OLD SOLDIER IRONWORKS, LLC



Home of the Freedom Flyer!!
Instruction Manual for the "Double Threat"

Thank you for your purchase of a premium flag flying system from Old Soldier Ironworks. Attached, you fill find instructions for the assembly of your Double Threat.

Should you have any questions, concerns, or recommendations, please feel free to contact us through our website or Facebook Messenger.

We are a Veteran owned, Veteran operated small business. Our goal is to provide you with products you want and enjoy, in unmatched quality, with excellent customer service, all while giving back to our community and supporting various Veteran causes.

We appreciate your business, your loyalty, and your friendship...now...

LET'S GET THOSE FLAGS FLYIN!!!!!

Sincerely,

The staff of OSI... Jerry, Tracy, Don, Mary, and James



This piece is referred to as the "Talon"...prior to bolting anything together, take your talon out to your vehicle. The bottom foot is adjustable and will slide out without the bolt in it. Place the two upper arms (with ratchets attached) over the top of your tire. Slide the bottom arm in, paying close attention to which hole allows the bottom foot to be closest to the tire. It does not have to rest against the tire, you just want to make a mental not of the most snug fitting.



Now you're ready to start assembly of your "Double Threat". Lay out the Talon, the "U" shaped bracket, the upper bracket (the flat bar), and one of your outer poles. The outer poles are bigger in diameter and have the "Freedom Flyer" sticker on them.



The "U" shaped bracket is positioned over the hole that is used to attach the bottom foot to the Talon. Notice there is a spacer welded to the lower arm of the Talon. The cut out portion of the "U" shaped bracket should but up against the spacer. They will not butt up against each other perfectly, and that's OK, as long as the holes line up.



Next, place the upper bracket across the top portion of the triangle between the two upper arms of the Talon so that the holes are aligned. Ensure that the angled edges of the bracket are positioned as they are in the picture to the left.



In your hardware packet, you will find 7 individual bolts. Five of them will be the same size, one will be longer, and one will be substantially smaller. The five that are the same size are for the bottom bracket x3, and for the top bracket x2. The smaller bolt is for the top bracket where it attaches to the triangle. The longer bolt will replace the bolt through the bottom foot, should you decide to convert the "Double Threat" back to a standard "Freedom Flyer" for a specific event, but will not be used during the assembly of your Double Threat.



Insert one of the 5 bolts that are the same size through the hole in the talon with the lower foot inserted. Make sure you've lined up the correct hole for your tire size on the lower foot, which was determined in the very first step. Place the "U" shaped bracket on the bolt as shown. Ensure that you insert the bolt from the bottom up, and that there is no washer on the side with the bolt head. This helps maintain a lower profile on the side which may or may not rest against your tire depending on tire size. On the "top" as it's sitting in the picture, make sure that there is a washer, and a lock nut. You will need 2 each 7/16 wrenches for this. DO NOT tighten all the way down, you will need to move the bracket around later in the instructions.



Next you will use the shorter bolt. This time, you are going to insert the bolt "down" through the bracket and then the hole in the triangle at the top of the Talon. For this bolt, there will be a washer on both sides. The lock nut is underneath and out of site. Again, DO NOT tighten this bolt all the way down at this time as it too will need to move around later in the instructions.



This is an illustration of what the top bracket should look like, once installed.



Once both brackets are in place, grab one of the outer poles. Make sure, if you haven't already to remove the inner pole from inside it. Placing the "Freedom Flyer" decal up (so that it shows when you install your Double Threat onto your spare tire), line up the bottom two holes on the outer pole with the holes on the outside of the top and bottom brackets. You may need a second set of hands in order to do this. Using to more of the 5 bolts that are the same size, insert them through the outer pole and through the brackets. There should be washers on both ends and the lock nut should be underneath the bracket side. When tightening these bolts, you also want to leave them loose to allow movement.



Here is an illustration of the bolts and the outer pole installed on one side of the Double Threat.



Repeat the steps for installing the outer pole on the opposite side.



Now that you have both outer poles installed, you need to adjust for uniformity on both sides. To do this, push the lower bracket toward the top of the talon while your extra set of hands pulls in on the poles. All holes in the brackets are elongated to allow movement for adjustment. Once you have everything the way you want it, have the extra set of hands hold everything in place. Tighten the center bolts in the upper and lower brackets, making sure they are good and snug but taking care not to tighten to the point of breaking the bolt off. Once the center bolts are tight, tighten the four bolts that attach the poles to the upper and lower brackets in the same manner.



After tightening all the bolts, you will need the Velcro straps included in your kit. When you place the free running end of the strap through the buckle, it should "catch" on the Velcro. This indicates that you have it inserted correctly. Now that you know the direction you need to insert it, remove it from the buckle and wrap it around the outer pole AND the top arm of the Talon.



Placement should be just below the hole in the outer pole where the pole crosses over the upper arm of the talon.



Pull the strap tight through the buckle and then reverse the direction in order to keep the tension on the strap.



When you get to what will be your last wrap, twist the strap on the underside of the talon.



Continue your last wrap and secure the Velcro to itself. Make sure that the strap has remained tight and that the hole is not covered. If this is not the case, remove the strap and re-apply.



Once you have installed the first strap, repeat the process on the other side. Here is an illustration of the completed strap installation.



At this point, you will need one of the hands from your extra set to apply pressure to the lower leg to keep the unit from tipping as you insert the inner poles. If your extra set of hands has abandoned you, this can be accomplished with a dumbbell, the edge of a couch, or a large cat...as long as its lazy and you are fairly certain it won't become disinterested in helping and move halfway through the process.



To install the inner pole, make sure that the warning label is facing the outside of the unit. This makes the label visible to anyone who may borrow your Double Threat when they extend the poles incase you forget to mention that the extended configuration should only be used when stationary, or at parade speeds less that 15 MPH.



Once installed, you should line up the bottom two holes in the inner pole, with the top two holes in the outer pole.







Once you've lined up the holes in the inner pole and the outer pole, secure one set of pole bolts. There will be two sets in your kit. Each set should consist of two eye bolts, two carabiners (snap links), three regular nuts, one wing nut, and 4 washers. Each set will have the two eye bolts attached by the carabiners with the nut, wing nut, and washers. Each eye bolt will have a regular nut snugged up against the eye. One will have an additional regular nut, the other will have a wing nut.

Place one eye bolt with a regular nut tightened all the way up against the eye and a washer down through the holes in the outer and inner poles. The upper arm may be close enough that you can't turn the wing nut. If you find this to be the case, don't worry! You can hold the wing nut with your finger and use the open end of your wrench to turn the eye bolt in order to tighten it by placing one side of it through the "eye" and using the leverage of the wrench against the opposite side as shown to the left. Tighten the bolt so that it is not going anywhere.

Once you've tightened the eye bolt, use the open end of the wrench to move the eye so that it is inline with the pole. This is the optimal position for attaching your flag and will help it flutter correctly.



Next, take the other eye bolt from the first set (with the regular nut on it) and attach it to the top of the inner pole. With the eye on the same side of the pole as the lower eye bolt, insert the bolt through the top hole ensuring that one regular nut is tightened all the way against the eye. Install a washer on both sides of the pole. Attach the nut on the bottom side and tighten.



Once the nut is tightened on the back side of the inner pole, use the open end of your wrench to line the eye up with the pole. Repeat the steps for installing the inner pole on the other side.

Your Double Threat is now in the "lowered" position. This is the position used for flying a flag while moving. It is safe at highway speeds, but is dependent on the quality of your flag. Your Double Threat will not fail, but a cheap flag will fray. Please see our website for flag recommendations or visit www.foreverwave.com



Also in your kit, you will find an optional plastic fastener. This is the last step so you're almost there! If you've ever removed a plastic piece from a Jeep Wrangler, you are familiar with these fasteners. The easiest way is to remove the center of the fastener so that it is in two pieces. If you are familiar with these, you may not need to separate them to accomplish this task.

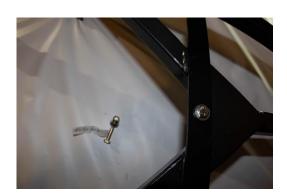


You will find that the hole at the top of the outer pole lines up with a hole on the inner pole. Insert the outer portion of the fastener through the holes pushing it down until the top is flush against the pole. At this point, your extra set of hands is probably kicked back with a cold beverage, giddy with excitement of the impending case of extreme patriotism in which they are about to participate.

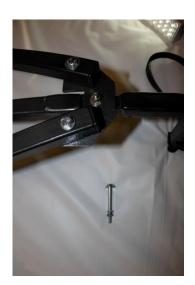


Insert the inner piece of the fastener. If it is hard to push in, rotate it a little as there are slots that have to line up while installing it into the outer piece.

Why did you do this you ask? Well...The Freedom Flyer, Double Threat, and Triple Threats do not rattle a lot, it is noticeable. If you find that irritating, this will reduce the vibration and make your Freedom more enjoyable. The fastener will need to be removed in order to extend the poles but that is easily accomplished with either a pocket knife, a small flat head screwdriver, or the extremely long fingernails of your significant other. The latter may not be an option based on maintenance level.



The only pieces you should have left over are: The last of the bolts that were all the same size...this allows you to convert your Double Threat back to a standard Freedom Flyer OR...to add a third pole converting it to a Triple Threat...thereby increasing the excitement of those around you by 1/3 as they look on in awe as you roll by flying your colors. Seriously though, this bolt is required because the current bolt on your double is sized for two flat pieces of metal, the additional bolt is long enough to go through the triangle AND an outer pole.



And...the longest of the bolts. This bolt replaces the center bolt on the lower bracket. The current bolt is designed for the lower leg and a flat piece of metal. The longer bolt accommodates the lower leg and an outer pole for use with the standard Freedom Flyer or a Triple Threat.



In order to install a third pole, simply remove the center bolts on both brackets, position a pole in the center, and reinstall the longer bolts.

We hope you have found these instructions helpful.

Old Soldier Ironworks will be conducting R&D during the winter months, in addition to our normally scheduled operations for sales and service. Please stay tuned for new and exciting products...you're gonna dig em!

OSI Staff