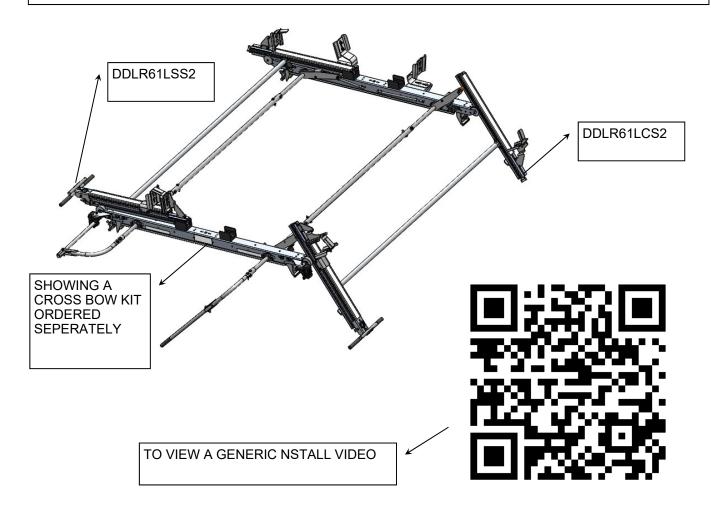


#### **Introduction / Comments:**

THIS DROP DOWN UNIT IS CURB SIDE. STREET SIDE SPECIFIC. THE DROP DOWN IS FOR THE GM FSV. THIS DROP DOWN LADDER RACK IS DESIGNED TO ADAPT TO AN ADRIAN STEEL CROSS BOW KIT SPECIFIC TO THIS VEHICLE.

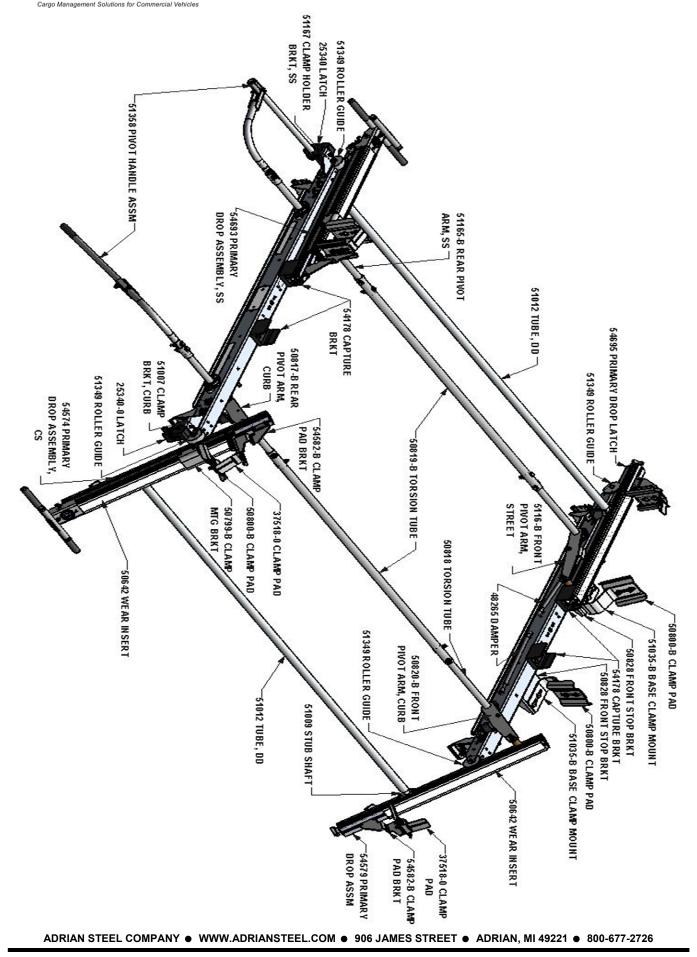
#### Note:

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.



### DDLR61GM2 / DDLR63GM2 DROP DOWN LADDER RACK, STREET, CURB **VARIOUS 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

RATCHET, SOCKETS AND/OR WRENCHES

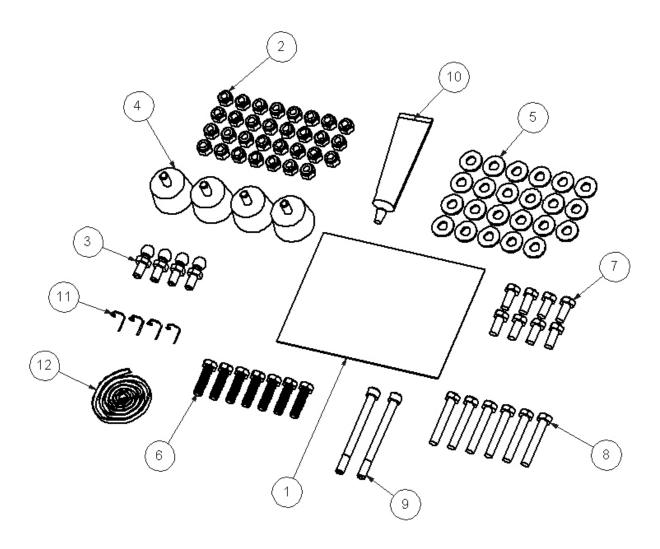
MEASURING TAPE

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



#### BAG51043 - DROP DOWN ASSEMBLY BAG

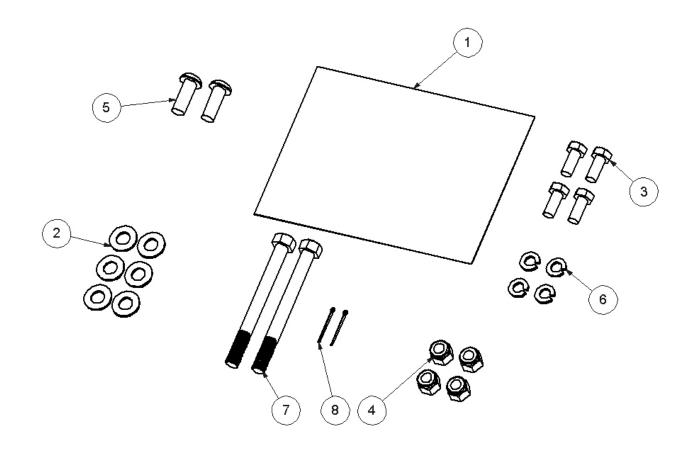
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BAG0507-A	5"×7"3MIL AUTOBAG	1
2	FAS0248	Nut, Nylon Insert Lock, 5/16-18 SST	31
3	34927-0	Ball Stud, Damper	4
4	34924-0	Neoprene Bumper	4
5	FAS0552	Washer, Flat, 5/16, SST	23
6	FAS0830	Screw, Hex Hd, 5/16-18 X 1.25 SS	7
7	FAS0799	Screw, Hex Hd, 5/16-18x0.75 SS	8
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

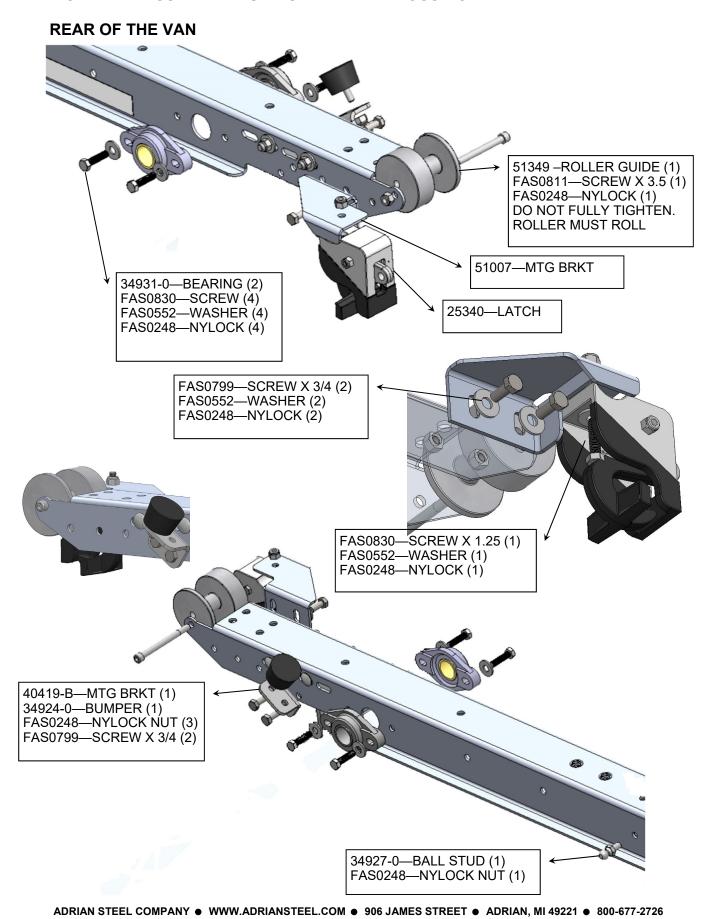
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BAG0507-A	5" x 7" 3MIL AUTOBAG	1
2	FAS0246	Washer, Flat, 3/8, HRD, ZN	6
3	FAS0799	Screw, Hex Hd, 5/16-18x0.75 SS	4
4	FAS0110	Nut,Hex Nylk 3/8-16 SS W	4
5	FAS0572	Screw, Button Hd Hex Soc, 3/8-16x1.00 NI-ZN	2
6	FAS0588	Washer, Lock, Split, 5/16, SS	4
7	FAS0286	SCREW,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







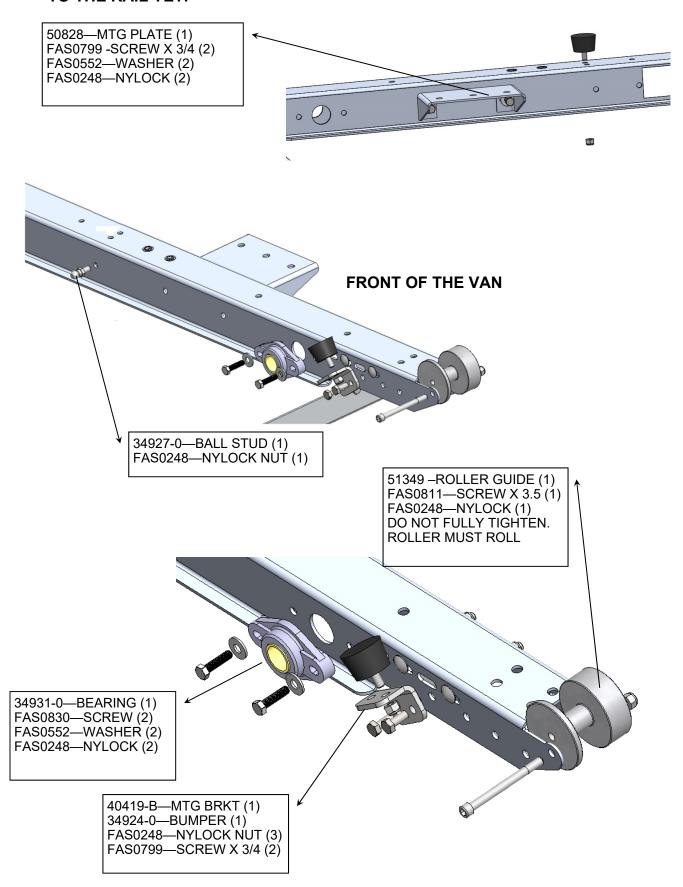
#### STEP #1: ASSEMBLE CURB SIDE REAR CROSS BOW







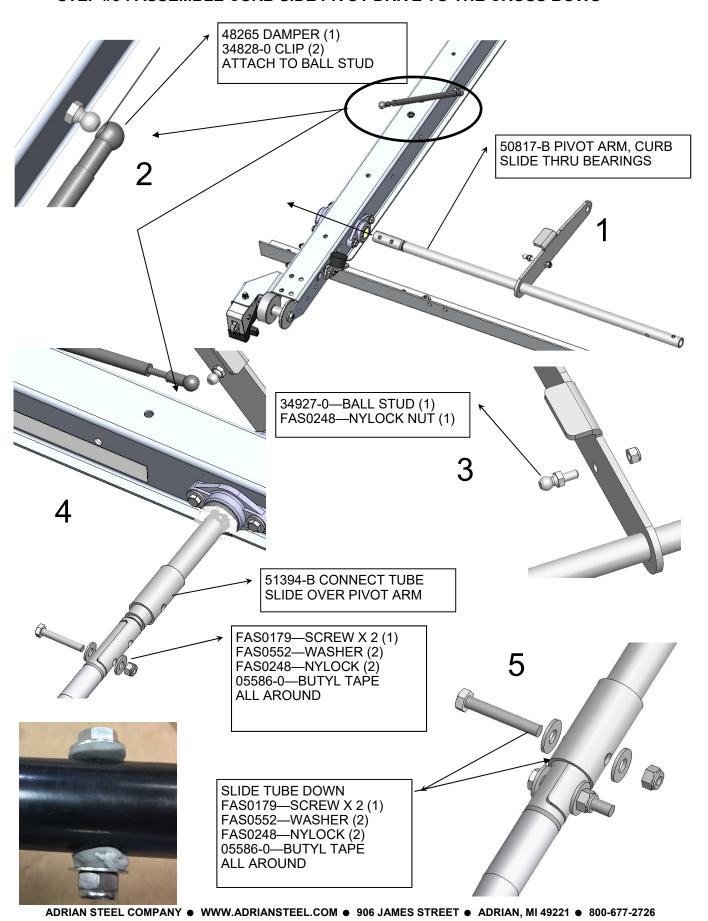
#### STEP #2: ASSEMBLE CURB SIDE FRONT CROSS BOW. DO NOT ATTACH TO THE RAIL YET.







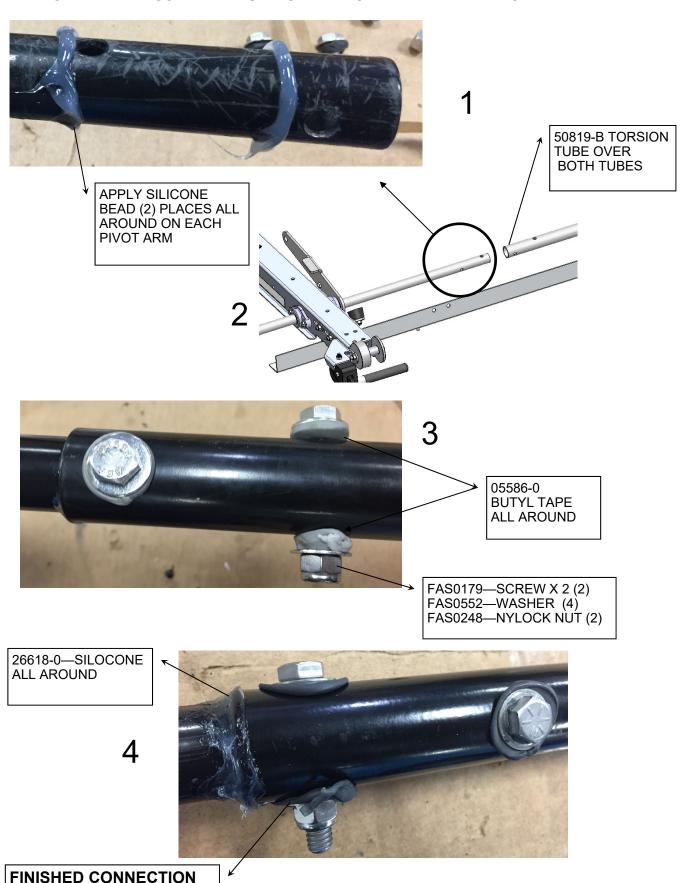
#### STEP #3: ASSEMBLE CURB SIDE PIVOT DRIVE TO THE CROSS BOWS





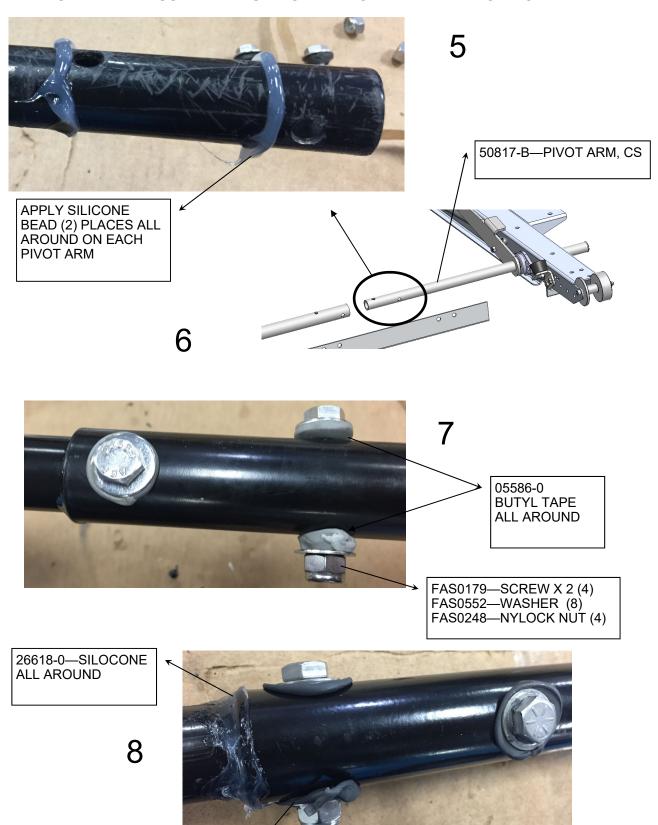


#### STEP #4A: ASSEMBLE CURB SIDE PIVOT DRIVE AT REAR OF VEHICLE.





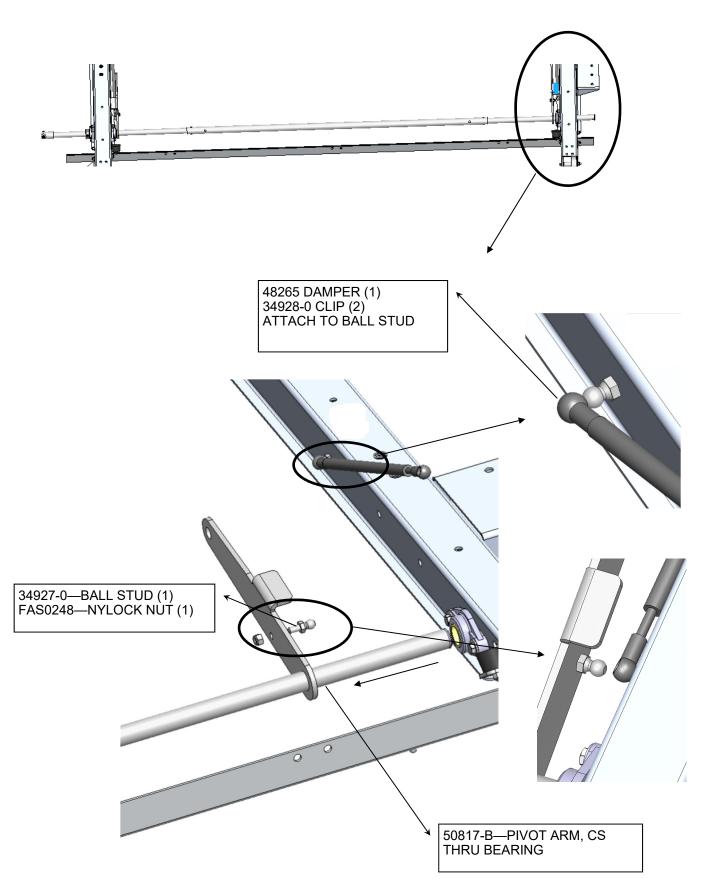
#### STEP #4B: ASSEMBLE CURB SIDE PIVOT DRIVE AT FRONT OF VEHICLE



**FINISHED CONNECTION** 



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





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.

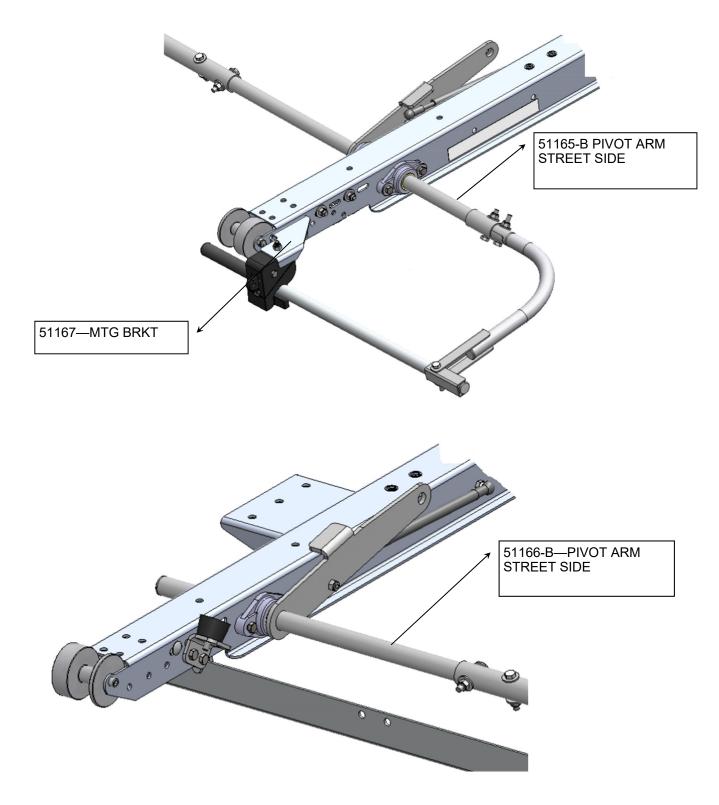


STEP #6: THIS IS THE FINISHED CURB SIDE PIVOT DRIVE.
-CONTINUE TO STEP #7 FOR A COMPLETE ASSEMBLY / INSTALL
-CONTINUE TO STEP #9 FOR THE STREET SIDE PIVOT DRIVE



#### 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



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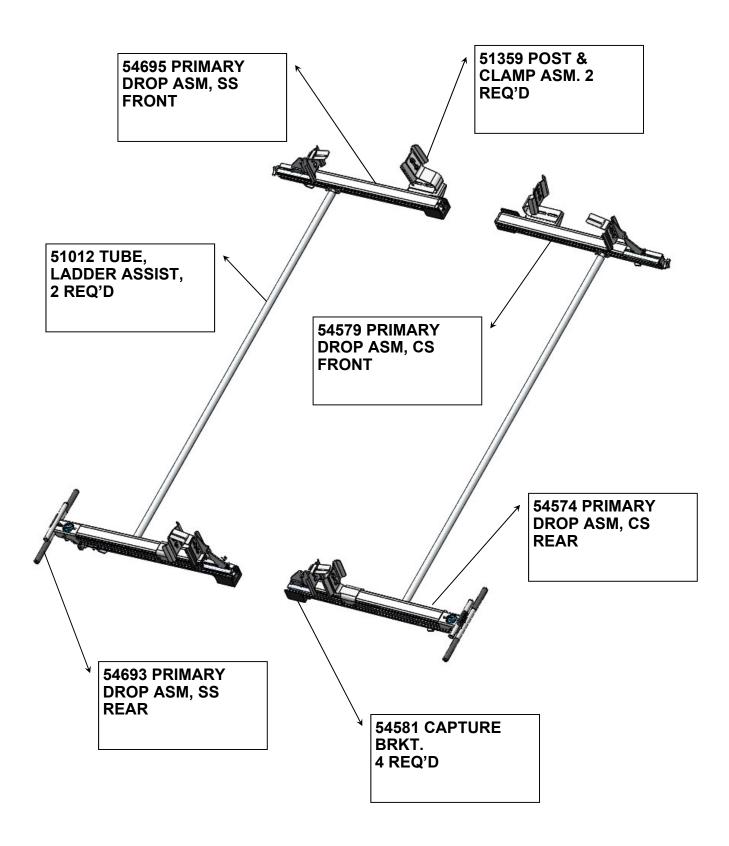
STEP #10: THIS IS THE FINISHED CURB AND STREET SIDE PIVOT DRIVE -CONTINUE TO STEP #11 FOR A COMPLETE ASSEMBLY / INSTALL



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

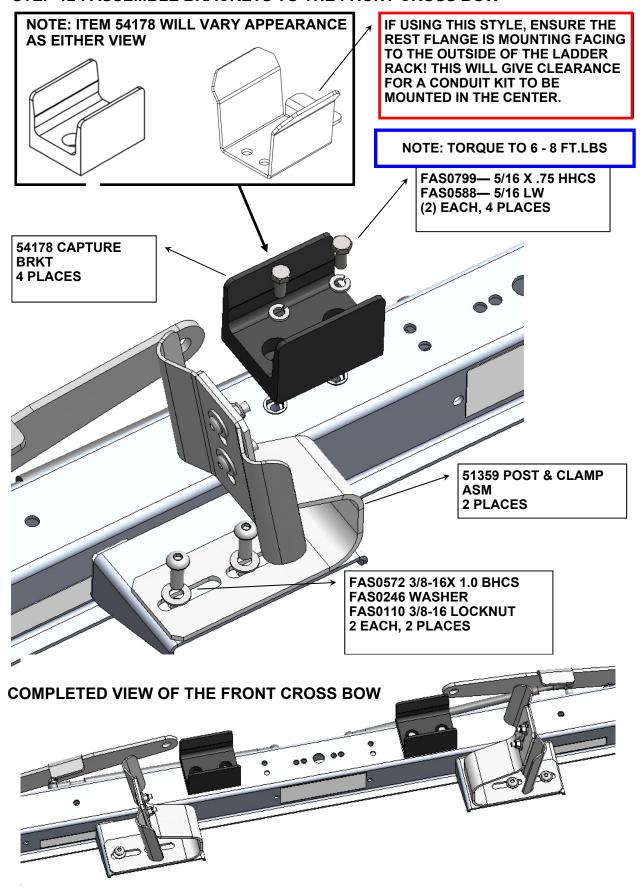


# STEP #11 - THIS IS THE FINAL ASSEMBLY, SHOWING THE CURB AND STREET SIDE DROP DOWN COMPONENTS





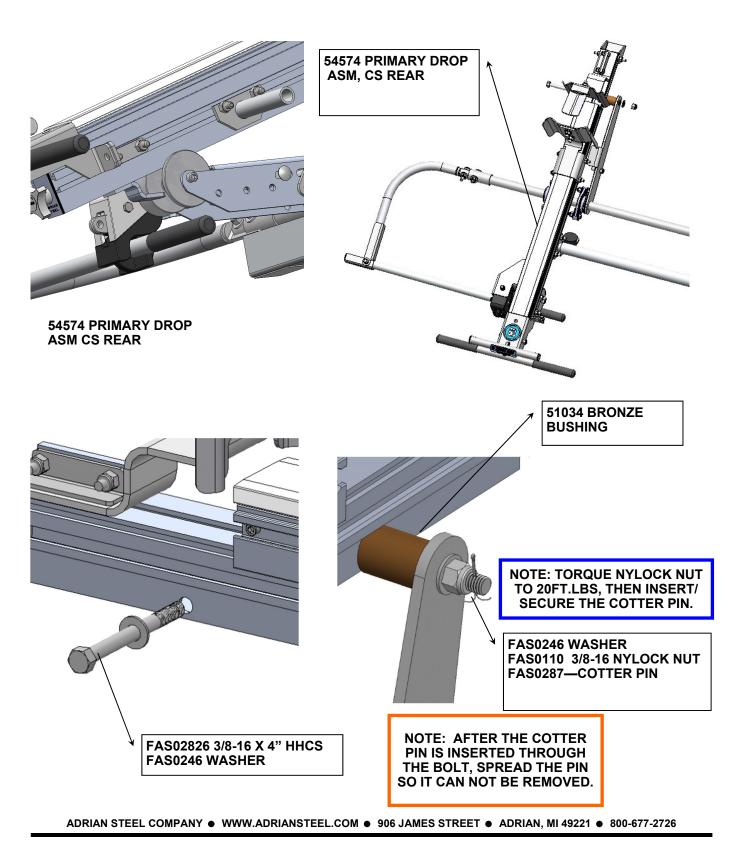
STEP 12: ASSEMBLE BRACKETS TO THE FRONT CROSS BOW





#### STEP 13: ASSEMBLE REAR CURB SIDE PRIMARY DROP TO RACK

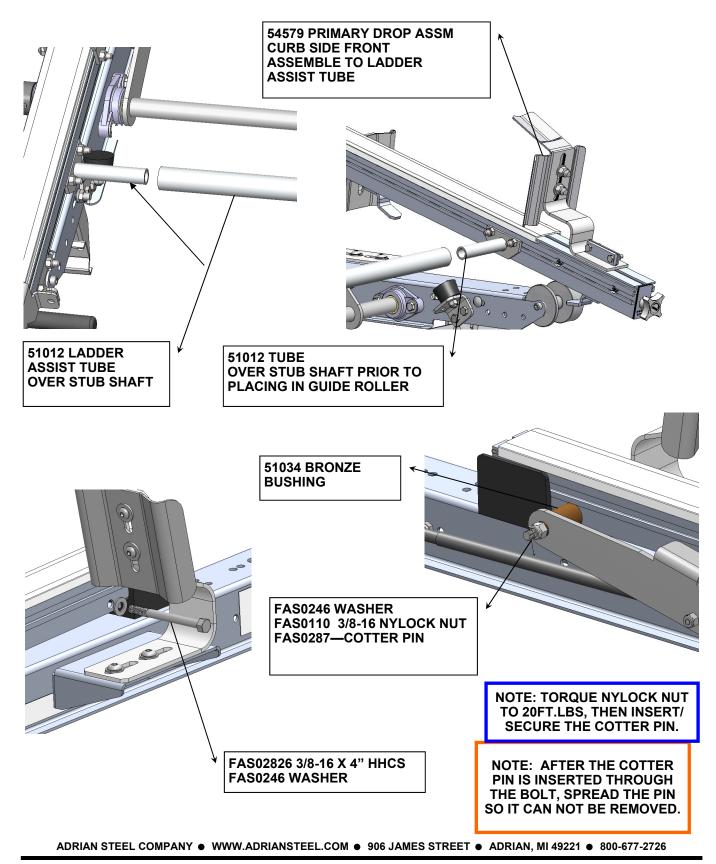
## SET 54574 PRIMARY DROP ASM, REAR CS IN PLACE ON REAR CROSS BOW. USE GUIDE ROLLER





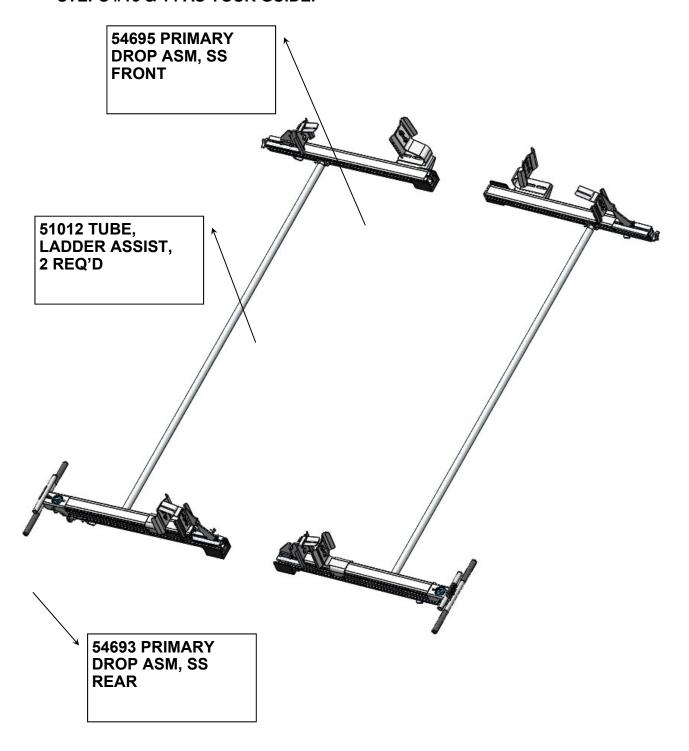
#### STEP 14: ASSEMBLE FRONT SIDE PRIMARY DROP TO RACK

SET 54579 PRIMARY DROP ASM, FRONT CS IN PLACE ON FRONT CROSS BOW. USE GUIDE ROLLER AFTER LADDER ASSIST TUBE IS ON BOTH STUB SHAFTS





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.

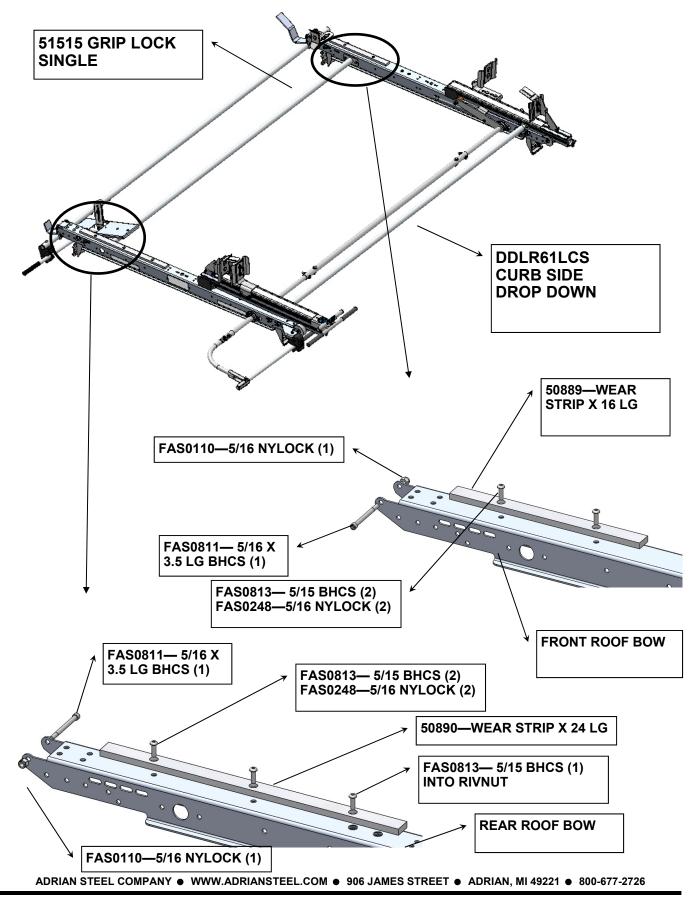
YOUR INSTALLATION IS NOW COMPLETE!

STOW THIS COPY IN THE VEHICLE FOR FUTURE REFERENCES!

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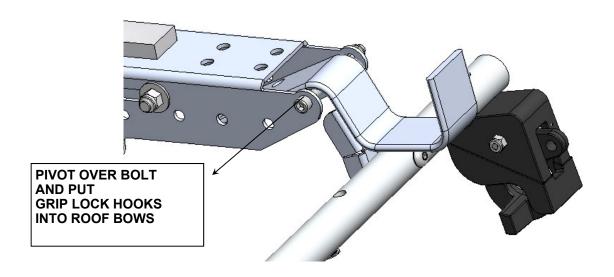


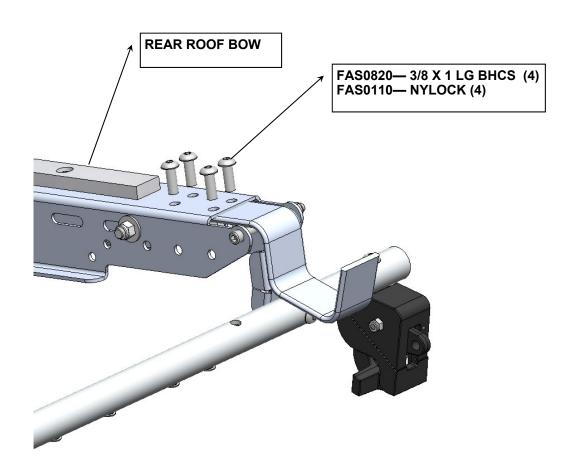
# STEP #17 : COMBO RACK, INSTALL STREET SIDE GRIP LOCK ADD WEAR STRIPS





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

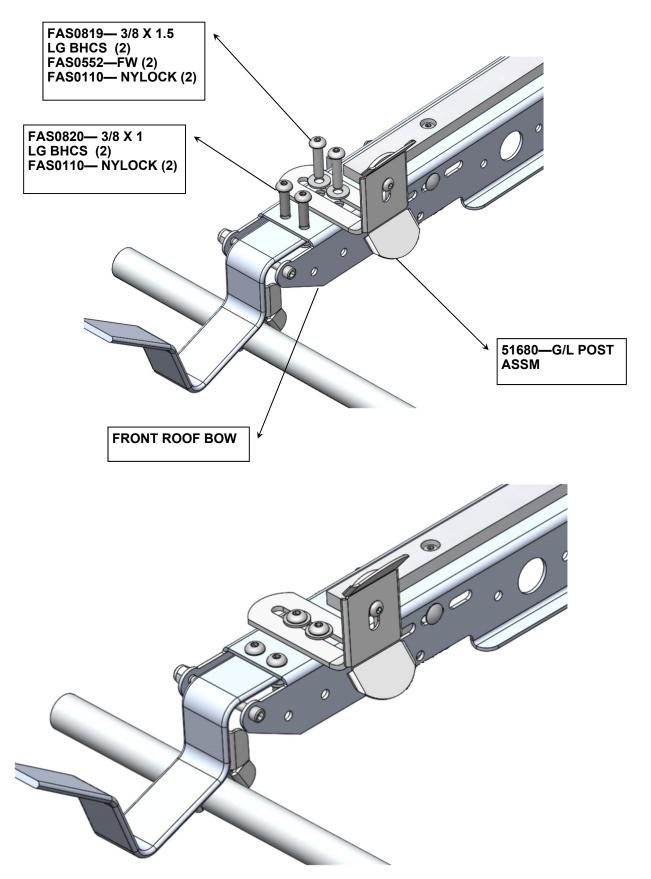




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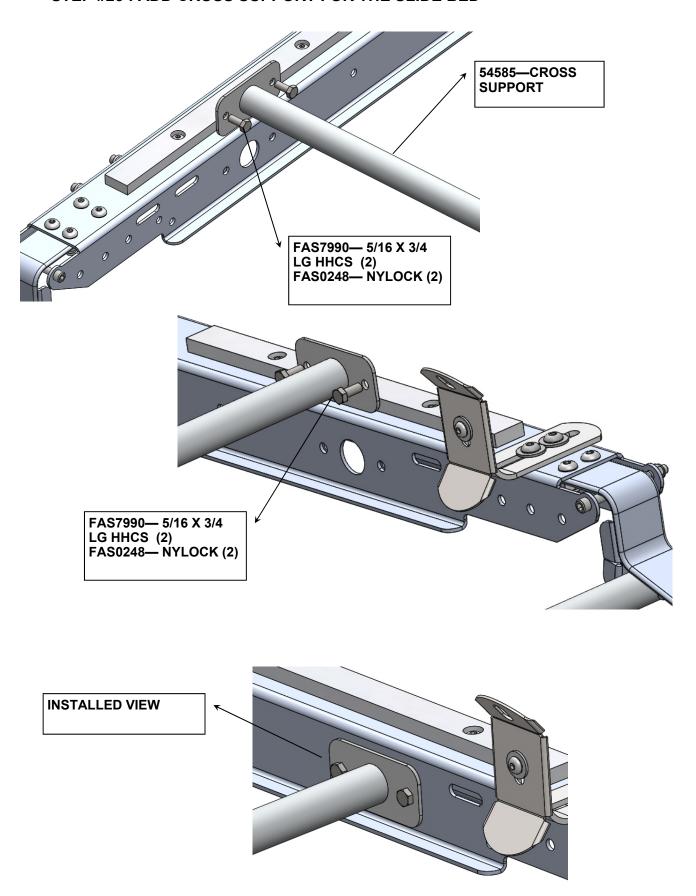


#### STEP #19: FRONT ROOF BOW ASSEMBLY -STREET SIDE



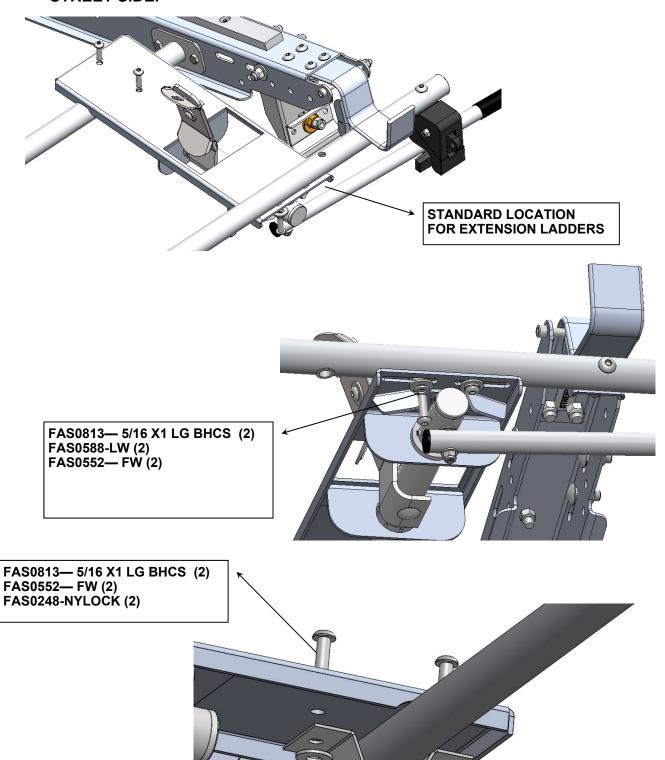


#### STEP #23: ADD CROSS SUPPORT FOR THE SLIDE BED





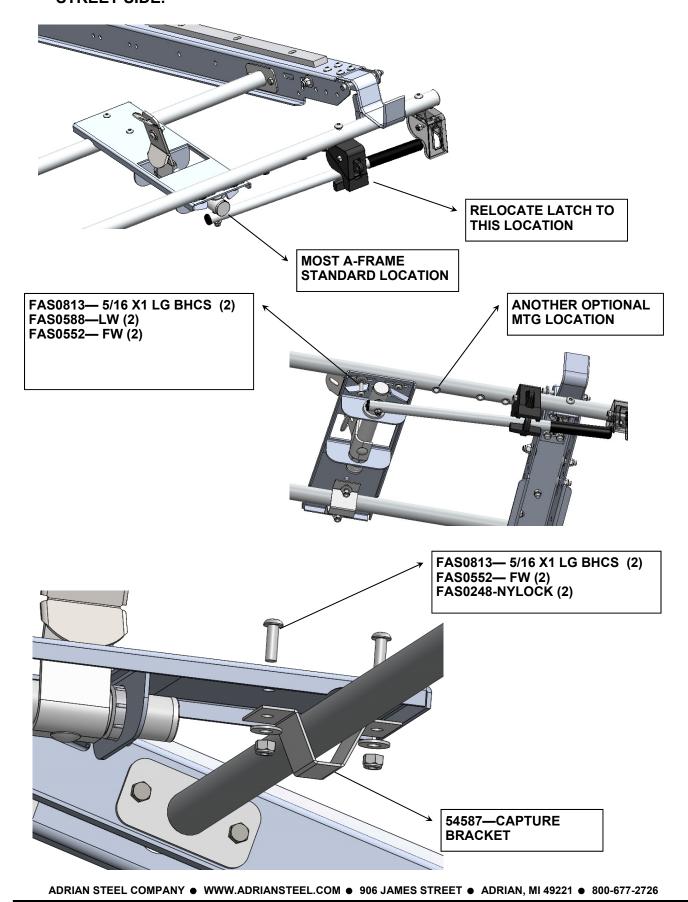
# STEP #24A: EXTENSION LADDER—ADD BED SLIDE TO THE CROSS SUPPORT -STREET SIDE.



54587—CAPTURE BRACKET

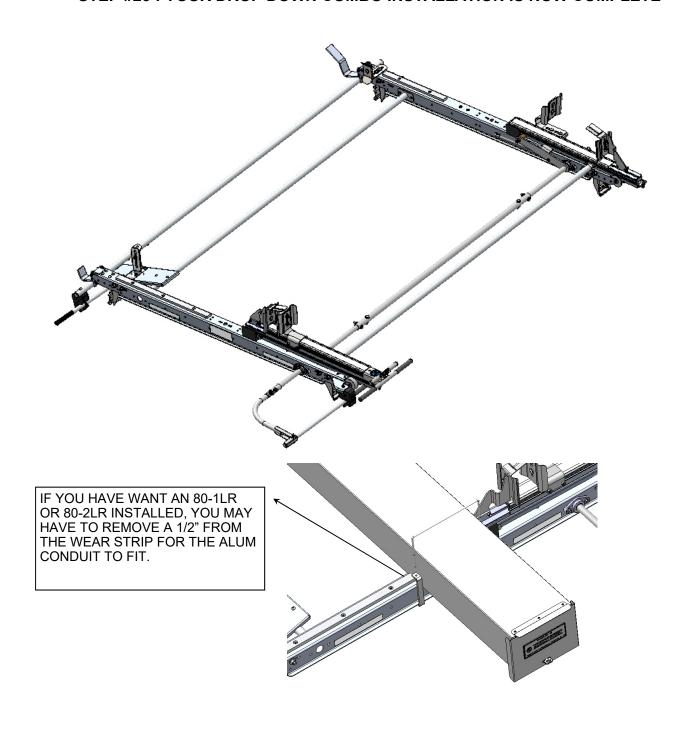


# STEP #24B: A-FRAME LADDER— ADD BED SLIDE TO THE CROSS SUPPORT -STREET SIDE.





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



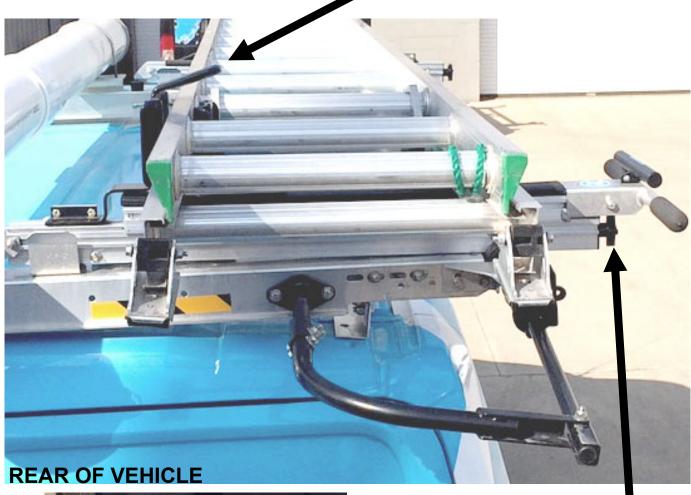
DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS.

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.

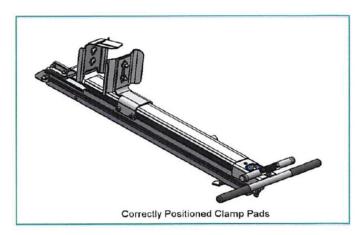
DO NOT OVER TIGHTEN! CLAMP PAD SHOULD JUST TOUCH THE LADDER.

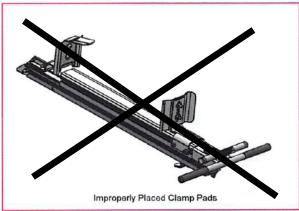


### **Proper Clamp Pad Locations**

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.





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.

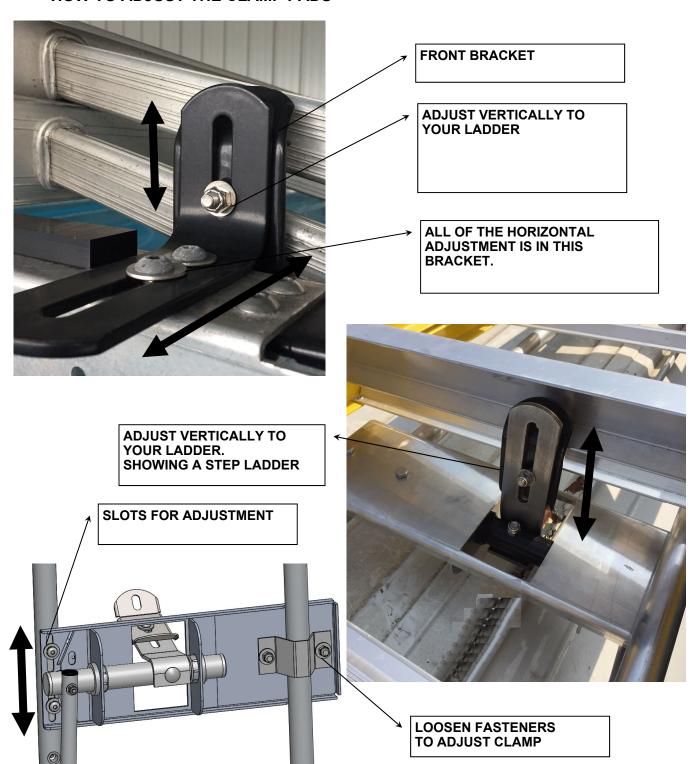
YOUR INSTALLATION IS NOW COMPLETE!

STOW THIS COPY IN THE VEHICLE FOR FUTURE REFERENCES!

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#### **HOW TO ADJUST THE CLAMP PADS**



### **GRIP LOCK 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!

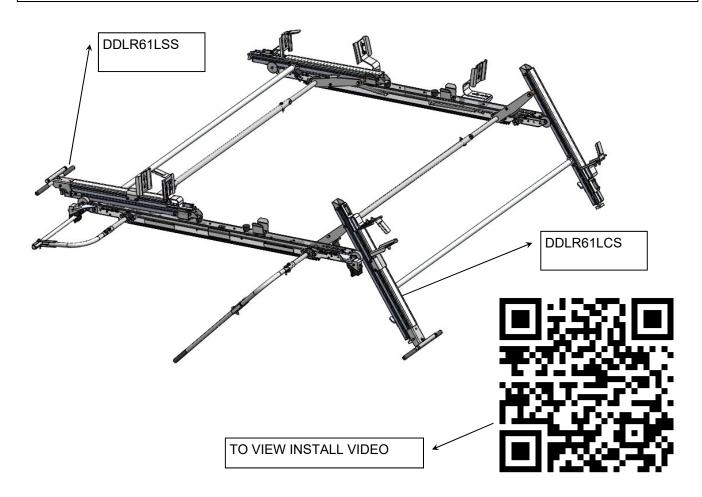


#### **Introduction / Comments:**

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 INSTALLATION 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

RATCHET, SOCKETS AND/OR WRENCHES

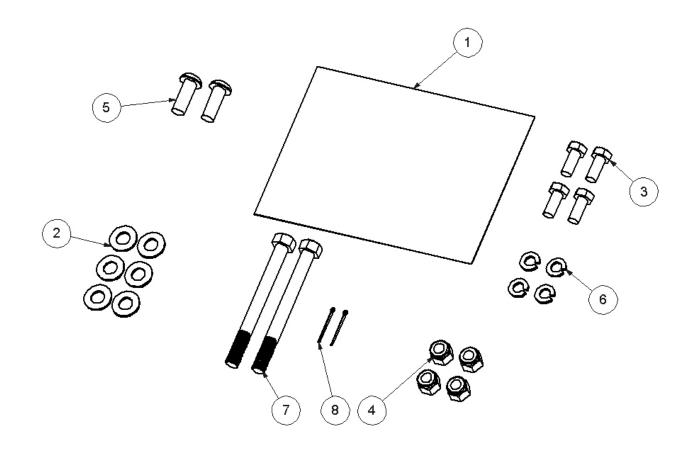
RS MEASURING TAPE

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



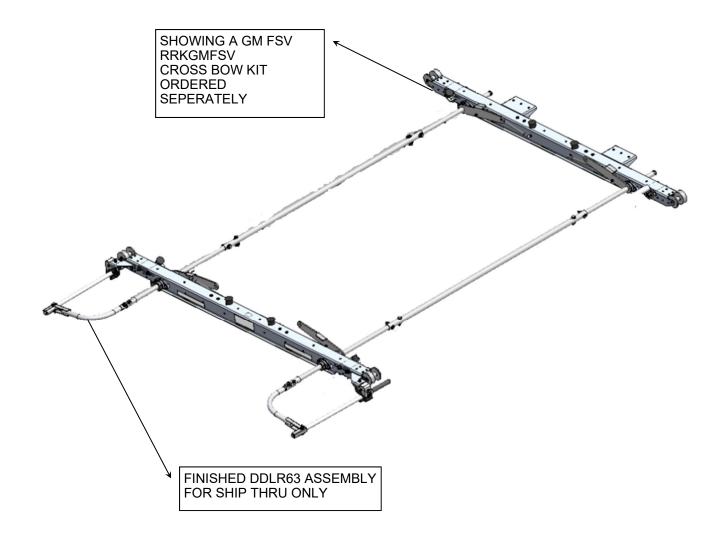


STEP 1A: THIS IS THE SHIP THRU SINGLE DROP DOWN AS YOU WOULD RECEIVE FOR FINAL DEALER ASSEMBLY. SEE STEP 1B FOR DOUBLE DROP DOWN.



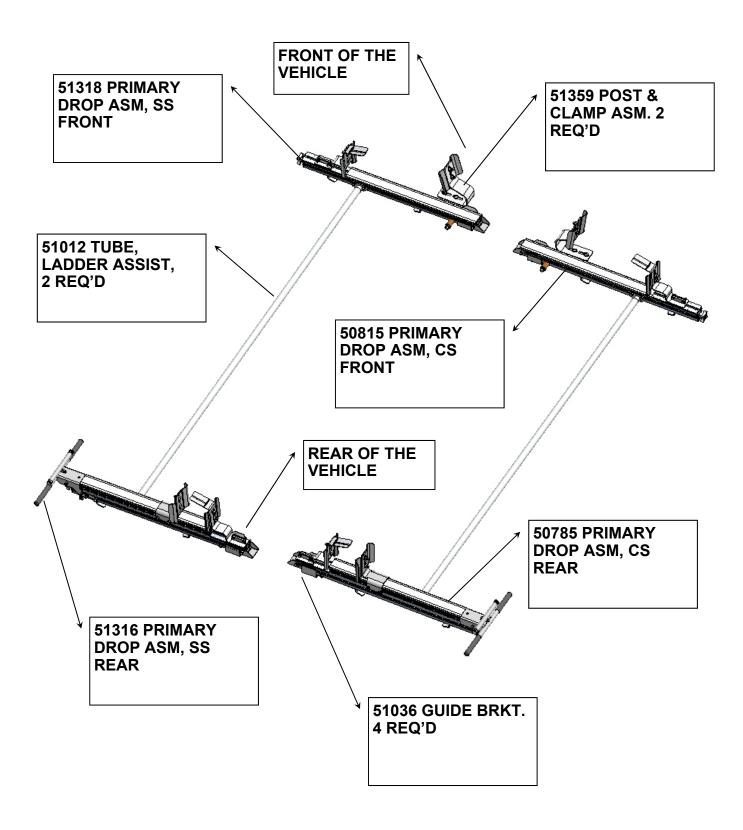


#### STEP 1B: THIS IS THE SHIP THRU DOUBLE DROP DOWN AS YOU WOULD RE-**CEIVE FOR FINAL DEALER ASSEMBLY**



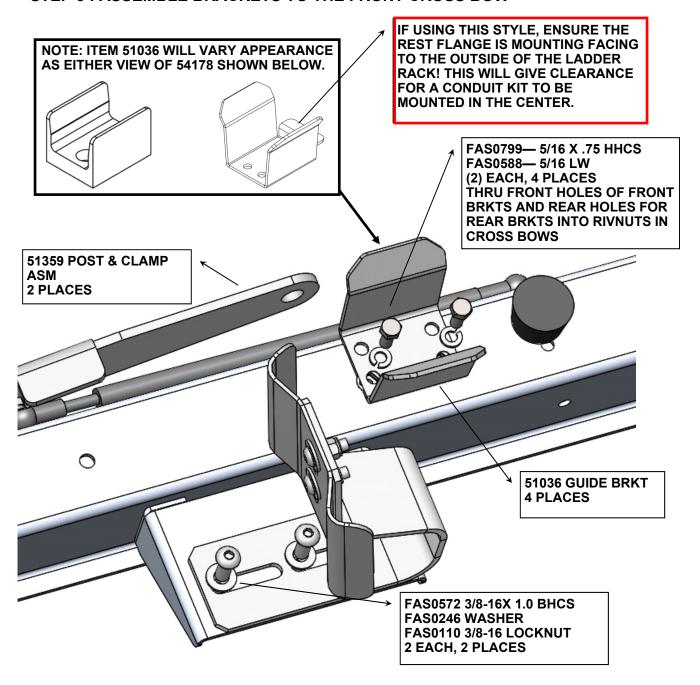


### STEP 2 - THIS IS THE FINAL ASSEMBLY, SHOWING THE CURB AND STREET SIDE DROP DOWN COMPONENTS

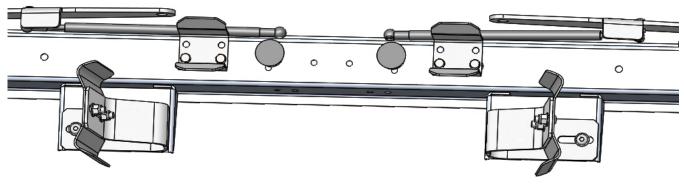




#### STEP 3: ASSEMBLE BRACKETS TO THE FRONT CROSS BOW



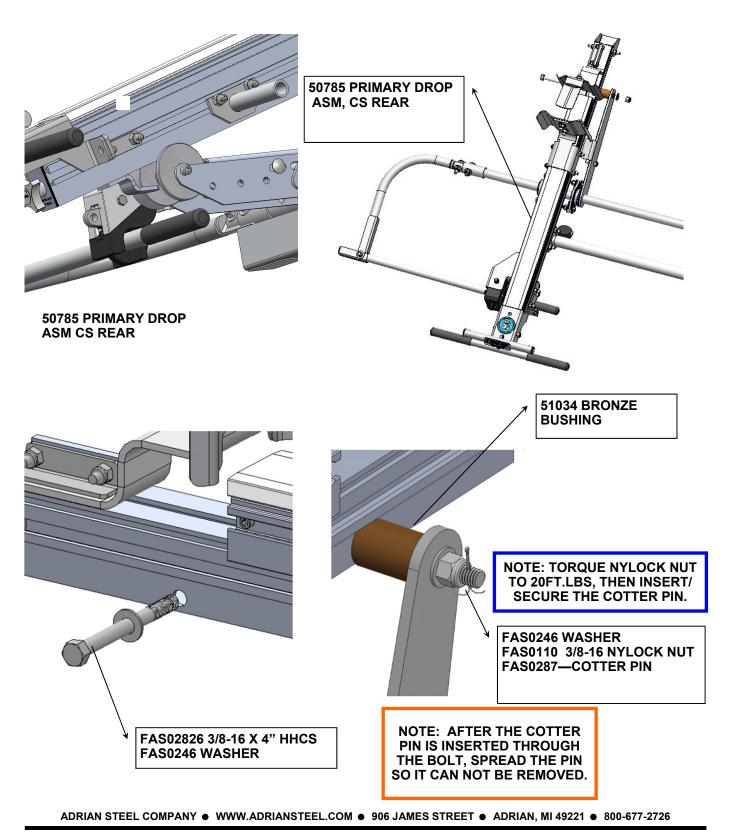
#### COMPLETED VIEW OF THE FRONT CROSS BOW





#### STEP 4: ASSEMBLE REAR CURB SIDE PRIMARY DROP TO RACK

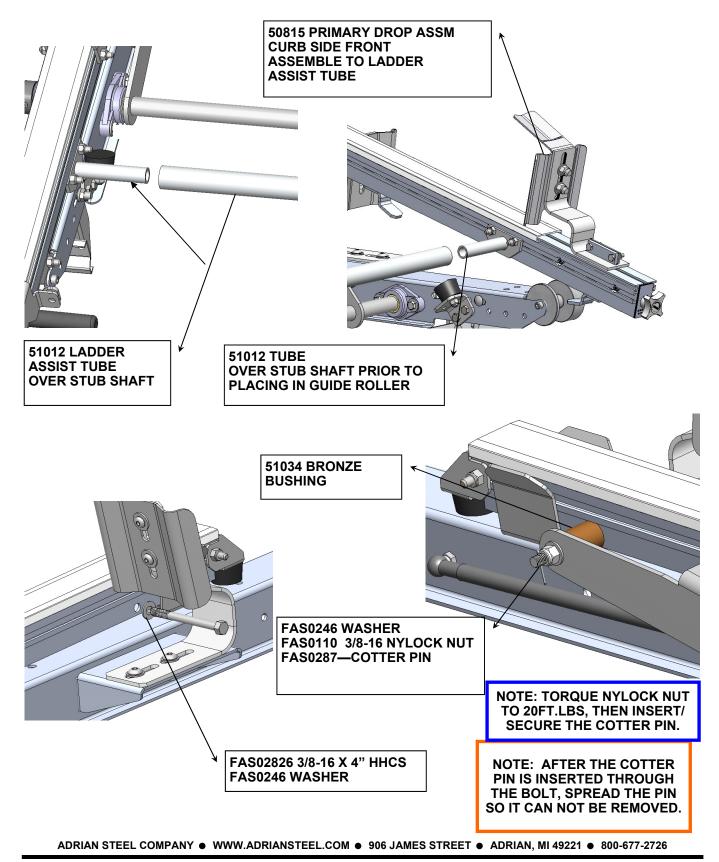
SET 50785 PRIMARY DROP ASM, REAR CS IN PLACE ON REAR CROSS BOW. **USE GUIDE ROLLER TO HELP LOAD INTO POSITION** 





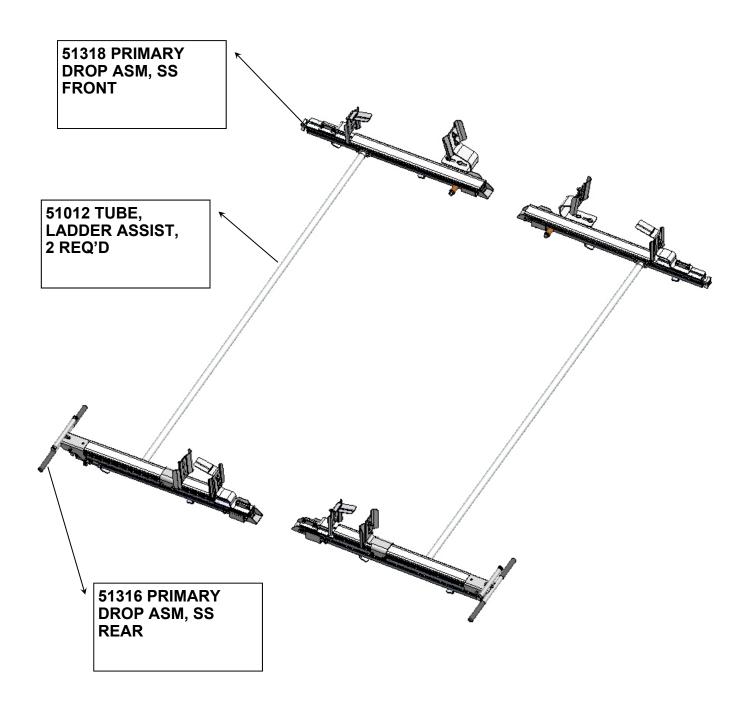
#### STEP 5: ASSEMBLE FRONT SIDE PRIMARY DROP TO RACK

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





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. YOUR INSTALLATION IS NOW COMPLETE! STOW THIS COPY IN THE VEHICLE FOR FUTURE REFERENCES!

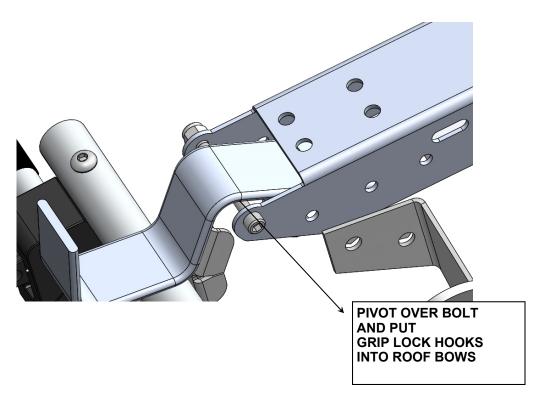


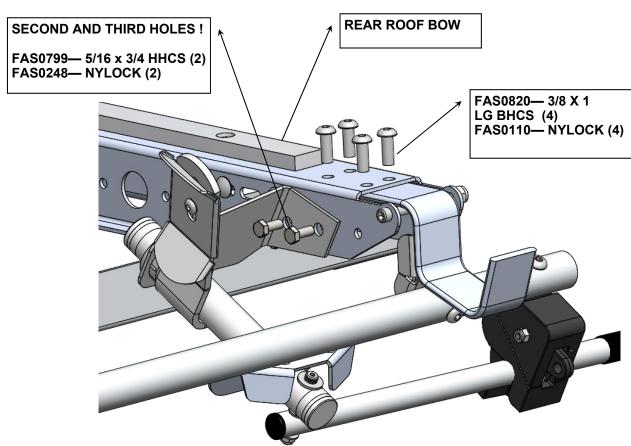
# STEP #08: COMBO RACK, FINAL INSTALL-STREET SIDE GRIP LOCK





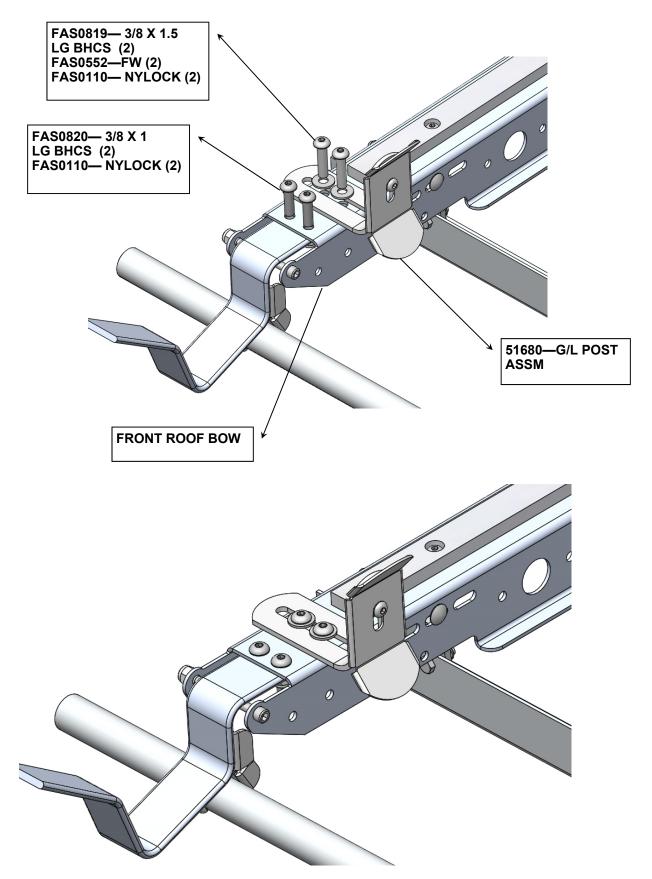
## STEP #9: COMBO RACK, INSTALL STREET SIDE GRIP LOCK







#### STEP #10: FRONT ROOF BOW ASSEMBLY -STREET SIDE





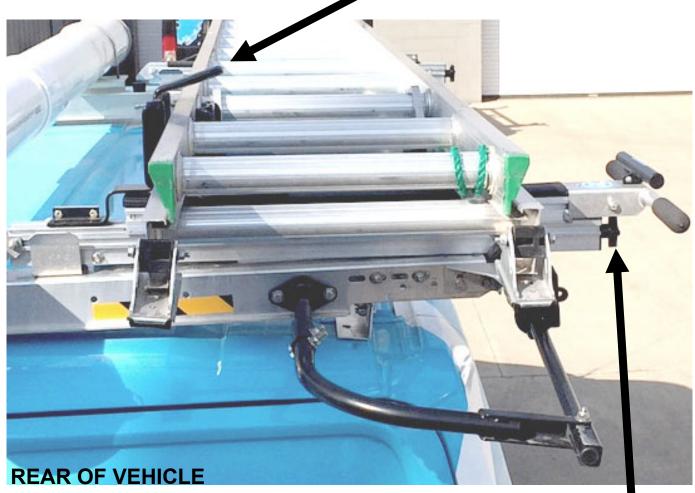
#### STEP #23: YOUR DROP DOWN COMBO INSTALLATION IS NOW COMPLETE



DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS. YOUR INSTALLATION IS NOW COMPLETE! 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.

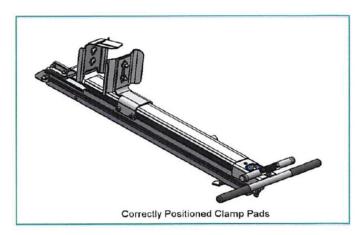
**DDLR Series Final Adjustment Instruction (GMFSV / Ford Transit)** 

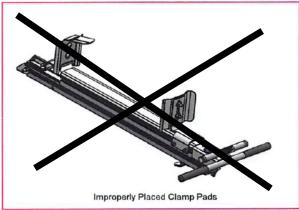


# **Proper Clamp Pad Locations**

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.





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. YOUR INSTALLATION IS NOW COMPLETE! STOW THIS COPY IN THE VEHICLE FOR FUTURE REFERENCES!



# 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

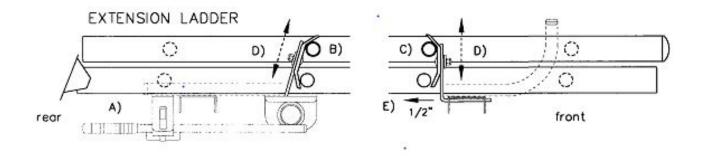


DOUBLE CHECK ALL FASTENERS LOCATIONS TO BE SURE THAT ALL FASTENERS ARE TIGHTENED TO SPECIFICATIONS. YOUR INSTALLATION IS NOW COMPLETE! STOW THIS COPY IN THE VEHICLE FOR FUTURE REFERENCES!

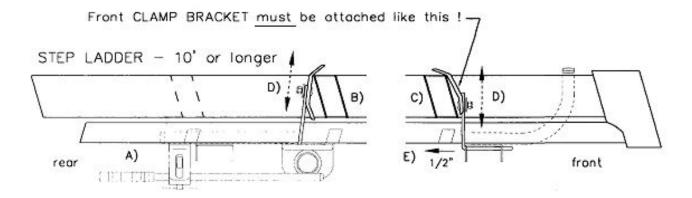


#### STEP #10B: HOW TO ADJUST THE CLAMP PADS

- A) Load your ladder anto 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 lodder 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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