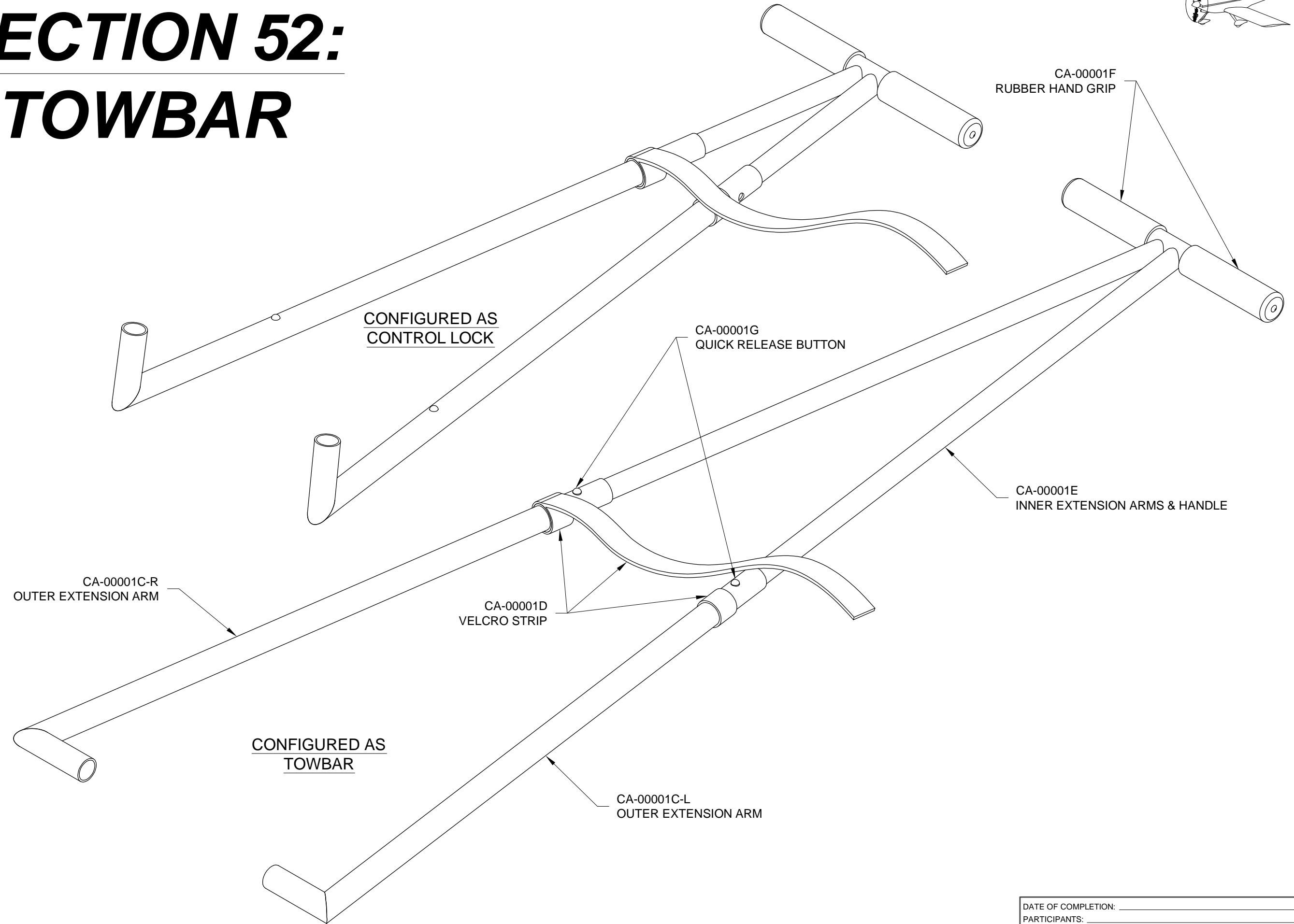


SECTION 52: TOWBAR



Step 1: Trim the CA-00001F Rubber Hand Grips to length as shown in Figure 1.

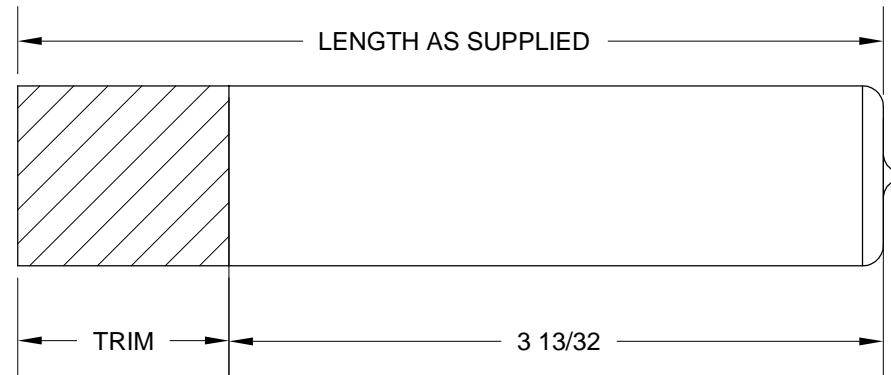


FIGURE 1: TRIM GRIPS TO LENGTH

Step 2: Install the CA-00001F Rubber Hand Grips onto the CA-00001E Inner Extension Arms & Handle as shown in Figure 2.

Step 3: Insert the CA-00001G Quick Release Buttons into the CA-00001E Inner Extension Arms & Handle as shown in Figure 2. Insert the quick release buttons such that the "button" portions protrude out of the holes in the inner extension arms & handle. This assembly will subsequently be referred to as the Towbar Handle.

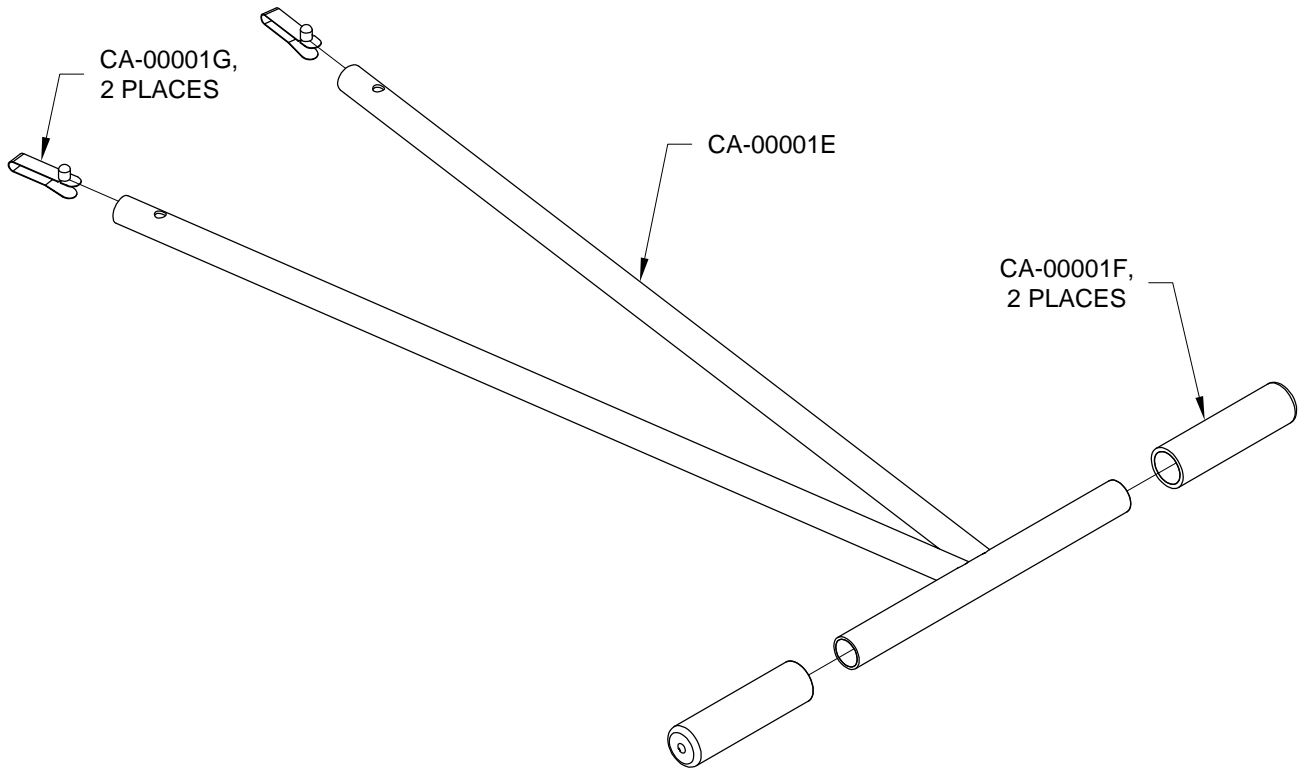


FIGURE 2: INSTALL GRIPS & QUICK RELEASE BUTTONS

Step 4: Separate the "hook" side and "loop" side of the CA-00001D Velcro Strip from each other.

Cut two lengths of "hook" velcro strip, each one 2 9/16 inches long.

Peel-back the protective paper from the self adhesive back of each length of "hook" velcro strip and install on the CA-00001C Outer Extension Arms as shown in Figure 3.

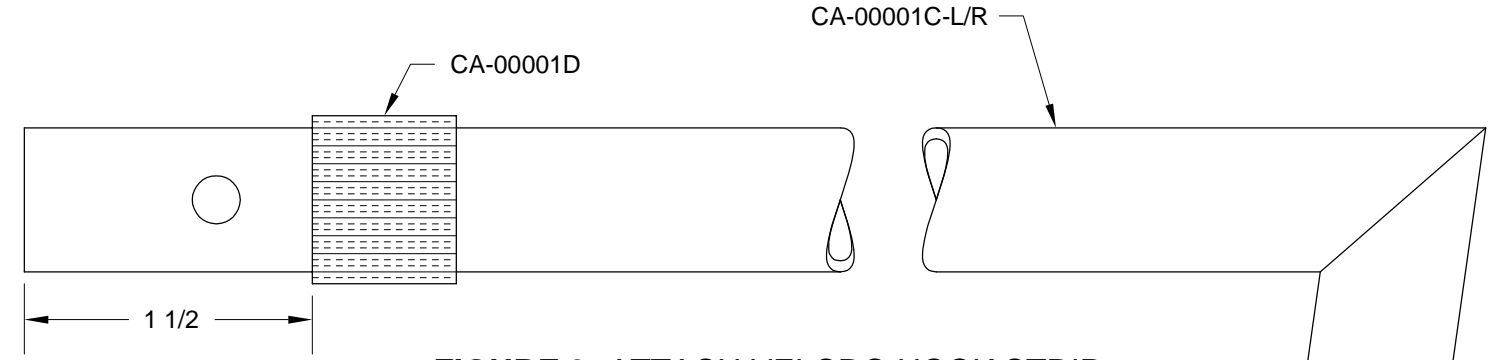


FIGURE 3: ATTACH VELCRO HOOK STRIP

NOTE: Completion of the following step is necessary only if the optional Wheel Fairings have NOT been installed on your RV-12 aircraft.

Step 5: Remove the Nose Wheel Assembly from the WD-1230 Nose Fork.

Final-Drill 5/16 the 1/4 inch holes in the nose fork as shown in Figure 1. Install the bolts, washers and nuts shown in Figure 1.

Reinstall the Nose Wheel Assembly.

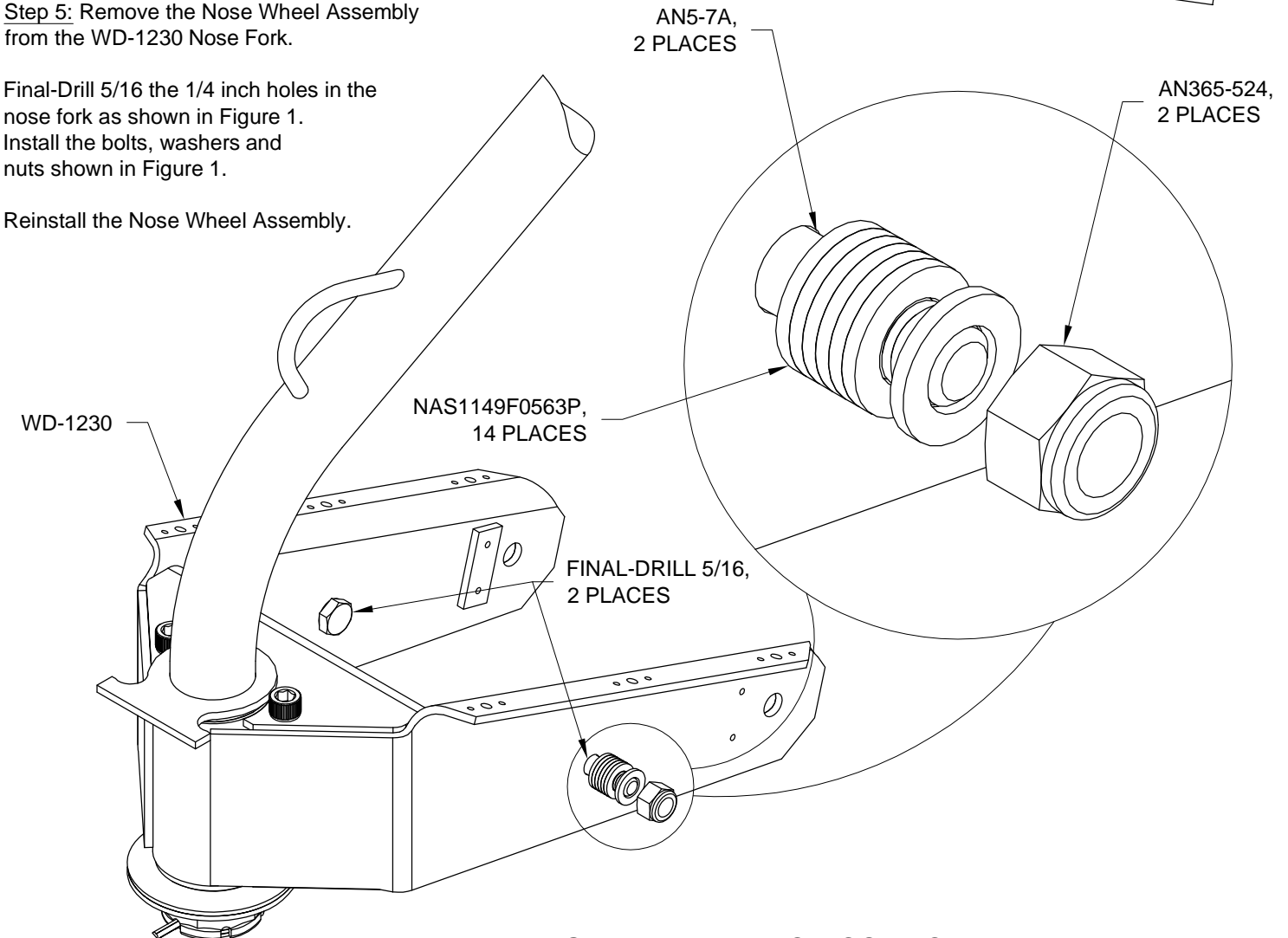


FIGURE 4: ADDING HARDWARE TO NOSE FORK



**FIGURE 1: CONTROL LOCK
INSTALLATION OVERALL VIEW**

Step 1: Place the CA-00001C-L & -R Outer Extension Arms over the CA-00001E Inner Extension Arms & Handle approximately as shown on Page 52-01 "Configured as Control Lock" view. The assembly will be subsequently referred to as the Towbar Assembly.

Step 2: Place the Towbar Assembly handle end against the F-1203 bulkhead with the outer extension arms resting on the left side rudder pedals as shown in Figures 1, 2, and 3.

Step 3: Grab a sharpie pen and sit yourself in the right side seat of your RV-12.

Place your feet on the rudder pedals and apply a moderate amount of force, something like 50 lbs, to each rudder pedal.

While maintaining force on the right side rudder pedals, push each extension arm forward so that they rest on the top of each rudder pedal and against the aft side of each brake pedal as shown in Figure 2.

With the extension arms in position and while force is being maintained on the right side rudder pedals, make a sharpie mark on each inner extension arm at the aft edge of each outer extension arm. See Figure 2.

Relax pressure on the rudder pedals, climb out of the aircraft, and remove the Towbar Assembly.

Step 4: Remove the CA-00001C-L & -R Outer Extension Arms from the Towbar Handle.

Place the the towbar handle on a table-top. Place each outer extension arm alongside its corresponding inner extension arm. Orient the outer extension arms such that their "fingers" are perpendicular to the surface of the table . Position the extension arms to re-align the aft edges of the outer extension arms with the sharpie pen marks on the inner extension arms.

Use your sharpie pen to mark the location of the quick release button centers on the outer extension arms then move the mark 1/8 inch away from the "finger" end of the outer extension arms. This relocation of the mark will ensure that when the control lock is installed it will apply pressure to the brake pedal.

Drill a 1/4 inch hole in each outer extension arm at the location of the quick release button center.

Thoroughly deburr the drilled holes, particularly the edge of the hole on the inside of the tube so as to prevent scratching or gouging of the tubes as they "telescope" on each other.



**FIGURE 2: CONTROL LOCK POSITION
ON RUDDER & BRAKE PEDALS**



**FIGURE 3: CONTROL LOCK
POSITION AGAINST BULKHEAD**

Step 1: Carefully mate the self adhesive side of the remaining length of the "hook" side of CA-00001D Velcro Strip to the self adhesive side of the "loop" side of the CA-00001D Velcro Strip.

Fold the "extra" length of "loop" velcro strip back onto itself such that the folded-over end of "loop" velcro strip butts against the end of the "hook" velcro strip. See Figure 1.

Step 2: The CA-00001D Velcro Strip is used to hold tension on the extension arms so that they are not able to slip-off the nose wheel fork when using the towbar to move the aircraft.

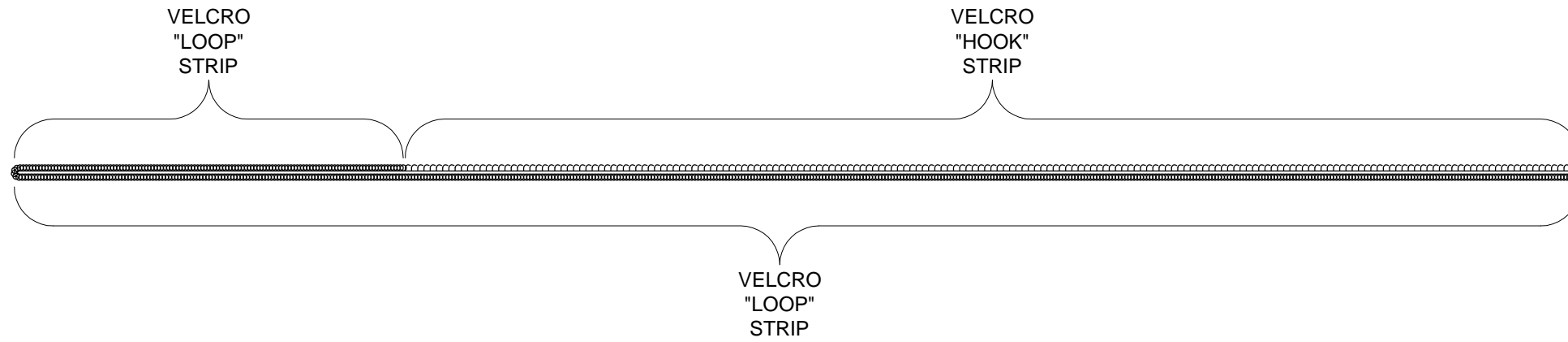


FIGURE 1: VELCRO STRIP CONFIGURATION

CAUTION: When carrying the towbar in the aircraft, it must be stowed and secured (just like any other loose item in the cabin) in such a manner that it will not become a projectile in the event of a sudden deceleration.