



**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 84" X 49.3"**

### *CAPACITY*

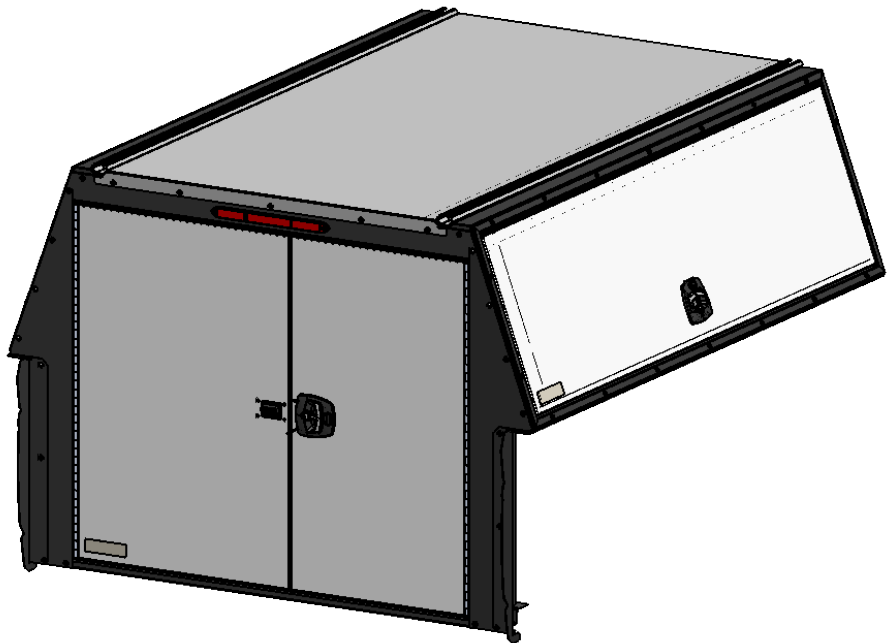
**400# ROOF CAPACITY**

### *COLOR*

**WHITE PANELS  
BLACK TRIM**

### *CATALOG NUMBER*

**TFKFDT178KM23W**



### **PRODUCT FEATURES**

***THIS IS ADRIAN STEEL'S STANDARD ALUMINUM TOPPER FOR 6.5' BED F-150 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 CONSISTING OF 0.125 SHEET & EXTRUDED ALUMINUM.***

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

**ALUM. TOPPER, W/ SIDE DOORS AND  
HINGED REAR BARN DOORS****CATALOG NUMBER TFKFDT178KM23W****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).**

| <b>CATALOG NUMBER</b>                                     | <b>DESCRIPTION (smart)</b> |
|-----------------------------------------------------------|----------------------------|
| <b>INTERIOR TOOLBOX COMPONENTS</b>                        |                            |
| TTBBK177520                                               | TBOX, BODY KIT, 177520     |
| TTBSDK1720                                                | TBOX, SPL DIV KIT, 1720    |
| TTBSK1737                                                 | TBOX, SHELF KIT, 1737      |
| TTBSK1775                                                 | TBOX, SHELF KIT, 1775      |
| TTBTDK1720                                                | TBOX, TALL DIV KIT, 1720   |
|                                                           |                            |
| <b>INTERIOR TOOLBOX CONFIGURATIONS (REFER TO WEBSITE)</b> |                            |
| TTB177520C01                                              | TBOX CONFIG, 01            |
| TTB177520C02                                              | TBOX CONFIG, 02            |
| TTB177520C03                                              | TBOX CONFIG, 03            |
| TTB177520C04                                              | TBOX CONFIG, 04            |
| TTB177520C05                                              | TBOX CONFIG, 05            |
| TTB177520C06                                              | TBOX CONFIG, 06            |
| TTB177520C07                                              | TBOX CONFIG, 07            |
| TTB177520C08                                              | TBOX CONFIG, 08            |
| TTB177520C09                                              | TBOX CONFIG, 09            |
| TTB177520C10                                              | TBOX CONFIG, 10            |
| TTB177520C11                                              | TBOX CONFIG, 11            |

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**ALUM. TOPPER, W/ SIDE DOORS AND  
HINGED REAR BARN DOORS****CATALOG NUMBER TFKFDT178KM23W*****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).***

| <b>CATALOG NUMBER</b>         | <b>DESCRIPTION (smart)</b> |
|-------------------------------|----------------------------|
| <b>LADDER RACK COMPONENTS</b> |                            |
| URMBK4W                       | UTILITY,MNT BKT KT,RAIL,4W |
| 2BARTOPW                      | 2BAR UTILITY RACK, TOP, W  |
| PLSDPSLT5W                    | PROLIFT,STD,PS,LOW T,5,W   |
| PLSDDSLT5W                    | PROLIFT,STD,DS,LOW T,5,W   |
| PLMDPSLT5W                    | PROLIFT,MAX,PS,LOW T,5,W   |
| PLMDDSLT5W                    | PROLIFT,MAX,DS,LOW T,5,W   |
| PLMDPSMT5W                    | PROLIFT,MAX,PS,MID T,5,W   |
| PLMDDSM5T5W                   | PROLIFT,MAX,DS,MID T,5,W   |
| GL-CVPS                       | GRIP LOCK,COMPACT VAN,PS   |
| GL-CVDS                       | GRIP LOCK,COMPACT VAN,DS   |
| <b>LADDER RACK KITS</b>       |                            |
| PLS61LT5                      | PROLIFT SGL STD DR 5' TOP  |
| PLS63LT5                      | PROLIFT DBL STD DR 5' TOP  |
| PLS64LT5                      | PROLIFT CMB STD DR 5' TOP  |
| PLS65LT5                      | PROLIFT-UT CMB SDR 5' TOP  |
| GL61LT5                       | SGL GL,6'2"-6'10" TOP      |
| GL63LT5                       | DUAL GL,6'2"-6'10" TOPPER  |
| 2B6TOPW                       | 2-BAR UTY RK TOP 6" UPRT   |
| PLM61LT5                      | PROLFT SGL SIDE MAX 5'     |
| PLM63LT5                      | PROLFT DUAL SIDE MAX 5'    |

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**ALUM. TOPPER, W/ SIDE DOORS AND  
HINGED REAR BARN DOORS****CATALOG NUMBER TFKFDT178KM23W****LIGHTING ACCESSORIES THAT WILL WORK WITH THIS PRODUCT**

| <b>CATALOG NUMBER</b> | <b>DESCRIPTION (smart)</b>                         |
|-----------------------|----------------------------------------------------|
| <b>LIGHTING KITS</b>  |                                                    |
| 77475                 | COMPLETE PLUG & PLAY LIGHTING KIT: 2 DOME, 2 STRIP |
| 77479                 | COMPLETE PLUG & PLAY KIT: 2 STRIP LIGHTS           |
| 77478                 | PLUG & PLAY STRIP LIGHT KIT: 1 DRIVER DOOR         |
| 77477                 | PLUG & PLAY STRIP LIGHT KIT: 1 PASSENGER DOOR      |



INSTR. : 77454

PG: 1

REV: E

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    |

PART : TFKFDT178KM23W

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

\* E-LOCK VERSION SWAP TMLHK WITH TELH09

FASTENER AND HOLE COUNTS MAY BE DIFFERENT BETWEEN TOPPER KITS.

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

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:  
**E**

PART  
NUMBER : **TFKFDL166KM23W**

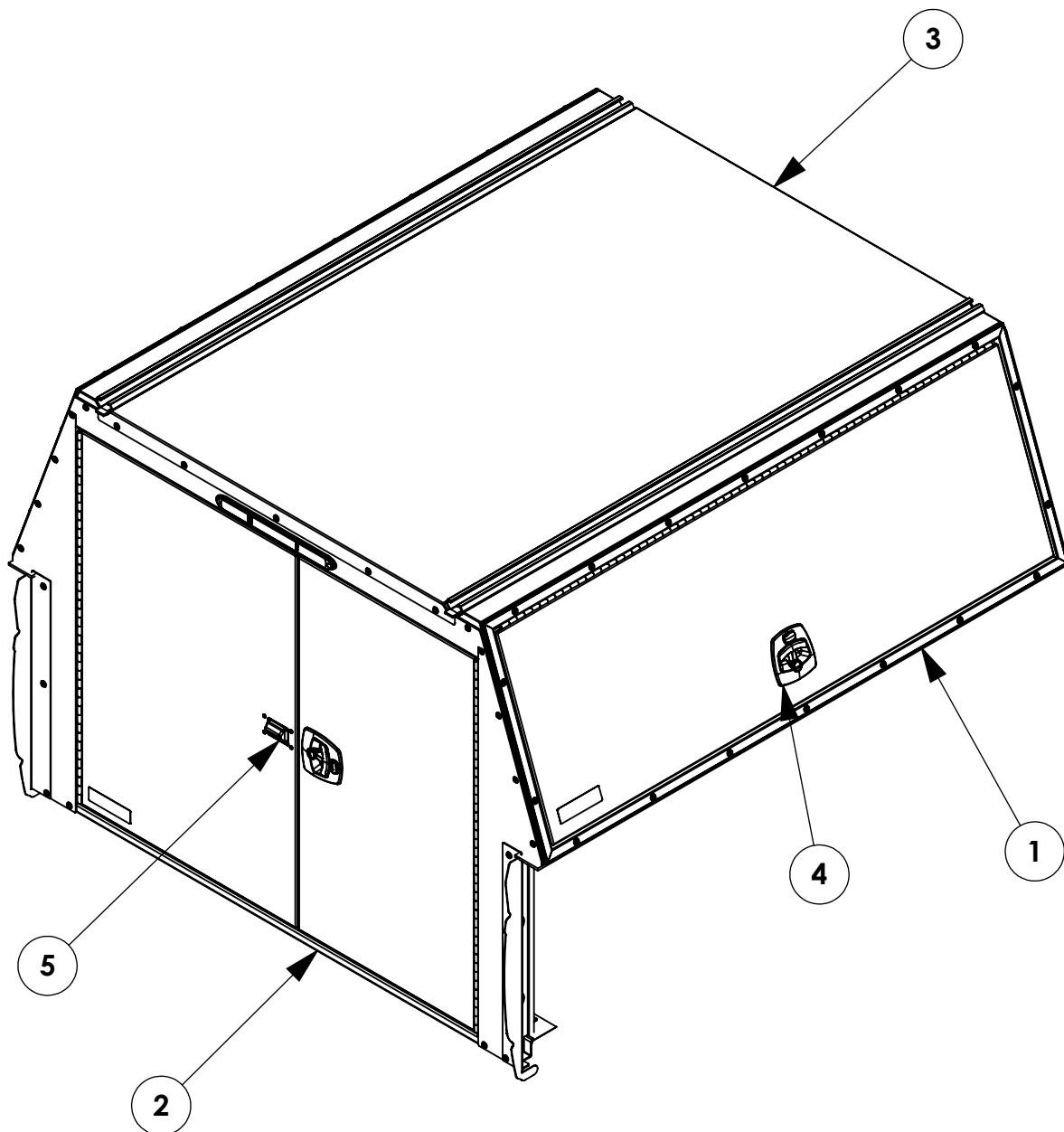
PART • ASM INS, TFK \_\_\_\_\_ KM23W /  
DESC. • JM23W & 26W

**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. : 77454

PG: 3

REV: E

PART : TFKFDT166KM23W

NUMBER

PART • ASM INS, TFK\_\_\_\_\_KM23W /

DESC. • JM23W & 26W

E-LOCK VERSIONS:  
SWAP M WITH E IN PART NUMBER  
EXAMPLE: TFKFDT166KM23W  
BECOMES TFKFDT166E23W

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

The diagram shows an exploded view of a truck camper assembly. Callout 1 points to the side kit (TSK66M23W) on the right side of the camper. Callout 2 points to the bottom door close kit (TCKFDT1BM23) at the front. Callout 3 points to the roof kit (TRK6623W) on top. Callout 4 points to the mechanical lock hatch kit (TMLHK) on the front door. Callout 5 points to the hardware kit (TEKFDT1K) at the front bottom corner.

INSTR. : 77454  
NUMBER

PG: 4

REV: E

PART : TFKFDT196KM23W  
NUMBER

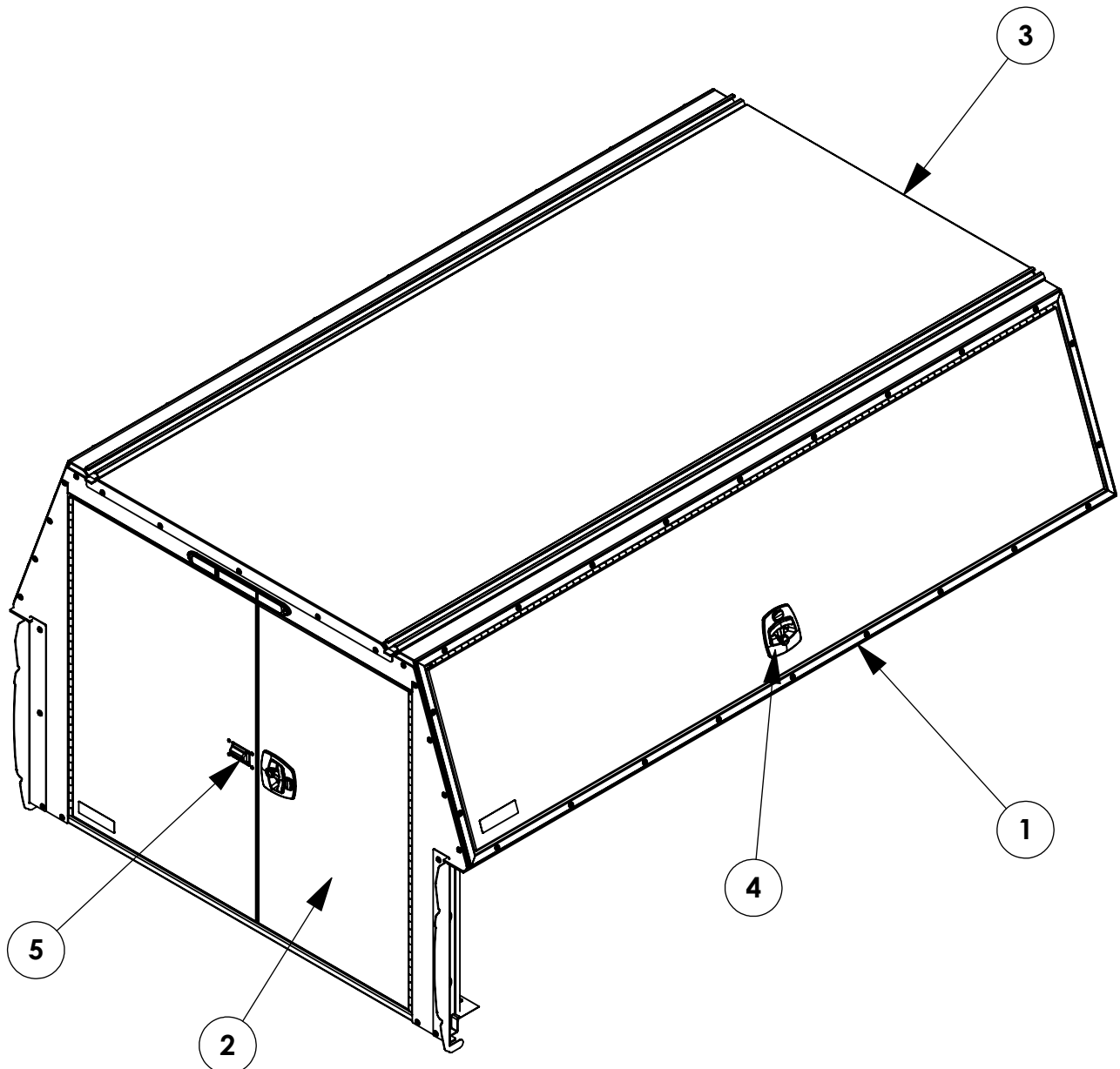
PART • ASM INS, TFK\_\_\_\_\_KM23W /  
DESC. • JM23W & 26W

**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.<br>NUMBER | : 77454                                     | PG:<br>5 | REV:<br>E |
| PART<br>NUMBER   | • TFKFDT280JM26W<br>• TFKFDT280KM26W        |          |           |
| PART<br>DESC.    | • ASM INS, TFK_____KM23W /<br>• JM23W & 26W |          |           |

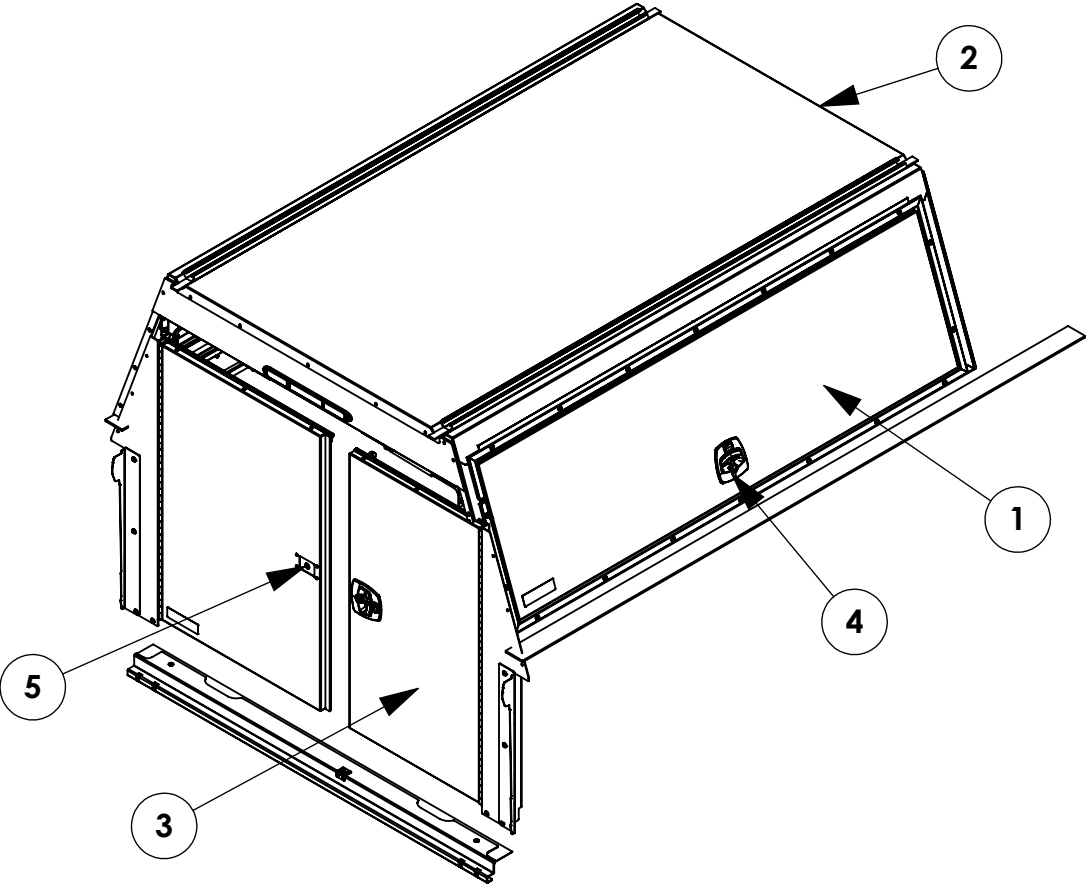
**E-LOCK VERSIONS:**  
**SWAP M WITH E IN PART NUMBER**  
**EXAMPLE: TFKFDT280JM26W**  
**BECOMES TFKFDT280JE26W**

### 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. : 77454  
NUMBER

PG: 6  
REV: E

PART • TFKFDT296JM26W  
NUMBER • TFKFDT296KM26W

PART • ASM INS, TFK \_\_\_\_\_ KM23W /  
DESC. • JM23W & 26W

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

## BOM FOR 8' FORD F-250

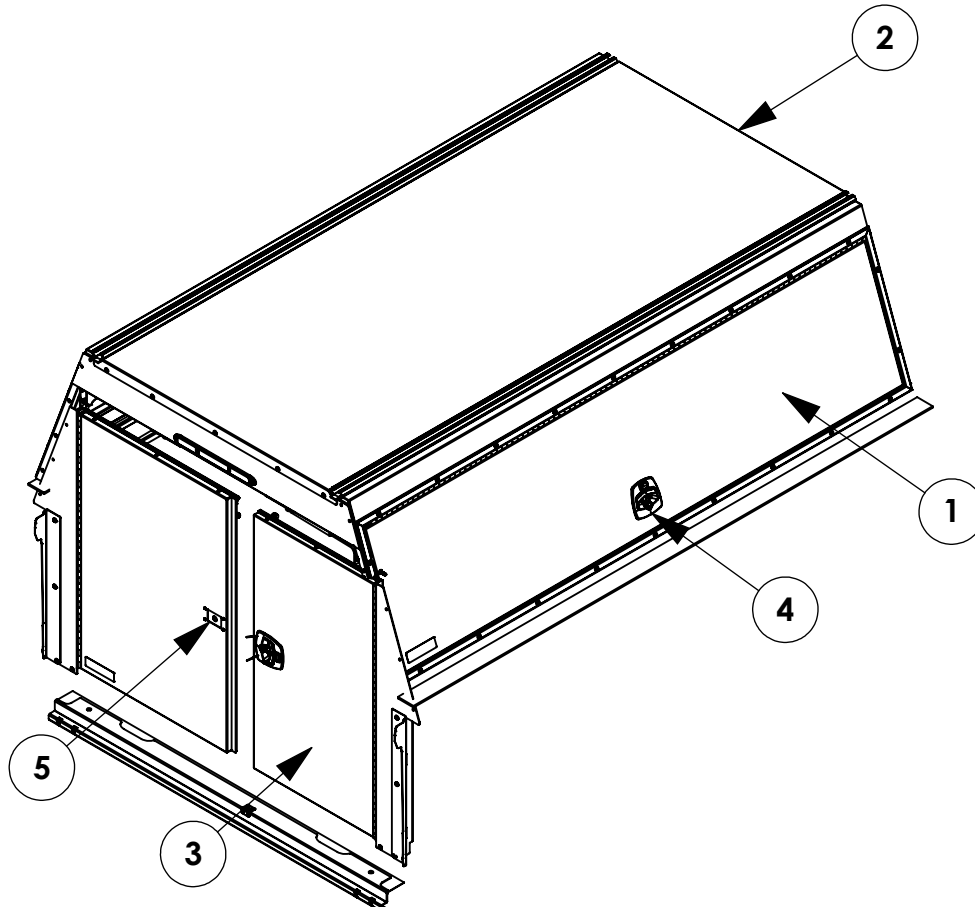
### TFKFDT296JM26W

| 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:  
**E**

PART  
NUMBER : **TFKCOL160KM23W**

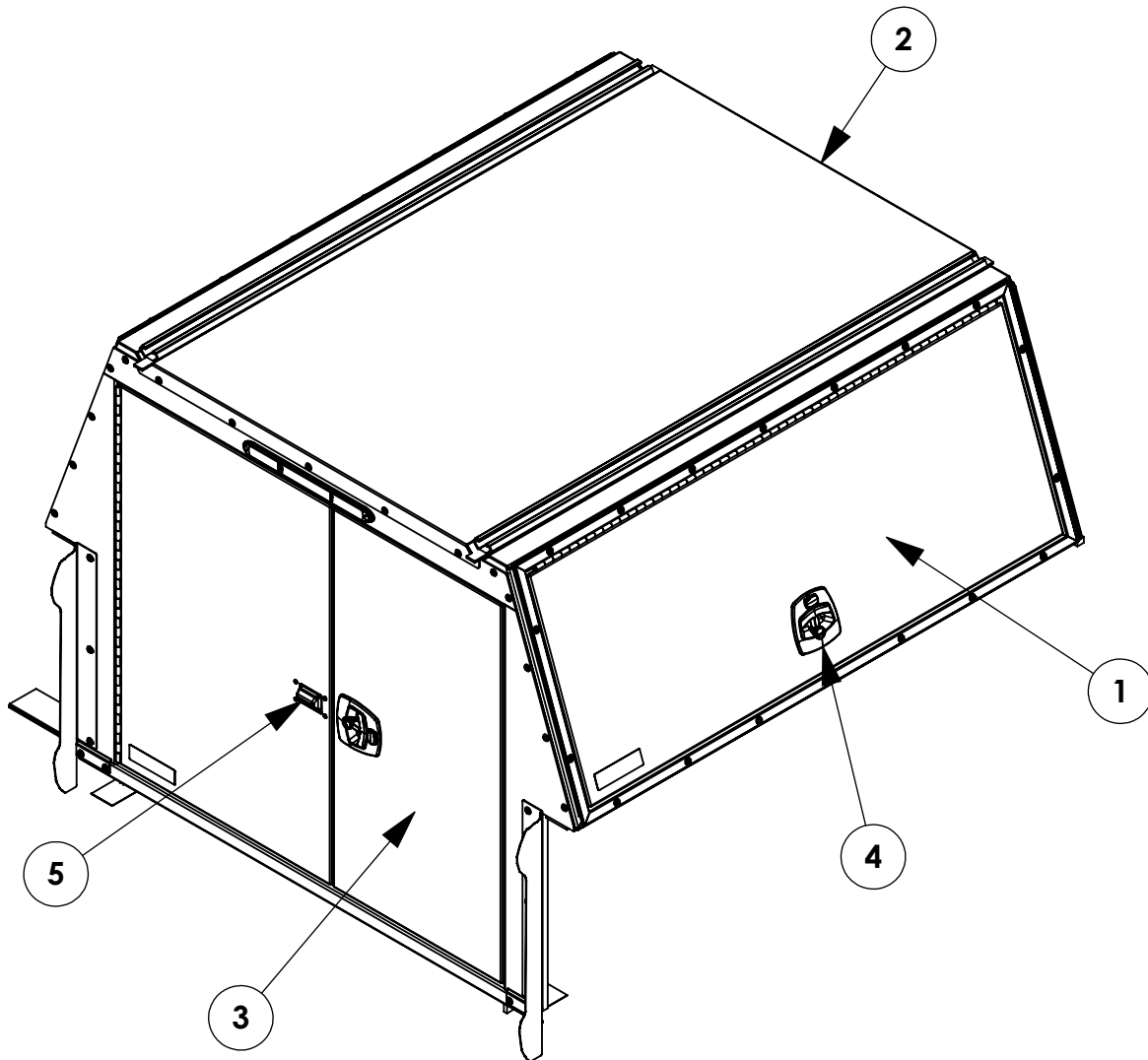
PART • ASM INS, TFK\_\_\_\_\_KM23W /  
DESC. • JM23W & 26W

**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:  
**E**

PART  
NUMBER : **TFKGMT178KM23W**

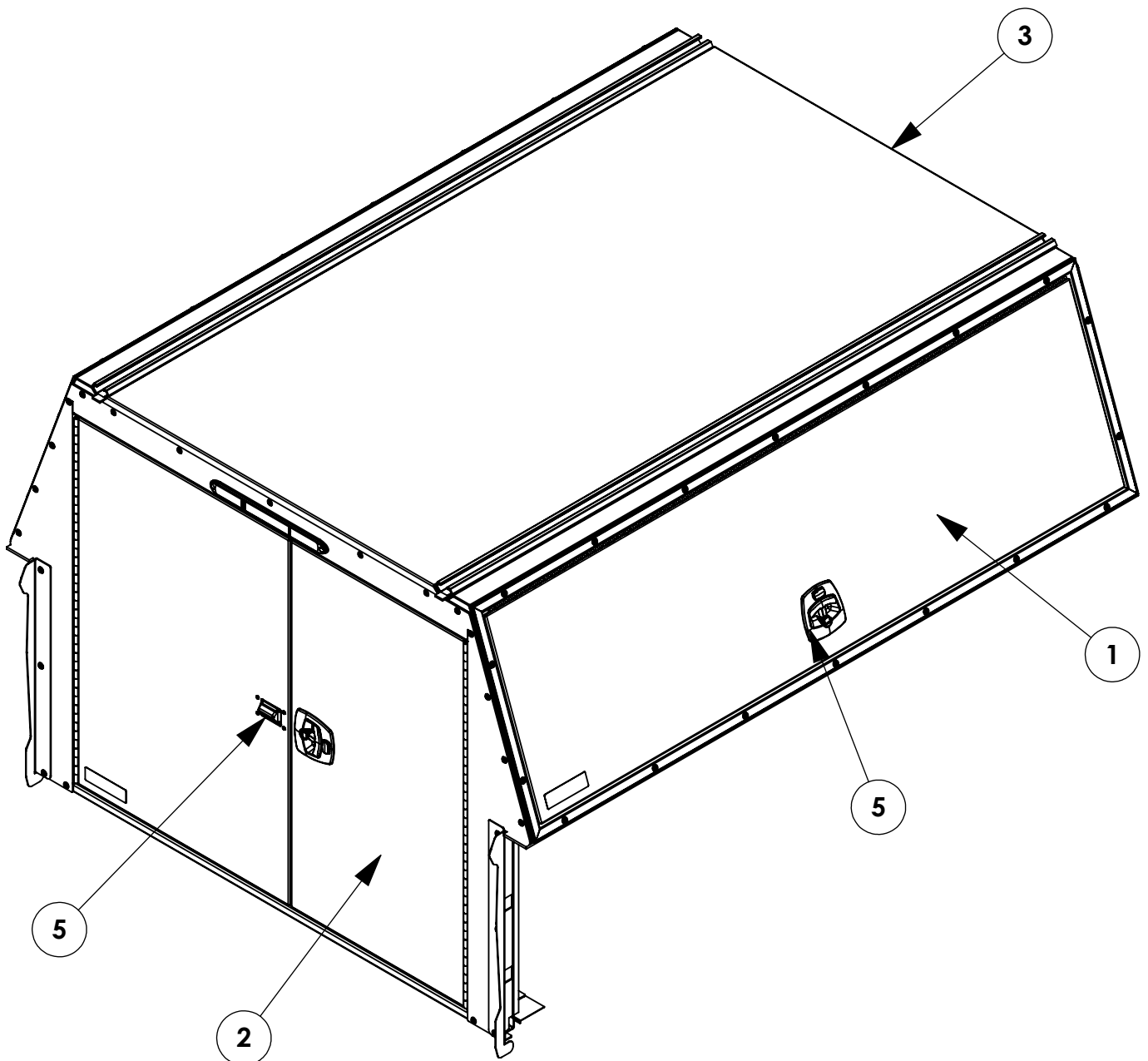
PART • ASM INS, TFK\_\_\_\_\_KM23W /  
DESC. • JM23W & 26W

**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:  
**E**

PART  
NUMBER : **TFKGMT196KM23W**

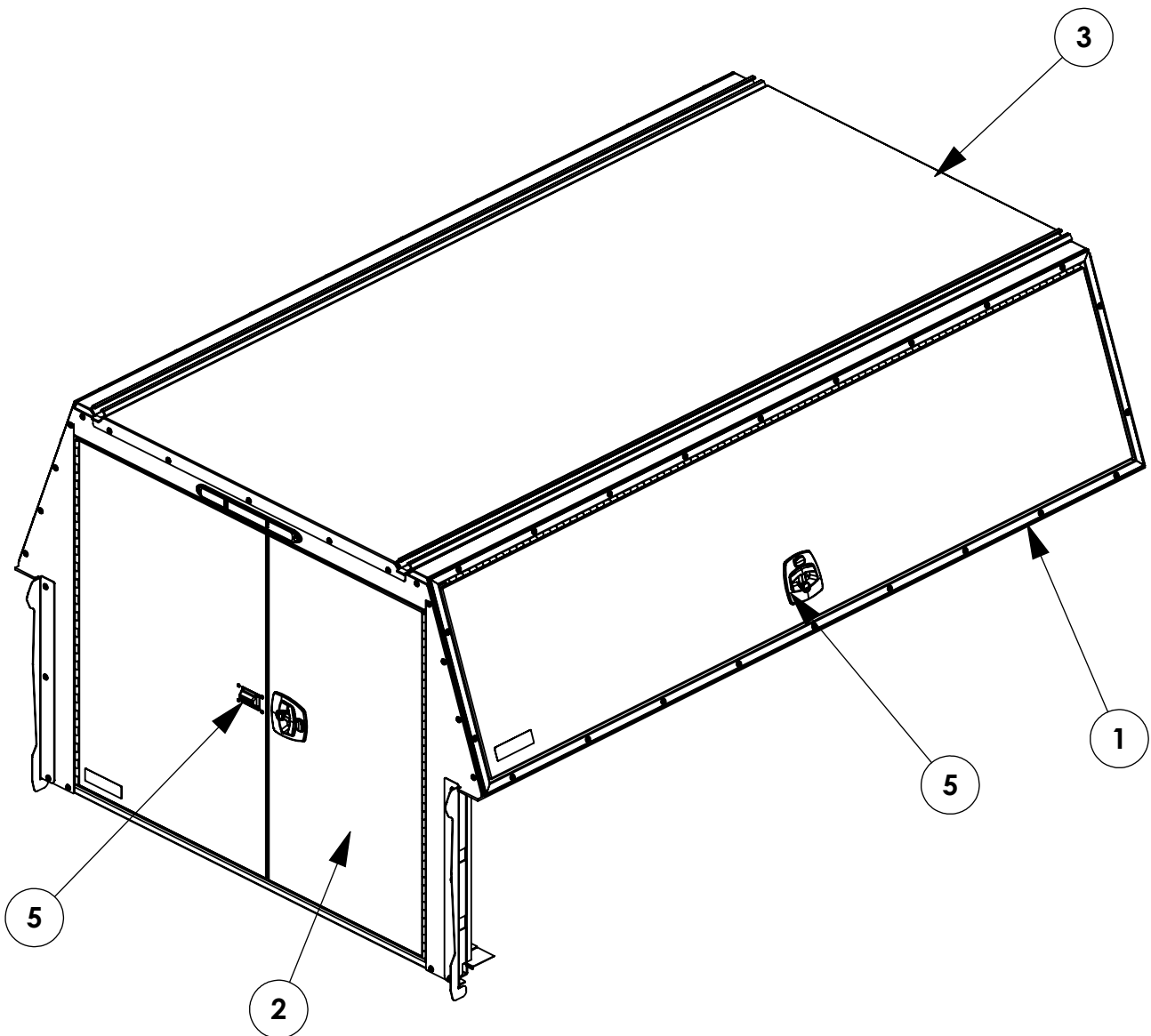
PART • ASM INS, TFK\_\_\_\_\_KM23W /  
DESC. • JM23W & 26W

**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/<br>ADPTR    | 1    |
| 5        | TMLHK       | Topper Mechanical Lock<br>Hatch Kit | 1    |

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



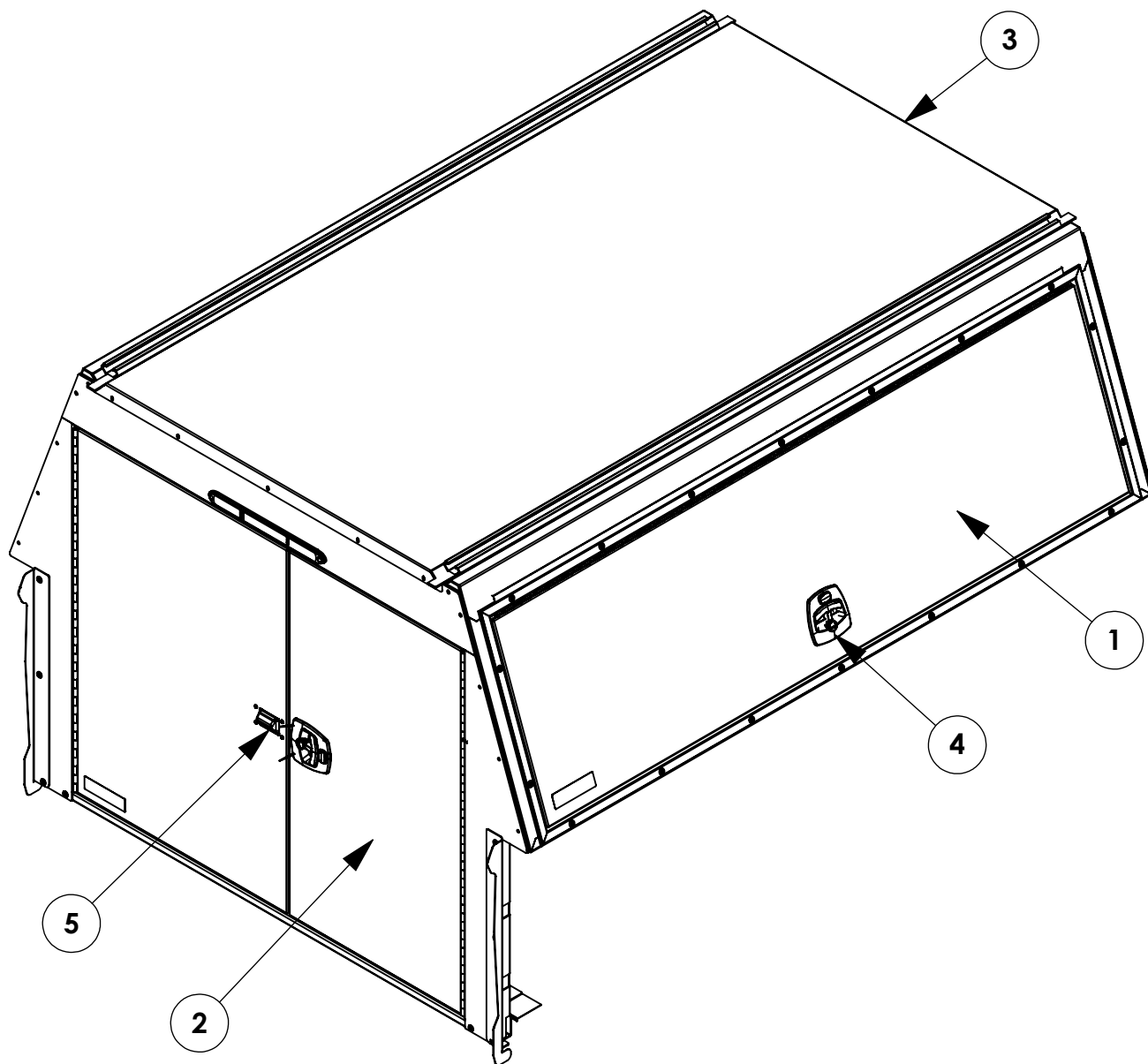
|                                                        |                  |           |           |
|--------------------------------------------------------|------------------|-----------|-----------|
| INSTR.<br>NUMBER                                       | : 77454          | PG:<br>10 | REV:<br>E |
| PART<br>NUMBER                                         | : TFKGMT280KM26W |           |           |
| PART • ASM INS, TFK_____KM23W /<br>DESC. • 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:  
**E**

PART  
NUMBER : **TFKGMT296KM23W**

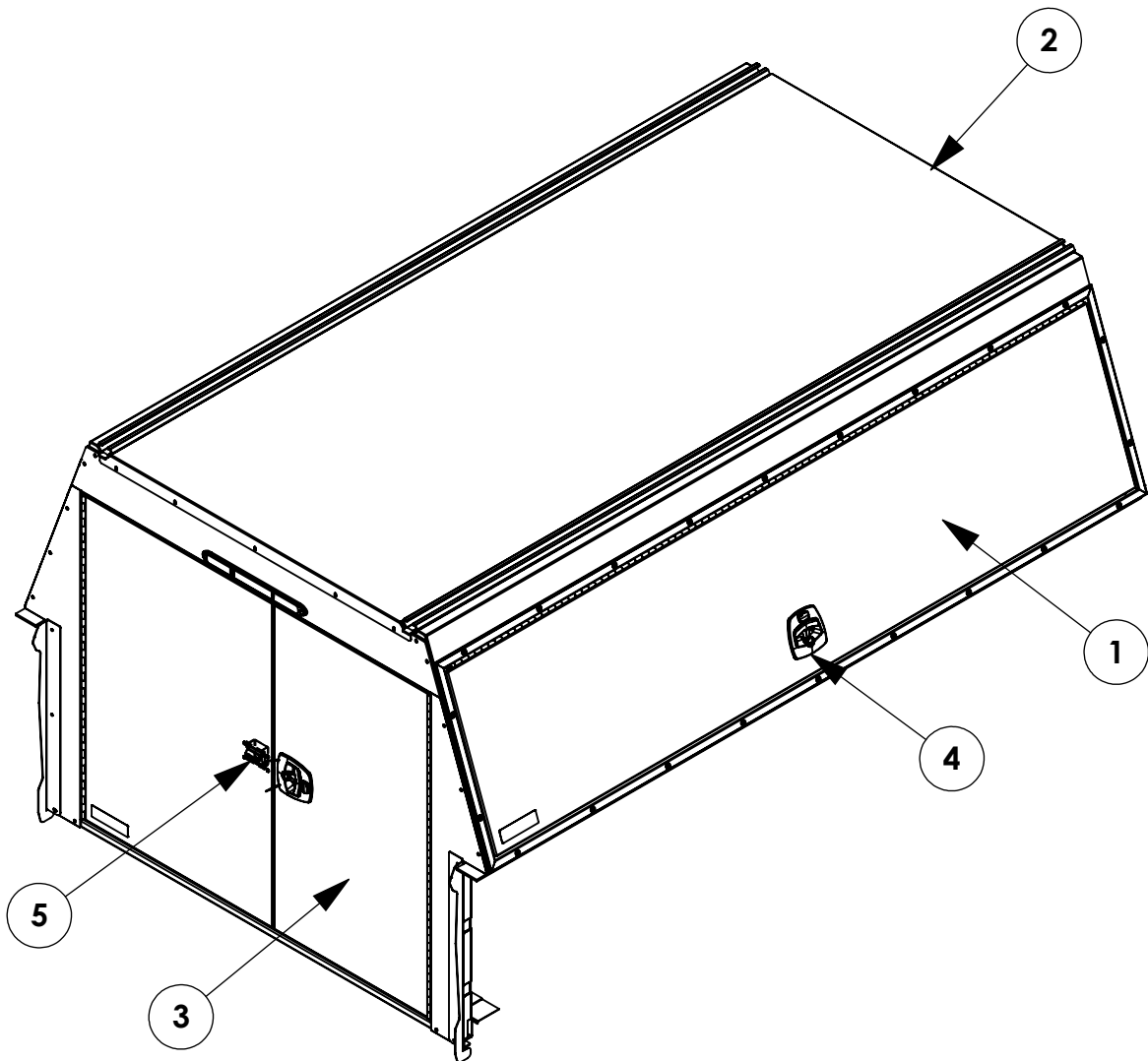
PART :  
DESC. : ASM INS, TFK\_\_\_\_\_KM23W /  
JM23W & 26W

**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**



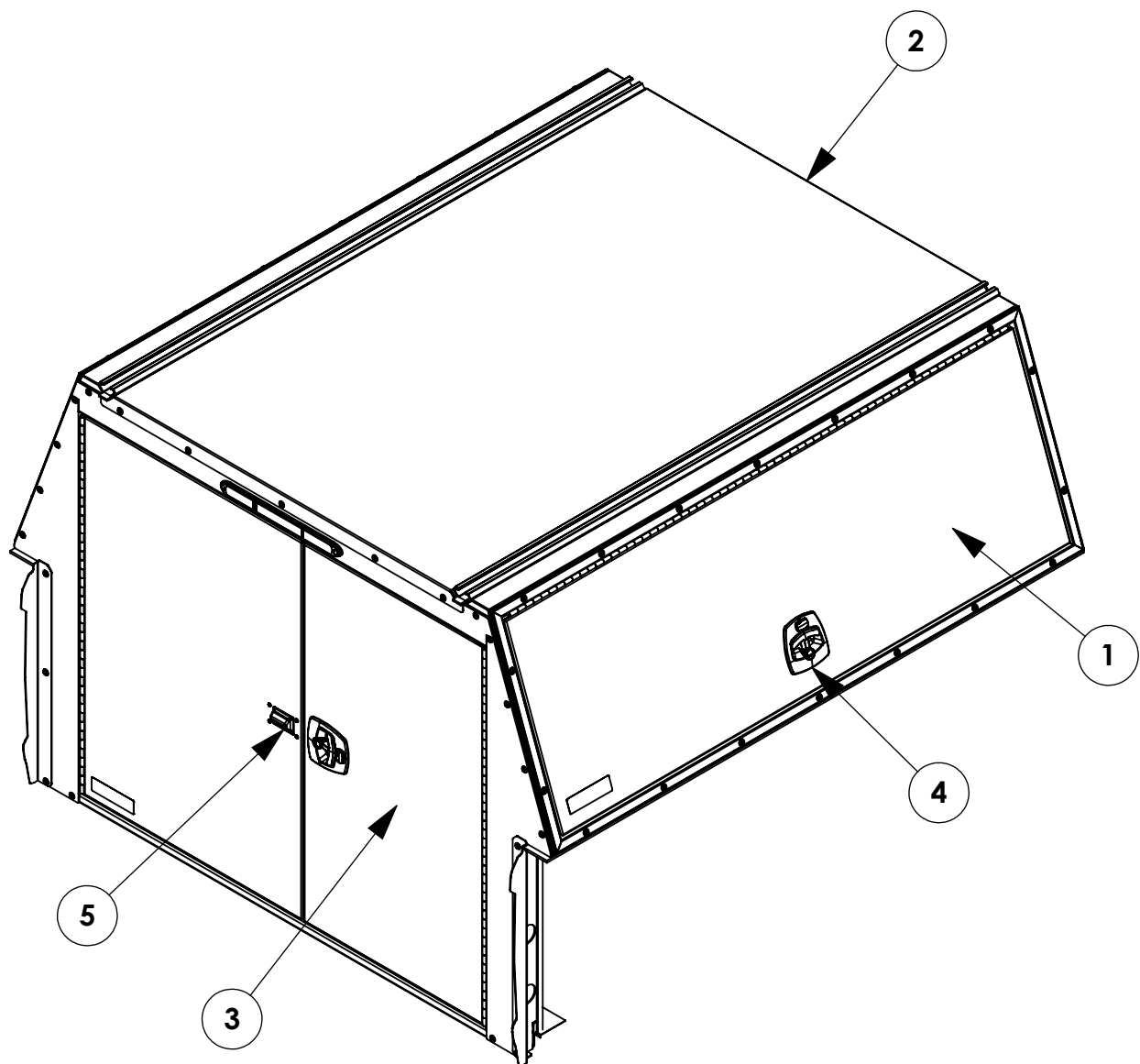
|                                                        |  |        |        |
|--------------------------------------------------------|--|--------|--------|
| INSTR. : 77454                                         |  | PG: 12 | REV: E |
| PART : TFKRAM167KM23W                                  |  |        |        |
| PART • ASM INS, TFK_____KM23W /<br>DESC. • 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:  
**E**

PART  
NUMBER : **TFKRAM175KM23W**

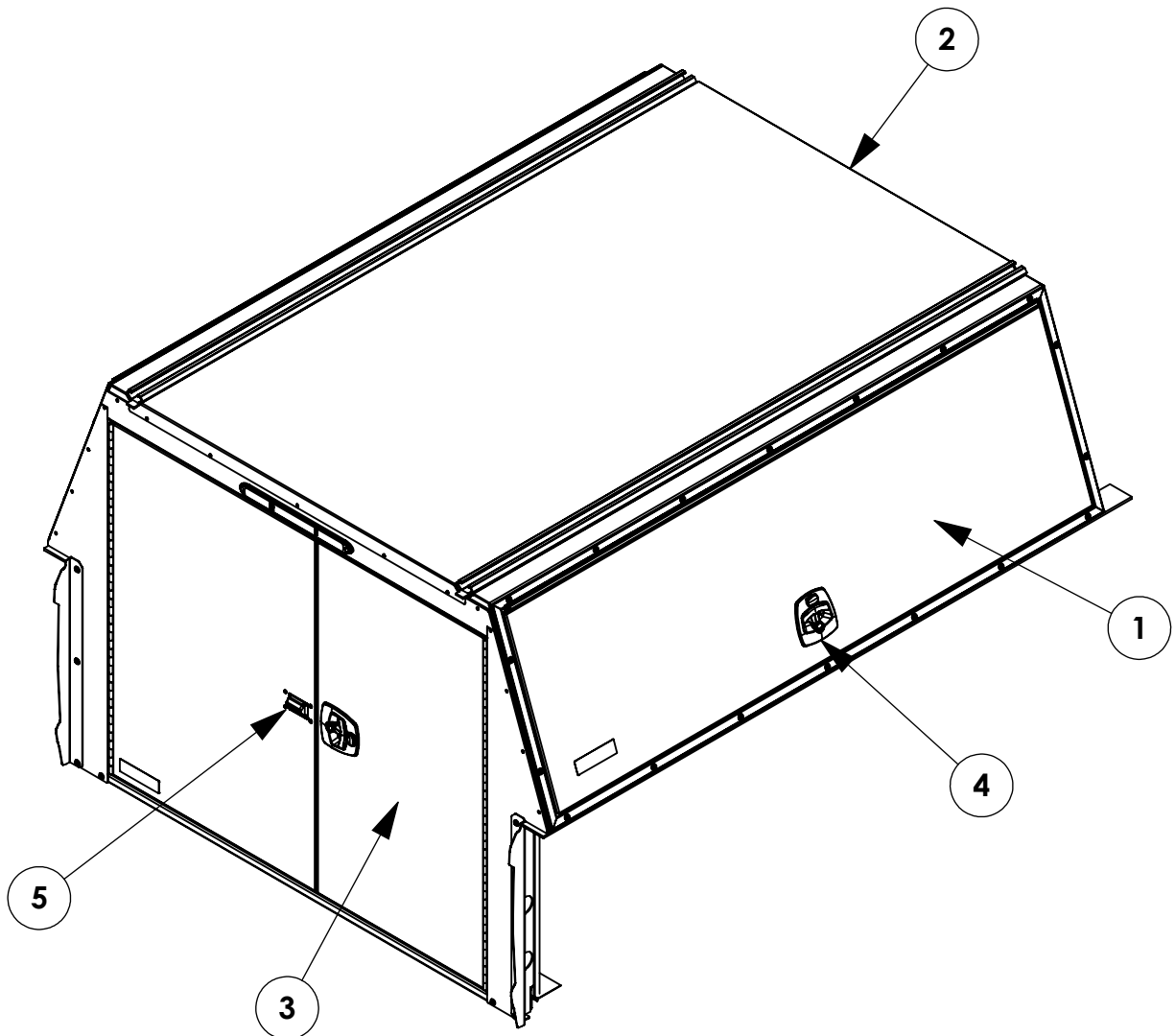
PART • ASM INS, TFK \_\_\_\_\_ KM23W /  
DESC. • JM23W & 26W

**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    |

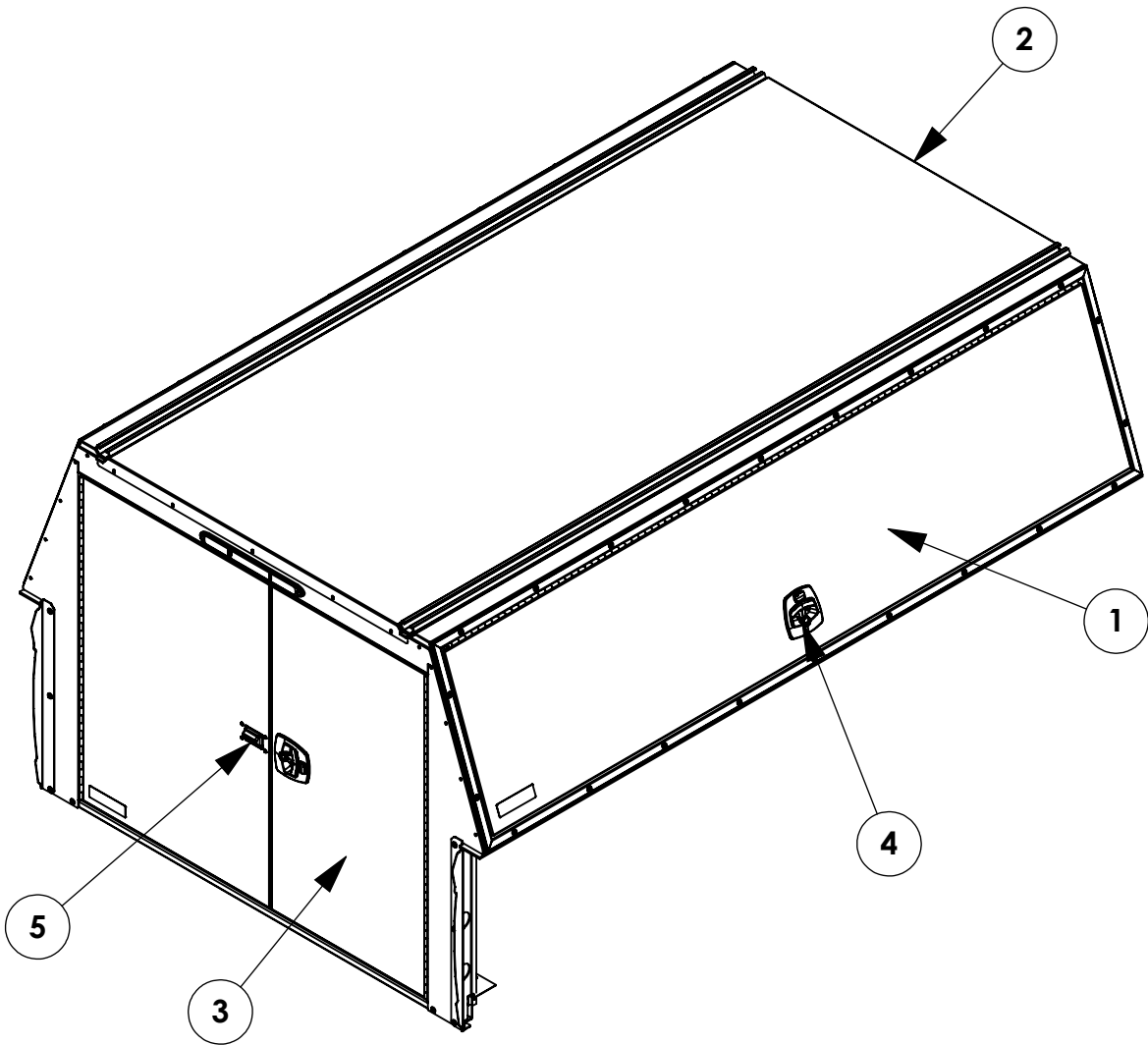
**\* E-LOCK VERSION SWAP TMLHK WITH TELH10**



|                                                        |  |               |               |                      |               |                                  |      |
|--------------------------------------------------------|--|---------------|---------------|----------------------|---------------|----------------------------------|------|
| INSTR. : <b>77454</b>                                  |  | PG: <b>14</b> | REV: <b>E</b> | BOM FOR 96" RAM 1500 |               |                                  |      |
| PART : <b>TFKRAM196KM23W</b>                           |  |               |               | ITEM NO.             | PART NUMBER   | DESCRIPTION                      | QTY. |
| PART : ASM INS, TFK_____KM23W /<br>DESC. : JM23W & 26W |  |               |               | 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 VERSIONS:**  
**SWAP M WITH E IN PART NUMBER**  
**EXAMPLE: TFKRAM196KM23W**  
**BECOMES TFKRAM196KE23W**

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



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

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

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

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

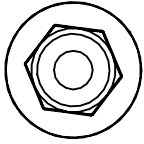
**MOUNTING POINTS MUST HAVE METAL-TO-METAL CONTACT** - USE PROVIDED MOUNTING SPACERS TO ACCOMMODATE FOR VEHICLE FEATURES, CARPET OR SUBFLOORS.

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

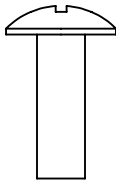
**CHECK SPACER ORIENTATION** - BE SURE THAT THE INDENT IN THE SPACER COVERS THE PLUSNUT HEAD; THIS ENSURES THE MOST METAL-TO-METAL CONTACT AND REDUCES VIBRATION.

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

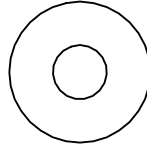
**THRU-BOLT CLEARANCE** - WHEN USING A THRU-BOLT AT ANY MOUNTING LOCATION, BE SURE THAT YOUR HOLE HAS 1/16" CLEARANCE.

**FASTENERS USED****BAG REFERENCE: ALL**

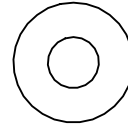
**FAS0055**  
1/4-20 ZP  
HFLNG NLK NUT  
QTY: 29



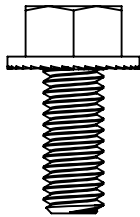
**FAS0062**  
1/4-20 X 0.75 ZP  
THP SCREW  
QTY: 9



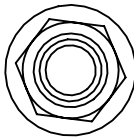
**FAS0067**  
1/4 ZP  
FLAT WASHER  
QTY: 9



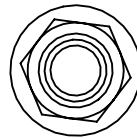
**FAS0234**  
1/4 SST  
FLAT WASHER  
QTY: 44



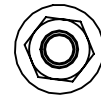
**FAS0438**  
5/16-18 X .75 ZP  
HFNLG SCREW  
QTY: 20



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



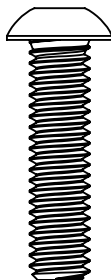
**FAS0861**  
5/16-18 SST  
HFLNG NLK NUT  
QTY: 4



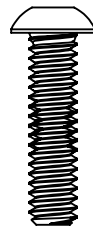
**FAS0917**  
M5 X .8 ZP  
HFLNG NLK NUT  
QTY: 8



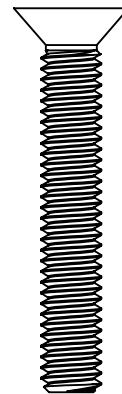
**FAS0918**  
10-24 ZP  
HFLNG NLK NUT  
QTY: 4



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



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



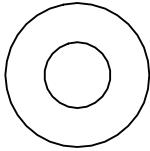
**FAS1279**  
5/16-18 X 2.0 SST  
FHT SCREW  
QTY: 2



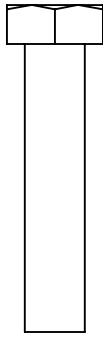
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**FASTENERS USED**

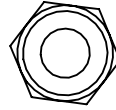
**BAG REFERENCE: ALL**



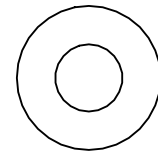
**FAS0164**  
**5/16 ALUM**  
**FLAT WASHER**  
**QTY: 8**



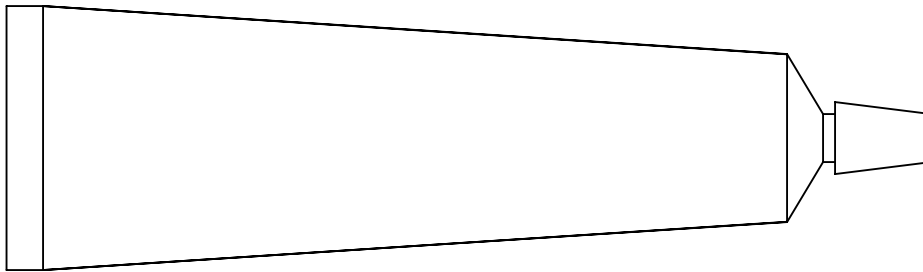
**FAS0242**  
**5/16-18 X 1.5 SST**  
**HH SCREW**  
**QTY: 8**



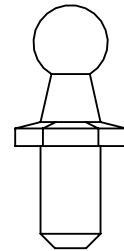
**FAS0248**  
**5/16-18 SST**  
**HH NLK NUT**  
**QTY: 8**



**FAS0552**  
**5/16 SST**  
**FLAT WASHER**  
**QTY: 20**



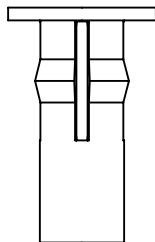
**26618-0**  
**1 OZ TUBE**  
**SILICONE**  
**QTY: 2**



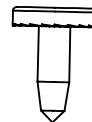
**30015-0**  
**THREADED BALL STUD**  
**QTY: 4**



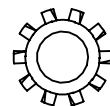
**FAS0711**  
**1/4-20 BK PH**  
**SPRING CLIP**  
**QTY: 4**



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



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

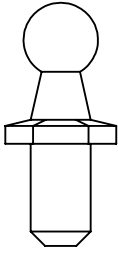


**FAS0066**  
**1/4**  
**EXT TOOTH**  
**LOCK WASHER**  
**QTY: 1**

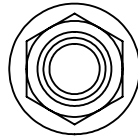
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**FASTENERS USED**

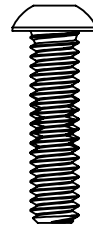
**BAG REFERENCE: BAG77939**



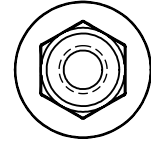
**30015-0  
THREADED BALL STUD  
QTY: 4**



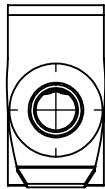
**FAS0861  
NUT, HEX NLK FLG,  
5/16-18, SS  
QTY: 4**



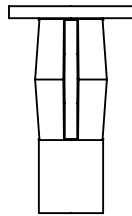
**FAS0920  
SCREW, BHCS,  
1/4-20X1.0, SS  
QTY: 6**



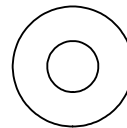
**FAS0055  
NUT, HEX NLK FLG,  
1/4-20, ZP  
QTY: 12**



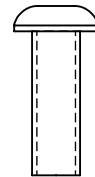
**FAS0711  
SPRING, CLIP,  
1/4-20, BK PH  
QTY: 4**



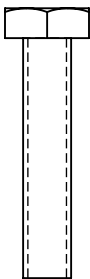
**FAS0052  
PLUSNUT,  
1/4-20, PB DC  
QTY: 2**



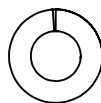
**FAS0234  
WASHER, FLAT,  
1/4, SST  
QTY: 18**



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



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



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

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PAGE:

**22**

***FASTENERS USED***

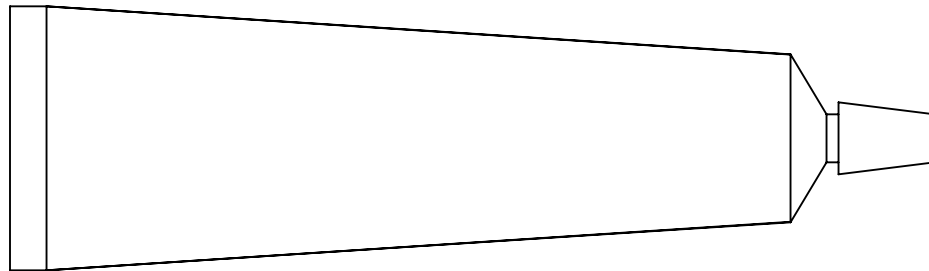
**BAG REFERENCE: BAG76637**



**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**

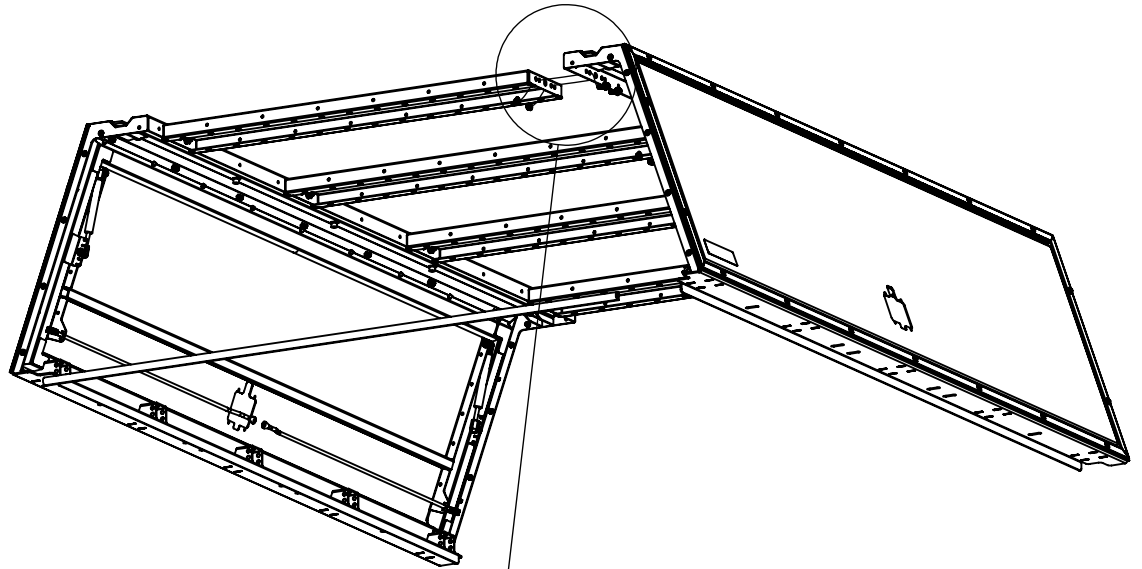
**INTENTIONALLY LEFT BLANK**

**STEP 1 - ASSEMBLE BODY FRAME: SIDES AND CROSSBOWS**

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

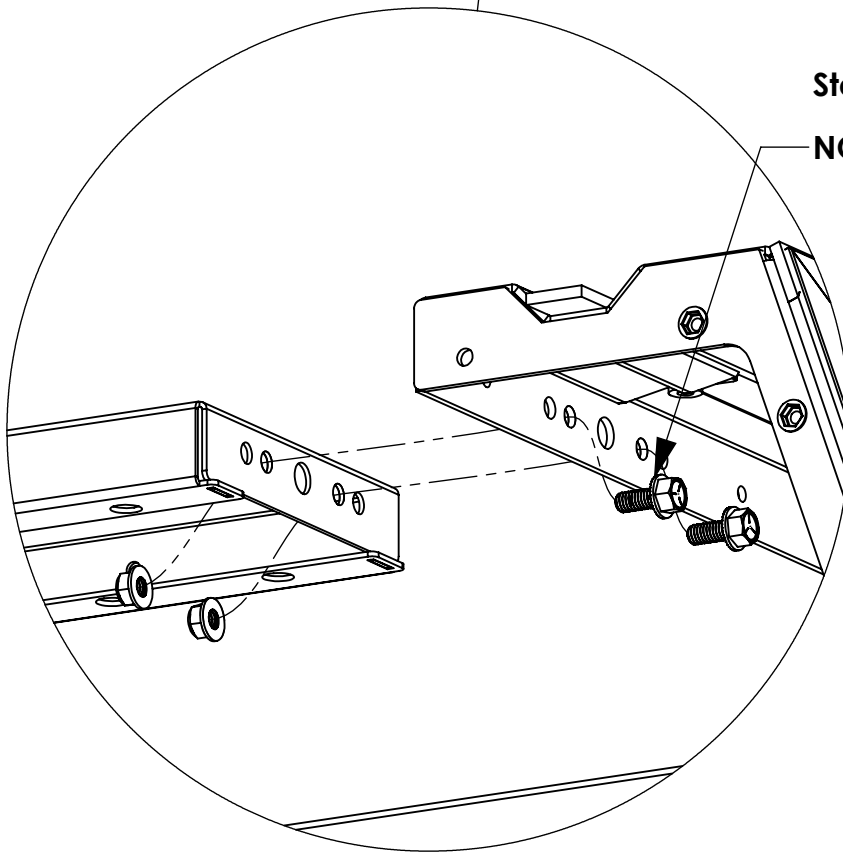
**Step 1.2**  
**OPEN TOPPER**  
**ROOF KIT**  
**[TRK7823W]**

**Step 1.3**  
**FULLY TIGHTEN**  
**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

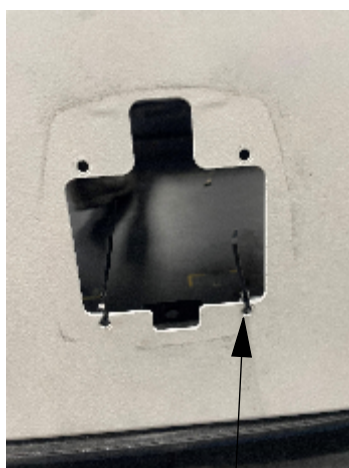
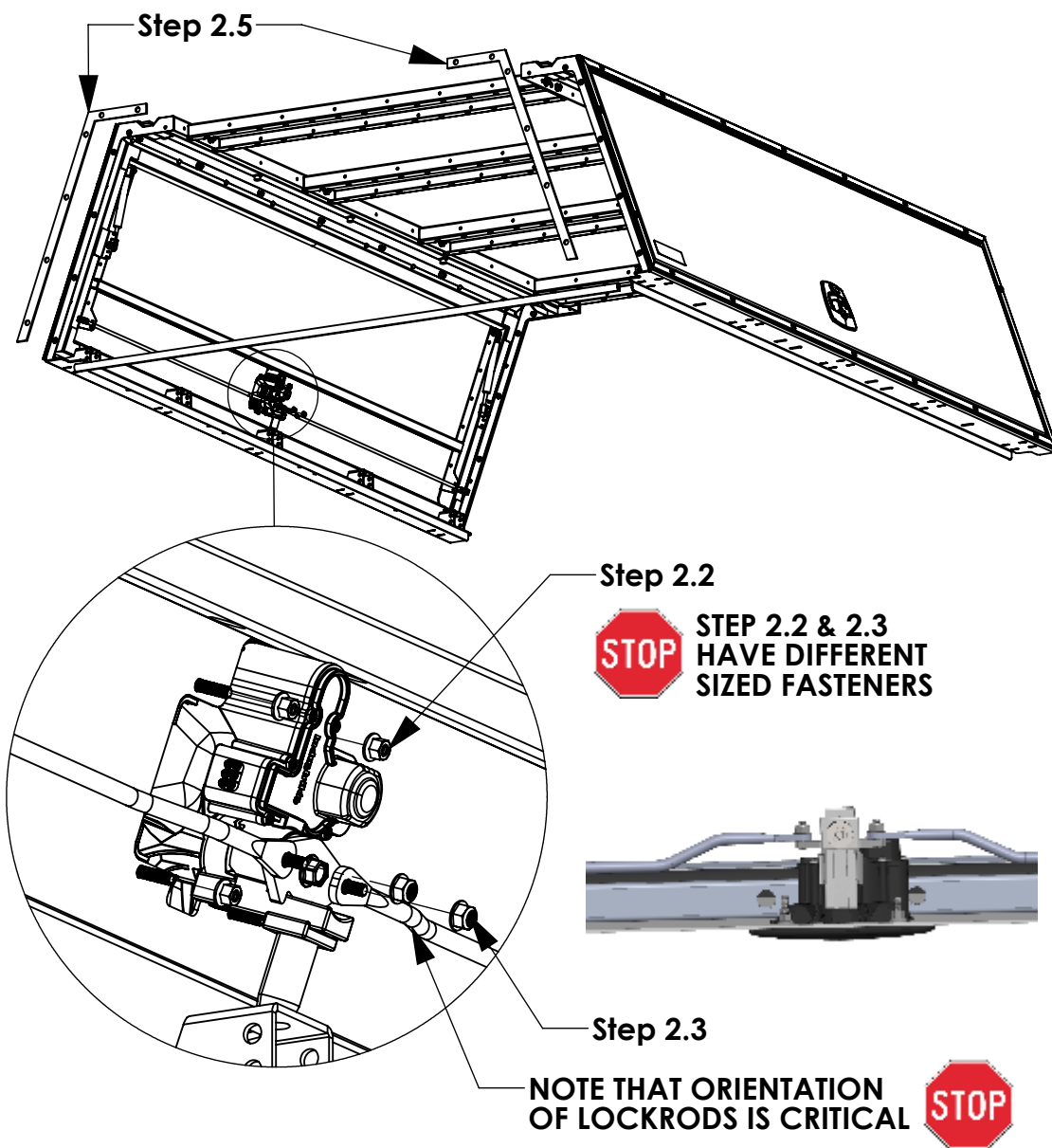
**DO NOT**  
**OVERTIGHTEN**

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

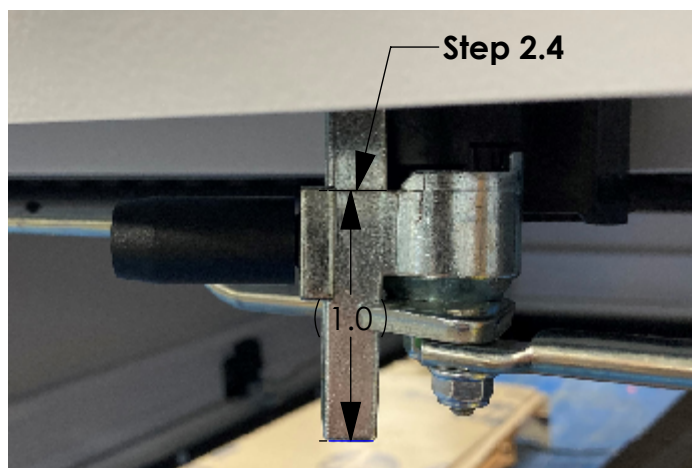
**FULLY TIGHTEN**  
**4mm ALLEN**  
(2 PLACES)

**Step 2.5**  
APPLY FOAM  
SEALS TO ALL  
CORNERS

**USE HOLES IN**  
**SEAL TO ALIGN**  
**MATERIAL**



Step 2.1



**STEP 3 - ATTACH FRONT PANEL**

**Step 3.1**  
**OPEN TOPPER**  
**CLOSURE KIT**  
**[TCK78HM23W]**

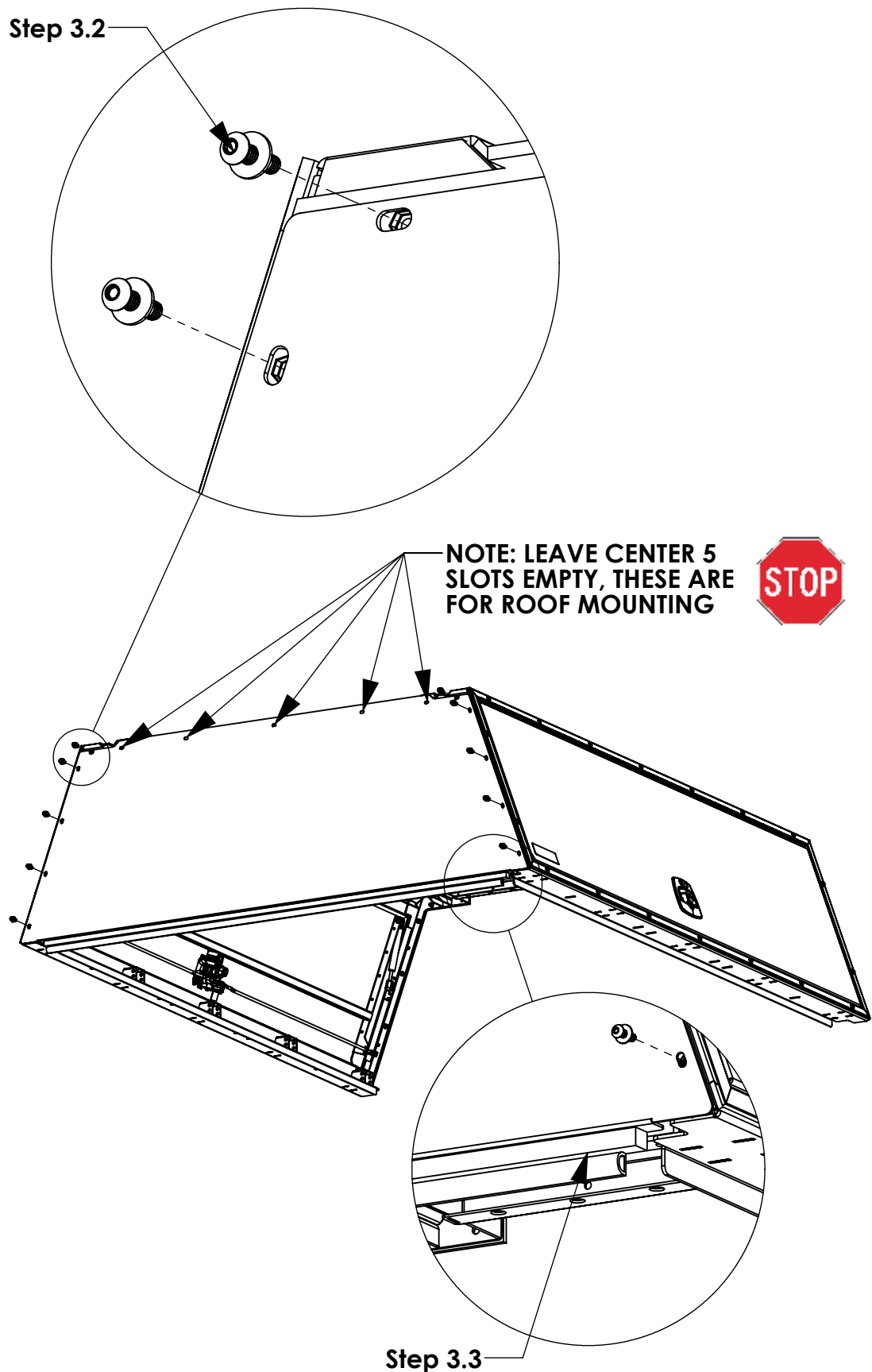
**Step 3.2**  
**ATTACH FRONT**  
**PANEL**

**HAND TIGHTEN**  
**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.**

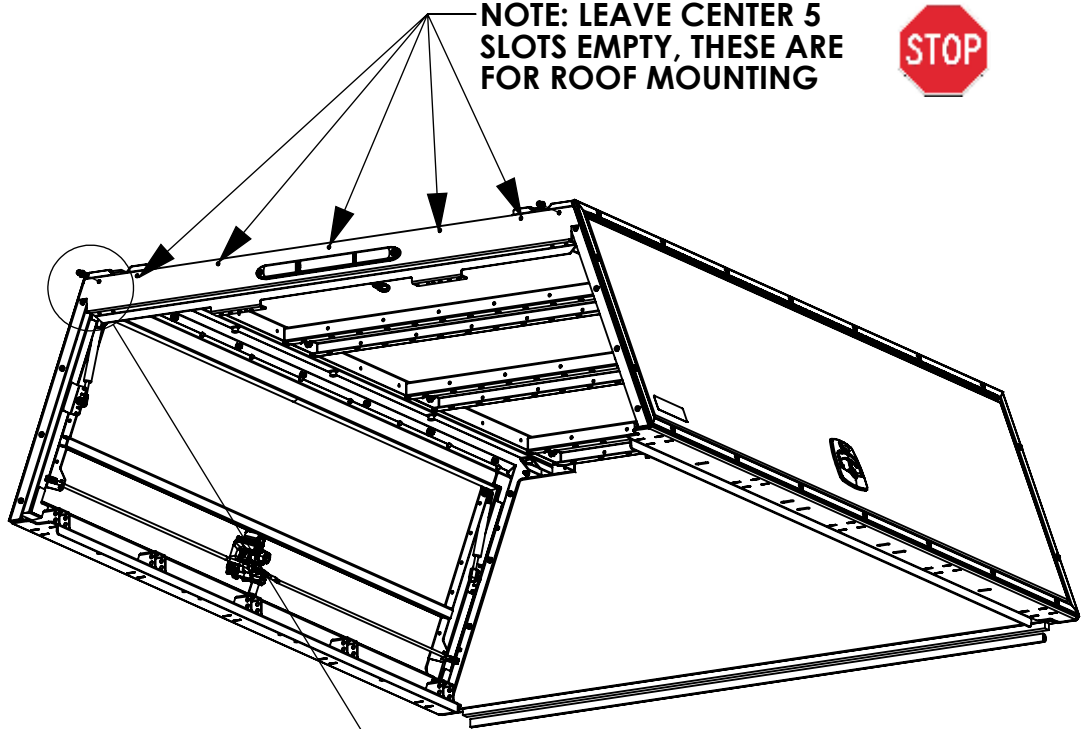
**TRIM OFF EXTRA,**  
**IF NECESSARY.**



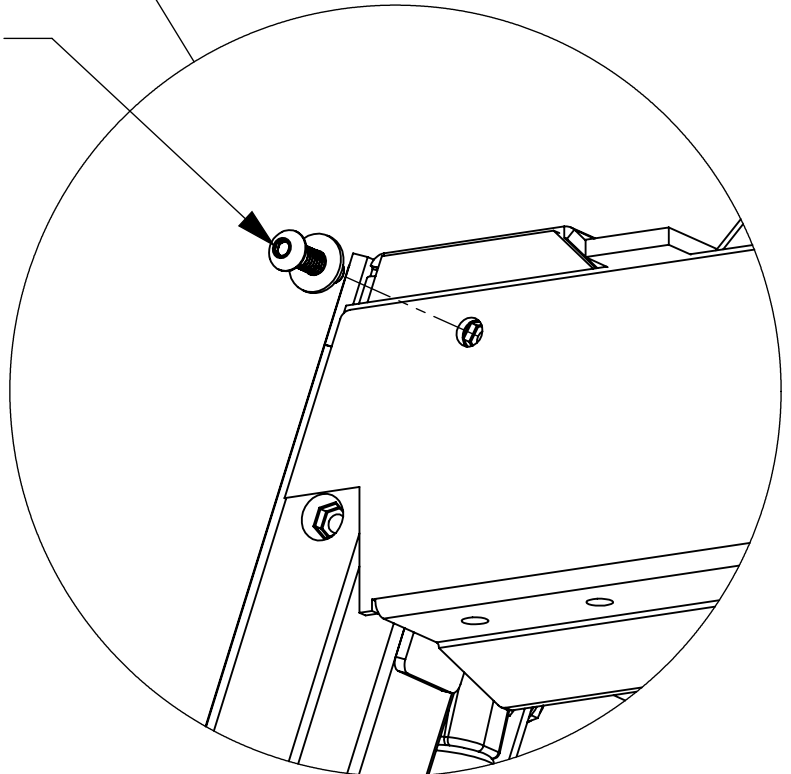
**STEP 4 - ATTACH TOP BRACKET ASSEMBLY****Step 4  
ATTACH TOP  
BRACKET ASSM**

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

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



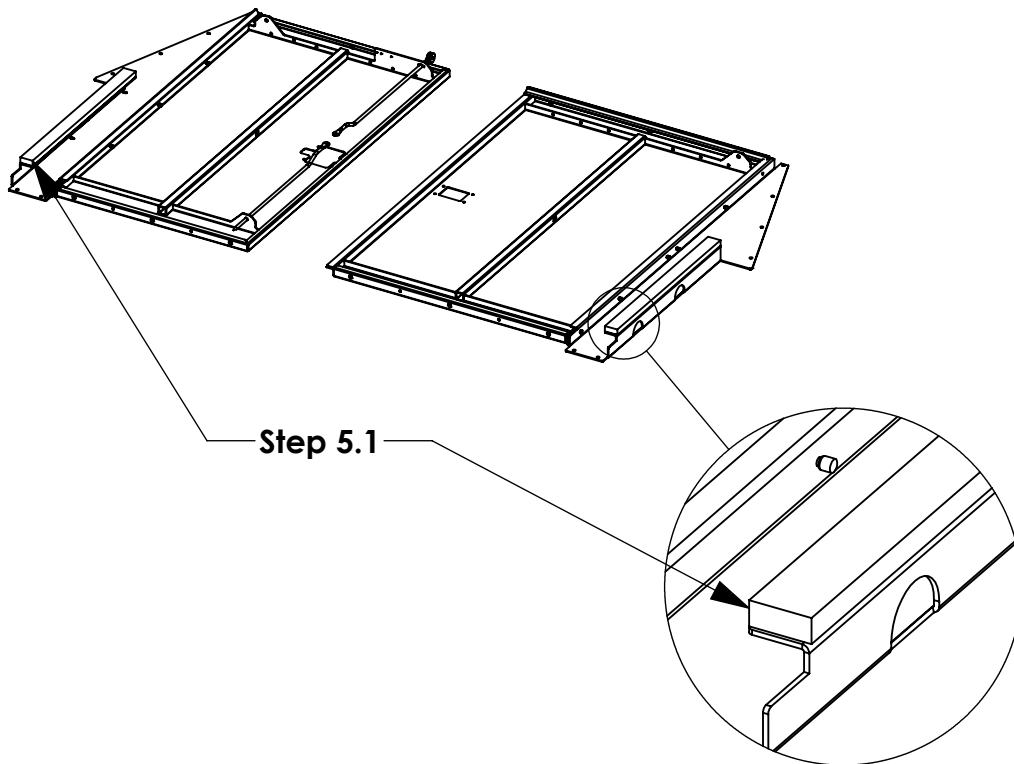
**Step 4**



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

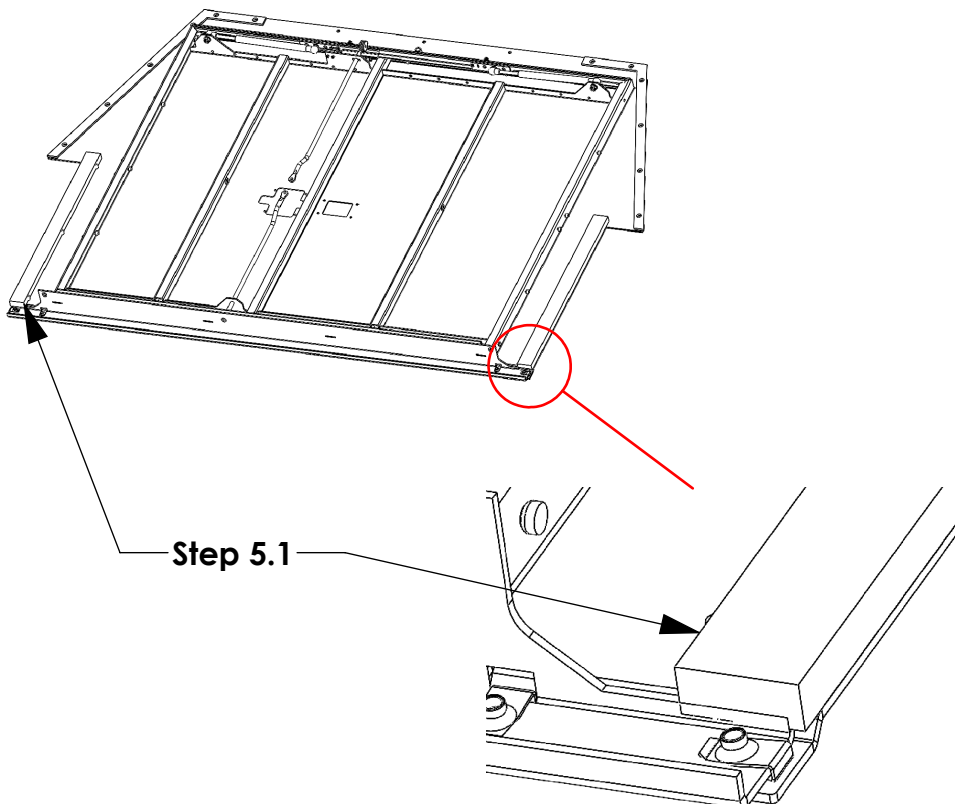
**Step 5.1**  
**ALIGN (2)77757**  
**FOAM AT TOP**  
**OF FLANGE OF**  
**BARN DOOR DS**  
**AND PS**  
**ASSEMBLIES**  
**AND PRESS**  
**FIRMLY TO**  
**ATTACH**

**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**

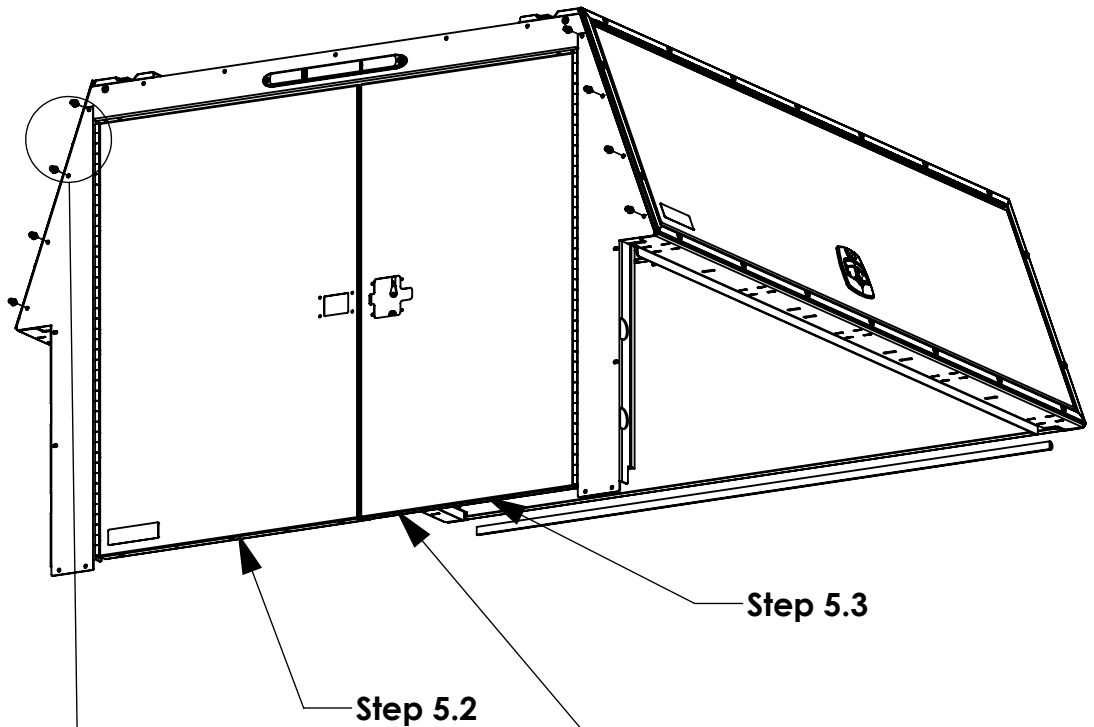


**STEP 5 - ATTACH BARN DOOR DS AND PS ASSEMBLIES CONT'D****Step 5.2  
ATTACH DS  
ASSM**

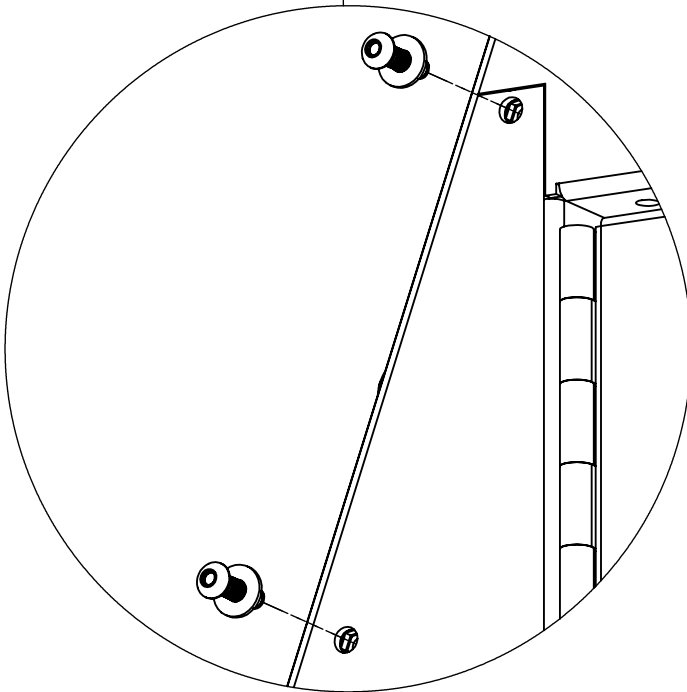
**HAND TIGHTEN**  
FAS0234,  
FAS0920  
(4 PLACES)  
5/32" ALLEN

**Step 5.3  
ATTACH PS  
ASSM**

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



**NOTE:**  
BEFORE TIGHTENING  
MAKE SURE BOTH DOORS  
ARE SQUARE.



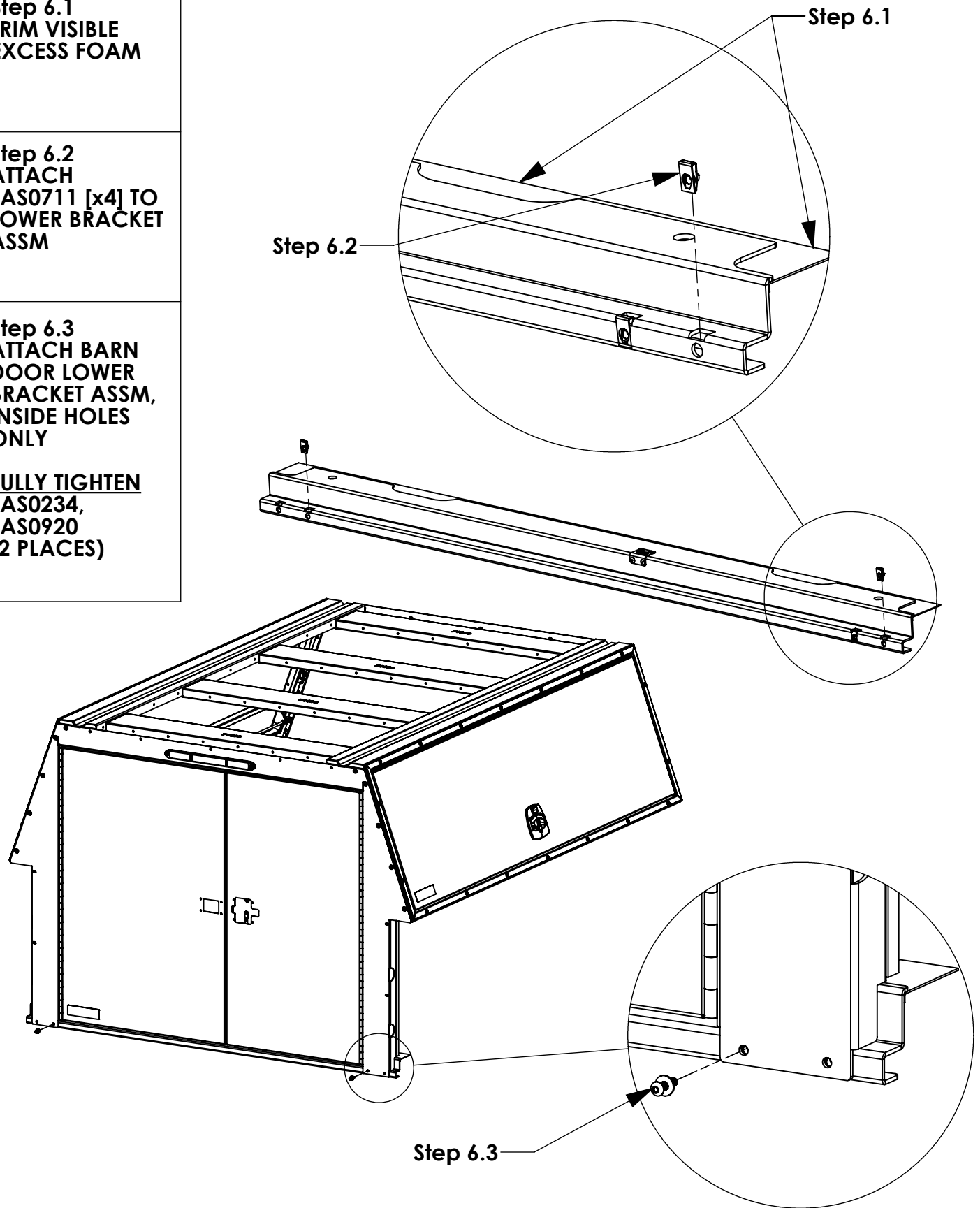
**STEP 6 - ATTACH BARN DOOR LOWER BRACKET ASSEMBLY**

**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**

**FULLY TIGHTEN**  
**FAS0234,**  
**FAS0920**  
**(2 PLACES)**



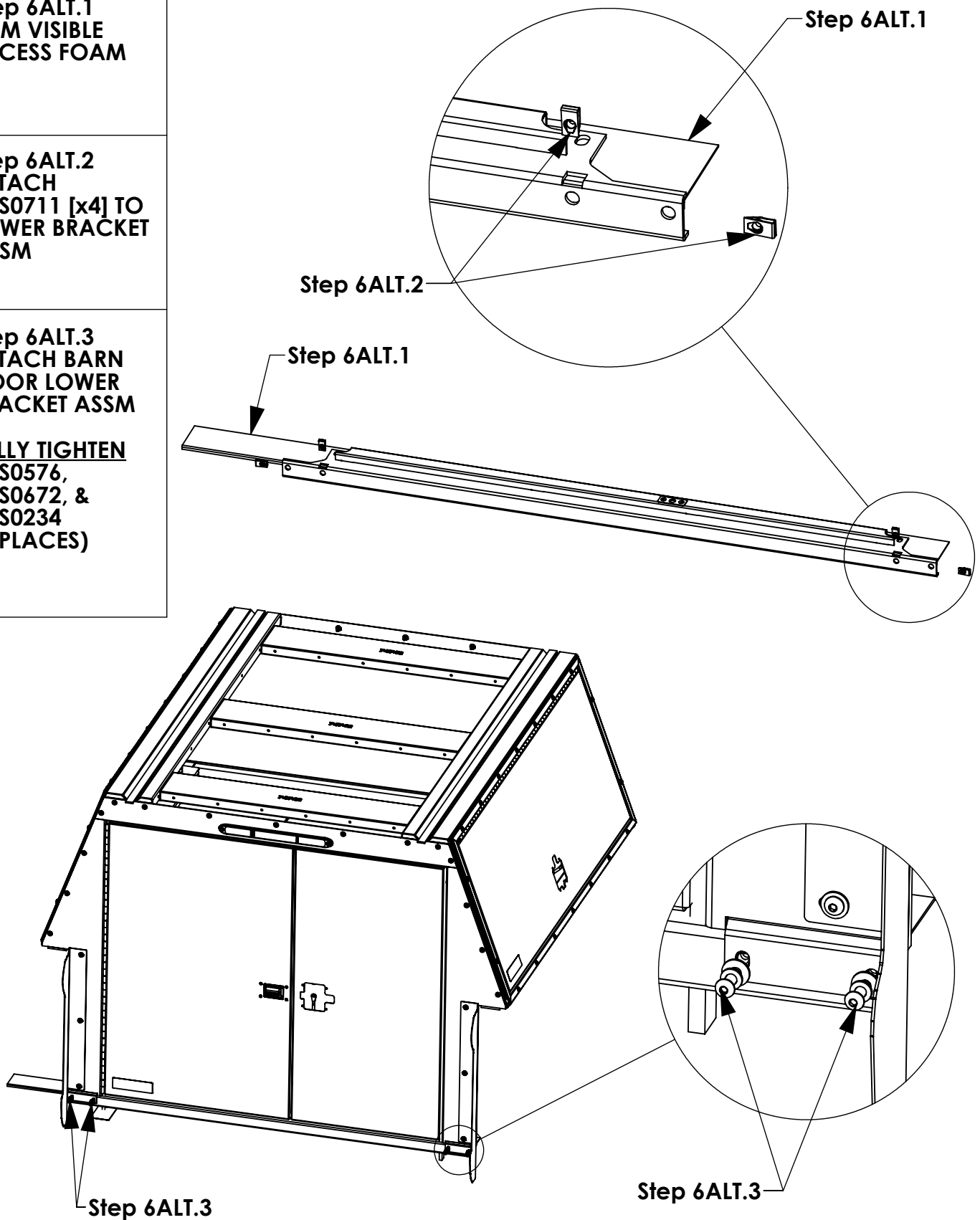
**STEP 6ALT - ATTACH BARN DOOR LOWER BRACKET ASSEMBLY  
(ALTERNATE FOR COLORADO)**

**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**

**FULLY TIGHTEN  
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**

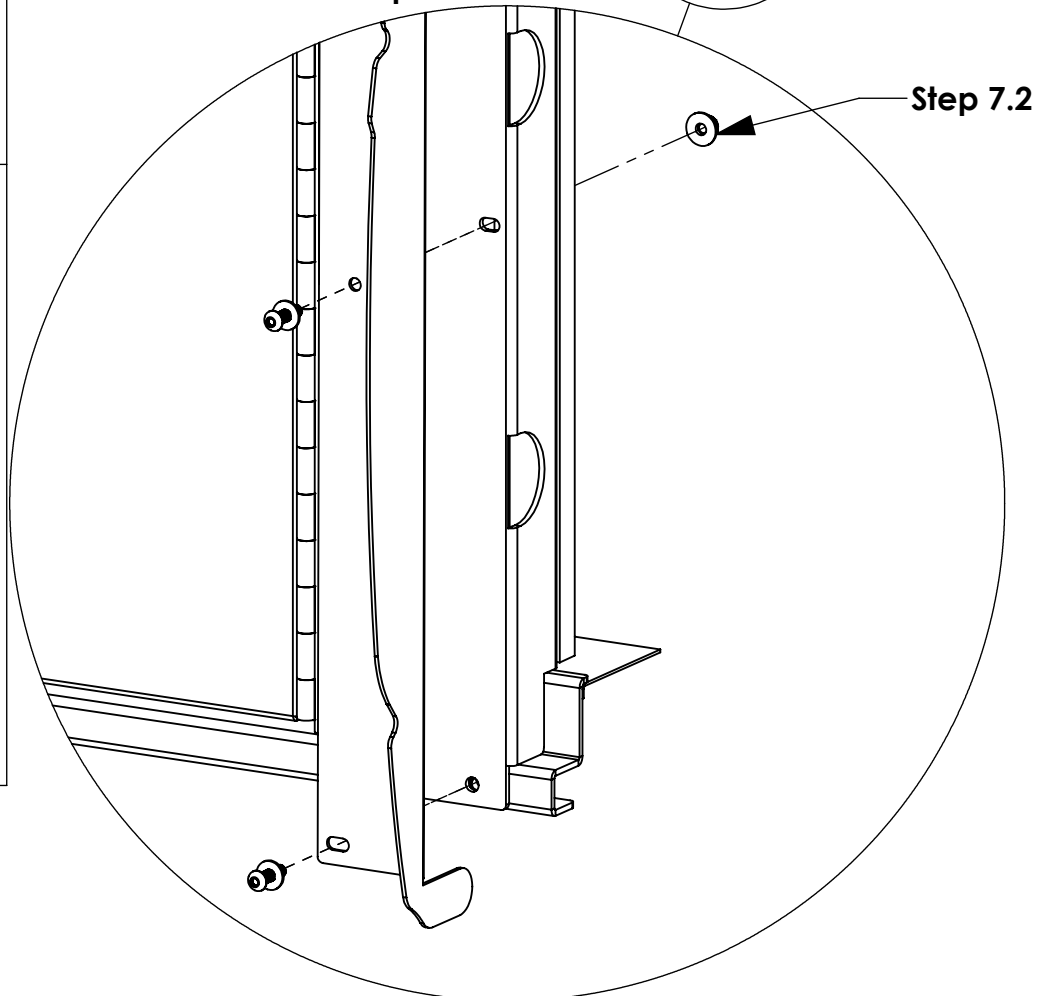
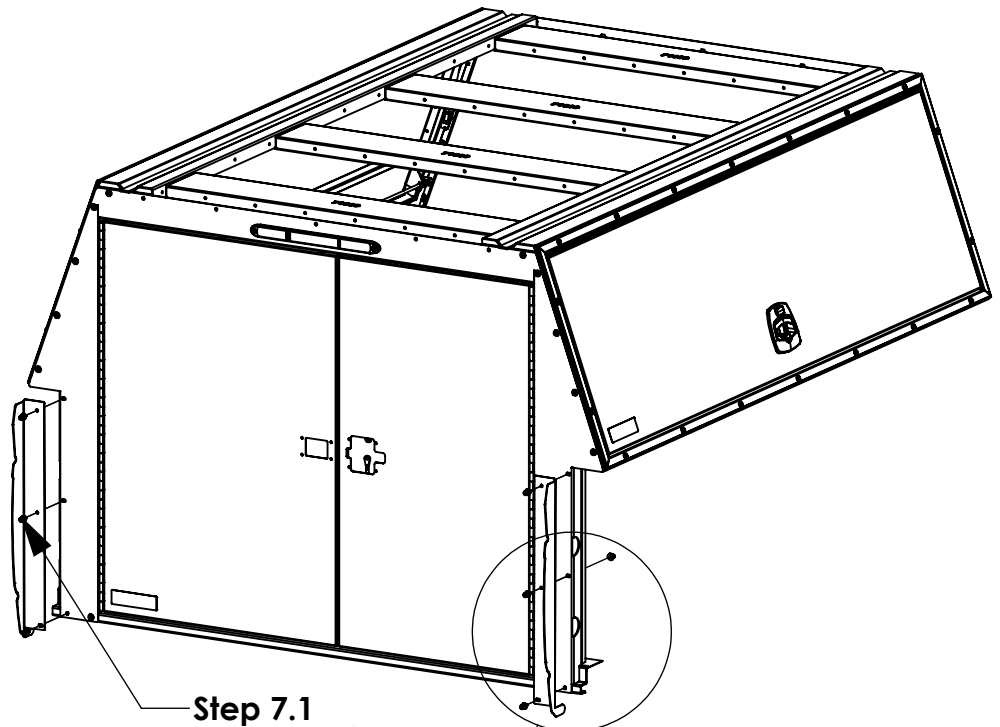
**Step 7.2  
ATTACH PS BED  
FILLER**

**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

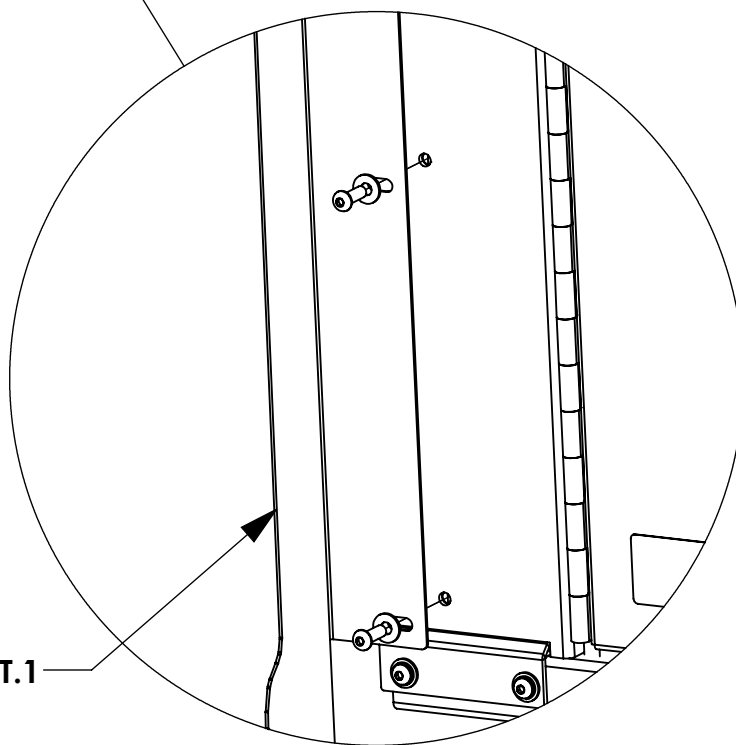
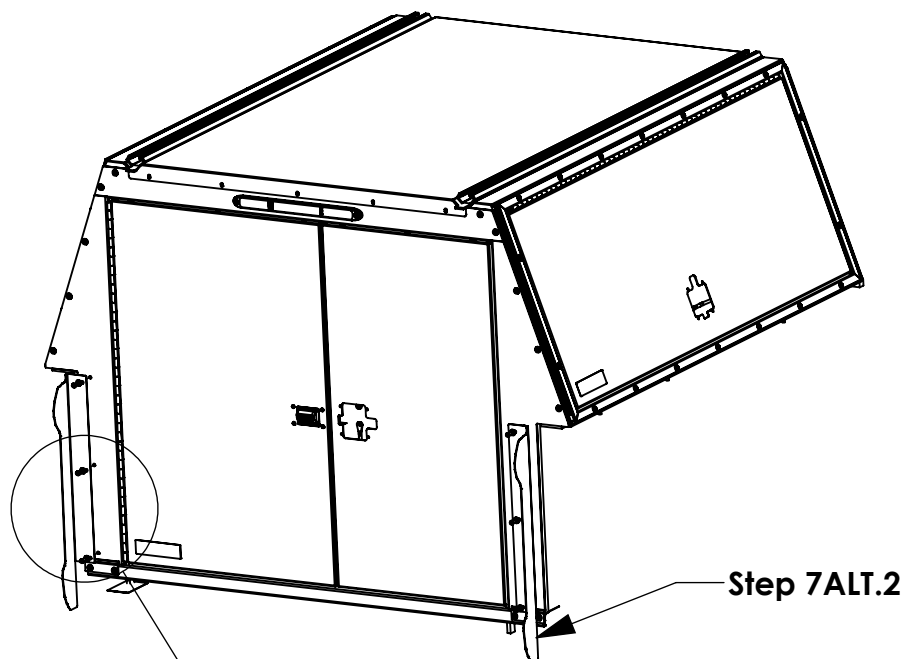
### Step 7ALT.2 ATTACH PS BED FILLER

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 7ALT.1

**STEP 8 - ATTACH BARN DOOR HANDLE**

**Step 8.1**  
CUT ZIP TIES  
THAT ARE  
HOLDING  
LOCKRODS IN  
PLACE

**!! CAUTION !!**  
DOORS MAY  
TRY TO OPEN

**Step 8.2**  
ATTACH HANDLE  
TO DOOR

**FULLY TIGHTEN**  
**FAS0917**  
(4 PER DOOR)  
10mm SOCKET

**DO NOT**  
**OVERTIGHTEN**

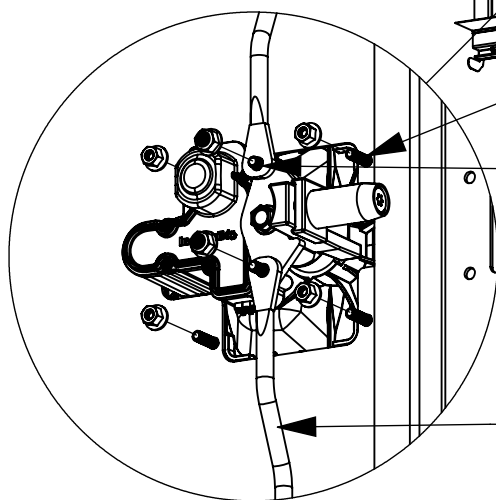
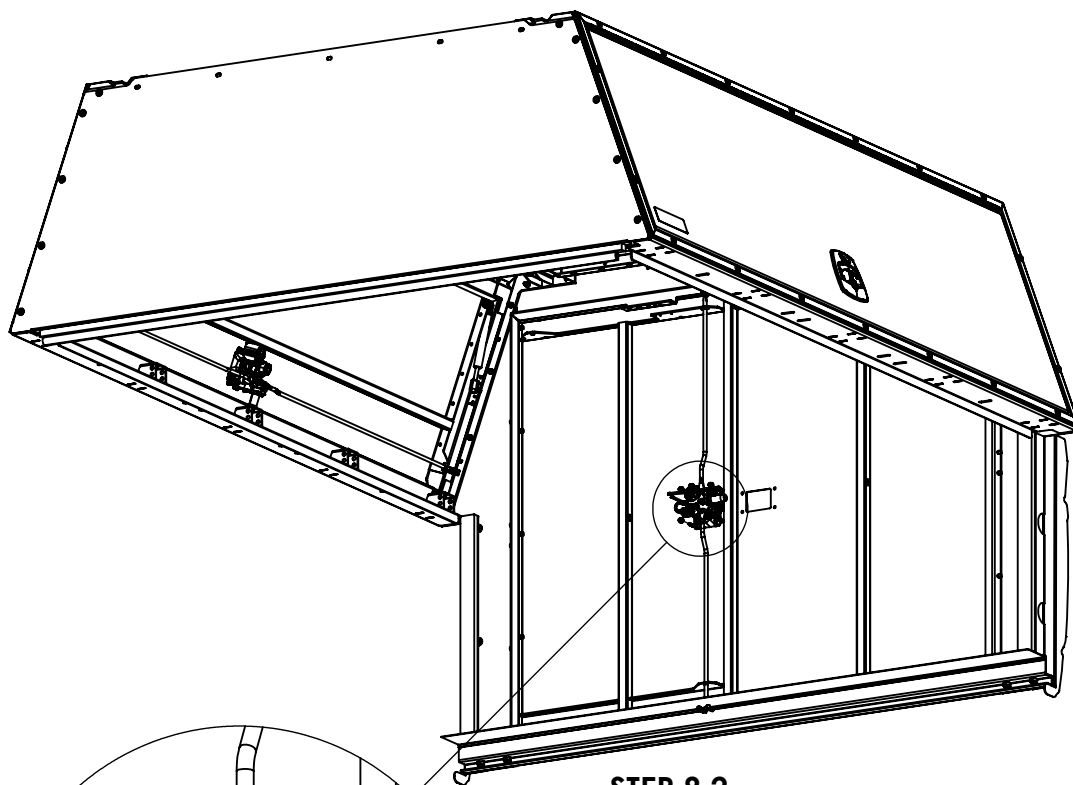
**Step 8.3**  
ATTACH  
LOCKRODS TO  
HANDLE

**FULLY TIGHTEN**  
**FAS0918**  
(2 PLACES)  
8mm SOCKET

**DO NOT**  
**OVERTIGHTEN**

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

**FULLY TIGHTEN**  
**4mm ALLEN**  
(2 PLACES)



STEP 8.2

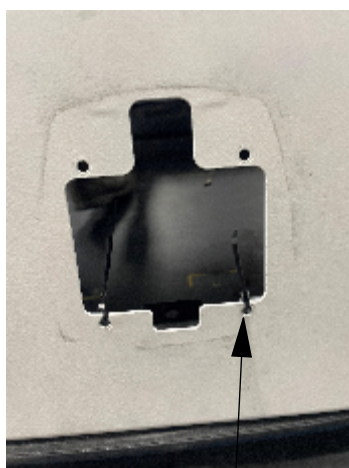
STEP 8.3



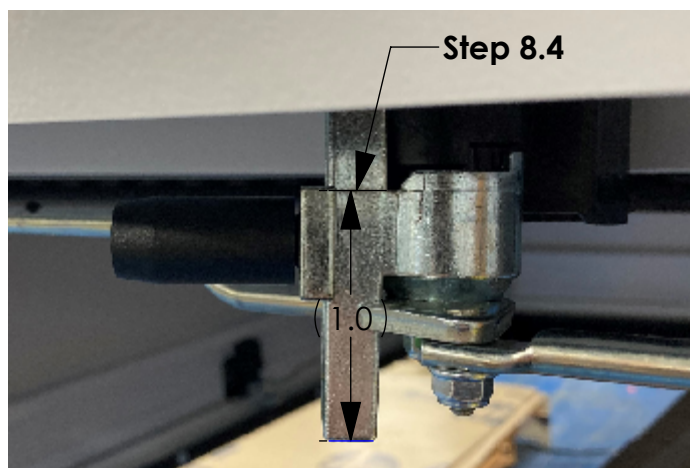
STEP 8.2 & 8.3  
HAVE DIFFERENT  
SIZED FASTENERS



NOTE THAT ORIENTATION  
OF LOCKRODS IS CRITICAL



Step 8.1



**STEP 9 - ATTACH ROOF AND ROOF RAILS**

**Step 9.1**  
**SET ROOF PANEL**  
**ON TOPPER BODY**



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

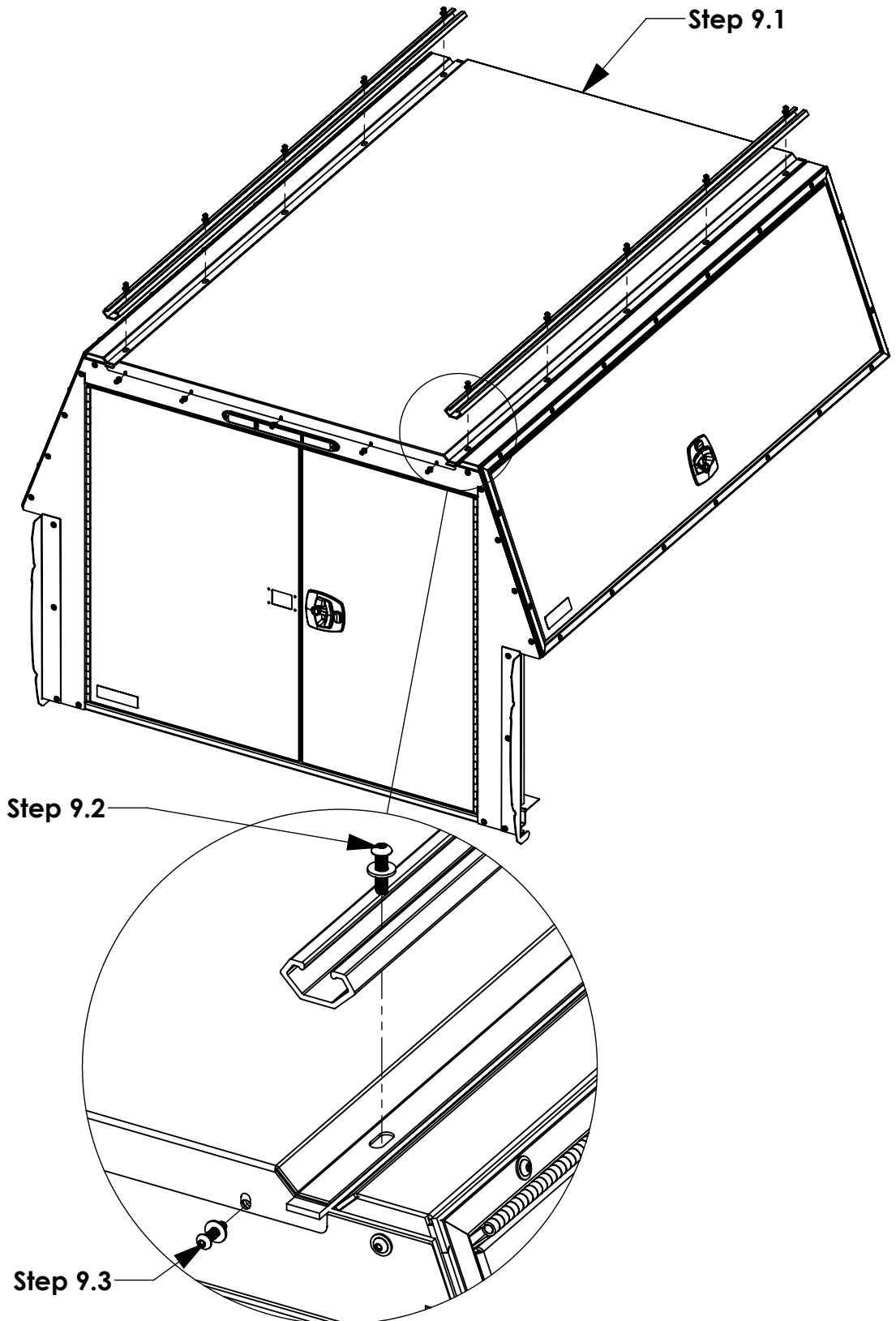
**Step 9.2**  
**ATTACH**  
**MOUNTING RAILS**  
**TO TOPPER BODY.**

**USE AN**  
**ALIGNMENT**  
**PUNCH TO POKE**  
**THROUGH SEALS**

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

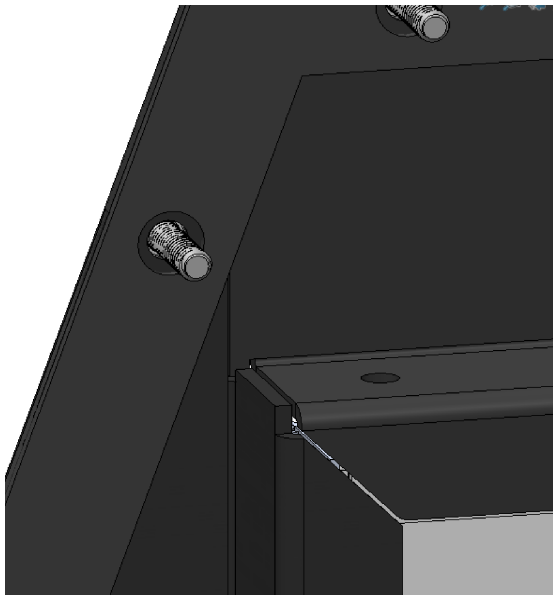
**Step 9.3**  
**ATTACH ROOF**  
**TO TOPPER**  
**BODY.**

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

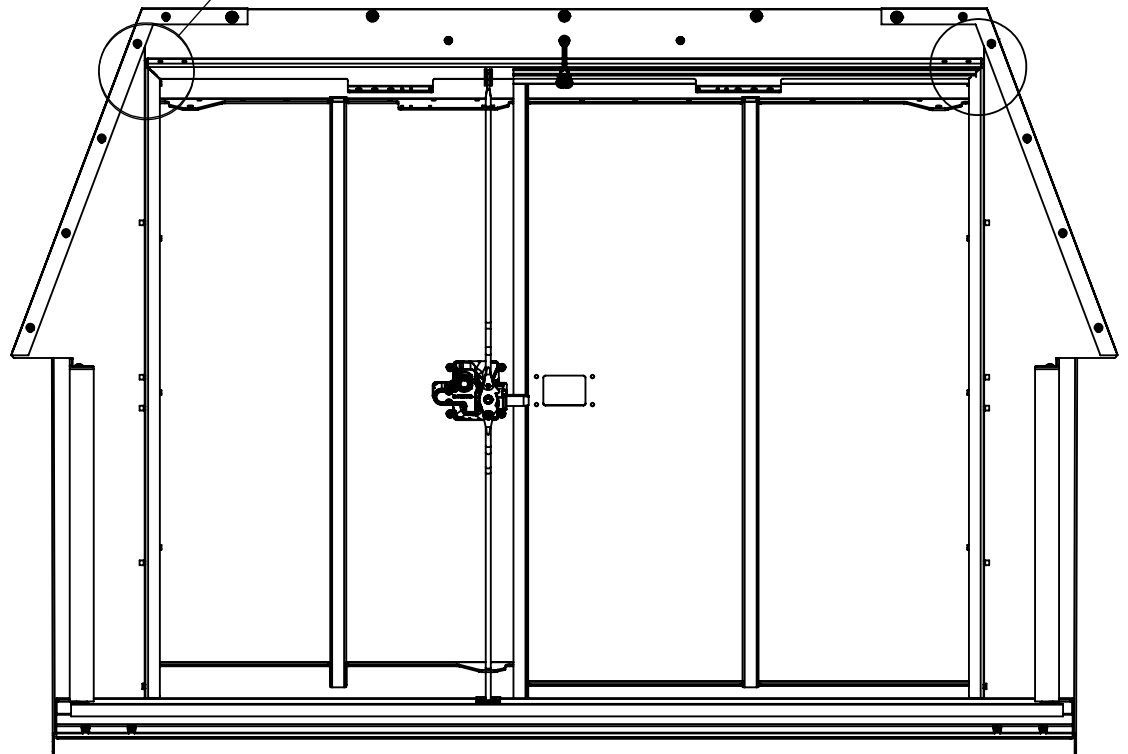
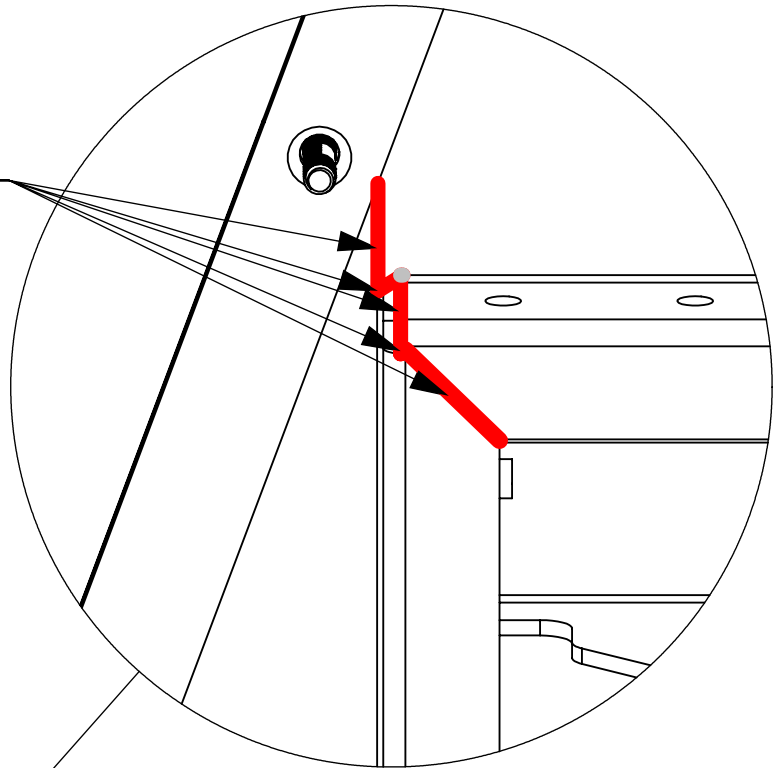


**STEP 10 - SILICONE JOINTS**

**Step 10**  
**SILICONE ALONG**  
**SEAM AS SHOWN,**  
**BOTH ENDS**



SILICONE

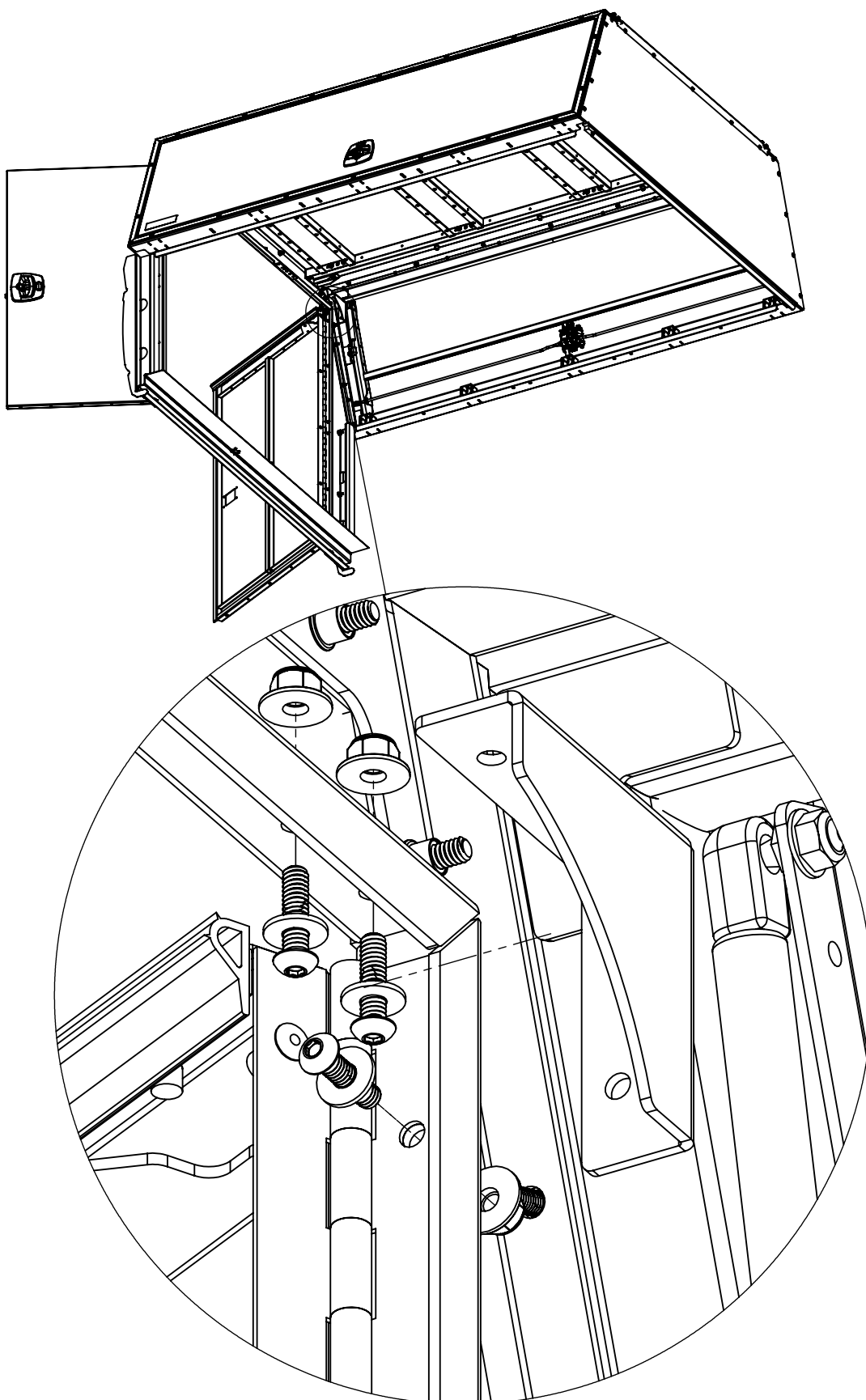


**STEP 11 - ATTACH CORNER GUSSETS**

**Step 11**  
**ATTACH CORNER**  
**GUSSETS, BOTH**  
**ENDS**

**FULLY TIGHTEN**  
**FAS0920**  
**FAS0234**  
**FAS0055**

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



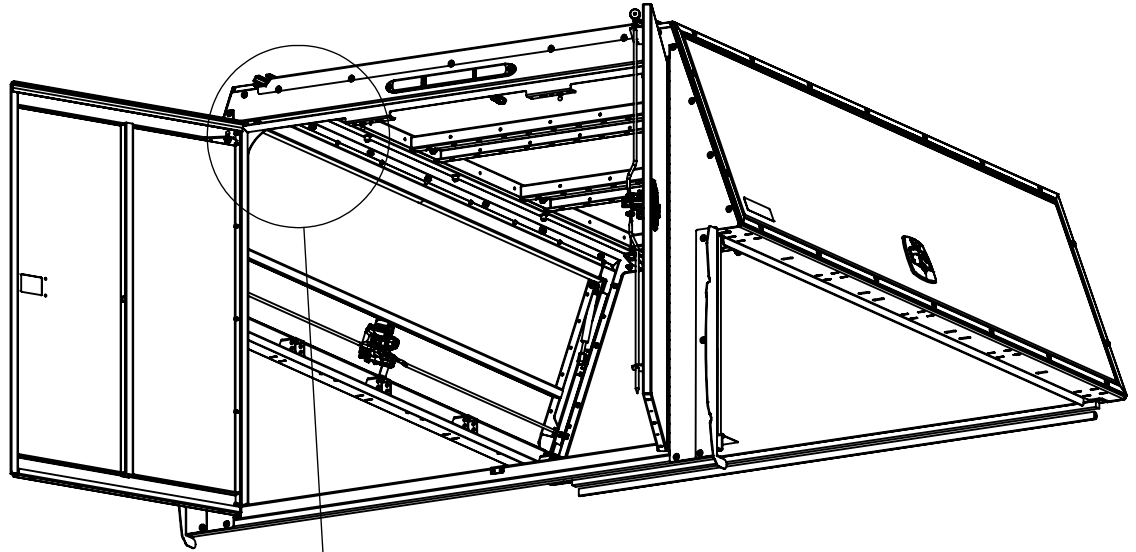
## STEP 12 - INSTALL BALL STUDS

### Step 12 INSTALL BALL STUDS

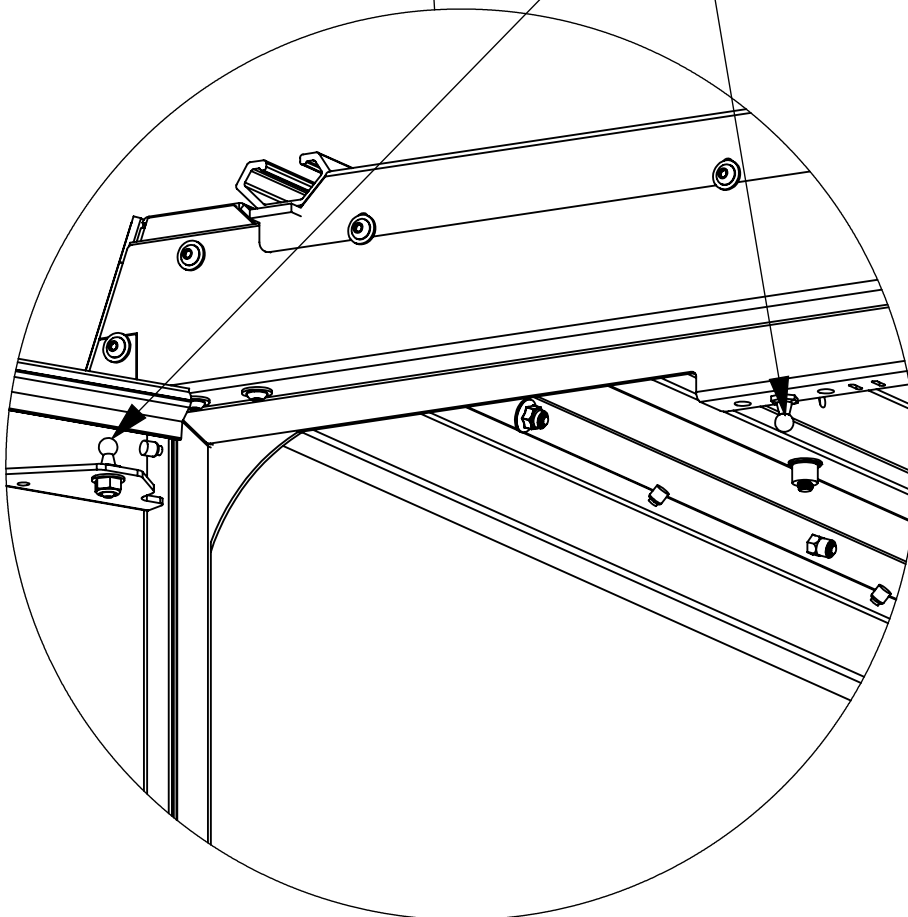
**FULLY TIGHTEN**  
**30015-0**  
**FAS0861**

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

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



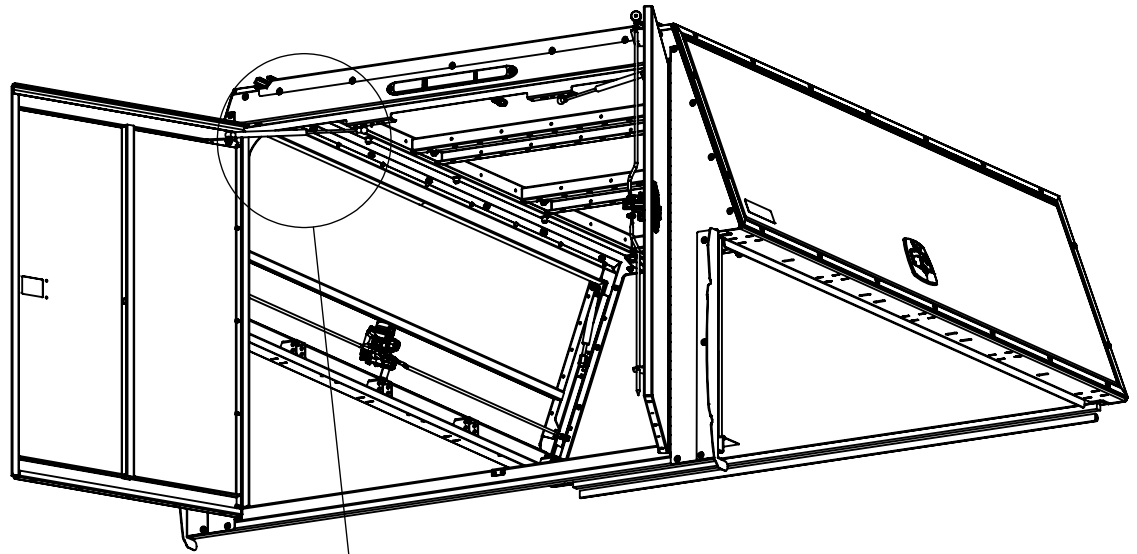
**BALL STUD UPWARD ON DOOR,  
DOWNWARD ON FRAME**



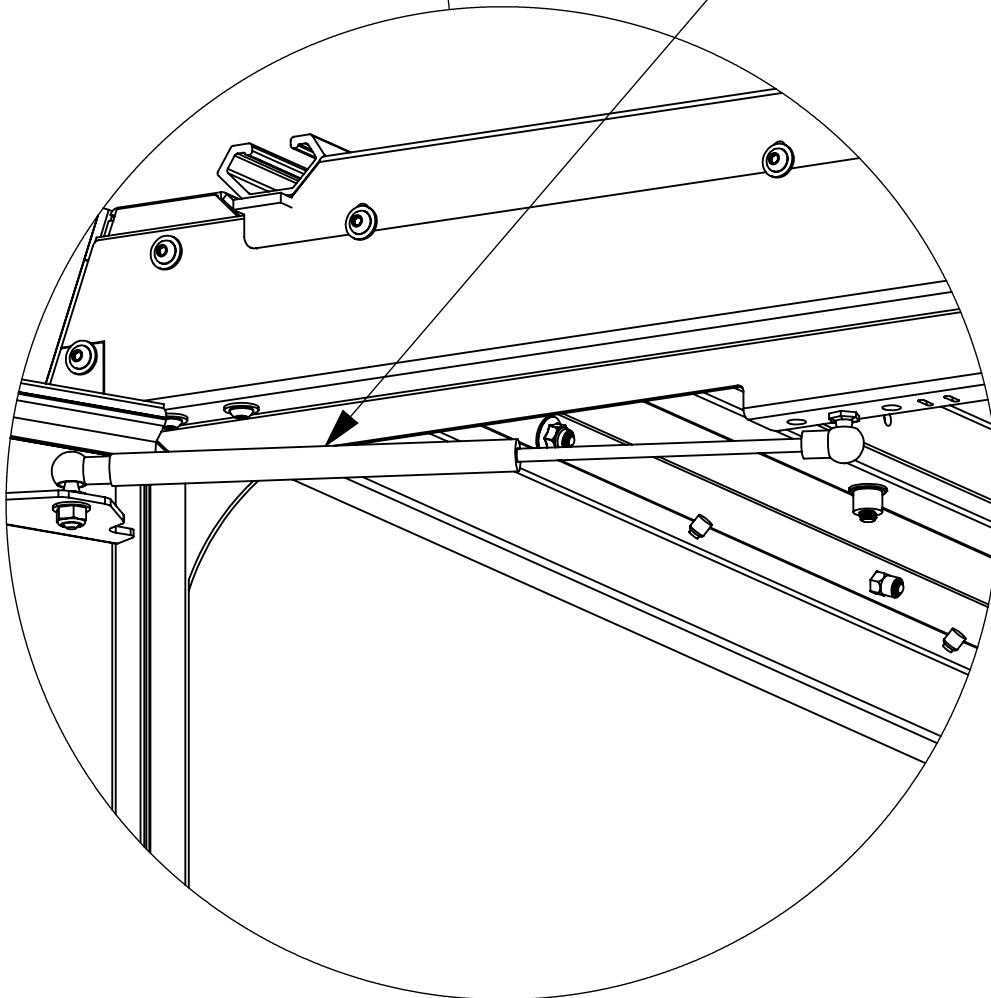
## **STEP 13 - INSTALL SHOCKS**

### **Step 13 INSTALL SHOCKS**

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



**BARREL TO DOOR**



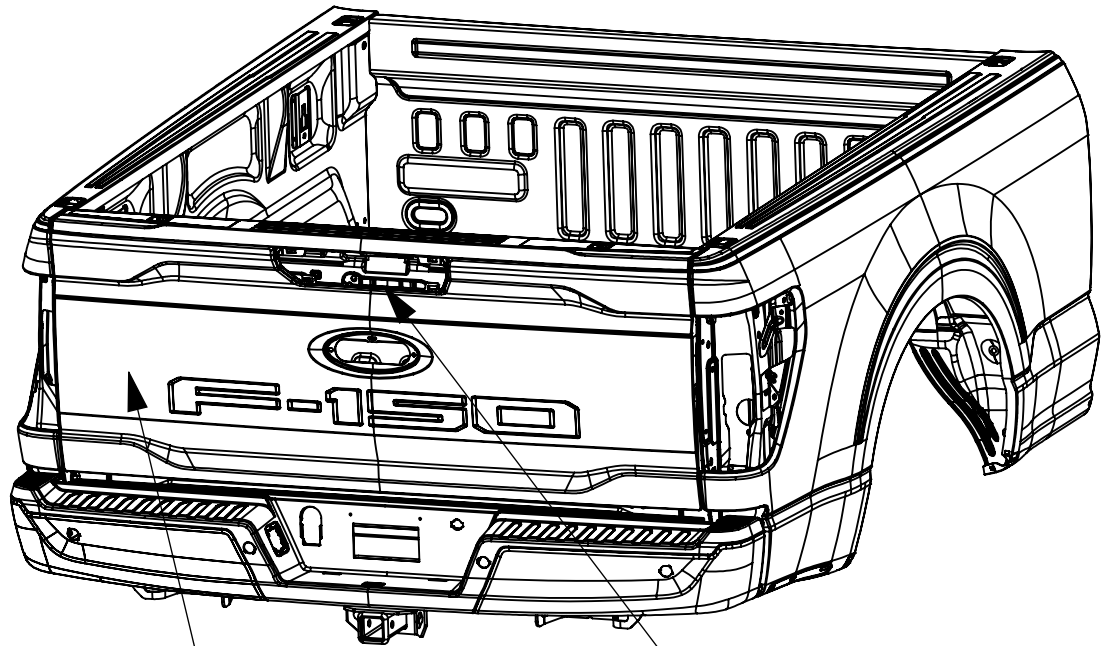
**STEP 14 - REMOVE BACKUP CAMERA AND TAILGATE**

**Step 14.1**  
**REMOVE BACKUP**  
**CAMERA PER**  
**77217**  
**RELOCATION**  
**INSTRUCTIONS**  
**77963**

**Step 14.2**  
**REMOVE**  
**TAILGATE PER**  
**OEM GUIDLINES**



**NOTE: CONTACT**  
**CUSTOMER FOR**  
**DISPOSITION OF**  
**REMOVED**  
**TAILGATE**



Step 14.2

Step 14.1



## STEP 15 - 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 PLACED AT THE INSIDE EDGE OF THE BED TO LOCATE TOPPER PROPERLY AT REAR OF VEHICLE.

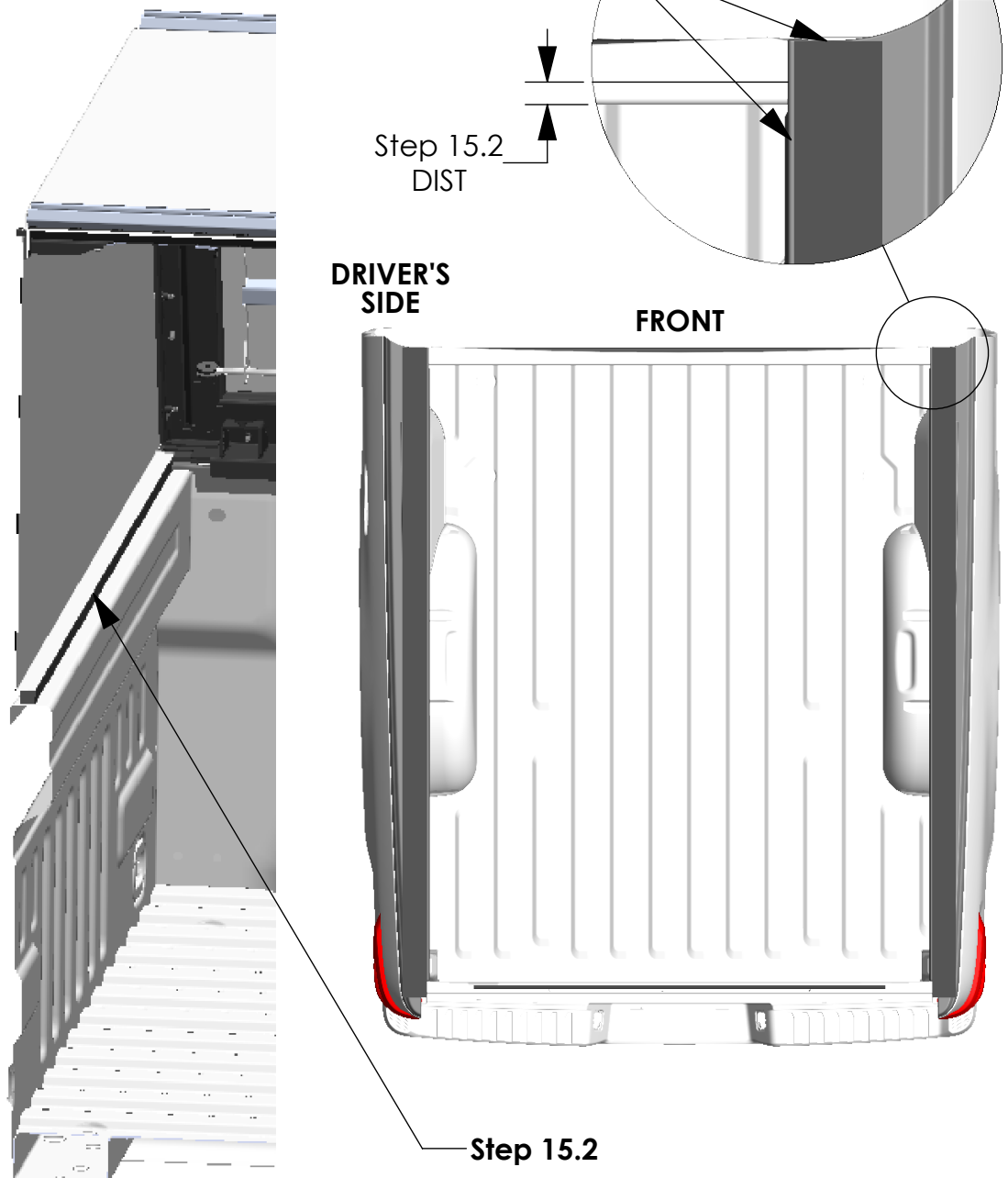
NOTE: IT IS RECOMMENDED THAT YOU LOAD THE TOPPER ONTO A TRUCKBED WITH ONE OF THE FOLLOWING METHODS:

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

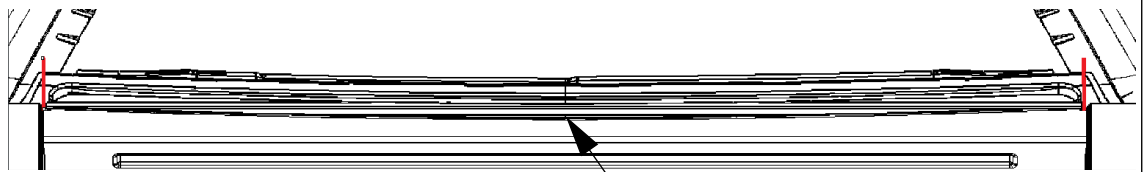
**Step 15.3**  
**PLACE 81456 GASKET IN THE GAP BETWEEN THE TRUCK BED AND CAB.**



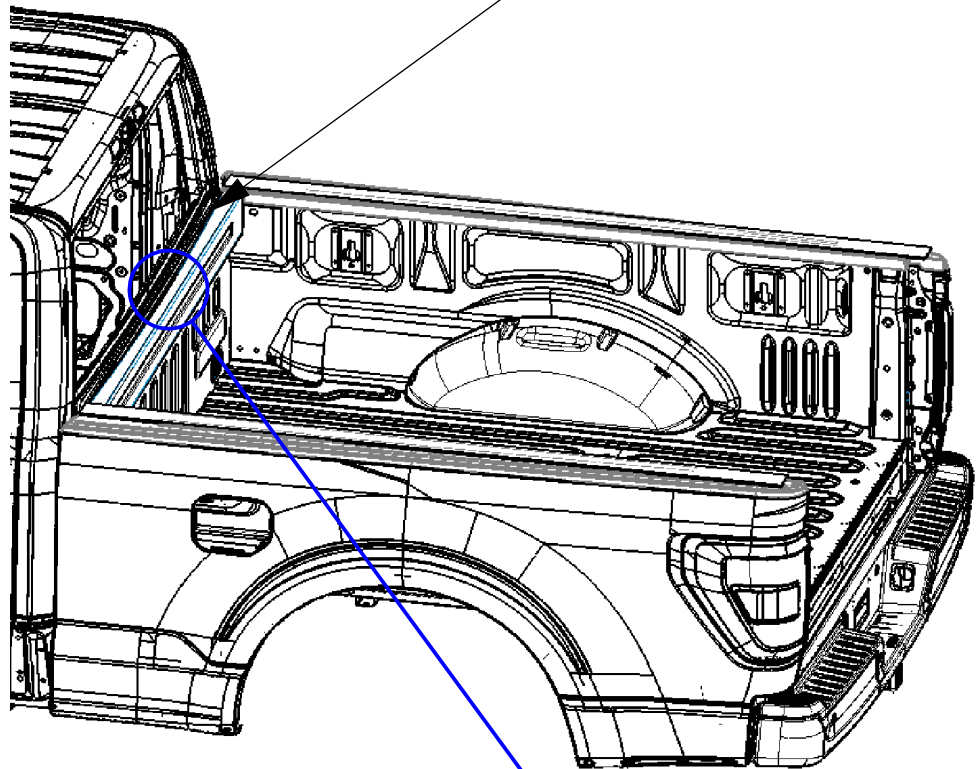
**BEFORE ATTACHING TO TRUCK BED, CLEAN AND PREP AREA. DO NOT ATTACH TO PLASTIC TRIM. IF TRIM IS ON FRONT OF BED ATTACH TO CAB.**

**ONCE AREA IS PREPARED CENTER GASKET ON THE REAR WINDOW.**

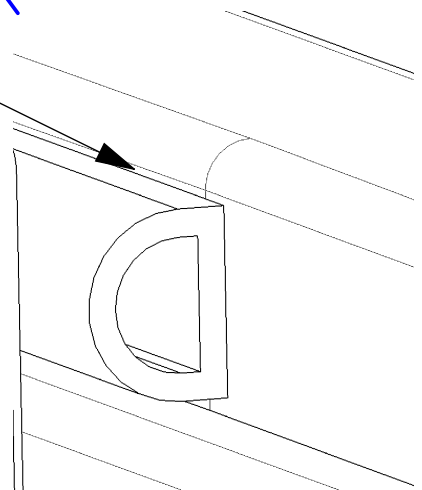
**MAKE SURE THAT GASKET HAS FULL SURFACE CONTACT SO ADHESIVE WILL PROPERLY BOND.**



Step 15.3



**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.



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

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

**1/2" STEP DRILL BIT**

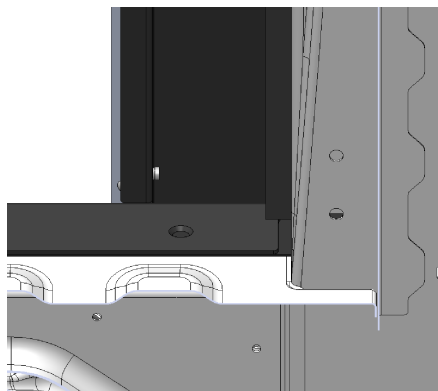
**Step 16.3**  
SET PLUSNUTS USING PLUSNUT SETTING TOOL OR AIR POWERED SETTING GUN.

**FAS0222**

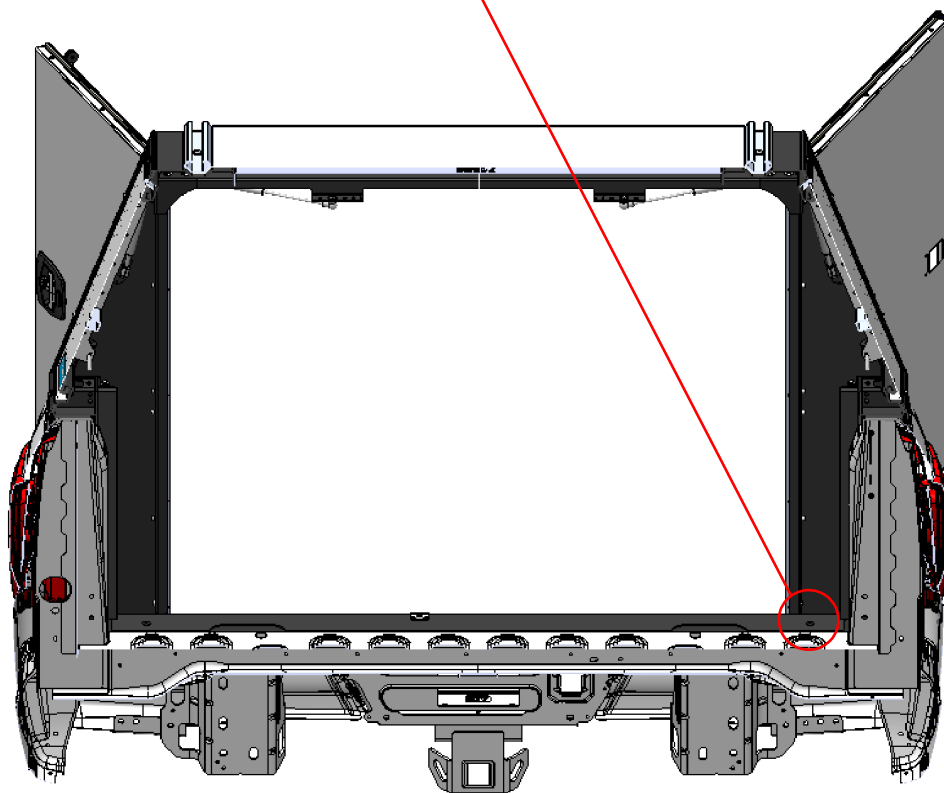
**Step 16.4**  
REPLACE TOPPER TO ORIGINAL LOCATION AND FASTEN TOPPER TO THE TRUCK BED

**FULLY TIGHTEN**  
**FAS1279**  
**(2 PLACES)**  
**T40 TORX BIT**

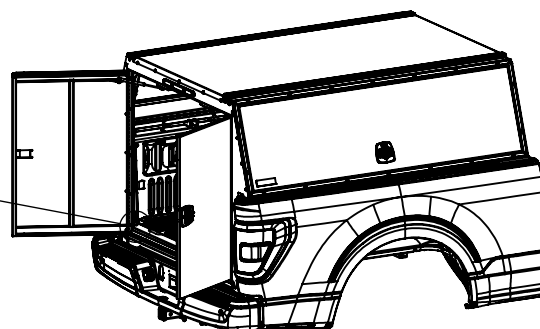
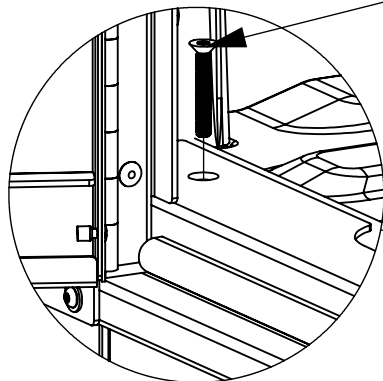
**FAS0242,**  
**FAS0552 [x2]**  
**FAS0248**  
**(8 PLACES)**  
**1/2" SOCKET**  
**1/2" WRENCH**



**VIEW LOOKING FROM FRONT TO BACK**



**FAS1279**



**STEP 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.



**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.

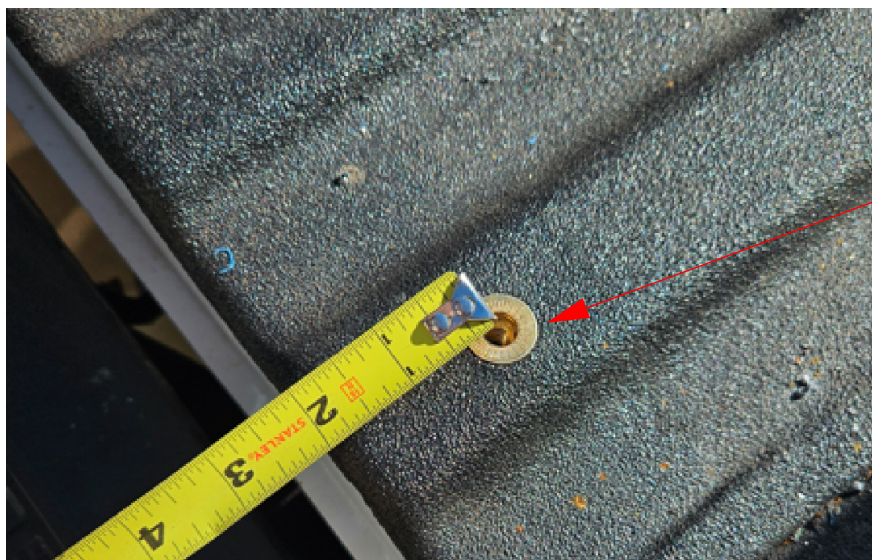
**(2 PLACES)**

**TO COMPLETE  
INSTALLATION  
SEE Steps 16.2,  
16.3 AND 16.4.**

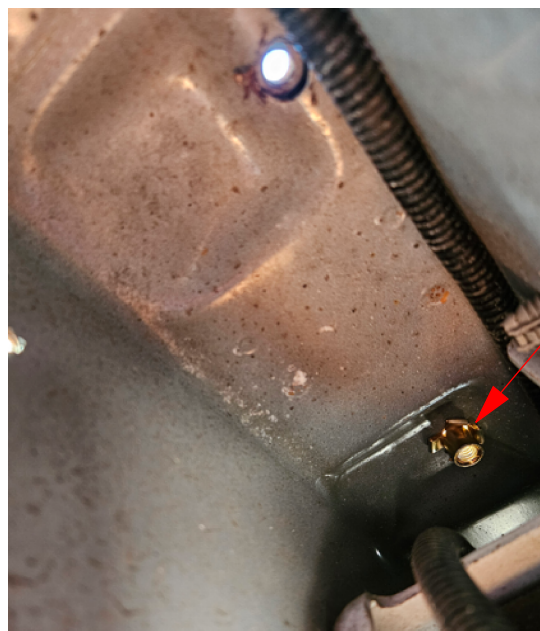
**Step 16ALT.5**



**Step 16ALT.6**



**Step 16ALT.6**  
LOCATION WILL PLACE  
PLUSNUT IN CAVITY  
UNDERNEATH BED FOR  
PROPER SEATING





# **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.



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

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

**1/2" STEP DRILL  
 BIT**

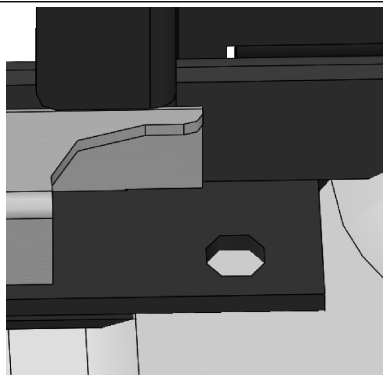
**Step 16ALT.10**  
 SET PLUSNUTS  
 USING PLUSNUT  
 SETTING TOOL  
 OR AIR  
 POWERED  
 SETTING GUN.

**FAS0222**

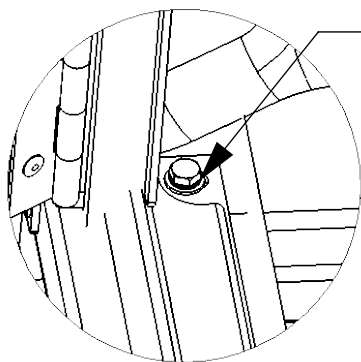
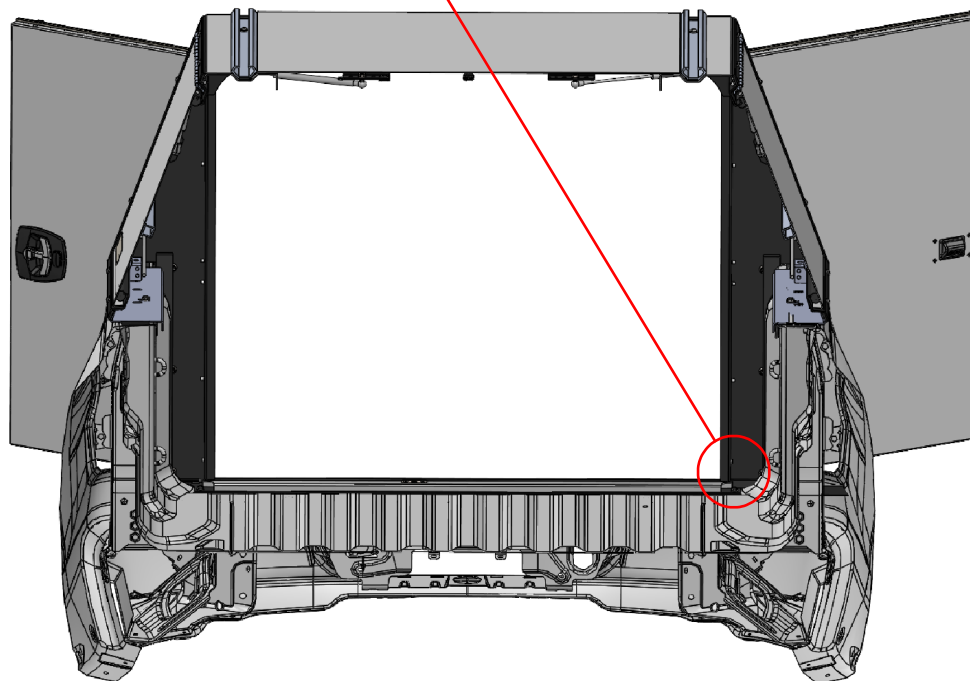
**Step 16ALT.11**  
 REPLACE TOPPER  
 TO ORIGINAL  
 LOCATION AND  
 FASTEN TOPPER  
 TO THE TRUCK  
 BED

**FULLY TIGHTEN**  
**FAS0671**  
**FAS0672**  
**FAS0234**  
**(2 PLACES)**

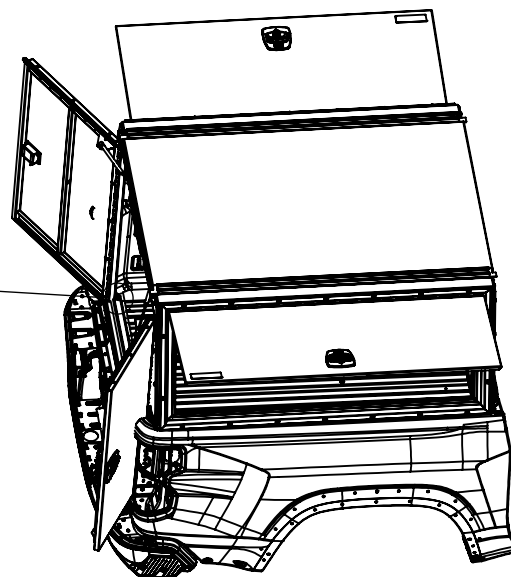
**FAS0242,**  
**FAS0552 [x2]**  
**FAS0248**  
**(8 PLACES)**  
**1/2" SOCKET**  
**1/2" WRENCH**



**VIEW LOOKING FROM  
 FRONT TO BACK**



**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.**

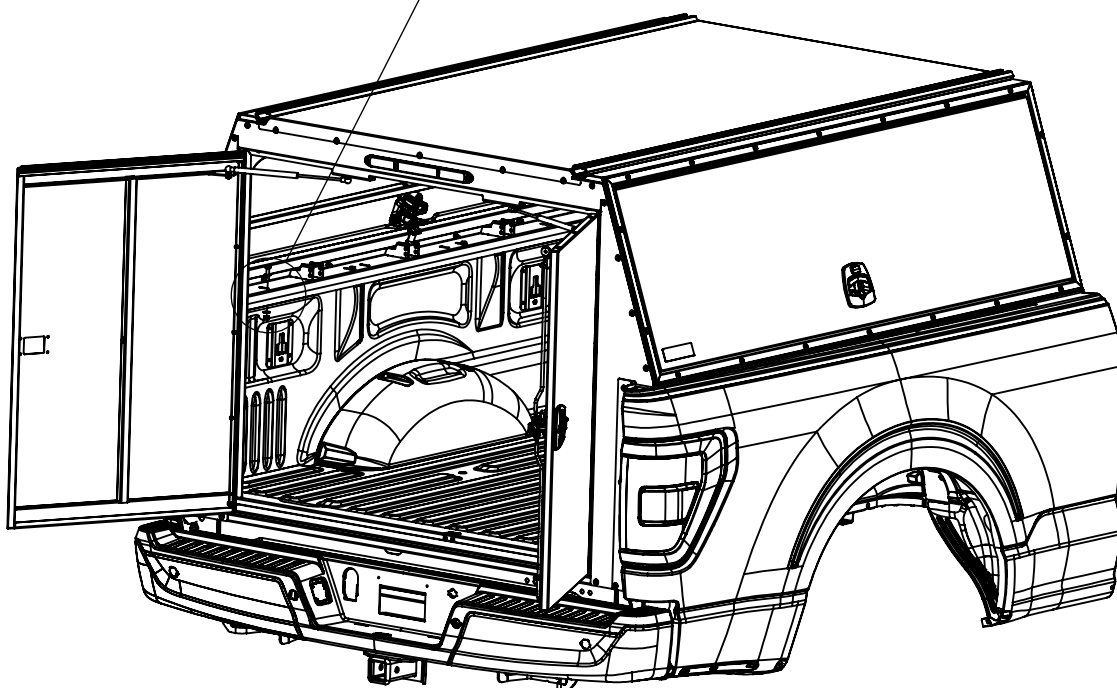
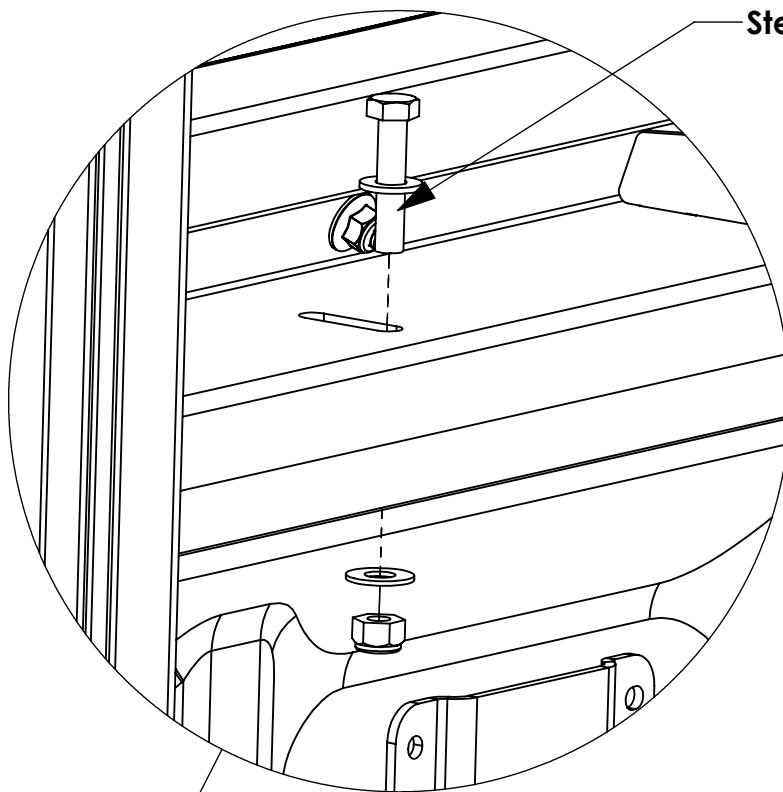
**Step 16.13**  
**USE HOLES IN THE**  
**BED RAIL TO**  
**MARK AND DRILL**  
**MOUNTING**  
**LOCATIONS. IT IS**  
**NOT NECESSARY**  
**TO REMOVE THE**  
**TOPPER FOR THIS**  
**STEP.**

**(8 PLACES)**  
**11/32" DRILL BIT**



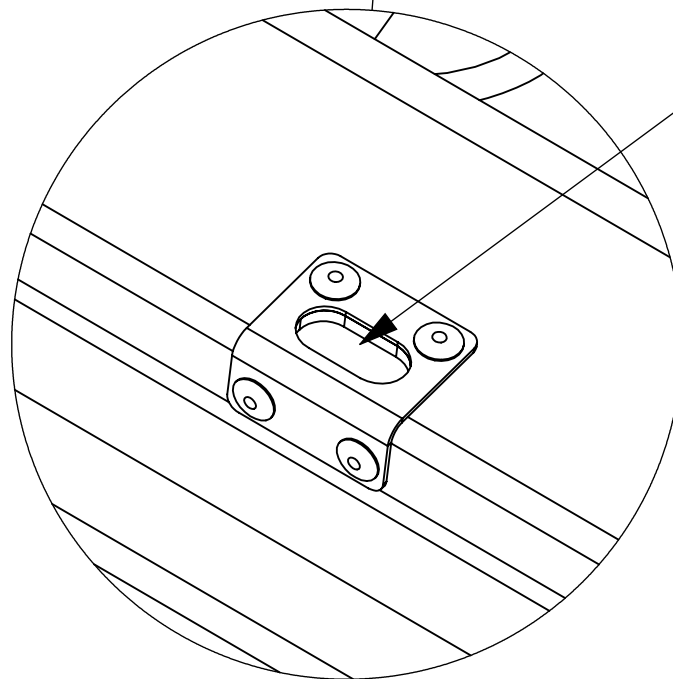
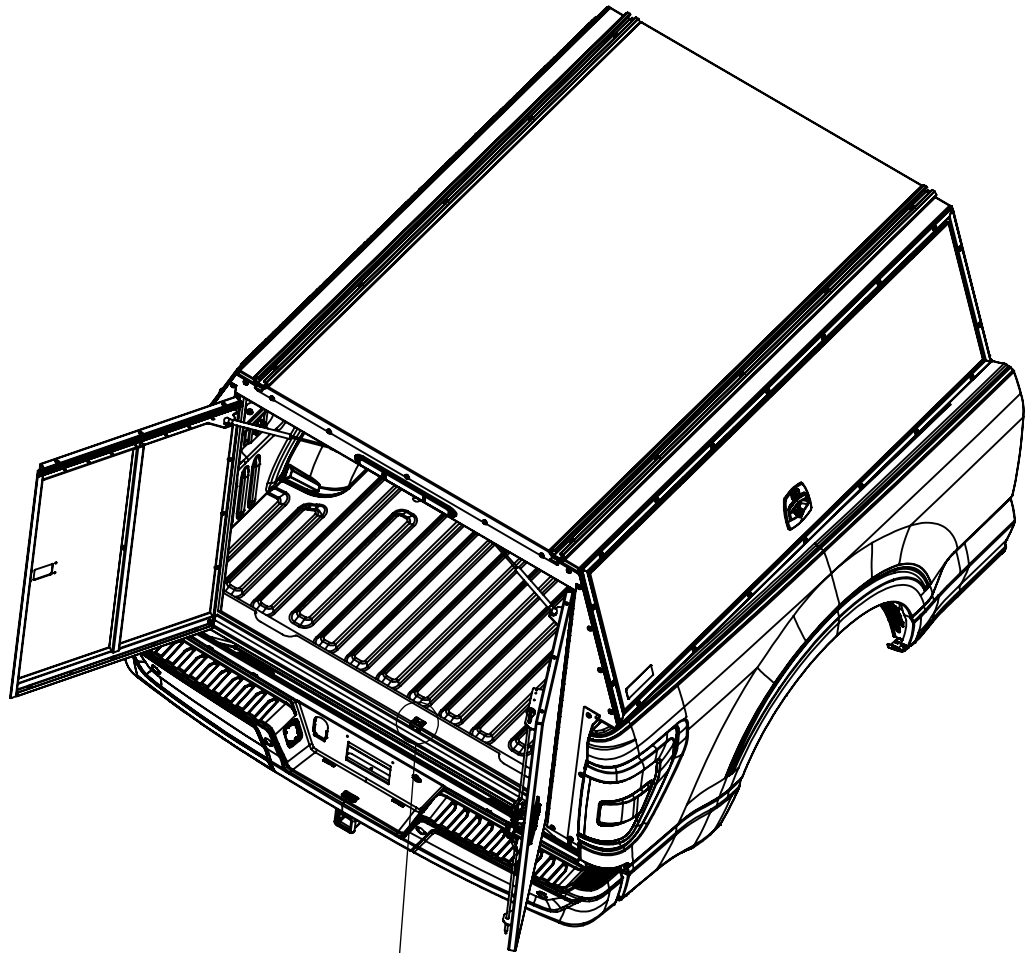
**NOTE: IF THESE**  
**HOLES INTERFERE**  
**WITH THE OEM**  
**BODY, DRILL A**  
**NEW HOLE IN THE**  
**BED RAIL +/- 2"**  
**FROM THE**  
**INTERFERENCE.**

Step 16.13



**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 17

**STEP 18 - ATTACH FOAM TO INSIDE OF BARN DOORS**

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



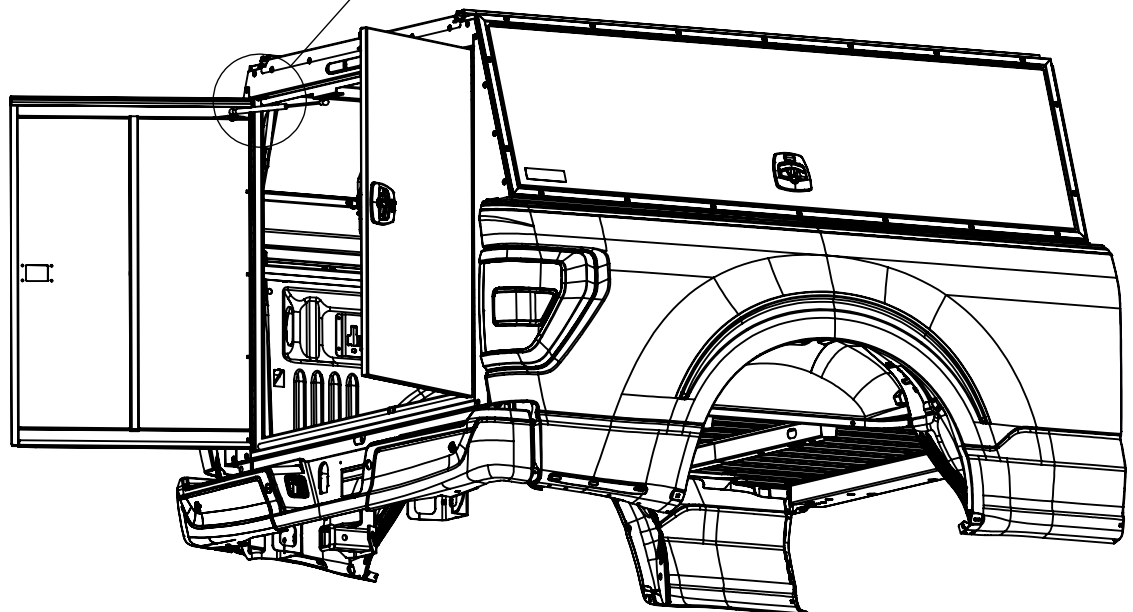
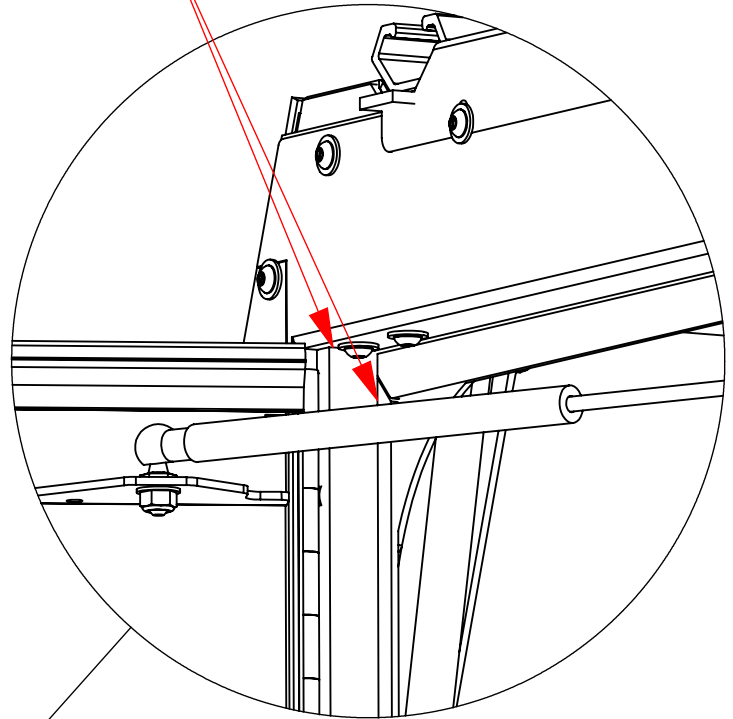
**APPLY 77586**  
**FOAM STRIP ON**  
**HINGE LEG.**  
**(2 PLACES)**



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



**Step 18**





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

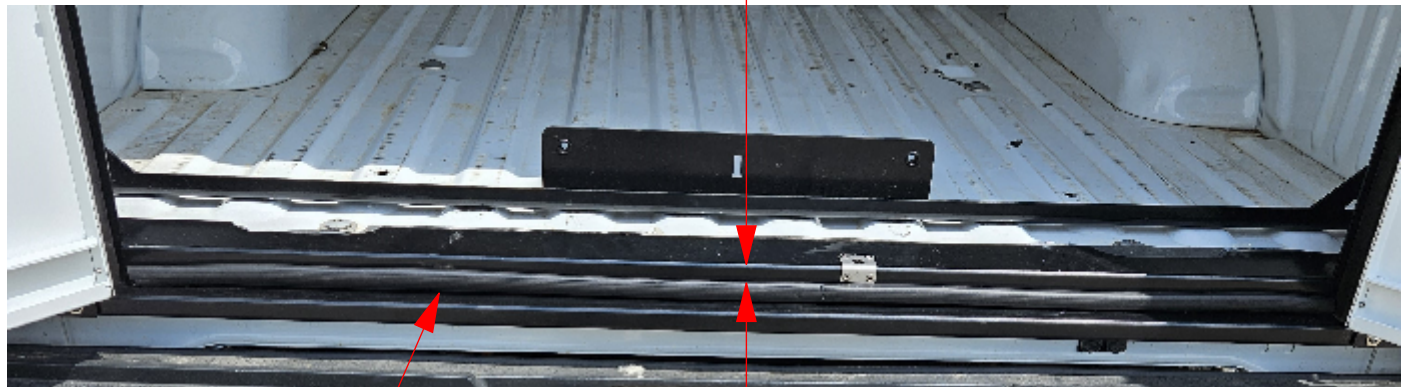
**Step 19**  
**CLEAN SURFACE**  
**WITH ALCOHOL.**  
**PREP WITH 57392**  
**ADHESIVE**  
**PROMOTER.**



**APPLY 77941**  
**GASKET**



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



**Step 19**

**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.**

FOAM STRIPS



Step 19

**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**

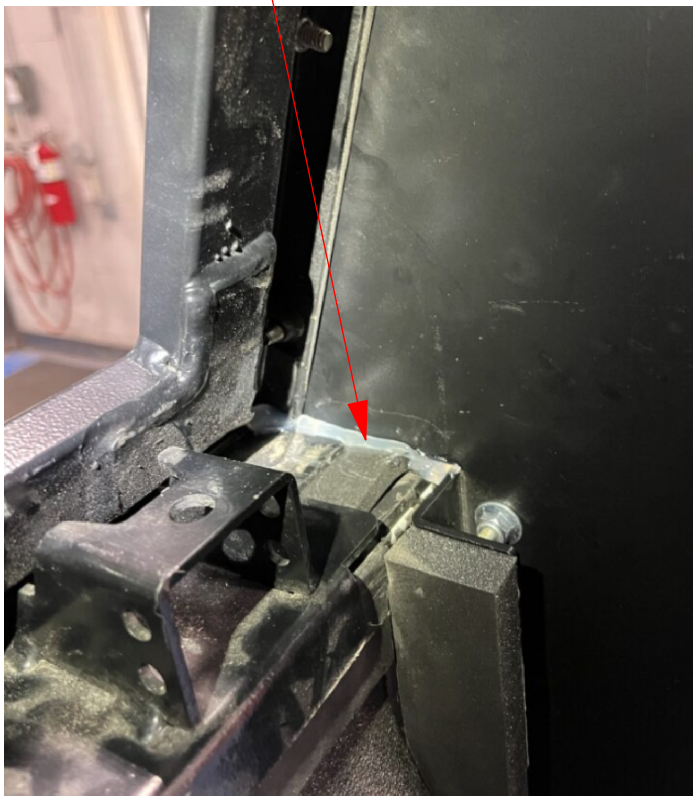
**Step 20.3**  
**CUT 75114 IN (2)**  
**6" PIECES AND**  
**PLACE AS**  
**SHOWN AT REAR**  
**OF VEHICLE**

**(2) PLACES**

**Step 20.1**



**Step 20.2**



**Step 20.3**

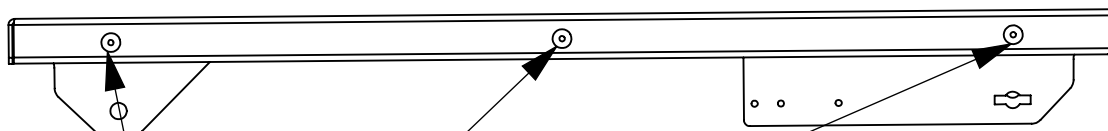
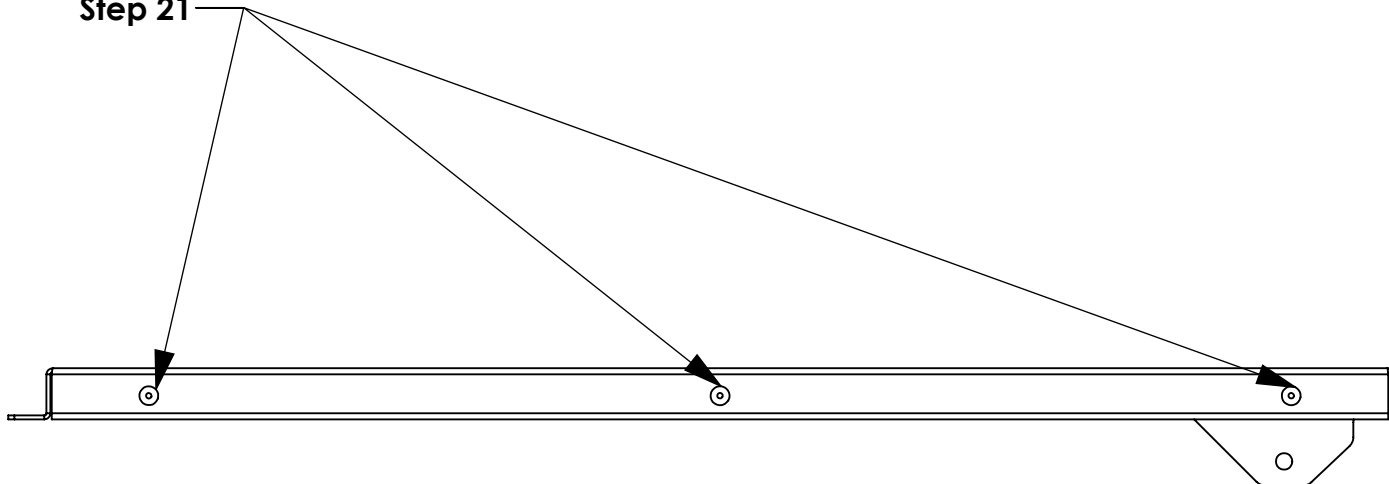


**STEP 21 - APPLY SILICONE TO TOP OF BOTH DOORS ON RIVETS.**

**Step 21**  
**APPLY SILICONE**  
**TO TOPS OF**  
**DOORS ON**  
**RIVETS**

**(6 PLACES)**

**Step 21**



**Step 21**

**STEP 22 - CLOSE DOORS AND ADJUST BED FILLERS.**

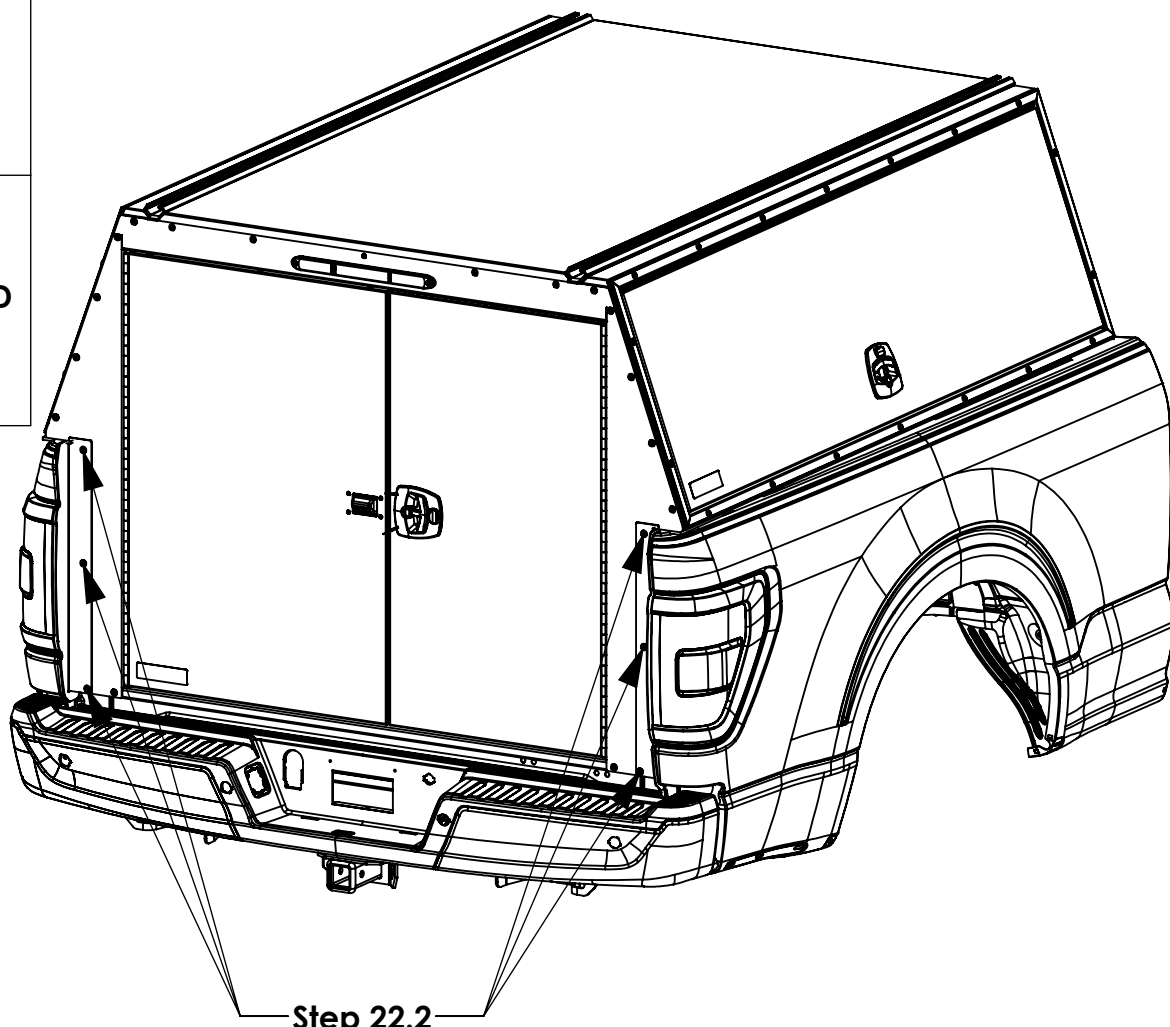
**Step 22.1**  
**CLOSE DOORS**  
**STARTING WITH**  
**DRIVER'S SIDE**  
**FIRST THEN**  
**PASSENGER SIDE.**  
**CONFIRM LOCK**  
**ROD IS ENGAGED**  
**IN HOLE OF**  
**LOWER BRACKET.**



**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)**



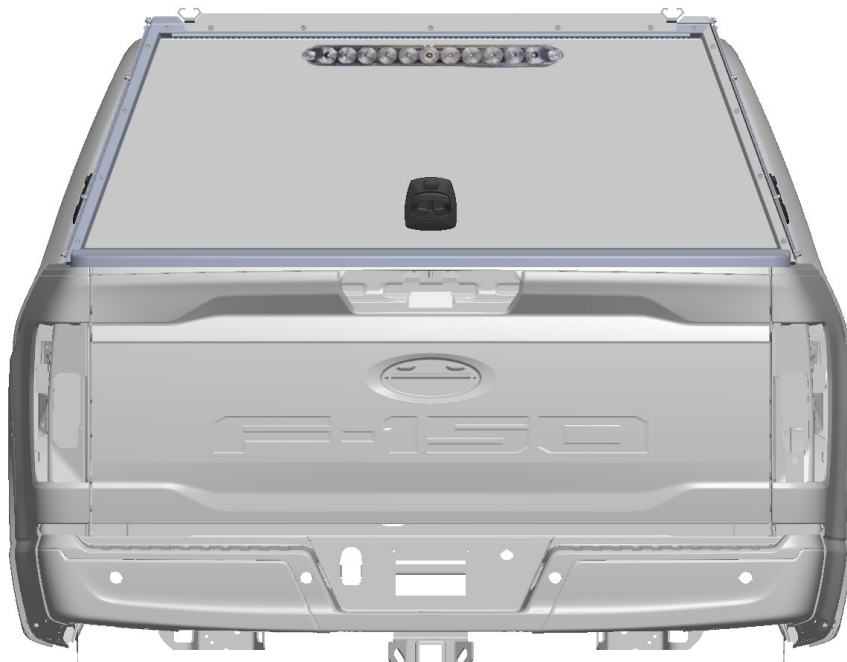
**MAKE SURE ALL FASTENERS ARE TIGHTENED!! INSTALLATION IS COMPLETE**

### **Introduction / Comments:**

Install Instructions For Brake Light On Topper For F150 (5.5'/6.5' & 8')

#### **Note:**

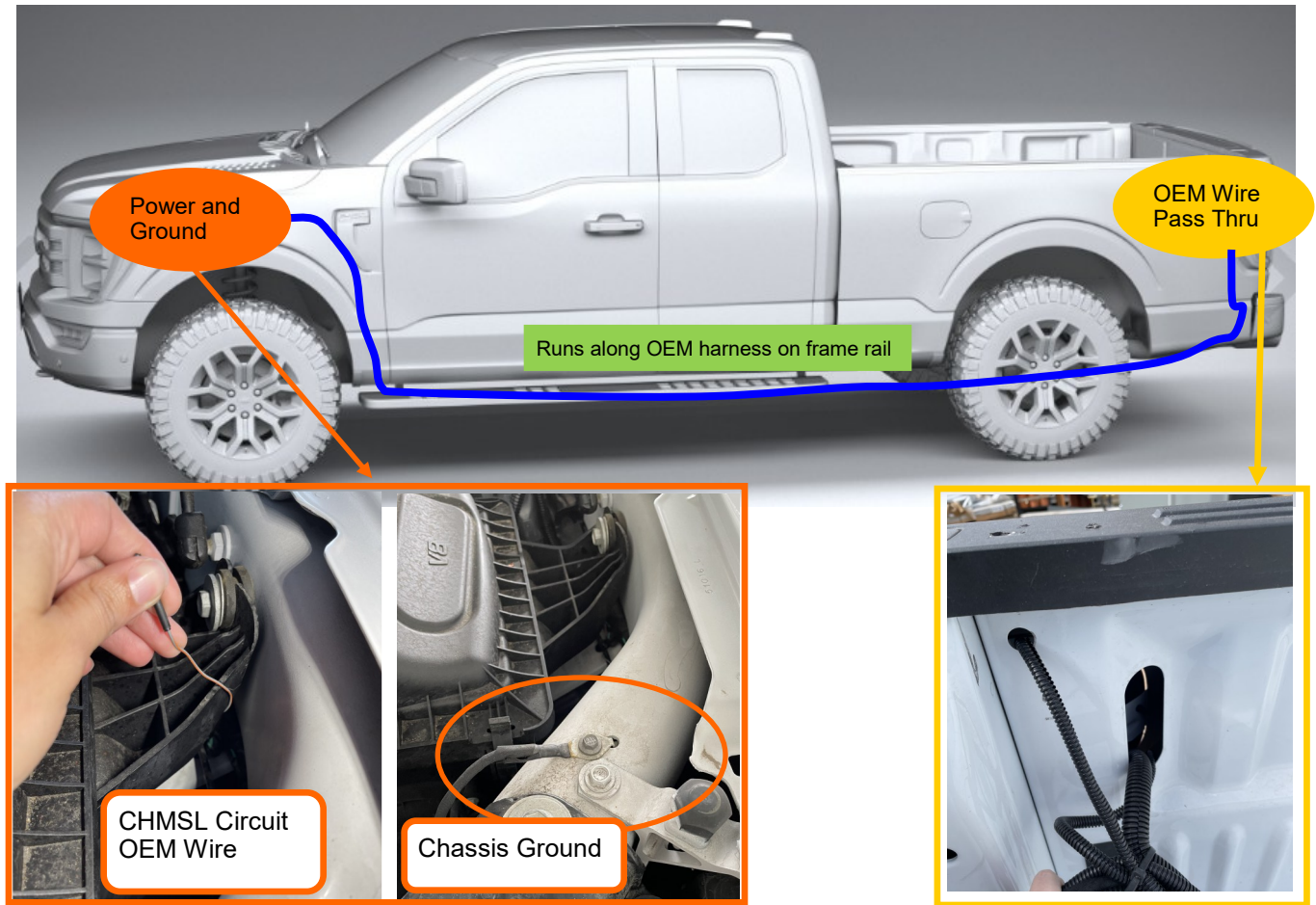
Read all instructions prior to installation. Review the Adrian Steel **GENERAL PRECAUTIONS PAGES (56638)** before attempting installation. Only personnel familiar with using electrical best practices should perform this install. Reference **ELECTRICAL BEST PRACTICES MANUAL (54479)** before attempting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



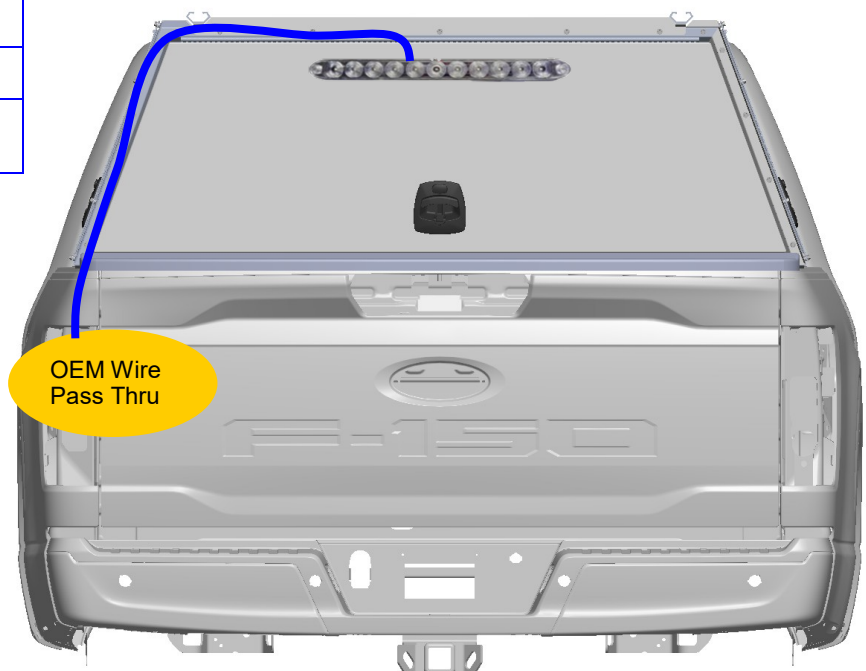
## Installation Instructions For Brake Light On Topper For F150 (5.5'/6.5' & 8')



## Routing Overview



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





**Step 1:** Locate the brake light harness 71668.

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

**Step 2:** Open the vehicle hood.

Locate the driver's side frame OEM harness. Follow the harness forward of the truck, until you reach the hood shock area.

There will be a small grey/orange wire separate from the OEM harness. It will have a black covering on the end.

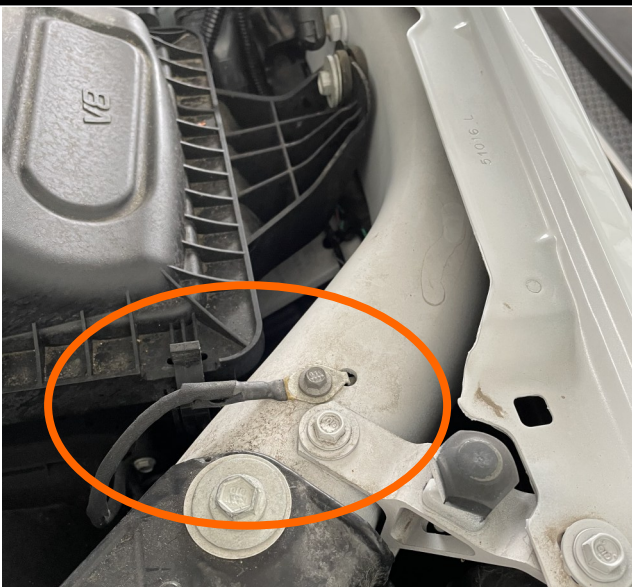
\*\*\* Please note the Hybrid F150 may have a green/purple wire instead of grey/orange.

This is the OEM CHMSL circuit wire for the brake light.

Strip the wire covering and prepare it to be connected to the brake light harness.

Locate the end of the harness (PN71668) with the ring terminal and butt connector.

Use the butt connector to connect to the OEM CHMSL wire. Use a heat gun to shrink the butt connector once crimped on.



**Step 3:** Locate the OEM chassis ground located on the frame—forward of the CHMSL circuit.

Secure the ring terminal on the brake light harness to the chassis ground.

Torque the ground to 9Nm (80 in lb).





Excess Wire Under Body



Use if grommet is not available

Bed Pass Thru Grommet

#### Step 4: Routing (Refer to routing diagrams at the beginning of the instructions)

Route the brake light harness rearward and down the engine compartment to the frame (red dotted line).

Follow the OEM wire harness on the frame rearward to the bumper of the truck.

Continue routing the harness upward in the bed cavity, to the bed wire pass thru.

Drill a hole in the OEM grommet, for the pass thru. If the grommet has a light in place of it, please utilize the round hole that is up and to the right of it.

If installing the interior lighting kit as well as the brake light kit, utilize the larger grommet supplied in the brake light harness bag.

If only installing the brake light harness, utilize the smaller grommet supplied in the brake light harness kit.

Drill (for larger grommet a 1" hole and 0.625" (5/8) hole for the smaller grommet) then route the wire harness through the grommet, to the underbody of the truck.

Silicone after routing through the grommet.

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

For **REV B** of the harnesses there will be a tek screw and p-clip supplied in the bag. Bundle the excess wire in the cavity using zip ties. Use the tek screw and p-clip to secure the bundle to the frame.

Secure the wiring with zip ties.

**DO NOT secure wiring to any brake lines.**

Be sure the bundle of wire is secure and will not fall out over time.



#### Step 5: Routing continued

Continue routing the brake light harness inside the topper, to the light.

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

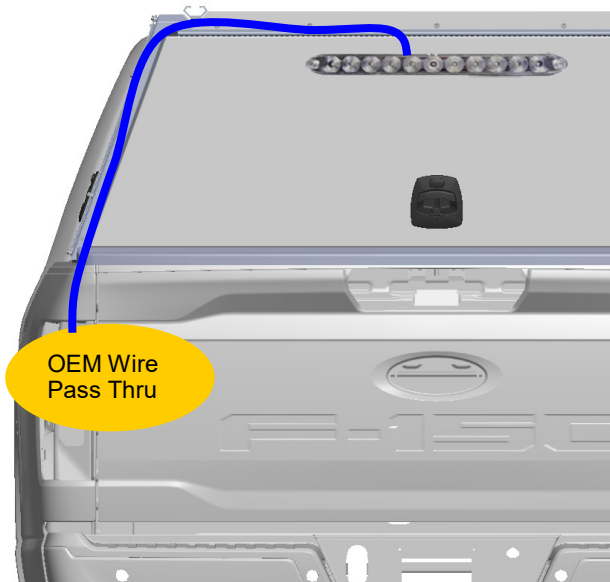
Be sure to leave extra wire from the brake light to the topper rails before securing. This ensures the wires won't brake when the topper door opens and closes.

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                   |
| <a href="#">Section 1: TOC &amp; Safety Precautions Information .....</a> | <a href="#">2</a>   |
| <a href="#">Section 2: Cable Kit Part Identification .....</a>            | <a href="#">3-5</a> |
| <a href="#">Section 3: Tools Needed.....</a>                              | <a href="#">6</a>   |
| <a href="#">Section 4: General Vehicle Layout .....</a>                   | <a href="#">7</a>   |
| <a href="#">Section 5: General Wiring Diagram .....</a>                   | <a href="#">8</a>   |
| <a href="#">Section 6: Application Specifics: F150.....</a>               | <a href="#">9</a>   |
| <a href="#">Section 7: General installation .....</a>                     | <a href="#">13</a>  |
| <a href="#">Section 8: Routing harness.....</a>                           | <a href="#">15</a>  |
| <a href="#">Section 9: Testing and Finish.....</a>                        | <a href="#">20</a>  |

### **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.                                |

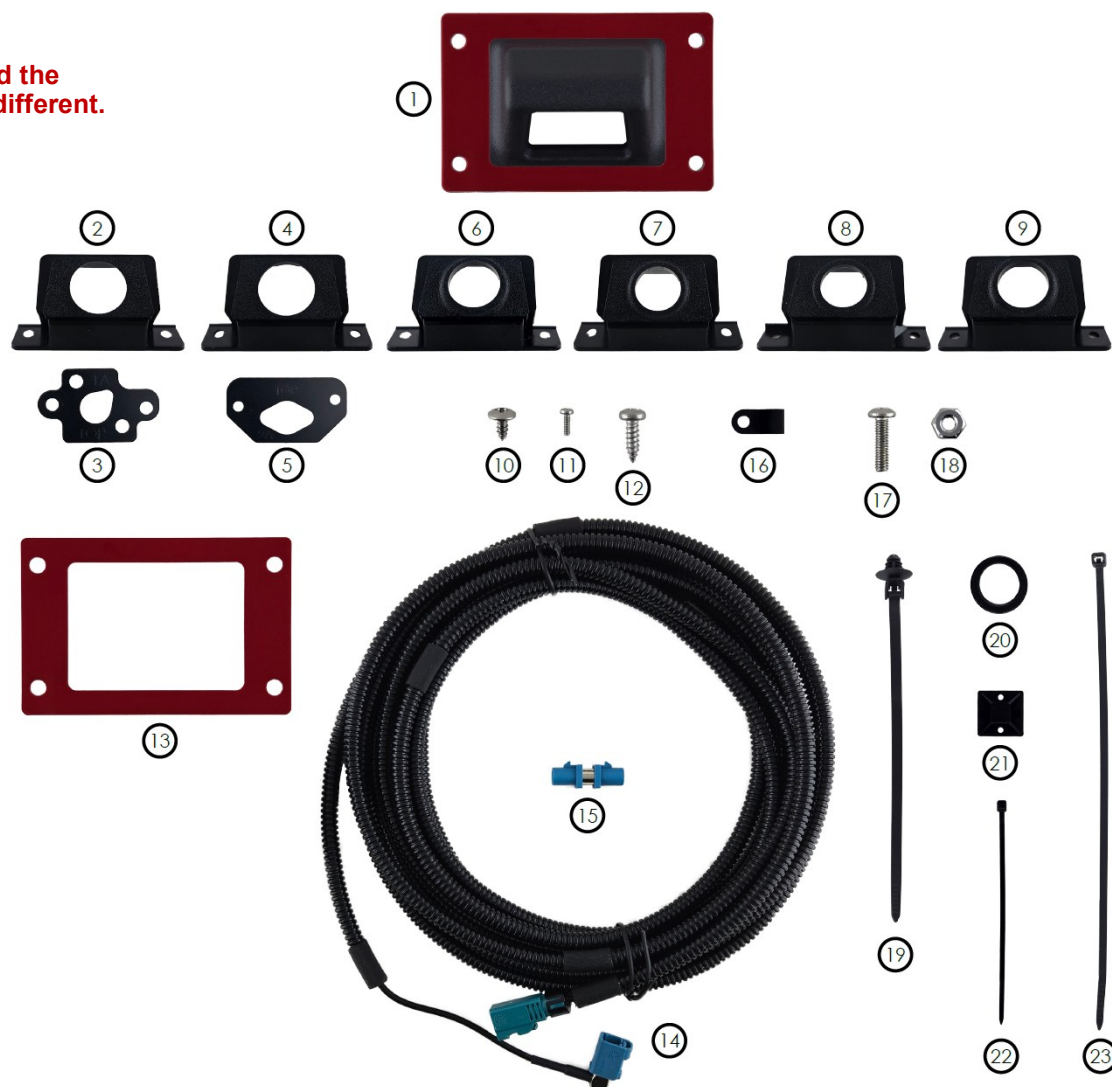


## Section 2: Part Identification:

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        |      |                                   |          |

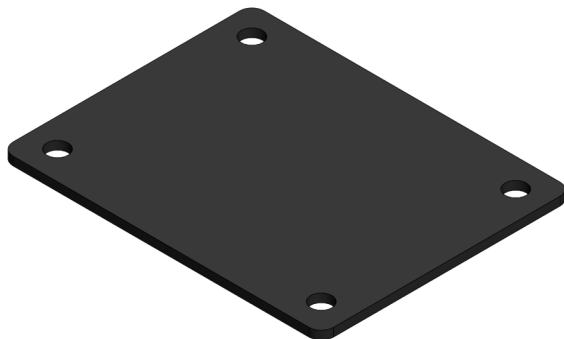
**PLEASE NOTE:**  
The **ITEM NUMBER** and the  
**INSERT NUMBER** are different.



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):**

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

**NOTES:**

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

## Section 3: Tools Needed

①



②



③



④



⑤



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



## Section 4: General Vehicle Layout

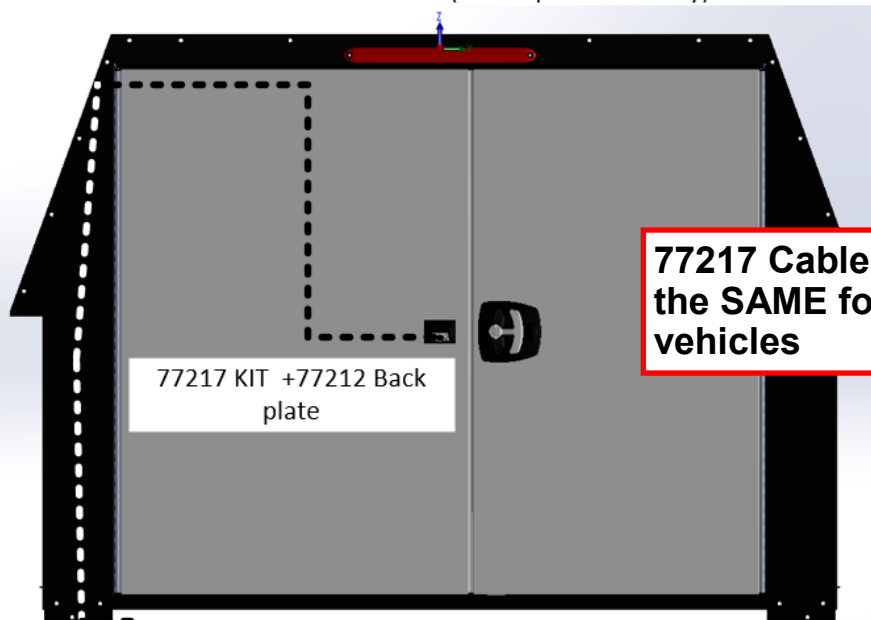
Rear side of  
Adrian Top



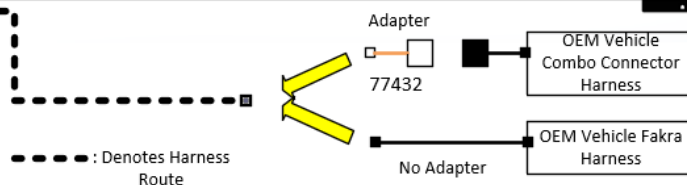
Ford F150  
[LVDS only]

### Notes:

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



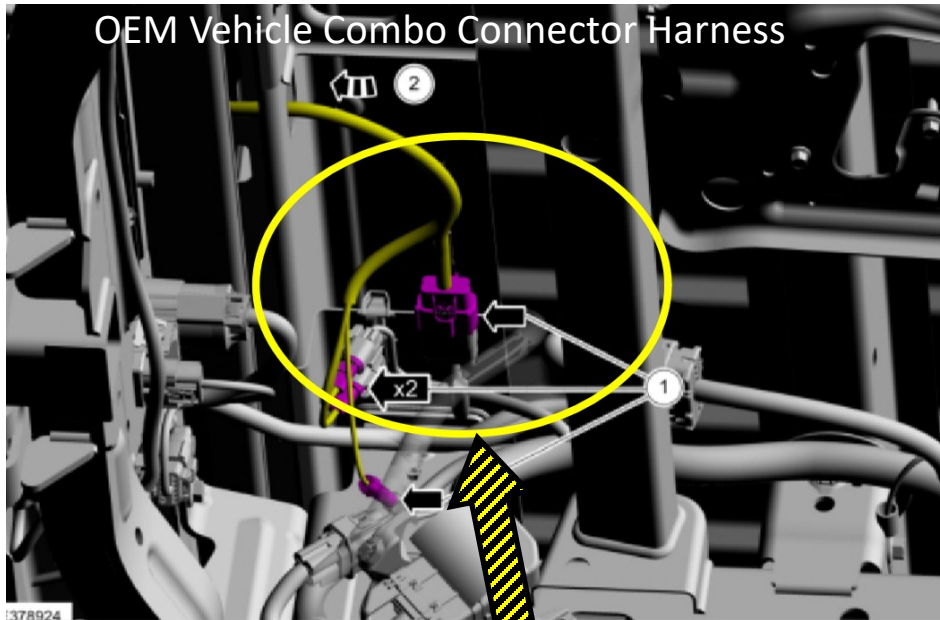
**77217 Cable routing is  
the SAME for all  
vehicles**



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

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

## Section 5: General Wiring Diagram

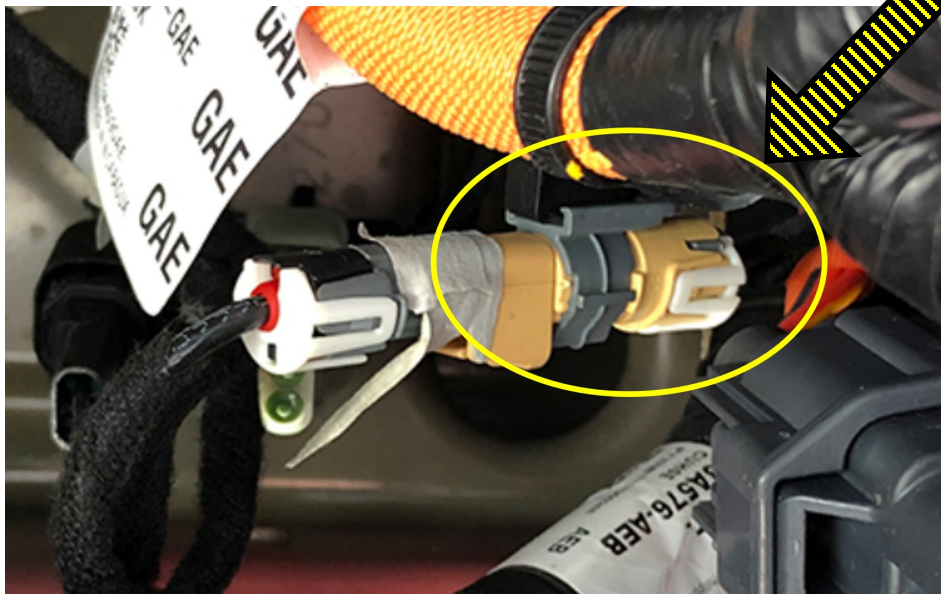


MY 24 & 25 F-150  
+ F-150 Hybrid

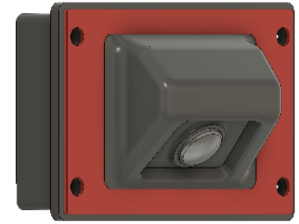
77432 Adapter



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



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



Right Angle

Loomed Coaxial Cable



OEM Vehicle Fakra Harness

## Section 6: Application Specifics: F150 / Super Duty

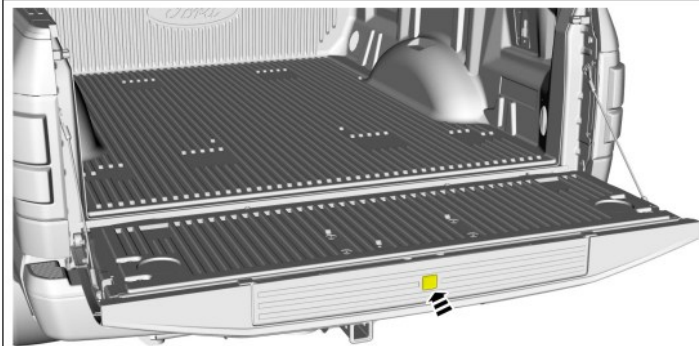
### Step 6-1.

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

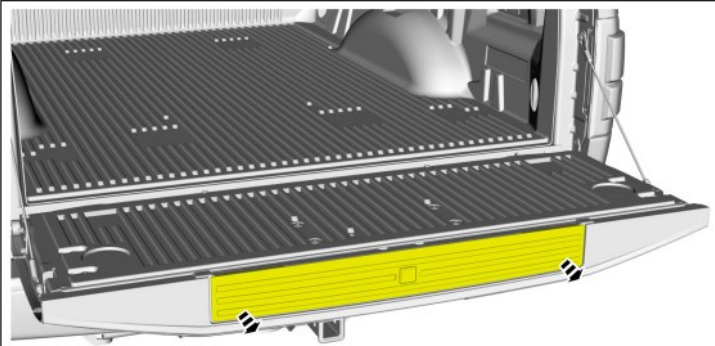
1. Open the tailgate.
2. **Vehicles With: Tailgate Step:**
  - Push the tailgate step release button.
  - Open the tailgate step.



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



E196243



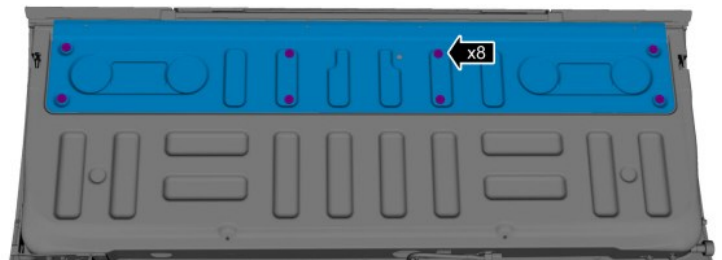
E196244

### c. All vehicles

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



E196058



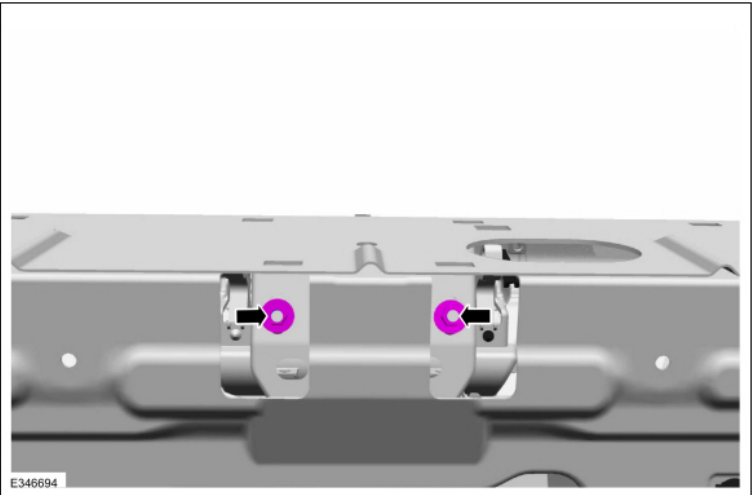
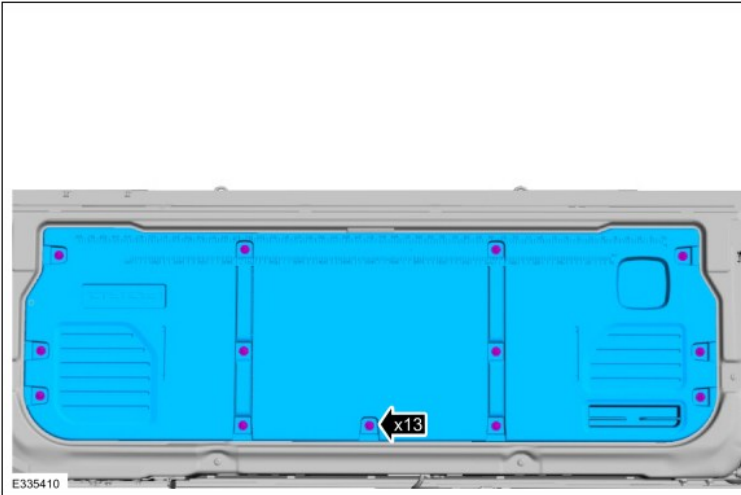
E196059

## Section 6: Application Specifics: F150 / Super Duty

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

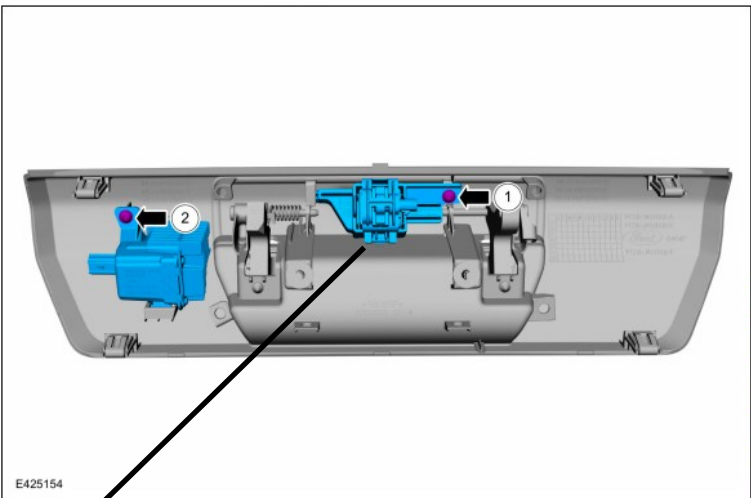
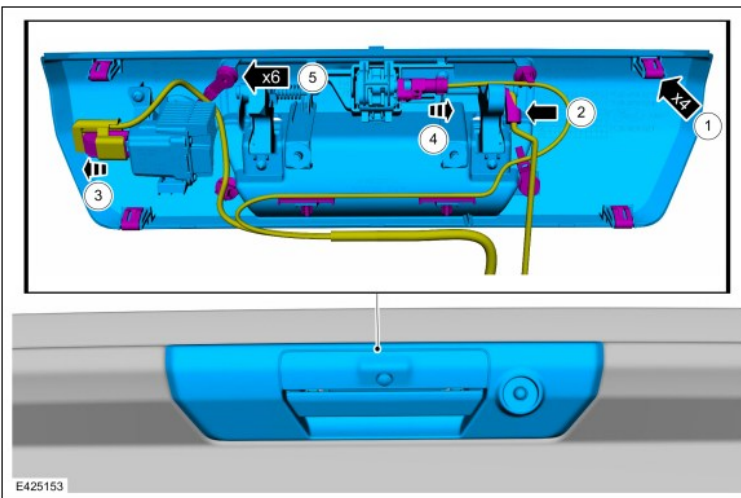


Caution: Make sure camera orientation for up is noted when removing from release handle.

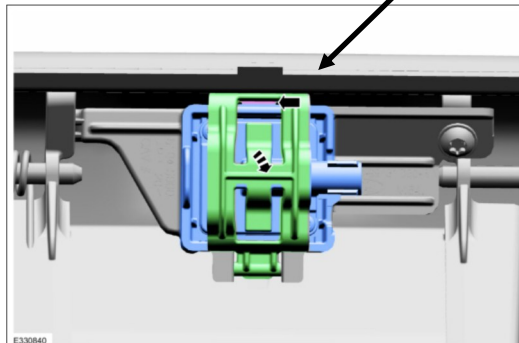


TOP VIEW

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



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



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



## Section 6: Application Specifics: F150 / Super Duty

### Step 6-2.

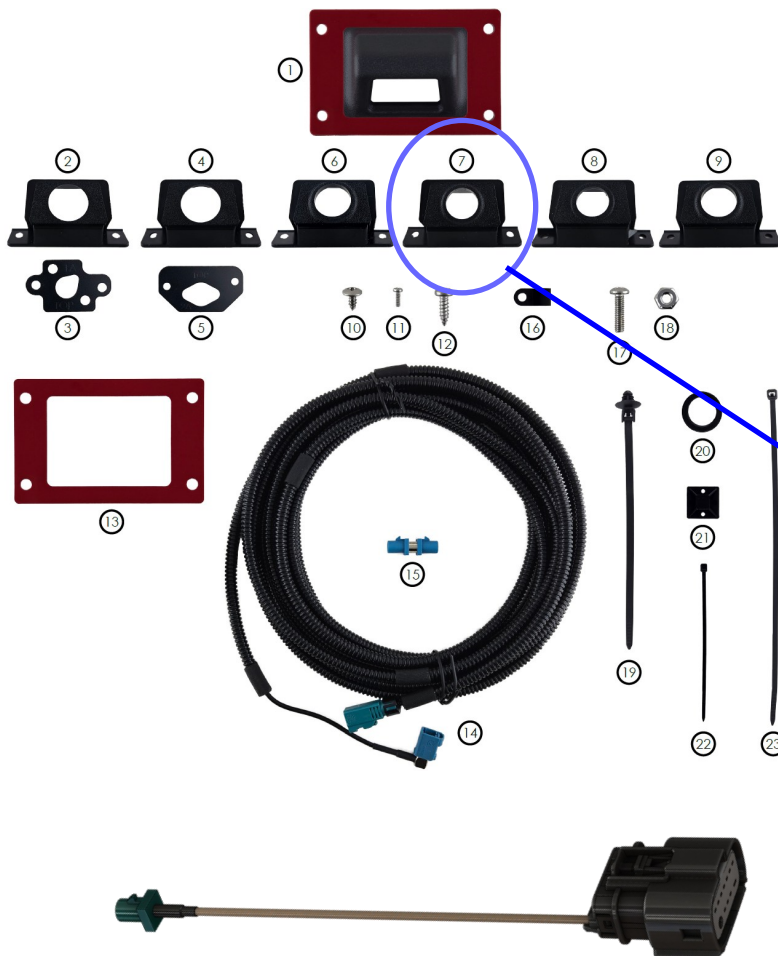


Caution: Make sure camera orientation for up is noted from previous disassembly.

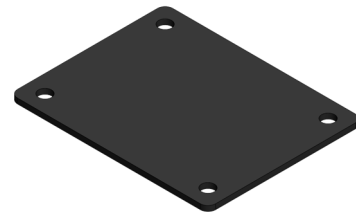


- If the camera DOES not look like this (a single pin round coaxial snap-on connection) –**STOP**– you will need an analog back up camera kit. Please contact your Adrian representative.

### Step 6-3.



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



- Enclosure Back Plate (77212)

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

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

## Section 6: Application Specifics: F150 / Super Duty

### Step 6-4.



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

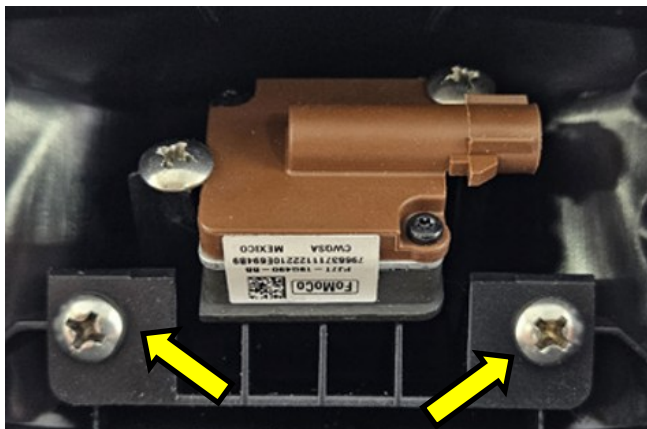
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16" Truss Head Screws will be used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

### Step 6-5.



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

### Step 6-6.



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

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

## Section 6: Application Specifics: Ford Maverick

### Step 6-1.

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

1. Open the tailgate.

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

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



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

c. **All vehicles**

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



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





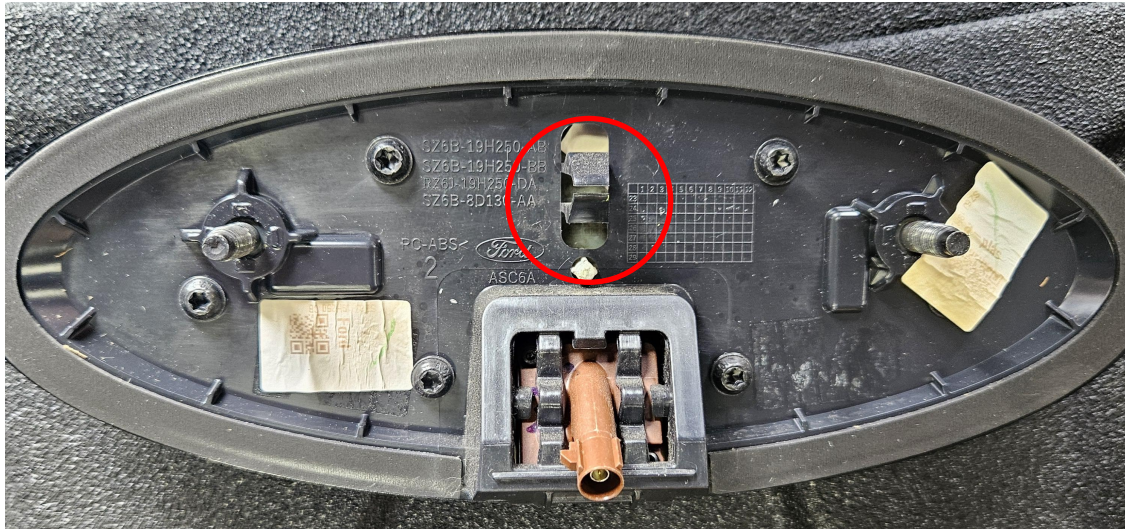
## Section 6: Application Specifics: Ford Maverick

### Step 6-2.

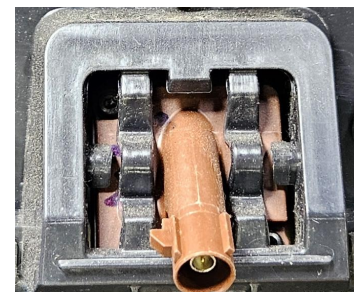
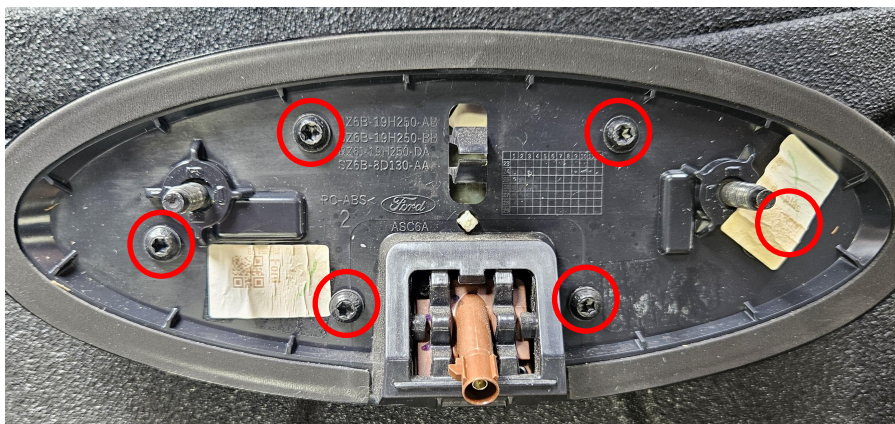
There is one clip holding in the camera housing. Using a trim tool you can remove it



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



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





## Section 6: Application Specifics: Ford Maverick

### Step 6-2.

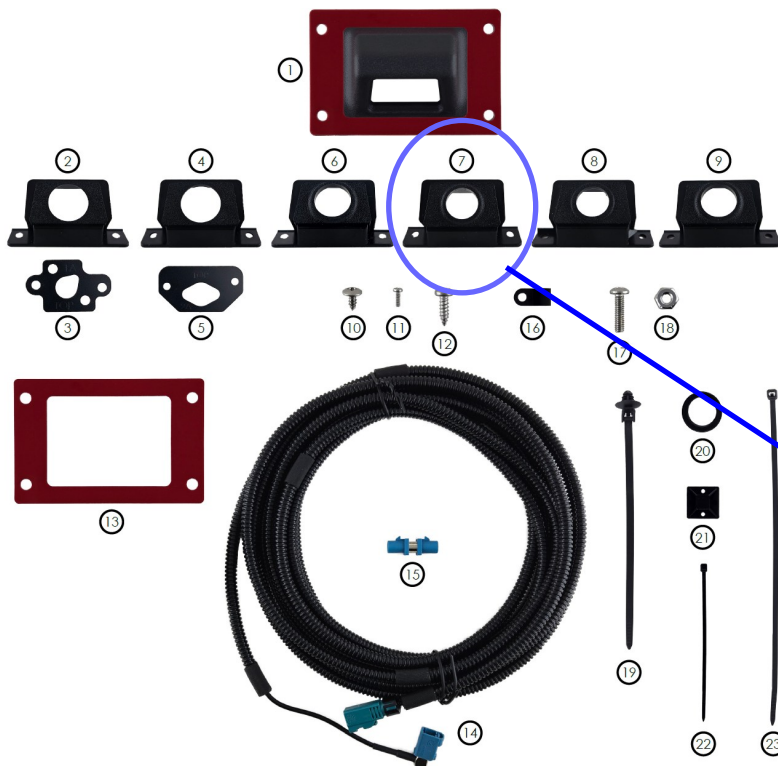


Caution: Make sure camera orientation for up is noted from previous disassembly.

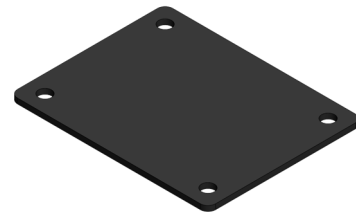


- If the camera DOES not look like this (a single pin round coaxial snap-on connection) –**STOP**– you will need an analog back up camera kit. Please contact your Adrian representative.

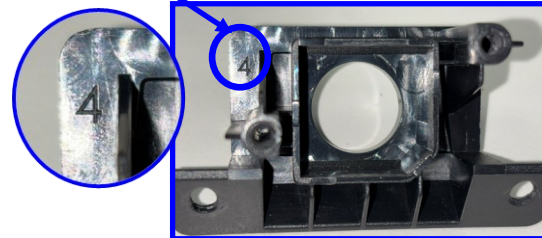
### Step 6-3.



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



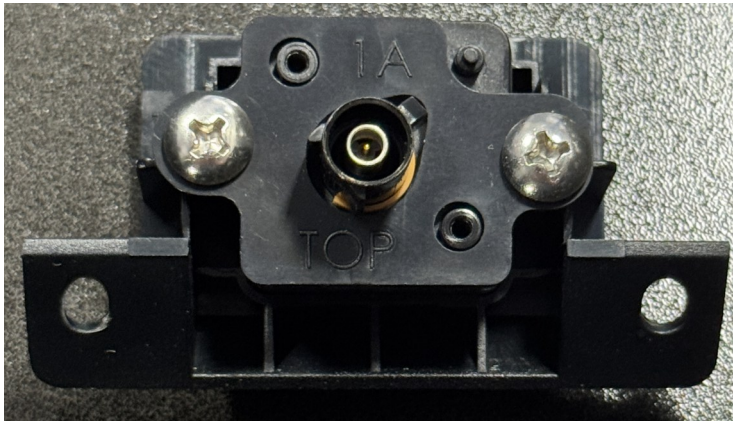
- Enclosure Back Plate (77212)



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

## Section 6: Application Specifics: Colorado

### Step 6-4.



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

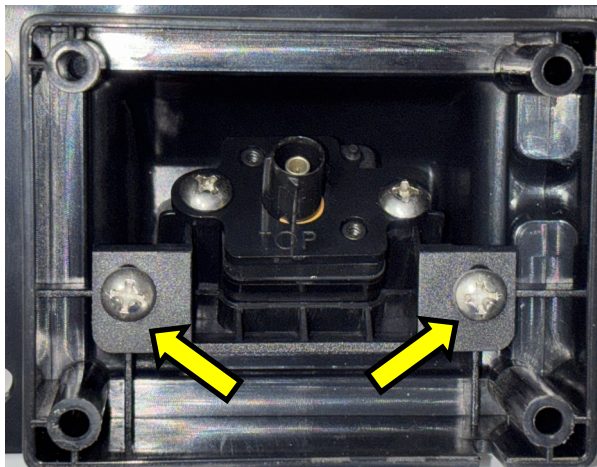
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16" Truss Head Screws will be used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

### Step 6-5.



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

### Step 6-6.



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

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

## Section 6: Application Specifics: Chevrolet Silverado 1500

### Step 6-1.

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

1. Open the tailgate.

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

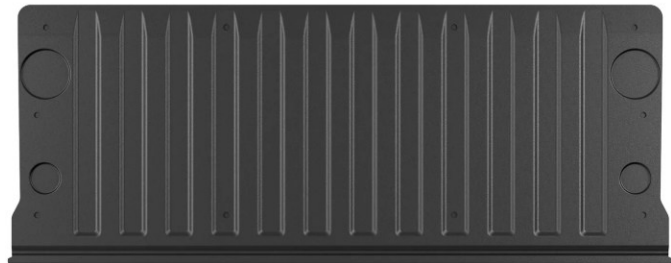
- Push the tailgate step release button.
- Open the tailgate step.



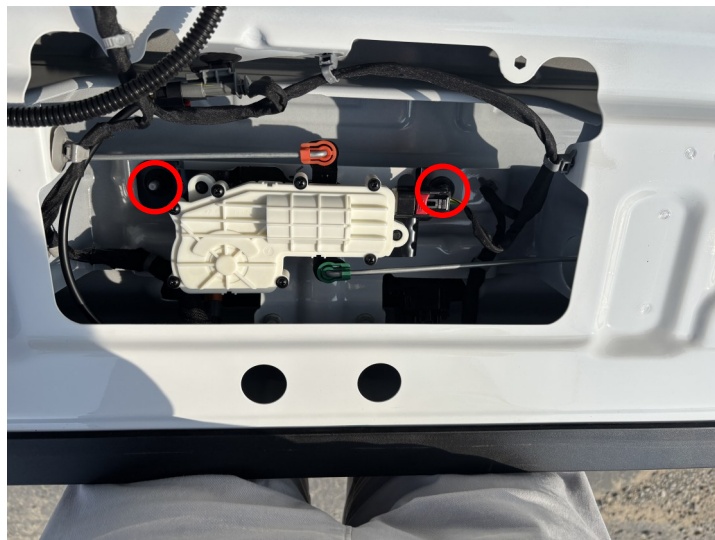
Caution: Make sure camera orientation for up is noted when removing from release handle.

c. **All vehicles**

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



d. **Remove bolts circled**





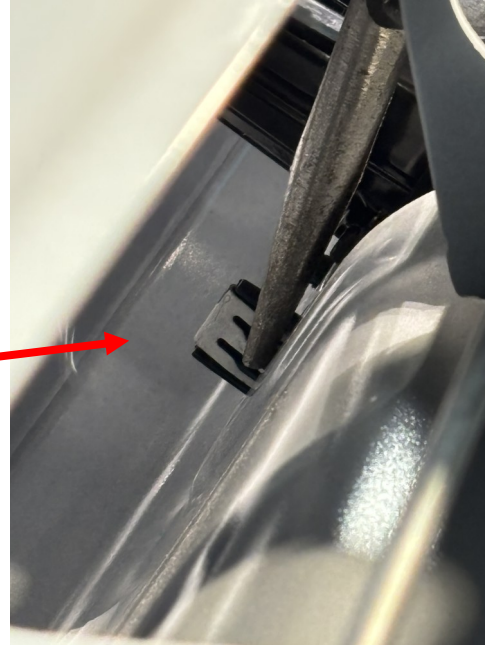
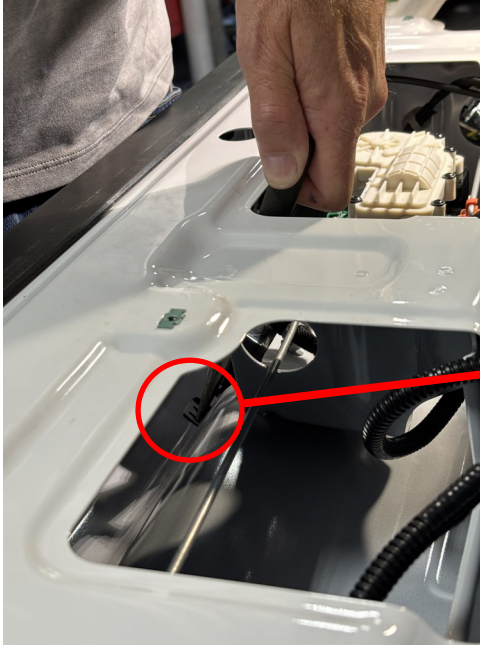
## Section 6: Application Specifics: Chevrolet Silverado 1500

### Step 6-2.

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



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



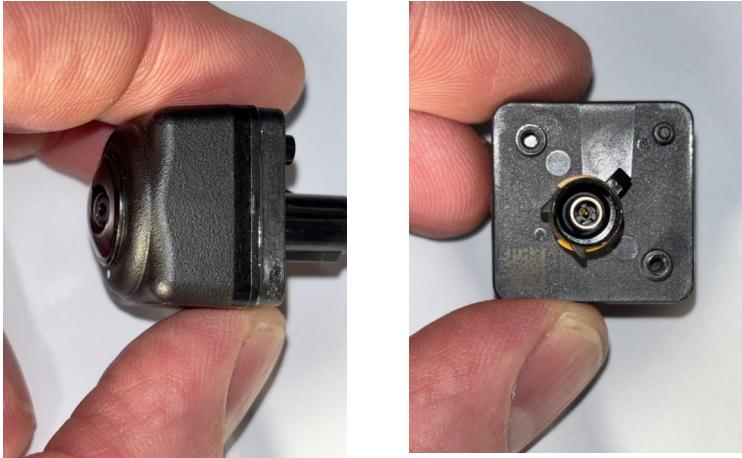
### Step 6-2.

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



## Section 6: Application Specifics: Silverado 1500

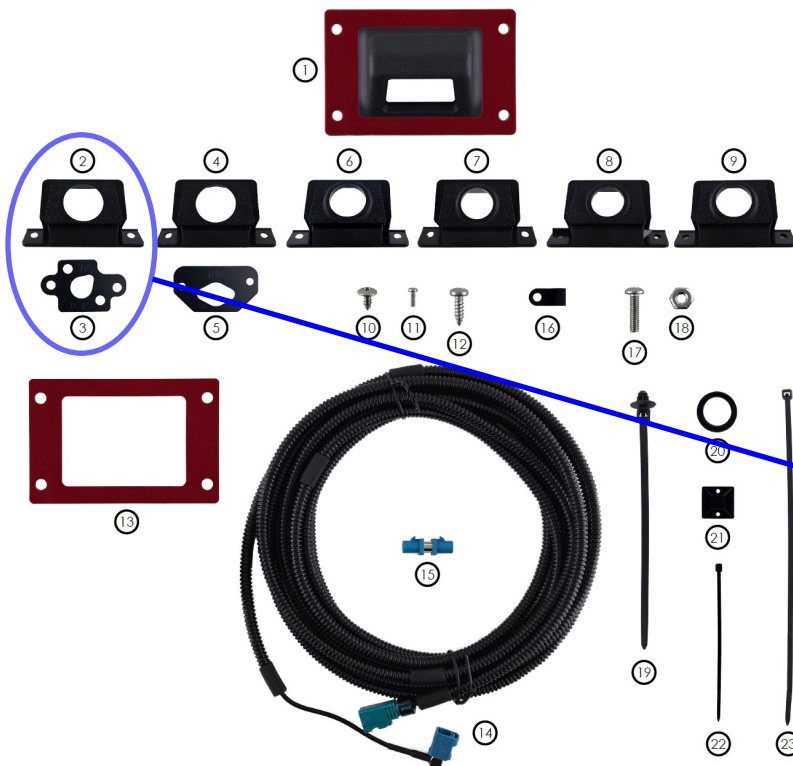
### Step 6-3.



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

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

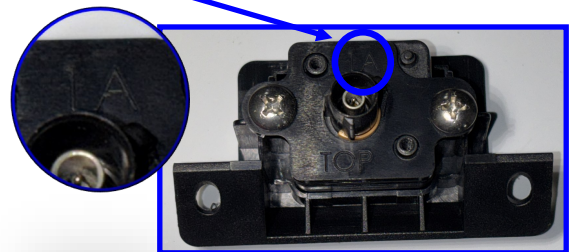
### Step 6-3.



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



Enclosure Back Plate (77212)



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

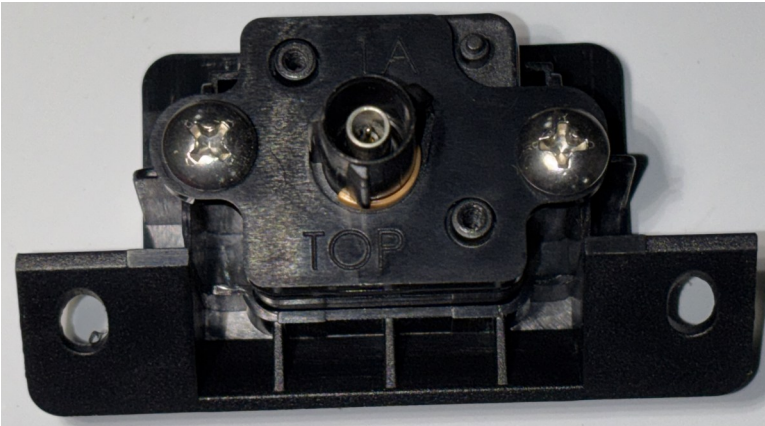


## Section 6: Application Specifics: Silverado 1500

### Step 6-4.



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



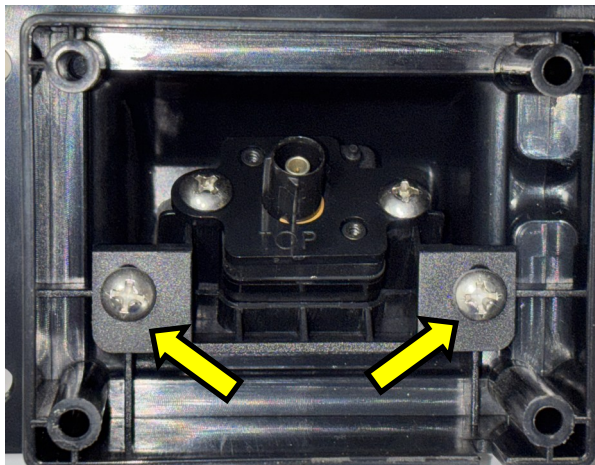
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16" Truss Head Screws will be used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

### Step 6-5.



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

### Step 6-6.



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

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

## Section 6: Application Specifics: Chevrolet Colorado

### Step 6-1.

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

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



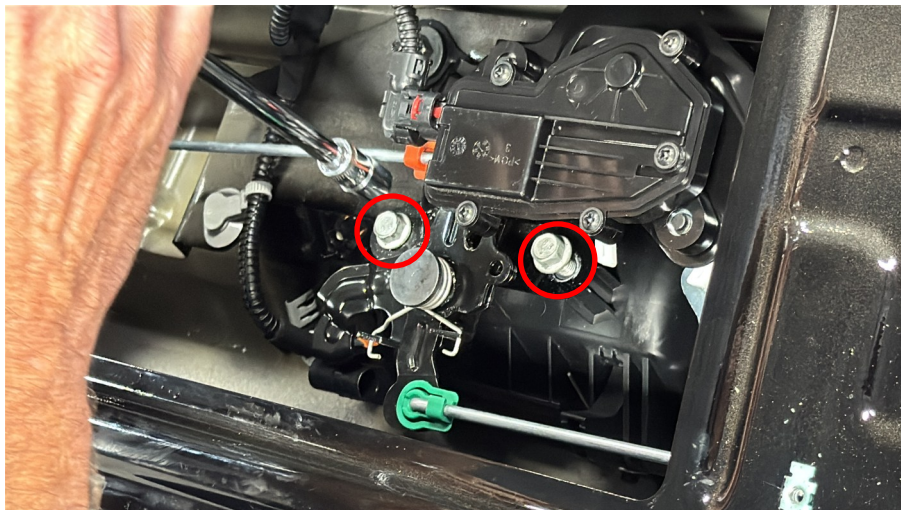
Caution: Make sure camera orientation for up is noted when removing from release handle.

### c. All vehicles

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



### d. Remove bolts circled





## Section 6: Application Specifics: Chevrolet Colorado

### Step 6-2.

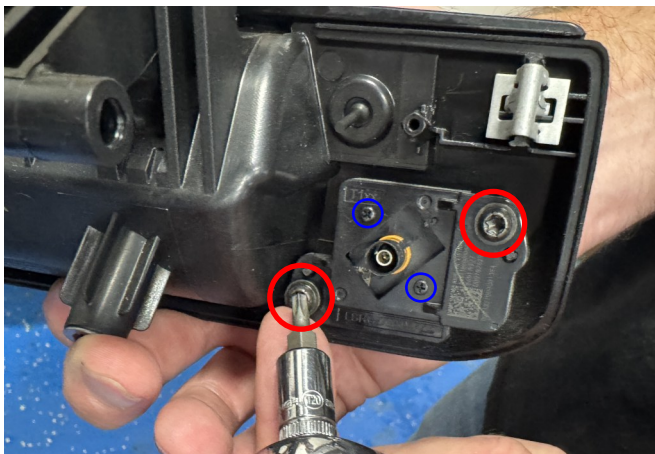
There are two clips holding in the camera housing. Using a trim tool you can remove them



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

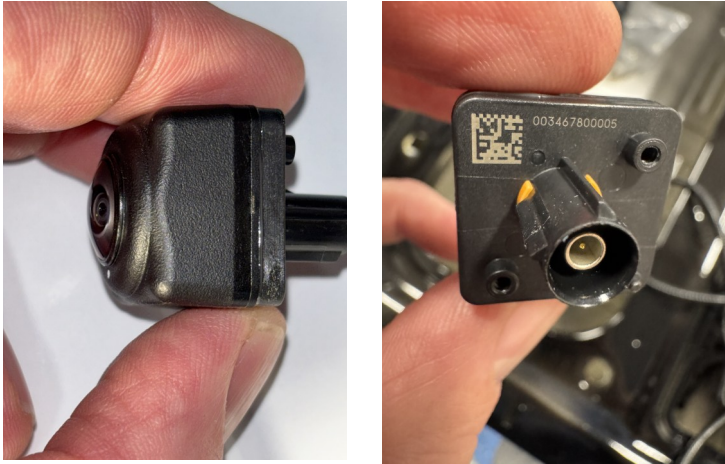


**Step 6-2.** Unscrew the two T20 torx bit screws circled. Unscrew the two Phillips head screws. Remove camera from housing



## Section 6: Application Specifics: Colorado

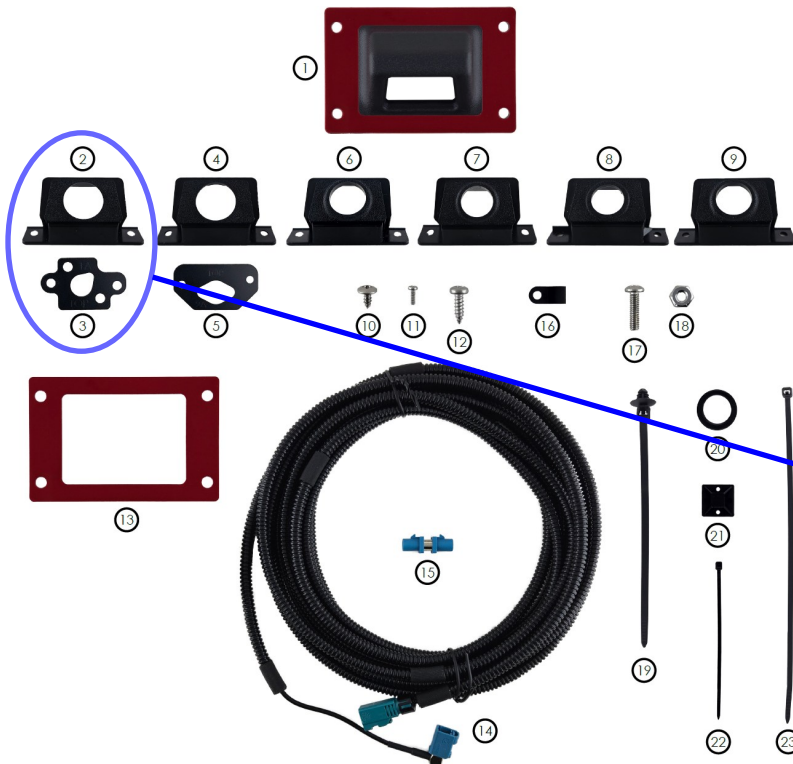
### Step 6-3.



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

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

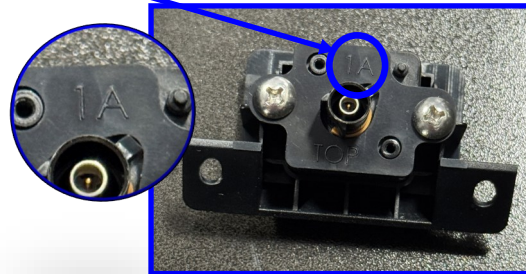
### Step 6-3.



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



Enclosure Back Plate (77212)

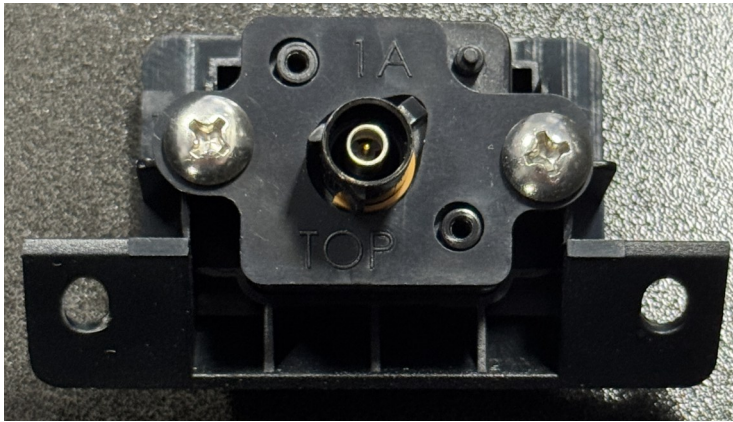


- Identify CAMERA INSERT "1A" bracket AND CAMERA INSERT PLATE "1A" (molded into the BACK SURFACE of part) [Part number BOM ID #2 and #3]



## Section 6: Application Specifics: Colorado

### Step 6-4.



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

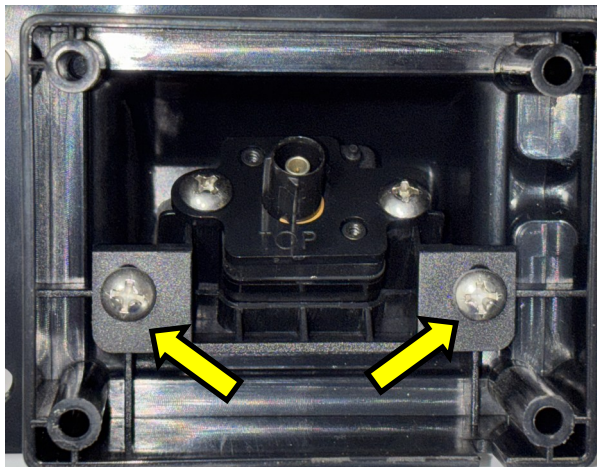
- Again, identify the orientation of the enclosure on the door, and the orientation of the inner bracket inside the enclosure and make sure the proper OEM orientation has been maintained when all are in the installed position on the door.
- The BOM ITEM #10: #6 X 5/16" Truss Head Screws will be used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

### Step 6-5.



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

### Step 6-6.



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

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

## Section 7: General installation

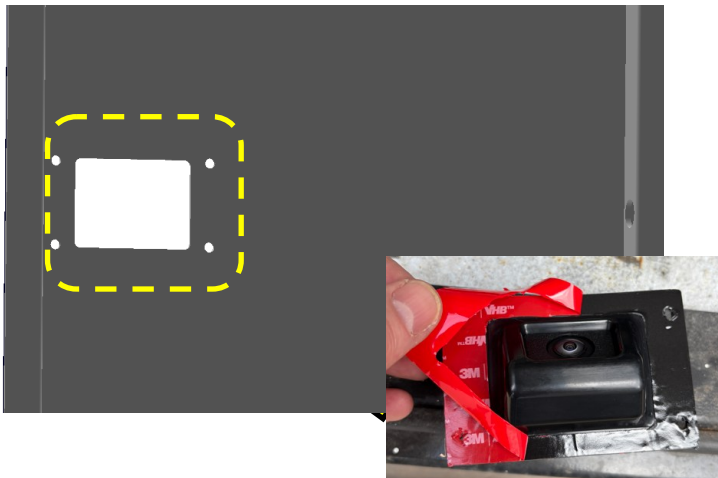
### Step 7-1.

Camera installed in  
Enclosure



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

### Step 7-2.



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

### Step 7-3.



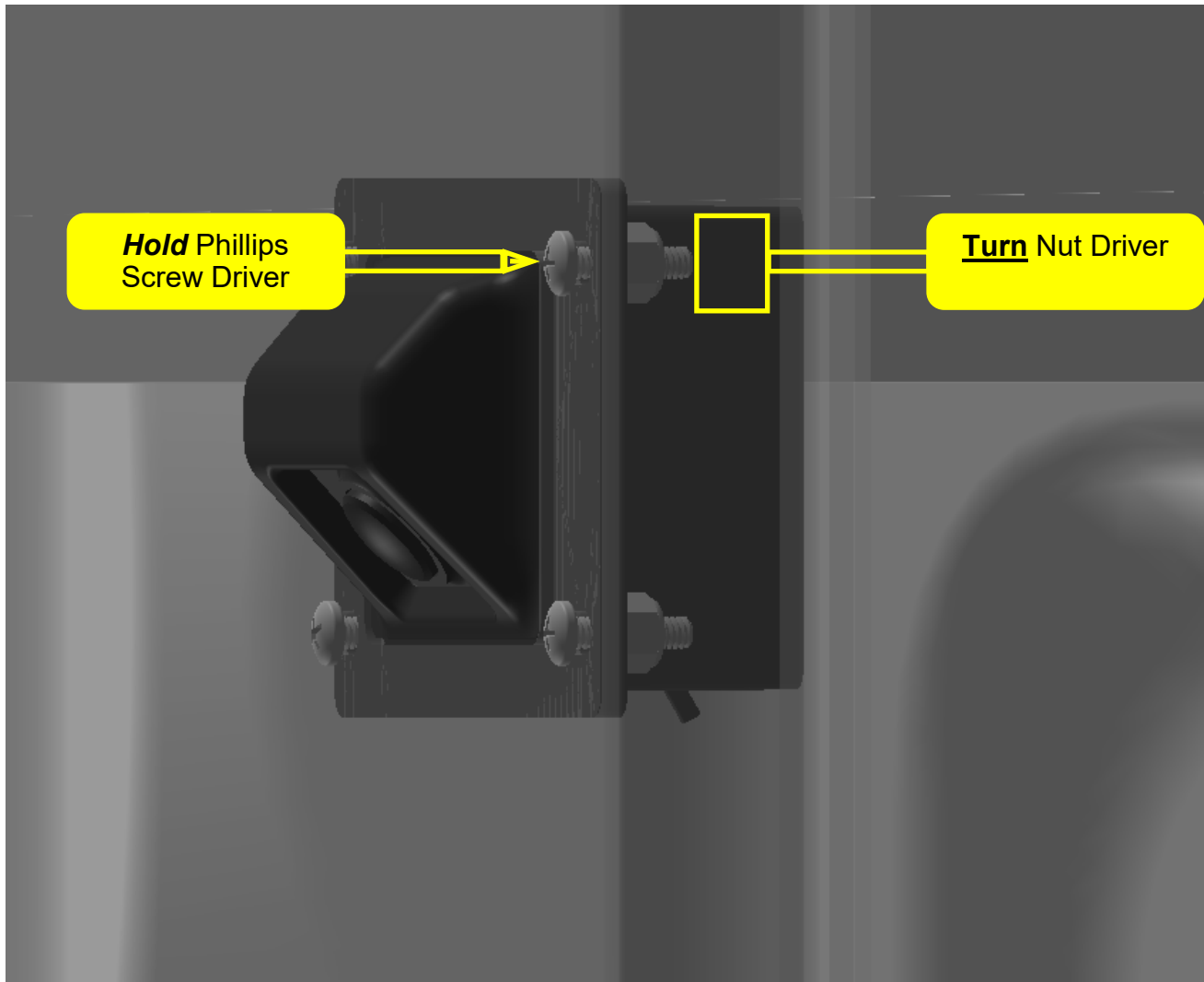
- This is VHB tape, so do not push to stick it unless the 4 screw holes are aligned.
- It is recommended that at least two corner screws BOM ITEM #17: 8-32 5/8" PHP SCREWS are present while installing the enclosure,
- Carefully aligning the enclosure protrusion through the hole in the door, make sure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

## Section 7: General installation

### Step 7-4.



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



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

## Section 8: Routing harness

### Step 8-1.



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

#### Extension Harness Connection to OEM Camera Connection:

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

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

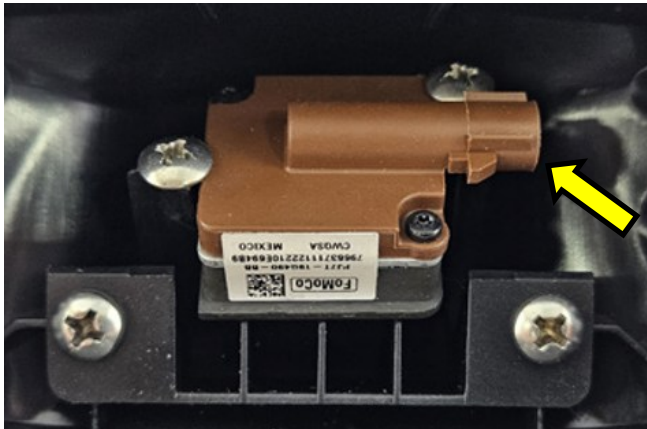
Fully Seated Connection



Not Fully Seated Connection

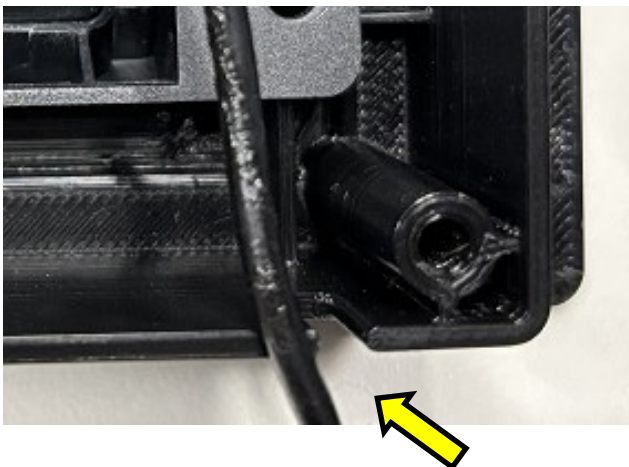


### Step 8-2.



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

### Step 8-3.

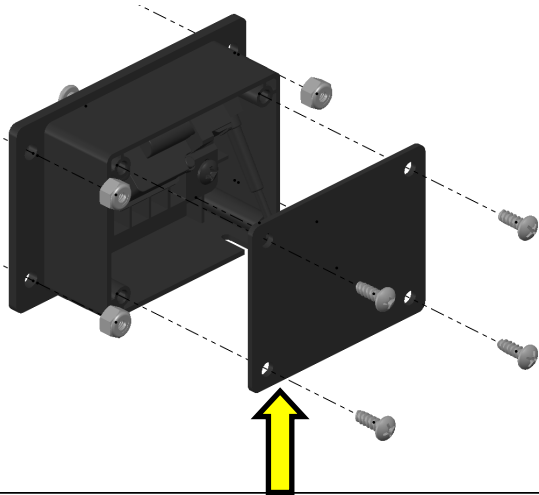


- The right angle swivel connection will be adjusted so that the coaxial wire can be routed out of the slot in the bottom of the box.



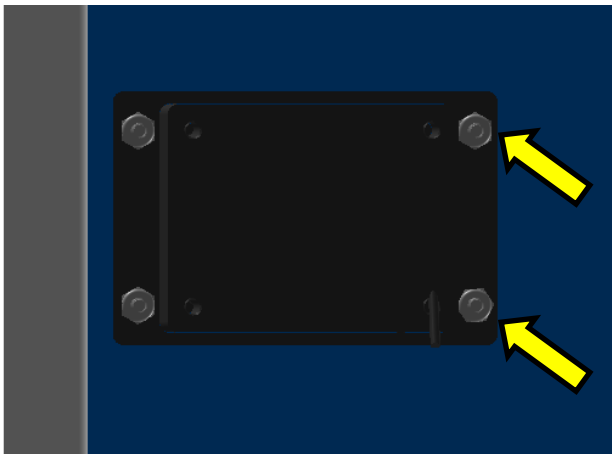
## Section 8: Routing harness

### Step 8-4.



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

### Step 8-5.

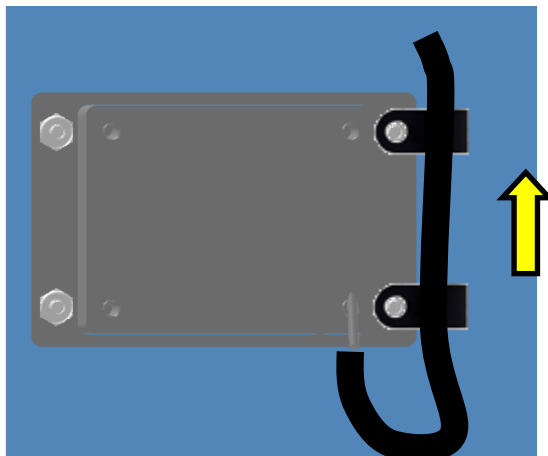


- Remove the bottom and top driver's side nuts from the enclosure mounting screws and obtain a black plastic P-clips BOM ITEM #16: BLACK P-CLIPS from the kit package.



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

### Step 8-6.



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

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

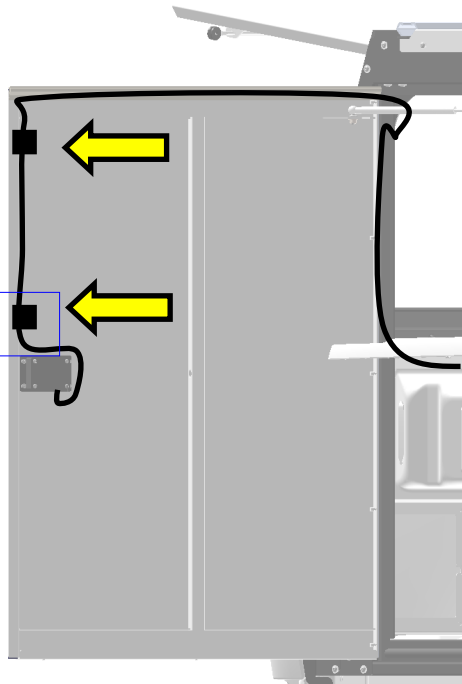
## Section 8: Routing harness

### Step 8-7.



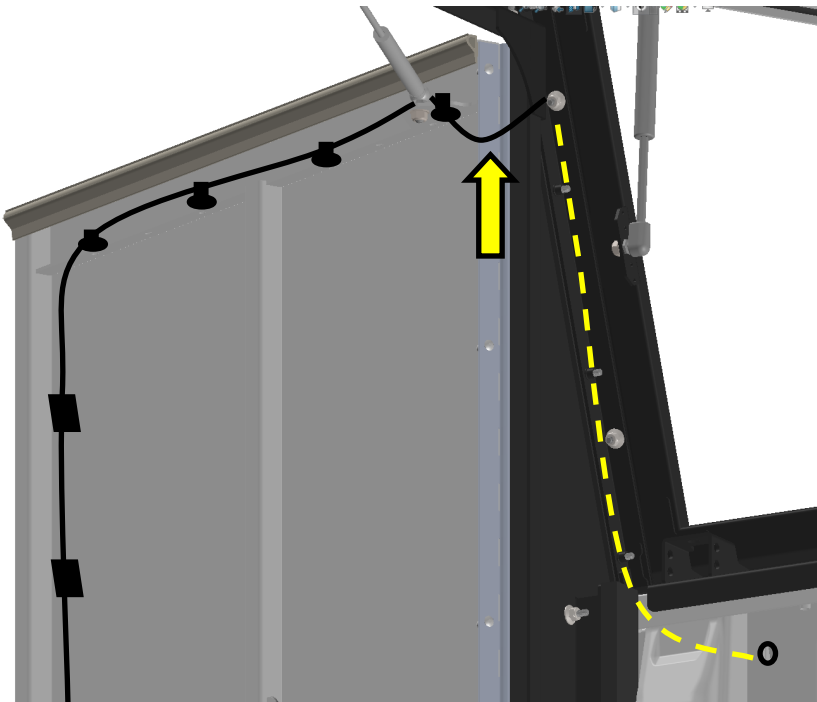
**Caution:** The loom covered coaxial cable should not be bent at harsh angles, kinked or pinched during the installation.

Door edge square tube



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

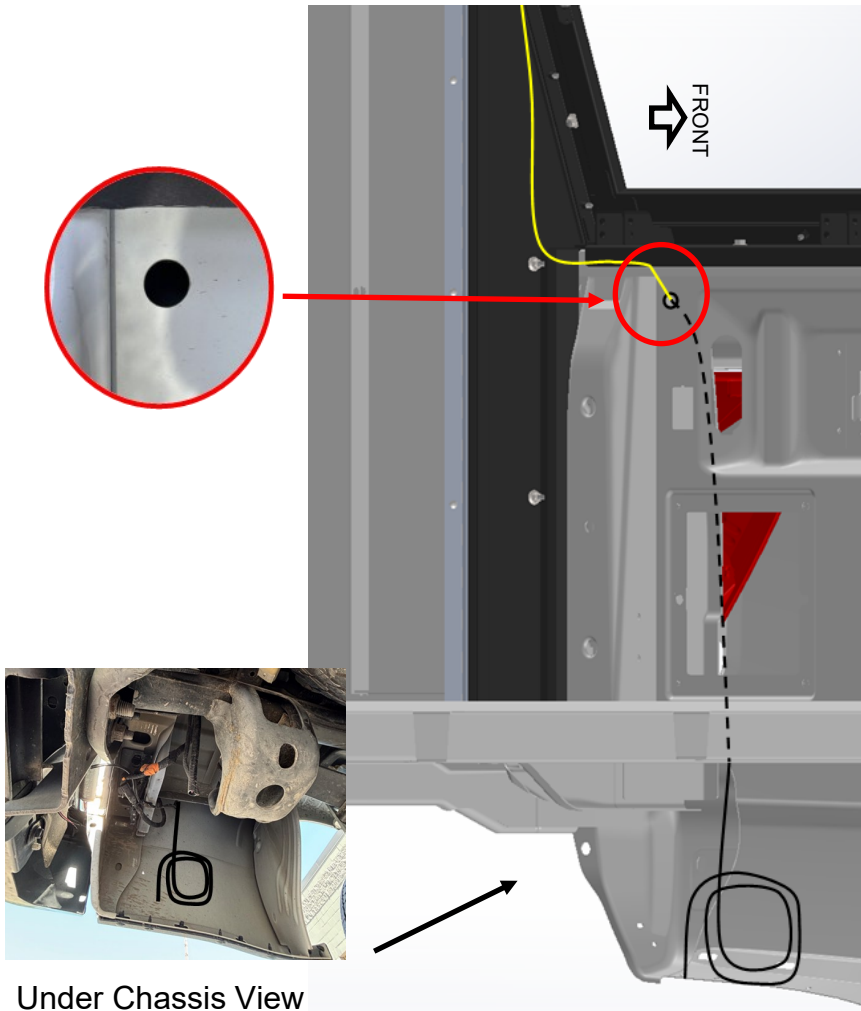
### Step 8-8.



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

## Section 8: Routing harness

### Step 8-9.



Under Chassis View



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

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

### Step 8-10.



FRONT

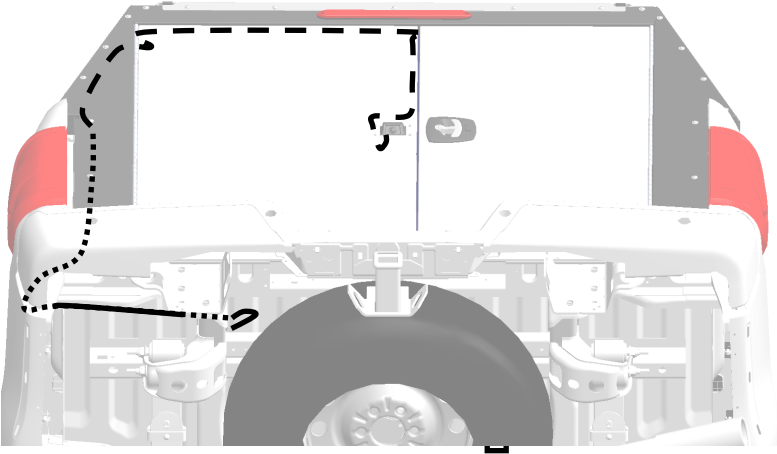


The wire MUST be tied up above the frame rail to avoid damage from ice and road debris.

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

## Section 8: Routing harness

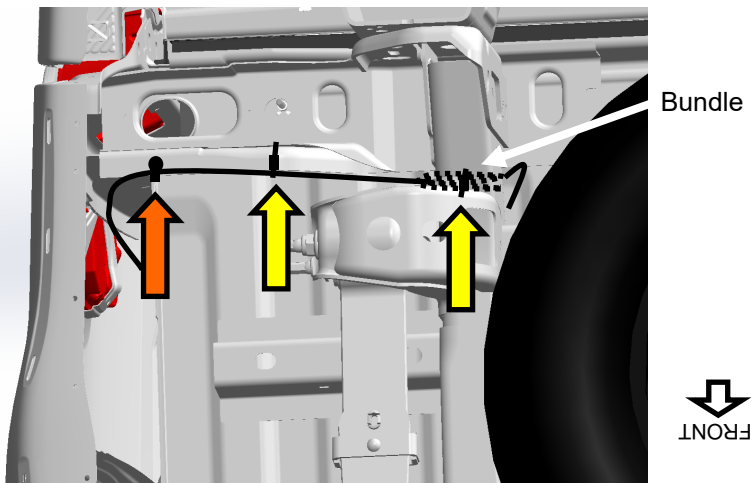
### Step 8-11.



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

### Step 8-12.

Under Chassis View



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

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

## **Section 9: Testing and Finish**

The camera installation should now be checked:

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

