

SHARP

SERVICE MANUAL / SERVICE-ANLEITUNG / MANUEL DE SERVICE

S1601HK9000HK

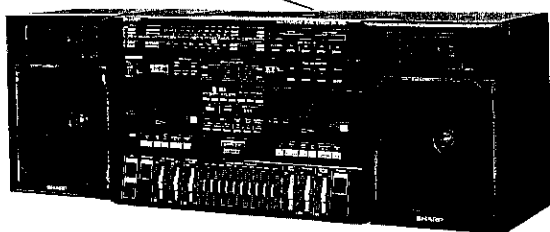
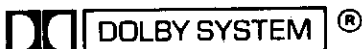


Photo: HK-9000H(BK)



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HK-9000H(BK) HK-9000E(BK)

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.
- Im Interesse der Benutzer-Sicherheit sollte dieses Gerät wieder auf seinen ursprünglichen Zustand eingestellt und nur die vorgeschriebenen Teile verwendet werden.
- Dans l'intérêt de la sécurité de l'utilisateur, l'appareil devra être reconstitué dans sa condition première et seules des pièces identiques à celles spécifiées, doivent être utilisées.

Note for users in UK.

Recording and playback of any material may require consent which SHARP are unable to give. Please refer particularly to the provisions of Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1958, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

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FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

General

Power source: AC 110—120 V and 220—240 V, 50/60 Hz
DC 15 V [UM/SUM-1 (H:UM/SUM-1, E:HP-2) or R20 type x.10, or external 12—15 V DC]

Power consumption: 120 W (AC)

Semiconductors: H: 19 ICs (Integrated circuits)
61 transistors
62 diodes
17 LEDs (Light Emitting Diodes)
E: 18 ICs (Integrated circuit)
57 transistors
58 diodes
17 LEDs (Light Emitting Diodes)

Dimensions: (Main unit)
Width; 430 mm (17")
Height; 295 mm (11-5/8")
Depth; 235 mm (9-1/4")
(System)
Width; 858 mm (33-3/4")
Height; 295 mm (11-5/8")
Depth; 235 mm (9-1/4")

Weight

(without batteries): (Main unit) 9 kg (19.8 lbs)
(System) 14.8 kg (32. lbs)

Amplifier

Music power output: 2 x 26 W/4 ohms (AC operation)
(H: DIN45 324)

Continuous power output: 2 x 18 W/4 ohms (AC operation)
(H: DIN45 324) (E: at 10% T.H.D.)

Frequency response (Aux): 60 Hz—20 kHz (± 3 dB)

Graphic equalizer: 100 Hz (± 7 dB)
180 Hz (± 7 dB)
310 Hz (± 7 dB)
550 Hz (± 7 dB)
1 kHz (± 7 dB)
1.8 kHz (± 7 dB)
3.1 kHz (± 7 dB)
5.5 kHz (± 7 dB)
10 kHz (± 7 dB)
16 kHz (± 7 dB)

Input sensitivity/impedance: CD/AUX; 220 mV/47 k ohms
PHONO; 3 mV/47 k ohms
MIC; 1 mV/10 k ohm

Output impedance: INSTRUMENT; 220 mV/1 M ohm
Speakers; 4—16 ohms
Headphones; 8—32 ohms

Cassette Deck

Tape: Compact cassette tape
Tape speed: 4.8 cm/sec.
Frequency response: Normal tape; 60—12,000 Hz
CrO₂ tape; 60—13,000 Hz
Metal tape; 60—14,000 Hz

S/N ratio: 55 dB (Deck 1, playback)
50 dB (Deck 2, recording)

Wow and flutter: $\pm 0.17\%$ (DIN)

Tuner

Frequency range: FM; 87.6—108 MHz
MW; 526.5—1606.5 kHz
LW; 150—285 kHz
SW; 5.95—18 MHz

Usable sensitivity

(mono): FM; 3 μ V (40 kHz deviation, S/N 26 dB)
MW; 500 μ V/m (30% modulation, S/N 20 dB)
LW; 350 μ V/m (30% modulation, S/N 10 dB)
SW; 60 μ V/m (30% modulation, S/N 20 dB)

FM S/N ratio (mono): 50 dB

Total harmonic distortion: FM; 0.5% (Mono)

FM stereo separation: 30 dB

Speaker

The specifications can be applied to either of the right and left speaker enclosures.

Type: 2-way
Speaker: 16 cm (6-1/2") woofer x 2
5 cm (2") tweeter x 2
Input: 36 W
Rated impedance: 4 ohms
Dimensions: Width; 212 mm (8-3/8")
Height; 295 mm (11-5/8")
Depth; 228 mm (9")
Weight: 2.9 kg (6.4 lbs)

Specifications for this model are subject to change without prior notice.

VOLTAGE SELECTION

Before operating the unit on mains, check the preset voltage. If the voltage is different from your local voltage, adjust the voltage as follows: Slide the AC power supply socket cover

by slightly loosening the screw to the visible indication of the side of your local voltage.

D

EINE VOLLSTÄNDIGE BESCHREIBUNG DER BEDIENUNG DIESES GERÄTES IST IN DER BEDIENUNGSANLEITUNG ENTHALTEN.

TECHNISCHE DATEN

Allgemeine Daten

Spannungsversorgung: 110—120 und 220—240 V
Netzspannung, 50/60 Hz
Gleichspannung (Typ UM/
SUM-1 oder R20 x 10, oder
12—15 V Fremdgleichspannung)

Leistungsaufnahme: 120 W (Wechselstrom)

Bestückung: 19 integrierte Schaltkreise
61 Transistoren
62 Dioden
17 Leuchtdioden

Abmessungen: (Hauptgerät)
Breite; 430 mm
Höhe; 295 mm
Tiefe; 235 mm
(System)
Breite; 858 mm
Höhe; 295 mm
Tiefe; 235 mm

Gewicht
(ohne Batterien): (Hauptgerät) 9 kg
(System) 14,8 kg

Verstärker

Musikausgangsleistung: 2 x 26 W/4 Ohm (Netzbetrieb),
DIN45 324

Dauerausgangsleistung: 2 x 18 W/4 Ohm, bei 10% (Netzbetrieb),
DIN45 324

Frequenzgang (Aux): 60 Hz—20 kHz (± 3 dB)

Frequenzgangentzerrung: 100 Hz (± 7 dB)
180 Hz (± 7 dB)
310 Hz (± 7 dB)
550 Hz (± 7 dB)
1 kHz (± 7 dB)
1,8 kHz (± 7 dB)
3,1 kHz (± 7 dB)
5,5 kHz (± 7 dB)
10 kHz (± 7 dB)
16 kHz (± 7 dB)

Eingangsempfindlichkeit/impedanz: CD/AUX; 220 mV/47 kOhm
PHONO; 3 mV/47 kOhm
MIC; 1 mV/10 kOhm
INSTRUMENT; 220 mV/1 MOhm

Ausgangsimpedanz: Lautsprecher; 4—16 Ohm
Kopfhörer; 8—32 Ohm

Cassettendeck

Band: Kompaktcassettenband

Bandgeschwindigkeit: 4,8 cm/s

Frequenzgang: Normalband; 60—12 000 Hz
CrO₂-Band; 60—13 000 Hz
Rauschabstand: 60—14 000 Hz

Reineisenband; 55 dB (Deck 1, Wiedergabe)
50 dB (Deck 2, Aufnahme)

Gleichlaufschwankungen: $\pm 0,17\%$ (DIN)

Tuner

Frequenzbereiche: UKW; 87,6—108 MHz
MW; 526,5—1606,5 kHz
LW; 150—285 kHz
KW; 5,95—18 MHz

Nutzempfindlichkeit (Mono): UKW; 3 μ V (40 kHz Hub, Rauschabstand 26 dB)
MW; 500 μ V/m (30% Modulation, Rauschabstand 20 dB)
LW; 350 μ V/m (30% Modulation, Rauschabstand 10 dB)
KW; 60 μ V/m (30% Modulation, Rauschabstand 20 dB)

UKW-Rauschabstand (Mono): 50 dB

Gesamtkrillfaktor: UKW; 0,5% (Mono)

UKW-Stereotrennung: 30 dB

Lautsprecher

Die technischen Daten beziehen sich sowohl auf die rechte als auch auf die linke Lautsprecherbox.

Typ: Zweiweg

Lautsprecher: 16 cm—Tieftöner x 2
5 cm—Hochtöner x 2

Eingang: 36 W

Nennimpedanz: 4 Ohm

Abmessungen: Breite; 212 mm
Höhe; 295 mm
Tiefe; 228 mm

Gewicht: 2,9 kg

Die technischen Daten für dieses Modell können ohne vorherige Ankündigung Änderungen unterworfen sein.

SPANNUNGSWAHL

Vor Betrieb dieses Gerätes über Netzspannung muß die Spannungsvoreinstellung des Spannungswählers überprüft werden. Sollte die Einstellung des Spannungswählers nicht mit der örtlichen Netzspannung übereinstimmen, diesen auf folgende Weise

se einstellen. Durch Lösen der Schrauben der Netzzuleitungsbuchsenabdeckung wird die Abdeckung auf die Spannungszahl der örtlichen Netzspannung geschoben.

F

POUR LA DESCRIPTION COMPLÈTE DU FONCTIONNEMENT DE CET APPAREIL, SE REPORTER AU MDOE D'EMPLOI.

CARACTÉRISTIQUES

Généralités

Alimentation: 110—120/220—240 V CA,
50/60 Hz
15 V CC (UM/SUM-1 ou R20 x 10
ou extérieur 12—15 V CC)

Consommation: 120 W (CA)

Semi-conducteurs: 19 circuits intégrés
61 transistors
62 diodes
17 diodes à lueurs
(Unité principale)

Dimensions: Largeur; 430 mm
Hauteur; 295 mm
Profondeur; 235 mm
(Système)
Largeur; 858 mm
Hauteur; 295 mm
Profondeur; 235 mm
(Unité principale) 9 kg
(Système) 14,8 kg

Poids (sans piles):

Amplificateur

Sortie de puissance musicale: 2 x 26 W/4 ohms (Fonctionnement
sur CA), DIN45 324

Sortie de puissance continue: 2 x 18 W/4 ohms (Fonctionnement
sur CA), DIN45 324

Réponse en fréquence (Aux): 60 Hz—20 kHz (± 3 dB)

Égaliseur graphique: 100 Hz (± 7 dB)
180 Hz (± 7 dB)
310 Hz (± 7 dB)
550 Hz (± 7 dB)
1 kHz (± 7 dB)
1,8 kHz (± 7 dB)
3,1 kHz (± 7 dB)
5,5 kHz (± 7 dB)
10 kHz (± 7 dB)
16 kHz (± 7 dB)

Sensibilité/impédance d'entrée: CD/AUX; 220 mV/47 k ohms
PHONO; 3 mV/47 k ohms
MIC; 1 mV/10 k ohm
INSTRUMENT; 220 mV/1 MOhm

Impédance de sortie: Enceintes; 4—16 ohms
Casque; 8—32 ohms

Platine à cassette

Bande: Cassette compacte

Vitesse de défilement: 4,8 cm/s

Réponse en fréquence: Bande Normale; 60—12 000 Hz
Bande CrO₂; 60—13 000 Hz
Bande métallique; 60—14 000 Hz

Rapport S/B: 55 dB (Platine 1, lecture)
50 dB (Platine 2, enregistrement)

Pleurage et scintillement: $\pm 0,17\%$ (DIN)

Tuner

Gamme de fréquence: FM; 87,6—108 MHz
PO; 526,5—1606,5 kHz
GO; 150—285 kHz
OC; 5,95—18 MHz

Sensibilité utilisable (mono): FM; 3 μ V (40 kHz de déviation, S/B 26 dB)
PO; 500 μ V/m (30% de modulation, S/B 20 dB)
GO; 350 μ V/m (30% de modulation, S/B 10 dB)
OC; 60 μ V/m (30% de modulation, S/B 20 dB)

Rapport S/B FM (mono): 50 dB

Distorsion harmonique totale: FM; 0,5% (Mono)

Séparation stéréo FM: 30 dB

Enceintes

Les caractéristiques s'appliquent aux enceintes de droite et de gauche.

Type: À 2 voies

Haut-parleurs: Woofer de 16 cm x 2
Tweeter de 5 cm x 2

Entrée: 36 W

Impédance nominale: 4 ohms

Dimensions: Largeur; 212 mm
Hauteur; 295 mm
Profondeur; 228 mm

Poids: 2,9 kg

Les caractéristiques de ce modèle sont sujettes à modification sans préavis.

SÉLECTION DE LA TENSION

Avant de brancher l'appareil sur l'alimentation de secteur, Vérifier la tension prééglée. Si la tension diffère de la tension locale, régler la tension de la façon suivante: faire glisser le couvercle

de la douille d'alimentation de secteur, en desserrant un peu la vis, vers l'indication visible du côté de l'alimentation locale.

E

NAMES OF PARTS

1. Tweeter
2. Woofer
3. Power Switch
4. Clock/Timer Display
5. Minute Digit Button
6. Hour Digit Button
7. Clock Adjust Button
8. Timer Button
9. Sleep Button
10. Sound Level Meter
11. FM Stereo Indicator
12. Band Selector
13. Tuning Control
14. Fine Tuning Control
15. Function Selector
16. APLD/APPS Programme Set Indicators
17. Record Indicator
18. APPS End-Pause Indicator
19. APLD/APPS Set Button
20. APLD/APPS Clear Button
21. Deck 1 Tape Selector Button
22. Deck 2 Tape Selector Button
23. Dolby NR Button
24. Continuous Play Selector Switch
25. Dubbing Speed Selector Button (H only)
26. Deck 2 Tape Counter and Reset Button
27. Deck 1 Play Button
28. Deck 1 Rewind Button
29. Deck 1 Fast Forward Button
30. Deck 1 Stop/Eject Button
31. Deck 1 Pause Button
32. Dubbing Start Button
33. Deck 2 Record Button
34. Deck 2 Play Button
35. Deck 2 Rewind Button
36. Deck 2 Fast Forward Button
37. Deck 2 Stop/Eject Button
38. Deck 2 Pause Button
39. Microphone-1 Socket
40. Microphone-2 Socket
41. Instrument Socket
42. Microphone-1 Volume Control
43. Microphone-2 Volume Control
44. Instrument Volume Control
45. Graphic Equalizer Controls
46. Deck 1 Tape Speed Control
47. Balance Control
48. Master Volume Control
49. Headphones Socket
50. Speaker Lead Holder
51. Speaker Release Lever
52. Ground Terminal
53. External Antenna Terminals
54. FM/SW Antenna Selector
55. FM/SW Rod Antenna
56. AC Power Supply Cord Holder
57. Main Battery Compartment
58. Phono Input Sockets
59. CD/AUX Input Sockets
60. External Speaker Sockets
61. Timer Battery Compartment
62. Beat Cancel Switch
63. AC Power Supply Socket
64. External DC Power Supply Socket

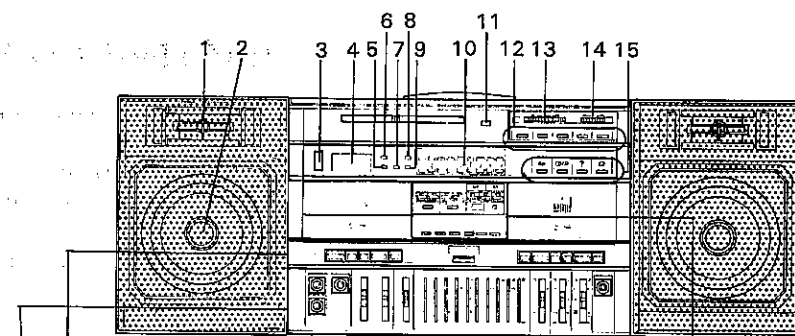


Figure 5-1

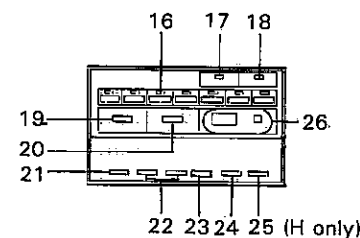


Figure 5-2

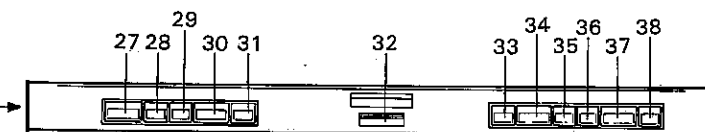


Figure 5-3

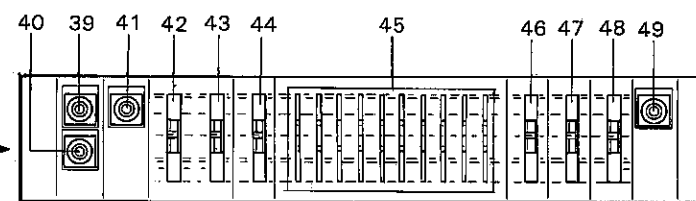


Figure 5-4

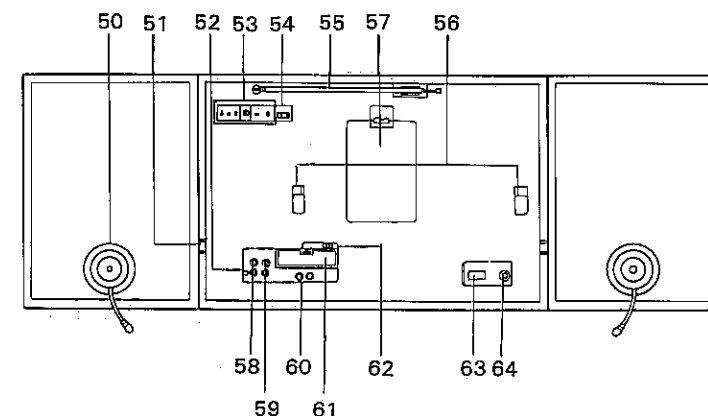


Figure 5-5

D

BEZEICHNUNG DER TEILE

1. Hochtöner
2. Tieftöner
3. Netzschalter
4. Uhr-/Zeitschaltuhranzeige
5. Minutenzifferntaste
6. Stundenzifferntaste
7. Uhreinstelltaste
8. Zeitschaltuhrntaste
9. Einschlafntaste
10. Klangpegelanzeige
11. UKW-Stereoanzeige
12. Wellenbereichswahltasten
13. Abstimmsteller
14. Feinabstimmsteller
15. Funktionswahltasten
16. APLD/APPS-Programmeinstellanzeigen
17. Aufnahmenanzeige
18. APPS-Ende-Pausenanzeige
19. APLD/APPS-Einstelltaste
20. APLD/APPS-Löschtaste
21. Deck 1 Bandsortenwahltaste
22. Deck 2 Bandsortenwahlschalter
23. Dolby-NR-Schalter
24. Dauerwiedergabewahlschalter
25. Überspielgeschwindigkeitswahltaste (H)
26. Deck 2 Digitales Bandzählwerk und Rückstelltaste
27. Deck 1 Wiedergabetaste
28. Deck 1 Rückspultaste
29. Deck 1 Schnellvorlauftaste
30. Deck 1 Stopp-/Auswurfntaste
31. Deck 1 Pausentaste
32. Überspielstartntaste
33. Deck 2 Aufnahme-ntaste
34. Deck 2 Wiedergabetaste
35. Deck 2 Rückspultaste
36. Deck 2 Schnellvorlauftaste
37. Deck 2 Stopp-/Auswurfntaste
38. Deck 2 Pausentaste
39. MIC-1 Mikrofonbuchsen
40. MIC-2 Mikrofonbuchsen
41. Instrumentenanschlußbuchse
42. MIC-1 Mikrofonlautstärksteller
43. MIC-2 Mikrofonlautstärksteller
44. Instrumentenlautstärksteller
45. Frequenzgangentzerrsteller
46. Deck 1 Bandgeschwindigkeitssteller
47. Balancesteller
48. Hauptlautstärksteller
49. Kopfhörerbuchse
50. Lautsprecherkabelhalter
51. Lautsprecher-Entriegelungshebel
52. Erdklemme
53. Außenantennenklemmen
54. UKW/KW-Antennenwähler
55. UKW/KW-Teleskopstabantenne
56. Netzkabelhalter
57. Hauptbatteriefach
58. Plattenspielerbuchsen
59. CD/AUX-Buchsen
60. Außenlautsprecherbuchsen
61. Zeitschaltuhrbatteriefach
62. Schwebungsunterdrückungsschalter
63. Netzanschlußbuchse
64. Fremdgleichspannungsbuchse

F

NOMENCLATURE

1. Tweeter
2. Woofer
3. Commutateur d'alimentation
4. Affichage horloge/minuterie
5. Bouton de chiffre de minute
6. Bouton de chiffre d'heure
7. Bouton de mise à l'heure
8. Bouton de minuterie
9. Bouton de sommeil
10. Compteur de niveau sonore
11. Témoin de FM stéréo
12. Boutons de sélection de gamme d'ondes
13. Commande d'accord
14. Commande d'accord fin
15. Boutons de sélection de fonction
16. Témoins de réglage des programmes APLD/APPS
17. Bouton d'enregistrement
18. Témoin de pause de fin APPS
19. Bouton de réglage APLD/APPS
20. Bouton d'effacement APLD/APPS
21. Platine 1 Bouton de sélection de bande
22. Platine 1 Commutateur de sélection de bande
23. Commutateur Dolby NR
24. Commutateur de sélection de lecture continue
25. Bouton de sélection de vitesse de copie (H)
26. Platine 2 Compteur numérique de bande et bouton de remise à zéro
27. Platine 1 Bouton de lecture
28. Platine 1 Bouton de rebobinage
29. Platine 1 Bouton d'avance rapide
30. Platine 1 Bouton d'arrêt/éjection
31. Platine 1 Bouton de pause
32. Bouton de démarrage de copie
33. Platine 2 Bouton d'enregistrement
34. Platine 2 Bouton de lecture
35. Platine 2 Bouton de rebobinage
36. Platine 2 Bouton d'avance rapide
37. Platine 2 Bouton d'arrêt/éjection
38. Platine 2 Bouton de pause
39. MIC-1 Douilles de microphone
40. MIC-2 Douilles de microphone
41. Douille d'instrument
42. MIC-1 Commandes de volume de microphone
43. MIC-2 Commandes de volume de microphone
44. Commande de volume d'instrument
45. Commandes d'égaliseur graphique
46. Platine 1 Commande de vitesse de défilement de bande
47. Commande de balance
48. Commande de volume principale
49. Douille de casque
50. Support de fil d'enceinte
51. Levier de libération d'enceinte
52. Bonde de terre
53. Bornes d'antenne extérieure
54. Sélecteur d'antenne FM/OC
55. Antenne-tige télescopique FM/OC
56. Support de cordon d'alimentation
57. Compartiment de piles principales
58. Douilles de phono
59. Douilles CD/AUX
60. Douilles d'enceinte extérieure
61. Compartiment de pile de minuterie
62. Commutateur de suppression de battement
63. Douille d'alimentation
64. Douille d'alimentation en courant continu extérieure

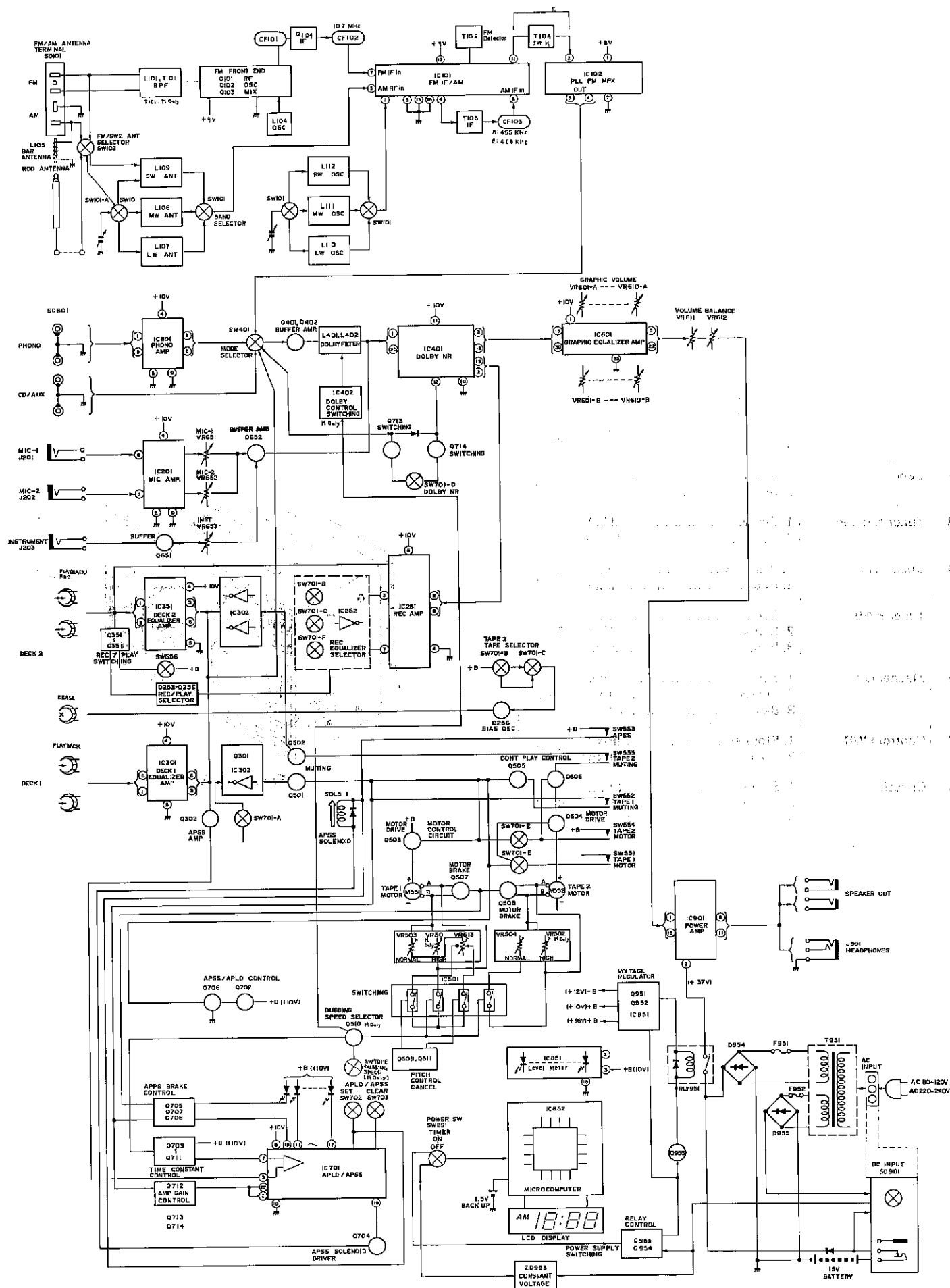


Figure 7 BLOCK DIAGRAM

E

DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep its safety and excellent performance:

1. Take cassette tape out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit and remove the batteries from the unit.
3. Take off nylon bands or wire holders where they need be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVAL	PROCEDURE	FIGURE
1	Rear Panel	1. Screw (A)x8	8-1
		2. Screw (B)x5	8-2
		3. Socket (C1)x1	
		4. Tip (C2)x1	
2	Cabinet	1. Screw (D)x2	8-3
		2. Screw (E)x4	
3	Tuner Section	1. Screw (F)x1	8-4
		2. Screw (G)x3	
4	Deck PWB	1. Push Rivet (H)x1	9-1
		2. Hook (I)x2	
5	Timer PWB	1. Socket (J)x1	9-2
		2. Screw (K)x2	
		3. Hook (L)x3	
6	Mechanism	1. Screw (M)x4	9-2
		2. Screw (N)x2	
		3. Belt (O)x1	
7	Control PWB	1. Stopper (P)x2	9-3
		2. Hook (Q)x5	
8	Chassis	1. Screw (R)x2	9-3
		2. Screw (S1)x4	
		3. Screw (S2)x3	
9	Volume PWB	1. Hook (T)x4	9-4
		2. Screw (U)x2	

SPEAKER

STEP	REMOVAL	PROCEDURE	FIGURE
1	Front Panel	1. Screw (A)x6	9-5

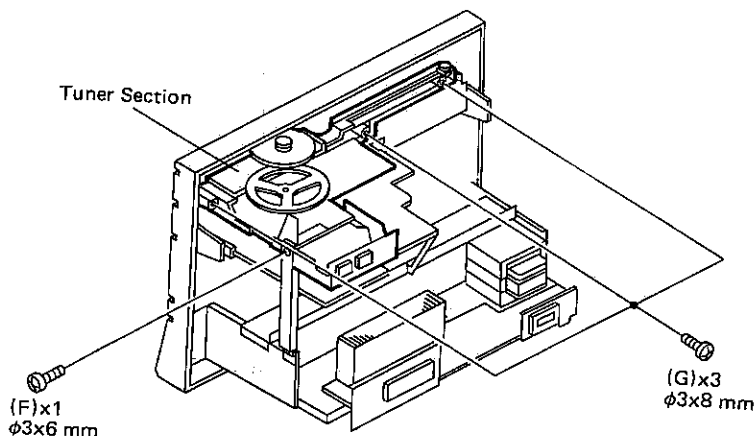


Figure 8-4

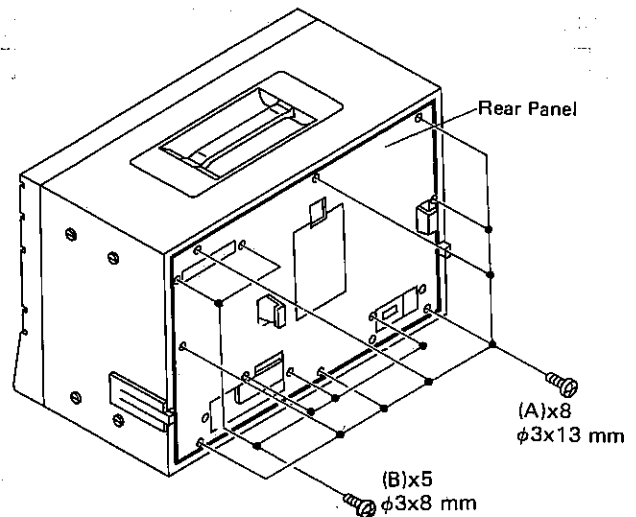


Figure 8-1

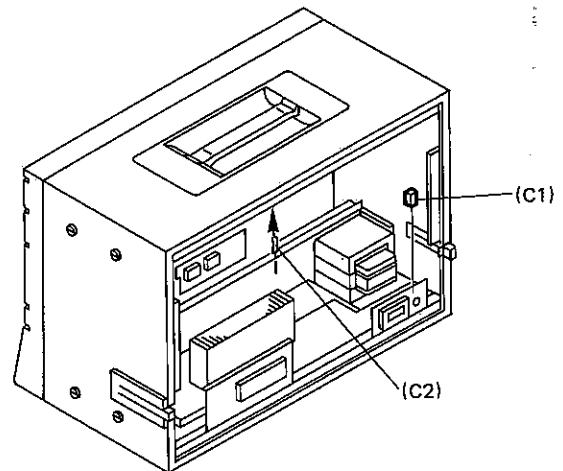


Figure 8-2

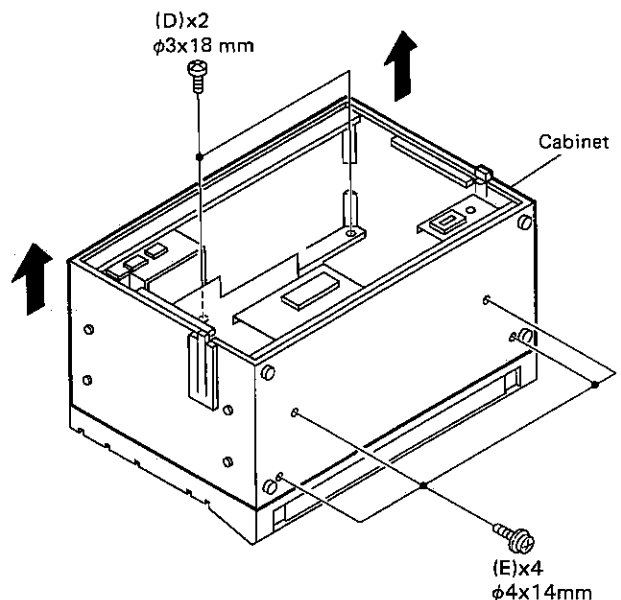


Figure 8-3

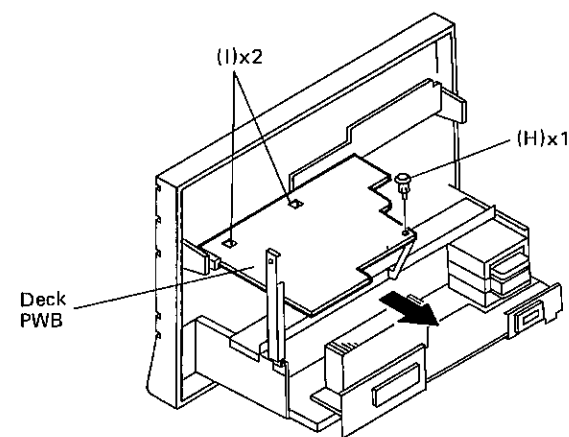


Figure 9-1

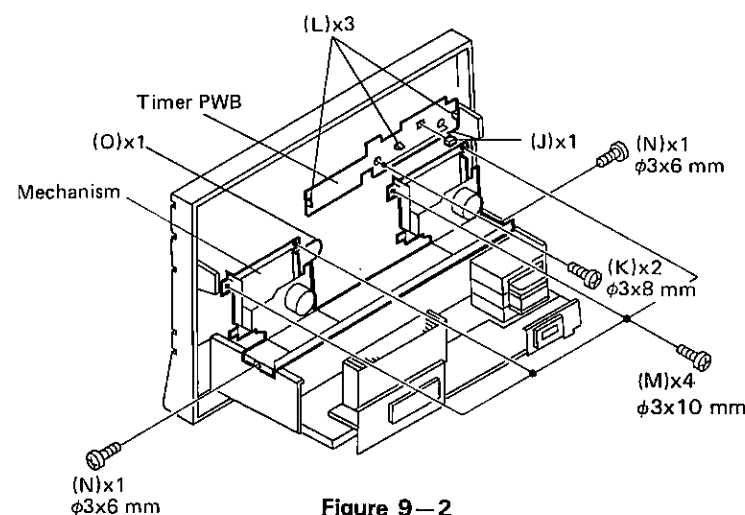


Figure 9-2

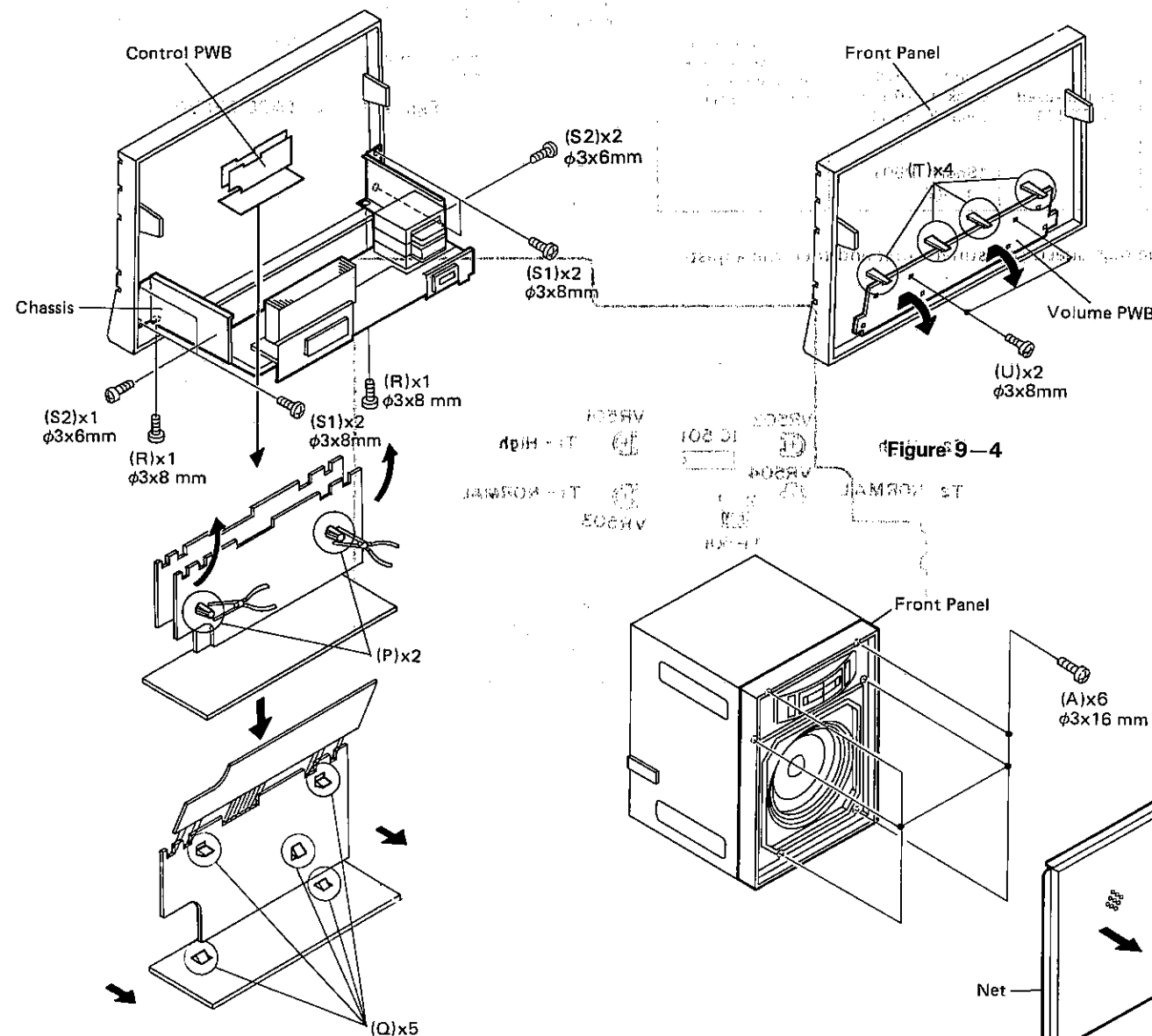


Figure 9-3

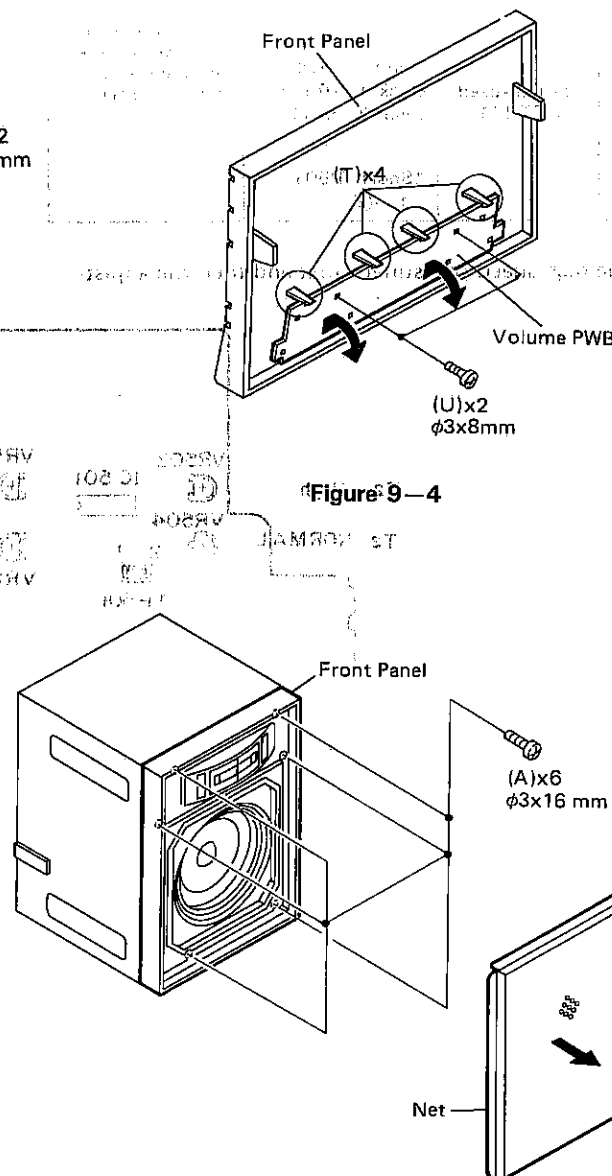


Figure 9-4

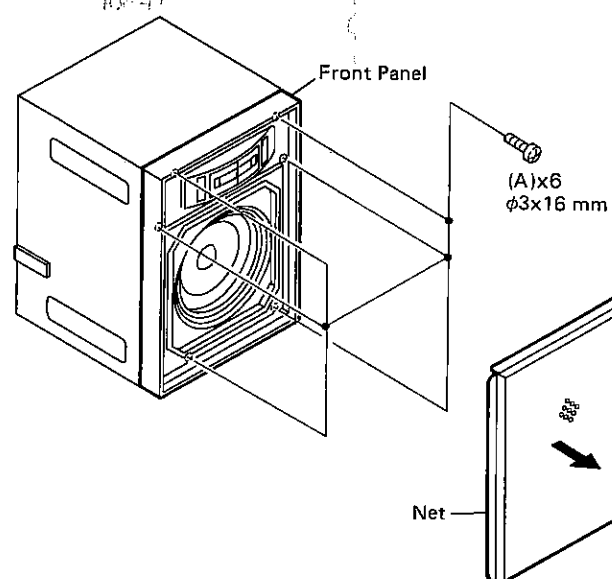


Figure 9-5

D

ZERLEGEN

Vorsichtsmassregeln Für Das Zerlegen

Beim Zerlegen und Zusammenbauen des Gerätes die folgenden Anweisungen befolgen, um dessen Betriebssicherheit und ausgezeichnete Leistung aufrechtzuerhalten.

1. Die Cassette aus dem Gerät entfernen.
2. Bevor mit dem Zerlegen des Gerätes begonnen wird, unbedingt den Netzkabelstecker aus der Netzsteckdose ziehen und die Batterien aus dem Gerät entfernen.
3. Nylonbänder oder Leitungshalter entfernen, falls dies beim Zerlegen des Gerätes erforderlich ist. Nach Warten des Gerätes darauf achten, die Leitungen wieder so zu verlegen, wie sie vor den Zerlegen angeordnet waren.
4. Beim Ausführen von Wartungsarbeiten auf statische Elektrizität der integrierten Schaltkreise und anderen Schaltungen achten.

F

DÉMONTAGE

Précautions pour le démontage

Lors du démontage de l'appareil et de son remontage, suivre les précautions ci-dessous, pour maintenir la sécurité et d'excellentes performances.

1. Déposer la bande cassette de l'appareil.
2. S'assurer de retirer la fiche d'alimentation secteur de la prise murale avant de démarrer le démontage de l'appareil et déposer les piles de l'appareil.
3. Déposer les bandes de nylon ou les serre-câbles si nécessaire lors du démontage de l'appareil. Après la réparation de l'appareil, s'assurer de redispenser les fils tel qu'ils étaient avant le démontage.
4. Faire attention à l'électricité statique des circuits intégrés et des autres circuits lors de la réparation.

SCH-RITT	ENTFERNEN	VERFAHREN	ABBILDUNG
1	Rückwand	1. Schraube (A)x8 2. Schraube (B)x5 3. Buchse (C1)x1 4. Spitze (C2)x1	8-1 8-2
2	Gehäuse	1. Schraube (D)x2 2. Schraube (E)x4	8-3
3	Tuner-Teil	1. Schraube (F)x1 2. Schraube (G)x3	8-4
4	Deck-Leiterplatte	1. Druckniet (H)x1 2. Haken (I)x2	9-1
5	Zeitschaltuhr-Leiterplatte	1. Buchse (J)x1 2. Schraube (K)x2 3. Haken (L)x3	9-2
6	Laufwerk	1. Schraube (M)x4 2. Schraube (N)x2 3. Riemen (O)x1	9-2
7	Steuer-Leiterplatte	1. Anschlag (P)x2 2. Haken (Q)x5	9-3
8	Chassis	1. Schraube (R)x2 2. Schraube (S1)x4 3. Schraube (S2)x3	9-3
9	Lautstärke-Leiterplatte	1. Haken (T)x4 2. Schraube (U)x2	9-4

LAUTSPRECHER

SCH-RITT	ENTFERNEN	VERFAHREN	ABBILDUNG
1	Frontplatte	1. Schraube (A)x6	9-5

ÉTA-PE	DÉPOSE	PROCÉDÉ	FIGURE
1	Panneau arrière	1. Vis (A)x8 2. Vis (B)x5 3. Douille (C1)x1 4. Bout (C2)x1	8-1 8-2
2	Coffret	1. Vis (D)x2 2. Vis (E)x4	8-3
3	Section de tuner	1. Vis (F)x1 2. Vis (G)x3	8-4
4	PMI de platine	1. Rivet-poussoir (H)x1 2. Crochet (I)x2	9-1
5	PMI de minuterie	1. Douille (J)x1 2. Vis (K)x2 3. Crochet (L)x3	9-2
6	Mécanisme	1. Vis (M)x4 2. Vis (N)x2 3. Courroie (O)x1	9-2
7	PMI de contrôle	1. Pièce d'arrêt (P)x2 2. Crochet (Q)x5	9-3
8	Châssis	1. Vis (R)x2 2. Vis (S1)x4 3. Vis (S2)x3	9-3
9	PMI de volume	1. Crochet (T)x4 2. Vis (U)x2	9-4

HAUT-PARLEUR

ÉTA-PE	DÉPOSE	PROCÉDÉ	FIGURE
1	Panneau avant	1. Vis (A)x6	9-5

E STRINGING OF DIAL CORD

1. Turn the drum fully in the direction (A) shown in Fig. 11-1 and stretch its cord over the parts in the numerical order.
2. Then turn the tuning control shaft fully in the direction (B) shown in Fig. 11-1 and fix its pointer as shown in Fig. 11-1.

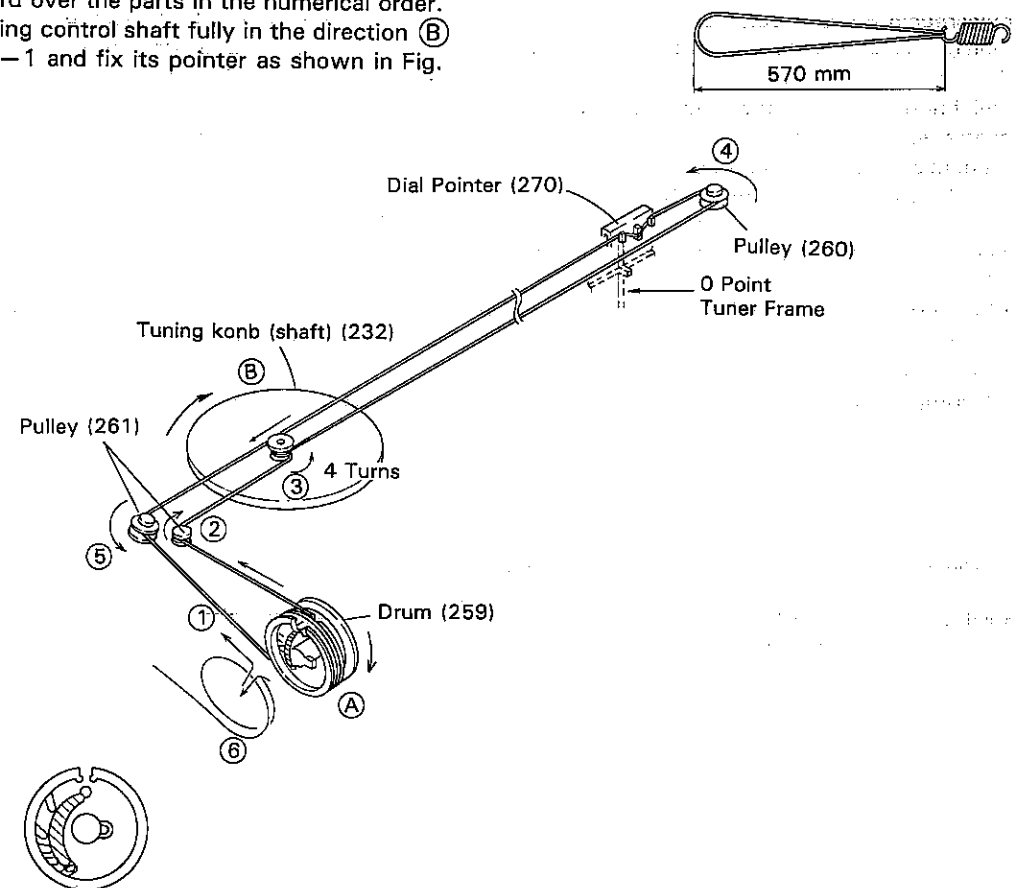


Figure 11-1

D SPANNEN DER SKALENSCHNUR

1. Die Trommel gemäß Abb. 11-1 bis zum Anschlag in Richtung (A) drehen, dann die Schnur in der numerischen Reihenfolge über die einzelnen Teile spannen.
2. Die Abstimmstellerachse gemäß Abb. 11-1 bis zum Anschlag in Richtung (B) drehen, dann den Zeiger gemäß Abb. 11-1 befestigen.

F PASSAGE DU CORDON DU CADRAN

1. Tourner le tambour entièrement dans le sens (A) montré sur la Fig. 11-1 et passer le cordon sur les organes indiqués et dans l'ordre numérique.
2. Tourner l'arbre de commande d'accord entièrement dans le sens (B) montré sur la Fig. 11-1 et fixer son index comme le montre la Fig. 11-1.

MECHANICAL ADJUSTMENT

ITEM	JIG	ADJUSTMENT POINTS	REMARKS (CHECK)
Driving power	Tape tension measuring cassette TW-2412	—	(More than 150 g)
Torque	Torque meter Play TW-2111 Fast-forward TW-2231 Rewind TW-2231	—	(Play: 35-60 g-cm) (Fast-forward: 85-120 g-cm) (Rewind: 85-120 g-cm)
Azimuth	Test tape MTT-114	Azimuth adjusting screw	Sine waveform attains the maximum.
Tape speed	Test tape High speed MTT-111 (H only) Normal speed MTT-111	High speed* Deck 1: VR501 Deck 2: VR502 Normal speed Deck 1: VR503 Deck 2: VR504 *Short TP501 ①-②	High speed* Deck 1: 5250 ± 60 Hz Deck 2: within ± 10 Hz different from that of Deck 1 Normal speed 3000 ± 30 Hz

NOTE:

Perform the high speed adjustment first and then the adjustment.

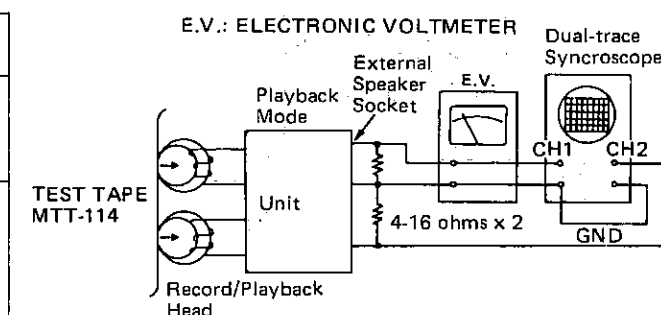


Figure 12-1 AZIMUTH

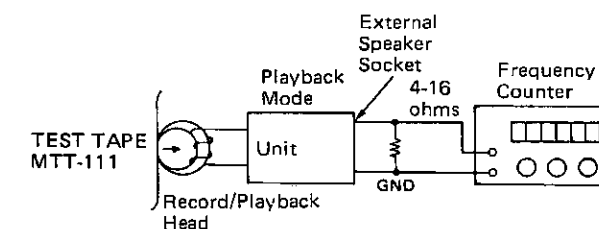


Figure 12-2 TAPE SPEED

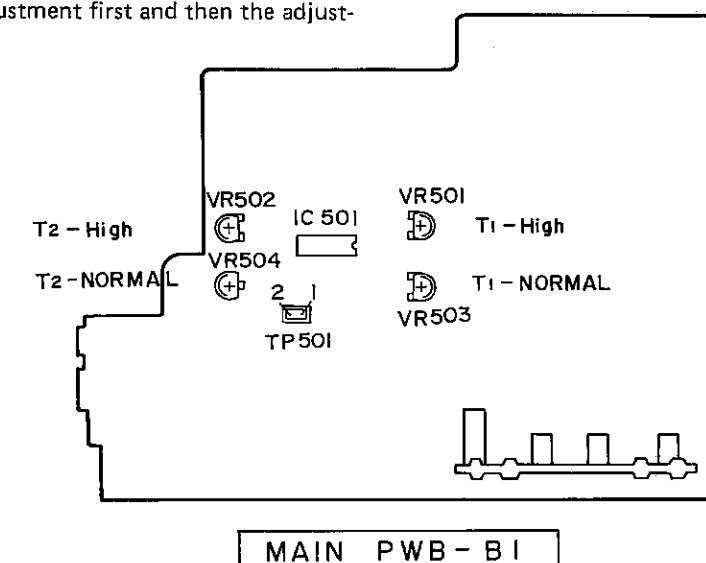


Figure 12-3 ADJUSTMENT POINTS

④ MECHANISCHE EINSTELLUNG

BENEN- NUNG	FÜHRUNG- SLEHRE	EINSTELL-PUNKT	BEMERKUNGEN (PRÜFUNG)
Antriebs- kraft	Bandzug- Meßcassette TW-2412	—	(Mehr als 150 g)
Dreh- moment	Drehmoment- messer Wiedergabe: TW-2111 Schnellvorlauf: TW-2231 Rückspulung: TW-2231	—	(Wiedergabe: 30 — 60 g-cm) (Schnellvorlauf: 85 — 120 g-cm) (Rückspulung: 85 — 120 g-cm)
Azimut	Testband MTT-114	Azimuteinstell- schraube	Sinuswellenform wird maximal.
Bandge- schwin- digkeit	Testband Hohe Geschwindig- keit MTT-111 Normal Geschwin- digkeit MTT-111	Hohe Geschwindigkeit Deck 1: VR501 Deck 2: VR503 Normal Geschwindigkeit Deck 1: VR502 Deck 2: VR504 * Bei der Einstel- lung der hohen Geschwindigkeit TP501 ①—②	Hohe Geschwindigkeit Deck 1: 5 250±60 Hz Deck 2: Bis zu -10 Hz Unterschied gegen- über Deck 1 Normal Geschwindigkeit Deck 1: 3 000±30 Hz

⑤ RÉGLAGE MÉCANIQUE

ARTICLE	GABARIT	POINTS DE RÉGLAGE	REMARQUES (VÉRIFICATION)
Puissance d'entraî- nement	Cassette de mesure de tension de la bande TW-2412	—	(Plus de 150 g)
Couple	Compteur de couple Lecture: TW-2111 Avance rapide: TW-2231 Rebobinage: TW-2231	—	(Lecture: 30 à 60 g-cm) (Avance rapide: 85 à 120 g-cm) (Rebobinage: 85 à 120 g-cm)
Azimuth	Bande d'essai MTT-114	Vis de réglage de l'azimuth	La forme d'onde sinusoïdale atteint le maximum.
Vitesse de la bande	Bande d'essai Grande vitesse: MTT-111 Vitesse normale: MTT-111	Grande vitesse Platine 1: VR501 Platine 2: VR503 Vitesse normale Platine 1: VR502 Platine 2: VR504 *Mettre la platine TP501 ①—②	Grande vitesse Platine 1: 5 250±60 Hz Platine 2: De l'ordre de -10 Hz de celle de la Platine 1 Vitesse normale Platine 1: 3 000±30 Hz

E

CIRCUIT ADJUSTMENT (TUNER SECTION)

FM IF/RF ADJUSTMENT

SWITCH POSITION		Band: FM mono Antenna Selector: EXT			
SIGNAL GENERATOR		400 Hz, 30%, FM modulated			
STEP	TEST STAGE	FRE-QUENCY	DIAL POINTER SETTING	AD-JUST-MENT	REMARKS
1	IF	10.7 MHz	High frequency	T102	1. Using a minus driver, turn the core of T105 counterclockwise before taking it out of the bobbin. 2. Adjust for best "IF" curve.
2	Detection			T105	Adjust for best "S" curve.
3	Repeat steps 1 and 2 until no further improvement can be made.				
4	Band coverage	87.35 MHz	Lowest frequency	L104	Adjust for maximal output.
5		108.3 MHz	Highest frequency	TC103	
6	Tracking	90 MHz	90 MHz	L102,L103	Adjust for maximal output.
7		106 MHz	106 MHz	TC101,TC102	
8	Repeat steps 4, 5 and 6, 7 until no further improvement can be made.				

VCO FREQUENCY ADJUSTMENT

SIGNAL GENERATOR		400 Hz, 30%, FM modulated (mono signal)	
FREQUENCY	DIAL POINTER SETTING	AD-JUST-MENT	REMARKS
FM mono position		FM stereo position (unmodulated)	
98 MHz at 60 dB	98 MHz	VR101	Adjust for 19 kHz ± 25 Hz.

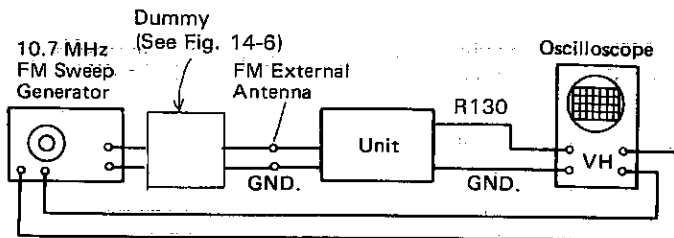


Figure 14-1 FM IF

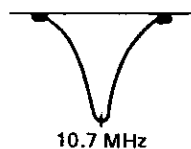


Figure 14-2 IF CURVE

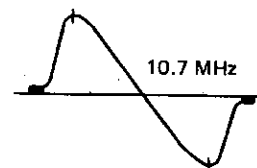


Figure 14-3 S CURVE

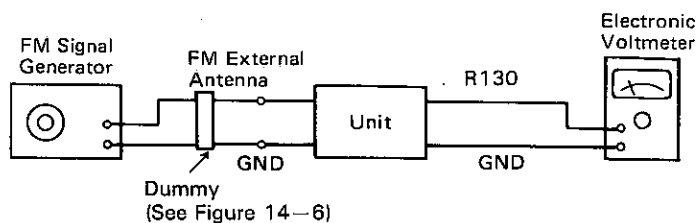


Figure 14-4 FM RF

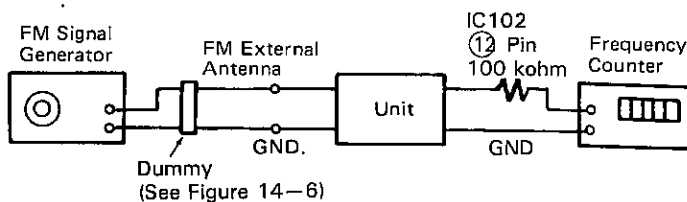
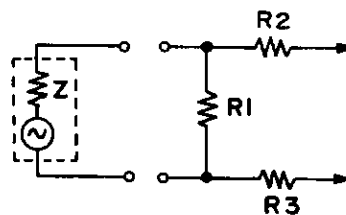


Figure 14-5 VCO FREQUENCY



To Telescopic Rod Antenna

Z = 50 ohms

R1 = 50 ohms

R2 = 125 ohms

R3 = 150 ohms

Z = 75 ohms

R1 = 75 ohms

R2 = 112.5 ohms

R3 = 150 ohms

To Chassis GND

Z : Output impedance of signal generator

Figure 14-6 FM DUMMY

D

UKW-ZF/HF-EINSTELLUNG

SCHALTER- STELLUNG		FM mono Antennenwähler: EXT			
SIGNAL- GENERATOR		400 Hz, 30%, UKW-Modulation			
SCHRITT	PRÜF- STUFE	FRE- QUENZ	SKALEN- ZEIGE- REINSTE- LLUNG	EIN- STEL- LUNG	BEMERKUNGEN
1	ZF	10,7 MHz	Hoch- frequenz	T102	1. Den Kern von T105 mit Hilfe eines normalen Schraubenziehers entgegen dem Uhrzeigersinn drehen, bevor dieser aus der Spule genommen wird. 2. Auf beste ZF-Kurve einstellen.
2	Detektion			T105	Auf beste S-Kurve einstellen.
3	Die Schritte 1 und 2 wiederholen, bis keine weitere Verbesserung möglich ist.				
4	Frequenz- bereich	87,35 MHz	Unterste Frequenz	L104	Auf maximalen Ausgang einstellen.
5		108,3 MHz	Höchste Frequenz	TC103	
6	Gleichlauf	88 MHz	88 MHz	L102,L103	Auf maximalen Ausgang einstellen.
7		108 MHz	108 MHz	TC101,TC102	
8	Die Schritte 4,5,6 und 7 wiederholen, bis keine weitere Verbesserung möglich ist.				

F

RÉGLAGE DE FI/RF FM

POSITION DU COMMUTATEUR		FM mono Sélecteur d'antenne: EXT			
GÉNÉRATEUR DE SIGNAUX		400 Hz, 30%, modulé FM			
ÉTAPE	ÉTAGE D'ESSAI	FRÉQUENCE	MISE AU POINT DE L'INDEX	RÉGLAGE	REMARQUES
1	FI	10,7 MHz	Haute fréquence	T102	1. À l'aide d'un tournevis plat, tourner le noyau de T105 à gauche avant de le sortir de la bobine. 2. Régler sur la meilleure courbe "FI".
2	Détection			T105	Régler sur la meilleure courbe "S".
3	Refaire les étapes 1 et 2 jusqu'à ce qu'une amélioration ultérieure ne puisse plus être obtenue.				
4	Étendur de gamme d'ondes	87,35 MHz	Fréquence la plus basse	L104	Régler sur la sortie maximale.
5		108,3 MHz	Fréquence la plus élevée	TC103	
6	Alignement	88 MHz	88 MHz	L102,L103	Régler sur la sortie maximale.
7		108 MHz	108 MHz	TC101,102	
8	Refaire les étapes 4,5 et 6,7 jusqu'à ce qu'une amélioration ultérieure ne puisse plus être obtenue.				

EINSTELLUNG DER VCO-FREQUENZ

SIGNAL-GENERATOR	400 Hz, 30%, UKW-Modulation (Mono-Signal)		
FREQUENZ	SKALENZEIGEREINSTELLUNG	EINSTELLUNG	BEMERKUNGEN
"FM mono" einstellen		"FM stereo" einstellen (unmoduliert)	
98 MHz bei 60 dB	98 MHz	VR101	Auf 19 kHz ± 25 Hz einstellen.

RÉGLAGE DE LA FRÉQUENCE VCO

GÉNÉRATEUR DE SIGNAUX		400 Hz, 30%, modulé FM (mono signal)	
FRÉQUENCE	MISE AU POINT DE L'INDEX	RÉGLAGE	REMARQUES
Position FM mono		Position FM stéréo (non modulés)	
98 MHz à 60 dB	98 MHz	VR101	Réglage sur 19 kHz ± 25 Hz.

DIE ANWEISUNG DER FREQUENZEINSTELLUNG

Um der Postverfügung Nr. 478/1981 zu entsprechen, wird der UKW-Frequenzbereich mit Hilfe der Oszillator-spule (L104-untere Eckfrequenz: 87,5 MHz) und des Oszillatortrimmers (TC1-obere Eckfrequenz: 108,0 MHz) eingestellt.

④ SCHALTUNGSEINSTELLUNG (TUNERTEIL)

AM-ZF/HF EINSTELLUNG

SIGNAL-GENERATOR		400 Hz, 30%, AM-Modulation			
SCH- RITT	PRÜF- STUFE	FRE- QUENZ	SKALEN- ZEIGEREIN- STELLUNG	EIN- STEL- LUNG	BEMERKUNGEN
AM ZF					
1	ZF	455 kHz	Hoch- frequenz	T103	Auf beste ZF- Kurve einstellen.
MW HF					
2	Frequenz- bereich	513 kHz	Unterste Frequenz	L111	Auf maximalen Ausgang einstellen.
3		1.650 kHz	Höchste Frequenz	TC108	
4	Gleichlauf	600 kHz	600 kHz	L108	
5		1 400 kHz	1 400 kHz	TC105	
6	Die Schritte 2,3,4 und 5 wiederholen, bis keine weitere Ver- besserung möglich ist.				
LW HF					
7	Frequenz- bereich	144 kHz	Unterste Frequenz	L110	Auf maximalen Ausgang einstellen.
8		295 kHz	Höchste Frequenz	TC107	
9	Gleichlauf	160 kHz	160 kHz	L107	
10		260 kHz	260 kHz	TC104	
11	Die Schritte 7,8,9 und 10 wiederholen, bis keine weitere Ver- besserung möglich ist.				
KW HF					
12	Frequenz- bereich	5,85 kHz	Unterste Frequenz	L112	Auf maximalen Ausgang einstellen.
13		18,3 MHz	Höchste Frequenz	TC109	
14	Gleichlauf	6,5 MHz	6,5 MHz	L109	
15		16 MHz	16 MHz	TC106	
16	Die Schritte 12,13,14 und 15 wiederholen, bis keine weitere Verbesserung möglich ist.				

⑤ RÉGLAGE DU CIRCUIT (SECTION DU TUNER)

RÉGLAGE DE FI/RF AM

GÉNÉRATEUR DE SIGNAUX		400 Hz, 30%, modulé AM			
ÉTAPE	ÉTAGE D'ESSAI	FRÉ-QUENCE	MISE AU POINT DE L'INDEX	RÉ-GLAGE	REMARQUES
FI AM					
1	FI	455 kHz	Haute fréquence	T103	Régler sur la meilleure courbe "FI".
RF PO					
2	Étendur de gamme d'ondes	513 kHz	Fréquence la plus basse	L111	Régler sur la sortie maximale.
3		1.650 kHz	Fréquence la plus élevée	TC108	
4	Ali-gnement	600 kHz	600 kHz	L108	
5		1 400 kHz	1 400 kHz	TC105	
6	Refaire les étapes 2,3,4 et 5 jusqu'à ce qu'une amélioration ultérieure ne puisse plus être obtenue.				
RF GO					
7	Étendur de gamme d'ondes	144 kHz	Fréquence la plus basse	L110	Régler sur la sortie maximale.
8		295 kHz	Fréquence la plus élevée	TC107	
9	Ali-gnement	160 kHz	160 kHz	L107	
10		260 kHz	260 kHz	TC104	
11	Refaire les étapes 7,8,9 et 10 jusqu'à ce qu'une amélioration ultérieure ne puisse plus être obtenue.				
RF OC					
12	Étendur de gamme d'ondes	5,85 kHz	Fréquence la plus basse	L112	Régler sur la sortie maximale.
13		18,3 MHz	Fréquence la plus élevée	TC109	
14	Ali-gnement	6,5 MHz	6,5 MHz	L109	
15		16 MHz	16 MHz	TC106	
16	Refaire les étapes 12,13,14 et 15 jusqu'à ce qu'une amélioration ultérieure ne puisse plus être obtenue.				

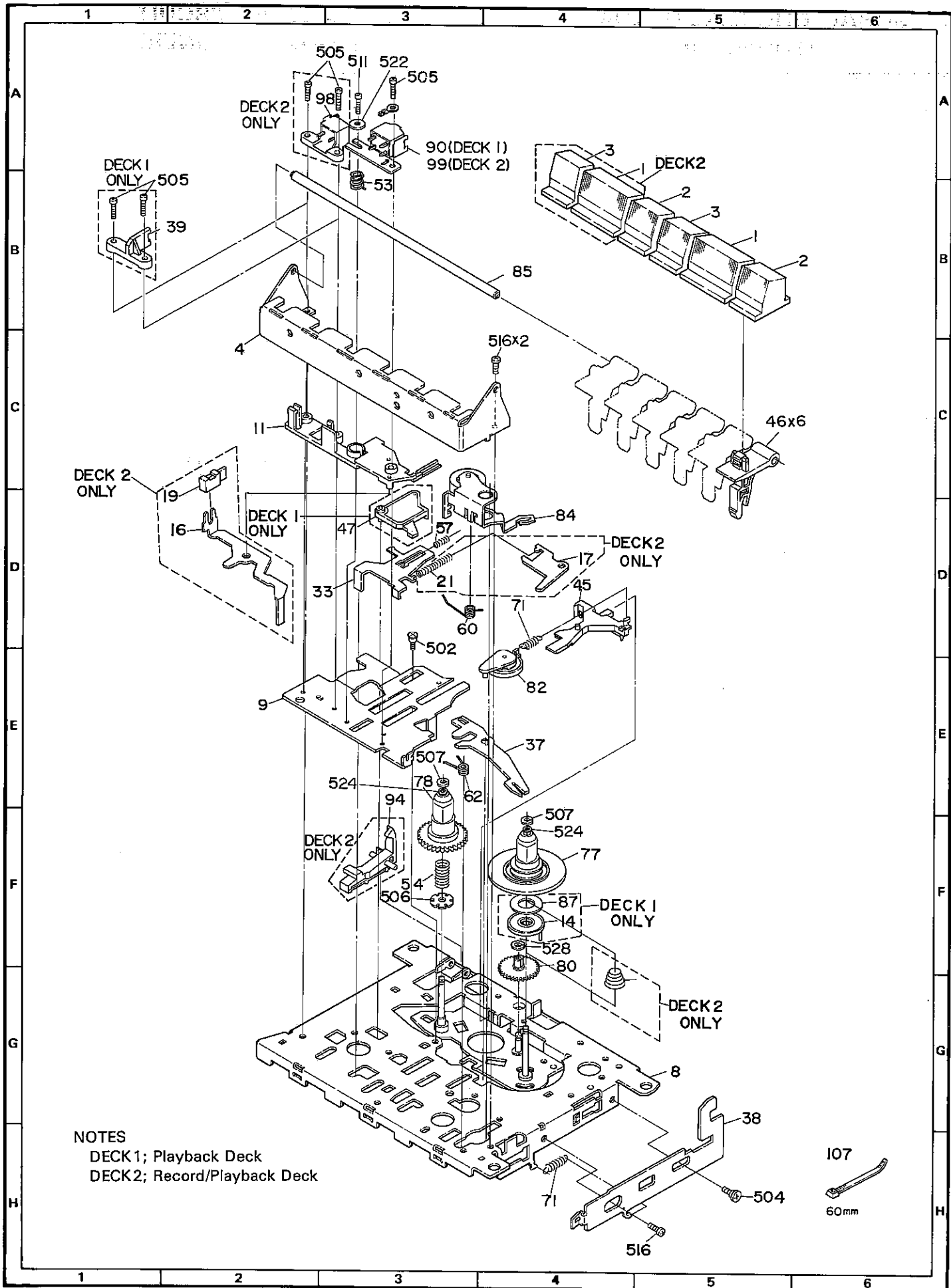
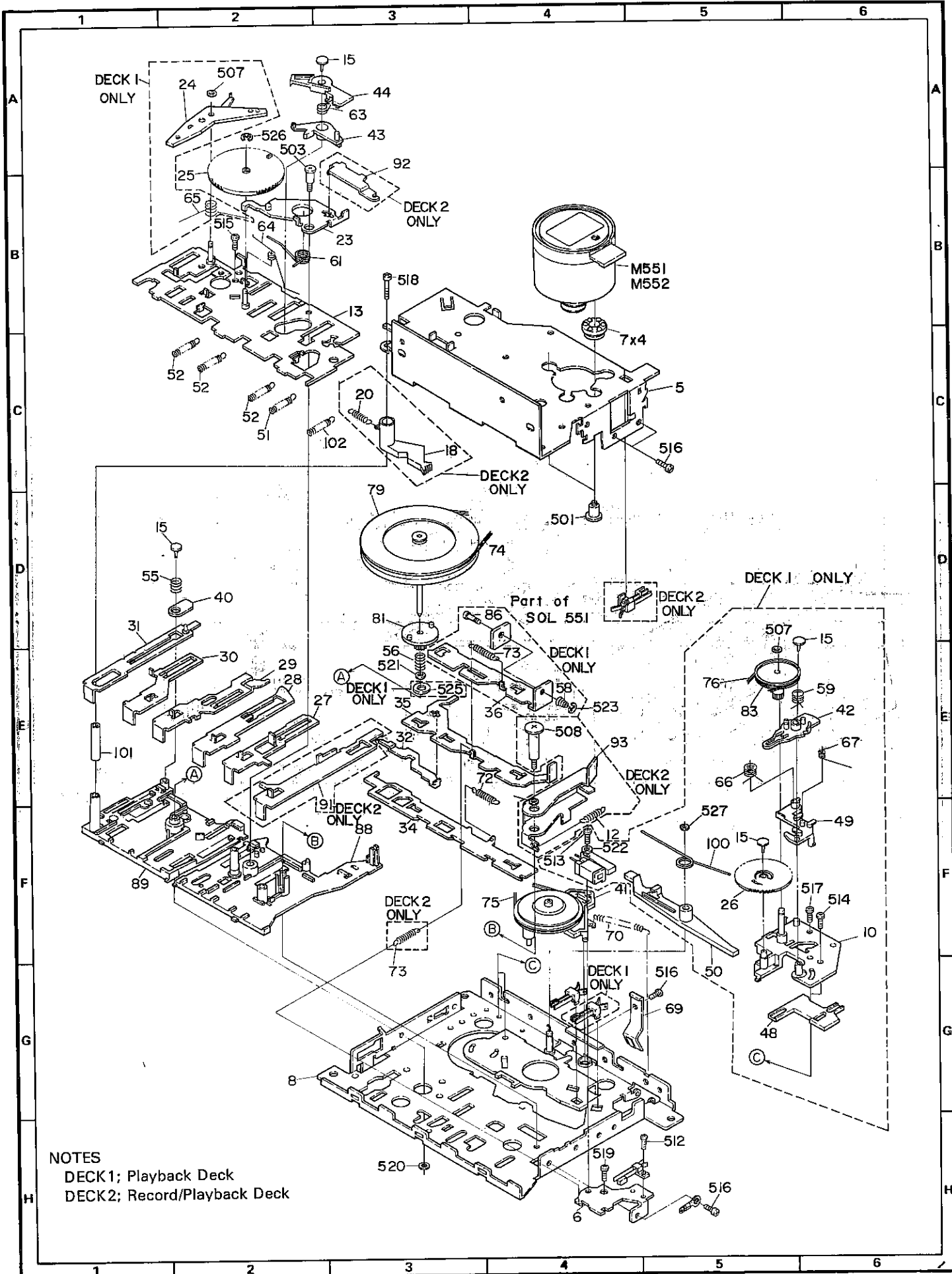


Figure 18 MECHANISM EXPLODED VIEW (1/2)



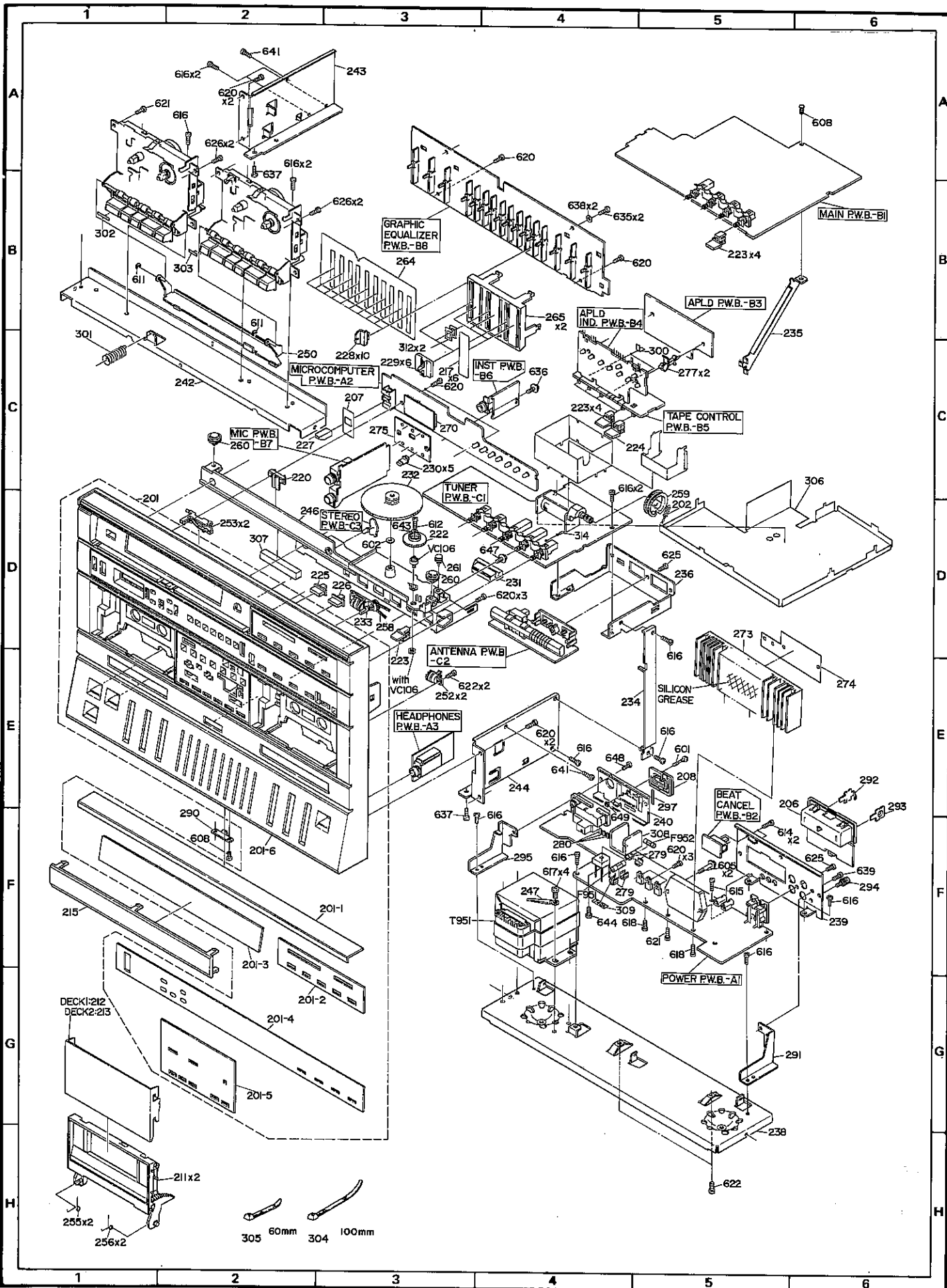


Figure 20 CABINET EXPLODED VIEW (1/2)

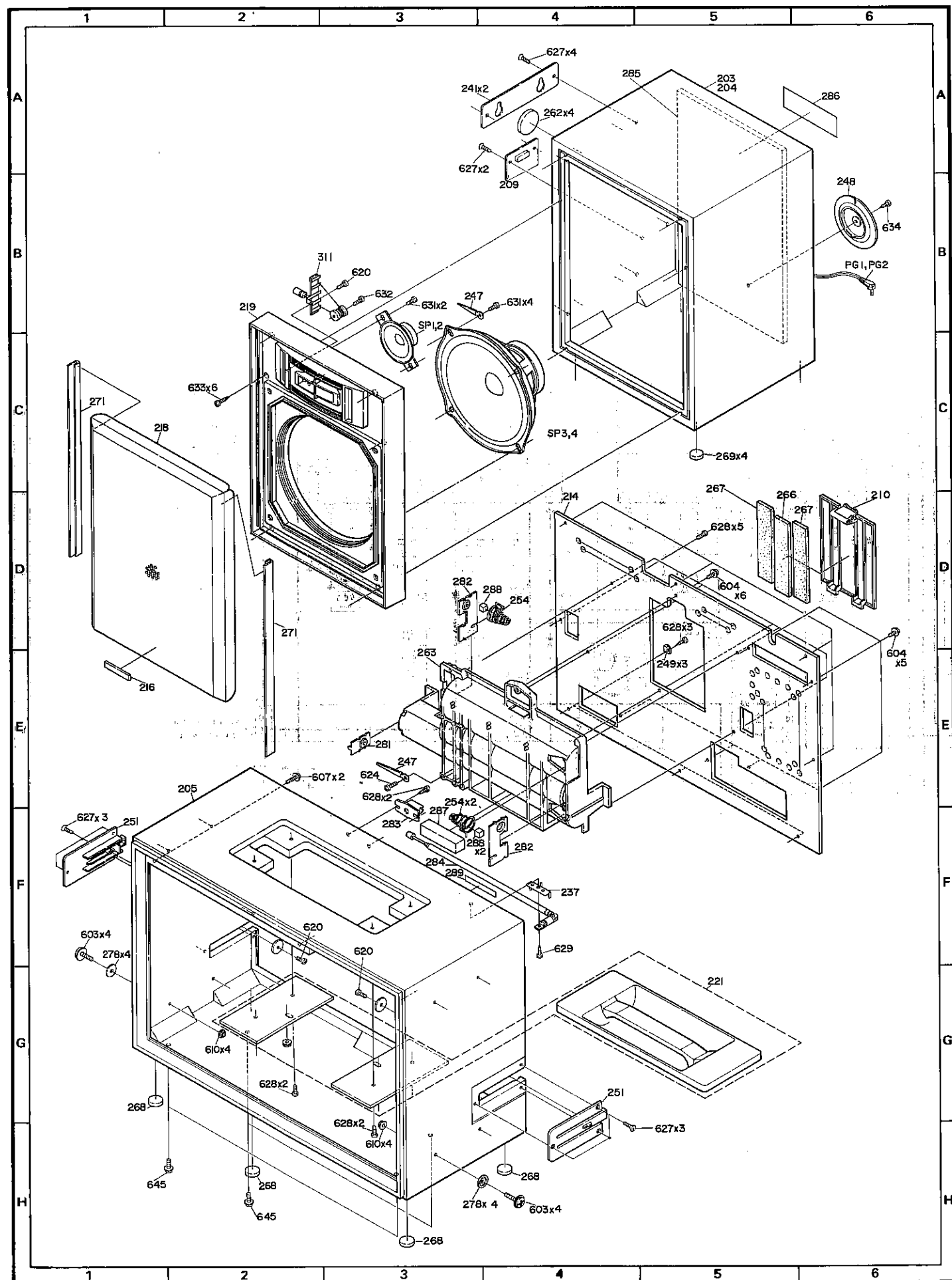


Figure 21 CABINET EXPLODED VIEW (2/2)

NOTES ON SCHEMATIC DIAGRAM

E

• Resistor:

To differentiate the units of resistors, such symbol as K is used: the symbol K means 1000 ohm and the resistor without any symbol is ohm-type resistor.

• Capacitor:

To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.

• The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.

() : AM mode < > : FM stereo

Marking except for () : FM mode

- Parts marked with "Δ" () are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.

D

ANMERKUNGEN ZUM SCHEMATISCHEN SCHALTPLAN

• Widerstände:

Um die Einheiten der Widerstände unterscheiden zu können, werden Symbole wie K benutzt. Das Symbol K bedeutet 1000 Ohm. Bei Widerständen ohne Symbol handelt es sich um ohmsche Widerstände.

• Kondensatoren:

Zum Bezeichnen der Kondensatoreinheit wird das Symbol P benutzt; dieses Symbol P bedeutet Nanofarad. Die Einheit eines Kondensators ohne Symbol ist Mikrofarad. Für Elektrolytkondensatoren wird die Bezeichnung "Kapazität / Stehspannung" benutzt.

• Die in den einzelnen Teilen angegebenen Spannungen werden mit einem Digitalvielfachmeßgerät zwischen dem betreffenden Teil und dem Chassis ohne Signaleitung gemessen.

() : AM-Betriebsart < > : UKW-Stereo

Anzeichen, außer () : UKW-Betriebsart

- Die mit Δ () bezeichneten Teile sind besonders wichtig für die Aufrechterhaltung der Sicherheit. Beim Wechseln dieser Teile sollten die vorgeschriebenen Teile immer verwendet werden, um sowohl die Sicherheit als auch die Leistung des Gerätes aufrechtzuerhalten.

- Änderungen des schematischen Schaltplans und der Verdrahtungsseite der Leiterplatte für dieses Modell im Sinne von Verbesserungen jederzeit vorbehalten.

F

REMARQUES CONCERNANT LE DIAGRAMME SCHEMATIQUE

• Résistance:

Pour différencier les unités de résistances, on utilise des symboles tels que K: le symbole K signifie 1000 ohms et la résistance donnée sans symbole est une résistance de type ohm.

• Condensateur:

Pour indiquer l'unité de condensateur, on utilise le symbole P; ce symbole P signifie micro-microfarad, et l'unité de condensateur donnée sans ce symbole est le microfarad. En ce qui concerne le condensateur électrolytique, on utilise l'expression "tension de régime/capacité"

• La tension indiquée dans chaque section est celle mesurée par un multimètre numérique entre la section en question et le châssis, en l'absence de tout signal.

() : Mode AM < > : FM stéréo

Marque, à l'exception de () : Mode FM

- Les pièces portant la marque Δ () sont particulièrement importantes pour le maintien de la sécurité. S'assurer de les remplacer par des pièces du numéro de pièce spécifié pour maintenir la sécurité et la performance de l'appareil.
- Le diagramme schématique et le côté câblage de la PMI de ce modèle sont sujets à modifications sans préavis pour l'amélioration de ce produit.

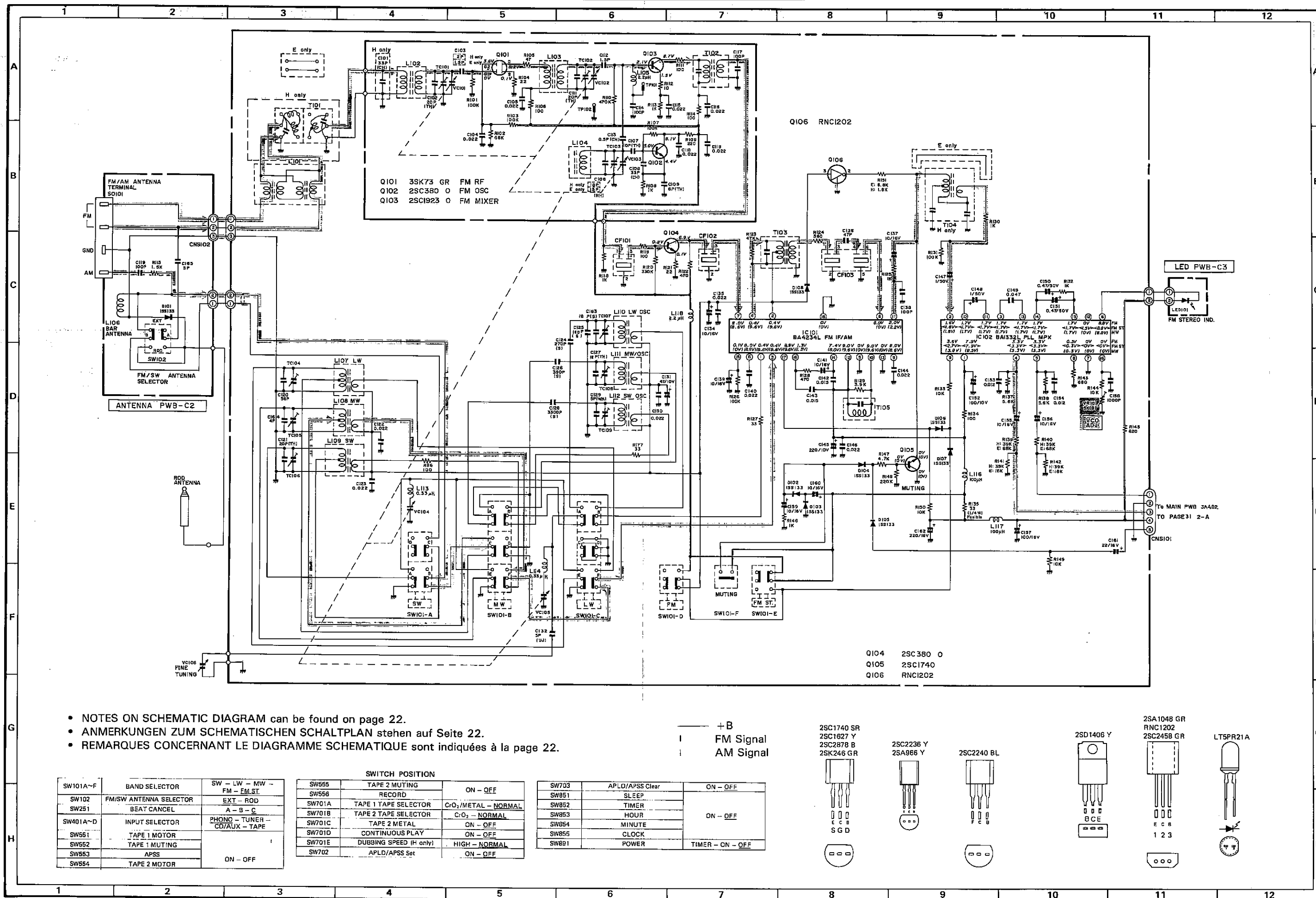


Figure 23 SCHEMATIC DIAGRAM (1/4)

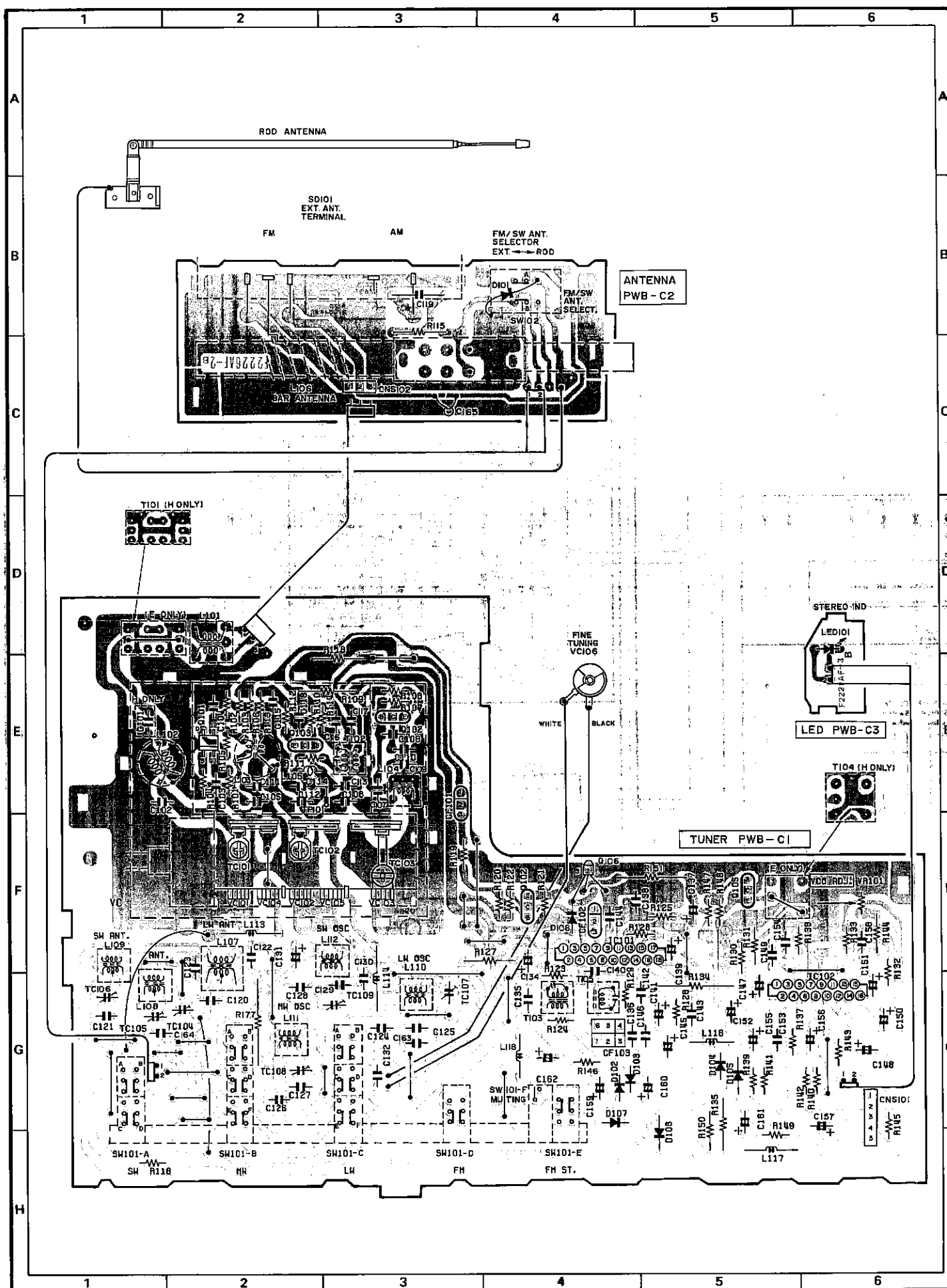


Figure 25 WIRING SIDE OF P.W.BOARD (1/3)

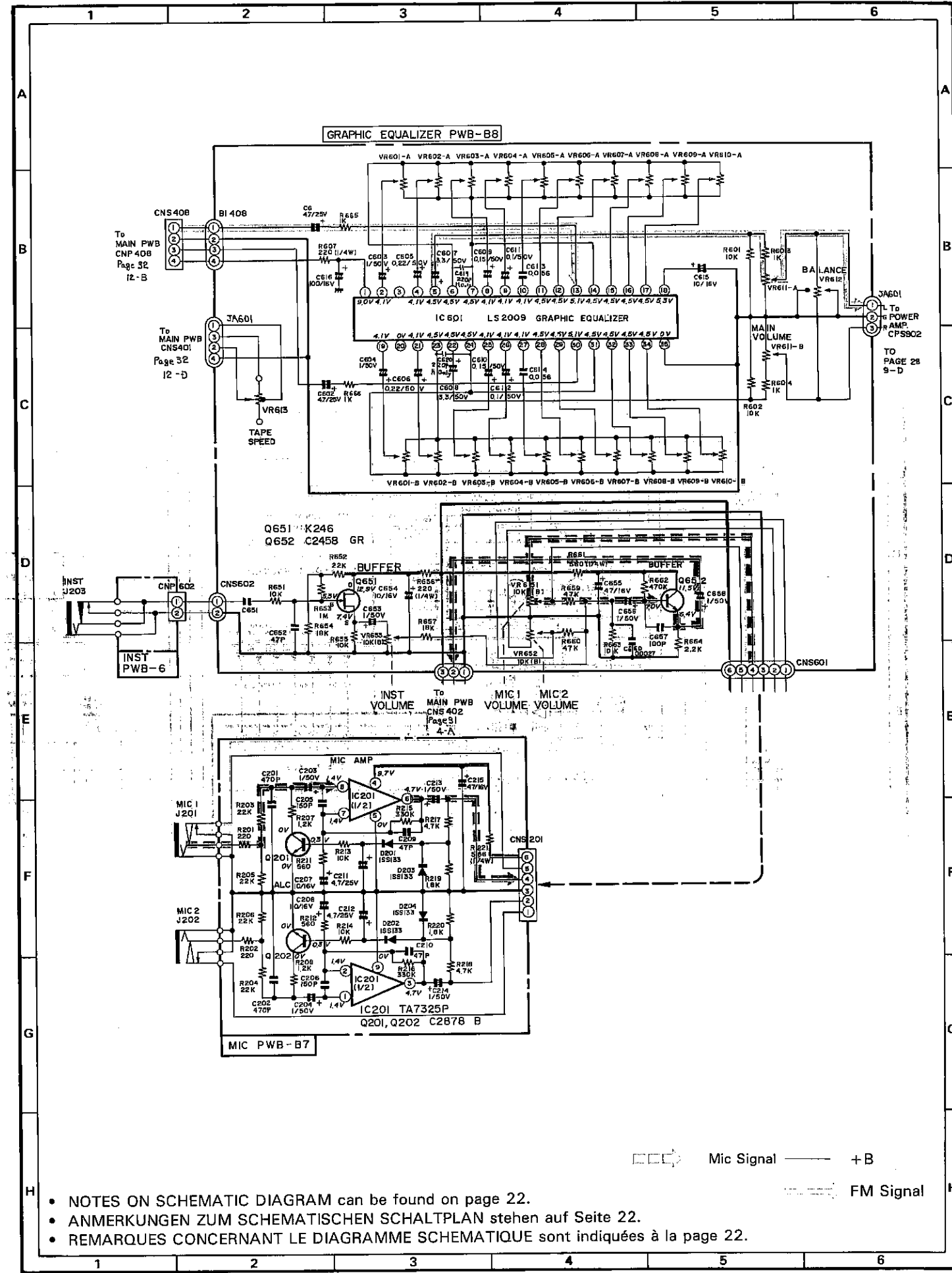


Figure 26 SCHEMATIC DIAGRAM (2/4)

- NOTES ON SCHEMATIC DIAGRAM can be found on page 22.
- ANMERKUNGEN ZUM SCHEMATISCHEN SCHALTPLAN stehen auf Seite 22.
- REMARQUES CONCERNANT LE DIAGRAMME SCHEMATIQUE sont indiquées à la page 22.

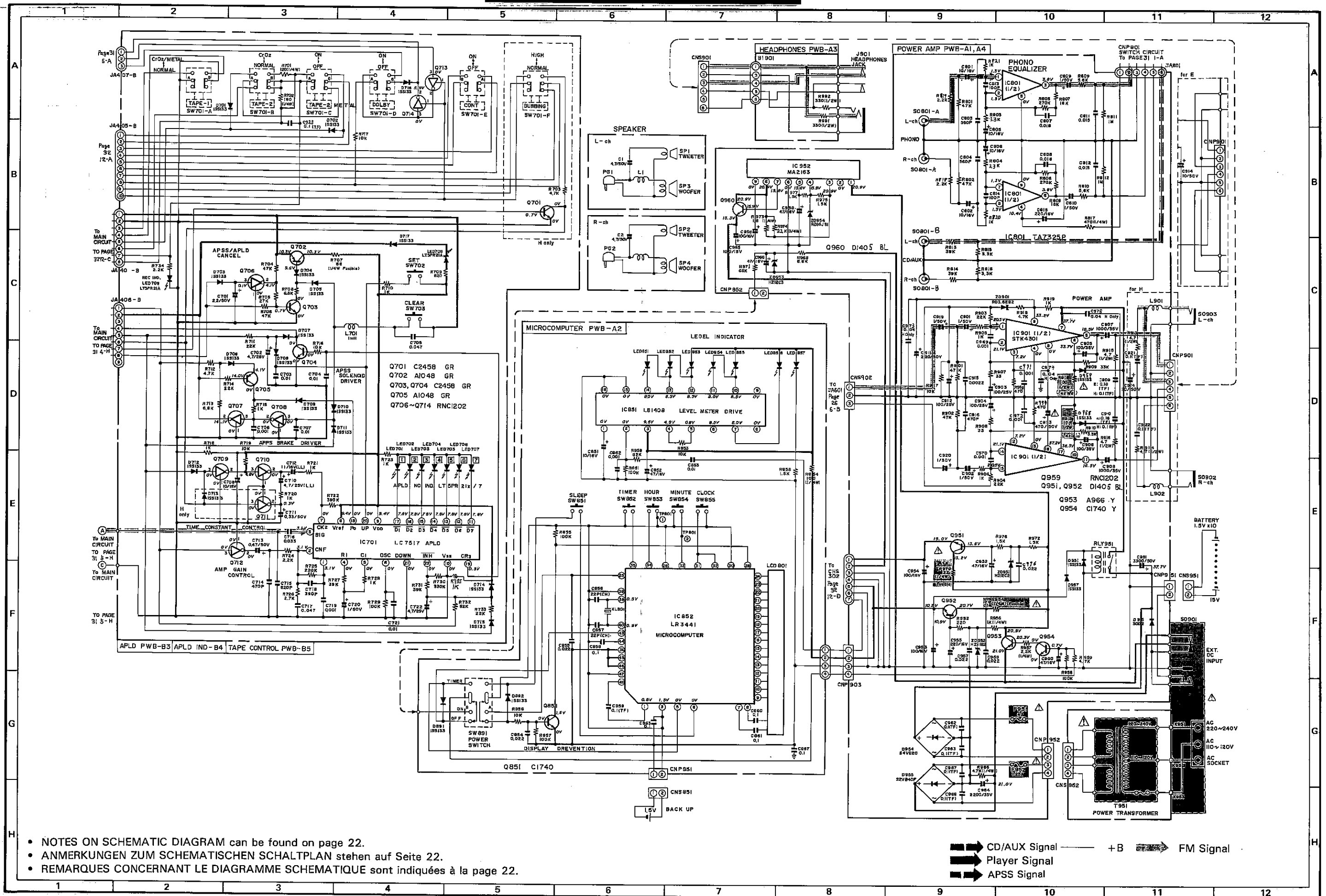


Figure 27 SCHEMATIC DIAGRAM (3/4)



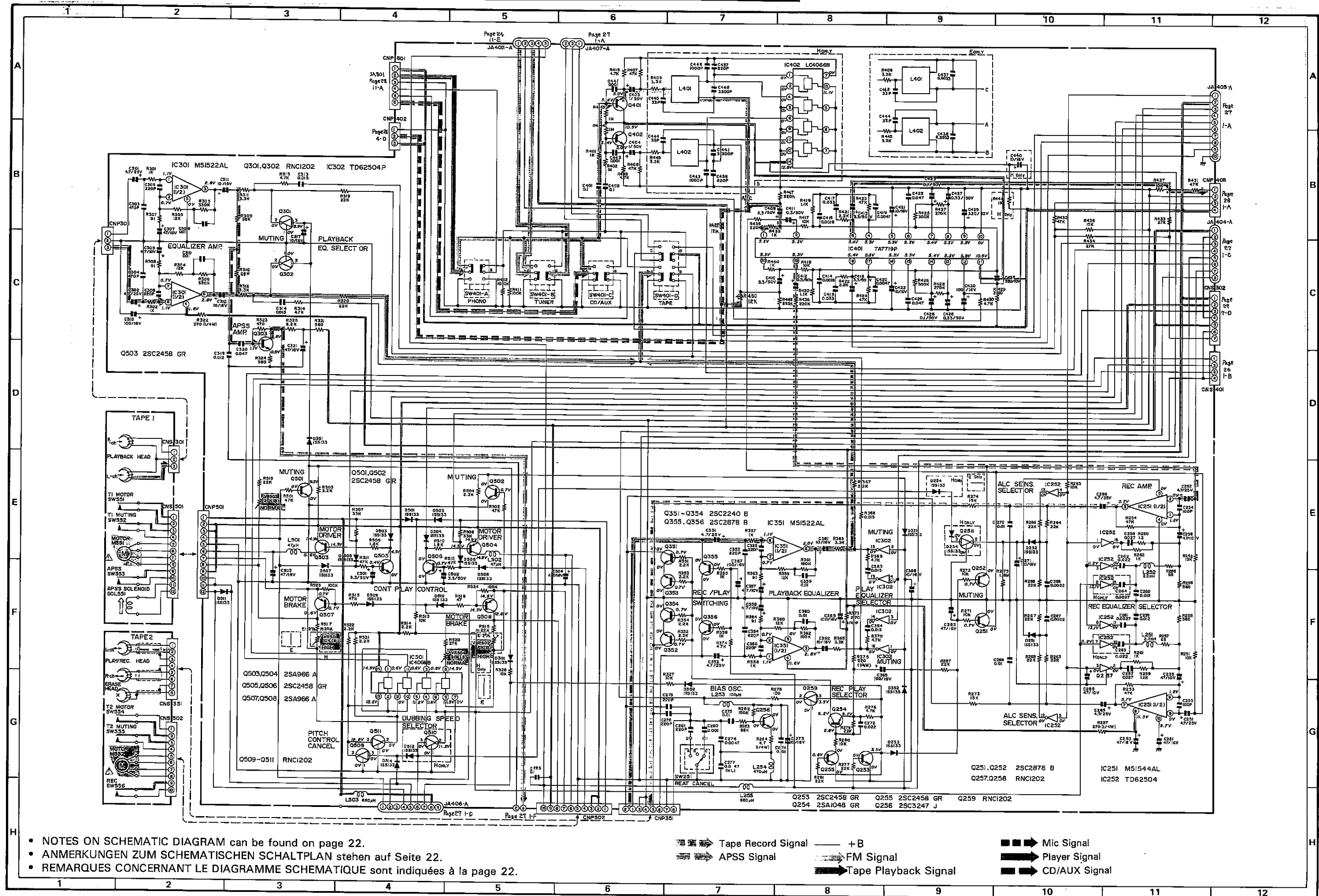
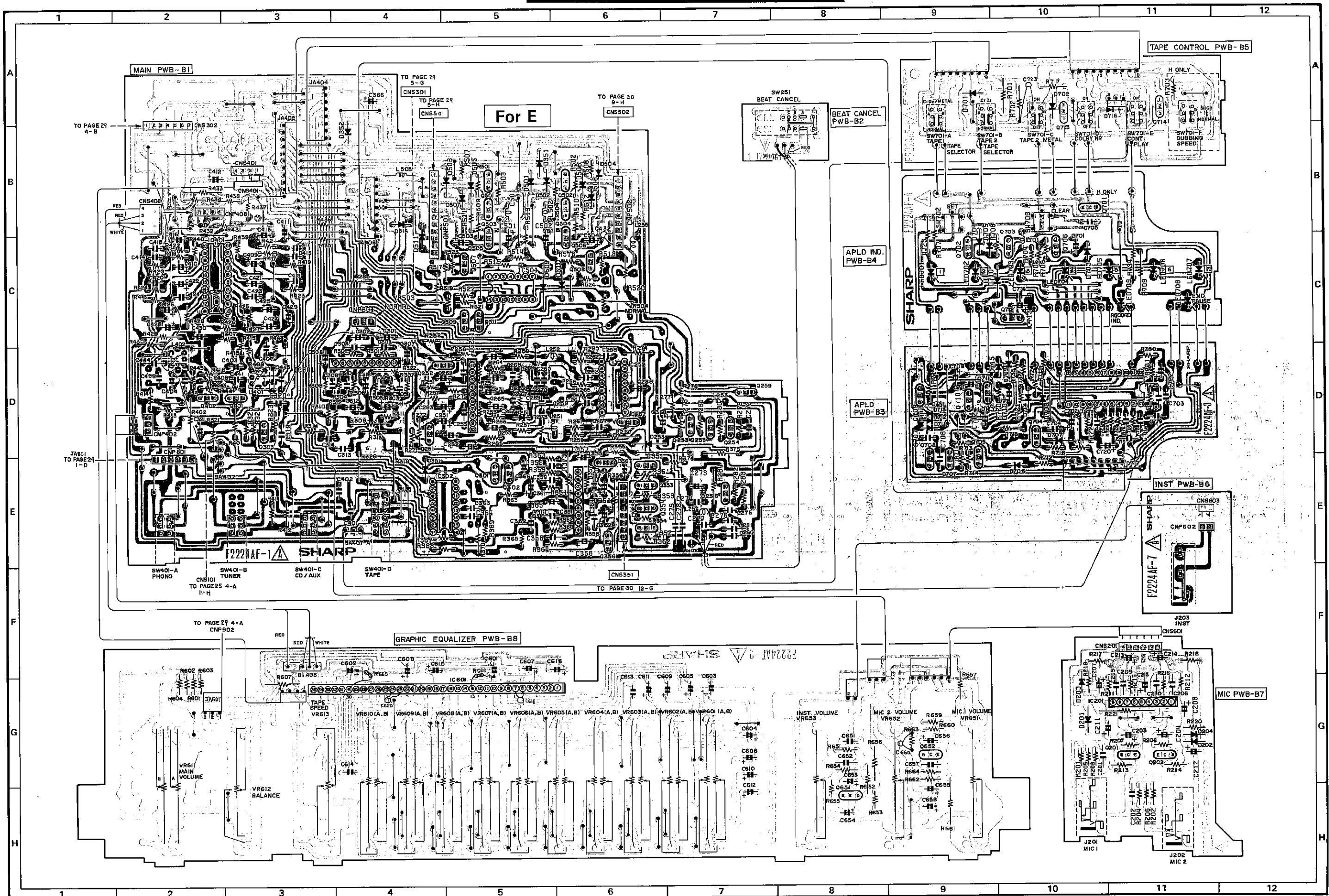
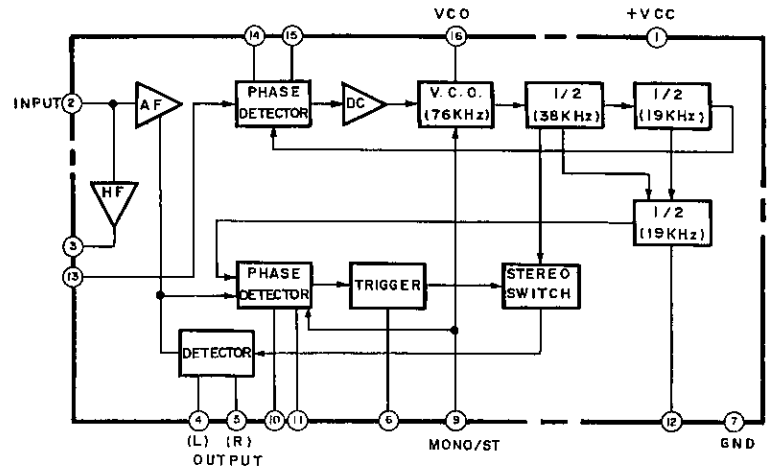
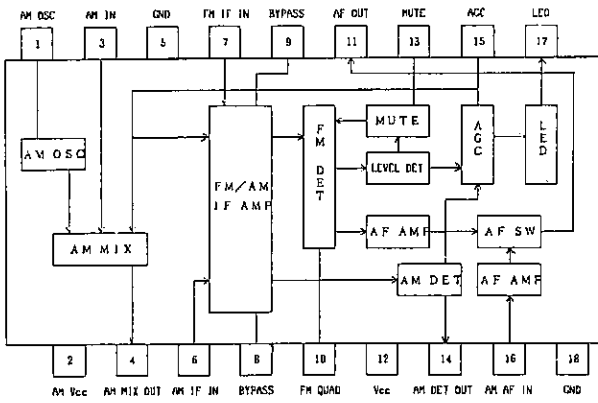


Figure 31 SCHEMATIC DIAGRAM (4/4)



BA4234L

BA1332L



LC7517

LB1408

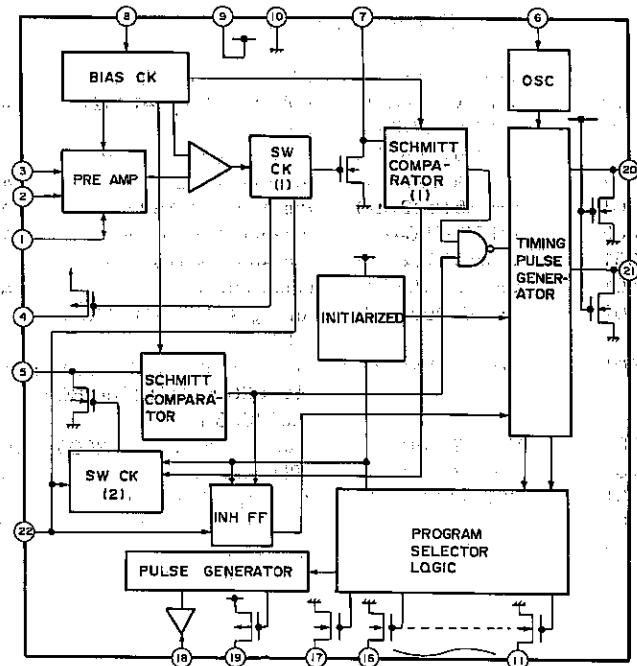
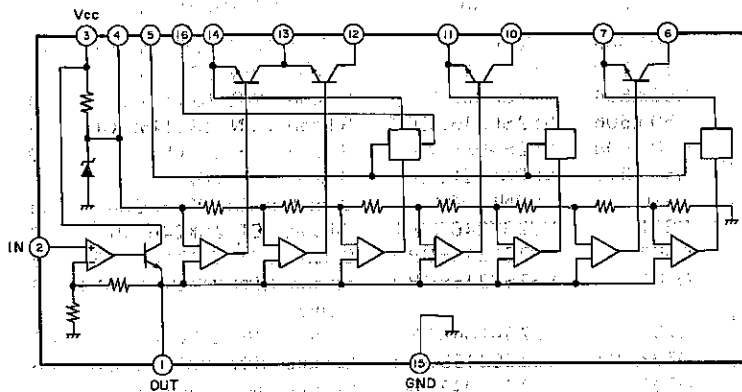


Figure 37 EQUIVALENT CIRCUIT (BLOCK DIAGRAM) OF IC

(E)

REPLACEMENT PARTS LIST

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

NOTE:

Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

(D)

ERSATZTEILLISTE

"BESTELLEN VON ERSATZTEILEN"

Um Ihren Auftrag schnell und richtig ausführen zu können, bitten wir um die folgenden Angaben.

1. MODELLNUMMER
2. REF. NR.
3. TEIL NR.
4. BESCHREIBUNG

ANMERKUNGEN:

Die mit △ bezeichneten Teile sind besonders wichtig für die Aufrechterhaltung der Sicherheit. Beim Wechseln dieser Teile sollten die vorgeschriebenen Teile immer verwendet werden, um sowohl die Sicherheit als auch die Leistung des Gerätes aufrechtzuerhalten.

(F)

LISTE DES PIÈCES DE RECHANGE

"COMMENT COMMANDER DES PIÈCES DE RECHANGE"

Pour voir votre commande exécutée de manière rapide et correcte, veuillez fournir les renseignements suivants.

1. NUMÉRO DU MODÈLE
2. N° DE RÉFÉRENCE
3. N° DE LA PIÈCE
4. DESCRIPTION

NOTE:

Les pièces portant la marque △ sont particulièrement importantes pour le maintien de la sécurité. S'assurer de les remplacer par des pièces du numéro de pièce spécifié pour maintenir la sécurité et la performance de l'appareil.

REF.NO.	PART NO.	DESCRIPTION	CODE
INTEGRATED CIRCUITS			
IC101	VHiBA4234L/-1	FM IF/AM BA4234L	AH
IC102	VHiBA1332L/-1	FM Multiplex, BA1332L	AG
IC201	VHiTA7325P/-1	Pre Amp., TA7325P	AF
IC251	VHiM51544AL/-1	Line Amp, M51544AL	AG
IC252	VHiTD62504/-1	Inverter, TD62504P	AG
IC301	VHiM51522AL/-1	Pre Amp., M51522AL	AF
IC302	VHiTD62504/-1	Inverter, TD62504P	AG
IC351	VHiM51522AL/-1	Pre Amp., M51522AL	AF
IC401	VHiTA7719P/-1	Line Amp, TA7719P	AP
IC402	VHiLC4066BS/-1	Analog Switch LC14066 B, H Only	AH
IC501	RH-iX1215AFZZ	Analog Switch MC14066 BCP, LC4066 B, MC14066 BCP, LC14066 B	AH
IC601	VHiLS2009///-1	Graphic Equalizer, LS2009	AW
IC701	VHiLC7517///-1	APLD Circuit, LC7517	AL
IC801	VHiTA7325P/-1	Pre Amp., TA7325P	AF
IC851	VHiLB1408///-1	Meter Driver LB1408	AH
IC852	VHiLR3441///-1	Microcomputer, LR3441	AN
IC901	VHiSTK4301/-1	Power Amp, STK4301	AV
IC952	VHiMA2613///-1	Voltage Regulator, MA2613	AG

TRANSISTORS

Q101	VS3SK73-GR/-1	FET, Silicon, N-Channel 3SK73 GR	AF
Q102	VS2SC380-δ/-1	Silicon, NPN, 2SC380 O	AB
Q103	VS2SC1923δ/-1	Silicon, NPN, 2SC1923 O	AB
Q104	VS2SC380-δ/-1	Silicon, NPN, 2SC380 O	AB
Q105	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q106	VSRNC1202///-1	Silicon, RNC1202	AB
Q201,202	VS2SC2878B/-1	Silicon, NPN, 2SC2878 B	AC
Q251,252	VS2SC2878B/-1	Silicon, NPN, 2SC2878 B	AC
Q253	VS2SC2458GR-1	Silicon, NPN, 2SC2458 GR	AB
Q254	VS2SA1048GR-1	Silicon, PNP, 2SA1048 GR	AB
Q255	VS2SC2458GR-1	Silicon, NPN, 2SC2458 GR	AB
Q256	VS2SC3247J/-1	Silicon, NPN, 2SC3247 J	AD
Q257,259	VSRNC1202///-1	Digital, RNC1202	AB
Q258	VSRNC1202///-1	Digital, RNC1202, H Only	AB
Q301,302	VSRNC1202///-1	Digital, RNC1202	AB
Q303	VS2SC2458GR-1	Silicon, NPN, 2SC2458 GR	AB
Q351~354	VS2SC2240BL-1	Silicon, NPN, 2SC2240 BL	AB
Q355,356	VS2SC2878B/-1	Silicon, NPN, 2SC2878 B	AC
Q357	VSRNC1202///-1	Digital, RNC1202	AB

REF.NO.	PART NO.	DESCRIPTION	CODE
Q401,402	VS2SC2458GR-1	Silicon, NPN, 2SC2458 GR	AB
Q501,502	VS2SC2458GR-1	Silicon, NPN, 2SC2458 GR	AB
Q503,504	VS2SA966-Y/-1	Silicon, PNP, 2SA966 Y	AD
Q505,506	VS2SC2458GR-1	Silicon, NPN, 2SC2458 GR	AB
Q507,508	VS2SA966-Y/-1	Silicon, PNP, 2SA966 Y	AD
Q509,511	VSRNC1202///-1	Digital, RNC1202	AB
Q510	VSRNC1202///-1	Digital, RNC1202, H Only	AB
Q651	VS2SK246GR/-1	Silicon, FET, 2SK246 GR	AC
Q652	VS2SC2458GR-1	Silicon, NPN, 2SC2458 GR	AB
Q701	VS2SC2458GR-1	Silicon, NPN, 2SC2458 GR, H Only	AB
Q702	VS2SA1048GR-1	Silicon, PNP, 2SA1048 GR	AB
Q703,704	VS2SC2458GR-1	Silicon, NPN, 2SC2458 GR	AB
Q705	VS2SA1048GR-1	Silicon, PNP, 2SA1048 GR	AB
Q706~710	VSRNC1202///-1	Digital, RNC1202	AB
Q711	VSRNC1202///-1	Digital, RNC1202, H Only	AB
Q712~714	VSRNC1202///-1	Digital, RNC1202	AB
Q851	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q951,952	VS2SD1405BL-1	Silicon, NPN, 2SD1405 BL	AE
Q953	VS2SA966-Y/-1	Silicon, PNP, 2SA966 Y	AD
Q954	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q960	VS2SD1405BL-1	Silicon, NPN, 2SD1405 BL	AE

DIODES

D101~108	VHD1SS133///-1	Silicon, 1SS133	AA
D201~204	VHD1SS133///-1	Silicon, 1SS133	AA
D251~253	VHD1SS133///-1	Silicon, 1SS133	AA
D254	VHD1SS133///-1	Silicon, 1SS133, H Only	AA
D301~303	VHD1SS133///-1	Silicon, 1SS133, H Only	AA
D351~352	VHD1SS133///-1	Silicon, 1SS133	AA
D501~511	VHD1SS133///-1	Silicon, 1SS133	AA
D512	VHD1SS133///-1	Silicon, 1SS133	AA
D514	VHD1SS133///-1	Silicon, 1SS133, H Only	AA
D515	VHD1SS133///-1	Silicon, 1SS133	AA
D531	VHD1SS133///-1	Silicon, 1SS133	AA
D701~712	VHD1SS133///-1	Silicon, 1SS133	AA
D713	VHD1SS133///-1	Silicon, 1SS133, H Only	AA
D715~717	VHD1SS133///-1	Silicon, 1SS133	AA
D714	VHD1SS133///-1	Silicon, 1SS133	AA
D891,892	VHD1SS133///-1	Silicon, 1SS133	AA

REF.NO.	PART NO.	DESCRIPTION	CODE
D951	VHD1SS133/-1	Silicon, 1SS133	AA
D952	VHD30D2FAS/-1	Silicon, Bridge, 30D2FAS	AE
D954	VHDS4VB20/-1	Silicon, Bridge, S4VB20	AG
D955	VHDS2VB40F/-1	Silicon, Bridge, S2VB40F	AF
D957	VHD1SS133/-1	Silicon, 1SS133	AA
D958,959	VHD1SS133/-1	Silicon, 1SS133	AA
LED101	VHPLT5PR21A-1	LED, Red, LT5PR21A	AB
LED701 ~ 709	VHPLT5PR21A-1	LED, Red, LT5PR21A	AB
LED851 ~ 857	VHPLT5PR21A-1	LED, Red, LT5PR21A	AB
ZD901	VHERD3R6EB2-1	Zener, 3.6V, RD3.6EB2	AB
ZD951	VHEHZ12C-2/-1	Zener, 12V, HZ12C2	AB
ZD952	VHEHZ11B-2L-1	Zener, 11V, HZ11B2L	AB
ZD953	VHEHZ12C-3/-1	Zener, 12V, HZ12C-3	AB
ZD954	VHERD160JS1-1	Zener, 16V, RD16JS1	AB

TRANSFORMERS

T101	RCILZ0149AFZZ	Band Pass Filter H Only	AF
T102	RCILQ322AFZZ	FM IF	AC
T103	RCILQ346AFZZ	AM IF	AC
T104	RFILLO075AFZZ	Band Pass Filter H Only	AF
T105	RCILD0084AFZZ	FM Detector	AC
△T951	RTRNP1207AFZZ	Power	BA

COILS

L101	RCILA0777AFZZ	Bawl	AE
L102	RCILA0746AFZZ	FM Antenna	AD
L103	RCILR0384AFZZ	FM RF	AD
L104	RCILB0631AFZZ	FM Local Oscillator	AD
L105	VP-CV2R2M0000	2.2 μH	AB
L106	RCILA0807AFZZ	Bar Antenna	AE
L107	RCILA0764AFZZ	LW Antenna	AE
L108	RCILA0765AFZZ	MW Antenna	AE
L109	RCILA0802AFZZ	SW Antenna	AE
L110	RCILB0759AFZZ	LW OSC	AC
L111	RCILB0760AFZZ	MW OSC	AC
L112	RCILB0799AFZZ	SW OSC	AC
L113,114	VP-DHR33M0000	0.33 μH, Choke	AB
L116,117	VP-DH101K0000	100 μH, Choke	AB
L118	VP-DH2R2M0000	2.2 μH, Choke	AB
L251,252	VP-MK222K0000	2.2 mH, Choke	AB
L253	VP-MK101K0000	100 μH, Choke	AB
L254	VP-MK471K0000	470 μH, Choke	AB
L255	VP-CH681K0000	680 μH, Choke	AB
L401,402	RCILLO106AFZZ	Dolby NR	AE
L501,502	RCILF0014AGZZ	47 μH, Choke	AB
L503	VP-DH681K0000	680 μH, Choke	AB
L701	VP-CH102K0000	1 mH, Choke	AB
L901,902	RCILZ0137AFZZ	Choke, H Only	AA

FILTERS

CF101,102	RFILF0106AFZZ	Ceramic, FM IF, 10.7MHz	AC
CF103	RFILAO074AFZZ	AM IF, 455kHz for H	AE
CF103	RFILAO077AFZZ	AH IF, 468kHz for E	AE

CONTROLS

TC104,107	RT6-H1110AFZZ	Trimmer, Brown	AC
TC105,106	RT6-H1106AFZZ	Trimmer, WHITE	AB
TC108,109	RVC-W0056AFZZ	Variable Capacitor with Trimmers	AU
VC106	RVC-Z0066AFZZ	Fine Tuning	AE

REF.NO.	PART NO.	DESCRIPTION	CODE
VR101	RVR-M0407AFZZ	5 kohm (B)	AB
VR501,502	RVR-M0408AFZZ	10 kohm (B), H Only	AB
VR503,504	RVR-M0409AFZZ	20 kohms (B)	AB
VR601 ~ 610	RVR-Q0220AFZZ	10 kohm (W) × 2	AE
VR611	RVR-Q0208AFZZ	20 kohms (B) × 2	AE
VR612	RVR-Q0217AFZZ	100 kohm (B)	AE
VR613	RVR-Q0219AFZZ	10 kohm (B)	AG
VR651 ~ 653	RVR-Q0218AFZZ	10 kohm (B)	AE

ELECTROLYTIC CAPACITORS

(Unless otherwise specified electrolytic capacitors are ±20% type.)

C131	RC-EZA476AF1A	47 μF, 10V	AA
C134	RC-EZA106AF1C	10 μF, 16V	AB
C137	RC-EZA106AF1C	10 μF, 16V	AB
C139	RC-EZA106AF1C	10 μF, 16V	AB
C141	RC-EZA474AF1H	0.47 μF, 50V	AB
C145	RC-GZA227AF1A	220 μF, 10V	AB
C147,148	RC-EZA105AF1H	1 μF, 50V	AB
C150,151	RC-EZA474AF1H	0.47 μF, 50V	AB
C152	RC-GZA107AF1A	100 μF, 10V	AC
C155,156	RC-EZA106AF1C	10 μF, 16V	AB
C157	RC-GZA107AF1C	100 μF, 16V	AB
C159,160	RC-EZA106AF1C	10 μF, 16V	AB
C161	RC-EZA226AF1C	22 μF, 16V	AG
C162	RC-GZA227AF1C	220 μF, 16V	AB
C203,204	RC-EZA105AF1H	1 μF, 50V	AB
C207,208	RC-EZA106AF1C	10 μF, 16V	AB
C211,212	RC-EZA475AF1E	4.7 μF, 25V	AB
C213,214	RC-EZA105AF1H	1 μF, 50V	AB
C215	RC-GZA476AF1C	47 μF, 16V	AB
C251,252	RC-EZA475AF1E	4.7 μF, 25V	AB
C255,256	RC-EZA476AF1A	47 μF, 10V	AB
C265,266	RC-EZA475AF1E	4.7 μF, 25V	AB
C271	RC-EZA106AF1C	10 μF, 16V	AB
C273	RC-GZA476AF1C	47 μF, 16V	AB
C281	RC-GZA476AF1C	47 μF, 16V	AB
C282,283	RC-GZA476AF1C	47 μF, 16V	AB
C288	RC-EZA476AF1C	47 μF, 16V	AB
C301,302	RC-EZA475AF1E	4.7 μF, 25V	AB
C307,308	RC-EZA476AF1A	47 μF, 10V	AB
C311,312	RC-EZA106AF1C	10 μF, 16V	AB
C318	RC-GZA107AF1C	100 μF, 16V	AB
C321	RC-GZA476AF1C	47 μF, 16V	AB
C351,352	RC-EZA475AF1E	4.7 μF, 25V	AB
C357,358	RC-EZA476AF1A	47 μF, 10V	AB
C361,362	RC-EZA106AF1C	10 μF, 16V	AB
C365	RC-GZA107AF1C	100 μF, 16V	AB
C366	RC-EZA106AF1C	10 μF, 16V	AB
C367	RC-EZA107AF1C	100 μF, 16V	AB
C368	RC-GZA107AF1C	100 μF, 16V	AB
C403,404	RC-EZA105AF1H	1 μF, 50V	AA
C409,410	RC-EZA335AF1H	3.3 μF, 50V	AB
C411,412	RC-EZA335AF1H	3.3 μF, 50V	AA
C415,416	RC-EZA335AF1H	3.3 μF, 50V	AA
C421,422	RC-EZA106AF1C	10 μF, 16V	AB
C425,426	RC-EZA104AF1H	0.1 μF, 50V	AB
C427,428	RC-EZA334AF1H	0.33 μF, 50V	AA
C429	RC-GZS337AF1A	330 μF, 10V	AB

REF.NO.	PART NO.	DESCRIPTION	CODE
C430	RC-EZA226AF1E	22 μF, 25V	AB
C439	RC-GZS337AF1A	330 μF, 10V	AB
C437,438	VCTYPA1EX332K	0.0033 μF, 25V, E Only	AA
C440	RC-EZS106AF1C	10 μF, 16V	AB
C501,502	RC-EZA335AF1H	3.3 μF, 50V	AB
C503,504	RC-GZA476AF1C	47 μF, 16V	AB
C601,602	RC-EZA475AF1E	4.7 μF, 25V	AB
C603,604	RC-EZA105AF1H	1 μF, 50V	AB
C605,606	RC-EZA224AF1H	0.22 μF, 50V	AB
C607,608	RC-EZA335AF1H	3.3 μF, 50V	AB
C609,610	RC-EZA154AF1H	0.15 μF, 50V	AB
C611,612	RC-EZA104AF1H	0.1 μF, 50V	AB
C615	RC-EZA106AF1C	10 μF, 16V	AB
C616	RC-GZA107AF1C	100 μF, 16V	AB
C653	RC-EZA105AF1H	1 μF, 50V	AB
C654	RC-EZA106AF1C	10 μF, 16V	AB
C655	RC-GZA476AF1C	47 μF, 16V	AB
C656	RC-EZA105AF1H	1 μF, 50V	AB
C658	RC-EZA105AF1H	1 μF, 50V	AB
C701	RC-EZA225AF1H	2.2 μF, 50V	AB
C702	RC-EZA226AF1E	2.2 μF, 25V	AB
C708	RC-EZA106AF1C	10 μF, 16V	AB
C710	VCEALA1EW475M	4.7 μF, 25V	AB
C711	RC-EZA334AF1H	0.33 μF, 50V	AB
C712	VCEALA1CW106M	10 μF, 16V	AB
C713	RC-EZA474AF1H	0.47 μF, 50V	AB
C720	RC-EZA105AF1H	1 μF, 50V	AB
C722	RC-EZA475AF1E	4.7 μF, 25V	AB
C801,802	RC-EZA106AF1C	10 μF, 16V	AB
C805,806	RC-EZA106AF1C	10 μF, 16V	AB
C809,810	RC-EZA105AF1H	1 μF, 50V	AB
C815	RC-GZA227AF1C	220 μF, 16V	AB
C851	RC-EZA106AF1C	10 μF, 16V	AB
C852	RC-GZA476AF1C	47 μF, 16V	AB
C901,902	RC-EZA105AF1H	1 μF, 50V	AB
C903,904	RC-GZA107AF1E	100 μF, 25V	AB
C905,906	RC-GZA107AF1V	100 μF, 35V	AB
C907,908	RC-GZV108AF1V	1000 μF, 35V	AD
C912	RC-GZA107AF1E	100 μF, 25V	AB
C913	RC-GZV477AF1H	470 μF, 50V	AD
C914	RC-EZA106AF1H	10 μF, 50V	AB
C919,920	RC-EZA105AF1H	1 μF, 50V	AA
C923	RC-GZV227AF1H	220 μF, 50V	AB
C952	RC-GZA476AF1C	47 μF, 16V	AA
C953,954	RC-GZA107AF1C	100 μF, 16V	AB
C955	RC-GZA227AF1C	220 μF, 16V	AB
C956	RC-GZA107AF1C	100 μF, 16V	AB
C958	RC-GZA476AF1C	47 μF, 16V	AB
C960	RC-GZA476AF1C	47 μF, 16V	AB
C961	RC-EZ1315AFZZ	3300 μF, 50V	AH
C964	RC-GZW228AF1V	2200 μF, 35V	AF
C965	RC-EZA107AF1C	100 μF, 50V	AB
C966	RC-GZA476AF1C	47 μF, 16V	AB

CAPACITORS

There are two types of capacitors available and they can be identified from each other by reading their Part Numbers.

- Ceramic type capacitor;
A symbol "C" or "K" is given at the 3rd digit of its Part Number like "VCC (or K).....J."
- Semiconductor type capacitor;
A symbol "T" is given at the 3rd digit of its Part Number like "VCT.....J."

The capacitance error of each capacitor is indicated by the symbol given at the 13th digit of the Part Number as follows: "J" (±5%), "K" (±10%), "M" (±20%), "N" (±30%), "C" (±0.25 pF), "D" (±0.5 pF), "Z" (±80-20%).

REF.NO.	PART NO.	DESCRIPTION	CODE
C101	VCCCPA1HH330J	33 pF(CH), 50V H Only	AA
C102	VCCTPA1HH200J	20 pF(TH), 50V	AA
C103	VCCSPA1HL2R0C	2 pF, 50V H Only	AA
C103	VCCSPA1HL1R5C	1.5 pF, 50V E Only	AA
C104	VCKZPA1HF223Z	0.022 μF, 50V	AA
C105	VCKZPA1HF223Z	0.022 μF, 50V	AA
C106	VCCRPA1HH180J	18 pF(RH), 50V for H	AA
C106	VCCTPA1HH150J	15 pF(RH), 50V for E	AA
C107	VCCTPA1HH100J	10 pF(TH), 50V	AA
C108	VCCCPA1HH330J	33 pF(CH), 50V	AA
C109	VCCTPA1HH8R0D	8 pF(TH), 50V	AA
C110	VCKZPA1HF223Z	0.022 μF, 50V	AA
C111	VCCTPA1HH200J	20 pF(TH), 50V	AA
C112	VCCSPA1HL1R5C	1.5 pF, 50V	AA
C113	VCCCPA1HHR50C	0.5 pF(CH), 50V	AA
C114	VCCSPA1HL101J	100 pF, 50V	AA
C115	VCKZPA1HF223Z	0.022 μF, 50V	AA
C116	VCKZPA1HF223Z	0.022 μF, 50V	AA
C117	VCCSPA1HL101J	100 pF, 50V	AA
C118	VCKZPA1HF223Z	0.022 μF, 50V	AA
C119	VCCSAT1HL101J	100 pF, 50V	AA
C120	VCCSPA1HL560J	56 pF, 50V	AA
C121	VCCTPA1HH200J	20 pF, 50V	AA
C122,123	VCKZPA1HF223Z	0.022 μF, 50V	AA
C124	VCQSPA1HL271J	270 pF, 50V, Styrol	AC
C125	VCQSPA1HL181J	180 pF, 50V, Styrol	AB
C126	VCQSPA1HL391J	390 pF, 50V, Styrol	AB
C127	VCCTPU1HH180J	18 pF, 50V	AA
C128	VCQSPA1HL332J	0.0033 μF, 50V, Styrol	AB
C129	VCCWPU1HK150J	15 pF, 50V	AA
C130	VCKZPA1HF223Z	0.022 μF, 50V	AA
C132	VCCUPU1HJ5R0C	5 pF, 50V	AA
C135	VCTYPA1EX223K	0.022 μF, 25V	AA
C136	VCCSPA1HL470J	47 pF, 50V	AA
C138	VCCSPA1HL101J	100 pF, 50V	AA
C140	VCTYPA1EX223K	0.022 μF, 25V	AA
C142,143	VCTYPA1EX153K	0.015 μF, 25V	AA
C144	VCTYPA1EX223K	0.022 μF, 25V	AA
C146	VCTYPA1EX223K	0.022 μF, 25V	AA
C149	VCTYPA1EX473K	0.047 μF, 25V	AA
C153	VCTYPA1EX123K	0.012 μF, 25V	AA
C154	VCTYPA1EX123K	0.012 μF, 25V	AA
C158	VCQSPA1HL102J	0.001 μF, 50V, Styrol	AB
C163	VCQSPA1HL180J	18 pF, 50V, Styrol	AB
C164	VCCSPU1HL4R0C	4 pF, 50V	AA
C165	VCCSPU1HL5R0C	5 pF, 50V	AA
C201,202	VCKYBT1HB471K	470 pF	AA
C205,206	VCKYBT1HB151K	150 pF, 50V	AA
C209,210	VCCSBT1HL470J	47 pF, 50V	AA
C253,254	VCKYBT1HB101K	100 pF, 50V	AA
C257,258	VCTYPA1EX273K	0.027 μF, 25V	AA
C259,260	VCTYPA1EX333K	0.033 μF, 25V for E	AA
C259,260	VCTYPA1EX123K	0.012 μF, 25V for H	AA
C261,262	VCTYPA1EX272K	0.0027 μF, 25V	AA
C263,264	VCTYPA1EX223K	0.022 μF, 25V, H Only	AA
C267,268	VCTYPA1EX222K	0.0022 μF, 25V	AA
C269,270	VCTYPA1EX103K	0.01 μF, 25V	AA
C272	VCTYPA1EX223K	0.022 μF, 25V	AA
C274,275	VCTYPA1EX103K	0.01 μF, 25V	AA
C276	VCQPKA2AA472J	0.0047 μF, 100V, Mylar	AA
C277	VCQYKA1HM473K	0.047 μF, 50V, Mylar	AA
C278,279	VCKYBT1HB221K	220 pF, 50V	AA
C280,281	VCKYBT1HB221K	220 pF, 50V	AA
C285	VCFYHU1HA104J	0.1 μF, 50V	AB
C303,304	VCKYBT1HB471K	470 pF, 50V	AA
C305,306	VCKYBT1HB221K	220 pF, 50V	AA

REF.NO.	PART NO.	DESCRIPTION	CODE
C309,310	VCTYPA1EX103K	0.01 μ F, 25V	AA
C313,314	VCTYPA1EX153K	0.015 μ F, 25V	AA
C319	VCTYBT1CX122M	0.0012 μ F, 25V	AA
C320	VCTYPA1EX473K	0.047 μ F, 25V	AA
C353,354	VCKYBT1HB821K	820 pF, 50V	AA
C355,356	VCKYBT1HB221K	220 pF, 50V	AA
C359,360	VCTYBT1CY103M	0.01 μ F, 16V	AA
C363,364	VCTYPA1EX153K	0.015 μ F, 25V	AA
C401,402	VCFYHA1HF104J	0.1 μ F, 50V	AB
C414,415	VCTYPA1EX182K	0.0018 μ F, 25V	AA
C417,418	VCTYPA1EX333K	0.033 μ F, 25V	AA
C419,420	VCTYPA1EX472K	0.0047 μ F, 25V	AA
C423,424	VCTYPA1EX473K	0.047 μ F, 25V	AA
C437,438	VCTYPA1EX332K	0.0033 μ F, 25V, for E	AA
C437,438	VCCSPA1HL821J	820 pF, 50V, for H	AA
C440,441	VCTYPA1EX332K	0.0033 μ F, 25V, for H	AA
C441,442	VCTYPA1EX102K	0.001 μ F, 25V, for E	AA
C442,443	VCTYPA1EX103K	0.001 μ F, 25V, for E	AA
C444,445	VCCSBT1HL330J	33 pF, 50V	AA
C448	VCTYPA1EX332K	0.0033 μ F, 25V	AA
C613,614	VCTYPA1EX563K	0.056 μ F, 25V	AA
C619,620	VCCSPA1HL221J	220 pF, 50V	AA
C651	VCTYPA1EX683K	0.068 μ F, 25V	AB
C652	VCCSBT1HL470J	47 pF, 50V	AA
C657	VCKYBT1HB101K	100 pF, 50V	AA
C660	VCTYPU1EX272K	0.0027 μ F, 25V	AA
C703,704	VCTYPA1EX103K	0.01 μ F, 25V	AA
C705	VCTYPA1EX473K	0.047 μ F, 25V	AA
C706	VCKYBT1HB102K	0.001 μ F, 50V	AA
C707	VCTYPA1EX103K	0.01 μ F, 25V	AA
C714	VCKYBT1HB471K	470 pF, 50V	AA
C715	VCKYBT1HB821K	820 pF, 50V	AA
C716	VCTYPA1EX333K	0.033 μ F, 25V	AA
C717	VCTYPA1EX473K	0.047 μ F, 25V	AA
C718	VCKYBT1HB391K	390 pF, 50V	AA
C719	VCKYBT1HB102K	0.001 μ F, 50V	AA
C721	VCTYPA1EX103K	0.01 μ F, 25V	AA
C723	VCFYHU1HA104J	0.1 μ F, 50V	AB
C803,804	VCCSPA1HL561J	560 pF, 50V	AA
C807,808	VCTYPA1EX183K	0.018 μ F, 25V	AA
C811,812	VCTYPA1EX153K	0.015 μ F, 25V	AA
C813,814	VCCSPA1HL101J	100 pF, 50V	AA
C853	VCTYPA1EX103K	0.01 μ F, 25V	AA
C854,855	VCKZPA1HF223Z	0.022 μ F, 50V	AA
C856,857	VCCCPA1HH220J	22 pF, 50V	AA
C858,859	VCFYHA1HA104J	0.1 μ F, 50V, Polyethylene Film	AB
C860	VCFYHA1HA104J	0.1 μ F, 50V, Polyethylene Film	AB
C861	VCFYHA1HA104J	0.1 μ F, 50V, Polyethylene Film	AB
C862	VCTYPU1EX102K	0.001 μ F, 25V	AA
C863	VCKZPU1HF104Z	0.1 μ F, 50V	AA
C867	VCKZPU1HF104Z	0.1 μ F, 50V	AB
C909	VCFYHA1HA184J	0.18 μ F, 50V, Polyethylene Film for E	AC
C909	VCFYHA1HA104J	0.1 μ F, 50V, Polyethylene Film for H	AB
C910	VCFYHA1HA184J	0.18 μ F, 50V, Polyethylene Film	AC
C915,916	VCTYPA1EX222K	0.0022 μ F, 25V	AA
C921,922	VCFYHA1HA104J	0.1 μ F, 50V, Polyethylene Film, H Only	AB
C957	VCKZPA1HF223Z	0.022 μ F, 50V	AA
C959	VCKZPA1HF223Z	0.022 μ F, 50V	AA

REF.NO.	PART NO.	DESCRIPTION	CODE
C962,963	VCFYHA1HA104J	0.1 μ F, 50V, Polyethylene Film	AB
C967,968	VCFYHA1HA104J	0.1 μ F, 50V, Polyethylene Film	AB
C969,970	CVTYPU1EX102K	0.001 μ F, 25V	AB
C971,972	VCTYPU1EX102K	0.001 μ F, 50V	AA
C973~975	VCKZPU1HF403Z	0.04 μ F, 25V	AA
C976	VCKZPU1HF223Z	0.022 μ F, 50V	AA

RESISTORS

(Unless otherwise specified, resistors are $\pm 5\%$, carbon type)

R101	VRD-ST2CD104J	100 kohm, 1/6W	AA
R102	VRD-ST2CD683J	68 kohms, 1/6W	AA
R103	VRD-ST2CD104J	100 kohm, 1/6W	AA
R104	VRD-ST2CD220J	22 ohms, 1/6W	AA
R105	VRD-ST2CD470J	47 ohms, 1/6W	AA
R106	VRD-ST2CD101J	100 ohm, 1/6W	AA
R107	VRD-ST2CD104J	100 kohm, 1/6W	AA
R108	VRD-ST2CD102J	1 kohm, 1/6W	AA
R109	VRD-ST2CD221J	220 kohms, 1/6W	AA
R110	VRD-ST2CD474J	47 kohms, 1/6W	AA
R111	VRD-ST2CD101J	100 ohm, 1/6W	AA
R112	VRD-ST2CD100J	10 ohm, 1/6W	AA
R113	VRD-ST2CD102J	1 kohm, 1/6W	AA
R114	VRD-ST2CD101J	100 ohm, 1/6W	AA
R115	VRD-ST2CD152J	1.5 kohms, 1/6W	AA
R116	VRD-ST2CD101J	100 ohm, 1/6W	AA
R118	VRD-ST2CD102J	1 kohm, 1/6W	AA
R119	VRD-ST2CD101J	100 kohm, 1/6W	AA
R120	VRD-ST2CD334J	330 kohms, 1/6W	AA
R121	VRD-ST2CD220J	22 kohms, 1/6W	AA
R122	VRD-ST2CD471J	470 ohms, 1/6W	AA
R123	VRD-ST2CD473J	470 kohms, 1/6W	AA
R124	VRD-ST2CD561J	560 kohms, 1/6W	AA
R125	VRD-ST2CD102J	1 kohm, 1/6W	AA
R126	VRD-ST2CD104J	100 kohm, 1/6W	AA
R127	VRD-ST2CD330J	33 kohms, 1/6W	AA
R128	VRD-ST2CD471J	470 ohms, 1/6W	AA
R129	VRD-ST2CD392J	3.9 kohms, 1/6W	AA
R130	VRD-ST2CD102J	1 kohm, 1/6W	AA
R131	VRD-ST2CD104J	100 kohm, 1/6W	AA
R132	VRD-ST2CD102J	1 kohm, 1/6W	AA
R133	VRD-ST2CD103J	10 kohm, 1/6W	AA
R134	VRD-ST2CD101J	100 ohm, 1/6W	AA
R135	VRG-ST2EF330J	33 ohms, 1/4W, Fusible	AB
R137,138	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R139	VRD-ST2CD683J	68 kohms, 1/6W, for E	AA
R139-141	VRD-ST2CD393J	39 kohms, 1/6W, for H	AA
R140	VRD-ST2CD683J	68 kohms, 1/6W, for E	AA
R141,142	VRD-ST2CD183J	18 kohms, 1/6W, for E	AA
R143	VRD-ST2CD681J	680 ohms, 1/6W	AA
R144	VRD-ST2CD103J	10 kohm, 1/6W	AA
R145	VRD-ST2CD821J	820 ohms, 1/6W	AA
R146	VRD-ST2CD102J	1 kohm, 1/6W	AA
R147	VRD-ST2CD472J	4.7 kohms, 1/6W	AA

REF.NO.	PART NO.	DESCRIPTION	CODE
R148	VRD-ST2CD224J	220 kohms, 1/6W	AA
R149,150	VRD-ST2CD103J	10 kohm, 1/6W	AA
R151	VRD-ST2CD682J	6.8 kohms, 1/6W, for E	AA
R151	VRD-ST2CD182J	1.8 kohms, 1/6W, for H	AA
R177	VRD-ST2CD330J	330 ohms, 1/6W	AA
R201,202	VRD-ST2CD221J	220 ohms, 1/6W	AA
R203,204	VRD-ST2CD223J	22 kohms, 1/6W	AA
R205,206	VRD-ST2CD223J	22 kohms, 1/6W	AA
R207,208	VRD-ST2CD122J	1.2 kohms, 1/6W	AA
R211,212	VRD-ST2CD561J	560 ohms, 1/6W	AA
R213,214	VRD-ST2CD103J	10 kohm, 1/6W	AA
R215,216	VRD-ST2CD334J	330 kohms, 1/6W	AA
R217,218	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R219,220	VRD-ST2CD182J	1.8 kohms, 1/6W	AA
R221	VRD-ST2EE561J	560 ohms, 1/4W	AA
R251,252	VRD-ST2CD103J	10 kohm, 1/6W	AA
R253,254	VRD-ST2CD473J	47 kohms, 1/6W	AA
R255,256	VRD-ST2CD561J	560 ohms, 1/6W	AA
R257,258	VRD-ST2CD680J	68 ohms, 1/6W	AA
R259	VRD-ST2CD102J	1 kohm, 1/6W	AA
R260,261	VRD-ST2CD122J	1.2 kohms, 1/6W	AA
R262	VRD-ST2CD102J	1 kohm, 1/6W	AA
R263~268	VRD-ST2CD223J	22 kohms, 1/6W	AA
R270	VRD-ST2EE271J	270 ohms, 1/4W	AA
R271,272	VRD-ST2CD103J	10 kohm, 1/6W	AA
R273,274	VRD-ST2CD153J	15 kohms, 1/6W	AA
R275	VRD-ST2CD185J	1.8 Mohm, 1/6W	AA
R276	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R277	VRD-ST2CD223J	22 kohms, 1/6W	AA
R278	VRD-ST2CD101J	100 kohm, 1/6W	AA
R279	VRD-ST2CD223J	22 kohms, 1/6W	AA
R280	VRD-ST2CD103J	10 kohm, 1/6W	AA
R281	VRD-ST2CD223J	22 kohms, 1/6W	AA
R282	VRD-ST2CD104J	100 kohm, 1/6W	AA
R283	VRD-ST2CD683J	68 kohms, 1/6W	AA
R284	VRD-ST2EE4R7J	4.7 ohms, 1/4W	AA
R285	VRD-ST2CD103J	10 kohm, 1/6W	AA
R287	VRD-ST2CD223J	22 kohms, 1/6W	AA
R301,302	VRD-ST2CD102J	1 kohm, 1/6W	AA
R303,304	VRD-ST2CD334J	330 kohms, 1/6W	AA
R305,306	VRD-ST2CD123J	12 kohms, 1/6W	AA
R307,308	VRD-ST2CD910J	91 ohms, 1/6W	AA
R309,310	VRD-ST2CD683J	68 kohm, 1/6W	AA
R311,312	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R313,314	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R319,320	VRD-ST2CD223J	22 kohms, 1/6W	AA
R321	VRD-ST2CD561J	560 ohms, 1/6W	AA
R322	VRD-ST2EE271J	270 ohms, 1/4W	AA
R323	VRD-ST2CD474J	470 kohms, 1/6W	AA
R324	VRD-ST2CD561J	560 ohms, 1/6W	AA
R325	VRD-ST2CD822J	8.2 kohms, 1/6W	AA
R327,328	VRD-ST2CD103J	10 kohm, 1/6W, H Only	AA
R351,352	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R353,354	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R355~358	VRD-ST2CD102J	1 kohm, 1/6W	AA
R359,360	VRD-ST2CD123J	12 kohms, 1/6W	AA
R361,362	VRD-ST2CD334J	330 kohms, 1/6W	AA
R363,364	VRD-ST2CD910J	91 ohms, 1/6W	AA
R365	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R367,368	VRD-ST2CD223J	22 kohms, 1/6W	AA
R369,370	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R373	VRD-ST2EE271J	270 ohms, 1/4W	AA
R374	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R375	VRD-ST2EE221J	220 ohms, 1/4W	AA
R401,402	VRD-ST2CD102J	1 kohm, 1/6W	AA
R408	VRD-ST2CD473J	47 kohms, 1/6W	AA

REF.NO.	PART NO.	DESCRIPTION	CODE
R409	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R411,412	VRD-ST2CD104J	100 kohm, 1/6W	AA
R413,414	VRD-ST2CD123J	12 kohms, 1/6W	AA
R415,416	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R417,418	VRD-ST2CD103J	10 kohm, 1/6W	AA
R419,420	VRD-ST2CD112J	1.1 kohms, 1/6W	AA
R421	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R422	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R423,424	VRD-ST2CD473J	47 kohms, 1/6W	AA
R425,426	VRD-ST2CD304J	300 kohms, 1/6W	AA
R427,428	VRD-ST2CD274J	270 kohms, 1/6W	AA
R429	VRD-ST2EE221J	220 kohms, 1/4W	AA
R430	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R431	VRD-ST2CD473J	47 kohms, 1/6W	AA
R433,434	VRD-ST2CD273J	27 kohms, 1/6W	AA
R435,436	VRD-ST2CD224J	220 kohms, 1/6W	AA
R437,438	VRD-ST2CD103J	1 kohm, 1/6W	AA
R439,440	VRD-ST2CD102J	1 kohm, 1/6W	AA
R441	VRD-ST2CD102J	1 kohm, 1/6W	AA
R443	VRD-ST2CD105J	1 Mohm, 1/6W	AA
R444	VRD-ST2CD105J	1 Mohm, 1/6W	AA
R445	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R447,448	VRD-ST2CD224J	220 kohms, 1/6W	AA
R449,450	VRD-ST2CD123J	12 kohms, 1/6W	AA
R501,502	VRD-ST2CD473J	47 kohms, 1/6W	AA
R503,504	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R507,508	VRD-ST2CD333J	33 kohms, 1/6W	AA
R509,510	VRD-ST2CD182J	1.8 kohms, 1/6W	AA
R511,512	VRD-ST2CD473J	47 kohms, 1/6W	AA
R513	VRD-ST2CD103J	10 kohm, 1/6W	AA
R514	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R515,516	VRD-ST2CD473J	47 kohms, 1/6W	AA
R517,518	VRD-ST2CD273J	27 kohms, 1/6W, E	AA
R517,518	VRD-ST2CD223K	22 kohms, 1/6W, H	AA
R519	VRD-ST2CD223J	22 kohms, 1/6W	AA
R520	VRD-ST2CD273J	27 kohms, 1/6W	AA
R521,522	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R523,524	VRD-ST2CD104J	100 kohm, 1/6W	AA
R601,602	VRD-ST2CD103J	10 kohm, 1/6W	AA
R603,604	VRD-ST2CD102J	1 kohm, 1/6W	AA
R607	VRD-ST2EE221J	220 ohms, 1/4W	AA
R651	VRD-ST2CD103J	10 kohm, 1/6W	AA
R652	VRD-ST2CD223J	22 kohms, 1/6W	AA
R653	VRD-ST2CD105J	1 Mohm, 1/6W	AA
R654	VRD-ST2CD183J	18 kohms, 1/6W	AA
R655	VRD-ST2CD103J	10 kohm, 1/6W	AA
R656	VRD-ST2EE221J	220 ohms, 1/4W	AA
R657	VRD-ST2CD183J	18 kohms, 1/6W	AA
R659,660	VRD-ST2CD473J	47 kohms, 1/6W	AA
R661	VRD-ST2EE561J	560 ohms, 1/4W	AA
R662	VRD-ST2CD474J	470 kohms, 1/6W	AA
R663	VRD-ST2CD103J	10 kohm, 1/6W	AA
R664	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R665,666	VRD-ST2CD102J	1 kohm, 1/6W	AA
R701	VRD-ST2EE121J	120 ohms, 1/4W	AA
R702	VRD-ST2EE181J	180 ohms, 1/4W	AA
R703	VRD-ST2CD103J	10 kohm, 1/6W, H Only	AA
R704	VRD-ST2CD473J	47 kohms, 1/6W	AA
R705	VRD-ST2CD273J	27 kohms, 1/6W	AA
R706	VRD-ST2CD473J	47 kohms, 1/6W	AA
R707	VRG-ST2EC680J	68 ohms, 1/4W, Fusible	AA
R708	VRD-ST2CD682J	6.8 kohms, 1/6W	AA
R709	VRD-ST2CD821J	820 ohms, 1/6W	AA
R710	VRD-ST2CD102J	1 kohm, 1/6W	AA

REF.NO.	PART NO.	DESCRIPTION	CODE
R711	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R712	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R713	VRD-ST2CD682J	6.8 kohms, 1/6W	AA
R714	VRD-ST2CD223J	22 kohms, 1/6W	AA
R715	VRD-ST2CD102J	1 kohm, 1/6W	AA
R716,717	VRD-ST2CD103J	10 kohm, 1/6W	AA
R718	VRD-ST2CD102J	1 kohm, 1/6W	AA
R719	VRD-ST2CD103J	10 kohm, 1/6W	AA
R720,721	VRD-ST2CD102J	1 kohm, 1/6W	AA
R722	VRD-ST2CD394J	390 kohms, 1/6W	AA
R723	VRD-ST2CD102J	1 kohm, 1/6W	AA
R724	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R725	VRD-ST2CD224J	220 kohms, 1/6W	AA
R726	VRD-ST2CD272J	2.7 kohms, 1/6W	AA
R727	VRD-ST2CD393J	39 kohms, 1/6W	AA
R728	VRD-ST2CD102J	1 kohm, 1/6W	AA
R729	VRD-ST2CD104J	100 kohm, 1/6W	AA
R730	VRD-ST2CD334J	330 kohms, 1/6W	AA
R731	VRD-ST2CD393J	39 kohms, 1/6W	AA
R732	VRD-ST2CD823J	82 kohms, 1/6W	AA
R733	VRD-ST2CD223J	22 kohms, 1/6W	AA
R734	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R735	VRD-ST2CD102J	1 kohm, 1/6W	AA
R757	VRD-ST2EE271J	270 ohms, 1/4W	AA
R801,802	VRD-ST2CD473J	47 kohms, 1/6W	AA
R803,804	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R805,806	VRD-ST2CD274J	270 kohms, 1/6W	AA
R807,808	VRD-ST2CD183J	18 kohms, 1/6W	AA
R809,810	VRD-ST2CD562J	5.6 kohms, 1/6W	AA
R811,812	VRD-ST2CD105J	1 Mohm, 1/6W	AA
R813,814	VRD-ST2CD393J	39 kohms, 1/6W	AA
R815,816	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
R817	VRD-ST2EE471J	470 ohms, 1/4W	AA
R851	VRD-ST2CD104J	100 kohm, 1/6W	AA
R853	VRD-ST2CD103J	10 kohm, 1/6W	AA
R854	VRD-ST2EE101J	100 ohm, 1/4W	AA
R855	VRD-ST2CD104J	100 kohm, 1/6W	AA
R856	VRD-ST2CD103J	10 kohm, 1/6W	AA
R857	VRD-ST2CD104J	100 kohm, 1/6W	AA
R858	VRD-ST2CD152J	1.5 kohms, 1/6W	AA
R859	VRD-ST2CD823J	82 kohms, 1/6W	AA
R901,902	VRD-ST2CD473J	47 kohms, 1/6W	AA
R903,904	VRD-ST2CD223J	22 kohms, 1/6W	AA
R905,906	VRD-ST2CD102J	1 kohm, 1/6W	AA
R907,908	VRD-ST2CD330J	33 ohms, 1/6W	AA
R909,910	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
△R911,912	VRG-ST2HC101J	100 ohm, 1/2W, Fusible	AB
R913,914	VRD-RT2HD4R7J	4.7 ohms, 1/2W, Metal Film, H Only	AA
R915,916	VRD-RT2HD4R7J	4.7 ohms, 1/2W	AA
R917	VRD-ST2CD103J	10 kohm, 1/6W	AA
R918	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R919	VRD-ST2CD102J	1 kohm, 1/6W	AA
R952	VRD-ST2CD221J	220 ohms, 1/6W	AA
△R954	VRG-ST2EG3R9J	3.9 ohms, 1/4W, Fusible	AB
R956	VRD-ST2EE102J	1 kohm, 1/4W	AA
R957	VRD-ST2EE222J	2.2 kohms, 1/4W	AA
R958	VRD-ST2CD104J	100 kohm, 1/6W	AA
R959	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R966	VRD-ST2EE472J	4.7 kohms, 1/4W	AA
R968	VRD-ST2HD682J	6.8 kohms, 1/2W	AA
△R970	VRG-ST2EF220J	22 ohms, 1/2W, Fusible	AA
R971	VRD-ST2CD683J	68 kohms, 1/6W	AA
R972	VRD-ST2CD152J	1.5 kohms, 1/6W	AA

REF.NO.	PART NO.	DESCRIPTION	CODE
R973	VRD-ST2EE1R8J	1.8 ohms, 1/4W	AA
R974	VRD-ST2EE2R2J	2.2 ohms, 1/4W	AA
R975	VRD-ST2CD152J	1.5 kohms, 1/6W	AA
R976	VRD-ST2CD152J	1.5 kohms, 1/6W	AA
R977	VRD-ST2CD152J	1.5 kohms 1/6W	AA
R820,821	VRD-ST2CD102J	1 kohm, 1/6W	AA
R818,819	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R991,992	VRD-RT2HD331J	330 ohms, 1/2W	AA
R993,994	VRD-ST2CD471J	470 ohms, 1/6W	AA

CIRCUIT PARTS

B1408		Part of Ref, No CNS408	
B1901	QCNCW-3694AFZZ	Connector Assembly, 6-7 Pin	AB
CNP301	QCNCM136CAFZZ	Plug, 3 Pin	AB
CNP351	QCNCM134HAFZZ	Plug, 7 Pin	AD
CNP408	QCNCM233DAFZZ	Plug, 4 Pin	AC
CNP501	QCNCM258MAFZZ	Plug, 12 Pin	AC
CNP502	QCNCM235KAFZZ	Plug, 10 Pin	AD
CNP851	QCNCM311BAFZZ	Plug, 2 Pin	AB
CNP852	QCNCM095BAFZZ	Plug, 2 Pin	AB
CNP901	QCNCM132FAFZZ	Plug, 6 Pin	AD
CNP905	QCNCM689JAFZZ	Plug, 9 Pin	AD
CNP951	QCNCM621BAFZZ	Plug, 2 Pin	AA
CNP952	QCNCM623DAFZZ	Plug, 4 Pin	AB
CNS102	QCNCM656CAFZZ	Socket, 3 Pin	AB
CNS201	QCNCM656FAFZZ	Socket, 6 Pin	AB
CNS301	QCNCW-3731AFZZ	Socket, 3 Pin	AE
CNS302	QCNCM656GAFZZ	Socket, 7 Pin	AC
CNS351	QCNCW-3733AFZZ	Socket, 8 Pin	AH
CNS401	QCNCM656DAFZZ	Socket, 4 Pin	AB
CNS402	QCNCM656CAFZZ	Socket, 3 Pin	AB
CNS408	QCNCN0153AFZZ	Socket, 5 Pin	AG
CNS502	QCNCW-3734AFZZ	Socket, 10 Pin	AF
CNS551	QCNCW-3732AFZZ	Socket, 12 Pin	AG
CNS602	QCNCM656BAFZZ	Socket, 2 Pin	AB
CNS801	QCNCM656FAFZZ	Socket, 6 Pin	AB
CNS851	QCNCW-3736AFZZ	Socket, 2 Pin	AC
CNS852	QCNCW-3907AFZZ	Socket, 2 Pin	AB
CNS901		Refer to B1901	—
CNS902	QCNCM656CAFZZ	Socket, 6 Pin	AB
CNS903	QCNCM656DAFZZ	Socket, 4 Pin	AB
CNS951	QCNCW-3705AFZZ	Socket, 2 Pin	AC
△F951	QFS-C402GAFNi	Fuse, 4A	AD
△F952	QFS-C122GAFNi	Fuse, 1.2A	AD
J201,202	QJAKE0156AFZZ	Jack, Microphone	AE
J203	QJAKE0105AFZZ	Jack, Insultment	AD
J901	QJAKJ0147AFZZ	Headphones Jack	AE
LCD801	RV-LX0008AFZZ	LCD Display	AR
△M551,552	RM5TV0208AF02	Motor with Pulley	AU
PG1,2	QCNCW-3737AFZZ	Speaker Cord	AG
RLY951	RRLYZ0105AFZZ	Relay	AH
SO101	QS5CD2497AFZZ	Socket, Antenna	AF
SO801A-B	QS5CJ4404AFZZ	External Input Socket	AE
△SO901	QS5CE0563AFZZ	AC Power Supply	AH
SO902,903	QJAKE0124AFZZ	Socket/External DC Power Supply Socket	
SOL551	RPLU-0175AFZZ	External Speaker Jack	AC
SP1,2	VSP0050TB914A	Solenoid, APSS	AG
SP3,4	VSP0016PBC14A	Tweeter	AM
SW101A~F	QSW-P0650AFZZ	Woofer	AW
		Switch, Push Type	AQ

REF.NO.	PART NO.	DESCRIPTION	CODE	REF.NO.	PART NO.	DESCRIPTION	CODE
SW102	QSW-S0504AFZZ	Switch, Slide Type	AD	48	MLEVP0525AF00	Lever, Pause Coupler	AB
SW251	QSW-S0510AFZZ	SWitch, Slide Type	AE	49	MLEVP0526AF00	Lever, Full Auto Killer	AB
SW401A-D	QSW-P0651AFZZ	Switch, Push Type	AL	50	MLEVP0553AF00	Lever, Stop Killer	AC
SW551	QSW-F0199AFZZ	Switch, Leaf Type	AB	51	MSPRC0492AFFJ	Spring, Lever Return	AA
SW552	QSW-F0197AFZZ	Switch, Leaf Type	AC	52	MSPRC0455AFFJ	Spring, Lever Return	AA
SW553	QSW-F0197AFZZ	Switch, Leaf Type	AC	53	MSPRC0456AFFJ	Spring, Azimuth	AA
SW554	QSW-F0199AFZZ	Switch, Leaf Type	AB	54	MSPRC0457AFFJ	Spring, Back Tention, Deck 1	AA
SW555	QSW-F0197AFZZ	Switch, Leaf Type	AC	54	MSPRC0602AFFJ	Spring, Back Tention, Deck 2	AA
SW556	QSW-F0204AFZZ	Switch, Leaf Type	AC	55	MSPRC0458AFFJ	Spring, Pause Lock Lever	AA
SW701	QSW-P0683AFZZ	Switch, Push Type, for E	AL	56	MSPRC0459AFFJ	Spring, Flywheel	AA
SW701	QSW-P0676AFZZ	Switch, Push Type, for H	AM	57	MSPRC0460AFFJ	Spring, Interlocking Lever	AA
SW702,703	QSW-K0065AFZZ	Switch, Push Type	AB	58	MSPRC0461AFFJ	Spring, Solenoid	AA
SW851~855	QSW-K0079AFZZ	Switch, Key Type	AB	59	MSPRC0462AFFJ	Spring, Auto Stop Clutch	AA
SW891	QSW-B0201AFZZ	Switch, Slide Type	AE	60	MSPRD0570AFFJ	Spring, Pinch Roller	AA
TP301	QCNCM213BAFZZ	Test Pin, 2 Pin, H Only	AB	61	MSPRD0571AFFJ	Spring, Pad Lever	AA
TP801	QCNCM213BAFZZ	Test Pin, 2Pin	AB	62	MSPRD0572AFFJ	Spring, Head Base Release	AA
XL801	RCRSP0054AFZZ	Crystal	AF	63	MSPRD0573AFFJ	Spring, Cam Lock	AA
MECHANICAL PARTS				64	MSPRD0574AFFJ	Spring, Pad cam	AA
1	JKNBRO444AFSA	Button, Play/Stop	AD	65	MSPRD0575AFFJ	Spring, Swing Lever	AA
2	JKNBRO445AFSA	Button, Rewind/Pause	AD	66	MSPRD0576AFFJ	Spring, Full Auto Killer Lever	AA
3	JKNBRO446AFSA	Button, Fast-Forward/Record	AD	67	MSPRD0577AFFJ	Spring, Full Auto Killer	AA
4	LANGF0863AFFW	Bracket, Button	AD	69	MSPRP0370AFFW	Plate Spring, Cassette Press	AA
5	LANGF0884AFZZ	Bracket, Flywheel	AD	70	MSPRT1070AFFJ	Spring, Fast-Forward/Rewind Gear	AA
6	LANGQ0927AFFW	Bracket, Switch	AB	71	MSPRT1071AFFJ	Spring, Playback Idler	AA
7	LBSHZ0086AFZZ	Motor Cushion	AA	72	MSPRT1072AFFJ	Spring, Main Lock Plate	AA
8	LCHSM0528AFZZ	Main Chassis, Deck 1	—	73	MSPRT1073AFFJ	Spring, Switch Lever	AA
8	LCHSM0528AF01	Main Chassis, Deck 2	—	74	NBLTK0313AF00	Belt, Motor (Large)	AB
9	LCHSS0212AFFW	Head Plate	AD	75	NBLTK0314AF00	Belt, Fast-Forward/Rewind	AB
10	LCHSZ0163AFZZ	Full Auto Base	AD	76	NBLTK0291AF00	Belt, Full Auto Gear	AB
11	LDAIH0063AF00	Head Base	AB	77	NDAlR0185AFZZ	Take-Up Turntable	AE
12	MSPRT1074AFFJ	Spring, Record Sensor	AA	78	NDAlR0193AF00	Supply Turntable, Deck 1	AB
13	LPLTM0148AFZZ	Plate, Lever Guide, Deck 1	AE	78	NDAlR0201AFZZ	Supply Turntable, Deck 2	AB
13	LPLTM0148AF01	Plate, Lever Guide, Deck 2	AE	79	NFLYC0120AFZZ	Flywheel	AG
14	LPLTP0068AF00	Clutch Plate, Auto Stop	AB	80	NGERH0149AF00	Gear, Fast-Forward	AB
15	LRTNP0058AFZZ	Retaining Ring	AA	81	NGERH0144AF00	Gear, Flywheel	AB
16	MLEVF1678AFFW	Lever, Auto Stop	AB	82	NiDR-0088AFZZ	Idler, Playback	AE
17	MLEVF1667AFFW	Prevention Lever, Auto Stop	AA	83	NPLYR0106AF00	Pulley, Full Auto Gear	AB
18	MLEVP0539AF00	Release Lever, Arm Lock	AB	84	NR6LY0065AFZZ	Pinch Roller Assembly	AE
19	MLEVP0433AFZZ	Chip, Sensor	AA	85	NSFTT0304AFFD	Shaft, Bottom Lever	AD
20	MSPRT1078AFFJ	Spring, Arm Lock Release Lever	AA	86	NSFTT0305AFFD	Shaft, Solenoid	AB
21	MSPRC0490AFFJ	Spring, Auto Stop Prevention	AA	87	PCUSF0029AFZZ	Felt, Clutch	AA
23	MARMM0069AFZZ	Lever, Pad	AC	88	PGiDP0002AF00	Leber Guide (Left)	AC
24	MARMP0024AF00	Lever, Swing	AB	89	PGiDP0003AFZZ	Leber Guide (Right)	AC
25	MCAMP0060AF00	Cam, Pad	AB	90	RHEDF0089AFZZ	Head Playback	AM
26	MCAMP0061AF00	Cam, Full Auto	AB	91	MLEVF1628AFFW	Lever, Record	AB
27	MLEVF1616AFFW	Lever, Play	AB	92	MLEVF1629AFFW	Lever, Record Sensor	AC
28	MLEVF1617AFFW	Lever, Rewind	AB	93	MLEVF1630AFFW	Lever, Record Switch	AC
29	MLEVF1618AFFW	Lever, Fast-Forward	AB	94	MLEVP0527AF00	Lever, Erase Prevention	AA
30	MLEVF1619AFFW	Lever, Stop	AB	98	RHEDA0095AFZZ	Head, Erase	AH
31	MLEVF1620AFZZ	Lever, Pause	AB	99	RHEDH0132AFZZ	Head, Record/Playback	AM
32	MLEVF1621AFFW	Lever, Eject Action	AA	100	MSPRD0597AFFJ	Spring, Stop Killer Lever	AA
33	MLEVF1622AFFW	Lever, Interlocking	AB	101	LSLVM0178AFFD	Sleeve, Arm	AC
34	MLEVF1623AFFW	Lever, Lock, Deck 1	AC	102	MSPRC0446AFFJ	Spring, Operation Lever	AA
34	MLEVF1631AFFW	Lever, Lock, Deck 2	AC	107	LHLDW1075AFZZ	Nylon Band	AA
35	MLEVF1624AFFW	Lever, Switch	AC	110	MSPRC0489AFZZ	Spring, Back Tention, Deck 1	AA
36	MLEVF1625AFFW	Lever, APSS Lock, Deck 1	AB	501	LX-BZ0451AFFD	Screw, 2mm Dia. x 6mm	AA
37	MLEVF1626AFFW	Release Lever, Play Idler	AB	502	LX-HZ0138AFFD	Screw, Head Plate	AB
38	MLEVF1627AFFW	Lever, Eject	AC	503	LX-HZ0139AFFD	Screw, Pad Lever	AB
39	MLEVP0482AFZZ	Deck 1 Head, Dummy	AB	504	LX-HZ0141AFFD	Screw, Eject Lever	AB
40	MLEVP0502AFZZ	Lever, Pause Lock	AB	505	LX-HZ0142AFFD	Screw, Head	AA
41	MLEVP0518AFZZ	Lever, Fast-Forward/Rewind	AK	506	LX-WZ1076AF00	Washer, Supply Turn Table	AA
42	MLEVP0519AF00	Lever, Full Auto Sensor	AA	507	LX-WZ9064AFZZ	Washer, $\phi 1.5 \times \phi 3.8$ x 0.5mm	AA
43	MLEVP0520AF00	Lever, Play Lock	AA	508	LX-HZ0137AFFD	Screw, Record Switch Lever	AB
44	MLEVP0521AF00	Lever, Stop Lock	AA	509	XWHJZ41-01100	Washer, $\phi 4.1 \times \phi 10$ x 0.1mm	AA
45	MLEVP0522AF00	Lever, Brake	AB	511	LX-HZ0154AFFD	Screw, $\phi 2 \times 8$ mm	AB
46	MLEVP0523AF00	Lever, Button	AB	512	XHPSD26P05000	Screw, $\phi 2.6 \times 5$ mm	AA
47	MLEVP0524AF00	Lever, APSS Switch	AA	513	LX-HZ0143AFFD	Screw, $\phi 2 \times 8$ mm	AA

PWB-A1 ~A3 DUNTLO214AF03 (Combined Assembly)	Power/Microcomputer/ Headphones for H
PWB-A1 ~A3 DUNTLO214AF06 (Combined Assembly)	Power/Microcomputer/ Headphones for E
PWB-B1 ~B8 DUNTU0198AF03 (Combined Assembly)	Main/Beat Cancel/APLD/ APLD Ind./Tape Control/ INST/Mic/Graphic Equalizer for H
PWB-B1 ~B8 DUNTU0198AF06 (Combined Assembly)	Main/Beat Cancel/APLD/ APLD Ind./Tape Control/ INST/Mic/Graphic Equalizer for E
PWB-C1,C2 DUNTRO284AF03 (Combined Assembly)	Tuner/Antenna/Stereo Ind. for H
PWB-C1,C2 DUNTRO284AF06 (Combined Assembly)	Tuner/Antenna/Stereo Ind. for E

NAME	COMPONENT	VALUE	UNIT	REMARKS	DATE	TESTER	BOARD	UNIT/REMARKS
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	4	10K	Ω					
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