

Assembly Instructions	
Mandolin bridges, one-piece	
Rev: 9/1/06	Pt# 306

Notes:

1) The foot of our #306 mandolin bridges is made with a radius that approximates the soundboard shape of most A and F model mandolins. However, the foot must be fitted to each mandolin to ensure proper height (playing action) and proper contact to the soundboard. **Do not use the bridge without fitting it to the soundboard.**

2) We manufacture our bridges without string slots so that each owner can set their preferred string spacing.

3) The intonation notches are designed so that the bridge can be turned either way (to facilitate fitting). Once the string slots are cut, it will establish the treble and bass sides.

Fitting the bridge:

The bridge foot must be fitted to the soundboard's compound-convex curve (not just to its side-to-side arch shape). The fitting process requires continuous checking of the bridge height (playing action). The fitting can be done in two ways: by hand, and with a fixture (preferred).

Fitting by hand:

1) Find a sturdy, clean worksurface. Cover it with several towels to protect the mandolin's backboard. Place the mandolin on the towels with the backboard down.

2) Ensure that the face of the soundboard is clean and free from debris.

3) Place the bridge on the soundboard and determine which orientation of the bridge presents the best initial fit to the soundboard. Use a pencil to mark the bridge to indicate its bass or treble side.

4) Place a ruler so that it rests on the nut, directly over the G-string slots, and rests on the bridge where the G-string slots will be. Measure the distance between the bottom of the ruler and the 12th fret (playing action). Do the same to the treble side (over the on the top of the E-string slots). The desirable action is $\frac{3}{32}$ " (2.38mm) at the E string and $\frac{5}{64}$ " (1.98mm) at the G string. It is important to realize that this distance will decrease by about .020" (.51mm) once the soundboard is loaded by the strings's tension at pitch. You will need to keep checking the distance as you fit the bridge. Keep in mind that the fitting process is comprised of two related steps: achieving proper bridge height, and achieving proper fit of the bridge foot to the soundboard.

5) Place a piece of 200-grit sandpaper face up on the soundboard. Ensure that the back of the sandpaper is free from debris and sand particles that could scratch the soundboard's face.

6) Hold the piece of sandpaper firmly so it does not move around on the mandolin's soundboard. (Caution: If the sandpaper moves it could scratch the soundboard's finish.) Keep checking that no debris accumulates between the sandpaper and soundboard.



Fig. 1

7) Place the bridge on the sandpaper, grasp the bridge firmly, and slowly move the bridge back and forth (from bridge to tailpiece) on the sandpaper, moving it in an arc to conform to the soundboard's shape as you go. Be sure that the bridge is not rocking back and forth. The bottom of the bridge's foot must conform to the shape of the soundboard.



Fig. 2

8) Continue until you get a full dark path of ebony dust on the sandpaper (indicating that you have full contact of the entire foot on the soundboard's surface). (Fig. 2)

Fitting with a fixture (preferred):

- 1) Set up the work space by following the previous steps 1 through 4 for "Fitting by hand."
- 2) To keep the bridge from rocking as you sand, fabricate a T-shaped fixture into which you can secure the bridge. To secure the bridge in place, make a cap that you can tighten into the handle with screws, or use wing nuts as shown in Fig. 3.



Fig. 3

Guide the bridge in a slight arcing motion as you move it back and forth, to mimic the shape of the soundboard and to ensure a good fit of the bridge's foot on the forward/backward axis of the soundboard.



Fig. 4

Cutting the string notches:

The string notches can be easily made in the top of the bridge with a few light passes of a jeweler's file or sharp knife. Draw the notches with a pencil using the diagram in Fig. 5 for recommended spacing. Adjust width as desired.

Note:

Since the one-piece bridge is mainly intended for for early A1, A2, A4, F1, F2, and F4 mandolins, the string spacing below is a bit wider than used for the F5 mandolin because of the wider fret-board used on these early instruments.

The distances shown are the spaces between the string pairs.

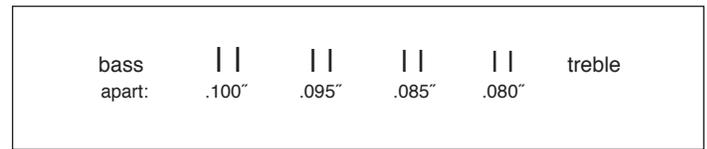


Fig. 5

Fingerrest support hole:

According to the year and model, some of the original one-piece bridges had a hole drilled in the base to receive a support pin from the fingerrest. Some of the holes were large to accommodate a small piece of rubber tubing to act as a rattle-free support, and others were merely drilled to fit the pin. Fig. 6 shows the dimensions and location of the hole that fits the pin.

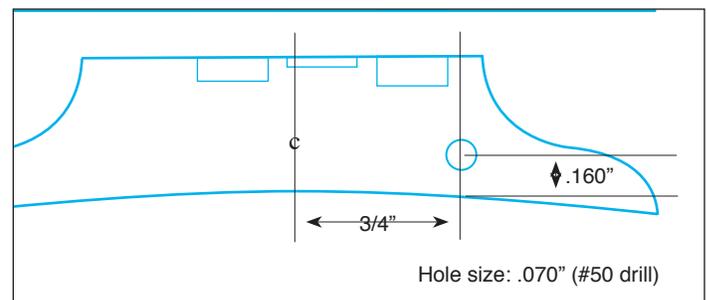


Fig. 6