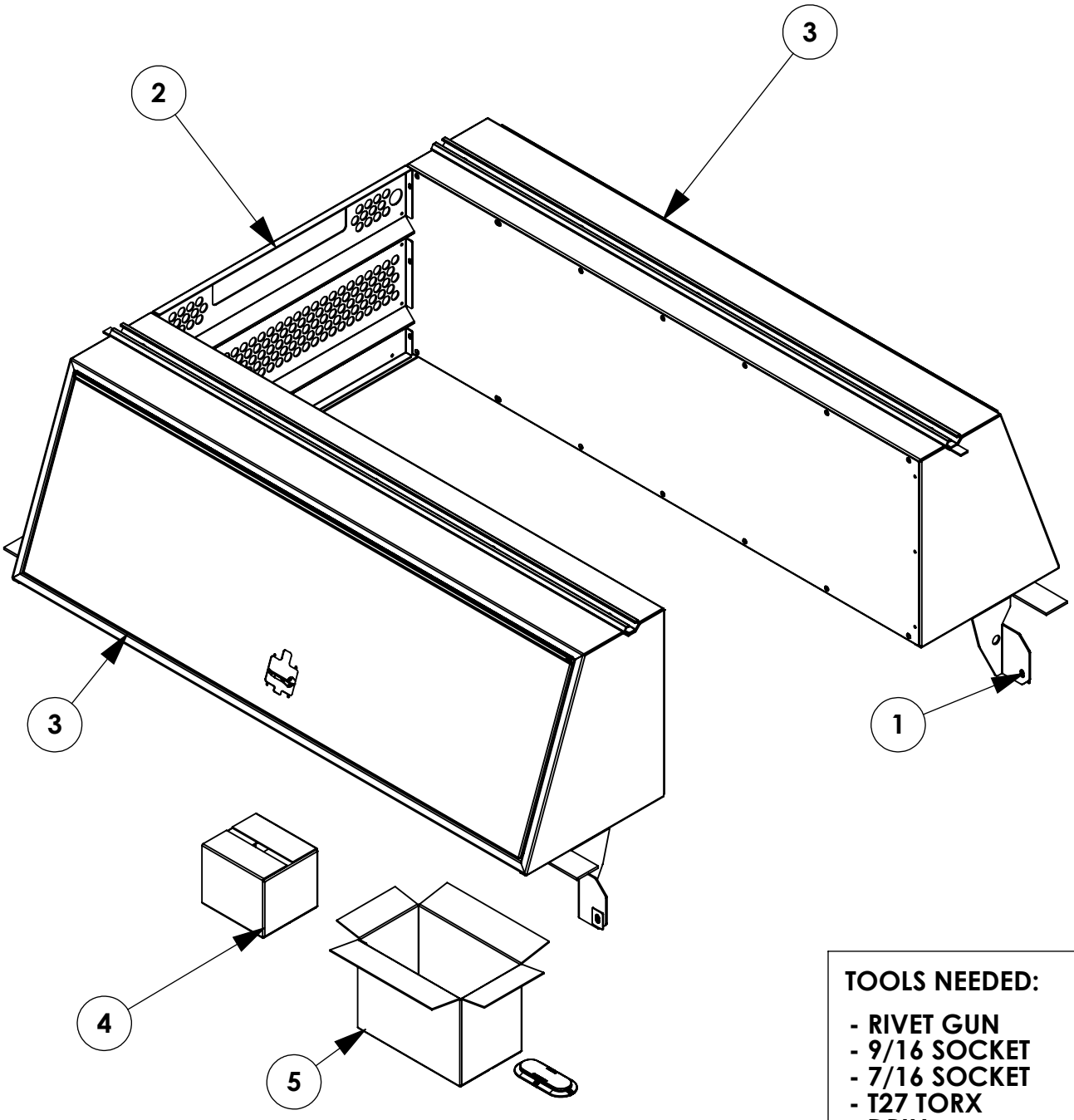
INSTR. NUMBER : 81821	PG: 1	REV: A
PART NUMBER : **TSBX-6F1M**		
PART DESC. : TSBX KIT, F150 6' BED M		

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TS-BK6F1	TSBX FORD F-150 6' CAB GUARD/BED BRKT KIT	1
2	TS-CG1	TSBX, CAB GUARD KIT, 1	1
3	TS-BOX6	TOP SIDE BOX, 6' ASSEMBLY	2
4	TMLHK2	Topper Mechanical Lock Hatch Kit	1
5	81248	CHMSL KIT TSBX	1

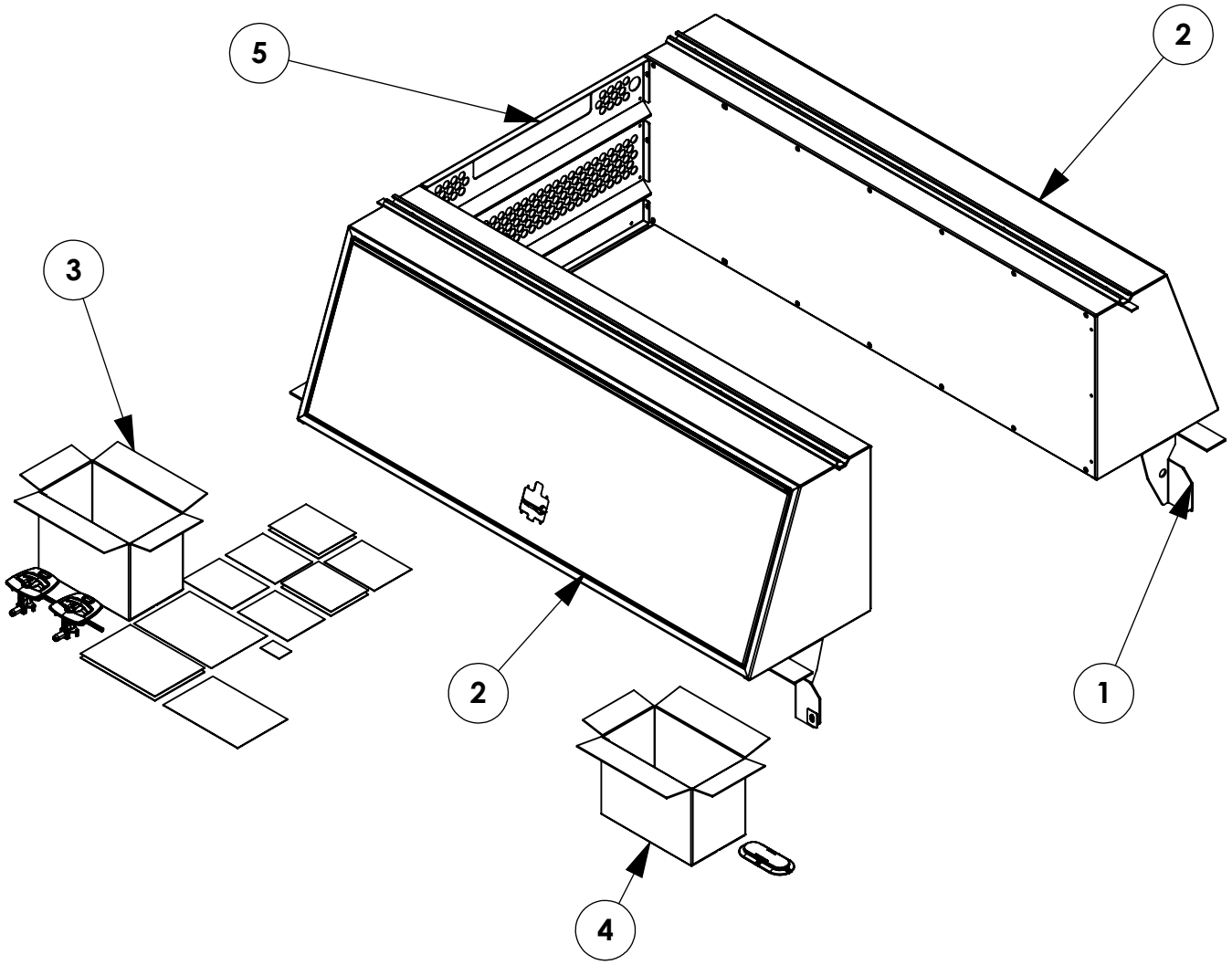


TOOLS NEEDED:

- **RIVET GUN**
- **9/16 SOCKET**
- **7/16 SOCKET**
- **T27 TORX**
- **DRILL**

INSTR. NUMBER : 81821	PG: 2	REV: A
PART NUMBER : **TSBX-6F1E**		
PART DESC. : TSBX KIT, F-150 6' BED E		

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TS-BK6F1	TSBX FORD F-150 6' CAB GUARD/BED BRKT KIT	1
2	TS-BOX6	TOP SIDE BOX, 6' ASSEMBLY	2
3	81246	KIT,TOPSIDER,6FT,FULL	1
4	81248	CHMSL KIT TSBX	1
5	TS-CG1	TSBX, CAB GUARD KIT, 1	1

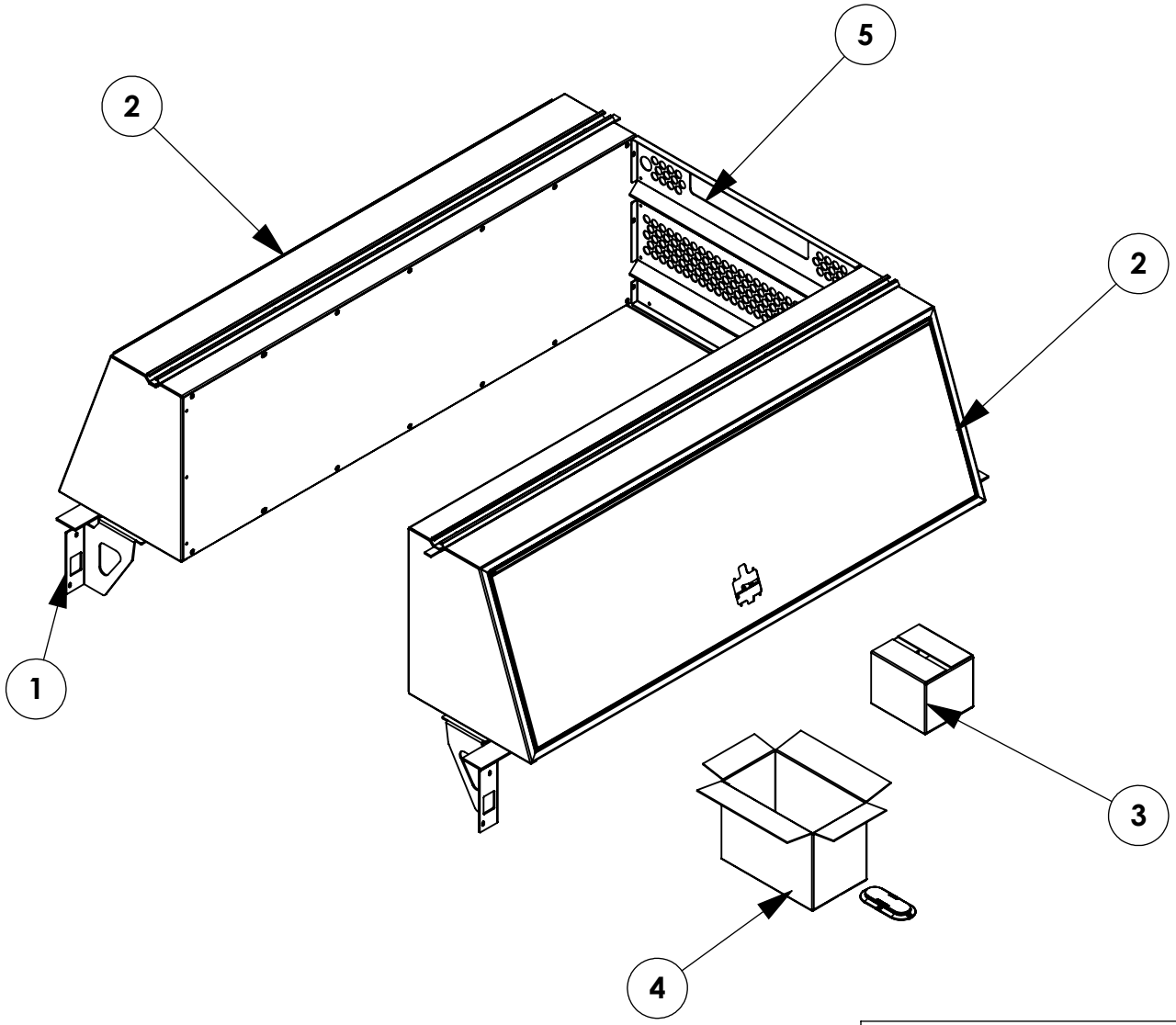


TOOLS NEEDED:

- **RIVET GUN**
- **9/16 SOCKET**
- **7/16 SOCKET**
- **T27 TORX**
- **DRILL**

INSTR. NUMBER : 81821	PG: 3	REV: A
PART NUMBER : **TSBX-6F2M**		
PART DESC. : TSBX KIT, F-250 6' BED M		

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TS-BK6F2	TSBX, RAM 6' CAB BRK KIT	1
2	TS-BOX6	TOP SIDE BOX, 6' ASSEMBLY	2
3	TMLHK2	Topper Mechanical Lock Hatch Kit	1
4	81248	CHMSL KIT TSBX	1
5	TS-CG1	TSBX, CAB GUARD KIT, 1	1

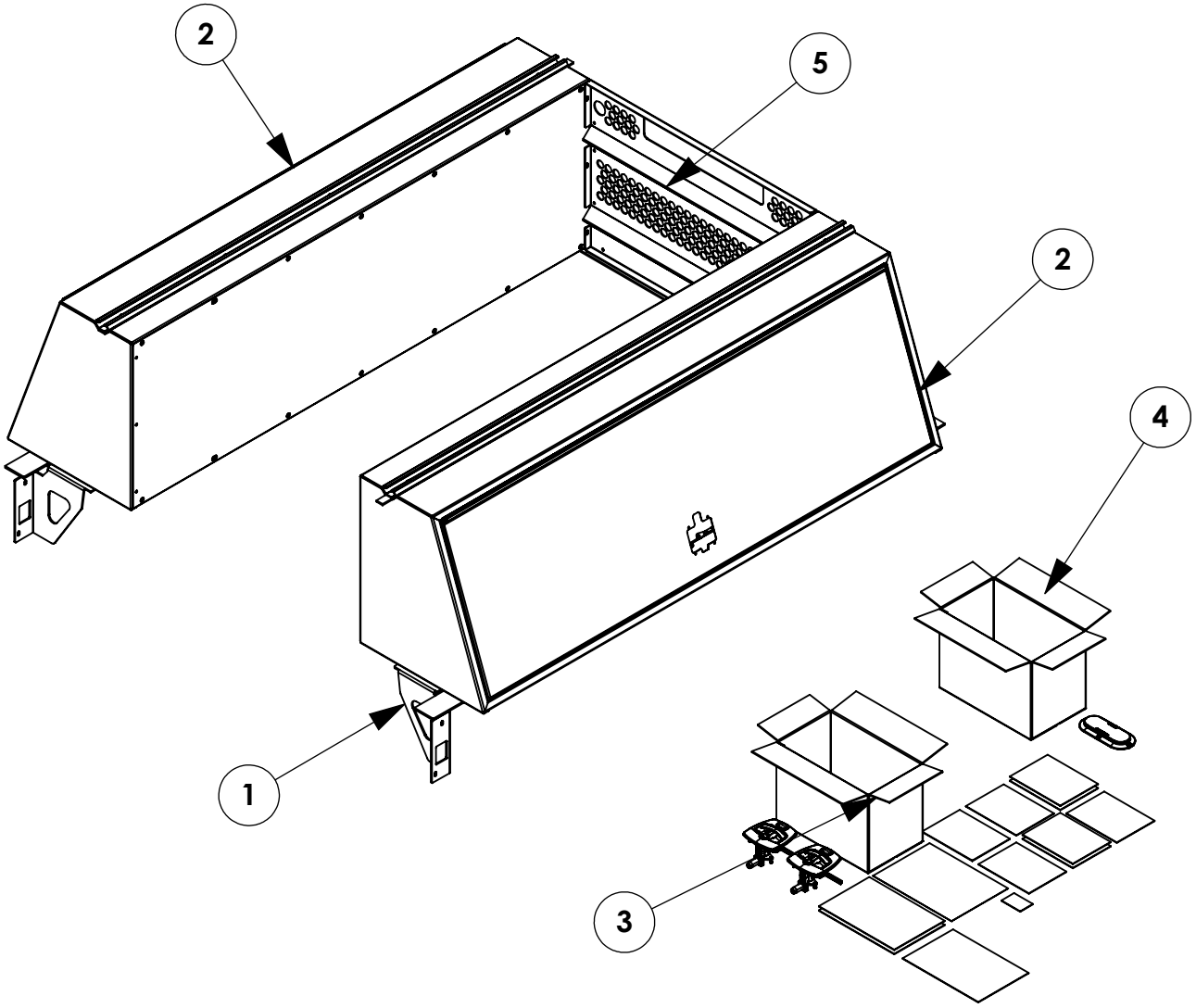


TOOLS NEEDED:

- **RIVET GUN**
- **9/16 SOCKET**
- **7/16 SOCKET**
- **T27 TORX**
- **DRILL**

INSTR. NUMBER : 81821	PG: 4	REV: A
PART NUMBER : **TSBX-6F2E**		
PART DESC. : TSBX KIT, F-250 6' BED E		

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TS-BK6F2	TSBX, RAM 6' CAB BRK KIT	1
2	TS-BOX6	TOP SIDE BOX, 6' ASSEMBLY	2
3	81246	KIT,TOPSIDER,6FT,FULL	1
4	81248	CHMSL KIT TSBX	1
5	TS-CG1	TSBX, CAB GUARD KIT, 1	1



TOOLS NEEDED:

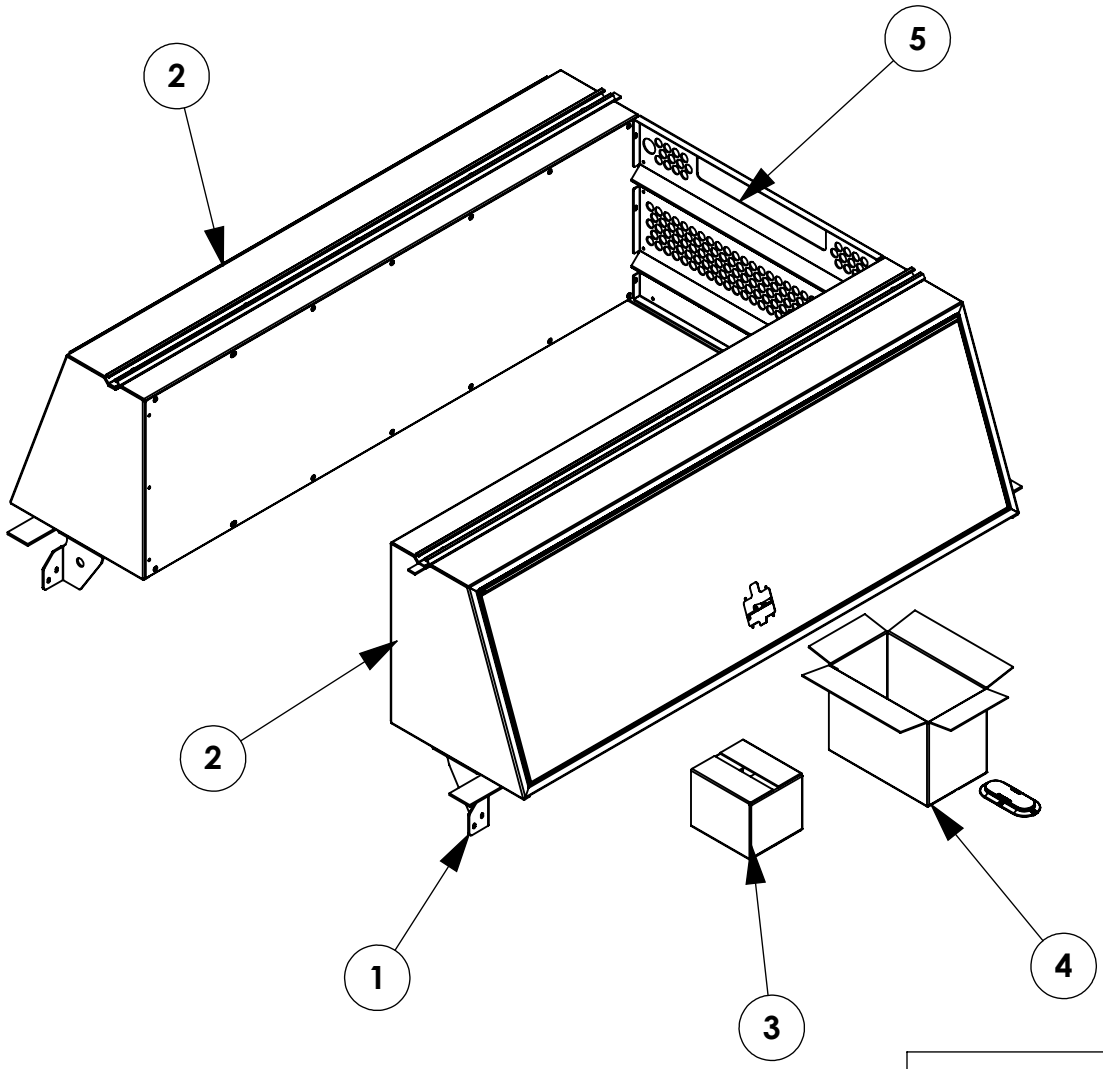
- **RIVET GUN**
- **9/16 SOCKET**
- **7/16 SOCKET**
- **T27 TORX**
- **DRILL**

INSTR. NUMBER	PG:	REV:
81821	5	A

PART NUMBER : **TSBX-6G1M**

PART DESC. : TSBX KIT, GM 1500 6' BED M

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TS-BK6G1	TSBX, RAM 6' CAB BRK KIT	1
2	TS-BOX6	TOP SIDE BOX, 6' ASSEMBLY	2
3	TMLHK2	Topper Mechanical Lock Hatch Kit	1
4	81248	CHMSL KIT TSBX	1
5	TS-CG1	TSBX, CAB GUARD KIT, 1	1



TOOLS NEEDED:

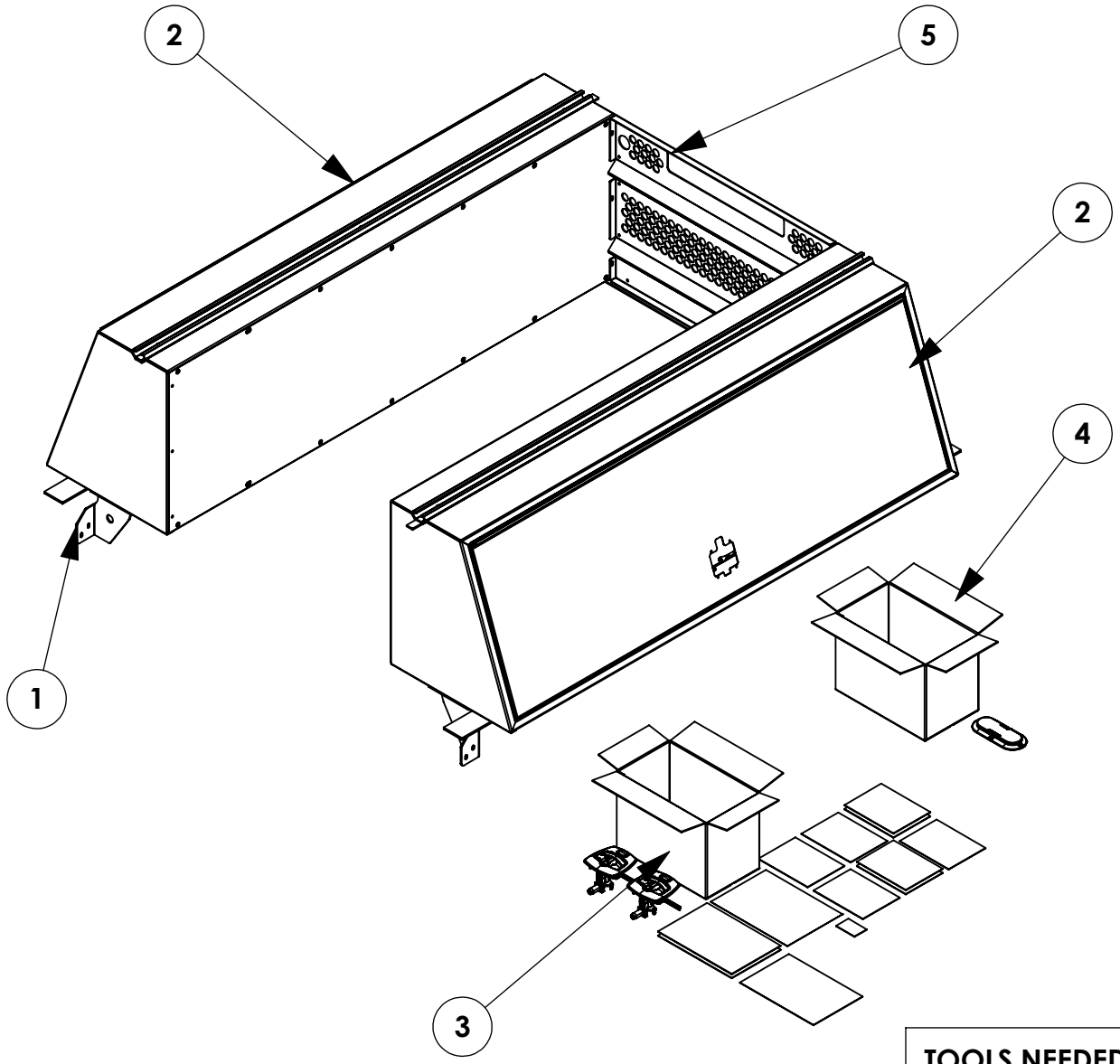
- **RIVET GUN**
- **9/16 SOCKET**
- **7/16 SOCKET**
- **T27 TORX**
- **DRILL**

INSTR. NUMBER	PG:	REV:
81821	6	A

PART NUMBER : **TSBX-6G1E**

PART DESC. : TSBX KIT, GM1500 6' BED E

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TS-BK6G1	TSBX, RAM 6' CAB BRK KIT	1
2	TS-BOX6	TOP SIDE BOX, 6' ASSEMBLY	2
3	81246	KIT,TOPSIDER,6FT,FULL	1
4	81248	CHMSL KIT TSBX	1
5	TS-CG1	TSBX, CAB GUARD KIT, 1	1

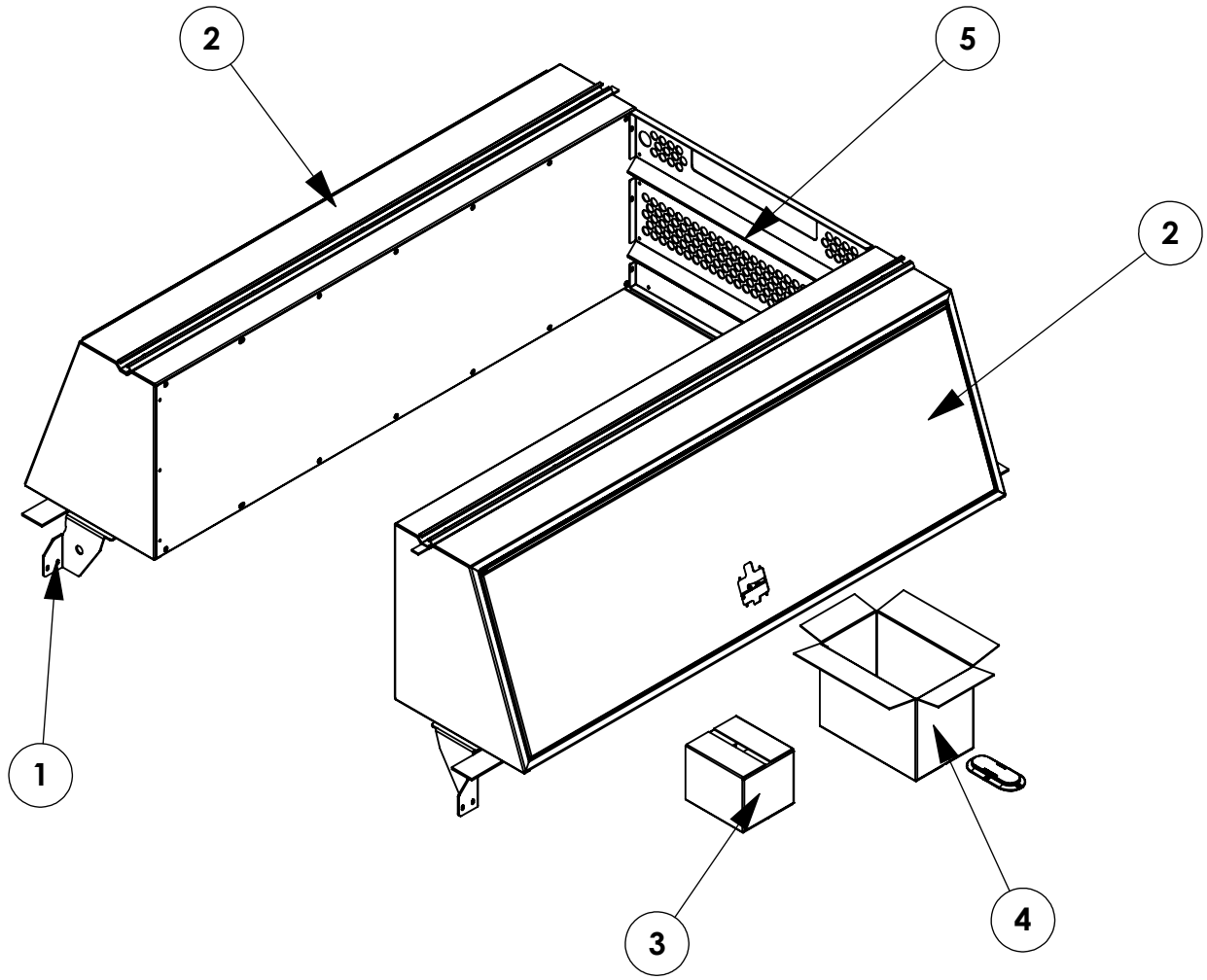


TOOLS NEEDED:

- **RIVET GUN**
- **9/16 SOCKET**
- **7/16 SOCKET**
- **T27 TORX**
- **DRILL**

INSTR. NUMBER : 81821	PG: 7	REV: A
PART NUMBER : **TSBX-6G2M**		
PART DESC. : TSBX KIT, GM2500 6' BED M		

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TS-BK6G2	TSBX, RAM 6' CAB BRK KIT	1
2	TS-BOX6	TOP SIDE BOX, 6' ASSEMBLY	2
3	TMLHK2	Topper Mechanical Lock Hatch Kit	1
4	81248	CHMSL KIT TSBX	1
5	TS-CG1	TSBX, CAB GUARD KIT, 1	1

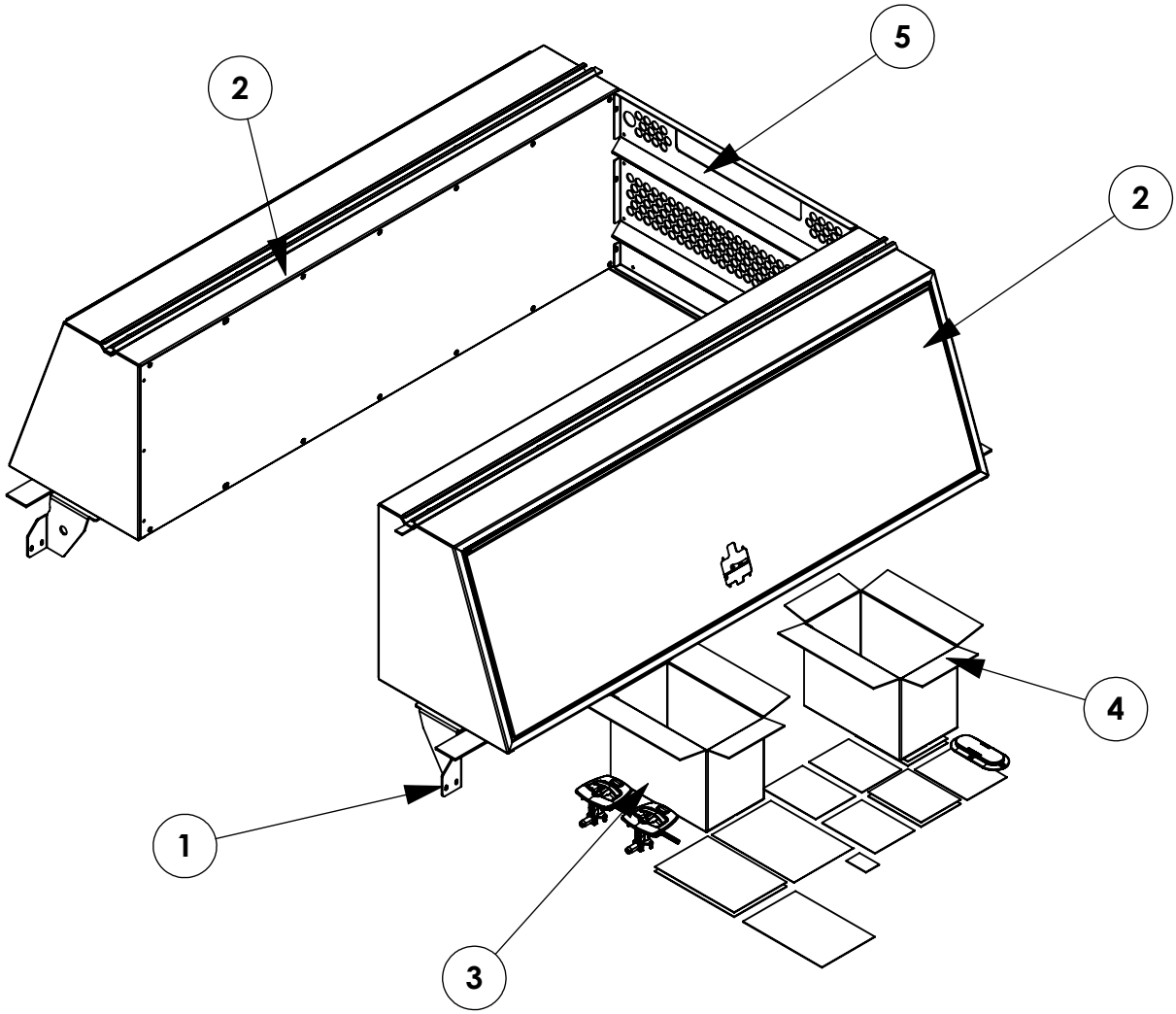


TOOLS NEEDED:

- **RIVET GUN**
- **9/16 SOCKET**
- **7/16 SOCKET**
- **T27 TORX**
- **DRILL**

INSTR. NUMBER : 81821	PG: 8	REV: A
PART NUMBER : **TSBX-6G2E**		
PART DESC. : TSBX KIT, GM2500 6' BED E		

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TS-BK6G2	TSBX, RAM 6' CAB BRK KIT	1
2	TS-BOX6	TOP SIDE BOX, 6' ASSEMBLY	2
3	81246	KIT,TOPSIDER,6FT,FULL	1
4	81248	CHMSL KIT TSBX	1
5	TS-CG1	TSBX, CAB GUARD KIT, 1	1

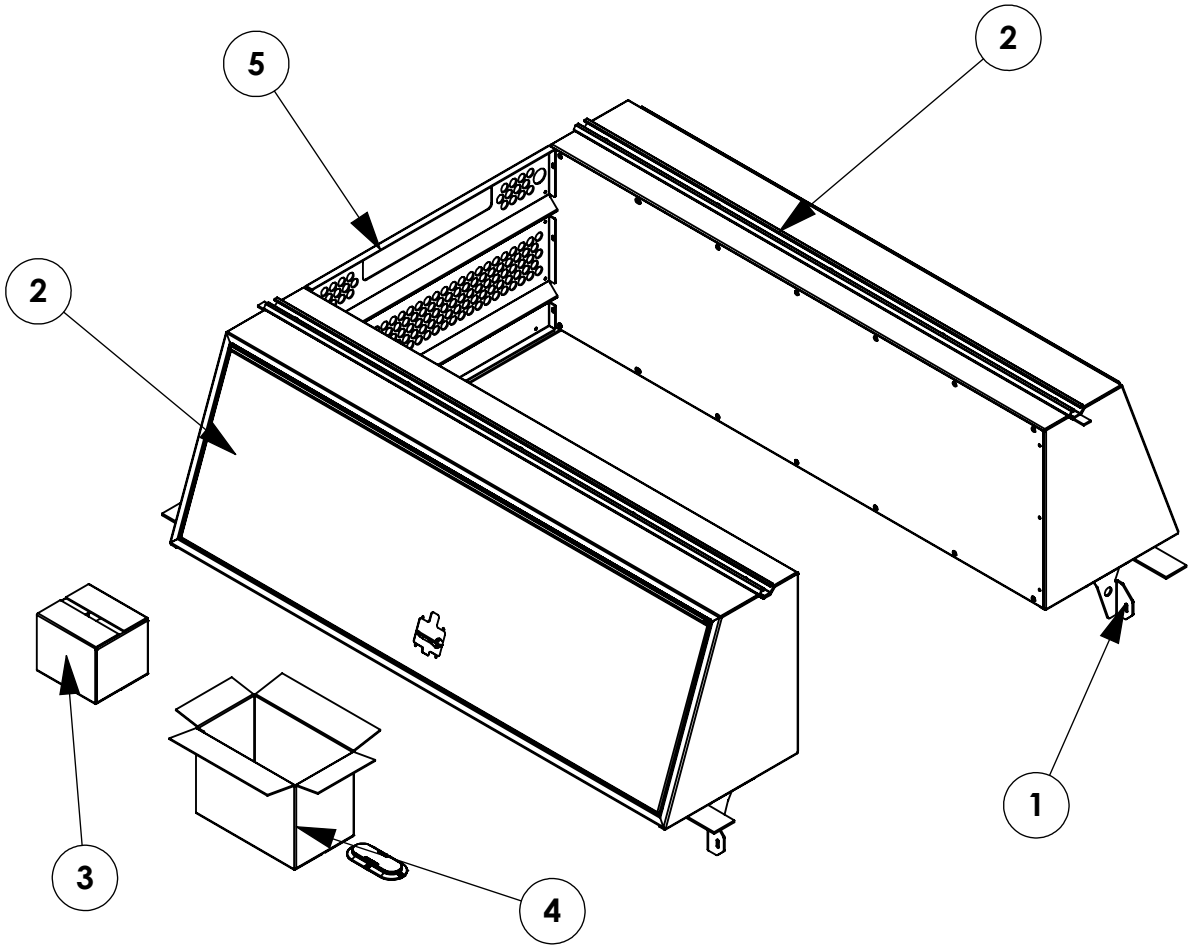


TOOLS NEEDED:

- **RIVET GUN**
- **9/16 SOCKET**
- **7/16 SOCKET**
- **T27 TORX**
- **DRILL**

INSTR. NUMBER : 81821	PG: 9	REV: A
PART NUMBER : **TSBX-6R1M**		
PART DESC. • TSBX KIT, RAM1500&2500, • 6' BED M		

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TS-BK6R1	TSBX, RAM 6' CAB BRK KIT	1
2	TS-BOX6	TOP SIDE BOX, 6' ASSEMBLY	2
3	TMLHK2	Topper Mechanical Lock Hatch Kit	1
4	81248	CHMSL KIT TSBX	1
5	TS-CG1	TSBX, CAB GUARD KIT, 1	1

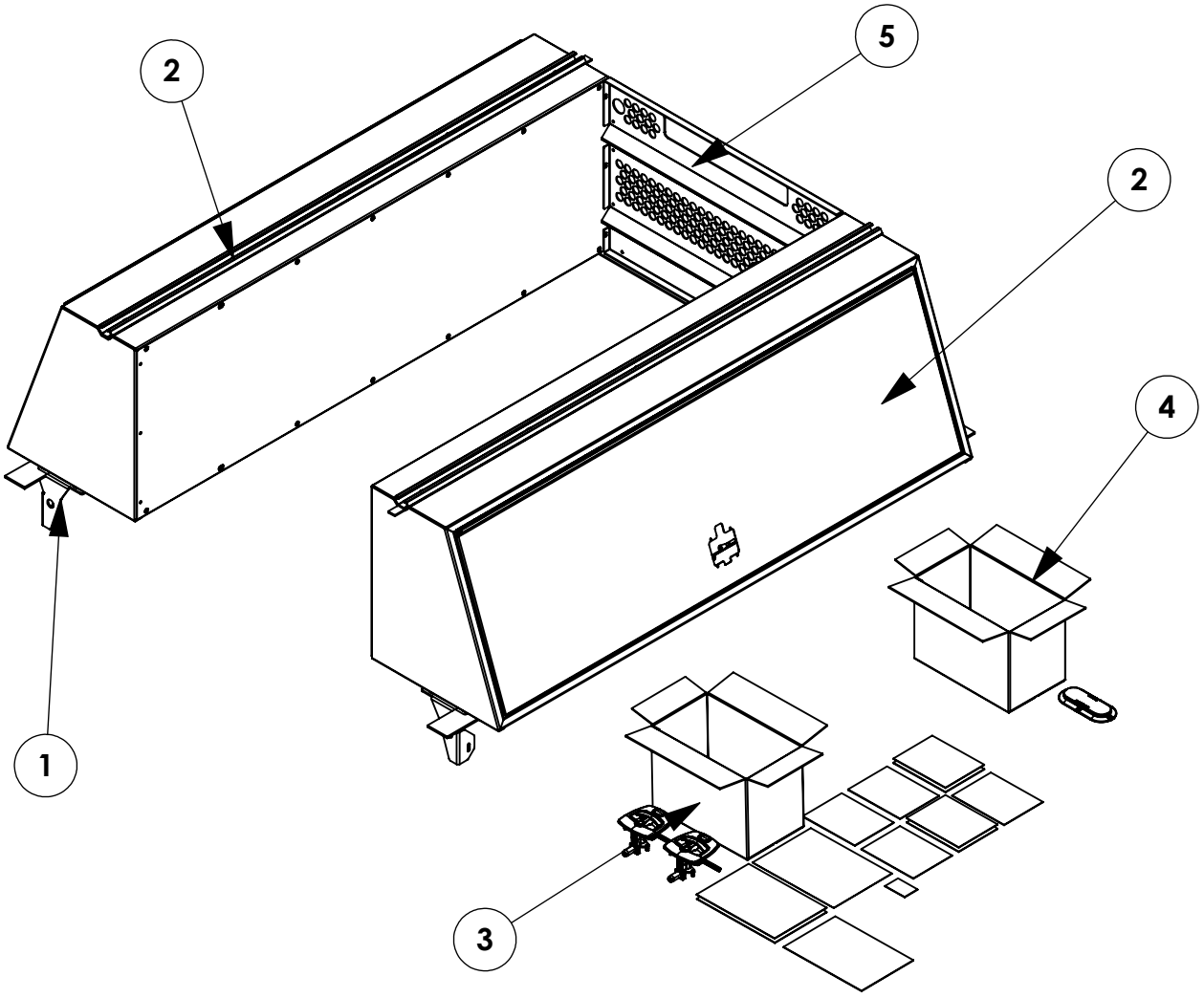


TOOLS NEEDED:

- **RIVET GUN**
- **9/16 SOCKET**
- **7/16 SOCKET**
- **T27 TORX**
- **DRILL**

INSTR. NUMBER : 81821	PG: 10	REV: A
PART NUMBER : **TSBX-6R1E**		
PART DESC. • TSBX KIT, RAM1500&2500 • 6' BED E		

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TS-BK6R1	TSBX, RAM 6' CAB BRK KIT	1
2	TS-BOX6	TOP SIDE BOX, 6' ASSEMBLY	2
3	81246	KIT,TOPSIDER,6FT,FULL	1
4	81248	CHMSL KIT TSBX	1
5	TS-CG1	TSBX, CAB GUARD KIT, 1	1



TOOLS NEEDED:

- **RIVET GUN**
- **9/16 SOCKET**
- **7/16 SOCKET**
- **T27 TORX**
- **DRILL**

BEST PRACTICES

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

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

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

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

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

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

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

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

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

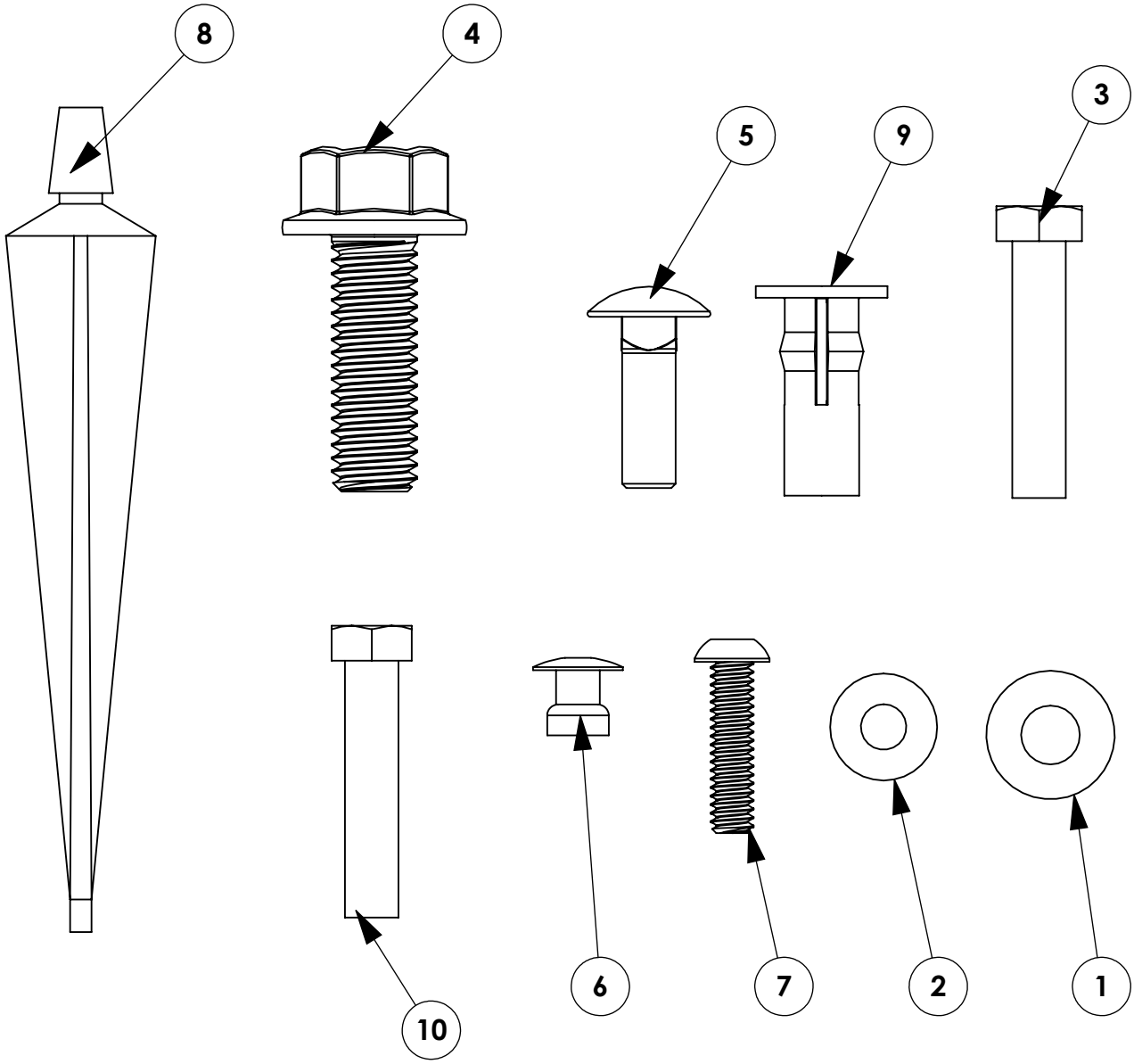
BEST PRACTICE: ORGANIZE ALL FASTENERS & VERIFY THAT ALL ARE ACCOUNTED FOR

PAGE: **12**

FASTENERS USED

BAG REFERENCE: **BAG80398**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FAS0164	WASHER,FLAT,SAE,5/16,ALUM	1
2	FAS0234	WASHER, FLAT, 1/4, SST	1
3	FAS0242	SCREW, HEX HD, 5/16-18X1.50 STAINLESS STEEL	1
4	FAS1025	HHCS FLNG 1/2"-13, 1-1/2" 18-8 SS	1
5	FAS0398	BOLT,CRG 5/16-18X1.0 SS	1
6	FAS0584	RIVET, BLIND, DOMEHEAD, 1/4 X .25 GRIP	1
7	FAS0940	SCREW, BHTX 1/4-20X1 SS NP	1
8	26618-0	SILICONE SEALANT	1
9	FAS0091	PLUSNUT, 5/16	1
10	FAS0092	SCREW, HEX HD, 5/16-18X1.50 ZN PLATE, G8	1



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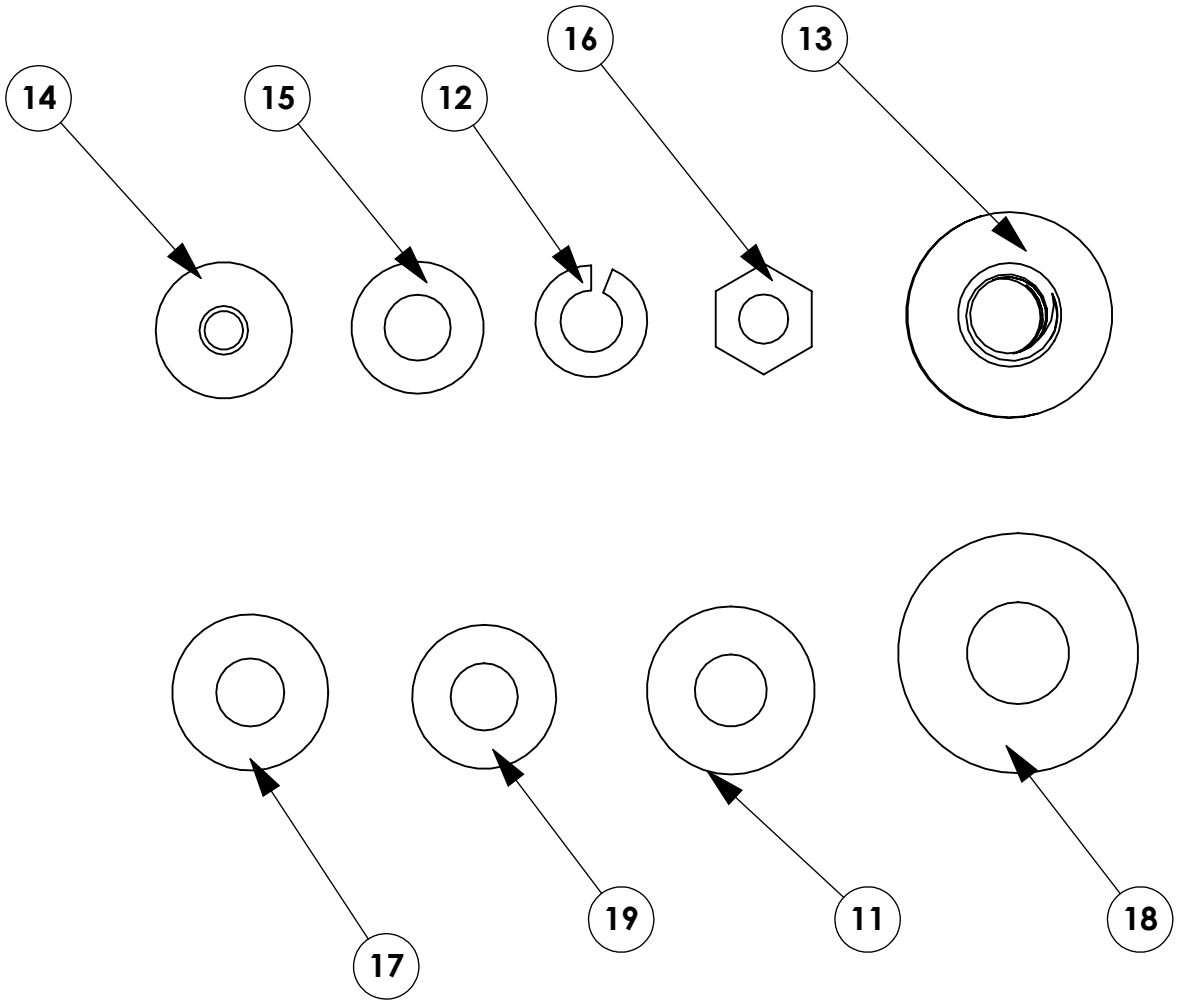
BEST PRACTICE: ORGANIZE ALL FASTENERS & VERIFY THAT ALL ARE ACCOUNTED FOR

PAGE: **14**

FASTENERS USED

BAG REFERENCE: **BAG80398**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
11	FAS0086	WASHER,FLAT USS 5/16 ZP	1
12	FAS0098	WASHER, LOCK, SPLIT, 5/16, ZINC PLATE	1
13	FAS1026		1
14	FAS0055	NUT,HEX NLK FLG 1/4-20 ZP	1
15	FAS0245	WASHER, FLAT, 5/16 HRD, ZN	1
16	FAS0248	NUT, NYLON INSERT LOCK, 5/16-18 SST	1
17	FAS0688	EPDM WASHER	1
18	FAS0334	WASHER,FLAT 1/2 SS	1
19	FAS0552	WASHER, FLAT, 5/16, SST	1



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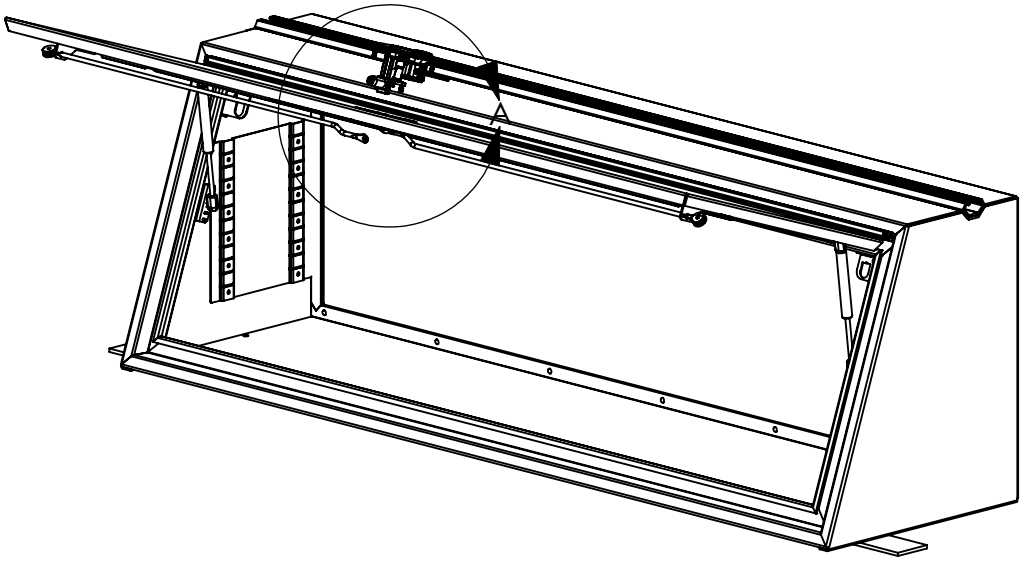
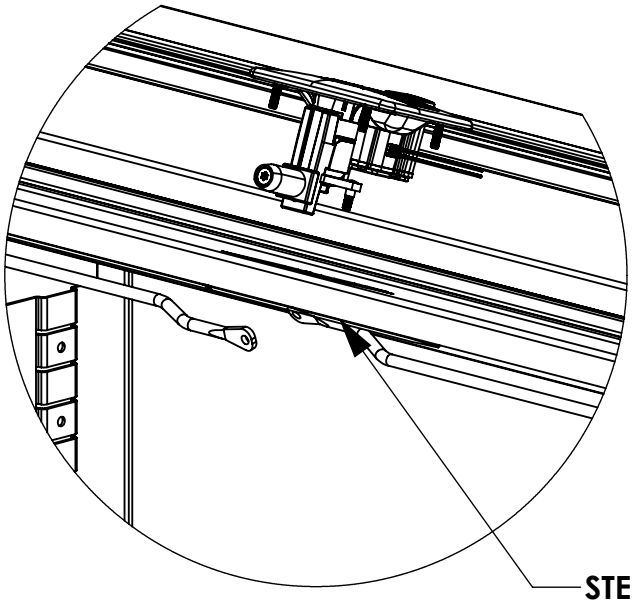
STEP 1 - DETERMINE WHICH BOX WILL BE THE PS AND DS SIDE - TEHSE BOXES WILL SHIP FROM ASC SYMMETRICAL

Step 1.1
IDENTIFY WHAT SIDE OF THE BOX WILL BE FACING FORWARD AND REWARD ON THE VEHICLE

Step 1.2
INSTALL LATCH <u>FULLY TIGHTEN</u> FAS0917 (4 PLACES)

Step 1.3
<u>REPEAT FOR 2ND BOX</u>





DETAIL A
SCALE 1 : 5

STEP 2.1 - INSTALL BED SUPPORT BRACKETS THIS IS VEHICLE SPECIFIC

F-150

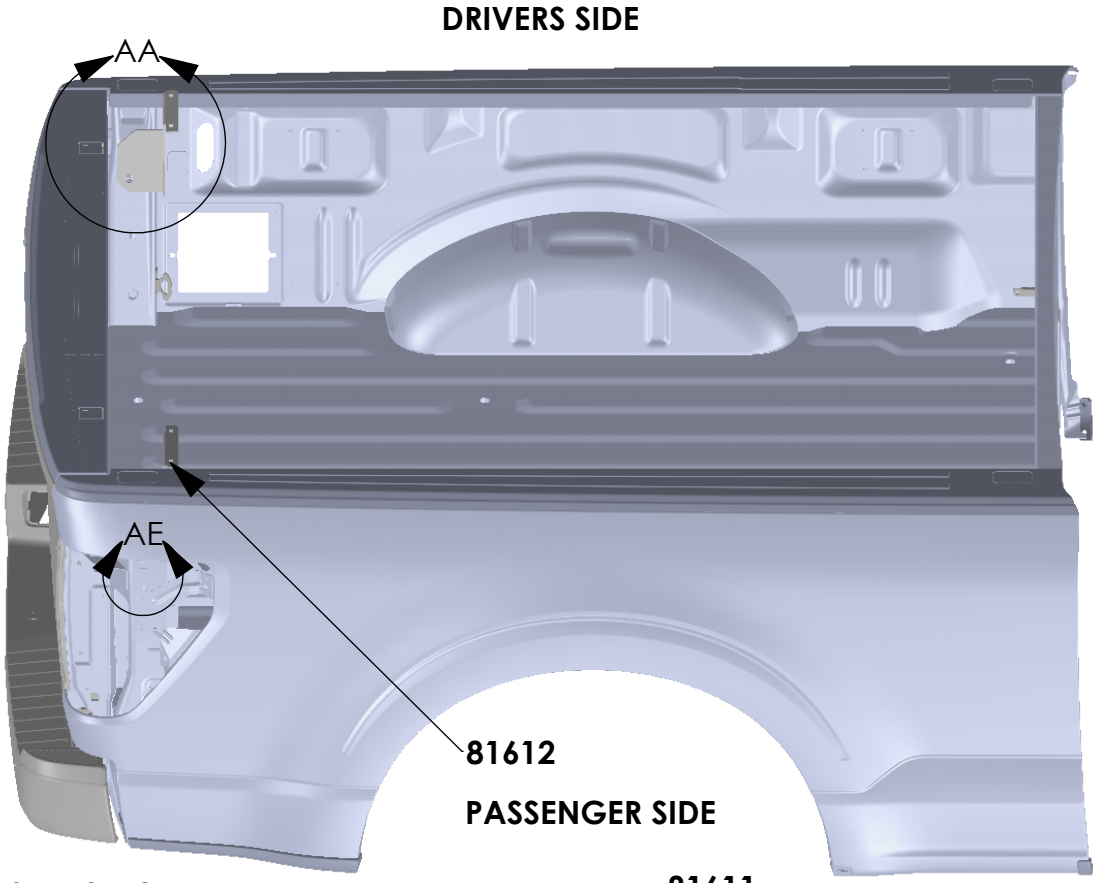
Step 2.1.1
LOCATE THE BED SUPPORT BRACKETS IN THE BRKT KIT

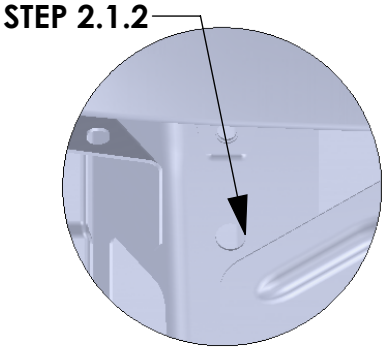
81611-B AND 81612-B FOR F-150

Step 2.1.2
REMOVE TAIL LIGHT TO GAIN ACCESS TO MOUNTING HOLES SHOWN

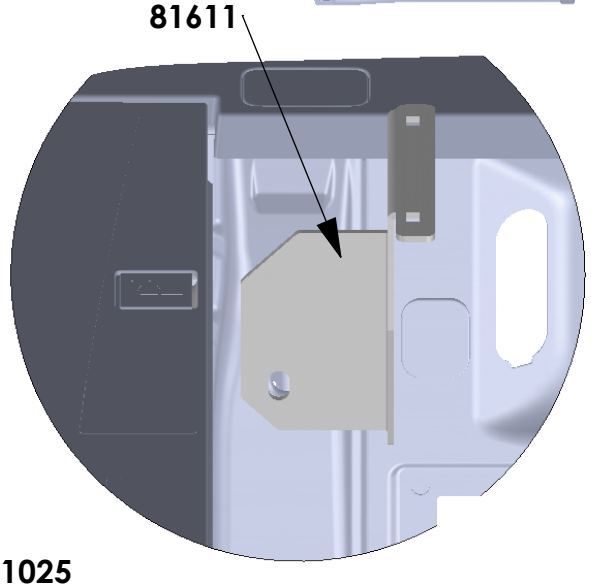
Step 2.1.3
ATTACH BRACKETS <u>LOOSELY TIGHTEN</u> FAS1025, FAS0334, 81848-B, AND FAS1026 (2 PLACES)

DO NOT REINSTALL TAIL LIGHT UNTIL END OF INSTALL

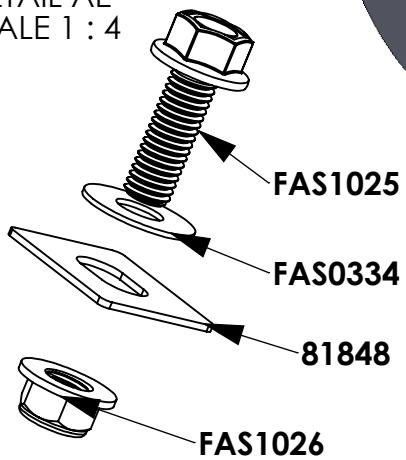




DETAIL AE
SCALE 1 : 4



DETAIL AA
SCALE 1 : 5



STEP 2.2 - INSTALL BED SUPPORT BRACKETS
THIS IS VEHICLE SPECIFIC

F-250

Step 2.2.1
LOCATE THE BED SUPPORT BRACKETS IN THE BRKT KIT

81609-B AND 81610-B FOR F-250

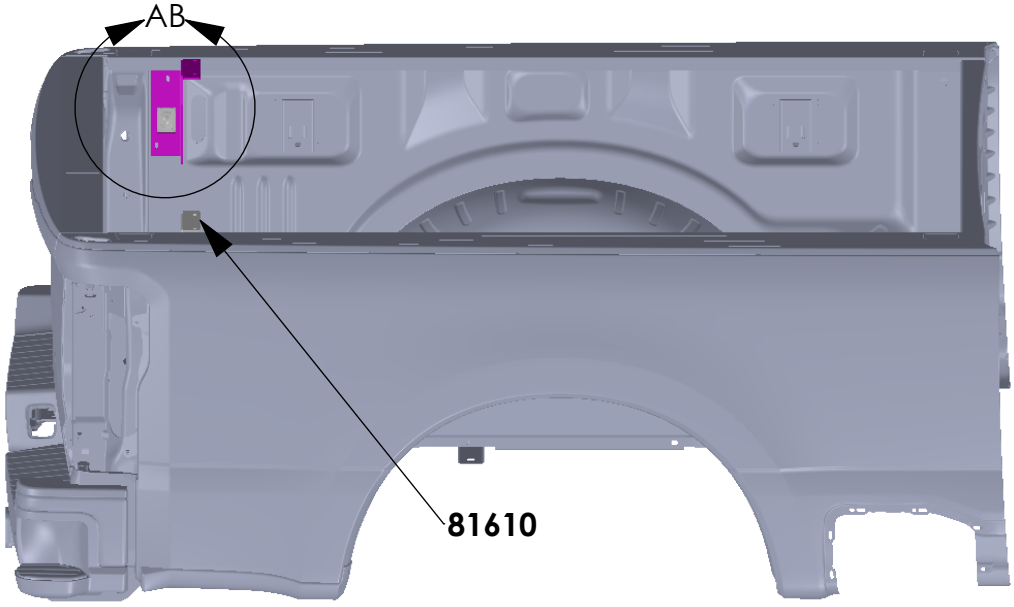
Step 2.2.2
ALIGN UPPER HOLE ON BED BRACKET TO HOLE IN F-250 BED
MARK
BOTTOM HOLE
DRILL
OUT OEM HOLE TO .565"
DRILL
MARKED HOLE TO .565"

Step 2.2.3
SET PLUSNUTS
FAS0091
(4 PLACES)

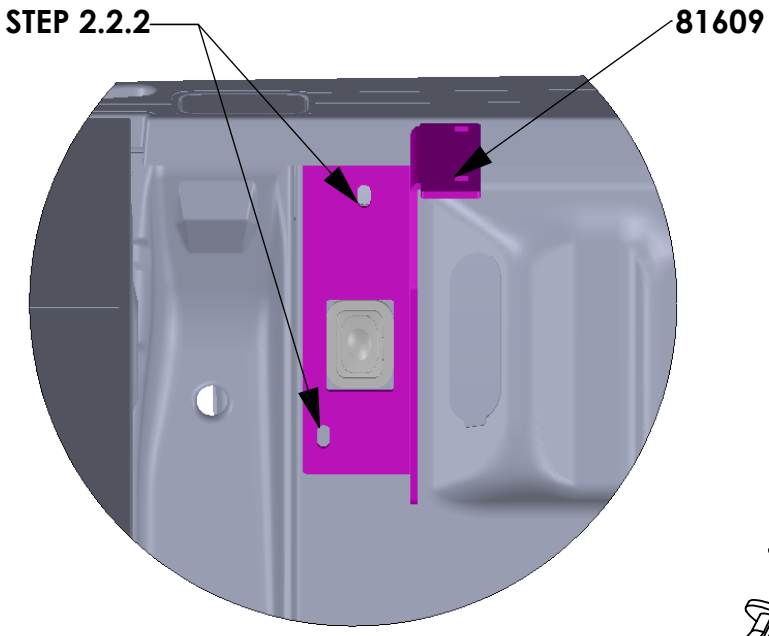
Step 2.2.4
LOOSELY TIGHTEN

FAS0091, FAS0092, FAS0086, AND FAS0086
(4) PLACES

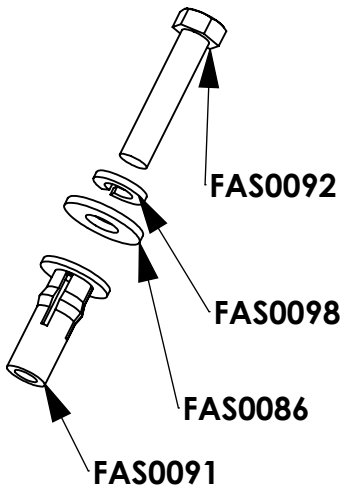
DRIVERS SIDE



PASSENGER SIDE



DETAIL AB
SCALE 1 : 5



STEP 2.3 - INSTALL BED SUPPORT BRACKETS
THIS IS VEHICLE SPECIFIC

GM1500

Step 2.3.1
LOCATE THE BED SUPPORT BRACKETS IN THE BRKT KIT

81332-B AND 81333-B FOR GM1500

ONLY INSTALL DS BRACKET
PS BRACKET WILL BE INSTALLED LATER

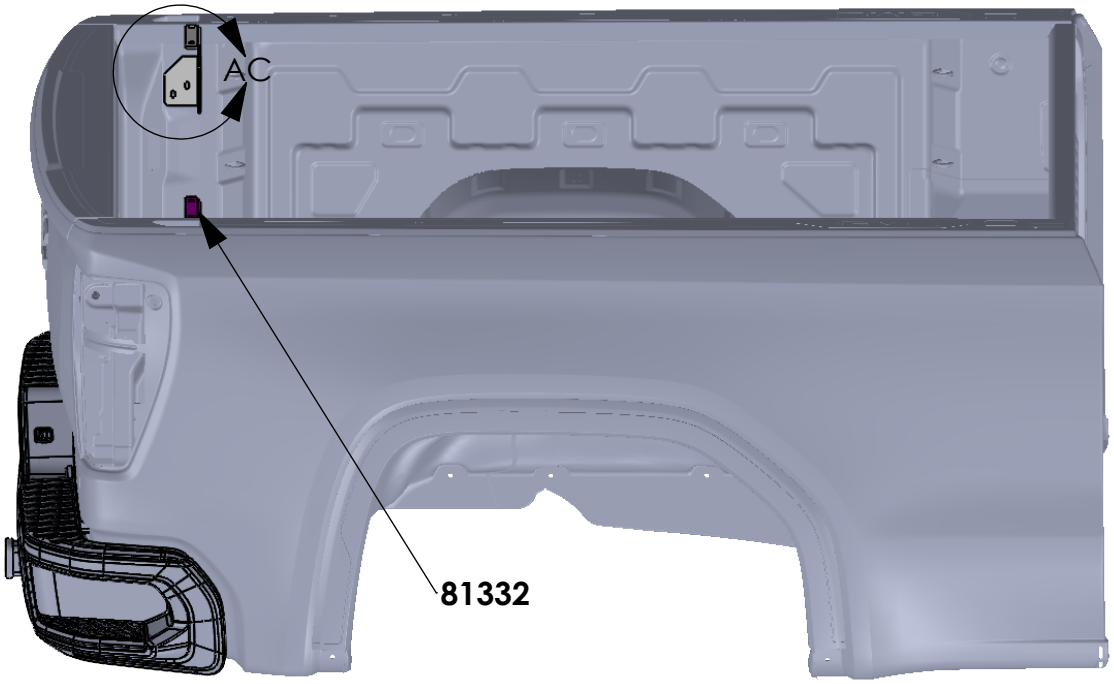
Step 2.3.2
ALIGN LEFT HAND HOLE ON BED BRACKET TO HOLE IN GM1500 BED
MARK
RIGHT HAND HOLE
DRILL
OUT OEM HOLE TO .565"
DRILL
MARKED HOLE TO .565"

Step 2.3.3
SET PLUSNUTS
FAS0091
(2 PLACES)

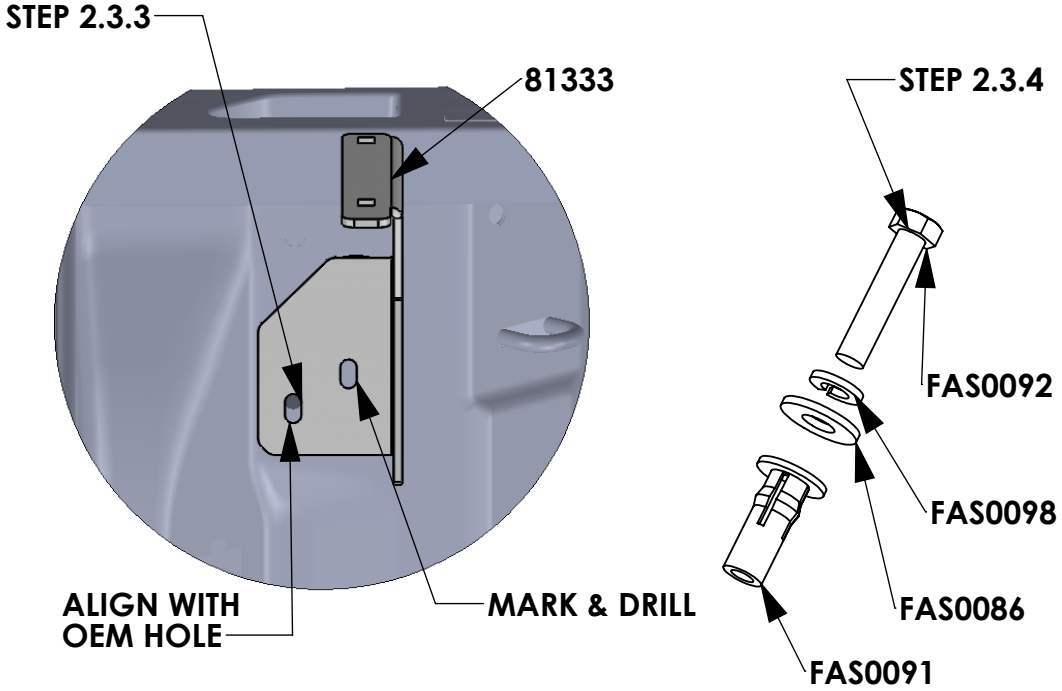
Step 2.3.4
LOOSELY TIGHTEN

FAS0091, FAS0092, FAS0086, AND FAS0086
(2) PLACES

DRIVERS SIDE



PASSENGER SIDE



DETAIL AC
SCALE 1 : 4

STEP 2.4 - INSTALL BED SUPPORT BRACKETS THIS IS VEHICLE SPECIFIC

GM2500

Step 2.4.1
LOCATE THE BED SUPPORT BRACKETS IN THE BRKT KIT

81614-B AND 81613-B FOR GM2500

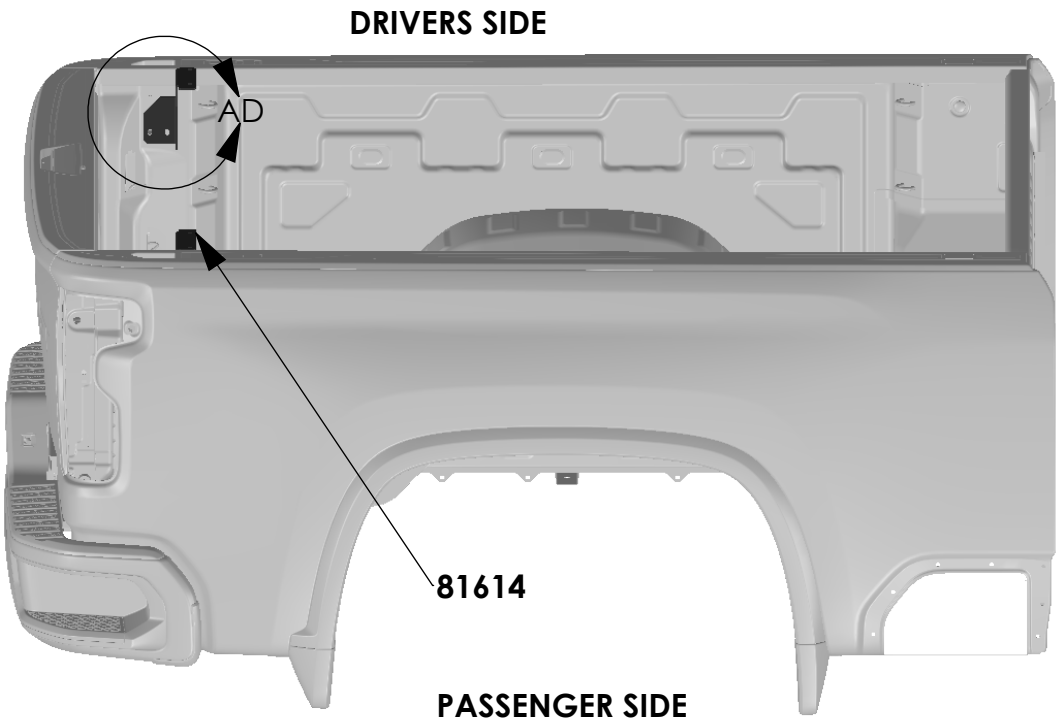
ONLY INSTALL DS BRACKET
PS BRACKET WILL BE INSTALLED LATER

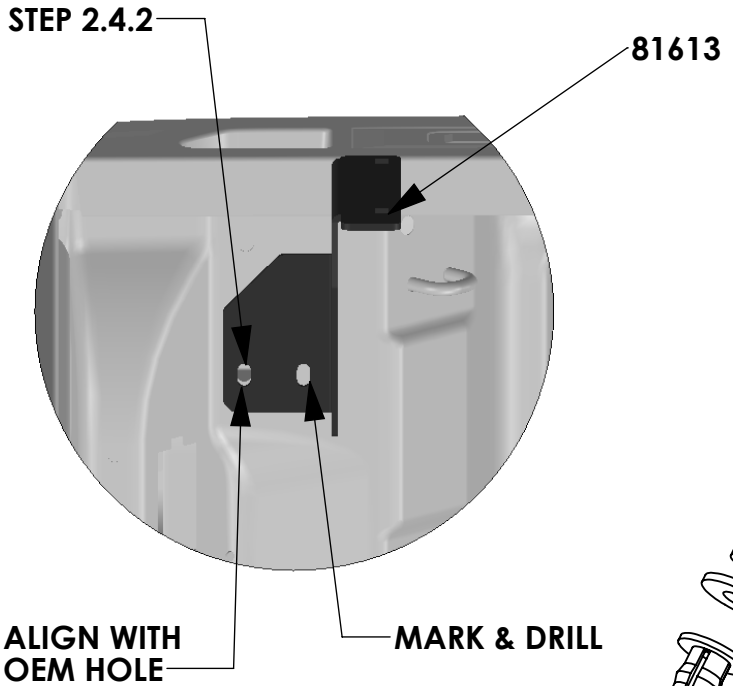
Step 2.4.2
ALIGN LEFT HAND HOLE ON BED BRACKET TO HOLE IN GM2500 BED
MARK
RIGHT HAND HOLE
DRILL
OUT OEM HOLE TO .565"
DRILL
MARKED HOLE TO .565"

Step 2.4.3
SET PLUSNUTS
FAS0091
(2 PLACES)

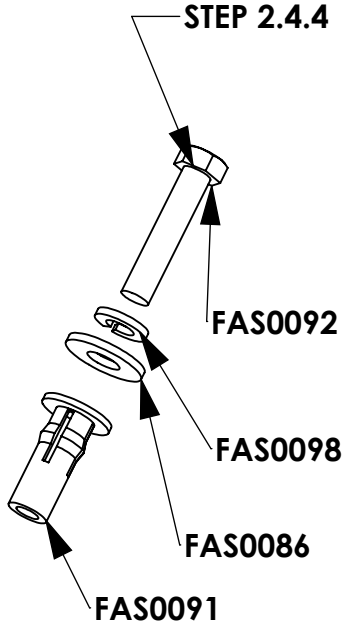
Step 2.4.4
LOOSELY TIGHTEN

FAS0091, FAS0092, FAS0086, AND FAS0086
(2) PLACES





DETAIL AD
SCALE 1 : 5



STEP 2.5 - INSTALL BED SUPPORT BRACKETS THIS IS VEHICLE SPECIFIC

RAM1500

Step 2.5.1
LOCATE THE BED SUPPORT BRACKETS IN THE BRKT KIT

81330-B AND 81331-B FOR RAM1500 & RAM 2500

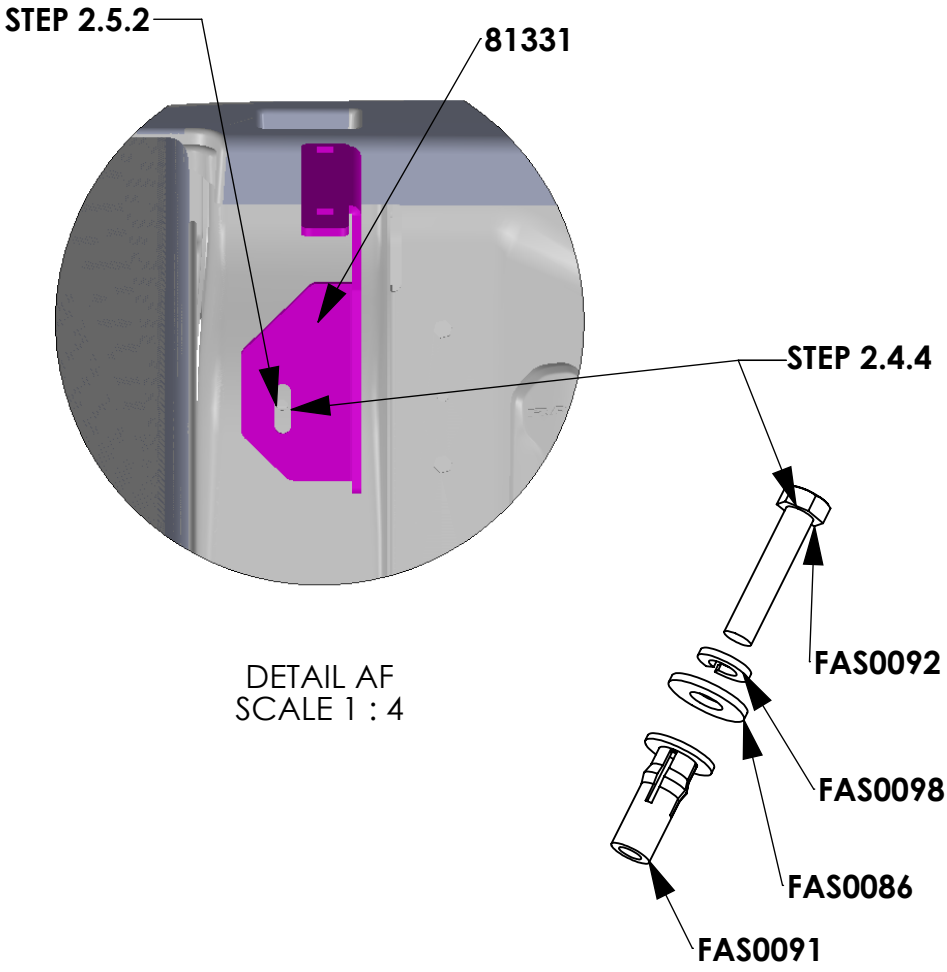
Step 2.5.2
ALIGN HOLE ON BED BRACKET TO HOLE IN RAM BED

DRILL
OUT OEM HOLE TO .565"

Step 2.5.3
SET PLUSNUTS
FAS0091
(2 PLACES)

Step 2.4.4
LOOSELY TIGHTEN

FAS0091, FAS0092, FAS0086, AND FAS0086
(2) PLACES

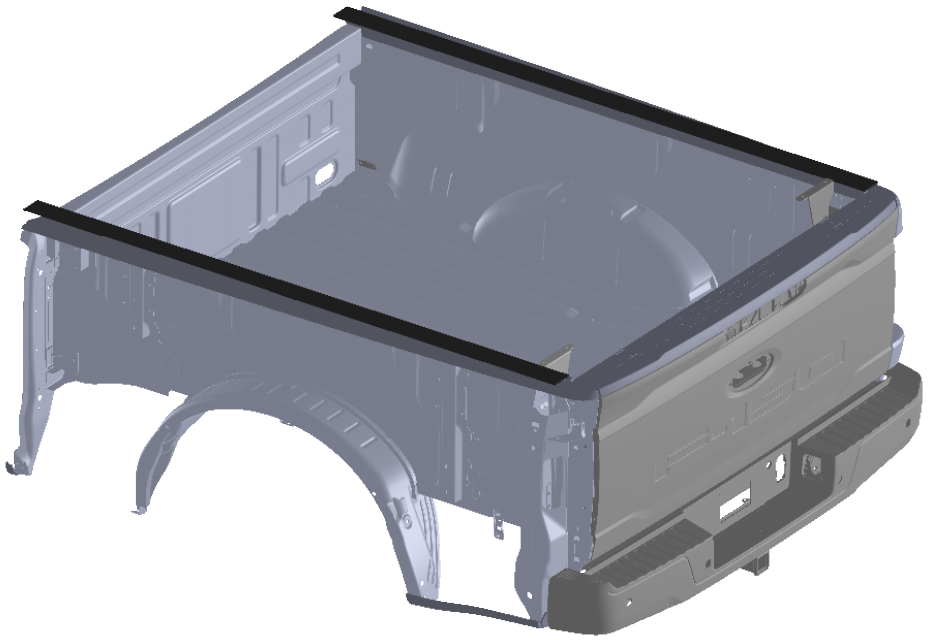


DETAIL AF
SCALE 1 : 4

STEP 3 - PREP BED (ALL VEHICLEES)

Step 3.1
APPLY FOAM STRIPS 73632 ON BED RAIL (1 PER SIDE)
START FLUSH WITH THE END OF THE CAB SIDE OF THE BED RAIL
DO NOT TRIM EXCESS UNTIL FULLY INSTALLED

F-150 BED SHOWN



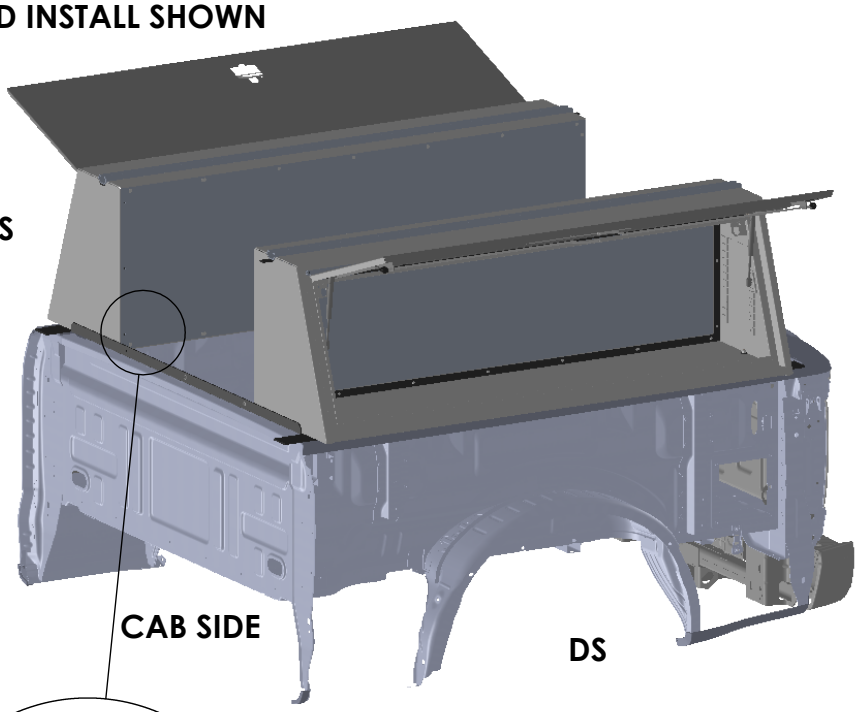
STEP 4 - ATTACH FRONT SUPPORT BRACKET

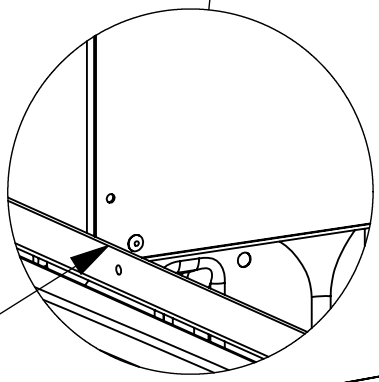
F-150 BED INSTALL SHOWN

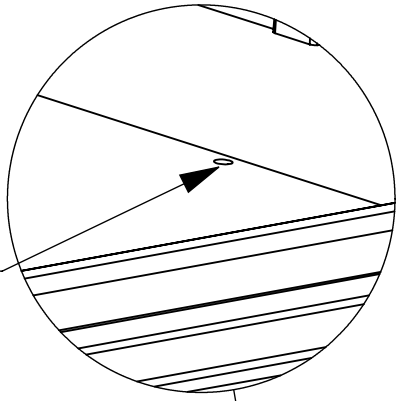
Step 4.1
PLACE BOXES ON BED RAILS

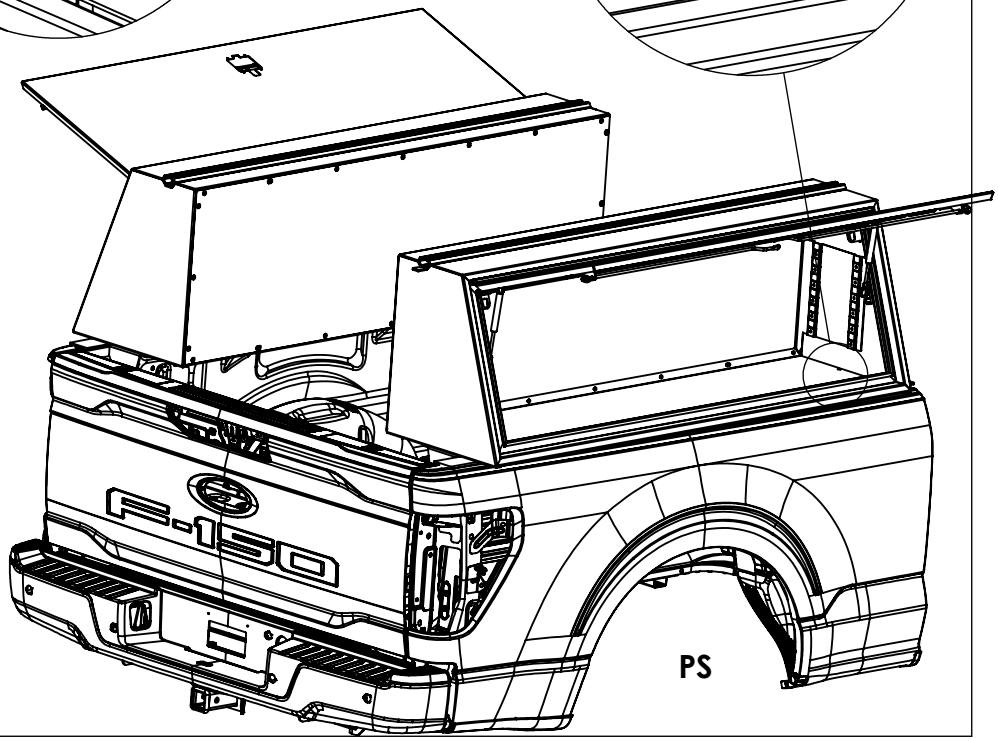
Step 4.2
LOOSELY ASSEMBLE UNTIL AFTER STEP 7
FAS0398, FAS0552, FAS0248 AND FAS0688 (4 PLACES)

1/2 SOCKET









BOXES NOT ATTACHED TO BED AT THIS POINT

STEP 5 - ATTACH CAB GAURD

Step 5.1
PLACE CAB GAURD IN POSITION SHOWN
USE PRY BAR IF NECESSARY

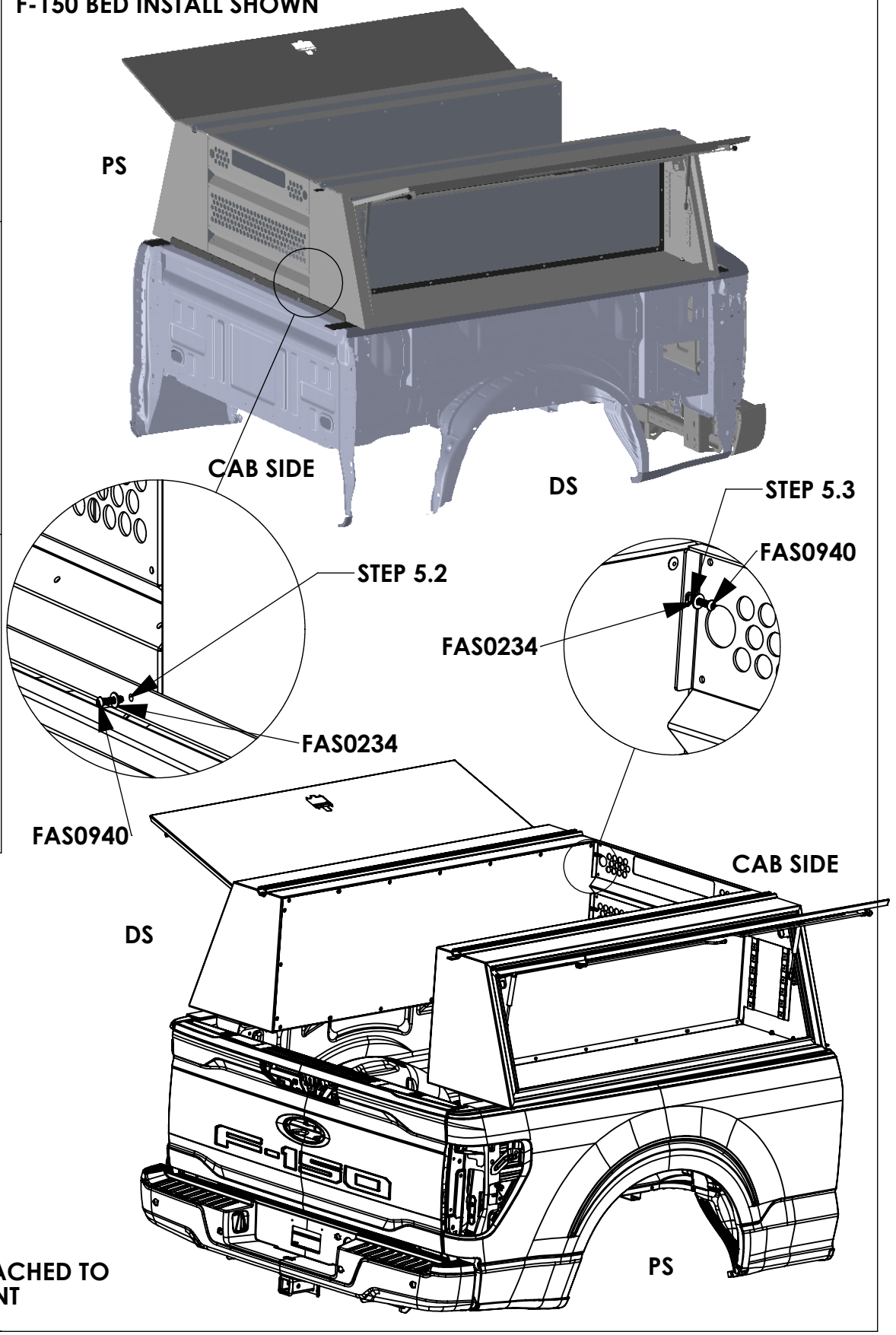
Step 5.2
ATTACH TO FRONT BED SUPPORT
<u>FULLY TIGHTEN</u>
FAS0055, FAS0234 AND FAS0940
(3 PLACES)

T27 TORX
7/16 WRENCH

Step 5.3
ATTACH TO BOXES
<u>FULLY TIGHTEN</u>
FAS0055, FAS0234 AND FAS0940
(6 PLACES)

T27 TORX
7/16 WRENCH

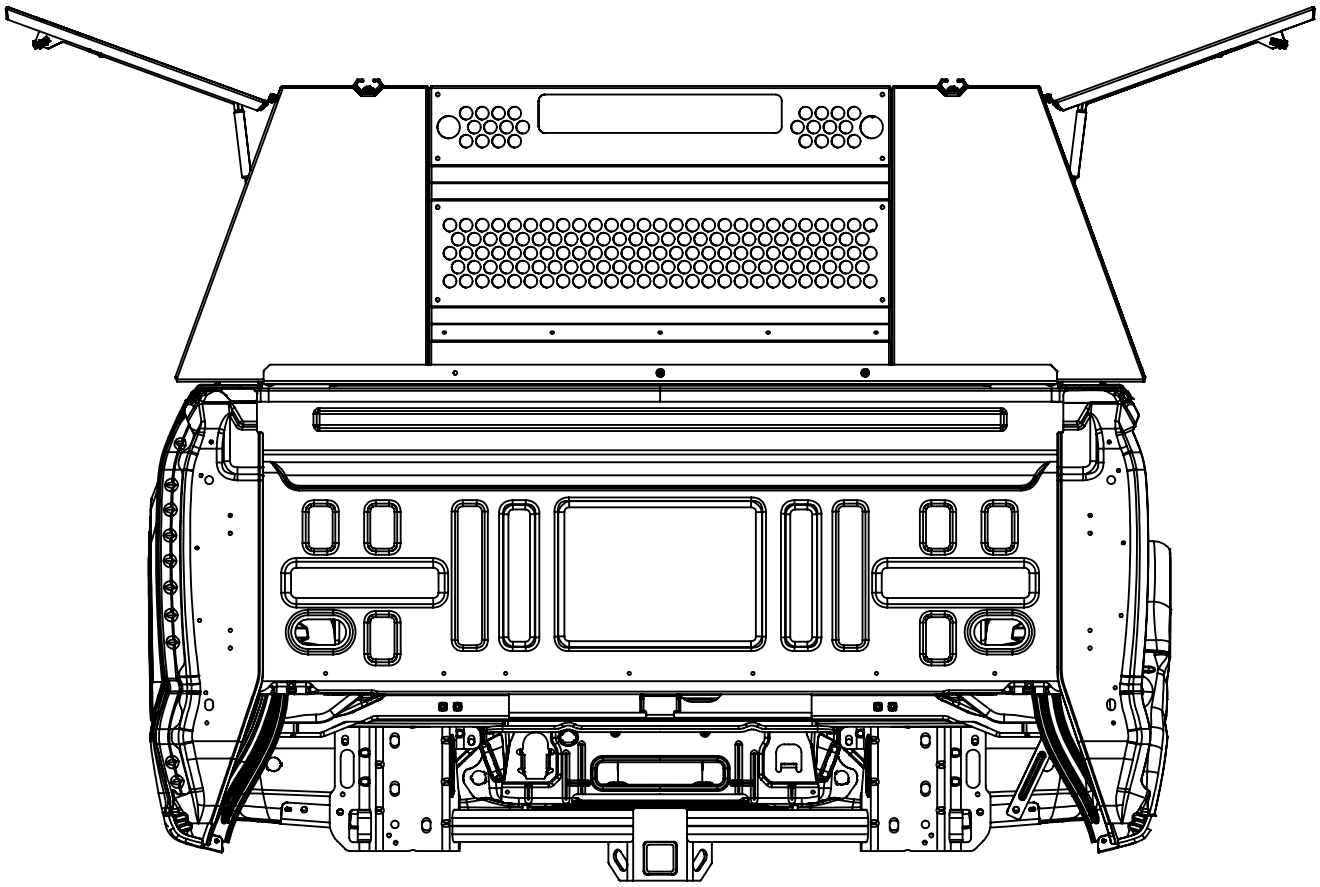
F-150 BED INSTALL SHOWN



BOXES NOT ATTACHED TO BED AT THIS POINT

CHECK THAT THE BOXES ARE CENTERED ON THE VEHICLE

STEP 4 - MEASURE DISTANCE FROM BED RAIL AT CAB SIDE AND ENSURE BOTH SIDES ARE EQUAL



STEP 7 - ATTACH CAB GAURD

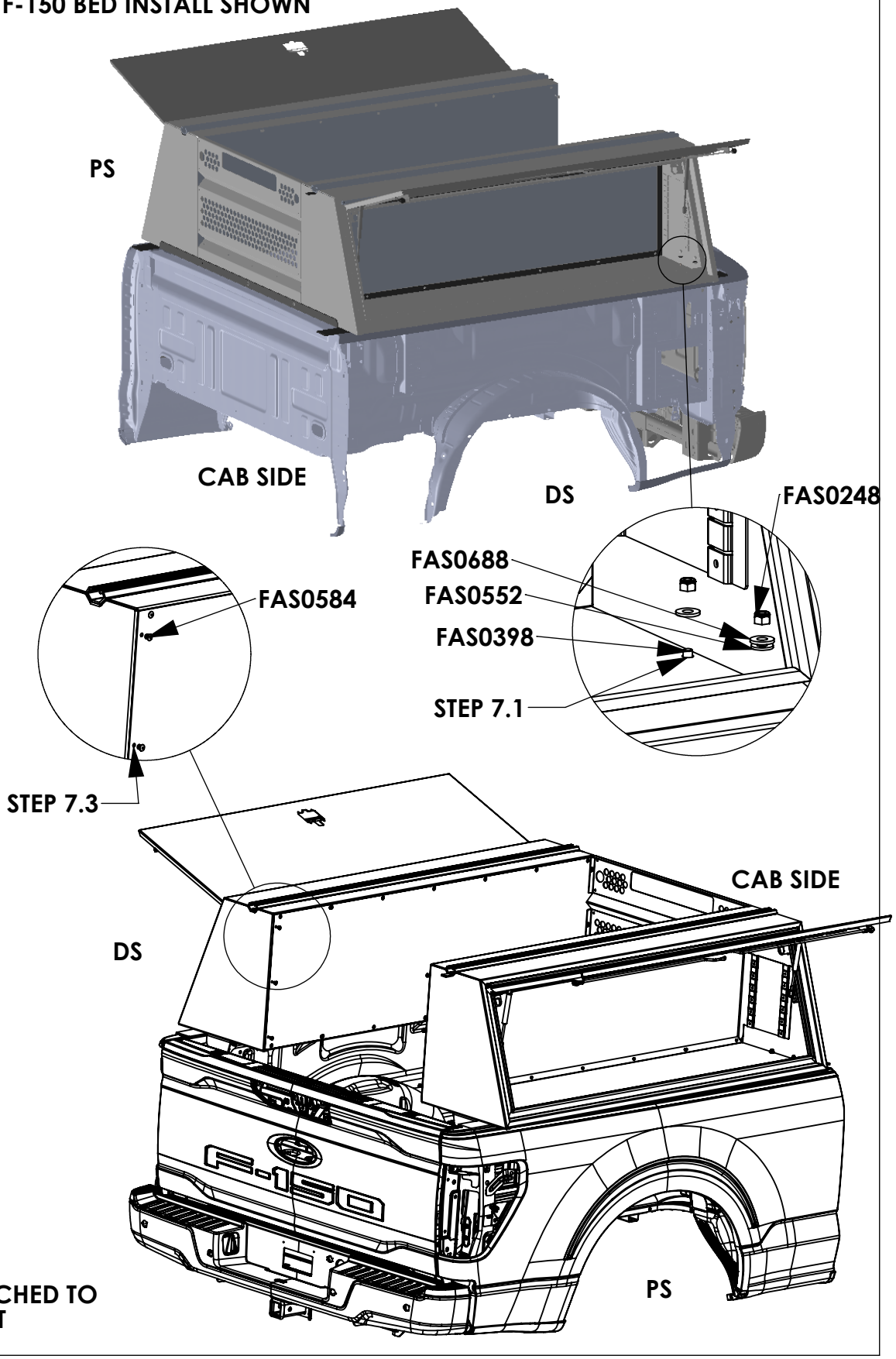
Step 7.1
BOLT BOXES TO REAR SUPPORT BRACKETS
<u>FULLY TIGHTEN</u>
FAS0248
FAS0552
FAS0688 AMD
FAS0398
(4) PLACES
9/16 SOCKET

Step 7.2
FULLY TIGHTEN FASTENERS FROM STEP 2 AND REINSTALL TAILIGHT IF NECESSARY

Step 7.3
RIVET BACK PANEL
<u>FULLY TIGHTEN</u>
FAS0584
(6 PLACES)

RIVET GUN

F-150 BED INSTALL SHOWN



BOXES NOT ATTACHED TO BED AT THIS POINT

STEP 8 - DRILL BED RAIL MOUNTING HOLES AND INSTALL FASTENERS

Step 8.1
IDENTIRY THE CORRECT DRILL JIG
IF YOU DO NOT HAVE A DRILL JIG YOU WILL NEED TO ENSURE A SAFE PLACE TO DRILL

Step 8.2
PLACE JIG IN BOX AS SHOWN FOR DS

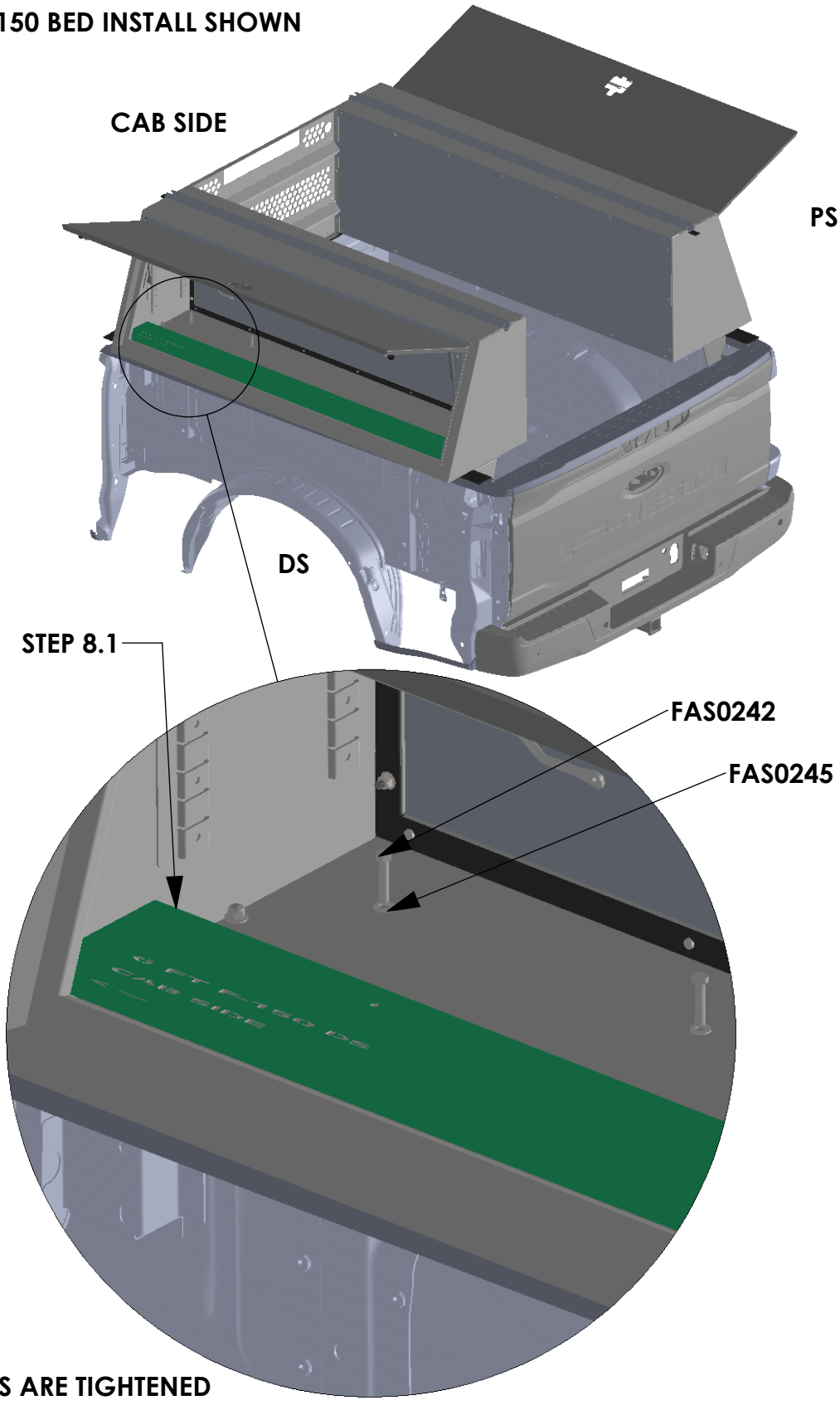
FLIP FOR PS

MARK HOLES WITH PEN AND DRILL USING A STEP BIT OR 3/8" DRILL BIT

Step 8.3
INSTALL BED RAIL FASTENERS FULLY TIGHTEN FAS0242 FAS0245(2), AND FAS0254

(8) PLACES

F-150 BED INSTALL SHOWN



ENSURE ALL FASTENERS ARE TIGHTENED INSTALL IS COMPLETE

KIT, TAILGATE CHMSL

CATALOG NUMBER **81246**

PRODUCT APPLICATION

PRODUCT FEATURES

Lighting and E-Lock kit designed for 6 FT Topsider toolboxes

Kit includes two 4 FT light strips, two E-Locks, and the accompanying harnesses, plunger switches, and modules

This kit is compatible with Ford F-150 & SD, Silverado 1500 & 2500, and RAM 1500 and 2500.

This kit is validated for model year 2026.

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Introduction / Comments:

Install Instructions for Open Bed Solution Electrical Accessories

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.

Install Instructions 81693
For Open Bed Solution Electrical Accessory Kits
81244, 81245, 81246, & 81247

Table of Contents

Tools Required 2
Parts Included 3
Routing Overview 4
Install Instructions 5
QC Tests and Troubleshooting 17

Tools Required

- 8mm, 10mm, 11mm, and 13mm sockets
- T20 Torx Bit
- Torque Wrench
- Panel Pry Tool
- Deburring Tool
- 1" step bit
- 3/8” drill bit
- Fish Tape
- Power Drill
- Impact Driver
- **1-1/16" Greenlee hole punch 730BB-1-1/16**

Parts Included

80379	TOPSIDER POWER HARNESS
80994	TOPSIDER CAB HARNESS
80995 *	TOPSIDER BOX HARN FULL
80996 *	TOPSIDER BOX HARN LIGHTS
80721	VSS-TVMH90 TOPSIDER
80883	TOPSIDER PLUNGER SWITCH
BAGTMLHK *	BAG FOR TELH KITS
36096-0 *	GROMMET,RUBBER,1"ID
74340 *	ALLEGIS T-HANDLE E-LATCH
74341 *	E-LATCH OEM RELAY HARNESS
74349 *	E-LOCK TPPR SIDE DOR HARN
74533 *	DUAL SPDT RELAY MODULE
81171 *	4FT LIGHT STRIP W/ SS CON
81172 *	6FT LIGHT STRIP W/ SS CON
26618-0 *	SILICONE, 1 OZ TUBE

Dependent on Kit - *

80379

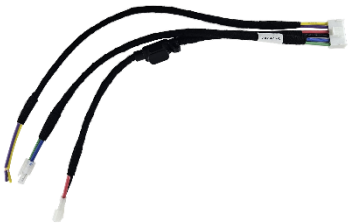
80995

80994

80996

74533

74349

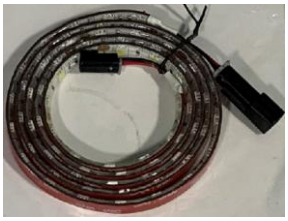


74341

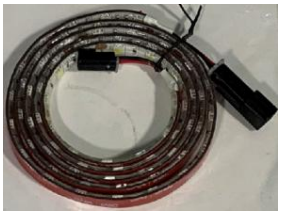
74340

80883

36096-0

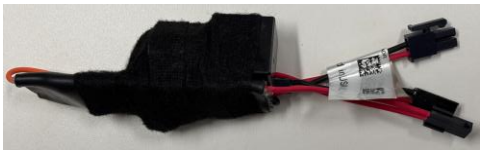


81171



81172

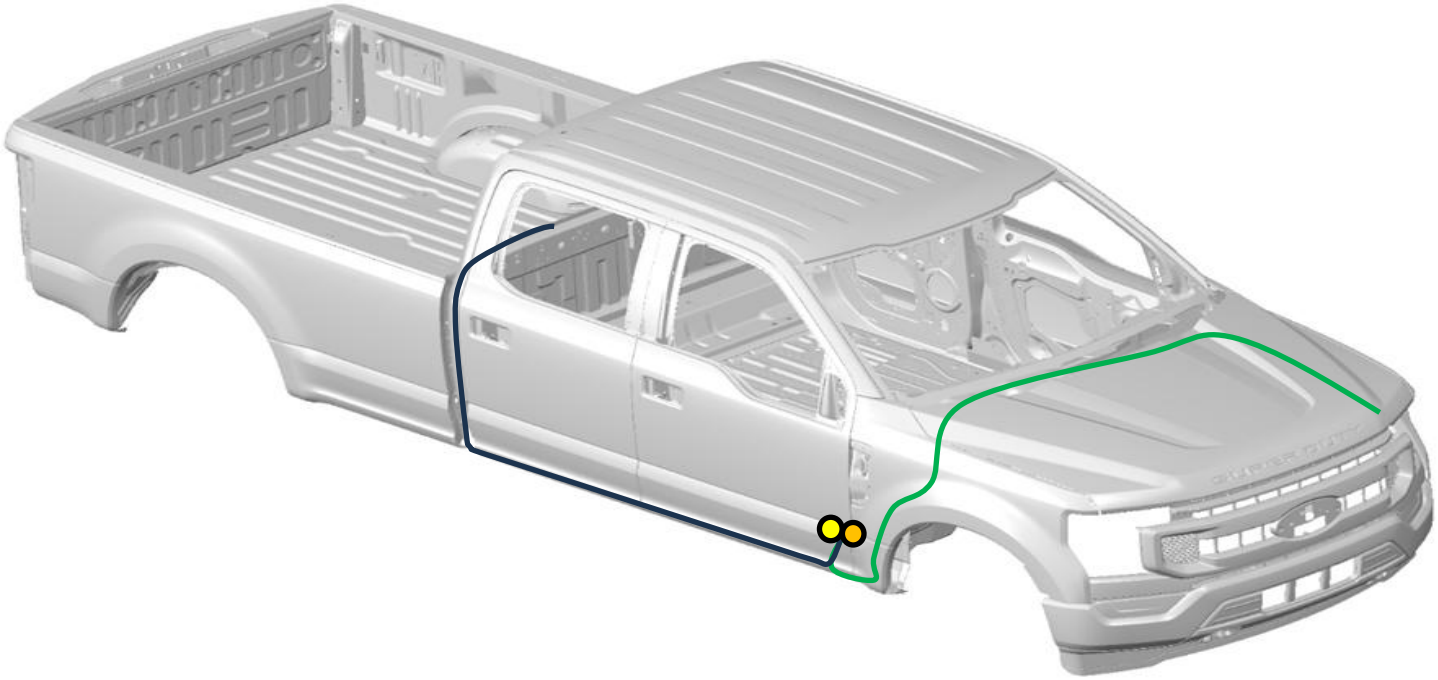
26618-0

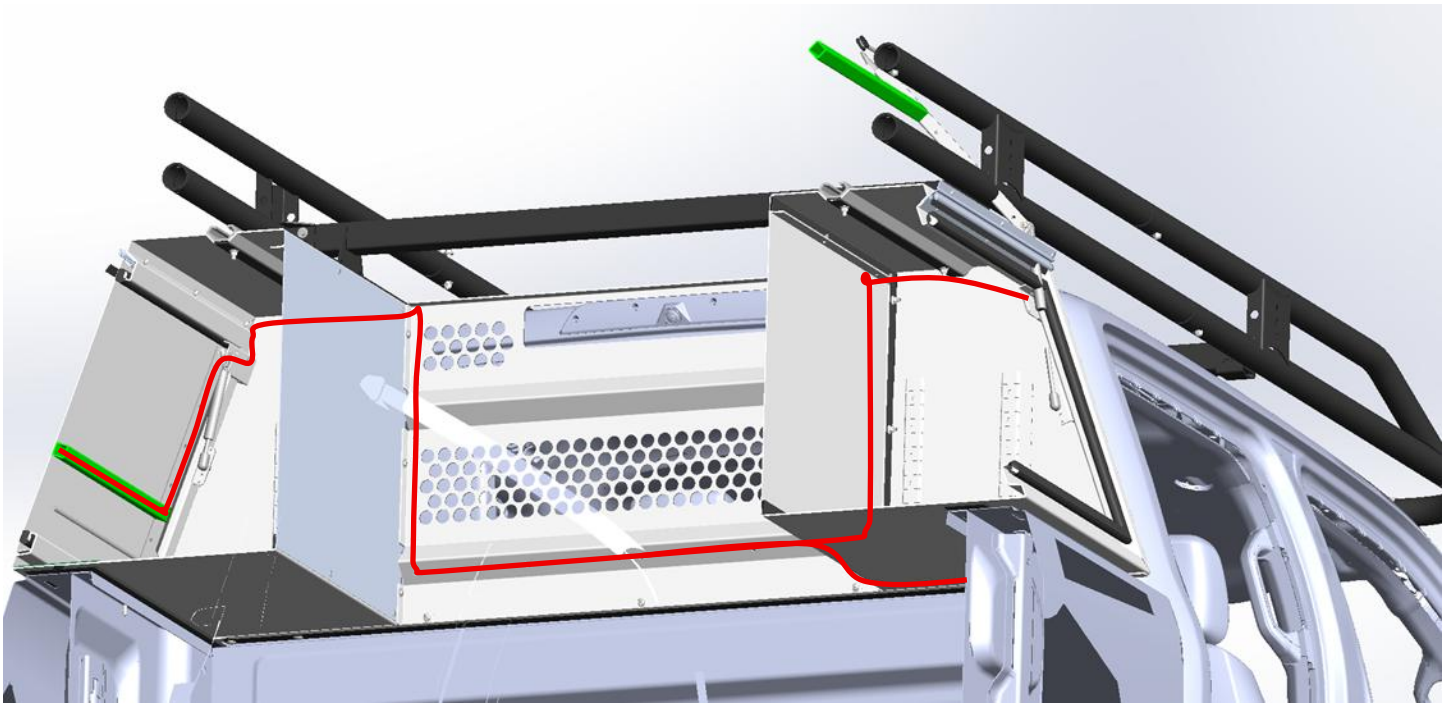


80721

BAGTMLHK

Routing Overview





Install Instructions

Step 1:

Grab harness 80379 and remove the fuse from the in-line fuse holder.

Connect the ring terminal near the in-line fuse holder to the OEM battery positive or fuse block positive as applicable.

Connect the negative to the OEM battery negative, or a nearby chassis ground as applicable.

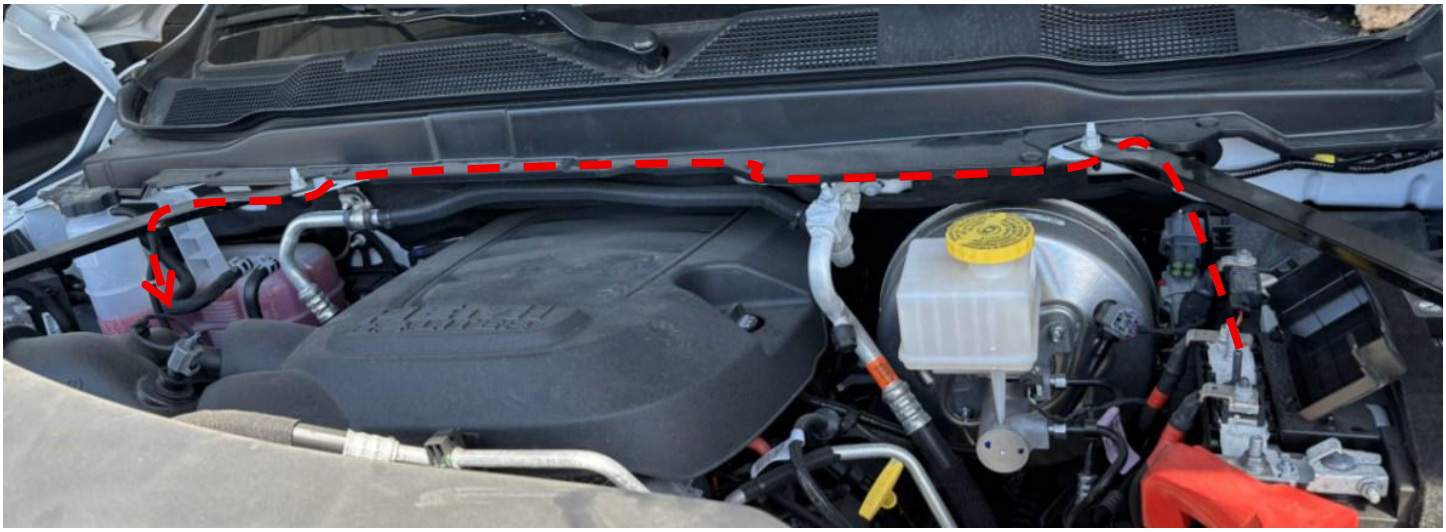
F-150 and F-250

RAM 1500 and 2500

Silverado 1500 and 2500

Step 2:

Route harness 80379 along the engine bay and down between the passenger wheel well and the engine bay, securing to nearby OEM harnessing whenever possible along the liner below the front windshield.



Step 3:

Route the harness down and around the front passenger-side wheel well so that it emerges under the front passenger footwell floor

Step 4:

Some vehicles will have OEM grommets in the front passenger footwell floor. If that is the case, cut an X in the grommet and feed 80379 up through the grommet.

Step 5:

If the vehicle does not have an OEM grommet in the passenger footwell, drill a 1” hole in a flat section of the floor using a step bit. Ensure the area is clear on both sides of the floor before drilling. Insert the included grommet in its place before proceeding to feed 80379 up through the floor.

Step 6:

Grab harnesses 80994, 80721, and 74341 and 74533 if applicable. Feed the multi-connector end of 80994 up through the grommet in the floor.

Connect the harnesses and modules together as shown.

Once 80379 and 80994 are fed through the grommet seal the excess space with silicone.

Make sure the switch on the E-Lock module (74533) is switched **AWAY from the connector.**

Posi-tap Install instructions:

Remove the gray cap on the Posi-Tap

Push the OEM signal wire into the slot on the gray cap.

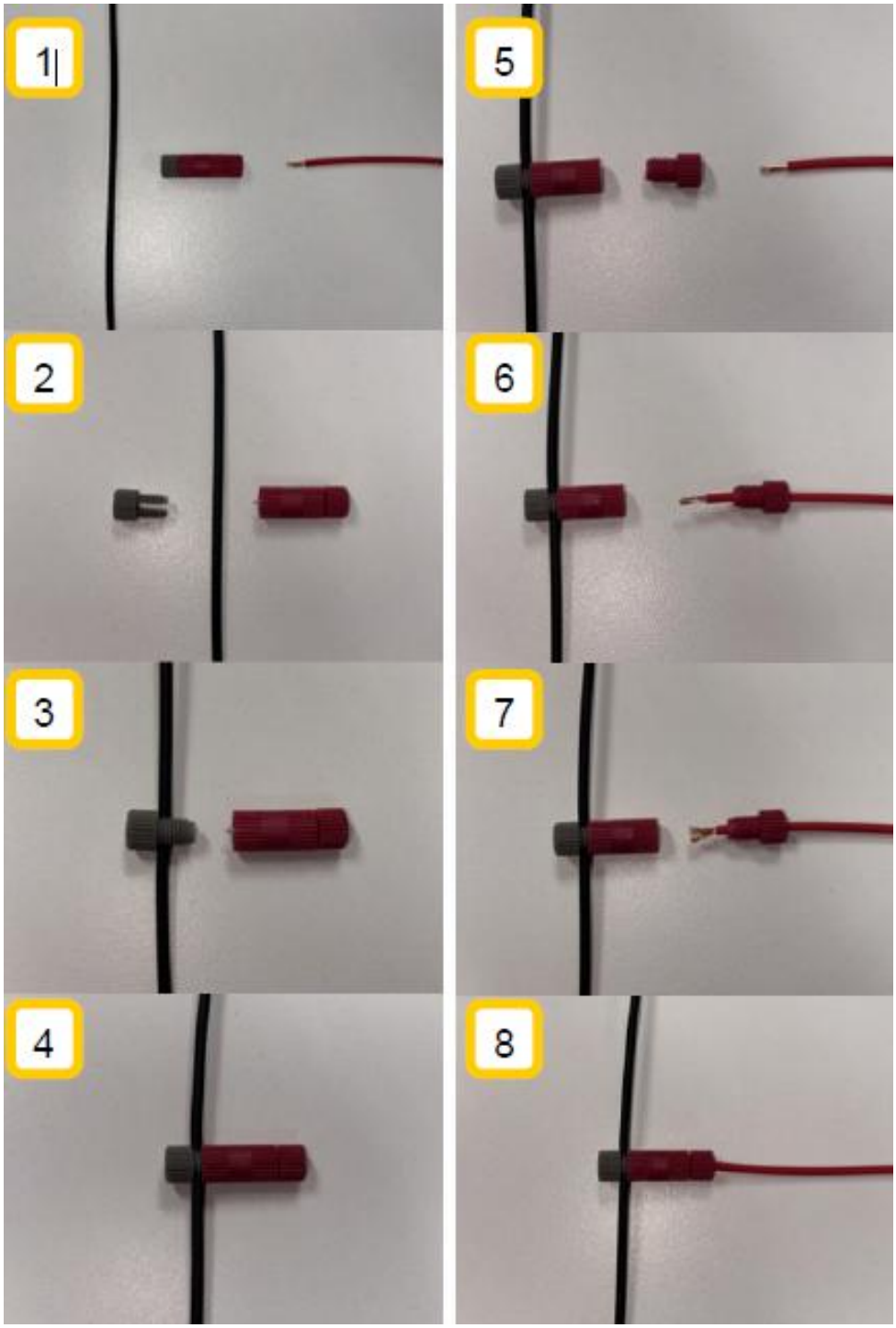
Twist the Posi-Tap onto the gray cap with the OEM wire secured in between the two.

The pin in the Posi-Tap will puncture the OEM wire and obtain the signal.

Remove the red cap on the Posi-Tap and place over the tapping wire with the threads facing towards the end of the wire.

Spread out the copper strands of the tapping wire into a cone-like shape, and insert the strands into the Posi-Tap

Twist the cap back onto the Posi-Tap with the tapping wire secured. Be sure of secure connection.



Platform Specific Posi-Tap Installation Instructions

Ford F-150 & Superduty

1. Ensure the battery negative is disconnected before removing any connectors from the BCM.

2. In the front passenger footwell, remove the kick plate and other trim panels around the BCM under the dash.

3. Locate BCM connector C2280C (J3) and disconnect it from the BCM. (Fig 12.1 & 12.2)

4. CAREFULLY cut away the tape wrapped around the OEM wires. (Fig 12.3)

5. Install the Posi-Taps following the instructions on page 11 using harness 74341 tapping wires. (Fig 12.4)

F150
74341 Yellow -> OEM Yellow / Grey Stripe
74341 Purple -> OEM Gray / Brown Stripe

Superduty (F250+)
74341 Yellow -> OEM Yellow
74341 Purple -> OEM Gray

6. Retape the harness around the Posi-Taps to secure the wires as intended by the OEM and plug the connector back into the BCM.

7. Plug the 74533 Relay Module into the 74341 harness 6-pin connector.

8. Secure the harness and relay module to the OEM harnesses. (Fig 12.5)

NOTE: The photos on this page may not reflect the accurate wire colors. Follow the colors listed above.

Fig 12.1

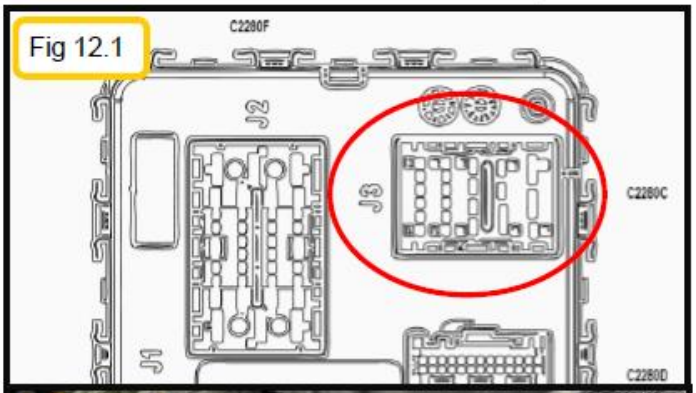


Fig 12.2

Fig 12.3

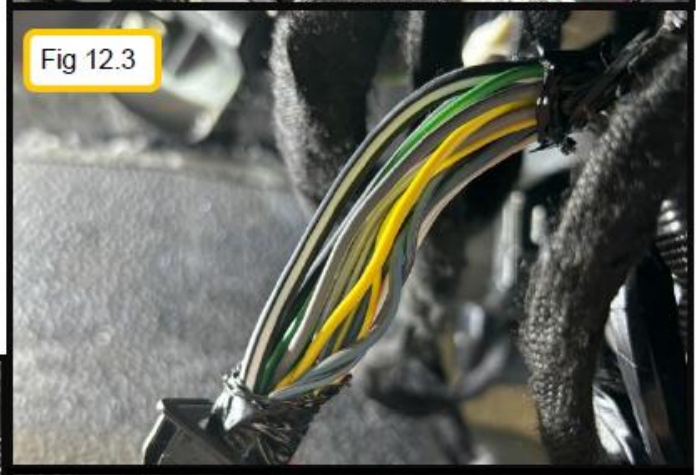


Fig 12.4

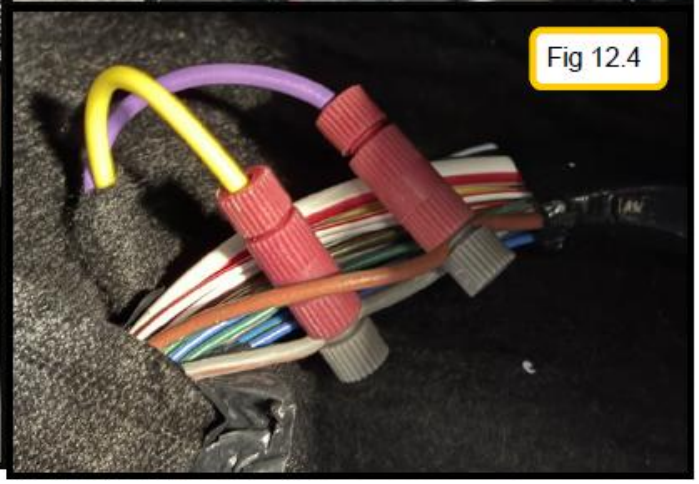
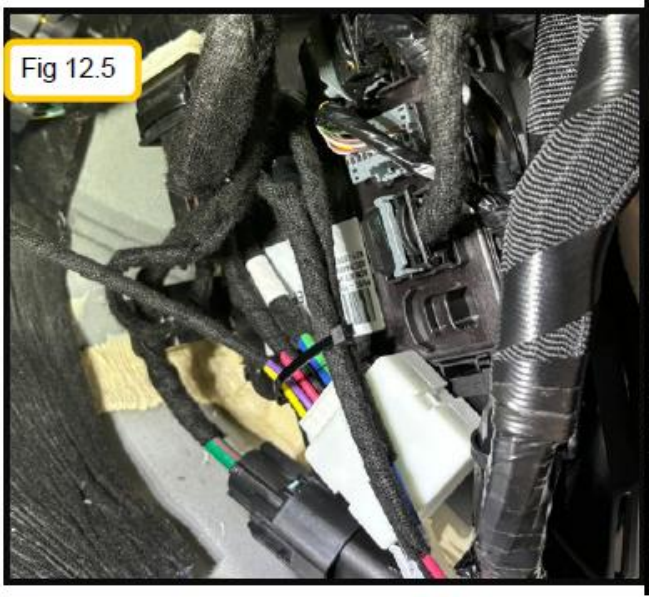


Fig 12.5



Platform Specific Posi-Tap Installation Instructions

RAM 1500 & HD (MY25+)

1. Ensure the battery negative is disconnected before removing any connectors from the BCM.

2. In the front passenger footwell, remove the kick plate and other trim panels under the dash.

3. Locate the OEM harness wrapped in glossy black tape on the side wall of the vehicle. (Fig 16.1)

4. CAREFULLY cut away the tape wrapped around the wires and locate the purple with green stripe wire and the green with gray stripe wire. (Fig 16.2)

5. Install the Posi-Taps following the instructions on page 11 using harness 74341 tapping wires. (Fig 16.3)

RAM
74341 Yellow -> OEM Beige W/ White Stripe
74341 Purple -> OEM Green W/ Violet Stripe

6. Retape the harness around the Posi-Taps to secure the wires as intended by the OEM and plug the connector back into the BCM.

7. Plug the 74533 Relay Module into the 74341 harness 6-pin connector.

8. Secure the harness and relay module to the OEM harnesses.

NOTE: The photos on this page may not reflect the accurate wire colors. Follow the colors listed above.

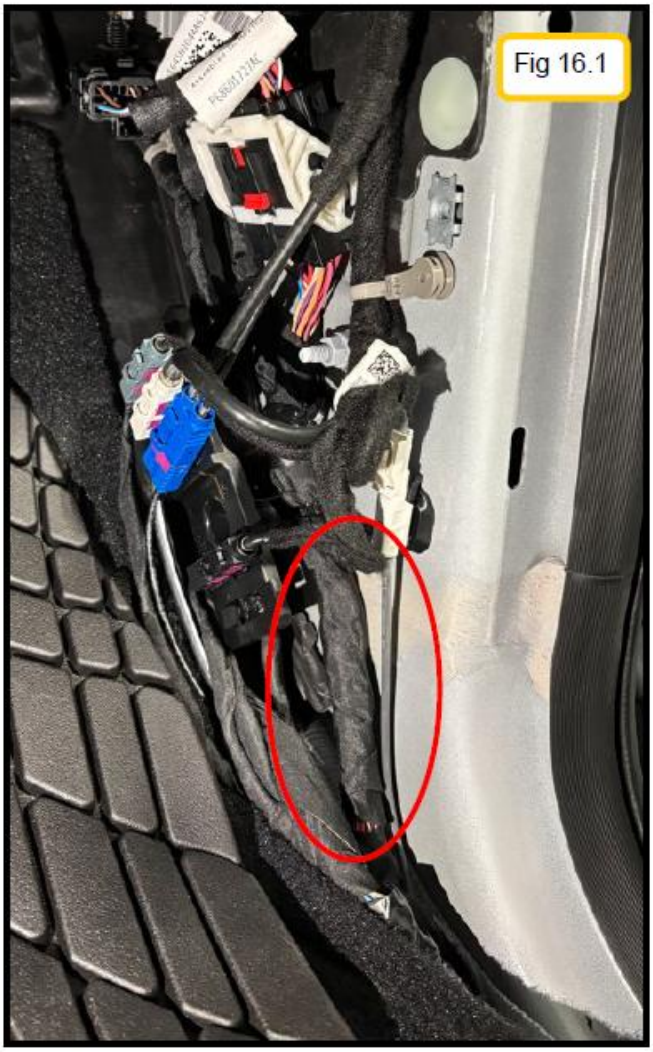


Fig 16.1

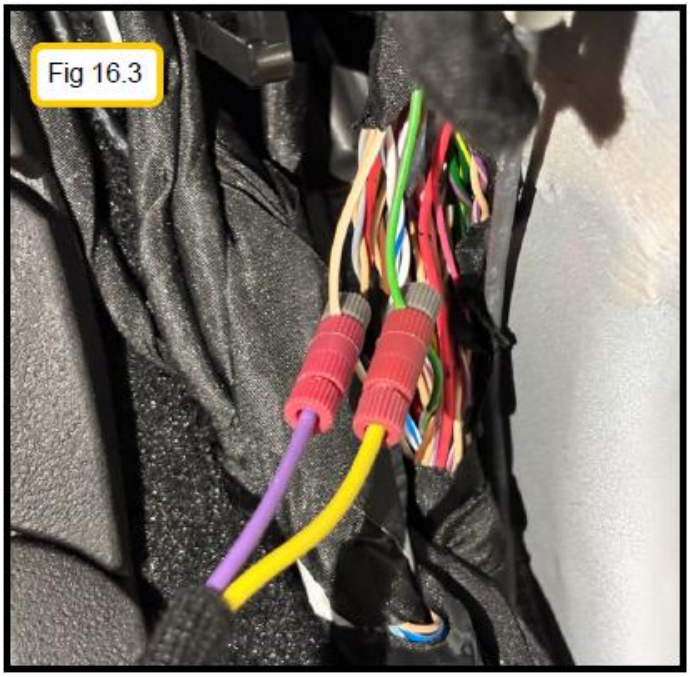


Fig 16.3

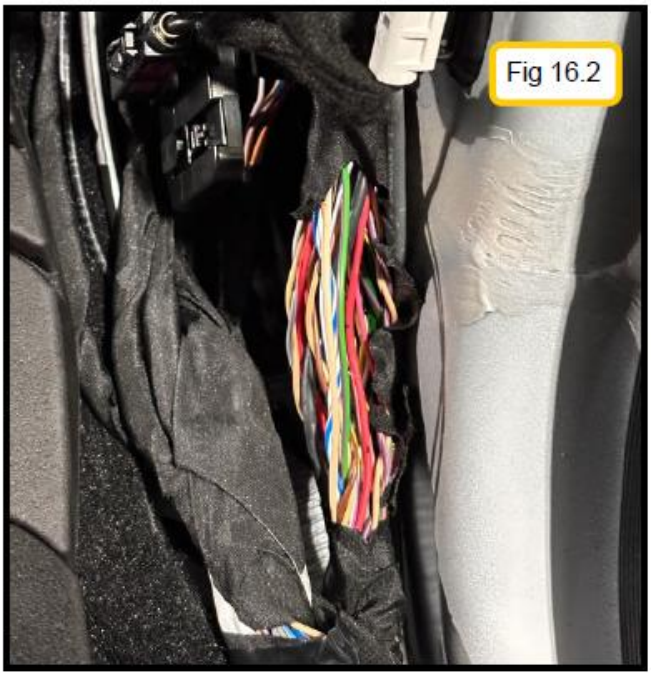


Fig 16.2

Platform Specific Posi-Tap Installation Instructions

Chevy Silverado ICE and Hybrid 1500-3500

1. Ensure the battery negative is disconnected before removing any connectors from the BCM.

2. Silverado is different from all other platforms. The BCM is located behind the driver's side knee bolster. From underneath, there are two rows of colorful connectors. The one closest to driver's side wall of the vehicle is the BCM.

3. Disconnect connectors x8 (grey), and x6 (tan) by pulling the small tab down, and pressing the release in. (fig 18.1 & 18.2)

4. Install the Posi-Taps following the instructions on page 11 using harness 74341 tapping wires. (Fig 18.3)

Silverado
74341 Yellow -> OEM X6 Gray / Black Stripe
74341 Purple -> OEM X8 Yellow / Green Stripe

6. Plug the connectors back into the BCM.

7. Plug the 74533 Relay Module into the 74341 harness 6-pin connector.

8. Secure the harness and relay module to the OEM harnesses.

NOTE: The photos on this page may not reflect the accurate wire colors. Follow the colors listed above.

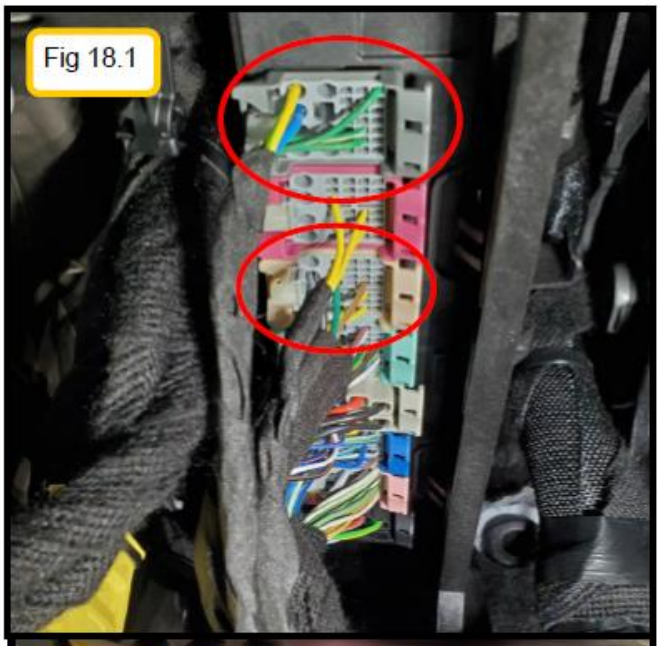


Fig 18.1

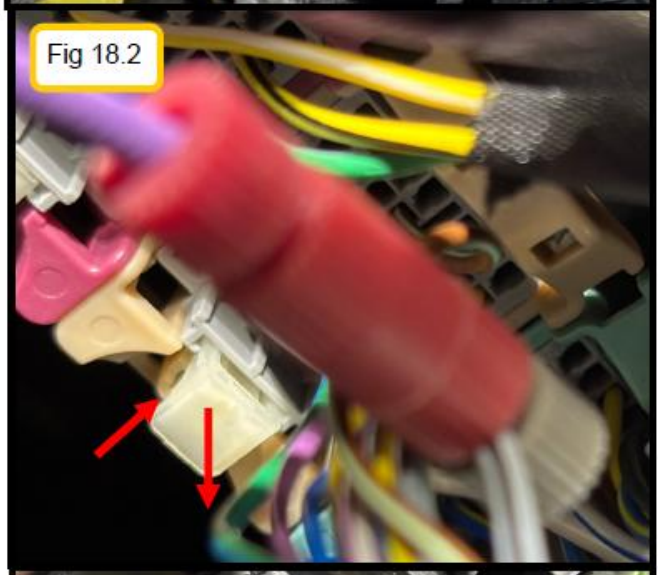


Fig 18.2

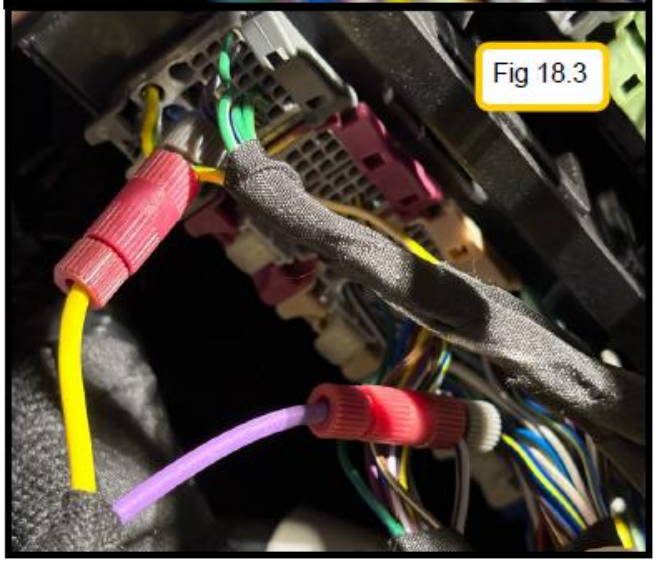
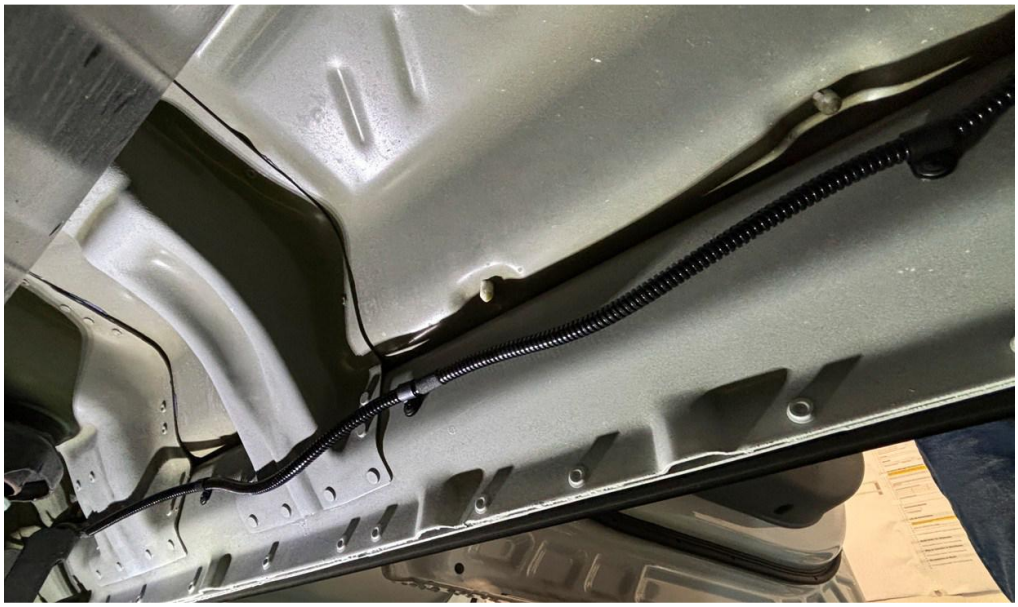


Fig 18.3

Step 7:

Route 80994 back under the vehicle to the gap between the cab and the bed. Wait to secure the harness until you ensure you have enough length to connect to the toolbox harness, 80995 or 80996 depending on the kit.



Step 8:

Move to the toolboxes. On the back panel of the toolbox next to the cab guard will be a small X divot. Drill a 3/8” hole in the center of that X. Insert the bolt of the **1-1/6” Greenlee hole punch** through the hole and screw the wedge of the punch to the inside of the toolbox as shown. Turn the nut on the Greenlee until the metal punch comes free and the hole is made. Repeat on the other toolbox.

NOTE: Use of a properly sized 1-1/16” hole punch, such as the Greenlee called out, is required for proper sealing of the cable gland. Failure to create a clean 1-1/16” hole can result in the cable gland leaking. A step drill bit has been shown to not create a reliable hole.

Step 9:

Grab harness 80995 or 80996 depending on kit. Feed the multi-connector ends through the holes in the toolboxes, one to each side, up to the grommets.

Step 10:

Secure the flange nut on the threads of the grommets.

Step 11:

Snap in the plunger switches 80883 in the slots closest to the cab of the vehicle.

Step 12:

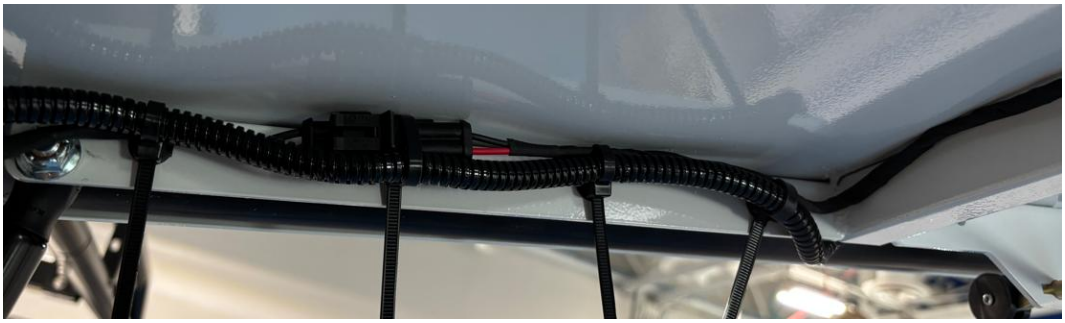
Connect the two quick connect terminals on the toolbox harness to the two blades on the plunger switch.

If your kit came we E-Locks, grab the E-lock side door harness, 74349, and plug it into the connector on the toolbox harness.

Step 13:

Grab a light strip (81171 or 81172) and connect it to the toolbox harness.

Then route both the E-Lock door harness and the light strip harness down the door brace, passing the E-Lock harness into the door tube as shown. Do not tighten the zip ties until the light strip and E-Lock are installed.



Step 14:

Install the light strip on the side of the door tube facing the toolboxes, centering it along the door. Use the provided alcohol pads to clean the surface before adhering the light strip to the door.

Place a small sticky back square zip tie mount at each end of the strips to secure the connector to the topper.

Step 15:

Feed the E-Lock door harness through the door tube and out the closer 5/8” hole in the tube so it comes out next to the E-Lock.

Step 16:

Connect the E-Lock pigtail to the door harness and tuck the harnessing back into the tube. Secure the grommet into the hole and secure the pigtail with the P-clip as shown.

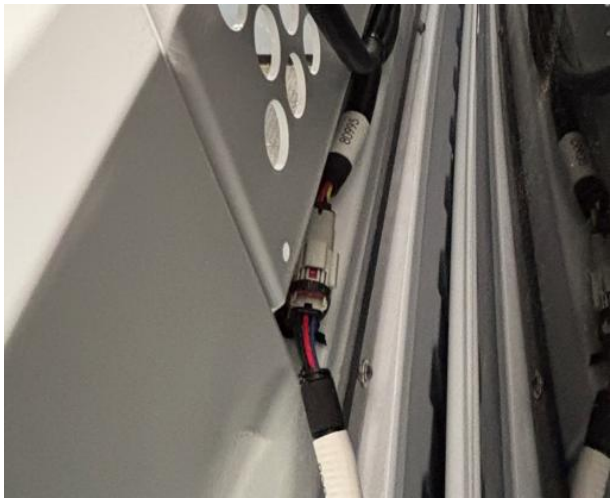
Once both the light strip and the E-Lock are installed, you can then tighten the zip ties along the door brace from step 13.

Step 17:

Pull back and secure any excess harnessing behind the plunger switch using the two zip tie mounting points on the metal flat with the plunger switch.

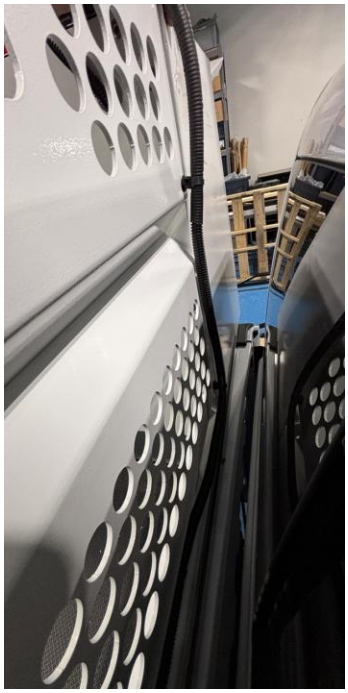
Step 18:

Once both toolboxes are complete, connect the toolbox harness to the cab harness.



Step 19:

Secure the toolbox harness to the cab guard as shown.



Step 20:

Secure the remainder of the cab harness underneath the vehicle. Coil any excess near the rear of the cab as shown. Picture is reference only; this is not the cab harness shown.

Step 21:

At this point all harnesses should be connected, routed, and secured properly.

Insert the fuse back into the inline fuse holder in the power harness (80379).

Proceed to the next page for install testing and troubleshooting

QC Tests and Troubleshooting

QC Step 1:

Test E-Lock functionality by triggering the OEM locks, either with the door switch or the OEM key fob. Ensure both E-Locks are locking and unlocking in unison with the OEM locks.

Troubleshooting:

1. If both E-Locks aren't triggering
    a. Double check the posi-taps are installed properly and on the correct wires.
    b. Check that all connections are tight and that the locks are receiving signals
2. If both E-Locks are triggering opposite the OEM locks
    a. Swap the wires the posi-taps are connected to
3. If one of the E-Locks is not triggering or is triggering opposite
    a. Follow the steps above, if those do not work you may have a faulty lock. RMA the faulty lock.

QC Step 2:

Verify plunger switch is secured in place with proper connections from harness.
Validate functionality of interior lighting using plunger switch to activate lights on/off.

Troubleshooting:

1. If lights are not turning on/off when pushing the plunger switch by hand
    a. Ensure there is a proper connection on the lights and the plunger switch
    b. Make sure plunger is not stuck
    c. Make sure the vehicle has been started after the modules have been installed

THE INSTALL IS NOW COMPLETE

KIT, TAILGATE CHMSL

CATALOG NUMBER **81248**

PRODUCT APPLICATION

PRODUCT FEATURES

CHMSL kit designed to mount on OEM tailgate for ASCO topsider install.

Kit includes CHMSL light and harness that ties directly into OEM stop lamps.

This kit is compatible with model year 2026 Ford Super Duty.

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

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ADRIAN STEEL
Cargo Management Solutions for Commercial Vehicles

CATALOG NUMBER **81248**

PRODUCT APPLICATION

This product is designed to be installed on OEM vehicle tailgate for ASCO topsider box install.

ACCESSORIES THAT WILL WORK WITH THIS PRODUCT

CATALOG NUMBER	*DESCRIPTION*
80384	TAILGATE CHMSL HARNESS
71628	TOPPER LIGHT T17 W/ CONN
80700	DASH WARNING LABEL

SPECIAL APPLICATION NOTES

The information contained in this document is the sole property of ADRIAN STEEL COMPANY. ADRIAN STEEL COMPANY retains the right to modify and/or change the product of its design at any time without prior notification.

Introduction / Comments:

Install Instructions for Tailgate CHMSL Kit

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.

Install Instructions for Tailgate CHMSL Kit

Parts Included

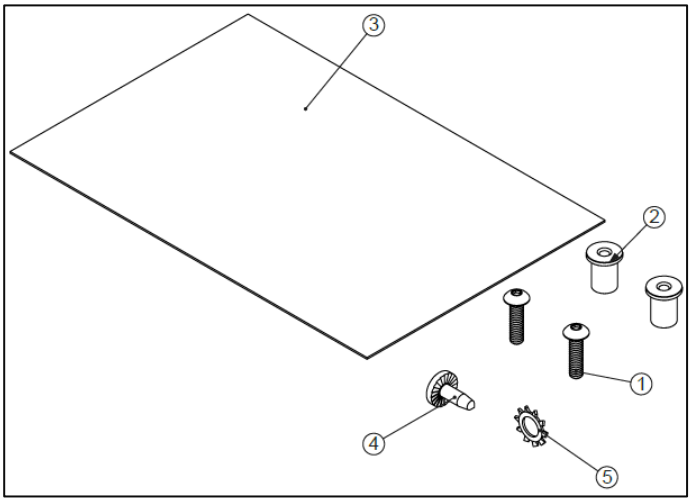
71680	HARN, BRAKE LIGHT TOP 25'
71628	TOPPER LIGHT T17 W/ CONN
35353-0	BUTT CONN,22-18GA,SEALED
80700	DASH WARNING LABEL
BAG81366	FAS BAG, TOPSIDER CHMSL
1) FAS0922	SCREW,BHCS 8-32 X 0.63 SS
2) FAS1021	NUT,WELL 8-32 HD 0.312"
3) BAG0406-A	BAG, 4X6 3MIL
4) FAS0148	SCREW,FHP TEK 10-24X.5 ZN
5) FAS0066	WASHER,LCK EXT 1/4 ZP

71628

35353-0

80700

71680



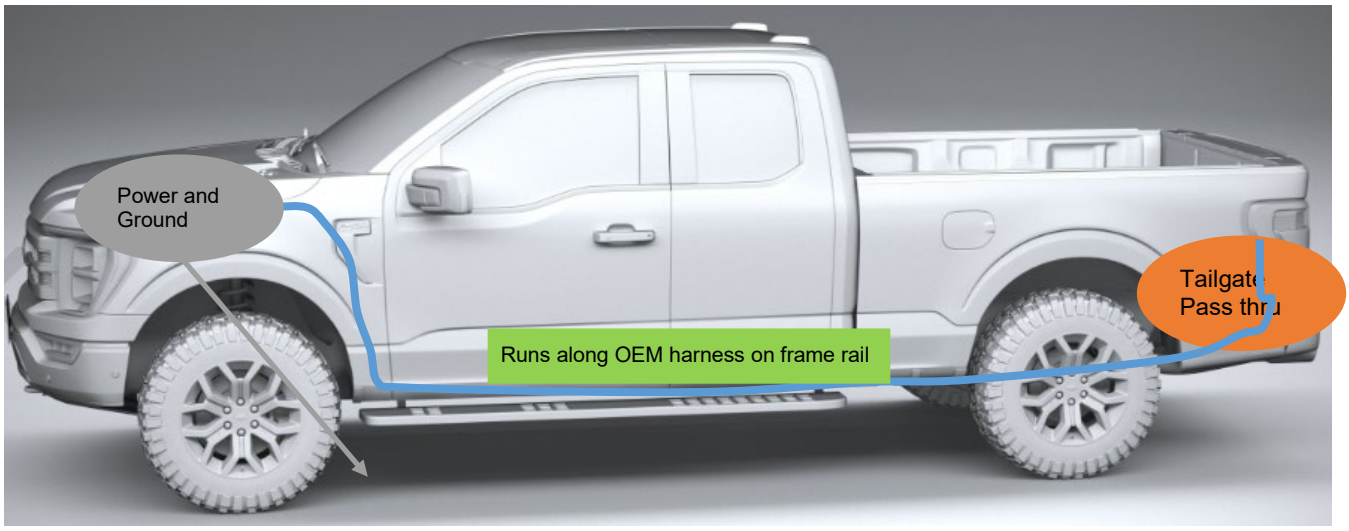
BAG81366

Tools Needed

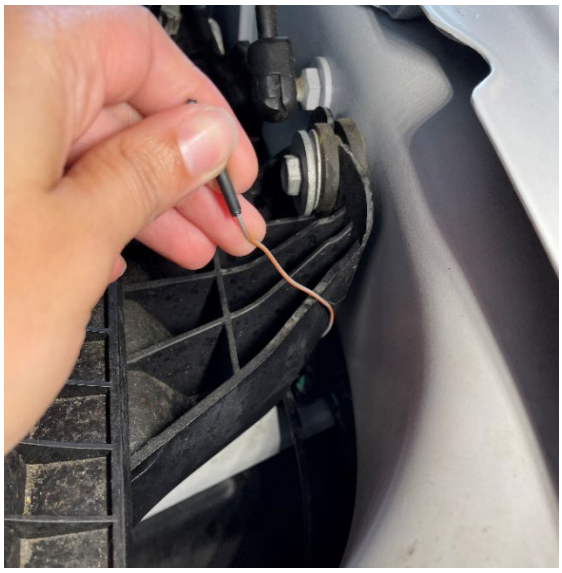
1. Insulated Splice Crimper
2. Wire Strippers
3. Diagonal Cutters
4. Drill driver
5. Phillips Bit with 9/16” Drill driver bit
6. 3/4” Hole Saw or Step Drill
7. 10mm Socket
8. Socket driver and extensions

Figure 4-1: Tools Needed for Installation

Vehicle Specific Install Steps – Ford F-150



Vehicle Specific Install Steps – Ford F-150



Step 1:
Locate harness 71680. Remove the fuse from the inline fuse holder until the end of the install.

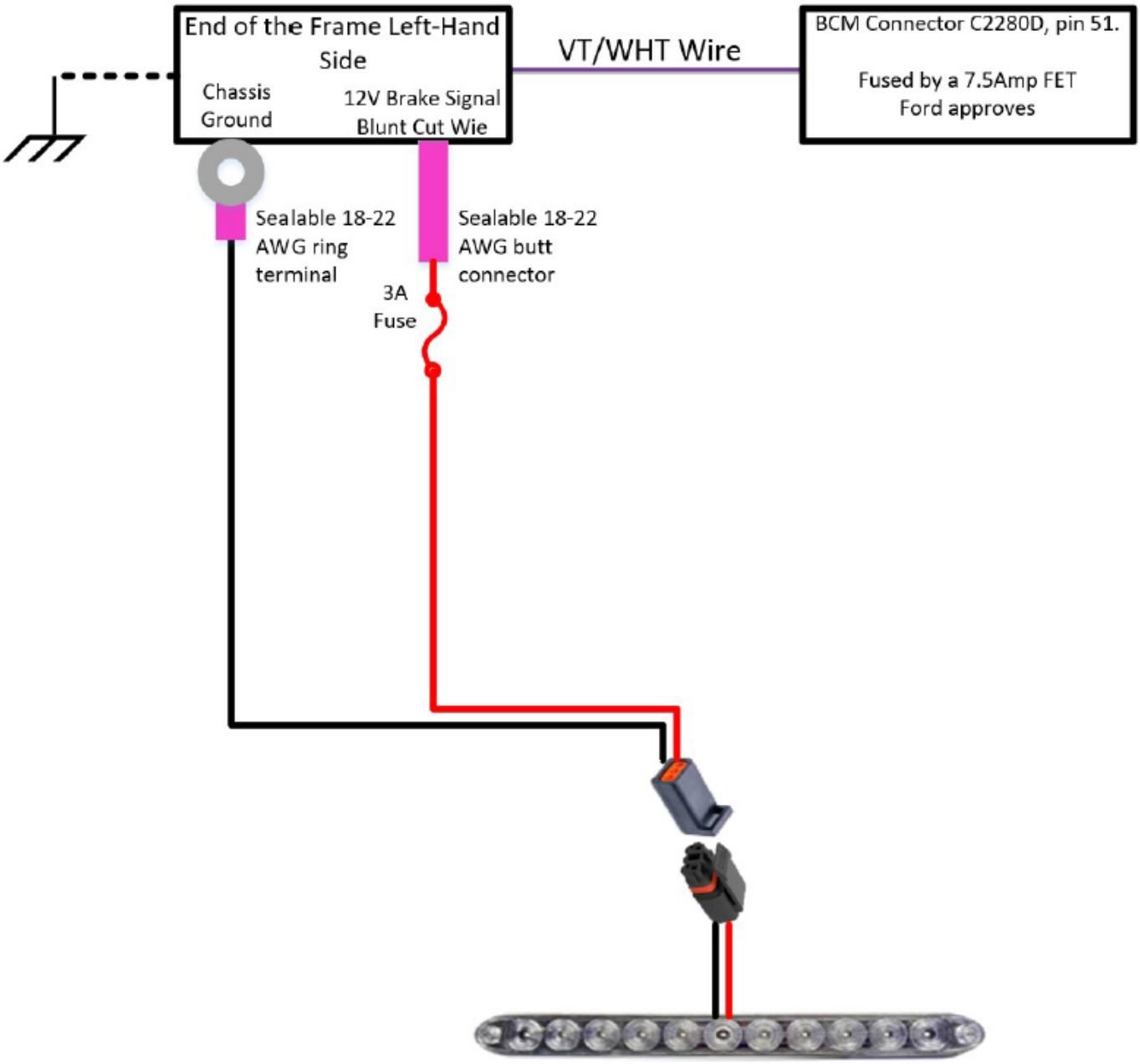
Step 2:
Open the hood of the F-150 and locate the OEM harness under the driver's side hood strut mount.

There will be a small gray/orange (ICE) or green/purple (Hybrid) wire with a black end cap that comes out separate from the OEM harness. This is the OEM CHMSL circuit wire for our 3rd brake light

Snip the black cover and strip the end of the wire. Crimp one end of the included butt splice connector to the OEM wire, and the other to the bare wire on harness 71680.

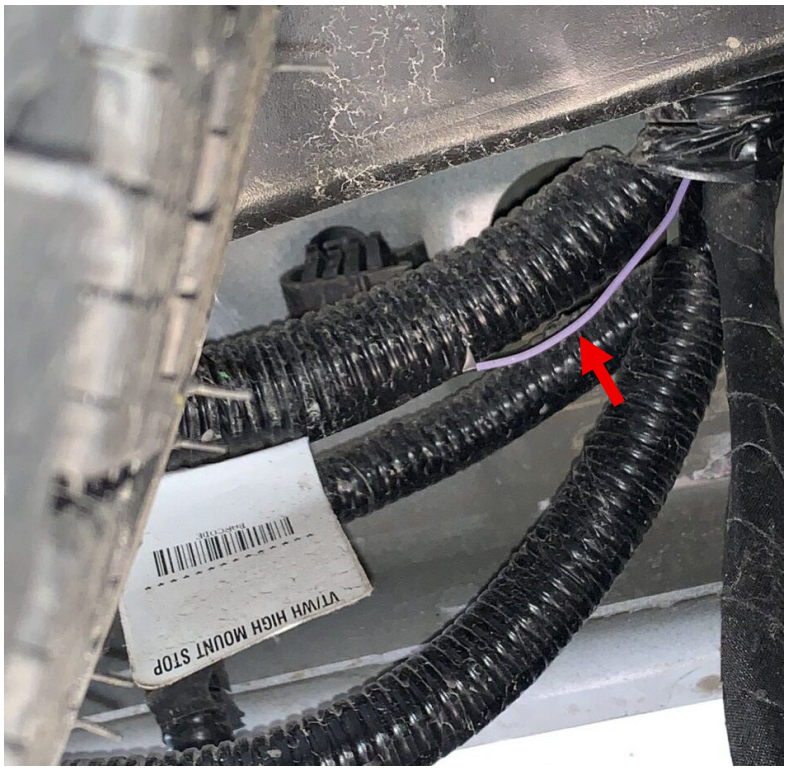
Step 3:
Back out the OEM ground screw and place the ring terminal from harness 71680 between the OEM ground point and the screw. Retighten the screw back in place.

Vehicle Specific Install Steps – Ford F-250/350



For MY23+ Ford F-250/350 with 6.75’ and 8’ Beds

Vehicle Specific Install Steps – Ford F-250/350



Step 1:
On the street side, rearward of the vehicle spare tire, there is access to the harnessing for the rear high mount stop signal.

Pull the OEM harness out from behind truck spare tire until you can visually see the blunt cut wire end wrapped in black tape. Locate the violet and white wire as shown in the image.

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

Step 2:
Grab harness 71680 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. It must be completely sealed.

Use images as reference.

Vehicle Specific Install Steps – Ford F-250/350

Step 3:
Route the other end over the underbody frame rail to where the harness drops down the D pillar. Follow the image as reference.

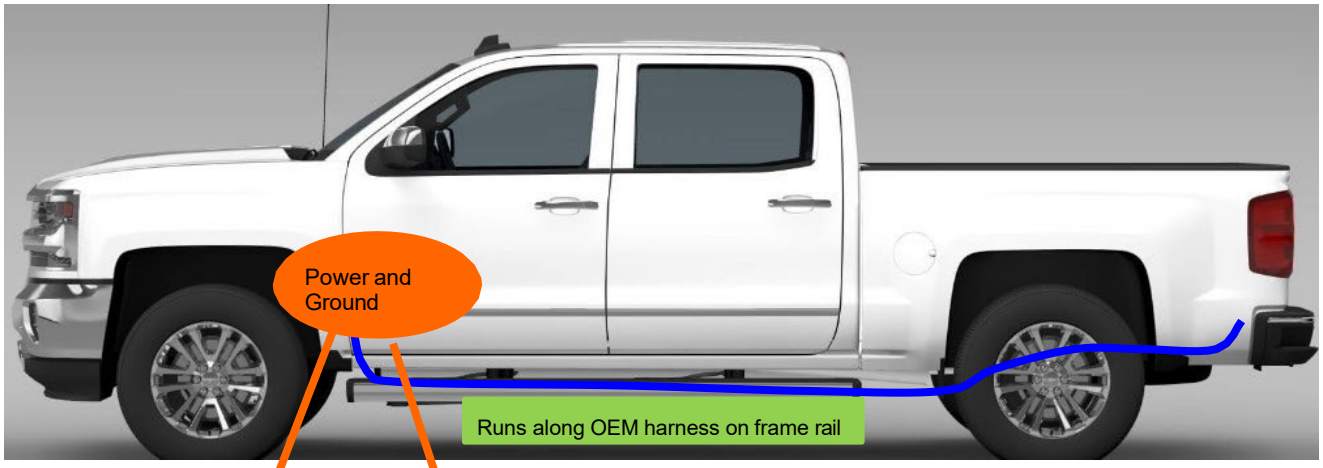
Step 4:
Using the self-tapping screw and star washer (see Page 5), screw the ground wire ring terminal to the vehicle.

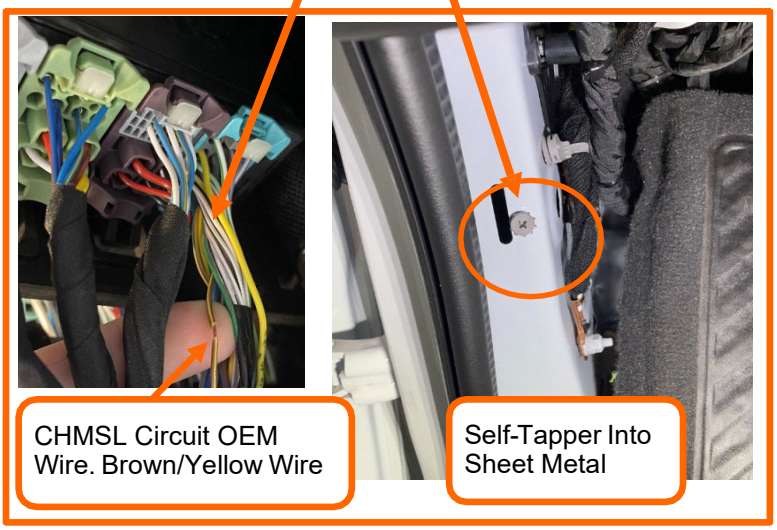
Be certain that self-tapping screw and star washer are on either side of the ring terminal and firmly tightened into the body sheet metal structure. It is advised to remove a small portion of the paint in that are to ensure good contact with the sheet metal ground. If the ground connection is loose or insufficient the brake light will work intermittently or not at all.

Ensure the fastener is sufficiently driven into the sheet metal and check the ring terminal cannot rotate.

Step 5:
Route the harness over towards the blunt cut wire, secure wiring along OEM harnesses in that same area.

Vehicle Specific Install Steps – Silverado



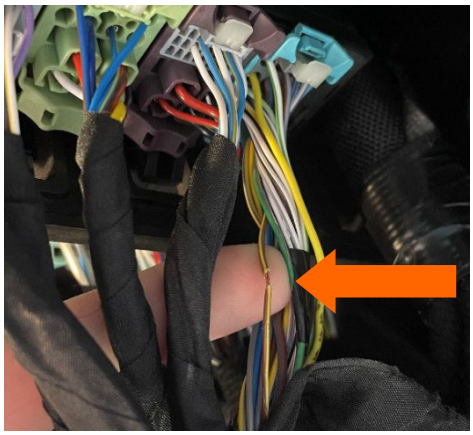


Vehicle Specific Install Steps – Silverado

Step 1:
Locate the brake light harness 71680.

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

Open the driver's side door. Remove the trim panels circled in red.



Step 2:
Locate the body control module on the lefthand side of the vehicle body, behind the OBDII port. There will be 5 colorful connectors with wire harnesses plugged into the bottom of the module.

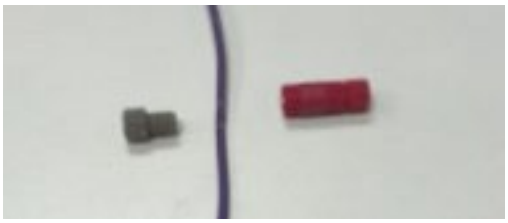
Locate the light blue connector (X5), pin 25. This wire will be Yellow/Brown. This is the OEM CHMSL circuit wire for the brake light. Use a meter to be sure this is the correct wire (OEM's tend to change wire colors).

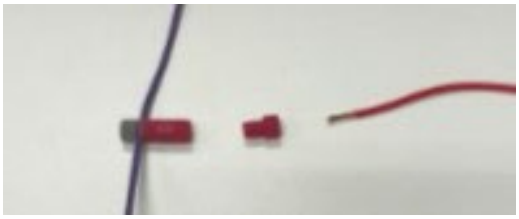
Separate the wire from the bundle (by your finder or a trim tool) to prepare it to be connected with the brake light harness.

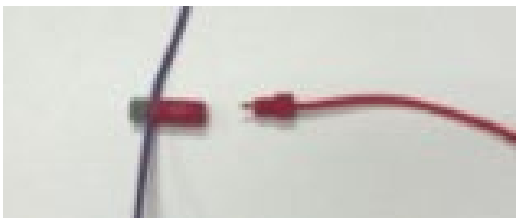
Locate the posi-tap in the brake light harness bag.

Vehicle Specific Install Steps – Silverado

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







Step 3:

Remove the grey cap on the posi-tap.

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

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

Remove the red cap on the posi-tap.

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

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

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

Be sure the connection is secure.

Vehicle Specific Install Steps – Silverado

Step 4:
On the driver's side: locate the cut outs for the trim panels in the sheet metal near the OEM chassis ground. This is located to the left of the OBDII port on the vehicle body.

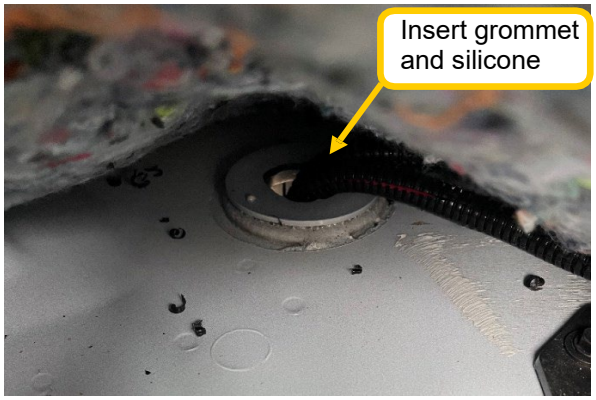
Locate the cut out that is higher on the frame than the OEM ground, shown in the picture to the left.

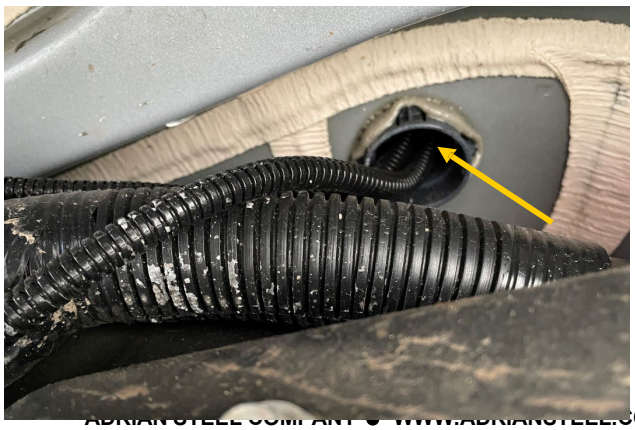
Locate the fastener bag BAG81366 and find the small tek screw and the star washer.

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

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

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





Step 5:
Locate the OEM floor grommet by lifting up the carpet on the driver's side.

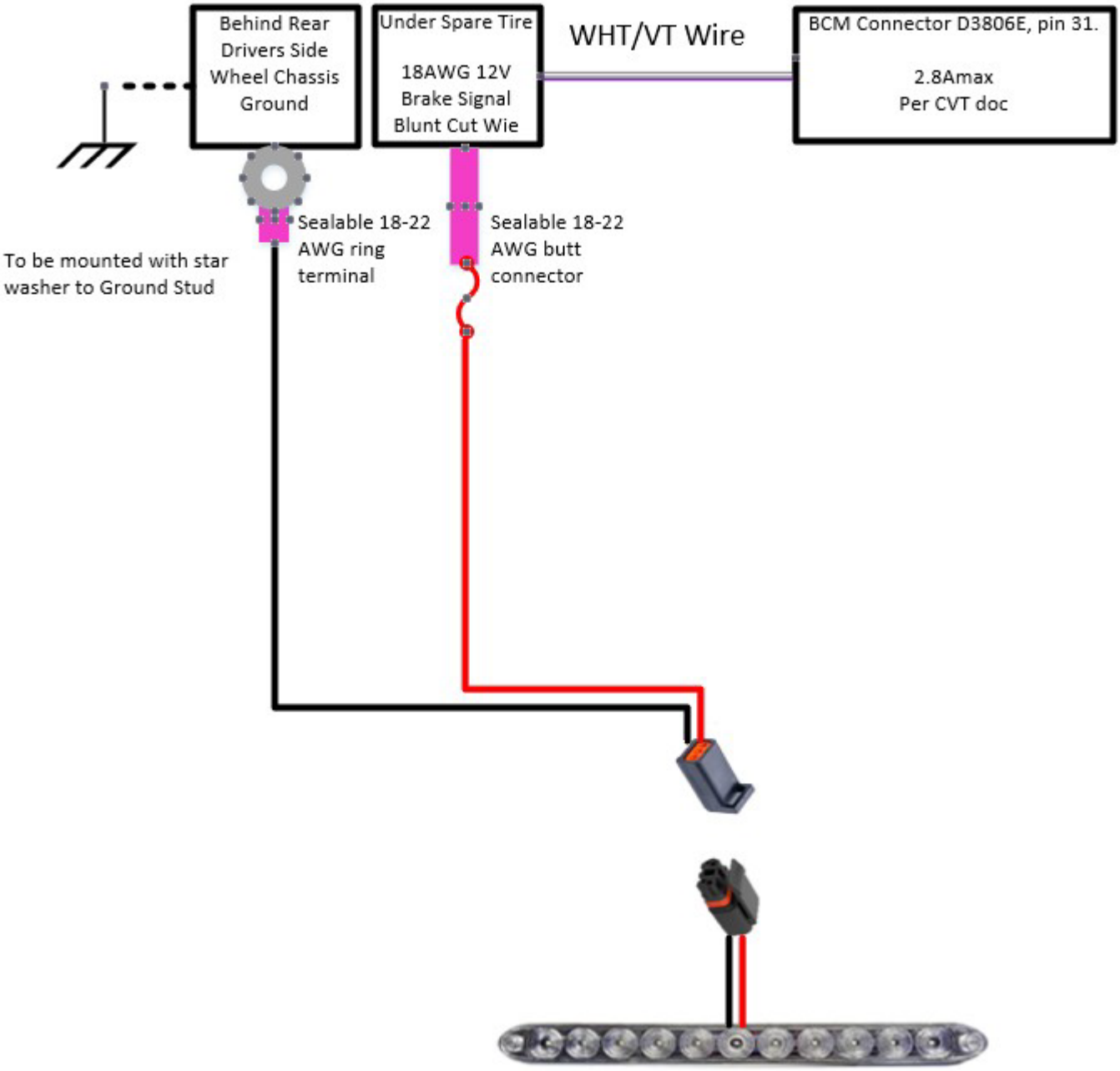
If installing the interior lighting kit as well as the brake light kit, utilize the larger grommet supplied in the brake light harness bag.

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 when done.

Vehicle Specific Install Steps – RAM 1500



For MY23+ RAM 1500 with 5.6’, 6.3’, and 8’ Beds

Vehicle Specific Install Steps – RAM 1500

Step 1:
Locate the brake light harness 71680 that is dropped through the D-pillar and ensure that the fuse from the inline fuse holder is removed until the end of the install.

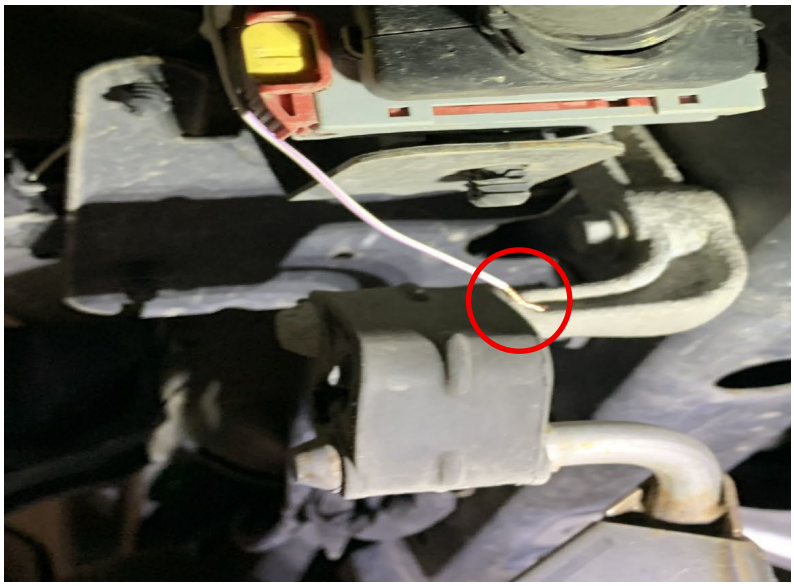
Step 2:
On the street side, rearward of the vehicle tire is access to the harnessing for the rear electrical. Locate OEM red and gray connector.

Look around the topside of the harness connections and follow the part of the harness that goes toward the center of the vehicle (towards the curb side) [See yellow arrow 1].

There will be a small tape covered wire separate from the OEM harness. It will have a black covering on the end [See yellow arrow 2].

This is the OEM CHMSL circuit wire for the brake light. Its color is White with a Violet stripe.

Vehicle Specific Install Steps – RAM 1500



Step 3:
On backside of the OEM harness, locate the white and violet wire. Begin to strip the wire covering and prepare it to be connected to the brake light harness.
Use the image as reference.

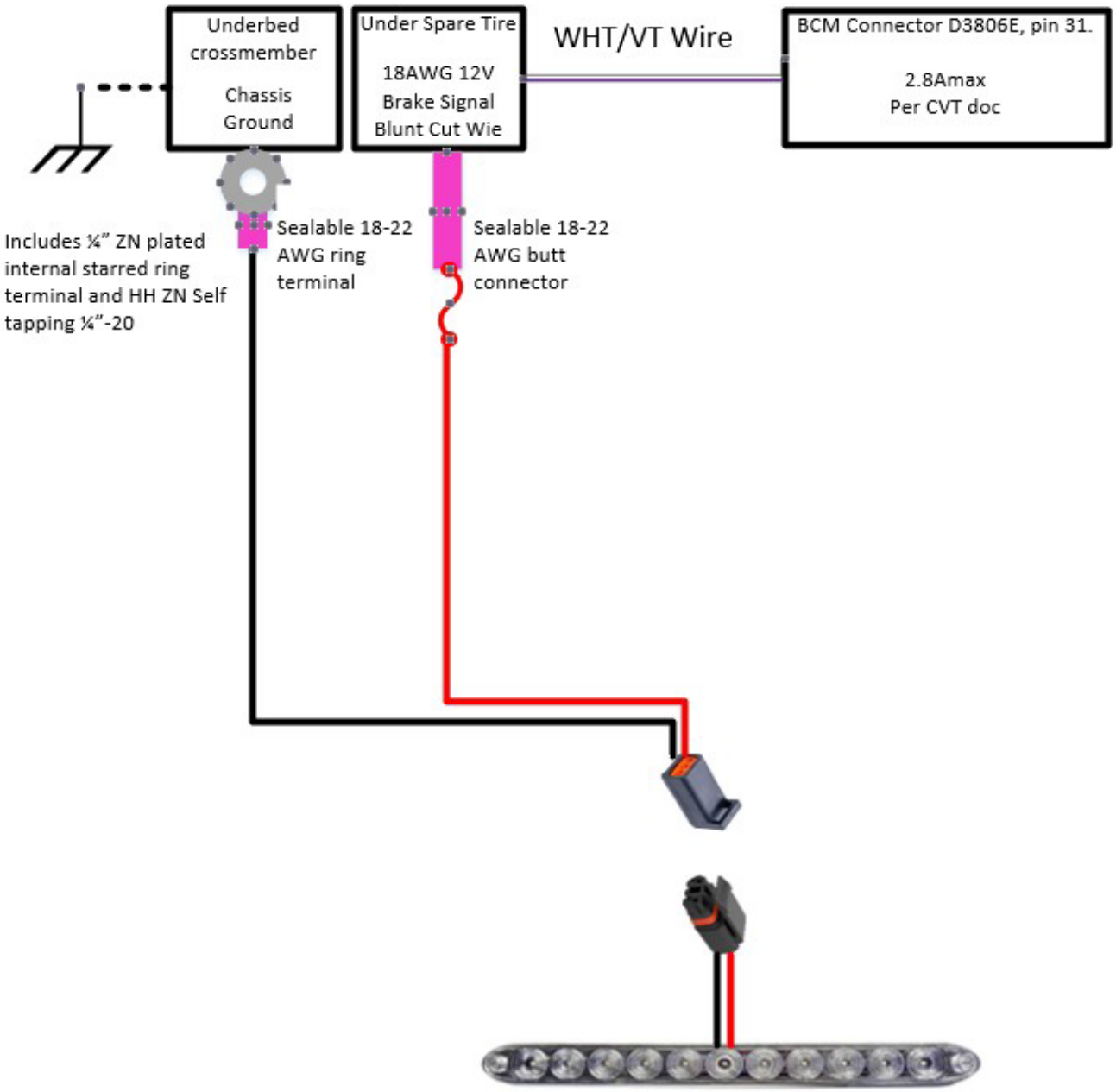
Step 4:
Locate the end of the harness with the ring terminal and butt connector.

Use the butt connector to connect to the OEM CHMSL wire. Use a heat gun to shrink the butt connector once crimped on. It must be completely sealed.

Step 5:
Alongside of the OEM harness, locate the OEM chassis ground located on the frame—forward of the CHMSL connection, but still aft of the street side rear wheel. Shown circled in red in the image to the left.

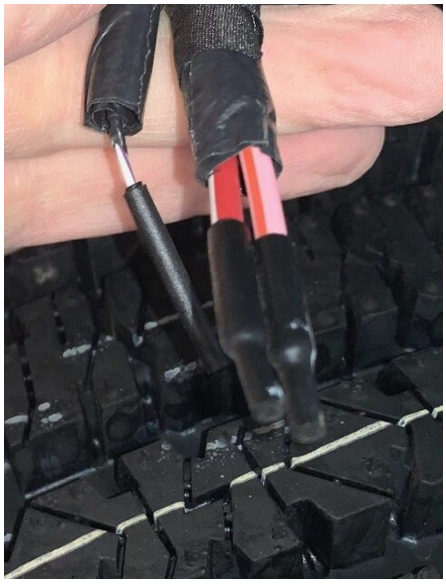
Using a 10mm socket wrench, firmly secure the ring terminal on the brake light harness to the chassis ground. Be sure to place a 1/4” star tooth washer (FAS0066) in proper position, in front of ring terminal before securing back in place.

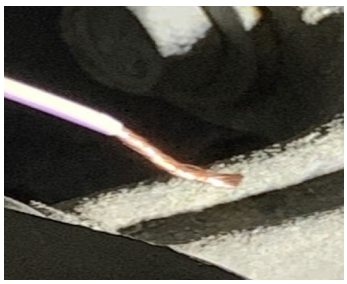
Vehicle Specific Install Steps – RAM 2500/3500



For MY23+ RAM 2500/3500 with 5.6', 6.3', and 8' Beds

Vehicle Specific Install Steps – RAM 2500/3500





Step 1:
Locate the underside of the vehicle. Near the spare tire, closer to passenger side, locate OEM harness shown in the image to the left. Cut white tape wrapped around harness. Begin to pull OEM harness out from behind truck tire until you can visually see the blunt cut wire end wrapped in black tape.

Step 2:
Locate the end of the harness 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. It must be completely sealed.

Step 3:
Route the other end over the underbody frame rail to the white underbed crossmember. Follow the image as reference.

Using a self-tapping screw, begin to screw the other end wire terminal to the vehicle.

1pc - ¼” HH Self tapper FAS0641
1 pc - ¼”Star tooth Washer Galv. FAS0066

Excess Wire Under Body. Use the provided tek screw and p-clip to secure wiring to the frame

Refer to vehicle specific routing diagrams to route the harness into the tailgate.

Route the brake light harness rearward following the OEM wire harness on the frame.

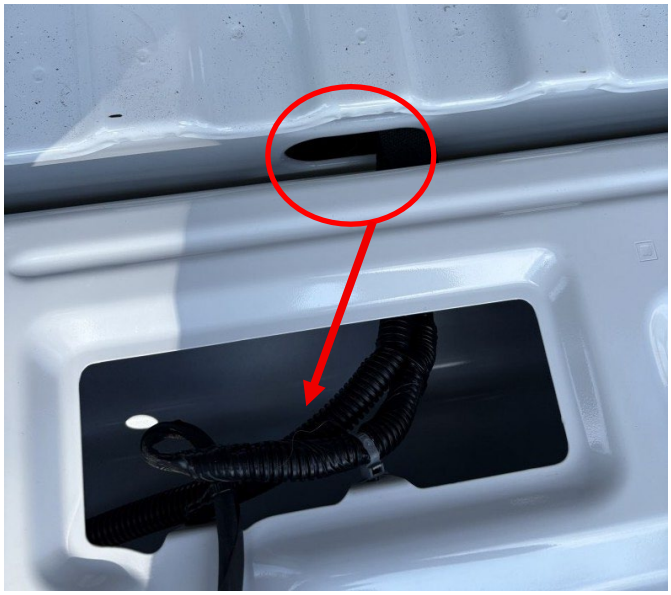
Continue routing the harness rearward until you reach the bumper.

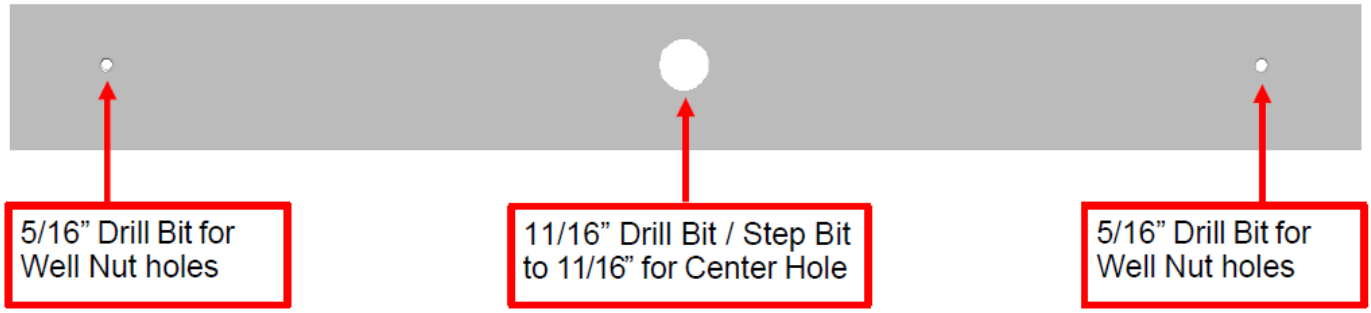
Route the harness between the bed and the tailgate, into the bottom of the tailgate.

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

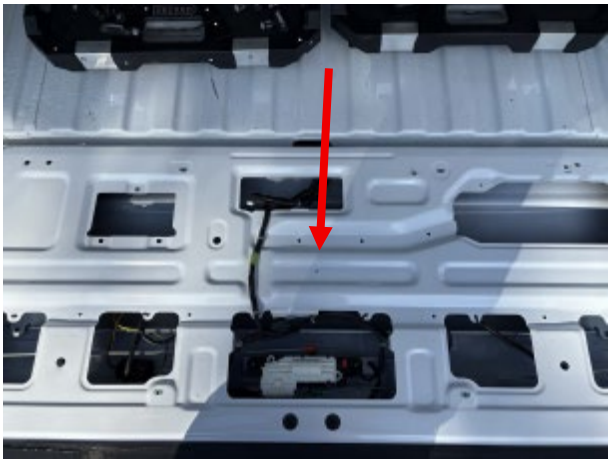
DO NOT secure wiring to any brake lines.





Drill the middle hole centered and as high on the tailgate as possible while making certain the light sits flat on the tailgate. The light must be at least 34 inches about the ground, and cannot be tilted at more than a 10 degree angle.

Place (2) FAS1021 Well Nuts in outside holes for the taillight. Ensure flange is flush to the tailgate. Using FAS0922 fasten taillights onto tailgate. Confirm Well Nuts have a good grab on the back side of the tailgate.



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

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.