



INSTALLATION GUIDE

WINNEBAGO EKKO REAR TIRE CARRIER PLATFORM

WB1102B



TOOLS REQUIRED (NOT INCLUDED)

- | | |
|---------------------------|------------------------|
| + POWER DRILL | + 10MM WRENCH |
| + 13/64" DRILL BIT | + 12MM WRENCH |
| + 39/64" DRILL BIT | + 13MM WRENCH |
| + 5/32" ALLEN WRENCH | + PHILLIPS SCREWDRIVER |
| + 7/32" ALLEN WRENCH | + FLUSH CUTTERS |
| + 7/16" WRENCH AND SOCKET | + CAULKING GUN |
| + 9/16" WRENCH AND SOCKET | + MASKING TAPE |
| + 3/4" WRENCH AND SOCKET | + EXTERIOR SEALANT |
| + 1 - 1/8" SOCKET | + SOFT Mallet |

INSTALL INFO

TIME TO INSTALL THIS PRODUCT: 2 HOURS

Additional help is suggested for a few of the install steps.

BEFORE YOU START

Please inspect the product and packaging upon delivery to ensure there are no issues and that all parts and hardware are accounted for.

Contact us ASAP if anything is missing at:

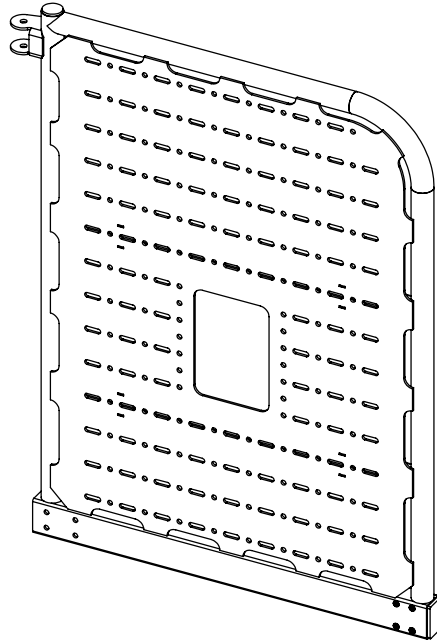
support@flatlinevanco.com

BEFORE YOU START

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.

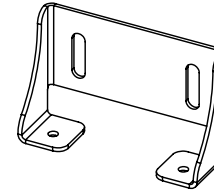


PLATFORM PACKAGE CONTENTS



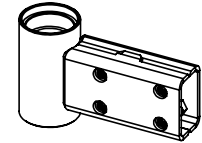
EKKO BUMPER REAR PANEL
WELDMENT

QTY: 1



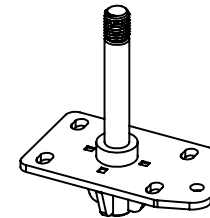
INSIDE UPPER PIVOT BACKER

QTY: 1



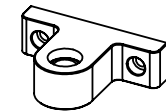
LOWER PIVOT PANEL MOUNT

QTY: 1



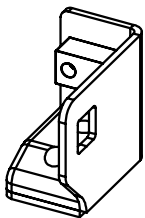
LOWER PIVOT SHAFT ASSEMBLY

QTY: 1



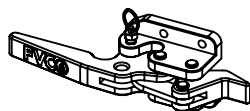
UPPER PIVOT ASSEMBLY

QTY: 1



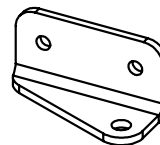
LATCH PLATE ASSEMBLY

QTY: 1



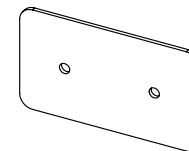
CAM LATCH ASSEMBLY

QTY: 1



GAS STRUT BRACKET

QTY: 1



UPPER PIVOT BACKER

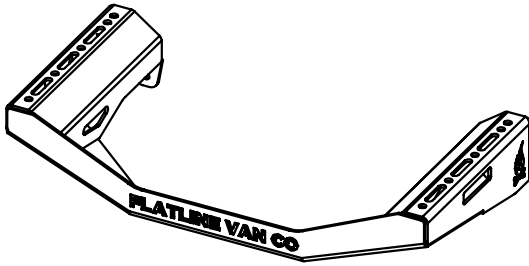
QTY: 1



UPPER PIVOT SPACER

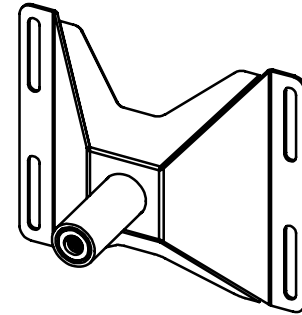
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TIRE CARRIER PACKAGE CONTENTS



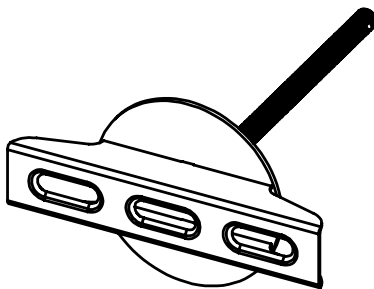
TIRE CRADLE WELDMENT

QTY: 1



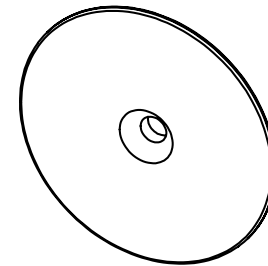
TIRE CENTER SUPPORT

QTY: 1



TIRE SCREW WELDMENT

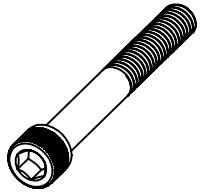
QTY: 1



CENTERING WHEEL CATCH

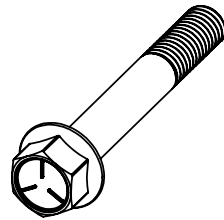
QTY: 1

HARDWARE



3/8-16 X 3 SOCKET HEAD
HEX DRIVE SCREW

QTY: 2



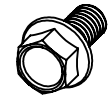
1/2-13 X 3.50 FLANGED HEX
HEAD SCREW

QTY: 1



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

QTY: 6



3/8-16 X 0.75 FLANGED HEX
HEAD SCREW

QTY: 8



3/8-16 X 1.5 FLANGED HEX
HEAD SCREW

QTY: 4



1/4-20 X 2.50 SOCKET
HEAD

QTY: 2



3/8-16 X 1.50 SOCKET HEAD
HEX DRIVE SCREW

QTY: 2



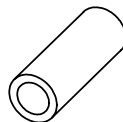
TAPERED
ROLLER BEARING

QTY: 2



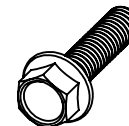
COTTER PIN

QTY: 1



TUBE SPACER

QTY: 2



3/8-16 X 1 FLANGED HEX
HEAD SCREW

RTC +8

HARDWARE



1/4 SCREW FLAT WASHER

QTY: 4



3/8 SCREW FLAT WASHER

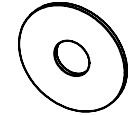
QTY: 26

RTC: +16



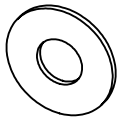
M8 FLAT WASHER

QTY: 2



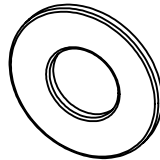
3/8 SCREW FENDER
WASHER

QTY: 2



1/2 SCREW FLAT WASHER

QTY: 2



3/4 SCREW FLAT WASHER

QTY: 1



1/4-20 NYLON INSERT
LOCKNUT

QTY: 2



3/8-16 NYLON INSERT
LOCKNUT

QTY: 8

RTC: +8



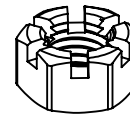
1/2-13 NYLON INSERT
LOCKNUT

QTY: 1



M8-1.25 NYLON INSERT
LOCKNUT

QTY: 1



3/4-10 CASTLE HEX NUT

QTY: 1

INSTALL

STEP | 01 LAYOUT AND INSTALL PREP

1.1 Park and Prep Van: Before beginning the installation, park your vehicle on a flat, level surface, turn off the engine, and engage the parking brake (**FIG 1**).

NOTE - The *FVC Rear Platform Tire Carrier* requires the prior installation of the *FVC Sprinter Ekko Rear Bumper*.

TOOLS REQUIRED FOR THIS STEP:



FIG 1

TOOLS REQUIRED FOR THIS STEP: + 7/32" ALLEN WRENCH
+ 9/16" SOCKET

STEP | 01 LAYOUT AND INSTALL PREP

1.2 Remove Platform Cover Plate (if applicable): Locate the rear bumper assembly on the vehicle (**FIG 2**). If installed, unbolt the **Factory Bumper Cover Plate** (highlighted in red) by removing the top mounting screws and the lower retaining hardware beneath the bumper channel (**FIG 3-4**).



FIG 2

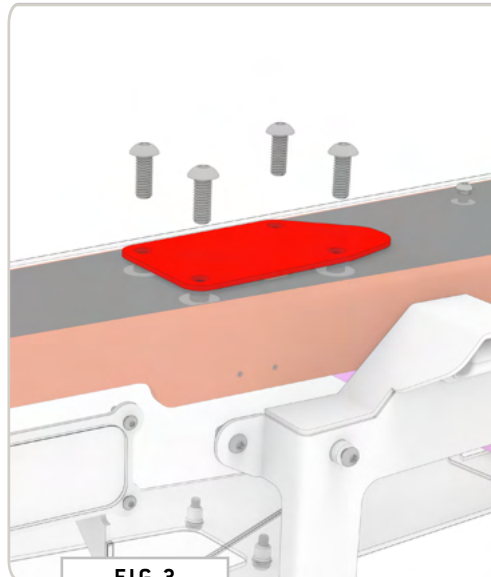


FIG 3

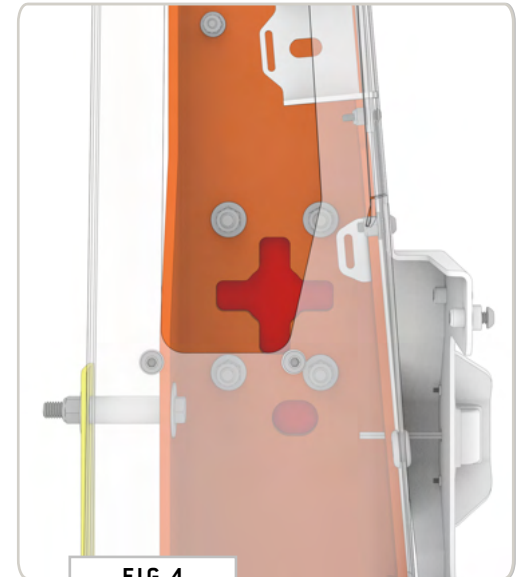


FIG 4

TOOLS REQUIRED FOR THIS STEP: + 9/16" WRENCH AND SOCKET

STEP | 02 INSTALL FVC PLATFORM

2.1 Install Lower Pivot Shaft Assembly: Place the **Lower Pivot Shaft Assembly** over the mounting holes on the driver-side surface of the bumper and insert four **3/8-16 x 1.50" Flanged Hex Head Screws** with **Washers** down through the baseplate. (FIG 5). Reaching through the access cutout in the **Bumper**, secure each bolt using **3/8" Flat Washers** and a **3/8-16 Nylon Locknuts** (FIG 6). Tighten securely.



FIG 5



FIG 6

STEP | 02 INSTALL FVC PLATFORM

2.2 Install Latch Plate Assembly: Position the **Latch Plate Assembly** onto the passenger-side surface of the bumper, aligning the two holes of the assembly to those of the **Bumper** (FIG 7). Fasten the latch plate with **3/8-16 x 1" Flanged Hex Head Screws**, **3/8" Flat Washers**, and **3/8-16 Nylon Locknuts** (FIG 8). Tighten securely.

TOOLS REQUIRED FOR THIS STEP: + 7/32" ALLEN WRENCH
+ 9/16" SOCKET

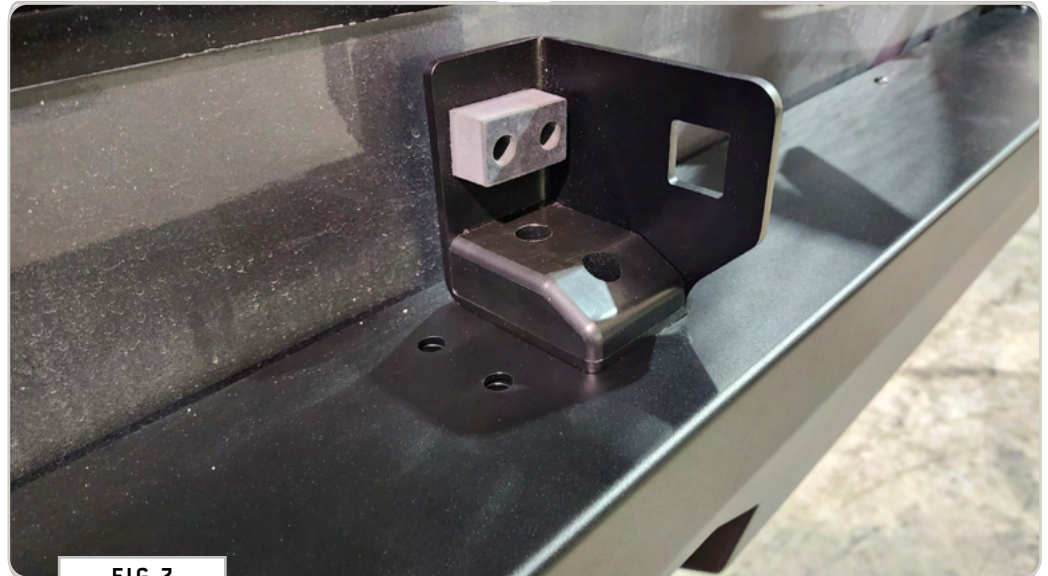


FIG 7

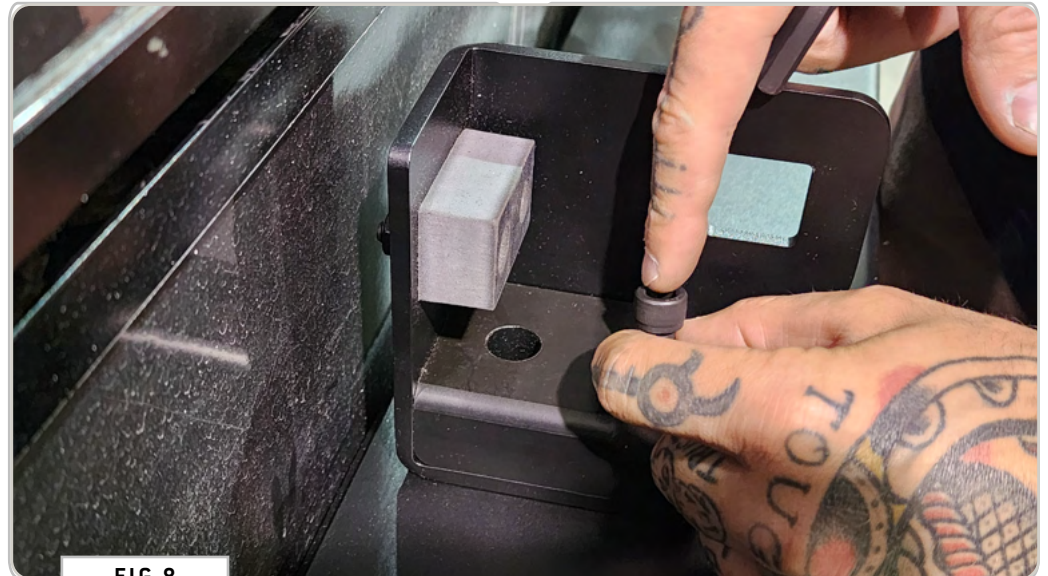


FIG 8

TOOLS REQUIRED FOR THIS STEP: +

STEP | 02 INSTALL FVC PLATFORM

2.3 Pack Roller Bearings: Apply **Waterproof Bearing Grease** thoroughly into the roller cages of the inner **Bearings** (FIG 9) until completely saturated (FIG 10).

NOTE - We recommend **Valvoline General Multipurpose Grease**, but any waterproof grease designed for use wheel bearings will work.



FIG 9



FIG 10

TOOLS REQUIRED FOR THIS STEP: + 9/16" WRENCH OR SOCKET

STEP | 02 INSTALL FVC PLATFORM

2.4 Attach Lower Pivot Panel Mount to Panel: Locate the **Lower Pivot Panel Mount** and align the mount against the **Lower Hinge Tab** on the main **Panel Weldment** (FIG 11). Secure using **3/8-16 x 0.75" Flanged Hex Head Screws with Loctite** (FIG 12).

NOTE - Make sure to install the **Pivot Panel Mount** with the machined lip facing **upwards**.



FIG 11



FIG 12

TOOLS REQUIRED FOR THIS STEP: + 5/32" ALLEN WRENCH
+ 10MM WRENCH

STEP | 02 INSTALL FVC PLATFORM

2.5 Attach Cam Latch Assembly to Platform: Attach Retractable Plunger to Cam Latch (FIG 13). Position the Cam Latch Assembly onto the lower passenger-side mounting area of the Panel Weldment (FIG 14). Secure using 1/4-20 x 1" Button Head Hex Drive Screws with Loctite (FIG 15).

NOTE - When attaching the *Plunger* to the *Cam Latch*, don't torque it all the way down. Leave just enough room for the latch to actuate when the plunger is retracted.



FIG 13



FIG 14

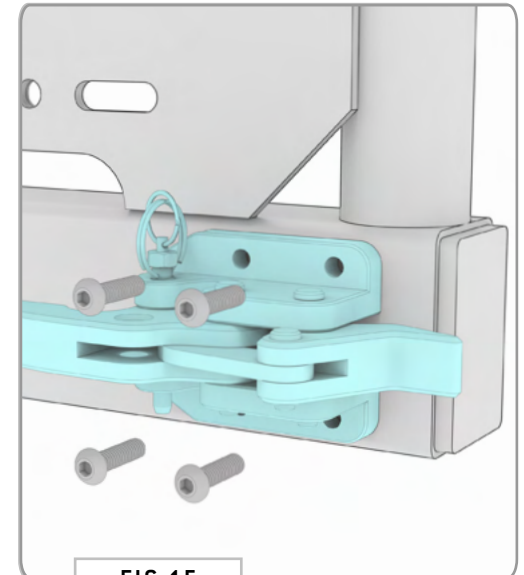


FIG 15

STEP | 02 INSTALL FVC PLATFORM

2.6 Attach Roller Bearing to Lower Pivot Shaft: Slide one packed tapered roller bearing down over the shaft of the **Lower Pivot Shaft Assembly (FIG 16)**. Press down until the bearing sits flush against the bottom collar and apply a light coat of bearing grease to the assembly (**FIG 17**).

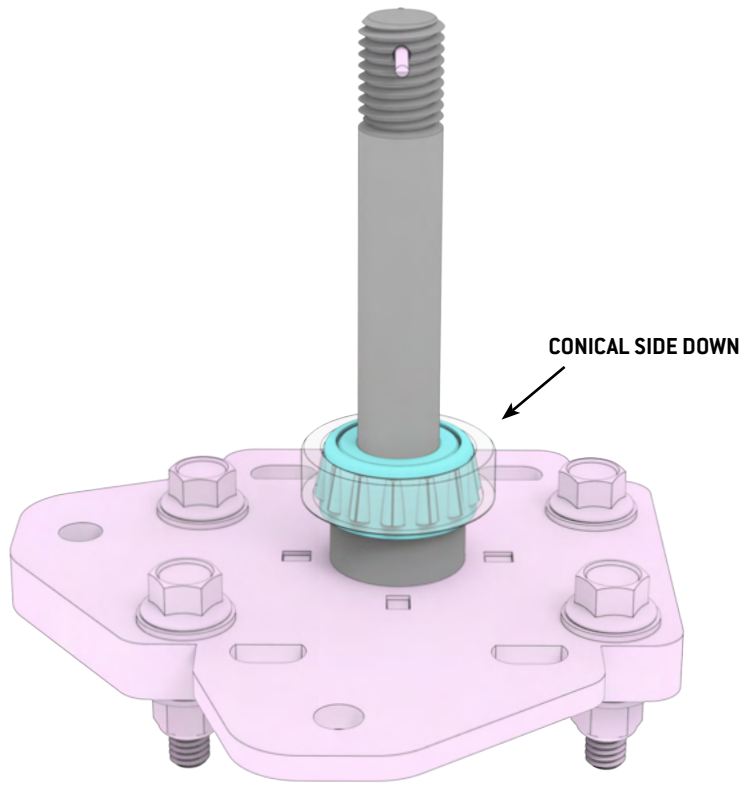


FIG 16



FIG 17

TOOLS REQUIRED FOR THIS STEP:

TOOLS REQUIRED FOR THIS STEP: + 3/4" WRENCH AND SOCKET

STEP | 02 INSTALL FVC PLATFORM

2.7 Attach Pivot Assembly to Panel: Mount the **Upper Pivot Bracket** into the upper tube boss on the **Panel Weldment** using a hardware stack of **(1) 1/2-13 X 3.50 Flanged Hex Head Screw**, **(2) 1/2" Flat Washers**, **(1) Pivot Install Spacer** and **(1) Nylon Locknut** (FIG 19). Leave hand-tight for final alignment adjustments.

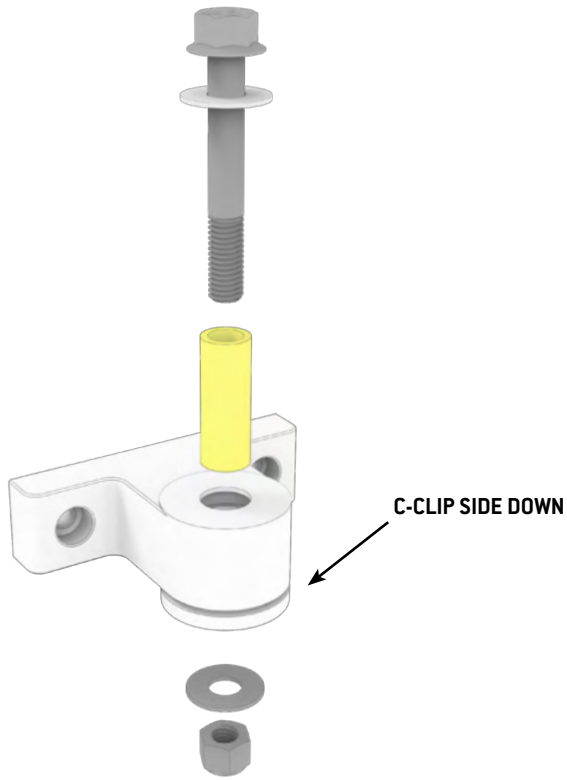


FIG 18

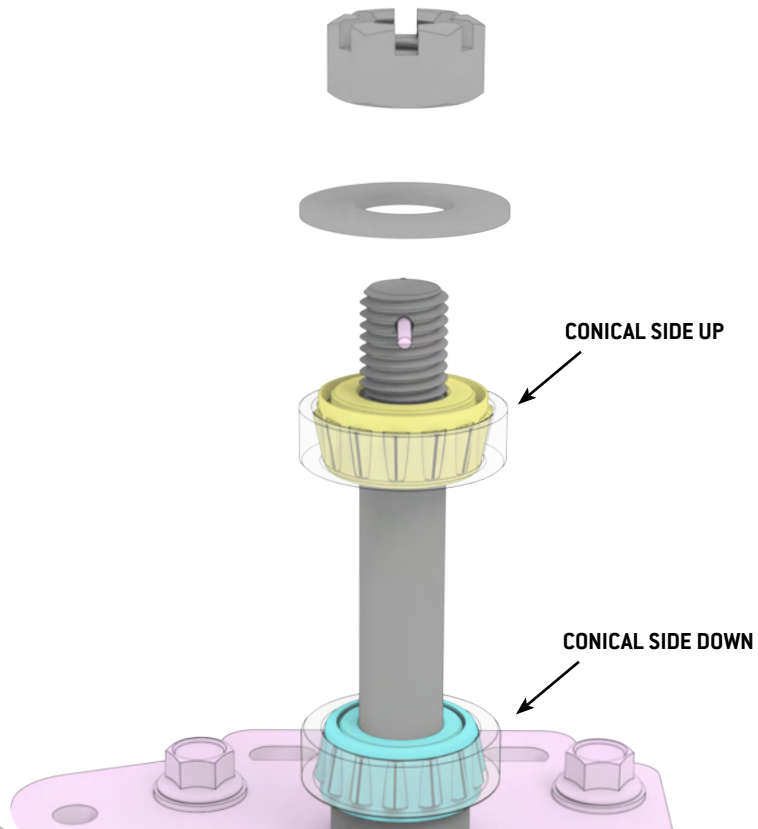


FIG 19

STEP | 02 INSTALL FVC PLATFORM

2.8 Fit Panel to Lower Pivot Assembly: With an assistant, lift the **Panel Weldment** and **Lower The Pivot Mount Tube** directly onto the **Lower Pivot Shaft** (FIG 20-21).

2.9 Set Upper Roller Bearing: Slide the second packed **Tapered Roller Bearing** down over the top of the pivot shaft until seated in the top bearing cup (FIG 22).



TOOLS REQUIRED FOR THIS STEP:



FIG 20



FIG 21



FIG 22

TOOLS REQUIRED FOR THIS STEP: + 1 - 1/8" SOCKET

STEP | 02 INSTALL FVC PLATFORM

2.10 Temporarily Secure With Castle Nut: Place the 3/4" Flat Washer over the upper bearing (FIG 23). Thread the 3/4-10 Castle Hex Nut onto the top threaded end of the pivot shaft (FIG 24). Tighten with a socket wrench to seat the bearings and eliminate pivot play (FIG 25-26).

NOTE - Do not overtighten. This is temporary and only needs to be enough to align the platform for next steps.



FIG 23



FIG 24



FIG 25



FIG 26

STEP | 02 INSTALL FVC PLATFORM

2.11 Mark Upper Drill Holes: Swing the panel shut, engaging the **Cam Latch** to confirm true alignment (**FIG 27**). Hold the **Upper Pivot Assembly** flat against the Ekko rear body panel. Mark the two upper mounting hole centers onto the body wall with a marker (**FIG 28**) Use the **Upper Pivot Backer** to verify level with a bubble level (**FIG 29**).

TOOLS REQUIRED FOR THIS STEP: + MARKER
+ BUBBLE LEVEL



FIG 27



FIG 28



FIG 29

STEP | 02 INSTALL FVC PLATFORM

2.12 Remove Panel and Drill Holes: Unlatch and lift the panel off the **lower Pivot Shaft** and set aside. Place a shop towel over the **Lower Pivot Shaft** to protect against debris (**FIG 30**). Drill pilot holes into the marked locations on the body wall, then finish with a **39/64" Drill Bit** (**FIG 31-32**). Clean up drill holes and van body (**FIG 33**).

TOOLS REQUIRED FOR THIS STEP: + 13/64" DRILL BIT
+ 39/64" DRILL BIT



FIG 30

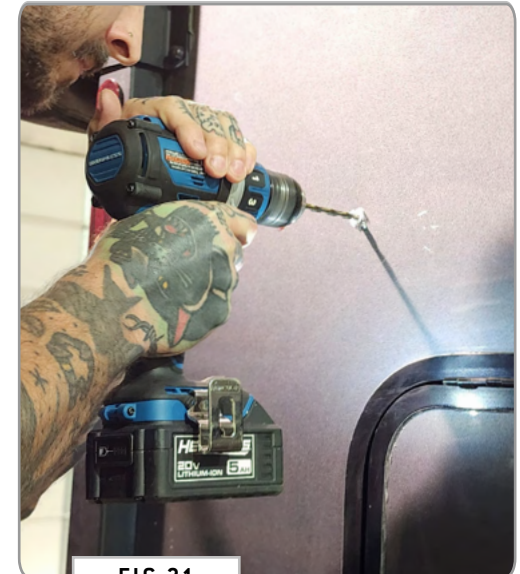


FIG 31



FIG 32

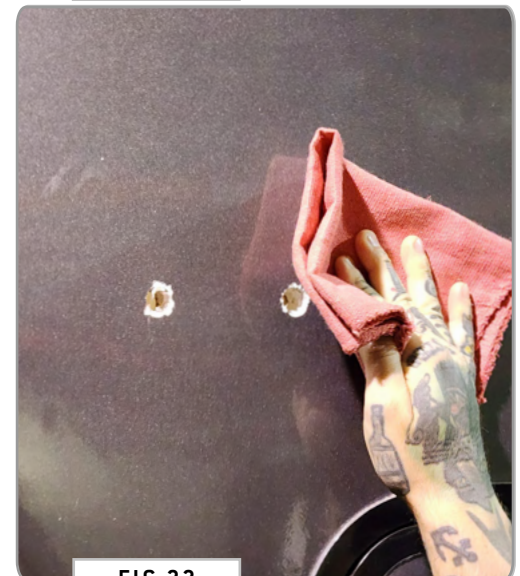


FIG 33

TOOLS REQUIRED FOR THIS STEP: + CAULKING GUN

STEP | 02 INSTALL FVC PLATFORM

2.13 Insert Tube Spacers and Apply Sealant: Press the two aluminum **Tube Spacers** into the drilled wall holes until flush with the wall surface (**FIG 34**). Trace around each drilled hole generously with exterior polyurethane sealant to seal against moisture (**FIG 35**).

NOTE - We recommend **Teroson MS 5510 BK**, but any waterproof exterior sealant will work.



FIG 34



FIG 35

TOOLS REQUIRED FOR THIS STEP: + MASKING TAPE
+ 1 - 1/8" SOCKET

STEP | 02 INSTALL FVC PLATFORM

2.14 Align Upper Pivot Backer and Secure Platform: Position the **Upper Pivot Backer** over the exterior drilled holes and tube spacers, taping it in place (**FIG 36-37**). Lift the **Panel Weldment** back onto the lower pivot shaft and re-thread the **3/4-10 Castle Nut** loosely onto the pivot shaft (**FIG 38**).

NOTE - Make sure that the **Cotter Pin** hole is accessible for next steps as shown in **FIG 38**.



FIG 36

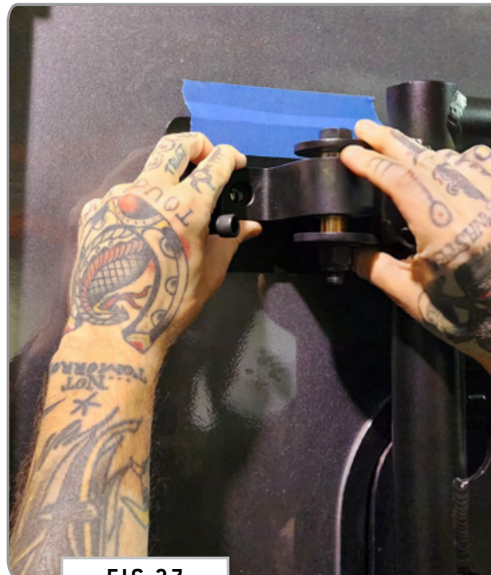


FIG 37



FIG 38

STEP | 02 INSTALL FVC PLATFORM

2.15 Prep for Interior Mount: From the *exterior*, insert two 3/8-16 x 3" Socket Head Screws through the **Upper Pivot Assembly, Pivot Backer and Tube Spacers (FIG 39)**. From the *interior*, use a **Phillips Head Screwdriver** and set of **Flush Cutters** to temporarily remove a section of the **Plastic Mattress Support (FIG 40)**.

TOOLS REQUIRED FOR THIS STEP: + PHILLIPS SCREWDRIVER
+ FLUSH CUTTERS

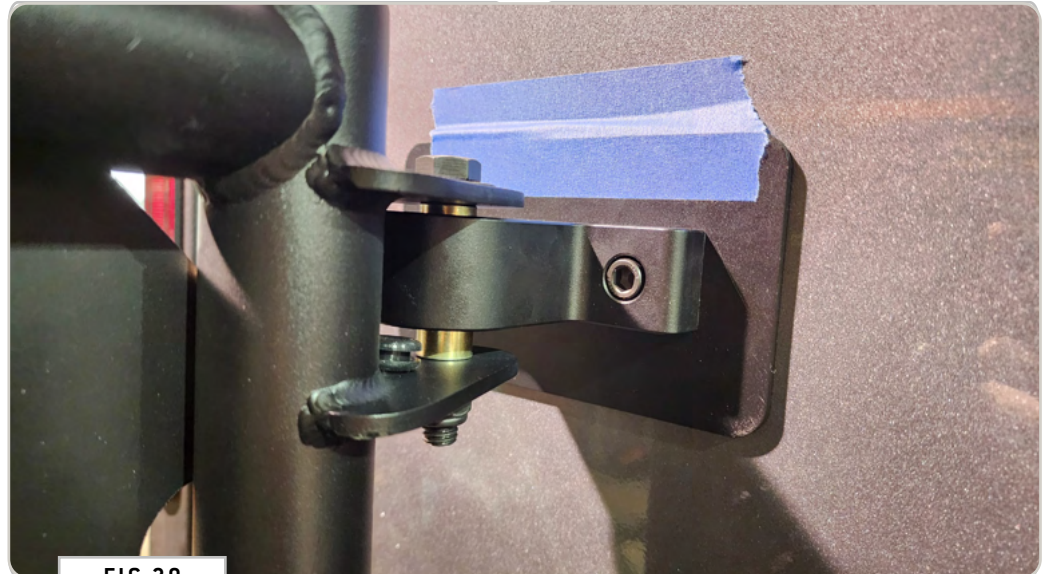


FIG 39



FIG 40

STEP | 02 INSTALL FVC PLATFORM

2.16a Prep for Upper Pivot Backer: Align the **Inside Upper Pivot Backer** over the protruding screws along the interior wall surface (**FIG 41**). Using the bracket as a template, mark the drill holes used for the lower mounting hardware (**FIG 42**). Remove the bracket and drill out holes using a **13/64" Drill Bit** (**FIG 43**).

2.16b Install Inside Upper Pivot Backer: Clean up all debris, realign bracket and with help, fasten **3/8" Flat Washers and Nylon Locknuts** to the protruding screws from the exterior. Along the bottom of the bracket, insert two **1/4-20 x 2.5 Socket Head Hex Drive Screws** with **Flat Washers** through the bracket and with help, fasten with an additional **Flat Washer and Nylon Locknut** from the rear **Garage Space** (**FIG 44**).

NOTE - You may reinstall the **Mattress Support** at this time, making modifications as needed.

TOOLS REQUIRED FOR THIS STEP:

- + MARKER
- + 13/64" DRILL BIT
- + 7/32" ALLEN WRENCH
- + 5/32" ALLEN WRENCH
- + 9/16" SOCKET
- + 7/16" SOCKET



FIG 41



FIG 42



FIG 43



FIG 44

TOOLS REQUIRED FOR THIS STEP: + PLIERS
+ SOFT MALLET

STEP | 02 INSTALL FVC PLATFORM

2.17 Install Cotter Pin and Dust Cap: Push the **Cotter Pin** through and bend its legs back around the nut to lock it in place (**FIG 45**). Gently tap the **Dust Cover** onto the top of the **Pivot Sleeve** using a soft mallet (**FIG 46**).



FIG 45



FIG 46

STEP | 02 INSTALL FVC PLATFORM

2.18 Install Strut Bracket: Bolt the **Gas Strut Bracket** onto the prescribed location along the **Panel Weldment** using **1/4-20 x 1" Button Head Hex Drive Screws** with **Loctite** (FIG 47).

2.19 Install Strut to Bumper: Thread the barrel end of the **Gas Strut** into the pre-threaded location of the **Lower Pivot Shaft Assembly** with **Loctite** (FIG 48).

TOOLS REQUIRED FOR THIS STEP: + 5/32" ALLEN WRENCH
+ 12MM WRENCH



FIG 47



FIG 48

STEP | 02 INSTALL FVC PLATFORM

2.20 Install Strut to Platform: Connect the rod-end of the **Gas Strut** to the **Strut Bracket** previously mounting to the lower bar of the **Panel Weldment** (FIG 49).

2.21 Apply Exterior Sealant: Apply a smooth, continuous bead of exterior automotive sealant around the outer edge of the exterior **Upper Pivot Backer plate** (FIG 50).

NOTE - We recommend **Teroson MS 5510 BK**, but any waterproof exterior sealant will work.

TOOLS REQUIRED FOR THIS STEP: + 12MM WRENCH
+ 13MM WRENCH
+ CAULKING GUN



FIG 49



FIG 50

TOOLS REQUIRED FOR THIS STEP: + 9/16" WRENCH AND SOCKET

STEP | 03 INSTALL TIRE CARRIER

[OPTIONAL TIRE CARRIER INSTALL PROCEDURE]

3.1 Install Tire Cradle Weldment: Select the desired mounting height of the **Tire Cradle Weldment** along the **Panel Platform** slot rows (FIG 51). Attach using four **3/8-16 x 1" Flanged Hex Head Screws, 3/8" Flat Washers and 3/8-16 Nylon Locknuts** through the slots (FIG 52).



FIG 51



FIG 52

TOOLS REQUIRED FOR THIS STEP: + 9/16" WRENCH AND SOCKET

STEP | 03 INSTALL TIRE CARRIER

3.2 Loosely Install Tire Center Support: Place the **Tire Center Support** against the center slot opening of the **Panel Weldment**. Install four **3/8-16 x 1" Flanged Hex Head Screws, Flat Washers, and 3/8-16 Nylon Locknuts** loosely to allow for up-and-down adjustment (**FIG 55-56**).

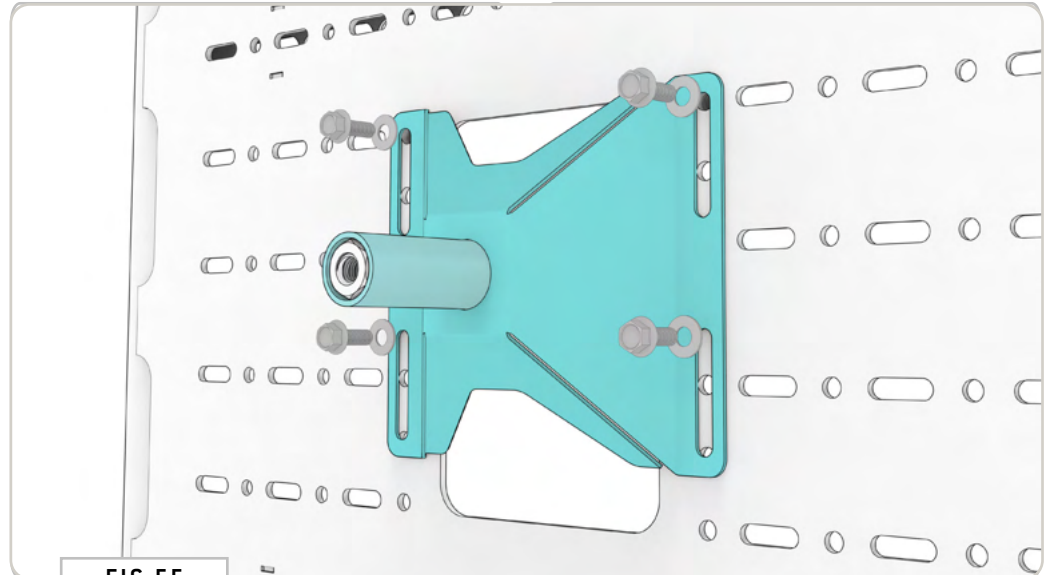


FIG 55

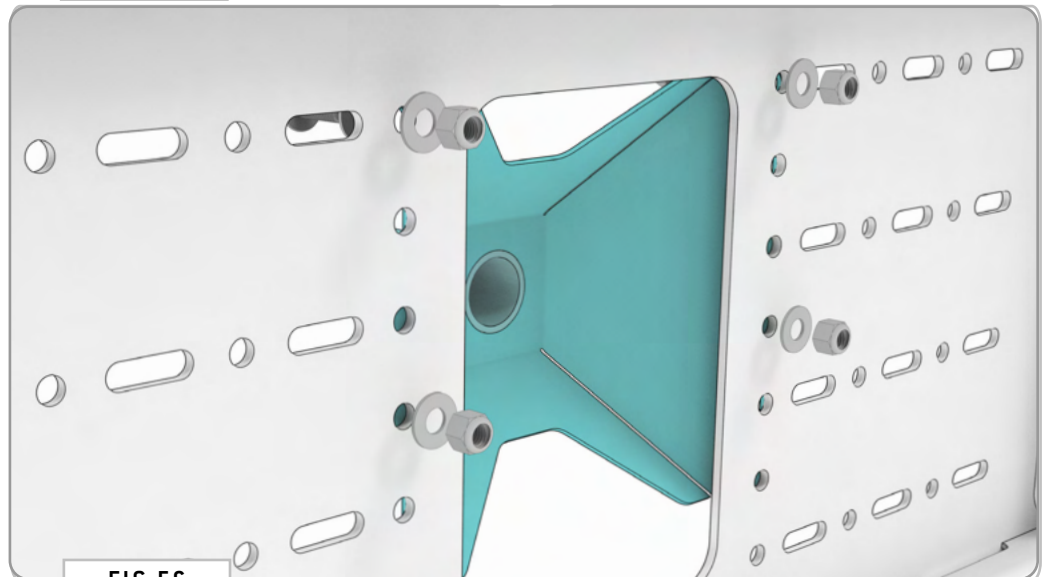


FIG 56

TOOLS REQUIRED FOR THIS STEP:

STEP | 03 INSTALL TIRE CARRIER

3.3 Release Spare Tire: Remove or lower the factory spare tire from under the vehicle (FIG 57).

3.4 Fit Spare Tire to Tire Cradle Weldment: Rest the tire into the **Tire Cradle Weldment** with the wheel face facing outward against the panel (FIG 58).

3.5 Secure Tire Center Support and Grease: Center the threaded sleeve of the **Tire Center Support** with the wheel hub hole. Tighten all four mounting bolts on the center support to lock its position. Apply waterproof grease onto the internal threads inside the center support sleeve (FIG 58).



STEP | 03 INSTALL TIRE CARRIER

3.6 Install Tire Screw and Wheel Catch: Position the **Centering Wheel Catch** over the tire screw handle, pressing it flat into the center wheel bore. Thread in the **Tire Screw Assembly** into the greased **Tire Center Support** sleeve (FIG 59-60). Spin the handle down tightly until the wheel is clamped firmly against the carrier framework.

TOOLS REQUIRED FOR THIS STEP:



FIG 59



FIG 60

TOOLS REQUIRED FOR THIS STEP:

STEP | 04 FINISHING TOUCHES

4.1 Final Checks: Double-check that all fasteners are tightened and all components are operating smoothly. Enjoy your new FVC Ekko Rear Platform/Tire Carrier!



FIG 61

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 PICS

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!

+ NEED ANY HELP?

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!



@FLATLINEVANCO