DESCRIPTION:

Model 41-55 is an 8-transistor, 1-diode, portable receiver for Broadcast Band reception from 525 to 1650 KHz.

The circuitry is designed for separate assembly construction; 1 Silicon transistor with associated components form the R.F. Assembly, Part No. 90-8530, on Board, Part No. 10-8484; 3 Silicon transistors and components form the I.F.—2nd Detector Assembly, Part No. 90-8528, on Board, Part No. 10-7926; 2 Silicon and 2 Germanium transistors and components form the Audio Assembly,

Part No. 90-8529, on Board, Part No. 10-7925. The cabinet consists of an anodised metal framework which houses a metal front (with cut-outs for loudspeaker and Tuning/Battery Indication Meter), and the imitation leatherette-covered hardboard back, sides and bottom.

The two-pointer dial scale is in two sections; the forward section is of perspex, screened with the callsign letters of the large-city stations; the rear section is a metal-cal, screened with the callsign letters of the remaining country-area stations.



AERIAL:

In-built ferrite rod, size $9" \times \frac{1}{2}"$. (Note: If ordering a replacement, it is advisable to order the aerial loopstick assembly complete, Part No. 14-8511.)

An external aerial may be connected to the plated screw underneath the cabinet on the left-hand side. To be more effective than the loopstick, it should be 25-30 feet in length.

BATTERY:

Six 1.5V., "D" size cells, Eveready 1050 or equivalent; Manganese Alkaline cells may be used for longer life. For battery access, remove back after releasing two self-evident screws. When replacing battery, note that the two middle cells are upside down and refer to battery outline drawing in the battery box for correct positioning of cells.

TUNING RANGE: 525-1650 KHz. INTERMEDIATE FREQUENCY: 455 KHz.

SPEAKER TYPE AND ACCESS:

MSP 7-50A/15, 15 Ω . Access: Remove metal panel and loopstick support panel as described under "Service Access".

DIAL CORD ACCESS: As for "Speaker Access".

DIMENSIONS AND WEIGHT:

Length, 101/2"; Height, excluding handle, 81/2"; Depth, 31/2"; Weight, 6 lb approx.

SERVICE ACCESS:

As described on "Chassis Circuit and Service Card", reprinted herewith.

ALIGNMENT: Conventional, with tracking points at 600 and 1500 KHz. Connect Signal Generator, via a .22µF capacitor, between base and emitter of TR1 for I.F.'s and peak in reverse sequence; IFT3, IFT2, IFT1b, IFT1a. Radiate signal into aerial and re-check IFT1a with gang closed. Adjust oscillator coil at 525 KHz, gang closed. Fully open gang, adjust oscillator trimmer at 1650 KHz. Set Dial Scale at 600 KHz, peak aerial and R.F. coils. Set Dial Scale at 1500 KHz, peak aerial and R.F. trimmers. Check alignment at low level inputs.

PARTS LIST: The following items are printed on the circuit diagram:—

Aerial Compensating Coil, Aerial Loopstick Assembly, Tuning Gang, R.F. Transformer, Oscillator Coil, I.F. Transformers, Audio Driver Transformer.

Part No. Description. Part No. Description. 20-7948 Control knobs. 16-7939 Control Knob Inserts. 20-8500 Speaker grille. 90-8517 Battery magazine 90-8518

Cabinet case. 90.8516 Cabinet handle, Black or Brown as ordered. 69-8515 Dial Scale, perspex. 16-8487

Dial Scale, metal cal. Off-On/Tone Pot (R105). Volume Control (R106). 32-8512

Tuning Meter: Bertram 3-688-3. Thermistors: Philips B8/320/01/A130E or Ducon A/T130. Pre-set Pot. (R101). Philips E097AD/A470K.

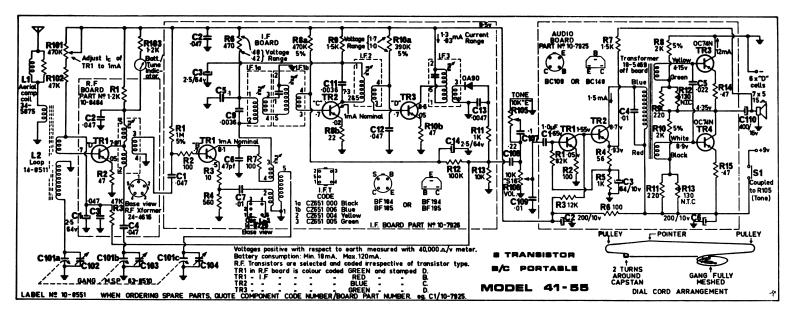
RESISTORS:

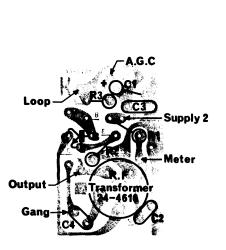
All $\frac{1}{2}$ W ± 10% carbon, except as follows:—

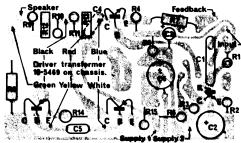
 $\frac{1}{2}$ W \pm 5% Carbon; R1, R8a, R10a on I.F. Board Part No. 90-8528.

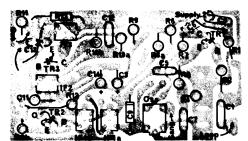
R8, R10 on Audio Board Part No. 90-8529. ½W ± 10% W.W.; R14, R15 on Audio Board Part No. 90-8529.

NOTA BENE: When ordering board-mounted components, quote component code number/board part number, viz., C1/10-7925 or Assembly Part No., viz., C1/90-8529.









CAPACITORS:

C108, Polyester 10% 160VW.

SERVICE ACCESS

R.F. BOARD (the smallest of the three boards): Unsolder wire loop from pillar on main panel, near bottom centre edge of board. Lift board, allowing coil can to withdraw from retaining grommet, and invert board as required for component access.

MIXER, I.F. and DETECTOR BOARD (board with components uppermost): Remove the two visible S.T. screws and invert the board as required. AUDIO BOARD: Do NOT remove the two visible S.T. screws. The retaining screws for the brackets securing this board are inserted from under-

neath the Main Metal Panel. Access is as follows:- Remove (a) Control Knobs. (b) Battery Magazine (one screw). (c) Main Panel/Loop and Gang Support Panel (3 screws; one at 1/2" in from left-hand end of bottom edge of Loop Support Panel, one at 1" in from right-hand end of bottom edge of Loop Support Panel, one at 1" in from right-hand end of bottom edge of Main Metal Panel). Handling Main Panel and Loop Support Panel as single unit, withdraw them from receiver cabinet and invert as required, disconnecting external aerial lead from cabinet base if necessary.