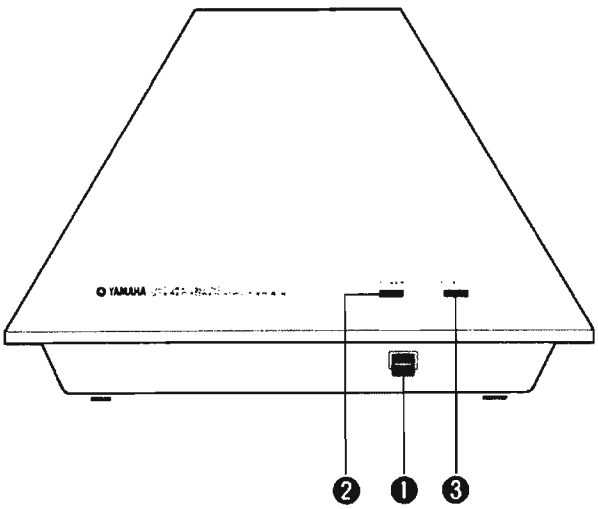
B-6

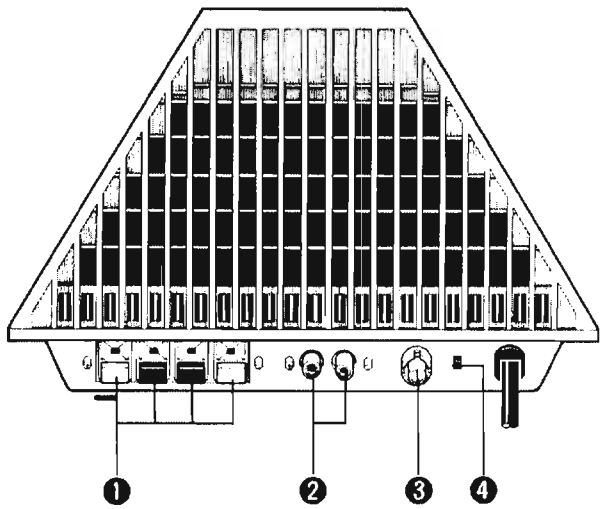
SERVICE MANUAL

■ FRONT VIEW



❶POWER SWITCH
❷POWER INDICATOR
❸PROTECTION INDICATOR

■ REAR VIEW



❶SPEAKER TERMINALS
❷INPUT TERMINALS
❸GROUND TERMINAL
❹SPEAKER SWITCH

■ CONTENTS

004416

SINCE 1887 YAMAHA
NIPPON GAKKI CO., LTD HAMAMATSU, JAPAN
'80. 9 1.8K K.T Printed in Japan

■SPECIFICATIONS

Minimum rims Output Power
(8Ω, 20 to 20,000Hz, T.H.D. 0.003%) . . 200W + 200W

Total Harmonic Distortion
(8Ω, 100W, 20 to 20,000Hz) . . . . . Less than 0.03%

IM Distortion Ratio (50Hz · 7kHz = 4 : 1)
(8Ω, 100W) . . . . . Less than 0.003%

Power Bandwidth
(8Ω, 100W, 0.03% T.H.D.) . . . . . 10Hz to 100kHz

Damping Factor
(8Ω, 1kHz) . . . . . Better than 200

Frequency Response
(8Ω) . . . . . DC to 100kHz $\pm \frac{0}{0.5}$dB

Input Sensitivity/Impedance
(8Ω, 200W, 1kHz) 1.41V/25kΩ

Signal-to-Noise Ratio (IHF A Network)
(8Ω, input shorted) 127dB

Channel Separation (1kHz, shorted)
20Hz 95dB
1kHz 92dB
20kHz 72dB

Power Supply
U.S. 120V, 60Hz
Northern Europe 220V, 50Hz

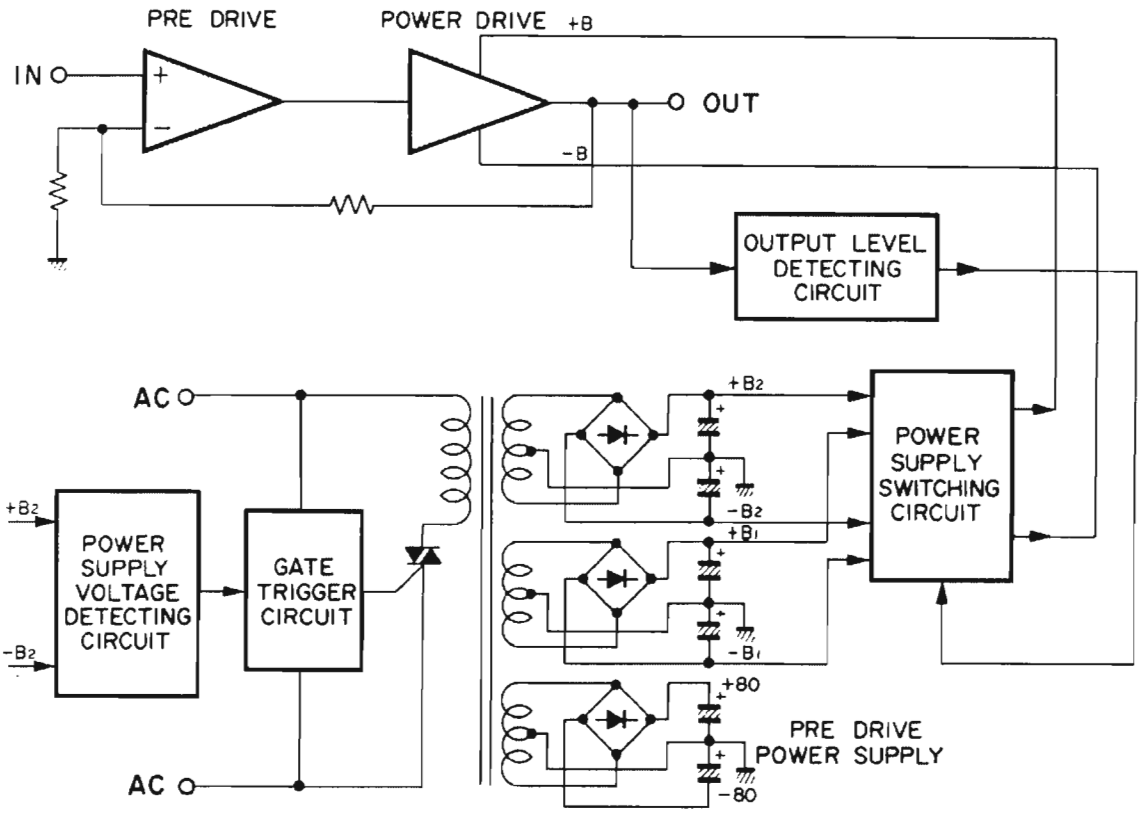
Power Consumption
U.S. . . . . 200W (1% T.H.D., 1/10 output power)
Northern Europe . . . . . 1200W (1% T.H.D.)

Dimensions (W x H x D) . . . . . 290 x 176.5 x 290 mm
(11-7/16" x 6-15/16" x 11-7/16")

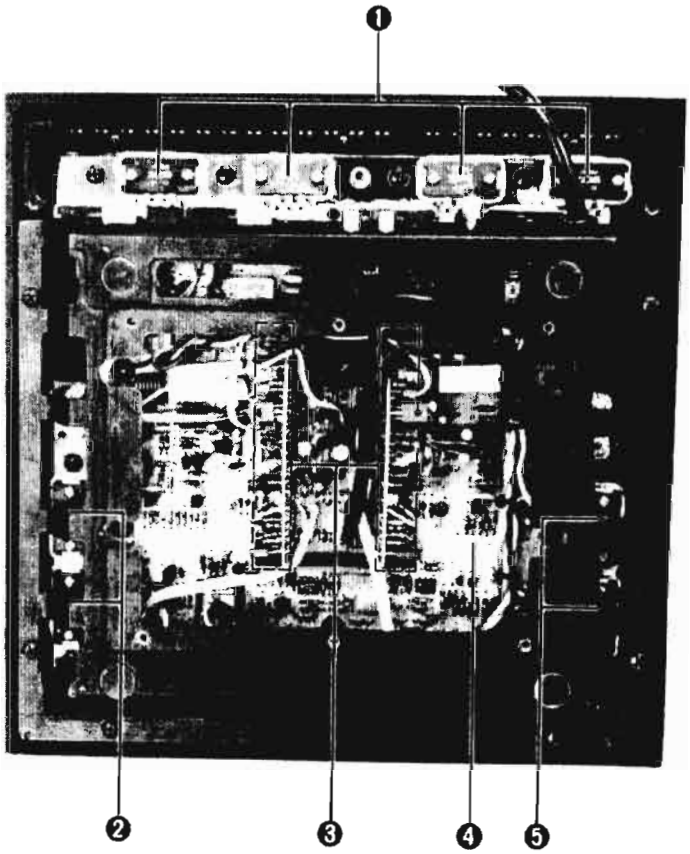
Weight
U.S. . . . . 9.0 kg (19 lbs. 13 oz.)
Northern Europe . . . . . 9.2 kg (20 lbs. 4 oz.)

Specifications subject to change without notice.

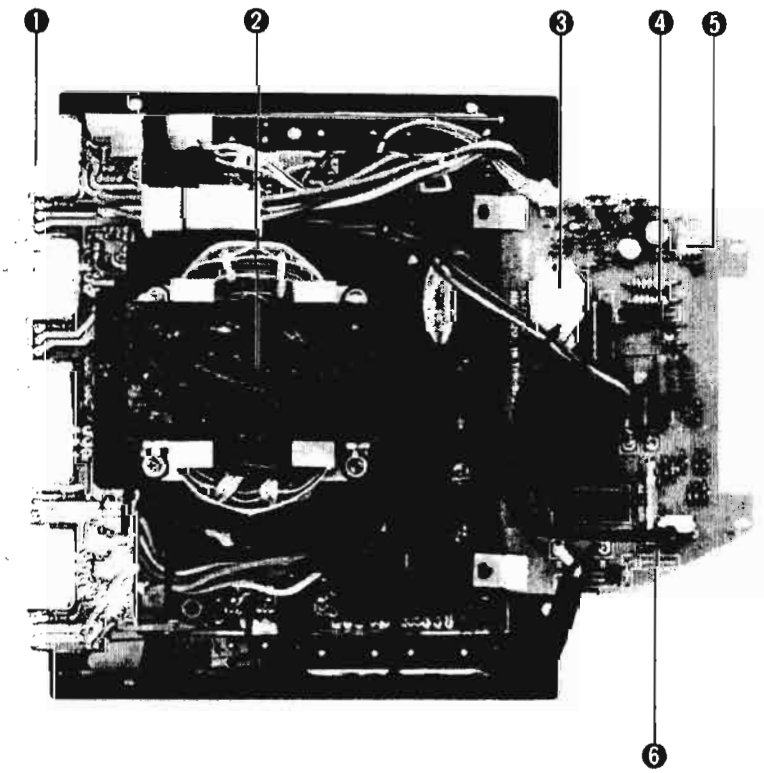
■BLOCK DIAGRAM



■INTERNAL VIEW



❶Power Transistor
2SA1095LBB
2SC2565LBB
❷ ❺Transistor (For Voltage selector)
2SA1095LBB
2SC2565LBB
2SB596 (O, Y)
2SD526LBB
❸Pri-drive C. Board (NA07519)
❹Main C. Board
(U.S. Model: NA07549)
(N. European Model: NA07518)



❶Radiator
❷Power Transformer
(U.S. Model: GA64010)
(N. European Model: GA64000)
(Japanese Model: GA63730)
❸ Triac AC16D1F-L (iH00102)
❹Triac SMOR5G42 (iH00090)
❺Photo coupler TLP508 (iK00028)
❻Power Supply C. Board
(U.S. Model: NA07556)
(N. European Model: NA07557)

■DISASSEMBLY PROCEDURES

1. **Bottom cover removal**
   Remove the screws ① to ⑥ in Photo 1 and then the bottom cover can be removed.
   ① to ⑥ : Bind Head Tap-Tyte screw 4 x 8 (Black)

2. **Transistor cover removal**
   Remove the screws ⑦ to ⑨ in Photo 1 and then the transistor cover can be removed.
   ⑦ to ⑨ : Bind Head Tap-Tyte screw 4 x 8 (Black)

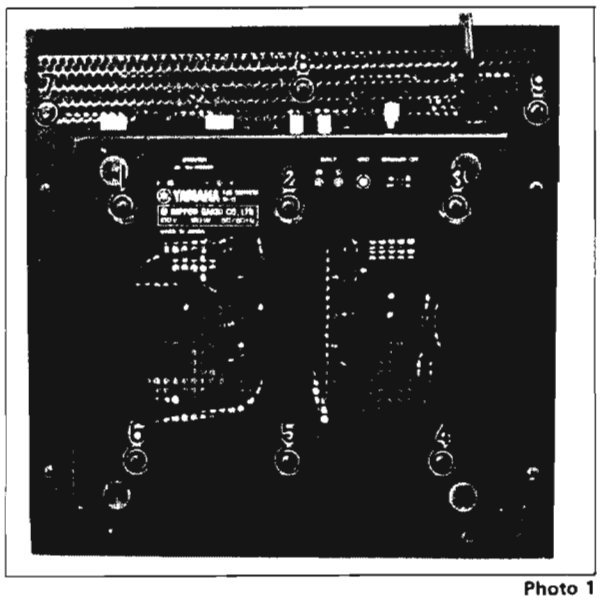


Photo 1

3. **Top case unit removal**
   Remove the screws ① to ⑭ in Photo 2 and then loosen the screws ⑮ to ⑱.
   * The screws ⑮ to ⑱ can not be removed because they are attacked with guide bushes.
   ① to ⑩ : Bind Head Tap-Tyte screw 4 x 8 (Black)
   ⑪ to ⑭ : B.W Head Tap-Tyte screw 4 x 8 (Black)
   * Make sure that you use the above screws.

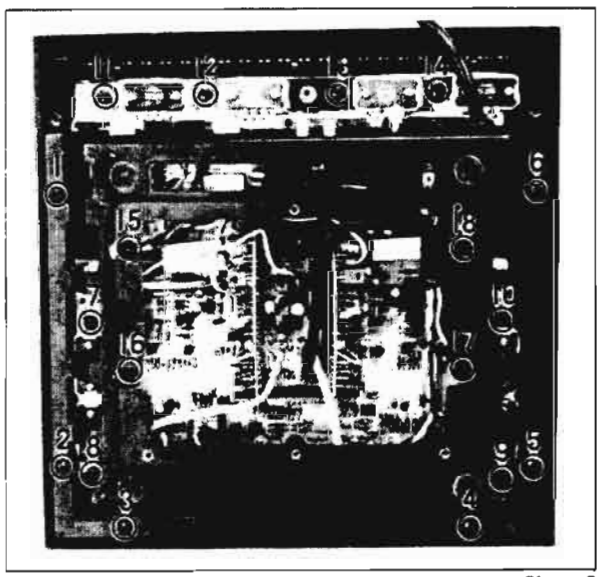


Photo 2

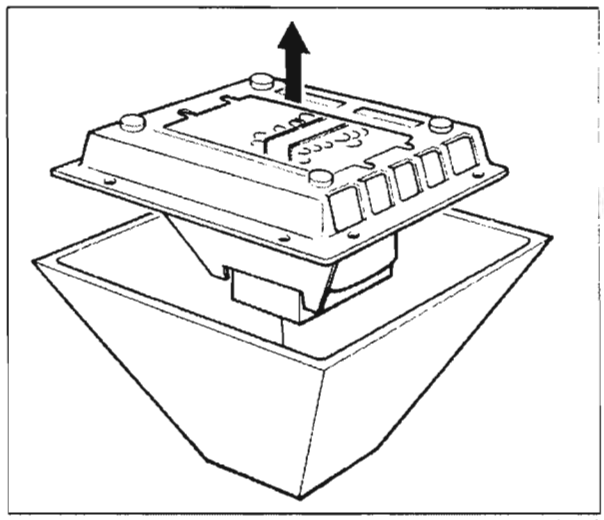


Fig. 1

4. **Power supply printed circuit board removal**
   Remove the screws ① to ④ in Photo 3 and then spread out the power supply printed circuit board in Photo 4. You can exchange the parts in power supply printed circuit board (ex. Triac).
   ①. ② : B.W Head Tap-Tyte screw 3 x 6 (Black)
   ③. ④ : Bind Head Tap-Tyte screw 3 x 8
   * Make sure that you use the toothed locked washer with the screw ①

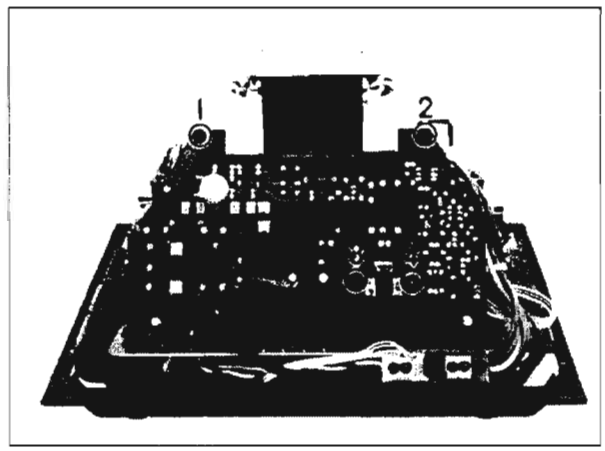


Photo 3

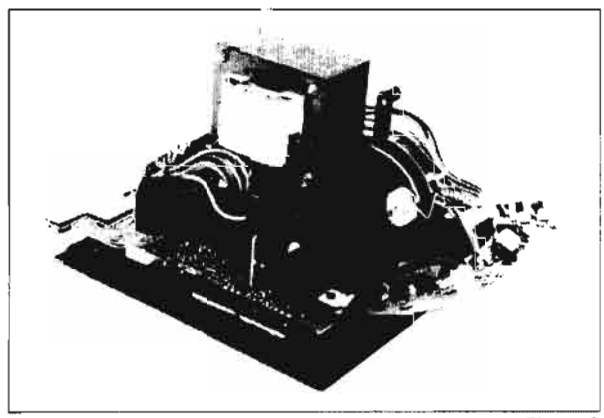


Photo 4

5. **Power supply unit removal**
   Remove the three connectors which are connected to power supply unit. Remove the screws ① to ③ in Photo 5 and then power supply unit can be removed from the bottom unit.
   ① to ③ : Bind Head Tap-Tyte screw 4 x 8 (Black)

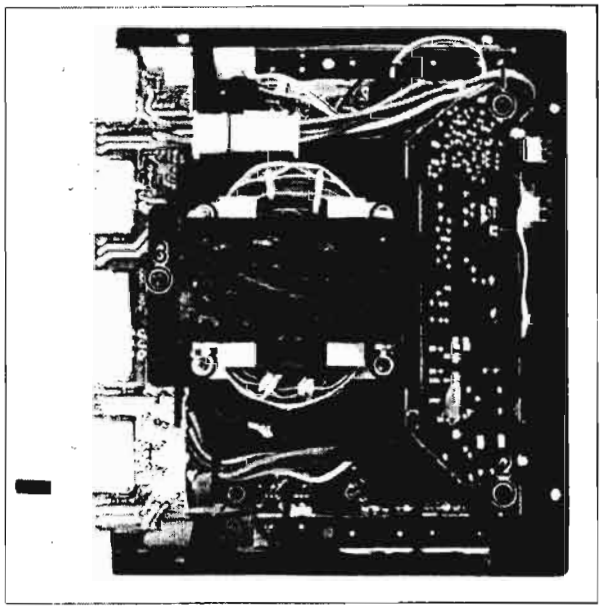


Photo 5

6. **Capacitor cover removal**
   Remove the screws ① to ④ in Photo 6 and then remove the capacitor cover.
   ① to ④ : Bind Head Tap-Tyte screw 3 x 8 (Black)

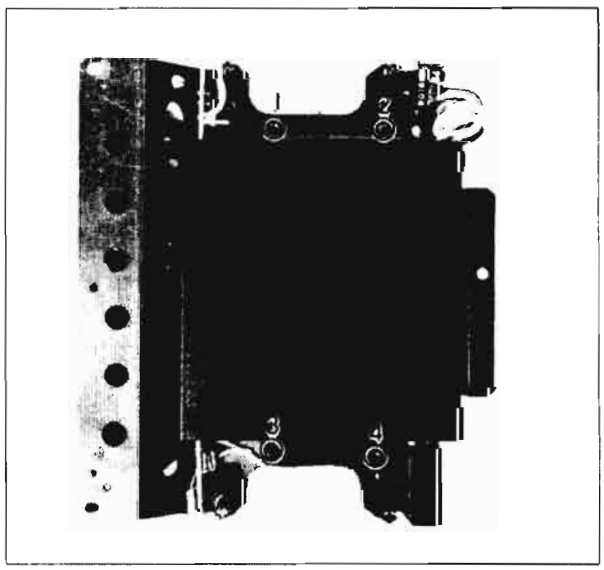


Photo 6

7. **Electrolytic capacitor printed circuit board removal**
   Remove the screws ① and ② in Photo 7 and remove the electrolytic capacitor printed circuit board.
   ①, ② : Bind Head Tap-Tyte screw 3 x 16 (Black)

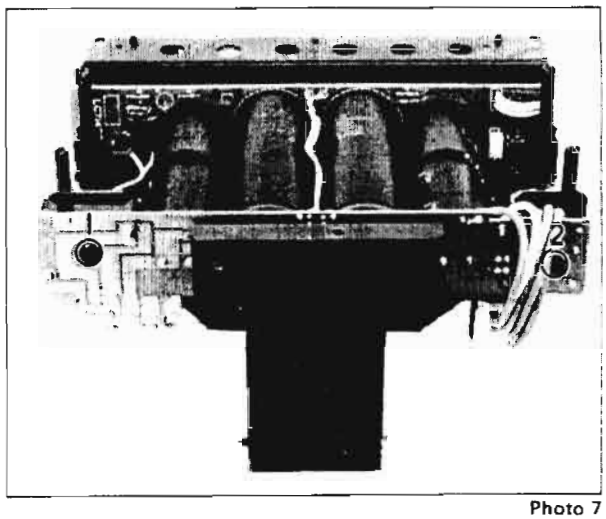


Photo 7

8. **Main printed circuit board removal**
   a. Remove the lead wires which are connected to the main printed circuit board.
      - Remove the speaker terminal. (2-screws)
      - Remove the LED Holder. (2-screws)
      - Remove the connector. (2-screws)
   b. Remove the screws ① to ⑥ in Photo 8 and then Remove the main printed circuit board.
      ① to ⑥ : Bind Head Tap-Tyte screw 4 x 8 (Black)
      *Make sure that you use the toothed locked washer with the screw ④

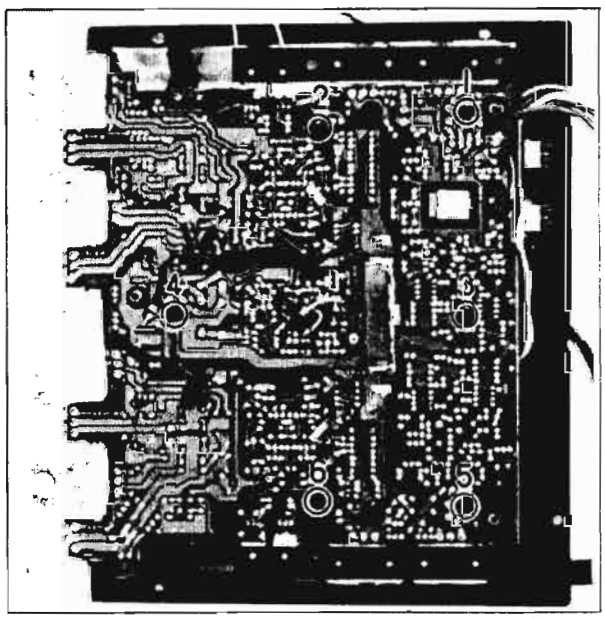


Photo 8

■CIRCUIT OPERATION

X POWER SUPPLY CIRCUIT OPERATION CONTROL CIRCUIT

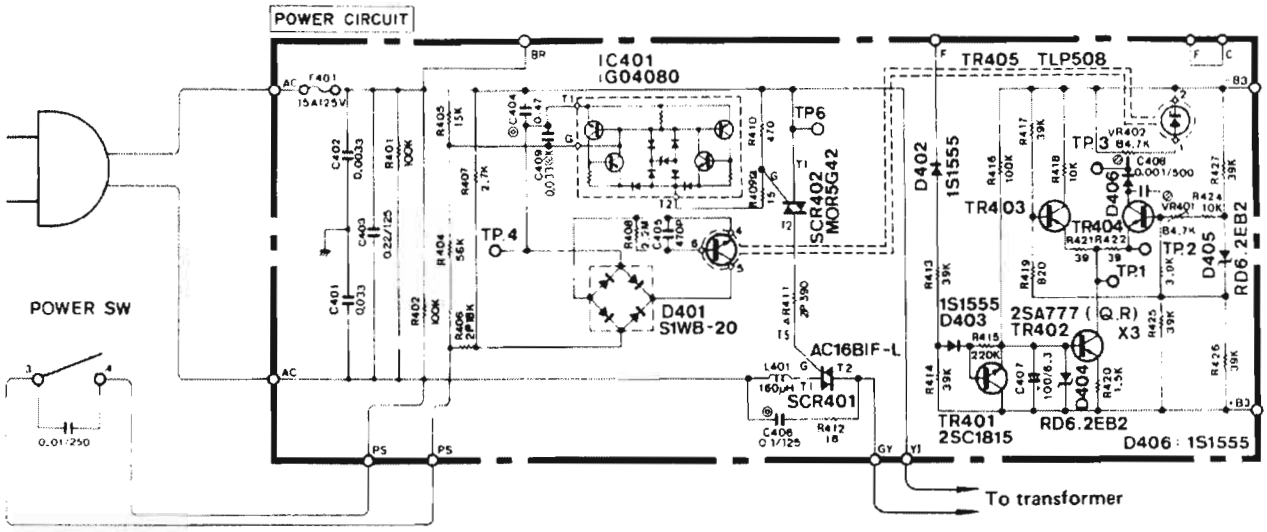


Fig. 1

X Power Supply Circuit Operation

The X power supply circuit is composed of a voltage variation detector circuit consisting of TR405 (Photo Coupler TLP508), TR402, TR403, TR404, D404, D405 and D406, and a control circuit consisting of IC401, IG04080, TR405 (TLP508), D401, SCR401 and SCR402.

IG04080

This is an IC with the function of triggering TRIAC.

Operation when $T_2 < T_1$

If a voltage higher than the combined forward-direction voltage of D_1 and D_4 (0.6 + 0.6V) and the zener voltage of ZD (7.5V) is applied (7.5 + 1.2 = 8.7V → about 9V), current flows to ZD. As this current becomes IB_2, TR_2 turns on, then TR_4 also turns on. Accordingly, a high current flows from T_1 to T_2.

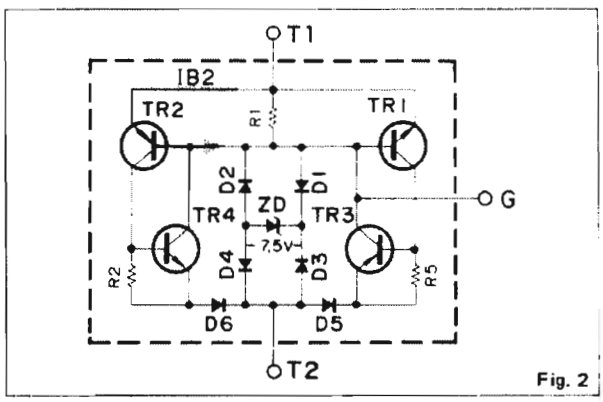


Fig. 2

Operation when $T_2 > T_1$

The same as above applies, but current flows in the order of: $D_3 \rightarrow ZD \rightarrow D_2 \rightarrow TR_1$. Then TR_1 and TR_2 turn on, and current flows from T_2 to T_1.

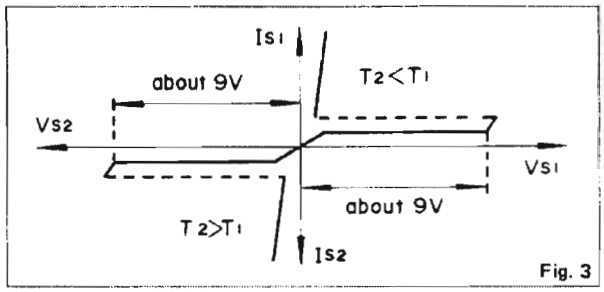


Fig. 3

POWER APPLICATION PHASE ANGLE CONTROL CIRCUIT AND CONSTANT-VOLTAGE OPERATION

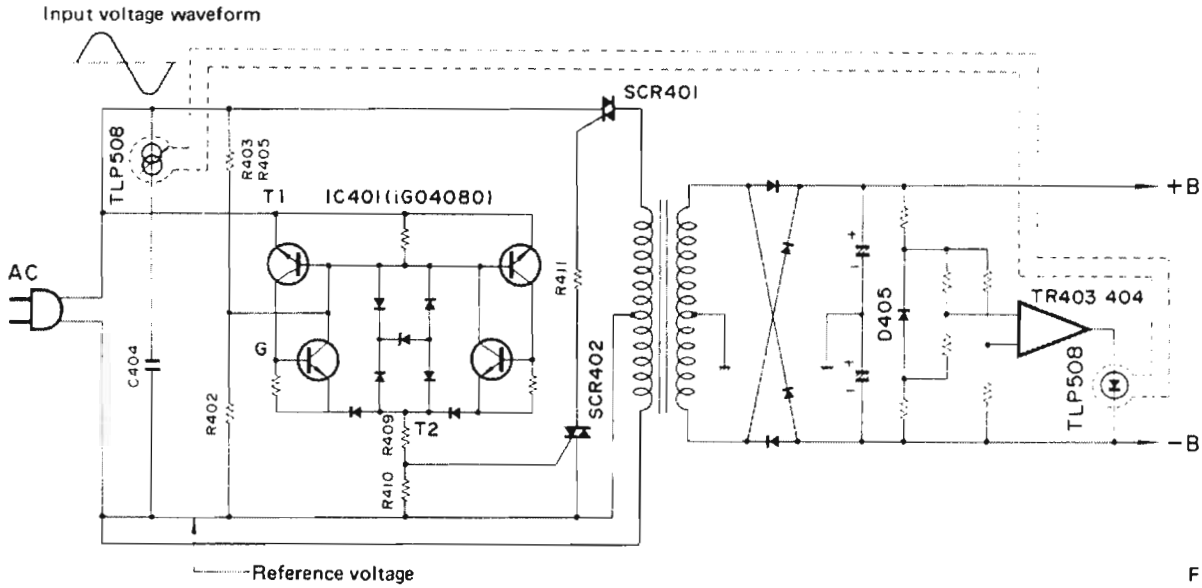


Fig. 4

The positive half-cycle of AC input is explained below: With the current from the constant-current source generated by a phototransistor of Photo Coupler TLP508, the voltage at both ends of C404 ($T_1 - T_2$ voltage) becomes higher over time as shown in Fig. 3. If it reaches about 9V, $T_1 - T_2$ turns on, and the electric energy stored in C404 passes, $T_1 \rightarrow T_2 \rightarrow$ R409 $\rightarrow$ R410, then discharges. At this time, the trigger operates and SCR402 switches on. Accordingly, SCR401 also switches on, and the voltage is applied to the transformer primary. If the current from the constant-current circuit with the phototransistor TLP508 is low, it will take a longer time to reach 9V. Thus the voltage applied to the transformer primary will be lower and the rectified voltage (±B) in the secondary will also be lower. On the other hand, if the current from the constant-current circuit is high, it will take a shorter time to reach 9V. As a result, the voltage applied to the transformer primary will be higher and the rectified voltage in the secondary (±B) will also be higher. Thus, by detecting the voltage variation of ±B of the secondary, and changing the current supplied to the LED of Photo Coupler 508 so as to change the light emitting quantity, the current of the phototransistor changes and the power application phase angle changes, thereby ensuring stability. If, for example, voltage ±B tends to rise, a voltage lower than the reference voltage obtained in zener diode D405 is input to terminal of the voltage variation detector circuit.

As a result, the current supplied to the LED of TLP508 decreases and it becomes dim. Accordingly, the current of the phototransistor decreases and it will take a longer time for TRIAC to turn on. Thus the voltage applied to the transformer primary will be lower and the rectified voltage of the secondary will also be lower. This means, that the amount by which ±B voltage tended to become higher, is detected and fed back so as to keep constant voltage. On the other hand, if ± voltage tends to become lower, the same sequence operates in reverse to maintain constant voltage.

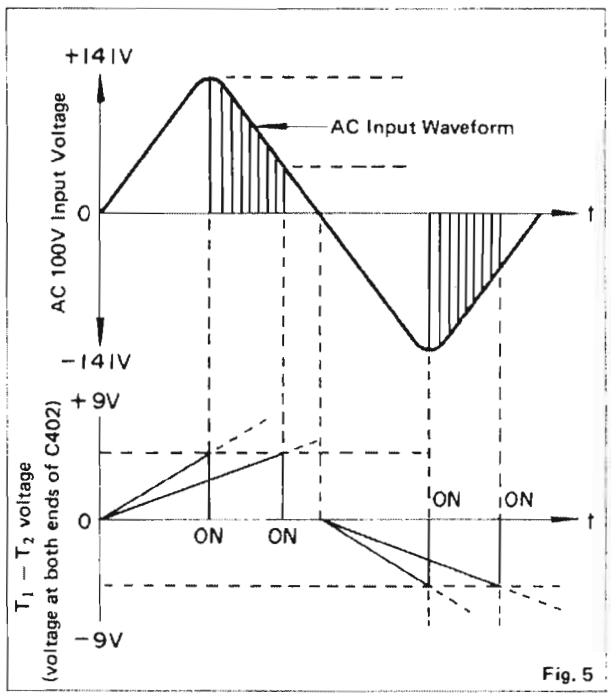


Fig. 5

THE OPERATION AT THE TIME OF ON-OFF OF POWER SW

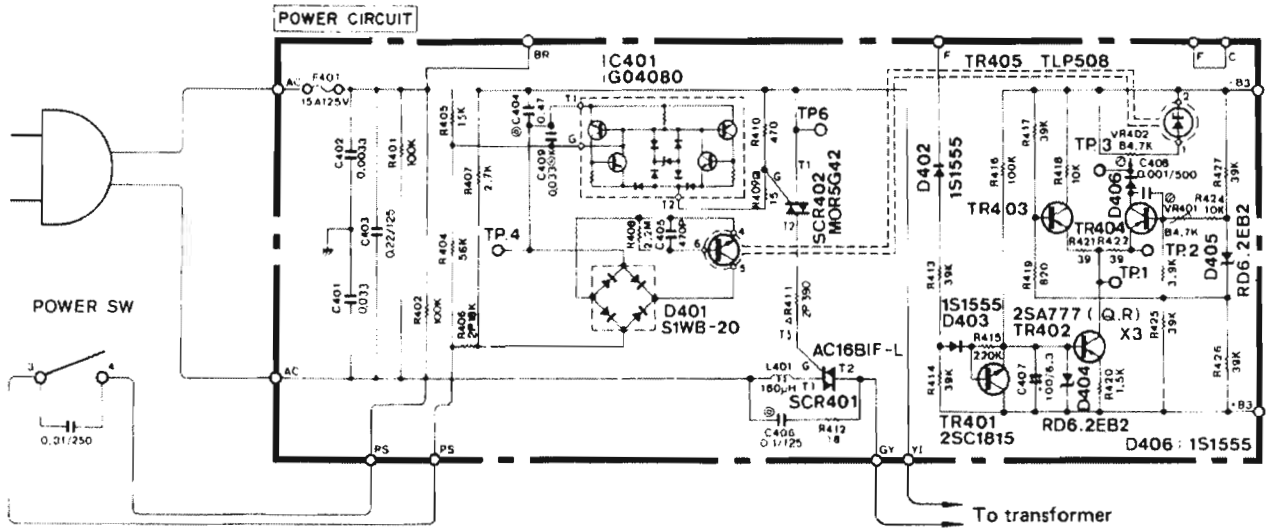


Fig. 6

In all cases mentioned above, the voltage variation detector circuit operates and, accordingly, the control circuit is activated. If the power SW is turned on, however, there is no ±B voltage. Therefore the voltage variation detector circuit does not operate and no current flows to the photo coupler. That is, as the control circuit of the primary is not activated either, there is no power supply.

This power circuit is provided with a start circuit to insure operation when the power SW is turned on. Resistors R404, and R405 connected to G circuit of IC401 (IG04080) provide this function. If the power SW is turned on, the AC input voltage passes R402 (100K), then from G terminal of IC401 to T_1 terminal and current flows to charge C404. Thus the voltage of T_1 terminal gradually increases. If it nears 9V, $T_1 - T_2$ of IC401 is connected, thereby switching on SCR402 and SCR401. At that time, a voltage of about 13V is supplied to the voltage variation detection circuit of the secondary to start operation.

And the start circuit operates quickly as the power voltage is low.

SOFT START CIRCUIT

Just after the power SW is turned on, the voltage variation detector circuit detects that the power voltage is very low. Then it is fed back to the primary control circuit via TLP508 so as to increase the power application phase angle.

However, if the phase angle increases abruptly, a very large rush current flows to TRIAC (SCR401).

To prevent this, a soft start circuit consisting of TR402, D404, C407 and R416 is provided so that the power application phase angle is increased gradually. Because this circuit gives a bias applied to TR402 with charge time of C407 and R416, the current flowing to TR402 gradually increases. Therefore, the current flowing to Photo Coupler TLP508 varies in the same way to increase the power application phase angle gradually.

VR401 is for adjustment of ±B, and VR402 for adjustment of the current flowing to TLP508.

■ADJUSTMENTS

AC line voltages under adjustments

Models	AC line voltage	Frequency
US	120V ± 10%	60 Hz
North European	220V ± 10%	50 Hz

STEP	ADJUSTMENT ITEM	ADJUSTMENT	TEST POINT	RATING OR STANDARD	REMARKS
1	DC offset (Lch)	Pre-drive P.C. board VR301	Main P.C. board TP1 ~ TP2	0 ± 5 mV	After the power switch is ON, wait 3 minutes before adjustment.
2	DC offset (Rch)	Pre-drive P.C. board VR302	Main P.C. board TP1 ~ TP4	0 ± 5 mV	
3	Idling current (Lch)	Main P.C. board VR101	Main P.C. board TP2(+) ~ TP3 (–)	2.5 ± 0.5 mV	• No Load • Rotate VR101 and 102 to the left and after the power switch is ON, wait 5 minutes before adjustment. • Max 40mV under warming up.
4	Idling current (Rch)	Main P.C. board VR102	Main P.C. board TP4(+) ~ TP5(–)	2.5 ± 0.5 mV	
5	Power supply voltage	Power supply P.C. board VR401	Main P.C. board TP1(E) ~ TP11	76.0 ± 0.2 V	No Load
6	Photo coupler working point	Power supply P.C. board VR402	Power supply TP1 ~ TP2	60 ± 10 mV	Adjust the moment you adjust step 5.

** Adjust step 5 and 6 at the same time as you use the two digital multi-meters.*

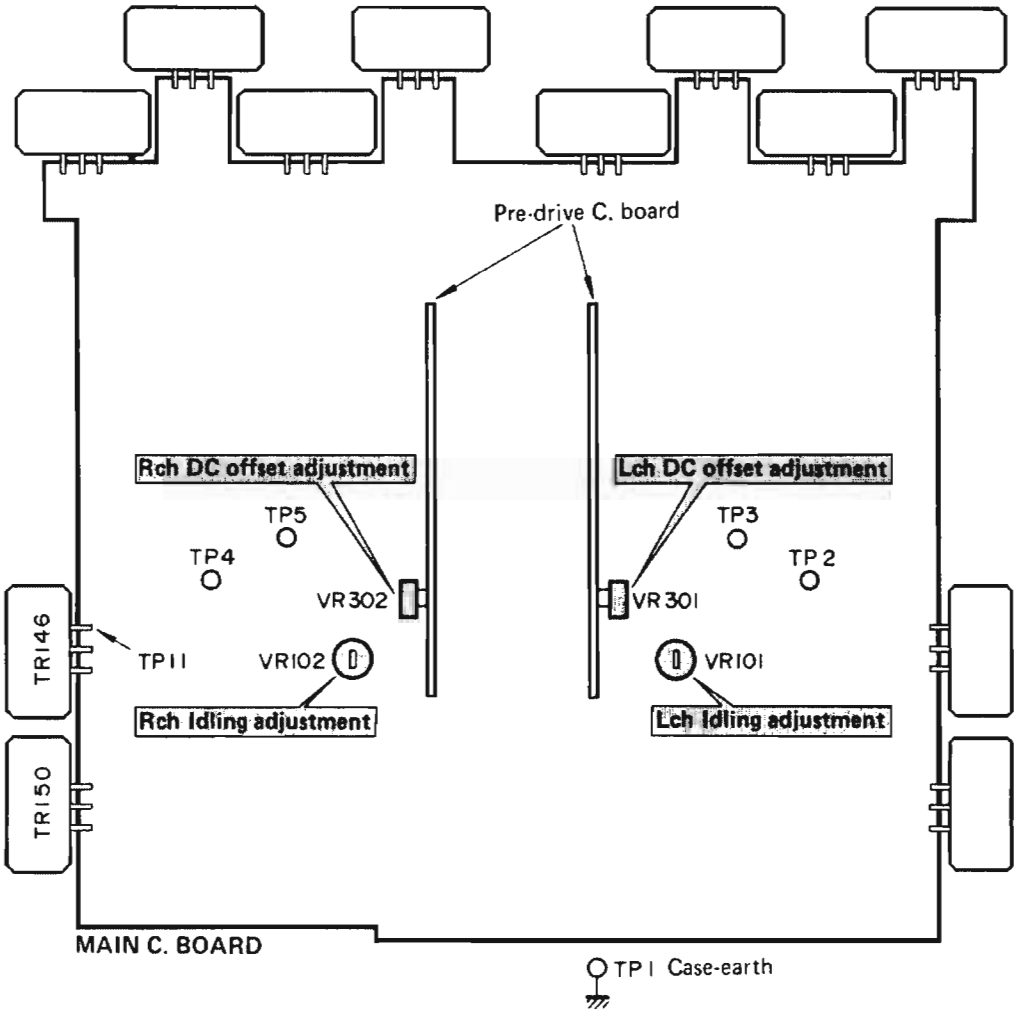
** Adjust step 6 only when exchanging the photo-coupler.*

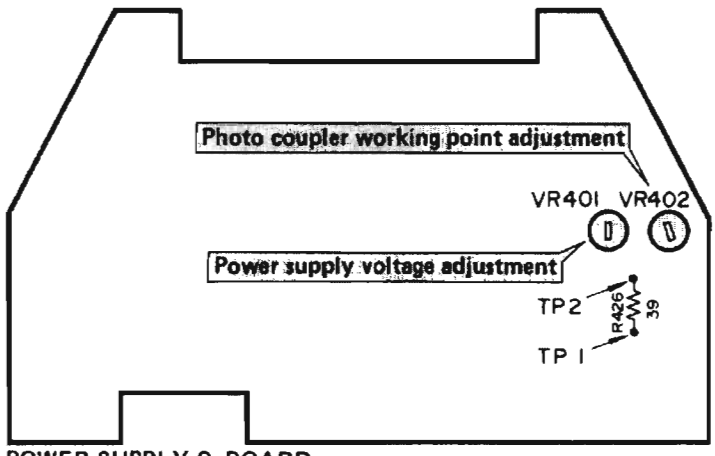
** Remove the Top case when adjusting but adjust in a short time when full power Drive is needed, because the top case unit is serves as a heat sink.*

- **Cautions (Power supply P.C. board adjustment)**

1) Be careful not to receive an electric shock because AC line voltage is feeded to power supply P.C. board directly.
2) Make sure that the voltage is checked between the check point and the standard point.
3) Make sure that you use the floating input type osciloscope for observing the waveform.
   By using body-earthed osciloscope the circuit may be shorted. As the AC line voltage is feeded to the body, do not touch it.
4) Observe the waveform across R411 (390Ω 2P) (U.S Model) R413 (390Ω 2P) (N. European Model) to check the triac.

I. Adjustment Test point

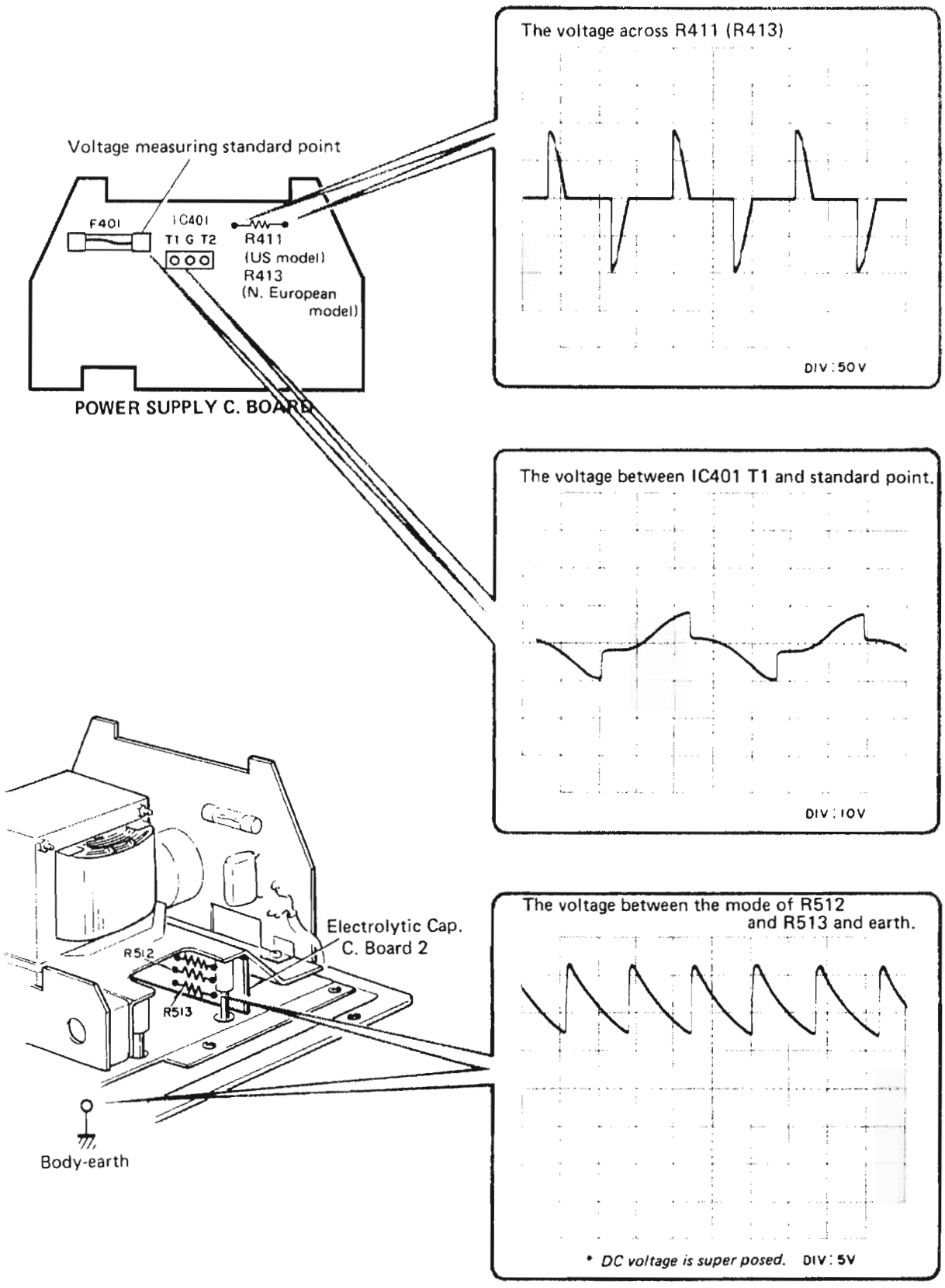




POWER SUPPLY C. BOARD
(print pattern side)

- *You can adjust easily to solder the lead wires (about 1cm) to TP1, and TP2.*
- *VR401 and 402 are able to adjust at print pattern side.*

II. Waveform Check point



B-6

WIRING

SPEAKER
R + − − + L
MAIN C. BOARD 2/3

INPUT
R L
PJ601
IR IL
PIN JACK
C. BOARD 1/2

SPEAKER OFF
ON
OFF
SW601
PIN JACK
C. BOARD 2/2
NA07522

Dimension of AC cord
50mm
U : 270mm
G : 400mm

C508, 509 are connected to the pattern side
(cover the lead wire with the isolation tube)
P.C. board
Tube 4 t 1
3.3/100

ELECTROLYTIC CAPACITOR
C. BOARD 1/2

ELECTROLYTIC CAPACITOR C.BOARD 2/2

MAIN C. BOARD 1/3 NA07518

Mounting: temperature compensation of transistor
Transistor pusher
Tube 2 t 2
Heat sink
Main C. board
Transistor
Paint silicon grease sufficiently

TEMPERATURE COMPENSATION
PRE-DRIVE P.C. BOARD
PC LIMITER
HIGH SPEED COMPARATER
IDLING CURRENT ADJUSTMENT
IDLING CURRENT ADJUSTMENT

PRE-DRIVE
C. BOARD
NA07519
DC OFFSET ADJUSTMENT

PRE-DRIVE
C. BOARD
NA07519
DC OFFSET
ADJUSTMENT

POWER SUPPLY VOLTAGE SWITCHING SECTION

POWER TRANSFORMER
GA6401 (U.S. MODEL)
GA6400 (NORTH EUROPEAN MODEL)
※ The auto return type temperature fuse is set in the power transformer.

Out the lead wires of C501 and 502 above 3mm from P.C. board.
P.C. board
3mm

Mount pre-drive P.C. board to make a right angle with main P.C. board.
Pre-drive C. board
Right angle
Main C. board
Solder

Mounting C403 C406
Character side
C403
C406
P.C. board

Mounting SCR401
16 ± 0.5mm

Twist AC cord tight and solder.

CONTROL CIRCUIT
POWER SUPPLY C.BOARD
(U.S. MODEL)
POWER SUPPLY VOLTAGE SWITCHING SECTING
VOLTAGE CHANGE DETECTING CIRCUIT

PHOTO COUPLER WORKING POINT ADJUSTMENT

Mounting Transistor
TR119 ~ TR122
Paint silicon grease sufficiently
Bush
Transistor
Heat sink

Mounting Transistor
TR123 ~ 130, 145, 146, 149, 150
Paint silicon grease sufficiently
Transistor
Mica base
Heat sink

Mounting
D137, 138, 140 ~ 142, 144, 145, 155
P.C. board

The polarity of D146 to 149 and mounting
D146 ~ 149
LED Holder
P.C. board

MAIN C. BOARD 3/3
POWER PROTECTION

POWER

Mounting L401
Bonding
P.C. board
cap
160μH
Spacer
Fold to the print pattern side

To AC Cord
POWER

POWER SUPPLY C.BOARD
(NORTH EUROPEAN MODEL)

*Wiring Diagram is subject to change without notice.

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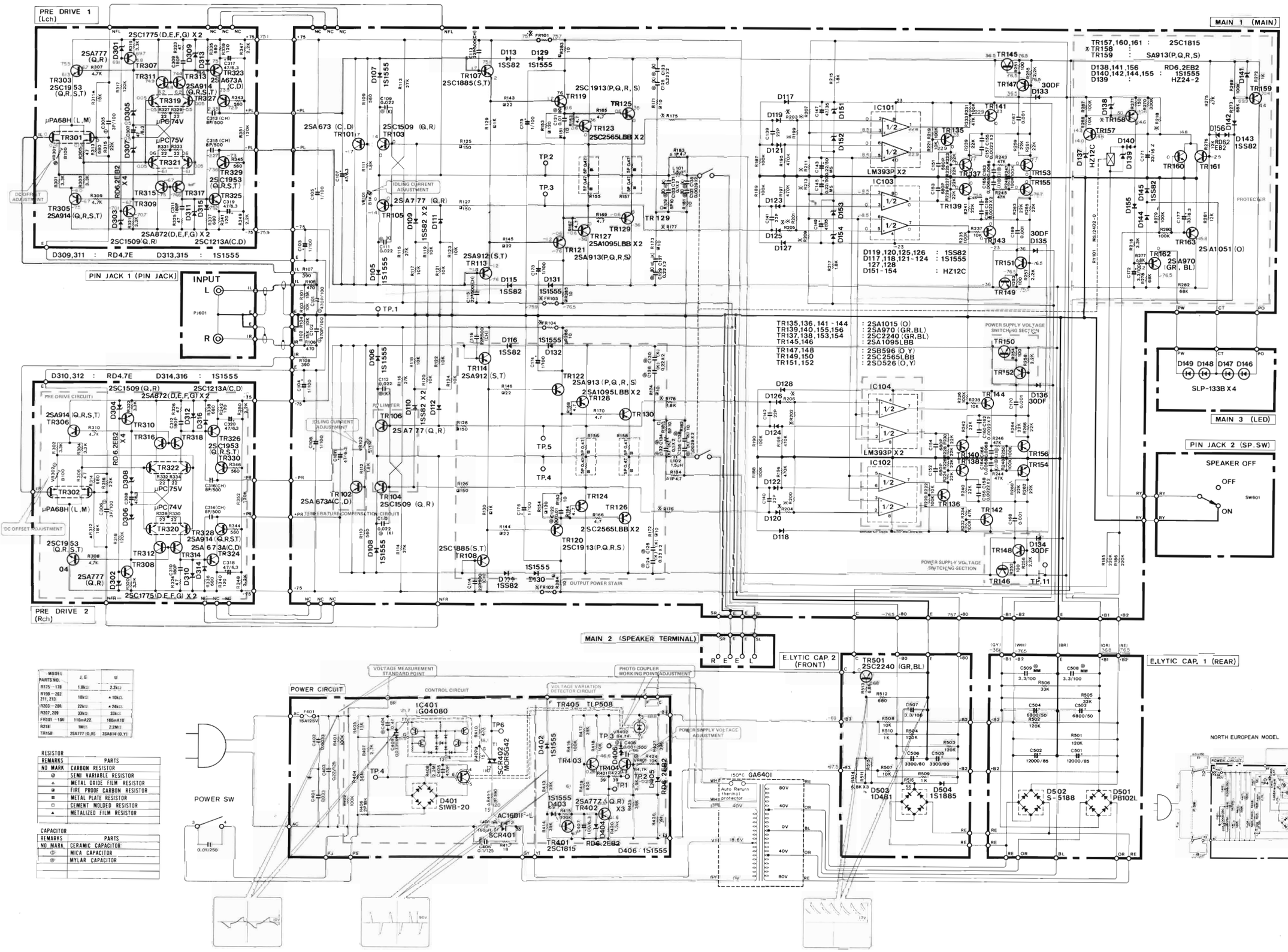
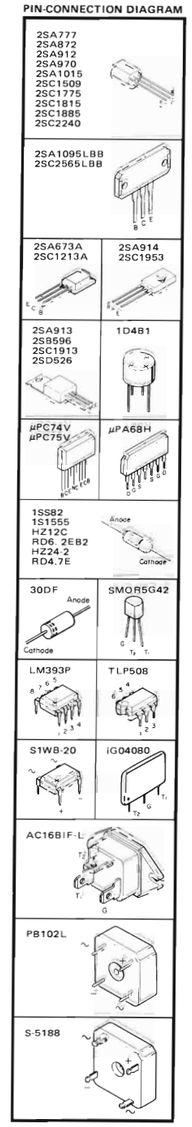
■SCHEMATIC DIAGRAM



PIN-CONNECTION DIAGRAM



MODEL PARTS NO.	J,G	U
R175 – 178	1.8kΩ	2.2kΩ
R198 – 202 211, 213	10kΩ	▲10kΩ
R203 – 206	22kΩ	▲24kΩ
R207, 209	33kΩ	33kΩ
FR101 – 104	110mA22	160mA10
R218	1MΩ	2.2MΩ
TR158	2SA777 (Q,R)	2SA816 (O,Y)

RESISTOR

REMARKS NO MARK	PARTS
⊘	SEMI VARIABLE RESISTOR
△	METAL OXIDE FILM RESISTOR
◪	FIRE PROOF CARBON RESISTOR
⊠	METAL PLATE RESISTOR
□	CEMENT MOLDED RESISTOR
▲	METALIZED FILM RESISTOR

CAPACITOR

REMARKS NO MARK	PARTS
Ⓒ	CERAMIC CAPACITOR
Ⓜ	MICA CAPACITOR
Ⓜ	MYLAR CAPACITOR

1) Measure the voltage of power supply P. C. Board between test points and Voltage measurement standard point.
2) When observing the waveform of power supply P. C. Board, make sure that you don't touch the body of the oscilo-scope, because of receiving an electric shock and you don't have a body-earth.
3) Triac is active when you observe the waveform of R413 (2.2kΩ 3P) in the circuit.

* The voltages are measured by the digital multimeter having internal resistance 1MΩ.
* Given above is the voltage measured with the U.S. model.
* Schematic Diagram is subject to change without.

PARTS LIST

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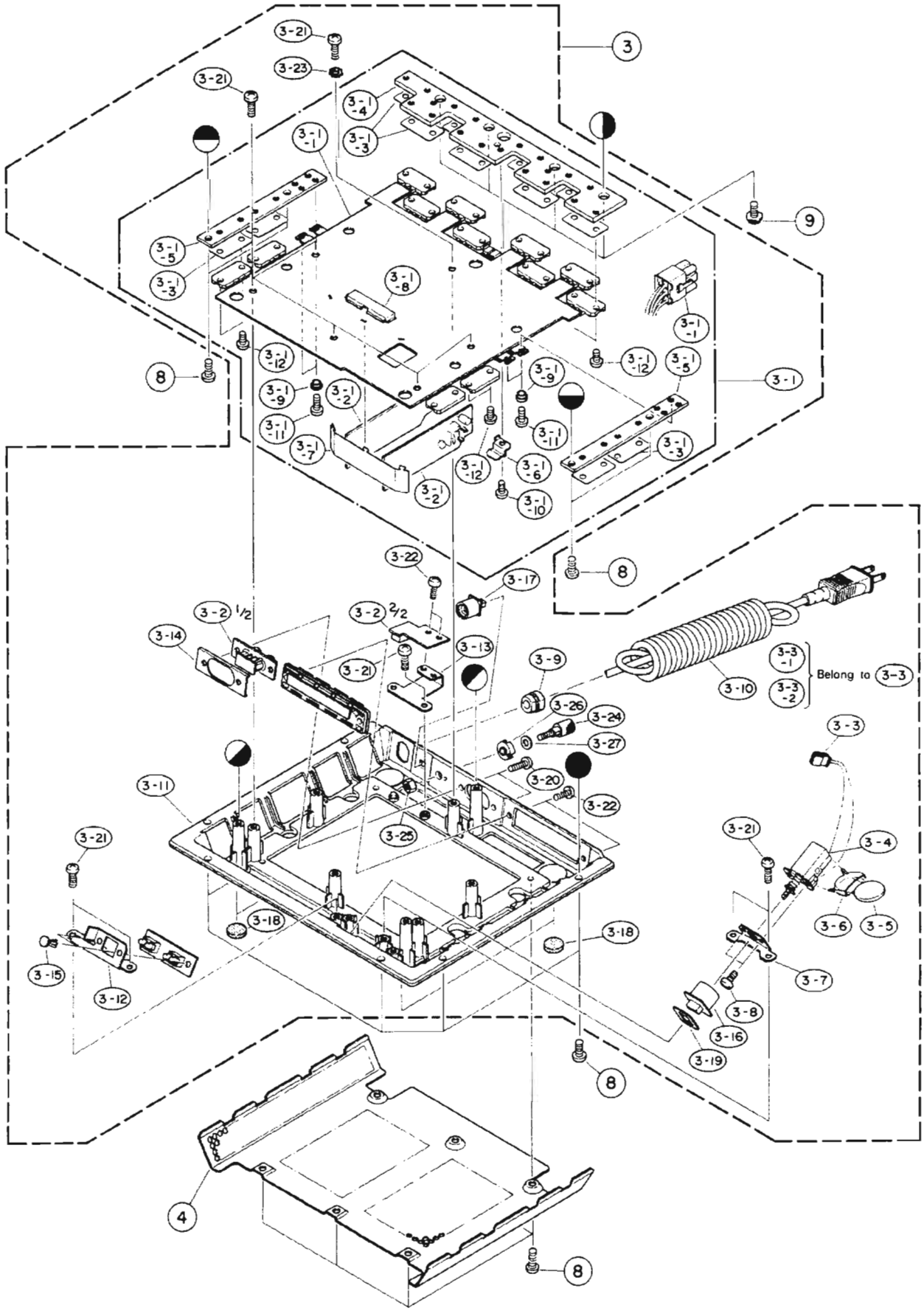
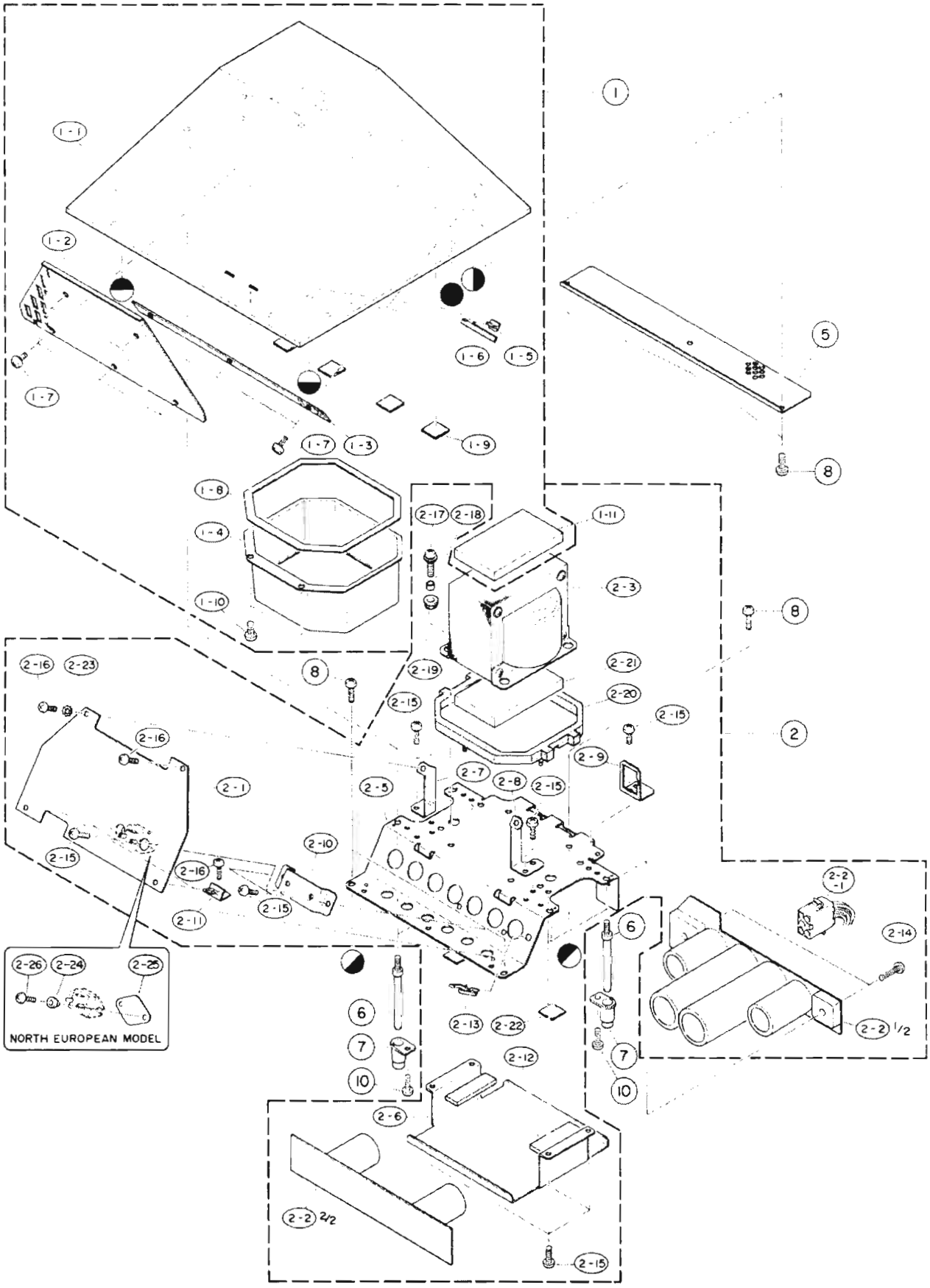
SINCE 1887 YAMAHA
NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN

004416

■EXPLODED VIEW (BOTTOM VIEW)



■EXPLODED VIEW (TOP VIEW)



■PARTS LIST

U: U.S.A
G: North European
J: Japanese

	Ref. No.	Part No.	Description	(部 品 名)	Remarks	Common model	Markets
*	1	32 00 00 NB 09 78 60	Top Case Unit	トップケースユニット			
*	1-1	32 00 00 BA 07 91 60	Top Case	トップケース			
*	1-2	32 00 00 AA 60 33 00	Case Cover (L)	ケースカバー(L)			
*	1-3	32 00 00 AA 60 33 10	Case Cover (S)	ケースカバー(S)			
*	1-4	32 00 00 BA 07 96 20	Trans Case	トランスケース			
*	1-5	32 00 00 CB 09 95 50	Lamp Lens	ランプレンズ			
	1-6	42 00 00 CB 08 52 10	Dumper 7 x 45 x t1.52 mm	メーターダンパー(A)		T-2	
*	1-7	42 00 00 EK 97 00 20	Pan Head Tap-Tyte Screw (B-Tyte) 2.6x4 (ZMC2-Bℓ)	鉄ナベタップタイト(Bタイト)			
*	1-8	42 00 00 CB 60 02 10	Packing	ケースパッキン			
*	1-9	42 00 00 CA 07 06 20	Isolation Fiber	絶縁ファイバー			
	1-10	42 00 00 EK 39 50 20	Bind Head Tap-Tyte Screw (B-Tyte) 4x8 (ZMC2-Bℓ)	鉄バインドタップタイト(Bタイト)			
*	1-11	42 00 00 NB 09 80 20	Silicon Grease Pack	シリコングリスパック			
*	2	32 00 00 NB 09 78 70	Power Supply Unit	電源ユニット			J
*	2	32 00 00 NB 09 91 70	〃	〃			U
*	2	32 00 00 NB 09 91 80	〃	〃			G
*	2-1	32 00 00 NA 07 52 00	Power Supply C. Board	電源シート			J
*	2-1	32 00 00 NA 07 55 60	〃	〃			U
*	2-1	32 00 00 NA 07 55 70	〃	〃			G
*	2-2	32 00 00 NA 07 52 10	Electrolytic Cap. C. Board	ケミコンシート			J, G
	2-2	32 00 00 NA 07 55 00	〃	〃			U
	2-2-1	42 00 00 NB 09 79 00	Receptacle (male)	レセプタクル			
*	2-3	42 00 00 GA 63 73 00	Power Transformer	電源トランス			J
*	2-3	42 00 00 GA 64 00 00	〃	〃			G
*	2-3	42 00 00 GA 64 01 00	〃	〃			U
*	2-5	32 00 00 AA 60 32 10	Holder, Power Transformer	トランスホルダー			
*	2-6	32 00 00 AA 60 32 30	Holder, Electrolytic Cap.	ケミコンホルダー			
*	2-7	32 00 00 AA 60 32 50	C. Board Stay (L)	シートスティ(L)			
*	2-8	32 00 00 AA 60 33 90	〃 (R)	〃 (R)			
*	2-9	32 00 00 AA 60 32 90	Metal Fittings, Connector	コネクター金具			
*	2-10	32 00 00 BA 07 93 00	Holder, Triac	トライアックホルダー			
*	2-11	32 00 00 CB 09 95 40	P.C.B. Hinge (B-Type)	P.C.Bヒンジ(Bタイプ)			
*	2-12	32 00 00 CB 09 96 30	Anti-Vibration Rubber	防振ゴム			
	2-13	42 00 00 CB 06 94 80	Wire Clip	ワイヤークリップ			
*	2-14	42 00 00 EN 33 01 00	Bind Head Tapping Screw (Type-II) 3x16 (FCM3-Bℓ)	鉄バインドタッピングネジ(2種ミゾ)			
	2-15	42 00 00 EN 33 00 10	〃 〃 3x8 (FCM3-Bℓ)	〃			
*	2-16	42 00 00 EK 33 60 20	B.W Head Tapping Screw (Type-II) φ8 3x6 (FCM3-Bℓ)	B.Wヘッドタッピングネジ(2種ミゾ)			
	2-17	42 00 00 EH 04 01 20	Pan Head Screw (Sems-Type) 4 x 12 (ZMC2-Y)	セムスナベ小ネジ(スリーピース)			
*	2-18	32 00 00 BA 07 96 30	Collar	カラー			
*	2-19	32 00 00 CB 09 99 10	Cushion Rubber	防振ゴム			
*	2-20	32 00 00 CB 60 02 00	〃	〃			
*	2-21	42 00 00 NB 09 80 20	Silicon Grease Pack	シリコングリスパック			
*	2-22	42 00 00 CA 07 06 20	Isolation Fiber	絶縁ファイバー			
	2-23	42 00 00 EV 42 00 30	Toothed Locked Washer 3S (ZMC2-Y)	鉄外歯形歯付座金			
*	2-24	32 00 00 CB 60 15 80	Isolation Bush	絶縁ブッシュ			G
*	2-25	42 00 00 CB 60 15 90	Triac Base	トライアックベース			G
	2-26	42 00 00 EN 03 00 50	Bind Head Tapping Screw (Type-II) 3x12 (ZMC2-Y)	鉄バインドタッピングネジ(2種ミゾ)			G
*	3	32 00 00 NB 09 78 80	Bottom Unit	ボトムユニット			J
*	3	32 00 00 NB 09 91 90	〃	〃			U
*	3	32 00 00 NB 09 92 00	〃	〃			G
*	3-1	32 00 00 NB 09 78 90	Main C. Board Unit	メインシートユニット			J, G
*	3-1	32 00 00 NB 09 92 10	〃	〃			U
*	3-1-1	32 00 00 NA 07 51 80	Main C. Board	メインシート			J, G
*	3-1-1	32 00 00 NA 07 54 90	〃	〃			U
*	3-1-2	32 00 00 NA 07 51 90	Pre-Drive C. Board	プリドライブシート			

	Ref. No.	Part No.	Description	(部品名)	Remarks	Common model	Markets
	3-1-3	42 00 00 iL 00 05 10	Mica Base AC243	マイカベース			
※	3-1-4	32 00 00 BA 07 92 70	Heat Sink	放熱板			
※	3-1-5	32 00 00 BA 07 92 90	Sub Heat Sink	サブ放熱板			
※	3-1-6	32 00 00 BB 06 90 50	Transistor Pusher	トランジスタ押え			
※	3-1-7	32 00 00 BB 06 90 80	Shield Plate	シールド板			
※	3-1-8	32 00 00 BB 06 90 90	Shield Cover	シールドカバー			
	3-1-9	32 00 00 CB 07 28 80	Isolation Bush	絶縁ブッシュ			
	3-1-10	42 00 00 ED 33 00 50	Bind Head Screw 3 x 5 (FCM3-Bℓ)	鉄バインド小ネジ			
	3-1-11	42 00 00 EA 12 60 80	Pan Head Screw 2.6 x 8 (FNM3-3g)	鉄ナベ小ネジ			
	3-1-12	42 00 00 EA 13 00 80	〃 3 x 8 (〃)	〃			
※	3-2	32 00 00 NA 07 52 20	Pin Jack C. Board	ピンジャックシート			
※	3-3	32 00 00 MZ 07 89 90	Connector Ass'y (Power Switch)	パワーSWコネクター Ass'y			J
※	3-3	32 00 00 MZ 07 96 10	〃	〃			U
※	3-3	32 00 00 MZ 07 95 90	〃	〃			G
	3-3-1	42 00 00 BB 00 44 30	Connect Pin (2.5 Pitch) SHF-001T-08CS	2.5 ピッチコンタクトピン			
	3-3-2	42 00 00 LB 40 05 60	Housing (2.5-Pitch) H4P-SHF	2.5 ピッチハウジング			
	3-4	42 00 00 KA 80 10 70	Push Switch (Power Switch) SDV-2P	プッシュSW			J, U
	3-4	42 00 00 KA 80 06 90	〃 SDG-5PE	〃			G
	3-5	42 00 00 Fi 16 41 00	Ceramic Cap. 150 VAC 0.01μF	セラミックコンデンサー			J
※	3-5	42 00 00 Fi 34 41 00	〃 MY 0.01μF	〃			U
※	3-5	42 00 00 FR 16 41 00	Metallized Paper Cap. 250VAC 0.01μF	MPコンデンサー			G
※	3-6	42 00 00 CB 60 08 10	Cover (For Cap.) HY-0102	コンデンサカバー半丸形			J, U
	3-6	42 00 00 CB 07 21 90	〃 SB-0632-B	コンデンサカバー角形			G
※	3-7	32 00 00 AA 60 32 60	Switch Holder	スイッチホルダー			
	3-8	42 00 00 ED 33 00 50	Bind Head Screw 3 x 5 (FCM3-Bℓ)	鉄バインド小ネジ			
	3-9	42 00 00 CB 80 68 50	Cord Stopper SR-6N3-4	コードストッパー			J
	3-9	42 00 00 CB 07 27 50	〃 SR-4N-4	〃			U, G
	3-10	42 00 00 MG 00 06 90	Power Cord 2.2m 15A 125V	電源コード			J
	3-10	42 00 00 MG 00 08 90	〃 2m 13A 125V	〃			U
	3-10	42 00 00 MG 00 09 10	〃 2m 6A 250V	〃			G
※	3-11	32 00 00 BA 07 91 70	Bottom Case	ボトムケース			J
※	3-11	32 00 00 BA 07 92 50	〃	〃			U, G
※	3-12	32 00 00 AA 60 32 70	LED Stay	LEDステイ			
※	3-13	32 00 00 AA 60 32 80	Jack Holder	ジャックホルダー			
※	3-14	32 00 00 AA 60 10 20	Pin Jack Holder	ピンジャックホルダー			
	3-15	42 00 00 CB 06 88 80	Plastic Rivet	プラスチックリベット			
	3-16	32 00 00 NB 08 46 40	Push Button Ass'y (P)	プッシュボタンAss'y(P)		T-2	
	3-17	32 00 00 NB 09 39 30	Push Button Ass'y	プッシュボタンAss'y		CR-640	
	3-18	42 00 00 CC 03 60 40	Pad (Leg) φ15 x t3	トランレッグ(パッド)			
※	3-19	42 00 00 CA 07 05 60	Spacer (P) (6.5 x 11.5) □17 x t1.4	スペーサー (P)			
	3-20	42 00 00 ED 33 01 00	Bind Head Screw 3 x 10 (FCM3-Bℓ)	鉄バインド小ネジ			
	3-21	42 00 00 EK 95 00 60	Bind Head Tap-Tyte Screw (B-Tyte)4x8(ZMC2-Bℓ)	鉄バインドタップタイト(Bタイト)			
	3-22	42 00 00 EN 33 00 10	Bind Head Tapping Screw (Type II)3x8(FCM3-Bℓ)	鉄バインドタッピングネジ			
※	3-23	42 00 00 EV 42 04 00	Toothed Locked Washer 4S (ZMC2-Y)	鉄外歯形歯付座金			
	3-24	32 00 00 NB 08 14 80	Terminal Unit	ターミナルユニット			
	3-25	32 00 00 AA 09 57 20	Bonding Nut	ボンディングナット			
	3-26	32 00 00 CB 07 81 70	Saucer	受皿			
	3-27	42 00 00 EV 90 13 60	Flat Washer (Sems-Type)φ3.6xφ10xt0.8(FNM3-3g)	鉄セムス平座金			
※	4	32 00 00 AA 60 32 20	Bottom Cover	ボトムカバー			J
※	4	32 00 00 AA 60 33 40	〃	〃			U
※	4	32 00 00 AA 60 33 50	〃	〃			G
※	5	32 00 00 AA 60 32 40	Transistor Cover	トランジスタカバー			
※	6	32 00 00 AA 60 33 70	Screw	止めネジ			

Ref. No.	Part No.	Description	(部 品 名)	Remarks	Common model	Markets
7	32 00 00 CB 09 95 60	Guide Bush	ガイドブッシュ			
8	42 00 00 EK 95 00 60	Bind Head Tap-Tyte Screw(B-Tyte)4x8(ZMC2-Bℓ)	鉄バインドタップタイトネジ(Bタイト)			
※ 9	42 00 00 EK 96 60 70	B.W Head Tap-Tyte Screw(B-Tyte)4x8(φ10)(")	B.Wヘッドタップタイト(Bタイト)			
10	42 00 00 EN 33 00 10	Bind Head Tapping Screw(Type II)3x8(FCM3-Bℓ)	鉄バインドタッピングネジ(2種ミゾ)			
※	32 00 00 MZ 07 89 40	Connector(Female) Ass'y(Electrolytic Cap. C. Board)	ケミコンコネクターAss'y			
※	32 00 00 MZ 07 89 80	" (Female) (Pin Jack C. Board)	ピンジャックコネクターAss'y			

■PARTS LIST (ELECTRICITY)

Ref. No.	Part No.	Description		(部 品 名)	Remarks	Common model	Markets
	32 00 00 NA 07 51 80	Main C. Board		メ イ ン シ ー ト			J, G
	32 00 00 NA 07 54 90	〃		〃			U
C101, 102	42 00 00 FU 35 24 70	Mica Cap.	470pF 100V	マ イ カ コ ン			
C103~106	42 00 00 UW 69 61 00	Electrolytic Cap.	1μF 100V	ケ ミ コ ン			
C107, 108	42 00 00 UW 81 74 70	〃	47μF 6.3V	〃			
C109~112	42 00 00 FA 11 42 20	Mylar Cap.	0.022μF 50V	マ イ ラ ー コ ン			
C113~116	42 00 00 FH 61 12 20	Ceramic Cap.	22pF 500V	セ ラ コ ン			
C121, 122	42 00 00 FA 11 41 00	Mylar Cap.	0.01μF 50V	マ イ ラ ー コ ン			
C123~130	42 00 00 FA 11 52 20	〃	0.22μF 50V	〃			
C131~134	42 00 00 FA 15 51 00	〃	0.1μF 50V	〃			
C135~138	42 00 00 FA 11 33 90	〃	0.0039μF 50V	〃			
C139~142	42 00 00 FG 51 12 20	Ceramic Cap.	22pF 50V	セ ラ コ ン			
C143	42 00 00 FZ 00 02 30	Electrolytic Cap.	0.22μF 50V	ケ ミ コ ン			
C145	42 00 00 FZ 00 02 30	〃	0.22μF 50V	〃			
C147	42 00 00 UW 85 74 70	〃	47μF 35V	〃			
C149	42 00 00 UW 85 74 70	〃	47μF 35V	〃			
C151~154	42 00 00 FG 51 26 80	Ceramic Cap.	680pF 50V	セ ラ コ ン			
C155~162	42 00 00 FG 51 32 20	〃	0.0022μF 50V	〃			
C163~166	42 00 00 FA 15 36 80	Mylar Cap.	0.0068μF 50V	マ イ ラ ー コ ン			
C167~170	42 00 00 FG 51 31 00	Ceramic Cap.	0.001μF 50V	セ ラ コ ン			
C171	42 00 00 FM 39 73 30	Electrolytic Cap.	33μF 16V	ケ ミ コ ン			
C172	42 00 00 UW 69 63 30	〃	3.3μF 100V	〃			
C173~176	42 00 00 UW 69 61 00	〃	1μF 100V	〃			
C177	42 00 00 UW 81 73 30	〃	33μF 6.3V	〃			
L101, 102	42 00 00 GD 90 03 70	Coil	1.5μH	コ イ ル			
R101, 102	42 00 00 HN 75 71 50	Carbon Resistor	15kΩ	カ ー ボ ン 抵 抗			
R103, 104	42 00 00 HN 75 71 00	〃	10kΩ	〃			
R105, 106	42 00 00 HN 75 54 70	〃	470Ω	〃			
R107, 108	42 00 00 HN 75 53 90	〃	390Ω	〃			
R109, 110	42 00 00 HK 35 55 60	〃	560Ω	〃			
R111, 112	42 00 00 HK 35 61 80	〃	1.8kΩ	〃			
R113~116	42 00 00 HK 35 72 70	〃	27kΩ	〃			
R117~124	42 00 00 HK 35 71 00	〃	10kΩ	〃			
R125~128	42 00 00 HV 35 51 50	Flame Proof Resistor	150Ω	不燃化カーボン抵抗			
R129, 130	42 00 00 HV 35 61 00	〃	1kΩ	〃			
R143~146	42 00 00 HV 35 42 20	〃	22Ω	〃			
R151, 152	42 00 00 HK 35 41 00	Carbon Resistor	10Ω	カ ー ボ ン 抵 抗			
R153, 154	42 00 00 HV 35 51 20	Flame Proof Resistor	120Ω	不燃化カーボン抵抗			
R155~158	42 00 00 HZ 00 16 50	Dual Metal Plate Resistor	5P 0.47Ω	デュアル金属板抵抗			
R163~170	42 00 00 HK 35 34 70	Carbon Resistor	4.7Ω	カ ー ボ ン 抵 抗			
R171~174	42 00 00 HV 35 41 00	Flame Proof Resistor	10Ω	不燃化カーボン抵抗			
R175~178	42 00 00 HK 35 61 80	Carbon Resistor	1.8kΩ	カ ー ボ ン 抵 抗			J, G
〃	42 00 00 HK 35 62 20	〃	2.2kΩ	〃			U
〃	42 00 00 HK 35 61 80	〃	1.8kΩ	〃			
R179, 180	42 00 00 HM 75 41 00	Cement Molded Resistor	5P 10Ω	セ メ ン ト 抵 抗			
R181, 182	42 00 00 HK 35 41 00	Carbon Resistor	10Ω	カ ー ボ ン 抵 抗			
R183, 184	42 00 00 HL 81 34 70	Metal Oxide Film Resistor	1P 4.7Ω	酸 金 抵 抗			
R185, 186	42 00 00 HN 75 82 20	Carbon Resistor	220kΩ	カ ー ボ ン 抵 抗			
R187~190	42 00 00 HK 35 81 00	〃	100kΩ	〃			
R195~198	42 00 00 HK 35 84 70	〃	470kΩ	〃			
R199~202	42 00 00 HK 35 71 00	〃	10kΩ	〃			J, G
〃	42 00 00 HU 57 71 00	Metal Film Resistor	10kΩ	金 属 被 膜 抵 抗			U
R203~206	42 00 00 HK 35 72 20	Carbon Resistor	22kΩ	カ ー ボ ン 抵 抗			J, G

Ref. No.	Part No.	Description	(部品名)	Remarks	Common model	Markets
R203~206	42 00 00 HU 57 72 20	Metal Film Resistor 10kΩ	金属被膜抵抗			U
R207, 209	42 00 00 HK 35 73 30	Carbon Resistor 33kΩ	カーボン抵抗			J, G
"	42 00 00 HU 57 73 30	Metal Film Resistor 33kΩ	金属被膜抵抗			U
R211, 213	42 00 00 HK 35 71 00	Carbon Resistor 10kΩ	カーボン抵抗			J, G
"	42 00 00 HU 57 71 00	Metal Film Resistor 10kΩ	金属被膜抵抗			U
R215	42 00 00 HK 35 61 80	Carbon Resistor 1.8kΩ	カーボン抵抗			
R216	42 00 00 HN 75 63 30	" 3.3kΩ	〃			
R217	42 00 00 HK 35 61 80	" 1.8kΩ	〃			
R218	42 00 00 HK 35 91 00	" 1MΩ	〃			J, G
"	42 00 00 HK 35 92 20	" 2.2MΩ	〃			U
R219, 220	42 00 00 HK 35 81 00	" 100kΩ	〃			
R221, 222	42 00 00 HK 35 71 00	" 10kΩ	〃			
R223~230	42 00 00 HK 35 72 20	" 22kΩ	〃			
R231, 232	42 00 00 HK 35 81 00	" 100kΩ	〃			
R233, 234	42 00 00 HK 35 74 70	" 47kΩ	〃			
R235, 236	42 00 00 HK 35 81 00	" 100kΩ	〃			
R237, 238	42 00 00 HK 35 71 00	" 10kΩ	〃			
R239~242	42 00 00 HK 35 72 20	" 22kΩ	〃			
R243~246	42 00 00 HK 35 74 70	" 47kΩ	〃			
R247~250	42 00 00 HK 35 81 00	" 100kΩ	〃			
R251~254	42 00 00 HK 35 51 00	" 100Ω	〃			
R255~258	42 00 00 HK 35 62 20	" 2.2kΩ	〃			
R259~266	42 00 00 HK 35 72 20	" 22kΩ	〃			
R267	42 00 00 HN 75 81 00	" 100kΩ	〃			
R268	42 00 00 HK 35 71 00	" 10kΩ	〃			
R269	42 00 00 HK 35 81 00	" 100kΩ	〃			
R270	42 00 00 HN 75 83 30	" 330kΩ	〃			
R271	42 00 00 HN 75 51 50	" 150Ω	〃			
R272	42 00 00 HK 35 61 00	" 1kΩ	〃			
R273	42 00 00 HN 75 76 80	" 68kΩ	〃			
R275	42 00 00 HK 35 74 70	" 47kΩ	〃			
R276	42 00 00 HN 75 71 20	" 12kΩ	〃			
R277	42 00 00 HN 75 66 80	" 6.8kΩ	〃			
R278	42 00 00 HN 75 76 80	" 68kΩ	〃			
R279, 280	42 00 00 HN 75 81 00	" 100kΩ	〃			
R281	42 00 00 HN 75 71 20	" 12kΩ	〃			
R282	42 00 00 HK 35 76 80	" 68kΩ	〃			
R283~286	42 00 00 HV 35 41 00	Flame Proof Resistor 10Ω	不燃化カーボン抵抗			
VR101 VR102	42 00 00 HT 57 03 60	Metal Grazed Semi Variable Resistor B1kΩ	メタルグレーズボリューム			
FR101~ FR104	42 00 00 HW 89 42 20	Fuse Resistor 110 mA 22Ω	ヒューズ抵抗			J, G
"	42 00 00 HW 99 41 00	" 160 mA 10Ω	〃			U
TR101 TR102	42 00 00 iA 06 73 10	Transistor 2SA673A (C, D)	トランジスタ			
TR103 TR104	42 00 00 iA 07 77 30 iC 15 09 30	" 2SA777 (Q, R) 2SC1509 (Q, R)	〃			
TR105 TR106	42 00 00 iA 07 77 30 iC 15 09 30	" 2SA777 " 2SC1509	〃			
TR107 TR108	42 00 00 iC 18 85 00	" 2SC1885 (S, T)	〃			
TR119~ TR122	42 00 00 iA 09 13 00 iC 19 13 00	" 2SA913(P,Q,R,S), 2SC1913(P,Q,R,S)	〃			
TR123~ TR130	42 00 00 iA 10 95 00 iC 25 65 00	" 2SA1095, 2SC2565	〃			
TR135 TR136	42 00 00 iA 10 15 10	" 2SA1015 (O)	〃			
TR137 TR138	42 00 00 iC 22 40 00	" 2SC2240 (GR, BL)	〃			
TR139 TR140	42 00 00 iA 09 70 00	" 2SA970 (GR, BL)	〃			
TR141~ TR144	42 00 00 iA 10 15 10	" 2SA1015	〃			
TR145 TR146	42 00 00 iA 10 95 00 iC 25 65 00	" 2SA1095, 2SC2565	〃			
TR147 TR148	42 00 00 iB 05 96 30 iD 05 26 30	" 2SB596 (O, Y) 2SD526 (O, Y)	〃			
TR149 TR150	42 00 00 iA 10 95 00 iC 25 65 00	" 2SA1095, 2SC2565	〃			

Ref. No.	Part No.	Description	(部品名)	Remarks	Common model	Markets
TR151 TR152	42 00 00 iB iD 05 05 96 26 30 30	Transistor 2SB596 (O, Y), 2SD526 (O, Y)	トランジスタ			
TR153 TR154	42 00 00 iC 22 40 00	" 2SC2240 (GR, BL)	〃			
TR155 TR156	42 00 00 iA 09 70 00	" 2SA970 (GR, BL)	〃			
TR157	42 00 00 iC 18 15 00	" 2SC1815	〃			
TR158	42 00 00 iA 07 77 30	" 2SA777 (Q, R)	〃			J, G
"	42 00 00 iA 08 14 00	" 2SA814 (O, Y)	〃			U
TR159	42 00 00 iA 09 13 00	" 2SA913 (P, Q, R, S)	〃			
TR160 TR161	42 00 00 iC 18 15 00	" 2SC1815	〃			
TR162	42 00 00 iA 09 70 00	" 2SA970 (GR, BL)	〃			
TR163	42 00 00 iA 10 15 10	" 2SA1015 (O)	〃			
D105~108	42 00 00 iF 00 00 40	Diode 1S1555	ダイオード			
D109~116	42 00 00 iF 00 14 00	" 1SS82	〃			
D117, 118	42 00 00 iF 00 00 40	" 1S1555	〃			
D119, 120	42 00 00 iF 00 14 00	" 1SS82	〃			
D121~124	42 00 00 iF 00 00 40	" 1S1555	〃			
D125~126	42 00 00 iF 00 14 00	" 1SS82	〃			
D127~132	42 00 00 iF 00 00 40	" 1S1555	〃			
※ D133~136	42 00 00 iH 00 09 60	" 30DF	〃			
D137	42 00 00 iF 00 05 50	Zener Diode HZ12C	ツェナーダイオード			
D138	42 00 00 iF 00 14 70	" RD6.2EB2	〃			
D139	42 00 00 iF 00 19 40	" HZ24-2	〃			
D140	42 00 00 iF 00 00 40	Diode 1S1555	ダイオード			
D141	42 00 00 iF 00 14 70	Zener Diode RD6.2EB2	ツェナーダイオード			
D142	42 00 00 iF 00 00 40	Diode 1S1555	ダイオード			
D143	42 00 00 iF 00 14 00	" 1SS82	〃			
D144	42 00 00 iF 00 00 40	" 1S1555	〃			
D145	42 00 00 iF 00 14 00	" 1SS82	〃			
D146~149	42 00 00 iF 00 10 50	LED SLP-133B	LED			
D151~154	42 00 00 iF 00 05 50	Zener Diode HZ 12C	ツェナーダイオード			
D155	42 00 00 iF 00 00 40	Diode 1S1555	ダイオード			
D156	42 00 00 iF 00 14 70	Zener Diode RD6.2EB2	ツェナーダイオード			
IC101~ IC104	42 00 00 iG 03 77 10	IC LM393P	IC			
※ RY101	42 00 00 KC 00 11 10	Relay MSJ24D2-0 24V	リレー			
※	42 00 00 LA 00 33 40	Speaker Terminal	スピーカーターミナル			
	42 00 00 LB 20 13 90	Connector (male) 2P	2.5 ピッチベースピン			
※	42 00 00 NB 09 79 10	Receptacle (with wire)	リード付レセプタクル	Refer to Page 1		
	42 00 00 CB 06 92 50	Binding Tie BK-1	インシュロックタイ			
	42 00 00 LA 00 25 00	Wrapping Terminal 1P	i型ラッピング端子板			
	42 00 00 LB 40 05 70	Connector (male)	2.5 ピッチベースピン			
	32 00 00 CB 09 79 30	LED Holder	LED ホルダー			
	42 00 00 iL 00 02 70	Mica Base	マイカベース			
※	32 00 00 NA 07 51 90	Pre-drive C. Board	プリドライブシート			
※ C305, 306	42 00 00 FU 35 03 00	Mica Cap. 3pF 100V	マイカコン			
C307, 308	42 00 00 UW 81 74 70	Electrolytic Cap. 47μF 6.3V	ケミコン			
C309~312	42 00 00 FG 51 21 80	Ceramic Cap. 180pF 50V	セラコン			
C313~316	42 00 00 FH 61 08 00	" 8pF 500V	〃			
C317~320	42 00 00 UW 81 74 70	Electrolytic Cap. 47μF 6.3V	ケミコン			
R301~304	42 00 00 HN 75 63 30	Carbon Resistor 3.3kΩ	カーボン抵抗			
R305, 306	42 00 00 HN 75 44 70	" 47Ω	〃			
R307~310	42 00 00 HN 75 64 70	" 4.7kΩ	〃			
※ R311, 312	42 00 00 HU 57 71 80	Metal Film Resistor 18kΩ	金属被膜抵抗			
R313, 314	42 00 00 HN 75 56 80	Carbon Resistor 680Ω	カーボン抵抗			

Ref. No.	Part No.	Description	(部品名)	Remarks	Common model	Markets
R315, 316	42 00 00 HN 75 72 20	Carbon Resistor 22kΩ	カーボン抵抗			
R317, 318	42 00 00 HN 75 81 20	〃 120kΩ	〃			
R319~322	42 00 00 HN 75 63 30	〃 3.3kΩ	〃			
R323~326	42 00 00 HN 75 44 70	〃 47Ω	〃			
R327~334	42 00 00 HN 75 42 20	〃 22Ω	〃			
R335, 336	42 00 00 HN 75 56 80	〃 680Ω	〃			
R337, 338	42 00 00 HJ 35 56 80	〃 680Ω	〃			
R339~342	42 00 00 HN 75 51 20	〃 120Ω	〃			
R343~346	42 00 00 HN 75 55 60	〃 560Ω	〃			
R347~350	42 00 00 HN 75 62 20	〃 2.2kΩ	〃			
R351, 352	42 00 00 HN 75 81 20	〃 120kΩ	〃			
※ VR301 VR302	42 00 00 HT 57 02 60	Metal Grazed Semi Variable Resistor B100Ω	メタルグレーズボリューム			
TR301 TR302	42 00 00 iE 10 19 10	Dual FET μPA68H L, M	デュアルFETトランジスタ			
TR303~TR306	42 00 00 iA 09 19 / iC 14 53 50 50	Transistor 2SA914(Q,R,S,T), 2SC1953(Q,R,S,T)				
TR307~TR310	42 00 00 iA 07 15 / iC 77 09 30 30	〃 2SA777(Q,R), 2SC1509(Q, R)	〃			
TR311~TR318	42 00 00 iA 08 17 / iC 72 75 00 00	〃 2SA872(D,E,F,G), 2SC1775(D,E,F,G)	〃			
TR319 TR320	42 00 00 iZ 00 01 20	Dual Transistor μPC74V	デュアルトランジスタ			
TR321 TR322	42 00 00 iZ 00 01 30	〃 μPC75V	〃			
D301~308	42 00 00 iF 00 14 70	Zener Diode RD6.2EB2	ツェナーダイオード			
D309~312	42 00 00 iF 00 08 30	〃 RD4.7E	〃			
D313~316	42 00 00 iF 00 00 40	Diode 1S1555	ダイオード			
※	42 00 00 LB 20 17 50	Miniature Connector Pin 2P	ミニチュアコネクトコンピン			
※	42 00 00 LB 40 07 90	〃 4P	〃			
	32 00 00 NA 07 55 00	**Electrolytic Cap. C. Board**	ケミコンシート			U
	32 00 00 NA 07 52 10	〃	〃			G
C501, 502	42 00 00 FZ 00 23 40	Electrolytic Cap. 12000μF 80V	ケミコン			
C503, 504	42 00 00 FZ 00 23 30	〃 6800μF 50V	〃			
※ C505, 506	42 00 00 FZ 00 23 20	〃 3300μF 80V	〃			
C507	42 00 00 UW 69 63 30	〃 3.3μF 100V	〃			
C508, 509	42 00 00 FC 10 63 30	Metallized Mylar Cap. 3.3μF 100V	MMコン			
R501~504	42 00 00 HJ 35 81 20	Carbon Resistor 120kΩ	カーボン抵抗			
R505, 506	42 00 00 HN 75 73 30	〃 33kΩ	〃			
R507, 508	42 00 00 HJ 35 71 00	〃 10kΩ	〃			
R509, 510	42 00 00 HJ 35 61 00	〃 1kΩ	〃			
R511	42 00 00 HJ 35 66 80	〃 6.8kΩ	〃			
R512	42 00 00 HJ 35 56 80	〃 680Ω	〃			
R513~515	42 00 00 HJ 35 66 80	〃 6.8kΩ	〃			
R516	42 00 00 HJ 35 45 60	〃 56Ω	〃			
TR501	42 00 00 iC 22 40 00	Transistor 2SC2240 (GR, BL)	トランジスタ			
D501	42 00 00 iH 00 08 50	Diode Bridge PB102L	ダイオードブリッジ			
D502	42 00 00 iH 00 06 80	〃 S-5188	〃			
D503	42 00 00 iH 00 04 70	Diode 1D4B1	ダイオード			
D504	42 00 00 iH 00 02 40	〃 1S1885	〃			
	42 00 00 LB 40 05 70	Connector (male) 4P	2.5 ピッチベースピン			
※	42 00 00 NB 09 79 00	Plug (with wire) 6P 3191-06P	リード付プラグ			
	42 00 00 LA 00 23 90	Wrapping Terminal P = 7.5 2P L-type	L型ラッピング端子板			
	42 00 00 LA 00 24 00	〃 P = 7.5 3P 〃	〃			
※	42 00 00 CA 07 06 40	Isolation Plate	絶縁板			
	42 00 00 CB 06 92 50	Binding Tie	インシュロックタイ			
※	**32 00 00 NA 07 52 20**	**Pin Jack C. Board**	ピンジャックシート			
※ SW601	42 00 00 KA 80 17 00	Push Switch SPJ-222	プッシュスイッチ			
PJ601	42 00 00 LB 20 16 20	Pin Jack 2P	2Pピンジャック			
※	32 00 00 MZ 07 89 80	Pin Jack Connector Ass'y	ピンジャックコネクタAss'y			

Ref. No.	Part No.	Description		(部 品 名)	Remarks	Common model	Markets
		U.S.A Model					
※	32 00 00 NA 07 55 60	**Power Supply C. Board**		電 源 シ ー ト			
※ C401, 402	42 00 00 Fi 34 43 30	Ceramic Cap.	0.0033μF 125V	セ ラ コ ン			
※ C403	42 00 00 FC 24 52 20	Metallized Mylar Cap.	0.22μF 125V	M M コ ン			
C404	42 00 00 FA 85 54 70	Mylar Cap.	0.47μF 50V	マ イ ラ ー コ ン			
C405	42 00 00 FG 51 24 70	Ceramic Cap.	470pF 50V	セ ラ コ ン			
※ C406	42 00 00 FC 24 51 00	Metallized Mylar Cap.	0.1μF 125V	M M コ ン			
C407	42 00 00 UW 81 81 00	Electrolytic Cap.	100μF 6.3V	ケ ミ コ ン			
C408	42 00 00 FH 21 31 00	Ceramic Cap.	0.001μF 500V	セ ラ コ ン			
※ C409	42 00 00 FA 81 43 30	Mylar Cap.	0.033μF 50V	マ イ ラ ー コ ン			
L401	42 00 00 GD 90 03 80	Coil		コ イ ル			
R401, 402	42 00 00 HK 35 81 00	Carbon Resistor	100kΩ	カ ー ボ ン 抵 抗			
R403	42 00 00 HK 35 81 20	〃	120kΩ	〃			
R404	42 00 00 HK 35 75 60	〃	56kΩ	〃			
R405	42 00 00 HK 35 71 50	〃	15kΩ	〃			
R406	42 00 00 HL 82 71 80	Metal Oxide Film Resistor	2P 18kΩ	酸 金 抵 抗			
R407	42 00 00 HK 35 62 70	Carbon Resistor	2.7kΩ	カ ー ボ ン 抵 抗			
R408	42 00 00 HK 35 92 20	〃	2.2M	〃			
R409	42 00 00 HV 35 41 50	Flame Proof Resistor	15Ω	不燃化カーボン抵抗			
R410	42 00 00 HK 35 54 70	Carbon Resistor	470Ω	カ ー ボ ン 抵 抗			
※ R411	42 00 00 HL 82 53 90	Metal Oxide Film Resistor	2P 390Ω	酸 金 抵 抗			
R412	42 00 00 HV 35 41 80	Flame Proof Resistor	18Ω	不燃化カーボン抵抗			
R413, 414	42 00 00 HK 35 73 90	Carbon Resistor	39kΩ	カ ー ボ ン 抵 抗			
R415	42 00 00 HK 35 82 20	〃	220kΩ	〃			
R416	42 00 00 HK 35 81 00	〃	100kΩ	〃			
R417	42 00 00 HK 35 73 90	〃	39kΩ	〃			
R418	42 00 00 HK 35 71 00	〃	10kΩ	〃			
R419	42 00 00 HK 35 58 20	〃	820Ω	〃			
R420	42 00 00 HK 35 61 50	〃	1.5kΩ	〃			
R421, 422	42 00 00 HK 35 43 90	〃	39Ω	〃			
R423	42 00 00 HK 35 63 90	Carbon Resistor	3.9kΩ	カ ー ボ ン 抵 抗			
R424	42 00 00 HK 35 71 00	〃	10kΩ	〃			
R425~427	42 00 00 HK 35 73 90	〃	39kΩ	〃			
VR401 VR402	42 00 00 HT 41 00 40	Solid Semi Variable Resistor	B4.7kΩ	ソリッドボリューム			
TR401	42 00 00 iC 18 15 00	Transistor	2SC1815	ト ラ ン ジ ス タ			
TR402~ TR404	42 00 00 iA 07 77 30	〃	2SA777 Q, R	〃			
TR405	42 00 00 iK 00 02 80	Photo coupler		フ ォ ト カ プ ラ			
D401	42 00 00 iH 00 08 80	Diode Bridge	S1WB-20	ダイオードブリッジ			
D402, 403	42 00 00 iF 00 00 40	Diode	1S1555	ダ イ オ ー ド			
D404, 405	42 00 00 iF 00 14 70	Zener Diode	RD6.2EB2	ツェナーダイオード			
D406	42 00 00 iF 00 00 40	Diode	1S1555	ダ イ オ ー ド			
IC401	42 00 00 iG 04 08 00	IC (Trigger)		ト リ ガ ー I C			
※ SCR401	42 00 00 iH 00 10 20	Triac	AC16DIF-L	ト ラ イ ア ッ ク			
※ SCR402	42 00 00 iH 00 09 00	〃	SM0R5G42	〃			
F401	42 00 00 KB 00 13 80	Fuse UL	15A 125V	ヒ ュ ー ズ			
〃	42 00 00 KB 00 12 70	〃	15A 125V	〃			
	42 00 00 LB 20 09 00	Fuse Holder Pin PC		ヒューズホルダーピン			
	42 00 00 LB 30 07 30	Connector (male)	3P	2.5 ピッチベースピン			
	42 00 00 LB 40 05 70	〃 (〃)	4P	〃			
	42 00 00 LA 00 21 40	Wrapping Terminal	P = 10 2P I-type	i 型ラッピング端子板			
	42 00 00 LA 00 24 10	〃	P = 10 2P L-type	L型ラッピング端子板			
	42 00 00 LA 00 21 10	〃	P = 5 2P I-type	i 型ラッピング端子板			
	42 00 00 LA 00 25 00	〃	1P 〃	〃			
※	42 00 00 CB 60 05 00	Spacer, Anti-Vibration		防 振 ス ペ ー サ ー			
※	32 00 00 CB 60 06 50	Rubber Cap		ゴ ム キ ャ ッ プ			

Ref. No.	Part No.	Description	(部 品 名)	Remarks	Common model	Markets
		North European Model				
	32 00 00 NA 07 55 70	Power Supply C. Board	電 源 シ ー ト			G
※ C401~403	42 00 00 FR 16 36 80	Metallized Paper Cap. 0.0068μF 250V	M P コ ン			
※ C404	42 00 00 FR 15 54 70	" 0.47μF 250V	〃			
C405	42 00 00 FA 85 54 70	Myler Cap. 0.47μF 50V	マ イ ラ ー コ ン			
C406	42 00 00 FG 51 24 70	Ceramic Cap. 470pF 50V	セ ラ コ ン			
※ C407	42 00 00 FQ 09 46 80	Oil Cap. 0.068μF 450V	オ イ ル コ ン			
C408	42 00 00 UW 81 81 00	Electrolytic Cap. 100μF 6.3V	ケ ミ コ ン			
C409	42 00 00 FH 21 31 00	Ceramic Cap. 0.001μF 500V	セ ラ コ ン			
※ C410	42 00 00 FA 81 43 30	Myler Cap. 0.033μF 50V	マ イ ラ ー コ ン			
L401	42 00 00 GD 90 03 80	Coil 160μH	コ イ ル			
R401~404	42 00 00 HK 35 83 30	Carbon Resistor 330kΩ	カ ー ボ ン 抵 抗			
R405, 406	42 00 00 HK 35 81 80	" 180kΩ	〃			
R407	42 00 00 HK 35 71 50	" 15kΩ	〃			
R408	42 00 00 HL 82 73 30	Metal Oxide Film Resistor 2P 33kΩ	酸 金 抵 抗			
R409	42 00 00 HK 35 62 70	Carbon Resistor 2.7kΩ	カ ー ボ ン 抵 抗			
R410	42 00 00 HK 35 92 20	" 2.2MΩ	〃			
R411	42 00 00 HV 35 41 50	Flame Proof Resistor 15Ω	不燃化カーボン抵抗			
R412	42 00 00 HK 35 54 70	Carbon Resistor 470Ω	カ ー ボ ン 抵 抗			
※ R413	42 00 00 HL 82 53 90	Metal Oxide Resistor 2P 390Ω	酸 金 抵 抗			
R414	42 00 00 HV 35 41 80	Flame Proof Resistor 18Ω	不燃化カーボン抵抗			
R415, 416	42 00 00 HK 35 73 90	Carbon Resistor 39kΩ	カ ー ボ ン 抵 抗			
R417	42 00 00 HK 35 82 20	" 220kΩ	〃			
R418	42 00 00 HK 35 81 00	" 100kΩ	〃			
R419	42 00 00 HK 35 73 90	" 39kΩ	〃			
R420	42 00 00 HK 35 71 00	" 10kΩ	〃			
R421	42 00 00 HK 35 58 20	" 820Ω	〃			
R422	42 00 00 HK 35 61 50	" 1.5kΩ	〃			
R423 R424	42 00 00 HK 35 43 90	Carbon Resistor 39Ω	カ ー ボ ン 抵 抗			
R425	42 00 00 HK 35 63 90	" 3.9kΩ	〃			
R426	42 00 00 HK 35 71 00	" 10kΩ	〃			
R427~429	42 00 00 HK 35 73 90	" 39kΩ	〃			
VR401 VR402	42 00 00 HT 41 00 40	Solid Semi Variable Resistor B4.7kΩ	ソリッドボリューム			
TR401	42 00 00 iC 18 15 00	Transistor 2SC1815	ト ラ ン ジ ス タ			
TR402~ TR404	42 00 00 iA 07 77 30	" 2SA777 Q, R	〃			
TR405	42 00 00 iK 00 02 80	Photo coupler	フ ォ ト カ プ ラ			
D401	42 00 00 iH 00 08 80	Diode Bridge S1WB-20	ダイオードブリッジ			
D402, 403	42 00 00 iF 00 00 40	Diode 1S1555	ダ イ オ ー ド			
D404, 405	42 00 00 iF 00 14 70	Zener Diode RD6.2EB2	ツェナーダイオード			
D406	42 00 00 iF 00 00 40	Diode 1S1555	ダ イ オ ー ド			
IC401	42 00 00 iG 04 08 00	IC (Trigger)	ト リ ガ ー I C			
※ SCR401	42 00 00 iH 00 10 20	Triac AC16DIF-L	ト ラ イ ア ッ ク			
SCR402	42 00 00 iH 00 09 00	" SM0R5G42	〃			
F401	42 00 00 KB 00 22 40	Fuse F6.3A 250V	ヒ ュ ー ズ			
	42 00 00 LB 20 15 30	Fuse Holder Pin	ヒューズホルダーピン			
	42 00 00 LB 30 07 30	Connector (male) 3P	2.5 ピッチベースピン			
	42 00 00 LA 00 21 40	Lapping Terminal P = 10 2P I-type	i 型ラッピング端子板			
	42 00 00 LA 00 24 10	" P = 10 2P L-type	L 型ラッピング端子板			
	42 00 00 LA 00 21 10	" P = 5 2P I-type	i 型ラッピング端子板			
	42 00 00 LA 00 25 00	" 1P 〃	〃			
	42 00 00 CB 60 05 00	Spacer, Anti-Vibration	防 振 ス ペ ー サ ー			
	32 00 00 CB 60 06 50	Rubber Cap	ゴ ム キ ャ ッ プ			