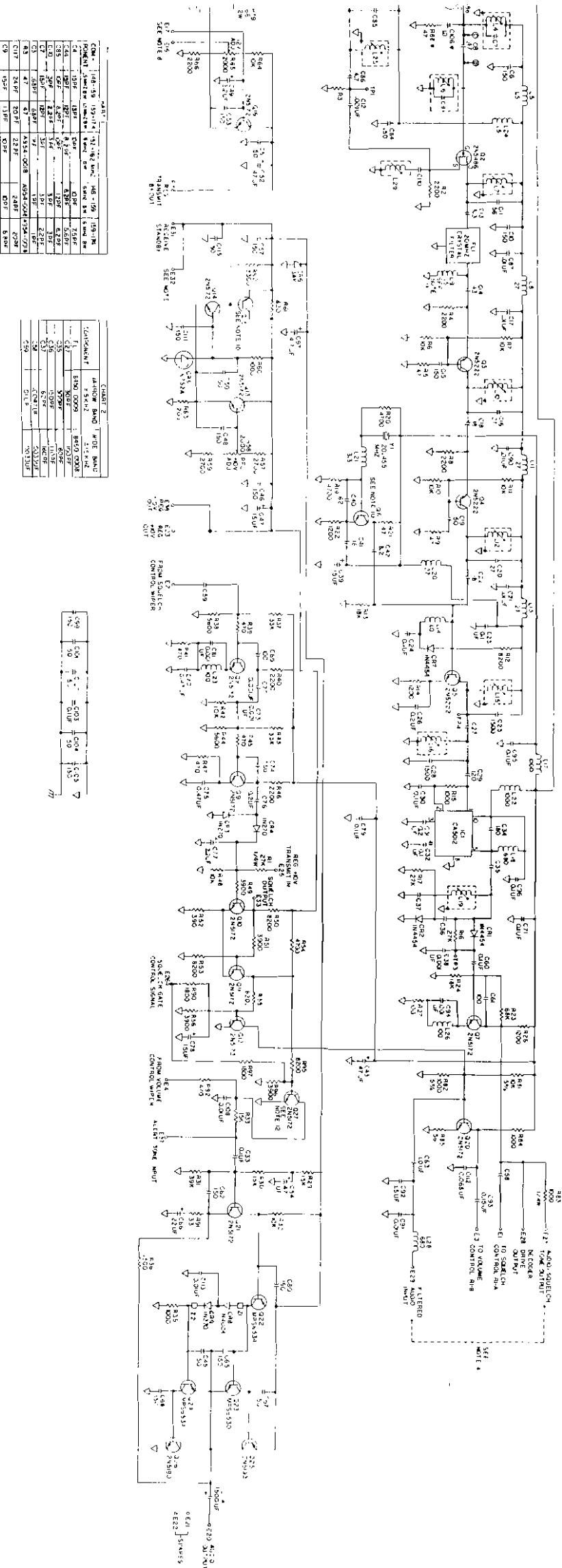


Figure 5-5 Trunk Mount (Non-TCS) Main Frame Schematic Diagram



REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER
1	Receiver Assembly, see separate parts list		C7	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741
	148-159 MHz	954-0100	C8	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741
	159-174 MHz	954-0101	C9	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
2	Exciter Assembly, $\pm$ 0.0005% Transmit Stability, $\pm$ 0.001% Receive Stability See separate parts list		C10	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
	148-159 MHz, 1 Channel	452-0202	C11	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
	159-174 MHz, 1 Channel	452-0203	C12	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
	148-159 MHz, 2 Channel	452-0204	C13	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
	159-174 MHz, 2 Channel	452-0205	C14	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
	148-159 MHz, 6 Channel	452-0200	C15	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
	159-174 MHz, 6 Channel	452-0201	C16	Cap, Elect, 1000 uf, +50%, -10%, 25 VDCW	C-1421
	Exciter Assembly, $\pm$ 0.0005% Transmit Stability, $\pm$ 0.0005% Receive Stability See separate parts list		C17	Cap, Elect, 1000 uf, +50%, -10%, 25 VDCW	C-1421
	148-159 MHz, 1 Channel	1937-0202	C18	Not Used	
	159-174 MHz, 1 Channel	1937-0203	C19	Not Used	
	148-159 MHz, 2 Channel	1937-0204	C20	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
	159-174 MHz, 2 Channel	1937-0205	C21	Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
	148-159 MHz, 6 Channel	1937-0200	C22	Cap, Var, 1.3 - 14 pf	C-4649
	159-174 MHz, 6 Channel	1937-0201	C23	148-159 MHz Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741
3	Modulator Assembly, see separate parts list			159-174 MHz Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
	Narrowband	450-0300	C24	Cap, Disc, NPO, 6.8 pf, 5%, 1 KVDCW	C-4739
4	PA Assembly, see separate parts list	450-0400	CR1	Diode, 1N 4454	CR-0705
5	Oscillator Assembly, $\pm$ 0.0005% Transmit Stability, $\pm$ 0.001% Receive Stability See separate parts list		CR2	Diode, MR 751	CR-0407
	148-159 MHz	452-0500	F1	Fusible Link	450-0080
	159-174 MHz	452-0501	J1	Connector, Control/Power	P-0103
	Oscillator Assembly, $\pm$ 0.0005% Transmit Stability, $\pm$ 0.0005% Receive Stability See separate parts list		J2	Connector, Coax	J-0003
	148-159 MHz	1937-0500	J3	Connector, T/R Relay	X-1005
	159-174 MHz	1937-0501	K1	Relay, T/R	K-0069
C1	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744	L1	Inductor, Fixed	483-0391
C2	Cap, Disc, NPO, 15 pf, 5%, 1 KVDCW	C-4743	L2	Inductor, Fixed	483-0391
C3	Cap, Disc, NPO, 15 pf, 5%, 1 KVDCW	C-4743	L3	Inductor, Fixed	954-0014
C4	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744	O1	Transistor, 2N5986	O-0427
C5	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	R1	Not Used	
C6	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741	R2	Not Used	
			R3	Res, Comp, 1K, 10%, 1/2W	R-0024
			R4	Res, Comp, 1K, 10%, 1/2W	R-0024
			S1	Switch, Tune/Operate	S-0054
				Cover, Top	972-1090
				Cover, Bottom	972-1091
				Lock Assembly, with Keys	MP-4157
				Lock Pawl	MP-4158





1. ON 250V-0-250V BOARD 019 AND 015 ARE P41C7, AND 06, 05 & 4 ARE 250V12Z  
2. ON 250V-0-250V BOARD 019 AND 015 ARE P41C7, AND 05 ARE P41C7, AND 06, 05 & 4 ARE 250V12Z  
3. ON 250V-0-250V BOARD 019 AND 015 ARE P41C7, AND 05 ARE P41C7, AND 06, 05 & 4 ARE 250V12Z

COMPONENT	VALUE	BOARD	REF. DES.
C1	200P	019	101
C2	200P	019	102
C3	200P	019	103
C4	200P	019	104
C5	200P	019	105
C6	200P	019	106
C7	200P	019	107
C8	200P	019	108
C9	200P	019	109
C10	200P	019	110
C11	200P	019	111
C12	200P	019	112
C13	200P	019	113
C14	200P	019	114
C15	200P	019	115
C16	200P	019	116
C17	200P	019	117
C18	200P	019	118
C19	200P	019	119
C20	200P	019	120
C21	200P	019	121
C22	200P	019	122
C23	200P	019	123
C24	200P	019	124
C25	200P	019	125
C26	200P	019	126
C27	200P	019	127
C28	200P	019	128
C29	200P	019	129
C30	200P	019	130

COMPONENT	VALUE	BOARD	REF. DES.
C31	200P	019	131
C32	200P	019	132
C33	200P	019	133
C34	200P	019	134
C35	200P	019	135
C36	200P	019	136
C37	200P	019	137
C38	200P	019	138
C39	200P	019	139
C40	200P	019	140
C41	200P	019	141
C42	200P	019	142
C43	200P	019	143
C44	200P	019	144
C45	200P	019	145
C46	200P	019	146
C47	200P	019	147
C48	200P	019	148
C49	200P	019	149
C50	200P	019	150

COMPONENT	VALUE	BOARD	REF. DES.
C51	200P	019	151
C52	200P	019	152
C53	200P	019	153
C54	200P	019	154
C55	200P	019	155
C56	200P	019	156
C57	200P	019	157
C58	200P	019	158
C59	200P	019	159
C60	200P	019	160
C61	200P	019	161
C62	200P	019	162
C63	200P	019	163
C64	200P	019	164
C65	200P	019	165
C66	200P	019	166
C67	200P	019	167
C68	200P	019	168
C69	200P	019	169
C70	200P	019	170

Figure 5-6 Receiver Assembly Schematic Diagram (Sheet 1 of 2)





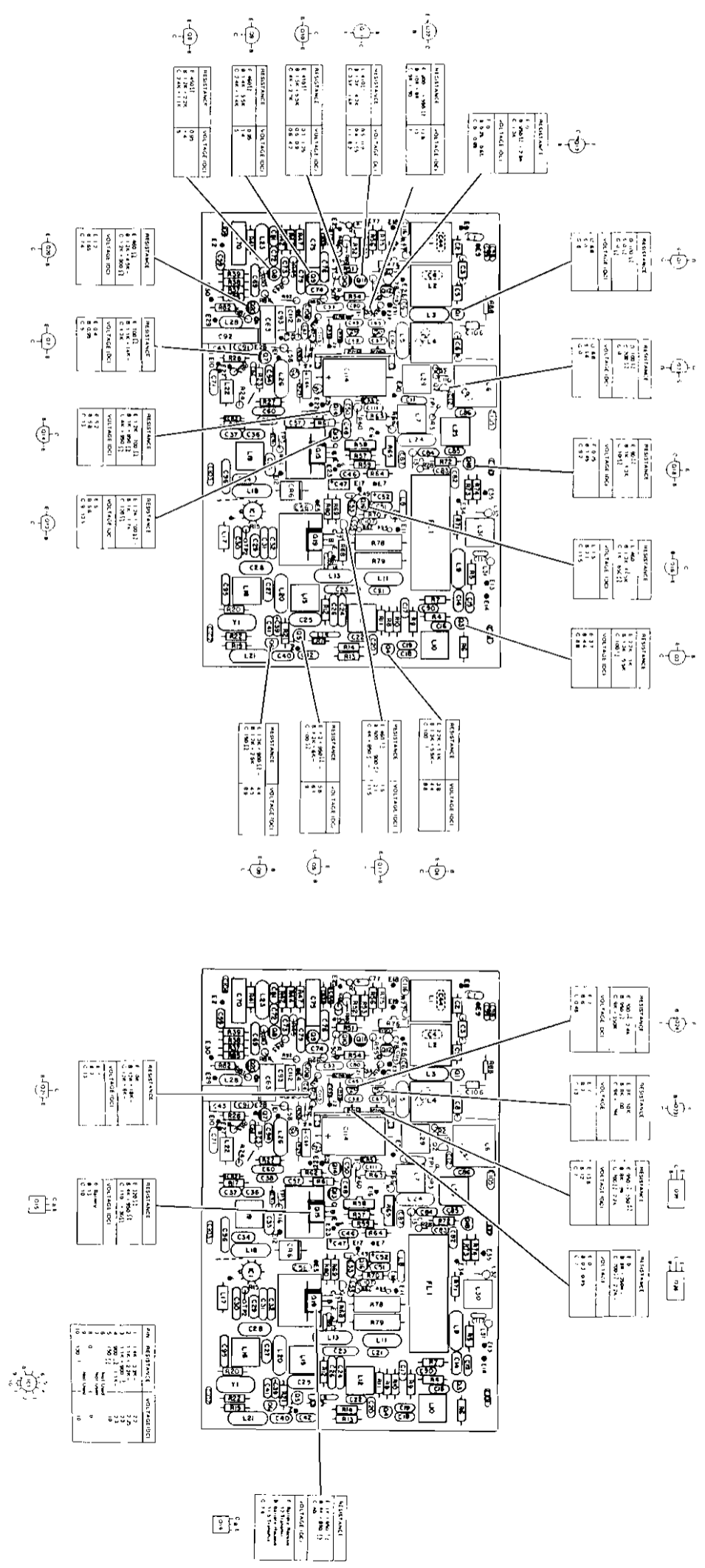
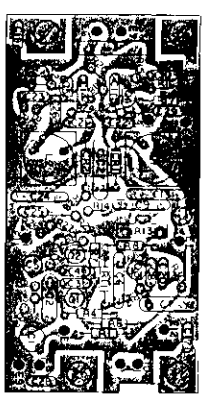
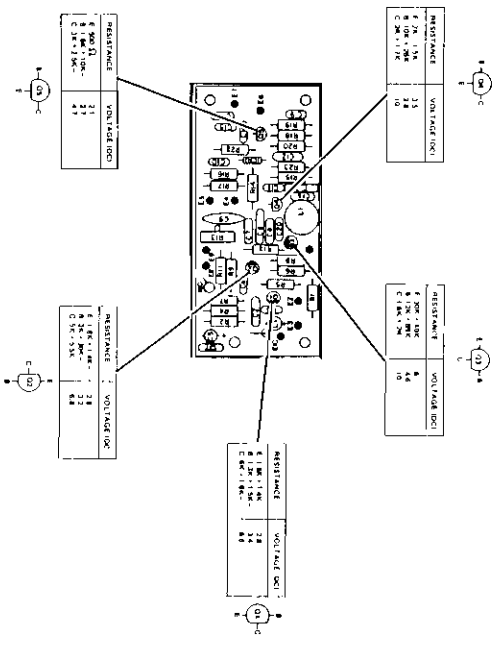
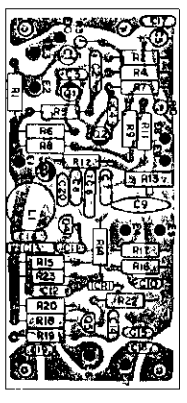


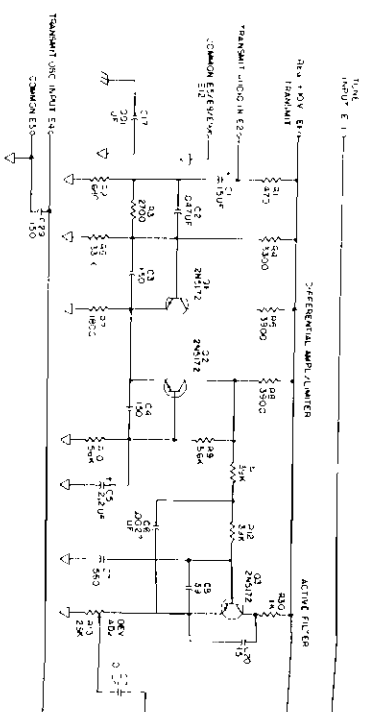
Figure 5-6 Receiver Assembly Schematic Diagram (Sheet 2 of 2)



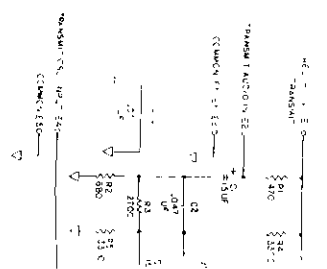
WIDEBAND



NARROWBAND

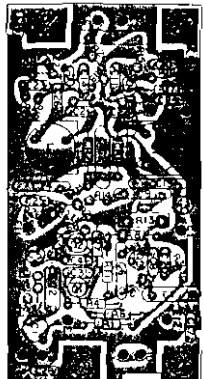


NOTES  
 1. UNLESS OTHERWISE INDICATED  
 ALL DIMENSIONS ARE IN CM (IN. IN PARENTHESES)  
 2. U- AND U2 ARE PART NO. 590 0027

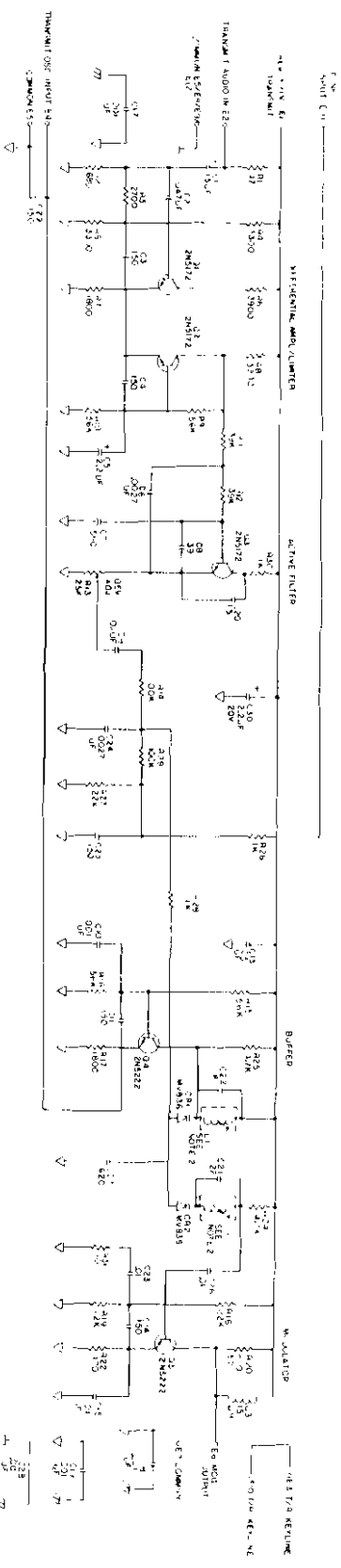


NOTES  
 1. UNLESS OTHERWISE INDICATED  
 ALL DIMENSIONS ARE IN CM (IN. IN PARENTHESES)  
 2. U- AND U2 ARE PART NO. 590 0027

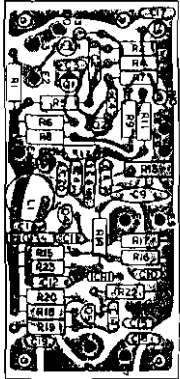




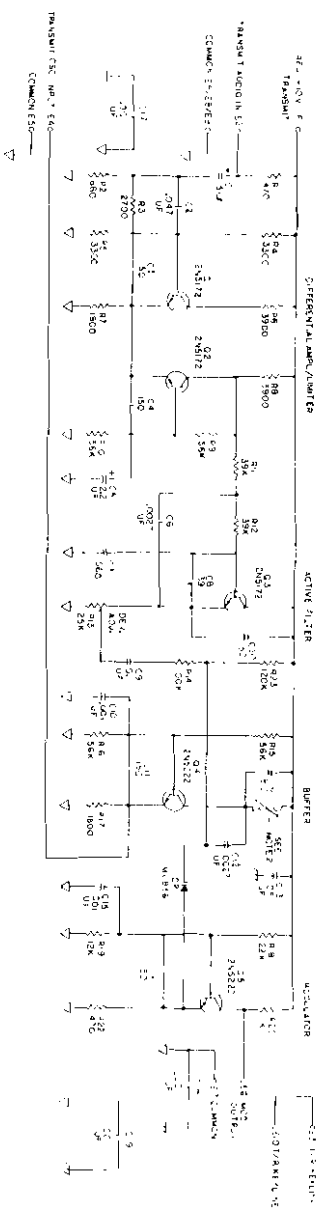
WIDEBAND



NOTES  
UNLESS OTHERWISE INDICATED  
ALL RESISTORS ARE IN OHMS 1/4 WATT  
ALL CAPACITORS ARE IN PICOFARADS  
P.C. BOARD PART NO. 397-0027



NARROWBAND

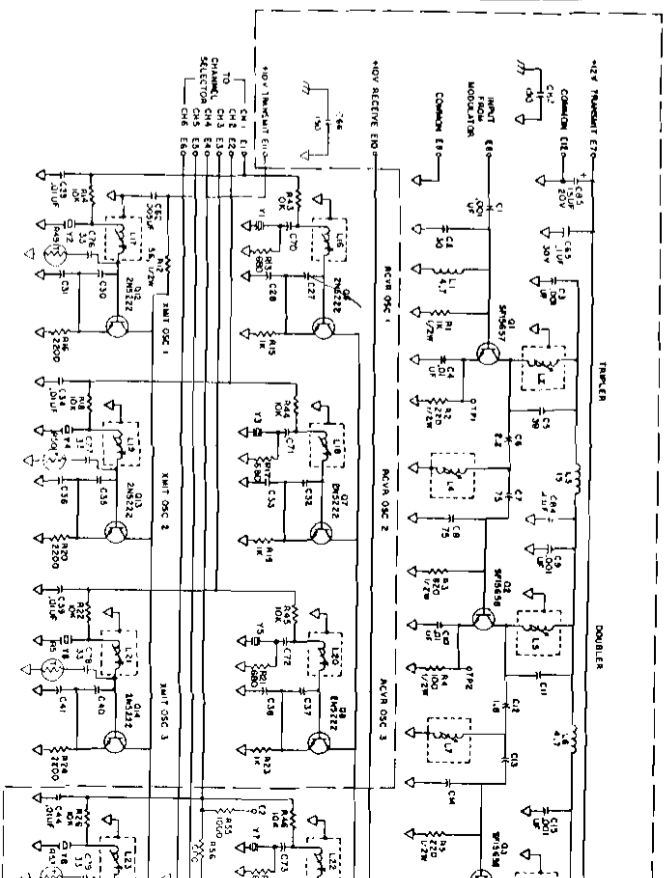
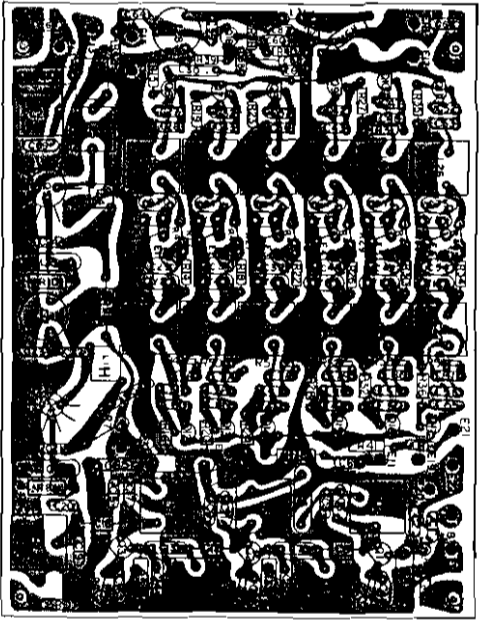
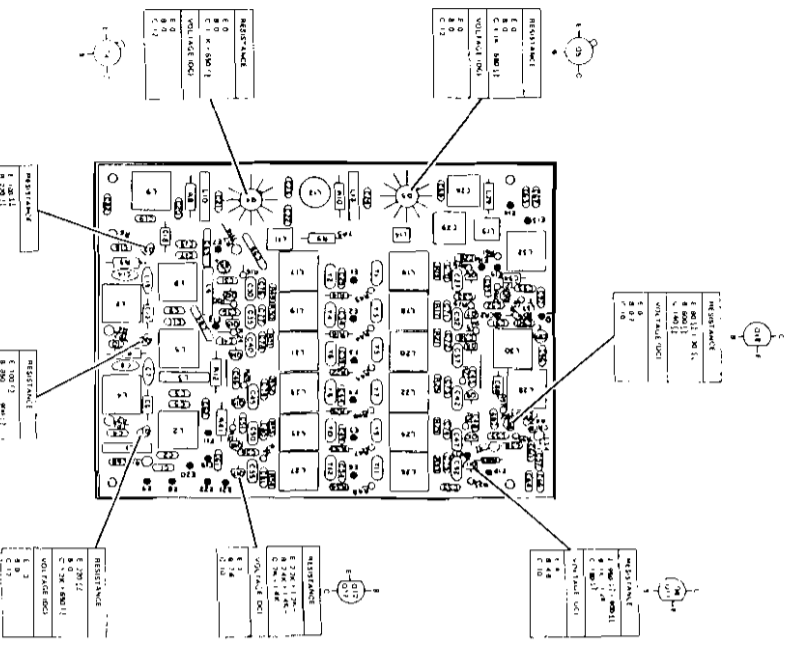


NOTES  
UNLESS OTHERWISE INDICATED  
ALL RESISTORS ARE IN OHMS 1/4 WATT  
ALL CAPACITORS ARE IN PICOFARADS  
P.C. BOARD PART NO. 397-0027

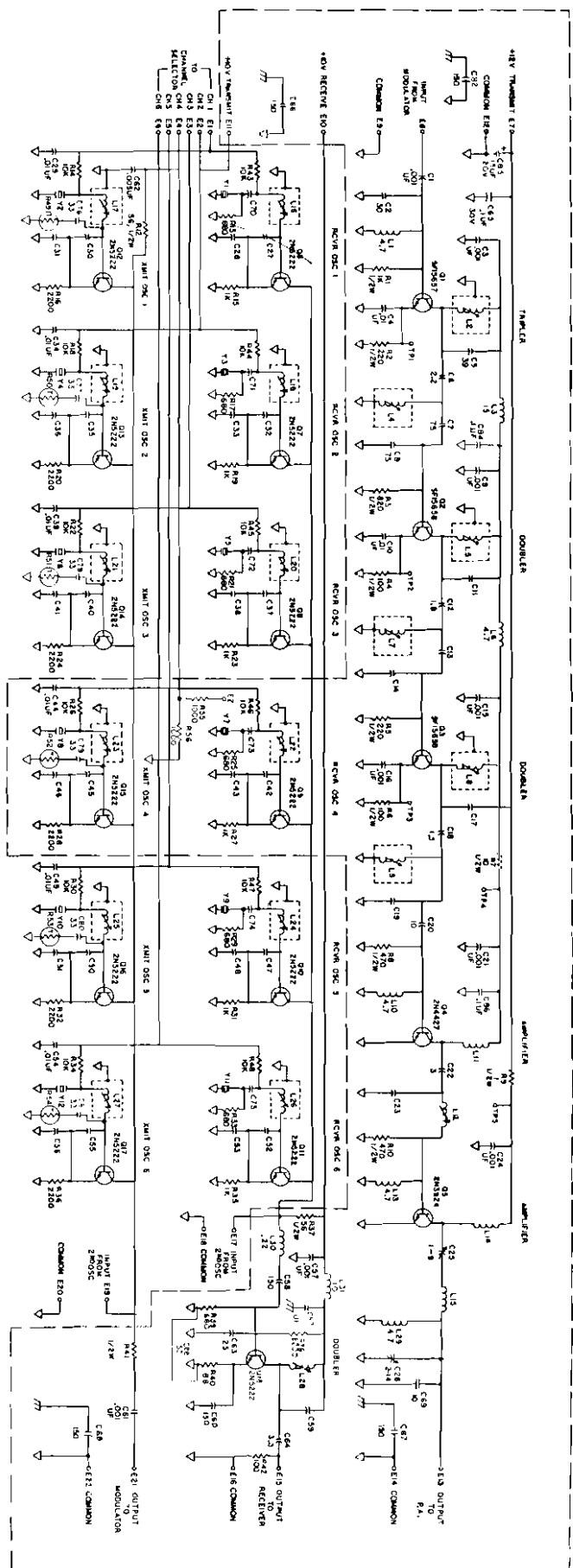
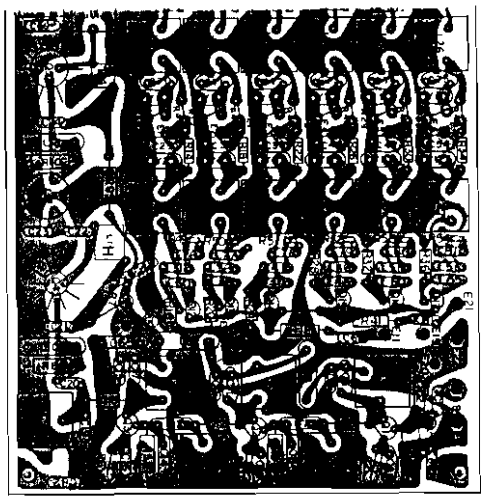
Figure 5-7. Modulator Assembly Schematic Diagram



REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER
C1	Cap. Tant, 15 uf, 20%, 20 VDCW	C-6449	C30	Wideband Modulator Only	C-6444	R26	Wideband Modulator Only	
C2	Cap. Met. Poly, 0.047 uf, 10% 250 VDCW	C-6576		Cap. Tant, 2.2 uf, 20%, 20 VDCW	CR-0667	R27	Res. Comp, 1K, 10%, 1/4W	R-0024
C3	Cap. Disc. Cer, 150 pf, 20%, 1 KVDCW	C-4794	CR1	Diode, MV836			Wideband Modulator Only	
C4	Cap. Disc. Cer, 150 pf, 20%, 1 KVDCW	C-4794	CR2	Wideband Modulator Only		R28	Res. Comp, 22K, 10%, 1/4W	R-0040
C5	Cap. Tant, 2.2 uf, 20%, 20 VDCW	C-6444		Diode, MV836	CR-0667		Wideband Modulator Only	
C6	Cap. Disc. Cer, 0.0027 uf, 10%, 500 VDCW	C-3518	L1	Inductor, Var	A850-0027	R29	Res. Comp, 1K, 10%, 1/4W	R-0024
C7	Narrowband Modulator		L2	Wideband Modulator Only			Wideband Modulator Only	
	Cap. Disc. Cer, 560 pf, 20%, 1 KVDCW	C-4809		Inductor, Var	A850-0027	R30	Res. Comp, 100K, 10%, 1/4W	R-0048
	Wideband Modulator		L3	Wideband Modulator Only			Wideband Modulator Only	
	Cap. Disc. Cer, 560 pf, 5%, 1 KVDCW	C-0146		Inductor, 15 uh	L-0697	R31	Res. Comp, 1K, 10%, 1/4W	R-0024
C8	Cap. Disc. Cer, 39 pf, 20%, 1 KVDCW	C-4751	Q1	Transistor, 2N5172	Q-0382		Wideband Modulator Only	
C9	Cap. Disc. Cer, 0.1 uf, +80%, -20%, 30 VDCW	C-2210	O2	Transistor, 2N5172	Q-0382		Res. Comp, 10 ohm, 10%, 1/4W	R-0000
C10	Cap. Disc. Cer, 0.001 uf, GMV, 500 VDCW	C-0001	O3	Transistor, 2N5172	Q-0382		Pin, Terminal	MP-0287
C11	Cap. Disc. Cer, 150 pf, 20%, 1 KVDCW	C-4794	O4	Transistor, 2N5222	Q-0021			
C12	Narrowband Modulator Only		Q5	Transistor, 2N5222	Q-0021			
	Cap. Met. Poly, 0.0027 uf, 10%, 250 VDCW	C-6561	R1	Res. Comp, 470 ohm, 10%, 1/4W	R-0020			
C13	Cap. Disc. Cer, 0.05 uf, +60%, -40%, 150 VDCW	C-0060	R2	Res. Comp, 680 ohm, 5%, 1/4W	R-1245			
C14	Cap. Disc. Cer, 150 pf, 20%, 1 KVDCW	C-4794	R3	Narrowband Modulator				
C15	Narrowband Modulator			Res. Comp, 3.3K, 10%, 1/2W	R-0130			
	Cap. Disc. Cer, 0.001 uf, GMV, 500 VDCW	C-0001		Wideband Modulator				
	Wideband Modulator		R4	Res. Comp, 2.7K, 5%, 1/4W	R-1259			
	Cap. Disc. Cer, 0.01 uf, +60%, -40%, 150 VDCW	C-0065	R5	Res. Comp, 3.3K, 5%, 1/4W	R-1261			
C16	Narrowband Modulator Only		R6	Res. Comp, 3.3K, 5%, 1/4W	R-1261			
	Cap. Disc. NPO, 8.2 pf, 0.5 pf, 1 KVDCW	C-4740	R7	Res. Comp, 3.9K, 5%, 1/4W	R-1263			
C17	Cap. Disc. Cer, 0.001 uf, GMV, 500 VDCW	C-0001	R8	Res. Comp, 1.8K, 10%, 1/4W	R-0027			
C18	Cap. Disc. Cer, 0.001 uf, GMV, 500 VDCW	C-0001	R9	Res. Comp, 3.9K, 5%, 1/4W	R-1263			
C19	Cap. Disc. Cer, 0.001 uf, GMV, 500 VDCW	C-0001	R9	Narrowband Modulator				
C20	Cap. Disc. Cer, 150 pf, 20%, 1 KVDCW	C-4794		Res. Comp, 56K, 10%, 1/2W	R-0145			
C21	Wideband Modulator Only		R10	Wideband Modulator				
	Cap. Disc. NPO, 22 pf, 5%, 1 KVDCW	C-4746		Res. Comp, 56K, 5%, 1/4W	R-1291			
C22	Wideband Modulator Only			Narrowband Modulator				
	Cap. Disc. NPO, 18 pf, 5%, 1 KVDCW	C-4744		Res. Comp, 56K, 10%, 1/2W	R-0145			
C23	Wideband Modulator Only			Wideband Modulator				
	Cap. Disc. Cer, 0.01 uf, +60%, -40%, 150 VDCW	C-0065		Res. Comp, 56K, 5%, 1/4W	R-1291			
C24	Wideband Modulator Only		R11	Narrowband Modulator				
	Cap. Disc. Cer, 0.0027 uf, 10%, 500 VDCW	C-3518		Res. Comp, 39K, 10%, 1/2W	R-0143			
C25	Wideband Modulator Only			Wideband Modulator				
	Cap. Disc. Cer, 150 pf, 20%, 1 KVDCW	C-4794		Res. Comp, 39K, 10%, 1/4W	R-0043			
C26	Wideband Modulator Only		R13	Res. Var, 25K, 30%, Linear Taper	R-3712			
	Cap. Disc. Cer, 0.01 uf, +60%, -40%, 150 VDCW	C-0065	R14	Res. Comp, 100K, 10%, 1/4W	R-0048			
C27	Wideband Modulator Only		R15	Res. Comp, 56K, 10%, 1/4W	R-0045			
	Cap. Mica, 620 pf, 5%, 500 VDCW	C-0147	R16	Res. Comp, 56K, 10%, 1/4W	R-0045			
C28	Wideband Modulator Only		R17	Res. Comp, 1.8K, 10%, 1/4W	R-0027			
	Cap. Disc. Cer, 0.001 uf, GMV, 500 VDCW	C-0001	R18	Res. Comp, 22K, 10%, 1/4W	R-0040			
C29	Wideband Modulator Only		R19	Res. Comp, 12K, 10%, 1/4W	R-0037			
	Cap. Disc. Cer, 150 pf, 20%, 1 KVDCW	C-4794	R20	Narrowband Modulator				
				Res. Comp, 1K, 10%, 1/2W	R-0124			
				Wideband Modulator				
				Res. Comp, 820 ohm, 5%, 1/4W	R-1247			
			R21	Not Used				
			R22	Res. Comp, 470 ohm, 10%, 1/4W	R-0020			
			R23	Narrowband Modulator Only				
				Res. Comp, 120K, 10%, 1/2W	R-0149			
			R24	Wideband Modulator Only				
				Res. Comp, 4.7K, 10%, 1/4W	R-0032			
			R25	Wideband Modulator Only				
				Res. Comp, 4.7K, 10%, 1/4W	R-0032			



NOTES:  
 1. UNLESS OTHERWISE INDICATED, ALL RESISTORS ARE IN OHMS (AWM), ALL CAPACITORS ARE IN PICOFARADS,  
 AND ALL INDUCTORS ARE IN MICROHENTRIES.  
 2. FOR DIMENSIONED VALUES IN TRANSMIT OSCILLATOR, REFER TO CHART 2.  
 3. FOR ALL OTHER DIMENSIONED VALUES, REFER TO CHART 1.  
 4. COMPONENTS WITHIN DOTTED LINE COMPLETE SINGLE CHANNEL SET TER.  
 R55/R56 USED ONLY ON SINGLE CHANNEL EXETER.



NOTES: UNLESS OTHERWISE INDICATED ALL RESISTORS ARE IN OHMS UNLESS NOTED OTHERWISE.  
 AND ALL INDUCTORS ARE IN MICROHENRIES.  
 2. FOR UNLARGED VALUES IN TRANSMITTER OSCILLATOR, REFER TO CHART 7.  
 3. FOR UNLARGED VALUES IN RECEIVER OSCILLATOR, REFER TO CHART 8.  
 4. SERIES CAPACITOR/INTERSTITIAL USED ONLY ON 2-GANG OSCILLATORS.  
 5. FOR ALL OTHER UNLARGED CAPACITOR VALUES REFER TO CHART 1.  
 6. ALL CAPACITORS ARE OF THE 50V TYPE UNLESS OTHERWISE NOTED.  
 7. ALL CAPACITORS ARE OF THE 50V TYPE UNLESS OTHERWISE NOTED.  
 8. ALL CAPACITORS ARE OF THE 50V TYPE UNLESS OTHERWISE NOTED.

CHART 1	
CONNECTION	RESISTOR VALUE
R1	100K
R2	100K
R3	100K
R4	100K
R5	100K
R6	100K
R7	100K
R8	100K
R9	100K
R10	100K
R11	100K
R12	100K
R13	100K
R14	100K
R15	100K
R16	100K
R17	100K
R18	100K
R19	100K
R20	100K
R21	100K
R22	100K
R23	100K
R24	100K
R25	100K
R26	100K
R27	100K
R28	100K
R29	100K
R30	100K
R31	100K
R32	100K
R33	100K
R34	100K
R35	100K
R36	100K
R37	100K
R38	100K
R39	100K
R40	100K
R41	100K
R42	100K
R43	100K
R44	100K
R45	100K
R46	100K
R47	100K
R48	100K
R49	100K
R50	100K
R51	100K
R52	100K
R53	100K
R54	100K
R55	100K
R56	100K
R57	100K
R58	100K
R59	100K
R60	100K
R61	100K
R62	100K
R63	100K
R64	100K
R65	100K
R66	100K
R67	100K
R68	100K
R69	100K
R70	100K
R71	100K
R72	100K
R73	100K
R74	100K
R75	100K
R76	100K
R77	100K
R78	100K
R79	100K
R80	100K
R81	100K
R82	100K
R83	100K
R84	100K
R85	100K
R86	100K
R87	100K
R88	100K
R89	100K
R90	100K
R91	100K
R92	100K
R93	100K
R94	100K
R95	100K
R96	100K
R97	100K
R98	100K
R99	100K
R100	100K

CHART 2	
CONNECTION	RESISTOR VALUE
R1	100K
R2	100K
R3	100K
R4	100K
R5	100K
R6	100K
R7	100K
R8	100K
R9	100K
R10	100K
R11	100K
R12	100K
R13	100K
R14	100K
R15	100K
R16	100K
R17	100K
R18	100K
R19	100K
R20	100K
R21	100K
R22	100K
R23	100K
R24	100K
R25	100K
R26	100K
R27	100K
R28	100K
R29	100K
R30	100K
R31	100K
R32	100K
R33	100K
R34	100K
R35	100K
R36	100K
R37	100K
R38	100K
R39	100K
R40	100K
R41	100K
R42	100K
R43	100K
R44	100K
R45	100K
R46	100K
R47	100K
R48	100K
R49	100K
R50	100K
R51	100K
R52	100K
R53	100K
R54	100K
R55	100K
R56	100K
R57	100K
R58	100K
R59	100K
R60	100K
R61	100K
R62	100K
R63	100K
R64	100K
R65	100K
R66	100K
R67	100K
R68	100K
R69	100K
R70	100K
R71	100K
R72	100K
R73	100K
R74	100K
R75	100K
R76	100K
R77	100K
R78	100K
R79	100K
R80	100K
R81	100K
R82	100K
R83	100K
R84	100K
R85	100K
R86	100K
R87	100K
R88	100K
R89	100K
R90	100K
R91	100K
R92	100K
R93	100K
R94	100K
R95	100K
R96	100K
R97	100K
R98	100K
R99	100K
R100	100K

Figure 5-8 Exciter Assembly Schematic Diagram  
 (±0.0005% Transmittal, ±0.001% Receiver  
 Frequency Stability)

	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER
	C-4745	C54	Cap, Disc, Cer, 0.01 uf, +60%, -40%, 150 VDCW	C-0065	C78	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750	Q16	Transistor, 2N5222	Q-0021
DCW	C-0065				C79	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750	Q17	Transistor, 2N5222	Q-0021
		C55	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-3500	C80	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750	Q18	Transistor, 2N5222	Q-0021
		C56	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752	C81	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750	R1	Res, Comp, 1K, 10%, 1/2W	R-0124
DCW	C-3500	C57	Cap, Disc, Cer, 0.001 uf, GMV, 500 VDCW	C-0001	C82	Cap, Disc, Cer, 150 pf, 20%, 2 KVDCW	C-4794	R2	Res, Comp, 220 ohm, 10%, 1/2W	R-0116
	C-4752				C84	Cap, Disc, Cer, 0.1 uf, +80%, -20%, 30 VDCW	C-2210	R3	Res, Comp, 820 ohm, 10%, 1/2W	R-0123
		C58	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW 148-159 MHz	C-4794	C85	Cap, Tant, 15 uf, 20%, 20 VDCW	C-6449	R4	Res, Comp, 100 ohm, 10%, 1/2W	R-0112
		C59	Cap, Disc, NPO, 13 pf, 5%, 1 KVDCW 159-174 MHz	C-6619	C86	Cap, Disc, Cer, 0.1 uf, +80%, -20%, 30 VDCW	C-2210	R5	Res, Comp, 220 ohm, 10%, 1/2W	R-0116
					C87	Cap, Disc, Cer, 0.001 uf, GMV, 500 VDCW	C-0001	R6	Res, Comp, 100 ohm, 10%, 1/2W	R-0112
								R7	Res, Comp, 10 ohm, 10%, 1/2W	R-0100
DCW	C-4747	C60	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741	C88	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	R8	Res, Comp, 470 ohm, 10%, 1/2W	R-0120
		C61	Cap, Disc, Cer, 0.001 uf, GMV, 500 VDCW	C-0001	L1	Inductor, 4.7 uh	L-0691	R9	Res, Carbon Film, 1 ohm, 10%, 1/2W	R-7400
					L2	Inductor, Var	A850-0028	R10	Res, Comp, 470 ohm, 10%, 1/2W	R-0120
DCW	C-4745	C62	Cap, Disc, Cer, 0.005 uf, +60%, -40%, 150 VDCW	C-0064	L3	Inductor, 15 uh	L-0697	R11	Not Used	
	C-0065				L4	Inductor, Var	A850-0028	R12	Res, Comp, 56 ohm, 10%, 1/2W	R-0109
DCW	C-3500	C63	Cap, Disc, NPO, 25 pf, 5%, 1 KVDCW	C-4747	L5	Inductor, Var	A450-0029	R13	Res, Comp, 680 ohm, 10%, 1/4W	R-0036
DCW	C-4752	C64	Cap, Disc, NPO, 3.3 pf, ± 0.5 pf, 1 KVDCW	C-4734	L6	Inductor, 4.7 uh	L-0691	R15	Res, Comp, 1K, 10%, 1/4W	R-0024
					L7	Inductor, Var	A450-0029	R16	Res, Comp, 2.2K, 10%, 1/4W	R-0028
		C65	Cap, Disc, Cer, 0.1 uf, +80%, -20%, 30 VDCW	C-2210	L8	Inductor, Var	A450-0027	R17	Res, Comp, 680 ohm, 10%, 1/4W	R-0022
					L9	Inductor, Var	A450-0027	R18	Res, Comp, 10K, 10%, 1/4W	R-0036
		C66	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	L10	Inductor, 4.7 uh	L-0691	R19	Res, Comp, 1K, 10%, 1/4W	R-0024
		C67	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	L11	Inductor, Fixed 148-159 MHz	A450-0025	R20	Res, Comp, 2.2K, 10%, 1/4W	R-0028
		C68	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	L12	Inductor, Var 159-174 MHz	A450-0035	R21	Res, Comp, 680 ohm, 10%, 1/4W	R-0022
		C69	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741	L13	Inductor, Var	A450-0034	R22	Res, Comp, 10K, 10%, 1/4W	R-0036
DCW	C-4745	C70	Cap, Disc, NPO, 8.2 pf, ± 0.5 pf, 1 KVDCW 159-174 MHz	C-4740	L14	Inductor	A850-0034	R23	Res, Comp, 1K, 10%, 1/4W	R-0024
	C-0065				L15	Inductor	A450-0025	R24	Res, Comp, 2.2K, 10%, 1/4W	R-0028
					L16	Inductor, Var	A450-0024	R25	Res, Comp, 680 ohm, 10%, 1/4W	R-0022
DCW	C-3500				L17	Inductor, Var	A450-0023	R28	Res, Comp, 10K, 10%, 1/4W	R-0036
DCW	C-4752	C71	Cap, Disc, NPO, 6.8 pf, ± 0.5 pf, 1 KVDCW 148-159 MHz	C-4739	L18	Inductor, Var	A450-0024	R27	Res, Comp, 1K, 10%, 1/4W	R-0024
					L19	Inductor, Var	A450-0023	R28	Res, Comp, 2.2K, 10%, 1/4W	R-0028
					L20	Inductor, Var	A450-0024	R29	Res, Comp, 680 ohm, 10%, 1/4W	R-0022
		C72	Cap, Disc, NPO, 8.2 pf, ± 0.5 pf, 1 KVDCW 148-159 MHz	C-4740	L21	Inductor, Var	A450-0023	R30	Res, Comp, 10K, 10%, 1/4W	R-0036
					L22	Inductor, Var	A450-0024	R31	Res, Comp, 1K, 10%, 1/4W	R-0024
					L23	Inductor, Var	A450-0023	R32	Res, Comp, 2.2K, 10%, 1/4W	R-0028
					L24	Inductor, Var	A450-0024	R33	Res, Comp, 680 ohm, 10%, 1/4W	R-0022
					L25	Inductor, Var	A450-0023	R34	Res, Comp, 10K, 10%, 1/4W	R-0036
					L26	Inductor, Var	A450-0024	R35	Res, Comp, 1K, 10%, 1/4W	R-0024
					L27	Inductor, Var	A450-0023	R36	Res, Comp, 2.2K, 10%, 1/4W	R-0028
					L28	Inductor, Var	A450-0024	R37	Res, Comp, 56 ohm, 10%, 1/4W	R-0109
		C73	Cap, Disc, NPO, 8.2 pf, ± 0.5 pf, 1 KVDCW 159-174 MHz	C-4739	L29	Inductor, 4.7 uh	L-0056	R38	Res, Comp 2.2K, 10%, 1/4W	R-0035
					L30	Inductor, 0.22 uh	L-0678	R39	Res, Comp, 680 ohm, 10%, 1/4W	R-0022
					L31	Inductor, 1.0 uh	L-0054	R40	Res, Comp, 68 ohm, 10%, 1/4W	R-0010
					Q1	Transistor, SF15657	Q-0354	R41	Res, Comp, 47 ohm, 10%, 1/2W	R-0108
					Q2	Transistor, SF15658	Q-0355	R42	Res, Comp, 100 ohm, 10%, 1/4W	R-0012
					Q3	Transistor, SF15658	Q-0355	R43	Res, Comp, 10K, 10%, 1/4W	R-0036
					Q4	Transistor, 2N4427	Q-0343	R44	Res, Comp, 10K, 10%, 1/4W	R-0036
					Q5	Transistor, 2N3924	Q-0345	R45	Res, Comp, 10K, 10%, 1/4W	R-0036
					Q6	Transistor, 2N5222	Q-0021	R46	Res, Comp, 10K, 10%, 1/4W	R-0036
					Q7	Transistor, 2N5222	Q-0021	R47	Res, Comp, 10K, 10%, 1/4W	R-0036
					Q8	Transistor, 2N5222	Q-0021	R48	Res, Comp, 10K, 10%, 1/4W	R-0036
					Q9	Transistor, 2N5222	Q-0021	R49	Thermistor, 3D204	R-4051
					Q10	Transistor, 2N5222	Q-0021	R50	Thermistor, 3D204	R-4051
					Q11	Transistor, 2N5222	Q-0021	R51	Thermistor, 3D204	R-4051
					Q12	Transistor, 2N5222	Q-0021	R52	Thermistor, 3D204	R-4051
					Q13	Transistor, 2N5222	Q-0021	R53	Thermistor, 3D204	R-4051
					Q14	Transistor, 2N5222	Q-0021	R54	Thermistor, 3D204	R-4051
					Q15	Transistor, 2N5222	Q-0021	R55	Used on single chan Exciter only	
									Res, Comp, 1K, 10%, 1/4W	R-0024
								R56	Used on single chan Exciter only	
									Res, Comp, 1K, 10%, 1/4W	R-0024
		C76	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750	Y1	Crystal, Receive, ± 0.001%	Y-0002	Y3	Crystal, Receive, ± 0.001%	Y-0002
		C77	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750	Y2	Crystal, Transmit, ± 0.0005%	Y-0003	Y4	Crystal, Transmit, ± 0.0005%	Y-0003





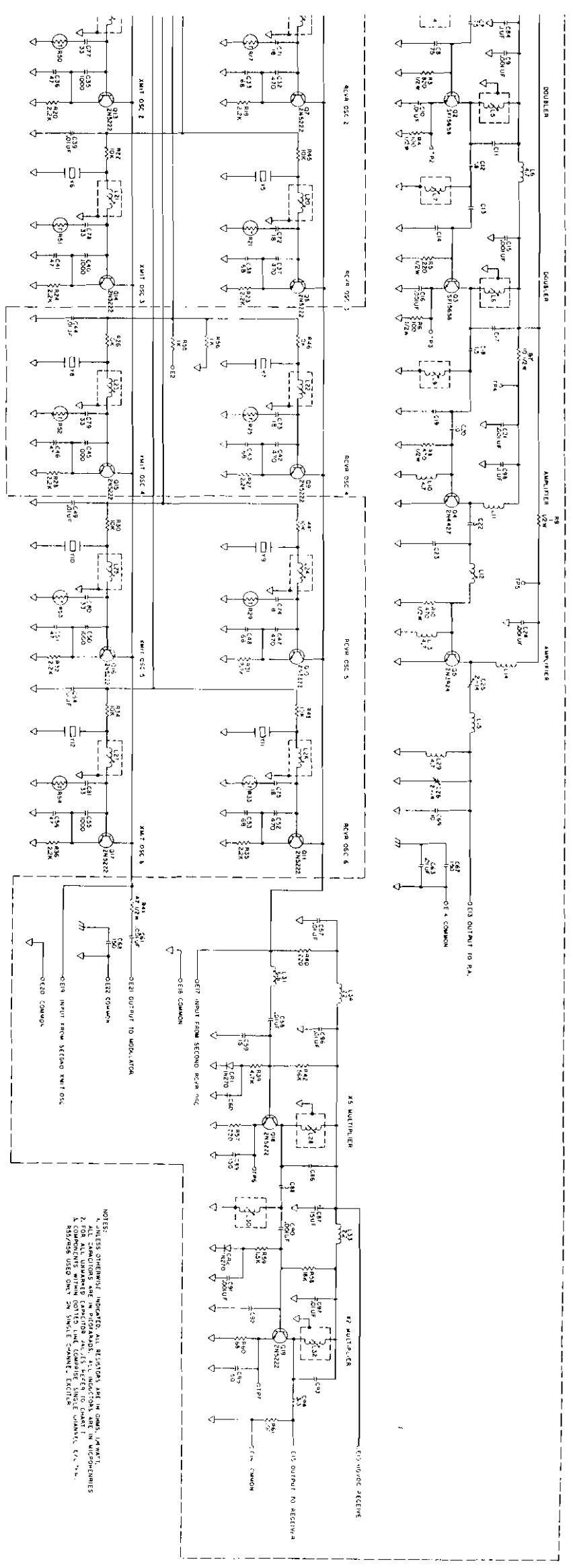
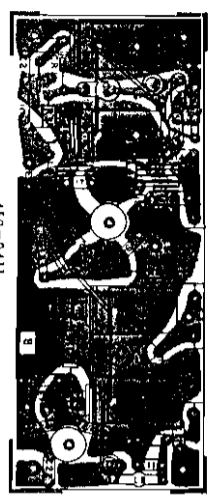


Figure 5-9 Exciter Assembly Schematic Diagram  
(E0.0005% Transmitt, Receive Frequency Stability)





REF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER
C-3513	C37	Cap, Mica, 470 pf, 10%, 100 VDCW	C-4969	C86	148 - 159 MHz		L24	148 - 159 MHz	
C-4749	C38	Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122	Cap, Disc, NPO, 56 pf, 5%, 1 KVDCW	C-4754			Inductor, Var	450-0023
C-3513	C39	Cap, Disc, Cer, 0.01 uf, +80%, -20% 25 VDCW	C-3531	159 - 174 MHz			L25	159 - 174 MHz	1937-0023
C-3531				Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752		L26	Inductor, Var	450-0023
C-4751	C40	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973	Cap, Tant, 15 uf, 20%, 20 VDCW	C-6449			Inductor, Var	450-0023
C-4616	C41	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752	Cap, Cer, 3.0 pf, 5%, 500 VDCW	C-4619			Inductor, Var	450-0023
C-0123	C42	Cap, Mica, 470 pf, 10%, 100 VDCW	C-4969	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794			Inductor, Var	450-0023
C-0123	C43	Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122	Cap, Disc, Cer, 0.001 uf, 10%, 500 VDCW	C-3513			159 - 179 MHz	
C-3513	C44	Cap, Disc, Cer, 0.01 uf, +80%, -20%, 25 VDCW	C-3531	Cap, Disc, Cer, 0.001 uf, 10%, 500 VDCW	C-3513		L27	Inductor, Var	1937-0023
C-3531				148 - 159 MHz			L28	Inductor, Var	450-0023
	C45	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752		L29	Inductor, Fixed, 4.7 uh	450-0029
	C46	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752	159 - 174 MHz			L30	Inductor, Var	450-0029
	C47	Cap, Mica, 470 pf, 10%, 100 VDCW	C-4969	Cap, Disc, NPO, 39 pf, 5%, 1 KVDCW	C-4751		L31	Inductor, Fixed, 6.8 uh	L-0081
	C48	Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122	148 - 159 MHz			L32	Inductor, Var	450-0026
	C49	Cap, Disc, Cer, 0.01 uf, +80%, 20% 25 VDCW	C-3531	Cap, Disc, NPO, 13 pf, 5%, 1 KVDCW	C-6619		L33	Inductor, Fixed, 2.2 uh	L-0055
C-0114	C50	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741		L34	Inductor, Fixed, 22 uh	L-0058
C-4614	C51	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752	Cap, Cer, 3.3 pf, 5%, 500 VDCW	C-4620		Q1	Transistor, SF-15657	Q-0354
	C52	Cap, Mica, 470 pf, 10%, 100 VDCW	C-4969	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794		Q2	Transistor, SF-15658	Q-0355
C-0124	C53	Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122	Cap, Disc, Cer, 0.01 uf, +80%, -20%, 25 VDCW	C-3531		Q3	Transistor, SF-15658	Q-0355
	C54	Cap, Disc, Cer, 0.01 uf, +80%, -20%, 25 VDCW	C-3531	Cap, Disc, Cer, 0.01 uf, +80%, -20%, 25 VDCW	C-3531		Q4	Transistor, 2N4427	Q-0343
C-0122				Cap, Disc, Cer, 0.01 uf, +80%, -20%, 25 VDCW			Q5	Transistor, 2N3924	Q-0345
	C55	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973	Cap, Disc, Cer, 0.1 uf, +80%, -20%, 30 VDCW	C-2210		Q6	Transistor, 2N5222	Q-0021
C-0124	C56	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752	CR1	Diode, 1N270	CR-0047	Q7	Transistor, 2N5222	Q-0021
	C57	Cap, Disc, Cer, 0.01 uf, +80%, -20%, 25 VDCW	C-3531	CR2	Diode, 1N270	CR-0047	Q8	Transistor, 2N5222	Q-0021
C-0122	C58	Cap, Disc, Cer, 0.01 uf, +80%, -20%, 25 VDCW	C-3531	L1	Inductor, Fixed, 4.7 uh	L-0691	Q9	Transistor, 2N5222	Q-0021
C-3513				L2	Inductor, Var	850-0028	Q10	Transistor, 2N5222	Q-0021
C-3513				L3	Inductor, Fixed, 15 uh	L-0697	Q11	Transistor, 2N5222	Q-0021
	C59	Cap, Disc, NPO, 15 pf, 5%, 1 KVDCW	C-4743	L4	Inductor, Var	850-0028	Q12	Transistor, 2N5222	Q-0021
C-4743	C60	Cap, Disc, Cer, 0.01 uf, +80%, -20%, 25 VDCW	C-3531	L5	Inductor, Var	450-0029	Q13	Transistor, 2N5222	Q-0021
	C61	Cap, Disc, Cer, 0.001 uf, 10%, 500 VDCW	C-3513	L6	Inductor, Fixed, 4.7 uh	L-0691	Q14	Transistor, 2N5222	Q-0021
C-4742	C62	Cap, Disc, Cer, 0.005 uf, +60%, -40%, 150 VDCW	C-3064	L7	Inductor, Var	450-0029	Q15	Transistor, 2N5222	Q-0021
C-4612				L8	Inductor, Var	450-0027	Q16	Transistor, 2N5222	Q-0021
	C63	Cap, Disc, Cer, 0.01 uf, +80%, -20%, 25 VDCW	C-3531	L9	Inductor, Var	450-0027	Q17	Transistor, 2N5222	Q-0021
C-4739	C64	Cap, Disc, Cer, 0.01 uf, +80%, -20% 25 VDCW	C-3531	L10	Inductor, Fixed, 4.7 uh	L-0691	Q18	Transistor, 2N5222	Q-0021
	C65	Cap, Disc, Cer, 0.1 uf, +80%, -20%, 30 VDCW	C-2210	L11	Inductor, Fixed	450-0025	Q19	Transistor, 2N5222	Q-0021
C-4736	C66	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	L12	148-159 MHz	450-0033	R1	Res, Comp, 1K, 10%, 1/2 W	R-0124
C-4741	C67	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794				R2	Res, Comp, 220 ohm, 10%, 1/2 W	R-0116
C-3513	C68	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	L13	Inductor, Fixed, 4.7 uh	450-0034	R3	Res, Comp, 820 ohm, 10%, 1/2 W	R-0123
C-4733	C69	Cap, Disc, NPO, 10 pf, 5%, 1 KVDCW	C-4741	L14	Inductor Fixed	L-0691	R4	Res, Comp, 100 ohm, 10%, 1/2 W	R-0112
	C70	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744	L15	Inductor, Fixed	850-0034	R5	Res, Comp, 220 ohm, 10%, 1/2 W	R-0116
	C71	Cap, Disc, NPO, 16 pf, 5%, 1 KVDCW	C-4744	L16	148 - 159 MHz	450-0025	R6	Res, Comp, 100 ohm, 10%, 1/2 W	R-0112
	C72	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744				R7	Res, Comp, 10 ohm, 10%, 1/2 W	R-0100
	C73	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744	L17	Inductor, Var	450-0023	R8	Res, Comp, 470 ohm, 10%, 1/2 W	R-0120
	C74	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744	L18	148 - 159 MHz	450-0023	R9	Res, Nickel Film, 1 ohm, 10%, 1/2 W	R-7400
	C75	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744				R10	Res, Comp, 470 ohm, 10%, 1/2 W	R-0120
	C76	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750				R11	Not Used	
	C77	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750				R12	Res, Comp, 56 ohm, 10%, 1/2W	R-0109
	C78	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750				R13	Thermistor, 2DA-290	R-2094
	C79	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750				R14	Res, Comp, 10K, 10%, 1/4 W	R-0036
	C80	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750				R15	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
	C81	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750				R16	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
	C82	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794				R17	Thermistor, 2DA-290	R-2094
	C83	Not Used					R18	Res, Comp, 10K, 10%, 1/4 W	R-0036
	C84	Cap, Disc, Cer, 0.1 uf, +80%, -20%, 30 VDCW	C-2210				R19	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
	C85	Cap, Tant, 15 uf, 20%, 20 VDCW	C-6449				R20	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
C-4973							R21	Thermistor, 2DA-290	R-2094
C-4752							R22	Res, Comp, 10K, 10%, 1/4 W	R-0036
C-4969							R23	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
C-0122							R24	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
C-3531							R25	Thermistor, 2DA-290	R-2094
							R26	Res, Comp, 10K, 10%, 1/4 W	R-0036
C-4973							R27	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
C-4752									



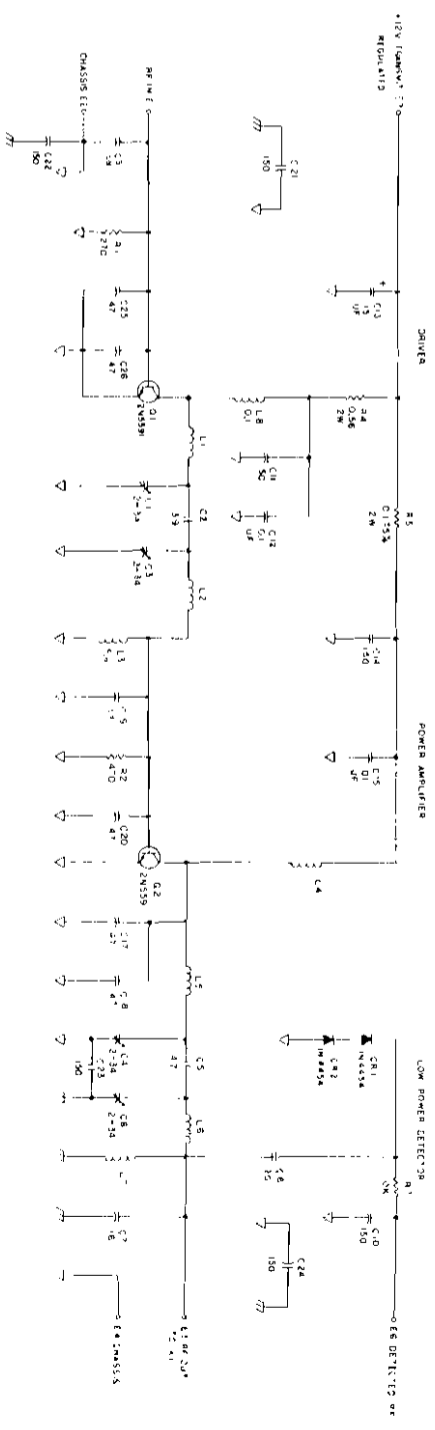
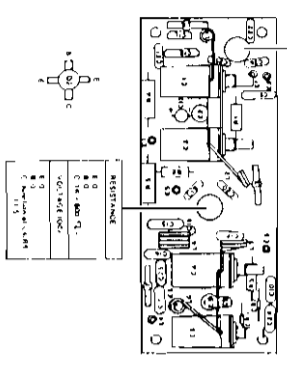
450-0411

RESISTANCE

1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
0	0

RESISTANCE

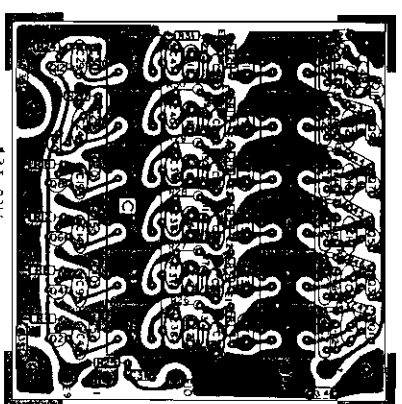
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
0	0



NOTES:  
UNLESS OTHERWISE INDICATED, ALL RESISTORS ARE 1/4 WATT.  
ALL CAPACITORS ARE IN MICROFARADS, ALL INDUCTORS ARE IN MICROHENRIES.



REF DESIG	DESCRIPTION	RF PART NUMBER
C1	Cap, Var, 2-34 pf	C-4652
C2	Cap, Cer, 3.9 pf, 5%, 500 VDCW	C-4735
C3	Cap, Var, 2-34 pf	C-4652
C4	Cap, Var, 2-34 pf	C-4652
C5	Cap, Cer, 4.7 pf, 5%, 500 VDCW	C-4736
C6	Cap, Var, 2-34 pf	C-4652
C7	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C8	Cap, Disc, NPO, 20 pf, 5%, 1 KVDCW	C-4745
C9	Cap, Disc, NPO, 68 pf, 5%, 1 KVDCW	C-4755
C10	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C11	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C12	Cap, Disc, Cer, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
C13	Cap, Tant, 15 uf, 20%, 20 VDCW	C-6449
C14	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C15	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
C16	Not Used	
C17	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C18	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C19	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C20	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C21	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C22	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C23	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C24	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C25	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C26	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
CR1	Diode, 1N4454	CR-0705
CR2	Diode, 1N4454	CR-0705
L1	Coil	A850-0045
L2	Coil	A850-0046
L3	Inductor, 5.6 uh, 5%	L-0692
L4	Coil	483-0227
L5	Coil	A850-0047
L6	Coil	A850-0048
L7	Inductor, 1.0 uh, 5%	L-0683
L8	Inductor, 0.1 uh, 5%	L-0676
Q1	Transistor, 2N5591	O-0024
Q2	Transistor, 2N5591	O-0024
R1	Res, Comp, 270 ohm, 10%, 1/2W	R-0117
R2	Res, Comp, 470 ohm, 10%, 1/2W	R-0120
R3	Res, Comp, 10K, 10%, 1/2W	R-0136
R4	Res, W.W., 0.56 ohm, 10%, 2W	R-3845
R5	Res, W.W., 0.1 ohm, 10%, 2W	R-0983



4-23 (DJI)

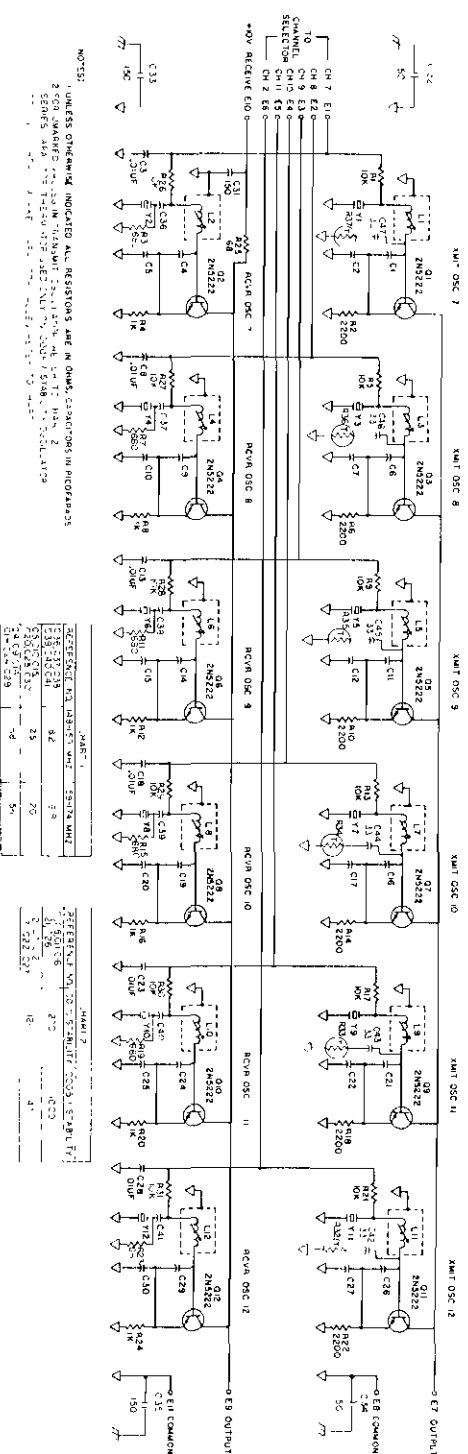
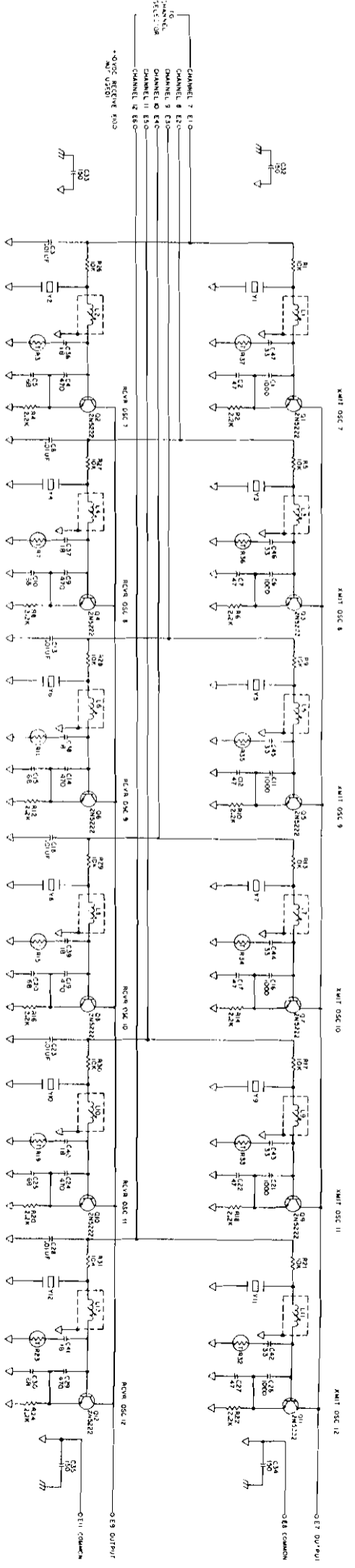


Figure 5-11. Oscillator Assembly (400005)



REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER	REF DESIG	DESCRIPTION	RF PART NUMBER
C1	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973	C27	Cap, Disc, NPD, 47 pf, 5%, 1 KVDCW	C-4752	L4	Inductor, Var	A450-0024	Y3	Crystal, Transmit, $\pm 0.0005\%$	Y-0003
C2	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752	C28	Cap, Disc, Cer, 0.01 uf, +60%, -40%, 150 VDCW	C-0065	L5	Inductor, Var	A450-0023	Y4	Crystal, Receive, $\pm 0.001\%$	Y-0002
C3	Cap, Disc, Cer, 0.01 uf, +60%, -40%, 150 VDCW	C-0065	C29	148 - 159 MHz Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122	L6	Inductor, Var	A450-0024	Y5	Crystal, Transmit, $\pm 0.005\%$	Y-0003
C4	148 - 159 MHz Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122	C30	159 - 174 MHz Cap, Mica, 56 pf, 5%, 500 VDCW	C-0120	L7	Inductor, Var	A450-0023	Y6	Crystal, Receive, $\pm 0.001\%$	Y-0002
C5	148 - 159 MHz Cap, Disc, NPO, 25 pf, 5%, 1 KVDCW	C-4747	C31	148 - 159 MHz Cap, Disc, NPO, 25 pf, 5%, 1 KVDCW	C-4747	L8	Inductor, Var	A450-0024	Y7	Crystal, Transmit, $\pm 0.0005\%$	Y-0003
C6	Cap, Disc, NPO, 20 pf, 5%, 1 KVDCW	C-4745	C32	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	L9	Inductor, Var	A450-0023	Y8	Crystal, Receive, $\pm 0.001\%$	Y-0002
C7	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973	C33	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	L10	Inductor, Var	A450-0024	Y9	Crystal, Transmit, $\pm 0.0005\%$	Y-0003
C8	Cap, Disc, Cer, 0.01 uf, +60%, -40%, 150 VDCW	C-0065	C34	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	L11	Inductor, Var	A450-0023	Y10	Crystal, Receive, $\pm 0.001\%$	Y-0002
C9	148 - 159 MHz Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122	C35	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794	L12	Inductor, Var	A450-0024	Y11	Crystal, Transmit, $\pm 0.0005\%$	Y-0003
C10	148 - 159 MHz Cap, Mica, 56 pf, 5%, 500 VDCW	C-0120	C36	148 - 159 MHz Cap, Disc, NPO, 8.2 pf, $\pm 0.5$ pf, 1 KVDCW	C-4740	Q1	Transistor, 2N5222	Q-0021	Y12	Crystal, Receive, $\pm 0.001\%$	Y-0002
C11	Cap, Disc, NPO, 20 pf, 5%, 1 KVDCW	C-4745	C37	148 - 159 MHz Cap, Disc, NPO, 5.6 pf, $\pm 0.5$ pf, 1 KVDCW	C-4736	Q2	Transistor, 2N5222	Q-0021		Crystal Socket	J-0825
C12	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973	C38	148 - 159 MHz Cap, Disc, NPO, 8.2 pf, $\pm 0.5$ pf, 1 KVDCW	C-4740	Q3	Transistor, 2N5222	Q-0021		Inductor Shield	850-0037
C13	Cap, Disc, Cer, 0.01 uf, +60%, -40%, 150 VDCW	C-0065	C39	148 - 159 MHz Cap, Disc, NPO, 5.6 pf, $\pm 0.5$ pf, 1 KVDCW	C-4738	Q4	Transistor, 2N5222	Q-0021			
C14	148 - 159 MHz Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122	C40	148 - 159 MHz Cap, Disc, NPO, 8.2 pf, $\pm 0.5$ pf, 1 KVDCW	C-4740	Q5	Transistor, 2N5222	Q-0021			
C15	148 - 159 MHz Cap, Mica, 56 pf, 5%, 500 VDCW	C-0120	C41	148 - 159 MHz Cap, Disc, NPO, 8.2 pf, $\pm 0.5$ pf, 1 KVDCW	C-4740	Q6	Transistor, 2N5222	Q-0021			
C16	Cap, Disc, NPO, 20 pf, 5%, 1 KVDCW	C-4745	C42	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	Q7	Transistor, 2N5222	Q-0021			
C17	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973	C43	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	Q8	Transistor, 2N5222	Q-0021			
C18	Cap, Disc, Cer, 0.01 uf, +60%, -40%, 150 VDCW	C-0065	C44	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	Q9	Transistor, 2N5222	Q-0021			
C19	148 - 159 MHz Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122	C45	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	Q10	Transistor, 2N5222	Q-0021			
C20	148 - 159 MHz Cap, Mica, 56 pf, 5%, 500 VDCW	C-0120	C46	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	Q11	Transistor, 2N5222	Q-0021			
C21	Cap, Disc, NPO, 20 pf, 5%, 1 KVDCW	C-4745	C47	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	Q12	Transistor, 2N5222	Q-0021			
C22	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973	L1	Inductor, Var	A450-0023	R1	Res, Comp, 10K, 10%, 1/4W	R-0036			
C23	Cap, Disc, Cer, 0.01 uf, +60%, -40%, 150 VDCW	C-0065	L2	Inductor, Var	A450-0024	R2	Res, Comp, 2.2K, 10%, 1/4W	R-0028			
C24	148 - 159 MHz Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122	L3	Inductor, Var	A450-0023	R3	Res, Comp, 680 ohm, 10%, 1/4W	R-0022			
C25	148 - 159 MHz Cap, Mica, 56 pf, 5%, 500 VDCW	C-0120	C42	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	R4	Res, Comp, 1K, 10%, 1/4W	R-0024			
C26	148 - 159 MHz Cap, Disc, NPO, 25 pf, 5%, 1 KVDCW	C-4747	C43	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	R5	Res, Comp, 10K, 10%, 1/4W	R-0036			
			C44	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	R6	Res, Comp, 2.2K, 10%, 1/4W	R-0028			
			C45	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	R7	Res, Comp, 680 ohm, 10%, 1/4W	R-0022			
			C46	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	R8	Res, Comp, 1K, 10%, 1/4W	R-0024			
			C47	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750	R9	Res, Comp, 10K, 10%, 1/4W	R-0036			
						R10	Res, Comp, 2.2K, 10%, 1/4W	R-0028			
						R11	Res, Comp, 680 ohm, 10%, 1/4W	R-0022			
						R12	Res, Comp, 1K, 10%, 1/4W	R-0024			
						R13	Res, Comp, 10K, 10%, 1/4W	R-0036			
						R14	Res, Comp, 2.2K, 10%, 1/4W	R-0028			
						R15	Res, Comp, 680 ohm, 10%, 1/4W	R-0022			
						R16	Res, Comp, 1K, 10%, 1/4W	R-0024			
						R17	Res, Comp, 10K, 10%, 1/4W	R-0036			
						R18	Res, Comp, 2.2K, 10%, 1/4W	R-0028			
						R19	Res, Comp, 680 ohm, 10%, 1/4W	R-0022			
						R20	Res, Comp, 1K, 10%, 1/4W	R-0024			
						R21	Res, Comp, 10K, 10%, 1/4W	R-0036			
						R22	Res, Comp, 2.2K, 10%, 1/4W	R-0028			
						R23	Res, Comp, 680 ohm, 10%, 1/4W	R-0022			
						R24	Res, Comp, 1K, 10%, 1/4W	R-0024			
						R25	Res, Comp, 68 ohm, 10%, 1/4W	R-0010			
						R26	Res, Comp, 10K, 10%, 1/4W	R-0036			
						R27	Res, Comp, 10K, 10%, 1/4W	R-0036			
						R28	Res, Comp, 10K, 10%, 1/4W	R-0036			
						R29	Res, Comp, 10K, 10%, 1/4W	R-0036			
						R30	Res, Comp, 10K, 10%, 1/4W	R-0036			
						R31	Res, Comp, 10K, 10%, 1/4W	R-0036			
						R32	Thermistor, 3D204	R-4051			
						R33	Thermistor, 3D204	R-4051			
						R34	Thermistor, 3D204	R-4051			
						R35	Thermistor, 3D204	R-4051			
						R36	Thermistor, 3D204	R-4051			
						R37	Thermistor, 3D204	R-4051			
						Y1	Crystal, Transmit $\pm 0.0005\%$	Y-0003			
						Y2	Crystal, Receive, $\pm 0.001\%$	Y-0002			



NOTE: UNLESS OTHERWISE INDICATED, ALL RESISTORS ARE IN OHMS, ALL CAPACITORS ARE IN MICROFARADS, ALL INDICATORS ARE IN MICROAMPERES.

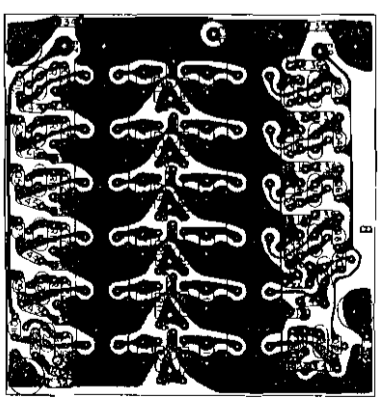


Figure 5-12. Oscillator Assembly Schematic Diagram (40,0005 & Transmitt. Receive Frequency Stability)

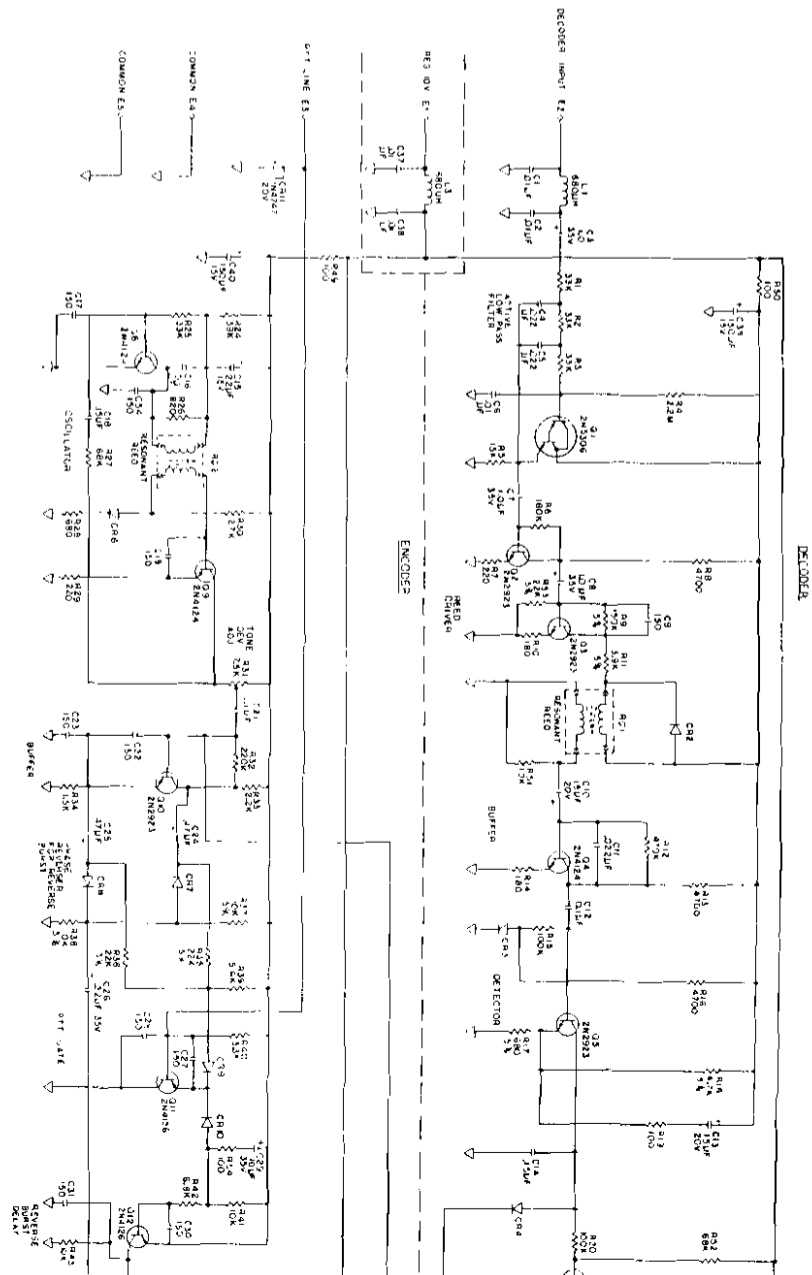
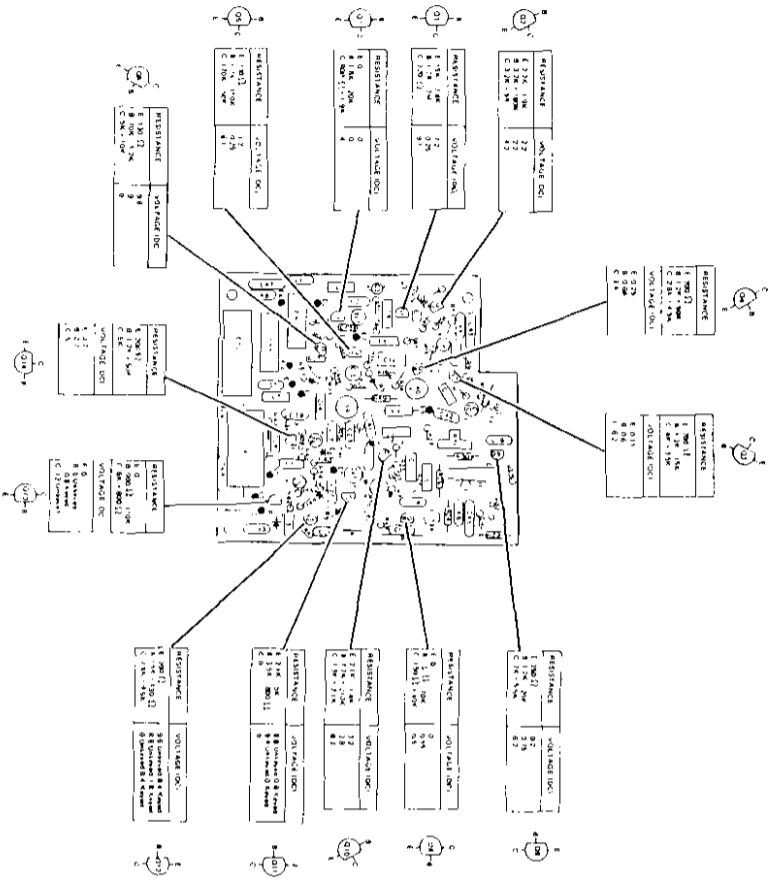


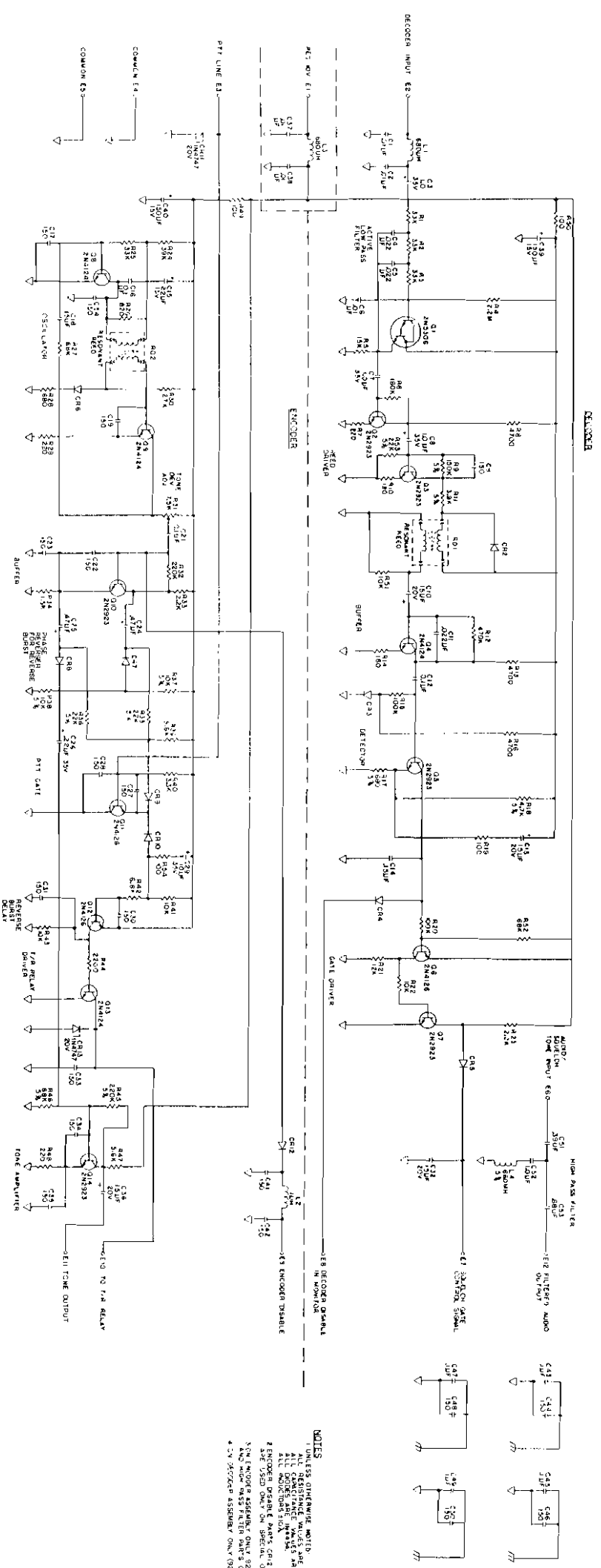
REF DESIG	DESCRIPTION	RF PART NUMBER
C1	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973
C2	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C3	Cap, Disc, Cer, 0.01 uf, +60%, 40% 150 VDCW	C-0065
C4	Cap, Mica, 470 pf, 10%, 100 VDCW	C-4969
C5	Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122
C6	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973
C7	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C8	Cap, Disc, Cer, 0.01 uf, +60%, 40%, 150 VDCW	C-0065
C9	Cap, Mica, 470 pf, 10%, 100 VDCW	C-4969
C10	Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122
C11	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973
C12	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C13	Cap, Disc, Cer, 0.01 uf, +60%, 40%, 150 VDCW	C-0065
C14	Cap, Mica, 470 pf, 10%, 100 VDCW	C-4969
C15	Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122
C16	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973
C17	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C18	Cap, Disc, Cer, 0.01 uf, +60%, 40%, 150 VDCW	C-0065
C19	Cap, Mica, 470 pf, 10%, 100 VDCW	C-4969
C20	Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122
C21	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973
C22	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C23	Cap, Disc, Cer, 0.01 uf, +60%, 40%, 150 VDCW	C-0065
C24	Cap, Mica, 470 pf, 10%, 100 VDCW	C-4969
C25	Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122
C26	Cap, Mica, 1000 pf, 10%, 100 VDCW	C-4973
C27	Cap, Disc, NPO, 47 pf, 5%, 1 KVDCW	C-4752
C28	Cap, Disc, Cer, 0.01 uf, +60%, 40%, 150 VDCW	C-0065
C29	Cap, Mica, 470 pf, 10%, 100 VDCW	C-4969
C30	Cap, Mica, 68 pf, 5%, 500 VDCW	C-0122
C31	Not Used	
C32	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C33	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C34	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C35	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C36	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C37	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C38	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C39	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C40	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C41	Cap, Disc, NPO, 18 pf, 5%, 1 KVDCW	C-4744
C42	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750
C43	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750
C44	Cap, Disc, NPD, 33 pf, 5%, 1 KVDCW	C-4750
C45	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750
C46	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750
C47	Cap, Disc, NPO, 33 pf, 5%, 1 KVDCW	C-4750
L1	Inductor, Var 148 - 159 MHz	450-0023
L2	Inductor, Var 159 - 174 MHz	1937-0023
L3	Inductor, Var 148 - 159 MHz	450-0023
L4	Inductor, Var 159 - 174 MHz	1937-0023

REF DESIG	DESCRIPTION	RF PART NUMBER
L5	Inductor, Var 148 - 159 MHz	450-0023
L6	Inductor, Var 159 - 174 MHz	1937-0023
L7	Inductor, Var 148 - 159 MHz	450-0023
L8	Inductor, Var 159 - 174 MHz	1937-0023
L9	Inductor, Var 148 - 159 MHz	450-0023
L10	Inductor, Var 159 - 174 MHz	1937-0023
L11	Inductor, Var 148 - 159 MHz	450-0023
L12	Inductor, Var 159 - 174 MHz	1937-0023
Q1	Transistor, 2N5222	Q-0021
Q2	Transistor, 2N5222	Q-0021
Q3	Transistor, 2N5222	Q-0021
Q4	Transistor, 2N5222	Q-0021
Q5	Transistor, 2N5222	Q-0021
Q6	Transistor, 2N5222	Q-0021
Q7	Transistor, 2N5222	Q-0021
Q8	Transistor, 2N5222	Q-0021
Q9	Transistor, 2N5222	Q-0021
Q10	Transistor, 2N5222	Q-0021
Q11	Transistor, 2N5222	Q-0021
Q12	Transistor, 2N5222	Q-0021
R1	Res, Comp, 10K, 10%, 1/4 W	R-0036
R2	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R3	Thermistor, 2DA-290	R-2094
R4	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R5	Res, Comp, 10K, 10%, 1/4 W	R-0036
R6	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R7	Thermistor, 2DA-290	R-2094
R8	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R9	Res, Comp, 10K, 10%, 1/4 W	R-0036
R10	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R11	Thermistor, 2DA-290	R-2094
R12	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R13	Res, Comp, 10K, 10%, 1/4 W	R-0036
R14	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R15	Thermistor, 2DA-290	R-2094
R16	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R17	Res, Comp, 10K, 10%, 1/4 W	R-0036
R18	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R19	Thermistor, 2DA-290	R-2094
R20	Resistor, Comp, 2.2K, 10%, 1/4 W	R-0028
R21	Res, Comp, 10K, 10%, 1/4 W	R-0036
R22	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R23	Thermistor, 2DA-290	R-2094
R24	Res, Comp, 2.2K, 10%, 1/4 W	R-0028
R25	Not Used	
R26	Res, Comp, 10K, 10%, 1/4 W	R-0036
R27	Res, Comp, 10K, 10%, 1/4 W	R-0036
R28	Res, Comp, 10K, 10%, 1/4 W	R-0036
R29	Res, Comp, 10K, 10%, 1/4 W	R-0036
R30	Res, Comp, 10K, 10%, 1/4 W	R-0036

REF DESIG	DESCRIPTION	RF PART NUMBER
R31	Res, Comp, 10K, 10%, 1/4 W	R-0036
R32	Thermistor, 3D204	R-4051
R33	Thermistor, 3D204	R-4051
R34	Thermistor, 3D204	R-4051
R35	Thermistor, 3D204	R-4051
R36	Thermistor, 3D204	R-4051
R37	Thermistor, 3D204	R-4051







- NOTES**
- 1. RES. DIMENSIONS: 1/16" ± 0.0015"
  - 2. ENCODER DRIVE: 5VDC ± 0.1V
  - 3. ENCODER DRIVE: 5VDC ± 0.1V
  - 4. 2V SECTION ASSEMBLY ONLY (S99) ODD/DEF. ETC. ALL ENCODER PARTS.

Figure 5-13. TCS Assembly Schematic Diagram

REF DESIG	DESCRIPTION	RF PART NUMBER
C1	Cap, Disc, Cer, 0.01 uf, +60%, -40% 150 VDCW	C-0065
C2	Cap, Disc, Cer, 0.01 uf, +60%, -40% 150 VDCW	C-0065
C3	Cap, Tant, 1.0 uf, 20%, 35 VDCW	C-3324
C4	Cap, Mylar, 0.022 uf, 10%, 250 VDCW	C-8004
C5	Cap, Mylar, 0.022 uf, 10%, 250 VDCW	C-8004
C6	Cap, Disc, Cer, 0.01 uf, +60%, -40% 150 VDCW	C-0065
C7	Cap, Tant, 1.0 uf, 20%, 35 VDCW	C-3324
C9	Cap, Tant, 1.0 uf, 20%, 35 VDCW	C-3324
C9	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C10	Cap, Tant, 15 uf, 20%, 20 VDCW	C-3325
C11	Cap, Mylar, 0.022 uf, 10%, 250 VDCW	C-8004
C12	Cap, Polycar, 0.1 uf, 10%, 100 VDCW	C-8031
C13	Cap, Tant, 15 uf, 20%, 20 VDCW	C-3325
C14	Cap, Polycar, 0.15 uf, 10%, 100 VDCW	C-8033
C15	Cap, Tant, 22 uf, 20%, 15 VDCW	C-3326
C16	Cap, Polycar, 0.1 uf, 10%, 100 VDCW	C-8031
C17	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C18	Cap, Polycar, 0.15 uf, 10%, 100 VDCW	C-8033
C19	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C20	Not Used	
C21	Cap, Polycar, 0.1 uf, 10%, 100 VDCW	C-8031
C22	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C23	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C24	Cap, Tant, 0.47 uf, 20%, 35 VDCW	C-3322
C25	Cap, Tant, 0.47 uf, 20%, 35 VDCW	C-3322
C26	Cap, Tant, 0.47 uf, 20%, 35 VDCW	C-3322
C27	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C28	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C29	Cap, Tant, 10 uf, 10%, 35 VDCW	C-6448
C30	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C31	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C32	Cap, Tant, 15 uf, 20%, 20 VDCW	C-3325
C33	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C34	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C35	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C36	Cap, Tant, 15 uf, 20%, 20 VDCW	C-3325
C37	Cap, Disc, Cer, 0.01 uf, +60%, -40% 150 VDCW	C-0065
C38	Cap, Disc, Cer, 0.01 uf, +60%, -40% 150 VDCW	C-0065
C39	Cap, Tant, 150 uf, 20%, 15 VDCW	C-4976
C40	Cap, Tant, 150 uf, 20%, 15 VDCW	C-4976
C41	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C42	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C43	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
C44	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C45	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
C46	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C47	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
C48	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C49	Cap, Disc, 0.1 uf, +80%, -20%, 30 VDCW	C-2210
C50	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
C51	Cap, Polycar, 0.39 uf, 10%, 100 VDCW	C-8038
C52	Cap, Mylar, 1.0 uf, 10%, 250 VDCW	C-8024
C53	Cap, Polycar, 0.68 uf, 10%, 100 VDCW	C-8041
C54	Cap, Disc, Cer, 150 pf, 20%, 1 KVDCW	C-4794
CR1	Not Used	

REF DESIG	DESCRIPTION	RF PART NUMBER
CR2	Diode, 1N4454	CR-0705
CR3	Diode, 1N4454	CR-0705
CR4	Diode, 1N4454	CR-0705
CR5	Diode, 1N4454	CR-0705
CR6	Diode, 1N4454	CR-0705
CR7	Diode, 1N4454	CR-0705
CR8	Diode, 1N4454	CR-0705
CR9	Diode, 1N4454	CR-0705
CR10	Diode, 1N4454	CR-0705
CR11	Diode, Zener, 1N4747	CR-0405
CR12	Diode, 1N4454	CR-0705
CR13	Diode, Zener, 1N4747	CR-0405
L1	Inductor, Fixed, 680 uh	L-0544
L2	Inductor, Fixed, 1 uh	L-0176
L3	Inductor, Fixed, 680 uh	L-0544
L4	Inductor, Fixed, 660 mh	L-0178
Q1	Transistor, 2N5306	Q-0034
Q2	Transistor, 2N2923	Q-0121
Q3	Transistor, 2N2923	Q-0121
Q4	Transistor, 2N4124	Q-0385
Q5	Transistor, 2N2923	Q-0121
Q6	Transistor, 2N4126	Q-0386
Q7	Transistor, 2N2923	Q-0121
Q8	Transistor, 2N4124	Q-0385
Q9	Transistor, 2N4124	Q-0385
Q10	Transistor, 2N2923	Q-0121
Q11	Transistor, 2N4126	Q-0386
Q12	Transistor, 2N4126	Q-0386
Q13	Transistor, 2N4124	Q-0385
Q14	Transistor, 2N2923	Q-0121
R1	Res, Comp, 33K, 10%, 1/4W	R-0042
R2	Res, Comp, 33K, 10%, 1/4W	R-0042
R3	Res, Comp, 33K, 10%, 1/4W	R-0042
R4	Res, Comp, 2.2M, 10%, 1/4W	R-0064
R5	Res, Comp, 15K, 10%, 1/4W	R-0038
R6	Res, Comp, 180K, 10%, 1/4W	R-0051
R7	Res, Comp, 220 ohm, 10%, 1/4W	R-0016
R8	Res, Comp, 4.7K, 10%, 1/4W	R-0032
R9	Res, Comp, 150K, 5%, 1/4W	R-1301
R10	Res, Comp, 180 ohm, 10%, 1/4W	R-0015
R11	Res, Comp, 3.9K, 5%, 1/4W	R-1263
R12	Res, Comp, 470K, 10%, 1/4W	R-0056
R13	Res, Comp, 4.7K, 10%, 1/4W	R-0032
R14	Res, Comp, 180 ohm, 10%, 1/4W	R-0015
R15	Res, Comp, 100K, 10%, 1/4W	R-0048
R16	Res, Comp, 4.7K, 10%, 1/4W	R-0032
R17	Res, Comp, 680 ohm, 5%, 1/4W	R-1245
R18	Res, Comp, 4.7K, 5%, 1/4W	R-1265
R19	Res, Comp, 100 ohm, 10%, 1/4W	R-0012
R20	Res, Comp, 100K, 10%, 1/4W	R-0048
R21	Res, Comp, 12K, 10%, 1/4W	R-0037
R22	Res, Comp, 10K, 10%, 1/4W	R-0036
R23	Res, Comp, 2.2K, 10%, 1/4W	R-0028
R24	Res, Comp, 39K, 10%, 1/4W	R-0043
R25	Res, Comp, 33K, 10%, 1/4W	R-0042
R26	Res, Comp, 820 ohm, 10%, 1/4W	R-0023
R27	Res, Comp, 68K, 10%, 1/4W	R-0046
R28	Res, Comp, 680 ohm, 10%, 1/4W	R-0022
R29	Res, Comp, 220 ohm, 10%, 1/4W	R-0016
R30	Res, Comp, 27K, 10%, 1/4W	R-0041

REF DESIG	DESCRIPTION	RF PART NUMBER
R31	Res, Var, 7.5K	R-2095
R32	Res, Comp, 220K, 10%, 1/4W	R-0052
R33	Res, Comp, 2.2K, 10%, 1/4W	R-0028
R34	Res, Comp, 1.5K, 10%, 1/4W	R-0026
R35	Res, Comp, 22K, 5%, 1/4W	R-1281
R36	Res, Comp, 22K, 5%, 1/4W	R-1281
R37	Res, Comp, 10K, 5%, 1/4W	R-1273
R38	Res, Comp, 10K, 5%, 1/4W	R-1273
R39	Res, Comp, 5.6K, 10%, 1/4W	R-0033
R40	Res, Comp, 3.3K, 10%, 1/4W	R-0030
R41	Res, Comp, 10K, 5%, 1/4W	R-1273
R42	Res, Comp, 6.8K, 5%, 1/4W	R-1269
R43	Res, Comp, 10K, 10%, 1/4W	R-0036
R44	Res, Comp, 2.2K, 10%, 1/4W	R-0028
R45	Res, Comp, 220K, 5%, 1/4W	R-1305
R46	Res, Comp, 68K, 5%, 1/4W	R-1293
R47	Res, Comp, 5.6K, 10%, 1/4W	R-0033
R48	Res, Comp, 220 ohm, 10%, 1/4W	R-0016
R49	Res, Comp, 100 ohm, 10%, 1/4W	R-0012
R50	Res, Comp, 100 ohm, 10%, 1/4W	R-0012
R51	Res, Comp, 10K, 10%, 1/4W	R-0036
R52	Res, Comp, 68K, 10%, 1/4W	R-0046
R53	Res, Comp, 22K, 5%, 1/4W	R-1281
R54	Res, Comp, 100 ohm, 10%, 1/4W	R-0012
RD1	Resonant Reed (Specify Frequency)	MP-0399
RD2	Resonant Reed (Specify Frequency) Insulator for Resonant Reeds	MP-0399 A929-0009