The Bandola Model 125

Dave Mahr

G. W. MacKinnon (the country's largest dealer in automatic musical instruments in the early 1970s) commissioned the Johnson Organ Company of Fargo, North Dakota to make a band organ similar to the Wurlitzer Style 125 band organ. Mr. MacKinnon called the band organ a "Bandola Model 105A," see **Figure 1**. Recent communication with Lance Johnson (Johnson Organ Co.) revealed that the labeling of this organ as a 105A was in error—it is actually a Bandola Model 125. Seventeen organs were sold (by G.W. MacKinnon) between 1973 and 1984—they sold for $6,995.00 in 1975 (the 1974 price was $4,995 as advertised in Catalog #19, *Offerings by G. W. MacKinnon, Purveyor of Fine Automatic Musical Instruments*). Interestingly, MacKinnon touted that "we will sell more of this model this year [1974] than Mr. Wurlitzer did during his first three years of production (1923-1926, 27 units)." The organ has 100 pipes consisting of 15 stopped pipes and 15 violins in bass and accompaniment; 13 stopped pipes, 13 violins, 13 brass piccolos and 13 fifes in melody; 13 brass trumpets in counter melody and five wood trombones in base. It plays Wurlitzer Style 125 rolls. The roll carrier, vacuum pump and blower are each operated by a single speed 110 volt AC motor.

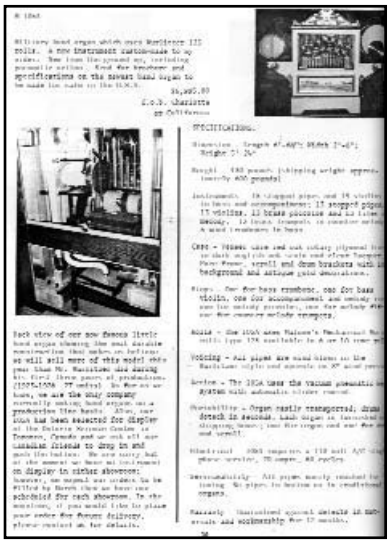

Figure 1. Page 68 from G. W. MacKinnon's 1974 catalog promoting the "Bandola 105A."

Figure 2. The Bandola Model 125 with chrome-finished trumpets as it came from the Johnson factory.

Figure 3. An interior view of the Bandola Model 125.

Specifications

Dimension—Length 6', 6 ½"; Width 2', 6"; Height 5', 2 ½"

Weight—430 pounds (shipping weight approximately 600 pounds).

Instruments—15 stopped pipes and 15 violins in bass and accompaniment; 13 stopped pipes, 13 violins, 13 brass piccolos and 13 fifes in melody. 13 brass trumpets in counter melody. 5 wood trombones in bass.

Case—Veneer core red oak rotary plywood finished in dark English oak stain and clear lacquer. Face frame, scroll and drum brackets with ivory background and antique gold decorations.

Stops—One for bass trombone, one for bass violin, one for accompaniment and melody violin, one for melody piccolos, one for melody fife and one for countermelody trumpets.

Rolls—The 105A uses Malone's Mechanical Music rolls type 125 available in 6 or 10 tune rolls.

Voicing—All pipes are wind blown in the Wurlitzer style and operate on 8" wind pressure.

Action—The 105A uses the vacuum pneumatic keying system with automatic slider rewind.

Portability—Organ easily transported; drums detach in seconds. Each organ is furnished with shipping boxes; one for organ and one for drums and scroll.

Electrical—105A requires a 110 volt A/C single phase service, 20 ampre, 60 cycles.

Serviceability—all pipes easily reached for tuning. No pipes in bottom as in traditional organs.

Warranty—Guaranteed against defects in materials and workmanship for 12 months.

Specifications for the Model 105 A (Bandola 125) from *Offerings by G. W. MacKinnon, Purveyor of Fine Automatic Musical Instruments*, Volume 19, Spring, 1974.

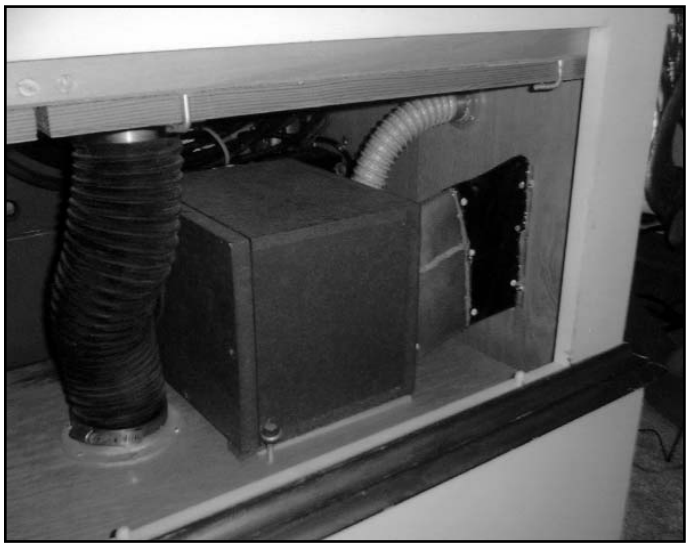

Figure 4. The revised venting of the vacuum pump to the outside of the organ case.

I purchased my organ (**Figures 2 & 3**) in 1994 from Mr. MacKinnon's son. The organ sat for a number of years and the plastic tubing had turned to oil and soaked the Wurlitzer unit valves. After rebuilding the unit valves and retubing the organ, it played well but I was not satisfied with a couple of physical features of the organ. The vacuum pump exhausted to the inside of the organ. The exhaust was quite warm and raised the temperature significantly inside the case, which, in turn, affected the stability of the pipes.

The vacuum pump is mounted on top of the hinged end of the pressure reservoir. This required that a flexible vent be made to get the hot exhaust air outside the organ case. Aluminum was used to fabricate a duct, which was attached over the 6" x 3/8" exhaust slot on the vacuum box. Leather was attached to the aluminum and the inside of the organ case (where a similar size 6" x 3/8" slot was cut) which allowed the vacuum pump box up and down movement without obstructing the exhaust going outside the case (**Figure 4**).

The motor turning the take-up spool was powered by a one speed A/C motor that did not allow for adjusting the tempo of the roll. A DC motor with a variable speed control replaced the AC motor. The speed controller is located on top of the organ case where it isn't seen but can easily be reached.

Also, a new blower box was built and a variable speed DC motor replaced the AC motor allowing more flexibility in supplying pressure for the pipes. A push button was installed on the side of the organ and connected to the rewind tube from the tracker bar to permit the roll to be re-wound at any point during the playing of the roll. A few other minor adjustments were made and the organ now plays quite well.

Dave Mahr is retired from labor relations and personnel work, and lives in Decatur, Il with his wife, Pat. He has collected and restored a variety of automatic musical instruments during the past 15 years.

Tuning Sleeves for Wooden Pipes

Mike Knudsen

Open wooden pipes, usually violins, are generally tuned by adjusting a thin metal slide within a slot cut into the the end of the pipe. In some organs, there are one or more pipes that were made too short, and are already tuned as flat as they can be with this slide. Such a pipe presents a problem if it is still sharp to the rest of the organ (mine was), or the organ is to be tuned to a lower pitch or in a different temperament (Equal, Meantone, etc.).

My own Raffin 31er had a violin pipe that had been made too short, and had a piece of thin cardboard glued across the open end, blocking about 1/3 of the opening, in an attempt to bring it down to correct pitch. It was over 20 cents sharp relative to A=440, although the rest of the organ was tuned 15 cents sharp (probably A=444; other Raffin owners say their organs are tuned sharp). This cardboard piece was so neatly cut and glued that it may have been a factory job.

I needed a way to make this pipe longer, without doing anything ugly that could not be reversed. My solution is not pretty, but can easily be removed or done over in neater fashion (**Figure 1**).

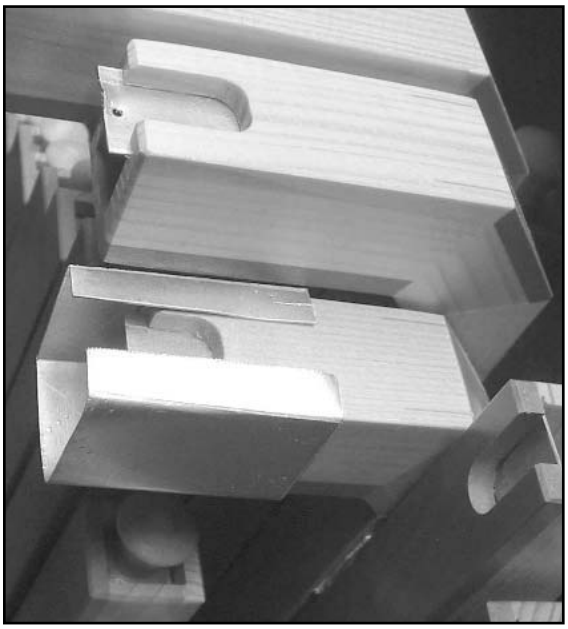

Figure 1. A new tuning slide on a mitered pipe in a 31-note Raffin hand organ.

Sliding pipe sleeves are commonly used to tune metal pipes in church organs. It seems odd to fit a metal sleeve to a wooden pipe, but why not? I carefully measured the pipe's sides in millimeters, added one or two mm for the bend creases, and laid out a pattern on a piece of thin sheet aluminum. Brass or copper would look better and may be more springy, but aluminum is what I had on hand for a first try.

Rather than try to make an airtight seam, I simply let the sleeve carry on the tuning slot already cut into the upper side of the pipe, as shown in the photo. Bending the two free sides inward (before slipping onto the pipe) gives enough friction to hold the sleeve in place.

Sliding the sleeve back and forth on the pipe, I quickly got it in tune. I may do the job over in brass for better aesthetics, but it works fine as it is.

Note that string-voiced pipes partly rely on the side slot to increase the rich stringy harmonic tones. If the original tuning slide is set all the way to the pipe top, then the slot is gone. My added sleeve restores the slot effect, while lengthening the pipe to the required pitch.