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f. Check for a receiver current drain of approximately 300 mA with no signal input.

#### 6.4.4 Audio

- a. Set the Squelch control fully counterclockwise, the Volume control fully clockwise and set the AC VTVM to the 3 volt scale.
- b. Set the signal generator output level for 0.5  $\mu V$  modulated 30% with 1 kHz.
- The audio output indication on the VTVM should be 0.55 volts minimum (-3 dB).

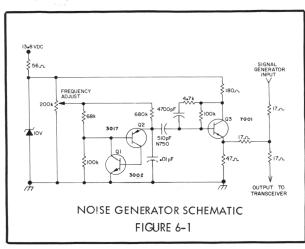
#### 6.4.5 Tight Squelch

- Set the channel selector switch to channel 11 and adjust the Squelch control to maximum clockwise. Set the Volume control to approximately midrange.
- b. Set the signal generator output level to  $100\mu V$  modulated 30% with 1 kHz and connect it to the antenna connector.
- c. Adjust R72 for squelch opening at  $100\mu V$  ( $50\mu V$  minimum and  $200\mu V$  maximum).
- d. Reduce the signal generator output level to  $50\mu V$ , the squelch should close. If unable to obtain this performance, adjust R72 and repeat steps c and d.

#### 6.4.6 Noise Blanker

Figure 6-1 shows the schematic of a pulse generator which can be assembled and used to check the performance of the Noise Blanker. A quick check of the Noise Blanker can be conducted as follows:

a. Set the signal generator for an "on channel" frequency with  $1\mu V$  output (the three 17 ohm resistors in the pulse generator form a 6 dB pad) and connect it to the pulse generator.



- Turn the pulse generator on and adjust the frequency to 100 Hz.
- c. Connect the transceiver to the pulse generator output and switch the Noise Blanker switch on and off for an audible indication of its effectiveness.
- d. If there is no appreciable noise pulse reduction proceed to troubleshoot the Noise Blanker circuit.

#### 6.5 TRANSMITTER TUNEUP

Connect the test setup as shown in Figure 5-2.

#### 6.5.1 Predriver and Driver

- Connect the RF voltmeter to the base of Q18 and key the transmitter.
- Adjust T15, T16 and T17 for a maximum meter reading.

#### 6.5.2 Power Amplifier

- Connect the wattmeter and dummy load to the antenna connector.
- Key the transmitter and adjust T19, T18 and L10 for maximum power output.
- c. Connect an ammeter in Q20 collector lead and adjust L9 for 3.8 watts with the power amplifier collector current 410 mA or less.

#### 6.5.3 Transmit Meter Adjust

- Connect a dummy load to the antenna connector and key the microphone.
- b. Adjust R39 for a meter reading of 4 with no modulation. The meter should deflect upscale with modulation.

### 6.6 TRANSMITTER PERFORMANCE TEST

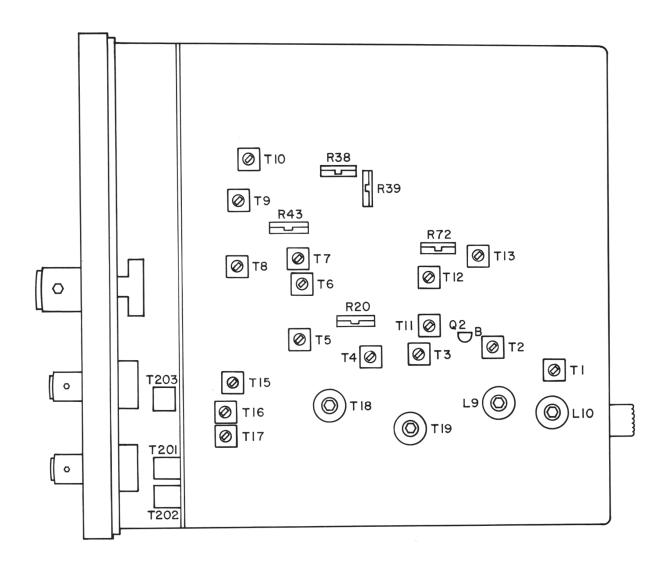
Connect the test setup as shown in Figure 5-2 and refer to Table 5-1 for suggested test equipment.

#### 6.6.1 RF Power Output

Key the transmitter and check for an RF power output of between 2.8 and 3.8 watts with no modulation. The transmitter should draw a maximum of 970 milliamperes. The final power amplifier, Q20, collector current should not exceed 410 milliamperes.

#### 6.6.2 Transmitter Frequency

a. Connect a dummy load to the antenna connector and loop couple a frequency counter to L10.



ALIGNMENT POINTS COMPONENTS SIDE VIEW

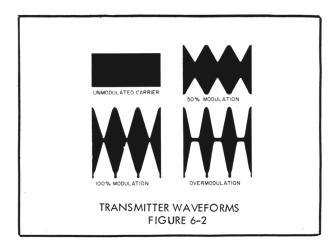
b. Key the transmitter and count the unmodulated carrier frequency on channels 1, 6, 11, 16, 20 and 23. Refer to Table 6-2 for the transmitter channel frequencies.

TABLE 6-2 TRANSMITTER CHANNEL FREQUENCY LIMITS						
Channel No.	Low Limit (kHz)	Frequency (MHz)	High Limit (kHz)			
1	26,963.652	26.965	26,966.348			
6	27,023.649	27.025	27,026.351			
11	27,083.646	27.085	27,086.354			
16	27,153.643	27.155	27,156.357			
20	27,203.640	27.205	27,206.360			
23	27,253.638	27.255	27,256.362			

c. If the transmitter frequencies are out of tolerance, refer to paragraph 5.3.3.

#### 6.6.3 Transmitter Modulation

 Loop couple the oscilloscope to L10 and refer to Figure 6-2 for transmitter waveforms.



- b. Apply a 1000 Hz tone through a  $1\mu F$  coupling capacitor to the base of Q15 at a level of 0.8mV. The oscilloscope waveform should indicate approximately 50% modulation.
- c. Increase the audio level to 5.2mV (16 dB over 50% modulation). The modulation waveform should indicate 70% modulation minimum.

## SECTION 7 PARTS LIST

SYMB	OL NO.	DESCRIPTION	PART NO.	SYMBOL NO.	DESCRIPTION	PART NO.
		BRACKETS	-	C79	4700 pF, ±10%, 1KV Y5S disc	510-3061-472
		DICTORE 15		C81	$0.010\mu F$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103
BK 1		Bracket, PC board front support	017-1821-001	C82	Same as C81	
4		Mtg. bracket, transceiver	017 - 1363 - 001	C83	100μF 10V aluminum	510-4003-005
BK 2			017-1836-001	C84	22μF, ±20%, 15V tubular	510-2003-220
BK3		Bracket, speaker mounting	023-3407-002	C85	$0.010\mu\text{F}, \pm 20\%, 16\text{V Y5S disc}$	510-3010-103
BK 4		Lampholder, DS201		1	220μF 16V aluminum	510-4006-004
BK5		Bracket, meter mounting	017-0439-001	C86	·	
BK 6		Lampholder, DS202, DS203	023-3407-001	C87	2200 pF ±10% 500V Y5S disc	510-3061-222
				C89	220μF 16V aluminum	510-4006-004
		CAPACITORS		C91	$0.33\mu\mathrm{F}$ , $\pm10\%$ , 15V molded	510-2033-338
				C92	$6.8\mu F \pm 20\%$ , 35V dipped	510-2045-689
C1		$0.010 \mu F$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103	C93	$1.0\mu F$ , $\pm 20\%$ , $35V$ dipped	510-2045-109
C3		Same as C1		C101	330 pF,±5%, 100V 1DM15	510-0001-331
C4		6.8 $\mu$ F ±10%, 35V dipped	510-2045-689	C102	82 pF, ±5%, 50V N150 disc	510-3016-820
C5		$0.010\mu F$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103	C103	$0.010 \mu F$ , $\pm 20\%$ , $16V$ Y5S disc	510-3010-103
C6		27 pF, ±5%, 200V N150 ceramic	510-3216-270	C104	10 pF,±5%, 50V NPO disc	510-3013-100
C8		$0.010\mu F$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103	C105	$0.010\mu F, \pm 20\%, 16V Y5S disc$	510-3010-103
C9		Same as C8		C106	Same as C105	
C11		12 pF, ±5%, 50V N150 disc	510-3016-120	C107	150 pF, ±5%, 50V N150 disc	510-3016-151
C12		$0.010\mu\text{F}, \pm 20\%, 16\text{V Y5S disc}$	510-3010-103	C108	$0.010\mu F$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103
C13		5.1 pF, ±5%, 200V NPO ceramic	510-3213-519	C109	33 pF, ±5%, 200V N150 ceramic	510-3216-330
C14		$0.010\mu\text{F}, \pm 20\%, 16\text{V Y5S disc}$	510-3010-103	C111	1 pF, ±5%, 500V composition	510-9002-109
C15		4700 pF, ±10%, 1KV Y5S disc	510-3061-472	C112	1000 pF, ±20%, 1KV Y5S disc	510-3061-102
1		27 pF, ±5%, 200V NPO ceramic	510-3213-270	C112	33 pF, ±5%, 200V N150 ceramic	510-3216-330
C16			510-3213-270	C113	1 pF, ±5%, 500V composition	510-9002-109
C18		5.1 pF, ±5%, 200V NPO ceramic		1	33 pF, ±5%, 200V N150 ceramic	510-3216-330
C20		$1 \text{ pF, } \pm 5\%$ , $500 \text{V}$ composition	510-9002-109	C115	22 pF, ±5%, 200V NPO ceramic	510-3213-220
C21		1000 pF,±20%, 1KV Y5S disc	510-3061-102	C116		510-3213-220
C22		$0.010 \mu F$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103	C117	0.010μF, ±20%, 16V Y5S disc	
C23		Same as C22		C118	1000 pF, ±20%, 1KV Y5S disc	510-3061-102
C24		10 pF, ±5%, 50V N150 disc	510-3016-100	C119	12 pF, ±5%, 200V N750 ceramic	510-3220-120
C27		$0.010 \mu F$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103	C121	$0.010\mu\text{F}$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103
C28		Same as C27		C122	1000 pF, ±20%, 1KV Y5S disc	510-3061-102
C32		Same as C27		C123	47 pF, ±5%, 200V N150 ceramic	510-3216-470
· C33		150 pF, ±5%, 50V N150 disc	510-3016-151	C124	4700 pF, ±20%, 50V Y5U disc	510-3002-472
C35		1000 pF, ±20%, 1KV Y5S disc	510-3061-102	C125	$0.047 \mu F$ , $\pm 20\%$ , $50V Y5U$	510-3202-473
C36		$0.022\mu F, \pm 20\%, 16V Y5S disc$	510-3010-223	C126	$1000 \text{ pF}$ , $\pm 20\%$ , $1\text{KV Y5S disc}$	510-3061-102
- C37		$1.0\mu F$ , $\pm 20\%$ , 35V dipped	510-2045-109	C127	27 pF, $\pm 5\%$ , 200V NPO ceramic	510-3213-270
. C41		$0.010 \mu F$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103	C128	1000 pF, ±20%, 1KV Y5S disc	510-3061-102
C42		$6.8\mu F, \pm 20\%, 35V \text{ dipped}$	510-2045-689	C129	100 pF, ±5%, 200V N150 ceramic	
C43		$0.010\mu F$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103	C131	300 pF, ±5%, 100V 1DM15	510-0001-301
C44		$6.8\mu F$ , $\pm 20\%$ , $35V$ dipped	510-2045-689	C132	330 pF, ±5%, 100V 1DM15	510-0001-331
C45		$0.22\mu F$ , $\pm 20\%$ , 250V flat foil	510-1004-224	C133	4700 pF, ±20%, 1.4KV Z5U	510-3001-472
C46		$1.0 \mu F$ , $\pm 20\%$ , 35V dipped	510-2045-109	C134	$0.022 \mu F$ , $\pm 20\%$ , $50 V Y 5 U disc$	510-3002-223
C51		$0.010\mu F$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103	C135	Same as C134	
C52		Same as C51		C136	$5.1 \text{ pF}$ , $\pm 5\%$ , $200 \text{V}$ NPO ceramic	510-3213-519
C53		Same as C51		C137	$0.010 \mu F$ , $\pm 20\%$ , $16V$ Y5S disc	510-3010-103
C55		Same as C51		C141	$0.010\mu\text{F}$ , $\pm20\%$ , $50\text{V}$ Y5U disc	510-3002-103
C56		Same as C51		C142	1000μF 16V aluminum	510-4006-005
C57		Same as C51		C143	Same as C142	
C58		Same as C51		C144	220μF 16V aluminum	510-4006-004
C58				C144	$0.010\mu\text{F}$ , $\pm 20\%$ , 16V Y5S disc	510-3010-103
C61		Same as C51	510-3061-472	C145	Same as C145	010 0010-100
C62		4700 pF, ±10%, 1KV Y5S disc	510-3061-472 510-3010-473	C146	47μF 25V aluminum	510-4006-012
C63		0.047μF, ±20%, 16V Y5S disc		C147 C200	24 pF, ±5%, 50V NPO disc	510-3013-240
C64		6.8μF, ±20%, 35V dipped	510-2045-689	C200	470 pF, ±5%, 100V 1DM15	510-0001-471
C65		1000 pF, ±20%, 1KV Y5S disc	510-3061-102	C201	220 pF, ±5%, 100V 1DM15	510-0001-471
C66 C71		0.10μF, ±20%, 16V Y5S disc 0.010μF, ±20%, 16V Y5S disc	510-3010-104 510-3010-103	C202 C203	$0.010\mu\text{F}$ , $\pm 10\%$ , 50V Y5U disc	510-3002-103
C72		47μF, 10V aluminum	510-4003-004	C204	Same as C203	
C73		$1.0\mu\text{F}$ , $\pm 20\%$ , 35V dipped	510 - 2045 - 109	C205	150 pF, ±5%, 50V NPO disc	510-3013-151
C74		Same as C73		C206	$0.010\mu F$ , $\pm 20\%$ , 50V Y5U disc	510-3002-103
C75		$0.010\mu F$ , $\pm 20\%$ , 50V Y5U disc	510-3002-103	C207	39 pF 200V N150 ceramic	510-3216-390
1			310 0002 100		1	
C76		Same as C75		C208	1 pF, ±5%, 500V composition	510-9002-109
		22μF, ±20%, 15V tubular	510-2003-220	C209	39 pF 200V N150 ceramic	510-3216-390
C77 C78		$0.022 \mu F$ , $\pm 10\%$ , 250V flat foil	510-1003-223	C211	$0.010\mu F$ , $\pm 20\%$ , $50V Y5U disc$	510-3002-103

#### PARTS LIST (cont'd)

PARTS LIST (cont'd)						
SYMBOL NO.	DESCRIPTION	PART NO.	SYMBOL NO.	DESCRIPTION	PART NO.	
C212	Same as C211		J4	Antenna jack	142-0101-002	
C213	Same as C211		1			
C214	8.2 pF, ±5%, 200V N750 ceramic	510-3220-829		INDUCTORS		
C215	100 pF, ±5%, 200V N750 ceramic	510-3220-101				
C216	$0.010 \mu F$ , $\pm 20\%$ , $50V$ Y5U disc	510-3002-103	L2	18 mH 500 mA filter	542-5007-001	
C217	22 pF, ±5%, 200V N150 ceramic	510-3216-220	L5	220μH RF choke	542-2004-221	
C218	$0.010 \mu F$ , $\pm 20\%$ , $50V Y5U disc$	510-3002-103	L6	30μH choke	542-3002-004	
C219	Same as C218		L8	13μH choke	542-3003-001	
			L9	10 1/2 T inductor $0.75-1.0\mu H$	542-1005-010	
	CHASSIS PARTS		L10	4 1/2 T inductor 0.24-0.32 $\mu$ H	542-1005-004	
			L201	20μH choke	542-3002-002	
CH1	Chassis rail	017-1819-002	L202	Same as L201		
CH2	Front panel	015-0823-002				
	DIODES			SPEAKER		
	DIODES		LS1	Speaker Assembly		
CR1	1N67A germanium diode	523-1500-067		Includes:		
CR2	1N4148 SI diode	523-1500-883				
CR3	Same as CR2	020 2000 000		Speaker, 3 inch, 3.2 ohm	589-1013-001	
CR4	1N67A germanium diode	523-1500-067		Grille	017-1869-001	
CR7	10V   1W zener	523-2503-100		Grille cloth	018-1026-002	
CR8	Same as CR7	020 2000 200		Gasket	018-1028-001	
CR9	1N67A germanium diode	523-1500-067	1			
CR10	1N4818 200V 1.5A rect.	523-0013-201		METER		
CR13	1N4148 SI diode	523-1500-883		METER		
CR14	Same as CR13	323-1300-003	M1	Meter, S/RFO	554-0009-001	
			IVII	Weter, S/RPO	334-0009-001	
CR15	Same as CR13	E00 1500 067		1 COR CRITICAL IN		
CR16	1N67A germanium diode	523-1500-067		MICROPHONE		
CR17	1N4148 SI diode	523-1500-883	) /// 1	Missesshare Assesships	000 0700 005	
CR19	Same as CR17	500 0 <b>5</b> 01 000	MK1	Microphone Assembly	023-2708-005	
CR21	1N4003 200V 1A rect.	523-0501-002		Includes:		
CR22	1N881/1N645 diode blk	523-1000-881				
CR 23	1N4149 75V 75 mA SI SW	523-0006-002		Actuator	032-0218-001	
CR24	Same as CR23			Interior cup	023-2707-001	
CR201	1N881/1N645 diode blk	523-1000-881		Slide switch	583-3001-011	
CR 202	Same as CR201			Grille cloth	018-0919-001	
				Resonator, bakelite	018-0918-002	
	LAMPS			Cord clamp	016-1798-001	
				Screw, phillips panhead	575-5504-024	
DS201	2157D lamp, clear	549-3001-007		Nameplate	559-0036-001	
DS 202	Same as DS201			Viking head	559-0037-001	
DS203	2193D 14.4V 0.12A, red	549-3001-004		Case front	032-0216-002	
			1	Cable	597 - 2001 - 004	
	ELECTRICAL PARTS		i	Case back	023-2701-003	
				Cushion	018-0920-002	
EP3	0.14 x 0.13 ferrite bead	517-2002-001				
EP5	0.14 x 0.24 ferrite bead	517-2002-002		MECHANICAL PARTS		
EP9	2104-06 terminal lug	586-0005-106				
			MP1	Heat sink for Q19	013-1074-001	
	HARDWARE		MP2	Heat sink	014-0671-002	
			MP3	Knob, large	032-0445-002	
HW13	Ring nut 3/8 anodized,		MP4	Knob, small	032-0445-00	
	Volume & squelch controls	560-9098-016	MP7	Heat sink for U3	014-0694-003	
HW16	1/4 ID rubber grommet,		MP12	Insulator, fish paper	018-1023-00	
	for microphone cable	574-0002-007	NP2	Overlay front panel	559-2081-00	
HW30	Rubber grommet 7/8 ID,	555= 557	111.2	Storie, Irone paner	007-2001-00	
	speaker	574-0002-013		TRANSISTORS		
				CAUTGIGNAT		
	CONNECTORS		Q1	Silicon NPN 50 MHz amp TO92	576-0003-01	
71	DC Person In als	000 0070 001	Q2	Same as Q1		
J1	DC Power Jack	023-3370-001	Q3	Silicon NPN 175 MHz amp TO72	576-0003-02	
	Includes:		Q4	Silicon NPN 50 MHz amp TO92	576-0003-01	
			Q5	Silicon NPN gen. purp. TO92	576-0003-01	
	Red terminal bushing	515-4100-002	Q6	Same as Q5		
	Terminal tab	515-4101-001	Q7	Same as Q5		
J2	Ext. spkr. jack	515-2001-011	Q8	Same as Q5		
J3	PA spkr. jack	515-2001-011	Q9	Same as Q5		
J -	Janes		1 *	22		

PARTS LIST (cont'd)

			T (cont'd)		
SYMBOL NO.	DESCRIPTION	PART NO.	SYMBOL NO.	DESCRIPTION	PART NO.
Q10	Silicon NPN VHF amp TO72	576-0003-021	R46	Same as R45	
Q11	Same as Q10		R47	2.2K ohm $\pm 10\%$ 1/4 W	569-1502-222
Q12	Silicon NPN gen. purp. TO92	576-0003-011	R48	470 ohm ±10% 1/4 W	569-1502-471
Q13	Same as Q12		R49	Same as R48	
Q14	Same as Q12		R51	470 ohm ±10% 1/4 W	569-1502-471
Q15	Same as Q12		R52	$2.2$ K ohm $\pm 10\%$ $1/4$ W	569-1502-222
Q16	Same as Q12		R53	470 ohm ±10% 1/4 W	569-1502-471
Q17	Same as Q12		R54	2.2K ohm ±10% 1/4 W	569-1502-222
Q18	0.4 W 27 MHz amp. TO39	576-0004-004	R56	47K ohm ±10% 1/4 W	569-1502-473
Q19	Same as Q18		R57	$2.2$ K ohm $\pm 10\%$ $1/4$ W	569-1502-222
Q20	3.4 W 27 MHz amp. TO39	576-0004-005	R58	1.0K ohm ±10% 1/4 W	569-1502-102
Q21	Silicon NPN 50 MHz amp. TO92	576-0003-018	R59	Same as R58	
Q22	Silicon NPN gen. purp. TO92	576-0003-011	R61	3.9K ohm ±10% 1/4 W	569-1502-392
Q201	Same as Q22		R62	330 ohm ±10% 1/4 W	569-1502-331
Q202	Same as Q22		R63	5.6K ohm $\pm 10\%$ 1/4 W	569-1502-562
Q203	Silicon NPN 50 MHz amp TO92	576-0003-018	R64	$3.9$ K ohm $\pm 10\%$ $1/4$ W	569-1502-392
			R65	470 ohm ±10% 1/4 W	569-1502-471
	RESISTORS		R66	1.8K ohm	569-1502-182
			R68	3.3K ohm ±10% 1/4 W	569-1502-332
R1	4.7K ohm ±10% 1/4 W	569-1502-472	R70	Same as R68	
R 2	47 ohm ±10% 1/4 W	569-1502-470	R71	10K ohm ±10% 1/4 W	569-1502-103
R3	22K ohm ±10% 1/4 W	569-1502-223	R72	15K 1/8 W PC trim pot.,	
R4	1.0K ohm ±10% 1/4 W	569-1502-102		tight squelch control	562-0004-253
R5	Same as R4		R73	15K 1/2 W std. D 15/16	562-0001-022
R6	47 ohm ±10% 1/4 W	569-1502-470		squelch control	
R7	4.7K ohm ±10% 1/4 W	569-1502-472	R75	5.6K ohm ±10% 1/4 W	569-1502-562
R8	220 ohm ±10% 1/4 W	569-1502-221	R76	120 ohm ±10% 1/4 W	569-1502-121
R9	1.0K ohm ±10% 1/4 W	569-1502-102	R77	150K ohm ±10% 1/4 W	569-1502-154
R10	22K ohm ±10% 1/4 W	569-1502-223	R78	100K ohm ±10% 1/4 W	569-1502-104
R11	470 ohm ±10% 1/4 W	569-1502-471	R79	68K ohm ±10% 1/4 W	569-1502-683
R12	Same as R11	# (O 1#OO 100	R 80	100 ohm ±10% 1/4 W	569-1502-101
R13	1.0K ohm ±10% 1/4 W	569-1502-102	R81	22K ohm ±10% 1/4 W	569-1502-223
R14	6.8K ohm ±10% 1/4 W	569-1502-682	R82	47K ohm ±10% 1/4 W	569-1502-473
R16	1.0K ohm ±10% 1/4 W	569-1502-102	R83	3.9K ohm ±10% 1/4 W	569-1502-392
R17	220 ohm ±10% 1/4 W	569-1502-221	R84	2.7K ohm ±10% 1/4 W	569-1502-272
R18	1.0K ohm ±10% 1/4 W	569-1502-102	R85	33K ohm ±10% 1/4 W	569-1502-333
R19	2. 2K ohm ±10% 1/4 W	569-1502-222	R86	47 ohm ±10% 1/4 W	569-1502-470
R20	10K 1/8 W PC trim pot., IF gain control	562-0004-103	R87	33 ohm ±10% 1/4 W	569-1502-330
R21	220 ohm ±10% 1/4 W	569-1502-221	R88	6. 8K ohm ±10% 1/4 W	569-1502-682
	1.0K ohm ±10% 1/4 W	569-1502-102	R89	3.3K ohm ±10% 1/4 W	569-1502-332
R22 R23	56K ohm ±10% 1/4 W	569-1502-563	R101	4.7K ohm ±10% 1/4 W	569-1502-472
R24	27K ohm ±10% 1/4 W	569-1502-273	R102	15K ohm ±10% 1/4 W 3.3K ohm ±10% 1/4 W	569-1502-153 569-1502-332
R25	4.7K ohm ±10% 1/4 W	569-1502-472	R103	1.0K ohm ±10% 1/4 W	569-1502-332
R26	220 ohm ±10% 1/4 W	569-1502-221	R104 R105	470 ohm ±10% 1/4 W	569-1502-471
R27	1.0K ohm ±10% 1/4 W	569-1502-102	R106	3.9K ohm ±10% 1/4 W	569-1502-392
R28	10K ohm ±10% 1/4 W	569-1502-103	R107	6. 8K ohm ±10% 1/4 W	569-1502-682
R29	10K 1/2 W A 15/16 SPST,		R108	1. 0K ±10% 1/4 W	569-1502-102
	Volume control	562-0001-021	R109	2. 2K ohm ±10% 1/4 W	569-1502-222
R30	1.0K ohm ±10% 1/4 W	569-1502-102	R111	3.3K ohm ±10% 1/4 W	569-1502-332
R31	22K ohm ±10% 1/4 W	569-1502-223	R112	470 ohm ±10% 1/4 W	569-1502-471
R32	39K ohm ±5% 1/4 W	569-1501-393	R113	56 ohm ±10% 1/4 W	569-1502-560
R33	2.7K ohm ±10% 1/4 W	569-1502-272	R115	120 ohm ±10% 1/4 W	569-1502-121
R34	6. 8K ohm ±10% 1/4 W	569-1502-682	1	1.0K ohm ±10% 1/4 W	569-1502-121
R35	5. 6K ohm ±10% 1/4 W	569-1502-562	R116	47 ohm ±10% 1/4 W	569-1502-470
R36	1.5K ohm ±10% 1/4 W	569-1502-152	R117 R118	1. 2K ohm ±10% 1/2 W	569-1004-122
	· ·	569-1502-122	R119	470 ohm ±10% 1/4 W	569-1502-471
R37	1.2K ohm ±10% 1/4 W 10K 1/8 W PC trim pot.,"S"	309-1302-122	R141	33 ohm ±10% 1 W	569-1006-330
R38	meter sensitivity control	562-0004-103	R142	39 ohm ±10% 1 W	569-1006-390
R39	50K 1/8 W PC trim pot., relative	302 0004 100	R143	Same as R142	
N37	power output	562-0004-503	R201	2. 2K ohm ±10% 1/4 W	569-1502-222
	•		1	7.	
R40	6.8K ohm $\pm 10\%$ 1/4 W	569-1502-682	R202	Same as R201	E40 1500 471
R42	470 ohm ±10% 1/4 W	569-1502-471	R203	470 ohm ±10% 1/4 W	569-1502-471
R43	500 1/8 W PC trim pot.,	E(0,000; E01	R204	Same as R203	569-1502-121
244	S meter zero	562-0004-501	R205	120 ohm ±10% 1/4 W 39K ohm ±10% 1/4 W	569-1502-121
R44	2.2K ohm ±10% 1/4 W	569-1502-222	R 206	6. 8K ohm ±10% 1/4 W	569-1502-682
			R 207		

#### PARTS LIST (cont'd)

SYMBOL NO.	DESCRIPTION	PART NO.	SYMBOL NO.	DESCRIPTION	PART NO.
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R208 R209	2.2K ohm ±10% 1/4 W 1.2K ohm ±10% 1/4 W	569-1502-222 569-1502-122	T203	10MM 27 MHz oscillator trans.	592-5015-004
R210 R211	680 ohm ±10% 1/4 W 120 ohm ±10% 1/4 W	569-1502-681 569-1502-121		PEC's	
R212 R213	2. 2K ohm ±10% 1/4 W 2. 7K ohm ±10% 1/4 W	569-1502-222 569-1502-272	U1 U2	PEC 2nd IF PEC noise limiter	544-0002-014 544-0002-015
R214 R215 R216	470 ohm ±10% 1/4 W 120 ohm ±10% 1/4 W 680 ohm ±10% 1/4 W	569-1502-471 569-1502-121 569-1502-681		INTEGRATED CIRCUIT	
R217 R218	390 ohm ±10% 1/4 W 22 ohm ±10% 1/4 W	569-1502-391 569-1502-220	U3	IC audio UA706	544-2004-001
	THERMISTORS			CRYSTALS	
			Y1	4.3 MHz filter HC-18/U	519-0007-001
RT2	Thermistor, 8K ohm	569-3001-001	Y2	Same as Y1	017 0007 001
RT3	$500 \text{ ohm } \pm 10\%$ -3.9 thermistor	569-3001-002	Y3	Same as Y1	
			Y4	Same as Y1	
	SWITCHES		Y5	4.3 MHz filter set	519-0007-002
			Y6 Y7	Same as Y5	510 0000 001
S1	DPDT POS/NEG ground switch	583-3001-005	Y201	4.3 MHz 32 pF HC-18/U 10.180 MHz HC-25/U	519-0008-001 519-0006-114
S2 S3	Slide switch DPDT, red Same as S2	583-3003-005	Y202	10. 170 MHz HC-25/U	519-0006-114
			Y203	10. 160 MHz HC-25/U	519-0006-113
S201	Channel Selector Switch Includes:		Y204	10.140 MHz HC-25/U	519-0006-111
	merudes:		Y205	32.845 MHz HC-25/U	519-0005-111
	Bushing	018-0036-023	Y206	32.895 MHz HC-25/U	519-0005-112
	Spacer	013-1422-001	Y207	32.945 MHz HC-25/U	519-0005-113
	Standoff	013-1475-001	Y208	32.995 MHx HC-25/U	519-0005-114
	Channel indicator dial	032-0154-002	Y209	33.045 MHz HC-25/U	519-0005-115
	24 position detent	583-9004-012	Y210	33.095 MHz HC-25/U	519-0005-116
	Channel selector knob Switch wafer	023-3532-002 583-2009-211		CERAMIC FILTER	
	TRANSFORMERS		Z1	10 MHz trap	544-9001-001
				Accessory Package	
T1	10MM 27 MHz ant, transformer	592-5015-001		Includes:	
T2	10 MM 27 MHz RF out	592-5015-009			
T3 T4	10MM 4.3 MHz IF transformer	592-5015-008		Battery cable	023-1652-001
T5	10MM 4.3 MHz filter in 10MM 4.3 MHz filter out	592-5015-011 592-5015-012		Connector package	023-2209-001
T6	10MM 4.3 MHz III transformer	592-5015-013		Hardware envelope No. 20 white envelope	023-2615-001
T7	10MM 4.3 MHz filter in	592-5015-011		3 3/4 poly bag	041-0413-000
T8	10MM 4.3 MHz filter out	592-5015-012		Microphone clip	537-9004-002
T9	10MM 4.3 MHz interstage	592-5015-014		Neg. ground warning tag	564-0006-001
T10	10MM 4.3 MHz output trans-			Transmitter ID card	564-1001-001
	former	592-5015-015		SCR 4 MTL PH NPS	574-9504-006
T11	10MM 4.3 MHz mixer out	592-5015-010			
T12	Same as T11			Literature Package	
T13	10MM 4.3 MHz IF transformer	592-5015-007		Includes:	
T14	Modulation transformer	592-1013-007			
T15	10MM 27 MHz auto-transformer	592-5015-005		Operating manual M323A	002-0323-001
T16 T17	Same as T15 Same as T15			Installation instructions	004-2001-001
T18	25-40 MHz osc. transformer	592-5014-001		Rule Part 95 FCC Form 505	022-1635-001
T19	25-50 MHz driver transformer	592-5014-001		CB warranty card	022-1636-001 041-0419-014
T201	10MM 27 MHz auto-transformer	592-5015-005		Service center list	041-0419-014
T202	Same as T201			Schematic M323A	564-3001-323
					0001 040