serial peripheral is added. Adjustment is affected by VR1. Clockwise rotation reduces the clock speed. With a printer attached via the RS232 or 20mA outputs, a short test program may be written that will output continual text in the form '1234567890123.....' etc. Adjustment is made by observing the printed output;

If the clock is too fast, random garbage will appear, thus:

123c5u789,P234+z7 ..... etc.

If the clock is too slow, characters will be missed, thus:

1235679013457891 ..... etc.

Note that VR1 is a multuturn (20 turns) preset, and that the end stops are detected by an increase in rotational torque at the ends of the track. No harm can be done by over 'turning' the preset.

Correct adjustment is the mid point between garbage and missing characters, this is a latitude of 4 to 5 turns of the pot.

The clock speed may be changed to 4800Hz (30 chars./sec.) by changing C12 to a 8n2 10% polyester capacitor. Setting of the 4800Hz clock is as above.

3). "Snow Plough" and NMI "Break".

The snow plough is used in conjunction with IC11 to increase the VDUSEL blanking time to eliminate 'snow' on the screen during memory access to the video RAM. See Fig. 1. The simplest method of construction is to take one of the spare 16 pin dil plugs (supplied) and cut off two pins, making it a 14 pin plug. Then cut a piece 0.1" pitch vero board about 1" wide by about 1.5" long, with the tracks in the longer direction. Mount a 14 pin socket at one end (breaking tracks as appropriate) and build the LS123 circuit at the other, connecting the output of the 123 to pin 5 of the 14 pin socket. Then solder the 14 pin plug pin for pin to the underside of the 14 pin socket (except pin 5). Link pin 5 of the plug to the input of the 123 circuit, and low!! a little plug in module which carries IC11 and the 123, with a plug that fits directly into IC11 socket on the board. Neat, tidy and effective. Don't forget to connect power to the 123, in parallel with pins 7 and 14 of IC11.

Plug in the module, and a TV display should appear as usual. Tab from 0 to FFFF and adjust the preset pot such that the 'snow' just disappears.

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