3740 Gnome Trouble-shooting

The Gnome doesn't require any special cables, only a couple of nine-volt batteries attached to the snaps accessible when the four screws are removed from the case bottom.

Problems often stemmed from transistors being included without identification notes, or, these notes not noticed. Check the transistor installation against the diagram included at the end of this guide.

Check on fig. 2 of this Gnome construction article for the connections of the series-connected nine-volt battery snaps for +9 and +18 volt dc power supplies: X is the 18v supply, Y is the 9v supply and Z is the ground/common, 0v circuit. The snaps are wired together with the red of one to the black of the other. The red end is the 18v, the red/black junction is the 9v, and the black end is the 0v (ground/common).

http://www.paia.com/manuals/docs/GNOME-howto-article.PDF

Audio Output

Audio Output is via a mini-phone-connector to be patched to an amp/speaker or a portable tape/cd player's Line-in.

Trigger Input

J2 on the Gnome is a trigger input. When an external audio signal is patched over from another device (and the cable is establishing the ground between the two devices), a voltage from the other device will activate the trigger function, just as if the button had been pressed.

It is necessary to modify the Gnome to have an external audio input would enable it to for example, process the 'organ' tones from the PAiA Oz for key-presses that 'triggered' the gnome via a patch between the Oz Gate-trigger output and the Gnome trigger-input connector..

The single conductor Pin or Tip jack could be replaced with a mini-phone jack or other two conductor connector, and an external footswitch could be used to send in a voltage over the hot and ground circuits to the trigger input for remote activation of the trigger function (or some other synthesizer or drum machine, etc. with a trigger output could connect with two conductor hot and ground patch cord to trigger Gnome without the need for the audio cable to establish a common ground.

Controller Strip

It was always normal for the Controller Range control to need to be turned towards Max. and the Filter or Oscillator range controls advanced too to get a good range when touching the probe to the strip. Also, the ends that push into the wood-ends can be a weak link: The strip should be evenly pressed against the 'tinned' printed-circuit-pad at each end of the board by the wood-end. The wood-ends needed trimming with a knife to make room for the board and the strip wrapped around the end of the board. If the strip isn't extending over the pads at each end of the board, it could result in little to no effect when using the strip.

Fixes

The hex nut at the ends of each switch must be aligned so the flat side of the nut is facing the opening at the end of the slide switch to prevent it from impeding the travel of the slide.

Dirty switch and pot contacts can be cleaned with isopropyl alcohol and repeated operation while wet to clear dust/debris.

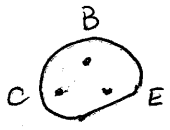
TO-92 | TO-62 | ? (BULLET-SHAPED

NPN

	1	2	3
2N5129	E	B	C
PN5129	E	B	C
2N2712	E	C	B
PN2712	E	B	C
2N3391	E	C	B
PN3391	E	B	C

PNP

2N5139	E	B	C
PN5139	E	B	C



PC GRAPHICS

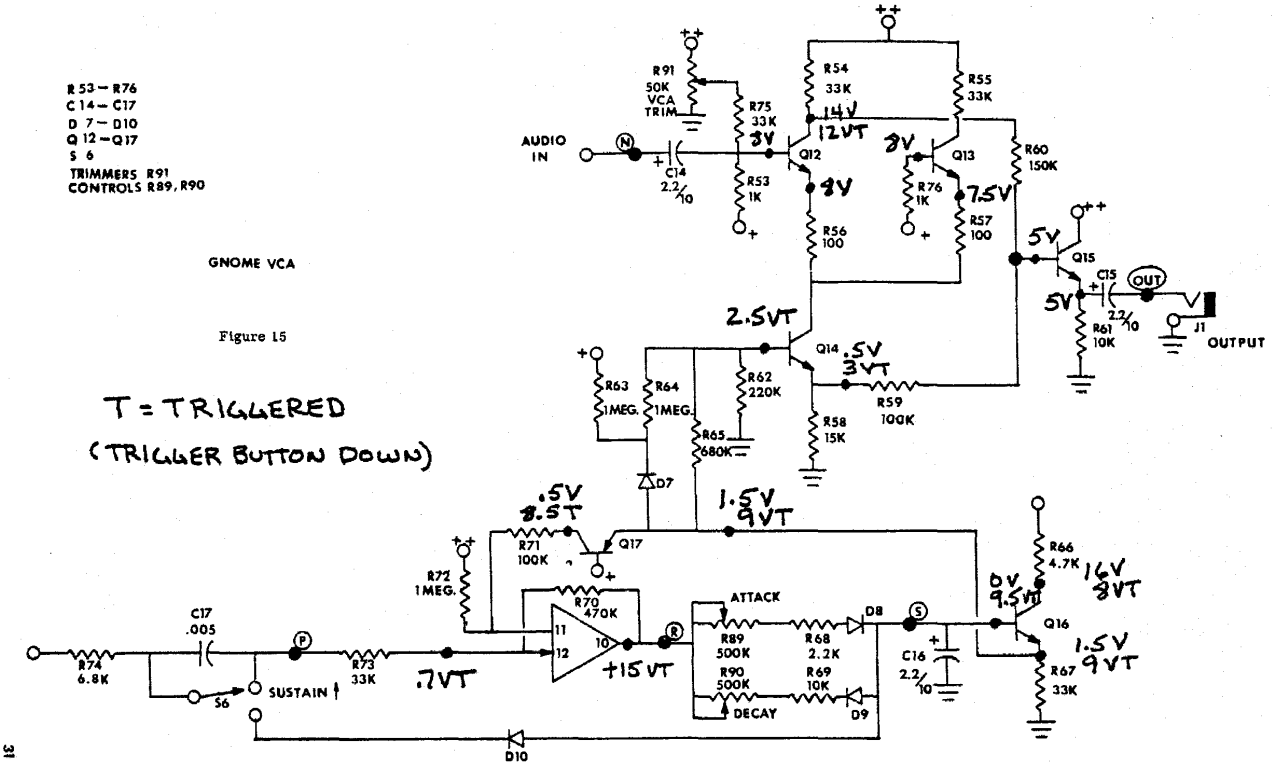


Figure 15

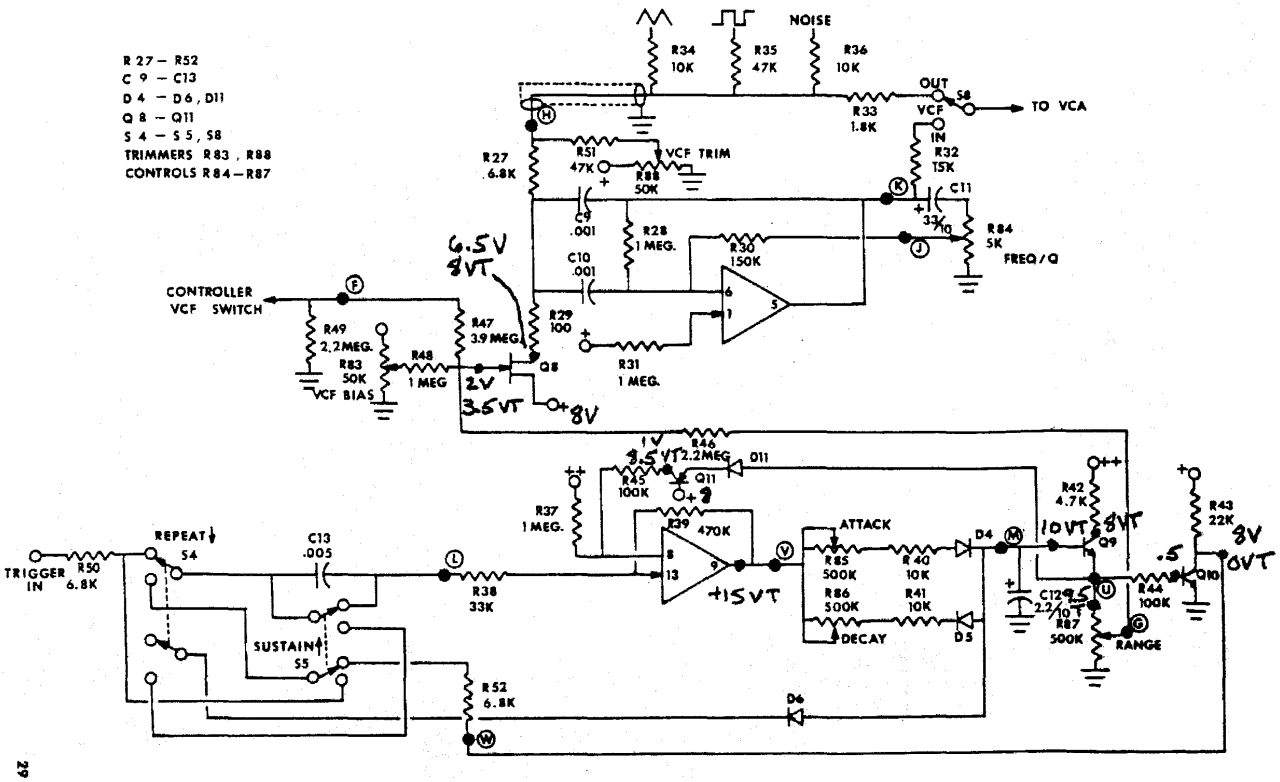
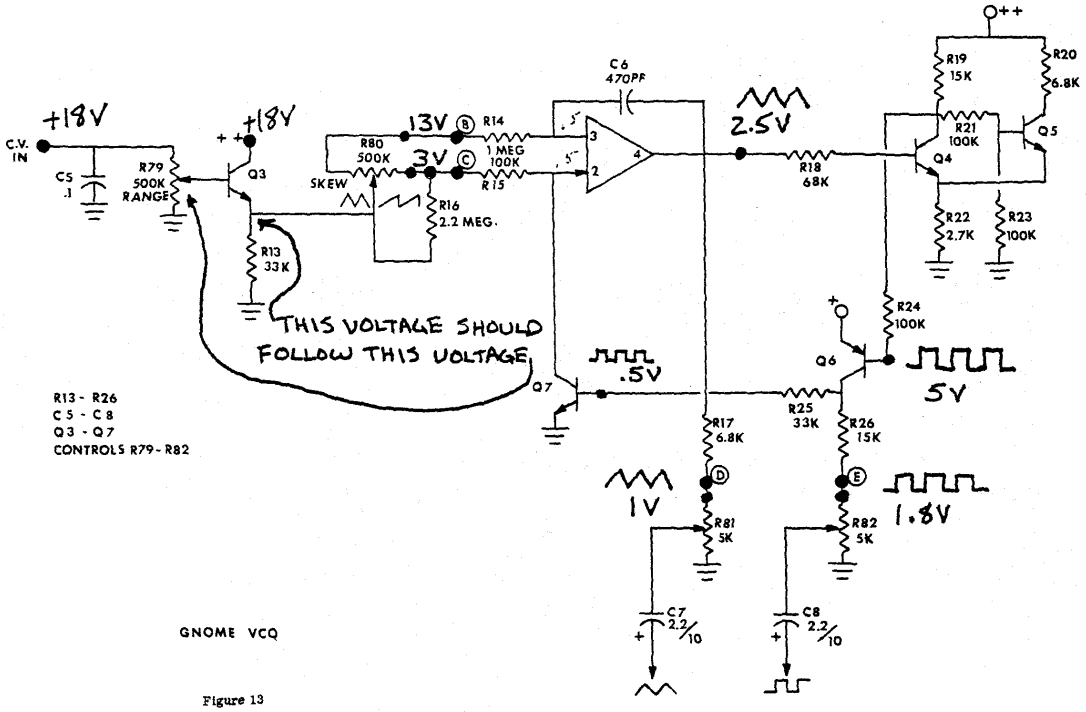


Figure 14



GNOME VCQ

Figure 13