



INSTALLATION GUIDE

SPRINTER VAN APEX SIDE LADDER

SP0209B



TOOLS REQUIRED (NOT INCLUDED)

- | | |
|--------------------------|---------------------------|
| + 3/16" ALLEN WRENCH | + 1/4" DRILL BIT |
| + 7/32" ALLEN WRENCH | + 25/64" DRILL BIT |
| + 5/16" ALLEN WRENCH | + IMPACT DRILL |
| + 6MM ALLEN WRENCH | + RIVET NUT TOOL |
| + RATCHETING WRENCH | + RUST PREVENTATIVE PAINT |
| + 7/16" WRENCH OR SOCKET | + CENTER PUNCH |
| + 9/16" WRENCH OR SOCKET | + QUICK GRIP CLAMPS |
| + POWER DRILL | |

INSTALL INFO

TIME TO INSTALL THIS PRODUCT: 1 HOUR

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.

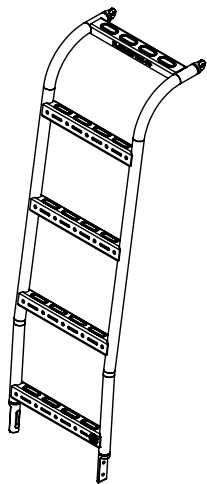
Contact us ASAP if anything is missing at:
support@flatlinevanco.com

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.

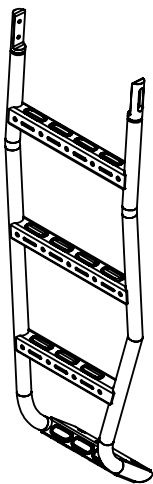


PACKAGE CONTENTS



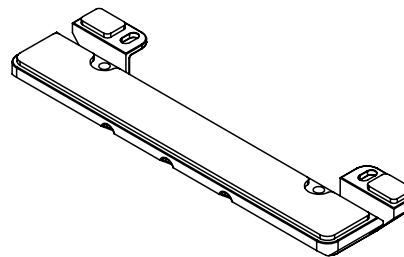
LADDER UPPER HALF

QTY: 1



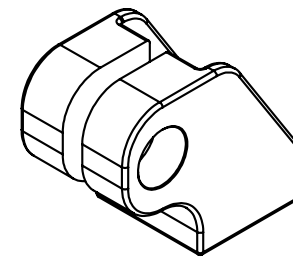
LADDER LOWER HALF

QTY: 1



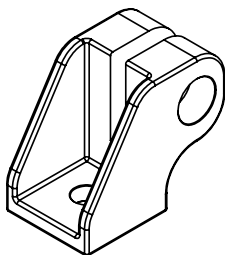
PINCH SEAM MOUNTING BRACKET

QTY: 1



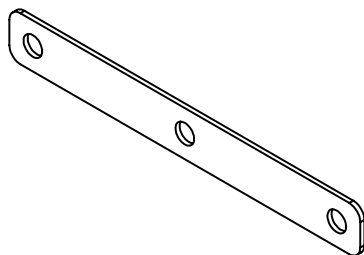
RIGHT SLIDE CLEVIS MOUNT

QTY: 1



LEFT SIDE CLEVIS MOUNT

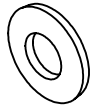
QTY: 1



PINCH SEAM BACKER PLATE

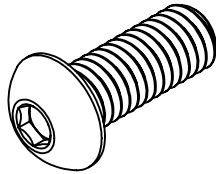
QTY: 1

HARDWARE



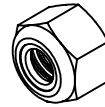
1/4 SCREW BELLEVILLE LOCK
WASHER

QTY: 2



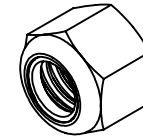
3/8-16 X 1 BUTTON HEAD
HEX DRIVE SCREW

QTY: 2



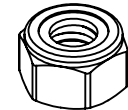
1/4-20 NYLON LOCKNUT

QTY: 3



3/8-16 NYLON LOCKNUT

QTY: 2



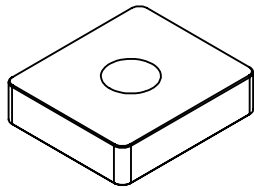
M8-1.25 NYLON LOCKNUT

QTY: 4



1/4-20 HEAVY DUTY RIVET
NUT

QTY: 4



SPRINTER RAIL NUT

QTY: 2



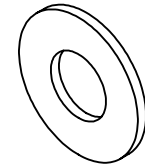
3/8 SCREW BELLEVILLE LOCK
WASHER

QTY: 2



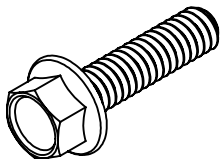
1/4 SCREW FLAT WASHER

QTY: 5



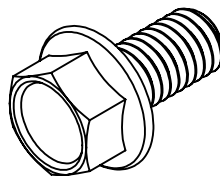
3/8 SCREW FLAT WASHER

QTY: 2



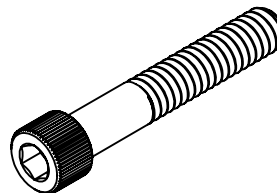
1/4-20 X 0.75 FLANGED
HEX HEAD SCREW

QTY: 2



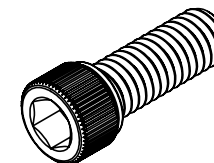
3/8-16 X 0.75 FLANGED HEX
HEAD SCREW

QTY: 2



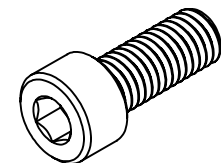
1/4-20 x 1.5 SOCKET HEAD
HEX DRIVE SCREW

QTY: 5



3/8-16 X 1 SOCKET HEAD
HEX DRIVE SCREW

QTY: 2



M8-1.25 X 20 SOCKET HEAD
SCREW

QTY: 4

INSTALL

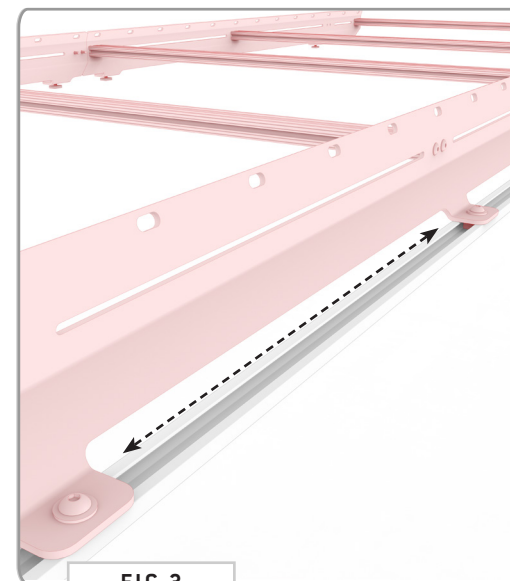
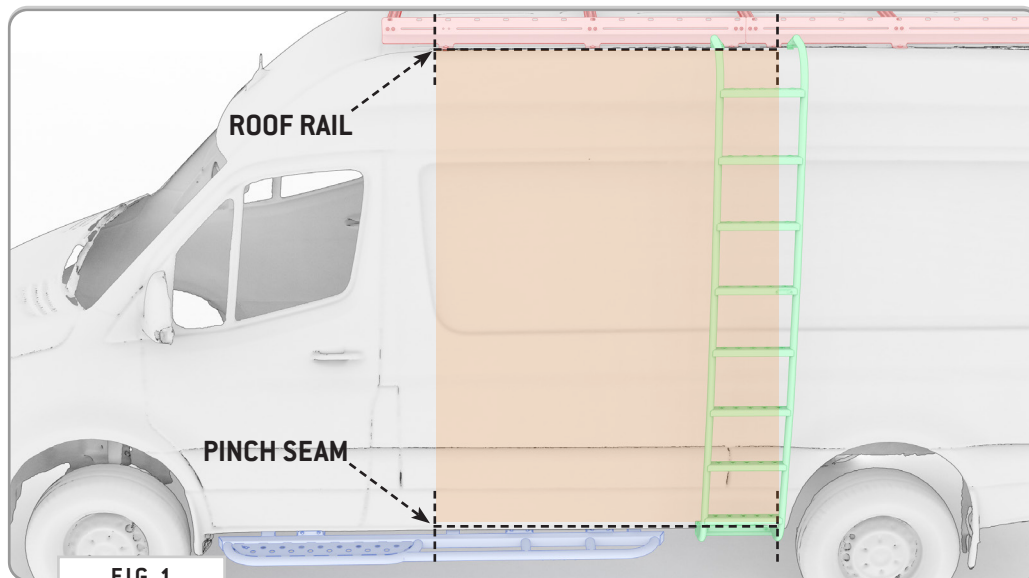
STEP | 01 LAYOUT AND INSTALL PREP

1.1 Identify Van Configuration: There could be any number of accessories mounted to your van that may inform the way you approach the install of your **Side Ladder** (Roof Racks, Side Steps, Water Tanks, etc.) See **FIG 1** for key areas that will need accessed.

NOTE - The van pictured is a 144" High Roof Sprinter, but the same principles apply to the 170"

NOTE - You may need to loosen or temporarily remove mounted accessories to gain sufficient access to the Roof Rail and Pinch Seam of your van.

TOOLS REQUIRED FOR THIS STEP:



STEP | 02 SIDE LADDER ASSEMBLY

2.1 Assemble Apex Ladder: Combine the **Top and Bottom Halves** of the **Side Ladder** using **(2ea) M8-1.25 X 20 Socket Cap Screws and M8-1.25 Locknuts (FIG 4+5)**.

NOTE - *You may need to use Quick Grip Clamps to keep the weldments aligned while tightening up the hardware.*

TOOLS REQUIRED FOR THIS STEP: + 6MM ALLEN WRENCH
+ QUICK GRIP CLAMPS

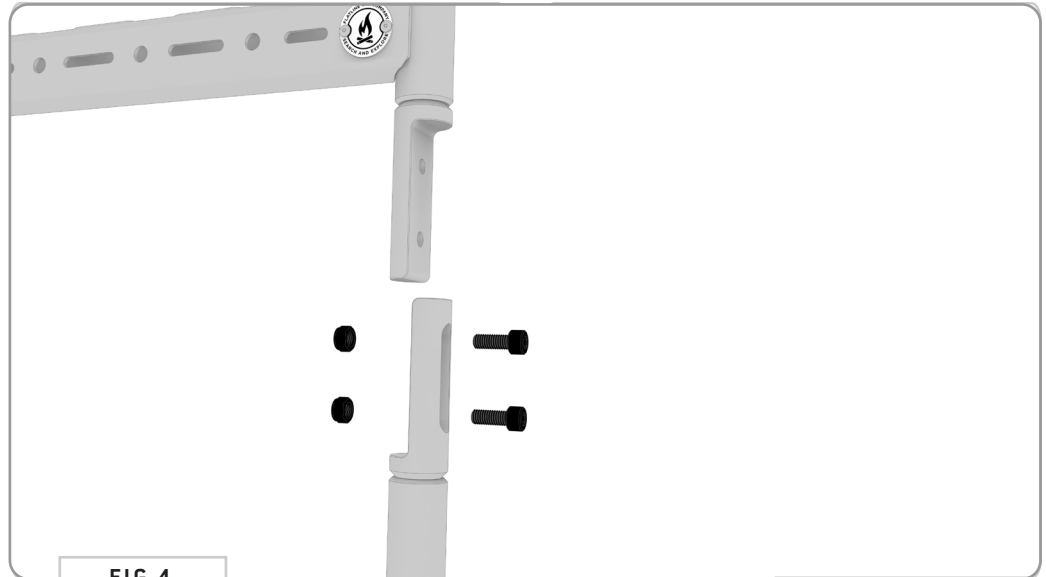


FIG 4



FIG 5

STEP | 03 SIDE LADDER INSTALL

3.1 Roof Rail Nuts: Slide in **Rail Nuts** to location of install along the **Roof Rail** (FIG 6+7).

NOTE - If you already have a **Roof Rack** installed, this can be a somewhat lengthy process.

3.2 Attach Ladder Clevises: Loosely secure **Right and Left Side Clevises** to **Rail Nuts** using (1ea) **3/8-16 x 0.5" Flanged Hex Head Screws** (FIG 7).

NOTE - The right side **Clevis** has the rounded through-hole on the **right**. The left side **Clevis** has the rounded through-hole on the **left**.

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

THIS SIDE OUT

THIS SIDE IN

FIG 6

FIG 7

STEP | 03 SIDE LADDER INSTALL

3.3 Dry Fit Pinch Seam Bracket to Van: Dry fit your **Pinch Seam Mounting Bracket** to the **Pinch Seam** of your van (FIG 8+9).

NOTE - There may be one or more “weep holes” along the **Pinch Seam** that the **Bracket** can snug up to on one side or the other, depending on how close you want it to be to the wheel well.

NOTE - Be sure not to block these weep holes! If they are inhibiting the **Bracket** from fitting correctly along the **Pinch Seam**, you can hammer them down, but don't seal them up completely.

3.4 Mark Holes for Drilling: Use the supplied **Drill Bit**, or a **Punch**, create a dimple in the undercoating as a mark for your **Drill Holes** (FIG 9).

NOTE - You can opt to use a **Marker** to accentuate your marks in order to avoid error.

TOOLS REQUIRED FOR THIS STEP:



FIG 8



FIG 9

STEP | 03 SIDE LADDER INSTALL

3.5 Drill Out Mounting Holes: Drill out your pilot holes using the supplied **1/4" Drill Bit (FIG 10)**, then ream out with a **25/64" Drill Bit**. Finish by smoothing out the hole with a **Countersink** or **Metal File (FIG 11)**.

3.6 Paint Exposed Edges: Using a **Rust Preventative Paint**, coat the exposed edges of the raw metal to protect it from corrosion (**FIG 12**).

3.7 Set Rivet Nuts: Using a **Rivet Nut Tool**, set the supplied **Rivet Nuts** in place (**FIG 13**).

NOTE - We recommend using a *pneumatic or electric drill adapter rivet nut tool* for this, although a *manual rivet nut tool* can work if you have enough ground clearance. We like the *Astro Tools ADN38 XL model* for a drill adapter.

TOOLS REQUIRED FOR THIS STEP:

- + POWER DRILL
- + 1/8" DRILL BIT
- + 9/16" WRENCH OR SOCKET
- + 7/32" ALLEN WRENCH
- + 7/16" WRENCH OR SOCKET
- + 5/32" ALLEN WRENCH



FIG 10

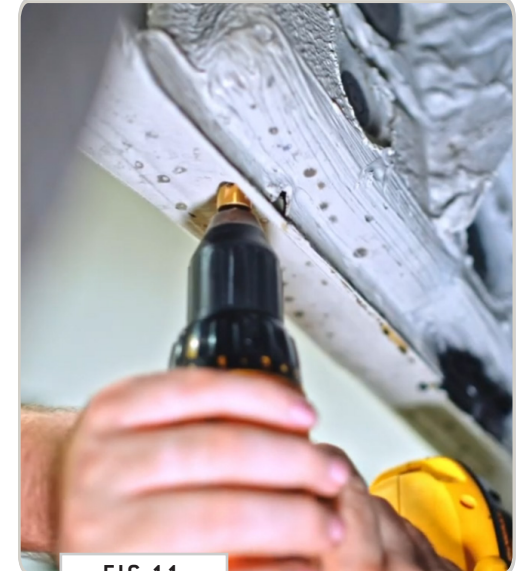


FIG 11



FIG 12



FIG 13

STEP | 03 SIDE LADDER INSTALL

3.8 Fastening Mounting Bracket to Van: After drilling, fasten the **Mounting Bracket** to the installed **Rivet Nuts**.

Use a stack of **(1ea) 1/4-20 x 0.75 Flanged Hex Head Screws, 1/4" Lock Washers and Flat Washers** for the **Interior Rivet Nuts**.

Use **(1ea) 1/4-20 x 1.5 Socket Cap Screws** for the **Exterior Rivet Nuts**.

TOOLS REQUIRED FOR THIS STEP:

- + POWER DRILL
- + 1/8" DRILL BIT
- + 9/16" WRENCH OR SOCKET
- + 7/32" ALLEN WRENCH
- + 7/16" WRENCH OR SOCKET
- + 5/32" ALLEN WRENCH

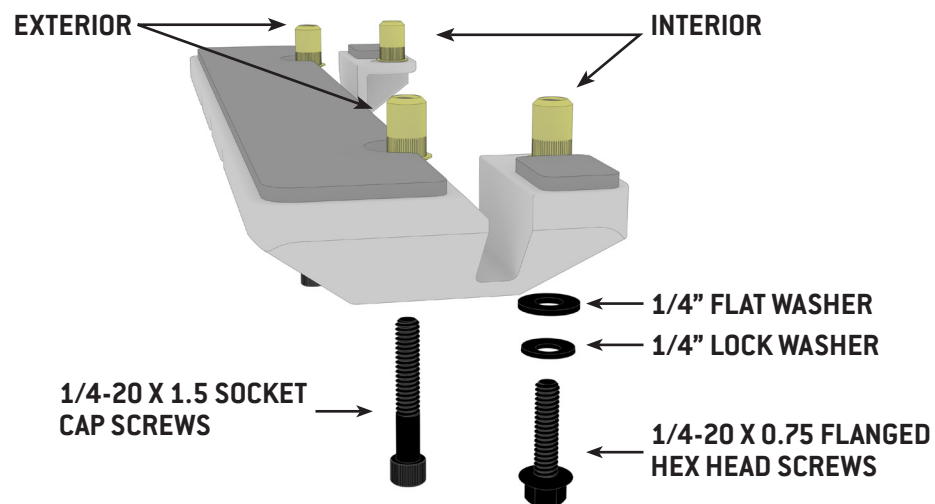


FIG 14



FIG 15

STEP | 03 SIDE LADDER INSTALL

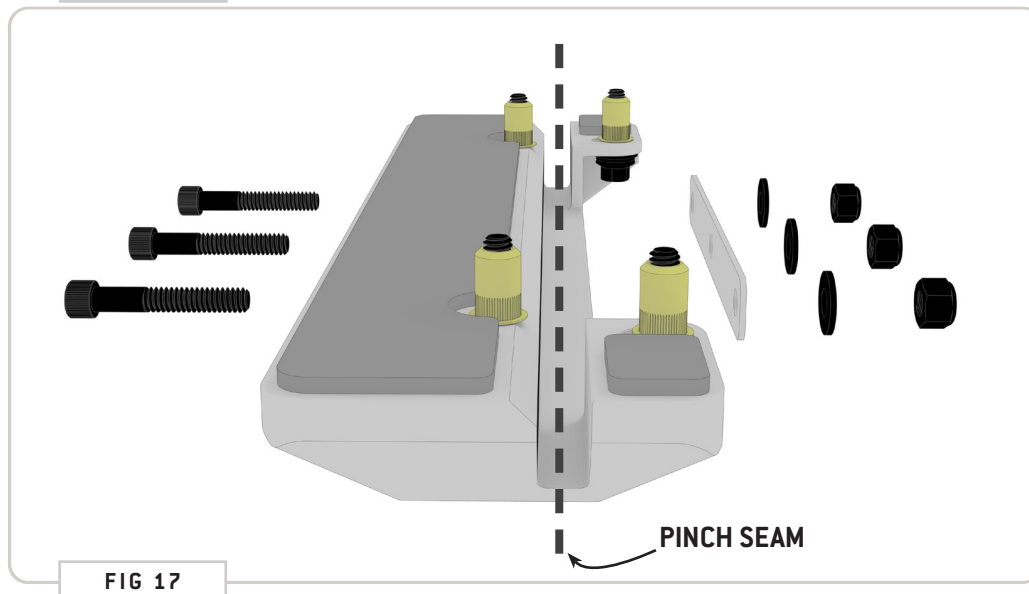
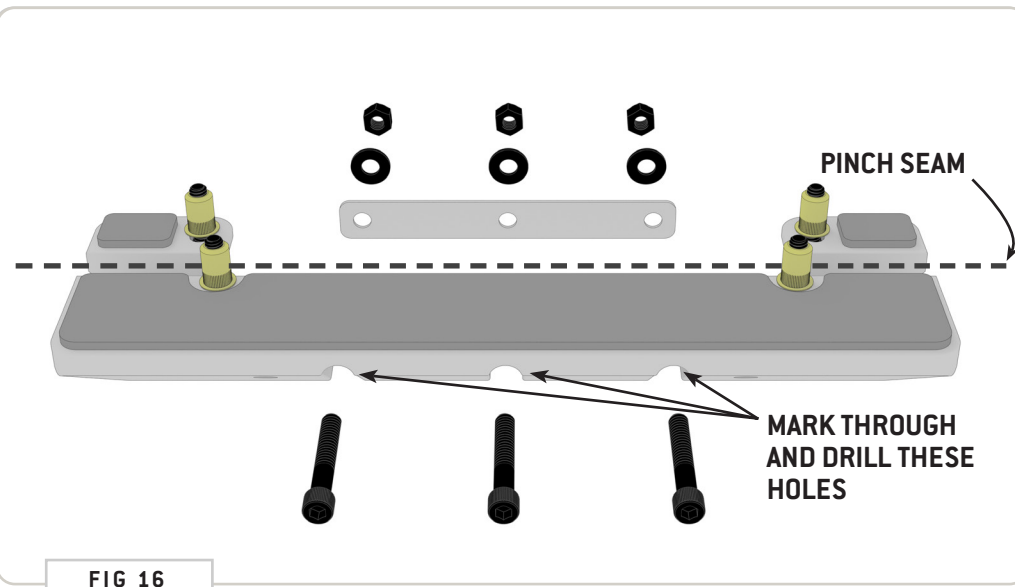
3.9 Drill Holes for Backer Plate: There are three locations along the front of the **Pinch Seam Mounting Bracket** that will need to be drilled out using the supplied **1/4" Drill Bit** (FIG 16).

NOTE - Always be sure to paint raw edges of exposed sheet metal with a rust preventative paint.

3.10 Attach Backer Plate: Attach Backer Plate along the back of the **Pinch Seam** using (3) **1/4-20 x 1.5 Socket Cap Screws, Flat Washers and Nylon Locknuts** (FIG 17).

TOOLS REQUIRED FOR THIS STEP:

- + POWER DRILL
- + 1/8" DRILL BIT
- + 9/16" WRENCH OR SOCKET
- + 7/32" ALLEN WRENCH
- + 7/16" WRENCH OR SOCKET
- + 5/32" ALLEN WRENCH



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

STEP | 03 SIDE LADDER INSTALL

3.11 Hang Side Ladder: Slide the **Upper Tabs** of your **Apex Side Ladder** into the **Clevises** along your **Roof Rail** and attach using **(1ea) 3/8-16 x 0.75 Socket Cap Screws and Nylon Locknuts** **(FIG 18)**.

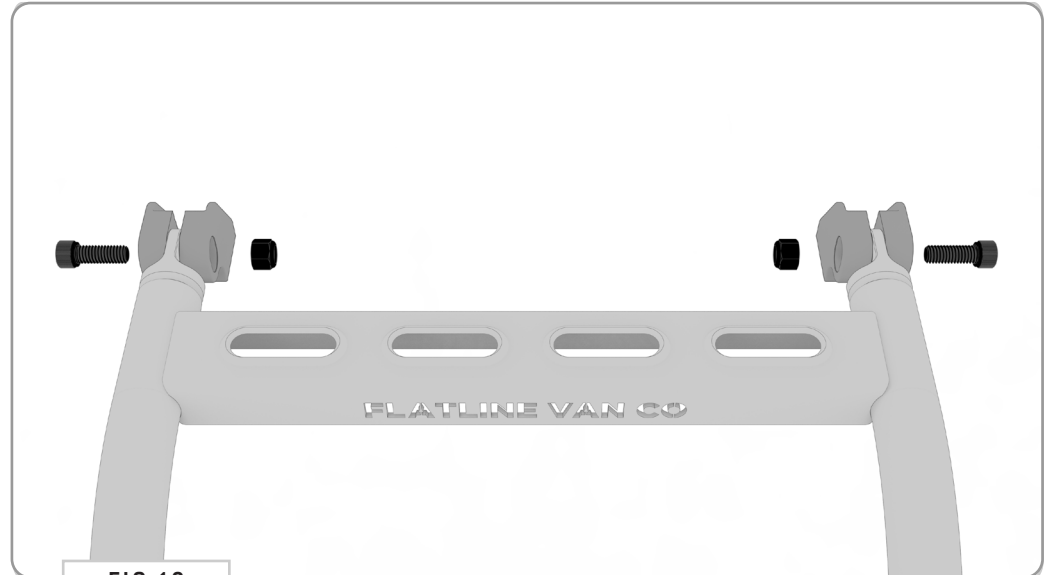


FIG 18



FIG 19

STEP | 03 SIDE LADDER INSTALL

3.12 Position Side Ladder: Take a moment to ensure that your ladder is properly aligned before securing in the next step. With the **Clevises** only loosely installed, you should be able to slide them left-to-right as needed (FIG 20).

3.13 Fasten Ladder to Mounting Bracket: Once aligned, fasten the **Apex Ladder** to the **Mounting Bracket** a stack of (1ea) **3/8-16 x 0.75 Button Head Screws**, **3/8" Lock Washers** and **Flat Washers** (FIG 21).

3.14 Tighten All Fasteners: Double-check your alignment and proceed to finish the install by tightening down all fasteners.

TOOLS REQUIRED FOR THIS STEP:

- + 7/32" ALLEN WRENCH
- + 9/16" WRENCH OR SOCKET
- + POWER DRILL
- + 1/2" DRILL BIT



FIG 20

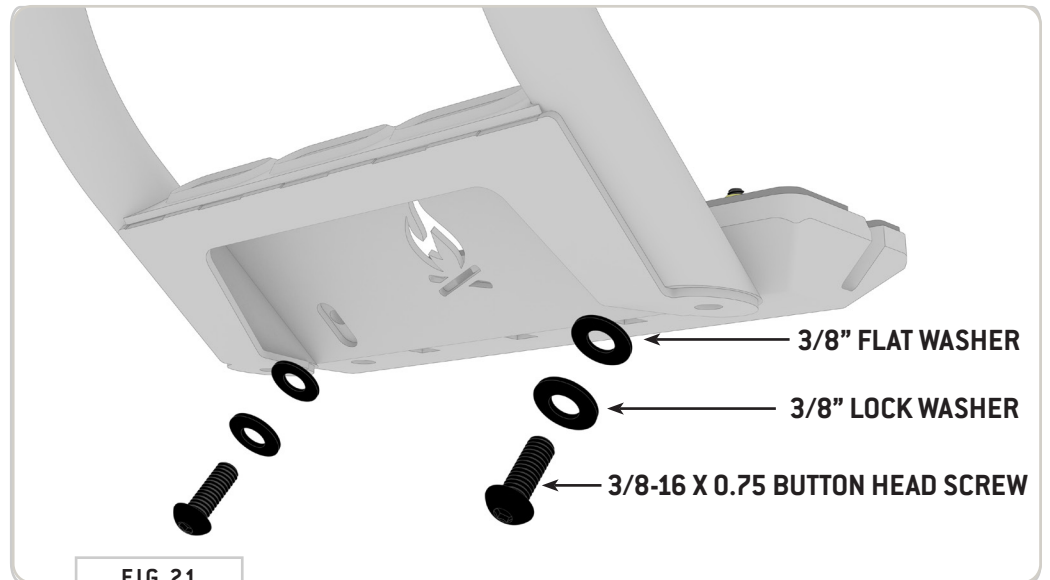


FIG 21

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!



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