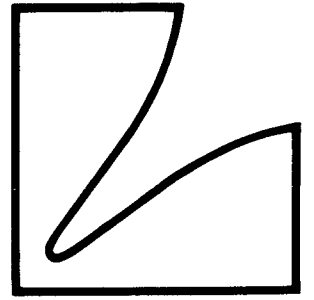
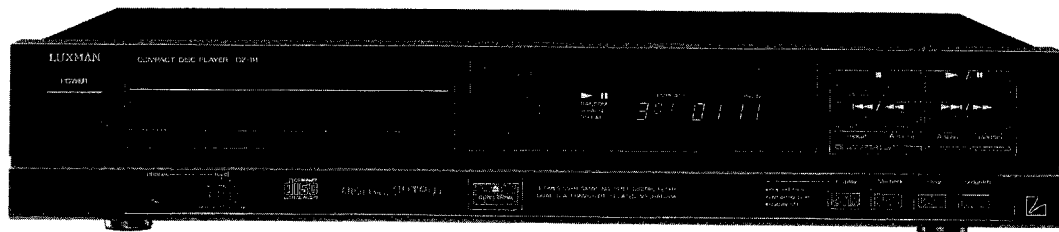


SERVICE MANUAL



Compact Disk Player

DZ-111



Contents

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Specifications

| | |
|---|--|
| Systems | Optical (Compact Disc System) |
| Quantizing Bit Number | 16 Bit Linear System |
| Channels | 2 Channels, Stereo |
| Pick up | Semiconductor Laser Pick-up |
| Output Voltage | 2V±1dB |
| Frequency Response | 50 ~ 20kHz±1dB |
| T.H.D (1kHz) | 0.08% |
| S/N Ratio | 100dB |
| Dynamic Range | 85dB |
| Channel Separation (1kHz) | 90dB |
| Headphone Output Voltage (1kHz, -20dB/8ohm) | 190mV±1dB |
| Power Supply | AC120/220/240V, 50Hz (EK, AD Model Only) AC120V, 60HZ (UZ, UQ Model Only) |
| Power Consumption | 10W |
| Semiconductors | 16 IC's, 21 Transistors, 2 FET's, 27 Diodes, 1 Zener Diode |
| Dimension (W × H × D) | 438 × 85 × 314 mm |
| Weight | 5.5 kg |

Parts Locations and Dissassembly Instructions

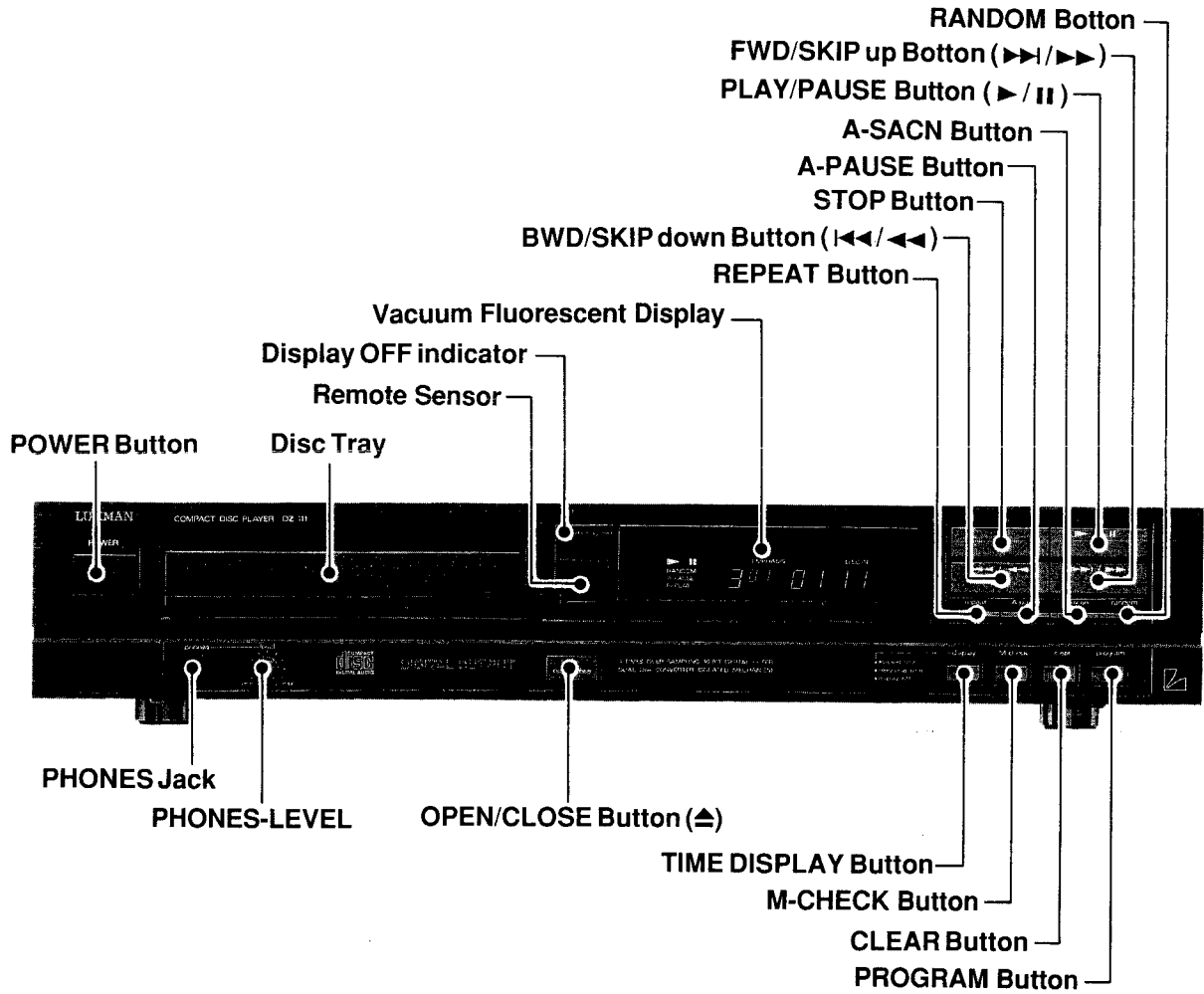


Figure 1

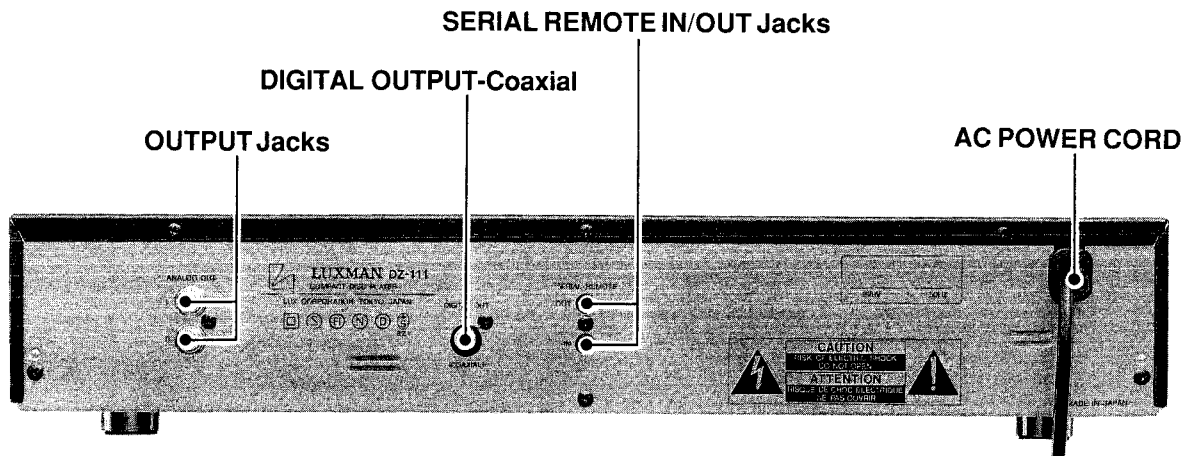


Figure 2

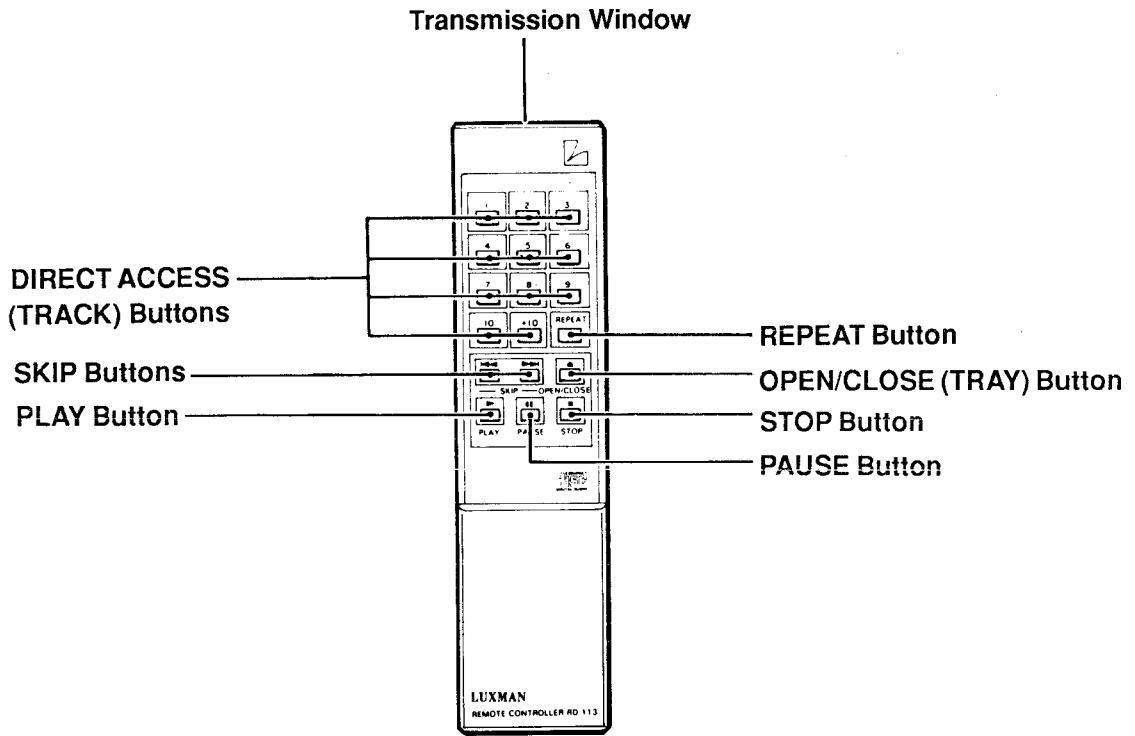


Figure 3

<Disassembly>

1. Removal of Top Cover

- (1) Remove seven screws marked "■" as shown in Figure 4 and 5.
- (2) Pull out the top cover in the direction of the arrow as shown in Figure 4.

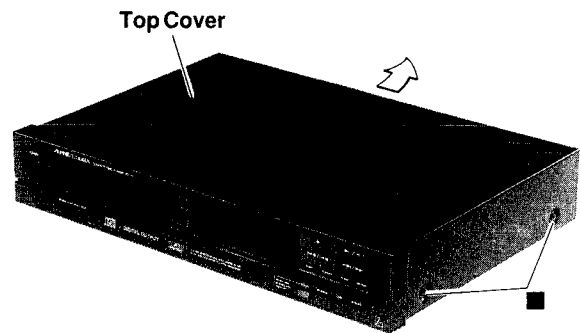


Figure 4

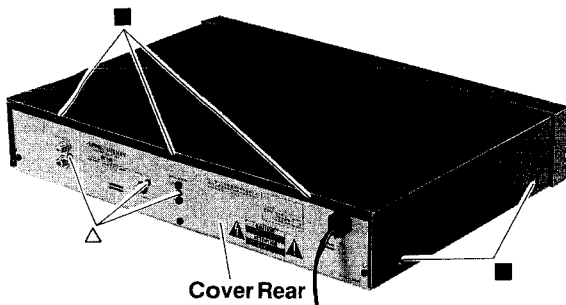


Figure 5

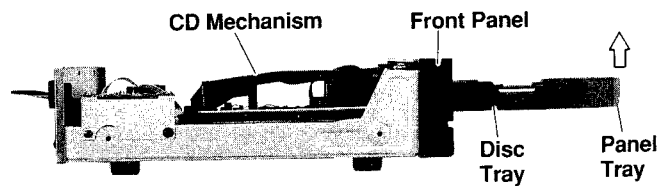


Figure 6

2. Removal of CD Mechanism

- (1) After removal of the top cover, open the disc tray as shown in Figure 6.
- (2) Remove the panel tray in the arrow direction as shown in Figure 6.
- (3) Remove four screws marked "○" as shown in Figure 7.
- (4) Disconnect all connectors from the CD Mechanism.

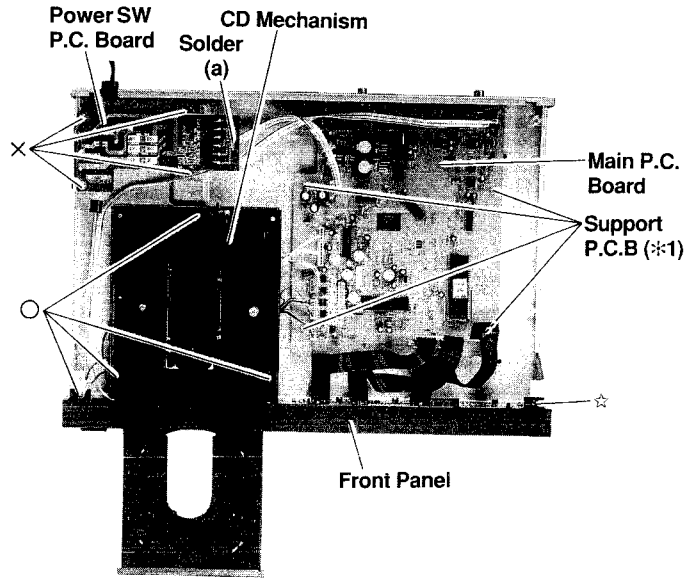


Figure 7

3. Removal of Front Panel and Logic/Phone P.C.Board

- (1) After removal of CD Mechanism, remove four screws marked "☆" as shown in Figure 7 and 8.
- (2) Remove six screws marked "▲" as shown in Figure 9.
- (3) Remove six hooks as shown in Figure 9.
- (4) Remove two screws marked "●" as shown Figure 9, and the Front Panel will be removed.
- (5) Remove solder (b) as shown in Figure 9, and the Logic P.C.Board will be removed.
- (6) Disconnect a connector from the Phone P.C.B. and the Phone P.C.Board will be removed.

4. Removal of Power SW P.C. Board

- (1) After removal of the top cover, remove four screws marked "X" and solder (a) as shown in Figure 7.

5. Removal of Main P.C.Board

- (1) After removal of the top cover, remove three screws marked "Δ" as shown in Figure 5.
- (2) Remove four P.C.B. supports (*1) from Main P.C.Board as shown in Figure 7, by pushing the point "A" as shown in Figure 10.
- (3) Disconnect all connectors from Main P.C.Board.

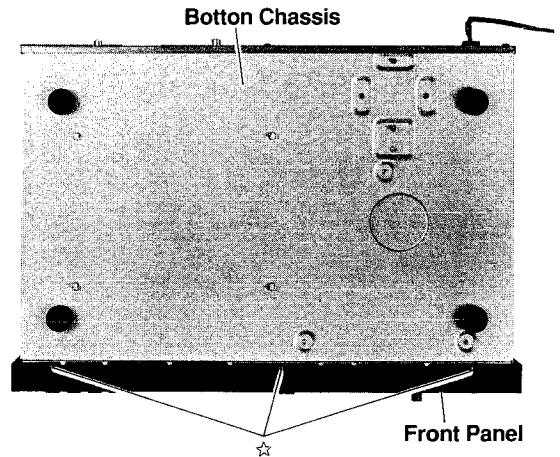


Figure 8

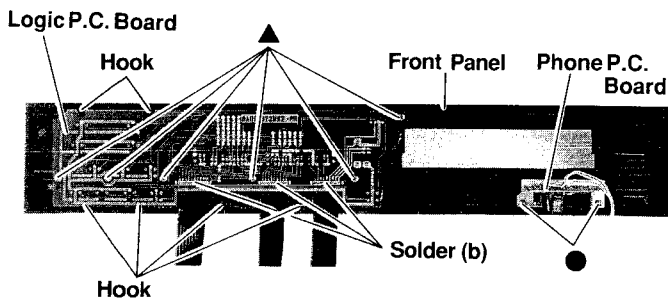


Figure 9

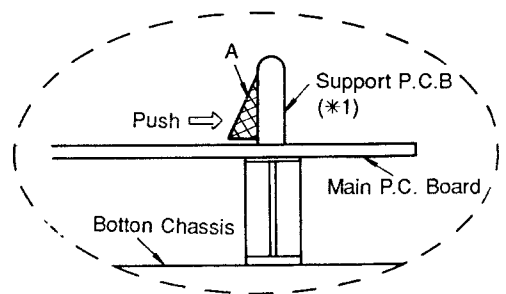


Figure 10

Adjustment Procedures

1. Connections

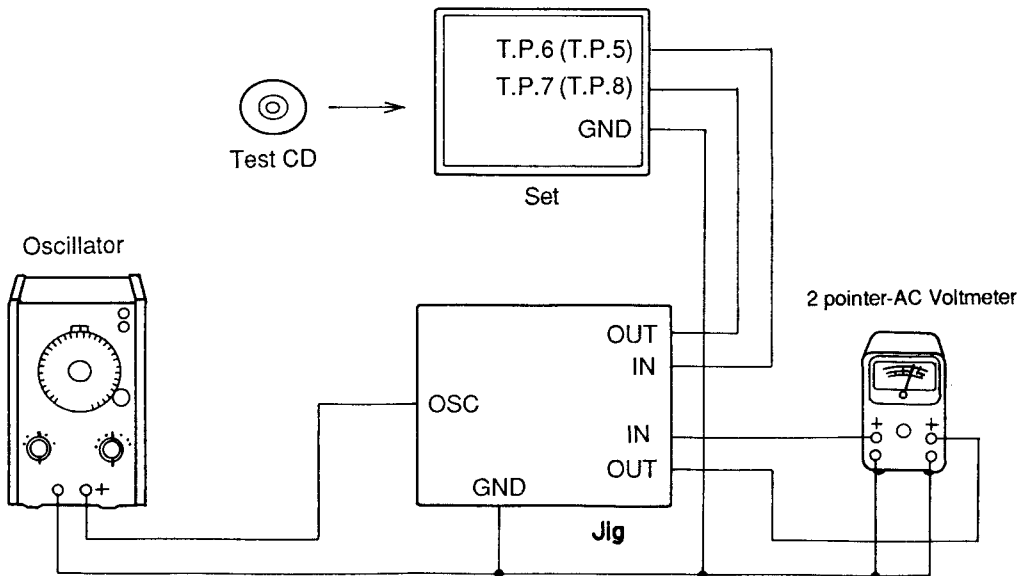
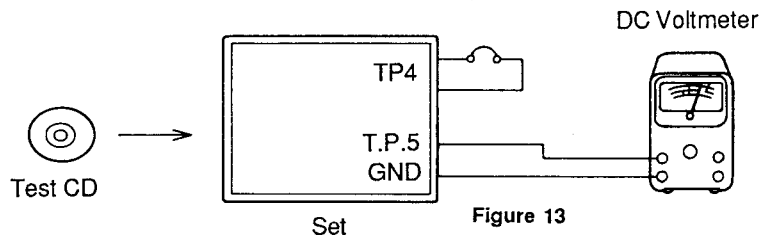
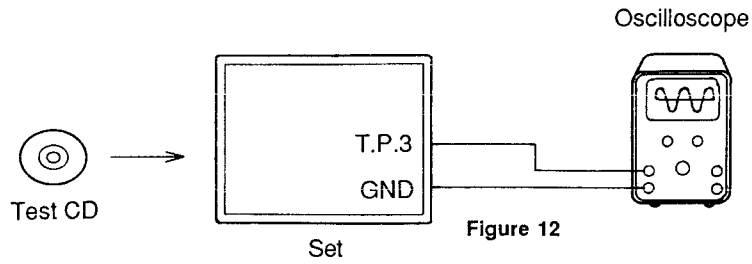
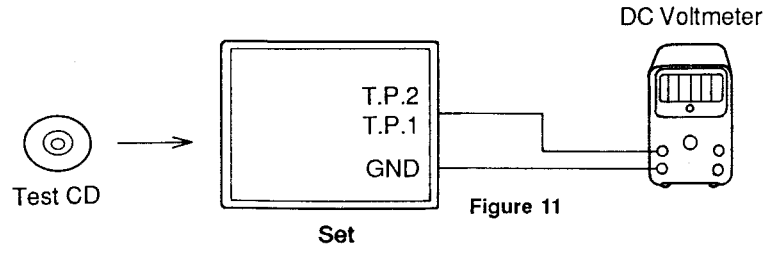


Figure 14

2. Switch setting

POWER Switch ON
 PLAY Switch ON
 Other Switches OFF

3. Adjustment Procedures

| Step | Discription | Connection | Oscilltor Input | Test Point | Adjustment |
|------|----------------------------------|------------|-----------------|------------|--|
| 1 | VCO Adjustment | Figure 11 | — | TP1 TP2 | Measure the voltage of TP1. Then set VR1303 so that the output voltage of TP2 becomes 1/2 voltage of that of TP1. |
| 2 | Focus Bias Adjustment | Figure 12 | — | TP3 | Set VR1202 so that the output waveform of TP3 becomes the maximum of the waveform shwon in Figure 15. |
| 3 | Tracking Error Blance Adjustment | Figure 13 | — | TP4 TP5 | Short-circuit TP4, and turn VR1302 completely counterclockwise. Then set VR1201 so that the output voltage of TP5 becomes 0+50/-0mV. After that, return VR1302 to near the center. |
| 4 | Tracking Gain Adjustment | Figure 14 | 1kHz 100mv | TP6 TP7 | Set VR1301 so that the pointers of the 2 pointer-AC voltmeter overlap. |
| 5 | Focus Gain Adjustment | Figure 14 | 1kHz 100mv | TP5 TP8 | Set VR1302 so that the pointers of the 2 pointer-AC voltmeter overlap. |

* Test CD

SONY CD Type4 YEDS18 (2nd track) -- Tracking Error Balance Adjustment

SONY CD Type4 YEDS18 (2nd track) -- Adjustment other than Tracking Error Balance Adjustment

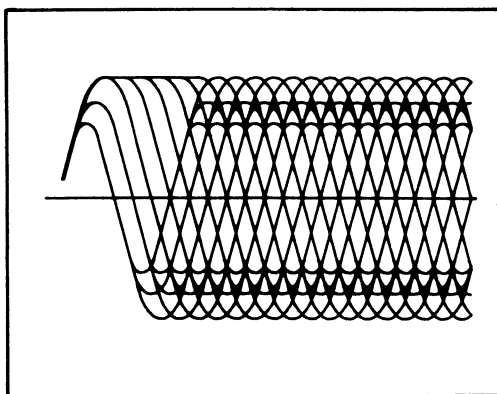


Figure 15

Adjustment Locations

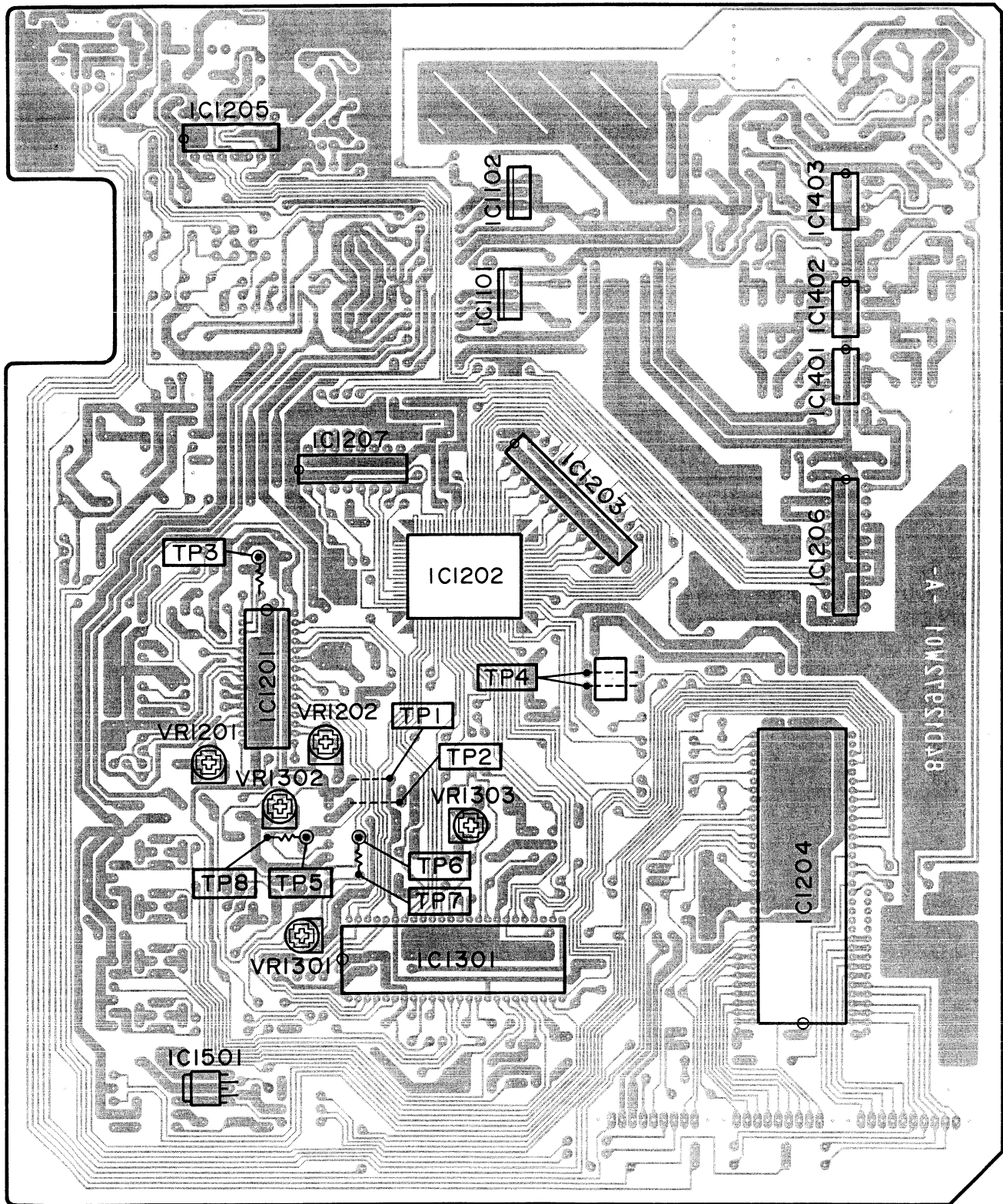
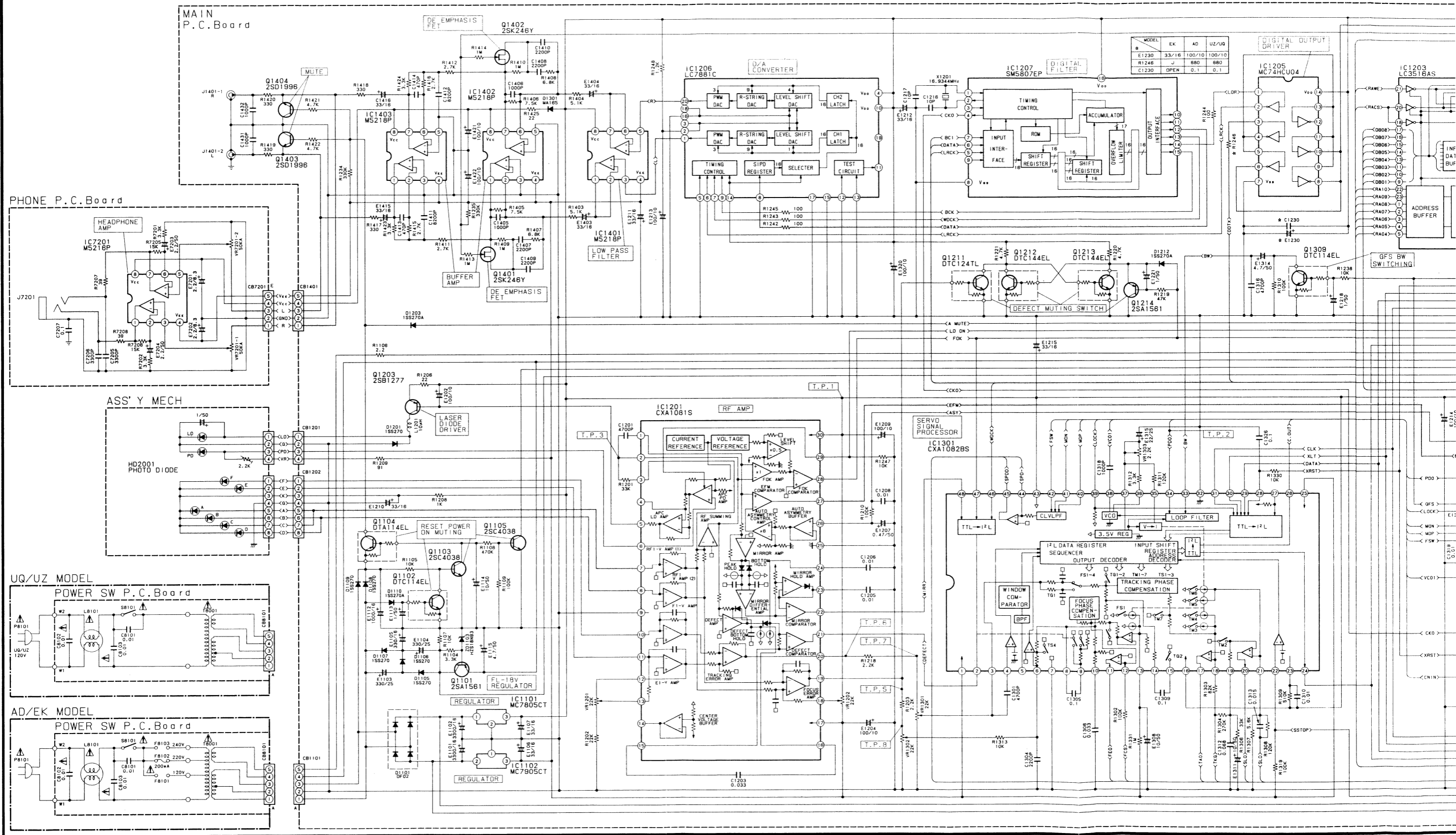


Figure 16 Main P.C. Board (Component Side)

Schematic Diagram

| | | | | | | | | | | | | |
|-----------------|----------------|----------------|-------------------------|-------------------------|--------|----------------|--------|--------|--------|--------|--------|--------|
| IC'S | IC7201 | IC1403 | IC1402 | IC1101 IC1102 | IC1401 | IC1201 | IC1206 | IC1301 | IC1207 | IC1205 | IC1203 | IC1204 |
| TRANSISTORS (Q) | Q1404 Q1403 | Q1203 Q1104 | Q1103 Q1102 Q1101 | Q1401 Q1402 Q1105 | Q1211 | Q1212 Q1213 | Q1214 | Q1309 | | | | |

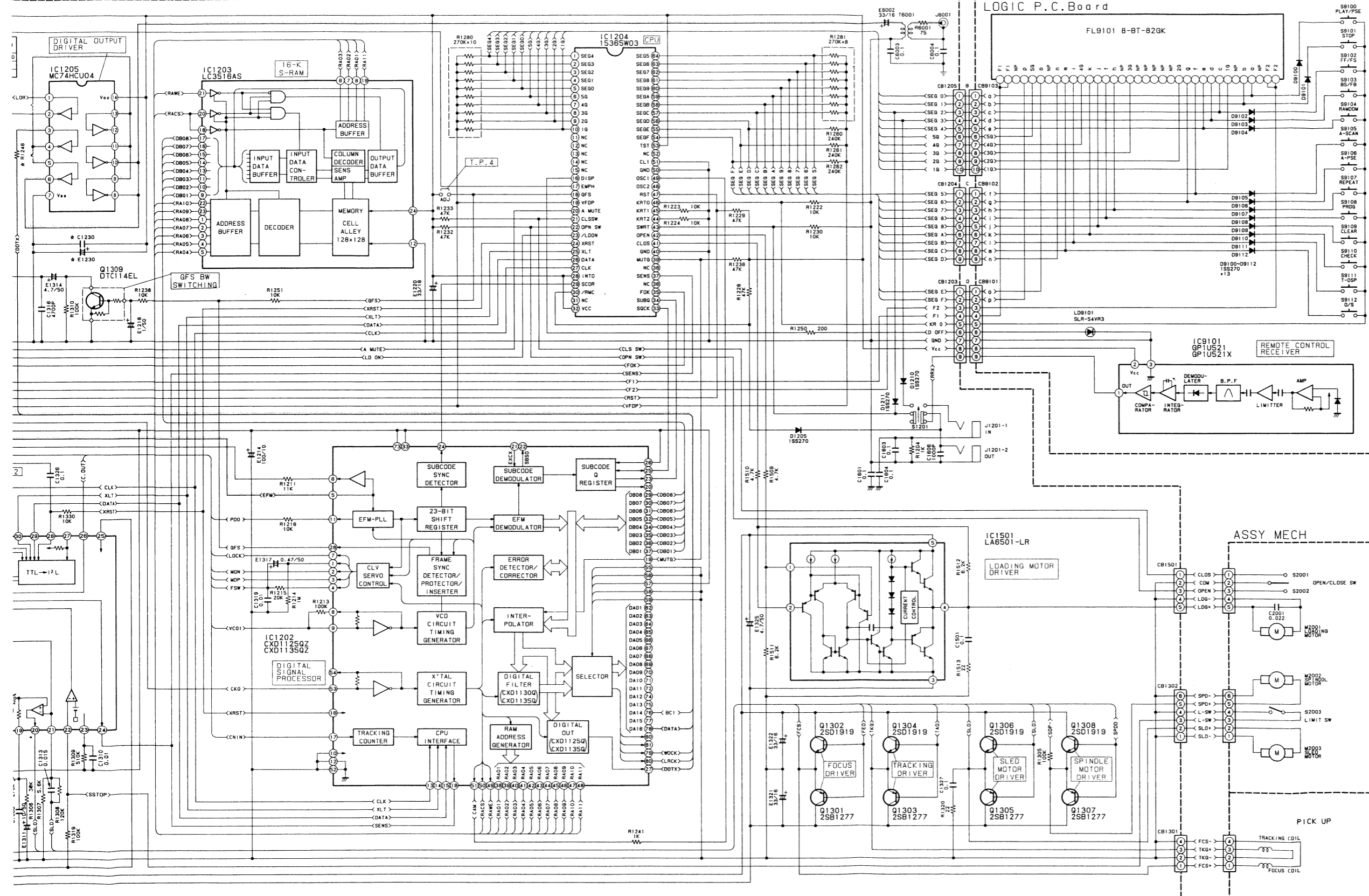


A | B | C | D | E | F | G | H

IC1205 IC1203 IC1202 IC1204 IC1501 IC9101
Q1309 Q1302 Q1301 Q1304 Q1303 Q1306 Q1305 Q1308 Q1307

NOTE
1. All resistance values are in ohms, K=1,000 M=1,000,000
2. All capacitance values are in microfarads, P=1/1,000,000

Voltage Measuring Conditions
1. Power Supply Voltage : 220V (EK/AD), 120V (UZ/UQ)
2. Measuring Meter : Multi Voltmeter
3. Measuring Point Reference : Between Ground
4. Measuring Conditions : No Signal Input
CD in Poly Condition



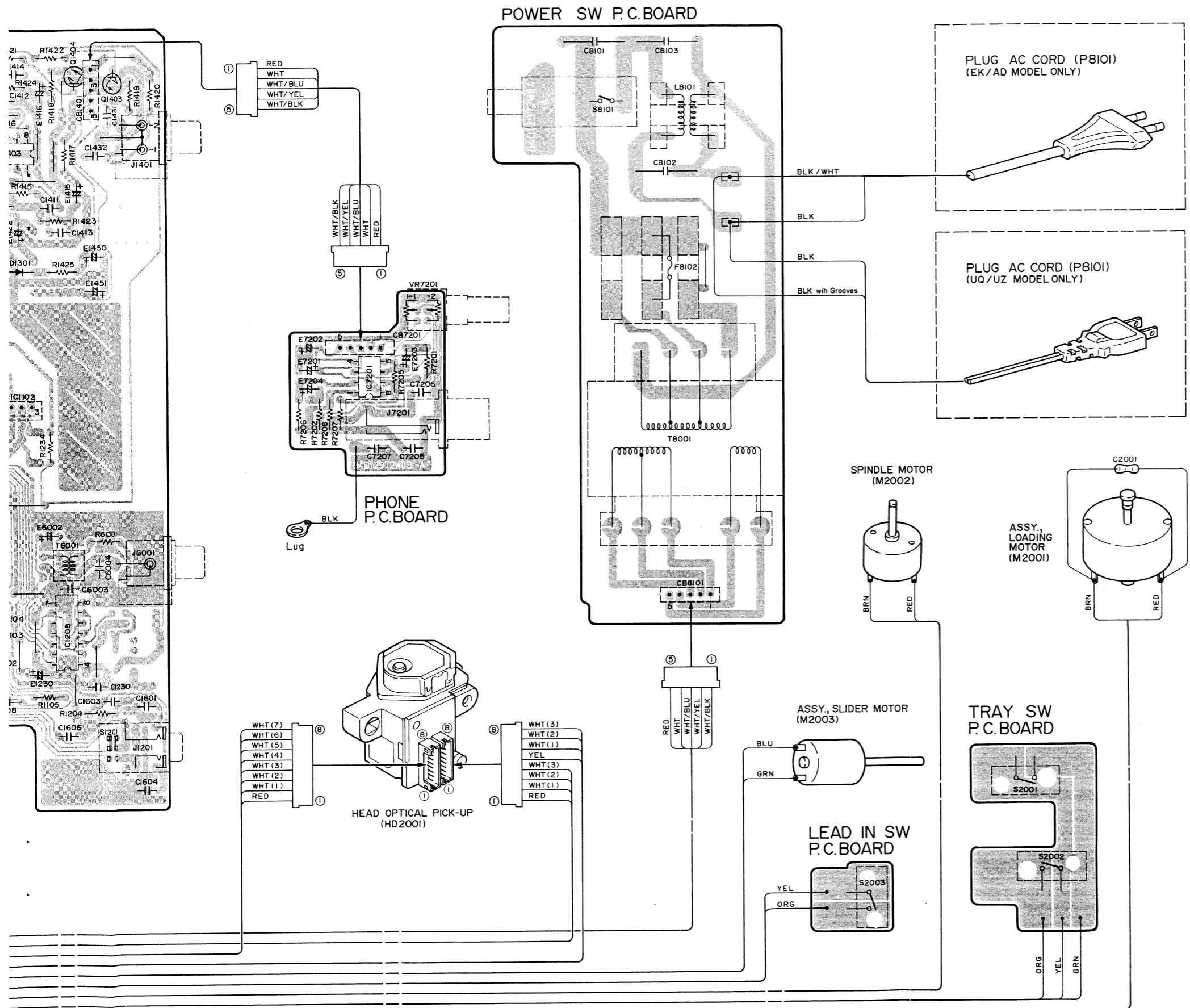
| IC1201 | IC1202 |
|----------|---------------------------------|
| 1 0V | 1 0.1V 21 |
| 2 1.3V | 2 5V 22 |
| 3 1.3V | 3 2.6V 23 0.1V 42 2.5V 62 |
| 4 3.1V | 4 2.8V 24 0V 44 2.5V 64 |
| 5 3.3V | 5 2.5V 25 0V 45 2.5V 65 |
| 6 -4.8V | 6 2.8V 26 5.1V 46 |
| 7 0V | 7 5.1V 27 2.4V 47 |
| 8 0V | 8 2.5V 28 5.1V 48 |
| 9 0V | 9 2.5V 29 0V 49 4.5V 69 |
| 10 0V | 10 0V 30 0V 50 2.7V 70 |
| 11 0V | 11 1.6V 31 0V 51 2.3V 71 |
| 12 -1.1V | 12 0V 32 0V 52 0V 72 |
| 13 -0.7V | 13 5.1V 33 5.1V 53 1.9V 73 5.1V |
| 14 0.1V | 14 5.1V 34 0V 54 |
| 15 -3V | 15 0V 35 0V 55 0V 75 |
| 16 -2.9V | 16 5.1V 36 0V 56 0V 76 2.4V |
| 17 -5V | 17 0.1V 37 0V 57 5.1V 77 |
| 18 0V | 18 5.1V 38 2.5V 58 1V 78 0V |
| 19 0.1V | 19 0V 39 2.5V 59 0V 79 2.5V |
| 20 0V | 20 0V 40 2.5V 60 80 2.5V |

| IC1203 | IC1301 | IC1206 |
|----------|-----------------|---------|
| 1 2.5V | 1 -5V 25 -5V | 1 1.8V |
| 2 2.5V | 2 -4.3V 26 0.1V | 2 3.6V |
| 3 2.5V | 3 0V 27 5V | 3 3.6V |
| 4 2.5V | 4 0V 28 5.1V | 4 5.1V |
| 5 2.5V | 5 0V 29 0V | 5 0V |
| 6 2.5V | 6 0V 30 5.1V | 6 2.5V |
| 7 2.5V | 7 0V 31 5.1V | 7 2.5V |
| 8 2.5V | 8 0V 32 0V | 8 0V |
| 9 0V | 9 0V 33 2.5V | 9 2.2V |
| 10 0V | 10 0V 34 2.5V | 10 5.1V |
| 11 0.9V | 11 0.9V 35 2.2V | 11 0V |
| 12 0V | 12 0V 36 2.3V | 12 0V |
| 13 0V | 13 0.4V 37 3.6V | 13 0V |
| 14 0V | 14 0V 38 2.4V | 14 5.1V |
| 15 0V | 15 0V 39 5.1V | 15 0V |
| 16 5.1V | 16 5.1V 40 2.6V | 16 0V |
| 17 0V | 17 0V 41 5V | 17 0V |
| 18 2.7V | 18 0V 42 2.6V | 18 0V |
| 19 0V | 19 0V 43 5.1V | 19 0V |
| 20 2.7V | 20 0V 44 0V | 20 1.8V |
| 21 4.5V | 21 4.5V | |
| 22 -5V | 22 -5V 46 2.5V | |
| 23 -4.1V | 23 -4.1V 47 5V | |
| 24 5.1V | 24 5.1V 48 0V | |

| IC1204 | IC1401 | IC1402 | IC1403 | IC7201 |
|-------------------|-----------------------|--------|--------|--------|
| 1 0.1V 33 5V | 1 1.8V 0V 0V 0V | | | |
| 2 -0.1V 34 0.1V | 2 1.8V 0V 0V 0V | | | |
| 3 -0.1V 35 5V | 3 1.8V 0V 0V 0V | | | |
| 4 -0.2V 36 1.5V | 4 -5V -5.1V -5V -5V | | | |
| 5 -0.1V 37 5V | 5 1.8V 0V 0V 0V | | | |
| 6 -0.5V 38 1.5V | 6 1.8V 0V 0V 0V | | | |
| 7 -28V 39 0V | 7 1.8V 0V 0V 0V | | | |
| 8 -28.5V 40 0V | 8 5.1V 4.1V 4.1V 4.1V | | | |
| 9 -28.3V 41 0V | | | | |
| 10 -28.3V 42 0V | | | | |
| 11 0.4V 43 1.6V | | | | |
| 12 0.4V 44 0V | | | | |
| 13 0V 45 0V | | | | |
| 14 0.1V 46 0V | | | | |
| 15 0V 47 0V | | | | |
| 16 0V 48 2.3V | | | | |
| 17 -4.8V 49 2.5V | | | | |
| 18 5V 50 0V | | | | |
| 19 -31V 51 0V | | | | |
| 20 -4.6V 52 2.8V | | | | |
| 21 0V 53 5.1V | | | | |
| 22 5.1V 54 -31V | | | | |
| 23 0.4V 55 -1.8V | | | | |
| 24 5.1V 56 -28.4V | | | | |
| 25 5.1V 57 -1.8V | | | | |
| 26 0V 58 -1.3V | | | | |
| 27 5.1V 59 -0.8V | | | | |
| 28 5.1V 60 -0.5V | | | | |
| 29 0V 61 0V | | | | |
| 30 5.1V 62 -18.5V | | | | |
| 31 1.6V 63 -23.2V | | | | |
| 32 5.1V 64 -1.3V | | | | |

| IC1501 | IC1401 | IC1402 | IC9101 |
|---------|------------------|--------|--------|
| 1 0V | 1 0V 0V 0V -4.4V | | |
| 2 0V | 2 0V 0V 0V -4.4V | | |
| 3 -11V | | | |
| 4 0V | | | |
| 5 10.2V | | | |

DZ-111



- BLU Blue
- GRN Green
- BLK Black
- GRY Gray
- WHT White
- RED Red
- BRN Brown
- ORG Orange
- YEL Yellow
- VIO Violet
- PNK Pink
- GRN/WHT Green/White
- GRY/WHT Gray/White
- GRY/YEL Gray/Yellow
- GRN/YEL Green/Yellow
- SHLD Shield

Electrical Parts List

Resistor: Carbon resistors under 1/8 watts are not mentioned in the parts list. please confirm them by schematic diagram.

Capacitor: μ F=microfarads. pF=picofarads

| Abbreviations | | | | |
|---------------------------|-------------|-------------------|--|--|
| CAP.-Capacitor | | CER.-Ceramic | | |
| CP.-Chip | | ELY.-Electrolytic | | |
| LED.-Light Emitting Diode | | MIC.-Mica | | |
| MO.-Metal Oxide Film | | MYL.-Mylar | | |
| PP.-Polypropylene | | SOL.-Solid | | |
| TAN.-Tantalum | | ZEN.-Zener | | |
| Symbol No. | Part No. | Description | | |
| Main P.C. Board | | | | |
| IC's | | | | |
| IC1101 | 51T94884F01 | MC7805 CT | | |
| IC1102 | 51T94885F01 | MC7905 CT | | |
| IC1201 | 51T84721F01 | CXA1081S | | |
| IC1202 | 51T84720F01 | CXD1125QZ | | |
| or | 51T84719F01 | CXD1135QZ | | |
| IC1203 | 51T84723F01 | LC3516AS | | |
| or | 51T80623F02 | CXK5816SP | | |
| IC1204 | 51T15365W03 | 15365W03 | | |
| IC1205 | 51T94890F01 | MC74HCU04 | | |
| IC1206 | 51T95181F02 | LC7881C | | |
| IC1207 | 51T15265W02 | SM5807EP | | |
| IC1301 | 51T84722F02 | CXA1082BS | | |
| IC1401 | 51T90149F01 | M5218P | | |
| or | 51T15329W01 | BA15218 | | |
| IC1402 | 51T90149F01 | M5218P | | |
| or | 51T15329W01 | BA15218 | | |
| IC1403 | 51T90149F01 | M5218P | | |
| or | 51T15329W01 | BA15218 | | |
| IC1501 | 51T90889F01 | LA6501 | | |
| Transistors | | | | |
| Q1101 | 48T82757F01 | 2SA1561 | | |
| Q1102 | 48T82763F02 | DTC114EL | | |
| Q1103 | 48T82758F01 | 2SC4038 | | |
| Q1104 | 48T82762F02 | DTA114EL | | |
| Q1105 | 48T82758F01 | 2SC4038 | | |
| Q1203 | 48T82759F01 | 2SB1277 | | |
| Q1211 | 48T82763F11 | DTC124TL | | |
| Q1212 | 48T82763F04 | DTC144EL | | |
| Q1213 | 48T82763F04 | DTC144EL | | |
| Q1214 | 48T82757F01 | 2SA1561 | | |
| Q1301 | 48T82759F01 | 2SB1277 | | |
| Q1302 | 48T83275F01 | 2SD1919 | | |
| Q1303 | 48T82759F01 | 2SB1277 | | |
| Q1304 | 48T83275F01 | 2SD1919 | | |
| Q1305 | 48T82759F01 | 2SB1277 | | |

| Symbol No. | Part No. | Description | | |
|------------|-------------|---------------|------------------|--|
| Q1306 | 48T83275F01 | 2SD1919 | | |
| Q1307 | 48T82759F01 | 2SB1277 | | |
| Q1308 | 48T83275F01 | 2SD1919 | | |
| Q1309 | 48T82763F02 | DTC114EL | | |
| Q1401 | 48T66948F02 | FET.2SK246 | | |
| Q1402 | 48T66948F02 | FET.2SK246 | | |
| Q1403 | 48T90183F01 | 2SD1996 | | |
| Q1404 | 48T90183F01 | 2SD1996 | | |
| Diodes | | | | |
| D1101 | 48T15662W01 | DF02 | | |
| D1105 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1106 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1107 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1108 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1109 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1110 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1201 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1203 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1205 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1210 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1211 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1212 | 48T84758F01 | 1SS270 | | |
| or | 48T58583F01 | 1SS176 | | |
| D1301 | 48T44813F02 | MA165 | | |
| ZD1103 | 48T90517F64 | ZEN.HZS 18NB3 | | |
| Capacitors | | | | |
| E1101 | 23T00181L23 | ELY.. | 3300 μ F/16V | |
| E1102 | 23T00181L23 | ELY.. | 3300 μ F/16V | |
| E1103 | 23S40657F65 | ELY.. | 330 μ F/25V | |
| E1104 | 23S40657F65 | ELY.. | 330 μ F/25V | |
| E1105 | 23S40657F61 | ELY.. | 330 μ F/16V | |

| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|------------|-------------|-------------|------------------|--|------------|-------------|----------------------|------------------|--|
| E1106 | 23T00180L08 | ELY.. | 33 μ F/16V | | C1316 | 08T57705F63 | MYL.. | 4700pF | |
| E1107 | 23T00180L08 | ELY.. | 33 μ F/16V | | E1317 | 23T00180L20 | ELY.. | 0.47 μ F/50V | |
| E1112 | 23T81002F35 | ELY.. | 1000 μ F/16V | | C1318 | 08T57705F55 | MYL.. | 1000pF | |
| E1113 | 23T00180L21 | ELY.. | 1 μ F/50V | | C1319 | 08T57705F67 | MYL.. | 0.01 μ F | |
| E1114 | 23T00180L25 | ELY.. | 10 μ F/50V | | E1320 | 23T00136L16 | ELY.. | 100 μ F/10V | |
| E1115 | 23T00180L24 | ELY.. | 4.7 μ F/50V | | E1321 | 23T00180L08 | ELY.. | 33 μ F/16V | |
| C1201 | 08T57705F63 | MYL.. | 4700pF | | E1322 | 23T00180L08 | ELY.. | 33 μ F/16V | |
| E1202 | 23T00180L04 | ELY.. | 100 μ F/10V | | E1325 | 23T00180L24 | ELY.. | 4.7 μ F/50V | |
| C1203 | 08T57705F73 | MYL.. | 0.033 μ F | | C1326 | 08T57298F01 | CER.. | 0.1 μ F | |
| E1204 | 23T00149L13 | ELY.. | 100 μ F/10V | | C1327 | 08T57705F79 | MYL.. | 0.1 μ F | |
| C1205 | 08T57705F67 | MYL.. | 0.01 μ F | | E1403 | 23T00180L08 | ELY.. | 33 μ F/16V | |
| C1206 | 08T57705F67 | MYL.. | 0.01 μ F | | E1404 | 23T00180L08 | ELY.. | 33 μ F/16V | |
| E1207 | 23T00180L20 | ELY.. | 0.47 μ F/50V | | C1405 | 08T57705F55 | MYL.. | 1000pF | |
| C1208 | 08T57705F67 | MYL.. | 0.01 μ F | | C1406 | 08T57705F55 | MYL.. | 1000pF | |
| E1209 | 23T00149L13 | ELY.. | 100 μ F/10V | | C1407 | 08T57705F59 | MYL.. | 2200pF | |
| E1210 | 23T00180L08 | ELY.. | 33 μ F/16V | | C1408 | 08T57705F59 | MYL.. | 2200pF | |
| E1211 | 23T00180L08 | ELY.. | 33 μ F/16V | | C1409 | 08T57705F59 | MYL.. | 2200pF | |
| E1212 | 23T00180L08 | ELY.. | 33 μ F/16V | | C1410 | 08T57705F59 | MYL.. | 2200pF | |
| E1213 | 23T00180L04 | ELY.. | 100 μ F/10V | | C1411 | 08T57705F66 | MYL.. | 8200pF | |
| E1214 | 23T00180L04 | ELY.. | 100 μ F/10V | | C1412 | 08T57705F66 | MYL.. | 8200pF | |
| E1215 | 23T00180L08 | ELY.. | 33 μ F/16V | | C1413 | 08T57705F51 | MYL.. | 470pF | |
| C1216 | 08T55260F13 | CER.. | 10pF | | C1414 | 08T57705F51 | MYL.. | 470pF | |
| C1217 | 08T55260F13 | CER.. | 10pF | | E1415 | 23T00180L08 | ELY.. | 33 μ F/16V | |
| E1218 | 23T00180L21 | ELY.. | 1 μ F/50V | | E1416 | 23T00180L08 | ELY.. | 33 μ F/16V | |
| E1220 | 23T00180L08 | ELY.. | 33 μ F/16V | | E1421 | 23T00149L13 | ELY.. | 100 μ F/10V | |
| E1221 | 23T00180L21 | ELY.. | 1 μ F/50V | | E1422 | 23T00149L13 | ELY.. | 100 μ F/10V | |
| ▲ C1230 | 08T57298F01 | CER.. | 0.1 μ F | | C1431 | 08T57705F55 | MYL.. | 1000pF | |
| ■ C1230 | 08T57298F01 | CER.. | 0.1 μ F | | C1432 | 08T57705F55 | MYL.. | 1000pF | |
| ◆ C1230 | 08T57298F01 | CER.. | 0.1 μ F | | C1501 | 08T57705F79 | MYL.. | 0.1 μ F | |
| ● E1230 | 23T00180L08 | ELY.. | 33 μ F/16V | | C1601 | 08T57298F01 | CER.. | 0.1 μ F | |
| ▲ E1230 | 23T00149L13 | ELY.. | 100 μ F/10V | | C1603 | 08T57298F01 | CER.. | 0.1 μ F | |
| ■ E1230 | 23T00149L13 | ELY.. | 100 μ F/10V | | C1604 | 08T57298F01 | CER.. | 0.1 μ F | |
| ◆ E1230 | 23T00149L13 | ELY.. | 100 μ F/10V | | C1606 | 08T40794F50 | CER.. | 1000pF | |
| C1301 | 08T57705F63 | MYL.. | 4700pF | | E6002 | 23T00180L08 | ELY.. | 33 μ F/16V | |
| C1304 | 08T57705F59 | MYL.. | 2200pF | | C6003 | 08T57298F01 | CER.. | 0.1 μ F | |
| C1305 | 08T57705F79 | MYL.. | 0.1 μ F | | C6004 | 08T57298F01 | CER.. | 0.1 μ F | |
| C1306 | 08T57705F73 | MYL.. | 0.033 μ F | | Coil | | | | |
| E1308 | 23T00180L25 | ELY.. | 10 μ F/50V | | L1201 | 24T50508F22 | Inductor. 10 μ H | | |
| C1309 | 08T57705F79 | MYL.. | 0.1 μ F | | Trans | | | | |
| C1310 | 08T57705F67 | MYL.. | 0.01 μ F | | T6001 | 25T94882F01 | PULS(1/10) | | |
| E1311 | 23T00180L25 | ELY.. | 10 μ F/50V | | Crystal | | | | |
| C1312 | 08T57705F77 | MYL.. | 0.088 μ F | | X1201 | 48T84727F02 | 16.9344MHz | | |
| C1313 | 08T57705F69 | MYL.. | 0.015 μ F | | | | | | |
| E1314 | 23T00180L24 | ELY.. | 4.7 μ F/50V | | | | | | |
| E1315 | 23T00180L12 | ELY.. | 22 μ F/25V | | | | | | |

Note : ● ; For General Foreign model only (EK) ▲ ; For West Germany model only (AD)
 ■ ; For North American model only (UZ) ◆ ; For Canadian model only (UQ) others ; Common

| Symbol No. | Part No. | Description | | |
|-------------------------|----------------------------|---------------------------|--|--|
| Resistors | | | | |
| R1280 | 06T74182F09 | Block 270K ohm x10 | | |
| R1281 | 06T74182F08 | Block 270K ohm x8 | | |
| VR1201 | 18T15356W15 | Variable.RH0634C 22K ohm | | |
| VR1202 | 18T15356W15 | Variable.RH0634C 22K ohm | | |
| VR1301 | 18T15356W15 | Variable.RH0634C 22K ohm | | |
| VR1302 | 18T15356W15 | Variable.RH0634C 22K ohm | | |
| VR1303 | 18T15356W09 | Variable.RH0634C 2.2K ohm | | |
| Jacks | | | | |
| J1201 (S1201) | 09T84124F01 | Head-Phone Mini | | |
| J1401 | 09T15974W03 | T6302-DZ111 | | |
| J6001 | 09T15627W02 | T6314 ORG | | |
| Logic P.C. Board | | | | |
| IC's | | | | |
| IC9101 or | 51T16094W01 51T16094W02 | GP1U521 GP1U521X | | |
| Diodes | | | | |
| D9100 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9101 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9102 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9103 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9104 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9105 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9106 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9107 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9108 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9109 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9110 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9111 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| D9112 or | 48T84758F01 48T58583F01 | 1SS270 1SS176 | | |
| Switches | | | | |
| S9100 | 40T83324F11 | SW.TACT SKHHAP (PLY/PSE) | | |
| S9101 | 40T83324F11 | SW.TACT SKHHAP (STOP) | | |
| S9102 | 40T83324F11 | SW.TACT SKHHAP (FF/FS) | | |
| S9103 | 40T83324F11 | SW.TACT SKHHAP (BS/FB) | | |
| S9104 | 40T83324F06 | SW.TACT SKHHAN (RANDOM) | | |
| S9105 | 40T83324F06 | SW.TACT SKHHAN (A-SCAN) | | |
| S9106 | 40T83324F06 | SW.TACT SKHHAN (A-PSE) | | |
| S9107 | 40T83324F06 | SW.TACT SKHHAN (REPEAT) | | |
| S9108 | 40T83324F11 | SW.TACT SKHHAP (PROG) | | |
| S9109 | 40T83324F11 | SW.TACT SKHHAP (CLEAR) | | |
| S9110 | 40T83324F11 | SW.TACT SKHHAP (CHECK) | | |
| S9111 | 40T83324F11 | SW.TACT SKHHAP (T-DSP) | | |
| S9112 | 40T83324F11 | SW.TACT SKHHAP (O/C) | | |
| LED | | | | |
| LD9101 | 48T66616F02 | SLR-54VR3 (RED) | | |
| Phone P.C. Board | | | | |
| IC | | | | |
| IC7201 | 51T81896F01 | M5216P | | |
| Capacitors | | | | |
| E7201 | 23T16145W14 | ELY., 22 μ F /6.3V | | |
| E7202 | 23T16145W14 | ELY., 22 μ F /6.3V | | |
| E7203 | 23T16145W06 | ELY., 2.2 μ F/50V | | |
| E7204 | 23T16145W06 | ELY., 2.2 μ F/50V | | |
| C7205 | 08T57705F61 | MYL., 3300pF | | |
| C7206 | 08T57705F61 | MYL., 3300pF | | |
| C7207 | 08T57298F01 | CER., 0.1 μ F | | |
| Jack | | | | |
| J7201 | 09T74077F02 | Phones | | |
| Resistors | | | | |
| VR7201 | 18T84123F01 | Variable RK9A00 50K ohmx2 | | |

Cabinet Assembly Parts List

Note: The parts without part numbers are not supplied.

| Symbol No. | Part No. | Description | | |
|---------------------|----------|-------------|------------------------|--------------|
| Power SW P.C. Board | | | | |
| Capacitors | | | | |
| | C8101 | 08T00196L01 | MF.. | 0.01 μ F |
| | C8102 | 08T00196L01 | MF.. | 0.01 μ F |
| | C8103 | 08T00196L01 | MF.. | 0.01 μ F |
| Coils | | | | |
| ● | L8101 | 24T15610W01 | FLT..PLA6003R3A | |
| ▲ | L8101 | 24T16397W01 | FLT., Line SU10V-20006 | |
| ■ | L8101 | 24T16397W01 | FLT., Line SU10V-20006 | |
| ◆ | L8101 | 24T16397W01 | FLT., Line SU10V-20006 | |
| Switch | | | | |
| | S8101 | 40T84122F01 | Power Sddle | |
| Miscellaneous | | | | |
| ● | F8102 | 65T42077U09 | Fuse, Semko 200mA | |
| ▲ | F8102 | 65T42077U09 | Fuse, Semko 200mA | |
| | FL9101 | 65T15806W01 | Display, FL 8-BT-82GK | |
| ● | P8101 | 28T43812P04 | Plug, Cord (AC) | |
| ▲ | P8101 | 28T43812P04 | Plug, Cord (AC) | |
| ■ | P8101 | 28T55335F02 | Plug, Cord (AC) | |
| ◆ | P8101 | 28T55335F02 | Plug, Cord (AC) | |
| ● | T8001 | 25T16090W01 | Trans. Power | |
| ▲ | T8001 | 25T16090W01 | Trans. Power | |
| ■ | T8001 | 25T16092W01 | Trans. Power | |
| ◆ | T8001 | 25T16092W01 | Trans. Power | |

| Symbol No. | IN-dex | Part No. | Description | | |
|------------|--------|----------|-------------|-------------------------------|--|
| | 1 | 5-C | 01C12898W01 | Panel, Front Assy. | |
| | 2 | 2-D | 15C12903W01 | Cover, Top | |
| ● | 4 | 4-G | 15C12902W04 | Cover, Rear | |
| ▲ | 4 | 4-G | 15C12902W04 | Cover, Rear | |
| ■ | 4 | 4-G | 15C12902W06 | Cover, Rear | |
| ◆ | 4 | 4-G | 15C12902W06 | Cover, Rear | |
| | 5 | 3-F | 43T16093W01 | Support, Cord | |
| | 6 | 5-E | 75A52969F01 | Pad., Trann-Leg | |
| | 7 | 4-E | 07A91046F01 | Support, PCB | |
| | 8 | 1-C | 03S44205G49 | Screw, Bind (M4x8) | |
| | 9 | | 03S71031F04 | Screw, Bind (M3x8) | |
| | 10 | 5-E | 03S71677F25 | Screw, Bind (M4x12) | |
| | 11 | 2-B | 47A12896W02 | Shaft, Power | |
| | 12 | 2-C | 43A83885F01 | Spacer, Rubber | |
| | 14 | 2-C | 03A83946F01 | Screw, Special (M4x35) | |
| | 15 | 2-C | 04S40071G14 | Washer, Spring (M3) | |
| | 16 | 2-C | 04S40070G59 | Washer, Flat (M4) | |
| | 17 | | 03S71031F02 | Screw, Bind (M2.6x8) | |
| | 18 | 1-B | 03C42723U01 | Screw, Cup (M3x6) | |
| | 21 | 3-E | 03C40121T05 | Screw, W/Double Washer (M3x8) | |
| ● | 24 | 1-B | 09T51410F01 | Holder, Fuse | |
| ▲ | 24 | 1-B | 09T51410F01 | Holder, Fuse | |
| | 27 | 4-B | 01T15318W01 | Assy., Lug Wire 1P | |
| | 30 | 4-C | 07A83876F01 | Support, FL | |
| | 31 | 4-C | 43A61758F01 | Spacer, Lamp | |
| | 32 | | 03S40036U01 | Screw, W/Washer (M4x8) | |
| | 33 | 2-B | 64B10696W01 | Panel, Tray | |
| | 34 | 5-B | 36A55234F04 | Knob, Control | |
| | 35 | 4-G | 16T82537F01 | Cap, Pin Jack | |
| | 36 | 4-B | 01T92483F01 | Assy., Lug Wire 1P | |
| | 37 | 5-C | 75S12196W21 | Cushion, Rubber | |

Note: ● ; For General Foreign model only (EK)

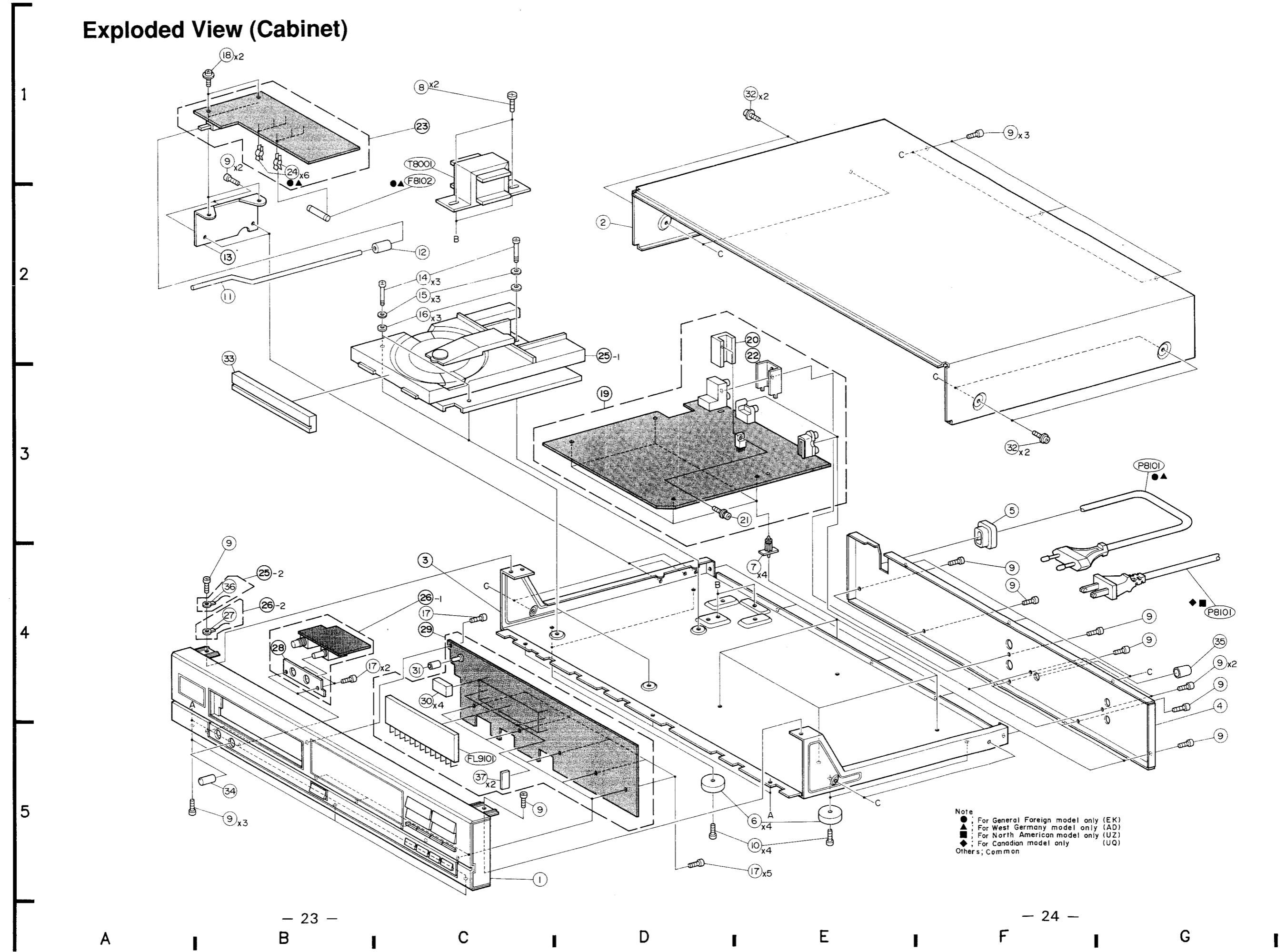
▲ ; For West Germany model only (AD)

■ ; For North American model only (UZ)

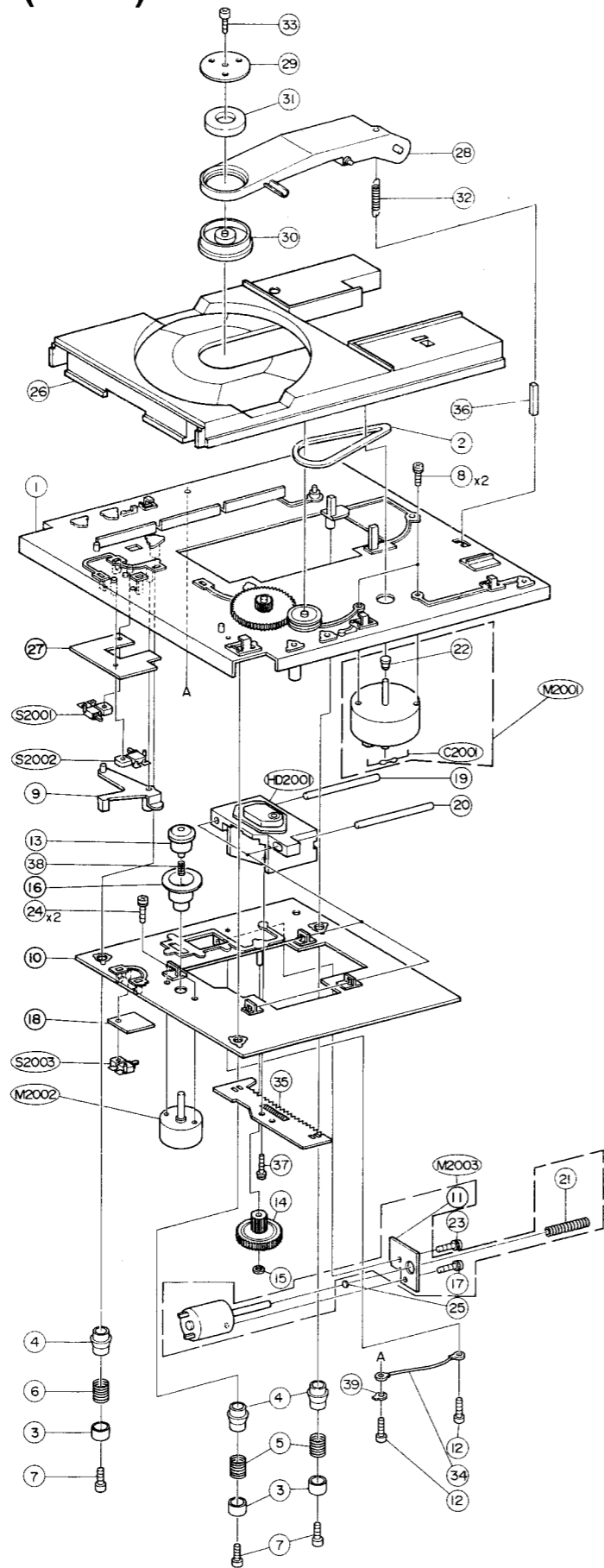
◆ ; For Canadian model only (UQ)

others ; Common

Exploded View (Cabinet)



Exploded View (Deck)



Mechanism Assembly Parts List

Note: The parts without part numbers are not supplied.

| Symbol No. | IN-dex | Part No. | Description |
|---------------|--------|-------------|-------------------------------|
| 1 | 2-B | 01C82391F02 | Assy. Chassis Main |
| 2 | 2-C | 42A81427F02 | Belt. Drive |
| 3 | | 43A81407F01 | Bush. Damper |
| 4 | | 75A81411F01 | Rubber. Damper |
| 5 | 5-C | 41A81428F03 | Spring. Compresion |
| 6 | 5-B | 41A81428F05 | Spring. Compresion |
| 7 | | 03S40012G18 | Screw. Tapping (M2.6x6) |
| 8 | 2-C | 03D40014G19 | Screw. W/Washer (M2.6x5) |
| 9 | 3-B | 45A81434F01 | Arm. Switch |
| 12 | 5-C | 03S44205G30 | Screw. Pan (M2.6x4) |
| 13 | 3-B | 49B81417F01 | Disc. Guide |
| 14 | 4-C | 44A81401F01 | Gear. Worm Wheel |
| 15 | 5-C | 04A41345P02 | Washer. Lock (M1.7) |
| 16 | 3-B | 49B81414F01 | Disc. Table |
| 17 | 5-C | 03D40014G62 | Screw. W/Washer(M2x3) |
| 19 | 3-C | 47A81426F01 | Shaft. Head |
| 20 | 3-C | 47A81426F02 | Shaft. Head |
| 21 | 4-D | 44A96257F01 | Worm. Drive |
| 22 | 3-C | 49A81397F01 | Pulley. Loading Motor |
| 23 | 4-C | 03C40121T31 | Screw. W/Double Washer (M2x6) |
| 24 | 3-B | 03D40014G07 | Screw. W/Washer(M2x4) |
| 25 | 5-C | 43A41182P02 | Ball Steel |
| 26 | 2-B | 01C10716W01 | Assy.. Tray Disc |
| 28 | 1-C | 45C81418F04 | Arm. Clamp |
| 29 | 1-C | 07A81413F02 | Bracket. Magnet |
| 30 | 1-C | 49A81403F01 | Wheel. Clamp |
| 31 | 1-C | 59T81430F01 | Magnet |
| 32 | 1-C | 41B81429F02 | Spring. Extension |
| 33 | 1-C | 03S70494F08 | Screw. Bind (M2x5) |
| 34 | 5-C | 01T92483F01 | Assy. Lug Wire 1P |
| 35 | 4-C | 01A82323F01 | Assy. Rack |
| 36 | 2-C | 75S12196W06 | Cushion. Rubber |
| 37 | 4-C | 03S70494F01 | Screw. Bind (M2x5) |
| 38 | 3-B | 41A81428F01 | Spring. Compresion |
| 39 | 5-C | 01T84733F11 | Assy. Lug Wire |
| Miscellaneous | | | |
| C2001 | 3-C | 08S40154T63 | Capacitor. CER. 0.022 μF |
| HD2001 | 3-C | 88T81528F01 | Head. Optical Pick Up |
| M2001 | 3-C | 01V11200W42 | Assy. Motor. Loading |
| M2002 | 4-B | 59T81431F01 | Motor. Spindle |
| M2003 | 4-C | 01V94700F74 | Assy. Slider Motor |
| S2001 | 3-B | 40T71025F01 | SW.. Detector (IN) |
| S2002 | 3-B | 40T71025F01 | SW.. Detector (OUT) |
| S2003 | 4-B | 40T71025F01 | SW.. Detector (Limit) |

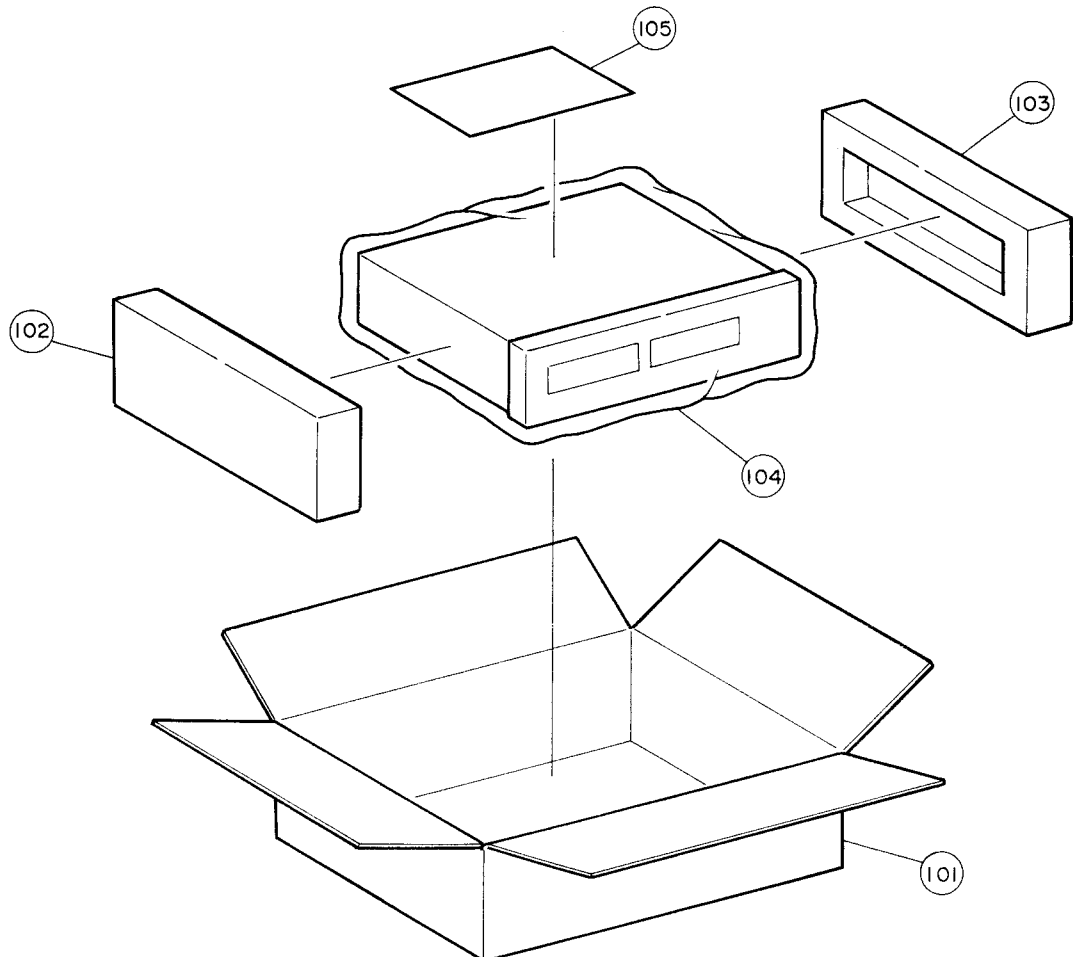
Note: ● ; For General Foreign model only (EX)
 ■ ; For North American model only (UZ)
 ▲ ; For West Germany model only (AD)
 ◆ ; For Canadian model only (UQ)
 others ; Common

Packing Assembly Parts List

| Symbol No. | Part No. | Description | | |
|------------|----------|-------------|-----------------------|--|
| | 101 | 56S10005W37 | Carton, Packing DZ111 | |
| | 102 | 56D13765W01 | Tray, Packing DZ L | |
| | 103 | 56D13765W02 | Tray, Packing DZ R | |
| | 104 | 56B40230G23 | Sack, Polythylene | |
| ● | 105-1 | 68P96552F32 | Owners, Manual | |
| ▲ | 105-1 | 68P96552F32 | Owners, Manual | |
| ■ | 105-1 | 68P96552F31 | Owners, Manual | |
| ◆ | 105-1 | 68P96552F31 | Owners, Manual | |
| | 105-2 | 28T70621F03 | Plug, Output | |
| | 105-3 | 01T82091F01 | Assy, Mini Plug Cord | |
| | 105-4 | 01T90545F01 | Unit, Remocon RD113 | |
| | 105-5 | 60T81756F01 | Battery, UM-4UC(2S)FJ | |

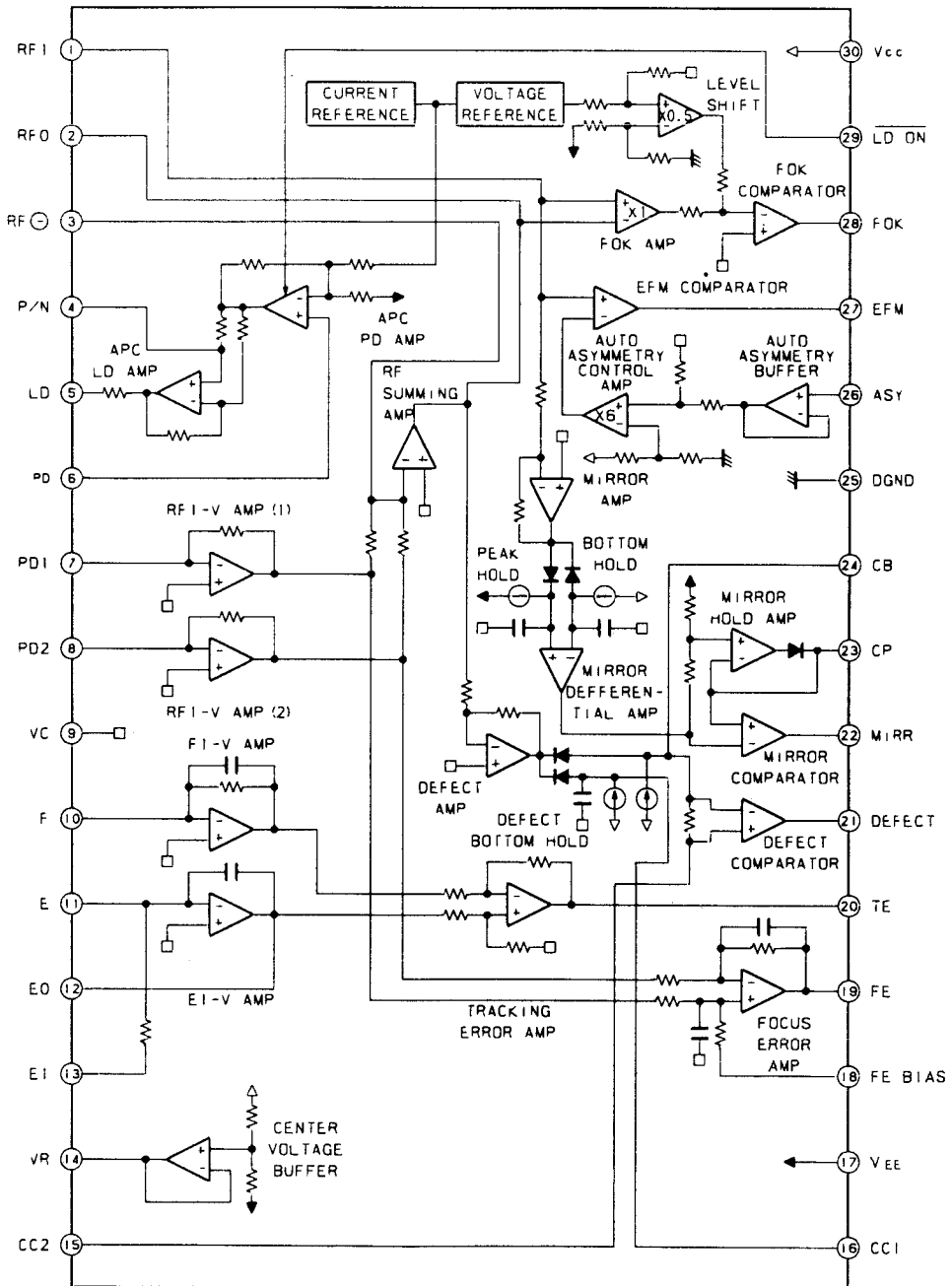
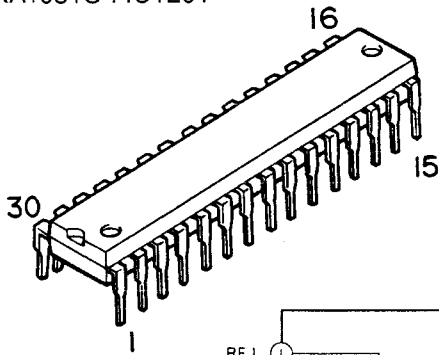
Note: ● : For General Foreign model only (EK) ▲ : For West Germany model only (AD)
 ■ : For North American model only (UZ) ◆ : For Canadian model only (UQ) others ; Common

Packing Method View

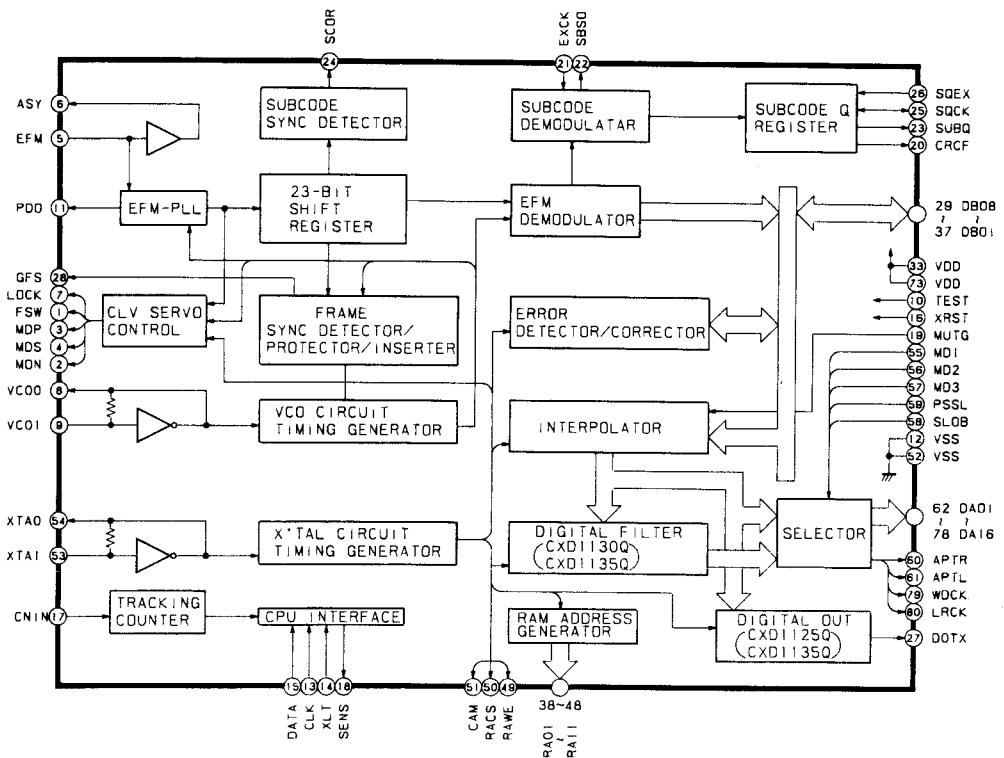
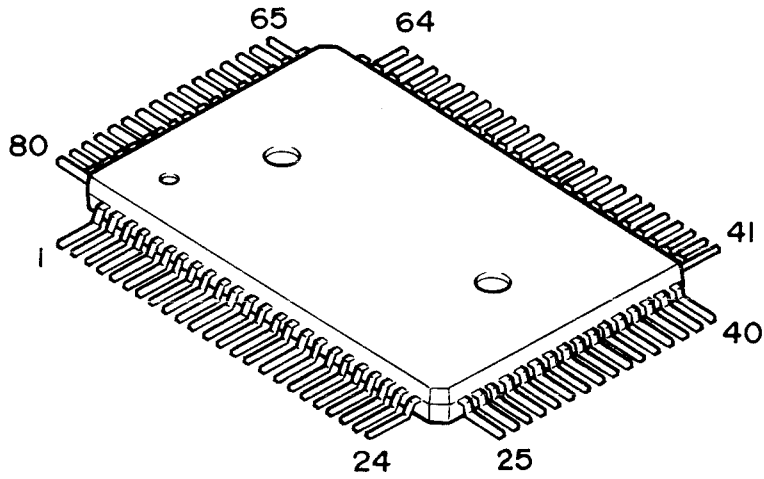


Semi-Conductor Lead Identifications

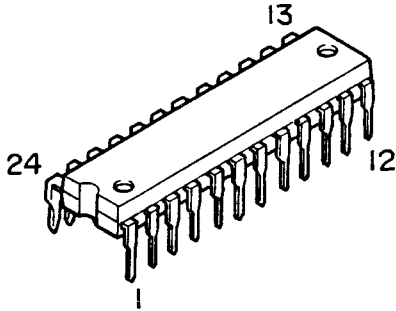
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CXD1135QZ — : IC1202
 CXD1125QZ —

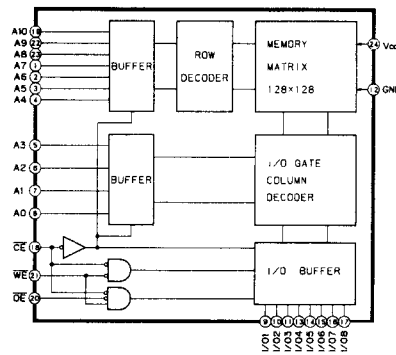
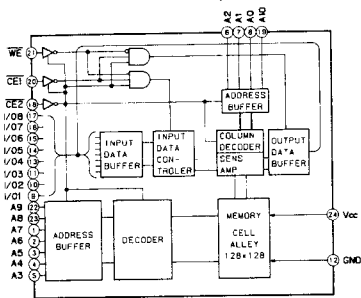


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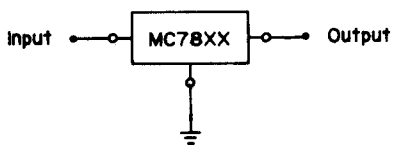
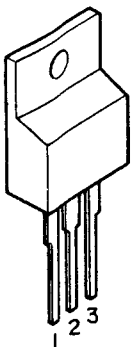


(LC3516AS)

(CXK5816SP)

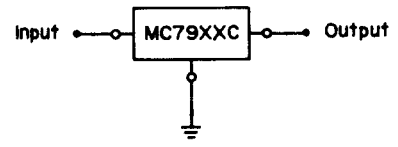
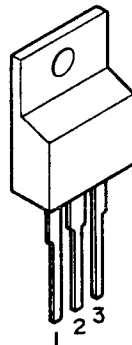


MC7805 : IC1101



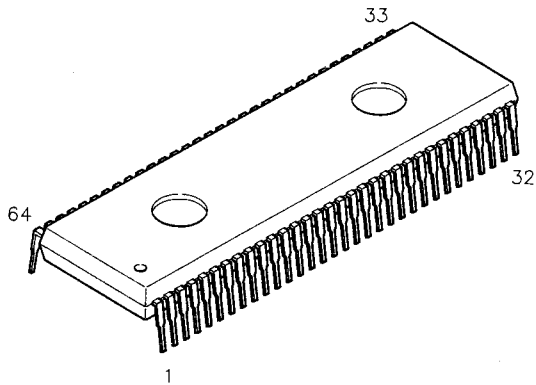
- 1. Input
- 2. GND
- 3. Output

MC7905 : IC1102



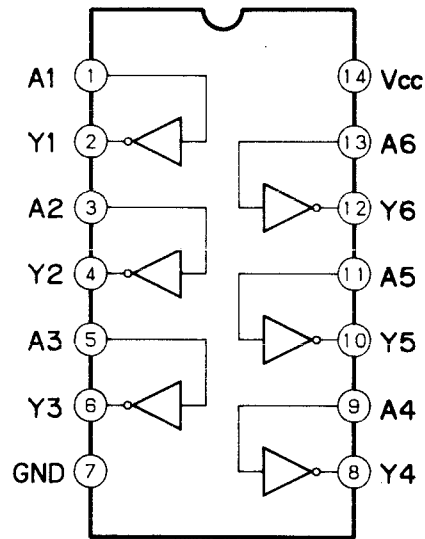
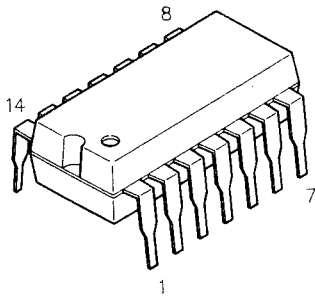
- 1. GND
- 2. Input
- 3. Output

15365W03 : IC1204

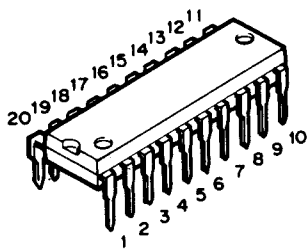


| PIN NO. | Description | Signal | | | PIN NO. | Description | Signal | | |
|---------|-------------|--------------------|----------|----------|---------|-------------|--------------------|---------|----------|
| | | Clock Power Source | In put | Out put | | | Clock Power Source | In put | Out put |
| 1 | SEG4 | | D11 | D11/FS4 | 33 | SQCK | | R40/SCK | R40/SCR |
| 2 | SEG3 | | D12 | D12/FS3 | 34 | SUBQ | | R41/SI | R41 |
| 3 | SEG2 | | D13 | D13/FS2 | 35 | FOK | | R42 | R42/SO |
| 4 | SEG1 | | D14 | D14/FS1 | 36 | NC | | R43 | R43/PWM |
| 5 | SEG0 | | D15 | D15/FS0 | 37 | SENS | | R70 | R70/BUZZ |
| 6 | 5G | | R00 | R00/FD0 | 38 | NC | | R71 | R71 |
| 7 | 4G | | R01 | R01/FD1 | 39 | MUTG | | R72 | R72 |
| 8 | 3G | | R02 | R02/FD2 | 40 | GND | | R73 | R73 |
| 9 | 2G | | R03 | R03/FD3 | 41 | CLOS | | R80 | R80 |
| 10 | 1G | | R10 | R10/FD4 | 42 | OPEN | | R81 | R81 |
| 11 | NC | | R11 | R11/FD5 | 43 | SWRT | | R90 | |
| 12 | NC | | R12 | R12/FD6 | 44 | KRT2 | | R91 | |
| 13 | NC | | R13 | R13/FD7 | 45 | KRT1 | | R92 | |
| 14 | NC | | R20 | R20/FD8 | 46 | KRT0 | | R93 | |
| 15 | NC | | R21 | R21/FD9 | 47 | RST | | RESET | |
| 16 | DISP | | R22 | R22/FD10 | 48 | OSC2 | OSC2 | | |
| 17 | EMPH | | R23 | R23/FD11 | 49 | OSC1 | OSC1 | | |
| 18 | GFS | | RA0 | | 50 | GND | GND | | |
| 19 | VFDP | Vdisp | RA1 | | 51 | CL1 | CL1 | | |
| 20 | A MUTE | | R30 | R30/FD12 | 52 | NC | CL2 | | |
| 21 | CLSSW | | R31 | R31/FD13 | 53 | TST | | TEST | |
| 22 | OPN SW | | R32 | R32/FD14 | 54 | SEGF | | D0 | D0/FS15 |
| 23 | /LDON | | R33 | R33/FD15 | 55 | SEGE | | D1 | D1/FS14 |
| 24 | XRST | | R50 | R50 | 56 | SEGD | | D2 | D2/FS13 |
| 25 | XLT | | R51 | R51 | 57 | SEGC | | D3 | D3/FS12 |
| 26 | DATA | | R52 | R52 | 58 | SEGB | | D4 | D4/FS11 |
| 27 | CLK | | R53 | R53 | 59 | SEGA | | D5 | D5/FS10 |
| 28 | INT0 | | R60/INT0 | R60 | 60 | SEG9 | | D6 | D6/FS9 |
| 29 | SCOR | | R61/INT1 | R61 | 61 | SEG8 | | D7 | D7/FS8 |
| 30 | /RMC | | R62/INT2 | R62 | 62 | SEG7 | | D8 | D8/FS7 |
| 31 | NC | | R63/INT3 | R63 | 63 | SEG6 | | D9 | D9/FS6 |
| 32 | Vcc | Vcc | | | 64 | SEG5 | | D10 | D10/FS5 |

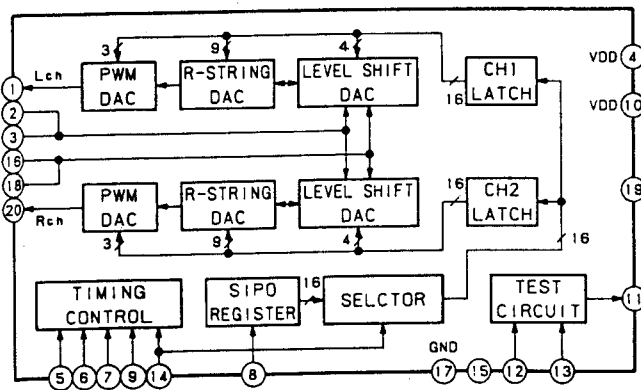
MC74HCU04 : IC1205



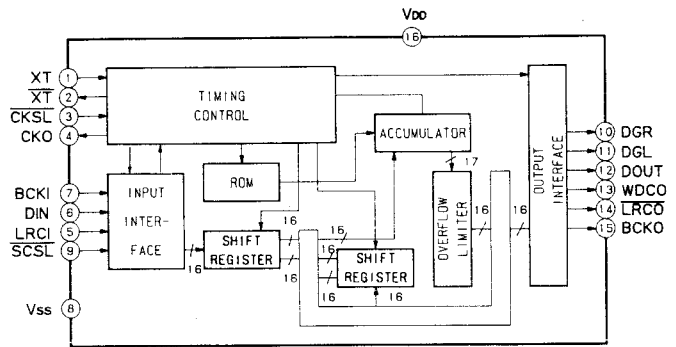
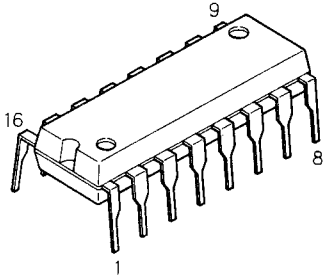
LC7881C : IC1206



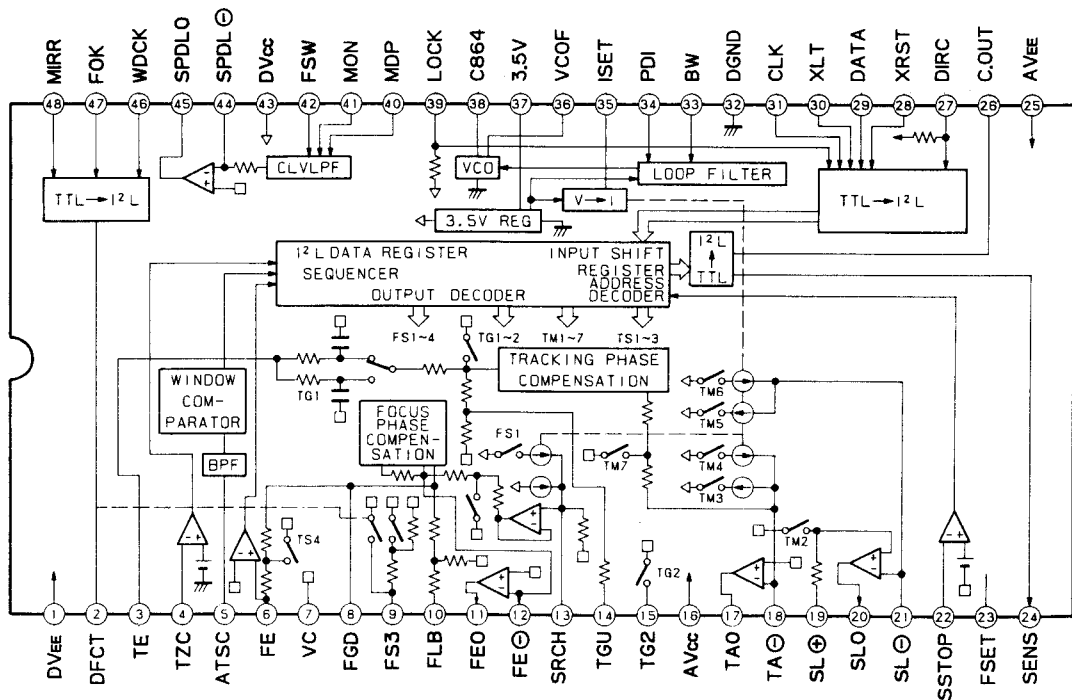
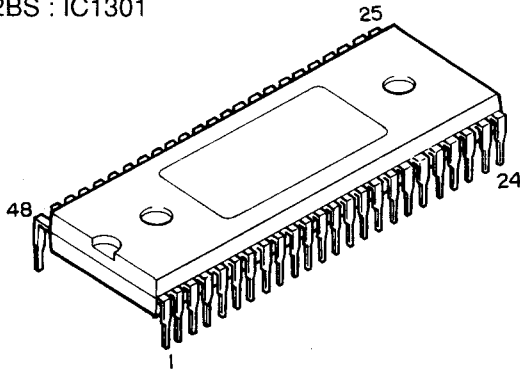
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|----|---------|----|---------|
| 1 | CH1 OUT | 11 | TST OUT |
| 2 | Vref H1 | 12 | TST1 |
| 3 | Vref H2 | 13 | TST2 |
| 4 | VDD | 14 | IF |
| 5 | WCLK2 | 15 | GXD |
| 6 | LRCK | 16 | Vref L1 |
| 7 | WCLK1 | 17 | GND |
| 8 | DATA | 18 | Vref L2 |
| 9 | BCLK | 19 | NC |
| 10 | VDD | 20 | CH2 OUT |



SM5807EP : IC1207

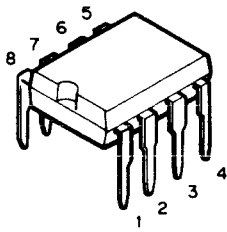


CXA1082BS : IC1301

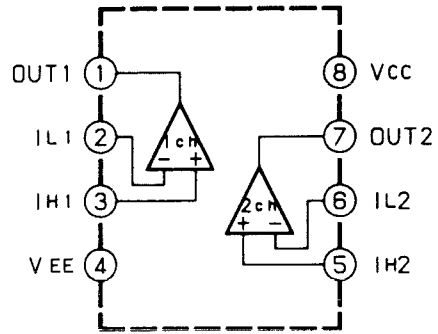
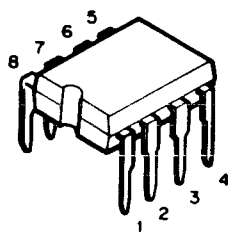


M5218P : IC1401, 1402, 1403
 BA15218
 M5216P : IC7201

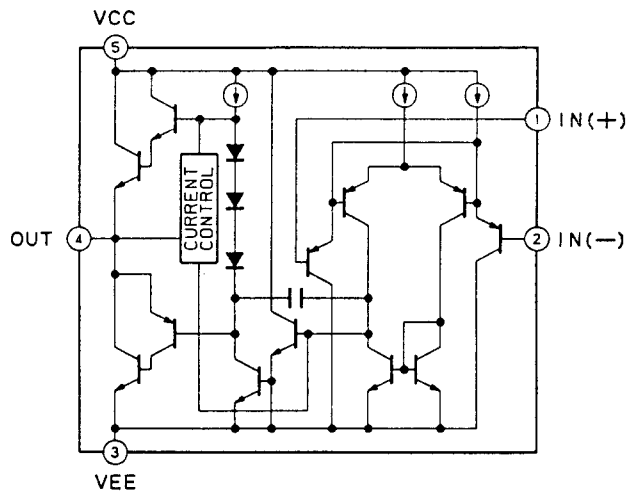
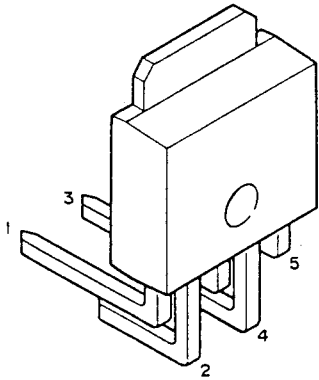
(M5218P, M5216P)



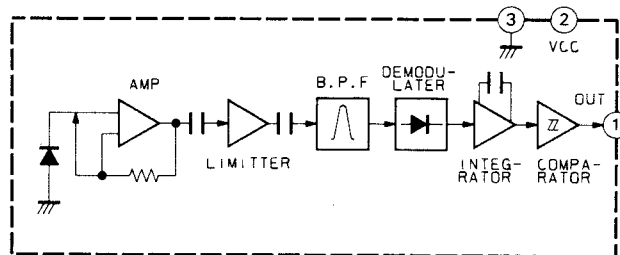
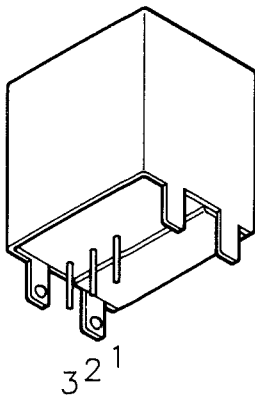
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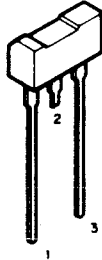
LA6501 : IC1501



GPIU521 : IC9101
 GPIU521X

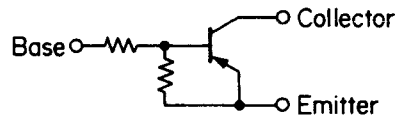
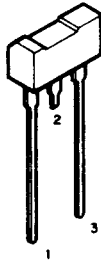


2SA1561 : Q1101, 1214
 2SB1277 : Q1203, 1301, 1303, 1305, 1307
 2SC4038 : Q1103, 1105
 2SD1919 : Q1302, 1304, 1306, 1308



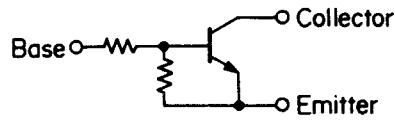
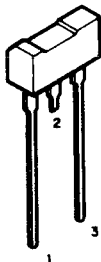
- 1. Emitter
- 2. Collector
- 3. Base

DTA114EL : Q1104



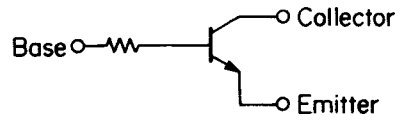
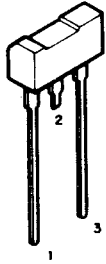
- 1. Emitter
- 2. Collector
- 3. Base

DTC114EL : Q1102, 1309
 DTC144EL : Q1212, 1213



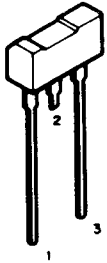
- 1. Emitter
- 2. Collector
- 3. Base

DTC124TL : Q1211



- 1. Emitter
- 2. Collector
- 3. Base

2SD1996 : Q1403, 1404



- 1. Emitter
- 2. Collector
- 3. Base