

## CHAPTER 7

### COMPONENTS LIST

#### CONTENTS

	<u>Page</u>
CHASSIS COMPONENTS	7-1
RF AMPLIFIER/LPF MODULE	7-3
RF AMPLIFIER/LPF BOARD A1	7-4
1ST MIXER BOARD A2	7-7
2ND MIXER BOARD A3	7-11
MAIN IF/AF BOARD A4	7-15
MICROCOMPUTER BOARD A6A2	7-27
FIRST LO SYNTHESIZER BOARD A7	7-30
2ND LO/BFO SYNTHESIZER A8	7-39
FRONT PANEL SWITCH AND DISPLAY BOARD A9A1	7-47
FRONT PANEL MEMORY BOARD A9A2	7-50
AC POWER SUPPLY MODULE A10	7-54
FREQUENCY STANDARD MODULE A11	7-56

### ORDERS FOR SPARE PARTS

In order to expedite handling of part orders,  
please quote:-

- (1) Type and serial number of equipment.
- (2) Circuit reference, description, Racal part number, and manufacturer of part required.
- (3) Quantity required.

NOTE: If the equipment is designed on a modular basis, please include the type and description of the module for which the replacement part is required.

## CHASSIS COMPONENTS (ST80767)

(earlier versions ST80766)

Cct. Ref.	Value	Description	Rat	Tol. %	Racal Part Number
<u>Resistors</u>					
R1	50K	Potentiometer (IF GAIN)			B08243
R2	1K	Potentiometer (VOLUME)			B08244
R3	1K	Metal Oxide		2	910388
<u>Capacitors</u>					
C1	.001	Feedthrough	500	20	938668
C2	.001	Feedthrough	500	20	938668
C3	.001	Feedthrough	500	20	938668
C4	.001	Feedthrough	500	20	938668
C5	.001	Feedthrough	500	20	938668
C6	.001	Feedthrough	500	20	938668
C7	.001	Feedthrough	500	20	938668
C8	.001	Feedthrough	500	20	938668
C9	.001	Feedthrough	500	20	938668
<u>Connectors</u>					
J1		Socket, bulkhead, BNC (REF IN/OUT)			919499
J2		Socket, bulkhead, BNC (MAIN IF OUT)			919499
		Mating plug for J1, J2			900038
J3		Socket, 25-way (AF OUT)			938656
		Mating plug, 25-way			916489
		Shell junction, straight			918108
		Retainer			914245
J4		PHONES jack			938636
J5		Plug, bulkhead			938654
J6		Plug, bulkhead			938654
		Mating connector, snap-on			938423
J7		Socket, bulkhead, BNC (LO OUT)			919499
		Mating plug, BNC			900038
J8		Not used			
J9		Socket, bulkhead, BNC (ISB IF OUT)			919499
		Mating plug, BNC			900038

Cct. Ref.	Value	Description	Rat	Tol. %	Racal Part Number
<u>Switches</u>					
S1		SUPPLY			938535
S2		REF INT/EXT			938666
S3		METER			938535
S4		L/S			938535
<u>Assemblies</u>					
		RF Amp/LPF Module			ST08076
		A1 RF Amp/LPF Board			ST08078
		A2 First Mixer			ST08184
		A3 Second Mixer			ST08093
		A4 Main IF/AF			ST08276
		A5 ISB IF/AF (Option)			ST08109
		A6A1 Score Interface (Option)			ST08459
		A6A2 Microcomputer			ST08203
	*	A7 First LO Synthesizer			ST80788
		A8 Second LO/BFO Synthesizer			ST08283
		A9A1 Switch and Display Board			ST08198
		A9A2 Memory Board			ST08234
		A10 AC Power Supply Module			ST80784
		A10 DC Power Supply Module (option)			ST80762
		A11 Frequency Standard Module (option)			ST08140
<u>Miscellaneous</u>					
		Loudspeaker			B08269
		Encoder disc			B08194
		Encoder shaft assembly			B08195
		Knob (Frequency)			BA43873
		Knob (IF GAIN, VOLUME)			927731
		Knob end cap			927734
		Cable assemblies:			
		W1			B07909/1
		W2			B07909/2
		W3			B07909/3
		W4			B07909/4
		W5			B07909/16
		W6			B07909/5
		W7			B07910/1
		W12			B07910/6
		W16			C08336

\* Earlier Versions ST 08545 (Appendix 4)

Cct. Ref.	Value	Description	Rat	Tol. %	Rcal Part Number
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Miscellaneous

		W19			D08222
		W21			B08263
		W22			B08262
		W25			B07910/8

RF AMPLIFIER/LPF MODULE (ST08076)

Connectors

A1J1		Socket, BNC (ANT. INPUT)			938474
		Mating plug, BNC			900038
A1J2		Plug, 4-pin			938475
		Mating socket			938658

Miscellaneous

E1		RF Amplifier/LPF Board A1			ST 08078
		Lighting Arrestor			911141
		Box Spanner (for tuning knob removal)			AD81031

RF AMPLIFIER/LPF BOARD A1 (ST08078)

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R1	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R2	4.7k	Metal Oxide	$\frac{1}{4}$	2	913490
R3	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R4	2.2k	Metal Oxide	$\frac{1}{4}$	2	916546
R5	4.7k	Metal Oxide	$\frac{1}{4}$	2	913490
R6	2.2k	Metal Oxide	$\frac{1}{4}$	2	916546
R7	1.5k	Metal Oxide	$\frac{1}{4}$	2	911166
R8	470	Metal Oxide	$\frac{1}{4}$	2	920758
R9	270	Metal Oxide	$\frac{1}{4}$	2	910391
R10	47	Metal Oxide	$\frac{1}{4}$	2	917063
R11	10	Metal Oxide	$\frac{1}{4}$	2	920736
R12	22	Metal Oxide	$\frac{1}{4}$	2	920743
R13	270	Metal Oxide	$\frac{1}{4}$	2	910391
R14	18	Metal Oxide	$\frac{1}{4}$	2	916545
R15	270	Metal Oxide	$\frac{1}{4}$	2	910391
<u>Capacitors</u>			<u>V</u>		
C1	1	Polyester	100	+20	931163
C2	0.1	Ceramic	50	$\overline{+20}$	938406
C3	0.1	Ceramic	50	$\overline{+20}$	938406
C4	1	Ceramic	50	$\overline{+20}$	938401
C5	0.01	Ceramic		$\overline{+20}$	938053
C6	3p	Silver Mica		$+\frac{1}{2}$ pf	938404
C7	1	Tantalum	35	$\overline{20}$	938405
C8	0.1	Ceramic	50	+20	938406
C9	0.01	Ceramic		$\overline{+20}$	938053
C10	6.8	Tantalum	35	$\overline{+20}$	938030
C11	1	Ceramic	50	+20	938401
C12	0.01	Ceramic		$\overline{+20}$	938053
C13	0.1	Ceramic	50	$\overline{+20}$	938406
C14	0.1	Ceramic	50	$\overline{+20}$	938406
C15	6.8	Tantalum	35	$\overline{20}$	938030

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C16	110p	Silver Mica		2	938409
C17	10p	Silver Mica		1/2pf	938410
C18	150p	Silver Mica	350	1p	902238
C19	75p	Silver Mica		2	938411
C20	110p	Silver Mica		2	938409
C21	91p	Silver Mica		2	938412
C22	120p	Silver Mica	350	1p	902236
C23	43p	Silver Mica		2	938413
C24	82p	Silver Mica	350	1p	902232
<u>Diodes</u>					
CR1		IN3600			926132
CR2		IN3600			926132
CR3		IN916			913480
CR4		IN916			913480
CR5		Not used			
CR6		Not used			
CR7		IN916			913480
CR8		IN916			913480
<u>Transistors</u>					
Q1		Silicon (2N5089)			938417
Q2		Silicon (2N3866)			917219
Q3		Silicon (2N5160)			938418
<u>Inductors</u>					
L1	15μH	Choke		10	915850
L2	100μH	Choke			919471
L3	100μH	Choke			919471
L4		Coil, Variable			AT81393
L5		Coil, Variable			AT81394
L6		Coil, Variable			AT81395
L7		Coil, Variable			AT81396

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
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Miscellaneous

F1		Fuse, 1 Amp, $\frac{1}{4} \times \frac{5}{8}$ Std Blo			938415
XF1		Fuse Holder			938414
FB1		Ferrite Bead			907488
FB2		Ferrite Bead			907488
K1		Relay, Reed 2 Form A			938416



1ST MIXER BOARD A2 (ST 08184)

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R1		Not used			
R2		Not used			
R3		Not used			
R4		Not used			
R5		Not Used			
R6		Not Used			
R7		Not Used			
R8	1.2k	Metal Oxide		2	911179
R9	150	Metal Oxide		2	910389
R10	100k	Metal Oxide		2	915190
R11	22	Metal Oxide		2	920743
R12	1k	Metal Oxide		2	913489
R13	100k	Metal Oxide		2	915190
R14	22	Metal Oxide		2	920743
R15	1.2k	Metal Oxide		2	911179
R16	150	Metal Oxide		2	910389
R17	220	Metal Oxide		2	910390
R18	220	Metal Oxide		2	910390
R19	10	Metal Oxide		2	920736
R20	1k	Metal Oxide		2	913489
R21	100	Metal Oxide		2	910388
R22	10k	Metal Oxide		2	914042
R23	47	Metal Oxide		2	917063
<u>Capacitors</u>			<u>V</u>		
C1	100p	Silver Mica	350	+1p	902234
C2	43p	Silver Mica	350	$\frac{2}{2}$	938413
C3	91p	Silver Mica	350	2	938412
C4	390p	Silver Mica	350	2	902248
C5	33p	Silver Mica	350	+1p	902222

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C6	100p	Silver Mica	350	1p	902234
C7	43p	Silver Mica	350	2	938413
C8	150p	Silver Mica	350	1p	902238
C9	47p	Silver Mica	400	1p	938834
C10		Not used			
C11	68p	Silver Mica	350	1p	902230
C12		Not Used			
C13	0.1	Ceramic	50	20	938406
C14	680p	Ceramic			938479
C15	0.1	Ceramic	50	20	938406
C16	680p	Ceramic			938479
C17	680p	Ceramic			938479
C18	2.2p	Ceramic			938480
C19	680p	Ceramic			938479
C20	680p	Ceramic			938479
C21		Not Used			
C22	0.1	Ceramic	50	20	938406
C23		Not Used			
C24	0.1	Ceramic	50	20	938406
C25	0.01	Ceramic		20	938053
C26	1000p	Ceramic		20	938408
* C27	27p	Silver Mica	350	1p	902220
C28	1000p	Ceramic		20	938408
C29	1000p	Ceramic		20	938408
C30	15	Tantalum	20	20	938034
C31	0.01	Ceramic		20	938053
C32	1000p	Ceramic		20	938408
C33	1000p	Ceramic		20	938408
C34	0.1	Ceramic	50	20	938406
C35	0.01	Ceramic		20	938053
C36	0.01	Ceramic		20	938053
C37	0.01	Ceramic	250	20	916187

\*Earlier Versions 33p. 902222

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Diodes</u>					
CRI		KS8379			938424
<u>Transistors</u>					
Q1		Not used			
Q2		Silicon (Matched BSV81)			A08298
Q3		Silicon (Matched BSV81)			A08298
Q4		Silicon (Matched BSV81)			A08298
Q5		Silicon (Matched BSV81)			A08298
Q6		Silicon (2N3866)			917219
Q7		Silicon (2N3866)			917219
Q8		Silicon (U310)			932518
<u>Transformers</u>					
T1		RF Wide Band			AT80404
T2		RF Wide Band			AT81405
T3		RF Wide Band			AT81406
T4					AT81407
T5					AT81398
<u>Inductors</u>					
L1	0.27 $\mu$ H	Choke RF			938481
L2		RF Variable Coil			AT81395
L3		RF Variable Coil			AT81402
L4		RF Variable Coil			AT81880
L5		RF Variable Coil			AT81403
L6		Not used			
L7		Not used			
L8	10 $\mu$ H	Choke			921209
L9	15 $\mu$ H	Choke		10	915850
L10	15 $\mu$ H	Choke		10	915850

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Connectors</u>					
J1		Plug, Coaxial RF			938429
J2		Plug, 8-way			B06846-4
J3		Plug, Coaxial RF			938429
<u>Miscellaneous</u>					
FL1	40.455MHz	Filter			BD80550

2ND MIXER BOARD A3 (ST 08093)

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R1	100	Metal Oxide	$\frac{1}{4}$	+2	910388
R2	220k	Metal Oxide	$\frac{1}{4}$	+2	921771
R3	22k	Metal Oxide	$\frac{1}{4}$	+2	913493
R4	22k	Metal Oxide	$\frac{1}{4}$	+2	913493
R5	4.7k	Metal Oxide	$\frac{1}{4}$	+2	919490
R6	100k	Metal Oxide	$\frac{1}{4}$	+2	915190
R7	390	Metal Oxide	$\frac{1}{4}$	2	916331
R8	2.2k	Metal Oxide	$\frac{1}{4}$	2	916546
R9	220	Metal Oxide	$\frac{1}{4}$	2	910390
R10	22k	Metal Oxide	$\frac{1}{4}$	+2	913493
R11	27	Metal Oxide	$\frac{1}{4}$	+2	920745
R12	560	Metal Oxide	$\frac{1}{4}$	+2	917061
R13	10	Metal Oxide	$\frac{1}{4}$	+2	920736
R14	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R15	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R16	220	Metal Oxide	$\frac{1}{4}$	2	910390
R17	100	Metal Oxide	$\frac{1}{4}$	+2	910388
R18		Not Used			
R19	100	Metal Oxide	$\frac{1}{4}$	+2	910388
R20	100	Metal Oxide	$\frac{1}{4}$	+2	910388
R21	39k	Metal Oxide	$\frac{1}{4}$	+2	900993
R22	4.7k	Metal Oxide	$\frac{1}{4}$	+2	919490
R23	56	Metal Oxide	$\frac{1}{4}$	+2	917055
R24	500	Variable		20	938426
R25	2.2k	Metal Oxide	$\frac{1}{4}$	2	916546
R26	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R27	47	Metal Oxide	$\frac{1}{4}$	2	917063
R28	470	Metal Oxide	$\frac{1}{4}$	2	920758
R29	470	Metal Oxide	$\frac{1}{4}$	2	920758
R30	1k	Metal Oxide	$\frac{1}{4}$	2	913489

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R31	39	Metal Oxide	$\frac{1}{4}$	+2	917062
R32	10	Metal Oxide	$\frac{1}{4}$	+2	920736
R33	100	Metal Oxide	$\frac{1}{4}$	+2	910388
R34	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R35	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R36	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R37	47	Metal Oxide	$\frac{1}{4}$	2	917063
R38	330	Metal Oxide	$\frac{1}{4}$	2	915690
R39	330	Metal Oxide	$\frac{1}{4}$	2	915690
R40	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R41	47	Metal Oxide	$\frac{1}{4}$	2	917063
R42	47	Metal Oxide	$\frac{1}{4}$	2	917063
<u>Capacitors</u>			<u>V</u>		
C1	0.01	Ceramic		+20	938053
C2	1	Tantalum	35	+20	938405
C3	1000p	Ceramic		+20	938408
C4	1000p	Ceramic		+20	938408
C5		Not Used			
C6		Not Used			
* C7	27p	Silver Mica	350	+1p	902220
C8	1000p	Ceramic		+20	938408
C9	1000p	Ceramic		+20	938408
C10	1000p	Ceramic		+20	938408
C11	15	Tantalum	20	+20	938034
C12	1000p	Ceramic		+20	938408
C13	68p	Silver Mica	350	+1p	902230
C14	68p	Silver Mica	350	+1p	902230
C15	68p	Silver Mica	350	+1p	902230
C16	82p	Silver Mica	350	+1p	902232
C17	330p	Silver Mica	350	+1p	902246
C18	1000p	Ceramic		+20	938408
C19	1000p	Ceramic		+20	938408
C20	1000p	Ceramic		+20	938406

\* Earlier Version 33p, 902222

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C21	1000p	Ceramic		+20	938408
C22	1	Tantalum	35	+20	938405
C23		Not Used			
C24	0.1	Ceramic		+20	938406
C25	0.1	Ceramic		+20	938406
C26	15	Tantalum	20	+20	938034
C27	0.1	Ceramic		+20	938406
C28	15	Tantalum	20	+20	938034
C29	0.1	Ceramic		+20	938406
<u>Diodes</u>					
CRI		KS8379			938424
<u>Transistors</u>					
Q1		Silicon (U310)			932518
Q2		Silicon (2N918)			906517
<u>Integrated Circuits</u>					
U1		CA3046			922907
U2		LM324N			925944
U3		MC1496P			938427
U4		MC1733			938429
<u>Transformers</u>					
T1		RF Variable			AT81398
T2		RF Variable			AT81399
<u>Inductors</u>					
L1	15 $\mu$ H	Choke RF			915850
L2		Not Used			
L3	100 $\mu$ H	Choke RF			919471
L4		Coil RF Variable			AT81397
L5		Coil RF Variable			AT81397

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
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Inductors

L6		Coil RF Variable			AT81397
L7		Coil RF Variable			AT81397

Connectors

J1		Plug, 10-way			B06846-5
J2		Plug, Coaxial RF			938429

Miscellaneous

FL1		Filter VTD-3-A			938425
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MAIN IF/AF BOARD A4 (ST 08276)

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R1	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R2	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R3	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R4	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R5	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R6	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R7		Ref. FL7			
R8	47	Metal Oxide	$\frac{1}{4}$	+2	917063
R9	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R10	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R11	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R12	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R13	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R14	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R15	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R16	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R17	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R18	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R19	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R20	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R21	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R22	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R23	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R24	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R25	100	Metal Oxide	$\frac{1}{4}$	+2	910388
R26	22k	Metal Oxide	$\frac{1}{4}$	+2	913493
R27	1.5k	Metal Oxide	$\frac{1}{4}$	+2	911166
R28	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R29	47	Metal Oxide	$\frac{1}{4}$	+2	917063
R30	22k	Metal Oxide	$\frac{1}{4}$	+2	913493

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R31	3.3k	Metal Oxide	$\frac{1}{4}$	2	910111
R32	47k	Metal Oxide	$\frac{1}{4}$	2	913496
R33	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R34	2.7k	Metal Oxide	$\frac{1}{4}$	2	916548
R35	560	Metal Oxide	$\frac{1}{4}$	2	917061
R36	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R37	100k	Metal Oxide	$\frac{1}{4}$	2	915190
R38	47k	Metal Oxide	$\frac{1}{4}$	2	913496
R39	2k	Variable			938440
R40	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R41	47k	Metal Oxide	$\frac{1}{4}$	2	913496
R42	22k	Metal Oxide	$\frac{1}{4}$	2	913493
R43	680	Metal Oxide	$\frac{1}{4}$	2	910113
R44	1.5k	Metal Oxide	$\frac{1}{4}$	2	911166
R45	220k	Metal Oxide	$\frac{1}{4}$	2	921771
R46	47	Metal Oxide	$\frac{1}{4}$	2	917063
R47	50k	Variable			938441
R48	680	Metal Oxide	$\frac{1}{4}$	2	910113
R49	22k	Metal Oxide	$\frac{1}{4}$	2	913493
R50	4.7k	Metal Oxide	$\frac{1}{4}$	2	913490
R51	2.2k	Metal Oxide	$\frac{1}{4}$	2	916546
R52	47k	Metal Oxide	$\frac{1}{4}$	2	913496
R53	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R54	220k	Metal Oxide	$\frac{1}{4}$	2	921771
R55	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R56	22k	Metal Oxide	$\frac{1}{4}$	2	913493
R57	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R58	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R59	22k	Metal Oxide	$\frac{1}{4}$	2	913493
R60	100	Metal Oxide	$\frac{1}{4}$	2	910388
R61	22k	Metal Oxide	$\frac{1}{4}$	2	913493
R62	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R63	1.5k	Metal Oxide	$\frac{1}{4}$	2	911166
R64	1.5k	Metal Oxide	$\frac{1}{4}$	2	911166
R65	15k	Metal Oxide	$\frac{1}{4}$	2	920645

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R66	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R67	18k	Metal Oxide	$\frac{1}{4}$	+2	900994
R68	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R69	15k	Metal Oxide	$\frac{1}{4}$	+2	920645
R70	1.2k	Metal Oxide	$\frac{1}{4}$	+2	911179
R71	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R72	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R73	22k	Metal Oxide	$\frac{1}{4}$	+2	913493
R74	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R75	390	Metal Oxide	$\frac{1}{4}$	+2	916331
R76	3.3k	Metal Oxide	$\frac{1}{4}$	+2	910111
R77	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R78	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R79	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R80	47	Metal Oxide	$\frac{1}{4}$	+2	917063
R81	22k	Metal Oxide	$\frac{1}{4}$	+2	913493
R82	39	Metal Oxide	$\frac{1}{4}$	+2	938440
R83	22k	Metal Oxide	$\frac{1}{4}$	+2	913493
R84	3.3k	Metal Oxide	$\frac{1}{4}$	+2	910111
R85	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R86	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R87	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R88	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R89	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R90	47k	Metal Oxide	$\frac{1}{4}$	+2	913496
R91	22k	Metal Oxide	$\frac{1}{4}$	+2	913493
R92	3.9k	Metal Oxide	$\frac{1}{4}$	+2	915074
R93	47k	Metal Oxide	$\frac{1}{4}$	+2	913496
R94	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R95	100k	Metal Oxide	$\frac{1}{4}$	+2	915190
R96	100k	Metal Oxide	$\frac{1}{4}$	+2	915190
R97	18k	Metal Oxide	$\frac{1}{4}$	+2	900994
R98	12k	Metal Oxide	$\frac{1}{4}$	+2	917952
R99	27k	Metal Oxide	$\frac{1}{4}$	+2	913494
R100	10	Metal Oxide	$\frac{1}{4}$	+2	920736

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R101	2.2k	Metal Oxide	$\frac{1}{4}$	+2	916546
R102	1k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	913489
R103	47k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	913496
R104	18k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	900994
R105	10k	Variable		$\overline{-}$	935310
R106	180k	Metal Oxide	$\frac{1}{4}$	+2	920644
R107	18k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	900994
R108	6.8k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	910112
R109	3.3k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	910111
R110	470	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	920758
R111	3.3k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	910111
R112	3.3k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	910111
R113	1.5k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	911166
R114	3.3k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	910111
R115	47	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	917063
R116	3.3k	Metal Oxide	$\frac{1}{4}$	+2	910111
R117	100k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	915190
R118	10k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	914042
R119	10k	Variable		$\overline{-}$	935286
R120	100k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	915190
R121	1.8k	Metal Oxide	$\frac{1}{4}$	+2	911148
R122	100k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	915190
R123	100k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	915190
R124	22k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	913493
R125	100k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	915190
R126	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R127	8.2k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	918202
R128	2.2k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	916546
R129	2k	Variable		$\overline{-}$	917845
R130	22	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	920743
R131	22	Metal Oxide	$\frac{1}{4}$	+2	920743
R132	2k	Variable		$\overline{-}$	917845
R133	10	Metal Oxide	$\frac{1}{4}$	+2	920736
R134	27k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	913494
R135	10k	Metal Oxide	$\frac{1}{4}$	$\overline{+2}$	914042

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R136	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R137	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R138	100	Metal Oxide	$\frac{1}{4}$	+2	910388
R139	100k	Metal Oxide	$\frac{1}{4}$	+2	915190
R140	100k	Metal Oxide	$\frac{1}{4}$	+2	915190
R141	100	Metal Oxide	$\frac{1}{4}$	+2	910388
R142	33	Metal Oxide	$\frac{1}{4}$	+2	917060
R143	1.5k	Metal Oxide	$\frac{1}{4}$	+2	911166
R144	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R145	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R146		Not Used			
R147		Not Used			
R148		Not Used			
R149		Not Used			
R150	100k	Metal Oxide	$\frac{1}{4}$	+2	915190
R151	100k	Metal Oxide	$\frac{1}{4}$	+2	915190
R152	1k	Metal Oxide		2	913489
R153	270k	Metal Oxide		2	923598
R154	1k	Metal Oxide		2	913489
<u>Capacitors</u>			<u>V</u>		
C1 to C12	)	Part of filter assemblies FL1 to FL6			
C13	0.1	Ceramic	50	+20	938406
C14	0.1	Ceramic	50	+20	938406
C15	0.1	Ceramic	50	+20	938406

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C16	0.1	Ceramic	50	+20	938406
C17	0.1	Ceramic	50	+20	938406
C18	0.1	Ceramic	50	+20	938406
C19	0.1	Ceramic	50	+20	938406
C20	15	Tantalum	20	+20	938034
C21	0.1	Ceramic	50	+20	938406
C22	0.1	Ceramic	50	+20	938406
C23	0.1	Ceramic	50	+20	938406
C24	0.1	Ceramic	50	+20	938406
C25	0.1	Ceramic	50	+20	938406
C26	0.1	Ceramic	50	+20	938406
C27	0.1	Ceramic	50	+20	938406
C28	0.1	Ceramic	50	+20	938406
C29	0.1	Ceramic	50	+20	938406
C30	0.1	Ceramic	50	+20	938406
C31	0.1	Ceramic	50	+20	938406
C32	15	Tantalum	20	+20	938034
C33	0.1	Ceramic	50	+20	938406
C34	0.1	Ceramic	50	+20	938406
C35	100	Electrolytic	25		935140
C36	0.1	Ceramic	50	+20	938406
C37	1000p	Ceramic		20	938408
C38	0.1	Ceramic	50	+20	938406
C39	0.1	Ceramic	50	+20	938406
C40	0.1	Ceramic	50	+20	938406
C41	0.022	Ceramic		+20	930219
C42	6.8	Tantalum	35	+20	938030
C43	0.01	Ceramic		+20	938053
C44	1500p	Silver Mica		+2	938435
C45	0.1	Ceramic	50	+20	938406
C46	82p	Silver Mica		+2	902232
C47	1500p	Silver Mica		+2	938435
C48	1000p	Ceramic		20	938408
C49	0.1	Ceramic	50	+20	938406
C50	0.1	Ceramic	50	+20	938406

Cct. Ref.	Value	Description	Rot.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C51	0.01	Ceramic		+20	938053
C52	15	Tantalum	20	+20	938034
C53	0.01	Ceramic		+20	938053
C54	0.1	Ceramic	50	+20	938406
C55		Not Used			
C56	0.1	Ceramic	50	+20	938406
C57	0.1	Ceramic	50	+20	938406
C58	15	Tantalum	20	+20	938034
C59	6.8	Tantalum	35	+20	938030
C60	0.1	Ceramic	50	+20	938406
C61	0.1	Ceramic	50	+20	938406
C62	0.1	Ceramic	50	+20	938406
C63	0.1	Ceramic	50	+20	938406
C64	0.1	Ceramic	50	+20	938406
C65	0.1	Ceramic	50	+20	938406
C66	0.1	Ceramic	50	+20	938406
C67	0.1	Ceramic	50	+20	938406
C68	3300p	Silver Mica		+2	938400
C69	0.01	Ceramic		+20	938053
C70	0.1	Ceramic	50	+20	938406
C71	100p	Silver Mica		+2	902234
C72	0.1	Ceramic	50	+20	938406
C73	100	Electrolytic	25		935140
C74	1	Ceramic		+20	938401
C75	0.1	Ceramic	50	+20	938406
C76	0.1	Ceramic	50	+20	938406
C77	0.1	Ceramic	50	+20	938406
C78	0.1	Ceramic	50	+20	938406
C79	0.1	Ceramic	50	+20	938406
C80	15	Tantalum	20	+20	938034
C81	0.1	Ceramic	50	+20	938406
C82	0.1	Ceramic	50	+20	938406
C83	4.7	Tantalum	35	-20	938033
C84	10p	Ceramic			938446
C85	6.8	Tantalum	35	+20	938030

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C86	1	Tantalum	35		938405
C87	1	Tantalum	35		938405
C88	4700p	Ceramic		+5	938437
C89	2200p	Ceramic		+5	938438
C90	220	Electrolytic	16	-	938436
C91	6.8	Tantalum	35	+20	938030
C92	470	Electrolytic	25	-	938439
C93	15	Tantalum	20	+20	938034
C94	0.1	Ceramic	50	+20	938406
C95	6.8	Tantalum	35	+20	938030
C96	6.8	Tantalum	35	+20	938030
C97	6.8	Tantalum	35	+20	938030
C98	6.8	Tantalum	35	+20	938030
C99	220	Electrolytic	16	-	938436
C100	0.1	Ceramic	50	+20	938406
C101	0.1	Ceramic	50	+20	938406
C102	15	Tantalum	20	+20	938034
C103	0.1	Ceramic	50	+20	938406
C104	0.1	Ceramic	50	+20	938406
C105	220	Electrolytic	16	-	938436
C106	6.8	Tantalum	35	+20	938030
C107	68	Tantalum	15	+20	938036
C108	220	Electrolytic	16	-	938436
C109	)	Part of Filter Assembly			
C110	)	FL7			
C111	0.1	Ceramic	50	+20	938406
C112	0.1	Ceramic	50	+20	938406
C113	15	Tantalum	20	+20	938034
C114		Not Used			
C115		Not Used			
C116		Not Used			
C117		Not Used			
C118		Not Used			
C119		Not Used			
C120	0.1	Ceramic	50	+20	938406



Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C121	0.1	Ceramic	50	+20	938406
<u>Diodes</u>					
CR1		1N916			913480
CR2		1N916			913480
CR3		1N916			913480
CR4		1N916			913480
CR5		1N916			913480
CR6		1N916			913480
CR7		1N916			913480
CR8		1N916			913480
CR9		1N916			913480
CR10		1N916			913480
CR11		1N916			913480
CR12		1N916			913480
CR13		1N916			913480
CR14		1N916			913480
CR15		1N916			913480
CR16		1N916			913480
CR17		1N916			913480
CR18		1N916			913480
CR19		1N916			913480
CR20		1N916			913480
CR21		1N916			913480
CR22		1N916			913480
CR23		1N916			913480
CR24		1N916			913480
CR25		1N916			913480
CR26		1N916			913480
CR27		1N916			913480
CR28		1N916			913480
CR29		1N916			913480
CR30		1N916			913480
CR31		1N916			913480

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Transistors</u>					
Q1		Silicon (2N5089)			938417
Q2		Silicon (2N5089)			938417
Q3		Silicon (2N5089)			938417
Q4		Silicon (T1S74)			938450
Q5		Silicon (2N3906)			914047
Q6		Silicon (2N5089)			938417
Q7		Silicon (2N5089)			938417
Q8		Silicon (2N5089)			938417
Q9		Silicon (2N5089)			938417
Q10		Not Fitted			
Q11		Not Fitted			
<u>Integrated Circuits</u>					
U1		4028			938454
U2		4042			938443
U3		40109			931054
U4		4042			938443
U5		40109			929328
U6		78L12			938455
U7		324			925944
U8		757			938442
U9		4013			933644
U10		CA3046			922907
U11		4066			930148
U12		4066			930148
U13		4042			938443
U14		324			925944
U15		4042			938443
U16		40109			931054
U17		324			925944
U18		MC1357P			938456
U19		4053			938457
U20		MC1496P			938427

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Integrated Circuits</u>					
U21		AD7524			938458
U22		1458			938459
U23		4042			938443
U24		339			929149
U25		CD22100			938460
U26		LM377N			938753
U27		7812			938445
U28		1458			938459
U29		1458			938459
U30		Not Fitted			
U31		Not Fitted			
<u>Transformers</u>					
T1					AT81401
<u>Inductors</u>					
L1		RF Coil			AT81400
L2		RF Coil			AT81400
L3		RF Coil			AT81408
L4	10 $\mu$ H	Choke		10	921209
<u>Connectors</u>					
J1		Plug, Coaxial RF			938429
J2		Plug, 40-way			938447
J3		Plug, Coaxial RF			938429
J4		Plug, Coaxial RF			938429
J5		Plug, Coaxial RF			938429
J6		Plug, Coaxial RF			938429
J7		Plug, 26-way			938449
J8		Plug, 34-way			938448

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
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Filters

Sideband:

	3KHz USB	BD 81059
	3KHz LSB	BD 81058
	2.7KHz USB Marine	BD 81052

Symmetrical:

	0.1KHz	BD 81023
	0.3KHz	BD 81053
	1.0KHz	BD 81054
	1.6KHz	BD 81015
	2.0KHz	BD 81016
	3.2KHz	BD 81055
	6.0KHz	BD 81056
	16KHz	BD 81057

MICROCOMPUTER BOARD A6A2 (ST 08203)

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R1	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R2	39k	Metal Oxide	$\frac{1}{4}$	2	900993
R3	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R4	47k	Metal Oxide	$\frac{1}{4}$	2	913496
R5	120k	Metal Oxide	$\frac{1}{4}$	2	915373
R6	82k	Metal Oxide	$\frac{1}{4}$	2	915189
R7	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R8	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R9	270	Metal Oxide	$\frac{1}{4}$	2	910391
R10	33k	Metal Oxide	$\frac{1}{4}$	2	913495
R11	47	Metal Oxide	$\frac{1}{4}$	2	917063
R12	47k	Metal Oxide	$\frac{1}{4}$	2	913496
R13	10	Metal Oxide	$\frac{1}{4}$	2	909145
R14	100k	Metal Oxide	$\frac{1}{4}$	2	915190
R15	33k	Metal Oxide	$\frac{1}{4}$	2	913495
R16	10k	Metal Oxide		2	914042
<u>Capacitors</u>			<u>V</u>		
C1	15p	Ceramic		+5	938522
C2	15p	Ceramic		+5	938522
C3	0.1	Ceramic	50	+20	938406
C4	0.1	Ceramic	50	+20	938406
C5	0.1	Ceramic	50	+20	938406
C6	0.1	Ceramic	50	+20	938406
C7	0.1	Ceramic	50	+20	938406
C8	0.1	Ceramic	50	+20	938406
C9	0.1	Ceramic	50	+20	938406
C10	0.1	Ceramic	50	+20	938406
C11		Not Used			
C12		Not Used			
C13	6.8	Tantalum	35	+20	938030
C14	6.8	Tantalum	35	+20	938030
C15	0.001	Ceramic		+20	938408
C16	4.7	Tantalum	10	+20	938033

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
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Diodes

CR1		Zener IN752			921717
CR2		IN916 Silicon			913480
CR3		IN270 Germanium			938523
CR4		IN916 Silicon			913480
CR5		IN916 Silicon			913480
CR6		IN916 Silicon			913480

Transistors

Q1		Silicon (2N3906)			914047
Q2		Silicon (2N3904)			914046
Q3		Silicon (2N3904)			914046
Q4		Silicon (2N3906)			914047
Q5		Silicon (2N3904)			914046
Q6		Silicon (T15-74)			938450

Integrated Circuits

U1	<i>mk.</i>	3850 <i>23</i>	<i>(pin</i>		938526
U2	<i>mk</i>	3853 <i>N</i>	<i>Static memory device</i>		938527
U3		74LS139			938528
U4		74LS245			938529
U5		2716 2kx8 EPROM	)	) programmed Devices	
U6		2716 2kx8 EPROM	)		
U7		2716 2kx8 EPROM	)		
U8		445L 1kx4 Bit RAM			938038
U9		445L 1kx4 Bit RAM			938038
U10		Not used			
U11		74LS10			938530
U12		74LS02			938531
U13		74LS04			938532
U14		74LS374			938533

Crystals

Y1	2MHz	Crystal			A07621
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Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Connectors</u>					
XU1		IC Socket 40 Pin DIP			938646
XU2		IC Socket 40 Pin DIP			938646
XU3		Not Used			
XU4		Not Used			
XU5		IC Socket 24 Pin DIP			938534
XU6		IC Socket 24 Pin DIP			938534
XU7		IC Socket 24 Pin DIP			938534
J1		Plug, 34-way			938524
J2		Socket, 50-way			938525
<u>Miscellaneous</u>					
BT1	2.4V DC	Battery Ni-Cad			938521

FIRST LO SYNTHESIZER BOARD A7 (ST80788)

Earlier Versions (ST08545) see Appendix 4

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>					
R1	47k	Metal Oxide		2	913496
R2	10	Metal Oxide		2	920736
R3	10k	Metal Oxide		2	914042
R4	150	Metal Oxide		2	910389
R5	200	Variable	0.5	20	938618
R6	<del>100</del> 47 $\Omega$	Metal Oxide		2	<del>910388</del> 917063
R7	68	Metal Oxide		2	916476
R8	68	Metal Oxide		2	916476
R9	22	Metal Oxide		2	920743
R10	1.5k	Metal Oxide		2	911166
R11	680	Metal Oxide		2	910113
R12	10	Metal Oxide		2	920736
R13	390	Metal Oxide		2	916331
R14	56	Metal Oxide		2	917055
R15	820	Metal Oxide		2	917065
R16	500	Variable	0.5	20	938426
R17	2.2k	Metal Oxide		2	917652
R18	47	Metal Oxide		2	917063
R19	1.0	Composition		5	938617
R20		Not Used			
R21	82	Metal Oxide		2	917057
R22	10	Metal Oxide		2	920736
R23	220	Metal Oxide		2	910390
R24	100	Metal Oxide		2	910388
R25	1k	Metal Oxide		2	913489
R26	100	Metal Oxide		2	910388
R27	100	Metal Oxide		2	910388
R28	1k	Metal Oxide		2	913489
R29	1k	Metal Oxide		2	913489
R30	820	Metal Oxide		2	917065



Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
R31	220	Metal Oxide		2	910390
R32	220	Metal Oxide		2	910390
R33	820	Metal Oxide		2	917065
R34	470	Metal Oxide		2	920758
R35	470	Metal Oxide		2	920758
R36	220	Metal Oxide		2	910390
R37	820	Metal Oxide		2	917065
R38	470	Metal Oxide		2	920758
R39	1k	Metal Oxide		2	913489
R40	470	Metal Oxide		2	920758
R41	470	Metal Oxide		2	920758
R42	470	Metal Oxide		2	920758
R43	<del>470</del> 820Ω	Metal Oxide		2	<del>920758</del> 917065
R44	<del>470</del> 330Ω	Metal Oxide		2	<del>920758</del> 915690
R45	<del>56k</del> 39K	Metal Oxide		2	<del>900952</del> 900993
R46	470	Metal Oxide		2	920758
R47	820	Metal Oxide		2	917065
R48	470	Metal Oxide		2	920758
R49	470	Metal Oxide		2	920758
R50	10k	Metal Oxide		2	914042
R51	<del>4.7k</del> 12K	Metal Oxide		2	<del>913490</del> 917952
R52	<del>2.2k</del> 2K7	Metal Oxide		2	917652 916568
R53	<del>3.3k</del> 4K7	Metal Oxide		2	<del>910111</del> 913490
R54	<del>3.3k</del> 4K7	Metal Oxide		2	<del>910111</del> 913490
R55	470	Metal Oxide		2	920758
R56	<del>2.2k</del> 1K8	Metal Oxide		2	<del>917652</del> 911148
R57	<del>3.9k</del> 3K8	Metal Oxide		2	<del>915074</del> 910111
R58	470	Metal Oxide		2	920758
R59	3.3k	Metal Oxide		2	910111
R60	22	Metal Oxide		2	920743
R61	1k	Metal Oxide		2	913489
R62	10k	Metal Oxide		2	914042
R63	1k	Metal Oxide		2	913489
R64	39k	Metal Oxide		2	900993
R65	15k	Metal Oxide		2	920645

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
R66	8.2k	Metal Oxide		2	918202
R67	18k	Metal Oxide		2	900994
R68	1k	Metal Oxide		2	913489
R69	3.3k	Metal Oxide		2	910111
R70	1k	Metal Oxide		2	913489
R71	82	Metal Oxide		2	917057
R72	10	Metal Oxide		2	920736
R73	10k	Metal Oxide		2	914042
R74	15k	Metal Oxide		2	920645
R75	15k	Metal Oxide		2	920645
R76	15k	Metal Oxide		2	920645
R77	100k	Metal Oxide		2	915190
R78	2.7k	Metal Oxide		2	916548
R79	12k	Metal Oxide		2	917952
R80	150k	Metal Oxide		2	917954
R81	10k	Metal Oxide		2	914042
R82	10k	Metal Oxide		2	914042
R83	10k	Metal Oxide		2	914042
R84	3.3k	Metal Oxide		2	910111
R85	100	Metal Oxide		2	910388
R86	470	Metal Oxide		2	920758
R87	47k	Metal Oxide		2	913496
R88	120k	Metal Oxide		2	915373
R89	47k	Metal Oxide		2	913496
R90	1k	Metal Oxide		2	913489
R91	150	Metal Oxide		2	910389
R92	10	Metal Oxide		2	920736
R93	680	Metal Oxide		2	910113
R94	10	Metal Oxide		2	920736
R95	1k	Metal Oxide		2	913489
R96		Not used			
R97		Not used			
R98	1k	Metal Oxide		2	913489
R99	680	Metal Oxide		2	916476
R100	100	Metal Oxide		2	910388
R101	10	Metal Oxide		2	920736

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>					
			<u>V</u>		
C1	6.8	Tantalum	35	20	938030
C2	6.8	Tantalum	35	20	938030
C3	6.8	Tantalum	35	20	938030
C4	6.8	Tantalum	35	20	938030
C5	.01	Ceramic	50	20	938053
C6	6.8	Tantalum	35	20	938030
C7	.01	Ceramic	50	20	938053
C8	6.8	Tantalum	35	20	938030
C9	.01	Ceramic	50	20	938053
C10		Not used			
C11	.01	Ceramic	50	20	938053
C12	6.8	Tantalum	35	20	938030
C13	.01	Ceramic	50	20	938053
C14	.01	Ceramic	50	20	938053
C15	.01	Ceramic	50	20	938053
C16	.01	Ceramic	50	20	938053
C17	.01	Ceramic	50	20	938053
C18	.01	Ceramic	50	20	938053
C19	.01	Ceramic	50	20	938053
C20	.01	Ceramic	50	20	938053
C21	.01	Ceramic	50	20	938053
C22	.01	Ceramic	50	20	938053
C23	.01	Ceramic	50	20	938053
C24	.01	Ceramic	50	20	938053
C25	.01	Ceramic	50	20	938053
C26	.01	Ceramic	50	20	938053
C27	.01	Ceramic	50	20	938053
C28	.01	Ceramic	50	20	938053
C29	.01	Ceramic	50	20	938053
C30	.01	Ceramic	50	20	938053
C31	.01	Ceramic	50	20	938053
C32	.01	Ceramic	50	20	938053
C33	.01	Ceramic	50	20	938053
C34	.01	Ceramic	50	20	938053
C35	.01	Ceramic	50	20	938406

Cct. Ref.	Value	Description	Rat.	Tol. %	Recal Part Number
C36	6.8	Tantalum	35	20	938030
C37	15	Tantalum	20	20	922516
C38	6.8	Tantalum	35	20	938030
C39	.01	Ceramic	50	20	938053
C40	.001	Ceramic	50	20	938408
C41	33	Tantalum	25	10	938606
C42	0.1	Ceramic	50	20	938406
C43	.001	Ceramic	50	20	938408
C44	.01	Ceramic	50	20	938053
C45	6.8	Tantalum	35	20	928030
C46	6.8	Tantalum	35	20	938030
C47	.01	Ceramic	50	20	938053
C48	.01	Ceramic	50	20	938053
C49	6.8	Tantalum	35	20	938030
C50	6.8	Tantalum	35	20	938030
C51	0.1	Ceramic	50	20	938406
C52	.001	Ceramic	50	20	938408
C53	150	Tantalum	6	20	938607
C54	.001	Ceramic	50	20	938408
C55	.001	Ceramic	50	20	938408
C56	.01	Ceramic	50	20	938053
C57	10p	Ceramic	500	5	917746
C58	.01	Ceramic	50	20	938053
C59	0.1	Ceramic	50	20	938406
C60	6.8	Tantalum	35	20	938030
C61	6.8	Tantalum	35	20	938030
C62	0.1	Ceramic	50	20	938406
C63	0.1	Ceramic	50	20	938406
C64	0.1	Ceramic	50	20	938406
C65	0.1	Ceramic	50	20	938406
C66	0.1	Ceramic	50	20	938406
C67	0.1	Ceramic	50	20	938406
C68	0.1	Ceramic	50	20	938406
C69	0.1	Ceramic	50	20	938406
C70	0.1	Ceramic	50	20	938406

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
C71	0.1	Ceramic	50	20	938406
C72	0.1	Ceramic	50	20	938406
C73	0.1	Ceramic	50	20	938406
C74	0.1	Ceramic	50	20	938406
C75	0.1	Ceramic	50	20	938406
C76	0.1	Ceramic	50	20	938406
C77	0.1	Ceramic	50	20	938406
C78	100p	Mica	350	5	938510
C79	6.8	Tantalum	35	20	938030
C80	27p	Mica	350	1p	902220
C81	.001	Polyester	400	10	938671
C82	.047	Polycarbonate	100	10	931129
C83	6.8	Tantalum	35	20	938030
C84	6.8	Tantalum	35	20	938030
C85	.001	Ceramic	50	20	938408
C86	1.0	Tantalum	35	10	938032
C87	1.0	Tantalum	35	10	938032
C88	15	Tantalum	20	20	910060
C89	.047	Ceramic	50	20	938511
C90	2200p	Ceramic	100	20	937903
C91	4700p	Mica	350	5	939350
C92	2200p	Mica	350	2	902197
C93	0.1	Ceramic	50	20	938406
C94	6.8	Tantalum	35	20	938030
C95	.001	Ceramic	50	20	938408
C96	0.1	Ceramic	50	20	938406
C97	1.0	Polycarbonate	100	20	938098
C98	3.3	Polycarbonate	63	10	938673
C99	.068	Polycarbonate	100	10	938672
C100	4.7p	Ceramic	100	0.5p	938794
C101	10p	Mica	500	5	921270
C102		Not used			
C103	.01	Ceramic	50	20	938053
C104	0.1	Ceramic	50	20	938406
C105	.001	Ceramic	50	20	938408

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Diodes</u>					
CR1		IN 916			913480
CR2		IN 916			913480
CR3		Varactor KV 2201			938614
CR4		Varactor KV 2201			938614
CR5		IN 916			913480
CR6		IN 916			913480
CR7		IN 916			913480
CR8		IN 916			913480
CR9		IN 916			913480
CR10		IN 916			913480
CR11		IN 916			913480
CR12		IN 916			913480
CR13		IN 916			913480
CR14		IN 916			913480
CR15		IN 916			913480
CR16		IN 916			913480
CR17		Not used			
CR18		Zener 9.1V, 400mW, IN757A			938674
CR19		IN 916			913480
CR20		IN 916			913480
CR21		IN 916			913480
CR22		IN 916			913480
CR23		HP 5082-2811 SCHOTTKY DIODE			919460
<u>Transistors</u>					
Q1		FET BFW11			921213
Q2		NPN RF 2N3866			917219
Q3		NPN RF 2N3866			917219
Q4		NPN Silicon 2N4921			938616
Q5		NPN Silicon 2N2369			906842
Q6		PNP Plastic 2N4126			912678
Q7		PNP Plastic 2N4126			912678
Q8		PNP Plastic 2N4126			912678
Q9		NPN Plastic 2N4124			915617
Q10		NPN Plastic 2N4124			915617

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
Q11		PNP Plastic 2N4126			912678
Q12		NPN Silicon 2N2369			906842
Q13		NPN Silicon 2N2369			906842
Q14		NPN Silicon 2N2369			906842
<u>Integrated Circuits</u>					
U1		4001			938561
U2		4503			935215
U3		74LS174			939351
U4		74LS02			938531
U5		74LS174			939351
U6		74LS174			939351
U7		* 4070			938837
U8		4094			934550
U9		4094			934550
U10		4094			934550
U11		4094			934550
U12		4094			934550
U13		4094			934550
U14		4094			934550
U15		82583			938622
U16		10k resistor network			938625
U17		4008			938620
U18		* 40174			938838
U19		74LS74			939352
U20		4006			938628
U21		4006			938628
U22		40108			938629
U23		DAC 20			938631
U24		UA723			925040
U25		Not used			
U26		10231			938630
U27		11C90			938600
U28		10231			938630
U29		74LS169			938627
U30		74LS168			938626

\* Use RCA, Motorola or National only.

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
U31		74LS168			938626
U32		10211			938633
U33		1458			938632
U34		LM339			929149
U35		AD518			938634
U36		DG201			934880
U37		1458			938632
U38		Not used			
U39		7812			938445
U40		3140E			932204
<u>Transformers</u>					
T1		RF wideband			AT81411
<u>Inductors</u>					
L1	6.8 $\mu$ H	Choke			919469
L2	6.8 $\mu$ H	Choke			919469
L3	6.8 $\mu$ H	Choke			919469
L4	6.8 $\mu$ H	Choke			919469
L5		Coil assembly			AT81189
L6	15 $\mu$ H	Choke		10	915850
<u>Connectors</u>					
J1		Plug 20-way			938675
J2		Plug, Coaxial 50 ohms			938429
J3		Plug, Coaxial 50 ohms			938429
J4		Plug, Coaxial 50 ohms			938429



2ND LO/BFO SYNTHESIZER - BOARD A8 (ST 08283/2)

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R1	20k	Variable		10	938593
R2	33	Metal Oxide	$\frac{1}{4}$	2	917060
R3	1.8k	Metal Oxide	$\frac{1}{4}$	2	911148
R4	6.8k	Metal Oxide	$\frac{1}{4}$	2	910112
R5	2.2k	Metal Oxide	$\frac{1}{4}$	2	916546
R6	680	Metal Oxide	$\frac{1}{4}$	2	910113
R7	4.7k	Metal Oxide	$\frac{1}{4}$	2	913490
R8	47	Metal Oxide	$\frac{1}{4}$	2	917063
R9	33	Metal Oxide	$\frac{1}{4}$	2	917060
R10	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R11	330	Metal Oxide	$\frac{1}{4}$	2	915690
R12	10	Metal Oxide	$\frac{1}{4}$	2	920736
R13	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R14		Not Used			
R15		Not Used			
R16		Not Used			
R17		Not Used			
R18	3.3k	Metal Oxide	$\frac{1}{4}$	2	910111
R19	1.8k	Metal Oxide	$\frac{1}{4}$	2	911148
R20	3.3k	Metal Oxide	$\frac{1}{4}$	2	910111
R21	1.8k	Metal Oxide	$\frac{1}{4}$	2	911148
R22	820	Metal Oxide	$\frac{1}{4}$	2	917065
R23	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R24	4.7k	Metal Oxide	$\frac{1}{4}$	2	913490
R25	4.7k	Metal Oxide	$\frac{1}{4}$	2	913490
R26	10	Metal Oxide	$\frac{1}{4}$	2	920736
R27	330	Metal Oxide	$\frac{1}{4}$	2	915690
R28	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R29	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R30		Not Used			

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R31		Not Used			
R32	47	Metal Oxide	$\frac{1}{4}$	2	917063
R33	680	Metal Oxide	$\frac{1}{4}$	2	910113
R34	680	Metal Oxide	$\frac{1}{4}$	2	910113
R35	820	Metal Oxide	$\frac{1}{4}$	2	917065
R36	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R37	3.3k	Metal Oxide	$\frac{1}{4}$	2	910111
R38	680	Metal Oxide	$\frac{1}{4}$	2	910113
R39	2.2k	Metal Oxide	$\frac{1}{4}$	2	916546
R40	470	Metal Oxide	$\frac{1}{4}$	2	920758
R41	3.3k	Metal Oxide	$\frac{1}{4}$	2	910111
R42		Not used			
R43	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R44	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R45	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R46	56	Metal Oxide	$\frac{1}{4}$	2	917055
R47	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R48	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R49	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R50	470	Metal Oxide	$\frac{1}{4}$	2	920758
R51	470	Metal Oxide	$\frac{1}{4}$	2	920758
R52	220	Metal Oxide	$\frac{1}{4}$	2	910390
R53	100	Metal Oxide	$\frac{1}{4}$	2	910388
R54	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R55	470	Metal Oxide	$\frac{1}{4}$	2	920758
R56	47	Metal Oxide	$\frac{1}{4}$	2	917063
R57	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R58	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R59	680	Metal Oxide	$\frac{1}{4}$	2	910113
R60	2.2k	Metal Oxide	$\frac{1}{4}$	2	916546
R61	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R62	3.3k	Metal Oxide	$\frac{1}{4}$	2	910111
R63	680	Metal Oxide	$\frac{1}{4}$	2	910113
R64	2.2k	Metal Oxide	$\frac{1}{4}$	2	916546
R65	18k	Metal Oxide	$\frac{1}{4}$	2	900994

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R66	560k	Metal Oxide	$\frac{1}{4}$	2	920831
R67	680	Metal Oxide	$\frac{1}{4}$	2	910113
R68	560k	Metal Oxide	$\frac{1}{4}$	2	920831
R69	330	Metal Oxide	$\frac{1}{4}$	2	915690
R70	330	Metal Oxide	$\frac{1}{4}$	2	915690
R71		Not Used			
R72	4.7k	Metal Oxide	$\frac{1}{4}$	2	913490
R73	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R74	1k	Metal Oxide	$\frac{1}{4}$	2	913489
R75	1.8k	Metal Oxide	$\frac{1}{4}$	2	911148
R76	820	Metal Oxide	$\frac{1}{4}$	2	917065
R77	820	Metal Oxide	$\frac{1}{4}$	2	917065
R78	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R79	3.3k	Metal Oxide	$\frac{1}{4}$	2	910111
R80	2.2k	Metal Oxide	$\frac{1}{4}$	2	916546
R81	4.7k	Metal Oxide	$\frac{1}{4}$	2	913490
R82	3.3k	Metal Oxide	$\frac{1}{4}$	2	910111
R83	47	Metal Oxide	$\frac{1}{4}$	2	917063
R84	1k	Metal Oxide	$\frac{1}{4}$	2	913489
<u>Capacitors</u>			<u>V</u>		
C1	6.8	Tantalum	35	+20	938030
C2	100p	Silver Mica	500	+5	938510
C3	0.1	Ceramic	50	+20	938406
C4	0.1	Ceramic	50	+20	938406
C5	0.01	Ceramic	50	+20	938053
C6	0.047	Ceramic	50	+20	938511
C7	0.047	Ceramic	50	+20	938511
C8	0.01	Ceramic	50	+20	938053
C9	0.1	Ceramic	50	+20	938406
C10	0.001	Ceramic	50	+20	938408
C11	0.1	Ceramic	50	+20	938406
C12	0.1	Ceramic	50	+20	938406
C13	0.1	Ceramic	50	+20	938406
C14	0.01	Ceramic	50	+20	938053
C15	0.1	Ceramic	50	+20	938406

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C16	0.1	Ceramic	50	+20	938406
C17	0.1	Ceramic	50	+20	938406
C18	0.1	Ceramic	50	+20	938406
C19	0.1	Ceramic	50	+20	938406
C20	12p	Silver Mica	350	+1p	902139
C21	0.1	Ceramic	50	+20	938406
C22	0.1	Ceramic	50	+20	938406
C23	6.8	Tantalum	35	+20	938030
C24	0.1	Ceramic	50	+20	938406
C25	3.3	Tantalum	15	10	938692
C26	0.1	Polycarbonate	100	+20	938585
C27	0.1	Ceramic	50	+20	938406
C28		Not used			938053
C29	39p	Silver Mica	350	+1p	902224
C30	0.1	Ceramic	50	+20	938406
C31	39p	Silver Mica	350	+1p	902224
C32	0.01	Ceramic	50	+20	<del>938053</del>
C33	68p	Silver Mica	350	+1p	902230
C34	100p	Silver Mica	500	+5	938510
C35	100p	Silver Mica	500	+5	938510
C36	0.001	Ceramic	50	+20	938408
C37	100p	Silver Mica	500	+5	938510
C38	5p	Silver Mica	500	+1/2p	938586
C39	0.1	Ceramic	50	+20	938406
C40	0.001	Ceramic	50	+20	938408
C41	68p	Silver Mica	350	+1p	902230
C42		Not used			
C43	0.1	Ceramic	50	+20	938406
C44	0.1	Ceramic	50	+20	938406
C45	0.1	Ceramic	50	+20	938406
C46	100p	Silver Mica	500	+5	938510
C47	0.1	Ceramic	50	+20	938406
C48	0.1	Ceramic	50	+20	938406
C49	6.8	Tantalum	35	+20	938030
C50	0.47	Polycarbonate	100	+20	938587

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C51	0.1	Polycarbonate	100	+20	938585
C52	0.01	Ceramic	50	+20	938053
C53	0.01	Ceramic	50	+20	938053
C54	6.8	Tantalum	35	+20	938030
C55	56p	Silver Mica	500	+5	938588
C56	100p	Silver Mica	500	+5	938510
C57	100p	Silver Mica	500	+5	938510
C58	0.01	Ceramic	50	+20	938053
C59	0.01	Ceramic	50	+20	938053
C60	0.01	Ceramic	50	+20	938053
C61	0.01	Ceramic	50	+20	938053
C62	0.1	Ceramic	50	+20	938406
C63	820p	Silver Mica	500	5	938589
C64	150p	Silver Mica	350	+1p	902238
C65	820p	Silver Mica	500	5	938589
C66	0.1	Ceramic	50	+20	938406
C67	0.1	Ceramic	50	+20	938406
C68	0.1	Ceramic	50	+20	938406
C69	0.1	Ceramic	50	+20	938406
C70	0.1	Ceramic	50	+20	938406
C71	0.1	Ceramic	50	+20	938406
C72	0.01	Ceramic	50	+20	938053
C73	0.1	Ceramic	50	+20	938406
C74	0.1	Ceramic	50	+20	938406
C75	0.1	Ceramic	50	+20	938406
C76	82p	Silver Mica	350	1p	902232
C77	330p	Silver Mica	350	2	902246
C78	0.01	Ceramic	50	+20	938053
C79	6.8	Tantalum	35	+20	938030
C80	0.01	Ceramic	50	+20	938053
C81	6.8	Tantalum	35	+20	938030
C82	0.01	Ceramic	50	+20	938053
C83	39p	Silver Mica	350	+1p	902224
C84	0.01	Ceramic	50	+20	938053
C85	0.01	Ceramic	50	+20	938053

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C86	39p	Silver Mica	350	+1p	902224
C87	0.001	Ceramic	50	+20	938408
<u>Diodes</u>					
CR1		IN4001			915266
CR2		IN916			913480
CR3		IN916			913480
CR4		ZC707			937650
CR5		IN916			913480
CR6		KV650 (MV1650)			938591
CR7		KV650 (MV1650)			938591
<u>Transistors</u>					
Q1		Silicon (2N2369)			906842
Q2		Silicon (2N2369)			906842
Q3		Silicon (2N2369)			906842
Q4		Silicon (2N2369)			906842
Q5		Silicon (2N2369)			906842
Q6		Silicon (2N2369)			906842
Q7		Silicon (2N3904)			914046
Q8		Silicon (2N4126)			912679
Q9		Silicon (2N3904)			914046
Q10		Silicon (2N2369)			906842
Q11		Silicon (2N2369)			906842
Q12		Not Used			
Q13		Not Used			
Q14		Not Used			
Q15		Silicon (2N3904)			914046
Q16		Silicon (2N4126)			912679
Q17		Silicon (2N3904)			914046
Q18		Silicon (2N3823)			938592
Q19		Silicon (2N3823)			938592
Q20		Silicon (2N2369)			406842
Q21		Silicon (2N2369)			906842

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Integrated Circuits</u>					
U1		UA723PC Voltage Regulator			925040
U2		74LS00			938594
U3		74LS74			939352
U4		74LS151			939355
U5		74LS151			939355
U6		74LS90			939358
U7		74LS74			939352
U8		74LS39C			938598
U9		74LS390			939353
U10		74LS74			939352
U11		74LS00			939356
U12		74LS02			938531
U13		74LS08			939357
U14		74LS160			939354
U15		74LS160			939354
U16		74LS160			939354
U17		74LS160			939354
U18		74LS160			939354
U19		11C90			938600
U20		74LS39C			938597
U21		4N28			938601
U22		10115 ECL			938602
<u>Inductors</u>					
L1	100 $\mu$	Choke		10	919471
L2	1 $\mu$	Choke		10	915849
L3	33 $\mu$	Choke		10	919465
L4		Coil Assembly			AT81409
L5	33 $\mu$	Choke		10	919465
L6	220 $\mu$	Choke		10	918986
L7	5.6 $\mu$	Choke		10	922275
L8	5.6 $\mu$	Choke		10	922275
L9		Coil Assembly			AT81397
L10		Coil Assembly			AT81397

Cct. Ref.	Value	Description	Rat.	Tol. %	Rcal Part Number
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Crystals

Y1		Oscillator TCXO (optional)			C07978
Y2		20000.00 KHz			AD80547

Connectors

J1		Plug, Coaxial RF			938429
J2		Plug, Coaxial RF			938429
J3		Plug, Coaxial RF			938429
J4		Plug, Coaxial RF			938429
J5		Plug, 26-way			938569
J6		Plug, Int/Ext Select			B06846-2
J7		Plug, Coaxial RF			938429
J8		Plug, Coaxial RF			938429



FRONT PANEL SWITCH AND DISPLAY BOARD A9A1 (ST08198)

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R1	10k	Metal Oxide	$\frac{1}{4}$	2	914042
R2	15k	Metal Oxide	$\frac{1}{4}$	2	920645
R3	15k	Metal Oxide	$\frac{1}{4}$	2	920645
<u>Capacitors</u>			<u>V</u>		
C1	6.8	Tantalum	35	+20	938030
C2	0.1	Ceramic	50	+20	938406
C3	6.8	Tantalum	35	+20	938030
C4	6.8	Tantalum	35	+20	938030
<u>Integrated Circuits</u>					
U1		LCD Mode			C08180
U2		LCD Frequency			C08181
U3		4054B			938464
U4		4054B			938464
U5		4056B			938465
U6		4056B			938465
U7		4054B			938464
U8		4054B			938464
U9		4054B			938464
U10		4056B			938465
U11		4056B			938465
U12		4056B			938465
U13		4056B			938465
U14		4056B			938465
U15		4056B			938465
U16		4056B			938465
U17		4056B			938465
U18		4056B			938465
U19		4056B			938465
U20		4056B			938465

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Integrated Circuits</u>					
U21		4054B			938464
U22		4054B			938464
U23		4054B			938464
U24		4056B			938465
U25		4056B			938465
U26		4054B			938464
U27		4514B			938466
U28		4054B			938464
U29		4047			938463
<u>Switches</u>					
SW1		RSM83-1A			938467
SW2		RSM83-1A			938467
SW3		RSM83-1A			938467
SW4		RSM83-1A			938467
SW5		RSM83-1A			938467
SW6		RSM83-1A			938467
SW7		RSM83-1A			938467
SW8		RSM83-1A			938467
SW9		RSM83-1A			938467
SW10		RSM83-1A			938467
SW11		RSM83-1A			938467
SW12		RSM83-1A			938467
SW13		RSM83-1A			938467
SW14		RSM83-1A			938467
SW15		RSM83-1A			938467
SW16		RSM83-1A			938467
SW17		RSM83-1A			938467
SW18		RSM83-1A			938467
SW19		RSM83-1A			938467
SW20		RSM83-1A			938467

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
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Switches

SW21		RSM83-1A			938467
SW22		RSM83-1A			938467
SW23		RSM83-1A			938467
SW24		RSM83-1A			938467
SW25		RSM83-1A			938467

Switch Keytops (serial numbers 7400 onwards)

Switchtop	Part No.	Switchtop	Part No.	Switchtop	Part No.
ENTER	BD81103/36	STORE	BD81103/58	6/MAN	BD81103/67
AM	BD81103/45	ISB	BD81103/59	7/SHORT	BD81103/68
FM	BD81103/46	LSB	BD81103/60	8/MED	BD81103/69
CW	BD81103/47	USB	BD81103/61	9/LONG	BD81103/70
CHAN	BD81103/53	1/BW1	BD81103/62	0/AUX	BD81103/71
RCL	BD81103/54	2/BW2	BD81103/63	FREQ.	BD81103/79
TUNE	BD81103/55	3/BW3	BD81103/64	CHAN. SCAN	BD81103/80
BFO	BD81103/56	4/BW4	BD81103/65		
REM	BD81103/57	5/BW5	BD81103/66		

Connectors

P1	Cable Assembly Comprising:	BE08290
	PCB Connector, 50-way	927270
	Ribbon cable, 50-way	927301
	Socket, 50-way	934413
	Clamp, strain relief	934414

FRONT PANEL MEMORY BOARD A9A2 (ST08234)

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R1	4.7k	Metal Oxide	$\frac{1}{4}$	+2	913490
R2	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R3	270	Metal Oxide	$\frac{1}{4}$	+2	910391
R4	47k	Metal Oxide	$\frac{1}{4}$	+2	913496
R5	47k	Metal Oxide	$\frac{1}{4}$	+2	913496
R6	68k	Metal Oxide	$\frac{1}{4}$	+2	916478
R7	68k	Metal Oxide	$\frac{1}{4}$	+2	916478
R8	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R9	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R10	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R11	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R12	1M	Metal Oxide	$\frac{1}{4}$	5	929119
R13	1M	Metal Oxide	$\frac{1}{4}$	5	929119
R14	33k	Metal Oxide	$\frac{1}{4}$	+2	913495
R15	33k	Metal Oxide	$\frac{1}{4}$	+2	913495
R16	100k	Metal Oxide	$\frac{1}{4}$	+2	915190
R17	12k	Metal Oxide	$\frac{1}{4}$	+2	917952
R18	12k	Metal Oxide	$\frac{1}{4}$	+2	917952
R19	100k	Metal Oxide	$\frac{1}{4}$	+2	915190
R20	22k	Metal Oxide	$\frac{1}{4}$	+2	913493
R21	22k	Metal Oxide	$\frac{1}{4}$	+2	913493
R22	180	Metal Oxide	$\frac{1}{4}$	+2	915465
R23	180	Metal Oxide	$\frac{1}{4}$	+2	915465
R24	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R25	10k	Metal Oxide	$\frac{1}{4}$	+2	914042
R26	1k	Metal Oxide	$\frac{1}{4}$	+2	913489
R27	47	Metal Oxide	$\frac{1}{4}$	+2	917063

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>			<u>V</u>		
C1	0.1	Ceramic	50	+20	938406
C2	0.1	Ceramic	50	+20	938406
C3	0.1	Ceramic	50	+20	938406
C4		Not Used			
C5	0.1	Ceramic	50	+20	938406
C6	330	Electrolytic	10	+20	938555
C7	100	Electrolytic	40		938554
C8	100	Electrolytic	40		938554
C9	0.1	Ceramic	50	+20	938406
C10	15p	Ceramic		5	938522
C11	15p	Ceramic		5	938522
C12	15	Tantalum	20	20	938034
C13	1	Tantalum	35	20	938405
C14	100p	Ceramic		10	938556
C15	100p	Ceramic		10	938556
<u>Diodes</u>					
CR1		IN916			913480
CR2		IN4001			915266
CR3		IN916			913480
CR4		IN916			913480
CR5		IN725A Zener,	30V	5%	937983
CR6		IN916			913480
CR7		IN916			913480
<u>Transistors</u>					
Q1		Silicon (2N2906A)			920963
Q2		Silicon (2N2906A)			920963
Q3		Silicon (2N3906)			914047
Q4		Silicon (2N2369)			906842

Cct. Ref.	Value	Description	Rat.	Tol. %	Rcal Part Number
<u>Integrated Circuits</u>					
U1	10k	Resistor Network 10 Pin			938558
U2	10k	Resistor Network 10 Pin			938558
U3		4066			930148
U4		4013			933644
U5		4081 B			938559
U6		4011			938560
U7		4001			938561
U8		4514B			938466
U9		MC14528BCL			938562
U10		4051			929383
U11		$\mu$ A79M12			938563
U12		4516			938564
U13		ER3400			934622
U14		ER3400			934622
U15		4503			935215
U16		4503			935215
U17		4503			935215
U18		4503			935215
U19		4042			938443
U20		4042			938443
U21		40107			928188
U22	10k	Resistor Network			938565
U23	10k	Resistor Network			938565
U24		4076B			938566
U25		4076B			938566
U26		4076B			938566
U27		4076B			938566
U28		LM339			929149
U29		OPB706A			938567
U30		OPB706A			938567
<u>Connectors</u>					
J1		Plug 26-way			938569
J2		Plug 50-way			938570

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Switches</u>					
S1		DIP, SPST.			938557
<u>Cable and Connector Assemblies</u>					
W1		34-way comprising:			B08227
		PCB Connector, 34-way			938571
		Ribbon Cable, 34-way			927430
		Socket, 34-way			934213
		Clamp, Strain Relief			934124
W2		26-way comprising:			B08368
		PCB Connector, 26-way			938572
		Ribbon Cable, 26-way			927429
		Socket, 26-way			935019
		Clamp, Strain Relief			935020
W3		Not used			
W4		Not used			
W5		20-way comprising:			B08714
		PCB connector, 20-way			938062
		Ribbon cable, 20-way			927303
		Socket, 20-way			935017
		Clamp, Strain Relief			935018
W6		40-way comprising:			B08363
		PCB connector, 40-way			938574
		Ribbon Cable, 40-way			927302
		Socket, 40-way			935021
		Clamp, Strain Relief			935022

AC POWER SUPPLY MODULE A10 (ST80784)

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Resistors</u>			<u>W</u>		
R1	33	Metal Oxide	$\frac{1}{4}$	2	917060
<u>Capacitors</u>			<u>V</u>		
C1	12,500	Electrolytic	25	-10+75	938486
C2	1	Tantalum	35	+20	938487
C3	1	Tantalum	35	+20	938487
C4	5200	Electrolytic	40	-10+75	938488
C5	1	Tantalum	35	+20	938487
C6	1	Tantalum	35	+20	938487
C7	5200	Electrolytic	40	-10+75	938488
C8	1	Tantalum	35	+20	938487
C9	6.8	Tantalum	35	+20	938490
C10	1200	Electrolytic	50	-10+75	938489
C11		Not used			
C12		Not used			
C13	1	Tantalum	35	+20	938487
C14	1	Tantalum	35	+20	938487
C15	10n	Disc Ceramic	250	+40-20	916187
<u>Diodes</u>					
CR1		VH148			938491
CR2		VS148			938492
CR3		VS148			938492
VR1		Zener 6.8V			918491
<u>Integrated Circuits</u>					
U1		$\mu$ A78H05KC +5V Regulator			938498
U2		$\mu$ A7815KC +15V Regulator			932797
U3		$\mu$ A7915KC -15V Regulator			938499
U4		Not used			
U5		7812K2 +12V Regulator			938501



Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Transformers</u>					
T1					CT81412
<u>Connectors</u>					
J1		Plug, 3-way, filtered inlet			938496
J2		Socket, 9-way			918090
<u>Miscellaneous</u>					
F1, F2	½A	Fuse 250V Slo Blo			938494
XF2		Fuse Holder - Clip Type			938495
		20V Regulator Board			ST08717
		Comprising:			
R1	4.7k	Metal Oxide		2	913490
C1	.01	Ceramic	50	20	938053
C2	6.8	Tantalum	35	20	938030
C3	1	Tantalum	35	20	938405
C4	6.8	Tantalum	35	20	938030
CR1		Zener 27V, 400mW			919300
Q1		MIE 800			938641
U1		78M20			938642
		A10A1 Connector assembly			B08160
		comprising:			
		Socket, 25-way			930819
		Connection Board			BA80777
		Mating socket for J1 (POWER IN)			930766

FREQUENCY STANDARD MODULE A11 (ST08140)

Cct. Ref.	Value	Description	Rat.	Tol. %	Racal Part Number
<u>Capacitors</u>					
C1	0.01	Ceramic		+20	938053
C2	0.01	Ceramic		+20	938053
<u>Inductors</u>					
L1	15 $\mu$ H	Choke Fixed RF			915850
<u>Frequency Standard</u>					
Y1		9442/12			933706
<u>Connectors</u>					
J1		Plug, 3-way			938471
J2		Plug, Coaxial RF			938472
XY1		Socket 7-way			938473