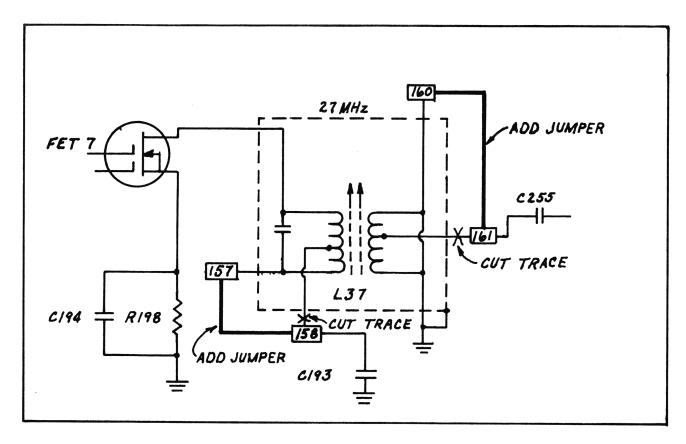
BROWNING MARK IVA

MODIFICATION & UFO INSTALLATION



LOOP FILTERING

The addition of a variable loop filter on 8719 and 8734 radios is occasionally a necessity. A variable loop filter allows the technician to vary the loop filtering and make up for variables present in synthesizer circuits of radios.

Symptoms of the loop filtering being incorrect may be: distorted SSB, warble on SSB, difficult to clarify SSB, or, in extreme cases, squeal on AM and bleedover may be present. In most cases the problems described above are most easily cured by the addition of a variable loop filter consisting of a variable resistor (usually a trimpot) in series with an electrolytic capacitor. Values of 10uF and 10k have been used quite successfully. This loop filter is added between TP9 and ground.

Better results can be achieved by removing the capacitors inside the UFO which normally compose the loop filter. These capacitors are identified in the programming section of the instruction manual as they are removed for 858 installations.

The loop filter is aligned for best SSB clarity. If the resistance of the trimpot is too low, the radio will warble on higher frequencies and, if the resistance is too high, bleedover may be experienced on lower frequencies.

BROWNING MARK IVA CONTINUED:

- 1. Do not remove 145106 PLL chip.
- 2. Connect the center of Coax 1 to the Junction of R708 and R709.
- 3. Remove R715 and C734.
- 4. Connect the center of Coax 2 to TP3.
- 5. Install a 10uF cap and 10k pot in series from TP3 to ground.
- 6. Remove loop filtering capacitors in UFO as in 858 installation.
- 7. Cut the foil trace connecting to Pin 8 of the 145106 chip.
- 8. Connect the foil trace that was connected to Pin 8 to an 8V source.

PROGRAM CODE: BBWW BBBB WW

