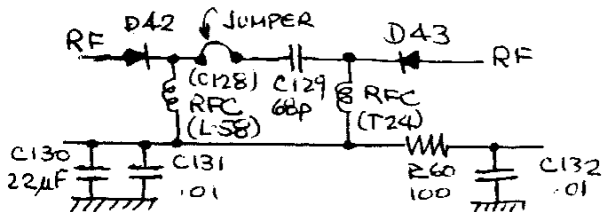


by Ray Pesek WB8NXR

- 2 ea chokes (L58/T24)
2 ea .01 uF miniature ceramic disc caps
(C131/C132)
1 ea 100 ohm 1/4 watt resistor (R60)
1 ea 22 uF 25 vdc capacitor (C130)
1 ea 68 pF ceramic disc capacitor (C129)
2 ea switching diodes (D42/D43)
[A kit [980 MARS] of above parts is
available from the Club for \$5 including
shipping.]



If you have placed all components properly, the configuration shown below should match that on the circuit board.

j. Install the RF Unit into the radio after double checking all connections.

Power-On Checks:

1. Receiver operation on any band and either VFO should be unchanged.

2. Q31 pin 7 - This pin should be "high" on any frequency using the GEN VFO. It should also be "high" on the 24 and 28/29 MHz bands with the HAM VFO.

3. Q29 pin 13 - This pin should be "low" for any frequency using the GEN VFO and should be "high" for any frequency using the HAM VFO. As a double check, the voltage on the Q29 side of R-60 should produce the same readings.

4. If these checks are OK, fire it on up. A slightly different setting of the drive knob may be required for full output.

NOTE: The HAM VFO should still be used for any frequency which can be covered by it. This will insure maximum out-of-band rejection for the receiver and possibly a slightly better transmitter SWR.

FILTER CASCADING FOR THE FT-301 [Cont]

by Bill Good W2CVI, et al

This is a continuation of the article published on pages 8354/55 in which a simple method of filter cascading was described. Its principal disadvantage was that it disabled the Noise Blanker. If this capability is important, the following achieves cascading in a somewhat more complex installation without affecting Noise Blanker operation. N4ML.

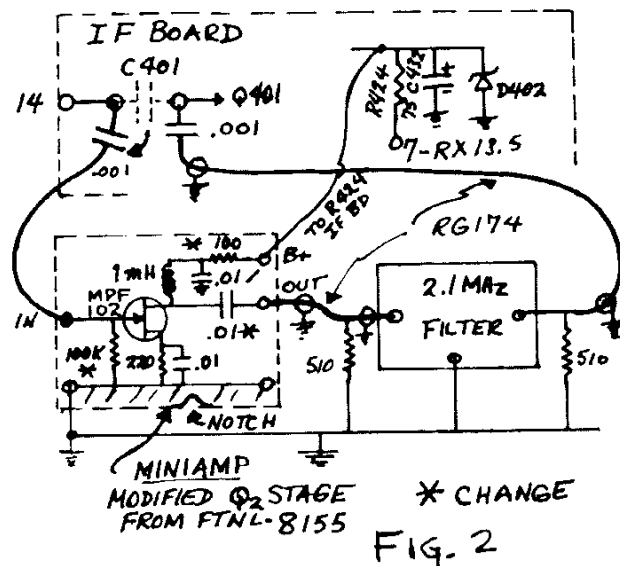
Modification For Location #2

This modification is for those who wish to maintain the NB function and also keep the AM filter position in use (AM or narrow CW). In AM the bandwidth will be limited by the new 2.1 kHz filter. This modification requires a Mini-Amp (FT #8B3-1) for isolation between the two filters.

1. Modify the Mini-Amp board by: a. removing the 1000 ohm potentiometer and replacing it with a 100k 1/4W resistor between the holes where the outer terminals of the potentiometer were attached. b. Place a short jumper between the gate lead and the top of the 100k resistor. c. Remove the output coupling capacitor on the Mini-Amp and replace with a 0.01uF capacitor, Fig. 2

2. File a notch in the wide ground trace at the bottom edge of the Mini-Amp. Mount the Mini-Amp at the edge of the IF Unit (PB-1436D) by soldering the foil at the notch to the bridging ground wire, near C401, on the component side of the board, see Figs. 2 and 4.

3. Remove one lead of C401 from the input of Q401 and resolder to the Mini-Amp transistor gate.



A short piece of wire may be necessary. Keep C401 close to the board.

4. To supply the Mini-Amp with power (Rx 13.5V) attach a small wire to R424 (75 ohm) on the end away from connector pin #7, see Fig. 2. Do this on the foil side of the board. Route the wire around the edge of the board by the Mini-Amp. Connect to a new 100 ohm 1/4 W isolation resistor which has been soldered to the positive (+) terminal of the Mini-Amp.

5. Solder the center conductor of a 7 inch piece of RG-174 to the output terminal of the Mini-Amp. Solder the braid lead to the Mini-Amp ground foil.

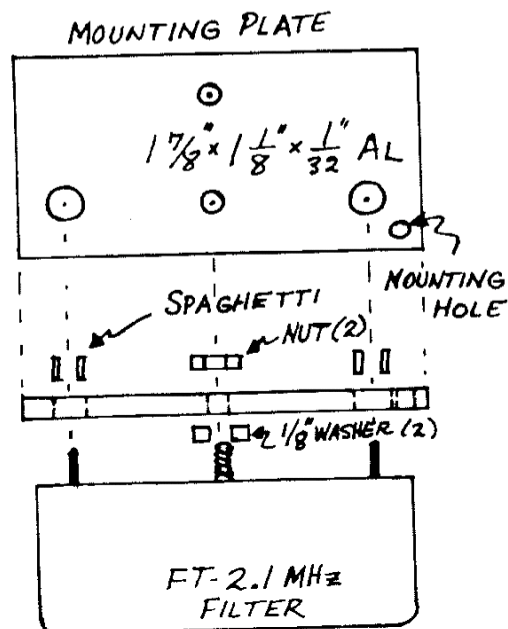


FIG. 3