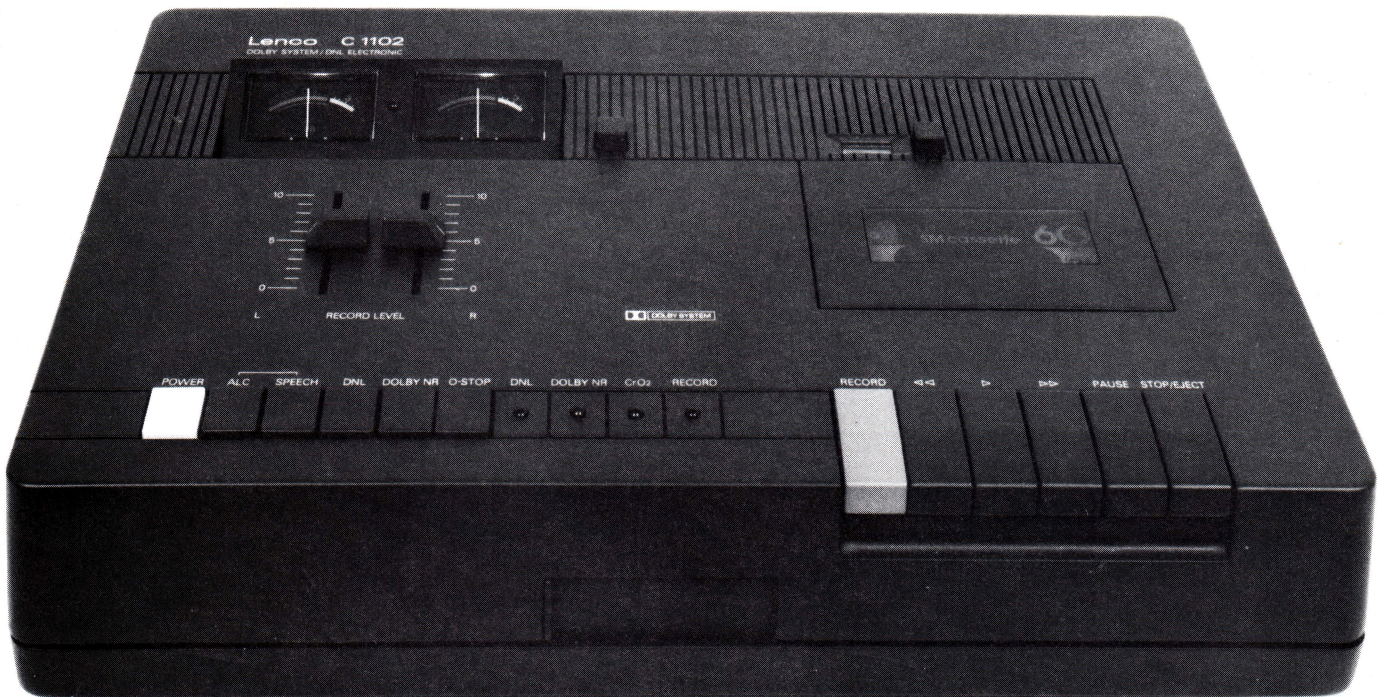


Service Instruction



Lenco C 1102

Contents

Electrical Alignment Instructions

	Page
- Technical data	3
- Playback	4
1. Azimuth Adjustment	
2. Tape Speed Adjustment	
3. Output Level Adjustment	
4. DNL Adjustment	
- Recording	4
1. OSC Frequency Adjustment	
2. Bias Trap Adjustment	
3. Bias Current Adjustment	
4. Dolby Nr. Bias Trap Adjustment	
5. Input Sensitivity Adjustment	
6. Level Meter Adjustment	
7. Record Current Adjustment	
8. Peak Indicator Level Adjustment	
9. ALC Balance Adjustment	
- Electrical Adjustment Procedure	5+6
1. DC F.G. Servo Motor	
2. RIP Head (Azimuth)	
3. Dolby P.C.B.	
4. DNL P.C.B.	
5. Power P.C.B.	
6. Pre Amp. P.C.B.	

Mechanical Alignment Instructions

- Take-up Torque	7
- Fast Forward and Rewind Torque	7
- Pinch Roller Pressure	7
- Tape Speed / Wow and Flutter	7
- Azimuth Head, Alignment	7

	Page
- Tape Speed.....	7
- Wow and Flutter	7
- Mechanical Adjustment	8 + 9
1. Pinch Roller Pressure Measurement	
2. Azimuth, Head Location Adjustment	
3. Tape Speed Adjustment Location	

Mechanical Parts List 10-14

Electrical Parts List 15-21

Drawings

- Muting SW P.C.B.	22
- Reed SW P.C.B.	22
- Mic Jack P.C.B.	23
- Auto Stop P.C.B.	24
- DIN/RCA Jack P.C.B.	25
- Power Supply P.C.B. (Bottom View)	26
- Power Supply P.C.B. (Top View)	27
- LED P.C.B.	28
- Peak Level LED P.C.B.	28
- PRE P.C.B. (Bottom View)	29
- PRE P.C.B. (Top View)	30
- Dolby P.C.B. (Bottom View)	31
- Dolby P.C.B. (Top View)	32
- Push SW P.C.B. (Bottom View)	33
- Push SW P.C.B. (Top View)	34
- DNL P.C.B.	35
- Exploded drawings	36+37
- Exploded and Lubrication drawings	38+39

Wiring Diagram..... 40

Electrical Circuit Diagram 40

Technical data

Mains voltage:

220 V, can be resoldered for 110 V (Europe)
240 V (UK)
117 V (USA, ANP, Canada)

Mains frequency:

50 - 60 Hz

Power requirement:

0 W

Motors:

1 DC-motor with servo control

Cassettes:

Compact cassette:
Chrome dioxide BASF CrO₂ C 60 C 401 R
Standard TEAC MTT-502

Tape speed:

4.76 cm/s

Fast forward and rewind:

<75 s with C 60 cassette

Erase and bias frequency:

105 kHz

Level meter:

2 VU-meter
1 Peak Level Indicator
Dolby Level at ± 3 dB

Inputs: (for Dolby level)

1. Microphone input with DIN plug for low-impedance microphones
Sensitivity: 330 μ V imp. about 5.6 kOhms
Max. input voltage: 33 mV
Electret microphones: + 5 V max. 0.5 mA
2. Input DIN plug connections 1 + 4
Sensitivity: 0.33 mV impedance: 5.6 kOhms
(0.06 mVikOhm)
Max. input voltage: 33 mV

3. Line input PHONO plug

Sensitivity: 33 mV impedance: 560 kOhms
Max. input voltage: 3.3 V

4. Phono Input (DIN) DIN Plug connection 3+5

Sensitivity: 200 mV impedance: 3.3 mOhms

Outputs: (for Dolby level)

1. DIN plug, pin 3+5: 1000 mV impedance: 15 kOhms
2. LINE output (PHONO): 1000 mV impedance: 15 kOhms
3. Headphone output: 200 mV impedance: 8 kOhms

Harmonic distortion (333 Hz): (for 0 dB VU)

Standard cassette: < 2.0 %
Ferri chrome cassette: < 2.0 %

Frequency response with: -

20 dB VU
Standard cassette: 30-15000 Hz ± 3 dB
Ferri chrome cassette: 30-16000 Hz ± 3 dB

Wow + Flutter:

to WRMS < 0.06 % to DIN 45507 weighted
 $< \pm 0.14$ %

Drift: $< \pm 1.5$ %

Signal/noise ratio: (DIN 45500)

(Reference 3 % third harmonic distortion)

Standard cassette:	53 dB	58 dB
Ferri chrome cassette:	54 dB	60 dB
	without Dolby	with Dolby

Cross talk: (1000 Hz)

with two track recording in opposite directions: > 60 dB with
stereo recording: > 35 dB

Erase attenuation: (1000 Hz, full modulation CrO₂ tape) > 62 dB

Weight:

5.5 kg

Dimensions:

268 X 424 X 107 mm

Alignment Instructions

Playback

1. Azimuth Adjustment

Connect a scope or VTVM to the right channel PRE-AMP OUTPUT jack. Insert a test tape (TEAC MTT-114, 115) into the unit. Adjust the Azimuth adjusting screw for maximum output into the right channel. (See figure 1 R/P HEAD.)

2. Tape Speed Adjustment

Connect scope, VTVM and FREQUENCY COUNTER to the right channel PRE-AMP OUTPUT jack. Insert a Test Tape (MTT-111 3 kHz) into the unit. Adjust the tape speed adjusting screw for a 3 kHz value in the frequency counter. (See fig. 1 DC F.G. Servo Motor.)

3. Output Level Adjustment

Connect scope and VTVM to the TP-2 and Ground (L-ch and R-ch). Insert a test tape MTT-150 (Dolby level calibration tape 200 nwb/m) into the unit. Adjust the P 104 (left) and P 204 (right) for a 580 mV reading.

4. DNL adjustment

Connect a scope to the PRE-AMP OUTPUT jack. Set the unit for a PLAY function, then depress the PAUSE button, DNL switch, ON. Adjust the VR 501 (L-ch), VR 601 (R-ch) so that the level of high frequency noise is at a minimum on the scope. (See fig. 1, DNL P.C.B.)

Recording

1. OSC Frequency Adjustment

Connect the scope and frequency counter to the terminals of the erase head. Set the unit for recording. Adjust L 1 so that there is an OSC frequency value of 105 kHz on the frequency counter. (See fig. 1 Power P.C.B.)

2. Bias Trap Adjustment

Connect the scope and VTVM to the TP-3 and Ground. (See fig. 2.) Set the unit for recording. Adjust the L 104 (L-ch) and L 204 (R-ch) so that the level on the VTVM is at a minimum. (See fig. 2.)

3. Bias Current Adjustment AF

Generator
333 Hz
1 kHz
0 dB - 1 V
Attenuator -
95 dB Unit
Mic. Input L
R
V.T.V.M.
Scope

Connection should be made as above. Set the unit for recording. For Fe 203, adjust C 133 (L-ch), C 233 (R-ch) to flat level at between 333 Hz and 10 kHz. For Cr02, adjust C 134 (L-ch), C 234 (R-ch) to flat level at between 333 Hz and 12,5 kHz. (See figure 2.)

4. Dolby NR Bias Trap Adjustment

Connect the VTVM and scope to the test point pin on the Dolby P.C.B. (See figure 1).

Set the unit for recording. Dolby NR switch "ON" position. Adjust L 303 (L-ch), L 403 (R-ch) for the minimum indication on the VTVM.

5. Input Sensitivity Adjustment AF

Generator
333 Hz
0 dB - 1 V
Attenuator
-70 dB Unit
DIN Input
L
R
TP-2
V.T.V.M.
Scope

Connection should be made as above. Set the unit for recording. Record level controls (P 103, P 203) set at maximum. Adjust P 102 (L-ch), P 202 (R-ch) for 580 mV reading at TP 2 (L-ch, R-ch). (See figure 2.)

6. Level Meter Adjustment

Connection should be made as for ADJUSTMENT 5. When ADJUSTMENT 5 has been completed (580 mV reading at TP a), adjust P 107 (L-ch), P 207 (R-ch) for +3 VU reading on level meters (L-ch, R-ch). (See figure 2.)

7. Record Current Adjustment

Connection should be made as in ADJUSTMENT 5. Feed -70 dB (333 Hz) into the DIN input. Set the record level controls (103/203) to maximum.

Make a recording (use blank tape) then playback what has been recorded and adjust P 105 (L-ch), P 205 (R-ch) for Fe 203 Tape, P 106 (L-ch), P 206 (R-ch) for Cr02 Tape so that the output at TP 2 has a value of 580 mV. (See figure 2.)

8. Peak Indicator Level Adjustment

Set the unit for recording. Feed -68.5 dB (1 kHz) into the DIN input Left and Right channels. Adjust P 2 until the peak level indicator lights up. (See fig. 2).

AF Generator
1 kHz
0 dB = 1 V
Attenuator
-68.5 dB (1 kHz)
DIN Input
L
R
Unit

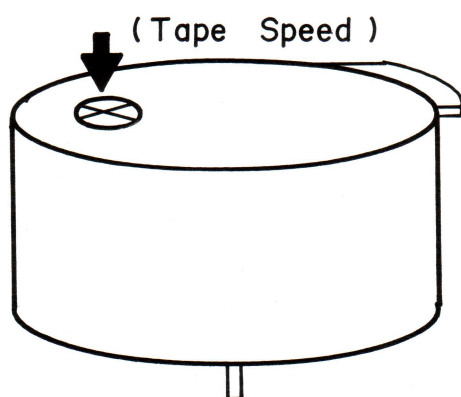
9. ALC Balance Adjustment

Disconnect R 1 (or cut the foil pattern) so that the Bias OSC is stopped. Set the ALC switch to the "ON" position and keep the unit set at recording. Feed -50 dB (1 kHz) signal into the DIN input Left and Right channels. Adjust P 1 so that the value of the level meter on Left and Right channel will be the same. (See figure 2 ALC BALANCE).

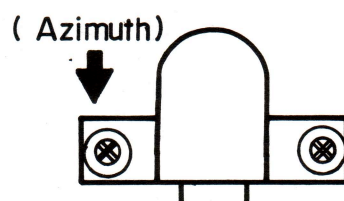
AF Generator
1 kHz
0 dB = 1 V
Attenuator -50 dB
(1 kHz) Unit
DIN Input
L
R

ELECTRICAL ADJUSTMENT PROCEDURE FOR Lenco C1102

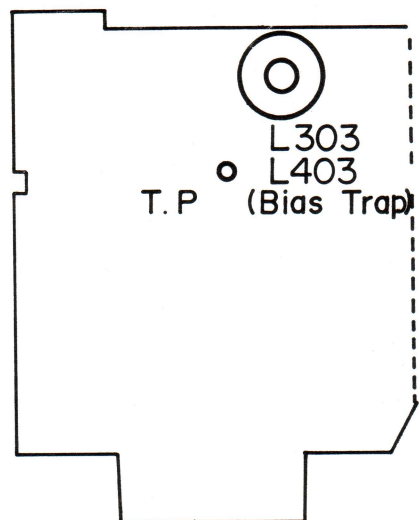
DC F-G Servo Motor



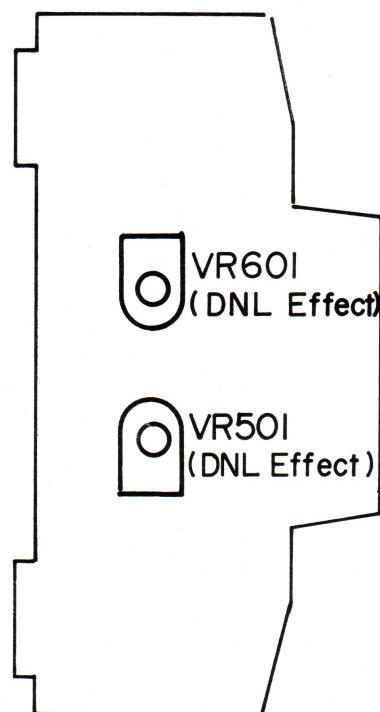
R / P Head



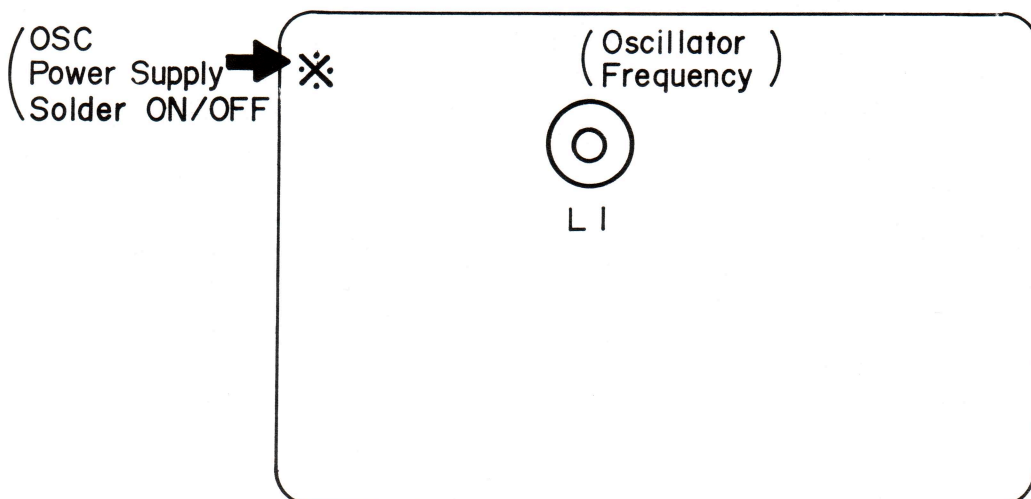
Dolby P.C.B.



DNL P.C.B.

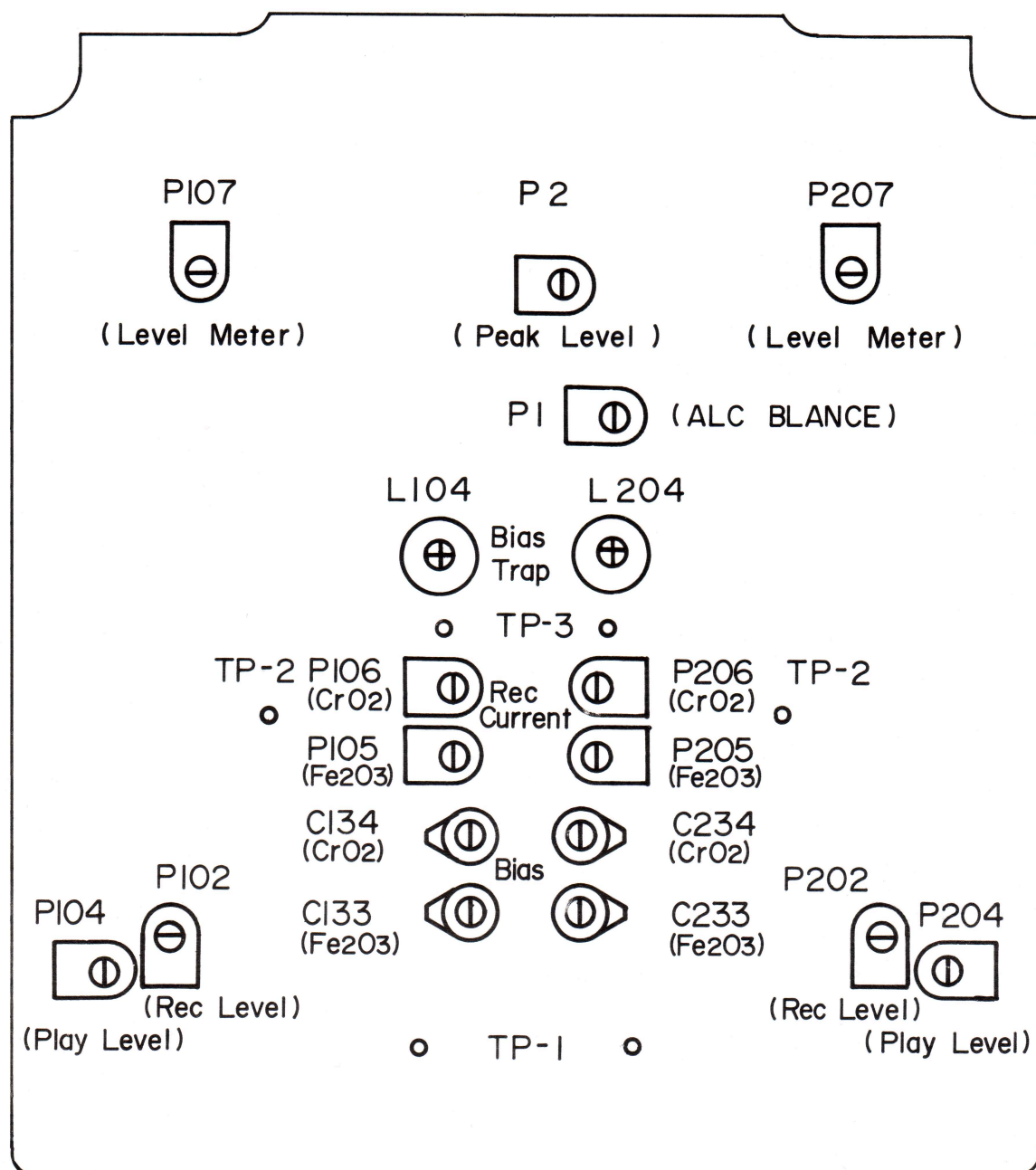


POWER P.C.B.



ELECTRICAL ADJUSTMENT PROCEDURE FOR Lenco CI102

Pre Amp P.C.B. (Top View)



Mechanical Checks and Adjustments

Model C 1102

Note: All the mechanical checks and alignments should be done with the upper and bottom cabinet assembly (A-1 and A-2) removed.

Take-up Torque

(Spec. 30-60 g/cm)

1. Load the torque meter cassette.
2. Set the unit in the play mode and read the value on the dial scale. The meter should indicate a torque of 30 to 60 g/cm.
3. If the torque range is out of the specified limit, clean the driving surface of the take-up reel base shaft assembly (B 1-8) and tape-up pulley assembly (B 1-12) with pure alcohol.
4. If the above cleaning proves ineffective for a correct torque alignment, replace the take-up reel base shaft assembly.
5. First, remove the reel table assembly (B 1-12), then pull out the take-up reel base shaft assembly. After putting a drop of oil on the reel shaft (B 1-17), insert the new part and then fit the reel assembly onto its shaft. Finally tighten two set screws (L 1-1).

Fast-Forward and Rewind Torque

(Spec. 65-120 g/cm)

1. Load the torque meter cassette.
2. Set the unit at F.F. or REWIND mode and read the value on the dial scale. The meter should indicate a torque of 65 to 120 g/cm.
3. If the value is outside the specified range, clean the driving surface of the fast forward pulley A assembly (B 1-14), fast forward pulley B (B 1-13) and C (B 1-14).
4. If the above cleaning operation is ineffective for a torque alignment replace the fast forward pulley A assembly.
5. To replace, first remove the fast forward and rewind arm A assembly (B 1-29).

Pinch Roller Pressure

1. Place the unit in the play mode (but without a loaded tape).
2. Attach the spring scale to the edge of the pinch roller assembly (B 1-18) as shown (fig. 1).
3. Gently draw the pinch roller assembly away from the capstan shaft (in a direction parallel to a line that intersects the centre of the capstan shaft and the pinch roller) until the capstan shaft and the pinch roller are completely separated.
4. Gradually lessen the pressure until the pinch roller just begins to rotate. The scale should then read approximately 500-650 g/cm.
5. If the scale reading is outside the above range, replace the pinch roller spring (B 1-61) or adjust the spring arm as shown.
6. After the replacement, install the pinch roller adjusting nut (B 1-87) with 1 mm vertical clearance. Check whether the pinch roller is vertical to the capstan.

Tape Speed / WOW and Flutter

Note: Before commencing the following alignments, make sure that all parts in the tape path, particularly the capstan, pinch roller and head, are cleaned with pure alcohol.

Head Azimuth Alignment

1. Connect the AC vacuum tube voltage meter to both channels of the "Line-out".
2. Use a test tape (in which 10,000 Hz signal is recorded).
3. To achieve the maximum reading on the AC VTVM adjust the azimuth alignment screw (fig. 2).
4. After the adjustment, fix the screw with lacquer.

Tape Speed

(Spec. 3000 Hz $\pm$ 45 Hz)

1. Connect the frequency counter to both channels of the line-out.
2. Set the EQ switch to normal position, then load and play a TEAC MTT-111 test tape in which a 3000 Hz signal is recorded.
3. Adjust the control located at the top of the meter for a reading of 3000 Hz $\pm$ 5 Hz on the frequency counter (fig. 3). (This tape speed alignment should be done after approx. 30 seconds operating time).
4. Then, verify the reading on the frequency counter as being within the specified range 3000 Hz $\pm$ 45 Hz at the beginning, middle and near the end of the tape.

Wow and Flutter

(Spec. DIN weighted: within $\pm$ 0.2% at record and playback)

Note: When using these methods, obtain the maximum wow and flutter value, by repeated play, stop or pause mode of operation. This operation is necessary to make sure that the wow and flutter value between record and playback will not create a false reading.

1. Connect the oscillator to the line-in of the unit, and the wow and flutter meter to either channel of the line-out.
2. Set line or record controls of the unit to obtain the optimum input level.
3. Load a test tape (BASF C 60) and set the BASF/EQ switches to the normal position.
4. Apply and record a 3000 Hz signal.
5. Record and play the recorded section.
6. Read the value on the wow and flutter meter. The wow and flutter value should be within $\pm$ 0.2 %, DIN max.
7. If the measured value is out of specification, check the take-up torque and pinch roller pressure, and see that the capstan or belt is not stretched or oily.
8. If the above checks prove ineffective, repair or replace the pinch roller assembly (B 1-6), motor and any other defective parts.
9. When the capstan assembly must be replaced, make sure it is well oiled. Re-adjust the end clearance by adjusting the thrust-screw (B 1-111) until the clearance is between 0.15-0.3 mm.

MECHANICAL ADJUSTMENT

CP-630
R20427

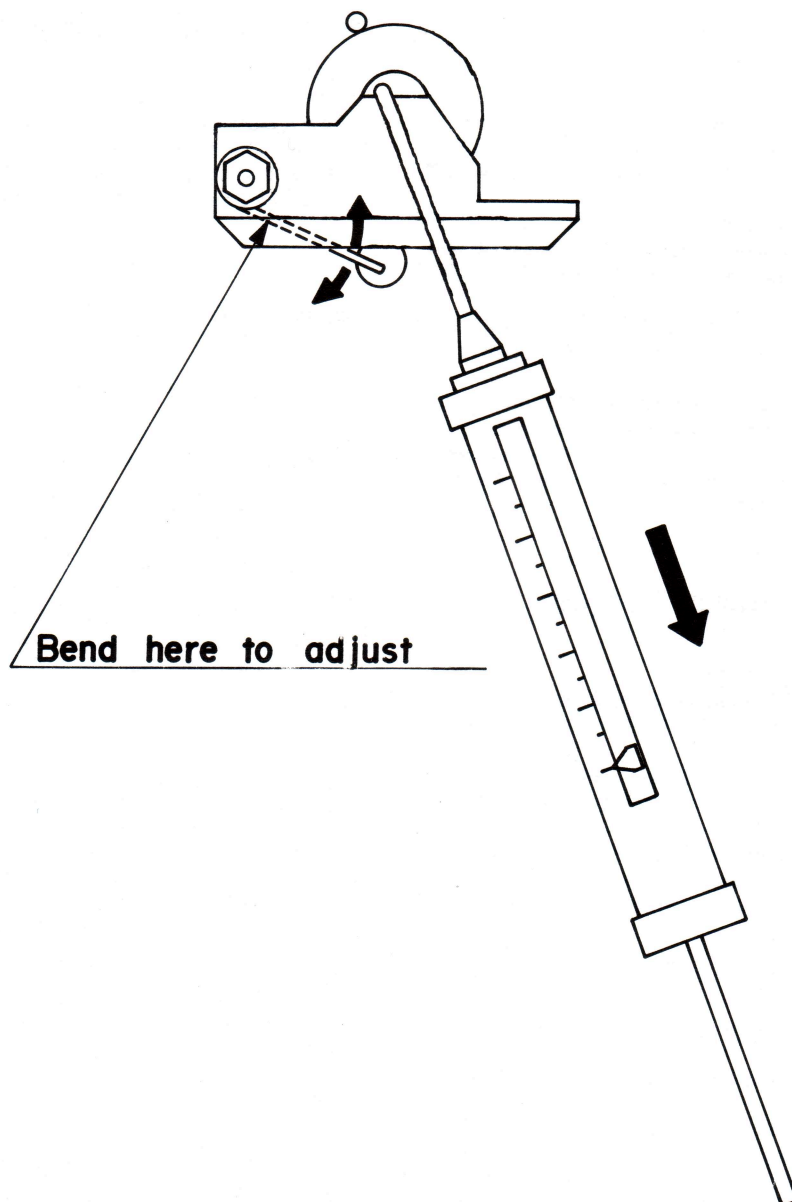


Fig. 1 Pinch Roller Pressure Measurement

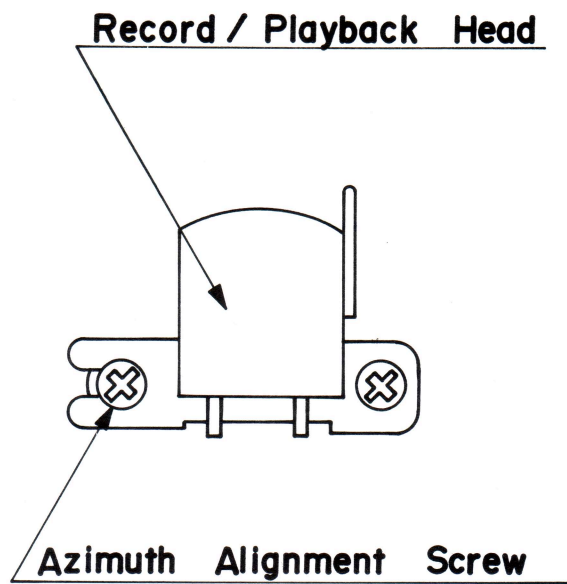


Fig. 2 Head Azimuth Adjustment Location

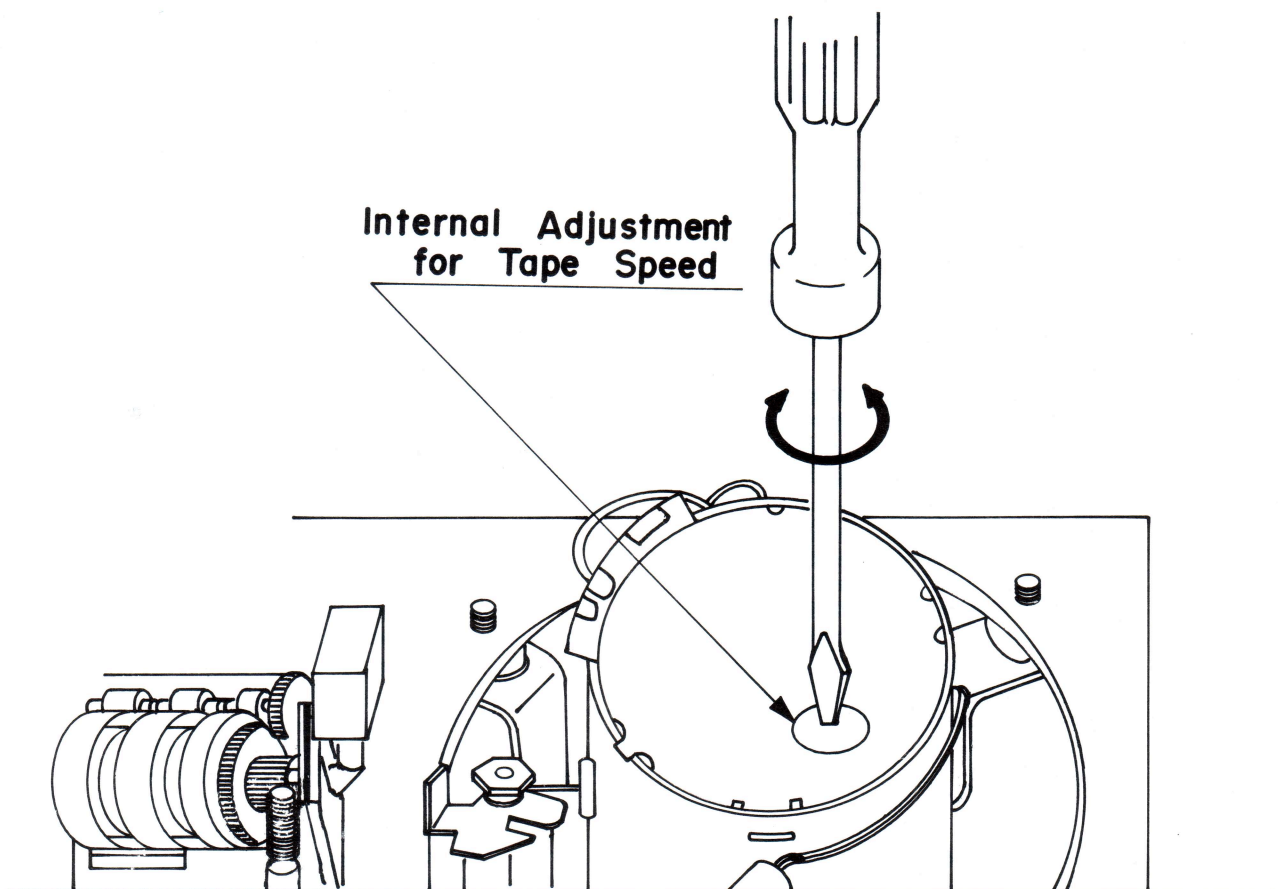


Fig. 3 Tape Speed Adjustment Location

Parts List

CP-637 L (Lenco C 1102)

Mechanical Parts

Reference No.	Description	Lenco Part No.	Quantity	Unit Price
A-1	Cabinet Assembly, Top	21C7384X	1	
	Consists of following:			
	A-1 Cabinet, Top	21C7384	1	
	A-16 Window, Tapecounter	21W7472	1	
	B 2-37 Cover, Volume Control	24W7808	1	
A-2	Cabinet Assembly, Bottom	21C7386X	1	
	Consists of following:			
	A-2 Cabinet, Bottom	21C7386	1	
	A-12 Rubber, Foot	21W7299	4	
	B 2-32 Paper, Shield	24W7641	1	
A-3	Door Assembly, Cassette	21C7392X	1	
	Consists of following:			
	A-3 Door, Cassette	21C7392	1	
	A-4 Window, Cassette	2107088	1	
	A-23 Spring, Cassette Setting	23W9627	2	
A-5	Box, VU Meter	21C7389	1	
A-6	Cover, Microphone Jack	21C7390	1	
A-7	Door, Microphone Jack	21C7391	1	
A-10	Button, Push Switch	21N7597	5	
A-11	Button, Power Switch	21N7598	1	
A-13	Button, VU Meter Box	21N7602	1	
A-14	Button, Tapecounter	21N7603	1	
A-15	Knob, Volume Control	21N7604	2	
A-17	Decoration Plate, Azimuth Hole	21W7473	1	
A-18	Plate, Rating (220 V, 50 Hz)	23M7885	1	
A-22	Plate, Rating (240 V, 50 Hz)	23M7890	1	
B 1-1	Chassis Assembly	23S7191X	1	
	Consists of following:			
	B 1-1 Chassis, Mechanism	23S7191	1	
	B 1-17 Metal, Reel Shaft	22R7051	2	
	B 1-56 Stay, Auto Stop PC Board	25W8271	1	
	B 1-67 Stay, Flywheel Holder	25W7723	1	
	B 1-71 Shaft, Pause Lever B	25W7718	1	
	B 1-74 Stay, Basic	25W8172	2	
	B 1-83 Shaft, Head Chassis Guide	25W7713	2	
	B 1-85 Stay, Basic	25W7709	1	
	B 1-86 Shaft, Guide	25W7710	5	
	B 1-89 Shaft, Fast Forward Arm	25W7719	2	
	B 1-104 Shaft, Tape Changing Spring	25W7737	1	
B 1-2	Plate Assembly, Head Base	23W8776X	1	
	Consists of following:			
	B 1-2 Chassis, Head	23W8776	1	
	B 1-76 Stay, Pinch Roller Arm	25W7712	1	
	B 1-79 Stay, Head Adjusting Spring	25W7720	1	
	B 1-83 Shaft, Head Chassis Guide	25W7713	1	
B 1-3	Plate Assembly, Cassette Lifting	23W9940X	1	
	Consists of following:			
	B 1-3 Plate, Cassette Lifting	23W9940	1	
	A-19 Sheet A	24W7508	1	
	A-20 Sheet B	24W7509	1	
	B 1-140 Spacer	24W7443	1	
B 1-4	Pushbutton Assembly	27N7060	1	
B 1-5	Capstan Assembly	27W7060	1	

Note:

Reference No.	Description	Lenco Part No.	Quantity	Unit Price
B 1-6	Metal, Capstan	22H7050	1	
B 1-7	Belt, Capstan	21V7068	1	
B 1-8	Shaft Assembly, Take-up Reel Base	27W7061	1	
B 1-9	Shaft Assembly, Supply Reel Base	27W7062	1	
B 1-10	Pulley A Assembly, Fast Forward	27W7063X	1	
	Consists of following:			
	B 1-10 Pulley A, Fast Forward	27W7063	1	
	B 1-24 Arm, Fast Forward Pulley	21W7204	1	
	B 1-78 Shaft, Fast Forward Pulley	25W7683	1	
	B 1-101 Washer	24W7369	1	
	L 1-27 E-Ring Ø 1.5	EEU0015	1	
B 1-12	Pulley Assembly, Take-up	21W7327X	1	
	Consist of following			
	B 1-12 Pulley, Take-up	21W7327	1	
	B 1-39 Arm, Take-up Pulley	23W8774	1	
	B 1-68 Shaft, Take-up Pulley	25W7681	1	
	L 1-27 E-Ring Ø 1.5	EEU0015	1	
B 1-13	Pulley B, Fast Forward	27W7064	1	
B 1-14	Pulley C, Fast Forward	27W7065	1	
B 1-15	Belt, Fast Forward	21W7104	1	
B 1-16	Belt, Counter	21V7040	1	
B 1-18	Pinch Roller Assembly	21W7203X	1	
	Consist of following			
	B 1-18 Arm, Pinch Roller	21W7203	1	
	B 1-19 Pinch Rolier	27W7071	1	
	B 1-66 Shaft, Pinch-Roller	25W7741	1	
B 1-21	Rubber, Brake	21W7201	2	
B 1-22	Cushion, Door	21W7199	1	
B 1-23	Cushion, Motor	21W7236	3	
B 1-25	Holder, Motor	23X7262	1	
B 1-26	Bracket A, Flywheel	23W8783	1	
B 1-27	Bracket B, Flywheel	23W8765	1	
B 1-28	Arm Assembly, Back Tension	23W8778X	1	
	Consists of following:			
	B 1-28 Arm, Back Tension	23W8778	1	
	B 1-91 Felt. Back Tension	24W7360	1	
B 1-29	Arm A Assembly, Fast Forward and Rewind	23W8794X	1	
	Consists of following:			
	B 1-29 Arm A, Fast Forward and Rewind	23W8794	1	
	B 1-69 Shaft, Fast Forward Pulley B	25W7682	2	
B 1-30	Arm B Assembly, Fast Forward and Rewind	23W8793X	1	
	Consists of following:			
	B 1-30 Arm B, Fast Forward and Rewind	23W8793	1	
	B 1-103 Shaft, Fast Forward and Rewind Arm B	25W7733	1	
B 1-31	Arm C, Fast Forward and Rewind	23W8792	1	
B 1-32	Arm Assembly, Fast Forward	23W8791X	1	
	Consists of following:			
	B 1-32 Arm, Fast Forward	23W8791	1	
	B 1-72 Shaft, Fast Forward and Rewind Arm C	25W7721	1	
B 1-33	Arm Assembly, Rewind	23W8790X	1	
	Consists of following:			
	B 1-33 Arm, Rewind	23W8790	1	
	B 1-72 Shaft, Fast Forward and Rewind Arm C	25W7721	1	
B 1-34	Arm A Assembly, Tape Changing	23W9954X	1	
	Consists of following			
	B 1-34 Arm A, Tape Changing	23W9954	1	
	B 1-96 Stop Pin	25W8169	1	

Note:

Reference No.	Description	Lenco Part No.	Quantity	Unit Price
B 1-35	Arm B, Tape Changing	23W8785	1	
B 1-36	Lever A Assembly, Pause	23W8782X	1	
	Consists of following:			
	B 1-36 Lever A, Pause	23W8782	1	
	B 1-90 Shaft, Pause Lever A	25W7708	1	
B 1-37	Lever B, Pause	23W8795	1	
B 1-38	Lever C, Pause	23W8781	1	
B 1-40	Arm, Brake	23W8773	1	
B 1-41	Plate, Lock Release	23W9698	1	
B 1-42	Plate, Record Prevention	23W8779	1	
B 1-43	Angle B Assembly, Door	23W9749X	1	
	Consist of following			
	B 1-43 Angle B, Door	23W9749	1	
	B 1-80 Shaft B, Door	25W7946	1	
B 1-44	Arm A, Record	23W8771	1	
B 1-45	Lever B, Eject	23W9753	1	
B 1-46	Arm, Head Chassis	23W8775	1	
B 1-47	Arm B, Record	23W8770	1	
B 1-48	Angle Assembly, Door	23W8777X	1	
	Consist of following			
	B 1-48 Angle, Door	23W8777	1	
	B 1-11 Shaft, Door	25W7704	1	
B 1-49	Spring A, Head Chassis Holding	23W8789	1	
B 1-50	Spring B, Head Chassis Holding	23W8788	1	
B 1-51	Spring, R/P Head	23W8796	1	
B 1-52	Pulley, Motor	25R7082	1	
B 1-53	Spring, Slide Switch Changing	23W8772	1	
B 1-54	Spoke, Switch Changing	26W7359	1	
B 1-55	Spring, Brake Arm	26W7487	1	
B 1-57	Spring, Pause Lever B	26W7249	1	
B 1-58	Spring, Record Prevention Plate	26W7246	1	
B 1-59	Spring, Fast Forward	26W7250	1	
B 1-60	Spring, Rewind	26W7251	1	
B 1-61	Spring, Pinch Roller	26W7244	1	
B 1-62	Spring A, Push Shaft	26W7254	1	
B 1-63	Spring, Take-up Pulley Arm	26W7245	1	
B 1-64	Spring B, Push Shaft	26W7253	1	
B 1-65	Spring, Door	26W7248	1	
B 1-70	Shaft, Record Prevention Plate	25W7707	1	
B 1-73	Shaft, Tape Changing Arm A	25W7715	1	
B 1-75	Shaft, Head Chassis Pushing	25W7711	1	
B 1-77	Shaft 8, Pinch Roller Arm	25W8004	1	
B 1-81	Stay, Erase Head	25W7706	2	
B 1-82	Stay, R/P Head	25W7705	1	
B 1-84	Shaft, Record Arm B	25W7714	1	
B 1-87	Nut B, Pinch Roller Adjusting	25W8005	1	
B 1-88	Shaft, Eject Lever B	25W7717	1	
B 1-92	Coil Spring A	26W7258	3	
B 1-93	Coil Spring B	23W7259	1	
B 1-94	Coil Spring C	26W7292	1	
B 1-95	Spring, Back Tension Arm	23W7261	1	
B 1-97	Washer, Oil Stopper	24W7370	1	
B 1-98	Cramp, Shield Wire	23W8848	1	
B 1-99	Counter Assembly	1670017X	1	
	Consists of following:			
	B 1-99 Counter	1670017	1	
	B 1-124 Washer	24W7505	1	
	Magnet Ring	1790100	1	
B 1-100	Stay, Counter	25W7961	1	
B 1-102	2 H pipe	25W7241	10	
B 1-105	Coil Spring D	26W7265	1	
B 1-106	Coil Spring E	26W7266	1	
B 1-107	Washer B	24W7653	2	
B 1-108	Cushion, Rubber	21W7210	2	
B 1-110	Window, Tape Lighting	21 U7100	1	

Note:

Reference No.	Description	Lenco Part No.	Quantity	Unit Price
B 1-111	Screw, Thrust	25W7132	1	
B 1-112	Roller B, Guide	25W8000	2	
B 1-113	Guide, Tape Changing Arm B	25W7595	1	
B 1-114	Stay, Pause Lever B	21W7220	1	
B 1-116	Spring C, Head Chassis Holding	23W8900	1	
B 1-117	Washer, Thrust	24W7228	1	
B 1-119	Spring, Record Arm A	26W7333	1	
B 1-120	Cover, Chassis	23W9966	1	
B 1-121	Stay, Chassis Cover	25W7781	1	
B 1-123	Reel Table Assembly	27W7082	2	
B 1-125	Arm C, Tape Changing	23W9425	1	
B 1-126	Spring, Tape Changing	23W8800	1	
B 1-127	Spacer, Head Chassis	23W9555	1	
B 1-129	Bar, Eject	21W7253	1	
B 1-130	Holder, Eject Bar	23W9086	1	
B 1-131	Plate, Eject Bar Locking	23W9763	1	
B 1-132	Plate, Lock Release	23W9764	1	
B 1-133	Pipe, Locking Plate	25W7829	1	
B 1-134	Pipe, Lock Release Plate	25W7830	1	
B 1-135	Spring, Eject Bar	23W7315	1	
B 1-136	Spring, Eject Bar Locking	23W7316	1	
B 1-137	Holder, Lamp	23W9624	1	
B 1-138	Cover, Lamp	21W7351	1	
B 1-141	Pipe, Pause Lever C	25W8064	1	
B 2-1	Chassis	23X7296	1	
B 2-2	Joint A	23X7295	1	
B 2-3	Joint B Assembly	23X7298X	1	
	Consists of following:			
	B 2-3 Joint B	23X7298	1	
	B 2-49 Spacer	25W0744	1	
B 2-4	Bracket, Pin Jack	23X7301	1	
B 2-5	Bracket, Transformer	23X7302	1	
B 2-6	Holder, Microphone Jack	23X7290	1	
B 2-7	Bracket, Microphone Jack	23X7291	1	
B 2-8	Holder Assembly, VU Meter Box	23X7292X	2	
	Consists of following:			
	B 2-8 Holder, VU Meter Box	23X7292	2	
	B 2-42 Pin, VU Meter Box	25W7777	2	
B 2-9	Plate Assembly, VU Meter	23X7293X	1	
	Consists of following:			
	B 2-9 Plate, VU Meter	23X7293	1	
	B 2-40 Cover, VU Meter Box	24T7258	1	
B 2-10	Spring, VU Meter Box Locking	23X7294	1	
B 2-11	Stay, Bottom Cabinet Holding	25W8281	1	
B 2-12	Shaft, Record Arm C	25W8282	1	
B 2-13	Stay, Terminal Board	25W8283	1	
B 2-14	Lever, Auto Stop	23X7299	1	
B 2-15	Arm, Meter Box Lifting	23X7300	1	
B 2-16	Spring, Meter Box Lifting Button	26W7537	1	
B 2-17	Holder, Push Switch Button	21W7311	5	
B 2-18	Bracket, Power PCB	23W9560	1	
B 2-19	Bracket, Mechanism Chassis	23W8734	2	
B 2-20	Bracket B, Record/Playback PC Board	23W9413	1	
B 2-21	Bracket C, Record/Playback PC Board	23W9419	1	
B 2-22	Plate, PC Board	23W9566	1	
B 2-23	Pipe, Auto Stop Lever	25W7518	1	
B 2-24	Holder, Lamp	21W8502	2	
B 2-25	Retainer, Wire	23W1046	3	
B 2-26	Holder, Power Switch Button	21W7312	1	
B 2-29	Lever C Assembly, Record	23W9423X	1	
	Consists of following:			
	B 2-29 Lever C, Record	23W9423	1	
	B 2-31 Shaft, Record Lever D	25W7959	1	

Note:

Reference No.	Description	Lenco Part No.	Quantity	Unit Price
B 2-30	Lever 0, Record	23W9564	1	
B 2-33	Spring, Earth	26W7227	1	
B 2-34	Shield, Transformer	23W9562	2	
B 2-36	Plate, Insulation	24W7807	1	
B 2-38	Cushion, Stopper	21W7013	4	
B 2-39	Cushion, VU Meter	24W7805	4	
B 2-41	Plate, Shelter	23X7303	1	
B 2-43	Spring, Meter 80x Lifting	26W7242	1	
B 2-44	Cushion, Meter 80x	24W7389	1	
B 2-47	Spring, Auto Stop Lever	26W7439	1	
B 2-48	Washer, Transformer	23W0255	2	
B 2-50	Joint C	23X7426	1	
L 1-1	Slotted Socket Setscrew M 2 X 3	SSI2003	5	
L 1-2	Flat Countersunk Head Screw M 2 X 5	SDM1205	1	
L 1-35	Slotted Socket Setscrew M 2.6 X 4	SSI2604	1	
L 1-3	Pan Head Screw M 2 X 8	SPM1208	1	
L 1-4	Pan Head SEMS Screw M 2 X 5	CPM1205	1	
L 1-5	Pan Head SEMS Screw M 2 X 8	CPM1208	3	
L 1-6	Pan Head SEMS Screw M 2 X 10	CPM1210	1	
L 1-7	Pan Head SEMS Screw M 2 X 12	CPM1212	4	
L 1-8	Pan Head Screw M 2.6 X 3	SPM1903	4	
L 1-9	Pan Head SEMS Screw M 2.6 X 4	CPM1904	3	
L 1-10	Pan Head SEMS Screw M 2.6 X 6	CPM1906	19	
L 1-11	Pan Head SEMS Screw M 2.6 X 8	CPM1908	1	
L 1-12	Pan Head SEMS Screw M 2.6 X 10	CPM1910	1	
L 1-13	Pan Head W SEMS Screw M 2.6 X 6	FPM1906	2	
L 1-14	Pan Head W SEMS Screw M 3 X 6	FPM3306	1	
L 1-15	Pan Head SEMS Screw M 3 X 6	CPM3306	4	
L 1-16	Pan Head W SEMS Screw M 3 X 12	FPM3312	3	
	Steel Ball Ø 2.5	80S0025	2	
L 1-18	Steel Ball Ø 3	80S0030	3	
L 1-19	Nut M 2	NHM0020	3	
L 1-20	Nut M 2.6	NHM0026	4	
L 1-21	Nut M 3	NHM0030	1	
L 1-22	Flat Washer M 2 (0.4 t X Ø 5)	WP82054	2	
L 1-23	Flat Washer M 2.6 (0.5 t X Ø 7.5)	WP89075	3	
L 1-24	Flat Washer M 3.5 (0.5 t X Ø 7)	WP8C075	9	
L 1-25	Flat Washer Ø 4 X Ø 10X 0.8 t		1	
L 1-26	Flat Washer M 4 (0.5 t X Ø 10)	WP84103	3	
L 1-28	E-Ring Ø 2	EEU0020	5	
L 1-29	E-Ring Ø 2.5	EEU0025	10	
L 1-30	E-Ring Ø 3	EEU0030	1	
L 1-31	E-Ring Ø 4	EEU0040	2	
L 1-32	Spring Pin Ø 1.6 X 12	PSK1612	1	
L 1-33	Spring Washer M 2.6	WSM9056	4	
L 1-34	Spring Washer M 3	WSM3067	1	
L 1-36	Spacer Ø 3 X Ø 4 X 7	G003070	3	
L 2-1	Tapping Screw (Tap-Tite C Type) M 3 X 6		36	
L 2-2	Tapping Screw (Tape-Tite C Type) M 3 X 8		2	
L 2-3	Pan Head SEMS Screw M 3 X 6	CPM3306	18	
L 2-4	Pan Head W SEMS Screw M 3 X 6	FPM3306	7	
L 2-5	Pan Head SEMS Screw M 3 X 5	CPM3305	3	
L 2-6	Binding Head Screw M 3 X 8	S8K3308	9	
L 2-7	Pan Head SEMS Screw M 2.6 X 6	CPM1906	1	
L 2-8	Pan Head Tapping Screw M 2.6 X 6		3	
L 2-9	Tapping Screw M 3 X 8	SLM3308	1	
L 2-10	Flat Countersunk Head Screw M 2.6 X 6	SDK1906	2	
L 2-11	Pan Head W SEMS Screw M 2.6 X 6	FPK1906	2	
L 2-12	Nut M 3	NHM0030	1	
L 2-13	Nut M 12	NHM0120	1	
L 2-14	E-Ring Ø 3		1	
L 2-15	E-Ring Ø 2.5		1	

Note:

Electrical Parts

Reference No.	Description	Lenco Part No.	Quantity	Unit Price
	Record/Playback Head	165N053	1	
	Erase Head	165N042	1	
	Level Meter	1831229	2	
	Power Transformer	118G483	1	
	AC Cord (COMMON-type)	1750277	1	
	AC Cord (BASEC-type)	1750280	1	
	AC Cord (SAA-type)	1750283	1	
	AC Cord Stopper (COMMON-type)	SR-4N-4	1	
	AC Cord Stopper (BASEC-type)	SR-5N-4	1	
	AC Cord Stopper (SAA-type)	SR-6W-1	1	
	DC FG-Servo Motor	164N111	1	
S 1	Slide Switch (12-Circuit)	1621210, 1621259,	2	
		1621345		
S 2	Slide Switch (9-Circuit)	1621318,1621237,	1	
		1621344		
S 3	Slide Switch (4-Circuit)	1621248,1621341	1	
S 4, 5, 6, 12	Push Switch (5-function- common)	1622298	1	
	Power Switch	1622276	1	
	Micro Switch	1623052	1	
	Leaf Switch	1624025	1	
	Leaf Switch	1624041	1	
S 14	Reed Switch	1623133,1623136	1	
S 15	Push Switch (2-Circuit)	1622195,1622174	2	
	P.C.B. Connector 10 P	172M459	1	
	P.C.B. Connector 6 P	172M584	2	
	Connector (5 P-3.5 mm)	172M606	1	
	Connector (3 P-3.5 mm)	172M604	13	
	Connector (5 P-2.5 mm) L-type	172M854	1	
	Connector Socket (5 P-3.5 mm)	172M870, 172M590	1	
	Connector Socket (3 P-3.5 mm)	172M588, 172M868	13	
	Connector Socket (5 P-2.5 mm)	172M862	1	
P 103, 203	Slide Resistor 20 K (D)	139N724	2	
	DIN/RCA Jack Board	1720800	1	
	Terminal Board	1720813	1	
	DIN/RCA Jack P.C.B.	1611581	1	
	MIC Jack P.C.B.	1611266	1	
	Pre-Amplifier P.C.B.	1611263B	1	
	Dolby P.C.B.	1611190	1	
	DNL P.C.B.	1611020	1	
	Auto Stop P.C.B.	1611585	1	
	Push Switch P.C.B.	1611580	1	
	LED P.C.B. (4-function-common)	1611583	1	
	Peak Level LED P.C.B.	1611610	1	
	Power P.C.B.	1611584	1	
	Muting P.C.B.	1611021	1	
	Reed Switch P.C.B.	1611032	1	
PL 1, 2, 3	Pilot Lamp	1830159	3	
	Solenoid Coil	1660033	1	
	Head Phone Jack (6.3 mm)	1630108	1	
	DIN Jack (P.C.B.-type)	1720401, 172C401	2	
	O.S.C. Block	1810074	1	
	Filter Block	1810098	2	
	Magnet Ring	1790100	1	
	Fuse (315 mA)	1790095	1	
	Fuse (630 mA)	1790098	1	
L 102, 202	Semi-fixed Inductance 6.8 mH	1170100	2	
L 103, 203	Semi-fixed Inductance 4.7 mH (J)	1170135	2	
L 104, 204	Semi-fixed Inductance 15 mH	1170078	2	
L 1, 303, 403	Semi-fixed Inductance 200 µH	1170069	3	
	Trimmer Capacitor	1280057	4	
VR 302, 402	Semi-fixed Resistor (8 mm) 1 K	138N026	3	
P102, 202	Semi-fixed Resistor (8 mm) 10 K	138N271	8	
107, 207				
VR 501, 601				
301, 401				

Reference No.	Description	Lenco Part No.	Quantity	Unit Price
P 104, 204, 105	Semi-fixed Resistor (8 mm) 20 K	138N028	6	
205,106,206				
P2	Semi-fixed Resistor (8 mm) 100 K	138N004	1	
	MIC Jack P.C.B. Assembly	1611266X		
	MIC Jack P.C.B.	1611266	1	
R 101, 201	Carbon Resistor 18 K	1337183	2	
R102,202	Carbon Resistor 5.6 K	1337562	2	
R 104, 204	Carbon Resistor 1 K	1337102	2	
		1622195		
S 15	Push Switch (2-Circuit)	1622174	1	
	DIN/RCA Jack P.C.B. Assembly	1611581X		
	DIN/RCA Jack P.C.B.	1611581	1	
R 28, 29	Carbon Resistor 560 K ¼ W (J)	1346564	2	
R 30, 31	Carbon Resistor 3.3 M	1321335	2	
R 32, 33	Carbon Resistor 56 K ¼ W (J)	1346563	2	
	DIN/RCA Jack Board	1720800	1	
	Peak Level P.C.B. Assembly	1611610X		
	Peak Level P.C.B.	1611610	1	
011	Light Emitting Diode	TLR-114	1	
	Pre-Amplifier P.C.B. Assembly	1611263BX		
	Pre-Amplifier P.C.B.	1611263B	1	
	Filter Block	1810098	2	
T 5	Transistor	2SC1327U	1	
T 6,7	Transistor	2SC1815GR	2	
T 10, 201	Transistor	2SC1000BL	4	
102, 202		2SC1681BL		
T 103, 203	Transistor	2SC1327T	6	
104, 204		2SC732BL		
105, 205				
T 106, 206	Transistor	2SC1815GR	4	
107, 207				
T 108, 208	Transistor	2SC1327U	2	
T 109, 209	Transistor	2SC828S	2	
T 110, 210	Transistor	2SA564S	2	
T 301, 401	Transistor	2SC1327T	6	
302, 402		2SC732BL		
303, 403				
P 1	Semi-fixed Resistor (8 mm) 1 K	138N026	1	
P 2	Semi-fixed Resistor (8 mm) 100 K	138N004	1	
P 103, 203	Slide Resistor 20 K (0)	139N724	2	
P 104, 204	Semi-fixed Resistor (8 mm) 20 K	138N028	6	
105, 205				
106, 206				
P 107, 207	Semi-fixed Resistor (8mm) 10 K	138N271	2	
L 102, 202	Semi-fixed Inductance 6.8 mH	1170100	2	
L 103, 203	Semi-fixed Inductance 4.7 mH (J)	1170135	2	
L 104, 204	Semi-fixed Inductance 15 mH	1170078	2	
PL 1, 2, 3	Pilot Lamp	1830159	3	
D 101, 201	Diode	1K-60	2	
D 102, 202	Diode	1S1555	4	
103, 203				
D 104, 204	Diode	1K-60	4	
105, 205				
D 106, 206	Diode	KB-269	2	
R 21	Carbon Resistor 220 K	1337224	2	
R 22	Carbon Resistor 2.2 K	1337222	2	
R 23	Carbon Resistor 680 K	1337684	2	
R 24	Carbon Resistor 330 K	1337334	2	

Note:

Reference No.	Description		Lenco Part No.	Quantity	Unit Price
R 25	Carbon Resistor	4.7 K	1337472	2	
R 103, 203	Carbon Resistor	10	1337100	2	
R 105, 205	Carbon Resistor	120 K	1337124	2	
R 106, 206	Carbon Resistor	220	1337221	2	
R 107, 207	Carbon Resistor	220 K	1337224	2	
R 108, 208	Carbon Resistor	10 K	1337103	2	
R 109, 209	Carbon Resistor	1 K	1337102	2	
R 110, 210	Carbon Resistor	150 K	1337154	2	
R 111, 211	Carbon Resistor	2.7 K	1337272	2	
R 112, 212	Carbon Resistor	2.2 K	1337222	2	
R 113, 213	Carbon Resistor	3.3 K	1337332	2	
R 114, 214	Carbon Resistor	4.7 K	1337472	2	
R 115, 215	Carbon Resistor	470 K	1337474	2	
R 116, 216	Carbon Resistor	47 K	1337473	2	
R 117, 217	Carbon Resistor	3.3K	1337332	2	
R 118, 218	Carbon Resistor	330	1337331	2	
R 119, 219	Carbon Resistor	390	1337391	2	
R 121, 221	Carbon Resistor	22 K	1337223	2	
R 122, 222	Carbon Resistor	150	1337151	2	
R 123, 223	Carbon Resistor	68	1337680	2	
R 124, 224	Carbon Resistor	3.9 K	1337392	2	
R 125, 225	Carbon Resistor	6.8 K	1337682	2	
R 126, 226	Carbon Resistor	1.8 K	1337182	2	
R 127, 227	Carbon Resistor	470 K	1337474	2	
R 128, 228	Carbon Resistor	100 K	1337104	2	
R 129, 229	Carbon Resistor	4.7 K	1337472	2	
R 130, 230	Carbon Resistor	1 K	1337102	2	
R 131, 231	Carbon Resistor	82 K	1337823	2	
R 132, 232	Carbon Resistor	3.9 K	1337392	2	
R 133, 233	Carbon Resistor	470 K	1337474	2	
R 134, 234	Carbon Resistor	3.3 K	1337332	2	
R 135, 235	Carbon Resistor	330 K	1337334	2	
R 136, 236	Carbon Resistor	47 K	1337473	2	
R 137, 237	Carbon Resistor	4.7 K	1337472	2	
R 138, 238	Carbon Resistor	1 K	1337102	2	
R 139, 239	Carbon Resistor	100 K	1337104	2	
R 141, 241	Carbon Resistor	1.8 K	1337182	2	
R 142, 242	Carbon Resistor	560	1337561	4	
143, 243					
R 144, 244	Carbon Resistor	12 K	1337123	2	
R 145, 245	Carbon Resistor	22 K	1337223	2	
R 146, 246	Carbon Resistor	12 K	1337123	2	
R 147, 247	Carbon Resistor	120 K	1337124	2	
R 148, 248	Carbon Resistor	10	1337100	2	
R 149, 249	Carbon Resistor	10	1337100	2	
R 150, 250	Carbon Resistor	39	1337390	2	
R 151, 251	Carbon Resistor	10 K	1337102	2	
R 152, 252	Carbon Resistor	18 K	1337183	2	
R 153, 253	Carbon Resistor	1 K	1337102	2	
R 301,401	Carbon Resistor	470 K	1337474	2	
R 302, 402	Carbon Resistor	47 K	1337473	2	
R 303, 403	Carbon Resistor	3.3 K	1337332	2	
R 304, 404	Carbon Resistor	560	1337561	2	
R 305, 405	Carbon Resistor	5.6 K	1337562	2	
R 306, 406	Carbon Resistor	47 K	1337473	2	
R 307, 407	Carbon Resistor	180 K	1337184	2	
R 308, 408	Carbon Resistor	12 K	1337123	2	
R 309, 409	Carbon Resistor	1.8 K	1337182	2	
R 310, 410	Carbon Resistor	3.9 K	1337392	2	
R 343, 443	Carbon Resistor	270	1337271	2	
C 101, 201	Styrol Capacitor	680 p	1230681	2	
C 102, 202	Tantal Electrolytic Capacitor	10 µ/10	1224106	2	
C 103, 203	Electrolytic Capacitor	47 µ/16	1203476	2	
C 104, 204	Myler Capacitor	0.001 µ (K)	1250102	2	
C 105, 205	Ceramic Capacitor	100 p	1203101	2	
C 106, 206	Electrolytic Capacitor	33 µ/6.3	1201336	2	

Note:

Reference No.	Description		Lenco Part No.	Quantity	Unit Price
C 107, 207	Tantal Electrolytic Capacitor	3.3 µ/10	1224335	2	
C 108, 208	Myler Capacitor	0.022 µ (J)	1254223	2	
C 110, 210	Tantal Electrolytic Capacitor	3.3 µ/10	1224335	2	
C 113, 213	Electrolytic Capacitor	100 µ/16	1203107	2	
C 114, 214	Tantal Electrolytic Capacitor	3.3 µ/10	1224335	2	
C 115, 215	Electrolytic Capacitor	3.3 µ/25	1204335	2	
C 116, 216	Electrolytic Capacitor	100 µ/25	1204107	2	
C 117, 217	Ceramic Capacitor	150 p	12D3151	4	
118, 218					
C 119, 219	Ceramic Capacitor	470 p	12D3471	2	
C 120, 220	Myler Capacitor	0.018 µ (J)	1254183	2	
C 121, 221	Myler Capacitor	0.027 µ (J)	1254273	2	
C 122, 222	Tantal Electrolytic Capacitor	3.3 µ/25	1225335	2	
C 123, 223	Electrolytic Capacitor	3.3 µ/25	1204335	2	
C 124, 224	Electrolytic Capacitor	3.3 µ/25	1204335	4	
125, 225					
C 126, 226	Aluminium Solid Element Capacitor	0.47 µ/10	1211474	2	
C 128, 228	Electrolytic Capacitor	3.3 µ/25	1204335	4	
129, 229					
C 130, 230	Electrolytic Capacitor	1 µ/25	1204105	2	
C 131, 231	Electrolytic Capacitor	47 µ/6.3	1201476	2	
C 132, 232	Electrolytic Capacitor	100 µ/6.3	1201107	2	
C 133, 233	Electrolytic Capacitor	100 µ/25	1204107	2	
C 137, 237	Electrolytic Capacitor	10 µ/16	1203106	2	
C 151, 251	Electrolytic Capacitor	3.3 µ/25	1204335	2	
C 302, 402	Ceramic Capacitor	60 p	12D3600	2	
C 306, 406	Electrolytic Capacitor	3.3 µ/25	1204335	2	
C 307, 407	Electrolytic Capacitor	10 µ/16	1203106	2	
C 20	Electrolytic Capacitor	10 µ/16	1203106	2	
C 30	Electrolytic Capacitor	220 µ/6.3	1201227	2	
C 31	Electrolytic Capacitor	10 µ/16	1203106	2	
	Dolby P.C.B. Assembly		1611190X		
	Dolby P.C.B.		1611190	1	
Q 304, 404	Transistor		2SC732BL	2	
			2SC1327T		
Q 305, 405	Transistor		2SC732BL	2	
			2SC1327T		
Q 306, 406	Transistor		2SK30AD	2	
Q 307, 407	Transistor		2SC732BL	2	
			2SC1327T		
Q 308, 408	Transistor		2SA721T	2	
Q 309, 409	Transistor		2SC732BL	2	
			2SC1327T		
D 301, 401	Diode		1 K-60	2	
D 302, 402	Diode		KB-162	8	
D 303, 403					
D 304, 404					
D 305, 405					
VR 301, 401	Semi-fixed Resistor	(8 mm) 10 K	138N271	2	
VR 302, 402	Semi-fixed Resistor	(8 mm) 1 K	138N026	2	
ZD 2,3	Zener Diode		WZ-018	2	
			UZ-82B	2	
			05Z82	2	
L 303, 403	Semi-fixed Inductance	0.2 mH	117D069	2	
R 311, 411	Carbon Resistor	33 K	1321333	2	
R 312, 412	Carbon Resistor (Precision)	150 K/¼ W	1330052	2	
R 313, 413	Carbon Resistor (Precision)	180 K/¼ W	1330053	2	
R 314, 414	Carbon Resistor	27 K	1337273	2	
R 315, 415	Carbon Resistor	8.2 K	1337822	2	
R 316, 416	Carbon Resistor	22 K	1337223	2	
R 317, 417	Carbon Resistor (Precision)	150 K/¼ W	1330052	2	
R 318, 418	Carbon Resistor	2.7 K	1337272	2	
R 319, 419	Carbon Resistor	33 K	1337333	2	
R 320, 420	Carbon Resistor	270 K	1321274	2	

Note:

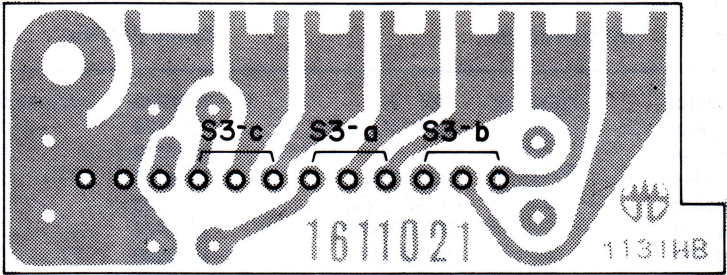
Reference No.	Description		Lenco Part No.	Quantity	Unit Price
R 321, 421	Carbon Resistor	47 K	1337473	2	
R 322, 422	Carbon Resistor (Precision)	3.3 K / ¼W	1330051	2	
R 323, 423	Carbon Resistor	1 K	1337102	2	
R 324, 424	Carbon Resistor	12 K	1337123	2	
R 325, 425	Carbon Resistor	1.2 K	1337122	2	
R 326, 426	Carbon Resistor	1.5 M	1337155	2	
R 327, 427	Carbon Resistor	1 M	1337105	2	
R 328, 428	Carbon Resistor	15 K	1337153	2	
R 329, 429	Carbon Resistor	8.2 K	1337822	2	
R 330, 430	Carbon Resistor	10 K	1337103	2	
R 331, 431	Carbon Resistor	8.2 K	1337822	4	
332, 432					
R 333, 433	Carbon Resistor	33 K	1337333	2	
R 334, 434	Carbon Resistor	120 K	1337124	2	
R 335, 435	Carbon Resistor	47 K	1337473	2	
R 336, 436	Carbon Resistor	1 K	1337102	2	
R 337, 437	Carbon Resistor	33	1337330	2	
R 338, 438	Carbon Resistor	82	1337820	2	
R 339, 439	Carbon Resistor	2.7 K	1337272	2	
R 340, 440	Carbon Resistor	15 K	1337153	2	
R 341, 441	Carbon Resistor	270 K	1337274	2	
R 342, 442	Carbon Resistor	270 K	1337274	2	
R 344, 444	Carbon Resistor	220 K	1337224	2	
C 308, 408	Electrolytic Capacitor	10 µ/16	1203106	6	
309, 409					
310, 410					
C 311, 411	Precision Film Capacitor	0.0056 µ	1220124	2	
C 312, 412	Precision Film Capacitor	0.027 µ	1220123	2	
C 313, 413	Precision Film Capacitor	0.0047 µ	1220125	2	
C 314, 414	Electrolytic Capacitor	10 µ/16	1203106	2	
C 315, 415	Myler Capacitor	0.1 µ (K)	1250104	2	
C 316, 416	Electrolytic Capacitor	47 µ/16	1203476	2	
C 318, 418	Myler Capacitor	0.1 µ (K)	1250104	2	
C 319, 419	Electrolytic Capacitor	10 µ/16	1203106	4	
320, 420					
C 321, 421	Myler Capacitor	0.01 µ (K)	1250103	2	
C 322, 422	Myler Capacitor	0.1 µ (J)	1254104	2	
C 323, 423	Myler Capacitor	0.1 µ (K)	1250104	2	
C 324, 424	Aluminium Solid Element Capacitor	0.33 µ/10	1211334	2	
	Auto Stop P.C.B. Assembly		1611585X		
	Auto Stop P.C.B.		1611585	1	
T 1	Transistor		2SC828S	1	
T 2	Transistor		2SC828AS	1	
T 3	Transistor		2SD235Y	1	
D 1, 2	Diode		SR1K-2	2	
R 2	Carbon Resistor	12 K	1337123	1	
R 4	Carbon Resistor	100 K	1337104	1	
R 5	Carbon Resistor	27 K	1337273	1	
R 6	Carbon Resistor	1.8 K	1337182	1	
R 7	Carbon Resistor	330	1337331	1	
R 8	Carbon Resistor	3.3 K	1337332	1	
R 9	Carbon Resistor	8.2 K	1337822	1	
R 10	Carbon Resistor	2.7 K	1337272	1	
R 11	Carbon Resistor	22 K	1337223	1	
R 12	Metal Oxide Resistor	820/2 W	1340821	1	
R 13	Cement Resistor	330/5 W	1330055	1	
			1330056		
C 3, 5	Electrolytic Capacitor	47 µ/16	1203476	2	
C 6	Electrolytic Capacitor	220 µ/10	1202227	1	
C 7	Electrolytic Capacitor	47 µ/35	1200476	1	
C 8	Electrolytic Capacitor	220 µ/35	1200227	1	
C 9	Electrolytic Capacitor	47 µ/35	1200476	1	
C 10	Electrolytic Capacitor	47 µ/16	1203476	1	
C 11	Electrolytic Capacitor	470 µ/35	1200477	1	

Note:

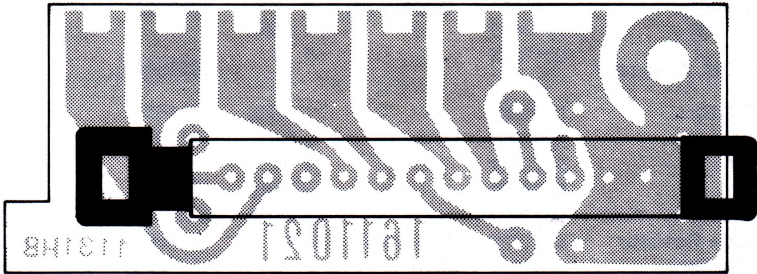
Reference No.	Description		Lenco Part No.	Quantity	Unit Price
	DNL P.C.B. Assembly		1611020X		
	DNL P.C.B.		1611020	1	
Q 501, 601	Transistor		28C1327T	8	
502, 602			28C732BL		
503, 603					
504, 604					
D 501, 601	Diode		181555	12	
502, 602					
503, 603					
504, 604					
505, 605					
506, 606					
VR 501, 601	Semi-fixed Resistor	10 K	138N271	2	
R 501, 601	Carbon Resistor	68 K	1337683	2	
R 502, 602	Carbon Resistor	22 K	1337223	2	
R 503, 603	Carbon Resistor	680	1337681	2	
R 504, 604	Carbon Resistor	1 K	1337102	2	
R 505, 605	Carbon Resistor	680	1337681	2	
R 506, 606	Carbon Resistor	8.2 K	1337822	2	
R 507, 607	Carbon Resistor	1 K	1337102	2	
R 508, 608	Carbon Resistor	330 K	1337334	2	
R 509, 609	Carbon Resistor	100 K	1337104	2	
R 510, 610	Carbon Resistor	1.8 K	1337182	2	
R 511, 611	Carbon Resistor	330 K	1337334	2	
R 512, 612	Carbon Resistor	22 K	1337223	2	
R 513, 613	Carbon Resistor	680	1337681	2	
R 514, 614	Carbon Resistor	5.6K	1337562	2	
R 515, 615	Carbon Resistor	680	1337681	2	
R 516, 616	Carbon Resistor	120 K	1337124	2	

Note:

Reference No.	Description		Lenco Part No.	Quantity	Unit Price
R 517, 617	Carbon Resistor	22 K	1337223	2	
R 518, 618	Carbon Resistor	120 K	1337124	2	
R 519, 619	Carbon Resistor	1 K	1337102	2	
C 501, 601	Electrolytic Capacitor	3.3 μ /25	1204335	2	
C 502, 602	Myler Capacitor	0.022 μ (K)	1250223	2	
C 503, 603	Myler Capacitor	0.0047 μ (K)	1250472	2	
C 504, 604	Styrol Capacitor	390 p (J)	1230390	2	
C 505, 605	Myler Capacitor	0.0018 μ (K)	1250182	2	
C 506, 606	Myler Capacitor	0.022 μ (K)	1250223	2	
C 507, 607	Myler Capacitor	0.0022 μ (K)	1250222	2	
C 508, 608	Styrol Capacitor	680 p	1230681	2	
C 509, 609	Myler Capacitor	0.022 μ (K)	1250223	2	
C 510, 610	Myler Capacitor	0.01 μ (K)	1250103	2	
C 511, 611	Electrolytic Capacitor	3.3 μ /25	1204335	2	
C 512, 612	Electrolytic Capacitor	47 μ /25	1204476	2	
C 513, 613	Myler Capacitor	0.022 μ (K)	1250223	2	
	Power P.C.B. Assembly		1611584X		
	Power P.C.B.		1611584	1	
	OSC Block		1810074	1	
T 4	Transistor		2SD235Y	1	
D 9, 10	Diode		1 B4B-1	2	
ZD 1	Zener Diode		BZ-240	1	
R 1	Metal Oxide Resistor	560/1 W	1334561	1	
R 14	Carbon Resistor	220	1337221	1	
R 15	Carbon Resistor	820	1337821	1	
R 16	Metal Oxide Resistor	10/1 W	1344100	1	
C 1	Styrol Capacitor	1000 p (J)	1231102	1	
C 2	Electrolytic Capacitor	100 μ /25	1204107	1	
C 12	Electrolytic Capacitor	1000 μ /16	1203108	1	
C 13	Electrolytic Capacitor	1000 μ /35	1200108	1	
C 14	Electrolytic Capacitor	470 μ /35	1200477	1	
C 15	Electrolytic Capacitor	470 μ /50	1221477	1	
C 16, 17, 18, 19	Ceramic Capacitor	0.04 μ	1203402	4	
	Reed Switch P.C.B. Assembly		1611032X		
	Reed Switch P.C.B.		1611032	1	
S 14	Reed Switch		1623133	1	
			1623136		
R 3	Carbon Resistor	3.9 K	1321392	1	
C 4	Ceramic Capacitor	0.04 μ	1203402	1	
	LED P.C.B. (4-function) Assembly		1611583X		
	LED P.C.B. (4-function)		1611583	1	
D 4, 5, 6, 7	Light Emitting Diode		TLR-114	4	
R 17, 18, 19, 20	Carbon Resistor	1/K	1321102	4	
	Mutting P.C.B. Assembly		1611021X		
	Muting P.C.B.		1611021	1	
S 3	Slide Switch (4-circuit)		1621248	1	
	Push Switch P.C.B. Assembly		1611580X		
	Push Switch P.C.B.		1611580	1	
	Push Switch (5-function)		1622298	1	
R 23	Carbon Resistor	680 K	1337684	1	
R 24	Carbon Resistor	330 K	1337334	1	



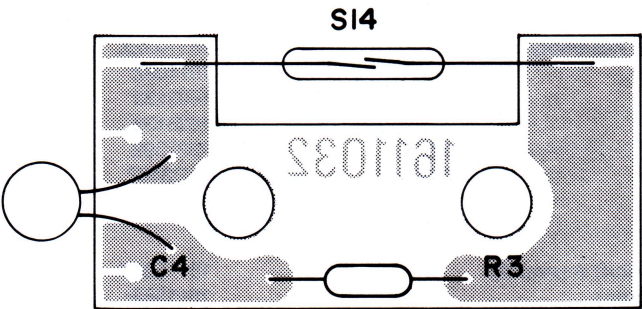
Bottom View



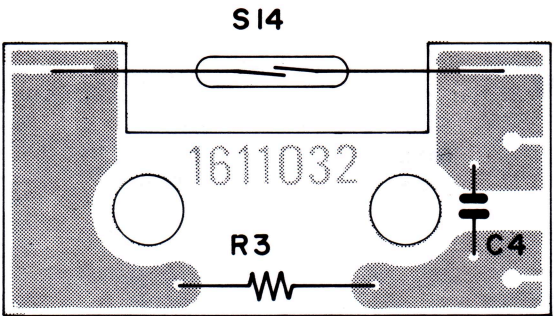
S 3

Top View

Muting SW P.C.B., 1611021, CP-637 L

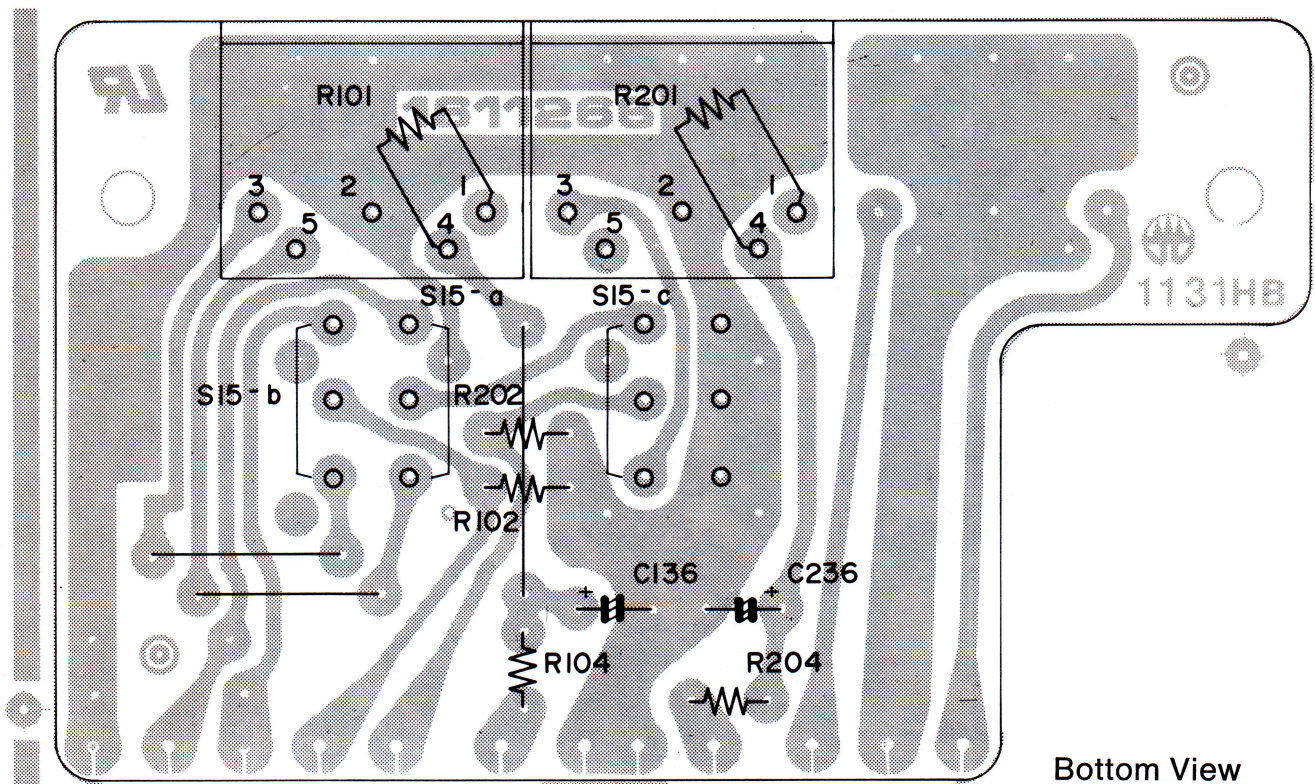
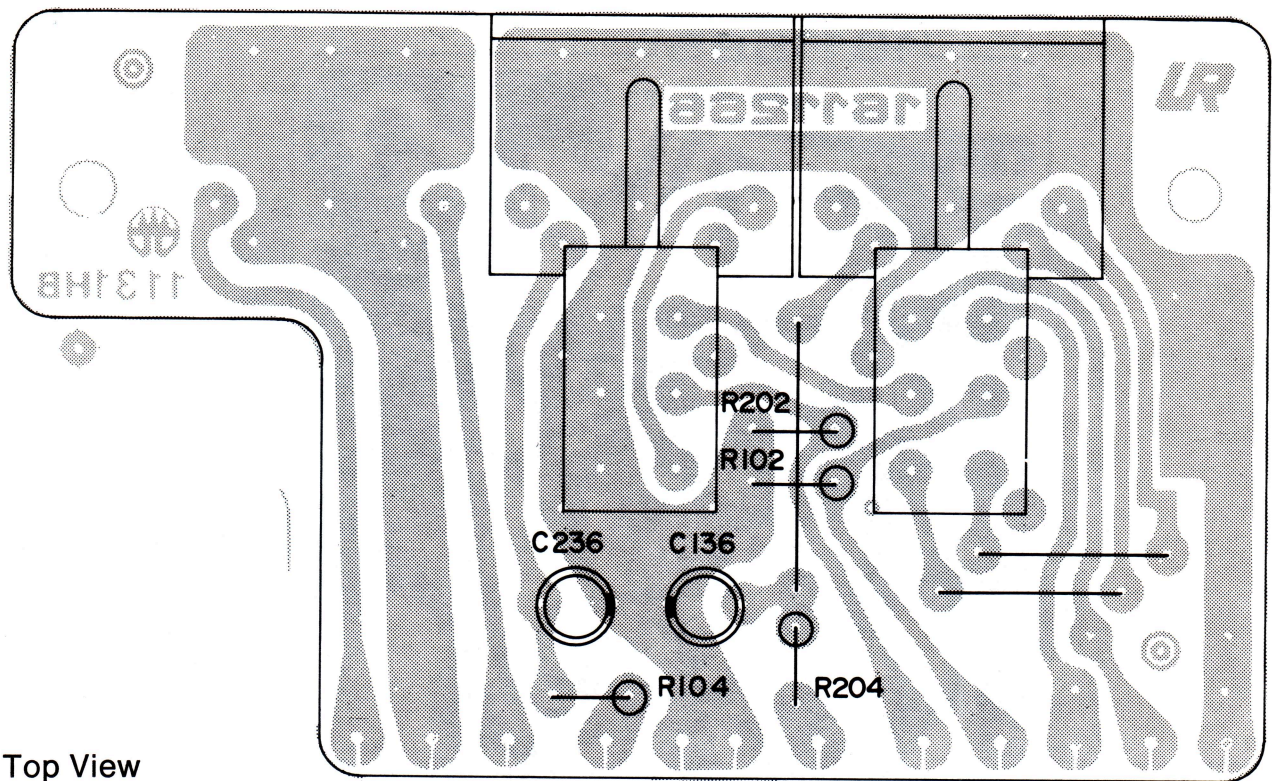


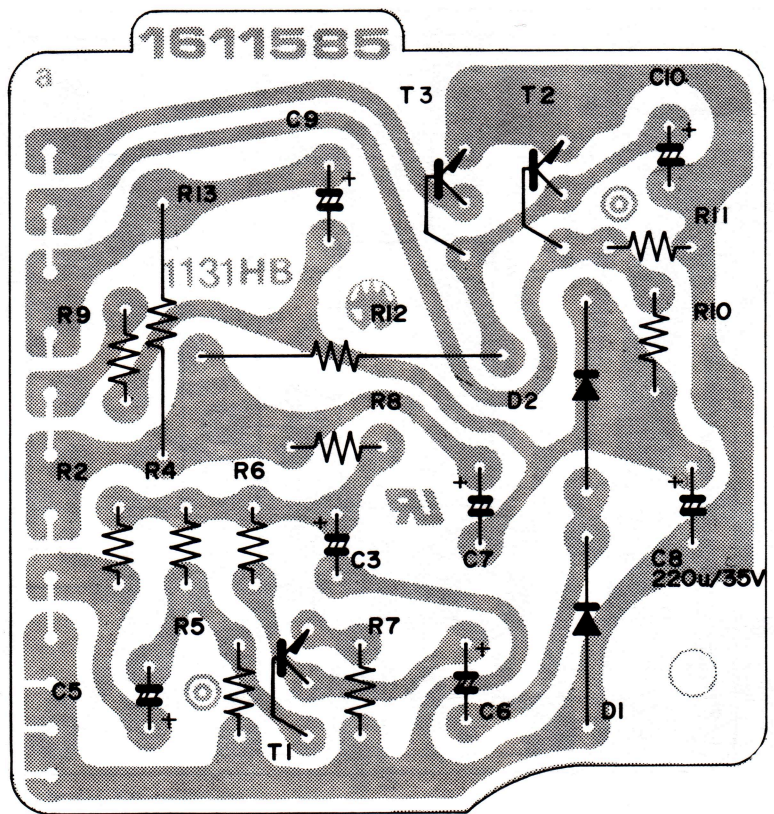
Bottom View



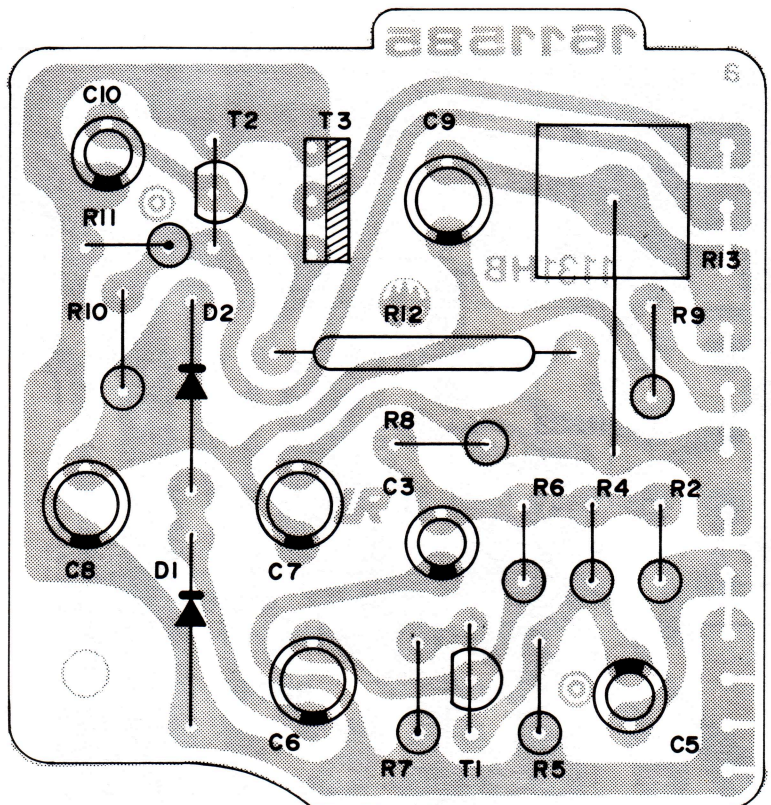
Top View

Reed SW P.C.B., 1611032, CP-637 L

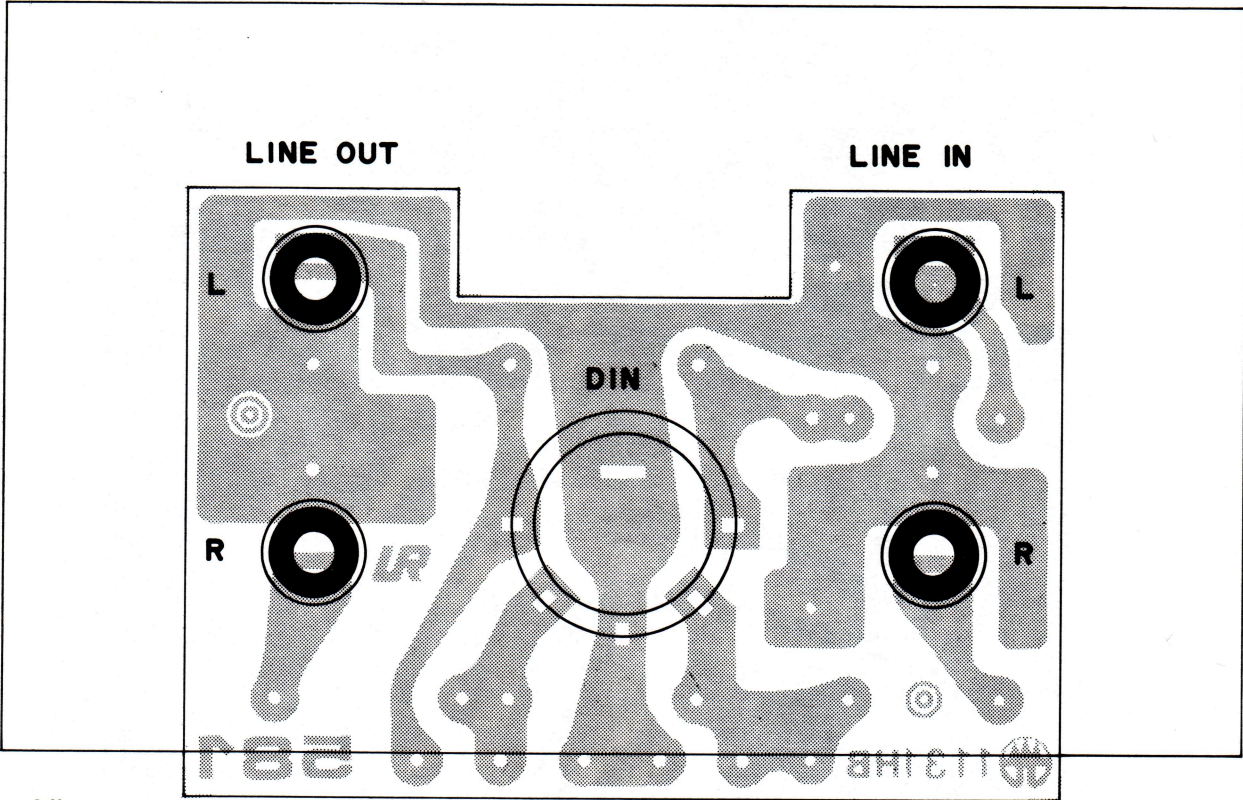




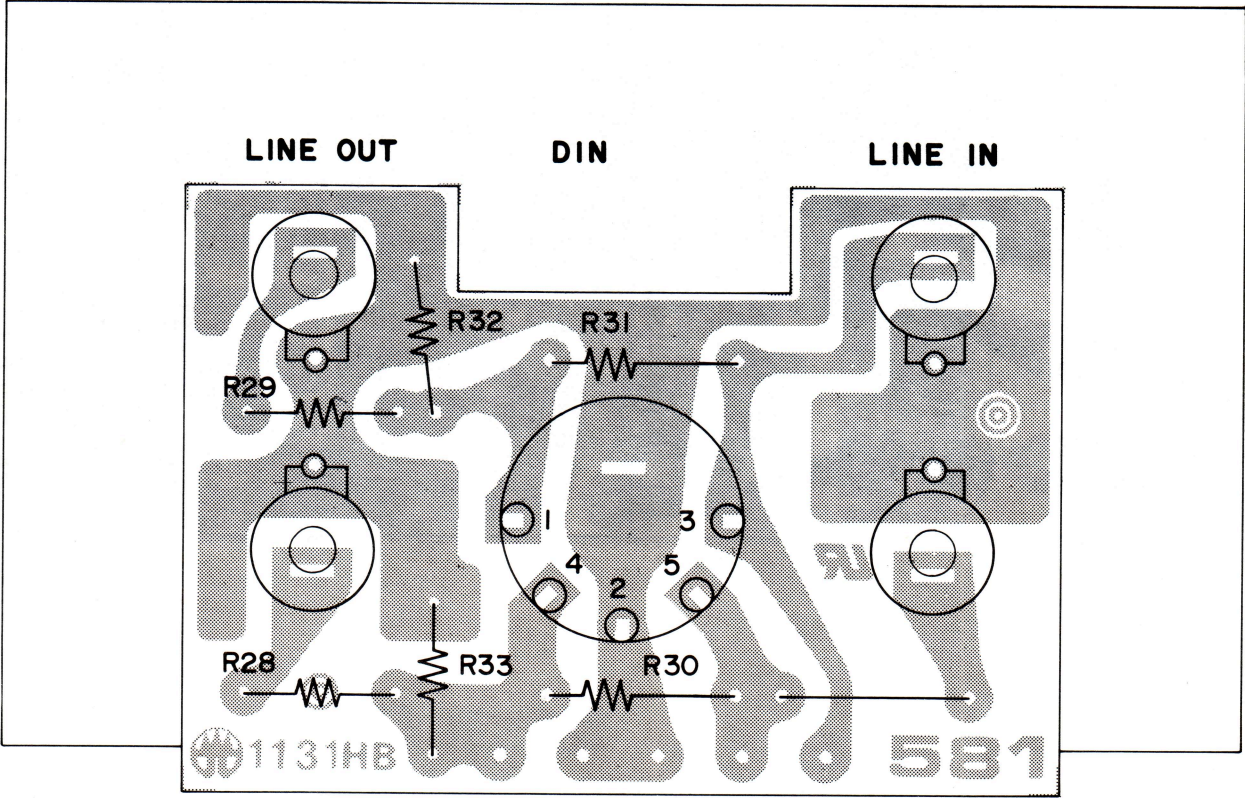
Top View



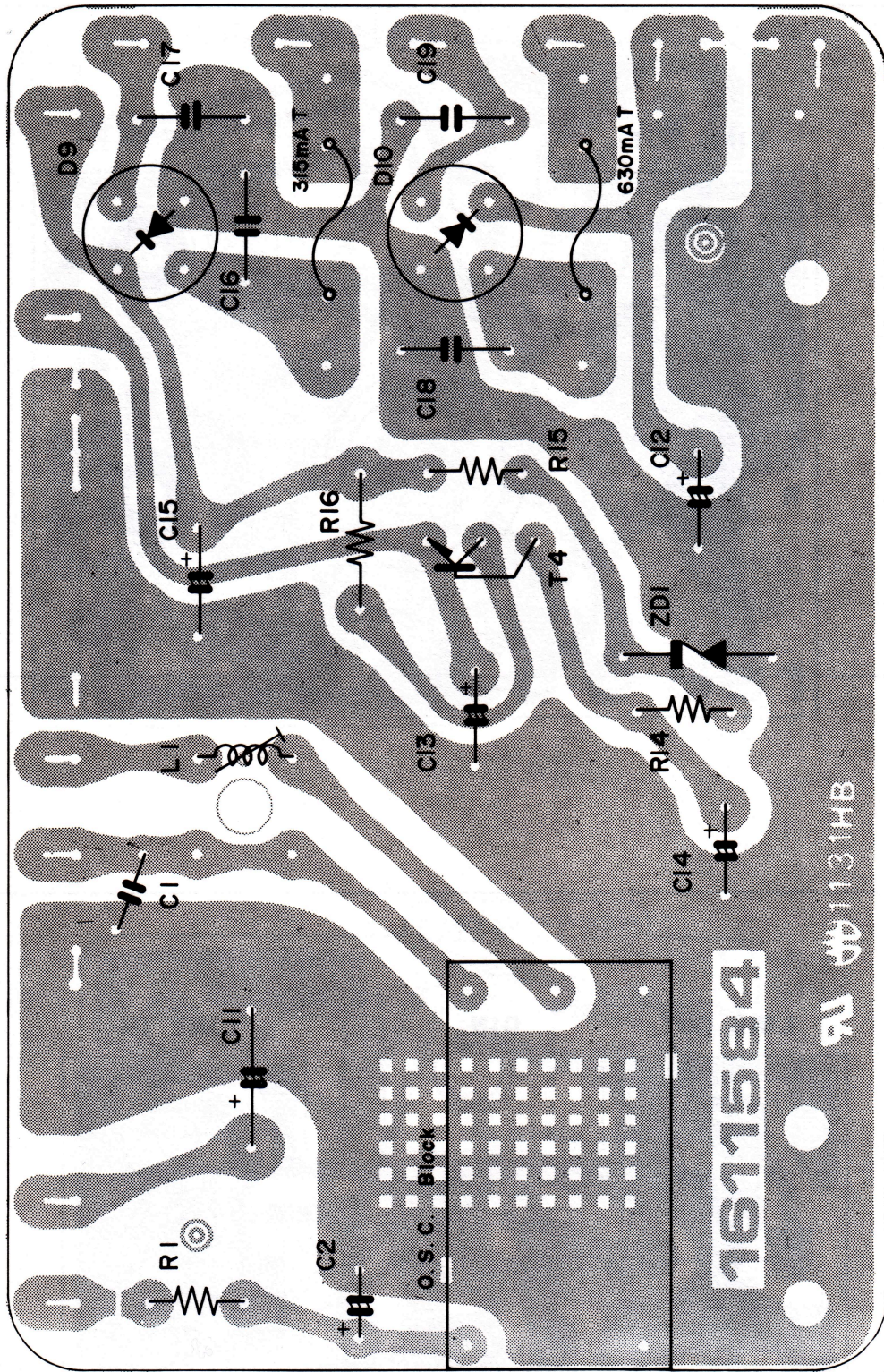
Bottom View



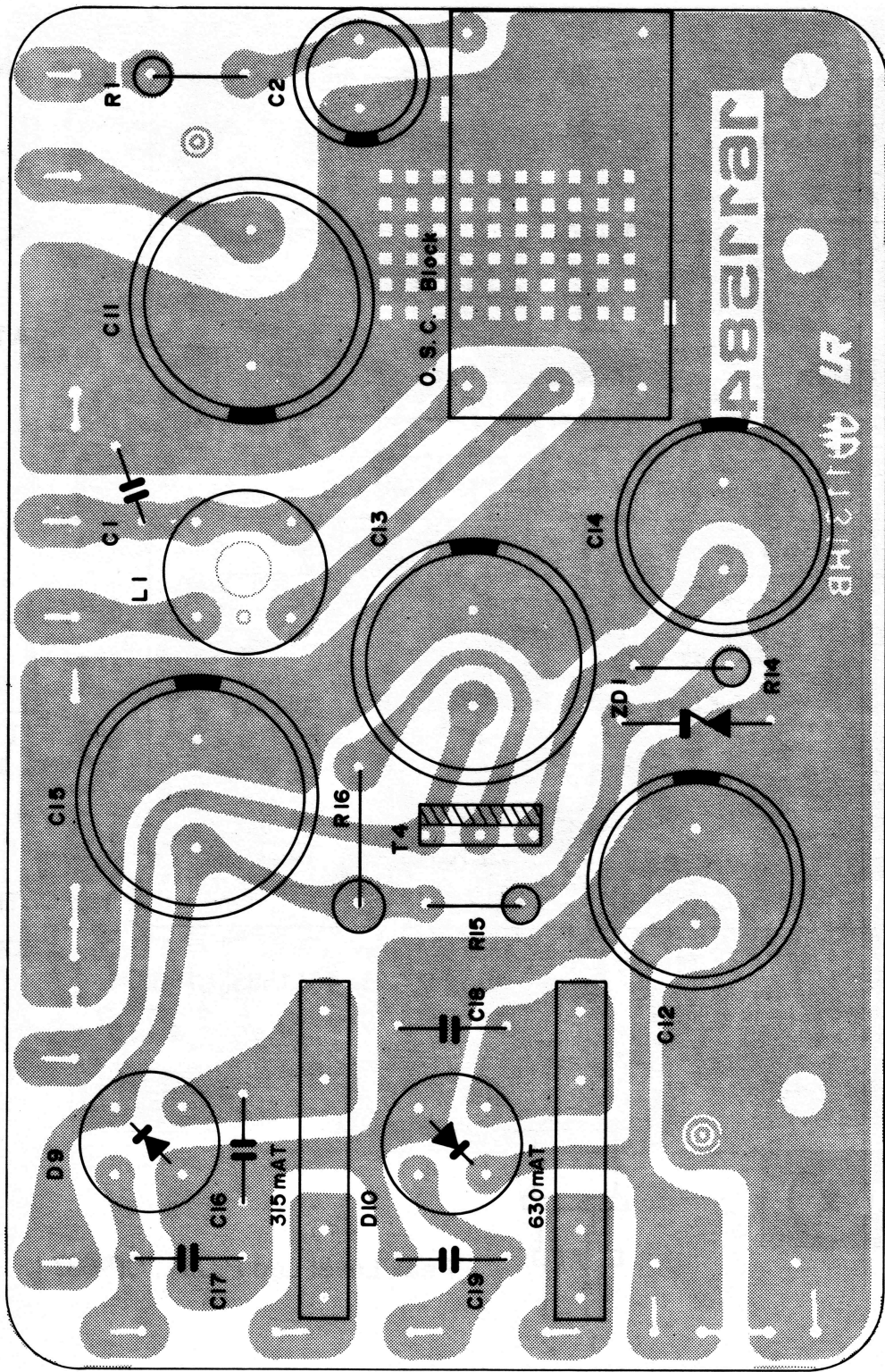
Top View



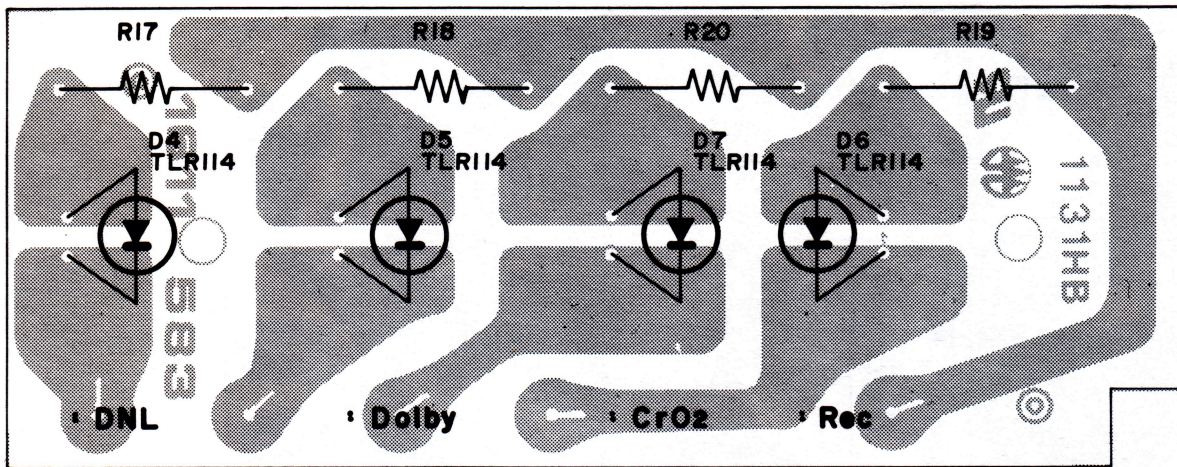
Bottom View



Power Supply P.C.B., Bottom View, 1611584, CP-637 L

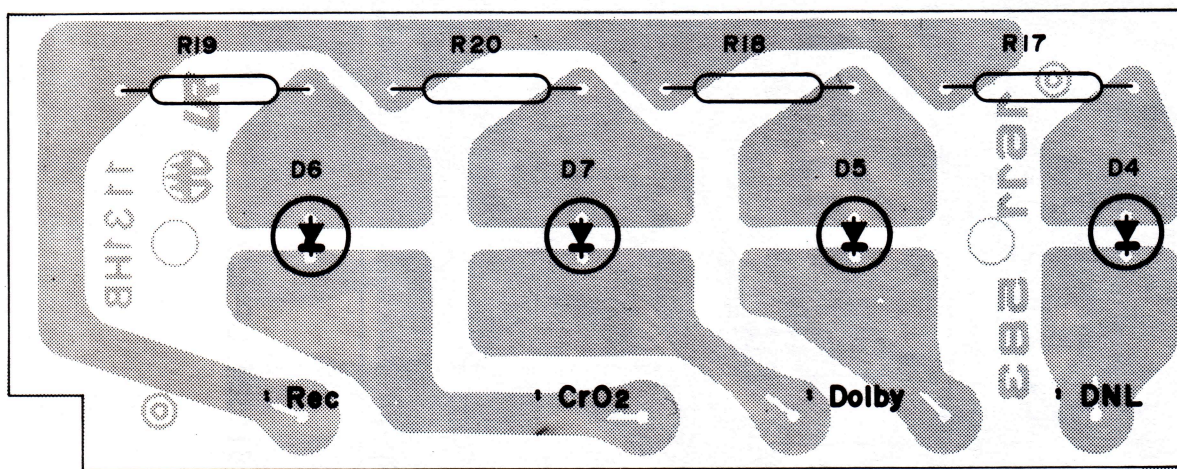
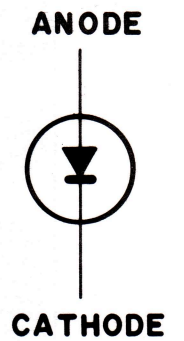


Power Supply P.C.B., Top View, 1611584, CP-637 L



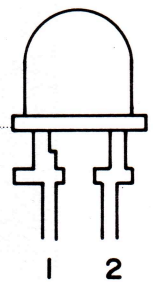
Top View

1611583



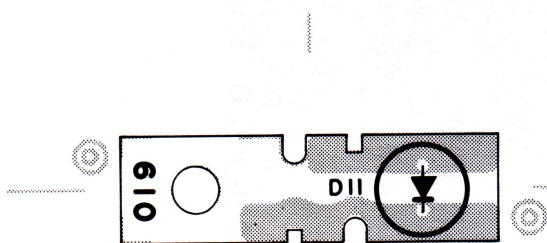
Bottom View

1611583

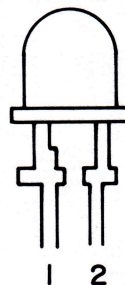


1. CATHODE
2. ANODE

Led P.C.B., 1611583, CP-637 L



Top View

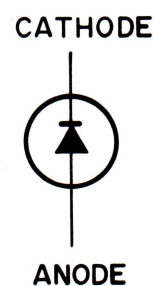


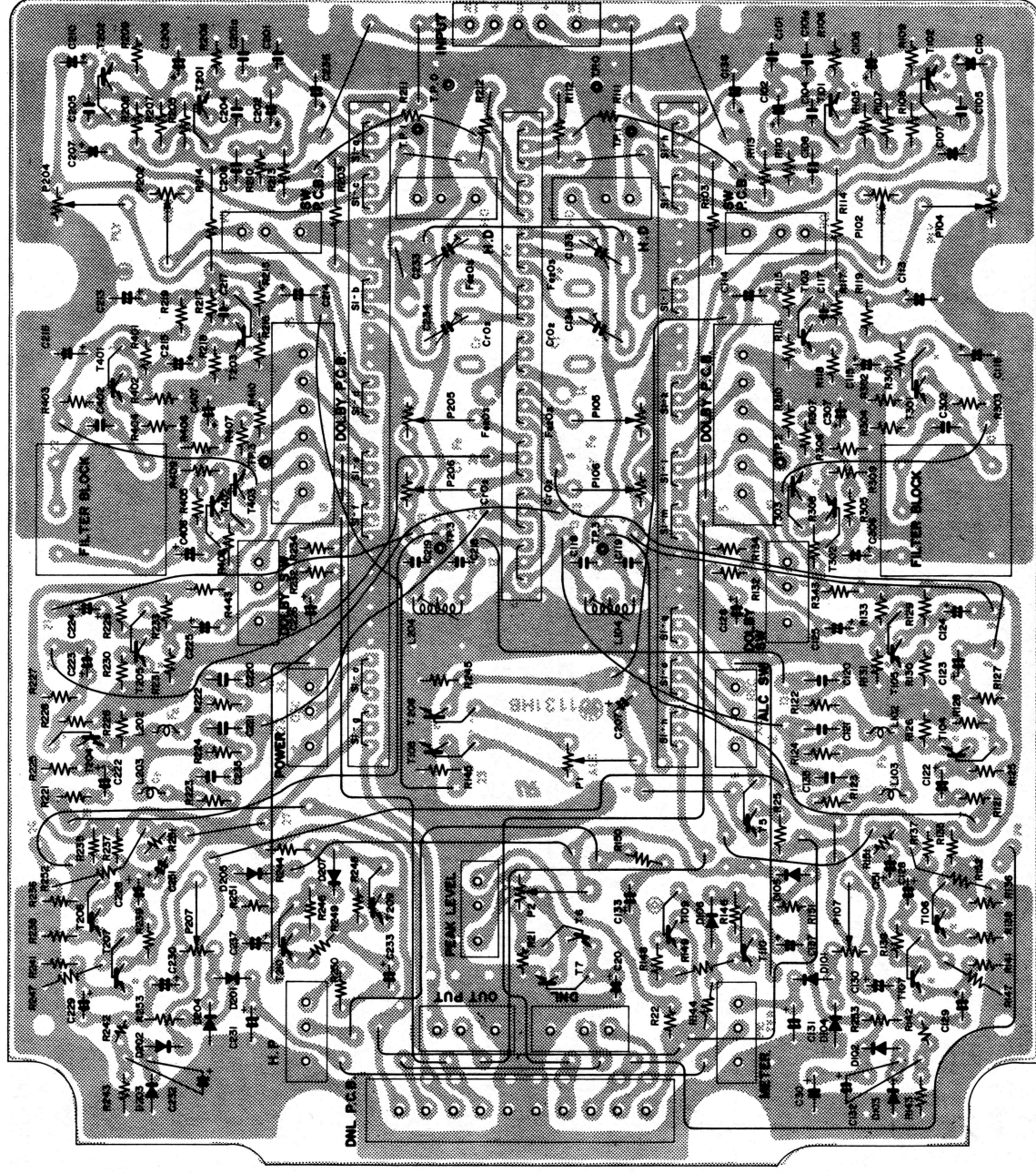
1. CATHODE
2. ANODE

Peak Level Led P.C.B., CP-637 L

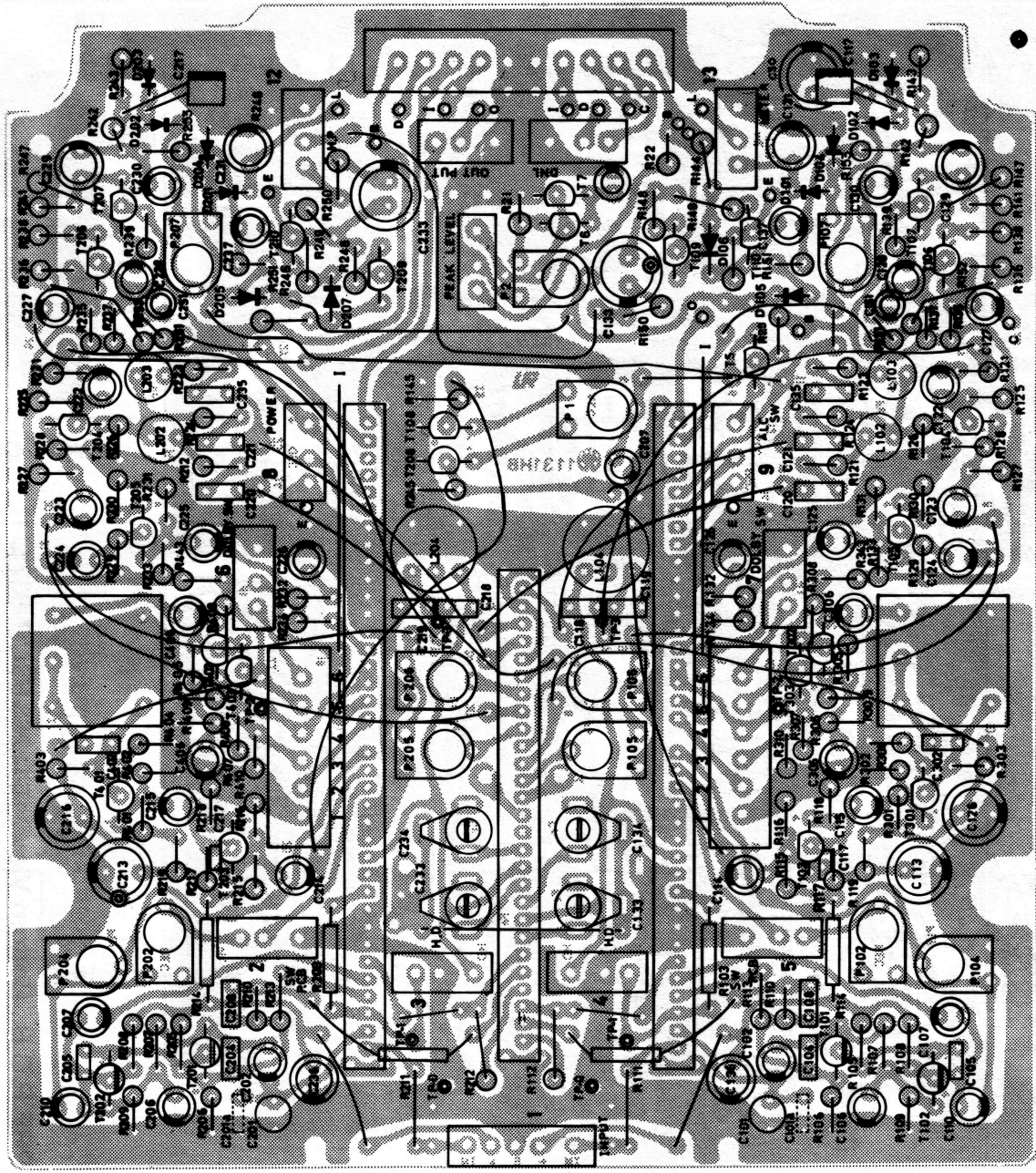


Bottom View

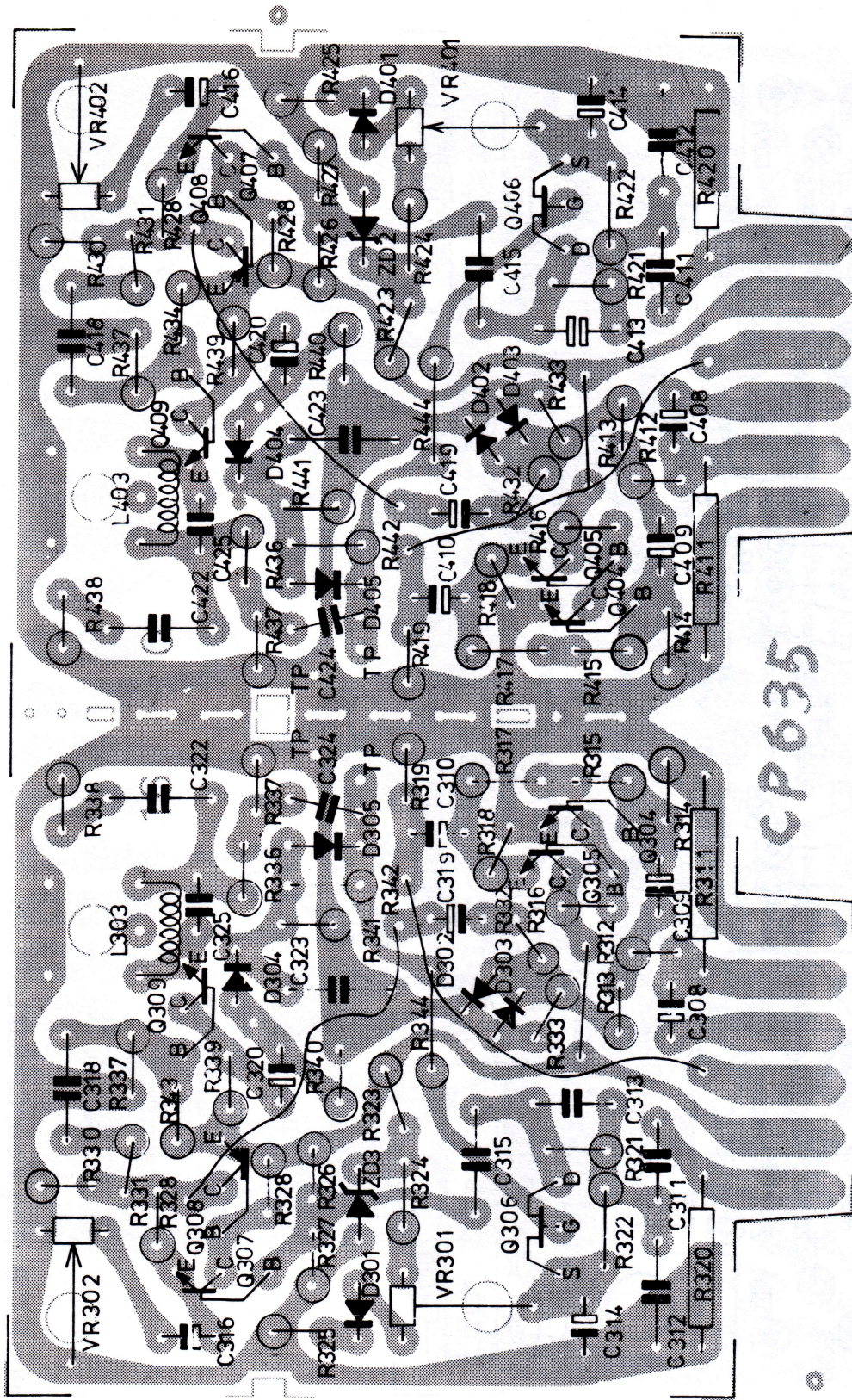




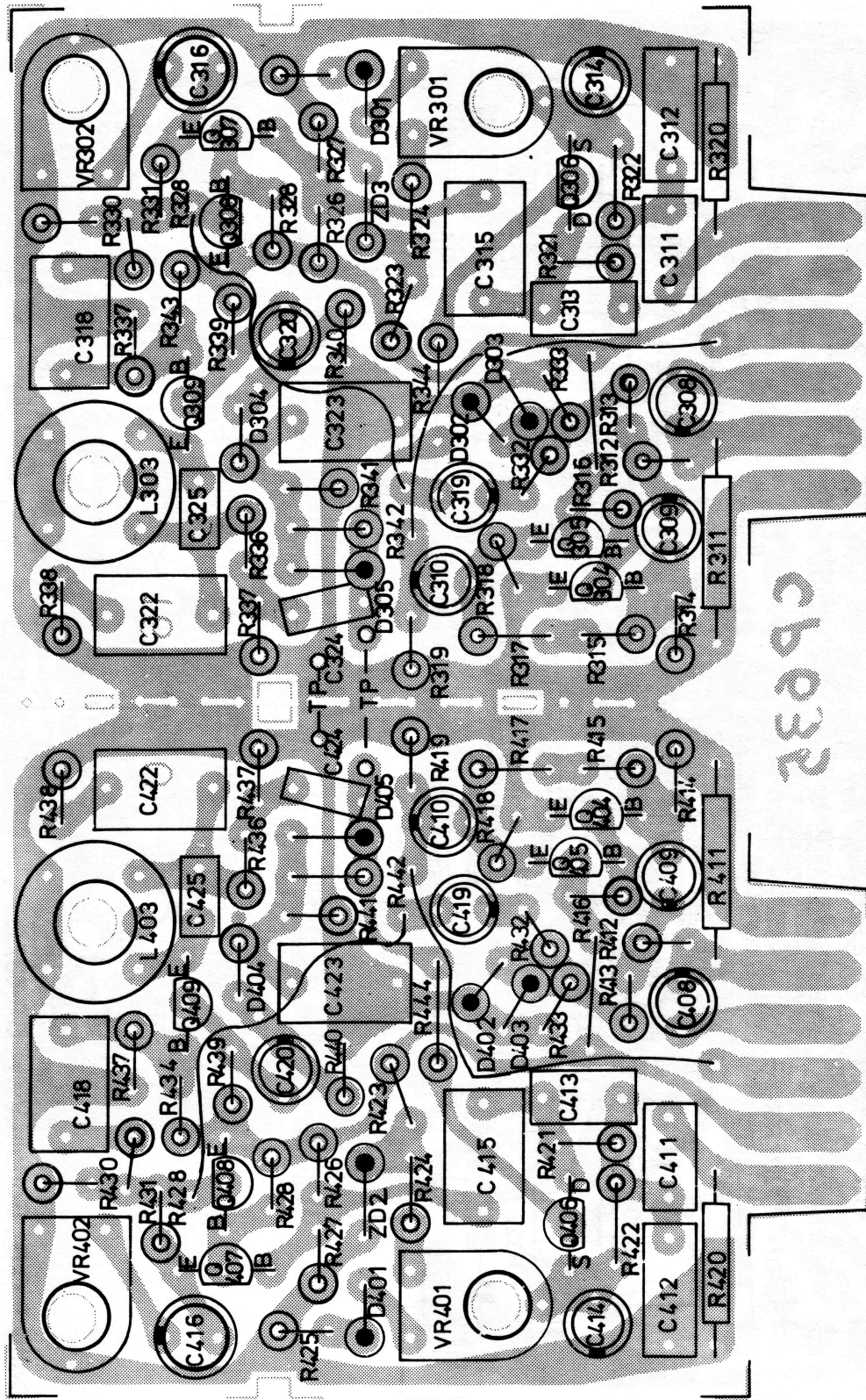
PRE P.C.B., Bottom View, 1611263 B, CP-637 L



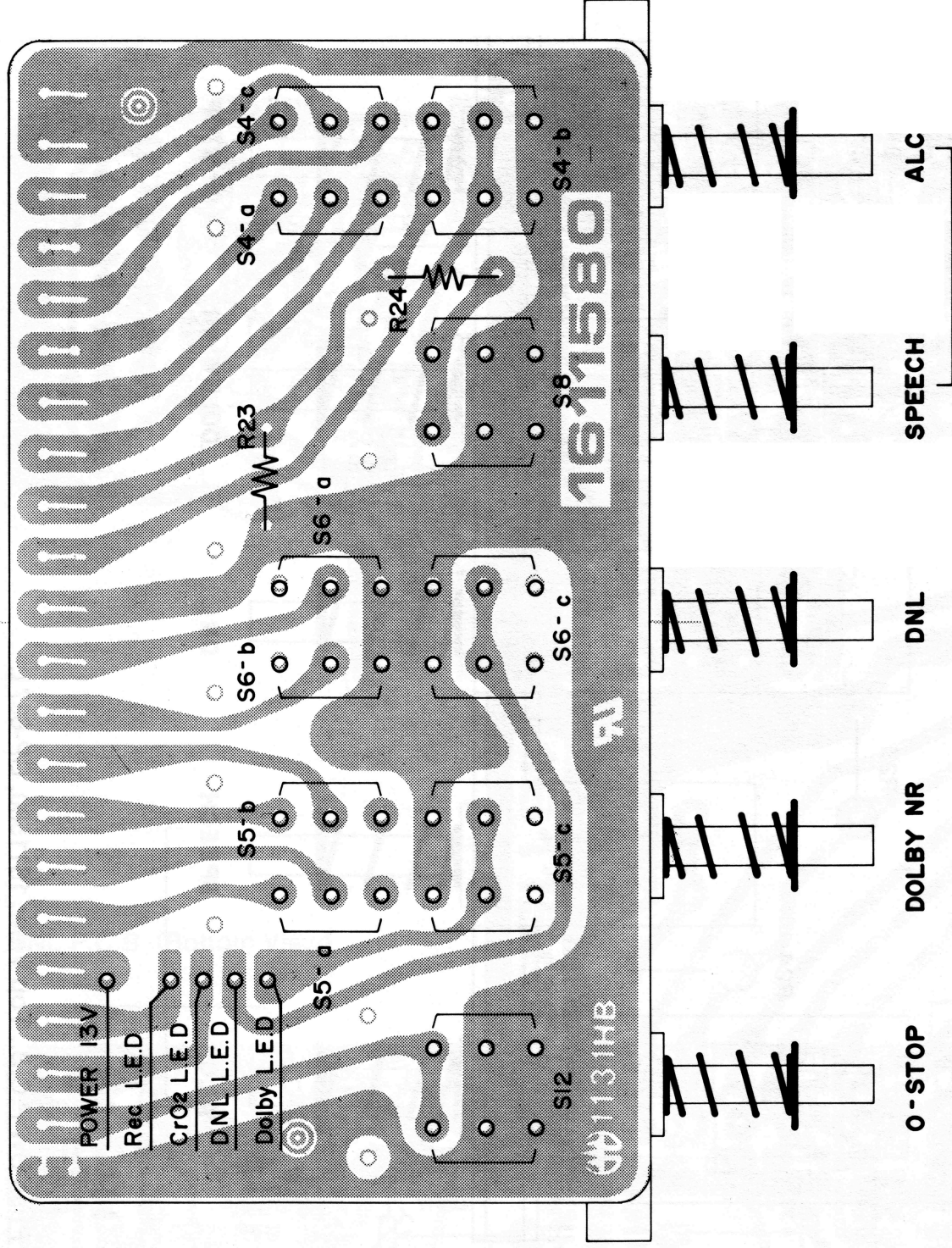
PRE P.C.B., Top View



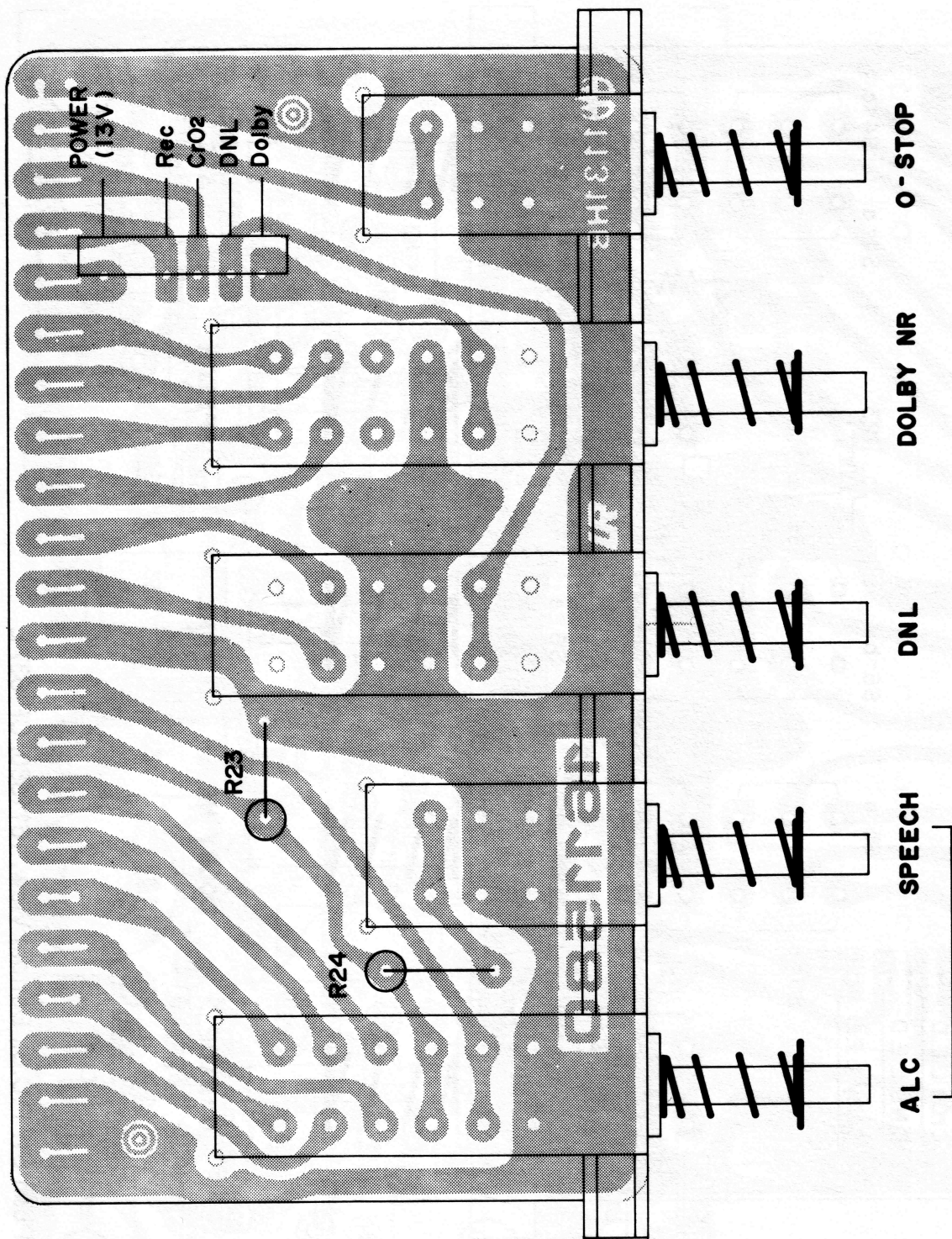
Dolby P.C.B., Bottom View, CP-637 L



Dolby P.C.B., Top View, CP-637 L

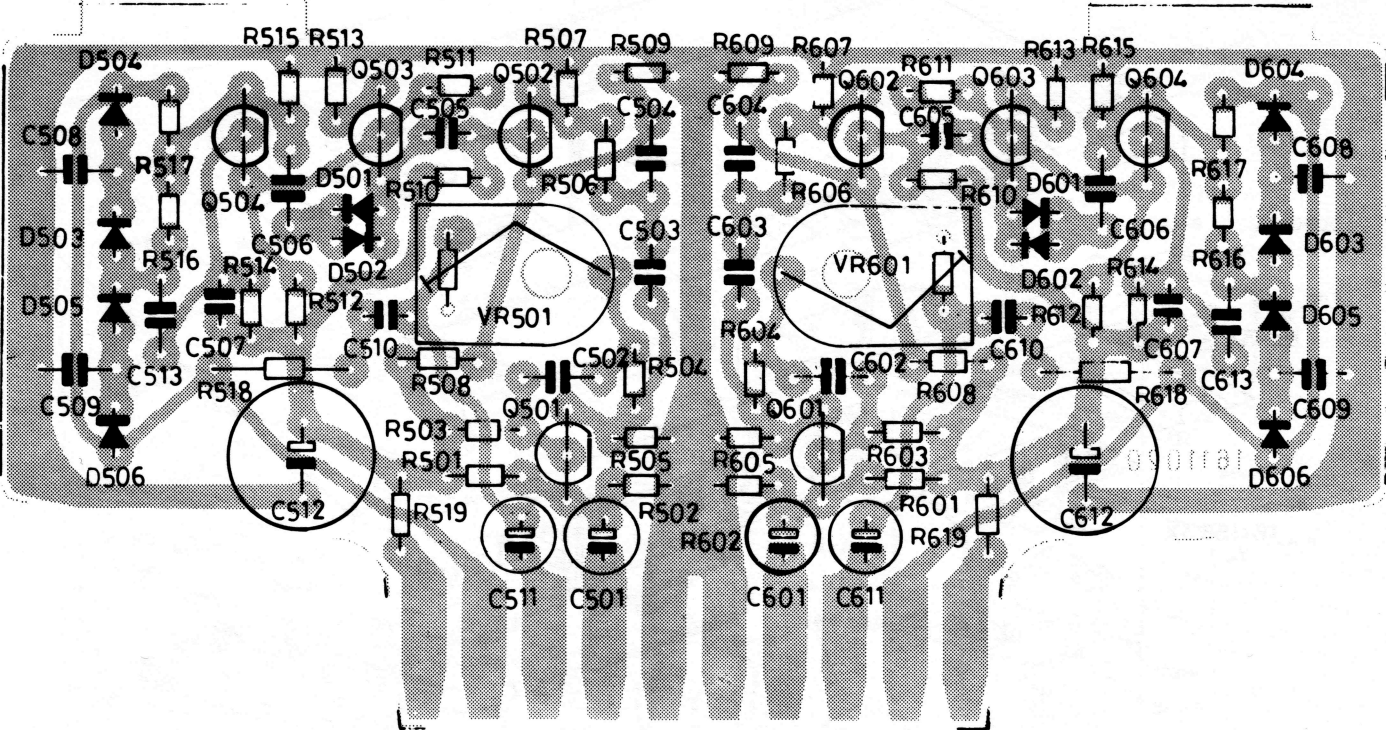


Push SW P.C.B., Bottom View, 1611580, CP-637 L

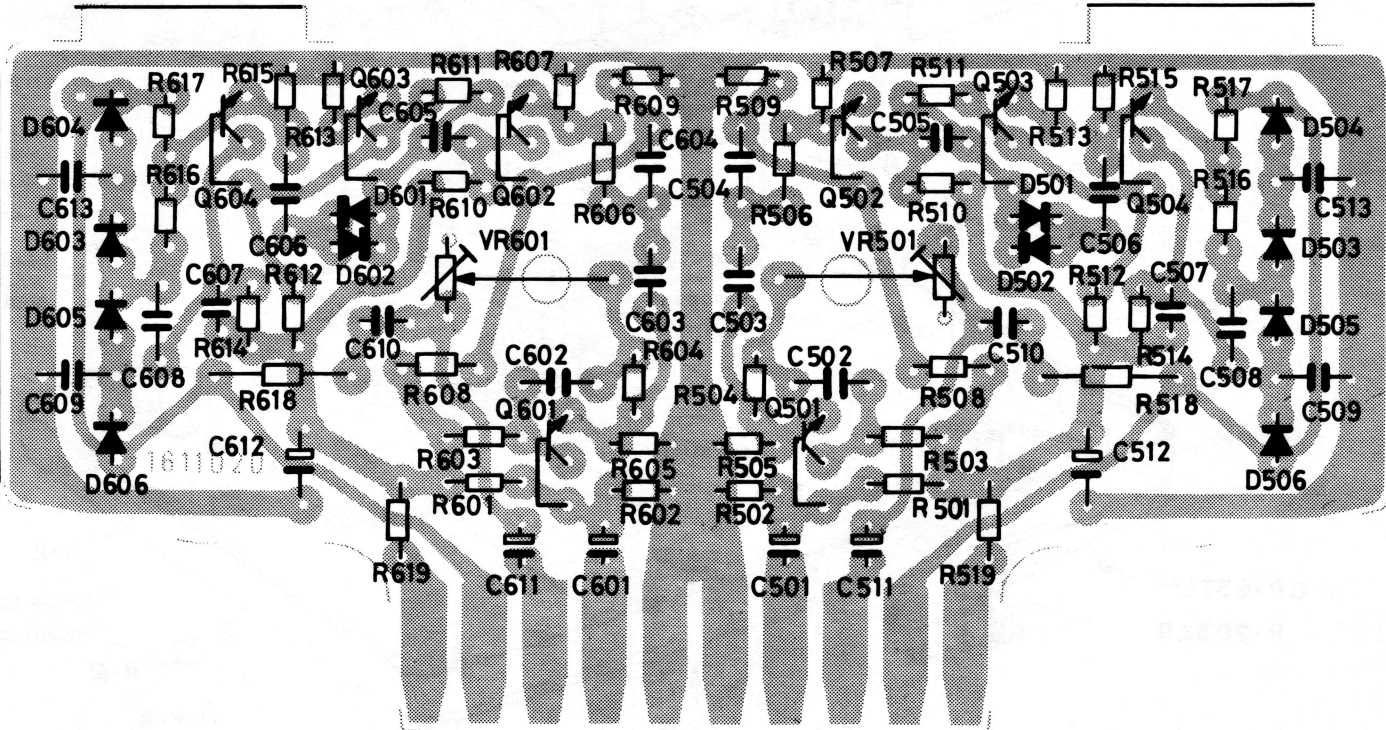


Push SW P.C.B., Top View, 1611580, CP-637 L

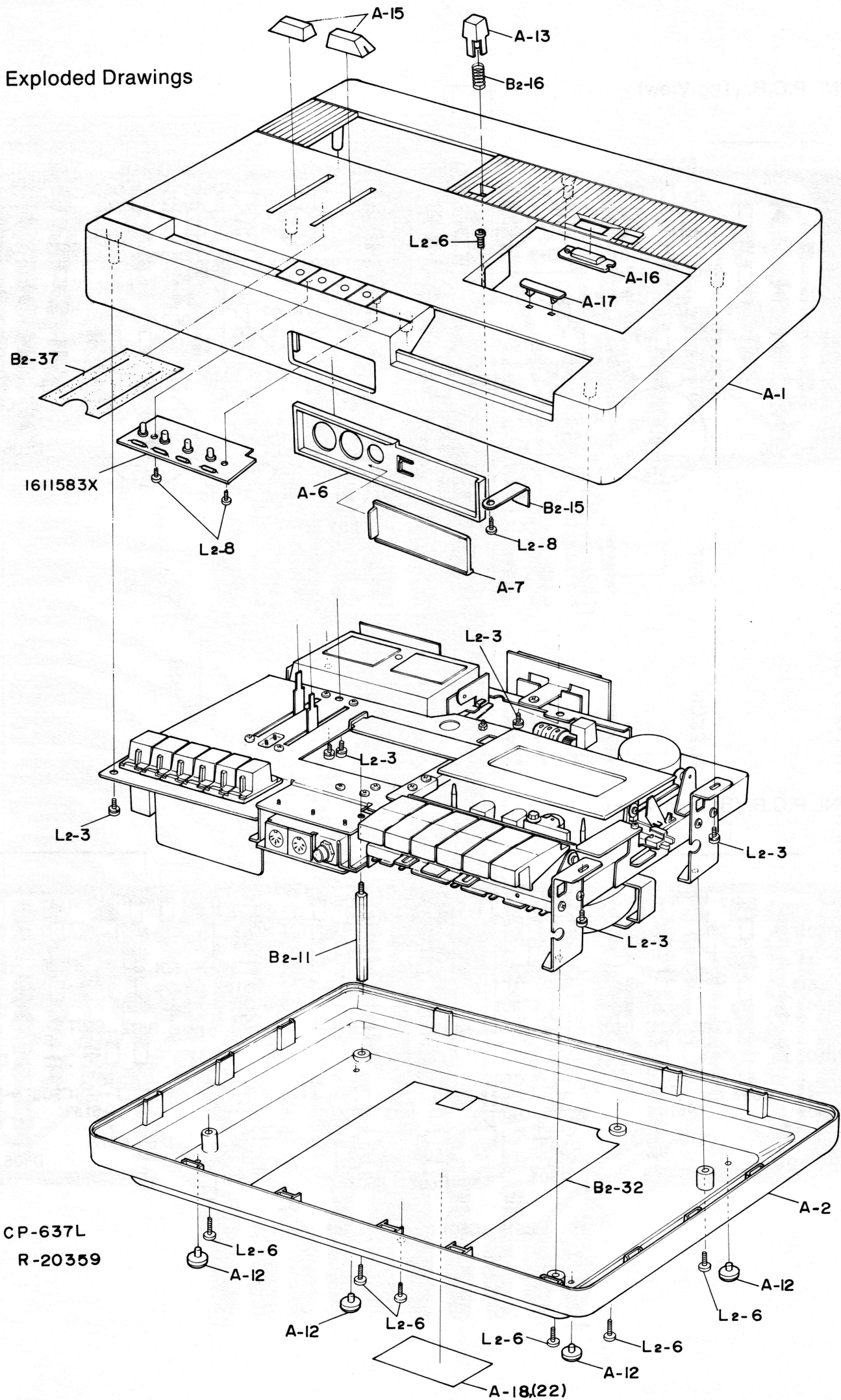
DNL P.C.B. (Top View)



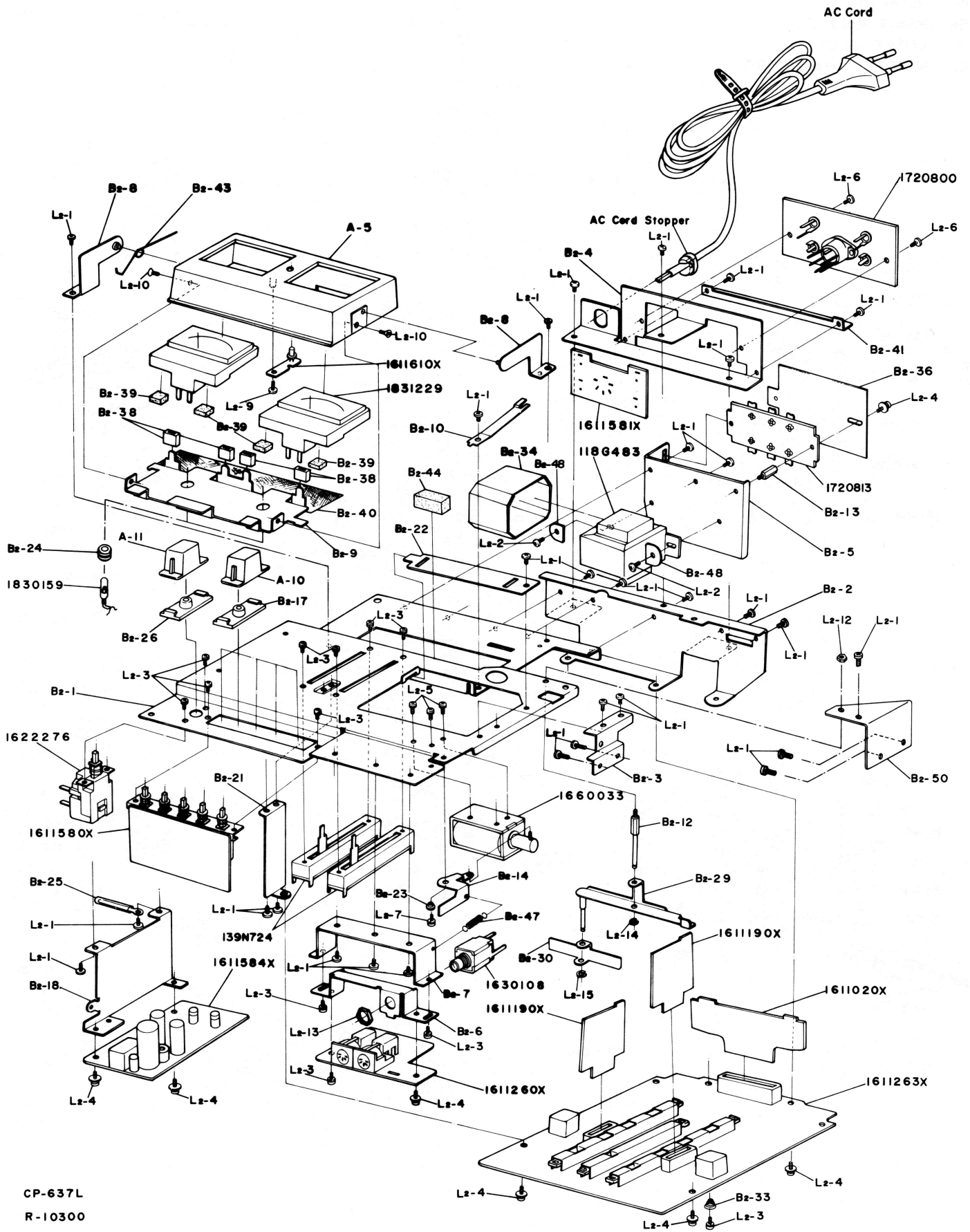
DNL P.C.B. (Bottom View)



Exploded Drawings

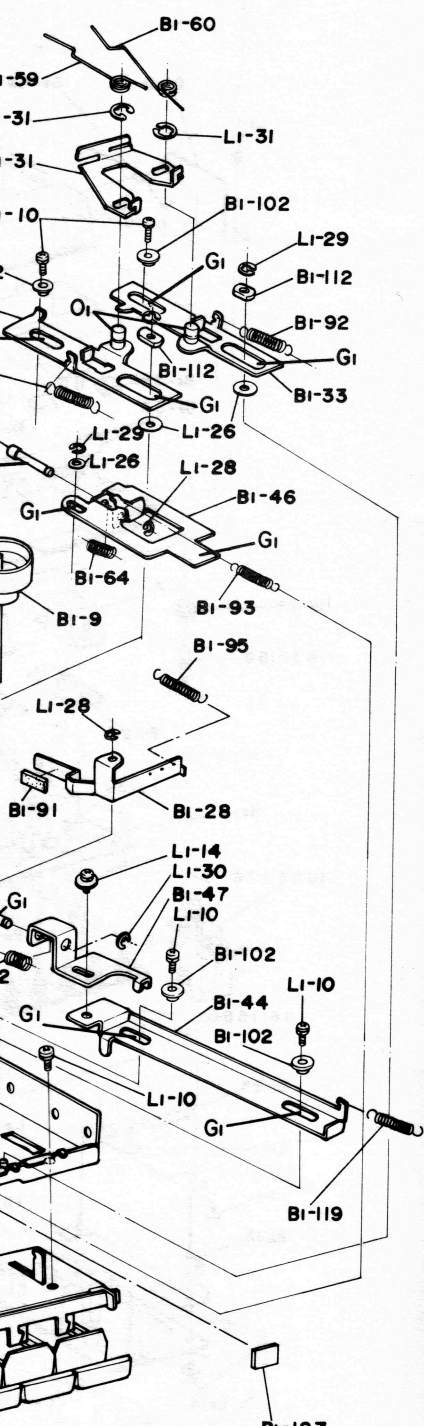


Exploded Drawings



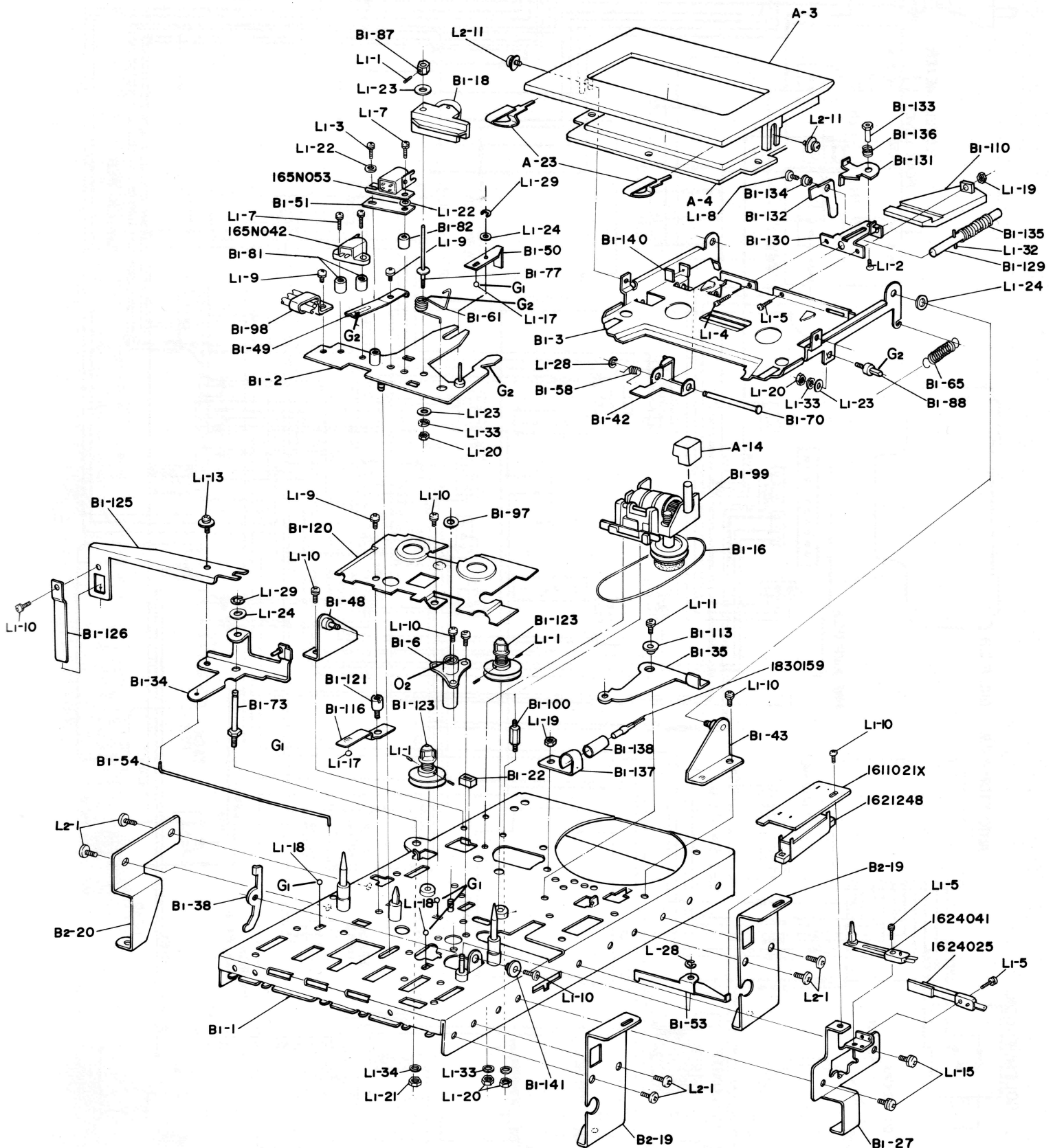
CP-637L
R-10300

B2-25

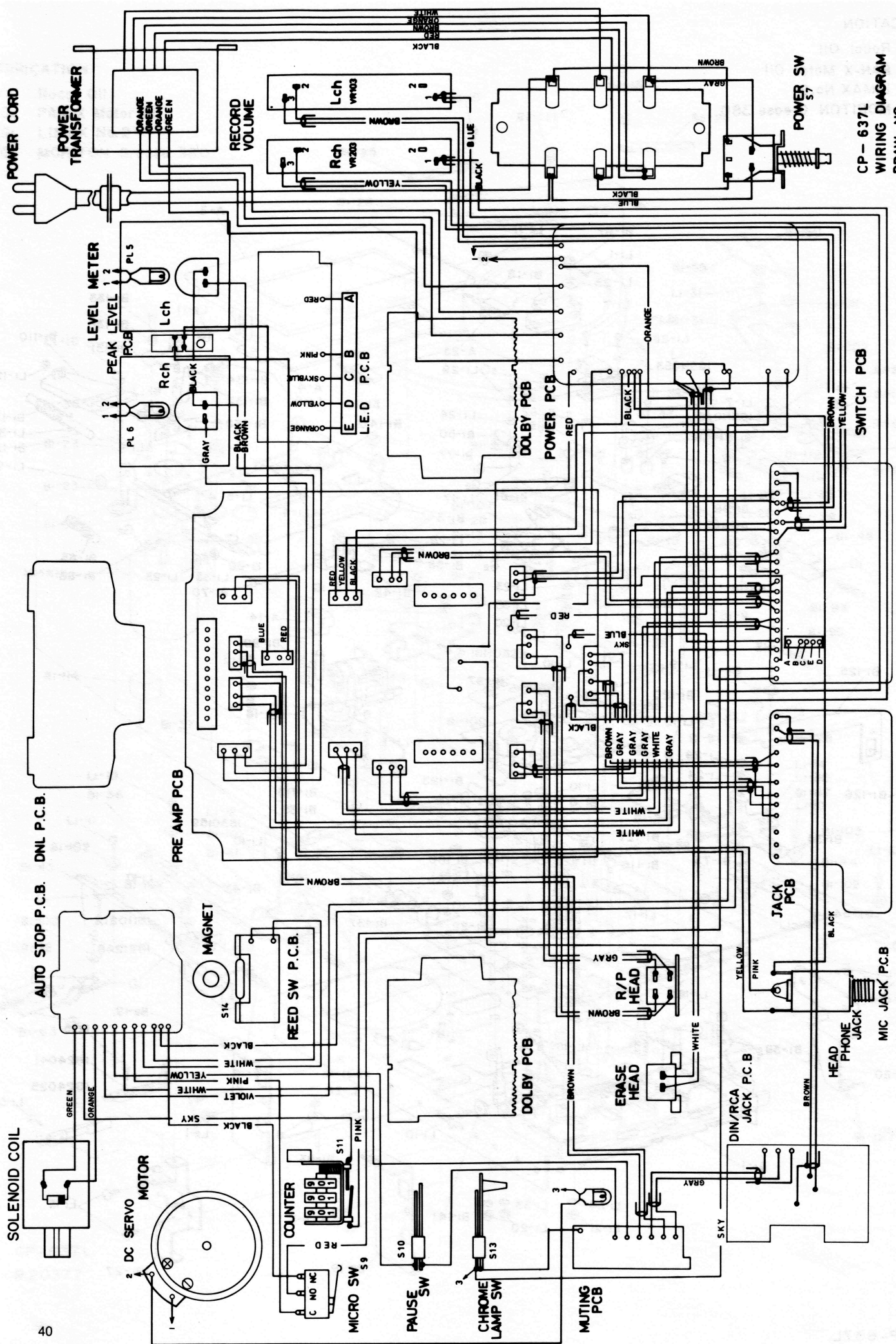


LUBRICATION

O ₁	Rocol Oil
O ₂	PAN-X Motor Oil
G ₁	LIMAX No.2
G ₂	MORITON Grease 380



CP- 637L
R 20376



Lch MIC

Rch MIC

Head Phone

NOTES

- S1-a-S1-q REC PLAY SELECT SW (PLAY POSITION)
S2-a-S2-l TAPE SELECT SW (Fez03 POSITION)
S3-a-S3-c MUTE SW (PLAY POSITION)
S4-a-S4-c ALC ON OFF SW (OFF POSITION)
S5-a-S5-c DOLBY NR ON OFF SW (OFF POSITION)
S6-a-S6-c DNL ON OFF SW (OFF POSITION)
S7-a-S7-b POWER SW (OFF POSITION)
S8 ALC TIME SW (MUSIC POSITION)
S9 AUTO STOP POWER SW (OFF POSITION)
S10 PAUSE SW (OFF POSITION)
S11 COUNTER SW (OFF POSITION)
S12 MEMORY SW (OFF POSITION)
S13 CR02 LAMP SW (OFF POSITION)
S14 REED SW
S15-a-S15-c MIC SW (MIC POSITION)

(Pre Amp PCB)

- T101,102,201,202 2SC1008BL, 2SC1681BL - a
T03,04,105,203,204,205,301,302,303,401,402,403
2SC1327T, 2SC732BL - a
T1,109,209 2SC8285 - a
T10,210 2SA5645 - a
T2 2SC828AS - a
T3,4 2SD235Y - b
T5,108,208 2SC1327U - b
T6,7,106,107,206,207 2SC1815GR - a

(Dolby and DNL PCB)

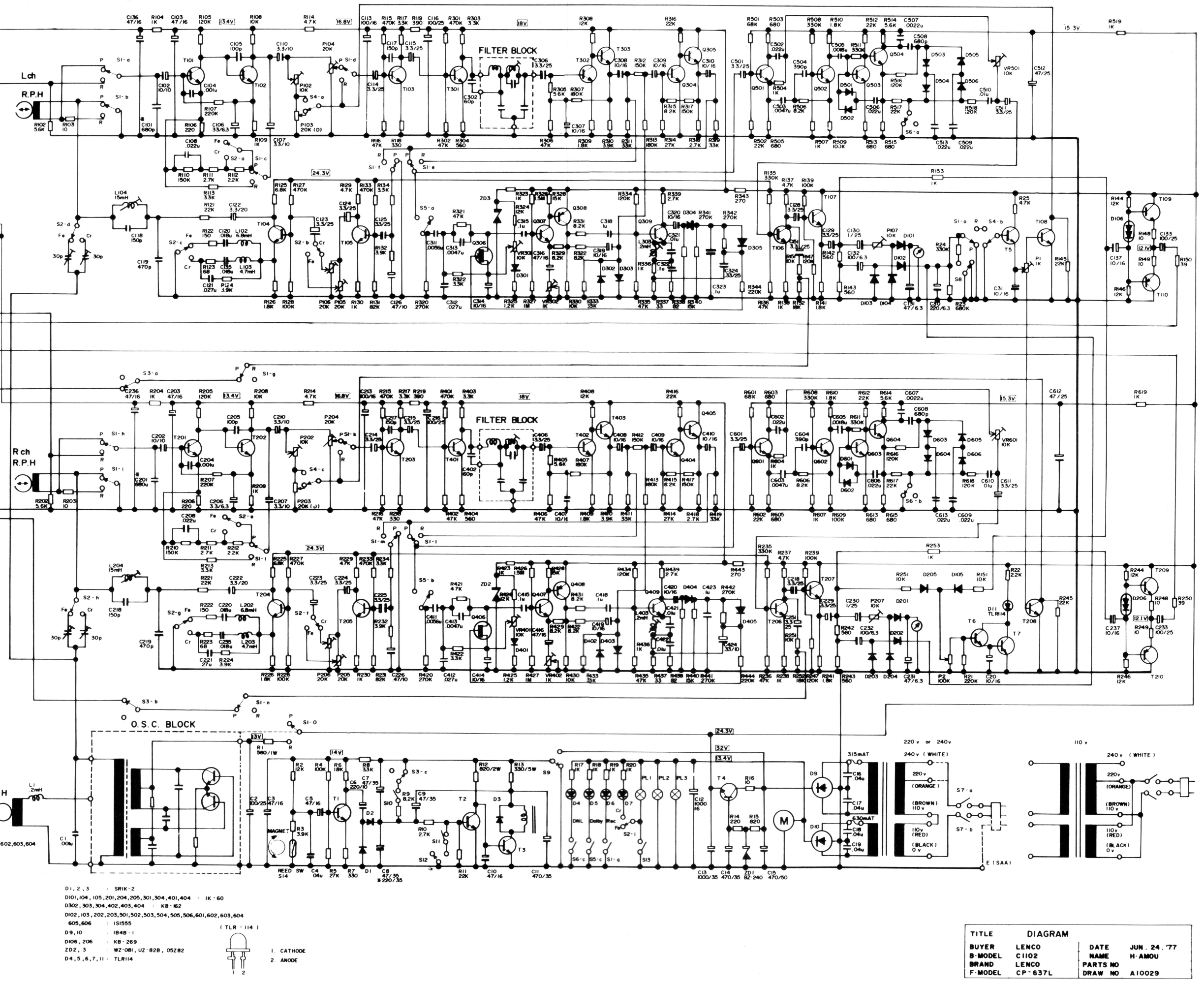
- Q304,305,307,309,404,405,407,409,501,502,503,504,601,602,603,604
2SC1327T, 2SC732BL - a
Q306,406 2SK304D - c
Q308,408 2SA721T - a

(Transistor Bottom View)

1. EMITTER
2. COLLECTOR
3. BASE
1. EMITTER
2. COLLECTOR
3. BASE
1. SOURCE
2. GATE
3. DRAIN

- D1,2,3 SR1K-2
D101,104,105,201,204,205,301,304,401,404 1K-60
D302,303,304,402,403,404 1K-162
D102,103,202,203,301,302,503,504,505,506,601,602,603,604
605,606 1S1555
D9,10 1B4B-1
D106,206 1B-269
ZD2,3 WZ-081, UZ-828, 05Z82
D4,5,6,7,11 TLH114

1. CATHODE
2. ANODE



TITLE		DIAGRAM	
BUYER	LENCO	DATE	JUN. 24. 77
B-MODEL	C1102	NAME	H-AMOU
BRAND	LENCO	PARTS NO	
F-MODEL	CP-637L	DRAW NO	A10029