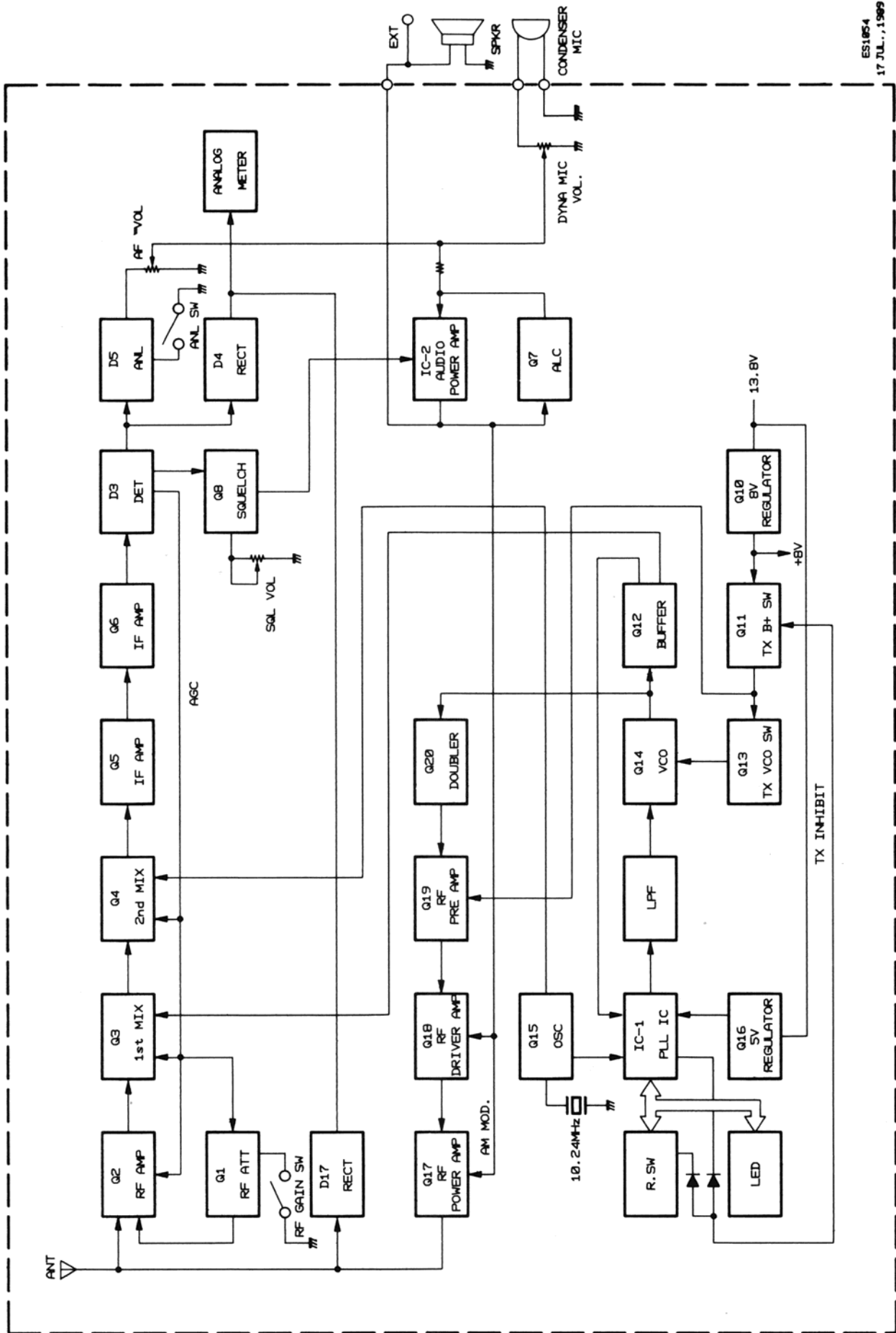
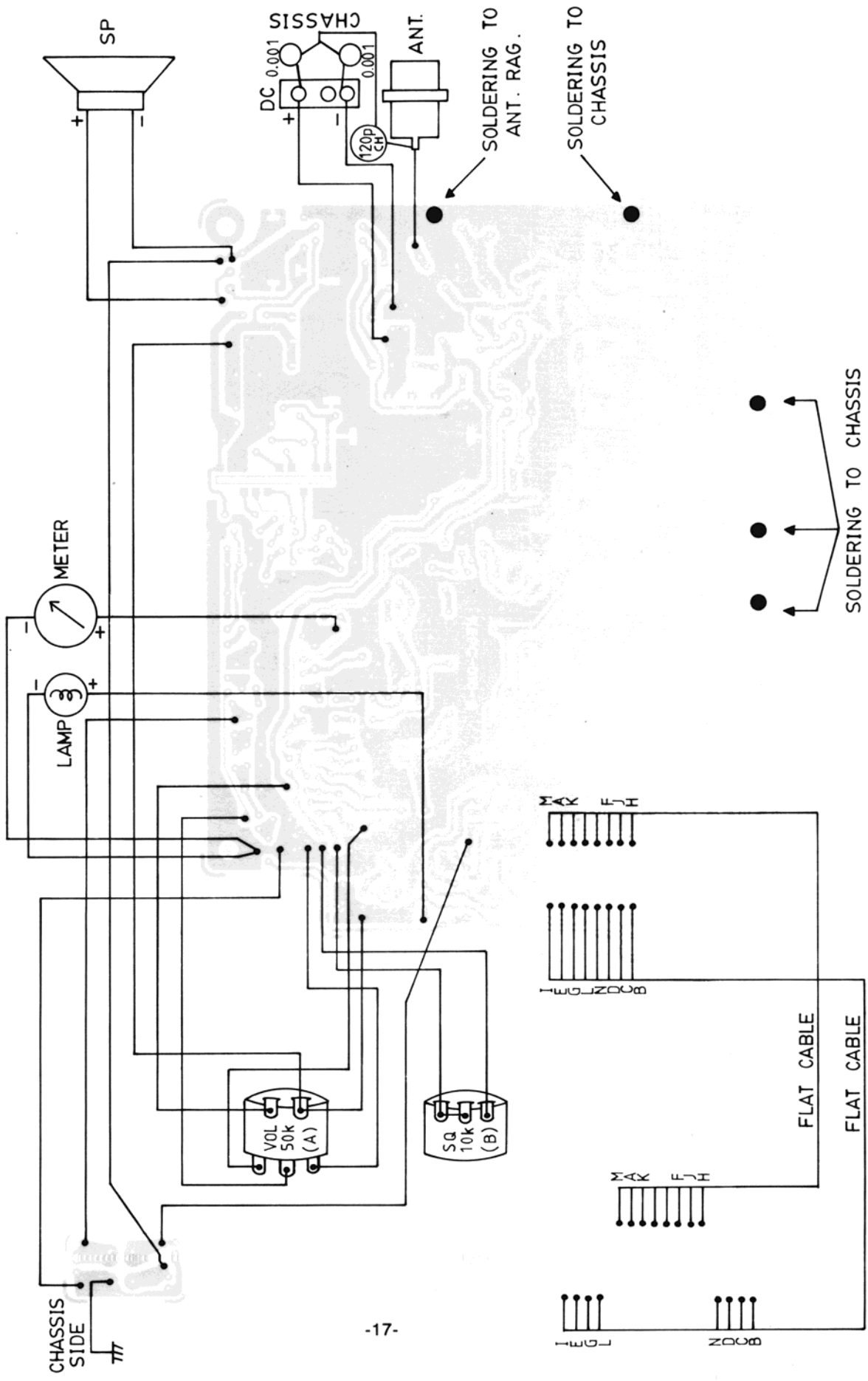


BLOCK DIAGRAM 21 LTD CLASSIC

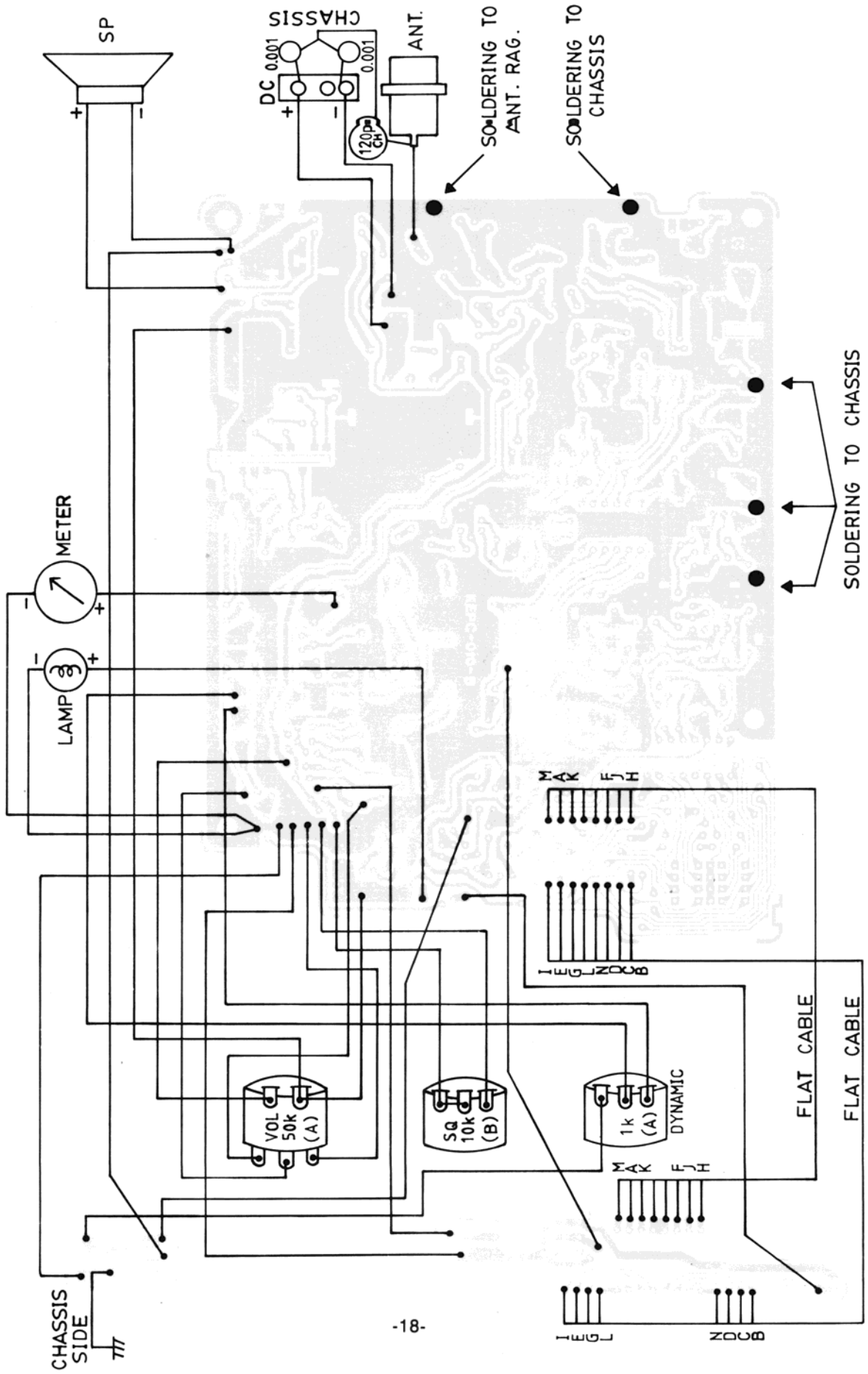


ES1054
17 JUL., 1999

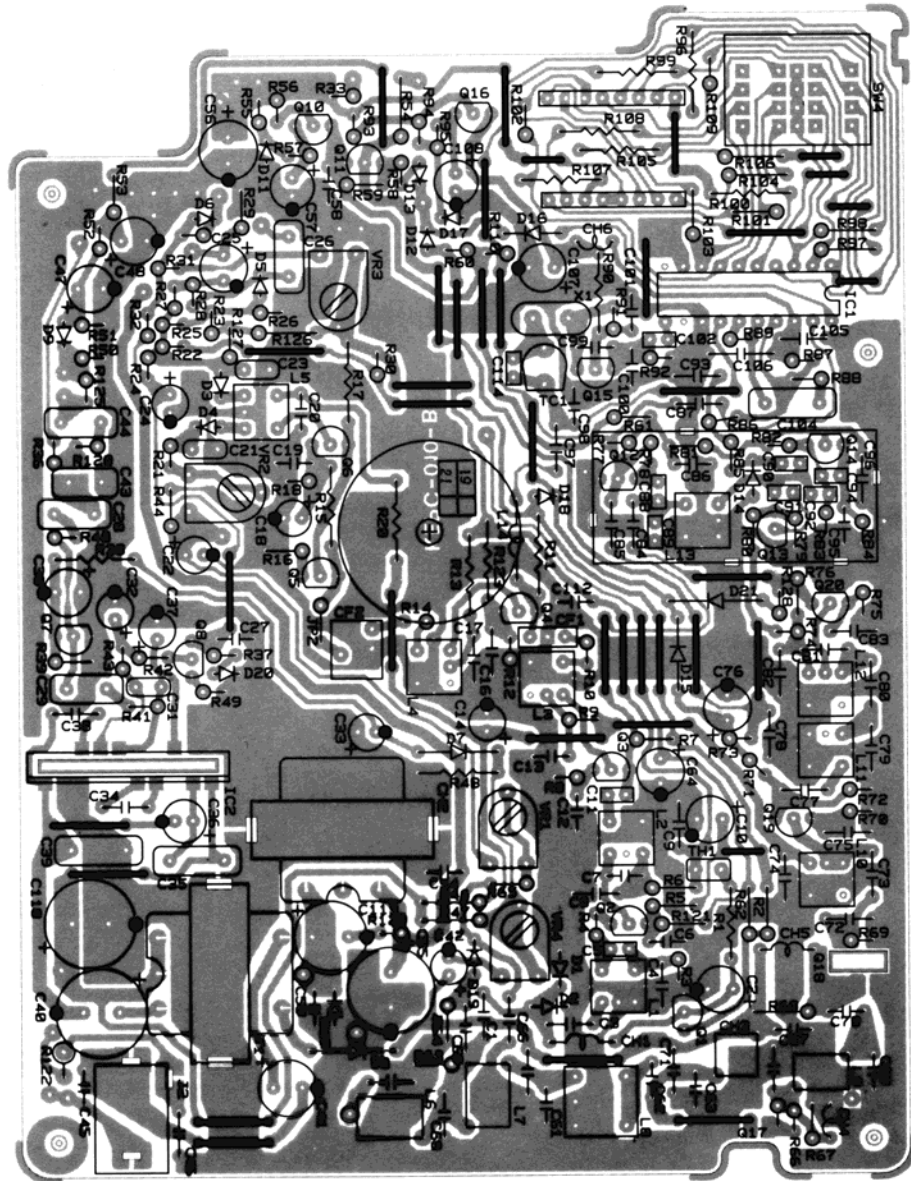
WIRING DIAGRAM 19 LTD CLASSIC



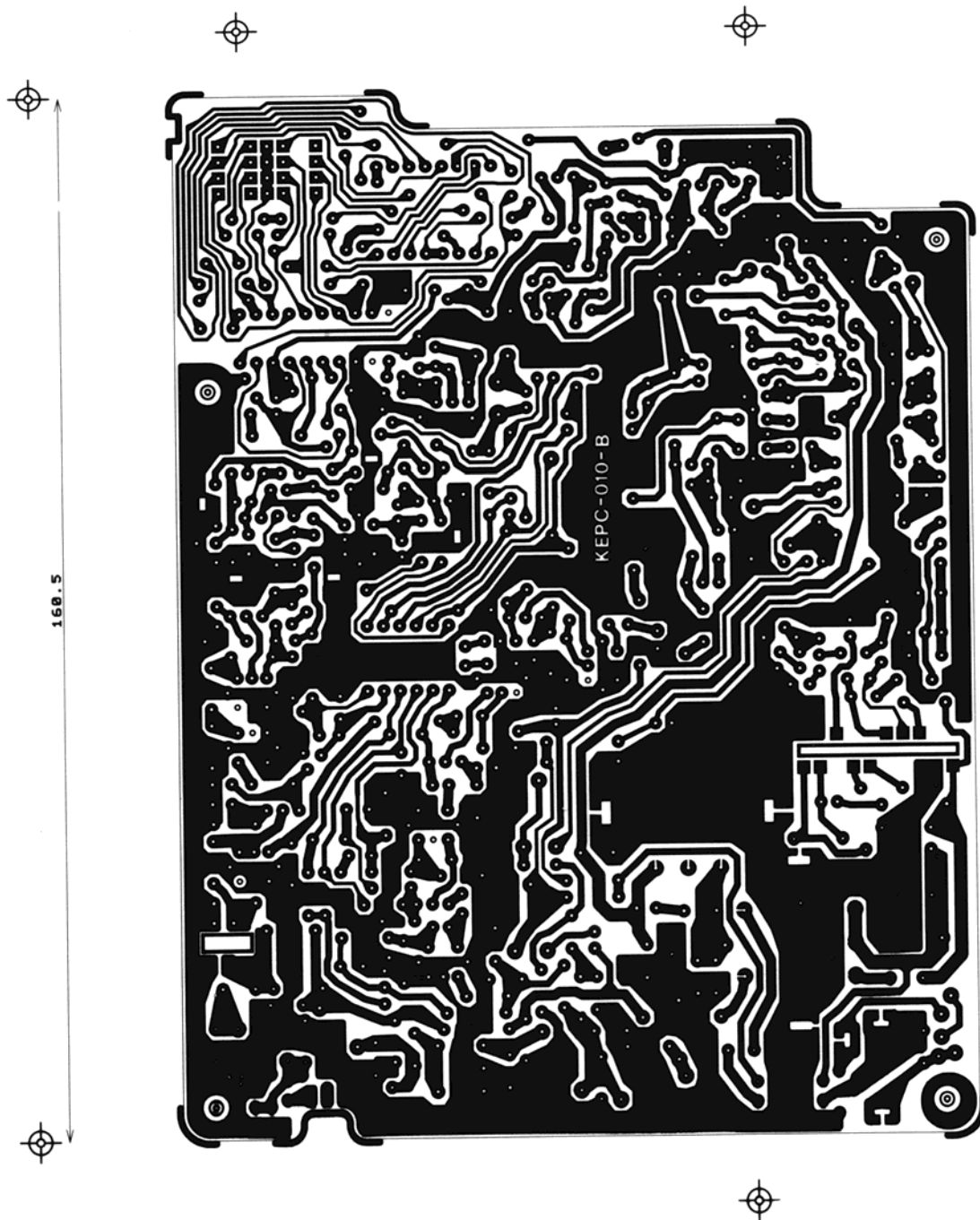
WIRING DIAGRAM 21 LTD CLASSIC



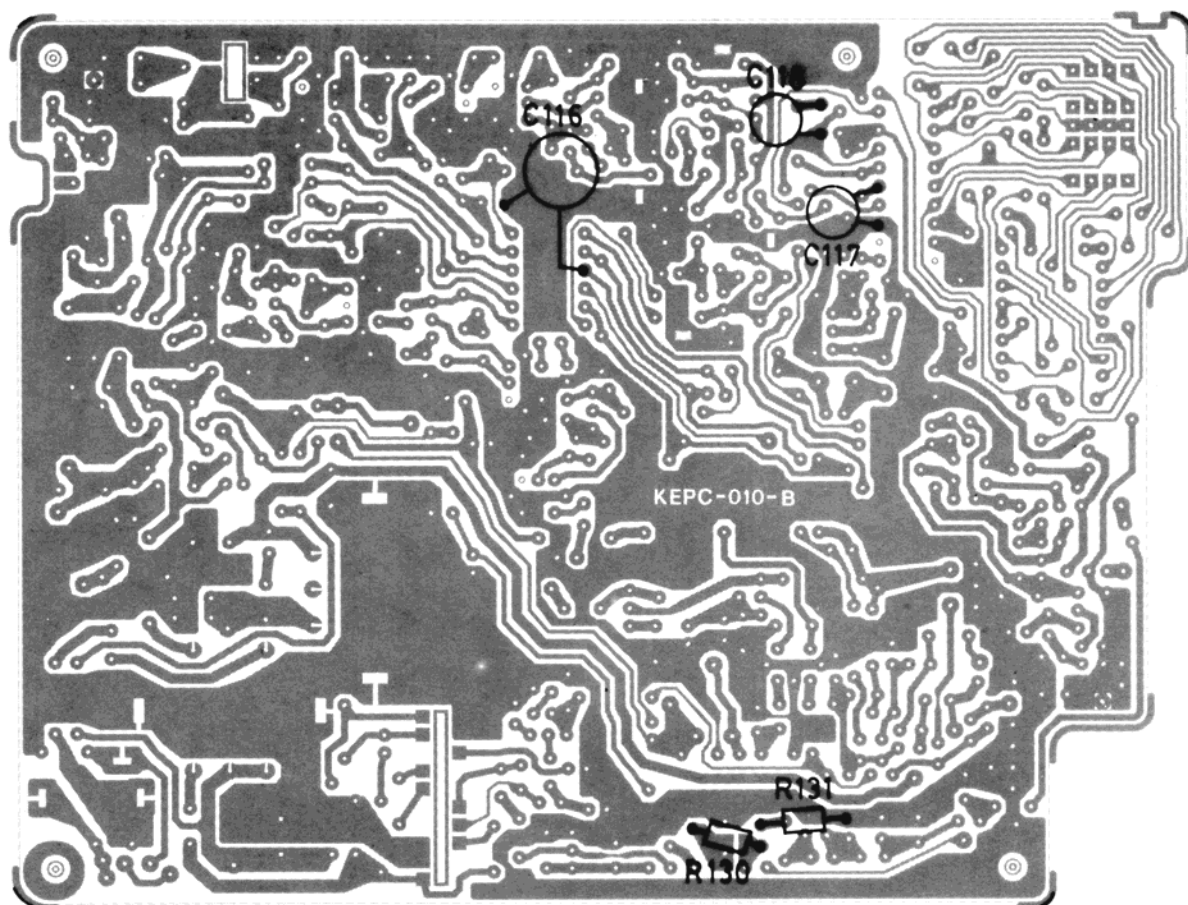
PARTS LAYOUT COMPOSITE
TOP VIEW—MAIN PCB
19/21 LTD CLASSIC



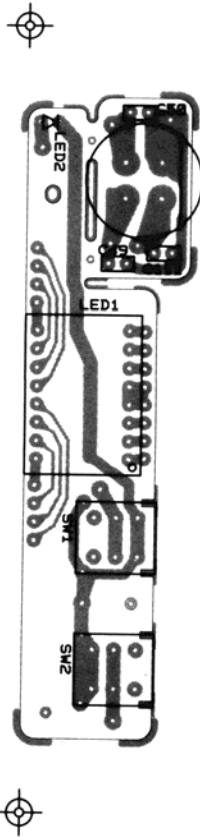
COPPER PATTERN LAYOUT
BOTTOM VIEW - MAIN PCB
19 / 21 LTD CLASSIC



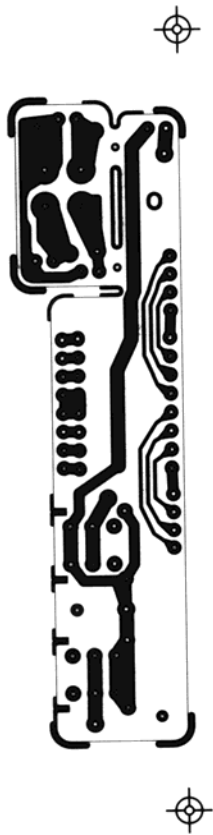
ADDED DISCRETE PARTS VIEW-MAIN PCB
19 / 21 LTD CLASSIC



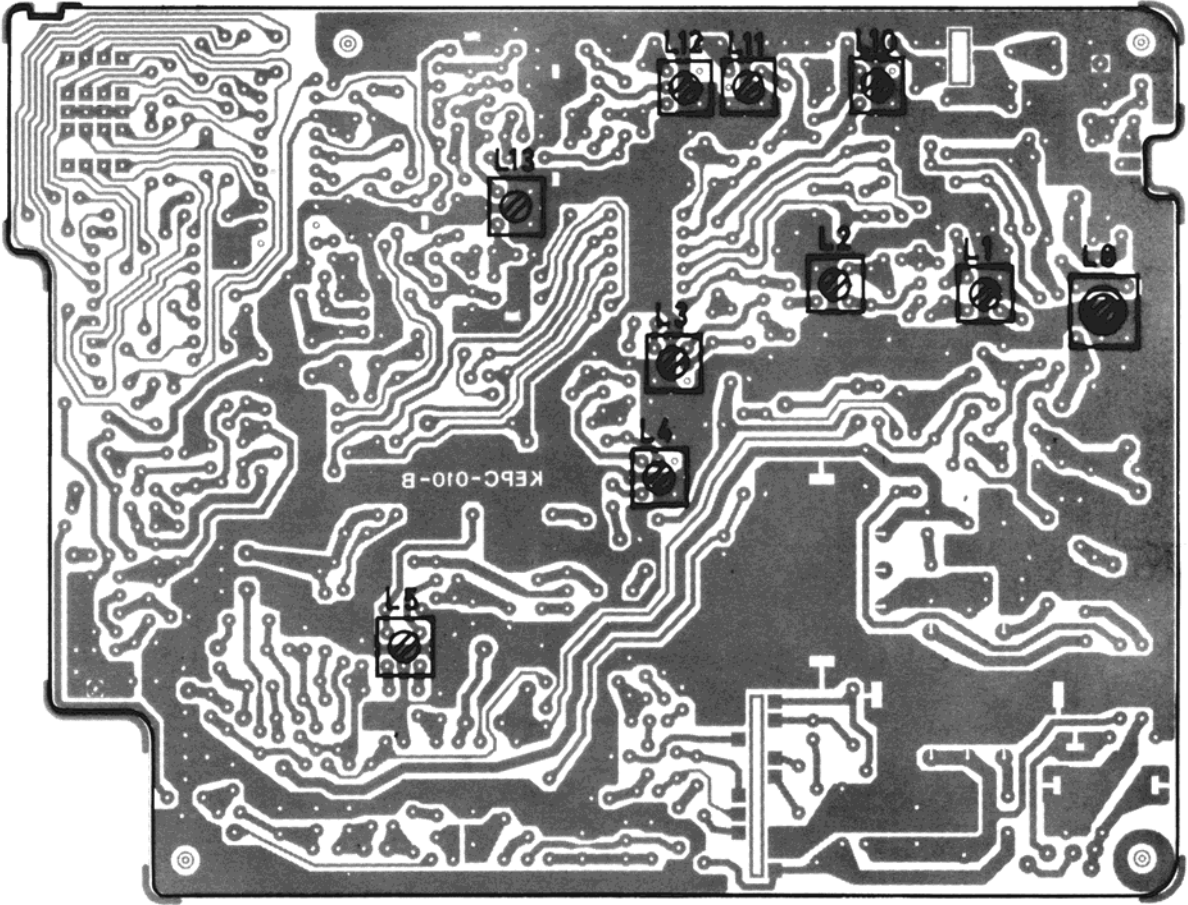
PARTS LAYOUT COMPOSITE
TOP VIEW—LED PCB
19 / 21 LTD CLASSIC



COPPER PATTERN LAYOUT
BOTTOM VIEW - LED PCB
19 / 21 LTD CLASSIC



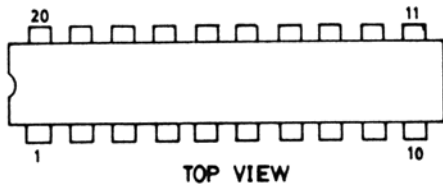
ALIGNMENT LAYOUT
19 / 21 LTD CLASSIC



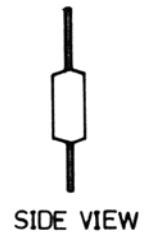
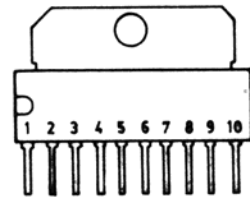
PIN CONFIGURATION

INTEGRATED CIRCUIT

LC 7132

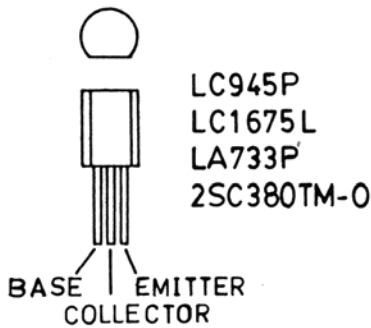


KIA7217AP

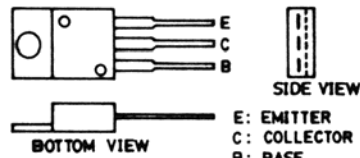


TRANSISTOR

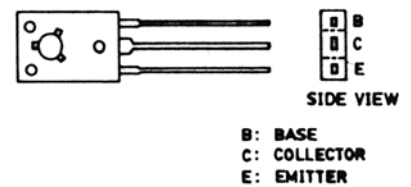
TOP VIEW



2SC2078



2SC2314



DIODE

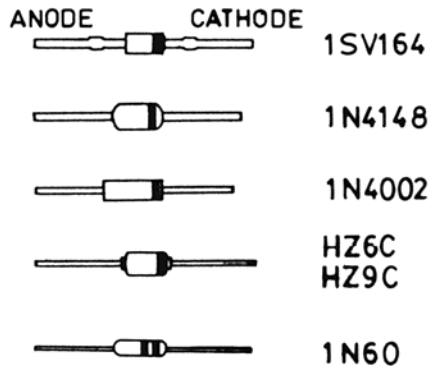
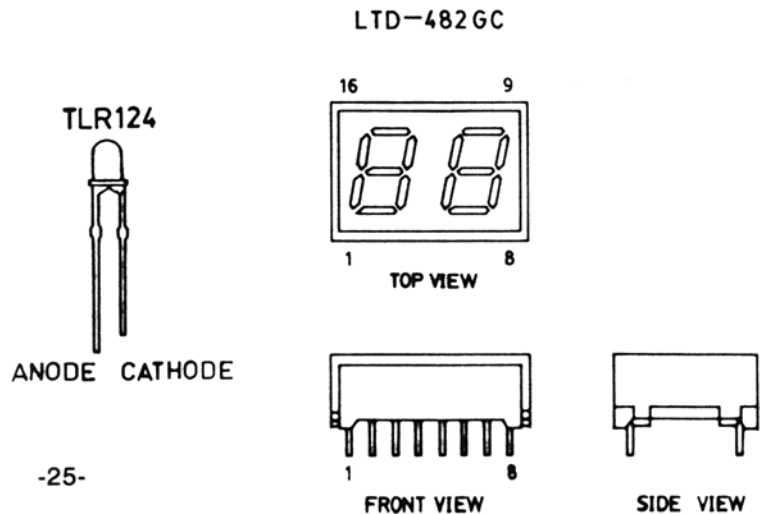
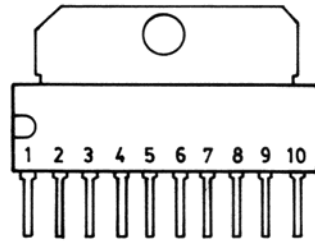


PHOTO DIODE



INTERNAL DIAGRAM

KIA 7217AP

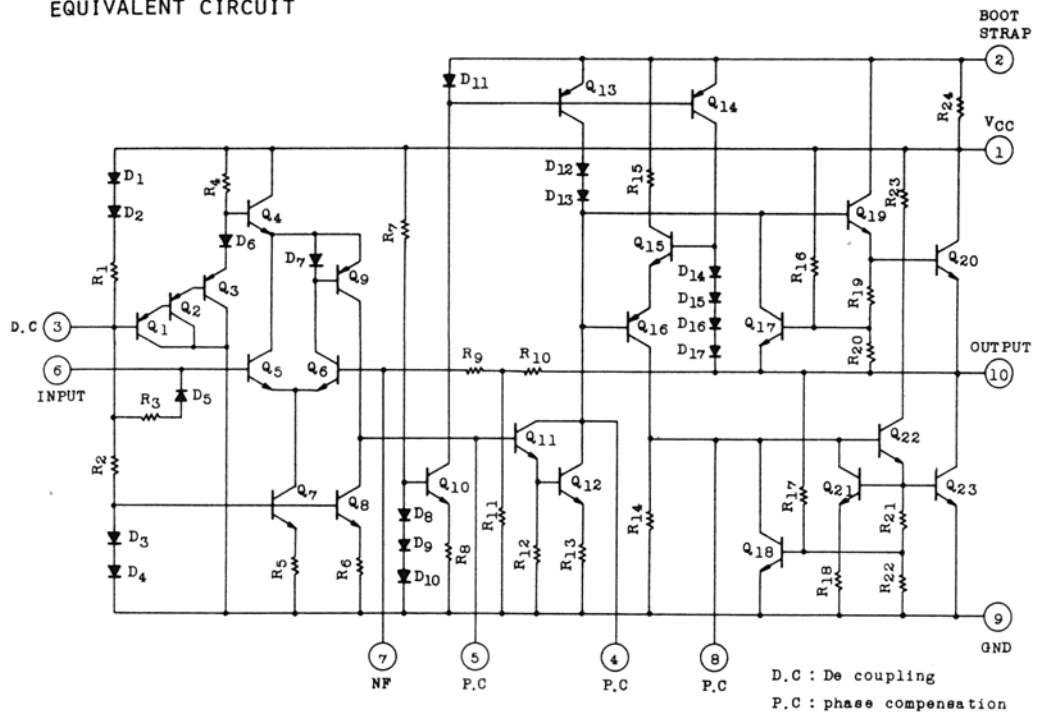


FRONT VIEW



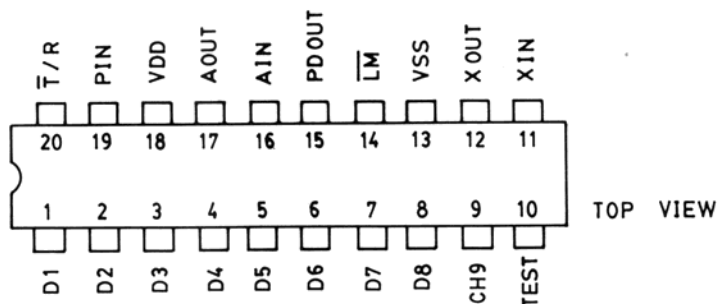
SIDE VIEW

EQUIVALENT CIRCUIT

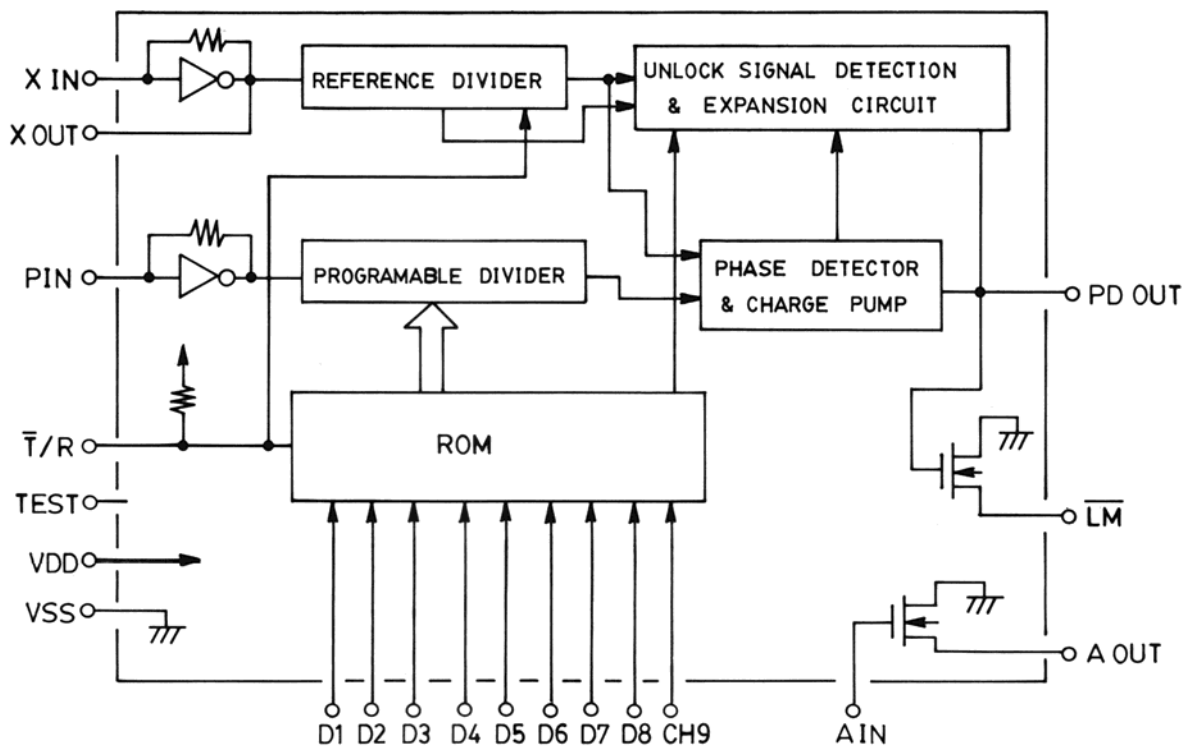


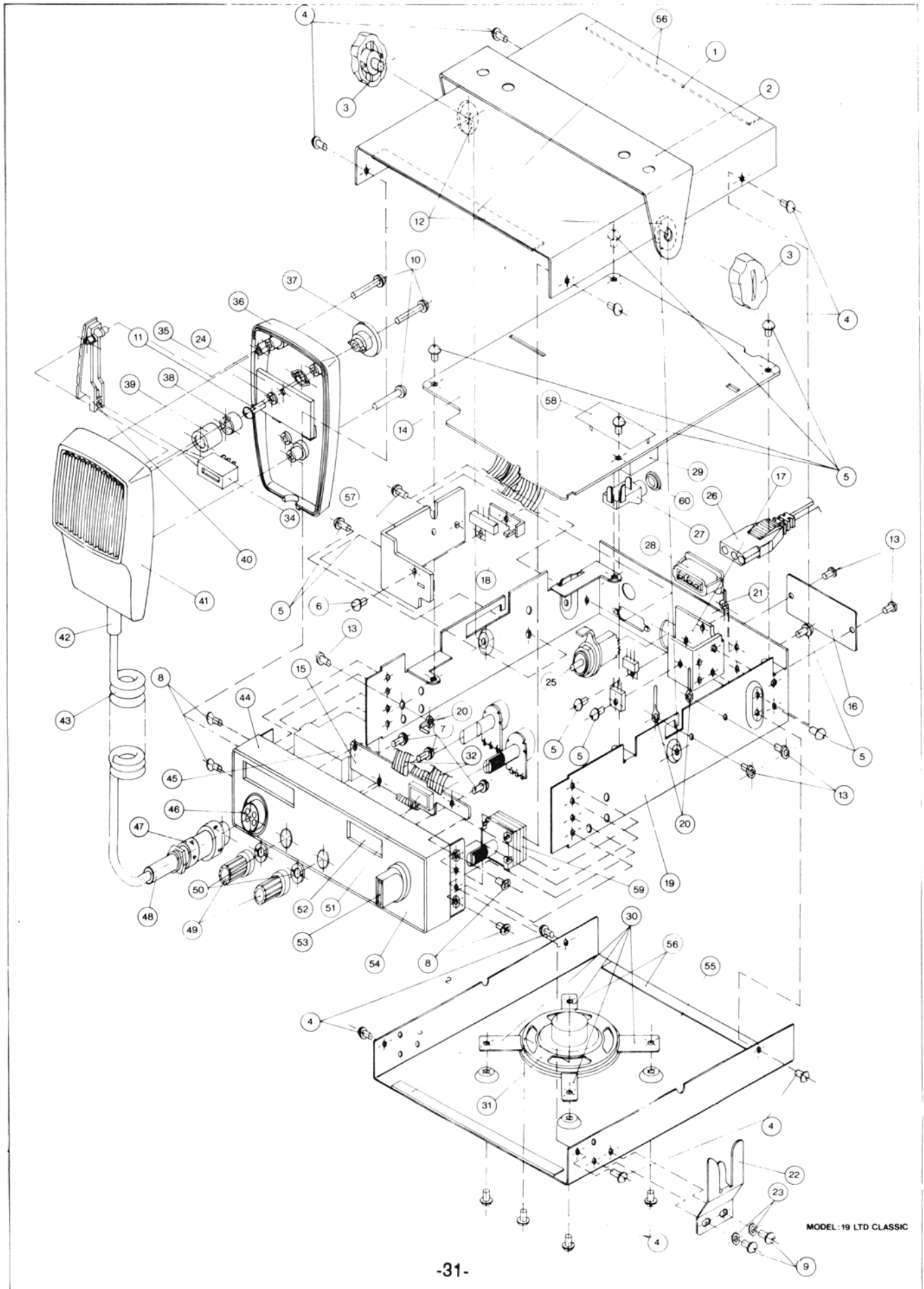
INTERNAL DIAGRAM

LC 7132

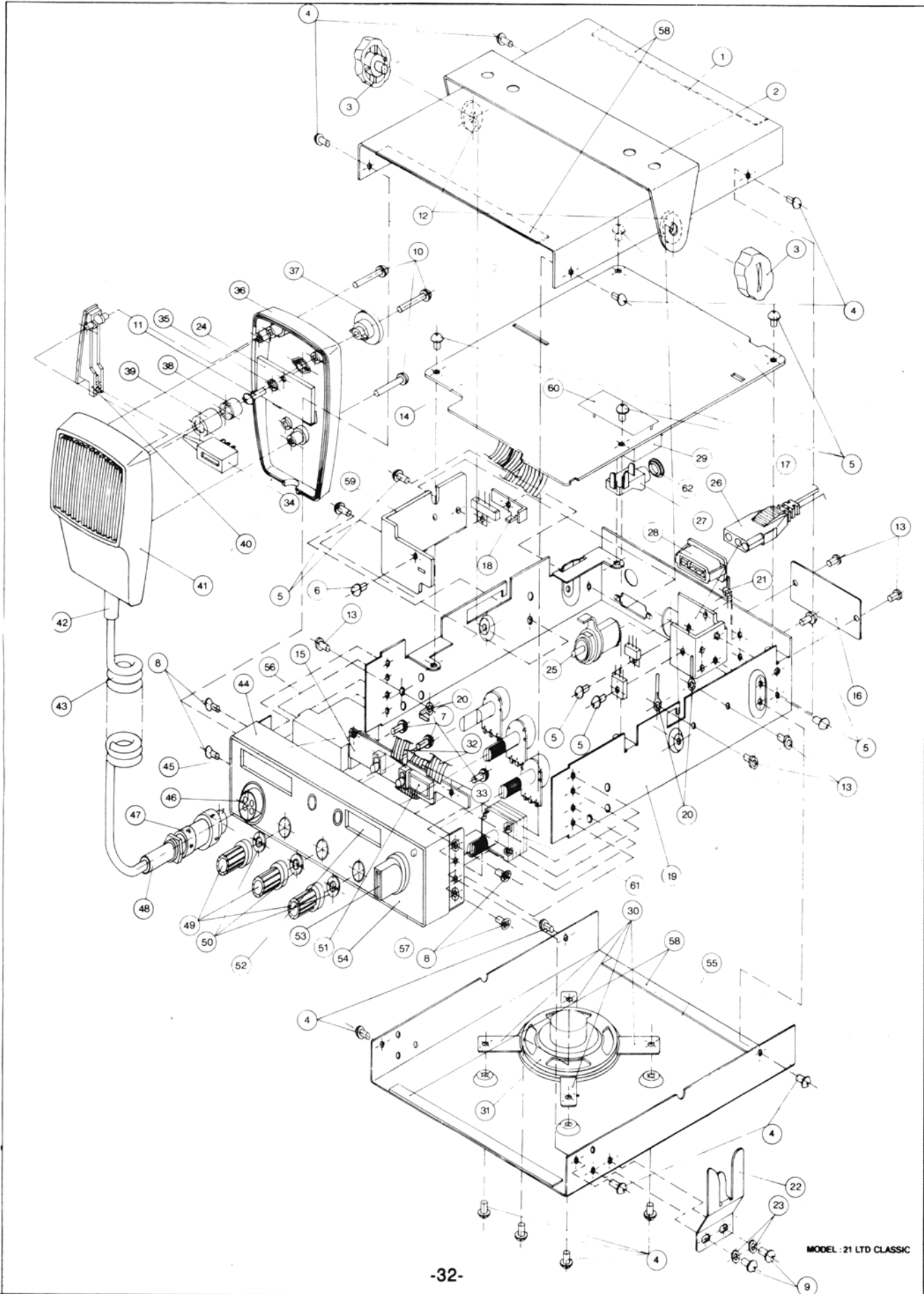


EQUIVALENT CIRCUIT AND BLOCK DIAGRAM





MODEL: 19 LTD CLASSIC



MODEL - 21 LTD CLASSIC

Model 19 LTD CLASSIC Exploded View Parts List

No.	Part No.	Description
1	253-005-N-001	Cover Top
2	250-010-N-001	Bracket
14	303-022-N-001	PCB Main Board
15	303-023-N-001	PCB LED Board
25	773-003-N-001	Antenna Receptacle 16-173B
26	420-005-N-001	DC Cord
27	773-002-N-001	Speaker Jack JC-304B
28	773-004-N-001	DC Jack YC-JK329
31	580-006-N-001	Speaker 8 OHM 66R 15
34	088-006-N-001	Switch Push 2P2T PR122A-16
44	380-018-N-001	Panel Front
45	320-001-N-001	Analog Meter H-12
46	773-005-N-001	Socket Mic 4 Pin 16-174C
49	751-007-N-001	Knob-Volume
51	158-006-N-001	LED 7 Seg. 2 Digit LTD482GC
52	380-019-N-001	Filter-Display
53	751-006-N-001	Knob-Channel
54	260-006-N-001	Inlay (A)
55	252-006-N-001	Cover-Bottom
59	083-001-N-001	Channel Selector GPS-0477 40CH

PARTS LIST 19 LTD CLASSIC

SYMBOL	DESCRIPTION	PART NO.
D14	DIODE VARACTOR 1SV164	153 046 9 001
D3,7,20	DIODE 1N60	150 001 9 005
D17	DIODE ZENER HZ6C2 6.2V 0.5W	152 145 9 003
D11	DIODE ZENER HZ9C1 9.1V 0.5W	152 014 N 001
IC1	IC LC7132	308 012 N 001
J2	SPEAKER JACK JC-304B	773 002 N 001
VR3	SEMI-FIXED RES. 10K OHM B 30%	010 003 N 001
VR4	SEMI-FIXED RES. 2K OHM B 30%	010 0003 N 002
VR2	SEMI-FIXED RES. 20K OHM B 30%	010 003 N 003
VR1	SEMI-FIXED RES. 50K OHM B 30%	010 003 N 004
TH1	THERMISTER 500 OHM 112-501-2	005 002 N 001
SW4	CHANNEL SELECTOR GPS-0477 40 CH	083 001 N 001
Q5,6	TRANSISTOR 2SC380-0	176 082 9 001
Q1,2,3,4,12,14,15, 19,20	TRANSISTOR LC1675L	176 065 9 001
Q7,11	TRANSISTOR LA733P	177 020 9 001
Q8,10,13,16	TRANSISTOR LC945P	176 055 9 002
T1	MOD TRANSFORMER AEC-607/892	061 003 N 001
CH2	CHOKE TRANSFORMER AEC-608/893	061 004 N 001
X1	CRYSTAL 10.24MHZ	135 005 N 001
IC2	IC KIA7217AP	307 169 9 002
J1	ANTENNA RECEPTACLE 16-173B	773 003 N 001
J4	DC JACK YC-JK329	773 004 N 001
M1	ANALOG METER H-12	320 001 N 001
Q17	TRANSISTOR 2SC2078(E)	172 062 9 001
VR7	POT. V16LN 20KQ B 10K OHM	008 005 N 001
VR5	POT. V16LS 20KQ A 50K OHM	008 006 N 001
Q18	TRANSISTOR 2SC2314(E)	176 120 9 001
LED 1	LED 7 SEG. 2 DIGIT LTD482GC	158 006 N 001
J3	SOCKET MIC 4 PIN 16-174C	773 005 N 001
SP1	SPEAKER 8 OHM 66R15	580 006 N 001

Model 21 LTD CLASSIC Exploded View Parts List

No.	Part No.	Description
1	253-005-N-001	Cover Top
2	250-010-N-001	Bracket
14	303-022-N-001	PCB Main Board
15	303-023-N-001	PCB LED Board
25	773-003-N-001	Antenna Receptacle 16-173B
26	420-005-N-001	DC Cord
27	773-002-N-001	Speaker Jack JC-304B
28	773-004-N-001	DC Jack YC-JK329
31	580-006-N-001	Speaker 8 OHM 66R 15
34	088-006-N-001	Switch Push 2P2T PR122A-16
40	751-010-N-001	Knob-Lever
44	380-018-N-001	Panel Front
45	320-001-N-001	Analog Meter H-12
46	773-005-N-001	Socket Mic 4 Pin 16-174C
49	751-007-N-001	Knob-Volume
51	158-006-N-001	LED 7 Seg. 2 Digit LTD482GC
52	380-019-N-001	Filter-Display
53	751-006-N-001	Knob-Channel
54	260-007-N-001	Inlay (B)
55	252-006-N-001	Cover-Bottom
56	084-010-N-001	Slide Switch SS-22F05-AT9.4
57	158-021-9-001	LED TLR 124
61	083-001-N-001	Channel Selector GPS-0477 40CH

PARTS LIST 21 LTD CLASSIC

SYMBOL	DESCRIPTION	PART NO.
TC1	TRIM. CAP. TZ03R200ER110 20PF	028 001 N 001
D14	DIODE VARACTOR 1SV164	153 046 9 001
D3,7,20	DIODE 1N60	150 001 9 005
D17	DIODE ZENER HZ6C2 6.2V 0.5W	152 145 9 003
D11	DIODE ZENER HZ9C1 9.1V 0.5W	152 014 N 001
IC1	IC LC7132	308 012 N 001
J2	SPEAKER JACK JC-304B	773 002 N 001
VR3	SEMI-FIXED RES. 10K OHM B 30%	010 003 N 001
VR4	SEMI-FIXED RES. 2K OHM B 30%	010 0003 N 002
VR2	SEMI-FIXED RES. 20K OHM B 30%	010 003 N 003
VR1	SEMI-FIXED RES. 50K OHM B 30%	010 003 N 004
TH1	THERMISTER 500 OHM 112-501-2	005 002 N 001
SW4	CHANNEL SELECTOR GPS-0477 40 CH	083 001 N 001
Q5,6	TRANSISTOR 2SC 380 (0)	176 082 9 001
Q1,2,3,4,12,14,15,19,20	TRANSISTOR LC1675L	176 065 9 001
Q7,11	TRANSISTOR LA733P	177 020 9 001
Q8,10,13,16	TRANSISTOR LC945P	176 055 9 002
T1	MOD TRANSFORMER AEC-607/892	061 003 N 001
CH2	CHOKE TRANSFORMER AEC-608/893	061 004 N 001
X1	CRYSTAL 10.24MHZ	135 005 N 001
IC2	IC KIA7217AP	307 169 9 002
J1	ANTENNA RECEPTACLE 16-173B	773 003 N 001
J4	DC JACK YC-JK329	773 004 N 001
M1	ANALOG METER H-12	320 001 N 001
Q17	TRANSISTOR 2SC2078(E)	172 062 9 001
VR6	POT. V16LN 20KQ A 1K OHM	008 007 N 001
VR7	POT. V16LN 20KQ B 10K OHM	008 005 N 001
VR5	POT. V16LS 20KQ A 50K OHM	008 006 N 001
Q18	TRANSISTOR 2SC2314(E)	176 120 9 001
LED 2	LED TLR124	158 021 9 001
LED 1	LED 7 SEG. 2 DIGIT LTD482GC	158 006 N 001
J3	SOCKET MIC 4 PIN 16-174C	773 005 N 001
SP1	SPEAKER 8 OHM 66R15	580 006 N 001