Procedure 2) – See Figures 3 & 4, Details C & G

Start with the assembly of the base with pieces A,B & C. Apply glue to all surfaces and clamp together to allow the glue to set for one hour. Make sure this assembly is flat when clamped together. When the glue is dry, fasten four pieces Q to the insides of this frame, keeping them flush with the top edges (ref. Detail C & G). Use glue and two 1–1/4" #8 screws for each piece.

Procedure 3) – See Figures 3 & 4, Detail C & G

Pieces D,E & F may now be assembled. Fasten the pieces together using two 3/8"x2" long dowels in each joint. This is simple, using metal dowel centring pins, and can be accomplished with the careful use of a power hand drill and 3/8" brad point – dowel drill bit. Put a piece of tape on the drill stem to mark the maximum depth you want to drill to!

TIP: To ensure proper alignment, do not rout the outer edges or the inside 1/4"x1/2" rabbets until this frame is assembled. You may want to clamp on wood scraps to prevent pieces E & D being splintered from the router. Once completed, and the glue is dry, piece G can be glued and clamped in place.

Procedure 4) – See Figures 3 & 4, Details C & E

Assemble the box frame now by first building the front frame with pieces J & K, you can also include panel L (Option A) or panel L1 (Option B) at this point. If you are using L1, glue and clamp your trim pieces to it first. Glue and clamp all pieces together, make sure they lay flat before you leave them for an hour to allow the glue to set.

You should attach pieces H to pieces J using three 3/8" dowels.

** Note: The outside edge of J should protrude past H by 1/8" (ref. Detail E), if you make them even, your assembly won't be square and won't fit the base properly!

Glue and clamp the back panel in place, you may use a few finishing nails through M and into H as they won't show. Make sure all pieces are even at the bottom edge, and set aside to set the glue. For Option B, we have shown some diamonds cut into the top of piece Y, but this is only a suggestion as to what you may do. Use your imagination and invent a pattern, or glue on some wood decorative pieces such as we have shown for the front of panel L1.

Once dry, turn this assembly upside down and fasten it to the frame assembly D,E,F. Use glue and pre–drill for a few 1–1/2" #8 flathead screws. Tack the assemblies together first with a few 1–1/2" finishing nails to ensure proper alignment. As illustrated in Detail E there should be a 1/4" space left on the sides and front. This may vary somewhat depending on the style of your moulding cutter. Just make sure the space is equal on both sides and flush at the BACK.

This box/base assembly may now be attached to the base frame assembly by pre–drilling (use a suitably sized countersink cutter) through the cleats pieces Q, and into the bottom of pieces D,E,F. Insert two 1–1/4" #8 screws through each cleat into the base. These need not be flathead screws as they will not show when completed.

Procedure 5) – See Figures 3 & 4, Detail D

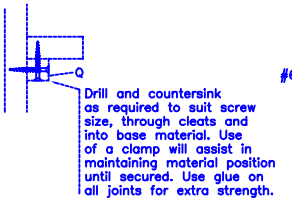
The seat sections are now built up on top of the previous assembly. You will first need to install two pieces Q to the top of pieces H (Detail C) and the two pieces R to the bottom of pieces N using glue and three 1–1/4" #8 screws. Pieces R should extend 1" inside the edges of N (ref. Detail H). Fasten two pieces Q to the top of M or to Y at 17–1/4" from the floor to support pieces P or Z as required, use glue and two #8 screws in each piece Q. Pieces N/N1 should be dowelled to pieces P/Z and then installed with glue and two 1–1/4" #8 screws through each piece Q (Detail C), so that pieces N overhang the outside of H by 1/4" and are flush at the back. Pieces P/Z can be secured with screws through pieces Q from the bottom.

Build the seat assembly by gluing and clamping together pieces S/S1. You may want to use sandpaper to put a slight chamfer on the mating top corners of each piece S & S1. This will accentuate the joint for good appearance, and help hide any joint imperfections. Do not rout the edges yet! Assemble the seat in place with a 34" length of 1–1/2" piano hinge, there should be a 1/8" space at each side. Just install a couple of screws at first to test the alignment and then install the balance of the screws. Once the seat is installed, use two pieces of 1/8" wood shim to jamb between S1 and N on each side. Make sure this is flush all along the front edge and top. This will now allow you to run the router along the front, using a 1/2" round edge cutter, all pieces will be evenly rounded off at the front. It is also advisable to clamp scrap pieces of wood at the outside edges of N to prevent any splintering of the wood from the router.

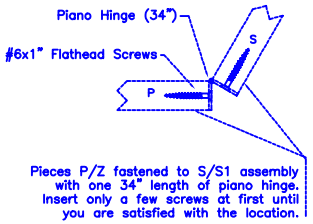
Procedure 6) – See Figure 3 & 6, Detail F

The arms, assemblies U/U1 are glued up and then the round ends are roughed out on a bandsaw, tablesaw, or with a coping saw, and sanded to shape, approximately to a 2" diameter (Detail F). These assemblies can be fastened using dowels or just glued and screwed from the back of Y or T. Bore a 3/4" dia. x 3/4" deep hole in each end of the large spindles. The large posts can be fastened to N first with a piece of 3/4"x1–1/4" dowel. If you are using piece T (Option A), fasten the arms to the back first and then glue all the spindles in place at one time. Spindles V should only be inserted 1/2" at each end if they are 7–1/2" long as per our drawings. Clamp together and allow the glue to set up. Make sure everything is nice and square.

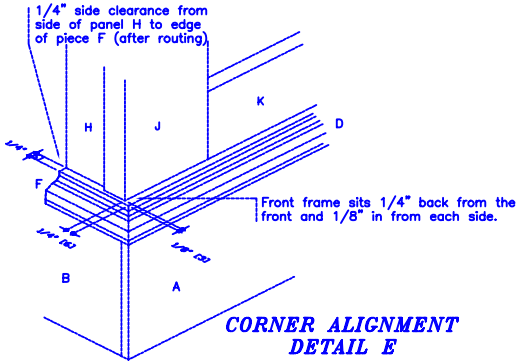
This completes the assembly of the Deacon's Bench, you are ready now to apply your selected finish. Ensure all surfaces are sanded smooth, and all excess glue has been removed. Apply the finish according to the manufacturer's instructions. A final option for a nice touch, would be to line the box with aeromatic cedar, although we have not included this in our instructions, this is a simple procedure. Use 1" finishing nails inserted through the tongue of the wood and glue to the inside of the box. See Detail J at the right for this procedure.



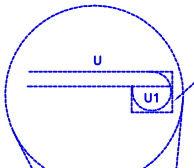
TYPICAL CLEAT INSTALLATION DETAIL
DETAIL C



PIANO HINGE INSTALLATION DETAIL
DETAIL D

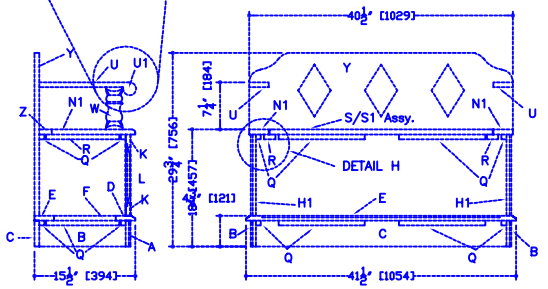


CORNER ALIGNMENT
DETAIL E



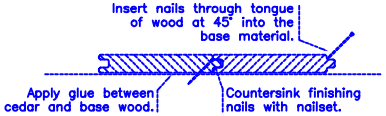
Round off corners after glue has dried. May be done with a bandsaw, tablesaw, or coping saw. Sand to final shape, approx. 2" diameter.

ARM ASSEMBLY
DETAIL F

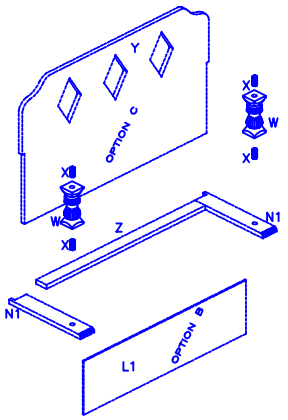


Cross Section views showing Option B installed
–Option B interchanges pieces Y/T,N1/N,Z/P–
–pieces V & M are deleted–

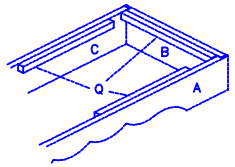
CROSS SECTIONS
FIGURE 3



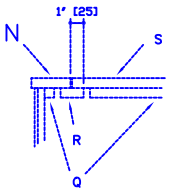
AEROMATIC CEDAR APPLICATION
DETAIL J



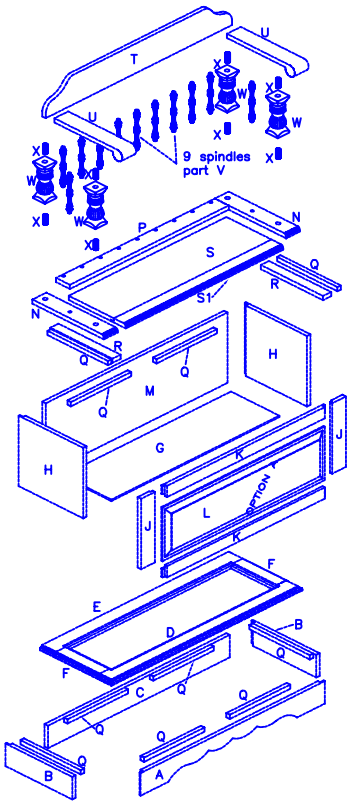
EXPLODED VIEW
(Options B & C)
(Showing replaced items only)
FIGURE 5



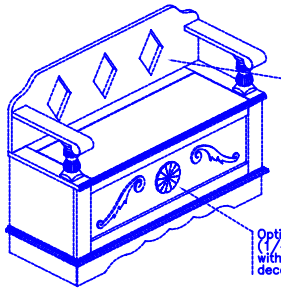
BASE FRAME CONSTRUCTION
DETAIL G



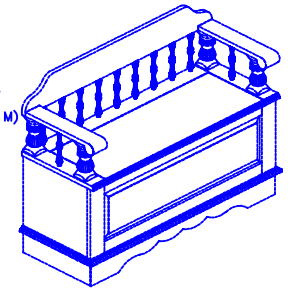
SEAT SUPPORT (R)
DETAIL H



EXPLODED VIEW
(Option A)
FIGURE 4



COMPLETED PROJECT
(Options B & C)
FIGURE 6



COMPLETED PROJECT
FIGURE 7