



## Installation Guide



## Transit Rear Tire Carrier TR1104B

All Flatline Van Co products must be properly assembled and secured before attaching to your vehicle. Improper attachment could result in an automobile accident, and could cause serious bodily injury or death to you or to others involved. You are responsible for assembling and securing Flatline Van Co products to your vehicle, checking the mounting points and attachments prior to use, and regularly inspecting the products for wear and or damage. We always recommend you use a professional to install any aftermarket accessories to your vehicle. If you have no mechanical experience and are not thoroughly familiar with the installation procedures, you must have the product installed by a professional installer or other qualified persons. The responsibility is yours and must be taken seriously for everyone's safety.



thanks.

# THANK YOU!

ARE YOU EXCITED ABOUT YOUR NEW REAR TIRE CARRIER? HERE ARE A FEW THINGS TO DO BEFORE BEGINNING THE INSTALLATION PROCESS--

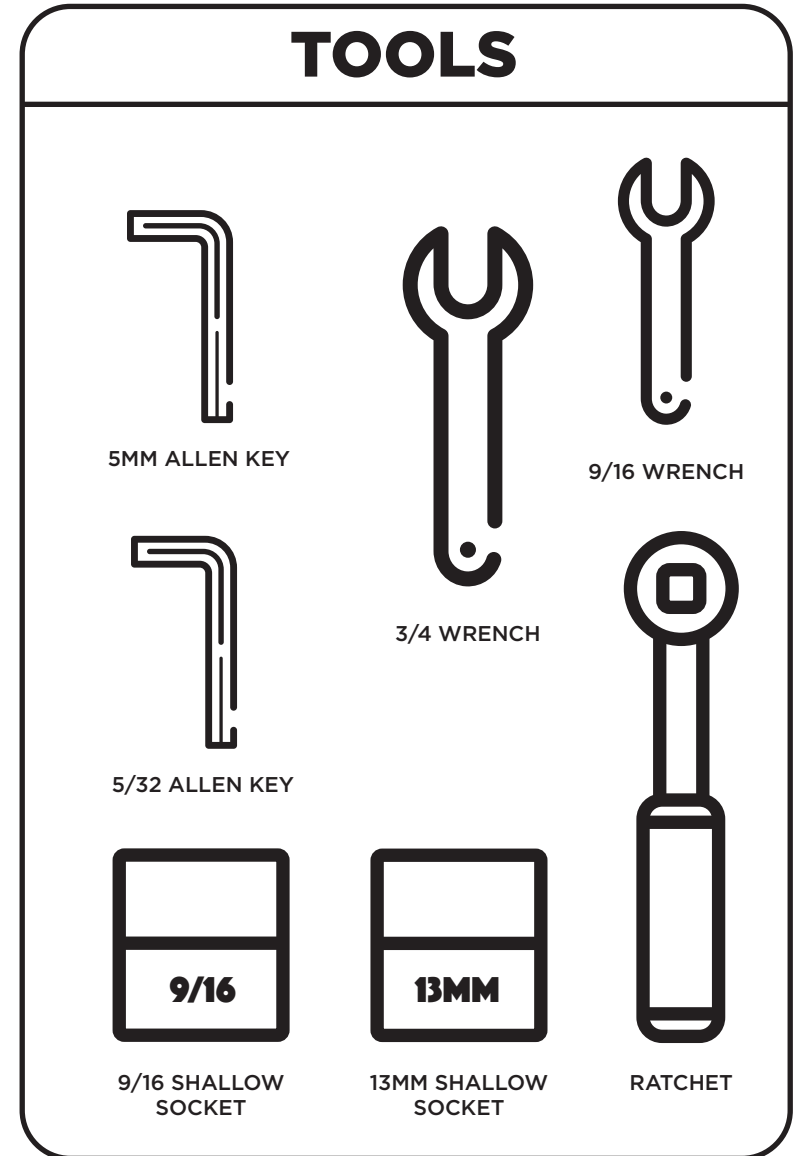
- PLEASE INSPECT THE PRODUCT TO ENSURE THERE WAS NO DAMAGE INCURRED DURING SHIPPING.
- IF THERE IS DAMAGE TO REPORT, PLEASE CONTACT OUR CUSTOMER SERVICE DEPARTMENT AS SOON AS POSSIBLE.
- NEXT, USING THE "PACKAGE CONTENTS" PAGE, CHECK INVENTORY AND FAMILIARIZE YOURSELF WITH THE PARTS AND HARDWARE.
- GATHER ALL TOOLS REQUIRED FOR INSTALL.
  - RATCHET
  - 13MM SOCKET
  - 9/16 BOX WRENCH OR SOCKET
  - 7/32 HEX KEY ALLEN WRENCH
  - POWER DRILL
  - 3/16" DRILL BIT
  - 27/64" DRILL BIT
  - PLASTIC TRIM PIECE REMOVAL KIT (OPTIONAL)
  - BLUE LOCTITE

ESTIMATED INSTALL TIME- 2 HRS

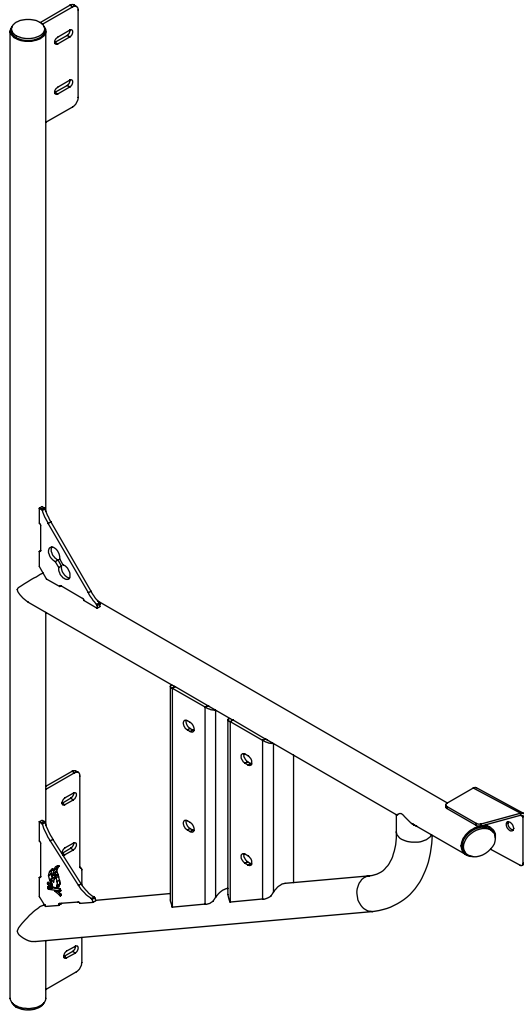
ADDITIONAL HELP IS SUGGESTED FOR A FEW OF THE INSTALL STEPS.

## \*\*DISCLAIMER\*\*

INSTALLING THE TIRE CARRIER LIMITS YOUR ABILITY TO OPEN THE DRIVER SIDE REAR DOOR PAST 90° WITHOUT THE TIRE CARRIER MAKING CONTACT WITH YOUR VAN. PLEASE BE ADVISED TO USE CARE OPENING THE DOOR PAST 90°

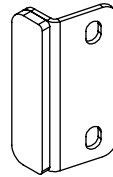


# PACKAGE CONTENTS



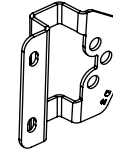
REAR TIRE CARRIER

QTY - 1



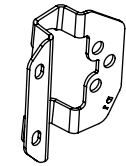
LOWER FRAME BRACE

QTY - 1



D2 HINGE BRACKET

QTY - 1



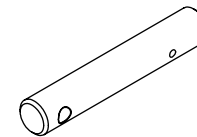
D1 HINGE BRACKET

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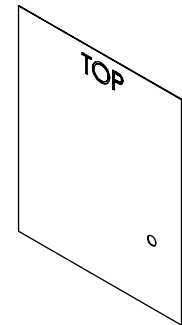
BACKER PLATE

QTY - 2



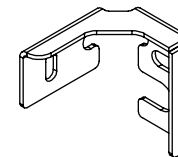
WHEEL REST

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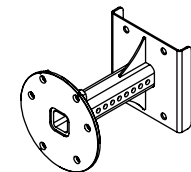
DRILL TEMPLATE

QTY - 1



INTERNAL DOOR BRACE

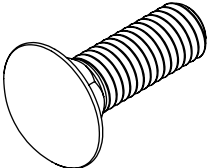
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WHEEL BRACKET

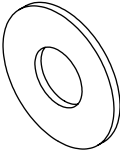
QTY - 1

# HARDWARE



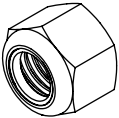
1/2-13 X 1.5 SQUARE NECK  
CARRIAGE BOLT

QTY - 4



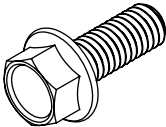
1/2 SCREW FLAT WASHER

QTY - 4



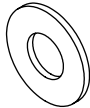
1/2-13 NYLON INSERT  
LOCKNUT

QTY - 4



3/8-16 X 1 FLANGED HEX  
HEAD SCREW

QTY - 8



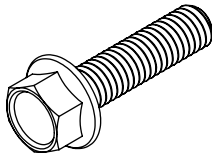
3/8 SCREW FLAT WASHER

QTY - 9



3/8-16 NYLON INSERT  
LOCKNUT

QTY - 7



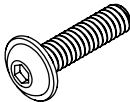
3/8-16 X 1.5 FLANGED HEX  
HEAD SCREW

QTY - 1



3/8 SCREW BONDED  
SEALING WASHER

QTY - 1



1/4-20 X 1.0 FLANGED  
BUTTON HEAD HEX DRIVE  
SCREW

QTY - 1



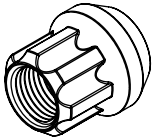
1/4 SCREW FLAT WASHER

QTY - 1



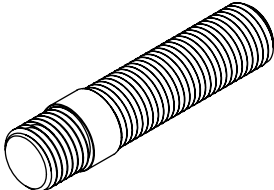
1/4-20 NYLON INSERT  
LOCKNUT

QTY - 1



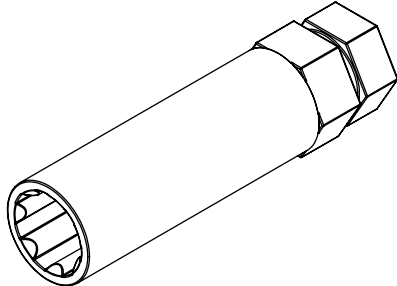
M14-1.5 LUG NUT

QTY - 3



M14-1.5 WHEEL STUD

QTY - 3



LUG NUT KEY

QTY - 3

# LET'S GET STARTED!

WE SUGGEST HAVING A HELPING HAND WITH THESE FIRST FEW STEPS TO HELP SUPPORT THE DOOR!

1. STARTING WITH THE BOTTOM HINGE ON YOUR DRIVER SIDE DOOR; MAKE SOME ALIGNMENT MARKS WITH A SHARPIE OR MARKER, AND THEN REMOVE THE 3 FACTORY BOLTS WITH A 13MM SOCKET. HAVE SOMEONE SUPPORT THE DOOR FOR YOU AND THEN SWING THE HINGE BACK AS SHOWN IN **FIGURE 2** SO YOU CAN SLIDE THE **D2 HINGE BRACKET** OVER THE HINGE. THEN REINSTALL THE FACTORY BOLTS AND SNUG DOWN. CHECK CLEARANCES BY SLOWLY CLOSING THE DOOR; IF ALL IS CLEAR THEN TIGHTEN DOWN THE BOLTS.

**NOTE-** SOME MANIPULATION OF THE BRACKET AND HINGE MAY BE NECESSARY TO GET THE BRACKET SEATED CORRECTLY ON TOP OF THE HINGE AND THE HINGE BACK IN PLACE.

2. REPEAT THE SAME PROCESS ON THE UPPER HINGE FOR THE **D1 HINGE BRACKET**. ENSURE THAT THE DOOR IS SAFELY SUPPORTED AND DOES NOT TWIST WHEN UNBOLTING THE HINGE. ONCE THE **D1 HINGE BRACKET** IS INSTALLED, TEST DOOR FUNCTION AND MAKE SURE THERE IS NO CONTACT WITH THE DOOR OR BODY OF THE VAN DURING OPERATION.

**FIGURE 2**



**FIGURE 1**



**MAKE  
ALIGNMENT  
MARKS**

**FIGURE 3**



FIGURE 4



- 3. NEXT, YOU WILL NEED TO REMOVE THE INTERIOR DOOR PANEL. WE RECOMMEND USING SOME PLASTIC PANEL REMOVAL TOOLS (EASILY FOUND AT HARBOR FREIGHT OR SIMILAR) BE GENTLE WHEN PRYING AS TO NOT BREAK THE FACTORY PANEL CLIPS. ONCE YOU GET THE FIRST FEW POPPED YOU SHOULD BE ABLE TO PULL IT THE REST OF THE WAY WITH YOUR HANDS.

*NOTE- SOMETIMES THE CLIPS WILL GET STUCK IN THE DOOR. ALL YOU NEED TO DO IS POP THEM OUT AND SLIDE THEM BACK IN TO THEIR LOCATION ON THE TRIM PANEL.*

- 4. WITH THE DOOR TRIM REMOVED; YOU SHOULD SEE THE FACTORY VAPOR BARRIER (OUR VAN DIDN'T HAVE IT) YOU WILL WANT TO SLOWLY PEEL BACK THE TOP LEFT CORNER BEING CAREFUL TO KEEP THE ADHESIVE ON THE VAPOR BARRIER TO MAKE RE-INSTALLATION EASIER. PEEL IT BACK ABOUT HALFWAY.

FIGURE 5



TRIM PANEL  
REMOVAL  
TOOLS

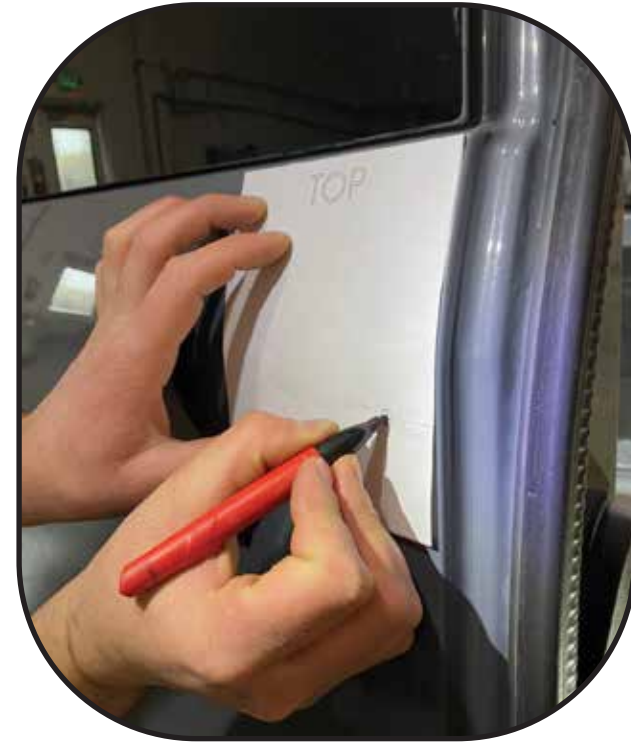


5. NOW GRAB YOUR **EXTERIOR DRILL TEMPLATE** AND LINE IT UP WITH THE EDGE OF THE DOOR AND EDGE OF SHEET METAL UNDER THE WINDOW (OR WINDOW SPACE) AND MARK YOUR HOLE TO DRILL.
6. GRAB YOUR DRILL AND START BY DRILLING A HOLE WITH YOUR PILOT BIT, THEN FINISH THE HOLE WITH THE 27/64" DRILL BIT. WE RECOMMEND DEBURRING THE HOLE WITH A DEBURRING TOOL OR COUNTERSINK, AND THEN PAINTING THE EXPOSED EDGES WITH A RUST PREVENTATIVE PAINT.

**FIGURE 7**



**FIGURE 6**



**FIGURE 8**

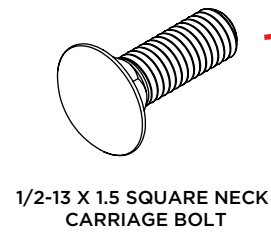
**MAKE SURE TO  
DRILL THROUGH  
BOTH LAYERS OF  
SHEET METAL**





7. NEXT WE NEED TO ATTACH THE **WHEEL BRACKET** TO THE **REAR TIRE CARRIER**. USING THE HARDWARE SHOWN BELOW, BOLT THE **WHEEL BRACKET** TO THE **TIRE CARRIER**. ENSURE THAT THE **BACKER PLATES** ARE INSTALLED AS SHOWN BELOW IN **FIGURE 10**. THEN TIGHTEN ALL HARDWARE DOWN WITH A 3/4" WRENCH.

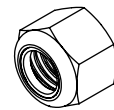
**FIGURE 10**



1/2-13 X 1.5 SQUARE NECK CARRIAGE BOLT

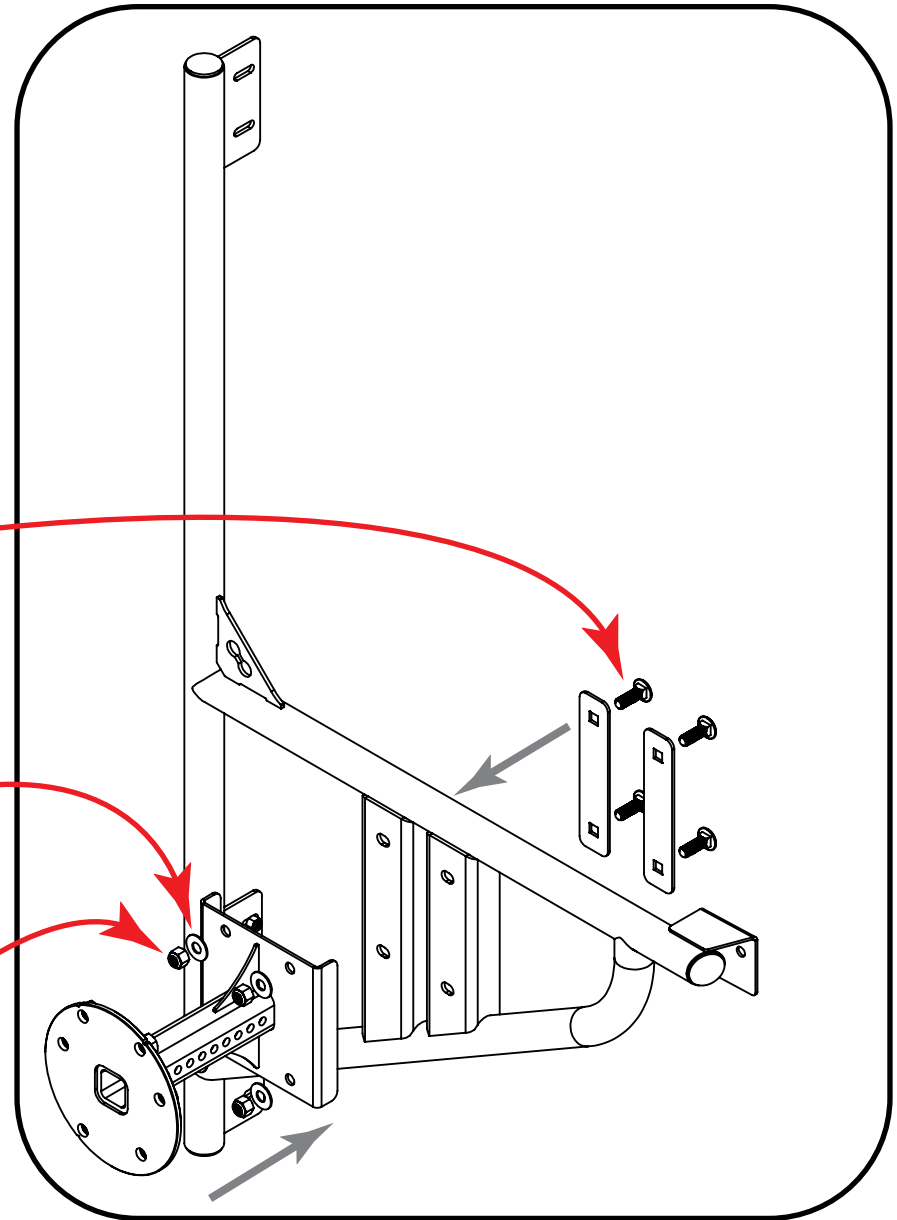


1/2 SCREW FLAT WASHER



1/2-13 NYLON INSERT LOCKNUT

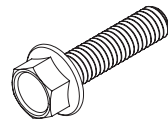
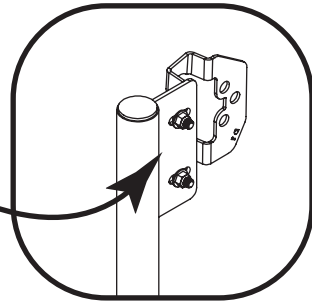
**FIGURE 9**



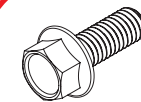
8. NOW IT'S TIME TO GET THE **TIRE CARRIER ASSEMBLY** BOLTED UP. HAVE SOMEONE HELP YOU BY INSERTING THE HARDWARE AS SHOWN WHILE HOLDING THE **TIRE CARRIER** IN PLACE. LEAVE THE HARDWARE LOOSE FOR NOW AND CONTINUE TO SUPPORT IT THROUGH THE NEXT STEP.

*NOTE- THE TIRE CARRIER ASSEMBLY RESTS ON THE INSIDE OF THE HINGE BRACKETS*

**FIGURE 12**



3/8-16 X 1.5 FLANGED HEX HEAD SCREW



3/8-16 X 1 FLANGED HEX HEAD SCREW



3/8 SCREW BONDED SEALING WASHER



3/8-16 FLANGED NYLON INSERT LOCKNUT

**FIGURE 11**



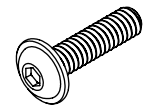
9. NEXT WE INSTALL THE **INTERNAL DOOR BRACE**. SLIDE THE BRACE OVER THE BOLT YOU HAVE INSERTED THROUGH THE DOOR AND PLACE THE **3/8 SCREW FLAT WASHER** AND **3/8-16 NYLON INSERT LOCK NUT** ON LOOSELY. AT THIS POINT THE PERSON SUPPORTING THE DOOR CAN BE RELIEVED. THEN ALIGN THE BRACE WITH THE HOLE ON THE INSIDE OF THE DOOR FRAME AND INSERT THE **1/4-20 X 1.0 FLANGED BUTTON HEAD HEX DRIVE SCREW** THROUGH THE SLOT AS SHOWN IN **FIGURE 15**. PLACE THE **1/4 SCREW FLAT WASHER** AND **1/4-20 NYLON INSERT LOCKNUT** ON AND THREAD LOOSELY. NOW ENSURE THE BRACE IS SEATED FLAT ON BOTH SURFACES AND TIGHTEN ALL FASTENERS DOWN.

**FIGURE 15**



**FIGURE 13**

**FIGURE 14**



**1/4-20 X 1.0 FLANGED  
BUTTON HEAD HEX DRIVE  
SCREW**



**1/4 SCREW FLAT WASHER**



**1/4-20 NYLON INSERT  
LOCKNUT**



**3/8 SCREW FLAT WASHER**



**3/8-16 NYLON INSERT  
LOCKNUT**

10. TIGHTEN THE 4 BOLTS ON THE HINGE BRACKETS.

11. MAKE SURE THE 3RD MOUNT IS TIGHT, THEN OPERATE THE DOOR AND MAKE SURE THAT THERE IS NO INTERFERENCE WITH ANY OF THE MOUNT BRACKETS.

**FIGURE 16**



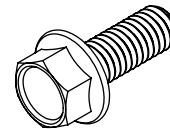
**FIGURE 17**



**FIGURE 18**

12. GRAB THE LOWER FRAME BRACE, AND ATTACH IT USING THE 3/8-16 X 1 FLANGED HEX HEAD SCREWS, 3/8 SCREW FLAT WASHER, AND 3/8-16 NYLON INSERT LOCKNUTS. ENSURE THAT THE BRACE IS BUTTED TIGHT TO THE DOOR AND TIGHTEN DOWN.

**FIGURE 19**



**3/8-16 X 1 FLANGED HEX  
HEAD SCREW**



**3/8 SCREW FLAT WASHER**



**3/8-16 NYLON INSERT  
LOCKNUT**

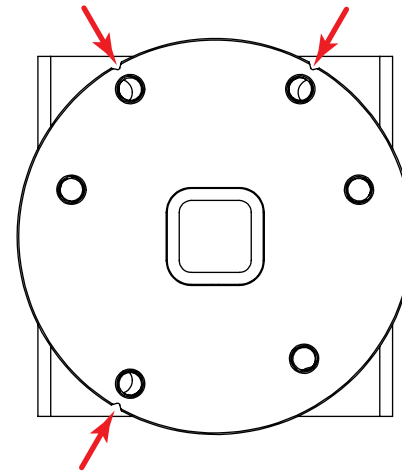
13. NEXT WE WILL INSERT THE WHEEL STUDS. GRAB THE THREE **M14-1.5 WHEEL STUDS**, APPLY SOME BLUE LOCTITE ON THE SHORT END AS SHOWN BELOW, AND THREAD IN TO THE HOLES MARKED WITH NOTCHES ON THE MOUNTING PLATE.
14. TIGHTEN THEM DOWN WITH A 5MM ALLEN WRENCH. THEY DO NOT NEED TO BE TORQUED HARD, JUST TIGHT. IF TOO MUCH TORQUE IS APPLIED IT WILL STRIP THE ALLEN KEY WAY ON THE STUD.

YOU ARE NOW READY TO INSTALL YOUR WHEEL AND HIT THE ROAD!

**FIGURE 20**



**FIGURE 21**



**INSERT WHEEL STUDS INTO MARKED LOCATIONS THESE ARE INDICATED WITH NOTCHES ON THE MOUNTING PLATE ITSELF**

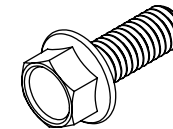
15. IF YOU INTEND ON USING THE **WHEEL REST**, WE RECOMMEND SETTING YOUR SPARE WHEEL IN POSITION ON THE CARRIER AND INSERTING THE **WHEEL REST** TO SET THE CORRECT INSERTION DEPTH. AFTERMARKET WHEELS VARY IN DEPTH FROM THE MOUNTING SURFACE, SO THEY MAY NEED A DIFFERENT INSERTION DEPTH THAN A STOCK WHEEL. YOU CAN MARK THE DEPTH WITH A PIECE OF PAINTERS TAPE OR SIMILAR.
16. ONCE YOU'VE DETERMINED DEPTH, INSERT THE **WHEEL REST** AS SHOWN IN **FIGURE 23**. WE RECOMMEND PUTTING BLUE LOCTITE ON THE BOLTS BEFORE THREADING THEM IN. TIGHTEN THEM DOWN.

THE LARGE HOLE ON THE END OF THE WHEEL REST IS DESIGNED TO ACCEPT A LOCK. WE LIKE TO USE A STANDARD RECEIVER HITCH LOCK AS THEY'RE EASY TO FIND AND USE.

**FIGURE 22**



**FIGURE 23**



**3/8-16 X 1 FLANGED HEX HEAD SCREW**



**3/8 SCREW FLAT WASHER**

# GET OUT AND EXPLORE!

## LEAVE US A REVIEW

Happy with your new FVC product? We would love to hear (and see) from you! Head to the product page and click "Leave Review." Add a short review and upload a few photos to be showcased on the product page.

## SHARE YOUR PHOTOS WITH US

We love seeing how our customers use their FVC products and following along with your adventures. Tag us in your photos with @flatlinevanco or send them to us via email. We love posting customer pictures in our feed!

## CUSTOMER SUPPORT

If you are having any issues with your product, please reach out, and we will make it right. FVC is a company of van and outdoor enthusiasts that design and use our own products, so we want you to be as stoked on your new parts as we are!



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**thanks!**