

BAND SWITCH S-1 IS SHOWN IN POSITION FOR BAND 4.

NOTE

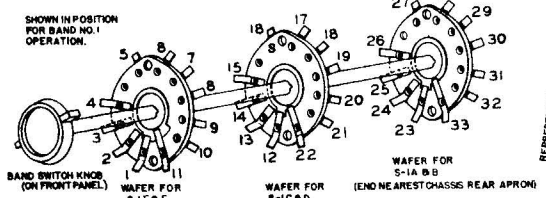
RESISTANCE VALUES ARE IN OHMS, MICA CAPACITOR VALUES ARE IN MMF, PAPER CAPACITOR VALUES ARE IN DECIMAL EQUIVALENTS OF MFD, ELECTROLYTIC CAPACITOR VALUES ARE IN MFD.

Z DENOTES MECHANICAL GANGING

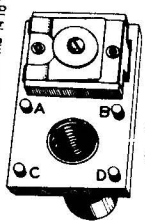
NUMERALS AT BANDSWITCH (S1) AND LETTERS AT ANTENNA, MIXER AND OSCILLATOR TRANSFORMERS (T1 TO T6) IDENTIFY CORRESPONDING TERMINALS ON PICTORIAL VIEWS

The Hallicrafters
MODEL S-40 A

BANDSWITCH S-1



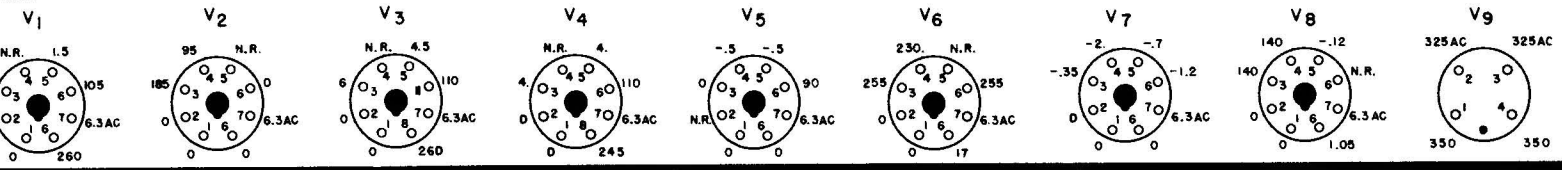
REPRESENTS TRANSFORMERS T1 TO T12



TUBE TERMINAL VOLTAGES (PIN VIEW)

ALL VOLTAGES ARE POSITIVE DC UNLESS OTHERWISE SPECIFIED

* "S" METER SWITCH CLOSED (MAX. CLOCKWISE), NR - NOT READABLE WITH METER USED.
ALL READINGS TAKEN AT 117 V. AC LINE VOLTAGE, WITH 20,000 OHM/VOLT METER; NO SIGNAL BEING RECEIVED; CONTROLS SET AS FOLLOWS: STANDBY/RECEIVE SWITCH AT "RECEIVE"; AVC, NOISE LIMITER AT "ON"; AM/CW SWITCH AT "CW"; SENSITIVITY AND VOLUME CONTROLS FULL CLOCKWISE; TUNING, PITCH CONTROL, AND TONE CONTROLS IN ANY POSITION AS THEY DO NOT AFFECT READINGS.



MANUAL OF 1949 MOST-OFTEN-NEEDED RADIO DIAGRAMS

The Hallicrafters Co.

MODEL S-40 A

ALIGNMENT

EQUIPMENT:

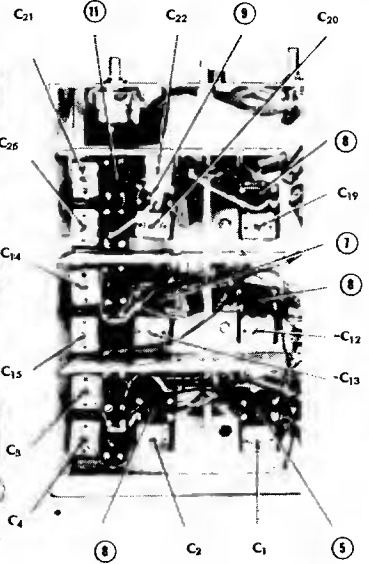
1. Signal Generator capable of the ranges indicated in the Alignment Chart, including a 400 cycle audio modulator.
2. Output meter capable of handling 1.5 watts of audio power.
3. Standard RMA dummy consisting of a 200 mmf condenser in series with a 20uh r-f choke which is shunted by a 400 mmf condenser in series with a 400 ohm carbon resistor.
4. Non-metallic screw driver.

CONNECTIONS: Connect the Sig. Gen. "cold" lead to the receiver's chassis; the "hot" lead is connected as indicated in the Chart.

Connect the output meter across the speaker voice coil. Caution: Set the meter at a sufficiently high range to prevent possible damage from overload.

CONTROL SETTINGS: After allowing about a ten minute warm up period, set the receiver's control as follows:

- SENSITIVITY control at full clockwise (maximum).
- VOLUME control at full clockwise (maximum).
- CW/AM switch at "AM" (except for BFO adjustment).
- A.V.C. switch at "OFF."
- NOISE LIMITER switch at "OFF."
- TONE control at "HIGH".



Top and bottom views of the receiver locating slugs, padders and trimmers

DUMMY ANT. IN SERIES WITH SIG. GENERATOR	CONNECTION OF SIG. GENERATOR OUTPUT TO RECEIVER	SIGNAL GEN. FREQUENCY SETTING	BAND SWITCH SETTING	RECEIVER DIAL SETTING	ADJUST SLUG, PADDER, OR TRIMMER NO.	DESCRIPTION	TYPE OF ADJUSTMENT—MAKE ADJUSTMENT FOR:	STEP NO.
IF ADJUSTMENT								
None	Stator plates of center sect. of tuning gang	455 kc	"1"	1000 kc	3 (both) 2 (both) 1 (both)	3rd IF 2nd IF 1st IF	Maximum output Maximum output Maximum output Repeat steps 1, 2 and 3	1 2 3
BFO ADJUSTMENT—NOTE: Turn off Sig. Gen. 400 cycle modulation; set CW/AM switch at "CW"; remove Pitch Control knob adjust slotted screw shaft.								
None	Stator plates of center sect. of tuning gang	455 kc	"1"	1000 kc	T-17 slug (See Fig. 3 for location)	BFO slug	Zero heat	4
BAND #4 ADJUSTMENT—NOTE: Make sure 400 cycle audio modulator is turned on; AM/CW switch should be at "AM."								
STANDARD	"A1" on antenna	36 mc	"4"	36 mc	C-19	Osc. Trimmer	Maximum output	5
RMA Dummy strip		18 mc		18 mc	8	Osc. Slug	Maximum output and repeat step 5	6
		36 mc		36 mc	†C-1	RF Trimmer	Maximum output	7
		36 mc		36 mc	†C-12	Mix. Trimmer	Maximum output	8
		18 mc		18 mc	*†5	RF Slug	Maximum output and repeat step 7	9
		18 mc		18 mc	*†6	Mix. Slug	Maximum output and repeat step 8	10
BAND #3 ADJUSTMENT								
STANDARD	"A1" on antenna	14 mc	"3"	14 mc	C-20	Osc. Trimmer	Maximum output	11
RMA Dummy strip		10 mc		10 mc	* 9	Osc. Slug	Maximum output and repeat step 11	12
		14 mc		14 mc	†C-2	RF Trimmer	Maximum output	13
		14 mc		14 mc	†C-13	Mix. Trimmer	Maximum output	14
		7 mc		7 mc	*† 4	RF Slug	Maximum output and repeat step 13	15
		7 mc		7 mc	*† 7	Mix. Slug	Maximum output and repeat step 14	16
BAND #2 ADJUSTMENT								
STANDARD	"A1" on antenna	5 mc	"2"	5 mc	C-21	Osc. Trimmer	Maximum output	17
RMA Dummy strip		3 mc		3 mc	* 11	Osc. Slug	Maximum output and repeat step 17	18
		5 mc		5 mc	C-3	RF Trimmer	Maximum output	19
		5 mc		5 mc	C-14	Mix. Trimmer	Maximum output	20
BAND #1 ADJUSTMENT								
STANDARD	"A1" on antenna	1500 kc	"1"	1500 kc	C-22	Osc. Trimmer	Maximum output	21
RMA Dummy strip		600 kc		600 kc	C-25	Osc. Padder	Maximum output and repeat step 21	22
		1500 kc		1500 kc	C-4	RF Trimmer	Maximum output	23
		1500 kc		1500 kc	C-15	Mix. Trimmer	Maximum output	24

*It may be necessary to repeat the indicated adjustments several times.

†Rock the main tuning capacitor slightly (turn back and forth) when making these adjustments.