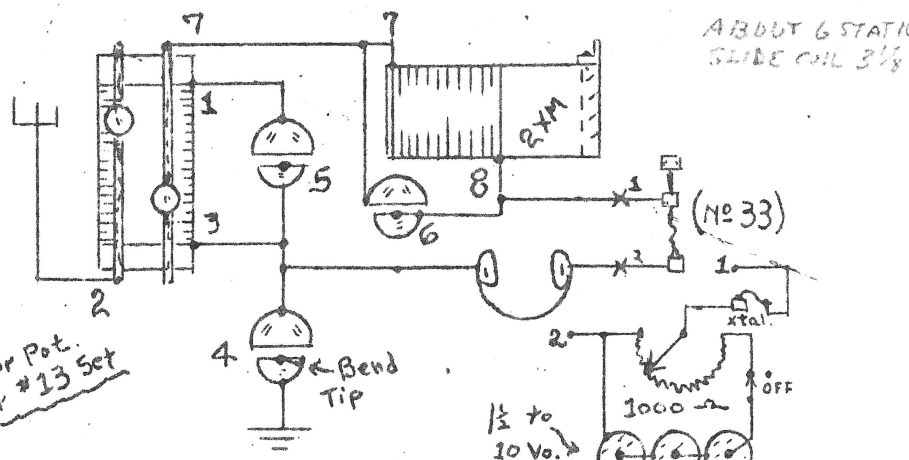
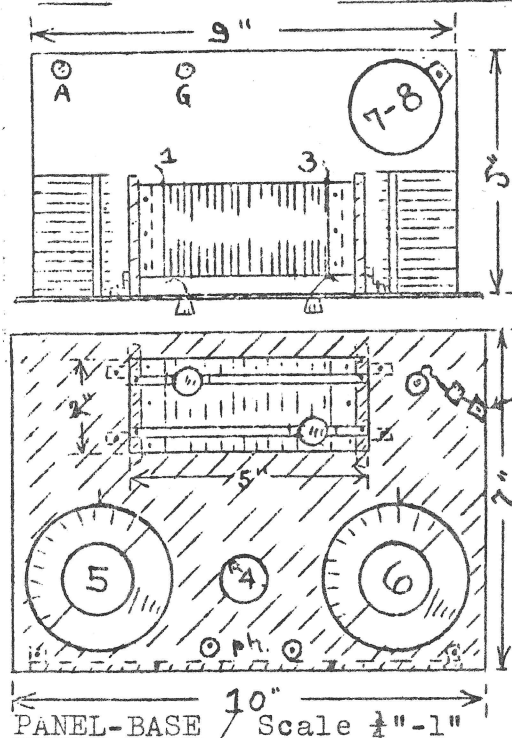


MRL

- VARIABLE SELECTIVITY NO. 13 - 200 MILER DP-52



LIST OF PARTS

- 1 Compo. panel 3/16" x 7" x 10". (N^o 13)
 1 Plywood base 1/4" x 5" x 9" 4 Bind. Posts.
 3 .00035 or .0005 Var. Cond. (4), (5), & (6).
 2 3" dials 1 knob 2 sliders with knobs.
 2 slider rods 3/16" square x 5". 4 Brackets.
 2 MRL 2XM Cell. forms (or Bak. 2" dia x 4 1/2")
 1 Crystal stand & MRL Steel Galena (#33 only)

FOR #13 SET ONLY.

- 1 MRL Fixed Carborundum Crystal. 1 1000 Ohm Potentiometer with Knob.
 1 SPST Panel switch 1 to 4 dry-cells Battery leads, etc.

Coil (1-3) is an Auto(self) transformer, i.e., the turns taken in between (2) & (3) form the primary, or antenna cir. - while the ones between (1) & (3) form the secondary, with a tap wherever (7) comes off. Adding more turns on slider from (1) end makes set more selective. This applies both to sliders (2) & (7). Coil (7-8) is more of a wave trap - the station being eliminated or cut-down it is tuned to. We believe the following specifications amply cover both sets #13 & #33. About the only difference is that #13 employs a Fixed MRL Carborundum Xtal, with it's batts. etc. Bend tip on Cond. (4) so it shorts when clear in, to prevent adding a switch to panel. Circuit has some good reports, and we are sure will exceed any expectations in being a stable and flexible set.

LAYOUT: Follow drawing - using 1/4" scale to 1". Be sure Condensers do not touch. There is plenty of room, - swing them around till they fit.

COILS: Coil (1-3) is 2" dia. by 4 1/2" long - MRL 2XM Celluloid form (or Bakelite). Wind 90 Ts #24 Enamel, and cement edges with MRL Coil cement so turns won't slip. Knock out end rings (if using 2XM form), and cut 2 3/8" thick blocks - 2" in diameter to fit in ends of form. Cut 2 3" sq. wooden supports. Mount sliders on front side, about 3/4" apart, by means of rods. Slip the form over till sliders touch wire. Take off the slider rods and nail or screw round piece to square one, at mark made when sliders were touching wire. Be sure to lay coil flat on bench before nailing form to round blocks. Now, adjust sliders so they touch wire good. File wire where sliders will make a contact. Wipe off or use a brush to remove filings. Put a little vaseline on bare strip and rub off - for a smooth contact. Mount brackets on back of panel, and onto end pieces, so slider knobs protrude thru front of panel. Fasten down, and wire up. Coil (7-8) is 2XM form (or Bakelite) with 65 Ts #24 enam. wire, no taps. Cement edges and connect up. SET #13: Instead of stand for MRL Steel Galena, mount a 1000 ohm potentiometer. Mount MRL Fixed Carborundum Xtal inside. Put switch at bottom of panel to cut off batts. when not in use. Reversing the Carborundum Xtal sometimes helps in DX signals.

Send stamped envelope for inquiries. Thanks. MODERN RADIO LABORATORIES