

Tailwheel Mounting Kit

If you have ordered a tailwheel fork along with your mounting kit, parts have been tested for fit in our shop, but we recommend a dry test assembly before adding lubricant and doing final assembly to test fit and function. Your kit should include the following:

- Mounting socket
- Control arm
- Locking pin and spring
- 2x large washers for the top of the assembly

Please note that if you already have the standard Van's full swivel tail assembly and that is in good shape, you do not need to replace the mounting socket. You can save yourself time, trouble, and expense by simply replacing the tailwheel fork. Contact us by email if you have unused parts that you would like to return.

As you assemble your tailwheel, make sure to properly lubricate all parts with a grease of your choice. Anything slippery will do, though you should probably avoid anything that is "safe for personal use." Aeroshell 22 or wheel bearing grease are commonly used options.

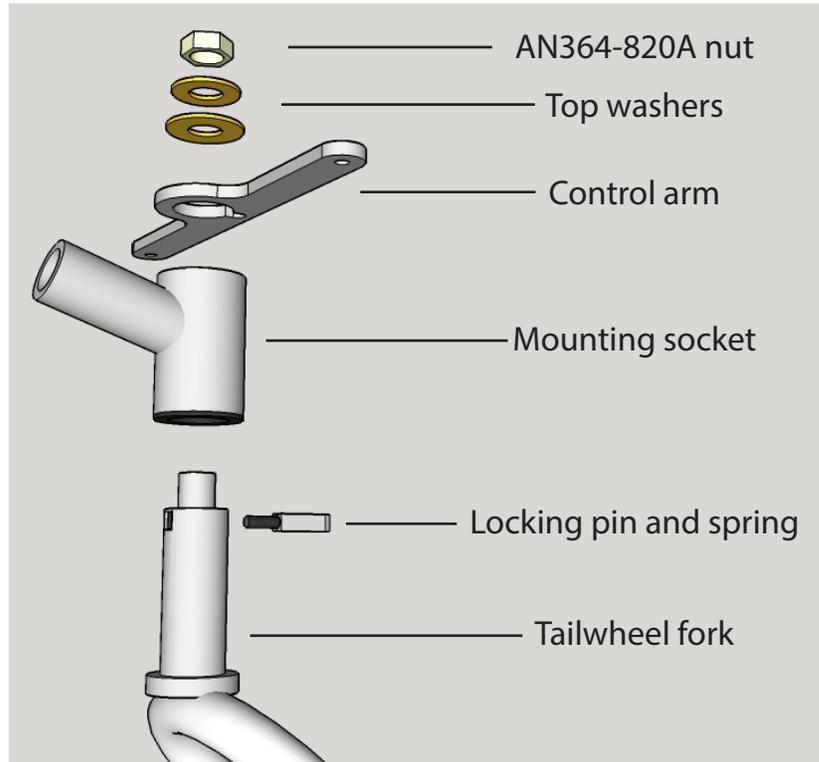
Pay special attention to the locking pin and square hole. Test operation several times before final assembly, and make sure that this mechanism is thoroughly lubricated to prevent any malfunction.

Steps for Assembly

1. Attach the mounting socket to the tail spring. If you are replacing an existing socket, see our document on "Replacing a mounting socket." If you are adding the socket to a new installation, see our document on "Drilling and Installing the Tail Spring."

If you don't already have these documents, email blake@flyboyaccessories.com or find them on our website.

2. Insert locking pin and spring into the square hole on the shaft, noting the orientation of the rounded corners on the pin (rounded corners should be on each side, not on the top and bottom).



3. Depress locking pin into its housing and slide the vertical shaft up into the mounting socket. When fully inserted, the locking pin should be able to extend into the groove on the top of the mounting socket, and should ride smoothly in the groove.

4. Turn the fork to depress the locking pin and slide the control arm onto the top of the tailwheel shaft, with the notch in the control arm pointed aft. A new control arm and fork will likely be a tight fit, but it should go on by hand, and you should be able to rotate the control arm around the shaft by hand. If that's not the case, check both pieces for interfering burrs and address them. Judiciously remove material from the control arm hole using a spindle sander if necessary.

Bringing the tailwheel and the control arm into their neutral (trailing) positions should engage the locking pin in the notch in the control arm. Test locking and unlocking function by manipulating the tailwheel fork and control arm manually.

Very important: pay close attention to the top surface of the control arm and its spatial relationship to the top of the shoulder of the tailwheel shaft. For proper fit, the control arm surface should sit just a little below the shoulder of the shaft. If the control arm sits too high, the nut that holds the assembly together can tighten down onto the socket and control arm, and bind the whole assembly. If this occurs, you can carefully remove material from the top of the mounting socket using a belt sander until proper fit is achieved.

5. Once you have lubricated the assembly, add washers and top nut and snug everything down. Test unlocking function again, and then go flying!

6. Optional: if there is too much space between the control arm top and the washer stack, you may add a shim washer here. Don't overdo it; see the note on step 4.

Important note: some of our mounting sockets come already powder coated; other sizes do not. Regardless of finish, please note that you should not powder coat or weld on the mounting socket, as the high heat from these activities will damage the plastic bushing. We do have replacement bushings available on our store in case you aren't the instruction-reading type.

 **FLYBOY ACCESSORIES**

888-8FLYBOY (888-835-9269)

blake@flyboyaccessories.com