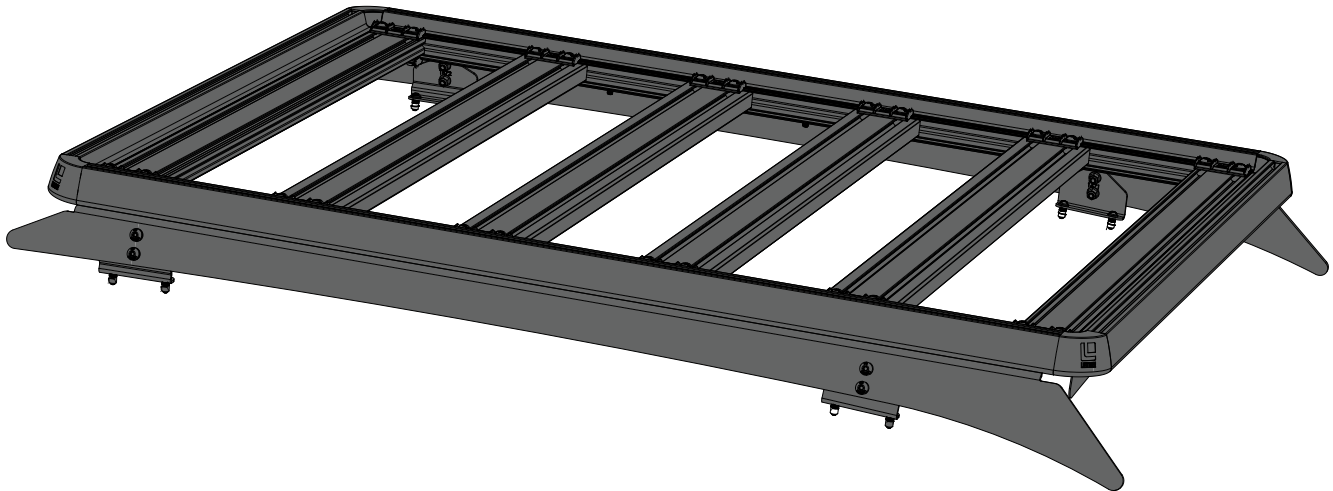


LEITNER

ACSR®OOOF



2022 UP 3RD GEN TUNDRA CREWMAX

LEITNERDESIGNS.COM | SALES@LEITNERDESIGNS.COM | 949-395-3049

ASSEMBLY / INSTALLATION INSTRUCTIONS:

ROOF PART NUMBERS:

00-T3GRA-1693

TOOLS REQUIRED

- TORQUE WRENCH
- T30 TORX BIT SOCKET
- T40 TORX BIT SOCKET
- 13MM WRENCH
- SILICON RTV SEALANT
- ELECTRIC DRILL
- 1/4 MATCO HYPER-STEP COBALT DRILL
- 25/64TH OR 10MM MATCO HYPER-STEP COBALT DRILL

INSTALLATION TIME

2-3 HOURS
DRILLING REQUIRED

SKILL LEVEL



4= EXPERT

LEITNER DESIGNS RECOMMENDS THAT THIS PRODUCT BE INSTALLED BY A QUALIFIED ACCESSORY INSTALLATION SHOP.

THIS PRODUCT REQUIRES DRILLING INTO YOUR ROOF. THE SHEET METAL TOYOTA USES IS HIGH STRENGTH STEEL AND STANDARD DRILLS WILL NOT WORK. HAVING A PROFESSIONAL WITH THE CORRECT TOOLS DO THE INSTALLATION IS HIGHLY RECOMMENDED. WE HAVE HAD GOOD LUCK WITH THE MATCO COBALT HYPER-STEP DRILLS.

THIS PRODUCT REQUIRES INSTALLING RIVET NUTS. WE HIGHLY RECOMMEND A PROFESSIONAL RIVET NUT SETTING TOOL SUCH AS THE ASTRO PNEUMATIC TOOL 1442 OR RIVET NUT SETTER RN-1

▼ READ BEFORE INSTALLING ACS ROOF ▼

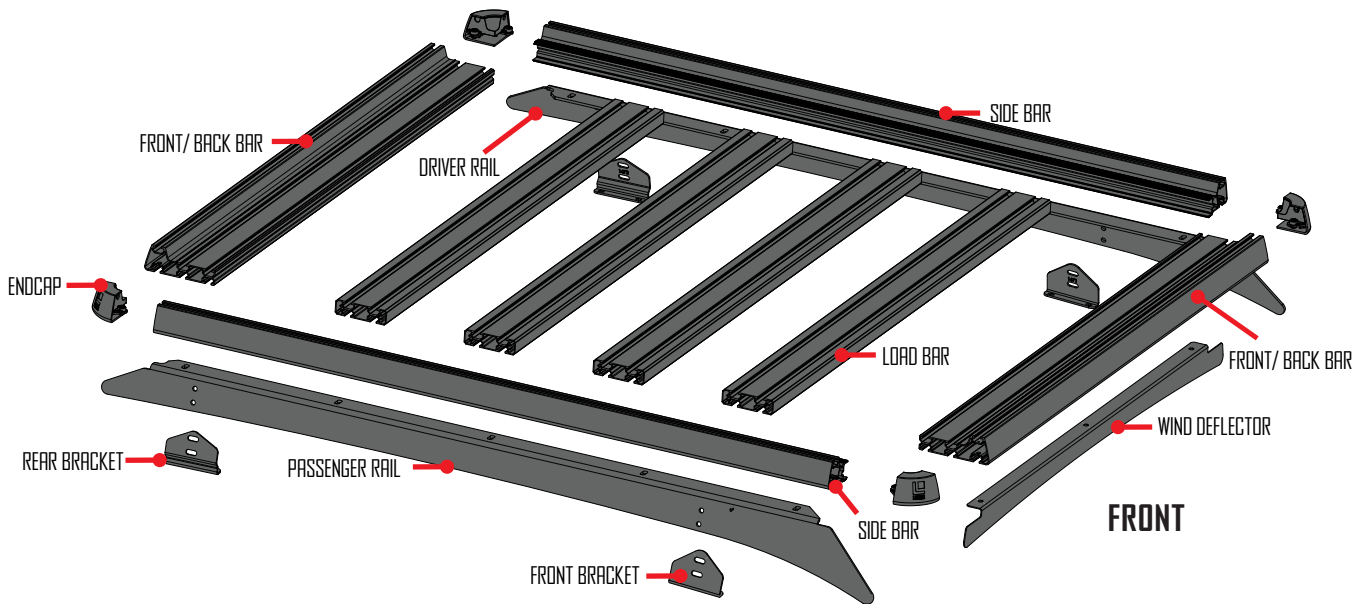
1. DON'T OVER-TIGHTEN BOLTS. ALL 8MM BOLTS = (16FT-LB) ALL 6MM BOLTS = (12FT-LB)

2. LAY DOWN A LARGE AREA OF CARPET OR BLANKETS AS A WORK AREA TO AVOID SCRATCHING PARTS DURING ASSEMBLY.

3. TAKE YOUR TIME TO DO IT RIGHT, MEASURE TWICE, DRILL ONCE.

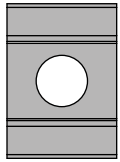
4. ALTHOUGH THE ACS ROOF IS LIGHT HAVING A FRIEND TO HELP IS RECOMMENDED.

▼ ASSEMBLY OVERVIEW ▼

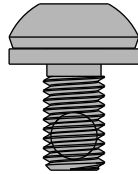


▼ ACS ROOF HARDWARE ▼

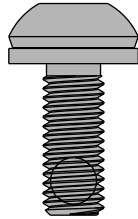
HARDWARE



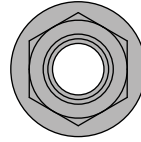
SINGLE T-NUT
- (X32) -



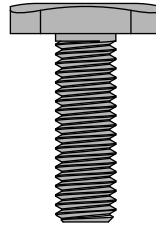
M8 X 14
- (X35) -



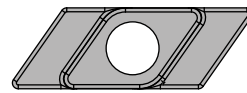
1523-M8 X 20
(X8)



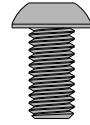
M8 LOCKNUT
(X18)



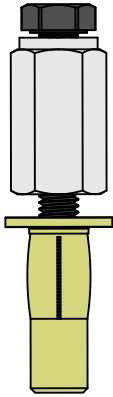
M8 T-BOLT
(X10)



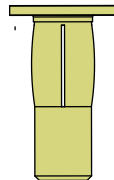
TRAKLOK NUT
(X3)



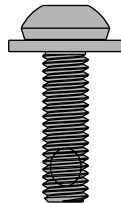
M6 X 12
(X8)



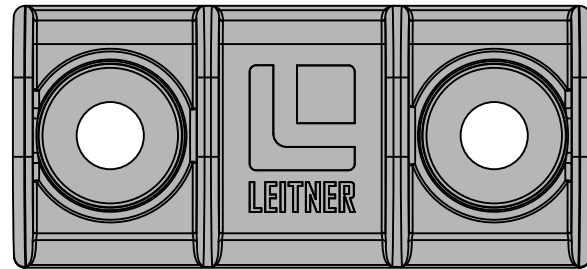
RIVET NUT SET TOOL
(X1)



RIVET NUT
(X10)



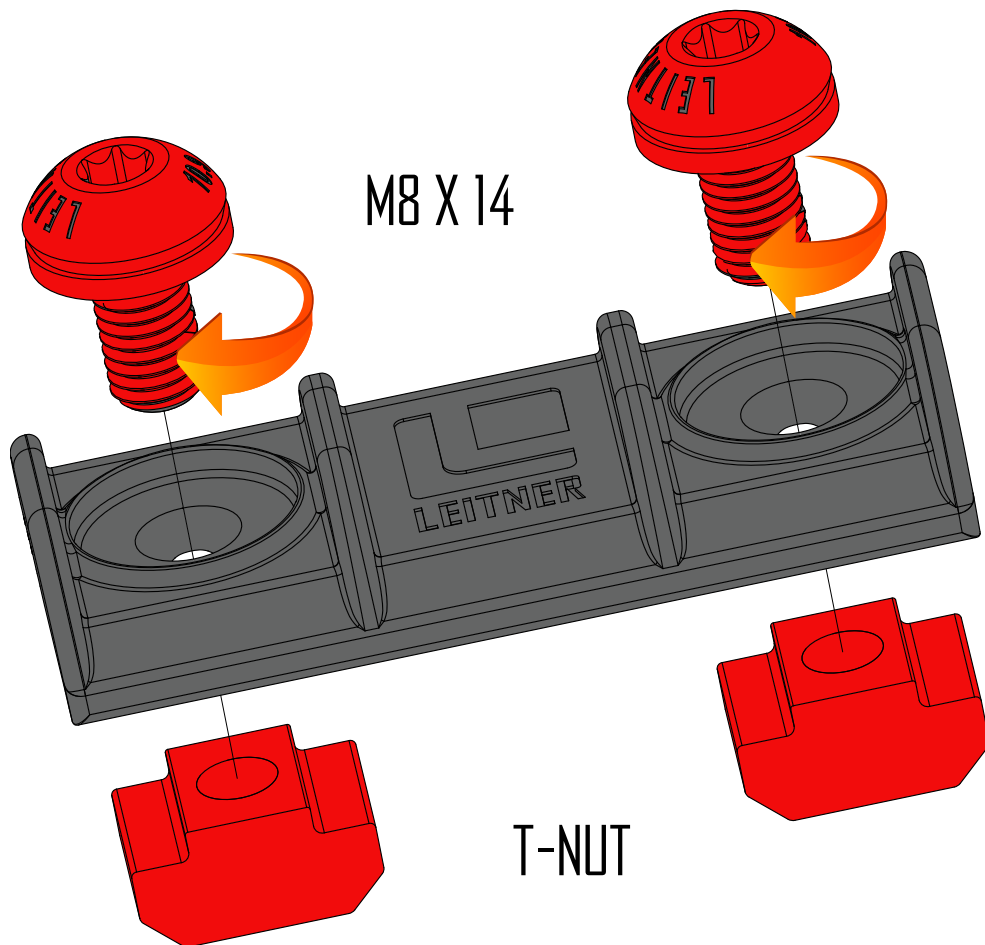
M6 X 20
(X8)



CLAMP PLATE
- (X18) -

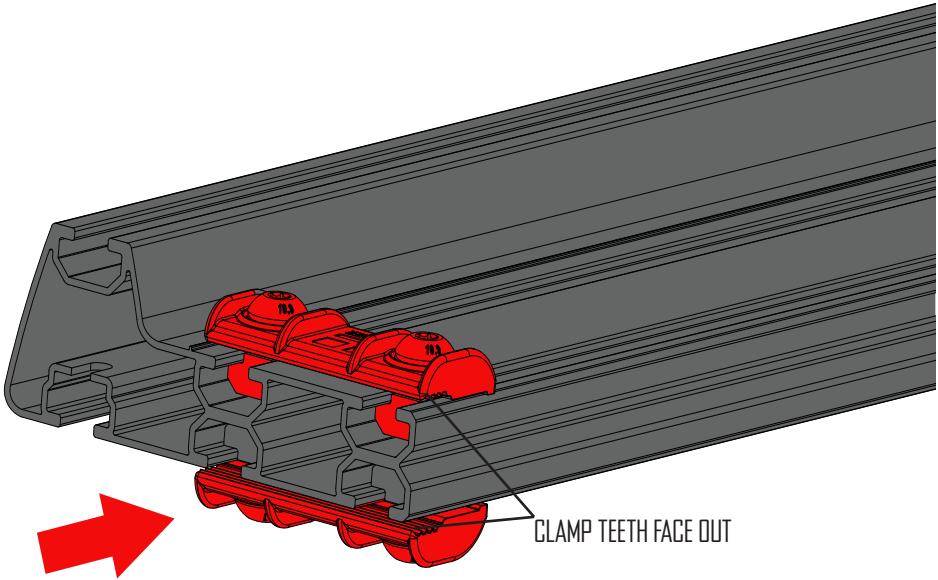
PREP: CLAMP PLATE

- INSTALL TWO M8 X 14 BOLTS THROUGH CLAMP PLATE AND THREAD INTO T-NUT. DO NOT TIGHTEN.
- REPEAT FOR ALL PLATES
- SET ASIDE FOR USE IN NEXT STEP



PREP: PREP FRONT AND REAR BARS

• INSTALL 2 CLAMP PLATE ASSEMBLIES **PER SIDE** INTO THE FRONT AND REAR BARS AS SHOWN. MAKE SURE THE TEETH ON THE CLAMP PLATE FACE OUT.



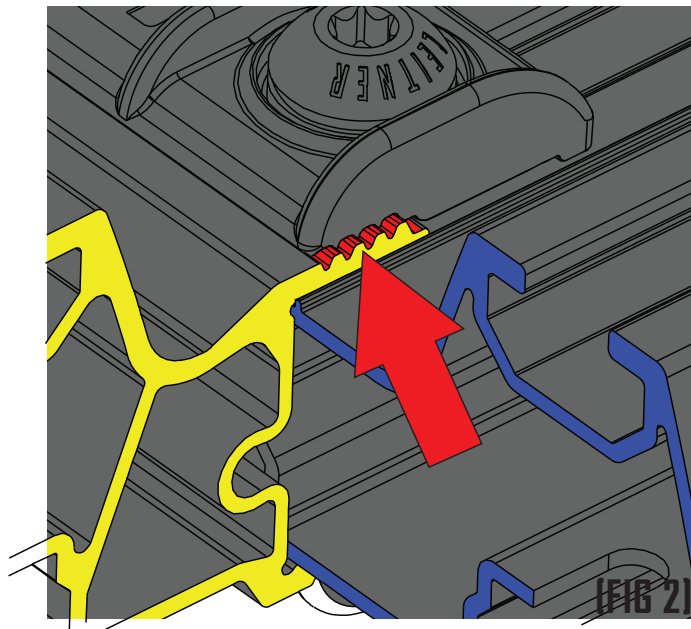
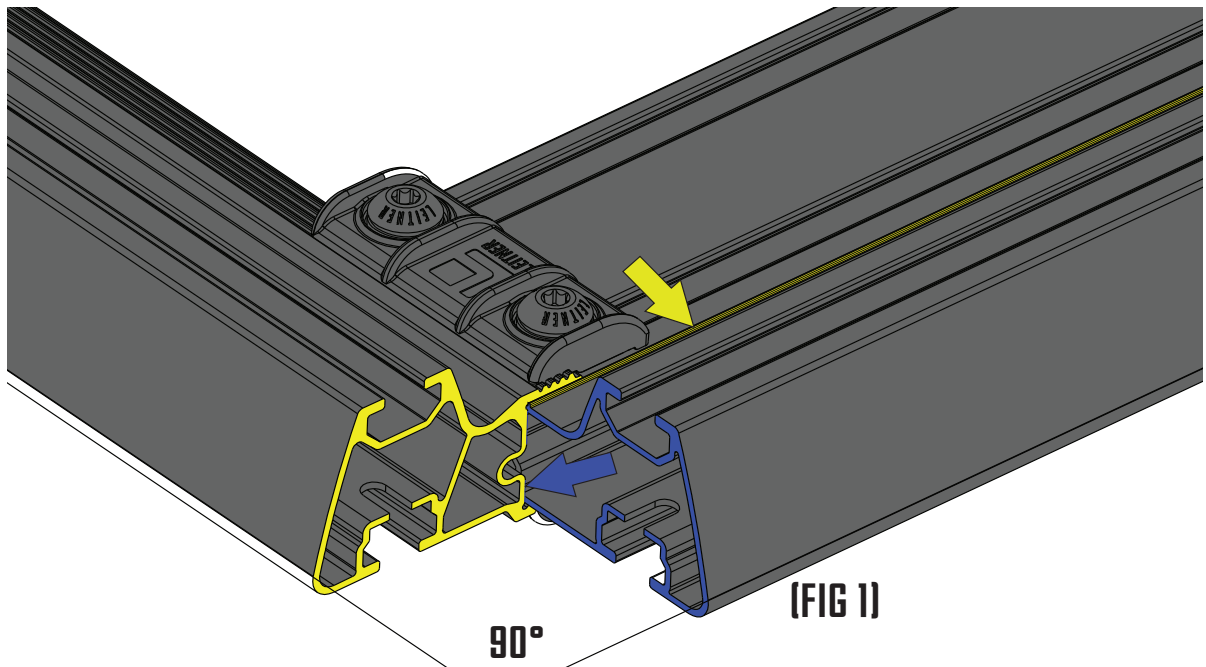
ASSEMBLE: FRAME OF RACK

- ON A SOFT WORKING SURFACE LAY OUT THE FOUR ALUMINUM EXTRUSION BARS AS SHOWN. WE RECOMMEND A MOVING BLANKET LAYED OUT ON A FLAT FLOOR AS THE RACK IS TOO LARGE TO ASSEMBLE ON A TABLE.



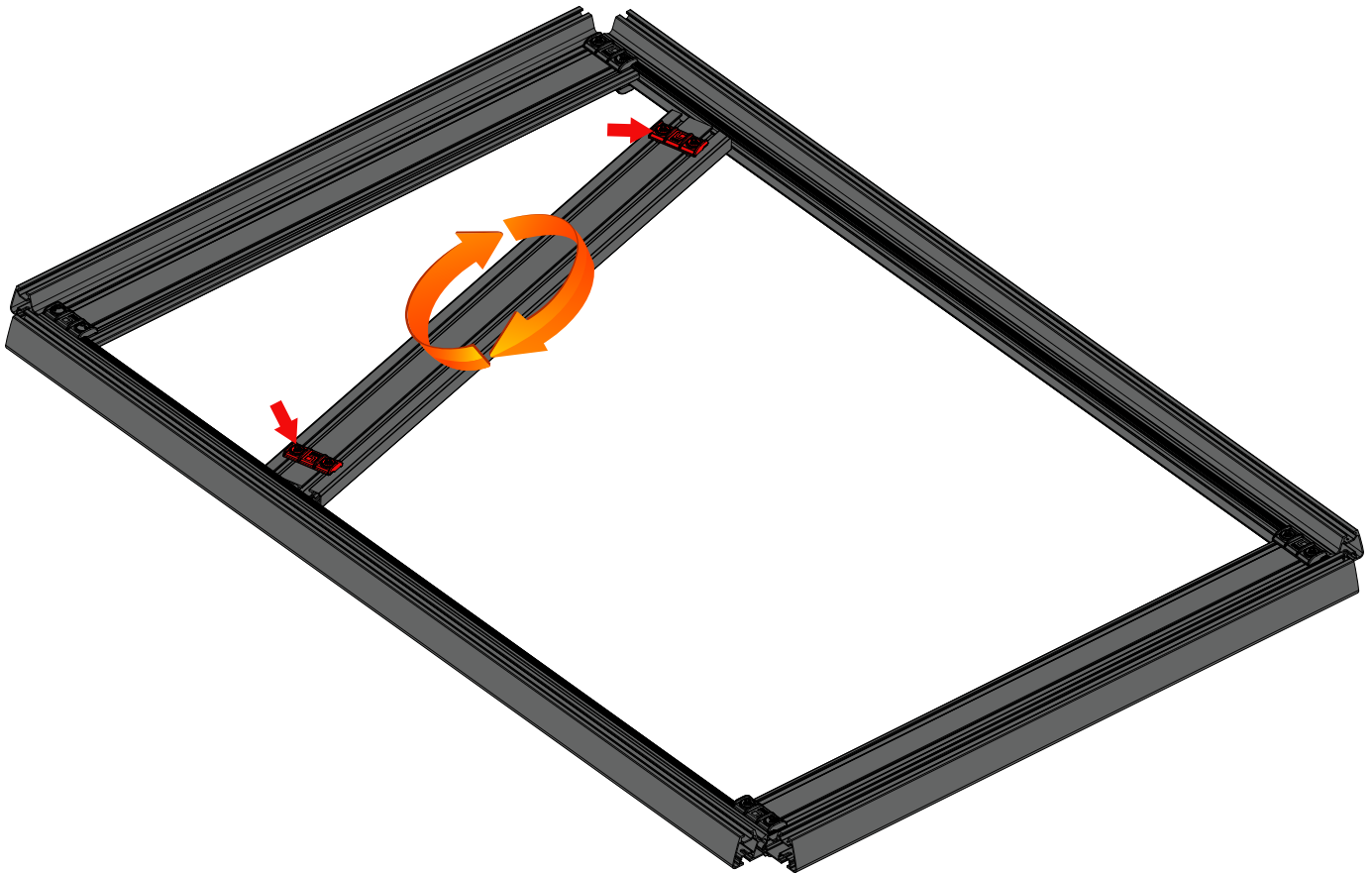
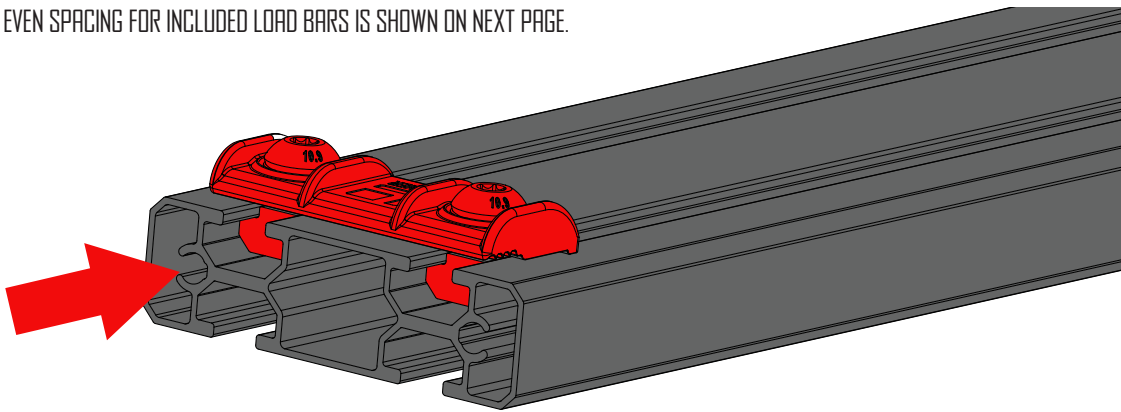
ASSEMBLE: RACK CORNERS

- PUSH ONE OF THE CORNERS OF THE RACK TOGETHER AS SHOWN BELOW. MAKE SURE THE SIDE BAR TOUCHES OFF AS SHOWN ON THE STOP LIP ON THE FRONT/BACK EXTRUSION (**YELLOW SURFACES**). ALSO MAKE SURE THE FRONT/BACK BAR FULLY TOUCHES THE INSIDE OF THE SIDE BAR (**BLUE SURFACES**). YOU CAN MAKE SURE EVERYTHING IS AT A 90 BY USING A CARPENTERS SQUARE (**FIG 1**)
- ADJUST THE CLAMP SO ALL THE TEETH LINE UP WITH THE GROVES IN THE SIDE EXTRUSION (**RED SURFACES**). TIGHTEN THE BOLTS USING A T40 TORX WRENCH TO 16 FT-LB (**FIG 2**)
- REPEAT STEP FOR ALL 4 CORNERS. AFTER YOU ARE SURE EVERYTHING IS SQUARE FLIP THE ASSEMBLY OVER AND TIGHTEN LOWER CLAMPS.



PREP: LOAD BARS

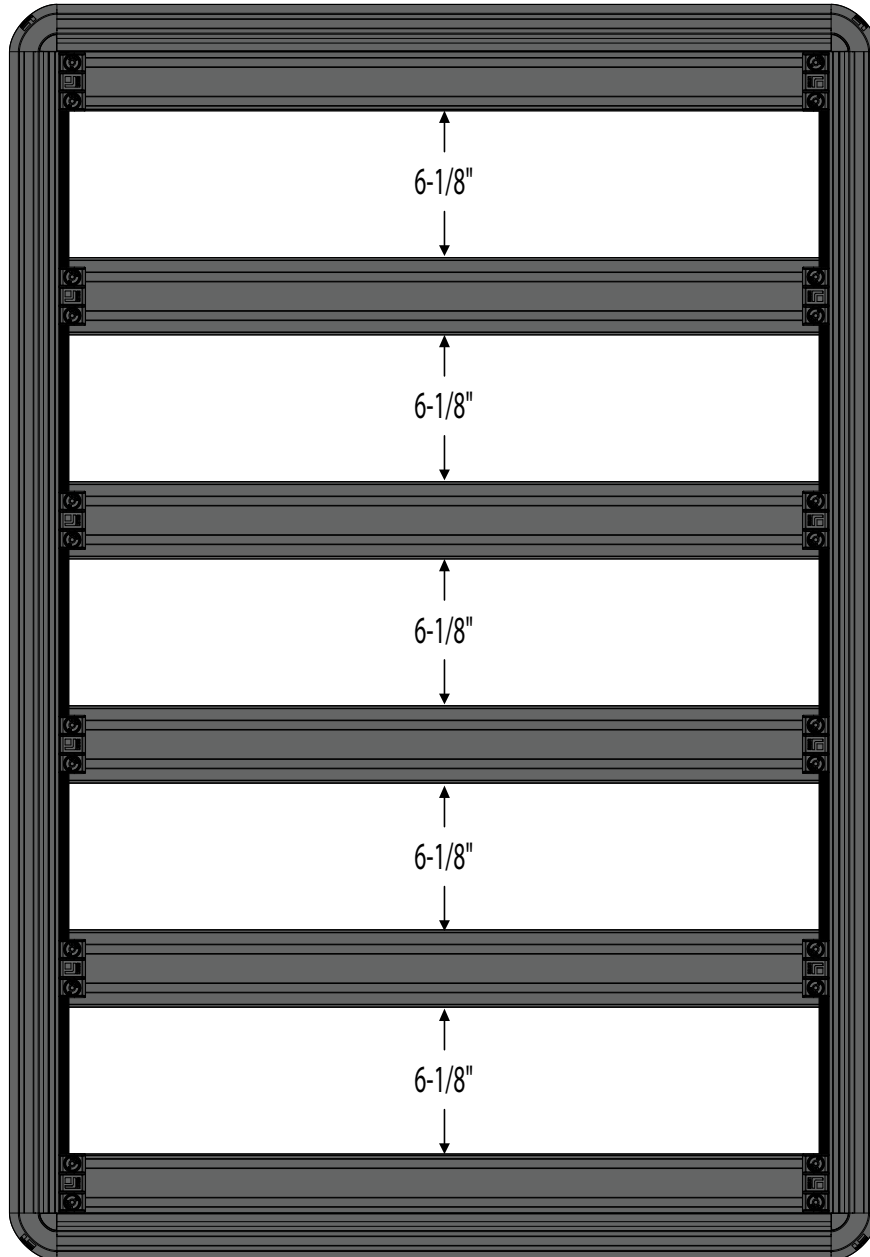
- INSTALL 2 CLAMP PLATES TO THE LOAD BARS. ONE ONE ON EACH SIDE. MAKE SURE THE TEETH ON THE CLAMP PLATE FACE OUT.
- **NOTE: ONLY 2 CLAMP PLATES ARE USED FOR EACH LOAD BAR. THERE IS NO NEED TO INSTALL 4 AS ON THE FRONT/BACK BAR.**
- INSTALL THE LOAD BAR INTO THE SIDE EXTRUSION BY ANGELING IT IN AS SHOWN IN THE DIAGRAM.
- REPEAT STEPS FOR ALL INCLUDED LOAD BARS. YOU CAN BUY EXTRA LOAD BARS AND INSTALL THEM AT ANY TIME UP TO MAKE A FULLY FLAT PLATFORM.
- EVEN SPACING FOR INCLUDED LOAD BARS IS SHOWN ON NEXT PAGE.



ADJUST: LOAD BAR DISTANCE

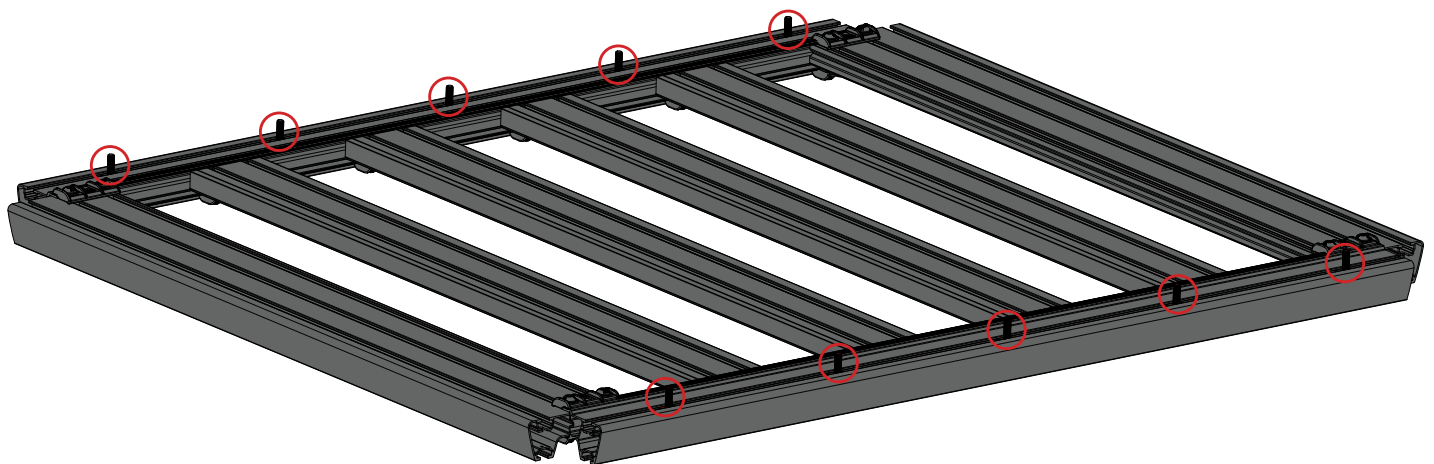
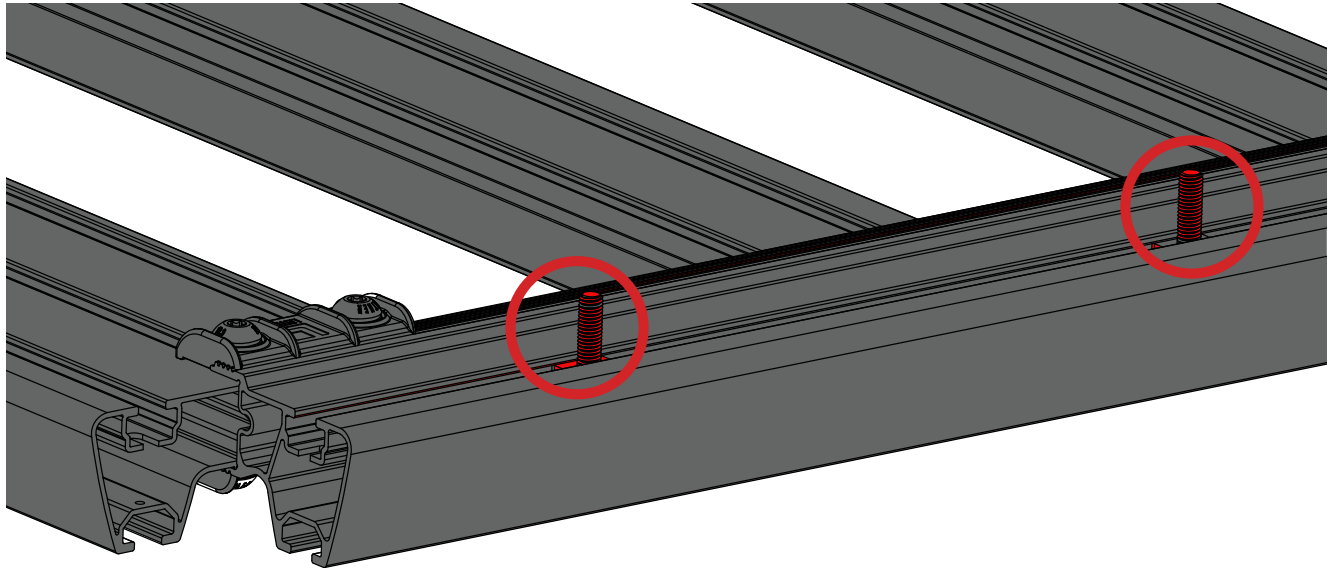
• THE LOAD BARS ARE DESIGNED TO SLIDE AND CAN BE POSITIONED ANYWHERE ALONG THE SIDE RAIL. YOU CAN ALSO ADD AS MANY LOAD BARS AS YOU LIKE UP TO AN ALMOST FULLY FLAT PLATFORM. HOWEVER IF YOU WOULD LIKE EVENLY SPACED LOAD BARS THE DIMENSIONS ARE BELOW.

• NOTE: IF YOU HAVE A MOONROOF YOU WILL NEED TO MAKE A SLIGHT ADJUSTMENT TO THE LOAD BAR LOCATION AFTER INSTALLATION TO INSURE IT DOES NOT MAKE CONTACT WHEN OPENING.



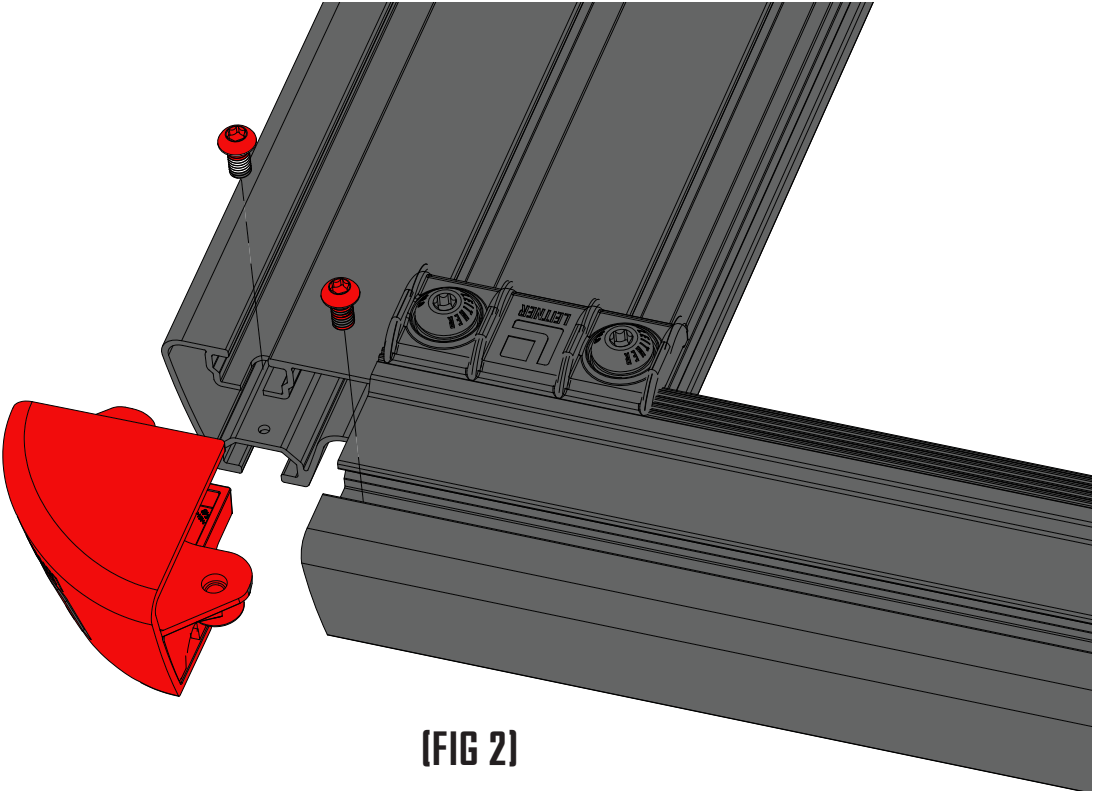
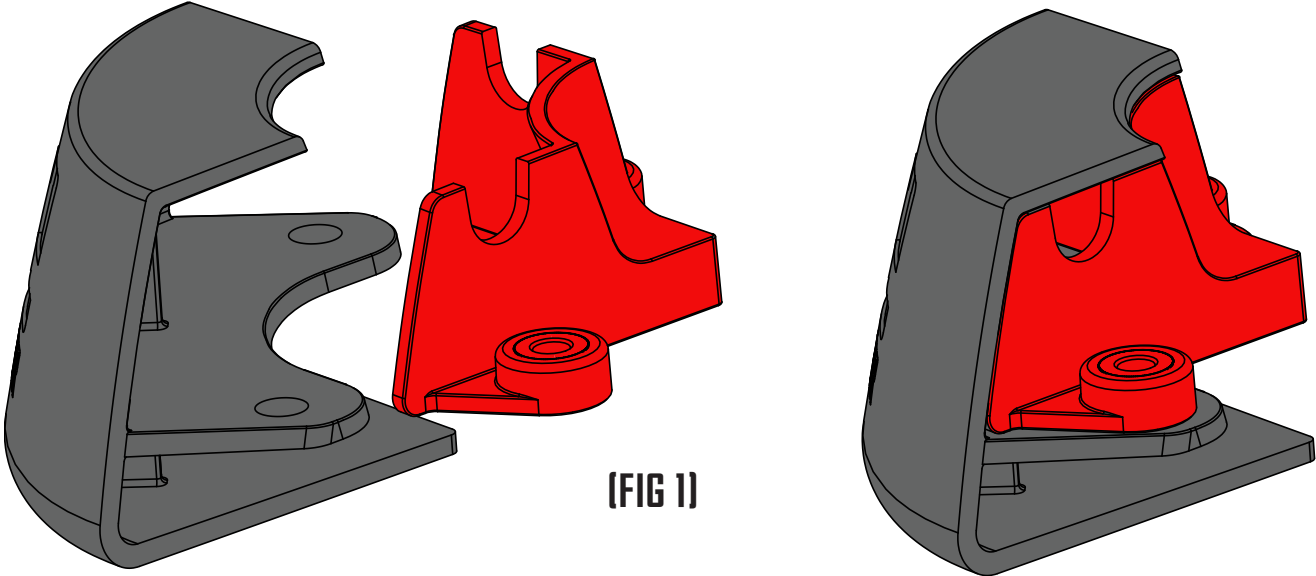
ASSEMBLE: T-BOLT FASTENERS

- FLIP THE RACK OVER SO YOU CAN SEE THE BOTTOM.
- INSTALL 5 T-BOLTS PER SIDE INTO THE SIDE RAIL EXTRUSION ON THE BOTTOM OF THE RACK.



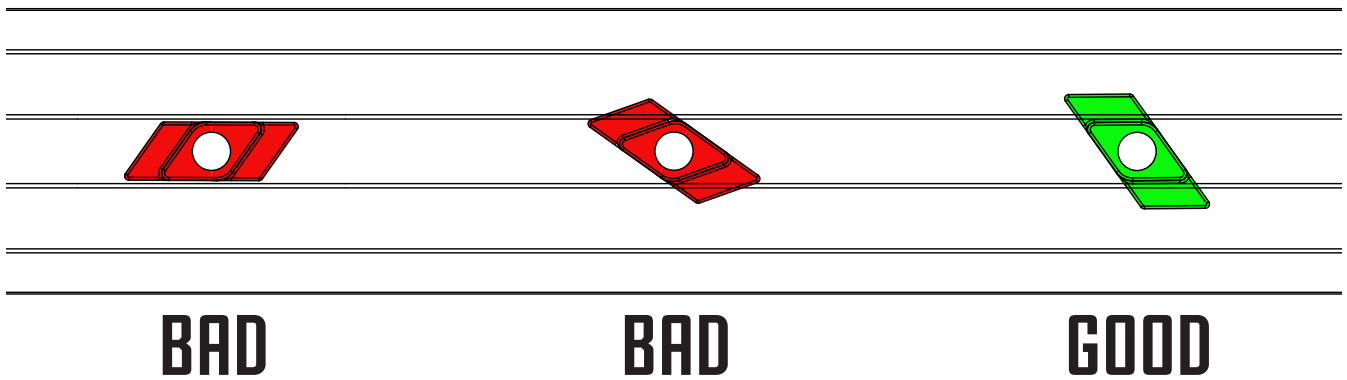
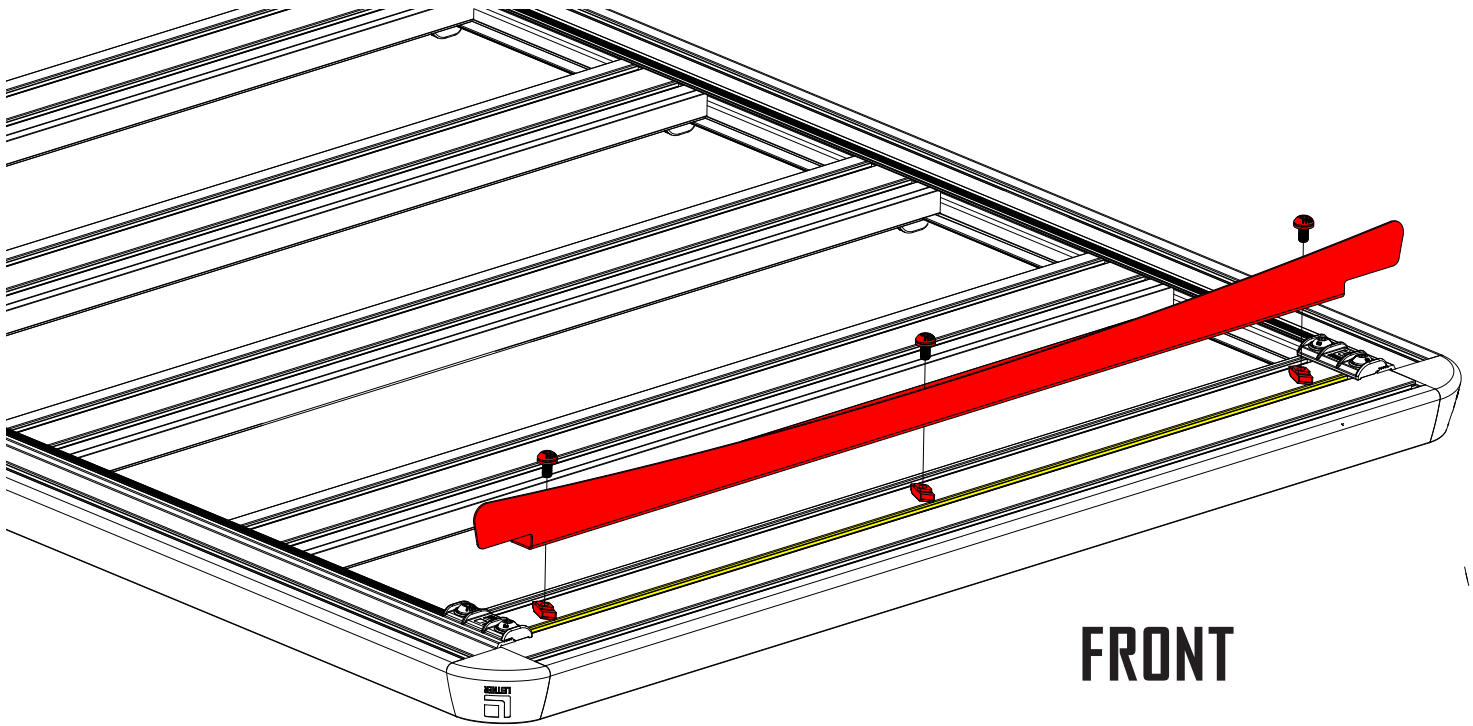
ASSEMBLE: ENDCAPS

- ASSEMBLE THE PLASTIC RETAINER INTO THE CORNER CAP AS SHOWN BELOW. (FIG A)
- USING TWO M6 X 12 FASTENERS SECURE THE ENDCAPS TO THE CORNERS OF THE RACK (FIG 2) TIGHTEN TO 24 IN-LB USING A T30 TORX WRENCH.



INSTALL: WIND DEFLECTOR

- USING M8 X 14 BOLTS AND 3X TRAKLOK NUTS, FASTEN WIND DEFLECTOR AS SHOWN TO THE YELLOW T-SLOT IN THE LOAD BAR, CENTER SLOT
- NOTE: THE WIND DEFLECTOR CAN BE MOVED TO OTHER LOCATIONS. THIS MIGHT BE THE CASE IF IT INTERFERES WITH THE SUNROOF.



• NOTE: IT IS EXTREMELY IMPORTANT THAT THE TRAKLOK NUTS ROTATE FULLY INTO PLACE AS SHOWN IN DIAGRAM AND TIGHTEN DOWN UNDER THE LIP OF THE ALUMINUM EXTRUSION.

MARK: FOAM ON ROOF CHANNEL

• THERE IS A FOAM SEALANT ON TOP OF THE ROOF THAT HAS BEEN PAINTED OVER.. SMALL SECTIONS OF THIS WILL NEED TO BE REMOVED IN ORDER TO INSTALL THE MOUNTING BRACKETS.

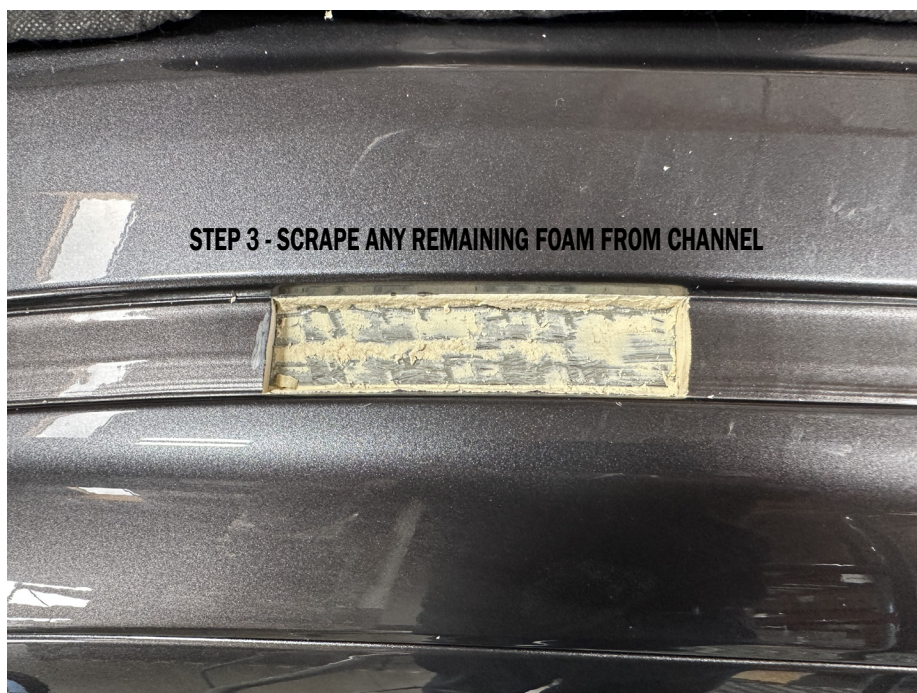
• USING A TAPE MEASURE MARK THE FOAM STRIP WITH A SHARPIE AT THESE DIMENSIONS. 6-1/2 , 10-3/4 , 46.0 & 50-1/2. THE STARTING POINT FOR THE MEASUREMENTS IS THE BLACK GUTTER CAP ON TOP OF THE ROOF MARKED BY A RED LINE.



CUT: FOAM STRIP

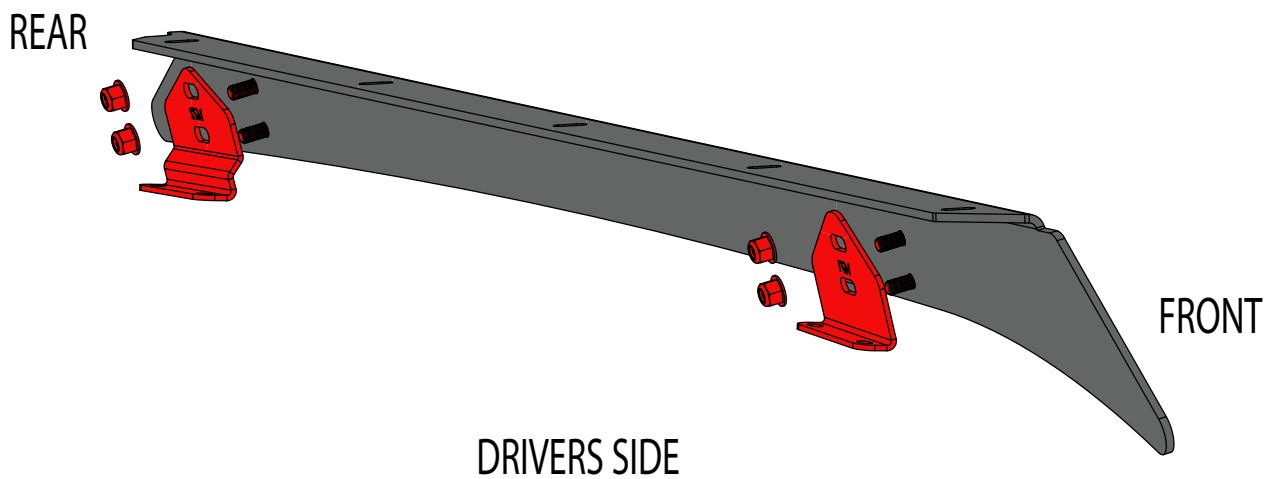
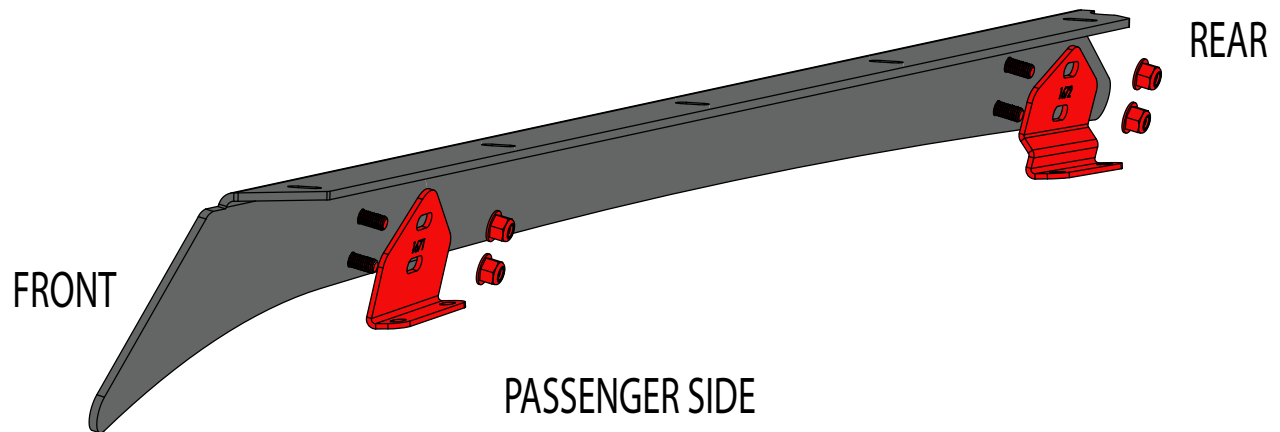
• USING A SHARP RAZOR BLADE CUT ON THE LINES YOU MARKED EARLIER. MAKE SURE TO GO ALL THE WAY DOWN TO THE METAL. THIS WILL TAKE A FEW PASSES.

• WITH A FLATBLADE SCREWDRIVER OR OTHER APPROPRIATE TOOL PRY THE FOAM MASTIC OUT OF THE CHANNEL FROM ONE END OF THE CUT MARK TO THE OTHER.



INSTALL: SIDE PLATES

- USE M8 X 20 BOLTS AND M8 LOCKNUTS TO LOOSELY FASTEN THE BRACKETS TO THE SIDE PLATES AS SHOWN. DO NOT FULLY TIGHTEN.
- NOTE: THE FRONT BRACKET HAS ONE BEND AND THE REAR BRACKET HAS 3 BENDS.



MARK HOLES: PREPAIRE FOR DRILLING.

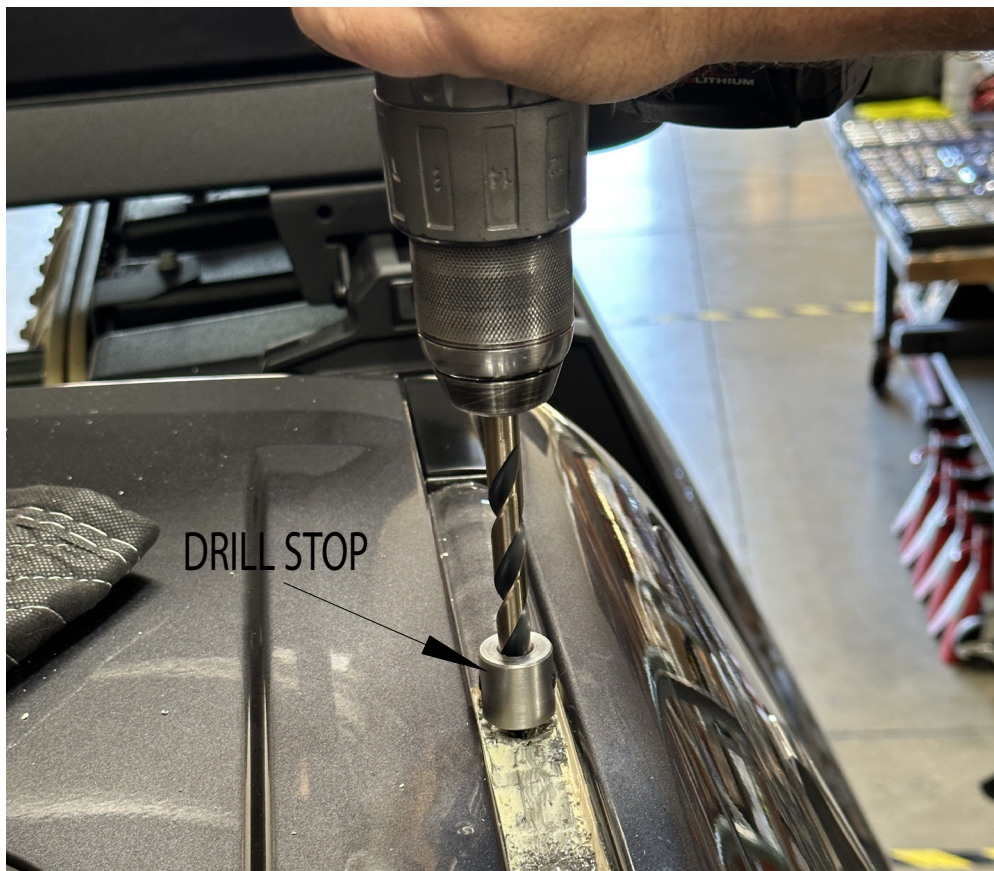
- SET THE APPROPRIATE SIDE ON TOP OF THE VEHICLE. THE STEEL BRACKETS WILL FIT INTO THE CUTOUTS YOU MADE IN THE FOAM IN A THE PREVIOUS STEP.
- USING A SHARPIE MARK THE CENTER OF THE HOLES. THEN USE A CENTER PUNCH TO MARK THE CENTER TO PREVENT THE DRILL FROM DRIFTING.



DRILL: HOLES IN ROOF CHANNEL.

- NOTE 1: IT IS IMPORTANT TO HAVE THE CORRECT DRILL FOR THIS STEP. WE RECOMMEND A 25/64TH MATCO COBALT HYPER-STEP DRILL. IF THIS IS NOT AVAILABLE HIGH QUALITY COBALT STEEL DRILL WILL WORK BUT YOU MIGHT NEED SEVERAL DRILLS TO MAKE THE HOLES SO HAVE SPAIRS ON HAND. IF YOU ARE NOT USING A MATCO COBALT HYPER-STEP DRILL YOU WILL NEED TO DRILL A 1/4 PILOT HOLE FIRST AS A STANDARD 25/64TH DRILL WILL NOT SELF CENTER.

- NOTE 2: USE A DRILL STOP ON ALL DRILLS SET AT 1/2 INCH FROM THE TIP OF THE DRILL. GOING TOO DEEP CAN CAUSE DAMAGE TO THE HEADLINER OR AIRBAGS SITUATED RIGHT BELOW THE DRILLING AREA.

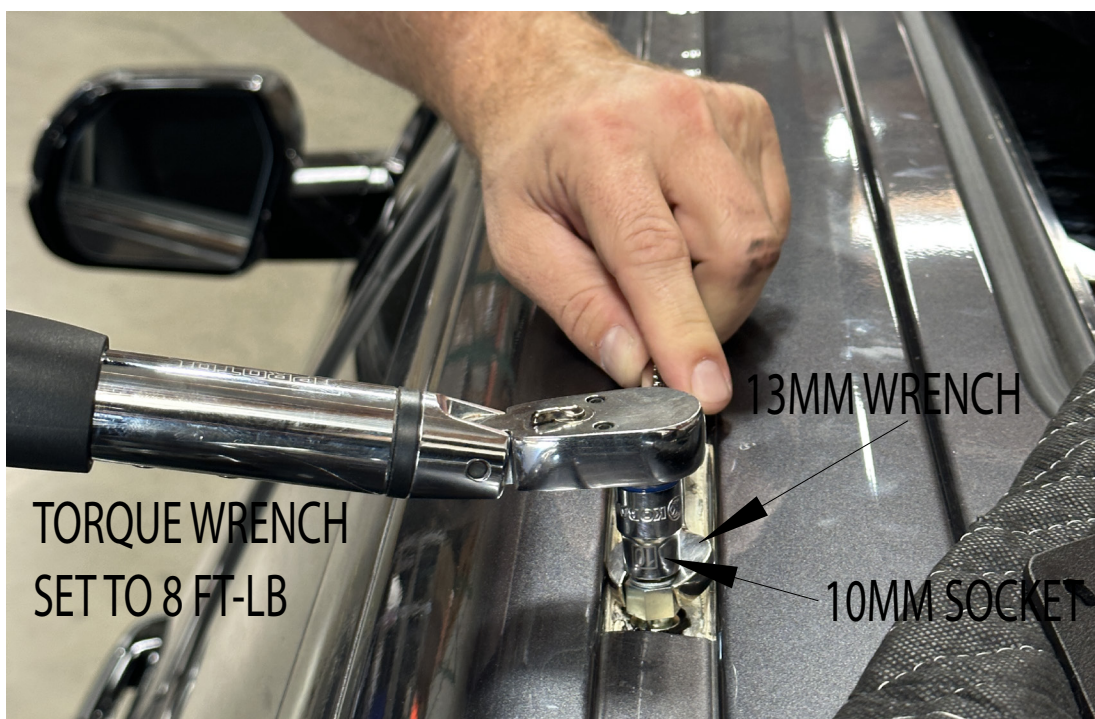
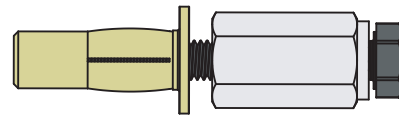


INSTALL: M6 RIVET NUTS

- USE A LIBERAL AMOUNT OF SILICON AROUND EACH HOLE OPENING. WE RECOMMEND USING "LOCKTITE SI 593 BK"
- WE RECOMMEND YOU USE A PURPOSE BUILT RIVET NUT SETTING TOOL. IF THIS IS NOT AVAILABLE WE HAVE INCLUDED A SMALL SETTING TOOL THAT WILL WORK IF PROPERLY USED.
- PLACE THE RIVET NUT AND SETTING TOOL INTO THE 25/64TH HOLE. USING A 13MM WRENCH HOLD THE TOOL STEADY AND USING A TORQUE WRENCH WITH A 10MM SOCKET TORQ TO 8 FT-LB. REMOVE THE TOOL TO BE USED ON THE OTHER RIVET NUTS. THIS WILL REQUIRE GRABBING THE TOOL WITH A PAIR OF PLIERS AND WIGELING IT LOOSE AFTER THE BOLT AND WSHER HAVE BEEN REMOVED.



THIS DIAGRAM SHOWS THE PROPER ASSEMBLY OF THE RIVET NUT TOOL



INSTALL: ROOF RAIL ASSEMBLY

• SET THE PASSENGER AND DRIVER SIDE RAIL ASSEMBLYS ON TO THE TRUCK AND INSTALL USING M6 X 20 FASTENERS TO THE RIVET NUTS YOU INSTALLED PREVIOUSLY. TIGHTEN USING A T30 TORX WRENCH.

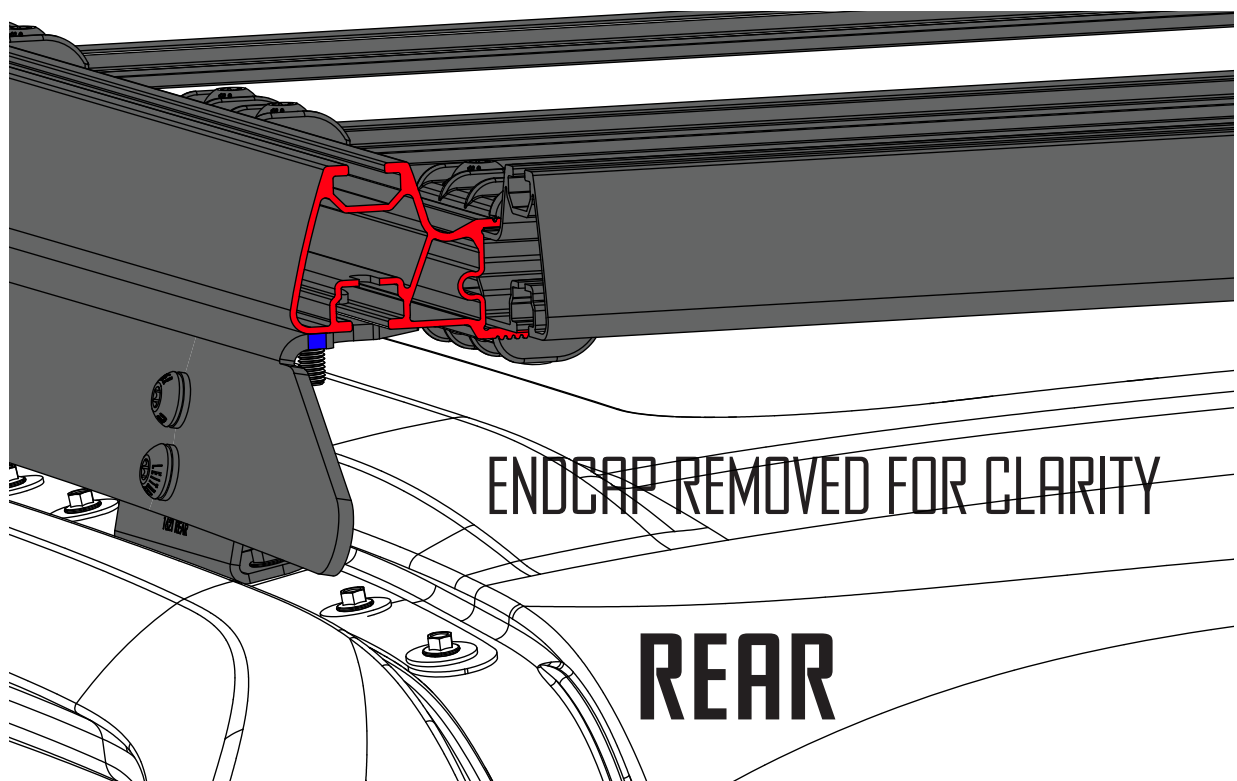
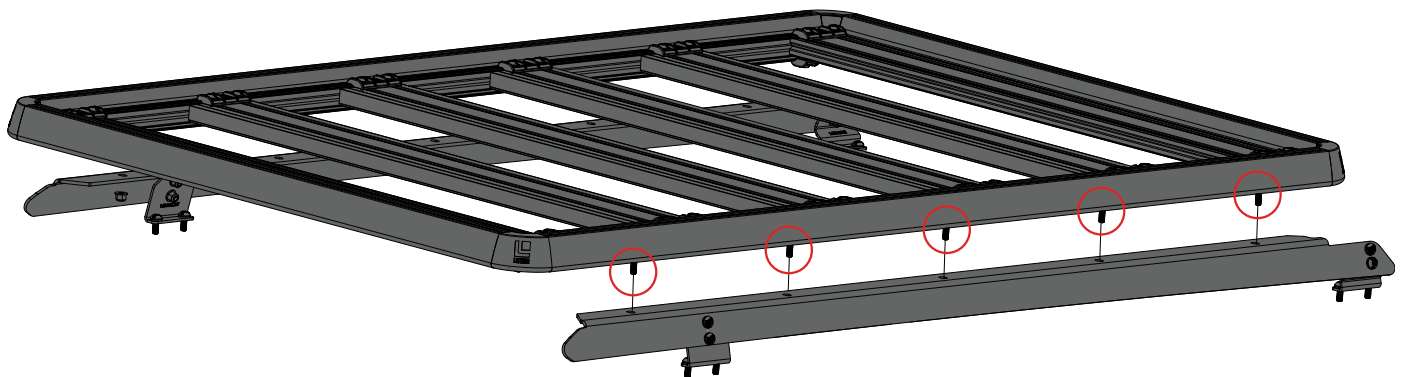
• NOTE: YOU CAN REMOVE THE BRACKETS FROM THE SIDE RAILS TO MAKE THIS STEP EASIER AND THEN REINSTALL THE SIDE PLATES AFTER.



INSTALL: RACK ON TRUCK

- ALIGN THE 10 T-BOLTS (5 PER SIDE) WITH THE SLOTS IN THE RAILS MOUNTED IN THE PREVIOUS STEP. THREAD ON M8 LOCKNUTS TO EACH.
- ADJUST THE RACK SO THAT THE SIDE BAR EXTRUSIONS LINE UP WITH THE END OF THE RAILS ON EACH SIDE. "RED SURFACE TO BLUE SURFACE"
- TORQUE ALL M8 LOCKNUTS INSTALLED IN PREVIOUS STEP TO 14 FT-LB USING A 13MM WRENCH.

A MINIMUM OF 2 PEOPLE ARE REQUIRED FOR THIS STEP. WE RECOMMEND USING A MOVING BLANKET ON THE ROOF TO PREVENT SCRATCHES.



USE GUIDELINES

WHEN USING LEITNER DESIGNS CARRIERS AND ACCESSORIES, THE USER MUST UNDERSTAND THE PRECAUTIONS. THE POINTS LISTED BELOW WILL ASSIST YOU IN USING THE RACK SYSTEM AND WILL ENCOURAGE SAFETY.

-FOR QUALITY FITS AND SAFETY, USE ONLY THE RECOMMENDED RACK OR ACCESSORIES. DO NOT ASSUME A RACK WILL FIT, ALWAYS CHECK THE CURRENT FIT GUIDE WHEN OBTAINING A NEW VEHICLE.

-THE MAXIMUM LOAD IS NOT TO BE EXCEEDED. (150# OFF ROAD – 300# ON ROAD). HOWEVER, **THIS LIMIT IS ALWAYS SUBORDINATE TO THE MAXIMUM LOAD RECOMMENDED BY THE MANUFACTURER OF THE VEHICLE ITSELF.** IT IS ALWAYS THE LOWER MAXIMUM RECOMMENDED LOAD THAT APPLIES. MAX TRUCK LOAD = LOAD CARRIER WEIGHT + ANY FITTED CARRIER ACCESSORIES + THE WEIGHT OF THE LOAD ITSELF.

-HIGH SPEED OFF ROAD DRIVING EVEN WITH A LIGHT LOAD CAN CAUSE DAMAGE TO THE RACK, ACCESSORIES AND VEHICLE BODY. DAMAGE CAUSED BY HIGH SPEED DRIVING AND ABUSE IS NOT COVERED UNDER WARRANTY.

-MAKE SURE ALL KNOBS, BOLTS, SCREWS, STRAPS, AND LOCKS ARE FIRMLY ATTACHED, TIGHTENED AND LOCKED BEFORE EVERY TRIP. KNOBS, BOLTS, SCREWS, STRAPS AND LOCKS MUST BE PERIODICALLY INSPECTED FOR SIGNS OF WEAR, CORROSION, AND FATIGUE. CHECK YOUR LOAD AT STOPS DURING THE TRIP TO ENSURE CONTINUED FASTENING SECURITY.

-CHECK LOCAL AND STATE LAWS GOVERNING PROJECTION OF OBJECTS BEYOND THE PERIMETER OF A VEHICLE. BE AWARE OF THE WIDTH AND HEIGHT OF YOUR CARGO SINCE LOW CLEARANCE BRANCHES, BRIDGES, AND PARKING GARAGES CAN AFFECT THE LOAD. ALL CARGO WILL AFFECT THE VEHICLE'S DRIVING BEHAVIOR. NEVER DRIVE WITH ANY LOCK, KNOB OR RACK IN AN OPEN OR UNLOCKED POSITION. ALL LONG LOADS SUCH AS, BUT NOT LIMITED TO, SAILBOARDS, SURFBOARDS, KAYAKS, CANOES, AND LUMBER MUST BE TIED DOWN FRONT AND REAR TO THE BUMPERS OR TOW HOOKS OF THE VEHICLE.

-ALL LOCKS MUST BE TURNED AND MOVED PERIODICALLY TO ENSURE SMOOTH OPERATION. USE GRAPHITE OR DRY LUBRICANT TO HELP THIS. LEITNER DESIGNS LOCKS ARE DESIGNED TO DETER VANDALISM AND THEFT BUT SHOULD NOT BE CONSIDERED THEFT PROOF. REMOVE VALUABLE GEAR IF YOUR VEHICLE IS UNATTENDED FOR AN EXTENDED PERIOD. PLACE AT LEAST ONE KEY IN THE GLOVE COMPARTMENT.

-FOR SAFETY TO YOUR VEHICLE AND RACK SYSTEM, OBEY ALL POSTED SPEED LIMITS AND TRAFFIC CAUTIONS. ADAPT YOUR SPEED TO THE CONDITIONS OF THE ROAD AND THE LOAD BEING CARRIED.

-DO NOT USE LEITNER DESIGNS LOAD CARRIERS AND ACCESSORIES FOR PURPOSES OTHER THAN THOSE FOR WHICH THEY WERE DESIGNED. DO NOT EXCEED THEIR CARRYING CAPACITY. FAILURE TO FOLLOW THESE GUIDELINES OR THE PRODUCT'S INSTRUCTIONS WILL VOID THE WARRANTY.

WARRANTY

LEITNER DESIGNS WARRANTS PRODUCT TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP, FOR TERMS SPECIFIED BELOW, PROVIDED THERE HAS BEEN NORMAL USE AND PROPER MAINTENANCE. ALL REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE REPAIR OR REPLACEMENT OF ANY ITEM FOUND BY THE FACTORY TO BE DEFECTIVE WITHIN THE TIME PERIOD SPECIFIED. IF YOU HAVE A WARRANTY CLAIM, FIRST YOU MUST CALL OUR FACTORY AT THE NUMBER BELOW FOR INSTRUCTIONS. YOU MUST RETAIN PROOF OF PURCHASE AND SUBMIT A COPY WITH ANY ITEMS RETURNED FOR WARRANTY WORK. UPON COMPLETION OF WARRANTY WORK, IF ANY, WE WILL RETURN THE REPAIRED OR REPLACED ITEM OR ITEMS TO YOU FREIGHT PREPAID. DAMAGE TO OUR PRODUCTS CAUSED BY ACCIDENTS, FIRE, VANDALISM, NEGLIGENCE, MIS-INSTALLATION, MISUSE, ACTS OF GOD, OR BY DEFECTIVE PARTS NOT MANUFACTURED BY US, IS NOT COVERED UNDER THIS WARRANTY.

THE WARRANTY TIME PERIOD IS AS FOLLOWS: (2) TWO YEARS FROM DATE OF PURCHASE.

HIGH SPEED OFF ROAD DRIVING EVEN WITH A LIGHT LOAD CAN CAUSE DAMAGE TO THE RACK, ACCESSORIES AND VEHICLE BODY. DAMAGE CAUSED BY HIGH SPEED OFF ROAD DRIVING AND ABUSE IS NOT COVERED UNDER WARRANTY.

ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE CREATED HEREBY ARE LIMITED IN DURATION TO THE SAME DURATION AND SCOPE AS THE EXPRESS WRITTEN WARRANTY. OUR COMPANY SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.

FOR WARRANTY ISSUES WITH THIS PRODUCT PLEASE CALL LEITNER DESIGNS CUSTOMER SERVICE **949-395-3049** OR EMAIL US AT **SALES@LEITNERDESIGNS.COM**