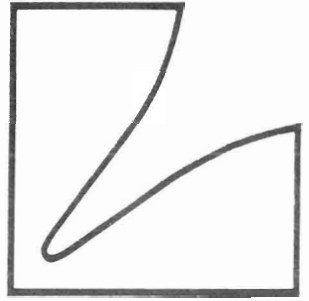


SERVICE MANUAL



Stereo Cassette Deck

K-92



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Specifications

| | |
|---|---|
| Power Source | AC 220/240V (50/60Hz) |
| Tape Speed (MTT-111)..... | 4.75cm/sec. +3%, - 2% |
| Wow & Flutter (MTT-111, JIS WRMS)..... | ≤ 0.11% |
| FF/REW Time (C-60) | ≤ 105 sec. |
| Frequency Response (Playback, ± 4dB) | Normal : 40Hz~14kHz CrO2 : 40Hz~16kHz Metal : 40Hz~16kHz |
| S/N Ratio (Over all JIS Weighted "A" curve) | Dolby NR-OFF : Normal ≥ 50dB, CrO2/Metal ≥ 52dB Dolby NR-B : Normal/CrO2/Metal ≥ 57dB Dolby NR-C : Normal/CrO2 ≥ 63dB, Metal ≥ 65dB |
| Input Sensitivity | Line ≤ 100mV |
| Output Level at 0dB playback | Line : 500mV ± 1.5dB/47k ohm Headphone ≤ 100mV/8 ohm |
| Distortion 3rd (0dBm input at 333Hz)..... | Normal : ≤ 2.5% CrO2/Metal : ≤ 3% |
| Semi-Conductors | 14 IC's, 49 Transistors, 14 Diodes, 2 Zener Diodes, 17 LED's |
| Chassis Dimensions | 438(W) x 100(H) x 250(D) mm |
| Weight | 3.8 kg |

NOTE: Due to continuing product improvement, specifications and designs are subject to change without notice.

Parts Locations and Disassembly Instructions

Figure 1

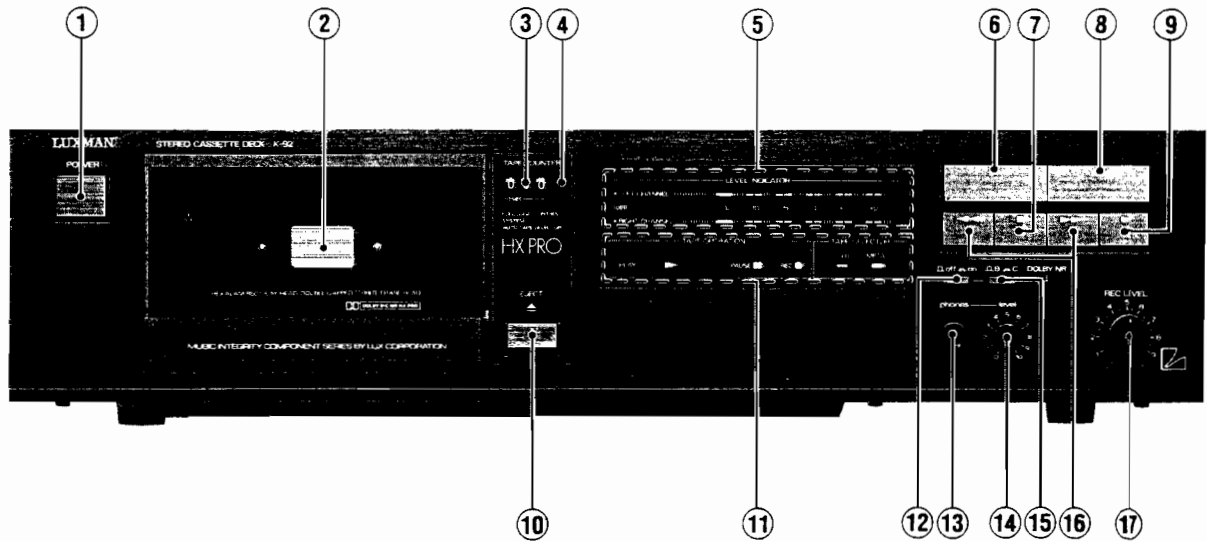
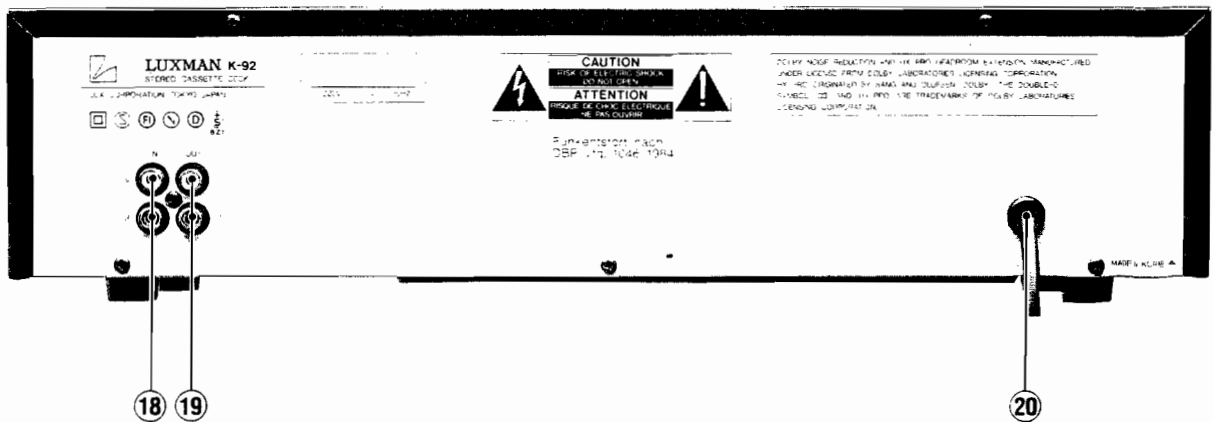
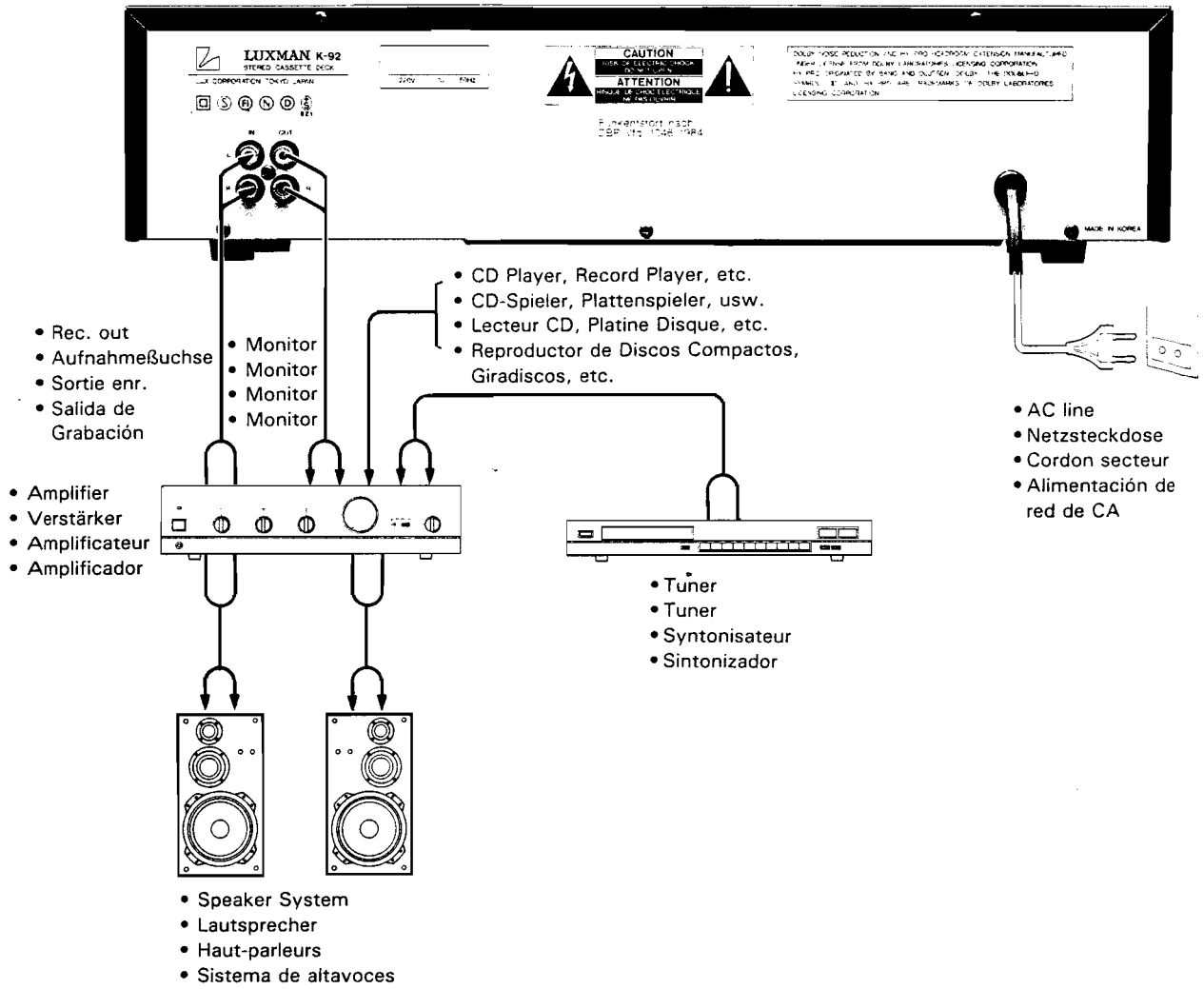


Figure 2



- | | |
|-----------------------------|----------------------------------|
| ① Power Button | ⑪ Function Indicators |
| ② Cassette Door | ⑫ Dolby NR ON/OFF Button |
| ③ Tape Counter | ⑬ Phones Jack |
| ④ Tape Counter Reset Button | ⑭ Level Control Knob |
| ⑤ Level Indicators | ⑮ Dolby NR Select (B/C) Button |
| ⑥ Play Button (▶) | ⑯ Fast Forward and Rewind Button |
| ⑦ Stop Button (■) | ⑰ Rec Level Control Knob |
| ⑧ Pause Button () | ⑱ Input Jacks |
| ⑨ Record Button (●) | ⑲ Output Jacks |
| ⑩ Eject Button (▲) | ⑳ AC Power Cord |

Figure 3



1. Removal of Top Cabinet (Figure 4)

- (1) Remove four screws marked (A) and four screws marked (B).
- (2) Slide off the top cabinet, stretching the both sides slightly outside.

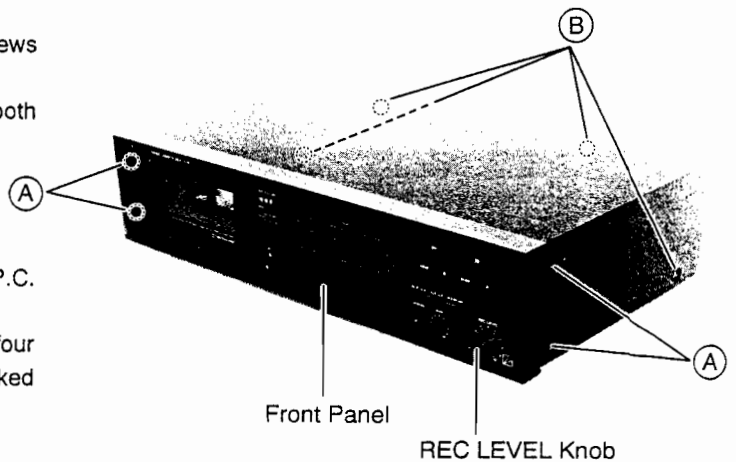


Figure 4

2. Removal of Front Panel (Figure 5)

- (1) Remove the top cabinet as shown above.
- (2) Disconnect all connectors from the main P.C. Board and the cassette deck.
- (3) Turn the unit upside down, and remove four screws marked (C) and three nylon rivets marked (D) from the bottom cabinet.
- (4) Remove the front panel by pulling it.

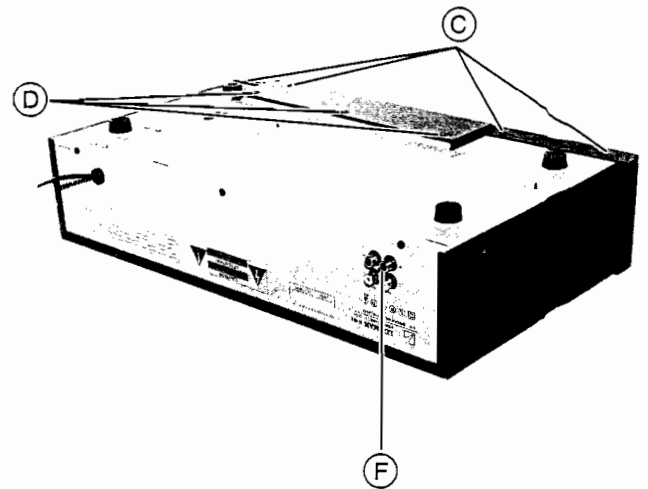


Figure 5

3. Removal of Cassette Deck Mechanism (Figure 6)

- (1) Remove the front panel as shown above.
- (2) Open the cassette door by pressing the EJECT button.
- (3) To remove the cassette deck mechanism, remove the belt from the counter pulley on the mechanism. (Be careful not to miss the belt.)
- (4) Remove four black screws (E) from the cassette deck mechanism.
- (5) Remove the cassette deck mechanism from the front panel. Be careful not to miss the slider with spacer and screw (shown by ※ in Figure 6) when removing the mechanism.

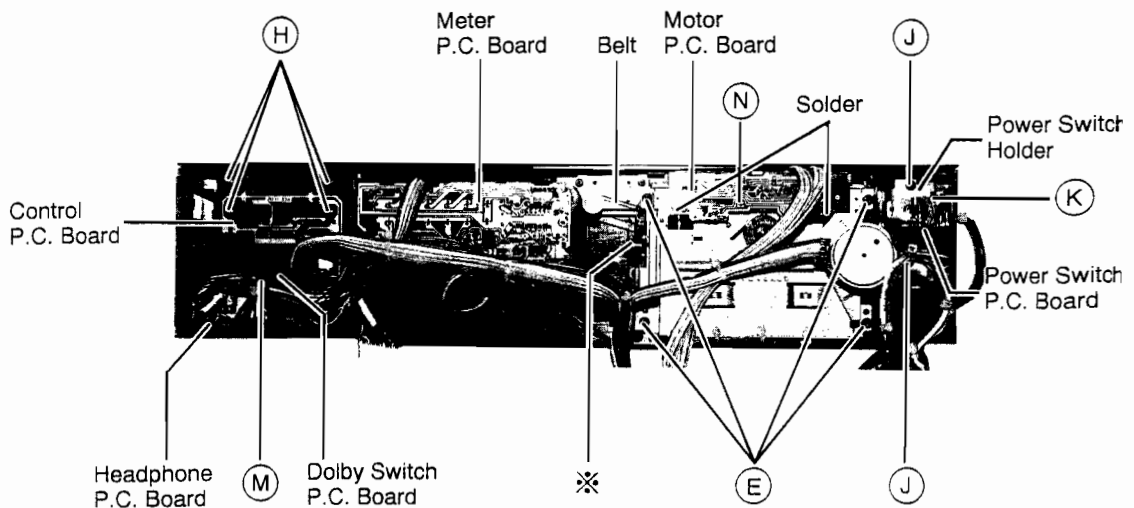


Figure 6

4. Removal of Main P.C. Board (Figures 5 and 7)

- (1) Remove the top cabinet.
- (2) Disconnect all connectors from the main P.C. Board and the cassette deck.
- (3) Remove a screw (F) from the RCA jack section. (Figure 5)
- (4) Remove four screws (G) from the P.C. Board. (Figure 7)

5. Removal of Control P.C. Board (Figure 6)

- (1) Remove the front panel.
- (2) Remove four screws (H) from the P.C. Board.

6. Removal of Power Switch P.C. Board (Figure 6)

- (1) Remove the front panel.
- (2) Make sure that the power switch is off (not depressed.)
- (3) Remove two screws (J) that secure the power switch holder.
- (4) Pull the power switch P.C. Board with the holder strongly backward to remove the power switch shaft from the power switch knob.
- (5) Remove one screw (K) from the holder.

7. Removal of Dolby Switch P.C. Board (Figure 8)

- (1) Remove the front panel.
- (2) Remove two screws (L) from the P.C. Board.

8. Removal of Headphone P.C. Board (Figures 4 and 6)

- (1) Remove the front panel.
- (2) Remove REC LEVEL knob from the front panel by pulling it. (Figure 4)
- (3) You will find a nut with a washer in the hole after removing the REC LEVEL knob. Remove the nut and washer.
- (4) Remove one screw (M) from the headphone holder. (Figure 6)

9. Removal of Meter P.C. Board (Figure 6)

- (1) Remove the front panel.
- (2) Remove the P.C. Board by stretching the four detents slightly that secure the P.C. Board to the frame.

10. Removal of Motor P.C. Board (Figures 6 and 7)

- (1) Remove the cassette deck mechanism.
- (2) Remove three screws (N) from the P.C. Board.
- (3) Unsolder the two solenoids and remove the P.C. Board.

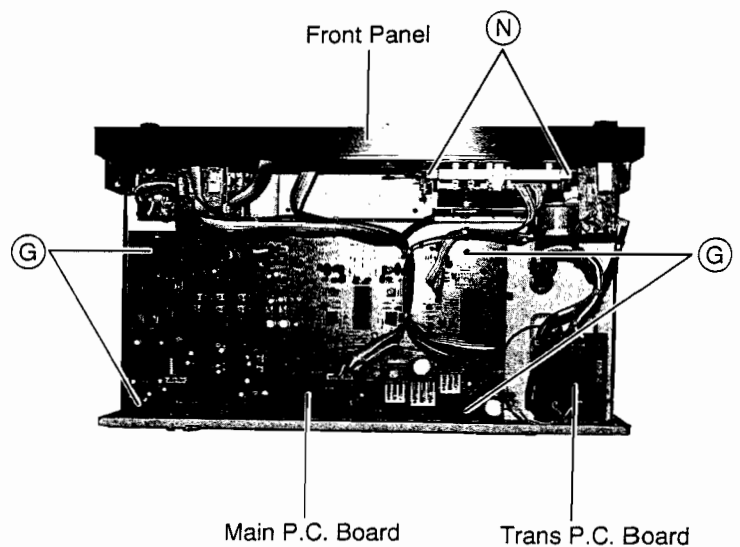


Figure 7

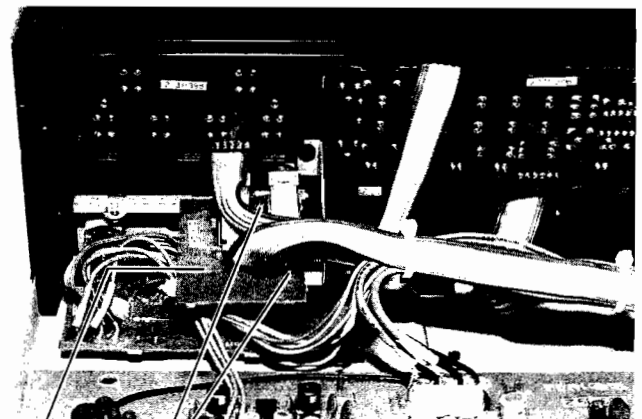
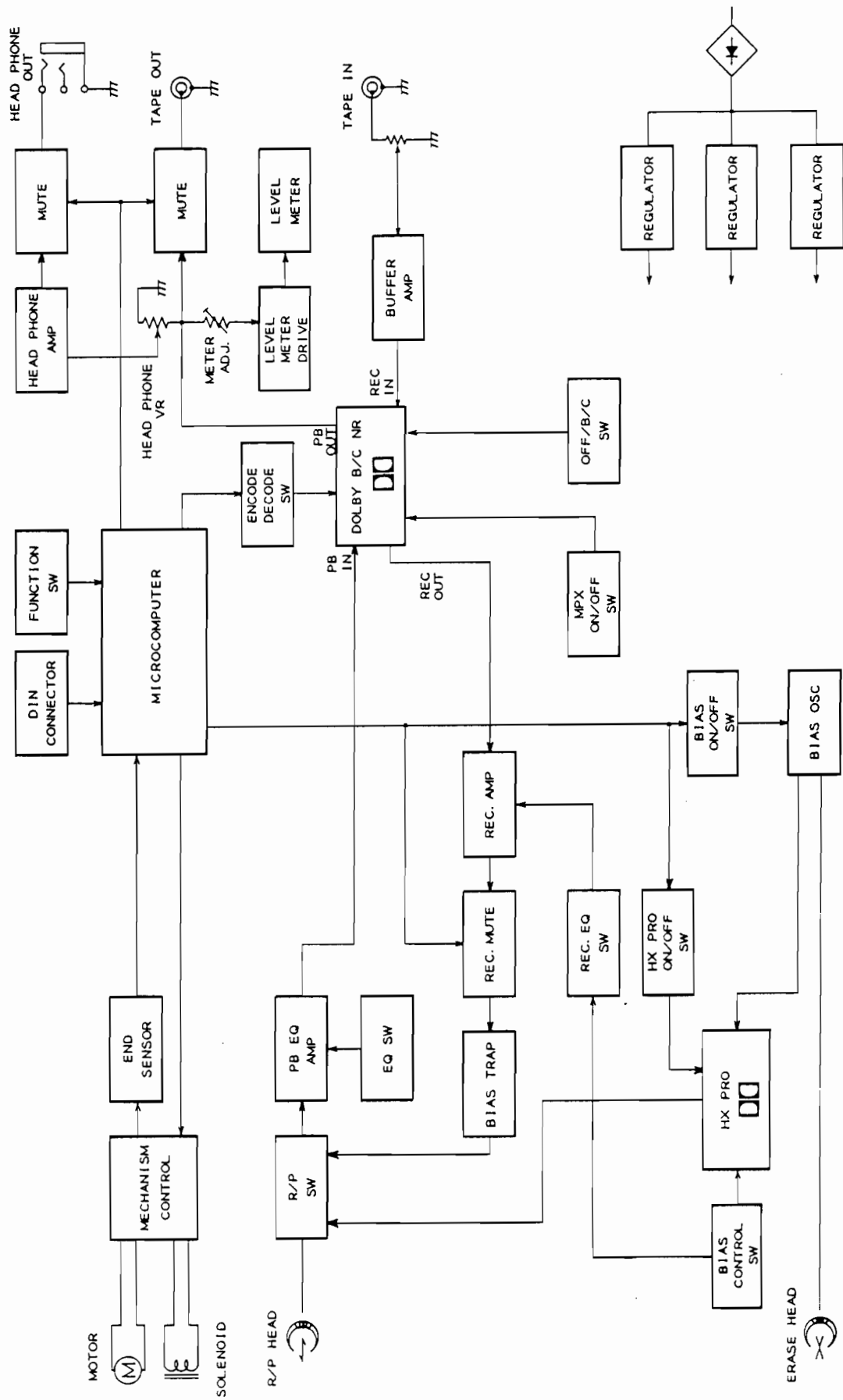
Dolby Switch
P.C. Board

Figure 8

Block Diagram




Adjustment Procedures

TEST EQUIPMENTS

1. VTVM (Vacuum Tube Voltmeter)
2. Signal Generator
3. Resistance Attenuator
4. Screwdriver
5. Frequency Counter

6. Test Tapes

- MTT-111 (Speed 3kHz)
 MTT-114 (Azimuth 10kHz)
 MTT-150 (Dolby 400Hz Modulation)
 AC-223 (Normal Tape : Blank)
 AC-512 (CrO2 Tape : Blank)
 AC-712 (Metal Tape : Blank)

| No. | Adjustment Item | Test Value | Test Tape | Rec. Volume Control VR802 | Switch Position | | | Adjustable Parts | Test Point | Input Frequency | Equipment/Connection | Remarks |
|-----|---|---------------|-----------|---------------------------|-----------------|-----------|---------|------------------------|-----------------------------------|-----------------|----------------------|--|
| | | | | | NR | NR B or C | Input | | | | | |
| 1 | Head Azimuth Adjustment | Maximum | MTT-114 | — | OFF | — | — | Adjustment Screw | TAPE OUT | — | VTVM See Fig. 9 | Apply lock paint after adjustment. |
| 2 | Tape Speed (Normal Speed) | 3000 ± 30Hz | MTT-111 | — | OFF | — | — | VR845 | TAPE OUT | — | Frequency Counter | Check at the halfway point of the tape length. |
| 3 | Playback Sensitivity Adjustment | 500 ± 10mV | MTT-150 | — | OFF | — | — | VR101 (L) VR102 (R) | TAPE OUT | — | See Fig. 10 | — |
| 4 | Bias Oscillator Frequency Adjustment | 105 ± 0.5kHz | AC-223 | — | OFF | — | — | L209 | HOT : TP-1 GND : TP-2 | — | See Fig. 11 | Adjust in REC mode. |
| 5 | Bias Trap Adjustment | Minimum | AC-223 | — | OFF | — | — | Lch L205 | HOT : TP-5 GND : TP-7 | — | VTVM | Adjust in REC mode. |
| | | | | | | | | Rch L206 | HOT : TP-6 GND : TP-7 | | | |
| 6 | Bias Current Adjustment | 5.2 ± 0.1mV | AC-223 | — | OFF | — | — | Lch/Rch VR207/VR208 | Lch HOT : TP-1 GND : TP-2 | — | VTVM | Adjust in REC mode. |
| | | 6.2 ± 0.1mV | AC-512 | | | | | Lch/Rch VR205/VR206 | | | | |
| | | 11 ± 0.2mV | AC-712 | | | | | Lch/Rch VR203/VR204 | | | | |
| 7 | Rec. Level Meter Sensitivity Adjustment | +3dB | AC-223 | Maximum | OFF | — | TAPE IN | Lch VR815 | Lch HOT : TP-12 GND : TP-14 | 400Hz | VTVM | Adjust VR815/816 so that the +3dB point ( mark) on the level meter lights dimly. (Input level at 90mV -1.5dB). |
| | | | | | | | | Rch VR816 | Rch HOT : TP-13 GND : TP-14 | | | |
| 8 | Rec. Sensitivity Adjustment | 160mV ± 0.5dB | AC-223 | Maximum | OFF | — | TAPE IN | Lch VR209 | Lch HOT : TP-15 GND : TP-7 | 400Hz | See Fig. 12 | Adjust VR209/210 so that TP15-7/16-7 measure 100mV ± 0.5dB. When supply the input level at 90mV, check that TAPE OUT for 500mV ± 40mV. |
| | | | | | | | | Rch VR210 | Rch HOT : TP-16 GND : TP-7 | | | |
| 9 | Rec./PB Frequency Response Adjustment | 0 ± 1dB | AC-223 | Maximum | OFF | — | TAPE IN | Lch/Rch VR207/VR208 | TAPE OUT | 400Hz 10kHz | See Fig. 13 | Adjust TAPE OUT for 500mV - 25dB first by resistance attenuator. Then adjust VRs 203-208 so that the rec/play level is 0 ± 1dB. |
| | | | AC-512 | | | | | Lch/Rch VR205/VR206 | | | | |
| | | | AC-712 | | | | | Lch/Rch VR203/VR204 | | | | |

Measurement Conditions

- Power Supply : AD=220V (50Hz)
- Input : 0dB=1Vrms
- TAPE IN (Signal Generator Output Impedance) : 600 ohms
- TAPE OUT (Load Impedance) : 47k ohms
- HEADPHONE OUT (Load Impedance) : 8 ohms
- Test Point Load Impedance : No load

Figure 9 HEAD AZIMUTH ADJUSTMENT

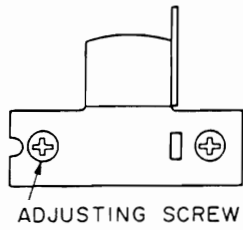


Figure 10 PLAYBACK SENSITIVITY ADJUSTMENT

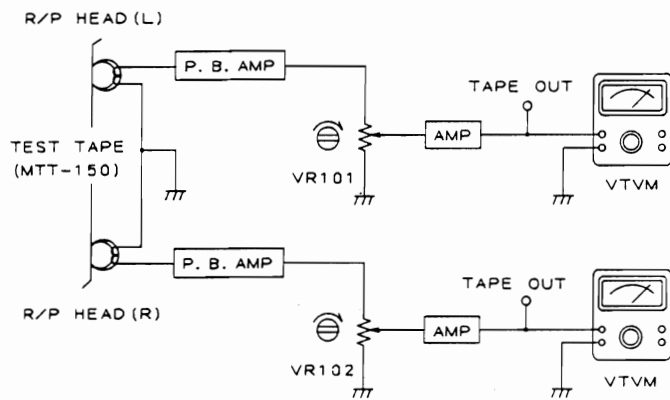


Figure 11 BIAS OSCILLATOR FREQUENCY ADJUSTMENT

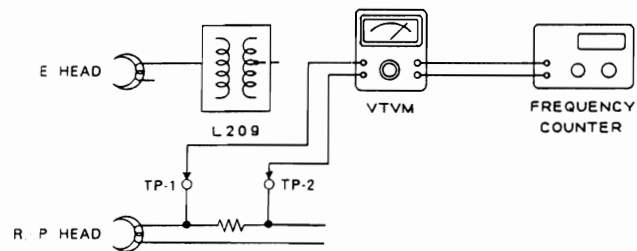


Figure 12 RECORD SENSITIVITY ADJUSTMENT

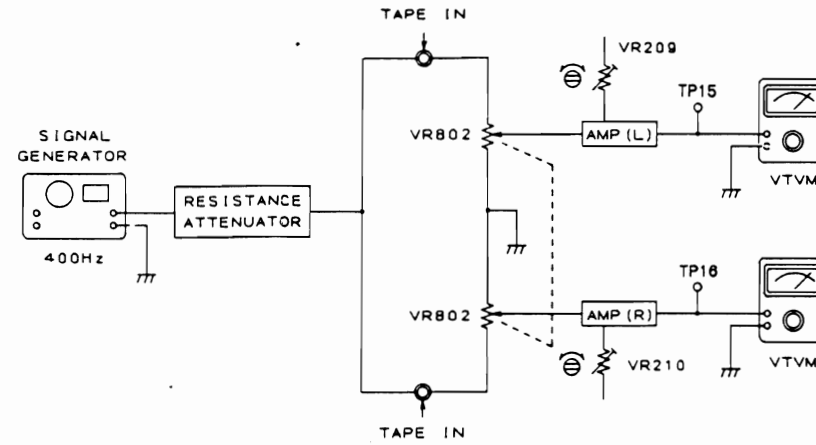
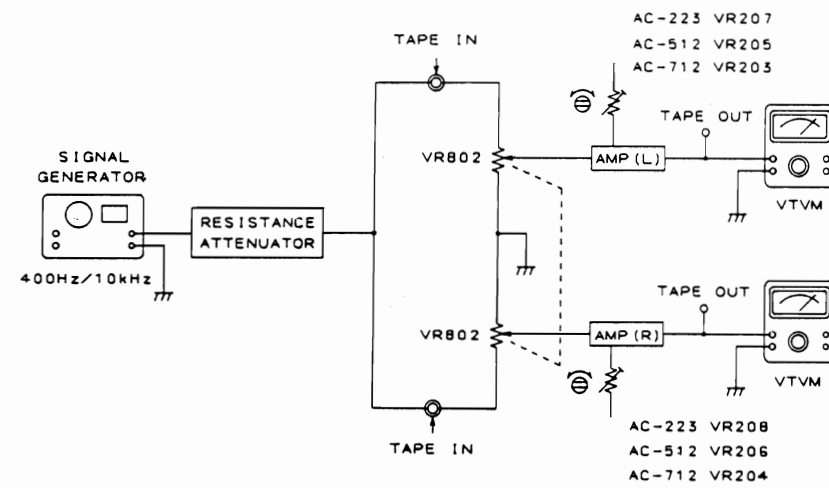


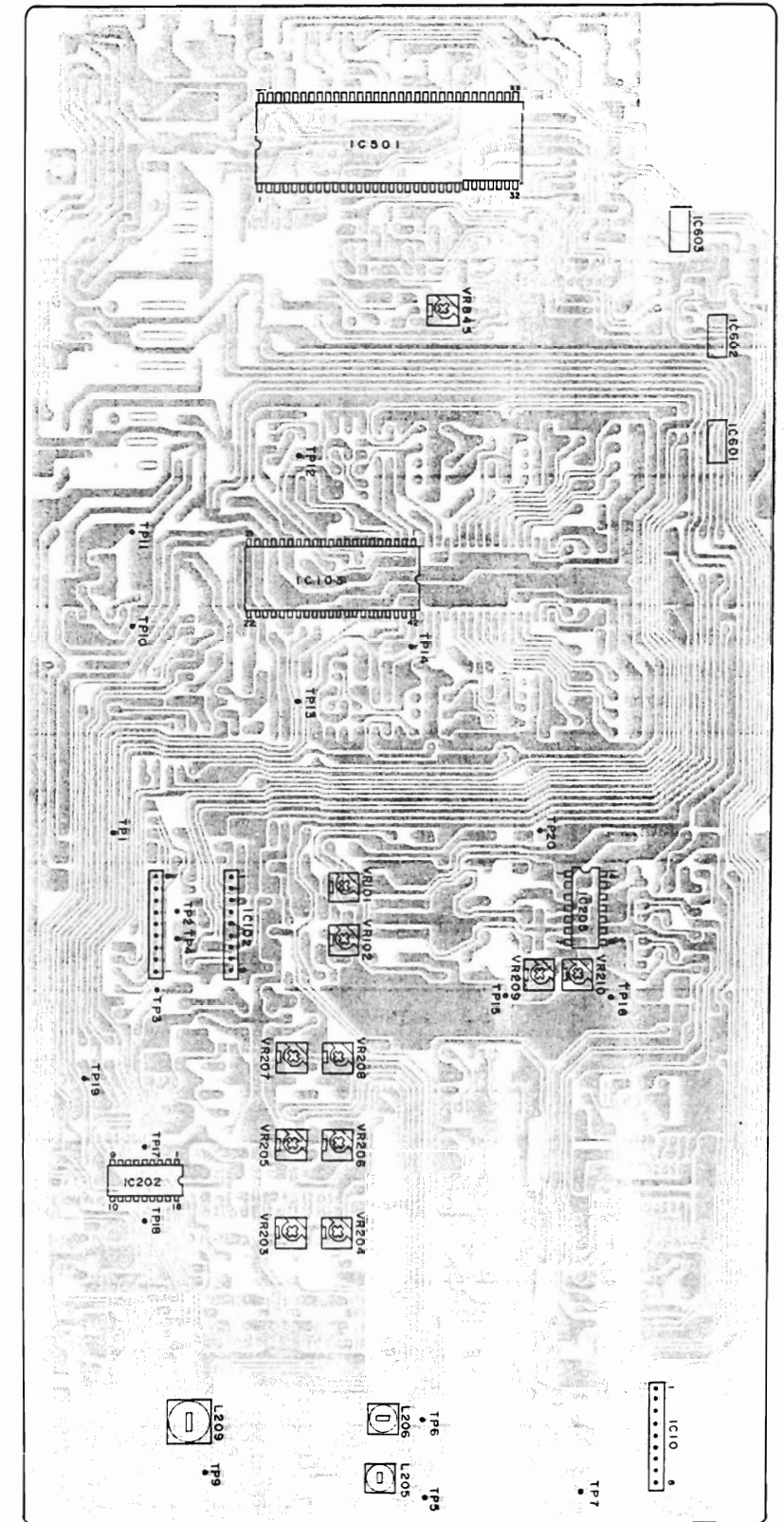
Figure 13 RECORD/PLAYBACK FREQUENCY RESPONSE ADJUSTMENT



Adjustment Locations



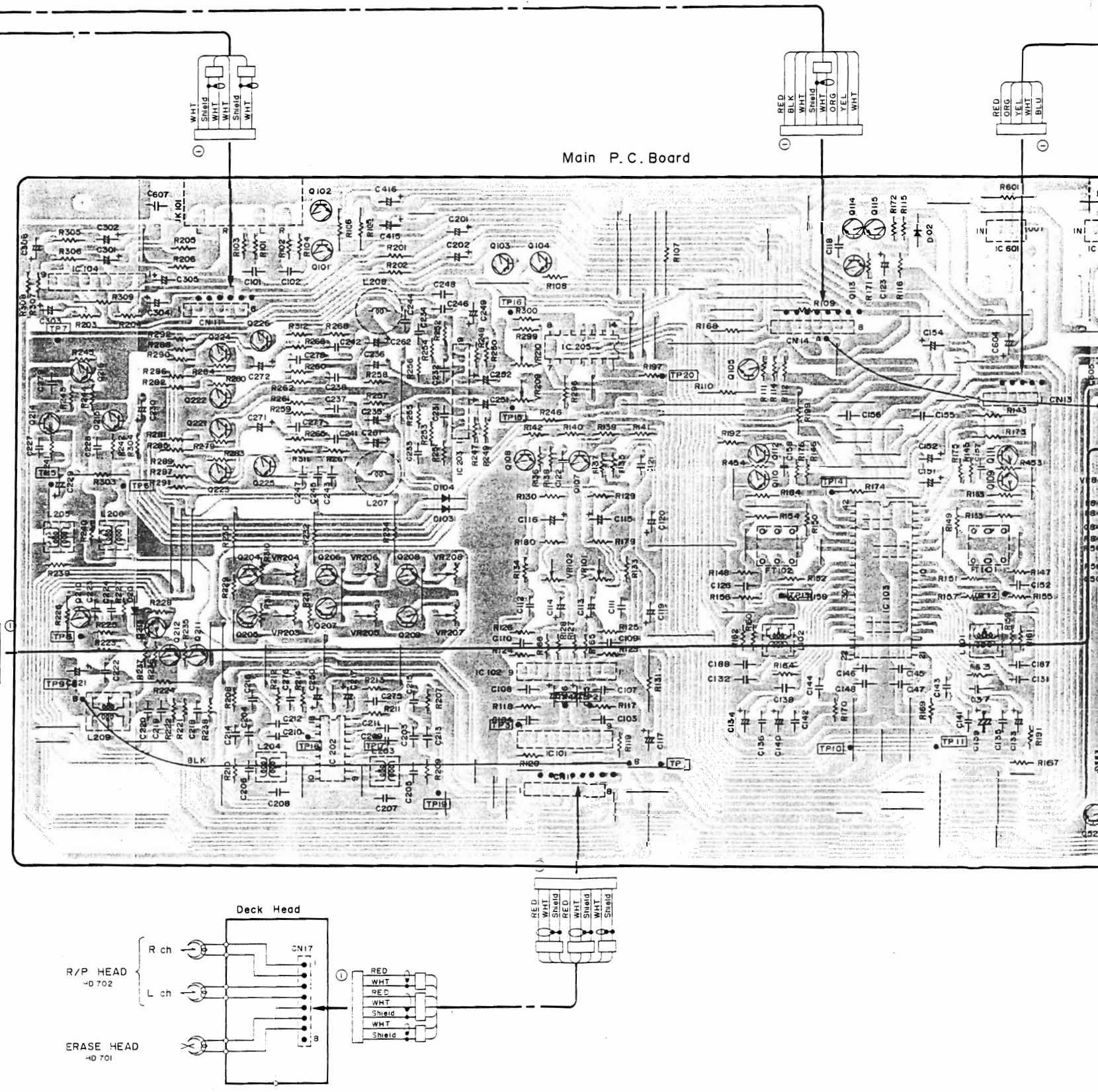
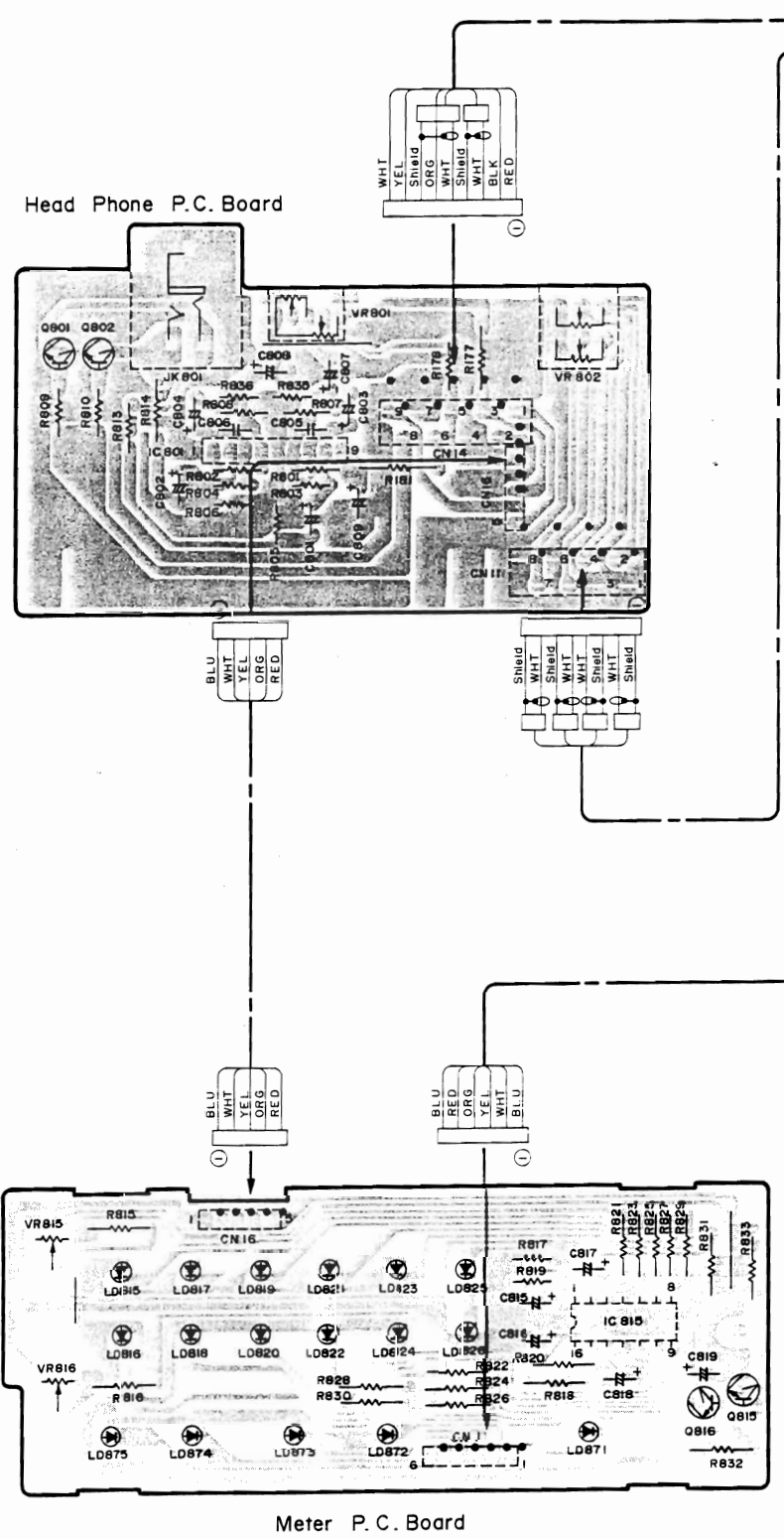
Meter P.C. Board

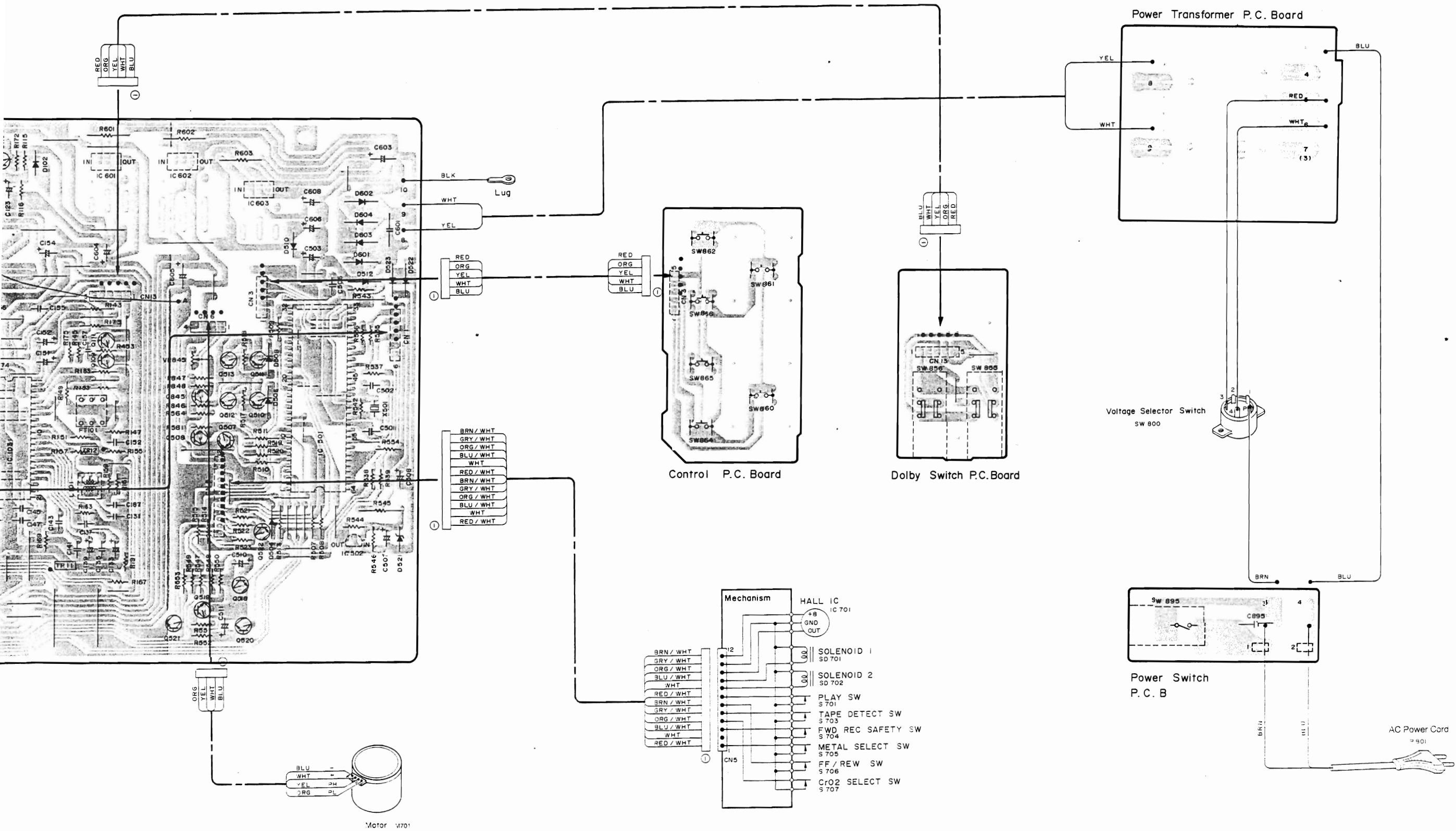


Main P.C. Board

Parts Layout on P.C. Boards and Wiring Diagram

1
2
3
4
5





Schematic Diagram (1/2)

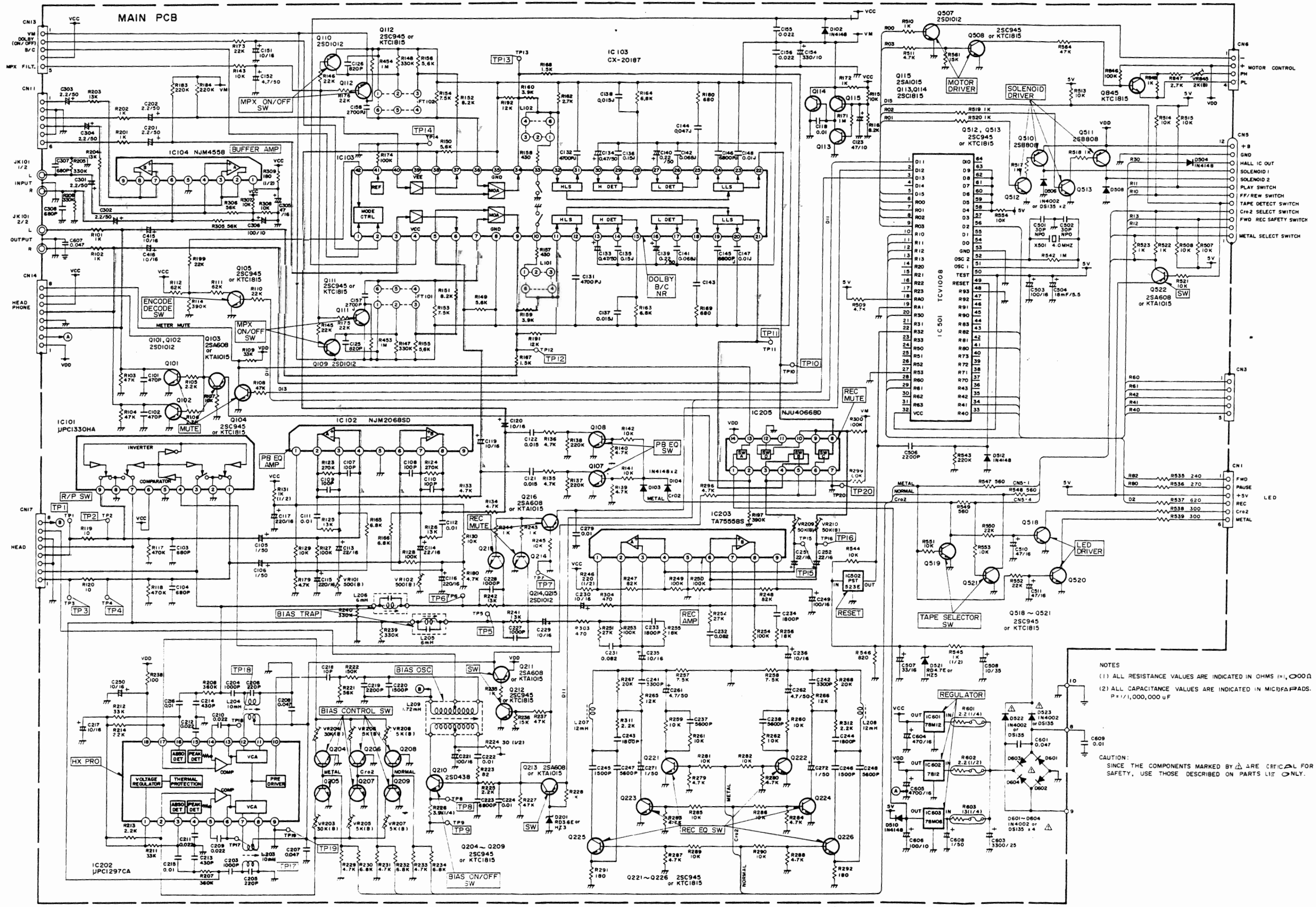
1

2

3

4

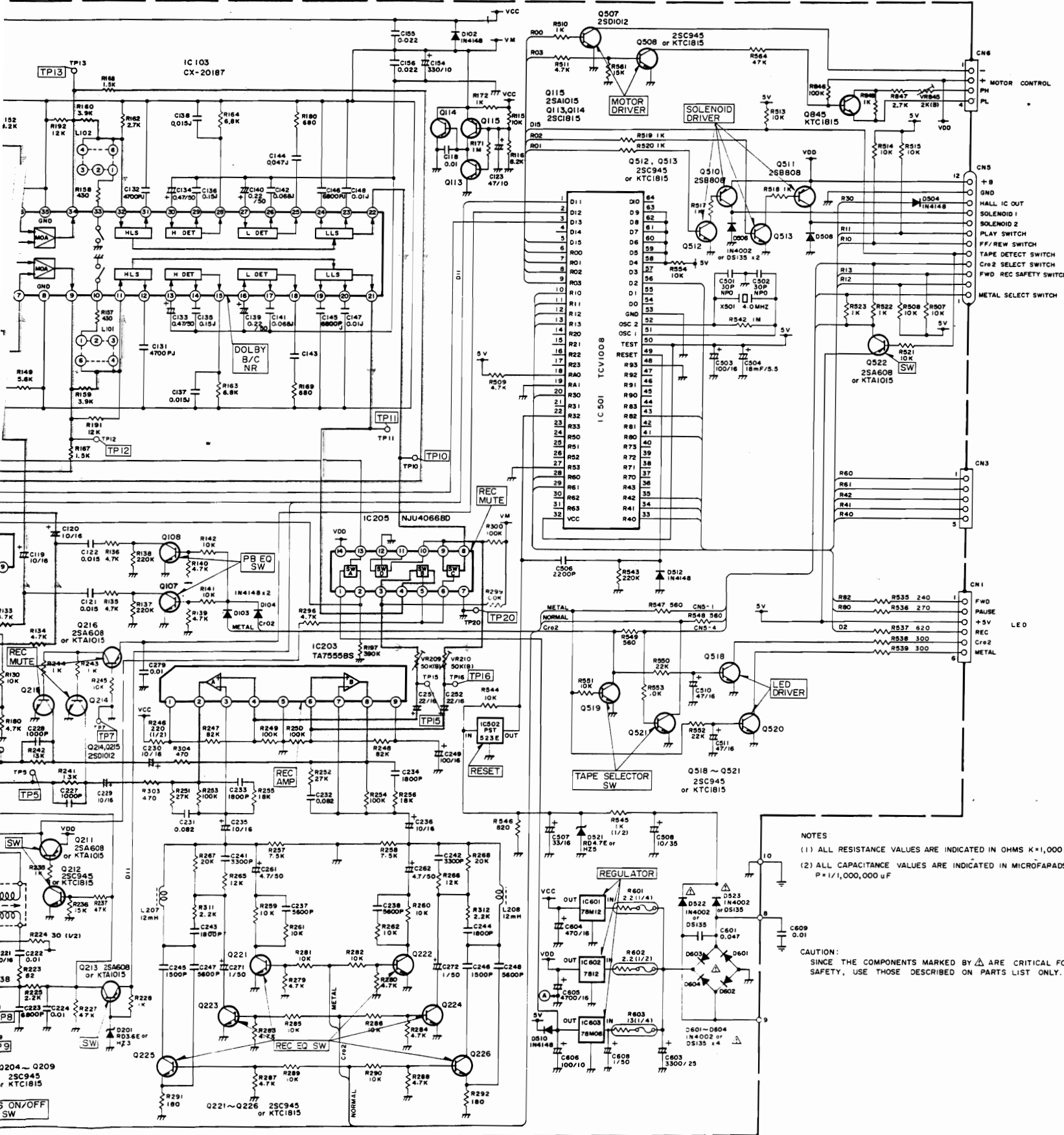
5



NOTES
 (1) ALL RESISTANCE VALUES ARE INDICATED IN OHMS (Ω), 000Ω
 (2) ALL CAPACITANCE VALUES ARE INDICATED IN MICROFARADS.
 P = 1/1,000,000 μF

CAUTION:
 SINCE THE COMPONENTS MARKED BY Δ ARE CRITICAL FOR
 SAFETY, USE THOSE DESCRIBED ON PARTS LIST ONLY.

| Pin No. | Pin No. | Pin No. |
|---------|---------|---------|
| 1 | 1 | 1 |
| 2 | 2 | 2 |
| 3 | 3 | 3 |
| 4 | 4 | 4 |
| 5 | 5 | 5 |
| 6 | 6 | 6 |
| 7 | 7 | 7 |
| 8 | 8 | 8 |
| 9 | 9 | 9 |
| 10 | 10 | 10 |
| 11 | 11 | 11 |
| 12 | 12 | 12 |
| 13 | 13 | 13 |
| 14 | 14 | 14 |
| 15 | 15 | 15 |
| 16 | 16 | 16 |
| 17 | 17 | 17 |
| 18 | 18 | 18 |
| 19 | 19 | 19 |
| 20 | 20 | 20 |
| 21 | 21 | 21 |
| 22 | 22 | 22 |
| 23 | 23 | 23 |
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| 90 | 90 | 90 |
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| 95 | 95 | 95 |
| 96 | 96 | 96 |
| 97 | 97 | 97 |
| 98 | 98 | 98 |
| 99 | 99 | 99 |
| 100 | 100 | 100 |



NOTES
 (1) ALL RESISTANCE VALUES ARE INDICATED IN OHMS K=1,000Ω
 (2) ALL CAPACITANCE VALUES ARE INDICATED IN MICROFAPADS.
 P = 1/1,000,000 μF

CAUTION:
 SINCE THE COMPONENTS MARKED BY Δ ARE CRITICAL FOR SAFETY, USE THOSE DESCRIBED ON PARTS LIST ONLY.

IC101

| Pin No. | REC | Others |
|---------|-------|--------|
| 1 | 0V | 0V |
| 2 | 0V | 0V |
| 3 | 0V | 0V |
| 4 | 4.4V | 0V |
| 5 | 0V | 0V |
| 6 | 12.0V | 12.0V |
| 7 | 0V | 0V |
| 8 | 0V | 0V |
| 9 | 0V | 0V |

IC No.

| Pin No. | IC102 | IC104 | IC203 |
|---------|-------|-------|-------|
| 1 | 7.3V | 11.4V | 11.0V |
| 2 | 5.8V | 8.0V | 8.0V |
| 3 | 5.0V | 8.0V | 8.0V |
| 4 | 4.9V | 5.9V | 8.0V |
| 5 | 0V | 0V | 0V |
| 6 | 4.9V | 5.9V | 8.1V |
| 7 | 5.0V | 8.0V | 8.1V |
| 8 | 5.8V | 8.0V | 8.1V |
| 9 | 7.3V | 11.4V | 11.0V |

IC202

| Pin No. | REC Normal | CrO2 | Metal | Others |
|---------|------------|-------|-------|--------|
| 1 | 4.3V | 4.3V | 4.3V | 4.3V |
| 2 | 1.3V | 1.8V | 3.2V | 3.2V |
| 3 | 4.3V | 4.3V | 4.3V | 4.3V |
| 4 | 1.9V | 2.4V | 3.7V | 0.5V |
| 5 | 1.3V | 1.8V | 3.2V | 0V |
| 6 | 3.7V | 4.9V | 8.9V | 8.8V |
| 7 | 12.0V | 12.0V | 11.8V | 0V |
| 8 | 12.0V | 12.0V | 11.8V | 0V |
| 9 | 0V | 0V | 0V | 0V |
| 10 | 1.8V | 1.8V | 1.7V | 1.8V |
| 11 | 12.0V | 12.0V | 11.8V | 0V |
| 12 | 12.0V | 12.0V | 11.8V | 0V |
| 13 | 3.3V | 4.3V | 8.7V | 8.8V |
| 14 | 1.4V | 1.8V | 3.3V | 0V |
| 15 | 1.8V | 2.4V | 3.8V | 0.8V |
| 16 | 3.3V | 4.3V | 4.3V | 4.3V |
| 17 | 1.4V | 1.8V | 3.4V | 3.4V |
| 18 | 11.0V | 11.0V | 10.8V | 10.0V |

IC301

| Pin No. | PLAY | REC | PLAY | REC |
|---------|----------|----------|------|----------|
| 1 | 0V | 4.5V | 33 | 5.1V |
| 2 | 5.0V | 0V | 34 | 5.1V |
| 3 | 5.0V | 5.0V | 35 | 5.1V |
| 4 | 0V | 0V | 36 | 0V |
| 5 | 0V | 0V | 37 | 0V |
| 6 | 4.1V | 4.1V | 38 | 0V |
| 7 | 0V | 0V | 39 | 0V |
| 8 | 0V | 0V | 40 | 0V |
| 9 | 0V | 0V | 41 | 3.7V |
| 10 | 5.1V | 5.1V | 42 | 0V |
| 11 | 0V | 0V | 43 | 0.4-3.8V |
| 12 | 5.1V | 5.1V | 44 | 0V |
| 13 | 0V | 0V | 45 | 5.1V |
| 14 | 0V | 0V | 46 | 5.1V |
| 15 | 0V | 0V | 47 | 5.1V |
| 16 | 0V | 0V | 48 | 0V |
| 17 | 0V | 5.1V | 49 | 0V |
| 18 | 5.1V | 5.1V | 50 | 5.1V |
| 19 | 0V | 0V | 51 | 2.2V |
| 20 | 0.5-5.1V | 0.5-5.1V | 52 | 2.2V |
| 21 | 5.1V | 5.1V | 53 | 0V |
| 22 | 4.8V | 4.8V | 54 | 5.1V |
| 23 | 5.1V | 5.1V | 55 | 5.1V |
| 24 | 5.1V | 5.1V | 56 | 5.1V |
| 25 | 5.1V | 5.1V | 57 | 5.1V |
| 26 | 0.2V | 0.2V | 58 | 5.1V |
| 27 | 0.2V | 0.2V | 59 | 5.1V |
| 28 | 0.2V | 0.2V | 60 | 5.1V |
| 29 | 0V | 0V | 61 | 5.1V |
| 30 | 0V | 0V | 62 | 5.1V |
| 31 | 0V | 0V | 63 | 5.1V |
| 32 | 6.0V | 6.0V | 64 | 0V |
| 33 | 6.0V | 6.0V | 65 | 6.0V |
| 34 | 6.0V | 6.0V | 66 | 6.0V |
| 35 | 6.0V | 6.0V | 67 | 6.0V |
| 36 | 6.0V | 6.0V | 68 | 6.0V |
| 37 | 6.0V | 6.0V | 69 | 6.0V |
| 38 | 6.0V | 6.0V | 70 | 6.0V |
| 39 | 0V | 0V | 71 | 0V |
| 40 | 6.0V | 6.0V | 72 | 6.0V |
| 41 | 1.3V | 1.3V | 73 | 1.3V |
| 42 | 10.3V | 10.3V | 74 | 5.8V |

IC205

| Pin No. | REC | Others |
|---------|-------|--------|
| 1 | 5.9V | 5.9V |
| 2 | 0V | 0V |
| 3 | 8.1V | 8.0V |
| 4 | 8.1V | 8.0V |
| 5 | 12.0V | 0V |
| 6 | 12.0V | 0V |
| 7 | 0V | 0V |
| 8 | 8.1V | 8.1V |
| 9 | 8.1V | 8.0V |
| 10 | 8.1V | 8.0V |
| 11 | 0V | 0V |
| 12 | 0V | 0V |
| 13 | 0V | 0V |
| 14 | 12.1V | 12.1V |

IC801, IC802, IC803

| Pin No. | PLAY | REC | PLAY | REC | PLAY | REC |
|---------|-------|-------|-------|-------|-------|-------|
| IN | 18.5V | 18.5V | 18.3V | 18.1V | 18.0V | 17.9V |
| GND | 0V | 0V | 0V | 0V | 0V | 0V |
| OUT | 12.0V | 12.0V | 12.1V | 12.1V | 5.9V | 5.9V |

IC502

| Pin | PLAY | REC |
|-----|------|------|
| IN | 4.8V | 4.8V |
| GND | 0V | 0V |
| OUT | 4.8V | 4.8V |

Q101, Q102, Q103, Q104, Q105

| Pin | Stop | Others | Stop | Others | REC | Others |
|-----|------|--------|------|--------|------|--------|
| E | 0V | 0V | 5.5V | 0V | 0V | 0V |
| C | 0V | 0V | 5.5V | 0V | 0V | 10.2V |
| B | 0.7V | 0V | 4.8V | 0V | 0.8V | 0.7V |

Q204, 205, Q206, 207, Q208, 209

| Pin | Normal | CrO2 | Metal | No Tape | Normal | CrO2 | Metal | No Tape | Normal | CrO2 | Metal | No Tape |
|-----|--------|------|-------|---------|--------|------|-------|---------|--------|------|-------|---------|
| E | 0V | 0V | 0V | 0V | 0V | 0V | 0V | 0V | 0V | 0V | 0V | 0V |
| C | 1.4V | 1.8V | 0V | 4.4V | 1.4V | 0V | 3.2V | 4.4V | 0.8V | 1.8V | 3.4V | 4.4V |
| B | 0V | 0V | 0.8V | 0V | 0V | 0.7V | 0V | 0V | 0.7V | 0V | 0V | 0V |

Q210, Q211, Q212, Q213

| Pin | REC | Others | REC | Others | REC | Others |
|-----|------|--------|-------|--------|------|--------|
| E | 0.3V | 0V | 12.1V | 12.1V | 0V | 4.4V |
| C | 8.8V | 12.1V | 12.0V | 0V | 3.3V | 11.5V |
| B | 0.8V | 0V | 11.2V | 11.5V | 0.7V | 0V |

Q214, Q215, Q216

| Pin | REC | Others | REC | Others | REC | Others |
|-----|-----|--------|-----|--------|-----|--------|
| E | 0V | 0V | 0V | 0V | 0V | 4.7V |
| C | 0V | 0V | 0V | 0V | 0V | 4.8V |
| B | 0V | 0.7V | 0V | 0.7V | 0V | 4.0V |

Q221, 222, Q223, 224, Q225, 226

| Pin | Normal | CrO2 | Metal | Normal | CrO2 | Metal | Normal |
|-----|--------|------|-------|--------|------|-------|--------|
| E | 0V | 0V | 0V | 0V | 0V | 0V | 0V |
| C | 0V | 0V | 0V | 0V | 0V | 0V | 0V |
| B | 0V | 0.6V | 0V | 0.8V | 0V | 0.7V | 0V |

Q507, Q508, Q845

| Pin | Stop | Others | Play | FF/Rew | Others | Play | FF/Rew | Others |
|-----|-------|--------|------|--------|--------|------|--------|--------|
| E | 0V | 0V | 0V | 0V | 0V | 8.2V | 7.7V | 8.2V |
| C | 10.8V | 0V | 8.8V | 0V | 8.8V | 8.3V | 8.1V | 8.2V |
| B | 0V | 0.7V | 0V | 0.7V | 0V | 8.8V | 3.8V | 8.8V |

Q510, Q511, Q512, Q513

| Pin | Stop | Stop | Stop | Stop |
|-----|-------|-------|-------|-------|
| E | 12.1V | 12.1V | 0V | 0V |
| C | 0V | 0V | 11.5V | 11.5V |
| B | 11.5V | 11.5V | 0V | 0V |

Q518, 3518

| Pin | Normal | CrO2 | Metal | No Tape | Normal | CrO2 | Metal | No Tape |
|-----|--------|------|-------|---------|--------|------|-------|---------|
| E | 0V | 0V | 0V | 0V | 0V | 0V | 0V | 0V |
| C | 3.8V | 0.1V | 3.7V | 3.8V | 4.3V | 0.1V | 0.1V | 0V |
| B | 0V | 0.7V | 0.0V | 0V | 0V | 0.7V | 0.7V | 0V |

Q520, 3521

| Pin | Normal | CrO2 | Metal | No Tape | Normal | CrO2 | Metal | No Tape |
|-----|--------|------|-------|---------|--------|------|-------|---------|
| E | 0V | 0V | 0V | 0V | 0V | 0V | 0V | 0V |
| C | 3.8V | 3.7V | 0.1V | 3.8V | 4.3V | 0.1V | 0.1V | 0V |
| B | 0V | 0V | 0.7V | 0V | 0V | 0.7V | 0.7V | 0V |

Q107, 108, Q522

| Pin | Normal | CrO2 | Metal | No Tape | Others |
|-----|--------|------|-------|---------|--------|
| E | 0V | 0V | E | 5.2V | 5.1V |
| C | 0V | 0V | C | 0V | 5.0V |
| B | 0V | 0.8V | B | 5.2V | 4.4V |

Q109, 110, Q111, 112, Q114, Q115

| Pin | Mps-off | Mps-on | Mps-off | Mps-on | Q114 | Q115 |
|-----|---------|--------|---------|--------|------|------|
| E | 8.0V | 8.0V | 8.0V | 8.0V | E | 0V |
| C | 5.8V | 6.0V | 5.8V | 6.0V | C | 0.7V |
| B | 6.0V | 6.7V | 6.0V | 6.7V | B | 0.8V |

IC815

| Pin | Stop | FF | Rec | No Signal |
|-----|-------|-------|-----|-----------|
| 1 | 1.4V | 1.4V | | |
| 2 | 1.4V | 1.5V | | |
| 3 | 0V | 10.2V | | |
| 4 | 0V | 10.2V | | |
| 5 | 0V | 10.0V | | |
| 6 | 0V | 10.1V | | |
| 7 | 0V | 10.1V | | |
| 8 | 0V | 0V | | |
| 9 | 12.1V | 12.1V | | |
| 10 | 0V | 10.0V | | |
| 11 | 0V | 10.0V | | |
| 12 | 0V | 10.0V | | |
| 13 | 0V | 10.2V | | |
| 14 | 0V | 10.2V | | |
| 15 | 1.4V | 1.5V | | |
| 16 | 1.4V | 1.4V | | |

Q815, Q816

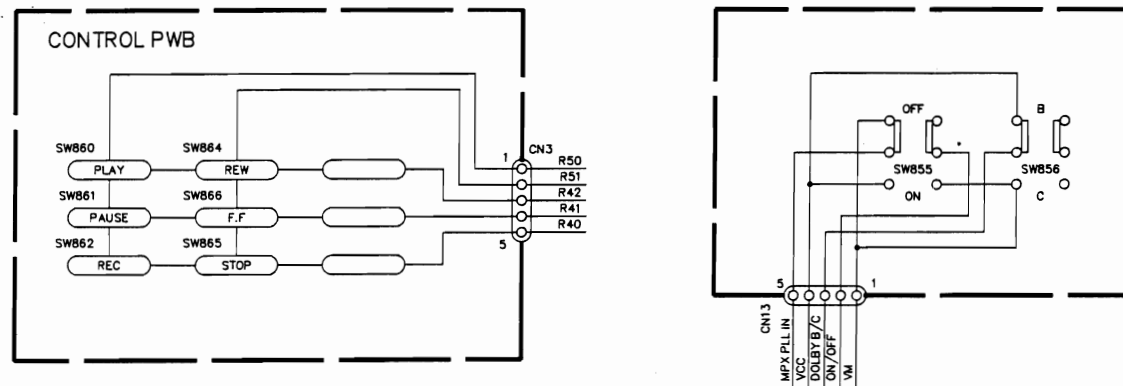
| Pin | Play/Rec | Others | Play/Rec | Others |
|-----|----------|--------|----------|--------|
| E | 0V | 0V | 11.8V | 0V |
| C | 12.1V | 0.1V | 12.1V | 12.1V |
| B | 0V | 0.7V | 12.1V | 0.1V |

Q801, 802

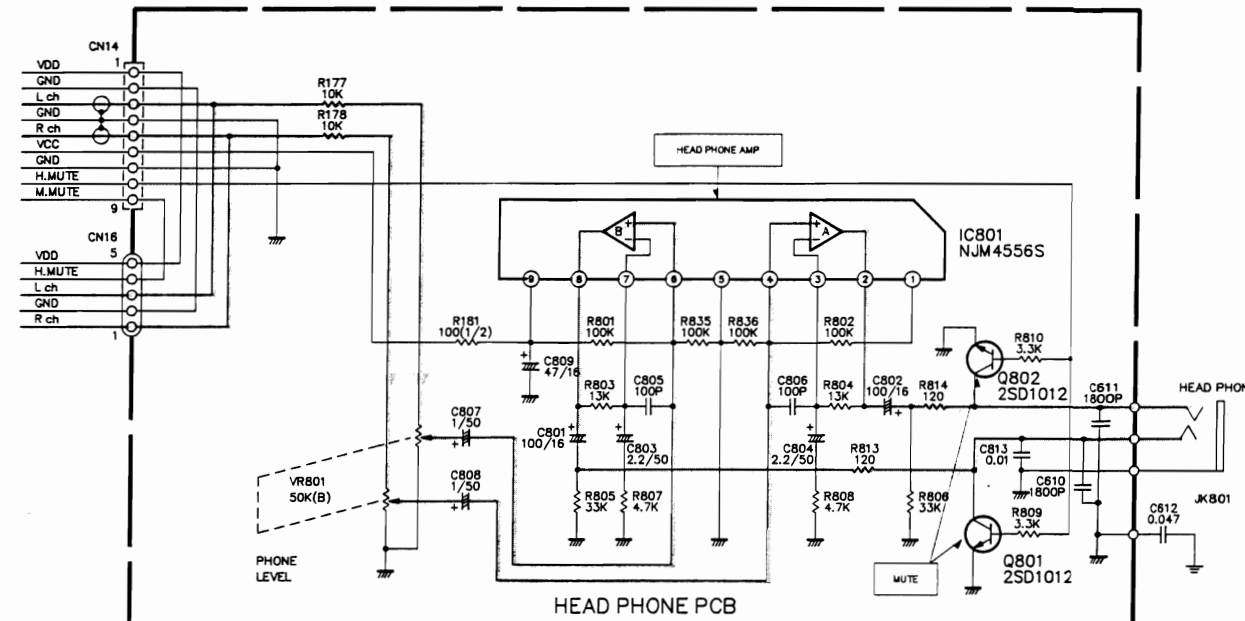
| Pin | FF | Rew | Stop | Others |
|-----|----|------|------|--------|
| E | 0V | 0V | | |
| C | 0V | 0V | | |
| B | 0V | 0.7V | | |

Schematic Diagram (2/2)

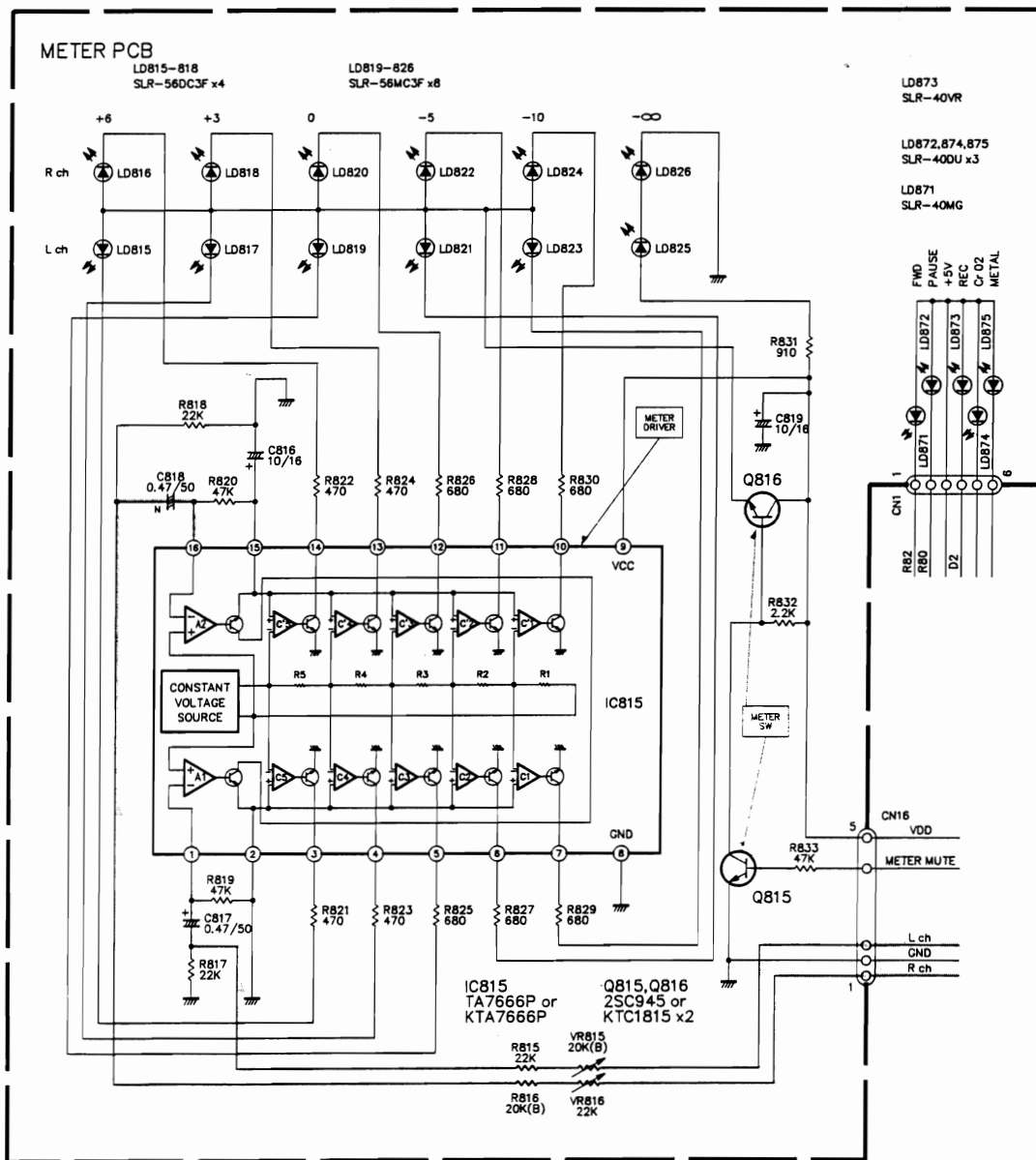
1



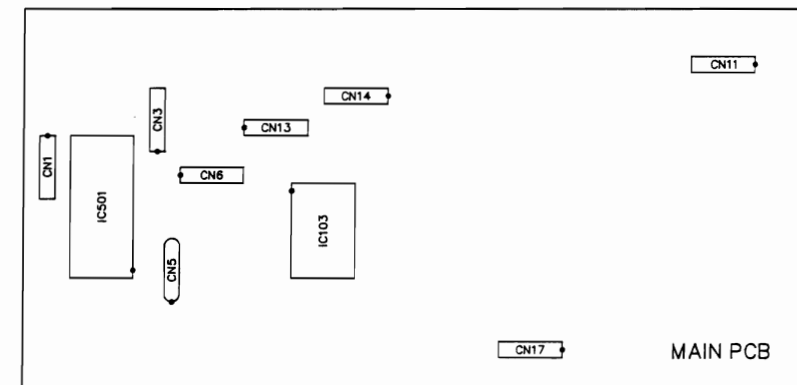
2



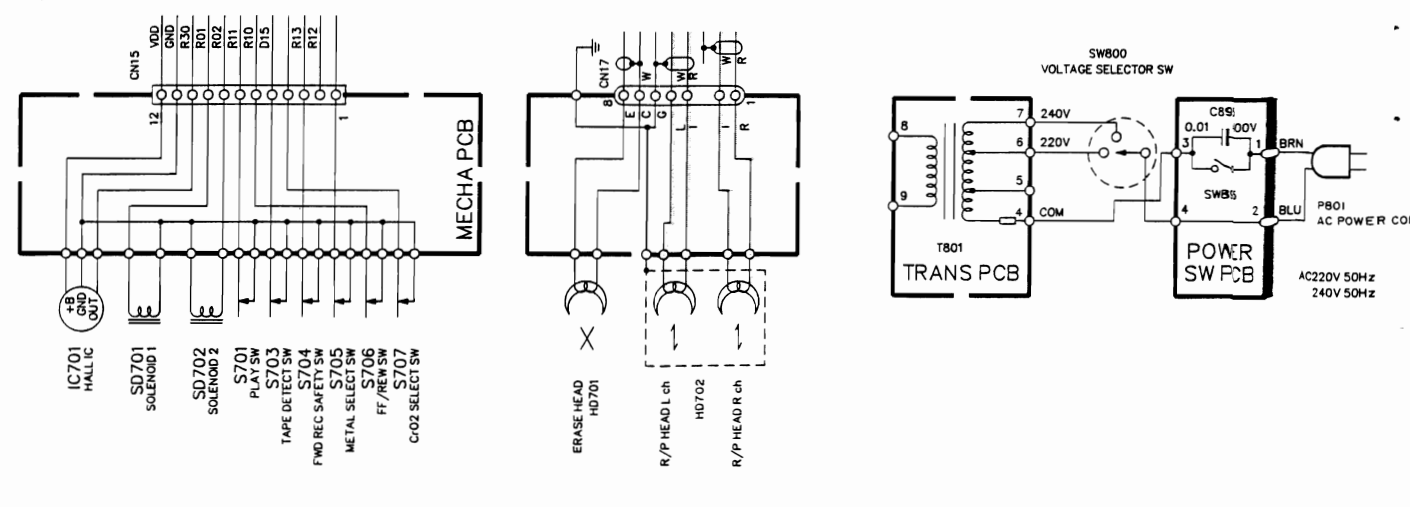
3



4



5



Electrical Parts List

Resistor : Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.
 Capacitor : μF = microfarads, pF = picofarads

| Abbreviations | | | | |
|-------------------------|---------------------|-------------------|--|--|
| RES. = Resistor | CAP. = Capacitor | | | |
| C.F. = Carbon Film | ELY. = Electrolytic | | | |
| M.F. = Metal Film | CER. = Ceramic | | | |
| M.O. = Metal Oxide Film | MYL. = Mylar | | | |
| M.P. = Metal Plate | TAN. = Tantalum | | | |
| CTM. = Cement Resistor | POLY. = Polystyrol | | | |
| TR. = Transistor | PP. = Polypropylene | | | |
| TRANS. = Transformer | PLT. = Polyethylene | | | |
| CP. = Chip | STR. = Styrene | | | |
| | M-PL. = M-Plastic | | | |
| Symbol No. | Part No. | Description | | |
| Main P. C. Board | | | | |
| IC's | | | | |
| IC101 | 51E05529S01 | μ PC1330HA | | |
| IC102 | 51T73021F02 | NJM2068SD | | |
| IC103 | 51E05539S01 | CX20187 | | |
| IC104 | 51E05531S01 | NJM4558S (D) | | |
| IC202 | 51T72929F01 | μ PC1297CA | | |
| IC203 | 51E05533S01 | TA75558S | | |
| IC205 | 51E05532S01 | NJU4066BD | | |
| IC501 | 51E05534S01 | TV1008 614042SK01 | | |
| IC502 | 51E05535S01 | PST523E | | |
| IC601 | 51E05536S01 | MC78M12CT | | |
| IC602 | 51T94884F04 | MC7812CT | | |
| IC603 | 51E05537S01 | MC78M06CT | | |
| Transistors | | | | |
| Q101 | 48E05541S01 | 2SD1012 | | |
| Q102 | 48E05541S01 | 2SD1012 | | |
| Q103 | 48T65363F02 | 2SA608 | | |
| or | 48E04785S03 | KTA1015 | | |
| Q104 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q105 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q107 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q108 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q109 | 48E05541S01 | 2SD1012 | | |
| Q110 | 48E05541S01 | 2SD1012 | | |
| Q111 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q112 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |

| Symbol No. | Part No. | Description | | |
|------------|-------------|-------------|--|--|
| Q113 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q114 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q115 | 48T65363F02 | 2SA608 | | |
| or | 48E04785S03 | KTA1015 | | |
| Q204 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q205 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q206 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q207 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q208 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q209 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q210 | 48T58776F02 | 2SD438 | | |
| Q211 | 48T65363F02 | 2SA608 | | |
| or | 48E04785S03 | KTA1015 | | |
| Q212 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q213 | 48T65363F02 | 2SA608 | | |
| or | 48E04785S03 | KTA1015 | | |
| Q214 | 48E05541S01 | 2SD1012 | | |
| Q215 | 48E05541S01 | 2SD1012 | | |
| Q216 | 48T65363F02 | 2SA608 | | |
| or | 48E04785S03 | KTA1015 | | |
| Q221 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q222 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q223 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q224 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q225 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q226 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q507 | 48E05541S01 | 2SD1012 | | |
| Q508 | 48E05542S01 | 2SC945 | | |
| or | 48E04784S04 | KTC1815 | | |
| Q510 | 48E05543S01 | 2SB808 | | |
| Q511 | 48E05543S01 | 2SB808 | | |

| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|--|--|--|--|--|--|---|---|--|--|
| Q512 or Q513 or Q518 or | 48E05542S01 48E04784S04 48E05542S01 48E04784S04 48E05542S01 48E04784S04 | 2SC945 KTC1815 2SC945 KTC1815 2SC945 KTC1815 | | | D603 or D604 or | 48S40477U02 48T44992F01 48S40477U02 48T44992F01 | 1N4002 DS135D 1N4002 DS135D | | |
| Q519 or Q520 or Q521 or | 48E05542S01 48E04784S04 48E05542S01 48E04784S04 48E05542S01 48E04784S04 | 2SC945 KTC1815 2SC945 KTC1815 2SC945 KTC1815 | | | Coils/Inductors | | | | |
| Q522 or Q845 or | 48T65363F02 48E04785S03 48E05542S01 48E04784S04 | 2SA608 KTA1015 2SC945 KTC1815 | | | L101 L102 L203 L204 L205 L206 L207 L208 L209 | 24E05523S01 24E05523S01 24E07997S01 24E07997S01 24E05525S01 24E05525S01 24E05526S01 24E05526S01 24E05527S01 | Coil 22mH Coil 22mH Coil 10mH Coil 10mH Coil 6mH Coil 6mH Inductor 12mH Inductor 12mH Coil 1.72mH | | |
| Diodes | | | | | Filters | | | | |
| D102 D103 D104 D201 or | 48E04616S01 48E04616S01 48E04616S01 48T40732F08 48T52739F15 | 1N4148 1N4148 1N4148 Zener, RD3.6E Zener, HZ3-C3 | | | FT101 FT102 | 91E05528S01 91E05528S01 | 10PD MPX 10PD MPX | | |
| D504 D506 or D508 or | 48E04616S01 48S40477U02 48T44992F01 48S40477U02 48T44992F01 | 1N4148 1N4002 DS135D 1N4002 DS135D | | | Jack | | | | |
| D510 D512 D521 or D522 or | 48E04616S01 48E04616S01 48T56372F21 48T52739F28 48S40477U02 48T44992F01 | 1N4148 1N4148 Zener, RD4.7E Zener, HZ5B-1 1N4002 DS135D | | | JK101 | 09E07996S01 | RCA Jack | | |
| D523 or D601 or D602 or | 48S40477U02 48T44992F01 48S40477U02 48T44992F01 48S40477U02 48T44992F01 | 1N4002 DS135D 1N4002 DS135D 1N4002 DS135D | | | Resonator | | | | |
| | | | | | X501 | 48E05503S01 | Resonator 4MHz | | |

| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|------------|-------------|------------------------|--|--|------------|-------------|-----------------------|--|--|
| Capacitors | | | | | C154 | 23E06052S02 | ELY., 330 μ F/10V | | |
| C101 | 21E04638S02 | CER., 470pF | | | C155 | 08E04735S09 | MYL., 0.022 μ F | | |
| C102 | 21E04638S02 | CER., 470pF | | | C156 | 08E04735S09 | MYL., 0.022 μ F | | |
| C103 | 21E04734S02 | CER., 680pF | | | C157 | 08E04735S10 | MYL., 2700pF | | |
| C104 | 21E04734S02 | CER., 680pF | | | C158 | 08E04735S10 | MYL., 2700pF | | |
| C105 | 23E04635S03 | ELY., 1 μ F/50V | | | C201 | 23E04635S08 | ELY., 2.2 μ F/50V | | |
| C106 | 23E04635S03 | ELY., 1 μ F/50V | | | C202 | 23E04635S08 | ELY., 2.2 μ F/50V | | |
| C107 | 21E04638S03 | CER., 100pF | | | C203 | 21E04638S10 | CER., 1000pF | | |
| C108 | 21E04638S03 | CER., 100pF | | | C204 | 21E04638S10 | CER., 1000pF | | |
| C109 | 21E04734S10 | CER., 100pF | | | C205 | 21E04734S08 | CER., 220pF | | |
| C110 | 21E04734S10 | CER., 100pF | | | C206 | 21E04734S08 | CER., 220pF | | |
| C111 | 08E04735S05 | MYL., 0.01 μ F | | | C207 | 21E05504S01 | CER., 0.047 μ F | | |
| C112 | 08E04735S05 | MYL., 0.01 μ F | | | C208 | 21E05504S01 | CER., 0.047 μ F | | |
| C113 | 23E04754S04 | ELY., 22 μ F/16V | | | C209 | 08E04735S09 | MYL., 0.022 μ F | | |
| C114 | 23E04754S04 | ELY., 22 μ F/16V | | | C210 | 08E04735S09 | MYL., 0.022 μ F | | |
| C115 | 23E04754S02 | ELY., 220 μ F/16V | | | C211 | 08E04735S09 | MYL., 0.022 μ F | | |
| C116 | 23E04754S02 | ELY., 220 μ F/16V | | | C212 | 08E04735S09 | MYL., 0.022 μ F | | |
| C117 | 23E04754S02 | ELY., 220 μ F/16V | | | C213 | 21E04638S09 | CER., 430pF | | |
| C118 | 21E05504S02 | CER., 0.01 μ F | | | C214 | 21E04638S09 | CER., 430pF | | |
| C119 | 23E04754S01 | ELY., 10 μ F/16V | | | C215 | 08E04735S05 | MYL., 0.01 μ F | | |
| C120 | 23E04754S01 | ELY., 10 μ F/16V | | | C216 | 08E04735S05 | MYL., 0.01 μ F | | |
| C121 | 08E04735S06 | MYL., 0.015 μ F | | | C217 | 23E04754S01 | ELY., 10 μ F/16V | | |
| C122 | 08E04735S06 | MYL., 0.015 μ F | | | C218 | 21E04734S01 | CER., 10pF | | |
| C123 | 23E04754S01 | ELY., 47 μ F/16V | | | C219 | 08E05505S01 | PP., 2200pF | | |
| C125 | 21E04734S11 | CER., 820pF | | | C220 | 08E05505S02 | PP., 1500pF | | |
| C126 | 21E04734S11 | CER., 820pF | | | C221 | 23E04754S03 | ELY., 100 μ F/16V | | |
| C131 | 08E04735S16 | MYL., 4700pF | | | C222 | 08E04735S05 | MYL., 0.01 μ F | | |
| C132 | 08E04735S16 | MYL., 4700pF | | | C223 | 08E04735S12 | MYL., 6800pF | | |
| C133 | 23E04635S04 | ELY., 0.47 μ F/50V | | | C224 | 08E04735S05 | MYL., 0.01 μ F | | |
| C134 | 23E04635S04 | ELY., 0.47 μ F/50V | | | C227 | 21E04734S09 | CER., 1000pF | | |
| C135 | 08E05500S01 | MYL., 0.15 μ F | | | C228 | 21E04734S09 | CER., 1000pF | | |
| C136 | 08E05500S01 | MYL., 0.15 μ F | | | C229 | 23E04754S01 | ELY., 10 μ F/16V | | |
| C137 | 08E04735S06 | MYL., 0.015 μ F | | | C230 | 23E04754S01 | ELY., 10 μ F/16V | | |
| C138 | 08E04735S06 | MYL., 0.015 μ F | | | C231 | 08E05500S06 | MYL., 0.082 μ F | | |
| C139 | 23E04635S05 | ELY., 0.22 μ F/50V | | | C232 | 08E05500S06 | MYL., 0.082 μ F | | |
| C140 | 23E04635S05 | ELY., 0.22 μ F/50V | | | C233 | 08E04735S15 | MYL., 1800pF | | |
| C141 | 08E05500S03 | MYL., 0.068 μ F | | | C234 | 08E04735S15 | MYL., 1800pF | | |
| C142 | 08E05500S03 | MYL., 0.068 μ F | | | C235 | 23E04754S01 | ELY., 10 μ F/16V | | |
| C143 | 08E05500S05 | MYL., 0.047 μ F | | | C236 | 23E04754S01 | ELY., 10 μ F/16V | | |
| C144 | 08E05500S05 | MYL., 0.047 μ F | | | C237 | 08E04735S08 | MYL., 5600pF | | |
| C145 | 08E04735S12 | MYL., 6800pF | | | C238 | 08E04735S08 | MYL., 5600pF | | |
| C146 | 08E04735S12 | MYL., 6800pF | | | C241 | 08E04735S13 | MYL., 3300pF | | |
| C147 | 08E04735S05 | MYL., 0.01 μ F | | | C242 | 08E04735S13 | MYL., 3300pF | | |
| C148 | 08E04735S05 | MYL., 0.01 μ F | | | C243 | 08E04735S15 | MYL., 1800pF | | |
| C151 | 23E04754S01 | ELY., 10 μ F/16V | | | C244 | 08E04735S15 | MYL., 1800pF | | |
| C152 | 23E04635S07 | ELY., 4.7 μ F/50V | | | C245 | 08E04735S18 | MYL., 1500pF | | |
| | | | | | C246 | 08E04735S18 | MYL., 1500pF | | |
| | | | | | C247 | 08E04735S08 | MYL., 5600pF | | |
| | | | | | C248 | 08E04735S08 | MYL., 5600pF | | |
| | | | | | C249 | 23E04754S03 | ELY., 100 μ F/16V | | |

| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|------------|-------------|------------------------|--|--|----------------------|-------------|----------------------------------|--|--|
| C250 | 23E04754S01 | ELY., 10 μ F/16V | | | VR102 | 18E05510S01 | Semi-fixed 500B | | |
| C251 | 23E04754S04 | ELY., 22 μ F/16V | | | or | 18E05511S01 | Semi-fixed 500B | | |
| C252 | 23E04754S04 | ELY., 22 μ F/16V | | | VR203 | 18E05510S06 | Semi-fixed 30kB | | |
| C261 | 23E04635S07 | ELY., 4.7 μ F/50V | | | or | 18E05511S06 | Semi-fixed 30kB | | |
| C262 | 23E04635S07 | ELY., 4.7 μ F/50V | | | VR204 | 18E05510S06 | Semi-fixed 30kB | | |
| | | | | | or | 18E05511S06 | Semi-fixed 30kB | | |
| C271 | 23E04635S03 | ELY., 1 μ F/50V | | | VR205 | 18E05510S02 | Semi-fixed 5kB | | |
| C272 | 23E04635S03 | ELY., 1 μ F/50V | | | or | 18E05511S02 | Semi-fixed 5kB | | |
| C277 | 21E04734S05 | CER., 560pF | | | VR206 | 18E05510S02 | Semi-fixed 5kB | | |
| C278 | 21E04734S05 | CER., 560pF | | | or | 18E05511S02 | Semi-fixed 5kB | | |
| C279 | 21E04631S01 | CER., 0.01 μ F | | | VR207 | 18E05510S02 | Semi-fixed 5kB | | |
| | | | | | or | 18E05511S02 | Semi-fixed 5kB | | |
| C301 | 23E04635S08 | ELY., 2.2 μ F/50V | | | VR208 | 18E05510S02 | Semi-fixed 5kB | | |
| C302 | 23E04635S08 | ELY., 2.2 μ F/50V | | | or | 18E05511S02 | Semi-fixed 5kB | | |
| C303 | 23E04635S08 | ELY., 2.2 μ F/50V | | | VR209 | 18E05510S03 | Semi-fixed 50kB | | |
| C304 | 23E04635S08 | ELY., 2.2 μ F/50V | | | or | 18E05511S03 | Semi-fixed 50kB | | |
| C305 | 23E04754S05 | ELY., 47 μ F/16V | | | VR210 | 18E05510S03 | Semi-fixed 50kB | | |
| | | | | | or | 18E05511S03 | Semi-fixed 50kB | | |
| C306 | 23E06052S03 | ELY., 100 μ F/10V | | | VR845 | 18E05929S01 | Semi-fixed 2kB | | |
| C415 | 23E04754S01 | ELY., 10 μ F/16V | | | or | 18E05930S01 | Semi-fixed 2kB | | |
| C416 | 23E04754S01 | ELY., 10 μ F/16V | | | | | | | |
| C501 | 21E04736S06 | CER., 30pF | | | | | | | |
| C502 | 21E04736S06 | CER., 30pF | | | | | | | |
| | | | | | | | | | |
| C503 | 23E04754S03 | ELY., 100 μ F/16V | | | | | | | |
| C506 | 08E04735S11 | MYL., 2200pF | | | | | | | |
| C507 | 23E04754S08 | ELY., 33 μ F/16V | | | | | | | |
| C508 | 23E04731S02 | ELY., 10 μ F/35V | | | | | | | |
| C510 | 23E04754S05 | ELY., 47 μ F/16V | | | | | | | |
| | | | | | | | | | |
| C511 | 23E04754S05 | ELY., 47 μ F/16V | | | | | | | |
| C601 | 21E05506S01 | CER., 0.047 μ F | | | | | | | |
| C603 | 23E04636S03 | ELY., 3300 μ F/25V | | | | | | | |
| C604 | 23E04754S06 | ELY., 470 μ F/16V | | | | | | | |
| C605 | 23E04754S07 | ELY., 4700 μ F/16V | | | | | | | |
| | | | | | | | | | |
| C606 | 23E06052S03 | ELY., 100 μ F/10V | | | | | | | |
| C607 | 21E04631S04 | CER., 0.047 μ F | | | | | | | |
| C608 | 23E04635S03 | ELY., 1 μ F/50V | | | | | | | |
| | | | | | | | | | |
| Resistors | | | | | Power SW P. C. Board | | | | |
| R131 | 06E05508S03 | C.F., 1K ohm 1/2W | | | Capacitor/Switch | | | | |
| R181 | 06E05508S04 | C.F., 100 ohm 1/2W | | | C895 | 08E04663S01 | CAP., Line, 0.01 μ F/400V | | |
| R224 | 06E05508S05 | C.F., 30 ohm 1/2W | | | SW895 | 40E04667S01 | Switch. Push (Power) | | |
| R246 | 06E05508S02 | C.F., 220 ohm 1/2W | | | | | | | |
| R309 | 06E05508S06 | C.F., 180 ohm 1/2W | | | | | | | |
| | | | | | | | | | |
| R545 | 06E05508S03 | C.F., 1K ohm 1/2W | | | Meter P. C. Board | | | | |
| R601 | 06E05509S01 | Fuse 2.2 ohm 1/4W | | | IC | | | | |
| R602 | 06E05546S01 | Fuse 2.2 ohm 1/2W | | | IC815 | 51E05538S01 | TA7666P | | |
| R603 | 06E05509S03 | Fuse 13 ohm 1/4W | | | or | 51E05547S01 | KIA7666P | | |
| VR101 | 18E05510S01 | Semi-fixed 500B | | | | | | | |
| or | 18E05511S01 | Semi-fixed 500B | | | | | | | |

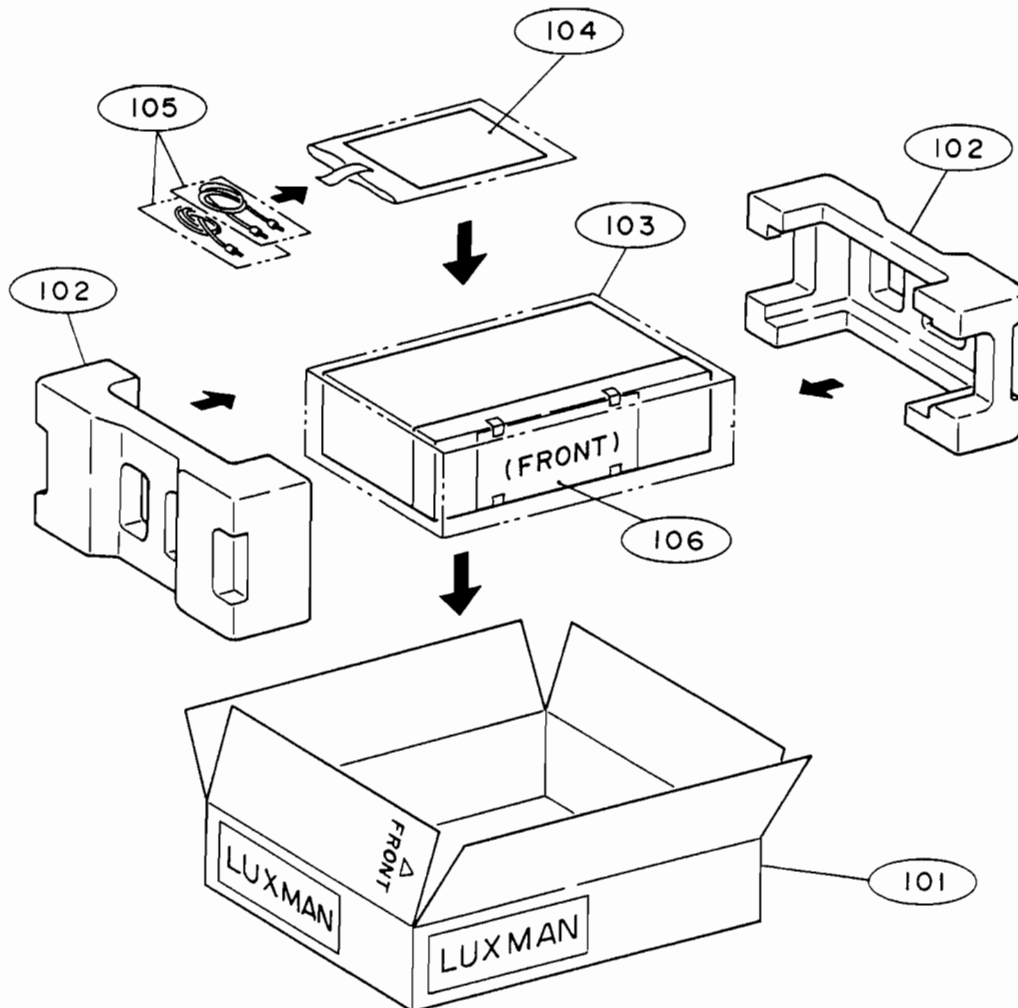
| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|---|---|--|--|--|--|--|--|--|--|
| Transistors | | | | | Capacitors | | | | |
| Q815 or Q816 or | 48E05542S01 48E04784S04 48E05542S01 48E04784S04 | 2SC945 KTC1815 2SC945 KTC1815 | | | C815 C816 C817 C818 C819 | 23E04635S10 23E04635S10 23E04635S04 23E04635S04 23E04635S10 | ELY., 10 μ F/16V ELY., 10 μ F/16V ELY., 0.47 μ F/50V ELY., 0.47 μ F/50V ELY., 10 μ F/16V | | |
| LED's | | | | | Resistors | | | | |
| LD815 LD816 LD817 LD818 LD819 LD820 LD821 LD822 LD823 LD824 LD825 LD826 LD871 LD872 LD873 LD874 LD875 | 48E05928S01 48E05928S01 48E05928S01 48E05928S01 48E08062S01 48E08062S01 48E08062S01 48E08062S01 48E08062S01 48E08062S01 48E08062S01 48E08062S01 48E05512S01 48E05513S01 48E05514S01 48E05513S01 48E05513S01 | SLR-56DC3F (Orange) SLR-56DC3F (Orange) SLR-56DC3F (Orange) SLR-56MC3F (Green) SLR-56MC3F (Green) SLR-56MC3F (Green) SLR-56MC3F (Green) SLR-56MC3F (Green) SLR-56MC3F (Green) SLR-40MG3F (Green) SLR-40DU3F (Orange) SLR-40VR3F (Red) SLR-40DU3F (Orange) SLR-40DU3F (Orange) | | | VR815 or VR816 or | 18E05510S04 18E05511S04 18E05510S04 18E05511S04 | Semi-fixed 20kB Semi-fixed 20kB Semi-fixed 20kB Semi-fixed 20kB | | |
| | | | | | Dolby SW P. C. Board | | | | |
| | | | | | Switches | | | | |
| | | | | | SW855 or SW856 or | 40E05516S01 40E05516S02 40E05516S01 40E05516S02 | Switch, Push (Dolby ON/OFF) Switch, Push Switch, Push (Dolby B/C) Switch, Push | | |
| | | | | | Control P. C. Board | | | | |
| | | | | | Switches | | | | |
| | | | | | SW860 SW861 SW862 SW864 SW865 SW866 | 40E08063S01 40E08063S01 40E08063S01 40E08063S01 40E08063S01 40E08063S01 | Switch, Key (PLAY) Switch, Key (PAUSE) Switch, Key (REC) Switch, Key (REW) Switch, Key (STOP) Switch, Key (FF) | | |

| Symbol No. | Part No. | Description | | | Symbol No. | Part No. | Description | | |
|------------------------------|-------------|-----------------------|--|--|----------------------|-------------|--|--|--|
| Headphone P. C. Board | | | | | Miscellaneous | | | | |
| IC | | | | | IC701 | 51E05436S01 | Hall IC LB9050TN for Mechanism | | |
| IC801 | 51E05540S01 | NJM4556S | | | M701 | 59E08255S01 | Motor | | |
| | | | | | P801 | 28E04687S01 | AC power Cord | | |
| | | | | | HD701 | 88E08253S01 | E Head Deck | | |
| | | | | | HD702 | 88E08254S01 | R/P Head, Deck | | |
| Transistors | | | | | S701 | 40E05434S01 | Switch, Leaf, (PLAY) for Mechanism | | |
| Q801 | 48E05541S01 | 2SD1012 (D) | | | S703 | 40E05435S01 | Switch, Leaf, (Tape Detect) for Mechanism | | |
| Q802 | 48E05541S01 | 2SD1012 (D) | | | S704 | 40E05433S01 | Switch, Leaf, (FWD REC Safety) for Mechanism | | |
| Jack | | | | | S705 | 40E05433S01 | Switch, Leaf (Metal Select) for Mechanism | | |
| JK801 | 09E05518S01 | Jack 6.3 | | | S706 | 40E05435S01 | Switch, Leaf, (FF/REWIND) for Mechanism | | |
| Capacitors | | | | | S707 | 40E05433S01 | Switch, Leaf, (CrO2 Select) for Mechanism | | |
| C801 | 23E04754S03 | ELY., 100 μ F/16V | | | SD701 | 01E05399S01 | Solenoid 1 for Mechanism | | |
| C802 | 23E04754S03 | ELY., 100 μ F/16V | | | SD702 | 01E05399S01 | Solenoid 2 for Mechanism | | |
| C803 | 23E04635S08 | ELY., 2.2 μ F/50V | | | T801 | 25E05931S01 | TRANS., Power EI54 120/220/240V | | |
| C804 | 23E04635S08 | ELY., 2.2 μ F/50V | | | SW800 | 40E08064S01 | Switch, Voltage Selector | | |
| C805 | 21E04638S03 | CER., 100pF | | | | | | | |
| C806 | 21E04638S03 | CER., 100pF | | | | | | | |
| C807 | 23E04635S03 | ELY., 1 μ F/50V | | | | | | | |
| C808 | 23E04635S03 | ELY., 1 μ F/50V | | | | | | | |
| C809 | 23E04754S05 | ELY., 47 μ F/16V | | | | | | | |
| Resistors | | | | | | | | | |
| VR801 | 18E05520S01 | Rotary VR 50KB | | | | | | | |
| or | 18E05520S02 | Rotary VR 50KB | | | | | | | |
| VR802 | 18E08065S01 | Rotary VR 50KB | | | | | | | |
| or | 18E08065S02 | Rotary VR 50KB | | | | | | | |

Packing Assembly Parts List

| Symbol No. | Part No. | Description | Symbol No. | Part No. | Description |
|------------|-------------|-----------------------|------------|-------------|------------------|
| 101 | 56E08233S01 | Carton, Packing (IND) | 106 | 56E08308S01 | PKG, Front Flame |
| 102 | 56E05497S01 | Tray, Packing (L, R) | | | |
| 103 | 56E05498S01 | Bag, High Polyester | | | |
| 104 | 68P96552F73 | Owner's Manual | | | |
| 105 | 28E04778S02 | Cord, Partch | | | |

Packing Method View



Cabinet Assembly Parts List

Note: The parts without part number are not supplied.

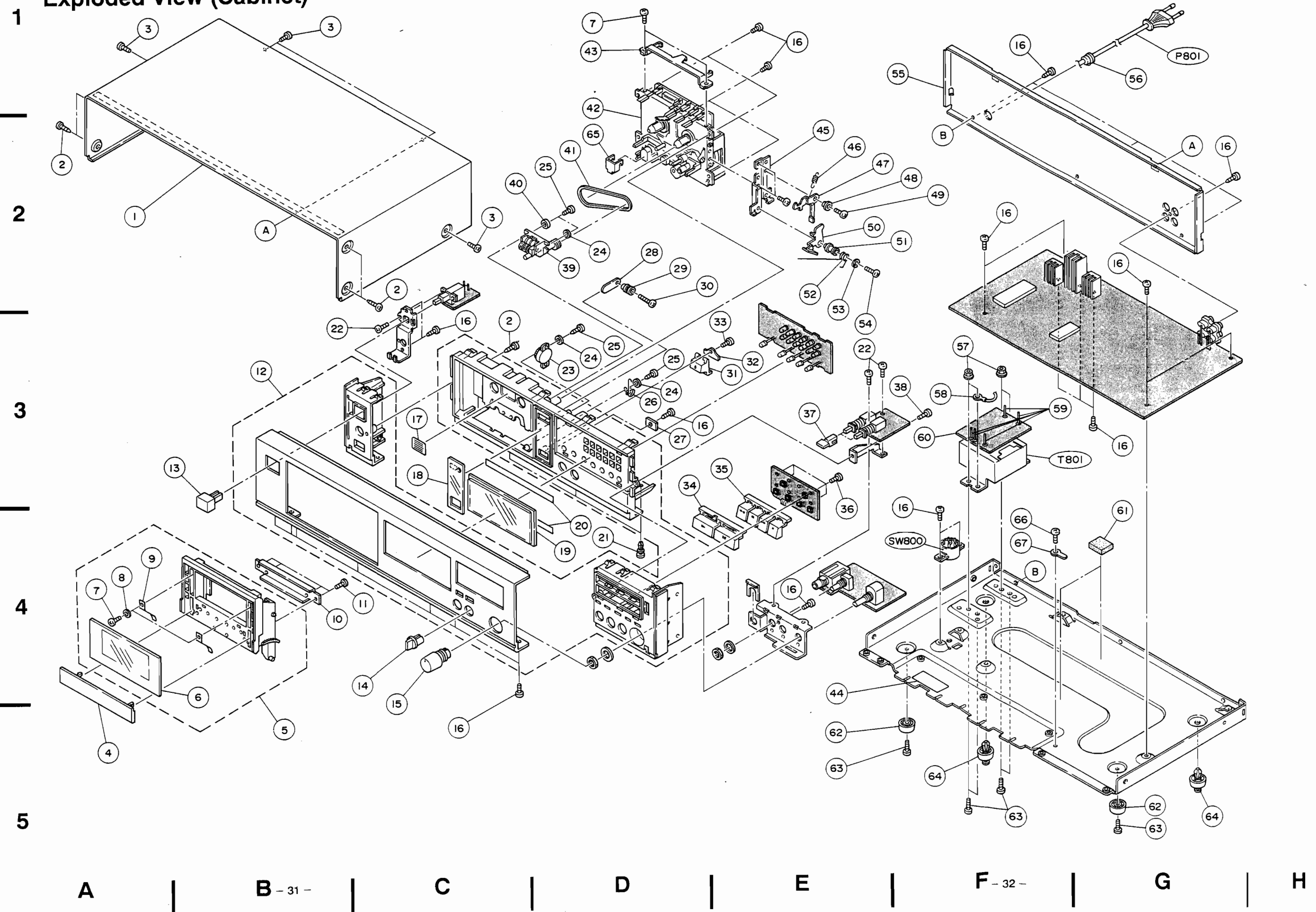
| Symbol No. | Index | Part No. | Description | | | Symbol No. | Index | Part No. | Description | | |
|------------|-------|-------------|---------------------------|--|--|------------|-------|-------------|--------------------------|--|--|
| 1 | 2-A | 15E08074S01 | Cabinet, Top | | | 36 | 4-E | 03E05066S03 | Screw, Taptite (M2 x 8) | | |
| 2 | | 03E04701S04 | Screw, Taptite (M3 x 10) | | | 37 | 3-E | 36E04672S01 | Knob, Dolby | | |
| 3 | | 03E04702S09 | Screw, Taptite (M3 x 6) | | | 38 | 3-F | 03E04701S04 | Screw, Taptite (M3 x 10) | | |
| 4 | 5-A | 64E08256S01 | Plate, Door | | | 39 | 2-D | 72E05466S01 | Counter | | |
| 5 | 5-B | 15E08071S01 | Assy., Door | | | 40 | 2-C | 43E07210S01 | Coller | | |
| 6 | 4-B | 64E08257S01 | Window, Door | | | 41 | 2-D | 42E05491S01 | Belt | | |
| 7 | | 03E05066S02 | Screw, Taptite (M2 x 5) | | | 42 | 1-D | 81E08066S01 | Assy., Tape, Mechanism | | |
| 8 | 4-A | 04E05465S01 | Washer, (M2) | | | 43 | 1-D | 07E08262S01 | Holder | | |
| 9 | | 41E05448S01 | Spring, Leaf | | | 44 | 5-E | 14E08306S01 | Sheet, Insulation | | |
| 10 | 4-B | 07E05451S01 | Cover | | | 45 | 2-E | 07E05480S01 | Holder, Base | | |
| 11 | 4-C | 03E04701S03 | Screw, Taptite (M2.6 x 8) | | | 46 | 2-E | 41E05481S01 | Spring, Coil | | |
| 12 | 3-B | 64E08068S01 | Assy., Panel Front | | | 47 | 2-E | 07E05483S01 | Lever, Door Look | | |
| 13 | 3-B | 36E04673S01 | Knob, Power | | | 48 | 2-F | 46E05487S01 | Stud | | |
| 14 | 4-C | 36E05461S01 | Knob, Level | | | 49 | 2-F | 03E05490S01 | Screw (M2 x 4) | | |
| 15 | 5-C | 36E04677S01 | Knob, Rec Level | | | 50 | 2-E | 07E05485S01 | Lever, Eject | | |
| 16 | | 03E04701S01 | Screw, Taptite (M3 x 8) | | | 51 | 2-F | 43E05489S01 | Spacer | | |
| 17 | 3-C | 64E05445S01 | Mirror, Cassette | | | 52 | 2-E | 41E05493S01 | Spring, Torsion | | |
| 18 | 3-C | 64E08258S01 | Plate, Indication | | | 53 | 3-E | 04E05494S01 | E-ring | | |
| 19 | 4-D | 64E08259S01 | Window | | | 54 | 3-E | 03E05490S03 | Screw (M2 x 12) | | |
| 20 | 4-D | 75E08260S01 | Cushion | | | ● 55 | 1-F | 15E08263S01 | Panel, Back | | |
| 21 | 4-D | 05E04709S02 | Rivet, Nylon | | | ○ 55 | 1-F | 15E08264S01 | Panel, Back | | |
| 22 | | 03E04775S02 | Screw, Taptite (M3 x 6) | | | 56 | 1-G | 43E04688S01 | Bushing, Cord | | |
| 23 | 3-D | 01E08072S01 | Assy., Damper | | | 57 | 3-F | 02E05471S01 | Nut, Flange | | |
| 24 | | 04E05467S01 | Washer, (M2.6) | | | 58 | 3-F | 29E04693S01 | Lug | | |
| 25 | | 03E04701S06 | Screw, Taptite (M2.6 x 6) | | | 59 | 3-F | 29E08100S01 | Terminal, Pin | | |
| 26 | 3-D | 41E05452S01 | Spring, Torsion | | | 60 | 3-F | 84E08281S01 | PCB 31 | | |
| 27 | 3-D | 07E05455S01 | Holder, Door | | | 61 | 4-G | 75E05472S01 | Cution | | |
| 28 | 2-D | 07E05486S01 | Slider | | | 62 | | 75E04521S01 | Foot, Front | | |
| 29 | 2-D | 43E05488S01 | Spacer | | | 63 | | 03E04702S06 | Screw, Taptite (M4 x10) | | |
| 30 | 2-D | 03E05490S02 | Screw, (M2 x 10) | | | 64 | | 75E04678S01 | Foot, Back | | |
| 31 | 3-E | 36E05468S02 | Knob, Eject | | | 65 | 2-D | 07E08307S01 | Shield, Cover | | |
| 32 | 3-E | 07E08261S01 | Holder | | | 66 | 4-F | 03E08004S01 | Screw, Taptite (M3 x 6) | | |
| 33 | 3-E | 03E05066S04 | Screw, Taptite (M2.6 x 6) | | | 67 | 4-F | 29E04693S01 | Lug | | |
| 34 | 3-D | 36E08070S01 | Knob, Play/Pause | | | | | | | | |
| 35 | 3-E | 36E06178S01 | Knob, Rew/Stop/FF/Rec | | | | | | | | |

Note ● : For West Germany model only (AD)

○ : For General Foreign model only (EK)

Others Common

Exploded View (Cabinet)



Exploded View (Cassette Deck)

1

2

3

4

5

A

B

C

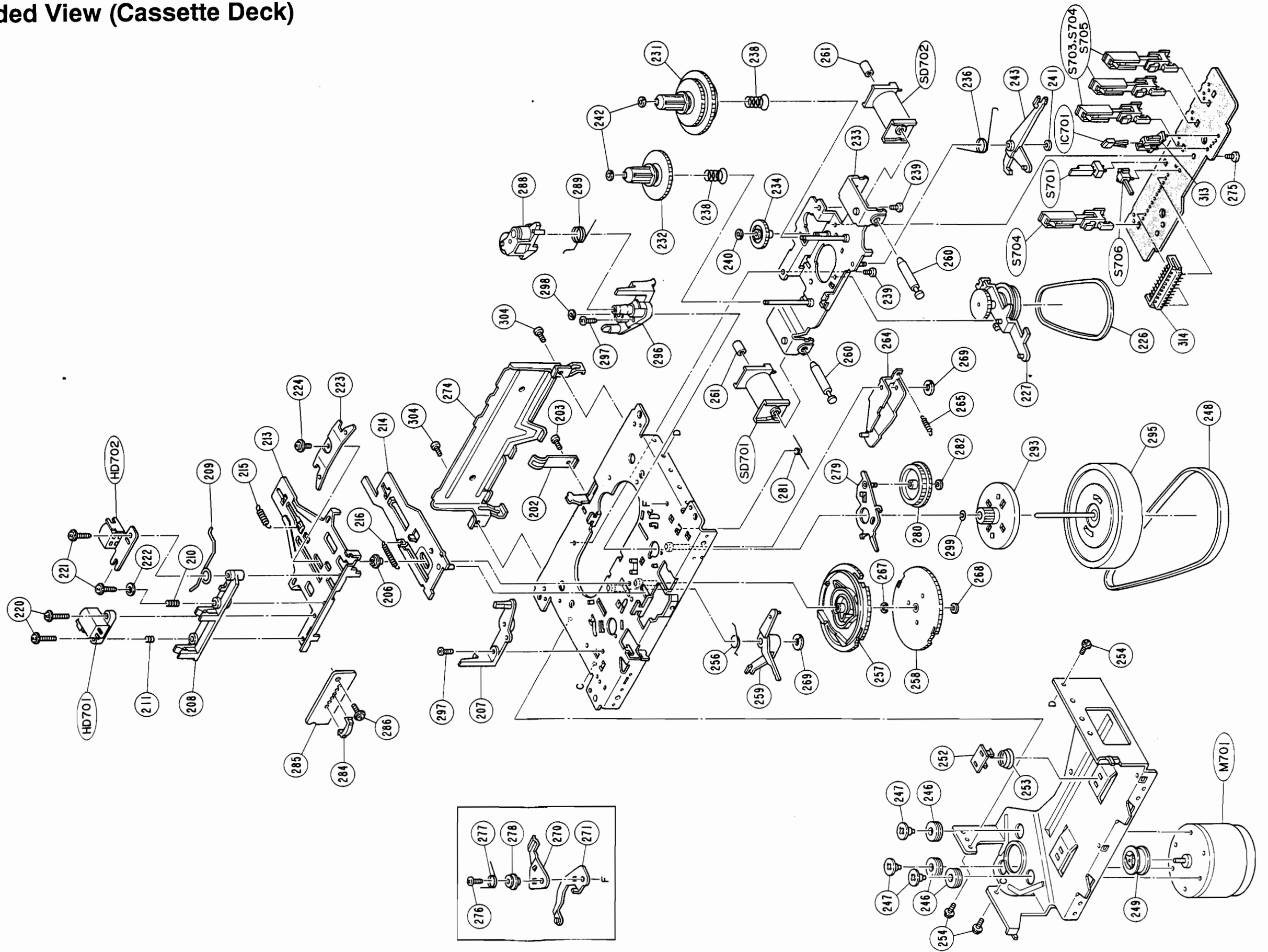
D

E

F

G

H



Cassette Deck Assembly Parts List

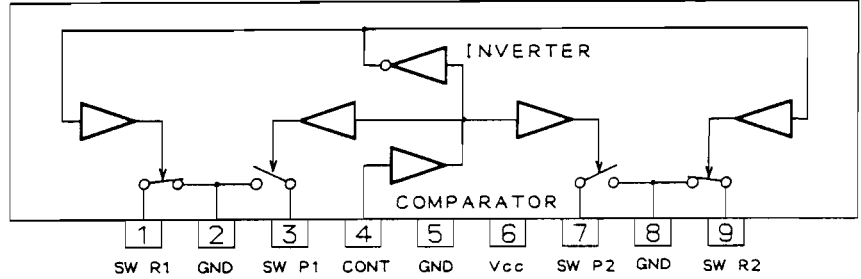
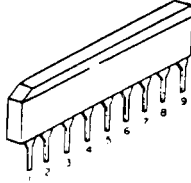
Note: The parts without part number are not supplied.

| Symbol No. | Index | Part No. | Description | Symbol No. | Index | Part No. | Description |
|------------|-------|-------------|-----------------------------|------------|-------|-------------|--------------------------------|
| 202 | 3-D | 41E05346S01 | Spring, Pack | 253 | 5-F | 41E05387S01 | Spring, Damper |
| 203 | 3-D | 03E05347S01 | Screw, Tapping, (M2 x 3) | 254 | | 03E05388S01 | Screw, Tams (M2 x 4) |
| 206 | 4-C | 43E08234S01 | Collar, Panel (A) | 256 | 4-E | 41E05389S01 | Spring, M Trigger |
| 207 | 4-D | 45E08238S01 | Guide, Tape | 257 | 4-F | 44E05390S01 | M Gear |
| 208 | 4-B | 01E08239S01 | Head, Base | 258 | 4-F | 44E05391S01 | Gear, RF Cam |
| 209 | 3-B | 41E08242S01 | Spring, Pinch Roller | 259 | 4-E | 45E05392S01 | Arm, M Trigger |
| 210 | 3-B | 41E08243S01 | Spring, Azimuth | 260 | | 47E05393S01 | Plunger |
| 211 | 4-B | 41E08244S01 | Spring, EH | 261 | | 43E05394S01 | Holder, Plunger |
| 213 | 3-C | 15E08248S01 | Head, Panel (A) | 264 | 2-F | 01E05397S01 | Ass'y, P Kick Lever |
| 214 | 3-C | 15E05357S01 | Head, Panel (B) | 265 | 3-F | 41E05398S01 | Spring, PK Lever |
| 215 | 3-B | 41E08245S01 | Spring, RC | 267 | 4-F | 04E05400S01 | E Ring ø2.0 |
| 216 | 3-C | 41E08246S01 | Spring, Panel | 268 | 4-F | 04E05401S01 | HL Washer, (M1.55) |
| 220 | 4-A | 03E08236S01 | Screw, (M2 x 11) | 269 | | 04E05378S01 | HL Washer, (M2.1) |
| 221 | 3-B | 03E08237S01 | Screw, (M2 x9.5) | 270 | 5-D | 07E05441S01 | E Stopper A (F) |
| 222 | 3-B | 04E08249S01 | Washer, BS (M2.1) | 271 | 5-D | 07E05442S01 | E Stopper B (F) |
| 223 | 3-C | 41E08247S01 | Spring, Plate | 274 | 3-C | 15E05405S01 | Protector, SW |
| 224 | 3-C | 03E05366S01 | Screw, Tapping (M2 x 5) | 275 | 2-G | 03E05406S01 | Screw, (M2 x 5) |
| 226 | 2-G | 42E05368S01 | RF, Belt | 276 | 5-D | 03E08235S01 | Screw, (M2 x 5) |
| 227 | 3-F | 01E08240S01 | Ass'y, RF Clutch | 277 | 5-D | 41E05408S01 | Spring, E Stopper |
| 231 | 1-E | 01E05370S01 | Ass'y, T Reel (F) | 278 | 5-D | 43E05409S01 | Collar, E Stopper |
| 232 | 2-E | 01E08241S01 | Ass'y, S Reel | 279 | 3-E | 01E05410S01 | Ass'y, T Gear Arm |
| 233 | 2-F | 01E05372S01 | Ass'y, Reel Base | 280 | 3-F | 44E08251S01 | T Gear |
| 234 | 2-E | 44E05373S01 | Gear, FF | 281 | 3-E | 41E05412S01 | Spring, TG Arm |
| 236 | 1-F | 41E05374S01 | Spring, FR Trigger Arm | 282 | 3-F | 04E05377S01 | P Washer, (M1.2) |
| 238 | | 41E05375S01 | Spring, (R) B.T | 284 | 4-C | 43E05355S01 | Wire, Clamp |
| 239 | 2-F | 03E05376S01 | Screw, Tapping (M2 x 4) | 285 | 4-C | 84E05439S01 | Relay, Board |
| 240 | 2-E | 04E05377S01 | P Washer, (M1.2) | 286 | 4-C | 03E05365S01 | Screw, (M2 x 5) |
| 241 | 1-G | 04E08250S01 | P Washer, (M2.1) | 288 | 2-D | 01E05416S01 | Ass'y, Pinch Roller Arm (F) |
| 242 | 1-D | 04E05379S01 | HL Washer, (M1.4) | 289 | 2-D | 41E05417S01 | Spring, P Arm |
| 243 | 1-F | 45E05380S01 | Arm, RF Trigger | 293 | 3-F | 44E05420S01 | Gear, FL |
| 246 | 5-F | 75E05381S01 | Motor, Rubber | 295 | 3-G | 49E05422S01 | Ass'y Flywheel (F) |
| 247 | 5-F | 03E05382S01 | Screw, Motor Collar | 296 | 3-D | 01E05423S01 | Ass'y FL Metal, (F) |
| 248 | 3-G | 42E08252S01 | Belt, Main | 297 | | 03E05424S01 | Screw, (M2 x 6) |
| 249 | 5-G | 49E05384S01 | Pulley, Motor | 298 | 2-D | 04E05425S01 | Washer (M2.1) (Nylon) |
| 252 | 4-F | 07E05386S01 | FL Patch, Plate | 299 | 3-F | 04E08282S01 | HL Washer (M2.3) |

| Symbol No. | Index | Part No. | Description | | | Symbol No. | Index | Part No. | Description | | |
|------------|-------|-------------|----------------------------|--|--|------------|-------|----------|-------------|--|--|
| 304 | | 03E05376S01 | Screw, Tapping (M2 x 4) | | | | | | | | |
| 313 | 2-G | 48E05437S01 | IC, Protector | | | | | | | | |
| 314 | 2-G | 09E05443S01 | Connector, TXL- P 12PM1 | | | | | | | | |

Semi-Conductor Lead Identifications

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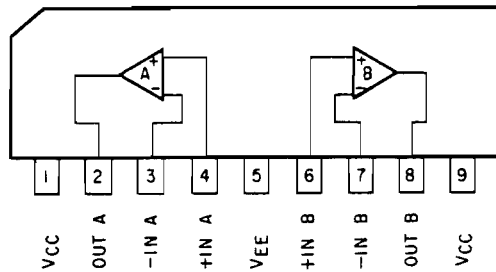
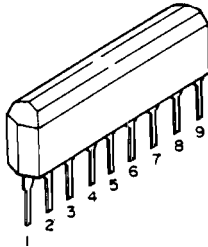


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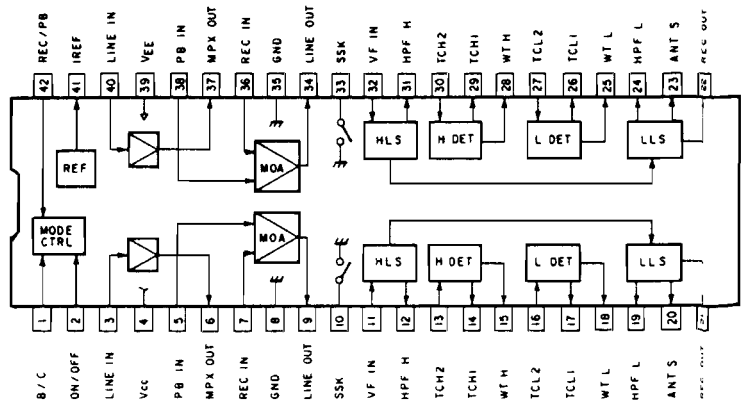
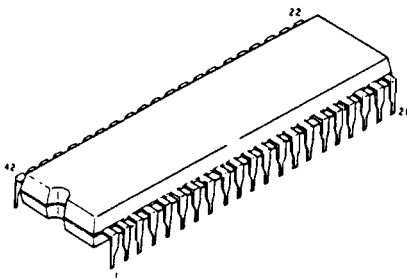
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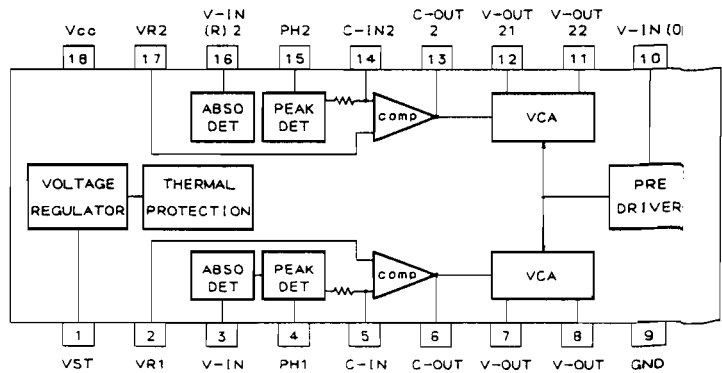
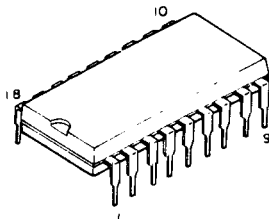
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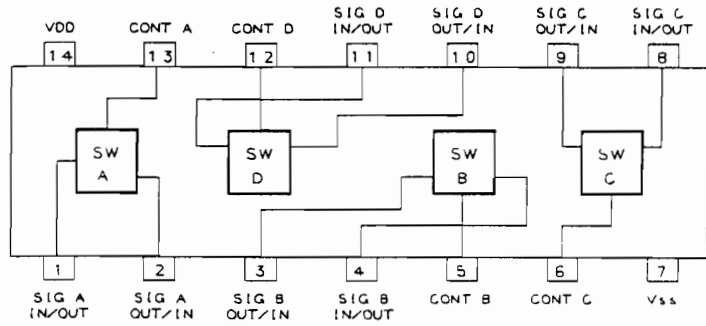
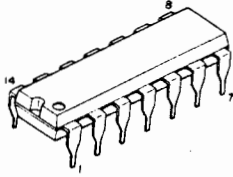
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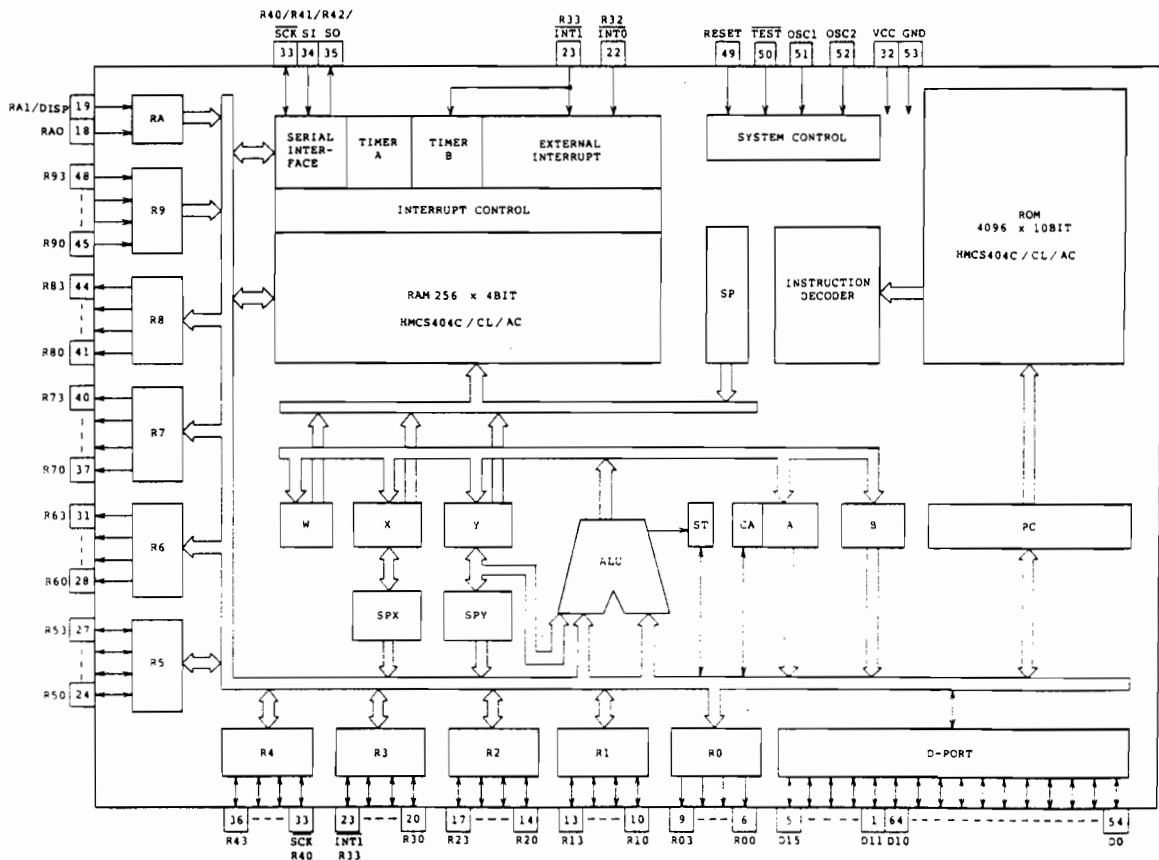
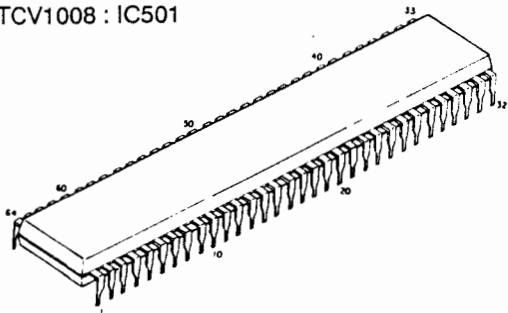
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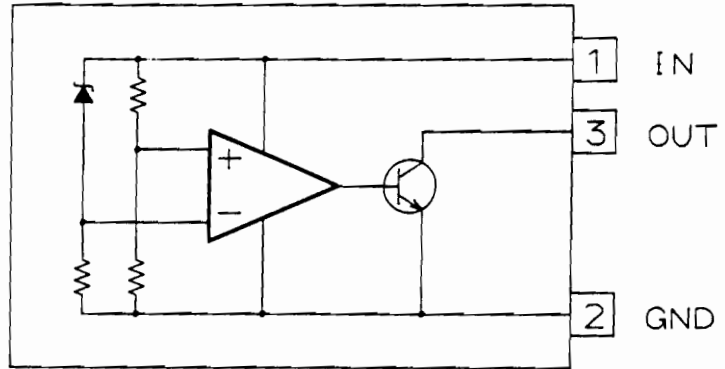
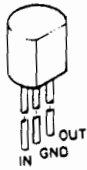
NJU4066B : IC205



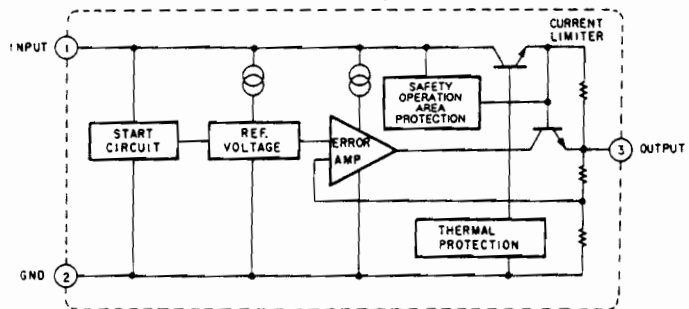
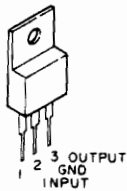
TCV1008 : IC501



PST523E : IC502



MC7812CT : IC602
 MC78M12CT : IC601
 MC78M06CT : IC603



TA7666P : IC815

