

Assembly Instructions	
Soundboards	
Rev: 12/9/05	Pt# 311

CAUTION:

- Soundboards are fragile until attached to rim. Handle with care.
- We recommend final shaping of the scroll volutes (peaks) after the soundboard has been attached to the rim.

NOTE:

- For A5 soundboards, disregard instructions about fitting and carving the scroll.

- Our soundboards are precision carved to very high tolerances. The graduation and arching measurements were taken from original F5 and F4 mandolins, and other than sanding, require little adjustment or shaping.
- In addition to pattern carving the inside and outside faces of the soundboard, we pattern-shape the outer edges and the opening into the scroll to the precise contour. Do not alter the shape of the opening until after both the soundboard and backboard have been attached to the rim. Any +/- difference between soundboard and rim size/shape can be adjusted when routing for binding.
- Our ProSeries Drawings and those in *The Ultimate Bluegrass Mandolin Construction Manual* show the scroll's opening coming to an end at a sharp corner (A). This sharp corner is actually

the inside connection of the binding. The opening in the scroll ends in a rounded corner that results from hand shaping the opening.

Also, the walls of this opening are somewhat rounded due to the shaping and matching (soundboard to backboard) process.

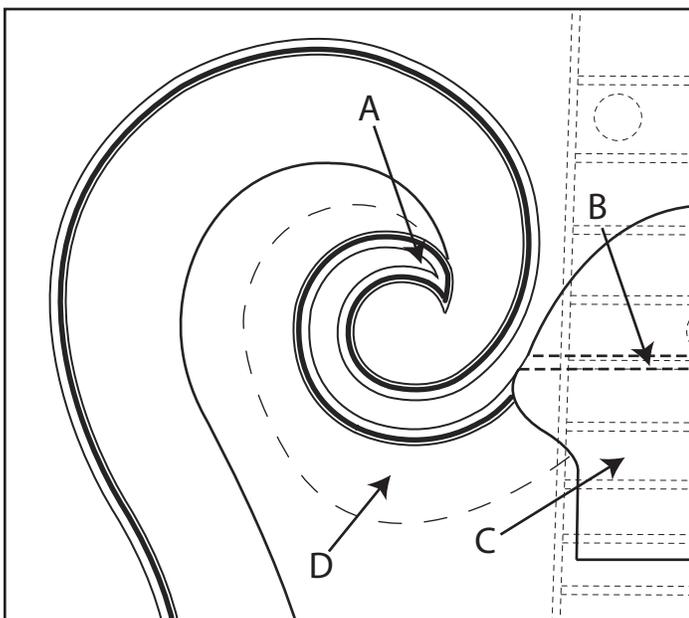


- The soundboard should end in a straight cut above the headblock, at the 15th fret (B). Since there are several ways to make the neck connection, we deliver the soundboard with a rounded end.

- To help position the fretboard extender, we rout a flat platform into the soundboard (C). The soundboard surface adjacent to this area should be sanded flat to remove the little lip.

- The dotted area "D" indicates where the carver could not reach. Remove this wood by hand.

- For installing the 15th fret crosspiece, follow the measurements in our drawings and the instructions in our book for the correct location and method to finish the end of the soundboard. Be sure to make the cut in the soundboard perpendicular to the centerline of the soundboard.



- To ensure proper alignment, the rim and block set should be assembled in a fixture and held securely in the fixture until the soundboard is permanently attached.

- The binding notch is routed after the soundboard and backboard are attached to the rim.

- Note that the volute begins in a sharp peak in the tight part of the scroll, and the peak softens as it continues to the body where it vanishes.

- The scroll opening in our mahogany headblocks is cut about 1/32" smaller than the scroll openings in the soundboard and backboard. In this way the headblock can be more easily shaped to match the soundboard and backboard after the body is glued together.

- If your soundboard has *f*-holes:

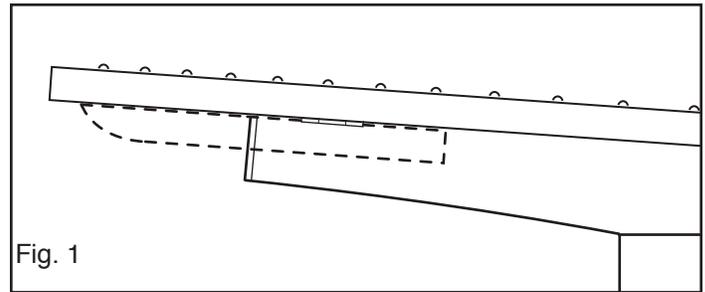
- Gently sand away any frayed gauze from inside edges of the *f*-hole openings.
- Sand away any gauze that interferes with the gluing edge of the soundboard (where rim and kerfed lining attach.)

- On our California Redwood soundboards, according to stiffness and grain of each individual soundboard, we often attach a gauzed patch across the butt end of the soundboard (beneath the tailpiece) to provide additional strength to this region of the soundboard that receives a lot of compressive load. This will not affect the tone, amplitude, or performance features of the instrument. Sand away any gauze that interferes with the gluing edge of the soundboard (where rim and kerfed lining will attach).

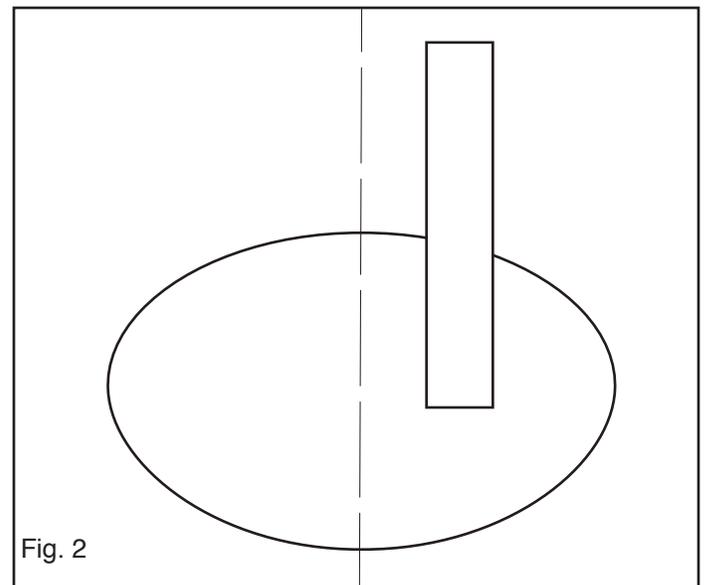
- To facilitate the routing of the binding notch, we machine the edges of our soundboards to a flattened height of 3/16". We suggest that you attach the soundboard and rout for binding before sanding the soundboard's minimum area (recurve) up to the binding edge. This will ensure a more accurate mating of the minimum area (recurve) to the binding. (Note: The edging tool we use may darken the edges of the soundboard. This area will be sanded away.)

F4 Soundboards

- On F4s, a maple fretboard support must be affixed to the soundboard to add strength to the unsupported end of the fretboard. The notch



for the fretboard support should be cut into the soundboard after the fretboard plane on the soundboard and fretboard plane on the neck have been sanded flush and square to each other. (We do not provide this notch since the accurate depth of the extension slot can only be achieved once the fretboard plane has been squared.) The bottom of the extension, nearest the soundhole, is rounded as shown in the cross section diagram (Fig. 1). Fit and glue the extension in place, and sand the upper surface flush to the fretboard plane prior to gluing the fretboard in place.



For more detailed information about the F4 specifications, see our ProSeries F4 Drawings, part number DF4.

Fretboard extender

- Our fretboard extenders are machined wider than needed so that you can shape them flush to the rim (treble side) and headblock (bass side).