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# Schober Organ Notes No. 73

# **OVERTURE**

Disclaimer: We accept no responsibility for any unfavorable consequences resulting from following our advice

# **OVERTURE**

Well, time just flies and here it's time for another issue of ON. I hope that you are all fine enjoying the spring and that you will have a great summer.

#### **CONSOLETTE II PROJECT (continued) PHASE 2**

## **By Richard McBeth**

Phase 2 of the Consolette II project involved the restoration and modification of the swell and great keyboards. I should say that working on the keyboards is not for the faint of heart. It requires time and a lot of patience. These keyboards were manufactured by Pratt & Read Co. and of course they are no longer in business.\* Spare parts may still be ordered from Organ Service Corp. (see note 1). The folks at Organ Service were very helpful. I started by reading the articles in Organ Notes (ON #56) concerning the keyboard and obtaining the Schober technical notes from Alexander Kruedener (A.K.). This proved to be a very good starting place.

The article in ON #56 discussed, in detail, the method for solving the "sticky key" problem and provided a detail drawing of the key action. An additional problem I found in the keyboard was that the rubber Key Guide Bushings, located on the inside of each key, dry out over time and become very hard. I believe this is what can cause the "clackity" noise referred to in ON #56. Their purpose is to cushion the press and release movement of the key. If you disassemble the keys to clean and replace the grease, I highly recommend that you replace the Key Guides at the same time. They are easily replaced after removing the old ones, which may fall apart when you look at them. (See note 1)

When you remove the keys, the lady at Organ Service recommended that you keep track of where each key came from and reassemble in the same order. I did this by giving each key a number on a piece of masking tape. I also numbered the metal key bodies. You also need to remove the Key Return Spring located on the rear of each key. These springs are color-coded. There are different springs for each type of key (natural or sharp key). It's a good idea to keep them separate as you remove them. Also have a few extra on hand in case some fly off and are gone forever. (see note 1)

As you remove the various parts be extremely careful not to disturb the Bell-Crank Return springs (not the same as the Key Return springs). These springs are very delicate and not held in place very well. Have some replacement springs on hand. (see note 1) They can be replaced, but be very careful. Before reassembling the keys check to insure all the bell-crank return springs are in place correctly and working properly.

Unless there is an electrical switching problem there is no need to remove the circuit board from the bottom. The contacts and busses may be cleaned without the removal of the PCB.

Because my project required modification to the circuit board I was required to remove the

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PCB. The Consolette II only has 3 buses, 4' 8' and 16'. The method of contact is the same as the bigger organs. The contact springs and bus bars will probably need cleaning. Follow the cleaning instructions provided in ON #56.

I purchased Pro Gold spray cleaning agent from the Radio Shack WEB site. (www.radioshack.com, not available in the stores) Removal of the printed circuit board (PCB) is described in the Schober technical notes #BM-043 & BM-043A. (available from A.K.) The PCB mounting grommets are destroyed when removing the PCB and a replacement is required. A PCB mounting replacement from Organ Service was purchased, unfortunately they were not suitable and I returned them for a 15% restocking charge. A suitable low cost board remounting method was developed and has been described in ON.

Basically the modifications required by the new Tone Generator circuit (see Phase 1 article in ON) required that the keyboard be changed from switching the audio signals to switching +6 volts to the Tone Generator circuit. This was accomplished by installing a wire jumper around the resistor on the rear contact and removing the resistor from the front contact and installing a wire jumper from that contact point on the PCB to the note pin. In making the circuit this way I created a parallel contact for each 6 volts to the Tone Generator. This is called a bifurcated contact and improves the reliability significantly. In essence I reversed the keyboard action. It originally switched an audio note from the note pin to the bus. It was changed to switch +6 volts from two buses to the note pin to the Tone Generator which in turn generates the audio note and puts it on the appropriate bus to the stop filters.

To sum up -- working with the keyboard can be frustrating and time consuming, but they certainly work better when completed.

Note 1, www.organservice.com (800) 457-4408

72320-214 Key Return Spring (\$0.40 ea.) 72320-215 Key Return Spring (\$0.40 ea.) 72320-224 Bell Crank Return Spring (\$0.20 ea.) 72320-236 Key Guide Bushing (\$0.38 ea.) 72320-264 Bell Crank Cap (\$0.20 ea.)

## **Repairing Stop Tablets**

One persistent trouble with the stop tablets of the Recital and Consolette II is that the plastic hinge (that snaps onto and pivots on the steel rod behind the rail) cracks and breaks off the metal part of the tab switch. If none of the plastic is lost, the tab can be repaired. This is how I do it, it works quite well.

1) Snap off the individual stop tab switch and make sure you don't lose any of the plastic "hinge" parts.

2) Glue the plastic back on with Krazy Glue. Use very little glue so that it will set quickly. (Photo #1)

3) When the glue has set, run a thin, solid (un-insulated) wire around the plastic, behind the hinge snaps, through the slot of the plastic arm that holds the actuators and cams for the combination action.

4) Twist this wire together on the side of the plastic arm, as tightly as possible without breaking the wire. (Photo #2)

5) Cut the wire so that about 3/16th of an inch of the twist remains.

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6) Solder the twist.

7) Push the twist as tightly down on the plastic as possible.

8) Mix some 5 Minute Epoxy Cement.

9) Put a thin coat of epoxy all around the wire loop. (Photo #3)

10) File off a little of the epoxy if there is too much on either side and movement is inhibited.

11) Finished product. (Photo #4)

To e-mail recipients of Organ Notes, photos are available for a SASE and an extra stamp.

## Information About an Organ Wanted

Francine Wiest Jansen writes:

My father, John F. Wiest, built a Schober Organ in the Fall of 1961. He was written up, with a few others, in the Denver Post Newspaper on November 19th, 1961. His home was in Northwest Denver @ 3347 Meade Street. He passed way January 6th, 1991. Shortly after, my mother sold the organ. She always regretted doing so. I am now trying to find it. I did try some years back, but I didn't have any information. Now, I have found a letter to my father from Richard H. Dorf, along with the newspaper clipping and I have a little more information to go on. I don't see a serial # or what "type" the organ is. The only references are mentioning generators for this electronic spinet organ and a transformer (T3) that my father wanted some information on. Please ask if any of your members know of this organ. I don't know that I could buy it back or that the owner would want to sell it, but I would like to know that someone has it and is taking good care of it. Our mother died two years ago and she and I loved the organ so much, I would feel better knowing what happened to it.

Francine Wiest Jansen, Phone: 303 431-4212, E-mail: francine@qwest.net, Address: 6767 Vivian Street, Arvada, Colorado 80004.

#### ADS

DISCLAIMER: Any deals, making of payments, receipt of payments or verifications are strictly your responsibility.

#### **Free Recital Schober**

A Recital, with two Schober speakers, a Leslie, documentation and Autotuner is available to a good home. The organ needs repair. Located in Clarksburgh, WV. Contact Mark Coffindaffer, Home Phone: 304-745-3192, Cell Phone: 304-288-1374, E-mail: MJCCoff@aol.com

#### Free Console

A Consolette (1) console with the original wood keyboards, but no electronics, is available. Located in Little Silver, NJ. Contact: Howard Mason, Home Phone: 732-747-1270, E mail: hlmason@hotmail.com.

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