Ziroli Beech 18 1/5 Scale

Parts List

Vacuform Parts

Two Single Seat Bottoms
Two Single Seat Backs
Two Side Walls
Dash Hood
Dash
Center Console
Lower Dash Right Side
Lower Dash Left Side
Four Rudder Pedals
Two Floor Plates for Rudder
Floor Plate Between Seats
Back Wall

Miscellanous Parts

18 Large Pins
Alum. Wire for toggle switches
3/16" alum. Tubing for yokes, 2" Long
Two T-Pins
Plastic channel for switch guards, 1/8 x 2" Long
1/8" alum. Tubing for seat braces, 8" Long
1/16" x 3/32" Plastic Rectangle 2" Long
24" of Alum. Tubing for Seat Legs, 1/4 Long
14x12 Felt
1/16" Alum tubing 6" Long
Computer Disc
Plastic Liner 12x12

Resin Pieces

Two Steering Yokes
Two Steering Posts
One Large Trim Box
One Small Trim Box
Trim Wheel
Knurled Knob

Instructions

Thank you for purchasing this cockpit interior. It was designed for the Ziroli's 1/5 Scale Beech 18 but will fit any other 1/5 scale Beech 18. Also included with this interior is Computer disc, some picutres are of the completed model interior and three pictures of a rebuilt Beech 18 Interior. The other pic is from a Beech 18 which is stuck in the ground north of Ottawa, although it is old and the floor and guages are missing most of the interior is complete. You might find this computer disc helpful in building the interior.

1 FLOOR-
the felt provided and glue it to the balsa to simmulate carpeting. You can paint this felt any color that you like although I would recommend using a small piece of this felt for a sample to paint to make sure your paint is compatable. I put my floor 4 3/4 down from the window ledge. This is slightly above the window height and you may want to lower it alittle more. You should just glue somecross stringers in the fuse and then use 1/8" balsa for the floor.

2 BACK WALL- Cut out the doorway leaving the lip as big as possible. Cut off the bottom leaving as much material as possible. The big step at the bottom of the back wall is the wing spar. I would recommend notching out the bottom section so that it will fit in the fuse to the floor line and then inserting it into the fuse and then trace around the fuse on the back side of the back wall and then cut the wall so it is flush with the edge of the fuse. You can either paint this your interior color

or you can paint this zinc chromate green for a military interior. You should fit the plastic sidewalls if you are using them as you may have to notch out the bottom of the back wall or the sidewalls to go around the simulated wing spar.

3 SIDEWALLS- I have provided two ways to do the sidewalls-you can use the vacuform pieces which simmulate a pleated sidewall or you can use the shinny cloth provided in the kit. You can paint this cloth OD Green and glue it to the sidewalls as an insulating cloth if you are doing the military version. The other option is to leave the walls bare and just paint the walls. After you have determined which version you are doing cut to fit and then paint and glue in the sidwalls and the back wall.

4 DASH- Using a sharp razor knife cut the back off of all the holes for the guages leaving approx. 1/16 of an inch depth in the holes. Cut the outer edge of the dash leaving 1/16" of an inch around the edge. Paint this dash black then using the clear plastic provided cut out so it will cover all of the guages in the back of the instrument panel. Using a low temp. hot glue gun or thick CA tack glue the plastic in place, next cut out around all the guages and insert all the guages at the same time as they are already spaced for you then tack glue this paper behind the plastic. Next cut a piece of 1/16" balsa and tack glue to the back of the paper guages, glue this around the edges to make a sandwich of the entire dash assembly. Do not glue this assembly in the airplane yet because we will need to put the lower dash next.

5 LOWER DASH LEFT SIDE- Before you put in the lower dashes you will need to measure the width of the center console and center it up on the dash then you need to measure the dash from the center console to the edge to get the length of the lower dash. It should be approx. 3 3/4". Cut the ends off of the lower dash leaving the same bare material on both ends. Cut the back off of the guages and then paint them, install the guages just like the dash. The lower buttons are circuit breakers and the top bottom are switches. You need to glue a piece of balsa' in behind the lower dash the full size of the dash. Paint the circuit breaker buttons white and paint the switch buttons silver. Using a small drill size 60 drill a hole in the top of the switch buttons and thru the wood. Next using the alum. Wire provided flatten one end with a hammer and then sand it round like a switch. Cut off so it is approx. 1" long and stick thru the hole, you can bend this up or down to have the toggle switch on or off then glue in the back with thick CA. Repeat this with all the toggle switches. Glue this under the left side of the dash approx. 30 degrees down angle.

6 LOWER DASH RIGHT SIDE- Cut out this dash just like the left side and glue a piece of balsa behind the lower dash. Paint the circuit breakers white and the switches silver and install the switch levers. Using the 3/32" x 1/16" plastic rectangle cut three pieces 3/8" long, paint two red and one white. Glue the white one to the top of the button in the circle on the left side of the lower dash and glue the red ones on each side of that all facing down. Before you glue this in place you should install the rudder pedals.

7 RUDDER PEDAL ASSEMBLY- Cut out the four plates for the rudder pedals, paint the bottom of the slot black and the floor plates can be painted an alum. Color, Zinc Chromate Green or interior color. The front of the rudder pedal plate should be approx. 6 1/4" forward of the rear wall and center between the center console and the side wall, you will need to cut two slots in the floor to allow the slots to fit thru the floor. Cut around the rudder pedals and paint those zinc chromate silver or the color of your interior. Before you paint these pedals you should glue a 3/16" tubing to the back of the pedal, cut a notch in the bottom lip of the pedal and put the tubing thru the notch and glue to the back and top of the pedal. Drill a hole in the slot of the rubber floor plate 3/16" diameter and insert the pedal thru the floor and glue in place. Then glue this whole assembly to the floor on both sides.

8 DASH - Now you can glue the dash into place. The top of the dash should be even with the top of the fuse in front.

9 DASH HOOD- Put the dash hood on the airplane and tape into place before cutting it. The rivet line should be approx. 1/4" behind the dash then set the canopy on top of the dash hood and draw a line around the edge of the canopy. Remove the canopy and remove the dash hood and cut inside of this line, paint the dash hood black and glue into place.

10 THE CENTER CONSOLE- This center console is designed to be 3" tall and 3" long. Before you cut this piece make sure that you have at least 3" between the floor and the dash, if it is taller you can make the dash center console dash taller but keep it 3" Long. Mark both sides with a ruler and cut it out. Then set into the interior to make sure that it fits. Next you will need to reinforce the inside sides with balsa and you also need to put balsa underneath the console where the pins are. Then paint this assembly black to match the dash on the slanted back of the console. Paint the eight places where the pins go silver then take eight pins and sand the top half off to make them flat on top. Paint them white and insert them into the silver spots. Next take two T-Pins and fill in the handles with thick CA and zap them to make them solid. Paint one silver and paint one red, the red ones goes into the rear of the center console just above floor level and the silver one goes into the circle on the horizontal part in the middle of the center console. Take two pieces of the 1/16" x 1/8" plastic rectangle provided, cut one end on a 45 degree and cut to 1/2" long and paint red. Take a sharp knife and scratch two X's on the circle on one side of the T-Pin. Glue these red handles thru the center of the X so they stick out on the left and right side. These are the fuel control handles. Take the plastic channel provided cut to 3/8" inch long and angle 45 degrees on each end with the flat down. Paint one yellow and one red and glue on each side of the console on the vertical part just below the top, the red on the left and yellow on the right, drill a hole in the center of each of these and insert a toggle switch with the wire provided. Using the resin knob provided cut to 1/8" long and glue on the end of a piece of 3/16". Paint this black and drill a hole above the silver T-Pin on the vertical part between and yellow and red toggle switches and insert this knob assembly into the hole leaving it stick out 1/8" of an inch. Next take the 1/16" alum. Tubing provided and cut 6 3/8" and 4 1/2" pieces. These are for the pins to go thru to enlarge the handle shaft. The pins in the center are 1/2" tubes with red pin tops, the lower four pins are 3/8" on each side of the center with the blue ones are the left and the white ones are on the right. The upper pins are yellow with 1/2" tubes on the left and black with 3/8" tubes on the right. After this whole assembly is together you may have to glue a piece of balsa to the bottom to glue it to the floor. Make sure that it is up against the dash.

11 FLOOR PLATE BETWEEN SEATS- Cut this out so it is approx 5/8" wide and 2 1/2" long, paint this the color of your interior and glue in the center with the front of this plate against the center console.

12 YOKE ASSEMBLY- Clean all edges of all the yokes and drill a 3/16" hole in the center of the yoke being careful not to come thru the front of it. Next clean all the edges off of the control arms, drill a 3/16" hole 1/2" back from the end of the arm making sure you make a left and right. Cut a couple of 3/16" tubing 1/2" long for the yoke shaft and assemble the yoke to the steering arm. Paint this whole assembly black, once dry, there is approx. 1" between the dash and the back of the steering arm you can glue these to the floor and the side walls.

13 SEAT- Cut around the base of the bottoms and cut around the edge of the lip on the back since you will not be seeing the back you will not need to cover the back. Glue the back onto the bottom then using the aluminum tubing provided glue four legs onto the chair. I made the top of my seat 2 3/4" off the floor, you can make them whatever you need to be, using the 1/8"

tubing provided I drilled some holes between the top and the bottom and used the tubing for the seat braces. The original seats were a welded tubing assembly and most seats had pads installed. You may paint these seats black of different colors like I did. You may want to leave the legs longer and drill holes in the floor and glue thru the floor if you are putting in pilots you may want to place a balsa block under the seats to support the weight of the pilot. You should also make sure your floor is reinforced for your pilot also.

14 **TRIM BOXES-** Sand the edges on both of these boxes and paint either Zinc Chromate green or your interior color. These boxes go on the inside of the left seat. Using a piece of the 1/16 rectangle plastic drill a small hole in each end of the plastic. In the handle end use the plastic bead provided along with the pin and glue this in the end of the plastic to form a handle. On the other end using a small headed pin stick thru the handle and thru the resin piece in the top radius then glue this whole assembly to the floor beside the seat. The small piece is approx. 1" long and glues to the spar box on the back wall and sits on the slanted part of the larger piece. Paint the trim wheel black and glue to the right side of the small box. If you have any problems assembling these look at the pictures on the computer disc.

You should have a complete interior now. If you want you can always run conduit or install extra boxes as with most airplanes there are hundreds of changes from the first to the last Beech 18. If you have any questions please feel free to call me at 815-856-2271.

thanks Brian