INSTR. NUMBER	PG:	REV:
74953	1	J

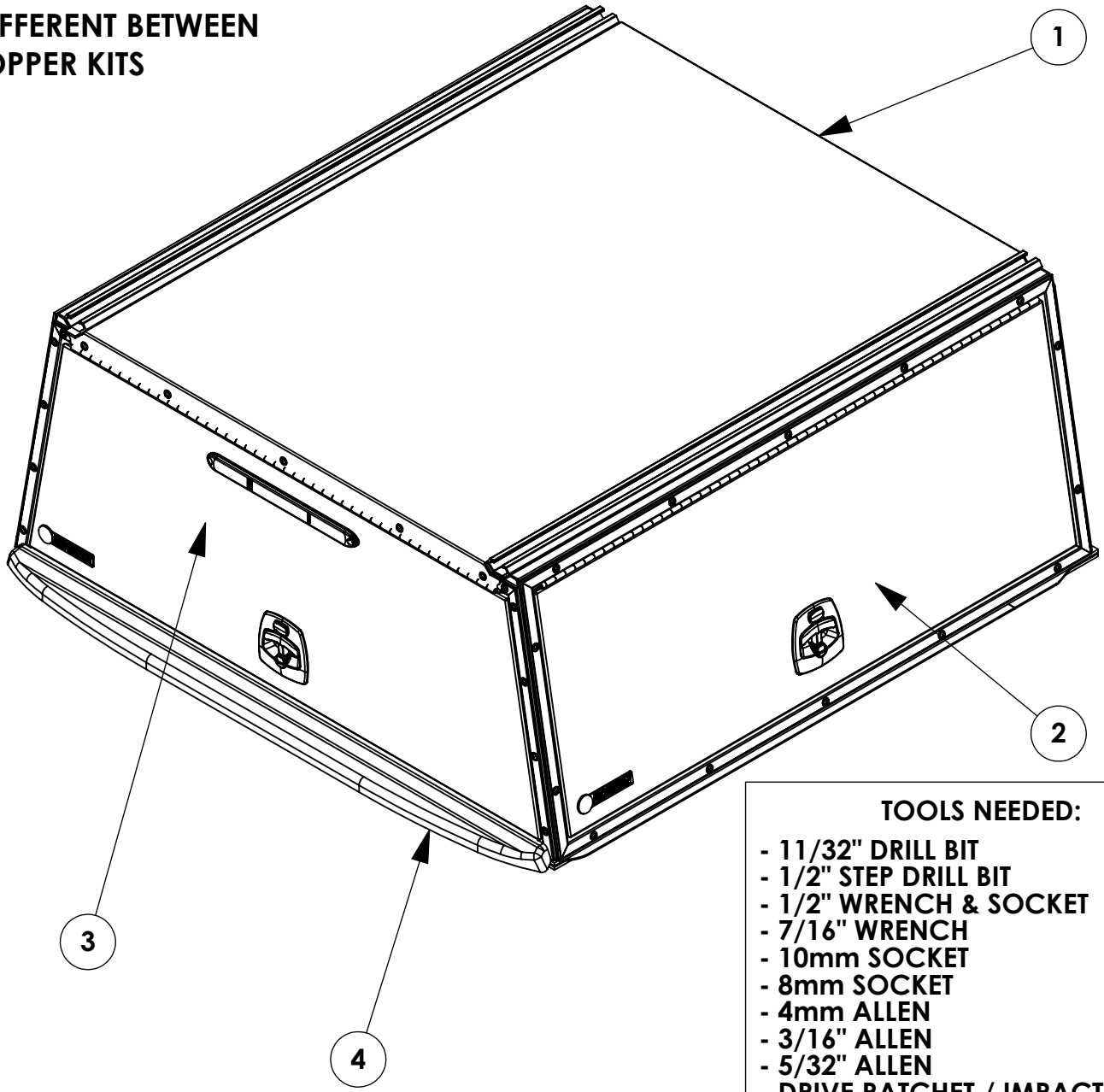
PART NUMBER : **TFKMAV154HM23W**

PART DESC. : ASM INS, TFKMAV154HM23W

BOM FOR 4.5' MAVERICK 23"

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TRK5423W	TOP, ROOF KIT,54",23,W	1
2	TSK54M23W	TOP, SIDE KIT,54",M,23,W	2
3	TCK54HM23W	TOP,CLOSE KIT,78",HM23,W	1
4	THKMAV154M23	HDW KIT, TFKMAV154HM23W	1

FASTENER AND HOLE COUNTS MAY BE DIFFERENT BETWEEN TOPPER KITS



TOOLS NEEDED:

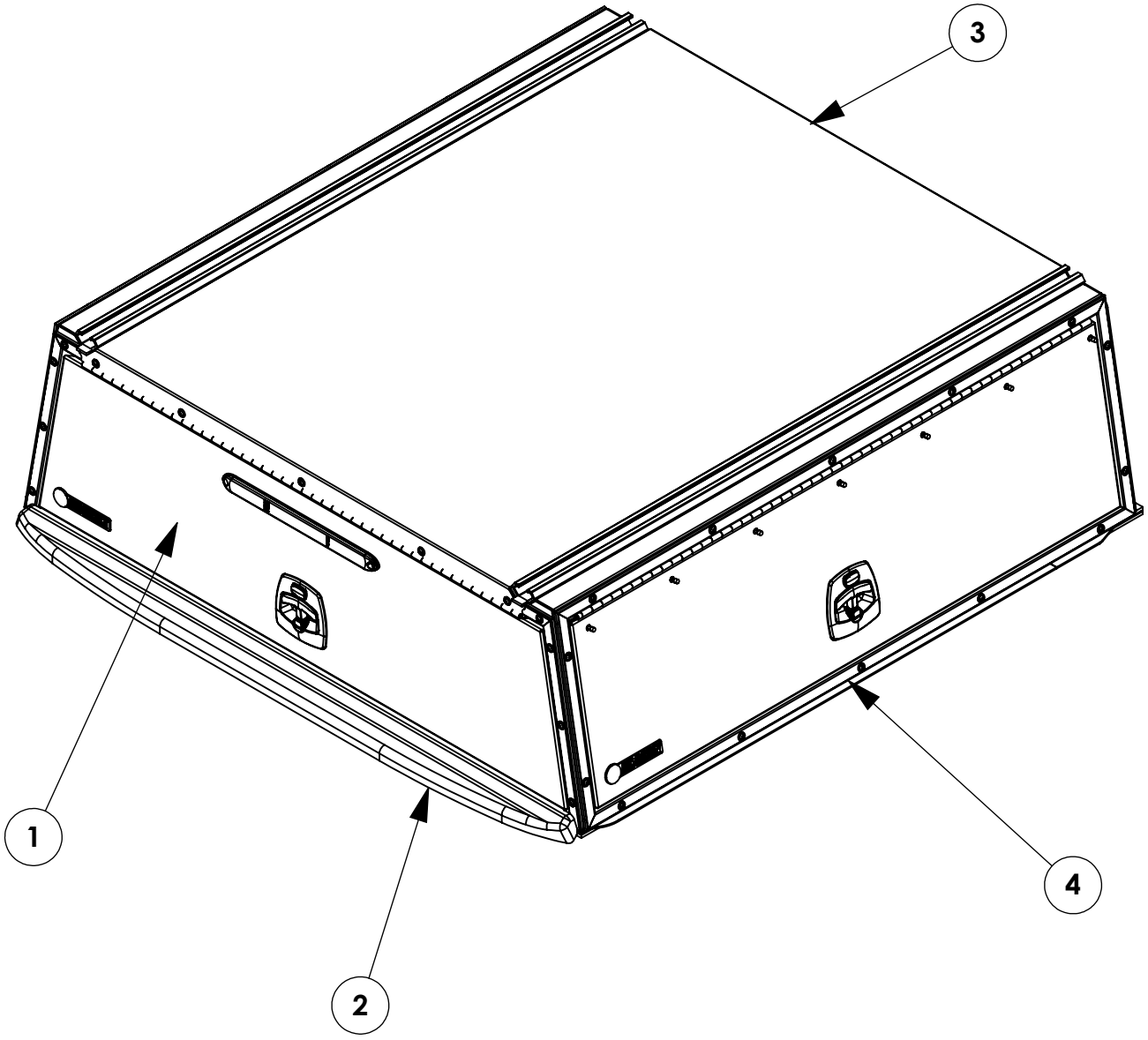
- 11/32" DRILL BIT
- 1/2" STEP DRILL BIT
- 1/2" WRENCH & SOCKET
- 7/16" WRENCH
- 10mm SOCKET
- 8mm SOCKET
- 4mm ALLEN
- 3/16" ALLEN
- 5/32" ALLEN
- DRIVE RATCHET / IMPACT
- SCISSORS
- TAPE MEASURE
- ALIGNMENT PUNCH
- 30MM OR 1-3/16" HOLE SAW
- T40 TORX BIT
- PLUSNUT TOOL OR GUN
- 1/4" RIVET TIP

INSTR. NUMBER : 74953	PG: 2	REV: J
PART NUMBER : TFKMAV154HM18W		
PART DESC. : ASM INS, TFKMAV154HM218W		

FASTENER AND HOLE COUNTS MAY BE DIFFERENT BETWEEN TOPPER KITS

BOM FOR 4.5' MAVERICK 18"

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TCK54HM18W	TOP,CLOSE KIT,54",HM18,W	1
2	THKMAV154M18	HDW KIT, TFKMAV154HM18W	1
3	TRK5423W	TOP, ROOF KIT,54",23,W	1
4	TSK54M18W	TOP, SIDE KIT,54",M,18,W	2
16	TMLHK	Topper Mechanical Lock Hatch Kit	1



BEST PRACTICES

GET TO KNOW THE VEHICLE - AT THE BEGINNING OF ANY INSTALLATION, CHECK THE LOCATION OF THE FUEL TANK, FUEL LINES, BRAKE LINES, HIGH VOLTAGE BATTERIES AND WIRING HARNESSES TO AVOID INJURY OR PROPERTY DAMAGE FROM TOOL CONTACT.

SEAL ALL EXTERIOR HOLES - ALL INSTALLATION HOLES SHOULD BE SEALED WITH BUTYL TAPE OR SILICON TO PREVENT WATER AND EXHAUST GASES FROM ENTERING THE VEHICLE.

CONTROL DRILL DEPTH - TO AVOID DAMAGE TO THE VEHICLE, USE A DRILL STOP OR CLEARED STEP BIT WHEN DRILLING INSTALLATION HOLES.

ALWAYS ADD PRIMER - WHEN ADDING INSTALLATION HOLES BE SURE TO USE A SELF-ETCHING PRIMER TO PREVENT CORROSION, FASTENER FAILURE AND INJURY.

MOUNTING POINTS MUST HAVE METAL-TO-METAL CONTACT - USE PROVIDED MOUNTING SPACERS TO ACCOMMODATE FOR VEHICLE FEATURES, CARPET OR SUBFLOORS.

PROVIDE CLEARANCE FOR SPACERS - IF THE INSTALLATION VEHICLE CONTAINS A CARPET OR SUBFLOOR, USE A 1-3/16" DIAMETER CARPET CUTTER (P/N: 31183-0) AT ALL MOUNTING LOCATIONS TO OPEN UP ROOM FOR SPACERS.

CHECK SPACER ORIENTATION - BE SURE THAT THE INDENT IN THE SPACER COVERS THE PLUSNUT HEAD; THIS ENSURES THE MOST METAL-TO-METAL CONTACT AND REDUCES VIBRATION.

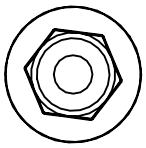
PLUSNUT INSTALLATION - A PLUSNUT GUN IS RECOMMENDED FOR PLUSNUT INSTALLATION FOR ITS PRODUCTION SPEED. HOWEVER, A PLUSNUT SETTING TOOL CAN ALSO BE USED (P/N: 22200-0).

THRU-BOLT CLEARANCE - WHEN USING A THRU-BOLT AT ANY MOUNTING LOCATION, BE SURE THAT YOUR HOLE HAS 1/16" CLEARANCE.

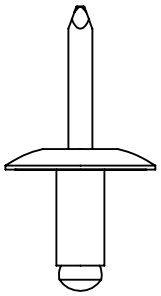
BEST PRACTICE: ORGANIZE ALL FASTENERS & VERIFY THAT ALL ARE ACCOUNTED FOR

FASTENERS USED

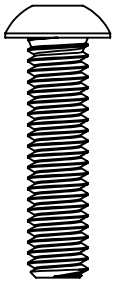
BAG REFERENCE: **BAG74558**



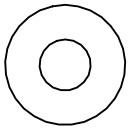
FAS0055
1/4-20 ZP
HFLNG NLK NUT
QTY: 10



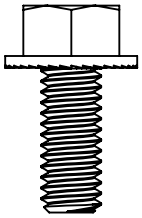
FAS1014
.25X.11GR AL
RIVET, BLND
QTY: 6



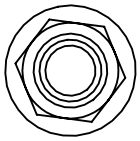
FAS0919
5/16-18 X 1.25 SST
BHC SCREW
QTY: 8



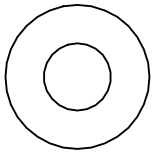
FAS0234
1/4 SST
FLAT WASHER
QTY: 30



FAS0438
5/16-18 X .75 ZP
HFNLG SCREW
QTY: 12



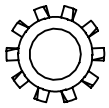
FAS0440
5/16-18 ZP
HFLNG NLK NUT
QTY: 12



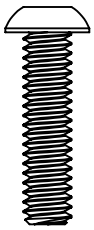
FAS0552
5/16 SST
FLAT WASHER
QTY: 8

FAS0917
M5 X .8 ZP
HFLNG NLK NUT
QTY: 8

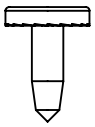
FAS0918
10-24 ZP
HFLNG NLK NUT
QTY: 4



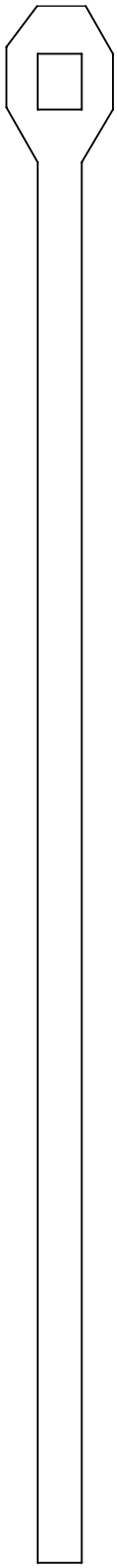
FAS0066
1/4
LOCK WASHER
QTY: 1



FAS0940
1/4-20 X 1.0 SST
BHC SCREW
QTY: 30



FAS0148
#10 X 0.5 NI-ZN
PAN HEAD SCREW
QTY: 1



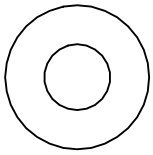
78320
7.5" STUD MNT
CABLE TIE
QTY: 5

INTENTIONALLY LEFT BLANK

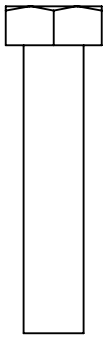
BEST PRACTICE: ORGANIZE ALL FASTENERS & VERIFY THAT ALL ARE ACCOUNTED FOR

FASTENERS USED

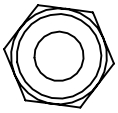
BAG REFERENCE: **BAG74559**



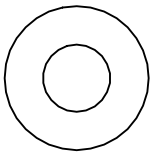
FAS0164
5/16 ALUM
FLAT WASHER
QTY: 8



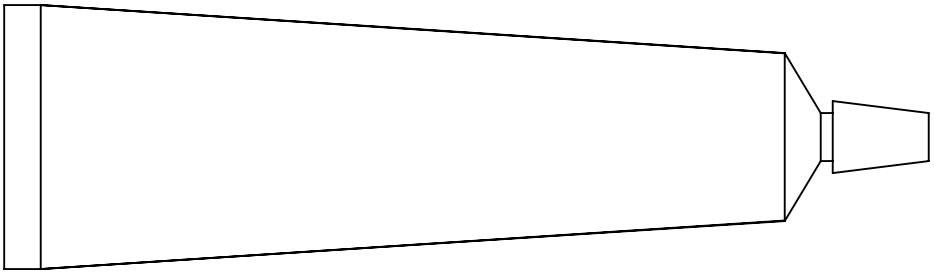
FAS0242
5/16-18 X 1.5 SST
HH SCREW
QTY: 8



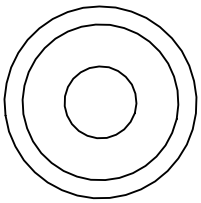
FAS0248
5/16-18 SST
HH NLK NUT
QTY: 18



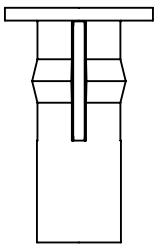
FAS0552
5/16 SST
FLAT WASHER
QTY: 16



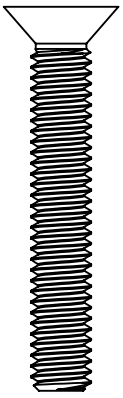
26618-0
1 OZ TUBE
SILICONE
QTY: 2



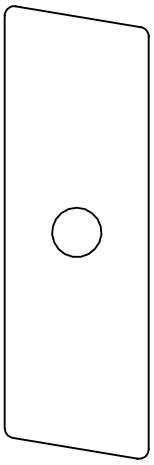
FAS0831
1/2 SHORT, ZN
SPACER
QTY: 10



FAS0091
5/16-18 PB DC
PLUSNUT
QTY: 3



FAS1279
5/16-18X2.0 SS
FHT SCREW
QTY: 13



36503-0
5/16-18
RETAINER BAR
QTY: 10

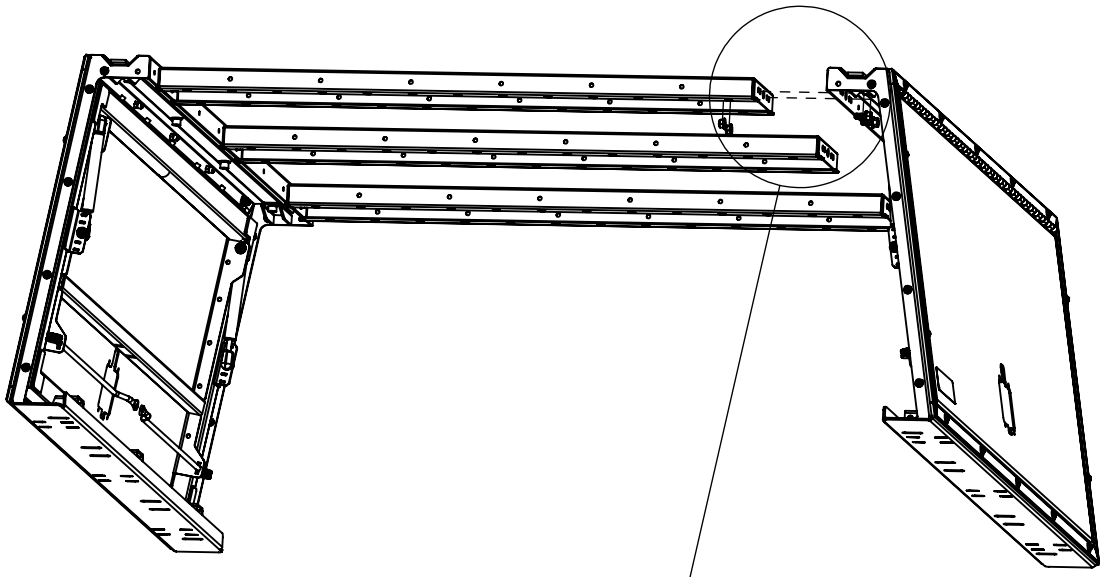
INTENTIONALLY LEFT BLANK

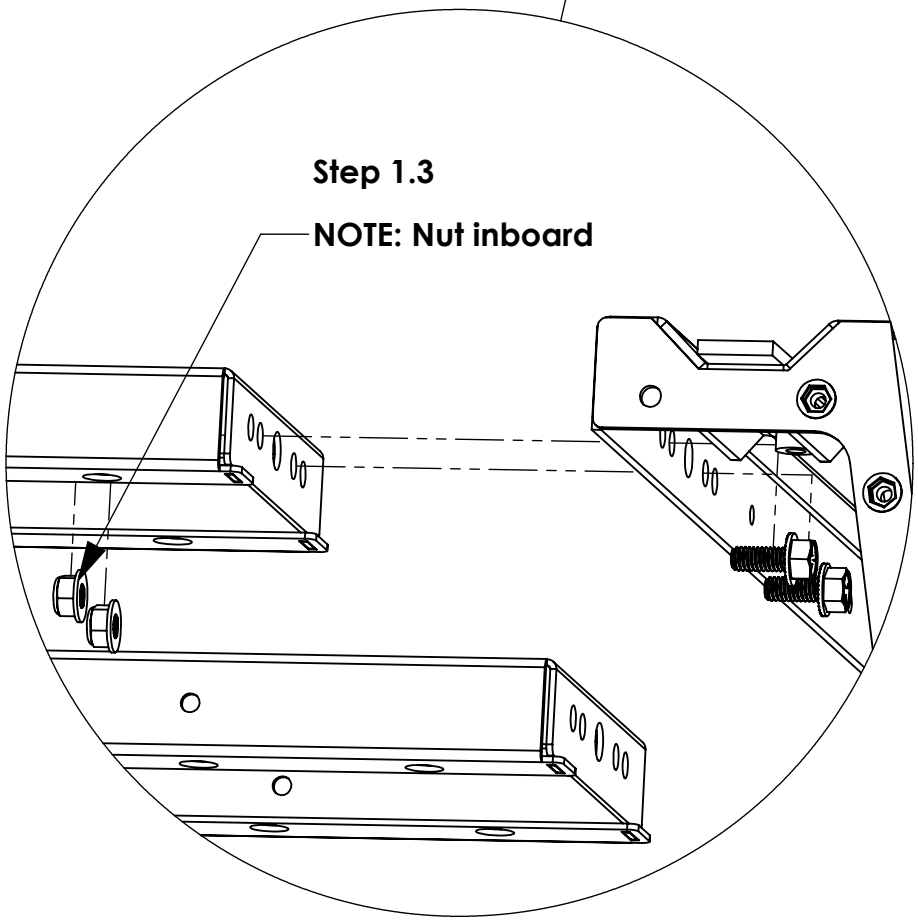
STEP 1 - ASSEMBLE BODY FRAME: SIDES AND CROSSBOWS.

Step 1.1
OPEN [x2] TOPPER SIDE KITS [TSK54M23W]

Step 1.2
OPEN TOPPER ROOF KIT [TRK5423W]

Step 1.3
<u>FULLY TIGHTEN</u>
FAS0438 AND FAS0440 (12 PLACES)
1/2" WRENCH
1/2" SOCKET





STEP 2 - ATTACH HARDWARE: SIDE DOOR HANDLES, FRONT & REAR SEALS.

****NOTE: CONFIRM ALL (3) LOCKS ARE KEYED THE SAME

Step 2.1
CUT ZIP TIES THAT ARE HOLDING LOCKRODS IN PLACE.

!! CAUTION !!
DOORS MAY TRY TO OPEN.

Step 2.2
ATTACH HANDLE TO DOOR

FULLY TIGHTEN
FAS0917
(4 PER DOOR)
10mm SOCKET

DO NOT OVERTIGHTEN

Step 2.3
ATTACH LOCKRODS TO HANDLE

FULLY TIGHTEN
FAS0918
(2 PLACES)
8mm SOCKET

DO NOT OVERTIGHTEN

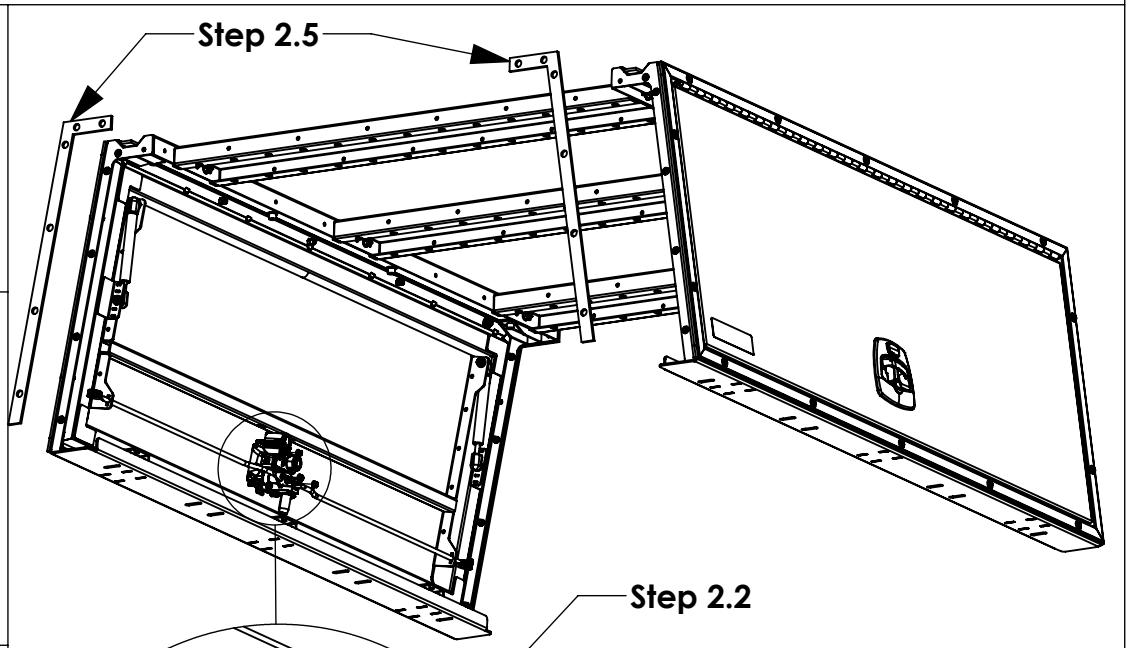
Step 2.4
ADJUST HANDLE POINT TO ALIGN WITH CASTING LINE ON HANDLE BODY (APPROX: 1.0")

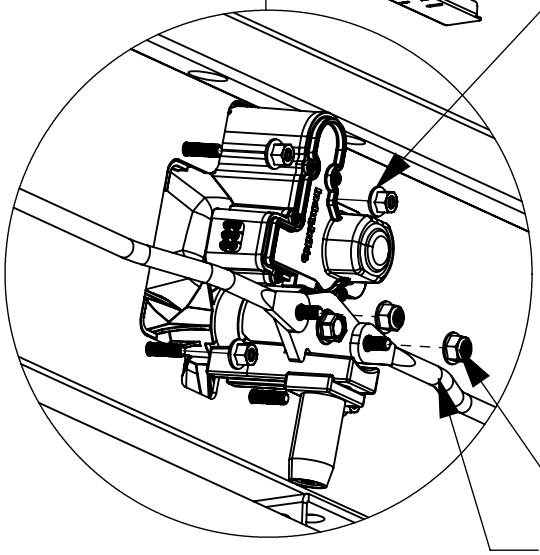
FULLY TIGHTEN
4mm ALLEN
(2 PLACES)

Step 2.5
APPLY FOAM SEALS TO ALL CORNERS.

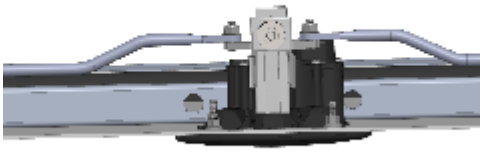
USE HOLES IN SEAL TO ALIGN MATERIAL.

Step 2.6
CUT 52376 INTO 2" STRIPS AND COVER HANDLE LATCH ADJUSTER AS SHOWN

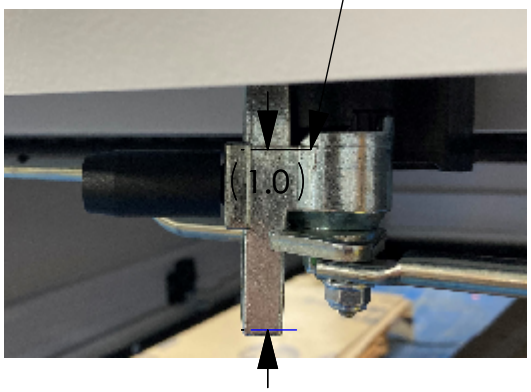




STOP STEP 2.2 & 2.3 HAVE DIFFERENT SIZED FASTENERS



STOP



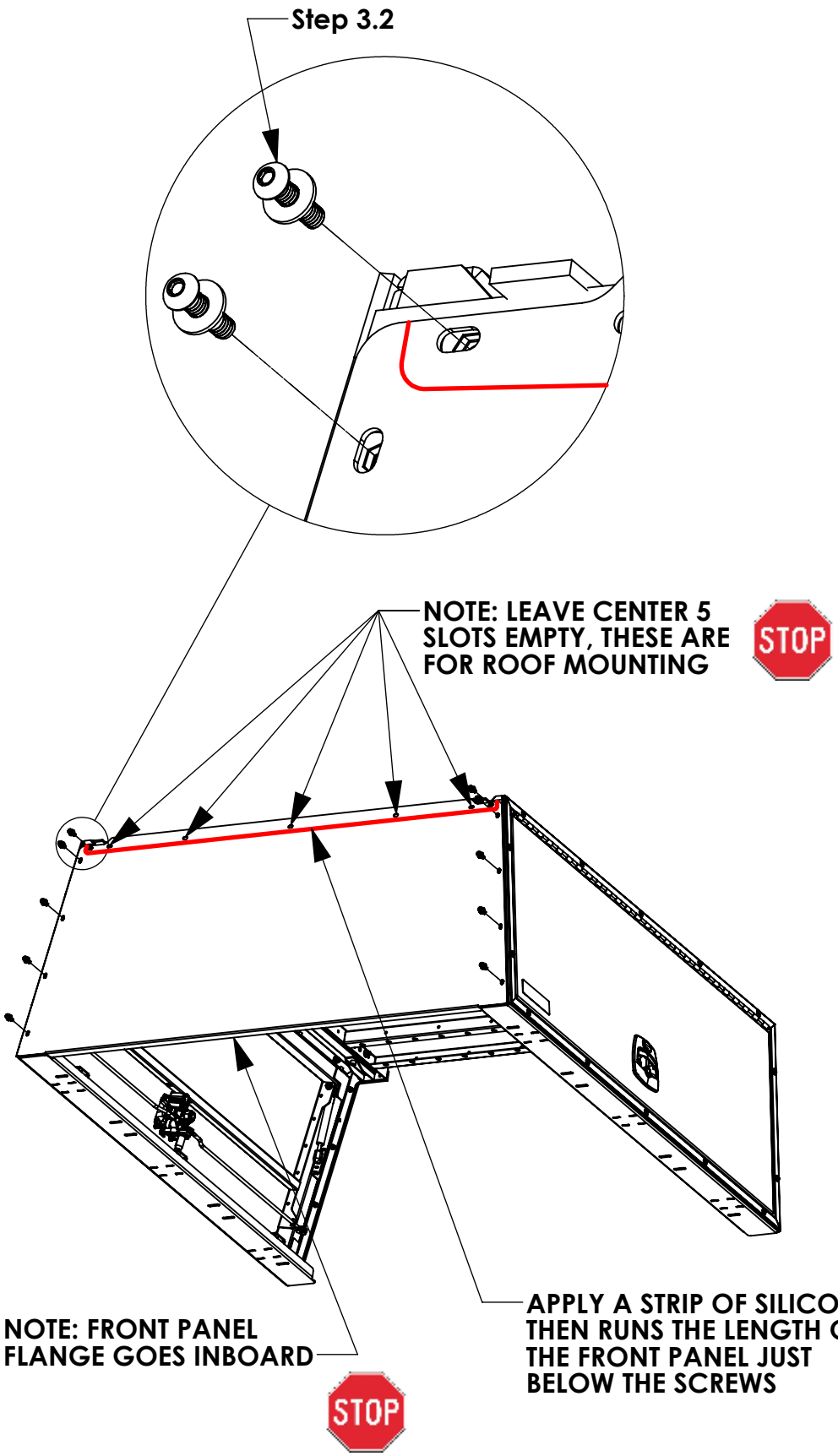
STEP 3 - ATTACH FRONT PANEL.

Step 3.1
OPEN TOPPER CLOSURE KIT [TCK54HM23W]

Step 3.2
ATTACH FRONT PANEL.

<u>HAND TIGHTEN</u>
FAS0234, FAS0940 (10 PLACES)

DO NOT TIGHTEN UNTIL AFTER STEP 4



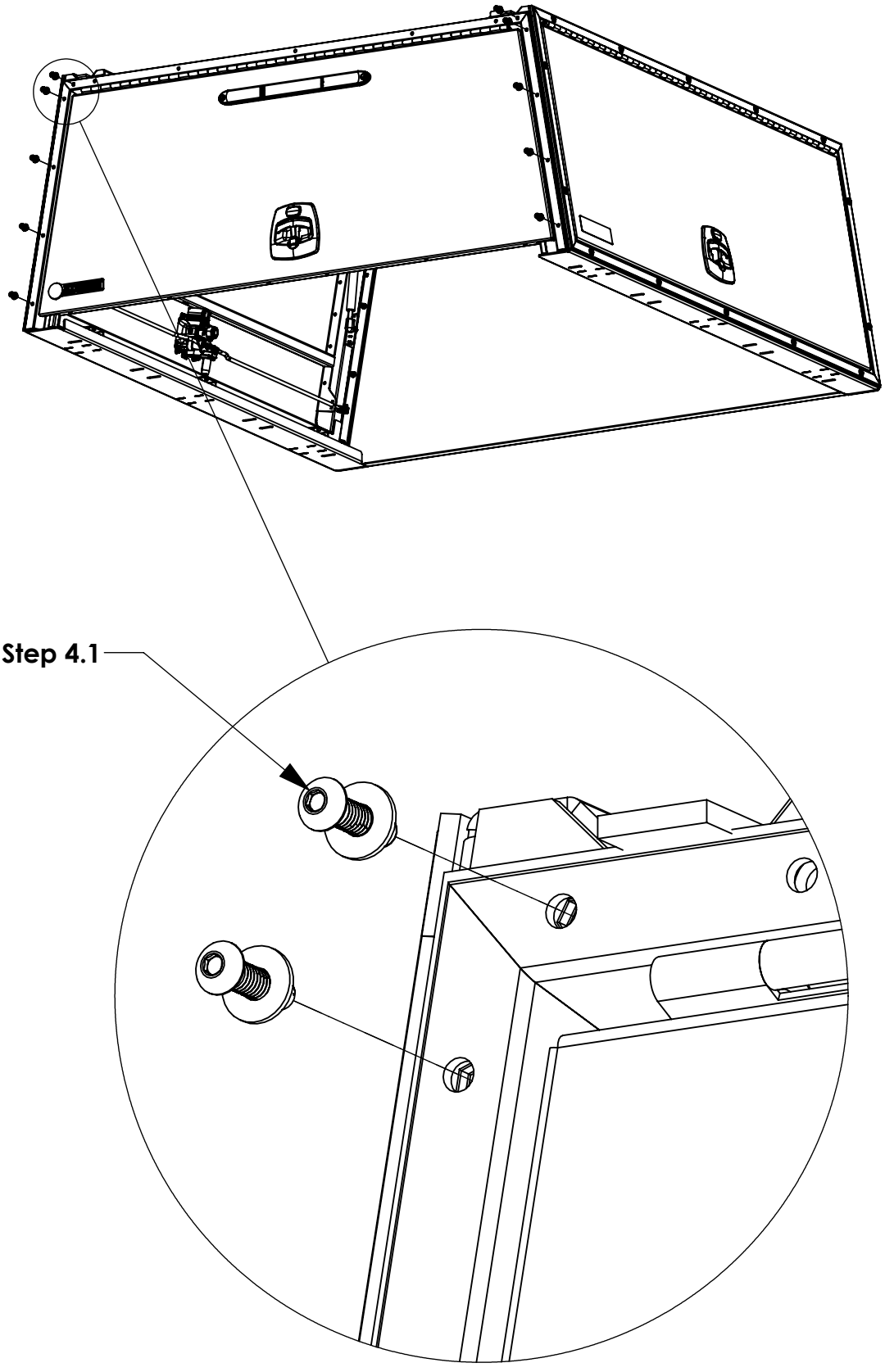
STEP 4 - ATTACH LIFTGATE.

Step 4.1
ATTACH LIFTGATE FRAME

<u>FULLY TIGHTEN</u>
FAS0234, FAS0940
(10 PLACES)
5/32" ALLEN

Step 4.2
GO BACK AND <u>FULLY TIGHTEN</u> FASTENERS FROM <u>STEP 3.2</u>

(10 PLACES)
5/32" ALLEN



STEP 5 - ATTACH ROOF AND ROOF RAILS.

Step 5.1
PLACE ROOF PANEL ON TOPPER BODY, BUT SLID FORWARD OF FRONT PANEL TO AVOID REMOVING SILICONE APPLIED IN STEP 3. THEN SLIDE ROOF PANEL INTO CORRECT POSITION.

Step 5.2
ATTACH MOUNTING RAILS TO TOPPER BODY.

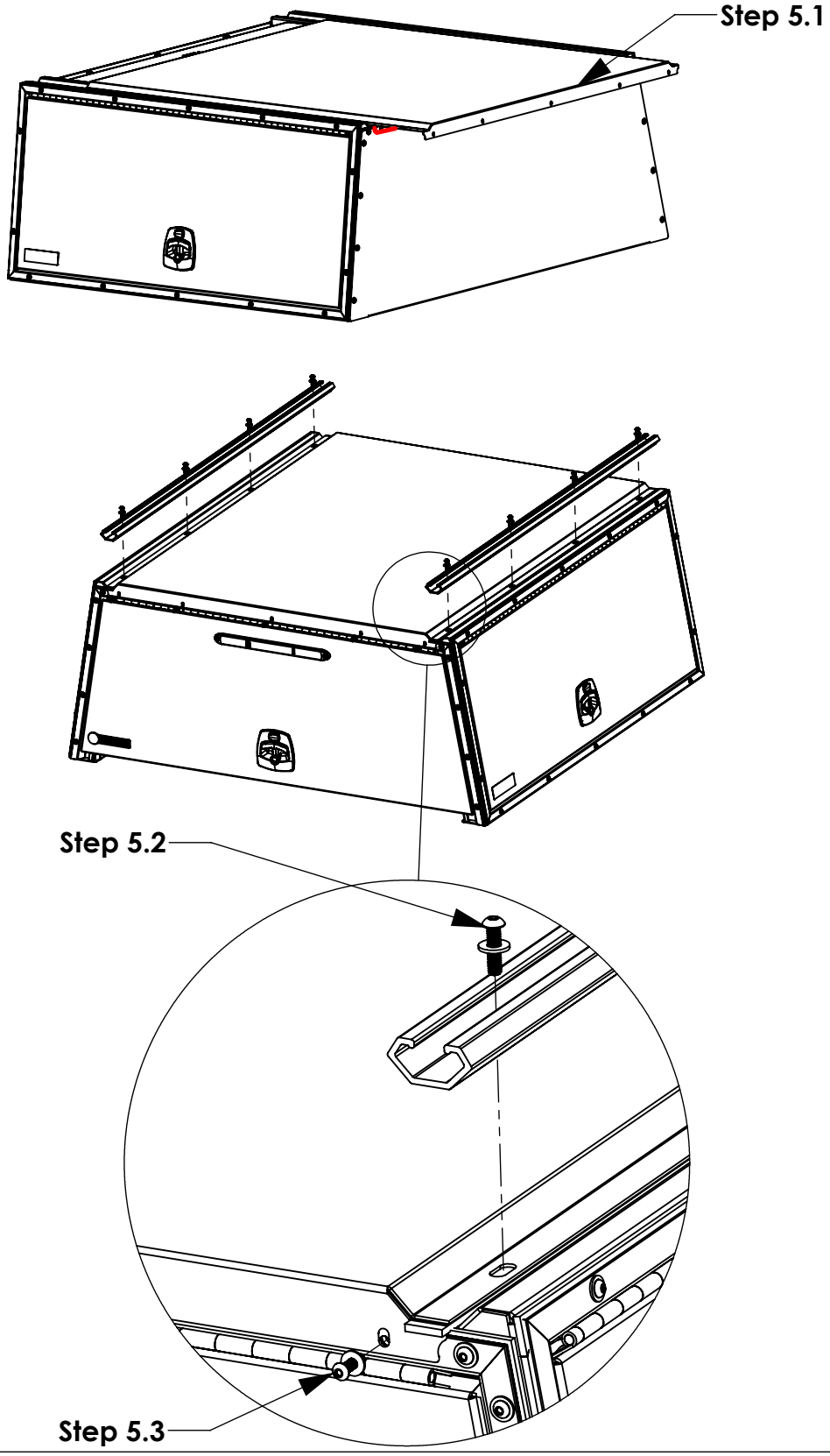
USE AN ALIGNMENT PUNCH OR PRE-TAP TO POKE THROUGH FOAM SEALS.

<u>FULLY TIGHTEN</u>
FAS0552,
FAS0919
(8 PLACES)
3/16" ALLEN

Step 5.3
ATTACH ROOF TO TOPPER BODY.

<u>FULLY TIGHTEN</u>
FAS0055,
FAS0552,
FAS0940
(10 PLACES)
5/32" ALLEN
7/16" WRENCH

PLEASE NOTE THAT ORDER OF OPERATIONS ON THESE BUILD STEPS IS CRITICAL TO A PROPER SEAL!



STEP 6 - ATTACH TAILGATE COVER.

*****NOTE REGARDING TOOLBOX ACCESSORY*

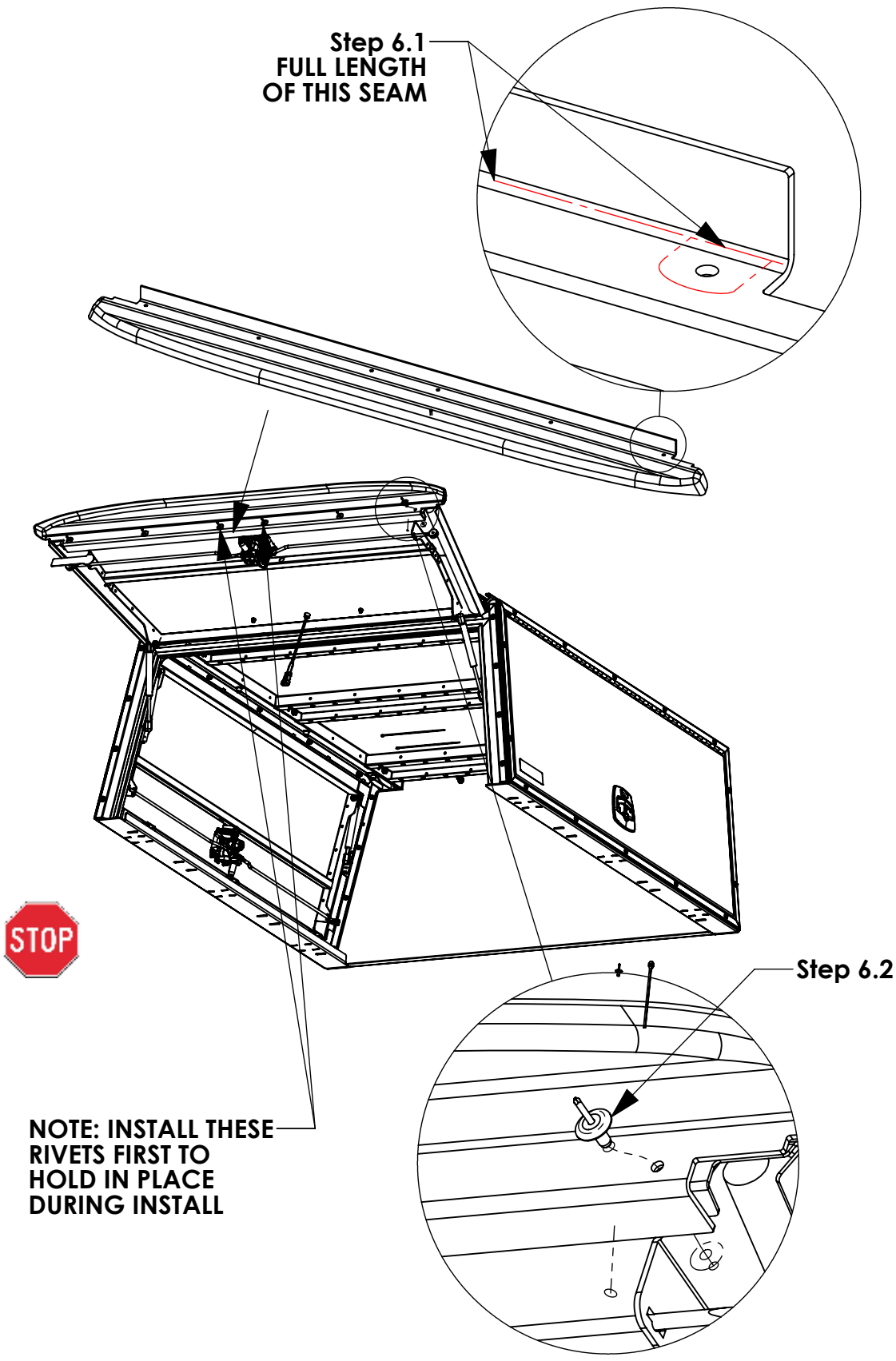
Step 6.1
ADD SILICONE TO CORNER OF TAILGATE COVER AND AROUND BOTTOM FACE MOUNTING HOLES.

Step 6.2
ATTACH TAILGATE COVER TO REAR DOOR.

<u>FULLY SECURE</u>
FAS1014
(6 PLACES)

1/4" RIVET TIP

******NOTE: IF ADDING TOOLBOX, WAIT TO INSTALL UNTIL AFTER TOPPER IS INSTALLED ON VEHICLE; MOUNTING HOLES IN TOPPER NOT ACCESSIBLE ONCE TOOLBOXES INSTALLED.***



STEP 7 - INSTALL 73740 SEALANT TO TRUCK CAB AND BED SEAMS. BEFORE APPLYING SEALANT, CLEAN ALL SURFACES REQUIRING IT WITH RUBBING ALCOHOL OR EQUIVALENT.

Step 7.1
PLACE 73740 SEALANT ALONG BOTTOM AND SIDES OF BACK WINDOW.

73740

Step 7.2
PLACE 73740 SEALANT ALONG SEAM AT BACK OF CAB AT TOP OF WINDOW.

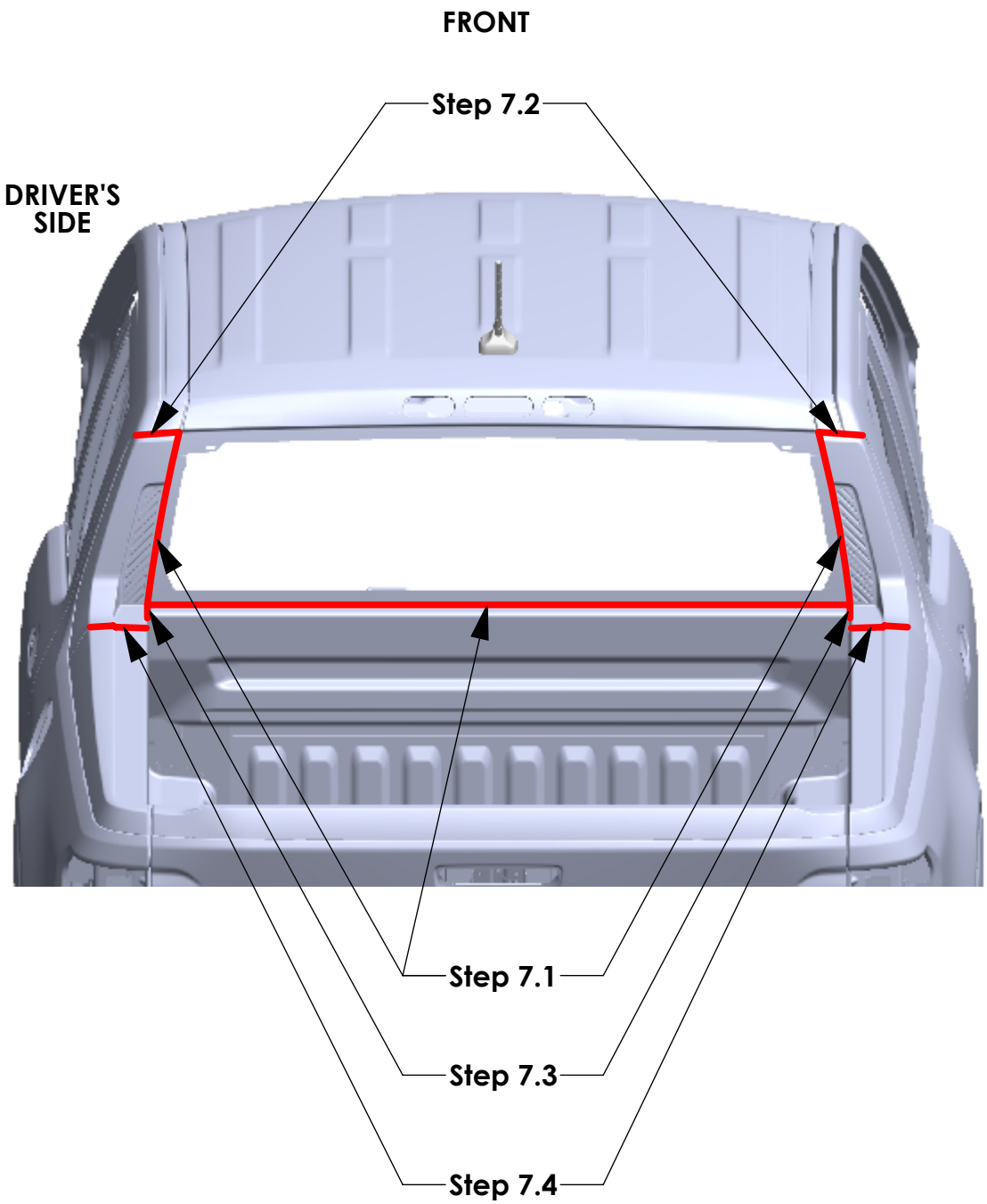
73740

Step 7.3
PLACE 73740 SEALANT ALONG SEAMS BETWEEN FRONT BED RAIL AND SIDE BED RAILS.

73740

Step 7.4
PLACE 73740 SEALANT ALONG SEAMS IN BED RAILS.

73740



STEP 8 - ATTACH SEALS TO TRUCK BED. BEFORE APPLYING SEALS, CLEAN ALL SURFACES REQUIRING IT.

Step 8.1
INSTALL FRONT BED SEAL. SEE DISTANCE OFF OF THE INSIDE EDGE OF THE BED. CENTER FROM LEFT TO RIGHT ON FRONT BED RAIL.

74924
(1 PLACE)

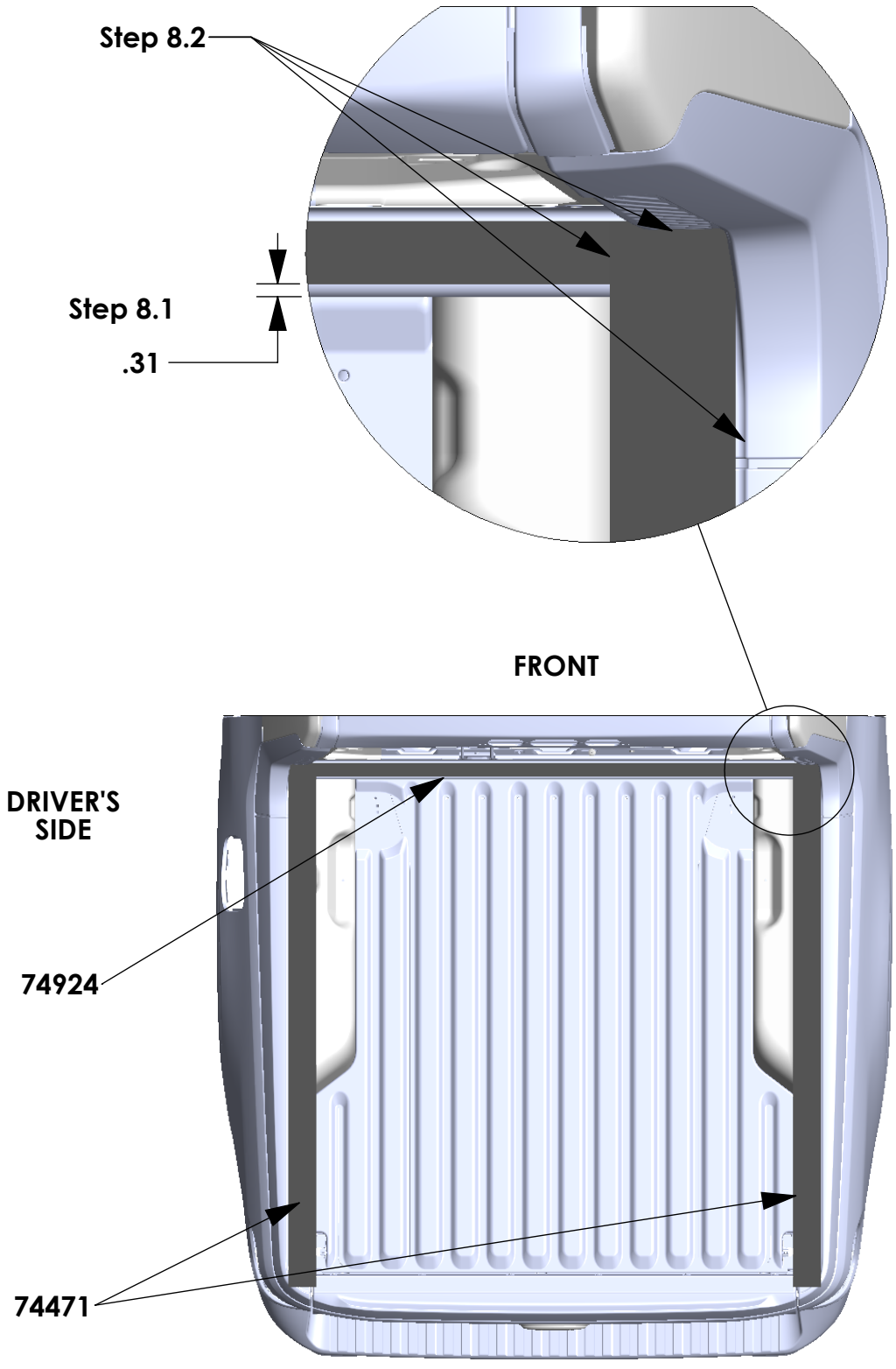
Step 8.2
INSTALL SIDE BED SEALS. ALIGN TO THE BACK OF THE CAB AND ENDS OF 74924 FOAM PIECE.

ANGLE THE BED SEALS ALONG THE LENGTH OF THE BED RAIL TO FOLLOW THE CONTOUR.

74471
(2 PLACES)

DO NOT TRIM EXCESS UNTIL TOPPER IS ON THE TRUCK.

TOP VIEW



STEP 9 - MARK AND DRILL HOLES FOR MOUNTING EXTRA FRAME. MARK HOLES AND REMOVE FRAMES TO DRILL HOLES IN FRONT OF BED AND BED RAILS. DRILL <u>ONLY</u> THROUGH THE PLASTIC ON BED RAILS, ABOUT 1/4".

Step 9.1
PLACE FRONT FRAME 74615 AT FRONT OF BED FLANGES UP. TOUCH BACK OF CAB AND CENTER BETWEEN BED RAILS. MARK (3) HOLES ALONG FRONT TO DRILL TO INSTALL PLUSNUTS. MAKE SURE HOLES IN FOAM LARGER THAN PLUSNUT. MARK (1) ON EACH SIDE TO DRILL TO INSTALL SPACERS.

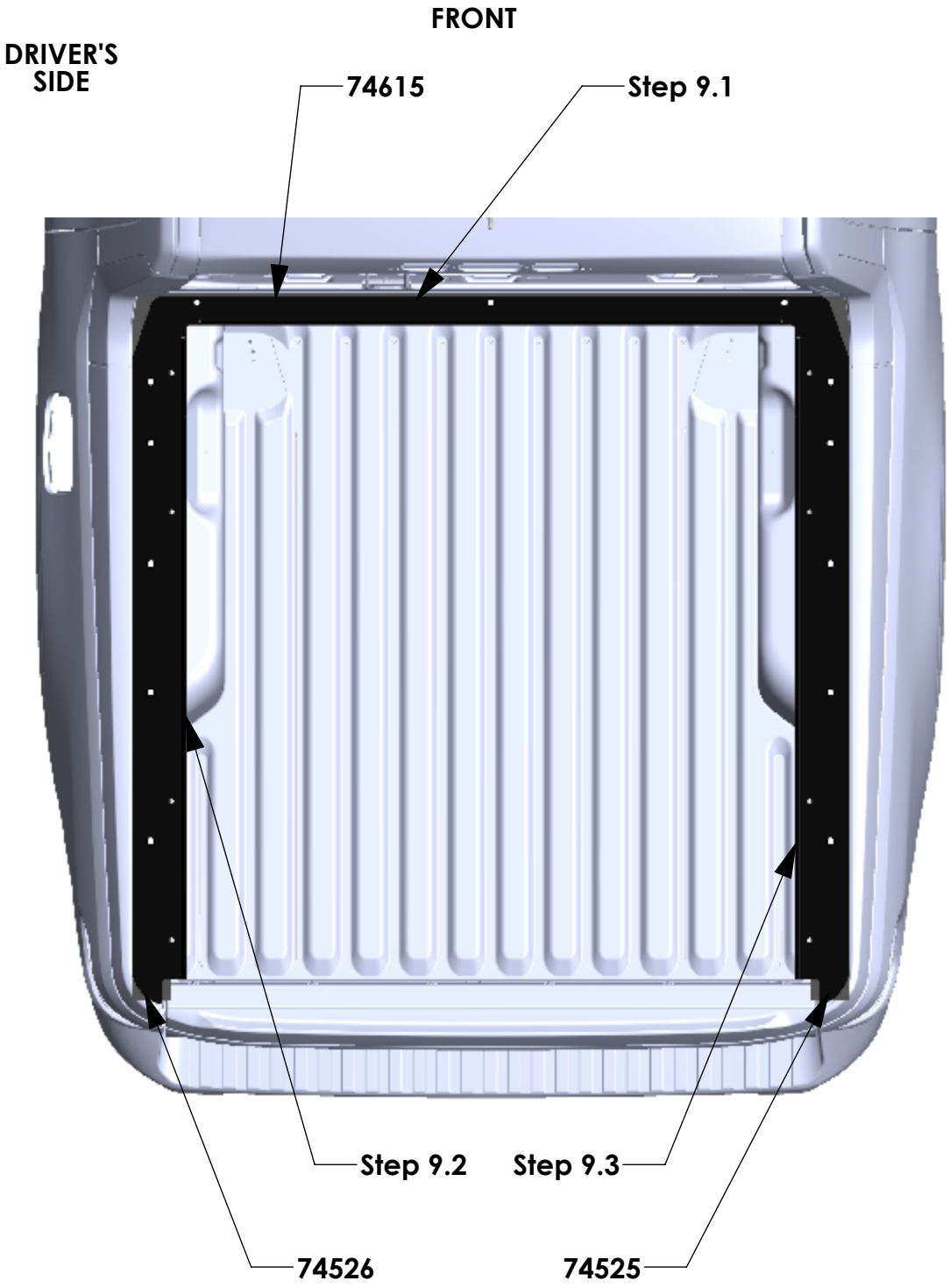
1/2" STEP DRILL BIT
1-3/16" HOLE SAW

Step 9.2
PLACE FRAME 74526 ON DRIVER SIDE BED RAIL FLANGES UP. TOUCH AND ALIGN WITH 74615 FRAME. MARK (4) HOLES SO YOU CAN DRILL TO INSTALL SPACERS.

1-3/16" HOLE SAW

Step 9.3
PLACE FRAME 74525 ON PASSENGER SIDE BED RAIL FLANGES UP. TOUCH AND ALIGN WITH 74615 FRAME. MARK (4) HOLES SO YOU CAN DRILL TO INSTALL SPACERS.

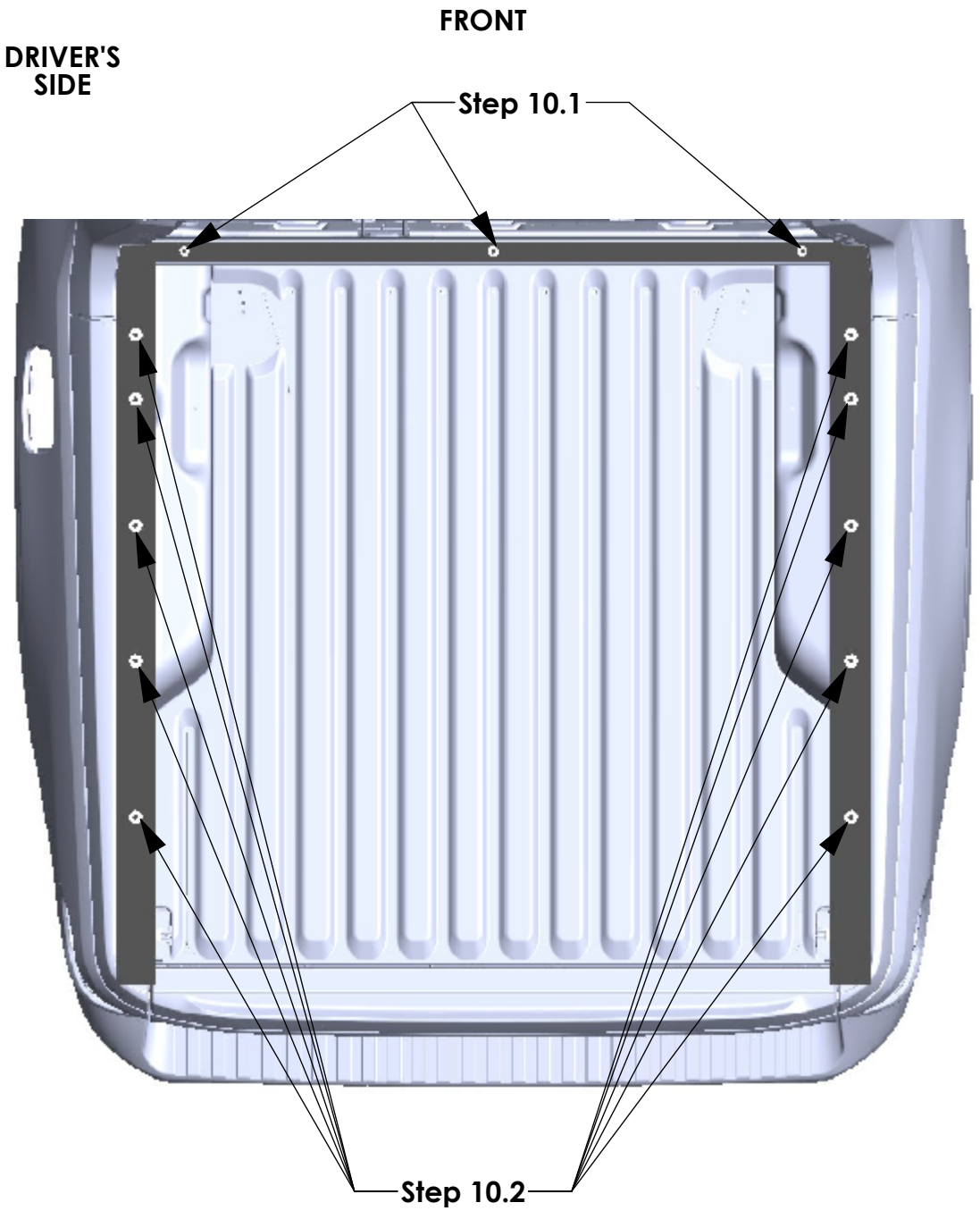
1-3/16" HOLE SAW



STEP 10 - INSTALL PLUSNUTS AND SPACERS.

Step 10.1
SPRAY PAINT NEWLY DRILLED HOLES. ADD SILICONE AROUND HOLE. INSTALL PLUSNUTS. MAKE SURE PLUSNUTS ARE SEATED ON METAL AND NOT FOAM.
FAS0091
SPRAY PAINT SILICONE (3 PLACES)
PLUSNUT SETTING TOOL OR AIR POWERED PLUSNUT SETTING GUN

Step 10.2
PLACE SPACER IN HOLES IN BED LINER.
FAS0831
(10 PLACES)

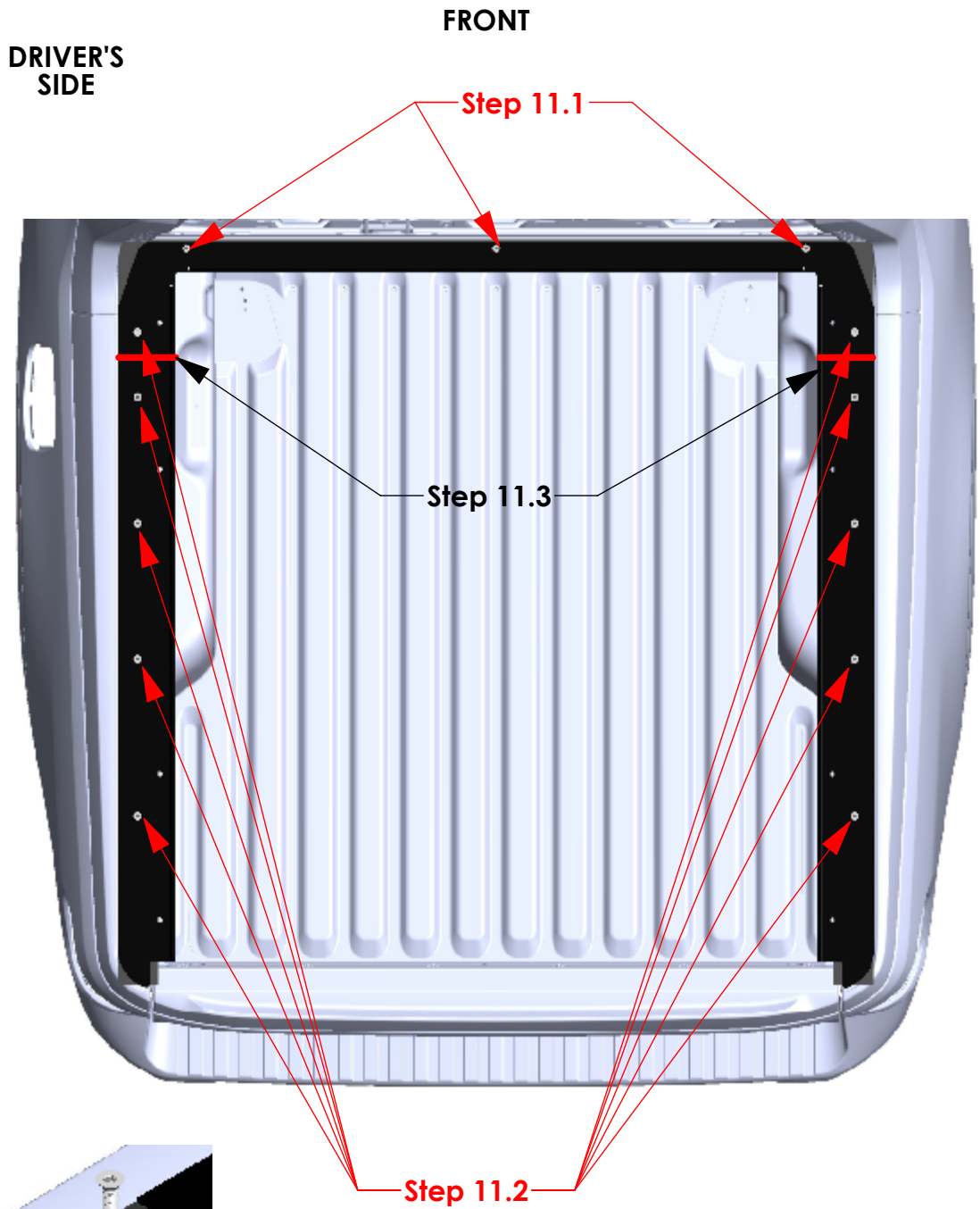


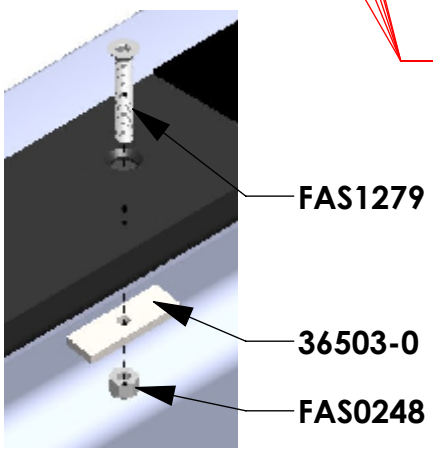
STEP 11 - PLACE FRAMES BACK ON BED AND INSTALL HARDWARE.

Step 11.1
FULLY TIGHTEN
ADD 73740 TO HOLE IN FRAME FOR WATER PREVENTION.
FAS1279
(3 PLACES)
T40 TORX BIT
IMPACT DRIVER

Step 11.2
FULLY TIGHTEN
FAS1279
36503-0
FAS0248
(10 PLACES)
T40 TORX BIT
IMPACT DRIVER
1/2" WRENCH

Step 11.3
INSTALL 73740 SEALANT WHERE 74525 AND 74526 BUTT UP TO 74615.





STEP 12 - ATTACH ADDITIONAL BED RAIL SEALS TO EXTRA FRAME.

Step 12.1
INSTALL SECOND SET OF SIDE BED SEALS. ALIGN WITH FLANGES OF EXTRA FRAMES AND BACK OF CAB.

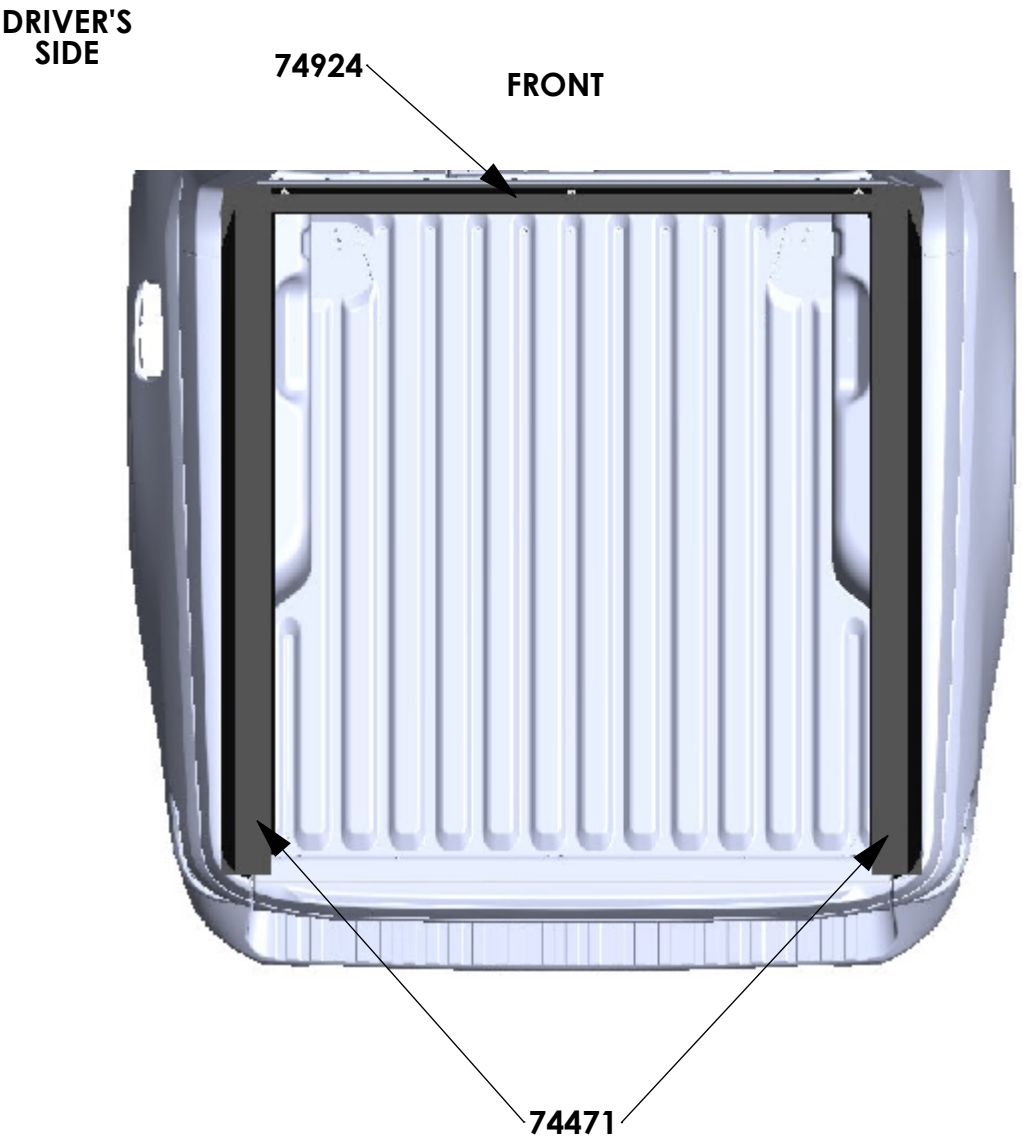
74471
(2 PLACES)

DO NOT TRIM EXCESS UNTIL TOPPER IS ON THE TRUCK.

Step 12.2
INSTALL ADDITIONAL TWO FRONT BED SEALS. PLACE ONE ALONG FLANGE OF FRONT EXTRA FRAME. CENTER BETWEEN SIDE FOAM PIECES. TRIM TO FIT BETWEEN AS NECESSARY. PLACE SECOND FOAM PIECE ON TOP OF FIRST PIECE.

74924
(2 PLACES)

TOP VIEW



STEP 13 - ATTACH TOPPER TO TRUCK BED

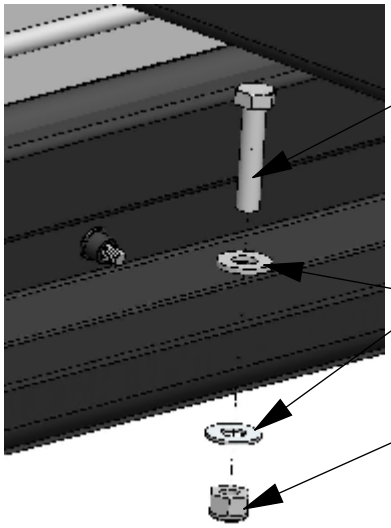
Step 13.1
SET TOPPER ONTO EXTRA FRAME ON TRUCK BED. ALIGN TOPPER MOUNTING HOLES IN FRAME WITH EXTRA FRAME.

NOTE: IT IS RECOMMENDED THAT YOU LOAD THE TOPPER ONTO A TRUCKBED WITH ONE OF THE FOLLOWING METHODS:

-HOIST: ATTACH TO THE ROOF RAILS OF THE TOPPER
-FORKLIFT: OPEN THE REAR DOOR AND SET FORKS ON THE ROOF BOWS
-MANUAL: HAVE 1 INDIVIDUAL AT EACH CORNER OF THE TOP AND CARRY OVER THE SIDES OF THE TRUCK. DO NOT SCRATCH THE VEHICLE.

Step 13.2
FASTEN THE TOPPER TO THE EXTRA FRAME.
FAS0242,
FAS0552 x2,
FAS0248

(8 PLACES)
1/2" SOCKET
1/2" WRENCH



MAKE SURE ALL FASTENERS ARE TIGHTENED!! INSTALLATION IS COMPLETE

STEP 14 - APPLY TRIM SEAL TO TAILGATE AND BACK OF TRUCK.

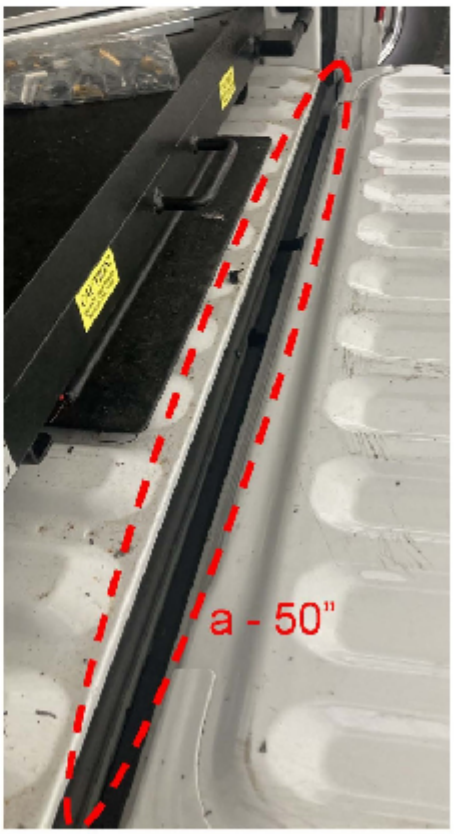
Step 14.1
APPLY TAILGATE SEAL AS SHOWN.
57698

Prep tailgate seal by cutting into the following lengths:

(x1) 50"
(x2) 14"
(x2) 21"

a) Apply trim seal bulb down along bottom of bed, and bulb side in on sides of bed that accepts the tailgate (x1 50" and x2 14" sections).
b) Apply trim seal to overhang on both ends of the tailgate (x2 21" sections). Refer to the images for placement relationship to the edge.

NOTE: IF YOU CLOSE THE TAILGATE AND CAN SEE IN THE BED, THE SEAL WAS INSTALLED IN THE WRONG LOCATION.



STEP 15 - APPLY TRIM SEAL AND FOAM TO INSIDE OF TAILGATE COVER.

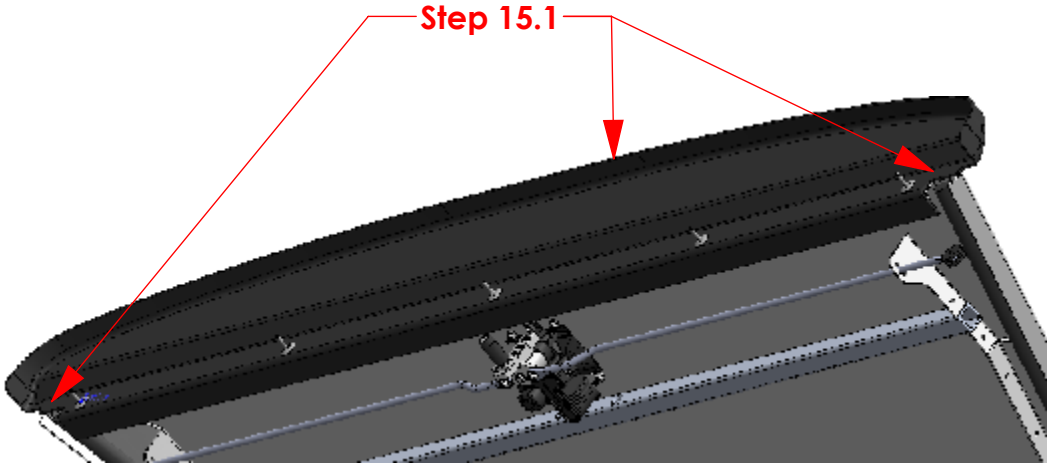
Step 15.1
CLEAN SURFACE WITH ALCOHOL WIPE AND PREP TAILGATE WITH 57392 ADHESION PROMOTER IN LOCATIONS WHERE FOAM WILL BE APPLIED.

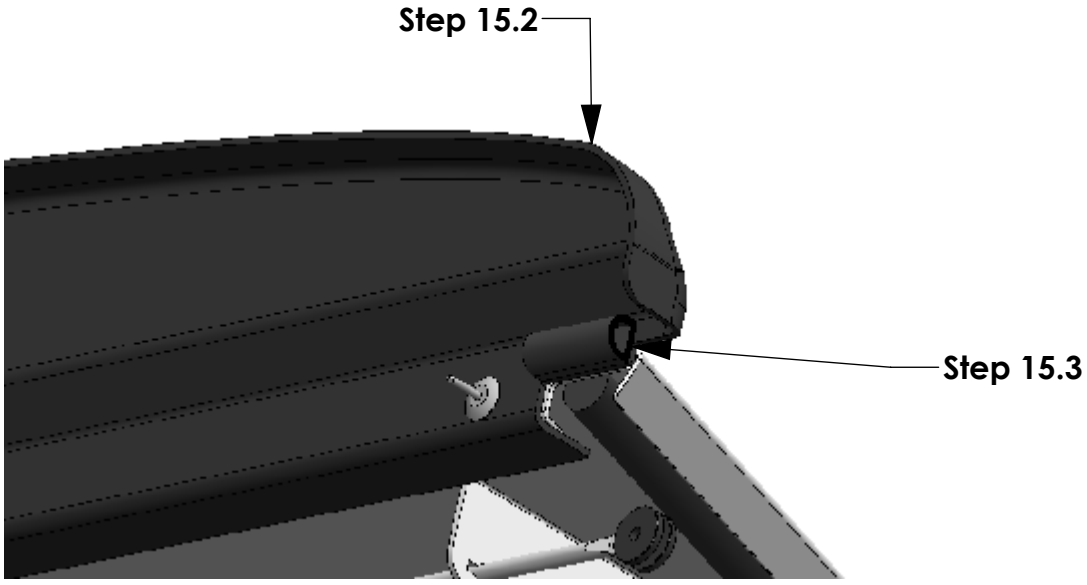
Step 15.2
APPLY TAILGATE SEAL AS SHOWN. USE A ROLLER AND APPLY 15 PSI OVER SEAL FOR PROPER ADHESION. 30020-0

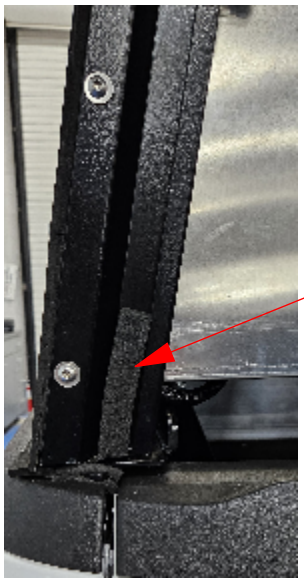
TRIM AS NECESSARY AFTER APPLICATION

Step 15.3
APPLY TAILGATE FOAM AS SHOWN ON BOTH SIDES OF INSIDE OF TAILGATE COVER. USE A ROLLER AND APPLY 15 PSI OVER SEAL FOR PROPER ADHESION. 75114 (CUT INTO 4; SAVE 2 FOR STEP 15.4)

Step 15.4
APPLY FOAM AS SHOWN ON BOTH SIDES OF REAR END OF TOPPER. USE A ROLLER AND APPLY 15 PSI OVER SEAL FOR PROPER ADHESION. 75114 (2)







STEP 16 - APPLY SILICONE TO INSIDE FRONT CORNERS.

Step 16.1
APPLY A 4" STRIP OF SILICONE TO BOTH INSIDE FRONT CORNERS

Introduction / Comments:

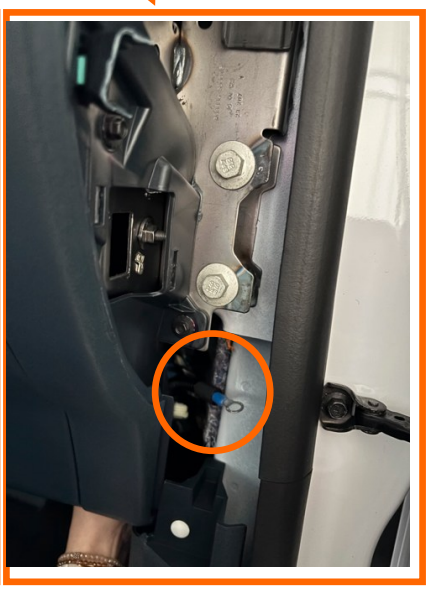
Install Instructions Topper 3rd Brake Light - Ford Maverick

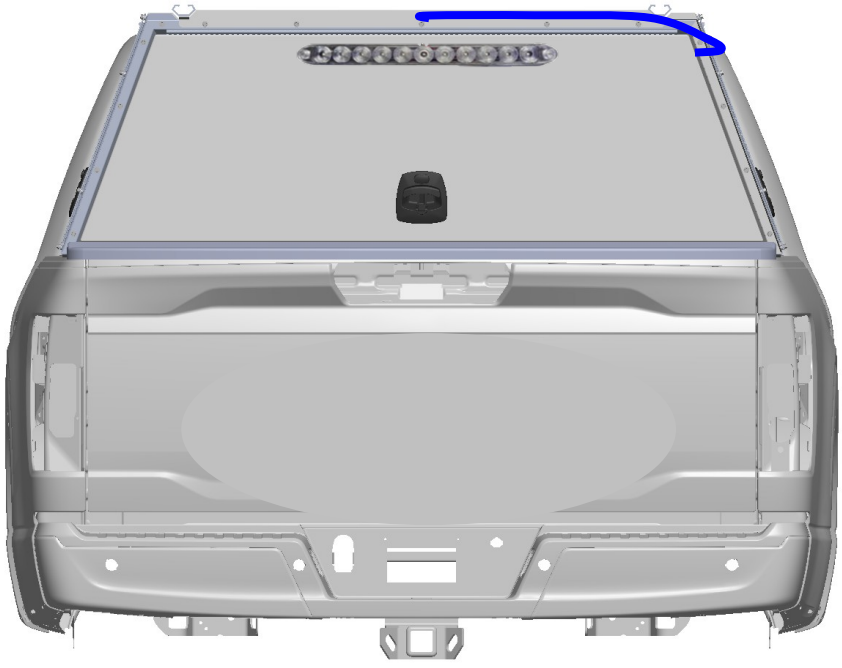
Note:

Read all instructions prior to installation. Review the Adrian Steel **GENERAL PRECAUTIONS PAGES (56638**) before attempting installation. Only personnel familiar with using electrical best practices should perform this install. Reference **ELECTRICAL BEST PRACTICES MANUAL (54479)** before attempting installation.

Installation Instructions for Topper 3rd Brake Light: Ford Maverick

Routing Overview





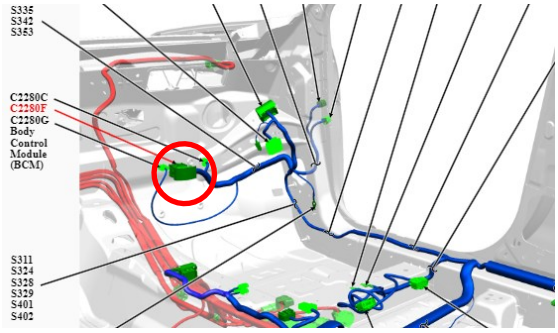
Color	Key - Items
Orange	Power Signal Location
Blue	Harness Routing
Yellow	Bed Wire Pass Thru

Step 1: Locate the brake light harness 71680.

Remove the fuse from the inline fuse holder until he end of the install.

Open the passenger side door. Use a trim tool to remove the trim panel circled in red.

Also, remove the side trim panel.

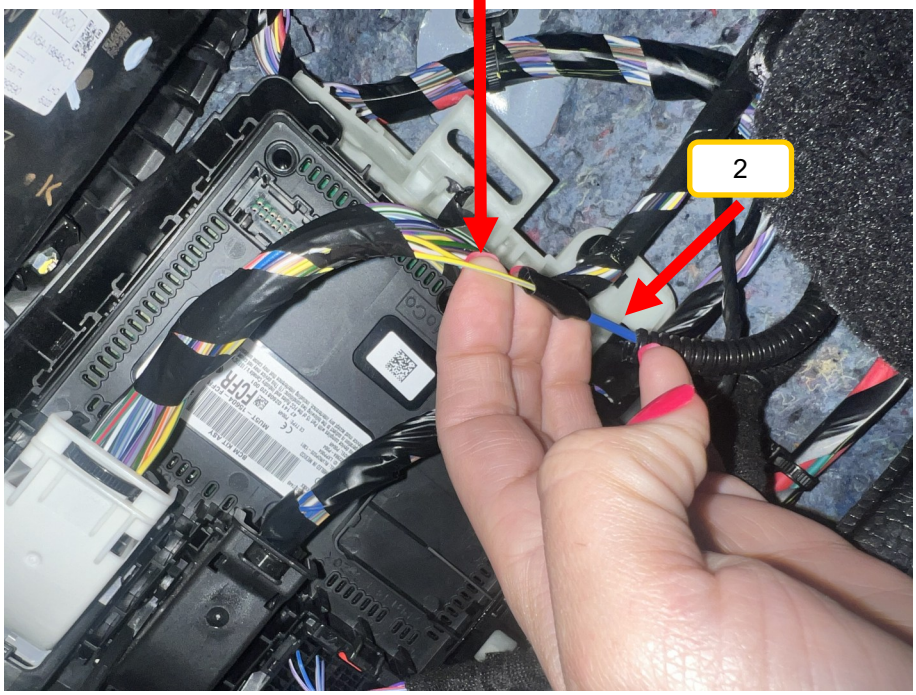


Step 2:
Locate the body control module behind the passenger's side dash panel, right footwell.

Locate the White connector (C2280F) on the BCM Module. Find pin 61. This wire will be Yellow / Gray. This is the high mounted stop lamp signal wire. Use a meter to be sure this is the correct wire.

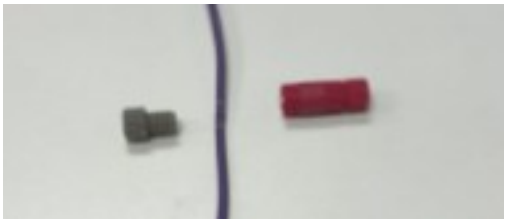
Separate the wire from the bundle (by your finger or a trim tool) to prepare it to be connected with the brake light harness.

Locate the posi-tap in the brake light harness bag.



Please Note:
- Arrow 1, shows the OEM yellow/gray wire.
- Arrow 2, shows wire that will connect using posi-tap
- This image is for reference. The use of electrical tape after the posi-tap is not needed.

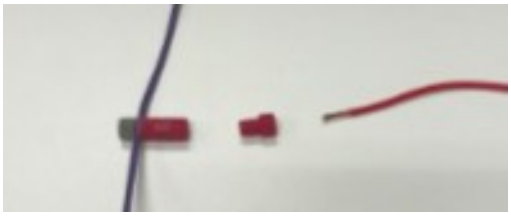
The red wire in the pictures is referencing the brake light harness.
The purple wire in the picture is referencing the OEM brake light signal wire.



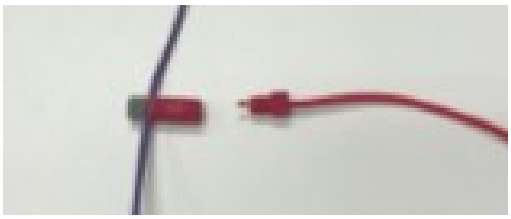
Step 3: Remove the grey cap on the posi-tap.

Push the OEM brake signal wire into the insert on the grey cap.

Twist the grey cap back onto the posi -tap with the OEM wire secured. The pin point on the posi-tap will puncture the OEM wire and obtain the signal.



Remove the red cap on the posi-tap.



Insert the blunt cut end of the brake light harness through the red cap.

Twist the cap back onto the posi-tap with the brake light harness secured.

The picture to the left is the actual installed posi-tap onto the OEM wire.

Be sure the connection is secure.

Step 3: On the passenger's side: once side trim has been removed, route the negative ring terminal from the harness upward.

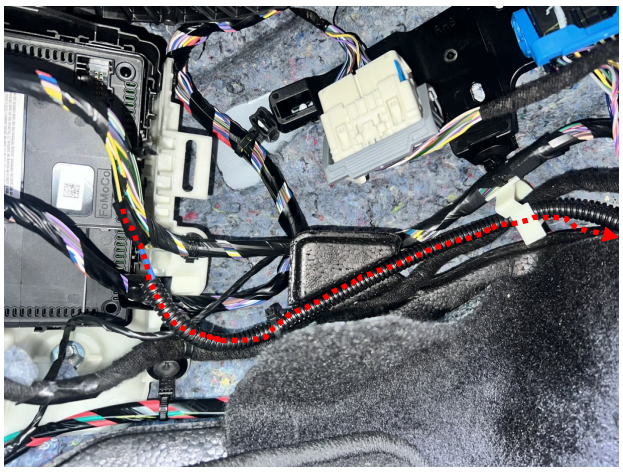
You will ground the negative cable in the area shown in the picture to the left.

Locate the fastener bag containing small tek screw and star washer (FAS0148 & FAS0066).

Insert the ring terminal through the star washer then through the ground ring terminal on the brake light harness.

Screw the tek screw into the frame like shown in the picture to the left.

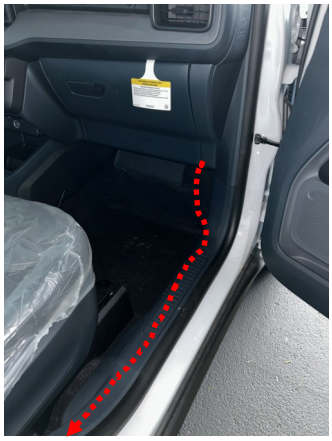
Be sure not to over tighten or under tighten the screw. Be sure there is a good connection by checking the connectivity of the ground with a multimeter. You can do this seeing if there is a resistance (Setting "Ω" on meter) between the OEM copper ground and the new ring terminal.



Step 4: Once proper ground connection has been made, begin routing the Brake Light Harness to the trim piece inside the passenger's side door.

Continue to route harness to backseat through trim piece.

Be sure the harness is not pulling on the posi-tap, and ensure there is a proper connection.



Step 5: Routing (Refer to routing diagrams at the beginning of the instructions)

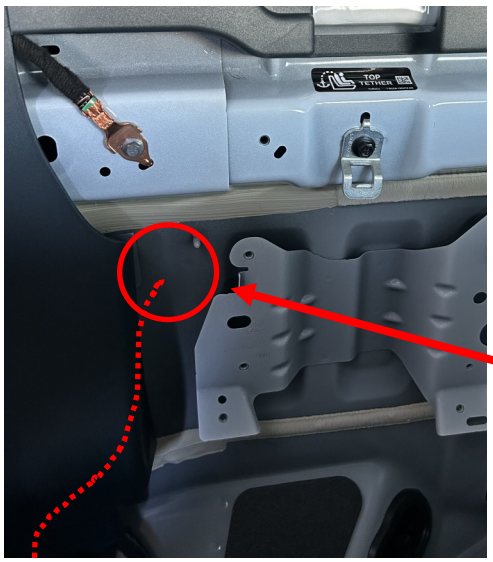
Remove trim piece circled in the image to the left.

Continue to route harness inside trim piece you just removed and route towards the back wall behind the backseat.

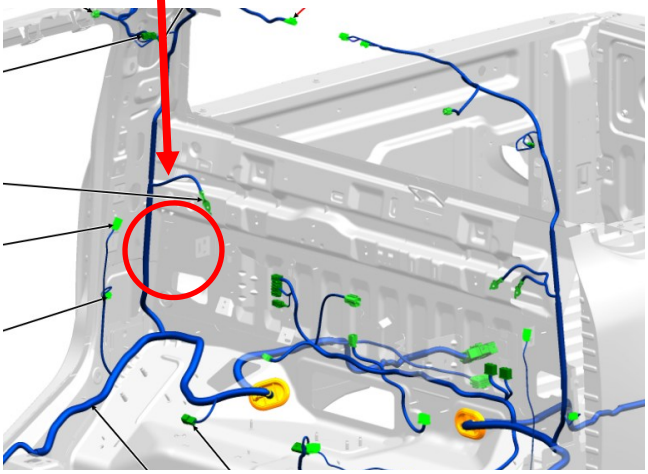
Pull the lever to pull the back of the backseat forward to access where to drill.

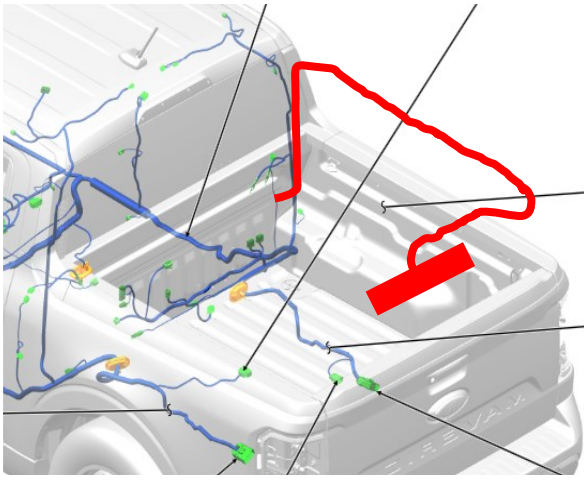
The drill spot is circled in the images to the left.

Use a step bit and drill a 3/8” hole to reach bed in location marked in images. Be sure to silicon seal after everything has been routed, secured, and coiled up.



CHECK BEHIND ALL DRILL LOCATIONS





Step 6: Routing continued
Continue routing the brake light harness inside the topper, to the light.

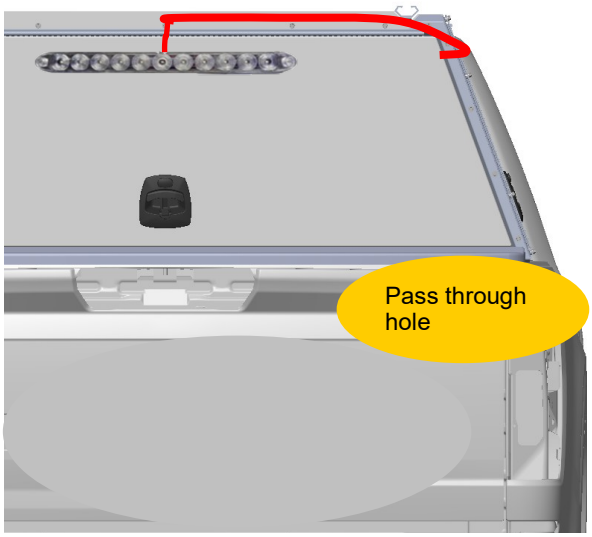
The harness should run up along the passenger's side rear cavity, then across the top cavity to the light (Red line shown in image).

Be sure to leave extra wire from the brake light to the topper rails before securing. This ensures the wires wont brake when the topper door opens and closes.

Secure harness using stud mount zip ties.

Connect the harness to the light:
Plug the connectors together. Pull connectors lightly to ensure they do not come apart.

Be sure the red wire on the harness connects to the black wire on the light. Then the black wire on the harness connects to the white wire on the light.



Insert the fuse into the inline-fuse holder on the brake light harness.

The install is now complete.

Check that the brake light comes on when the brake pedal is pushed, then back off once pedal is released.