

MODEL S-22  
Skyrider Marine  
Socket, Trimmers

HALLICRAFTERS, INC.



BANDS 2 1 4 3

OSC. C<sub>D</sub> C<sub>A</sub> C<sub>J</sub> C<sub>G</sub>

MIXER C<sub>E</sub> C<sub>B</sub> C<sub>K</sub> C<sub>H</sub>

R.F. C<sub>F</sub> C<sub>C</sub> C<sub>L</sub> C<sub>I</sub>

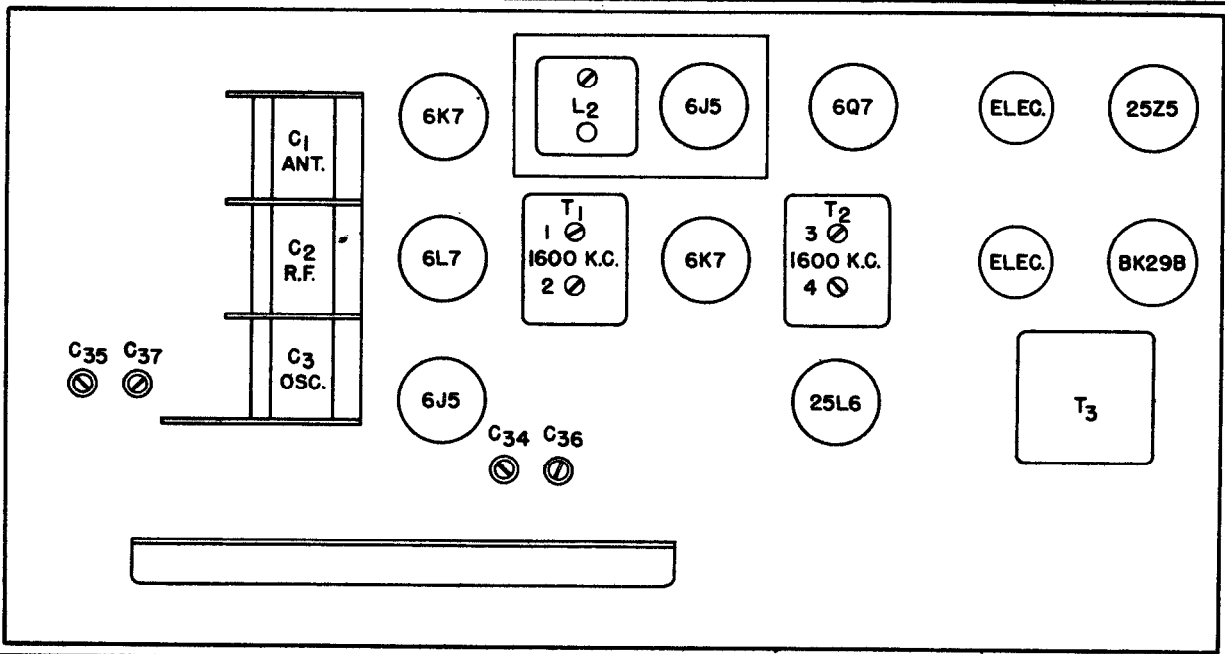
## SKYRIDER MARINE MODEL S-22

### TUBES

- 6K7 R.F. Amp.
- 6L7 1st. Det.
- 6J5 High Freq. Osc.
- 6K7 I.F. Amp.
- 6Q7 2nd. Det., A.V.C.  
1st Audio
- 25L6 Output
- 25Z5 Rectifier
- 6J5 B.F.O.

G A<sub>2</sub> A<sub>1</sub>

A.C. CORD

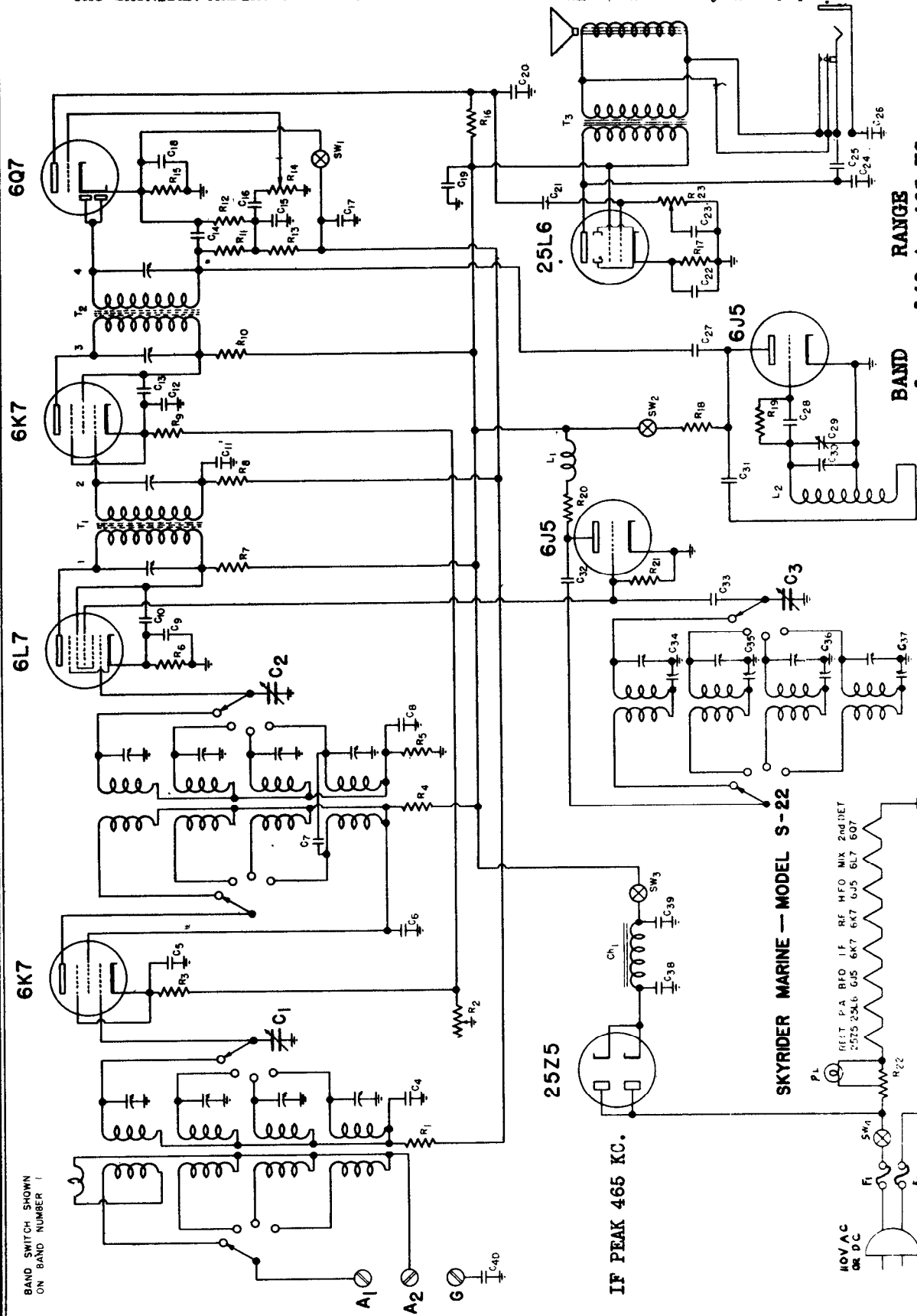


R.F. GAIN    BAND SWITCH    AUDIO GAIN    MAIN TUNING    TONE CONTROL    PITCH CONTROL    SEND REC.

HALLICRAFTERS, INC.

MODEL S-22  
Skyrider Marine  
Schematic

The SKYRIDER Marine receiver draws 47 watts at 117 volts .60 cycle A.C.



RANGE	
1	140 to 465 KC
2	465 to 1510 KC
3	1.7 to 5.8 MC
4	5.8 to 18.5 MC

BAND	
1	
2	
3	
4	

In keeping with underwriters recommendations the fuse block is mounted on the under side of the chassis. 250 volt 2 amp replacement fuses can be installed only after the bottom plate is removed from the receiver.

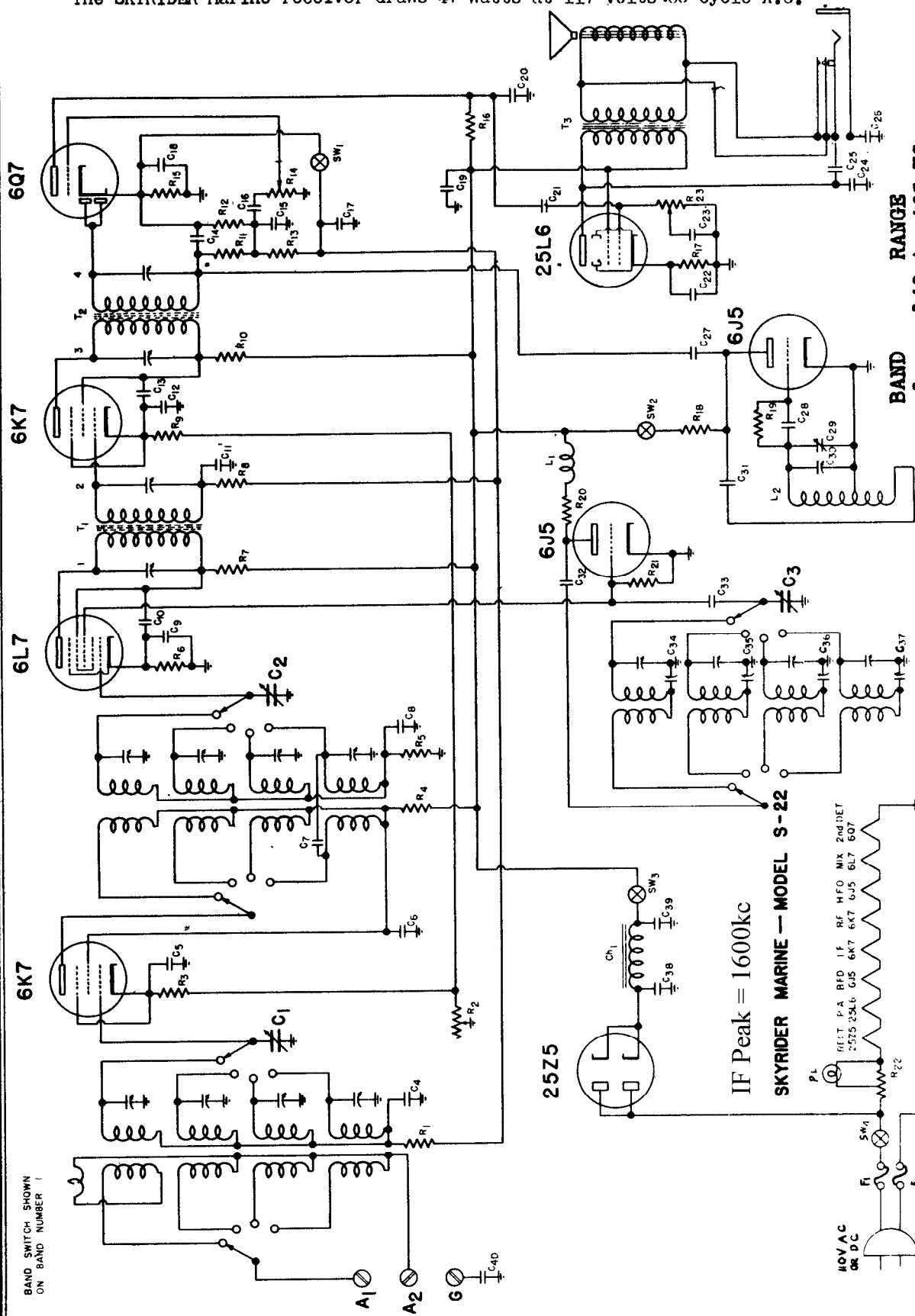
SKYRIDER MARINE — MODEL S-22

REPT. P.A. RFO IF RF HFO MIX 2nd DET  
25Z5 25L6 6J5 6K7 6L7 6J5 6L7 607

CORRECTED IF (1.600kc/s) HALLICRAFTERS, INC.

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**MODEL S-22**  
**Skyrider Marine**  
**Alignment, Parts**

**HALLICRAFTERS, INC**

NOTE: Because this receiver can be operated on either 110 volt AC or DC current the chassis is electrically placed above ground. DO NOT ground the receiver at any other point than the G terminal on the rear of the receiver.

**ALIGNMENT PROCEDURE FOR SKYRIDER MARINE MODEL S22**

**Intermediates Frequency Alignment**

Have the controls set as follows:-

- A.V.C.-B.F.O. switches in the "off" position.
- Adjust A.F. and R.F. gain controls for maximum volume.
- Set Band Switch on #1 Band.

Set main dial at 465 KC or minimum capacity position.

Remove 6L7 grid cap - connect the signal generator through a .1 MFD condenser to the grid of this tube. Connect the ground of the signal generator to the G terminal of the receiver.

The chassis is insulated from the cabinet so do not ground the cabinet.

After the above adjustments have been made, set the signal generator for 1600 KC signal output.

Now adjust the trimmers on T1 and T2 transformers for exact resonance which will be indicated by maximum signal output. If you prefer an output meter as an indicator it should be of the rectifier type and connected to the voice coil leads of the speaker, or to the plate of the 25L6 output tube through suitable coupling condenser.

**R.F. Alignment**

Replace the .1 MFD condenser in series with the generator leads with a 400 ohm resistor. Connect the generator to the A1 terminal on the strip mounted on the rear of the chassis. Leave the jumper between A2 and G connected. All pad adjustments are for the low frequency ends of the bands and are reached from the top of the chassis. All trimmer adjustments are for the high frequency ends of the bands and are adjusted through the bottom plate. Remove the guarantee card on the bottom of the cabinet by placing a knife under the small snap fasteners which hold it in place.

**Band #1**

Place the band switch on Band 1. Set generator for 350 KC output and adjust main dial for that frequency. Adjust oscillator trimmer OA, mixer trimmer, CB and antenna CC for maximum signal. Reset generator and receiver to 150 KC and resonate pad C34 for maximum signal.

**Band #2**

Turn Band Switch to Band 2. Set generator and receiver to 1400 KC and adjust CD CF for maximum output. Reset generator and receiver to 600 KC - add adjust pad C35 for maximum signal.

**Band #3**

Adjust Band Switch to Band 3. Set generator and receiver to 4 MC and adjust C9 CH CI for maximum signal. Reset generator and receiver to 1.8 MC and tune pad C36 for maximum output.

**Band #4**

Set Band Switch on Band 4. Tune generator and receiver to 14 MC and adjust CJ, CK, CL for maximum signal. Reset generator and receiver to 6MC and adjust pad C37 for maximum output.

**RESISTORS**

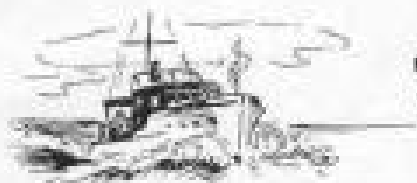
NO.	OHMS	WATTAGE	PARTS NO.
R1	100,000	1/3	20-093
2	25,000	R. F. Gain	25-039
3	600	1/3	22-125
4	1,000	1/3	20-033
5	100,000	1/3	20-093
6	200	1/3	20-015
7	1,000	1/3	20-033
8	100,000	1/3	20-093
9	600	1/3	22-125
10	1,000	1/3	20-033
11	100,000	1/3	20-093
12	1,000,000	1/3	20-108
13	1,000,000	1/3	20-108
14	500,000	Audio Gain	25-041
15	7,500	1/3	20-060
16	250,000	1/3	20-099
17	140	1/2	22-011
18	5,000	1/3	20-054
19	50,000	1/3	20-084
20	1,000	1/3	20-033
21	50,000	1/3	20-084
22	94	total - type BK 29B resistor tube	
23	500,000	Tone Control	25-040

**CONDENSER - Continued**

NO.	CAPACITY	TYPE	VOLTAGE	PARTS NO.
06	.01 mfd.		400	41-001
7	10 mfd.	ceramic	"	40-021
8	.01 mfd.	"	"	41-001
9	.01	"	"	41-001
10	.01	"	"	41-001
11	.01	"	"	41-001
12	.02	"	"	41-003
13	.01	"	"	41-001
14	.0001	mica	"	40-007
15	.0001	"	"	40-007
16	.05	"	"	41-005
17	.01	"	"	41-001
18	20.	electrolytic	25	42-025
19	.1	"	400	41-007
20	.00025	mica	"	40-024
21	.05	"	"	41-005
22	20.	electrolytic	25	42-025
23	.005	"	600	40-020
24	.005	"	"	40-020
25	.01	"	400	41-001
26	.01	"	"	41-001
27	10.	mmfd. ceramic	"	40-021
28	.00025 mfd.	mica	"	40-024
29	.0003	" in pitch control	"	
30	.00025	pitch control	"	48-021
31	.01	"	"	41-001
32	.002	mica	"	40-013
33	.0001	"	"	40-007
34	50.	mmfd. Pad.	"	44-027
35	100.	"	"	44-028
36	375.	"	"	44-027
37	1,080.	"	"	44-028
38	40	mfd.	150	42-028
39	40	"	"	42-026
40	.01	"	400	41-001

**CONDENSER**

NO.	CAPACITY	TYPE	VOLTAGE	PARTS NO.
C1				
2	408.	mmfd. Main Gang		48-022
3				
4	.05	mfd.	400	41-005
5	.01	"	400	41-001



## The SKYRIDER MARINE

Specifically designed for marine service, in the range from 16.2 to 2150 meters (112.5 mc. to 140 kc.). Improved image rejection at the higher frequencies is achieved through the use of 1000 kc. IF transformers. The directly calibrated main tuning dial eliminates the use of complicated charts and tables. An efficient mechanical bandspread with separate dial provides easy tuning. Built for 110 volt AC-DC operation. Also may be operated from 6 volt battery supply with the addition of a Model No. 101 Electronic Converter. Dimensions 12 1/2" x 9" x 4 1/2" high. The SKYRIDER MARINE (Model 842)—Complete with tubes and speaker. Ship-86450 (gross weight 51 lbs.).....(SKYCU)



Available in U.S.A. on Bellmopore Factory-Sponsored Five Percent Plan