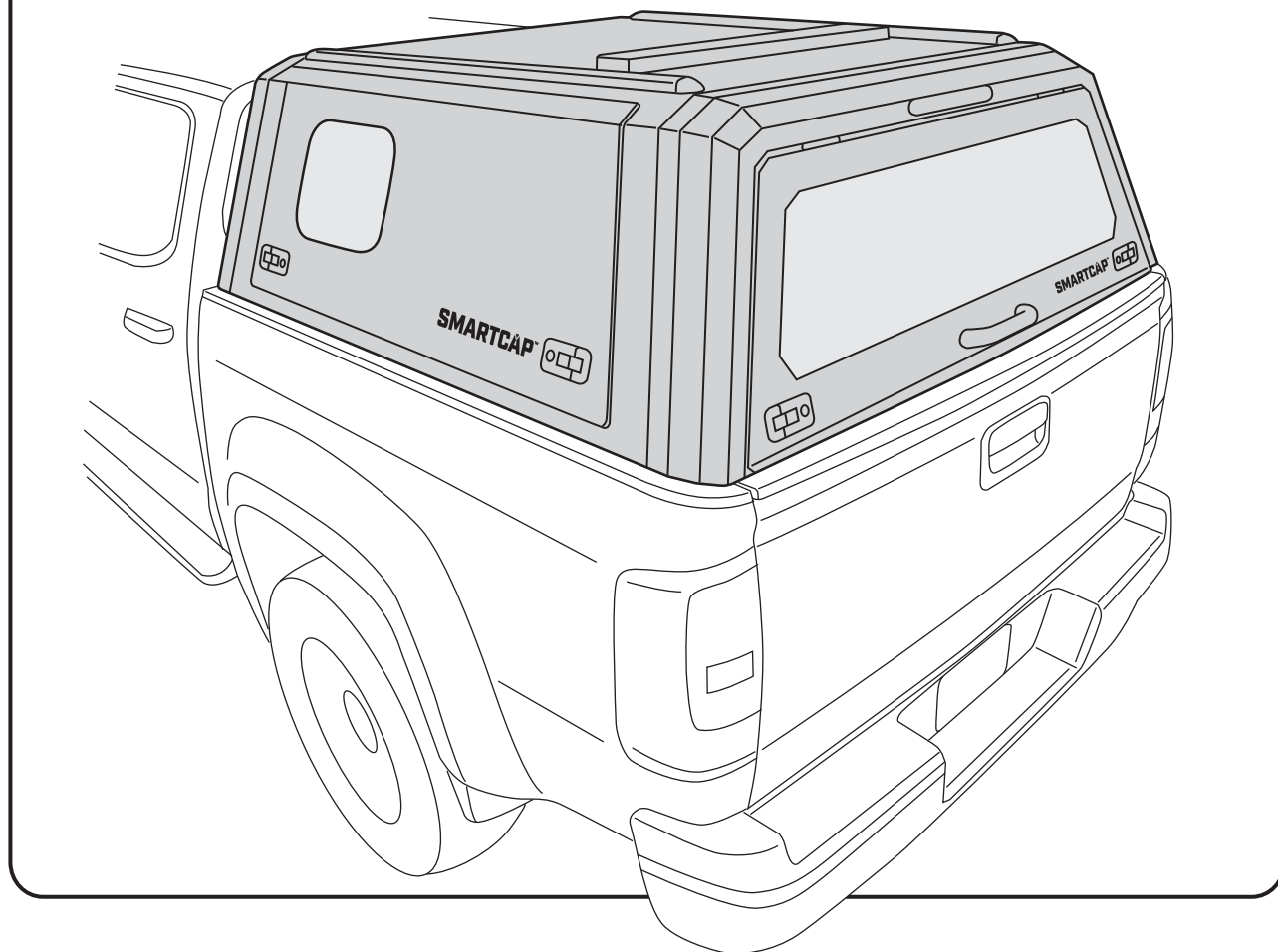


SMARTCAP®

INSTRUCTION GUIDE

RAM 1500 EDITION

2019-CURRENT



- ▼ **PREPARE A CLEAN WORK AREA.**
- ▼ **WE RECOMMEND A MINIMUM OF 2 PEOPLE FOR ASSEMBLY AND 4 PEOPLE FOR INSTALLATION**
- ▼ **ENSURE THE REQUIRED TOOLS ARE PRESENT AND ALL HARDWARE CONTENTS ARE ACCOUNTED FOR.**
- ▼ **NEVER USE ACETONE OR THINNERS ON PAINTED PARTS.**
- ▼ **READ THROUGH THE ENTIRE INSTRUCTION GUIDE BEFORE STARTING THIS PROCEDURE AND FOLLOW THE STEPS CAREFULLY TO AVOID ANY DAMAGE TO THE COMPONENTS OR THE VEHICLE.**

SMARTCAP.COM

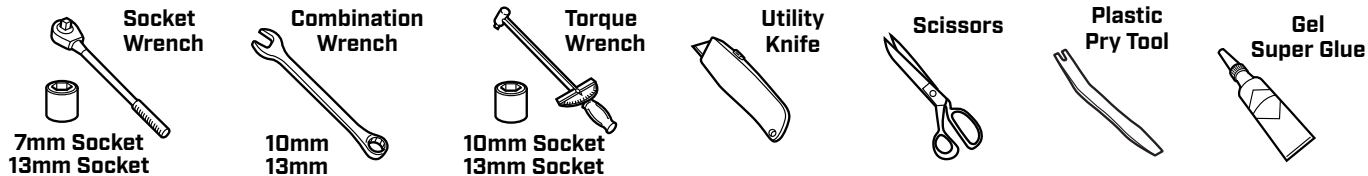
SUPPORT.SA@SMARTCAP.COM - REST OF WORLD

SUPPORT.NA@SMARTCAP.COM - NORTH AMERICA/CANADA



I-SHEET-NA-RAM-2

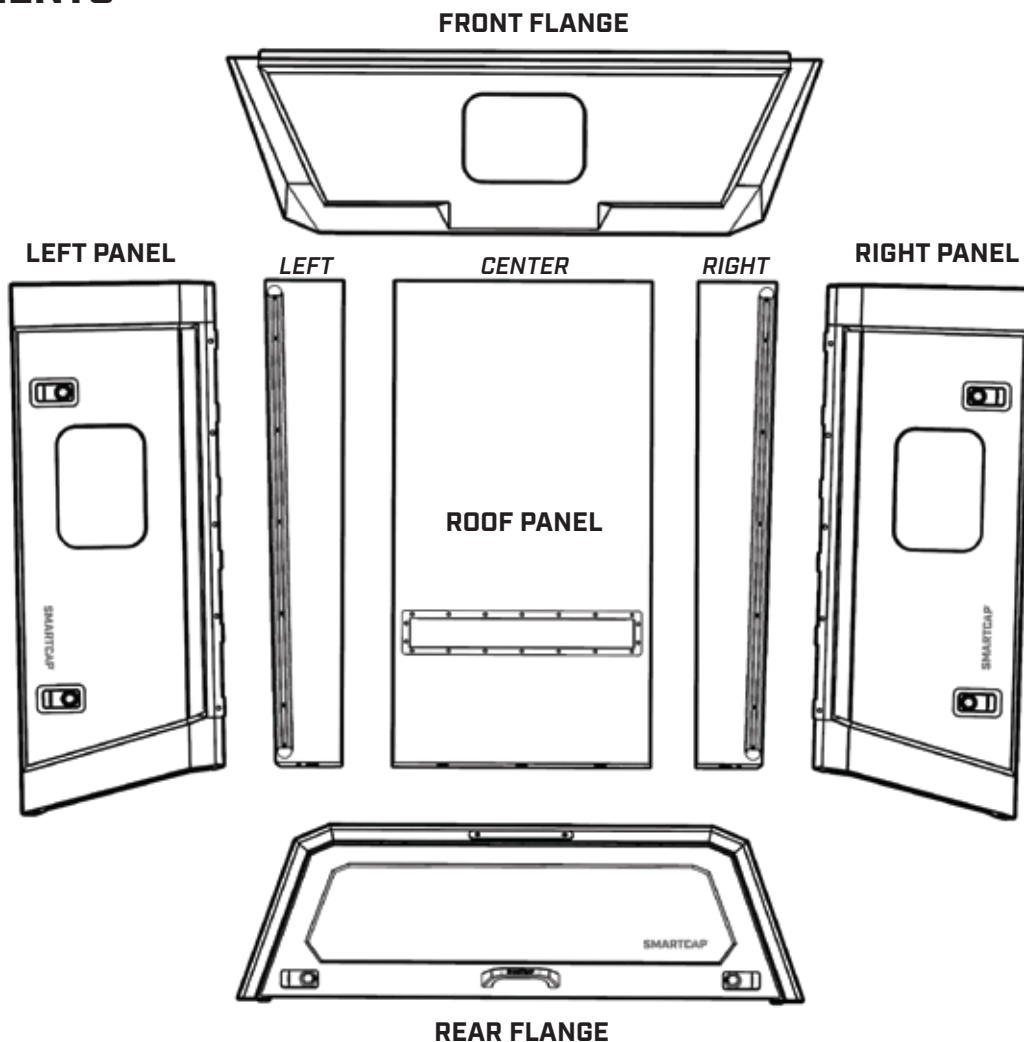
TOOLS REQUIRED



IMPORTANT

- ▼ USE ONLY THE TOOLS RECOMMENDED ABOVE.
- ▼ USE ONLY THE HARDWARE PROVIDED IN THIS KIT.
- ▼ ASSISTANCE WILL BE NEEDED FOR THIS INSTALLATION. FOUR PEOPLE ARE RECOMMENDED TO LIFT THE SMARTCAP ONTO THE VEHICLE.
- ▼ AVOID PINCHING OR CRUSHING HANDS AND FINGERS.
- ▼ INSPECT ALL KIT COMPONENTS FOR DAMAGE BEFORE ASSEMBLY.
- ▼ NEVER USE ACETONE OR THINNERS ON PAINTED PARTS.

COMPONENTS

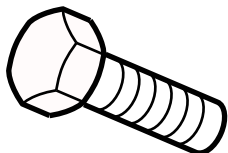


I-SHEET-NA-RAM-2

ASSEMBLY HARDWARE

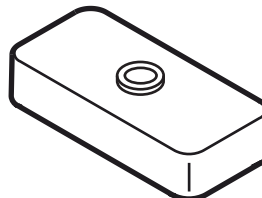
FITMENT KIT

M6 x 10mm BOLT



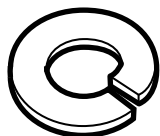
46X

**FASTENER
BLOCK CLAMP**



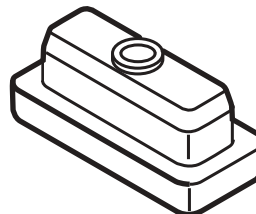
46X

**M6 LOCK
WASHER**



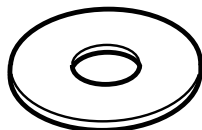
46X

**FASTENER
BLOCK**



46X

**M6 FENDER
WASHER**



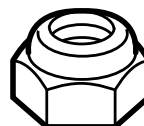
STANDARD BED

12X

LONG BED

14X

**M6 LOCK
NUT**



STANDARD BED

12X

LONG BED

14X

D - RUBBER



1X

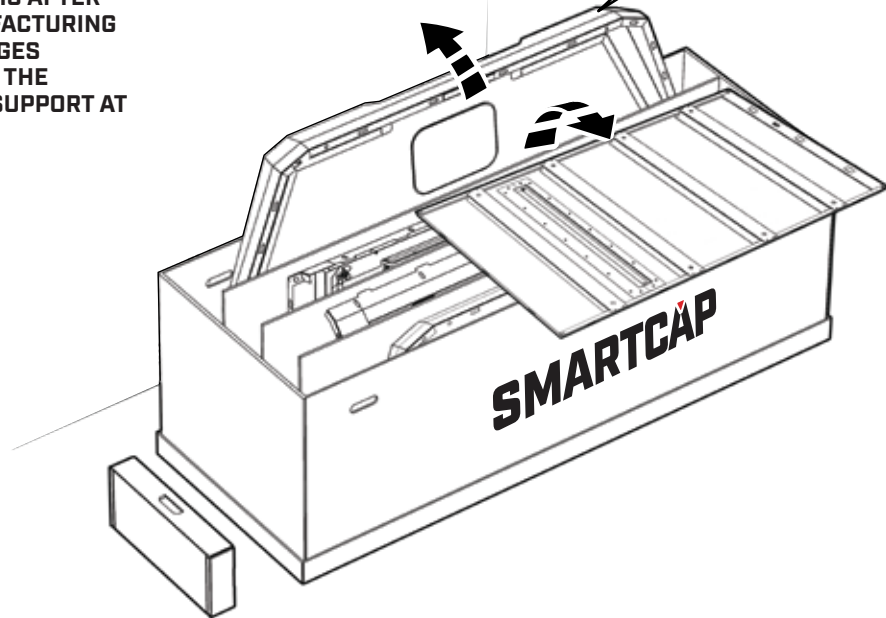
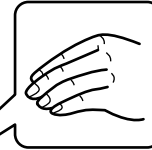
STEP 1



IMPORTANT

- ▼ BE SURE TO REMOVE ALL SEVEN PANELS FROM THEIR PACKAGING AND INSPECT THE PAINTED SURFACES PRIOR TO ASSEMBLY, AS SMARTCAP WILL NOT ACCEPT WARRANTY CLAIMS AFTER ASSEMBLY IS COMPLETED. IF MANUFACTURING IMPERFECTIONS OR SHIPPING DAMAGES ARE FOUND, DO NOT CONTINUE WITH THE ASSEMBLY PROCESS AND CONTACT SUPPORT AT SUPPORT.NA@SMARTCAP.COM

2 PERSON JOB

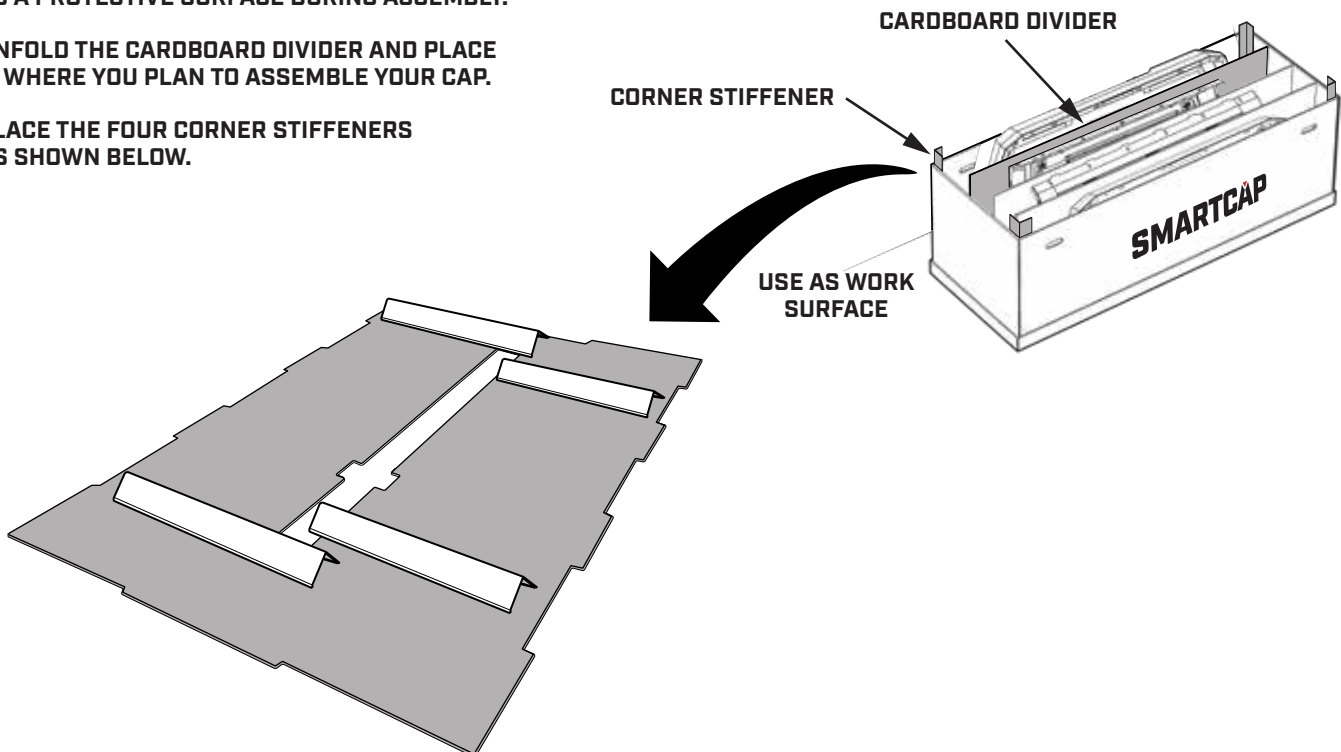


STEP 2

REMOVE THE FOUR CORNER STIFFENERS AND ONE OF THE CARDBOARD DIVIDERS TO BE USED AS A PROTECTIVE SURFACE DURING ASSEMBLY.

UNFOLD THE CARDBOARD DIVIDER AND PLACE IT WHERE YOU PLAN TO ASSEMBLE YOUR CAP.

PLACE THE FOUR CORNER STIFFENERS AS SHOWN BELOW.

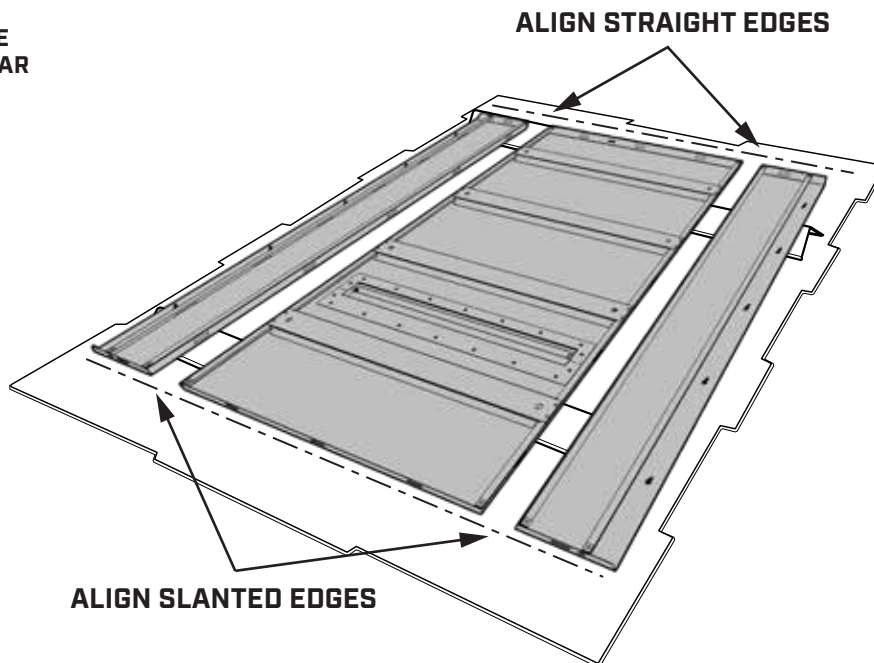


I-SHEET-NA-RAM-2

STEP 3

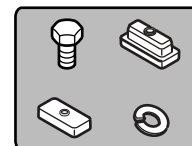
PLACE THE ROOF PANELS ON TOP OF THE CORNER STIFFENERS, WITH THE BOTTOM OF THE ROOF PANELS FACING UP.

ALIGN THE PANELS SO THAT THE PROFILE OF THE FRONT AND REAR EDGES MATCH.



STEP 4

ASSEMBLE THE FASTENER BLOCKS TO THE ROOF PANELS USING A TORQUE WRENCH AND 10MM SOCKET TO 3.7 FT. LBS [5 NEWTON METERS].



MAKE SURE ROOF PANELS ARE LEVEL



12X STANDARD BED

14X LONG BED

10mm



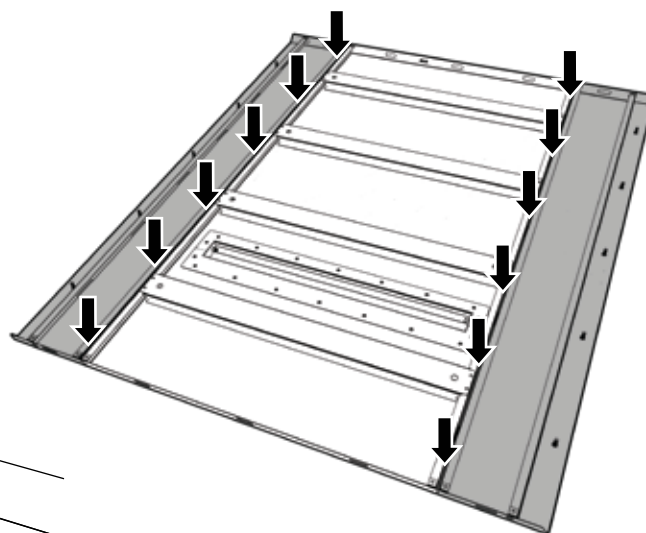
M6 BOLT

BLOCK CLAMP

M6 LOCK WASHER

FASTENER BLOCK

[3.7 ft. lbs]/[5 Nm]



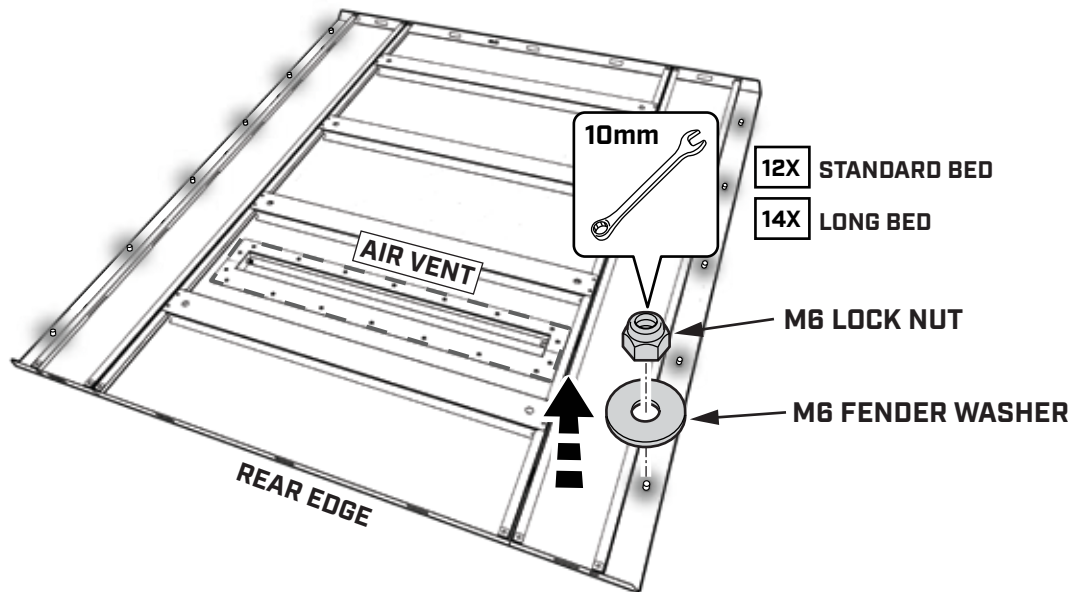
I-SHEET-NA-RAM-2

STEP 5

USE A 10MM COMBINATION WRENCH TO REMOVE THE LOCK NUTS AND FENDER WASHERS FROM THE ROOF BOLTS AND SAVE FOR REUSE.



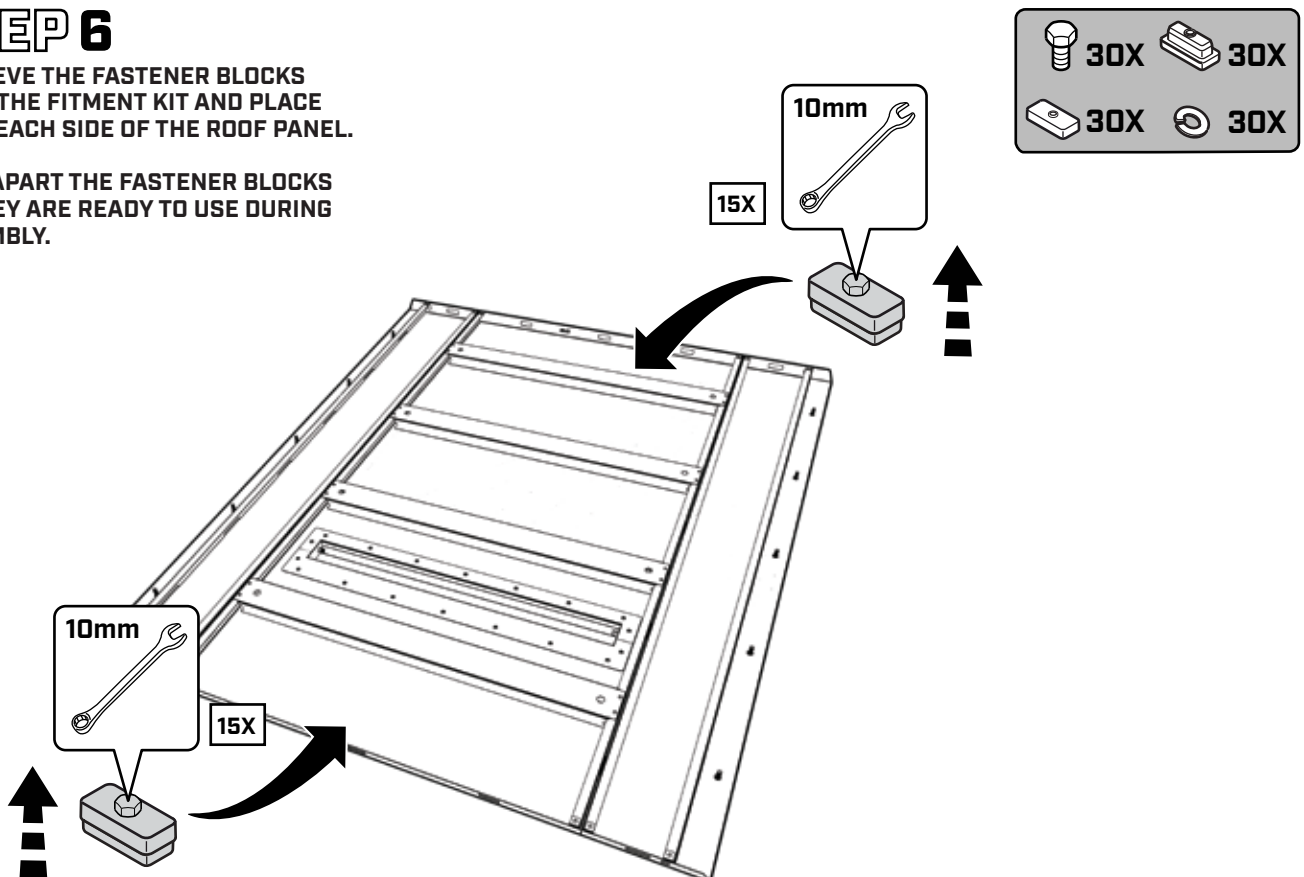
AIR VENT INDICATES REAR



STEP 6

RETRIEVE THE FASTENER BLOCKS FROM THE FITMENT KIT AND PLACE 15 ON EACH SIDE OF THE ROOF PANEL.

TAKE APART THE FASTENER BLOCKS SO THEY ARE READY TO USE DURING ASSEMBLY.



I-SHEET-NA-RAM-2

STEP 7

LOCATE THE RIGHT PANEL IN THE SMARTCAP PACKAGE AND BRING IT TO YOUR WORK AREA.

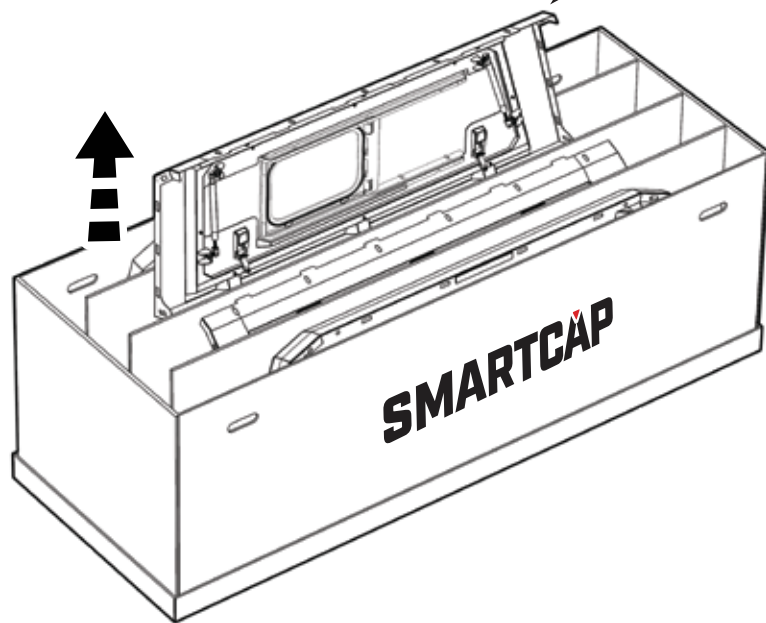
2 PERSON JOB



SLANTED EDGE INDICATES REAR



RIGHT PANEL



STEP 8

INSERT PANEL TABS INTO THE NARROW SLOTS JUST ABOVE FOAM PADDING ON ROOF PANEL.

TAP FIRMLY WITH PALM OF HAND UNTIL THERE IS A 2-3MM GAP.

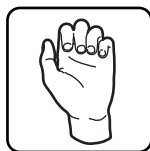
2 PERSON JOB



PANEL TABS

RIGHT PANEL

SLANTED EDGE
TOWARDS REAR



ROOF PANEL

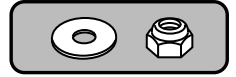
AIR VENT

REAR EDGE

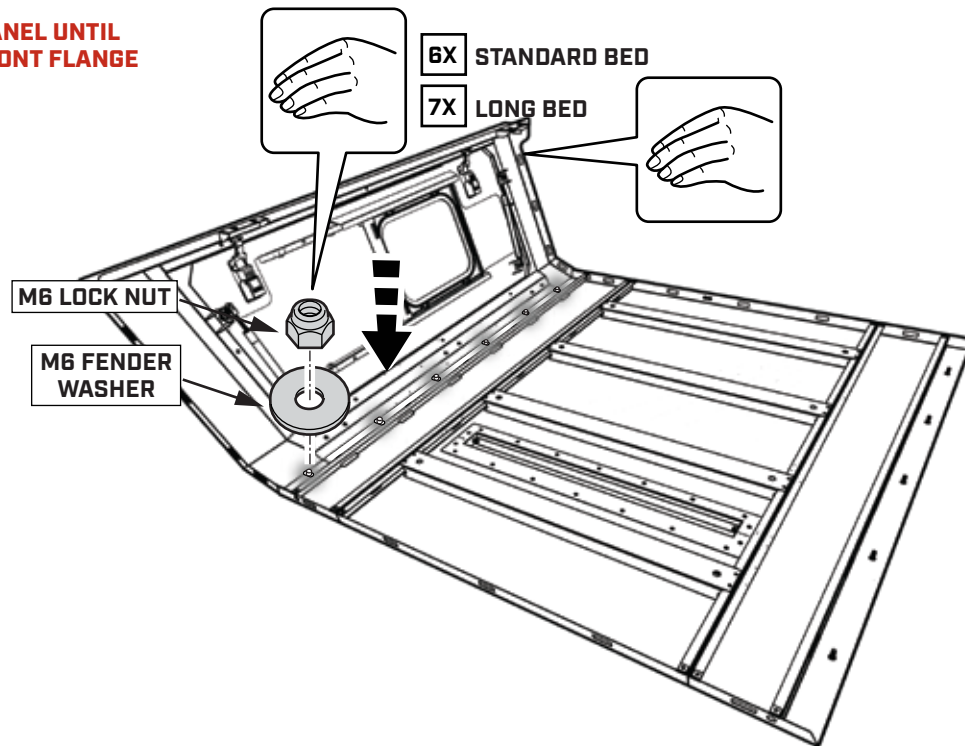
I-SHEET-NA-RAM-2

STEP 9

HAND TIGHTEN M6 LOCK NUT WITH
M6 FENDER WASHER TO ALL BOLTS.

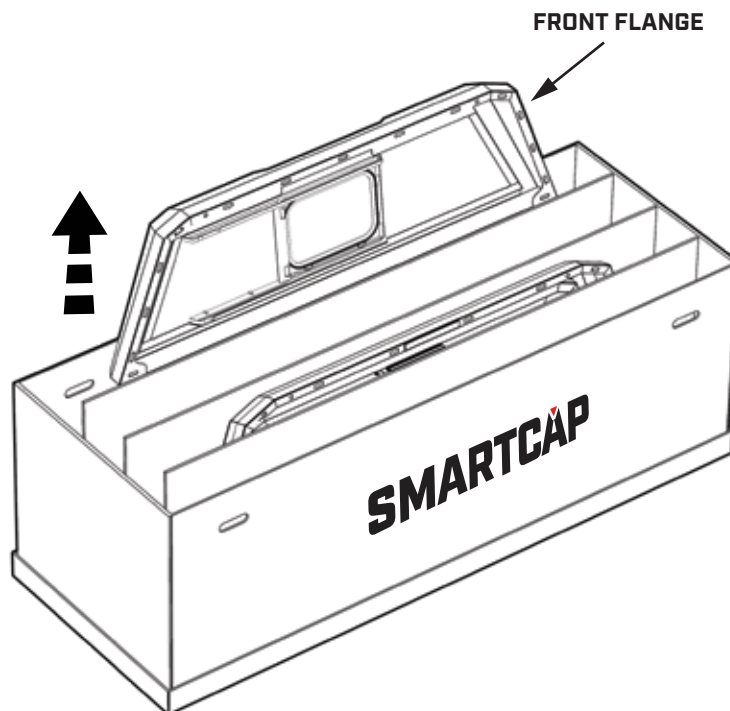


**SUPPORT RIGHT PANEL UNTIL
ASSEMBLED TO FRONT FLANGE**



STEP 10

LOCATE THE FRONT FLANGE IN THE
SMARTCAP PACKAGE AND BRING IT
TO YOUR WORK AREA.



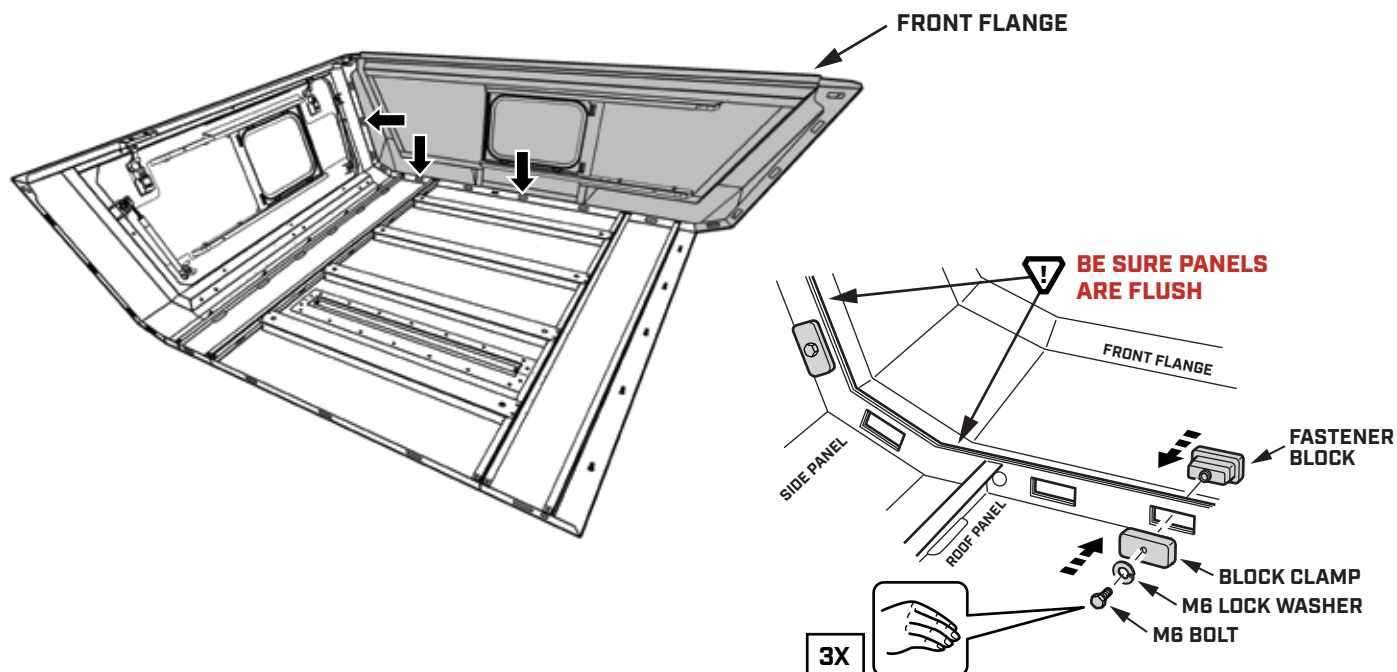
I-SHEET-NA-RAM-2

STEP 11

PLACE FRONT FLANGE AS SHOWN BELOW.

HAND TIGHTEN TWO FASTENER BLOCKS AT THE INDICATED LOCATIONS TO SUPPORT THE RIGHT PANEL AND FRONT FLANGE.

2 PERSON JOB



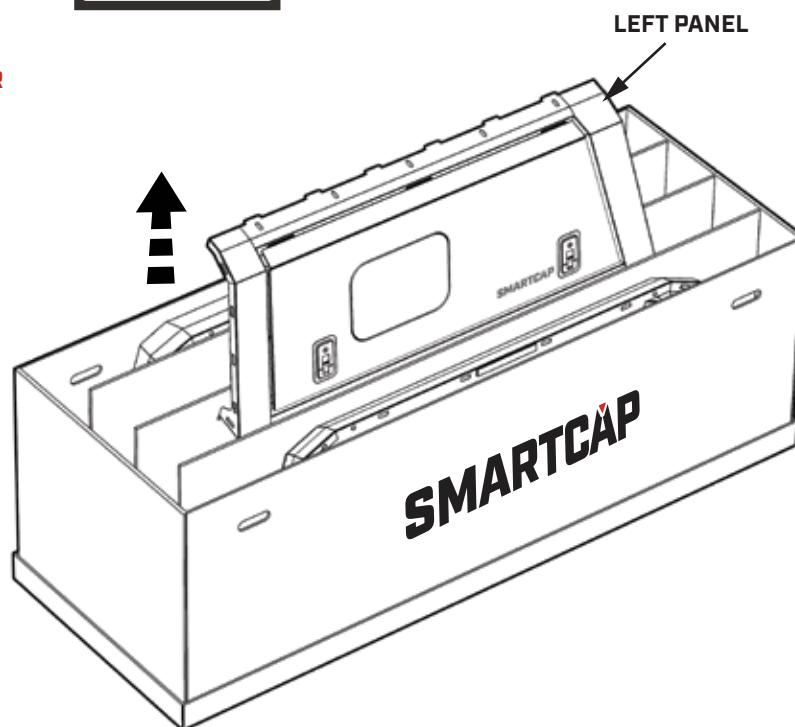
STEP 12

LOCATE THE LEFT PANEL IN THE SMARTCAP PACKAGE AND BRING IT TO YOUR WORK AREA.

2 PERSON JOB



SLANTED EDGE INDICATES REAR

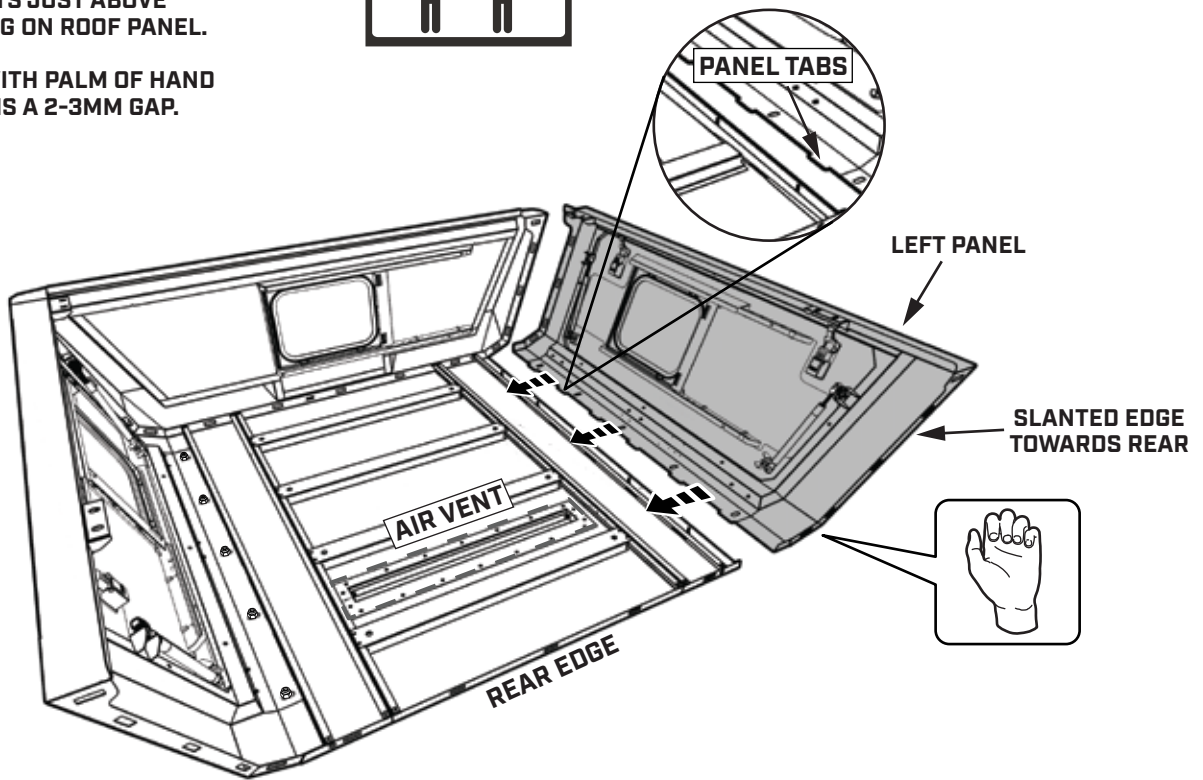


I-SHEET-NA-RAM-2

STEP 13

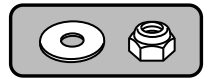
INSERT PANEL TABS INTO THE NARROW SLOTS JUST ABOVE FOAM PADDING ON ROOF PANEL.

TAP FIRMLY WITH PALM OF HAND UNTIL THERE IS A 2-3MM GAP.

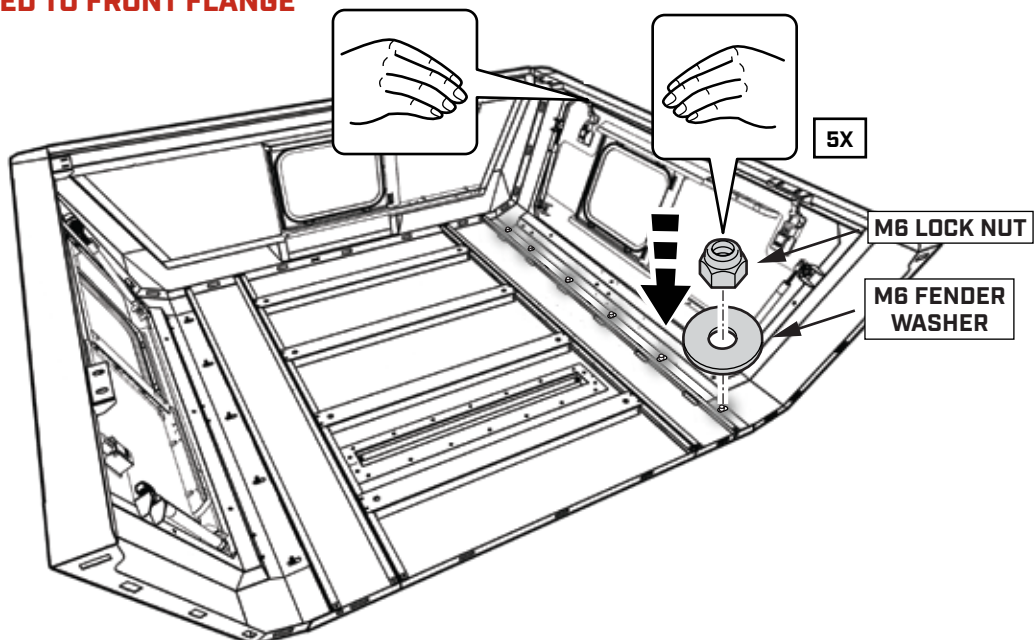


STEP 14

HAND TIGHTEN M6 LOCK NUT WITH M6 FENDER WASHER TO ALL BOLTS.



! SUPPORT LEFT PANEL UNTIL ASSEMBLED TO FRONT FLANGE



I-SHEET-NA-RAM-2

STEP 15

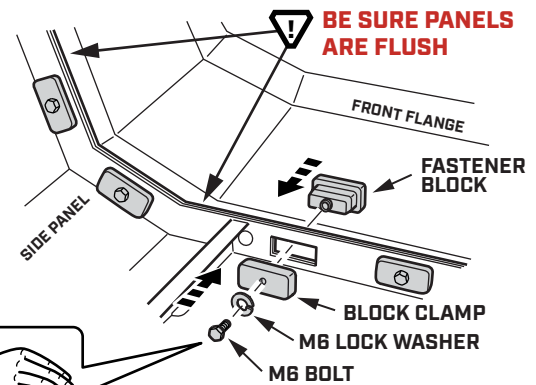
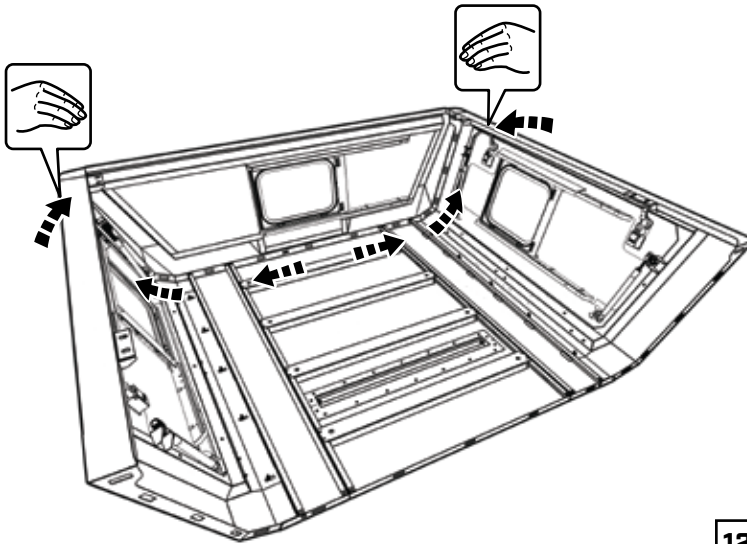
INSTALL HARDWARE ALONG FRONT FLANGE WITH BOLT ON INSIDE.

START AT CENTER OF THE FRONT FLANGE AND WORK YOUR WAY OUTWARDS.

ADJUST LEFT AND RIGHT PANELS TO ALIGN THE FASTENER BLOCK HOLES.

HAND TIGHTEN ONLY.

2 PERSON JOB

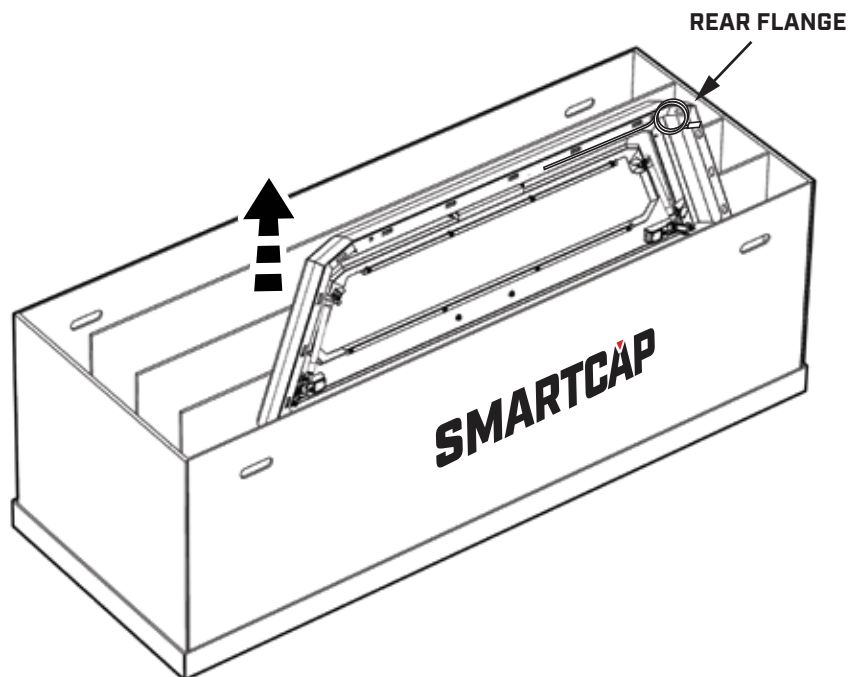


12X

STEP 16

LOCATE THE REAR FLANGE IN THE SMARTCAP PACKAGE AND BRING IT TO YOUR WORK AREA.

2 PERSON JOB

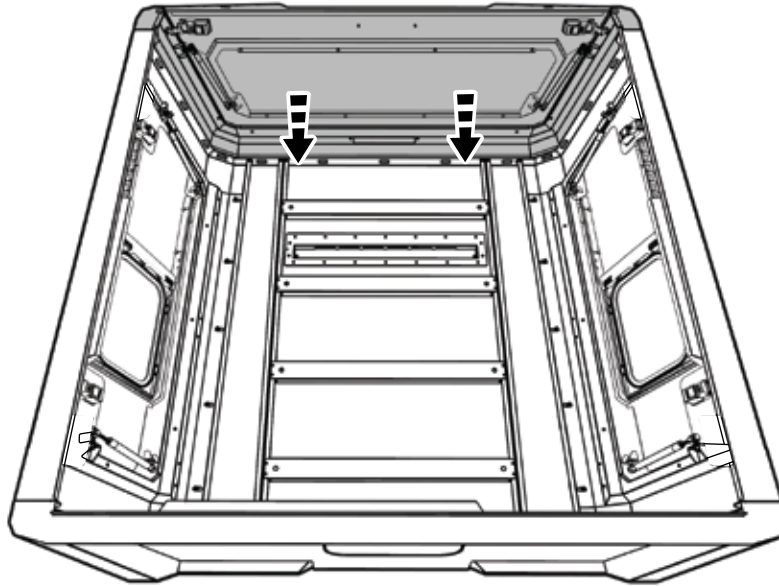


I-SHEET-NA-RAM-2

STEP 17

PLACE REAR FLANGE AS SHOWN BELOW.

2 PERSON JOB



STEP 18

INSTALL HARDWARE ALONG REAR FLANGE WITH BOLT ON INSIDE.

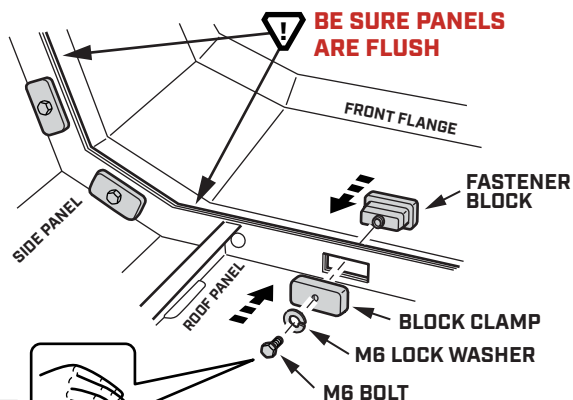
2 PERSON JOB



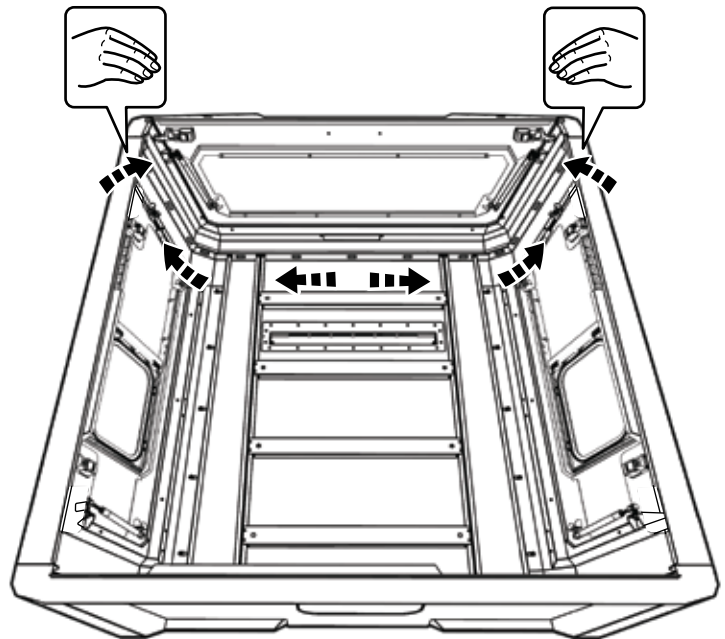
START AT CENTER OF THE REAR FLANGE AND WORK YOUR WAY OUTWARDS.

ADJUST LEFT AND RIGHT PANELS TO ALIGN THE FASTENER BLOCK HOLES.

HAND TIGHTEN ONLY.



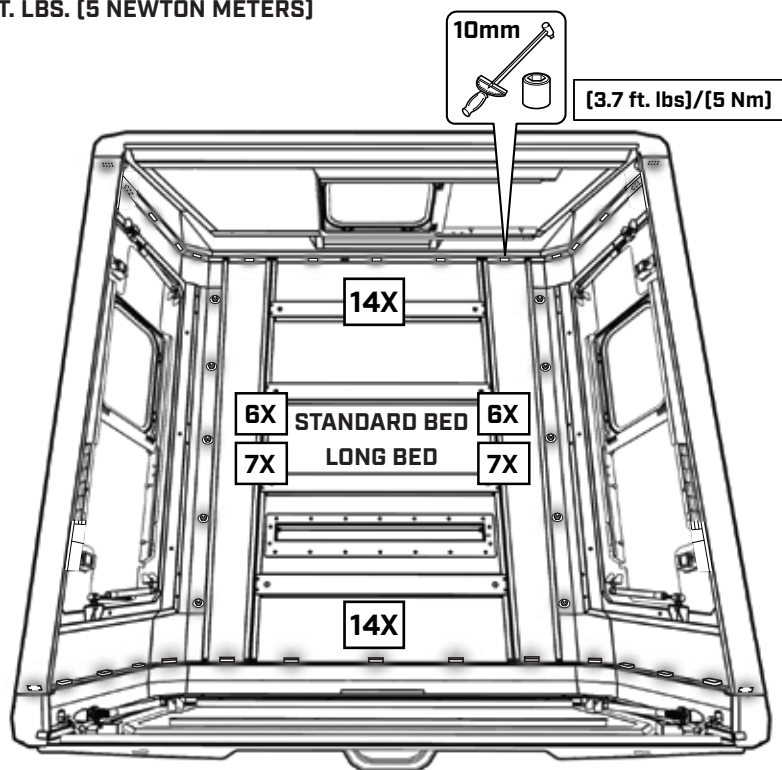
15X



I-SHEET-NA-RAM-2

STEP 19

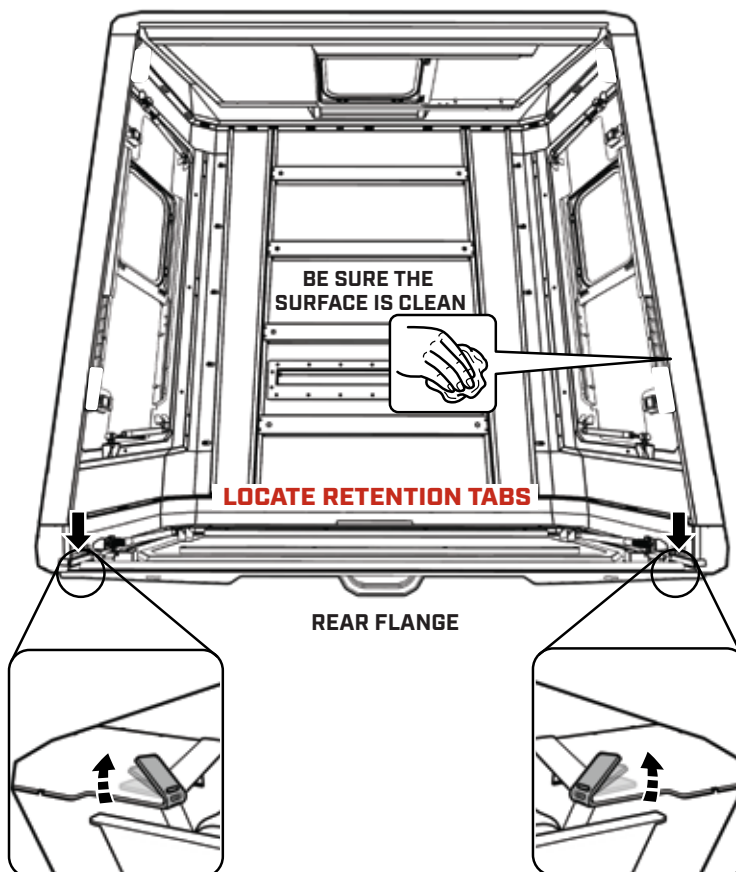
TIGHTEN ALL HARDWARE WITH TORQUE WRENCH
AND 10MM SOCKET TO 3.7 FT. LBS. [5 NEWTON METERS]



STEP 20

ENSURE THE ENTIRE BOTTOM EDGE
OF THE SMARTCAP IS CLEAN.

LOCATE BOTH RETENTION TABS ON
THE REAR FLANGE AND BEND EACH
TO A 45-DEGREE ANGLE FOR
O-RUBBER FITMENT.

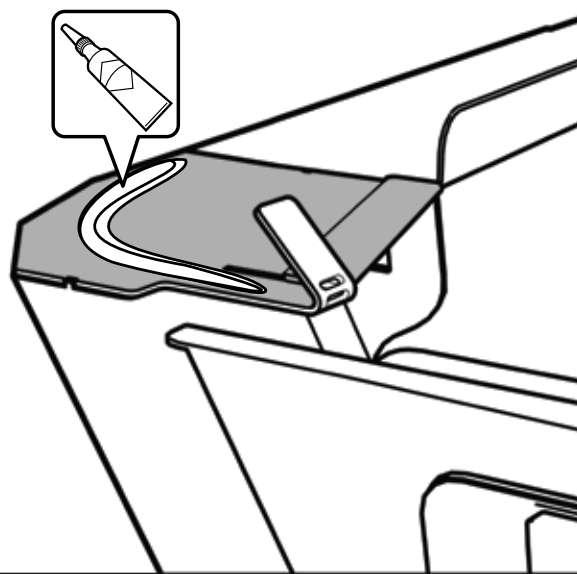
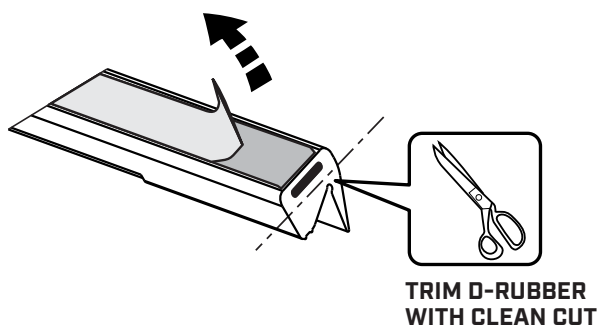


I-SHEET-NA-RAM-2

STEP 21

TRIM THE D-RUBBER WITH A CLEAN, STRAIGHT CUT.

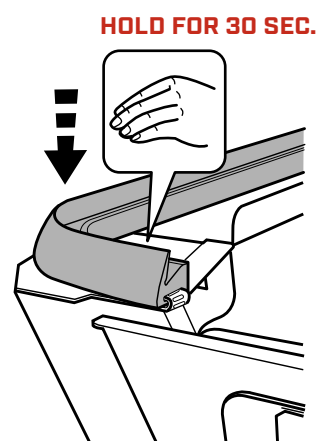
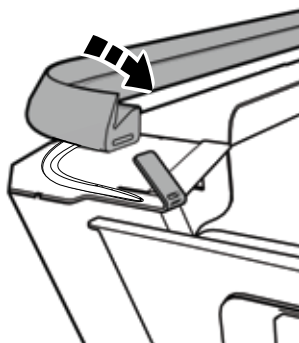
APPLY 2-3 INCHES OF GEL SUPER GLUE NEAR THE RETENTION TABS, ALONG THE BOTTOM EDGE OF THE REAR FLANGE



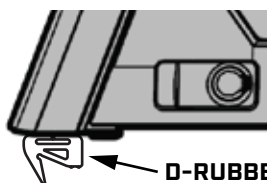
STEP 22

FULLY INSERT THE RETENTION TAB INTO THE SLOT ON THE D-RUBBER. ENSURE THE D-RUBBER IS ORIENTED CORRECTLY WITH ITS PROFILE MATCHING THE CONTOUR OF THE REAR FLANGE.

PRESS DOWN FIRMLY ON THE TAB AND THE D-RUBBER TO BOND IT TO THE REAR FLANGE, CREATING A TIGHT SEAL.



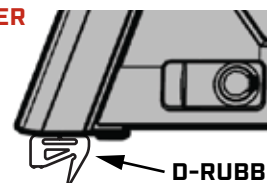
CORRECT D-RUBBER ORIENTATION



REAR FLANGE

D-RUBBER

INCORRECT D-RUBBER ORIENTATION



REAR FLANGE

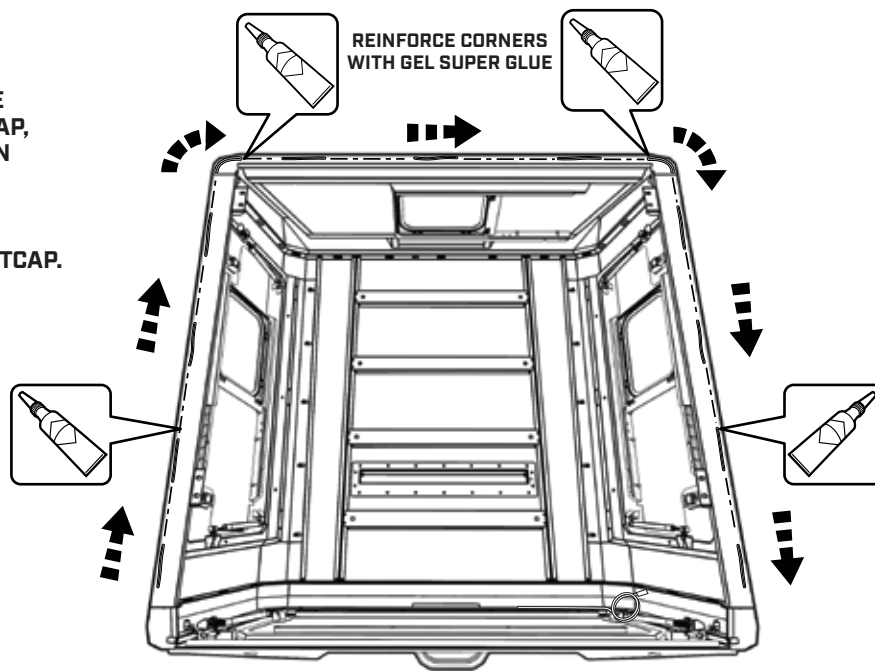
D-RUBBER

I-SHEET-NA-RAM-2

STEP 23

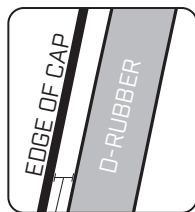
APPLY 3 INCH LONG STRANDS OF GEL SUPER GLUE ALONG THE BOTTOM EDGE OF THE SMARTCAP, LEAVING 3 INCH GAPS BETWEEN EACH STRAND OF GLUE.

ENSURE THAT GLUE IS APPLIED TO THE CORNERS OF THE SMARTCAP.

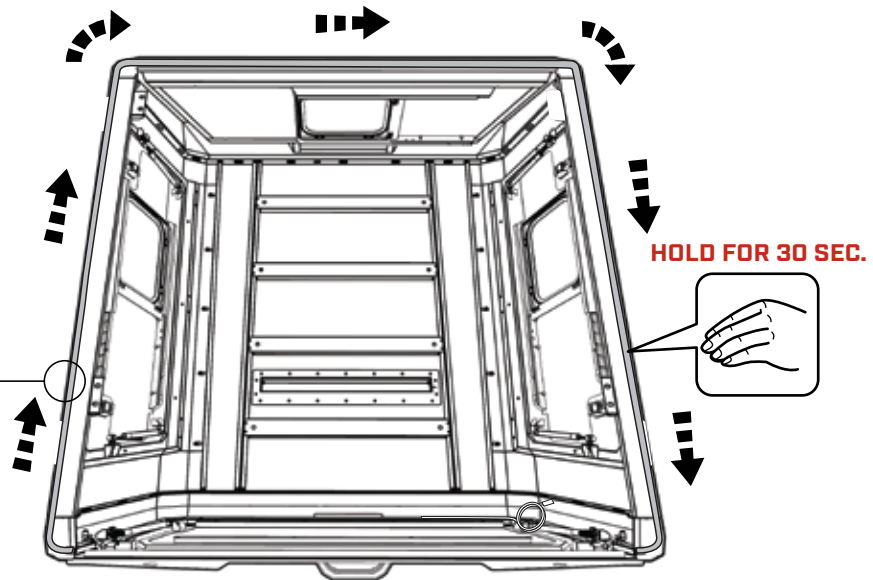


ALIGN THE D-RUBBER ALONG THE SMARTCAP'S EDGE, MAINTAINING A CONSISTENT 1/8 INCH GAP FROM THE EDGE.

APPLY PRESSURE FOR AT LEAST 30 SECONDS ON THE AREAS WHERE SUPER GLUE WAS APPLIED.



1/8 INCH
FROM EDGE

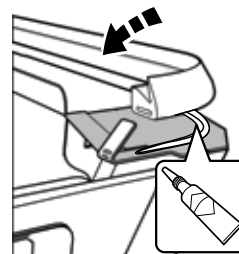
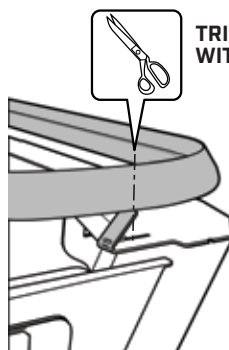


STEP 24

TRIM ANY EXCESS D-RUBBER BEYOND THE EDGE FOR A NEAT FINISH.

APPLY 2-3 INCHES OF GEL SUPER GLUE NEAR THE RETENTION TAB, ALONG THE BOTTOM EDGE OF THE REAR FLANGE. FULLY INSERT THE RETENTION TAB INTO THE SLOT ON THE D-RUBBER.

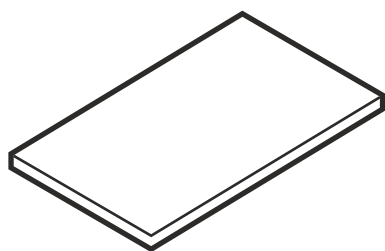
PRESS DOWN FIRMLY ON THE TAB AND THE D-RUBBER TO BOND IT TO THE REAR FLANGE, CREATING A TIGHT SEAL.



I-SHEET-NA-RAM-2

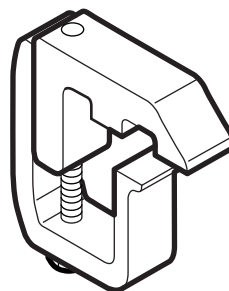
INSTALLATION HARDWARE

THIN RUBBER PAD



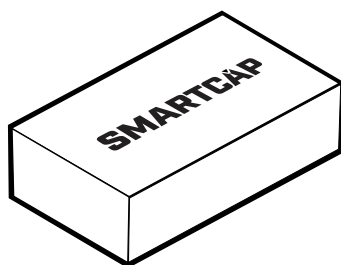
6X

MOUNTING CLAMP



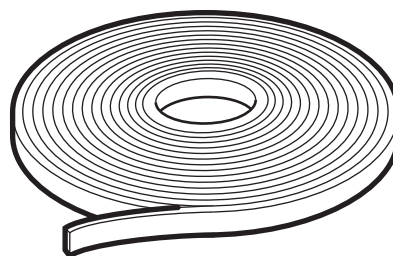
6X

THICK RUBBER PAD



8X

FOAM SEAL TAPE



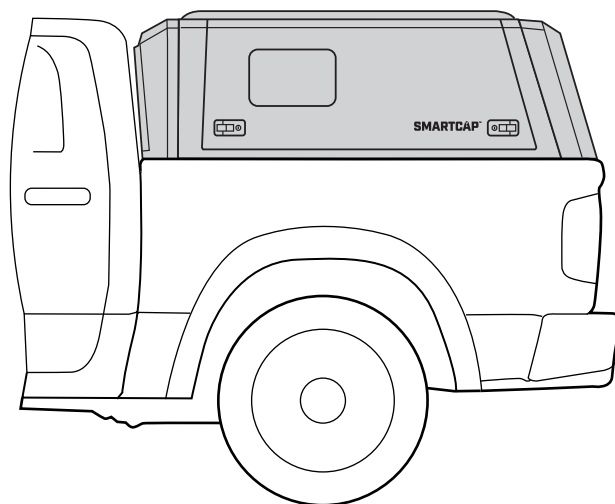
1X

VEHICLE INSTALLATION



IMPORTANT

- ▼ ASSISTANCE WILL BE NEEDED FOR THIS INSTALLATION. FOUR PEOPLE ARE RECOMMENDED TO LIFT THE SMARTCAP ONTO THE VEHICLE.
- ▼ AVOID PINCHING OR CRUSHING HANDS AND FINGERS.
- ▼ READ THROUGH THE ENTIRE PROCEDURE BEFORE STARTING.

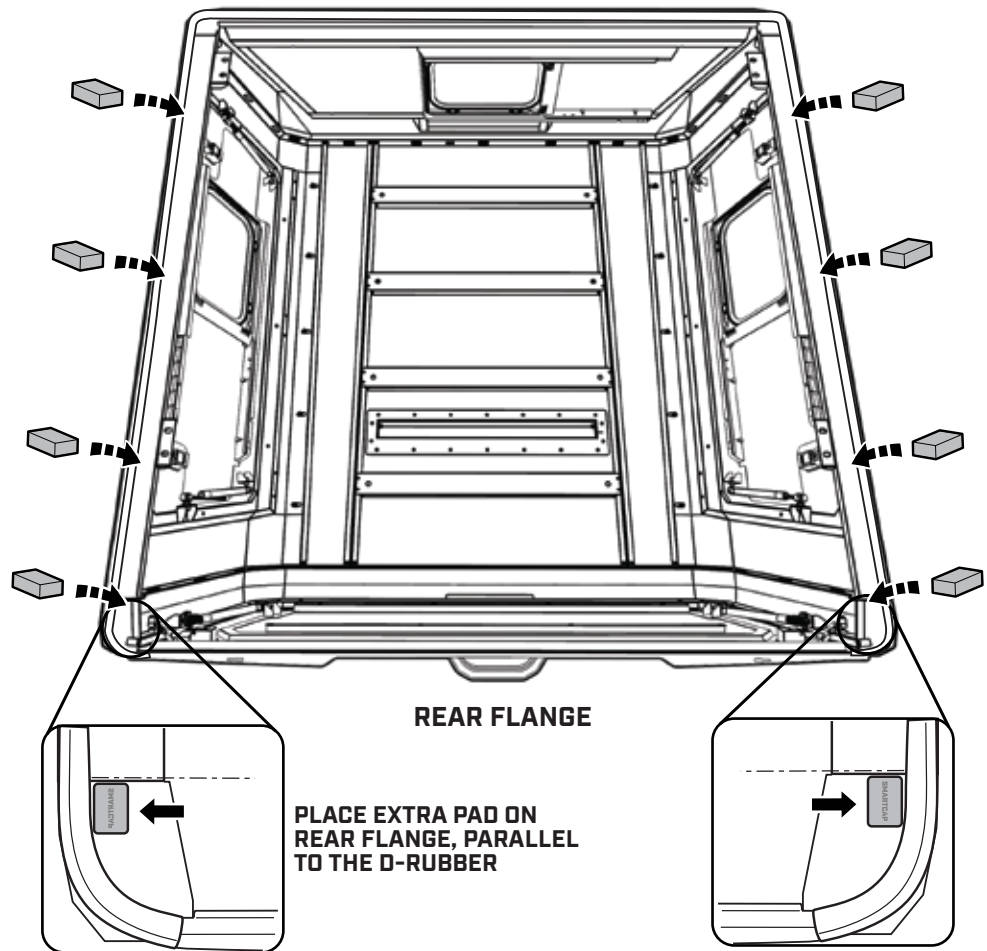
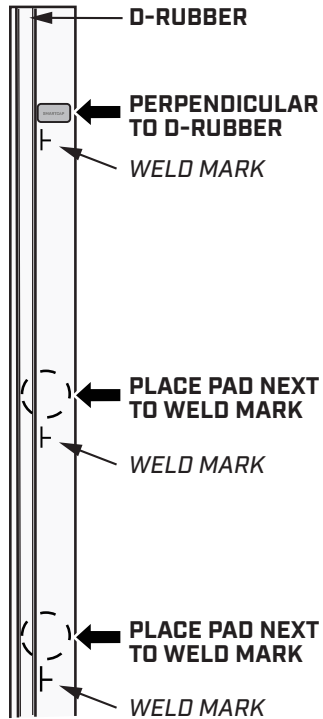


I-SHEET-NA-RAM-2

STEP 25

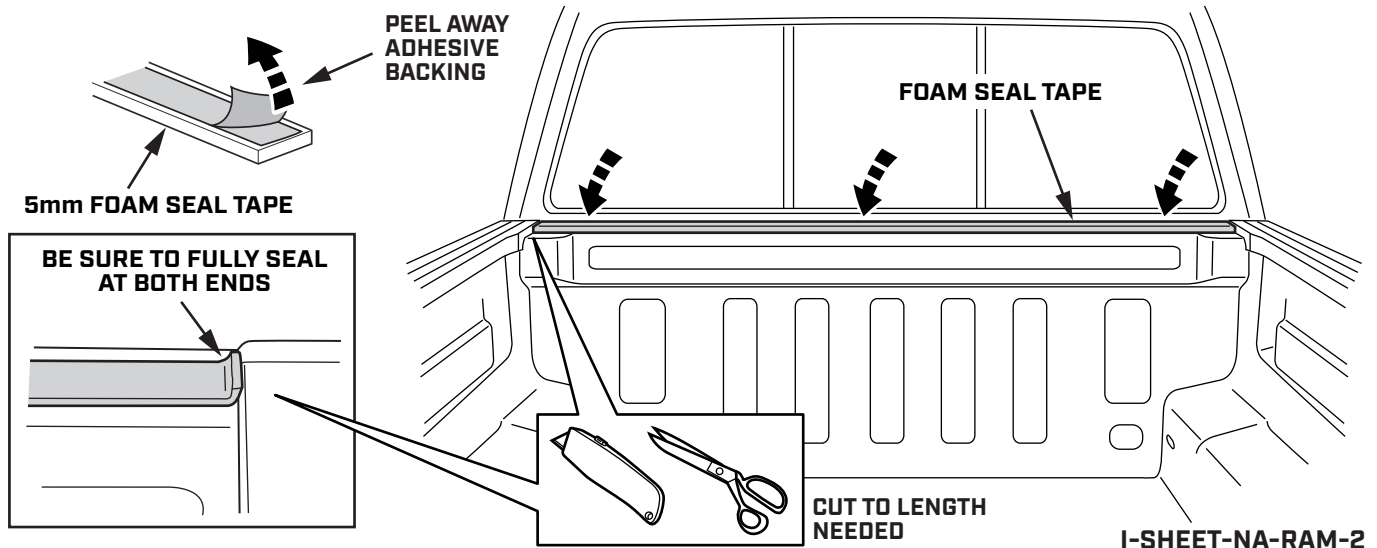
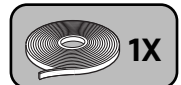
REMOVE THE ADHESIVE BACKING FROM THE THICK RUBBER PAD.

PLACE THE PADS ALONG THE INSIDE OF THE D-RUBBER AT THE INDICATED LOCATIONS.



STEP 26

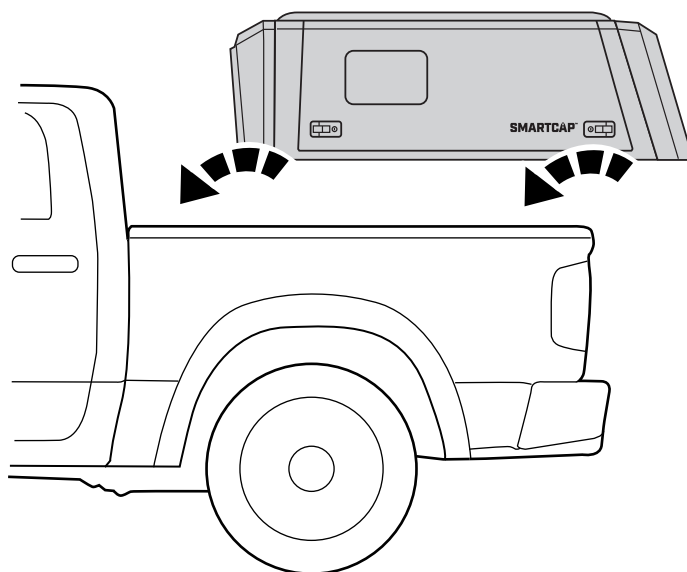
INSPECT THE TRUCK BED. IF FRONT EDGE IS LOWER THAN THE SIDES, ADD FOAM SEAL TAPE TO THE FRONT EDGE OF THE BED.



STEP 27

USE 4 PEOPLE TO LIFT THE ASSEMBLED SMARTCAP ONTO THE TRUCK BED.

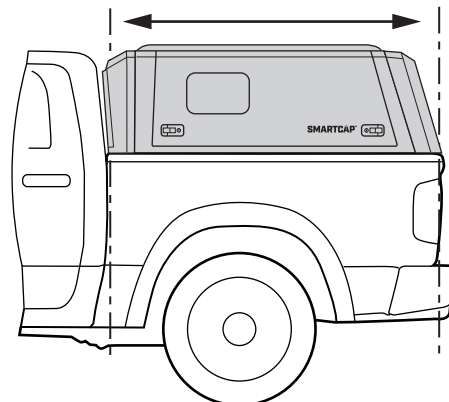
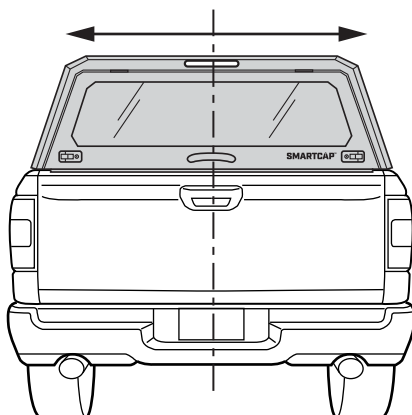
TO AVOID DAMAGE TO THE D-RUBBER, DO NOT SLIDE THE SMARTCAP INTO PLACE.



STEP 28

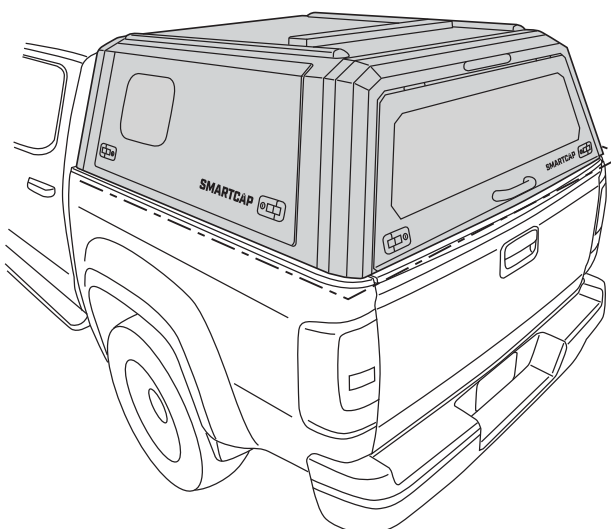
CHECK THAT THE SMARTCAP IS PROPERLY POSITIONED AND CENTERED ON THE TRUCK BED.

IT'S IMPORTANT THAT THE SMARTCAP IS NOT PUSHED TOO FAR FORWARD, LEAVING A GAP BETWEEN THE SMARTCAP AND THE CAB.



STEP 29

WALK AROUND THE TRUCK BED TO MAKE SURE THE D-RUBBER FITMENT IS CORRECT AND THAT THE RUBBER LIP IS PROPERLY TUCKED UNDERNEATH THE CAP.



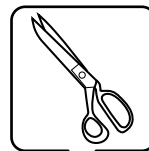
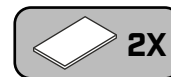
I-SHEET-NA-RAM-2

STEP 30

IN ORDER TO ENSURE CORRECT COMPRESSION OF THE D-RUBBER, YOU MUST TRIM TWO 1" INCH STRIPS FROM TWO DIFFERENT THIN RUBBER PADS.

WHILE LIFTING UP ON THE CAP, PLACE 1 STRIP IN EACH REAR CORNER OF THE CAP, IN BETWEEN THE THICK RUBBER PAD AND THE TRUCK BED RAILING.

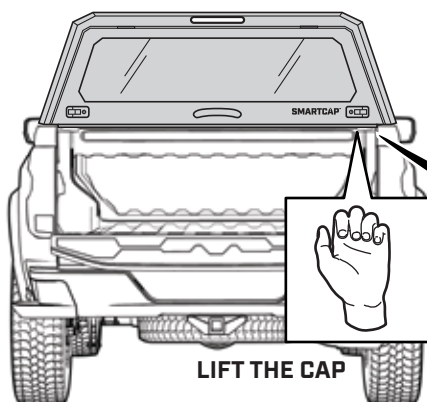
REPEAT FOR EACH SIDE



TRIM A 1" INCH STRIP FROM THIN RUBBER PAD.

2X

THIN RUBBER PAD



THICK RUBBER PAD

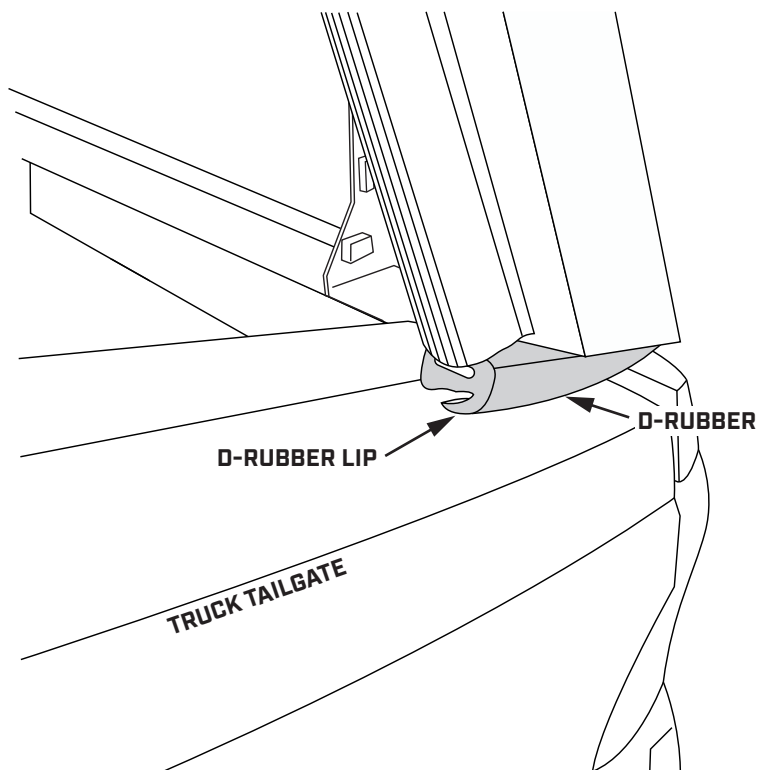
TRUCK BED RAIL

THIN RUBBER PAD STRIP

2X

STEP 31

CHECK THE OPERATION OF THE TAILGATE. THE LIP OF THE D-RUBBER SHOULD GRAZE THE TAILGATE WHEN OPENING AND CLOSING WITH EASE.

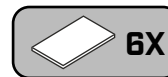
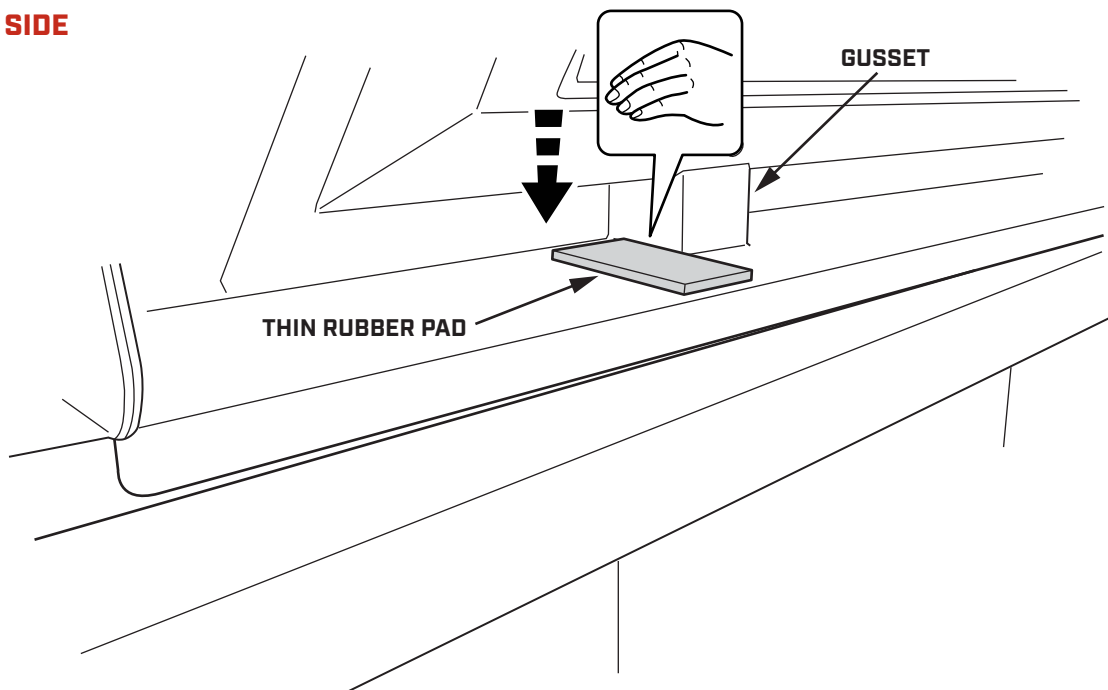


I-SHEET-NA-RAM-2

STEP 32

WITH THE EXCEPTION OF THE REAR CORNERS, PLACE THE THIN RUBBER PADS NEXT TO GUSSETS ON BOTH SIDES OF THE CAP.

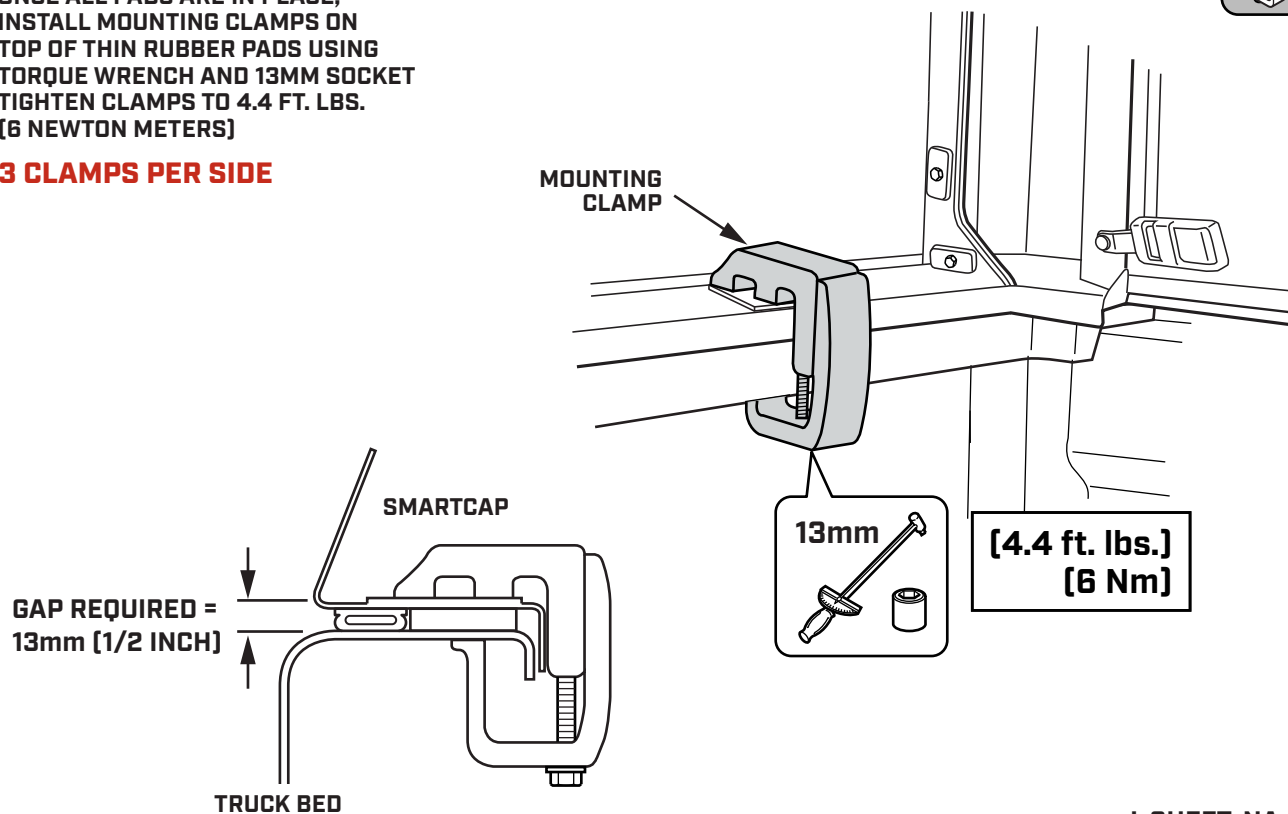
3 PADS PER SIDE



STEP 33

ONCE ALL PADS ARE IN PLACE, INSTALL MOUNTING CLAMPS ON TOP OF THIN RUBBER PADS USING TORQUE WRENCH AND 13MM SOCKET. TIGHTEN CLAMPS TO 4.4 FT. LBS. [6 NEWTON METERS]

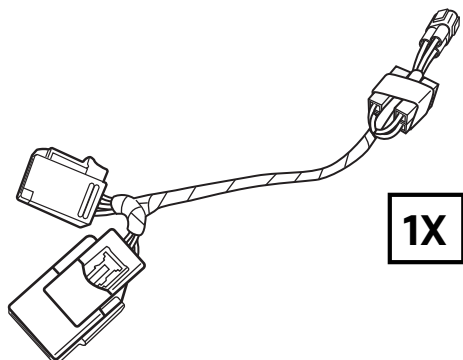
3 CLAMPS PER SIDE



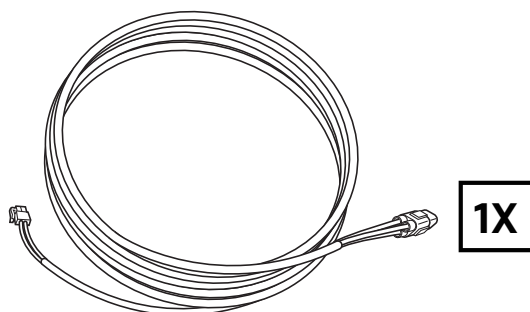
I-SHEET-NA-RAM-2

THIRD BRAKE LIGHT CONNECTOR INSTALLATION

T-HARNESS

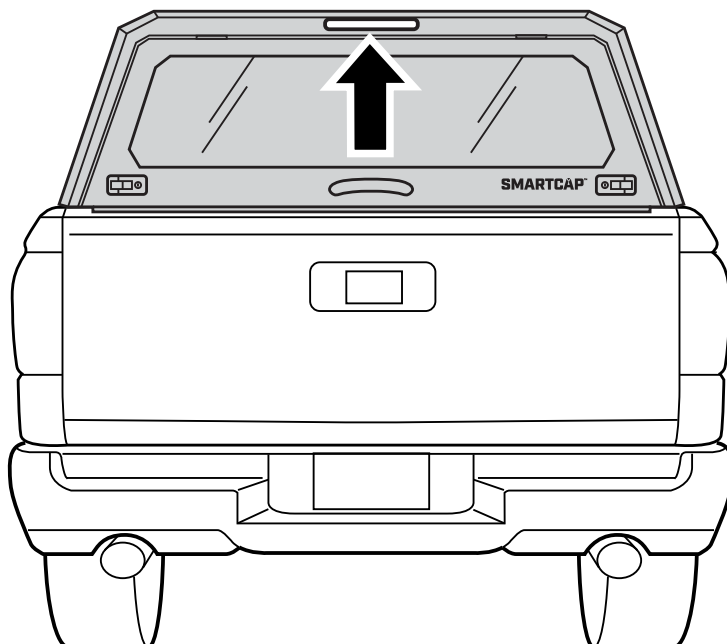


CONNECTOR HARNESS



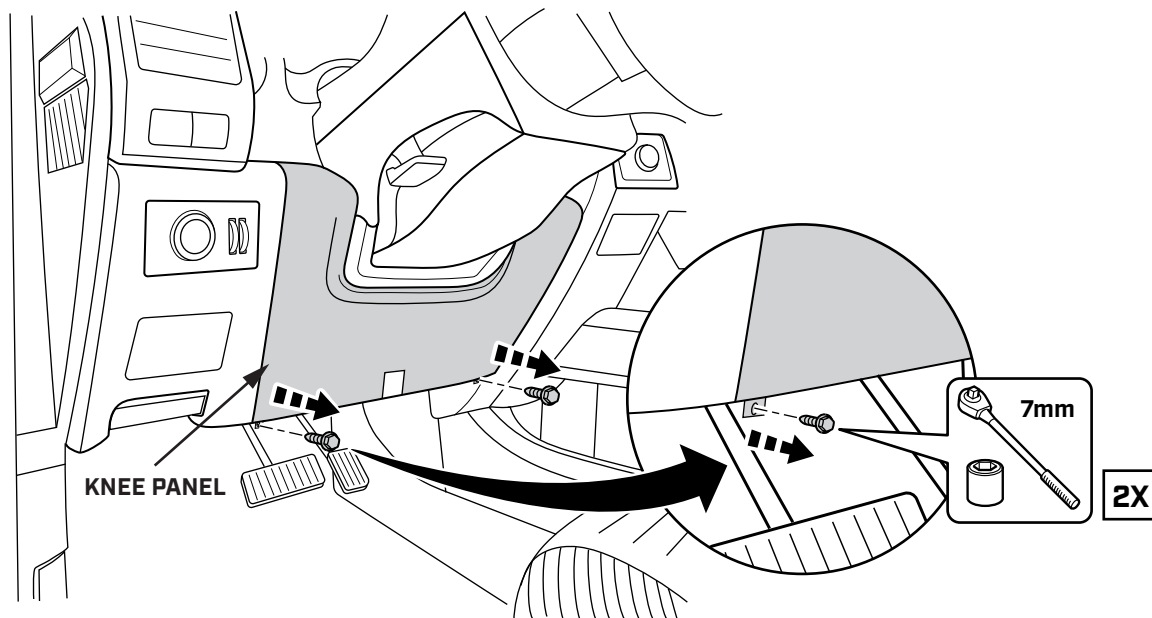
IMPORTANT

- ▼ BE SURE THE VEHICLE IS TURNED OFF FOR THIS INSTALLATION.
- ▼ READ THROUGH THE ENTIRE PROCEDURE BEFORE STARTING AND FOLLOW THE STEPS CAREFULLY TO ENSURE THE THIRD BRAKE LIGHT WILL FUNCTION PROPERLY.
- ▼ USE A TEST LIGHT TO CHECK FOR SUCCESSFUL INSTALLATION.
- ▼ DETERMINE WHICH CONNECTOR HARNESS YOUR FITMENT KIT CONTAINS.



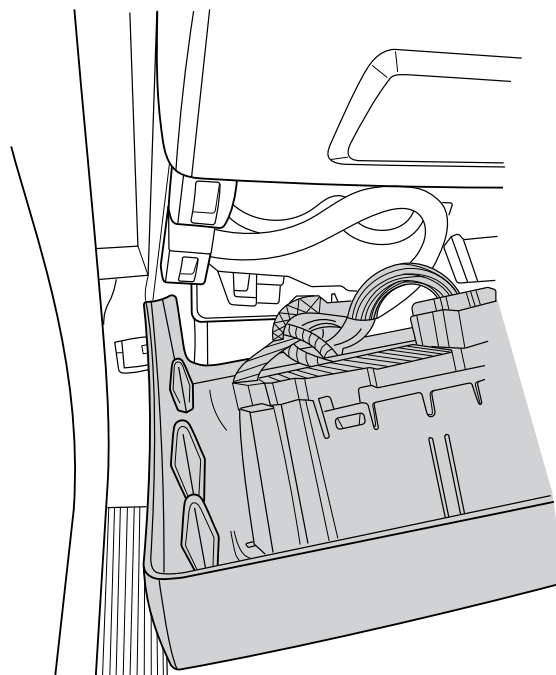
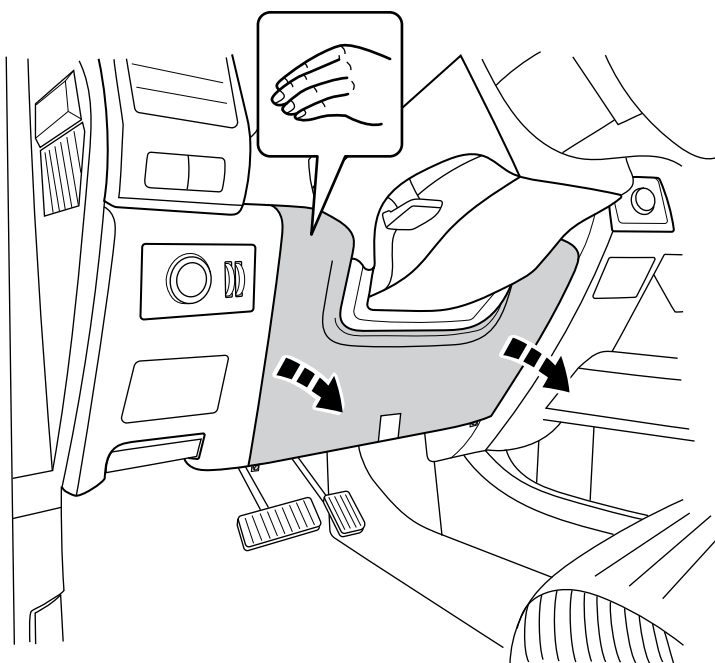
STEP 34

REMOVE THE TWO BOLTS FROM BOTTOM
OF THE DRIVER-SIDE KNEE PANEL
USING A SOCKET WRENCH AND 7MM SOCKET.



STEP 35

STARTING FROM THE UPPER CORNERS,
GENTLY PRY AND RELEASE THE CLIPS
TO REMOVE THE DRIVER-SIDE KNEE PANEL.

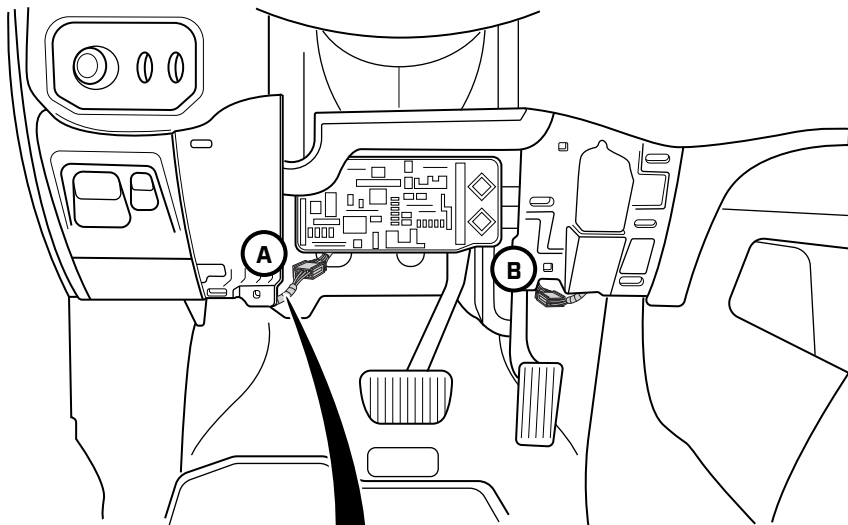


I-SHEET-NA-RAM-2

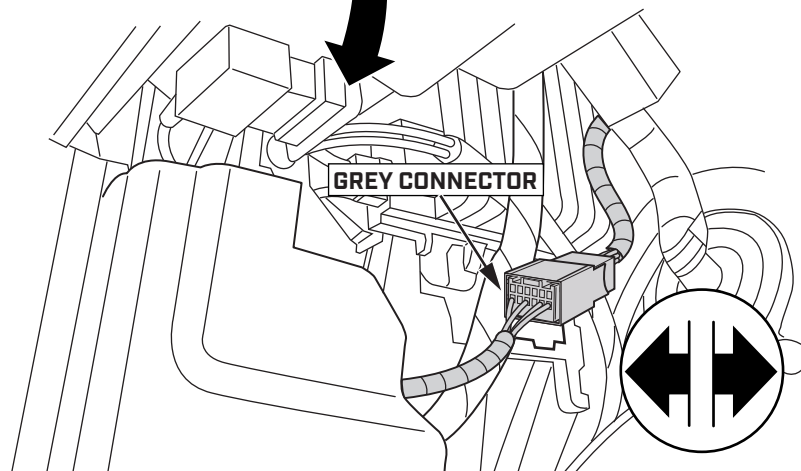
STEP 36

LOCATE THE GREY CONNECTOR
WITHIN THE DRIVER SIDE CONSOLE.

DEPENDING ON THE VEHICLE,
THE GREY CONNECTOR MAY BE
LOCATED ON THE RIGHT OR LEFT
SIDE, AS SHOWN.

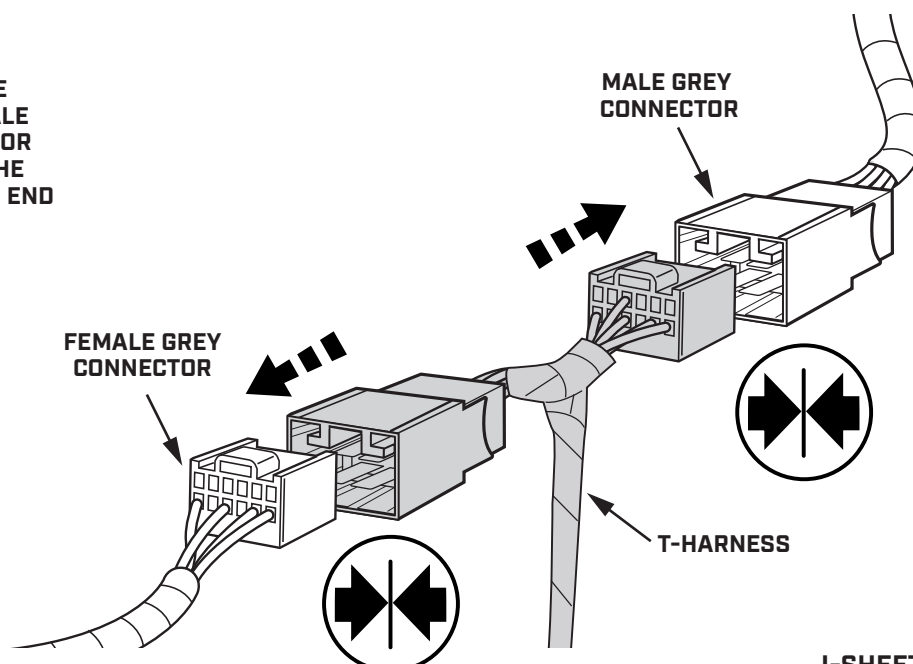


DISCONNECT THE GREY CONNECTOR.



STEP 37

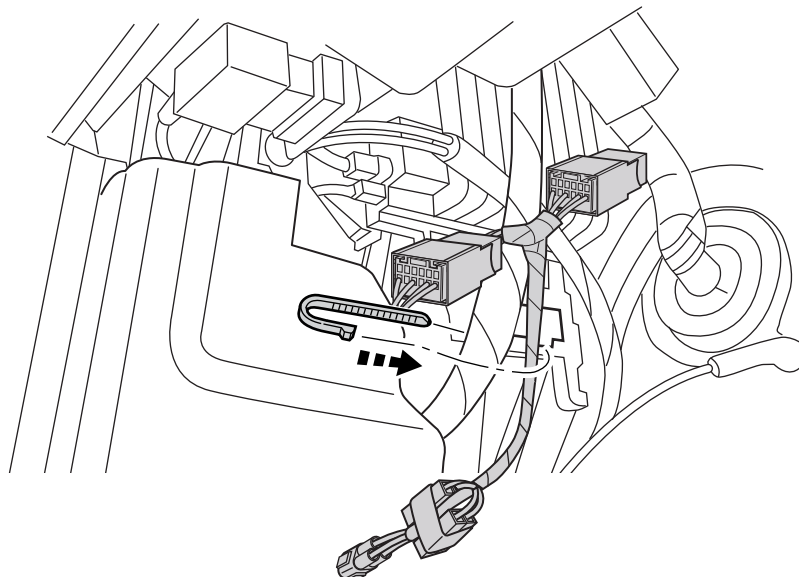
PLUG THE MALE END OF THE
T-HARNESS INTO THE FEMALE
END OF THE GREY CONNECTOR
AND THE FEMALE END OF THE
T-HARNESS INTO THE MALE END
OF THE GREY CONNECTOR.



I-SHEET-NA-RAM-2

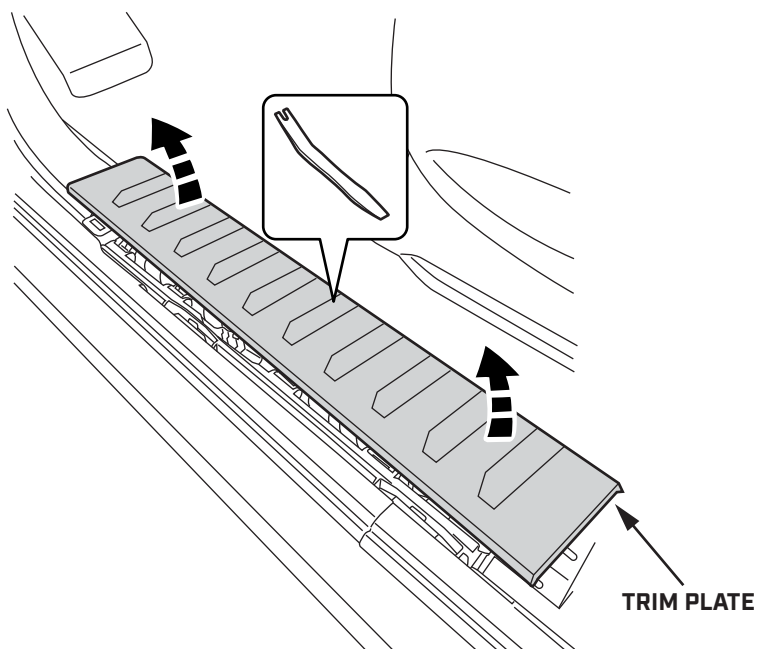
STEP 38

SECURE WITH CABLE TIES AS SHOWN.



STEP 39

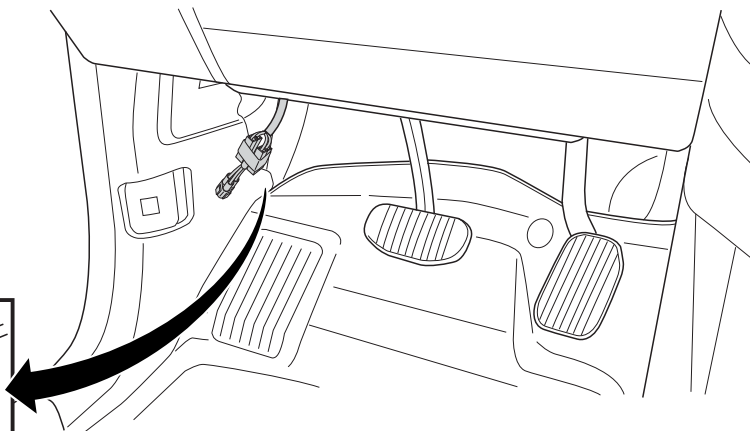
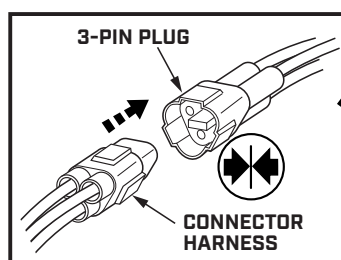
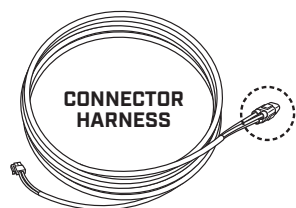
USING A PLASTIC PRY TOOL, CAREFULLY PRY OFF THE DOOR SILL TRIM PLATE ON THE DRIVER SIDE



STEP 40

LOCATE THE 3-PIN PLUG OF THE T-HARNESS.

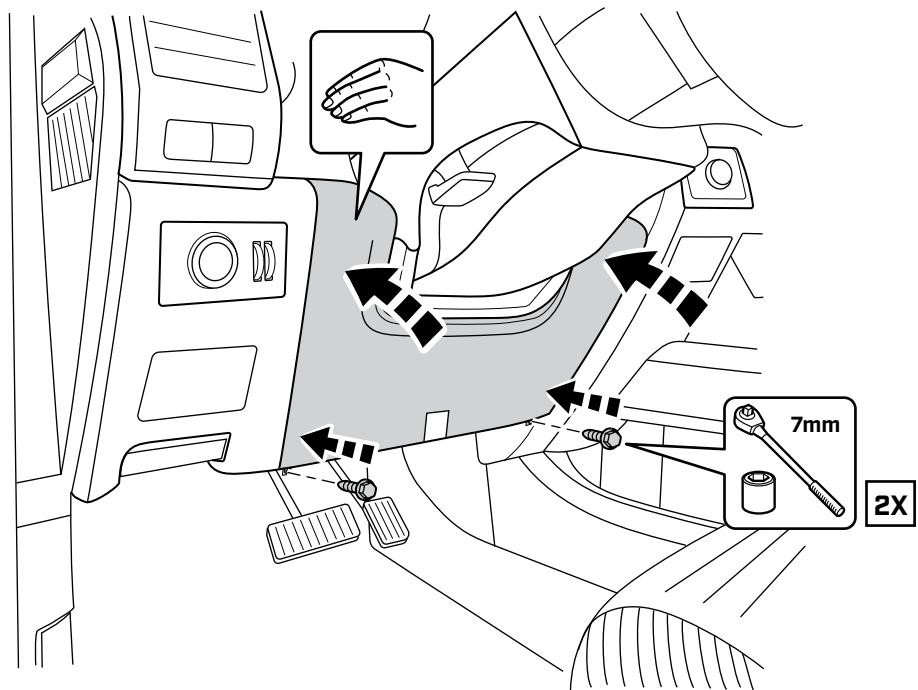
PLUG THE CONNECTOR HARNESS INTO THE 3-PIN PLUG OF THE T-HARNESS.



I-SHEET-NA-RAM-2

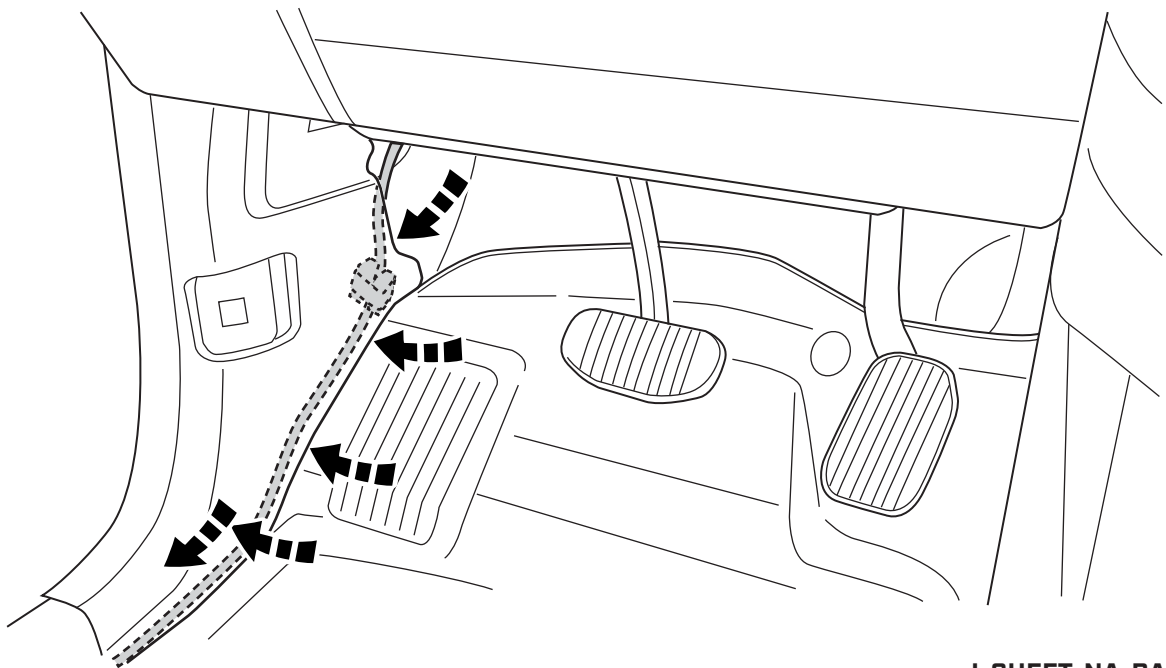
STEP 41

REINSTALL KNEE PANEL AND BOLTS USING A SOCKET WRENCH AND 7MM SOCKET.



STEP 42

TUCK THE HARNESSES UNDER THE EDGE OF THE OUTER FOOT WELL KICK PANEL AND ROUTE DOWN TOWARDS THE DOOR SILL.



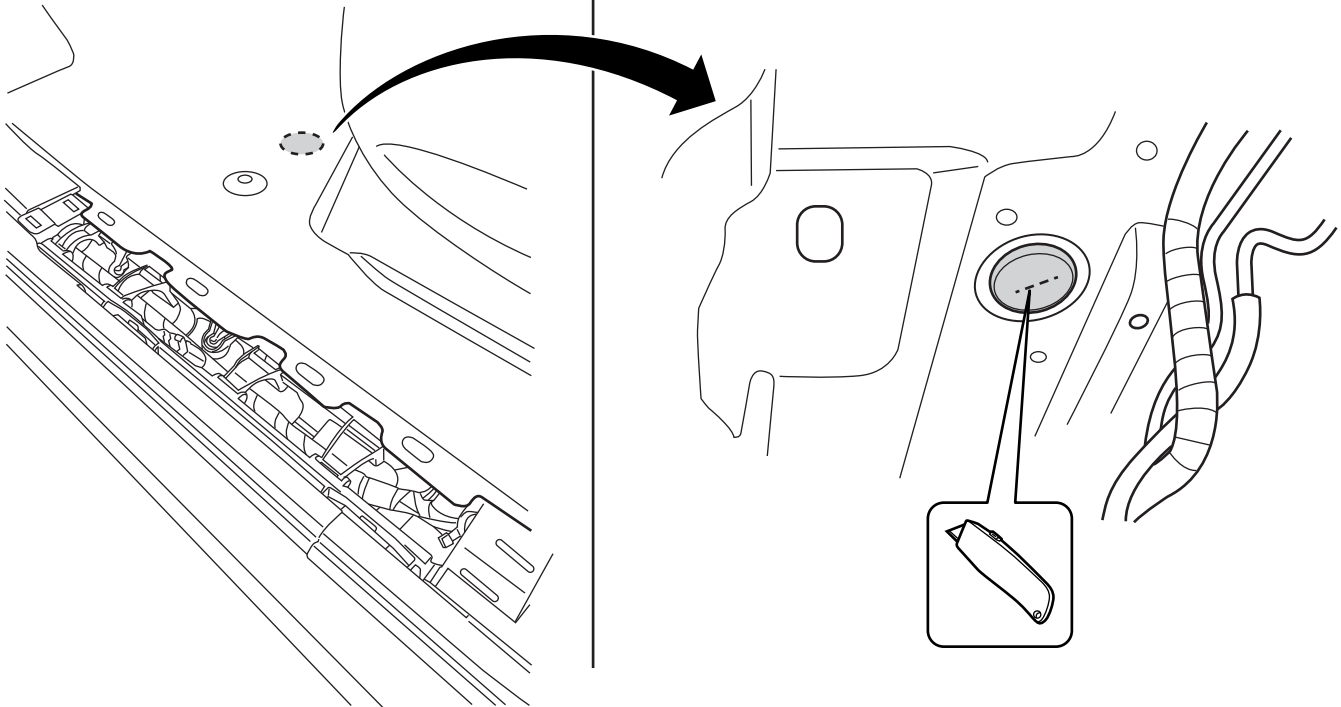
I-SHEET-NA-RAM-2

STEP 43

UNDERNEATH THE CARPET LINER, THERE WILL BE A RUBBER GROMMET IN THE METAL FLOOR.

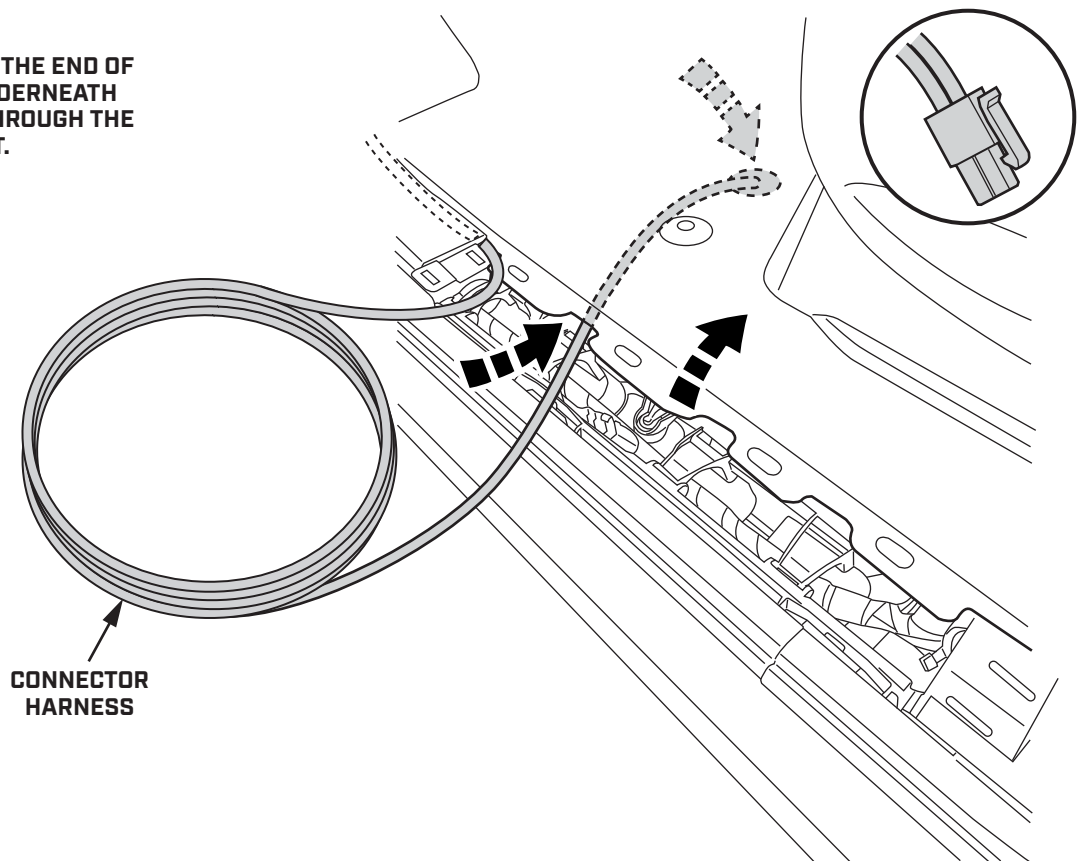
LOCATE THIS GROMMET FROM UNDERNEATH THE VEHICLE.

IF NEEDED, DRILL OR CUT A SMALL OPENING THROUGH THE RUBBER GROMMET.



STEP 44

ROUTE THE 2-PIN PLUG AT THE END OF CONNECTOR HARNESS UNDERNEATH THE CARPET LINER AND THROUGH THE OPENING IN THE GROMMET.

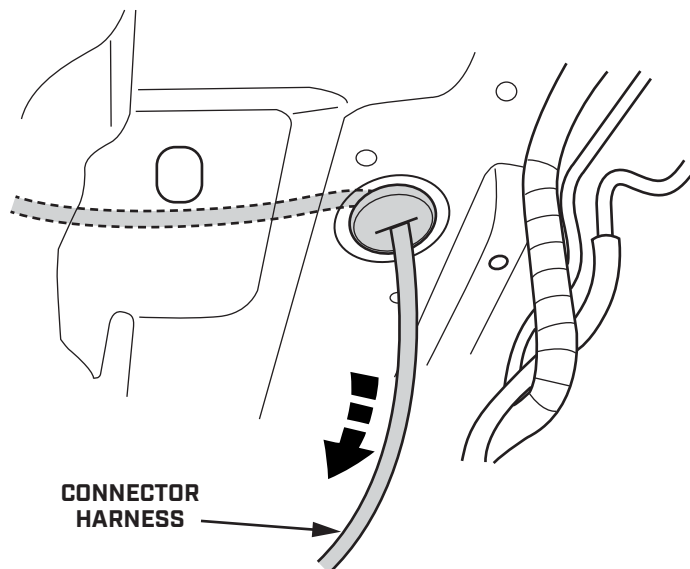


I-SHEET-NA-RAM-2

STEP 45

CAREFULLY PULL THE ENTIRE LENGTH OF THE CONNECTOR HARNESS DOWN THROUGH THE GROMMET.

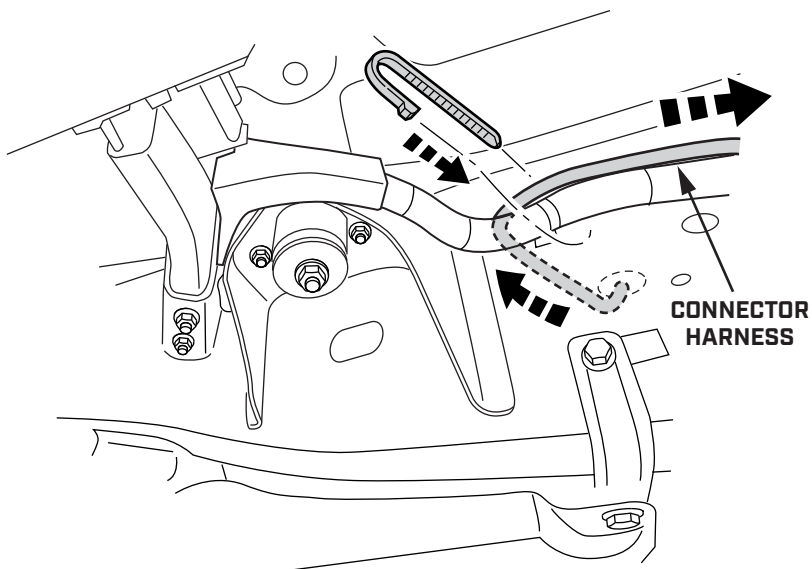
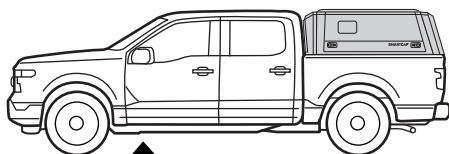
IT IS RECOMMENDED THAT A SEALING COMPOUND BE APPLIED TO THE OPENING FOR WEATHER AND DIRT PROTECTION.



STEP 46

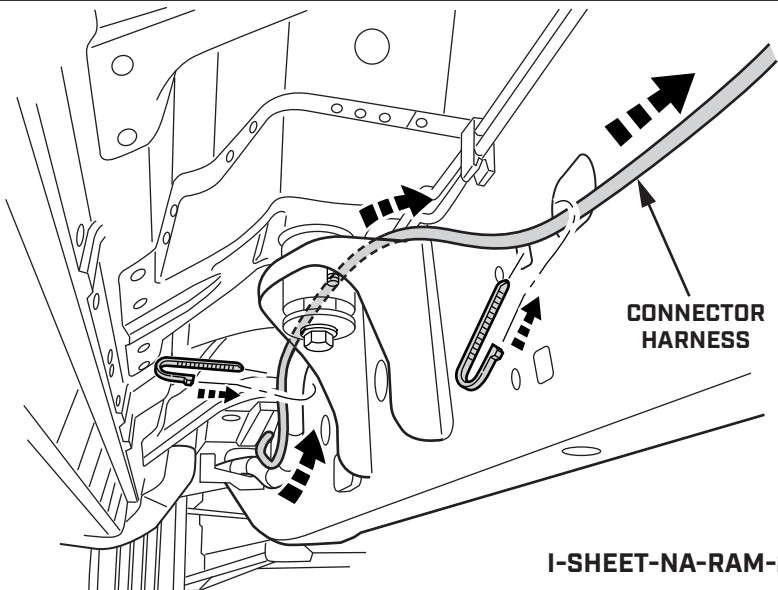
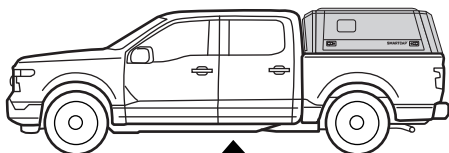
FROM UNDERNEATH THE VEHICLE, BEGIN ROUTING THE CONNECTOR HARNESS OVER THE TOP OF THE DRIVER SIDE FRAME RAIL.

SECURE THE HARNESS ALONG THE OUTSIDE OF THE FRAME WITH CABLE TIES AS SHOWN.



STEP 47

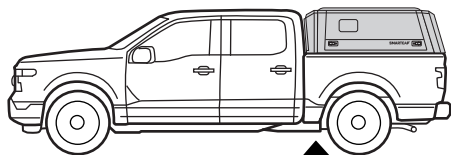
CONTINUE ROUTING THE CONNECTOR HARNESS TOWARDS THE REAR OF THE VEHICLE, SECURING TO THE VEHICLE WITH CABLE TIES WHEN NECESSARY.



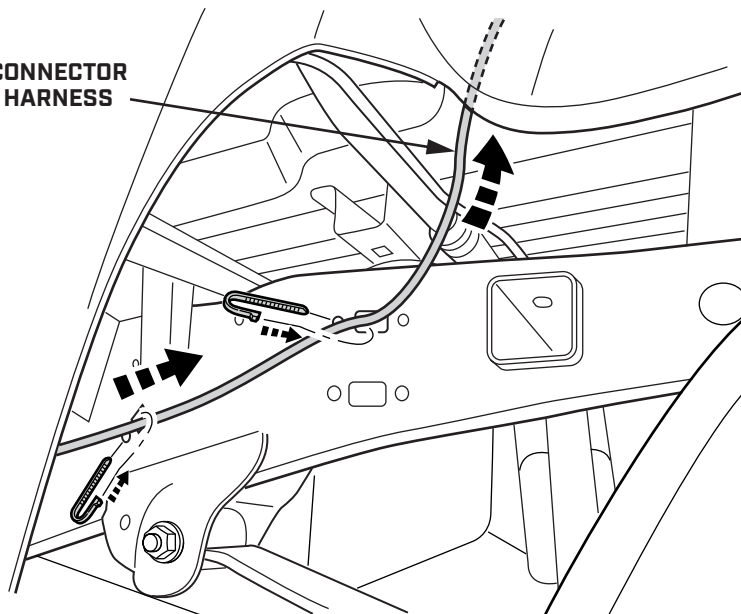
I-SHEET-NA-RAM-2

STEP 48

ROUTE THE CONNECTOR HARNESS UP AND OVER THE REAR WHEEL WELL.

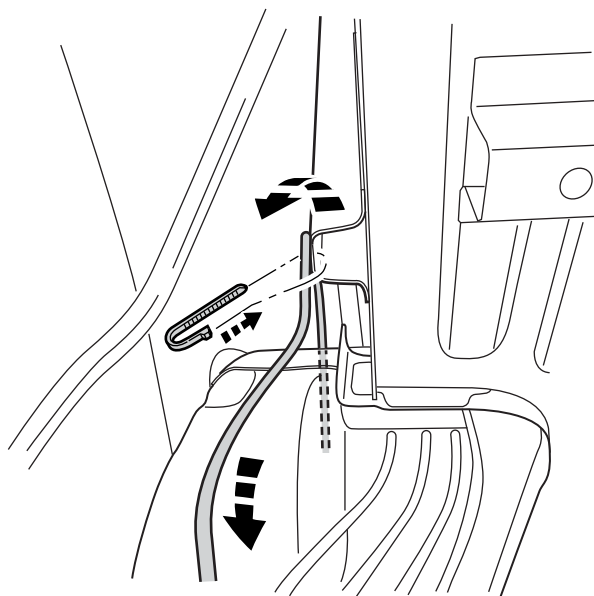
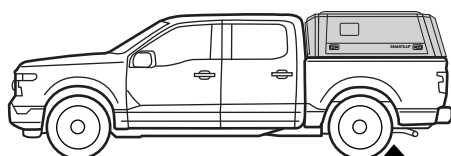


CONNECTOR HARNESS



STEP 49

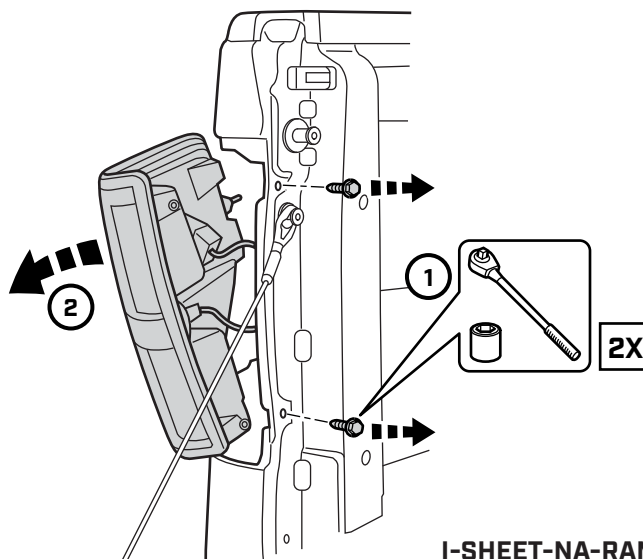
ROUTE THE CONNECTOR HARNESS DOWN OVER THE BACK OF THE REAR WHEEL WELL AND SECURE WITH CABLE TIE AS SHOWN.



STEP 50

REMOVE THE BOLTS HOLDING THE DRIVER SIDE TAILLIGHT ASSEMBLY.

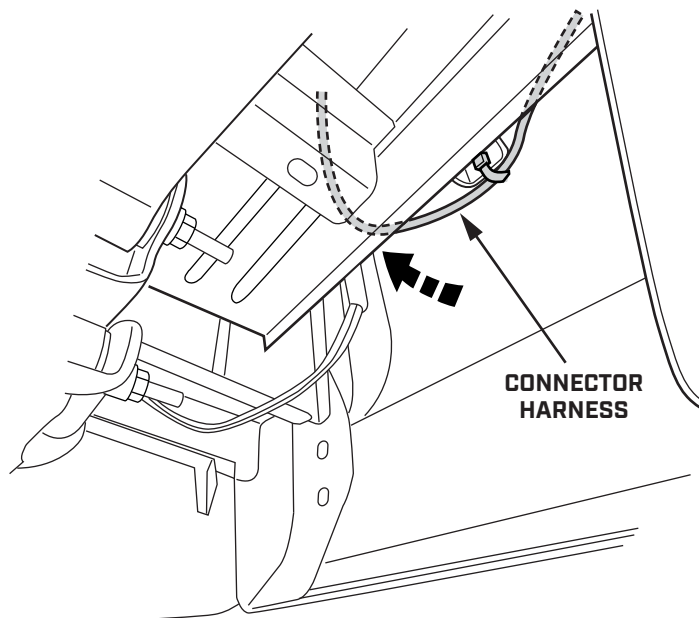
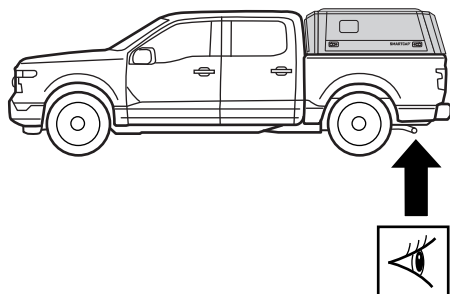
PLACE THE TAILLIGHT CAREFULLY ON THE TAILGATE. DO NOT UNPLUG ANY CONNECTORS.



I-SHEET-NA-RAM-2

STEP 51

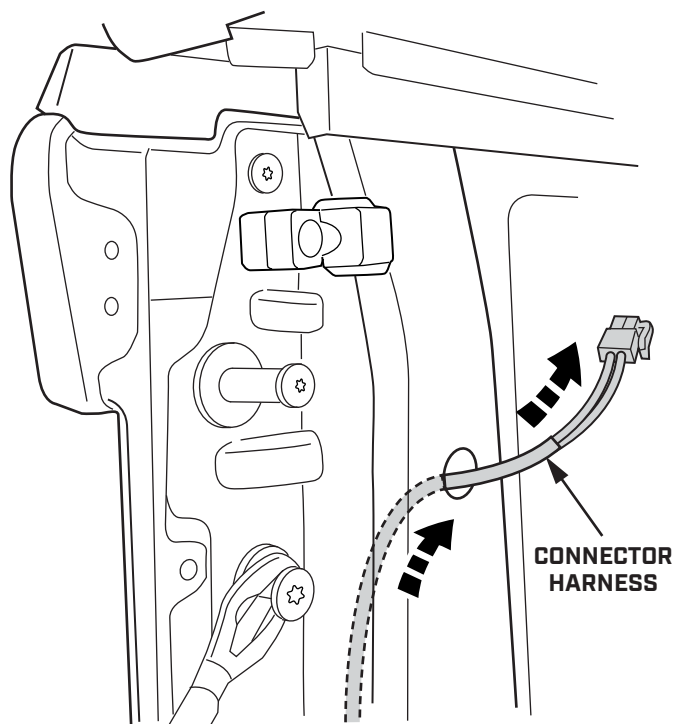
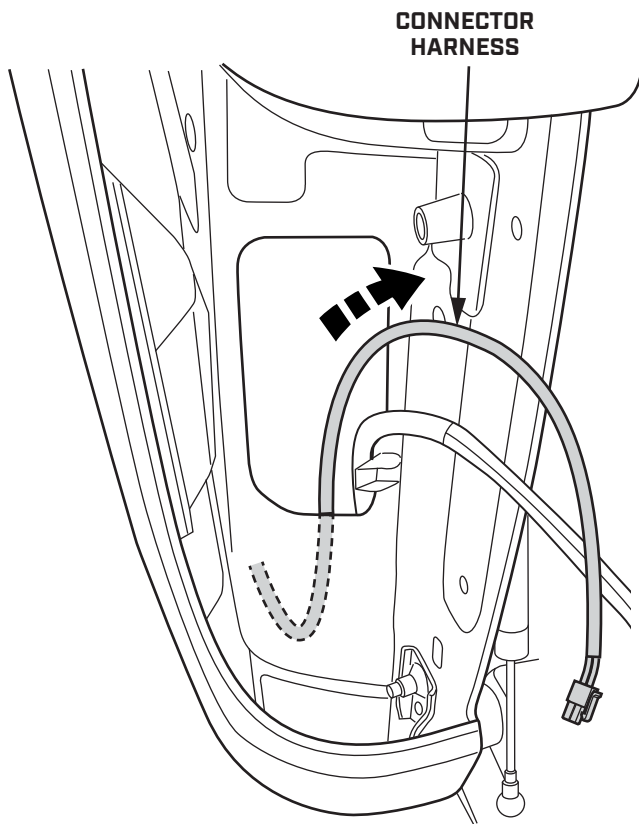
ROUTE THE CONNECTOR HARNESS UP TOWARDS THE TAILLIGHT CAVITY.



STEP 52

CAREFULLY PULL THE CONNECTOR HARNESS OUT THROUGH THE TAILLIGHT CAVITY.

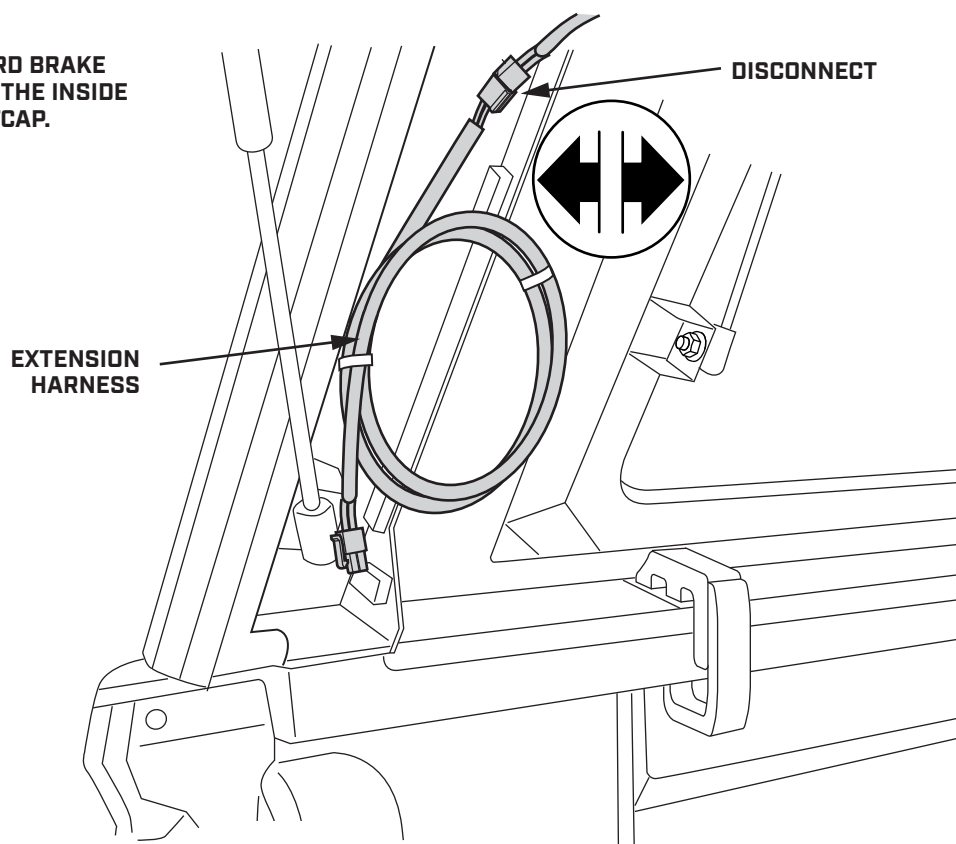
ROUTE THE CONNECTOR HARNESS UP AND OUT THROUGH THE HOLE IN THE SIDE OF THE BED.



I-SHEET-NA-RAM-2

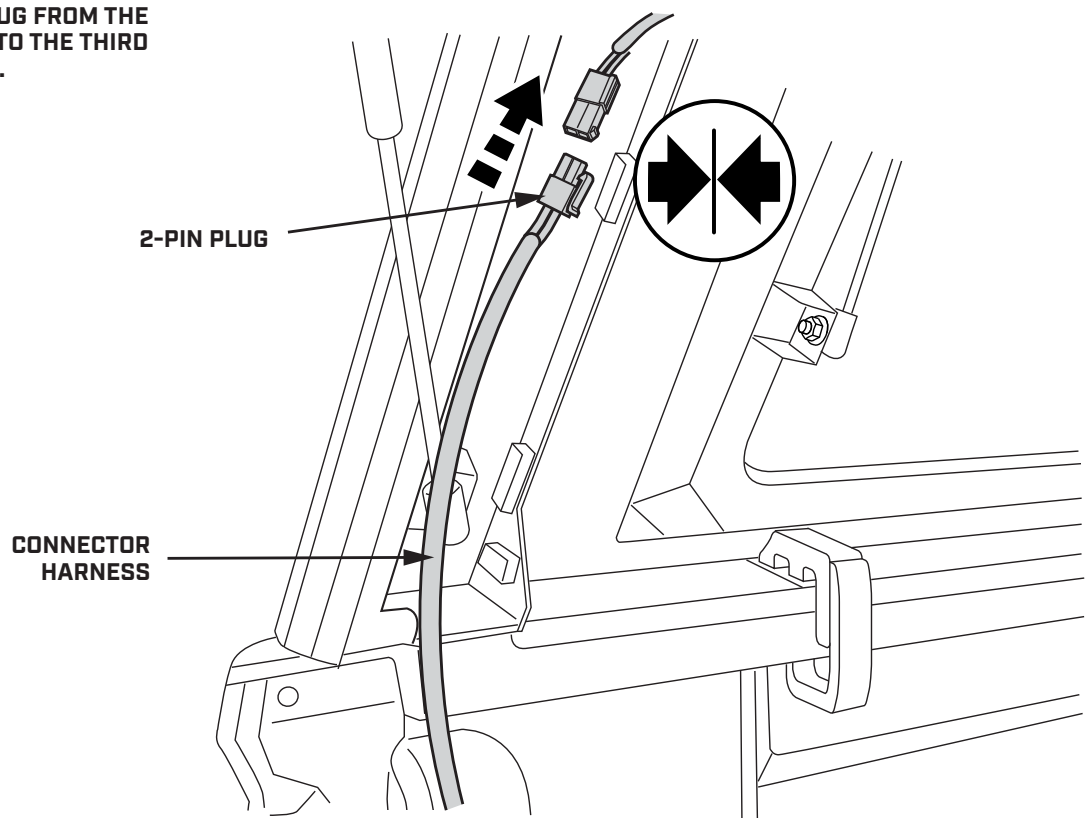
STEP 53

LOCATE AND DISCONNECT THE THIRD BRAKE LIGHT EXTENSION HARNESS FROM THE INSIDE BACK LEFT CORNER OF THE SMARTCAP.



STEP 54

CONNECT THE 2-PIN PLUG FROM THE CONNECTOR HARNESS TO THE THIRD BRAKE LIGHT HARNESS.

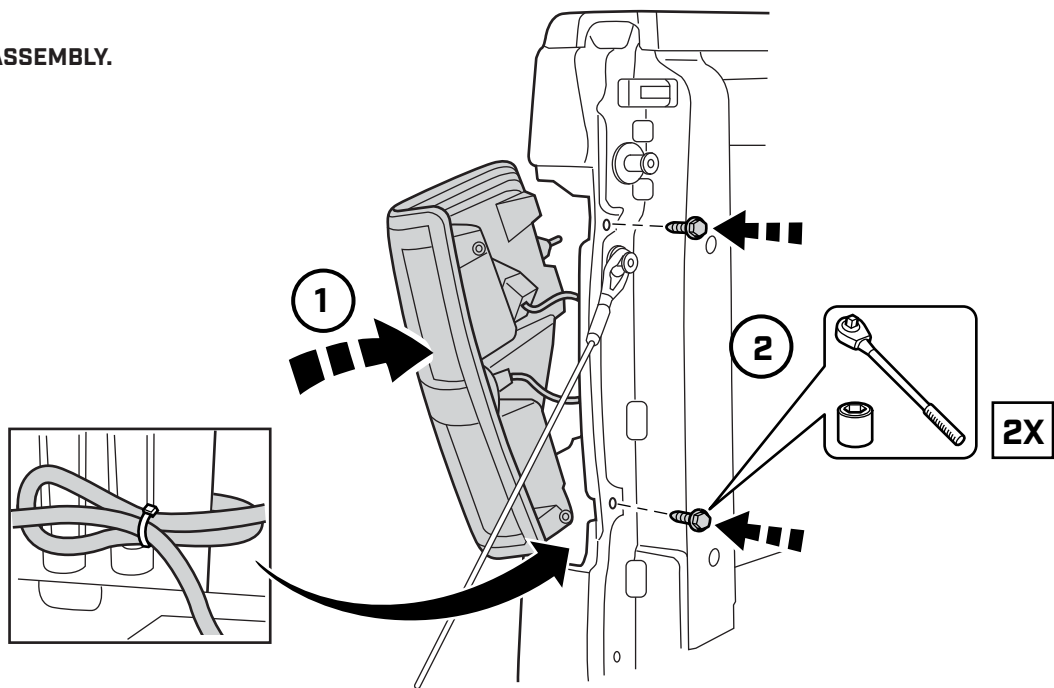


I-SHEET-NA-RAM-2

STEP 55

REINSTALL THE TAILLIGHT ASSEMBLY.

BUNDLE EXTRA
HARNESS LENGTH
IN THE TAIL LIGHT
CAVITY AND SECURE
WITH A CABLE TIE.



STEP 56



TEST YOUR BRAKE LIGHTS & TURN SIGNALS

- ▼ START THE TRUCK. SOME MODELS MAY TAKE UP TO 30 SECONDS FOR THE VEHICLE TO DETECT THE NEW CONNECTION.
- ▼ CHECK THE BRAKE LIGHTS AND TURN SIGNALS TO BE SURE THEY ARE FUNCTIONING PROPERLY.
- ▼ ONCE YOU HAVE CONFIRMED THAT THE LIGHTS ARE WORKING CORRECTLY, SECURE THE HARNESS WITH CABLE TIES.
- ▼ BE SURE NOT TO INTERFERE WITH ANY MOVING PARTS ON THE VEHICLE.

SMARTCAP[®]

THANKS FOR YOUR PURCHASE.
PLEASE LET US KNOW IF YOU HAVE ANY QUESTIONS.

SMARTCAP.COM

SUPPORT.NA@SMARTCAP.COM - NORTH AMERICA

SUPPORT.SA@SMARTCAP.COM - REST OF WORLD



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