Changing a Mounting Socket

If you've purchase a Screaming Eagle Mounting Socket or Van's Type Tapered Rod Spring from us, you'll notice that these items do not come predrilled. Because RVs are custom built and many builders have drilled their own bolt holes in various degrees of spacing and straightness, we must leave these holes undrilled so that you can duplicate them for an exact fit on your plane.

If you are installing a fresh mounting socket onto an already-drilled tail spring, you'll want to match drill the holes for an exact fit. You can find some instruction and discussion on how to do this at

http://www.vansairforce.com/community/showthread.php?t=28339

As one VAF user pointed out in the aforementioned thread, you may choose to use tapered pins for this job to eliminate any movement due to wear or error. We've collected the information you should need to use tapered pins to mount your tailwheel (please double check all part numbers provided!).

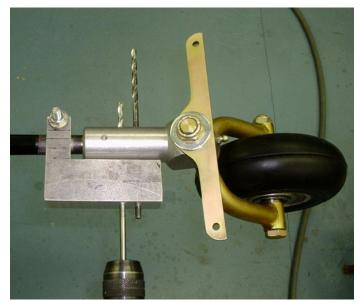


Photo Credit to Dan Horton, via Van's Air Force

To replace the AN4 bolt that hold the WD409 weldment to the the tapered (stinger) spring:

- AN386-2-9A taper pin (Aircraft spruce)
- AN975-3 taper pin washer (Aircraft spruce)
- B&S #2 taper pin reamer (available for half the price of ACS at http://www.mscdirect.com/MSCCatLookup2.process?MSCProdID=02054021)
- 12" long tap handle (<u>http://www.harborfreight.com/cpi/ctaf/Displayitem.taf?</u> <u>itemnumber=45206</u>)

The taper pin has the advantage that you can tighten the nut if the pin should ever loosen up, and things should be snug again. The taper pin is an odd-sized Browne & Sharpe #2 taper, so don't confuse it with other -2 tapers.

To replace the two AN3 bolts that hold the mounting socket to the the tapered (stinger) spring:

- <u>http://www.aircraftspruce.com/catalog/topages/reamers.php</u>
- <u>http://www.aircraftspruce.com/catalog/hapages/an386taperpin.php</u>
- <u>http://www.aircraftspruce.com/catalog/hapages/an975taperpinwshr.php?</u> <u>clickkey=61399</u>

You will probably want the B & S Taper No. #1 reamer, qty. 2 of the AN386-1-8 pins, and qty. 2 of the AN975-3 washers. (You can use a longer pin if you like, and grind off the excess. See ACS notes below for installation data.)

You'll also need patience, cutting oil, reamer (tap) handle, AN365-832 or AN320-832 nuts, and patience.

Pin data from the ACS site:

Manufactured from alloy steel, minimum tensile strength 125,000 PSI. Cadmium plated. Taper: 0.500"/ft. Use with AN975 taper pin washer, AN320 shear castle nut and cotter pin or with AN364 elastic stop nut. When installed, the small end of the tapered shank should protrude no more than 1/16" above the surface of the assembly. The first dash number is the Brown & Sharpe taper pin reamer number and the second dash number is the grip length in eighths of an inch. For undrilled threaded shank add the letter "A" after second dash number

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