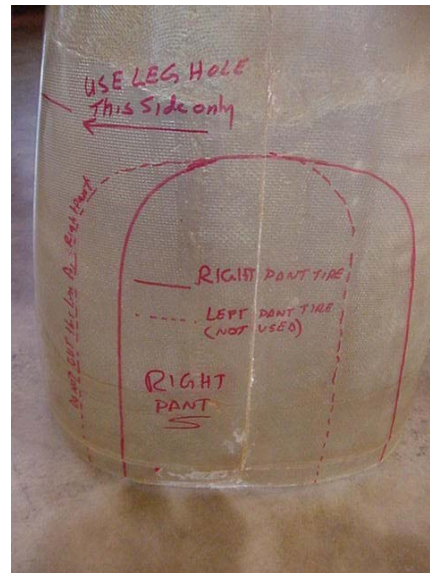
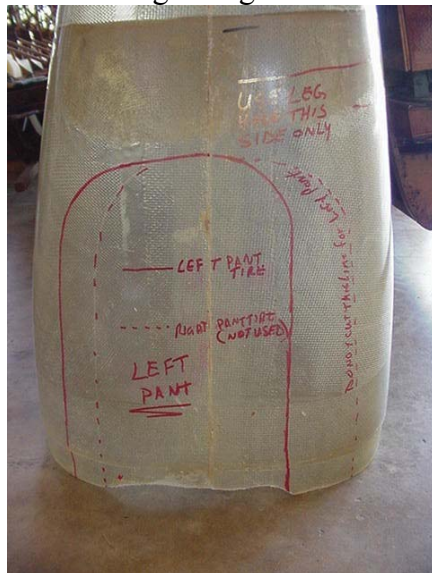


# Pitts Model 12 Wheel Pant Installation

- Install main gear spring, axles, wheels and brakes, inboard wheel pant brackets and tail wheel assy. Install 4 each 10-32 nut plates in each bracket with flush rivets.
- Wheel pants are to be fitted while the airplane is in 3 point attitude.
- Locate the scribe lines on each of the fwd and aft wheel pants halves that indicate the cutouts for the gear legs and tire openings. Notice that there are 2 sets of lines on showing the tire cutouts. Choose a left and right pair of fwd and aft parts and label them as such.
- On each of the aft sections, trace the inboard leg notch with a sharpie.



- On each aft section mark the outboard tire scribe line with a sharpie. Note that the wheels and tires favor the outside of the wheel pant. The inboard part of the pant covers the gear leg and brake.



- Mark matching outboard tire scribe lines on the fwd sections one left one right.



- On the aft sections, cut the leg notch and tire opening on the marked scribe line. These openings will be too small so you can trim to fit.
- On the fwd sections, mark a second line 3/8" inside the marked scribe lines. This will make an opening that matched the rear opening allowing for further trimming.
- If you have the gear trailing edge rubber and brake lines installed, you will need to cut the leg notch further aft in a "V" shape to clear it.



- Trial fit the aft sections to the plane. Open up the tire hole a little at a time as needed. This varies with the brand of tire you have.



- When adequately trimmed, the pant should have  $2\frac{1}{2}$ " of clearance to the floor at the extreme aft end and the step at the front end should fit to the brackets as shown. Also check that they aligned to the airplane center line. Do this by looking at the tire tread and the mold line on the aft sections.



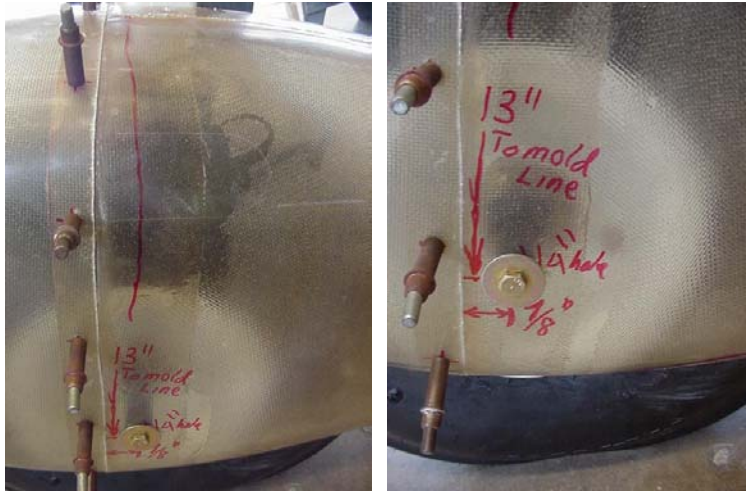
- Check for  $\frac{1}{2}$ " min clearance between the top of the tire and inside of aft section. Use a small block of wood to hold this spacing.



- When all lined up, drill 4 inboard mount holes through the aft section at the nut plates with a  $\frac{3}{16}$ " bit. Put a 10-32 screw in each hole after drilling.



- Drill outboard mounting hole to match hole in the center of the axle stub with  $\frac{1}{4}$ " drill. Take care not to damage the threads in the axle stub. This hole should be approx 13" from the center mold line and  $\frac{7}{8}$ " aft of step joint as shown. Install a  $\frac{1}{4}$ -28 bolt in the outboard hole.



- Remove the 10-32 forward 2 inboard mount screws. Fit the fwd sections onto the aft ones. Trim tire hole and aft edge as needed to get a good fit. Tape in place with masking tape.



- Layout and drill  $\frac{1}{8}$ " holes as shown. Don't put a screw hole directly over the center of the tire. This will keep maximum clearance to the tire as the tire expands while spinning. Note that the 2 forward inboard mount screws will pass through the nose sections at the brackets.



- Mark pants for final trimming at tire and gear leg. 3/8"-1/2" clearance all around tire and 1/8"-3/16" around gear leg and rubber.



- Remove all 4 pant sections and trim holes to the final lines marked.
- Drill out the screw holes with a 3/16" drill.
- Install 8-32 nut plates in the step flanges of the aft sections with flush rivets.  
Note, do not add nut plates to the holes that are for the inboard mounting bracket.
- Drill a 3/16" drain hole in the bottom of the aft sections just aft of the bulkheads.
- Test fit the fwd and aft sections together and then assemble on the airplane again for a final test fit.
- When satisfied with fit, remove, fill, prime, and paint as desired.