



ADRIAN STEEL®

Cargo Management Solutions for Commercial Vehicles

ALUM. TOPPER, W/ SIDE DOORS AND HINGED REAR BARN DOORS

PRODUCT WEIGHT

224.21 LBS

WIDTH X DEPTH X HEIGHT

53" X 55" X 46"

CAPACITY

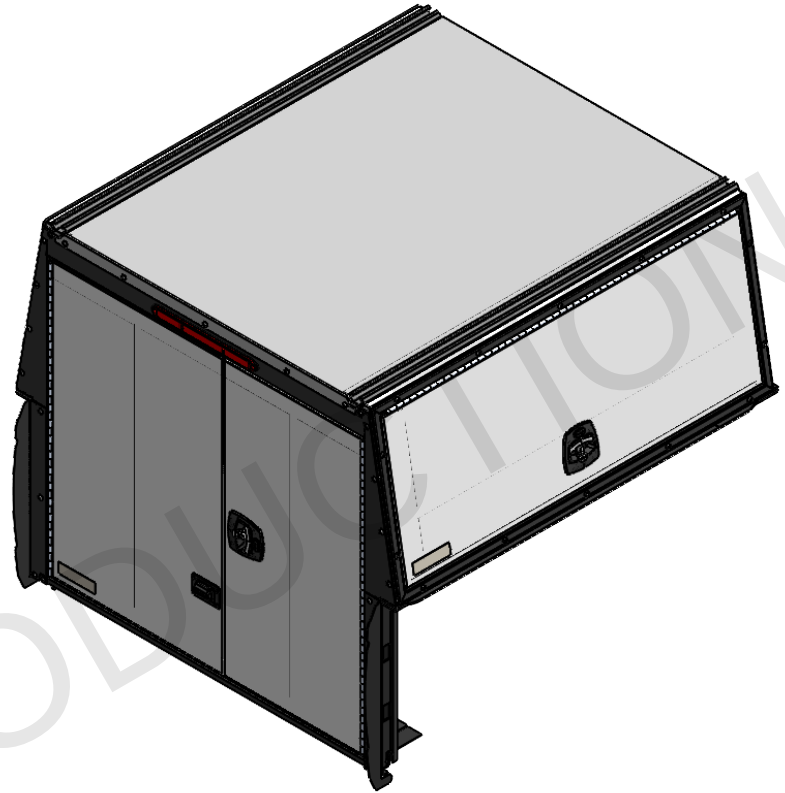
200# ROOF CAPACITY

COLOR

**WHITE PANELS
BLACK TRIM**

CATALOG NUMBER

**TFKMAV154KM23W &
TFKMAV154JM23W**



PRODUCT FEATURES

THIS IS ADRIAN STEEL'S STANDARD ALUMINUM TOPPER FOR 4.5' BED FORD MAVERICK PICKUP. PLEASE NOTE THAT THIS IS DESIGNED TO FIT THE 2022 TO CURRENT M.Y. PICKUP BED.

TOPPER ROOF RAIL IS STANDARD, ALLOWING FOR HD-UTILITY, GRIP LOCK AND PROLIFT LADDER RACKS TO BE MOUNTED TO THE ROOF. MORE OPTIONS TO COME.

SIDE DOOR TOOLBOX MOUNTING IS AN OPTIONAL ACCESSORY FOR THIS KIT.

KIT INCLUDES MOUNTING HARDWARE, VEHICLE SPECIFIC TAILGATE COVER AND OEM SPECIFIC 3rd BRAKE LIGHT HARNESS. ALL 3 HANDLES WILL BE KEYED ALIKE.

TOPPER PANELS ARE 0.080 SHEET ALUMINUM, WITH MOST STRUCTURAL COMPONENTS CONSISTING OF 0.125 SHEET & EXTRUDED ALUMINUM.

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

**ALUM. TOPPER, W/ SIDE DOORS AND
HINGED REAR BARN DOORS****CATALOG NUMBER TFKMAV154KM23W****TOOLBOX ACCESSORIES THAT WILL WORK WITH THIS PRODUCT.****THE FIRST SET OF PARTS IS INDIVIDUALLY BOXED COMPONENTS.
THE SECOND SET CONTAINS COMPLETE SOLUTIONS KITS (i.e. LEVEL 8'S).**

CATALOG NUMBER	DESCRIPTION (smart)
INTERIOR TOOLBOX COMPONENTS	
TTBBK1749020	TOP, TBOX,BODY KIT,174920
TTBBK174920	TBOX, BODY KIT, 174920
TTBSDK1720	TBOX, SPL DIV KIT, 1720
TTBSK1725	TBOX, SHELF KIT, 1725
TTBSK1749	TBOX, SHELF KIT, 1749
TTBTDK1720	TBOX, TALL DIV KIT, 1720
INTERIOR TOOLBOX CONFIGURATIONS (REFER TO WEBSITE)	
TTB174920C01	TBOX CONFIG, 01
TTB174920C02	TBOX CONFIG, 02
TTB174920C03	TBOX CONFIG, 03
TTB174920C04	TBOX CONFIG, 04
TTB174920C05	TBOX CONFIG, 05
TTB174920C06	TBOX CONFIG, 06
TTB174920C07	TBOX CONFIG, 07
TTB174920C08	TBOX CONFIG, 08
TTB174920C09	TBOX CONFIG, 09
TTB174920C10	TBOX CONFIG, 10
TTB174920C11	TBOX CONFIG, 11



**ALUM. TOPPER, W/ SIDE DOORS AND
HINGED REAR BARN DOORS**

CATALOG NUMBER TFKMAV154KM23W

TOOLBOX ACCESSORIES THAT WILL WORK WITH THIS PRODUCT.

**THE FIRST SET OF PARTS IS INDIVIDUALLY BOXED COMPONENTS.
THE SECOND SET CONTAINS COMPLETE SOLUTIONS KITS (i.e. LEVEL 8'S).**

CATALOG NUMBER	DESCRIPTION (smart)
INTERIOR TOOLBOX COMPONENTS	
TTBBK1449020	TOP, TBOX, BODY KIT, 144920
TTBBK144920	TBOX, BODY KIT, 144920
TTBSDK1420	TBOX, SPL DIV KIT, 1420
TTBSK1425	TBOX, SHELF KIT, 1425
TTBSK1449	TBOX, SHELF KIT, 1449
TTBTDK1420	TBOX, TALL DIV KIT, 1420
INTERIOR TOOLBOX CONFIGURATIONS (REFER TO WEBSITE)	
TTB144920C01	TBOX CONFIG, 01
TTB144920C02	TBOX CONFIG, 02
TTB144920C03	TBOX CONFIG, 03
TTB144920C04	TBOX CONFIG, 04
TTB144920C05	TBOX CONFIG, 05
TTB144920C06	TBOX CONFIG, 06
TTB144920C07	TBOX CONFIG, 07
TTB144920C08	TBOX CONFIG, 08
TTB144920C09	TBOX CONFIG, 09
TTB144920C10	TBOX CONFIG, 10
TTB144920C11	TBOX CONFIG, 11

**ALUM. TOPPER, W/ SIDE DOORS AND
HINGED REAR BARN DOORS****CATALOG NUMBER TFKMAV154KM23W****LADDER RACK ACCESSORIES THAT WILL WORK WITH THIS PRODUCT.**

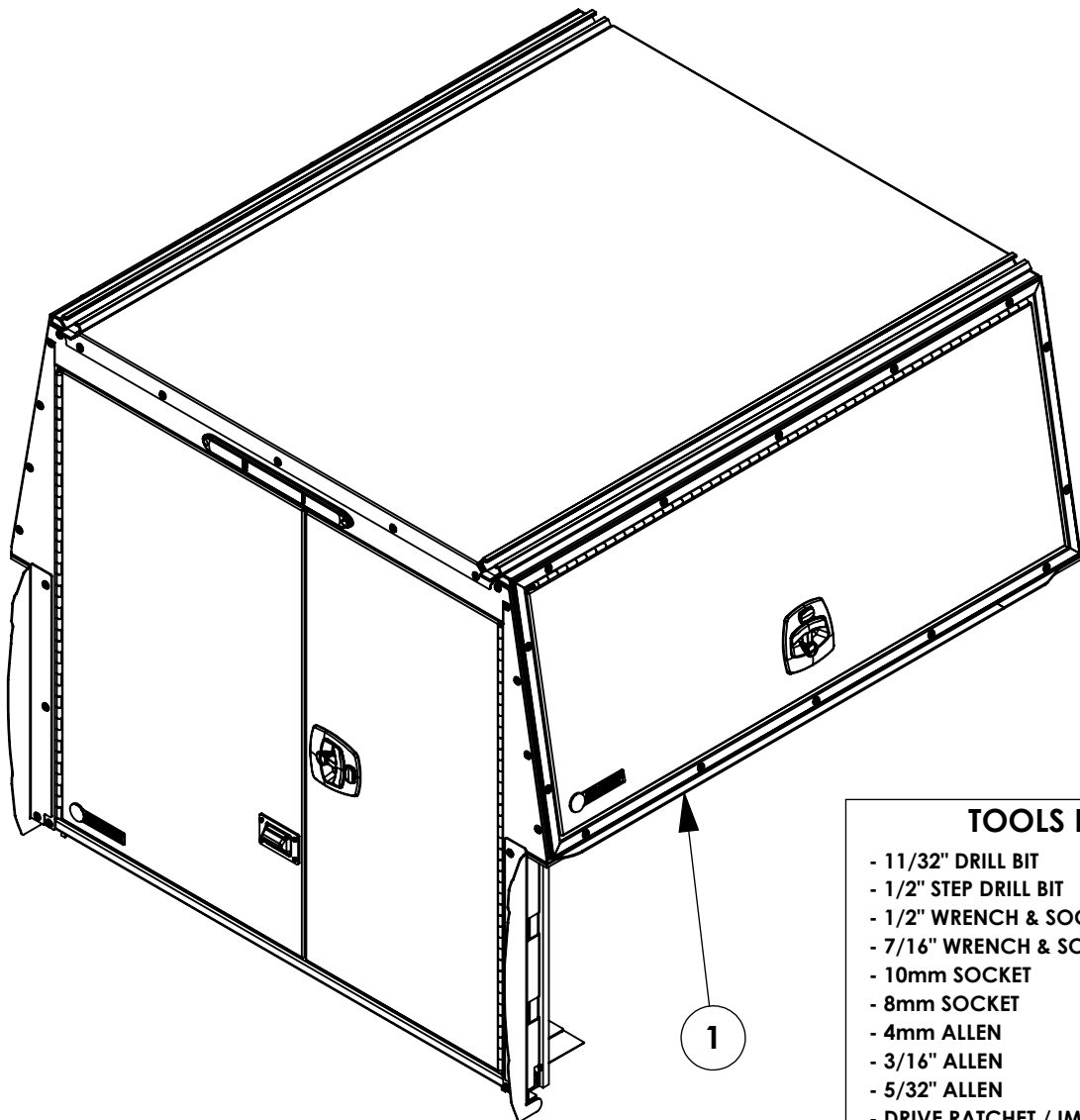
**THE FIRST SET OF PARTS IS INDIVIDUALLY BOXED COMPONENTS.
THE SECOND SET CONTAINS COMPLETE SOLUTIONS KITS (i.e. LEVEL 8'S).**

CATALOG NUMBER	DESCRIPTION (smart)
LADDER RACK COMPONENTS	
MAVRMBK4W	MAV RAIL MNT BKT KT,4,W
2BARTOPW	2BAR UTILITY RACK, TOP, W
PLSDPSLT4W	PROLIFT,STD,PS,LOW T,4,W
PLSDDSLT4W	PROLIFT,STD,DS,LOW T,4,W
PLMDPSLT4W	PROLIFT,MAX,PS,LOW T,4,W
PLMDDSLT4W	PROLIFT,MAX,DS,LOW T,4,W
PLMDPSMT4W	PROLIFT,MAX,PS,MID T,4,W
PLMDDSM4W	PROLIFT,MAX,DS,MID T,4,W
GL-TOPPS	GRIP-LOCK,COMPACT VAN,PS
GL-TOPDS	GRIP-LOCK,COMPACT VAN,DS
LADDER RACK KITS	
PLS61LTMAV	PROLIFT SGL STD DR MAV TOP
PLS63LTMAV	PROLIFT DBL STD DR MAV TOP
GL61LTMAV	SGL GRIP-LOCK, MAV TOP
GL63LTMAV	DUAL GRIP-LOCK, 4'6" MAV
2B6TOPW	2-BAR UTY RK TOP 6" UPRT
PLM61LTMAV	PROLFT SGL SIDE MAX MAV
PLM63LTMAV	PROLFT DUAL SIDE MAX MAV

**ALUM. TOPPER, W/ SIDE DOORS AND
HINGED REAR BARN DOORS****CATALOG NUMBER TFKMAV154HM23W****LIGHTING ACCESSORIES THAT WILL WORK WITH THIS PRODUCT**

CATALOG NUMBER	DESCRIPTION (smart)
LIGHITNG KITS	
78956	KIT,P&P WI TOP INT LGT MV
78957	KIT,P&P WI TOP 1PS 36" MV
78958	KIT,P&P WI TOP 1DS 36" MV
78959	KIT,P&P WI TOP 2 36" MAV

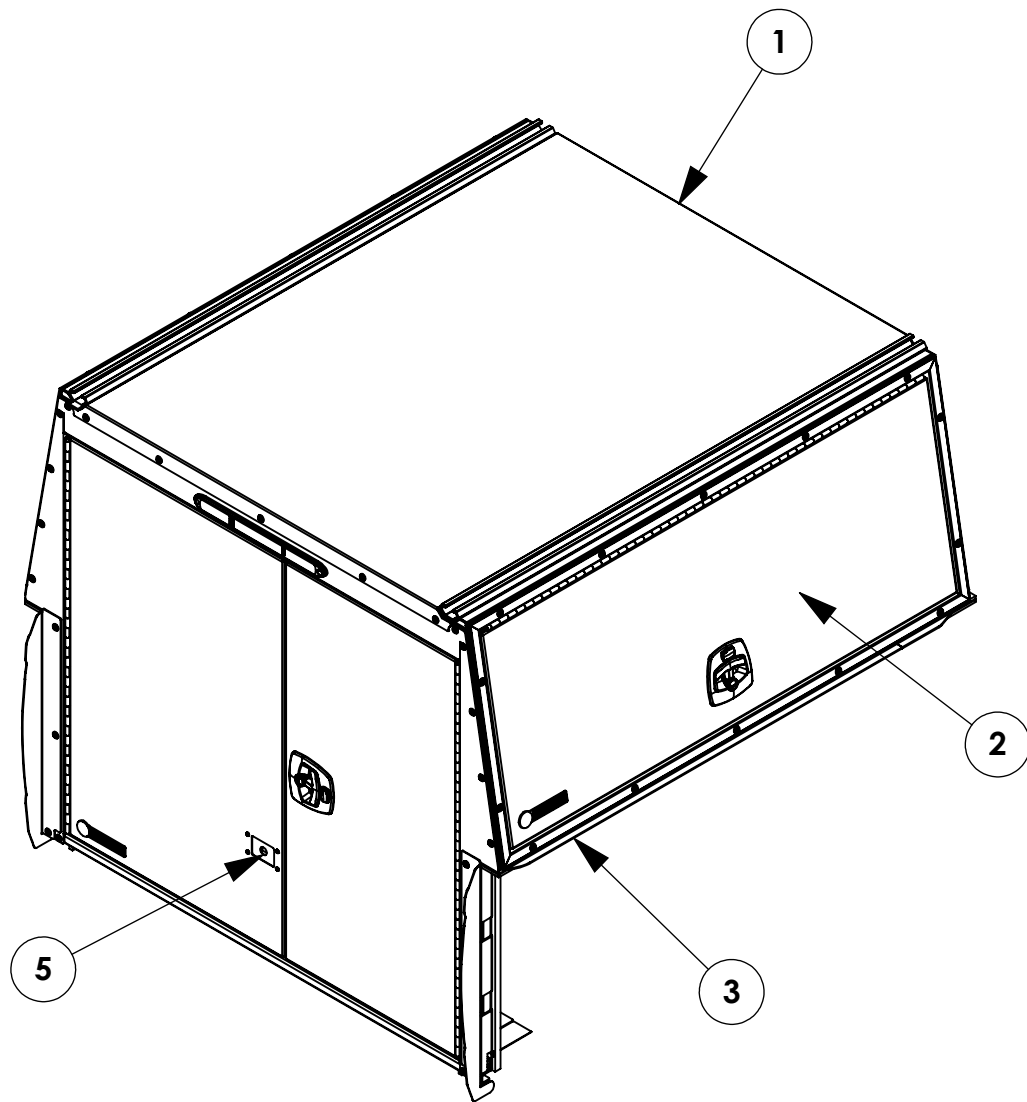
<i>INSTR. NUMBER</i> : 78810	<i>PG:</i> 1	<i>REV:</i> B	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
<i>PART NUMBER</i> : TFKMAV154KM23W			1	THKMAV154BM23	HDW KIT, TFKMAV154_M23W	1
			2	TCKMAV1BM23	TOP, BD CLOSE KIT, F-150	1
<i>PART & DESC.</i> • ASM INS, TFKMAV154KM23W & TFKMAV154JM23W			15	TRK5423W	TOP, ROOF KIT,54",23,W	1
			16	TSK54M23W	TOP, SIDE KIT,54",M,23,W	2
			17	TEKMAV1K	HDW KIT, CAM, F-150, W/ADPTR	1
			18	TMLHK	Topper Mechanical Lock Hatch Kit	1



TOOLS NEEDED:

- 11/32" DRILL BIT
- 1/2" STEP DRILL BIT
- 1/2" WRENCH & SOCKET
- 7/16" WRENCH & SOCKET
- 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

<i>INSTR. NUMBER</i> : 78810	<i>PG.</i> 2	<i>REV.</i> B	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.			
			1	TRK5423W	TOP, ROOF KIT,54",23,W	1			
			<i>PART NUMBER</i> : TFKMAV154JM23W			2	TSK54M23W	TOP, SIDE KIT,54",M,23,W	2
			<i>PART</i> • ASM INS, TFKMAV154KM23W & <i>DESC.</i> • TFKMAV154JM23W			3	THKMAV154BM23	HDW KIT, TFKMAV154_M23W	1
						4	TCKMAV1BM23	TOP, BD CLOSE KIT, F-150	1
						5	TEKMAV1J	HDW KIT, CAMERA, MAV ANALOG	1
						19	TMLHK	Topper Mechanical Lock Hatch Kit	1



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 HARNESSSES 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.

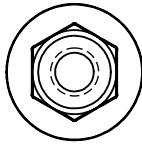
PLUSNUT INSTALLATION - A PLUSNUT GUN IS RECOMMENDED FOR PLUSNUT INSTALLATION FOR ITS PRODUCTION SPEED. HOWEVER, A PLUSNUT SETTING TOOL CAN ALSO BE USED (P/N: 22200-0).

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

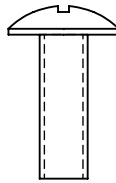
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FASTENERS USED

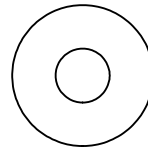
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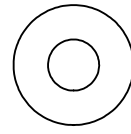
FAS0055
NUT, HEX NLK LFG,
1/4-20, ZP
QTY: 20



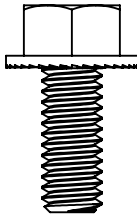
FAS0062
SCREW, THP
1/4-20X.75, G5ZP
QTY: 10



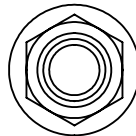
FAS0067
WASHER, FLAT USS,
1/4, ZP
QTY: 10



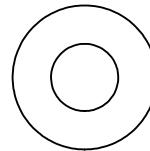
FAS0234
WASHER, FLAT,
1/4, SST
QTY: 30



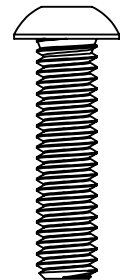
FAS0438
SCREW, HFLNG,
5/16-18X.75, ZP
QTY: 12



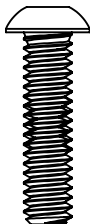
FAS0440
NUT, HEX NLK FLG,
5/16-18, ZP
QTY: 12



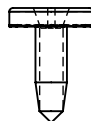
FAS0552
WASHER, FLAT,
5/16, SST
QTY: 8



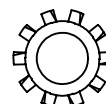
FAS0919
SCREW, BHCS,
5/16-18X1.25, SS
QTY: 8



FAS0920
SCREW, BHCS,
1/4-20X1.0, SS
QTY: 30



FAS0148
SCREW, SELF DRILL/TAP,
PAN PH. HD.,
#10X0.5, NI-ZN
QTY: 1



FAS0066,
WASHER, LOCK,
EXT. TOOTH, 1/4
QTY: 1

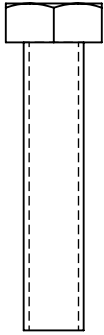
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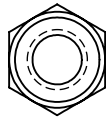
7

FASTENERS USED

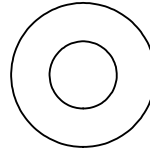
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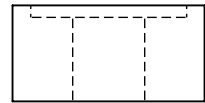
FAS0242
SCREW, HEX HD,
5/16-18X1.50, SS
QTY: 8



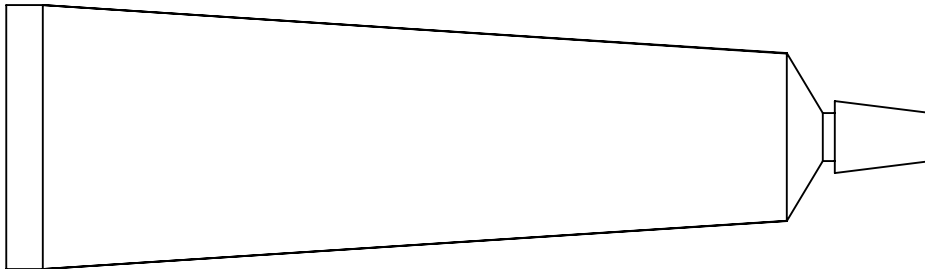
FAS0248
NUT, NYLON INSERT
LOCK, 5/16-18, SST
QTY: 18



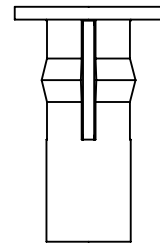
FAS0552
WASHER, FLAT,
5/16, SST
QTY: 16



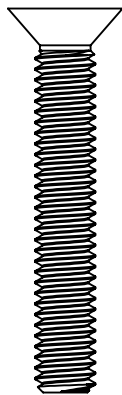
FAS0831
1/2" SHORT SPACER
QTY: 10



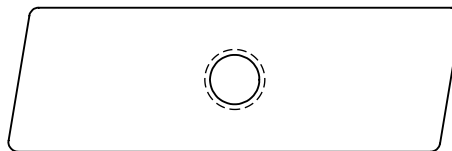
26618-0
SILICONE SEALANT
QTY: 2



FAS0091
PLUSNUT, 5/16
QTY: 3



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

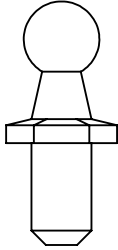


36503-0
RETAINER BAR,
5/16-18X2-3/8
QTY: 10

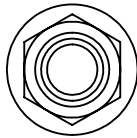
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FASTENERS USED

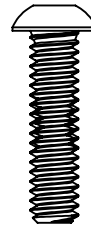
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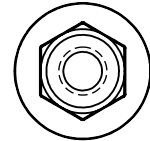
**30015-0
THREADED BALL STUD
QTY: 4**



**FAS0861
NUT, HEX NLK FLG,
5/16-18, SS
QTY: 4**



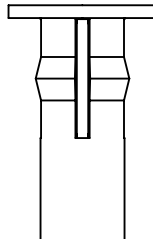
**FAS0920
SCREW, BHCS,
1/4-20X1.0, SS
QTY: 14**



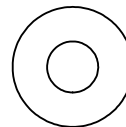
**FAS0055
NUT, HEX NLK LFG,
1/4-20, ZP
QTY: 10**



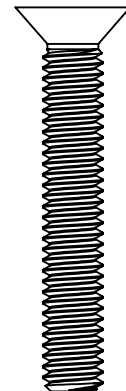
**FAS0711
SPRING, CLIP,
1/4-20, BK PH
QTY: 4**



**FAS0222
PLUSNUT,
5/16-18, PB WS450
QTY: 2**



**FAS0234
WASHER, FLAT,
1/4, SST
QTY: 14**



**FAS1279
SCREW, FHT,
5/16-18X2.00, SS
QTY: 2**

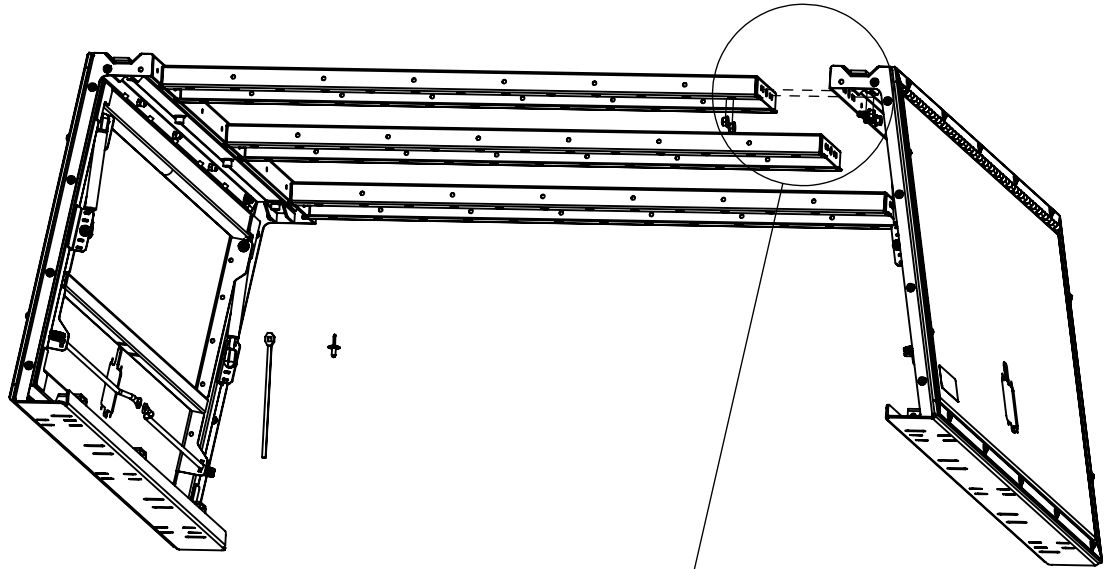
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STEP 1 - ASSEMBLE BODY FRAME: SIDES AND CROSSBOWS.

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

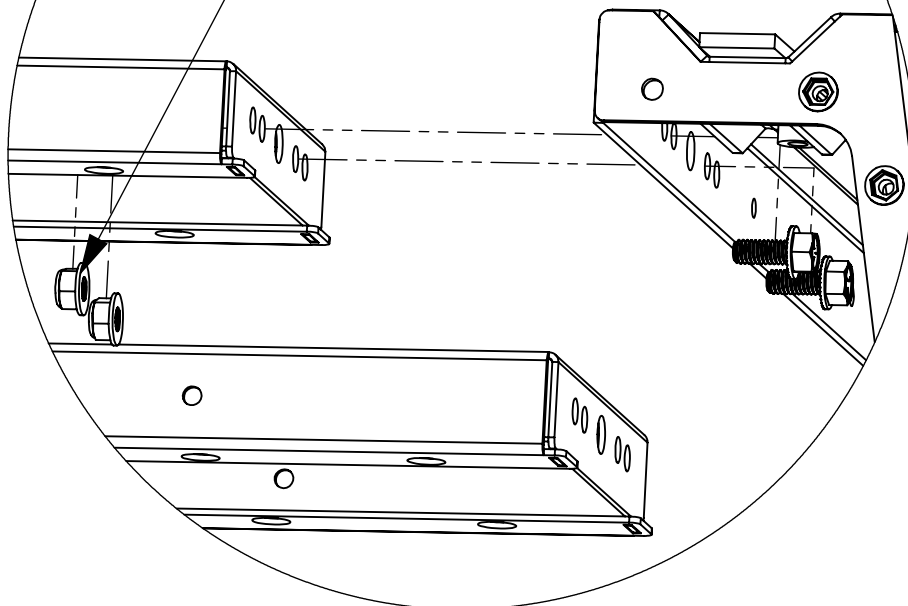
Step 1.2
OPEN TOPPER
ROOF KIT
[TRK5423W]

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



Step 1.3

NOTE: Nut inboard



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

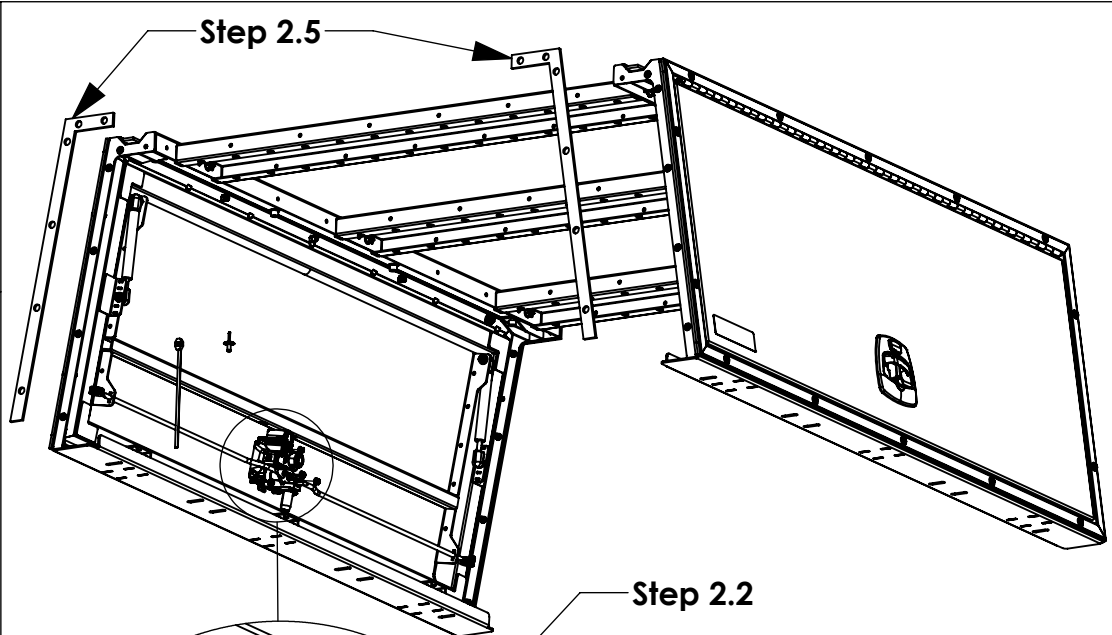
Step 2.4
ADJUST HANDLE
POINT TO ALIGN
WITH CASTING LINE
ON HANDLE BODY
(APPROX: 1.0")

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



Step 2.2

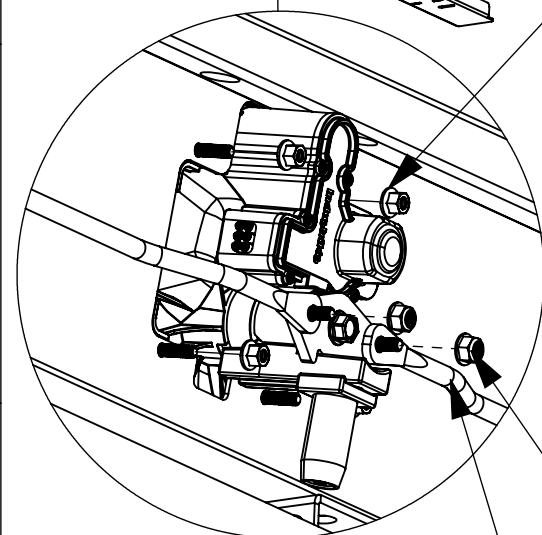


STEP 2.2 & 2.3
HAVE DIFFERENT
SIZED FASTENERS



Step 2.3

NOTE THAT ORIENTATION
OF LOCKRODS IS CRITICAL

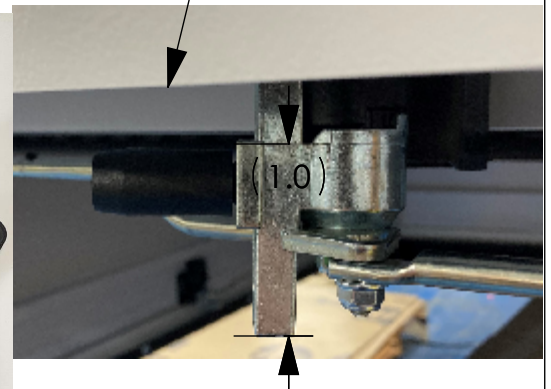


Step 2.1

Step 2.6



Step 2.4



STEP 3 - ATTACH FRONT PANEL

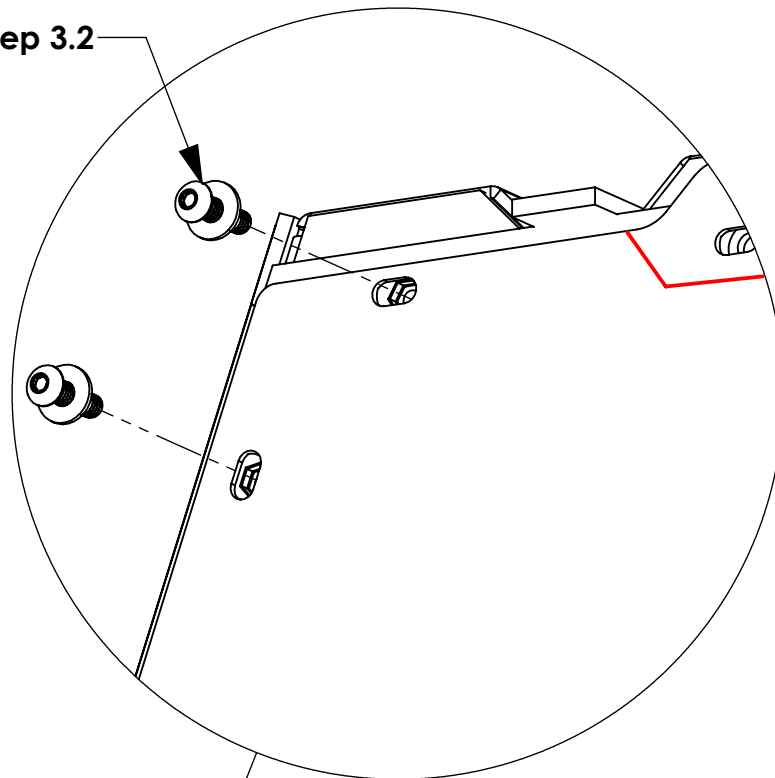
Step 3.1
OPEN TOPPER
CLOSURE KIT
[TCKMAV1BM23]

Step 3.2
ATTACH FRONT
PANEL

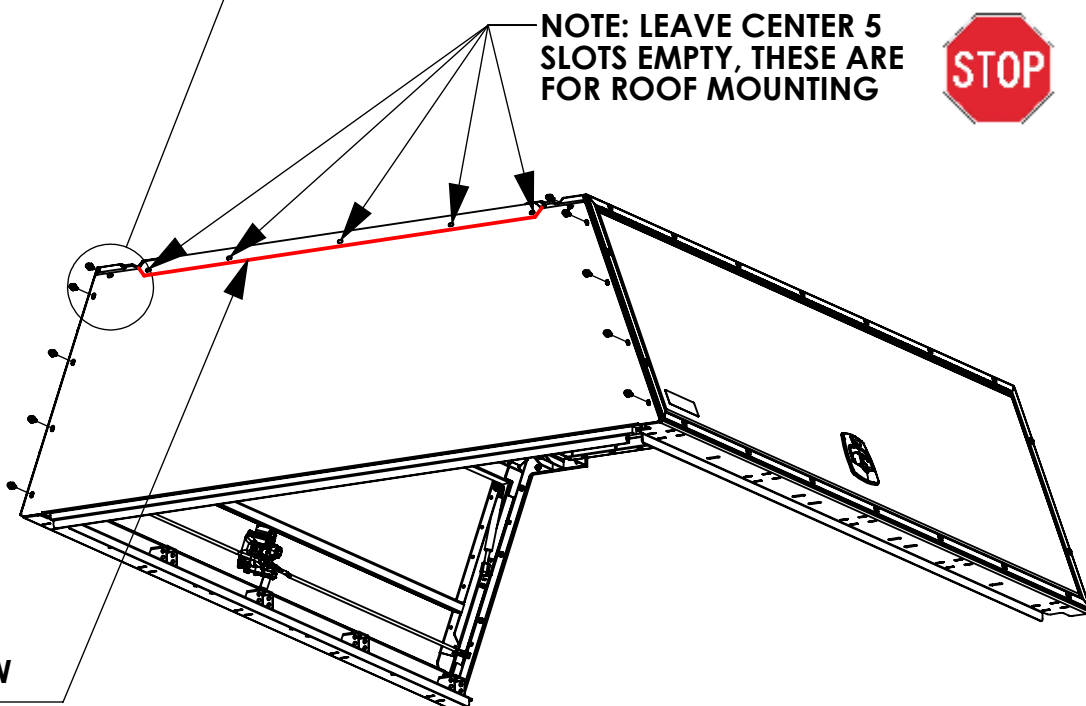
HAND TIGHTEN
FAS0234,
FAS0920
(10 PLACES)

DO NOT
TIGHTEN UNTIL
AFTER STEP 7

Step 3.2



NOTE: LEAVE CENTER 5
SLOTS EMPTY, THESE ARE
FOR ROOF MOUNTING

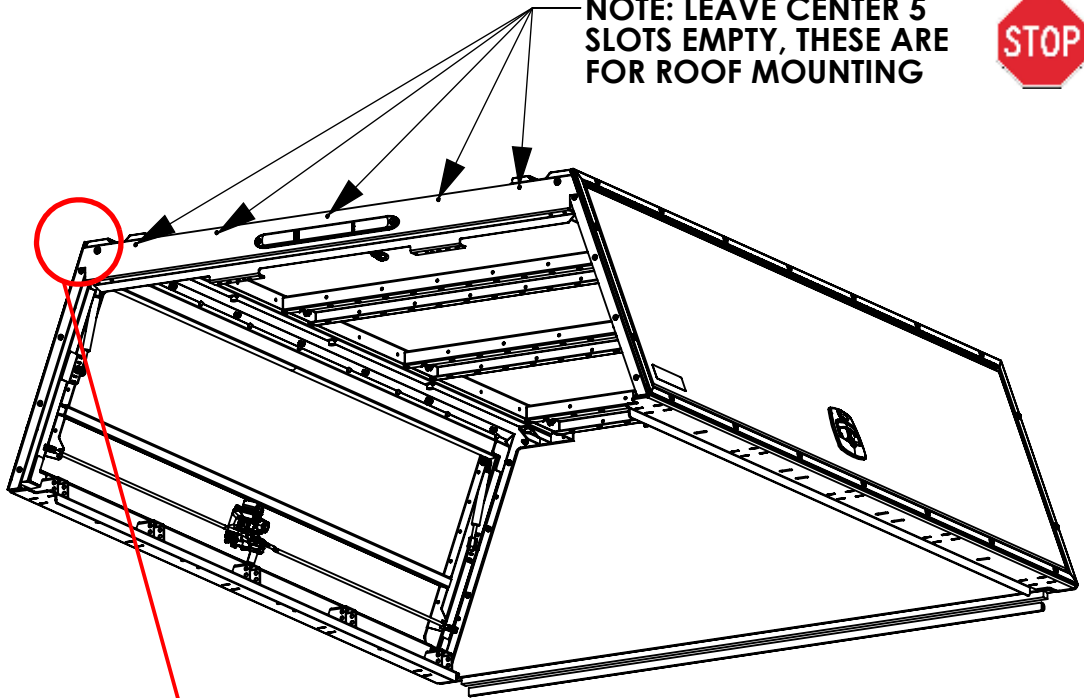


APPLY A STRIP OF
SILICONE THEN
RUNS THE LENGTH
OF THE FRONT
PANEL JUST BELOW
THE SCREWS

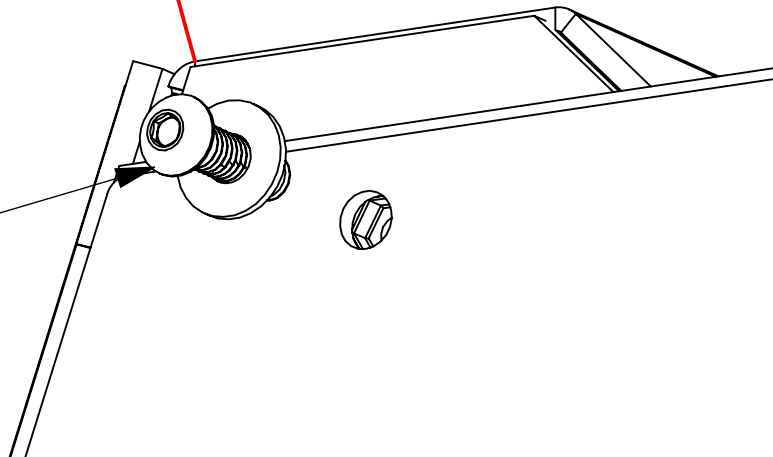
STEP 4 - ATTACH TOP BRACKET ASSEMBLY**Step 4
ATTACH TOP
BRACKET ASSM**

HAND TIGHTEN
FAS0234,
FAS0920
(2 PLACES)
5/32" ALLEN

**NOTE: LEAVE CENTER 5
SLOTS EMPTY, THESE ARE
FOR ROOF MOUNTING**

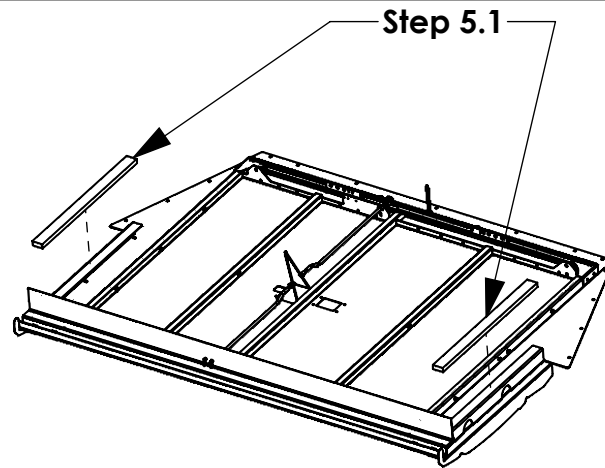


Step 4



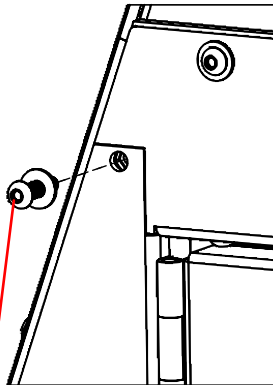
STEP 5 - ATTACH BARN DOOR DS AND PS ASSEMBLIES

Step 5.1
ALIGN 77757
FOAM [x2] AT
TOP OF FLANGE
OF BARN DOOR
DS AND PS
ASSEMBLIES
AND PRESS
FIRMLY TO
ATTACH



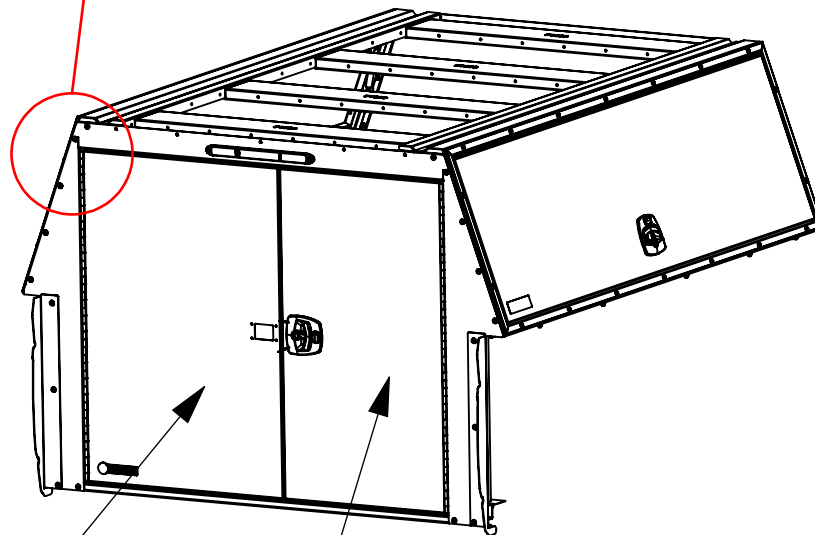
Step 5.2
ATTACH DS
ASSM

HAND TIGHTEN
FAS0234,
FAS0920
(4 PLACES)
5/32" ALLEN



Step 5.3
ATTACH PS
ASSM

HAND TIGHTEN
FAS0234,
FAS0920
(4 PLACES)
5/32" ALLEN



Step 5.2

Step 5.3

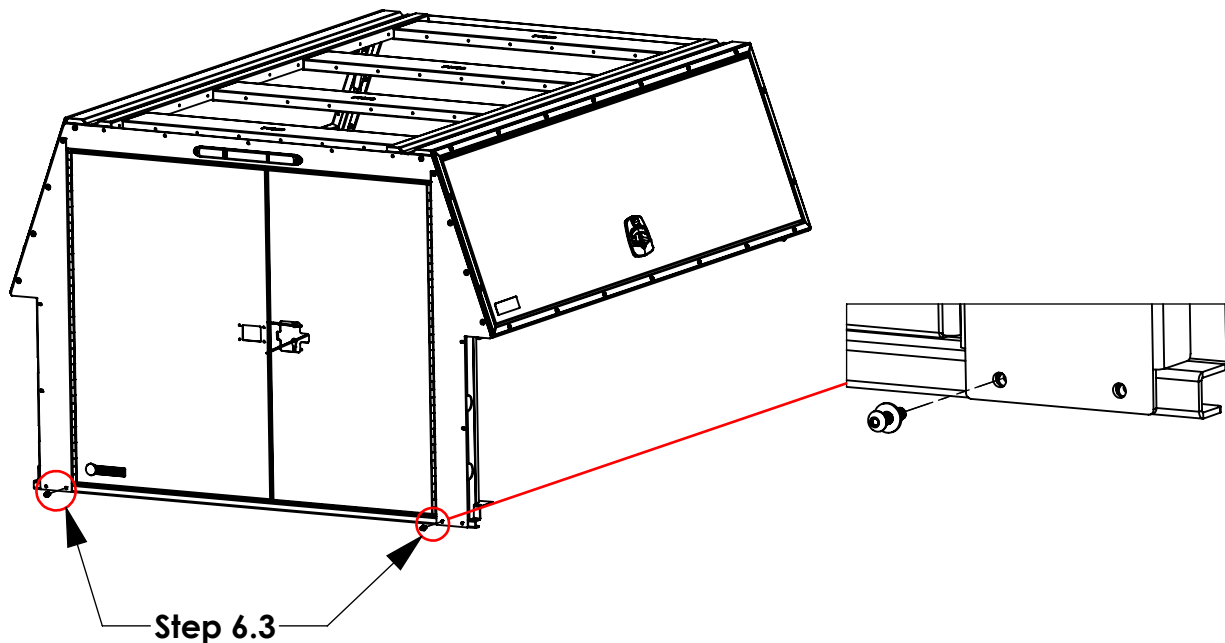
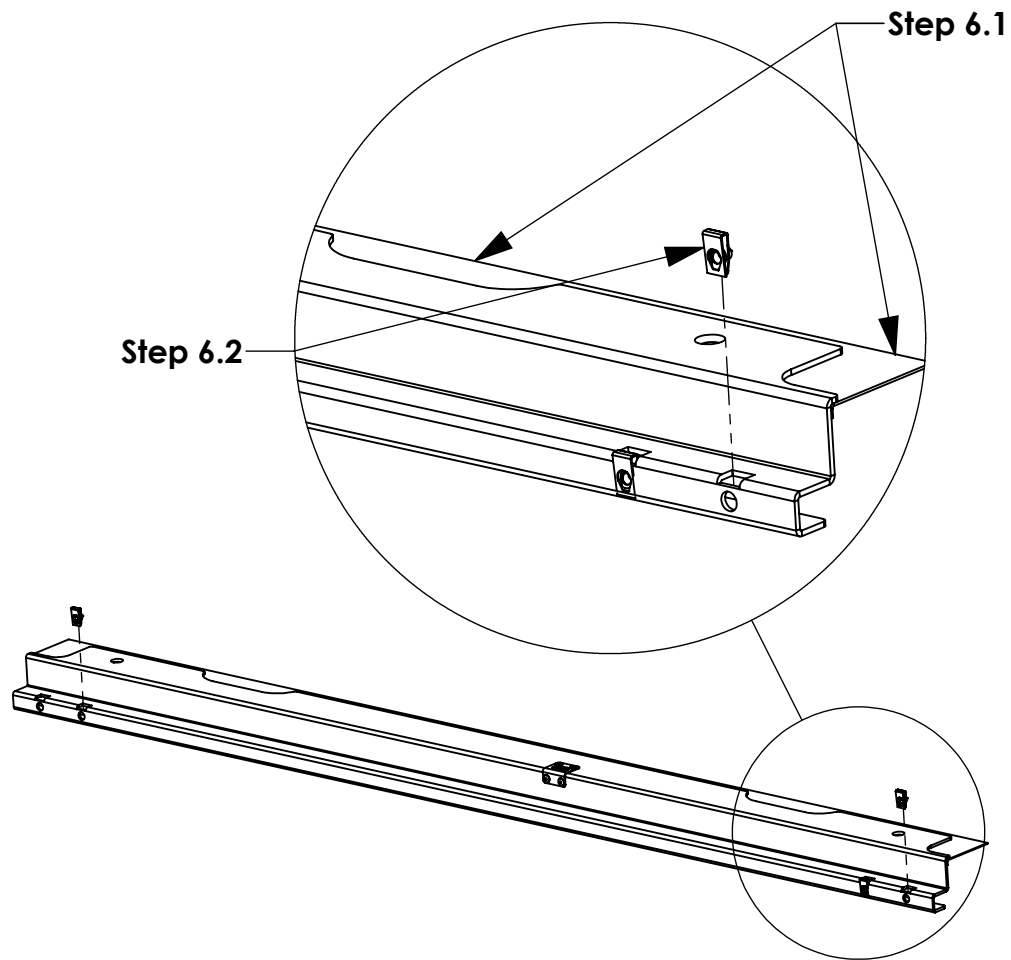
STEP 6 - ATTACH BARN DOOR LOWER BRACKET ASSEMBLY

Step 6.1
TRIM VISIBLE
EXCESS FOAM

Step 6.2
ATTACH
FAS0711 [x4] TO
LOWER BRACKET
ASSM

Step 6.3
ATTACH BARN
DOOR LOWER
BRACKET ASSM,
INSIDE HOLES
ONLY

FULLY TIGHTEN
FAS0234,
FAS0920
(2 PLACES)



STEP 7 - ATTACH PS AND DS BED FILLER**Step 7.1
ATTACH DS BED
FILLER**

**PUSH INWARD
AND HAND
TIGHTEN**
FAS0234,
FAS0920,
FAS0055 [x2]

**(3 PLACES)
5/32" ALLEN**

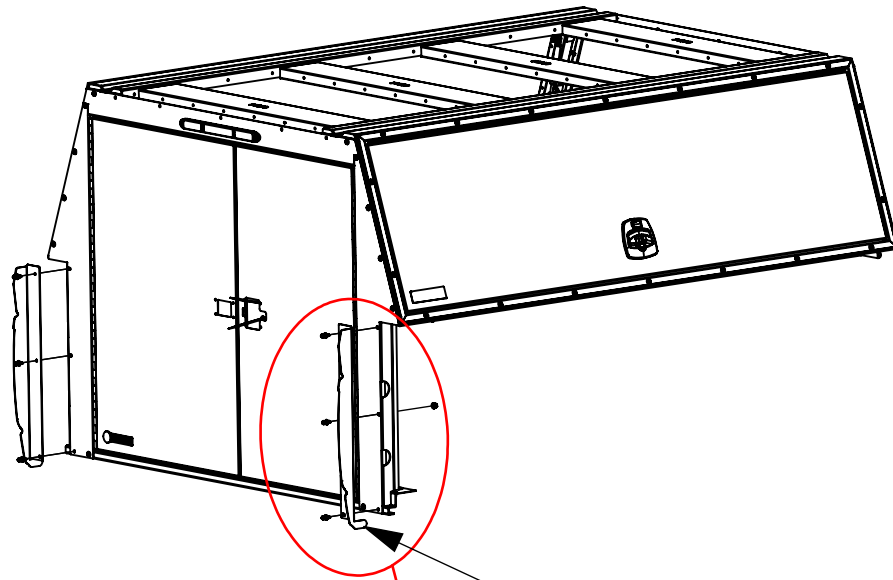
**Step 7.2
ATTACH PS BED
FILLER**

**PUSH INWARD
AND HAND
TIGHTEN**
FAS0234,
FAS0920,
FAS0055 [x2]

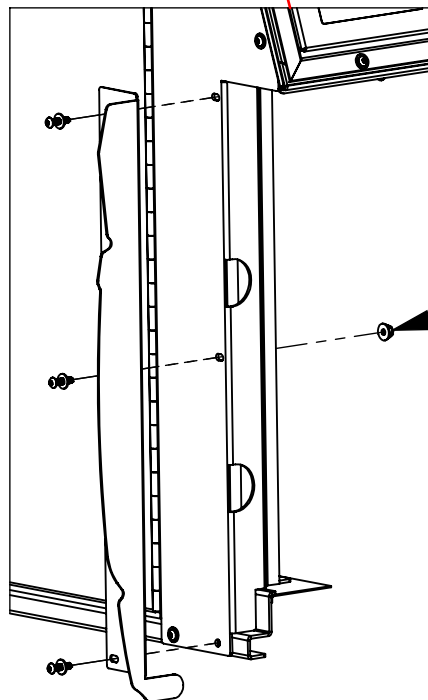
**(3 PLACES)
5/32" ALLEN**

**Step 7.3
ADJUST BARN
DOOR
ASSEMBLIES SO
THAT THE TOPS
OF DOORS ARE
EVEN AND
GO BACK AND
FULLY TIGHTEN
FASTENERS
FROM STEPS 3.2,
4, 5.2, 5.3 AND
6.2**

**(22 PLACES)
5/32" ALLEN**



Step 7.1



Step 7.2

STEP 8 - ATTACH BARN DOOR HANDLE

Step 8.1
CUT ZIP TIES
THAT ARE
HOLDING
LOCKRODS IN
PLACE

!! CAUTION !!
DOORS MAY
TRY TO OPEN

Step 8.2
ATTACH HANDLE
TO DOOR

FULLY TIGHTEN
FAS0917
(4 PER DOOR)
10mm SOCKET

DO NOT
OVERTIGHTEN

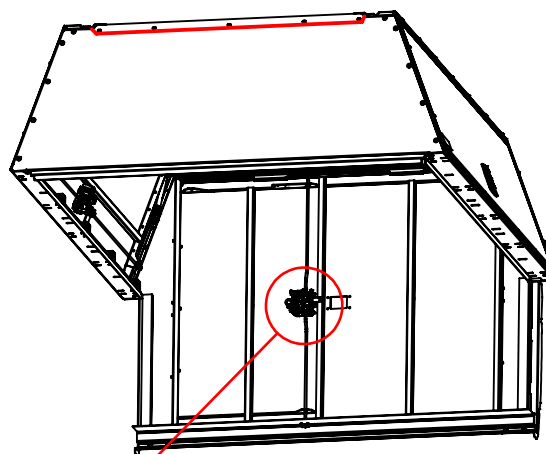
Step 8.3
ATTACH
LOCKRODS TO
HANDLE

FULLY TIGHTEN
FAS0918
(2 PLACES)
8mm SOCKET

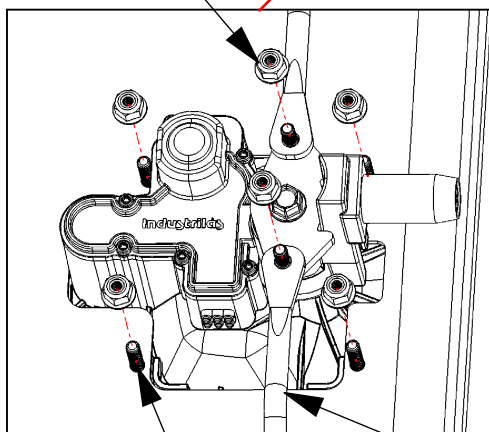
DO NOT
OVERTIGHTEN

Step 8.4
ADJUST HANDLE
POINT TO ALIGN
WITH CASTING
LINE ON HANDLE
BODY
(APPROX: 1.0")

FULLY TIGHTEN
4mm ALLEN
(2 PLACES)



STEP 8.3

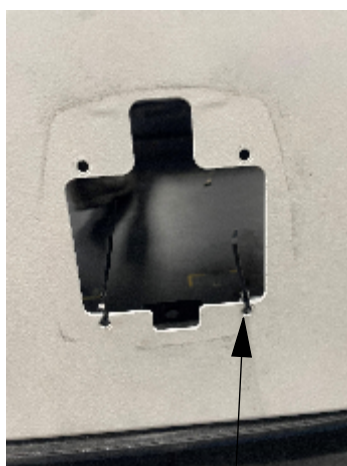


STEP 8.2

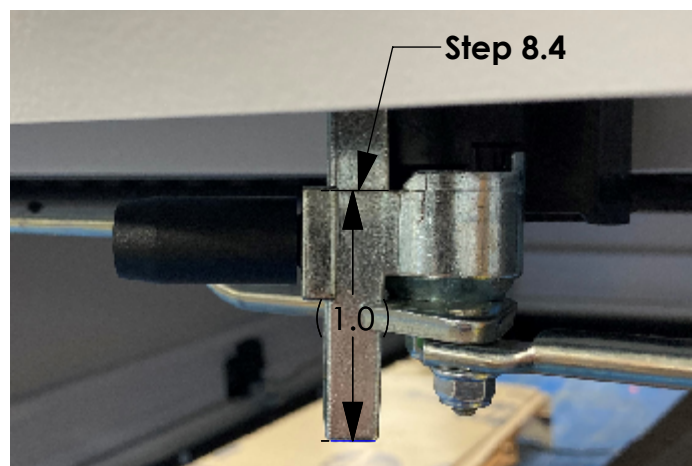


STEP 8.2 & 8.3
HAVE DIFFERENT
SIZED FASTENERS

NOTE THAT ORIENTATION
OF LOCKRODS IS CRITICAL



Step 8.1



Step 8.4

(1.0)

STEP 9 - ATTACH ROOF AND ROOF RAILS

Step 9.1
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 9.2
ATTACH
MOUNTING RAILS
TO TOPPER BODY.

USE AN
ALIGNMENT
PUNCH TO POKE
THROUGH SEALS

FULLY TIGHTEN
FAS0552,
FAS0919
(10 PLACES)
3/16" ALLEN

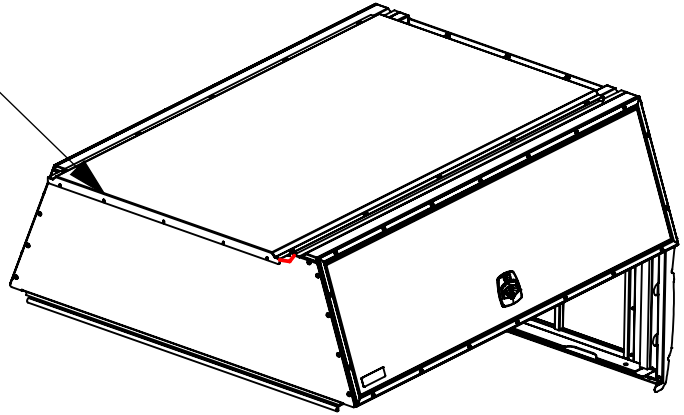
Step 9.3
ATTACH ROOF
TO TOPPER
BODY.

FULLY TIGHTEN
FAS0055,
FAS0552,
FAS0920
(10 PLACES)
5/32" ALLEN
7/16" WRENCH

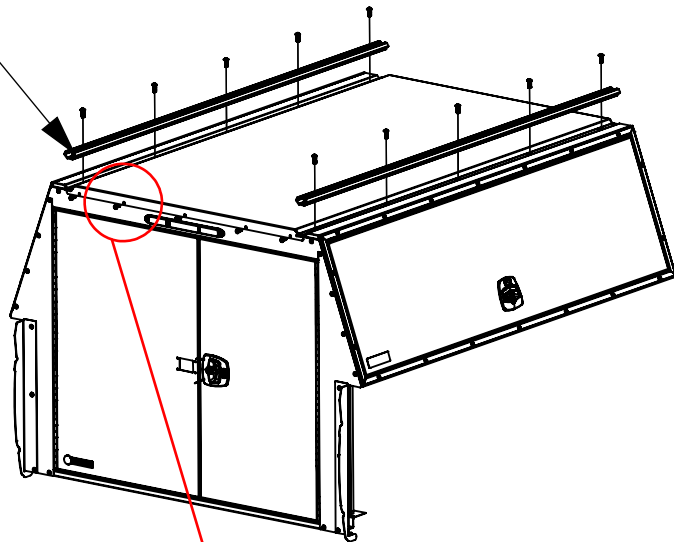


PLEASE NOTE THAT ORDER OF OPERATIONS ON THESE BUILD STEPS IS CRITICAL TO A PROPER SEAL!

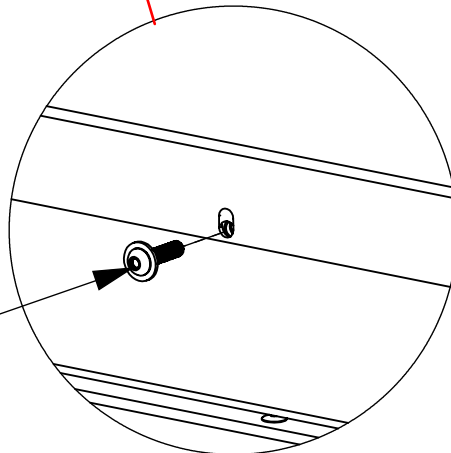
Step 9.1



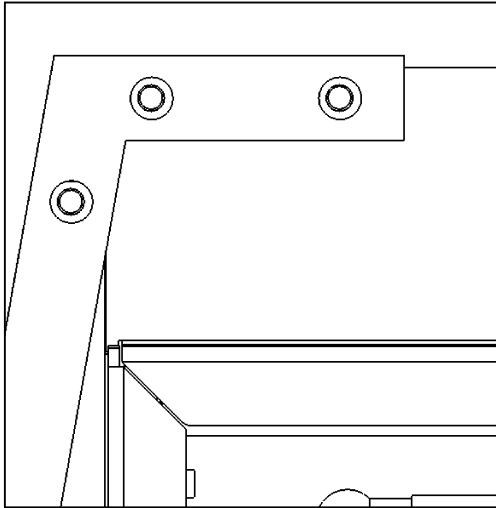
Step 9.2



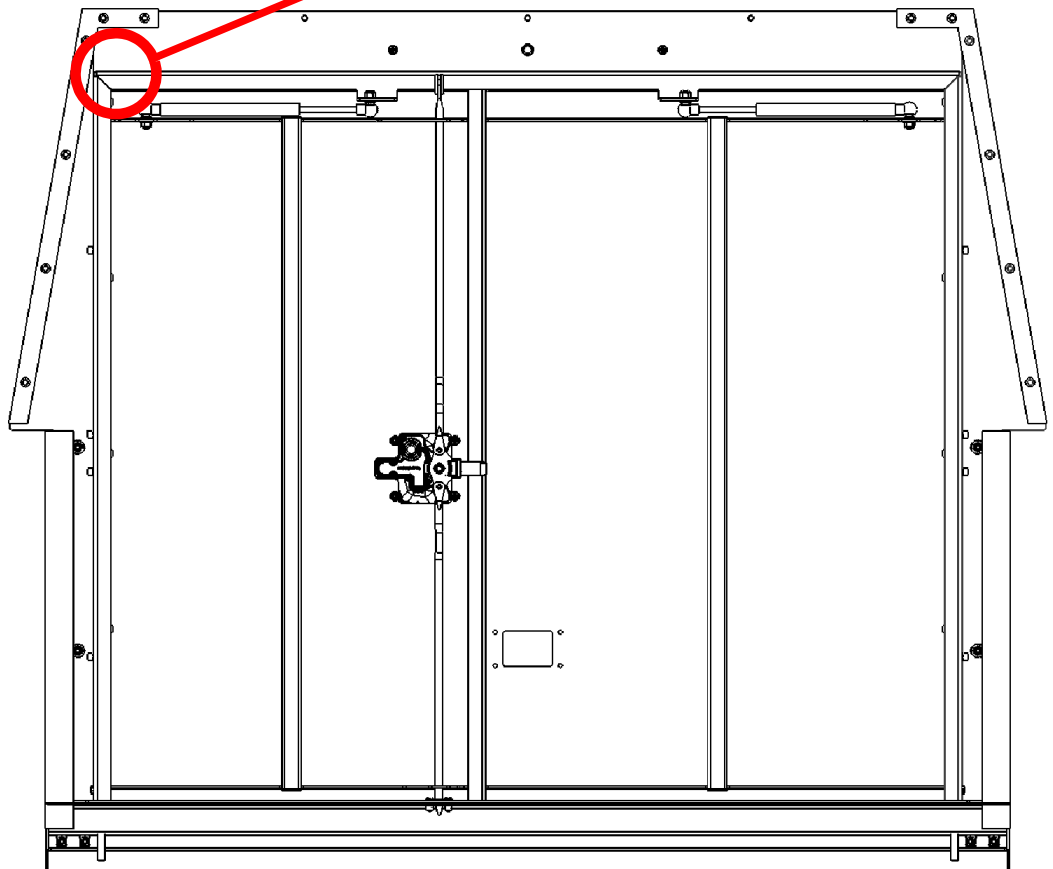
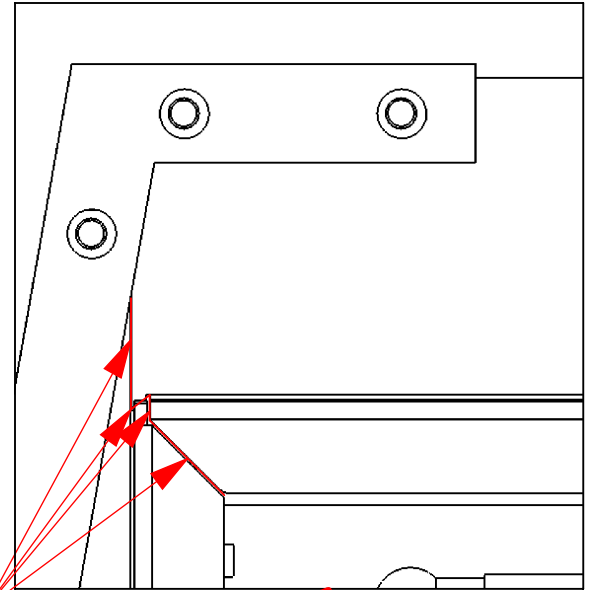
Step 9.3



Step 10
SILICONE ALONG
SEAM AS SHOWN,
BOTH ENDS



SILICONE

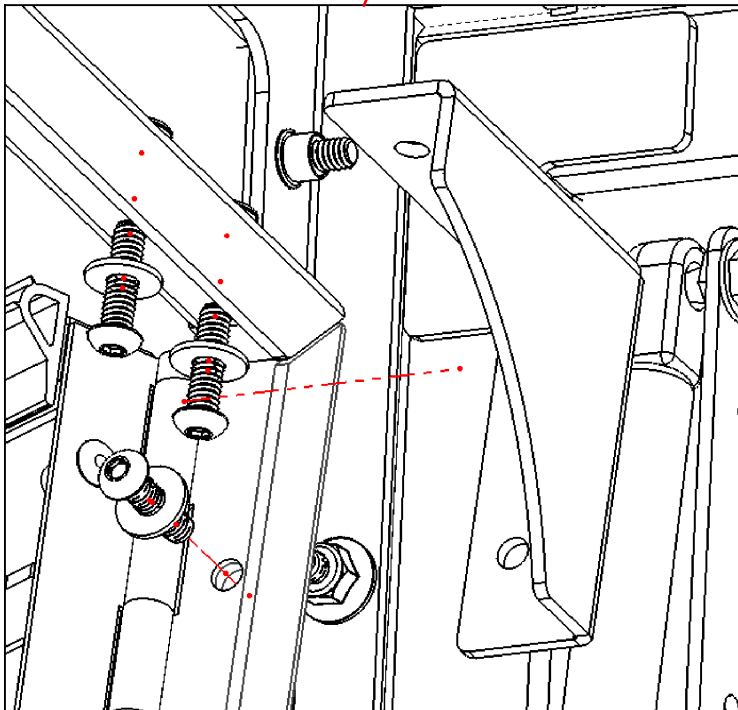
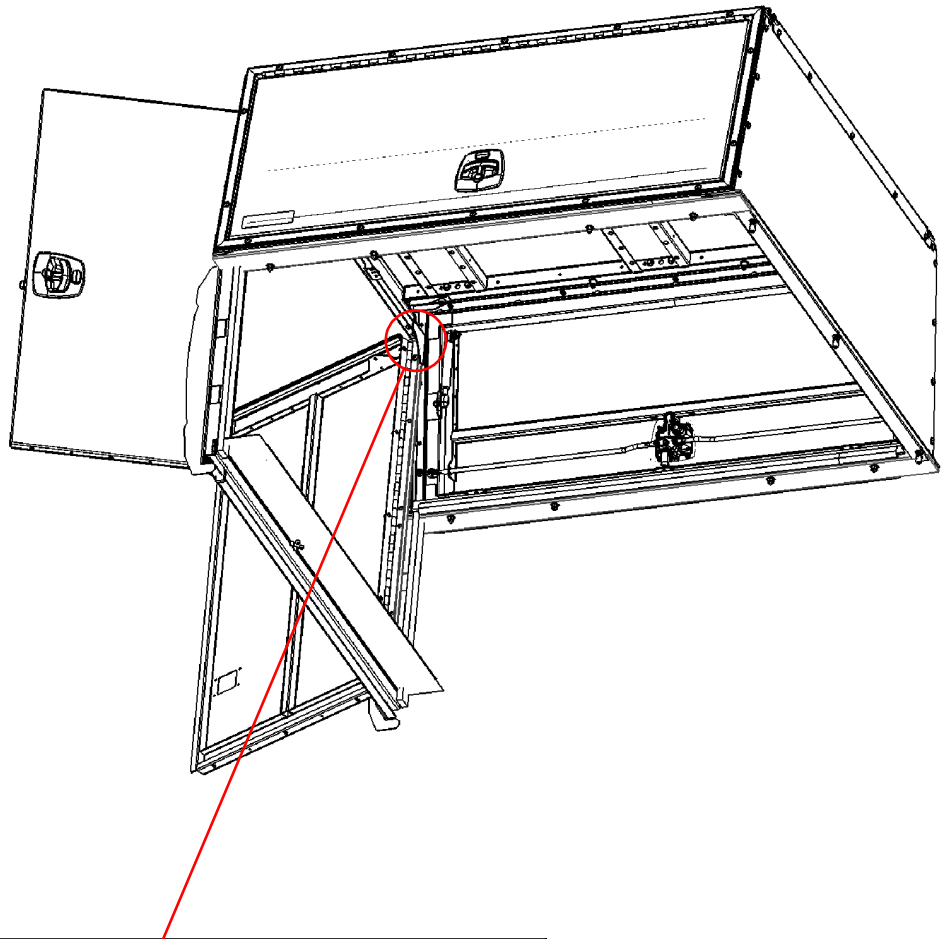


STEP 11 - ATTACH CORNER GUSSETS

Step 11
ATTACH CORNER
GUSSETS, BOTH
ENDS

FULLY TIGHTEN
FAS0920
FAS0234
FAS0055

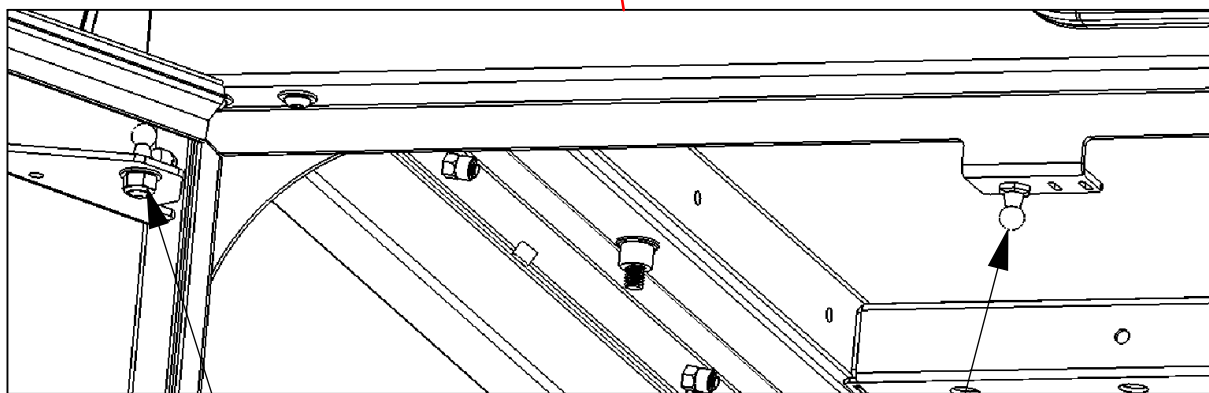
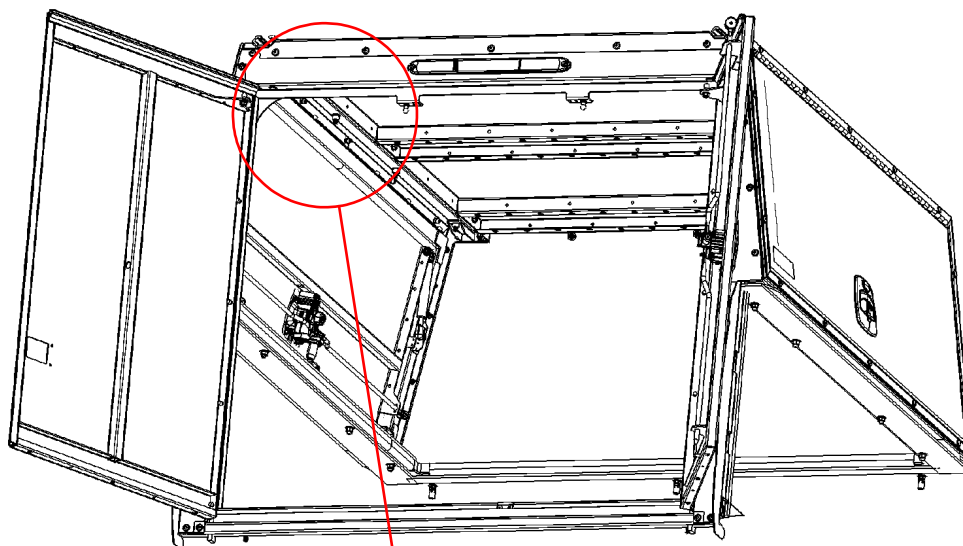
(6 PLACES)
5/32" ALLEN



**Step 12
INSTALL BALL
STUDS**

**FULLY TIGHTEN
30015-0
FAS0861**

**(4 PLACES)
1/2" WRENCH**

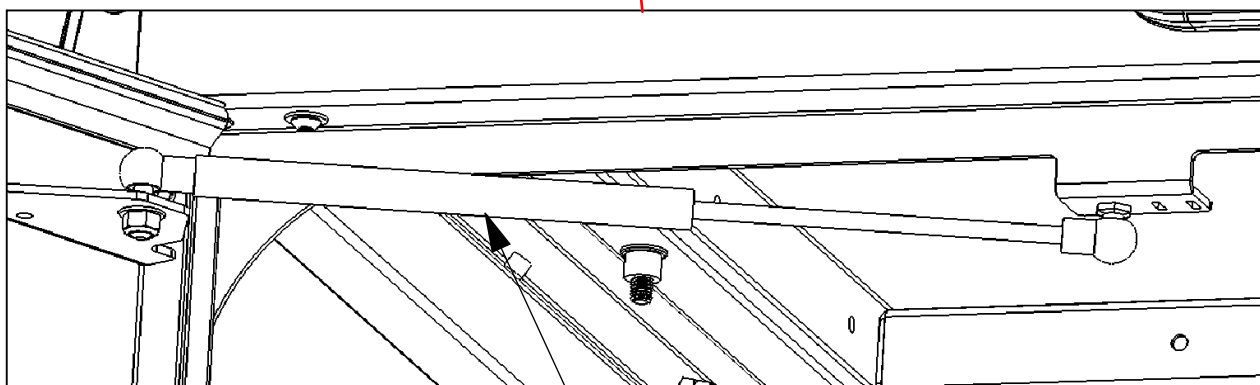
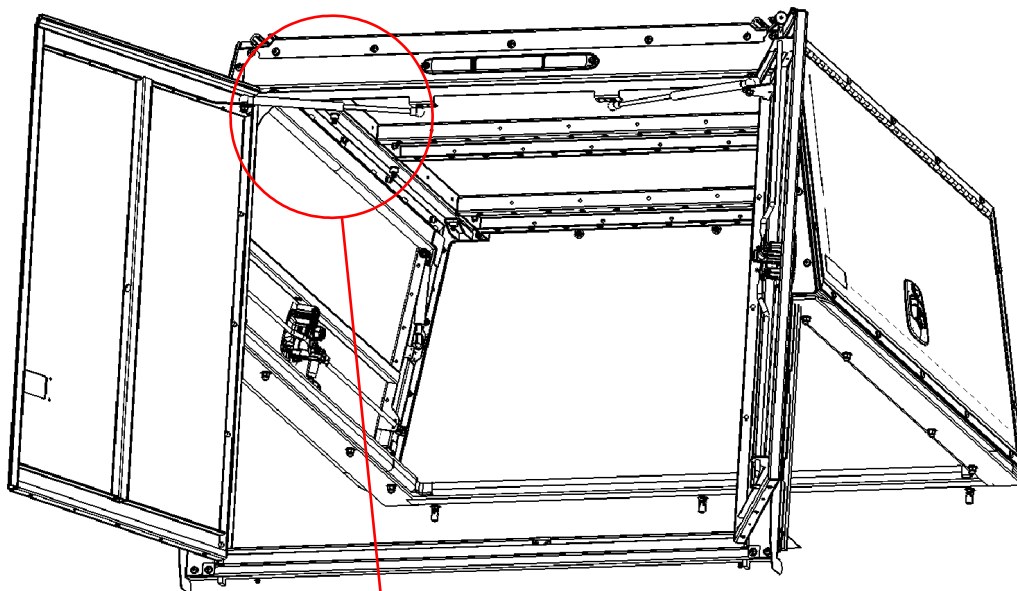


**BALL STUD UPWARD ON DOOR,
DOWNWARD ON FRAME**

STEP 13 - INSTALL SHOCKS

Step 13 INSTALL SHOCKS

**77108 (20#)
(2 PLACES)**



BARREL TO DOOR

STEP 14 - REMOVE BACKUP CAMERA AND TAILGATE

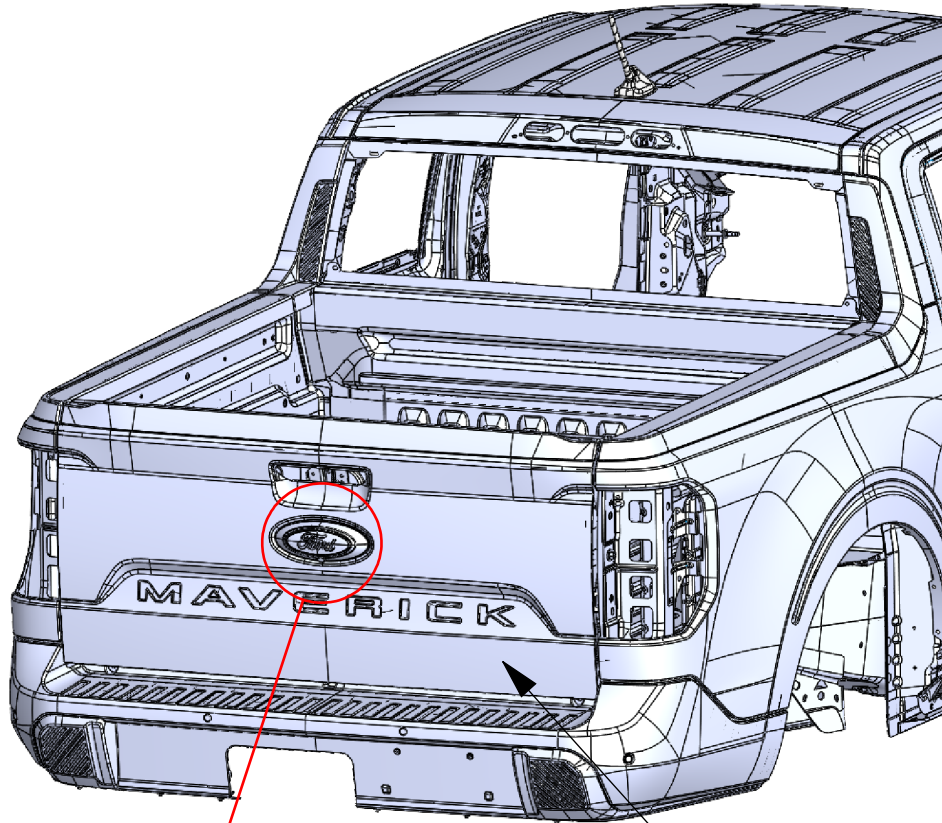
Step 14.1
REMOVE BACKUP
CAMERA PER
77217-DIGITAL,
77865-ANALOG

RELOCATION
INSTRUCTION
77963

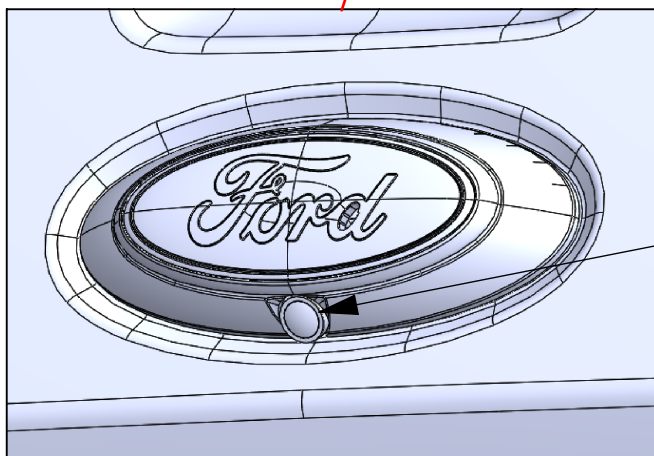
Step 14.2
REMOVE
TAILGATE PER
OEM GUIDLINES



NOTE: CONTACT
CUSTOMER FOR
DISPOSITION OF
REMOVED
TAILGATE



Step 14.2



Step 14.1

**STEP 15 - INSTALL 73740 SEALANT TO TRUCK CAB AND BED SEAMS.
BEFORE APPLYING SEALANT, CLEAN ALL SURFACES REQUIRING IT WITH
RUBBING ALCOHOL OR EQUIVALENT.**

**Step 15.1
PLACE 73740
SEALANT ALONG
BOTTOM AND
SIDES OF BACK
WINDOW.**

73740

**Step 15.2
PLACE 73740
SEALANT ALONG
SEAM AT BACK
OF CAB AT TOP
OF WINDOW.**

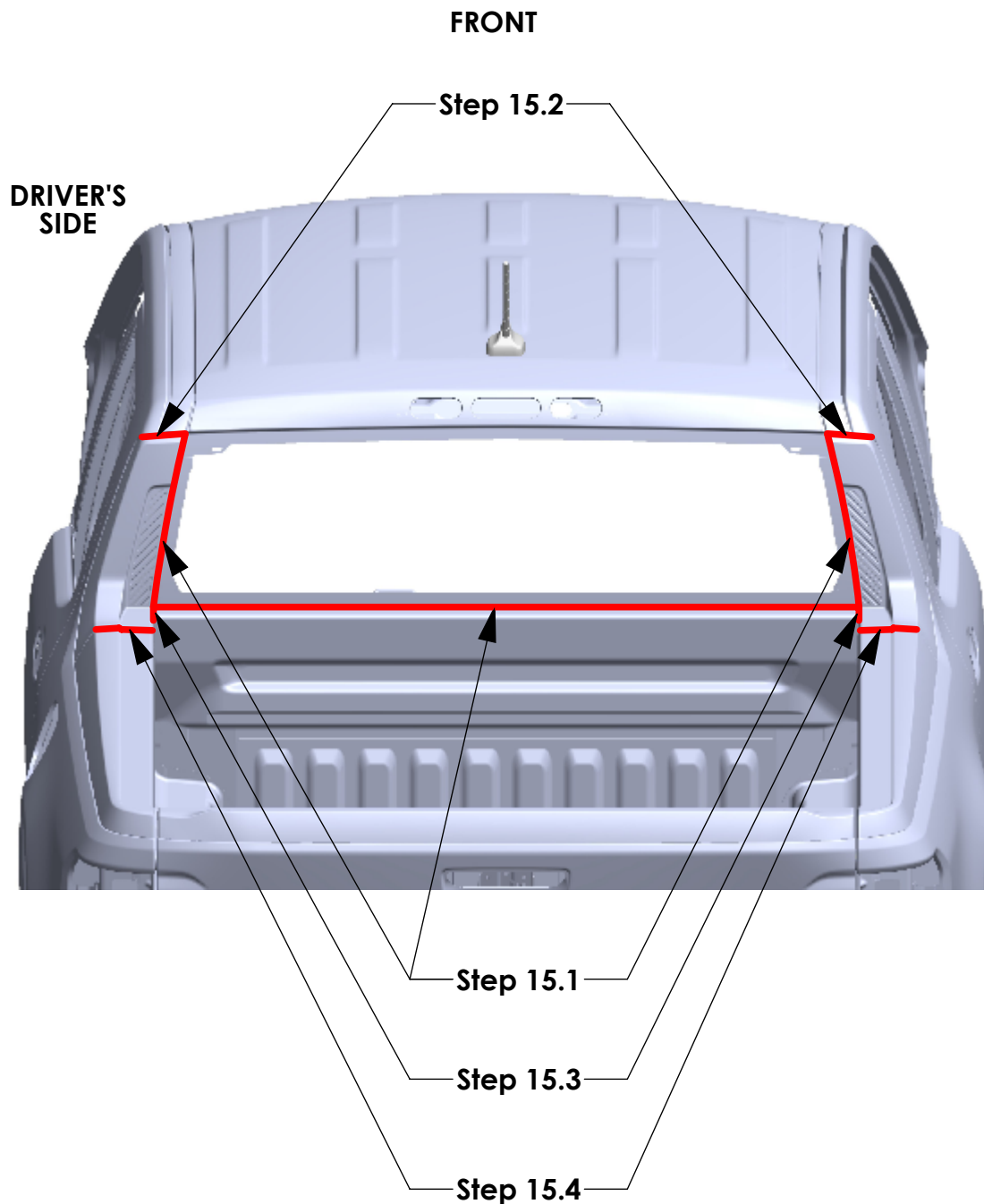
73740

**Step 15.3
PLACE 73740
SEALANT ALONG
SEAMS BETWEEN
FRONT BED RAIL
AND SIDE BED
RAILS.**

73740

**Step 15.4
PLACE 73740
SEALANT ALONG
SEAMS IN BED
RAILS.**

73740

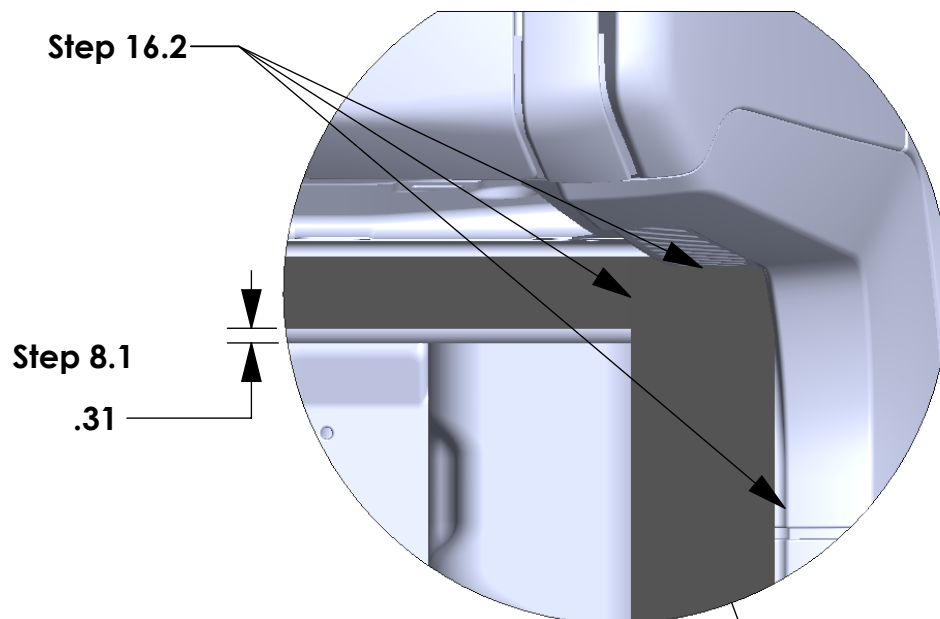


STEP 16 - ATTACH SEALS TO TRUCK BED. BEFORE APPLYING SEALS, CLEAN ALL SURFACES REQUIRING IT.

Step 16.1
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)

TOP VIEW



Step 16.2
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)

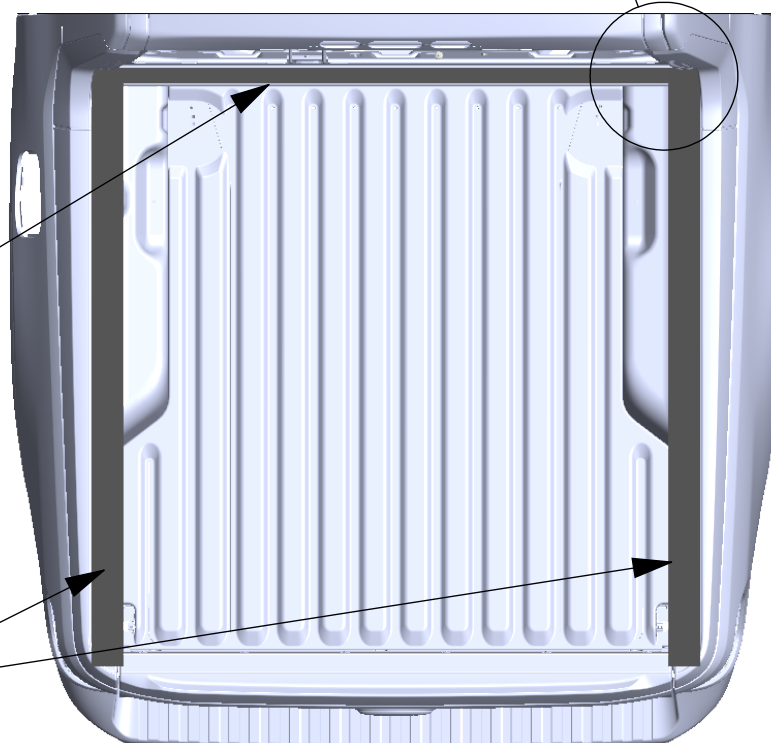
DO NOT
TRIM
EXCESS
UNTIL
TOPPER
IS
ON
THE
TRUCK.

FRONT

DRIVER'S
SIDE

74924

74471



STEP 17 - MARK AND DRILL HOLES FOR MOUNTING EXTRA FRAME. MARK HOLES AND REMOVE FRAMES TO DRILL HOLES IN FRONT OF BED AND BED RAILS. DRILL ONLY THROUGH THE PLASTIC ON BED RAILS, ABOUT 1/4".

Step 17.1
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.

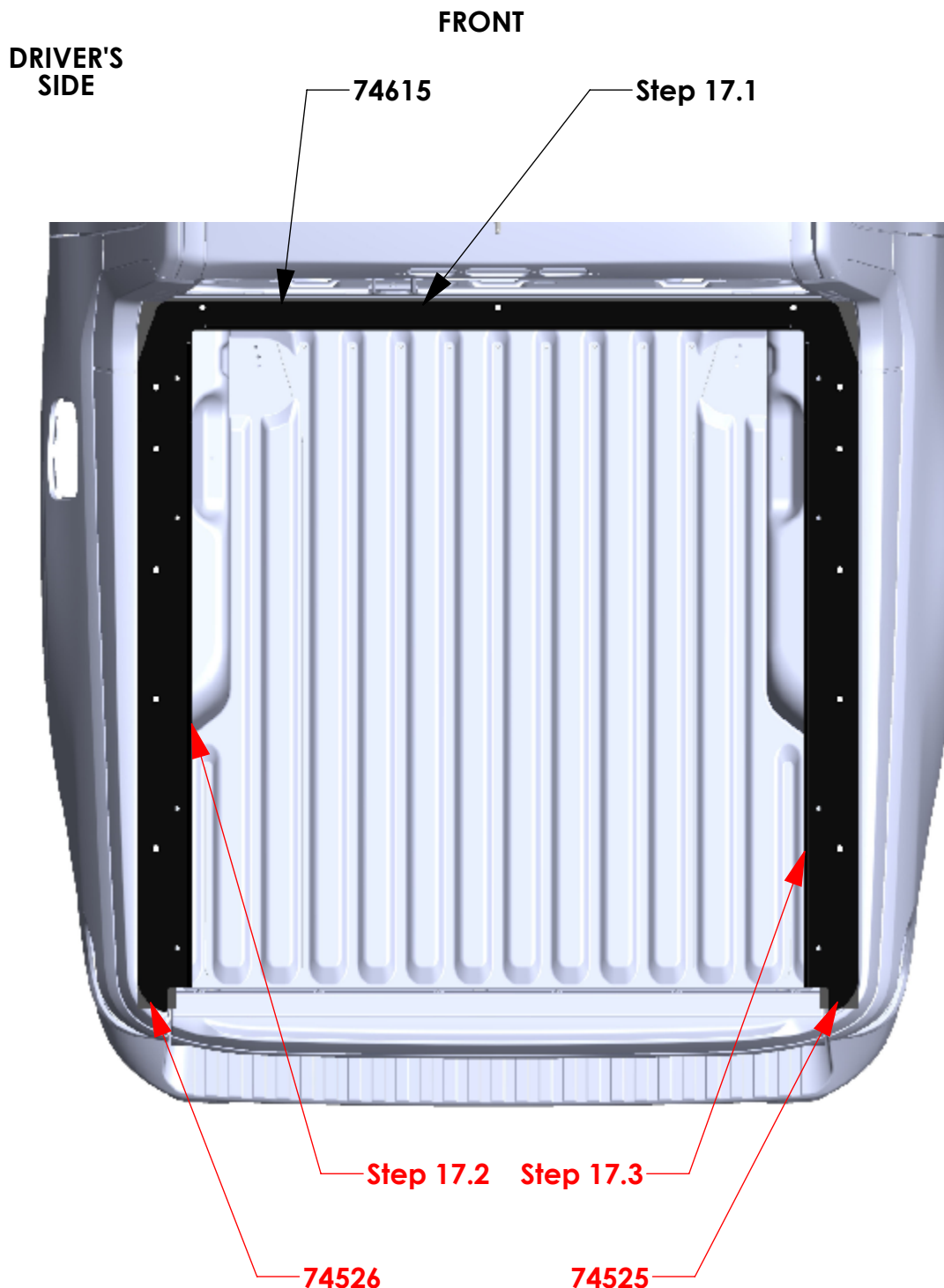
1/2" STEP DRILL BIT
1-3/16" HOLE SAW

Step 17.2
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 17.3
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.

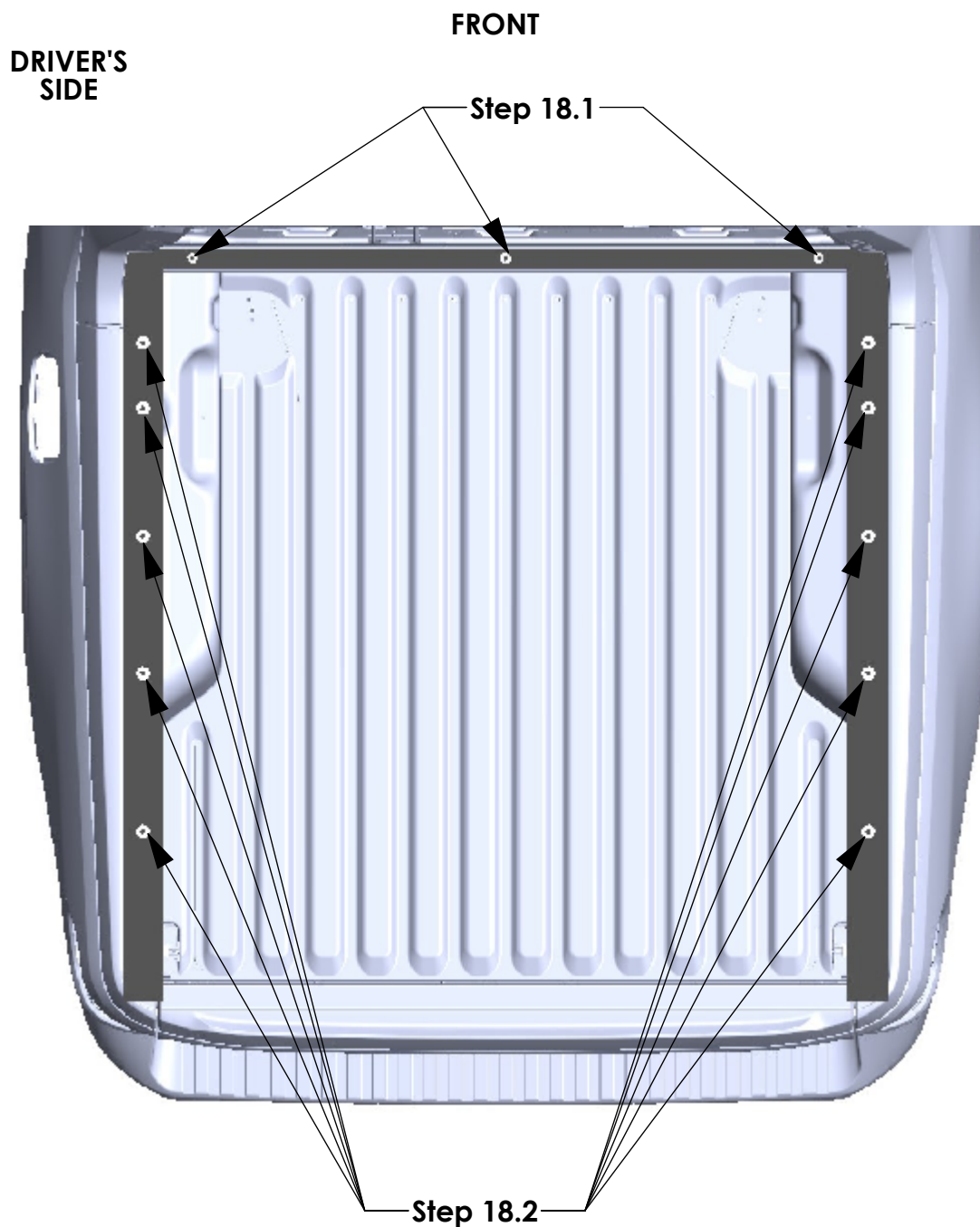
1-3/16" HOLE SAW



STEP 18 - INSTALL PLUSNUTS AND SPACERS.

Step 18.1
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 18.2
PLACE SPACER IN
HOLES IN BED
LINER.
FAS0831
(10 PLACES)

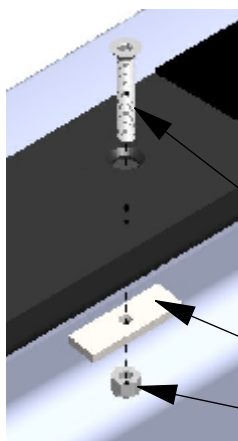
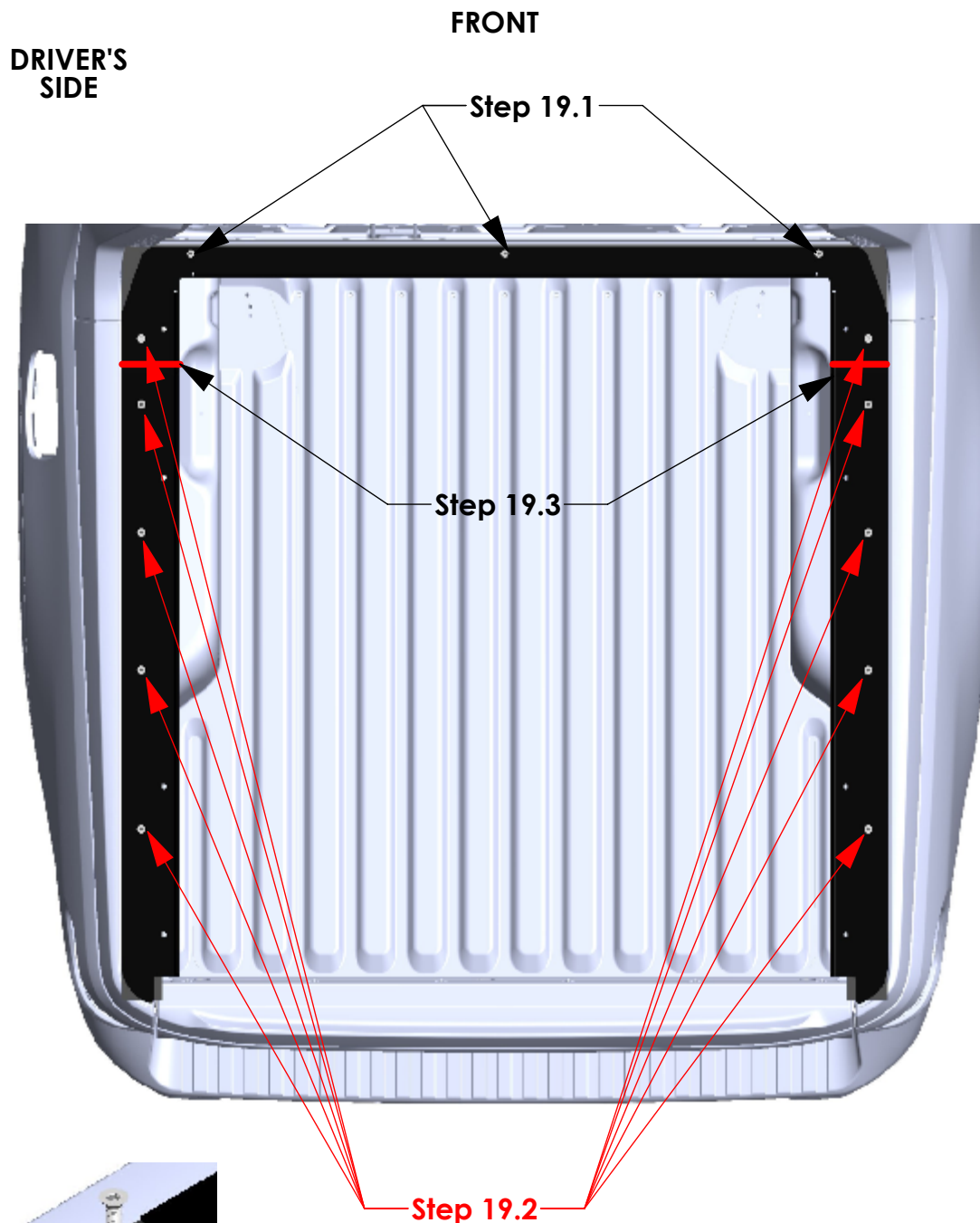


STEP 19 - PLACE FRAMES BACK ON BED AND INSTALL HARDWARE.

Step 19.1
FULLY TIGHTEN
ADD 73740 TO
HOLE IN FRAME
FOR WATER
PREVENTION.
FAS1279
(3 PLACES)
T40 TORX BIT
IMPACT DRIVER

Step 19.2
FULLY TIGHTEN
FAS1279
36503-0
FAS0248
(10 PLACES)
T40 TORX BIT
IMPACT DRIVER
1/2" WRENCH

Step 19.3
INSTALL 73740
SEALANT WHERE
74525 AND 74526
BUTT UP TO 74615.



FAS1279

36503-0

FAS0248

STEP 20 - ATTACH ADDITIONAL BED RAIL SEALS TO EXTRA FRAME.

Step 20.1
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 20.2
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

DRIVER'S
SIDE

74924

FRONT



74471

STEP 21 - ATTACH TOPPER TO TRUCK BED

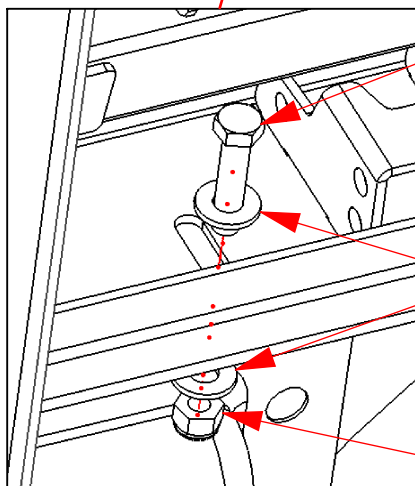
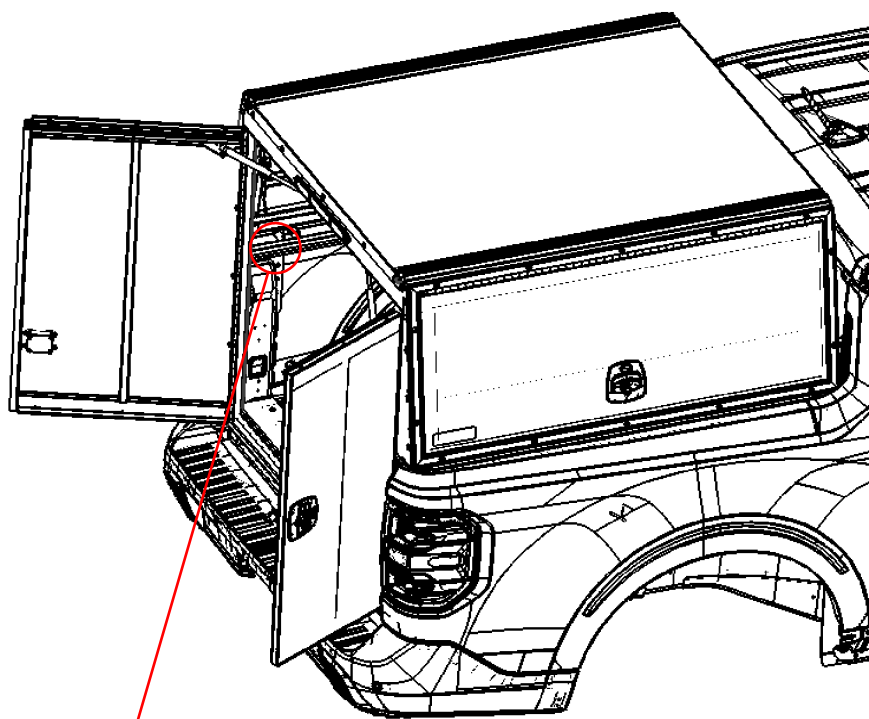
Step 21.1
SET TOPPER ONTO
EXTRA FRAME ON
TRUCK BED.
ALIGN TOPPER
MOUNTING
HOLES IN FRAME
WITH EXTRA
FRAME.

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 21.2
FASTEN THE
TOPPER TO THE
EXTRA FRAME.
FAS0242,
FAS0552 x2,
FAS0248

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



FAS0242

FAS0552

FAS0248

MAKE SURE ALL FASTENERS ARE TIGHTENED!! INSTALLATION IS COMPLETE

STEP 21 CONT'D - ATTACH TOPPER TO TRUCK BED, CONT'D

Step 21.3
USE THE HOLES IN
THE BD LOWER
BRACKET ASSM
TO MARK FOR
PLUS NUTS.



(2 PLACES)
NOTE: YOU WILL
HAVE TO
REMOVE FOAM
FROM THE
HOLES.

Step 21.4
MOVE TOPPER
REARWARD TO
DRILL HOLES FOR
PLUSNUTS.
SPRAY PAINT
HOLES.

**1/2" STEP DRILL
BIT**

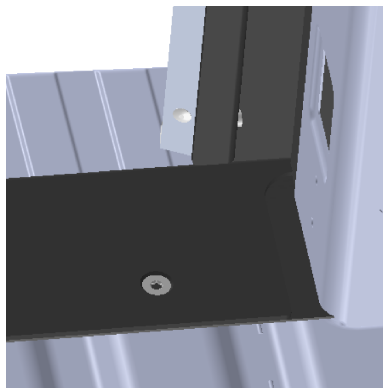
Step 21.5
SET PLUSNUTS
USING PLUSNUT
SETTING TOOL
OR AIR
POWERED
SETTING GUN.

FAS0222

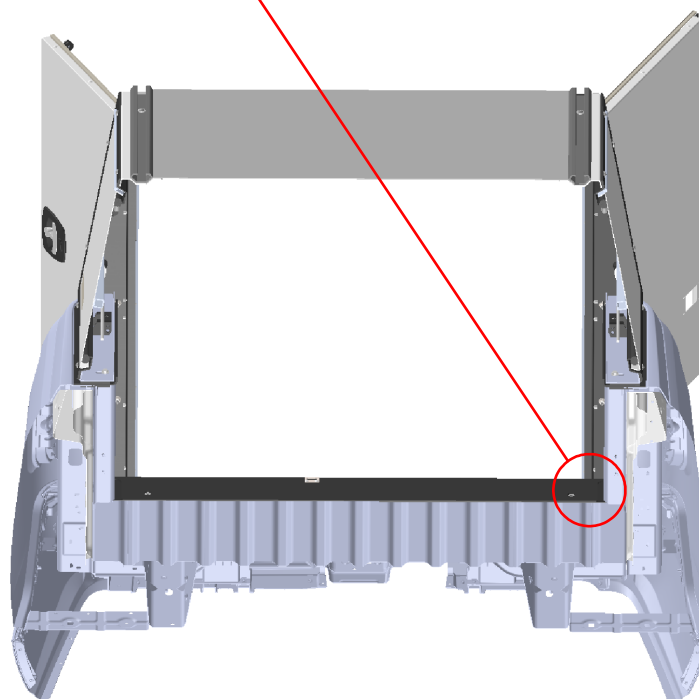
Step 21.6
REPLACE TOPPER
TO ORIGINAL
LOCATION AND
FASTEN TOPPER
TO THE TRUCK
BED

FULLY TIGHTEN
FAS1279
(2 PLACES)
T40 TORX BIT

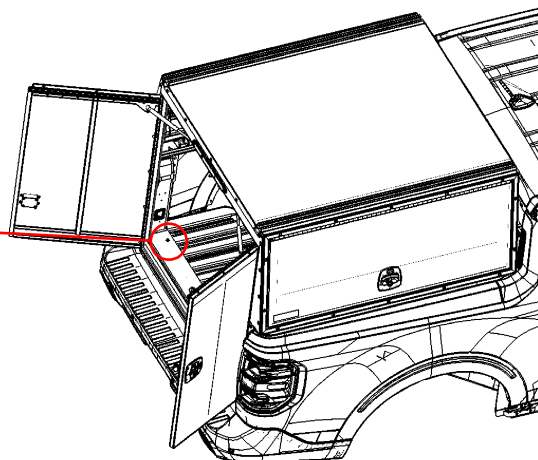
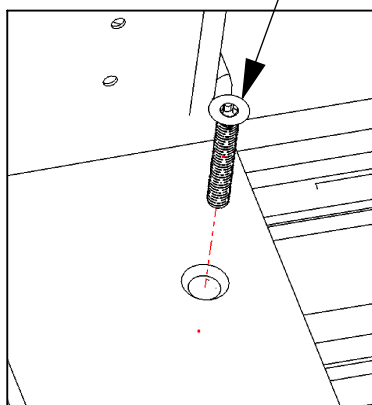
FAS0242,
FAS0552 [x2]
FAS0248
(8 PLACES)
1/2" SOCKET
1/2" WRENCH



**VIEW LOOKING FROM
FRONT TO BACK**

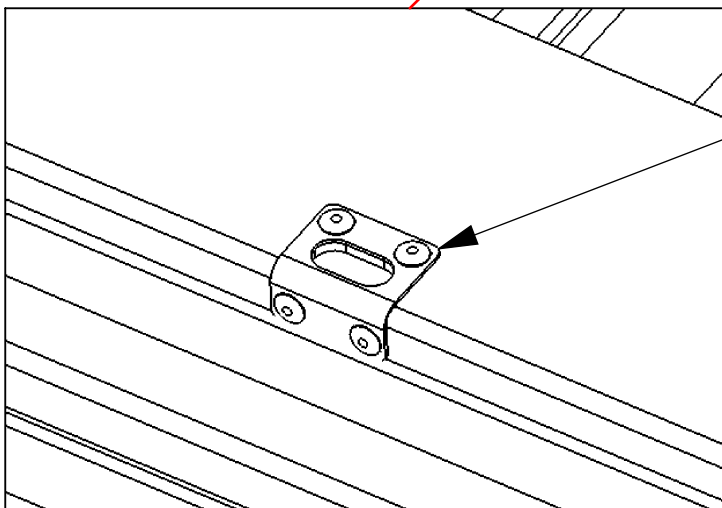
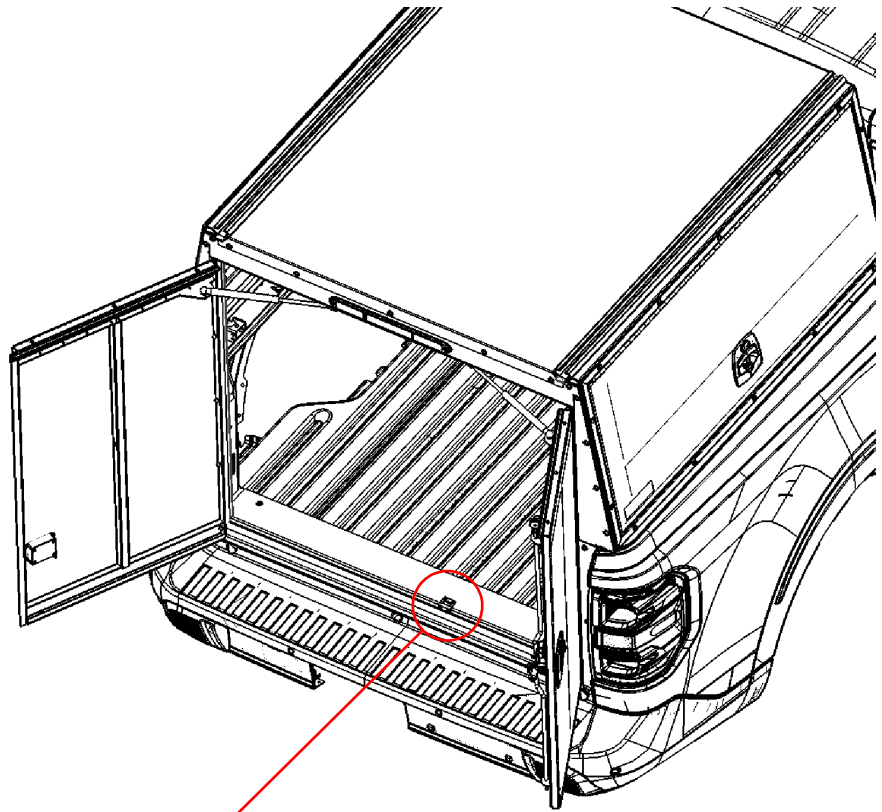


FAS1279



STEP 22 - MAY NEED TO DRILL HOLE IN BED FOR LOCK ROD TO ENGAGE FULLY IN LOWER BRACKET HOLE

Step 22
DRILL OUT TRUCK
BED IF LOWER
BRACKET IS
OVER IT AND
PREVENTING
LOCK ROD FROM
GOING
THROUGH.



Step 22

STEP 23 - ATTACH FOAM TO INSIDE OF BARN DOORS

Step 23
CLEAN SURFACES
WITH ALCOHOL.
PREP WITH 57392
ADHESIVE
PROMOTER.

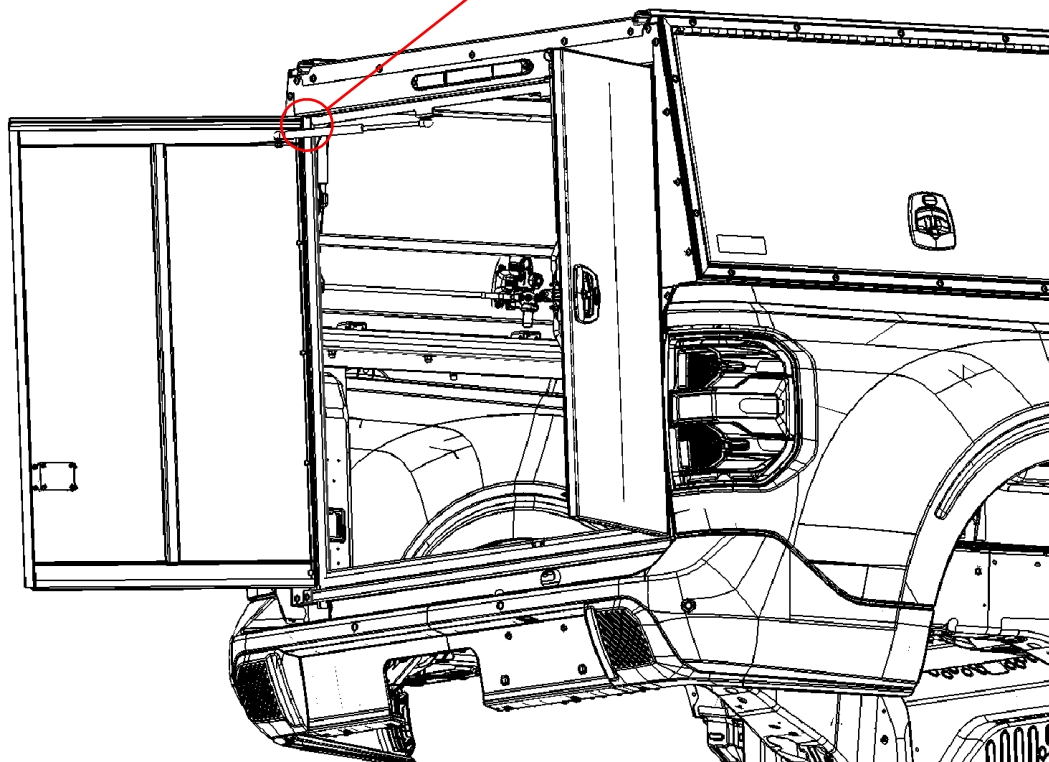
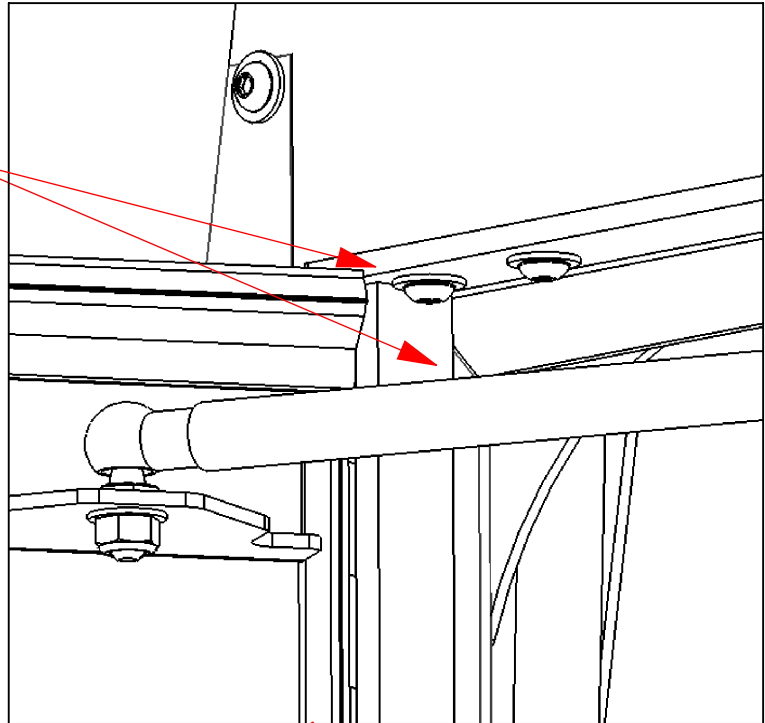


APPLY 77586
FOAM STRIP.
(2 PLACES), TRIM
STRIP TO FIT.



NOTE: FOAM
SHOULD BE AT
THE VERY TOP
AND AGAINST
FLANGE AWAY
FROM HINGE.

Step 23



STEP 24 - ATTACH SEAL TO FACE OF BARN DOOR LOWER BRACKET

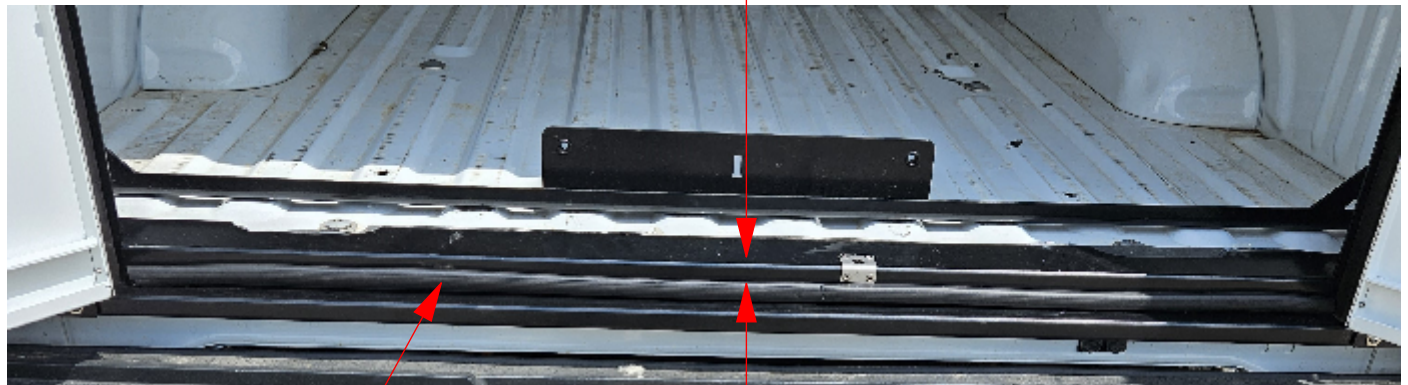
Step 24
CLEAN SURFACE
WITH ALCOHOL.
PREP WITH 57392
ADHESIVE
PROMOTER.



APPLY 77941
GASKET, TRIM TO
FIT



NOTE: GASKET
SHOULD BE
CENTERED
BETWEEN FOAM,
AND .75" FROM
TOP OF LOWER
BRACKET.



Step 24

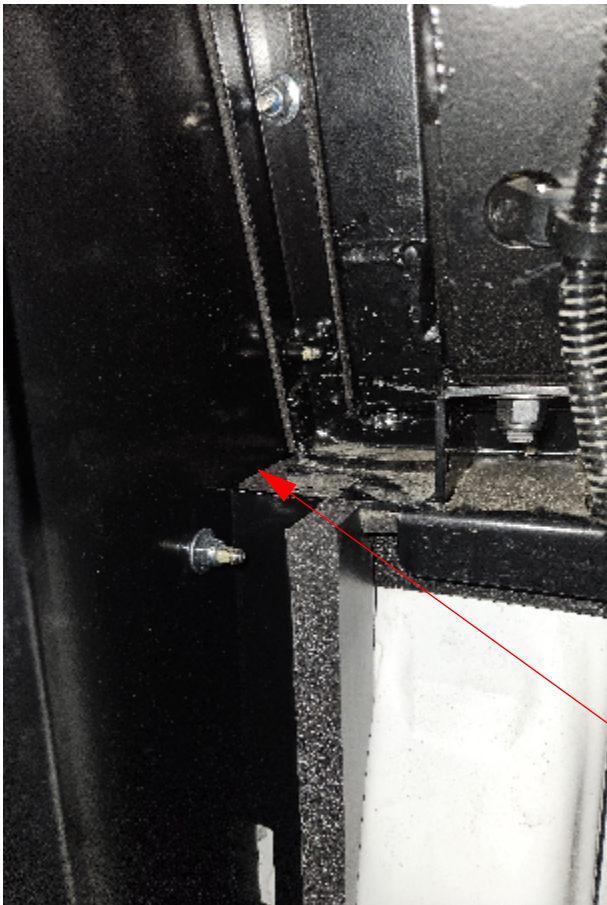
STEP 25 - APPLY SILICONE TO INSIDE FRONT CORNERS AND INSIDE REAR CORNERS.

Step 25.1
APPLY A 4" STRIP
OF SILICONE TO
BOTH INSIDE
FRONT CORNERS

Step 25.2
APPLY A 4" STRIP
OF SILICONE TO
BOTH INSIDE
REAR CORNERS



Step 25.1

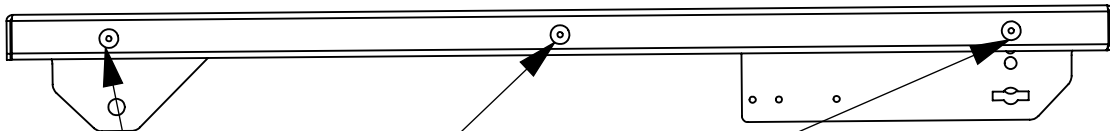
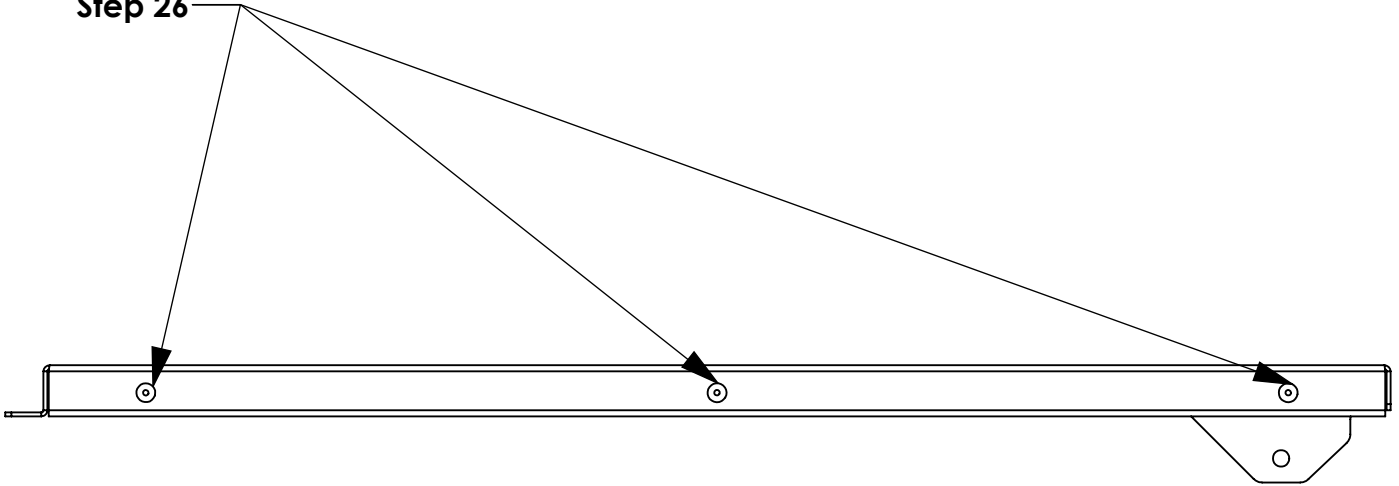


Step 25.2

STEP 26 - APPLY SILICONE TO TOP OF BOTH DOORS ON RIVETS.

Step 26
APPLY SILICONE
TO TOPS OF
DOORS ON
RIVETS
(6 PLACES)

Step 26



Step 26

STEP 27 - CLOSE DOORS AND ADJUST BED FILLERS.

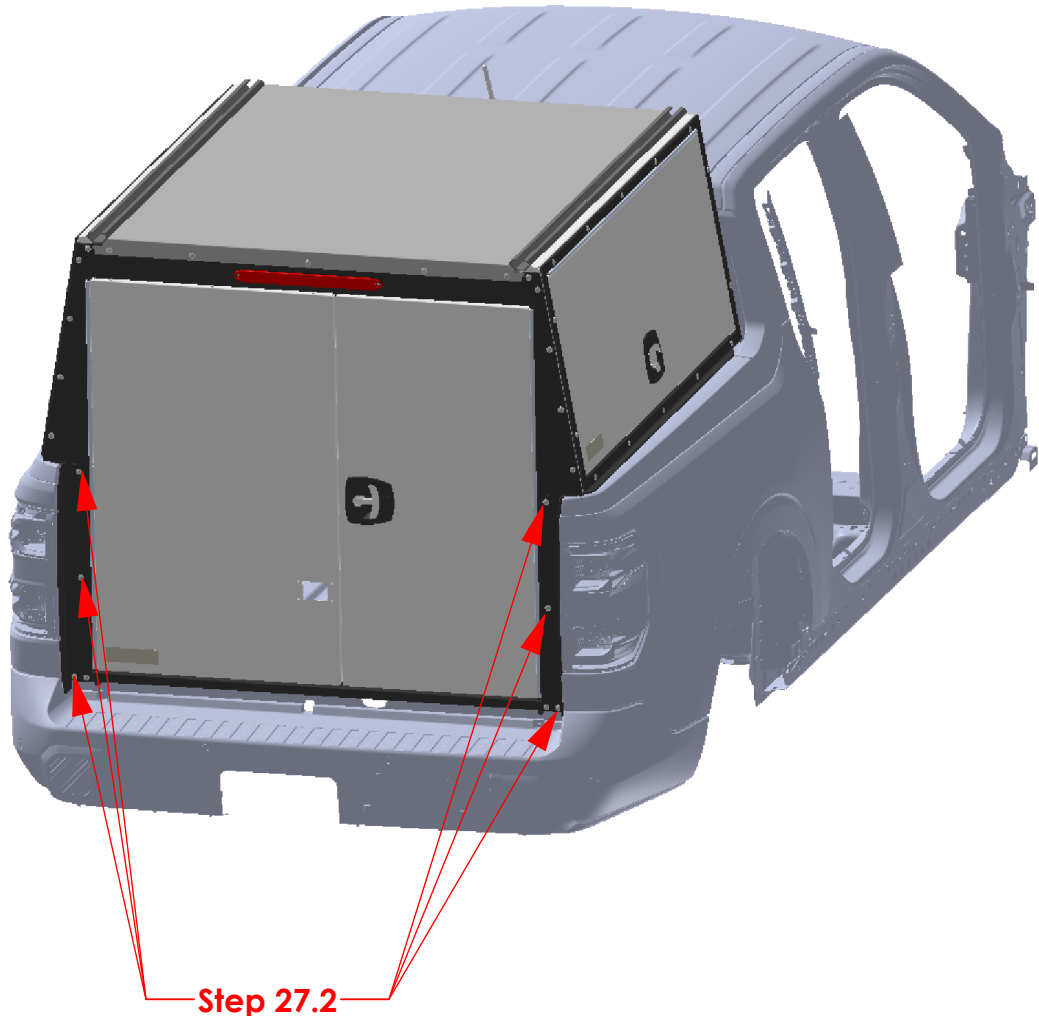
Step 27.1
CLOSE DOORS
STARTING WITH
DRIVER'S SIDE
FIRST THEN
PASSENGER SIDE.
CONFIRM LOCK
ROD IS ENGAGED
IN HOLE OF
LOWER BRACKET.



NOTE: IF DOOR
DOES NOT LATCH
WITH MINIMAL
EFFORT, CHECK
THAT TOPPER IS
SQUARE AND
CENTERED.

Step 27.2
ADJUST BED
FILLERS OUT TO
MAX WIDTH AND
FULLY TIGHTEN

(6 PLACES)



MAKE SURE ALL FASTENERS ARE TIGHTENED!! INSTALLATION IS COMPLETE

Introduction / Comments:

Install Instructions Topper 3rd Brake Light - Ford Maverick

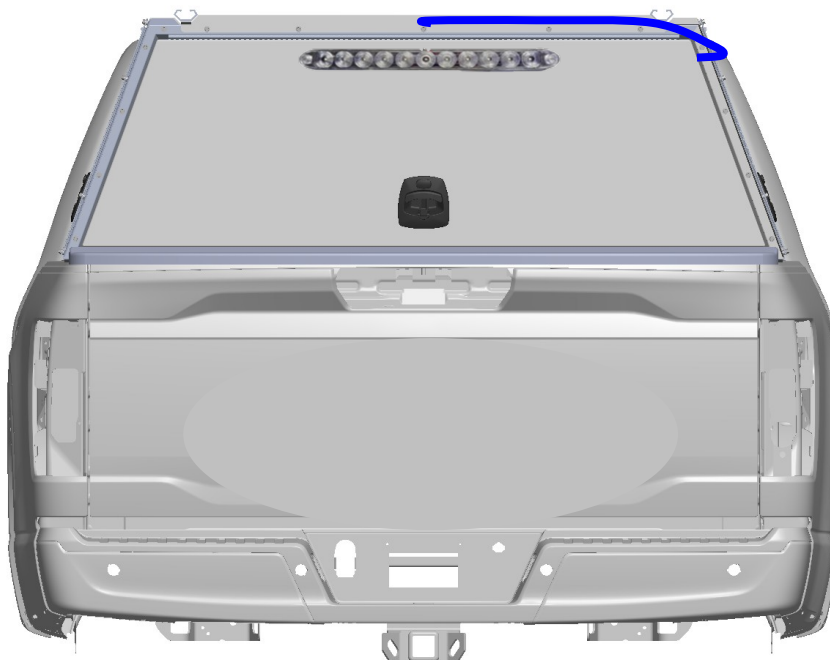
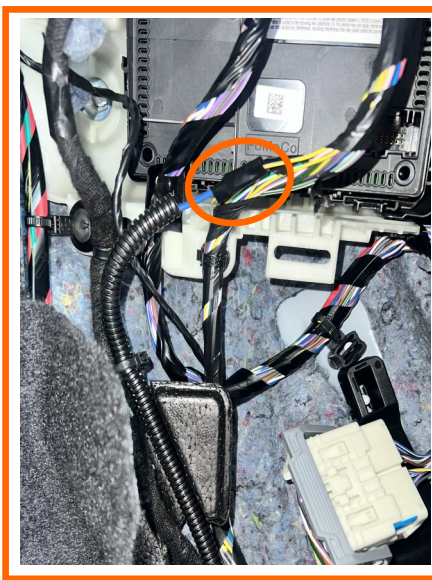
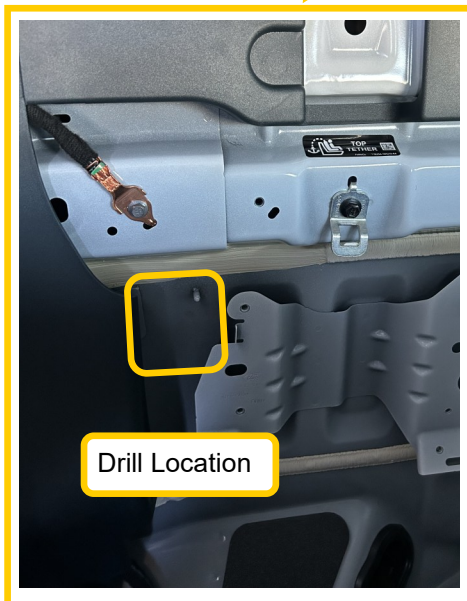
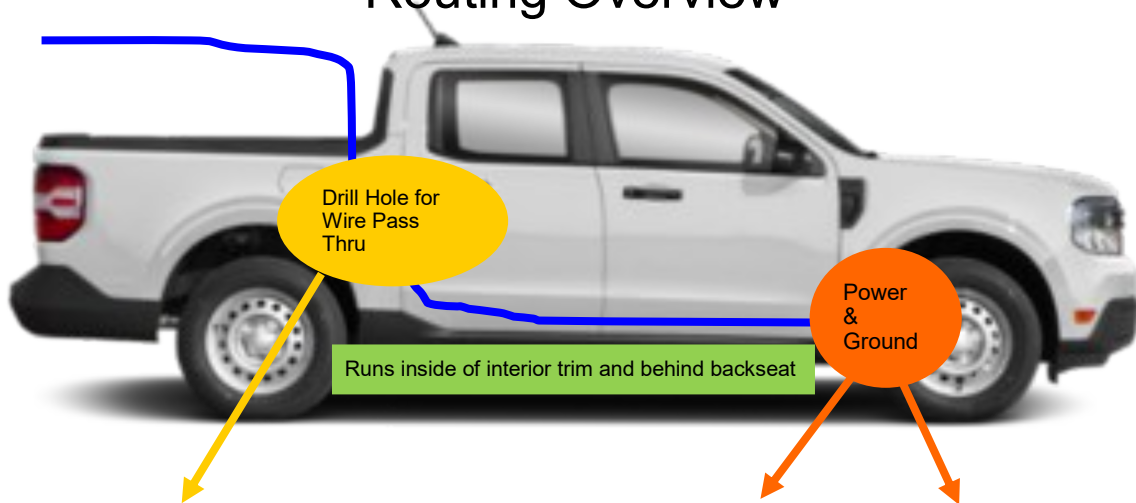
Note:

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

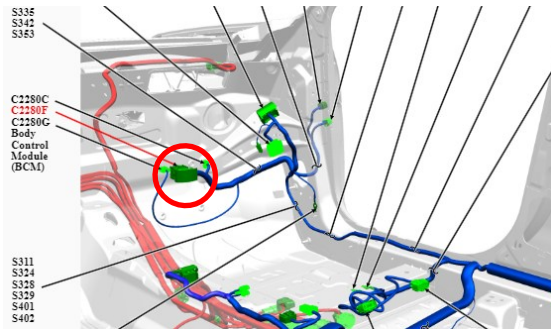


Step 1: Locate the brake light harness 71680.

Remove the fuse from the inline fuse holder until the 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:

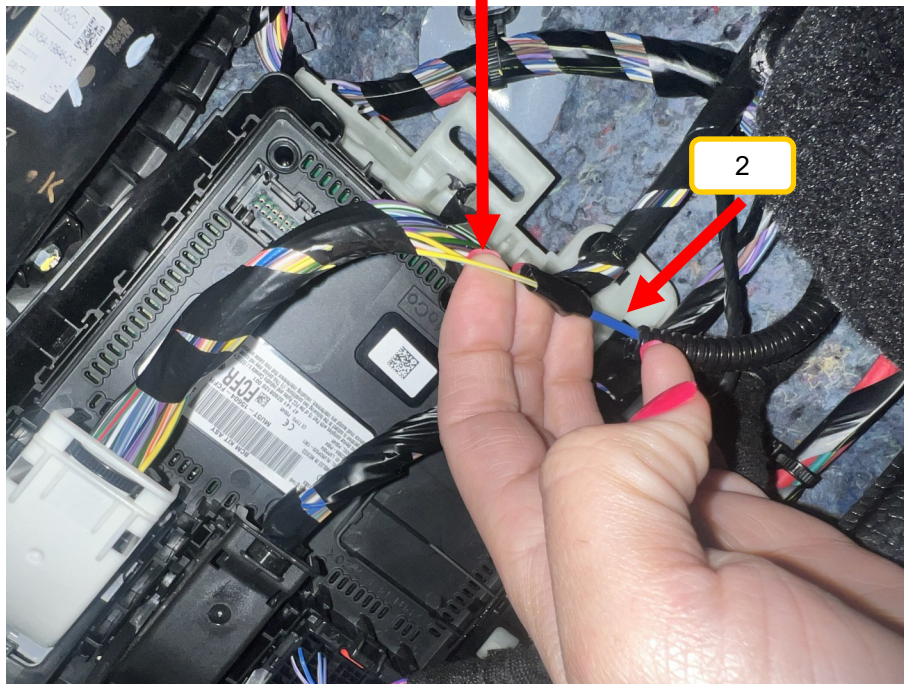
Locate the body control module behind the passenger's side dash panel, right footwell.

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.

1

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



Please Note:

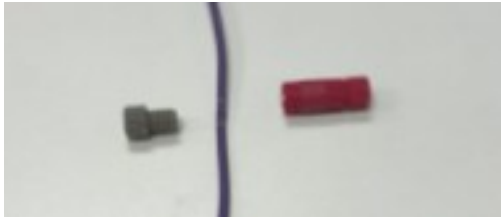
- Arrow 1, shows the OEM yellow/gray wire.
- Arrow 2, shows wire that will connect using posi-tap
- This image is for reference. The use of electrical tape after the posi-tap is not needed.



Posi-tap

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.

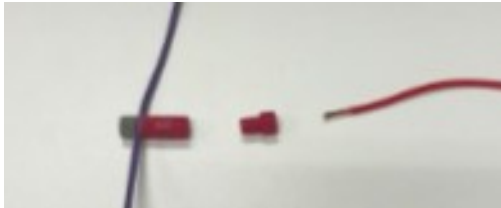


Step 3: Remove the grey cap on the posi-tap.

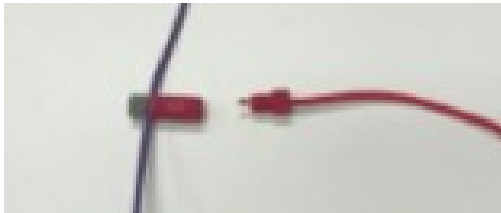
Push the OEM brake signal wire into the insert on the grey cap.



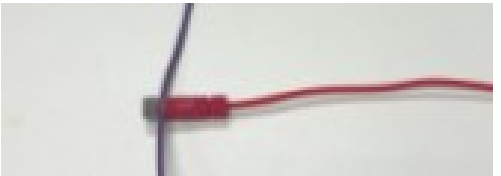
Twist the grey cap back onto the posi-tap with the OEM wire secured. The pin point on the posi-tap will puncture the OEM wire and obtain the signal.



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.

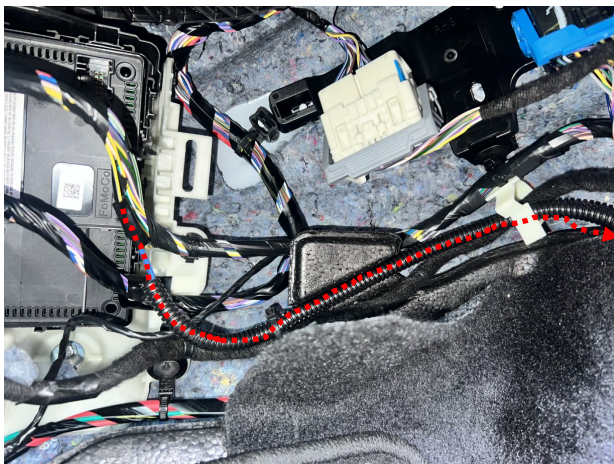
You will ground the negative cable in the area shown in the picture to the left.

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)

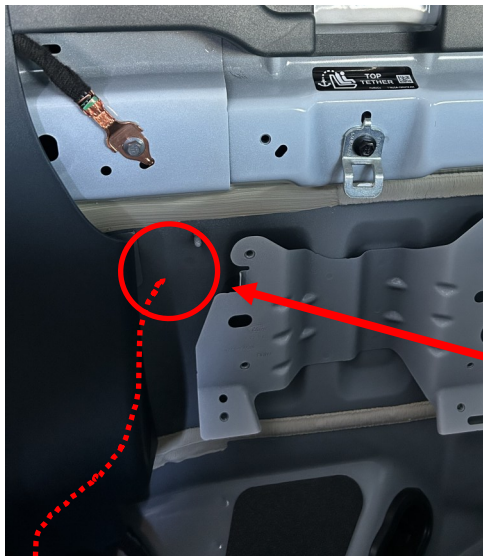
Remove trim piece circled in the image to the left.

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

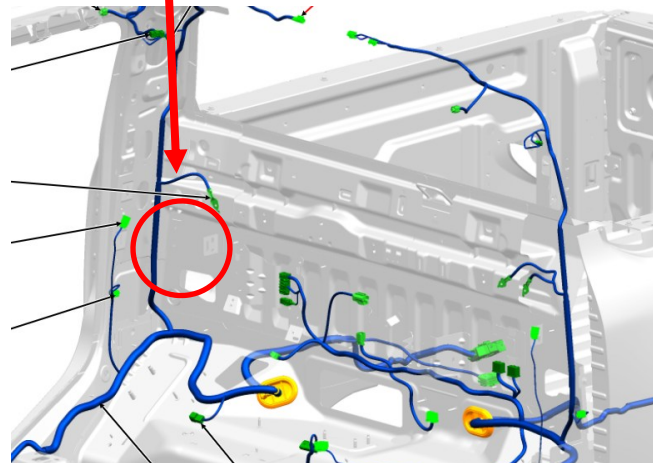
Pull the lever to pull the back of the backseat forward to access where to drill.

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.

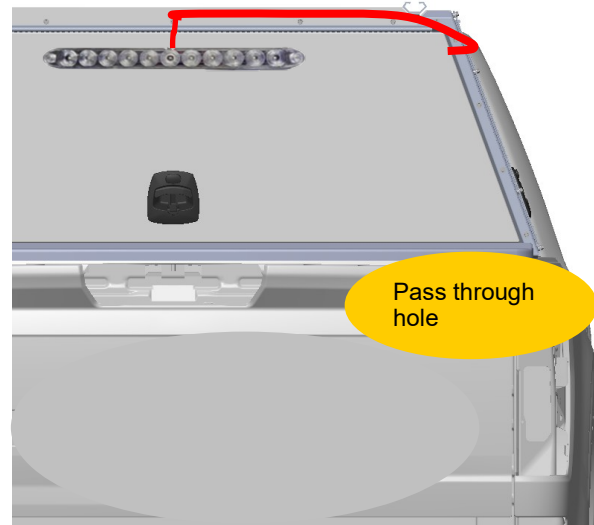
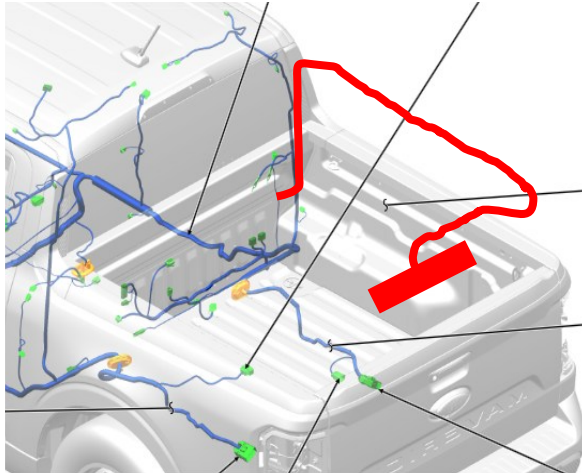
The harness should run up along the passenger's side rear cavity, then across the top cavity to the light (Red line shown in image).

Be sure to leave extra wire from the brake light to the topper rails before securing. This ensures the wires won't break 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.

Introduction / Comments:

Install Instructions For Walk-in Topper Backup Camera For F150

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.

ATTENTION:

1. The tailgate (removed for walk-in topper installation) will have the OEM camera still installed in the tailgate/end-gate handle. **It is important to use the camera that is installed in the same vehicle – or calibration errors can and will be registered on vehicle diagnostic– which will require a dealer service visit.**
2. Follow OEM back up camera removal instructions and **note the orientation of the camera.**



Install Instructions For Walk-in Topper Digital Backup Camera

Section 1: Table of Contents

Table of Contents:

Page 1: Cover Page/Introduction.....	1
Section 1: TOC & Safety Precautions Information	2
Section 2: Cable Kit Part Identification	3-5
Section 3: Tools Needed.....	6
Section 4: General Vehicle Layout	7
Section 5: General Wiring Diagram	8
Section 6: Application Specifics: F150.....	9
Section 7: General installation	13
Section 8: Routing harness.....	15
Section 9: Testing and Finish.....	20

Safety Precautions Information

These symbols are used in the document to warn installer to make sure there is understanding beyond general precautions used when working on electrical installations.

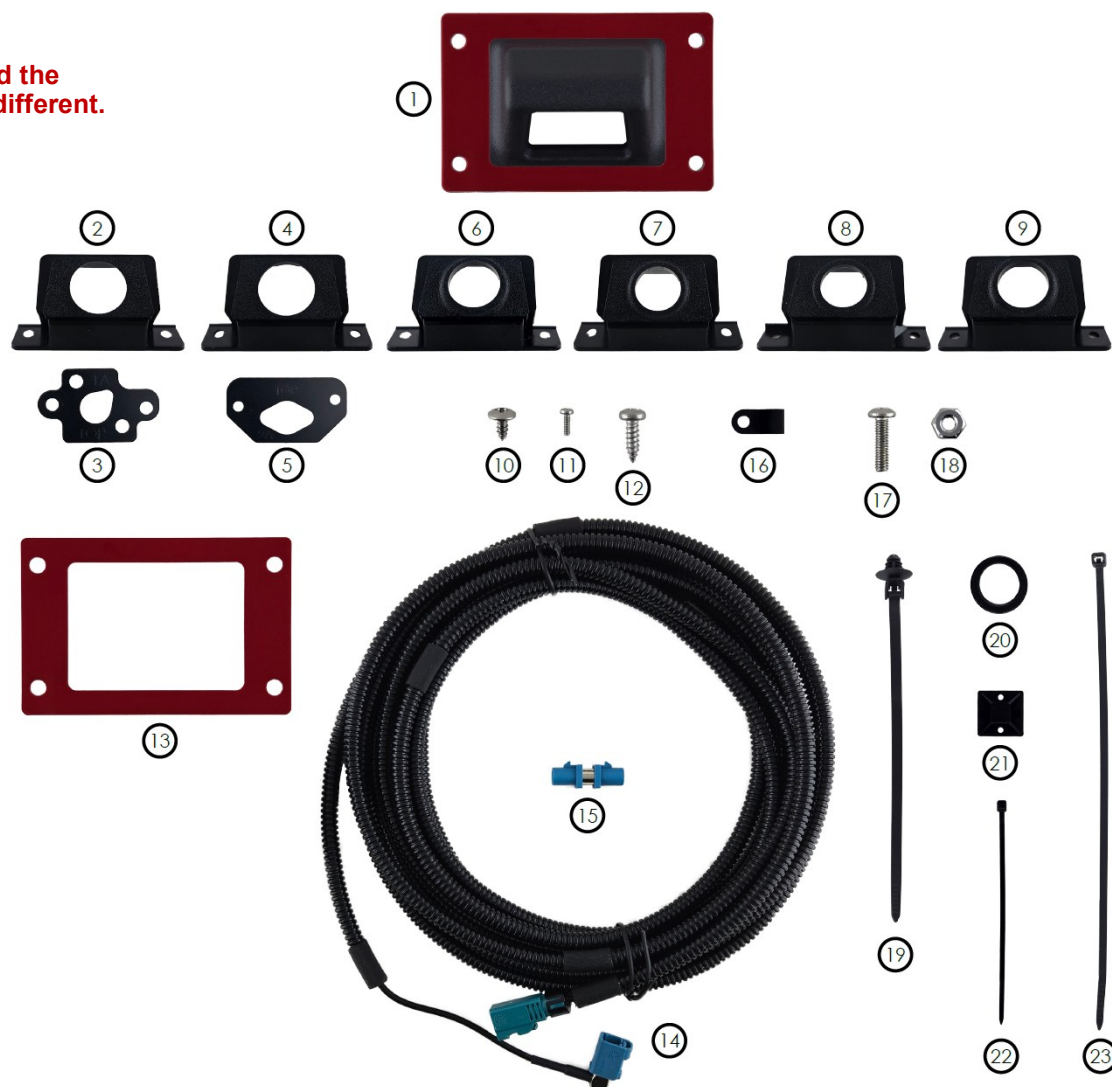
	ANSI Z535.6-2006 refers to the use of blue when “addresses practices not related to personal injury”.
	Yellow labelling level of personal injury = could result in minor injury.
	Red labelling level of personal injury = could / will result in death.

Section 2: Part Identification:

ASCW-LVDS KIT (77217) Contents (Item Reference Diagram Below):

Item	Description	Quantity	Item	Description	Quantity
1	MAIN HOUSING	1	13	DOUBLE-SIDED 1.25mm GASKET	2
2	CAMERA INSERT PLATE 1A	1	14	15' LVDS EXTENSION HARNESS	1
3	CAMERA INSERT 1A	1	15	MALE TO MALE FAKRA ADAPTER	1
4	CAMERA INSERT PLATE 2A	1	16	BLACK P-CLIPS	2
5	CAMERA INSERT 2A	1	17	8-32 5/8" PHP SCREW	4
6	CAMERA INSERT 3	1	18	8-32 NYLOCK NUTS	4
7	CAMERA INSERT 4	1	19	0.25" FIR TREE CABLE TIE	6
8	CAMERA INSERT 5	1	20	SNAP BUSHING WITH 15.3MM I.D.	1
9	CAMERA INSERT 6	1	21	VHB ADHESIVE CABLE TIE BASE MOUNT	2
10	#6 X 5/16" TRUSS HEAD SCREW	2	22	4" CABLE TIES	2
11	M2 X 6MM PHP SCREW	2	23	8" CABLE TIES	6
12	#8 X 0.5" TAPPING PHP SCREW	6			

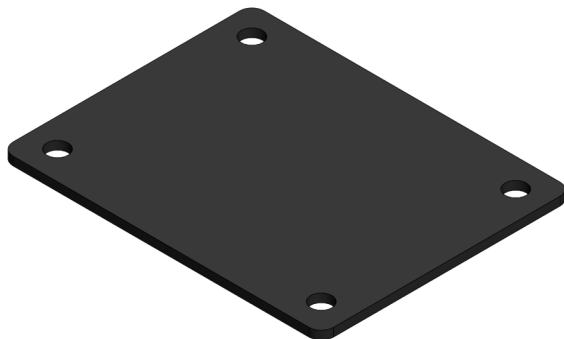
PLEASE NOTE:
The **ITEM NUMBER** and the
INSERT NUMBER are different.



ASCW-LVDS KIT (77217)

Section 2: Part Identification (Continued):

Enclosure Back Plate (77212):



MY 24-25 F-150 and F-150 Hybrid ONLY adapter (77432)



ASCW-LVDS KIT (77432)

Section 2: Part Identification (Continued):

Make	Model	Year	Notes	INSERT
Ford	F-150	2021-2025	With or Without OEM 360	4 (ITEM7 above)
Ford	Super Duty (F-250, F-350)	2023-2025	Digital and Analog Options	4
Ford	Maverick	2023-2025	Digital and Analog Options	4
Chevrolet	Silverado 1500	2023-2025	Digital	1A
Chevrolet	Colorado	2025	Digital	1A

NOTES:

1. There will be several pieces in the kit that are unused. These are for future platforms that will be validated.
2. F-150 MY 21-23 and Lightning will not use the 77432 Adapter.

Section 3: Tools Needed

①



②



③



④



⑤



1. Diagonal Cutters
2. Drill driver
3. 3/4" Hole or Step Drill (Unibit)
4. #2 Phillips head Screwdriver
5. 10mm Nut driver

Section 4: General Vehicle Layout

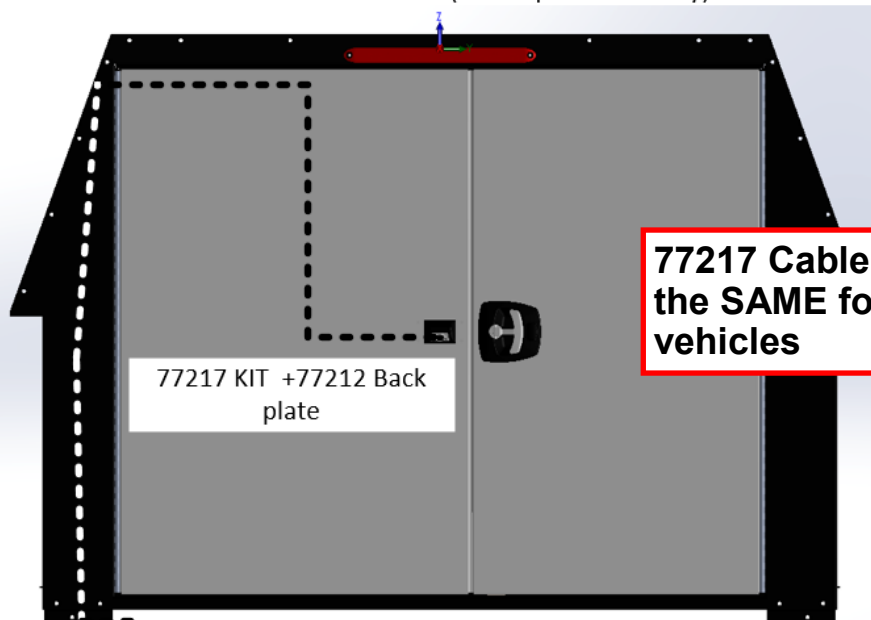
Rear side of
Adrian Top



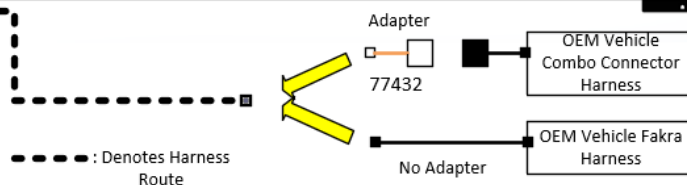
Ford F150
[LVDS only]

Notes:

All Options and Trim Levels include digital [LVDS]. F-150 + HYB have a combo connector and therefore need adapter.
Only the Lightning uses the old type Fakra connector (no adapter necessary).



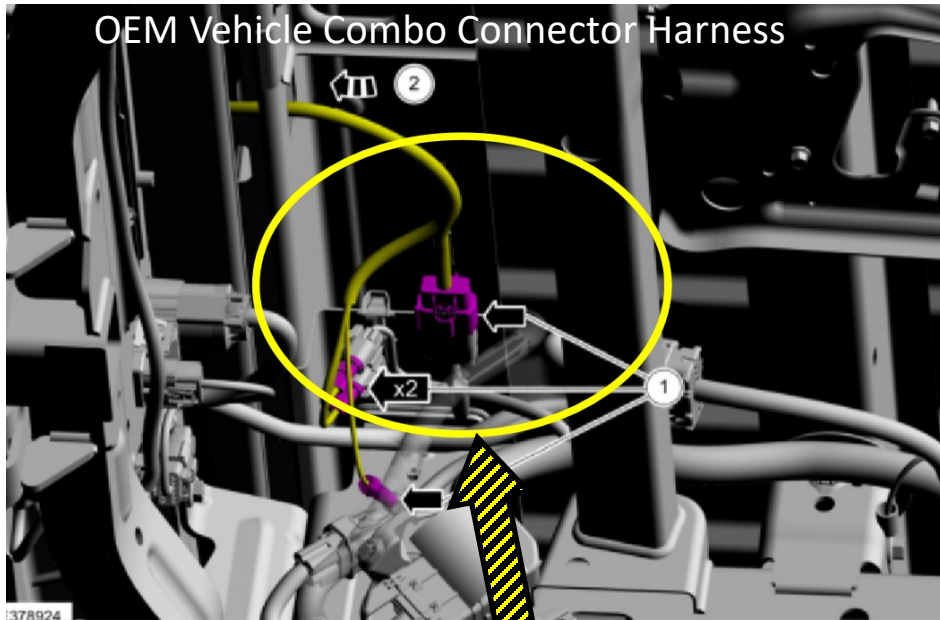
**77217 Cable routing is
the SAME for all
vehicles**



MY 24 & 25 F-150 + F-150 Hybrid

MY 24 & 25 Lightning
Pre-MY 24 F-150 + Hybrid

Section 5: General Wiring Diagram

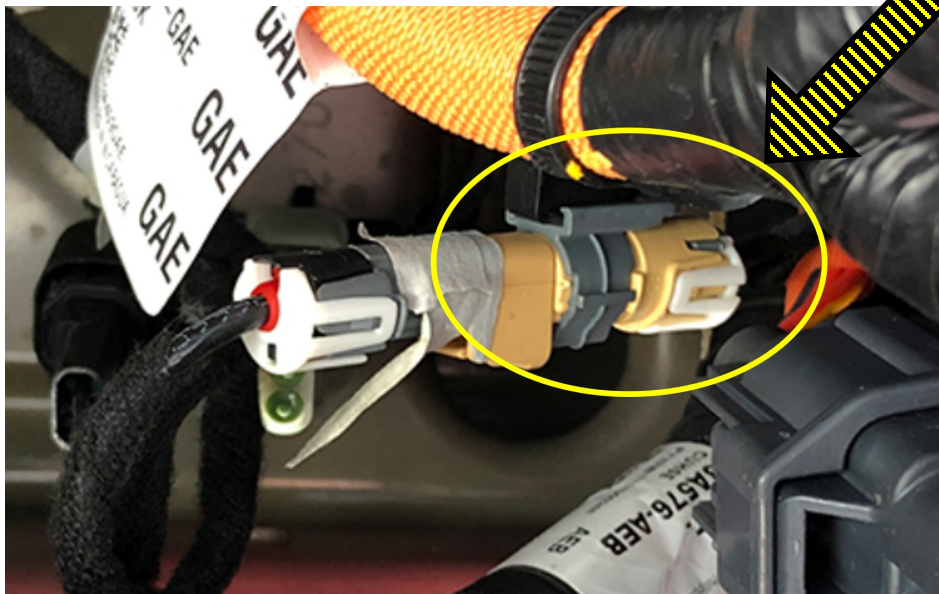


MY 24 & 25 F-150
+ F-150 Hybrid

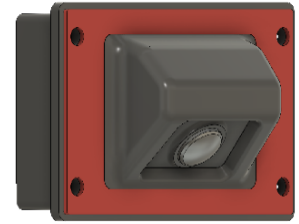
77432 Adapter



MY 24 & 25 Lightning &
Pre-MY 24 F-150 + Hybrid



Camera installed in Enclosure
(77432) & Back cover (77212)



Right Angle

Loomed Coaxial Cable



OEM Vehicle Fakra Harness

Section 6: Application Specifics: F150 / Super Duty

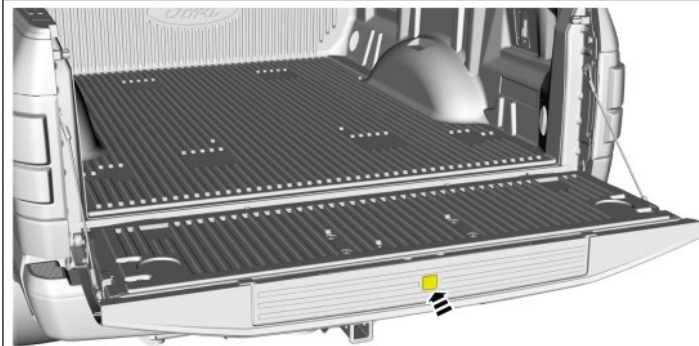
Step 6-1.

Follow Ford F-150 Service manual instructions to remove camera from the tailgate. Details extracted from instructions are as follows to the right:

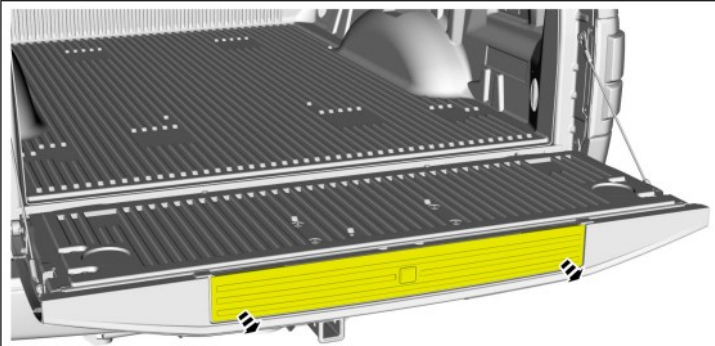
1. Open the tailgate.
2. **Vehicles With: Tailgate Step:**
 - Push the tailgate step release button.
 - Open the tailgate step.



Caution: Make sure camera orientation for up is noted when removing from release handle.



E196243



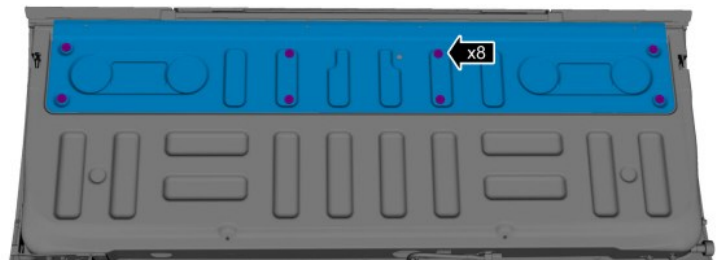
E196244

c. All vehicles

- If equipped. Remove the bedliner tailgate cover. *Torque: 22 lb.in (2.5 Nm)*
- If equipped. Remove the tailgate access panel bolts and the tailgate access panel. *Torque: 22 lb.*



E196058



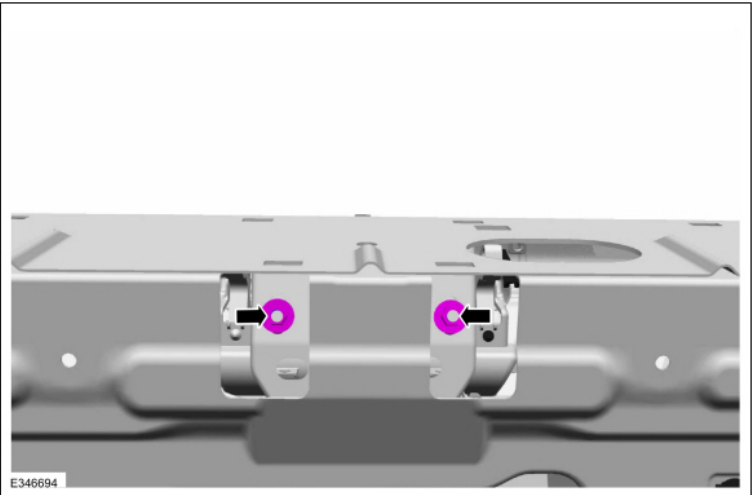
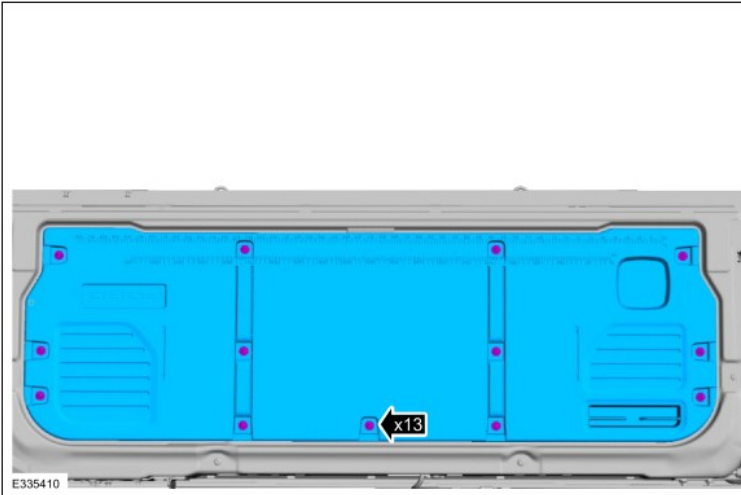
E196059

Section 6: Application Specifics: F150 / Super Duty

- If equipped. Remove the workspace tailgate access panel bolts and the workspace tailgate access panel. *Torque: 71 lb.in (8 Nm)*
- Remove the tailgate moulding. Refer to: Tailgate Moulding (501-08 Exterior Trim and Ornamentation, Removal and Installation).
- Remove the tailgate handle nuts. *Torque: 80 lb.in (9 Nm)*

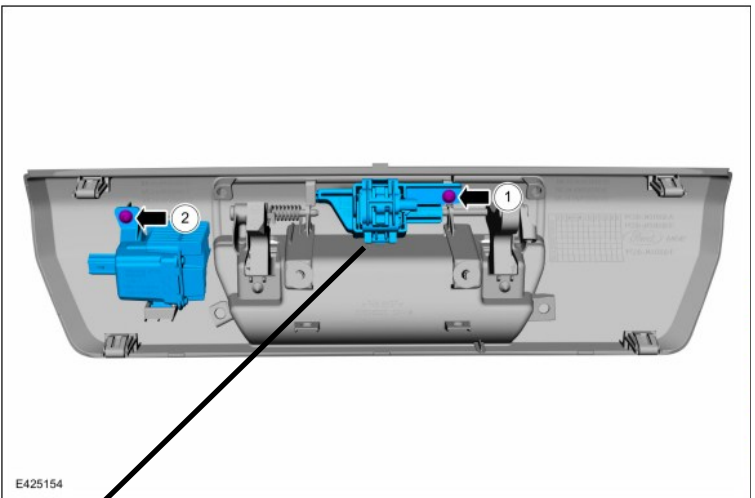
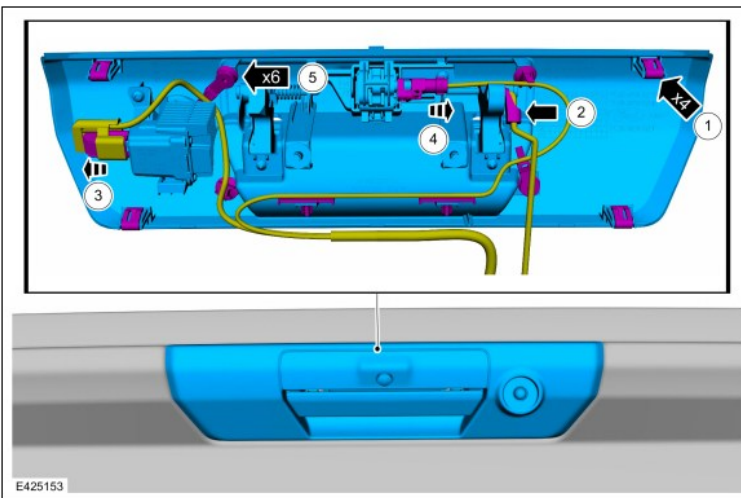


Caution: Make sure camera orientation for up is noted when removing from release handle.

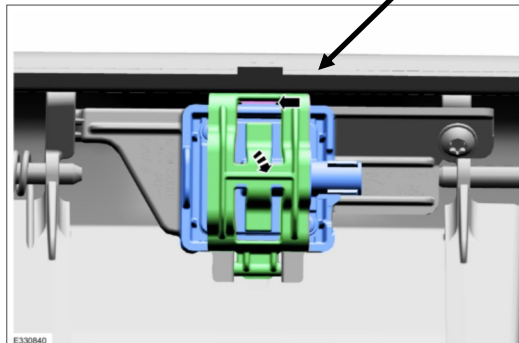


TOP VIEW

- Remove the tailgate release handle.
 - Release the retaining clips and position the tailgate release handle from the tailgate.
 - Disconnect the tailgate handle to tailgate control assembly rod.
 - Disconnect the rear camera electrical connector
 - Remove the screw and the rear bracket and camera.



- Release the tab, and remove the bracket and the rear parking aid camera.



Caution: Make sure to notice camera orientation for UP when removing from release handle.

Section 6: Application Specifics: F150 / Super Duty

Step 6-2.

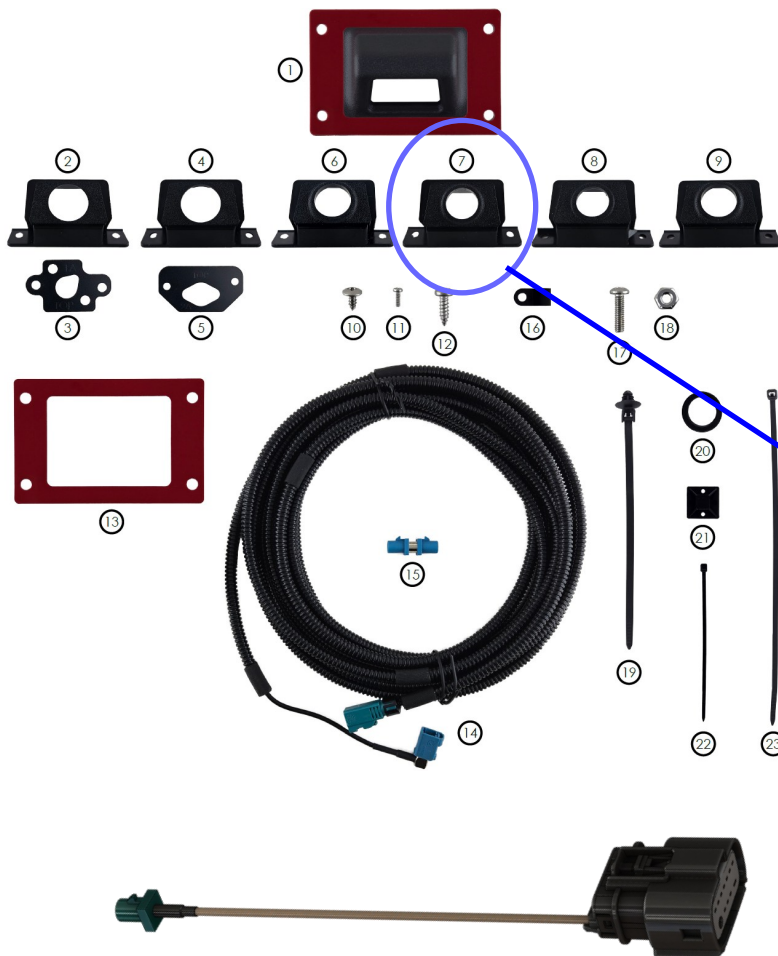


Caution: Make sure camera orientation for up is noted from previous disassembly.



- If the camera DOES not look like this (a single pin round coaxial snap-on connection) –**STOP**– you will need an analog back up camera kit. Please contact your Adrian representative.

Step 6-3.



- Remove Digital Backup Camera kit from shipping package and make sure all pieces are present (contains bracketry for multiple vehicle platforms)



- Enclosure Back Plate (77212)

- Identify CAMERA INSERT “4” bracket (molded into the BACK SURFACE of part) [Part number BOM ID #7]

- MY24-25 (Only) F-150 and Hybrid adapter (77432)

Section 6: Application Specifics: F150 / Super Duty

Step 6-4.



Caution: Use a hand screwdriver to tighten these screws— do not over-torque.



- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16" Truss Head Screws will be used to firmly mount the camera into the bracket.

Step 6-5.

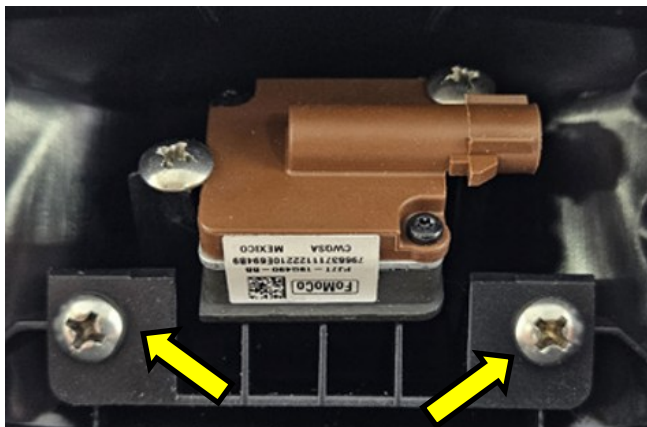


- The camera should fit the bracket with very little gap between the lens and the hole in the bracket. The OEM camera should fit into this bracket squarely and not be loose when twisted or rocked within the bracket. (if so-you might have the wrong bracket) bracket should fit into the enclosure at an angle, top first, lightly snapping in.

Step 6-6.



Caution: Use a hand screwdriver to tighten these screws— do not over-torque.



- The inner bracket's holes should align with the enclosure's screw bosses. Use BOM ITEM #12: #8 X 0.5 TAPPING PHP SCREWS to secure the inner bracket to the inside of the enclosure.
- DO NOT insert the 15' LVDS EXTENSION HARNESS to the back of the camera yet

Section 6: Application Specifics: Ford Maverick

Step 6-1.

Follow Ford Maverick manual instructions to remove camera from the tailgate. Details extracted from instructions are as follows to the right:

1. Open the tailgate.

2. **Vehicles With: Tailgate Step:**

- Push the tailgate step release button.
- Open the tailgate step.



Caution: Make sure camera orientation for up is noted when removing from release handle.

c. **All vehicles**

- If equipped. Remove the bedliner tailgate cover. *Torque: 22 lb.in (2.5 Nm)*
- If equipped. Remove the tailgate access panel bolts and the tailgate access panel. *Torque: 22 lb.*



d. You will need a 10mm socket and extender to reach the 10mm Nuts you need to unfasten to remove camera housing



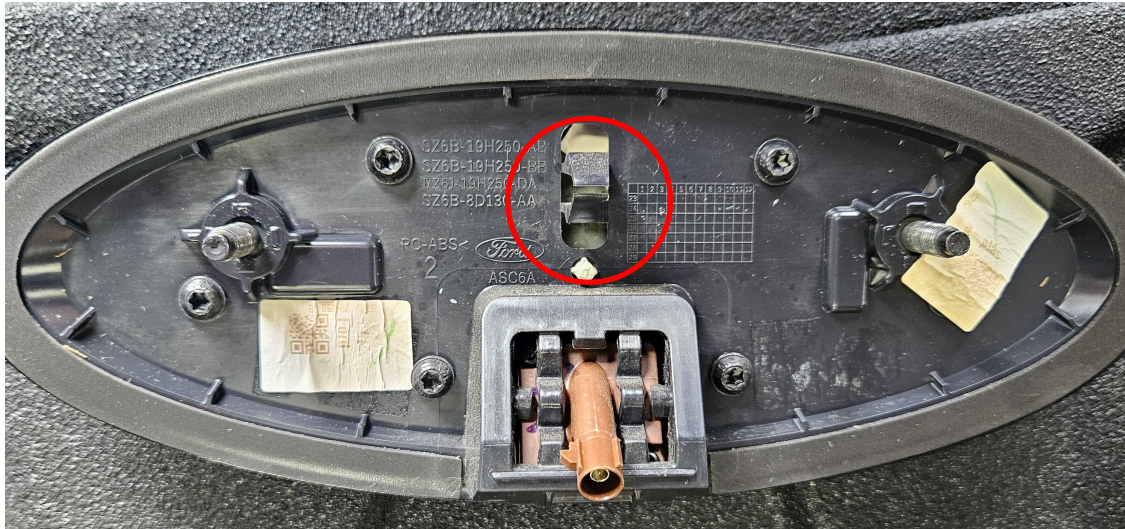
Section 6: Application Specifics: Ford Maverick

Step 6-2.

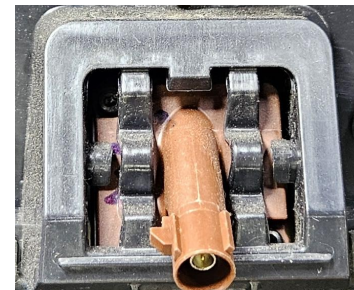
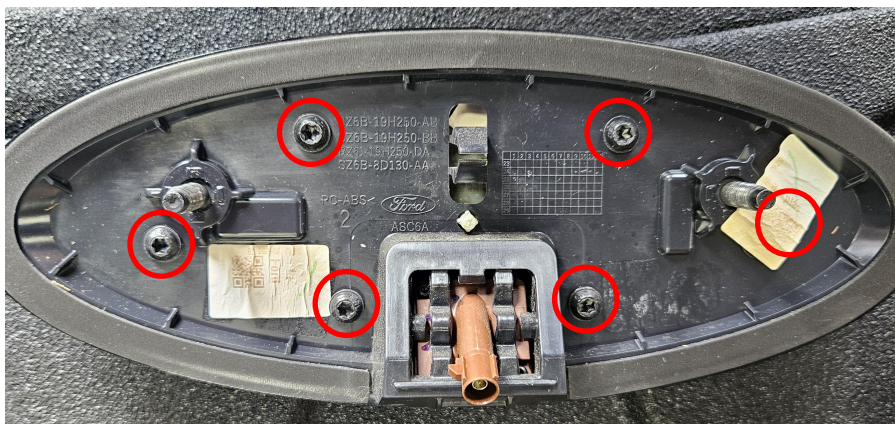
There is one clip holding in the camera housing. Using a trim tool you can remove it



Caution: Make sure camera orientation for up is noted when removing from release handle.



Step 6-2. Unscrew the six T20 torx bit screws circled. You will need a small knife to cut the seal along the edge of the housing. Remove camera from housing



Section 6: Application Specifics: Ford Maverick

Step 6-2.

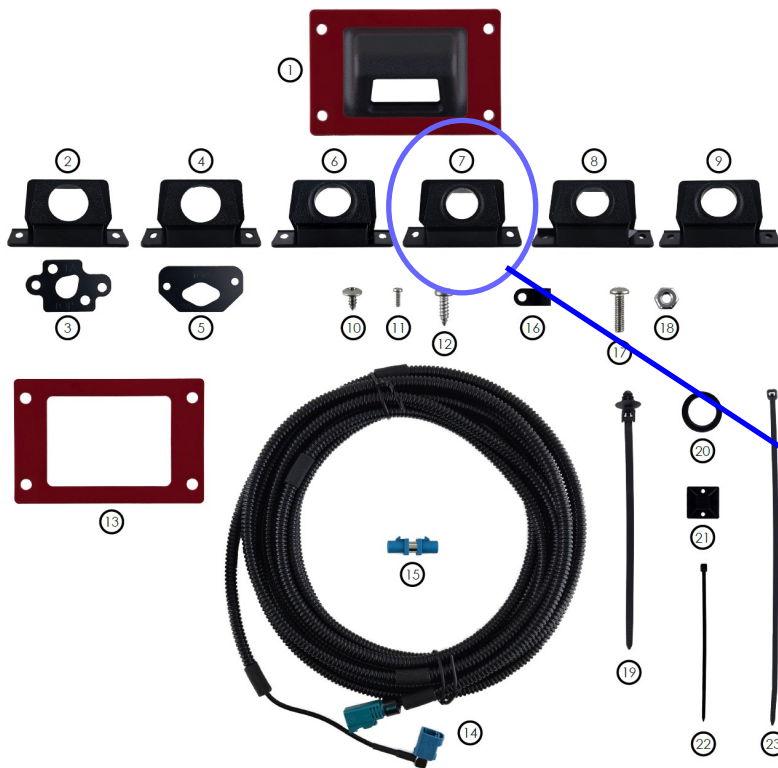


Caution: Make sure camera orientation for up is noted from previous disassembly.

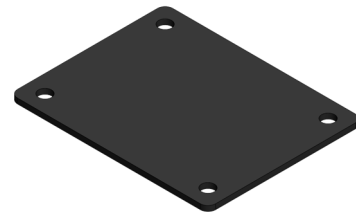


- If the camera DOES not look like this (a single pin round coaxial snap-on connection) –**STOP**– you will need an analog back up camera kit. Please contact your Adrian representative.

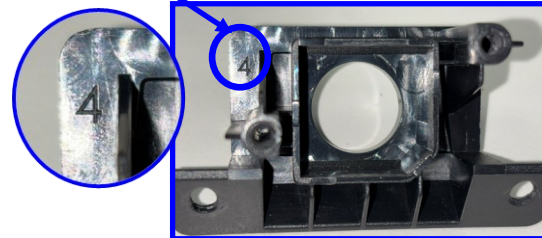
Step 6-3.



- Remove Digital Backup Camera kit from shipping package and make sure all pieces are present (contains bracketry for multiple vehicle platforms)



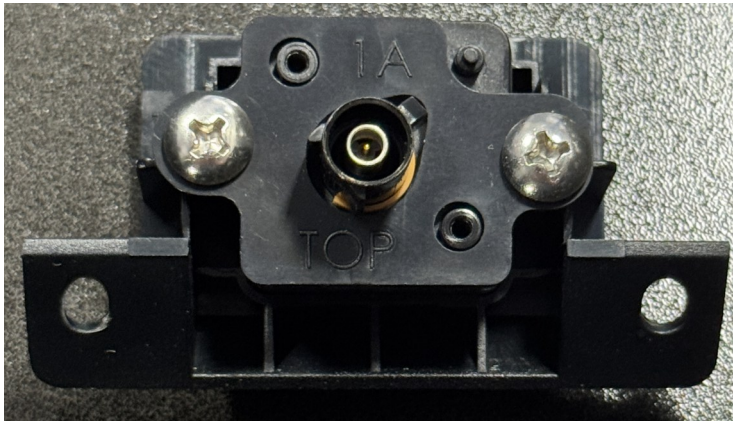
- Enclosure Back Plate (77212)



- Identify CAMERA INSERT “4” bracket (molded into the BACK SURFACE of part) [Part number BOM ID #7]

Section 6: Application Specifics: Colorado

Step 6-4.



Caution: Use a hand screwdriver to tighten these screws— do not over-torque.

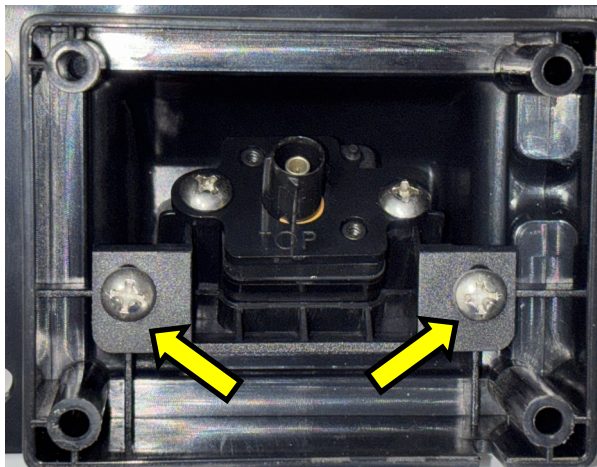
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16" Truss Head Screws will be used to firmly mount the camera into the bracket.

Step 6-5.



- The camera should fit the bracket with very little gap between the lens and the hole in the bracket. The OEM camera should fit into this bracket squarely and not be loose when twisted or rocked within the bracket. (if so-you might have the wrong bracket) bracket should fit into the enclosure at an angle, top first, lightly snapping in.

Step 6-6.



Caution: Use a hand screwdriver to tighten these screws— do not over-torque.

- The inner bracket's holes should align with the enclosure's screw bosses. Use BOM ITEM #12: #8 X 0.5 TAPPING PHP SCREWS to secure the inner bracket to the inside of the enclosure.
- DO NOT insert the 15' LVDS EXTENSION HARNESS to the back of the camera yet

Section 6: Application Specifics: Chevrolet Silverado 1500

Step 6-1.

Follow Chevy Silverado 1500 Service manual instructions to remove camera from the tailgate. Details extracted from instructions are as follows to the right:

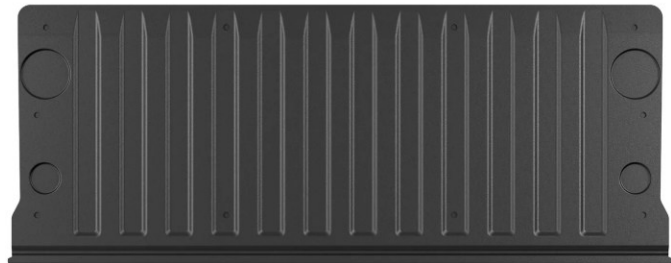
1. Open the tailgate.
2. **Vehicles With: Tailgate Step:**
 - Push the tailgate step release button.
 - Open the tailgate step.



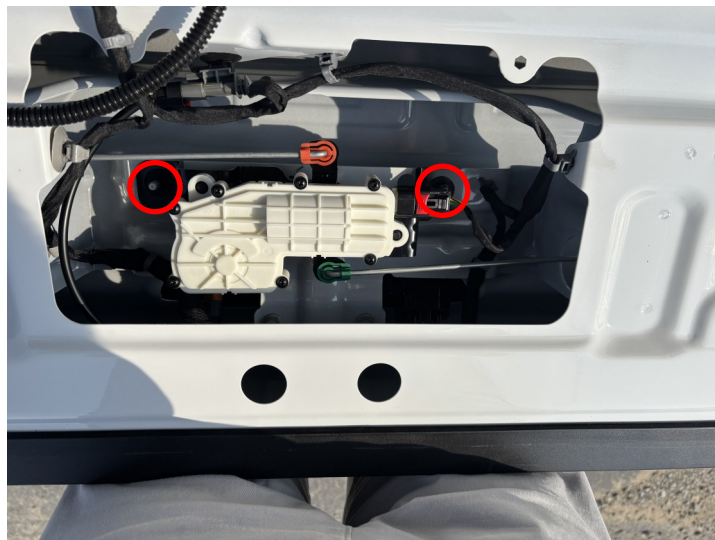
Caution: Make sure camera orientation for up is noted when removing from release handle.

c. All vehicles

- If equipped. Remove the bedliner tailgate cover. *Torque: 22 lb.in (2.5 Nm)*
- If equipped. Remove the tailgate access panel bolts and the tailgate access panel. *Torque: 22 lb.*



d. Remove bolts circled



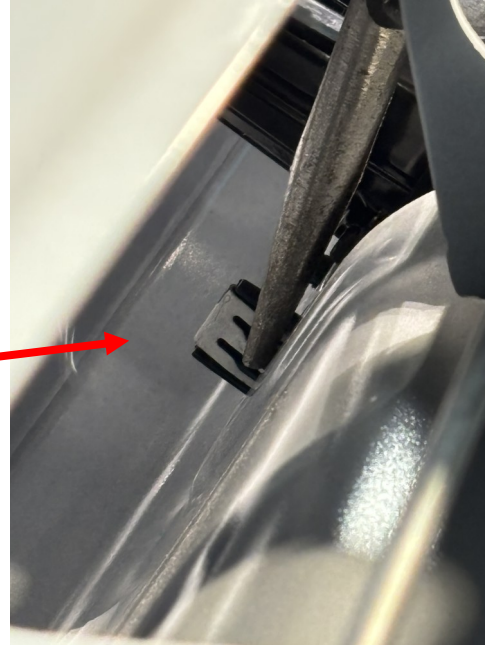
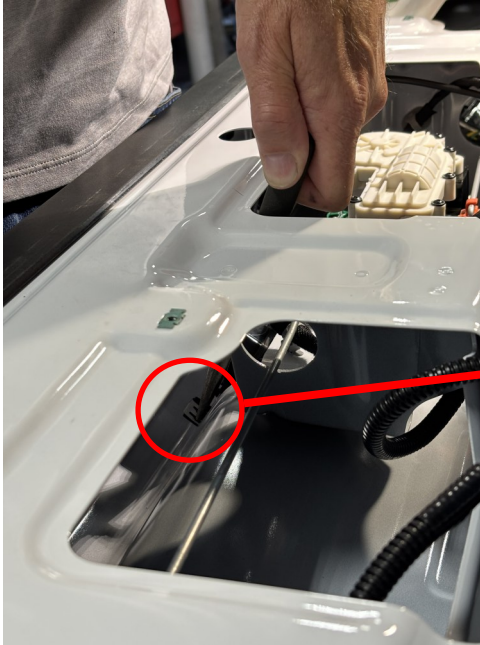
Section 6: Application Specifics: Chevrolet Silverado 1500

Step 6-2.

You will need to depress the clip holding in the camera housing with a tool as shown below



Caution: Make sure camera orientation for up is noted when removing from release handle.



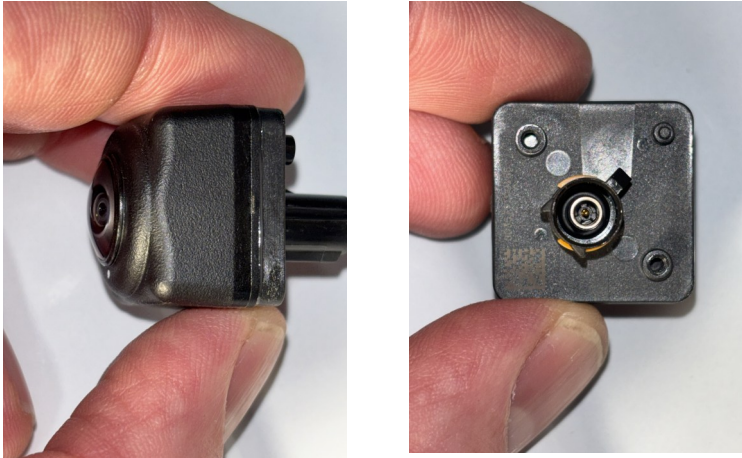
Step 6-2.

Remove camera housing. Unscrew the two screws circled. Remove camera from housing



Section 6: Application Specifics: Silverado 1500

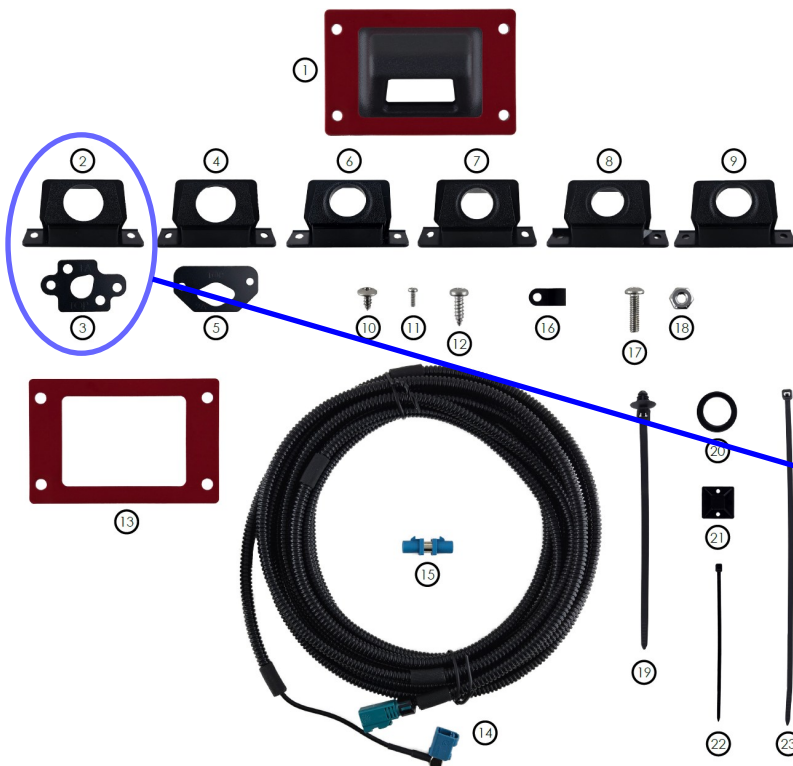
Step 6-3.



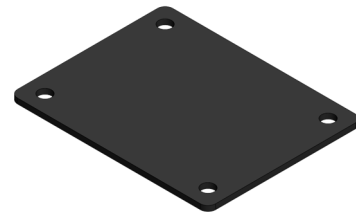
Caution: Make sure camera orientation for up is noted from previous disassembly.

- If the camera DOES not look like this (a single pin round coaxial snap-on connection) –**STOP**– you will need an analog back up camera kit. Please contact your Adrian representative.

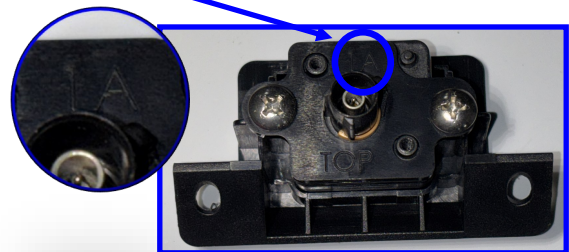
Step 6-3.



- Remove Digital Backup Camera kit from shipping package and make sure all pieces are present (contains bracketry for multiple vehicle platforms)



Enclosure Back Plate (77212)



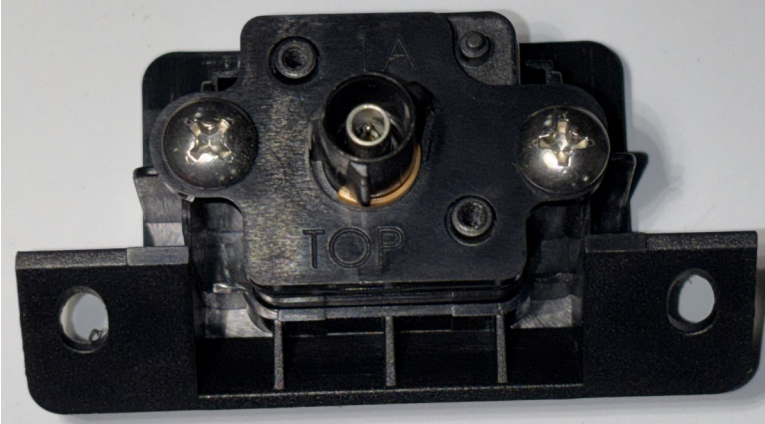
- Identify CAMERA INSERT "1A" bracket AND CAMERA INSERT PLATE "1A" (molded into the BACK SURFACE of part) [Part number BOM ID #2 and #3]

Section 6: Application Specifics: Silverado 1500

Step 6-4.



Caution: Use a hand screwdriver to tighten these screws— do not over-torque.



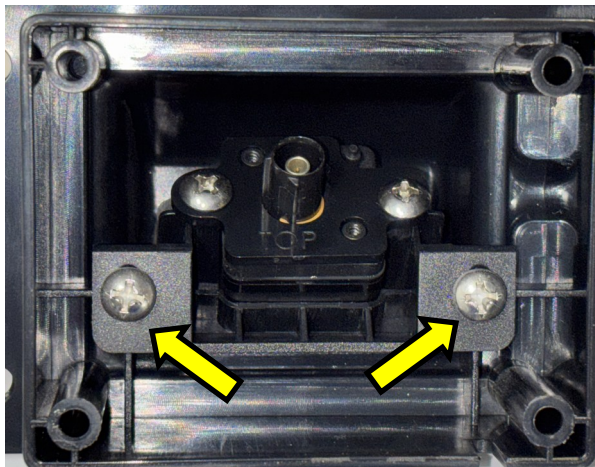
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16" Truss Head Screws will be used to firmly mount the camera into the bracket.

Step 6-5.



- The camera should fit the bracket with very little gap between the lens and the hole in the bracket. The OEM camera should fit into this bracket squarely and not be loose when twisted or rocked within the bracket. (if so-you might have the wrong bracket) bracket should fit into the enclosure at an angle, top first, lightly snapping in.

Step 6-6.



Caution: Use a hand screwdriver to tighten these screws— do not over-torque.

- The inner bracket's holes should align with the enclosure's screw bosses. Use BOM ITEM #12: #8 X 0.5 TAPPING PHP SCREWS to secure the inner bracket to the inside of the enclosure.
- DO NOT insert the 15' LVDS EXTENSION HARNESS to the back of the camera yet

Section 6: Application Specifics: Chevrolet Colorado

Step 6-1.

Follow Chevy Silverado 1500 Service manual instructions to remove camera from the tailgate. Details extracted from instructions are as follows to the right:

1. Open the tailgate.
2. **Vehicles With: Tailgate Step:**
 - Push the tailgate step release button.
 - Open the tailgate step.



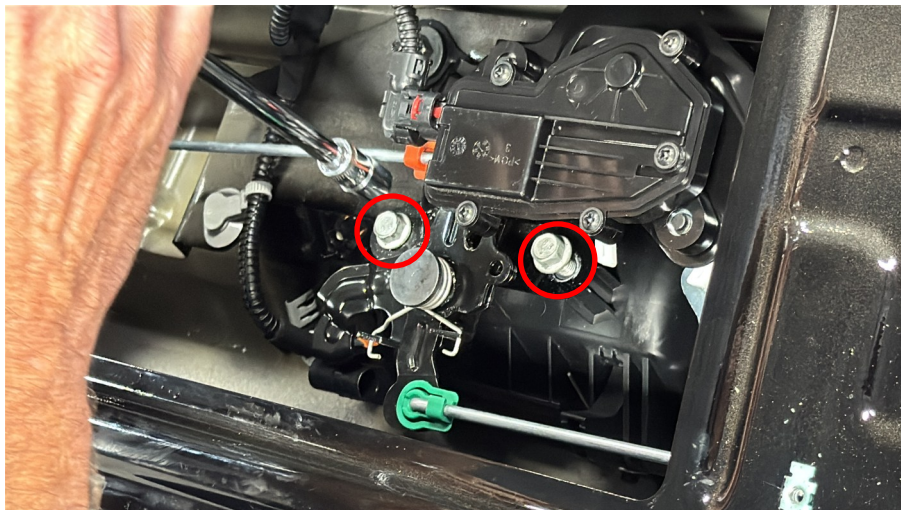
Caution: Make sure camera orientation for up is noted when removing from release handle.

c. All vehicles

- If equipped. Remove the bedliner tailgate cover. *Torque: 22 lb.in (2.5 Nm)*
- If equipped. Remove the tailgate access panel bolts and the tailgate access panel. *Torque: 22 lb.*



d. Remove bolts circled



Section 6: Application Specifics: Chevrolet Colorado

Step 6-2.

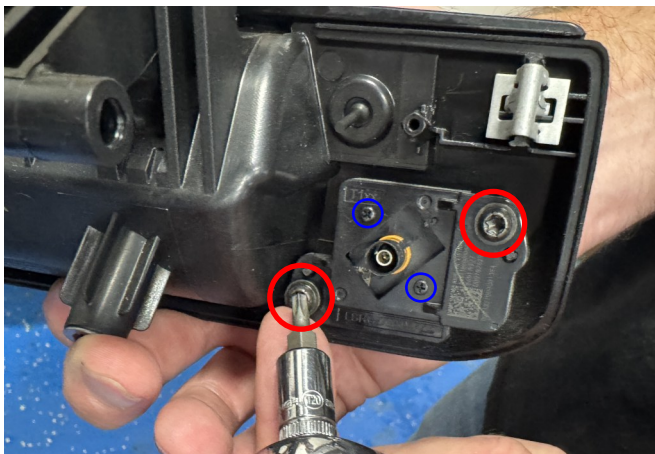
There are two clips holding in the camera housing. Using a trim tool you can remove them



Caution: Make sure camera orientation for up is noted when removing from release handle.

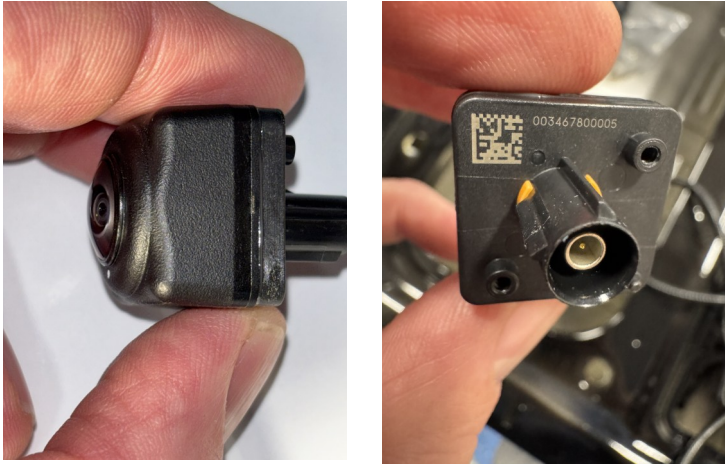


Step 6-2. Unscrew the two T20 torx bit screws circled. Unscrew the two Phillips head screws. Remove camera from housing



Section 6: Application Specifics: Colorado

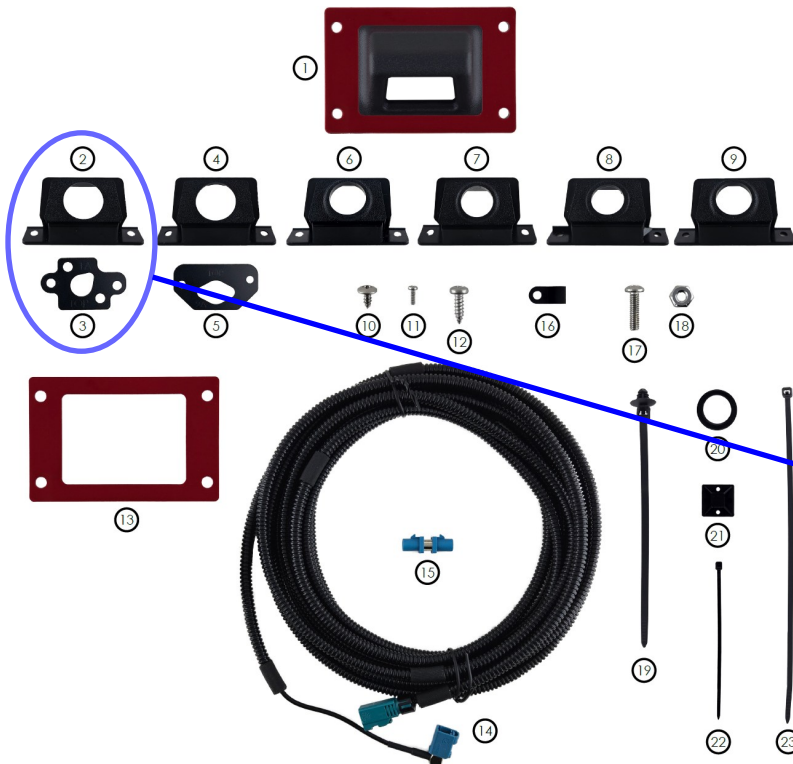
Step 6-3.



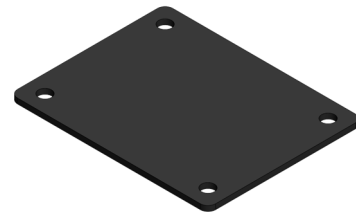
Caution: Make sure camera orientation for up is noted from previous disassembly.

- If the camera DOES not look like this (a single pin round coaxial snap-on connection) –**STOP**– you will need an analog back up camera kit. Please contact your Adrian representative.

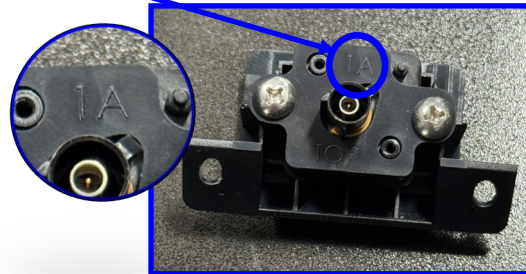
Step 6-3.



- Remove Digital Backup Camera kit from shipping package and make sure all pieces are present (contains bracketry for multiple vehicle platforms)



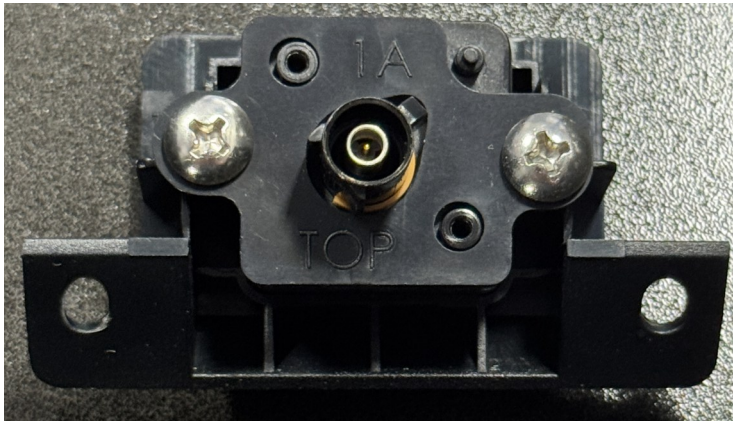
Enclosure Back Plate (77212)



- Identify CAMERA INSERT "1A" bracket AND CAMERA INSERT PLATE "1A" (molded into the BACK SURFACE of part) [Part number BOM ID #2 and #3]

Section 6: Application Specifics: Colorado

Step 6-4.



Caution: Use a hand screwdriver to tighten these screws— do not over-torque.

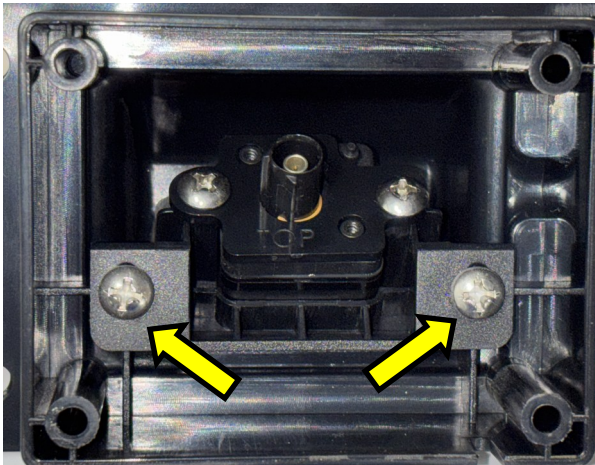
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16" Truss Head Screws will be used to firmly mount the camera into the bracket.

Step 6-5.



- The camera should fit the bracket with very little gap between the lens and the hole in the bracket. The OEM camera should fit into this bracket squarely and not be loose when twisted or rocked within the bracket. (if so-you might have the wrong bracket) bracket should fit into the enclosure at an angle, top first, lightly snapping in.

Step 6-6.



Caution: Use a hand screwdriver to tighten these screws— do not over-torque.

- The inner bracket's holes should align with the enclosure's screw bosses. Use BOM ITEM #12: #8 X 0.5 TAPPING PHP SCREWS to secure the inner bracket to the inside of the enclosure.
- DO NOT insert the 15' LVDS EXTENSION HARNESS to the back of the camera yet

Section 7: General installation

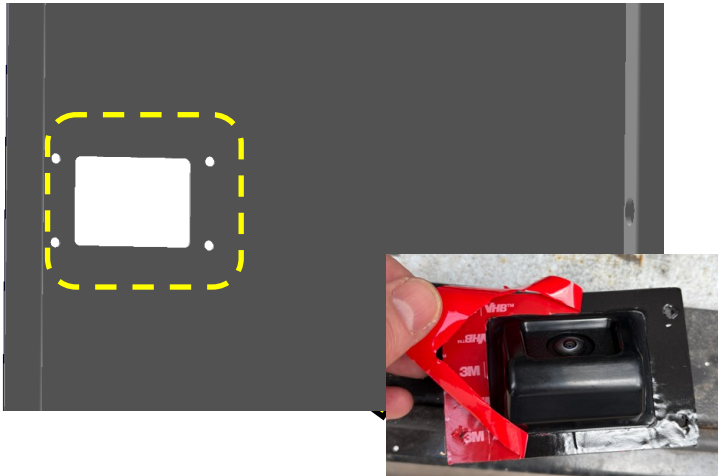
Step 7-1.

Camera installed in
Enclosure



- This assembly will be mounted into the walk-in door opening with the camera tilting at an angle downward toward the ground.
- There is red tape liner protecting the outward facing adhesive covered surface.

Step 7-2.



- Clean and let dry the surface around the square hole in the door on the inside of the door.
- **NOTE: The minimum double sided tape application temperature is 50° F (10°C).**
- Be sure to use 50:50 mixture of isopropyl alcohol (IPA*) solution to remove any dirt or oils. Allow to dry.
- The red gasket liner on the enclosure assembly will be removed before placement.

Step 7-3.



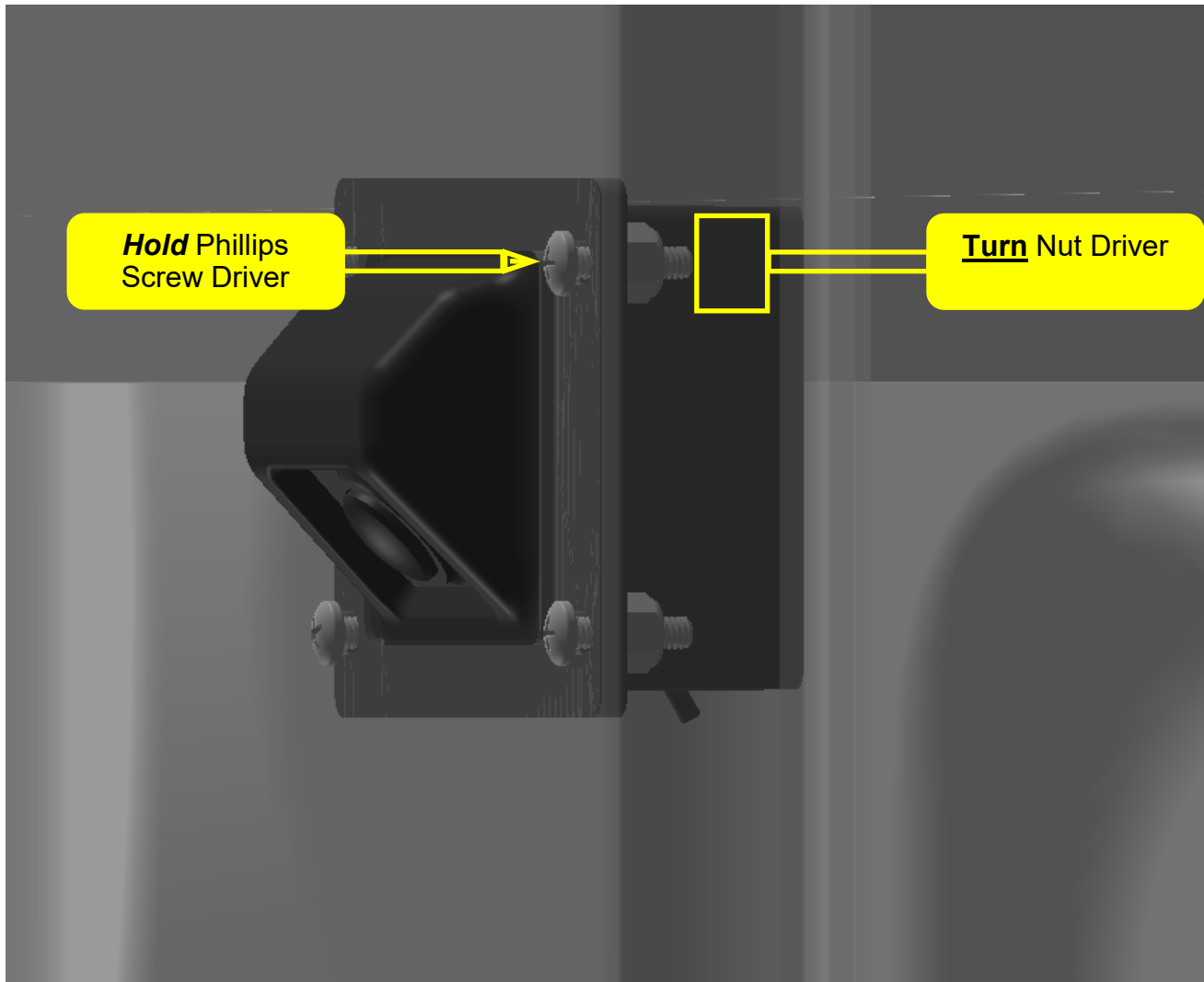
- This is VHB tape, so do not push to stick it unless the 4 screw holes are aligned.
- It is recommended that at least two corner screws BOM ITEM #17: 8-32 5/8" PHP SCREWS are present while installing the enclosure,
- Carefully aligning the enclosure protrusion through the hole in the door, make sure enclosure flange is flush before pushing for the adhesive to stick.

Section 7: General installation

Step 7-4.



Caution: Use a hand driver to tighten these nuts— do not over-torque



- Add the other two screws and make sure enclosure assembly is completely aligned before applying light pressure to the enclosure and gasket to the door.
- The enclosure should not be warping, binding, or pinching the plastic material into the side of the square hole. It should be interfacing flatly between the enclosure back flange, the gasket, and the door material for water tightness.
- **Hold** a Phillips head screwdriver to the screws on the outside of the door, while **turning** a hand nut driver to tighten the nylock nuts with very light torque on the back side (this prevents the turning screw heads from marking the outside paint or wrap of the walk-in door).
- Finish the nuts torquing lightly **HAND TIGHTEN** until snug (to avoid over compressing the plastic).

Section 8: Routing harness

Step 8-1.



Caution: The loom covered coaxial cable should not be bent at harsh angles, kinked or pinched during the installation.

Extension Harness Connection to OEM Camera Connection:

Because the extension harness right-angle connector is equipped with a seal, the connection between the connector and the OEM camera may require firm pressure to fully seat.

The connection should make a "click" sound when the connector is fully seated and locked.

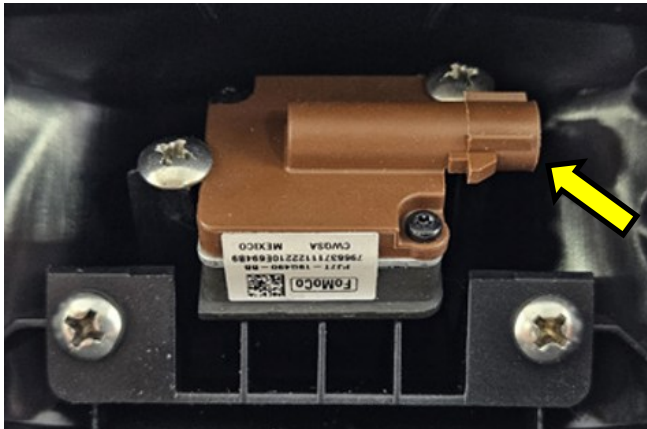
Fully Seated Connection



Not Fully Seated Connection

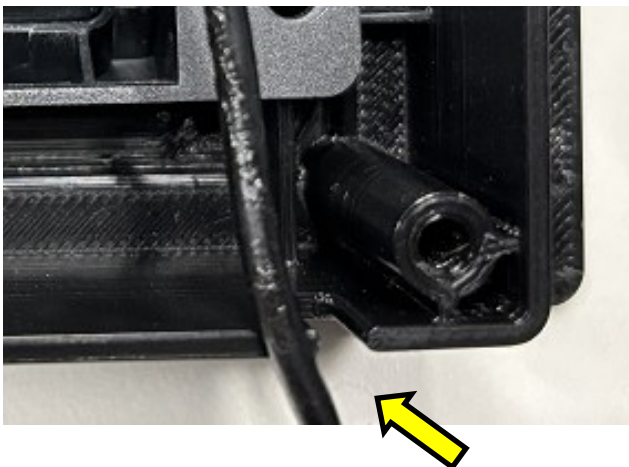


Step 8-2.



- Right angle end (shown above) of the BOM ITEM #14: 15' LVDS EXTENSION HARNESS will fit directly onto the OEM camera installed the enclosure with a small click. Be sure to use the push-pull-push test to ensure clip retainer is engaged.

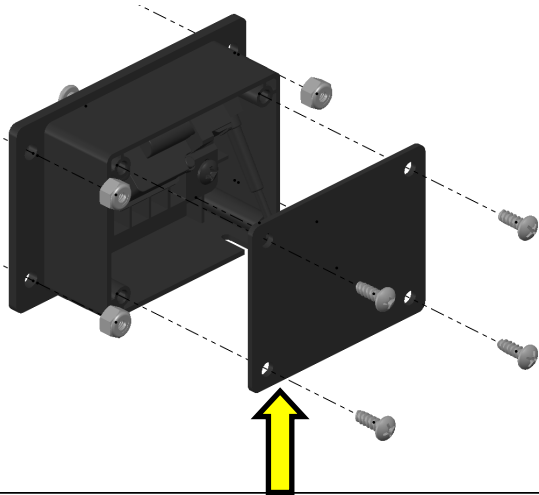
Step 8-3.



- The right angle swivel connection will be adjusted so that the coaxial wire can be routed out of the slot in the bottom of the box.

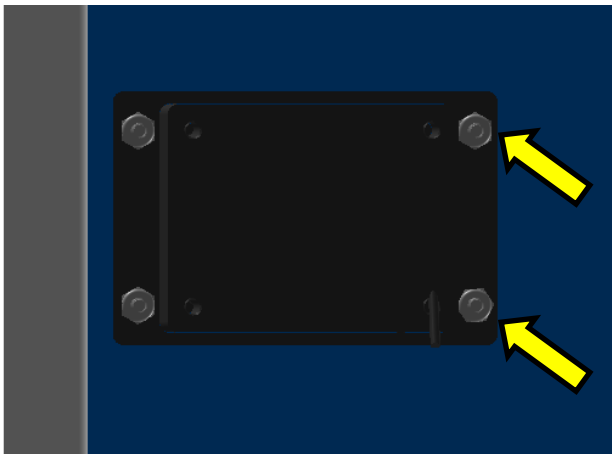
Section 8: Routing harness

Step 8-4.



- Install the aluminum back plate cover [77212] of the enclosure while keeping the coaxial harness wire in the allotted channel for exiting the enclosure.
- Use BOM ITEM #12: #8 X 0.5 TAPPING PHP SCREWS to secure the back plate to the enclosure.
- **HAND TIGHTEN** the back cover.

Step 8-5.

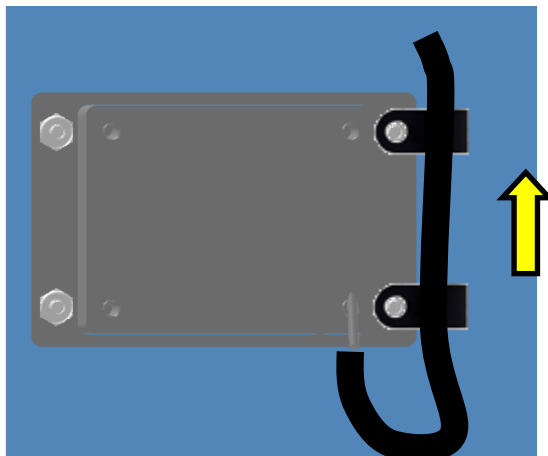


- Remove the bottom and top driver's side nuts from the enclosure mounting screws and obtain a black plastic P-clips BOM ITEM #16: BLACK P-CLIPS from the kit package.



- The tape will be assisting in keeping the enclosure in place now.

Step 8-6.



Caution: The loom covered coaxial cable should not be bent at harsh angles, kinked or pinched during the installation.

- These P-clips will be oriented like in the diagram so that wire is leaving the slot, then the looming cover on the coaxial cable begins, a small drip loop is formed, and then is fastened by the clips to the enclosure screws going upward to the top of the door.
- Again fasten the nuts with light torque while holding screws on the outside of the door to prevent spinning.
- During HAND TIGHTENING, ensure the P-clips stay in position and do not twist and damage the cable and loom.

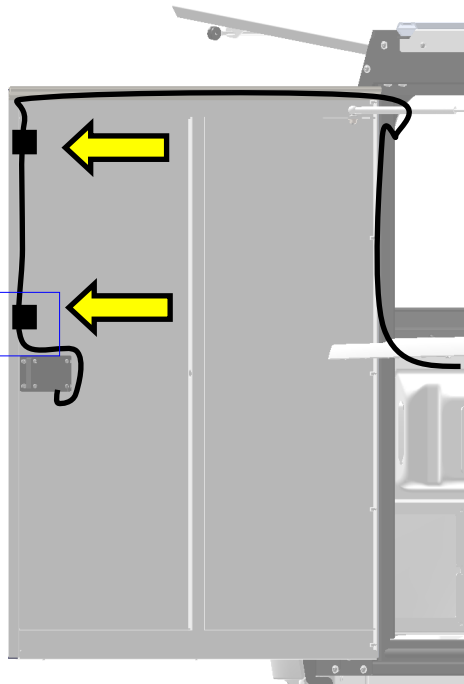
Section 8: Routing harness

Step 8-7.



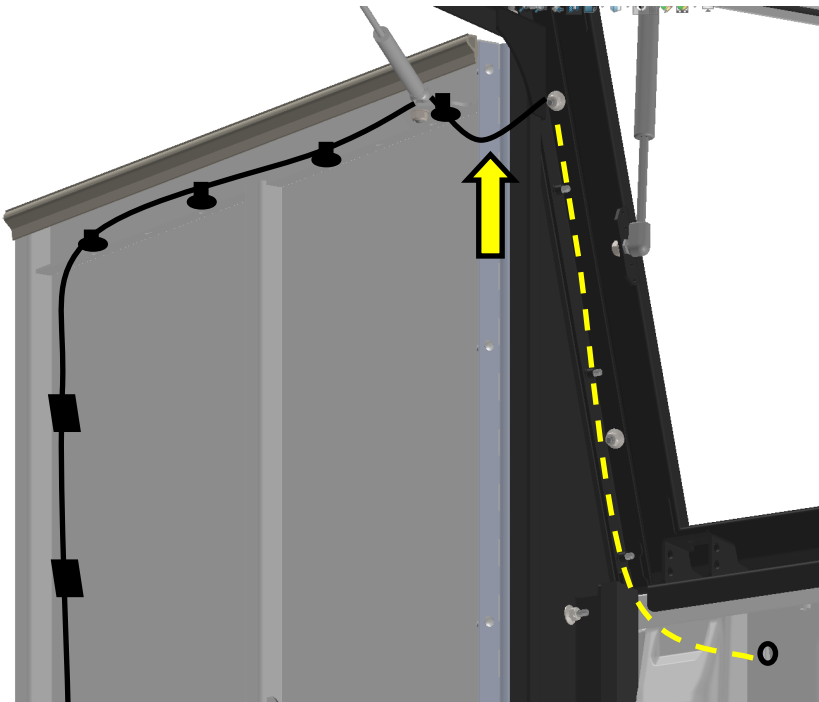
Caution: The loom covered coaxial cable should not be bent at harsh angles, kinked or pinched during the installation.

Door edge square tube



- From the P-Clip, the cable will be routed to the top of the door along the door's edge square tube.
- **NOTE: The minimum double sided tape application temperature is 50° F (10°C).**
- Be sure to use 50:50 mixture of isopropyl alcohol (IPA*) solution to remove any dirt or oils. Allow to dry.
- Apply the VHB adhesive mounts BOM ITEM #21: VHB ADHESIVE CABLE TIE BASE MOUNT.
- For excellent bonding, apply 15 lbs. of pressure for a few seconds.
- The adhesive will continue to bond for a few hours, do not stretch the cable too tightly between the squares when affixing cable ties.
- After the adhesive squares are affixed, use the BOM ITEM #22: 4" CABLE TIES

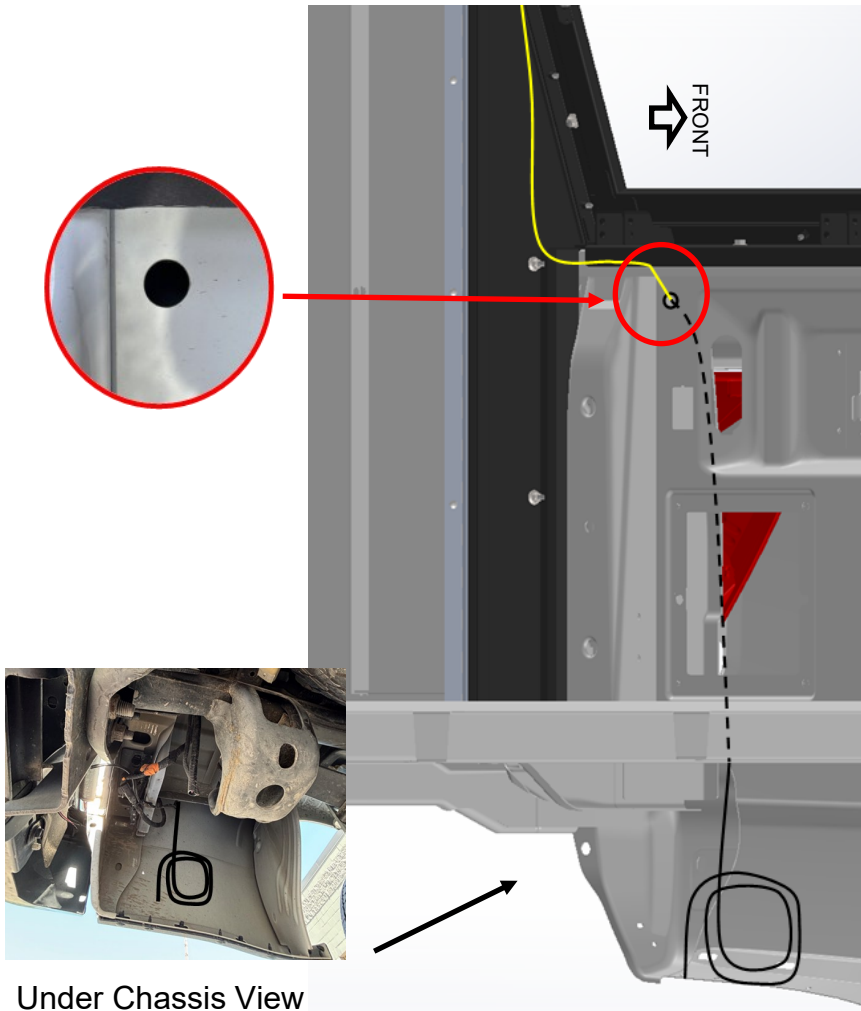
Step 8-8.



- Upon reaching the top of the door the cable will be neatly guided to the hinge side of the door. Fastening about every 10-12 inches to a Christmas tree cable mount in to the quarter inch holes in the top of the door bracket BOM ITEM #19: 0.25" FIR TREE CABLE TIE.
- The cable will be brought to the end of the door and a small amount of loop will be left in the space between the end mounting hole on the door bracket and the affixing point in the corner of the cap.

Section 8: Routing harness

Step 8-9.



Under Chassis View



Note: Make sure the hole size stays well controlled due to the stiff nature of the snap bushing— do not over drill.

- (Red Circle Area) If necessary, utilize the Step Bit and drill to widen the existing 18.4mm hole to 3/4" (19mm).
- It is best practice to add etching paint to prevent any corrosion if the hole is enlarged.
- At this point the snap bushing in the kit BOM ITEM #20: SNAP BUSHING WITH 15.3MM I.D. can be pushed into the hole on the side of the bed wall and the cable can be fed down into that hole.
- Be sure the cable end will stay clean as it travels down the interior of the sidewall down to the bottom of the truck.
- Pull the cable all the way through so that there is just enough cable left inside of the topper/bed area to begin to finish routing.
- Use about three - 8" cable ties from the kit to hold the cable to exiting non-moving structures on the inside corner of the cap and ensure they are out of the way to prevent anything from snagging.

Step 8-10.



FRONT

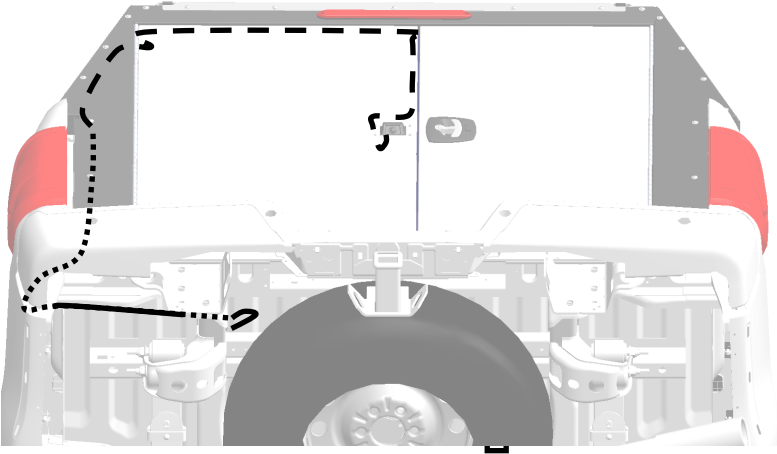


The wire MUST be tied up above the frame rail to avoid damage from ice and road debris.

1. UNDER the vehicle, by the rear bumper, BE AWARE of the hot exhaust systems, and route the harness above the frame rail and follow other wiring harnessing to the open OEM Mating connector for the adapter or the coaxial cable that has been left from the removal of the tail/end gate.

Section 8: Routing harness

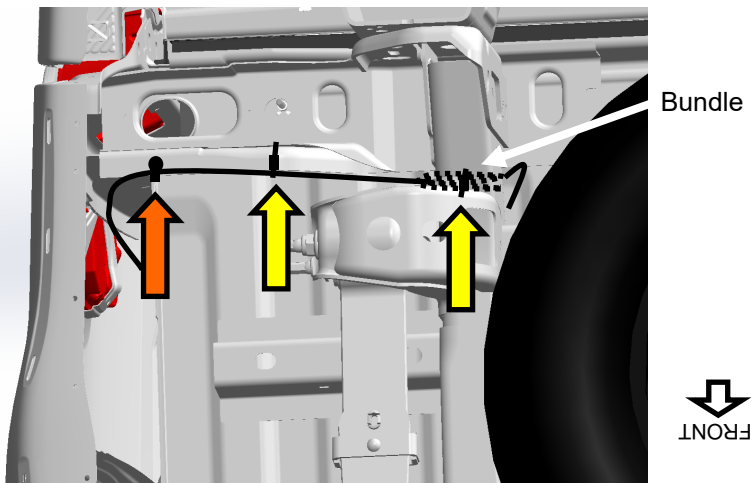
Step 8-11.



- The wire **MUST** be tied up above the frame rail to avoid damage from ice and road debris.

Step 8-12.

Under Chassis View



- It will be helpful to find a 1/4" hole [Area of Orange Arrow] in the trucks underbody sheet metal and utilize one of the Christmas tree cable mounts to secure the cable where it drops down from the hole on the topside bed wall.
- When routing is established, connect the coaxial cable and bundle/ loop any extra cable to tie high above the bottom of the truck.

- The installation is completed– please test and finish install by making sure cable will not be pinched or damaged during customer use.

Section 9: Testing and Finish

The camera installation should now be checked:

- Start vehicle.
 - Check around for safety.
 - Hold the brake, shift the vehicle into reverse and observe the back-up camera monitor in the vehicle. The image should be very similar to original image from the OEM tailgate installed backup camera.
 - If there any doubts, please ensure to validate with FMVSS111 procedure to ensure compliance.
- ◇ If the vehicle does not activate the backup camera while in reverse, check that there is no damage to the harnessing, and reassure all connections have been made securely.
- ◇ Lastly, ensure all harness is properly secured and cable ties are trimmed.
- ◇ The install is now complete!

