ADRIAN STEEL
Cargo Management Solutions for Commercial Vehicles

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

PRODUCT WEIGHT

346 LBS

WIDTH X DEPTH X HEIGHT

70" X 72" X 49.3"

CAPACITY

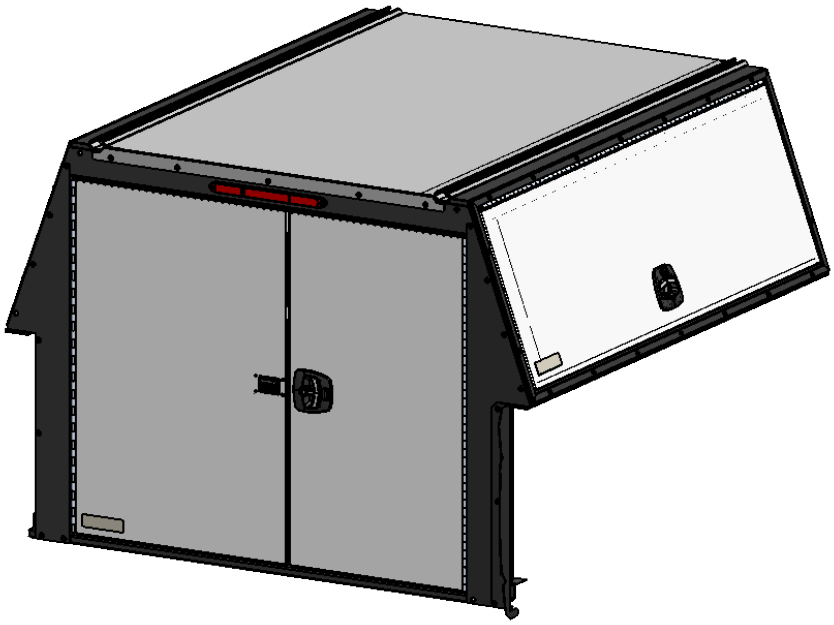
400# ROOF CAPACITY

COLOR

WHITE PANELS
BLACK TRIM

CATALOG NUMBER

TFKFDL166KM23W



PRODUCT FEATURES

THIS IS ADRIAN STEEL'S STANDARD ALUMINUM TOPPER FOR 5.5' BED F-150 LIGHTNING PICKUPS. PLEASE NOTE THAT THIS IS DESIGNED TO FIT THE 2022 M.Y. THROUGH CURRENT M.Y..

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 CONSISITING OF 0.125 SHEET & EXTRUDED ALUMINUM.

SEE PAGES 2-4 FOR OTHER PRODUCTS THAT WORK WITH THIS UNIT.

ADRIAN STEEL
Cargo Management Solutions for Commercial Vehicles

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

CATALOG NUMBER **TFKFDL166KM23W**

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
TTBBK176320	TBOX, BODY KIT, 176320
TTBSDK1720	TBOX, SPL DIV KIT, 1720
TTBSK1731	TBOX, SHELF KIT, 1731
TTBSK1763	TBOX, SHELF KIT, 1763
TTBTDK1720	TBOX, TALL DIV KIT, 1720
	INTERIOR TOOLBOX CONFIGURATIONS (REFER TO WEBSITE)
TTB176320C01	TBOX CONFIG, 01
TTB176320C02	TBOX CONFIG, 02
TTB176320C03	TBOX CONFIG, 03
TTB176320C04	TBOX CONFIG, 04
TTB176320C05	TBOX CONFIG, 05
TTB176320C06	TBOX CONFIG, 06
TTB176320C07	TBOX CONFIG, 07
TTB176320C08	TBOX CONFIG, 08
TTB176320C09	TBOX CONFIG, 09
TTB176320C10	TBOX CONFIG, 10
TTB176320C11	TBOX CONFIG, 11

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ADRIAN STEEL
Cargo Management Solutions for Commercial Vehicles

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

CATALOG NUMBER TFKFDL166KM23W

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	
URMBK4W	UTILTY,MNT BKT KT,RAIL,4W
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
PLMDDSMT4W	PROLIFT,MAX,DS,MID T,4,W
GL-TOPPS	GRIP LOCK, TOPPER, PS
GL-TOPDS	GRIP LOCK, TOPPER, DS
LADDER RACK KITS	
PLS61LT4	PROLIFT SGL STD DR 4' TOP
PLS63LT4	PROLIFT DBL STD DR 4' TOP
PLS64LT4	PROLIFT CMB STD DR 4' TOP
PLS65LT4	PROLIFT-UT CMB SDR 4' TOP
GL61LT4	SGL GL,4'10"-6'1" TOP
GL63LT4	DUAL GL,4'10"-6'1" TOP
2B6TOPW	2-BAR UTY RK TOP 6" UPRT
PLM61LT4	PROLFT SGL SIDE MAX 4'
PLM63LT4	PROLFT DUAL SIDE MAX 4'

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Cargo Management Solutions for Commercial Vehicles

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

CATALOG NUMBER **TFKFDL166KM23W**

LIGHTING ACCESSORIES THAT WILL WORK WITH THIS PRODUCT

CATALOG NUMBER	*DESCRIPTION (smart)*
	LIGHTING KITS
77624	COMPLETE PLUG & PLAY LIGHTING KIT: 2 DOME, 2 STRIP
77627	COMPLETE PLUG & PLAY KIT: 2 STRIP LIGHTS
77626	PLUG & PLAY STRIP LIGHT KIT: 1 DRIVER DOOR
77625	PLUG & PLAY STRIP LIGHT KIT: 1 PASSENGER DOOR

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INSTR. NUMBER : 77454	PG: 1	REV: F
PART NUMBER : TFKFDT178KM23W		
PART DESC. • ASM INS, TFK_____KM23W / • JM23W & 26W		

NOTE: THESE INSTRUCTIONS ARE VALID FOR ALL TFK FULL BARN DOOR TOPPER KITS.

INSTRUCTIONS SHOWS F-150 6.5' BODY DURING INSTALLATION

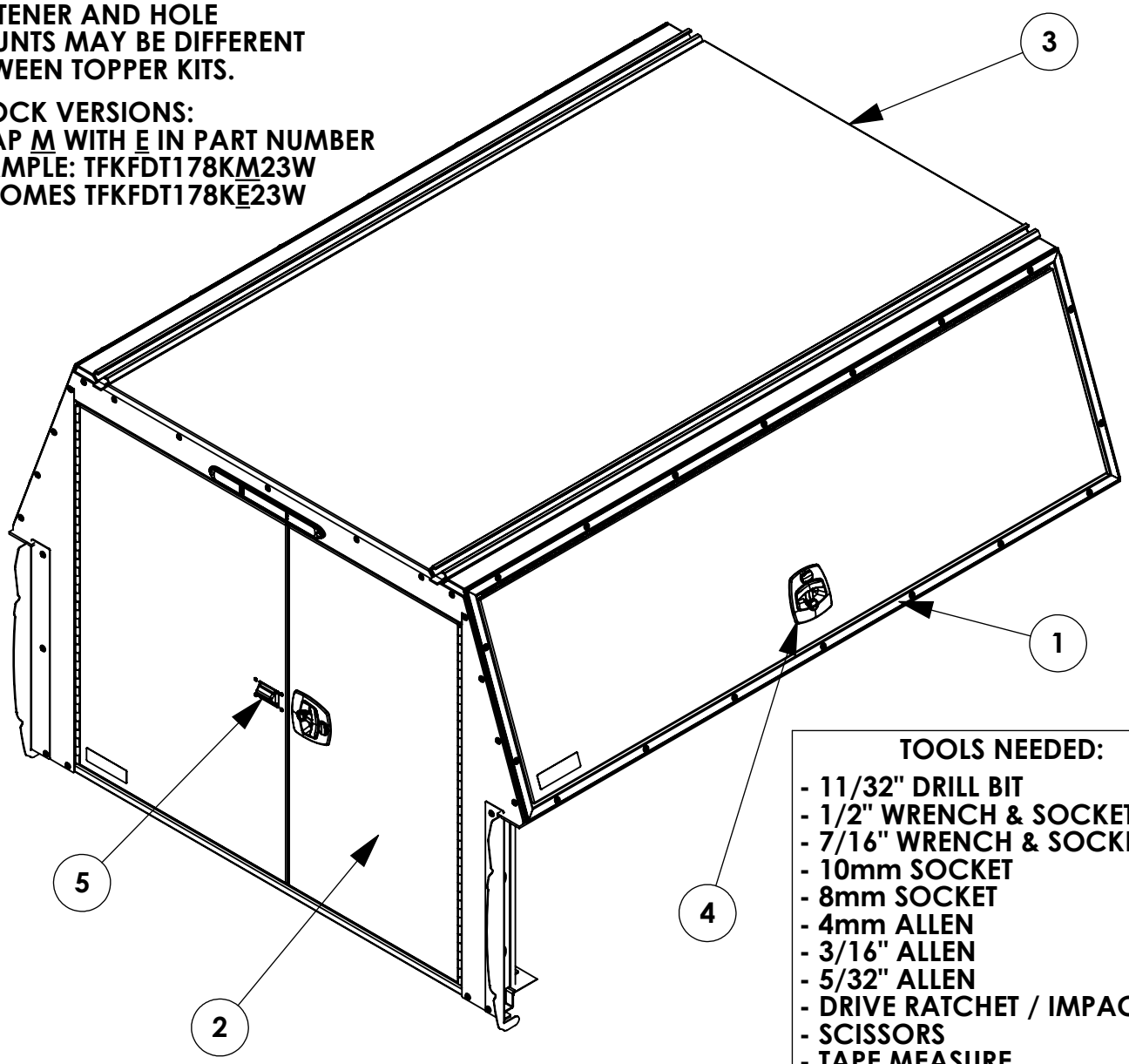
FASTENER AND HOLE COUNTS MAY BE DIFFERENT BETWEEN TOPPER KITS.

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKFDT178KM23W
BECOMES TFKFDT178KE23W

BOM FOR 6.5' FORD F-150

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK78M23W	TOP, SIDE KIT,78",M,23,W	2
2	TCKFDT1BM23	TOP, BD CLOSE KIT, F-150	1
3	TRK7823W	TOP, ROOF KIT,78",23,W	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKGMT1K	HDW KIT, CAM, F-150, W/ ADPTR	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH09**



TOOLS NEEDED:

- 11/32" 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
- ROLLER
- T40 TORX BIT
- PLUSNUT TOOL OR GUN

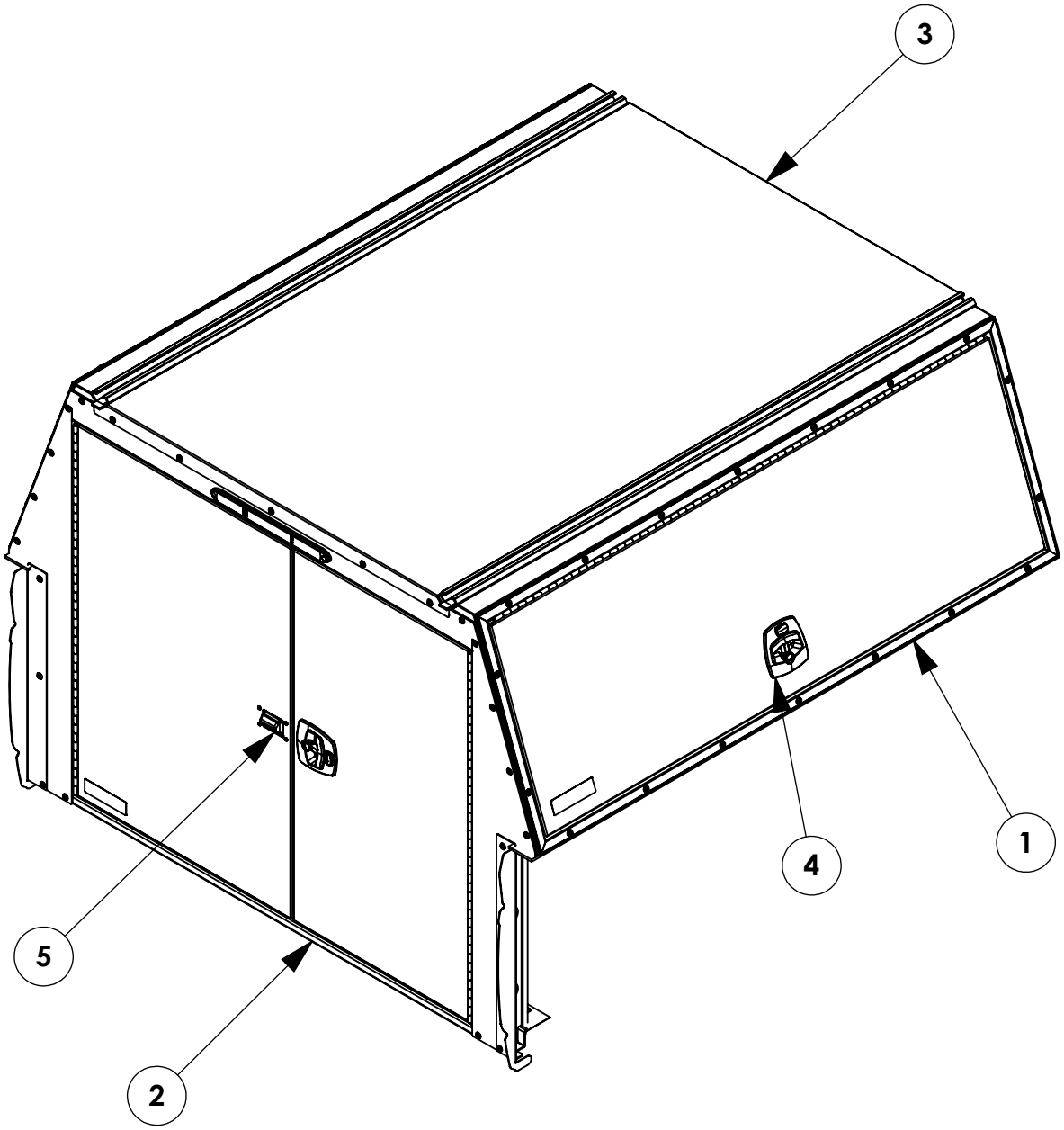
INSTR. NUMBER : 77454	PG: 2	REV: F
PART NUMBER : TFKFDL166KM23W		
PART • ASM INS, TFK_____KM23W / DESC. • JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKFDT166KM23W
BECOMES TFKFDT166KE23W

BOM FOR 5.5' FORD LIGHTNING

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK66M23W	TOP, SIDE KIT,66",M,23,W	2
2	TCKFDT1BM23	TOP, BD CLOSE KIT, F-150	1
3	TRK6623W	TOP, ROOF KIT,66",23,W	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKFDL1K	HDW KIT, CAM, F-150, W/ ADPTR	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH04**



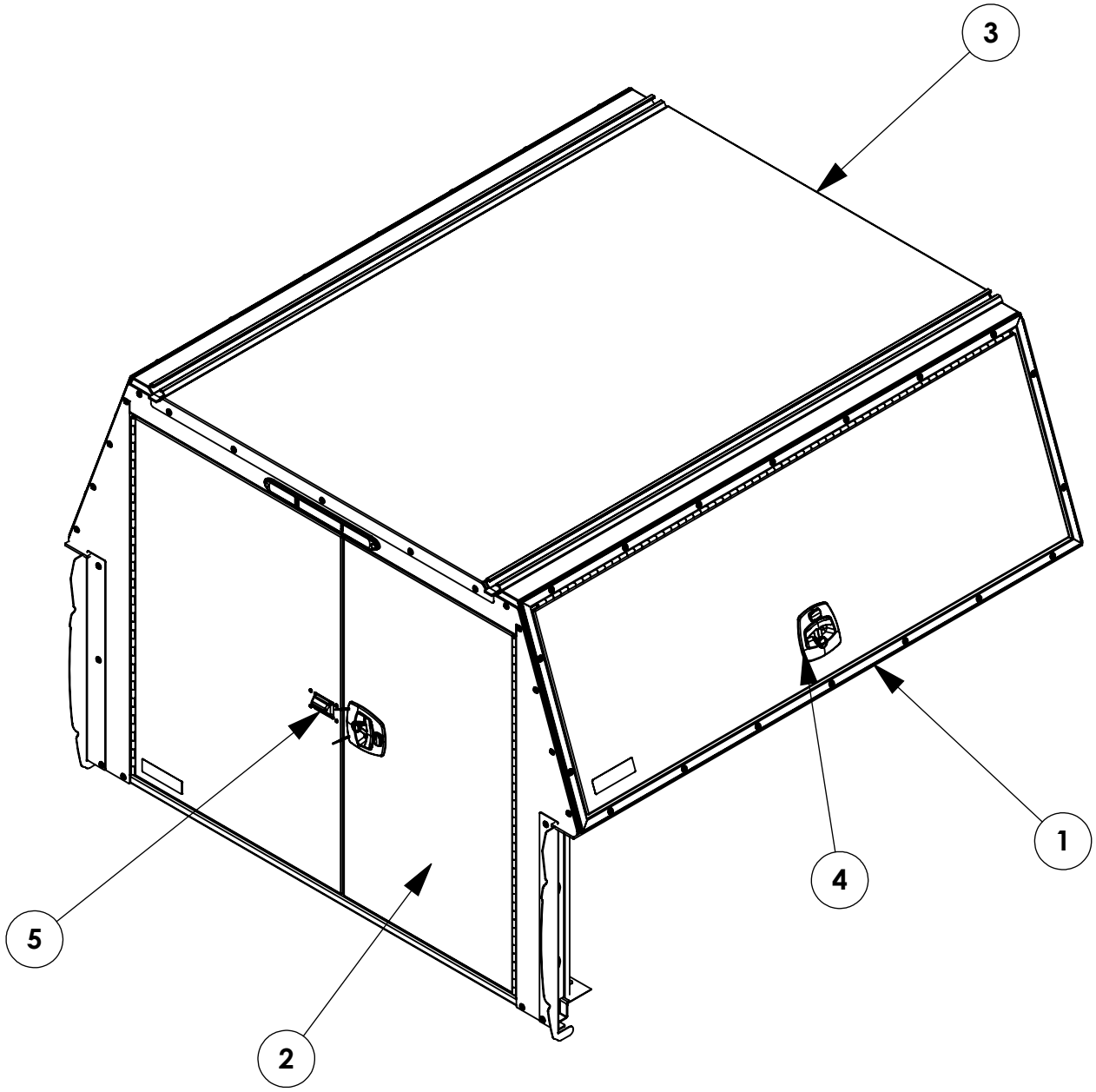
INSTR. NUMBER : 77454	PG: 3	REV: F
PART NUMBER : TFKFDT166KM23W		
PART DESC. • ASM INS, TFK_____KM23W / • JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKFDT166KM23W
BECOMES TFKFDT166KE23W

BOM FOR 5.5' FOR F-150 ICE & HYBRID

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK66M23W	TOP, SIDE KIT,66",M,23,W	2
2	TCKFDT1BM23	TOP, BD CLOSE KIT, F-150	1
3	TRK6623W	TOP, ROOF KIT,66",23,W	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKFDT1K	HDW KIT, CAM, F-150, W/ ADPTR	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH04**



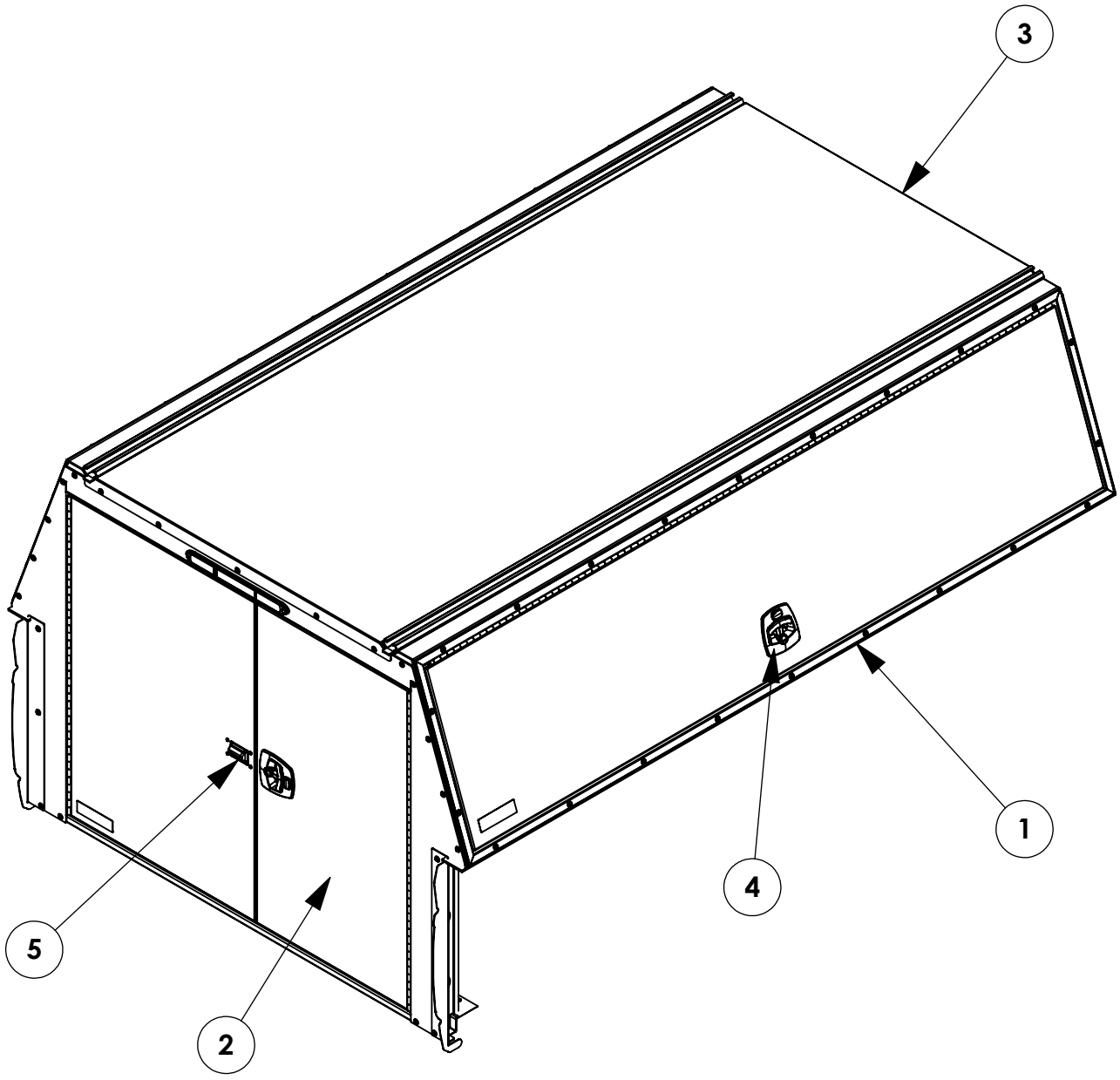
INSTR. NUMBER : 77454	PG: 4	REV: F
PART NUMBER : TFKFDT196KM23W		
PART DESC. • ASM INS, TFK_____KM23W / • JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKFDT196KM23W
BECOMES TFKFDT196KE23W

BOM FOR 8.0' FORD F-150

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK96M23W	TOP, SIDE KIT,96",M,23,W	2
2	TCKFDT1BM23	TOP, BD CLOSE KIT, F-150	1
3	TRK9623W	TOP, ROOF KIT,96",23,W	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKFDT1K	HDW KIT, CAM, F-150, W/ ADPTR	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH10**



INSTR. NUMBER : 77454	PG: 5	REV: F
PART NUMBER • TFKFDT280JM26W • TFKFDT280KM26W		
PART DESC. • ASM INS, TFK_____KM23W / JM23W & 26W		

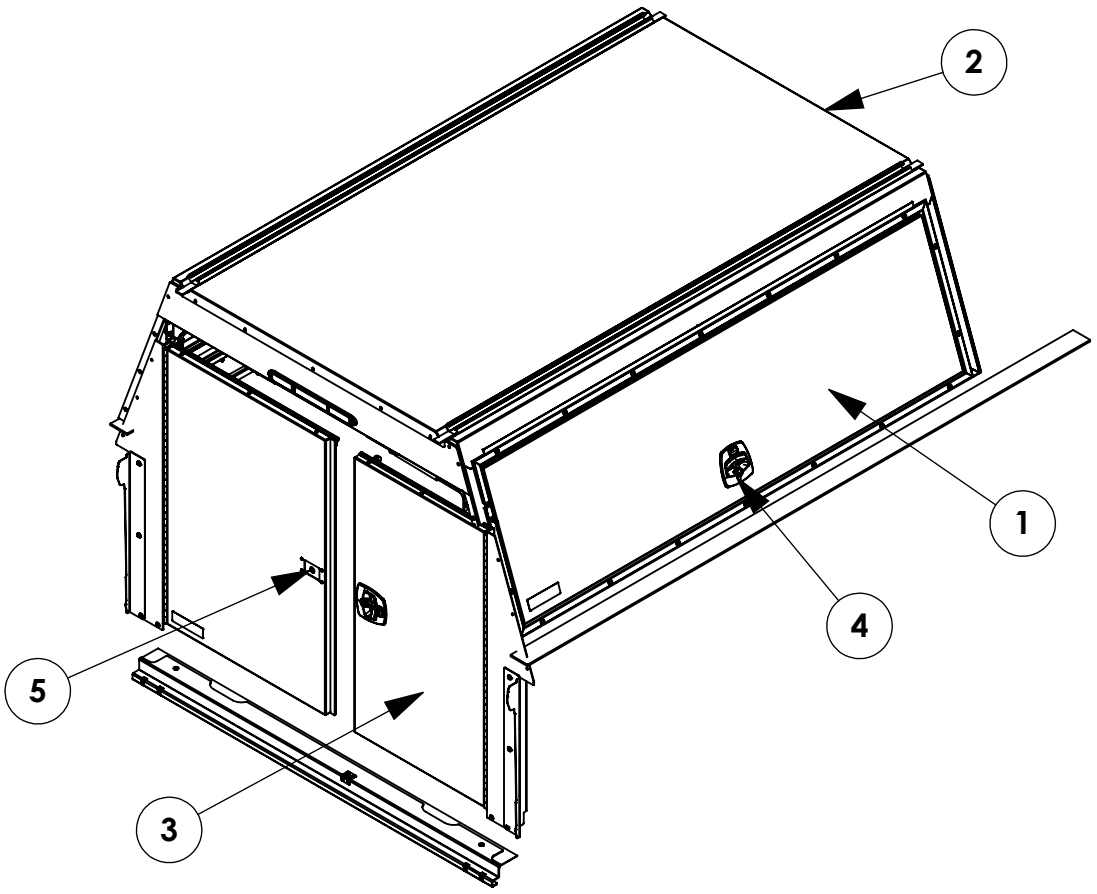
E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKFDT280JM26W
BECOMES TFKFDT280JE26W

BOM FOR 6.8' FORD F-250

TFKFDT280KM26W			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK80M26W	TOP, SIDE KIT,80",M,26,W	2
2	TRK8026W	TOP, ROOF KIT,80",26,W	1
3	TCKFDT2BM26	TOP, BD CLOSE KIT, F-250	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKFDT2J	HDW KIT, CAMERA, F250 ANALOG	1

TFKFDT280KM26W			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK80M26W	TOP, SIDE KIT,80",M,26,W	2
2	TRK8026W	TOP, ROOF KIT,80",26,W	1
3	TCKFDT2BM26	TOP, BD CLOSE KIT, F-250	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKFDT2K	HDW KIT, CAM, F-250, W/ ADPTR	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH05**



INSTR. NUMBER : 77454	PG: 6	REV: F

PART NUMBER • TFKFDT296JM26W
PART NUMBER • TFKFDT296KM26W

PART DESC. • ASM INS, TFK_____KM23W / JM23W & 26W

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKFDT296JM26W
BECOMES TFKFDT296JE26W

BOM FOR 8' FORD F-250

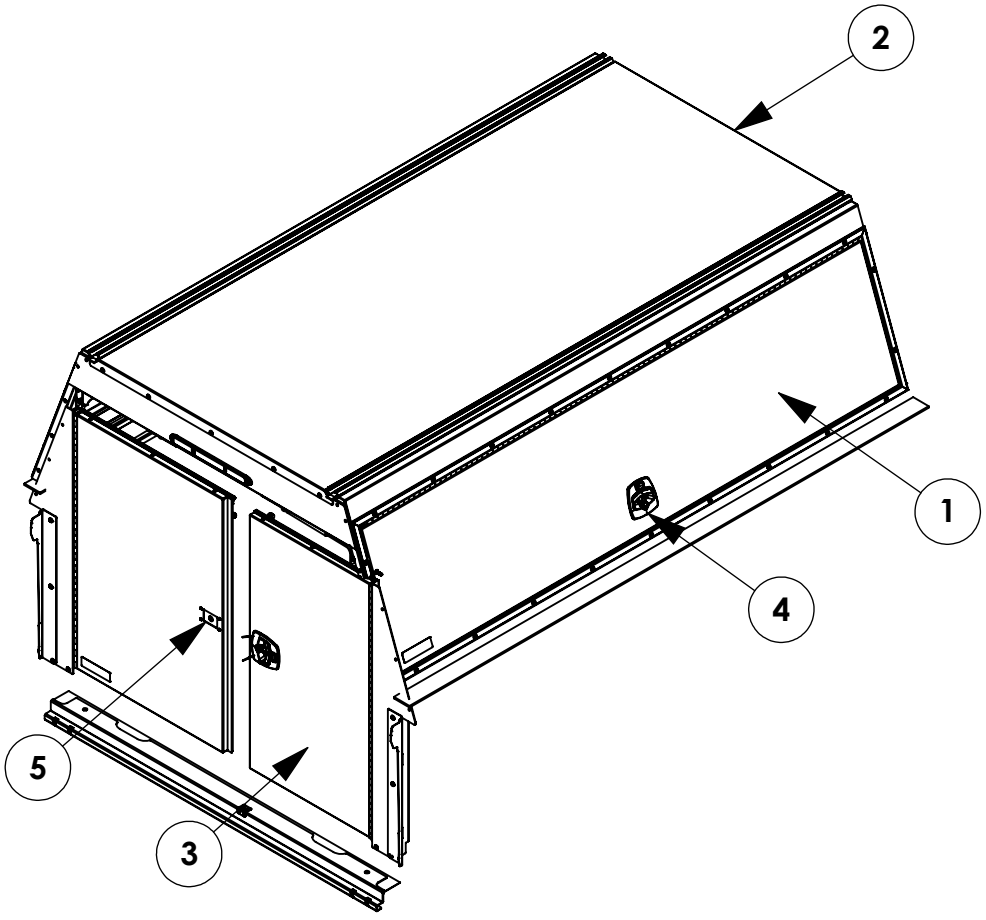
TFKFDT296JM26W

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK96M26W	TOP, SIDE KIT,96",M,26,W	2
2	TRK9623W	TOP, ROOF KIT,96",23,W	1
3	TCKFDT2BM26	TOP, BD CLOSE KIT, F-250	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKFDT2J	HDW KIT, CAMERA, F250 ANALOG	1

TFKFDT296KM26W

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK96M26W	TOP, SIDE KIT,96",M,26,W	2
2	TRK9623W	TOP, ROOF KIT,96",23,W	1
3	TCKFDT2BM26	TOP, BD CLOSE KIT, F-250	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKFDT2K	HDW KIT, CAM, F-250, W/ ADPTR	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH06**



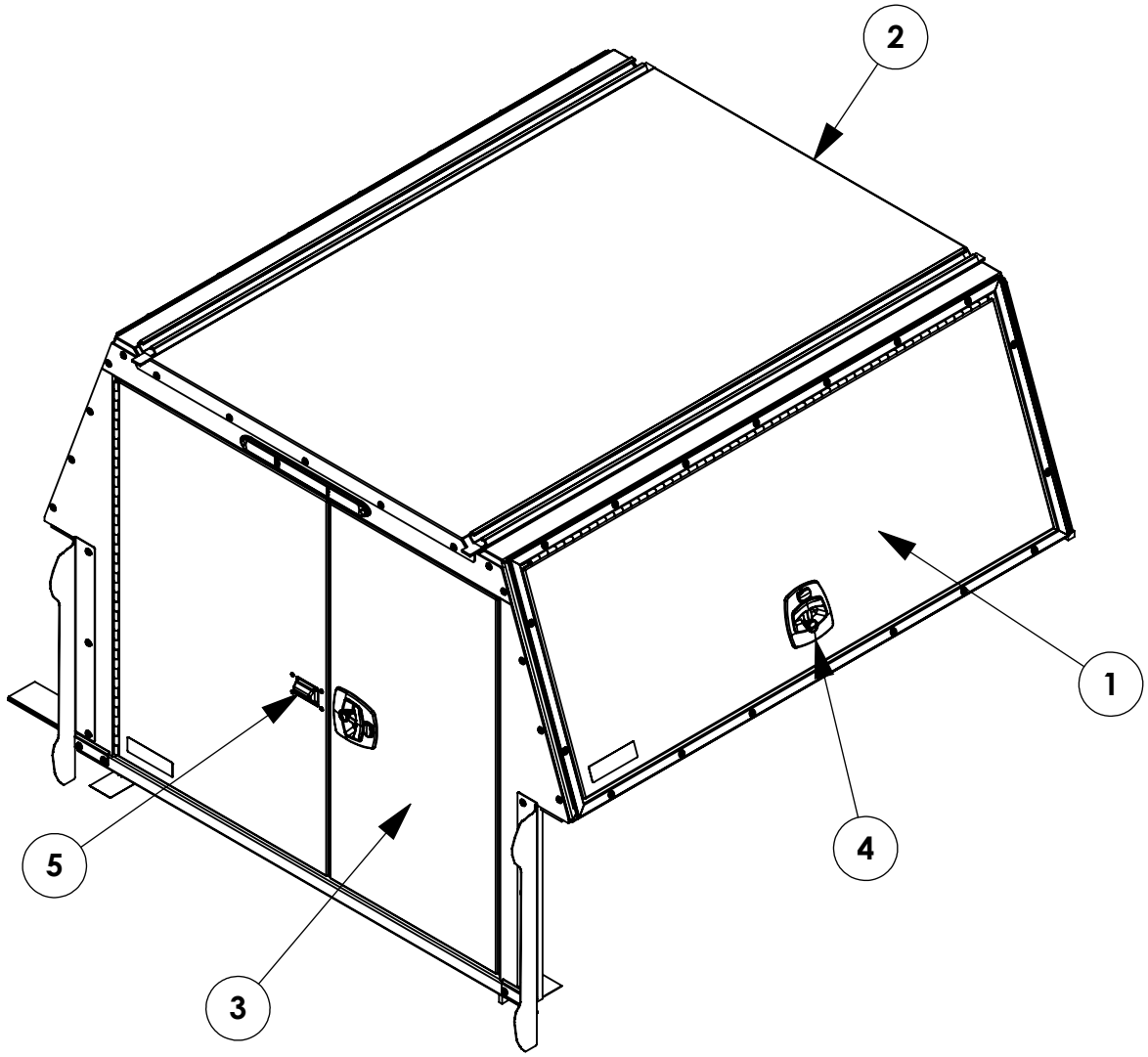
INSTR. NUMBER : 77454	PG: 7	REV: F
PART NUMBER : TFKCOL160KM23W		
PART DESC. • ASM INS, TFK_____KM23W / • JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKCOL160KM23W
BECOMES TFKCOL160KE26W

BOM FOR CHEVROLET COLORADO

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSKCOL60M23W	TOP, SIDE KIT,60",M,23,W	2
2	TRK6123W	TOP, ROOF KIT,61",23,W	1
3	TCKCOL1BM23	OP, BD CLOSE KIT, COLORADO	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKCOL1K	HDW KIT, CAM, COLORADO	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH04**



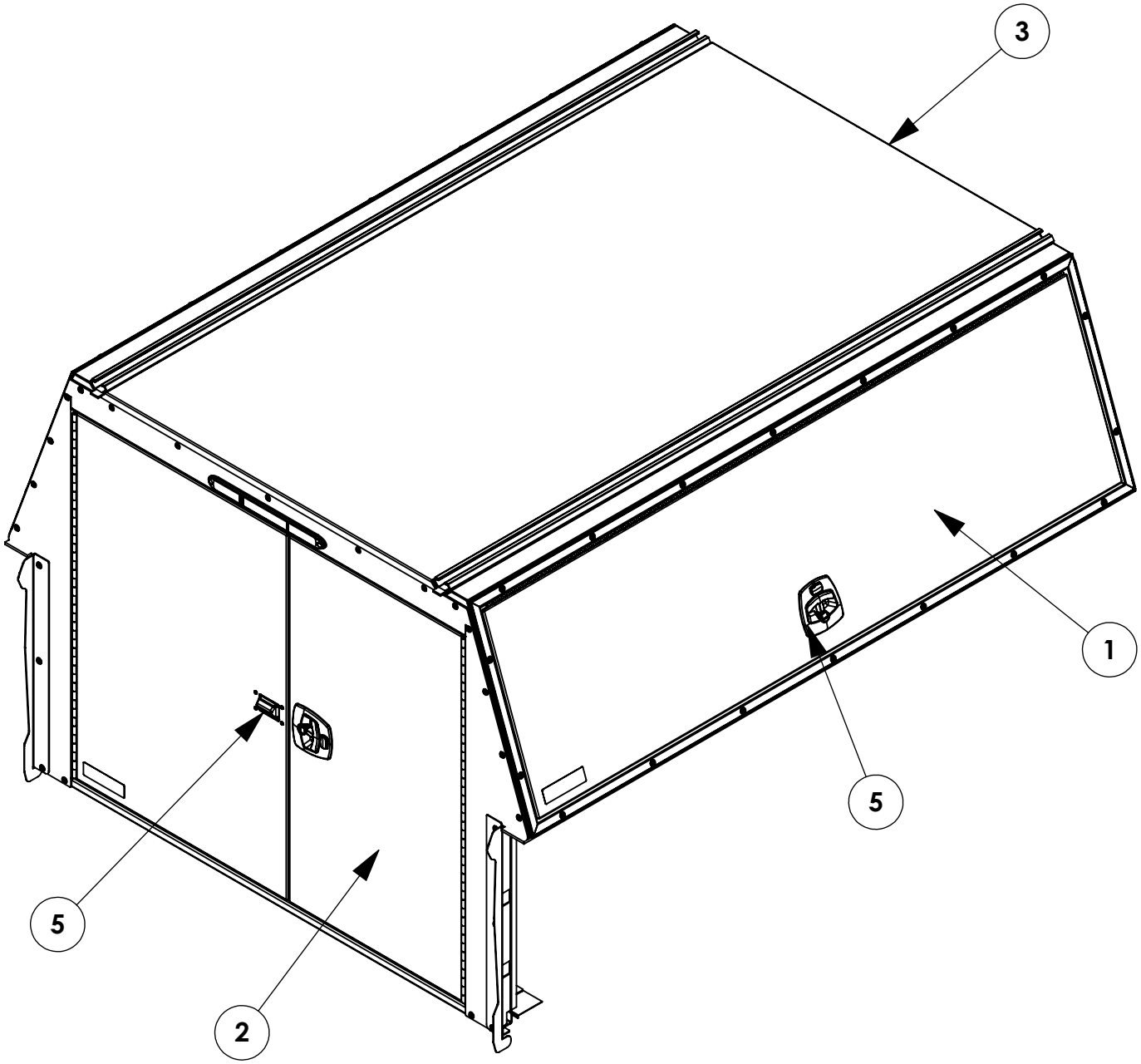
INSTR. NUMBER : 77454	PG: 8	REV: F
PART NUMBER : TFKGMT178KM23W		
PART • ASM INS, TFK_____KM23W / DESC. • JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKGMT178KM23W
BECOMES TFKGMT178KE23W

BOM FOR 6.5' CHEVROLET SILVERADO 1500

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK78M23W	TOP, SIDE KIT,78",M,23,W	2
2	TCKGMT1BM23	TOP, BD CLOSE KIT, F-150	1
3	TRK7823W	TOP, ROOF KIT,78",23,W	1
4	TEKFDT1K	HDW KIT, CAM, F-150, W/ ADPTR	1
5	TMLHK	TOPPER MECHANICAL LOCK HATCH KIT	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH05**



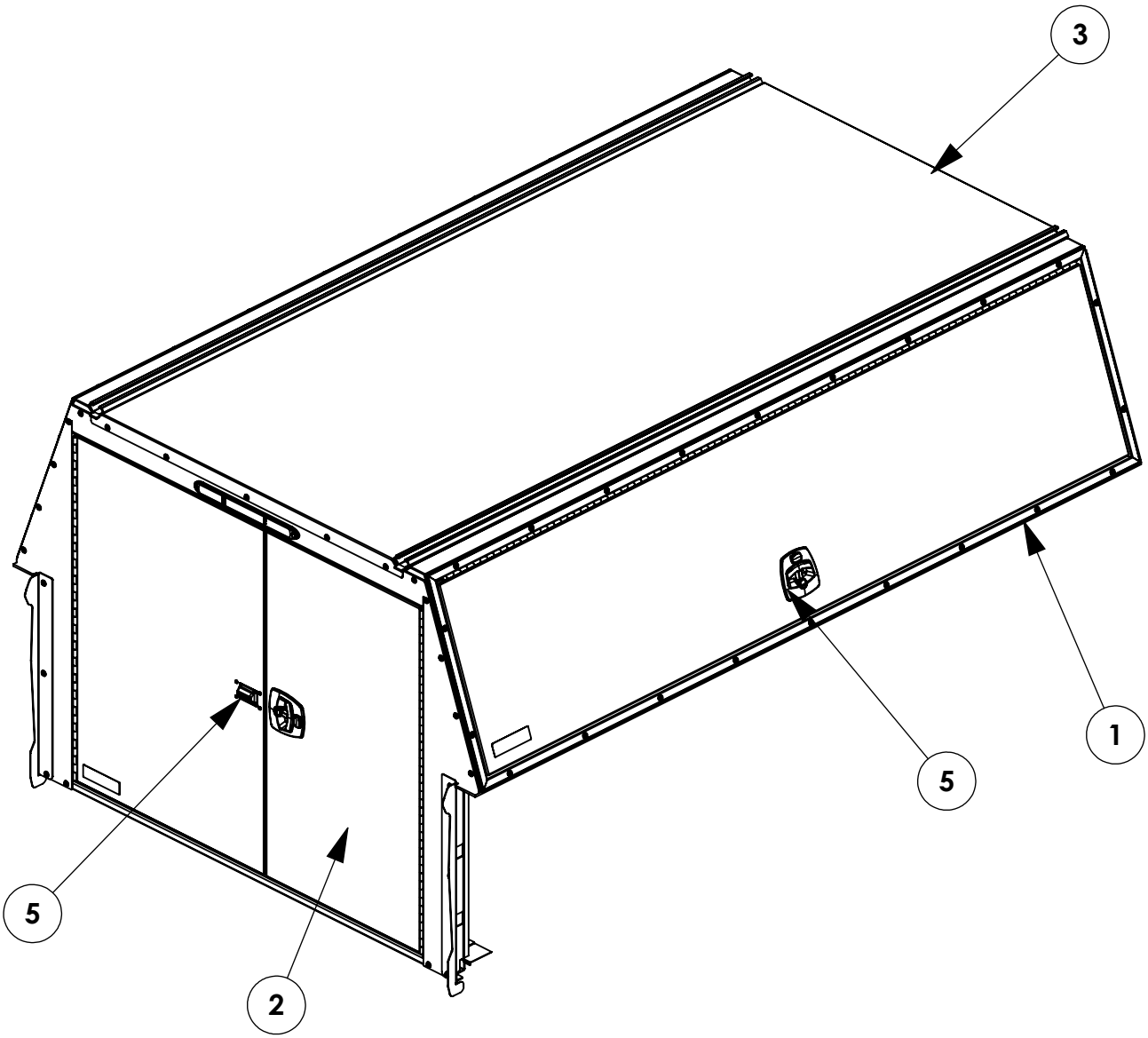
INSTR. NUMBER : 77454	PG: 9	REV: F
PART NUMBER : TFKGMT196KM23W		
PART • ASM INS, TFK_____KM23W / DESC. • JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKGMT196KM23W
BECOMES TFKGMT196KE23W

BOM FOR 8.0' CHEVROLET SILVERADO 1500

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK96M23W	TOP, SIDE KIT,96",M,23,W	2
2	TCKGMT1BM23	TOP, BD CLOSE KIT, F-150	1
3	TRK9623W	TOP, ROOF KIT,96",23,W	1
4	TEKFDT1K	HDW KIT, CAM, F-150, W/ ADPTR	1
5	TMLHK	Topper Mechanical Lock Hatch Kit	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH10**



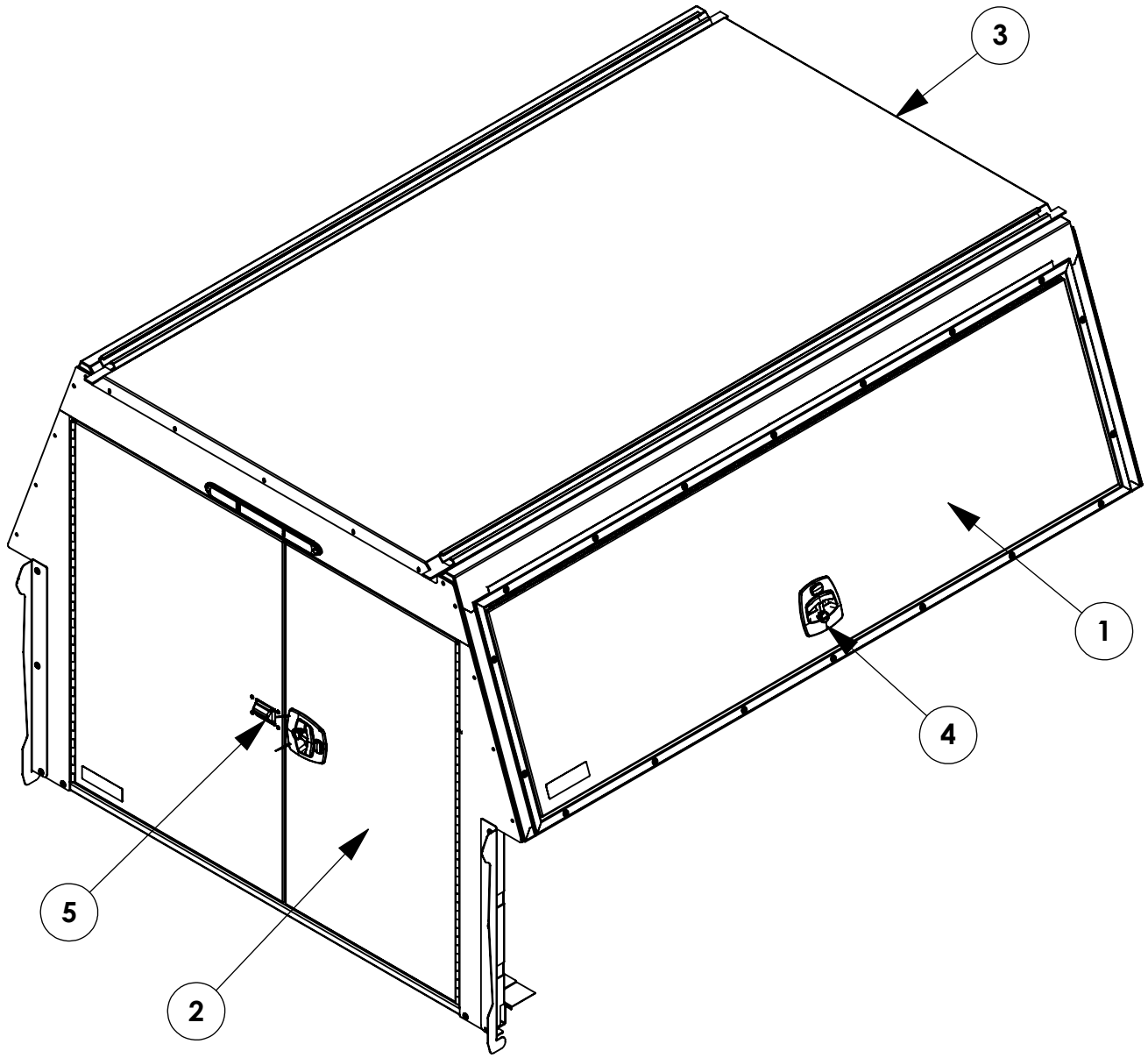
INSTR. NUMBER : 77454	PG: 10	REV: F
PART NUMBER : TFKGMT280KM26W		
PART DESC. • ASM INS, TFK_____KM23W / • JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKGMT280KM23W
BECOMES TFKGMT280E23W

BOM FOR 6.7' CHEVROLET SILVERADO 2500

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK80M26W	TOP, SIDE KIT,80",M,26,W	2
2	TCKGMT2BM26	TOP, BD CLOSE KIT, 2500	1
3	TRK8026W	TOP, ROOF KIT,80",26,W	1
4	TMLHK	TOPPER MECHANICAL LOCK HATCH KIT	1
5	TEKGMT1K	HDW KIT, CAM, F-150, W/ ADPTR	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH05**



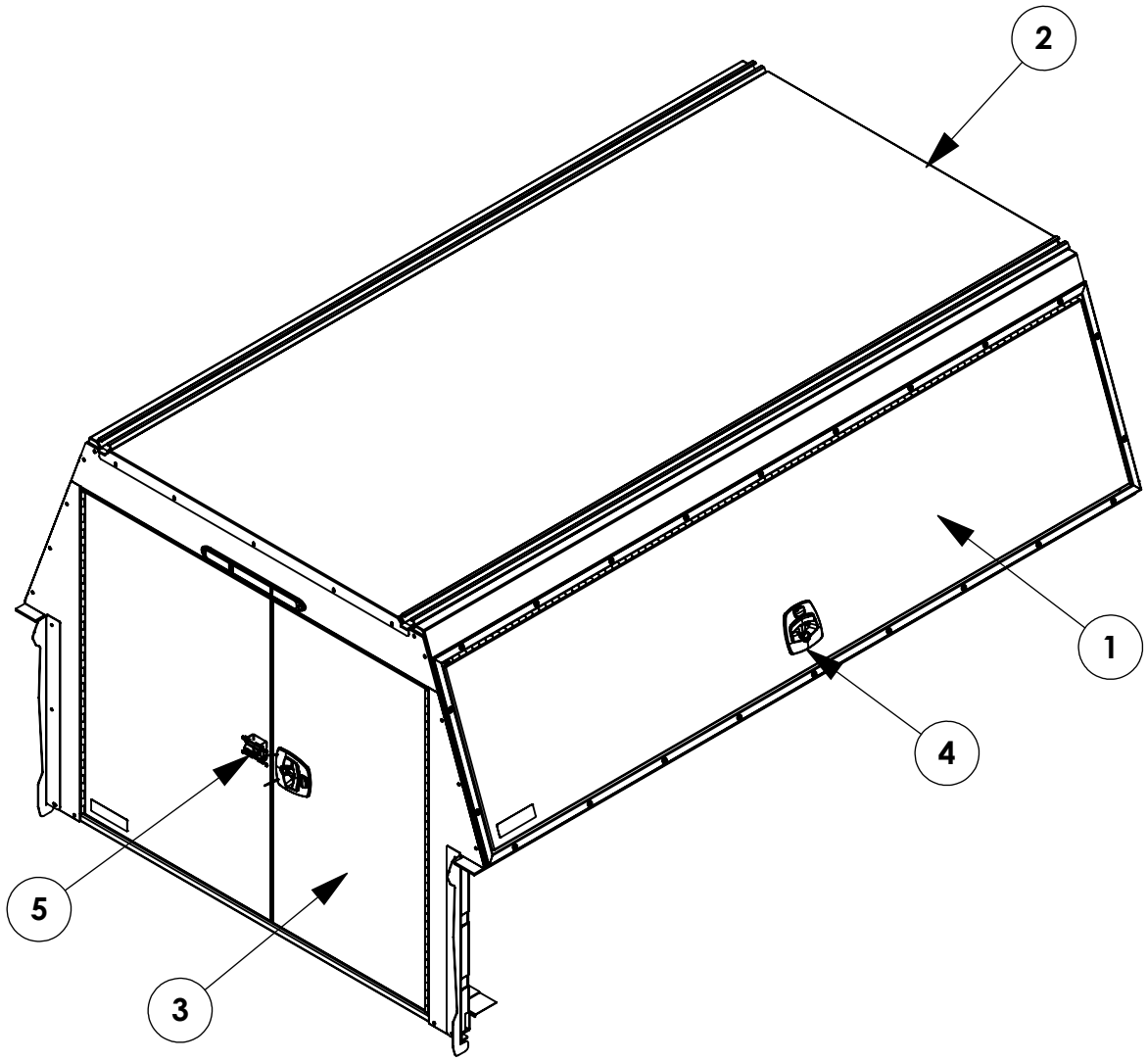
INSTR. NUMBER : 77454	PG: 11	REV: F
PART NUMBER : TFKGMT296KM23W		
PART DESC. : ASM INS, TFK_____KM23W / JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKGMT296KM23W
BECOMES TFKGMT296KE23W

BOM FOR 8.0' CHEVROLET SILVERADO 2500

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK96M26W	TOP, SIDE KIT,96",M,26,W	2
2	TRK9623W	TOP, ROOF KIT,96",23,W	1
3	TCKGMT2BM26	TOP, BD CLOSE KIT, SILV 2500	1
4	TMLHK	TOPPER MECHANICAL LOCK HATCH KIT	1
5	TEKGMT1K	HDW KIT, CAM, F-150, W/ ADPTR	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH10**



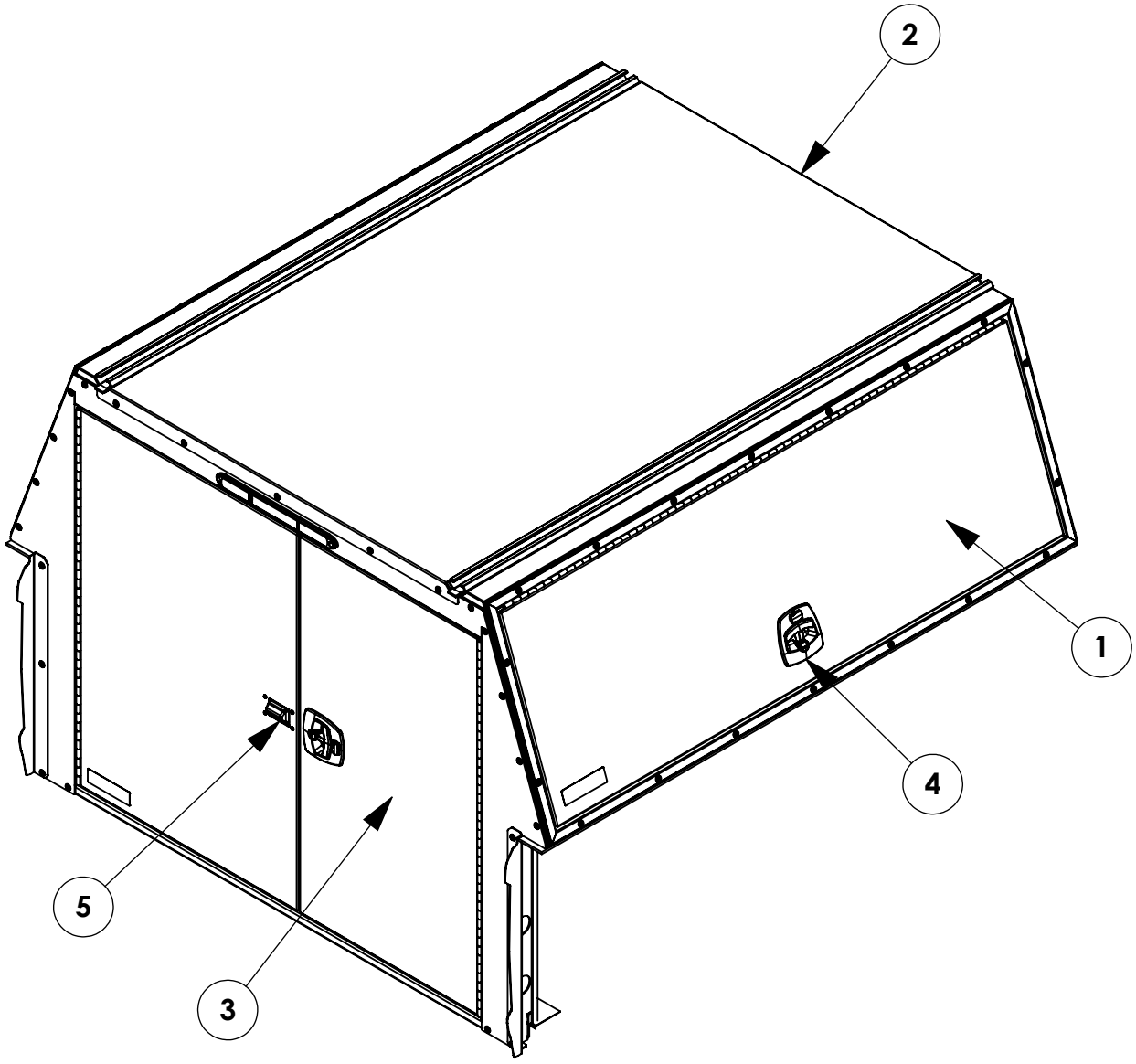
INSTR. NUMBER : 77454	PG: 12	REV: F
PART NUMBER : TFKRAM167KM23W		
PART DESC. • ASM INS, TFK_____KM23W / • JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKRAM167KM23W
BECOMES TFKRAM167KE23W

BOM FOR 5.7' RAM1500

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK66M23W	TOP, SIDE KIT,66",M,23,W	2
2	TRK6623W	TOP, ROOF KIT,66",23,W	1
3	TCKRAM1BM23	TOP, BD CLOSE KIT, F-150	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKRAM1K	HDW KIT, CAM, RAM 1500	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH10**



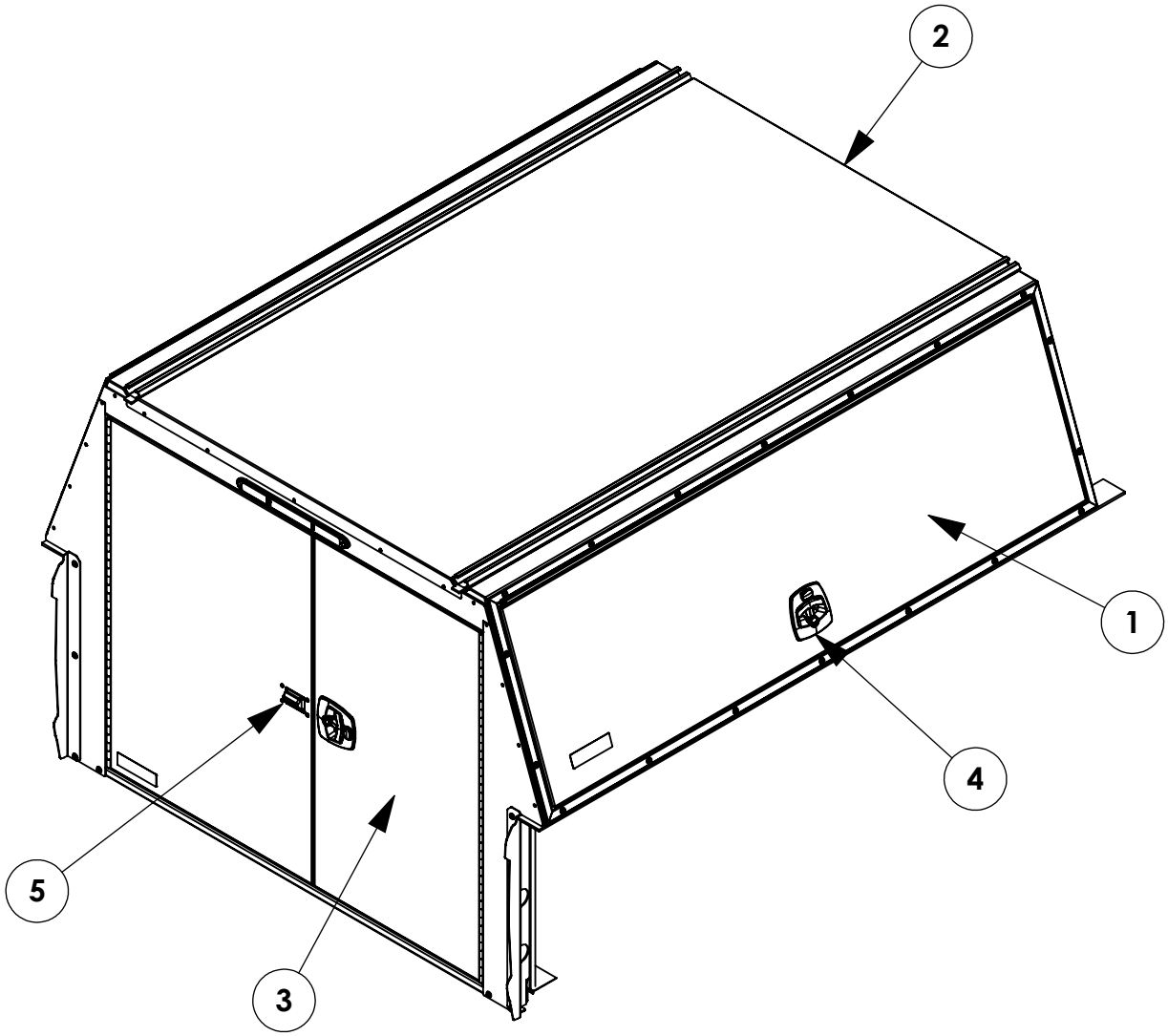
INSTR. NUMBER : 77454	PG: 13	REV: F
PART NUMBER : TFKRAM175KM23W		
PART • ASM INS, TFK_____KM23W / DESC. • JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKRAM175KM23W
BECOMES TFKRAM175KE23W

BOM FOR 75" RAM 1500

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK75M23W	TOP, SIDE KIT, 78" RAM	2
2	TRK7523W	TOP, ROOF PANEL KIT, RAM	1
3	TCKRAM1BM23	TOP, BD CLOSE KIT, RAM	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKRAM1K	HDW KIT, CAM, RAM 1500	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH10**

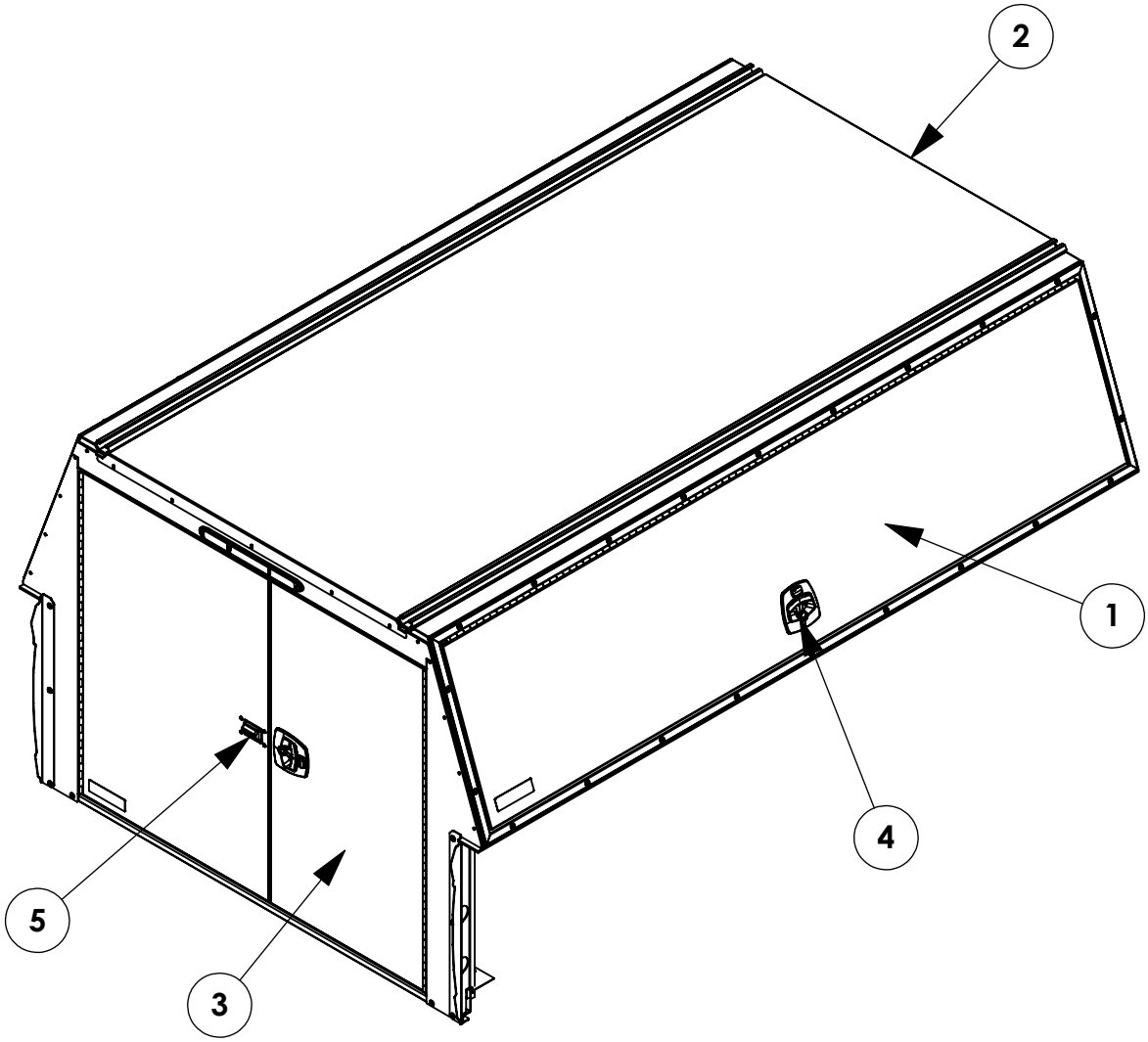


INSTR. NUMBER : 77454	PG: 14	REV: F
PART NUMBER : TFKRAM196KM23W		
PART DESC. : ASM INS, TFK_____KM23W / JM23W & 26W		

E-LOCK VERSIONS:
SWAP M WITH E IN PART NUMBER
EXAMPLE: TFKRAM196KM23W
BECOMES TFKRAM196KE23W

BOM FOR 96" RAM 1500			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TSK96M23W	TOP, SIDE KIT,96",M,23,W	2
2	TRK9623W	TOP, ROOF KIT,96",23,W	1
3	TCKRAM196BM23	TOP, BD CLOSE KIT, RAM, 8 FT BED	1
4	TMLHK	Topper Mechanical Lock Hatch Kit	1
5	TEKRAM1K	HDW KIT, CAM, RAM 1500	1

*** E-LOCK VERSION SWAP TMLHK WITH TELH03**



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.

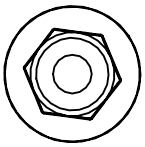
PLUSNUT INSTALLATION - A PLUSNUT GUN IS RECOMMENDED FOR PLUSNUT INSTALLATION FOR ITS PRODUCTION SPEED. HOWEVER, A PLUSNUT SETTING TOOL CAN ALSO BE USED (P/N: 22200-0).

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

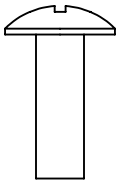
BEST PRACTICE: ORGANIZE ALL FASTENERS & VERIFY THAT ALL ARE ACCOUNTED FOR

FASTENERS USED

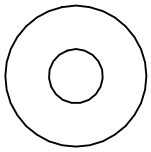
BAG REFERENCE: **ALL**



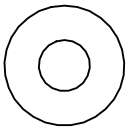
FAS0055
1/4-20 ZP
HFLNG NLK NUT
QTY: 29



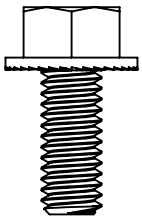
FAS0062
1/4-20 X 0.75 ZP
THP SCREW
QTY: 9



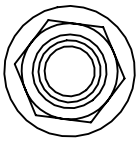
FAS0067
1/4 ZP
FLAT WASHER
QTY: 9



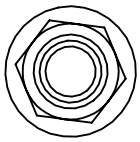
FAS0234
1/4 SST
FLAT WASHER
QTY: 44



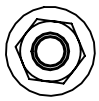
FAS0438
5/16-18 X .75 ZP
HFNLG SCREW
QTY: 20



FAS0440
5/16-18 ZP
HFLNG NLK NUT
QTY: 20



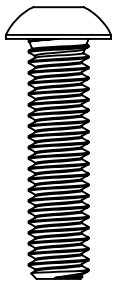
FAS0861
5/16-18 SST
HFLNG NLK NUT
QTY: 4



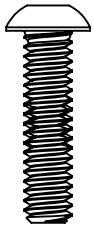
FAS0917
M5 X .8 ZP
HFLNG NLK NUT
QTY: 8



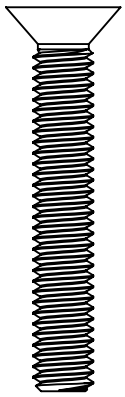
FAS0918
10-24 ZP
HFLNG NLK NUT
QTY: 4



FAS0919
5/16-18 X 1.25 SST
BHC SCREW
QTY: 12



FAS0920
1/4-20 X 1.0 SST
BHC SCREW
QTY: 44



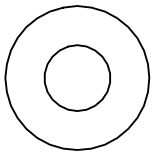
FAS1279
5/16-18 X 2.0 SST
FHT SCREW
QTY: 2

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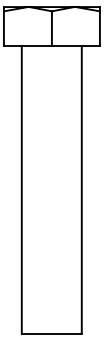
BEST PRACTICE: ORGANIZE ALL FASTENERS & VERIFY THAT ALL ARE ACCOUNTED FOR

FASTENERS USED

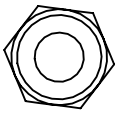
BAG REFERENCE: **ALL**



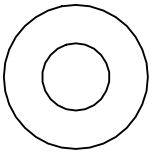
FAS0164
5/16 ALUM
FLAT WASHER
QTY: 8



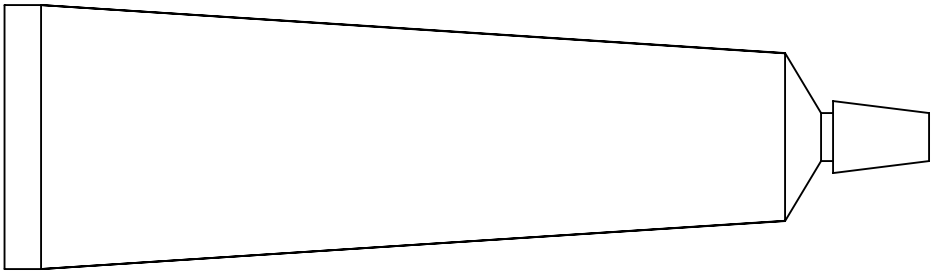
FAS0242
5/16-18 X 1.5 SST
HH SCREW
QTY: 8



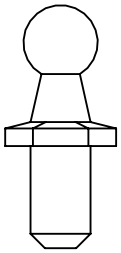
FAS0248
5/16-18 SST
HH NLK NUT
QTY: 8



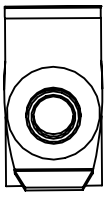
FAS0552
5/16 SST
FLAT WASHER
QTY: 20



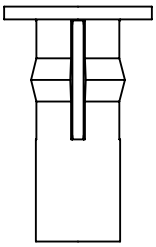
26618-0
1 OZ TUBE
SILICONE
QTY: 2



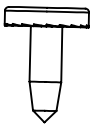
30015-0
THREADED BALL STUD
QTY: 4



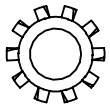
FAS0711
1/4-20 BK PH
SPRING CLIP
QTY: 4



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



FAS0148
#10 X .50 NI-ZN
PH SELF TAP SCREW
QTY: 1



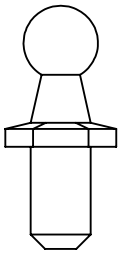
FAS0066
1/4
EXT TOOTH
LOCK WASHER
QTY: 1

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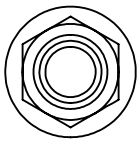
BEST PRACTICE: ORGANIZE ALL FASTENERS & VERIFY THAT ALL ARE ACCOUNTED FOR

FASTENERS USED

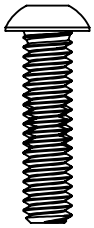
BAG REFERENCE: **BAG77939**



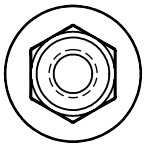
30015-0
THREADED BALL STUD
QTY: 4



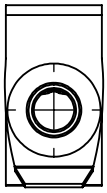
FAS0861
NUT, HEX NLK FLG,
5/16-18, SS
QTY: 4



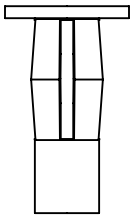
FAS0920
SCREW, BHCS,
1/4-20X1.0, SS
QTY: 6



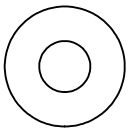
FAS0055
NUT, HEX NLK FLG,
1/4-20, ZP
QTY: 12



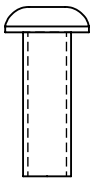
FAS0711
SPRING, CLIP,
1/4-20, BK PH
QTY: 4



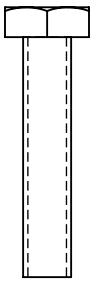
FAS0052
PLUSNUT,
1/4-20, PB DC
QTY: 2



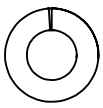
FAS0234
WASHER, FLAT,
1/4, SST
QTY: 18



FS0576
SCREW, BHCS,
1/4-20X.75, SSW
QTY: 10



FAS0671
SCERW, HEX HD,
1/4-20X1.25, SS
QTY: 2



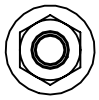
FAS0672
WASHER, LOCK, SPLIT
1/4, SST
QTY: 6

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

FASTENERS USED

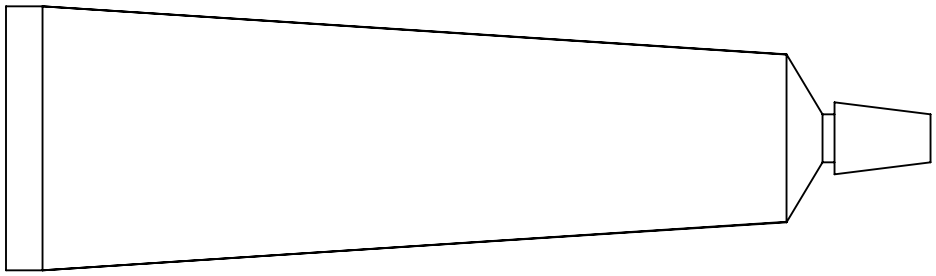
BAG REFERENCE: **BAG76637**



FAS0917
M5 X .8 ZP
HFLNG NLK NUT
QTY: 12



FAS0918
10-24 ZP
HFLNG NLK NUT
QTY: 6



26618-0
1 OZ TUBE
SILICONE
QTY: 1

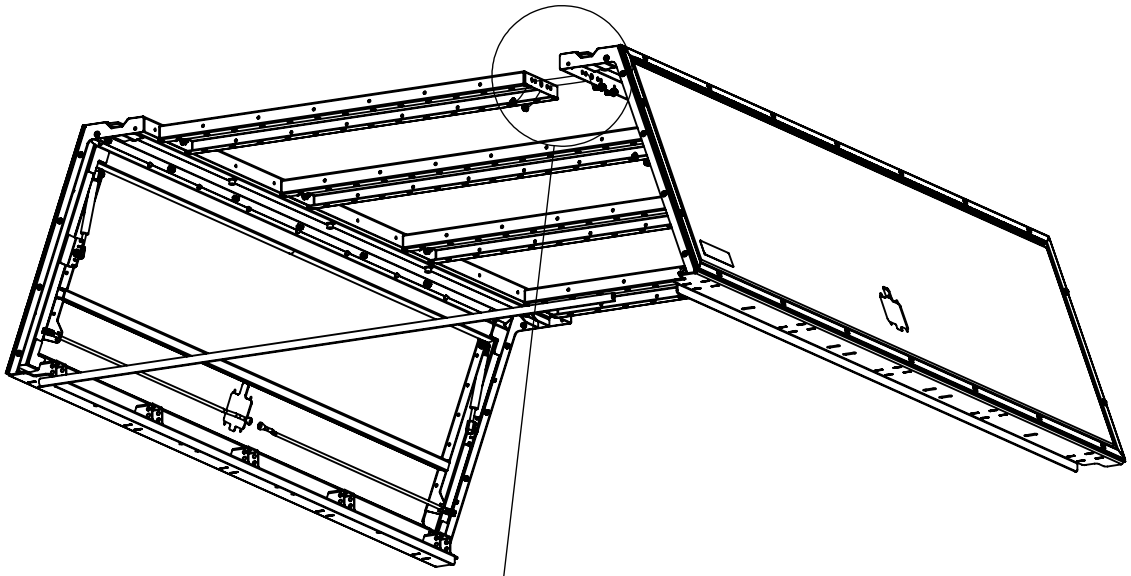
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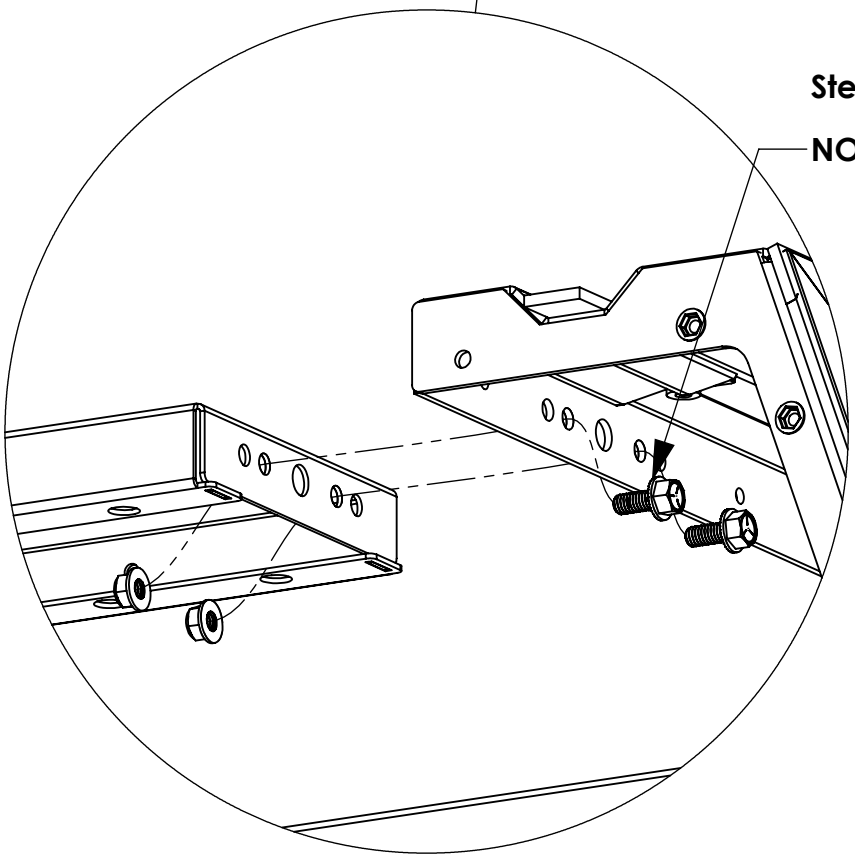
STEP 1 - ASSEMBLE BODY FRAME: SIDES AND CROSSBOWS

Step 1.1
OPEN [x2] TOPPER SIDE KITS [TSK78M23W]

Step 1.2
OPEN TOPPER ROOF KIT [TRK7823W]

Step 1.3
<u>FULLY TIGHTEN</u> FAS0438 AND FAS0440 (16 PLACES)
1/2" WRENCH
1/2" SOCKET





Step 1.3

NOTE: Nut inboard

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

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

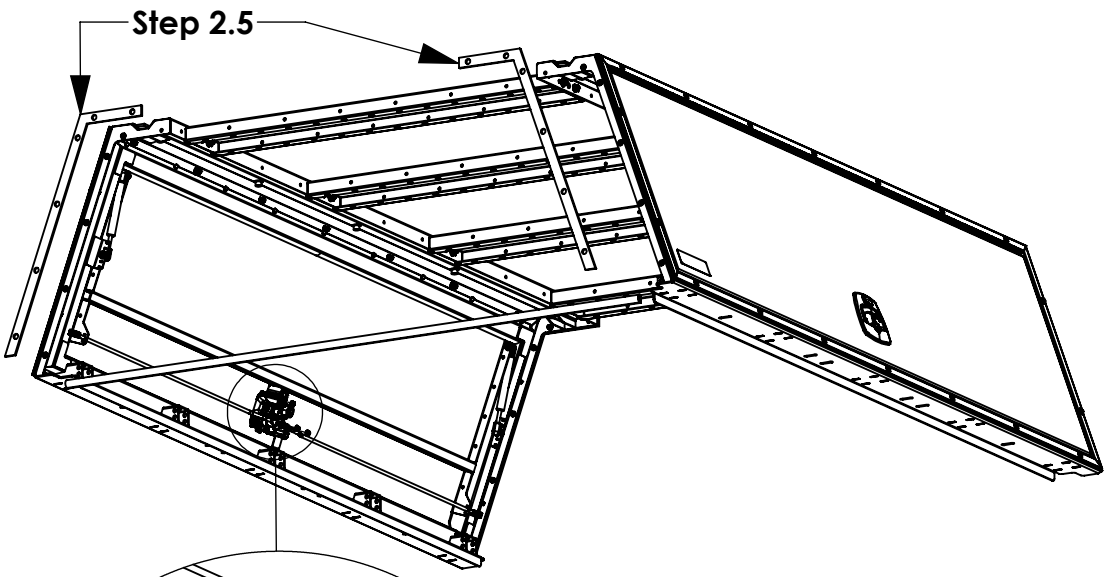
DO NOT OVERTIGHTEN

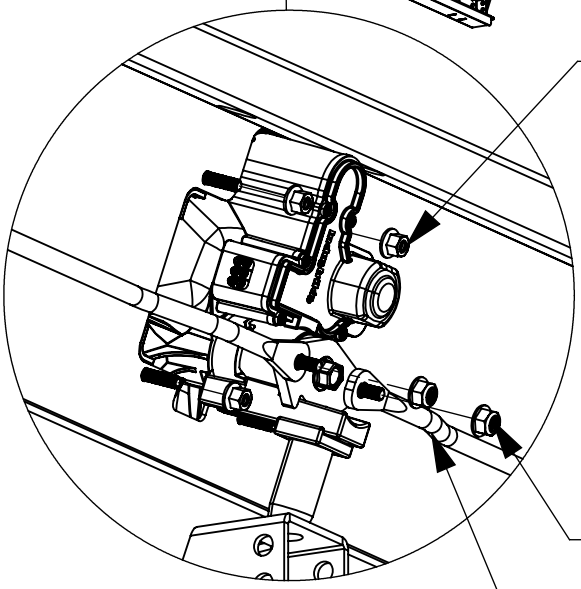
Step 2.4
ADJUST HANDLE POINT TO ALIGN WITH CASTING LINE ON HANDLE BODY (APPROX: 1.0")

FULLY TIGHTEN
4mm ALLEN
(2 PLACES)

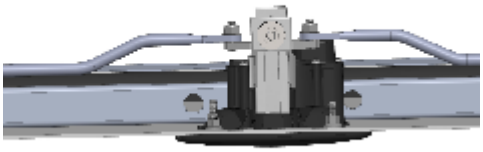
Step 2.5
APPLY FOAM SEALS TO ALL CORNERS

USE HOLES IN SEAL TO ALIGN MATERIAL

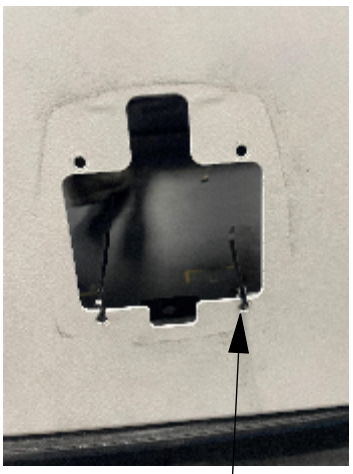


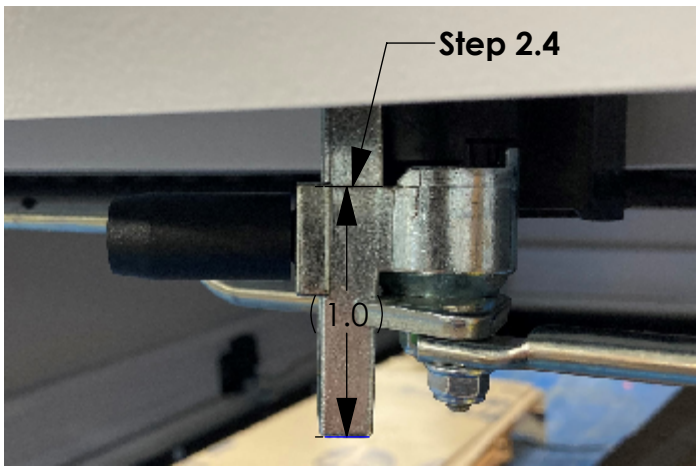


STOP STEP 2.2 & 2.3 HAVE DIFFERENT SIZED FASTENERS



NOTE THAT ORIENTATION OF LOCKRODS IS CRITICAL STOP





STEP 3 - ATTACH FRONT PANEL

Step 3.1
OPEN TOPPER CLOSURE KIT [TCK78HM23W]

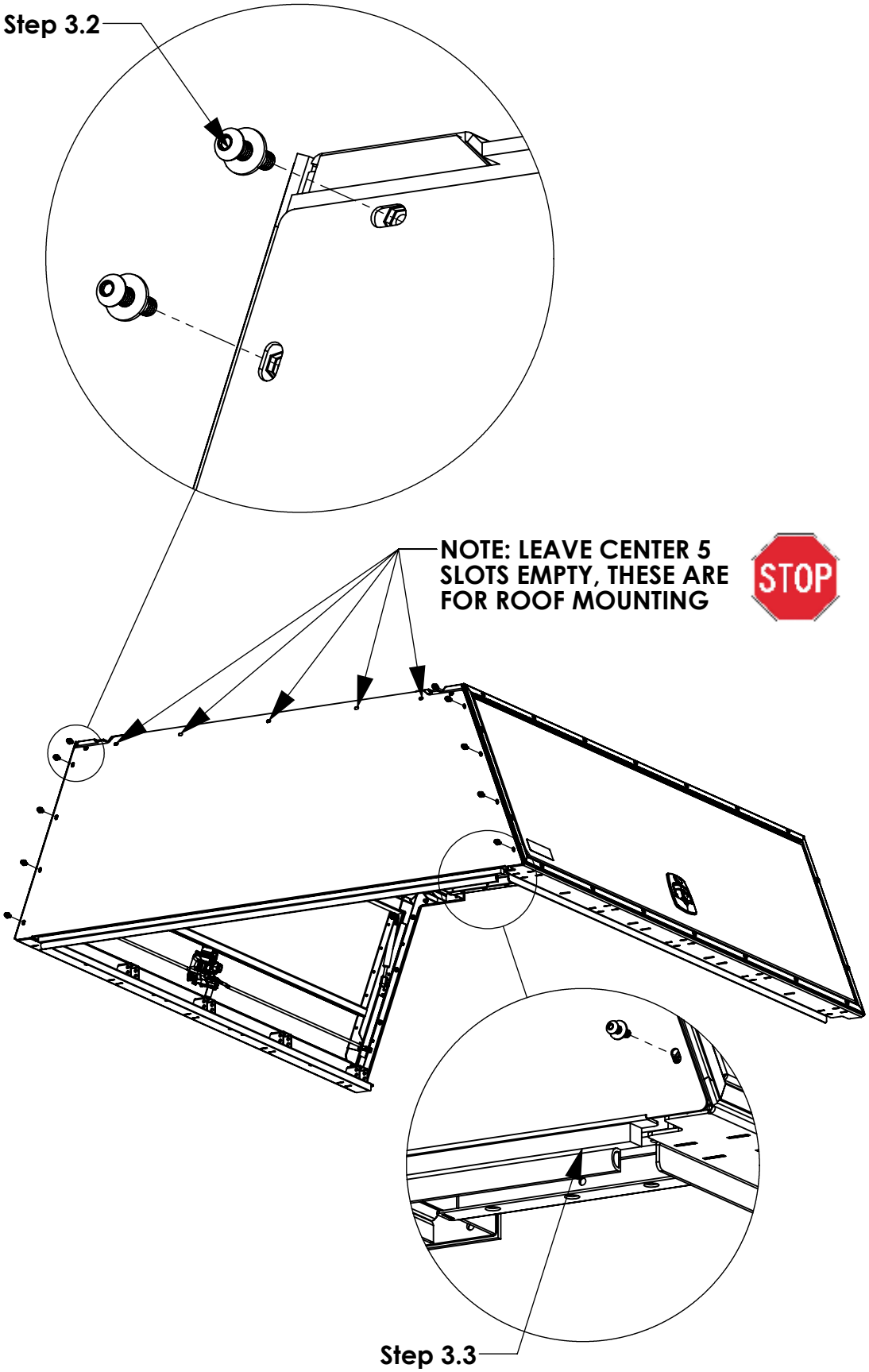
Step 3.2
ATTACH FRONT PANEL

<u>HAND TIGHTEN</u>
FAS0234, FAS0920 (10 PLACES)

DO NOT TIGHTEN UNTIL AFTER STEP 7

Step 3.3
INSTALL FRONT BED SEAL BY PLACING ON FRONT PANEL FLANGE CENTERED BETWEEN THE DRIVER AND PASSENGER SIDE BED RAILS.

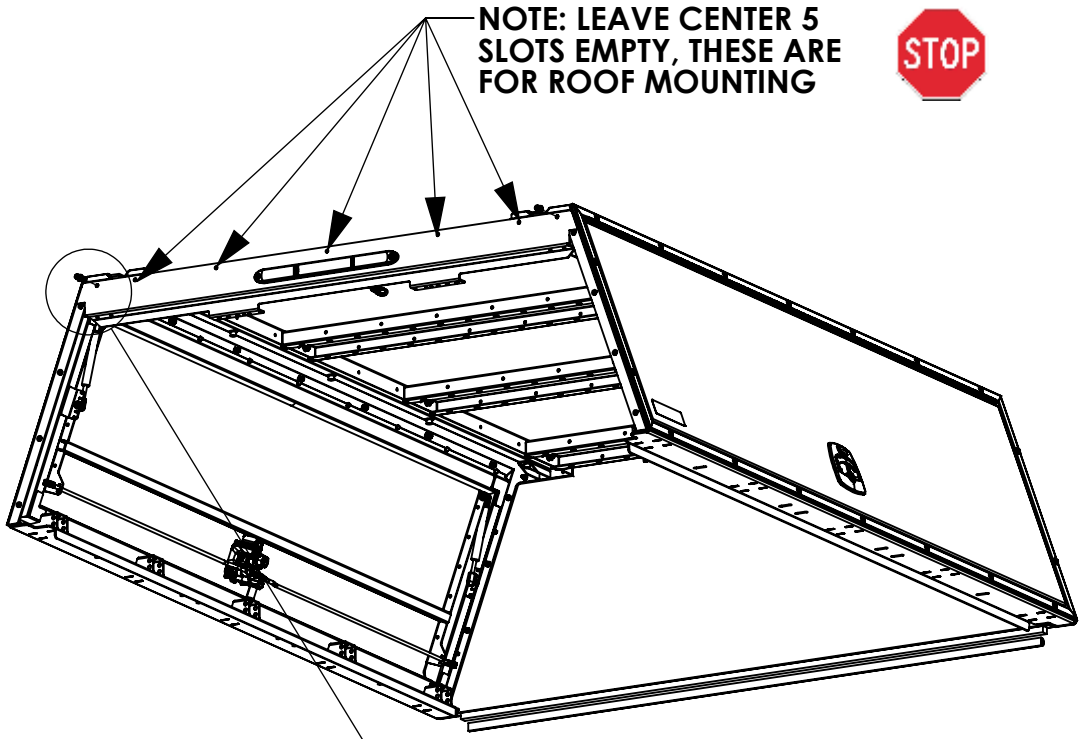
TRIM OFF EXTRA, IF NECESSARY.

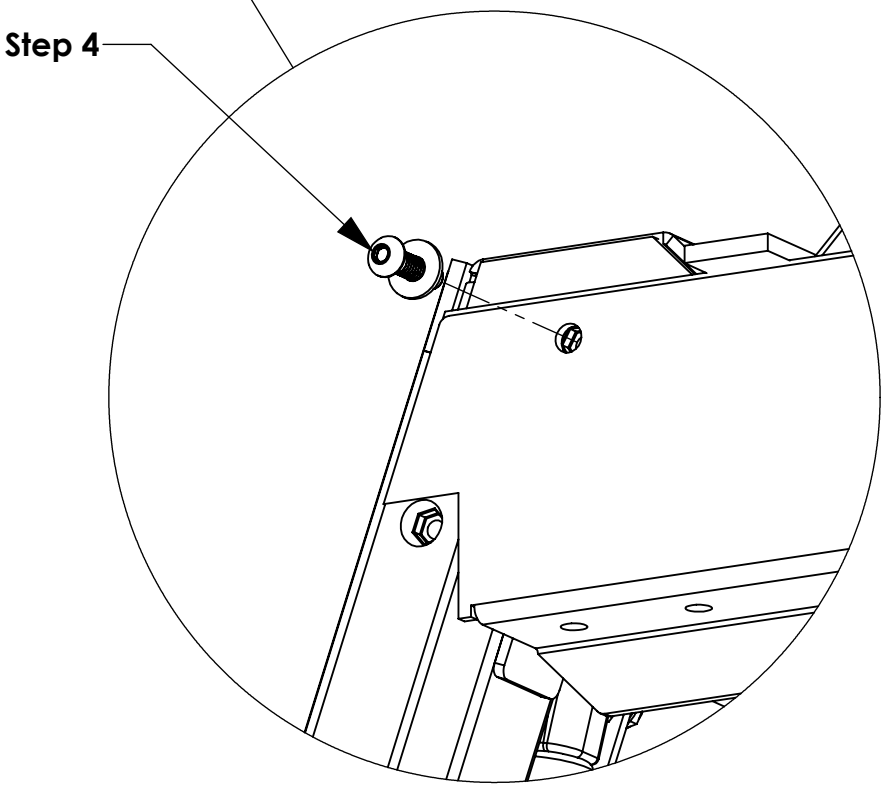


STEP 4 - ATTACH TOP BRACKET ASSEMBLY

Step 4
ATTACH TOP BRACKET ASSM

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

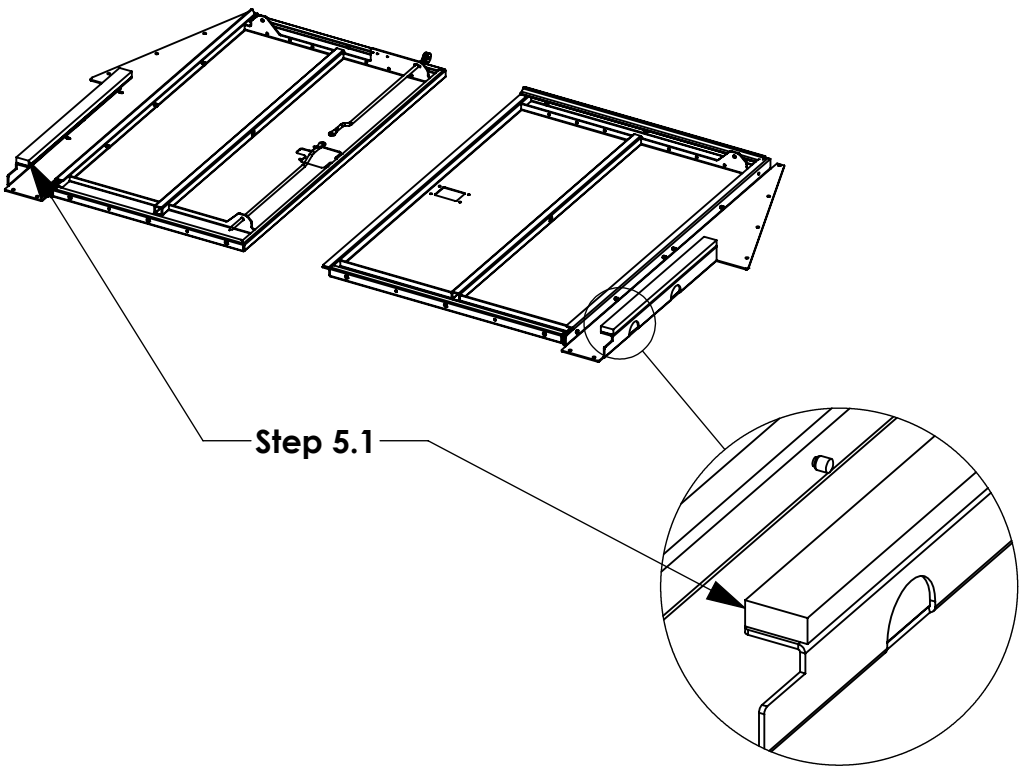




STEP 5 - ATTACH BARN DOOR DS AND PS ASSEMBLIES CONT'D

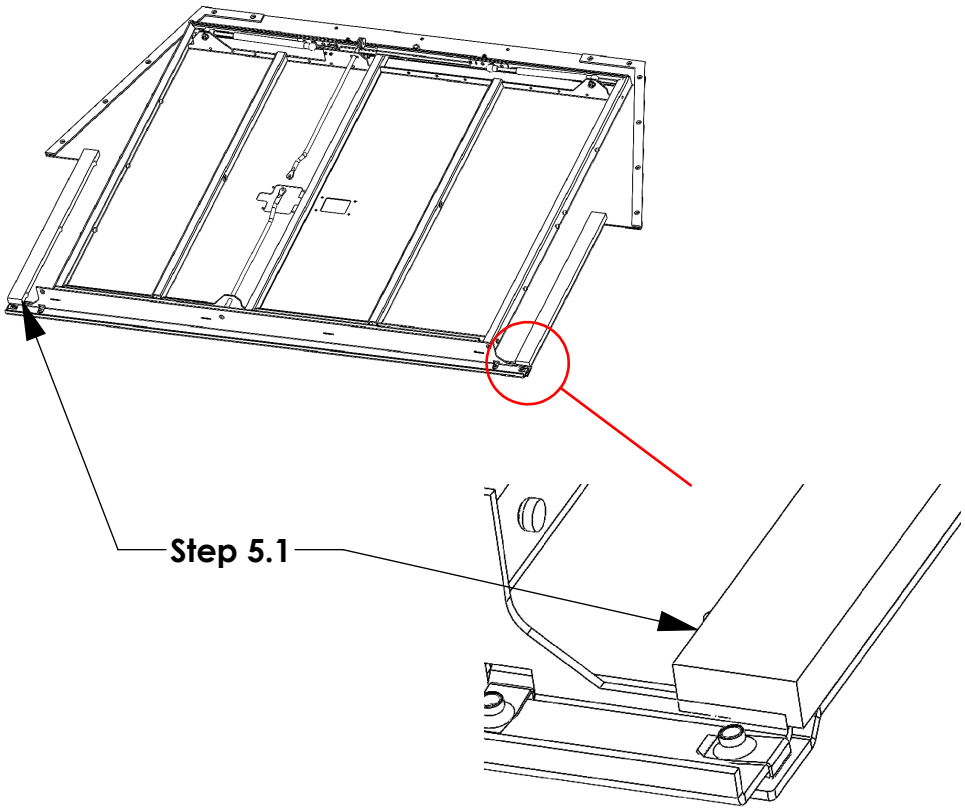
Step 5.1
ALIGN (2)77757 FOAM AT TOP OF FLANGE OF BARN DOOR DS AND PS ASSEMBLIES AND PRESS FIRMLY TO ATTACH

NOTE: FOAM PART NUMBERS MAY VARY



Step 5.1ALT FOR COLORADO

ALIGN (2)77757 FOAM AT THE EDGE OF BARN DOOR (AS SHOWN) DS AND PS ASSEMBLIES AND PRESS FIRMLY TO ATTACH



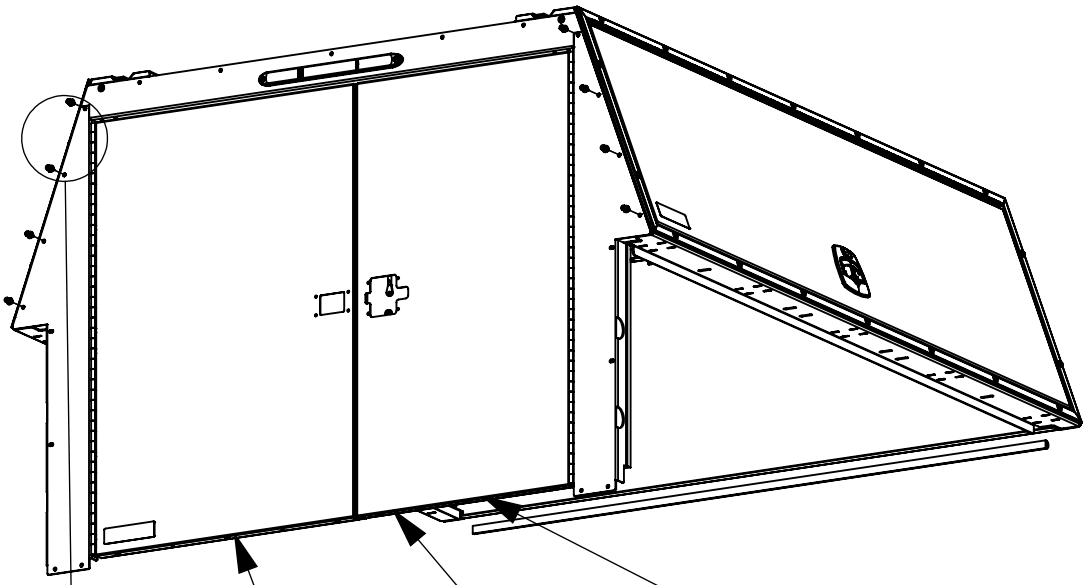
STEP 5 - ATTACH BARN DOOR DS AND PS ASSEMBLIES CONT'D

Step 5.2
ATTACH DS ASSM

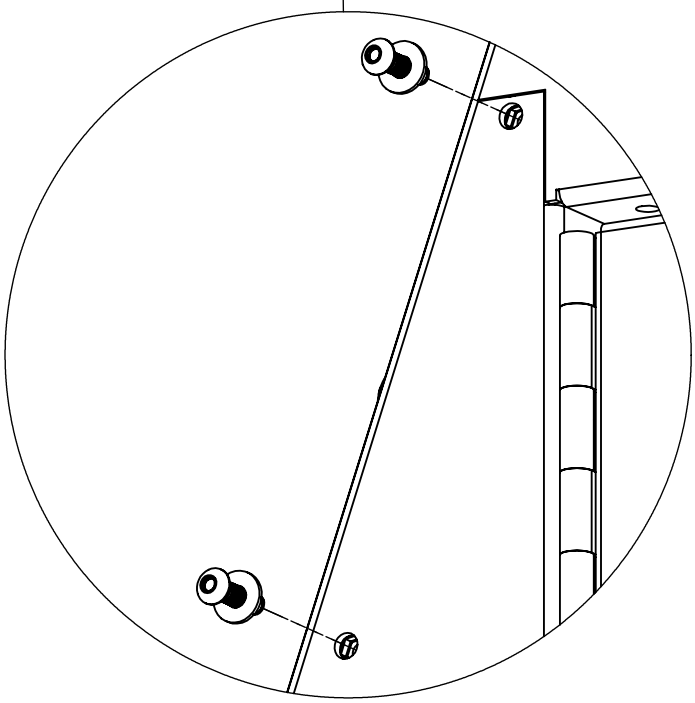
HAND TIGHTEN
FAS0234, FAS0920 (4 PLACES) 5/32" ALLEN

Step 5.3
ATTACH PS ASSM

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



NOTE:
BEFORE TIGHTENING MAKE SURE BOTH DOORS ARE SQUARE.



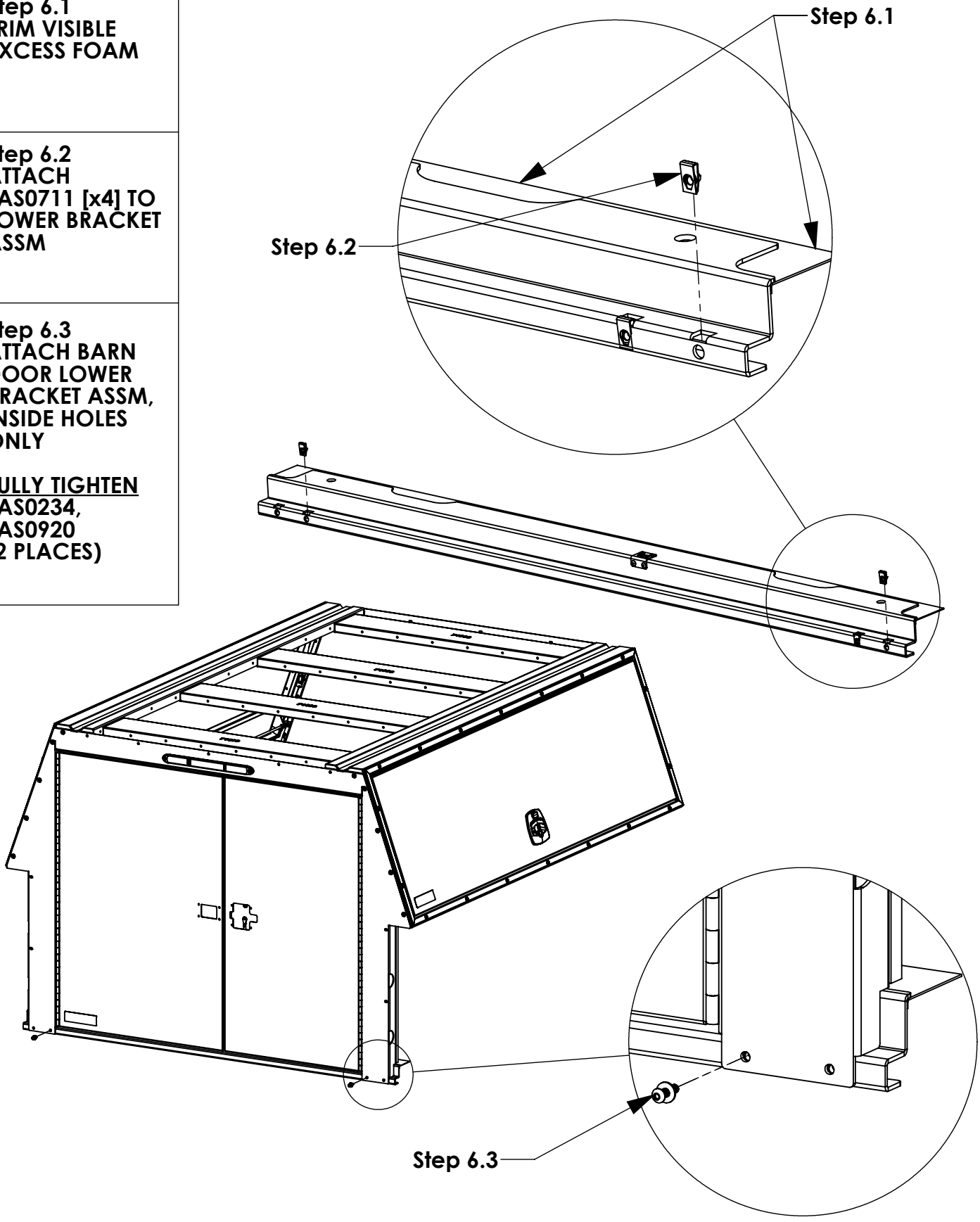
STEP 6 - ATTACH BARN DOOR LOWER BRACKET ASSEMBLY

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

<u>FULLY TIGHTEN</u>
FAS0234, FAS0920 (2 PLACES)



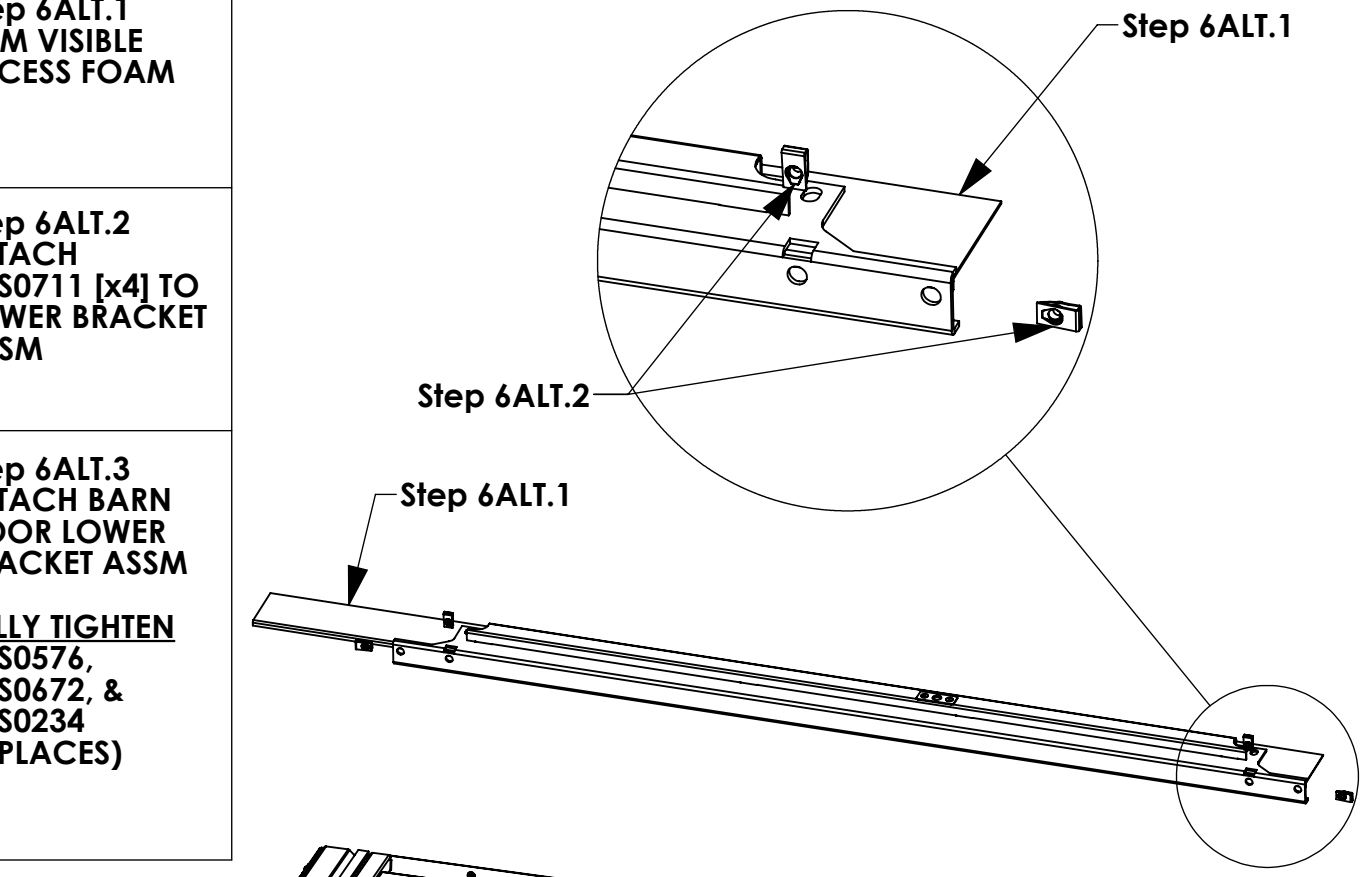
STEP 6ALT - ATTACH BARN DOOR LOWER BRACKET ASSEMBLY (ALTERNATE FOR COLORADO)

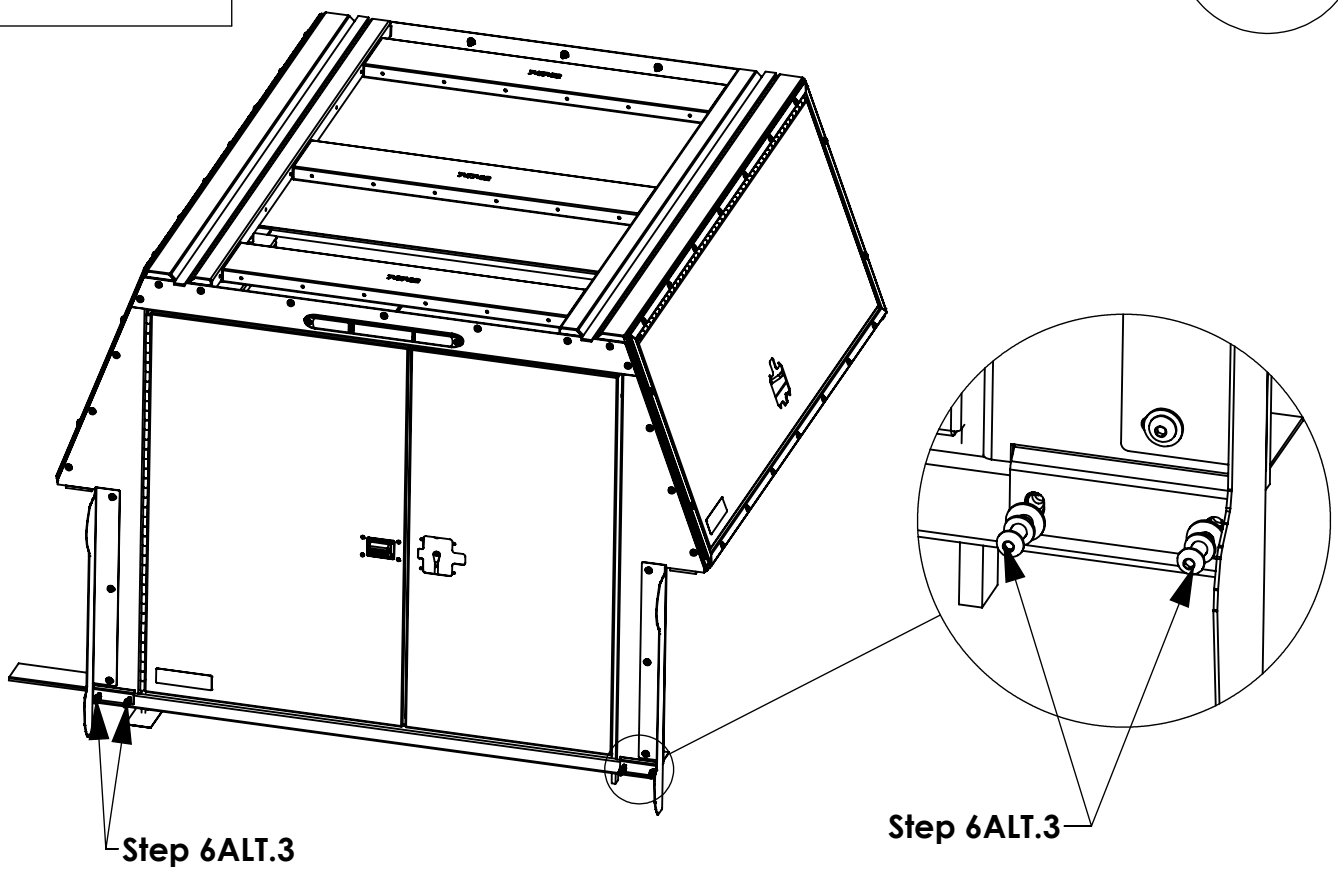
Step 6ALT.1
TRIM VISIBLE EXCESS FOAM

Step 6ALT.2
ATTACH FAS0711 [x4] TO LOWER BRACKET ASSM

Step 6ALT.3
ATTACH BARN DOOR LOWER BRACKET ASSM

<u>FULLY TIGHTEN</u>
FAS0576, FAS0672, & FAS0234 (4 PLACES)





STEP 7 - ATTACH PS AND DS BED FILLER

Step 7.1
ATTACH DS BED FILLER

PUSH INWARD AND HAND TIGHTEN
FAS0234, FAS0920, FAS0055

(3 PLACES) 5/32" ALLEN

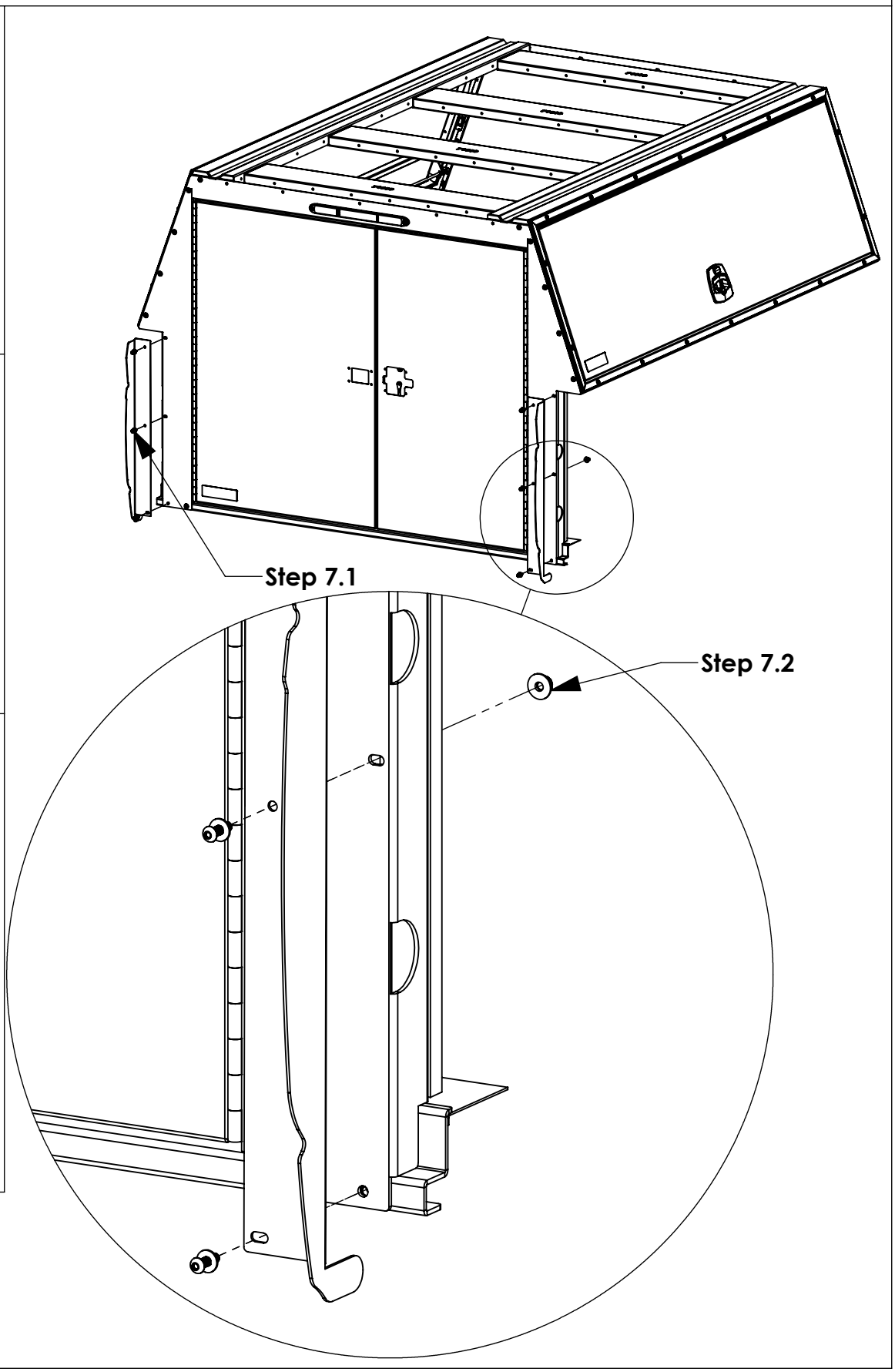
Step 7.2
ATTACH PS BED FILLER

PUSH INWARD AND HAND TIGHTEN
FAS0234, FAS0920, FAS0055

(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 7ALT - ATTACH PS AND DS BED FILLER (ALTERNATE FOR COLORADO)

Step 7ALT.1
ATTACH DS BED FILLER

PUSH INWARD AND HAND TIGHTEN FAS0234, FAS0576, FAS0055

(3 PLACES) 5/32" ALLEN

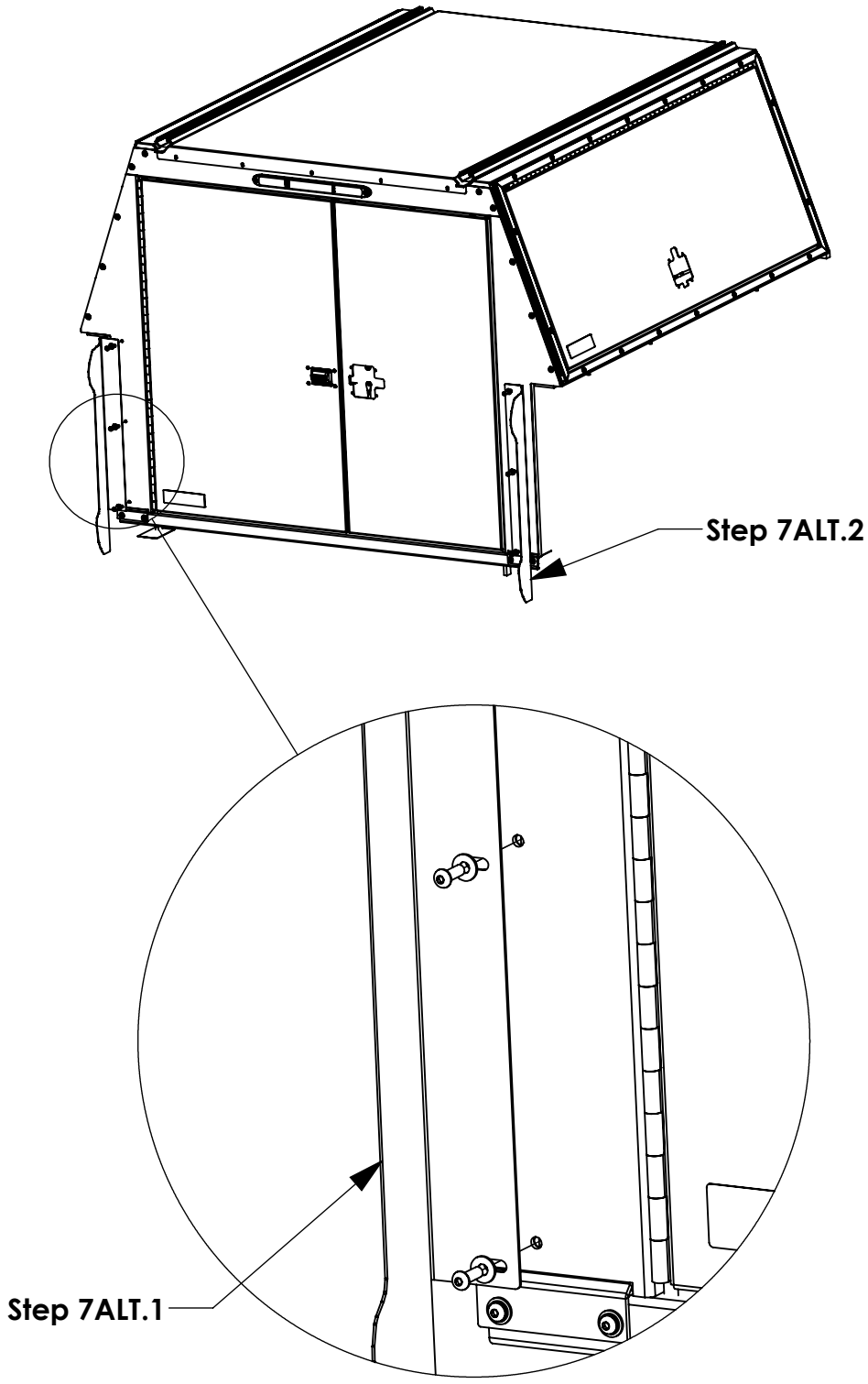
Step 7ALT.2
ATTACH PS BED FILLER

PUSH INWARD AND HAND TIGHTEN FAS0234, FAS0576, FAS0055

(3 PLACES) 5/32" ALLEN

Step 7ALT.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 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

<u>FULLY TIGHTEN</u>
FAS0917
(4 PER DOOR)
10mm SOCKET

DO NOT OVERTIGHTEN

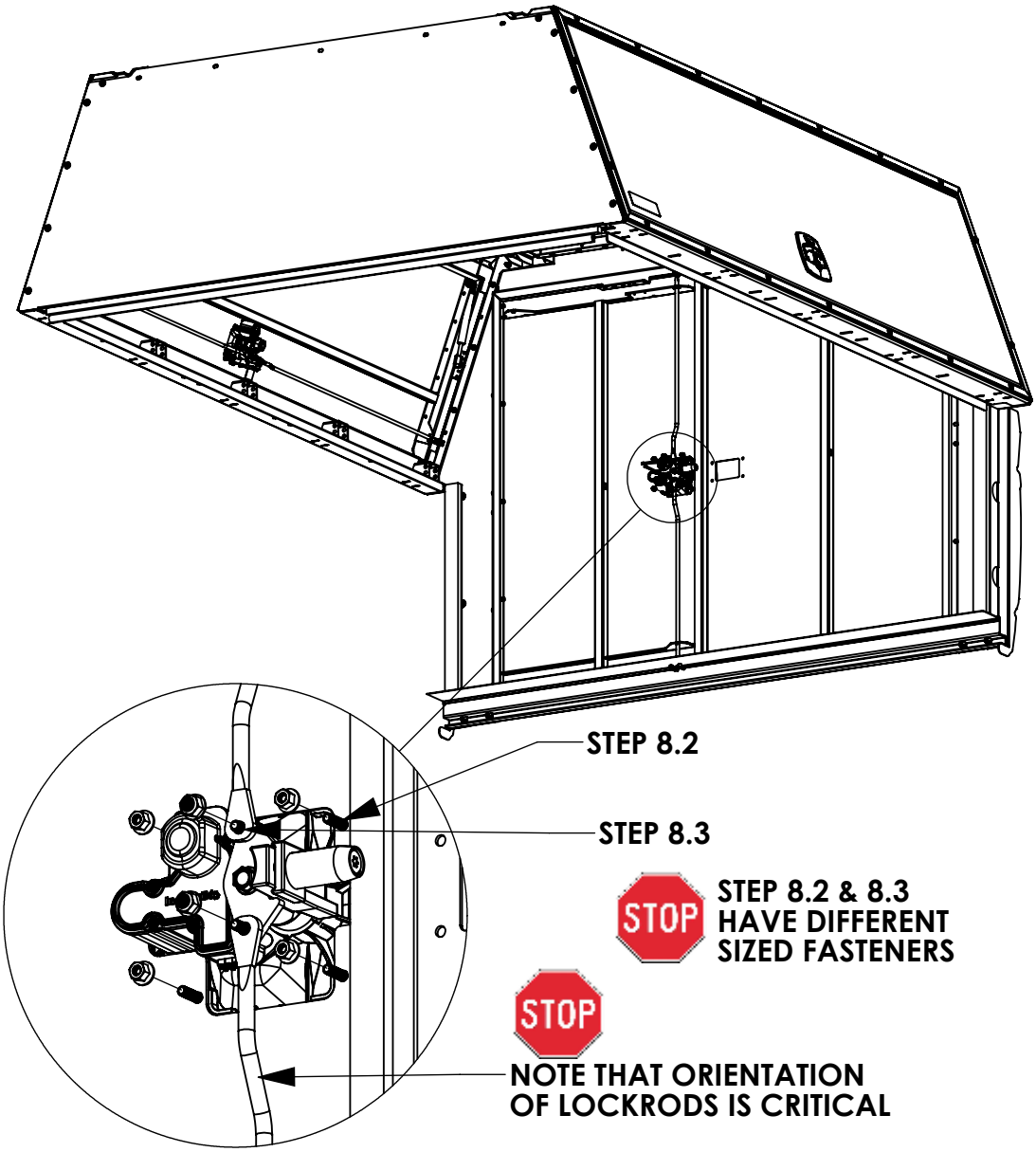
Step 8.3
ATTACH LOCKRODS TO HANDLE

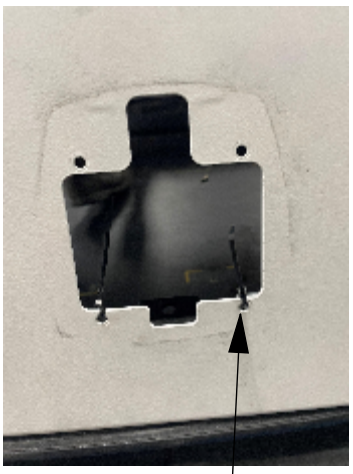
<u>FULLY TIGHTEN</u>
FAS0918
(2 PLACES)
8mm SOCKET

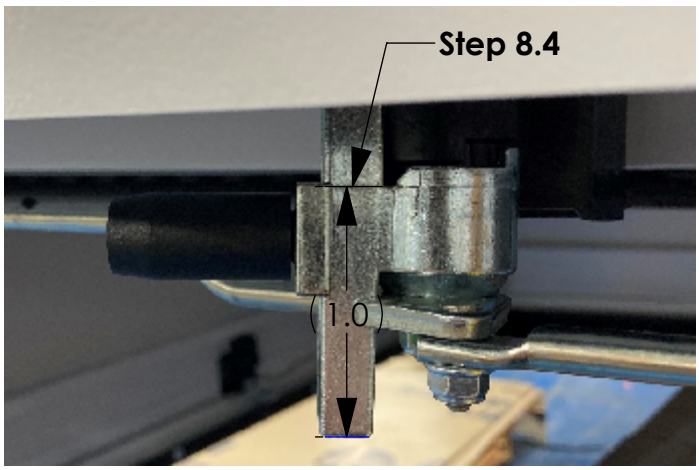
DO NOT OVERTIGHTEN

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

FULLY TIGHTEN
4mm ALLEN
(2 PLACES)







STEP 9 - ATTACH ROOF AND ROOF RAILS

Step 9.1
SET ROOF PANEL ON TOPPER BODY

Step9.2
ATTACH MOUNTING RAILS TO TOPPER BODY.

USE AN ALIGNMENT PUNCH TO POKE THROUGH SEALS

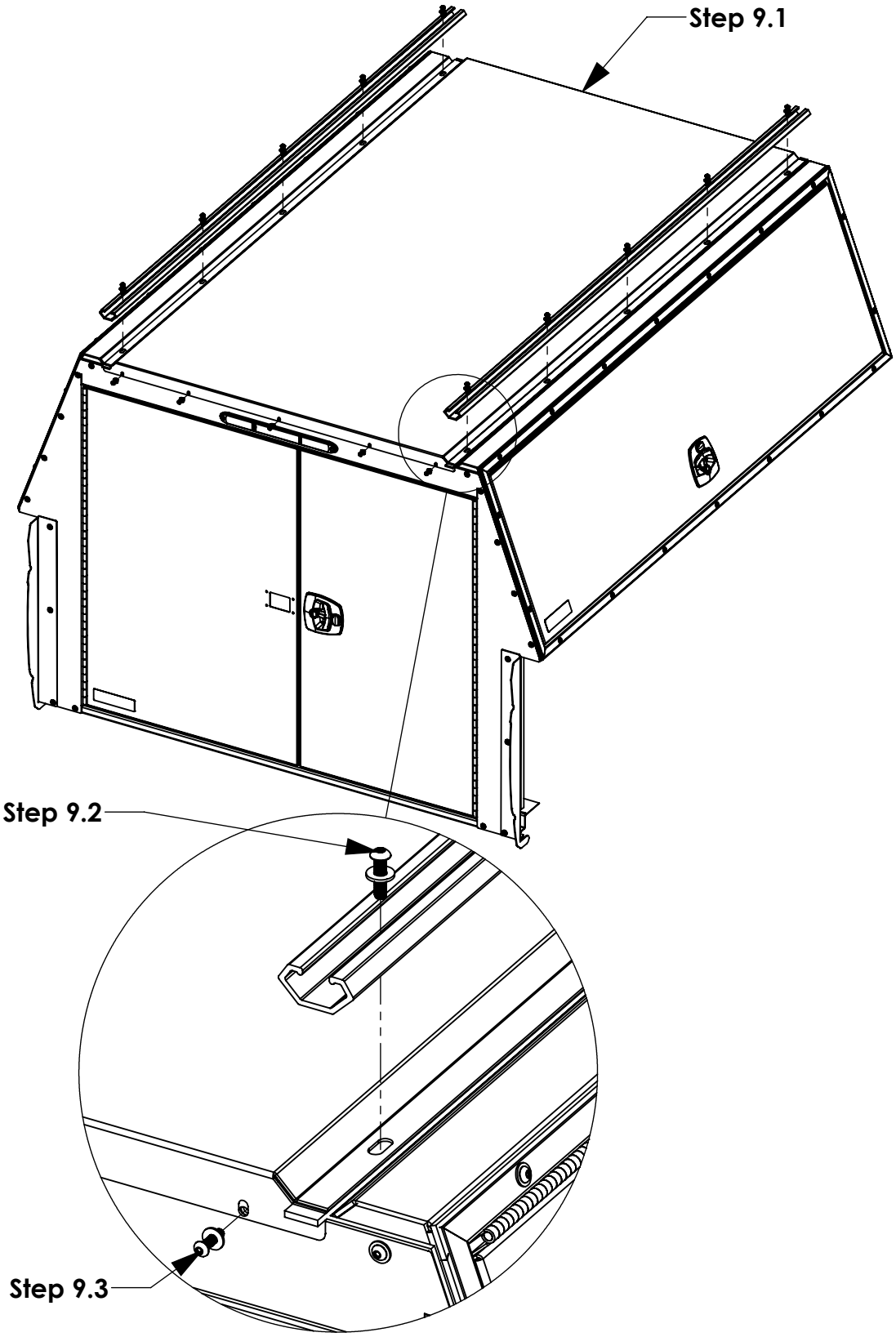
FULLY TIGHTEN
FAS0552,
FAS0919
(10 PLACES)
3/16" ALLEN

Step 9.3
ATTACH ROOF TO TOPPER BODY.

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

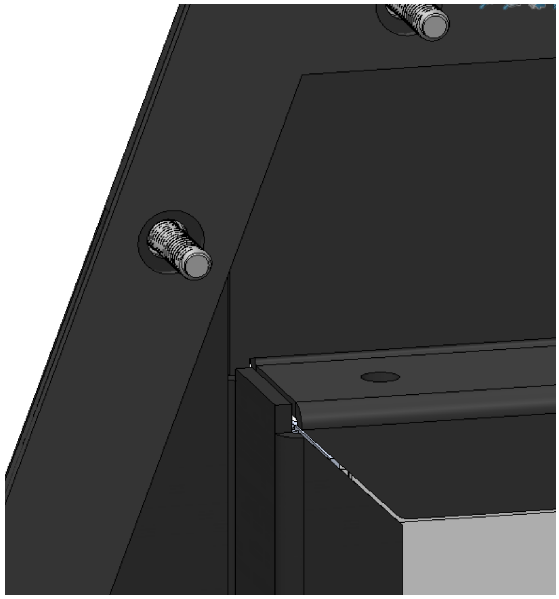


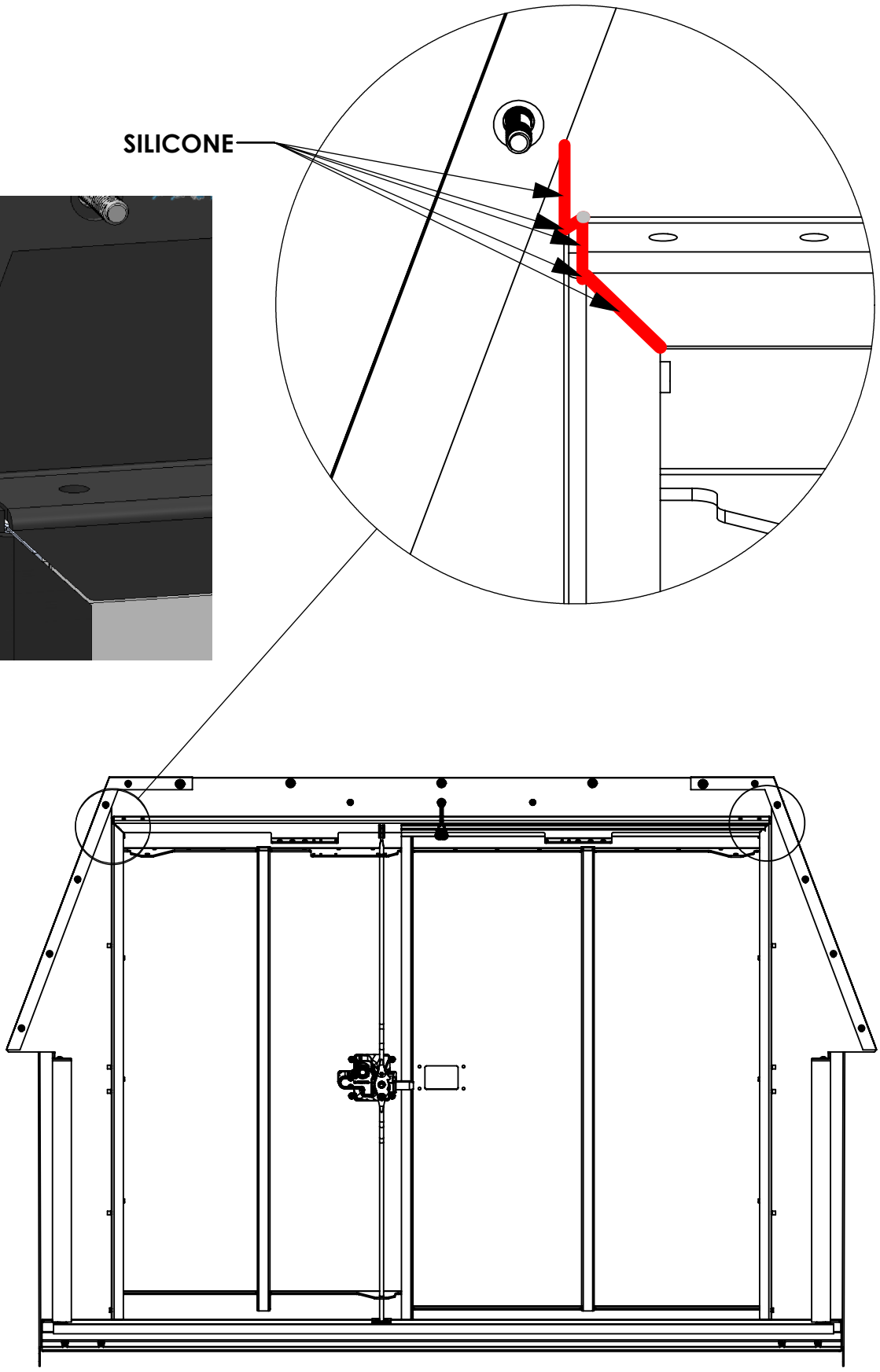
PLEASE NOTE THAT ORDER OF OPERATIONS ON THESE BUILD STEPS IS CRITICAL TO A PROPER SEAL!



STEP 10 - SILICONE JOINTS

Step 10
SILICONE ALONG SEAM AS SHOWN, BOTH ENDS



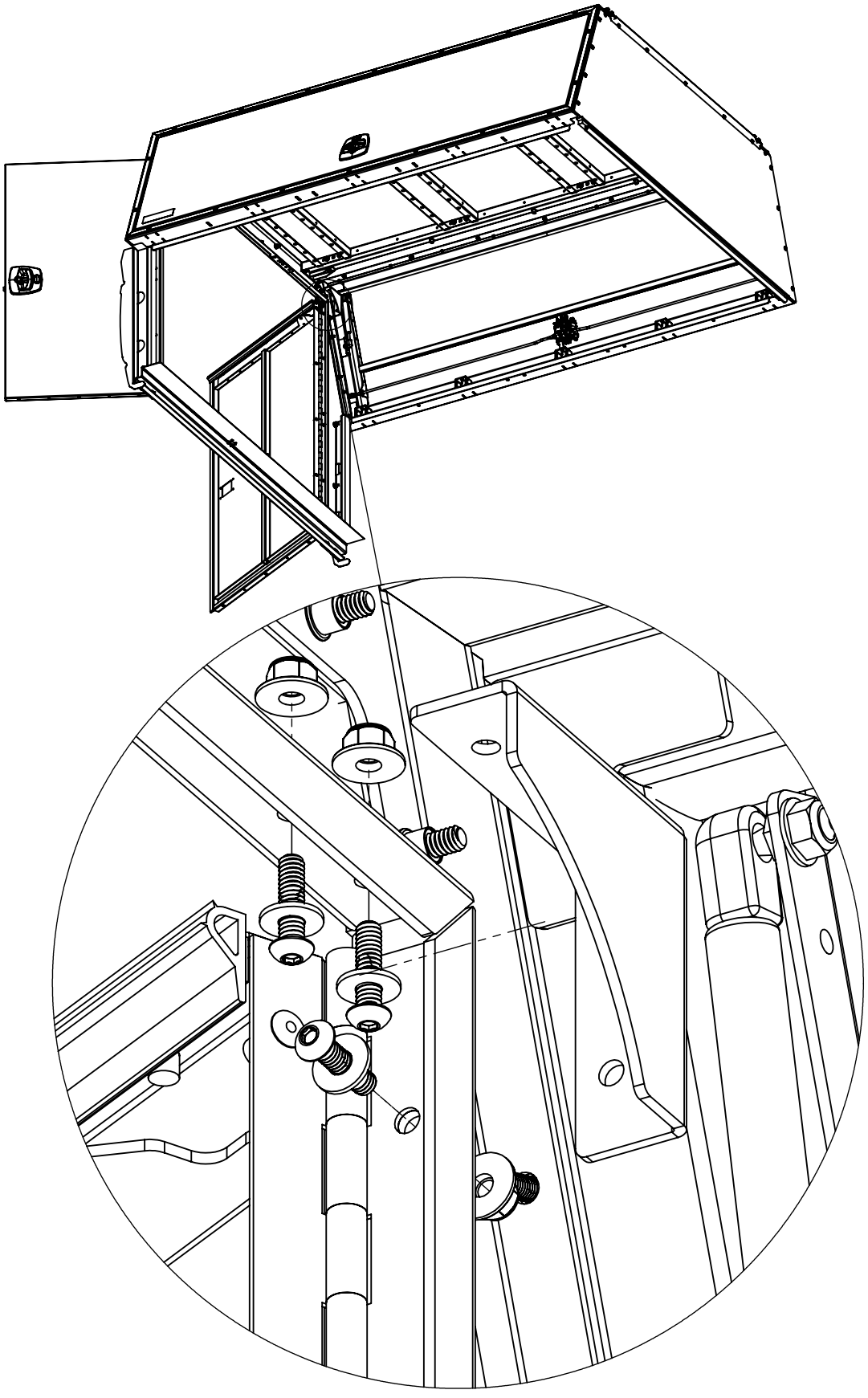


STEP 11 - ATTACH CORNER GUSSETS

Step 11
ATTACH CORNER GUSSETS, BOTH ENDS

<u>FULLY TIGHTEN</u>
FAS0920
FAS0234
FAS0055

(6 PLACES)
5/32" ALLEN



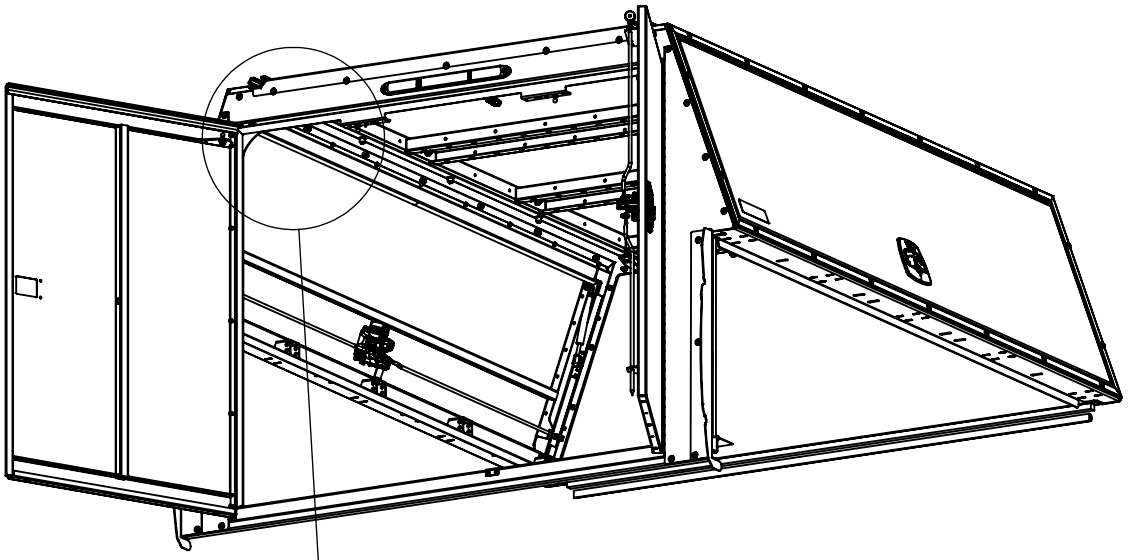
STEP 12 - INSTALL BALL STUDS

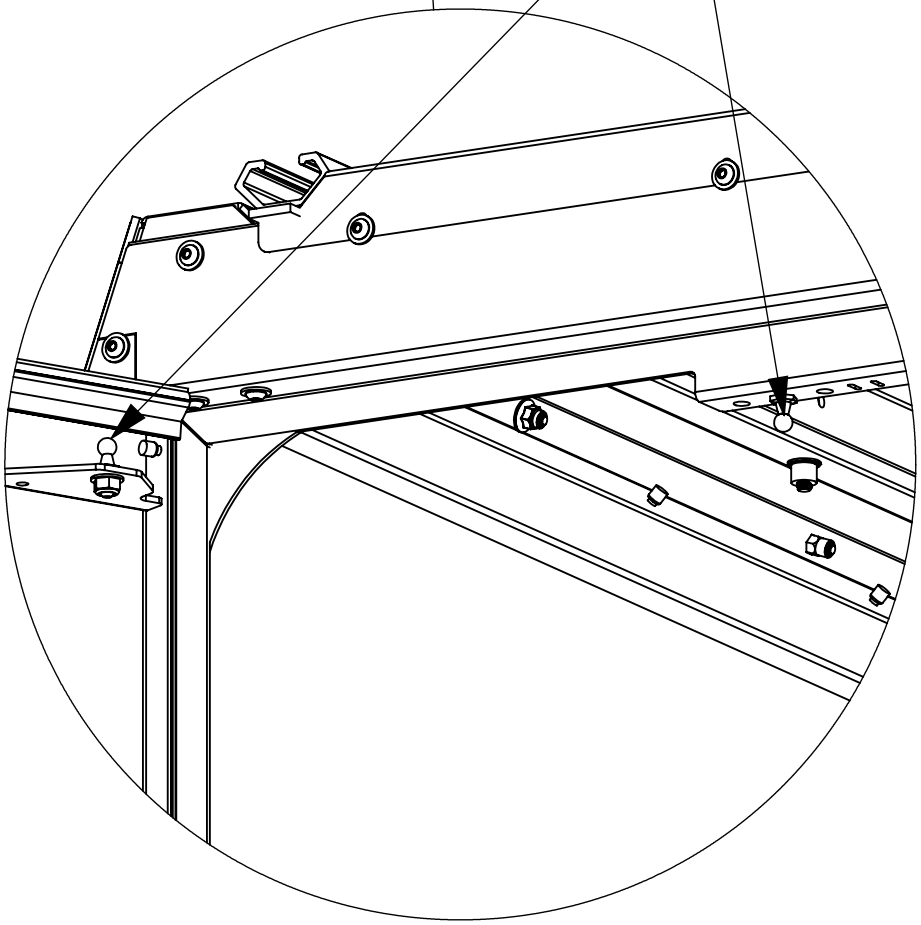
Step 12
INSTALL BALL STUDS

<u>FULLY TIGHTEN</u>
30015-0
FAS0861

(4 PLACES)
1/2" WRENCH

***NOTE: MOUNT IN CENTER HOLES FOR FORDS**

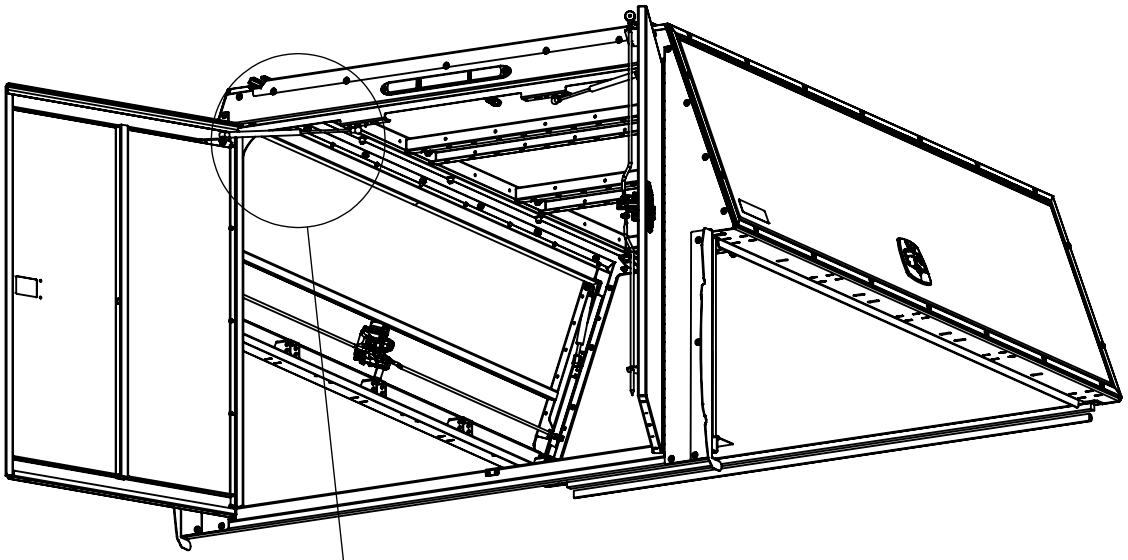


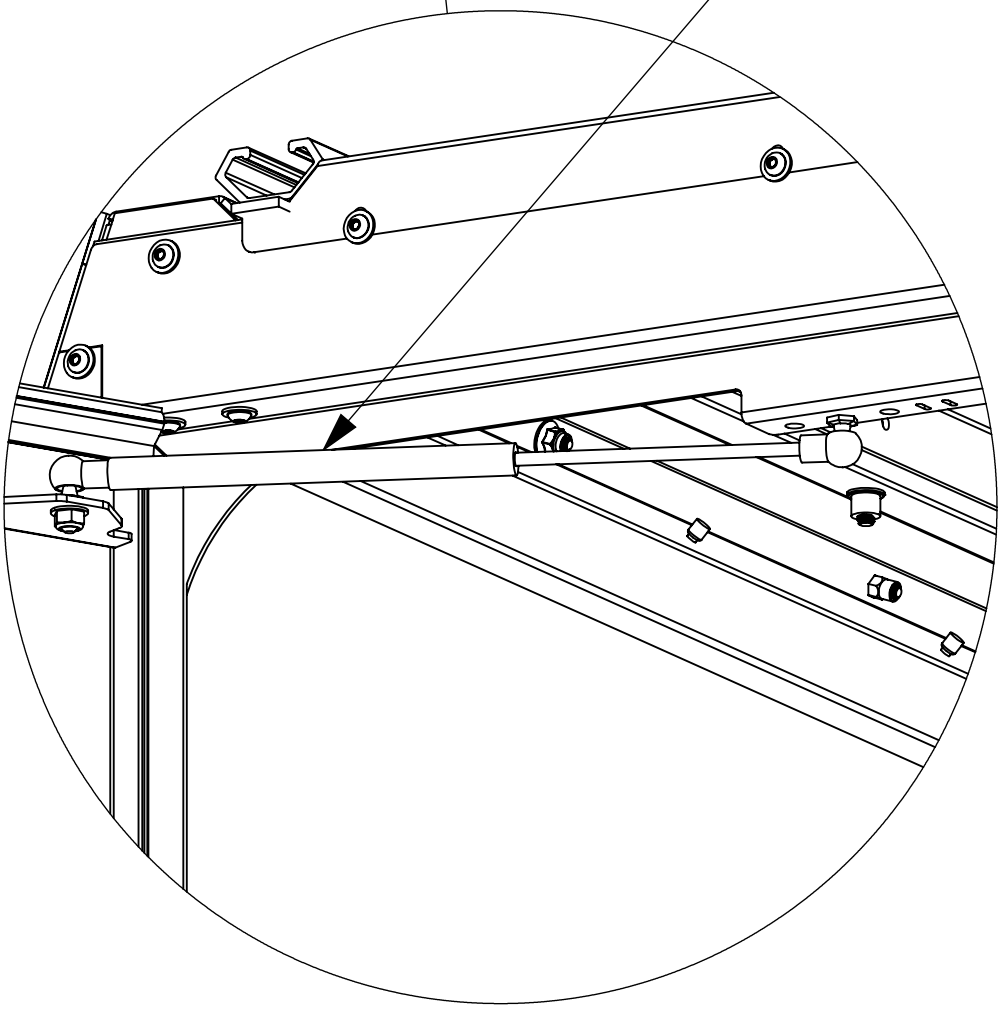


STEP 13 - INSTALL SHOCKS

Step 13
INSTALL SHOCKS

77108 (20#)
(2 PLACES)



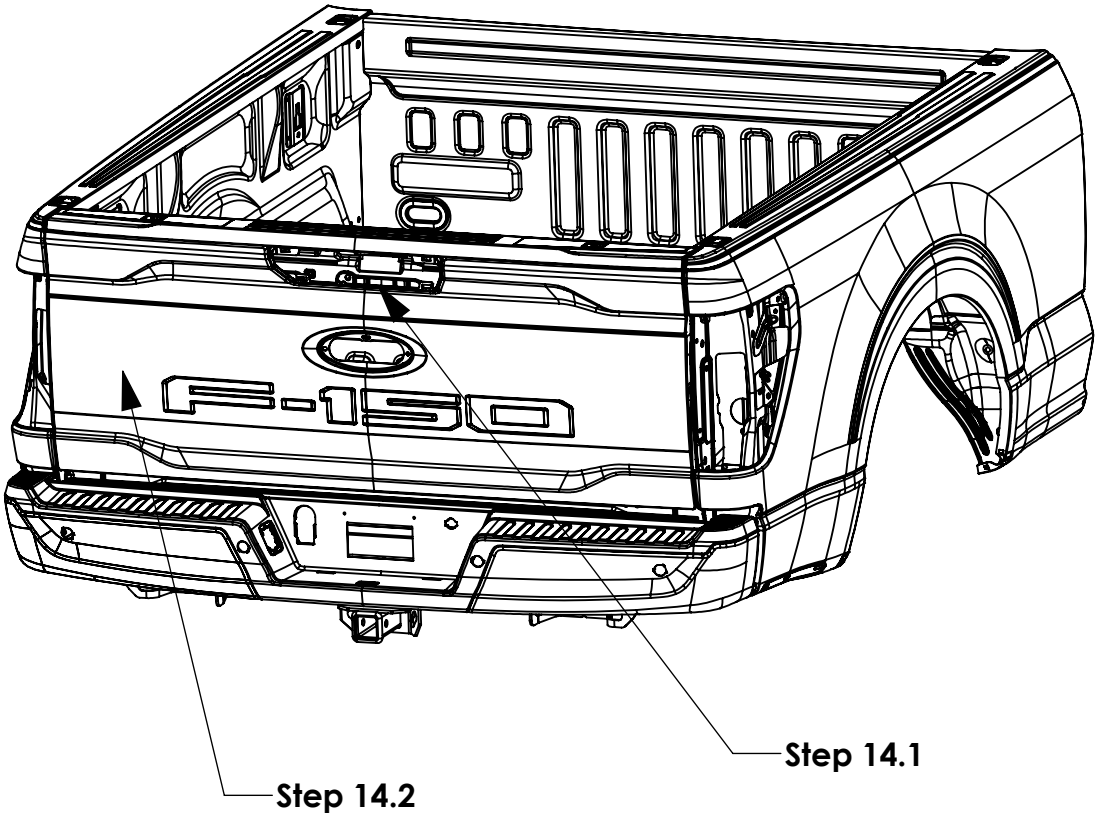


STEP 14 - REMOVE BACKUP CAMERA AND TAILGATE

Step 14.1
REMOVE BACKUP CAMERA PER 77217 RELOCATION INSTRUCTIONS 77963

Step 14.2
REMOVE TAILGATE PER OEM GUIDLINES

NOTE: CONTACT CUSTOMER FOR DISPOSTION OF REMOVED TAILGATE



STEP 15 - ATTACH SEALS TO TRUCK BED AND TOPPER LOCATION RELATIVE TO FRONT OF TRUCK BED

Step 15.1
INSTALL SIDE BED SEALS. ALIGN TO THE FRONT AND INSIDE EDGES OF THE SIDE BED RAIL TRIM.



DO NOT TRIM EXCESS UNTIL TOPPER IS ON THE TRUCK.

Step 15.2
WHEN PLACING THE TOPPER ON THE TRUCK BED ALIGN THE FRONT PANEL INSIDE FLANGE EDGE AND REFER TO TABLE 1 TO GET OEM SPECIFIC DISTANCE OFF OF THE INSIDE EDGE OF THE BED. CENTER BETWEEN THE DRIVER AND PASSENGER SIDE BED RAIL TRIM.

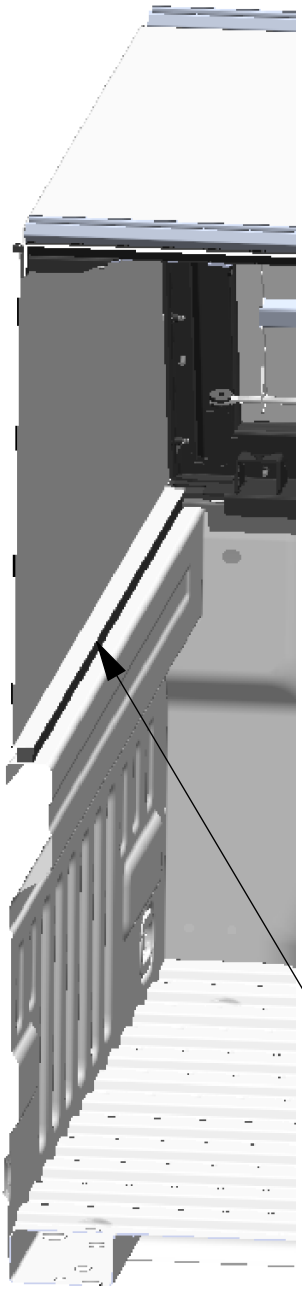
NOTE: BASED ON DIFFERENT VEHICLE MODEL YEARS AND BED VARIATION, THE TOPPER LOCATION MAY VARY. IT MAY REQUIRE THE INSIDE EDGE FLANGE TO BE PLACEDAT THE INSIDE EDGE OF THE BED TO LOCATE TOPPER PROPERLY AT REAR OF VEHICLE.

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

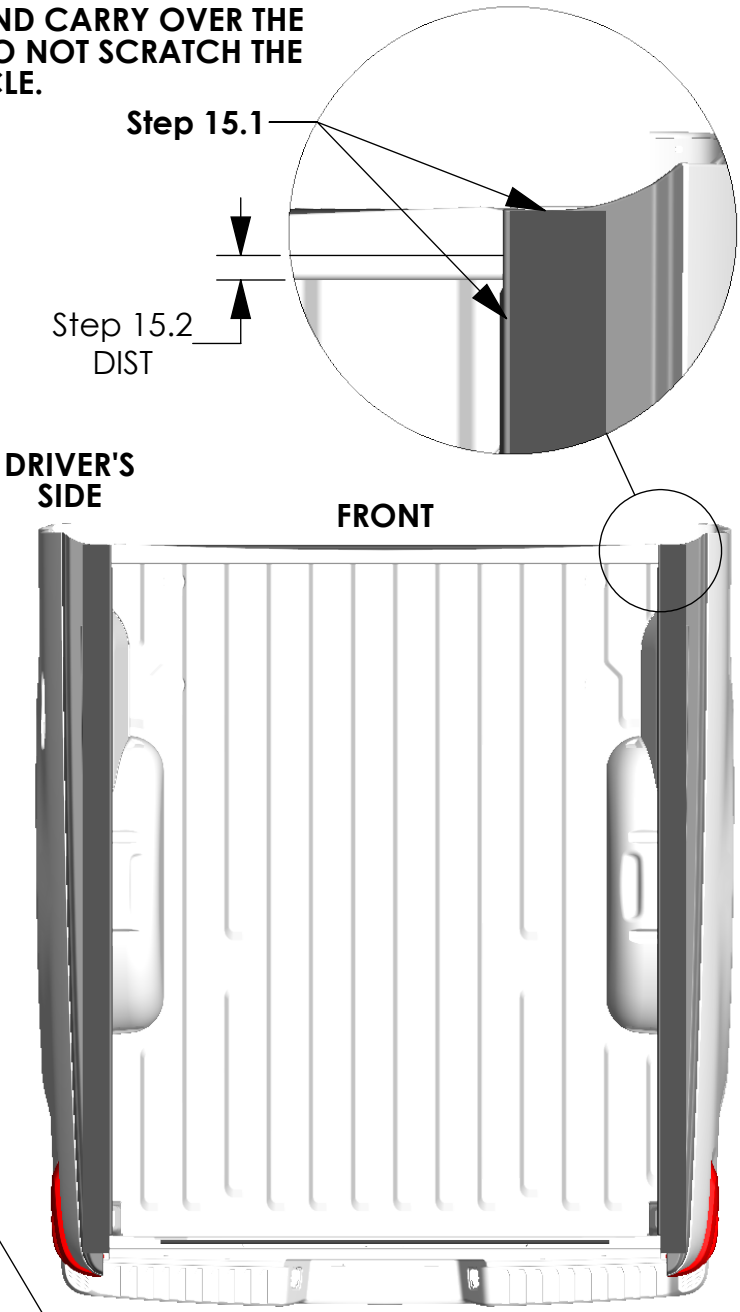
-HOIST: ATTACH TO THE ROOF RAILS OF THE TOPPER
-FORKLIFT: OPEN THE REAR DOOR AND SET FORKS ON THE ROOF BOWS
-MANUAL: HAVE 1 INDIVIDUAL AT EACH CORNER OF THE TOP AND CARRY OVER THE SIDES OF THE TRUCK. DO NOT SCRATCH THE VEHICLE.

TABLE 1:

VEHICLE PLATFORM	DIST.
F-150	.875"
SILVERADO	0.25"



TOP VIEW



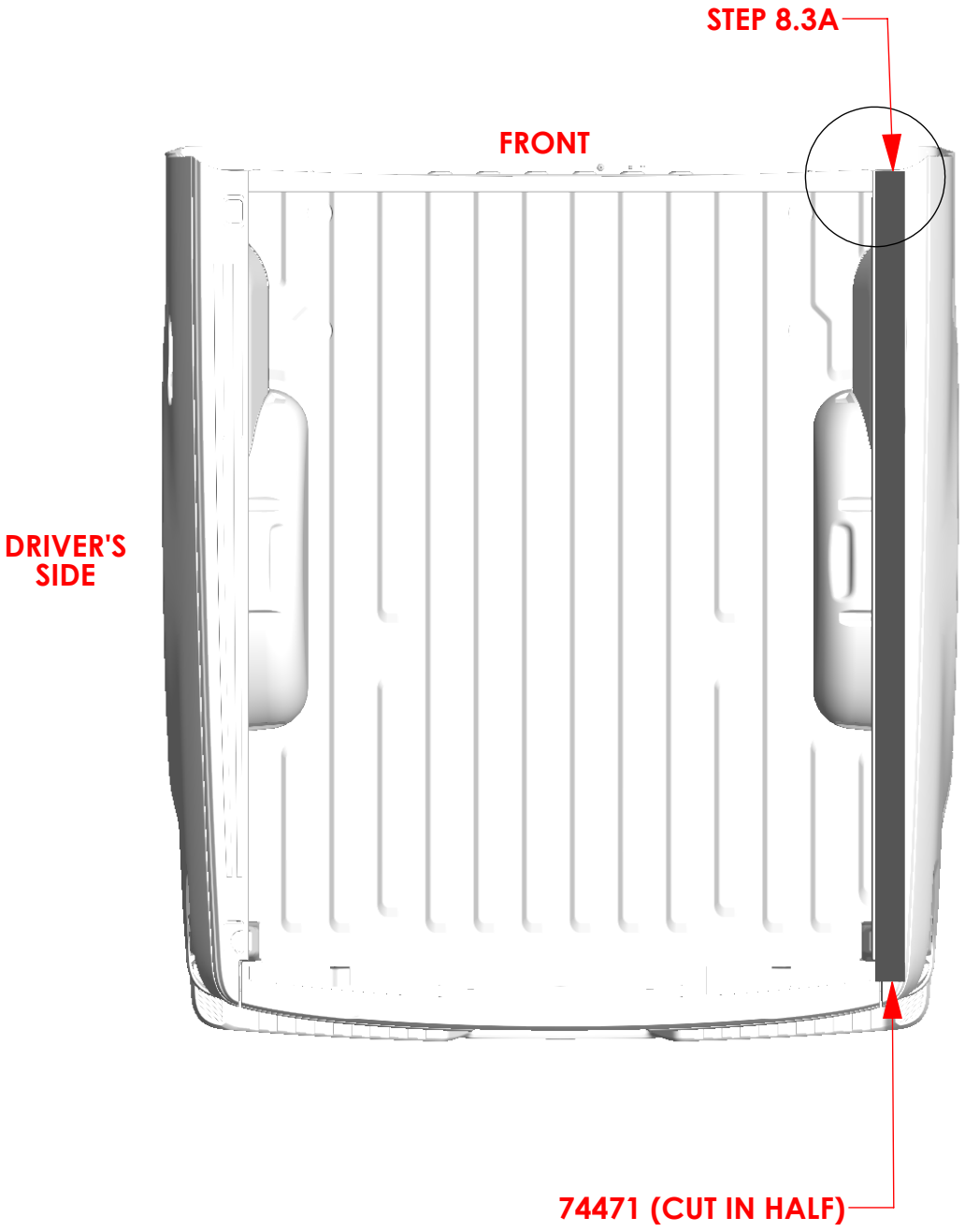
STEP 15.1 CONTINUED ON NEXT PAGE FOR COLORADO ONLY

STEP 15 CONTINUED - INSTALL FOAM (NOTE: FOR CHEVY COLORADO ONLY)

Step 8.3A
COLORADO ONLY! CUT 74471 IN HALF TO MAKE TWO SEALS. INSTALL ADDITIONAL SIDE BED SEALS (74471 (X1)). ALIGN TO THE FRONT AND INSIDE EDGES OF THE SEALS FROM THE PREVIOUS STEP.

DO NOT TRIM EXCESS UNTIL TOPPER IS ON THE TRUCK.

Step 8.3B
SHIFT TO DRIVERS SIDE OF TRUCK AND MIRROR INSTALLATION OF THE FIRST HALF OF 74471.



STEP 15 - ATTACH SEALS TO TRUCK BED AND TOPPER LOCATION RELATIVE TO FRONT OF TRUCK BED

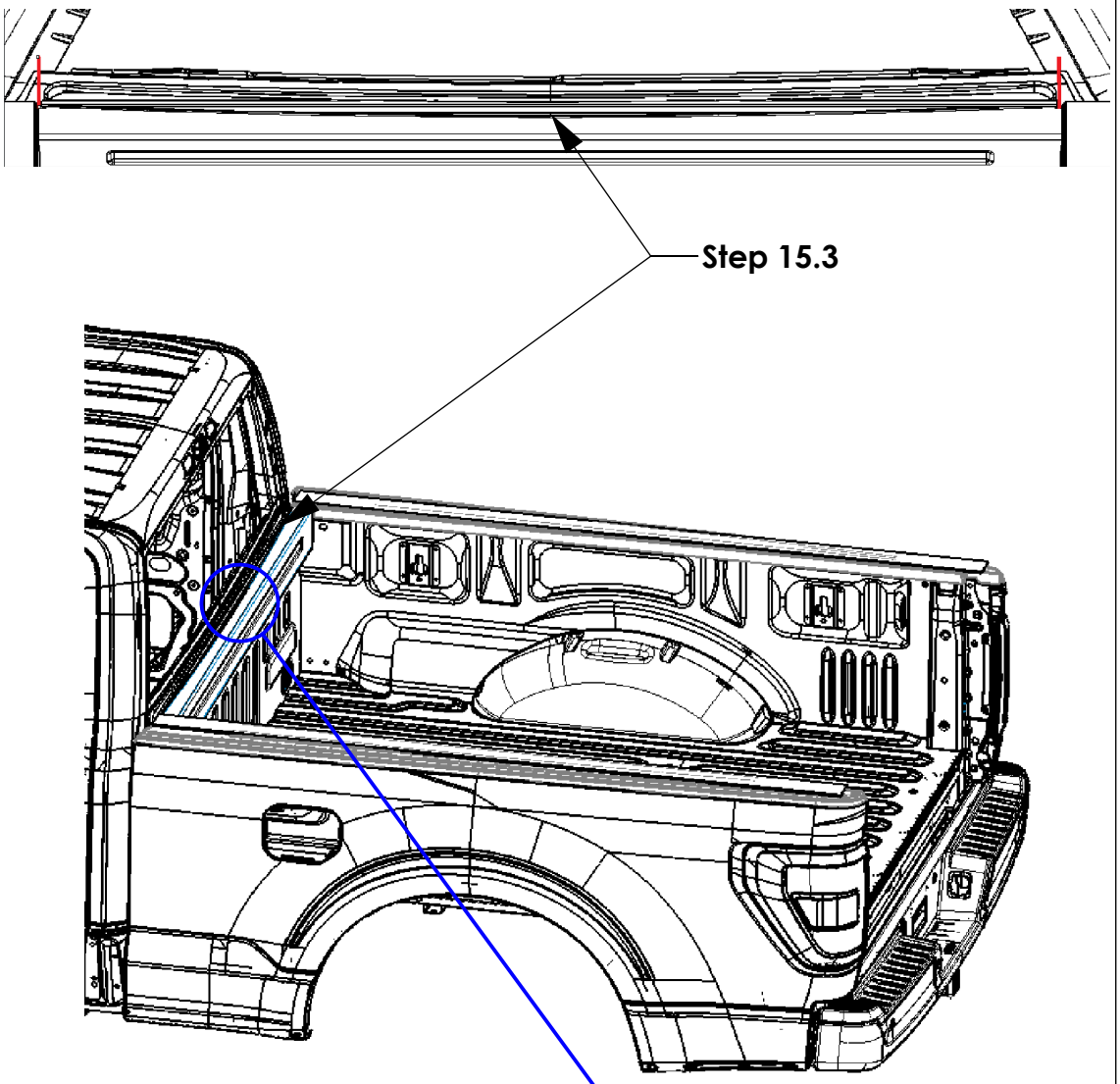
Step 15.3
PLACE 81456 GASKET IN THE GAP BETWEEN THE TRUCK BED AND CAB.



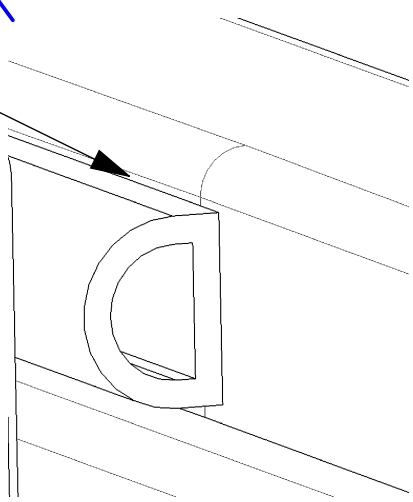
BEFORE ATTACHING TO TRUCK BED, CLEAN AND PREP AREA. DO NOT ATTACH TO PLASTIC TRIM. IF TRIM IS ON FRONT OF BED ATTACH TO CAB.

ONCE AREA IS PREPARED CENTER GASKET ON THE REAR WINDOW.

MAKE SURE THAT GASKET HAS FULL SURFACE CONTACT SO ADHESIVE WILL PROPERLY BOND.



NOTE:
IF TRUCK BED HAS A SPRAY ON BED LINER, PLACE GASKET UNDER LINER ON TRUCK BED

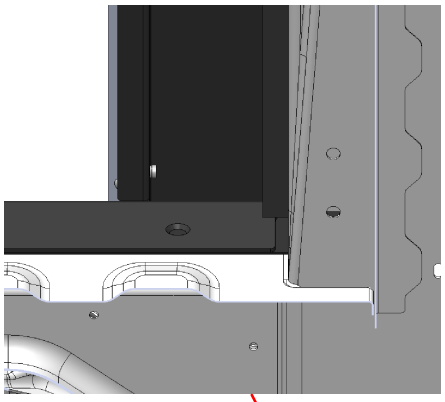


STEP 16 - ATTACH TOPPER TO TRUCK BED. CONT'D ON NEXT PAGE FOR LOCATING INSTRUCTIONS SPECIFIC TO SILVERADO 1500/2500.

Step 16.1
USE THE HOLES IN THE BD LOWER BRACKET ASSM TO MARK FOR PLUS NUTS.

STOP

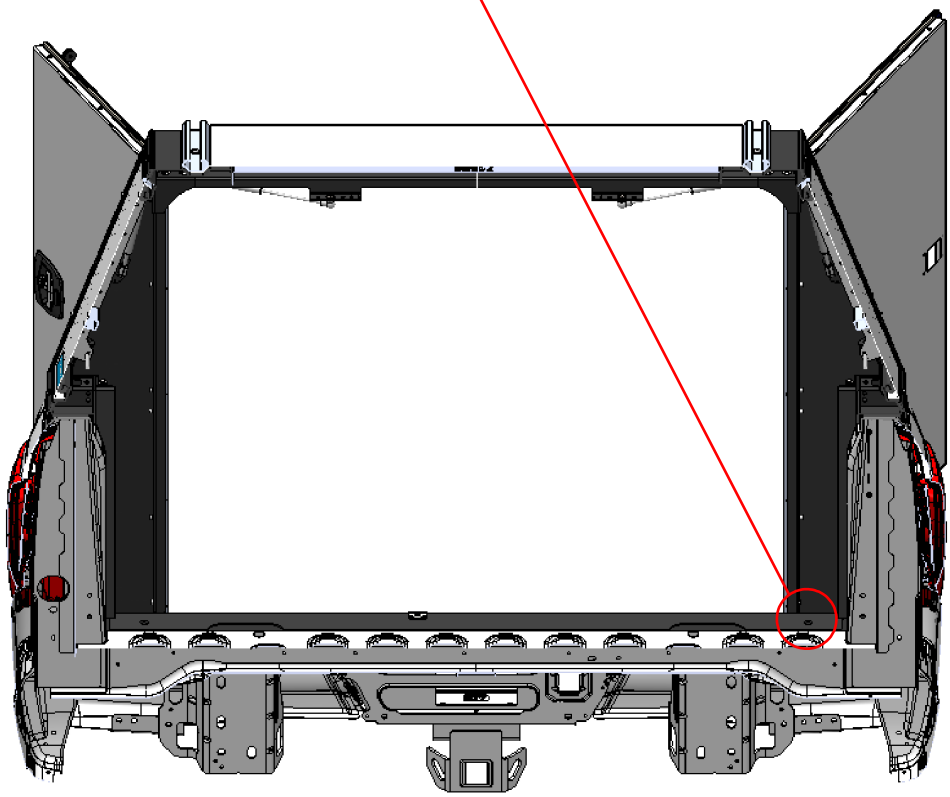
(2 PLACES)
NOTE: YOU WILL HAVE TO REMOVE FOAM FROM THE HOLES.



VIEW LOOKING FROM FRONT TO BACK

Step 16.2
MOVE TOPPER REARWARD TO DRILL HOLES FOR PLUSNUTS. SPRAY PAINT HOLES.

1/2" STEP DRILL BIT



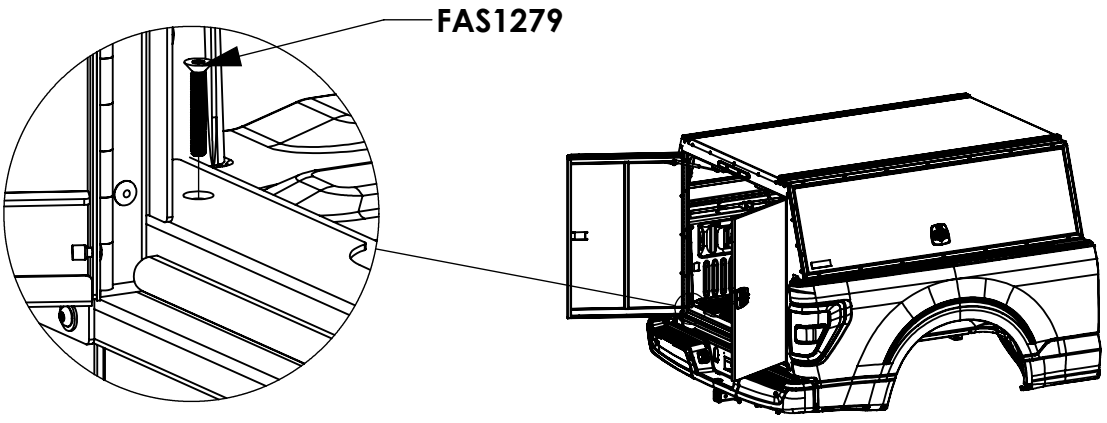
Step 16.3
SET PLUSNUTS USING PLUSNUT SETTING TOOL OR AIR POWERED SETTING GUN.

FAS0222

Step 16.4
REPLACE TOPPER TO ORIGINAL LOCATION AND FASTEN TOPPER TO THE TRUCK BED

<u>FULLY TIGHTEN</u>
FAS1279
(2 PLACES)
T40 TORX BIT

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



STEP 16 ALT CONT'D - ATTACH TOPPER TO TRUCK BED CONT'D. SPECIFIC TO SILVERADO 1500/2500.

Step 16ALT.5
USE THE HOLES IN THE BD LOWER BRACKET ASSM TO IDENTIFY BED STRIPS FOR PLUSNUTS.

STOP

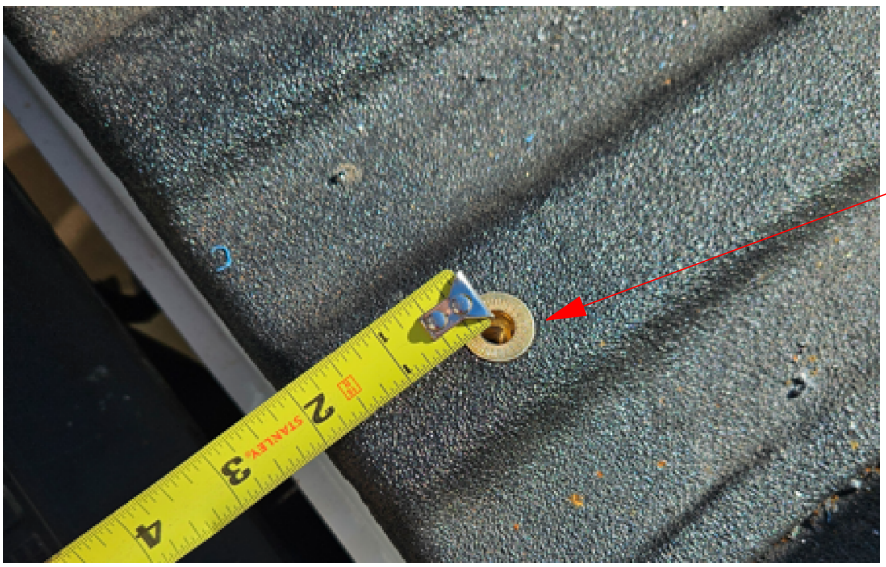
DO NOT MARK. SEE BELOW

(2 PLACES)



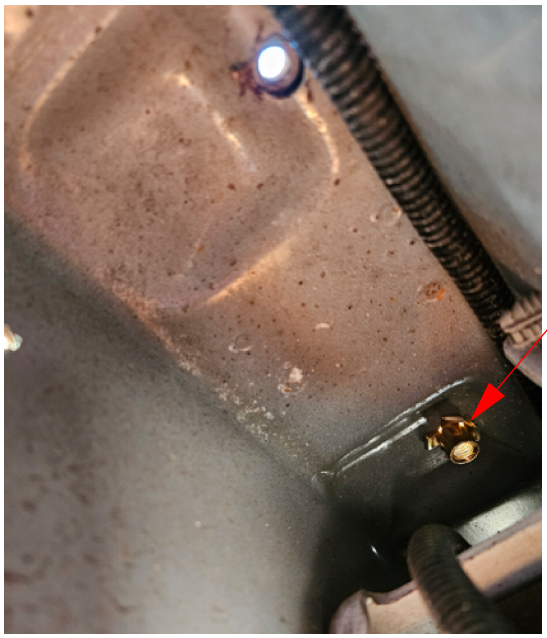
Step 16ALT.6
TO LOCATE PLUSNUTS MEASURE 2" FROM END OF PLASTIC BED INSERT AND MARK BED.

(2 PLACES)



Step 16ALT.7
REPLACE BD LOWER BRACKET ASSM AND LOCATE MARKINGS. USE BRACKET HOLES TO CENTER HOLES FROM DS AND PS.

(2 PLACES)



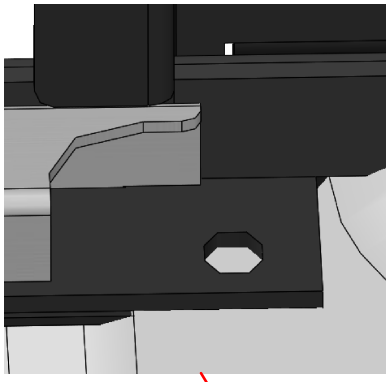
TO COMPLETE INSTALLATION SEE Steps 16.2, 16.3 AND 16.4.

STEP 16 ALT CONT'D - ATTACH TOPPER TO TRUCK BED, CONT'D (ALTERNATE FOR COLORADO)

Step 16ALT.8
USE THE HOLES IN THE BD LOWER BRACKET ASSM TO MARK FOR PLUS NUTS.

STOP

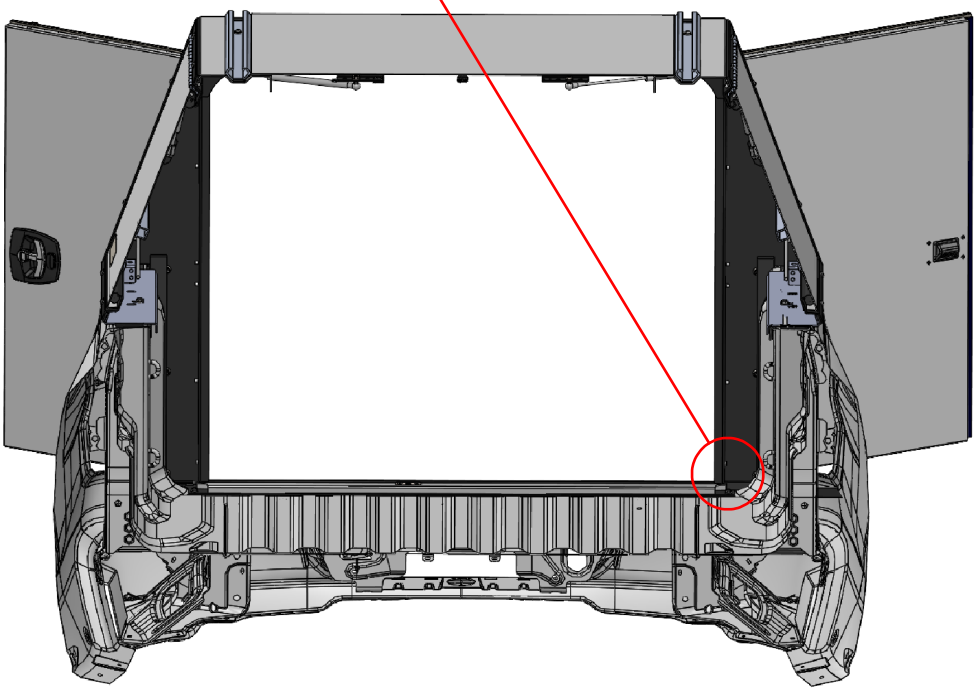
(2 PLACES)
NOTE: YOU WILL HAVE TO REMOVE FOAM FROM THE HOLES.



VIEW LOOKING FROM FRONT TO BACK

Step 16ALT.9
MOVE TOPPER REARWARD TO DRILL HOLES FOR PLUSNUTS.
SPRAY PAINT HOLES.

1/2" STEP DRILL BIT



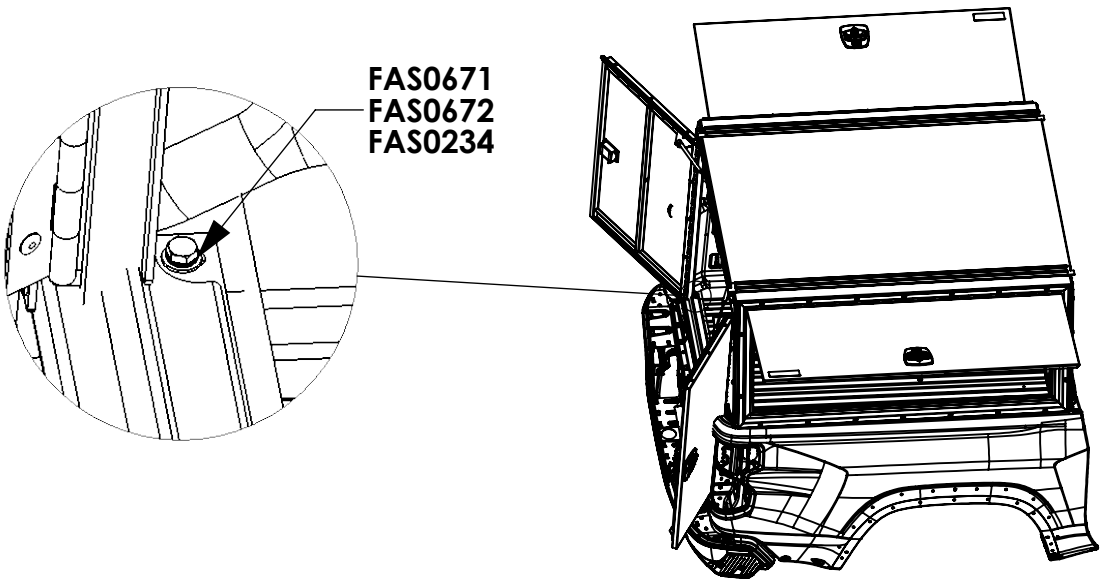
Step 16ALT.10
SET PLUSNUTS USING PLUSNUT SETTING TOOL OR AIR POWERED SETTING GUN.

FAS0222

Step 16ALT.11
REPLACE TOPPER TO ORIGINAL LOCATION AND FASTEN TOPPER TO THE TRUCK BED

FULLY TIGHTEN
FAS0671
FAS0672
FAS0234
(2 PLACES)

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



FAS0671
FAS0672
FAS0234

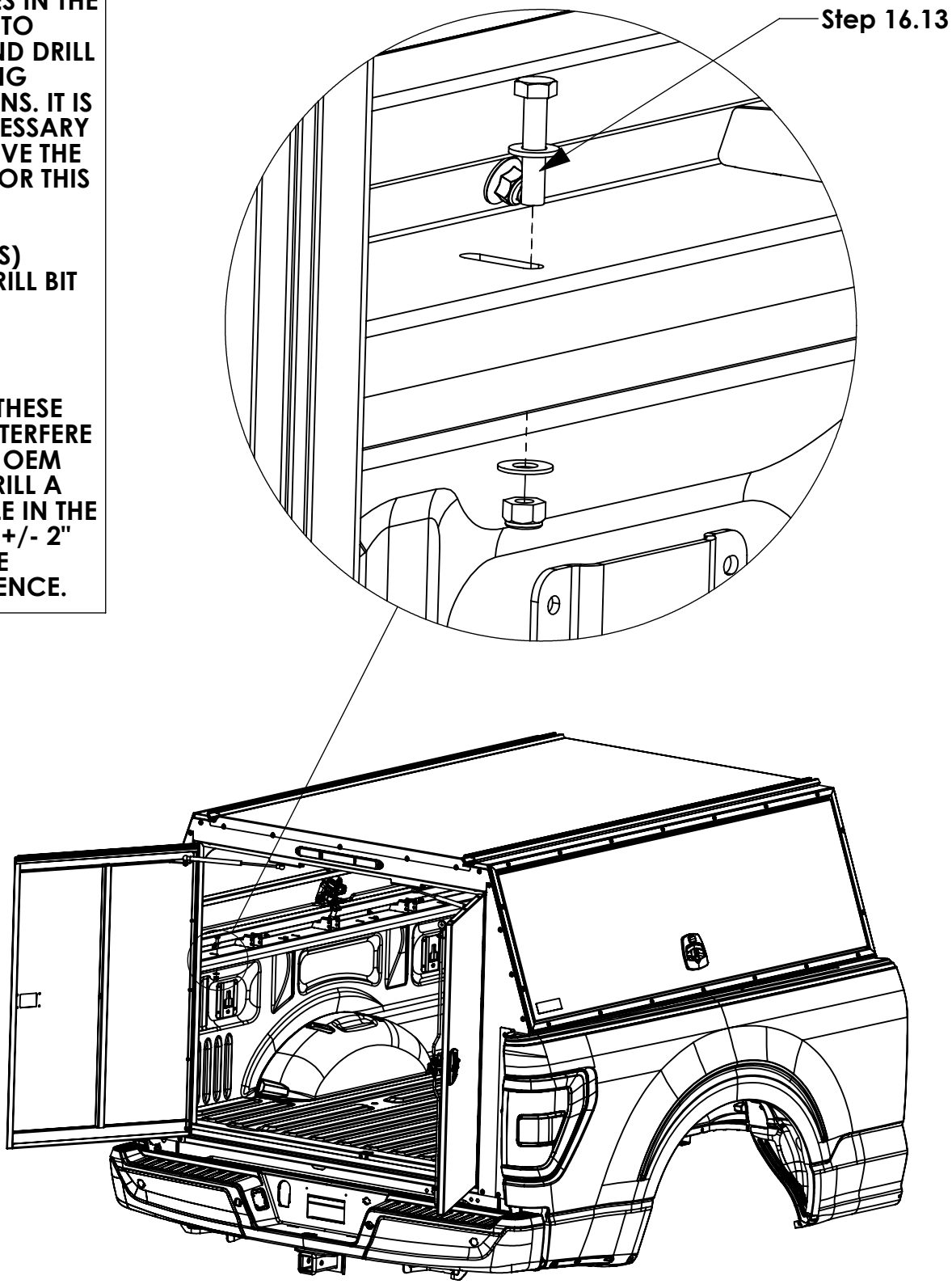
STEP 16 CONT'D - ATTACH TOPPER TO TRUCK BED

NOTE: (FOR 8.0' 26" TALL RAM 1500, 2500, 3500 ONLY) TOPPER MUST BE SOFT INSTALLED TO MARK FOR DRILLING. TOPPER TO BE REMOVED PRIOR TO DRILLING.

Step 16.13
USE HOLES IN THE BED RAIL TO MARK AND DRILL MOUNTING LOCATIONS. IT IS NOT NECESSARY TO REMOVE THE TOPPER FOR THIS STEP.

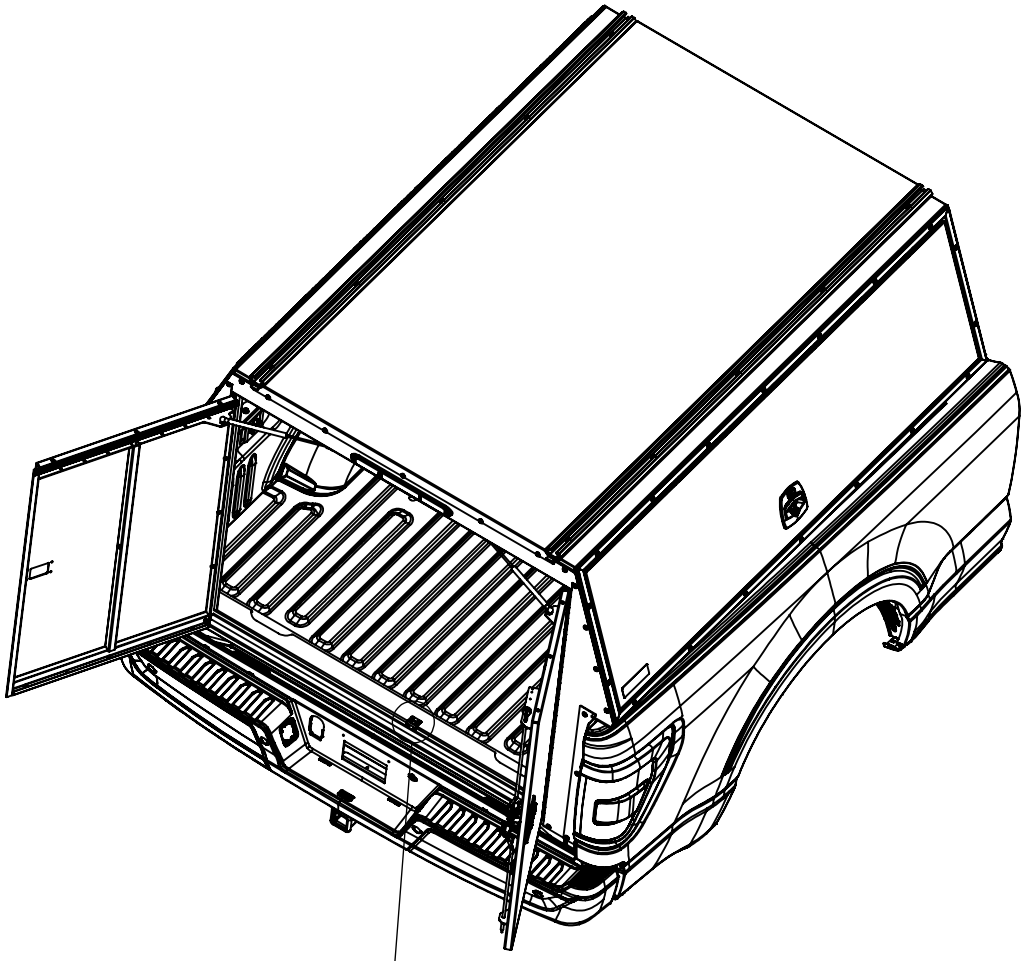
(8 PLACES)
11/32" DRILL BIT

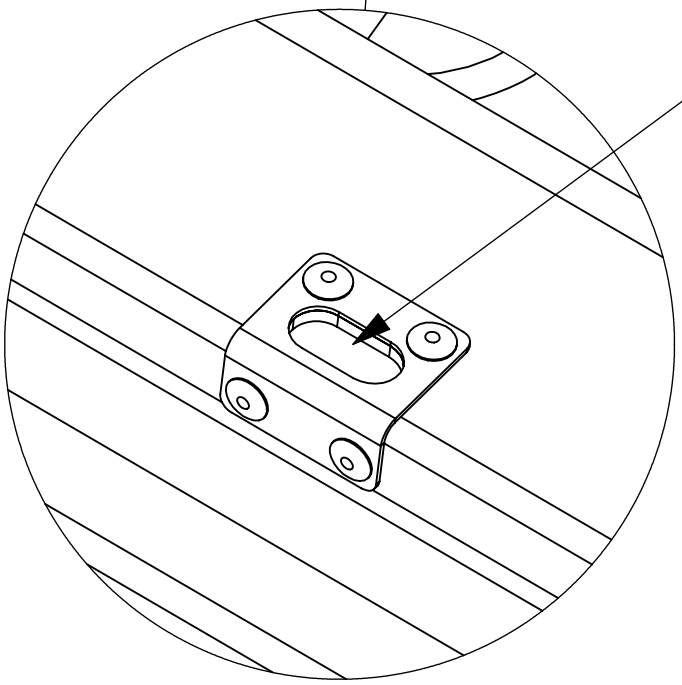
NOTE: IF THESE HOLES INTERFERE WITH THE OEM BODY, DRILL A NEW HOLE IN THE BED RAIL +/- 2" FROM THE INTERFERENCE.



STEP 17 - MAY NEED TO DRILL HOLE IN BED FOR LOCK ROD TO ENGAGE FULLY IN LOWER BRACKET HOLE

Step 17
DRILL OUT TRUCK BED IF LOWER BRACKET IS OVER IT AND PREVENTING LOCK ROD FROM GOING THROUGH.





STEP 18 - ATTACH FOAM TO INSIDE OF BARN DOORS

Step 18
CLEAN SURFACES WITH ALCOHOL. PREP WITH 57392 ADHESIVE PROMOTER.

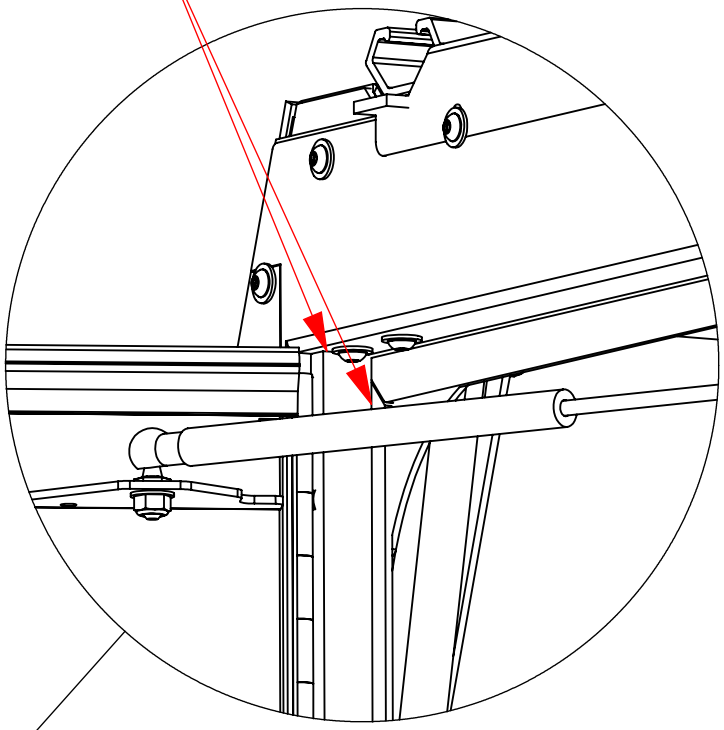


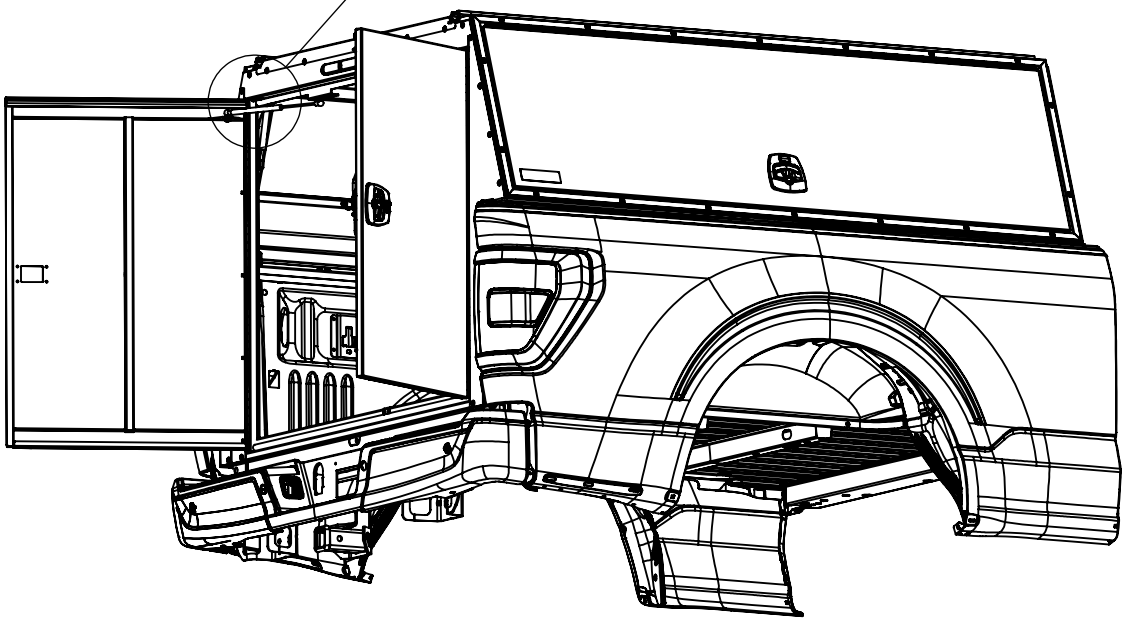
APPLY 77586 FOAM STRIP ON HINGE LEG. (2 PLACES)



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







STEP 19 - ATTACH SEAL TO FACE OF BARN DOOR LOWER BRACKET

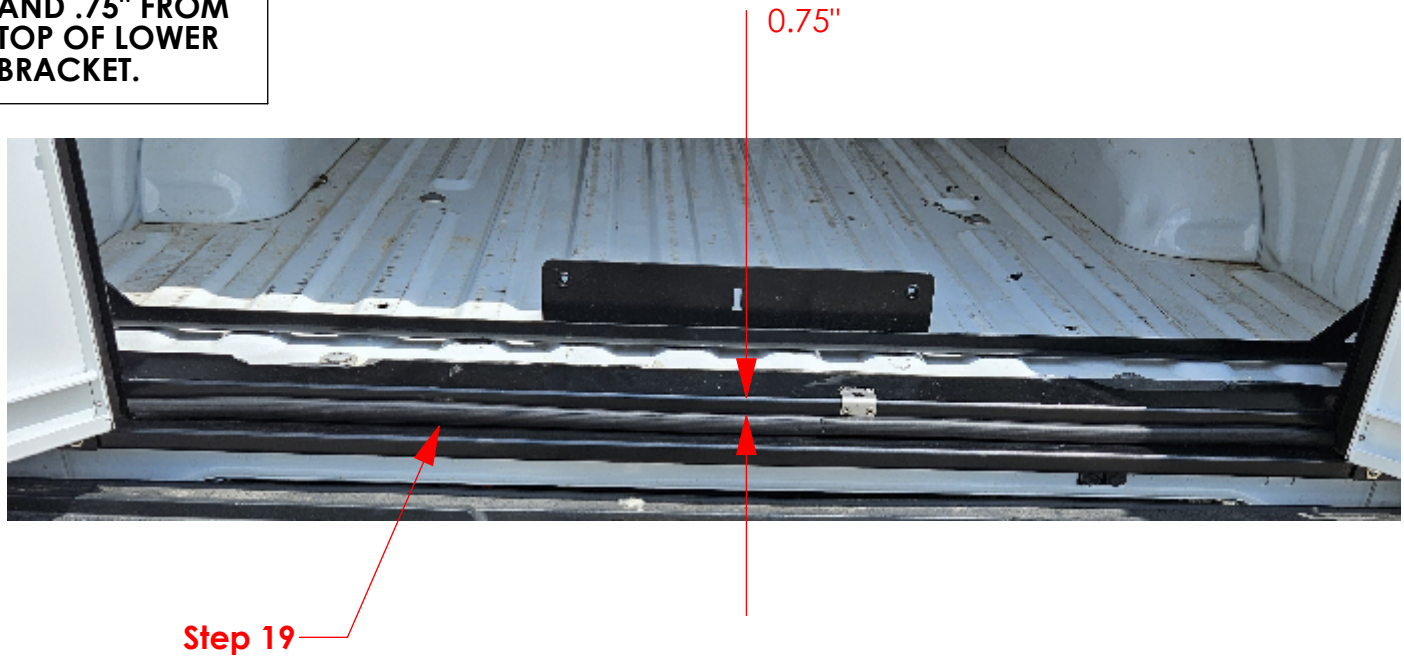
Step 19
CLEAN SURFACE WITH ALCOHOL. PREP WITH 57392 ADHESIVE PROMOTER.



APPLY 77941 GASKET



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



STEP 19 ALT - ATTACH SEAL TO FACE OF BARN DOOR LOWER BRACKET (ALTERNATE FOR COLORADO)

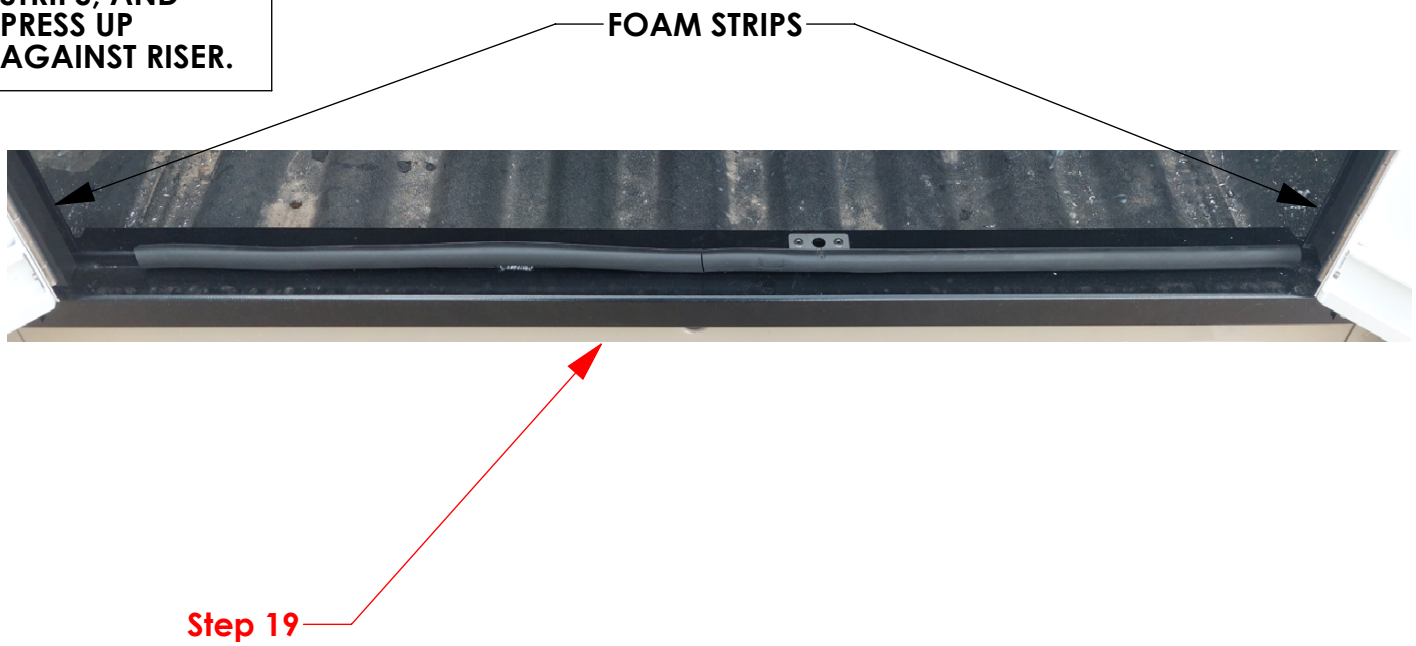
Step 19ALT CLEAN SURFACE WITH ALCOHOL. PREP WITH 57392 ADHESIVE PROMOTER.



APPLY 77941 GASKET



NOTE: GASKET SHOULD BE CENTERED BETWEEN FOAM STRIPS, AND PRESS UP AGAINST RISER.



STEP 20 - APPLY SILICONE TO INSIDE FRONT CORNERS AND INSIDE REAR CORNERS. ADD FOAM TO REAR.

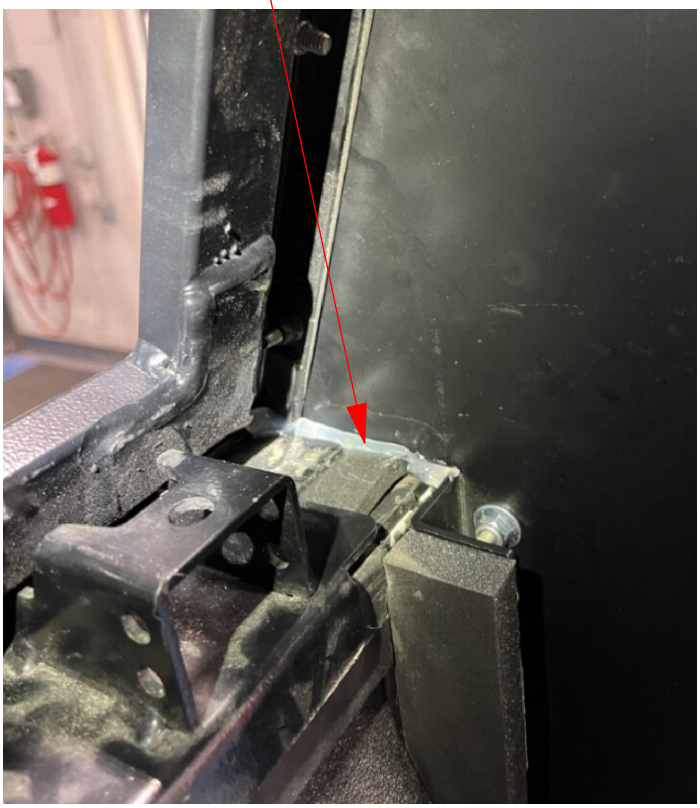
Step 20.1
APPLY A 4" STRIP OF SILICONE TO BOTH INSIDE FRONT CORNERS

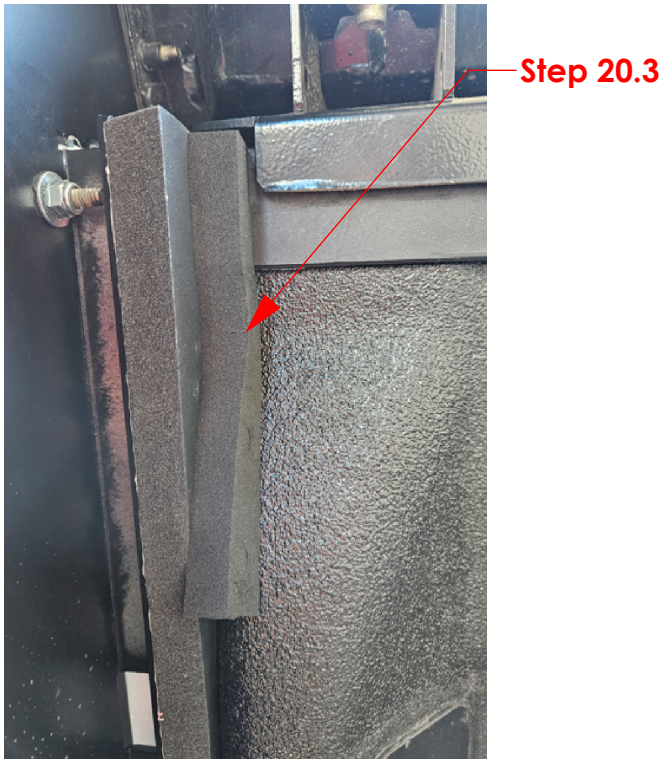
Step 20.2
APPLY A 4" STRIP OF SILICONE TO BOTH INSIDE REAR CORNERS

Step 20.3
CUT 75114 IN (2) 6" PIECES AND PLACE AS SHOWN AT REAR OF VEHICLE

(2) PLACES



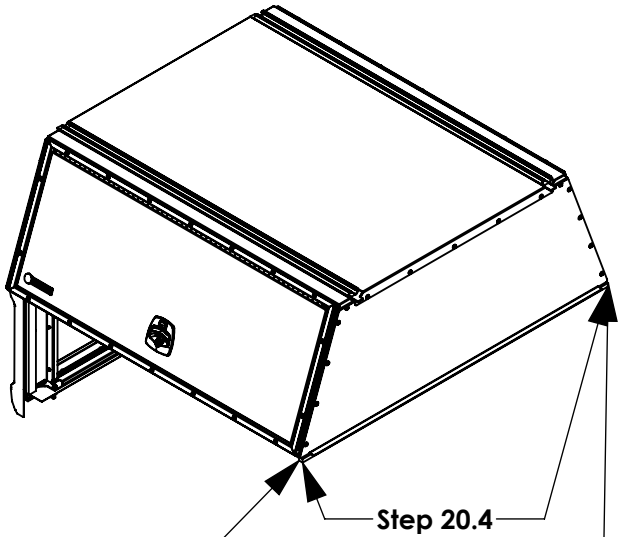




STEP 20 CONTINUED - CHECK BELOW FOR CHEVY COLORADO INSTALLATIONS ONLY

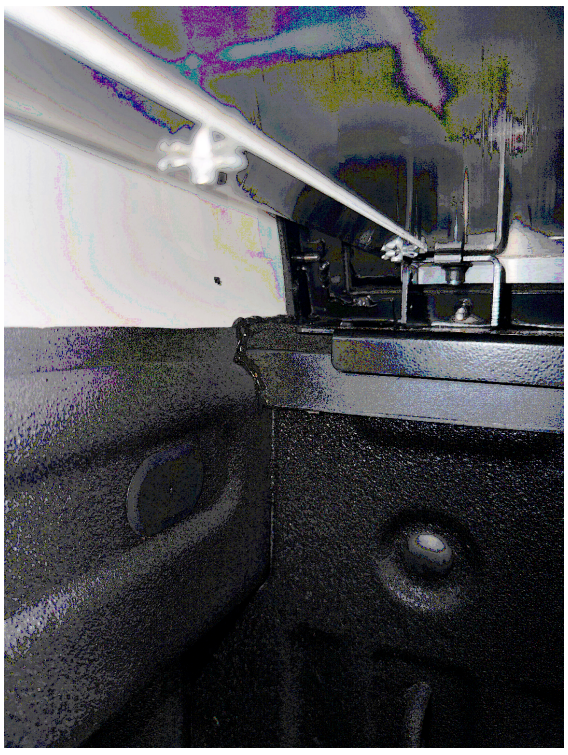
Step 20.4
<u>SEE IMAGES TO THE RIGHT,</u>
APPLY SILICONE TO EACH OF THE FRONT TWO LOWER CORNERS OF THE TOPPPER TO SEAL EDGES TO TRUCK BED

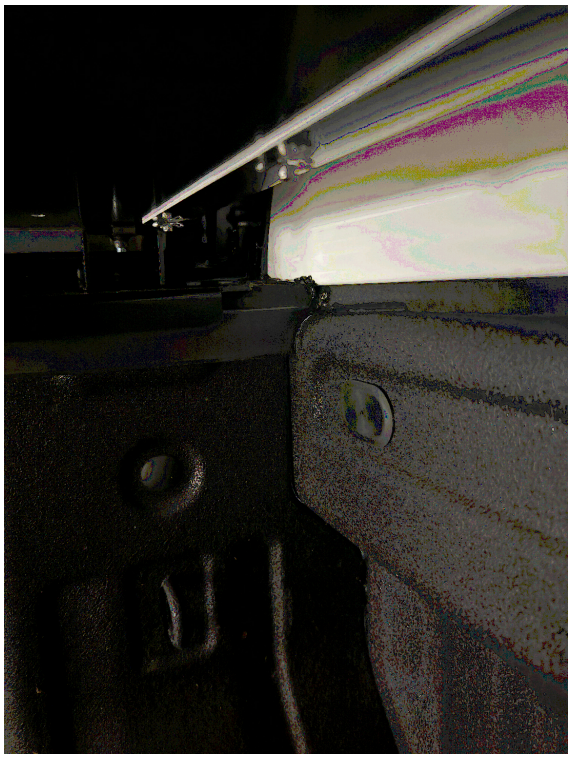
NOTE: IMAGES SHOW BLACK SEALANT, SILICONE PROVIDED WILL BE CLEAR



PASSENGER SIDE

DRIVER SIDE

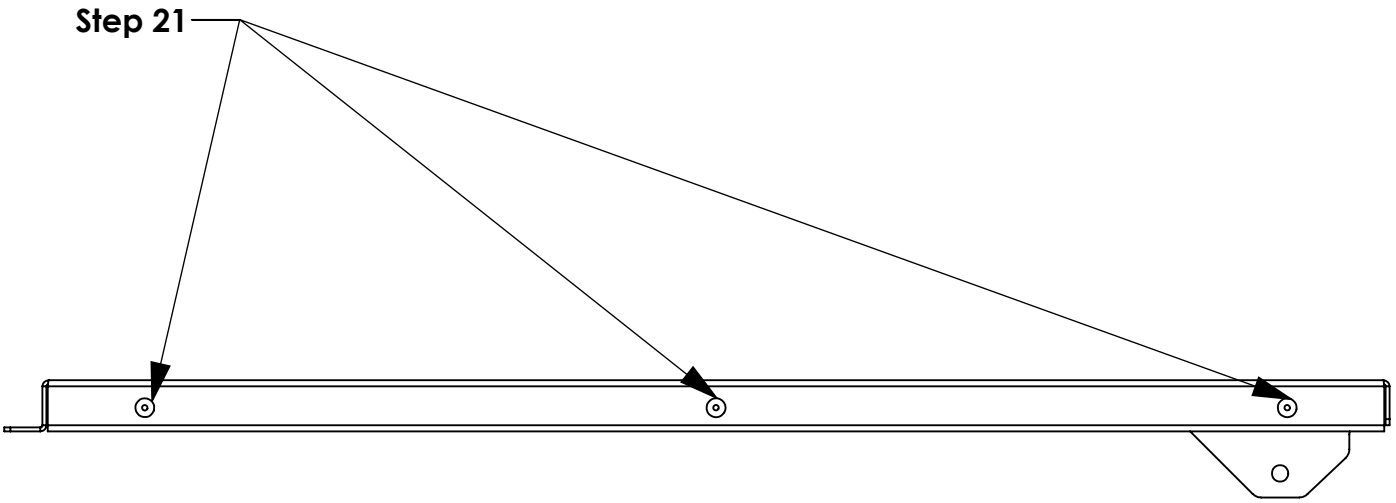


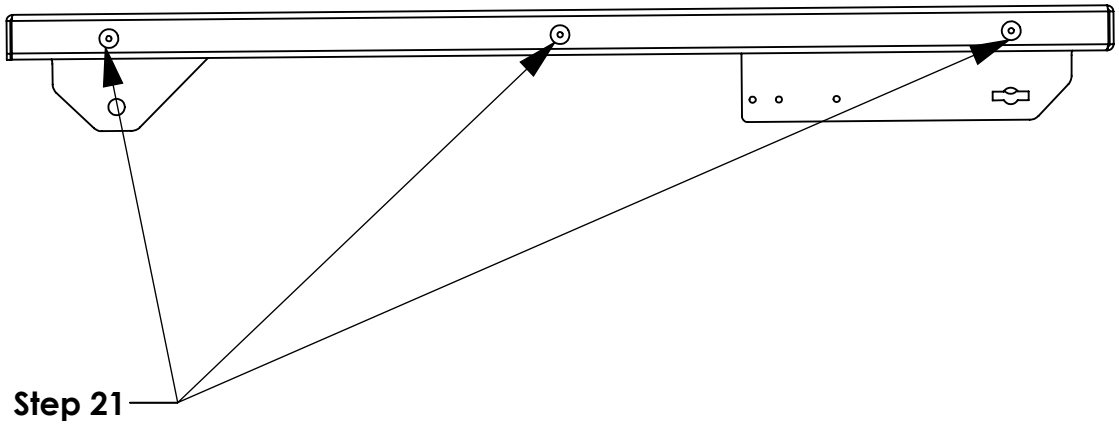


STEP 21 - APPLY SILICONE TO TOP OF BOTH DOORS ON RIVETS.

Step 21
APPLY SILICONE TO TOPS OF DOORS ON RIVETS

(6 PLACES)





STEP 22 - CLOSE DOORS AND ADJUST BED FILLERS.

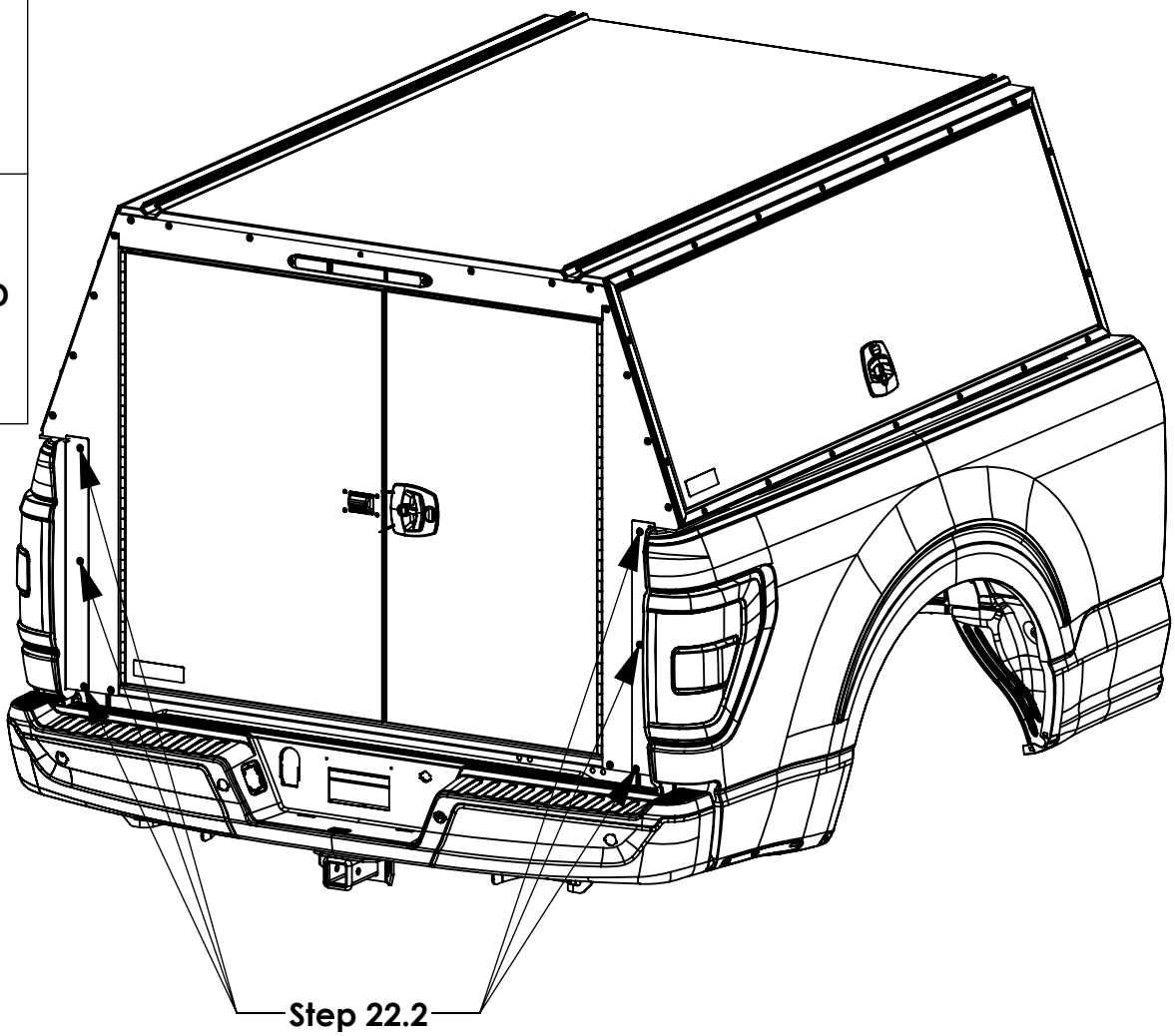
Step 22.1
CLOSE DOORS STARTING WITH DRIVER'S SIDE FIRST THEN PASSENGER SIDE. CONFIRM LOCK ROD IS ENGAGED IN HOLE OF LOWER BRACKET.



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

Step 22.2
ADJUST BED FILLERS OUT TO MAX WIDTH AND FULLY TIGHTEN

(6 PLACES)



Step 22.2

MAKE SURE ALL FASTENERS ARE TIGHTENED!! INSTALLATION IS COMPLETE

Introduction / Comments:

Install Instructions Brake Light Topper-Ford Lightning

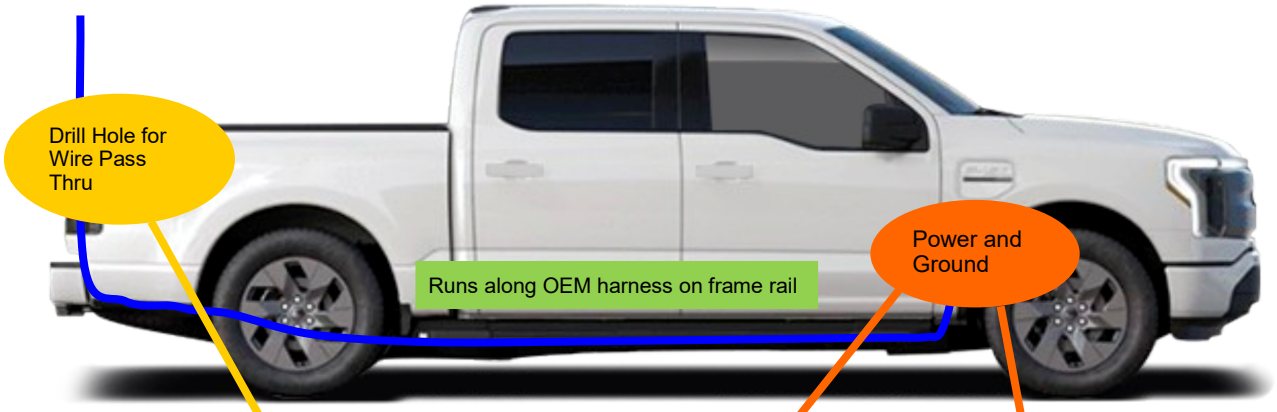
Note:

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 Topper 3rd Brake Light - Ford Lighting

Routing Overview





Grommet at end of truck bed for harness to run through



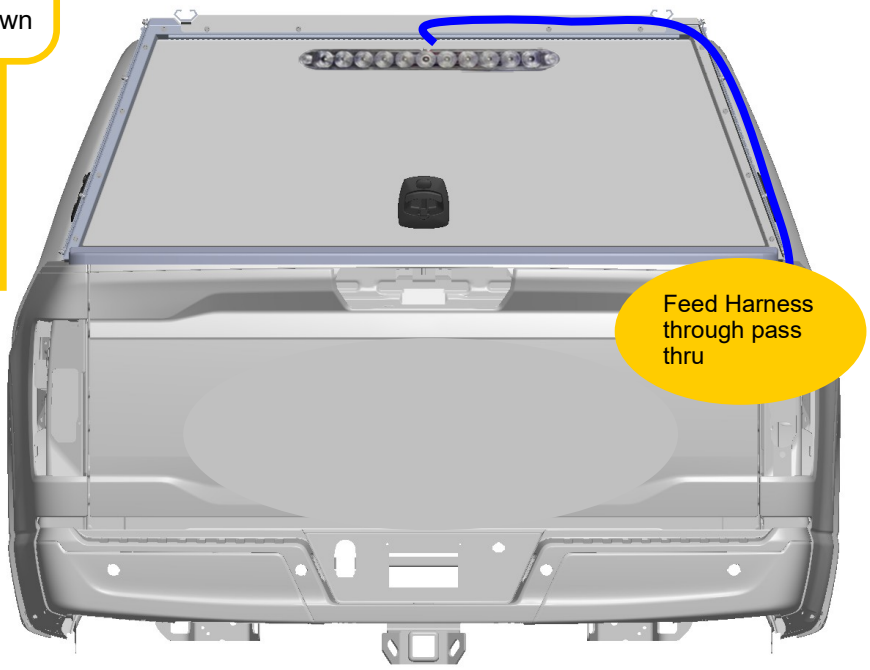
CHMSL Circuit OEM Wire. Gray/Orange Wire



Self Tapper Into Sheet Metal



View from passenger side topper door—looking down



Feed Harness through pass thru

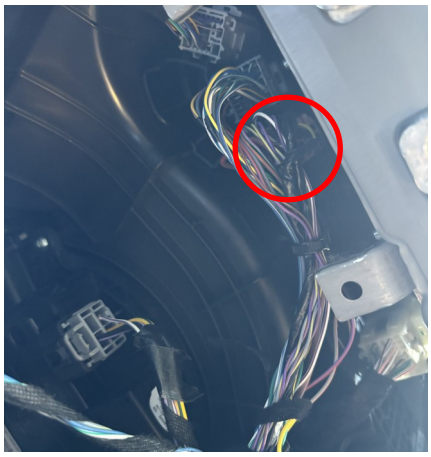
Color	Key - Items
Orange	Power and Ground Location
Blue	Harness Routing
Yellow	Bed Wire Pass Thru

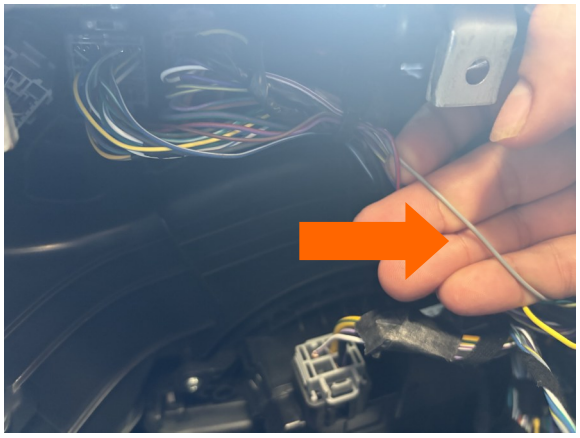


Step 1: Locate the brake light harness 71680.

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

Open the passenger side door. Remove the trim panels circled in red.





Step 2:
Locate the body control module on the righthand side of the vehicle body. There will be 3 connectors with one of them being brown.

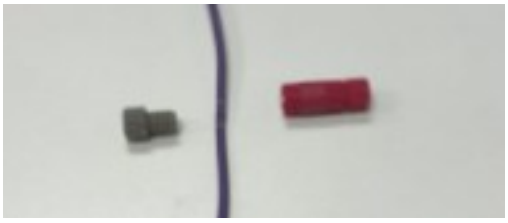
Locate the brown connector (C211), pin 3. This wire will be Gray / Orange. This is the BOO (Break On/ Off) circuit wire for the brake light. Use a meter to be sure this is the correct wire (OEM's tend to change wire colors).

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.



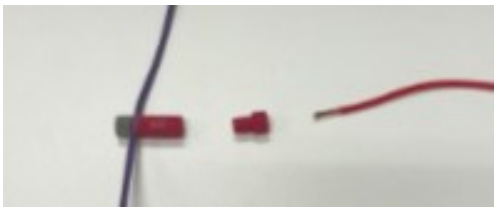
The red wire in the pictures is referencing the brake light harness.
The blue wire in the picture is referencing the OEM brake light signal wire.



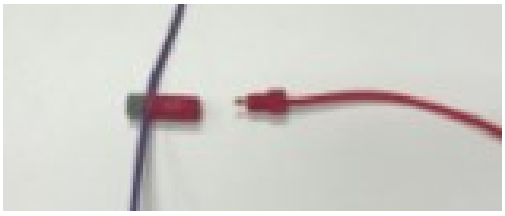


Step 3: Remove the grey cap on the posi-tap.

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 4: On the passenger's side: locate the cut outs for the trim panels in the sheet metal near the OEM chassis ground.

Locate the cut out that is higher on the frame than the OEM ground, shown in the picture to the left.

Locate the fastener bag BAG72914 and find the small tek screw and the star washer.

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 5: Once good connection to ground has been made, start routing the harness inside the trim near the door towards the backseat of the vehicle.

Ensure the harness is completely tucked and secured under trim supports so that wires are not pinched once trim pieces are reinstalled

Use the image to the left as reference.



Step 6: Once Harness 71905 has been routed to the backseat remove the trim piece shown to the left to access the gray plastic cover under the seat that we will be routing our Harness though. Plastic cover circled in red.

Use a step drill bit to drill a 11/16" sized hole to allow the harness to be routed through it to the underside of the vehicle. Once harness has been completely routed through plastic cover silicone the hole for water sealing.

Note: Run 71905 end with 3 connectors from underside of vehicle, through cut hole, towards front of vehicle. Leave all excess wiring under vehicle.



Step 7: Begin routing harness to the back of the vehicle on the passenger's side while staying away from the rear passenger's side wheel. Find mounting points on the vehicle's frame or thicker OEM harnesses to secure harness with zip ties.

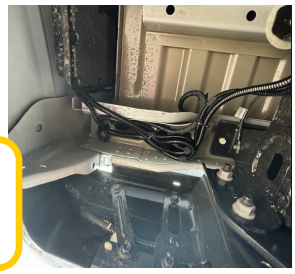
Once harness has been routed and secured to the back of the vehicle, move to the bed of the truck.



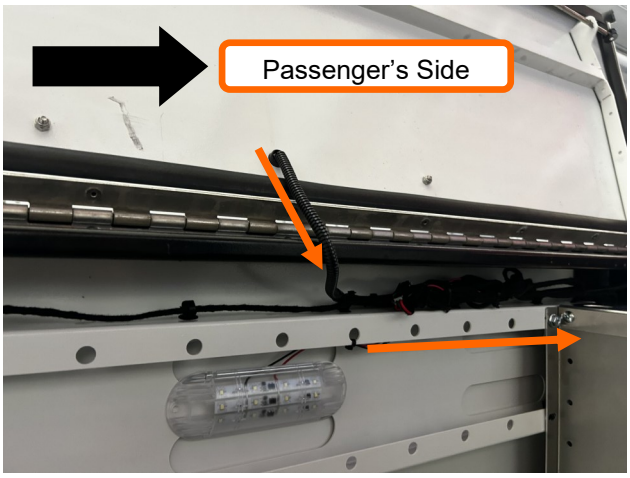
Step 8: Locate the rear passenger's side bed area. There is a circle shaped pass thru. Route the harness through this pass thru and continue up the side of the topper.

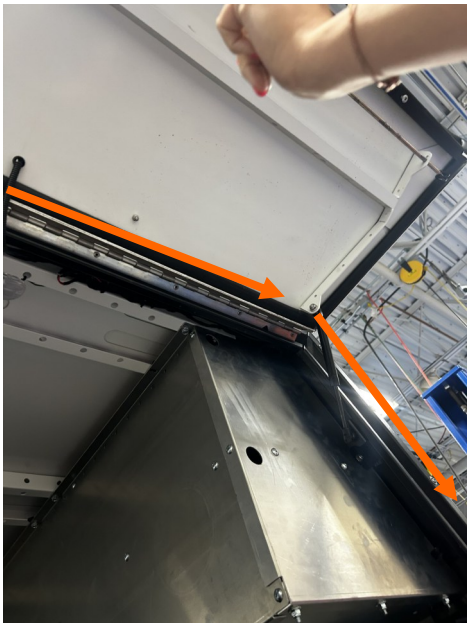
Tuck any excess wiring into the empty cavity underneath the bed frame.

Use the supplied Tek screw and P-clip to secure the wire harness to the frame.



Excess wiring tucked under the bed frame







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

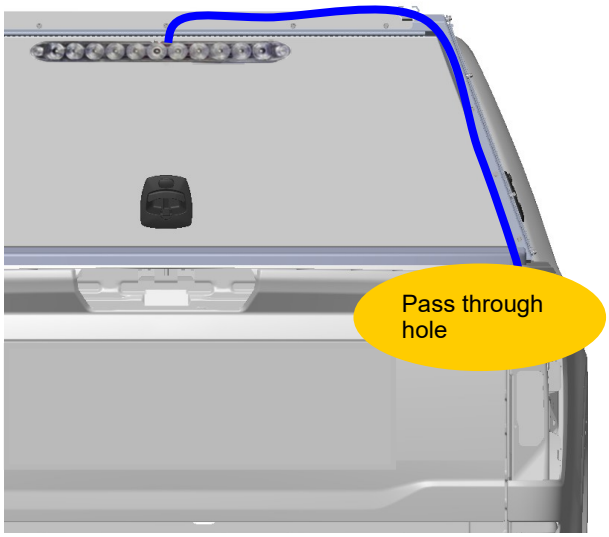
The harness should run along the passenger's side rear cavity, then across the top cavity to the light (Orange and blue lines shown in pictures).

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.

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.

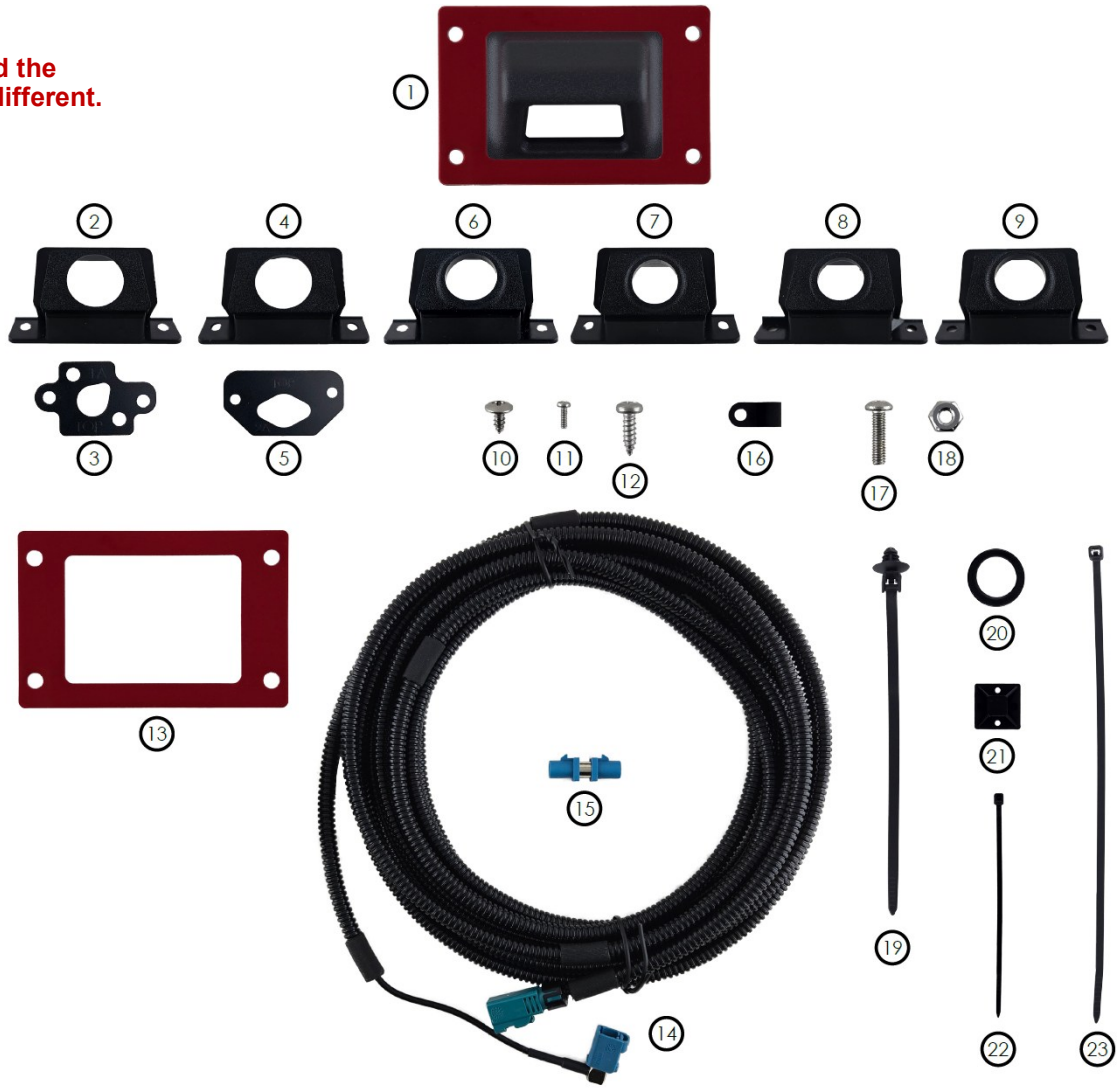
	ANSI Z535.6-2006 refers to the use of blue when “addresses practices not related to personal injury”.
	Yellow labelling level of personal injury = could result in minor injury.
	Red labelling level of personal injury = could / will result in death.

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			

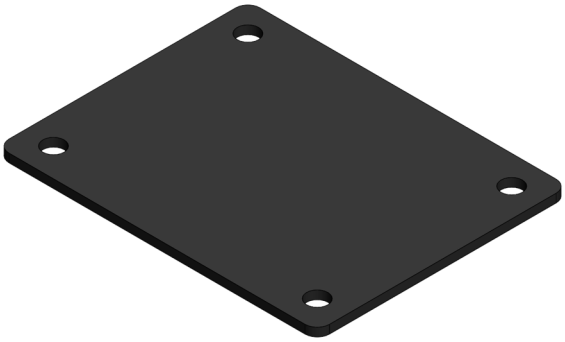
PLEASE NOTE:
The ITEM NUMBER and the
INSERT NUMBER are different.



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

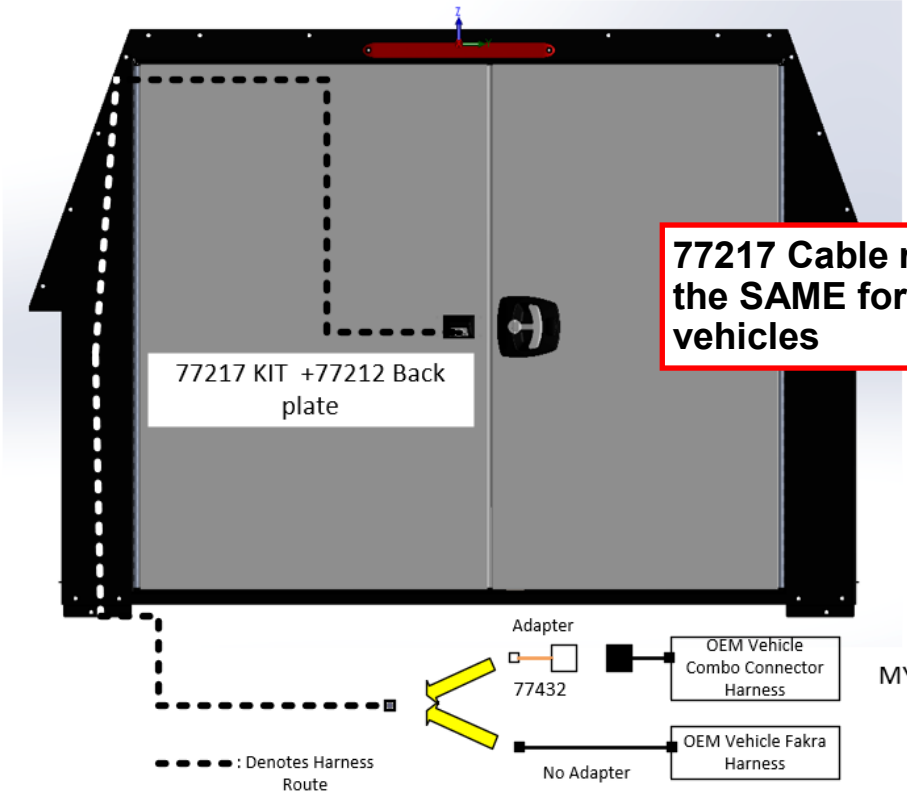
Section 4: General Vehicle Layout

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

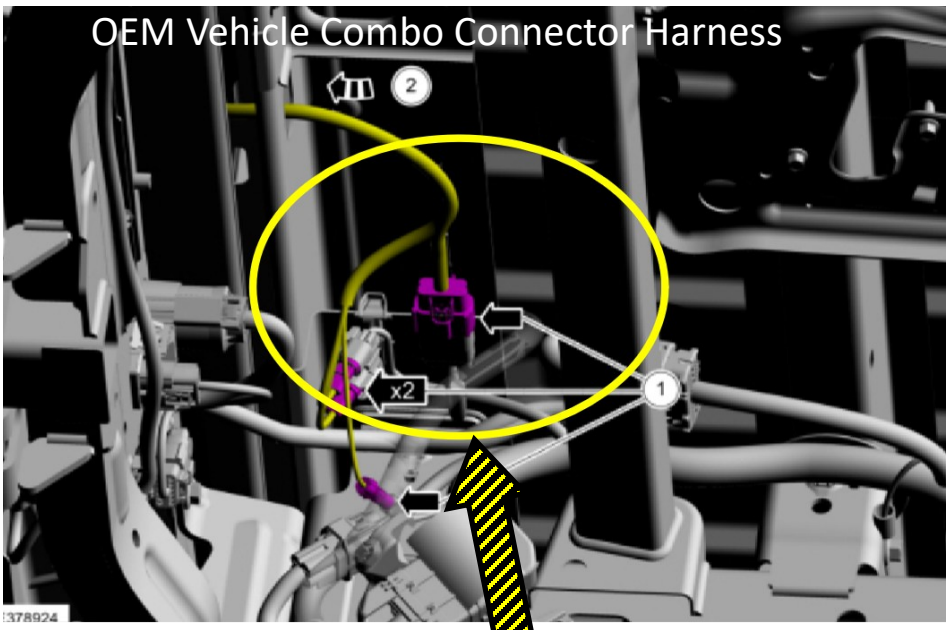
MY 24 & 25 F-150 + F-150 Hybrid

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

Section 5: General Wiring Diagram

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





Right Angle

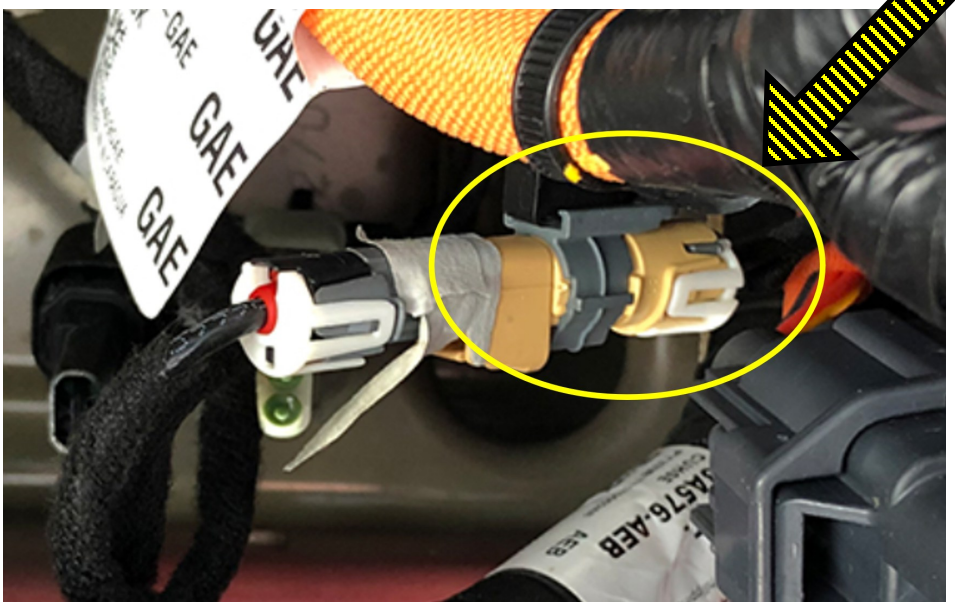
Loomed Coaxial Cable

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

77432 Adapter



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



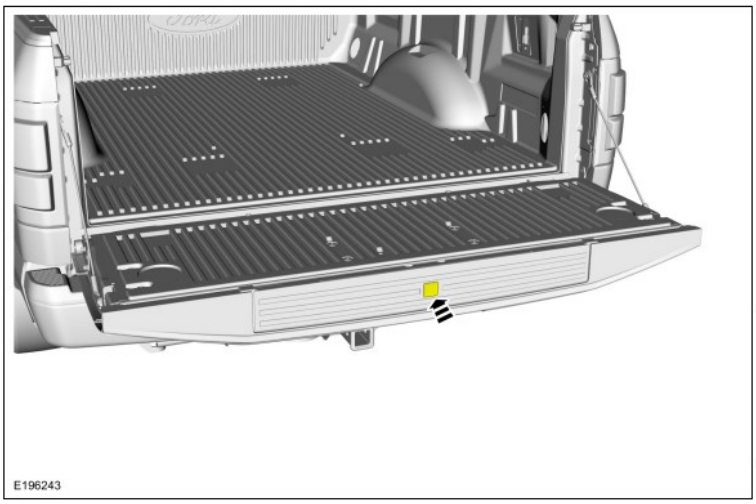
OEM Vehicle Fakra Harness

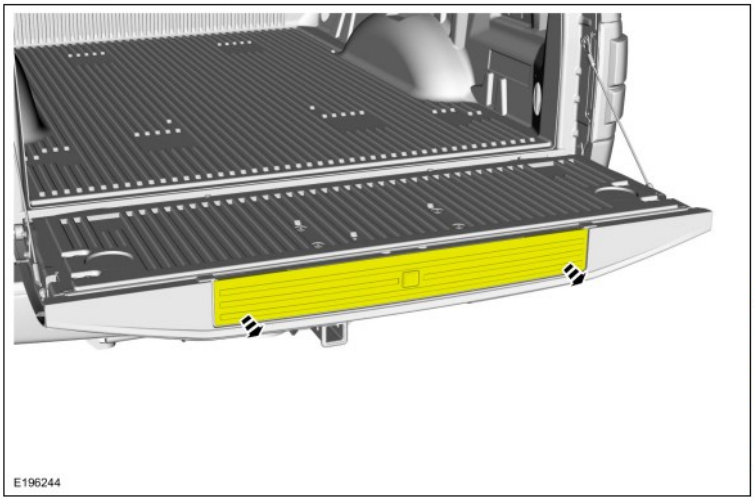
Section 6: Application Specifics: F150 / Super Duty

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:

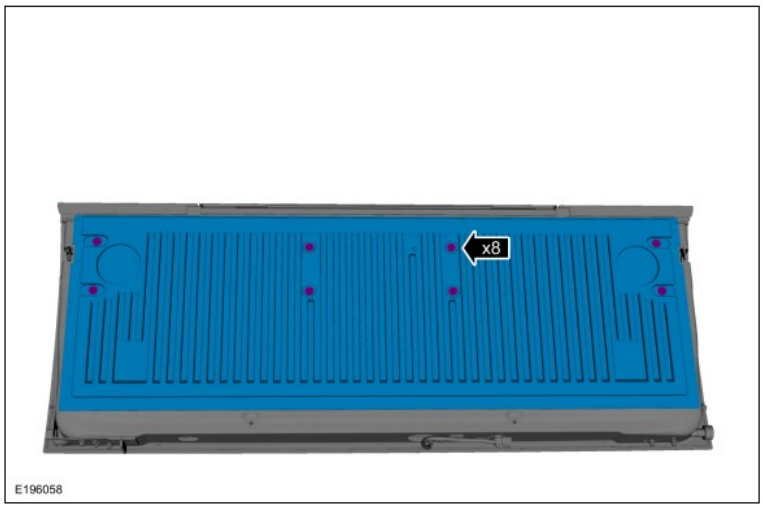
1. Open the tailgate.
2. **Vehicles With: Tailgate Step:**
   - Push the tailgate step release button.
   - Open the tailgate step.

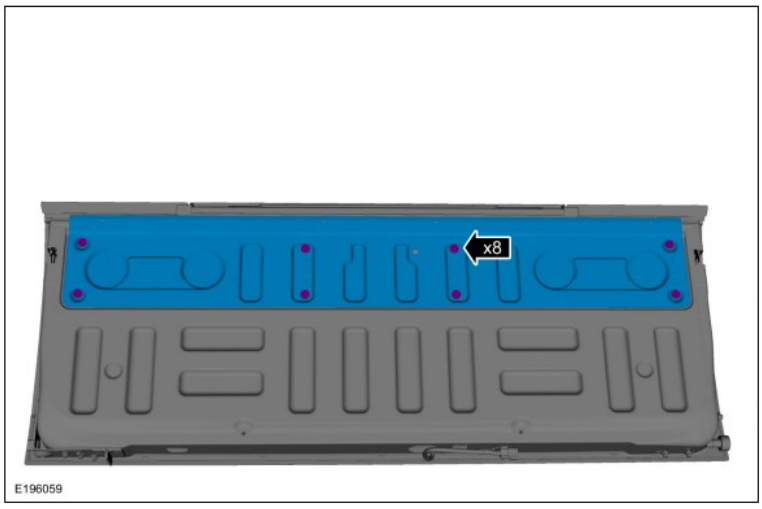
Caution: Make sure camera orientation for up is noted when removing from release handle.





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.

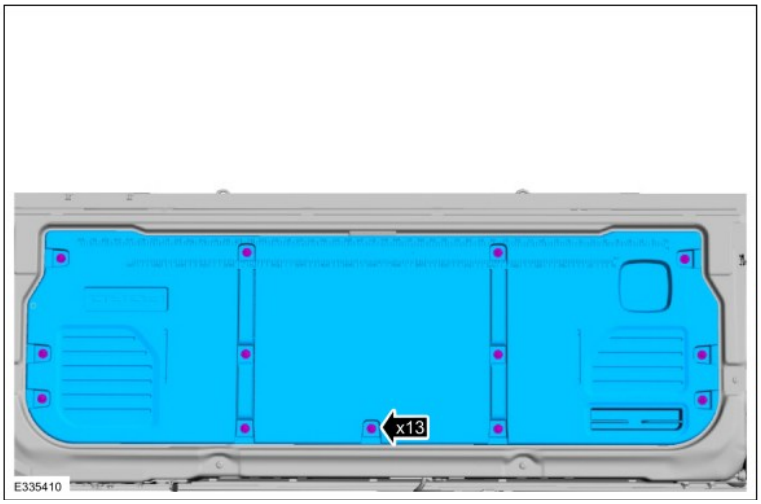


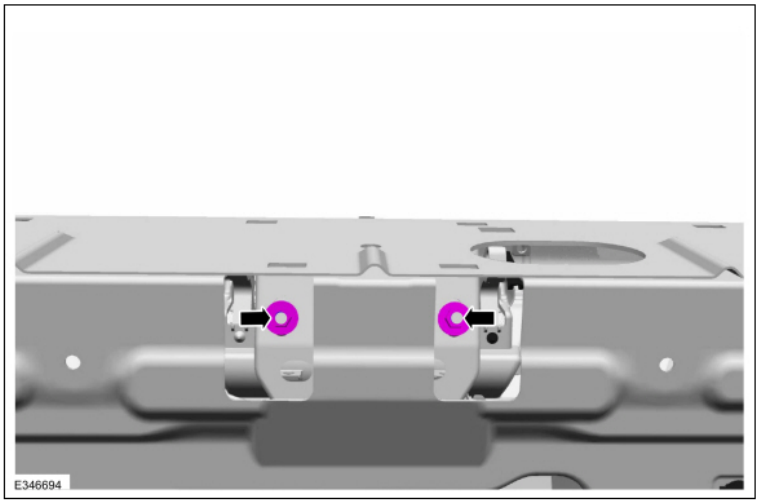


Section 6: Application Specifics: F150 / Super Duty

- 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)

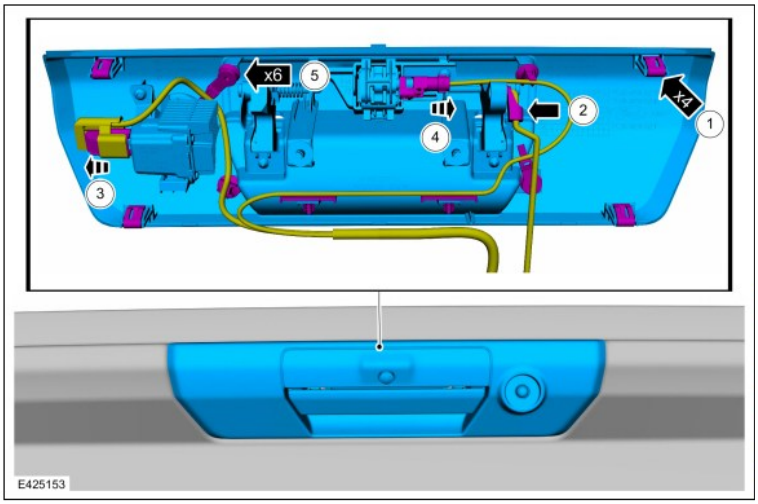
Caution: Make sure camera orientation for up is noted when removing from release handle.

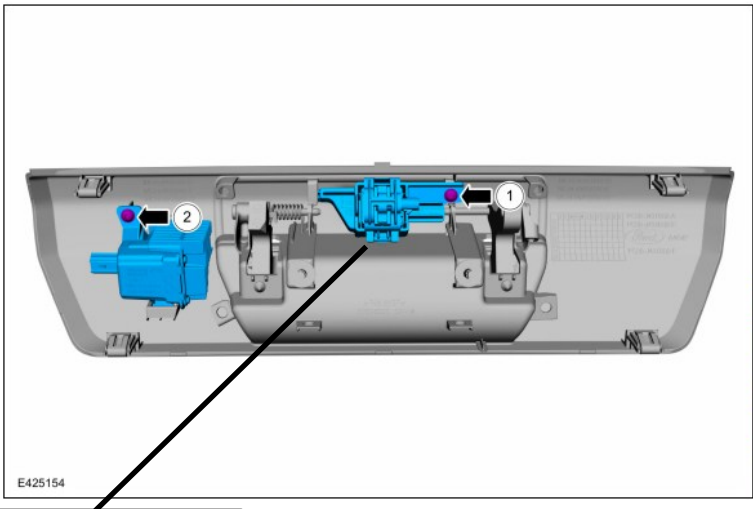




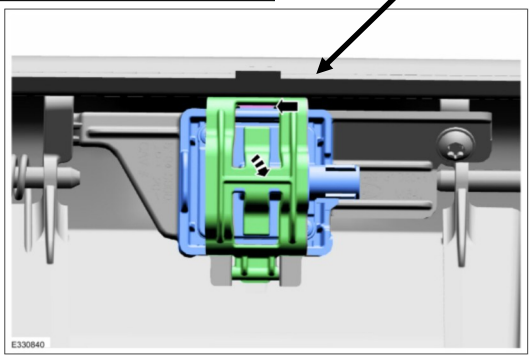
TOP VIEW

- 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

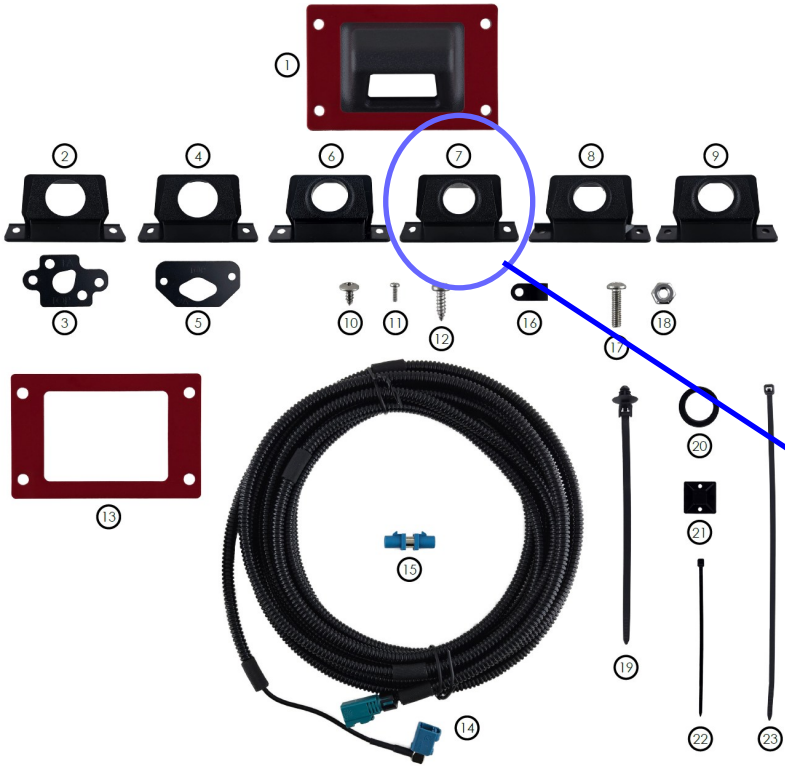
Step 6-2.

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

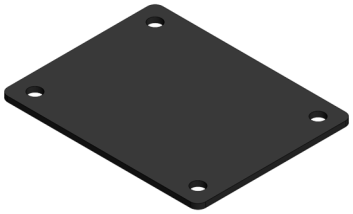


- If the camera DOES not look like this (a single pin round coaxial snap-on connection) –**STOP**– you will need an analog back up camera kit. Please contact your Adrian representative.

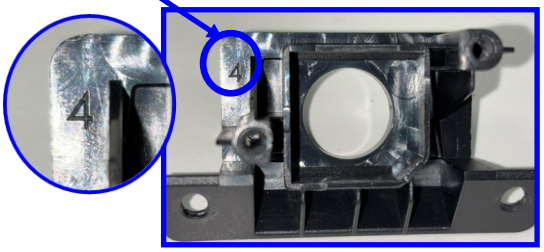
Step 6-3.



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



- Enclosure Back Plate (77212)



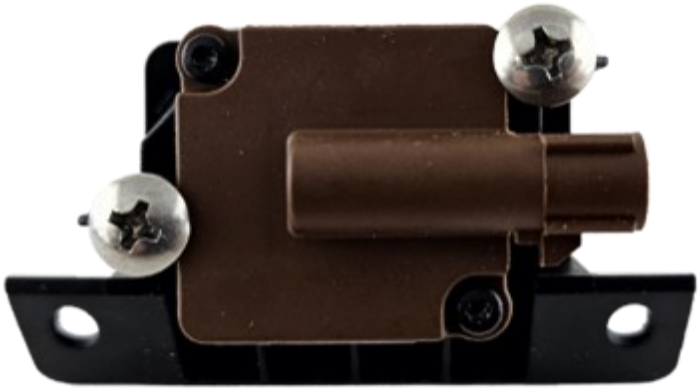
- Identify CAMERA INSERT “4” bracket (molded into the BACK SURFACE of part) [Part number BOM ID #7]



- 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.

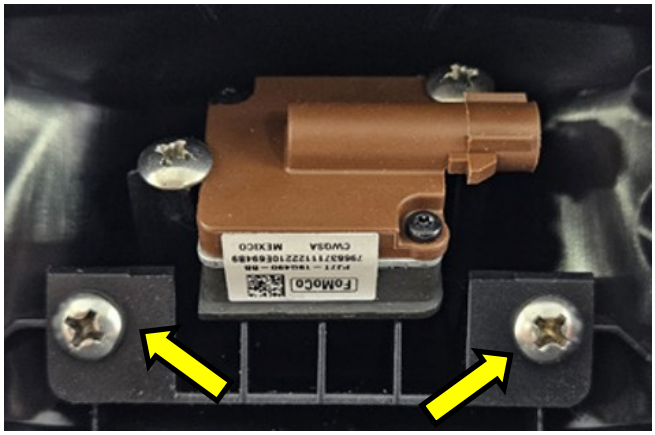
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16” Truss Head Screws will be used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

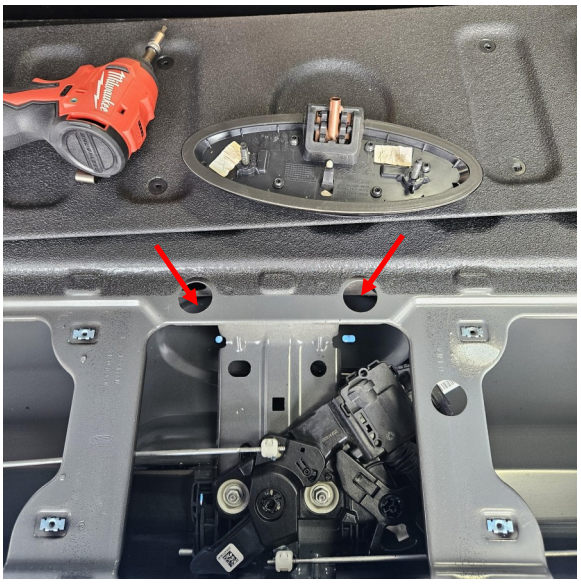
c. **All vehicles**

- 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**

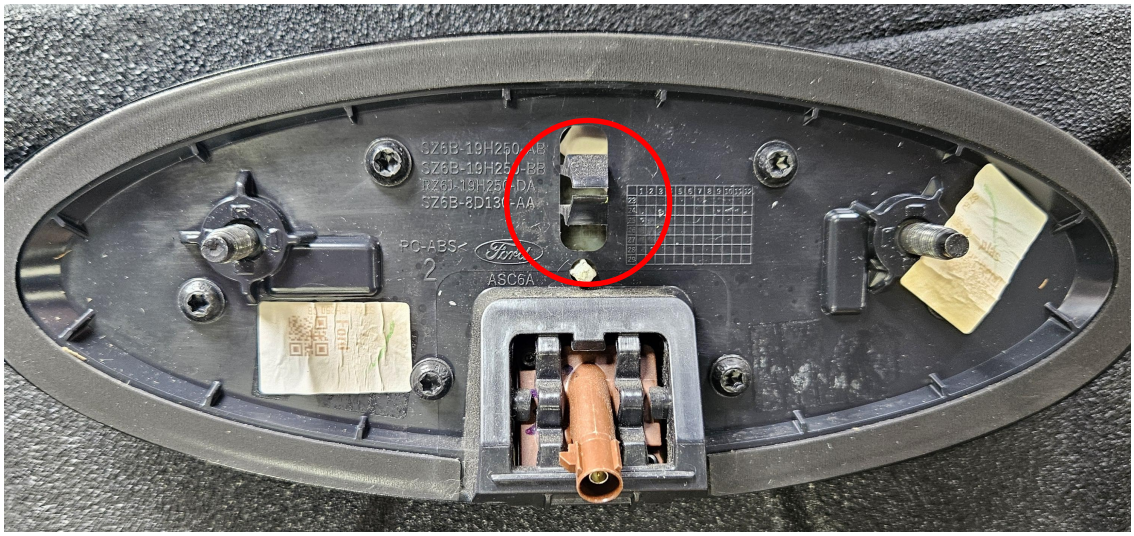




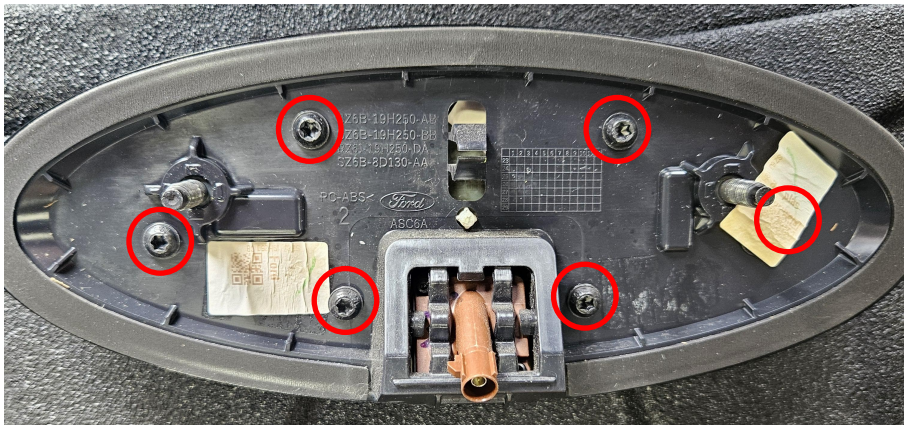
Section 6: Application Specifics: Ford Maverick

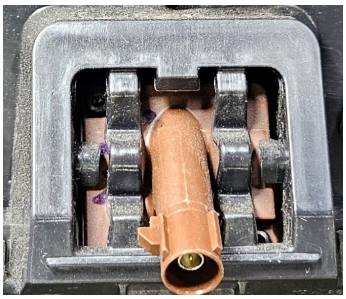
Step 6-2.
There is one clip holding in the camera housing. Using a trim tool you can remove it

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

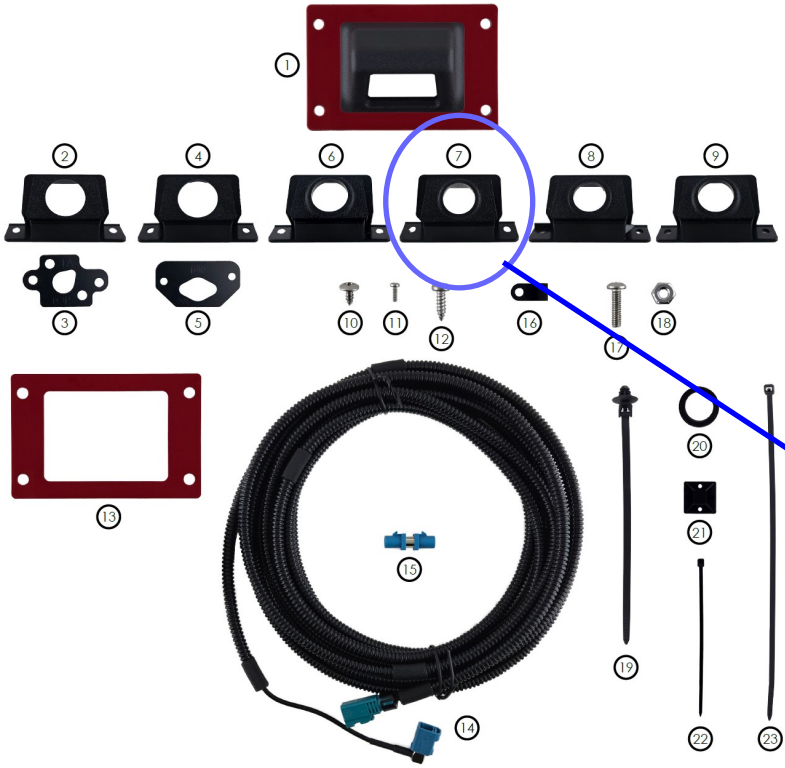
Step 6-2.

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

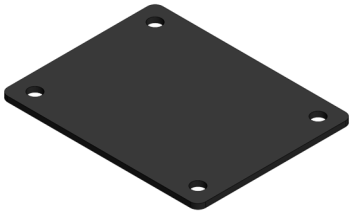


- If the camera DOES not look like this (a single pin round coaxial snap-on connection) –**STOP**– you will need an analog back up camera kit. Please contact your Adrian representative.

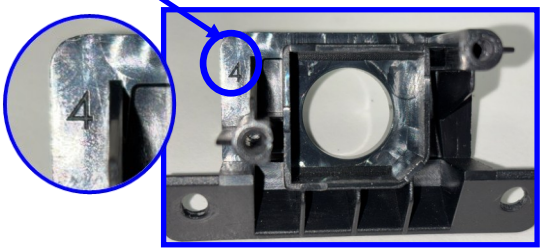
Step 6-3.



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



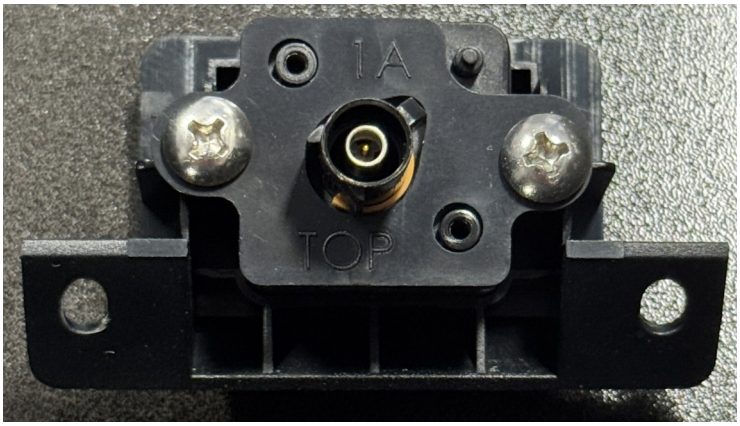
- Enclosure Back Plate (77212)



- 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.

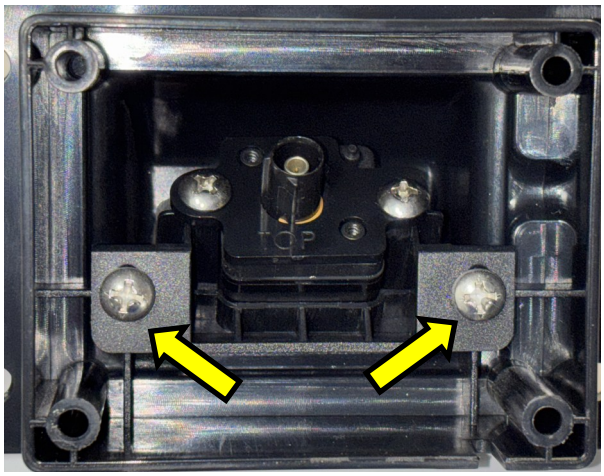
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16” Truss Head Screws will be used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

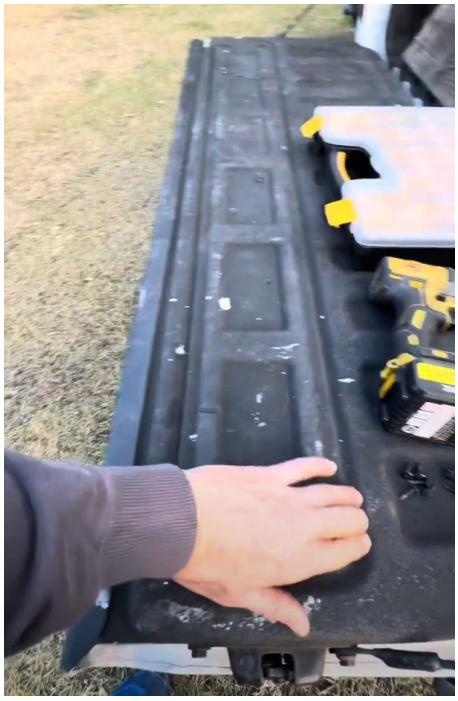
Step 6-1.
Follow Chevy Silverado 1500 Service manual instructions to remove camera from the tailgate. Details extracted from instructions are as follows to the right:

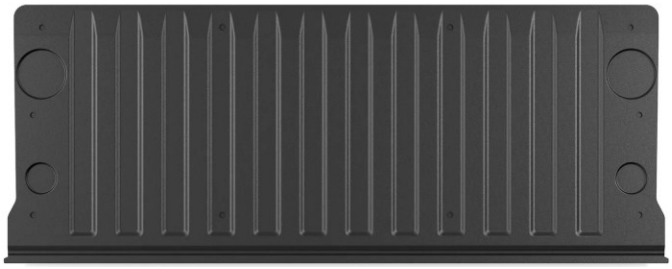
1. Open the tailgate.
2. **Vehicles With: Tailgate Step:**
   - Push the tailgate step release button.
   - Open the tailgate step.

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

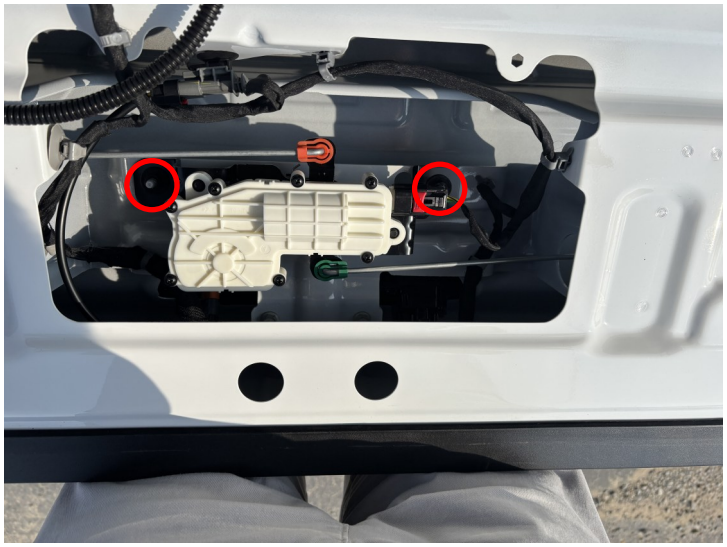
c. **All vehicles**

- 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.





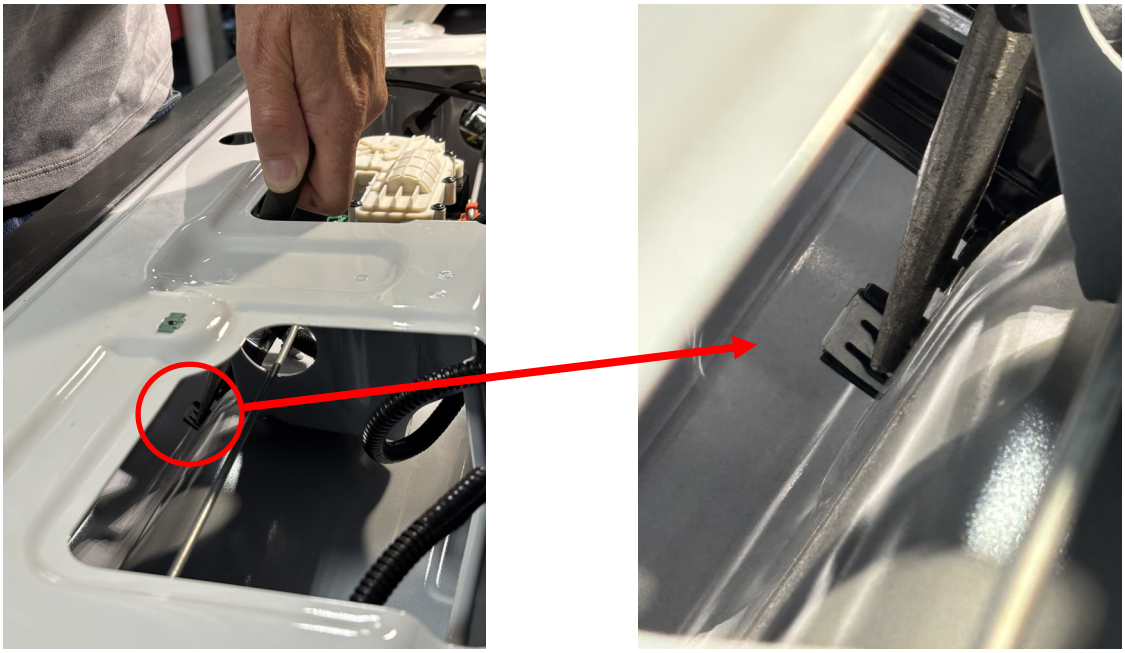
d. **Remove bolts circled**



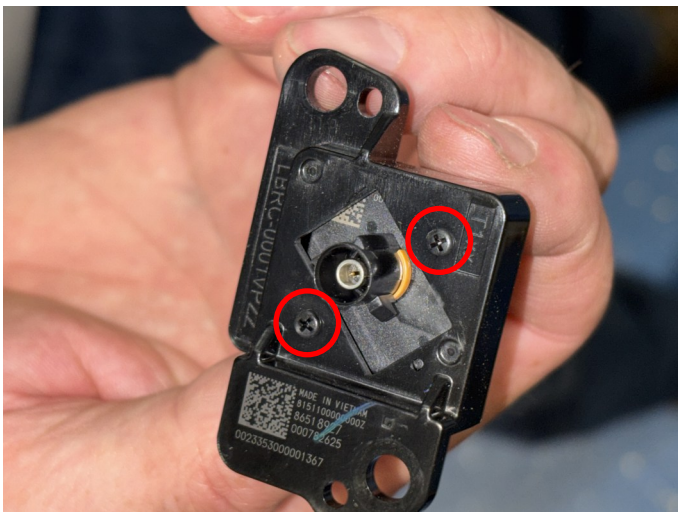
Section 6: Application Specifics: Chevrolet Silverado 1500

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

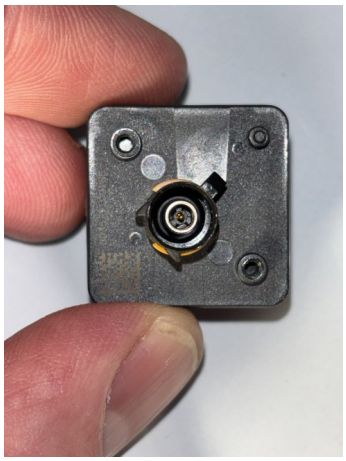




Section 6: Application Specifics: Silverado 1500

Step 6-3.

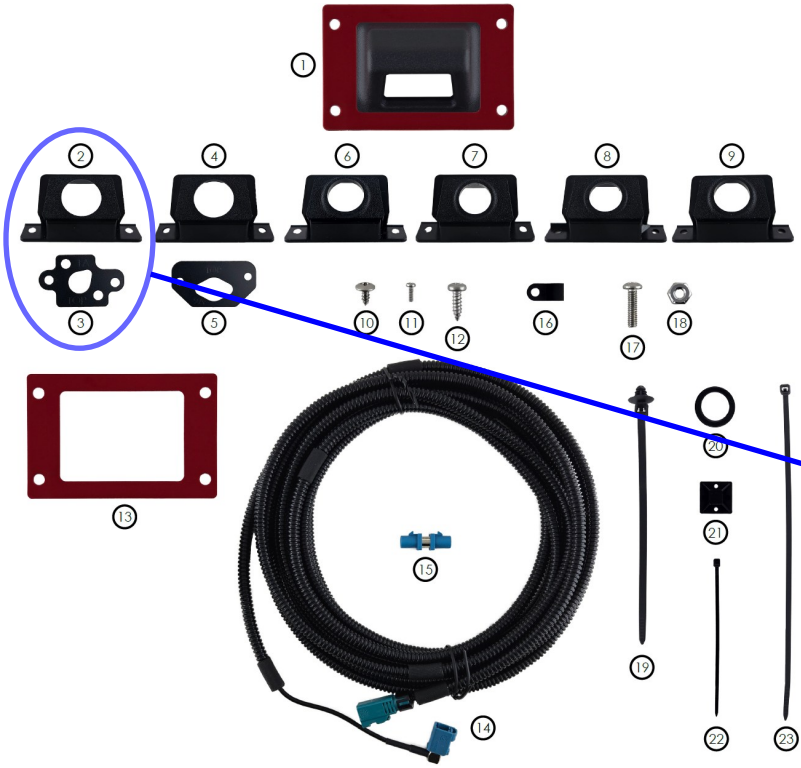




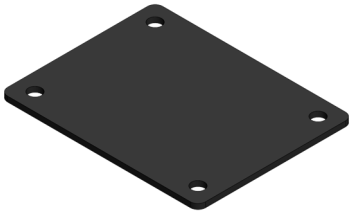
Caution: Make sure camera orientation for up is noted from previous disassembly.

- 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.

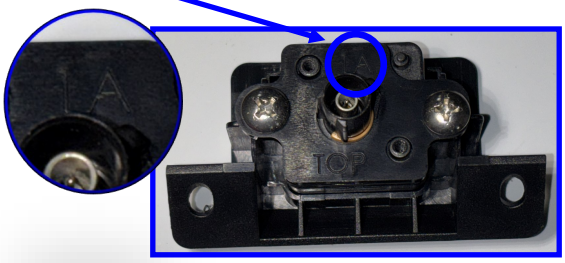
Step 6-3.



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



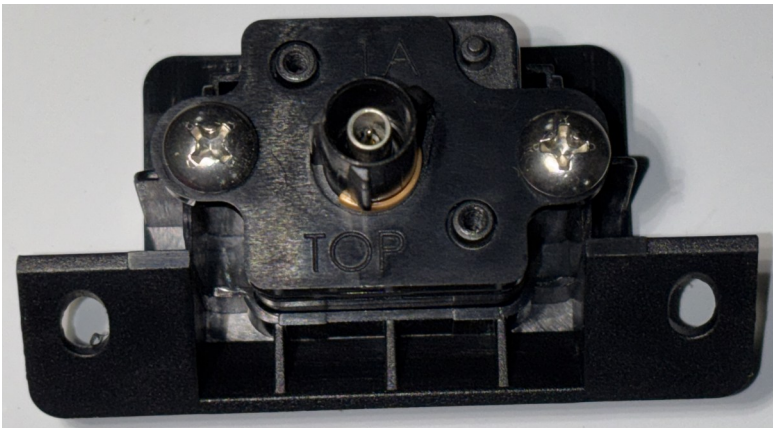
- Enclosure Back Plate (77212)



- 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.

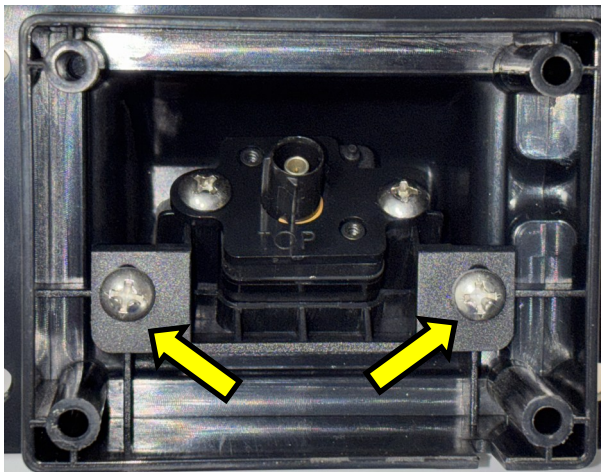
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16” Truss Head Screws will be used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

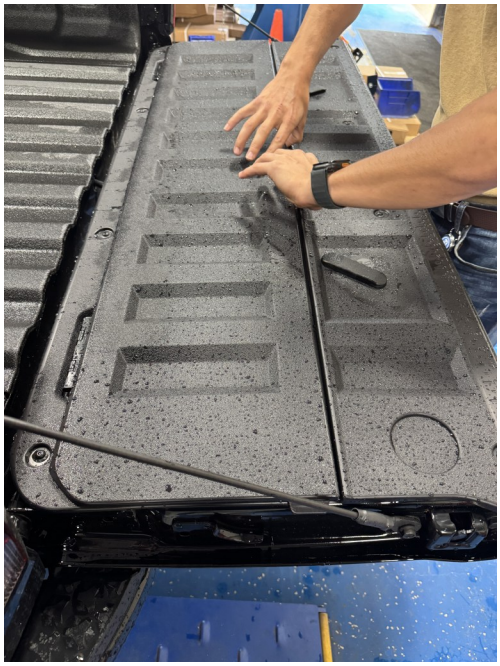
Step 6-1.
Follow Chevy Silverado 1500 Service manual instructions to remove camera from the tailgate. Details extracted from instructions are as follows to the right:

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.

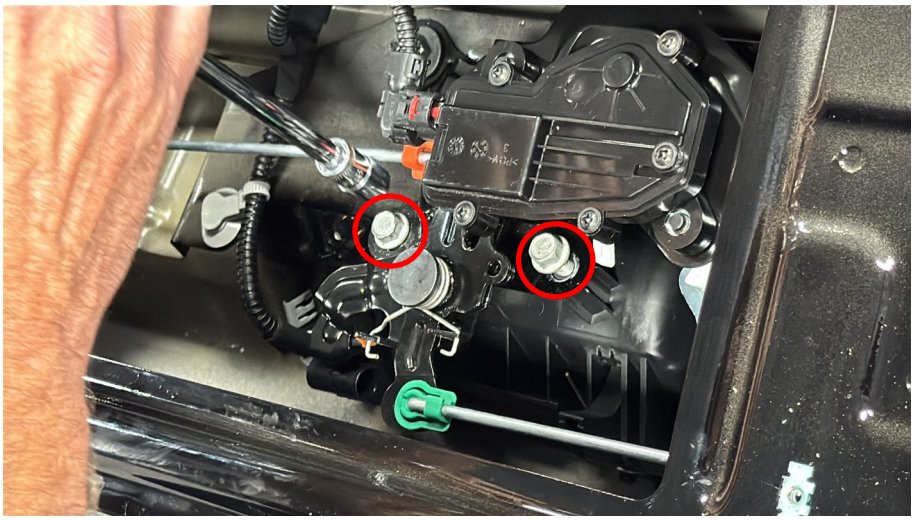
c. **All vehicles**

- 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**



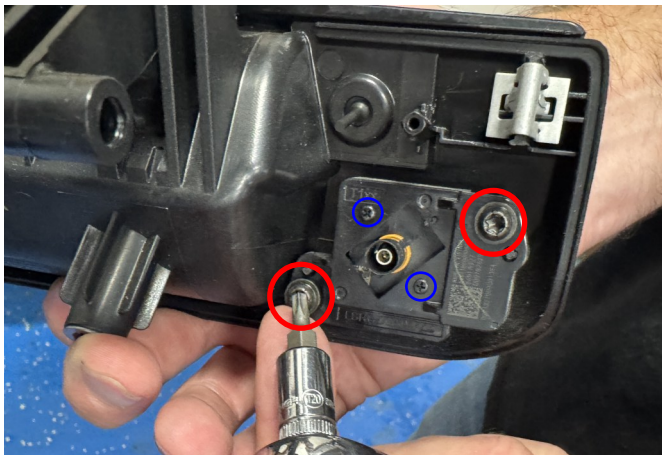
Section 6: Application Specifics: Chevrolet Colorado

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

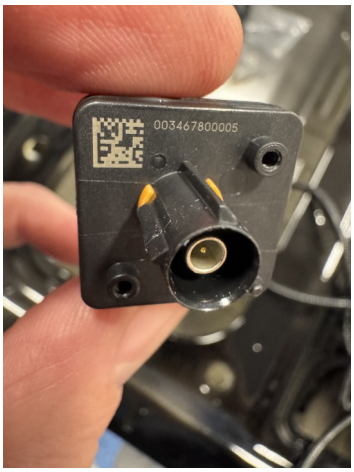




Section 6: Application Specifics: Colorado

Step 6-3.

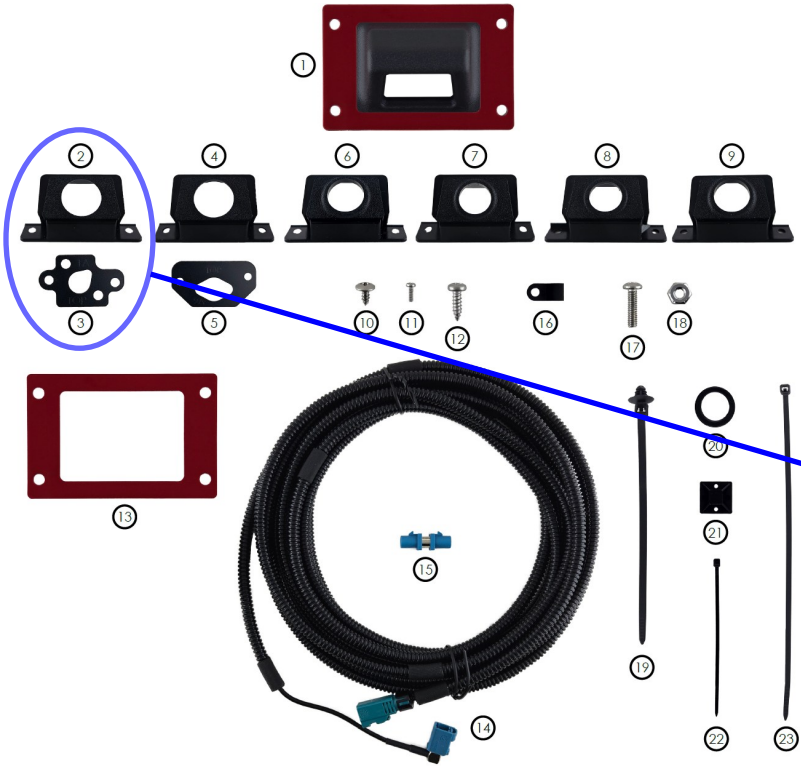




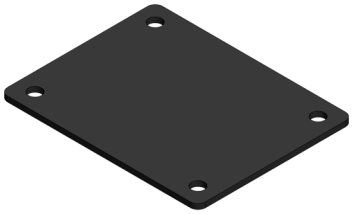
Caution: Make sure camera orientation for up is noted from previous disassembly.

- 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.

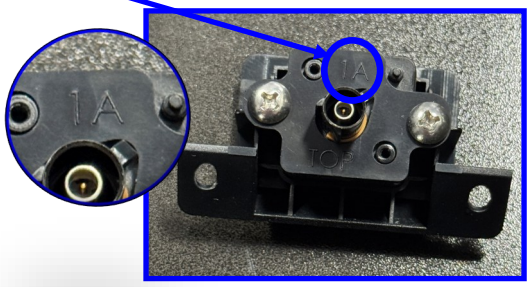
Step 6-3.



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



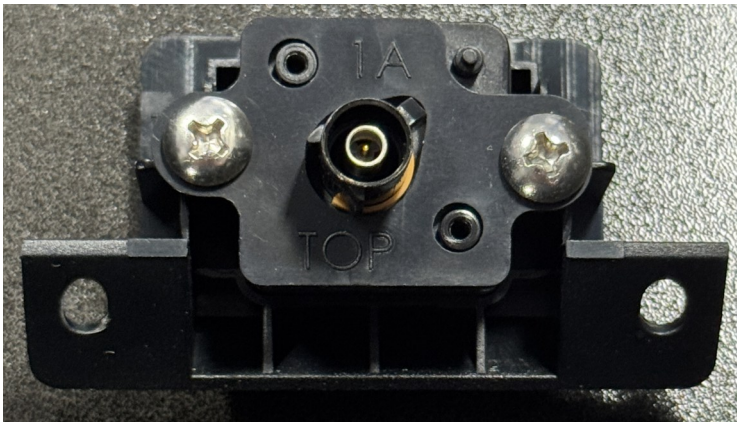
- Enclosure Back Plate (77212)



- 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.

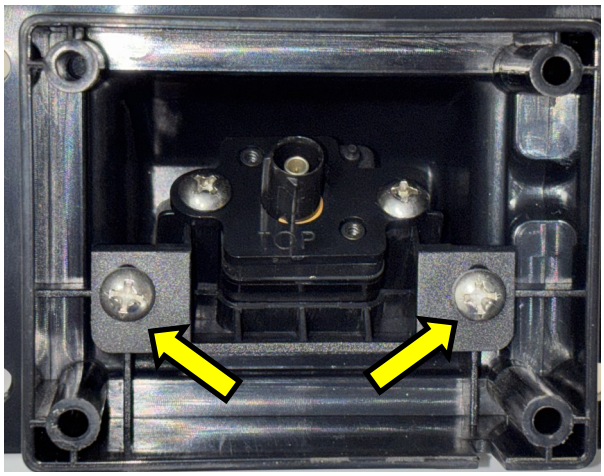
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16” Truss Head Screws will be used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

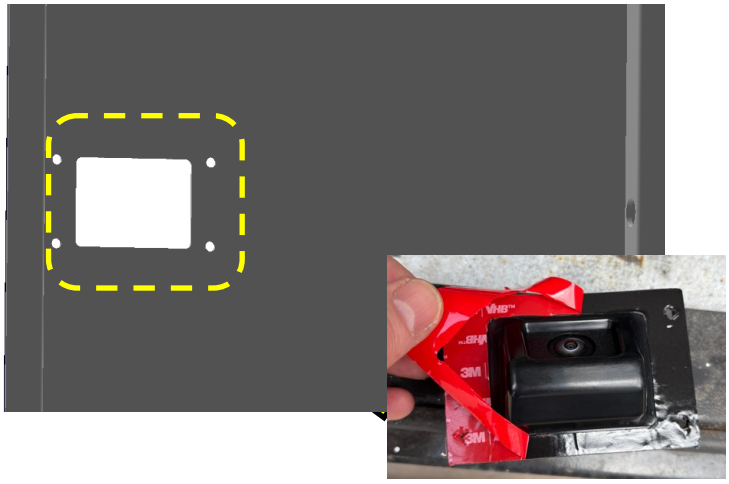
Section 7: General installation

Step 7-1.



- 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.

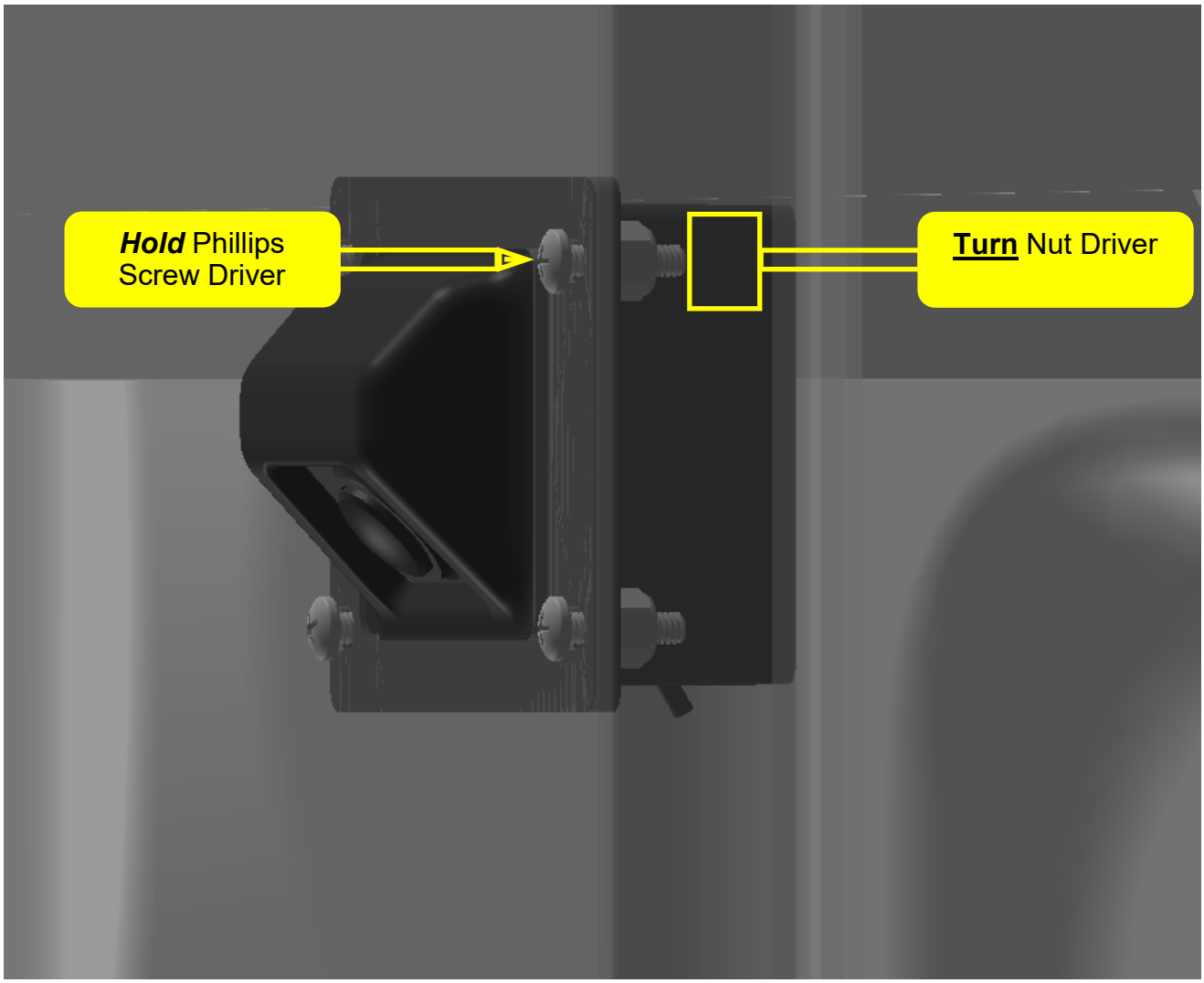


- This is VHB tape, so do not push to stick it unless the 4 screw holes are aligned.
- It is recommended that at least two corner screws BOM ITEM #17: 8-32 5/8" PHP SCREWS are present while installing the enclosure,
- Carefully aligning the enclosure protrusion through the hole in the door, make sure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

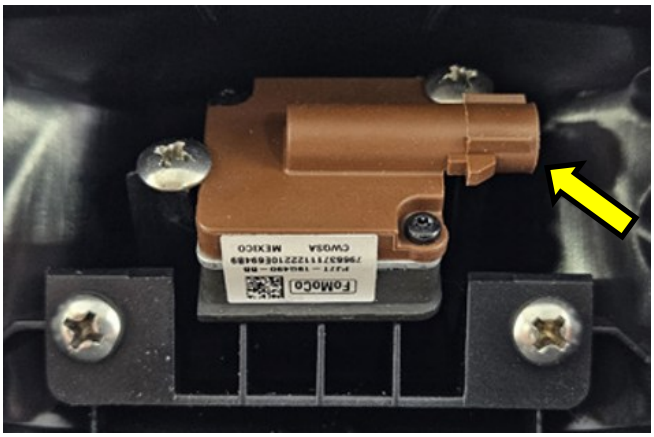
Fully Seated Connection



Not Fully Seated Connection

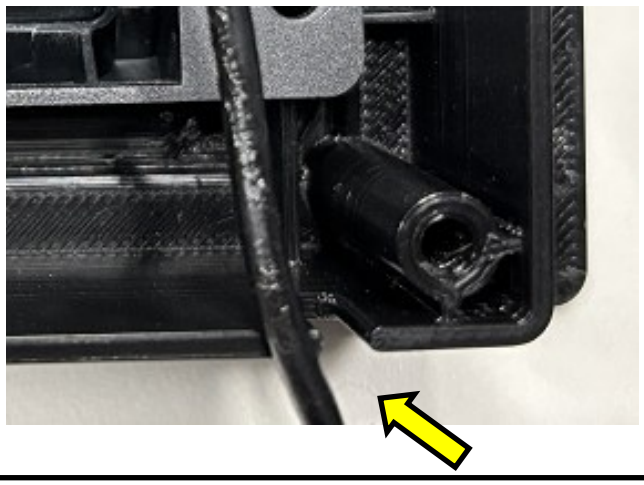


Step 8-2.



- 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.

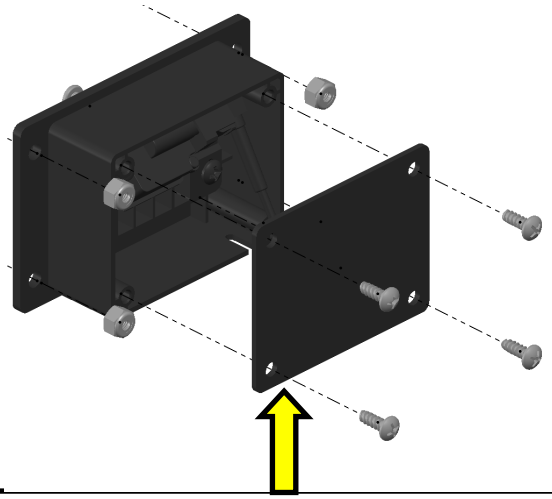
Step 8-3.



- 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.

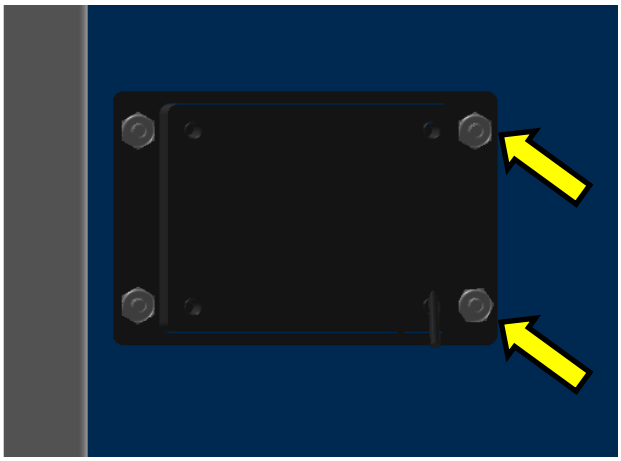
Section 8: Routing harness

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.

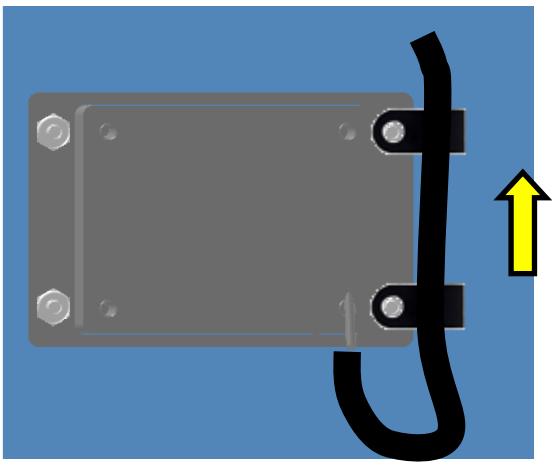


- *Remove* the bottom and top driver's side nuts from the enclosure mounting screws and obtain a black plastic P-clips BOM ITEM #16: BLACK P-CLIPS from the kit package.



- 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.

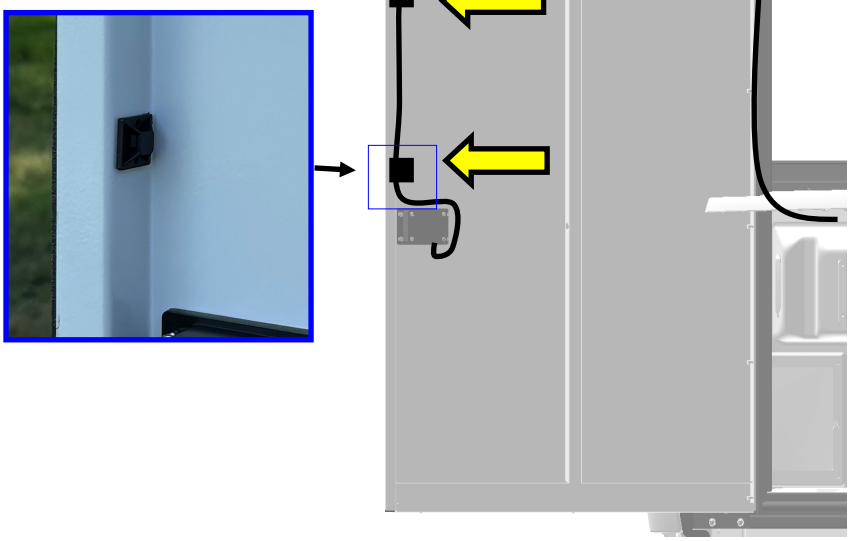
- These P-clips will be oriented like in the diagram so that wire is leaving the slot, then the looming cover on the coaxial cable begins, a small drip loop is formed, and then is fastened by the clips to the enclosure screws going upward to the top of the door.
- Again fasten the nuts with light torque 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.

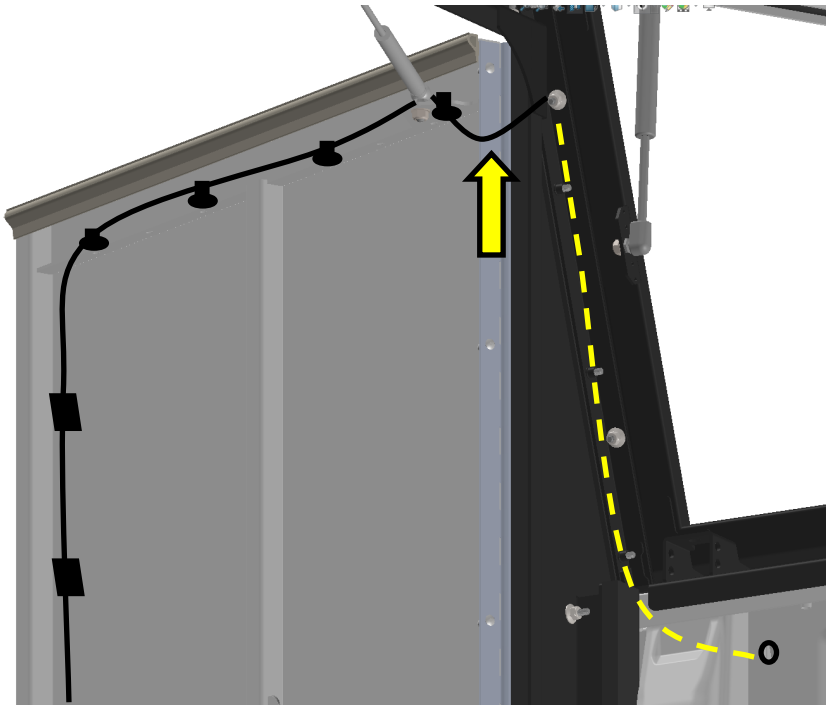
Caution: The loom covered coaxial cable should not be bent at harsh angles, kinked or pinched during the installation.

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

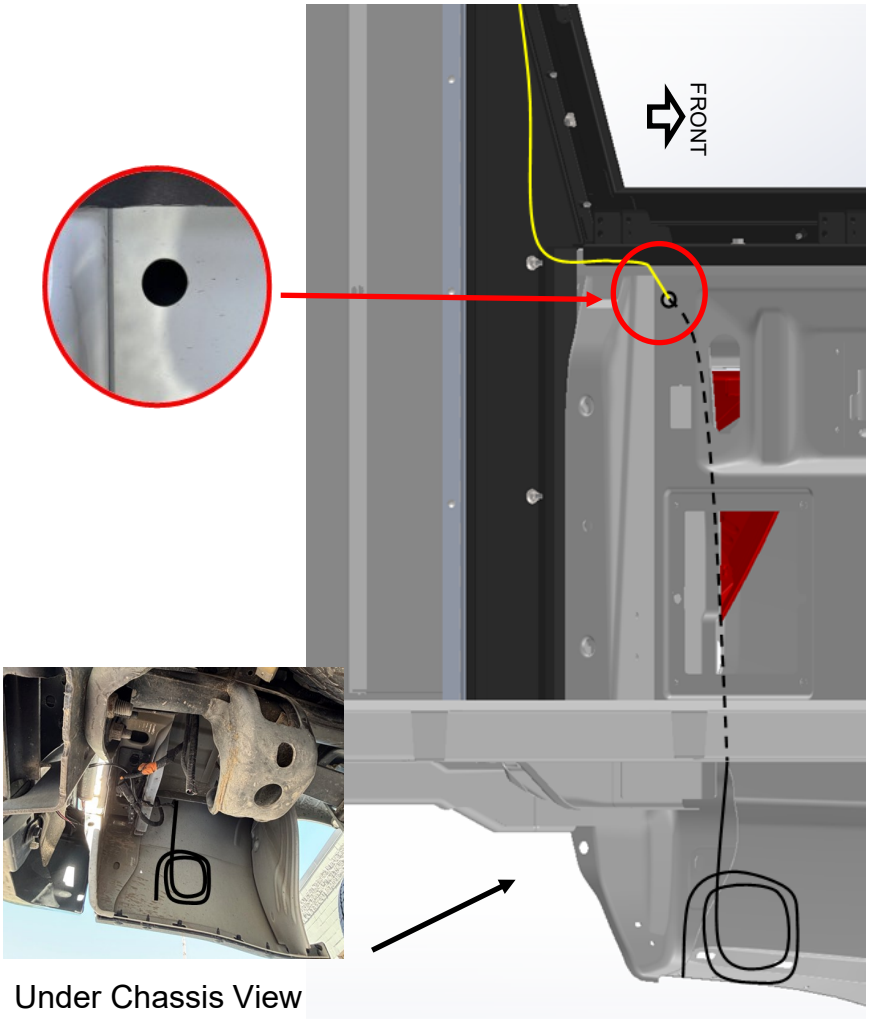
Step 8-8.



- 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.

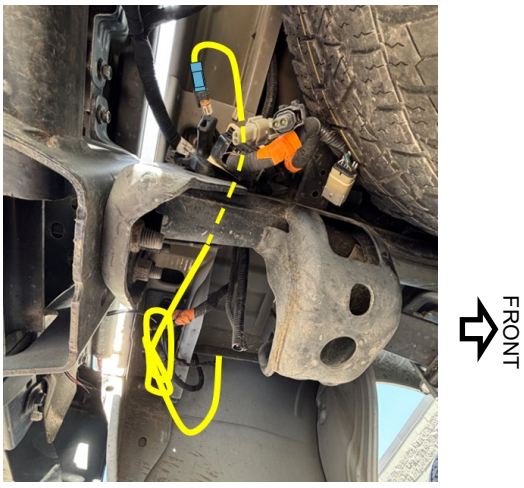


Under Chassis View

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.

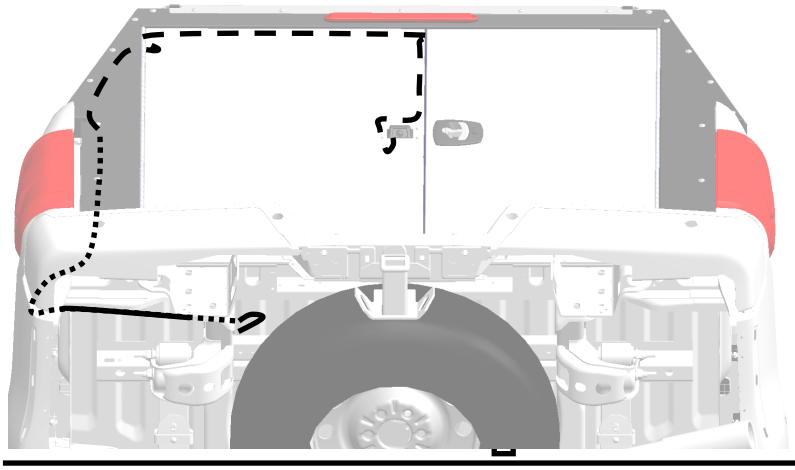


The wire MUST be tied up above the frame rail to avoid damage from ice and road debris.

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

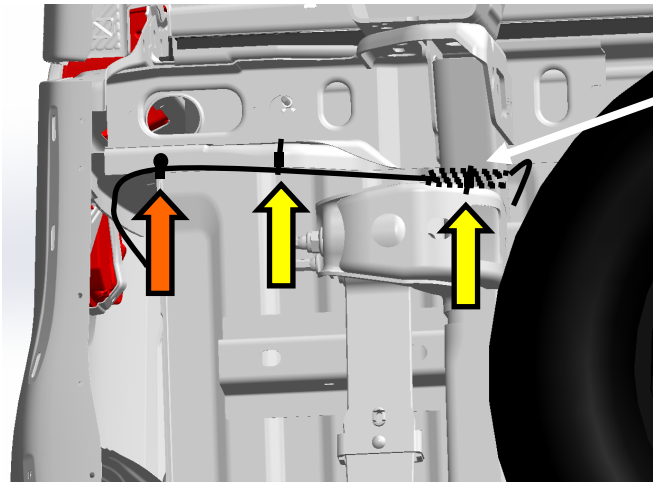
Step 8-11.



- 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 under-body 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 form 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!**

