# XM-7547

# SERVICE MANUAL

*US Model*
*Canadian Model*
*AEP Model*
*UK Model*
*E Model*

## SPECIFICATIONS

### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

75 watts per channel minimum continuous average power into 4 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.04%* total harmonic distortion per Car Audio Ad Hoc Committee standards.

### Other Specifications

| | | |
|---|---|---|
| Circuit system | Pure Direct Drive SEPP<br>Pulse power supply (Three Transformers) | |
| Inputs | RCA pin jacks | |
| Outputs | Speaker terminals | |
| Speaker impedance | 0.5** – 8 Ω (stereo)<br>1** – 8 Ω (when used as a bridging amplifier) | |
| Maximum outputs | | |
| | HI-VOLTAGE (A/B/C/D ch.) | HI-CURRENT (C/D ch.) |
| | 180 W (at 4 Ω) | 90 W (at 4 Ω) |
| | 300 W (at 2 Ω) | 180 W (at 2 Ω) |
| | 600 W (at 4 Ω BTL) | 360 W (at 4 Ω BTL) |
| Rated outputs (supply voltage at 14.4 V*, 20 Hz – 20 kHz) | | |
| | HI-VOLTAGE (A/B/C/D ch.) | HI-CURRENT (C/D ch.) |
| | 75 W (at 4 Ω, 0.04 %) | 37.5 W (at 4 Ω, 0.04 %) |
| | 150 W (at 2 Ω, 0.1 %) | 75 W (at 2 Ω, 0.1 %) |
| | — | 150 W (at 1 Ω, 0.3 %) |
| | — | 180 W (at 0.5 Ω , 0.3 %) |
| | 300 W (at 4 Ω BTL, 0.1 %) | 150 W (at 4 Ω BTL, 0.1 %) |
| | — | 300 W (at 2 Ω BTL, 0.3 %) |
| | — | 360 W (at 1 Ω BTL, 0.3 %) |
| Frequency response | 5 Hz – 100 kHz (-3 dB) | |
| Harmonic distortion | 0.005 % or less (at 1 kHz, 4 Ω*) | |
| Input level adjustment range | 0.2 - 4.0 V | |
| High-pass filter (x 1/x 10) | 50 - 400 Hz/500 - 4 kHz, -12 dB/oct | |
| Low-pass filter (x 1/x 10) | 50 - 400 Hz/500 - 4 kHz, -12 dB/oct | |
| Low boost | 0 – 10 dB (40 Hz) | |
| Power requirements | 12 V DC car battery (negative ground) | |
| Power supply voltage | 10.5 – 16 V | |
| Current drain | at rated output: 45 A (4Ω HI-VOLTAGE mode)<br>at rated output:100 A (2 Ω HI-VOLTAGE mode)<br>Remote input: 1.5 mA | |
| Dimensions | Approx. 532 × 83.5 × 260 (303 with cover) mm (w/h/d) (21 × 3 3/8 × 10 1/4 in.) not incl. projecting parts and controls | |
| Mass | Approx. 8 kg (17 lb. 10 oz.) not incl. accessories | |
| Supplied accessories | Mounting screws (4)<br>Terminal cover (1)<br>Hexagonal wrench 3mm (1/8 in.) (1) | |

* NFB ON
** HI-CURRENT (C/D channels) only

Design and specifications are subject to change without notice.

## STEREO POWER AMPLIFER

MICROFILM

SONY®

## TABLE OF CONTENTS



**Notes on chip component replacement**

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

# SECTION 1
# SERVICE NOTE

## Clearing the Protector During Repairs

- OVER CURRENT : Detects overcurrent during output.
- OFF SET : Detects DC offset at the speaker terminal.

### 1. Clearing the OVER CURRENT protector

① When the position of the MODE switch (S801/power board) is set to HI-VOLTAGE :
Cut the jumper wire JW535 of the amplifier board.

② When the position of the MODE switch (S801/power board) is set to HI-CURRENT :
Cut the jumper wire JW690 of the amplifier board.

### 2. Clearing the OFF SET protector

- Cut the jumper wire JW502 of the amplifier board.

### 3. TEST TONE Function

① Press the TEST TONE button (S851/amplifier board) with the power ON. The amplifier is normal if sound is produced from the speaker.

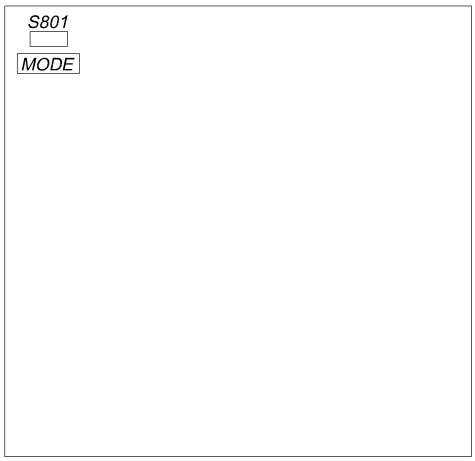
② If no sound

: Problem causer by incorrect connecttion of the power supply system or sperker system.

: The signals input by the RCA cable before the amplifier system are abnormal.

**Adjustment Location:**

**- POWER BOARD - (Component side)**




**- AMPLIFIER BOARD - (Component side)**

# SECTION 2
# GENERAL

This section is extracted from instruction manual.

## Connections

### Precautions

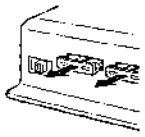
- This unit is designed for negative ground 12 V DC operation only.
- Use speakers with suitable impedance.
  — HI-CURRENT mode: 0.5 to 2 Ω
  — HI-VOLTAGE mode: 2 to 8 Ω.
- Do not connect any active speakers (with built in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers.
- Avoid installing the unit where:
  it would be subject to high temperatures such as from direct sunlight or hot air from the heater
  it would be exposed to rain or moisture
  it would be subject to dust or dirt.
- If your car is parked in direct sunlight and there is a considerable rise in temperature inside the car, allow the unit to cool down before use.
- Be sure to install the unit horizontally so that the air duct of the cooling fan or its fin will not be covered with carpet etc.
- The cooling fan operates when the temperature inside the unit rises to a certain level. It is not a malfunction if the cooling fan does not operate when you turn on the power.
- If this unit is placed too close to the car radio, interference may occur. In this case, relocate the amplifier away from the car radio.
- If no power is being supplied to the cassette player or tuner, check the connections.
- This power amplifier employs a protection circuit* to protect the transistors and speakers if the amplifier malfunctions. Do not attempt to test the protection circuits by covering the heat sink or connecting improper loads.
- Do not use the unit on a weak battery as its optimum performance depends on a good power supply.
- For safety reasons, keep your car audio volume moderate so that you can still hear sounds outside your car.

### Fuse Replacement

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

#### Warning

- When replacing the fuse, be sure to use one matching the amperage stated above the fuse holder. Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.
- If all four fuses are not used, the performance is limited, and the power may not be activated.



*Protection circuit*
*This amplifier is provided with a protection circuit that operates in the following cases:*
*— when the unit is overheated*
*— when a DC current is generated*
*— when the speaker terminals are short circuited.*
*The color of the POWERIPROTECTOR indicator will change from green to amber, and the unit will shut down.*
*If this happens, turn off the connected equipment, take out the cassette tape or disc, and determine the cause of the malfunction. If the amplifier has overheated, wait until the unit cools down before use.*

If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

## Connexions

### Précautions

- Cet appareil est conçu pour fonctionner uniquement sur courant continu de 12 volts avec masse négative.
- Utilisez des haut-parleurs d'une impédance appropriée.
  — Mode HI-CURRENT : 0,5 à 2 Ω.
  — Mode HI-VOLTAGE : 2 à 8 Ω.
- Ne raccordez pas de haut-parleurs actifs (avec amplificateur intégré) aux bornes de haut-parleurs de cet appareil; ils pourraient être endommagés.
- N'exposez pas l'appareil:
  — à des températures élevées, comme en plein soleil ou près de la sortie d'air chaud du chauffage;
  — à l'humidité ou à la pluie;
  — à la poussière ou à la saleté.
- Si votre voiture était garée en plein soleil et que la température à considérablement augmenté à l'intérieur, laissez refroidir l'appareil avant de l'utiliser.
- Veillez à installer l'appareil horizontalement de façon à ce que le conduit d'air du ventilateur de refroidissement ou ses ailettes ne soit par recouvert par le tapis de sol, etc.
- Le ventilateur fonctionne lorsque la température interne de l'appareil atteint un certain niveau. Ce n'est pas anormal que le ventilateur ne fonctionne pas à la mise sous tension.
- Si cet appareil est placé trop près de l'autoradio, des interférences risquent de se produire. Eloignez autant que possible l'amplificateur de l'autoradio.
- Si le lecteur de cassette ou le tuner ne sont pas alimentés, vérifiez tout d'abord les connexions.
- Cet amplificateur est équipé d'un circuit* destiné à protéger les transistors et les haut-parleurs en cas de défaillance. N'essayez pas de tester l'efficacité de ce circuit en recouvrant les dissipateurs thermiques ou en effectuant des connexions inadéquates.
- N'utilisez pas l'appareil sur une batterie faible, car sa performance maximale dépend d'une bonne alimentation en électricité.
- Pour des raisons de sécurité, écoutez l'autoradio à un volume modéré afin d'entendre les bruits extérieurs.

### Remplacement du fusible

Si le fusible saute, vérifiez les connexions du fil d'alimentation et remplacez le fusible. S'il saute de nouveau, un mauvais circuit interne peut en être la cause. Dans ce cas, consultez votre concessionnaire Sony.

#### Avertissement

- En cas de remplacement du fusible, veillez à utiliser un fusible dont l'intensité correspond à celle inscrite sur le porte-fusible. N'utilisez jamais de fusible dont l'intensité dépasse celle du fusible fourni avec l'appareil, car vous risqueriez d'endommager l'appareil.
- Si les quatre fusibles ne sont pas utilisés, les performances s'en trouvent limitées et il se peut que le système ne puisse être mis sous tension.

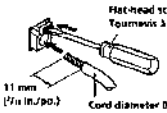
*Circuit de protection*
*Cet amplificateur est équipé d'un circuit de protection qui entre en service dans les cas suivants:*
*— Surchauffe de l'appareil*
*— Production d'un courant continu*
*— Court-circuit aux bornes des haut-parleurs.*
*La couleur du témoin POWERIPROTECTOR passe du vert à l'ambre et l'appareil s'éteint.*
*Si le cas se présente, coupez l'alimentation de l'appareil raccordé et éjectez la cassette le disque compact avant d'examiner la cause de la défaillance. Si l'amplificateur est trop chaud, attendez qu'il refroidisse.*

Pour toute question ou problème qui ne serait pas traité dans ce manuel, consultez votre concessionnaire Sony.

## Caution

- Before making any connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Be sure to use speakers with an adequate power rating. If you use small capacity speakers, they may be damaged.
- Do not connect the ⊖ terminal of the speaker system to the car chassis, and do not connect the ⊖ terminal of the right speaker with that of the left speaker.
- Install the input and output cords away from the power supply lead as running them close together can generate some interference noise.
- This unit is a high powered amplifier. Therefore, it may not perform to its full potential if used with the speaker cords supplied with the car.
- If your car is equipped with a computer system for navigation or some other purpose, do not remove the ground wire from the car battery. If you disconnect the wire, the computer memory may be erased. To avoid short circuits when making connections, disconnect the +12 V power supply lead until all the other leads have been connected.

### Make the terminal connections as illustrated below.



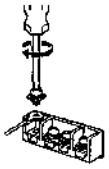

*Note*
*Tighten the screws firmly, but be careful not to apply too much force* as doing so may damage the screws.*

* *The torque value should be less than 1 N•m.*

## Attention

- Avant d'effectuer les connexions, débranchez le fil de masse de la borne de la batterie pour éviter un court-circuit.
- Utilisez des haut-parleurs d'une capacité adéquate. Si vous utilisez des haut-parleurs de faible capacité, ils risquent d'être endommagés.
- Ne raccordez pas la borne ⊖ des haut-parleurs à la carrosserie de la voiture ni la borne ⊖ du haut-parleur droit à celle du haut-parleur gauche.
- Eloignez les cordons d'entrée et de sortie du fil d'alimentation électrique pour éviter que des interférences ne se produisent.
- Cet appareil est un amplificateur de haute puissance et il peut ne pas atteindre sa puissance maximale si les cordons de haut-parleurs originaux de la voiture lui sont raccordés.
- Si votre voiture est équipée d'un ordinateur de bord pour la navigation ou à toute autre fin, ne débranchez pas le fil de masse de la batterie de la voiture. Si vous débranchez ce fil, toute la mémoire de l'ordinateur sera effacée. Pour éviter un court-circuit lorsque vous effectuez les branchements, branchez le fil d'alimentation de +12 V uniquement après avoir branché tous les autres fils.

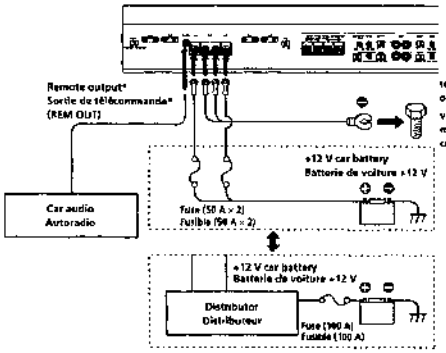
### Effectuez les connexions de la manière indiquée ci-dessous.



*Remarque*
*Ne serrez* pas trop fort la vis car vous pourriez l'endommager.*

* *Le couple de serrage devrait être inférieur à 1 N•m.*

### Power Connection Leads
### Câbles d'alimentation




* *If you have the factory original or some other car audio without a remote out-put on the amplifier, connect the remote input terminal (REMOTE) to the accessory power supply.*
* *Si vous disposez du modèle d'origine ou d'un autre autoradio dont l'amplificateur ne comporte pas de sortie de télécommande, raccordez la borne d'entrée de télécommande (REMOTE) à la prise d'alimentation accessoires.*

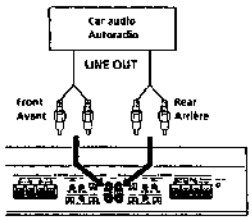
*Notes on the power supply*
- *Connect the +12 V power supply lead only after all the other leads have been connected.*
- *Be sure to connect the ground lead of the unit securely to a metal point of the car. A loose connection may cause a malfunction of the amplifier.*
- *Be sure to connect the remote control lead of the car audio to the remote terminal.*
- *When using a car audio without a remote output on the amplifier, connect the remote input terminal (REMOTE) to the accessory power supply.*
- *Use the power supply lead with a fuse attached (100 A).*
- *Place the fuse in the power supply lead as close as possible to the car battery.*
- *Make sure that the leads to be connected to the +12 V and GND terminals of this unit are larger than 6-Gauge (AWG-6) or have a sectional area of more than 13 mm².*
- *When using the optional RC-46 power amplifier connecting cord, consult that manual for proper use.*

*Remarques sur l'alimentation électrique*
- *Raccordez le câble d'alimentation +12 V uniquement après avoir réalisé toutes les autres connexions.*
- *Raccordez correctement le fil de masse à une partie métallique de la voiture. Une connexion lâche peut provoquer un dysfonctionnement de l'amplificateur.*
- *Veillez à raccorder le fil de télécommande de l'autoradio à la borne de télécommande.*
- *Si vous utilisez un autoradio dont l'amplificateur ne comporte pas de sortie de télécommande, raccordez la borne d'entrée de la télécommande (REMOTE) à la prise d'alimentation accessoires.*
- *Utilisez un câble d'alimentation muni d'un fusible (100 A).*
- *Fixez le câble d'alimentation le plus près possible de la batterie de voiture.*
- *Vous devez raccorder des câbles de calibre supérieurs à 6-jauges (AWG-6) ou d'une section supérieure à 13 mm² aux bornes +12V et GND.*
- *Lorsque vous utilisez le cordon de raccordement pour amplificateur RC-46 en option, consultez le manuel pour une utilisation correcte.*

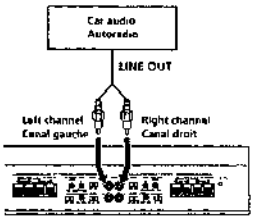
## Input Connections

## Connexions d'entrée

### Line Input Connection (with Speaker Connection 1, 2 or 4) — A
### Connexion d'entrée de ligne (avec connexion de haut-parleur 1, 2 ou 4)




### Line Input Connection (with Speaker Connection 3) — B
### Connexion d'entrée de ligne (avec connexion de haut-parleur 3)




*Note*
*Make sure that the line output from the car audio is connected to the jack marked "A (MONO)/C (MONO)" on the unit*

*Remarque*
*Vérifiez que la sortie de ligne de l'autoradio est raccordée à la prise portant l'indication "A (MONO)/C (MONO)" sur l'appareil.*

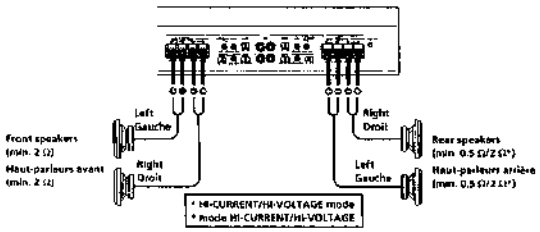
## Speaker Connections

## Raccordement de haut-parleurs

### 4-Speaker System (with Input Connection A) — 1
### Système à 4 haut-parleurs (avec connexion d'entrée A)

*For details on the settings of switches and controls, refer to "Location and Function of Controls."*

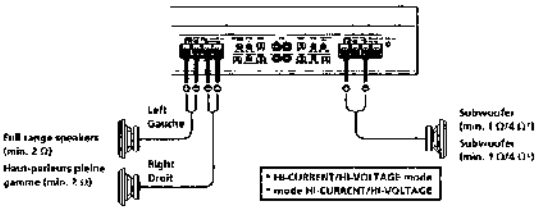
*Pour plus de détails sur les réglages des commutateurs et commandes, reportez-vous à "Emplacement et fonction des commandes".*




### 3-Speaker System (with Input Connection A) — 2
### Système à 3 haut-parleurs (avec connexion d'entrée A)

*For details on the settings of switches and controls, refer to "Location and Function of Controls."*

*Pour plus de détails sur les réglages des commutateurs et commandes, reportez-vous à "Emplacement et fonction des commandes".*



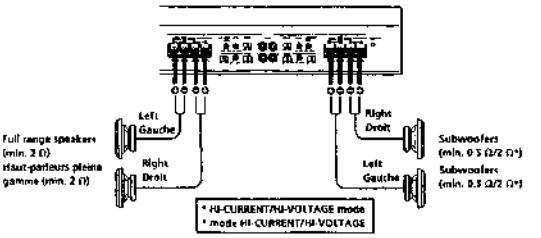

*Notes*
- *In this system, the volume of the subwoofer will be controlled by the car audio fader control.*
- *In this system, the output signals to the subwoofer are a combination of both the C and D INPUT jacks.*

*Remarques*
- *Dans ce système, le volume du subwoofer est contrôlé par le fader de l'autoradio.*
- *Sur cet appareil, les signaux transmis vers le subwoofer sont constitués des signaux des prises C et D INPUT.*

### 2-Way System (with Input Connection A) — 3
### Système à 2 voies (avec connexion d'entrée A)

*For details on the settings of switches and controls, refer to "Location and Function of Controls."*

*Pour plus de détails sur les réglages des commutateurs et commandes, reportez-vous à "Emplacement et fonction des commandes".*



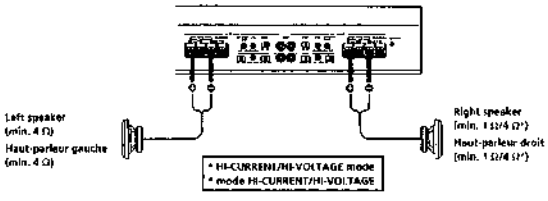

*Note*
*In this system, the volume of the subwoofers will be controlled by the car audio fader control.*

*Remarque*
*Dans ce système, le volume des subwoofers est contrôlé par le fader de l'autoradio.*

### 2-Speaker System (with Input Connection B) — 4
### Système à 2 haut-parleurs (avec connexion d'entrée B)

*For details on the settings of switches and controls, refer to "Location and Function of Controls."*

*Pour plus de détails sur les réglages des commutateurs et commandes, reportez-vous à "Emplacement et fonction des commandes".*



## Features

- Maximum power output of 180 watts per channel (at 4 Ω)
- This unit can be used as a bridging amplifier with a maximum output of 600 watts.
- Built-in the variable filter corresponds to a wide range, from 50Hz to 400Hz/500Hz to 4kHz. (x1/x10 switch)
- Built-in variable LPF (Low-pass filter), HPF (High-pass filter) and low boost circuit
- Possible to switch between HI-CURRENT mode (0.5 - 1 Ω) and HI-VOLTAGE mode (2 - 4 Ω) for C/D channels. A/B channels are fixed to HI-VOLTAGE mode.
- The DIRECT switch can be used to bypass the low-pass filter, high-pass filter for more enjoyable high quality sound.
- Negative Feed Back (ON/OFF) switchable.
- Independent voltage amplifier power supply.
- Protection circuit and indicator are provided.
- Pulse power supply* for stable, regulated output power.

** Pulse power supply*
*This unit has a built-in power regulator which converts the power supplied by the DC 12 V car battery into high speed pulses using a semiconductor switch. These pulses are stepped up by the built-in pulse transformer and separated into both positive and negative power supplies before being converted into direct current again. This is to regulate fluctuating voltage from the car battery. This light weight power supply system provides a highly efficient power supply with a low impedance output.*

## Caractéristiques

- Puissance de sortie maximale de 180 watts par canal (à 4 Ω).
- Cet appareil peut être utilisé comme amplificateur de pontage d'une sortie maximale de 600 watts.
- Le filtre variable intégré correspond à une large plage allant de 50Hz à 400Hz/500Hz à 4kHz. (commutateur x1/x10).
- Filtre passe-bas (LPF), filtre passe-haut (HPF) variables et circuit d'amplification des graves intégrés.
- Possibilité de commutation des modes HI-CURRENT (0,5 - 1 Ω) et HI-VOLTAGE (2 - 4 Ω) pour les canaux C/D. Les canaux A/B sont limités à la mode HI-VOLTAGE
- Le commutateur DIRECT peut être utilisé pour contourner le filtre passe-bas, le filtre passe-haut, et pour le circuit d'égalisation, afin d'optimiser la qualité sonore.
- Rétro-action négative (ON/OFF) commutable.
- Alimentation indépendante de l'amplificateur de tension.
- Circuit de protection et indicateur fournis.
- Alimentation électrique par impulsions* pour une puissance de sortie stable, régulée.

** Alimentation électrique par impulsions*
*Cet appareil est équipé d'un régulateur de puissance intégré qui convertit la puissance fournie par une batterie de voiture de 12 V CC en impulsions ultra-rapides au moyen d'un commutateur à semi-conducteur. Ces impulsions sont amplifiées par le transformateur d'impulsions intégré et séparées en alimentation positive et négative avant d'être reconverties en courant continu. Ce processus permet de comparer les fluctuations de tension provenant de la batterie de la voiture. Ce système d'alimentation de faible poids assure une alimentation électrique très efficace pour une sortie d'impédance faible.*

## Location and Function of Controls

**1 MODE (C/D CHANNEL) indicator**
Indicates HI-CURRENT mode or HI-VOLTAGE mode

**2 POWER/PROTECTOR indicator**
- OVER CURRENT lights up in green during normal operation. The color will change from green to amber when receiving a powerful signal.
- OFFSET lights up green during normal operation. The color will change from green to amber when the voltage going out to the Speaker terminal or the Pin jack is too high.
- THERMAL lights up in green during normal operation. The color will change from green to amber when the temperature rises to an unsafe level. The color will return to green when the temperature returns to normal.

**3 MODE (C/D CHANNEL) (HI-CURRENT/HI-VOLTAGE) switch**
- In HI-CURRENT mode the speaker impedance is 0.5 to 1 Ω. This mode sends a signal via parallel circuits for a powerful sound.
- In HI-VOLTAGE mode the speaker impedance is 2 to 4 Ω. In this mode you can enjoy clear sound with the dynamic range.

**4 NFB switch**
When the NFB (Negative Feed Back) switch is set to ON, the NFB circuits are effective at reducing the distortion produced by the amplifier.
*Tip*
*The NFB circuits are effective at reducing the static characteristic distortion produced by the amplifier, but are susceptible to the affects of sound muddiness from the reverse electromotive force produced by the speakers.*

**5 DIRECT switch**
When the DIRECT switch is set to ON, the signal will not go through the low-pass filter, high-pass filter, or low boost circuit.

**6 LEVEL adjustment control**
The input level can be adjusted with this control when using source equipment made by other manufacturers. Turn it to MAX when the output level of the car audio seems low.

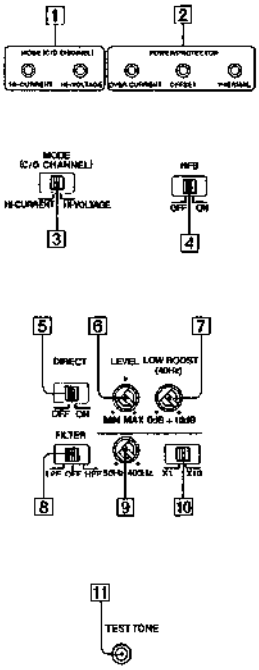
**7 LOW BOOST level control (See Fig. 1)**
Turn this control to boost the frequencies around 40 Hz to a maximum of 10 dB.

**8 FILTER select switch**
When the switch is in the LPF position, the filter is set to low-pass. When in the H/P F position, the filter is set to high-pass. When the DIRECT switch is set to ON, these filters do not work.

**9 Cut-off frequency adjustment control (See Fig. 2)**
Sets the cut-off frequency (50 - 400 Hz) for the low-pass or high-pass filters.

**10 ×1/×10 switch (See Fig. 2)**
When the ×1/×10 switch is set to ×10, the established cut-off frequency (9) will be 10 times as large as the ×1 setting.

**11 TEST TONE button**
To check the system's status, activate the built-in transmitter then press the TEST TONE button. If the tone is heard, the unit is functioning normally.




## Emplacement et fonction des commandes

**1 Indicateur MODE (C/D CHANNEL)**
L'indicateur signale le mode activé : HI-CURRENT ou HI-VOLTAGE.

**2 Indicateur POWER/PROTECTOR**
- OVER CURRENT s'allume en vert en cours de fonctionnement normal. La couleur passe du vert à l'ambre lors de la réception d'un signal puissant.
- OFFSET s'allume en vert en cours de fonctionnement normal. La couleur passe du vert à l'ambre lorsque la tension transmise via la borne de haut-parleurs ou la prise à broche est trop élevée
- THERMAL s'allume en vert en cours de fonctionnement normal. La couleur passe du vert à l'ambre lorsque la température dépasse le niveau de sécurité. La couleur repasse au vert dès que la température est revenue à un niveau normal.

**3 Commutateur de MODE (C/D CHANNEL) (HI-CURRENT/HI-VOLTAGE)**
- En mode HI-CURRENT, l'impédance de haut-parleur est de 0,5 à 1 Ω. Ce mode transmet un signal via des circuits parallèles pour créer un son de forte amplitude.
- En mode Hi-VOLTAGE, l'impédance de haut-parleur est de 2 à 4 Ω. Ce mode vous permet d'obtenir un son clair dans la plage dynamique.

**4 Commutateur NFB**
Lorsque le commutateur NFB (rétroaction négative) est réglé sur ON, les circuits NFB réduisent efficacement les distorsions produites par l'amplificateur.
*Conseil*
*Les circuits NFB réduisent efficacement les distorsions statiques produites par l'amplificateur, mais sont sensibles aux effets d'altération du son causés par la force électromotrice inverse produite par les haut-parleurs.*

**5 Commutateur DIRECT**
Lorsque le commutateur DIRECT est réglé sur ON, le signal ne passe pas par le filtre passe-bas, le filtre passe-haut et le circuit d'égalisation.

**6 Commande de réglage LEVEL**
Le niveau d'entrée peut se régler avec cette commande lors de l'utilisation d'équipements source d'autres fabricants. Mettez-le sur MAX lorsque le niveau de sortie de l'installation audio paraît faible.

**7 Commande de niveau LOW BOOST (Voir Fig. 1)**
Tournez cette commande pour amplifier les fréquences autour de 40 Hz à un maximum de 10 dB. Lorsque le commutateur DIRECT est activé, ce circuit n'est pas activé

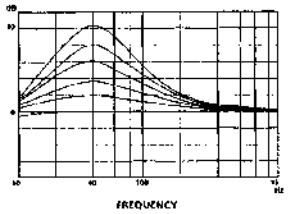
**8 Sélecteur FILTER**
Lorsque le commutateur est en position LPF, le filtre est mis sur passe-bas. Lorsqu'il est en position HPF, le filtre est mis sur passe-haut.
Lorsque le commutateur DIRECT est réglé sur ON, ces filtres sont inopérants.

**9 Commandes de réglage de la fréquence de coupure (Voir Fig. 2)**
Règle la fréquence de coupure (50 – 400 Hz) des filtres passe-bas ou passe-haut.

**10 Commutateur × 1/× 10 (Voir Fig. 2)**
Lorsque le commutateur × 1/× 10 est réglé sur × 10, la fréquence de coupure réglée (9) est dix fois supérieure au réglage × 1.

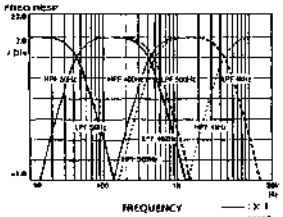
**11 Touche TEST TONE**
Pour contrôler le statut du système, activez le transmetteur intégré et appuyez ensuite sur la touche TEST TONE. Si vous entendez une tonalité, c'est que l'appareil fonctionne normalement.

**LOW BOOST**



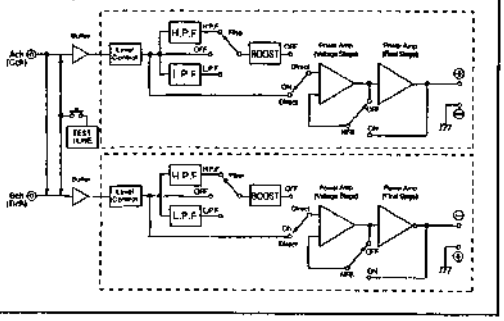

— Fig. 1 —

**Cut-off frequency/Fréquence de coupure**




— Fig. 2 —

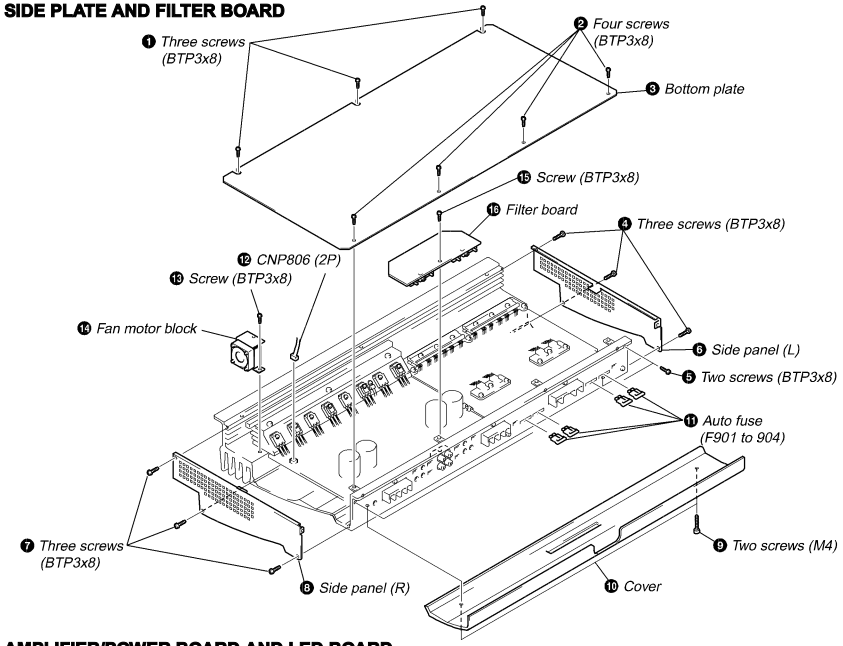
**Circuit Diagram / Schéma du circuit**



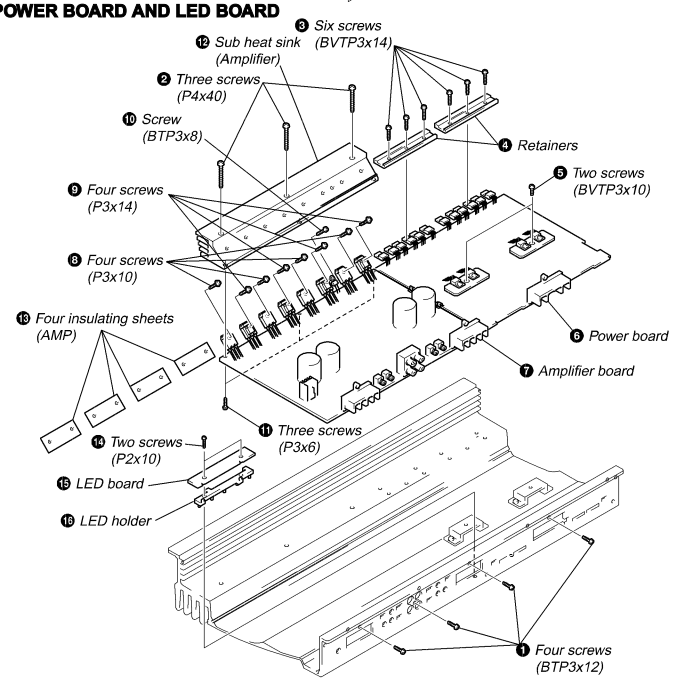
# SECTION 3
# DISASSEMBLY

**Note:** Follow the disassembly procedure in the numerical order given.

## 3-1. SIDE PLATE AND FILTER BOARD




## 3-2. AMPLIFIER/POWER BOARD AND LED BOARD






# SECTION 4
# ELECTRICAL ADJUSTMENT

## IDLING CURRENT ADJUSTMENT

• Perform adjustments in the HI-VOLTAGE mode.

① Adjustment point
Semi-fixed resistors VR101, VR201, VR301, VR401 of amplifier board.

② Precautions on adjustments
1. Set the RCA input terminal to open.
2. Apply a voltage of 14.4V between the +12V terminal, REMOTE terminal, and GND terminal.
3. Rotate the above semi-fixed resistors completely in the counterclockwise direction while observing the component side.
4. Check that the voltage at the adjustment point becomes 0 mV in step 2.
5. Fine adjustments may be required according to the characteristics of the MOS-FET used.

• When adjusting the idling current
Rotating the semi-fixed resistor in the clockwise direction:
In creases the idling current
Rotating the semi-fixed resistor in the counterclockwise direction:
Decreases the idling current

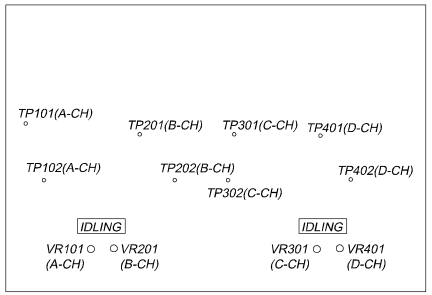
*Take note that rotating excessively in the clockwise direction will increase the idling current suddenly.

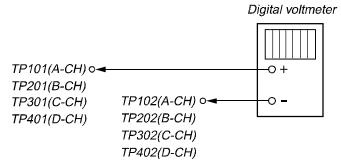
③ Approximate adjustment values
Adjust as follows so that the following voltages become 0.4 to 0.5 mV.

A channel :
Voltage between TP101 and TP102: Use VR101 of the amplifier board
B channel :
Voltage between TP201 and TP202: Use VR201 of the amplifier board
C channel :
Voltage between TP301 and TP302: Use VR301 of the amplifier board
D channel :
Voltage between TP401 and TP402: Use VR401 of the amplifier board

**Adjustment Location**

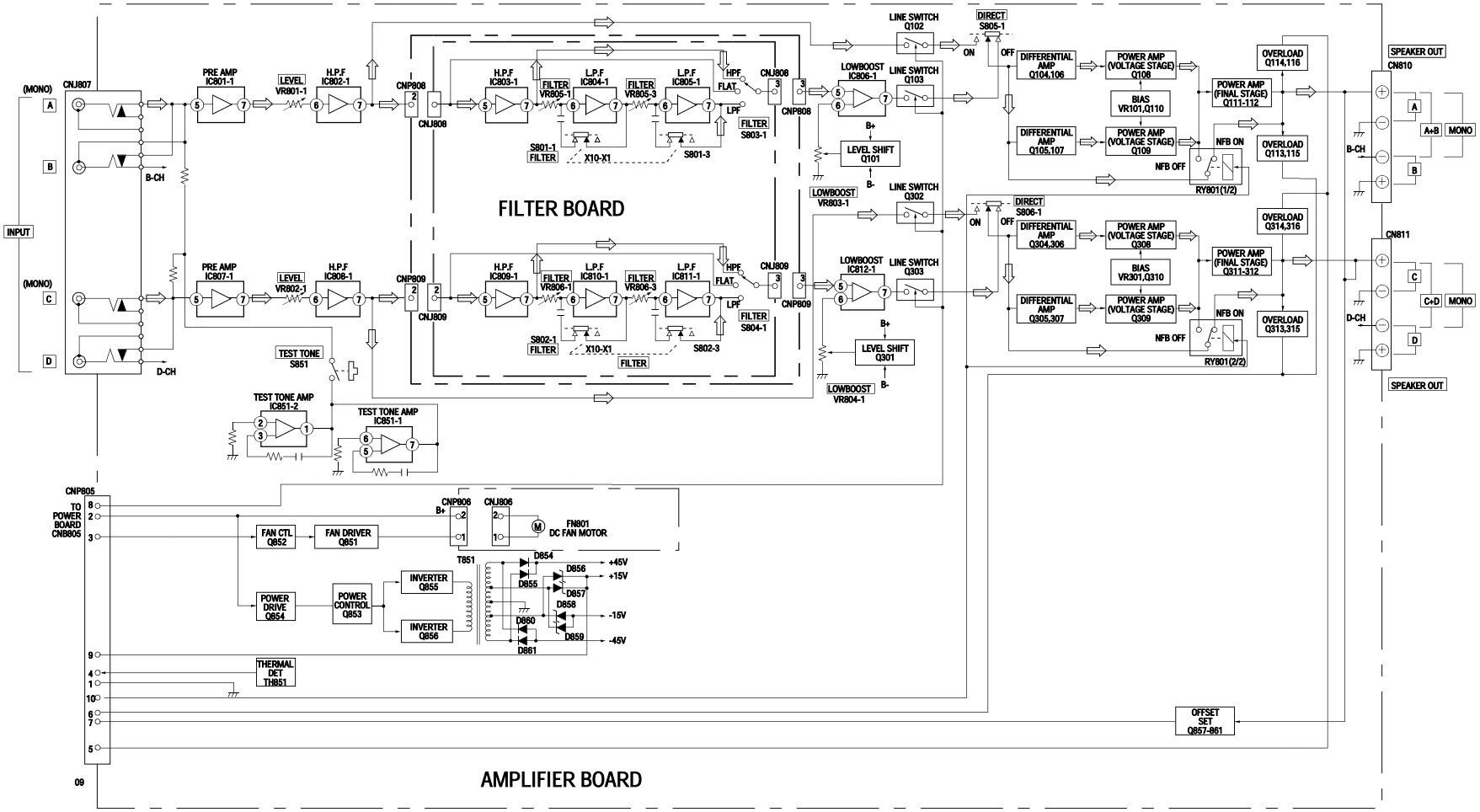
**- AMPLIFIER BOARD - (Component side)**



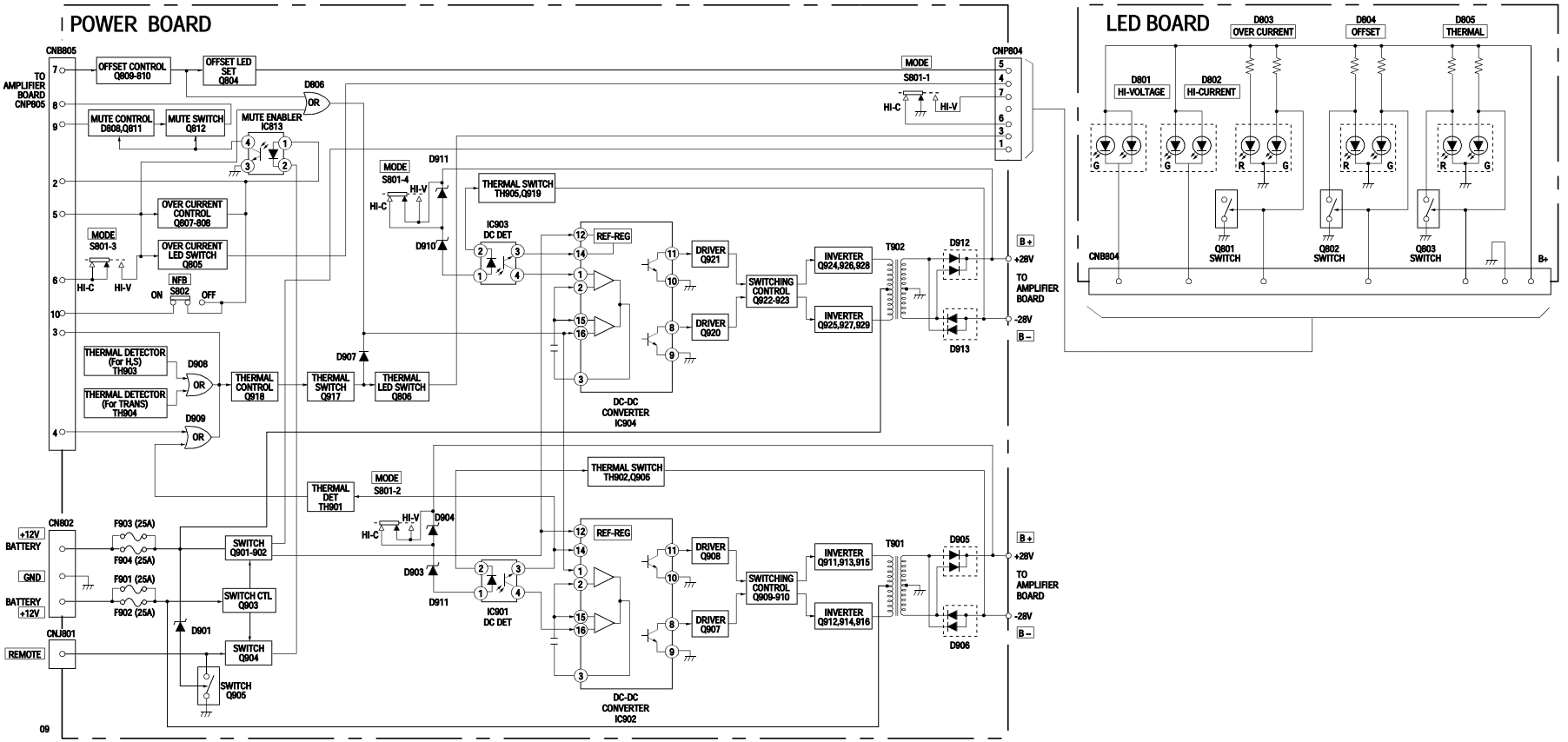
# SECTION 5
# DIAGRAMS

## 5-1. BLOCK DIAGRAM – AMPLIFIER SECTION –




• Signal path
⇨ : Audio

## 5-2. BLOCK DIAGRAM – POWER SECTION –



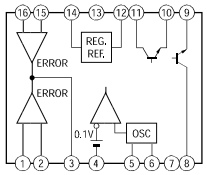
**THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.**
**(In addition to this, the necessary note is printed in each block.)**

**For schematic diagrams.**
**Note:**
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- B+ : B+ Line.
- Powr voltage is dc 14.4V and fed with regulated dc power supply from +12V and REMOTE terminals.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: POWER ON
  * : Impossible to mersure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : AUDIO

**For printed wiring boards.**
**Note:**
- ⟷ : parts extracted from the component side.

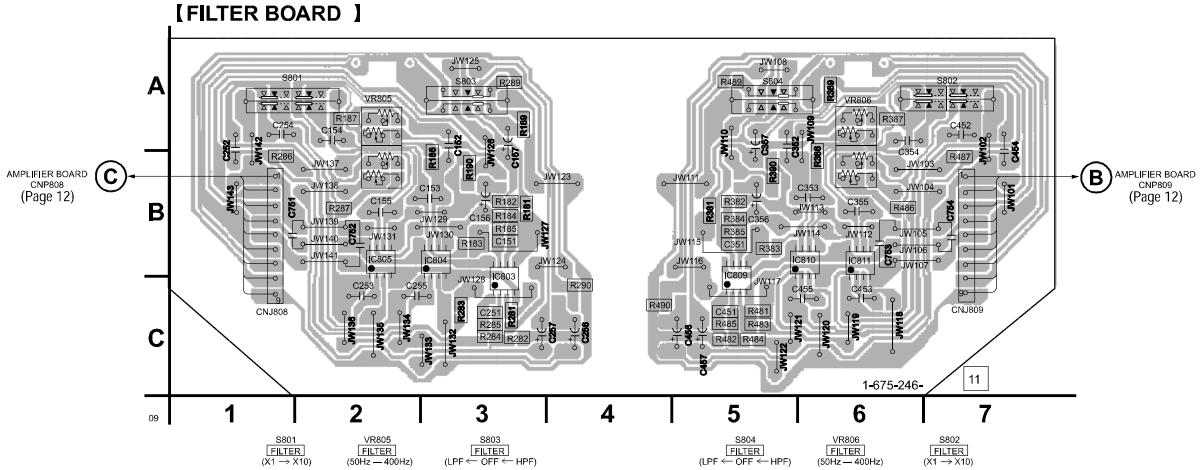
## 5-3. IC BLOCK DIAGRAM

- **POWER section**
  **IC902, 904 µPC494G2**




## 5-4. PRINTED WIRING BOARD – LED/FILTER SECTION –

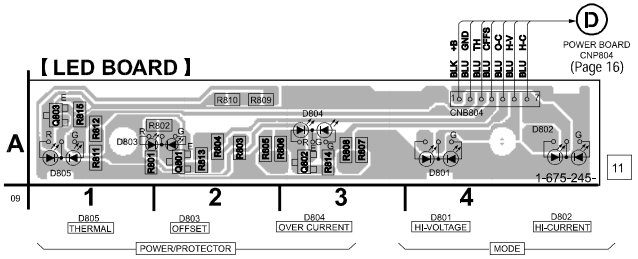
【FILTER BOARD 】




- **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| IC803 | C-3 |
| IC804 | B-3 |
| IC805 | B-2 |
| IC809 | C-5 |
| IC810 | B-6 |
| IC811 | B-6 |

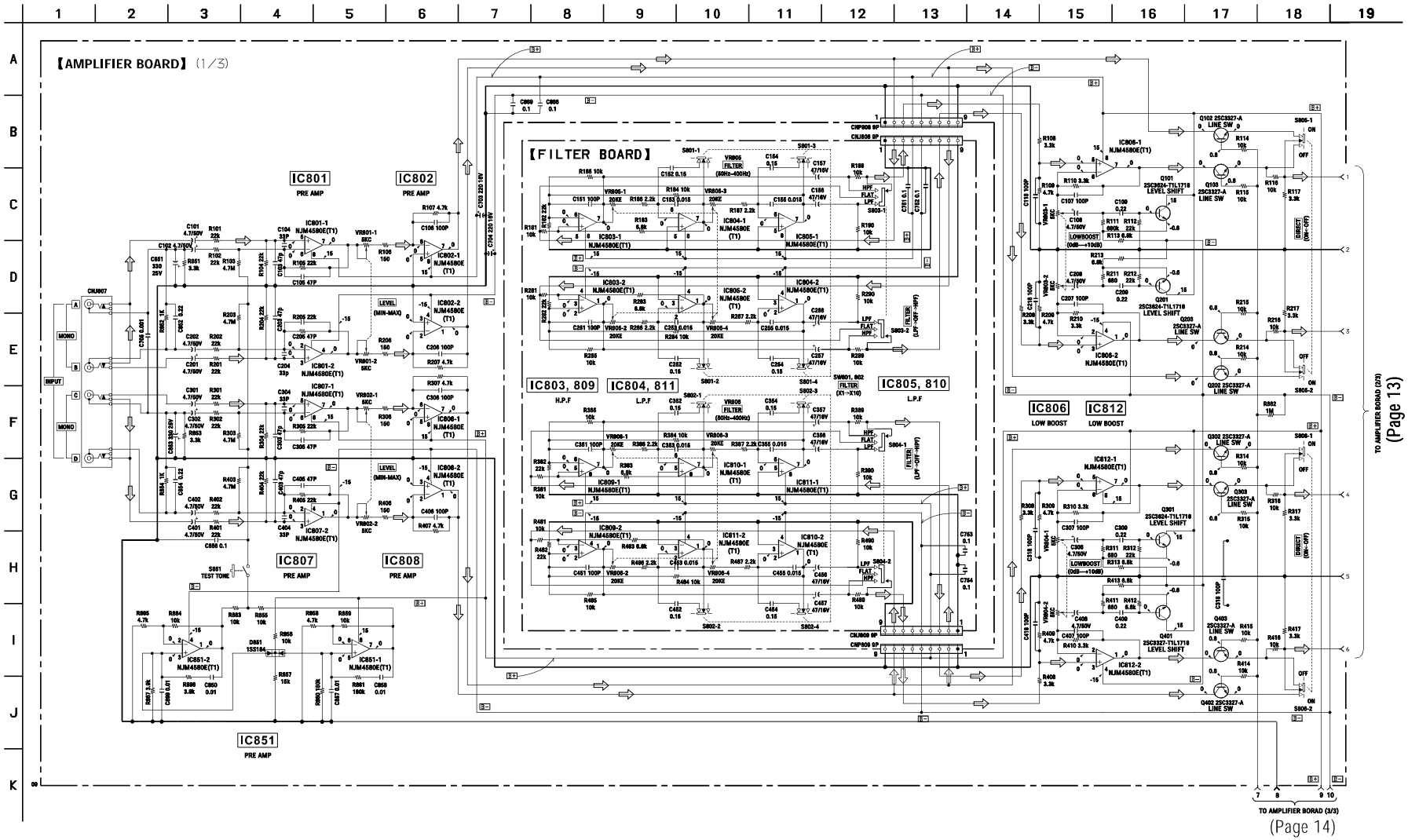
【LED BOARD 】




- **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D801 | A-4 |
| D802 | A-4 |
| D803 | A-2 |
| D804 | A-3 |
| D805 | A-1 |
| Q801 | A-2 |
| Q802 | A-3 |
| Q803 | A-1 |

**5-5. SCHEMATIC DIAGRAM – FILTER/AMPLIFIER (1/3) SECTION –** **• See page 10 for IC Block Diagram.**

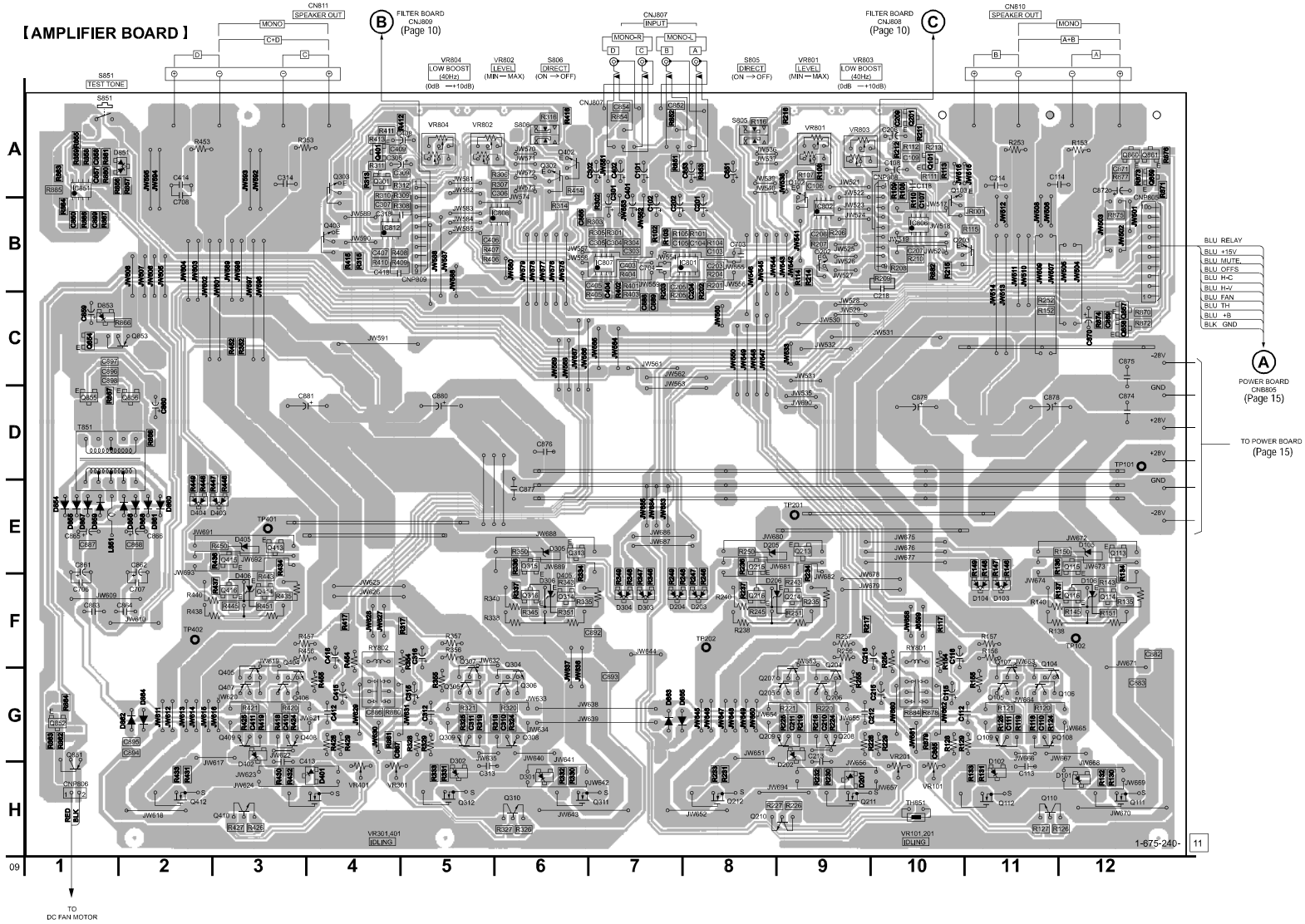


## 5-6. PRINTED WIRING BOARD – AMPLIFIER SECTION –

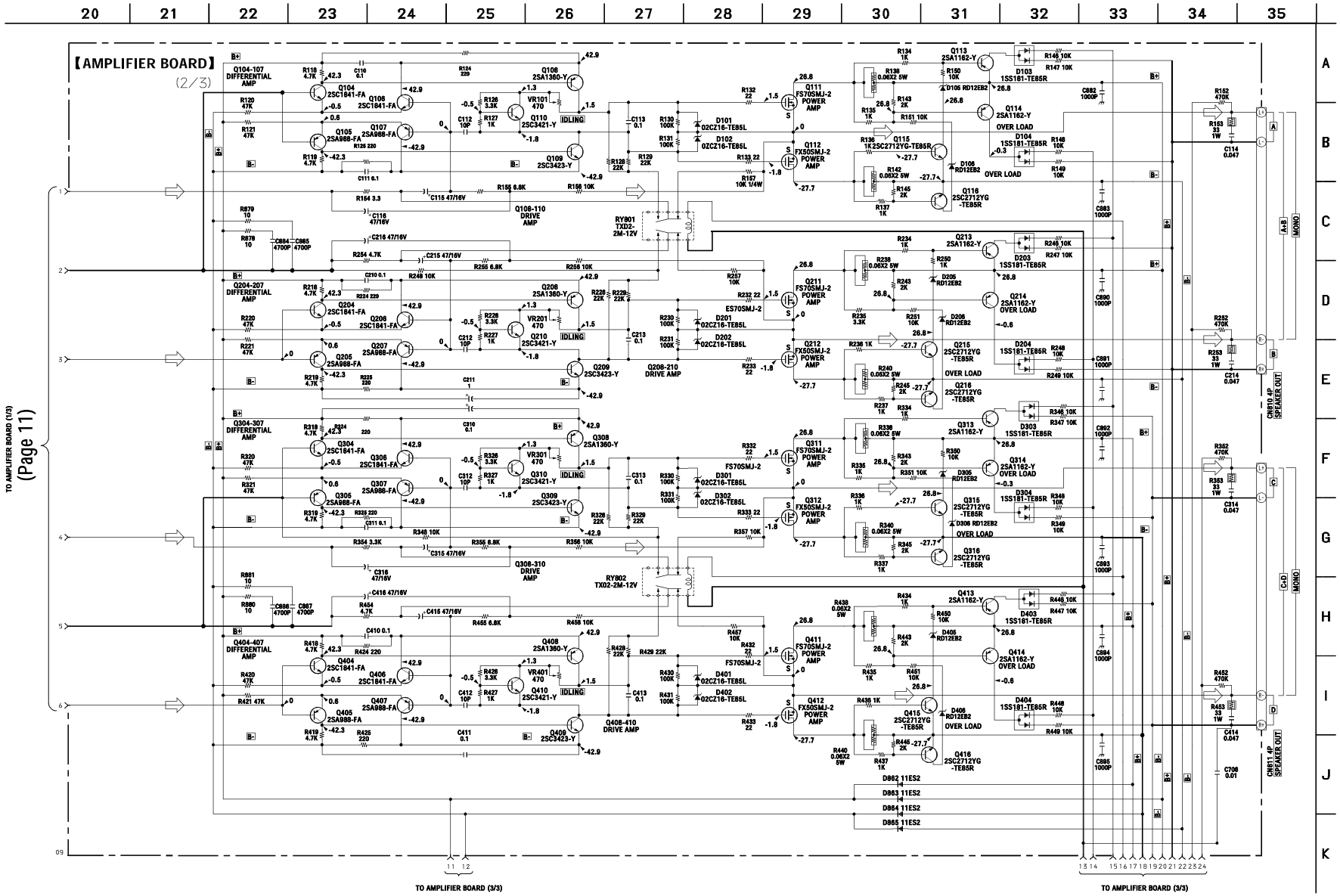
• **Semiconductor Location**

| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D101 | H-12 | Q202 | B-9 |
| D102 | H-11 | Q203 | B-11 |
| D103 | F-11 | Q204 | G-9 |
| D104 | F-11 | Q205 | G-9 |
| D105 | E-9 | Q206 | G-9 |
| D106 | F-9 | Q207 | G-9 |
| D201 | H-9 | Q208 | G-9 |
| D202 | G-9 | Q209 | G-9 |
| D203 | F-8 | Q210 | H-8 |
| D204 | F-7 | Q211 | H-9 |
| D205 | E-8 | Q212 | H-8 |
| D206 | F-8 | Q213 | E-9 |
| D301 | H-6 | Q214 | F-9 |
| D302 | H-5 | Q215 | E-8 |
| D303 | F-7 | Q216 | F-8 |
| D304 | F-7 | Q301 | A-4 |
| D305 | E-6 | Q302 | A-6 |
| D306 | F-6 | Q303 | A-4 |
| D401 | H-4 | Q304 | G-6 |
| D402 | G-3 | Q305 | G-5 |
| D403 | E-3 | Q306 | G-6 |
| D404 | E-2 | Q307 | G-5 |
| D405 | E-3 | Q308 | G-6 |
| D406 | F-3 | Q309 | G-5 |
| D851 | A-2 | Q310 | H-6 |
| D853 | C-1 | Q311 | H-6 |
| D854 | E-1 | Q312 | H-5 |
| D855 | E-1 | Q313 | E-6 |
| D856 | E-2 | Q314 | F-6 |
| D857 | E-1 | Q315 | E-6 |
| D858 | E-2 | Q401 | A-4 |
| D859 | E-1 | Q402 | A-6 |
| D860 | E-2 | Q403 | B-4 |
| D861 | E-1 | Q405 | G-3 |
| D862 | G-2 | Q406 | G-3 |
| D863 | G-7 | Q407 | G-3 |
| D864 | G-2 | Q408 | G-3 |
| D865 | G-7 | Q409 | G-3 |
| | | Q410 | H-3 |
| IC801 | B-8 | Q411 | H-3 |
| IC802 | B-9 | Q412 | H-2 |
| IC806 | B-10 | Q413 | E-3 |
| IC807 | B-7 | Q414 | F-3 |
| IC808 | B-6 | Q415 | E-3 |
| IC812 | B-4 | Q416 | F-3 |
| IC851 | A-1 | Q851 | H-1 |
| | | Q852 | C-12 |
| Q101 | A-10 | Q853 | C-2 |
| Q102 | A-9 | Q854 | C-1 |
| Q103 | A-10 | Q855 | D-1 |
| Q104 | G-11 | Q856 | D-2 |
| Q105 | G-11 | Q857 | C-12 |
| Q106 | G-11 | Q858 | C-12 |
| Q107 | G-11 | Q859 | A-12 |
| Q108 | G-11 | Q860 | A-12 |
| Q109 | G-11 | Q861 | A-12 |
| Q110 | H-11 | | |
| Q111 | H-12 | | |
| Q112 | H-11 | | |
| Q113 | E-12 | | |
| Q114 | F-12 | | |
| Q115 | E-12 | | |
| Q116 | F-12 | | |
| Q201 | A-10 | | |

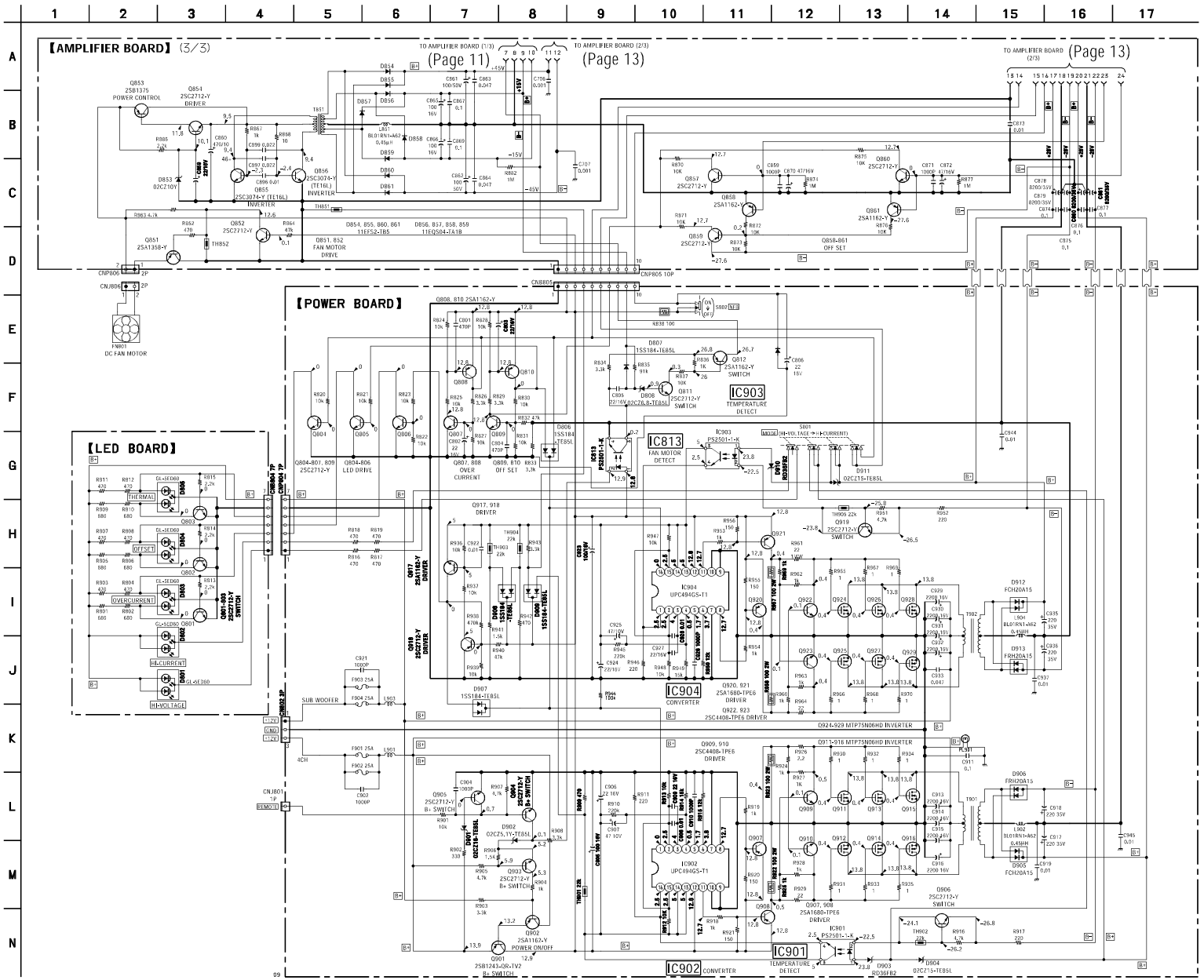
【AMPLIFIER BOARD】



**5-7. SCHEMATIC DIAGRAM – AMPLIFIER (2/3) SECTION –** **• See page 10 for IC Block Diagram.**

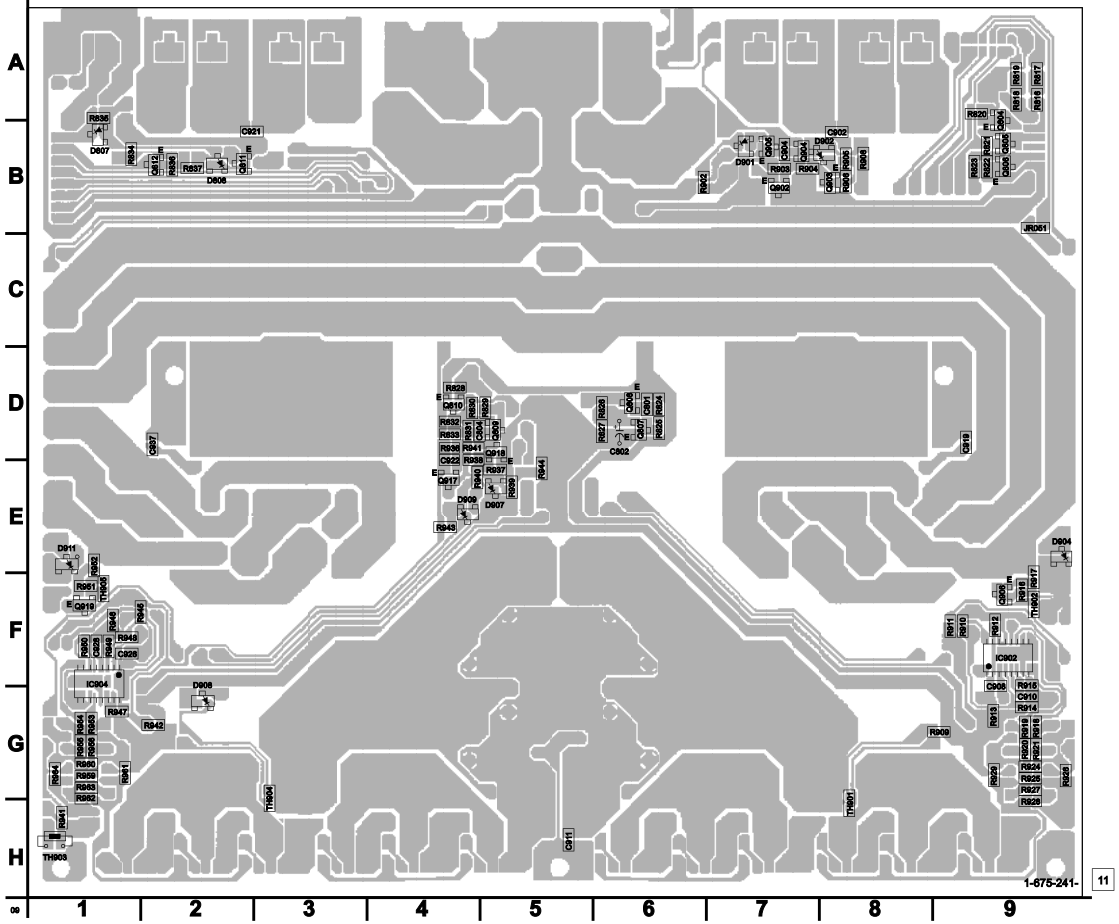


**5-8. SCHEMATIC DIAGRAM – POWER/AMPLIFIER (3/3)/LED SECTION – • See page 10 for IC Block Diagram.**



## 5-9. PRINTED WIRING BOARD – POWER SECTION –

【POWER BOARD 】(SIDE A)

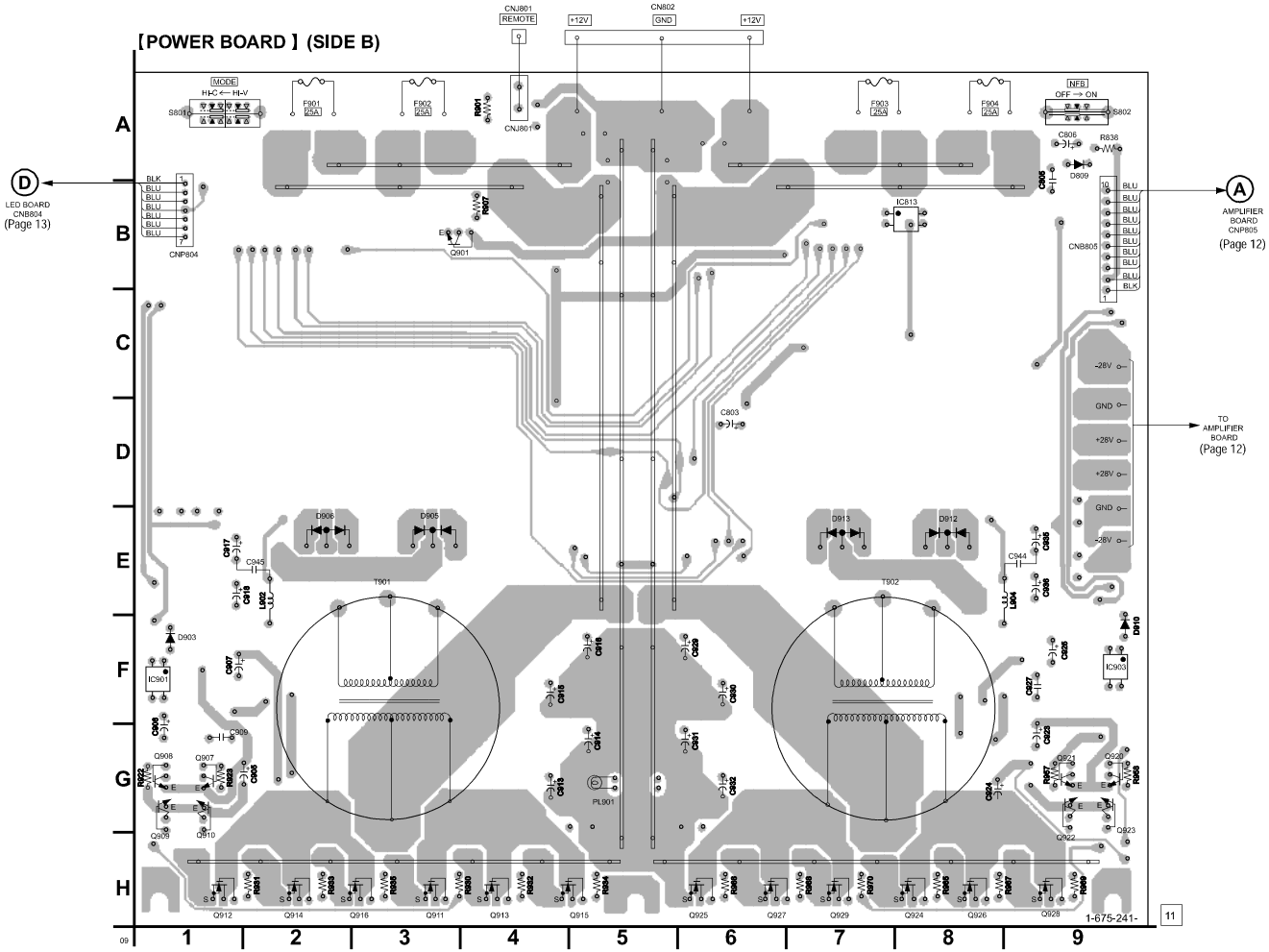



• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D806 | E-5 |
| D807 | B-1 |
| D808 | B-2 |
| D901 | B-7 |
| D902 | B-7 |
| D904 | E-9 |
| D907 | E-5 |
| D908 | G-2 |
| D909 | E-4 |
| D911 | E-1 |
| IC902 | F-9 |
| Q804 | B-9 |
| Q805 | B-9 |
| Q806 | B-9 |
| Q807 | D-6 |
| Q808 | D-6 |
| Q809 | D-5 |
| Q810 | D-4 |
| Q811 | B-2 |
| Q812 | B-2 |
| Q902 | B-7 |
| Q903 | B-8 |
| Q904 | B-7 |
| Q905 | B-7 |
| Q906 | F-9 |
| Q917 | E-4 |
| Q918 | D-5 |
| Q919 | F-1 |

- **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D809 | A-1 |
| D903 | F-9 |
| D905 | E-7 |
| D906 | E-8 |
| D910 | F-1 |
| D912 | E-2 |
| D913 | E-3 |
| IC813 | B-3 |
| IC901 | F-9 |
| IC903 | F-1 |
| Q901 | B-7 |
| Q907 | G-9 |
| Q908 | G-9 |
| Q909 | G-9 |
| Q910 | G-9 |
| Q911 | H-7 |
| Q912 | H-9 |
| Q913 | H-6 |
| Q914 | H-8 |
| Q915 | H-6 |
| Q916 | H-8 |
| Q920 | G-1 |
| Q921 | G-1 |
| Q922 | G-1 |
| Q923 | G-1 |
| Q924 | H-3 |
| Q925 | H-4 |
| Q926 | H-2 |
| Q927 | H-4 |
| Q928 | H-1 |
| Q929 | H-3 |



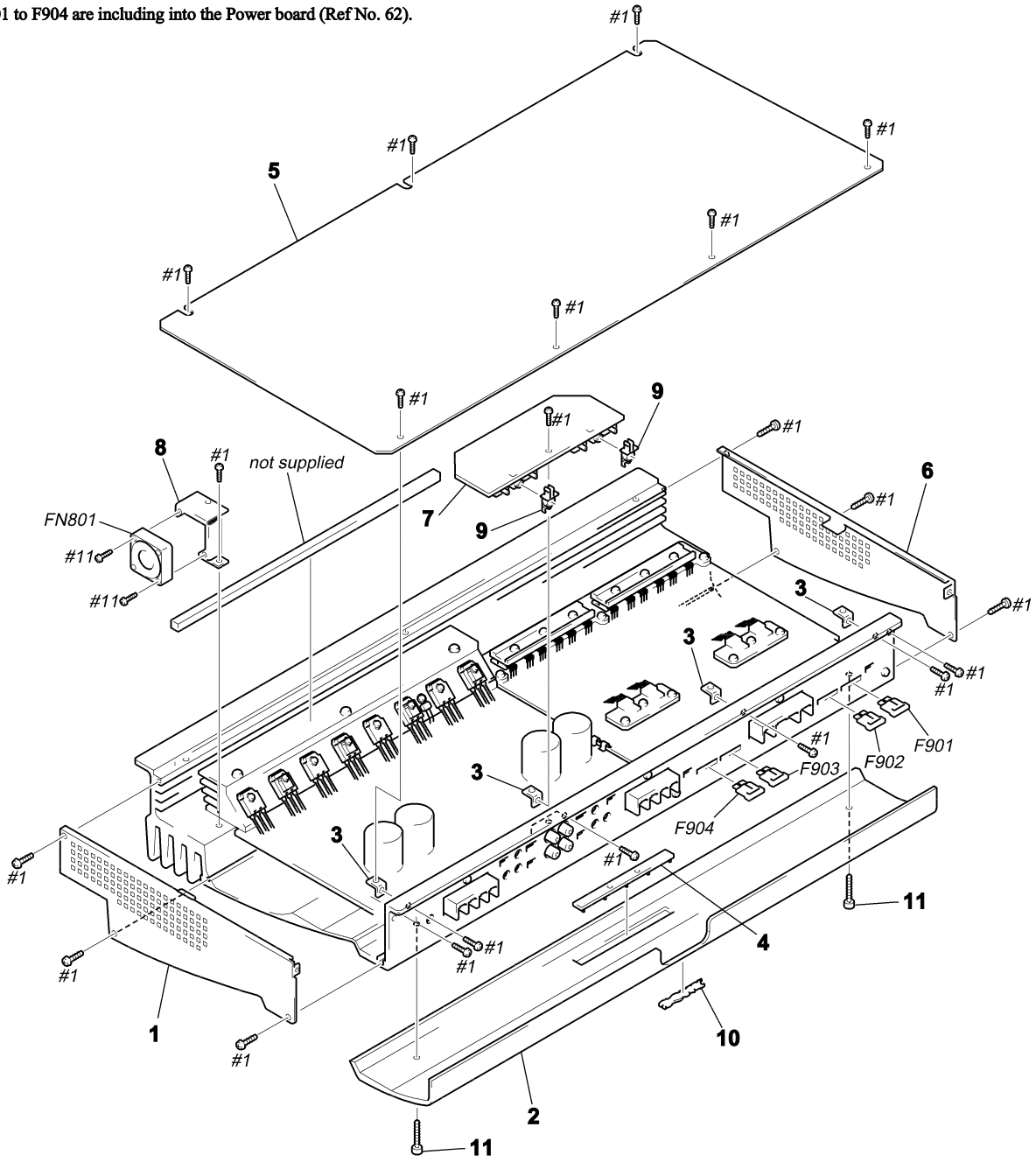
# SECTION 6
# EXPLODED VIEWS

NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CND : Canadian model

## 6-1. PLATE AND COVER SECTION

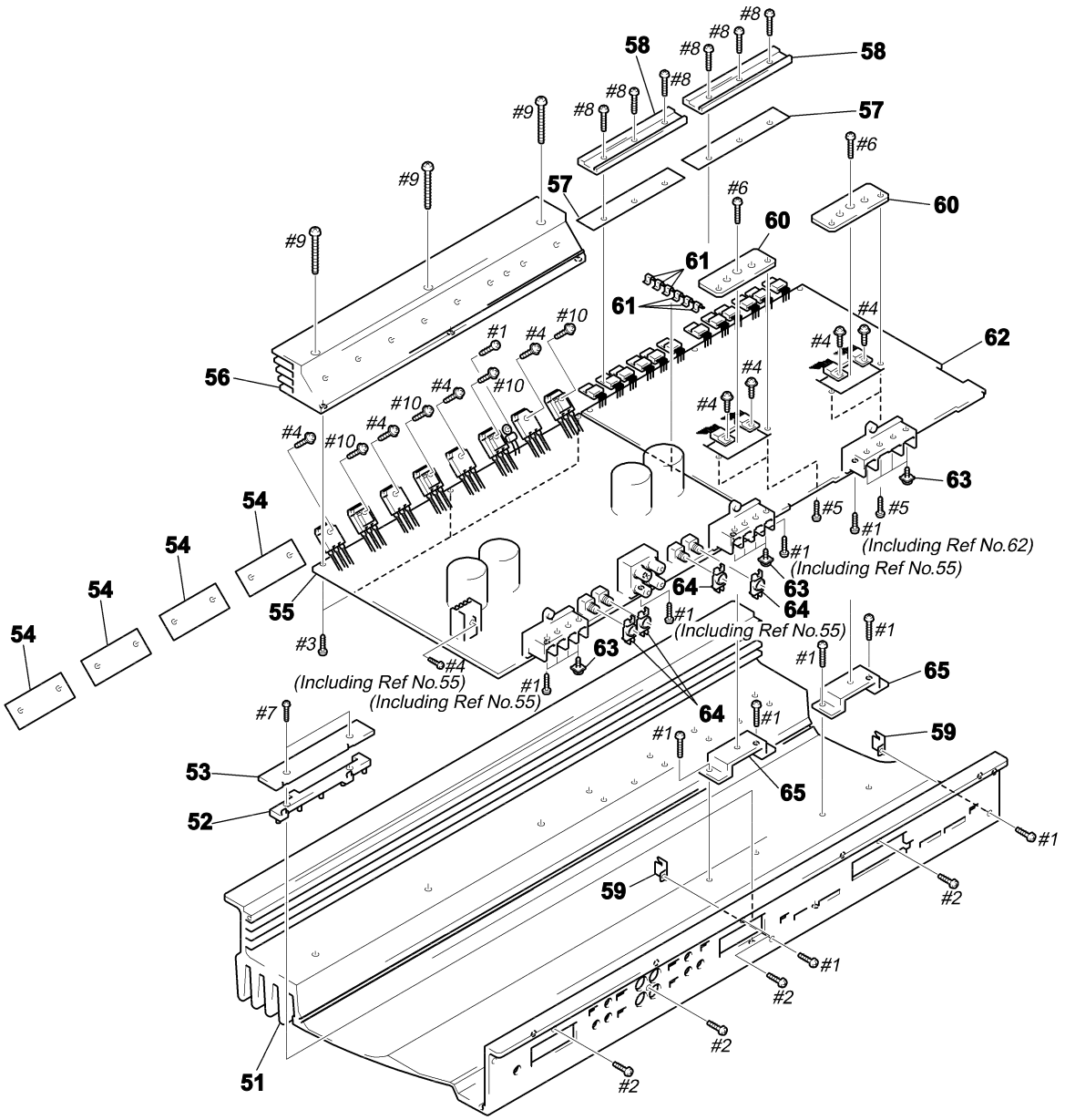
- F901 to F904 are including into the Power board (Ref No. 62).




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| * 1 | 3-039-168-01 | PANEL (R), SIDE | |
| * 2 | 3-039-205-01 | HEAT SINK (COVER) | |
| * 3 | 3-039-173-01 | PLATE (BKT), BOTTOM | |
| * 4 | 3-039-170-01 | LENS(COVER) | |
| * 5 | 3-039-201-01 | PLATE, BOTTOM | |
| * 6 | 3-039-167-01 | PANEL (L), SIDE | |
| * 7 | 1-675-246-11 | FILTER BOARD | |
| * 8 | 3-039-202-01 | BRACKET (FAN) | |
| * 9 | 3-039-172-01 | HOLDER, VOL | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 10 | 3-704-177-11 | EMBLEM (No. 7), SONY | |
| 11 | 3-040-933-01 | BOLT, M4 HEXAGON HOLE | |
| F901 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE) (25A) | |
| F902 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE) (25A) | |
| F903 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE) (25A) | |
| F904 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE) (25A) | |
| FN801 | 1-763-107-11 | MOTOR, FAN | |

## 6-2. BOARD AND HEAT SINK SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| * 51 | 3-039-210-01 | HEAT SINK (US,CND) | |
| * 51 | 3-039-210-11 | HEAT SINK (AEP,UK,E) | |
| 52 | 3-039-171-01 | HOLDER, LED | |
| * 53 | 1-675-245-11 | LED BOARD | |
| * 54 | 3-039-184-01 | SHEET (AMP), INSULATING | |
| * 55 | A-3317-930-A | AMPLIFIER BOARD, COMPLETE | |
| * 56 | 3-039-204-01 | HEAT SINK (AMPLIFIER), SUB | |
| * 57 | 3-039-183-01 | SHEET (POWER), INSULATING | |
| * 58 | 3-033-321-01 | RETAINER | |
| * 59 | 3-039-200-01 | BRACKET (PWB) | |
| * 60 | 3-039-179-01 | HEAT SINK, SPACER | |
| * 61 | 3-039-180-01 | BAR(PC-PC), BUS | |
| * 62 | A-3317-933-A | POWER BOARD, COMPLETE | |
| 63 | 3-912-431-01 | SCREW (P) | |
| * 64 | 3-039-172-01 | HOLDER, VOL | |
| * 65 | 3-039-178-01 | HEAT SINK (RECTIFIER), SUB | |

# SECTION 7
# ELECTRICAL PARTS LIST

**AMPLIFIER**

Note:

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μ A..., uPA...: μ PA..., uPB...: μ PB..., uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H
- Abbreviation
  CND : Canadian model

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| * | A-3317-930-A | AMPLIFIER BOARD, COMPLETE | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C101 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C102 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C103 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C104 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C105 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C106 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C107 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C108 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C109 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C110 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C111 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C112 | 1-102-508-11 | CERAMIC | 10PF | 0.5PF | 50V |
| C113 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C114 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V |
| C115 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C116 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C118 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C201 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C202 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C203 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C204 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C205 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C206 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C207 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C208 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C209 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C210 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C211 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C212 | 1-102-508-11 | CERAMIC | 10PF | 0.5PF | 50V |
| C213 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C214 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V |
| C215 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C216 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C218 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C301 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C302 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C303 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C304 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C305 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C306 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C307 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C308 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C309 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C310 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C311 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C312 | 1-102-508-11 | CERAMIC | 10PF | 0.5PF | 50V |
| C313 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C314 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V |
| C315 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C316 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C318 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C401 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C402 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C403 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C404 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C405 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C406 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C407 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C408 | 1-126-047-81 | ELECT | 4.7uF | 20% | 50V |
| C409 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C410 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C411 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C412 | 1-102-508-11 | CERAMIC | 10PF | 0.5PF | 50V |
| C413 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C414 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V |
| C415 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C416 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C418 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C703 | 1-126-010-81 | ELECT | 220uF | | 16V |
| C704 | 1-126-010-81 | ELECT | 220uF | | 16V |
| C705 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C706 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C707 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C708 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C850 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C851 | 1-126-025-11 | ELECT | 330uF | 20% | 25V |
| C852 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C853 | 1-126-025-11 | ELECT | 330uF | 20% | 25V |
| C854 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C856 | 1-165-319-11 | CERAMIC CHIP | 0.1uF | | 50V |
| C857 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C858 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C859 | 1-126-006-11 | ELECT | 22uF | 20% | 16V |
| C860 | 1-124-997-11 | ELECT | 470uF | 20% | 10V |
| C861 | 1-126-052-11 | ELECT | 100uF | 20% | 50V |
| C862 | 1-126-052-11 | ELECT | 100uF | 20% | 50V |
| C863 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V |
| C864 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V |

# AMPLIFIER

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C865 | 1-126-009-81 | ELECT | 100uF | 20% | 16V |
| C866 | 1-126-009-81 | ELECT | 100uF | 20% | 16V |
| C867 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C868 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C869 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C870 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C871 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C872 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C874 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C875 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C876 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C877 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C878 | 1-131-730-11 | ELECT | 8200uF | | 35V |
| C879 | 1-131-730-11 | ELECT | 8200uF | | 35V |
| C880 | 1-131-730-11 | ELECT | 8200uF | | 35V |
| C881 | 1-131-730-11 | ELECT | 8200uF | | 35V |
| C882 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C883 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C884 | 1-163-029-11 | CERAMIC CHIP | 0.0047uF | 50V | |
| C885 | 1-163-029-11 | CERAMIC CHIP | 0.0047uF | 50V | |
| C886 | 1-163-029-11 | CERAMIC CHIP | 0.0047uF | 50V | |
| C887 | 1-163-029-11 | CERAMIC CHIP | 0.0047uF | 50V | |
| C888 | 1-165-319-11 | CERAMIC CHIP | 0.1uF | | 50V |
| C889 | 1-165-319-11 | CERAMIC CHIP | 0.1uF | | 50V |
| C890 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C891 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C892 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C893 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C894 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C895 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C896 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C897 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C898 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C899 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| | | < CONNECTOR > | | | |
| CN810 | 1-694-619-11 | TERMINAL BOARD 4P (SPEAKER OUT/C/D CHANNEL) | | | |
| CN811 | 1-694-619-11 | TERMINAL BOARD 4P (SPEAKER OUT/A/B CHANNEL) | | | |
| | | < JACK > | | | |
| CNJ807 | 1-770-068-71 | JACK, PIN 4P (INPUT MONO A/B C/D) | | | |
| | | < CONNECTOR > | | | |
| * CNP805 | 1-564-513-11 | PLUG, CONNECTOR 10P | | | |
| * CNP806 | 1-564-704-11 | PIN, CONNECTOR (SMALL TYPE) 2P | | | |
| CNP808 | 1-784-917-11 | CONNECTOR, BOARD TO BOARD 9P | | | |
| CNP809 | 1-784-917-11 | CONNECTOR, BOARD TO BOARD 9P | | | |
| | | < DIODE > | | | |
| D101 | 8-719-025-50 | DIODE 02CZ16-TE85L | | | |
| D102 | 8-719-025-50 | DIODE 02CZ16-TE85L | | | |
| D103 | 8-719-820-05 | DIODE 1SS181-TE85R | | | |
| D104 | 8-719-820-05 | DIODE 1SS181-TE85R | | | |
| D105 | 8-719-100-65 | DIODE RD12EB2 | | | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| D106 | 8-719-100-65 | DIODE RD12EB2 | |
| D201 | 8-719-025-50 | DIODE 02CZ16-TE85L | |
| D202 | 8-719-025-50 | DIODE 02CZ16-TE85L | |
| D203 | 8-719-820-05 | DIODE 1SS181-TE85R | |
| D204 | 8-719-820-05 | DIODE 1SS181-TE85R | |
| D205 | 8-719-100-65 | DIODE RD12EB2 | |
| D206 | 8-719-100-65 | DIODE RD12EB2 | |
| D301 | 8-719-025-50 | DIODE 02CZ16-TE85L | |
| D302 | 8-719-025-50 | DIODE 02CZ16-TE85L | |
| D303 | 8-719-820-05 | DIODE 1SS181-TE85R | |
| D304 | 8-719-820-05 | DIODE 1SS181-TE85R | |
| D305 | 8-719-100-65 | DIODE RD12EB2 | |
| D306 | 8-719-100-65 | DIODE RD12EB2 | |
| D401 | 8-719-025-50 | DIODE 02CZ16-TE85L | |
| D402 | 8-719-025-50 | DIODE 02CZ16-TE85L | |
| D403 | 8-719-820-05 | DIODE 1SS181-TE85R | |
| D404 | 8-719-820-05 | DIODE 1SS181-TE85R | |
| D405 | 8-719-100-65 | DIODE RD12EB2 | |
| D406 | 8-719-100-65 | DIODE RD12EB2 | |
| D851 | 8-719-801-78 | DIODE 1SS184-TE85L | |
| D853 | 8-719-018-77 | DIODE 02CZ10Y | |
| D854 | 8-719-987-67 | DIODE 11EFS2-TB5 | |
| D855 | 8-719-987-67 | DIODE 11EFS2-TB5 | |
| D856 | 8-719-210-21 | DIODE 11EQS04-TA1B | |
| D857 | 8-719-210-21 | DIODE 11EQS04-TA1B | |
| D858 | 8-719-210-21 | DIODE 11EQS04-TA1B | |
| D859 | 8-719-210-21 | DIODE 11EQS04-TA1B | |
| D860 | 8-719-987-67 | DIODE 11EFS2-TB5 | |
| D861 | 8-719-987-67 | DIODE 11EFS2-TB5 | |
| D862 | 8-719-200-82 | DIODE 11ES2-TB5 | |
| D863 | 8-719-200-82 | DIODE 11ES2-TB5 | |
| D864 | 8-719-200-82 | DIODE 11ES2-TB5 | |
| D865 | 8-719-200-82 | DIODE 11ES2-TB5 | |
| | | < IC > | |
| IC801 | 8-759-711-82 | IC NJM4580E(T1) | |
| IC802 | 8-759-711-82 | IC NJM4580E(T1) | |
| IC806 | 8-759-711-82 | IC NJM4580E(T1) | |
| IC807 | 8-759-711-82 | IC NJM4580E(T1) | |
| IC808 | 8-759-711-82 | IC NJM4580E(T1) | |
| IC812 | 8-759-711-82 | IC NJM4580E(T1) | |
| IC851 | 8-759-711-82 | IC NJM4580E(T1) | |
| | | < COIL > | |
| L852 | 1-410-396-71 | INDUCTOR 0.45uH | |
| L951 | 1-410-396-71 | INDUCTOR 0.45uH | |
| | | < TRANSISTOR > | |
| Q101 | 8-729-107-43 | TRANSISTOR 2SC3624-T1L1718 | |
| Q102 | 8-729-203-48 | TRANSISTOR 2SC3327-A | |
| Q103 | 8-729-203-48 | TRANSISTOR 2SC3327-A | |
| Q104 | 8-729-184-53 | TRANSISTOR 2SC1841-FA | |
| Q105 | 8-729-140-82 | TRANSISTOR 2SA988-FA | |
| Q106 | 8-729-184-53 | TRANSISTOR 2SC1841-FA | |
| Q107 | 8-729-140-82 | TRANSISTOR 2SA988-FA | |
| Q108 | 8-729-209-18 | TRANSISTOR 2SA1360-Y | |
| Q109 | 8-729-203-45 | TRANSISTOR 2SC3423-Y | |

| Ref. No. | Part No. | Description | | Remark |
|---|---|---|---|---|
| Q110 | 8-729-207-82 | TRANSISTOR | 2SC3421-Y | |
| Q111 | 8-729-049-52 | TRANSISTOR | FS70SMJ-2 | |
| Q112 | 8-729-049-53 | TRANSISTOR | FX50SMJ-2 | |
| Q113 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q114 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q115 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R | |
| Q116 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R | |
| Q201 | 8-729-107-43 | TRANSISTOR | 2SC3624-T1L1718 | |
| Q202 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q203 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q204 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q205 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q206 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q207 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q208 | 8-729-209-18 | TRANSISTOR | 2SA1360-Y | |
| Q209 | 8-729-203-45 | TRANSISTOR | 2SC3423-Y | |
| Q210 | 8-729-207-82 | TRANSISTOR | 2SC3421-Y | |
| Q211 | 8-729-049-52 | TRANSISTOR | FS70SMJ-2 | |
| Q212 | 8-729-049-53 | TRANSISTOR | FX50SMJ-2 | |
| Q213 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q214 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q215 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R | |
| Q216 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R | |
| Q301 | 8-729-107-43 | TRANSISTOR | 2SC3624-T1L1718 | |
| Q302 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q303 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q304 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q305 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q306 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q307 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q308 | 8-729-209-18 | TRANSISTOR | 2SA1360-Y | |
| Q309 | 8-729-203-45 | TRANSISTOR | 2SC3423-Y | |
| Q310 | 8-729-207-82 | TRANSISTOR | 2SC3421-Y | |
| Q311 | 8-729-049-52 | TRANSISTOR | FS70SMJ-2 | |
| Q312 | 8-729-049-53 | TRANSISTOR | FX50SMJ-2 | |
| Q313 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q314 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q315 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R | |
| Q316 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R | |
| Q401 | 8-729-107-43 | TRANSISTOR | 2SC3624-T1L1718 | |
| Q402 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q403 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q404 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q405 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q406 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q407 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q408 | 8-729-209-18 | TRANSISTOR | 2SA1360-Y | |
| Q409 | 8-729-203-45 | TRANSISTOR | 2SC3423-Y | |
| Q410 | 8-729-207-82 | TRANSISTOR | 2SC3421-Y | |
| Q411 | 8-729-049-52 | TRANSISTOR | FS70SMJ-2 | |
| Q412 | 8-729-049-53 | TRANSISTOR | FX50SMJ-2 | |
| Q413 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q414 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q415 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R | |
| Q416 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R | |
| Q851 | 8-729-207-89 | TRANSISTOR | 2SA1358-Y | |
| Q852 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q853 | 8-729-141-83 | TRANSISTOR | 2SB1375 | |
| Q854 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q855 | 8-729-205-88 | TRANSISTOR | 2SC3074-Y(TE16L) | |
| Q856 | 8-729-205-88 | TRANSISTOR | 2SC3074-Y(TE16L) | |
| Q857 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q858 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q859 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q860 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q861 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |

< RESISTOR >

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R101 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R102 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R103 | 1-208-291-11 | RES,CHIP | 4.7M | 5% | 1/10W |
| R104 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R105 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R106 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R107 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R108 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R109 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R110 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R111 | 1-216-647-11 | METAL CHIP | 680 | 0.5% | 1/10W |
| R112 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R113 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R114 | 1-208-510-61 | RES,CHIP | 10K | 2% | 1/8W |
| R115 | 1-208-510-61 | RES,CHIP | 10K | 2% | 1/8W |
| R116 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R117 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R118 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R119 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R120 | 1-216-238-00 | RES,CHIP | 47K | 2% | 1/8W |
| R121 | 1-216-238-00 | RES,CHIP | 47K | 2% | 1/8W |
| R124 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R125 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R126 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R127 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R128 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R129 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R130 | 1-208-534-61 | RES,CHIP | 100K | 2% | 1/10W |
| R131 | 1-208-534-61 | RES,CHIP | 100K | 2% | 1/10W |
| R132 | 1-211-960-11 | RES,CHIP | 22 | 2% | 1/10W |
| R133 | 1-211-960-11 | RES,CHIP | 22 | 2% | 1/10W |
| R134 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R135 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R136 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R137 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R138 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R139 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R140 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R141 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R143 | 1-208-789-11 | RES,CHIP | 2K | 2% | 1/10W |
| R145 | 1-208-789-11 | RES,CHIP | 2K | 2% | 1/10W |
| R146 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R147 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R148 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R149 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |

## AMPLIFIER

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R150 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R151 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R152 | 1-208-550-61 | RES,CHIP | 470K | 2% | 1/10W |
| R153 | 1-217-784-11 | FUSIBLE | 10 | 5% | 5W F |
| R154 | 1-249-935-11 | CARBON | 3.3K | 5% | 1/4W |
| R155 | 1-249-943-11 | CARBON | 6.8K | 5% | 1/4W |
| R156 | 1-249-576-11 | CARBON | 10K | 5% | 1/4W |
| R157 | 1-249-576-11 | CARBON | 10K | 5% | 1/4W |
| R201 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R202 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R203 | 1-208-291-11 | RES,CHIP | 4.7M | 5% | 1/10W |
| R204 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R205 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R206 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R207 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R208 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R209 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R210 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R211 | 1-216-647-11 | METAL CHIP | 680 | 0.5% | 1/10W |
| R212 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R213 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R214 | 1-208-510-61 | RES,CHIP | 10K | 2% | 1/8W |
| R215 | 1-208-510-61 | RES,CHIP | 10K | 2% | 1/8W |
| R216 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R217 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R218 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R219 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R220 | 1-216-238-00 | RES,CHIP | 47K | 2% | 1/8W |
| R221 | 1-216-238-00 | RES,CHIP | 47K | 2% | 1/8W |
| R224 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R225 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R226 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R227 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R228 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R229 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R230 | 1-208-534-61 | RES,CHIP | 100K | 2% | 1/10W |
| R231 | 1-208-534-61 | RES,CHIP | 100K | 2% | 1/10W |
| R232 | 1-211-960-11 | RES,CHIP | 22 | 2% | 1/10W |
| R233 | 1-211-960-11 | RES,CHIP | 22 | 2% | 1/10W |
| R234 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R235 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R236 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R237 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R238 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R239 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R240 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R241 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R243 | 1-208-789-11 | RES,CHIP | 2K | 2% | 1/10W |
| R245 | 1-208-789-11 | RES,CHIP | 2K | 2% | 1/10W |
| R246 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R247 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R248 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R249 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R250 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R251 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R252 | 1-208-550-61 | RES,CHIP | 470K | 2% | 1/10W |
| R253 | 1-217-784-11 | FUSIBLE | 10 | 5% | 5W F |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R254 | 1-249-568-11 | CARBON | 4.7K | 5% | 1/4W |
| R255 | 1-249-943-11 | CARBON | 6.8K | 5% | 1/4W |
| R256 | 1-249-576-11 | CARBON | 10K | 5% | 1/4W |
| R257 | 1-249-576-11 | CARBON | 10K | 5% | 1/4W |
| R301 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R302 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R303 | 1-208-291-11 | RES,CHIP | 4.7M | 5% | 1/10W |
| R304 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R305 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R306 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R307 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R308 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R309 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R310 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R311 | 1-216-647-11 | METAL CHIP | 680 | 0.5% | 1/10W |
| R312 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R313 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R314 | 1-208-510-61 | RES,CHIP | 10K | 2% | 1/8W |
| R315 | 1-208-510-61 | RES,CHIP | 10K | 2% | 1/8W |
| R316 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R317 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R318 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R319 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R320 | 1-216-238-00 | RES,CHIP | 47K | 2% | 1/8W |
| R321 | 1-216-238-00 | RES,CHIP | 47K | 2% | 1/8W |
| R324 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R325 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R326 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R327 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R328 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R329 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R330 | 1-208-534-61 | RES,CHIP | 100K | 2% | 1/10W |
| R331 | 1-208-534-61 | RES,CHIP | 100K | 2% | 1/10W |
| R332 | 1-211-960-11 | RES,CHIP | 22 | 2% | 1/10W |
| R333 | 1-211-960-11 | RES,CHIP | 22 | 2% | 1/10W |
| R334 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R335 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R336 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R337 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R338 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R339 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R340 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R341 | 1-242-799-11 | METAL | 0.06/0.06 | | 5W F |
| R343 | 1-208-789-11 | RES,CHIP | 2K | 2% | 1/10W |
| R345 | 1-208-789-11 | RES,CHIP | 2K | 2% | 1/10W |
| R346 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R347 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R348 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R349 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R350 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R351 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R352 | 1-208-550-61 | RES,CHIP | 470K | 2% | 1/10W |
| R353 | 1-217-784-11 | FUSIBLE | 10 | 5% | 5W F |
| R354 | 1-249-935-11 | CARBON | 3.3K | 5% | 1/4W |
| R355 | 1-249-943-11 | CARBON | 6.8K | 5% | 1/4W |
| R356 | 1-249-576-11 | CARBON | 10K | 5% | 1/4W |
| R357 | 1-249-576-11 | CARBON | 10K | 5% | 1/4W |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R401 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R402 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R403 | 1-208-291-11 | RES,CHIP | 4.7M | 5% | 1/10W |
| R404 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R405 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R406 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R407 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R408 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R409 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R410 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R411 | 1-216-647-11 | METAL CHIP | 680 | 0.5% | 1/10W |
| R412 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R413 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R414 | 1-208-510-61 | RES,CHIP | 10K | 2% | 1/8W |
| R415 | 1-208-510-61 | RES,CHIP | 10K | 2% | 1/8W |
| R416 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R417 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R418 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R419 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R420 | 1-216-238-00 | RES,CHIP | 47K | 2% | 1/8W |
| R421 | 1-216-238-00 | RES,CHIP | 47K | 2% | 1/8W |
| R424 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R425 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R426 | 1-208-449-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R427 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R428 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R429 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R430 | 1-208-534-61 | RES,CHIP | 100K | 2% | 1/10W |
| R431 | 1-208-534-61 | RES,CHIP | 100K | 2% | 1/10W |
| R432 | 1-211-960-11 | RES,CHIP | 22 | 2% | 1/10W |
| R433 | 1-211-960-11 | RES,CHIP | 22 | 2% | 1/10W |
| R434 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R435 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R436 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R437 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R443 | 1-208-789-11 | RES,CHIP | 2K | 2% | 1/10W |
| R445 | 1-208-789-11 | RES,CHIP | 2K | 2% | 1/10W |
| R446 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R447 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R448 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R449 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R450 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R451 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R452 | 1-208-550-61 | RES,CHIP | 470K | 2% | 1/10W |
| R453 | 1-217-784-11 | FUSIBLE | 10 | 5% | 5W F |
| R454 | 1-249-568-11 | CARBON | 4.7K | 5% | 1/4W |
| R455 | 1-249-943-11 | CARBON | 6.8K | 5% | 1/4W |
| R456 | 1-249-576-11 | CARBON | 10K | 5% | 1/4W |
| R457 | 1-249-576-11 | CARBON | 10K | 5% | 1/4W |
| R851 | 1-216-210-00 | RES,CHIP | 3.3K | 2% | 1/8W |
| R852 | 1-208-486-61 | RES,CHIP | 1K | 2% | 1/8W |
| R853 | 1-216-210-00 | RES,CHIP | 3.3K | 2% | 1/8W |
| R854 | 1-208-486-61 | RES,CHIP | 1K | 2% | 1/8W |
| R855 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R856 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R857 | 1-208-441-61 | RES,CHIP | 1.5K | 2% | 1/10W |
| R858 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R859 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R860 | 1-208-539-11 | RES,CHIP | 160K | 2% | 1/10W |
| R861 | 1-208-539-11 | RES,CHIP | 160K | 2% | 1/10W |
| R862 | 1-208-774-11 | RES,CHIP | 470 | 2% | 1/10W |
| R863 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R864 | 1-208-526-61 | RES,CHIP | 47K | 2% | 1/10W |
| R866 | 1-216-659-11 | METAL CHIP | 2.2K | 0.5% | 1/10W |
| R867 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R868 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R870 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R871 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R872 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R873 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R874 | 1-216-121-91 | RES,CHIP | 1M | 5% | 1/10W |
| R875 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R876 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R877 | 1-216-121-00 | RES,CHIP | 1M | 5% | 1/10W |
| R878 | 1-216-603-11 | METAL CHIP | 10 | 0.5% | 1/10W |
| R879 | 1-216-603-11 | METAL CHIP | 10 | 0.5% | 1/10W |
| R880 | 1-216-603-11 | METAL CHIP | 10 | 0.5% | 1/10W |
| R881 | 1-216-603-11 | METAL CHIP | 10 | 0.5% | 1/10W |
| R882 | 1-216-121-00 | RES,CHIP | 1M | 5% | 1/10W |
| R883 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R884 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R885 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R886 | 1-216-665-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| R887 | 1-216-665-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| | | < RELAY > | | | |
| RY801 | 1-755-353-11 | RELAY | | | |
| RY802 | 1-755-353-11 | RELAY | | | |
| | | < SWITCH > | | | |
| S805 | 1-692-721-11 | SWITCH, SLIDE (DIRECT/ON←→OFF) | | | |
| S806 | 1-692-721-11 | SWITCH, SLIDE (DIRECT/ON←→OFF) | | | |
| S851 | 1-771-802-11 | SWITCH (TEST TONE) | | | |
| | | < TRANSFORMER > | | | |
| T851 | 1-435-149-11 | TRANSFORMER, DC-DC CONVERTER | | | |
| | | < THERMISTOR > | | | |
| TH851 | 1-809-664-51 | THERMISTOR, POSITIVE | | | |
| | | < VARIABLE RESISTOR > | | | |
| VR101 | 1-241-760-11 | RES, ADJ, CERMET 470 (IDLING) | | | |
| VR201 | 1-241-760-11 | RES, ADJ, CERMET 470 (IDLING) | | | |
| VR301 | 1-241-760-11 | RES, ADJ, CERMET 470 (IDLING) | | | |
| VR401 | 1-241-760-11 | RES, ADJ, CERMET 470 (IDLING) | | | |
| VR801 | 1-225-648-11 | RES, VAR 5K/5K (LEVEL/MIN-MAX) | | | |
| VR802 | 1-225-648-11 | RES, VAR 5K/5K (LEVEL/MIN-MAX) | | | |
| VR803 | 1-225-648-11 | RES, VAR 5K/5K (LOW BOOST/0dB-+10dB) | | | |
| VR804 | 1-225-648-11 | RES, VAR 5K/5K (LOW BOOST/0dB-+10dB) | | | |

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# FILTER | LED

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | 1-675-246-11 | FILTER (4CH) BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C151 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C152 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C153 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C154 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C155 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C156 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C157 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C251 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C252 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C253 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C254 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C255 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C256 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C257 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C351 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C352 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C353 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C354 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C355 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C356 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C357 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C451 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C452 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C453 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C454 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C455 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C456 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C457 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C751 | 1-164-001-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C752 | 1-164-001-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C753 | 1-164-001-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C754 | 1-164-001-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| | | < JACK > | | | |
| CNJ808 | 1-784-916-11 | CONNECTOR, BOARD TO BOARD 9P | | | |
| CNJ809 | 1-784-916-11 | CONNECTOR, BOARD TO BOARD 9P | | | |
| | | < IC > | | | |
| IC803 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC804 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC805 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC809 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC810 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC811 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| | | < RESISTOR > | | | |
| R181 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R182 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R183 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R184 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R185 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R186 | 1-216-057-61 | RES,CHIP | 2.2K | 5% | 1/10W |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R187 | 1-216-057-61 | RES,CHIP | 2.2K | 5% | 1/10W |
| R189 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R190 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R281 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R282 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R283 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R284 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R285 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R286 | 1-216-057-61 | RES,CHIP | 2.2K | 5% | 1/10W |
| R287 | 1-216-057-61 | RES,CHIP | 2.2K | 5% | 1/10W |
| R289 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R290 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R381 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R382 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R383 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R384 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R385 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R386 | 1-216-057-61 | RES,CHIP | 2.2K | 5% | 1/10W |
| R387 | 1-216-057-61 | RES,CHIP | 2.2K | 5% | 1/10W |
| R389 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R390 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R481 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R482 | 1-208-518-61 | RES,CHIP | 22K | 2% | 1/10W |
| R483 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R484 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R485 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R486 | 1-216-057-61 | RES,CHIP | 2.2K | 5% | 1/10W |
| R487 | 1-216-057-61 | RES,CHIP | 2.2K | 5% | 1/10W |
| R489 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R490 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| | | < SWITCH > | | | |
| S801 | 1-571-658-11 | SWITCH, SLIDE (FILTER, X1/X10) | | | |
| S802 | 1-571-658-11 | SWITCH, SLIDE (FILTER, X1/X10) | | | |
| S803 | 1-762-191-11 | SWITCH, SLIDE (FILTER, LPF/OFF/HPF) | | | |
| S804 | 1-762-191-11 | SWITCH, SLIDE (FILTER, LPF/OFF/HPF) | | | |
| | | < VARIABLE RESISTOR > | | | |
| VR805 | 1-225-921-11 | RES, VAR 20K/20K/20K/20K (FILTER/50Hz-400Hz) | | | |
| VR806 | 1-225-921-11 | RES, VAR 20K/20K/20K/20K (FILTER/50Hz-400Hz) | | | |

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| | | | | | |
|---|---|---|---|---|---|
| * | 1-675-245-11 | LED (4CH) BOARD | | | |
| | | ********** | | | |
| | | < DIODE > | | | |
| D801 | 8-719-076-62 | DIODE GL-5ED60 (HI-VOLTAGE) | | | |
| D802 | 8-719-076-62 | DIODE GL-5ED60 (HI-CURRENT) | | | |
| D803 | 8-719-076-62 | DIODE GL-5ED60 (OFFSET) | | | |
| D804 | 8-719-076-62 | DIODE GL-5ED60 (OVER CURRENT) | | | |
| D805 | 8-719-076-62 | DIODE GL-5ED60 (THERMAL) | | | |
| | | < TRANSISTOR > | | | |
| Q801 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q802 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| Q803 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| | | < RESISTOR > | | | |
| R801 | 1-216-194-00 | METAL CHIP | 680 | 5% | 1/8W |
| R802 | 1-216-194-00 | METAL CHIP | 680 | 5% | 1/8W |
| R803 | 1-216-190-00 | RES,CHIP | 470 | 2% | 1/8W |
| R804 | 1-216-190-00 | RES,CHIP | 470 | 2% | 1/8W |
| R805 | 1-216-194-00 | METAL CHIP | 680 | 5% | 1/8W |
| R806 | 1-216-194-00 | METAL CHIP | 680 | 5% | 1/8W |
| R807 | 1-216-190-00 | RES,CHIP | 470 | 2% | 1/8W |
| R808 | 1-216-190-00 | RES,CHIP | 470 | 2% | 1/8W |
| R809 | 1-216-194-00 | METAL CHIP | 680 | 5% | 1/8W |
| R810 | 1-216-194-00 | METAL CHIP | 680 | 5% | 1/8W |
| R811 | 1-216-190-00 | RES,CHIP | 470 | 2% | 1/8W |
| R812 | 1-216-190-00 | RES,CHIP | 470 | 2% | 1/8W |
| R813 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R814 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R815 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| ********** | | | | | |
| * | A-3317-933-A | POWER BOARD, COMPLETE | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C801 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5% | 50V |
| C802 | 1-126-006-11 | ELECT | 22uF | 20% | 16V |
| C803 | 1-126-006-11 | ELECT | 22uF | 20% | 16V |
| C804 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5% | 50V |
| C805 | 1-107-715-11 | ELECT | 22uF | 20% | 16V |
| C806 | 1-126-006-11 | ELECT | 22uF | 20% | 16V |
| C902 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V |
| C904 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V |
| C905 | 1-126-009-81 | ELECT | 100uF | 20% | 16V |
| C906 | 1-126-006-11 | ELECT | 22uF | 20% | 16V |
| C907 | 1-124-993-11 | ELECT | 47uF | 20% | 10V |
| C908 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C909 | 1-107-715-11 | ELECT | 22uF | 20% | 16V |
| C910 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V |
| C911 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C913 | 1-131-731-11 | ELECT | 2200uF | | 16V |
| C914 | 1-131-731-11 | ELECT | 2200uF | | 16V |
| C915 | 1-131-731-11 | ELECT | 2200uF | | 16V |
| C916 | 1-131-731-11 | ELECT | 2200uF | | 16V |
| C917 | 1-104-829-11 | ELECT | 220uF | 20% | 35V |
| C918 | 1-104-829-11 | ELECT | 220uF | 20% | 35V |
| C919 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C921 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V |
| C922 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C923 | 1-126-009-81 | ELECT | 100uF | 20% | 16V |
| C924 | 1-126-006-11 | ELECT | 22uF | 20% | 16V |
| C925 | 1-124-993-11 | ELECT | 47uF | 20% | 10V |
| C926 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C927 | 1-107-715-11 | ELECT | 22uF | 20% | 16V |
| C928 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V |
| C929 | 1-131-731-11 | ELECT | 2200uF | | 16V |
| C930 | 1-131-731-11 | ELECT | 2200uF | | 16V |
| C931 | 1-131-731-11 | ELECT | 2200uF | | 16V |
| C932 | 1-131-731-11 | ELECT | 2200uF | | 16V |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C935 | 1-104-829-11 | ELECT | 220uF | 20% | 35V |
| C936 | 1-104-829-11 | ELECT | 220uF | 20% | 35V |
| C937 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C944 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C945 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| | | < CONNECTOR > | | | |
| CN802 | 1-694-620-11 | TERMINAL BOARD 3P (+12V, GND, +12V) | | | |
| | | < JACK > | | | |
| CNJ801 | 1-793-279-11 | CONNECTOR 1P (REMOTE) | | | |
| | | < CONNECTOR > | | | |
| * CNP804 | 1-564-709-11 | PIN, CONNECTOR (SMALL TYPE) 7P | | | |
| | | < DIODE > | | | |
| D806 | 8-719-801-78 | DIODE 1SS184-TE85L | | | |
| D807 | 8-719-801-78 | DIODE 1SS184-TE85L | | | |
| D808 | 8-719-025-34 | DIODE 02CZ6.8-TE85L | | | |
| D809 | 8-719-160-56 | DIODE RD12FB2 | | | |
| D901 | 8-719-025-50 | DIODE 02CZ16-TE85L | | | |
| D902 | 8-719-043-82 | DIODE 02CZ5.1Y-TE85L | | | |
| D903 | 8-719-160-90 | DIODE RD36FB2 | | | |
| D904 | 8-719-025-49 | DIODE 02CZ15-TE85L | | | |
| D905 | 8-719-076-60 | DIODE FCH20A15 | | | |
| D906 | 8-719-076-61 | DIODE FRH20A15 | | | |
| D907 | 8-719-801-78 | DIODE 1SS184-TE85L | | | |
| D908 | 8-719-801-78 | DIODE 1SS184-TE85L | | | |
| D909 | 8-719-801-78 | DIODE 1SS184-TE85L | | | |
| D910 | 8-719-160-90 | DIODE RD36FB2 | | | |
| D911 | 8-719-025-49 | DIODE 02CZ15-TE85L | | | |
| D912 | 8-719-076-60 | DIODE FCH20A15 | | | |
| D913 | 8-719-076-61 | DIODE FRH20A15 | | | |
| | | < FUSE > | | | |
| F901 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE)(25A) | | | |
| F902 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE)(25A) | | | |
| F903 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE)(25A) | | | |
| F904 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE)(25A) | | | |
| | | < IC > | | | |
| IC813 | 8-719-156-72 | PHOTO COUPLER PS2501-1-K | | | |
| IC901 | 8-719-156-72 | PHOTO COUPLER PS2501-1-K | | | |
| IC902 | 8-759-144-88 | IC uPC494GS-T1 | | | |
| IC903 | 8-719-156-72 | PHOTO COUPLER PS2501-1-K | | | |
| IC904 | 8-759-144-88 | IC uPC494GS-T1 | | | |
| | | < COIL > | | | |
| L902 | 1-410-396-71 | INDUCTOR | 0.45uH | | |
| L904 | 1-410-396-71 | INDUCTOR | 0.45uH | | |
| | | < PILOT LAMP > | | | |
| PL901 | 1-518-540-00 | LAMP, PILOT | | | |
| | | < TRANSISTOR > | | | |
| Q804 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |

## POWER

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| Q805 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q806 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q807 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q808 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | | |
| Q809 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q810 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | | |
| Q811 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q812 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | | |
| Q901 | 8-729-046-13 | TRANSISTOR | 2SB1243-QR-TV2 | | |
| Q902 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | | |
| Q903 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q904 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q905 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q906 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q907 | 8-729-030-89 | TRANSISTOR | 2SA1680-TPE6 | | |
| Q908 | 8-729-030-89 | TRANSISTOR | 2SA1680-TPE6 | | |
| Q909 | 8-729-030-90 | TRANSISTOR | 2SC4408-TPE6 | | |
| Q910 | 8-729-030-90 | TRANSISTOR | 2SC4408-TPE6 | | |
| Q911 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q912 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q913 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q914 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q915 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q916 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q917 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | | |
| Q918 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q919 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q920 | 8-729-030-89 | TRANSISTOR | 2SA1680-TPE6 | | |
| Q921 | 8-729-030-89 | TRANSISTOR | 2SA1680-TPE6 | | |
| Q922 | 8-729-030-90 | TRANSISTOR | 2SC4408-TPE6 | | |
| Q923 | 8-729-030-90 | TRANSISTOR | 2SC4408-TPE6 | | |
| Q924 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q925 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q926 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q927 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q928 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q929 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| | | < RESISTOR > | | | |
| R816 | 1-216-190-00 | RES,CHIP | 470 | 2% | 1/8W |
| R817 | 1-216-190-00 | RES,CHIP | 470 | 2% | 1/8W |
| R818 | 1-216-190-00 | RES,CHIP | 470 | 2% | 1/8W |
| R819 | 1-216-190-00 | RES,CHIP | 470 | 2% | 1/8W |
| R820 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R821 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R822 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R823 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R824 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R825 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R826 | 1-216-210-00 | RES,CHIP | 3.3K | 2% | 1/8W |
| R827 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R828 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R829 | 1-216-210-00 | RES,CHIP | 3.3K | 2% | 1/8W |
| R830 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R831 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R832 | 1-208-526-61 | RES,CHIP | 47K | 2% | 1/10W |
| R833 | 1-216-210-00 | RES,CHIP | 3.3K | 2% | 1/8W |
| R834 | 1-216-234-00 | RES,CHIP | 33K | 2% | 1/8W |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R835 | 1-216-698-11 | METAL CHIP | 91K | 0.5% | 1/10W |
| R836 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R837 | 1-208-510-61 | RES,CHIP | 10K | 2% | 1/8W |
| R838 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R901 | 1-249-576-11 | CARBON | 10K | 5% | 1/4W |
| R902 | 1-208-474-61 | RES,CHIP | 330 | 2% | 1/8W |
| R903 | 1-216-210-00 | RES,CHIP | 3.3K | 2% | 1/8W |
| R904 | 1-208-486-61 | RES,CHIP | 1K | 2% | 1/8W |
| R905 | 1-216-214-00 | RES,CHIP | 4.7K | 2% | 1/8W |
| R906 | 1-208-441-61 | RES,CHIP | 1.5K | 2% | 1/10W |
| R907 | 1-249-568-11 | CARBON | 4.7K | 5% | 1/4W |
| R909 | 1-216-429-11 | RES,CHIP | 470 | 2% | 1/10W |
| R910 | 1-218-760-11 | RES,CHIP | 220K | 2% | 1/10W |
| R911 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R912 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R913 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R914 | 1-208-466-61 | RES,CHIP | 15K | 2% | 1/10W |
| R915 | 1-216-677-11 | METAL CHIP | 12K | 0.5% | 1/10W |
| R916 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R917 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R918 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R919 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R920 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R921 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R922 | 1-215-886-11 | METAL OXIDE | 100 | 5% | 2W F |
| R923 | 1-215-886-11 | METAL OXIDE | 100 | 5% | 2W F |
| R924 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R925 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R926 | 1-208-397-61 | RES,CHIP | 22 | 2% | 1/8W |
| R927 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R928 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R929 | 1-208-397-61 | RES,CHIP | 22 | 2% | 1/8W |
| R930 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R931 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R932 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R933 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R934 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R935 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R936 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R937 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R938 | 1-208-550-61 | RES,CHIP | 470K | 2% | 1/10W |
| R939 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R940 | 1-208-526-61 | RES,CHIP | 47K | 2% | 1/10W |
| R941 | 1-208-441-61 | RES,CHIP | 1.5K | 2% | 1/10W |
| R942 | 1-216-429-61 | RES,CHIP | 470 | 2% | 1/10W |
| R943 | 1-216-210-61 | RES,CHIP | 3.3K | 2% | 1/10W |
| R944 | 1-208-534-61 | RES,CHIP | 100K | 2% | 1/10W |
| R945 | 1-218-760-11 | RES,CHIP | 220K | 2% | 1/10W |
| R946 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R947 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R948 | 1-208-462-61 | RES,CHIP | 10K | 2% | 1/10W |
| R949 | 1-208-466-61 | RES,CHIP | 15K | 2% | 1/10W |
| R950 | 1-216-677-11 | METAL CHIP | 12K | 0.5% | 1/10W |
| R951 | 1-208-453-61 | RES,CHIP | 4.7K | 2% | 1/10W |
| R952 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R953 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R954 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R955 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R956 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R957 | 1-215-886-11 | METAL OXIDE | 100 | 5% | 2W F |
| R958 | 1-215-886-11 | METAL OXIDE | 100 | 5% | 2W F |
| R959 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R960 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R961 | 1-208-397-61 | RES,CHIP | 22 | 2% | 1/8W |
| R962 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R963 | 1-208-437-61 | RES,CHIP | 1K | 2% | 1/10W |
| R964 | 1-208-397-61 | RES,CHIP | 22 | 2% | 1/8W |
| R965 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R966 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R967 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R968 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R969 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| R970 | 1-259-033-51 | CARBON | 1 | 5% | 1/4W |
| | | < SWITCH > | | | |
| S801 | 1-571-658-11 | SWITCH, SLIDE (MODE, HI-C/HI-V) | | | |
| S802 | 1-692-721-11 | SWITCH, SLIDE (NFB, ON/OFF) | | | |
| | | < TRANSFORMER > | | | |
| T901 | 1-435-148-11 | TRANSFORMER, DC-DC CONVERTER | | | |
| T902 | 1-435-148-11 | TRANSFORMER, DC-DC CONVERTER | | | |
| | | < THERMISTOR > | | | |
| TH901 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |
| TH902 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |
| TH903 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |
| TH904 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |
| TH905 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |

**********

MISCELLANEOUS
*************

| | | |
|---|---|---|
| F901 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE) (25A) |
| F902 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE) (25A) |
| F903 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE) (25A) |
| F904 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE) (25A) |
| FN801 | 1-763-107-11 | MOTOR, FAN |

**********

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| | | ACCESSORIES | |
| | | ************ | |
| | 3-867-641-11 | MANUAL, INSTRUCTION (ENGLISH,FRENCH) | |
| | 3-867-641-21 | MANUAL, INSTRUCTION (GERMAN,ITALIAN)(AEP,UK,E) | |
| | 3-867-641-31 | MANUAL, INSTRUCTION (SPANISH,PORTUGUESE)(AEP,UK,E) | |
| | 3-867-641-41 | MANUAL, INSTRUCTION (DUTCH,SWEDISH)(AEP,UK,E) | |
| | 3-867-641-51 | MANUAL, INSTRUCTION (RUSSIAN)(AEP,UK,E) | |

**********

HARDWARE LIST
*************

| | | |
|---|---|---|
| #1 | 7-685-546-19 | SCREW (+BTP3X8) TYPE2 N-S |
| #2 | 7-685-548-19 | SCREW (+BTP3X12) TYPE2 N-S |
| #3 | 7-685-145-19 | SCREW (+P3X6) TYPE2 NON-SLIT |
| #4 | 7-685-147-11 | SCREW (+P3X10) TYPE2 NON-SLIT |
| #5 | 7-685-146-19 | SCREW (+P3X8) TYPE2 NON-SLIT |
| #6 | 7-685-647-79 | SCREW (+BVTP3X10) TYPE2 IT-3 |
| #7 | 7-685-106-11 | SCREW (+P2X10) TYPE2 NON-SLIT |
| #8 | 7-685-649-79 | SCREW (+BVTP3X14) TYPE2 IT-3 |
| #9 | 7-685-168-11 | SCREW (+P4X40) TYPE2 NON-SLIT |
| #10 | 7-685-149-11 | SCREW (+P3X14) TYPE2 NON-SLIT |
| #11 | 7-685-797-01 | SCREW +PTT2.6X16 (S) |

9-926-591-11

Sony Corporation
Mobile Electronics Company

99F09278-1
Printed in Japan 
Published by Quality Assurance Dept.

# XM-7547

SONY

# SERVICE MANUAL

*US Model*
*Canadian Model*
*AEP Mode*
*UK Model*
*E Model*

# SUPPLEMENT-1

**File this supplement with the service manual.**

**Subject: 1. CHANGE OF DISASSEMBLY**
**2. CHANGE OF EXPLODED VIEWS**
**3. CHANGE OF ELECTRICAL PARTS LIST**
**4. CHANGE OF DIAGRAMS**

(ENG-99012)

**The Amplifier Board and the Power Board were changed during production of this machine.**
**Here, only the printed circuit boards prior to the change are described.**

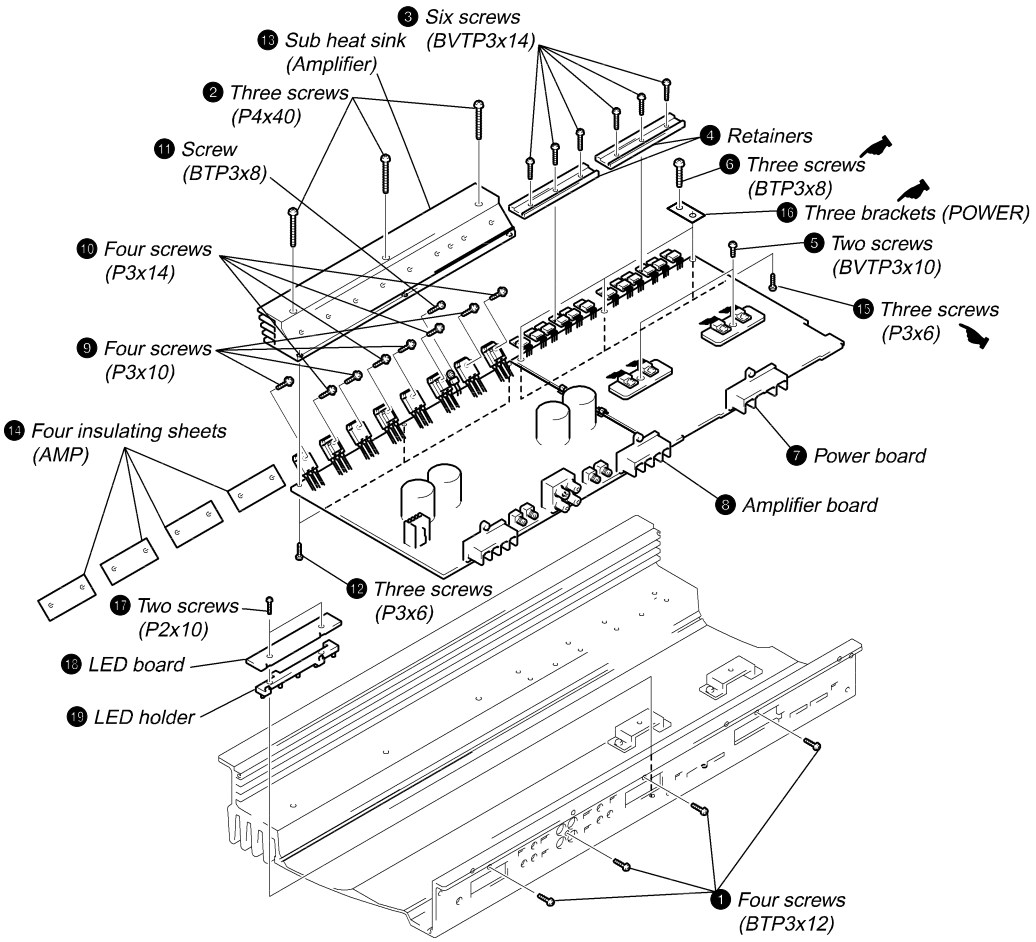
**9-926-591-83**

**Sony Corporation**
**Mobile Electronics Division Company**

99J090275-1
Printed in Japan 
**Published by General Engineering Dept.**

## 1. CHANGE OF DISASSEMBLY

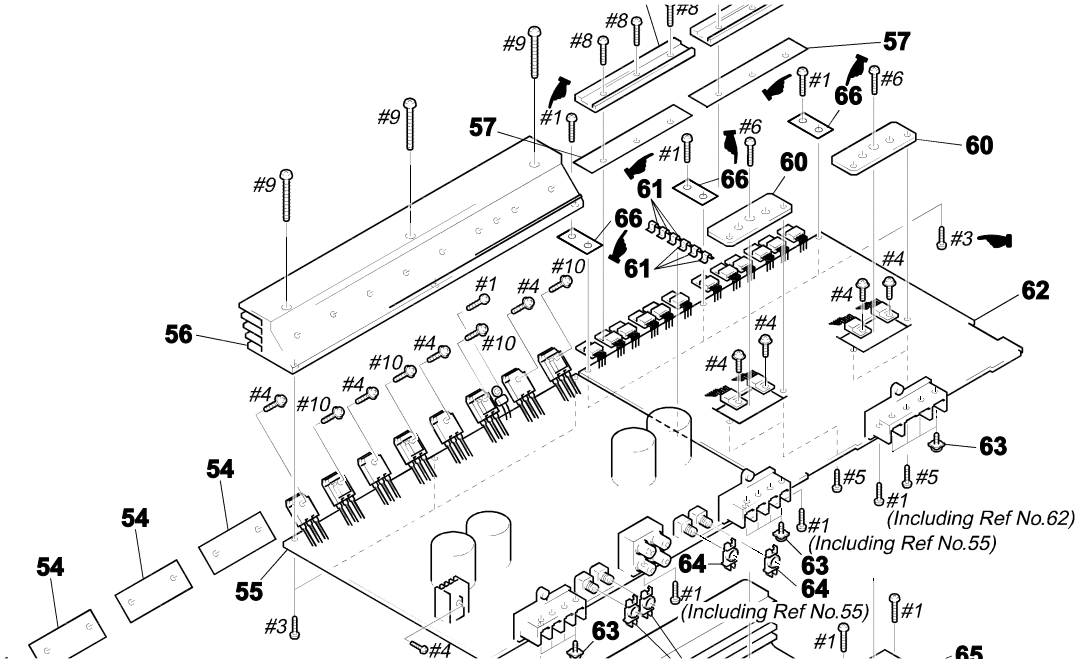
☛ : Changed portion

| Page | 3-2. AMPLIFIER/POWER BOARD AND LED BOARD |
|---|---|
| 7 |  |

## 2. CHANGE OF EXPLODED VIEWS

☛ : Changed portion

| Page | Former Type | | | | New Type | | | |
|---|---|---|---|---|---|---|---|---|
| | Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
| 17 | * 2 | 3-039-205-01 | HEAT SINK (COVER) | | * 2 | 3-039-205-01 | HEAT SINK (COVER) | (US, CND) |
| | | | | | * 2 | 3-039-205-11 | HEAT SINK (COVER) | (AEP, UK, E) |
| 18 | | | | | * 66 | 3-042-419-01 | BRACKET (POWER) | |




NOTE:

• Abbreviation

CND: Canadian model

## 3. CHANGE OF ELECTRICAL PARTS LIST

☛ : Changed portion

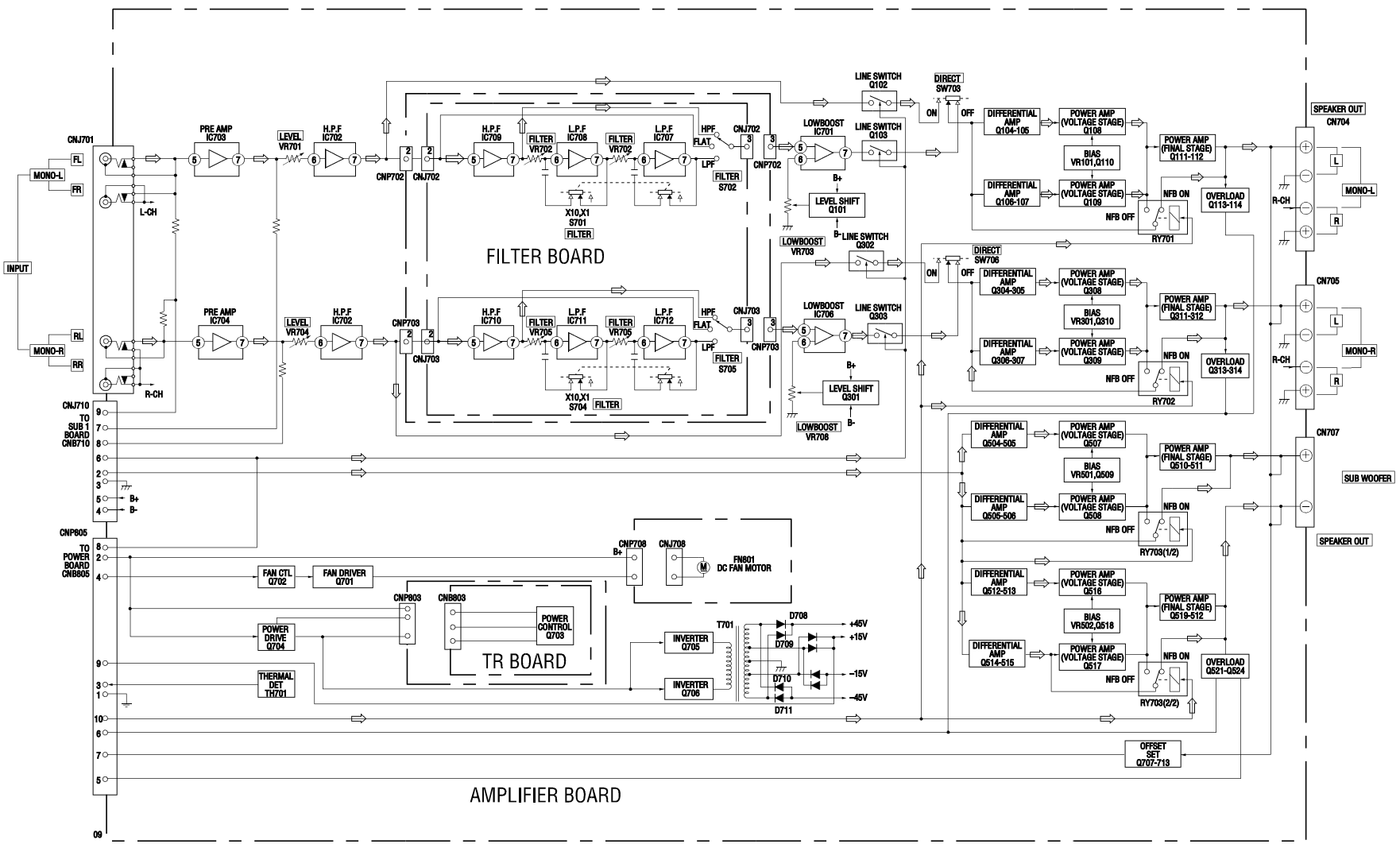
| Page | Former Type | | | | | | New Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ref. No. | Part No. | Description | | | Remark | Ref. No. | Part No. | Description | | | Remark |
| 19 | C112 | 1-102-508-11 | CERAMIC | 10PF | 0.5PF | 50V | C112 | 1-102-959-11 | CERAMIC | 22PF | 5% | 50V |
| | C212 | 1-102-508-11 | CERAMIC | 10PF | 0.5PF | 50V | C212 | 1-102-959-11 | CERAMIC | 22PF | 5% | 50V |
| | C312 | 1-102-508-11 | CERAMIC | 10PF | 0.5PF | 50V | C312 | 1-102-959-11 | CERAMIC | 22PF | 5% | 50V |
| | C412 | 1-102-508-11 | CERAMIC | 10PF | 0.5PF | 50V | C412 | 1-102-959-11 | CERAMIC | 22PF | 5% | 50V |
| 20 | D103 | 8-719-820-05 | DIODE | 1SS181-TE85R | | | D103 | 8-719-820-05 | DIODE | 1SS181-TE85R (AEP,UK,E) | | |
| | D105 | 8-719-100-65 | DIODE | RD12EB2 | | | D105 | 8-719-100-65 | DIODE | RD12EB2 (AEP,UK,E) | | |
| | | | ———— | | | | D107 | 8-719-921-71 | DIODE | MTZJ-9.1B | | |
| | D203 | 8-719-820-05 | DIODE | 1SS181-TE85R | | | D203 | 8-719-820-05 | DIODE | 1SS181-TE85R (AEP,UK,E) | | |
| | D205 | 8-719-100-65 | DIODE | RD12EB2 | | | D205 | 8-719-100-65 | DIODE | RD12EB2 (AEP,UK,E) | | |
| | | | ———— | | | | D207 | 8-719-921-71 | DIODE | MTZJ-9.1B | | |
| | | | ———— | | | | D307 | 8-719-921-71 | DIODE | MTZJ-9.1B | | |
| | | | ———— | | | | D407 | 8-719-921-71 | DIODE | MTZJ-9.1B | | |
| 21 | Q113 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | | | Q113 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y (AEP,UK,E) | | |
| | Q115 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R | | | Q115 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R (AEP,UK,E) | | |
| | Q213 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | | | Q213 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y (AEP,UK,E) | | |
| | Q215 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R | | | Q215 | 8-729-230-51 | TRANSISTOR | 2SC2712YG-TE85R (AEP,UK,E) | | |
| | R134 | 1-208-437-61 | RES, CHIP | 1K | 2% | 1/10W | R134 | 1-208-437-61 | RES, CHIP | 1K | 2% | 1/10W (AEP,UK,E) |
| | R136 | 1-208-437-61 | RES, CHIP | 1K | 2% | 1/10W | R136 | 1-208-437-61 | RES, CHIP | 1K | 2% | 1/10W (AEP,UK,E) |
| | R143 | 1-208-789-11 | RES, CHIP | 2K | 2% | 1/10W | R143 | 1-208-789-11 | RES, CHIP | 2K | 2% | 1/10W (AEP,UK,E) |
| | R145 | 1-208-789-11 | RES, CHIP | 2K | 2% | 1/10W | R145 | 1-208-789-11 | RES, CHIP | 2K | 2% | 1/10W (AEP,UK,E) |
| | R146 | 1-208-462-61 | RES, CHIP | 10K | 2% | 1/10W | R146 | 1-208-462-61 | RES, CHIP | 10K | 2% | 1/10W (AEP,UK,E) |
| | R147 | 1-208-462-61 | RES, CHIP | 10K | 2% | 1/10W | R147 | 1-208-462-61 | RES, CHIP | 10K | 2% | 1/10W (AEP,UK,E) |

| Page | Former Type | | | | | | | New Type | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ref. No. | Part No. | Description | | | | Remark | Ref. No. | Part No. | Description | | | | Remark |
| 22 | R150 | 1-208-462-61 | RES, CHIP | 10K | 2% | 1/10W | | R150 | 1-208-462-61 | RES, CHIP | 10K | 2% | 1/10W (AEP,UK,E) | |
| | R153 | 1-217-784-11 | FUSIBLE | 10 | 5% | 5F | F | R153 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| | | | ———— | | | | | R158 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| | | | ———— | | | | | R159 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| | R234 | 1-208-437-61 | RES, CHIP | 1K | 2% | 1/10W | | R234 | 1-208-437-61 | RES, CHIP | 1K | 2% | 1/10W (AEP,UK,E) | |
| | R236 | 1-208-437-61 | RES, CHIP | 1K | 2% | 1/10W | | R236 | 1-208-437-61 | RES, CHIP | 1K | 2% | 1/10W (AEP,UK,E) | |
| | R243 | 1-208-789-11 | RES, CHIP | 2K | 2% | 1/10W | | R243 | 1-208-789-11 | RES, CHIP | 2K | 2% | 1/10W (AEP,UK,E) | |
| | R245 | 1-208-789-11 | RES, CHIP | 2K | 2% | 1/10W | | R245 | 1-208-789-11 | RES, CHIP | 2K | 2% | 1/10W (AEP,UK,E) | |
| | R246 | 1-208-462-61 | RES, CHIP | 10K | 2% | 1/10W | | R246 | 1-208-462-61 | RES, CHIP | 10K | 2% | 1/10W (AEP,UK,E) | |
| | R247 | 1-208 462-61 | RES, CHIP | 10K | 2% | 1/10W | | R247 | 1-208-462-61 | RES, CHIP | 10K | 2% | 1/10W (AEP,UK,E) | |
| | R250 | 1-208 462-61 | RES, CHIP | 10K | 2% | 1/10W | | R250 | 1-208-462-61 | RES, CHIP | 10K | 2% | 1/10W (AEP,UK,E) | |
| | R253 | 1-217-784-11 | FUSIBLE | 10 | 5% | 5W | F | R253 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| | | | ———— | | | | | R258 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| | | | ———— | | | | | R259 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| | R353 | 1-217-784-11 | FUSIBLE | 10 | 5% | 5W | F | R353 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| | | | ———— | | | | | R358 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| | | | ———— | | | | | R359 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| 23 | R453 | 1-217-784-11 | FUSIBLE | 10 | 5% | 5W | F | R453 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| | | | ———— | | | | | R458 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| | | | ———— | | | | | R459 | 1-215-860-71 | METAL OXIDE | 33 | 5% | 1W | F |
| 25 | | | ———— | | | | | C912 | 1-131-994-11 | FILM | 0.047uF | 5% | 100V | |
| | | | ———— | | | | | C933 | 1-131-994-11 | FILM | 0.047uF | 5% | 100V | |
| 27 | | 3-867-641-11 | MANUAL, INSTRUCTION (ENGLISH,FRENCH) | | | | | | 3-867-641-11 | MANUAL, INSTRUCTION (ENGLISH,FRENCH) | | | | (US,CND) |
| | | | ———— | | | | | | 3-867-641-61 | MANUAL, INSTRUCTION (ENGLISH,FRENCH) | | | | (AEP,UK,E) |

Note:
• Abbreviation
CND: Canadian model

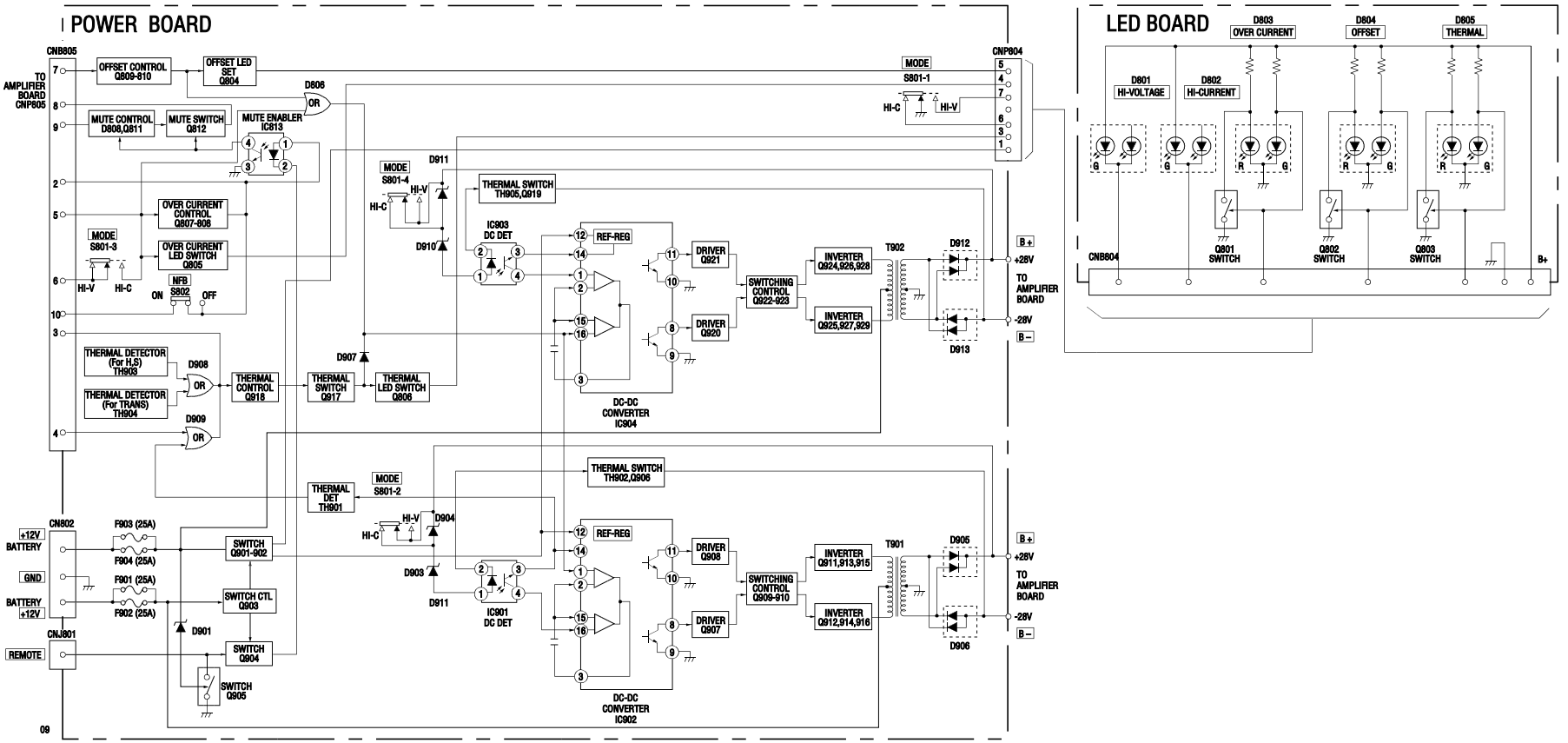
## 4. CHANGE OF DIAGRAMS

**• BLOCK DIAGRAM – AMPLIFIER SECTION –**



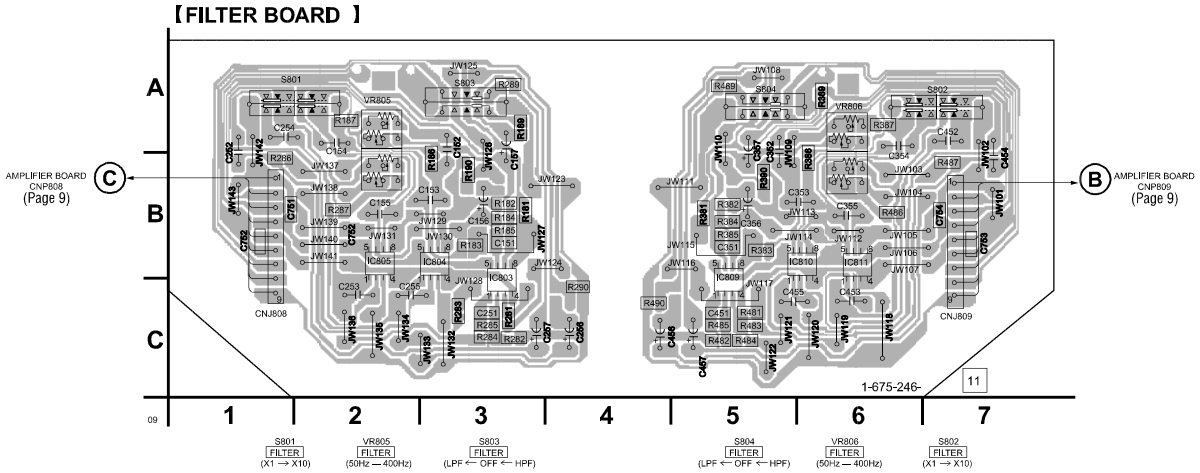

• Signal path
⇨: Audio

**• BLOCK DIAGRAM – POWER SECTION –**



• **PRINTED WIRING BOARD – LED/FILTER SECTION –**

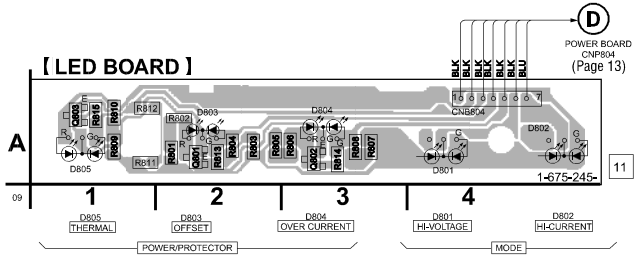
【FILTER BOARD 】




• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| IC803 | C-3 |
| IC804 | B-3 |
| IC805 | B-2 |
| IC809 | C-5 |
| IC810 | B-6 |
| IC811 | B-6 |

【LED BOARD 】



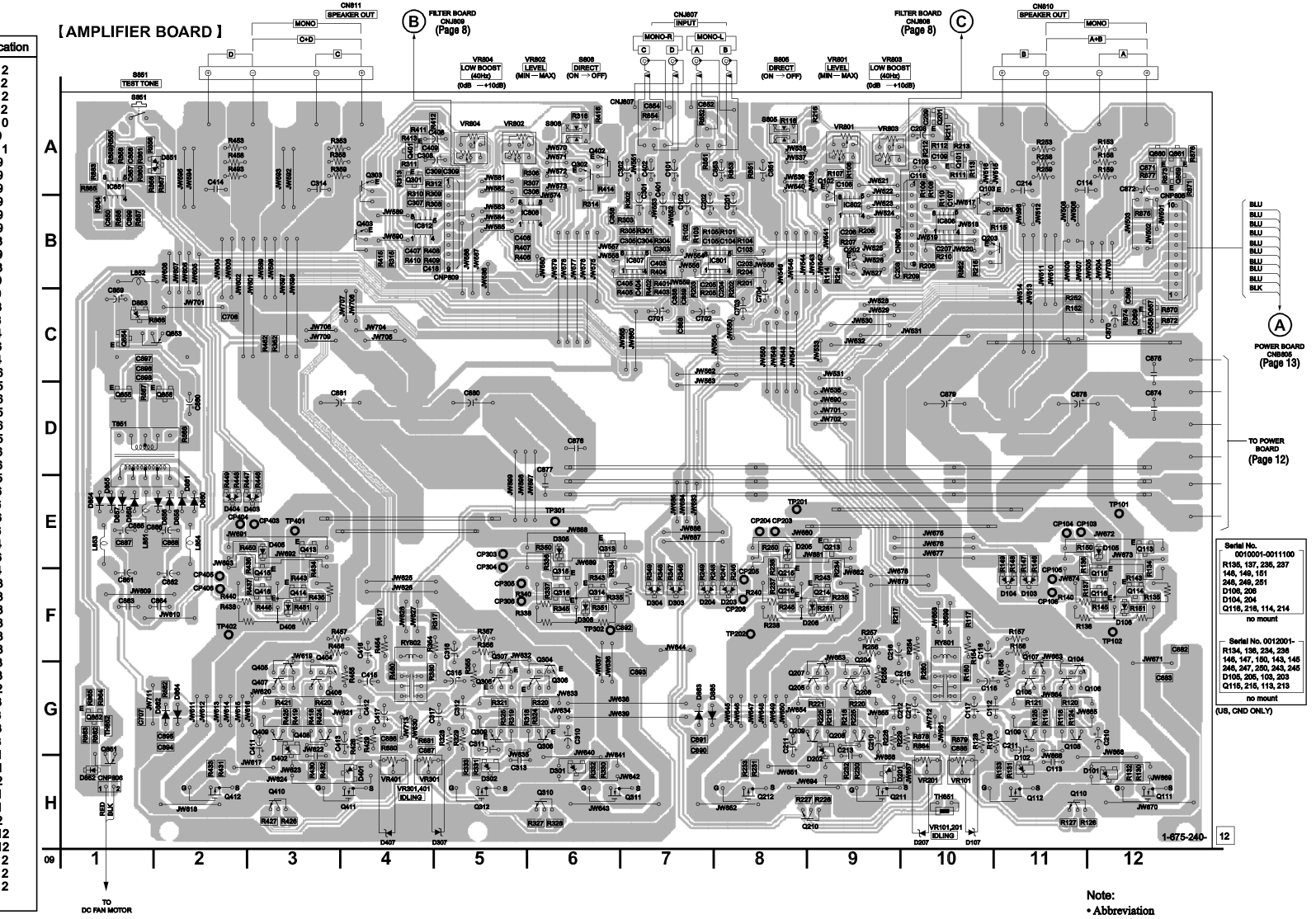

• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D801 | A-4 |
| D802 | A-4 |
| D803 | A-2 |
| D804 | A-3 |
| D805 | A-1 |
| Q801 | A-2 |
| Q802 | A-3 |
| Q803 | A-1 |

## • PRINTED WIRING BOARD – AMPLIFIER SECTION –

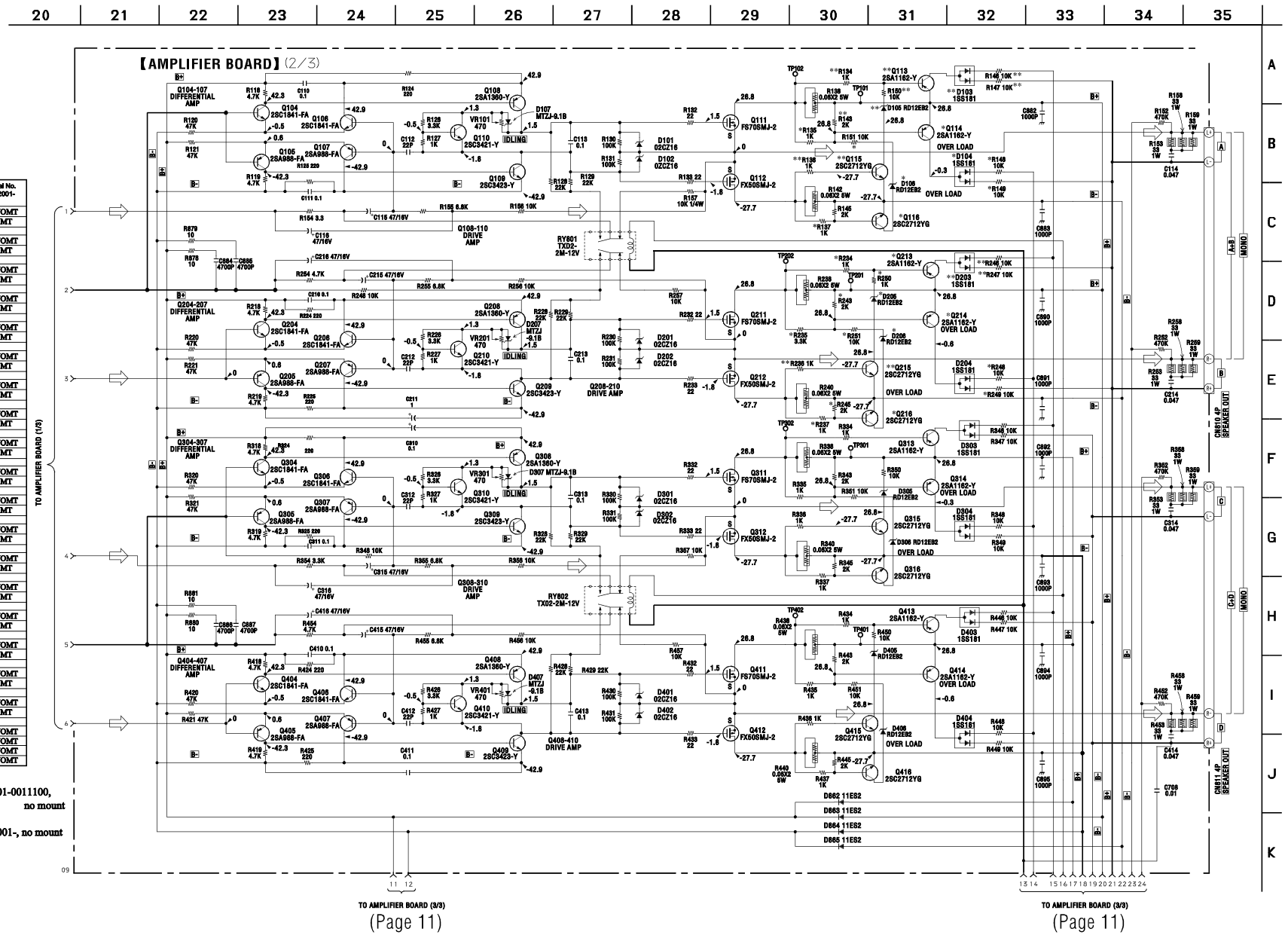
### • Semiconductor Location

| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D101 | H-12 | Q113 | E-12 |
| D102 | H-11 | Q114 | F-12 |
| D103 | F-11 | Q115 | E-12 |
| D104 | F-11 | Q116 | F-12 |
| D105 | E-12 | Q201 | A-10 |
| D106 | F-12 | Q202 | B-9 |
| D107 | H-10 | Q203 | B-11 |
| D201 | H-9 | Q204 | G-9 |
| D202 | G-9 | Q205 | G-9 |
| D203 | F-8 | Q206 | G-9 |
| D204 | F-7 | Q207 | G-9 |
| D205 | E-8 | Q208 | G-9 |
| D206 | F-8 | Q209 | G-9 |
| D207 | H-10 | Q210 | H-8 |
| D301 | H-6 | Q211 | H-9 |
| D302 | H-5 | Q212 | H-8 |
| D303 | F-7 | Q213 | E-9 |
| D304 | F-7 | Q214 | F-9 |
| D305 | E-6 | Q215 | E-8 |
| D306 | F-6 | Q216 | F-8 |
| D307 | H-4 | Q301 | A-4 |
| D401 | H-4 | Q302 | A-6 |
| D402 | G-3 | Q303 | A-4 |
| D403 | E-3 | Q304 | G-6 |
| D404 | E-2 | Q305 | G-5 |
| D405 | E-3 | Q306 | G-6 |
| D406 | F-3 | Q307 | G-5 |
| D407 | H-4 | Q308 | G-6 |
| D851 | A-2 | Q309 | G-5 |
| D852 | H-1 | Q310 | H-6 |
| D853 | C-1 | Q311 | H-6 |
| D854 | E-1 | Q312 | H-5 |
| D855 | E-1 | Q313 | E-6 |
| D856 | E-2 | Q314 | F-6 |
| D857 | E-1 | Q315 | E-6 |
| D858 | E-2 | Q316 | F-6 |
| D859 | E-1 | Q401 | A-4 |
| D860 | E-2 | Q402 | A-6 |
| D861 | E-2 | Q403 | B-4 |
| D862 | G-2 | Q404 | G-3 |
| D863 | G-7 | Q405 | G-3 |
| D864 | G-2 | Q406 | G-3 |
| D865 | G-7 | Q407 | G-3 |
| | | Q408 | G-3 |
| IC801 | B-8 | Q409 | G-3 |
| IC802 | B-9 | Q410 | H-3 |
| IC806 | B-10 | Q411 | H-3 |
| IC807 | B-7 | Q412 | H-2 |
| IC808 | B-6 | Q413 | E-3 |
| IC812 | B-4 | Q414 | F-3 |
| IC851 | A-1 | Q415 | E-3 |
| | | Q416 | F-3 |
| Q101 | A-10 | Q851 | H-1 |
| Q102 | A-9 | Q852 | G-1 |
| Q103 | A-10 | Q853 | C-2 |
| Q104 | G-11 | Q854 | C-1 |
| Q105 | G-11 | Q855 | D-1 |
| Q106 | G-11 | Q856 | D-2 |
| Q107 | G-11 | Q857 | C-12 |
| Q108 | G-11 | Q858 | C-12 |
| Q109 | G-11 | Q859 | A-12 |
| Q110 | H-11 | Q860 | A-12 |
| Q111 | H-12 | Q861 | A-12 |
| Q112 | H-11 | | |




Note:
• Abbreviation
CND: Canadian model

• **SCHEMATIC DIAGRAM – AMPLIFIER (2/3) SECTION –**

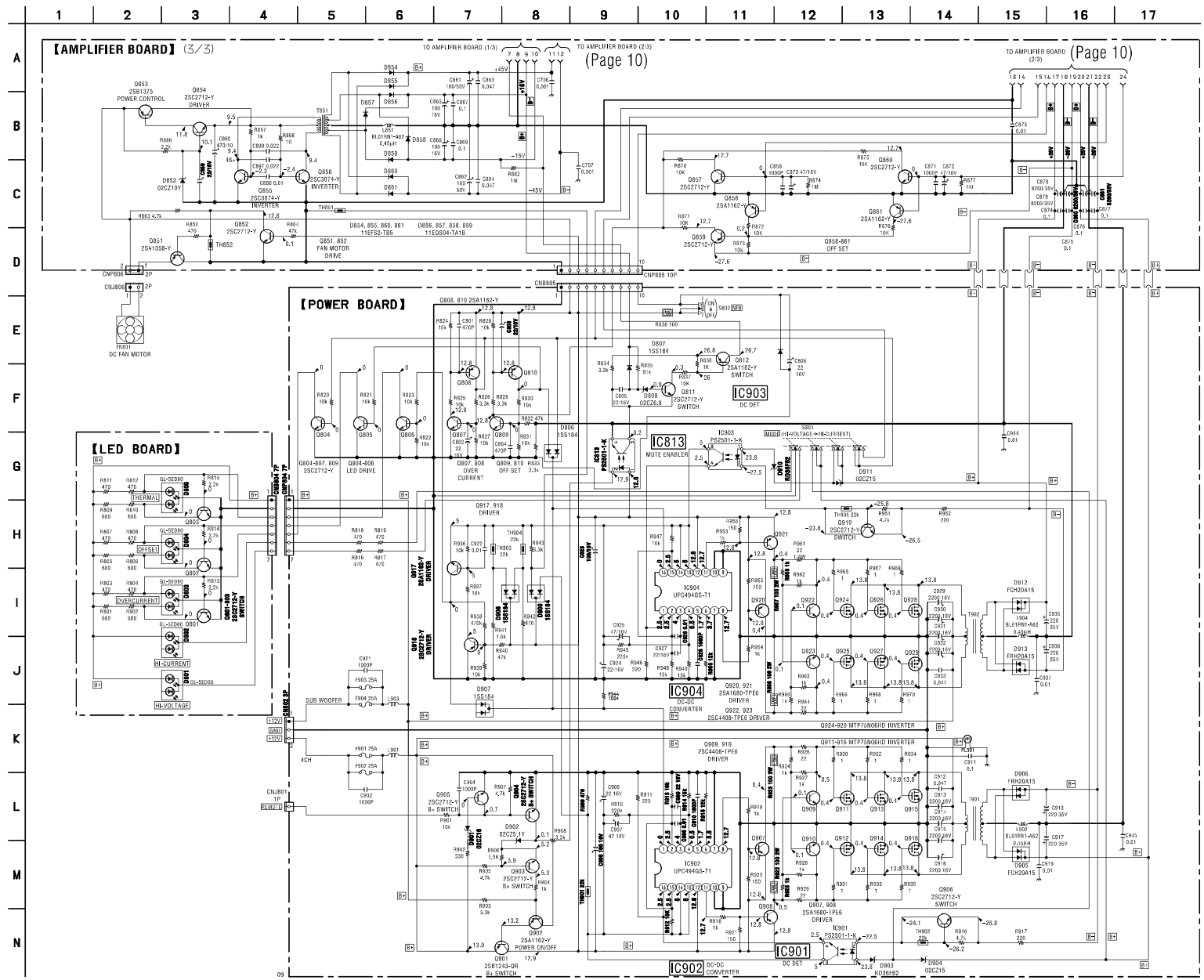



| | Serial No. 001001-0011100 | Serial No. 0012001- |
|---|---|---|
| D105 | MT | NOMT |
| D106 | NOMT | MT |
| D205 | MT | NOMT |
| D206 | NOMT | MT |
| D103 | MT | NOMT |
| D104 | MOMT | MT |
| D203 | MT | NOMT |
| D204 | NOMT | MT |
| Q115 | MT | NOMT |
| Q116 | NOMT | MT |
| Q215 | MT | NOMT |
| Q216 | NOMT | MT |
| Q113 | MT | NOMT |
| Q114 | NOMT | MT |
| Q213 | MT | NOMT |
| Q214 | NOMT | MT |
| R134 | MT | NOMT |
| R135 | NOMT | MT |
| R136 | MT | NOMT |
| R137 | NOMT | MT |
| R234 | MT | NOMT |
| R235 | NOMT | MT |
| R236 | MT | NOMT |
| R237 | NOMT | MT |
| R150 | MT | NOMT |
| R151 | NOMT | MT |
| R146 | MT | NOMT |
| R148 | NOMT | MT |
| R147 | MT | NOMT |
| R149 | NOMT | MT |
| R250 | MT | NOMT |
| R251 | NOMT | MT |
| R246 | MT | NOMT |
| R248 | NOMT | MT |
| R247 | MT | NOMT |
| R247 | NOMT | MT |
| R143 | MT | NOMT |
| R145 | MT | NOMT |
| R243 | MT | NOMT |
| R245 | MT | NOMT |

NOTE:
* : Serial No. 001001-0011100, no mount

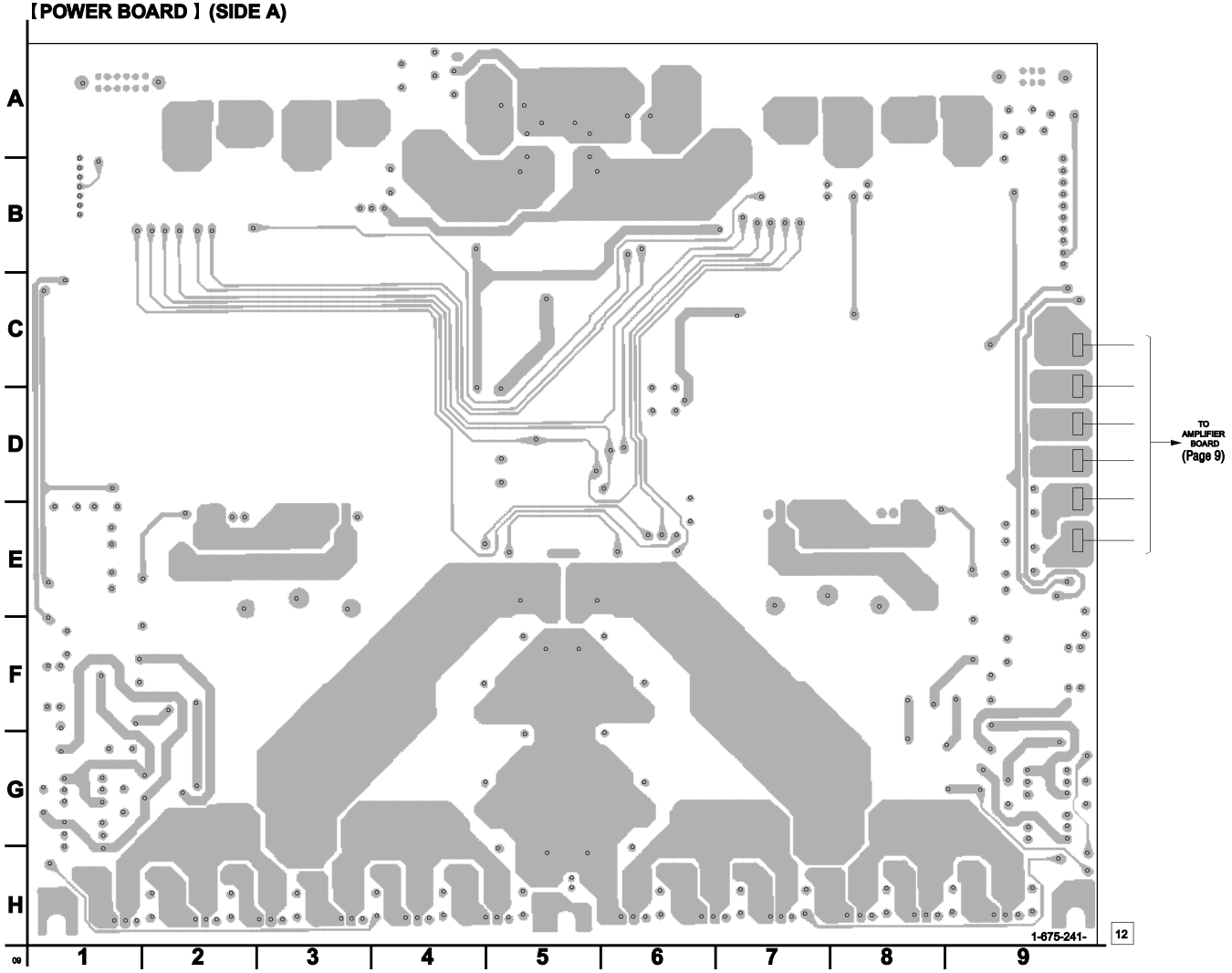
**: Serial No. 0012001-, no mount

**• SCHEMATIC DIAGRAM – POWER/AMPLIFIER (3/3) LED SECTION –**



• PRINTED WIRING BOARD – POWER SECTION –

【POWER BOARD 】(SIDE A)

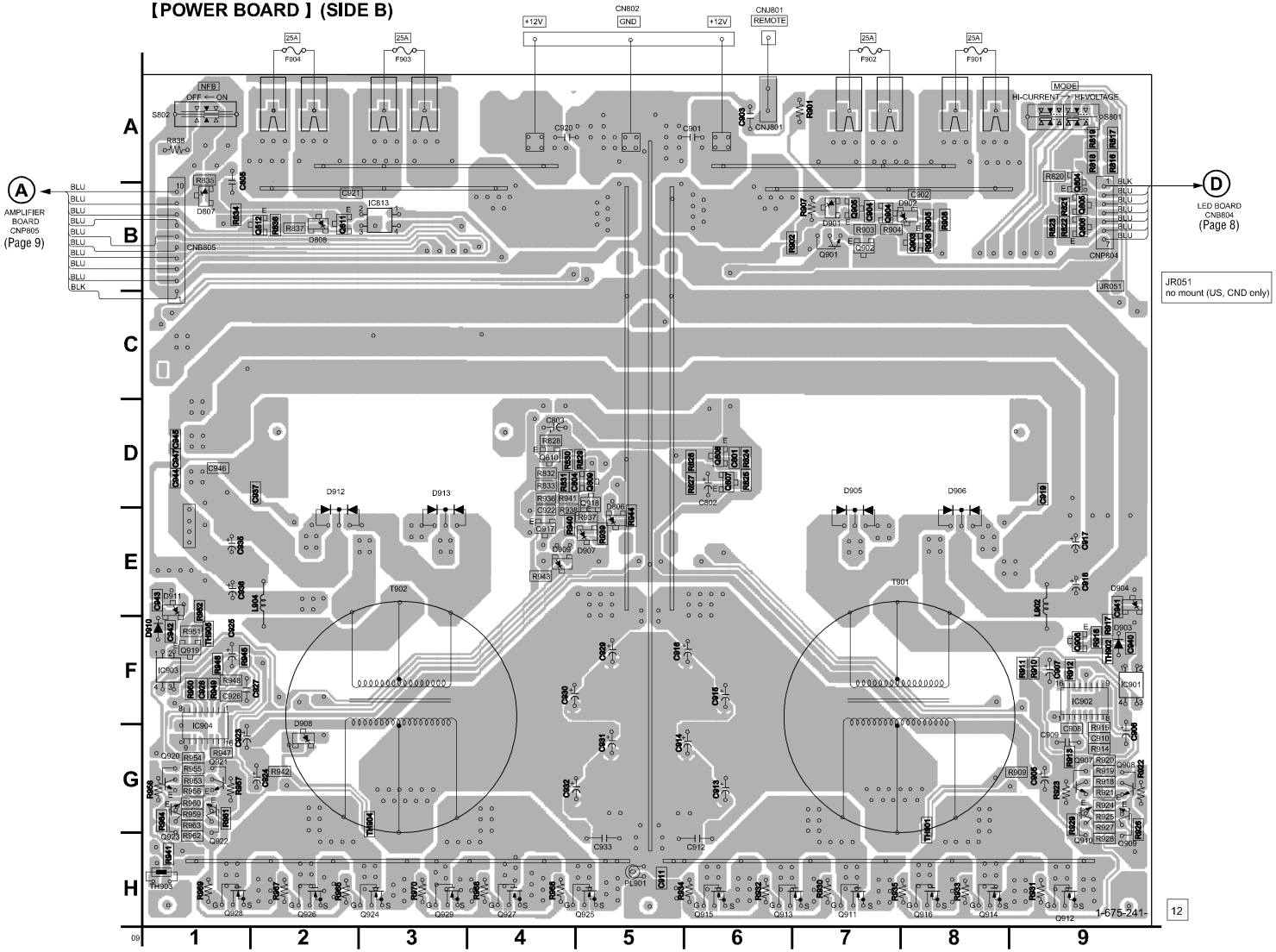


## • PRINTED WIRING BOARD – POWER SECTION –

### • Semiconductor Location

| Ref. No. | Location |
|---|---|
| D806 | E-5 |
| D807 | B-1 |
| D808 | B-2 |
| D901 | B-7 |
| D902 | B-8 |
| D903 | F-9 |
| D904 | E-9 |
| D905 | E-7 |
| D906 | E-8 |
| D907 | E-5 |
| D908 | G-2 |
| D909 | E-4 |
| D910 | F-1 |
| D911 | E-1 |
| D912 | E-2 |
| D913 | E-3 |
| | |
| IC813 | B-3 |
| IC901 | F-9 |
| IC902 | F-9 |
| IC903 | F-1 |
| IC904 | F-1 |
| | |
| Q804 | B-9 |
| Q805 | B-9 |
| Q806 | B-9 |
| Q807 | D-6 |
| Q808 | D-6 |
| Q809 | D-5 |
| Q810 | D-4 |
| Q811 | B-2 |
| Q812 | B-2 |
| Q901 | B-7 |
| Q902 | B-7 |
| Q903 | B-8 |
| Q904 | B-7 |
| Q905 | B-7 |
| Q906 | F-9 |
| Q907 | G-9 |
| Q908 | G-9 |
| Q909 | G-9 |
| Q910 | G-9 |
| Q911 | H-7 |
| Q912 | H-9 |
| Q913 | H-6 |
| Q914 | H-8 |
| Q915 | H-6 |
| Q916 | H-8 |
| Q917 | E-4 |
| Q918 | D-5 |
| Q919 | F-1 |
| Q920 | G-1 |
| Q921 | G-1 |
| Q922 | G-1 |
| Q923 | G-1 |
| Q924 | H-3 |
| Q925 | H-5 |
| Q926 | H-2 |
| Q927 | H-4 |
| Q928 | H-1 |
| Q929 | H-3 |

【POWER BOARD 】(SIDE B)




**Note:**
• Abbreviation
CND: Canadian model

# XM-7547

SONY

# SERVICE MANUAL

*US Model*
*Canadian Model*
*AEP Mode*
*UK Model*
*E Model*

# SUPPLEMENT-2

**File this supplement with the service manual.**

**Subject: 1. CORRECTION**
**2. CHANGE OF BOARDS**
**3. CHANGE OF STRUCTURE**

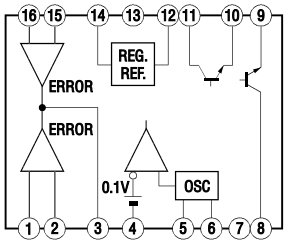
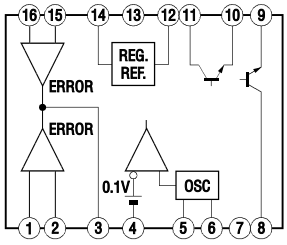
(ENG-00004)

## 1. CORRECTION

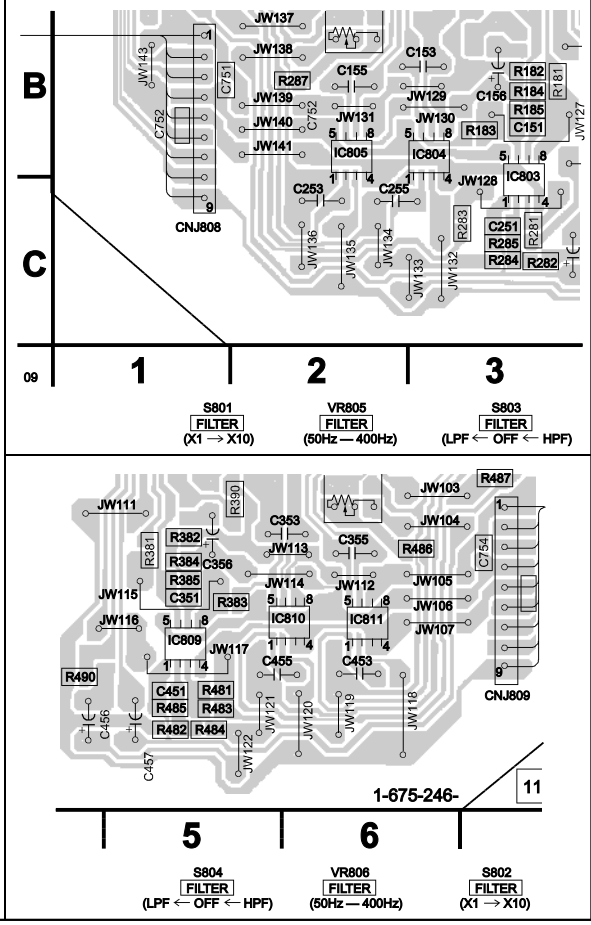
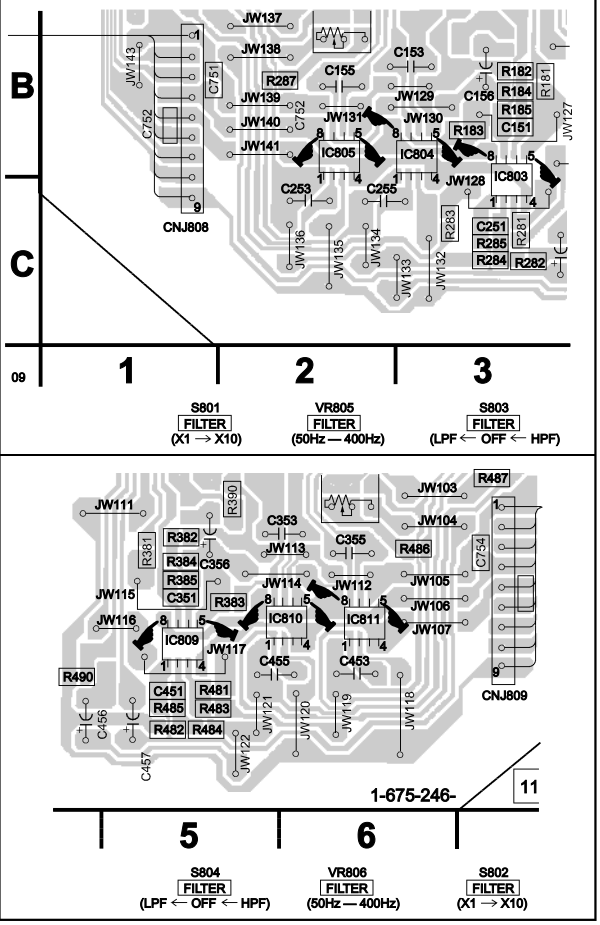
**Correct your service manual supplement-1 as shown below.**

**IC BLOCK DIAGRAM**

**☛ : indicates corrected portion**

| Page | INCORRECT | CORRECT |
|---|---|---|
| 10 | **• POWER section**<br>**IC902, 904 μPC494G2**<br>  | **• POWER section**<br>**IC902, 904 μPC494GS-T1**<br>  |

**PRINTED WIRING BOARD – LED/FILTER Section –**
**☛ : indicates corrected portion**
**page (8) : Refer to SERVICE MANUAL SUPPLEMENT-1.**

| Page | INCORRECT | CORRECT |
|---|---|---|
| (8) |  |  |
| |  |  |

**PRINTED WIRING BOARD – AMPLIFIER SECTION –**
**☛ : indicates corrected portion**
**page (10) : Refer to SERVICE MANUAL SUPPLEMENT-1.**

| Page | INCORRECT | CORRECT |
|---|---|---|
| (10) | | DIFFERECF TABLE<br>(Apply it US/CND models) |

| | Serial No. 001001-0011100 | Serial No. 0012001- |
|---|---|---|
| D105 | MT | NOMT |
| D106 | NOMT | MT |
| D205 | MT | NOMT |
| D206 | NOMT | MT |
| D103 | MT | NOMT |
| D104 | MOMT | MT |
| D203 | MT | NOMT |
| D204 | NOMT | MT |

| | | |
|---|---|---|
| R246 | MT | NOMT |
| R248 | NOMT | MT |
| R247 | MT | NOMT |
| R247 | NOMT | MT |
| R143 | MT | NOMT |
| R145 | MT | NOMT |
| R243 | MT | NOMT |
| R245 | MT | NOMT |

| | | |
|---|---|---|
| R246 | MT | NOMT |
| R248 | NOMT | MT |
| R247 | MT | NOMT |
| R249 | NOMT | MT |
| R143 | MT | NOMT |
| R145 | MT | NOMT |
| R243 | MT | NOMT |
| R245 | MT | NOMT |

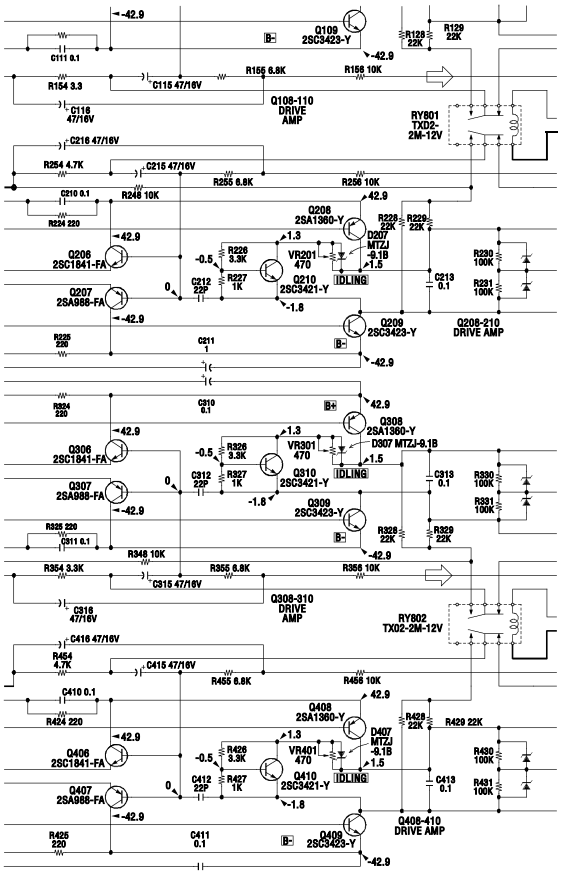
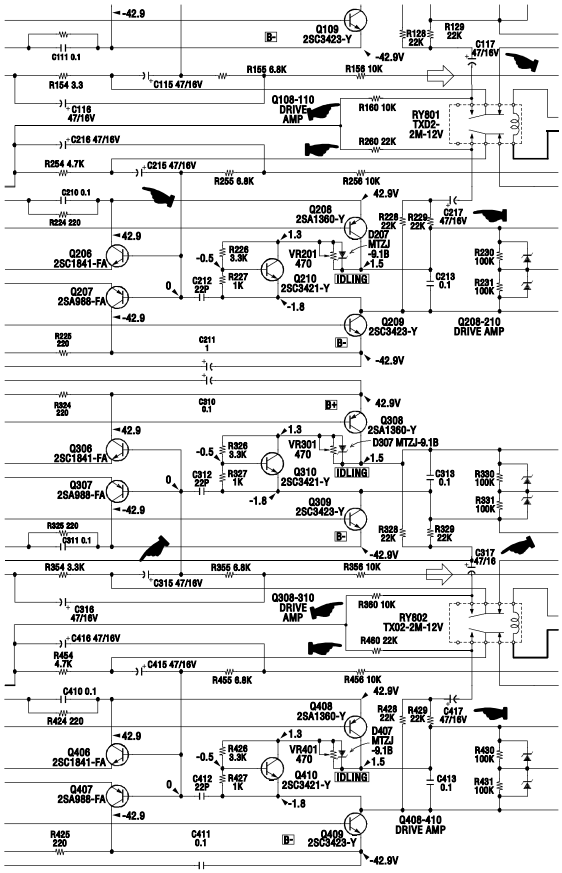
NOTE:
* : Serial No. 001001-0011100, no mount
**: Serial No. 0012001-, no mount

**Apply it SUFFIX -11, -12 OF AMPLIFIER BOARD**

**SCHEMATIC DIAGRAM – AMPLIFIER (2/3) SECTION –**

**☛ : indicates changed portion**

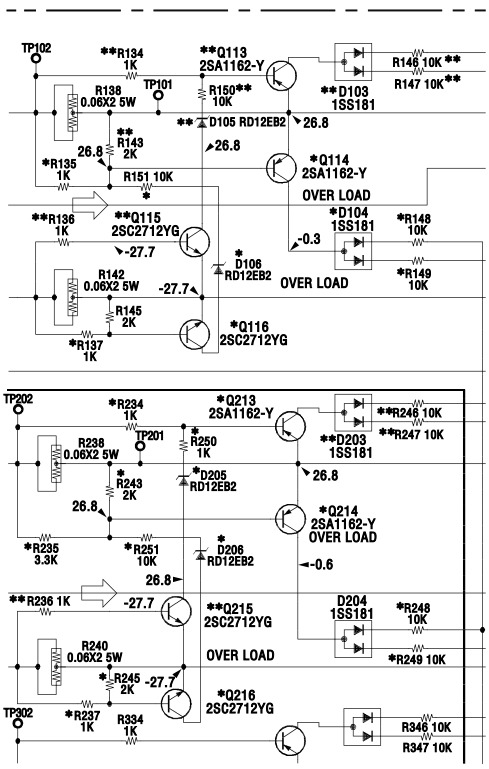
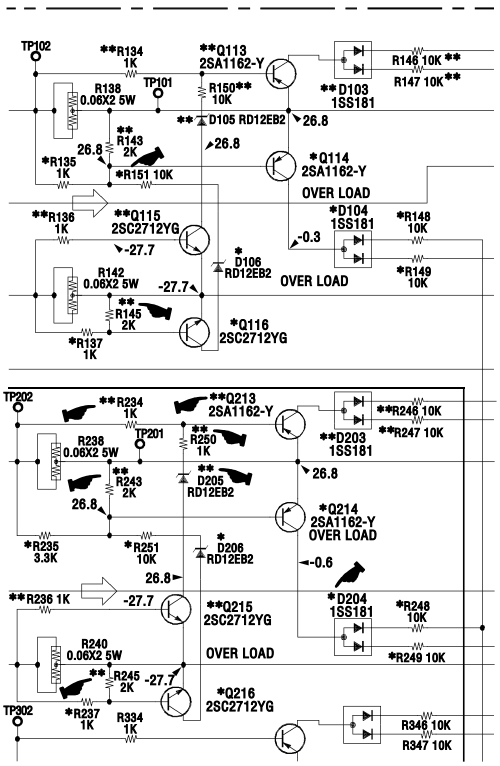
**page (10) : Refer to SERVICE MANUAL SUPPLEMENT-1.**

| Page | Former Type | New Type |
|---|---|---|
| (10) |  |  |

**SCHEMATIC DIAGRAM – AMPLIFIER (2/3) SECTION –**

**☛ : indicates corrected portion**

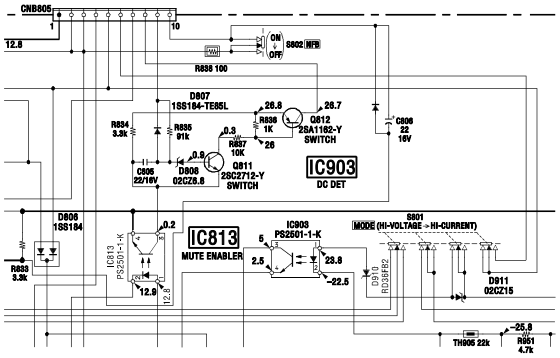
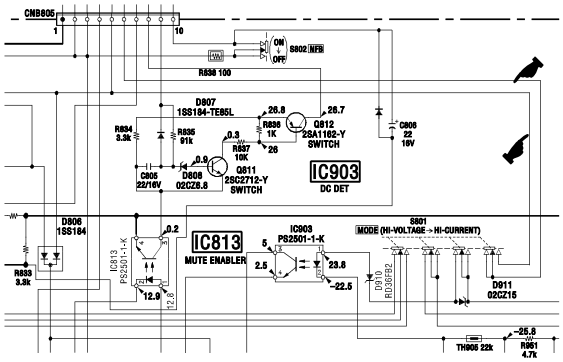
**page (10) : Refer to SERVICE MANUAL SUPPLEMENT-1.**

| Page | INCORRECT | CORRECT |
|---|---|---|
| (10) |  |  |

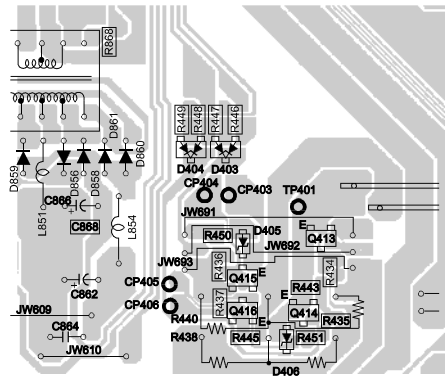
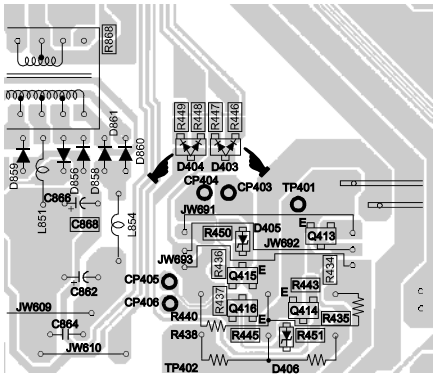
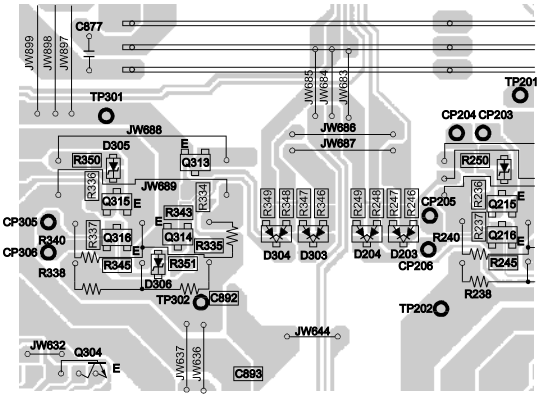
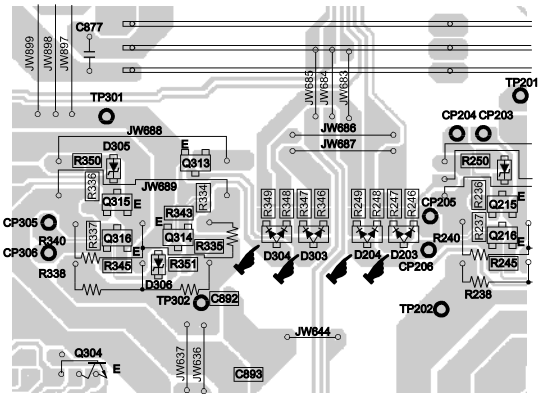
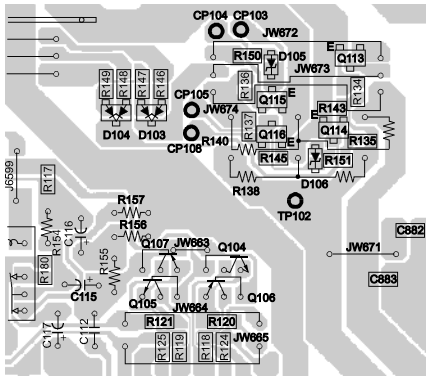
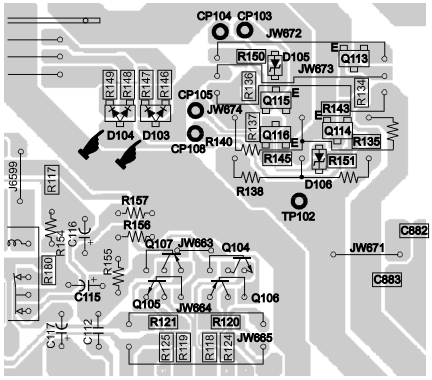
**SCHEMATIC DIAGRAM – POWER/AMPLIFIER (3/3) SECTION –**

**☛ : indicates corrected portion**

**page (11) : Refer to SERVICE MANUAL SUPPLEMENT-1.**

| Page | INCORRECT | CORRECT |
|---|---|---|
| (11) |  |  |

**PRINTED WIRING BOARD – AMPLIFIER SECTION –**
**☛ : indicates corrected portion**
**page (9) : Refer to SERVICE MANUAL SUPPLEMENT-1.**

| Page | INCORRECT | CORRECT |
|---|---|---|
| 12 (9) |  |  |
| |  |  |
| |  |  |

**Apply it SUFFIX -11, -12 OF AMPLIFIER BOARD**

**ELECTRICAL PARTS LIST**
**☛ : indicates changed portion**

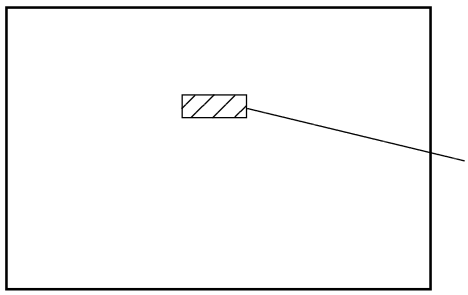
| Page | Former Type | | | | | | New Type | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ref. No. | Part No. | Description | | | Remark | Ref. No. | Part No. | Description | | | Remark |
| 19 | | | ———— | | | | C117 | 1-126-008-51 | ELECT | 470uF | 20% | 16V |
| | | | ———— | | | | C217 | 1-126-008-51 | ELECT | 470uF | 20% | 16V |
| | | | ———— | | | | C317 | 1-126-008-51 | ELECT | 470uF | 20% | 16V |
| | | | ———— | | | | C417 | 1-126-008-51 | ELECT | 470uF | 20% | 16V |
| 22 | | | ———— | | | | R160 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| | R248 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W | | | ———— | | | |
| | | | ———— | | | | R260 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| | R348 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W | | | ———— | | | |
| | | | ———— | | | | R360 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| 23 | | | ———— | | | | R460 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |

## 2. CHANGE OF BOARDS

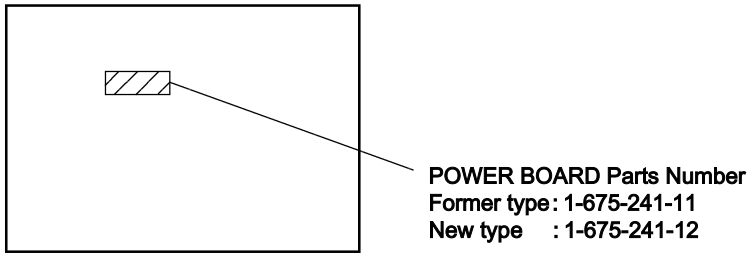
**The Amplifier Board and the Power Board were changed.**
**All schematic diagrams of the new type, printed wiring boards are published here.**

**Distinguish the new type, the old type with the printed wiring board number.**

**[AMPLIFIER BOARD]**




**[POWER BOARD]**

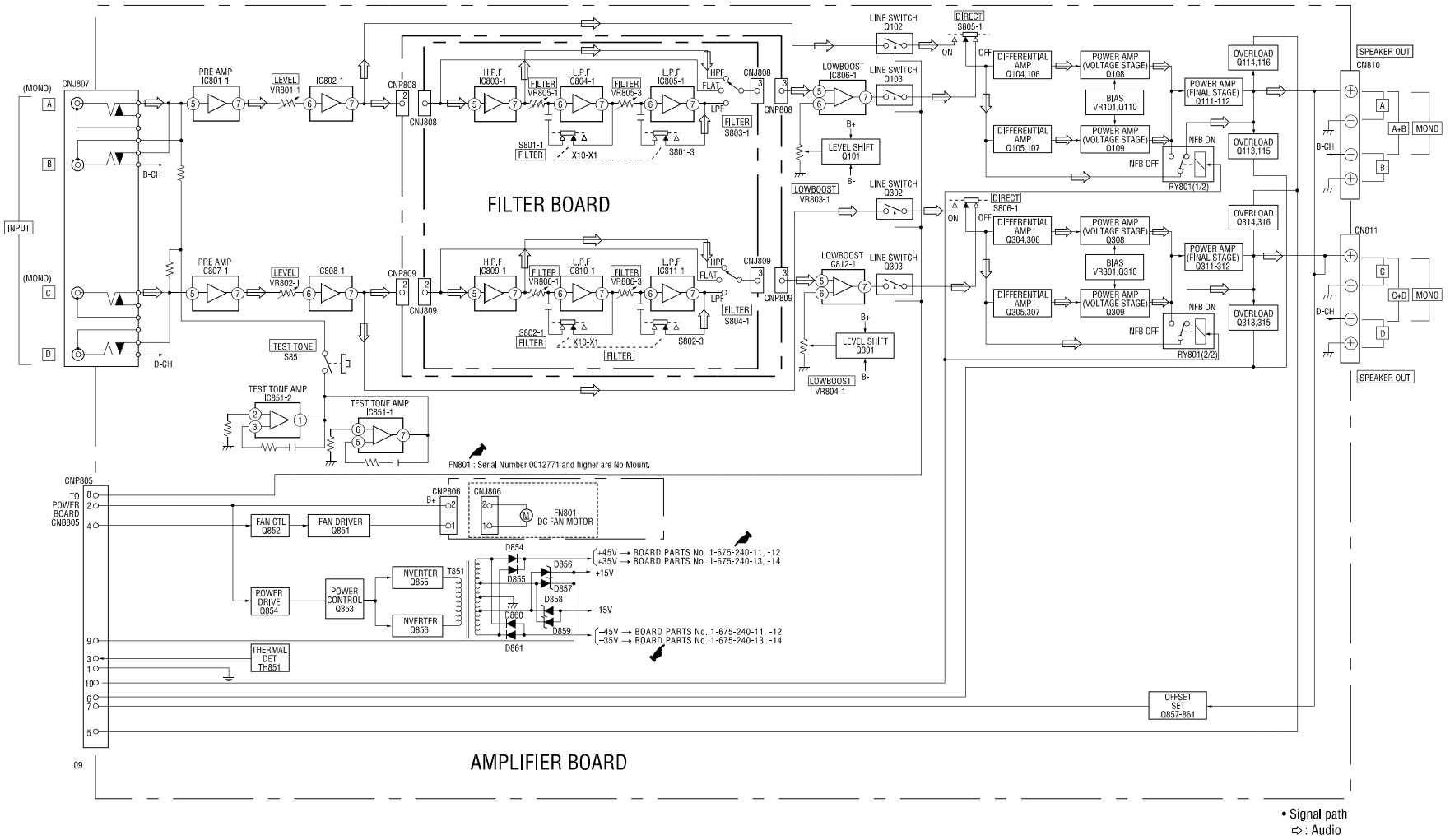


## IDLING CURRENT ADJUSTMENT

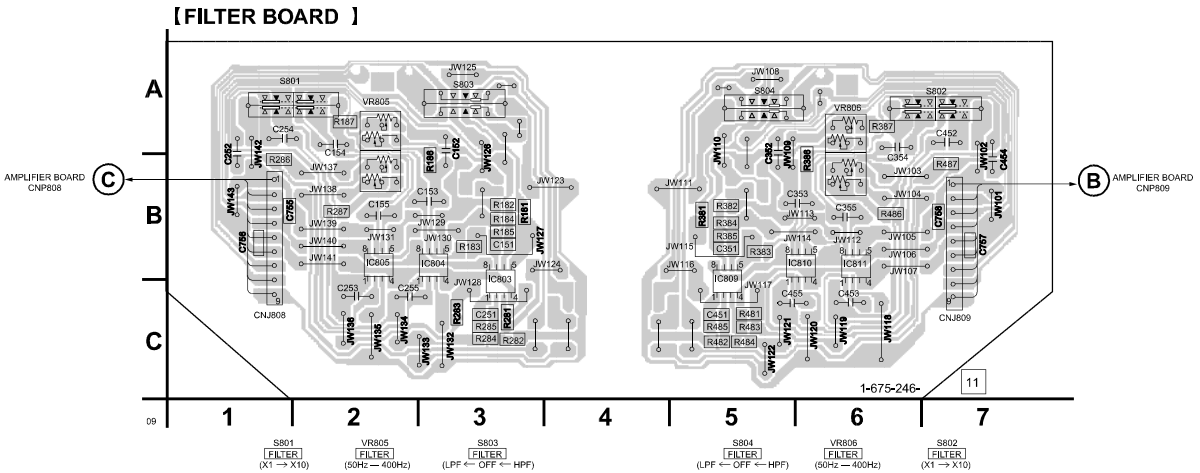
☛ : indicates changed portion

<table>
<tr><th>Page</th><th>Former Type</th><th>New Type</th></tr>
<tr><td>7</td><td>③ Approximate adjustment values<br>• Adjust as follows so that the following voltages become 0.4 to 0.5 mV.<br>(Board parts number : 1-675-240-11, 1-675-240-12)<br><br>A channel :<br>Voltage between TP101 and TP102: Use VR101 of the amplifier board<br>B channel :<br>Voltage between TP201 and TP202: Use VR201 of the amplifier board<br>C channel :<br>Voltage between TP301 and TP302: Use VR301 of the amplifier board<br>D channel :<br>Voltage between TP401 and TP402: Use VR401 of the amplifier board</td><td>③ Approximate adjustment values<br>• Adjust as follows so that the following voltages become 0.4 to 0.5 mV.<br>(Board parts number : 1-675-240-11, 1-675-240-12)<br>☛ • Adjust as follows so that the following voltages become 0.9 to 1.0 mV.<br>(Board parts number : 1-675-240-13 and higher)<br>But, the voltage when product doesn't warm up is 0.6 to 0.7 mV.<br><br>A channel :<br>Voltage between TP101 and TP102: Use VR101 of the amplifier board<br>B channel :<br>Voltage between TP201 and TP202: Use VR201 of the amplifier board<br>C channel :<br>Voltage between TP301 and TP302: Use VR301 of the amplifier board<br>D channel :<br>Voltage between TP401 and TP402: Use VR401 of the amplifier board<br><br>☛ Note:<br>Precautions regarding the replacement of parts for MOSFET:<br>Parts for the amplifier board suffix 11, 12 (serial numbers 0010001 to 012100) are each paired parts. Consequently, when replacing parts, if they are not replaced in pairs, it is impossible to guarantee the above adjustment values.<br><br>
<table>
<tr><th>Part Ref. No.</th><th>Replacement Part</th><th>Remarks</th></tr>
<tr><td>Q110, 111</td><td rowspan="4">X-3378-771-1<br>MOSFET Pair ASSY</td><td rowspan="4">They are supplied in pairs</td></tr>
<tr><td>Q210, 211</td></tr>
<tr><td>Q311, 312</td></tr>
<tr><td>Q411, 412</td></tr>
</table>
</td></tr>
</table>

**BLOCK DIAGRAM – AMPLIFIER SECTION –**
**☛ : Indicates changed portion**



• **PRINTED WIRING BOARD – LED/FILTER SECTION –**




• **Semiconductor Location**

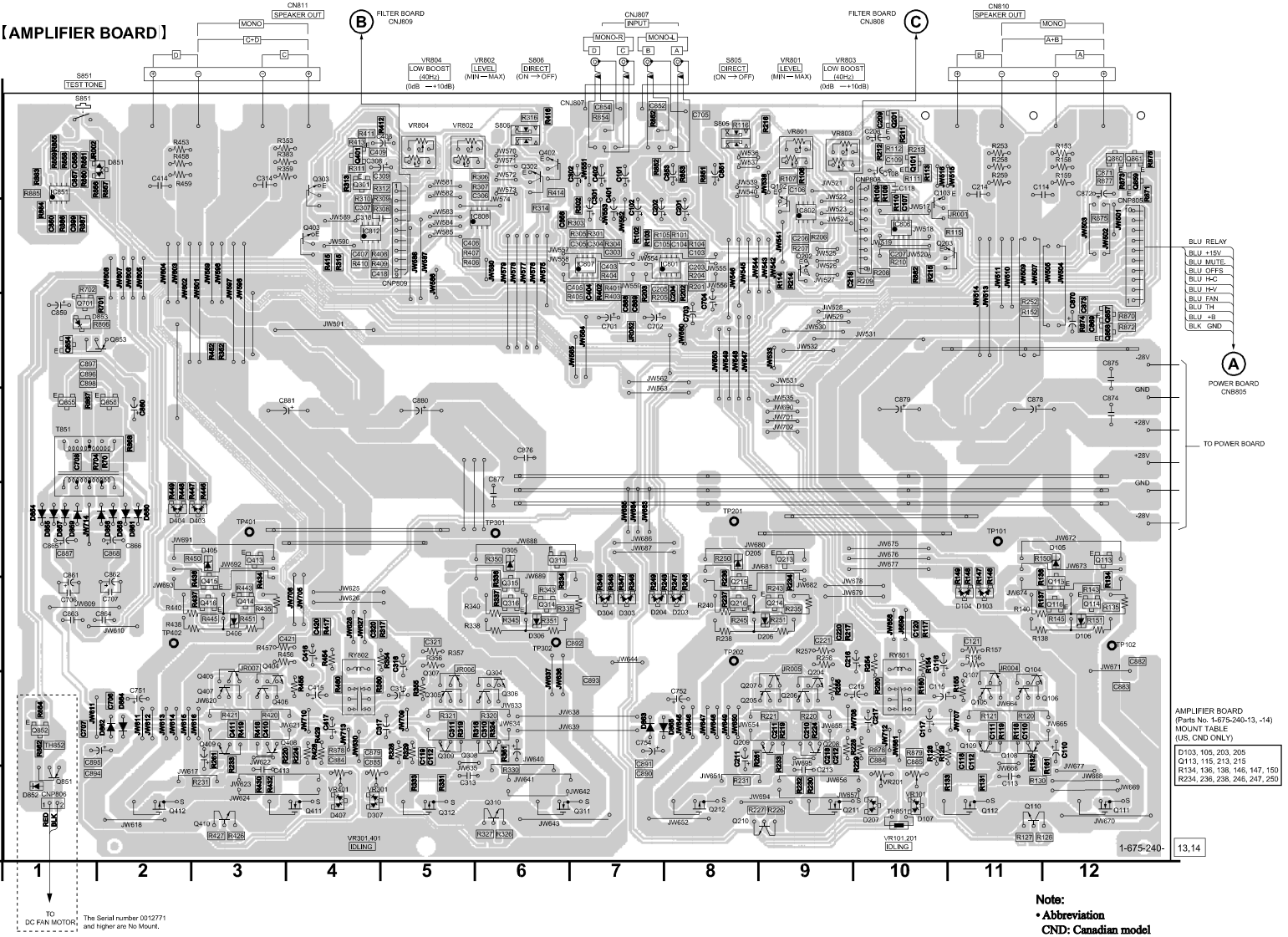
| Ref. No. | Location |
|---|---|
| IC803 | C-3 |
| IC804 | B-3 |
| IC805 | B-2 |
| IC809 | C-5 |
| IC810 | B-6 |
| IC811 | B-6 |

**Apply It SUFFIX -13, -14 OF AMPLIFIER BOARD**

## • PRINTED WIRING BOARD – AMPLIFIER SECTION –

### • Semiconductor Location

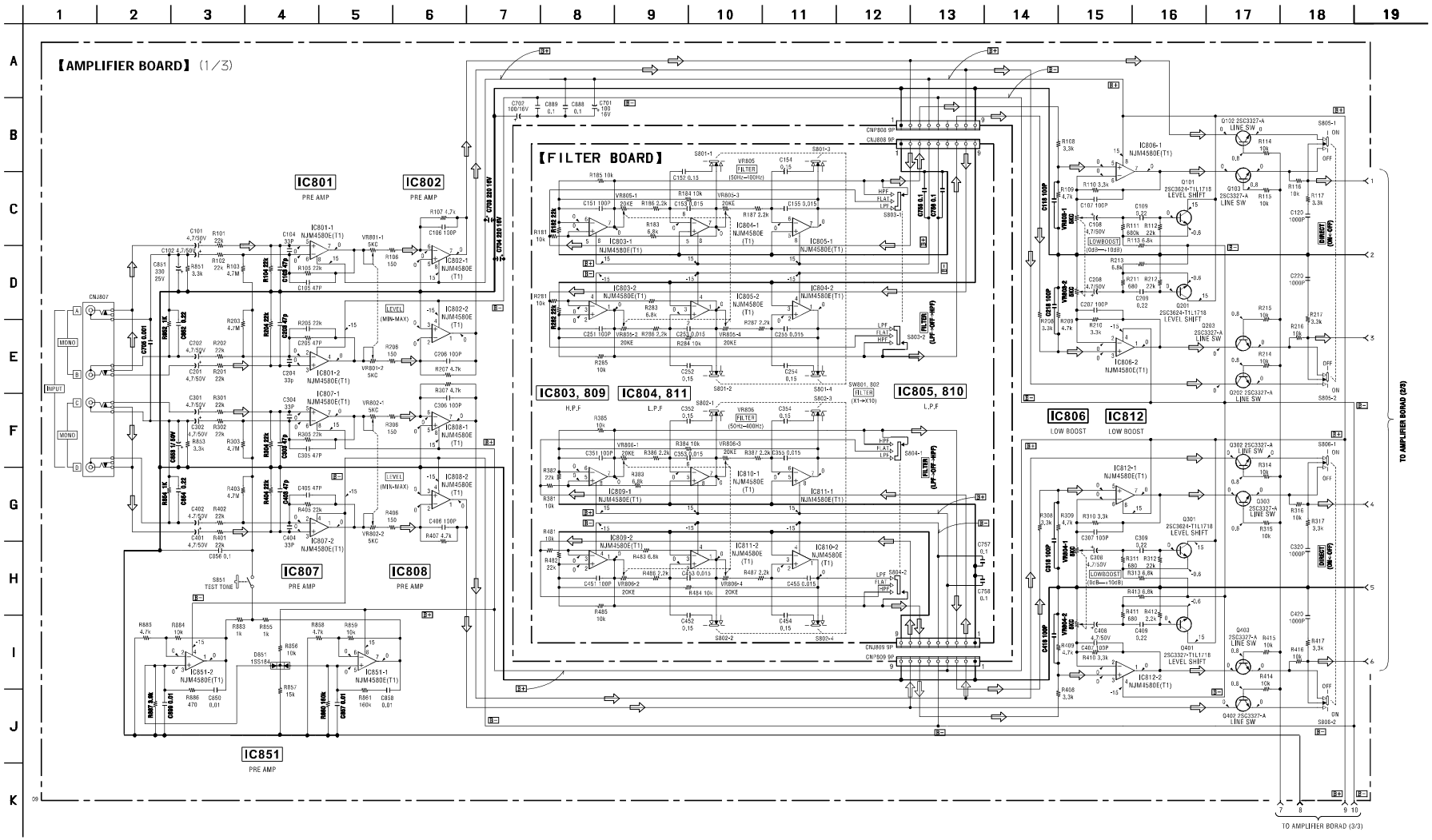
| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D103 | F-11 | Q116 | F-12 |
| D104 | F-11 | Q201 | A-10 |
| D105 | E-12 | Q202 | B-9 |
| D106 | F-12 | Q203 | B-10 |
| D107 | H-10 | Q204 | G-9 |
| D203 | F-8 | Q205 | G-9 |
| D204 | F-7 | Q206 | G-9 |
| D205 | E-8 | Q207 | G-9 |
| D206 | F-9 | Q208 | G-9 |
| D207 | H-10 | Q209 | G-9 |
| D301 | H-6 | Q210 | H-8 |
| D302 | H-5 | Q211 | H-9 |
| D303 | F-7 | Q212 | H-8 |
| D304 | F-7 | Q213 | E-9 |
| D305 | E-6 | Q214 | F-9 |
| D306 | F-6 | Q215 | E-8 |
| D307 | H-4 | Q216 | F-8 |
| D403 | E-3 | Q301 | A-4 |
| D404 | E-2 | Q302 | A-6 |
| D405 | E-3 | Q303 | A-4 |
| D406 | F-3 | Q304 | G-6 |
| D407 | H-4 | Q305 | G-5 |
| D851 | A-1 | Q306 | G-6 |
| D852 | G-1 | Q307 | G-5 |
| D853 | C-1 | Q308 | G-6 |
| D854 | E-1 | Q309 | G-5 |
| D855 | E-1 | Q310 | H-6 |
| D856 | E-2 | Q311 | H-6 |
| D857 | E-1 | Q312 | H-5 |
| D858 | E-2 | Q313 | E-6 |
| D859 | E-1 | Q314 | F-6 |
| D860 | E-2 | Q315 | E-6 |
| D861 | E-2 | Q316 | F-6 |
| D862 | G-2 | Q401 | A-4 |
| D863 | G-7 | Q402 | A-6 |
| D864 | G-2 | Q403 | B-4 |
| D865 | G-7 | Q404 | G-3 |
| | | Q405 | G-3 |
| IC801 | B-8 | Q406 | G-3 |
| IC802 | B-9 | Q407 | G-3 |
| IC806 | B-10 | Q408 | G-3 |
| IC807 | B-7 | Q409 | G-3 |
| IC808 | B-6 | Q410 | H-3 |
| IC812 | B-4 | Q411 | H-3 |
| IC851 | A-1 | Q412 | H-2 |
| | | Q413 | E-3 |
| Q101 | A-10 | Q414 | F-3 |
| Q102 | A-9 | Q415 | E-3 |
| Q103 | A-10 | Q416 | F-3 |
| Q104 | G-11 | Q701 | C-1 |
| Q105 | G-11 | Q851 | H-1 |
| Q106 | G-11 | Q852 | G-1 |
| Q107 | G-11 | Q853 | C-1 |
| Q108 | G-11 | Q854 | C-1 |
| Q109 | G-11 | Q855 | D-1 |
| Q110 | H-11 | Q856 | D-2 |
| Q111 | H-12 | Q857 | C-12 |
| Q112 | H-11 | Q858 | C-12 |
| Q113 | E-12 | Q859 | A-12 |
| Q114 | F-12 | Q860 | A-12 |
| Q115 | E-12 | Q861 | A-12 |




**Note:**
• Abbreviation
CND: Canadian model

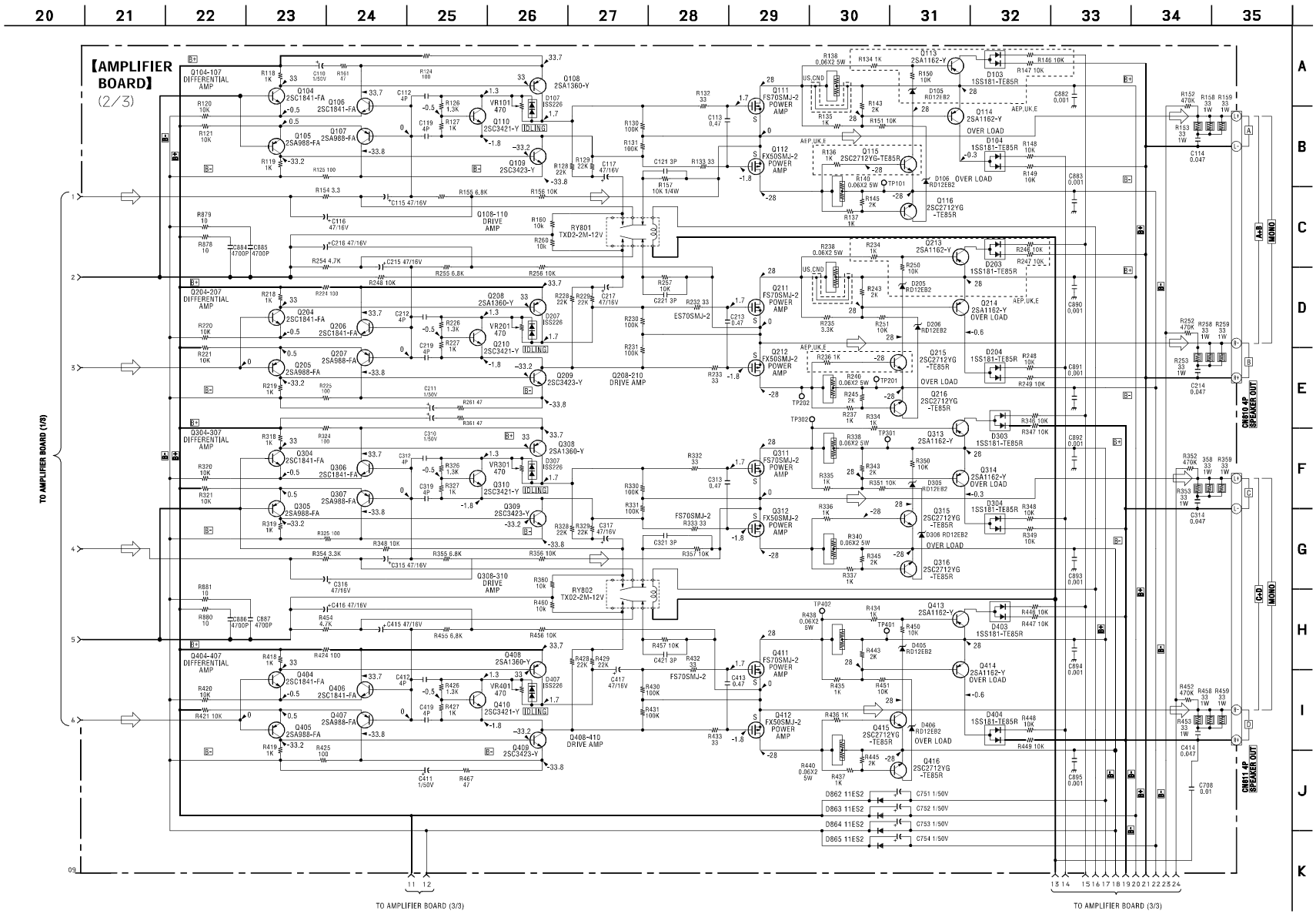
**Apply it SUFFIX -13, -14 OF AMPLIFIER BOARD**

**• SCHEMATIC DIAGRAM – FILTER/AMPLIFIER (1/3) SECTION –**



**Apply It SUFFIX -13, -14 OF AMPLIFIER BOARD**

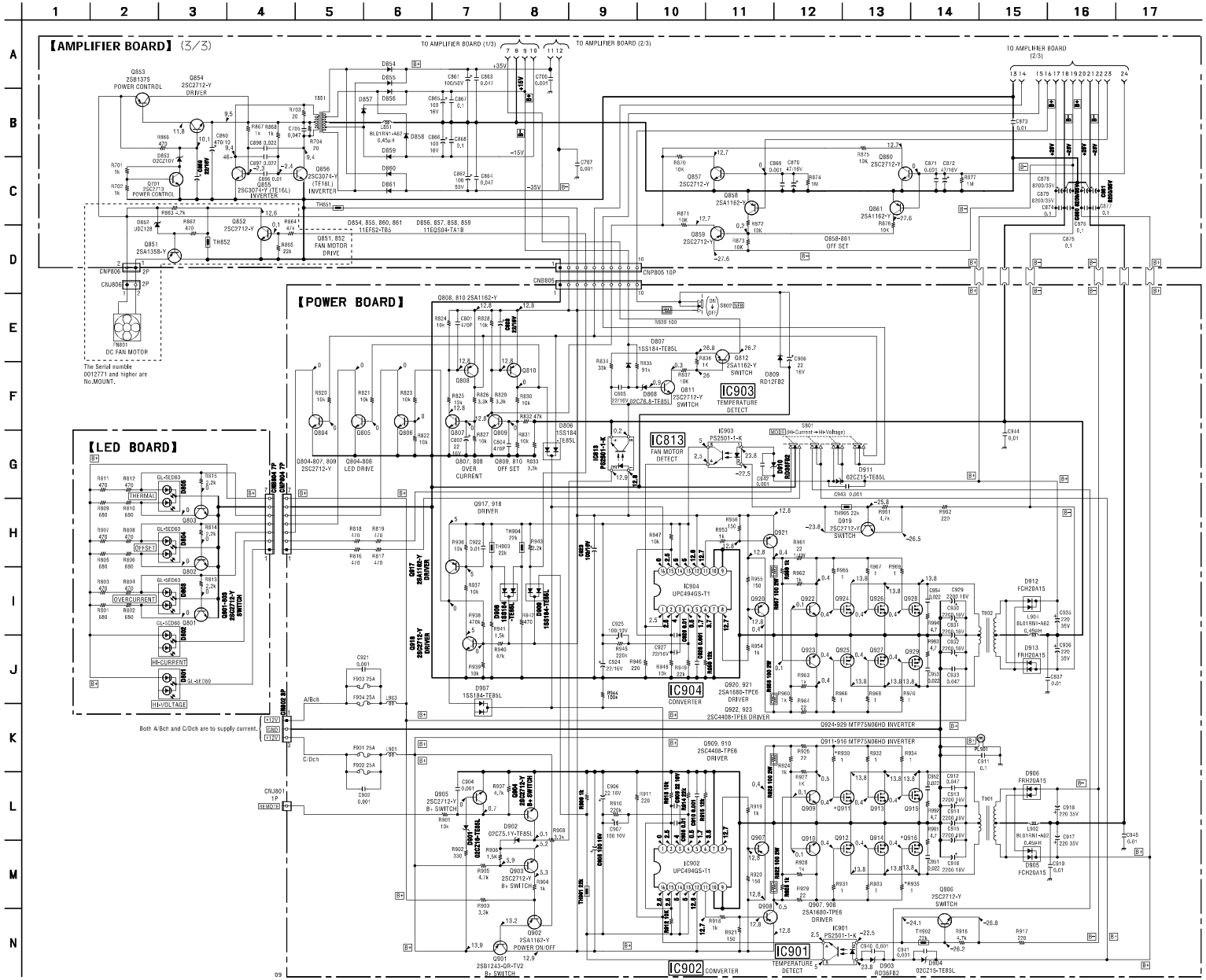
**• SCHEMATIC DIAGRAM – AMPLIFIER (2/3) SECTION –**



**Apply it SUFFIX -13, -14 OF AMPLIFIER BOARD**

**• SCHEMATIC DIAGRAM – POWER/AMPLIFIER (3/3) LED SECTION –**

**• See page for IC Block Diagram.**

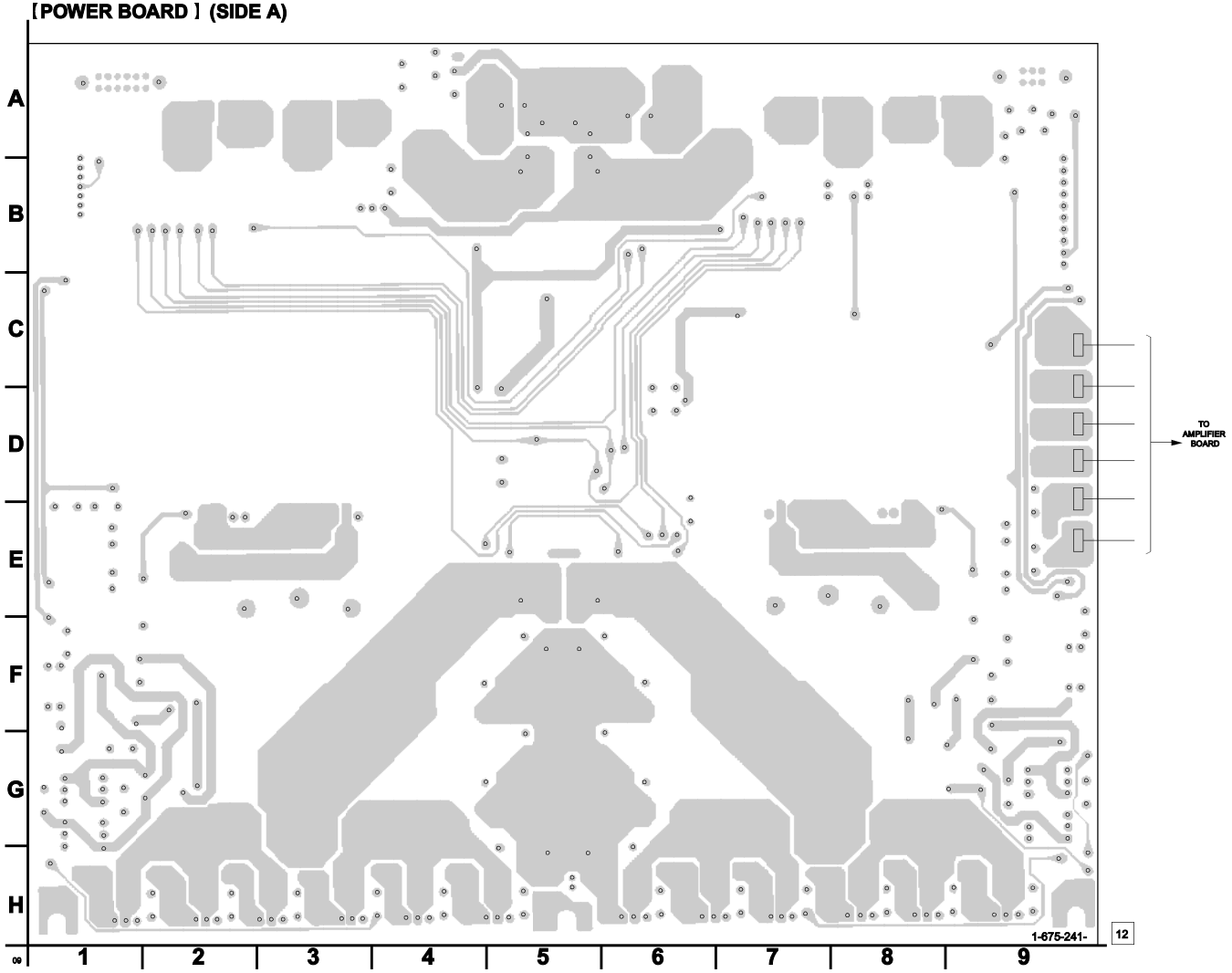



**[POWER BOARD]**
**US, Canadian MODEL ONLY**
**SERIAL NO. 0012441 AND HIGHER**

| | |
|---|---|
| *Q911 | NO MOUNT |
| *Q916 | NO MOUNT |
| *R930 | NO MOUNT |
| *R935 | NO MOUNT |

• PRINTED WIRING BOARD – POWER SECTION –

【POWER BOARD 】(SIDE A)

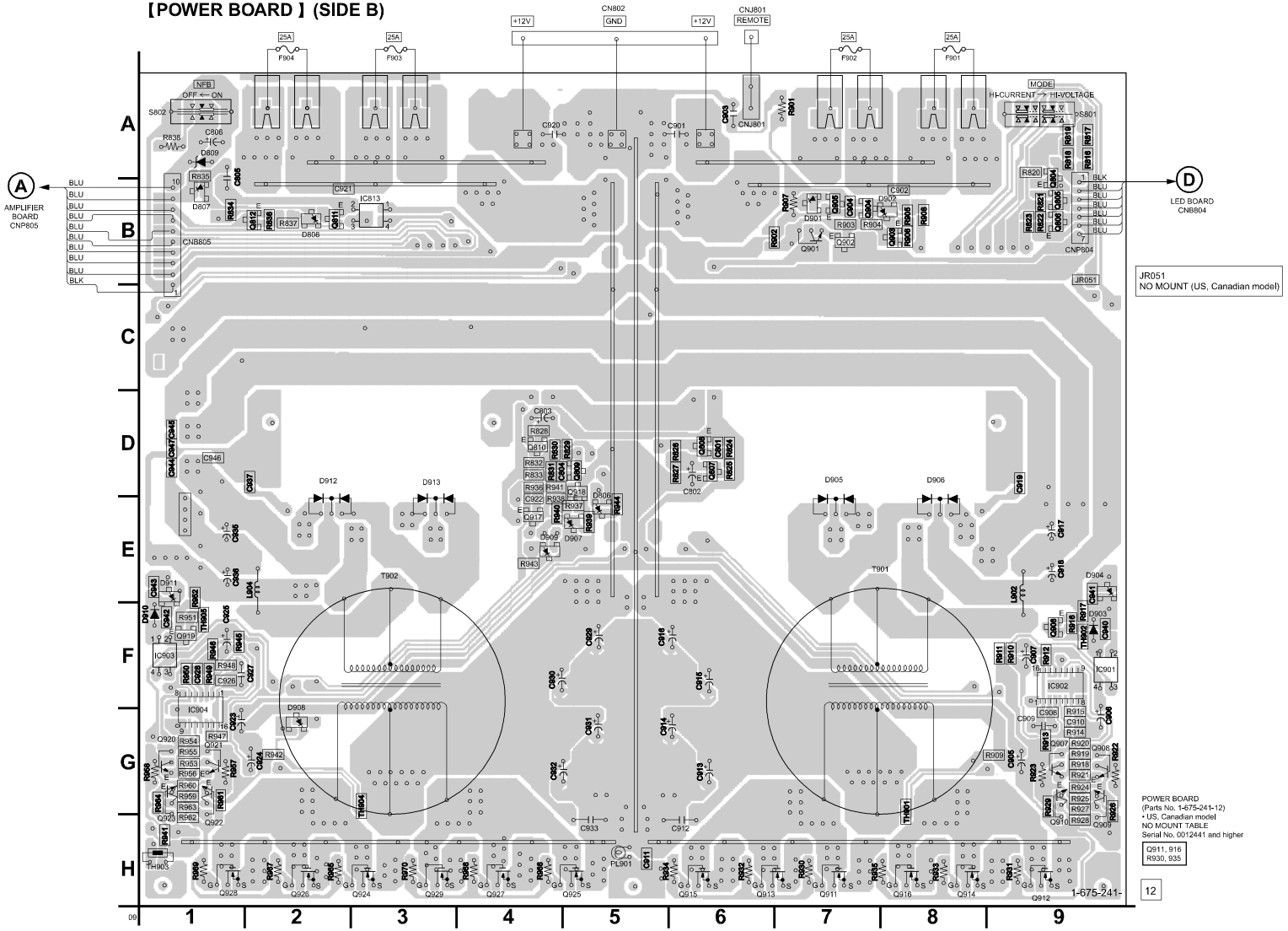


## • PRINTED WIRING BOARD – POWER SECTION –

• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D806 | E-5 |
| D807 | B-1 |
| D808 | B-2 |
| D809 | A-1 |
| D901 | B-7 |
| D902 | B-8 |
| D903 | F-9 |
| D904 | E-9 |
| D905 | E-7 |
| D906 | E-8 |
| D907 | E-5 |
| D908 | G-2 |
| D909 | E-4 |
| D910 | F-1 |
| D911 | E-1 |
| D912 | E-2 |
| D913 | E-3 |
| | |
| IC813 | B-3 |
| IC901 | F-9 |
| IC902 | F-9 |
| IC903 | F-1 |
| IC904 | F-1 |
| | |
| Q804 | B-9 |
| Q805 | B-9 |
| Q806 | B-9 |
| Q807 | D-6 |
| Q808 | D-6 |
| Q809 | D-5 |
| Q810 | D-4 |
| Q811 | B-2 |
| Q812 | B-2 |
| Q901 | B-7 |
| Q902 | B-7 |
| Q903 | B-8 |
| Q904 | B-7 |
| Q905 | B-7 |
| Q906 | F-9 |
| Q907 | G-9 |
| Q908 | G-9 |
| Q909 | G-9 |
| Q910 | G-9 |
| Q911 | H-7 |
| Q912 | H-9 |
| Q913 | H-6 |
| Q914 | H-8 |
| Q915 | H-6 |
| Q916 | H-8 |
| Q917 | E-4 |
| Q918 | D-5 |
| Q919 | F-1 |
| Q920 | G-1 |
| Q921 | G-1 |
| Q922 | G-1 |
| Q923 | G-1 |
| Q924 | H-3 |
| Q925 | H-5 |
| Q926 | H-2 |
| Q927 | H-4 |
| Q928 | H-1 |
| Q929 | H-3 |

【POWER BOARD 】(SIDE B)



New Type

# ELECTRICAL PARTS LIST

AMP

Note:

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μ A..., uPA...: μ PA..., uPB...: μ PB..., uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H
- Abbreviation
  CND : Canadian model

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| * | A-3317-930-A | AMP BOARD, COMPLETE (US,CND) | | | |
| | | ********** | | | |
| * | A-3326-258-A | AMP MBOARD, COMPLETE (AEP,UK,E) | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C101 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C102 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C103 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C104 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C105 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C106 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C107 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C108 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C109 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C110 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C112 | 1-164-356-11 | CERAMIC CHIP | 4PF | 0.25PF | 200V |
| C113 | 1-136-173-00 | MYLAR | 0.47uF | 5% | 50V |
| C114 | 1-136-161-00 | MYLAR | 0.047uF | 5% | 50V |
| C115 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C116 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C117 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C118 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C119 | 1-164-356-11 | CERAMIC CHIP | 4PF | 0.25PF | 200V |
| C120 | 1-130-471-00 | MYLAR | 0.001uF | 5% | 50V |
| C121 | 1-102-936-00 | CERAMIC | 3PF | | 50V |
| C201 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C202 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C203 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C204 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C205 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C206 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C207 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C208 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C209 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C211 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C212 | 1-164-356-11 | CERAMIC CHIP | 4PF | 0.25PF | 200V |
| C213 | 1-136-173-00 | MYLAR | 0.47uF | 5% | 50V |
| C214 | 1-136-161-00 | MYLAR | 0.047uF | 5% | 50V |
| C215 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C216 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C217 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C218 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C219 | 1-164-356-11 | CERAMIC CHIP | 4PF | 0.25PF | 200V |
| C220 | 1-130-471-00 | MYLAR | 0.001uF | 5% | 50V |
| C221 | 1-102-936-00 | CERAMIC | 3PF | | 50V |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C301 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C302 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C303 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C304 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C305 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C306 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C307 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C308 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C309 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C310 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C312 | 1-164-356-11 | CERAMIC CHIP | 4PF | 0.25PF | 200V |
| C313 | 1-136-173-00 | MYLAR | 0.47uF | 5% | 50V |
| C314 | 1-136-161-00 | MYLAR | 0.047uF | 5% | 50V |
| C315 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C316 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C317 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C318 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C319 | 1-164-356-11 | CERAMIC CHIP | 4PF | 0.25PF | 200V |
| C320 | 1-130-471-00 | MYLAR | 0.001uF | 5% | 50V |
| C321 | 1-102-936-00 | CERAMIC | 3PF | | 50V |
| C401 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C402 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C403 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C404 | 1-163-239-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C405 | 1-163-243-11 | CERAMIC CHIP | 47PF | 5% | 50V |
| C406 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C407 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C408 | 1-126-047-21 | ELECT | 4.7uF | 20% | 50V |
| C409 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C411 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C412 | 1-164-356-11 | CERAMIC CHIP | 4PF | 0.25PF | 200V |
| C413 | 1-136-173-00 | MYLAR | 0.47uF | 5% | 50V |
| C414 | 1-136-161-00 | MYLAR | 0.047uF | 5% | 50V |
| C415 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C416 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C417 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C418 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C419 | 1-164-356-11 | CERAMIC CHIP | 4PF | 0.25PF | 200V |
| C420 | 1-130-471-00 | MYLAR | 0.001uF | 5% | 50V |
| C421 | 1-102-936-00 | CERAMIC | 3PF | | 50V |
| C701 | 1-126-009-81 | ELECT | 100uF | 20% | 16V |
| C702 | 1-126-009-81 | ELECT | 100uF | 20% | 16V |
| C703 | 1-126-024-11 | ELECT | 220uF | 20% | 16V |
| C704 | 1-126-024-11 | ELECT | 220uF | 20% | 16V |
| C705 | 1-104-760-11 | CERAMIC CHIP | 0.047uF | 10% | 50V |
| C706 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |

## AMP

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C707 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C751 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C752 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C753 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C754 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C850 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C851 | 1-126-025-11 | ELECT | 330uF | 20% | 25V |
| C852 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C853 | 1-126-044-11 | ELECT | 1uF | 20% | 50V |
| C854 | 1-164-222-11 | CERAMIC CHIP | 0.22uF | | 25V |
| C856 | 1-165-319-11 | CERAMIC CHIP | 0.1uF | | 50V |
| C857 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C858 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C859 | 1-126-006-11 | ELECT | 22uF | 20% | 16V |
| C860 | 1-124-997-11 | ELECT | 470uF | 20% | 10V |
| C861 | 1-126-052-11 | ELECT | 100uF | 20% | 50V |
| C862 | 1-126-052-11 | ELECT | 100uF | 20% | 50V |
| C863 | 1-136-161-00 | MYLAR | 0.047uF | 5% | 50V |
| C864 | 1-136-161-00 | MYLAR | 0.047uF | 5% | 50V |
| C865 | 1-124-570-11 | ELECT | 220uF | 20% | 16V |
| C866 | 1-124-570-11 | ELECT | 220uF | 20% | 16V |
| C867 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C868 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C869 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C870 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C871 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C872 | 1-126-008-51 | ELECT | 47uF | 20% | 16V |
| C873 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C874 | 1-136-165-00 | MYLAR | 0.1uF | 5% | 50V |
| C875 | 1-136-165-00 | MYLAR | 0.1uF | 5% | 50V |
| C876 | 1-136-165-00 | MYLAR | 0.1uF | 5% | 50V |
| C877 | 1-136-165-00 | MYLAR | 0.1uF | 5% | 50V |
| C878 | 1-131-730-11 | CAP, ELECT | 8200uF | | 35V |
| C879 | 1-131-730-11 | CAP, ELECT | 8200uF | | 35V |
| C880 | 1-131-730-11 | CAP, ELECT | 8200uF | | 35V |
| C881 | 1-131-730-11 | CAP, ELECT | 8200uF | | 35V |
| C882 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C883 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C884 | 1-163-029-11 | CERAMIC CHIP | 0.0047uF | | 50V |
| C885 | 1-163-029-11 | CERAMIC CHIP | 0.0047uF | | 50V |
| C886 | 1-163-029-11 | CERAMIC CHIP | 0.0047uF | | 50V |
| C887 | 1-163-029-11 | CERAMIC CHIP | 0.0047uF | | 50V |
| C888 | 1-165-319-11 | CERAMIC CHIP | 0.1uF | | 50V |
| C889 | 1-165-319-11 | CERAMIC CHIP | 0.1uF | | 50V |
| C890 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C891 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C892 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C893 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C894 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C895 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C896 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| C897 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C898 | 1-163-037-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C899 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V |
| | | < CONNECTOR > | | | |
| CN810 | 1-694-619-11 | TERMINAL BOARD (4P) (SPEAKER OUT A/B CHANNELE) | | | |
| CN811 | 1-694-619-11 | TERMINAL BOARD (4P) (SPEAKER OUT C/D CHANNELE) | | | |
| | | < JACK > | | | |
| CNJ807 | 1-770-068-71 | JACK, PIN 4P (INPUT MONO A/B C/D) | | | |
| | | < CONNECTOR > | | | |
| * CNP805 | 1-764-333-11 | PLUG, CONNECTOR 10P | | | |
| * CNP806 | 1-564-704-11 | PIN, CONNECTOR (SMALL TYPE) 2P | | | |
| CNP808 | 1-784-917-11 | CONNECTOR, BOARD TO BOARD 9P | | | |
| CNP809 | 1-784-917-11 | CONNECTOR, BOARD TO BOARD 9P | | | |
| | | < DIODE > | | | |
| D103 | 8-719-820-05 | DIODE 1SS181-TE85R (AEP,UK,E) | | | |
| D104 | 8-719-820-05 | DIODE 1SS181-TE85R | | | |
| D105 | 8-719-158-49 | DIODE UDZ-TE-17-12B (AEP,UK,E) | | | |
| D106 | 8-719-158-49 | DIODE UDZ-TE-17-12B | | | |
| D107 | 8-719-800-76 | DIODE 1SS226 | | | |
| D203 | 8-719-820-05 | DIODE 1SS181-TE85R (AEP,UK,E) | | | |
| D204 | 8-719-820-05 | DIODE 1SS181-TE85R | | | |
| D205 | 8-719-158-49 | DIODE UDZ-TE-17-12B (AEP,UK,E) | | | |
| D206 | 8-719-158-49 | DIODE UDZ-TE-17-12B | | | |
| D207 | 8-719-800-76 | DIODE 1SS226 | | | |
| D303 | 8-719-820-05 | DIODE 1SS181-TE85R | | | |
| D304 | 8-719-820-05 | DIODE 1SS181-TE85R | | | |
| D305 | 8-719-158-49 | DIODE UDZ-TE-17-12B | | | |
| D306 | 8-719-158-49 | DIODE UDZ-TE-17-12B | | | |
| D307 | 8-719-800-76 | DIODE 1SS226 | | | |
| D403 | 8-719-820-05 | DIODE 1SS181-TE85R | | | |
| D404 | 8-719-820-05 | DIODE 1SS181-TE85R | | | |
| D405 | 8-719-158-49 | DIODE UDZ-TE-17-12B | | | |
| D406 | 8-719-158-49 | DIODE UDZ-TE-17-12B | | | |
| D407 | 8-719-800-76 | DIODE 1SS226 | | | |
| D851 | 8-719-801-78 | DIODE 1SS184-TE85L | | | |
| D852 | 8-719-158-49 | DIODE UDZ-TE-17-12B | | | |
| D853 | 8-719-105-92 | DIODE RD5.6M-T1B3 | | | |
| D854 | 8-719-987-67 | DIODE 11EFS2-TB5 | | | |
| D855 | 8-719-987-67 | DIODE 11EFS2-TB5 | | | |
| D856 | 8-719-210-21 | DIODE 11EQS04-TA1B | | | |
| D857 | 8-719-210-21 | DIODE 11EQS04-TA1B | | | |
| D858 | 8-719-210-21 | DIODE 11EQS04-TA1B | | | |
| D859 | 8-719-210-21 | DIODE 11EQS04-TA1B | | | |
| D860 | 8-719-987-67 | DIODE 11EFS2-TB5 | | | |
| D861 | 8-719-987-67 | DIODE 11EFS2-TB5 | | | |
| D862 | 8-719-200-82 | DIODE 11ES2-TB5 | | | |
| D863 | 8-719-200-82 | DIODE 11ES2-TB5 | | | |
| D864 | 8-719-200-82 | DIODE 11ES2-TB5 | | | |
| D865 | 8-719-200-82 | DIODE 11ES2-TB5 | | | |
| | | < IC > | | | |
| IC801 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC802 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC806 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC807 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC808 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC812 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC851 | 8-759-711-82 | IC NJM4580E(T1) | | | |

| Ref. No. | Part No. | Description | | Remark |
|---|---|---|---|---|
| | | < TRANSISTOR > | | |
| Q101 | 8-729-107-43 | TRANSISTOR | 2SC3624-T1L1718 | |
| Q102 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q103 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q104 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q105 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q106 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q107 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q108 | 8-729-209-18 | TRANSISTOR | 2SA1360-Y | |
| Q109 | 8-729-203-45 | TRANSISTOR | 2SC3423-Y | |
| Q110 | 8-729-030-82 | TRANSISTOR | 2SD1509 | |
| Q111 | 8-729-049-52 | TRANSISTOR | FS70SMJ-2 | |
| Q112 | 8-729-049-53 | TRANSISTOR | FX50SMJ-2 | |
| Q113 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y (AEP,UK,E) | |
| Q114 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q115 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y (AEP,UK,E) | |
| Q116 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q201 | 8-729-107-43 | TRANSISTOR | 2SC3624-T1L1718 | |
| Q202 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q203 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q204 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q205 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q206 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q207 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q208 | 8-729-209-18 | TRANSISTOR | 2SA1360-Y | |
| Q209 | 8-729-203-45 | TRANSISTOR | 2SC3423-Y | |
| Q210 | 8-729-030-82 | TRANSISTOR | 2SD1509 | |
| Q211 | 8-729-049-52 | TRANSISTOR | FS70SMJ-2 | |
| Q212 | 8-729-049-53 | TRANSISTOR | FX50SMJ-2 | |
| Q213 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y (AEP,UK,E) | |
| Q214 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q215 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y (AEP,UK,E) | |
| Q216 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q301 | 8-729-107-43 | TRANSISTOR | 2SC3624-T1L1718 | |
| Q302 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q303 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q304 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q305 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q306 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q307 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q308 | 8-729-209-18 | TRANSISTOR | 2SA1360-Y | |
| Q309 | 8-729-203-45 | TRANSISTOR | 2SC3423-Y | |
| Q310 | 8-729-030-82 | TRANSISTOR | 2SD1509 | |
| Q311 | 8-729-049-52 | TRANSISTOR | FS70SMJ-2 | |
| Q312 | 8-729-049-53 | TRANSISTOR | FX50SMJ-2 | |
| Q313 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q314 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q315 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q316 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q401 | 8-729-107-43 | TRANSISTOR | 2SC3624-T1L1718 | |
| Q402 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q403 | 8-729-203-48 | TRANSISTOR | 2SC3327-A | |
| Q404 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q405 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q406 | 8-729-184-53 | TRANSISTOR | 2SC1841-FA | |
| Q407 | 8-729-140-82 | TRANSISTOR | 2SA988-FA | |
| Q408 | 8-729-209-18 | TRANSISTOR | 2SA1360-Y | |
| Q409 | 8-729-203-45 | TRANSISTOR | 2SC3423-Y | |
| Q410 | 8-729-030-82 | TRANSISTOR | 2SD1509 | |
| Q411 | 8-729-049-52 | TRANSISTOR | FS70SMJ-2 | |
| Q412 | 8-729-049-53 | TRANSISTOR | FX50SMJ-2 | |
| Q413 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q414 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q415 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q416 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q701 | 8-729-271-32 | TRANSISTOR | 2SC2713L-TE85R | |
| Q851 | 8-729-207-89 | TRANSISTOR | 2SA1358-Y | |
| Q852 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q853 | 8-729-141-83 | TRANSISTOR | 2SB1375 | |
| Q854 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q855 | 8-729-205-88 | TRANSISTOR | 2SC3074-Y(TE16L) | |
| Q856 | 8-729-205-88 | TRANSISTOR | 2SC3074-Y(TE16L) | |
| Q857 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q858 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q859 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q860 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q861 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | | < RESISTOR > | | | |
| R101 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R102 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R103 | 1-208-291-11 | RES-CHIP | 4.7M | 5% | 1/10W |
| R104 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R105 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R106 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R107 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R108 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R109 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R110 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R111 | 1-216-647-11 | METAL CHIP | 680 | 0.5% | 1/10W |
| R112 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R113 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R114 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R115 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R116 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R117 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R118 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R119 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R120 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R121 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R124 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R125 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R126 | 1-216-052-00 | METAL CHIP | 1.3K | 5% | 1/10W |
| R127 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R128 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R129 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R130 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R131 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R132 | 1-216-615-11 | METAL CHIP | 33 | 0.5% | 1/10W |
| R133 | 1-216-615-11 | METAL CHIP | 33 | 0.5% | 1/10W |
| R134 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W (AEP,UK,E) |
| R135 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R136 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W (AEP,UK,E) |

## AMP

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R137 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R138 | 1-242-799-11 | RES, METAL BOARD 60M/60M | | | 5W F (AEP,UK,E) |
| R140 | 1-242-799-11 | RES, METAL BOARD 60M/60M | | | 5W F |
| R143 | 1-208-789-11 | RES-CHIP | 2K | 2% | 1/10W |
| R145 | 1-208-789-11 | RES-CHIP | 2K | 2% | 1/10W |
| R146 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W (AEP,UK,E) |
| R147 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W (AEP,UK,E) |
| R148 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R149 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R150 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W (AEP,UK,E) |
| R151 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R152 | 1-208-550-61 | RES-CHIP | 470K | 2% | 1/10W |
| R153 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R154 | 1-249-935-11 | CARBON | 3.3K | 5% | 1/4W |
| R155 | 1-249-943-11 | CARBON | 6.8K | 5% | 1/4W |
| R156 | 1-249-947-11 | CARBON | 10K | 5% | 1/4W |
| R157 | 1-249-947-11 | CARBON | 10K | 5% | 1/4W |
| R158 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R159 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R160 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W (US,CND) |
| R161 | 1-216-619-11 | METAL CHIP | 47 | 0.5% | 1/10W |
| R201 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R202 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R203 | 1-208-291-11 | RES-CHIP | 4.7M | 5% | 1/10W |
| R204 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R205 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R206 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R207 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R208 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R209 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R210 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R211 | 1-216-647-11 | METAL CHIP | 680 | 0.5% | 1/10W |
| R212 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R213 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R214 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R215 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R216 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R217 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R218 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R219 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R220 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R221 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R224 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R225 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R226 | 1-216-052-00 | METAL CHIP | 1.3K | 5% | 1/10W |
| R227 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R228 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R229 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R230 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R231 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R232 | 1-216-615-11 | METAL CHIP | 33 | 0.5% | 1/10W |
| R233 | 1-216-615-11 | METAL CHIP | 33 | 0.5% | 1/10W |
| R234 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W (AEP,UK,E) |
| R235 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R236 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W (AEP,UK,E) |
| R237 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R238 | 1-242-799-11 | RES, METAL BOARD 60M/60M | | | 5W F (AEP,UK,E) |
| R240 | 1-242-799-11 | RES, METAL BOARD 60M/60M | | | 5W F |
| R243 | 1-208-789-11 | RES-CHIP | 2K | 2% | 1/10W |
| R245 | 1-208-789-11 | RES-CHIP | 2K | 2% | 1/10W |
| R246 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W (AEP,UK,E) |
| R247 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W (AEP,UK,E) |
| R248 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R249 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R250 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W (AEP,UK,E) |
| R251 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R252 | 1-208-550-61 | RES-CHIP | 470K | 2% | 1/10W |
| R253 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R254 | 1-249-568-11 | CARBON | 4.7K | 5% | 1/4W |
| R255 | 1-249-943-11 | CARBON | 6.8K | 5% | 1/4W |
| R256 | 1-249-947-11 | CARBON | 10K | 5% | 1/4W |
| R257 | 1-249-947-11 | CARBON | 10K | 5% | 1/4W |
| R258 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R259 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R260 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R261 | 1-216-619-11 | METAL CHIP | 47 | 0.5% | 1/10W |
| R301 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R302 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R303 | 1-208-291-11 | RES-CHIP | 4.7M | 5% | 1/10W |
| R304 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R305 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R306 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R307 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R308 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R309 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R310 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R311 | 1-216-647-11 | METAL CHIP | 680 | 0.5% | 1/10W |
| R312 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R313 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R314 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R315 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R316 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R317 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R318 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R319 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R320 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R321 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R324 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R325 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R326 | 1-216-052-00 | METAL CHIP | 1.3K | 5% | 1/10W |
| R327 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R328 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R329 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R330 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R331 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R332 | 1-216-615-11 | METAL CHIP | 33 | 0.5% | 1/10W |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R333 | 1-216-615-11 | METAL CHIP | 33 | 0.5% | 1/10W |
| R334 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R335 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R336 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R337 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R338 | 1-242-799-11 | RES, METAL BOARD 60M/60M | | | 5W F |
| R340 | 1-242-799-11 | RES, METAL BOARD 60M/60M | | | 5W F |
| R343 | 1-208-789-11 | RES-CHIP | 2K | 2% | 1/10W |
| R345 | 1-208-789-11 | RES-CHIP | 2K | 2% | 1/10W |
| R346 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R347 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R348 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R349 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R350 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R351 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R352 | 1-208-550-61 | RES-CHIP | 470K | 2% | 1/10W |
| R353 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R354 | 1-249-935-11 | CARBON | 3.3K | 5% | 1/4W |
| R355 | 1-249-943-11 | CARBON | 6.8K | 5% | 1/4W |
| R356 | 1-249-947-11 | CARBON | 10K | 5% | 1/4W |
| R357 | 1-249-947-11 | CARBON | 10K | 5% | 1/4W |
| R358 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R359 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R360 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W (US,CND) |
| R361 | 1-216-619-11 | METAL CHIP | 47 | 0.5% | 1/10W |
| R401 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R402 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R403 | 1-208-291-11 | RES-CHIP | 4.7M | 5% | 1/10W |
| R404 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R405 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R406 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R407 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R408 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R409 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R410 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R411 | 1-216-647-11 | METAL CHIP | 680 | 0.5% | 1/10W |
| R412 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R413 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R414 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R415 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R416 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R417 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R418 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R419 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R420 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R421 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R424 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R425 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R426 | 1-216-052-00 | METAL CHIP | 1.3K | 5% | 1/10W |
| R427 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R428 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R429 | 1-249-955-11 | CARBON | 22K | 5% | 1/4W |
| R430 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R431 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R432 | 1-216-615-11 | METAL CHIP | 33 | 0.5% | 1/10W |
| R433 | 1-216-615-11 | METAL CHIP | 33 | 0.5% | 1/10W |
| R434 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R435 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R436 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R437 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R438 | 1-242-799-11 | RES, METAL BOARD 60M/60M | | | 5W F |
| R440 | 1-242-799-11 | RES, METAL BOARD 60M/60M | | | 5W F |
| R443 | 1-208-789-11 | RES-CHIP | 2K | 2% | 1/10W |
| R445 | 1-208-789-11 | RES-CHIP | 2K | 2% | 1/10W |
| R446 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R447 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R448 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R449 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R450 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R451 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R452 | 1-208-550-61 | RES-CHIP | 470K | 2% | 1/10W |
| R453 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R454 | 1-249-568-11 | CARBON | 4.7K | 5% | 1/4W |
| R455 | 1-249-943-11 | CARBON | 6.8K | 5% | 1/4W |
| R456 | 1-249-947-11 | CARBON | 10K | 5% | 1/4W |
| R457 | 1-249-947-11 | CARBON | 10K | 5% | 1/4W |
| R458 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R459 | 1-215-860-11 | METAL OXIDE | 33 | 5% | 1W |
| R460 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R461 | 1-216-619-11 | METAL CHIP | 47 | 0.5% | 1/10W |
| R702 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R703 | 1-208-396-61 | RES-CHIP | 20 | 2% | 1/8W |
| R704 | 1-208-396-61 | RES-CHIP | 20 | 2% | 1/8W |
| R851 | 1-216-210-00 | RES-CHIP | 3.3K | 2% | 1/8W |
| R852 | 1-208-782-11 | RES-CHIP | 1K | 2% | 1/8W |
| R853 | 1-216-210-00 | RES-CHIP | 3.3K | 2% | 1/8W |
| R854 | 1-208-782-11 | RES-CHIP | 1K | 2% | 1/8W |
| R855 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R856 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R857 | 1-208-441-61 | RES-CHIP | 1.5K | 2% | 1/10W |
| R858 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R859 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R860 | 1-208-539-11 | RES-CHIP | 160K | 2% | 1/10W |
| R861 | 1-208-539-11 | RES-CHIP | 160K | 2% | 1/10W |
| R862 | 1-208-774-11 | RES-CHIP | 470 | 2% | 1/10W |
| R863 | 1-208-449-61 | RES-CHIP | 3.3K | 2% | 1/10W |
| R864 | 1-208-526-61 | RES-CHIP | 47K | 2% | 1/10W |
| R865 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R866 | 1-216-190-00 | RES-CHIP | 470 | 2% | 1/8W |
| R867 | 1-208-782-11 | RES-CHIP | 1K | 2% | 1/8W |
| R868 | 1-208-782-11 | RES-CHIP | 1K | 2% | 1/8W |
| R870 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R871 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R872 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R873 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R874 | 1-216-121-00 | RES-CHIP | 1M | 5% | 1/10W |
| R875 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R876 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R877 | 1-216-121-00 | RES-CHIP | 1M | 5% | 1/10W |
| R878 | 1-216-603-11 | METAL CHIP | 10 | 0.5% | 1/10W |
| R879 | 1-216-603-11 | METAL CHIP | 10 | 0.5% | 1/10W |
| R880 | 1-216-603-11 | METAL CHIP | 10 | 0.5% | 1/10W |
| R881 | 1-216-603-11 | METAL CHIP | 10 | 0.5% | 1/10W |
| R882 | 1-216-121-00 | RES-CHIP | 1M | 5% | 1/10W |
| R883 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |

# AMP FILTER

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R884 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R885 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R886 | 1-216-665-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| R887 | 1-216-665-11 | METAL CHIP | 3.9K | 0.5% | 1/10W |
| | | < RELAY > | | | |
| RY801 | 1-755-353-11 | RELAY | | | |
| RY802 | 1-755-353-11 | RELAY | | | |
| | | < SWITCH > | | | |
| S805 | 1-692-721-11 | SWITCH, SLIDE (DIRECT/ON/OFF) | | | |
| S806 | 1-692-721-11 | SWITCH, SLIDE (DIRECT/ON/OFF) | | | |
| S851 | 1-771-802-11 | SWITCH (TEST TONE) | | | |
| | | < TRANSFORMER > | | | |
| T851 | 1-435-149-11 | TRANSFORMER, DC-DC CONVERTER | | | |
| | | < THERMISTOR > | | | |
| TH851 | 1-809-664-51 | THERMISTOR, POSITIVE | | | |
| TH852 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |
| | | < VARIABLE RESISTOR > | | | |
| VR101 | 1-241-759-11 | RES, ADJ, CERMET 220 (IDLING) | | | |
| VR201 | 1-241-759-11 | RES, ADJ, CERMET 220 (IDLING) | | | |
| VR301 | 1-241-759-11 | RES, ADJ, CERMET 220 (IDLING) | | | |
| VR401 | 1-241-759-11 | RES, ADJ, CERMET 220 (IDLING) | | | |
| VR801 | 1-225-648-11 | RES, VAR CARBON 5K/5K (LEVEL/MIN-MAX) | | | |
| VR802 | 1-225-648-11 | RES, VAR CARBON 5K/5K (LEVEL/MIN-MAX) | | | |
| VR803 | 1-225-648-11 | RES, VAR CARBON 5K/5K (LOW BOOST/0dB-+10dB) | | | |
| VR804 | 1-225-648-11 | RES, VAR CARBON 5K/5K (LOW BOOST/0dB-+10dB) | | | |

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| | | | | | |
|---|---|---|---|---|---|
| * | 1-675-246-11 | FILTER (4CH) BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C151 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C152 | 1-136-167-00 | MYLAR | 0.15UF | 5.00% | 50V |
| C153 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C154 | 1-136-167-00 | MYLAR | 0.15UF | 5.00% | 50V |
| C155 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C158 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C251 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C252 | 1-136-167-00 | MYLAR | 0.15UF | 5.00% | 50V |
| C253 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C254 | 1-136-167-00 | MYLAR | 0.15UF | 5.00% | 50V |
| C255 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C258 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C351 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C352 | 1-136-167-00 | MYLAR | 0.15UF | 5.00% | 50V |
| C353 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C354 | 1-136-167-00 | MYLAR | 0.15UF | 5.00% | 50V |
| C355 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C358 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C451 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5.00% | 50V |
| C452 | 1-136-167-00 | MYLAR | 0.15UF | 5.00% | 50V |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| C453 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C454 | 1-136-167-00 | MYLAR | 0.15UF | 5.00% | 50V |
| C455 | 1-136-155-00 | FILM | 0.015uF | 5% | 50V |
| C458 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C755 | 1-164-001-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C756 | 1-164-001-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C757 | 1-164-001-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| C758 | 1-164-001-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| | | < JACK > | | | |
| CNJ808 | 1-784-916-11 | CONNECTOR, BOARD TO BOARD 9P | | | |
| CNJ809 | 1-784-916-11 | CONNECTOR, BOARD TO BOARD 9P | | | |
| | | < IC > | | | |
| IC803 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC804 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC805 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC809 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC810 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| IC811 | 8-759-711-82 | IC NJM4580E(T1) | | | |
| | | < RESISTOR > | | | |
| R181 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R182 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R183 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R184 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R185 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R186 | 1-216-057-61 | RES-CHIP | 2.2K | 5% | 1/10W |
| R187 | 1-216-057-61 | RES-CHIP | 2.2K | 5% | 1/10W |
| R188 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R281 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R282 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R283 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R284 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R285 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R286 | 1-216-057-61 | RES-CHIP | 2.2K | 5% | 1/10W |
| R287 | 1-216-057-61 | RES-CHIP | 2.2K | 5% | 1/10W |
| R288 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R381 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R382 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R383 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R384 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R385 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R386 | 1-216-057-61 | RES-CHIP | 2.2K | 5% | 1/10W |
| R387 | 1-216-057-61 | RES-CHIP | 2.2K | 5% | 1/10W |
| R388 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| R481 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R482 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R483 | 1-216-671-11 | METAL CHIP | 6.8K | 0.5% | 1/10W |
| R484 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R485 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R486 | 1-216-057-61 | RES-CHIP | 2.2K | 5% | 1/10W |
| R487 | 1-216-057-61 | RES-CHIP | 2.2K | 5% | 1/10W |
| R488 | 1-208-365-61 | RES-CHIP | 100 | 2% | 1/10W |
| | | < SWITCH > | | | |
| S801 | 1-571-658-11 | SWITCH, SLIDE (FILTER, X1/X10) | | | |

| Ref. No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| S802 | 1-571-658-11 | SWITCH, SLIDE (FILTER, X1/X10) | | | | |
| S803 | 1-762-191-11 | SWITCH, SLIDE (FILTER, LPF/OFF/HPF) | | | | |
| S804 | 1-762-191-11 | SWITCH, SLIDE (FILTER, LPF/OFF/HPF) | | | | |
| | | < VARIABLE RESISTOR > | | | | |
| VR805 | 1-225-921-11 | RES,VAR CARBON 20K/20K/20K/20K (FILTER/50Hz-400Hz) | | | | |
| VR806 | 1-225-921-11 | RES,VAR CARBON 20K/20K/20K/20K (FILTER/50Hz-400Hz) | | | | |
| ********** | | | | | | |
| * | A-3317-933-A | POWER BOARD, COMPLETE ********** | | | | |
| | | < CAPACITOR > | | | | |
| C801 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5% | 50V | |
| C802 | 1-126-006-11 | ELECT | 22uF | 20% | 16V | |
| C803 | 1-126-006-11 | ELECT | 22uF | 20% | 16V | |
| C804 | 1-163-133-00 | CERAMIC CHIP | 470PF | 5% | 50V | |
| C805 | 1-107-715-11 | ELECT | 22uF | 20% | 16V | |
| C806 | 1-126-006-11 | ELECT | 22uF | 20% | 16V | |
| C902 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V | |
| C904 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V | |
| C905 | 1-126-009-81 | ELECT | 100uF | 20% | 16V | |
| C906 | 1-126-006-11 | ELECT | 22uF | 20% | 16V | |
| C907 | 1-124-994-11 | ELECT | 100uF | 20% | 10V | |
| C908 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V | |
| C909 | 1-107-715-11 | ELECT | 22uF | 20% | 16V | |
| C910 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V | |
| C911 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | |
| C912 | 1-131-994-11 | FILM | 0.047uF | 5% | 100V | |
| C913 | 1-131-731-11 | CAP, ELECT | 2200UF/16V | | | |
| C914 | 1-131-731-11 | CAP, ELECT | 2200UF/16V | | | |
| C915 | 1-131-731-11 | CAP, ELECT | 2200UF/16V | | | |
| C916 | 1-131-731-11 | CAP, ELECT | 2200UF/16V | | | |
| C917 | 1-104-829-11 | ELECT | 220uF | 20% | 35V | |
| C918 | 1-104-829-11 | ELECT | 220uF | 20% | 35V | |
| C919 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V | |
| C921 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V | |
| C922 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V | |
| C923 | 1-126-009-81 | ELECT | 100uF | 20% | 16V | |
| C924 | 1-126-006-11 | ELECT | 22uF | 20% | 16V | |
| C925 | 1-124-994-11 | ELECT | 100uF | 20% | 10V | |
| C926 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V | |
| C927 | 1-107-715-11 | ELECT | 22uF | 20% | 16V | |
| C928 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V | |
| C929 | 1-131-731-11 | CAP, ELECT | 2200UF/16V | | | |
| C930 | 1-131-731-11 | CAP, ELECT | 2200UF/16V | | | |
| C931 | 1-131-731-11 | CAP, ELECT | 2200UF/16V | | | |
| C932 | 1-131-731-11 | CAP, ELECT | 2200UF/16V | | | |
| C933 | 1-131-994-11 | FILM | 0.047uF | 5% | 100V | |
| C935 | 1-104-829-11 | ELECT | 220uF | 20% | 35V | |
| C936 | 1-104-829-11 | ELECT | 220uF | 20% | 35V | |
| C937 | 1-163-021-11 | CERAMIC CHIP | 0.01uF | 10% | 50V | |
| C951 | 1-163-037-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V | |
| C952 | 1-163-037-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V | |
| C953 | 1-163-037-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V | |
| C954 | 1-163-037-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V | |

| Ref. No. | Part No. | Description | | Remark |
|---|---|---|---|---|
| | | < CONNECTOR > | | |
| CN802 | 1-694-620-11 | TERMINAL BOARD (3P) | | |
| | | < JACK > | | |
| CNJ801 | 1-793-279-11 | CONNECTOR 1P (REMOTE)(+12V,GND,+12V) | | |
| | | < CONNECTOR > | | |
| * CNP804 | 1-564-709-11 | PIN, CONNECTOR (SMALL TYPE) 7P | | |
| | | < DIODE > | | |
| D806 | 8-719-801-78 | DIODE | 1SS184-TE85L | |
| D807 | 8-719-801-78 | DIODE | 1SS184-TE85L | |
| D808 | 8-719-025-34 | DIODE | 02CZ6.8-TE85L | |
| D809 | 8-719-160-56 | DIODE | RD12FB2 | |
| D901 | 8-719-025-50 | DIODE | 02CZ16-TE85L | |
| D902 | 8-719-043-82 | DIODE | 02CZ5.1Y-TE85L | |
| D903 | 8-719-160-90 | DIODE | RD36FB2 | |
| D904 | 8-719-025-49 | DIODE | 02CZ15-TE85L | |
| D905 | 8-719-076-60 | DIODE | FCH20A15 | |
| D906 | 8-719-076-61 | DIODE | FRH20A15 | |
| D907 | 8-719-801-78 | DIODE | 1SS184-TE85L | |
| D908 | 8-719-801-78 | DIODE | 1SS184-TE85L | |
| D909 | 8-719-801-78 | DIODE | 1SS184-TE85L | |
| D910 | 8-719-160-90 | DIODE | RD36FB2 | |
| D911 | 8-719-025-49 | DIODE | 02CZ15-TE85L | |
| D912 | 8-719-076-60 | DIODE | FCH20A15 | |
| D913 | 8-719-076-61 | DIODE | FRH20A15 | |
| | | < FUSE > | | |
| F901 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE)(25V) | | |
| F902 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE)(25V) | | |
| F903 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE)(25V) | | |
| F904 | 1-576-256-11 | FUSE (BLADE TYPE) (AUTO FUSE)(25V) | | |
| | | < IC > | | |
| IC813 | 8-719-156-72 | PHOTO COUPLER PS2501-1-K | | |
| IC901 | 8-719-156-72 | PHOTO COUPLER PS2501-1-K | | |
| IC902 | 8-759-144-88 | IC uPC494GS-T1 | | |
| IC903 | 8-719-156-72 | PHOTO COUPLER PS2501-1-K | | |
| IC904 | 8-759-144-88 | IC uPC494GS-T1 | | |
| | | < COIL > | | |
| L902 | 1-410-396-71 | INDUCTOR | 0.45uH | |
| L904 | 1-410-396-71 | INDUCTOR | 0.45uH | |
| | | < PILOT LAMP > | | |
| PL901 | 1-518-540-11 | LAMP, PILOT | | |
| | | < TRANSISTOR > | | |
| Q804 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q805 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q806 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q807 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q808 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |
| Q809 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | |
| Q810 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | |

# POWER

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| Q811 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q812 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | | |
| Q901 | 8-729-046-13 | TRANSISTOR | 2SB1243-QR-TV2 | | |
| Q902 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | | |
| Q903 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q904 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q905 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q906 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q907 | 8-729-048-66 | TRANSISTOR | 2SB1238PQR-TV2 | | |
| Q908 | 8-729-048-66 | TRANSISTOR | 2SB1238PQR-TV2 | | |
| Q909 | 8-729-032-94 | TRANSISTOR | 2SD1859TV2Q | | |
| Q910 | 8-729-032-94 | TRANSISTOR | 2SD1859TV2Q | | |
| Q911 | 8-729-035-83 | TRANSISTOR | MTP75N06HD (AEP,UK,E) | | |
| Q912 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q913 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q914 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q915 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q916 | 8-729-035-83 | TRANSISTOR | MTP75N06HD (AEP,UK,E) | | |
| Q917 | 8-729-216-21 | TRANSISTOR | 2SA1162-Y | | |
| Q918 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q919 | 8-729-230-49 | TRANSISTOR | 2SC2712-Y | | |
| Q920 | 8-729-048-66 | TRANSISTOR | 2SB1238PQR-TV2 | | |
| Q921 | 8-729-048-66 | TRANSISTOR | 2SB1238PQR-TV2 | | |
| Q922 | 8-729-032-94 | TRANSISTOR | 2SD1859TV2Q | | |
| Q923 | 8-729-032-94 | TRANSISTOR | 2SD1859TV2Q | | |
| Q924 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q925 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q926 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q927 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q928 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| Q929 | 8-729-035-83 | TRANSISTOR | MTP75N06HD | | |
| | | < RESISTOR > | | | |
| R816 | 1-216-190-00 | RES-CHIP | 470 | 2% | 1/8W |
| R817 | 1-216-190-00 | RES-CHIP | 470 | 2% | 1/8W |
| R818 | 1-216-190-00 | RES-CHIP | 470 | 2% | 1/8W |
| R819 | 1-216-190-00 | RES-CHIP | 470 | 2% | 1/8W |
| R820 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R821 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R822 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R823 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R824 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R825 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R826 | 1-216-210-00 | RES-CHIP | 3.3K | 2% | 1/8W |
| R827 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R828 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R829 | 1-216-210-00 | RES-CHIP | 3.3K | 2% | 1/8W |
| R830 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R831 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R832 | 1-208-526-61 | RES-CHIP | 47K | 2% | 1/10W |
| R833 | 1-216-210-00 | RES-CHIP | 3.3K | 2% | 1/8W |
| R834 | 1-216-234-00 | RES-CHIP | 33K | 2% | 1/8W |
| R835 | 1-216-698-11 | METAL CHIP | 91K | 0.5% | 1/10W |
| R836 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R837 | 1-208-510-61 | RES-CHIP | 10K | 2% | 1/8W |
| R838 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W F |
| R901 | 1-249-947-11 | CARBON | 10K | 5% | 1/4W |
| R902 | 1-208-474-61 | RES-CHIP | 330 | 2% | 1/8W |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R903 | 1-216-210-00 | RES-CHIP | 3.3K | 2% | 1/8W |
| R904 | 1-208-782-11 | RES-CHIP | 1K | 2% | 1/8W |
| R905 | 1-216-214-00 | RES-CHIP | 4.7K | 2% | 1/8W |
| R906 | 1-208-441-61 | RES-CHIP | 1.5K | 2% | 1/10W |
| R907 | 1-249-568-11 | CARBON | 4.7K | 5% | 1/4W |
| R908 | 1-216-210-00 | RES-CHIP | 3.3K | 2% | 1/8W |
| R909 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R910 | 1-218-760-11 | RES-CHIP | 220K | 2% | 1/10W |
| R911 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R912 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R913 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R914 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R915 | 1-216-677-11 | METAL CHIP | 12K | 0.5% | 1/10W |
| R916 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R917 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R918 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R919 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R920 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R921 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R922 | 1-215-865-11 | METAL OXIDE | 220 | 5% | 1W |
| R923 | 1-215-865-11 | METAL OXIDE | 220 | 5% | 1W |
| R924 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R925 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R926 | 1-208-397-61 | RES-CHIP | 22 | 2% | 1/8W |
| R927 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R928 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R929 | 1-208-397-61 | RES-CHIP | 22 | 2% | 1/8W |
| R930 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W (AEP,UK,E) |
| R931 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W |
| R932 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W |
| R933 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W |
| R934 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W |
| R935 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W (AEP,UK,E) |
| R936 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R937 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R938 | 1-208-550-61 | RES-CHIP | 470K | 2% | 1/10W |
| R939 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R940 | 1-208-526-61 | RES-CHIP | 47K | 2% | 1/10W |
| R941 | 1-208-441-61 | RES-CHIP | 1.5K | 2% | 1/10W |
| R942 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R943 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R944 | 1-216-699-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R945 | 1-218-760-11 | RES-CHIP | 220K | 2% | 1/10W |
| R946 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R947 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R948 | 1-208-462-61 | RES-CHIP | 10K | 2% | 1/10W |
| R949 | 1-208-518-61 | RES-CHIP | 22K | 2% | 1/10W |
| R950 | 1-216-677-11 | METAL CHIP | 12K | 0.5% | 1/10W |
| R951 | 1-208-453-61 | RES-CHIP | 4.7K | 2% | 1/10W |
| R952 | 1-216-635-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R953 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R954 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R955 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R956 | 1-216-631-11 | METAL CHIP | 150 | 0.5% | 1/10W |
| R957 | 1-215-865-11 | METAL OXIDE | 220 | 5% | 1W |
| R958 | 1-215-865-11 | METAL OXIDE | 220 | 5% | 1W |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R959 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R960 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R961 | 1-208-397-61 | RES-CHIP | 22 | 2% | 1/8W |
| R962 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R963 | 1-208-437-61 | RES-CHIP | 1K | 2% | 1/10W |
| R964 | 1-208-397-61 | RES-CHIP | 22 | 2% | 1/8W |
| R965 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W |
| R966 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W |
| R967 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W |
| R968 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W |
| R969 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W |
| R970 | 1-260-064-11 | CARBON | 1 | 5% | 1/2W |
| R991 | | | 4.7 | | 1/8W |
| R992 | | | 4.7 | | 1/8W |
| R993 | | | 4.7 | | 1/8W |
| R994 | | | 4.7 | | 1/8W |
| | | < SWITCH > | | | |
| S801 | 1-571-658-11 | SWITCH, SLIDE (MODE, HI-C/HI-V) | | | |
| S802 | 1-692-721-11 | SWITCH, SLIDE (NFB, ON/OFF) | | | |
| | | < TRANSFORMER > | | | |
| T901 | 1-435-148-11 | TRANSFORMER, DC-DC CONVERTER | | | |
| T902 | 1-435-148-11 | TRANSFORMER, DC-DC CONVERTER | | | |
| | | < THERMISTOR > | | | |
| TH901 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |
| TH902 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |
| TH903 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |
| TH904 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |
| TH905 | 1-810-506-11 | THERMISTOR NTH5G39B223K01 | | | |

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MISCELLANEOUS
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| | | |
|---|---|---|
| FN801 | 1-763-107-11 | MOTOR, FAN |

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HARDWARE LIST
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| | | |
|---|---|---|
| #1 | 7-685-546-19 | SCREW (+BTP3X8) TYPE2 N-S |
| #2 | 7-685-548-19 | SCREW (+BTP3X12) TYPE2 N-S |
| #3 | 7-685-145-19 | SCREW (+P3X6) TYPE2 NON-SLIT |
| #4 | 7-685-147-11 | SCREW (+P3X10) TYPE2 NON-SLIT |
| #5 | 7-685-146-19 | SCREW (+P3X8) TYPE2 NON-SLIT |
| #6 | 7-685-647-79 | SCREW (+BVTP3X10) TYPE2 IT-3 |
| #7 | 7-685-106-11 | SCREW (+P2X10) TYPE2 NON-SLIT |
| #8 | 7-685-649-79 | SCREW (+BVTP3X14) TYPE2 IT-3 |
| #9 | 7-685-168-11 | SCREW (+P4X40) TYPE2 NON-SLIT |
| #10 | 7-685-149-11 | SCREW (+P3X14) TYPE2 NON-SLIT |
| #11 | 7-685-797-01 | SCREW +PTT2.6X16 (S) |

## 3. CHANGE OF STRUCTURE

Amplifier Board Suffix-14 was structurally changed during production of this machine.

Former type : Serial number 0012441 to 0012770

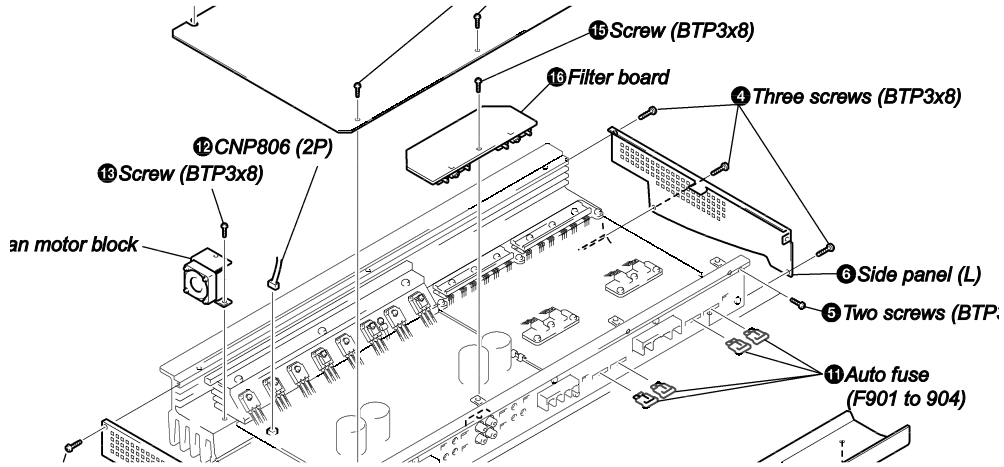
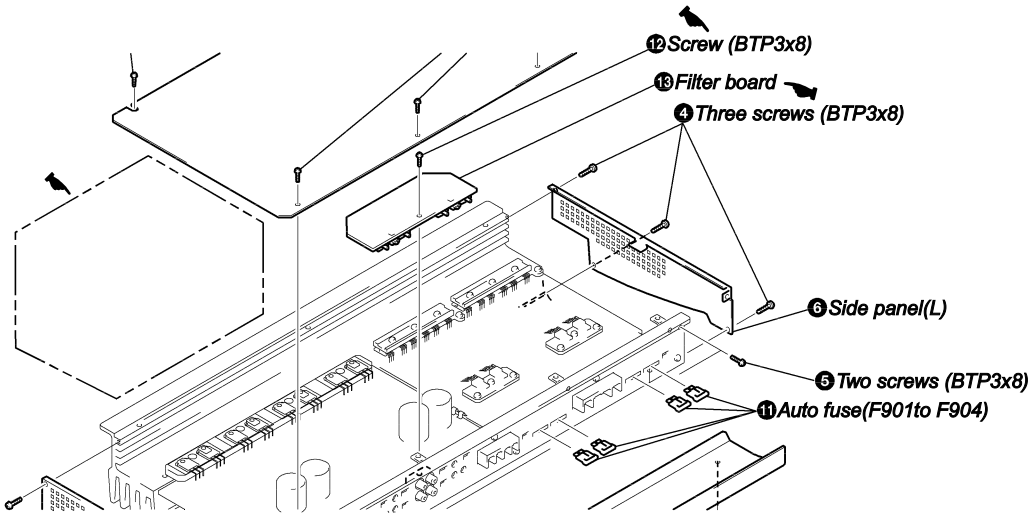
New type : Serial number 0012771 and higher

## DISASSEMBLY

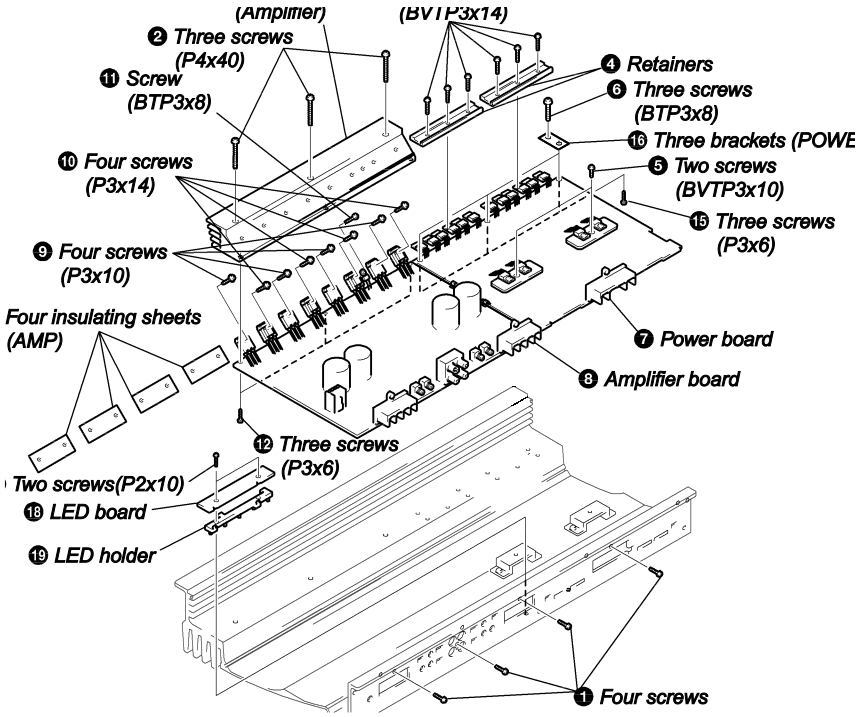
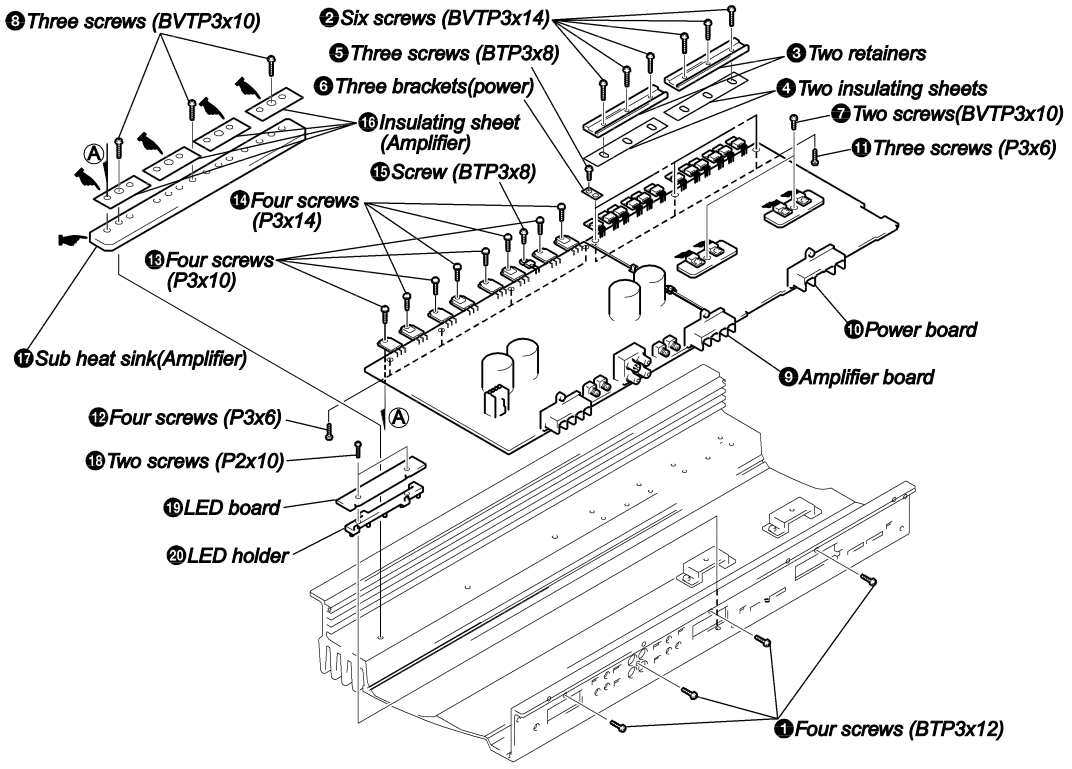
### (SIDE PLATE, BOTTOM PLATE AND FILTER BOARD)

- Parts may be changed or deleted due to structural changes.
  Disassembly method may also differ due to such changes.
  Delete of parts : Bracket(fan), Fan motor
  Change of parts : Sub heat sink (amplifier), Insulating sheet(AMP)

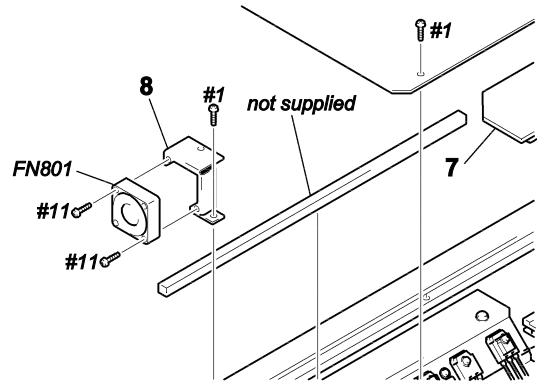
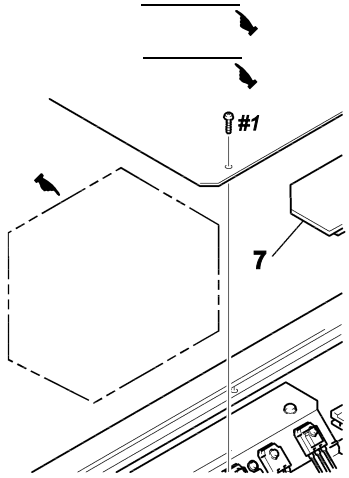
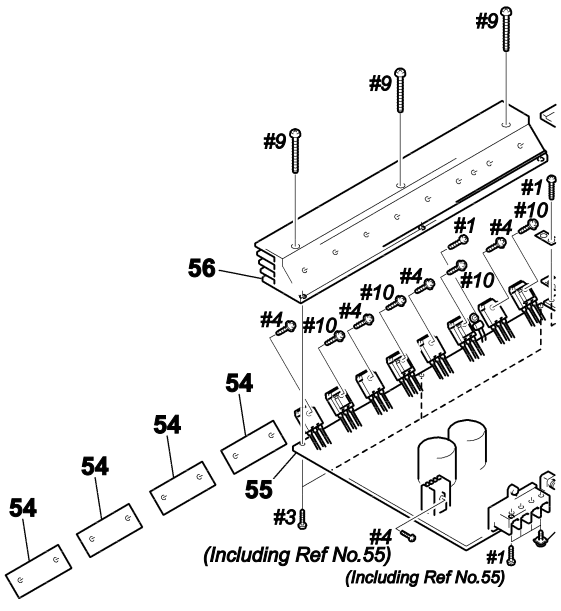
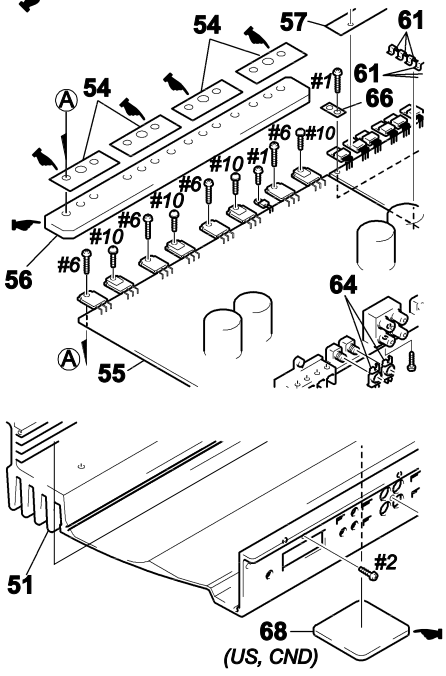
☛ **: indicates changed portion**

| Page | Former Type |
|---|---|
| 7 | **Apply it Serial No. up to 0012770**<br>  <br> |
| | New Type |
| | **Apply it Serial No. 0012771 and higher**<br>  <br> |

**(AMPLIFIER/POWER BOARD AND LED BOARD)**
**☛ : indicates changed portion**
**page (2) : Refer to SERVICE MANUAL SUPPLEMENT-1.**

| Page | Former Type |
|---|---|
| 7 (2) | **Apply it Serial No. up to 0012770**   |
| | New Type |
| | **Apply it Serial No. 0012771 and higher**   |

**CORRECT OF EXPLODED VIEWS**
**☛ : indicates changed portion**
**page (3) : Refer to SERVICE MANUAL SUPPLEMENT-1.**

| Page | Former Type **Apply it Serial No. up to 0012770** | New Type **Apply it Serial No. 0012771 and higher** |
|---|---|---|
| 17 | Ref. No. / Part No. / Description / Remark<br>* 8 3-039-202-01 BRACKET(FAN)<br>FN801 1-763-107-11 MOTOR, FAN<br>  | Ref. No. / Part No. / Description / Remark<br>  |
| 18<br>(3) | Ref. No. / Part No. / Description / Remark<br>* 51 3-039-210-01 HEAT SINK (US,CND)<br>* 51 3-039-210-11 HEAT SINK (AEP,UK,E)<br>* 54 3-039-184-01 SHEET(AMP),INSULATING<br>* 55 A-3317-930-A AMPLIFIER BOARD,COMPLETE<br>* 56 3-039-204-01 HEAT SINK (AMPLIFIER),SUB<br>  | Ref. No. / Part No. / Description / Remark<br>* 51 3-039-210-21 HEAT SINK (US,CND)<br>* 51 3-039-210-31 HEAT SINK (AEP,UK,E)<br>* 54 3-049-654-01 SHEET(AMP),INSULATING<br>* 55 A-3317-930-A AMPLIFIER BOARD,COMPLETE(US,CND)<br>* 55 A-3326-258-A AMPLIFIER BOARD,COMPLETE(AEP,UK,E)<br>* 56 3-049-653-01 HEAT SINK (AMPLIFIER),SUB<br>* 68 3-039-181-01 EMBLEM (XPLOD)(US,CND)<br>  |