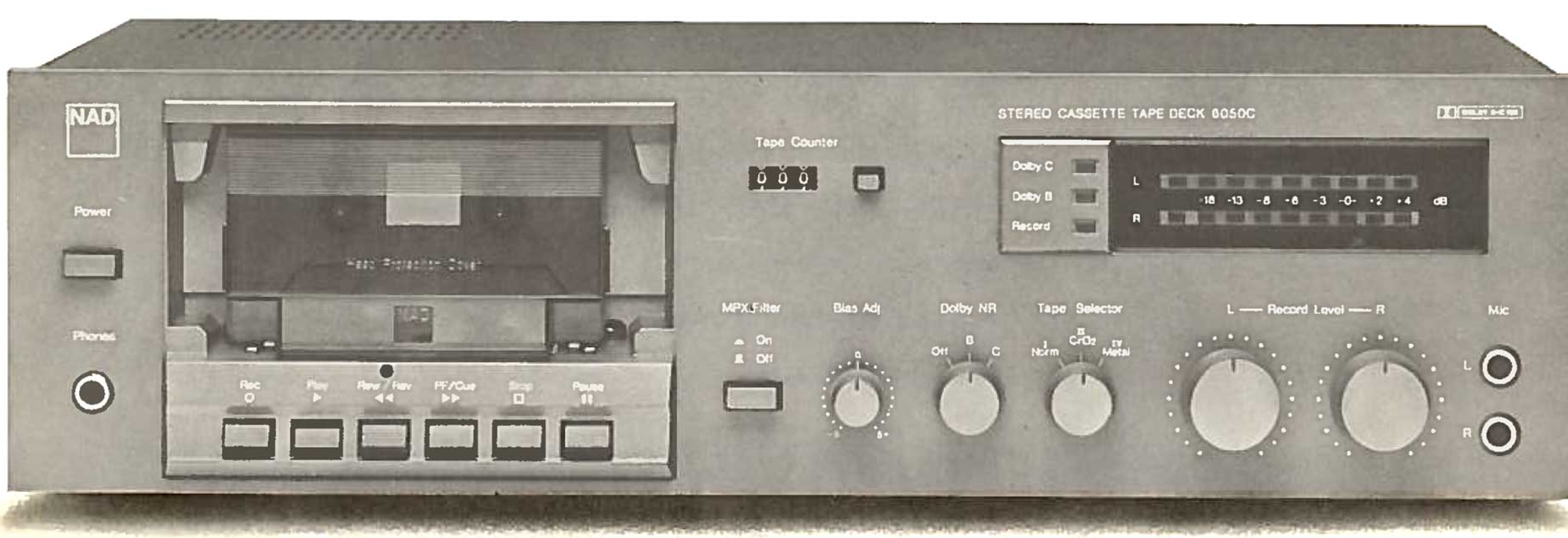
SERVICE MANUAL

NAD 6050C

STEREO CASSETTE TAPE DECK



SPECIFICATIONS

●Tepe speed variation	4.75cm/sec±1.5%	●Erasing Ratio	70dB at 1kHz
●Wow & Flutter (JIS WTD)	0.05%	●Frequvency Response	40-14000HZ 40-17000HZ (METAL)
●Output level	580mV (Dolby level)	●Pwer Consumption	25W
●Signal to Noise Ratio (with Dolby C)	72dB		

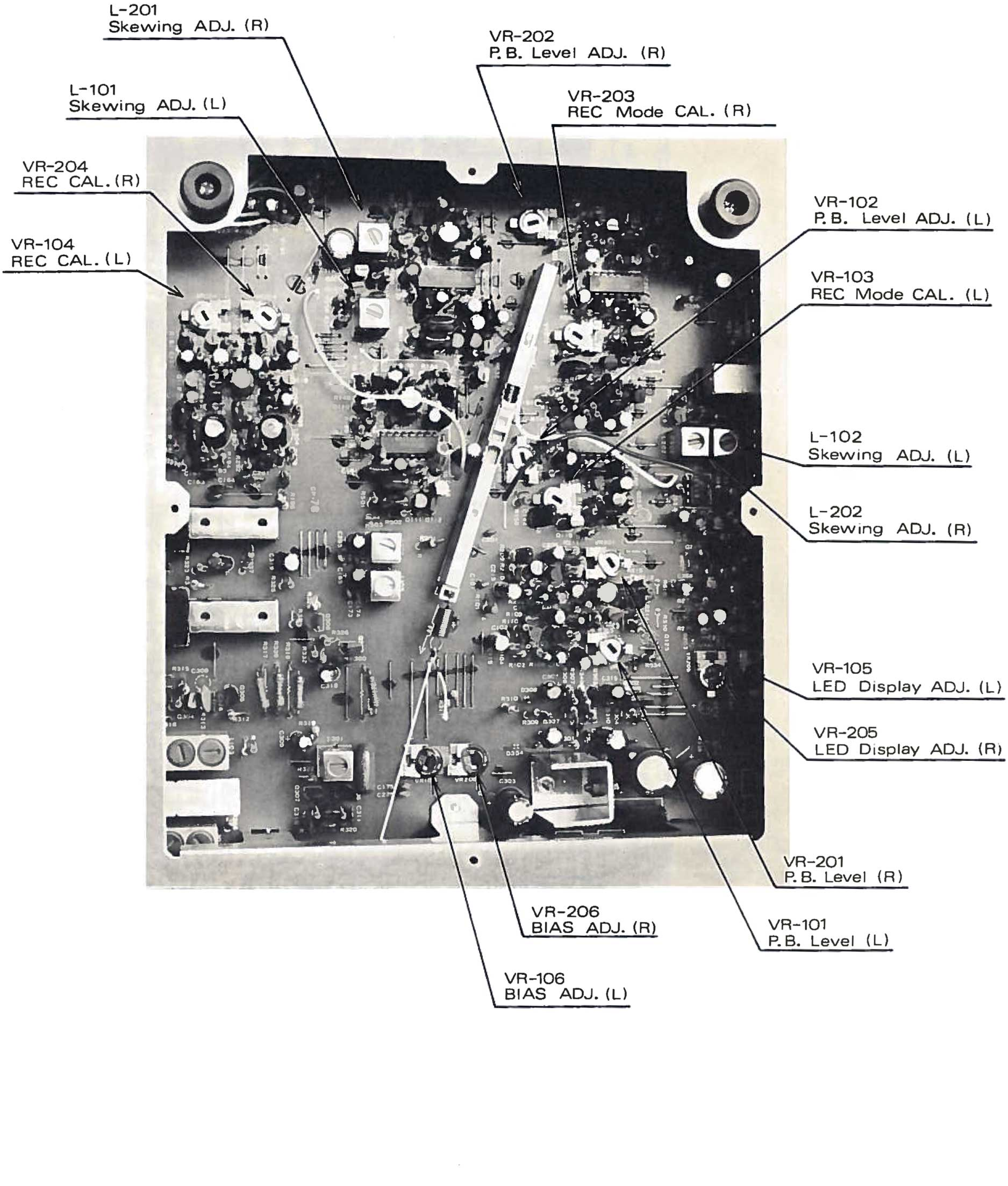
ALIGNMENT METHOD

The head should be clean and degaussing before adjustment.

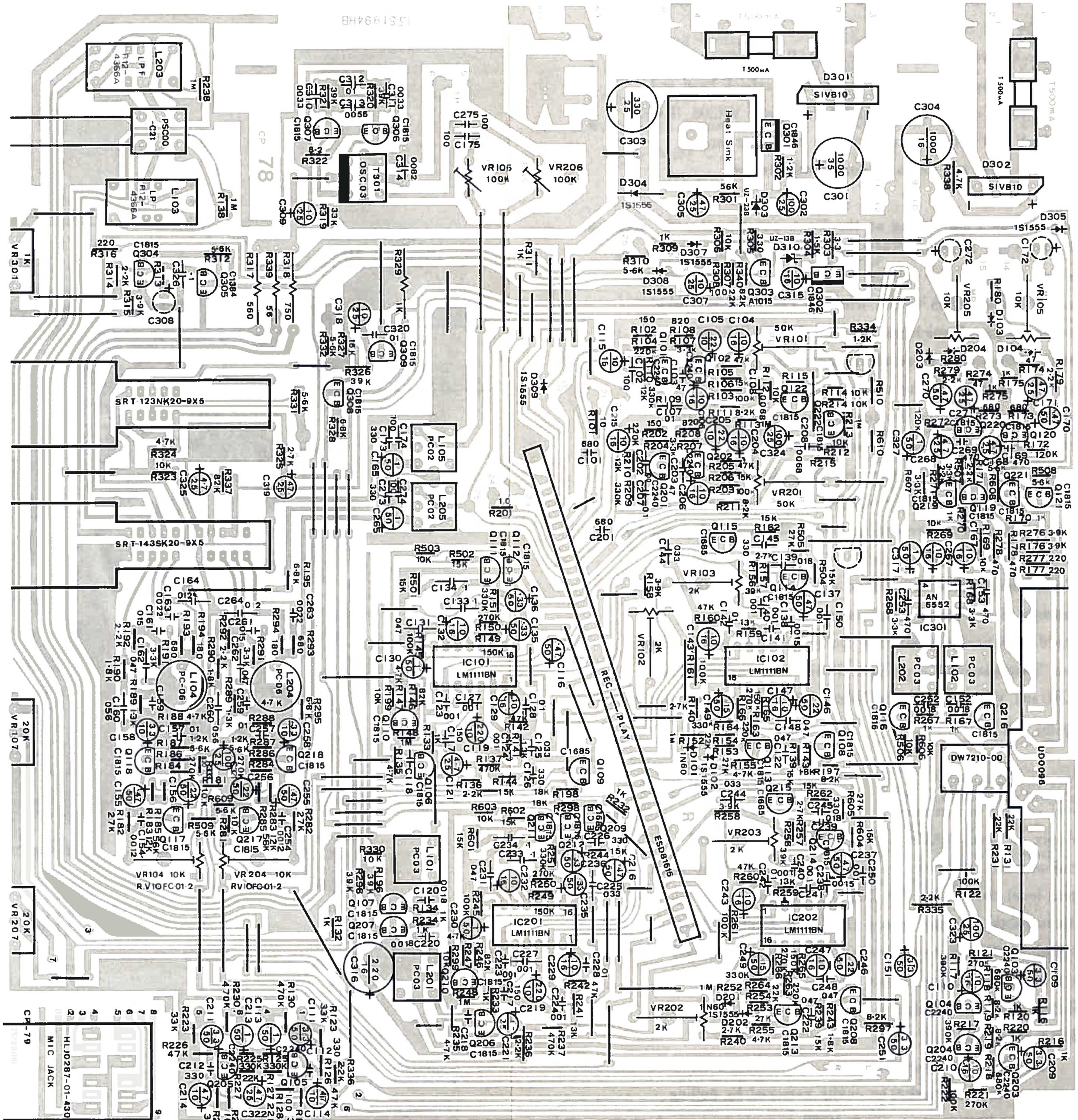
1	Tape Speed	Play a standard Test TAPE (MTT-111) 1 to 3 minutes, then adjust frequency as follows. 3000Hz ±1%
2	R/P Head Azimuth	Play the tape (MTT-114), then adjust ahead azimuth adjust screw for maximum output level . *Tape Selector (Norm), NR (off)
3	Playback Level Adjustment	Play the Dolby Level calibration tape (MTT-150), then adjust Semi-Fixed Resistor VR101 (LCH) and VR201 (RCH) for T.P.-2 (IC102/IC202 Pin 3) of 580mV. Adjust Semi-Fixed Resistor VR102 (LCH) and VR202 (RCH) for T.P.-1 (IC302, Pin3/Pin5) of 580mV. *Tape Selector (Norm) *Dolby NR (off)
4	LED Display Adjustment	Play the Dolby Level calibration tape (MTT-150) and make Line-output is 580mV. Adjust Semi-Fixed Resistor VR105 (LCH) and VR205 (RCH) until the LED Display Meter indicates "- 0 -" mark. *Tape Selector (Norm) *Dolby NR (off)
5	Record Mode Calibration	Apply an input 400Hz signal to the LINE INPUT terminal under the rated recording state and adjust input signal level or Recording Level control for T.P.1 (IC302 Pin 3/Pin 5) of 580mV. Then adjust Semi-Fixed Resistor VR103 (LCH) and VR203 (RCH) for T.P.2 (IC102/202 Pin 3) of 580mV. *Tape Selector (Norm) *Dolby NR (off)

6	Bias Adjustment <Metal Tape> Bias Oscillate frequency: 105KHZ	Set the Tape Selector Switch to the "Metal" position and Dolby NR Switch to the "off." Measure the voltage across the 10Ω (R101,R201) resistor connected in series with the recording/playback head and adjust Semi-Fixed resistor VR106(LCH) and VR206 (RCH) for 7.5mV±20% (target value) at the recording mode. The input must not be pulse during adjustment. NOTE Set the Bias Fine Tuning on the front. panel to the "O" position.
7	Bias Adjustment Special(Cr02) Tape	Set the Tape Selector Switch to the "Special(Cr02)" position. Measure the voltage across the 10Ω (R101, R201) resistor connected in series with the recording/playback head and adjust Semi-Fixed resistor VR106/VR206 for 5.0mV±20% (target value) at the recording mode. The input must not be pulse during adjustment.
8	Bias Adjustment Normal Tape (Fe203)	Set the Tape Selector Switch to the "Norm" position. Measure the voltage across the 10Ω (R101, R201) resistor connected in series with the recording/playback head and adjust Semi-Fixed resistor VR106/VR206 for 4.0mV±10% (target value) at the recording mode. The input must not be pulse during adjustment.
9	Record calibration	Set the tape selector switch to the "Norm" position and recording level control to maximum. Record 400Hz signal with the Dolby level(580mV) on Normal Tape. Then playback it. Adjust Semi-Fixed resistor VR104 (LCH) and VR204(RCH) for 580mV±3% at recording/playback. *Dolby NR : off
10	Spectral SKewing for Dolby C Adjustment	*Set the Dolby NR switch "C" position and Recording Level control to maximum. *Apply an input 20KHz signal to the LINE INPUT terminal under the rated recording state and adjust input signal level for a 180mV LINE OUT output level. *Measure the voltage across the LINE OUT and set the coil L101/L201 to minimum. Then adjust the coil L102/202 for maximum output level. *Tape Selector(Norm) *MPX filter(off)

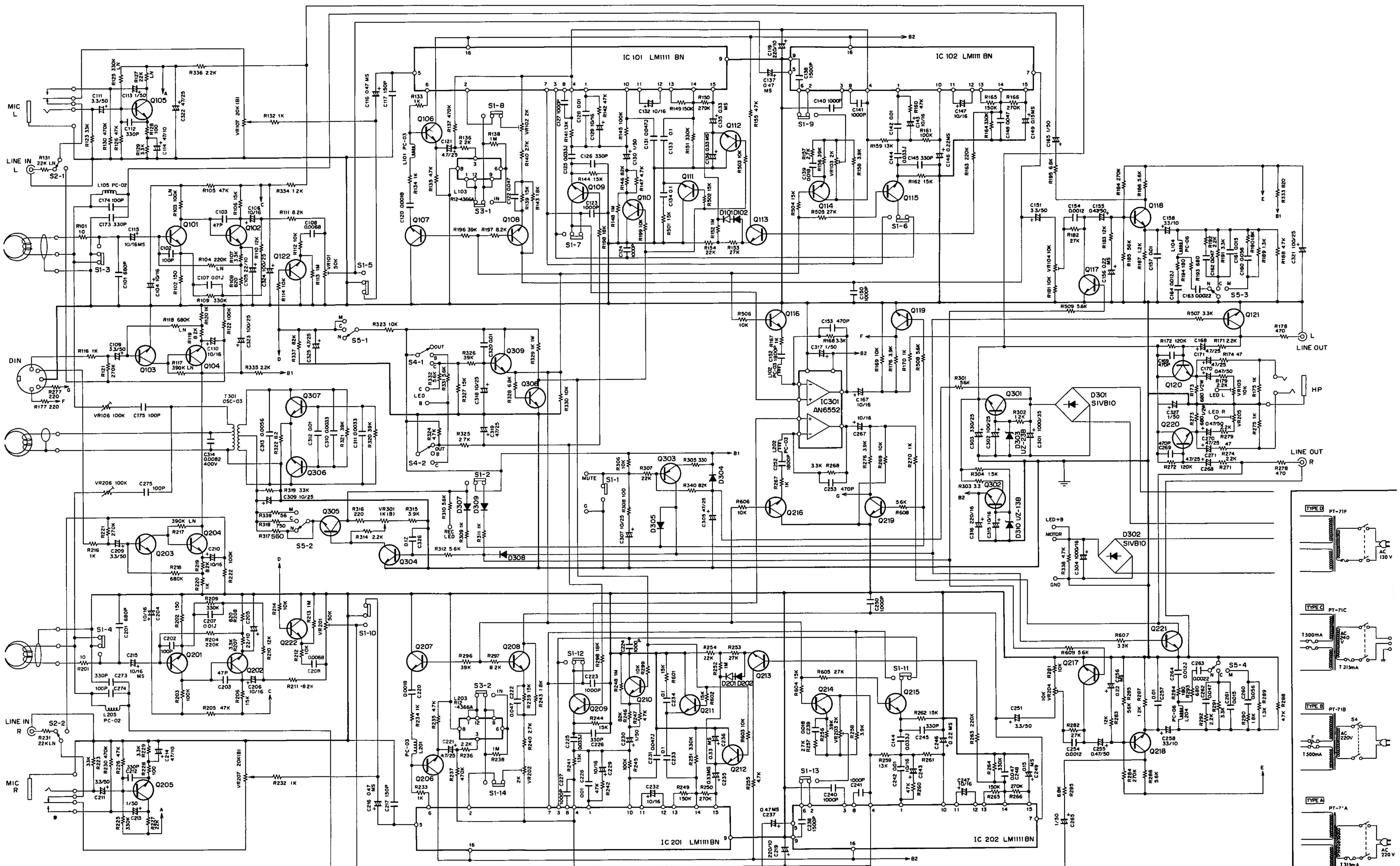
*Remove the pulley from motor. The pulley can be easily removed by pulling out covering with some cloth after heating it up about 10-20 seconds by something like fire-range.


L-201
Skewing ADJ. (R)
VR-202
P. B. Level ADJ. (R)
L-101
Skewing ADJ. (L)
VR-203
REC Mode CAL. (R)
VR-204
REC CAL. (R)
VR-102
P. B. Level ADJ. (L)
VR-104
REC CAL. (L)
VR-103
REC Mode CAL. (L)
L-102
Skewing ADJ. (L)
L-202
Skewing ADJ. (R)
VR-105
LED Display ADJ. (L)
VR-205
LED Display ADJ. (R)
VR-201
P. B. Level (R)
VR-206
BIAS ADJ. (R)
VR-101
P. B. Level (L)
VR-106
BIAS ADJ. (L)

MAIN PCB



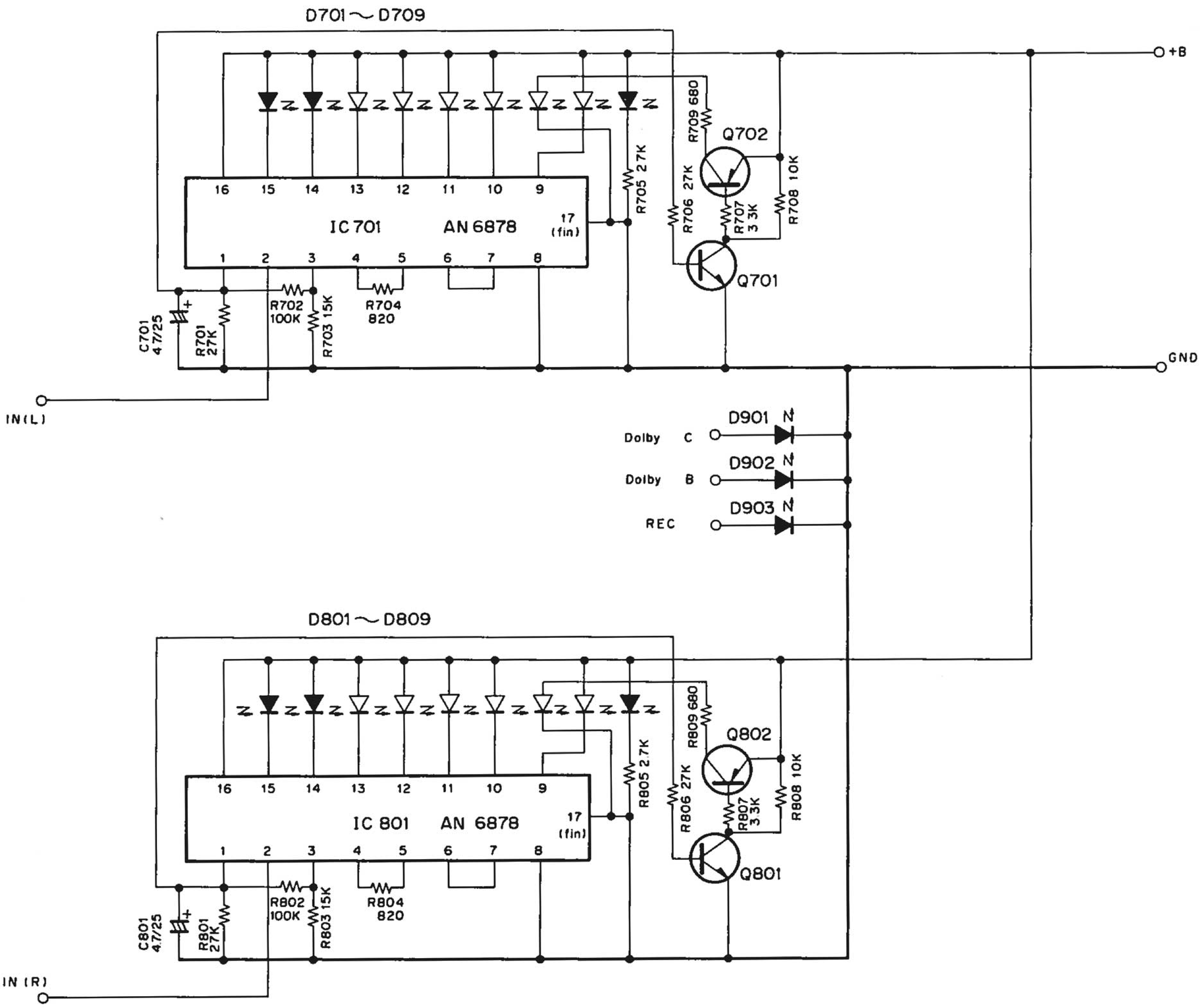
MAIN PCB



$Q_{201}^{101} \sim Q_{205}^{105}$	2SC 2240	Q 301 Q 302	2SC1846
$Q_{206}^{106} \sim Q_{208}^{108}$	2SC1815	Q 303	2SA1015
$Q_{210}^{110} \sim Q_{214}^{114}$	2SC1815	Q 305	2SC1384
$Q_{216}^{116} \sim Q_{222}^{122}$	2SC1815	D_{201}^{101}	IN60
Q304 Q306~Q309	2SC1815	D_{202}^{102} D304, D305	1S1555
Q_{209}^{109} Q_{215}^{115}	2SC1685	D 307 ~ D309	1S1555

S1-1~14 R/P SW (Play)
S2-1.2 DIN SW (NOT CONNEC TED)
S3-1.2 MPX SW (OUT)
S4-1.2 Dolby NR (OUT)
S5-1~4 Tape Selector (Norm)

LED PCB



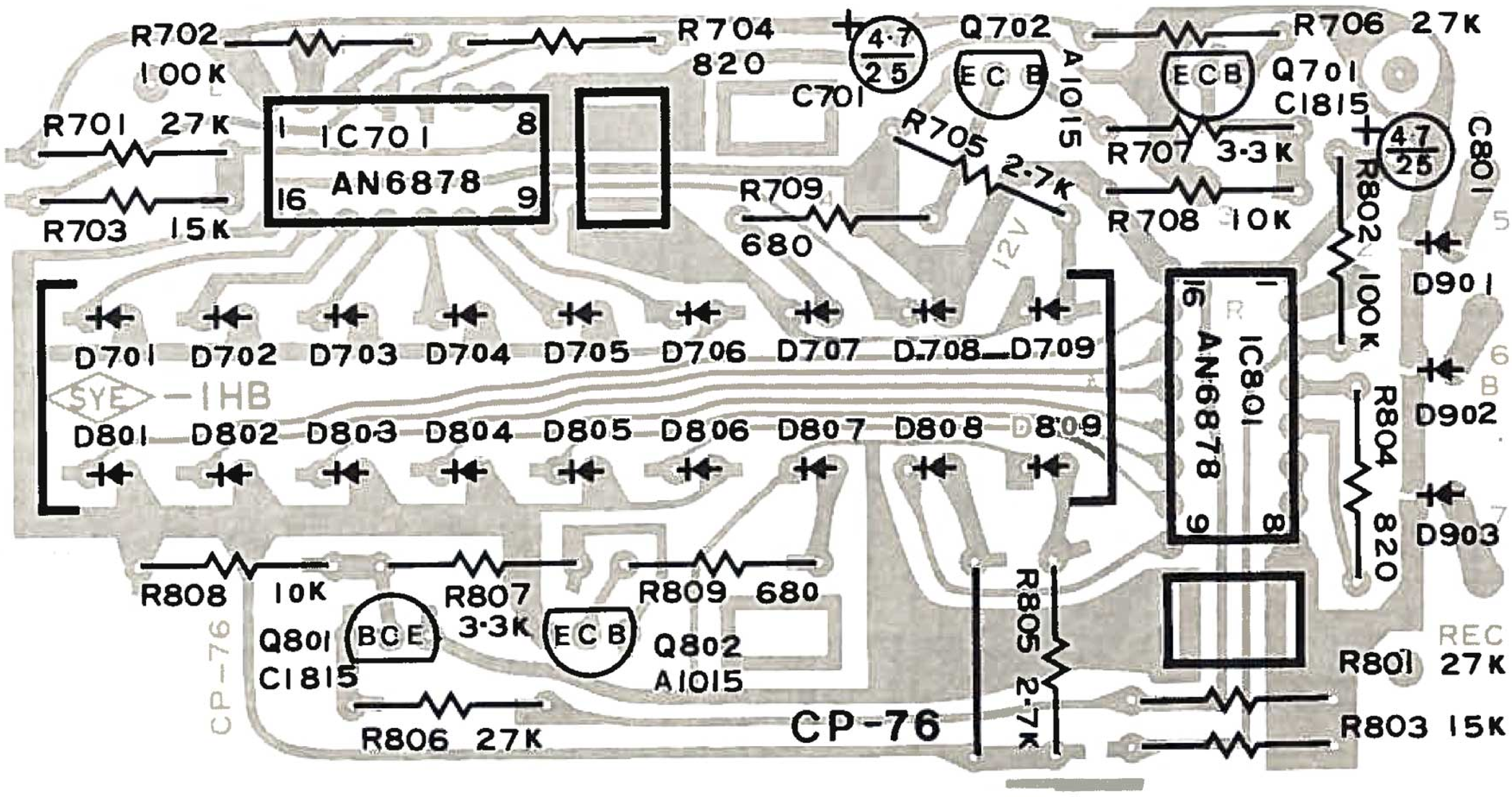
RED PR-5531K

GREEN PG-5531KY

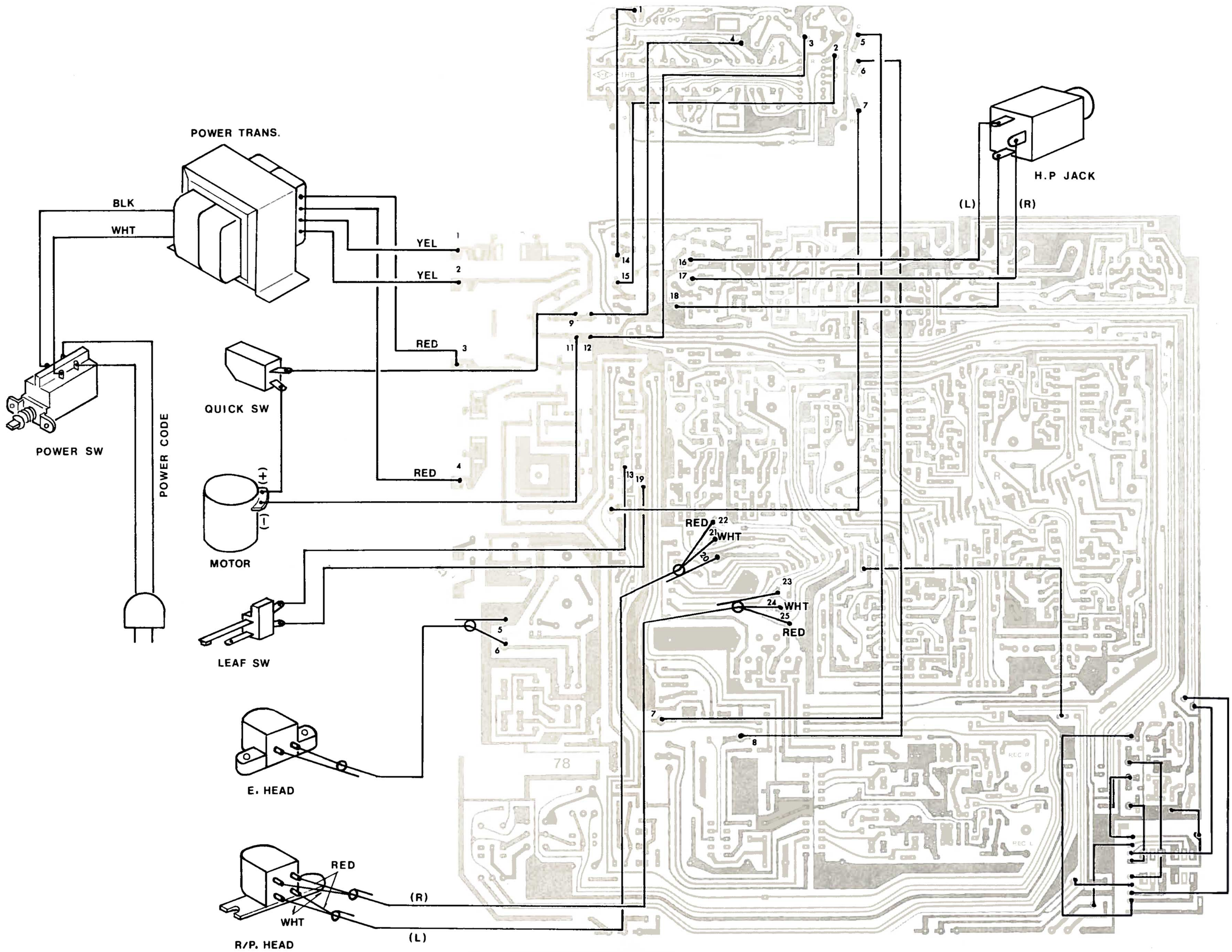
Q 701/801 2SC1815

Q 702/802 2SA1015

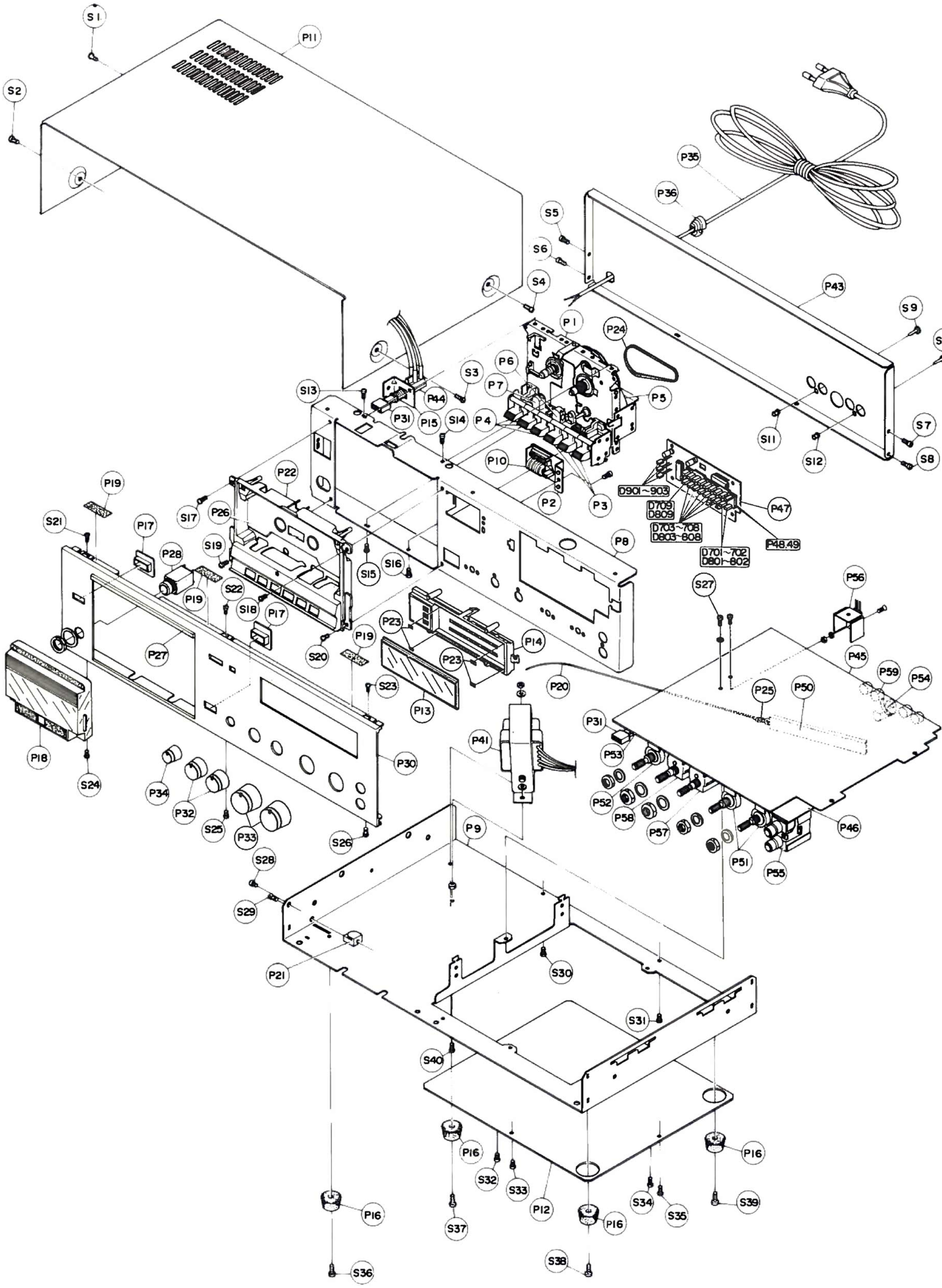
LED PCB


R702
100K
R704
820
C701
Q702
A1015
R706 27K
Q701
C1815
R701 27K
IC701
AN6878
R703 15K
R709
680
R705 2.7K
R707 3.3K
R708 10K
C801
R802
100K
D901
IC801
AN6878
R804
820
D902
D903
D701 D702 D703 D704 D705 D706 D707 D708 D709
SYE-1HB
D801 D802 D803 D804 D805 D806 D807 D808 D809
R808 10K
R807 3.3K
R809 680
Q801
C1815
Q802
A1015
R805 2.7K
R801 27K
R803 15K
R806 27K
CP-76
12V
REC

WIRING DIAGRAM



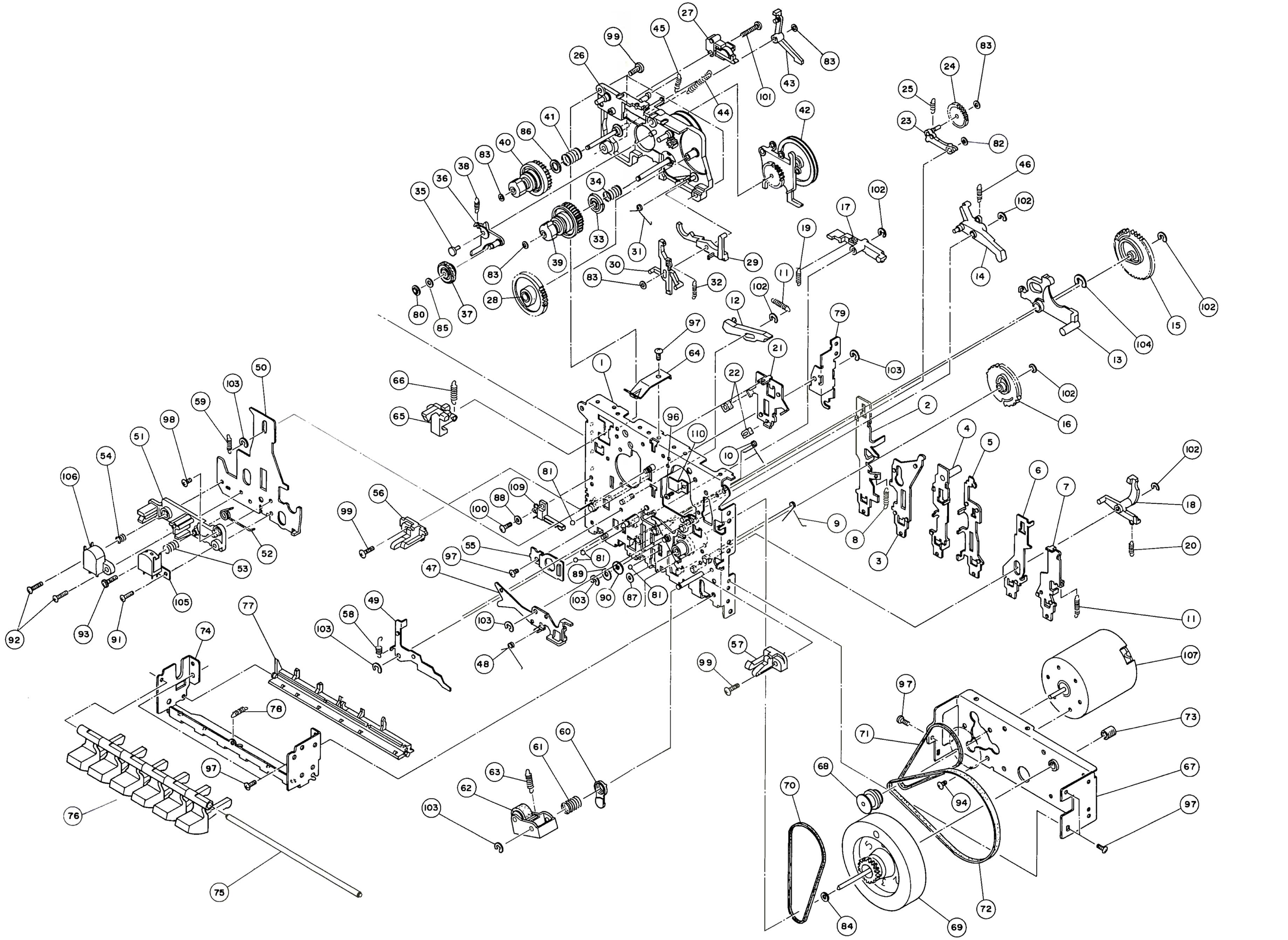
EXPLODED VIEW



MECHANISM PARTS LIST

No.	Descriptions	No.	Descriptions
1	Chassis assembly	57	Cassette guide (DR)
2	Rec lever	58	FR lock arm spring
3	Play lever	59	Brake spring
4	Rew lever assembly	60	Pause cam
5	FF lever	61	Pause cam spring
6	Stop lever	62	P roller arm assembly
7	Pause lever assembly	63	P roller spring
8	Rec lever spring	64	Pack spring
9	Lever spring (B)	65	Rec sensor
10	Lever spring (C)	66	Rec sensor spring
11	Pause lever spring	67	Motor bracket (D)
12	Rec lever (B)	68	Motor pulley (C)
13	Shift arm (A)	69	Flywheel
14	" " (B)	70	Belt
15	Gear (A)	71	"
16	" (B)	72	"
17	Gear lock arm (A)	73	Capstan screw
18	" " " (B)	74	Button holder
19	Shift arm (A) spring	75	Button shaft
20	Lock arm (B) spring	76	Button lever
21	Brake lever	77	Lock cam (F)
22	Brake shoe	78	Lock cam spring
23	FF idler arm assembly	79	Rec arm
24	FF gear	80	Push nut 1.9 x 6 x 0.25
25	C up spring	81	Steel ball 2
26	Reel base assembly	82	Polyslider washer 1.2 x 3.5 x 0.25
27	Quick action switch	83	" " 1.7 x 3.5 x 0.25
28	Auto gear	84	" " 2.6 x 4.7 x 0.25
29	Sensor arm	85	" " 3.2 x 6 x 0.25
30	Auto arm	86	" " 4.7 x 9 x 0.5
31	Sensor arm spring	87	Nylon washer 2.4 x 5 x 0.5
32	Auto arm spring	88	Plain washer 2.3 x 4.3 x 0.4
33	Auto clutch assembly	89	
34	Tension spring	90	Plain washer (L) 3.2 x 7 x 0.5
35	Bush	91	Binding screw
36	Play arm	92	" "
37	Play idler	93	Washer head screw
38	Play arm spring	94	Pan screw 2.6 x 3
39	T reel assembly	95	
40	S reel assembly	96	
41	Back tension spring	97	Tap tight screw 2.6 x 4
42	FR pulley arm assembly	98	" " " (BL) 2.6 x 4
43	Rew arm	99	" " " (BL) 2.6 x 8
44	FR pulley arm SP (A)	100	Tapping screw 2 x 6
45	FR pulley arm SP (B)	101	" " 2 x 12
46	Shift arm (B) spring	102	E ring 2
47	Auto lock arm	103	" 2.5
48	Auto lock arm spring	104	" 4
49	FR lock arm (N)	105	RP head
50	Head chassis	106	E head
51	Head base	107	DC motor
52	Head base spring	108	
53	Head spring	109	Leaf switch
54	Head spring	110	
55	Head chassis spring	111	
56	Cassette guide (DL)		

MECHANISM EXPLODED VIEW



※The circuit may change without notice.