

**OLD  
SOLDIER  
IRON  
WORKS**

# **FREEDOM FLYER**

**INSTRUCTION MANUAL FOR SINGLE AND DOUBLE FLYER**

# COMPONENTS

1 of 2

## TALON ●

### BODY COMPONENTS

**Y Frame** (QTY: 1)

**Upper L Brackets** (QTY: 2)

**Lower L Bracket** (QTY: 1)

**Y Bridge** (QTY: 2)

**Ratchet Buckles** (QTY: 2)

**1in Nylon Webbing Strap** (QTY: 1)

**Carabiner** (QTY: 2)

### HARDWARE

**#1 Bolt Set** (QTY: 4)

Y Bridge - Y Frame Connection

Y Bridge - Upper L Bracket Connection  
(M8 40mm bolt, locknut and washer)

**#2 Bolt Set** (QTY: 1)

Upper L Bracket - Ratchet Connection  
(M5 40mm bolt, locknut and washer)

**T40 Torx Key** (QTY: 1)

## BUMPER ASSEMBLY ●

### BODY COMPONENTS

**Bumpers** (QTY: 3)

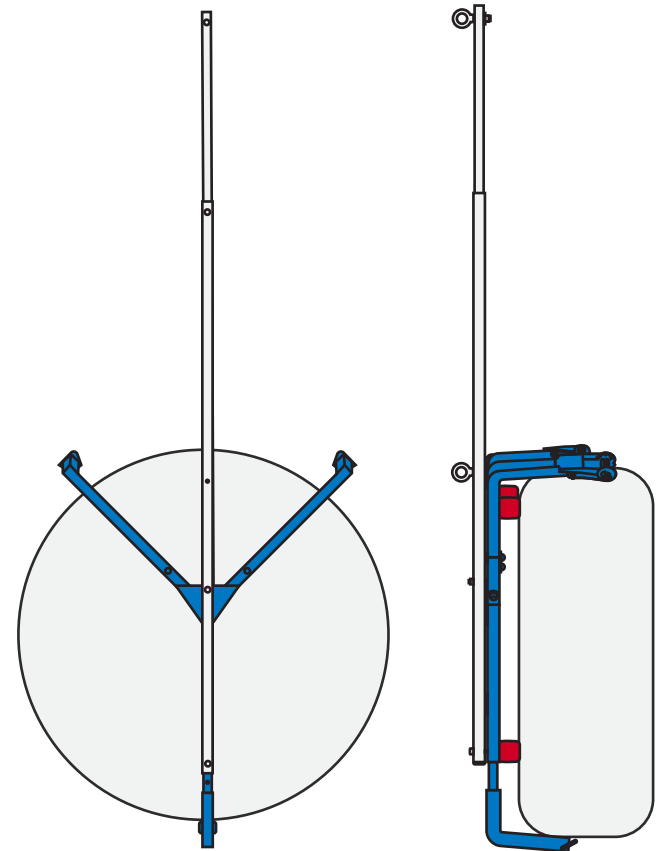
### HARDWARE

**#3 Screw Set** (QTY: 2)

Upper L Bracket Bumpers  
(NO12 40mm tapping screws and washer)

**#4 Bolt Set** (QTY: 1)

Lower L Bracket Bumper  
(M7 90mm bolt, locknut and washer)



SINGLE FLYER  
FRONT VIEW

SINGLE FLYER  
SIDE VIEW

# COMPONENTS

2 of 2

## SINGLE FLAG POLE ●

### BODY COMPONENTS

**Outer Flag Pole** (QTY: 1)

**Inner Flag Pole** (QTY: 1)

**Outer Pole Tube Cap** (QTY: 1)

**Inner Pole Tube Cap** (QTY: 1)

### HARDWARE

**#5 Bolt Set** (QTY: 1)

Outer Pole - top Y Frame Connection  
(M7 40mm bolt, locknut and washer)

**#6 Bolt Set** (QTY: 1)

Outer Pole - bottom Y Frame Connection  
(M7 65mm bolt, locknut and washer)

**#7 Threaded Eyebolt Set** (QTY: 1)

Inner Flag Pole top Eyebolt  
(Threaded eyebolt and rubber washer)

**#8 Locking Eyebolt Set** (QTY: 1)

Inner Flag Pole - Outer Flag Pole Connection  
(Locking eyebolt, rubber washer and Bow Tie Cottier Pin)

**T40 Torx Key** (QTY: 1)

**Sound Reduction Decal** (QTY: 1)

## DOUBLE FLAG POLE ● EXTENSION PACK

### BODY COMPONENTS

**Outer Flag Pole** (QTY: 1)

**Inner Flag Pole** (QTY: 1)

**Outer Pole Tube Cap** (QTY: 1)

**Inner Pole Tube Cap** (QTY: 1)

### HARDWARE

**#9 Bolt Set** (QTY: 5)

Outer Pole - U Bracket Connection  
U Bracket, Flat Bar - Y Frame Connection  
(M7 40mm bolt, locknut and washer)

**#10 Bolt Set** (QTY: 1)

Outer Pole - Flat Bar Connection  
(M7 16mm bolt, locknut and washer)

**#7 Threaded Eyebolt Set** (QTY: 1)

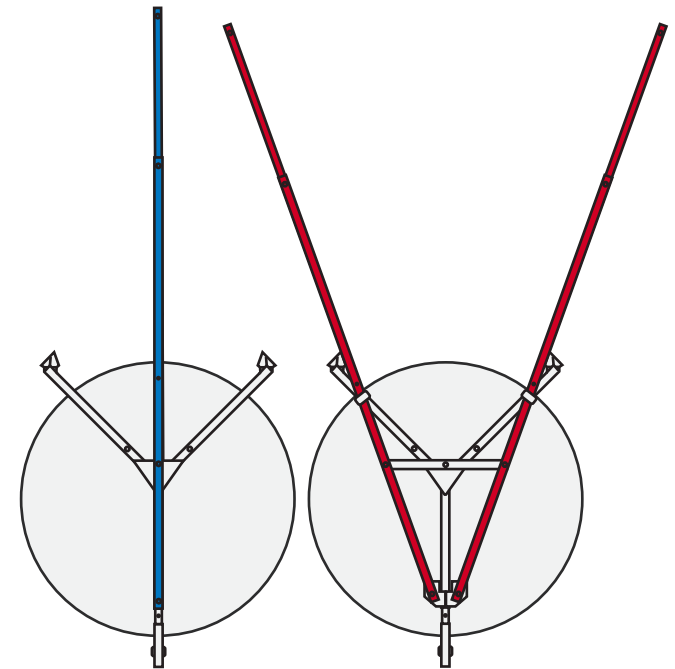
Inner Flag Pole top Eyebolt  
(Threaded eyebolt and rubber washer)

**#8 Locking Eyebolt Set** (QTY: 1)

Inner Flag Pole - Outer Flag Pole Connection  
(Locking eyebolt, rubber washer and Bow Tie Cottier Pin)

**T40 Torx Key** (QTY: 1)

**Sound Reduction Decal** (QTY: 2)



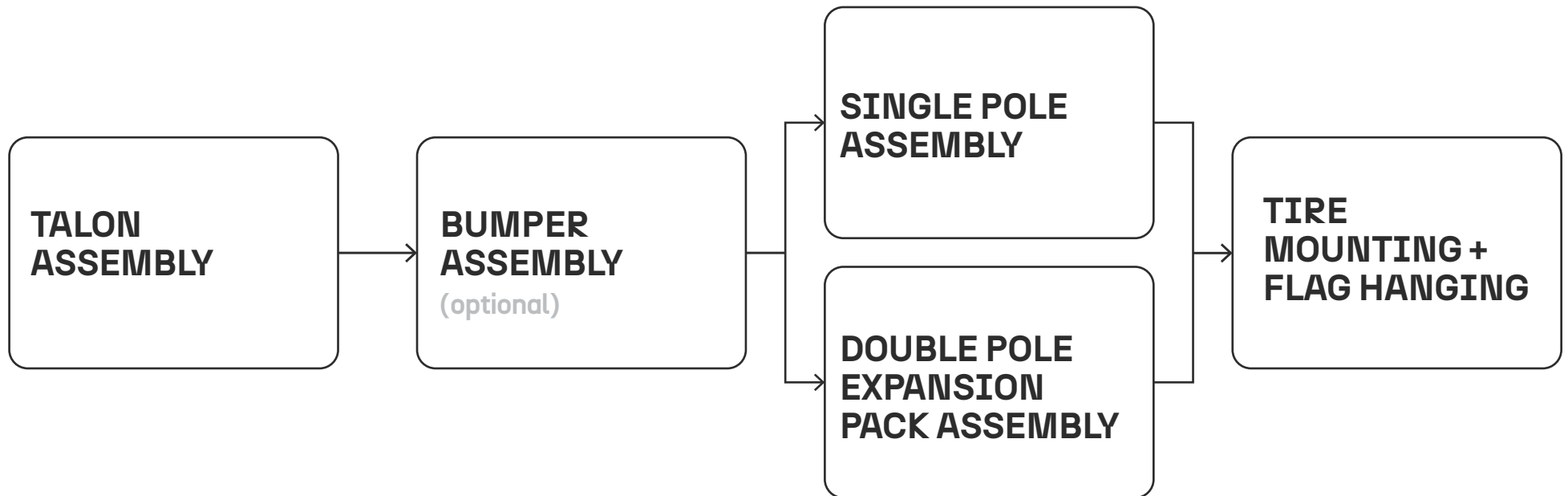
SINGLE FLYER  
FRONT VIEW

DOUBLE FLYER  
FRONT VIEW

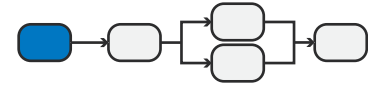
# ASSEMBLY OVERVIEW

1 of 1

Your Freedom Flyer can be assembled to hold one or two flags. Our base set comes with a single pole only. If you've ordered the double expansion pack be sure to follow the double pole assembly instructions.

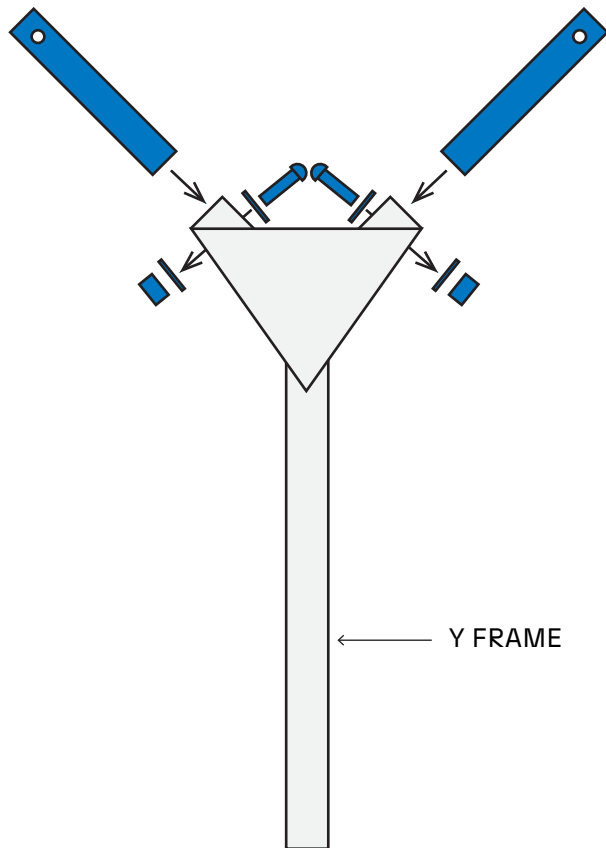


# TALON ASSEMBLY

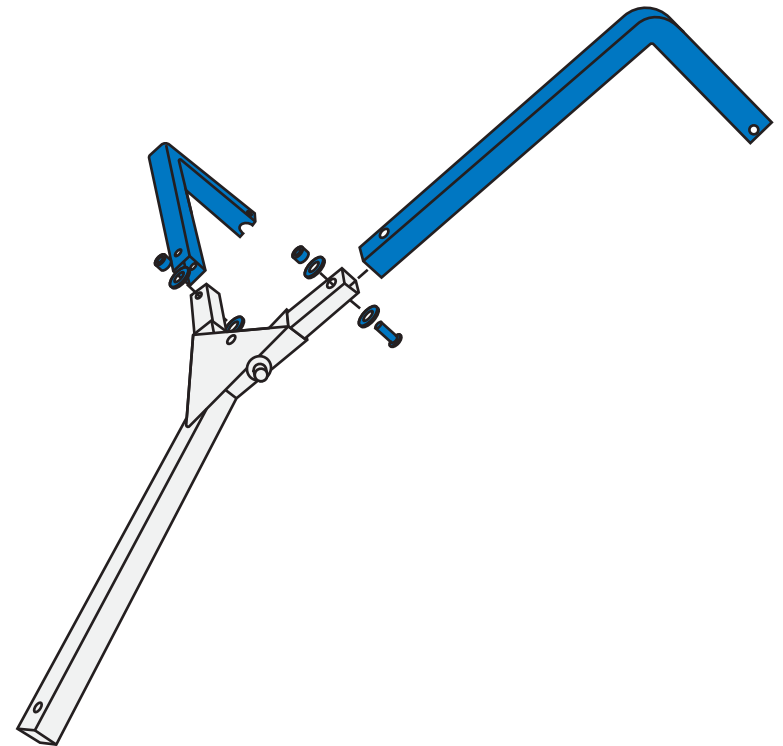


1 of 3

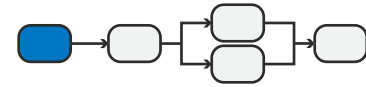
- 1A** Insert Y Bridges into Y Frame and secure with #1 bolt sets.



- 1B** Fit Upper L Brackets over Y bridges and secure with #1 bolt sets.



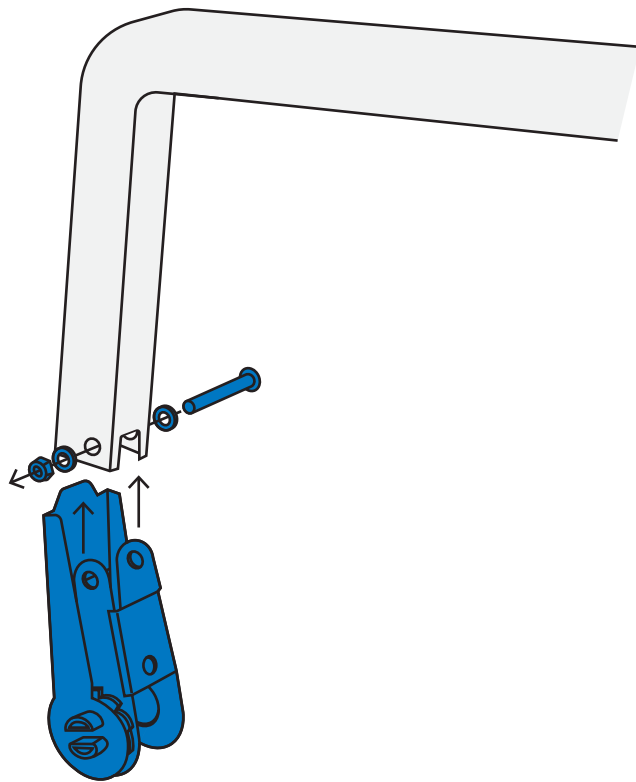
# TALON ASSEMBLY



2 of 3

1C

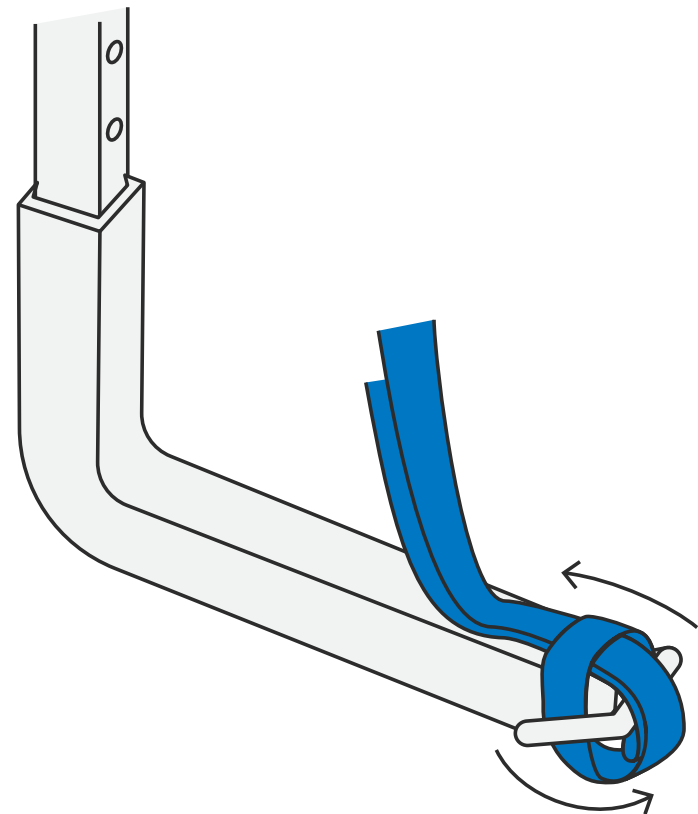
Connect ratchet buckles to upper L brackets with #2 bolt sets.



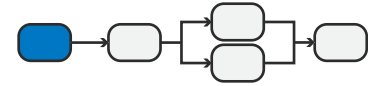
*Note: Don't tighten bolts completely. The buckle should be able to move like your wrist.*

1D

Lace the 1in webbing strap through the loop on the base of the Lower L Bracket by folding it in half and sticking the ends through the loop.



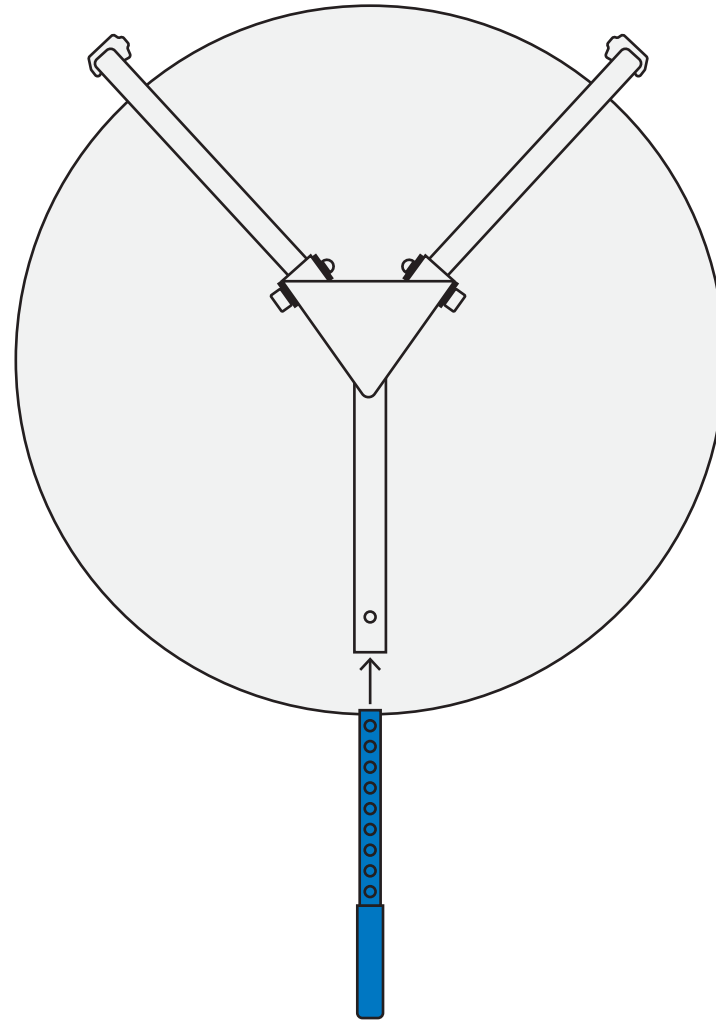
# TALON ASSEMBLY



3 of 3

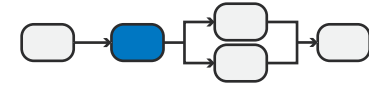
- 1E** Hang Talon on the top of your tire. Insert lower L bracket to the base of the talon. Find a snug fit and note which hole fits best.

You will attach this piece when you assemble the flag pole(s).



*Note: The talon does NOT need to fit tightly to the tire. The straps will do the final tightening.*

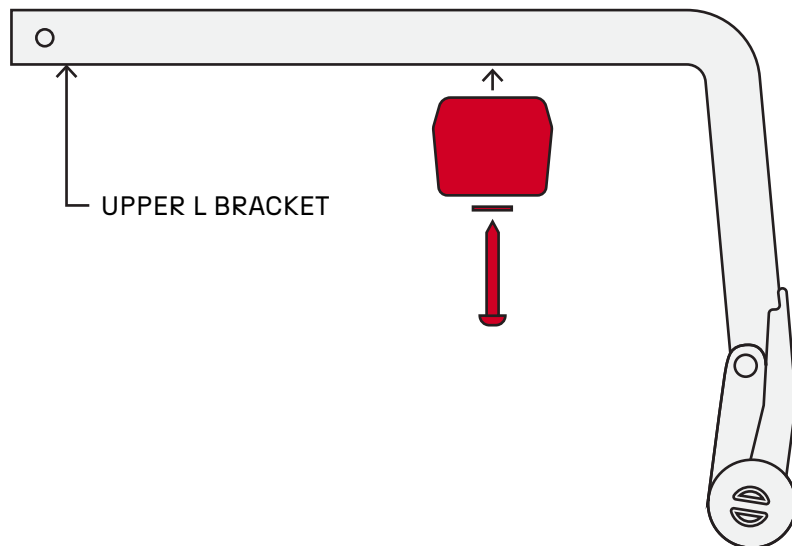
# BUMPER ASSEMBLY (optional)



1 of 1

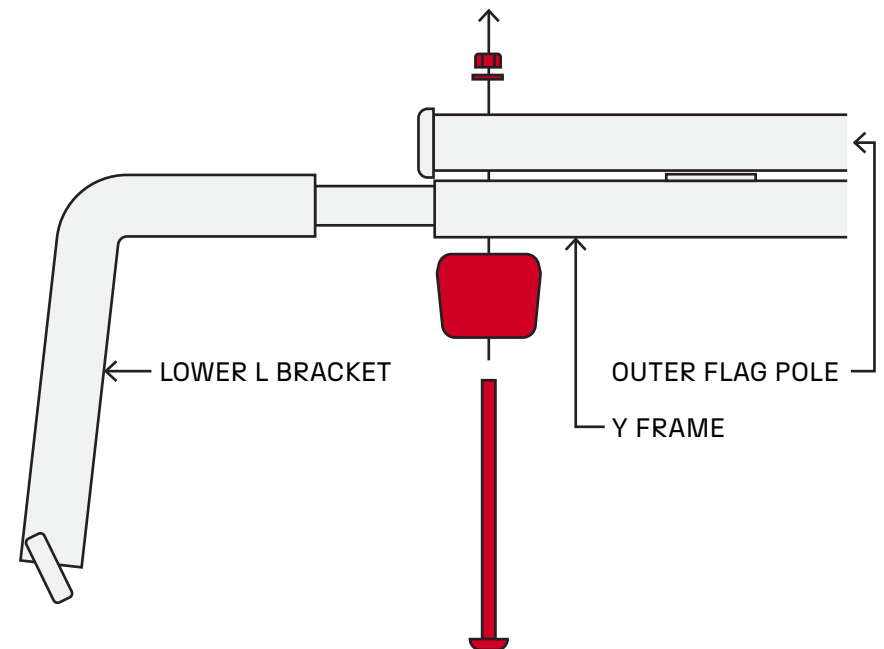
**2A** If your Flyer is touching your backup camera instead of your tire, install 3 bumpers with this step and step 2B.

Attach one bumper to each Upper L Bracket using #3 Screw sets.

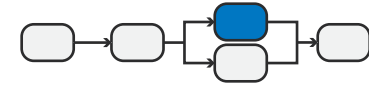


**2B** The third bumper will attach behind the base of the Y frame.

You will bolt the bumper, Lower L bracket, Y frame and either the U bracket or Outer pole all together in step 3A or 4A.



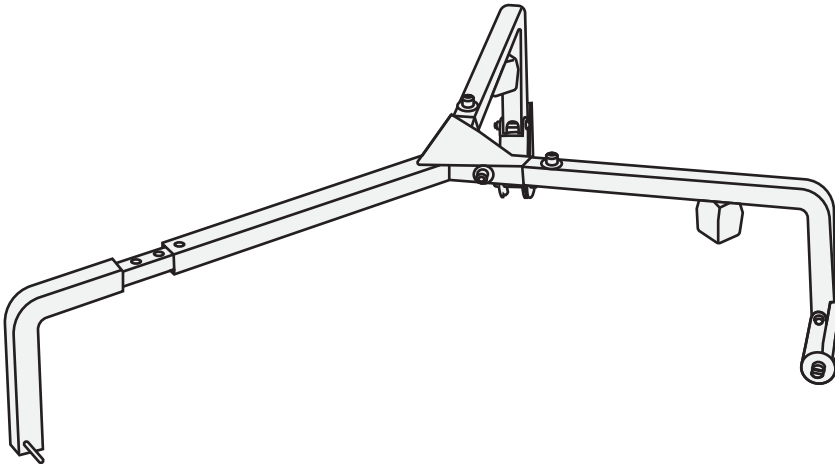
# SINGLE POLE ASSEMBLY



1 of 4

**3A**

Lay talon on a flat surface.

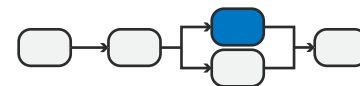


**3B**

Insert Large End Caps into bottom of Outer Pole. Insert Small End Cap into top of Inner Poles.



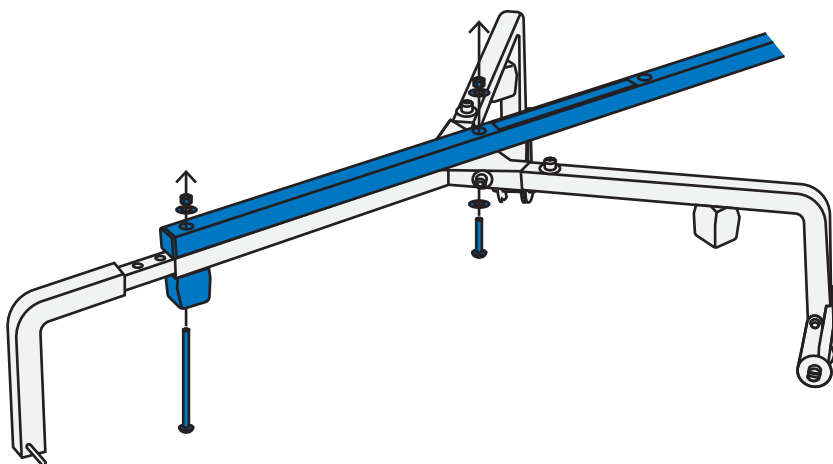
# SINGLE POLE ASSEMBLY



2 of 4

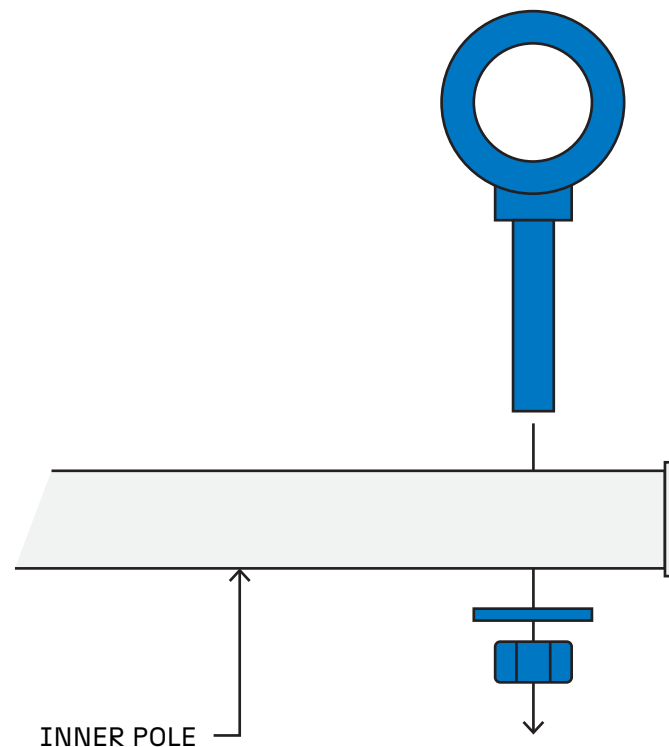
- 3C** Ensure inner and outer pole are separated. Place outer pole on top of talon. Secure top hole with #5 bolt set and bottom hole with #6 bolt set.

If you used the bumper assembly, use #5 bolt set for the bottom hole.

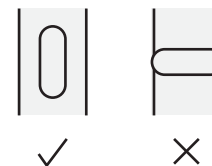


*Note: Be sure to place the Outer Pole with the Freedom Flyer sticker facing outwards.*

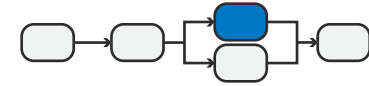
- 3D** Connect #7 threaded eyebolt to top hole of inner pole.



*Note: Ensure eyebolt is parallel with pole for optimal flying.*



# SINGLE POLE ASSEMBLY

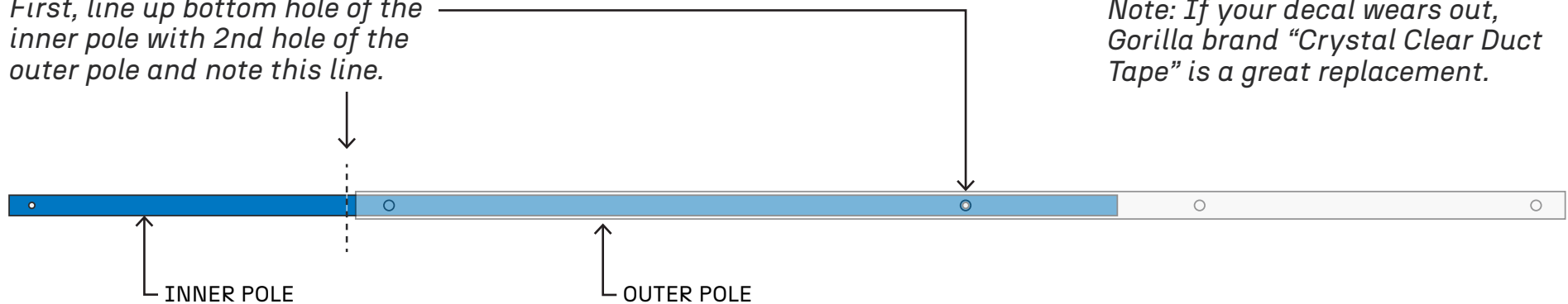


3 of 4

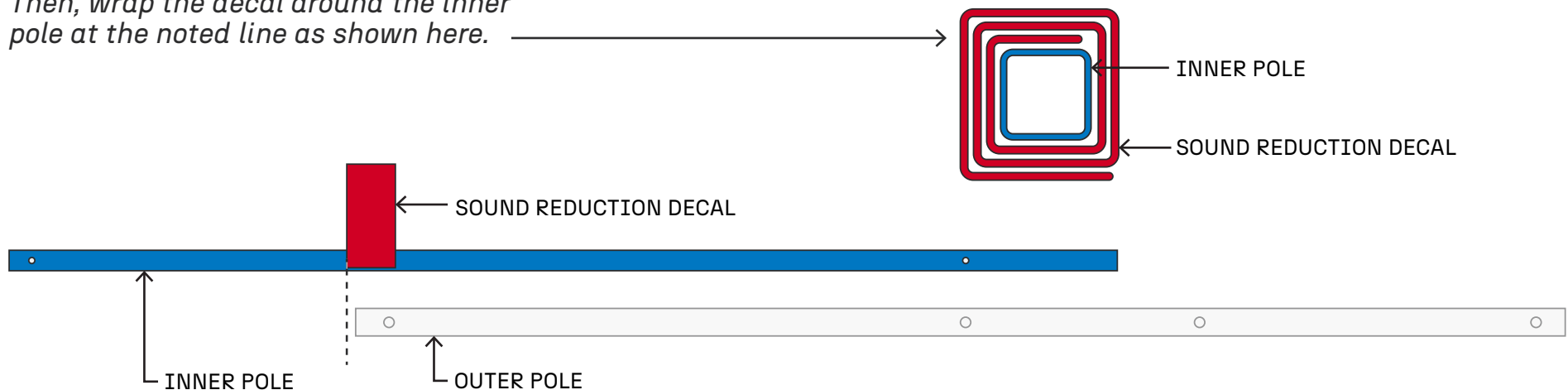
- 3E** Wrap sound reduction decal around inner pole.

*First, line up bottom hole of the inner pole with 2nd hole of the outer pole and note this line.*

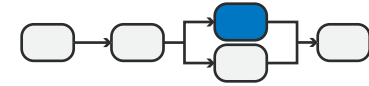
*Note: If your decal wears out, Gorilla brand "Crystal Clear Duct Tape" is a great replacement.*



*Then, wrap the decal around the inner pole at the noted line as shown here.*



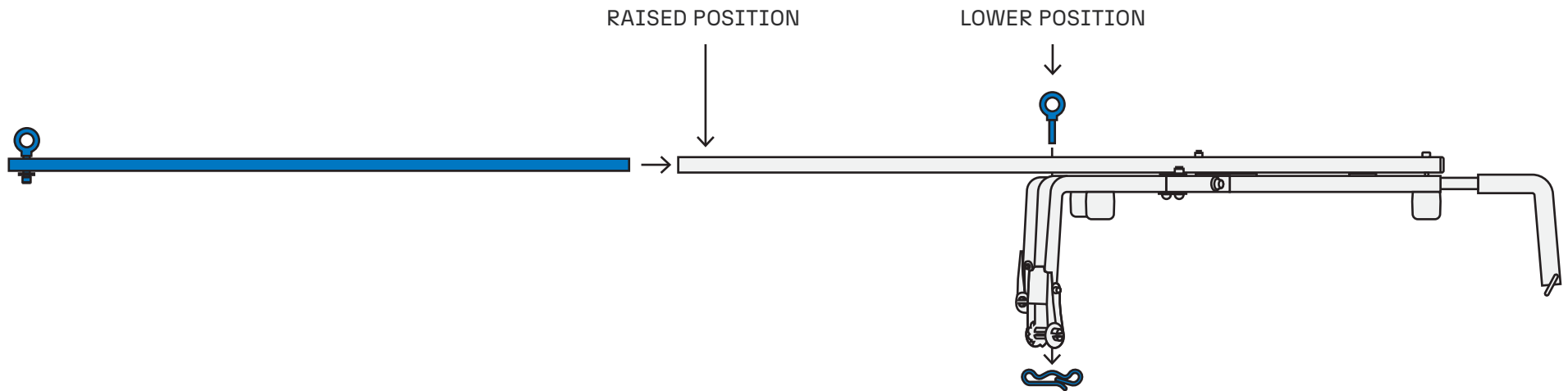
# SINGLE POLE ASSEMBLY



4 of 4

3F

Inset inner pole into outer pole.  
Secure with #8 locking eye bolt in  
lower position.

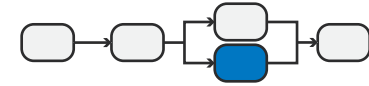


*Note 1: Ensure eyebolt is parallel  
with pole for optimal flying.*



*Note 2: If the decal makes the poles fit too tight, unwrap  
and cut off small peices until you get a snug fit.*

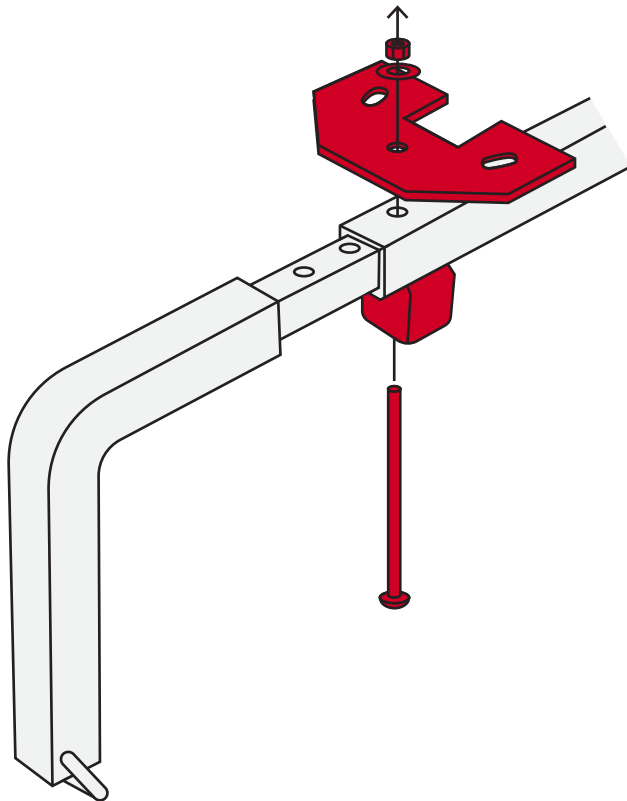
# DOUBLE POLE ASSEMBLY



1 of 5

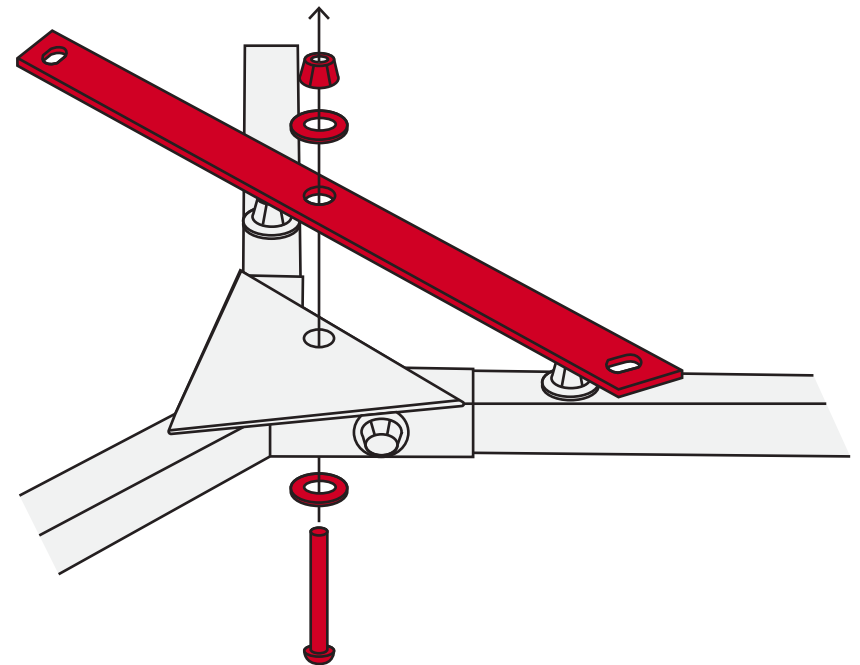
**4A** Place U bracket on Y Frame Lower and L Bracket and secure with #9 bolt set.

If you used the bumper assembly, use #4 bolt set and bumper.



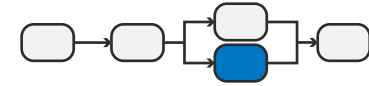
*Note: Do not tighten all the way down to allow for adjustment later.*

**4B** Place Flat Bar on Y Frame and secure with #10 bolt set.



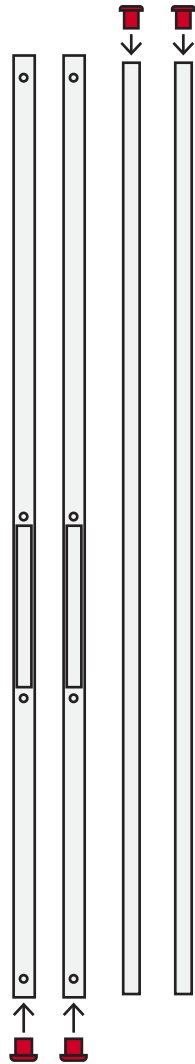
*Note: Do not tighten all the way down to allow for adjustment later.*

# DOUBLE POLE ASSEMBLY



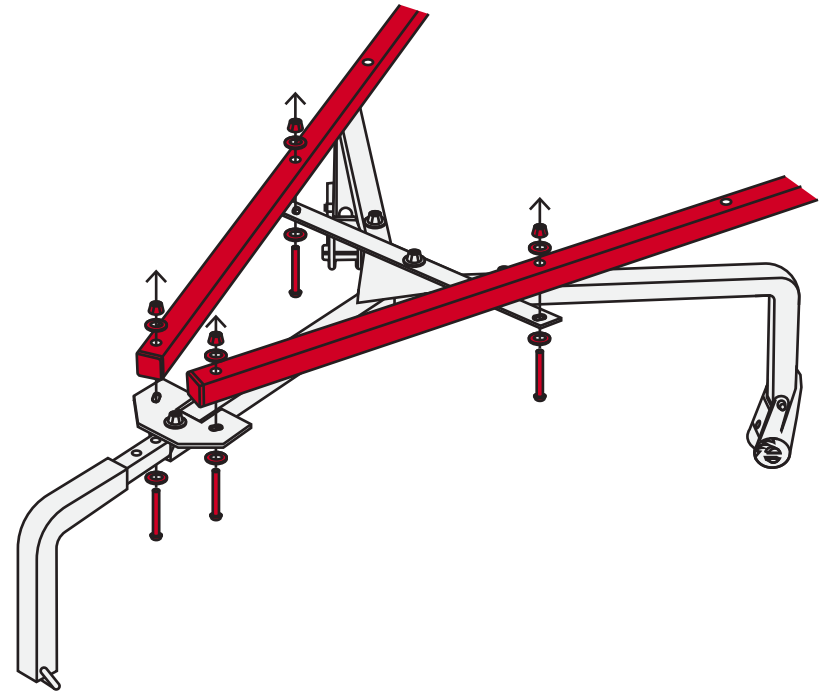
2 of 5

- 4C** Insert Large End Caps into bottom of Outer Pole. Insert Small End Cap into top of Inner Poles.



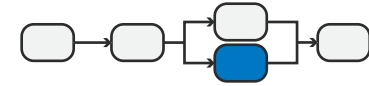
- 4D** Ensure inner and outer poles are separated. Place outer poles flat bar and U bracket as shown.

Line up pole with holes on brackets and secure with #9 bolt sets.



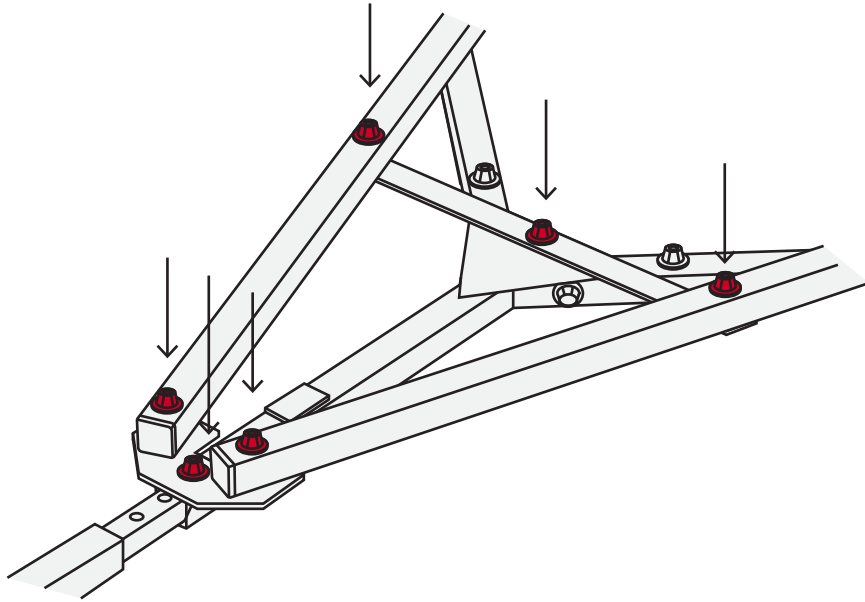
*Note: Do not tighten all the way down to allow for adjustment later. Also ensure Freedom Flyer decals are face up.*

# DOUBLE POLE ASSEMBLY



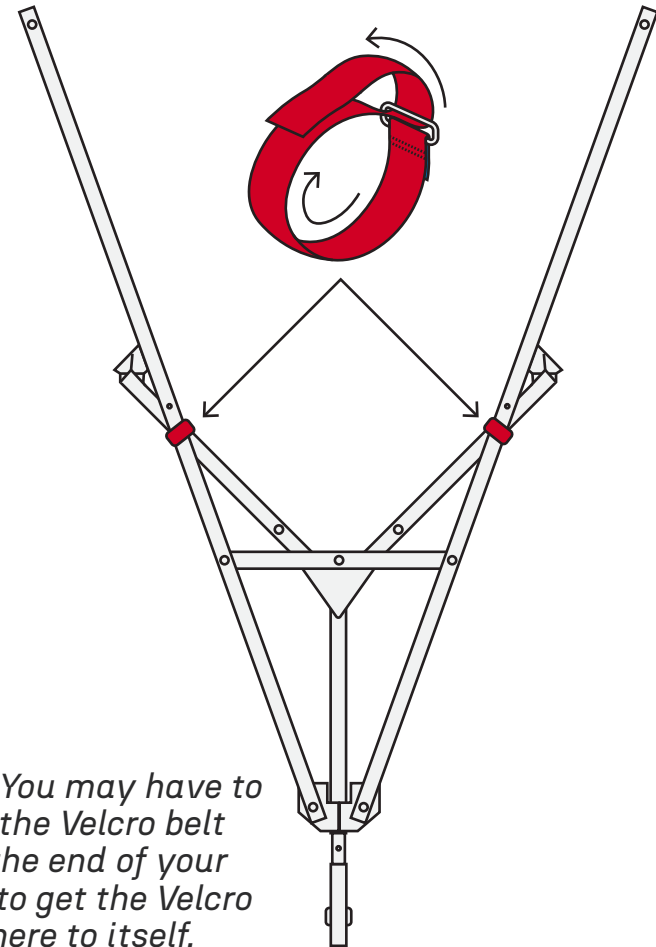
3 of 5

- 4E** Make sure all components look even and finish tightening all bolts from this phase.



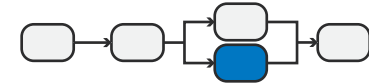
- 4F** Secure outer poles to upper L brackets with Velcro straps.

This step is VERY important. Failing to complete will damage your Flyer.



*Note: You may have to twist the Velcro belt near the end of your wrap to get the Velcro to adhere to itself.*

# DOUBLE POLE ASSEMBLY

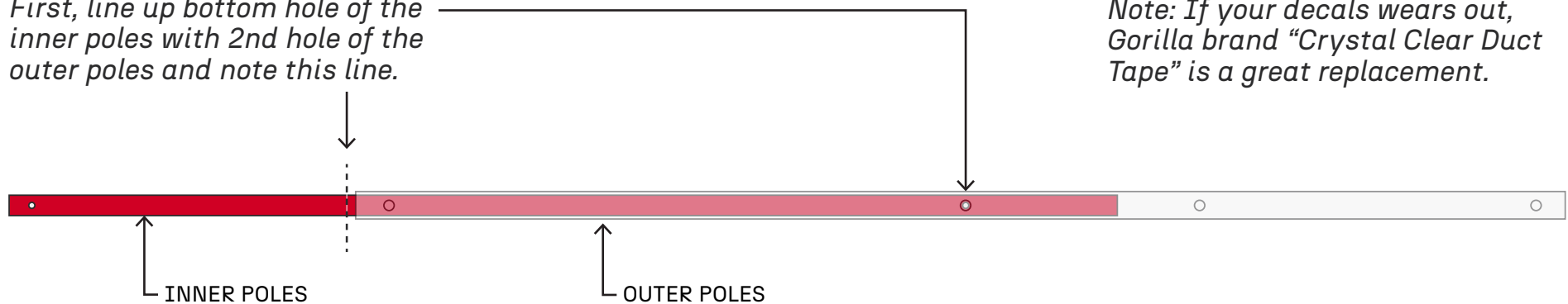


4 of 5

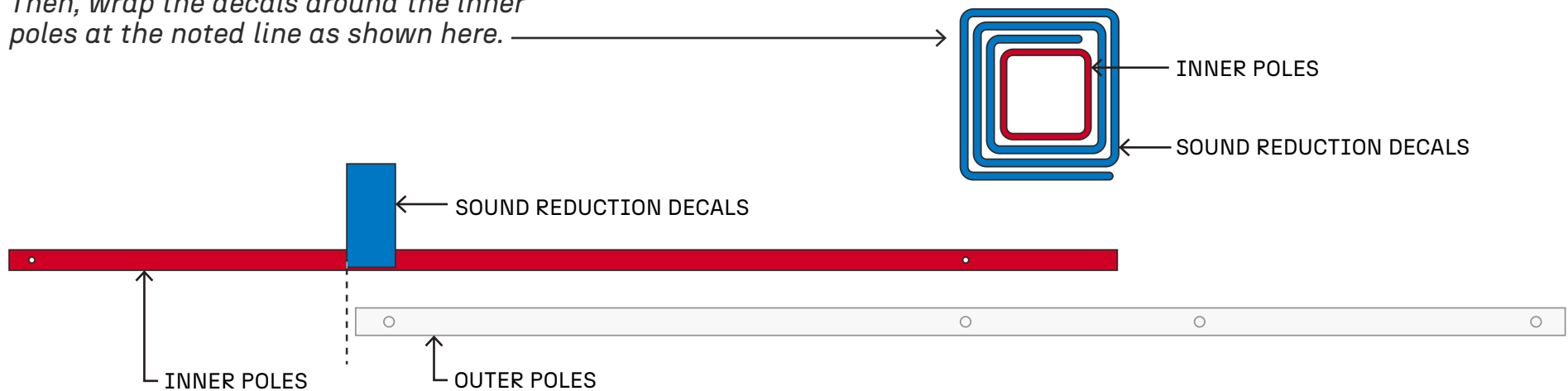
- 4G** Wrap sound reduction decals around inner poles.

*First, line up bottom hole of the inner poles with 2nd hole of the outer poles and note this line.*

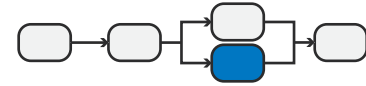
*Note: If your decals wears out, Gorilla brand "Crystal Clear Duct Tape" is a great replacement.*



*Then, wrap the decals around the inner poles at the noted line as shown here.*



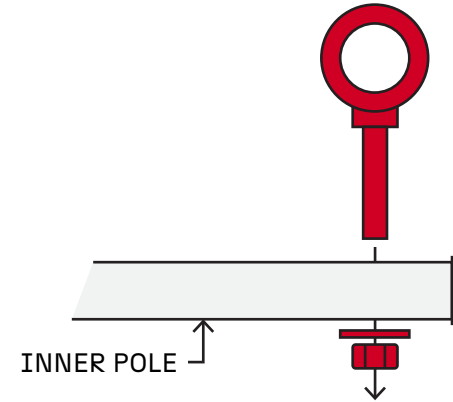
# DOUBLE POLE ASSEMBLY



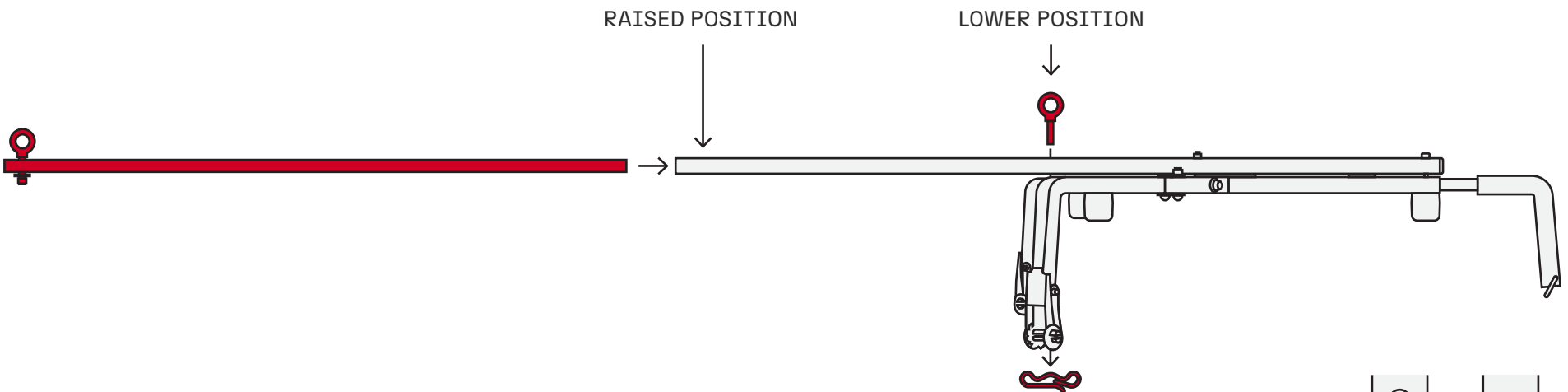
5 of 5

- 4H** Connect #7 threaded eyebolt to top hole of inner pole.

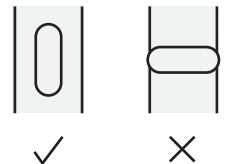
*Note: Ensure eyebolt is parallel with pole for optimal flying.*



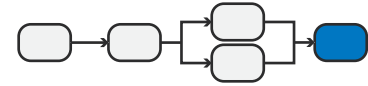
- 4I** Inset inner poles into outer poles. Secure with #8 locking eye bolt in lower position.



*Note: Ensure eyebolt is parallel with pole for optimal flying.*



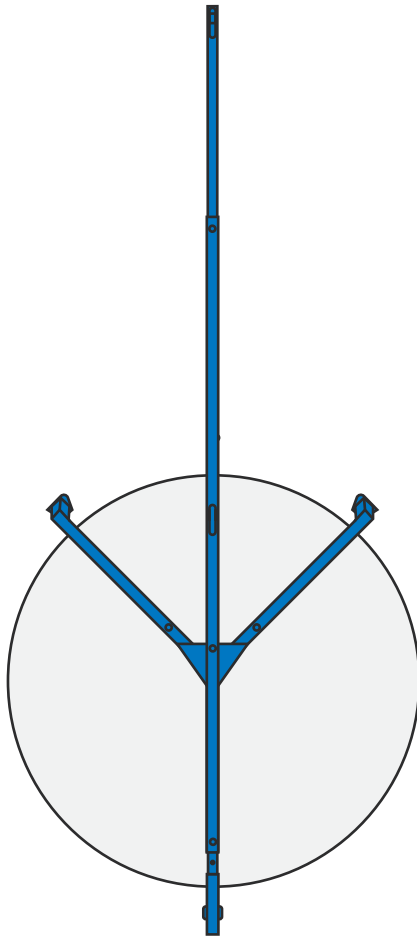
# TIRE MOUNTING + FLAG HANGING



1 of 3

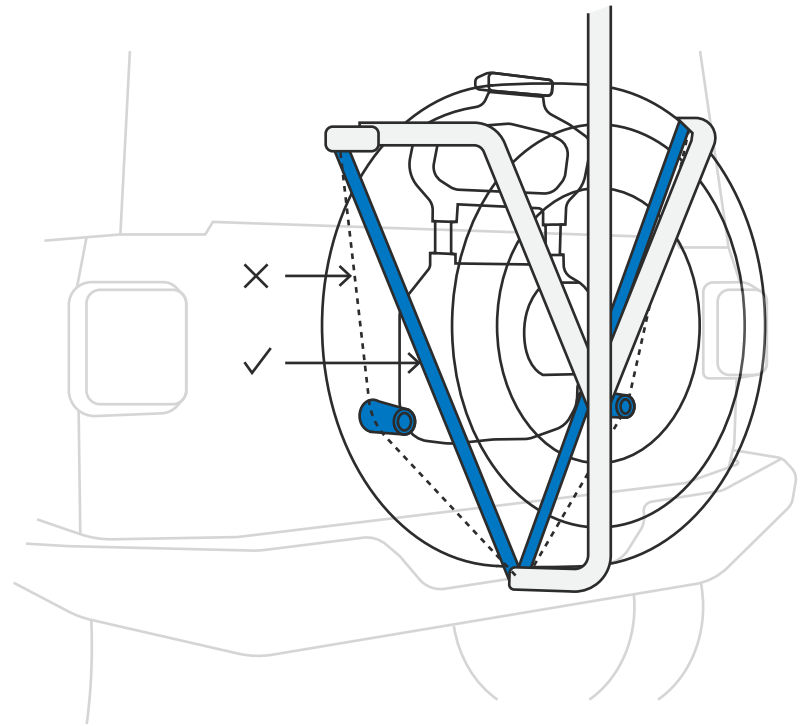
**5A**

Rest the Flyer on your tire.



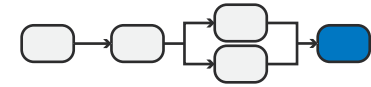
**5B**

Lace webbing straps up to the ratchet buckles and ensure they are straight.



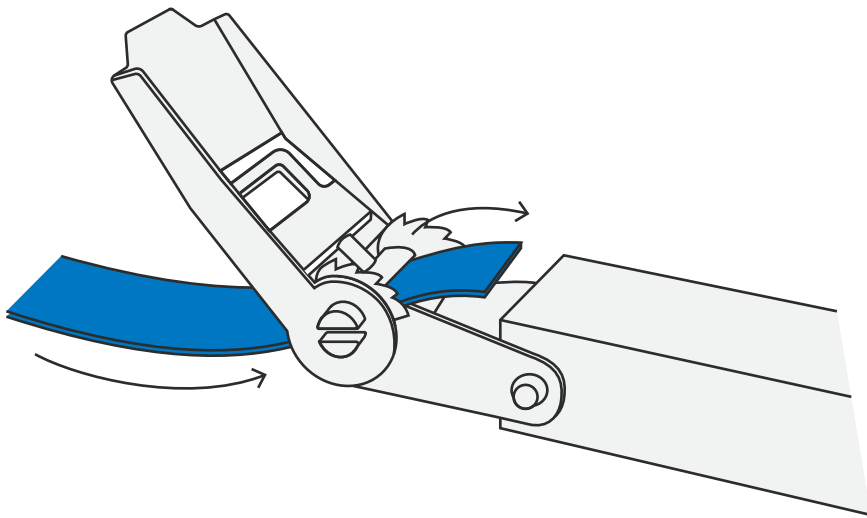
*Note: Most Jeeps have stabilizing rubber barrels behind the spare tire. Bending straps around the outside will damage barrels and weaken Flyer attachment.*

# TIRE MOUNTING + FLAG HANGING

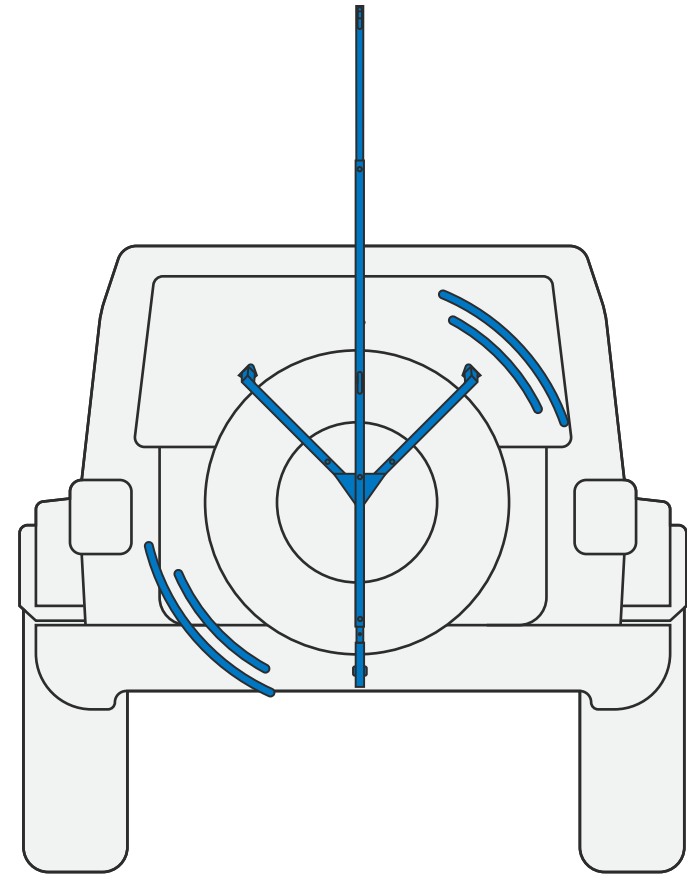


2 of 3

- 5C** Attach each end of the webbing strap to the ratchet buckles on the Upper L Brackets and tighten.
- 5D** Test your tightness. Grab your Flyer and shake it. It should be strong enough to shake your entire vehicle.

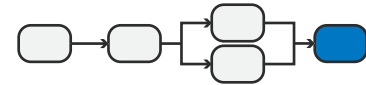


*Note: You can find a video on our website for how to lace straps through buckles.*



*Note: If your Flyer wiggles when shaken, tighten the buckle more until it is solid.*

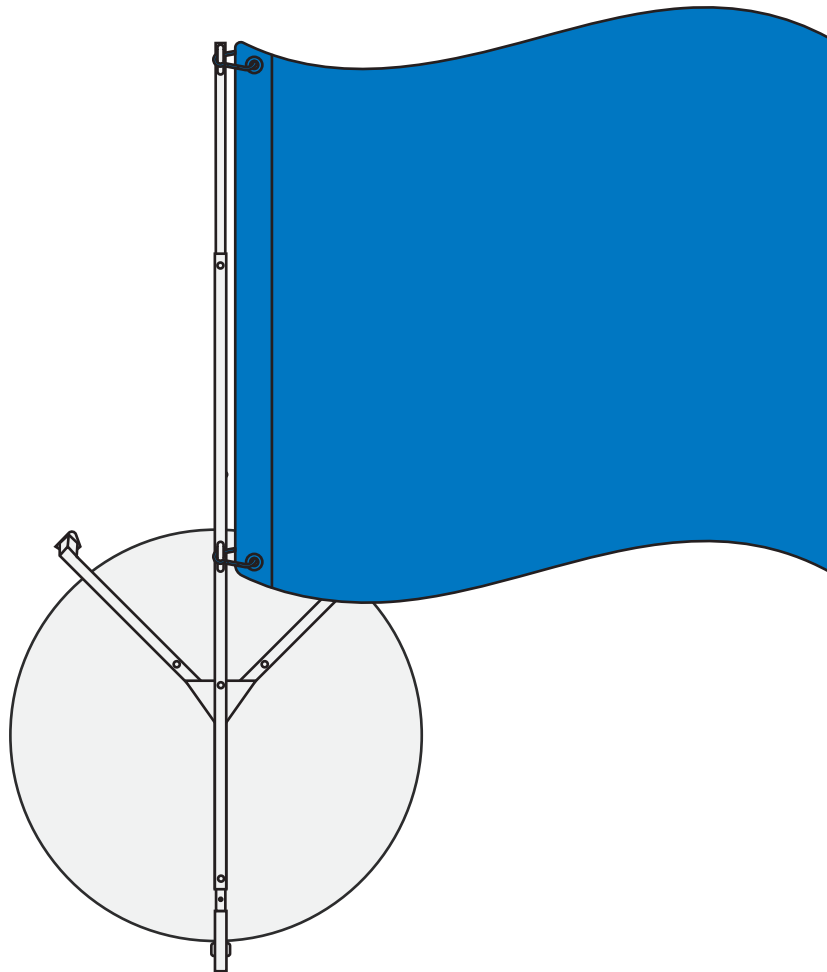
# TIRE MOUNTING + FLAG HANGING



3 of 3

**5E**

Now your Freedom Flyer is ready to fly a flag! Use carabiners to attach your flag to each eyebolt.

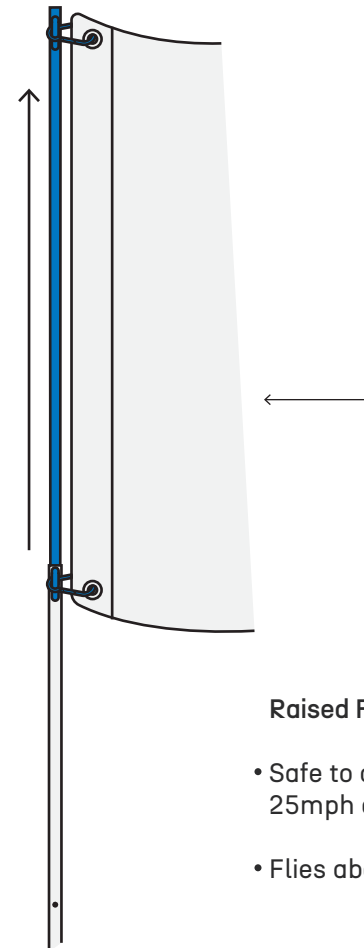
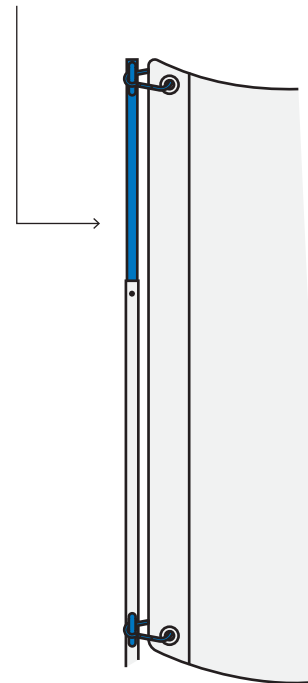


**5F**

To put your Flyer in the raised flag position, remove the locking eyebolt from the lower hole. Raise inner pole and replace locking eyebolt in top hole.

**Lowered Position:**

- Safe to drive at at highway speeds.
- Flies behind SUV.



**Raised Position:**

- Safe to drive at 25mph or less.
- Flies above SUV.

# WARNINGS AND NOTES

## WARNINGS:

### *VELCRO*

Failing to install velcro straps on double Flyer will damage product.

### *RAISED FLAG POSITION*

Do not drive in the raised flag position over 25mph for safety reasons.

### *LOW HANGING OBJECTS*

Driving under a low hanging object (tree limb/parking garage roof, garage door) can cause pole(s) to catch on the object. Poles are designed to break and bend at the outer pole's lower hole so as not to damage the talon.

Old Soldier Iron Works does not cover pole replacement but will sell replacement poles.

### *DRIVER RESPONSIBILITY*

Driver is responsible for any object attached to their vehicle. Be sure to follow our instructions as closely as possible. Drivers are responsible for installation failure and any modifications.

### *LUBRICATING RATCHETS*

Ensure that you lubricate the ratchets every 3-4 months or after visiting the beach, high dust areas, or driving through road salt.

## FOLLOW US:

### INSTAGRAM

*@freedomflyerosi*

### FACEBOOK

*Freedom Flyer*

*Last Updated July 10, 2025*