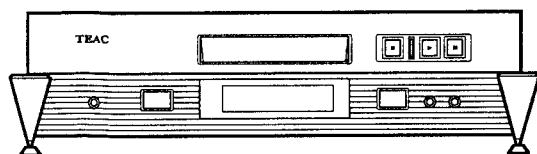


TEAC



SERVICE MANUAL

CD-5

Compact Disc Player

COMPACT
disc
DIGITAL AUDIO

CONTENTS

1 SAFETY INFORMATION	2
2 SPECIFICATIONS	3
仕 様	
3 CASE AND FRONT PANEL REMOVAL	4
外装部品の外し方	
4 ADJUSTMENT AND CHECKS	5
調整と確認	
5 EXPLODED VIEWS AND PARTS LIST	12
分解図とパーツリスト	
6 PC BOARDS AND PARTS LIST	16
基板図とパーツリスト	

1 SAFETY INFORMATION

SAFETY INFORMATION

This product has been designed and manufactured according to FDA regulations "title 21, CFR, chapter 1, subchapter J, based on the Radiation Control for Health and Safety Act of 1968", and is classified as class 1 laser product. There is not hazardous invisible laser radiation during operation because invisible laser radiation emitted inside of this product is completely confined in the protective housings.

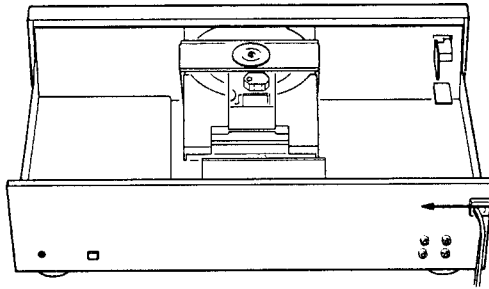
The label required in this regulation is shown ①.

CAUTION

● If you remove the above-mentioned housings under the operating state of the product, there is a possibility of human access to the invisible laser radiation emitted from the optical pickup.

Pay careful attention, not to let the invisible laser beam enter into your eyes.

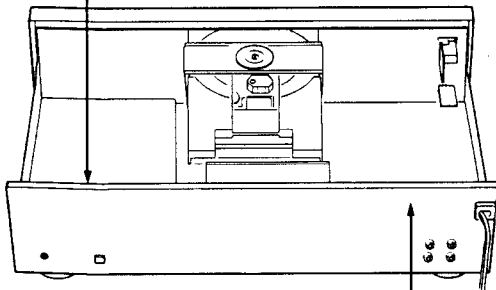
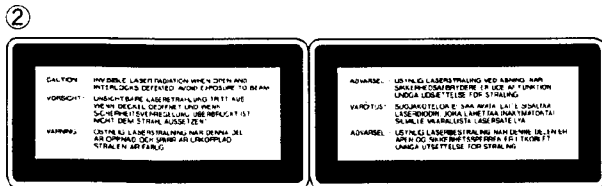
- If you find a troubled state of the laser diode, change to the specified new optical pickup.
- If you find a troubled state of safety interlock parts, change to the same type parts described in parts list.



① **CERTIFICATION**
 THIS PRODUCT COMPLIES WITH DHHS
 RULES 21 CFR SUBCHAPTER J APPLI-
 CABLE AT DATE OF MANUFACTURE
 SONY CORPORATION
 1-1-1 NAKA-CHO MUSASHINO-SHI TOKYO JAPAN
 MANUFACTURED

Optical pickup: Type : KSS-210A
 Manufacturer : SONY Corporation
 Laser output : Less than 0.4 mW on the objective lens
 Wavelength : 760 - 800 nm

• CAUTION • ACHTUNG • OBSERVERA • ADVARSEL



① **CLASS 1 LASER PRODUCT**
 LUOKAN 1 LASERLAITE
 KLASS 1 LASERAPPARAT

① THIS LABEL IS ATTACHED TO THE PLACE AS ILLUSTRATED TO INFORM THAT THE APPARATUS CONTAINS A LASER COMPONENT.

① DIESE AUFKLEBEMARKE IST AN DEM IN DER ABBILDUNG GEZEIGTEN ORT ANGEBRACHT UM DARAUF HINZUWEISEN, DASS IM INNERN DES GERÄTS EINE LASER-KOMPONENTE BEFINDET.

① PÅSKRIFTEN SITTER PÅ APPARATEN SOM VISAS SOM UPPMANING OM ATT APPARATEN OMFATTAR EN INBYGGD LASERKOMPONENT.

① DETTE MÆRKAT ER ANBRAGT SOM VIST I ILLUSTRATIONEN FOR AT ADVARE BRUGEREN OM AT APPARATET INDEHOLDER EN LASERKOMPONENT.

② DETTE MÆRKAT ER SOM VIST PÅ ILLUSTRATIONEN ANBRAGT PÅ INDERSIDEN AF TOPDÆKSLET FOR AT ADVARE BRUGEREN OM AT YDERLIGERE FREMTRÆNGEN VIL VÆRE FORBUNDET MED FARE FOR AT UDSÆTTE SIG FOR LASERSTRÅLING.

ADVARSEL - BETJENING AF ANDRE KONTROLLER OG REGULATORER ELLER BENYTTELSE AF ANDRE FREMGANGSMÅDER END BESKREVET HERI ER FORBUNDET MED FARE FOR UDSÆTTELSE FOR LASERSTRÅLING.

VARNIG: APPARATEN INNEHÅLLER LASER KOMPONENT MED STRÅLNING ÖVERSTIGANDE KLASS 1

"ADVARSEL: USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING."

"VAROITUS! SUOJAKOTELOA EI SAA AVATA. LAITE SISÄLTÄÄ LASERDIODIN, JOKA LÄHETTÄÄ (NÄKYMÄTÖNTÄ) SILMILLE VAARALLISTA LASERSÄTEILYÄ."

ADVARSEL: USYNLIG LASERBESTRÅLING NÅR DENNE DELEN ER ÅPEN OG SIKKERHETSSPERRER ER UTKOBLT UNNGÅ UTSETTELSE FOR STRÅLING.

2 SPECIFICATIONS

仕様

AUDIO

Number of Channels	2
Frequency Response	1 - 20,000Hz \pm 0.1dB
Signal to Noise Ratio	Better than 105dB (1kHz)
Dynamic Range	Better than 98dB (1kHz)
Harmonic Distortion	0.002% (1kHz)
Wow and Flutter	Unmeasurable (Quartz accuracy)
Channel Separation	Better than 104dB (1kHz)
Output Analog	2.5Vrms
Digital	-15dBm -- 21dBm (Optical)
Headphone	30mW/33 Ω
D/A Converter	"Bitstream" conversion
Digital Filter	8-times oversampling 20-bit digital filter
Analog Filter	3rd order Butterworth filter

〈オーディオ〉	
オーディオチャンネル数	2チャンネル
周波数特性	1~20,000Hz \pm 0.1dB
SN比	105dB以上(1kHz)
ダイナミックレンジ	98dB以上(1kHz)
高調波歪率	0.002%以下(1kHz)
ワウ・フラッター	測定限界値以下(水晶発振精度)
チャンネルセパレーション	104dB以上(1kHz)
アナログ出力	2.5Vrms
デジタル出力	-15~-21dBm(OPTICAL)
ヘッドホン出力	30mW(33 Ω 負荷)
D/Aコンバーター	ビットストリーム
デジタルフィルター	8倍オーバーサンプリング 20ビットデジタルフィルター
アナログフィルター	3次バターワースフィルター

PICK UP

Type	Optical 3-Beam laser pickup
Objective Lens	2-dimensional parallel drive
Laser Type	GaAlAs type semiconductor laser
Wave Length	780nm

〈ピックアップ〉	
方式	対物レンズ駆動、光学式3ビーム
対物レンズ駆動方式	2次元平行駆動
光源	半導体レーザー
波長	780nm

SIGNAL FORMAT

Sampling Frequency	44.1kHz
Quantization Bit	16-bit linear/channel
Channel Bit Rate	4.3218Mb/sec
Channel Modulation Code	EFM (Eight to Fourteen Modulation)
Error Correction	CIRC (Cross Interleave Reed Solomon Code)

〈信号フォーマット〉	
標準化周波数	44.1kHz
量子化ビット数	16ビット・リニア/チャンネル
伝送レート	4.3218Mb/sec
変調方式	EFM
エラー訂正方式	CIRC

GENERAL

Power Requirements	120/230V AC, 50 - 60Hz (USA/Canada/General Export Model) 230V AC, 50Hz (Europe Model) 240V AC, 50Hz (UK/Australia Model)
---------------------------	--

Power Consumption 14 watts

Dimensions (W x H x D)

481 x 123.5 x 295mm
(18-15/16" x 4-7/8" x 11-5/8")

Weight (net) 7.2kg (15-7/8 lbs)

Standard Accessories	Wireless Remote Control Unit (RC-530: for Gold-finish version or RC-529: for Black finish version) x 1, RCA pin-plug cord, Battery (SUM-4, "AAA", "R03" type) x 2, Foot Base x 4, Foot Height Adjustment Tool
-----------------------------	---

〈一般〉	
電源	100V AC 50-60Hz
消費電力	14W
外形寸法	481 x 123.5 x 295mm (W x H x D)
重量	7.2kg

付属品

- ワイヤレスリモコン RC-529またはRC-530
- ピンプラグコード x 1
- 乾電池(単4, SUM-4) x 2
- フットベース x 4
- 高さ調整棒 x 1
- 取扱説明書

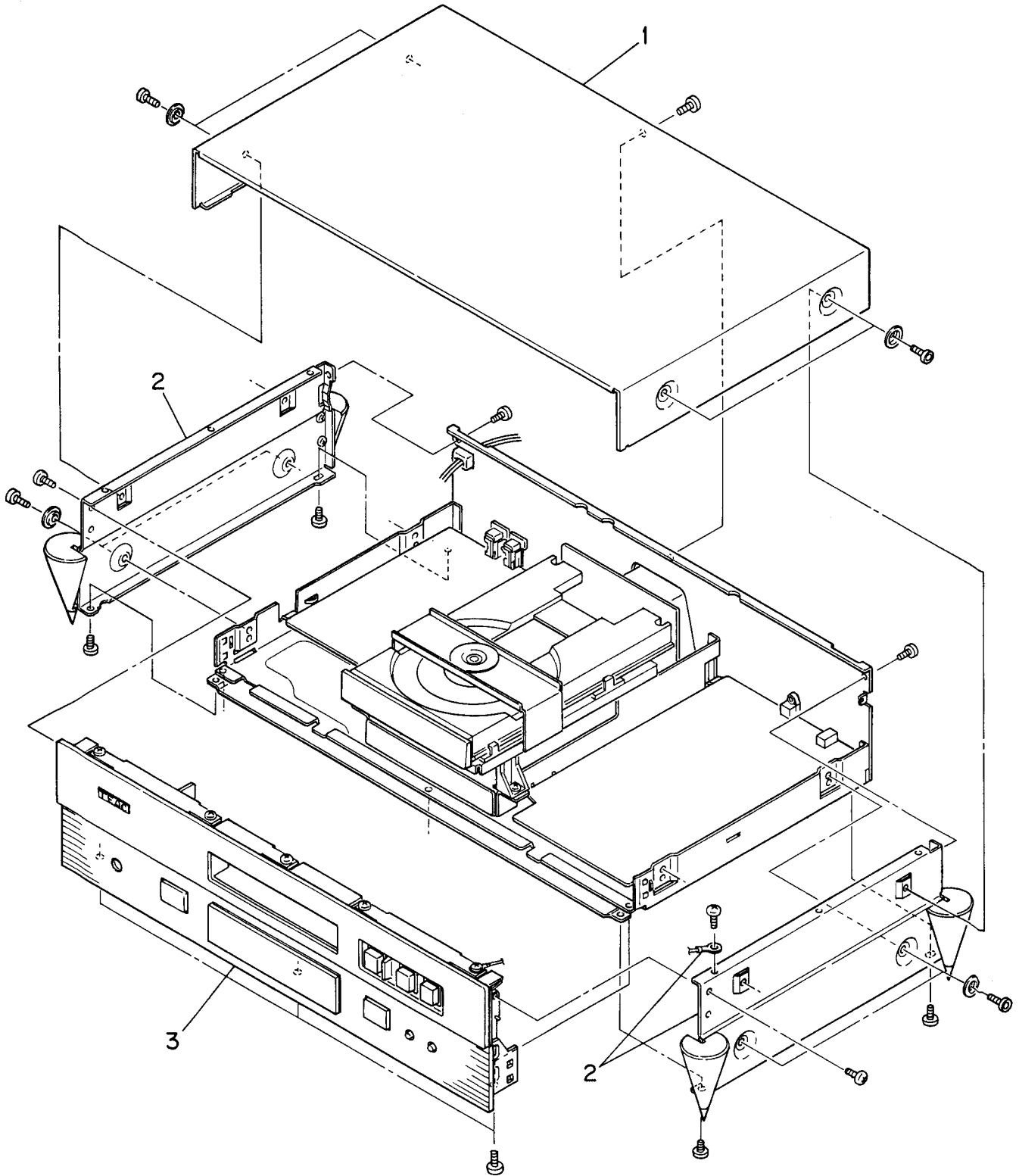
*仕様および外観は、改善のため予告なく変更することがあります。

- Improvements may result in specification or feature changes without notice.

3 CASE AND FRONT PANEL REMOVAL

外装部品の外し方

Disassemble in number-order
番号順に外してください



4 ADJUSTMENT AND CHECKS

調整と確認

1. Replacement of the pickup assembly

- Before removing the pickup assembly be sure to solder -bridge where indicated in the inset (Fig. 4-1) to prevent the laser diode from being electrostatically damaged. After replacing the pickup assembly, be sure to unsolder the antistatic bridge. Or else the laser diode does not function.
- Before servicing the pickup assembly be sure to prevent electrostatic-inducer destruction by grounding not only test equipment in use but also yourself as shown in Fig. 4-2.
- * Electrostatic charge drastically shortens the operating life of the laser diode or possibly results in its destruction.
- During the transportation, mounting and dismounting of the assembly, support with your fingers at points A and B as shown in Fig. 4-3. Be particularly careful not to touch the actuator, photosensor and LD plate and do not apply force to them.
- Soldering must be done quickly at less than 30W, 320°C.
- Don't disassemble the pickup ass'y.
- Don't apply shock to the pickup ass'y.
- Don't place the assembly in a place subject to excessive dust, heat or moisture.

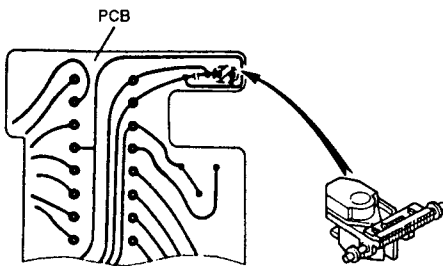


Fig. 4-1

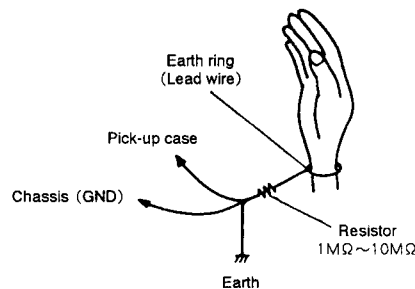


Fig. 4-2

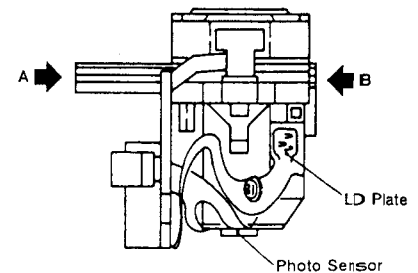


Fig. 4-3

1. ピックアップ ASSY の交換

- ピックアップ ASSY を外すときは、レーザーダイオードの静電破壊防止のため、必ず斜線部分 (Fig. 4-1) を半田ブリッジしてから作業をしてください。また、取り付ける場合も取り付けた後に半田ブリッジを外してください。半田ブリッジをしたままではレーザーダイオードは動作しません。
- ピックアップ ASSY を取り扱う場合は、測定器などに確実なアースを取ると共に、人体アースを行ない、静電破壊を十分防止してください。(Fig. 4-2)
- * レーザーダイオードは、静電気が加わると寿命が著しく低下したり、または破損しますので十分注意してください。
- 取り付け、取り外し、持ち運びの際は、Fig. 4-3 の A 部と B 部で支えてください。特にアクチュエーター、光検出部、LD プレート部は、手を触れたり力を加えたりしないでください。
- 半田ゴテは 30W、320°C 以下を使用し、すばやく処理してください。
- ピックアップ ASSY 本体の調整および分解などはしないでください。
- ピックアップ ASSY に落下・衝撃は加えないでください。
- ゴミ・ホコリなどの発生する場所、高温・多湿の場所は避けてください。

2. Objective

- Laser beams are similar to infrared rays. Don't look at the beams directly and keep your eyes at least 30cm away from them.
- Don't touch the objective with fingers.
- If objective becomes dirty, playback will deteriorate. To clean the objective, moisten a good cleaning tissue, such as made by KODAK, in isopropyl alcohol and wipe the objective gently. Wipe off and excess fluid with a dry cleaning tissue.

2. 対物レンズについて

- レーザー光は近赤外線の為目視は困難です。目の安全の為、目をレンズから 30cm 以上離してください。
- レンズには手を触れないでください。
- レンズに汚れが付くと再生能力が低下しますので、次のように清掃してください。
レンズクリーニングペーパー (KODAK 社製など) に、イソプロピルアルコール (I.P.A) を浸して清掃をし、液が残らないように必ず拭きとってください。

3. Laser diode check

[Iop(Intensity Optimum) check]

Connect a DC voltmeter to both ends of R415 on SERVO PCB. Measure the DC voltage while playing a disc to check that the measured value does not exceed the Iop value indicated on the pickup by 5mA. ($I = \text{measured value} / 22$) If the measured value is higher than that indicated, the pickup may be damaged.

* Pay special attention that parts are not damaged by static electricity.

3. レーザーダイオードの破損チェック

[Iop(Intensity Optimum)値確認]

(ピックアップ交換時には必ず実行のこと)

DCボルトメーターをSERVO PCBのR415の両端に接続する。PLAY中の直流電圧を測定し、その電圧から電流換算した値($I = \text{測定電圧} / 22$)がピックアップに表示してあるIop値より5mA以上増加していないことを確認する。増加の場合は、破損している可能性がある。

* 静電破壊に十分注意すること。

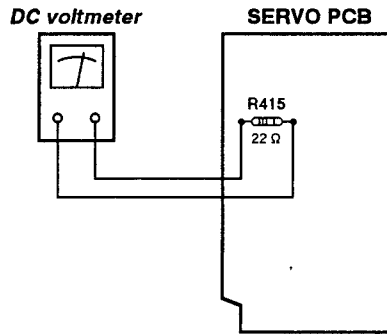
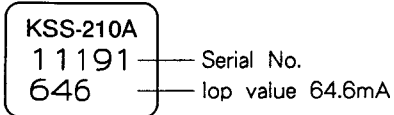
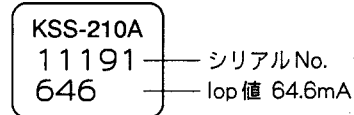


Fig. 4-4

● How to read numbers on sticker attached to the pickup
(Example)



● ピックアップ添付シールの読み方
(例)

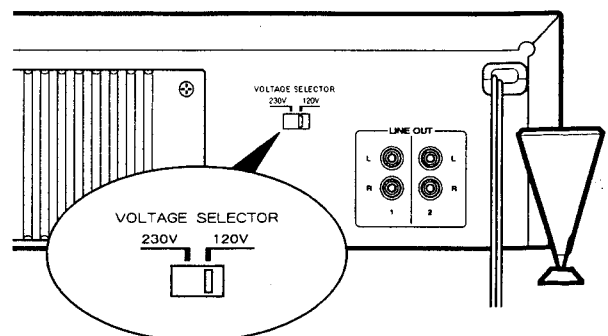


VOLTAGE CONVERSION

(For general export/U.S.A./Canada models)

Be sure to remove the power cord from the AC outlet before repositioning the voltage converter switch.

1. Locate the voltage selector on the rear panel.
2. Using a flat-bladed screwdriver, set to the appropriate 230 V or 120 V position according to your area.



4-1 SERVO ADJUSTMENT

4-1 サーボ調整

TEST DISC: MCD-111 (or YEDS-18)

テストディスク: MCD-111 (または YEDS-18)

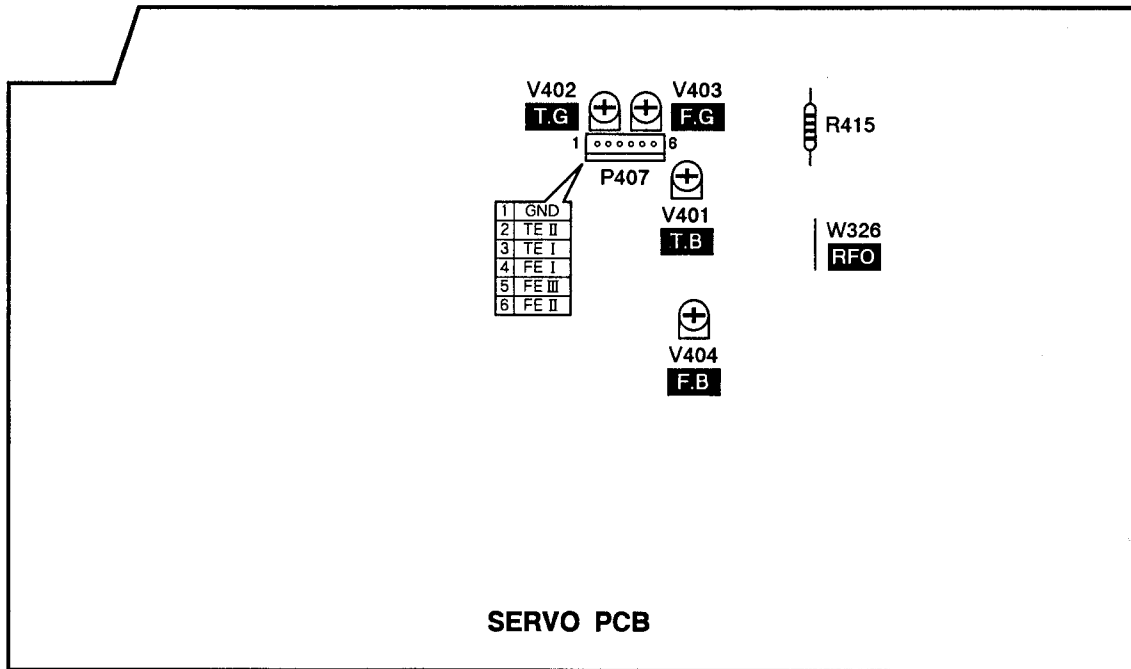


Fig. 4-5

4-1-1 Checking the pickup actuator operation

4-1-1 ピックアップアクチュエーター動作チェック

Before loading the disc, turn the power ON and check that the pickup actuator moves up and down three times. (If the pickup is not at inside on the disc, perform the above operation after moving the pickup to the inside.)

電源ON時ピックアップアクチュエーターが3回上下動すること。(ピックアップが最内周にないときは、最内周に移動後上記動作すること。) ディスクは装着しない。

4-1-2 Tracking balance adjustment

4-1-2 トラッキングバランス調整

1. Connect the oscilloscope between P407-3 (TE I) and P407-1 (GND), and press the SEARCH (◀◀ or ▶▶) button.
2. Adjust V401 (T.B) so that the upper and lower amplitudes of the tracking error signal waveform become equal above and below 0V.

1. P407-3 (TE I) と P407-1 (GND) 間にオシロスコープを接続し、SEARCH ボタン (◀◀ または ▶▶) を押す。
2. トラッキングエラー信号の波形が 0V を中心に振れるよう V401 (T.B) を調整する。

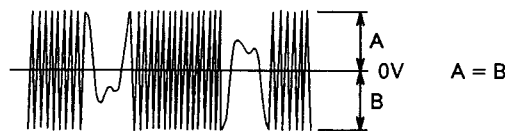


Fig. 4-6

4-1-3 Focus offset adjustment

1. Connect the oscilloscope between W326 (RFO) and P407-1 (GND).
2. In the play mode, adjust V404 (F.B) so that the waveform on the oscilloscope becomes maximum.
3. After adjusting the focus offset, stop the player. Check for an offset voltage of 50mV or less at P407-5 (FE III). If reading values are out of spec, adjust V404 again.

4-1-3 フォーカスオフセット調整

1. W326 (RFO)とP407-1 (GND)間にオシロスコープを接続する。
2. PLAY状態でオシロスコープの波形が最大になるようにV404 (F.B)を調整する。
3. フォーカスオフセット調整後 STOP状態にしてP407-5 (FE III)のオフセット電圧が50mV以下であることを確認する。もし規格に入らない場合は再度V404を調整する。

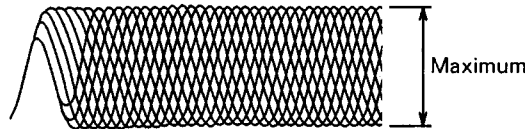


Fig. 4-7

4-1-4 Focus gain adjustment

1. Apply 1.04kHz/10Vp-p to P407-6 (FE II) from an external OSC via 100kΩ resistor.
2. Play the track 4, and adjust V403 (F.G) so that phase at P407-4 (FE I) is 90° with respect to that of the external OSC.

4-1-4 フォーカスゲイン調整

1. 外部OSCより100kΩの抵抗を介して1.04kHz/10Vp-pの信号をP407-6 (FE II)に入力する。
2. 4曲目を再生し、P407-4 (FE I)と外部OSCとの位相が90°になるようにV403 (F.G)を調整する。

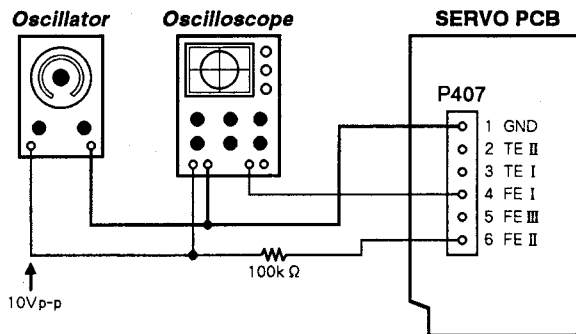


Fig. 4-8

4-1-5 Tracking gain adjustment

1. Apply 1.63kHz/10Vp-p (When using MCD-111) or 1.46kHz/10Vp-p (When using YEDS-18) to P407-2 (TE II) from an external OSC via 100kΩ resistor.
2. Play the track 4, and adjust V402 (T.G) so that phase at P407-3 (TE I) is 90° with respect to that of the external OSC.

4-1-5 トラッキングゲイン調整

1. 外部OSCより100kΩの抵抗を介して1.63kHz/10Vp-p (MCD-111にて調整時)または1.46kHz/10Vp-p (YEDS-18にて調整時)の信号をP407-2 (TE II)に入力する。
2. 4曲目を再生し、P407-3 (TE I)と外部OSCとの位相が90°になるようにV402 (T.G)を調整する。

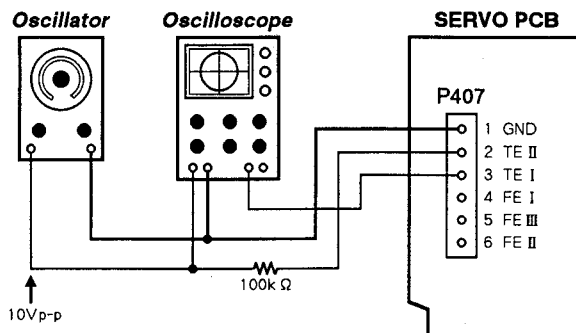


Fig. 4-9

4-2 AUDIO ADJUSTMENT

TEST DISC: MCD-111 (or YEDS-18)

4-2 オーディオ調整

テストディスク: MCD-111 (または YEDS-18)

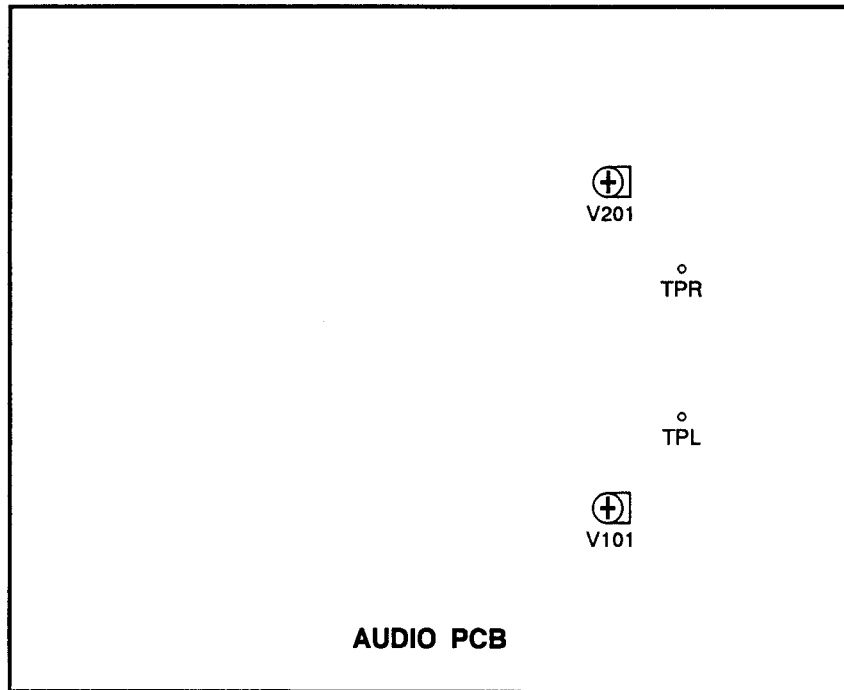


Fig. 4-10

4-2-1 DC offset adjustment

1. Connect a DC voltmeter to TPL (L-ch) and TPR (R-ch) on AUDIO PCB, and adjust V101 (L-ch) and V201 (R-ch) so that the offset voltage becomes within $3 \pm 2\text{mV}$.
2. Connect a AC voltmeter to the LINE OUT.
3. Readjust V101 (L-ch) and V201 (R-ch) by repeating the track 7 of MCD-111 between A and B for 1 sec., so that the click noise becomes -60dB or less.

4-2-1 DC オフセット調整

1. AUDIO PCBのTPL (L-ch), TPR (R-ch)にDCボルトメーターを接続し、オフセット電圧が $3 \pm 2\text{mV}$ になるようにV101 (L-ch), V201 (R-ch)を調整する。
2. LINE OUT端子にACボルトメーターを接続する。
3. MCD-111の7曲目を約1秒間A-B間リピートし、このときのクリックノイズが -60dB 以下となるようにV101 (L-ch), V201 (R-ch)を再調整する。

4-2-2 ELECTRICAL CHARACTERISTICS 電気特性

ITEM 項目	DISC: MCD-111 (YEDS-18)		SPECIFICATIONS 規格	REMARKS 備考
	TRACK No. トラック	FREQUENCY 周波数		
1. Output level 出力レベル	2	1kHz	$2.5 \pm 0.5V_{rms}$	
2. Channel level difference チャンネルレベル差	2	1kHz	0.5dB or less	
3. Phones level ヘッドホンレベル	2	1kHz	$1.0 \pm 0.3V_{rms}$	33 Ω load OUTPUT level : max.
4. Harmonic distortion 高調波歪率	2	1kHz	0.005 % or less	400Hz~20kHz filter in
5. Frequency response 周波数特性	3~6	20Hz~20kHz	Within $\pm 0.5dB$	reference level: 1kHz
6. S/N ratio S/N比	7		95dB or better	DIN AUDIO (Use SHIBASOKU 725 or equivalent)
7. Channel separation チャンネル セパレーション	8, 10	1kHz	90dB or better	DIN AUDIO
8. Emphasis effect エンファシス効果	13	16kHz	MCD-111 : - $20 \pm 0.5dB$ YEDS-18 : - $9 \pm 0.5dB$	reference level: 1kHz

PARTS LIST SECTION

NOTES

- PC boards shown are viewed from parts side.
- Parts marked with * require longer delivery time.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- Δ Parts marked with this sign are safety critical components. They must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
- Parts of [] mark can be used only with the version designated.
[J]: JAPAN [US]: U. S. A. [C]: CANADA [GE]: GENERAL EXPORT
[E]: EUROPE [UK]: U. K. [A]: AUSTRALIA
CD-5N: Gold Version, CD-5B: Black Version

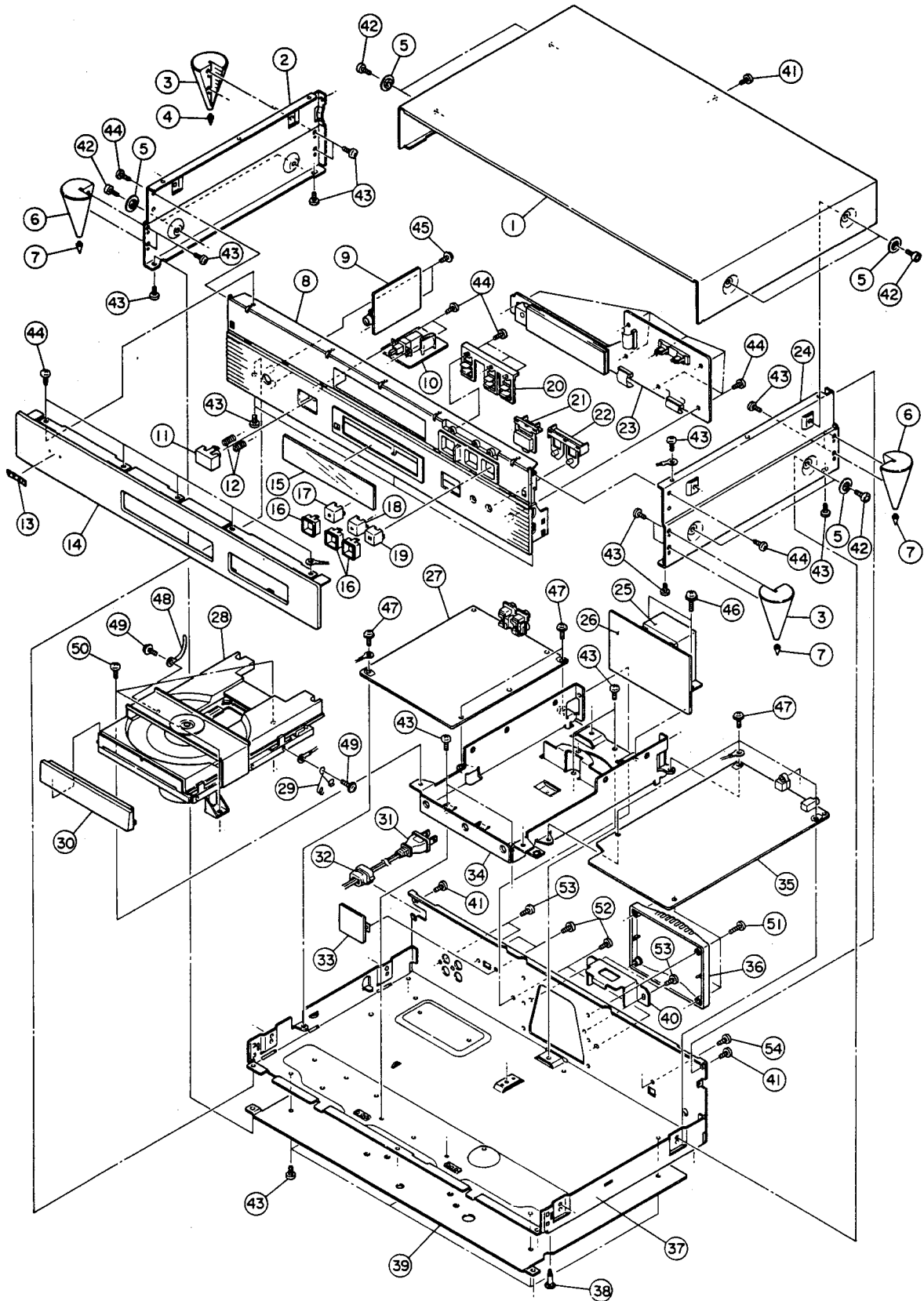
注意

- プリント基板図は部品面が示されています。
- *印の部品は納期が若干かかります。
あらかじめご了承ください。
- 分解図に部番のない部品及び品番のない部品は供給しません。
- 標準の抵抗、コンデンサーは省略してあります。
回路図を参照してください。
- Δ 印は安全重要部品です。
交換する時は必ずティアック指定の部品を使用してください。
- 仕向先
[J]: JAPAN [US]: U. S. A. [C]: CANADA [GE]: GENERAL EXPORT
[E]: EUROPE [UK]: U. K. [A]: AUSTRALIA
CD-5N: Gold Version, CD-5B: Black Version

5 EXPLODED VIEWS AND PARTS LIST

分解図とパーツリスト

EXPLODED VIEW-1

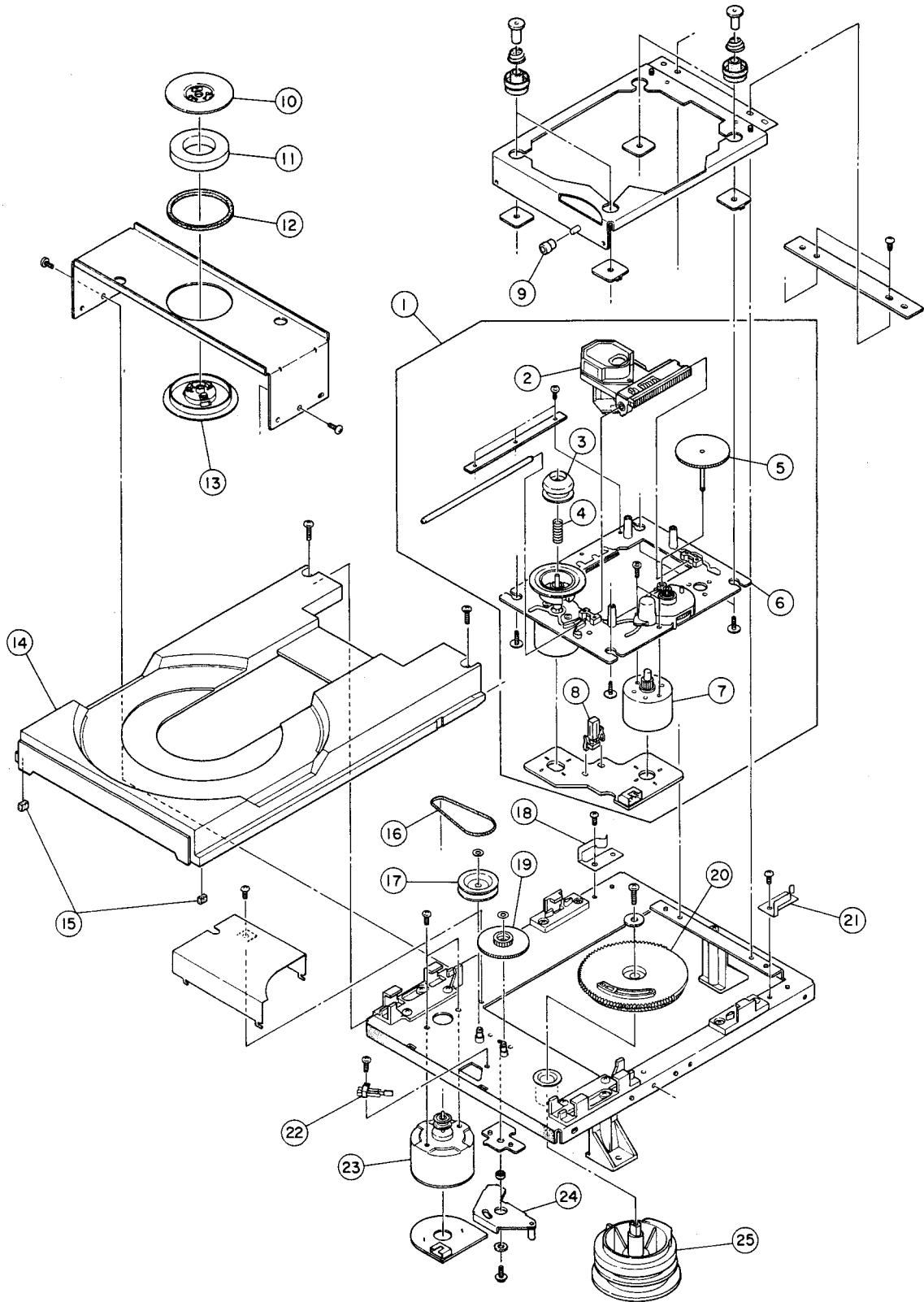


EXPLODED VIEW-1

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
1- 1	*9260194902	BONNET ASSY, N	CD-5N
	*9260194802	BONNET ASSY, B	CD-5B
1- 2	*9260193401	SIDE PANEL, L-N	CD-5N
	*9260189901	SIDE PANEL, L-B	CD-5B
1- 3	9260191900	CORNER FOOT, 2-N	CD-5N
	9260191800	CORNER FOOT, 2-B	CD-5B
1- 4	*9260192600	TIP, L	
1- 5	*9260192400	VIS COLLAR, N	
1- 6	9260191700	CORNER FOOT, 1-N	CD-5N
	9260191600	CORNER FOOT, 1-B	CD-5B
1- 7	*9260192500	TIP, S	
1- 8	*9260189402	FRONT ESCUTCHEON, N	CD-5N
	*9260189300	FRONT ESCUTCHEON, B	CD-5B
1- 9	*9145127200	HEADPHONE PCB ASSY	
1-10	*9145127300	POWER SW PCB ASSY	
1-11	9260190800	POWER BUTTON, N	CD-5N
	9260190700	POWER BUTTON, B	CD-5B
1-12	9260193600	BUTTON SPRING	
1-13	*5801533700	EMBLEM, TEAC	CD-5N
	*5801413200	NAME PLATE, TEAC	CD-5B
1-14	*9260190401	FRONT PANEL, N	CD-5N
	*9260190301	FRONT PANEL, B	CD-5B
1-15	*9260192200	FL WINDOW	
1-16	*5801530500	CAP ESCUTCHEON	
1-17	5801530801	PLAY CAP, ST	
1-18	5801530601	PLAY CAP, PL	
1-19	5801530701	PLAY CAP, PA	
1-20	*9260190900	BUTTON HINGE	
1-21	9260191300	O/C BUTTON, N	CD-5N
	9260191200	O/C BUTTON, B	CD-5B
1-22	9260191500	SKIP BUTTON, N	CD-5N
	9260191400	SKIP BUTTON, B	CD-5B
1-23	*9145127101	KEY PCB ASSY	
1-24	*9260193201	SIDE PANEL, R-N	CD-5N
	*9260190201	SIDE PANEL, R-B	CD-5B
1-25	△ 9125094000	POWER TRANSFORMER [J]	
	△ 9125094200	POWER TRANSFORMER [E,UK,A]	
	△ 9125094301	POWER TRANSFORMER [US,C,GE]	
1-26	*9145109204	POWER PCB ASSY [US,C,GE]	
	*9145109214	POWER PCB ASSY [E,UK,A]	
	*9145109224	POWER PCB ASSY [GE]	
	*9145109234	POWER PCB ASSY [J]	
1-27	*9145110210	AUDIO PCB ASSY	
1-28	*9278256400	CD MECHA.ASSY	
1-29	*9260126400	CLAMPER (A)	
1-30	*9260191100	TRAY PANEL, N	CD-5N
	*9260191000	TRAY PANEL, B	CD-5B
1-31	△ 5350019300	AC CORD [GE]	
	△ 9109025710	AC CORD [E]	
	△ 9109026010	AC CORD [A]	
	△ 9109026111	AC CORD [J]	
	△ 9109026910	AC CORD [US,C,GE]	
	△ 9109027300	AC CORD [UK]	
1-32	△ 9121000102	BUSHING, #2271	
1-33	*9145127400	SELECTOR SW PCB ASSY [US,C,GE]	
1-34	*9260160801	SUB CHASSIS (B)	
1-35	*9145110109	SERVO PCB ASSY	
1-36	*9A04899000	REAR COVER	
1-37	-----	MAIN CHASSIS	
1-38	*9260160600	PCB SUPPORT, H=16	
1-39	*9260189600	BOTTOM PLATE	
1-40	*9260202900	TRANS BRACKET	

(Continued on page 15)

EXPLODED VIEW-2



EXPLODED VIEW-2

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
2- 1	-----	DRIVE UNIT	
2- 2	9278321500	PICK UP, KSS-210A	
2- 3	*9278321400	CENTER RING (LO)	
2- 4	*9278321300	SPRING (S)	
2- 5	9278321600	TOOTH GEAR (A)	
2- 6	9278321700	TT CHASSIS ASSY (MB)	
2- 7	9278321800	MOTOR GEAR ASSY (MR)	
2- 8	9278322000	SW, LEAF	
2- 9	*9278317400	ROLLER (SP)	
2-10	*9278317000	CHUCKING YOKE (SP)	
2-11	*9278316900	MAGNET	
2-12	*9278316800	DAMPER	
2-13	9278316500	CHUCKING PULLEY (AU)	
2-14	*9278316200	TRAY (SP)	
2-15	*9278316300	DAMPER	
2-16	9278318700	LM BELT	
2-17	9278318900	LOADING PULLEY	
2-18	*9278319300	TRAY HOLDER (R) SP	
2-19	9278319100	MIDDLE GEAR (SP)	
2-20	9278318500	DRIVER GEAR (SP)	
2-21	*9278319400	TRAY HOLDER (L) SP	
2-22	9278320000	SW, LEAF	
2-23	9278321100	MOTOR ASSY	
2-24	*9278320500	STOPPER LINK ASSY (AU)	
2-25	9278320300	CONTROL CAM (SP)	

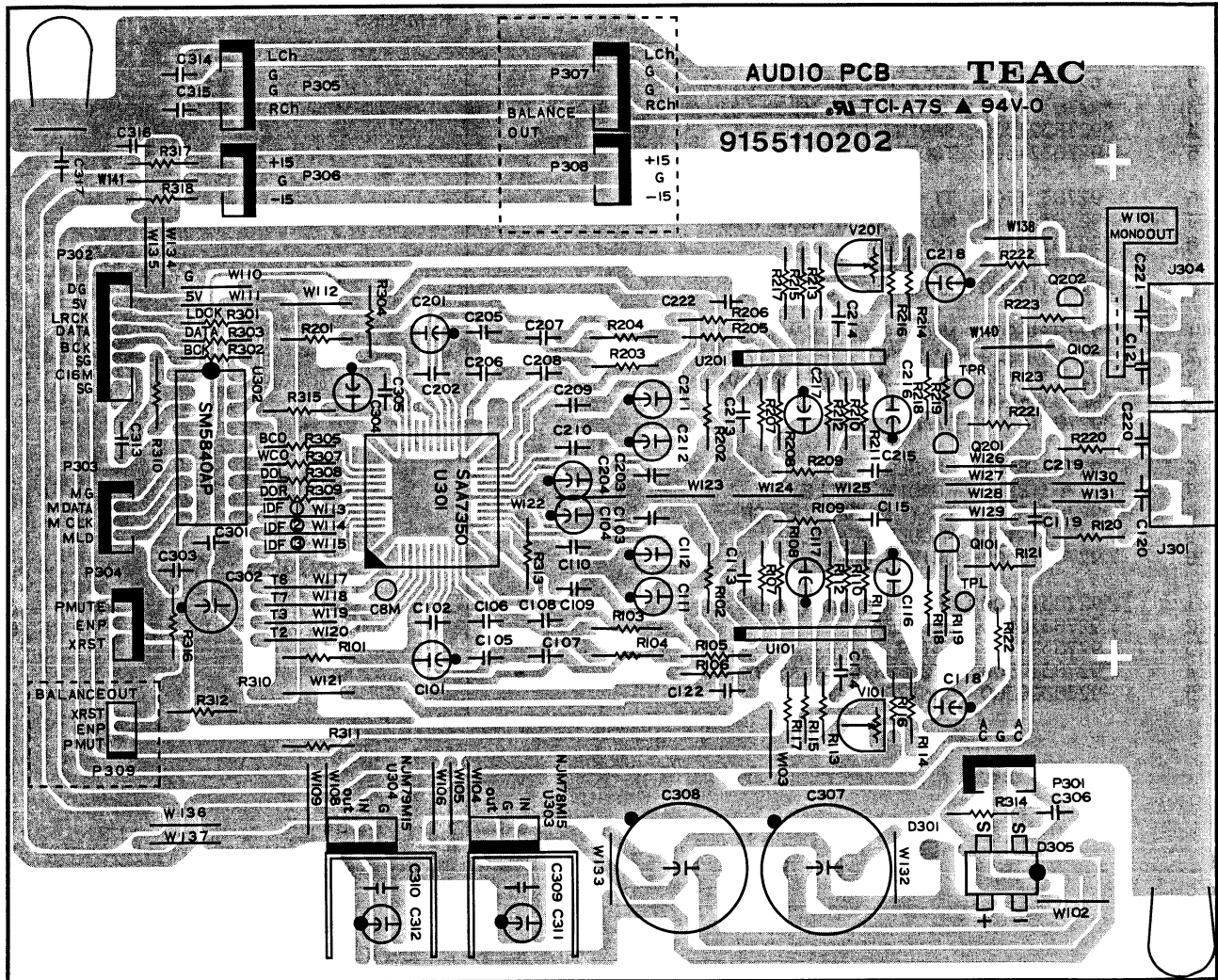
EXPLODED VIEW-1 (Continued from page 13)

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
1-41	*9783593008	SCREW, C-TITE M3X8 (NI-BLK)	
1-42	*9783503008	SCREW, HEX RTT-S M3X8 (GLD)	
1-43	*9783203006	SCREW, BTT-S M3X6	
1-44	*9783603008	SCREW, BTT-P M3X8	
1-45	*9783413008	SCREW, CAP-P M3X8 (BLK)	
1-46	*9783294008	SCREW, BTB-S M4X8	
1-47	*9783103006	SCREW, CAP-S M3X6	
1-48	*9788823059	WIRE CLAMPER	
1-49	*9783102606	SCREW, CAP-S M2.6X6	
1-50	*9783203008	SCREW, BTT-S M3X8	
1-51	*9783233012	SCREW, BTT-S M3X12 (BLK)	
1-52	*9783233006	SCREW, BTT-S M3X6 (BLK)	
1-53	*9783613008	SCREW, BTT-P M3X8 (BLK)	
1-54	*9783613006	SCREW, BTT-P M3X6 (BLK)	

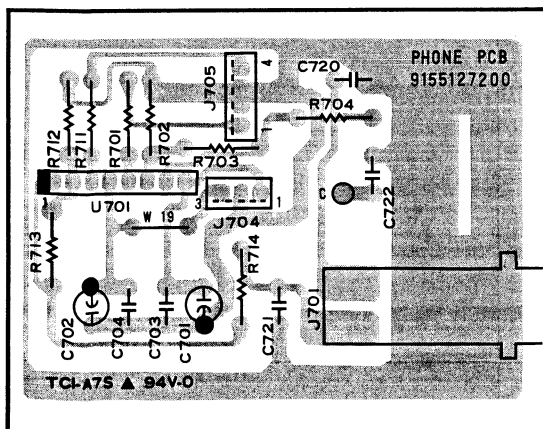
6 PC BOARDS AND PARTS LIST

基板図とパーツリスト

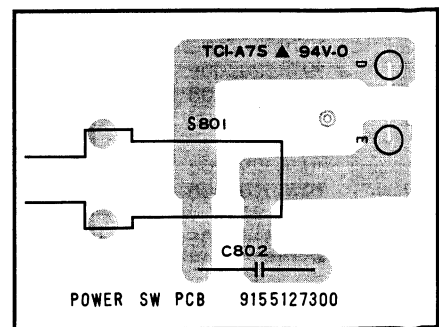
AUDIO PCB



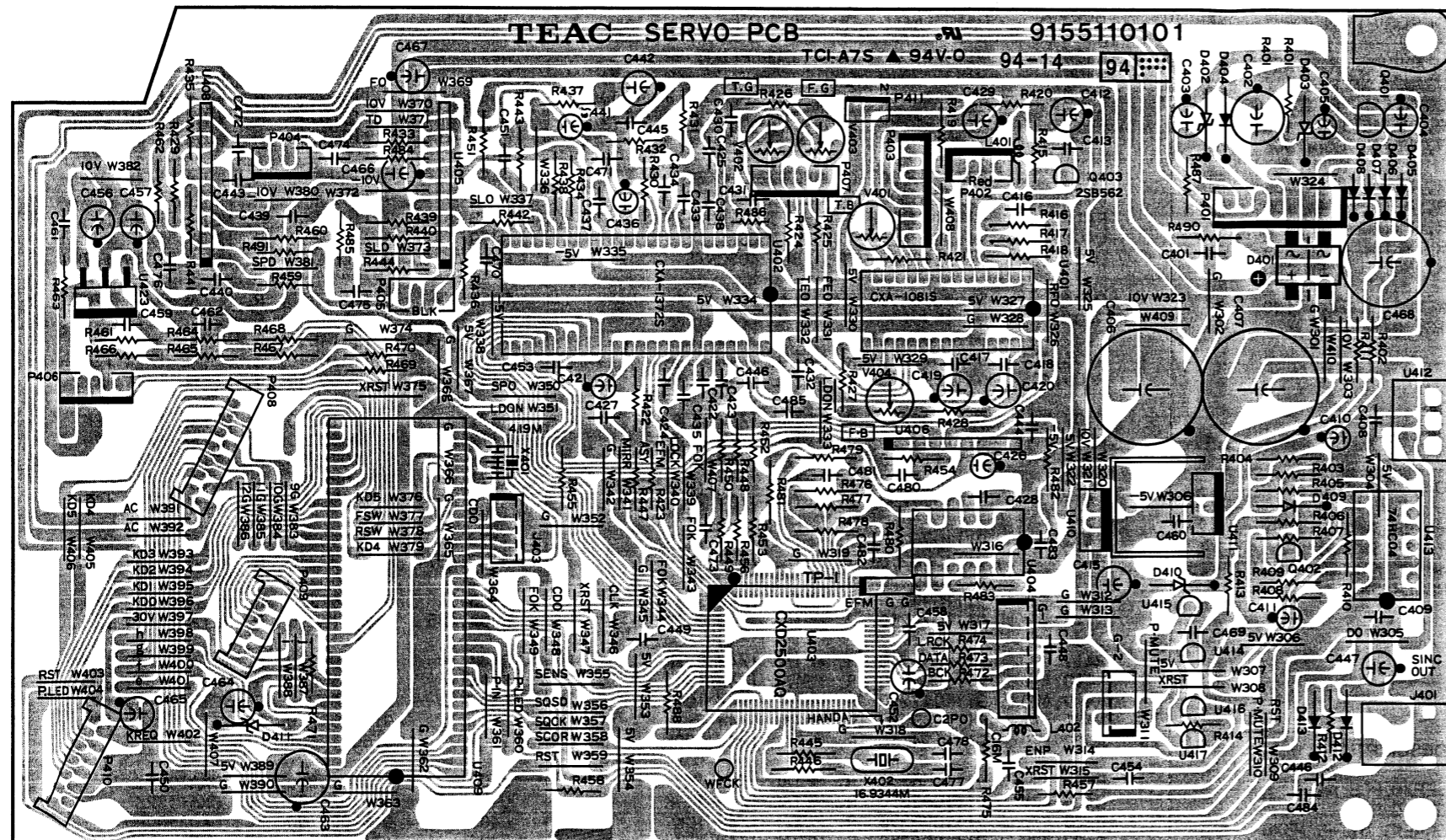
PHONE PCB



POWER SW PCB

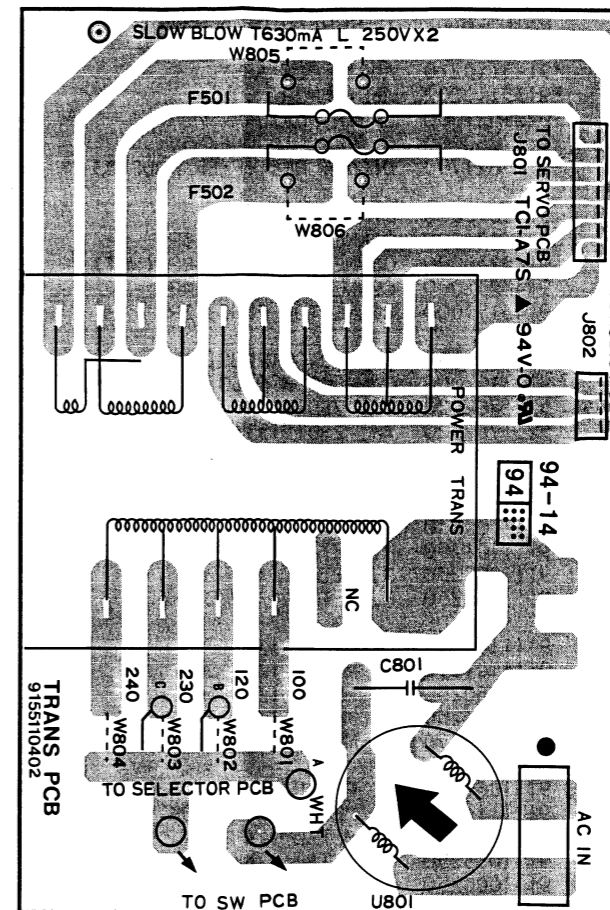


SERVO PCB

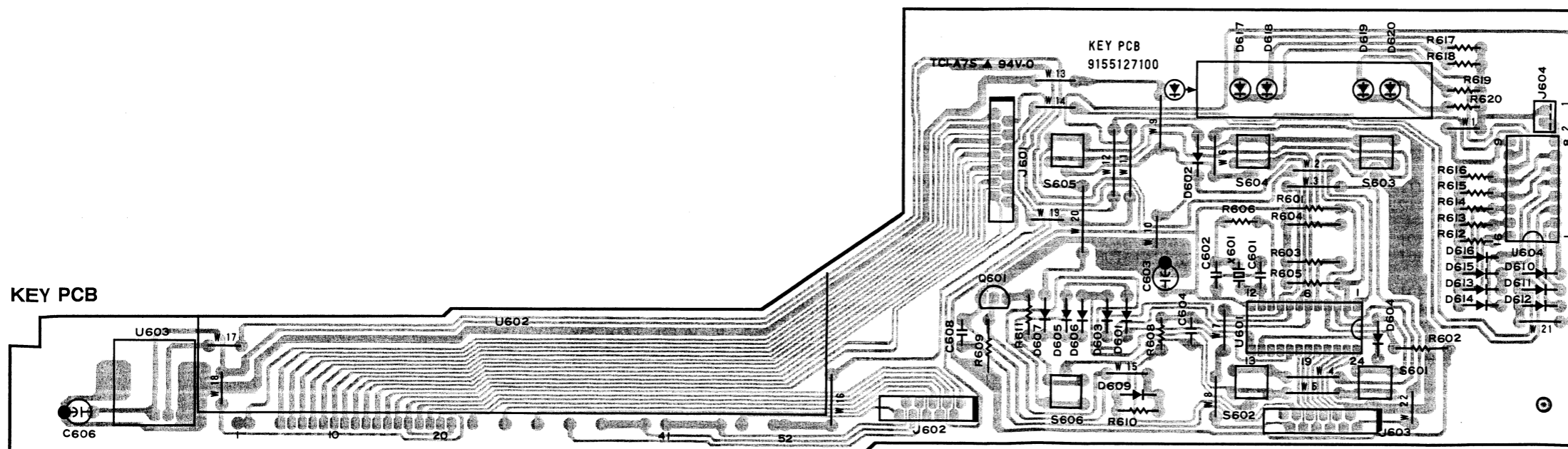


GATHER PCB
9155110003

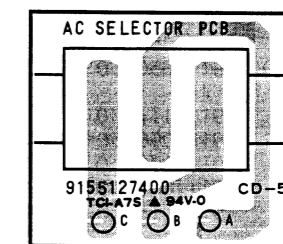
TRANS PCB



KEY PCB



AC SELECTOR PCB



AUDIO PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*9145110210	AUDIO PCB ASSY
	*9155110202	AUDIO PCB
	9229021000	EARTH PLATE A
C307,308 D305	△ 9117260000	C, ELEC 1000UF/35V
	△ 9165021700	DIODE, RECTIFIER PBD103
J301,304 P301 P302 P303 P304	9143870000 9143171000 9143236000 9143232000 9143171000	PIN JACK, 2P CONNECTOR PLUG, 3P CONNECTOR PLUG, 8P (WHT) CONNECTOR PLUG, 4P CONNECTOR PLUG, 3P
P305 P306 Q101,201 Q102,202 R101,201	9143172000 9143171000 5231762520 5231762520 9111006250	CONNECTOR PLUG, 4P CONNECTOR PLUG, 3P TR, 2SD1915TA TR, 2SD1915TA R, METAL 1/4W 3.9
R102,202 R103,203 R104,204 R105,205 R106,206	9111042250 9111101250 9111101250 9111097250 9111097250	R, METAL 1/4W 100 R, METAL 1/4W 30K R, METAL 1/4W 30K R, METAL 1/4W 20K R, METAL 1/4W 20K
R107,207 R108,208 R109,209 R110,210 R111,211	9111101250 9111101250 9111060250 9111063250 9111060250	R, METAL 1/4W 30K R, METAL 1/4W 30K R, METAL 1/4W 560 R, METAL 1/4W 750 R, METAL 1/4W 560
R112,212 R113,213 R114,214 R115,215 R116,216	9111066250 9111114250 9111094250 9111086250 9111000250	R, METAL 1/4W 1K R, METAL 1/4W 100K R, METAL 1/4W 15K R, METAL 1/4W 6.8K R, METAL 1/4W 2.2
R117,217 R118,218 R119,219 R120,220 R121,221	9111000250 9111096250 9111066250 9111042250 9111066250	R, METAL 1/4W 2.2 R, METAL 1/4W 18K R, METAL 1/4W 1K R, METAL 1/4W 100 R, METAL 1/4W 1K
R122,222 R123,223 R301-303 R304,305 R307-309	9111074250 9111066250 9111042250 9111050250 9111050250	R, METAL 1/4W 2.2K R, METAL 1/4W 1K R, METAL 1/4W 100 R, METAL 1/4W 220 R, METAL 1/4W 220
R310 R311,312 R313 R314 R315	9111114250 9111090250 9111099250 9111066250 9111016250	R, METAL 1/4W 100K R, METAL 1/4W 10K R, METAL 1/4W 24K R, METAL 1/4W 1K R, METAL 1/4W 10
R316 R317,318 TPL,TPR U101,201 U301	9111066250 9111000250 9160012600 9167025800 5220099700	R, METAL 1/4W 1K R, METAL 1/4W 2.2 PIN, TP IC, NJM2114L IC, SAA7350GP
U302 U302 U303 U304 V101,201	5220099800 5347026200 △ 9167015600 △ 9167015700 9112059800	IC, SM5840AP SHEILD SHEET, 19X5 IC, NJM78M15FA IC, NJM79M15FA VR, SEMI-FIXED 10K (B)

HEADPHONE PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*9145127200	HEADPHONE PCB ASSY
	*9155127200	HEADPHONE PCB
J701 R701 R702	9143258000 9111106250 9111101250	CONNECTOR PLUG, 10P R, METAL 1/4W 47K R, METAL 1/4W 30K
R703 R704 R711 R712 R713	9111096250 9111042250 9111106250 9111101250 9111096250	R, METAL 1/4W 18K R, METAL 1/4W 100 R, METAL 1/4W 47K R, METAL 1/4W 30K R, METAL 1/4W 18K
R714 U701	9111042250 9167015800	R, METAL 1/4W 100 IC, NJM4565L
POWER SW PCB ASSY		
REF.NO.	PARTS NO.	DESCRIPTION
	*9145127300	POWER SW PCB ASSY
	*9155127300	POWER SW PCB
	△ 5267704100	SPARK KILLER 0.0047UF/250V
	△ 9135031500	POWER SW
SERVO PCB ASSY		
REF.NO.	PARTS NO.	DESCRIPTION
	*9145110109	SERVO PCB ASSY
	*9155110101	SERVO PCB
	*9783213008	SCREW, BTT-B M3X8
	9229021000	EARTH PLATE A
C402	△ 9117186020	C, ELEC 47UF/50V
C406 C407 C468 D401 D402	△ 9117302200 △ 9117259100 △ 9117273510 △ 9165021700 9166036350	C, ELEC 4700UF/16V C, ELEC 1000UF/25V C, ELEC 2200UF/16V DIODE, RECTIFIER PBD103 ZENER DIODE, RD6.2ESB1
D403 D404 D405-408 D409 D410	9166037850 △ 9165020508 △ 9165020531 9165020250 9166036350	ZENER DIODE, RD33ESB1 DIODE, IN4003 DIODE, IN4003 DIODE, IS1555 ZENER DIODE, RD6.2ESB1
D411 D412,413 EFM H401 J401	9166036750 △ 9165020250 9160012601 9260069801 9143312000	ZENER DIODE, RD 9.1ESB1 DIODE, IS1555 PIN, TP HEAT SINK JACK, MINIATURE
L401 L402 P401 P402 P403	9122019250 14727478 9143175000 9143232020 9143236000	COIL, 4.7UH INDUCTOR FERRITE BEADS CONNECTOR PLUG, 7P (WHT) CONNECTOR PLUG, 4P (RED) CONNECTOR PLUG, 8P (WHT)

SERVO PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
P404 P405 P406 P407 P408	9143232000 9143232010 9143233000 9143234000 5336296400	CONNECTOR PLUG, 4P CONNECTOR PLUG, 4P (BLK) CONNECTOR PLUG, 5P (WHT) CONNECTOR PLUG, 6P (WHT) CONNECTOR SOCKET
P409 P410 P411 Q401 Q402	5336296000 5336296300 9143170000 △ 9163202400 9163310520	CONNECTOR SOCKET CONNECTOR SOCKET CONNECTOR PLUG, 2P TR, 2SB562C TR, 2SCI740SLN/S
Q403 R401 R402 R403,404 R405,406	9163202400 9111090250 9111066250 9111078250 9111090250	TR, 2SB562C R, METAL 1/4W 10K R, METAL 1/4W 1K R, METAL 1/4W 3.3K R, METAL 1/4W 10K
R407 R408 R409 R410 R411	9111066250 9111042250 9111114250 9111138250 9111050250	R, METAL 1/4W 47K R, METAL 1/4W 100 R, METAL 1/4W 100K R, METAL 1/4W 1M R, METAL 1/4W 220
R412 R413 R414 R415 R416	9111076250 9111066250 9111090250 9111024250 9111074250	R, METAL 1/4W 2.7K R, METAL 1/4W 1K R, METAL 1/4W 10K R, METAL 1/4W 22 R, METAL 1/4W 2.2K
R417 R418 R419,420 R421 R422	9111088250 9111096250 9111042250 9111088250 9111114250	R, METAL 1/4W 8.2K R, METAL 1/4W 18K R, METAL 1/4W 100 R, METAL 1/4W 8.2K R, METAL 1/4W 100K
R423 R424,425 R426 R427,428 R429	9111066250 9111082250 9111090250 9111096250 9111000250	R, METAL 1/4W 1K R, METAL 1/4W 4.7K R, METAL 1/4W 10K R, METAL 1/4W 18K R, METAL 1/4W 2.2
R430 R431 R432 R433 R434	9111117250 9111082250 9111074250 9111000250 9111112250	R, METAL 1/4W 130K R, METAL 1/4W 4.7K R, METAL 1/4W 2.2K R, METAL 1/4W 2.2 R, METAL 1/4W 82K
R435 R436 R437 R438 R439	9111082250 9111114250 9111094250 9111112250 9111194250	R, METAL 1/4W 4.7K R, METAL 1/4W 100K R, METAL 1/4W 15K R, METAL 1/4W 82K R, METAL 1/4W 680K
R440,441 R442 R443 R444 R445	9111000250 9111082250 9111131250 911106250 9111138250	R, METAL 1/4W 2.2 R, METAL 1/4W 4.7K R, METAL 1/4W 510K R, METAL 1/4W 47K R, METAL 1/4W 1M
R446 R447 R448 R449 R450	9111050250 9111090250 9111118250 9111102250 9111098250	R, METAL 1/4W 220 R, METAL 1/4W 10K R, METAL 1/4W 150K R, METAL 1/4W 33K R, METAL 1/4W 22K

SERVO PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
R451 R452 R453 R454 R455	9111116250 9111113250 9111090250 9111118250 9111066250	R, METAL 1/4W 120K R, METAL 1/4W 91K R, METAL 1/4W 10K R, METAL 1/4W 150K R, METAL 1/4W 1K
R456 R457 R458 R459 R460	9111090250 9111050250 9111096250 9111016250 9111082250	R, METAL 1/4W 10K R, METAL 1/4W 220 R, METAL 1/4W 18K R, METAL 1/4W 10 R, METAL 1/4W 4.7K
R461 R462,463 R464,465 R466 R467-470	9111116250 9111016250 9111114250 9111116250 9111066250	R, METAL 1/4W 120K R, METAL 1/4W 10 R, METAL 1/4W 100K R, METAL 1/4W 120K R, METAL 1/4W 1K
R471 R472-475 R476 R477 R478	9111110250 9111050250 9111078250 9111086250 9111090250	R, METAL 1/4W 68K R, METAL 1/4W 220 R, METAL 1/4W 3.3K R, METAL 1/4W 6.8K R, METAL 1/4W 10K
R479 R480,481 R482 R483 R484,485	9111050250 9111082250 9111050250 9111062250 9111016250	R, METAL 1/4W 220 R, METAL 1/4W 4.7K R, METAL 1/4W 220 R, METAL 1/4W 680 R, METAL 1/4W 10
R487 R488 R490 R491 TP 1	9111090250 9111050250 9111066250 9111090250 9160012601	R, METAL 1/4W 10K R, METAL 1/4W 220 R, METAL 1/4W 1K R, METAL 1/4W 10K PIN, TP
U401 U402 U403 U404 U405	9167023800 9167024200 9167024100 13441995 9167022000	IC, CXAI081S IC, CXAI372S IC, CXD2500BQ IC, SN74LS628N IC, TAB810AK
U406 U408 U409 U410 U411	9167015800 9167022000 5220829600 △ 9167021710 △ 9167021700	IC, NJM4565L IC, TAB810AK IC, UPD75212ACW-A38 IC, NJM78M05FA IC, NJM79M05FA
U412 U413 U414 U415 U416	9143321000 9167014700 9163313220 9163011420 9163313220	OPT TRANSMITTING MODULE IC, UPD74HC04C TR, DTC114ES TR, DTA114ES TR, DTC114ES
U417 U423 V601-603 V604 X401 X402	9163011420 9167022500 9112057000 9112056000 5347017700 5347010900	TR, DTA114ES IC, LA6500 VR, SEMI-FIXED 22K (B) VR, SEMI-FIXED 4.7K (B) OSC, CERAMIC OSC, CRYSTAL 16.9344MHZ

A

B

C

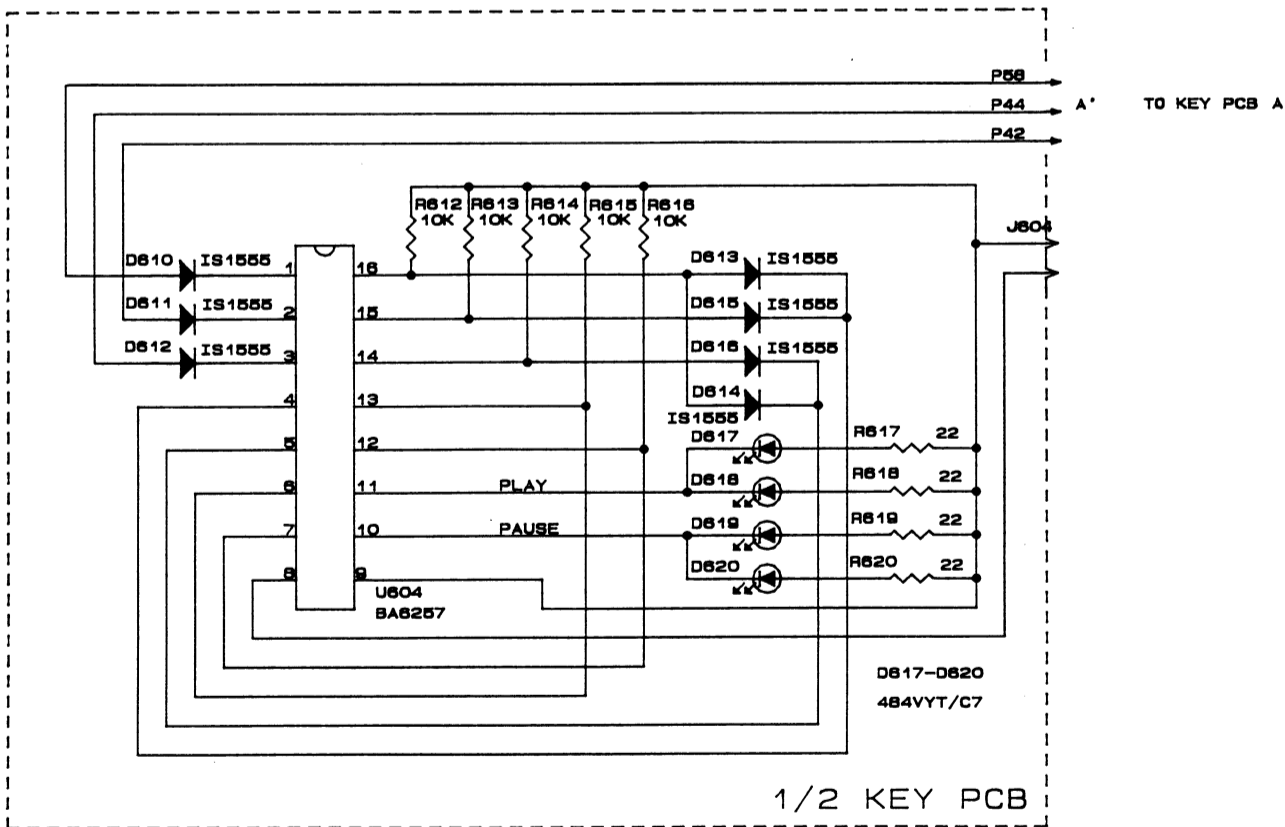
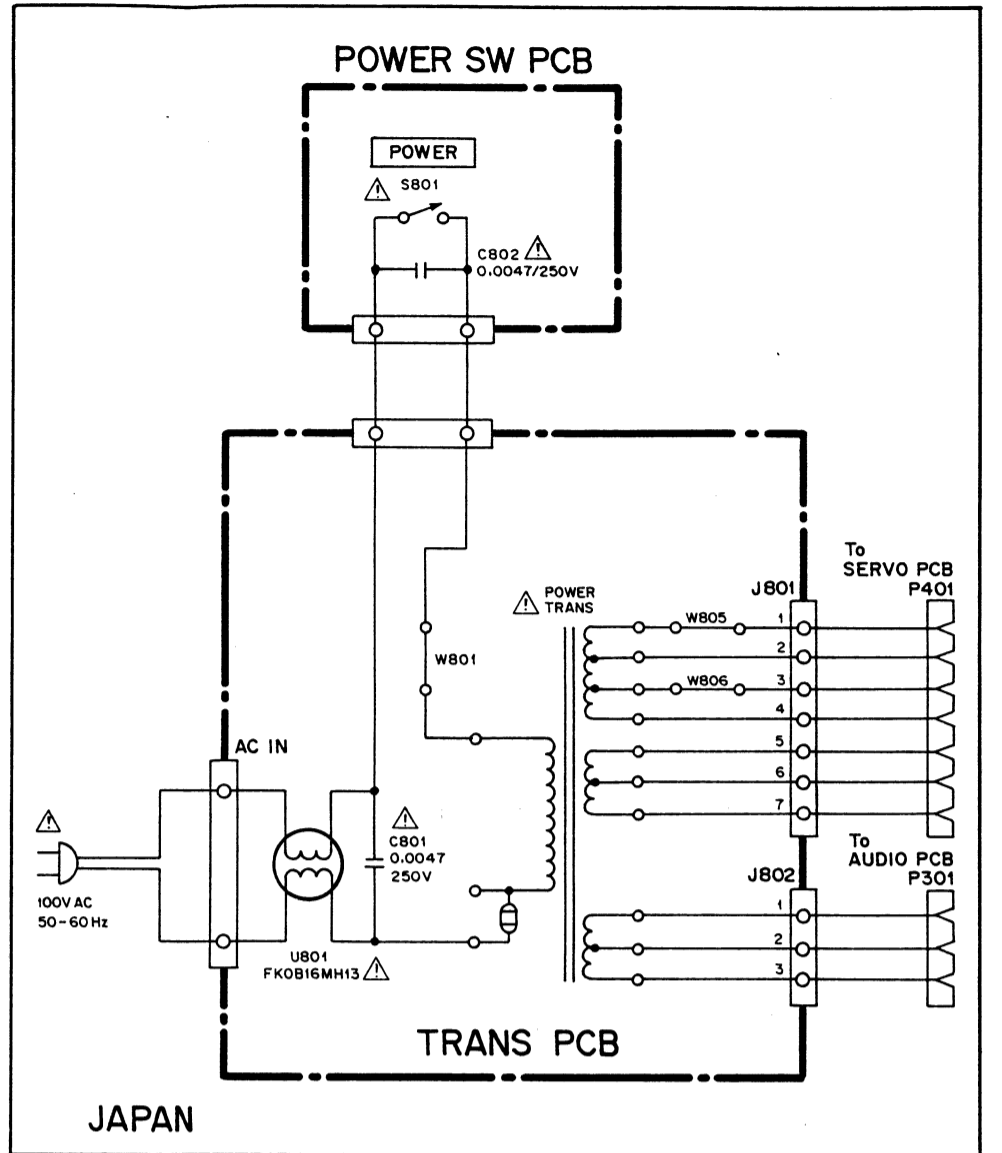
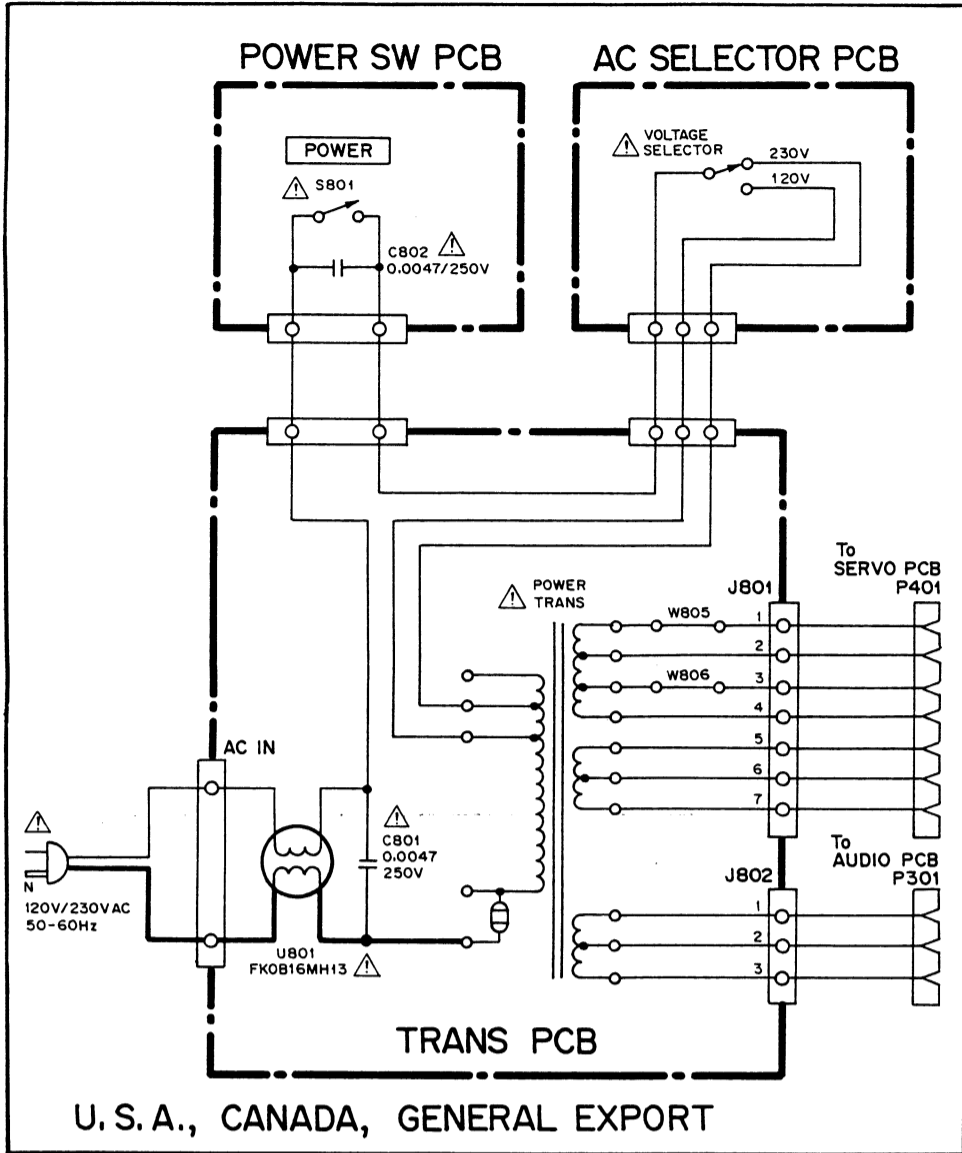
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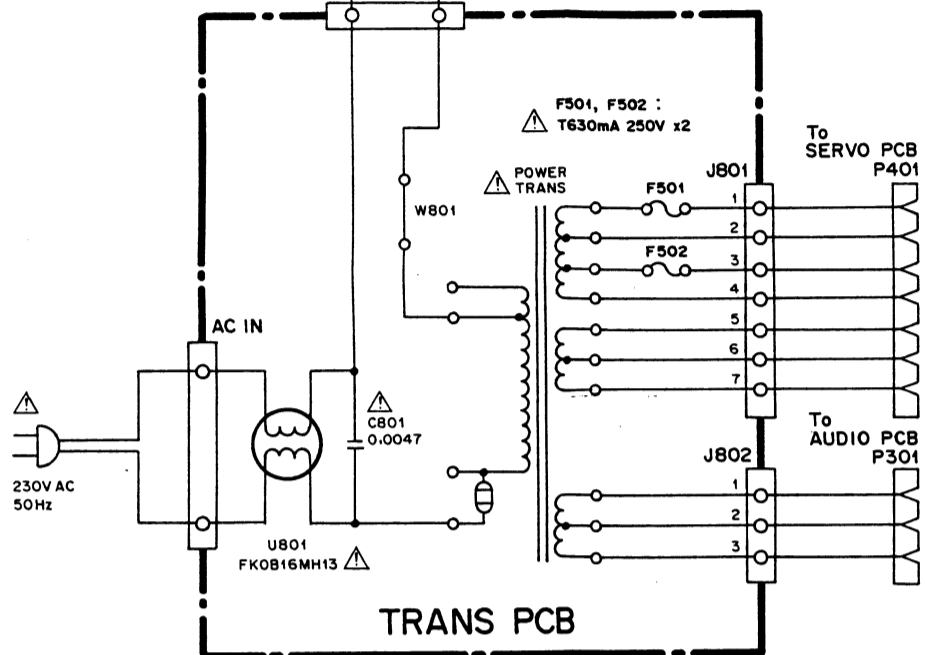
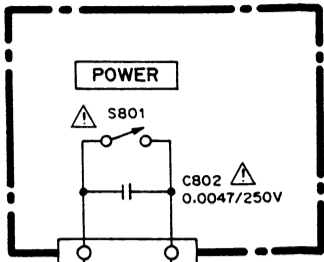
INSTRUCTIONS FOR SERVICE PERSONNEL
 BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

注意
 1. 抵抗の単位はΩ (k=kΩ, M=MΩ) です。
 2. コンデンサの単位はμF (p=pF) です。
 3. △マークのある部品は安全規格重要部品です。交換するときは必ずティアック指定の部品を使用してください。

NOTES:
 1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
 2. Capacitor values are in microfarads (p=picofarads).
 3. △ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

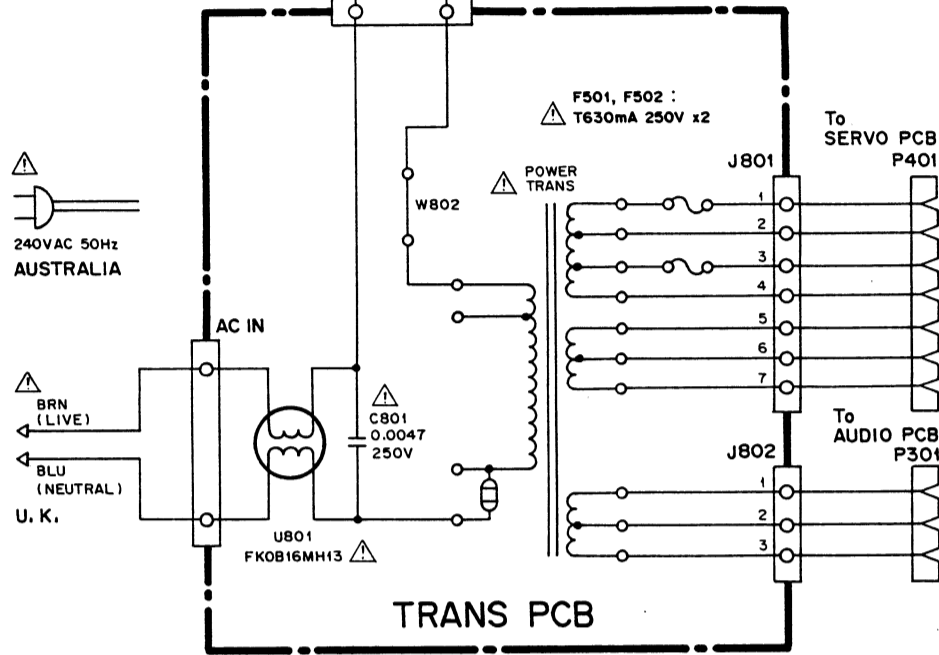
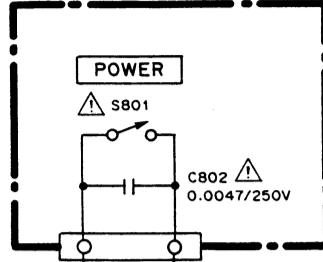
VO PCB P401
 IO PCB P301

POWER SW PCB



EUROPE

POWER SW PCB

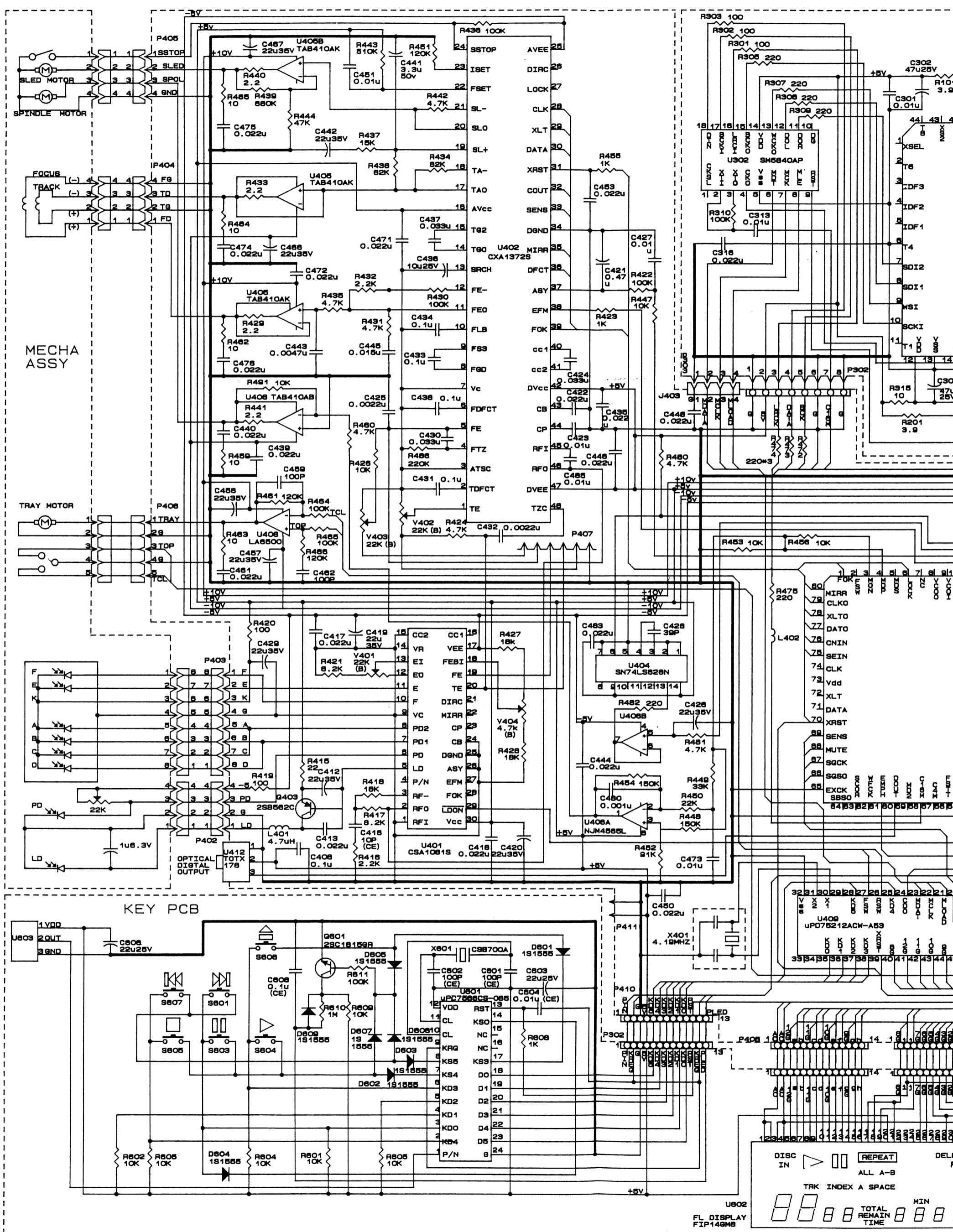


U. K., AUSTRALIA

TEAC SCHEMATIC DIAGRAM CD-5

1 2 3 4 5 6

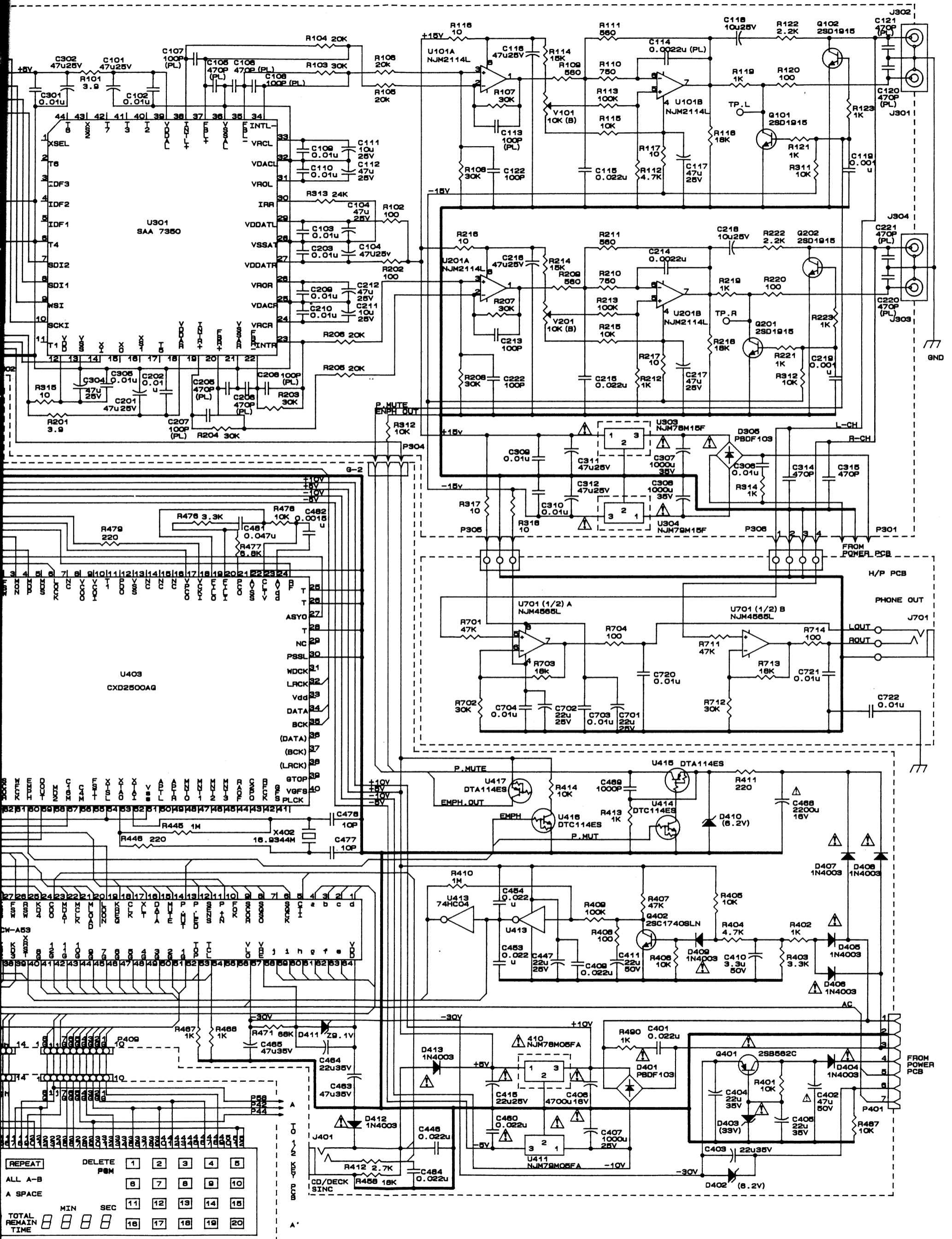
A
B
C
D
E
F
G
H



INSTRUCTIONS FOR SERVICE PERSONNEL
 BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

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KEY PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*9145127101	KEY PCB ASSY
	*9155127100	KEY PCB
	*9260192000	LED HOLDER
	*9260194700	FL CUSHION, 18X12X7T
D601-607	9165020250	DIODE, 1S1555
D609-616	9165020250	DIODE, 1S1555
D617-620	9174016200	LED, 484VYT/C7 (YEL)
J601	5340007400	WIRE HOLDER, 14P
J601	9107064600	FLAT CABLE, P1.25M14-150
J602	5340007000	WIRE HOLDER, 10P
J602	9107064700	FLAT CABLE, P1.25M10-150
J603	5340007300	WIRE HOLDER, 13P
J603	9107064800	FLAT CABLE, P1.25M13-150
Q601	9163309420	TR, 2SC1815GR
S601-606	9136000502	SW, TACT
U601	5220812900	IC, UPD7566CS-085
U602	5347007800	FL DISPLAY, FIPI4GM8
U603	9151001200	REMOCON RECEIVER, LTM90524
U604	9167025100	IC, BA6257
X601	5347006500	OSC, CERAMIC CSB700A

POWER PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*9145109204	POWER PCB ASSY [US,C,GE]
	*9145109214	POWER PCB ASSY [E,UK,A]
	*9145109224	POWER PCB ASSY [GE]
	*9145109234	POWER PCB ASSY [J]
	*9155110402	TRANS PCB
	5327007200	TERMINAL LAPPING, 2P
	9150018000	FUSE HOLDER [E,UK,A]
C801	△ 5267704100	SPARK KILLER 0.0047UF/250V
F501,502	△ 5142185000	FUSE, 630MA/250V [E,UK,A]
U801	△ 5292806300	FILTER, FKOB16MH13

SELECTOR SW PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*9145127400	SELECTOR SW PCB ASSY [US,C,GE]
	*9155127400	AC SELECTOR SW PCB
	△ 9134010700	AC SELECTOR SW

INCLUDED ACCESSORIES 付属品

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
	*9101396900	OWNER'S MANUAL, JAPANESE [J]	
	*9101397000	OWNER'S MANUAL, 6-MULTI [EXCEPT J]	
	*9109027101	IN-OUTPUT CORD	
	*9151002400	REMOTE CONTROL UNIT, RC-530	CD-5N
	*9151002300	REMOTE CONTROL UNIT, RC-529	CD-5B
	*5347016500	BATTERY, UM-4	
	*9260203000	WRENCHES	
	*9260195000	HOLDER SET ASSY	