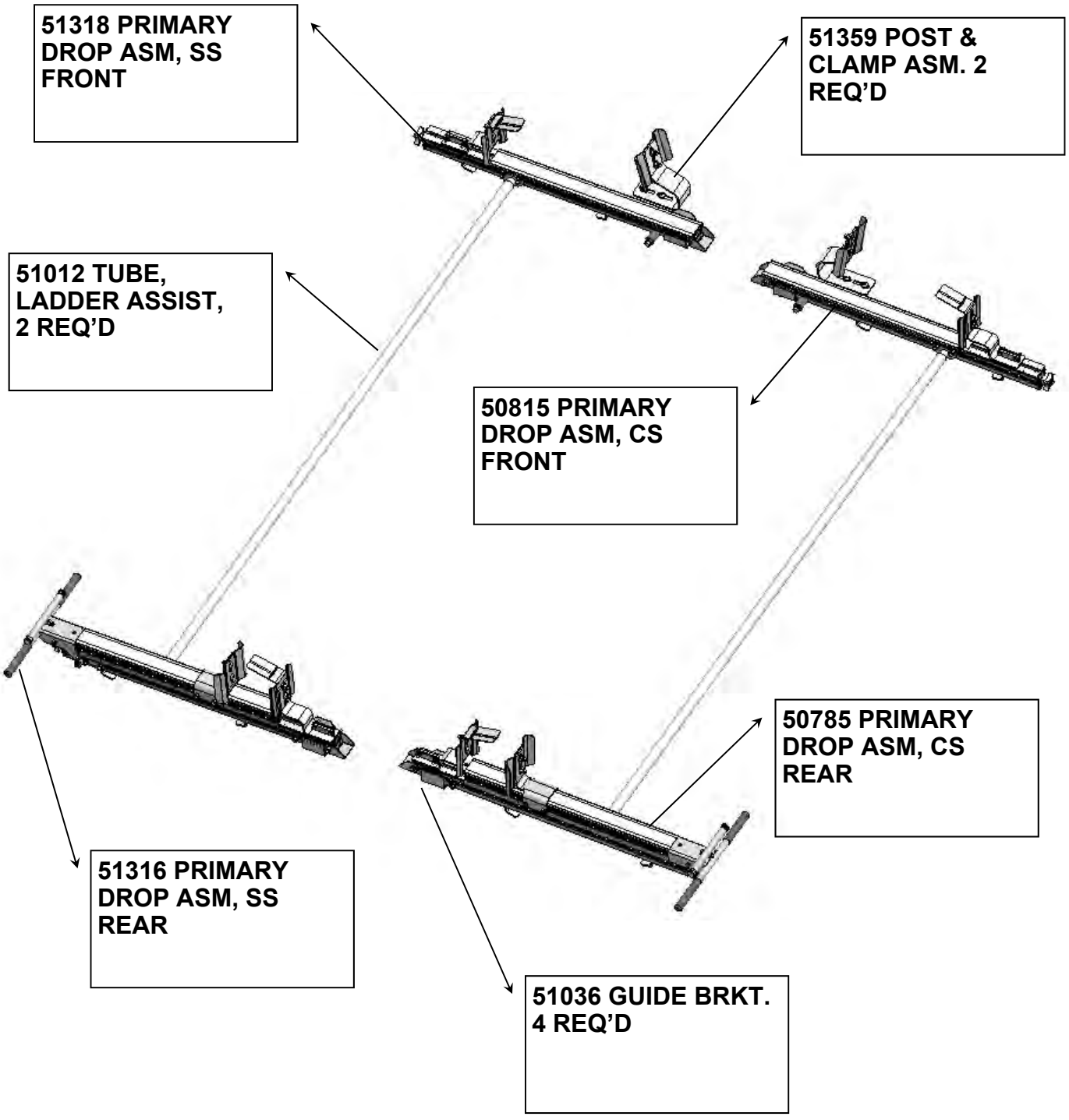




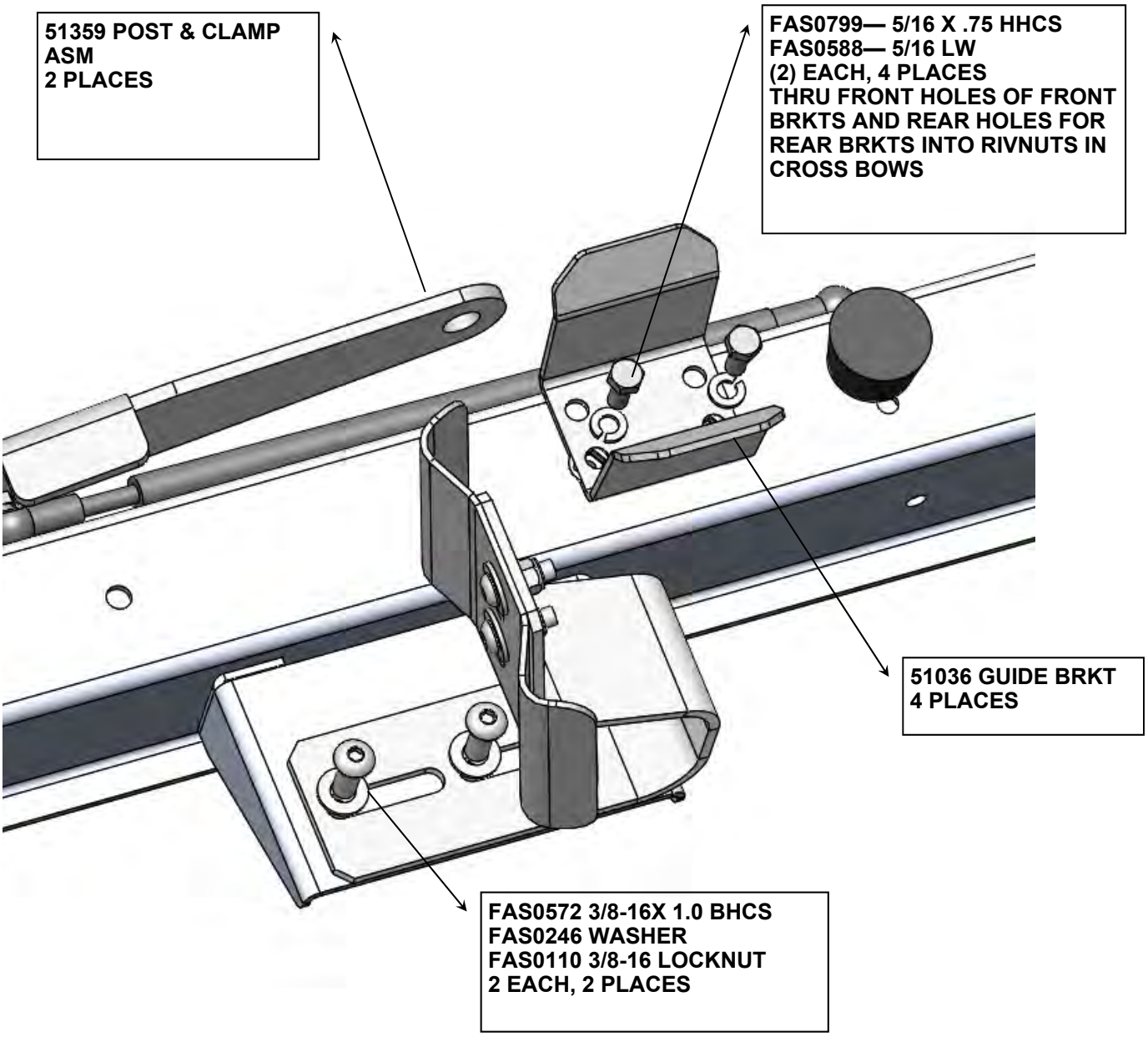
STEP #10 : THIS IS THE FINISHED CURB AND STREET SIDE PIVOT DRIVE
-CONTINUE TO STEP #11 FOR A COMPLETE ASSEMBLY / INSTALL

STEP #10 : THIS IS THE FINISHED CURB AND STREET SIDE PIVOT DRIVE.
-CONTINUE TO STEP #11 FOR A COMPLETE ASSEMBLY / INSTALL

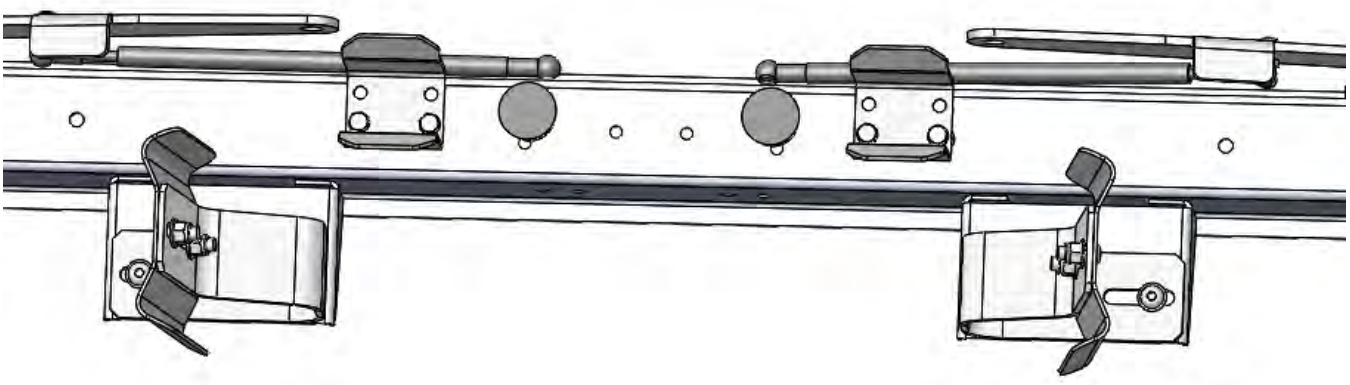
STEP #11 - THIS IS THE FINAL ASSEMBLY, SHOWING THE CURB AND STREET SIDE DROP DOWN COMPONENTS



STEP 12 : ASSEMBLE BRACKETS TO THE FRONT CROSS BOW

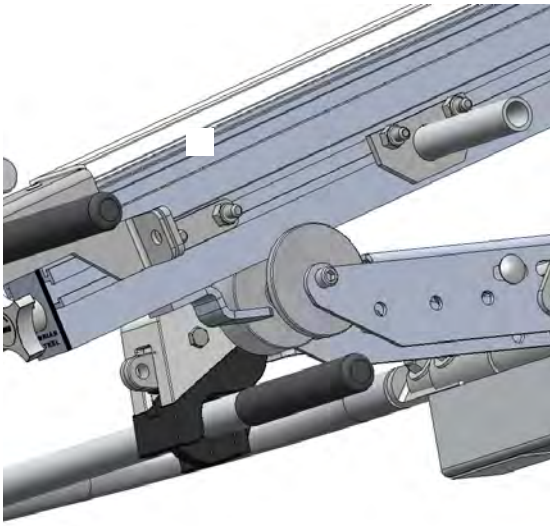


STEP 12 : COMPLETED VIEW OF THE FRONT CROSS BOW

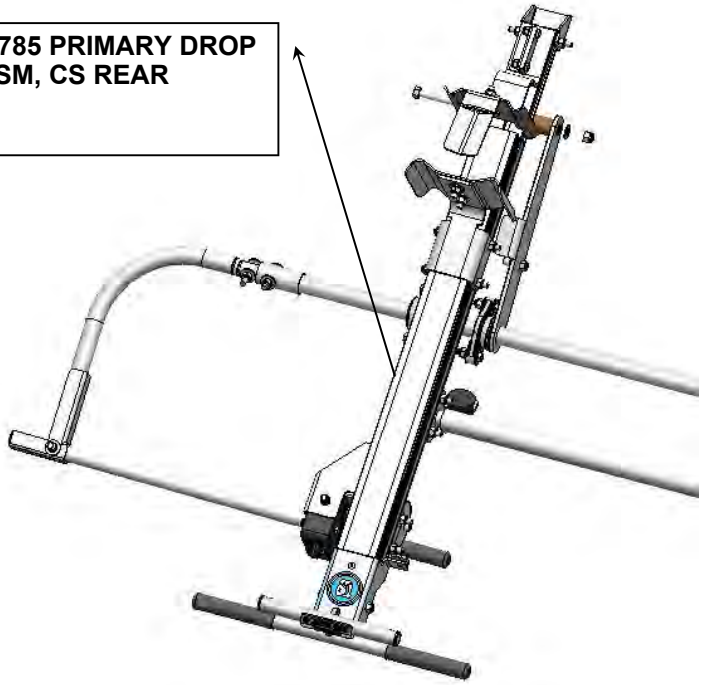


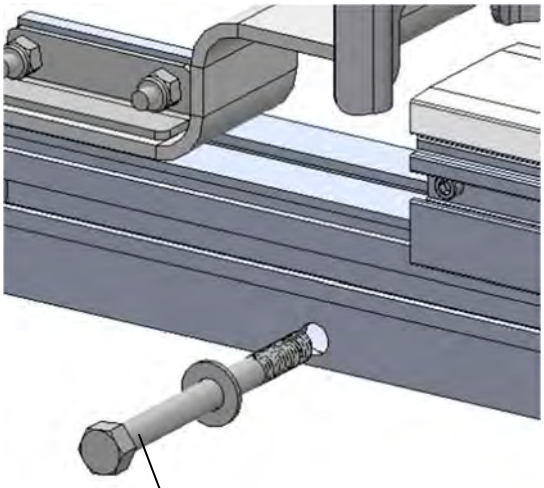
STEP 13 : ASSEMBLE REAR CURB SIDE PRIMARY DROP TO RACK

SET 50785 PRIMARY DROP ASM, REAR CS IN PLACE ON REAR CROSS BOW. USE GUIDE ROLLER

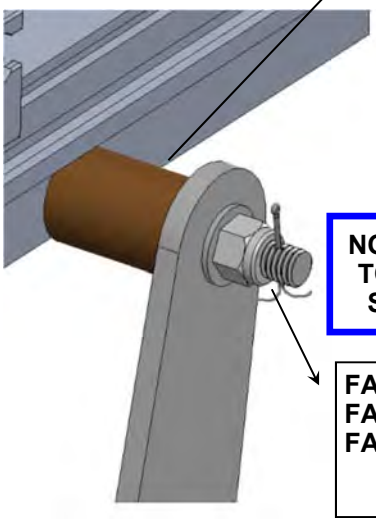


50785 PRIMARY DROP ASM CS REAR





FAS0286 3/8-16 X 4" HHCS
FAS0246 WASHER



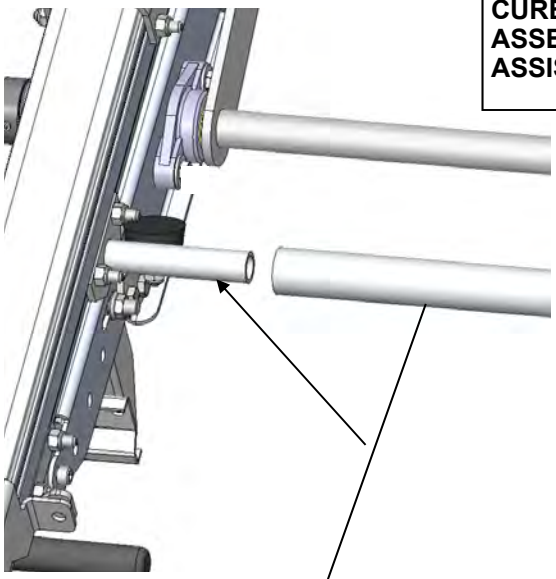
NOTE: TORQUE NYLOCK NUT TO 20FT.LBS, THEN INSERT/ SECURE THE COTTER PIN.

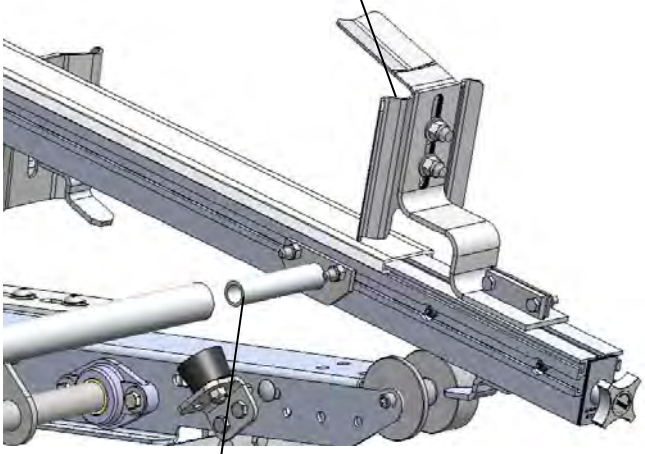
FAS0246 WASHER
FAS0110 3/8-16 NYLOCK NUT
FAS0287—COTTER PIN

NOTE: AFTER THE COTTER PIN IS INSERTED THROUGH THE BOLT, SPREAD THE PIN SO IT CAN NOT BE REMOVED.

STEP 14 : ASSEMBLE FRONT SIDE PRIMARY DROP TO RACK

SET 50815 PRIMARY DROP ASM, FRONT CS IN PLACE ON FRONT CROSS BOW. USE GUIDE ROLLER AFTER LADDER ASSIST TUBE IS ON BOTH STUB SHAFTS

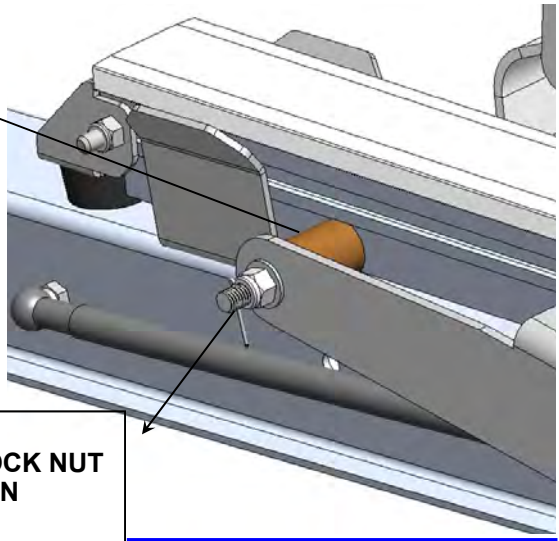




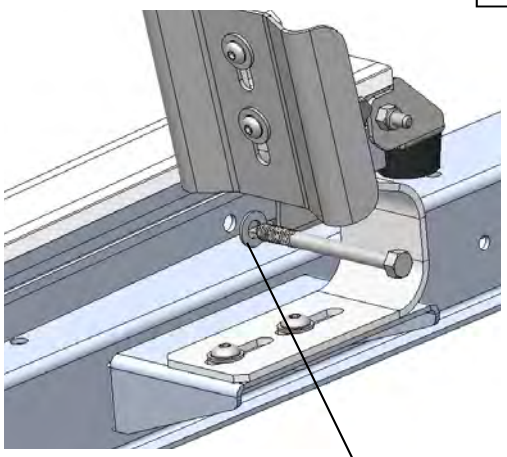
50815 PRIMARY DROP ASSM
CURB SIDE FRONT
ASSEMBLE TO LADDER
ASSIST TUBE

51012 LADDER
ASSIST TUBE
OVER STUB SHAFT

51012 TUBE
OVER STUB SHAFT PRIOR TO
PLACING IN GUIDE ROLLER



51034 BRONZE
BUSHING



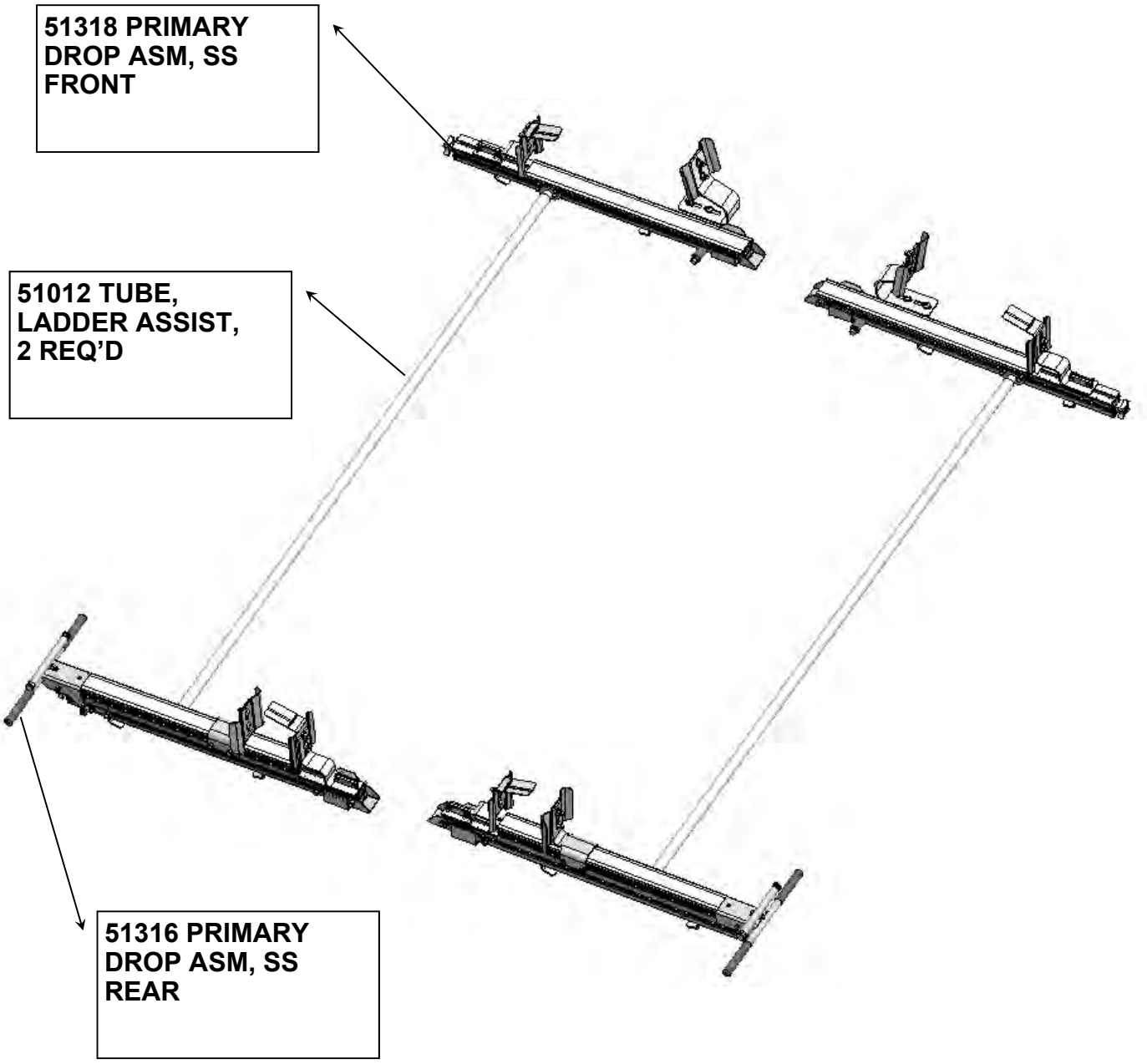
FAS0246 WASHER
FAS0110 3/8-16 NYLOCK NUT
FAS0287—COTTER PIN

NOTE: TORQUE NYLOCK NUT TO 20FT.LBS, THEN INSERT/ SECURE THE COTTER PIN.

FAS0286 3/8-16 X 4" HHCS
FAS0246 WASHER

NOTE: AFTER THE COTTER PIN IS INSERTED THROUGH THE BOLT, SPREAD THE PIN SO IT CAN NOT BE REMOVED.

STEP #15 : FOR A DOUBLE DROP DOWN, INSTALL STREET SIDE USING STEPS #13 & 14 AS YOUR GUIDE.

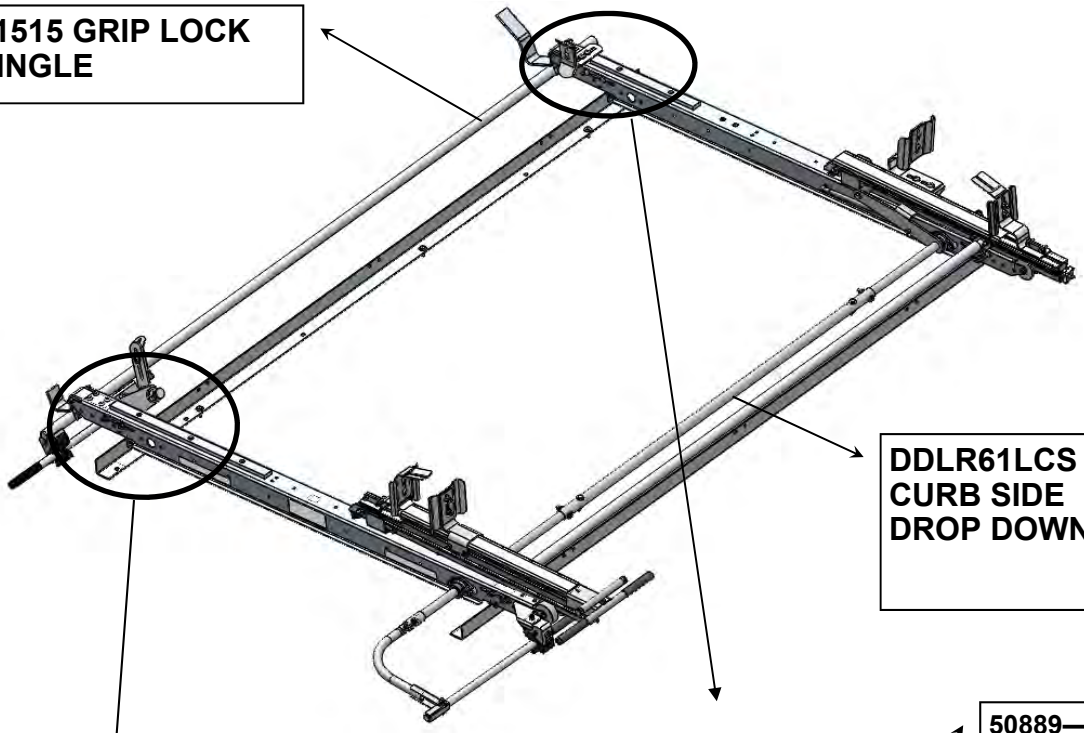


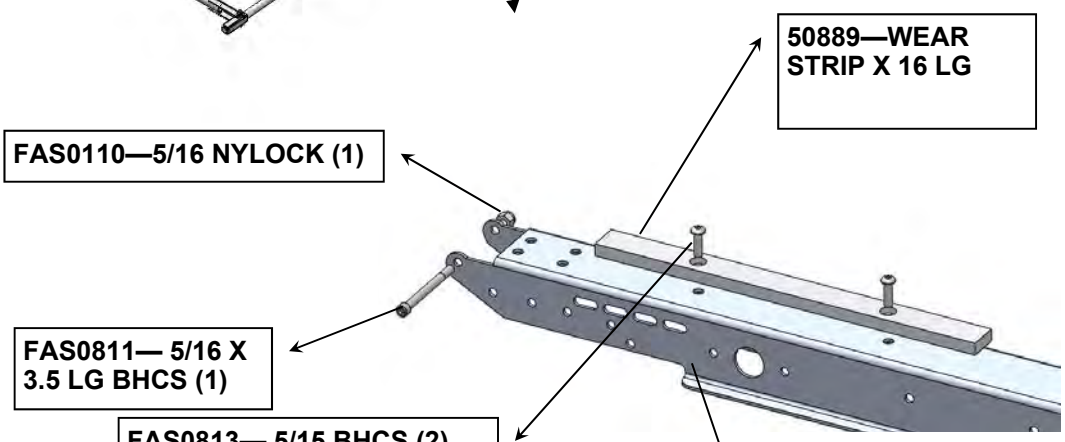
DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS.
YOUR INSTALLATION IS NOW COMPLETE!
STOW THIS COPY IN THE VEHICLE FOR FUTURE REFERENCES!

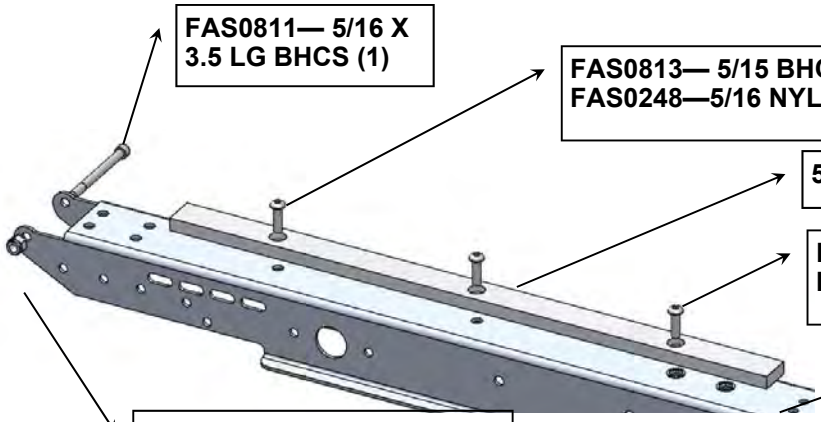
STEP #16 : YOUR DOUBLE DROP DOWN INSTALLATION IS NOW COMPLETE
GO TO STEP 17 FOR A COMBO RACK

DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS.
YOUR INSTALLATION IS NOW COMPLETE!
STOW THIS COPY IN THE VEHICLE FOR FUTURE REFERENCES!

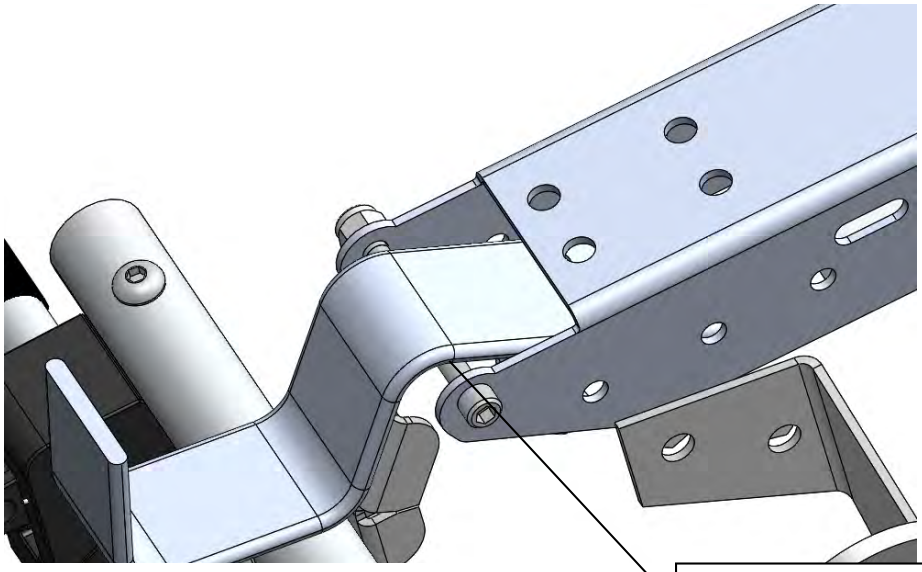
STEP #17 : COMBO RACK, INSTALL STREET SIDE GRIP LOCK ADD WEAR STRIPS







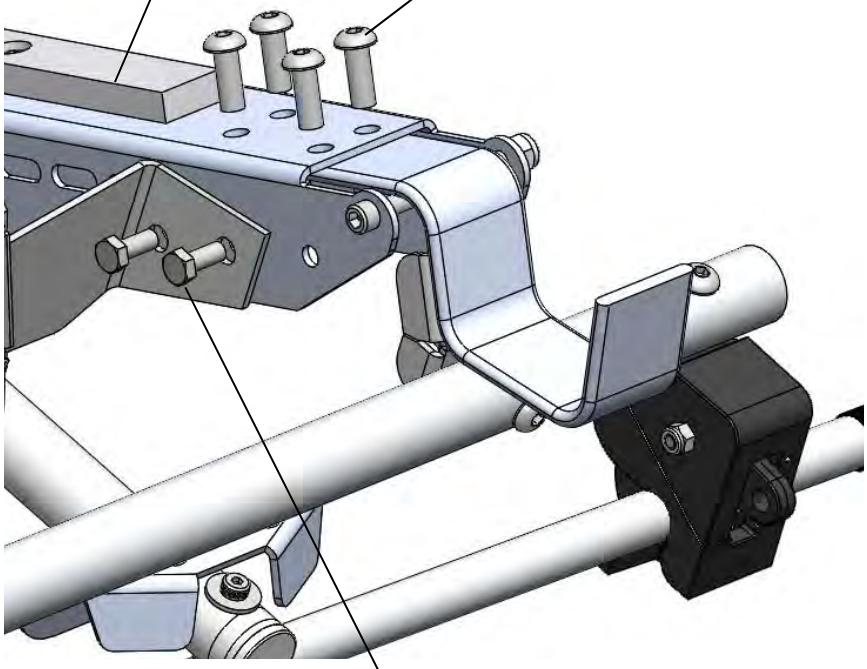
STEP #18 : COMBO RACK, INSTALL STREET SIDE GRIP LOCK



PIVOT OVER BOLT
AND PUT
GRIP LOCK HOOKS
INTO ROOF BOWS

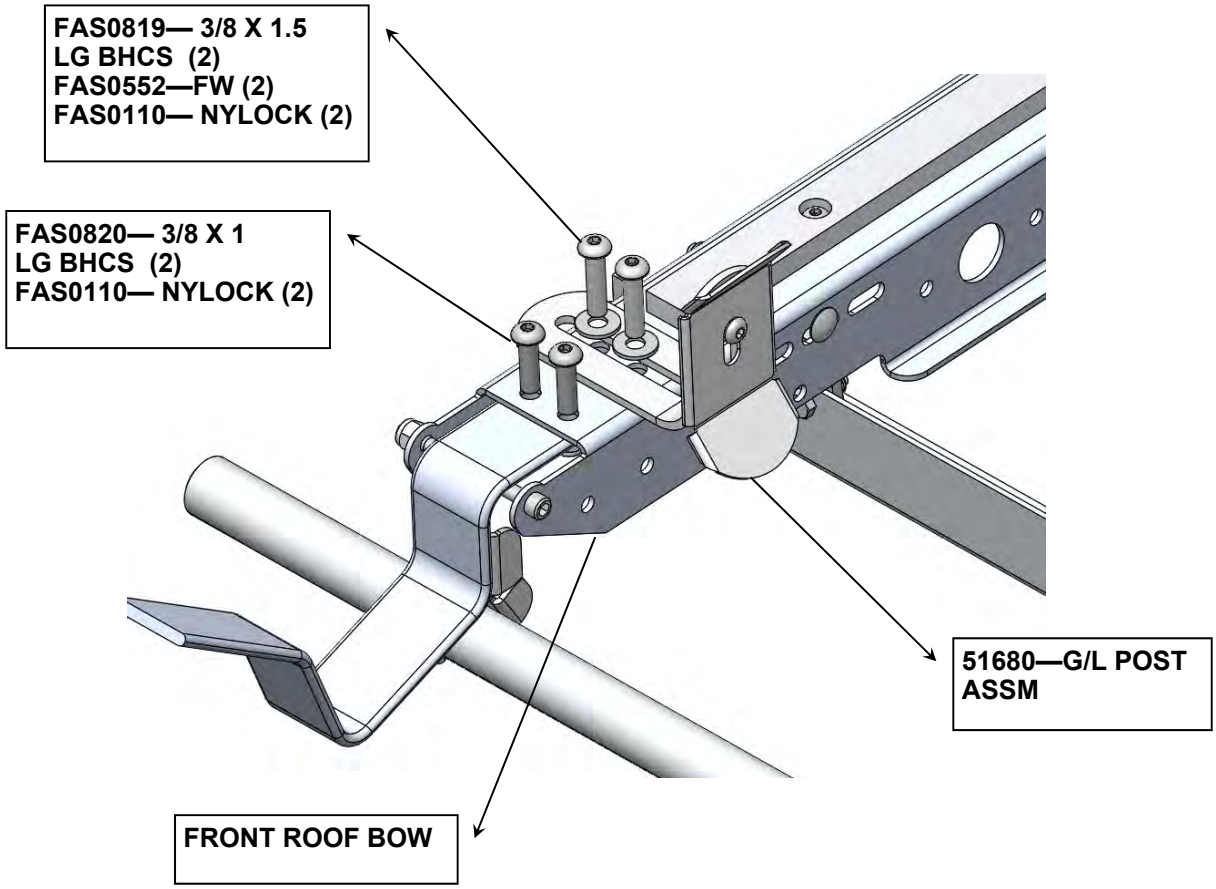
REAR ROOF BOW

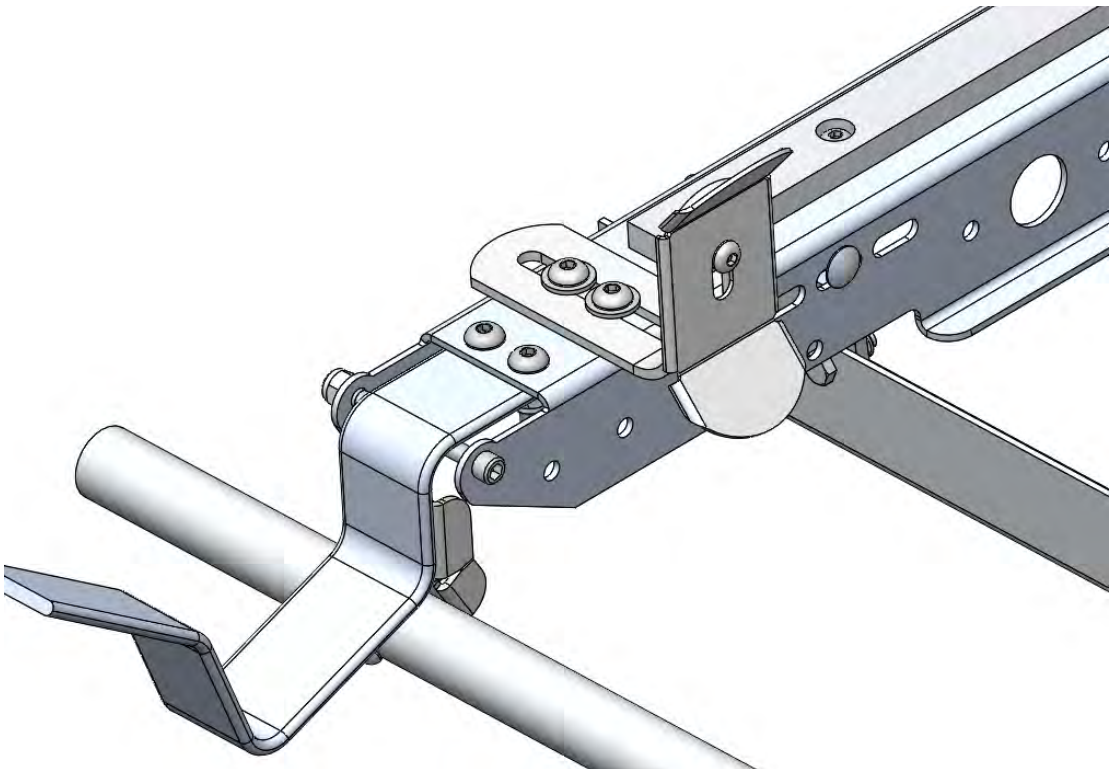
FAS0820— 3/8 X 1 LG BHCS (4)
FAS0110— NYLOCK (4)



SECOND AND THIRD HOLES !
FAS0799— 5/16 x 3/4 HHCS (2)
FAS0248— NYLOCK (2)

STEP #19: FRONT ROOF BOW ASSEMBLY –STREET SIDE

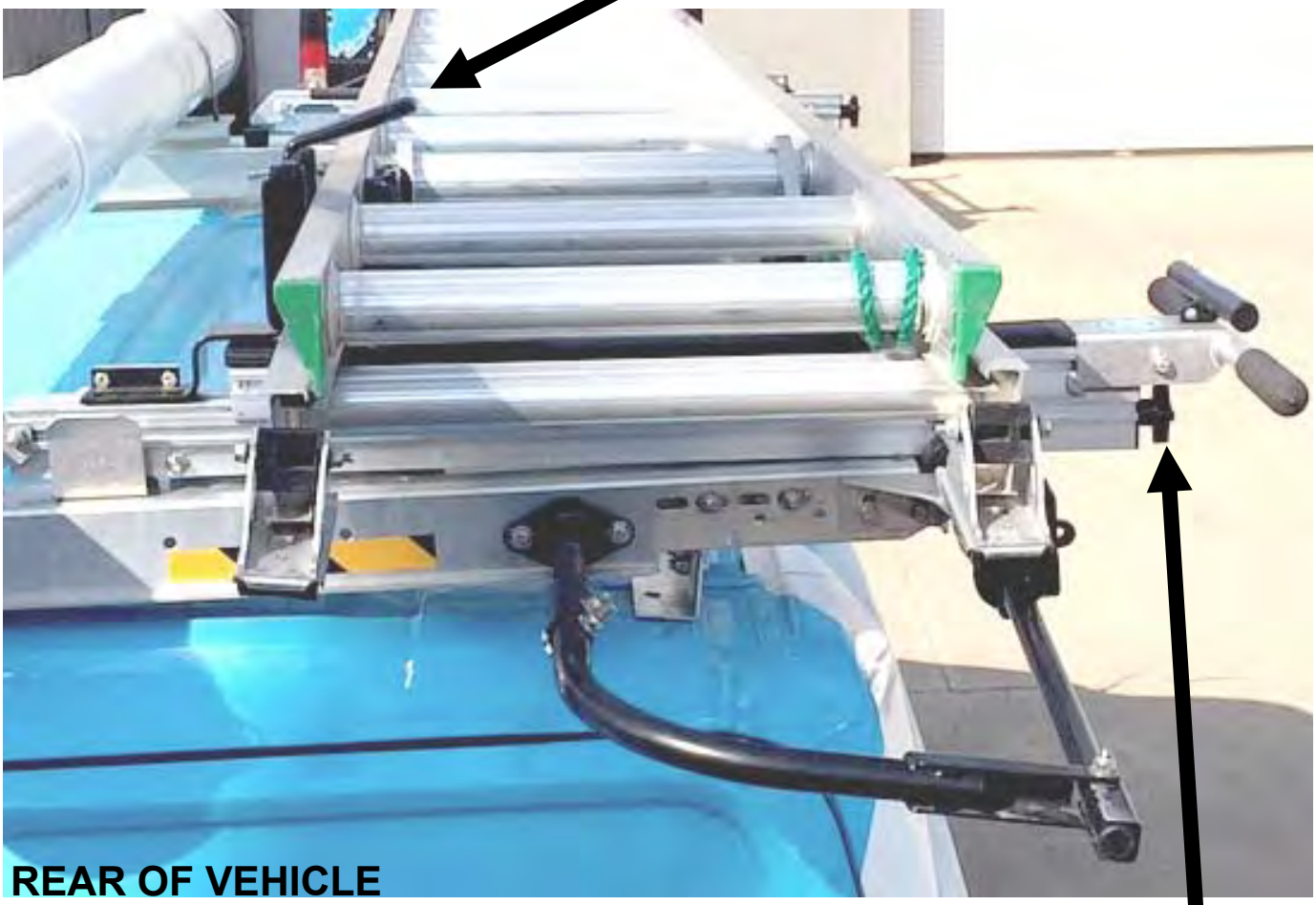




STEP #23 : YOUR DROP DOWN COMBO INSTALLATION IS NOW COMPLETE

DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS.
YOUR INSTALLATION IS NOW COMPLETE!
STOW THIS COPY IN THE VEHICLE FOR FUTURE REFERENCES!

REAR CLAMP PAD MOVES TOWARDS CURB TO TIGHTEN LADDER TO RACK



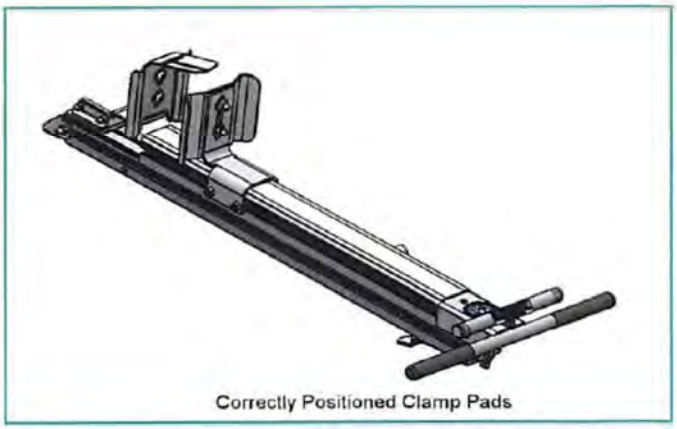
TURN KNOB TO ADJUST TO YOUR LADDER.

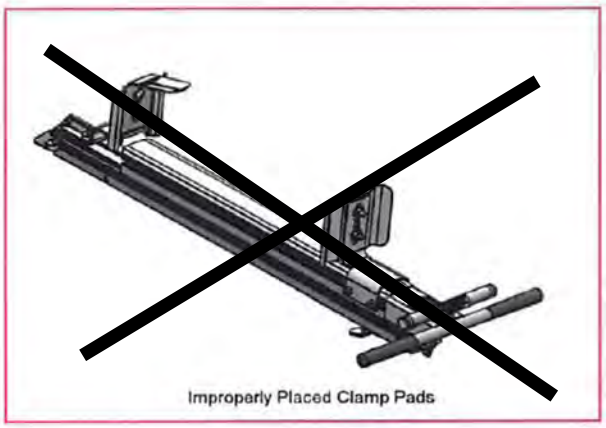
DO NOT OVER TIGHTEN! CLAMP PAD SHOULD JUST TOUCH THE LADDER.

Proper Clamp Pad Locations

Below is the proper way to clamp the ladder to the vehicle (highlighted in green)

How to inspect for this: Properly placed clamp pads should be in close proximity to each other to allow the clamp pads to securely retain the ladder from side to side motion and front to back motion.


Correctly Positioned Clamp Pads


Improperly Placed Clamp Pads

Above is the wrong way to clamp the ladder to the vehicle

FRONT CLAMP PAD MOVES TOWARDS STREET TO TIGHTEN LADDER TO RACK

FRONT OF VEHICLE

TURN KNOB TO ADJUST TO YOUR LADDER.

DO NOT OVER TIGHTEN! CLAMP PAD SHOULD JUST TOUCH THE LADDER.

DDLR Series Final Adjustment Instruction (GMFSV / Ford Transit)

DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS.
YOUR INSTALLATION IS NOW COMPLETE!
STOW THIS COPY IN THE VEHICLE FOR FUTURE REFERENCES!

ROOF RAIL KIT, FORD TRANSIT

PRODUCT WEIGHT
31 lbs

WIDTH x DEPTH x HEIGHT

CAPACITY
190

COLOR
Aluminum

CATALOG NUMBER
RRKFT130

PRODUCT FEATURES

This Roof Cross-bow Kit is designed to fit the Ford Transit, 130 and 148 wheel base. This base kit allows mounting of the new re -designed drop down and grip-lock ladder rack series.

Cross-bow kits is secured to the Ford Transit by OEM supplied fastening points.

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

The information contained in this document is the sole property of ADRIAN STEEL COMPANY. ADRIAN STEEL COMPANY retains the right to modify and/or change the product of its design at any time without prior notification.

CATALOG NUMBER RRKFT130

PRODUCT APPLICATION

This Roof Cross-bow Kit is designed to fit the Low roof transit, 130 and 148 wheel base. This will allow mounting of the new re-designed drop down and grip-lock ladder rack series.

ACCESSORIES THAT WILL WORK WITH THIS PRODUCT

CATALOG NUMBER	*DESCRIPTION*
DDLR61FTL	**DROP DOWN LADDER RACK, CURB SIDE**
DDLR63FTL	**DROP DOWN LADDER RACK, DOUBLE**
61-GLFTL	**GRIP LOCK, SINGLE, CURB SIDE**
63-GLFTL	**GRIP LOCK, DOUBLE**

SPECIAL APPLICATION NOTES

The information contained in this document is the sole property of ADRIAN STEEL COMPANY. ADRIAN STEEL COMPANY retains the right to modify and/or change the product of its design at any time without prior notification.

Introduction / Comments:

THIS ROOF RAIL AND CROSS BOW KIT IS DESIGNED FOR THE FORD TRANSIT LOW ROOF VANS, BOTH 130” AND 148” WHEEL BASE. IT IS THE BASE UNIT FOR ALL OF THE LADDER RACK COMBINATIONS FOR THIS VEHICLE. INCLUDING THE SINGLE AND DOUBLE DROP DOWN LADDER RACK, THE SINGLE AND DOUBLE GRIP LOCK, AND THE COMBO GRIP LOCK DROP DOWN LADDER RACK.

Note:
It is advised that all fasteners used in this assembly and installation of this Rack should be checked for tightness at the following intervals: @ 2-weeks and again @ 6-weeks of operation. This preventive maintenance step must be completed to ensure your package gives you long service life.

TO VIEW INSTALL VIDEO

RRKFT130
ROOF RAIL AND CROSS BOW KIT
FORD TRANSIT LOW ROOF VANS

- PRECAUTIONS -

CAUTION

THE USE OF 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 DRILLINGTO 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!

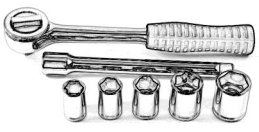
- IMPORTANT WARRANTY REQUIREMENTS -

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

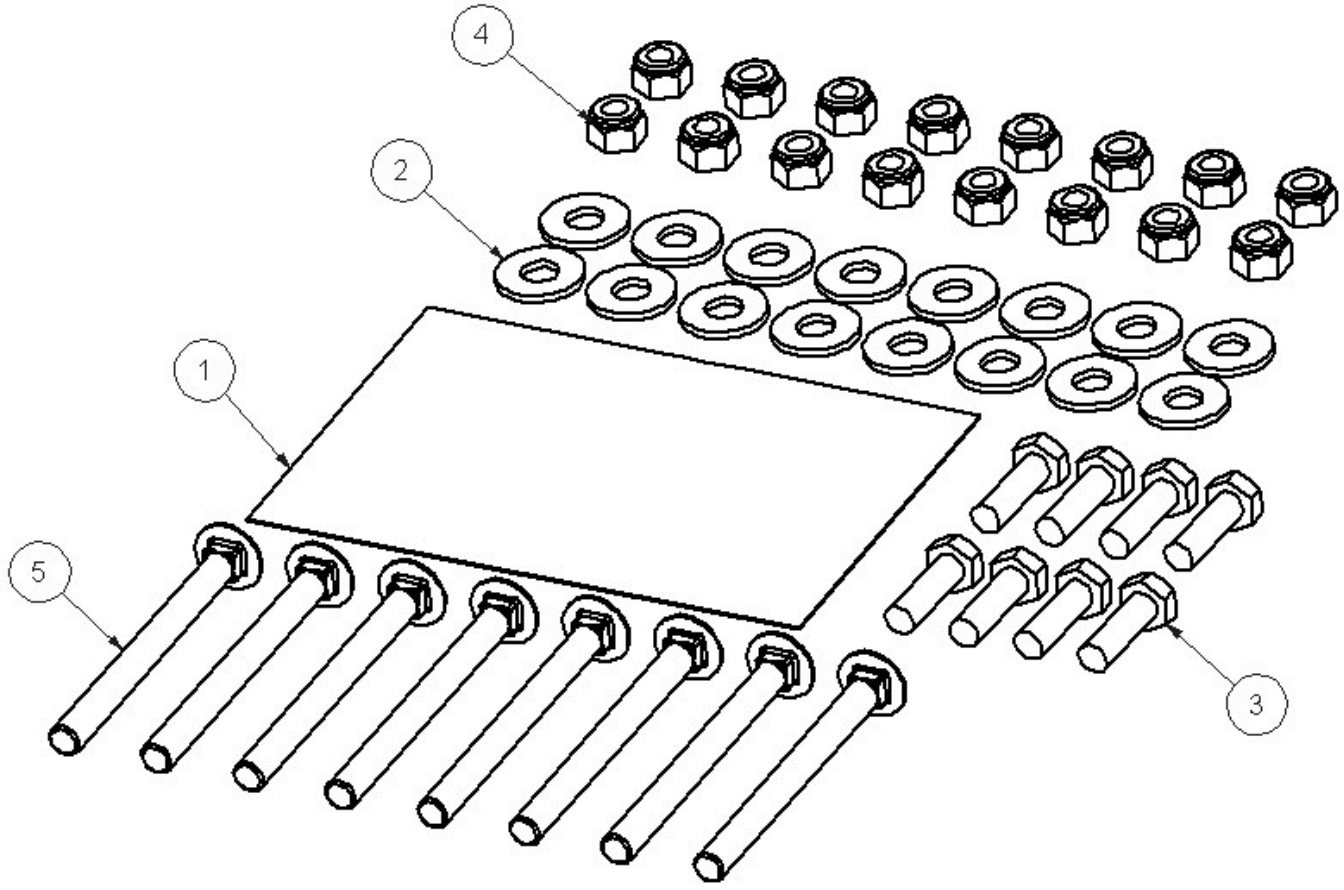
SCREWDRIVERS

MEASURING TAPE

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

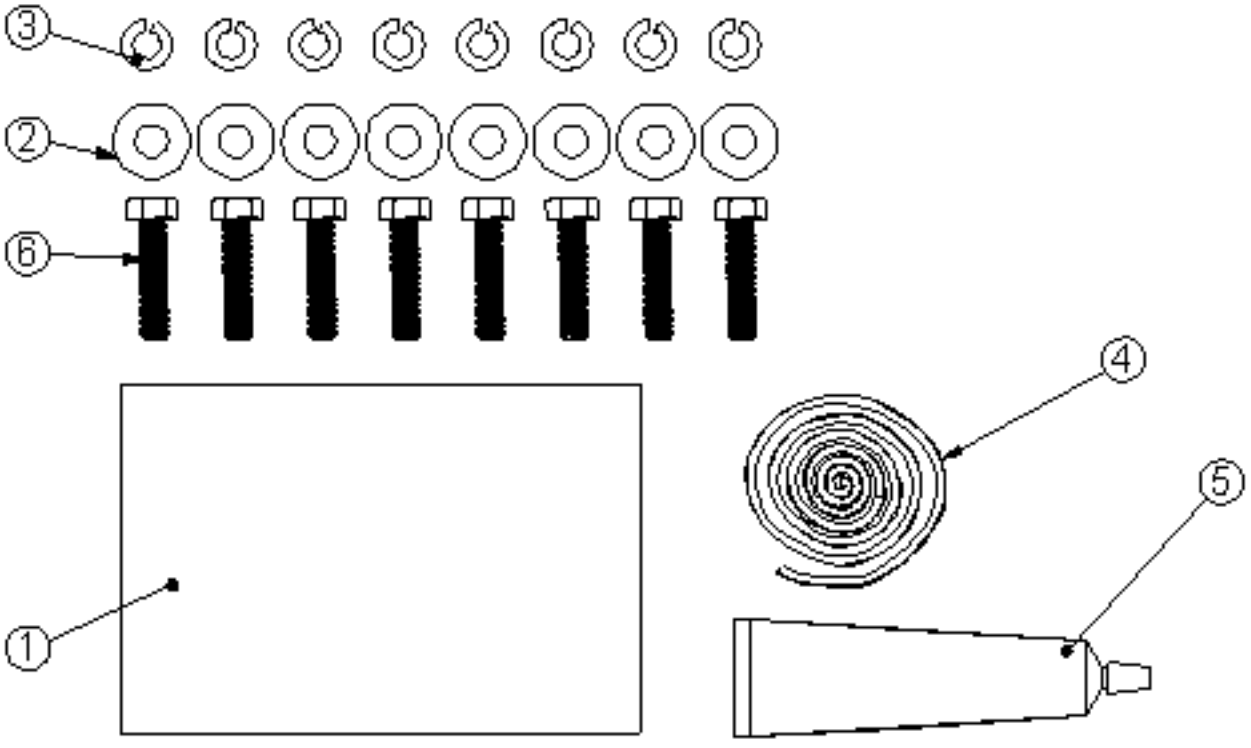
BAG50896 - FASTENER BAG

ITEM NO.	PART NUMBER	DESCRIPTION	BAG50896/QTY.
1	BAG0406-A	4" x 6" 3MIL AUTOBAG	1
2	FAS0552	Washer, Flat, 5/16, SST	16
3	FAS0597	Screw, Hex Hd, 5/16-18x 1.00 SST	8
4	FAS0248	Nut, Nylon Insert Lock, 5/16-18 SST	16
5	FAS0808	Bolt, Carriage, 5/16-18x3 1/2	8



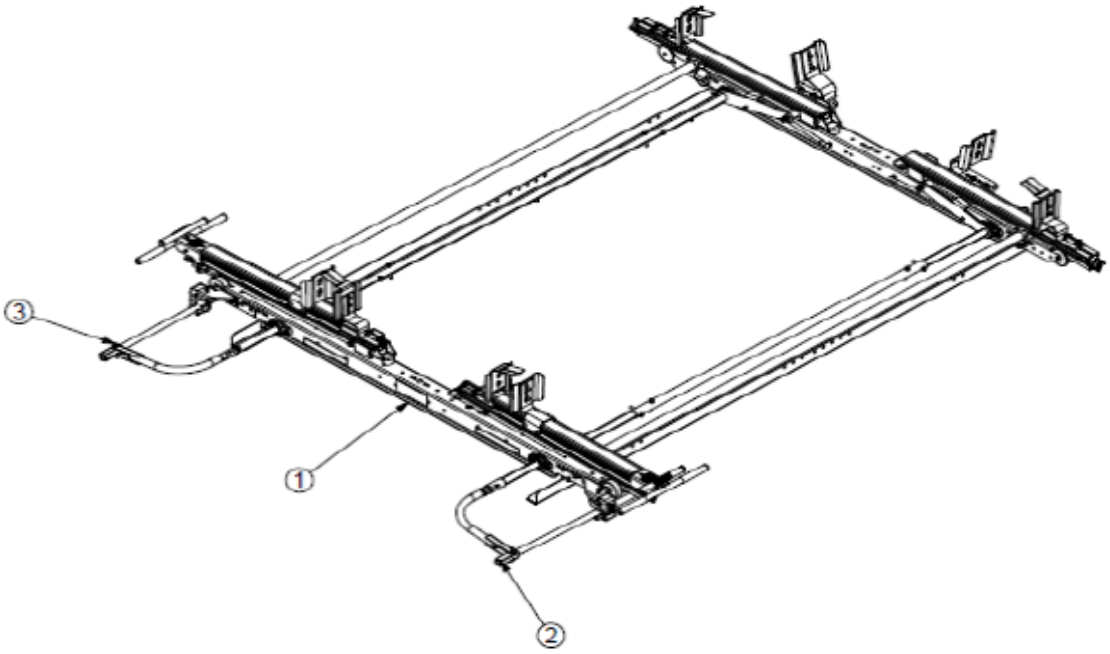
BAGRRKFTL—FASTENER BAG, TRANSIT ROOF RAILS

ITEM NO.	PART NUMBER	DESCRIPTION	BAGFTLRRK/QTY.
1	BAG0406-A	4" x 6" 3MIL AUTOBAG	1
2	FAS0552	Washer, Flat, 5/16, SST	8
3	FAS0588	Washer, Lock, Split, 5/16, SS	8
4	05586-0	Butyl Tape, T224-1/2"X 1' Roll	1
5	26618-0	Silicone Sealant	1
6	FAS0173	SCREW, HH, M8-1.25X35 SS	8



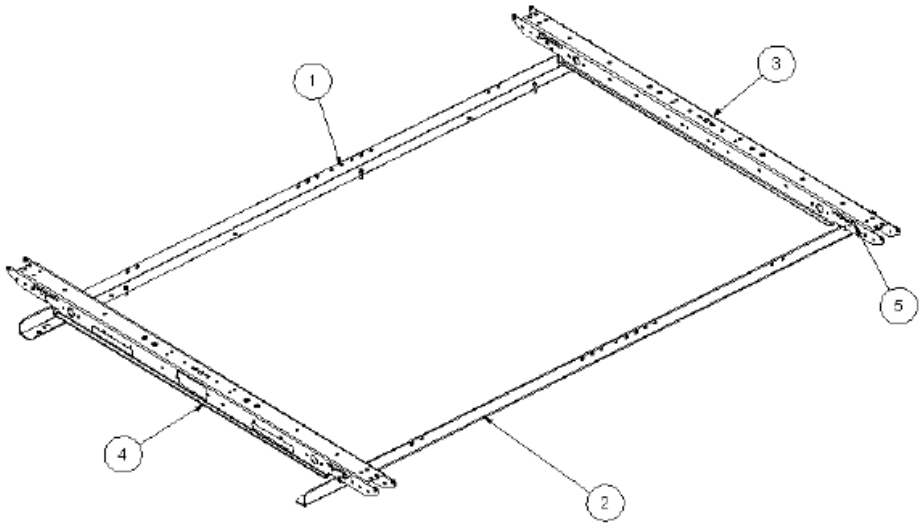
LADDER RACK ASSEMBLY—DDLR63FTL

ITEM NO.	PART NUMBER	DESCRIPTION	DDLR63FTL/QTY.
1	RRKFT130	ROOF RAIL KIT, TRANSIT, LR	1
2	DDLR61LCS	DDLR, CURB SIDE, LOW ROOF	1
3	DDLR61LSS	DDLR, STREET SIDE, LOW ROOF	1



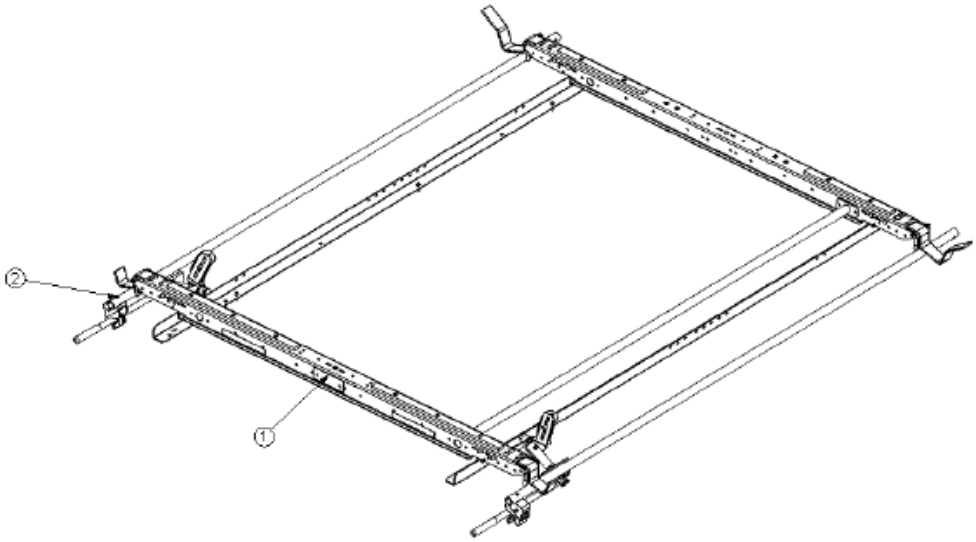
RRKFT130 - ROOF RAIL KIT, TRANSIT, LR

ITEM NO.	PART NUMBER	DESCRIPTION	RRKFT130/QTY.
1	50893	ROOF RAIL, SS FTL	1
2	50894	Roof Rail, CS, FTL	1
3	51398	FRONT CROSS BOW ASSM, TRANSIT STD	1
4	51399	REAR CROSS BOW ASSM, TRANSIT STD	1
5	40323	FOOT,NISSAN	4



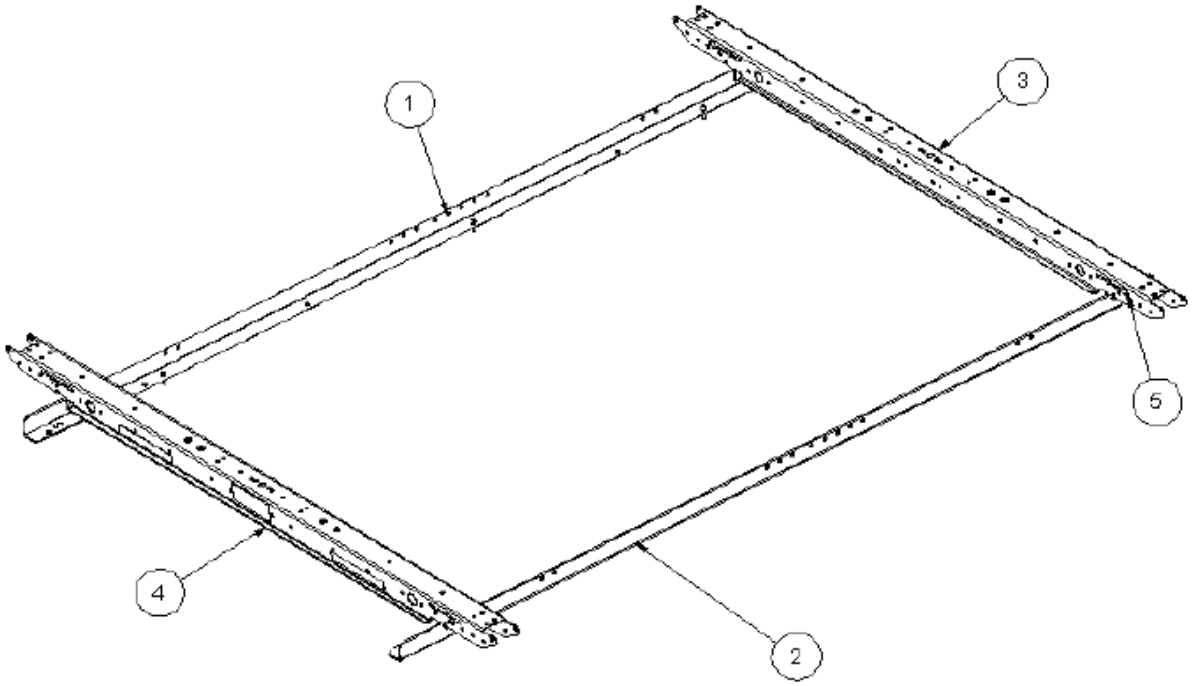
LADDER RACK ASSEMBLY — 63 - GLFTL

ITEM NO.	PART NUMBER	DESCRIPTION	63-GLFTL/QTY.
1	RRKFT130	ROOF RAIL KIT, TRANSIT, LR	1
2	51686	GRIP LOCK LADDER RACK, DBL, LR	1

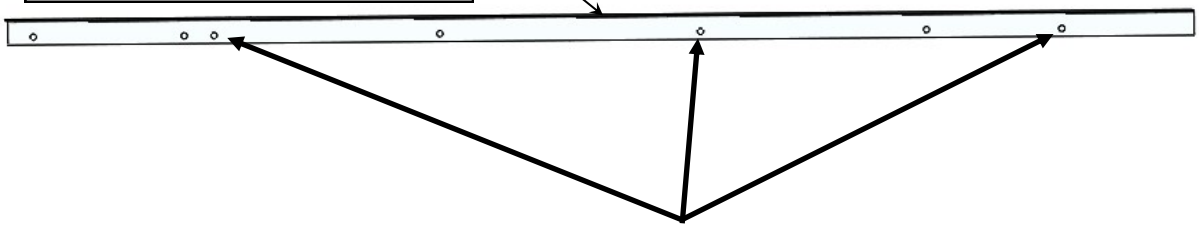


RRKFT130 — ROOF RAIL KIT, TRANSIT, LR

ITEM NO.	PART NUMBER	DESCRIPTION	RRKFT130/QTY.
1	50893	ROOF RAIL, SS FTL	1
2	50894	Roof Rail, CS, FTL	1
3	51398	FRONT CROSS BOW ASSM, TRANSIT STD	1
4	51399	REAR CROSS BOW ASSM, TRANSIT STD	1
5	40323	FOOT,NISSAN	4



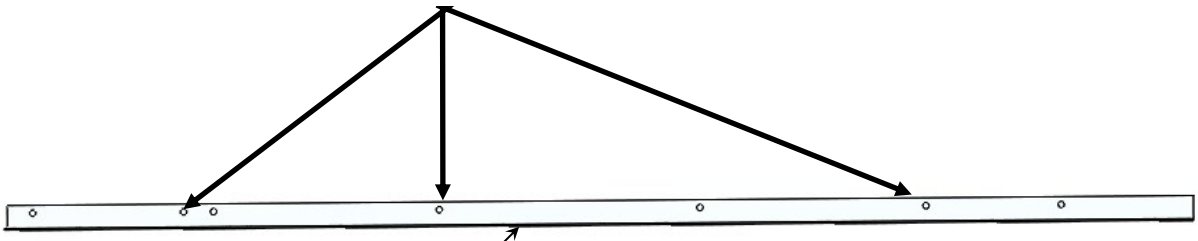
STEP #1 : PREP ROOF RAILS—NOTE THE HOLE PATTERNS



130” WB MOUNTING
LOCATIONS BOTH SIDES
3rd, 5th and 7th HOLE

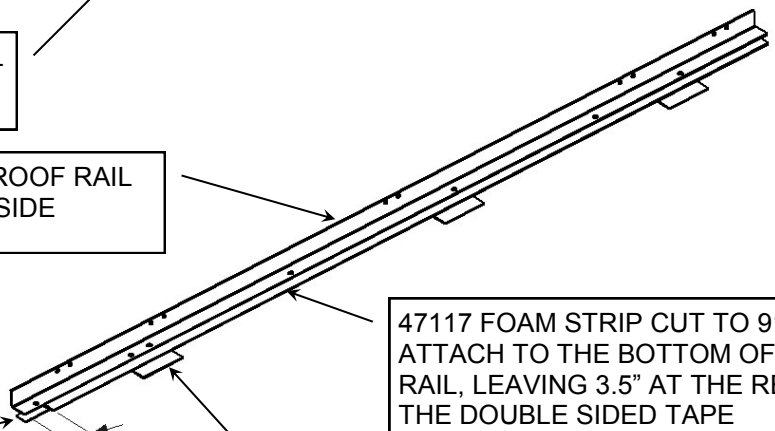
REAR OF THE VAN

148” WB MOUNTING
LOCATIONS BOTH SIDES
2nd, 4th and 6th HOLE



50894 CURB SIDE ROOF RAIL
TOE UP TO THE OUTSIDE

50893 STREET SIDE ROOF RAIL
TOE UP TO THE OUTSIDE



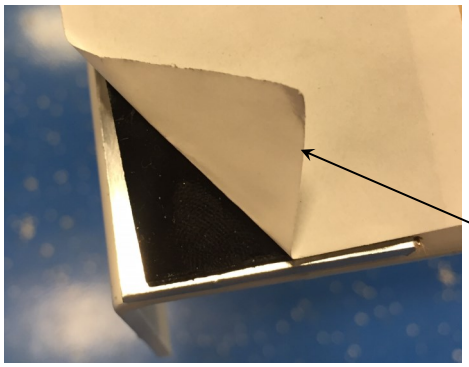
47117 FOAM STRIP CUT TO 91.5” AND ATTACH TO THE BOTTOM OF THE RAIL, LEAVING 3.5” AT THE REAR FOR THE DOUBLE SIDED TAPE

REAR OF VAN

43417 DOUBLE SIDED TAPE

3.5

52709, PLACE THE 1/4 THICK RUBBER SPACER UNDER EACH HOLE TO BE USED AS SHOWN.



43417 DOUBLE SIDED TAPE
PEAL EDGE OVER TO ASSIST
WHEN INSTALLING

SHIP THRU ONLY—STEP #2A INSTALL RAILS ON VEHICLE

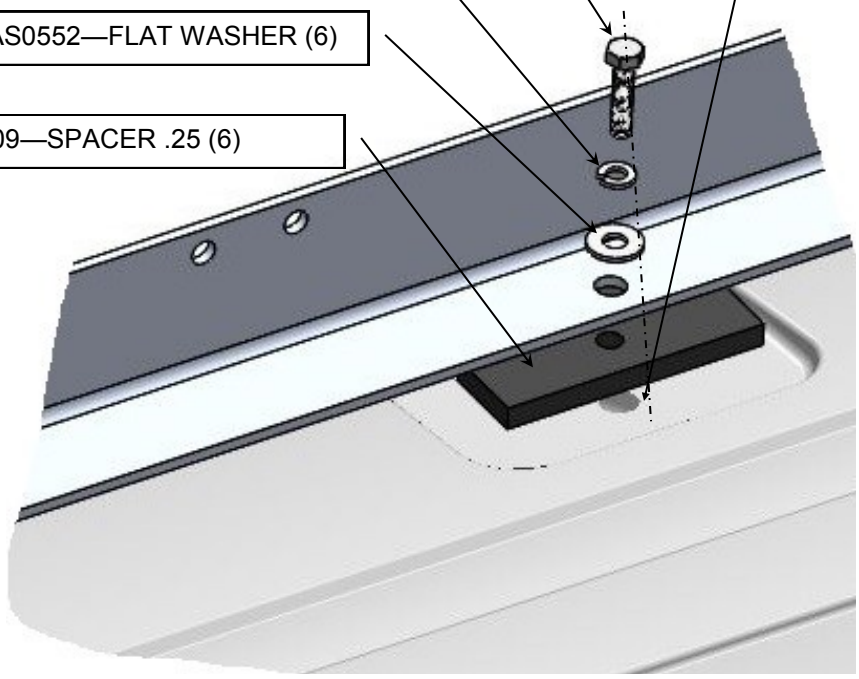
FAS0173—M8-1.25 X 35 SS (8)
05586-0—BUTYL TAPE

FAS0588—LOCK WASHER (6)

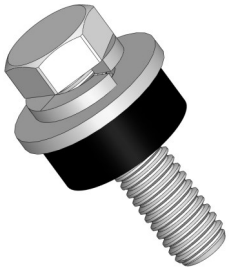
FAS0552—FLAT WASHER (6)

52709—SPACER .25 (6)

REMOVE PLASTIC PLUGS FROM SQUARE DEPRESSIONS ONLY. THESE ARE THE FACTORY MOUNTING POINTS. DO **NOT** REMOVE OTHER PLUGS!! RUN M8-1.25 TAP, FULL DEPTH, TO CLEAN OUT THREADS IN OEM FASTENER IF NECESSARY. MAY HAVE TO REPEAT PROCESS TO GET FULLY CLEAN.



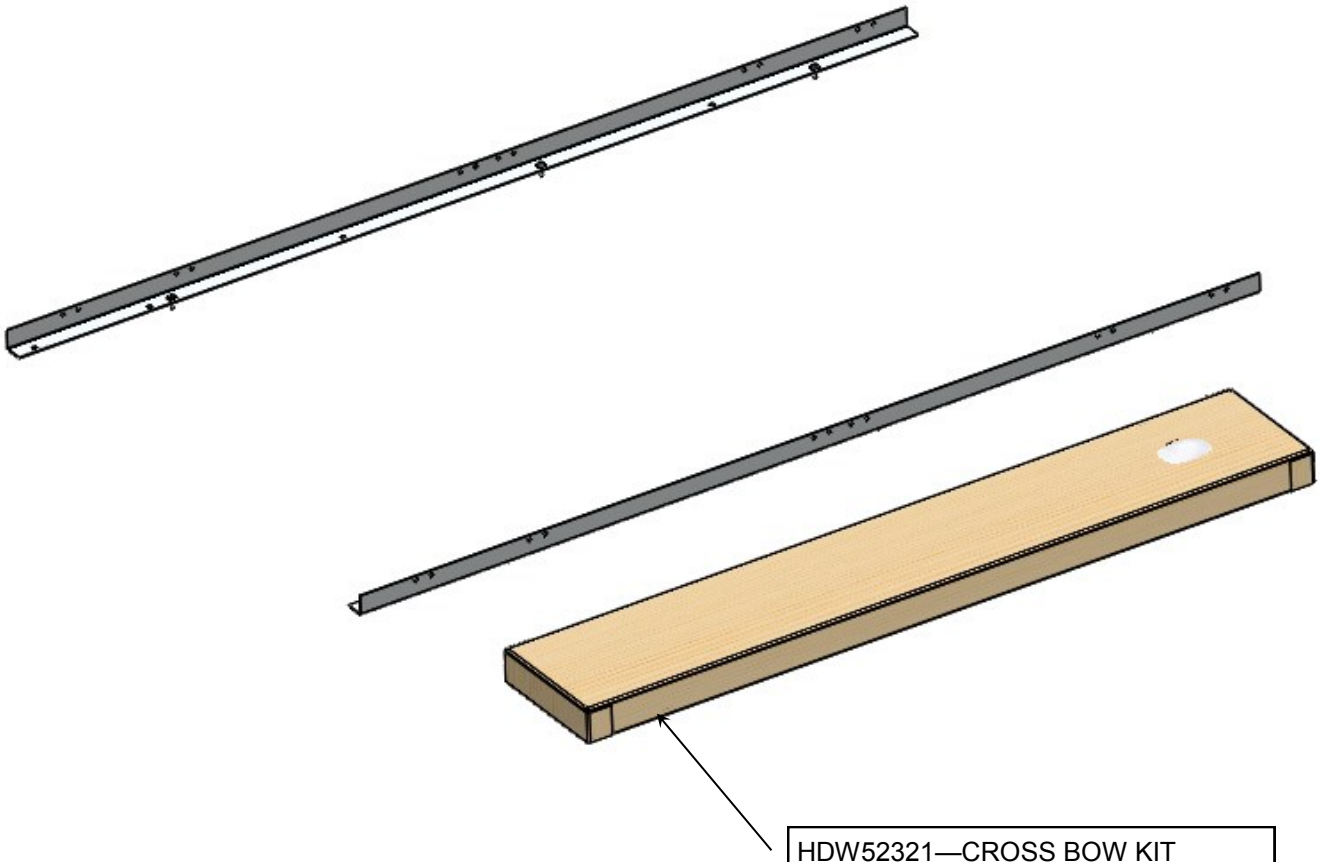
CAREFULLY REMOVE PLASTIC PLUGS FROM FACTORY ATTACHMENT POINTS. NOTE, THEY ARE INSTALLED PRIOR TO VEHICAL BEING PAINTED. IF ROOF CLEARANCE HOLES AND OEM FASTENER ARE MISALIGNED TOO FAR, HOLE IN ROOF SKIN MAY NEED TO BE ENLARGED (AND PRIMERED), AS WELL AS CORRESPONDING HOLE IN ROOF RAIL OF RACK. WRAP SCREWS WITH BUTYL TAPE BENEATH WASHERS, ENOUGH TO FILL HOLE IN RAIL. PUSH SREWS THRU FOAM, AND RUBBER PAD, ADD ENOUGH SILICONE TO FILL EACH CAVITY. INSTALL SCREWS AND WASHERS AS SHOWN. TORQUE TO 10 TO 12 FT LBS. TORQUE ALL FASTENERS ON RACK ITSELF TO 10-12 FT LBS. DO NOT OVER-TORQUE AS THESE ARE STAINLESS STEEL FASTENERS!



GENERIC PICTURE—MAY NOT LOOK LIKE YOUR FASTENER. MOUNTING SCREW WITH WASHERS AND BUTYL TAPE BEFORE INSTALLATION (LEFT) AND WHAT IT SHOULD LOOK LIKE AFTER INSTALLATION (RIGHT).

SHIP THRU ONLY—STEP #2B THIS IS WHAT YOUR SHIP THRU FINAL INSTALLATION WILL LOOKS LIKE.

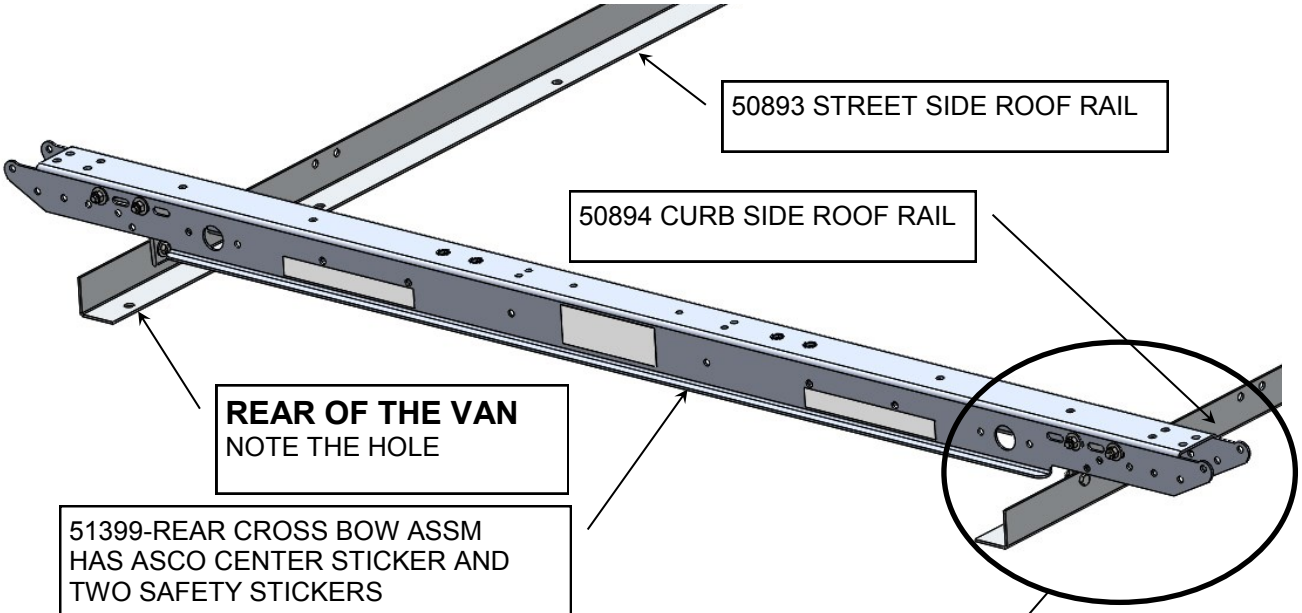
CONTINUE TO STEP #3 FOR A COMPLETE ASSEMBLY / INSTALL

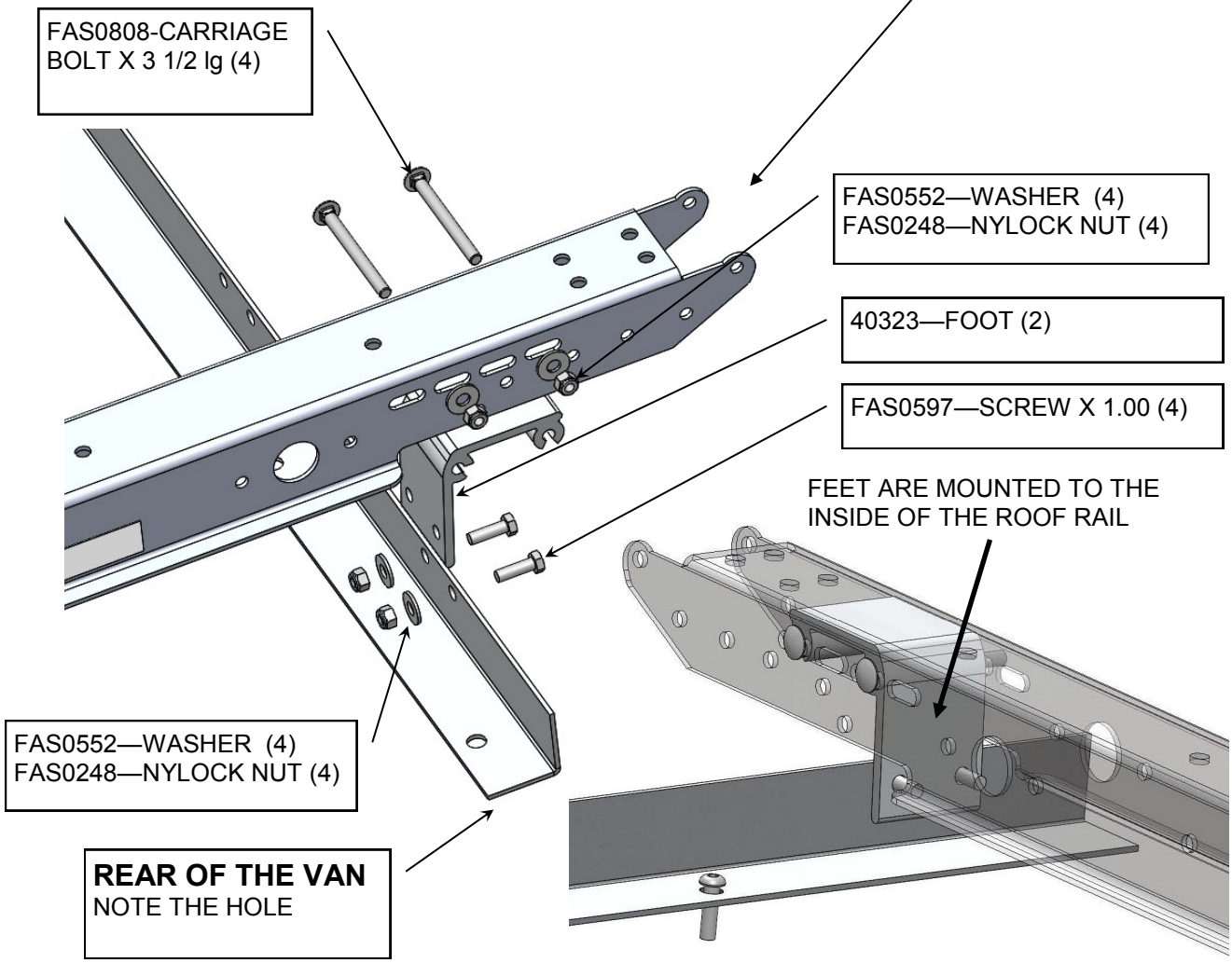


STEP #2B : THIS IS THE FINISHED ROOF RAIL KIT FOR SHIP THRU

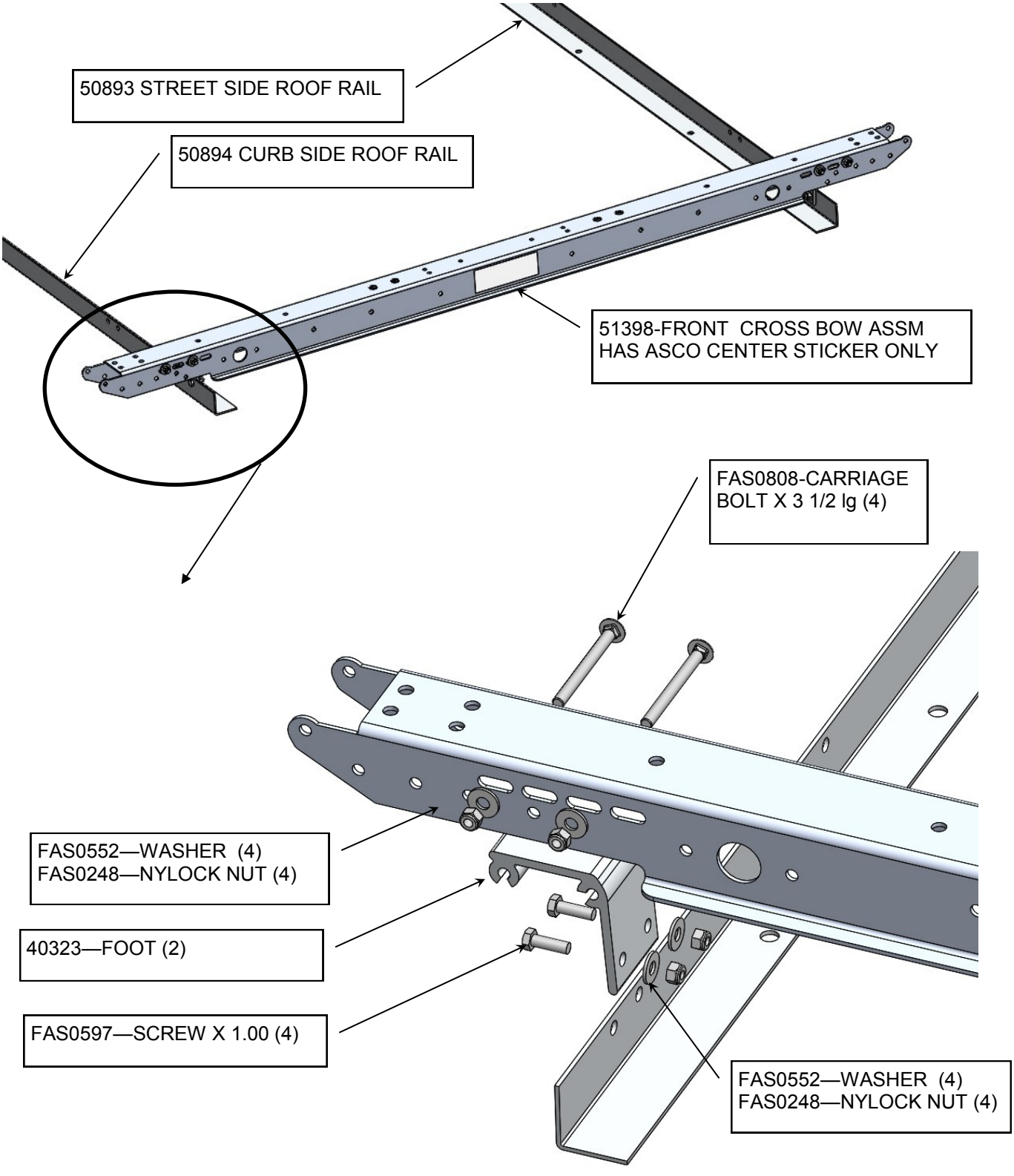
-CONTINUE TO STEP #3 FOR A COMPLETE ASSEMBLY / INSTALL

STEP #3 : ASSEMBLE REAR CROSS BOW TO THE ROOF RAILS





STEP #3 : ASSEMBLE FRONT CROSS BOW TO THE ROOF RAILS



STEP #5 INSTALL RACK ON VEHICLE

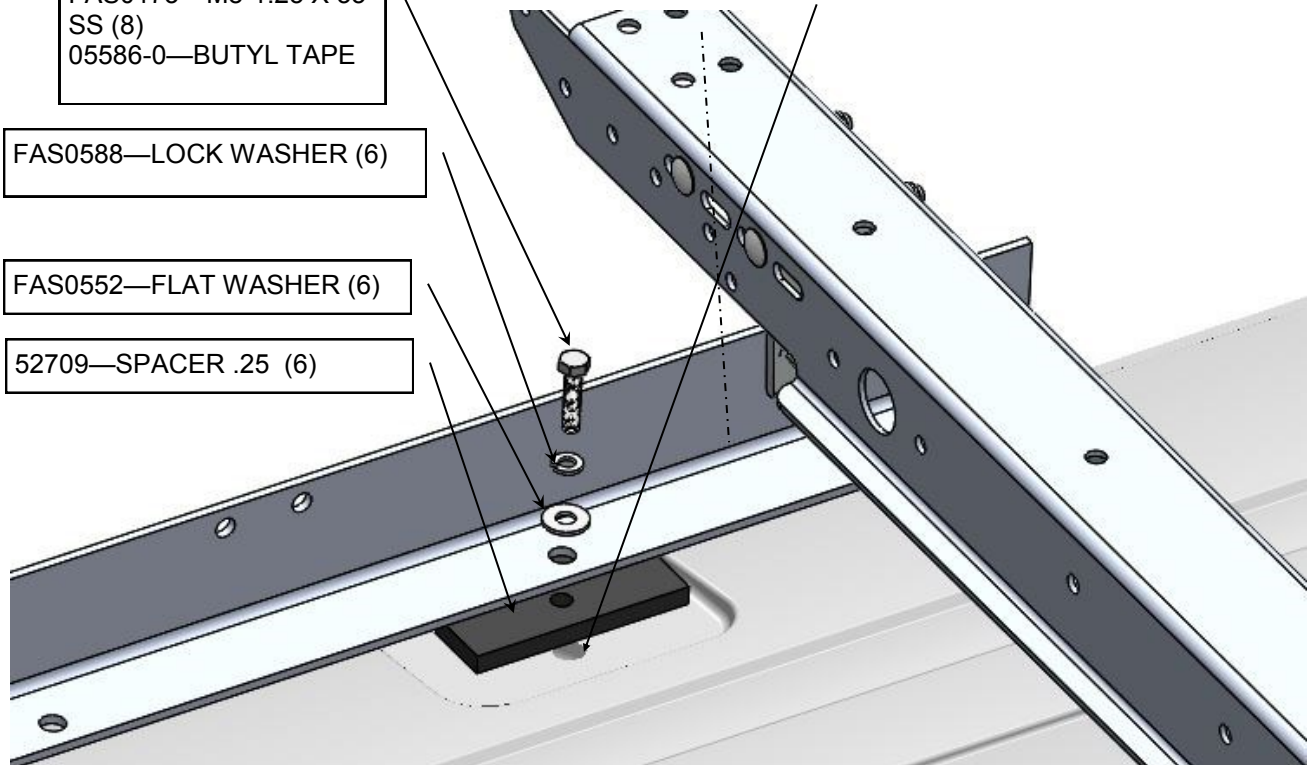
REMOVE PLASTIC PLUGS FROM SQUARE DEPRESSIONS ONLY. THESE ARE THE FACTORY MOUNTING POINTS. DO **NOT** REMOVE OTHER PLUGS!! RUN M8-1.25 TAP, FULL DEPTH, TO CLEAN OUT THREADS IN OEM FASTENER IF NECESSARY. MAY HAVE TO REPEAT PROCESS TO GET FULLY CLEAN.

FAS0173—M8-1.25 X 35 SS (8)
05586-0—BUTYL TAPE

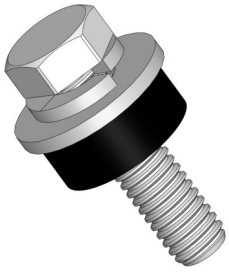
FAS0588—LOCK WASHER (6)

FAS0552—FLAT WASHER (6)

52709—SPACER .25 (6)



CAREFULLY REMOVE PLASTIC PLUGS FROM FACTORY ATTACHMENT POINTS. NOTE, THEY ARE INSTALLED PRIOR TO VEHICAL BEING PAINTED. IF ROOF CLEARANCE HOLES AND OEM FASTENER ARE MISALIGNED TOO FAR, HOLE IN ROOF SKIN MAY NEED TO BE ENLARGED (AND PRIMERED), AS WELL AS CORRESPONDING HOLE IN ROOF RAIL OF RACK. WRAP SCREWS WITH BUTYL TAPE BENEATH WASHERS, ENOUGH TO FILL HOLE IN RAIL. PUSH SCREWS THRU FOAM, AND RUBBER PAD, ADD ENOUGH SILICONE TO FILL EACH CAVITY. INSTALL SCREWS AND WASHERS AS SHOWN. TORQUE TO 10 TO 12 FT LBS. TORQUE ALL FASTENERS ON RACK ITSELF TO 10-12 FT LBS. DO NOT OVER-TORQUE AS THESE ARE STAINLESS STEEL FASTENERS!



GENERIC PICTURE—MAY NOT LOOK LIKE YOUR FASTENER. MOUNTING SCREW WITH WASHERS AND BUTYL TAPE BEFORE INSTALLATION (LEFT) AND WHAT IT SHOULD LOOK LIKE AFTER INSTALLATION (RIGHT).

COMPLETE DROP DOWN COMBO LADDER RACK