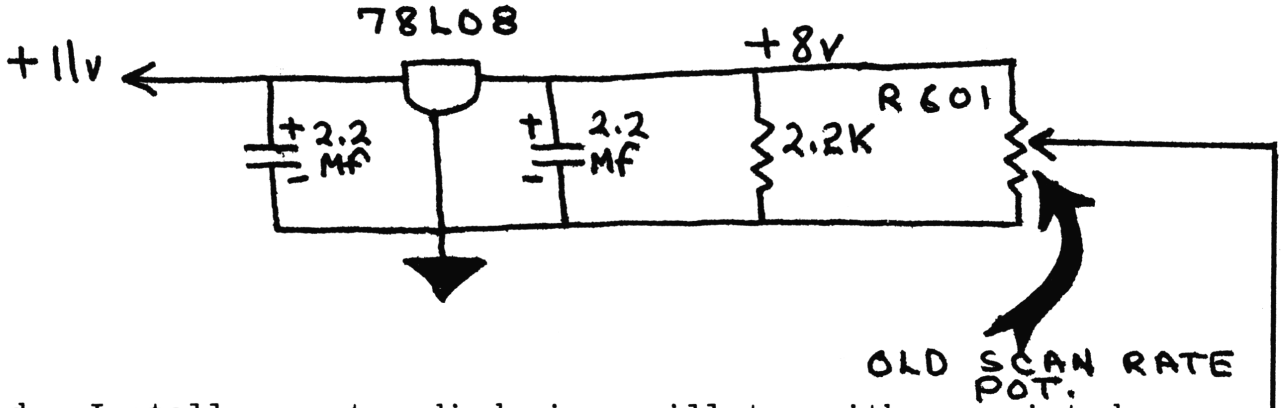
BROWNING EAGLE IV

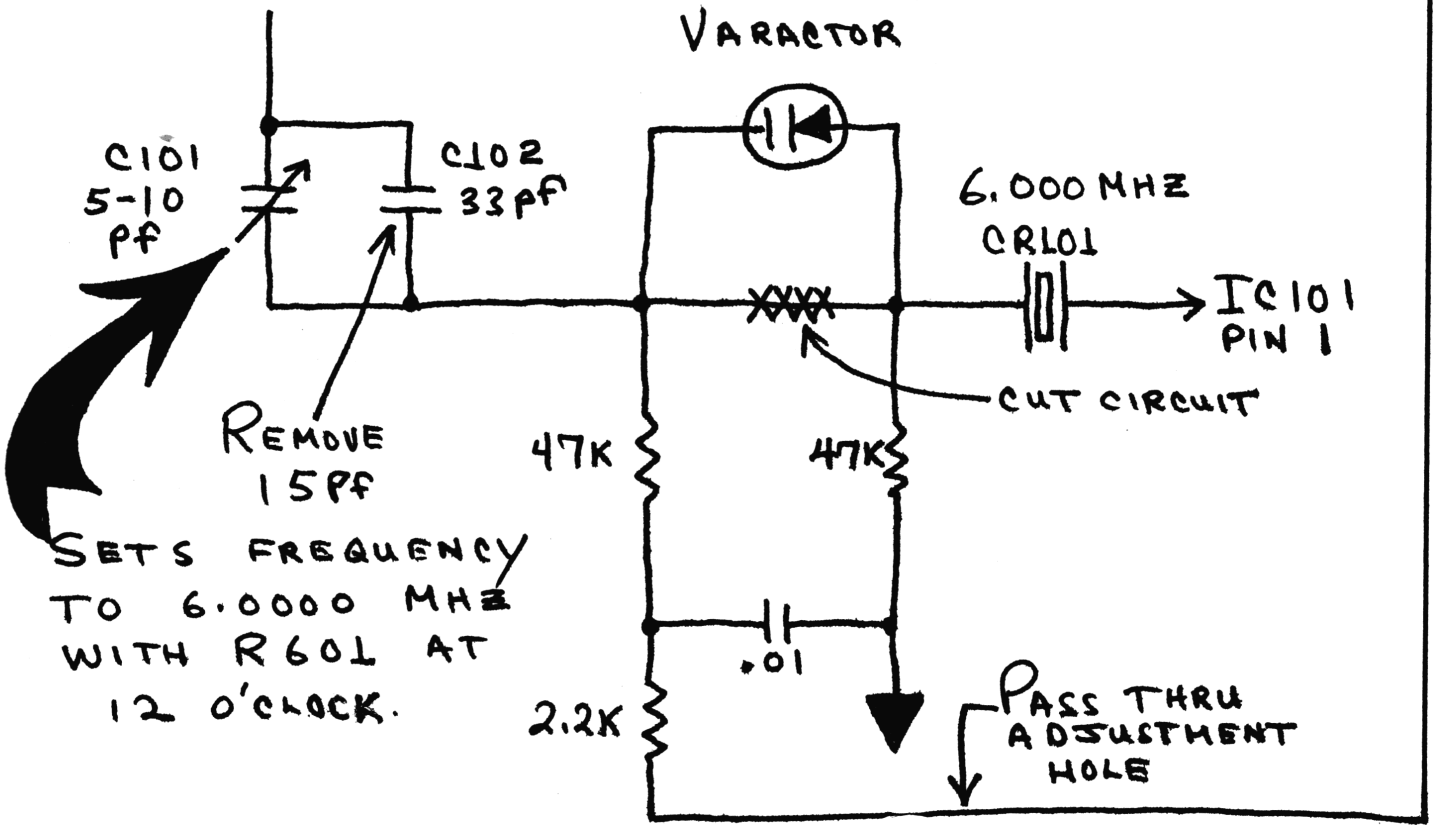
MODIFICATION

1. Remove up - down stops
   a. IC 503/C disconnect one input jumper from select bank.
   b. IC 503/d disconnect one input jumper from select bank.

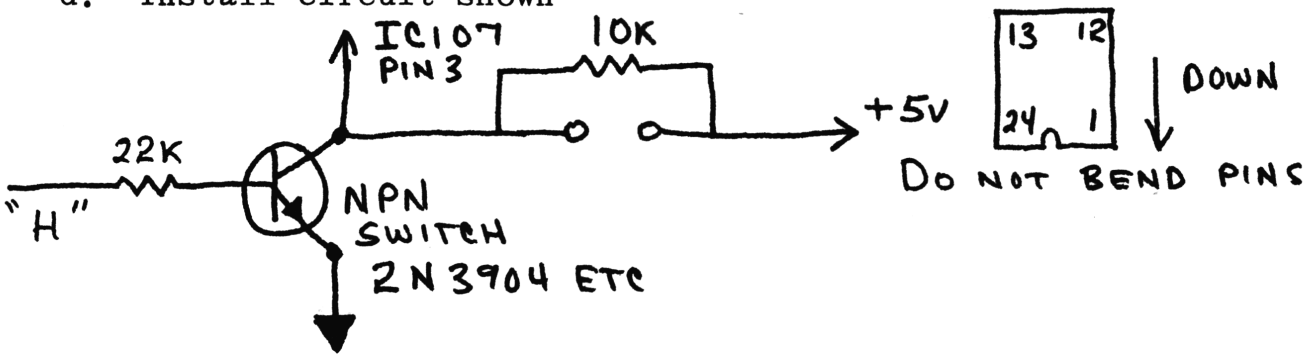
2. Change scan rate function pot to slide transmitter
   a. Remove wires from R601 and move to terminal strip installed near R601.
   b. Substitute 47K fixed resistor for R601.
   c. Build circuit shown on terminal strip added in B1.



   d. Install varactor diode in oscillator with associated components.



3. PLL Extension
   a. Disconnect point "H" (IC 106/6) from ground and add diode and resistor; duplicate A to G nodes.
   b. Add wires from "H' (via feed through cap) to IC 410/11.
   c. Install full feature ROM in place of original IC 410.
   d. Install circuit shown



   Circuit recognizes greater than 7 (HEX) and switches IC 107/3 low to add 256 to required division.
   e. As a note: all empty rom addresses will inhibit numerical display and transmitter key relay.
   f. Adjust C122 while monitoring T.P. (1.5 - 3.5V) with Voltmeter; and output BNC to frequency counter. Select lowest frequency required. Lowest frequency in full feature ROM is 26.885 output. (Note most receivers will only go down to 26.925). Power up - observe counter and voltmeter. If counter is stable PLL is locked.
   Voltmeter should read +1.5v. If greater than 1.5v touch up C122 to read +1.5v. (Do not make extreme changes to C122 as "lock range" is narrow). Step channel address upwards noting voltage moving upwards with each step and counter stable adding 10KHZ with each step. Top channel address 27.605 output. Voltmeter should read +3.5 volts. If PLL unlocks along the way. Power down and start over bringing lowest selection to +1.35V and repeat, etc.

NOTE 1: Output refers to corresponding xmit output, not OSC output
NOTE 2: If additional ΔC is needed, parallel MV2111 with IN 914s.
NOTE 3: For 5 KC jump feature wire a switch between IC 410/4 and C619.