VENTURE 60 WHEEL PANT ASSEMBLY

Contents of the BTE Venture 60 Wheel Pant Kit:

4   Wheel Pant Halves (2 left, 2 right)
2   1/16" x 3/4" x 2" Plywood Wheel Pant Plates
4   #2 x 3/8" Sheet Metal Screws
6   #8 Flat Washers (for wheel spacers)
1   18" Long Piece of 1" Wide Fiberglass Tape
1   Instruction Sheet

1. ❑❑ Sand the rough edges of the wheel pant halves smooth. The best way to do this is to tape a piece of 150-grit sandpaper face-up on a smooth table top. Now sand the plastic edge smooth by moving it over the sandpaper in a figure-8 motion, using light pressure.

2. ❑❑ **a.** The 1/16" x 3/4" x 2" plywood wheel pant plate should be sanded one side (the side that's to be glued to the plastic) to match the curved inner surface of the wheel pant. This plate will help distribute shock loads to a large area, but must make good contact with the wheel pant to work properly.

b. Use medium CA to glue the wheel pant plate inside the inboard wheel pant half.

c. Accurately drill the 3/16" dia. axle hole at the location shown in the diagram.

3. ❑❑ **a.** Use four pieces of tape to hold the wheel pant halves tightly together, then apply thin CA to the joint areas exposed between the tape. Use a small applicator tube to apply the glue sparingly. Remove the tape and add glue to the joint where the tape used to be.

b. Cutout the flat bottom surface of the wheel pant to make a wheel opening. A small sanding drum in a Dremel Moto-Tool works great, or you can drill a series of holes and cut between the holes with a knife. Sand the wheel opening to its final shape, making sure there's plenty of clearance (about 1/8" on each side and 1/4" at the front and back).

c. Reinforce the center joint with 1" fiberglass tape applied from the inside. Use three pieces for each wheel pant; a 6" piece along the top, a 2" piece on the bottom behind the wheel opening, and a 1" piece in front of the wheel opening. You can mist the fiberglass pieces with spray adhesive, stick them in place, then soak them with thin CA. Yeah, it's tough working through the small opening, but since nobody will see it, you don't have to make it pretty. Spray the tape with accelerator to make sure the CA is dry. You now have a very strong wheel pant!

4. ❑❑ **a.** Chances are the center joint will need sanding on the outer surface of the wheel pant. Use a sanding block with 150-grit paper to smooth the joint. Try not to leave an obvious flat spot all the way around. Instead, use your sanding block to blend the sanded joint area into the rest of the wheel pant.

b. Prepare the wheel pant for paint by sanding it with hand-held pieces of sandpaper, starting with 220-grit and finishing up with 360 or 400-grit. Any obvious scratches in the plastic will look worse after painting, so keep sanding until you have a very smooth surface that appears dull or frosty.

c. Use a sanding block to sand a flat spot at the axle hole, to allow the wheel pant to set flat against the aluminum landing gear leg.

d. Cut a 3/16"-wide slot from the axle hole down to the wheel opening.

5. ❑❑ Drill two 3/32" dia. holes in each landing gear leg as shown below. Be safe! Remove the landing gear from the model and hold them firmly in a vise while drilling.

5/16"

FULL SIZE
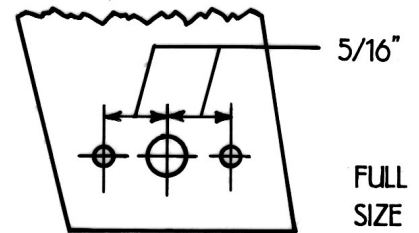
6. ❑❑ **a.** Bolt the gear to the fuselage, then trial fit the wheel pants. Use the same wheel & hardware as shown on page 9 of the Venture booklet, but sandwich the wheel pant between the nuts and the landing gear. Use as many flat washers as needed to center your wheel.

b. With both pants in place, step back and make sure they are aligned with each other and the fuselage. When satisfied, mark the wheel pants through the 3/32" holes in each landing gear. Remove the wheel pants and drill at each mark with a 1/16" drill.

7. ❑❑ A scrap balsa stick tack glued inside the wheel pant can be a temporary handle for painting. Wipe the pants clean with alcohol, then spray or brush on your choice of paint. Many color paints can be applied directly to the ABS plastic without priming. In fact, most of the covering material manufacturers offer paints to match their coverings. Always follow the paint manufacturer's instructions.

8. ❑❑ Install the wheel pants on your completed model as you did in step 6, then secure them by adding two #2 x 3/8" sheet metal screws through the landing gear and into the small holes in the wheel pants.

SHADED AREA REPRESENTS THE FLAT SPOT TO BE SANDED ON WHEEL PANT OUTER SURFACE.

6"-LONG FIBERGLASS TAPE

1/16" x 3/4" x 2" PLYWOOD WHEEL PANT PLATE

3/16" DIA. AXLE HOLE

13/16"

1"-LONG TAPE

2"-LONG TAPE

2"

3"

CUT SLOT AFTER HALVES ARE GLUED TOGETHER.