



skanti

INSTRUCTION MANUAL

SSB RECEIVER

Type R400

402

PARTS LIST
FOR
HF COIL SECTION



3C 1	0.1 pF	10%	250V	Polyes.
3C 2	47 nF	-20/+80%	12V	Cer.
3C 3	27 pF	5%	400V	Cer.N150
3C 4-10	0.1 uF	10%	250V	Polyes.
3C11	47 nF	-20/+80%	12V	Cer.
3C12	5.2 pF	$\pm 0.25pF$	400V	Cer.
3C13	160 pF	5%	400V	Cer.
3C14	91 pF	5%	400V	Cer.
3C15	82 pF	5%	400V	Cer.
3C16	68 pF	5%	400V	Cer.
3C17	56 pF	5%	400V	Cer.
3C18	51 pF	5%	400V	Cer.N150
3C19	39 pF	5%	400V	Cer.N150
3C20	47 nF	-20/+80%	12V	Cer.
3C21	6.8 pF	$\pm 0.25pF$	400V	Cer.N150
3C22-23	3.3 pF	$\pm 0.25pF$	400V	Cer.
3C24	2.2 pF	$\pm 0.25pF$	400V	Cer.
3C25	2.2 pF	$\pm 0.25pF$	400V	Cer.
3C26	2.2 pF	$\pm 0.25pF$	400V	Cer.
3C27	2.2 pF	$\pm 0.25pF$	400V	Cer.
3C28	2.2 pF	$\pm 0.25pF$	400V	Cer.
3C29	5.6 pF	$\pm 0.25pF$	400V	Cer.N150
3C30	3.9 pF	$\pm 0.25pF$	400V	Cer.N150
3C31	3.3 pF	$\pm 0.25pF$	400V	Cer.N150
3C32	2.7 pF	$\pm 0.25pF$	400V	Cer.
3C33	2.7 pF	$\pm 0.25pF$	400V	Cer.NP0
3C34-35	2.2 pF	$\pm 0.25pF$	400V	Cer.NP0
3C36	47 nF	-20/+80%	12V	Cer.
3C37	160 pF	5%	400V	Cer.N150
3C38	91 pF	5%	400V	Cer.
3C39	68 pF	5%	400V	Cer.
3C40	68 pF	5%	400V	Cer.
3C41	56 pF	5%	400V	Cer.
3C42	51 pF	5%	400V	Cer.N150
3C43	39 pF	5%	400V	Cer.N150
3C44	47 pF	5%	400V	Cer.
3C45	47 nF	-20/+80%	12V	Cer.
3C46	6.8 pF	$\pm 0.25pF$	400V	Cer.N150
3C47-48	3.3 pF	$\pm 0.25pF$	400V	Cer.
3C49	2.7 pF	$\pm 0.25pF$	400V	Cer.
3C50	2.2 pF	$\pm 0.25pF$	400V	Cer.
3C51	2.2 pF	$\pm 0.25pF$	400V	Cer.
3C52	2.2 pF	$\pm 0.25pF$	400V	Cer.NP0
3C53	5.6 pF	$\pm 0.25pF$	400V	Cer.N150
3C54	3.9 pF	$\pm 0.25pF$	400V	Cer.N150
3C55	3.3 pF	$\pm 0.25pF$	400V	Cer.N150
3C56	2.7 pF	$\pm 0.25pF$	400V	Cer.
3C57-59	2.2 pF	$\pm 0.25pF$	400V	Cer.NP0
3C60	33 pF	5%	400V	Cer.
3C61	160 pF	5%	400V	Cer.N150
3C62	91 pF	5%	400V	Cer.
3C63	82 pF	5%	400V	Cer.



3C64	68 pF	5%	400V	Cer.
3C65	56 pF	5%	400V	Cer.
3C66	51 pF	5%	400V	Cer.N150
3C67	39 pF	5%	400V	Cer.N150
3C68	150 pF	5%	400V	Cer.N150
3C69	47 nF	-20/+80%	12V	Cer.
3C70	12 pF	5%	400V	Cer.N150
3C71	100 pF	5%	400V	Cer.N150
3C72-79	47 nF	-20/+80%	12V	Cer.
3C80	4.7 pF	±0.25pF	400V	Cer.N150
3C81-87	47 nF	-20/+80%	12V	Cer.
3C88	4.7 nF	-20/+80%	30V	Cer.
3C89	180 pF	5%	400V	Cer.N150
3C90	150 pF	5%	400V	Cer.N150
3C91	110 pF	5%	400V	Cer.N150
3C92	100 pF	5%	400V	Cer.N150
3C93	75 pF	5%	400V	Cer.N150
3C94	56 pF	5%	400V	Cer.N150
3C95	39 pF	5%	400V	Cer.N150
3C96	5.6 pF	±0.25pF	400V	Cer.N150
3C97-98	3.3 pF	±0.25pF	400V	Cer.N150
3C99	2.7 pF	±0.25pF	400V	Cer.NP0
3C100-101	2.2 pF	±0.25pF	400V	Cer.NP0
3C102	1.8 pF	±0.25pF	400V	Cer.NP0
3C103	5.6 pF	±0.25pF	400V	Cer.N150
3C104	3.9 pF	±0.25pF	400V	Cer.N150
3C105	3.3 pF	±0.25pF	400V	Cer.N150
3C106	2.7 pF	±0.25pF	400V	Cer.NP0
3C107-108	2.2 pF	±0.25pF	400V	Cer.NP0
3C109	1.8 pF	±0.25pF	400V	Cer.NP0
3C110	47 nF	-20/+80%	12V	Cer.
3C111	180 pF	5%	400V	Cer.N150
3C112	150 pF	5%	400V	Cer.N150
3C113	110 pF	5%	400V	Cer.N150
3C114	100 pF	5%	400V	Cer.N150
3C115	75 pF	5%	400V	Cer.N150
3C116	56 pF	5%	400V	Cer.N150
3C117	39 pF	5%	400V	Cer.N150
3C118	47 nF	-20/+80%	12V	Cer.
3C119-125	0.1 nF	10%	250V	Polyes.
3C126	47 nF	-20/+80%	12V	Cer.
3C127	150 pF	5%	400V	Cer.

3D 1-24 1S920
3D25 BCX79 C6V8 Zener

3IC 1 S1010C

SL 1 COIL
SL 2 COIL
SL 3 COIL
SL 4 COIL
SL 5 COIL

SKANTI CODE: R-0204
SKANTI CODE: R-0207
SKANTI CODE: R-0207
SKANTI CODE: R-0207
SKANTI CODE: R-0182



3L 6	COIL	SKANTI CODE: R-0185
3L 7	COIL	SKANTI CODE: R-0186
3L 8	COIL	SKANTI CODE: R-0186
3L 9	COIL	SKANTI CODE: R-0186
3L10-11	COIL	SKANTI CODE: R-0187
3L12-13	COIL	SKANTI CODE: R-0208
3L14	COIL	SKANTI CODE: R-0209
3L15-16	1 ml RF CLOKE	10%

3R 1- 7	1.0 kohm	5%	1/8W	Car.
3R 8-11	150 ohms	5%	1/8W	Car.
3R12-18	1.0 kohm	5%	1/8W	Car.
3R19	150 ohms	5%	1/8W	Car.
3R20	330 ohms	5%	1/8W	Car.
3R21	150 ohms	5%	1/8W	Car.
3R22-28	1.0 kohm	5%	1/8W	Car.
3R29	1.8 kohms	5%	1/8W	Car.
3R30-36	1.0 kohm	5%	1/8W	Car.
3R37	47 ohms	5%	1/8W	Car.
3R38	100 ohms	5%	1/8W	Car.
3R39	33 ohms	5%	1/8W	Car.

3SL 1- 7 LAMP A9A-C

3T 1	TRANSFORMER	SKANTI CODE: R-0176
3T 2	TRANSFORMER	SKANTI CODE: R-0177
3T 3	TRANSFORMER	SKANTI CODE: R-0180
3T 4	TRANSFORMER	SKANTI CODE: R-0180
3T 5	TRANSFORMER	SKANTI CODE: R-0180
3T 6- 7	TRANSFORMER	SKANTI CODE: R-0181
3T 8	TRANSFORMER	SKANTI CODE: R-0188
3T 9	TRANSFORMER	SKANTI CODE: R-0191
3T10	TRANSFORMER	SKANTI CODE: R-0192
3T11	TRANSFORMER	SKANTI CODE: R-0192
3T12	TRANSFORMER	SKANTI CODE: R-0192
3T13-14	TRANSFORMER	SKANTI CODE: R-0193
3T15	TRANSFORMER	SKANTI CODE: R-0200
3T16	TRANSFORMER	SKANTI CODE: R-0201
3T17	TRANSFORMER	SKANTI CODE: R-0202
3T18	TRANSFORMER	SKANTI CODE: R-0191
3T19	TRANSFORMER	SKANTI CODE: R-0192
3T20-21	TRANSFORMER	SKANTI CODE: R-0203
3T22	TRANSFORMER	SKANTI CODE: R-0194
3T23	TRANSFORMER	SKANTI CODE: R-0195
3T24	TRANSFORMER	SKANTI CODE: R-0196
3T25	TRANSFORMER	SKANTI CODE: R-0197
3T26	TRANSFORMER	SKANTI CODE: R-0198
3T27-28	TRANSFORMER	SKANTI CODE: R-0199

PARTS LIST
FOR
IF AMPLIFIERS



5C 1	47 nF	-20/+80%	12V	Cer.
5C 2	10 nF	-20/+80%	30V	Cer.
5C 3	47 nF	-20/+80%	12V	Cer.
5C 4- 6	0.1 μ F	-20/+80%	12V	Cer.
5C 7	100 pF	\pm 5%	400V	Cer.N150
5C 8	22 pF	\pm 5%	400V	Cer.N150
5C 9-11	0.1 μ F	-20/+80%	12V	Cer.
5C12	360 pF	1%	125V	Polyst.
5C13	1 nF	1%	125V	Polyst.
5C14-18	0.1 μ F	-20/+80%	12V	Cer.
5C19	10 nF	-20/+80%	30V	Cer.
5C20	0.22 μ F	-20/+80%	12V	Cer.
5C21	0.1 μ F	-20/+80%	12V	Cer.
5C22	0.22 μ F	-20/+80%	12V	Cer.

5D 1	BZY88 C6V8	Zener
5D 2- 6	1S920	

5IC 1	SL612C
5IC 2	TBA120
5IC 3	CA3026

5L 1	1 mH	RF CHOKE	\pm 10%
5L 2	22 μ H	RF CHOKE	\pm 10%
5L 3	47 μ H	RF CHOKE	\pm 10%

5R 1- 2	100 ohms	5%	1/8W	Car.
5R 3	56 ohms	5%	1/8W	Car.
5R 4	47 ohms	5%	1/8W	Car.
5R 5	8.2 kohms	5%	1/8W	Car.
5R 6	1.8 kohms	5%	1/8W	Car.
5R 7- 8	680 ohms	5%	1/8W	Car.
5R 9	100 ohms	5%	1/8W	Car.
5R10	390 ohms	5%	1/8W	Car.
5R11	270 ohms	5%	1/8W	Car.
5R12	390 ohms	5%	1/8W	Car.
5R13	100 ohms	5%	1/8W	Car.
5R14-15	3.9 kohms	5%	1/8W	Car.
5R16-17	180 ohms	5%	1/8W	Car.
5R18	220 ohms	5%	1/8W	Car.
5R19-20	100 ohms	5%	1/8W	Car.
5R21	220 ohms	5%	1/8W	Car.
5R22	68 ohms	5%	1/8W	Car.
5R23	180 ohms	5%	1/8W	Car.
5R24	82 ohms	5%	1/8W	Car.
5R25-26	3.9 kohms	5%	1/8W	Car.



5R27	100 ohms	5%	1/8W	Car.
5R28	4.7 kohms	5%	1/8W	Car.
5R29	2.7 kohms	5%	1/8W	Car.
5R30	1 kohm	5%	1/8W	Car.
5R31	680 ohms	5%	1/8W	Car.
5R32	4.7 kohms	5%	1/8W	Car.
5R33	180 ohms	5%	1/8W	Car.
5R34	10 kohms	5%	1/8W	Car.
5R35	2.2 kohms	5%	1/8W	Car.
5R36	100 ohms	5%	1/8W	Car.
5R37	1 kohm	5%	1/8W	Car.

5TR 1- 2 BF185

5X 1	FILTER	939 BB	AM <i>Telex 1.3985 MHz</i>
5X 2	FILTER	939 DB	SSB

PARTS LIST
FOR
LOOP MIXER AND PHASE DETECTOR



14C 1	0.1 μ F	-20/+80%	12V	Cer.
14C 2	10 nF	-20/+80%	30V	Cer.
14C 3	10 nF	-20/+80%	30V	Cer.
14C 4	0.1 μ F	10%	250V	Polyes.
14C 5	0.1 μ F	-20/+80%	12V	Cer.
14C 6	39 pF	5%	400V	Cer.N150
14C 7	33 pF	5%	400V	Cer.N150
14C 8	10 nF	-20/+80%	30V	Cer.
14C 9	10 nF	-20/+80%	30V	Cer.
14C10	4.7 nF	-20/+80%	30V	Cer.
14C11	22 nF	-20/+80%	30V	Cer.
14C12	18 pF	5%	400V	Cer.N150
14C13	0.1 μ F	-20/+80%	12V	Cer.
14C14	10 nF	-20/+80%	30V	Cer.
14C15	0.1 μ F	-20/+80%	12V	Cer.
14C16	10 nF	-20/+80%	30V	Cer.
14C17	0.1 μ F	-20/+80%	12V	Cer.
14C18	0.1 μ F	-20/+80%	12V	Cer.
14C19	0.1 μ F	-20/+80%	12V	Cer.
14C20	0.1 μ F	-20/+80%	12V	Cer.
14C21	47 pF	5%	400V	Cer.N150
14C22	47 pF	5%	400V	Cer.N150
14C23	100 pF	5%	400V	Cer.N150
14C24	22 μ F	20%	15V	Tan.
14C25	0.1 μ F	-20/+80%	12V	Cer.
14C26	100 pF	5%	400V	Cer.N150
14D 1	1S920			
14D 2	1S920			
14D 3	1S920			
14D 4	1S920			
14D 5	1S920			
14D 6	1S920			
14D 7	AAZ 17			
14D 8	AAZ 17			
14D 9-10	1S920			
14IC 1	SL641C			
14L 1	100 μ H	RF CHOKE	10%	
14L 2	100 μ H	RF CHOKE	10%	
14L 3	COIL		SKANTI CODE: R-0241	
14L 4	100 μ H	RF CHOKE	10%	
14L 5	1 ml	RF CHOKE	10%	

PARTS LIST
FOR
FILTERS FOR 4.2-9.8 AND 12.6 MHz



15C 1- 2	22 nF	-20/+80%	30V	Cer.
15C 3- 5	47 nF	-20/+80%	12V	Cer.
15C 6	0.1 μ F	-20/+80%	12V	Cer.
15C 7	330 pF	1%	125V	Polyst.
15C 8	1 nF	1%	125V	Polyst.
15C 9	330 pF	1%	125V	Polyst.
15C10	910 pF	1%	125V	Polyst.
15C11	1.8 pF	± 0.25 pF	400V	Cer.NP0
15C12	5.6 pF	± 0.25 pF	400V	Cer.N150
15C13	270 pF	1%	125V	Polyst.
15C14	0.1 μ F	-20/+80%	12V	Cer.
15C15	330 pF	1%	125V	Polyst.
15C16	1 nF	1%	125V	Polyst.
15C17	330 pF	1%	125V	Polyst.
15C18	910 pF	1%	125V	Polyst.
15C19	2.7 pF	± 0.25 pF	400V	Cer.NP0
15C20-21	47 nF	-20/+80%	12V	Cer.
15C22	330 pF	1%	125V	Polyst.
15C23	1.2 nF	1%	125V	Polyst.
15C24-25	47 nF	-20/+80%	12V	Cer.

15D 1-10 1S920

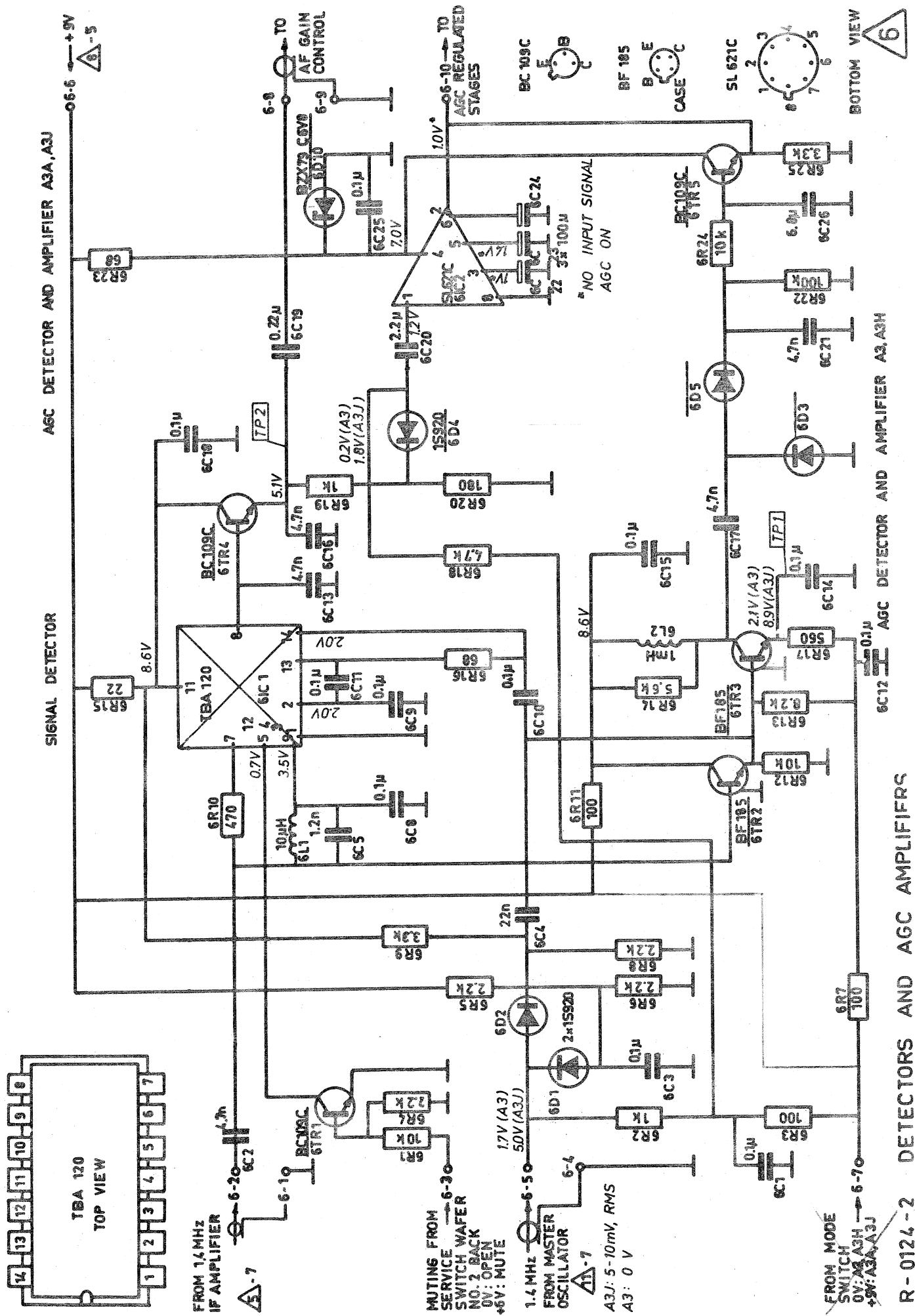
15L 1	COIL		SKANTI CODE: R-0215
15L 2	COIL	<i>12 Turn 12 x 0.40</i>	SKANTI CODE: R-0216
15L 3	COIL		SKANTI CODE: R-0215
15L 4	COIL	<i>12 Turn 12 x 0.40</i>	SKANTI CODE: R-0216
15L 5	COIL		SKANTI CODE: R-0235
15L 6	COIL		SKANTI CODE: R-0217

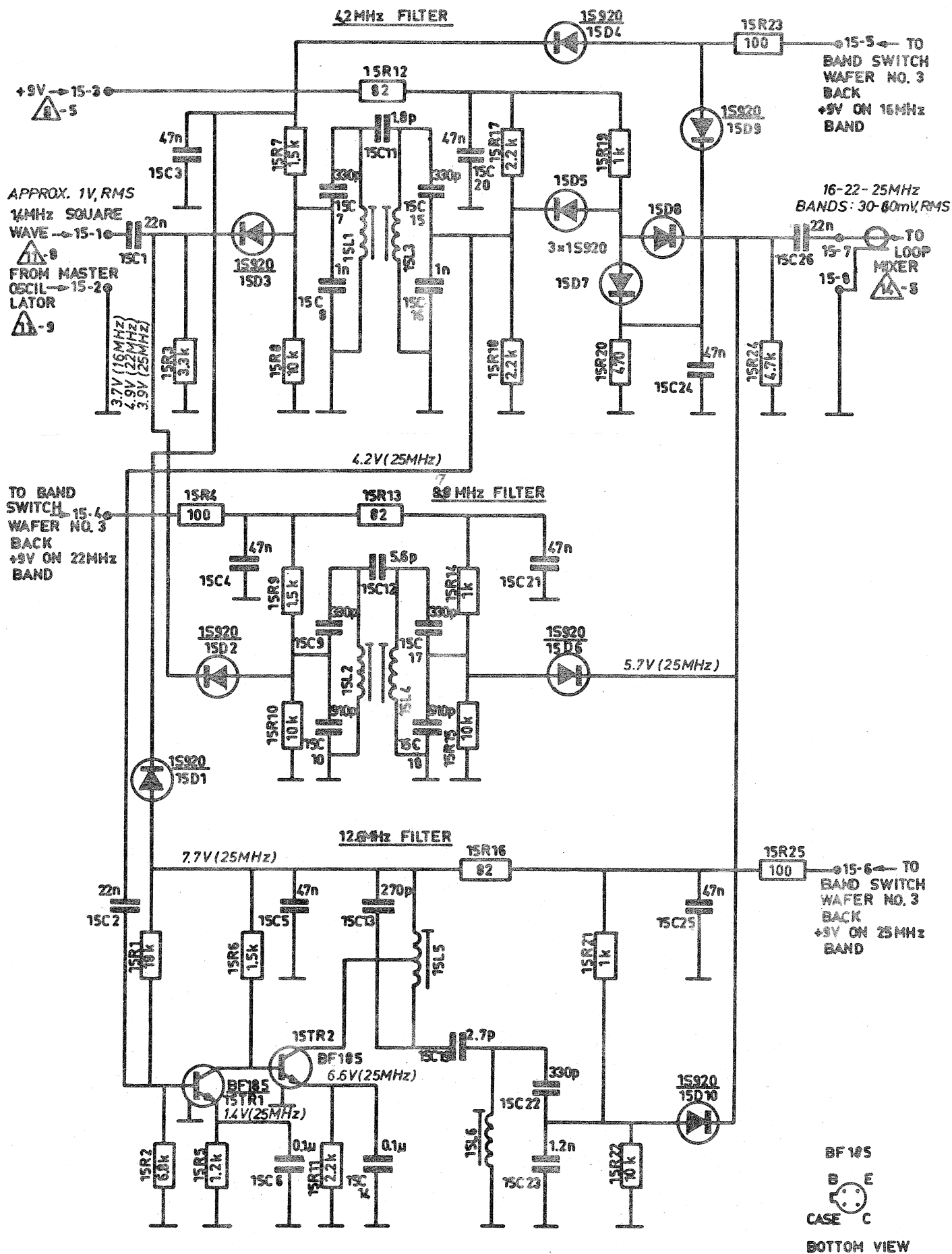
15R 1	18 kohms	5%	1/8W	Car.
15R 2	6.8 kohms	5%	1/8W	Car.
15R 3	3.3 kohms	5%	1/8W	Car.
15R 4	100 ohms	5%	1/8W	Car.
15R 5	1.2 kohms	5%	1/8W	Car.
15R 6- 7	1.5 kohms	5%	1/8W	Car.
15R 8	10 kohms	5%	1/8W	Car.
15R 9	1.5 kohms	5%	1/8W	Car.
15R10	10 kohms	5%	1/8W	Car.
15R11	2.2 kohms	5%	1/8W	Car.
15R12-13	82 ohms	5%	1/8W	Car.
15R14	1.0 kohm	5%	1/8W	Car.
15R15	10 kohms	5%	1/8W	Car.
15R16	82 ohms	5%	1/8W	Car.
15R17-18	2.2 kohms	5%	1/8W	Car.

PARTS LIST
FOR
CHASSIS (electrical parts)

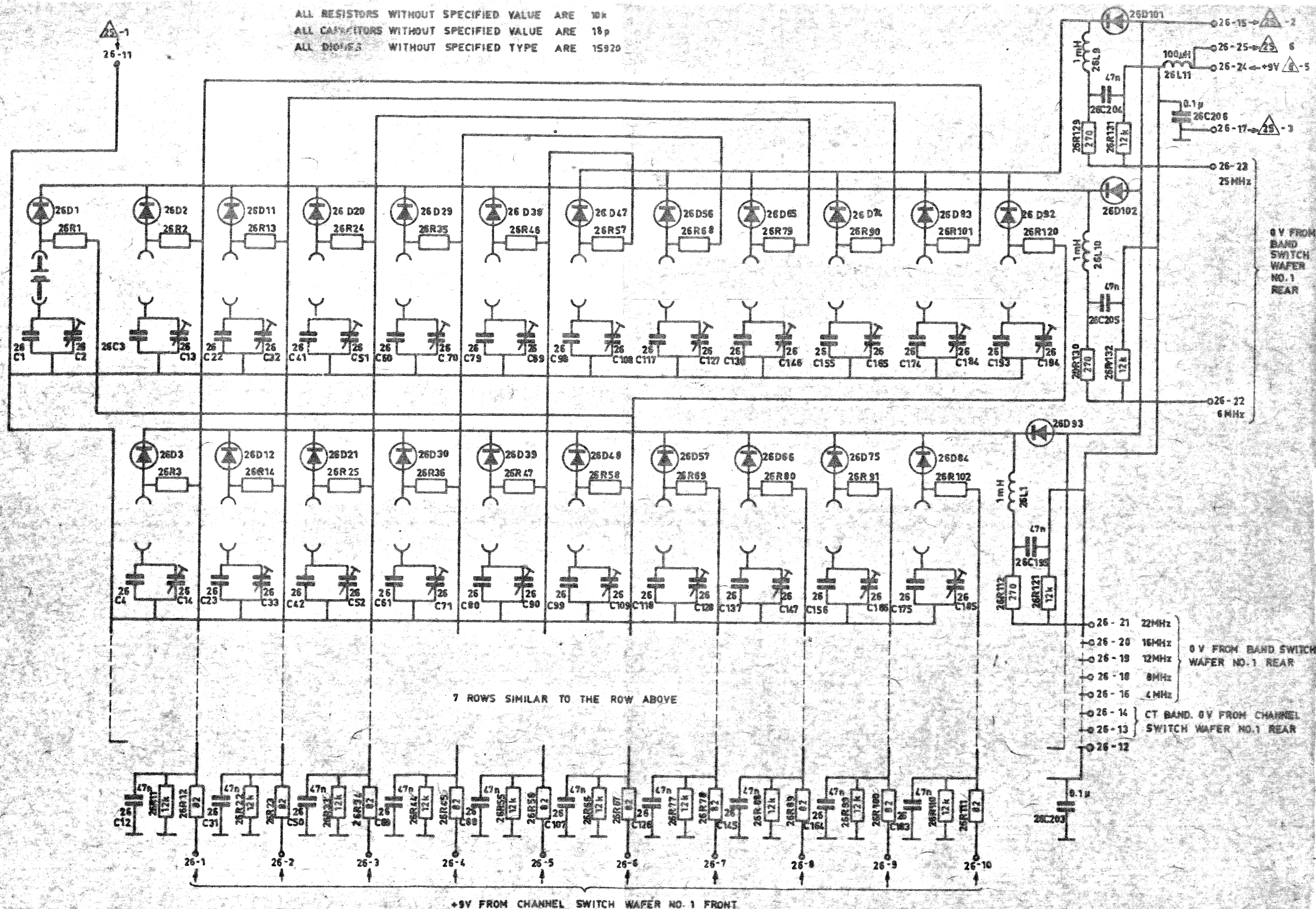


17C 1	15 nF	-20/+80%	400V	Cer.
17C 2	0.1 μ F	10%	250V	Polyes.
17C 3	15 nF	-20/+80%	400V	Cer.
17C 4	47 nF	10%	250V	Polyes.
17C 5	0.1 μ F	10%	250V	Polyes.
17C 6	4.7 nF	\pm 20%	5kV	Cer.
17C 7	47 nF	10%	250V	Polyes.
17C 8	22 nF	-20/+80%	30V	Cer.
17C 9	22 nF	-20/+80%	30V	Cer.
17D 1	388A			
17D 2	388A			
17D 3	1S920			
17D 4	BZX79 C6V8	Zener		
17L 1	1 mH	RF CHOKE	\pm 10%	
17L 2	100 μ H	RF CHOKE	\pm 10%	
17LS 1	8 ohms	0.5W	LOUDSPEAKER	
17PL 1	1 pole connector (plug)		SKANTI CODE: R-0233	
17PL 2	12 pole connector (plug)		XP12	McMurdo
17R 1	10 kohms	5%	1 W	Car.
17R 2	10 kohms	5%	1/8 W	Car.
17R 3	100 ohms	5%	1/8 W	Car.
17R 4	10 kohms	5%	1/8 W	Car.
17R 5	10 kohms	log.	1/3 W	Var.Car.
17R 6	2.2 kohms	5%	1/8 W	Car.
17R 7	10 kohms	lin.	1/3 W	Var.Car.
17R 8	330 ohms	5%	1/8 W	Car.
17R 9	8.2 ohms	5%	1 W	ww
17R 10	10 kohms	lin	1/4 W	Var. Car.
17S 1a,b,c,d	service	ROTARY SWITCH	SKANTI CODE: R-0224	
17S 2a,b,c	band	ROTARY SWITCH	SKANTI CODE: R-0225	
17S 3	mode	ROTARY SWITCH	SKANTI CODE: R-0223	
17S 4	speaker	ROTARY SWITCH	SKANTI CODE: R-0223	
17S 5a,b	channel	ROTARY SWITCH	SKANTI CODE: R-0226	
17SK 1	connector (socket)		BNC UG657/U	
17SK 2	connector (socket)		BNC UG657/U	isol.
17SK 3	4 pole connector (socket)		XS4	McMurdo
17SK 4	Connector (socket) pack SS-1			
17SL 1	LAMP	12V	913 0012	Schurter
17TR 1	2N3055			
17TR 2	2N3055			





ALL RESISTORS WITHOUT SPECIFIED VALUE ARE 10K
 ALL CAPACITORS WITHOUT SPECIFIED VALUE ARE 10p
 ALL DIODES WITHOUT SPECIFIED TYPE ARE 15920



7 ROWS SIMILAR TO THE ROW ABOVE

+9V FROM CHANNEL SWITCH WAFER NO.1 FRONT

0V FROM BAND SWITCH WAFER NO.1 REAR

0V FROM BAND SWITCH WAFER NO.1 REAR

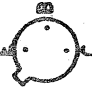
CT BAND, 0V FROM CHANNEL SWITCH WAFER NO.1 REAR

BF185



BC109C

BSX19



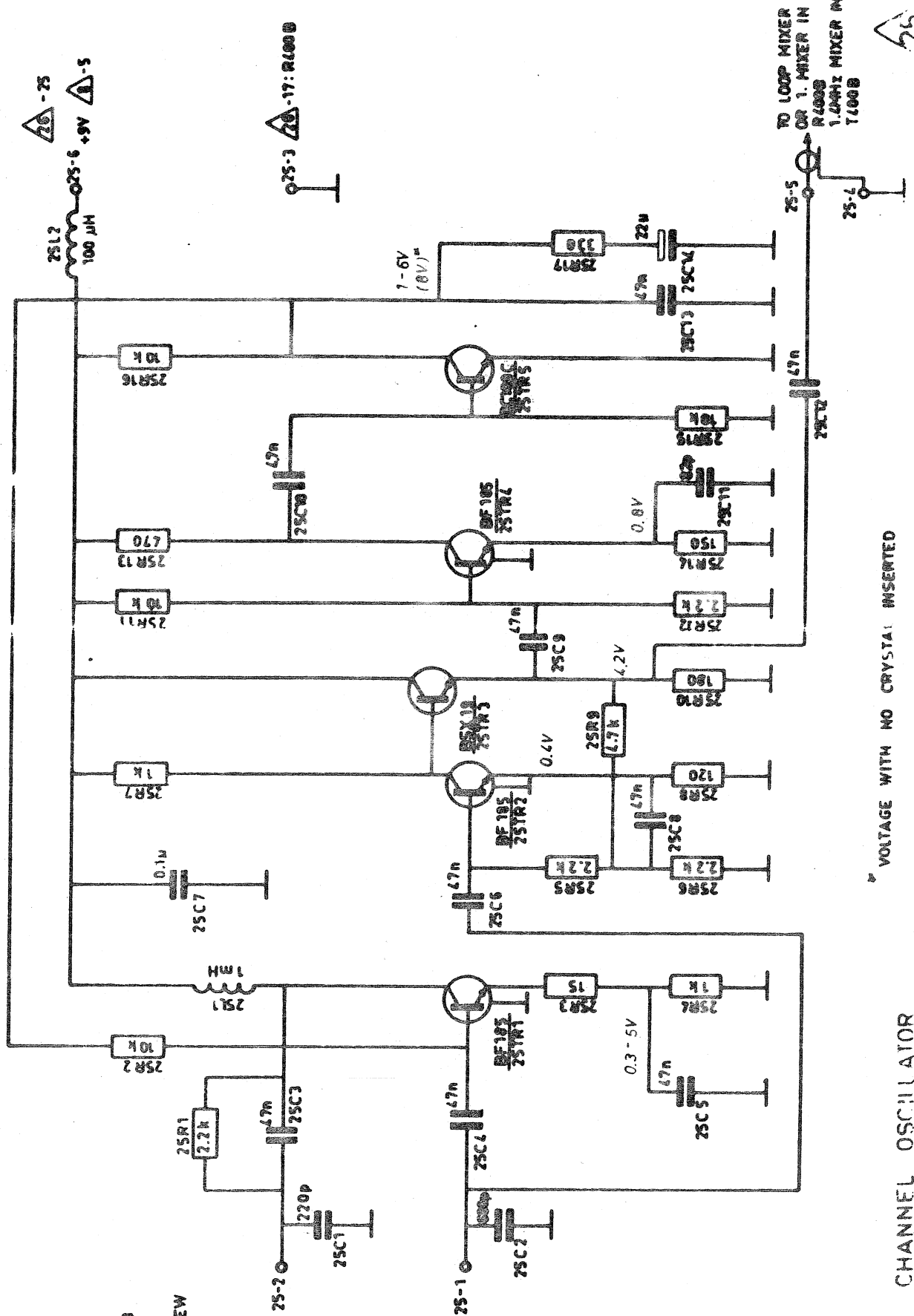
BOTTOM VIEW

R100B: 26-75

T100B: 33-15

R100B: 26-11

T100B: 33-11



VOLTAGE WITH NO CRYSTAL INSERTED

R-076.3 CHANNEL OSCILLATOR

26

