

### **OPTIONAL - TAILDRAGGER PULL HANDLE ASSEMBLY**

- Optional Pull Handle Assembly may be installed during or after Vertical Stabilizer Assembly is complete.
1. Refer to **SECTION 003** and collect all the parts shown on the part pages for the Pull Handle.
  2. Separate the Pull Handle Doubler into 2 pieces.
  3. Cleco doublers to each side of the Vertical Stab as shown on the parts page. Drill all holes to #30.
  4. Find the center of the large hole in the doubler and drill the Vertical Stab Side Skin to 3/4" to match the doubler. *Hint: A stepped drill bit will help.*
  5. Cut the 3/4" raw stock Aluminum tube .080" longer than the outside of the doublers. Cut long and trim a little at a time. Refer to **FIGURE 003-04**.
  6. Remove the doublers and final size the side skins to 7/8".
  7. Cut the 7/8" raw stock Aluminum Tube to be flush with the outside of the skins. Cut long and trim a little at a time.
  8. Apply JB Weld or similar adhesive to the trimmed raw stock tubes. Slide together and install in the Vertical Stab between the doublers. Be sure to center the 3/4" tube inside the 7/8" tube. The 3/4" tube should extend .040" beyond the outside of the doublers on each side. Rivet doublers to Vertical Stab.
  9. Fabricate the Pull Handle by cutting Raw Stock Tubes to length as shown in **FIGURE 003-05**. Apply JB Weld or similar adhesive to glue the 3/4" Aluminum Tube flush with the end of the 5/8" Aluminum Tube. Wipe off excess adhesive and allow to dry.
  10. Slip Handle Grip over end of Handle Assembly.
  11. Insert handle into Vertical Stab until against the 3/4" tube extending beyond the doubler. Place a mark flush with the opposite end of the tube. Remove handle from Vertical Stab.
  12. Refer to **FIGURE 003-05** and locate a 1/4" hole for the Quick-Release Button to protrude through. The Button will lock the Pull Handle in place when fully inserted.
  13. Insert Quick-Release Button into handle. Make sure the button can pop-up fully.
  14. Insert handle into Vertical Stab, until locked in place, for easier handling of the S-21 OUTBOUND on the ground. Press the button to remove.