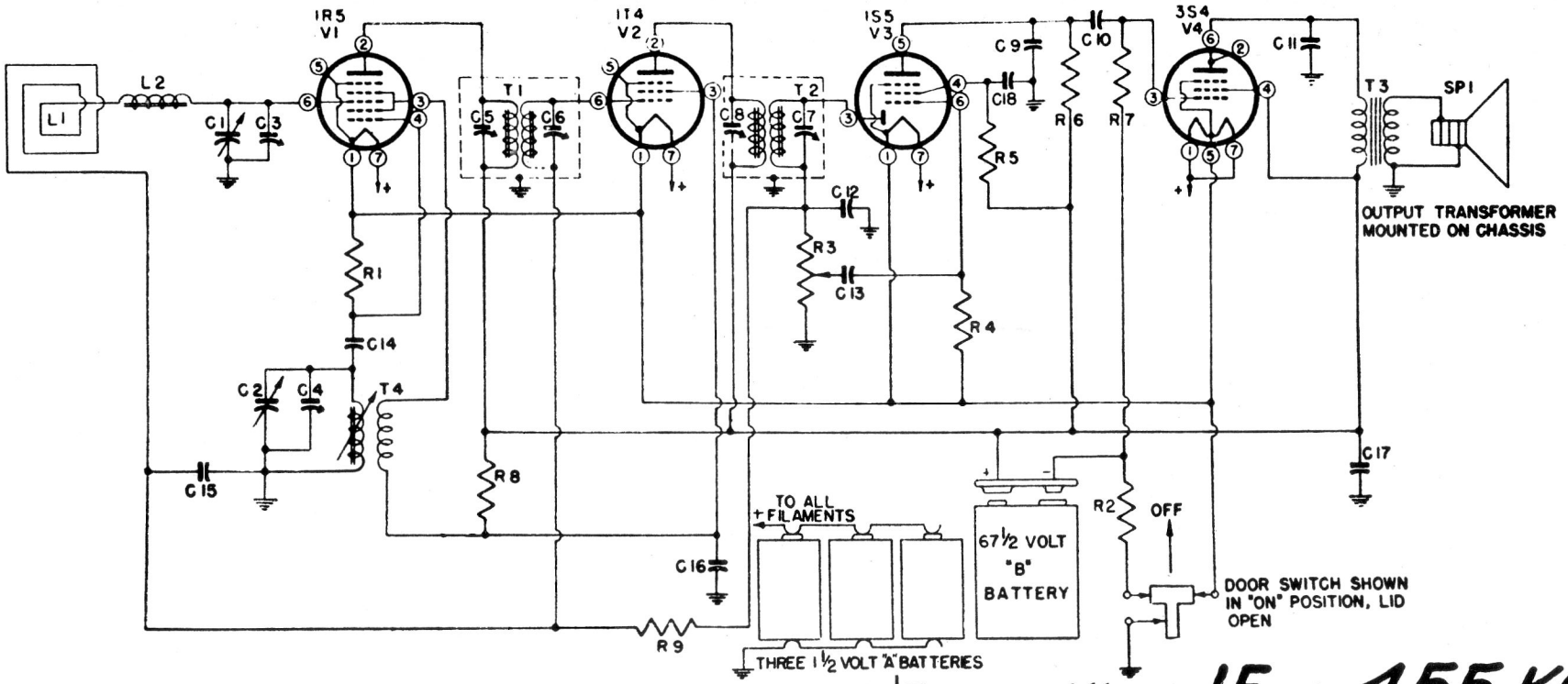

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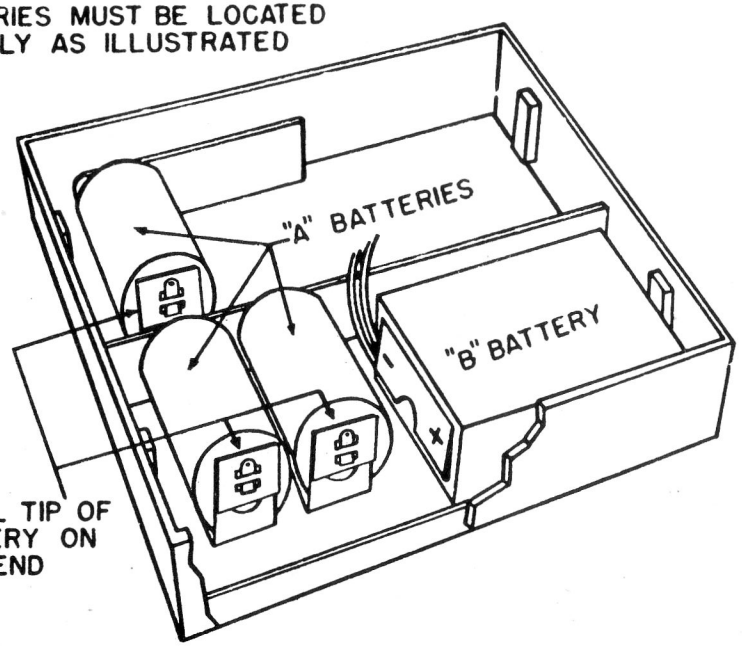
BATTERIES MUST BE LOCATED EXACTLY AS ILLUSTRATED



C1, C2	Two-gang variable
*C3	Trimmer
*C4	Trimmer
*C5, C6	Trimmer
*C7, C8	Trimmer
C9	0.0001 mfd. ceramic
C10	0.001 mfd., 200 volt
C11	0.005 mfd., 200 volt
C12	212 mmfd., ceramic
C13	0.001 mfd., 200 volt
C14	0.0001 mfd., ceramic (Alternate part 928013)
C15	0.05 mfd., 200 volt cond
C16	0.02 mfd., 100 volt cond
C17	16 mfd., 100 volt electi condenser
C18	0.01 mfd., 100 volt

R1	100,00 ohms, ½ watt resistor
R2	820 ohms, ½ watt resistor
R3	1 meg., volume control
R4	10 meg., ½ watt resistor
R5	3.3 meg., ½ watt resistor
R6	470,000 ohms, ½ watt resistor
R7	1.5 meg., ½ watt resistor
R8	10,000 ohms, ½ watt resistor
R9	3.3 meg., ½ watt resistor

IF. = 455 KC.

BATTERY MODELS 570 574 580

INSTRUCTIONS ON DATA SHEET 17

EMERSON DATA SHEET 16

ADJUSTMENTS

An oscillator with frequencies of 455, 600, 1420, and 1620 kc is required.

An output meter should be connected across the primary or secondary of the output transformer for observing maximum response.

Always use as weak a test signal as possible, turning down the output of the test oscillator as the alignment of the receiver progresses.

Turn the volume control on full.

Location of Coils and Trimmer Adjustments

The first i-f transformer is located next to the 1R5 tube. The trimmers are accessible through holes in the top of the can.

The second i-f transformer is located between the 1T4 and 1S5 tubes. Trimmers are accessible through holes in the top of the can.

The oscillator coil is located behind the on-off switch. The trimmer for the oscillator is located on the smaller variable condenser section. The 600 kc oscillator core adjustment is the brass screw protruding from the end of the oscillator coil.

The loop antenna acts as the antenna coil. The trimmer for the loop is located on the larger section of the variable condenser.

I-f Alignment

1. Rotate the variable condenser to the minimum capacity position.
2. Feed 455 kc to the grid (pin 6) of the 1R5 tube through a 0.01 mfd. condenser.
3. Adjust the four i-f trimmer screws for maximum response. (Clip the test signal lead to the stator of the larger capacity section of the variable condenser.)

R-f Alignment

1. Connect the test oscillator to a coil composed of three or four turns of wire wound in a circle approximately 12 inches in diameter. This coil should be placed parallel to and in line with the receiver loop at a distance of approximately 15 to 20 inches.
2. Radiate a signal at 1620 kc, rotate the variable condenser to minimum capacity, and adjust the oscillator trimmer, on the smaller section of the variable condenser, for maximum response.
3. Radiate a signal at 1420 kc, tune in the 1420 kc signal, and adjust the antenna trimmer, on the larger section of the variable condenser, for maximum response.
4. Radiate a signal at 600 kc, set the dial indicator to 60, and adjust the oscillator coil core trimmer while rocking the variable condenser for maximum response.
5. Return to 1620 kc and check alignment. If readjustment is necessary, repeat Steps 2 to 4 until no further improvement is noted.

GENERAL NOTES

1. If replacements are made in the r-f section of the circuit, the receiver should be carefully realigned.
2. The receiver has a self-contained antenna and does not require additional antenna or ground connections.
3. The self-contained loop antenna has directional properties. It is important, therefore, once the station is tuned in, to rotate the cabinet back and forth through a quarter of a circle (90 degrees), leaving it at the position where the station is received with maximum volume.
4. The receiver is turned on when the lid is open and the switch button is pulled up. The receiver is automatically turned off when the lid is closed or when the button is pushed down.
5. Remove batteries as soon as they are exhausted, or if the receiver is to be stored for several weeks.
6. Replace the 1.5-volt "A" batteries with standard D-size flashlight cells (1-5/16" dia.). Replace the 67.5-volt "B" battery with Eveready Minimax No. 467 or equivalent.

CIRCUIT DATA ON SHEET 16

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I.F. = 455 KC.

BATTERY MODELS 570 574 580

VOLTAGE ANALYSIS

The following voltage readings are d-c measurements taken from B— (chassis) to the indicated tube-socket pin. A 1000 ohms-per-volt meter should be used for all readings except those indicated by an asterisk (*), which should be taken with a d-c vacuum-tube voltmeter. Take readings with the volume control set at minimum and the variable condenser closed. Use fresh batteries.

	PIN NUMBER						
TUBE	1	2	3	4	5	6	7
1R5		60	35	*-8		*-0.2	1.5
1T4		60	35			*-0.2	1.5
1S5			*-0.2	*17	*25	*-0.1	1.5
3S4	1.5	59	*-6.5	60		59	1.5

TO REPLACE BATTERIES: Close cover and turn set over. Unscrew large screw in center of base and remove bottom panel. This makes batteries accessible. Replace batteries as shown in illustration. Replace bottom panel and tighten screw.

TO REPLACE PICTURE: Pull button on picture frame at top of cover. This removes frame. Mount picture in center of mat board. Place frame over picture and press the four corners in until they snap into grooves. Press the two lower corners first.

EMERSON DATA SHEET 17