

### Alignment Instructions

Instruments required: VTVM, Resistors (100K ohm)

Item	Test Tape	Output Connection	Adjustment	Remarks
Asimuth Adjustment	RCA 1-321	VTVM with the resistors across output (See Figure 7)	Head angle adjustment screw D (See Figure 6)	Adjust for maximum output
Head height adjustment	RCA 1-321		Head height adjustment screw E (See Figure 6)	Adjust for maximum separation (minimum crosstalk) between adjacent tracks
Meter adjustment	RCA 1-312		Semi fixed resistor R119 & R120	Adjust for -3dB point on VU meter of unit

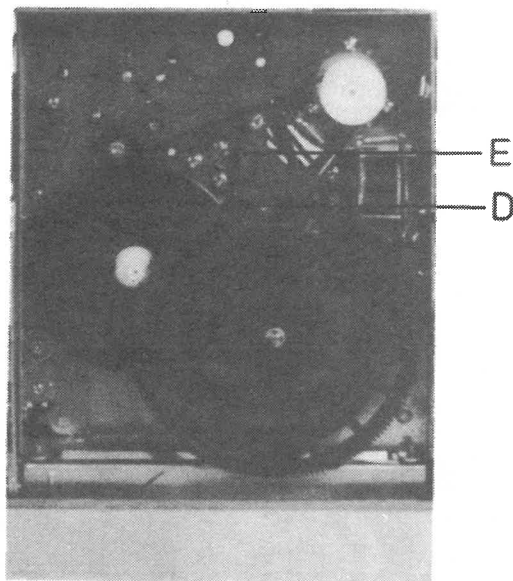


Figure 6

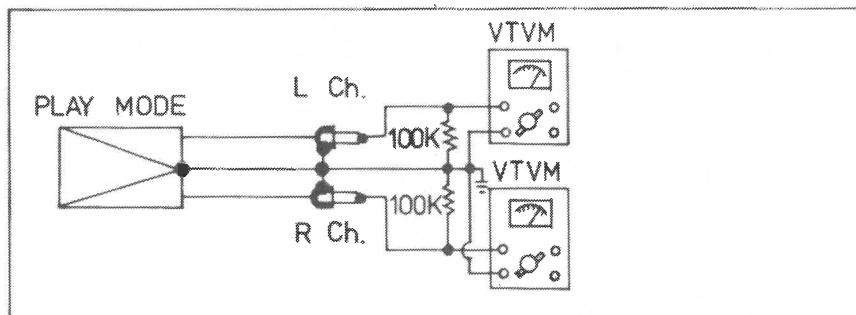
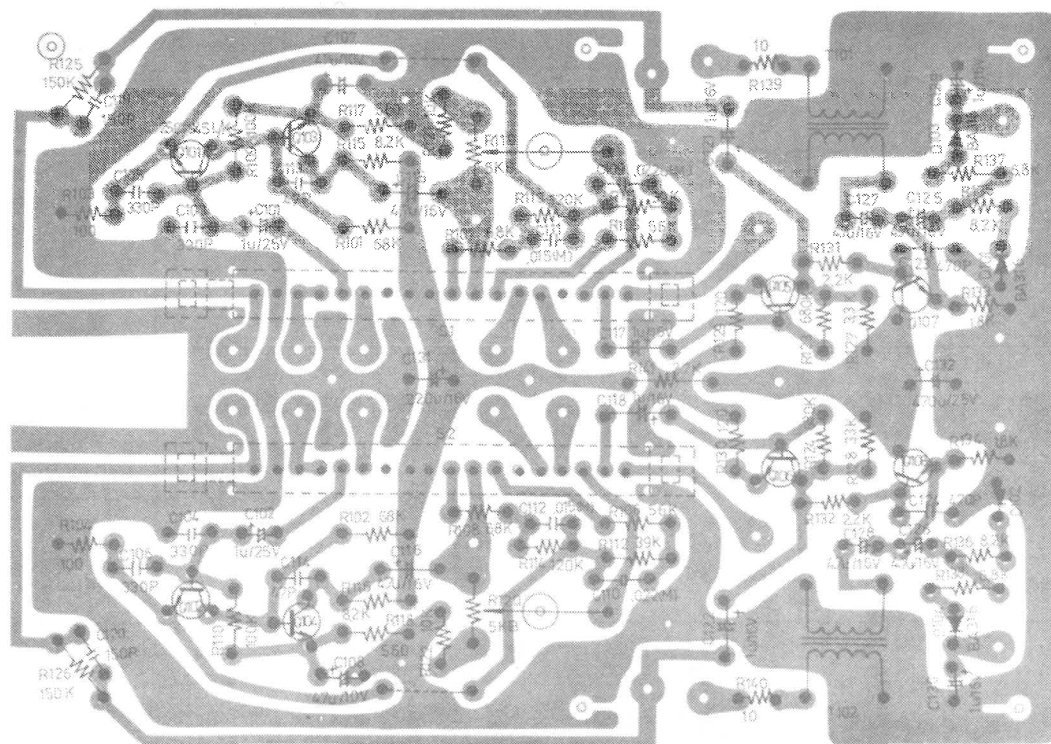
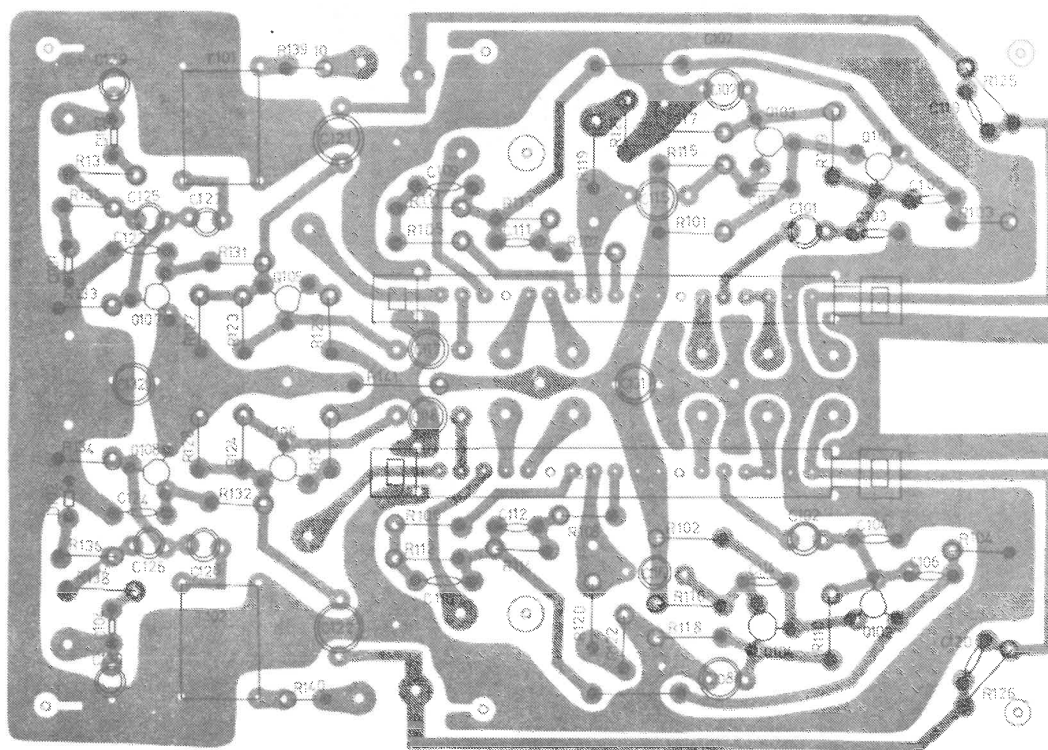


Figure 7

**Rec/Play P.C.B. (Solder Side)**

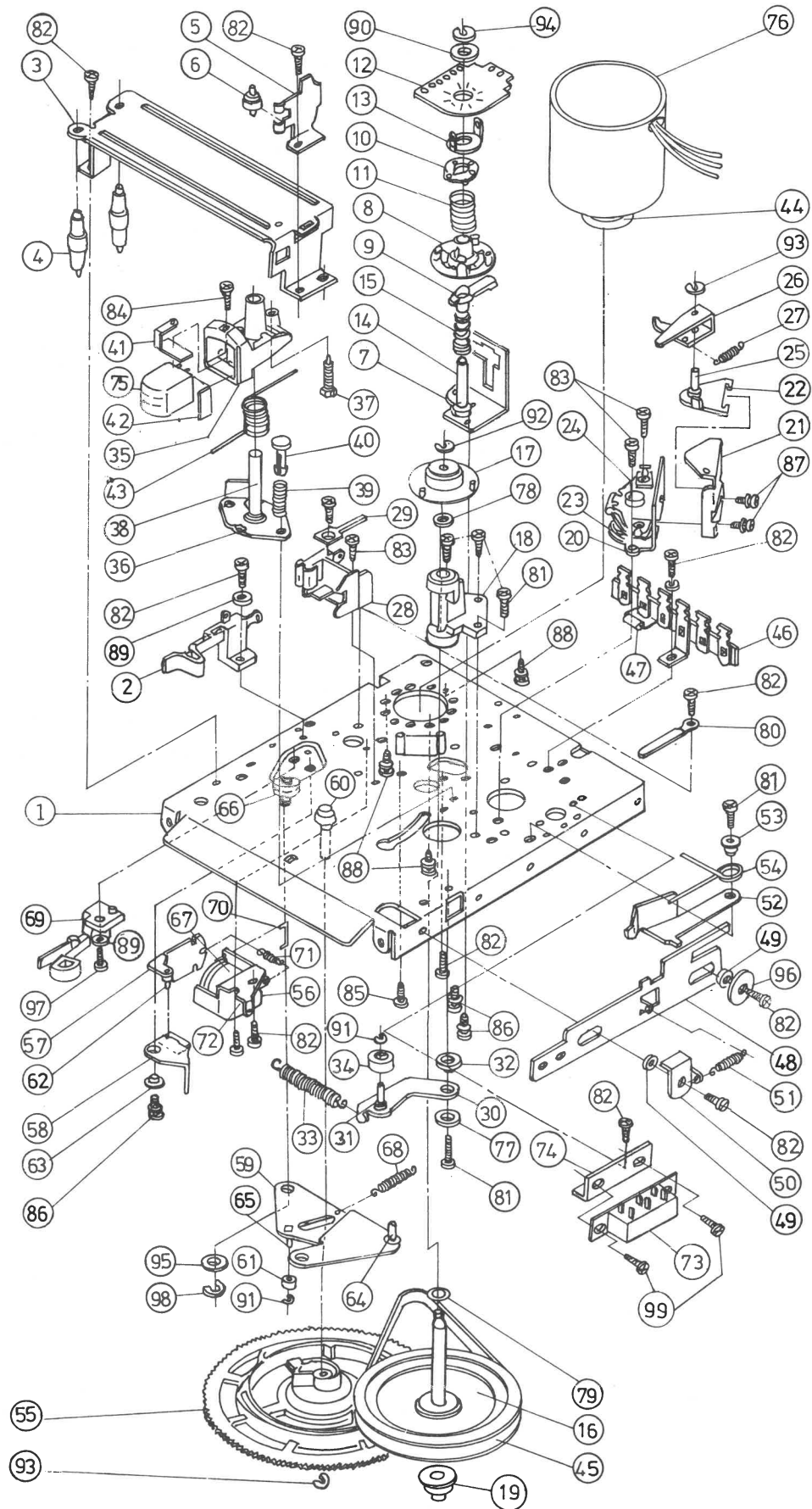


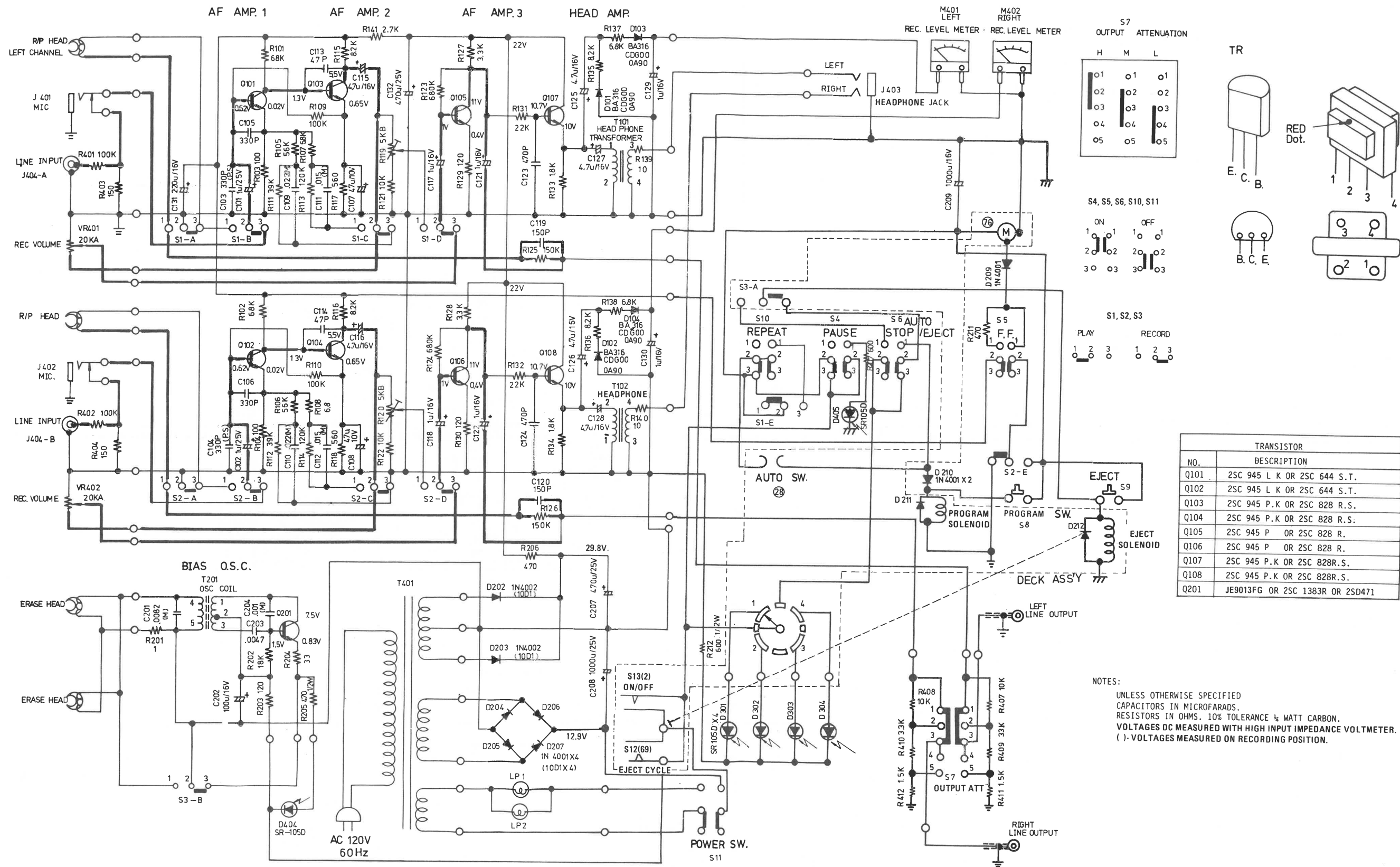
**Rec/Play P.C.B. (Component Side)**



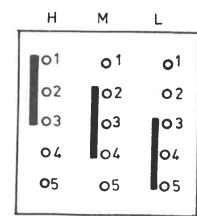


# Exploded View (Tape Deck, Mechanical Parts)

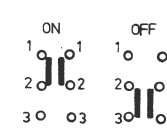




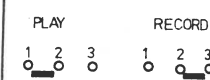
S7  
OUTPUT ATTENUATION



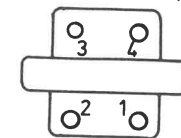
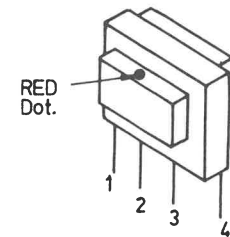
S4, S5, S6, S10, S11



S1, S2, S3

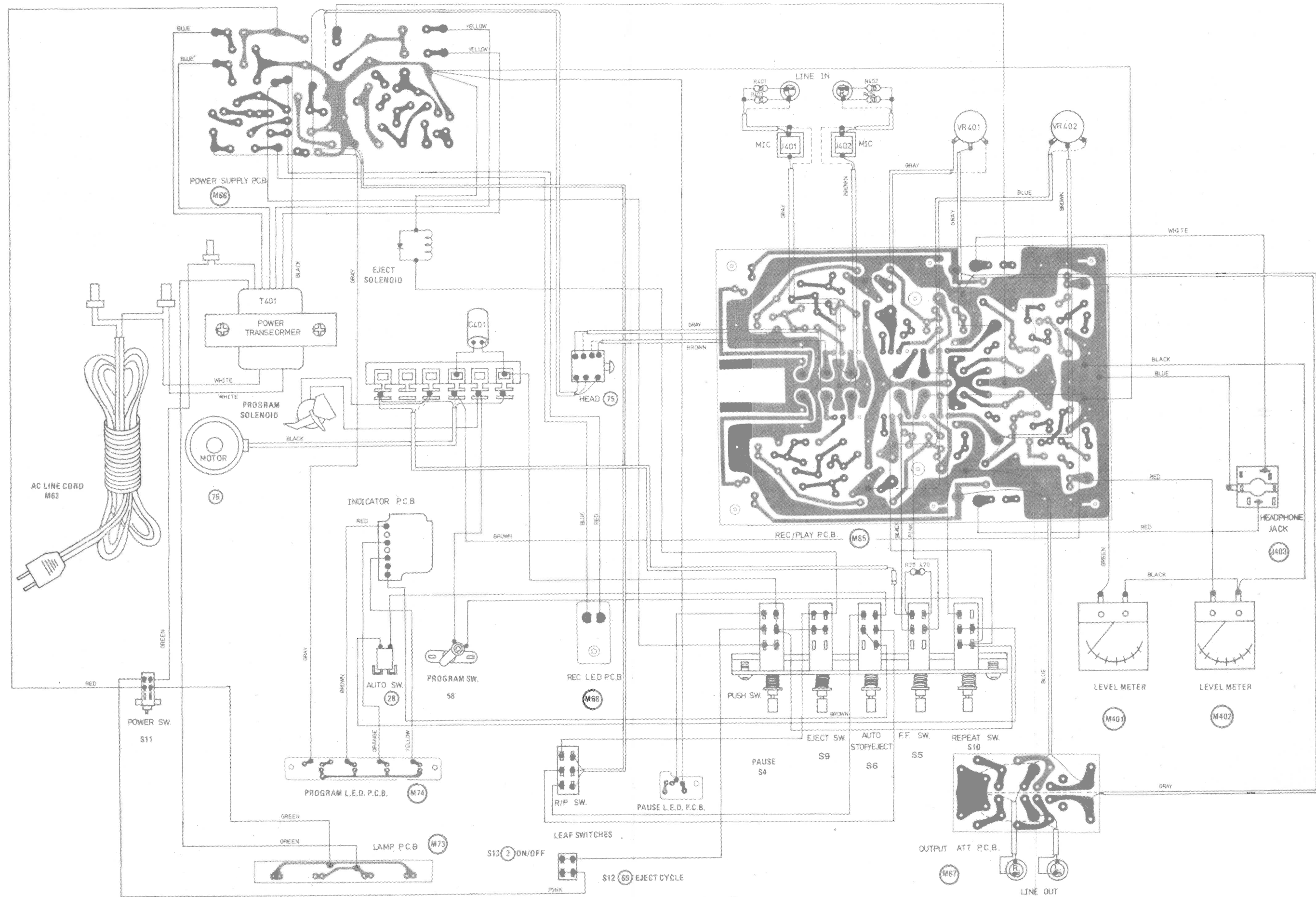


TR



TRANSISTOR	
NO.	DESCRIPTION
Q101	2SC 945 L K OR 2SC 644 S.T.
Q102	2SC 945 L K OR 2SC 644 S.T.
Q103	2SC 945 P.K OR 2SC 828 R.S.
Q104	2SC 945 P.K OR 2SC 828 R.S.
Q105	2SC 945 P OR 2SC 828 R.
Q106	2SC 945 P OR 2SC 828 R.
Q107	2SC 945 P.K OR 2SC 828R.S.
Q108	2SC 945 P.K OR 2SC 828R.S.
Q201	JE9013FG OR 2SC 1383R OR 2SD471





**Mechanical Parts (Tape Deck)**

Ref.No.	JC Penney Part No.	Supplier Part No.	Description
1	2(S13)	005600101B	Chassis
2		0SW0029000	Leaf SW., ON/OFF
3		001510102B	Pack Cover
4		000110202C	Pack Roller
5		0056001004	Pack Stabilizing Plate
6		0056001005	Pack Stabilizing Roller
7		0056002011	Cam Base
8		0056002012	4 Cam
9		0056002013	Latchet Cam
10		0056002004	Indication Contact
11		0056002005	Contact Spring
12		0056002017	Contact Panel
13		0056002018	Contact Plate(indicator contact)
14		0015102023	Cam Shaft
15		0056002008	Cam Spring
16		0056003009	Flywheel & Capstan
17		0078703005	Program Change Cam
18		0056003010	Flywheel Metal
19		0056013017	Gear (B)
20		0056004001	Yoke (A)
21		0056004002	Yoke (B)
22		001510422B	Switching Iron
23		0056004012	Coil With Bobbin(A)
24		0015104023	Center Pole
25		005600406B	Program Change Lever Shaft
26		005600407B	Program Change Lever
27		0056004008	Program Change Spring
28		0056005000	Tape Guide Ass'y
29		0015105018	GND Lug
30		0056006001	Pressure Roller Arm
31		0015106002	Pressure Roller Shaft
32		0056006003	Arm Metal
33		0056006004	Pressure Roller Arm Spring
34		0001103005	Pressure Roller
35		0056008001	Head Housing
36		005600802B	Head Base
37		0015108004	Adjust Screw
38		0015108006	Main Shaft
39		0056008008	Adjust Spring
40		0056008009	Insert Pin
41		0034708001	GND Plate
42		001510901B	TN-Spacer
43		0056008007	Head Support Spring
44		0015109010	Motor Pulley
45		0056109002	Belt

46		0001111008	Lug Terminal 3L2
47		OSD0000001	Silicon Diode SIB01-01
48		0061812001	Record Lever
49		0011512006	Record Lever Collar
50		0031712006	Spring Holder
51		000040901B	Record Lever Spring
52		0049112002	Record Push Arm
53		0049112003	Record Push Collar
54		0049112004	Record Push Arm Spring
55		0056013001	Gear(A)
56		0056013002	Yoke
57		0056013003	Armature
58		0056013004	Stop Plate
59		0056013005	Kick Plate
60		0056013006	Gear Shaft
61		0056013007	Kick Roller
62		0056013008	Armature Pin
63		0056013009	Stop Plate Metal
64		0056013010	Kick Lever Pin
65		0056013011	Kick Roller Shaft
66		0056013012	Kick Plate Metal
67		0078713001	Eject Coil
68		0023804006	Clutch Arm Spring
69 (S12)		OMSW005900	Leaf Switch, Eject Cycle
70		OMAX33M000	Max Pin
71		0029814001	Push Button Actuator Spring
72		0001108004	Solenoid Shaft
73 (S3)		0061812003	Push SW. Record
74		0061812002	Push SW. Bracket
75		OC1082A200	Head (C-1082A)
(75)		(OMH4600000)	(Head. MH-46)
76		ONAM3A0000	Motor (NAM-3A)
77		OS03010080	Washer 3x10x0.8
78		ON04676080	Nylon Washer 4.6x7.6x0.8
79		0056013015	Flywheel Washer 4.6x7.6x1.5
80		0056001011	Cord Clamp
81		020PZ30080	Tapping Screw 3x8
82		020PZ30060	Tapping Screw 3x6
83		020PZ30050	Tapping Screw 3x5
84		040PZ26080	Fixing Screw 2.6x8
85		002PZ30060	Screw(+/-) 3x6
86		010PZ30050	Tams Screw 3x5
87		010PZ26050	Tams Screw 2.6x5
88		010PZ26040	Tams Screw 2.6x4
89		OS03080050	Washer 3x8x0.5
90		OS04190080	Washer 4.1x9x0.8



**Resistors**

**Replacement Parts List**

Ref.No.	JC Penney Part No.	Supplier Part No.	Description
R101		4050468313	Carbon Resistor $\frac{1}{4}W$ 68K ohm
R102		4050468313	Carbon Resistor $\frac{1}{4}W$ 68K ohm
R103		4050410113	Carbon Resistor $\frac{1}{4}W$ 100 ohm
R104		4050410113	Carbon Resistor $\frac{1}{4}W$ 100 ohm
R105		4050456313	Carbon Resistor $\frac{1}{4}W$ 56K ohm
R106		4050456313	Carbon Resistor $\frac{1}{4}W$ 56K ohm
R107		4050468213	Carbon Resistor $\frac{1}{4}W$ 6.8K ohm
R108		4050468213	Carbon Resistor $\frac{1}{4}W$ 6.8K ohm
R109		4050410413	Carbon Resistor $\frac{1}{4}W$ 100K ohm
R110		4050410413	Carbon Resistor $\frac{1}{4}W$ 100K ohm
R111		4050439313	Carbon Resistor $\frac{1}{4}W$ 39K ohm
R112		4050439313	Carbon Resistor $\frac{1}{4}W$ 39K ohm
R113		4050412413	Carbon Resistor $\frac{1}{4}W$ 120K ohm
R114		4050412413	Carbon Resistor $\frac{1}{4}W$ 120K ohm
R115		4050482213	Carbon Resistor $\frac{1}{4}W$ 8.2K ohm
R116		4050482213	Carbon Resistor $\frac{1}{4}W$ 8.2K ohm
R117		4050456113	Carbon Resistor $\frac{1}{4}W$ 560 ohm
R118		4050456113	Carbon Resistor $\frac{1}{4}W$ 560 ohm
R119		5221105391	Semi-Fixed Resistor 5K ohm(B)
R120		5221105391	Semi-Fixed Resistor 5K ohm(B)
R121		4050410313	Carbon Resistor $\frac{1}{4}W$ 10K ohm
R122		4050410313	Carbon Resistor $\frac{1}{4}W$ 10K ohm
R123		4050468413	Carbon Resistor $\frac{1}{4}W$ 680K ohm
R124		4050468413	Carbon Resistor $\frac{1}{4}W$ 680K ohm
R125		4050415413	Carbon Resistor $\frac{1}{4}W$ 150K ohm
R126		4050415413	Carbon Resistor $\frac{1}{4}W$ 150K ohm
R127		4050433213	Carbon Resistor $\frac{1}{4}W$ 3.3K ohm
R128		4050433213	Carbon Resistor $\frac{1}{4}W$ 3.3K ohm
R129		4050412113	Carbon Resistor $\frac{1}{4}W$ 120 ohm
R130		4050412113	Carbon Resistor $\frac{1}{4}W$ 120 ohm
R131		4050422313	Carbon Resistor $\frac{1}{4}W$ 22K ohm
R132		4050422313	Carbon Resistor $\frac{1}{4}W$ 22K ohm
R133		4050418213	Carbon Resistor $\frac{1}{4}W$ 1.8K ohm
R134		4050418213	Carbon Resistor $\frac{1}{4}W$ 1.8K ohm
R135		4050482213	Carbon Resistor $\frac{1}{4}W$ 8.2K ohm
R136		4050482213	Carbon Resistor $\frac{1}{4}W$ 8.2K ohm
R137		4050468213	Carbon Resistor $\frac{1}{4}W$ 6.8K ohm
R138		4050468213	Carbon Resistor $\frac{1}{4}W$ 6.8K ohm
R139		4050410013	Carbon Resistor $\frac{1}{4}W$ 10 ohm
R140		4050410013	Carbon Resistor $\frac{1}{4}W$ 10 ohm
R141		4050427213	Carbon Resistor $\frac{1}{4}W$ 2.7K ohm
R201		4050410913	Carbon Resistor $\frac{1}{4}W$ 1 ohm
R202		4050418313	Carbon Resistor $\frac{1}{4}W$ 18K ohm
R203		4050412113	Carbon Resistor $\frac{1}{4}W$ 120 ohm
R204		4050433013	Carbon Resistor $\frac{1}{4}W$ 33 ohm

R205	4050247113	Carbon Resistor $\frac{1}{2}W$ 470 ohm
R206	4050447113	Carbon Resistor $\frac{1}{4}W$ 470 ohm
R207	4050260113	Carbon Resistor $\frac{1}{2}W$ 600 ohm
R211	4050447113	Carbon Resistor $\frac{1}{4}W$ 470 ohm
R212	4050260113	Carbon Resistor $\frac{1}{2}W$ 600 ohm
R401	4050410413	Carbon Resistor $\frac{1}{4}W$ 100K ohm
R402	4050410413	Carbon Resistor $\frac{1}{4}W$ 100K ohm
R403	4050415113	Carbon Resistor $\frac{1}{4}W$ 150 ohm
R404	4050415113	Carbon Resistor $\frac{1}{4}W$ 150 ohm
R407	4050410313	Carbon Resistor $\frac{1}{4}W$ 10K ohm
R408	4050410313	Carbon Resistor $\frac{1}{4}W$ 10K ohm
R409	4050433213	Carbon Resistor $\frac{1}{4}W$ 3.3K ohm
R410	4050433213	Carbon Resistor $\frac{1}{4}W$ 3.3K ohm
R411	4050415213	Carbon Resistor $\frac{1}{4}W$ 1.5K ohm
R412	4050415213	Carbon Resistor $\frac{1}{4}W$ 1.5K ohm

#### Capacitors

C101	5158109325	Electrolytic Capacitor 1uF/25V
C102	5158109325	Electrolytic Capacitor 1uF/25V
C103	5148331150	Styrol Film Capacitor 330pF(50V)
C104	5148331150	Styrol Film Capacitor 330pF(50V)
C105	5103331150	Ceramic Capacitor 330pF(50V)
C106	5103331150	Ceramic Capacitor 330pF(50V)
C107	5158470310	Electrolytic Capacitor 47uF/10V
C108	5158470310	Electrolytic Capacitor 47uF/10V
C109	5118223150	Mylar Capacitor .022uF/50V
C110	5118223150	Mylar Capacitor .022uF/50V
C111	5118153150	Mylar Capacitor .015uF/50V
C112	5118153150	Mylar Capacitor .015uF/50V
C113	5103470150	Ceramic Capacitor 47pF/50V
C114	5103470150	Ceramic Capacitor 47pF/50V
C115	5158479316	Electrolytic Capacitor 4.7uF/16V
C116	5158479316	Electrolytic Capacitor 4.7uF/16V
C117	5158109316	Electrolytic Capacitor 1uF/16V
C118	5158109316	Electrolytic Capacitor 1uF/16V
C119	5103151150	Ceramic Capacitor 150pF/50V
C120	5103151150	Ceramic Capacitor 150pF/50V
C121	5158109316	Electrolytic Capacitor 1uF/16V
C122	5158109316	Electrolytic Capacitor 1uF/16V
C123	5103471150	Ceramic Capacitor 470pF
C124	5103471150	Ceramic Capacitor 470pF
C125	5158479316	Electrolytic Capacitor 4.7uF/16V
C126	5158479316	Electrolytic Capacitor 4.7uF/16V
C127	5158479316	Electrolytic Capacitor 4.7uF/16V
C128	5158479316	Electrolytic Capacitor 4.7uF/16V
C129	5158109316	Electrolytic Capacitor 1uF/16V
C130	5158109316	Electrolytic Capacitor 1uF/16V

# JCPenney 683-3331-00 (853-1659)

C131	5158221316	Electrolytic Capacitor 220uF/16V
C132	5158471325	Electrolytic Capacitor 470uF/25V
C201	5118822100	Mylar Capacitor .0082uF
C202	5158101316	Electrolytic Capacitor 100uF/16V
C203	5118472150	Mylar Capacitor .0047uF/50V
C204	5118102150	Mylar Capacitor .001uF/50V
C207	5158471325	Electrolytic Capacitor 470uF/25V
C208	5158102325	Electrolytic Capacitor 1000uF/25V
C209	5158102316	Electrolytic Capacitor 1000uF/16V

## Miscellaneous

D101	4120100900	Diode 0A90(CDG BA316) (CDG00 BA316)
D102	4120100900	Diode 0A90(CDG BA316) (CDG00 BA316)
D103	4120100900	Diode 0A90(CDG BA316) (CDG00 BA316)
D104	4120100900	Diode 0A90(CDG BA316) (CDG00 BA316)
D202	4130101001	Diode 10DI or (1N4001,1N4002)
D203	4130101001	Diode 10DI or (1N4001,1N4002)
D204	4130101001	Diode 10DI or (1N4001,1N4002)
D205	4130101001	Diode 10DI or (1N4001,1N4002)
D206	4130101001	Diode 10DI or (1N4001,1N4002)
D207	4130101001	Diode 10DI or (1N4001,1N4002)
D210	4130101001	Diode 10DI (1N4001)
D301	4120601054	Diode L.E.D SR-105D
D302	4120601054	Diode L.E.D SR-105D
D303	4120601054	Diode L.E.D SR-105D
D304	4120601054	Diode L.E.D SR-105D
D404	4120601054	Diode L.E.D SR-105D
D405	4120601054	Diode L.E.D SR-105D
Q101	4100209459	Transistor 2SC 945L/K or 2SC 644S/T
Q102	4100209459	Transistor 2SC 945L/K or 2SC 644S/T
Q103	4100209459	Transistor 2SC 945P/K or 2SC 828R/S
Q104	4100209459	Transistor 2SC 945P/K or 2SC 828R/S
Q105	4100209452	Transistor 2SC 945P or 2SC 828R
Q106	4100209452	Transistor 2SC 945P or 2SC 828R
Q107	4100209459	Transistor 2SC 945P/K or 2SC 828R/S
Q108	4100209459	Transistor 2SC 945P/K or 2SC 828R/S
Q201	4100213834	Transistor 2SC 1383R or 2SD 471 or JE9013FG
T101	4211903901	Headphone Transformer
T102	4211903901	Headphone Transformer
T201	4330890010	Recording OSC coil
T401	4209481201	Power Transformer EI-48
VR401	5020124191	Volume 20K ohm(A)
VR402	5020124191	Volume 20K ohm(A)
M401	4010190003	Level Meter, Left
M402	4010190003	Level Meter, Right
LP1	4703140191	Lamp 14V 150mA with Blue Heat Sink
LP2	4703140191	Lamp 14V 150mA with Blue Heat Sink
J401	4500110003	MIC. Jack 3.5φ W/Nut
J402	4500110003	MIC. Jack 3.5φ W/Nut
J403	4500530001	Headphone Jack 6.4φ W/Nut
WC1,2,3	4520290001	Wire Connector SD-5.5