

## Wurlitzer Side Man

The electronics chassis.

Tube complement is one 6AV6, two 6C4, one 6BA6, and five 12AX7s. The trimpots control the resonance of the bandpass filters that make the drum tones. "SHIMMER GENERATOR" controls the decay time of the noise-based cymbal sounds. The inside of this chassis is quite impressive. Maybe later. (Does anyone out there have the schematic for the Sideman? Just curious. Repairing it is straightforward, but how this thing works is becoming interesting to me.)

### Sideman control panel

This is the control panel. It's quite difficult/costly to get that kind of chemically-etched brass panel made today. The BLOCKS and CYMBALS knobs are rotary selectors that provide five different variations for block and cymbal patterns, plus totally disabling them. I must assume some of those home organists found a use for this—because the amount of switching required to implement the function is frightening. Above the start and volume knobs are two neon lamps that flash in time with the rhythm.

### .Rhythm and Sound Generation

Introduced 1958. In this view we see the "pattern sequencer" - a large printed circuit board (the only one in the unit) with a set of contacts on a rotating arm. The contacts close circuits and generate trigger pulses, which hit vacuum-tube ringing filters to generate most of the drum sounds.

The centre core of the Sideman was an electric motor, similar to those used for record players. The motor powered a rubber band, attached to a metal wheel. The position of the rubber band on the metal wheel again could be varied by making use of the large TEMPO slider on the panel. This simple construction enabled a continuously adjustable change of motor speed.

The metal wheel itself had an arm with 8 spring contacts that rotated over a Pertinax plastic disc containing circles of soldered

Every time one of those springs made contact with one of the soldered points a drum sound was triggered. This meant that all of the rhythms resulted from the arrangement of the soldered contacts on the mounting plate.

The sound generation was based on a for that time very common valve technology, consisting of a filtering and shaping circuit

### The Control Panel

#### Control panel of a Wurlitzer Sideman

The gold coloured control unit (see figure 11) was placed in a recess on top of the machine, measuring about 20 x 20 cm. The most characteristic element on the panel was the white slider knob placed perpendicularly in the middle of the panel.<sup>18</sup> This slider was used as a TEMPO control which (when brought all the way up to zero) also had the function of a MAIN switch.

Left from the slider there was a BPM scale with values, going from 34 to 150. The whole design of this control unit was kept very stylish, similar to the design of most of the Wurlitzer organs from that period. At the right side of the slider there were 2 vertical rows of 5 white, round pushbuttons (see figure 11). Operating those allowed the Sideman user to trigger each of its drum sounds manually. The 10 drum sounds that could be played with those buttons are listed in figure 12.



## List of all 10 Drum Sounds of the Wurlitzer Sideman

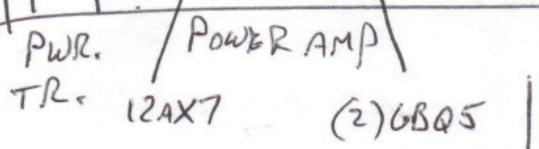
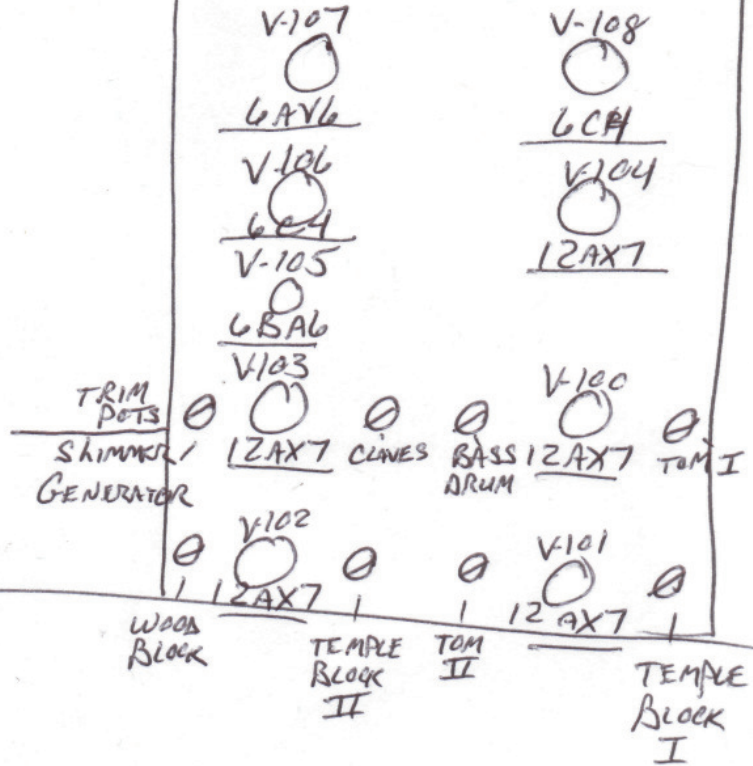
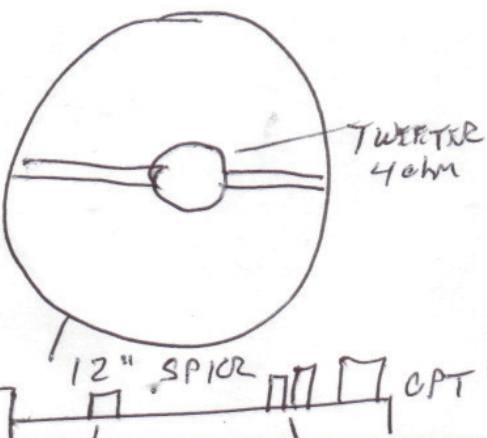
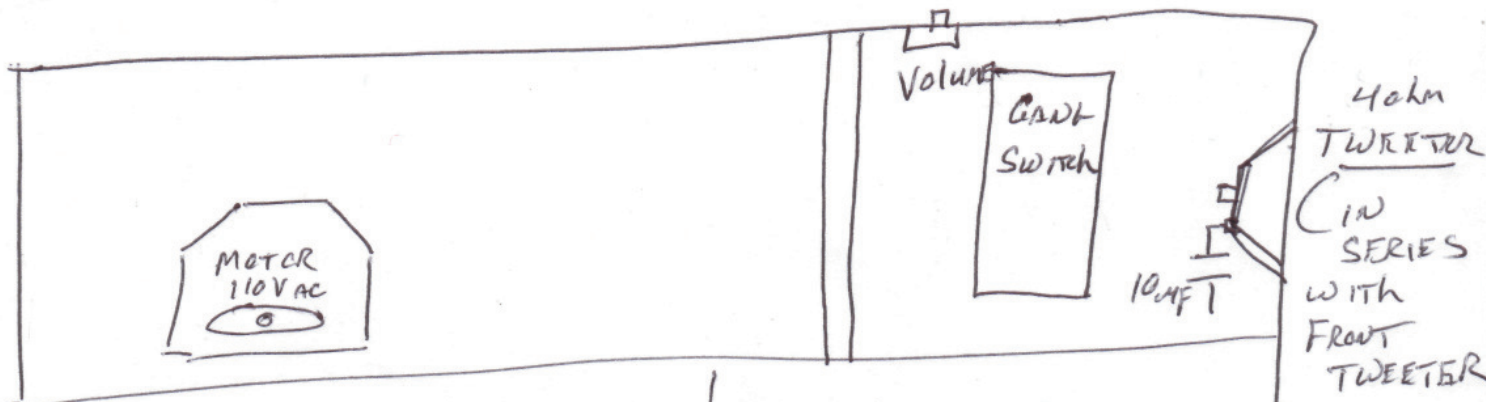
In the upper left corner there was a visual tempo indicator unit which consisted of two small impulse lamps. As soon as the machine was turned on both of them start blinking synchronous to the speed adjusted via the large TEMPO slider, located in the middle of the panel. While one lamp only lighted up every first beat, the other one did so at every quarter beat.

Underneath this visual metronome section there was a VOLUME control pot and a switch selector to choose between RHYTHM START and RHYTHM STOP. Additionally the machine also had a START/STOP footswitch, which could be found to one side at the bottom of the cabinet. Furthermore the control panel on top of the Sideman had a large, round and rather hard-steering 19 rotary SELECT dial to choose between the 12 preset rhythms (see figure 13).

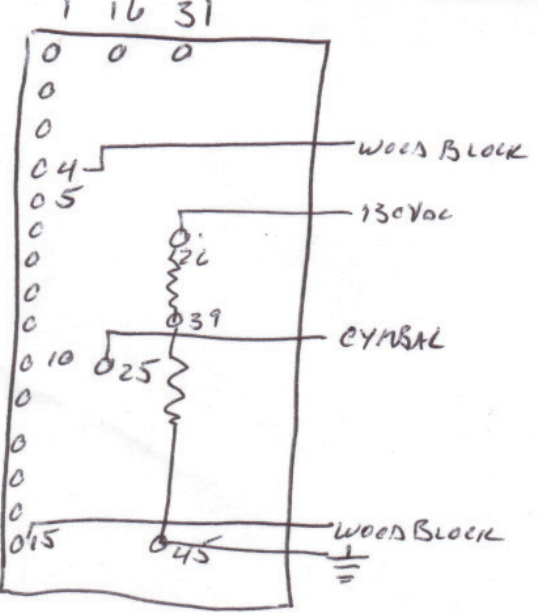
## List of all 12 Drum Rhythm Presets of the Wurlitzer Sideman

For one of those patterns, namely the FOX TROT rhythm there also was a very rudimentary editing function available: it was controlled by a simple VARI switch which gave the user the possibility of changing the standard bass drum figure – played every first beat – to a lush sounding and in today's speech a rather "dancy" four to the floor beat. Furthermore there were two 5 step pots to adjust different variations of the TEMPLE BLOCK sound and the CYMBAL, but both only for the FOX TROTT rhythm. By selecting the OFF position these sounds could also be muted.

# WURLITZER SIDE MAN



AMP output 13VAC



- ### Push Buttons
- - Bass Drum
  - - TOM TOM I
  - - TOM TOM II
  - - TEMPLE BCK I
  - - TEMPLE BCK II
  - - WOOD BLK -
  - - CLAVES
  - - MARACAS -
  - - BRUSH
  - - CYMBAL -

- V-100 BASS DRUM TOM I
- V-101 TOM II - TEMPLE I
- V-102 WOOD BLK - TEMPLE II
- V-103 CLAVES - SHIMMER
- V-104 BRUSH
- V-105 CYMBAL
- V-106 MARACAS
- V-107 output
- V-108 MARACAS - BRUSH