

New Tail Wheel Collar Modification

For those of you that have purchased the new tail wheel collar, congratulations! There is only a limited amount of these made so you are among the proud owners of the new, improved tail wheel collar.

Description

The original tail wheel collar (P/N 17F42041 or RPN 1126) was a forging made from 2014-T6 aluminum. This proved to be adequate but when a really hard landing was made or corrosion has reared its ugly head, it tended to crack at one of the bolt holes rendering the collar "unfixable". The new tail wheel collar is made from 7075-T6 billet aluminum and is considerably stronger and more corrosion-resistant than the original. It is also gold anodized for more corrosion protection. The design is slightly different but will not affect operation or weight. The new design will work with locking tail wheels and with a slight modification can be installed on steerable tail wheels as well.



CAD rendering of proposed collar
(RPN 1126 or 17F42041)

Procedure

For steerable tail wheels, the inner "ear" of the collar must be removed and a small wedge and pin is installed to accommodate the steering pulley on the other ear. In addition a small hole drilled in the collar for the left cable pulley. You must use the hardware removed from your steerable tail wheel to complete this modification.

Note: If you have a stock Seabee with a locking tail wheel and want to convert to a steerable tail wheel, there is a myriad of modifications required to do so. You may be better off sticking to the locking option. Cable guides, new pulley brackets and interior pulleys are just some of the requirements. ***This collar is for replacement only!***

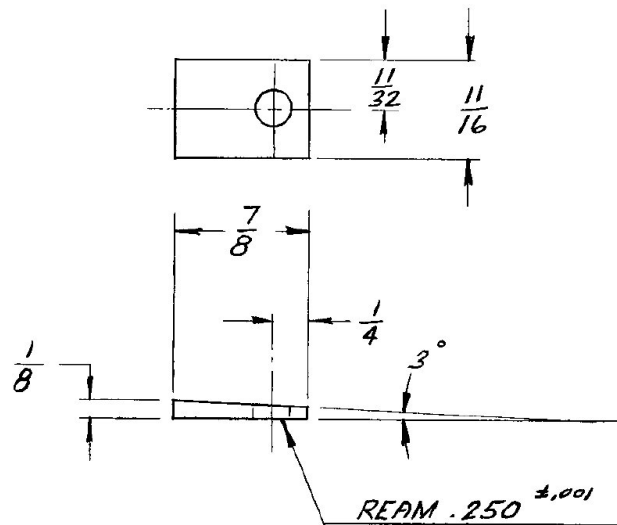
If you have a locking tail wheel, install the collar and go! Perhaps a little shaving of the inner circumference of the collar or the outer surface of the tail wheel "barrel" will be required to fit it into the tail wheel "barrel" (17F40728 or RPN 1125) but that's it!

If you have a steerable tail wheel, follow the instructions on [Republic Service Bulletin #17](#) available on the Seabee Club website. You will need to keep all the pulley hardware from your existing tail wheel and fabricate a small wedge for the steering pulley on the right side of the tail wheel collar as shown in the diagram below, or if you have a wedge on your old collar, drill it out and install it on the new collar if it is still in good condition.

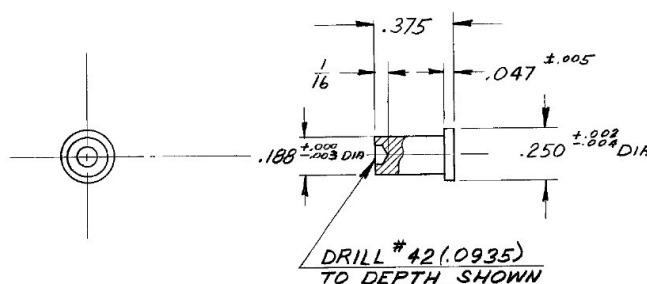
In a nutshell:

- 1-Cut off the inner ear of the new collar. Smooth as necessary.
- 2-Fabricate the wedge (P/N 17F42276 photo below).
- 3-Drill and tap the hole next to the remaining ear as shown below.
(This is for the left-hand steering cable pulley)
- 4-Drill two holes in the remaining ear for the wedge as shown.
- 5-Fasten the wedge with the steel pin (P/N 17F42277).
- 6-Fit and install the new collar with new clevis bolts
(2 ea. AN25-13A and 6 ea. AN26-13A).
- 7-Reattach pulley and additional removed hardware.

Detail of wedge
(17F42276)
Alclad Aluminum



Detail of wedge pin
(17F42277)
5/16" Steel bar



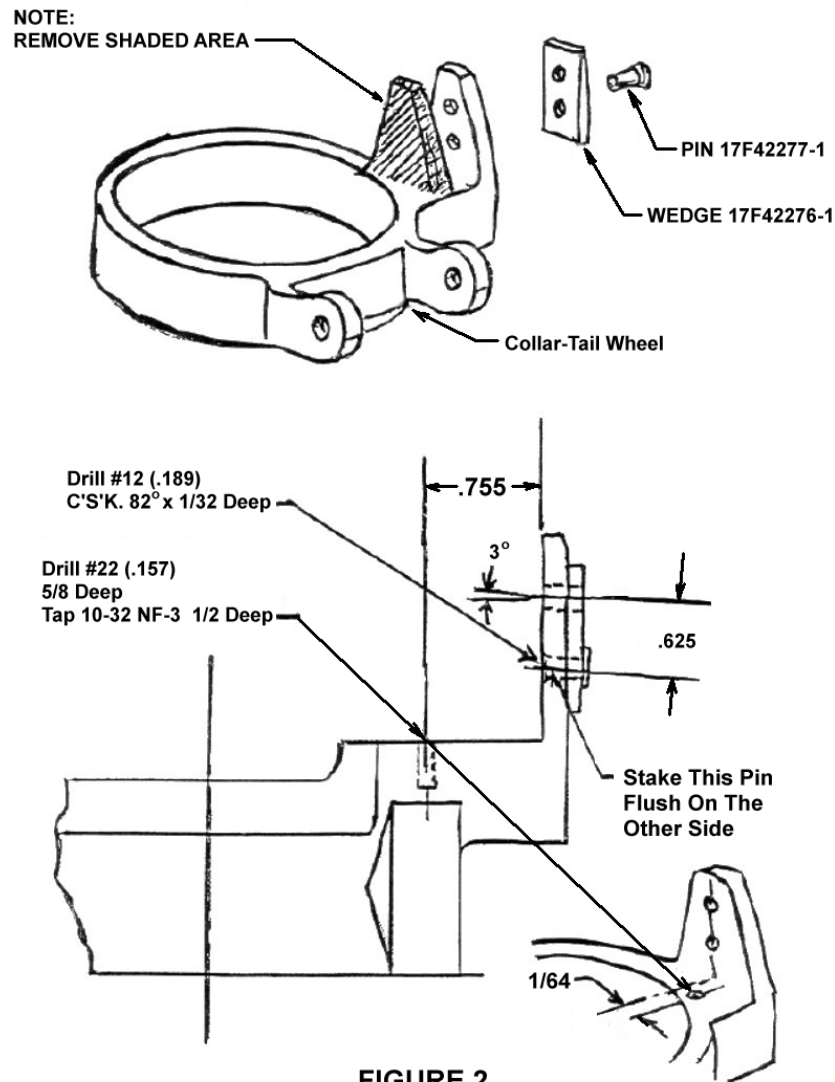


FIGURE 2
COLLAR REWORK

Keep those landings as smooth as you can!

The Seabee Club wishes to thank member Kevin Alquist for his research and hard work getting this done. This part has been a long time coming.