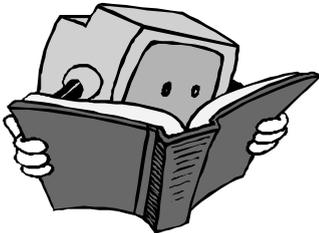


HITACHI

SM0094



SERVICE MANUAL MANUEL D'ENTRETIEN WARTUNGSHANDBUCH

AXM7E
AXM7EBS
AXM7UC
AXM7W
AXM7WUN

CAUTION:

Before servicing this chassis, it is important that the service technician read the "Safety Precautions" and "Product Safety Notices" in this service manual.

ATTENTION:

Avant d'effectuer l'entretien du châassis, le technicien doit lire les «Précautions de sécurité» et les «Notices de sécurité du produit» présentés dans le présent manuel.

VORSICHT:

Vor Öffnen des Gehäuses hat der Service-Ingenieur die „Sicherheitshinweise“ und „Hinweise zur Produktsicherheit“ in diesem Wartungshandbuch zu lesen.

CD MECHANISM RD-DRL008-M
MD MECHANISM MDM-98X

Data contained within this Service manual is subject to alteration for improvement.

Les données fournies dans le présent manuel d'entretien peuvent faire l'objet de modifications en vue de perfectionner le produit.

Die in diesem Wartungshandbuch enthaltenen Spezifikationen können sich zwecks Verbesserungen ändern.



November 1999

SAFETY PRECAUTIONS

WARNING: The following precautions must be observed.

ALL PRODUCTS

1. Before any service is performed on the chassis an isolation transformer should be inserted between the power line and the product.
2. When replacing the chassis in the cabinet, ensure all the protective devices are put back in place.
3. When service is required, observe the original lead dressing. Extra precaution should be taken to ensure correct lead dressing in any high voltage circuitry area.
4. Many electrical and mechanical parts in HITACHI products have special safety related characteristics. These characteristics are often not evident from visual inspection, nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified by marking with a  on the schematics and the replacement parts list.

The use of a substitute replacement component that does not have the same safety characteristics as the HITACHI recommended replacement one, shown in the parts list, may create electrical shock, fire, X-radiation, or other hazards.

5. Always replace original spacers and maintain lead lengths. Furthermore, where a short circuit has occurred, replace those components that indicate evidence of overheating.
6. Insulation resistance should not be less than 2M ohms at 500V DC between the main poles and any accessible metal parts.
7. No flashover or breakdown should occur during the dielectric strength test, applying 3kV AC or 4.25kV DC for two seconds between the main poles and accessible metal parts.
8. Before returning a serviced product to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock. The service technician must make sure that no protective device built into the instrument by the manufacturer has become defective, or inadvertently damaged during servicing.

CE MARK

1. HITACHI products may contain the CE mark on the rating plate indicating that the product contains parts that have been specifically approved to provide electromagnetic compatibility to designated levels.
2. When replacing any part in this product, please use only the correct part itemised in the parts list to ensure this standard is maintained, and take care to replace lead dressing to its original state, as this can have a bearing on the electromagnetic radiation/immunity.

PICTURE TUBE

1. The line output stage can develop voltages in excess of 25kV; if the E.H.T. cap is required to be removed, discharge the anode to chassis via a high value resistor, prior to its removal from the picture tube.
2. High voltage should always be kept at the rated value of the chassis and no higher. Operating at higher voltages may cause a failure of the picture tube or high voltage supply, and also, under certain circumstances could produce X-radiation levels moderately in excess of design levels. The high voltage must not, under any circumstances, exceed 29kV on the chassis (except for projection Televisions).
3. The primary source of X-radiation in the product is the picture tube. The picture tube utilised for the above mentioned function in this chassis is specially constructed to limit X-radiation. For continued X-radiation protection, replace tube with the same type as the original HITACHI approved type
4. Keep the picture tube away from the body while handling. Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn. People not so equipped should be kept away while picture tubes are handled

LASERS

If the product contains a laser avoid direct exposure to the beam when the cover is open or when interlocks are defeated or have failed.

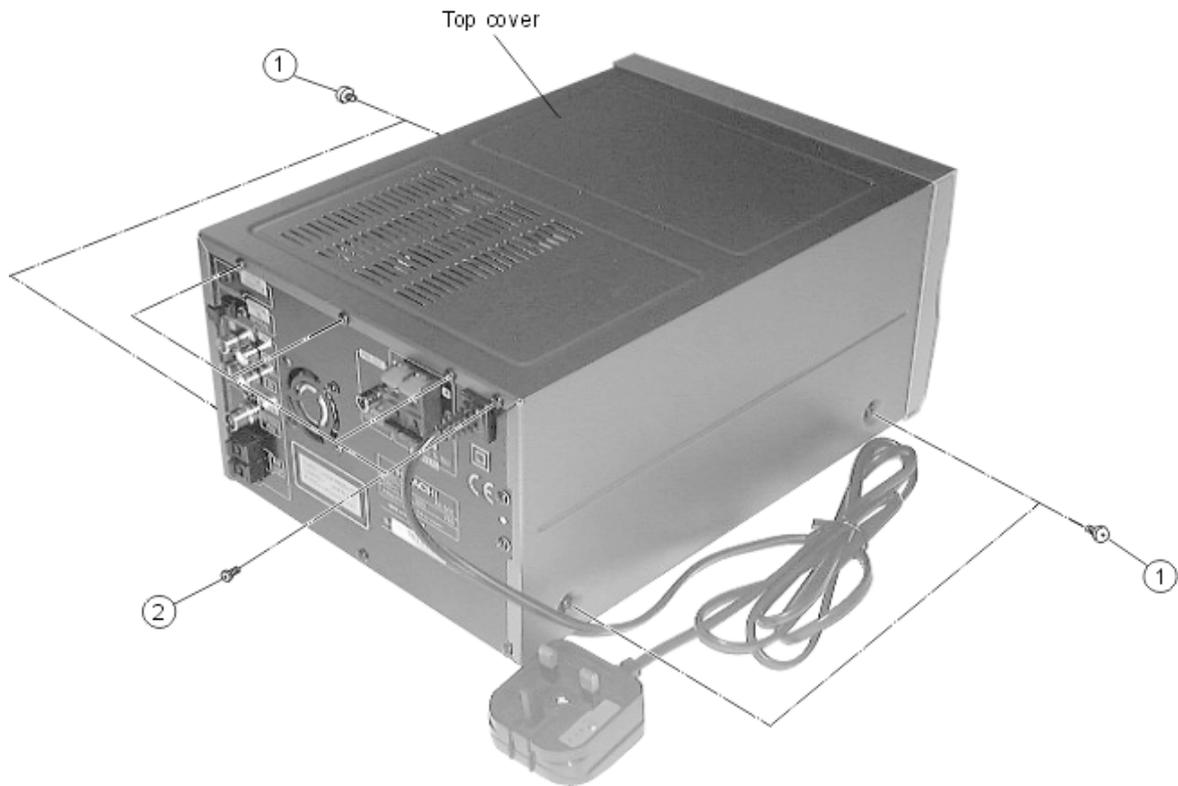
Specifications

| | | | |
|------------------------------|--|---|--|
| TUNER SECTION | Circuit System: | FM/AM 2 bands [For E, E(BS), W, W(UN)] | |
| | Tuning range: | [For E, E(BS), W] FM: 87.5 - 108 MHz (50 kHz step) AM: 522 - 1,611 kHz (9 kHz step) [For W(UN)] FM: 76.0 - 108 MHz (50 kHz step) AM: 522 - 1,629 kHz (9 kHz step) [For W, W(UN)] AM: 520 - 1,710 MHz (10 kHz step) | |
| MD SECTION | Sampling Frequency: | 44.1 kHz | |
| | Recording/Playback: | Magnetic modulation overwriting | |
| | Laser Diode Properties: | Wavelength: Output power: | 785 nm Playback – 0.6 mw Recording – 5 mw |
| TIMER SECTION | System: | Digital quartz clock | |
| | Display format: | 24-hour cycle [For E, E(BS), W] 12-hour cycle [For W(UN)] | |
| | Timer accuracy: | Within 60 seconds at monthly rate | |
| CD PLAYER SECTION | Number of channels: | 2 | |
| | Disc: | 12 cm/8 cm | |
| | Laser Diode Properties: | Wave length: | 785 nm ~ 815 nm |
| GENERAL SPECIFICATION | Power supply: | AC 230 V, 50 Hz [For E, E(EBS)] AC 110 V - 127 V, 220 V - 240 V, 50/60 Hz [For W, W(UN)] | |
| | Power consumption: | 74 W (Standby mode: 0.5W) | |
| | Dimensions: | 210 (W) x 150 (H) x 327 (D) mm | |
| | Weight: | 5.5 kg | |
| SPEAKER SECTION | System: | 2-way Bass Reflex Speaker System | |
| | Speakers: | Woofer: Tweeter: | 10cm x 1 5cm x 1 |
| | Impedance: | 6 ohms | |
| | Dimensions: | 150 (W) x 270 (H) x 227 (D) mm | |
| | Weight: | 3.1 kg (1 speaker) | |
| ACCESSORIES | FM Antenna: | 1 | |
| | AM loop antenna: | 1 | |
| | Remote control (RB-AXM7): | 1 | |
| | Battery: | 2 | |
| | Edison Plug Adapter - For W(UN) | | |

* Specifications are subject to change without notice for performance improvement.

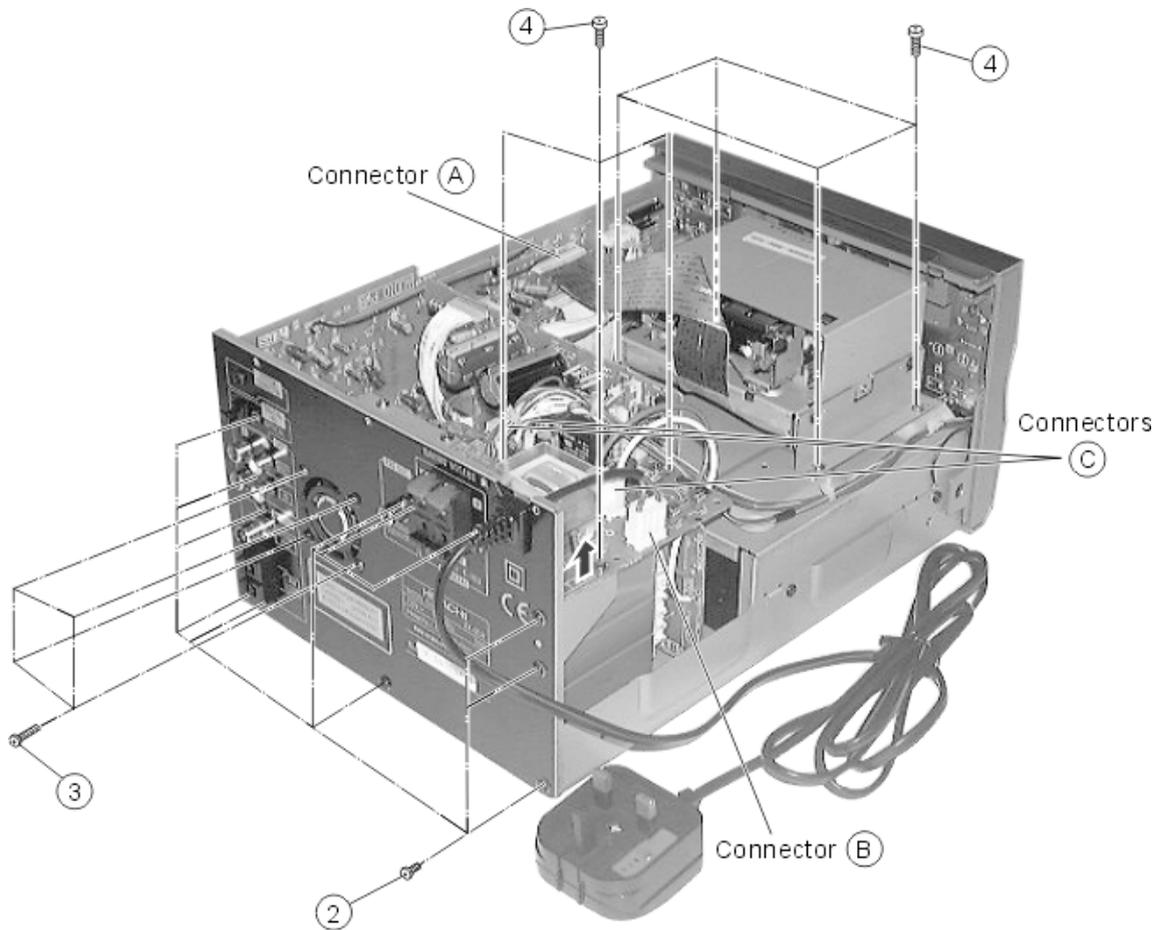
Removal of Top Cover

1. Remove 2 screws ① from each side.
2. Remove 4 screws ② from the rear plate.



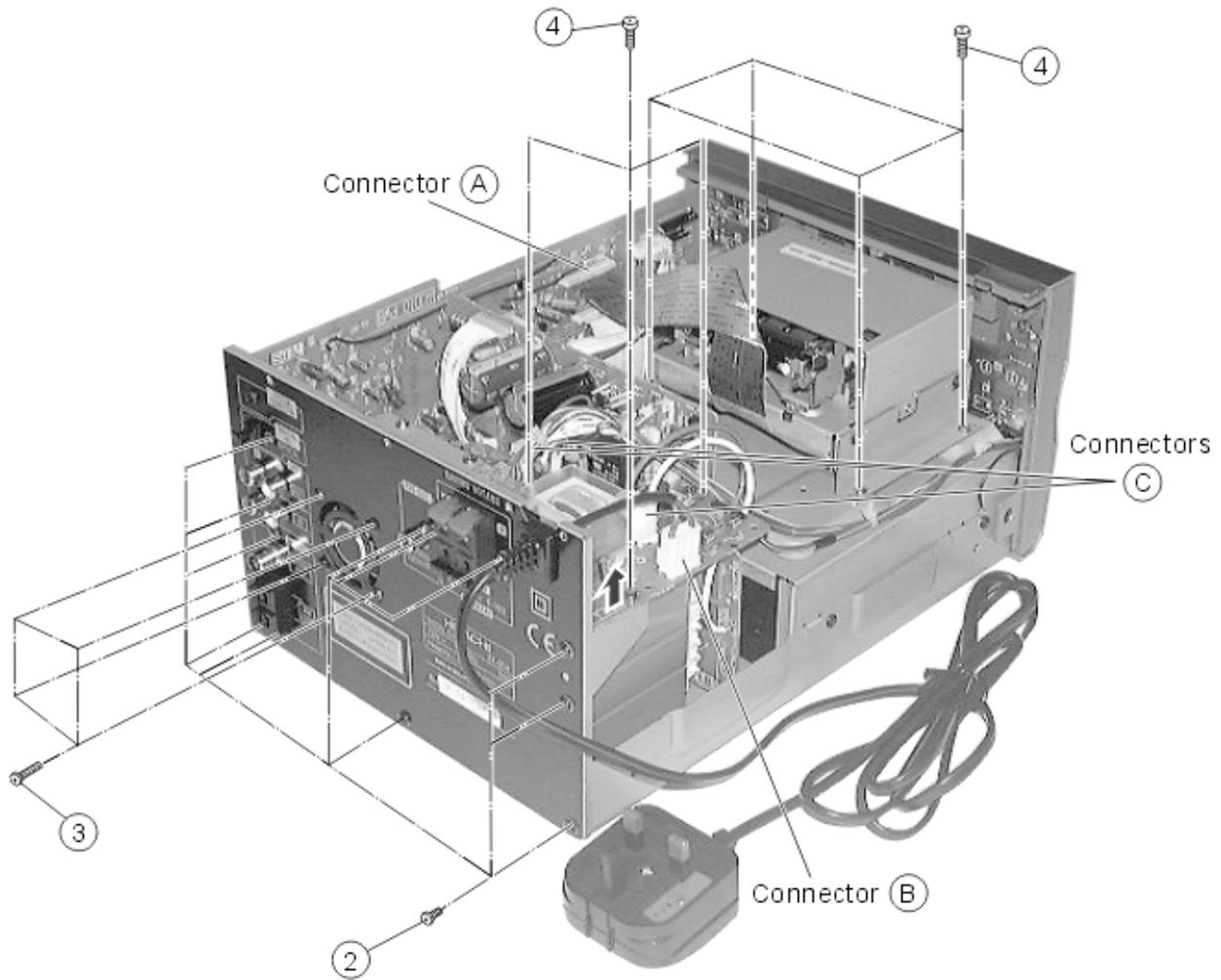
Removal of Rear Plate

1. Remove 12 screws ② and 4 screws ③ from the rear plate.



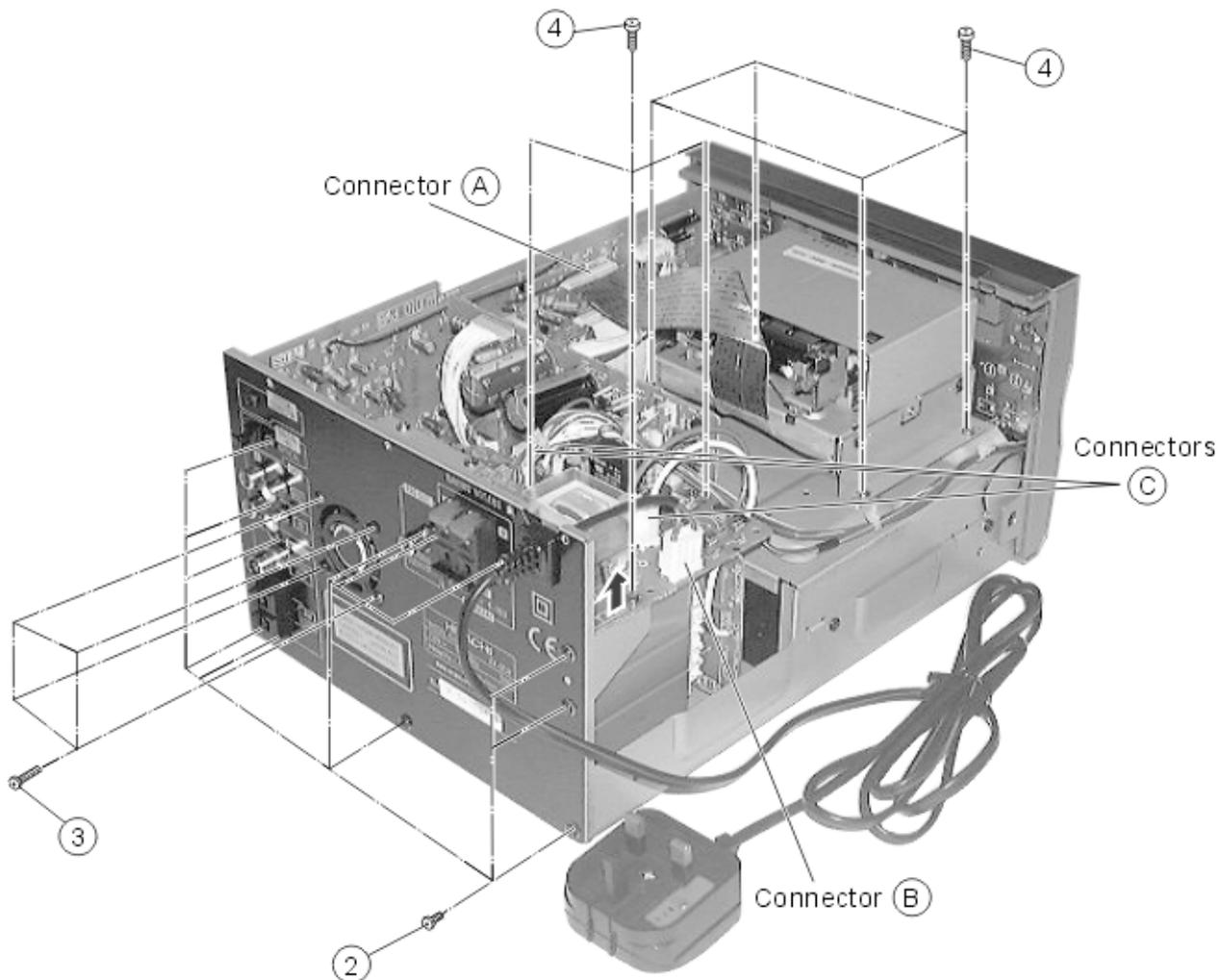
Removal of Powercord

1. Detach the power cord connector from connector ②.



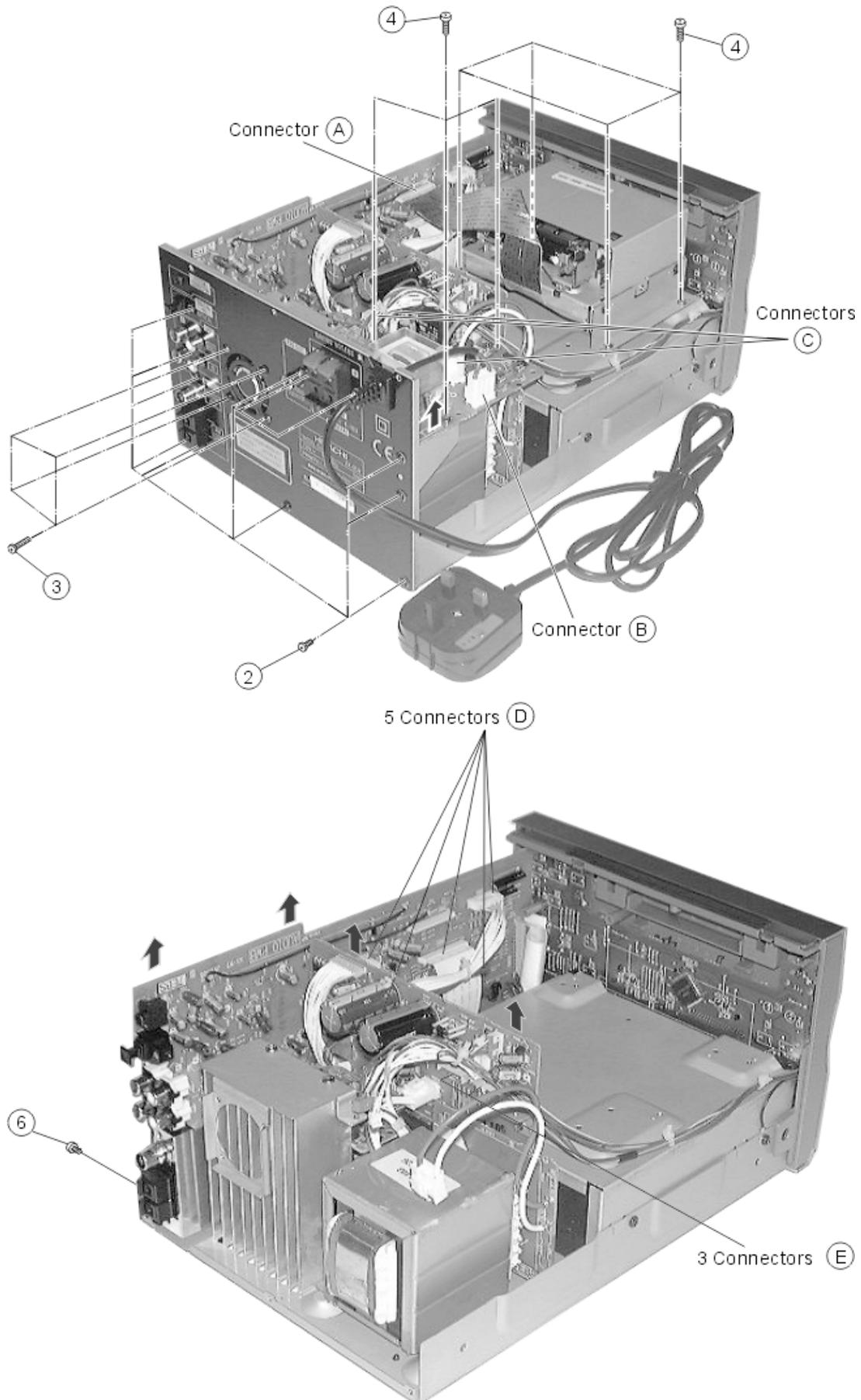
Removal of MD Mechanism

1. Detach the MD connector cable from connector **A**.
2. Remove 4 screws **4** and then remove the MD mechanism.



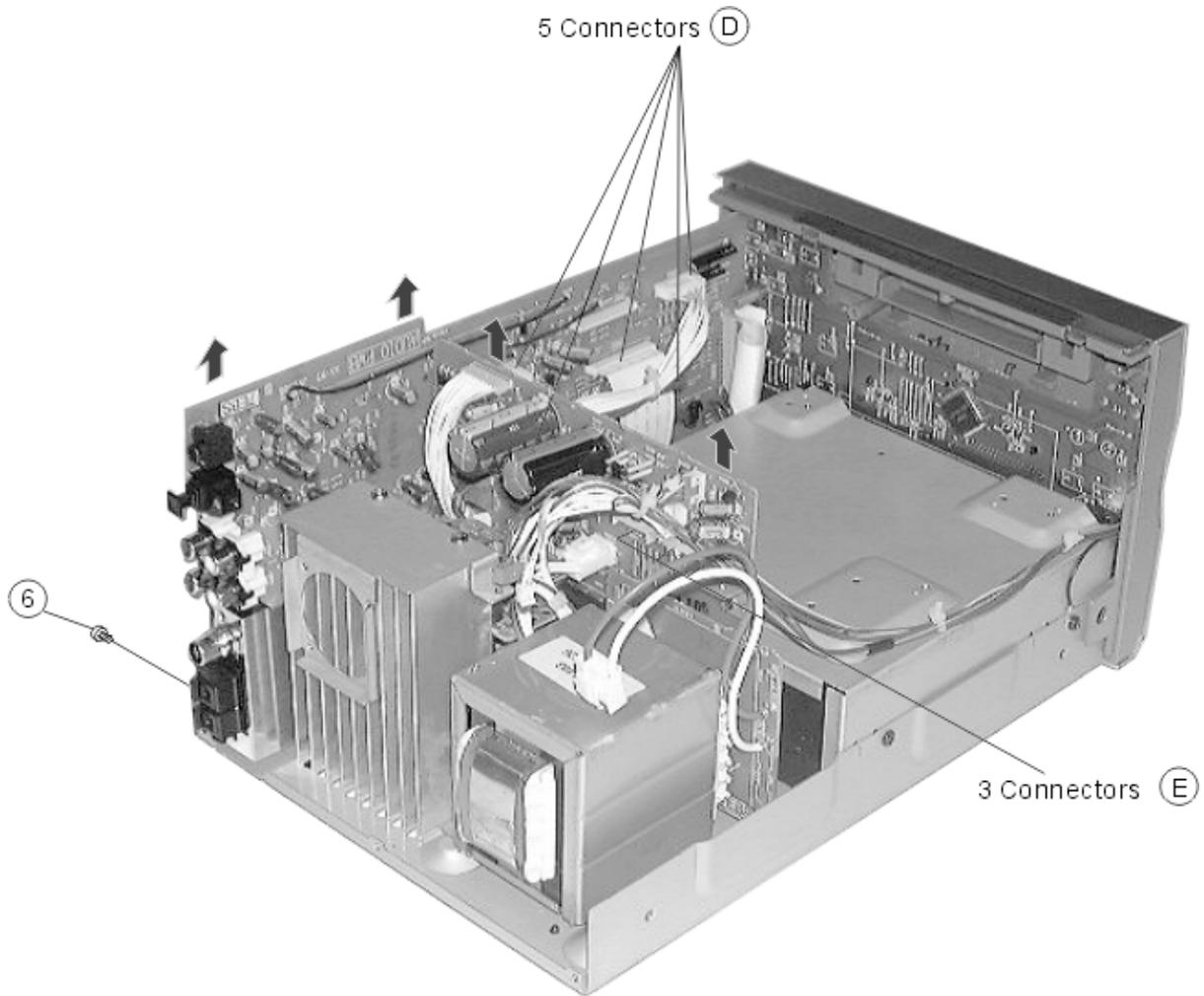
Removal of SUB T P.W.B. Board

1. Remove 3 screws ④ from the SUB T P.W.B. board.
2. Disconnect the 3 connectors ③ and gently pull the SUB T P.W.B. board away from the SUPPLY P.W.B. board to detach its 3 connectors ⑤.



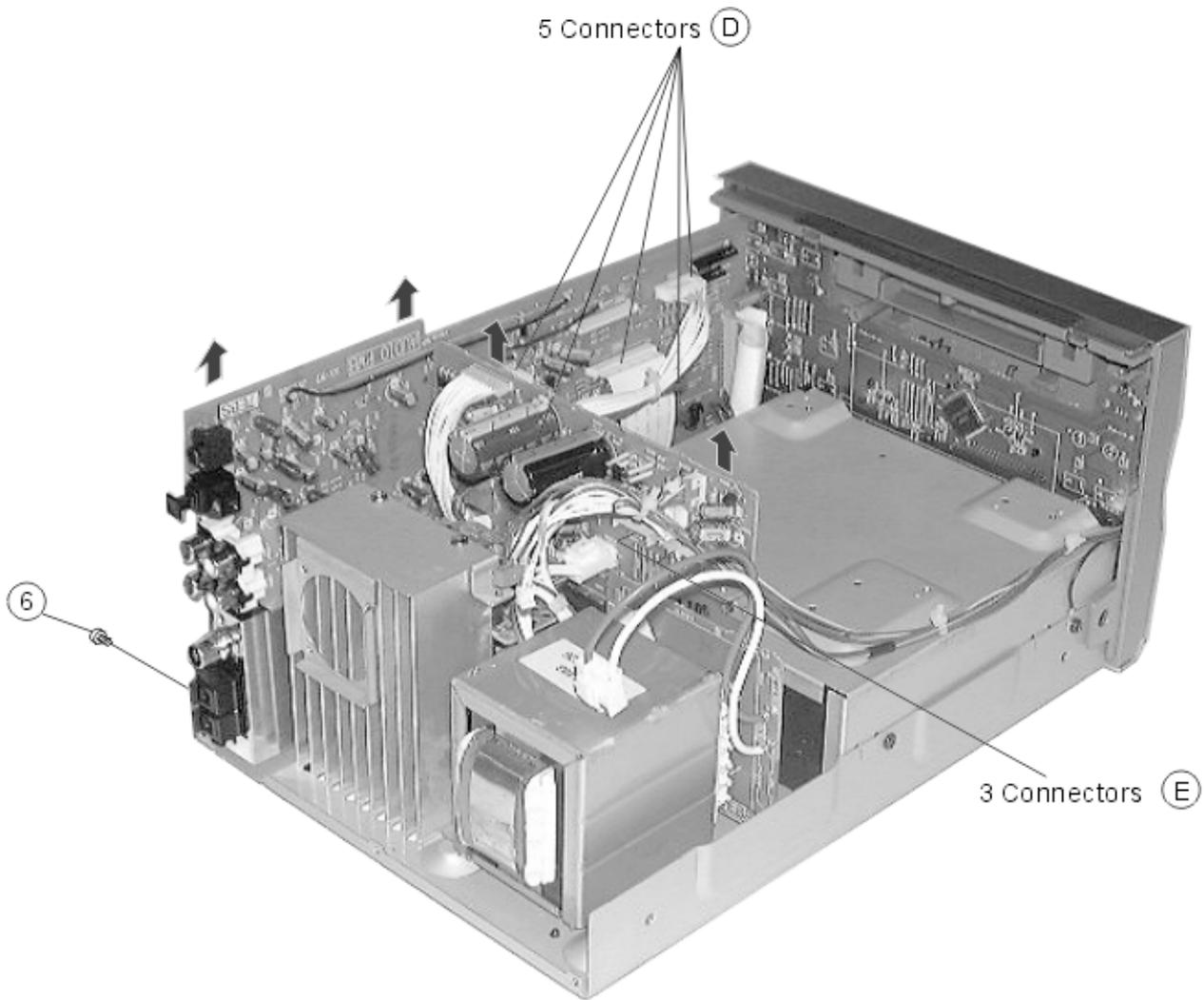
Removal of AUDIO P.W.B. Board

1. Remove 1 screw ⑥ on the side of the base plate and disconnect all the 5 connectors ④ from the Audio P.W.B. board. Detach each connector from the FL DISP P.W.B. and bottom of the CD mechanism
2. Gently pull the AUDIO P.W.B. board outwards.



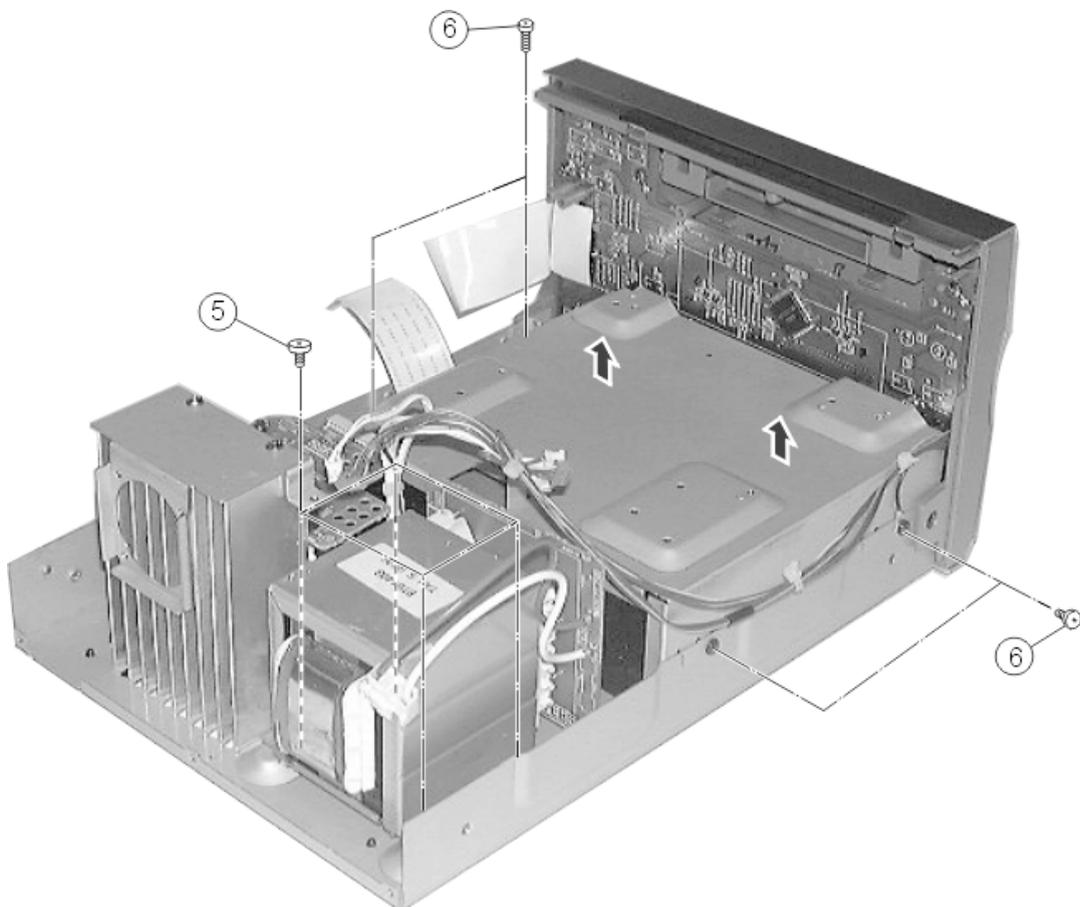
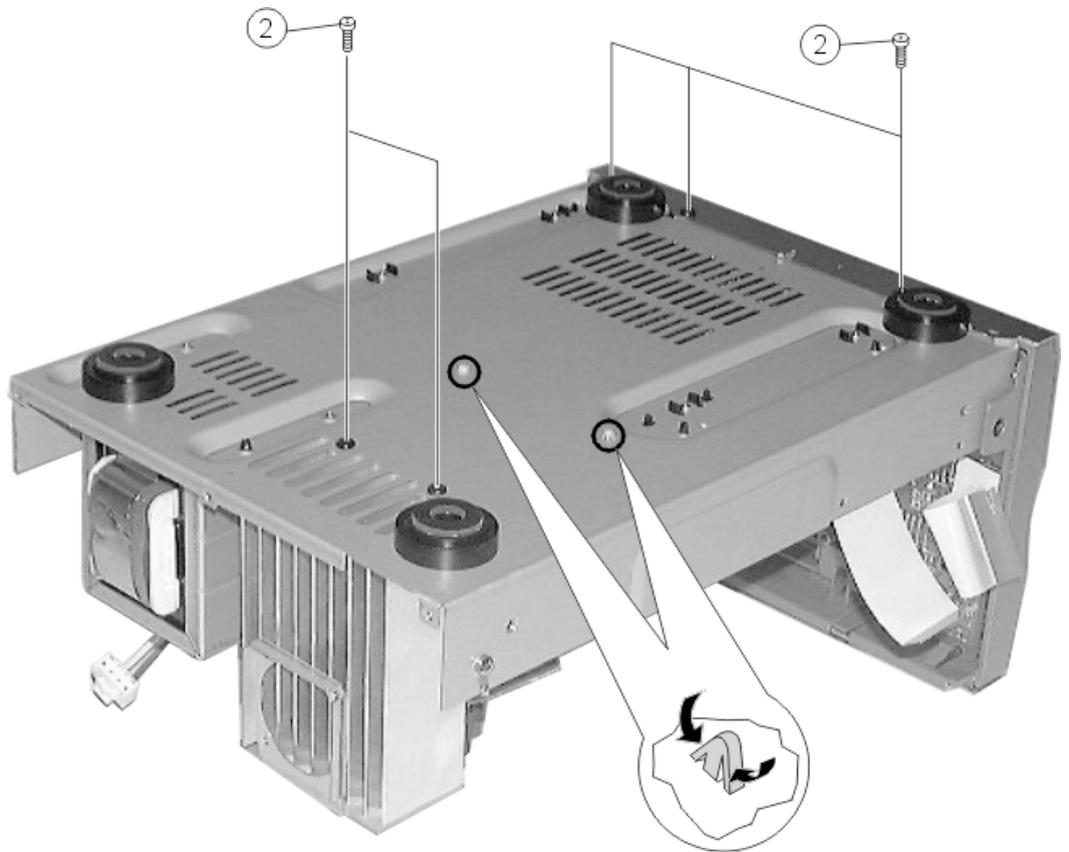
Removal of SUPPLY P.W.B. Board

1. Detach the 2 connectors from the Power P.W.B. board and 1 connector from the STAB P.W.B. board.
2. Gently pull the SUPPLY P.W.B. board upwards.



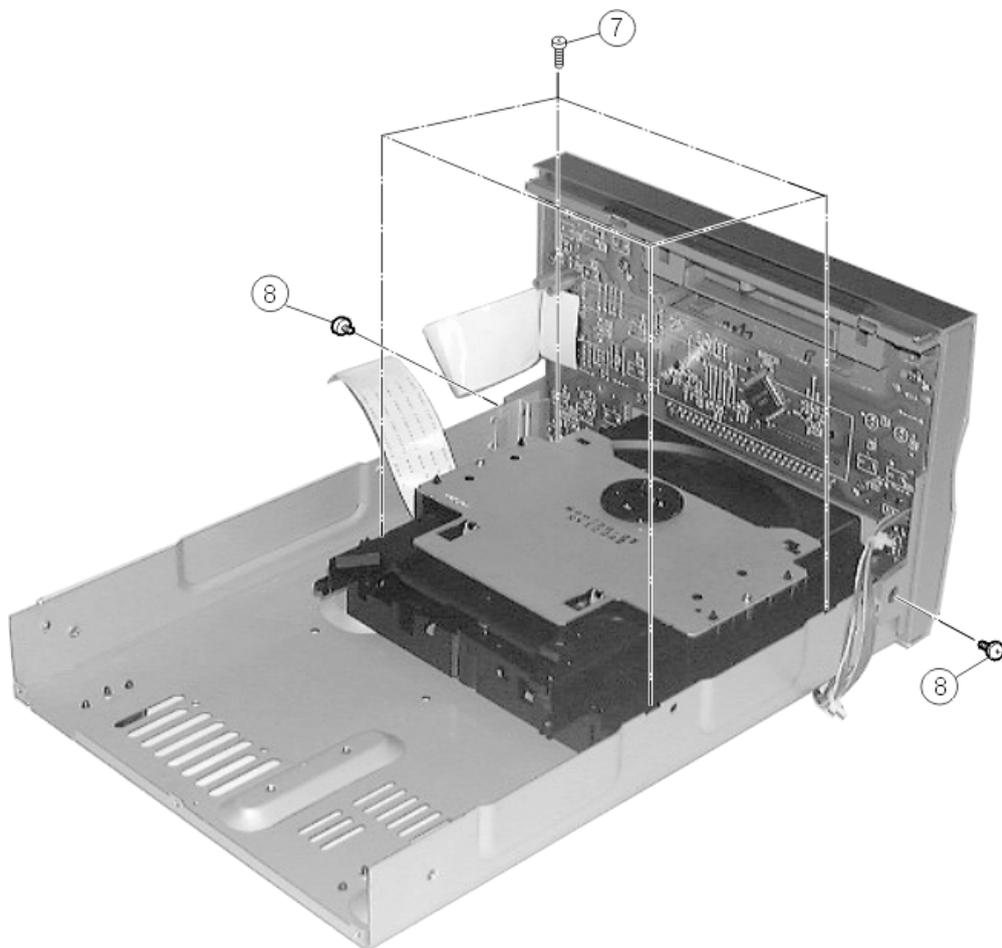
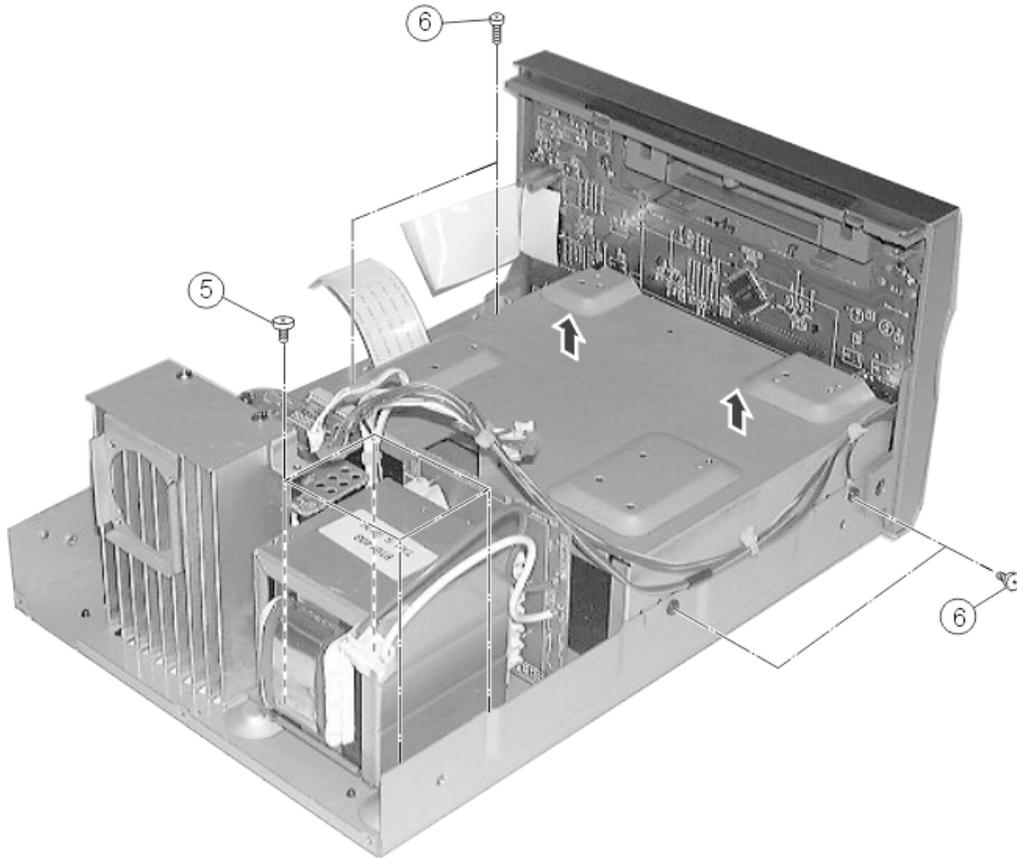
Removal of Heat Sink and Transformer

1. Invert the base plate and remove 2 screws ② connected to the heat sink. Press and push the 2 plastic catches out of the base plate.
2. Remove the 4 screws ⑤ and pull the transformer upwards together with the heat sink section.



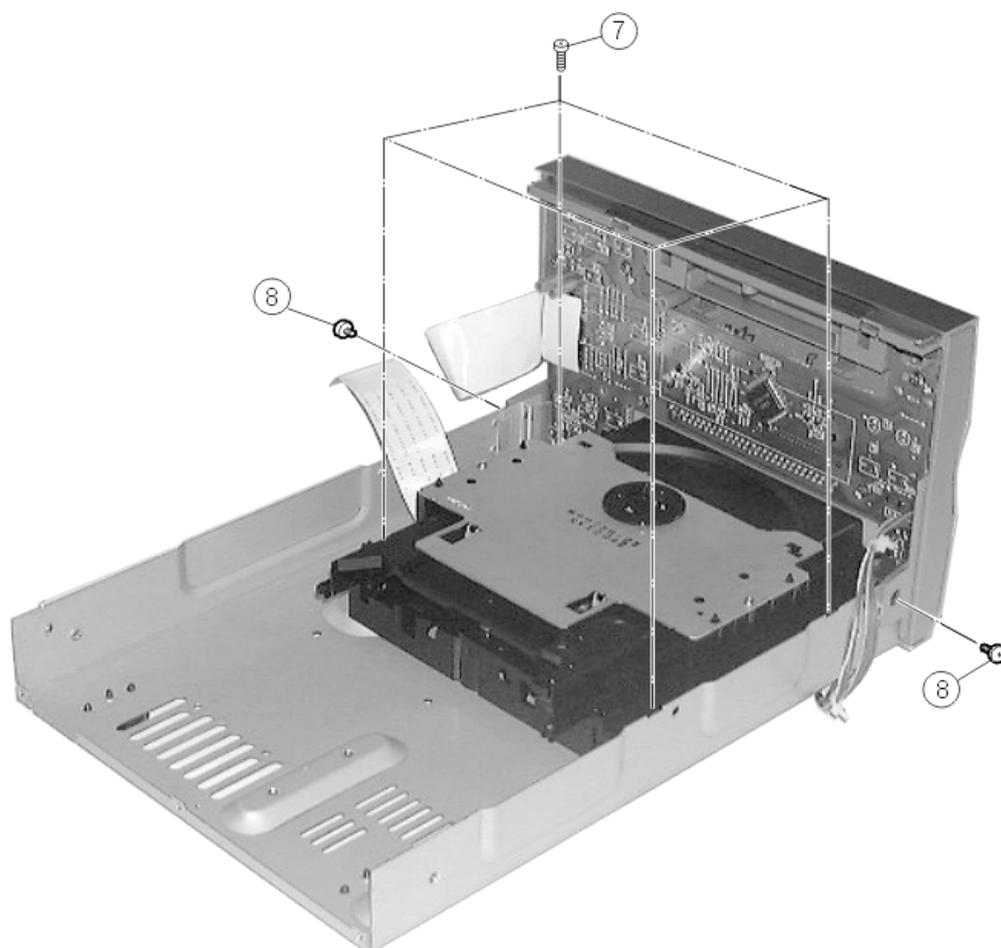
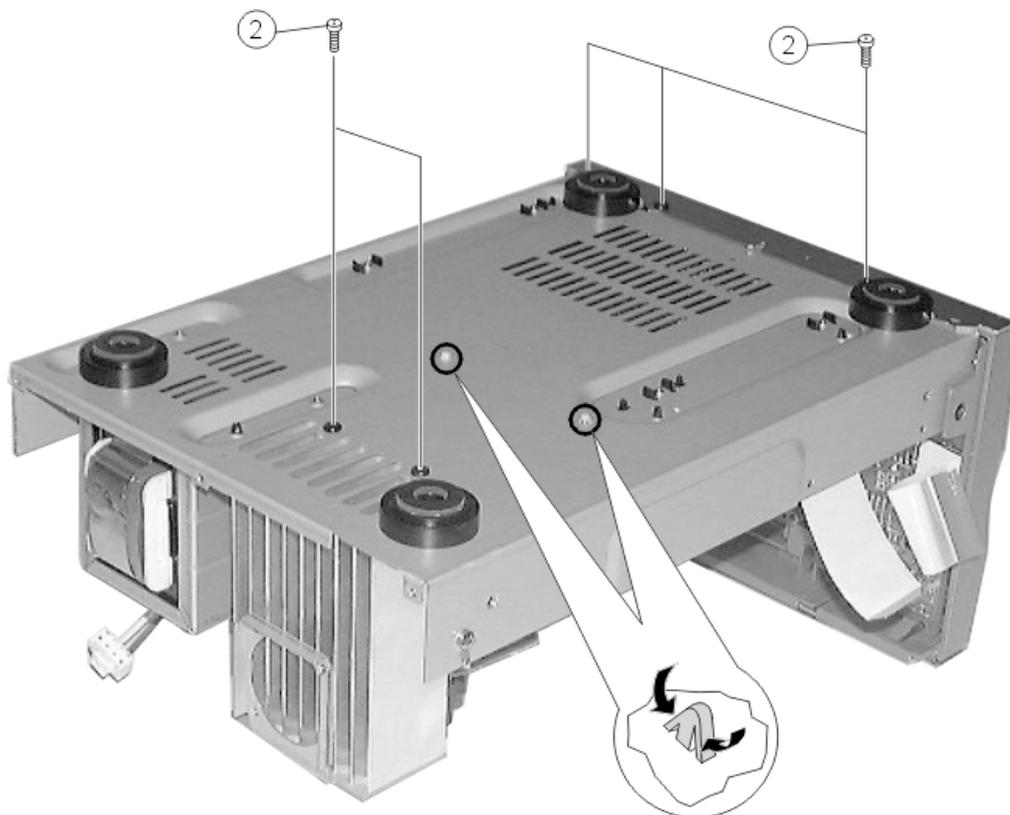
Removal of CD Mechanism

1. Remove 4 screws ⑥ and pull up the metal casing.
2. Remove 4 screws ⑦ and pull up the CD mechanism.



Removal of Front Panel

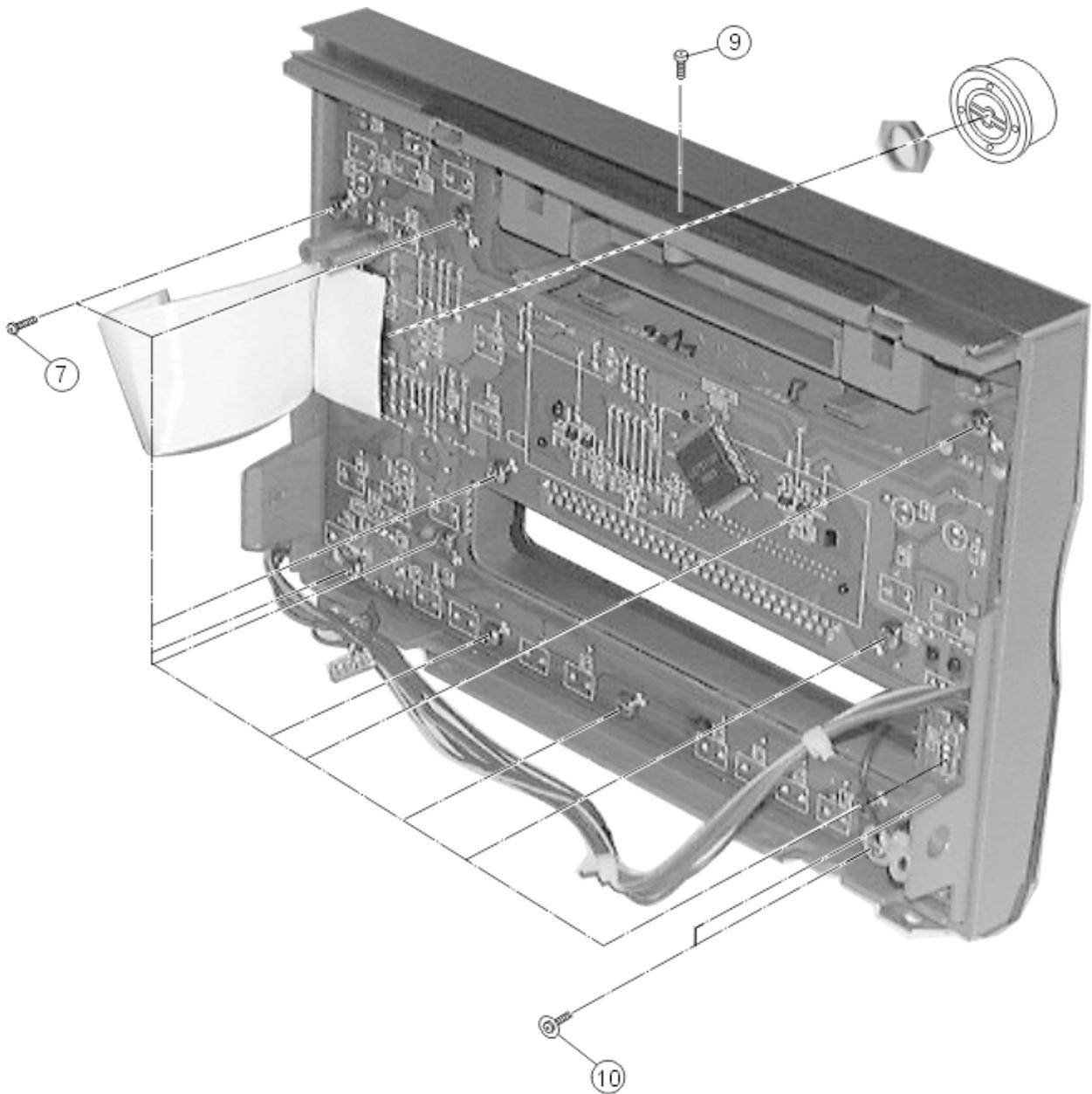
1. Remove 3 screws ② at the bottom of the base plate.
2. Remove 1 screw ⑧ on each side of the base plate, then pull the Front Panel away.



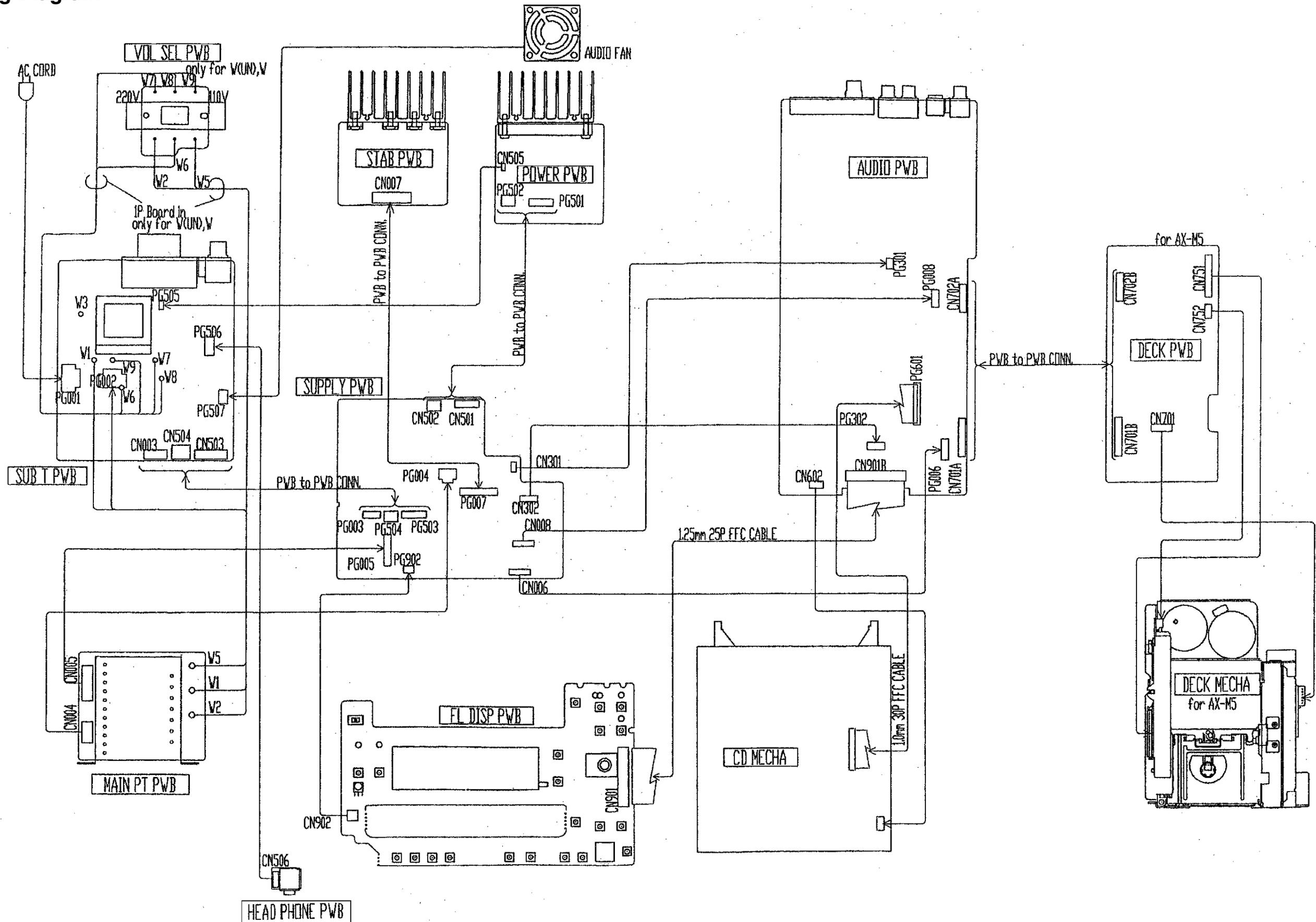
Removal of FL DISP P.W.B. Board

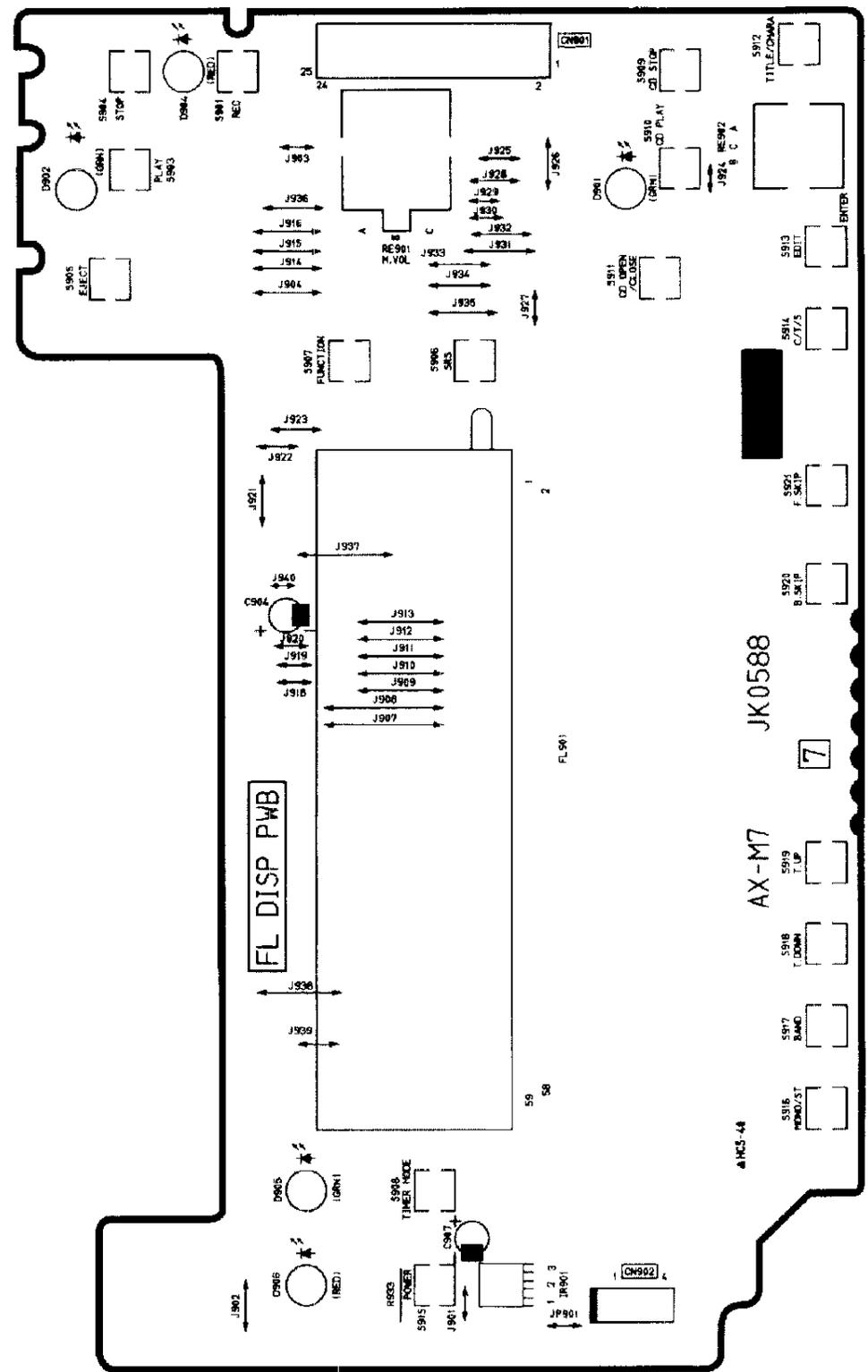
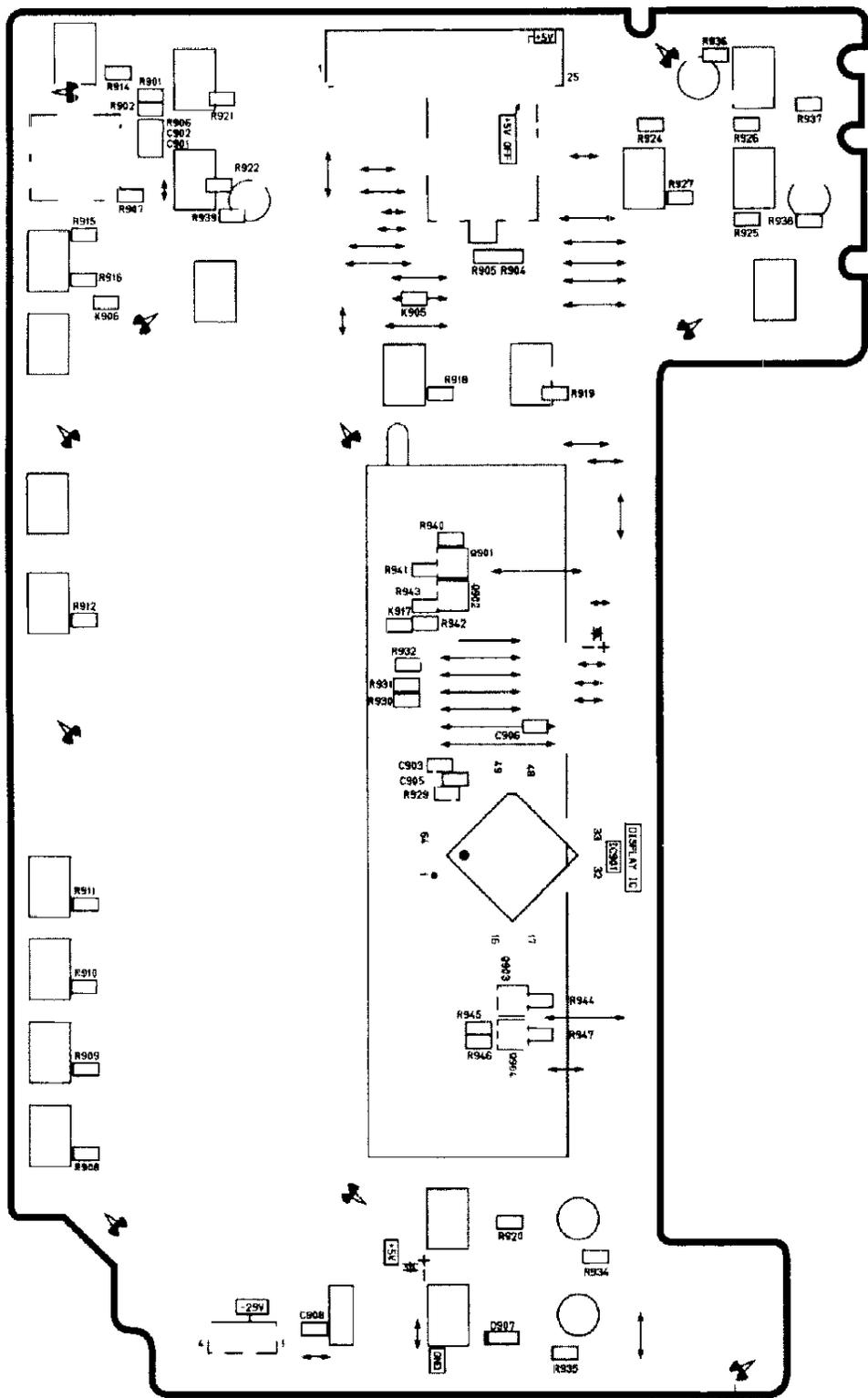
1. Remove 10 screws ⑦ and 2 screws ⑩.

2. Gently pull the Volume knob away from the front panel, and release the nut. Detach the FL DISP P.W.B. board from the front panel cover.



Wiring Diagram

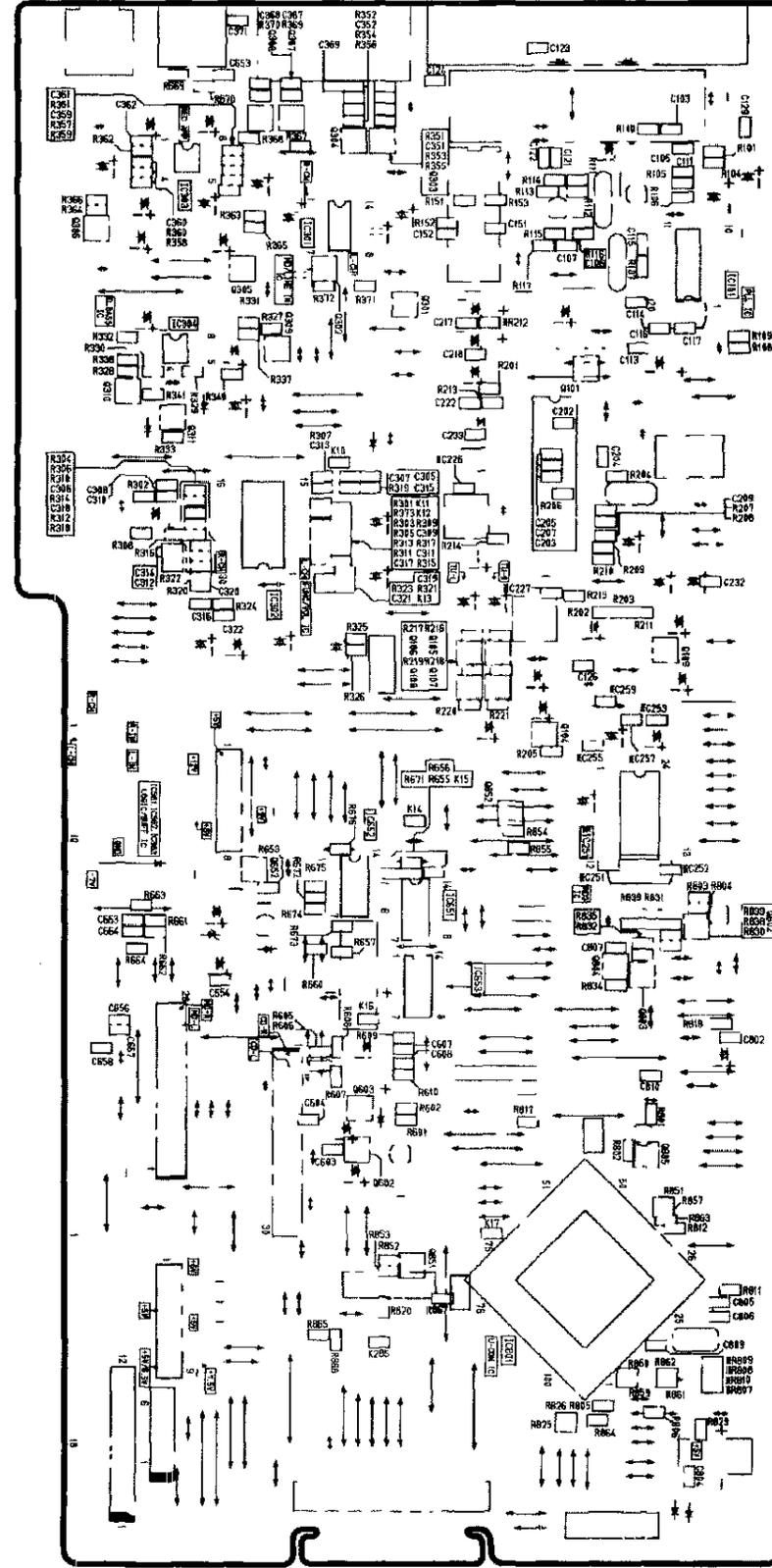
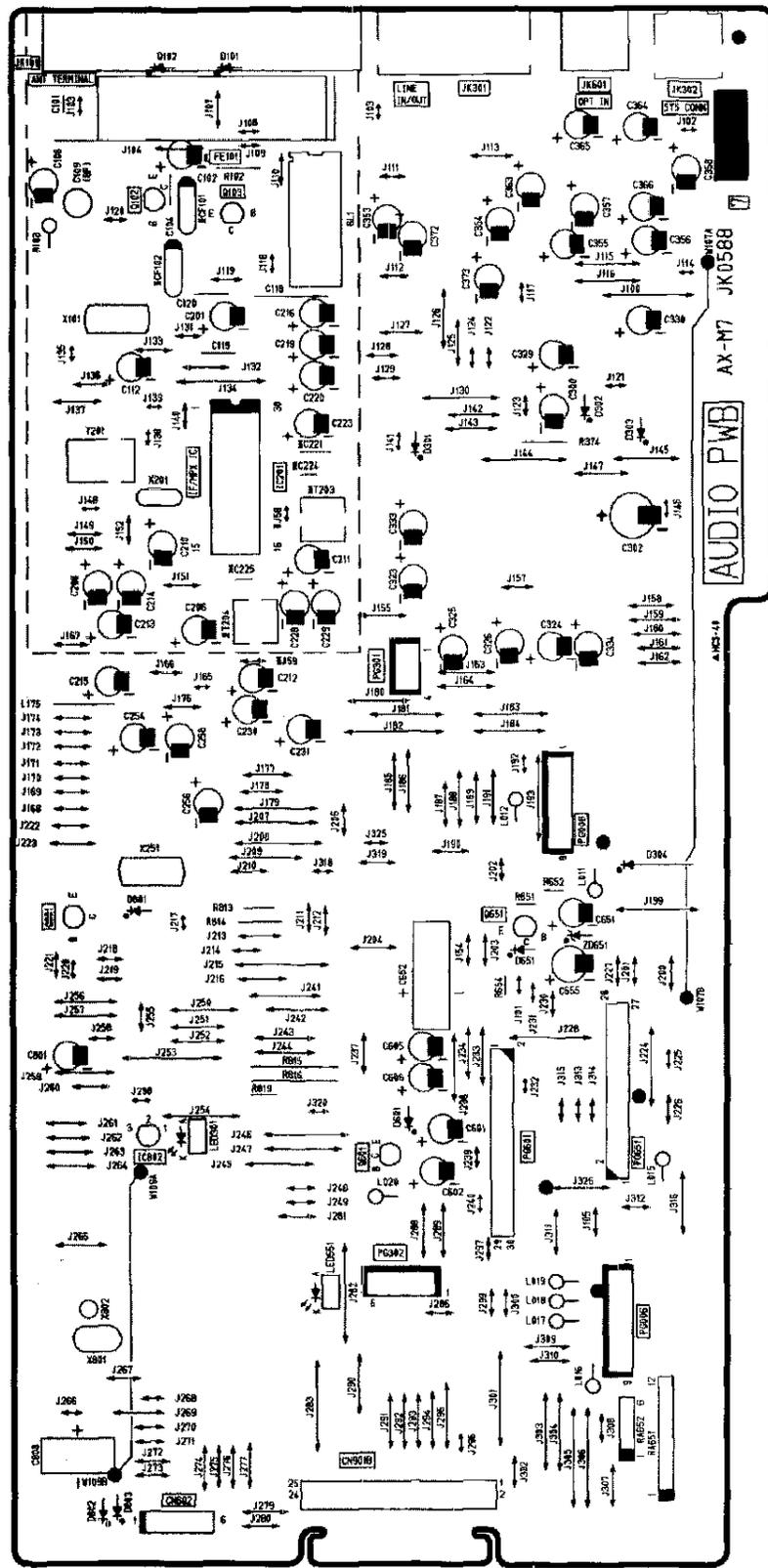




No 0094E

FL DISP PWB

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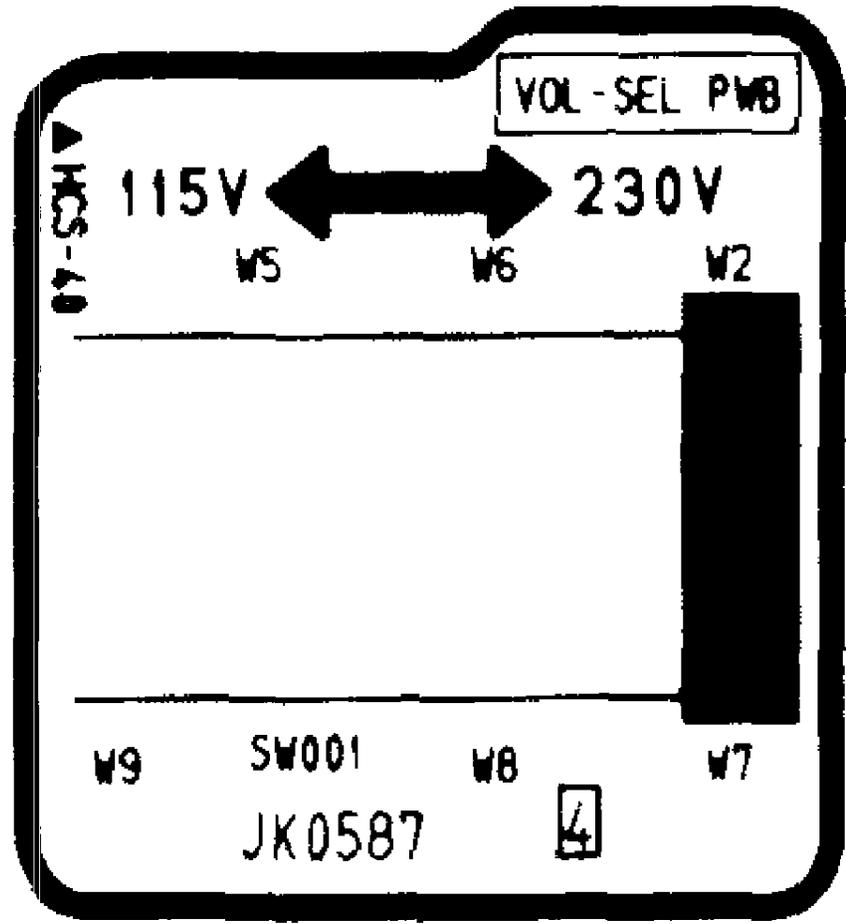


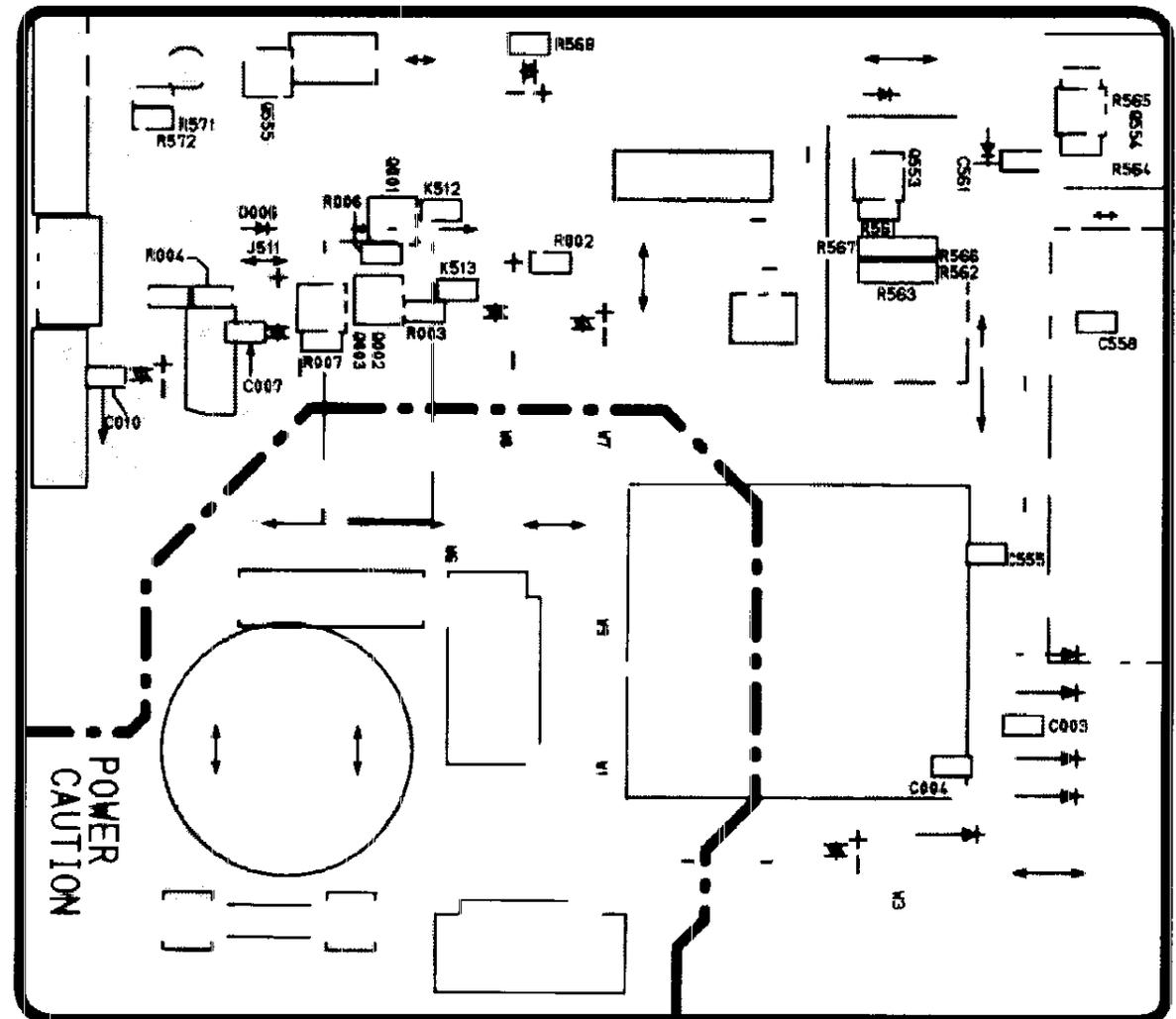
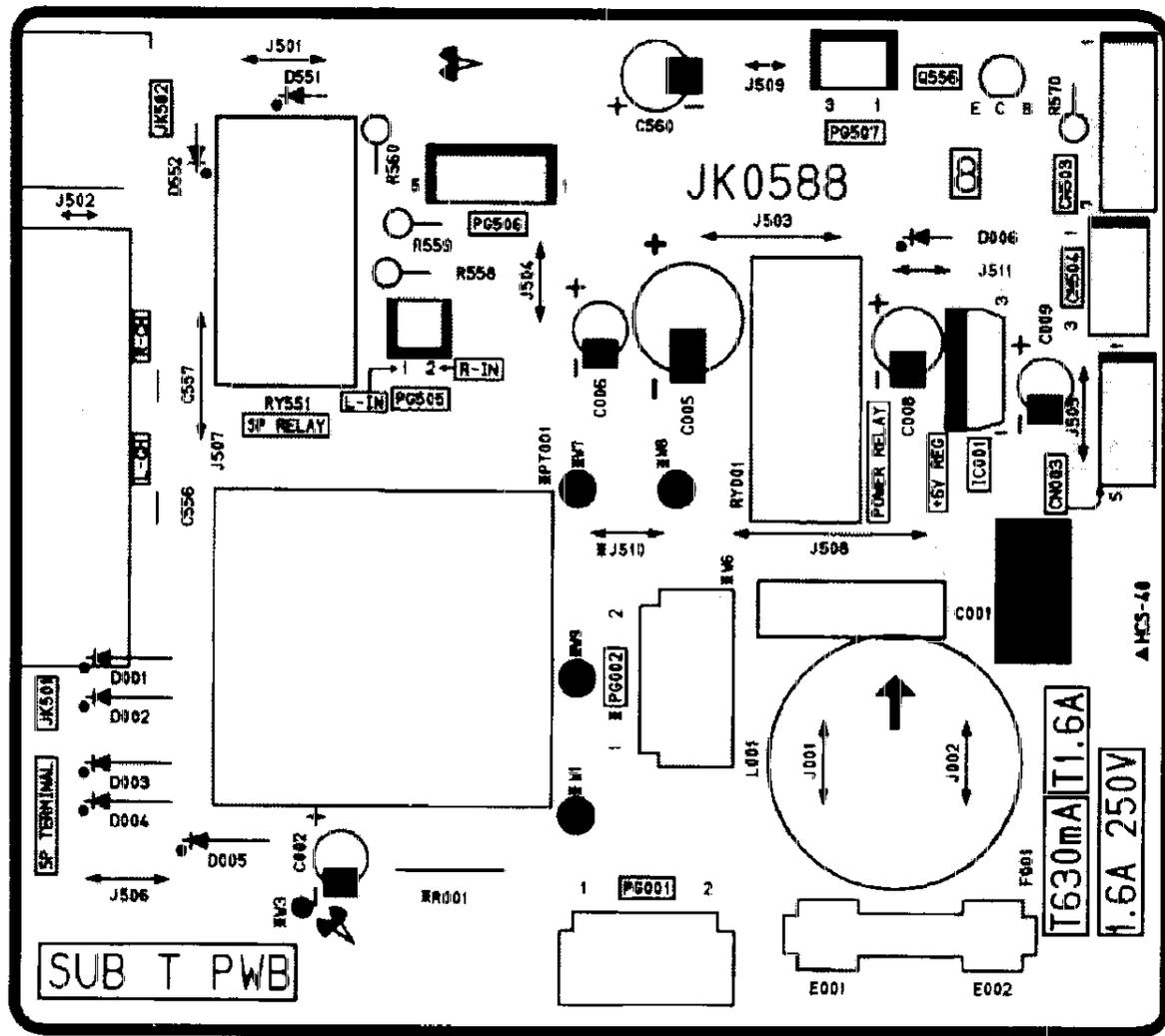
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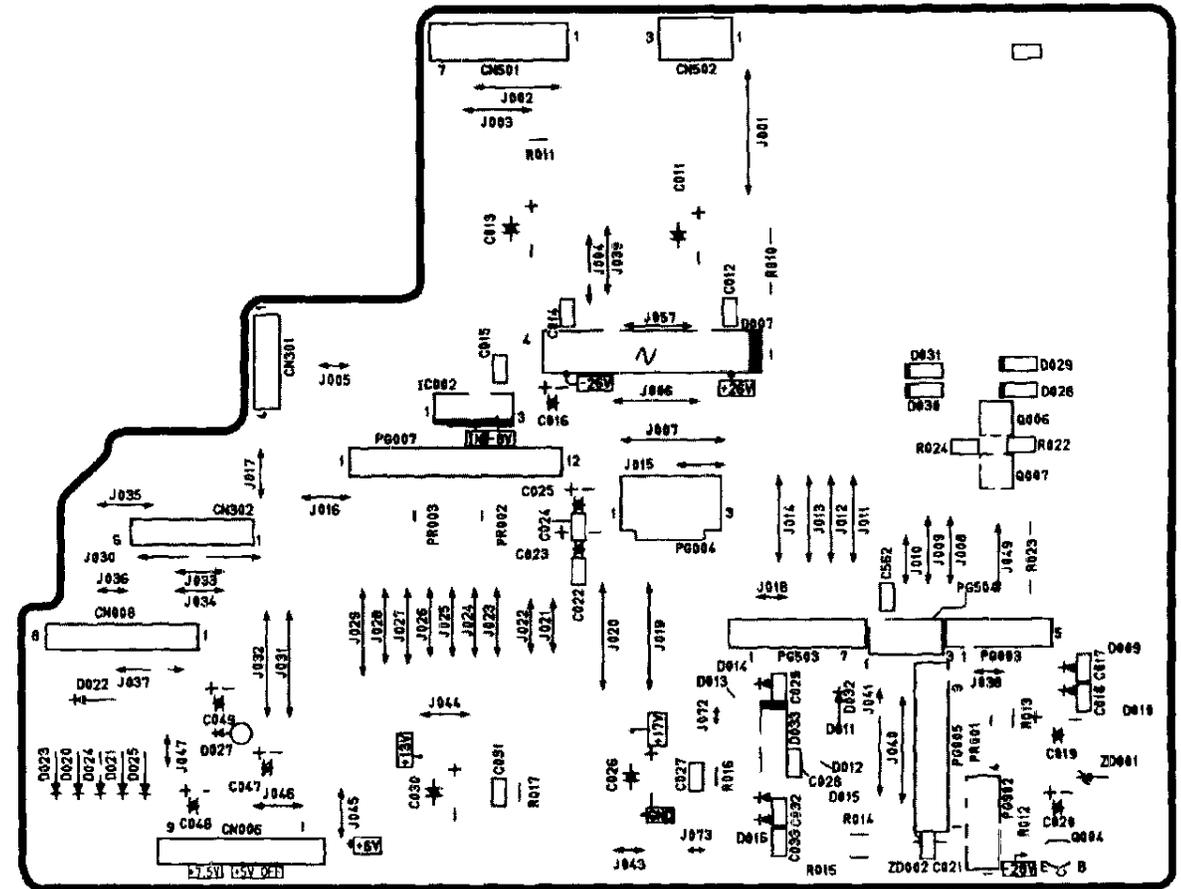
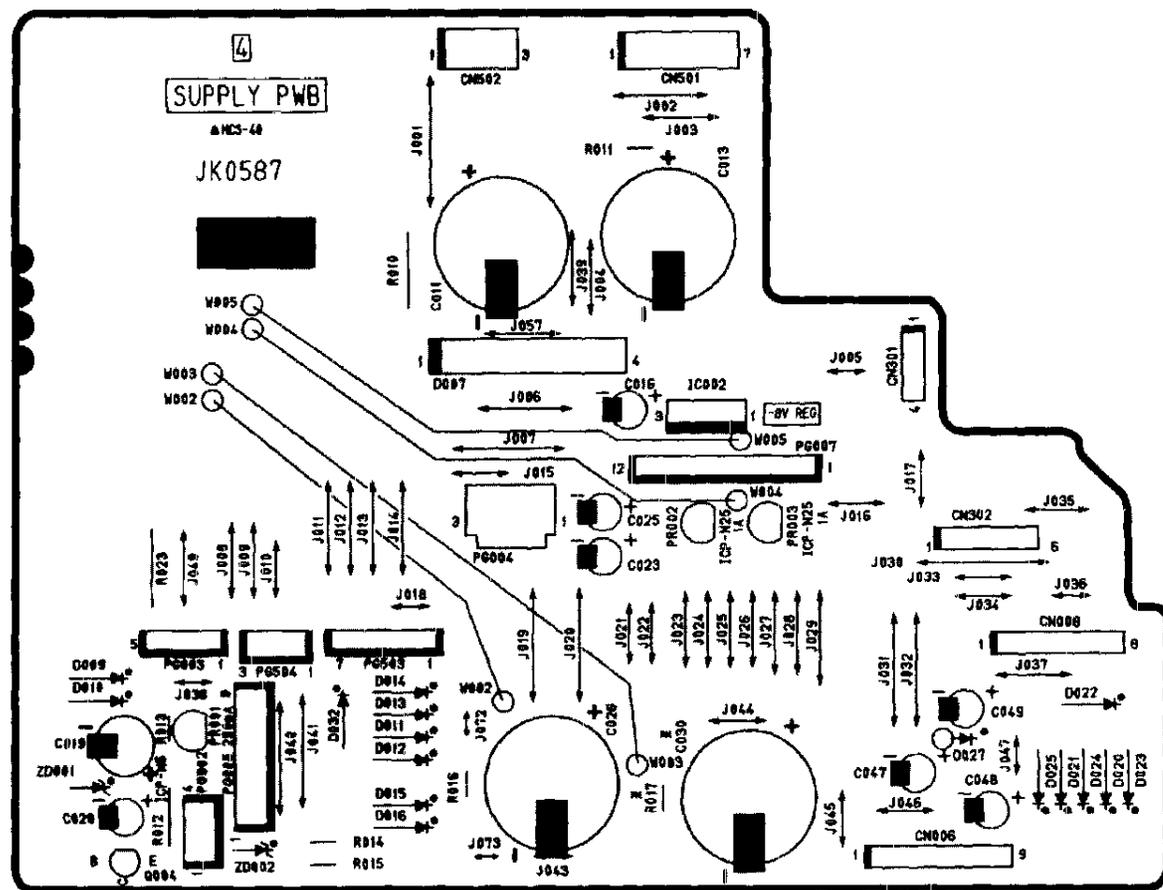
AUDIO PWB

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POWER CAUTION



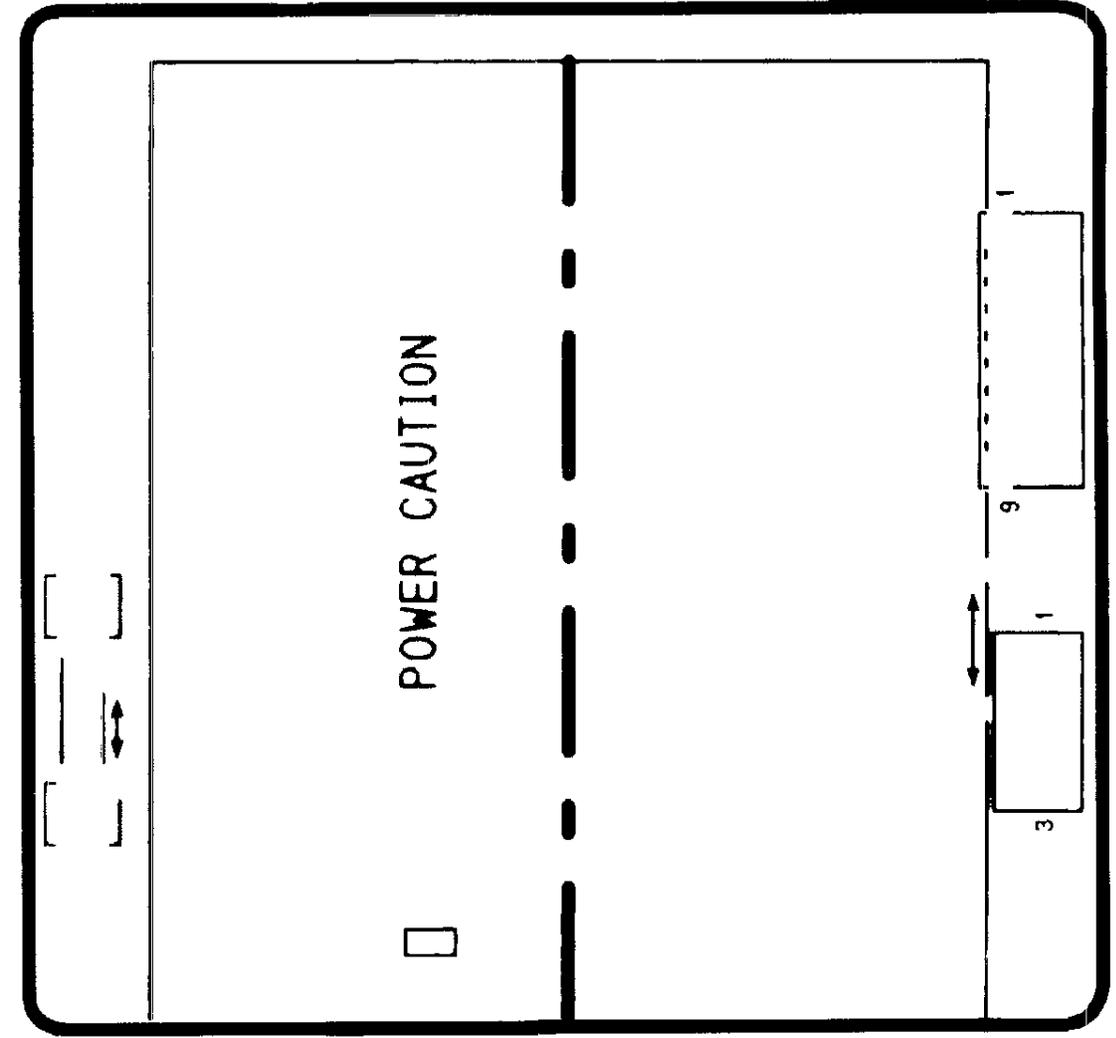
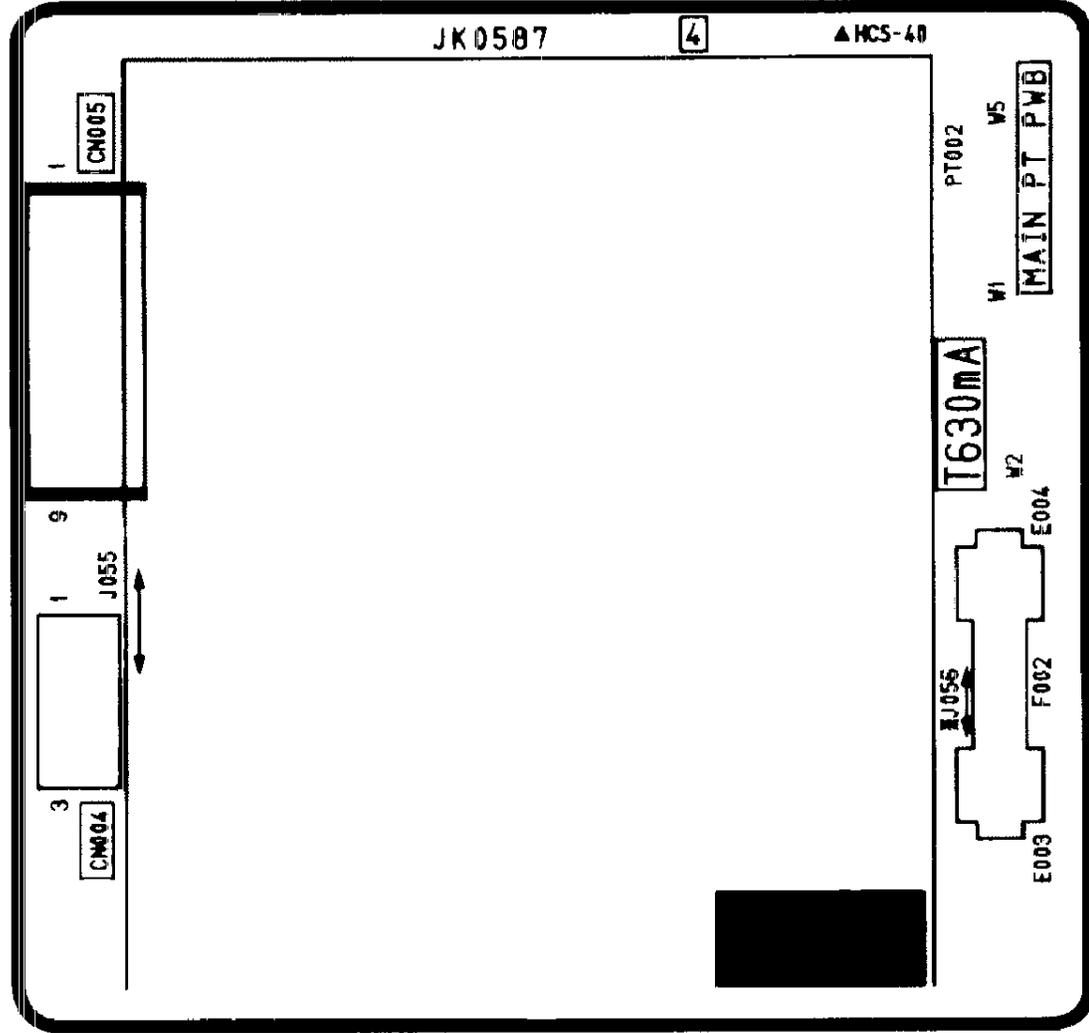


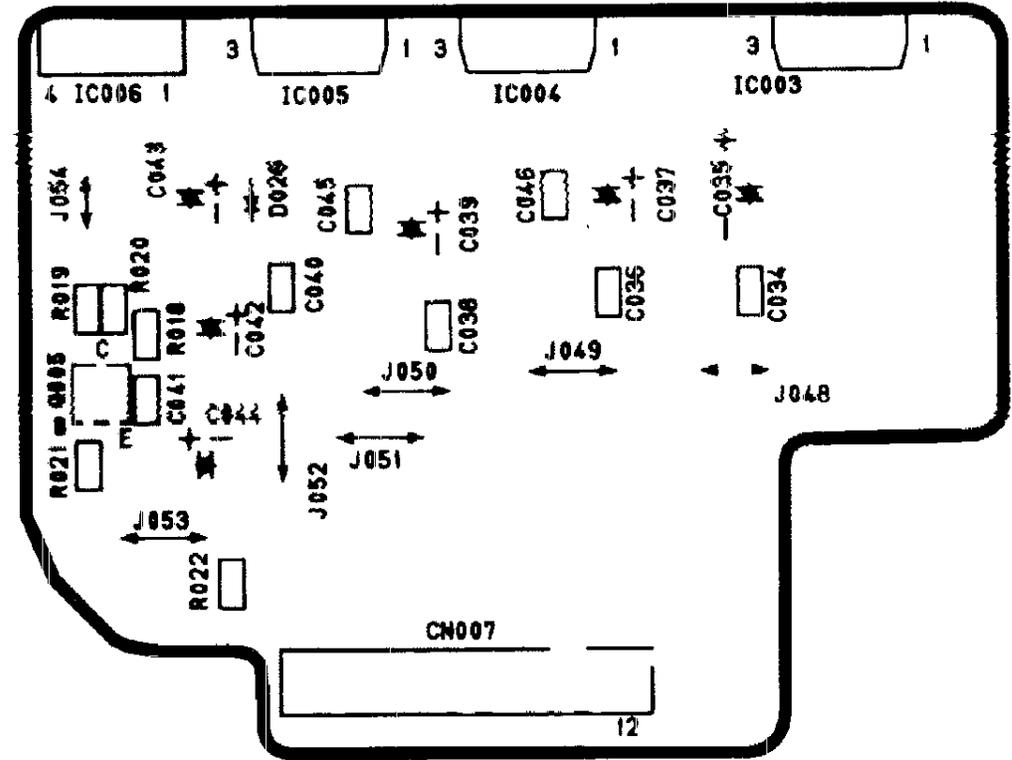
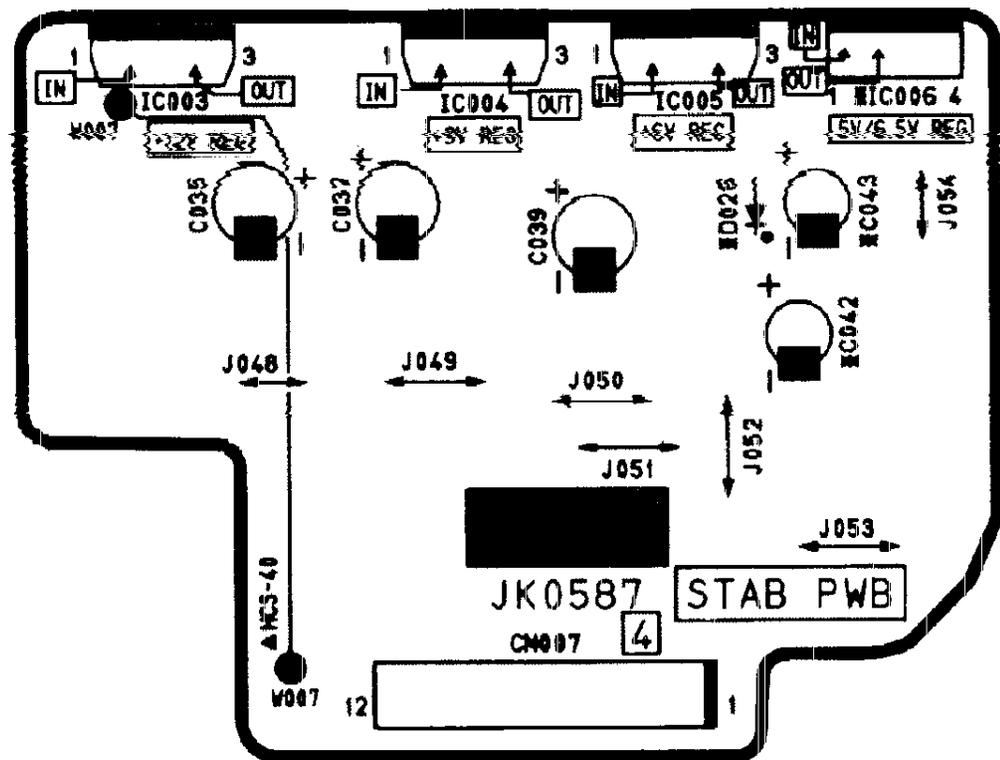


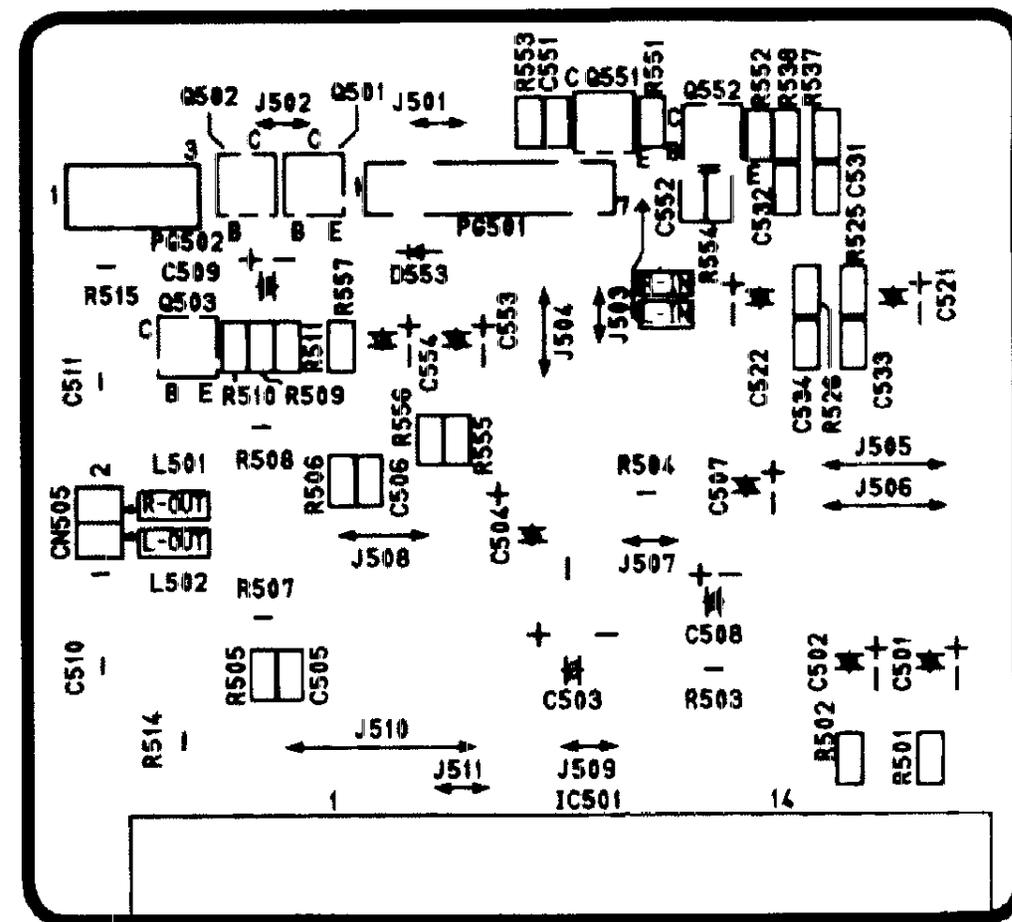
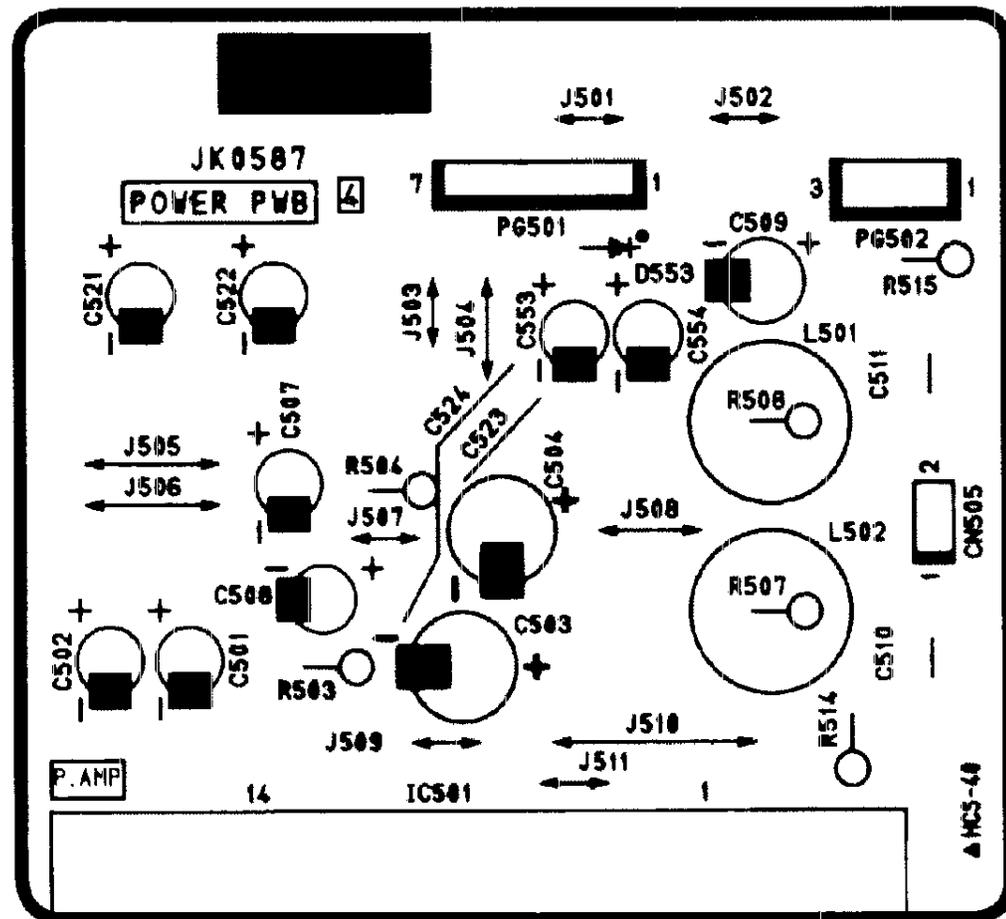
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SUPPLY PWB

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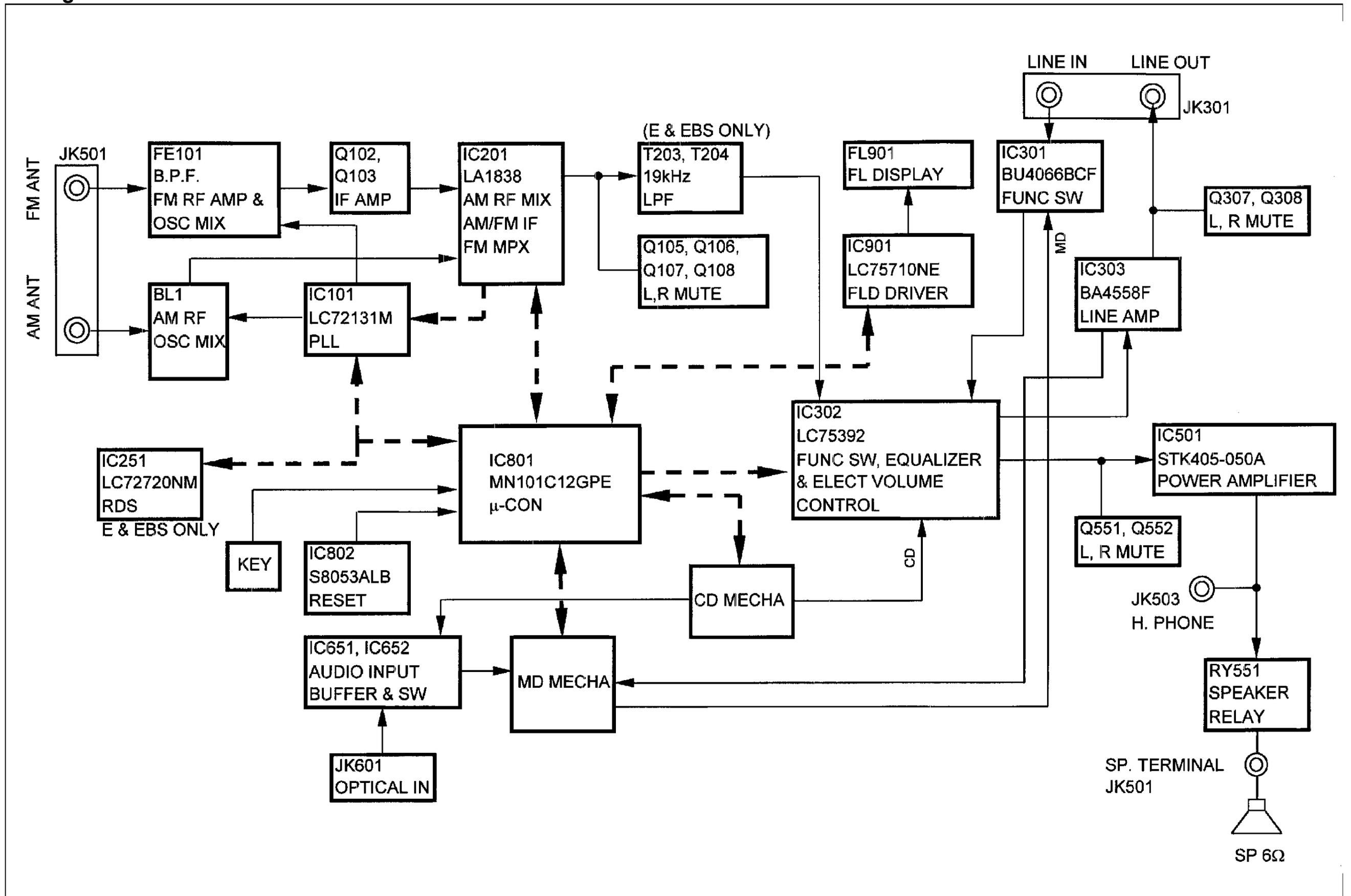


No 0094E

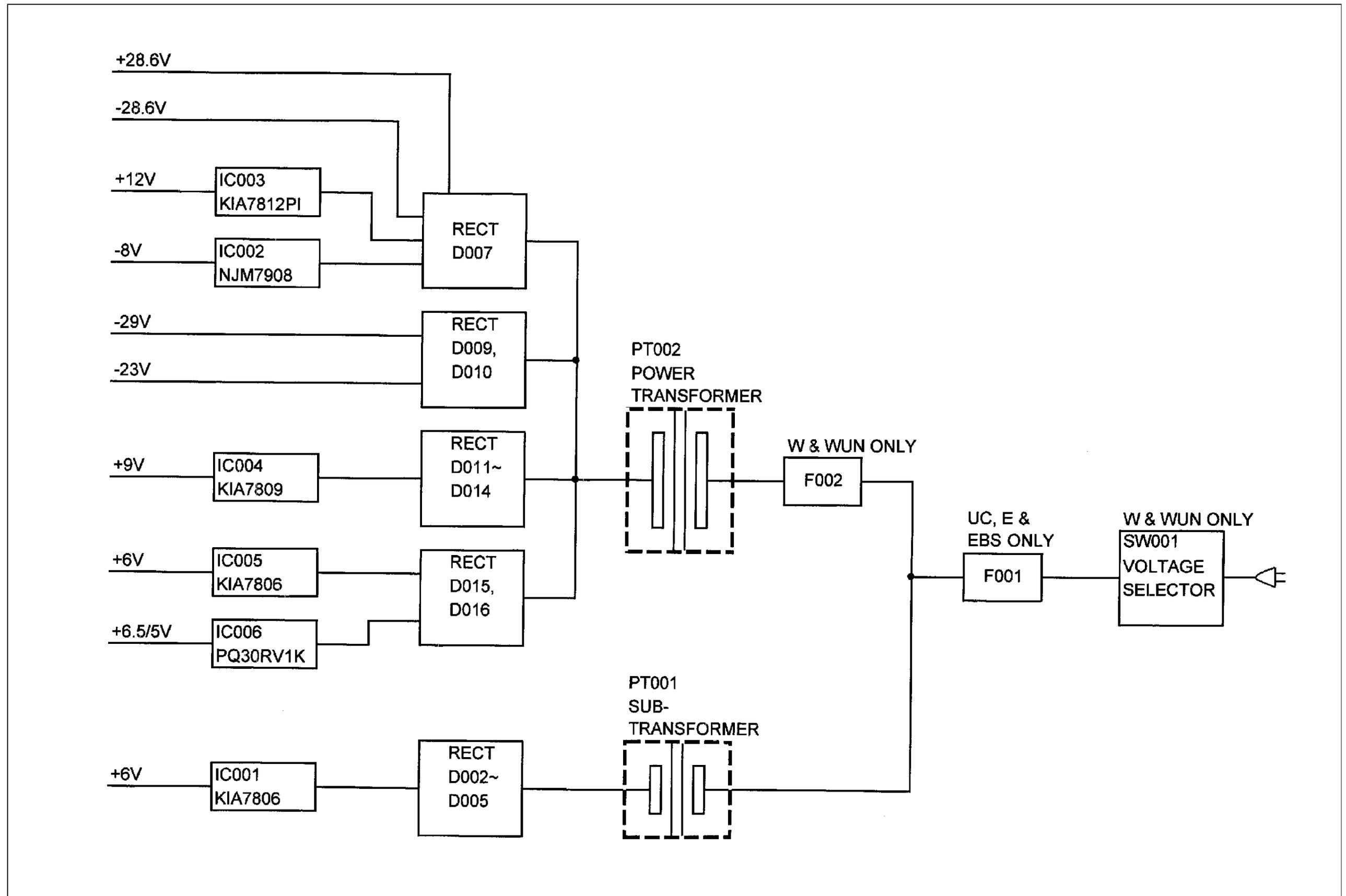
POWER PWB

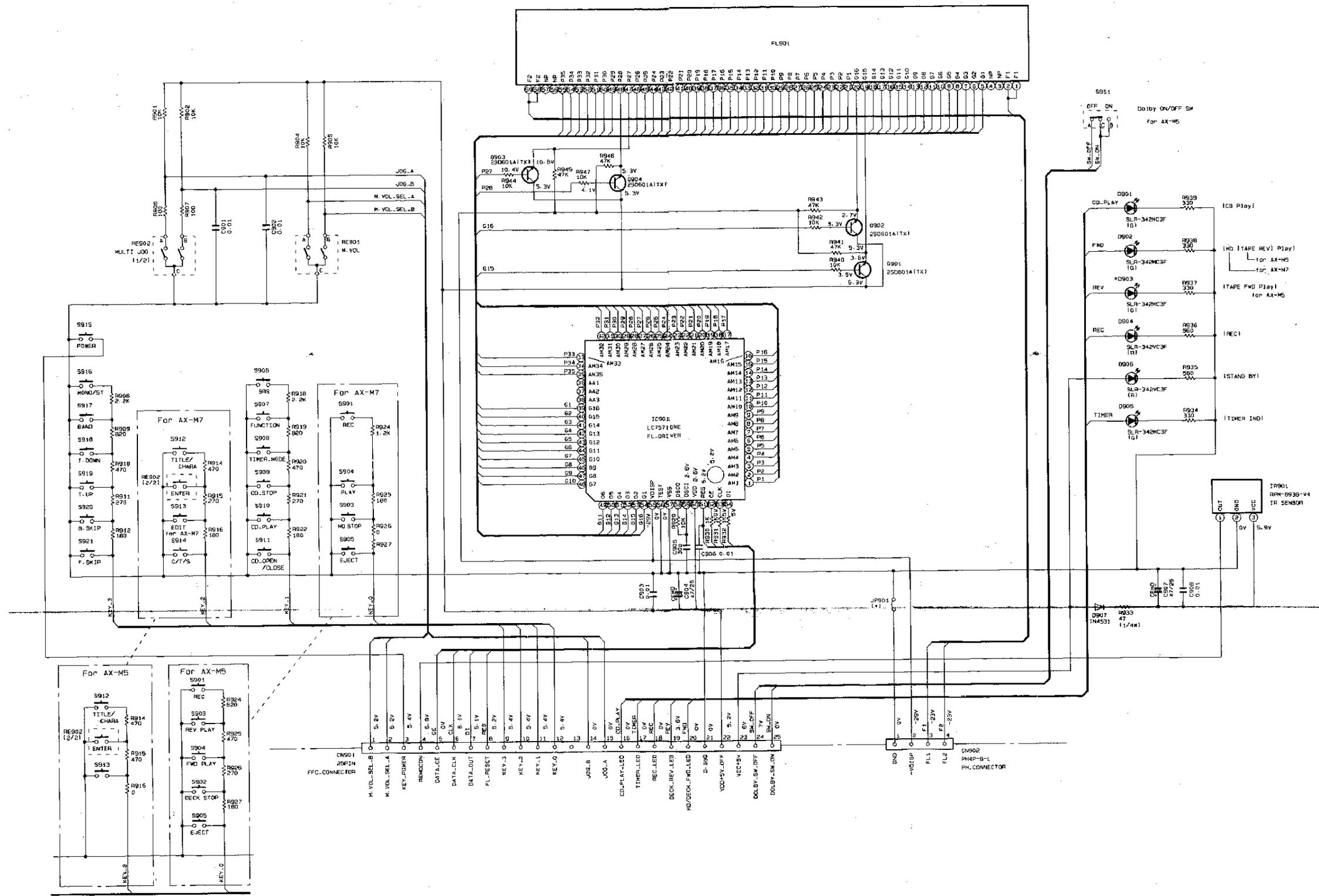
HITACHI

Block Diagram



Block Diagram (Power)

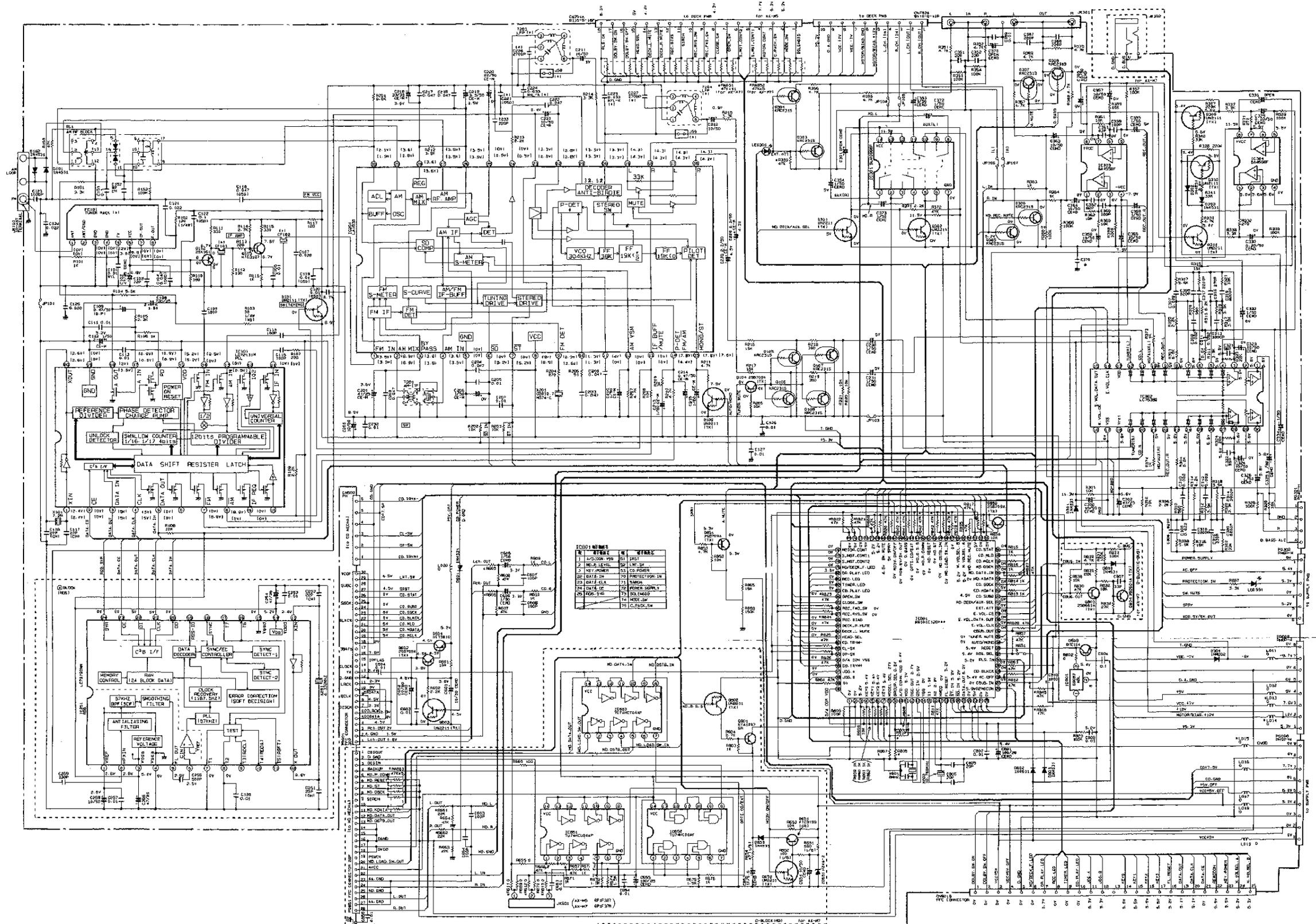




No 0094E

FL DISP BLOCK CIRCUIT

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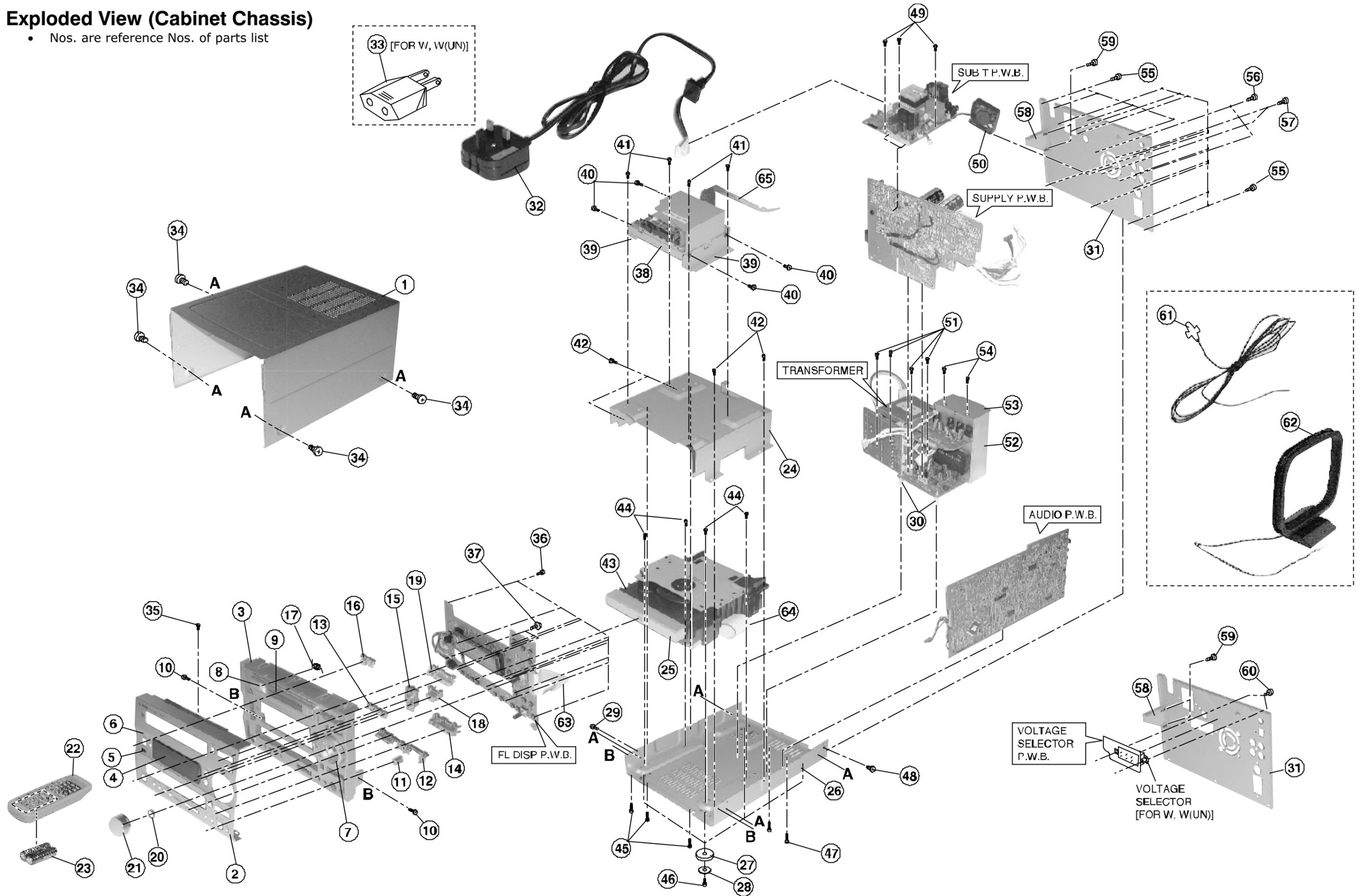
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AUDIO TUNER CIRCUIT

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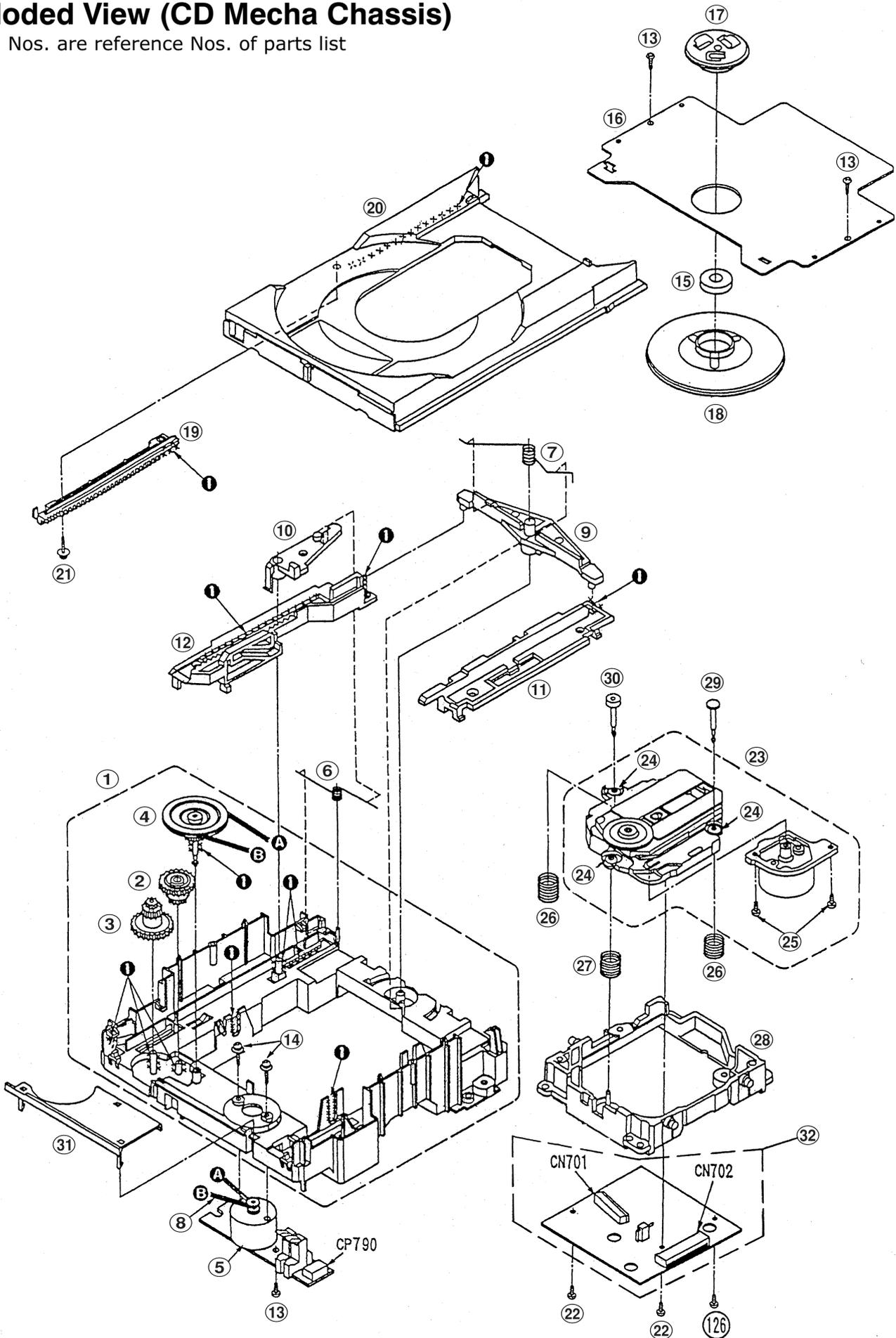
Exploded View (Cabinet Chassis)

• Nos. are reference Nos. of parts list



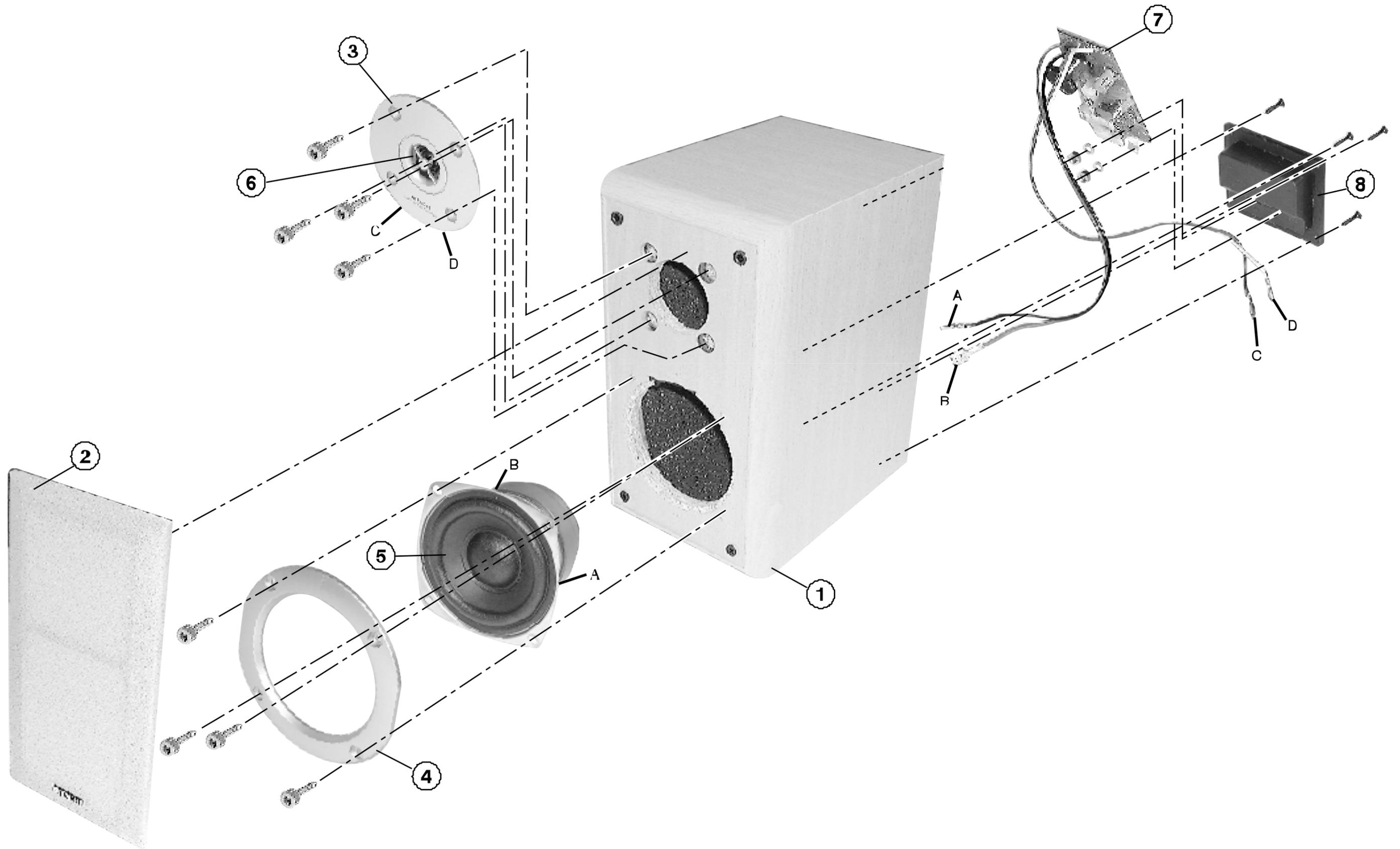
Exploded View (CD Mecha Chassis)

- Nos. are reference Nos. of parts list



Exploded View (Speaker System HS-M7)

- Nos. are reference Nos. of parts list



**THE UPDATED PARTS LIST
FOR THIS MODEL IS
AVAILABLE ON ESTA**

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