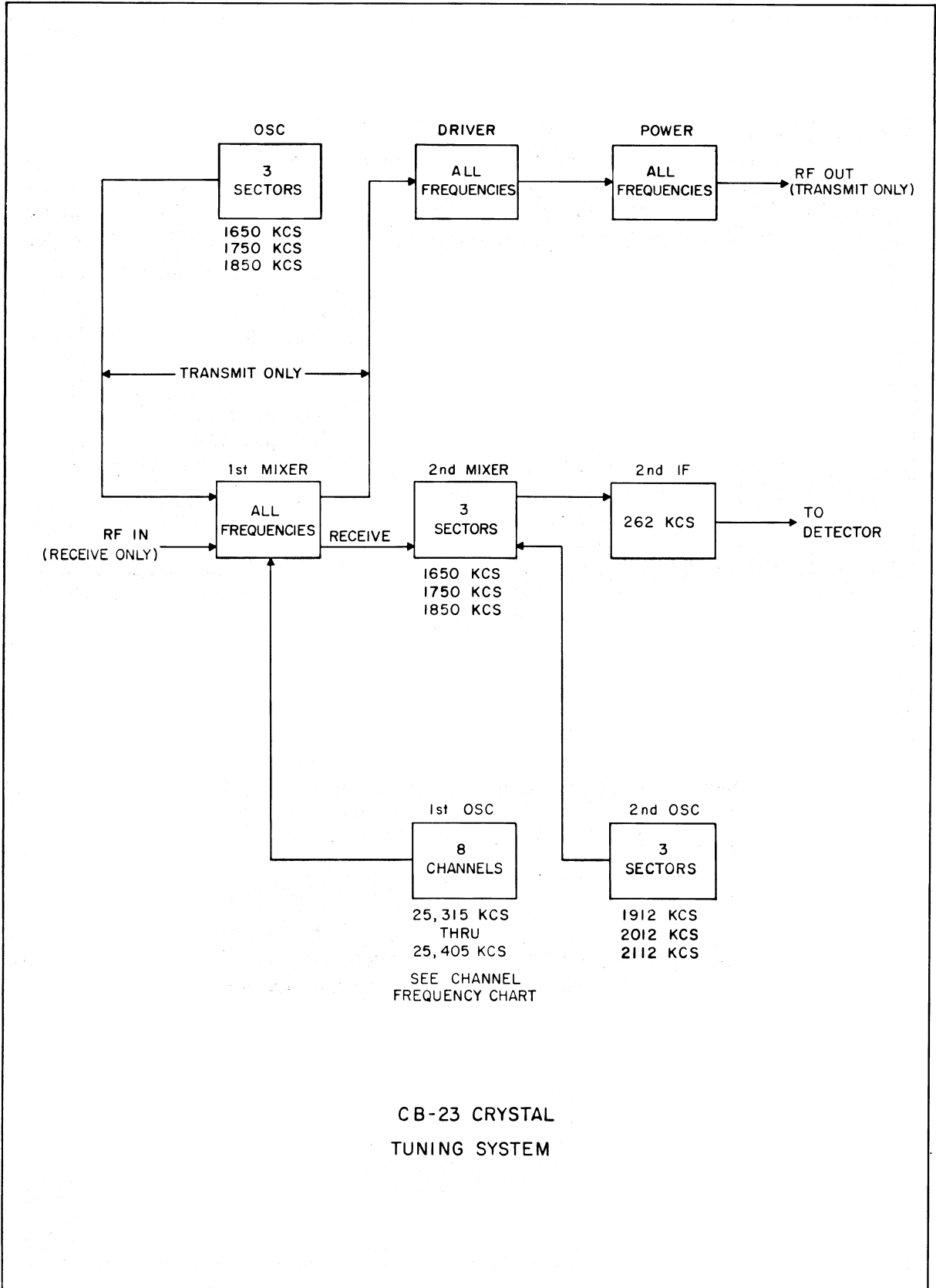
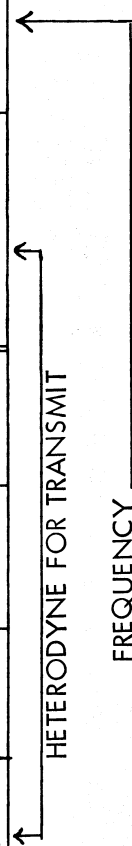


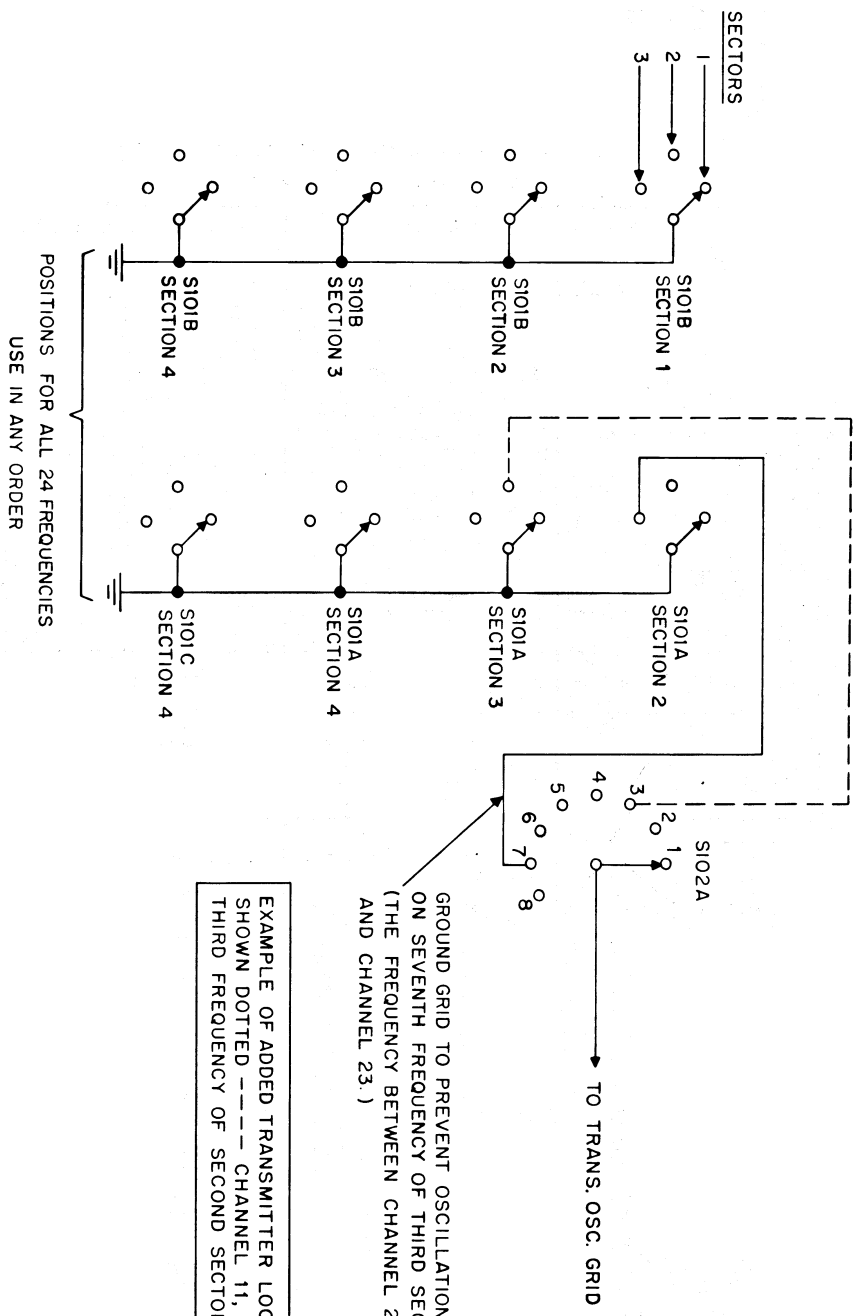
IDENTIFICATION OF RECEIVER
CRYSTAL LOCATIONS



		RECEIVER						TRANSMITTER			
Channel	Freq.	RF Amp.	1st Osc.	1st IF	2nd Osc.	2nd IF	Oscillator Freq.	Output Freq.			
SECTOR 1	1	26,965	25,315	1650	1912	262	1650	26,965			
	2	26,975	25,325	1650	1912	262	1650	26,975			
	3	26,985	25,335	1650	1912	262	1650	26,985			
	4	27,005	25,355	1650	1912	262	1650	27,005			
	5	27,015	25,365	1650	1912	262	1650	27,015			
	6	27,025	25,375	1650	1912	262	1650	27,025			
	7	27,035	25,385	1650	1912	262	1650	27,035			
	8	27,055	25,405	1650	1912	262	1650	27,055			
SECTOR 2	9	27,065	25,315	1750	2012	262	1750	27,065			
	10	27,075	25,325	1750	2012	262	1750	27,075			
	11	27,085	25,335	1750	2012	262	1750	27,085			
	12	27,105	25,355	1750	2012	262	1750	27,105			
	13	27,115	25,365	1750	2012	262	1750	27,115			
	14	27,125	25,375	1750	2012	262	1750	27,125			
	15	27,135	25,385	1750	2012	262	1750	27,135			
	16	27,155	25,405	1750	2012	262	1750	27,155			
SECTOR 3	17	27,165	25,315	1850	2112	262	1850	27,165			
	18	27,175	25,325	1850	2112	262	1850	27,175			
	19	27,185	25,335	1850	2112	262	1850	27,185			
	20	27,205	25,355	1850	2112	262	1850	27,205			
	21	27,215	25,365	1850	2112	262	1850	27,215			
	22	27,225	25,375	1850	2112	262	1850	27,225			
	--	--	27,235	25,385	1850	2112	262	--	--		
23	27,255	27,255	25,405	1850	2112	262	1850	27,255			



CHANNEL - FREQUENCY CHART



POSITIONS FOR ALL 24 FREQUENCIES
USE IN ANY ORDER

PREVENTING TRANSMISSION ON
SPECIFIC CHANNELS

GROUND GRID TO PREVENT OSCILLATION
ON SEVENTH FREQUENCY OF THIRD SECTOR.
(THE FREQUENCY BETWEEN CHANNEL 22
AND CHANNEL 23.)

EXAMPLE OF ADDED TRANSMITTER LOCKOUT
SHOWN DOTTED --- CHANNEL 11, OR
THIRD FREQUENCY OF SECOND SECTOR.

omitted and the 24th is numbered channel 23. For the best design results, the CB-23 includes 8 crystals for the first 8 channels then reuses them, in order, for the remaining two 8-channel groups.

An inspection of the frequencies of channels 1, 9 and 17 will show that they are 100 KCS apart in turn. The heterodyne between each of the channel frequencies, produces three different intermediate frequencies in turn, each 100 KCS apart. In the receiver, the tuned circuits between the first and second mixers are switched to tune to the proper intermediate frequency as required.

Since there are three first intermediate frequencies, the second oscillator is also adjusted in frequency to produce the final IF of 262 KCS for all channels received.

The technique designed to obtain three intermediate frequencies in the receiver is reversed to produce the RF output for the transmitter. Now the receiver first oscillator frequency is heterodyned with three transmitter oscillator frequencies to produce all of the channel frequencies. The receiver first mixer is used for this frequency heterodyning process, and the final channel signal is applied to the transmitter driver through the top sections of the interstage coils T102 and T107.

Finally, switch sections are reserved to permit channels to be inactivated for transmission. These are: S101A, sections 2, 3 and 4; S101B, all sections; S101C, section 4; S102A all sections. The wiring provided with the CB-23 does not permit the frequency between channel 22 and 23 to be transmitted. In the same manner, it is possible to prevent any other channel or channels from transmitting. This wiring does not affect the receiver; all channels can be received. The switch wiring system is shown in the illustration.

POWER SUPPLY SECTION

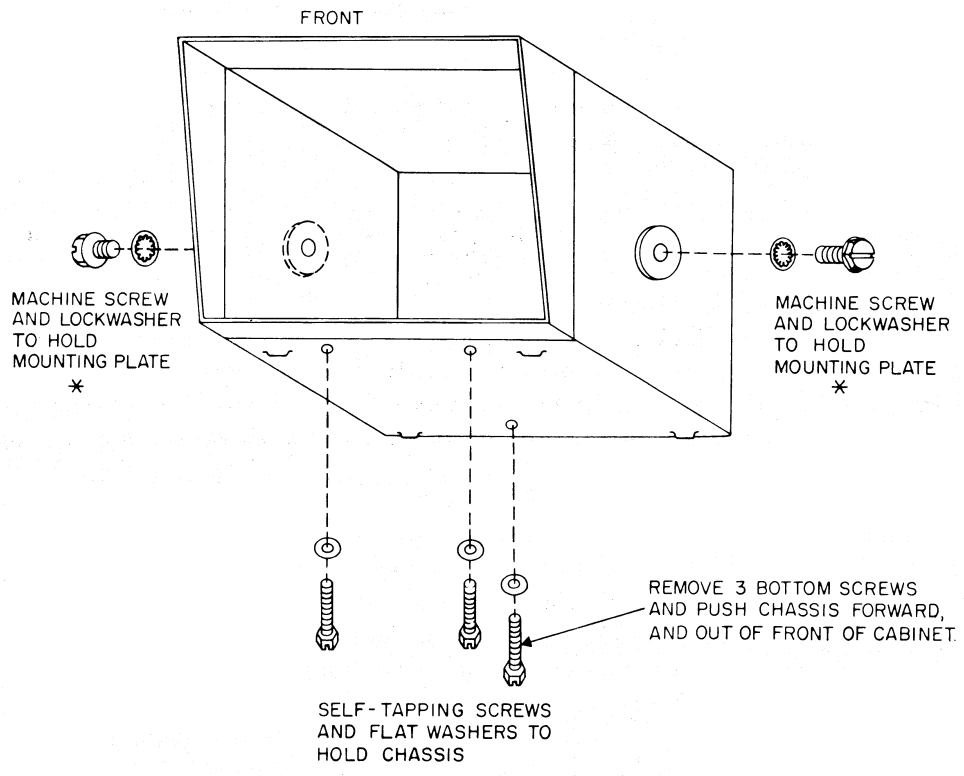
The cables supplied permit the use of the CB-23 from either 115-volt AC 60-cycle, or a 12-volt DC source. In either case the secondary of the power transformer feeds a voltage doubler circuit using two diode rectifiers.

CB-23 SERVICE AND MAINTENANCE

REMOVING AND REPLACING THE CHASSIS

Disconnect the antenna and the power cables, remove the screws from the bottom of the cabinet, and pull out the chassis.

When replacing the chassis, line up the holes in the cabinet with the chassis points designed to receive the screws.



* MOUNTING PLATE MAY BE ABOVE OR BELOW CABINET DEPENDING ON INSTALLATION - SEE USER'S MANUAL FOR INSTALLATION DETAILS. NOTE THAT REAR SECTION OF MOUNTING PLATE HOOKS OVER CABINET EDGE.

CHASSIS MOUNTING IN CABINET

REPLACING THE CHANNEL DIAL DRIVE BEAD CHAIN

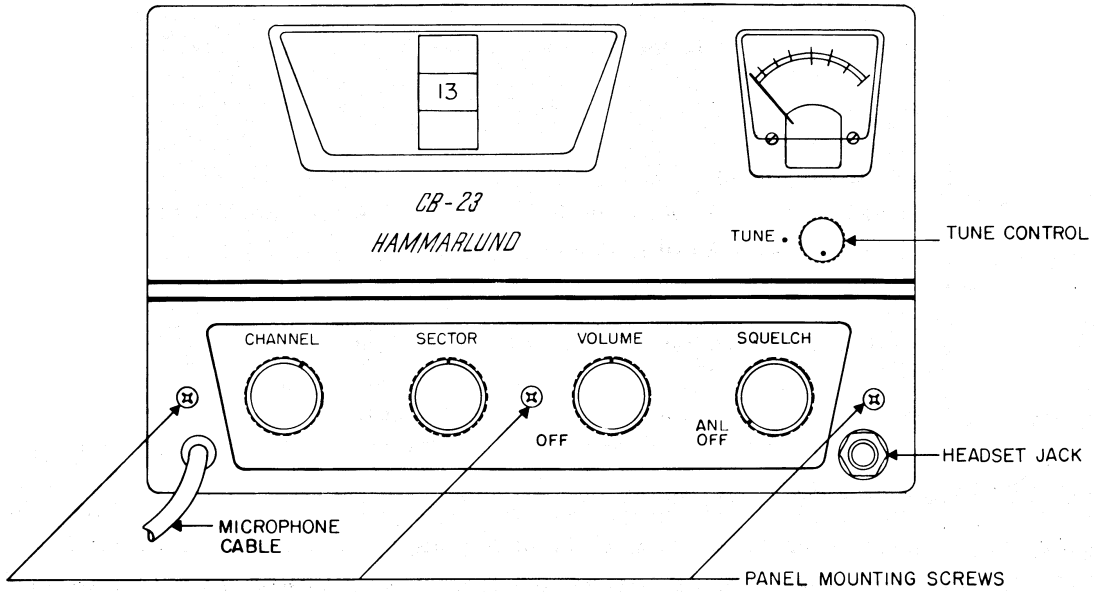
Normally it should not be necessary to remove the front panel except to repair a part of the channel or sector indicator dials or dial drives. The instructions below show how the panel is to be removed, and provide the proper method to replace the channel dial drive bead chain. Refer to the diagrams for the location and identification of all parts.

- Step 1. Remove the chassis from the cabinet.
- Step 2. Remove the five knobs from the controls. The tune knob is held by a set screw, the others just pull off.
- Step 3. Set the tune control so that its plates are fully meshed. Remove the nuts holding the headphone jack and the tune control.
- Step 4. At the rear of the panel, remove the two nuts holding the meter wire lugs. Be careful not to turn the nuts against the meter back, these are internal mounting points.
- Step 5. Remove the three screws and nuts holding the panel to the chassis. Note that two of the stand-offs will be loose, but the third holds the microphone cable clamp.
- Step 6. Turn the panel around towards the microphone cable to expose the dials.
- Step 7. Loosen but do not remove the two set screws holding the sector plate to its control shaft. Pull off the plate.

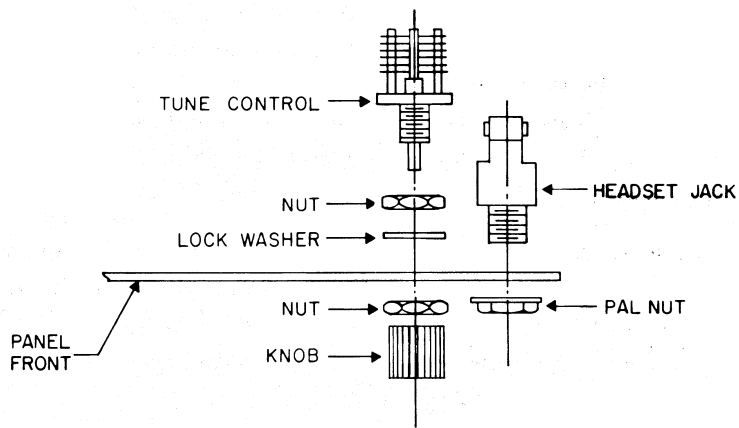
At this point you are ready to replace the bead chain. Because the chain must fit over the pulley on the dial shaft behind the dial, the dial and pulley must be removed. While removing the dial by loosening the pulley set screws may be a simple method, it is recommended that the C-washer be removed, and the dial and shaft be pulled out. This retains the dial positioning on its shaft.

The bead chain is intended to fit tightly. If difficulty is found in inserting the shaft into the bushing when the chain is in place, loosen the bushing nut sufficiently to tilt the bushing. Now the shaft will be inserted easily. CHECK THAT THE DIAL INDICATION AGREES WITH THE CHANNEL SWITCH POSITION. See illustration. Tighten the bushing nut, using two wrenches if necessary. Replace the C-washer.

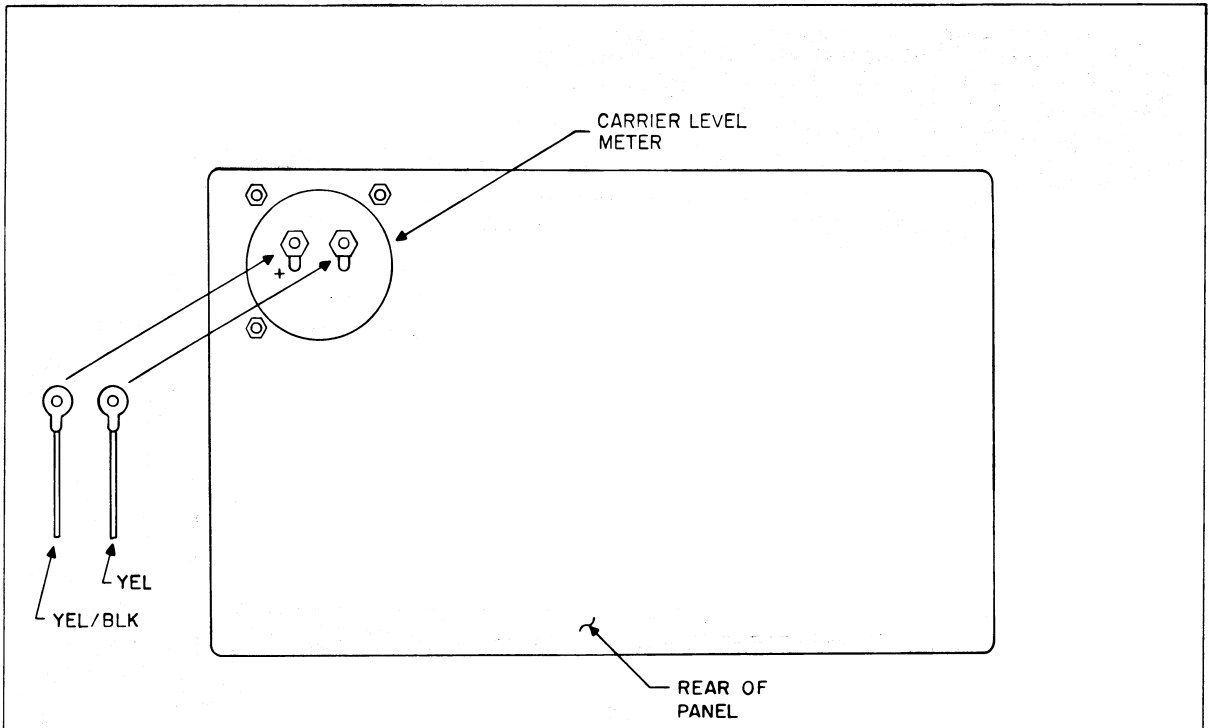
Reverse the steps above to replace the sector dial, the panel, the knobs, etc. Follow the illustrations for the proper locations of all parts. Position the sector dial plate so that the open spaces expose the numbers properly.



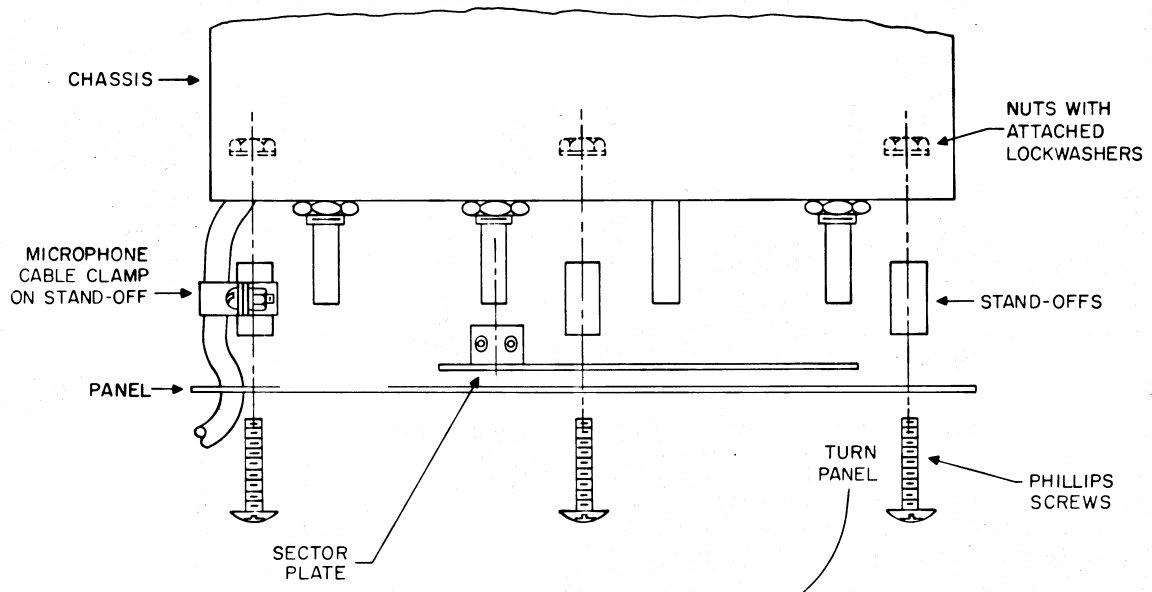
STEP 2



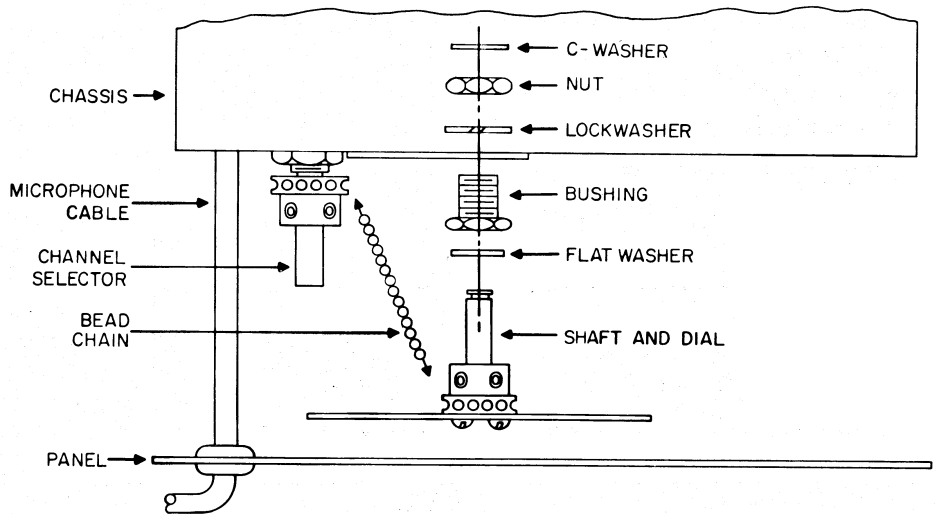
STEP 3



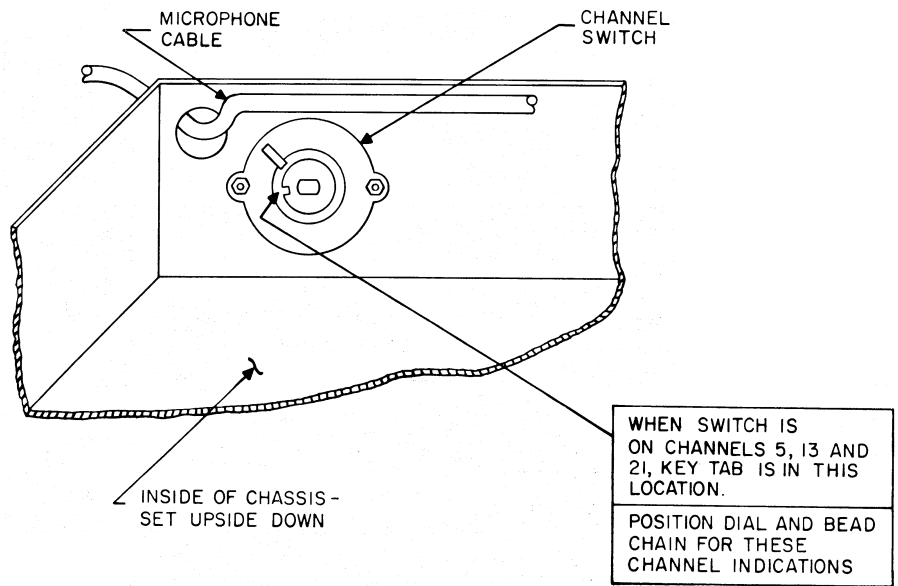
STEP 4



STEPS 5, 6 AND 7



BEAD CHAIN REPLACEMENT



DIAL CHANNEL POSITIONING

ALIGNMENT PROCEDURE

The CB-23 has been carefully aligned at the factory and should not require any more than a slight adjustment to retain the peak of its performance. If alignment is necessary, follow the instructions provided below with care.

For the alignment procedure, the equipment listed below is required:

Thin shaft insulated screwdriver.
Non-metallic alignment tool. (General Cement Co., No. 8606)
DC vacuum-tube voltmeter.
Signal generator(s) capable of accurately producing unmodulated signals of: 262 KCS, 1650 KCS, 1850 KCS, 27.1 MCS.
Field strength meter (Lafayette TM-14 or Monarch FS-1) or through-line type power meter for RF (Lafayette TM-58, Seco 520 or Cesco CB-52C)

Alignment must be undertaken with the CB-23 chassis out of its cabinet. Remove the chassis from the cabinet as instructed in this Manual. (Service and Maintenance, Page 19.)

Connect the CB-23 line cord into the correct source of power and turn it on. BEFORE ALIGNMENT, THE SET MUST BE ALLOWED TO WARM UP FOR AT LEAST A HALF HOUR. This is to assure frequency stability.

After warm up, check that no signal is being received and adjust the meter zero control on the right side of the chassis for zero on the meter scale, if required.

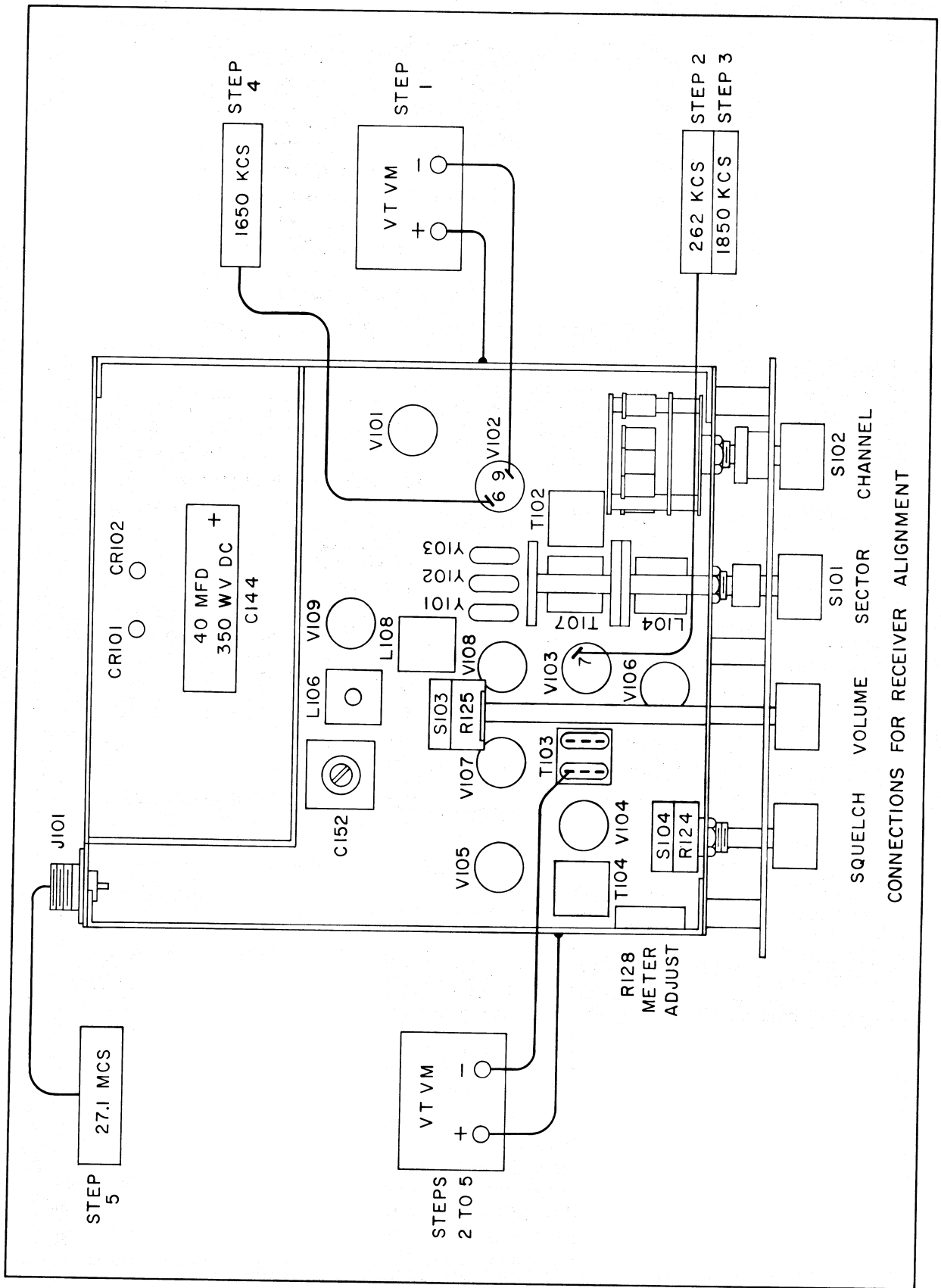
Turn squelch control off. Set the tune control so that the plates are in half mesh (dot on knob in line with dot on panel).

Note that the coil slugs are adjusted from the top of the can. Be sure you are turning the correct slug when there are two slugs in the same can; it is easy to be turning the wrong one, or even to be turning both at once if they happen to be close together inside the coil.

Receiver

Step 1. First Oscillator - The common connection of the RF amplifier and the first oscillator feed at the grid of V102A can cause interaction in the tuning of L102 and L103, resulting in feedback that sounds as a loud burbling noise in the loudspeaker. Follow these instructions to be sure of correct tuning without feedback.

Connect the VTVM between pin 9 of V102 and ground as shown in the diagram. Turn the slug of L102 counterclockwise as far as possible. Turn the slug of L103 counterclockwise as far as possible.



CONNECTIONS FOR RECEIVER ALIGNMENT

Now turn the slug of L103 slowly clockwise until the VTVM shows 20 volts DC. This is the correct tuning point. Note that if the slug is continued to be turned clockwise, the voltage will continue to rise and then fall off until oscillation finally stops. Be sure you have tuned L103 as directed above for correct operation.

Step 2. Second IF - Connect the VTVM between the pin of T103 and ground as shown in the diagram. This connection will remain for all of the receiver alignment procedure to follow.

Apply an unmodulated 262 KCS signal to pin 7 of V103 as shown in the diagram. Adjust both slugs of T103 and T104 for a peak reading. Set the input signal level so that the VTVM reads between -1 and -1.5 volts when the coils are peaked. Repeat these adjustments until no further improvement can be noticed.

Step 3. Second Oscillator - Set the sector switch extreme clockwise, to the highest sector. Apply an unmodulated 1850 KCS signal in place of the 262 KCS signal of Step 2 as shown in the diagram. Adjust L104 for a peak negative reading of the VTVM. Remember to reduce the input signal level as necessary to maintain about -1 to -1.5 volts.

Step 4. First IF - Set the sector switch counterclockwise, to the lowest sector. Apply an unmodulated 1650 KCS signal to pin 6 of V102 as shown in the diagram. Adjust the TOP slugs of T102 and T107 for a peak reading on VTVM, maintaining -1 to -1.5 volts as in Step 3.

Step 5. RF and Mixer - Set the sector and channel switches to receive channel 12. Apply an unmodulated 27.1 MCS signal to the antenna input connector J101. Adjust L102 and T101 for a peak reading, again maintaining -1 to -1.5 volts as in step 3 and 4.

Transmitter

Connect the transmitter RF output to an RF power meter and 50 ohm dummy load. To activate the transmitter for these adjustments, press the microphone switch.

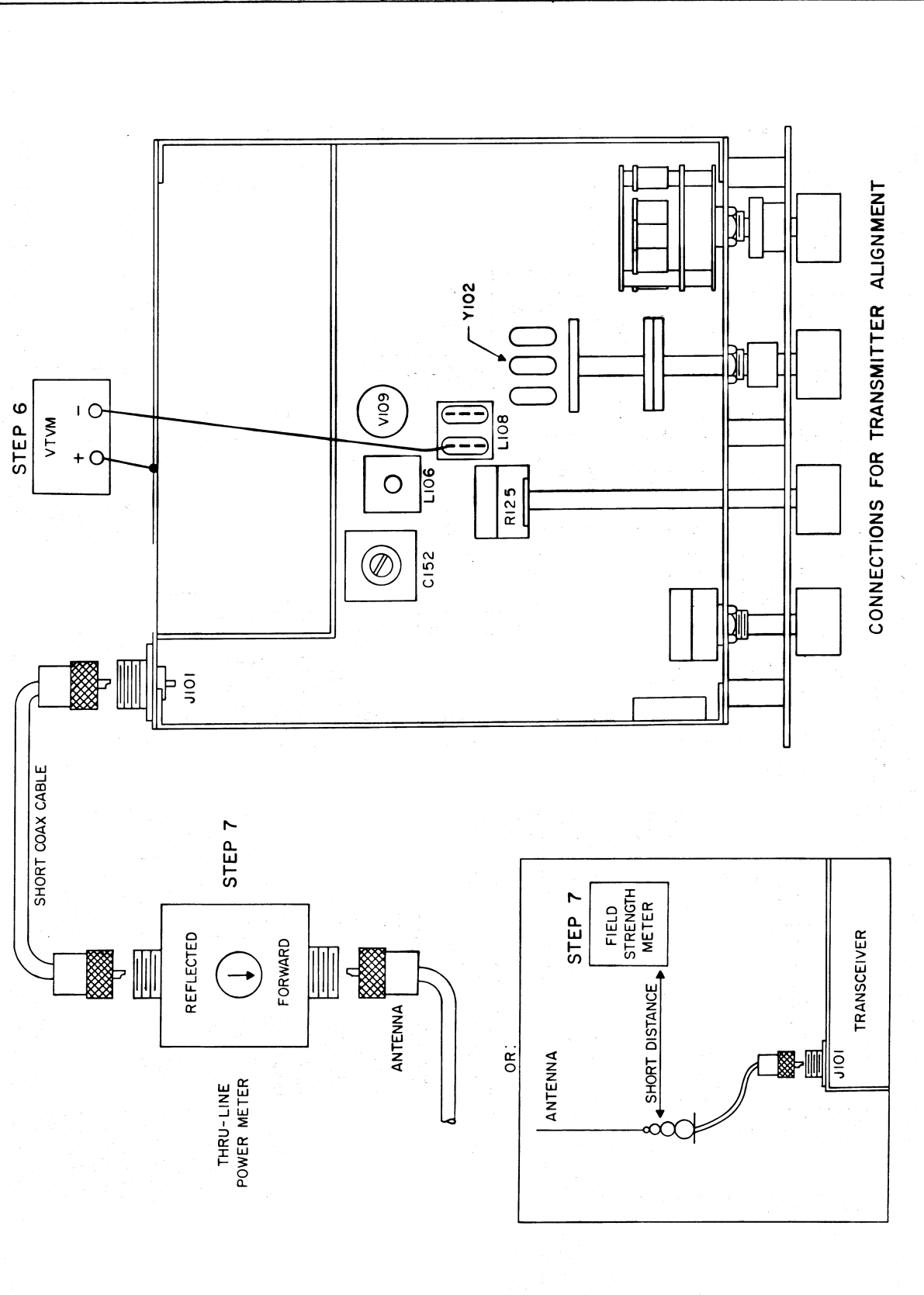
Step 6. Mixer and Driver - Set the sector and channel switches to receive channel 12. Connect the RF output into a 50-ohm dummy load. Connect the VTVM between the pin of L108 and ground as shown in the diagram. Adjust the BOTTOM slugs of T102 and T107, and L108 for peak VTVM reading. Check for proper adjustment by shorting crystal Y102 (see diagram for location). If the adjustments were correct, the meter reading should drop to zero.

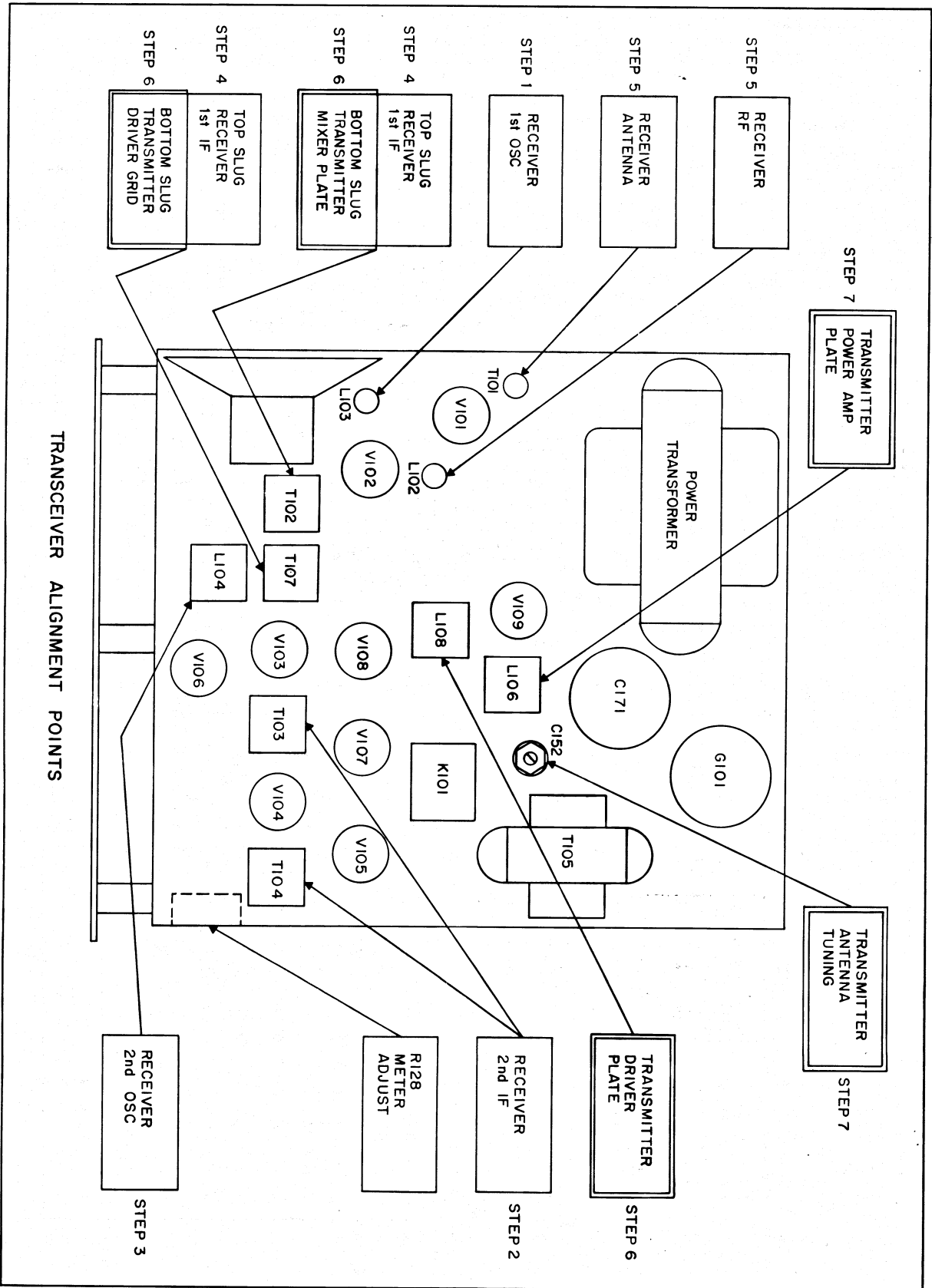
Step 7. RF Output - Set up the field strength meter or the thru-line RF power meter to measure the output of the transmitter. Set the sector and channel switches as above to channel 12.

Using the RF thru-line meter: Set the meter to read Power Output of Incident Power. Adjust L106 for a peak RF thru-line meter reading. Now adjust C152 for a peak reading

and repeak L106 again. Continue alternate tuning of C152 and L106 until no further improvement can be noted on R.F. thru-line meter.

This completes the entire alignment procedure for the transceiver. Return the chassis to the cabinet, reconnect the antenna and power cables, ready for operational use.





TUBE	Pin 1	Pin 3	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
6AZ8 V101	*50K	*50K	75	.4	0	2 meg	0		47K
6AZ8 V102	*50K	*50K	100	.4	0	47K	0	50K	100K
6BE6 V103	47K	100	.4	.5	*50K	*50K	2.2 meg		
6BA6 V108	0	0	.4	.6	*50K	50K	100		
6BJ7 V105	0	180K		2	0	2 meg	56K	100K	
12AX7 V106	*50K	47K	4.2	0	0	*50K	4.7 meg	2.2K	.4
6GW8 V107	1 meg	180	*50K	.5	.2	*50K	170	56K	*50K
6BA6 V104	2 meg	0	.4	0	*50K	*50K	100		
6DS5 V109	10K		.4	.6	*50K	*50K			

*This is a B+ point and takes a while to come up to a higher resistance. Any reading above 50K is normal.

CONDITIONS

NL. OFF. PWR. OFF Channel 8 Selector extreme CCW. PWR. Cable OFF.
 Meter is connected from point of test and chassis.

RESISTANCE MEASUREMENT CHART

TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V101 6AZ8									
Receive	230	110	1.5	6.2 AC	0	-.8	0	0	0
Transmit	---	0	0	6.2 AC	0	-25	10	160	---
V102 6AZ8	175	107	.55	6.2 AC	0	0	0	172	-20 Max.
V103 6BE6	0	6	6.2 AC	12.4 AC	235	67	-.6		
V104 6BA6 IF Amp	0	0	6.2 AC	0	215	107	1.1		
V105 6BJ7	0	0	---	6.2 AC	0	100	110	0	0
V106 12AX7	235	0	0	0	0	220	0	0	6.2 AC
V108 6BA6									
Receive	0	0	6.2 AC	12.4 AC	240	0	.15		
Transmit	---	0	6.2 AC	12.4 AC	170	100	1.35		
V109 6DS5									
Receive	0	65	6.2 AC	12.4 AC	280	280	-----		
Transmit	#-17	0			*182.5	155	-----		
V107 6GW8									
Receive	0	110	265	12.4 AC	6.2AC	280	6	0	210
Transmit	00	32	240	12.4 AC	6.2AC	255	5	0	170

*Transmitter on and volts read at junction of R113 and C179

#Transmitter on and volts read at junction of R112 and R148

-- Indicates points not to be measured.

CONDITIONS

115V AC line source. Receiver on Channel 8. 50 ohm dummy load connected to Antenna Reading taken W/20K ohm per volt meter. N.L. OFF; Transmitter properly ADJUSTED.

VOLTAGE MEASUREMENT CHART

PARTS LIST CB-23

<u>SCHEMATIC DESIGNATION</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>
C101, C108, C147	CAPACITOR, Dur-Mica DM-15 10MMF $\pm 10\%$ 500V	K23006-8
C102, C103, C104, C105, C110, C116, C117, C118, C120, C121, C122, C146, C153, C156, C158, C160, C177, C178, C179)	" Disc Ceramic .001MFD, GMV, 1000V	M23034-20
C107, C128	" Dur-Mica DM-15 47MMF $\pm 10\%$, 500V	K23006-6
C111, C112, C125, C126, C134, C135, C137, C184, C186	" Disc Ceramic .01MFD +80-20%, 600V	M23034-19
C113, C124	" Dur-Mica DM-15 405MMF $\pm 2\%$, 100V	K23006-131
C114, C123	" Dur-Mica DM-15 820MMF $\pm 5\%$, 100V	K23006-132
C115, C155, C161	" Dur-Mica DM-15 1MMF $\pm .5$ MMF, 500V	K23006-36
C127, C129, C130, C131, C132, C133, C163, C164, C183)	" Disc Ceramic .02MFD + 80-20%, 500V	M24034-27
C136, C145, C150, C181	" Dur-Mica DM-15 300MMF $\pm 10\%$, 500V	K23006-128
C138, C139	" Dur-Mica, DM-19 3000MMF $\pm 1\%$, 100V	K23027-28
C140	" Dur-Mica DM-15 720MMF $\pm 1\%$, 100V	K23006-140
C141	" Dur-Mica DM-19 1770MMF $\pm 1\%$, 100V	K23027-30
C142	" Disc Ceramic .005MFD, GMV, 1000V	M23034-10

<u>SCHEMATIC DESIGNATION</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>
C143	CAPACITOR, Variable, 1.9-15.8MMF	K34602-G3
C144	" Electrolytic 40MFD, 350V	K23073-83
C148	" Dur-Mica DM-15 30MMF $\pm 10\%$, 500V	K23006-130
C152	" Trimmer 65-340MMF	K23935-1
C157, C187	" Mylar, .1MFD, 400V	K23927-4
C159	" Disc Ceramic .005MFD + 80-20%, 500V	M23034-37
C166	" Metallized Paper Tubular 1MFD, 200V	K23035-7
C167	" Disc Ceramic .01MFD $\pm 20\%$, 500V	M23034-16
C168	" Dur-Paper .15MFD $\pm 10\%$, 600V	K23045-8
C169, C170	" Disc Ceramic .001MFD GMV, 2000V	M23034-50
C171	" Electrolytic 40-40-40/100	K15504-73
C171A	" 40MFD - 350V	Part of C171
C171B	" 40MFD - 350V	Part of C171
C171C	" 40MFD - 350V	Part of C171
C171D	" 100MFD - 25V	Part of C171
C173, C174, C175, C176	" Feed-Thru 1500MMF + 80-20%	K23094-1
C180	" Dur-Mica DM-15 8MMF $\pm .5$ MMF, 500V	K23006-73
C182	" Temp. Compensating 47MMF + 5%	K23010-7
C187	" Mylar, .1MFD, 400V	K23927-4
CR101, CR102	RECTIFIER, Silicon (1N3756)	M41223-1

<u>SCHEMATIC DESIGNATION</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>
G101	VIBRATOR	K51038-1
I101	LAMP, Incandescent #47	K16004-1
J101	CONNECTOR, Receptacle (Antenna)	K16111-1
J102	PHONE JACK	K41113-2
J103	CONNECTOR, Female	K16086-3
K101	RELAY, 4 PDT	K40417-1
L101	CHOKE, R.F. Plate, 25 Mh	K42356-21
L102	COIL, Mixer Grid	K39135-1
L103	COIL, H.F. Osc. Plate	K39135-1
L104	COIL, 2nd Conversion Tank	M39139-2
L105	CHOKE, 2nd Conversion Cathode, 100 Mh	K42356-22
L106	COIL, Final Tank	M39137-1
L107	CHOKE, P.A. Shunt Feed	K39161-1
L108	COIL, Driver Plate	M39138-1
M101	METER	K39191-1
MK101	MICROPHONE	P39190-1
R102	RESISTOR, Fixed, 180 Ω \pm 10%, 1/2 W	K19309-31
R103, R106, R134, R154,) R159)	" " 100K \pm 10%, 1/2W	K19309-97
R104, R107, R108, R117,) R119, R139, R156)	" " 2.2K \pm 10%, 1/2W	K19309-57
R105, R109, R114, R120,) R137)	" " 100 Ω \pm 10%, 1/2W	K19309-25
R110	" " 18K \pm 10% 1W	K19310-79
R112	" " 6.8K \pm 10%, 1/2W	K19309-69
R113	" " 10K \pm 10%, 1/2W	K19309-73
R115, R127, R135, R136,) R157)	" " 47K \pm 10%, 1/2W	K19309-89
R116	" " 33K \pm 10%, 1W	K19310-85
R121	" " 56K \pm 10%, 1/2W	K19309-91
R124	" Var. { 1MEG \pm 30%, 1/4W	K15382-10
	" " { Includes S104	
R125	" " { 1MEG \pm 30%, 1/4W	K15382-9
	" " { Includes S103	

<u>SCHEMATIC DESIGNATION</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>
R126, R138, R153	RESISTOR, Fixed, 1MEG $\pm 10\%$, 1/2W	K19309-121
R128	" Var., 170 Ω	K19444-1
R131	" Fixed, 4.7MEG $\pm 10\%$, 1/2W	K19309-137
R132	" " 4.7K $\pm 10\%$, 1/2W	K19309-65
R133	" " 10K $\pm 10\%$, 1W	K19310-73
R141, R142	" " 270 $\Omega \pm 10\%$, 1W	K19310-35
R143	" " 470K $\pm 10\%$, 1/2W	K19309-113
R144	" " 10 $\Omega \pm 10\%$, 2W	K19304-154
R145	" " 100 $\Omega \pm 10\%$, 2W	K19304-153
R146	" " 1K $\pm 10\%$, 10W	K19337-1
R147	" " 15K $\pm 10\%$, 2W	K19304-46
R148	" " 1.5K $\pm 10\%$, 2W	K19304-22
R150	" " 910 $\Omega \pm 5\%$, 1/2W	K19309-207
R151	" " 220K $\pm 10\%$, 1/2W	K19309-105
R152	" " 3.3MEG $\pm 10\%$, 1/2W	K19309-133
R155	" " 22K $\pm 10\%$, 1/2W	K19309-81
R158	" " 1K $\pm 10\%$, 1/2W	K19309-49
R160	" " 82K $\pm 10\%$, 1/2W	K19309-95
R161	" " 33K $\pm 10\%$, 1/2W	K19309-85
S101	SWITCH, Selector	K39156-1
S102	SWITCH, Channel	K39155-1
S103	"	Part of R125
S104	"	Part of R124
SP101	SPEAKER	M39067-2
T101	TRANSFORMER, Antenna	K39136-1
T102	" 1st High I.F.	M39141-1
T103	" 1st Low I.F.	M39170-1
T104	" 2nd Low I.F.	M39170-1
T105	" Modulation	K39035-2
T106	" Power	T39169-1
T107	" 2nd High I.F.	M39140-1
V101, V102	TUBE, Electron, 6AZ8	K16394-1
V103	TUBE, Electron, 6BE6	K16284-1
V104, V108	TUBE, Electron, 6BA6	K16283-1
V105	TUBE, Electron, 6BJ7	K16397-1
V106	TUBE, Electron, 12AX7	K16300-1
V107	TUBE, Electron, 6GW8	K40924-1
V109	TUBE, Electron, 6DS5	K40925-1

<u>SCHEMATIC DESIGNATION</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>
Y101	CRYSTAL, 1650KC	M39193-1
Y102	" 1750KC	M39193-2
Y103	" 1850KC	M39193-3
Y104	" 25315KC	M39210-1
Y105	" 25325KC	M39210-2
Y106	" 25335KC	M39210-3
Y107	" 25355KC	M39210-4
Y108	" 25365KC	M39210-5
Y109	" 25375KC	M39210-6
Y110	" 25385KC	M39210-7
Y111	" 25405KC	M39210-8
Z102	RC-Printed Network Diode Detector, AVC-Limiter	K38885-1

MISCELLANEOUS PARTS

DESCRIPTION

Line Cord Assy	M39174-G1
Fuse Cartridge, 1 AMP	K15928-5
Battery Cord Assy	M39175-G1
Fuse Cartridge, 6-1/4 Amps, Slo-Blow	K51010-1
Instruction Book	41391-2
Screw, #10 Self-Tapping Bd Hd, 1/2" Long (for Dash Board Mtg)	K40127-4
Microphone Clip	K39211-1
Cable Connector Plug	K16071-1
Screw, #6 Self-Tapping Hex Head (for Mtg Chassis to Cabinet)	K10080-63
Washer, Flat #6, 5/16 O.D. x 5/32 I.D. x .032 Thk	K10007-237
Knob LARGE	K39164-1
Knob SMALL	K39195-1
Bead Chain, Endless Loop	K35572-4
Service Manual	K52785-1

CB-23 TECHNICAL SPECIFICATIONS

CB CHANNELS COVERED: 23 Receive, 23 Transmit, both functions simultaneous and crystal controlled (all crystals supplied)

METER: Both transmitting and receiving indication

POWER SUPPLY: Dual-115V 60 cycle AC, /12 V DC interchangeable. No modification required. Primary power selection accomplished by choice of power cable.

TUBE COMPLEMENT:

12AX7	2nd conversion oscillator and audio preamp
6AZ8	RF amplifier and LF oscillator
6AZ8	1st mixer, 1st conversion oscillator
6BA6	IF amplifier
6BJ7	Detector, limiter and squelch
6GW8	Audio amplifier audio power amplifier
6DS5	RF power amplifier
6BA6	Driver
6BE6	2nd Mixer
	Plus 2 silicon rectifiers and vibrator for 12V DC supply

RECEIVER SECTION:

± 3 KC VERNIER TUNING CONTROL- (no effect on transmit frequencies)

DUAL CONVERSION- Superheterodyne using 262 KC last IF for high selectivity

BANDWIDTH- 4 KC at 6 db down 16.5 KC at 40 db down

SENSITIVITY- .8 μ V input will produce maximum audio output

SIGNAL-TO-NOISE RATIO- better than 1 μ V for a 10:1 signal-to-noise ratio

SQUELCH- Adjustable

NOISE LIMITER- Highly effective self-adjusting series type

AUDIO OUTPUT- 2 1/2 watts to built-in PM speaker

HEADPHONE JACK- Cuts off speaker for personal listening

TRANSMITTER SECTION:

POWER OUTPUT- 2 1/2 watts minimum over complete range of 23 channels for legal input of 5 watts

MODULATION- 100% assured, "hi-level" type

MICROPHONE- High quality ceramic push-to-talk type.