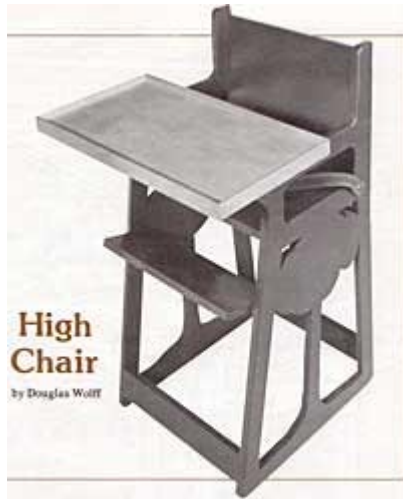


Project 12075EZ: High Chair



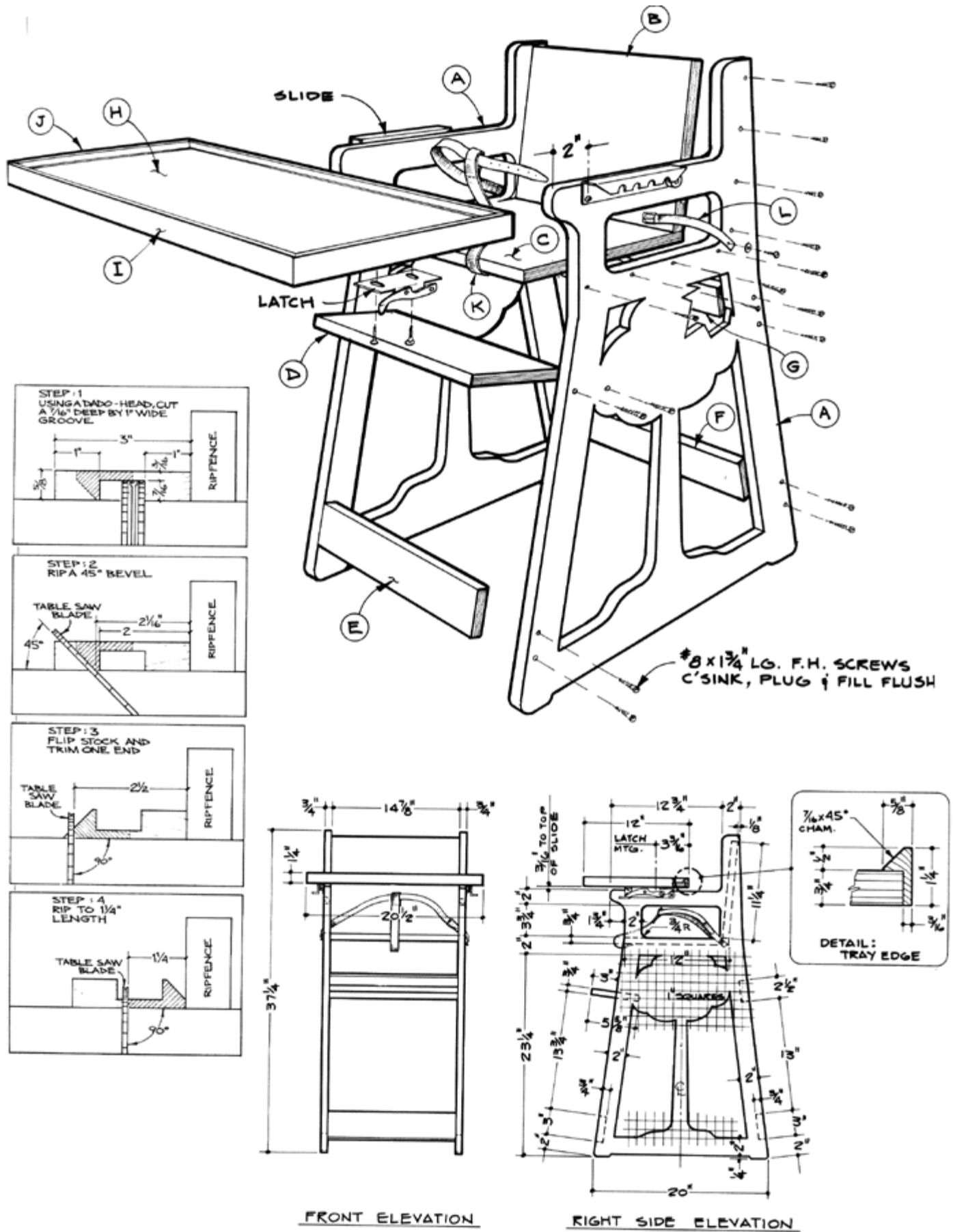
A sturdy high chair is definitely a must for anyone with a young child. This one, made from birch plywood, has both strength and stability — two important features to look for in a high chair. It also features a tray that's larger than most you'll see, with an edging to contain those inevitable spills. Except for the tray, all parts are finished with enamel paint.

As recommended by the U.S. Consumer Product Safety Commission (CPSC), we've included both a safety straps (part K and L) running between the child's legs and around the child's waist. The first prevents slipping under the tray — a potentially hazardous situation if the head becomes trapped under the tray. The second discourages standing, which often leads to falls.

High Chair Materials List

Part	Description	Size	No. Req'd
A	Side	3/4" x 20" x 37-1/4"	2
B	Back	3/4" x 11-1/4" x 14-7/8"	1
C	Seat	3/4" x 12 x 14-7/8"	1
D	Foot Rest	3/4" x 5-5/8" x 14-7/8"	1
E	Front Stretcher	3/4" x 3" x 14-7/8"	1
F	Lower Back Stretcher	3/4" x 3" x 14-7/8"	1
G	Upper Back Stretcher	3/4" x 2-1/2" x 14-7/8"	1
H	Tray	3/4" x 11-5/8" x 20-1/8"	1
I	Front/Back Tray Edge	5/8" x 1-1/4" x 20-1/2"	2
J	Side Tray Edge	5/8" x 1-1/4" x 12	2
K	Crotch Strap		1
L	Waist Strap		1

High Chair Complete Schematic



High Chair Step-by-Step Instructions

Step 1: Make the Two Sides (A)

1. Select a 3/4" piece of birch plywood from which to make the two sides.
2. Cut both side pieces (A) to 20" wide and 37-1/4" long.
3. Select one of the side pieces on which to lay out and mark the outside and inside profiles of the side as shown.
4. Use a saber or band saw to cut the outside profile.
5. Drill one or more pilot holes to start the inside cutouts.
6. Use a saber saw to cut the inside cutouts to shape.
7. Use a file to smooth and shape the edges, giving particular care to the inside and outside corners.
8. Use this piece as a template to trace the profile to the second side piece.
9. Cut out and smooth the second piece in the same manner you did the first one.

Step 2: Make Parts B through G

1. Cut square and to size — making sure each piece is exactly 14-7/8" long — the back (part B), seat (part C), foot rest (part D), front stretcher (part E), lower back stretcher (part F), and the upper back stretcher (part G).
2. Use glue and countersunk flat-head screws to assemble parts B through G to the sides (parts A).
3. Fill the countersunk holes with filler.
4. Allow the filler to dry, then sand smooth.

Step 3: Seal the End Grain and Finish

1. **NOTE:** Due to the cross-grained construction of plywood, its edges have lots of exposed end grain. Unless it is sealed, the end grain will soak up the paint like a sponge and make the finishing process a difficult one.
2. Purchase auto body glazing putty to seal the end grain and to fill any voids.
3. Apply the putty with your fingers, rubbing it in thoroughly.
4. Allow the putty to dry, then sand smooth.
5. Brush on two coats of red enamel paint, followed by one coat from a spray can to finish the assembled high chair.

Step 4: Make the Safety Straps

1. Cut a strong fabric belt to length to make the waist safety strap (part L).
2. Use a stainless steel round headed screw and washer to secure each belt section to the sides of the chair.
3. Use the same material to make the safety strap (part K) that runs between the legs.
4. Use a stainless steel round headed screw and washer to join one end of this strap to the underside of the seat.
5. Form the other end of the strap into a loop.
6. Stitch the loop with strong fabric thread.
7. Run the waist strap through the loop in the other strap.
8. Buckle the strap snugly around the child's waist to use.

Step 5: Make the Tray (H)

1. Cut the tray (H) to size.
2. Use the table saw to cut the tray edging (I and J) to size according to the steps shown in Figure 1.
3. Miter the ends of the tray edging.
4. Glue the tray edging to the tray.
5. Use a web clamp to pull the miters together and bar or pipe clamps to apply pressure across the sides.
6. Allow the glue to dry.
7. Remove the clamps.
8. Sand the tray thoroughly.
9. Apply three coats of polyurethane to each side of the tray.
10. Obtain tray hardware (slide and latch) and mount as shown.
11. Slide the tray into place.

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