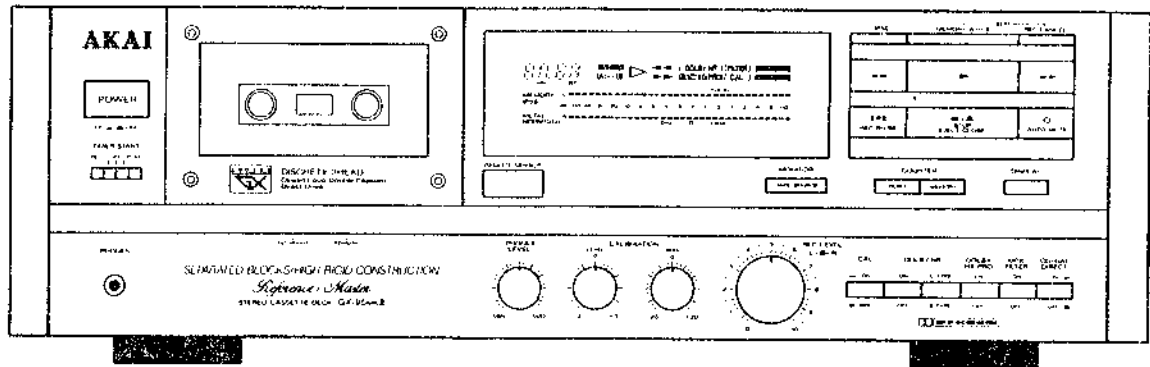


AKAI SERVICE MANUAL



MODEL GX-95MKII

STEREO CASSETTE DECK

MODEL **GX-75** MKII
 MODEL **GX-95** MKII

SPECIFICATIONS

Track System	4 track 2 channel Stereo	T, H, D	0.6%
Heads	Erase Head x1 LC-OFC SGX Head for recording x1 LC-OFC SGX Head for playback x1	Input Sensitivity/ Impedance	Line 70mV/47k Ω CD/DAT Direct IN 240mV/47k Ω
Motors	FG Servo D.D. motor for capstan drive x1 DC motor for reel drive x1 DC motor for cam drive & tape eject/loading x1	Output Level/Impedance	Line 388mV/200 Ω Headphones 1.3mW (8 Ω)
Wow & Flutter	0.04% DIN 0.025% WRMS	Power Requirements	220V, 50Hz for Europe except UK 240V, 50Hz for UK (GX-95 MKII ONLY)
Tape winding time	85 sec. (C-60)	Dimensions	GX-95MKII : 460(W) \times 155(H) \times 350(D)mm GX-75MKII : 425(W) \times 154(H) \times 350(D)mm
Frequency Response	Normal 15Hz to 19,000Hz \pm 3dB CrO ₂ 15Hz to 20,000Hz \pm 3dB Metal 15Hz to 22,000Hz \pm 3dB	Weight	GX-95MKII : 10.1kg GX-75MKII : 9.0kg
S/N	59dB (Measured via Metal tape with peak recording level) Dolby B type NR switch ON: Improves up to 5dB at 1kHz, 10dB above 5kHz Dolby C type NR switch ON: Improves up to 15dB at 500Hz, 20dB at 1kHz to 10kHz	Standard accessories	Connection cords RCA pin cord \times 2 Remote control unit \times 1 Dry batteries R6 (AA) size \times 2

- * For improvement purposes, specifications and design are subject to change without notice.
- * Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.
- * "DOLBY", the double-D symbol \square and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

★ SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

- Parts identified by the ⚡ (*) symbol are critical for safety. Replace only with parts number specified.
- In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
- Use specified internal wiring. Note especially:
 - Wires covered with PVC tubing
 - Double insulated wires
 - High voltage leads
- Use specified insulating materials for hazardous live parts. Note especially:
 - Insulation Tape
 - PVC tubing
 - Spacers (Insulating barriers)
 - Insulation sheets for transistors
 - Plastic screws for fixing microswitch (especially in turntable)
- When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



- Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).

- Check that replaced wires do not contact sharp edged or pointed parts.
- Also check areas surrounding repaired locations.
- Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit. The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphone jacks, signal input/output connectors, etc.) and the earth ground through a resistor of 1500 ohms paralleled with a 0.15 μ F capacitor, under the unit's normal working conditions. The leakage-current should be less than 0.5 mA rms AC. The resistance measurement should be done between accessible exposed metalparts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 Mohms.

★ INFORMATION

SYMBOLS FOR PRIMARY DESTINATION

Primary destinations of units are indicated with the following alphabetic

Symbols	Primary Destinations
A	USA
B	UK
C	Canada
E	Europe(exceptUK)
J	Japan
S	Australia
V	W.Germany only
U	Universal Area
Y	Custom version

I. DISASSEMBLY

In case of trouble, etc, necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

1. Removal of UPPER COVER

3. Removal of front panel

- Remove the front panel's 3 bottom retaining screws.
- Remove the front panel's 3 upper retaining screws.
- Pull the front panel forward in the direction of the arrow (⇓).

2. Removal of cassette lid

- Turn the power ON and press the STOP/EJECT button to open the cassette lid.
- Remove the cassette lid by pulling it in the direction of the arrow (⇓).

4. Removal of bottom cover

- Remove the bottom cover's ⓐ retaining screw.
- Loosen the ⓑ screw.
- Slide the bottom cover in the direction of the arrow (⇐) to remove it.

II. PRINCIPAL PARTS LOCATION

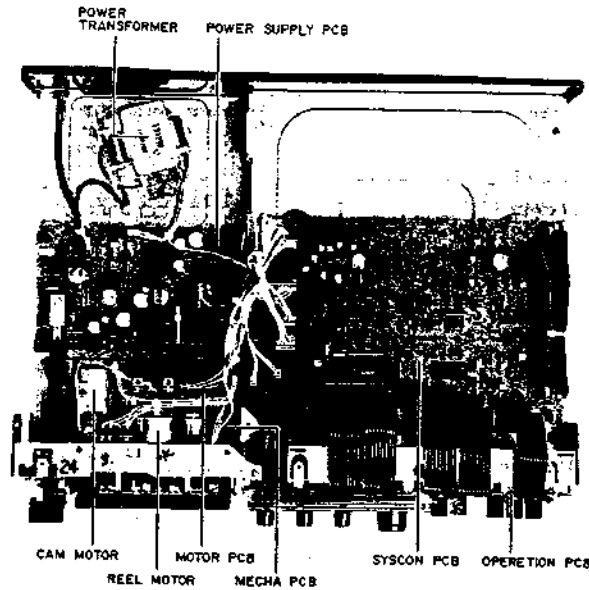


Fig. 2-1 View from upper side

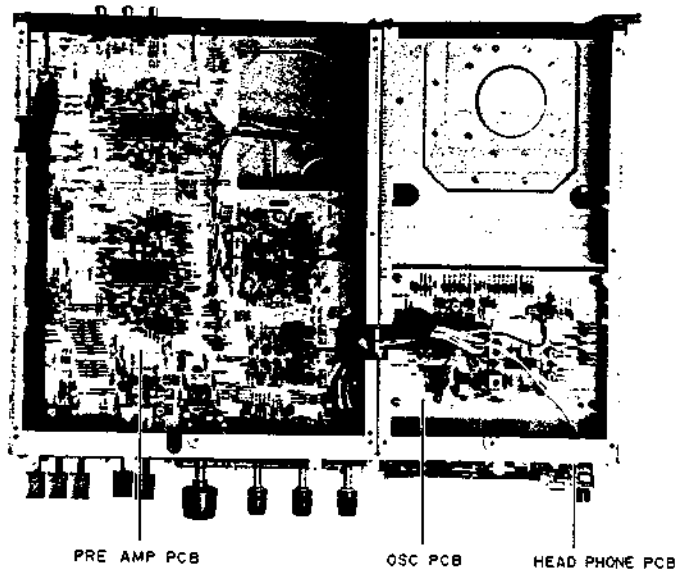


Fig. 2-2 View from bottom side

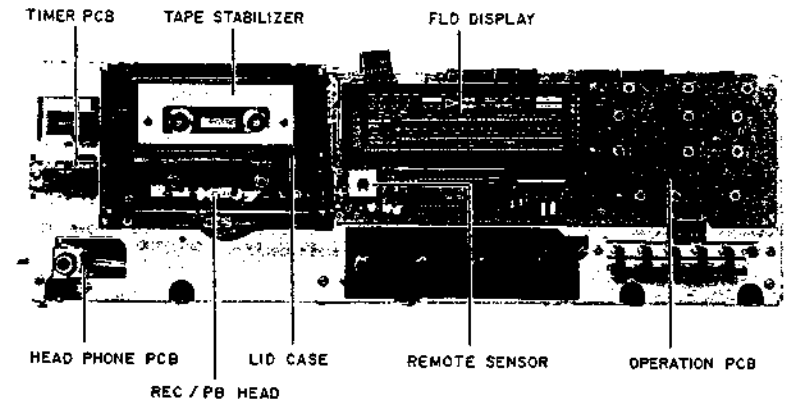


Fig. 2-3 View from front side

III. DISASSEMBLY AND REASSEMBLY OF THE MECHANISM BLOCK

3-1. REMOVING THE LID CASE AND LID DECORATION

- 1) Turn the power on and press the STOP/EJECT button. Remove the lid panel when the lid is in the eject position. Press the STOP/EJECT button a second time to close the lid. Turn the power off.
- 2) While pulling the Ⓐ section of the LID ARM outward, press inward on the Ⓑ section of the LID CASE to disengage the LID CASE from the collar and LID ARM (Refer to Fig. 3-1, 3-2)
- 3) Disengage the LID CASE from the MECHA BLOCK by pulling in the direction of the arrow.
- 4) Proceed in the reverse order for reassembling.
- 5) Next, while pressing up slightly on the decoration stopper on the upper right and left sides, move the lid decoration forward and down, disengaging it from the holders and guide shafts on the bottom left and right (Refer to Fig. 3-3.)
- 6) To reassemble, perform the above steps in the reverse order.

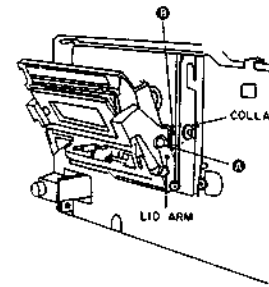


Fig. 3-1

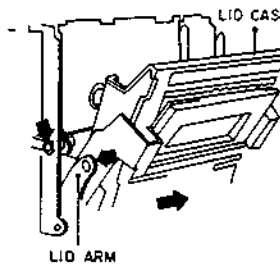


Fig. 3-2

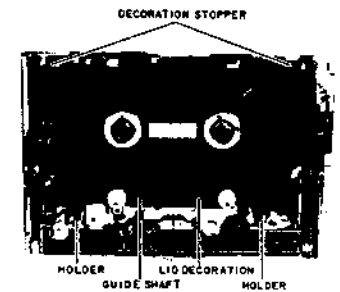


Fig. 3-3

3-2. REMOVING THE MECHANISM BLOCK

- 1) Remove connector P101 from the PRE AMP PCB and the P751 and P781 from the OSC PCB. Next, remove mechanism block securing screws (A) (Refer to Fig. 3-4.)
- 2) Remove the six connectors P1-P6 from the SYSCON PCB. Remove mechanism block securing screws (B) (Refer to Fig. 3-5.)
- 3) Finally, lift the mechanism block upward to remove it.
- 4) To reassemble, perform the above steps in the reverse order.

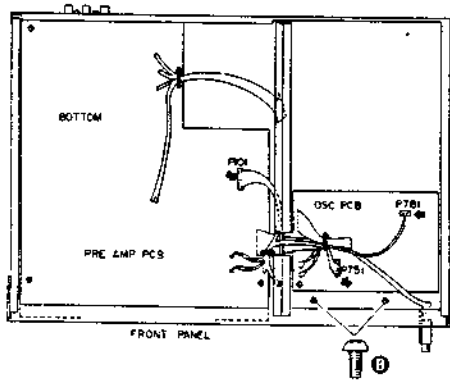


Fig. 3-4

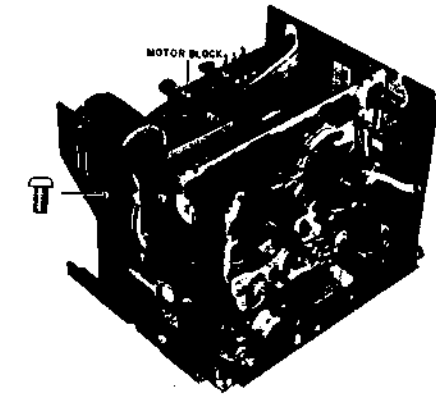


Fig. 3-6

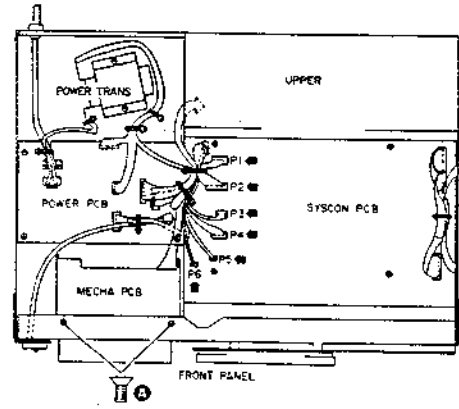


Fig. 3-5

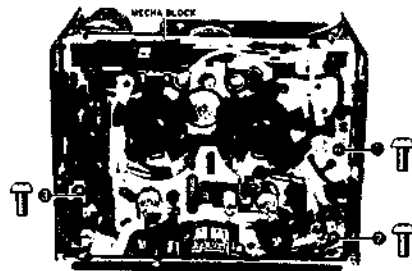


Fig. 3-7

3-3. REMOVING THE MOTOR BLOCK

- 1) First remove the lid case and lid decoration, then take the mechanism block out of the main unit.
- 2) Remove the MOTOR BLOCK securing screw from the left side panel of the mechanism block. (Refer to Fig. 3-6.)
- 3) Remove motor block securing screws (C), (D) and (E) from the mechanism block's front side. Remove the motor block from the mechanism block (Refer to Fig. 3-7.)
- 4) To reassemble, perform the above steps in the reverse order.

3-4. REMOVING THE CAM MOTOR AND CAM BELT

- 1) Remove the motor block from the mechanism block. (See section 3-3, "Removing the motor block.")
- 2) Disconnect the two cam motor lead wires.
- 3) Remove cam motor base screws (F) and (G) from the motor block. (Refer to Fig. 3-8.)
- 4) Remove the cam belt and operation pulley from the cam motor block which has just been removed.
- 5) Remove cam motor securing screws (H) and (I). (Refer to Fig. 3-9.)
- 6) To reassemble, perform the above steps in the reverse order.

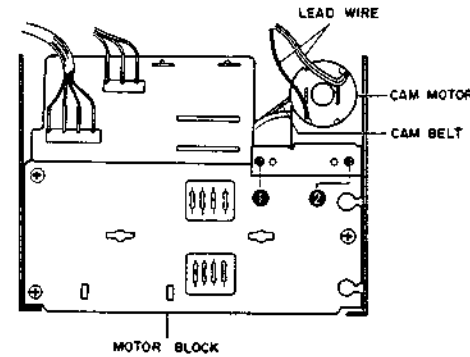


Fig. 3-8

3-5. REPLACING THE HALL ELEMENT

- 1) Remove the motor block from the mechanism block. (See section 3-4, "Removing the motor block.")
- 2) Remove motor PCB block securing screws (J), (K) and (L) and take out the motor PCB block. (Refer to Fig. 3-10.)
- 3) Remove the solder from the Hall element. Remove the Hall element from the motor circuit board.
- 4) When attaching a replacement, connect the protruding portion of the Hall element to the circuit board. (Refer to Fig. 3-11.)
- 5) To reassemble, perform the above steps in the reverse order.

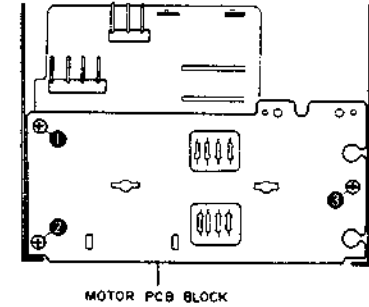


Fig. 3-10

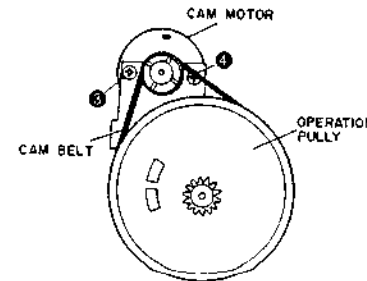


Fig. 3-9

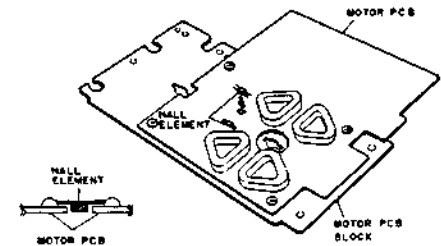


Fig. 3-11

3-6. REMOVING THE CAM WHEEL AND POSITION POTENTIAL VOLUME

- 1) Remove the motor block from the mechanism block. (See section 3-3, "Removing the motor block.") Also remove the motor PCB, the capstan belt and the fly-wheel.
- 2) Remove the stopper ring from the capstan holder. Pull off the cam wheel. (Refer to Fig. 3-12.)

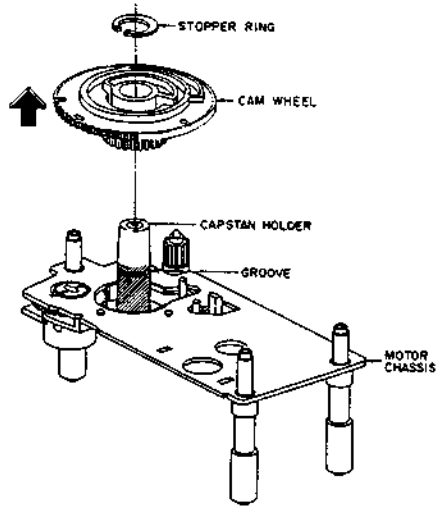


Fig. 3-12

- 3) Remove capstan holder securing screws ①, ②, ③ and ④. Remove the capstan holder. (Refer to Fig. 3-13.)
- 4) Remove the potential gear. Unscrew the position potential volume securing nut. (Refer to Fig. 3-14.)
- 5) To reassemble, follow the directions in section 3-7, "Reassembling the cam wheel and position potential volume," below.

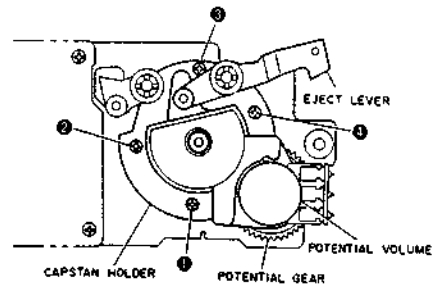


Fig. 3-13

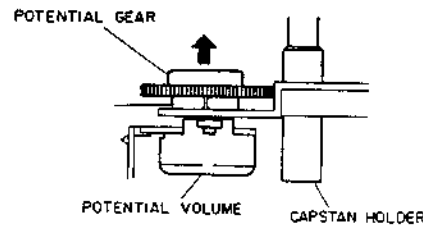


Fig. 3-14

4-1. POTENTIAL VOLUME PRESET VOLTAGE ADJUSTMENT (Refer to Fig. 4-1, 4-2)

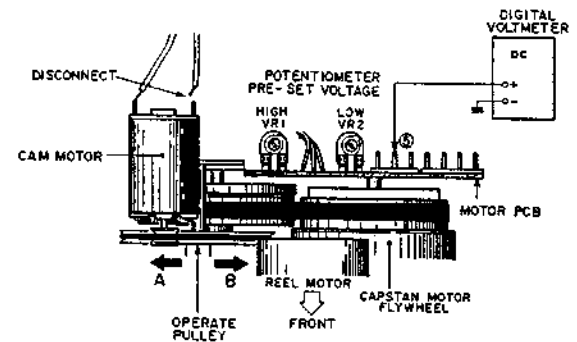


Fig. 4-1

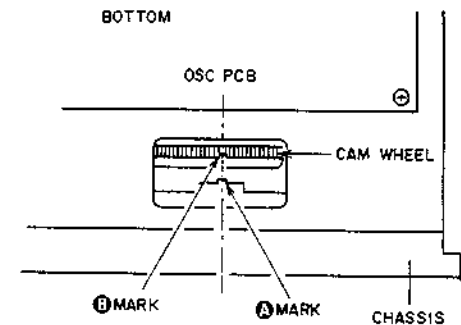


Fig. 4-2

3-7. REASSEMBLING THE CAM WHEEL AND POSITION POTENTIAL VOLUME

- 1) Attach the position potential volume to the capstan holder and attach the potential gear. Attach the capstan holder to the motor block and tighten the securing screws. Align the mark on the potential gear with the groove in the motor chassis as shown in Fig. 3-15.
- 2) Slide the cam wheel onto the capstan holder and position it so that the eject lever fits into the slot in the cam wheel and the center of the mark on the cam wheel aligns with the center of the chassis groove.

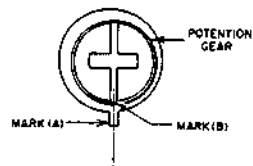


Fig. 3-15

Take care not to scratch the gear. When replacing with a new part, apply molybdenum grease to the portion of the capstan holder indicated by the slanted lines and the cam portion of the cam wheel before assembling.

- 3) After confirming that the positions of the marks on the potential gear and cam wheel are aligned with the groove in the motor chassis, attach the stopper ring.

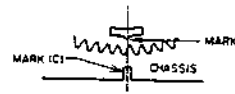


Fig. 3-16

1) LOW VOLTAGE ADJUSTMENT

- a. With power OFF, remove the connecting cord of the CAM MOTOR and turn the OPERATE PULLEY fully with your fingers in the A direction. (EJECT DIRECTION)
- b. Connect the digital voltmeter as shown in Fig. 4-1.
- c. With power ON, adjust VR2 so that the voltage reading on the Digital DC Voltmeter is 1.13V.

2) HIGH VOLTAGE ADJUSTMENT

- a. With power OFF, turn the OPERATE PULLEY fully with your fingers in B direction. (PLAY DIRECTION)
- b. With power ON, adjust VR1 so that the voltage reading on the Digital DC Voltmeter is 9.08V.

3) Repeat step 1) and 2).

- 4) With power OFF, connect the connecting cord of the CAM MOTOR.

5) Remove the Cassette lid, Front panel and Bottom cover.

(Refer to I. DISASSEMBLY)

- 6) a. Turn the power ON
- b. Adjust VR1 slightly so that the center of marker ② coincides with the center of marker ③ in the STOP mode as shown in Fig. 4-2. (The marker ③ on the CAM WHEEL can be seen clearly by lighting it from the back.)
- c. Set the IPLS switch to ON.
- d. Turn the reel with fingers in STOP mode to check that the brake works sufficiently. When the brake acts normally, the take-up reel does not turn clockwise and the supply reel does not rotate counter clockwise.

4-2. PINCH ROLLER PRESSURE MEASUREMENT (Refer to Fig. 4-3)

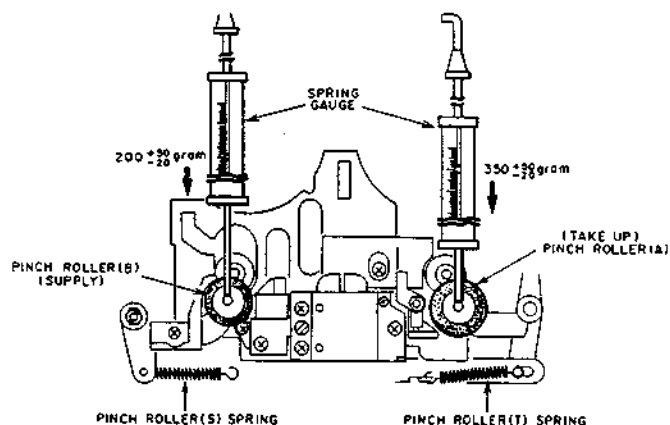


Fig. 4-3

Engage the PLAY mode. Push the pinch roller shaft down with the spring gauge, and push the pinch roller 1 to 2mm away from the capstan and release slowly. Read the spring gauge at the moment the pinch roller touches the capstan and begins to rotate.

Specified pressure : 350 \pm 30 gram (Take up)
200 \pm 20 gram (Supply)

If there is no measurement obtained, replace the pinch roller spring.

Note: Remove the cassette lid and cassette holder first.
(Refer to Assembly and disassembly of the mechanism)

4-3. WINDING TORQUE MEASUREMENT IN EACH MODE (Refer to Fig. 4-4)

Insert a cassette torque meter (AJ-751179) and measure in each mode. For Fast Forward and Rewind, measure at the end of the tape when the tape has stopped running.

PLAY mode

Take up Torque : 40 \pm 20 g-cm
Back tension torque : 10 \pm 4 g-cm

FAST FORWARD, REWIND mode

Take up Torque : 120 \pm 20 g-cm

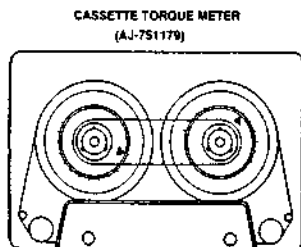


Fig. 4-4

V. HEAD ADJUSTMENT

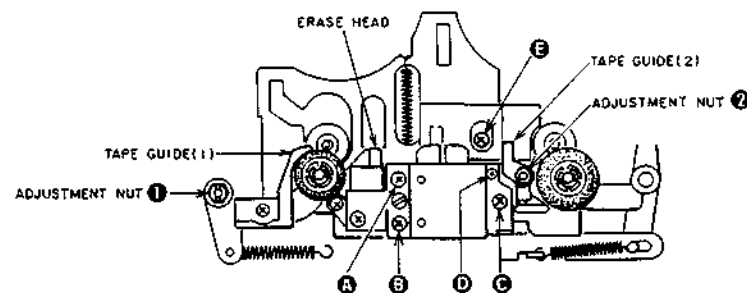


Fig. 5-1

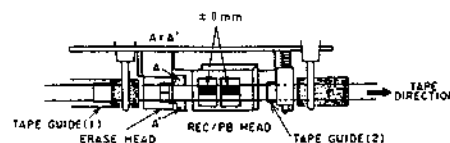


Fig. 5-2

Cassette Head Projection Gauge.

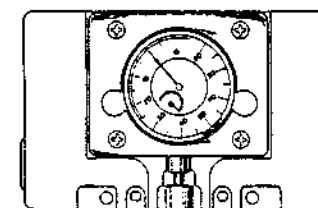


Fig. 5-3

5-1. TAPE GUIDE HEIGHT ADJUSTMENT

- 1) Load the mirror cassette tape (AJ-751178) and engage the PLAY mode.
- 2) Adjust the tape guide (2) so that the tape runs smoothly and is not hitched by the tape guide. For adjustment, use the adjustment nut (2).
- 3) After adjustment, paint-lock the adjustment nut (2).

Caution:

The tape guide adjustment nut (2) is important as it fixes the position of the tape guide (1). This nut should not be moved as it has been pre-adjusted at the factory.

5-2. REC/PB HEAD HEIGHT ADJUSTMENT

- 1) Load the mirror cassette tape and engage the PLAY mode.
- 2) Turn the (A), (B) and (C) screws alternately so that the upper edge of the REC/PB head core and the tape edge is in alignment.

NOTE: Always turn the three screws in the same direction and to the same degree. If they are not turned in the same manner, re-adjustment of head azimuth or tape transportation may be necessary.

- 3) Play back the head height adjustment tape (4 Track 1,000Hz) (AT-750775), and fine-adjust screws (A), (B) and (C) so that the largest output is obtained for both channels.

5-3. REC/PB HEAD AZIMUTH ALIGNMENT ADJUSTMENT

- 1) Play back a 10kHz (~15dB), Head Azimuth Adjustment Tape (AT-750778) and adjust the (E) adjustment screw until the output level from both LINE OUT channels is maximum. At the same time make sure that output phase is equal for both channels.
- 2) While recording a 12kHz (~26dBs) signal from an audio signal generator, monitor it and adjust the recording head azimuth adjustment screw (D) so that the play back level is maximum. At the same time make sure that output phase is equal for both channels.
- 3) After adjustment, paint-lock the adjustment screw.

- NOTES: 1. Be sure to clean the heads prior to head adjustment.
2. Be careful not to use a magnetized driver or other magnetized tools in the vicinity of the heads.
3. Be sure to demagnetize the heads with a Head Demagnetizer before and after head adjustment.

5-4. TAPE TRANSPORTATION SYSTEM ADJUSTMENT (Refer to Fig. 5-1, 5-2)

If there is level fluctuation or poor frequency response caused by faulty tape transportation use the following procedure to adjust the tape transportation system.

- 1) Load the mirror cassette tape (AJ-751178) and engage the PLAY mode.
- 2) Check to make sure that the tape is running smoothly and that it does not curl or wrinkle at the tape guide. If the tape is not running smoothly, make adjustment using the tape guide height adjustment screw (2).
- 3) Play back a 10kHz (-15dB) Head Azimuth Adjustment tape (AT-750778) and adjust the ④ adjustment screw so that the output from both the Right and Left LINE OUT channels is at the maximum level. At the same time make sure that output phase is equal for both channels.
- 4) After adjustment, paint-lock the adjustment screws.
- 5) After finishing the above adjustment refer to the "VI Electrical adjustment" section and perform electrical adjustment to the playback and recording circuits.

Caution:

The tape guide (1) screw is an important adjustment screw that fixes the position of tape transport. This screw should not be moved as it has been pre-adjusted at the factory.

5-5. ADJUSTMENT WHEN REC/PB HEAD IS REPLACED (Refer to Fig. 5-1, 5-2, 5-3)

Before proceeding with the following adjustment, the lid decoration must be removed. (Refer to section 3-1, "REMOVING THE LID CASE AND LID DECORATION")

- 1) Attach the REC/PB head to the head mount with the ①, ② and ③ screws.
Turn each screw the same amount of times (4 or 5 times) so that the screws are tightened temporarily.
- 2) Load the mirror cassette tape (AJ-751178) and engage the play mode.
- 3) Turn the ①, ② and ③ screws alternately so that the upper edge of the REC/PB head core and the tape edge is in alignment.

NOTE: Always turn the three screws in the same direction and to the same degree. If they are not turned in the same manner, re-adjustment of head azimuth or tape transportation may be necessary.

- 4) Perform the following procedure to adjust the angle of the REC/PB head against the tape surface.
 - a. Using your finger, lightly rub the top of the REC/PB head (where it makes contact with the tape) until it is cloudy.
 - b. Play back the tape for a few seconds.
 - c. Eject the cassette tape and check the shape of the mark made by the tape.



Fig. 5-4

- A long rectangular mark indicates good tape transportation.
 - If the tape leaves an inverted triangular mark, adjust the angle of the head by turning the ① screw in the counterclockwise direction. Repeat the adjustment until a long rectangular mark is left by the tape.
 - If the tape leaves a triangular mark, adjust the angle of the head by turning the ① screw in the clockwise direction. Repeat the adjustment until a long rectangular mark is left by the tape.
- 5) Insert the cassette head projection gauge (AJ-751180) and engage the PLAY mode. Loosen the ② screw and adjust the position of the REC/PB head so that it is 3.2 ± 0.1 mm from the tape. Tighten the ② screw and measure the position.
Repeat the adjustment until the correct measurement is obtained.
 - 6) Play back a 1000Hz (0dB) 4 track head height adjustment tape (AT-750775).
Adjust the ③ screw so that the output from both the Left and Right LINE OUT channels is at the maximum level. After adjusting the ③ screw, make the exact same adjustments to the ① and ② screws.
- NOTE:** always turn the screws in the same direction and to the same degree. If they are not turned in the same manner, re-adjustment of head azimuth or tape transportation may be necessary.
- 7) Play back a 10kHz (-15dB) Head Azimuth Adjustment tape (AT-750778) and adjust the ④ adjustment screw so that the output from both the Left and Right LINE OUT channels is at the maximum level.
At the same time make sure that output phase is equal for both channels.
 - 8) Repeat adjustments 6) and 7) a few times and set at the best point.
 - 9) Once adjustments 1) to 8) have been made, refer to the "VI electrical adjustment" section and perform electrical adjustment to the playback and recording circuits.
When adjusting the recording circuit's normal position frequency response, record a 12kHz (-26dB) signal from an audio signal generator. While recording the signal, monitor it and adjust the recording head azimuth with the ⑤ screw so that the playback level is maximum. At the same time make sure that the Left and Right levels are the same.
 - 10) After finishing the above adjustment, paint-lock the ①, ②, ③, ④, and ⑤ screws.

Caution:

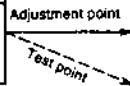
All adjustment screws other than screws ① to ⑤ have been pre-adjusted and should not be moved.

VI. ELECTRICAL ADJUSTMENT

- NOTES**
- All adjustments should be made with CAL DOLBY, HX-PRO and MPX FILTER switches OFF (except STEP 3, 9, 14)
 - Control settings
 REC LEVEL : Max
 CALIBRATION LEVEL : center click position
 CALIBRATION BIAS : center click position
 - Use the following cassette tapes for adjustment.
 NORMAL TAPE : MAXELL UD1 C-60
 CrO₂ TAPE : TDK SA C-60
 METAL TAPE : TDK MA C-60

ADJUSTMENT KEY

STEP No.	ADJUSTMENT ITEM
1.	TEST TAPE, Supply signal
2.	MODE
3.	Adjustment Parts
4.	Remarks/Result



- 6 PLAYBACK EQUALIZER LEVEL**
- 10kHz (-15dB) TEST TAPE (AT750776)
 - PLAY
 - VR102(Lch)/VR102b(Rch)
 - Connect the AC voltmeter to LINE OUT
* -21.0dBs

- 5 PLAYBACK LEVEL**
- 315Hz TEST TAPE (AT750773)
 - PLAY
 - VR101(Lch)/VR101b(Rch)
 - Connect the AC voltmeter to LINE OUT
* -6.0dBs

- 3 MPX FILTER**
- 19kHz. Set the audio signal generator output level to -6.0dBs
 - STOP/SOURCE MONITOR, MPX SW ON
 - FL331 (Lch)/FL331b (Rch)
 - Connect the AC voltmeters to LINE OUT.
*Minimum level. (Less than -36.0dBs)

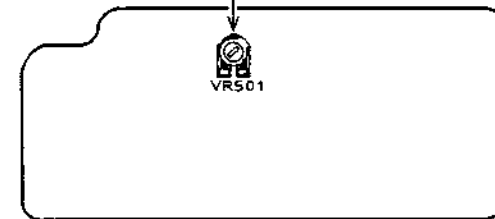
- 14 CAL METER**
- CrO₂ RECORDING TAPE
 - REC/PLAY, CAL SW ON
 - VR652 (CAL LEVEL), VR652b (CAL BIAS)
 - *Adjustment must be made just before the 0dB segment lights completely

- 2 METER SENSITIVITY (-40dB)**
- 400Hz. Set the audio signal generator output control, so that the OUT PUT level is -37.5dBs.
 - STOP/SOURCE MONITOR
 - VR653
 - Adjust until the -40dB indicator lights completely.

- 1 METER SENSITIVITY (0VU)**
- 400Hz. Set the audio signal generator output control, so that the LINE OUTPUT level is -4.5dBs
 - STOP/SOURCE MONITOR
 - VR651 (Lch)/VR651b (Rch)
 - DOLBY II segments light on

- 13 RECORDING LEVEL**
- NORMAL RECORDING TAPE
315Hz, -6.0dBs (LINE OUT)
 - REC/PLAY → PLAY
 - VR402 (Lch)/VR402b (Rch)
 - * Connect the AC voltmeters to LINE OUT
* -6.0dBs

- 4 TAPE SPEED**
- 3.150Hz TEST TAPE (AT751263)
 - PLAY
 - VR501
 - Connect a Frequency counter to LINE OUT
*3.150 ± 2Hz



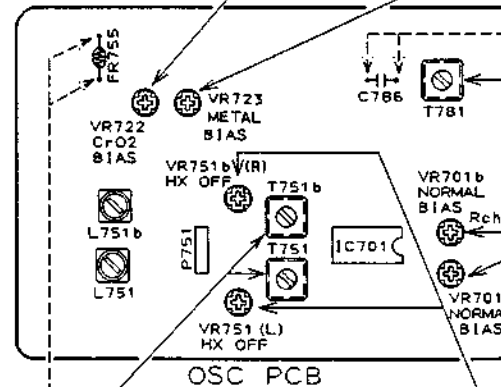
SYSCON PCB

- 11 CrO₂ POSITION FREQUENCY RESPONSE**
- CrO₂ RECORDING TAPE
1kHz/12kHz, -26.0dBs (LINE OUT)
 - REC/PLAY → PLAY
 - VR722
 - * -26.0dBs (1kHz, 12.5kHz) flat

- 12 METAL POSITION FREQUENCY RESPONSE**
- METAL RECORDING TAPE
1kHz/12kHz, -26.0dBs (LINE OUT)
 - REC/PLAY → PLAY, HX-PROON
 - VR723
 - * -26.0dBs (1kHz, 12.5kHz) flat

- 7 BIAS FREQUENCY**
- METAL RECORDING TAPE
 - REC/PLAY
 - T781/C786
 - Connect a Frequency counter to C786
*105 ± 0.1kHz

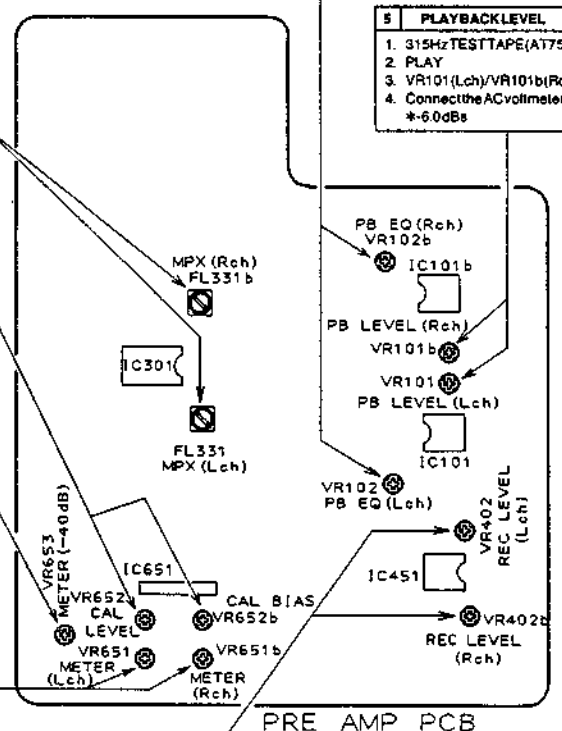
- 9 NORMAL POSITION FREQUENCY RESPONSE (HX-PROON)**
- NORMAL RECORDING TAPE
1kHz/12kHz, -26.0dBs (LINE OUT)
 - REC/PLAY → PLAY, HX-PROON
 - VR701 (Lch)/VR701b (Rch)
 - * Connect the AC voltmeters to LINE OUT
* -26.0dBs



OSC PCB

- 8 BIAS DIPPOINT**
- METAL RECORDING TAPE
 - REC/PLAY
 - T751/T751b/FR755
 - Connect a DC voltmeter to FR755
*Minimum DC voltage

- 10 NORMAL POSITION FREQUENCY RESPONSE (HX-PROOFF)**
- NORMAL RECORDING TAPE
1kHz/12kHz, -26.0dBs (LINE OUT)
 - REC/PLAY → PLAY
 - VR751 (Lch)/VR751b (Rch)
 - * Connect the AC voltmeters to LINE OUT
* -26.0dBs



PRE AMP PCB

VI. PARTS LIST

ATTENTION

- When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
- Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
- Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

- This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
- The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
- Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
- How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref.No.	Part No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PRA-8FU C
3	ZS-477876	PAN20-03STL CMT
4	ZS-536488	BID20-08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification
This number corresponds with the individual parts index number in that figure.

The available PC Board Blocks are listed separately.

b) PC Board

6. MAIN PC BOARD

Ref.No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U.E.B.S.]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [G.A.]
X1	EI-318364	OSC XTAL NC-18C

Symbols for primary destination
[A]. AAL (U.S.A) [S]. SAA (Australia)
[B]. BEAB (England) [U]. U/T (Universal Area)
[C]. CSA (Canada)
[E]. CEE (Europe) [V]. VDE (W. Germany)
[J]. JPN (Japan) [Y]. Custom Version

SP (Service Parts) Classification
These reference symbols correspond with component symbols in the Schematic Diagrams.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT

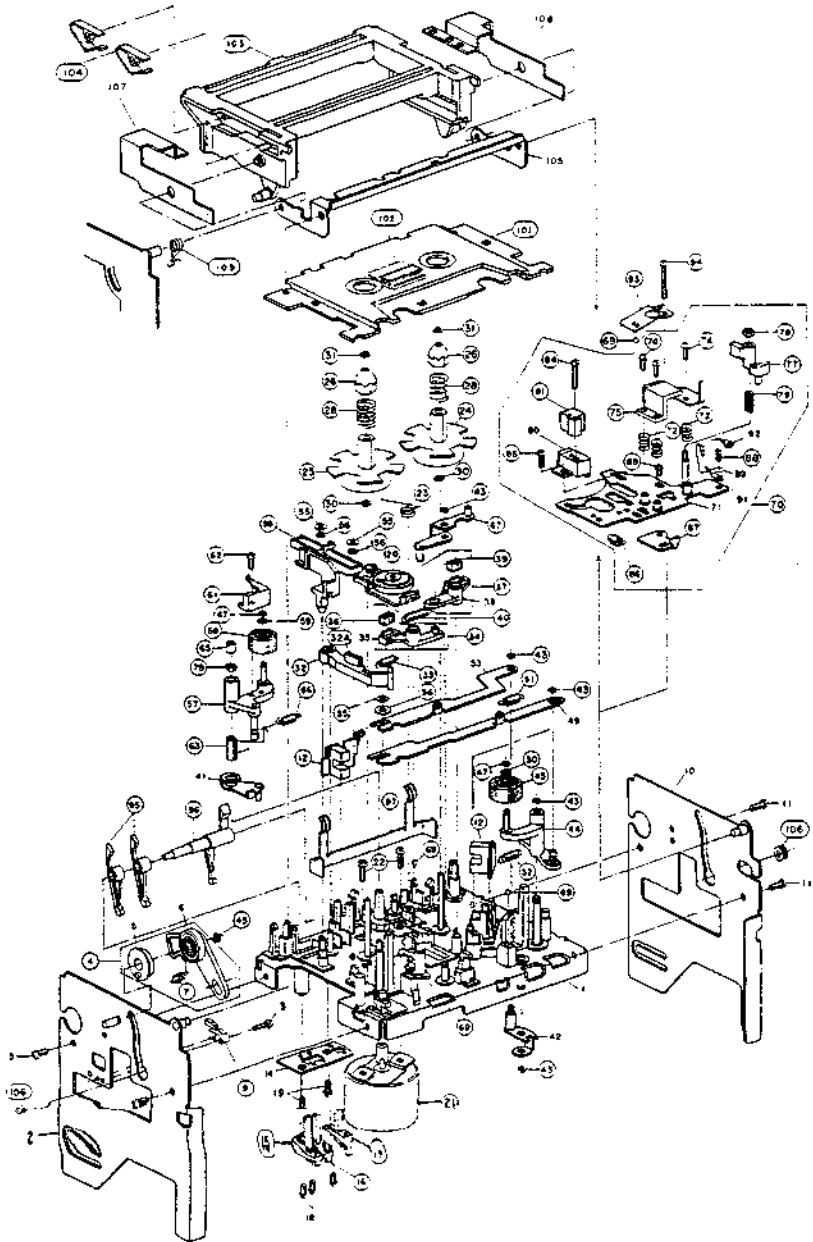
⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
1	AX-384937J	REMOCIONRC-G95	66	ES-396600J	SWPUSHSPUY525THROW [DOLBYNR]
2	BB-T2047A020K	MECHABLKX-Z7100EV	67	ES-370933	SWSLIDES5S001-03N [TIMERSW]
3	BH-T2047A060G	HEADBLKXG-Z7100EV	68	ES-398610J	SWTACTSDR-122HS T05 [RESET]
4	BL-T2030A160A	LEVERBRAKE(A)BLKXG-F51	69	ET-381685J	DETECTORAIQH0021H0
5	BL-T2030A170A	LEVERBRAKE(B)BLKXG-F51	70	ET-345001	DETECTORSP-201-40B,C [PH1]
6	BL-8336007	LEVERBRAKECAMPART	71	ET-383953	TRDTA114TS
7	BL-8336196	LEVERBTPART	72	ET-395076J	TRDTA124GS
8	BL-8336009	LEVERJECTCAMPART	73	ET-396487J	TRDTA124XL T05
9	BM-M3104A010C	MOTORBLM-310C	74	ET-371075	TRDTA124XS
10	BM-396252J	MOTOROPERATION(PULLEY)PART	75	ET-370634	TRDTA143XS
11	BM-T2030A120D	RELMOTORBLKXG-95	76	ET-354415	TRDTA144ES
12	*BT-386317J	TRANSPWNT2129(B) [B]	77	ET-353897	TRDTA144ES
13	*BT-396316J	TRANSPWNT2129(E) [E]	78	ET-400795J	TRDTA144GST05
14	ED-344244	DLED5LF-501CAMBER [D901]	79	ET-354365	TRDTA144YS
15	ED-307572	DSILCONH1SS131	80	ET-395077J	TRDTA115TS
16	ED-624903	DSILCONH1S2473	81	ET-382952J	TRDTA123ES
17	ED-511907	DSILCONH1N4002100/1.0A	82	ET-373391	TRDTA143ZS
18	ED-336322	DSILCON10DF1100/1.0A	83	ET-396486J	TRDTA144EL T05
19	ED-393772J	DZENERHHS11831T26	84	ET-354414	TRDTA144ES
20	ED-393774J	DZENERHHS11831T26	85	ET-370310	TRDTA144TS
21	ED-395070U	DZENERHHS320-3	86	ET-354897	TRFET2SK170BLGRV
22	ED-383773J	DZENERHHS3A3T26	87	ET-354841	TR2SA1282AF,GF05
23	ED-394924J	DZENERHHS35C1	88	ET-384093	TR2SA1283EF
24	ED-380358J	DZENERHHS35C2	89	ET-353699	TR2SA1317S,T,U
25	ED-400780J	DZENERHHS36B1 T26	90	ET-397403J	TR2SA1581RST05
26	ED-396385J	DZENERHHS36C3	91	ET-389803J	TR2SA933RS
27	ED-396063J	DZENERHHS37B-1	92	ET-337760	TR2SA984KF
28	ED-400779J	DZENERHHS39A3T26	93	ET-353067	TR2SB744P,Q,R
29	ED-395071J	DZENERHHS39C2	94	ET-389251J	TR2SC1740S,SF05
30	ED-346559	DZENERHHS282L	95	ET-397156J	TR2SC2274KE,F
31	ED-346559	DZENERHHS282L	96	ET-365394	TR2SC3242AE,GF05
32	ED-346540	DZENERHHS281L	97	ET-397160J	TR2SC3330RS,T,U,V
33	ED-346545	DZENERHHS282L	98	ET-378524J	TR2SC3383S,T,U
34	*EF-358974	FUSEBETT250V530MA [B]	99	ET-400741J	TR2SC3708 T05
35	*EF-601942	FUSESEMKT250V530MA [E]	100	ET-396486J	TR2SC4038Q,R,T05
36	EM-372101	FILTERD842B-5162-04	101	ET-346972J	TR2SC2159V,W
37	EI-400755J	HCLE-EHW-101A-04(D)	102	ET-346979J	TR2SC794P,Q,R
38	EI-373980	ICBA15218N	103	HE-391875J	HEADENHJWB3721A
39	EI-370012	ICBA6505A	104	HR-H2410A010A	HEADCOMBRP4-10SR RP4-10SR
40	EI-384868J	ICBU030B	105	MB-336026	BELT CAPSTAN
41	EI-359965	KCCK20187	106	MB-336027	BELT OPERATION
42	EI-355602	KCLB1649	107	MP-336204	PINCHROLLER(B)
43	EI-337008	KCLC7800	108	MP-401745J	PINCHROLLER(A-2)-8360
44	EI-377860	ICM5F7805L	109	MZ-336506	CAMWHEEL
45	EI-384892J	ICM50754-1065P	110	MZ-336505	GEARPOTENTION
46	EI-357498	ICM51143AL	111	TC-336505	WINDOWLERASSY
47	EI-393324J	ICM5218AL			
48	EI-362587	ICM5238L			
49	EI-362588	ICM5238P			
50	EI-400756J	ICNUM458L-B			
51	EI-389881J	ICNUM4580D-D			
52	EI-310036	ICTC4066BP			
53	EI-336992	ICUPC1043C			
54	EI-373383	ICUPC1297CA			
55	EI-396490J	OSCCCEST4.00MGW-TF01T05			
56	EM-384893J	INDFLBG-551GKDOUBLE			
57	EO-389453J	COILOSC2T2124105.0KHZ			
58	EO-400786J	COILOSC1T2128(MX)-7200KHZ			
59	ER-320526	RFUSEHERD2FC1/4W22R0G			
60	ER-400605J	RFUSEVT05ERD2FCV1/4W15R0G			
61	ER-401042J	RFUSEVT05ERD2FCV1/4W33R0G			
62	ES-336990	SWLEAFBSW-18901-1NO [SW901]			
63	ES-372912	SWLEAF5PB22101-2 [SW904]			
64	*ES-371104	SWPUSHDDLD101-1			
65	ES-396601J	SWPUSHSPUY192-06-02N [CD'DATIRECT]			

MECHA BLOCK



2. MECHA BLOCK

Ref.No.	Part No.	Description
4	MZ-368144J	OIL CLUTCH PART
7	ZG-368145J	SP PULL OIL CLUTCH(2)
9	ES-372912	SW LEAF SFPB27-01-2 [SW904]
12	ET-345091	DETECTOR SPI-201-40 B C [PH1]
15	ES-336990	SW LEAF BSW-169 01-1 NO [SW901]
16	ES-336990	SW LEAF BSW-169 01-1 NO [SW902]
17	ES-336990	SW LEAF BSW-169 01-1 NO [SW903]
20	TC-336605	WIND IDLER ASSY
21	BM-T2030A120D	REEL MOTOR BLK GX-95
23	ZG-336140	SP TORSION IDLER
24	MT-395947J	REEL TABLE (R) PART
25	MT-395948J	REEL TABLE (L) PART
26	MT-349681	REEL RETAINER(B)
28	ZG-395944J	SP PUSH BT
30	ZW-305546	PW21X040X025PSL
31	ZW-343120	PW17X040X025PSL
32	BL-B336196	LEVER BT PART
32A	MZ-344983	FELT BT
33	ZG-330078	SP T2-03 2/020-09.0 T2-038
34	BL-T2030A160A	LEVER BRAKE (A) BLK GX-F51
36	TC-336146	BRAKE RUBBER
37	BL-T2030A170A	LEVER BRAKE (B) BLK GX-F51
39	TC-336146	BRAKE RUBBER
40	ZG-312946	SP T1-03 2/029-16.0 T1-062
43	ZW-270086	RING E190SUP CMT
44	BL-B336150	ARM PINCH ROLLER (A) PART
45	MP-401746J	PINCH ROLLER(A-2)-8360
47	ZW-356657	RING E150SUP CMT
51	ZG-336175J1	SP PULL PINCH ROLLER (T)
52	ZG-321534	SP T2-03 2/029-12.5 T2-090
55	ZW-329422	RING CS 0300
56	ZW-306464	PW31X070X050STL CMT
57	BL-B336202	ARM PINCH ROLLER (B) PART
58	MP-336204	PINCH ROLLER (B)
59	ZW-381644	PW21X040X013PSL
61	HZ-367921J	GUIDE TAPE (BK2)
62	ZS-608095	PAN20X05STL CMT
63	ZG-336206	SP TORSION RETURN
65	ZW-356166	N
66	ZG-336208	SP PULL PINCH ROLLER (S)
67	BL-B336155	ARM HEAD SLIDE PART
69	MY-357208	BALL 200STL
70	BH-T2047A060G	HEAD BLK GX-Z7100EV
72	ZG-336127	SP PUSH HEAD
74	ZS-330864	PAN20X07STL CMT
75	HR-H2410A010A	HEAD COMB RP4-10SR RP4-10SR
77	HZ-367920J	GUIDE TAPE(2)
78	ZW-616884	N20STL CMT 1
79	ZG-336130	SP PUSH GUIDE
81	HE-361975J	HEAD E HAJWB3721A
84	ZS-306126	PAN20X12STL CMT
85	ZS-417161	PAN20X04STL CMT
86	ZG-341972	SP PULL HEAD RETURN
87	HZ-336132	ADJUST PLATE
88	ZS-201407	PAN23X03STL CMT
93	ZG-336157	SP PLATE HEAD HOLD
94	ZS-342002	ST PAN26X16STL CMT
95	ML-336158	LEVER DETECTION (B)
96	ML-336158J2	LEVER DETECTOR(A)
97	ZG-336160	SP PLATE CASSETTE HOLDER (A)
98	TC-336161J1	SLIDE EJECT
101	BD-B366352-A	LID DECORATION (A) PART
102	ED-344244	D LED SLF-601C AMBER [D901]
103	SP-368188J1	LID CASE(2)
104	ZG-336615	SP PLATE CASSETTE HOLDER (B)
106	SZ-336166	COLLAR LID
109	ZG-367604J	SP TORSION RETURN

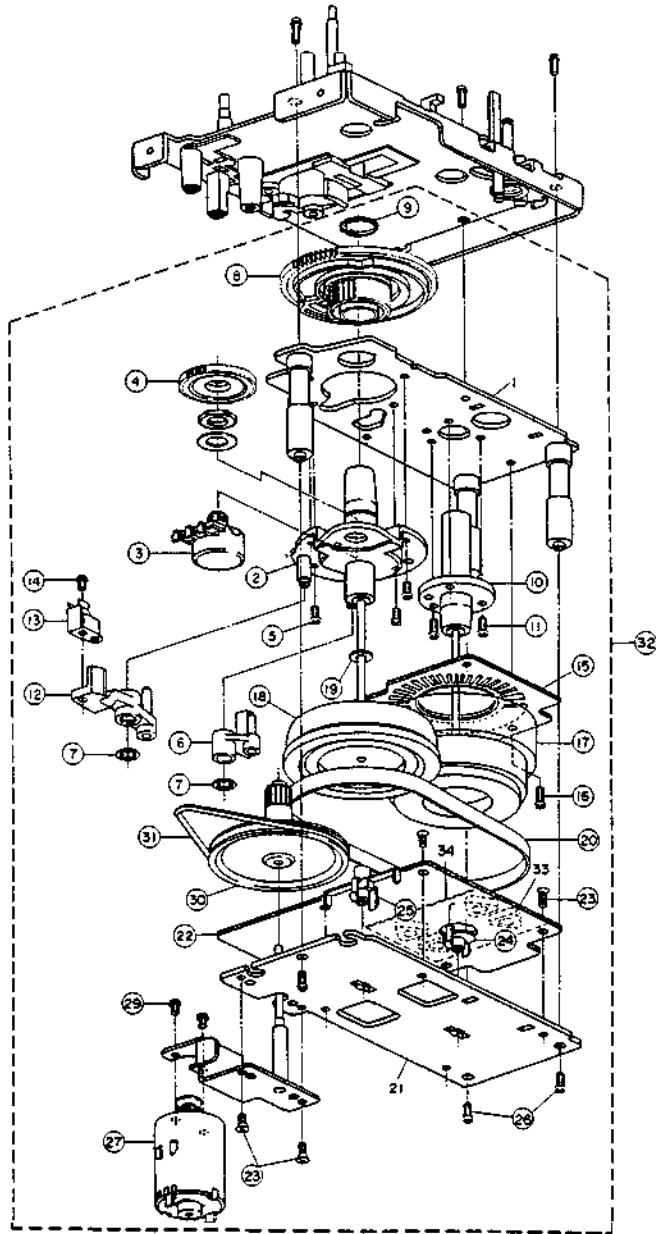
NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

3. MOTOR BLOCK (BLM-310C)

Ref.No.	Part No.	Description
2	TC-8336004A	HOLDER CAPSTAN (C-1) PART
3	EV-337052	VR ROTARY 16L10XOR B103
4	MZ-336005	GEAR POTENTION
5	ZS-432843	PAN26X04STL CMT
6	BL-B336007	LEVER BRAKE CAM PART
7	ZW-653153	RING CS 280STL PKR
8	MZ-336006	CAM WHEEL
9	ZW-336604	RETAINING RING O S930SUP ACP
10	TC-336002J1	HOLDER CAPSTAN (B)
11	ZS-355618	ST BR26X04STL CMT
12	BL-B336009	LEVER EJECT CAM PART
13	ZG-353156J2	SP PLATE EJECT
14	ZS-477876	PAN20X03STL CMT
15	EA-336012	PC FG
16	ZS-479474	PAN26X05STL CMT
17	BF-390568J1	FLYWHEEL (A) PART
18	BF-336025	FLYWHEEL (B)
19	ZW-309295	WASHER THRUST
20	MB-336026	BELT CAPSTAN
22	BA-M3103A030A	PC(8) MOTOR BLK BLM-300
23	ZS-477867	CTS26X05STL CMT
24	TC-336015	HOLDER THRUST (A)
25	TC-336027	HOLDER THRUST (B)
26	ZS-479474	PAN26X05STL CMT
27	BM-396252J	MOTOR OPERATION(PULLEY) PART
29	ZS-432674	PAN30X03STL CMT
30	MR-238019	PULLEY OPERATE
31	MR-336021	BELT OPERATION
32	BM-M3104A010C	MOTOR BLM-310C

MOTOR BLOCK (BLM-310C)



PARTS LIST

4. P.C BOARD BLOCK

Ref.No.	Part No.	Description
1A	BA-T2129A020C	PC(#) PREAMP BLK GX-75-2
1B	BA-T2129A020B	PC(#) PREAMP BLK GX-95-2
2	BA-T2128A030A	PC(#) SYSCON BLK GX-Z7100EV
3	BA-T2128A040C	PC POWER BLK GX-95-2

PC (#) PRE AMP BLK CONSISTS OF FOLLOWING P.C BOARD.

- PRE-AMP P.C BOARD
- OSC P.C BOARD
- HEADPHONE P.C BOARD

PC (#) SYSCON BLK CONSISTS OF FOLLOWING P.C BOARD.

- SYSCON P.C BOARD
- OPERATION P.C BOARD
- TIMER SW P.C BOARD

5. PRE-AMP P.C BOARD

Ref.No.	Part No.	Description
D551	ED-624903	D SILICON H 1S2473
D552	ED-624903	D SILICON H 1S2473
D553	ED-624903	D SILICON H 1S2473
D554	ED-624903	D SILICON H 1S2473
D555	ED-624903	D SILICON H 1S2473
D801	ED-346545	D ZENER H HZ9C2L
D802	ED-346545	D ZENER H HZ9C2L
D811	ED-346540	D ZENER H HZ9B1L
D812	ED-346540	D ZENER H HZ9B1L
D841	ED-305655	D ZENER H HZ4 8J
FL331	EH-372101	FILTER DB 428-S162-04
K101	EI-389881J	IC NUM4580D-C
K102	EI-393324J	IC M5218AL
K103	EI-382587	IC M5238L
K201	EI-359985	IC CX20187
K251	EI-357498	IC M1143AL
K301	EI-359985	IC CX20187
K451	EI-382588	IC M5238P
K501	EI-382587	IC M5238L
K551	EI-310036	IC TC4066BP
K601	EI-384868J	IC BU4030B
K651	EI-373980	IC BA15218N
K901	EI-393324J	IC M5218AL
J501A	EJ-344370	PNW J YKC21-0081 P 6P [GX-75-2]
J501B	EJ-397198J	PNW J YKC-21-0464 6P [GX-95-2]
L101	EO-392605J	COIL FIX 1 RC875 561J
L102	EO-392605J	COIL FIX 1 RC875 561J
L201	EO-372996	COIL FIX 1 RC875 223J
L301	EO-372996	COIL FIX 1 RC875 223J
L381	EO-400782J	COIL FIX 1 EL0806RA T05 222J
L451	EO-400825J	COIL FIX 2 2104A-682 682G
SW501	ES-396600J	SW PUSH SPLY52 5THROW [DOLBY NR]
SW502	ES-396601J	SW PUSH SPLY19 2-06-02N [CO-DAT DIRECT]
TR101	ET-354897	TR FET 2SK170 BLGRV
TR331	ET-389251J	TR 2SC1740S S F05
TR332	ET-389251J	TR 2SC1740S S F05
TR401	ET-378524J	TR 2SC3383 S.T.U
TR402	ET-378524J	TR 2SC3383 S.T.U
TR403	ET-378524J	TR 2SC3383 S.T.U
TR451	ET-378524J	TR 2SC3383 S.T.U
TR452	ET-378524J	TR 2SC3383 S.T.U
TR453	ET-378524J	TR 2SC3383 S.T.U
TR501	ET-378524J	TR 2SC3383 S.T.U
TR502	ET-389803J	TR 2SA933S R.S
TR551	ET-396488J	TR DTC144EL T05
TR552	ET-396488J	TR DTC144EL T05
TR553	ET-397403J	TR 2SA1561 RLS T05
TR554	ET-378524J	TR 2SC3383 S.T.U
TR601	ET-354414	TR DTC144ES
TR651	ET-378524J	TR 2SC3383 S.T.U
TR801	ET-349979	TR 2SD794 P.Q.R
TR802	ET-353067	TR 2SB744 P.Q.R
TR811	ET-349979	TR 2SD794 P.Q.R
TR812	ET-353067	TR 2SB744 P.Q.R
VR101	EV-818107	R S-FIX H RH1021C 0.50W471
VR102	EV-390869J1	R S-FIX H T05 RH0638C 0.1W 103
VR401	EV-389927J	VR RK16312A0 SPL C1253X2 [CALIBRATION LEVEL]
VR402	EV-391833J1	R S-FIX H T05 RH0638C 0.1W 104
VR501	EV-396813J	VR ROTARY RK1612220 A503X2 [REC LEVEL]
VR651	EV-391833J1	R S-FIX H T05 RH0638C 0.1W 104
VR652	EV-390868J1	R S-FIX H T05 RH0638C 0.1W 103
VR653	EV-396335J	R S-FIX H T05 RH0638C 0.1W 474
VR721	EV-400657J	VR ROTARY RK1631110 B202 [CALIBRATION BIAS]
VR901	EV-373388	VR ROTARY RK16312A0 A104X2 [HEADPHONE LEVEL]

PARTS LIST

6. OSC P.C BOARD

Ref.No.	Part No.	Description
D781	ED-624903	D SILICON H 1S2473
D782	ED-624903	D SILICON H 1S2473
D831	ED-346559	D ZENER H HZ1282L
D832	ED-624903	D SILICON H 1S2473
FR755	ER-320528	R FUSE H ERD2FC 1/4W 22R0G
FR831	ER-401042J	R FUSE V T05 ERD2FCV 1/4W33R0G
IC701	EI-373383	IC UPC1287CA
L751	EO-401048J	COIL FIX 2 2104A-262 262G
L752	EO-373247	COIL FIX 1 RC875 272J
L781	EO-379851J	COIL FIX 1 7132 682J
T751	EO-400766J	COIL OSC 1 T2128(HX)-7 200KHZ
T781	EO-389453J	COIL OSC T2124 105.0KHZ
TR721	ET-354414	TR DTC144ES
TR722	ET-354414	TR DTC144ES
TR723	ET-354414	TR DTC144ES
TR724	ET-400795J	TR DTC114GS T05
TR725	ET-353887	TR DTC114ES
TR726	ET-353887	TR DTC114ES
TR727	ET-353887	TR DTC114ES
TR751	ET-354414	TR DTC144ES
TR752	ET-400741J	TR 25C3708 T T05
TR753	ET-400741J	TR 25C3708 T T05
TR783	ET-396072J	TR 25C2159 V.W
TR831	ET-378524J	TR 25C3383 S.V.U
VR701	EV-398235J	R S-FIX H T05 RH0638C 0.1W 474
VR722	EV-398072J	R S-FIX H T05 RH0638C 0.1W 472
VR723	EV-397243J	R S-FIX H T05 RH0638C 0.1W 334
VR751	EV-398073J	R S-FIX H T05 RH0638C 0.1W 472

7. HEADPHONE P.C BOARD

Ref.No.	Part No.	Description
J901	EJ-369995	PHONE J 3P HLI0540-410 GP 6.3 [HEADPHONE JACK]

8. SYSCON P.C BOARD

Ref.No.	Part No.	Description
C204	ED-201645	C EC V CUT AS1 222M 25.0DC
D101	ED-624903	D SILICON H 1S2473
D102	ED-624903	D SILICON H 1S2473
D103	ED-624903	D SILICON H 1S2473
D104	ED-624903	D SILICON H 1S2473
D105	ED-624903	D SILICON H 1S2473
D106	ED-624903	D SILICON H 1S2473
D107	ED-624903	D SILICON H 1S2473
D108	ED-624903	D SILICON H 1S2473
D109	ED-307572	D SILICON H 1S5131
D110	ED-624903	D SILICON H 1S2473
D111	ED-624903	D SILICON H 1S2473
D112	ED-624903	D SILICON H 1S2473
D113	ED-307572	D SILICON H 1S5131
D114	ED-307572	D SILICON H 1S5131
D115	ED-307572	D SILICON H 1S5131
D116	ED-307572	D SILICON H 1S5131
D117	ED-307572	D SILICON H 1S5131
D118	ED-624903	D SILICON H 1S2473
D119	ED-624903	D SILICON H 1S2473
D201	ED-398063J	D ZENER H HZ57B-1
D202	ED-624903	D SILICON H 1S2473
D203	ED-384924J	D ZENER H HZ55C1
D206	ED-398355J	D ZENER H HZ56C3
D206	ED-624903	D SILICON H 1S2473
D207	ED-398772J	D ZENER H HZ511B1 T26
D209	ED-398772J	D ZENER H HZ511B1 T26
D301	ED-388358J	D ZENER H HZ55C2
D302	ED-398772J	D ZENER H HZ53A3 T26
D303	ED-392774J	D ZENER H HZ511B3 T26
D304	ED-400779J	D ZENER H HZ59A3 T26
D305	ED-624903	D SILICON H 1S2473
D306	ED-400780J	D ZENER H HZ56B1 T26
D401	ED-624903	D SILICON H 1S2473

Ref.No.	Part No.	Description
D402	ED-624903	D SILICON H 1S2473
D405	ED-624903	D SILICON H 1S2473
FR209	ER-400605J	R FUSE V T05 ERD2FCV 1/4W15R0G
IB1	EM-3E2925V	COMP R RGLD15T 223J
IC101	EI-337026	IC LC760C
IC102	EI-384892J	IC M50754-1065P
IC103	EI-384868J	IC BU4030E
IC201	EI-377880	IC M5F78C5L
IC301	EI-385602	IC LB1649
IC302	EI-373980	IC BA15218W
IC303	EI-373980	IC BA15218W
IC501	EI-336592	IC UPC1043C
TR101	ET-371075	TR DTA124XS
TR102	ET-371075	TR DTA124XS
TR103	ET-371075	TR DTA124XS
TR104	ET-395077J	TR DTC1157S
TR105	ET-395077J	TR DTC1157S
TR106	ET-395077J	TR DTC1157S
TR109	ET-395078J	TR DTA124GS
TR110	ET-371075	TR DTA124XS
TR111	ET-371075	TR DTA124XS
TR112	ET-371075	TR DTA124XS
TR113	ET-371075	TR DTA124XS
TR114	ET-354414	TR DTC144ES
TR115	ET-354414	TR DTC144ES
TR116	ET-382952J	TR DTC123ES
TR117	ET-371075	TR DTA124XS
TR118	ET-370310	TR DTC144ES
TR201	ET-397160J	TR 25C333C R.S.T.U.V
TR202	ET-363953	TR DTA1147S
TR203	ET-363953	TR DTA1147S
TR204	ET-354414	TR DTC144ES
TR207	ET-365394	TR 25C3242A E.F.G F05
TR208	ET-354414	TR 25A1282A F.G F05
TR301	ET-354414	TR DTC144ES
TR302	ET-373391	TR DTC142ES
TR303	ET-354414	TR DTC144ES
TR304	ET-354414	TR DTC144ES
TR401	ET-354365	TR DTC114YS
TR402	ET-354365	TR DTC114YS
TR403	ET-354365	TR DTC114YS
TR404	ET-354365	TR DTC114YS
TR405	ET-354365	TR DTC114YS
TR406	ET-354415	TR DTA144ES
TR501	ET-397160J	TR 25C333C R.S.T.U.V
TR502	ET-353897	TR DTC114ES
VR501	EV-330531	R S-FIX H TR8KV2-1S 0.50W503
X101	EI-396490J	OSC CE CS74.00MGW-TF01 T05

9. OPERATION P.C BOARD

Ref.No.	Part No.	Description
D601	ED-624903	D SILICON H 1S2473
D602	ED-624903	D SILICON H 1S2473
D603	ED-624903	D SILICON H 1S2473
D605	ED-624903	D SILICON H 1S2473
D607	ED-624903	D SILICON H 1S2473
IB2	EM-382935J	COMP R RGLD6X473J
IB3	EM-382933J	COMP R RGLD15T 473J
IB4	EM-382932J	COMP R RGLD9T 473J
IC601	EI-370012	IC BA6805A
IB601	EM-384893J	IND FL BC-551GK DOUBLE
RM601	ET-381683J	DETECTQR A1QH3021HD
TR602	ET-397403J	TR 25A1561 R.S T05
TR603	ET-396487J	TR DTA124XL T05
TR604	ET-354414	TR DTC144ES
TR605	ET-353899	TR 25A1317 S.T.U
TR606	ET-353897	TR DTC114ES
TR607	ET-396486J	TR 25C4038 Q.R T05
TR608	ET-396487J	TR DTA124XL T05
TR609	ET-396487J	TR DTA124XL T05
TR610	ET-370634	TR DTA143XS
TR611	ET-370634	TR DTA143XS
TR612	ET-354415	TR DTA144ES
TR613	ET-354415	TR DTA144ES
TR614	ET-354415	TR DTA144ES
TR615	ET-354415	TR DTA144ES
TS601	ES-396610J	SW TACT SOR-122HS T05 [RESET]
TS602	ES-396610J	SW TACT SOR-122HS T05 [DISPLAY]
TS603	ES-396610J	SW TACT SOR-122HS T05 [MONITOR]
TS604	ES-396610J	SW TACT SOR-122HS T05 [REC CANCEL]
TS605	ES-396610J	SW TACT SOR-122HS T05 [PSS]
TS606	ES-396610J	SW TACT SOR-122HS T05 [REC]
TS607	ES-396610J	SW TACT SOR-122HS T05 [REW]
TS608	ES-396610J	SW TACT SOR-122HS T05 [STOP]
TS609	ES-396610J	SW TACT SOR-122HS T05 [MEMORY]
TS610	ES-396610J	SW TACT SOR-122HS T05 [A-B SET]
TS611	ES-396610J	SW TACT SOR-122HS T05 [PLAY]
TS612	ES-396610J	SW TACT SOR-122HS T05 [FF]
TS613	ES-396610J	SW TACT SOR-122HS T05 [AUTO MUTE]

10. TIMER SW P.C BOARD

Ref.No.	Part No.	Description
SW701	ES-370933	SW SLIDE SSSU 01-03N [TIMER SW]

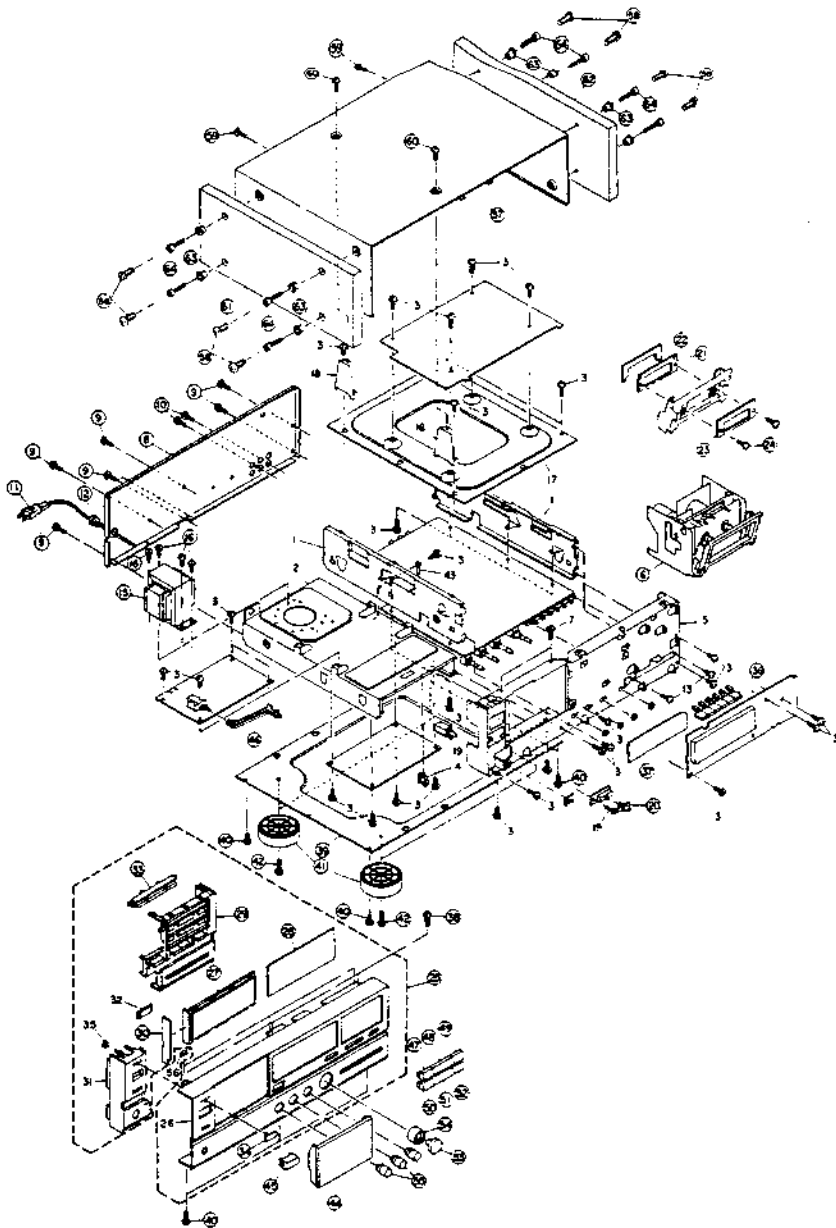
11. POWER P.C BOARD

Ref.No.	Part No.	Description
C1	EC-324662	C EC V CUT AS1 222M 25.0DC
C2	EC-324662	C EC V CUT AS1 222M 25.0DC
C3	EC-365619	C EC V CUT AS1 102M 25.0DC
C5	EC-365619	C EC V CUT AS1 102M 25.0DC
C6	EC-365619	C EC V CUT AS1 102M 25.0DC
C8	EC-365619	C EC V CUT AS1 102M 25.0DC
C9	EC-365619	C EC V CUT AS1 102M 25.0DC
C10	EC-322804	C EC V CUT AS1 472M 16.0DC
C15	EC-338411	C CE V DE7 F2 103P 400AC
D1	ED-338322	D SILICON 100P1 100/1.0A
D2	ED-338322	D SILICON 100P1 100/1.0A
D3	ED-338322	D SILICON 100P1 100/1.0A
D4	ED-338322	D SILICON 100P1 100/1.0A
D6	ED-511907	D SILICON 1N4002 100/1.0A
D7	ED-511907	D SILICON 1N4002 100/1.0A
D8	ED-511907	D SILICON 1N4002 100/1.0A
D9	ED-511907	D SILICON 1N4002 100/1.0A
D10	ED-511907	D SILICON 1N4002 100/1.0A
D11	ED-511907	D SILICON 1N4002 100/1.0A
D12	ED-511907	D SILICON 1N4002 100/1.0A
D13	ED-511907	D SILICON 1N4002 100/1.0A
D14	ED-511907	D SILICON 1N4002 100/1.0A
D15	ED-511907	D SILICON 1N4002 100/1.0A
D16	ED-511907	D SILICON 1N4002 100/1.0A
D17	ED-511907	D SILICON 1N4002 100/1.0A
D18	ED-511907	D SILICON 1N4002 100/1.0A
D19	ED-395071J	D ZENER H HZ520-3
D20	ED-395071J	D ZENER H HZ59C2
D21	ED-395071J	D ZENER H HZ59C2
D22	ED-511907	D SILICON 1N4002 100/1.0A
F1A	*EF-601942	FUSE SEMKO T 250V 630MA [E]
F1B	*EF-358874	FUSE BET T 250V 630MA [B]
F2A	*EF-601942	FUSE SEMKO T 250V 630MA [E]
F2B	*EF-358874	FUSE BET T 250V 630MA [B]
FR1	ER-320528	R FUSE H ERD2FC 1/4W 22R0G
FR2	ER-320528	R FUSE H ERD2FC 1/4W 22R0G
SW1	*ES-371104	SW PUSH SDDL01 01-1
TR1	ET-364093	TR 25A1263 E.F
TR2	ET-365394	TR 25C3242A E.F.G F05
TR3	ET-354841	TR 25A1282A F.G F05

12. MOTOR P.C BOARD

Ref.No.	Part No.	Description
IC1	EI-400756J	IC NJM4558L-B
IC3	EI-400755J	HOLE-E HW-101A-04(D)
IC4	EI-400755J	HOLE-E HW-101A-04(D)
TR1	ET-397156J	TR 25C2274K E.F
TR2	ET-337760	TR 25A984K F
TR3	ET-397156J	TR 25C2274K E.F
TR4	ET-337760	TR 25A984K F
VR1	EV-464253	R S-FIX V V8K1-1 0.10W 202
VR2	EV-464253	R S-FIX V V8K1-1 0.10W 202

FINAL ASSEMBLY BLOCK



PARTS LIST

13. FINAL ASSEMBLY

Ref.No.	Part No.	Description
6	BB-T2047A020K	MECHA BLK GX-Z7100EV
6A	SP-396307J1	PANEL REAR GX-75-2B(E)
6B	SP-396305J1	PANEL REAR GX-95-2B(E)
6C	SP-396306J1	PANEL REAR GX-95-2B(B)
9	ZS-376523	ST BID30X06STL BNI EARTH LOCK
10	ZS-350934	PT BR30X06STL BNI
11A	*EW-336923	AC CORD 2C KP-419CLTCE-2F EV [E]
11B	*EW-346249	AC CORD 2 CORES LCFL2X075 B [B]
12	*EZ-631945	STRAIN RELIEF SR-4N-4
15A	*BT-396316J	TRANS POW T2129(E) [E]
15B	*BT-396317J	TRANS POW T2129(B) [B]
16	ZS-301576	ST PAN40X10STL CMT
20	SK-358066B	KNOB SLIDE-BLACK
21	MZ-365721J2	PLATE DAMP
22	SZ-392824J	SHEET DAMP NEW
23	SE-395611J	PLATE STABJ
24	ZS-387752J	6RB26X030SCM BZN
25A	BD-T2107A050L	PANEL FRONT BLK GX-75-2B
25B	BD-T2107A050K	PANEL FRONT BLK GX-95-2B
27	SE-382435J	WINDOW METER
28	SE-384090J	FILTER FLD
29	SK-384076J	KNOB OPERATE B
33	SK-384079J1	KNOB B
34	SM-365756C	NAME PLATE AKAN2)
36	SK-384077J	KNOB PUSH B
37	SE-384091J	MASK VR
38	ZS-358936	ST BID30X06STL CMT
39A	SP-384060J	CHASSIS BOTTOM [GX-75-2]
39B	SP-384386J1	CHASSIS BOTTOM2) [GX-95-2]
40	ZS-305827	ST BID30X06STL BNI
41A	SA-384105J	FOOT ROUND SHAPED(N) [GX-75-2]
41B	SA-384387J	FOOT ROUND SHAPED(N)X2) [GX-95-2]
42	ZS-389961J	BT BID30X14STL COP CLEAR CUP
44A	BD-T2124A060C	LID PANEL BLK GX-Z7100EV-B [GX-75-2]
44B	BD-T2124A060E	LID PANEL BLK GX-95-2B [GX-95-2]
45	SK-373236B	KNOB POWER-B
46	MZ-384059J	JOINT POW
47	SK-373337C	KNOB OPERATION(B) REW-BLACK
48	SK-373339C	KNOB OPERATION(A) PLAY-BLACK
49	SK-373337A	KNOB OPERATION(B) FF-BLACK
50	SK-373337E	KNOB OPERATION(B) PAUSE-BLACK
51	SK-373336A	KNOB OPERATION(A) STOP-BLACK
52	SK-373337G	KNOB OPERATION(B) MUTE B
53	SK-384068J	KNOB RECL-B PART
54	SK-384068J	KNOB RECL-B PART
55	SK-381051J	KNOB VR-B(2) PART
57	SP-384100J1	COVER UPPER B
58	ZS-341960	ST BID40X06STL BNI [GX-75-2]
59	ZS-376523	ST BID30X06STL BNI EARTH LOCK
60	ZS-381482J	SCREW TOP COVER(3) B OM
61	SP-384102J	SIDEBOARD(L) [GX-95-2]
62	SP-384101J	SIDEBOARD(R) [GX-95-2]
63	ZW-376292	WASHER SIDE BOARD [GX-95-2]
64	ZS-376293	SCREW SIDE BOARD [GX-95-2]

NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

14. ACCESSORY

Ref.No.	Part No.	Description
1	EW-383168J	CORD TC-C-055 P-P 2PC5
2	AX-384837J	REMOCON RC-G95

15. REMOTE CONTROL RC-G95

Ref.No.	Part No.	Description
1	SC-726112J	CASE BATTERY GX-Z9100R

PARTS LIST

MEMO

ABBREVIATIONS (CASSETTE)

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
AC	Alternating Current	MIN	Minute
A/D	Analog/Digital	MML	Maximum Modulation Level
AF	Auto Fader	MOL	Maximum Output Level
AMP	AMPlifier	MPX	Multi PleX
AR	Anti Recording	NC	Not Connected (No Connection)
AT BIAS	Auto Turning BIAS	NFB	Negative Feed Back
ATT	ATTenuator	NORM	NORMal
BAL	BALance	NR	Noise Reduction
BEF	Band Elimination Filter	OSC	OSCillator (OSCillation)
BSS	Blank Search System	P	Pulse
CAP M	CAPstan Motor	PB	Play Back
CH	CHannel	QMSS	Quick Memory Search System
COMP	COMParator	QR	Quick Reverse
CONT	CONTinuanance	R CH	Right CHannel
CRLP	Computer Recording Level Processing	REC	RECORD (RECORDing)
CS	Chip Select	REV	REVERSE
D/A	Digital/Analog	ROT	ROTation
DC	Direct Current	REW	REWind
DET	DETECTOR	SEC	SECONd
DISCRI	DISCRIminator	SELE	SELEctor
DUB	DUBbing	SENS	SENSitivity
EQ	EQUALizer	SEPP	Single Ended Push Pull
FF (or F.FWD)	Fast Forward	SIG	SIGNal
FLD	FLuorescent Display	SPECT	SPECTrum
FREQ	FREQUency	STD	STANdard
FWD	ForWard	SW	SWitch
GND	GrouND	SYSCON	SYStem CONtrol
H	High	TP	Test Point
HPF	High Pass Filter	TRIG	TRIGa
IND	INDicator	VCA	Voltage Control Attenuator
IPLS	Instant Program Location System	VOL	VOLUME
L	Low	VOLT	VOLTage
L CH	Left CHannel	VR	Variable Resistor
LED	Light Emittning Diode	XTAL	cysTAL
MEMO	MEMORy	X1	Normal speed
MICOM	MicroCOMputer	X2	Dubble speed

AKAI

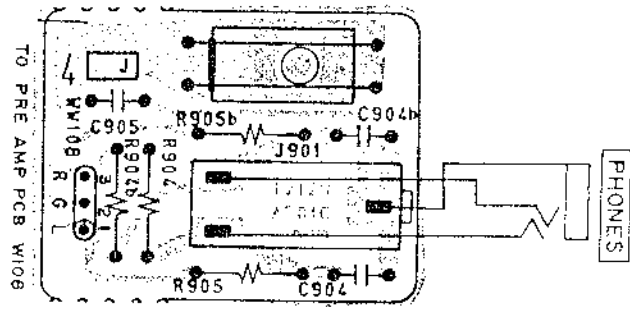
MODEL **GX-75**_{MKII}

MODEL **GX-95**_{MKII}

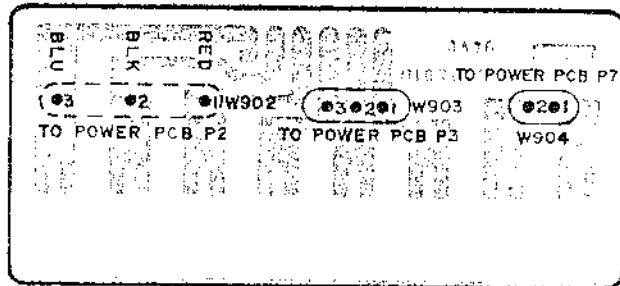
SCHEMATIC DIAGRAMS AND PC BOARDS

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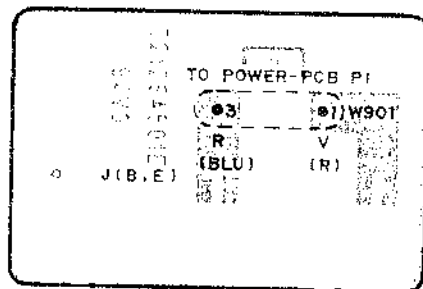
I. SCHEMATIC DIAGRAMS AND PC BOARDS	
1. CONNECTION DIAGRAM	5
2. SYSTEM CONTROL	6
3. PRE AMP, OSC	8
II. BLOCK DIAGRAM	10



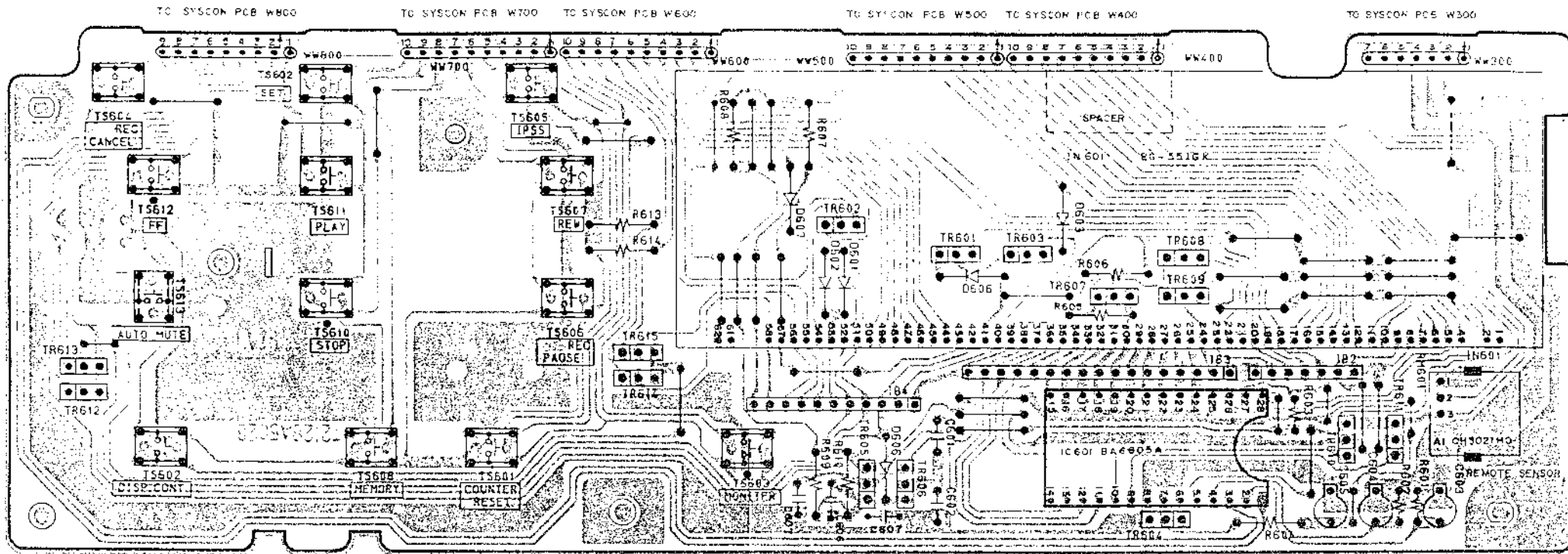
PHONE PCB T2129A501C



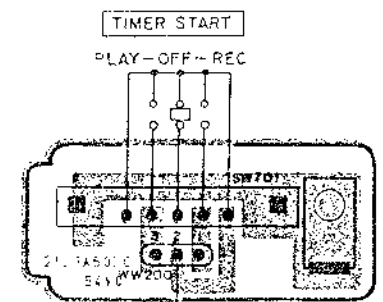
POWER TRANS PCB (1)
T2129A501D



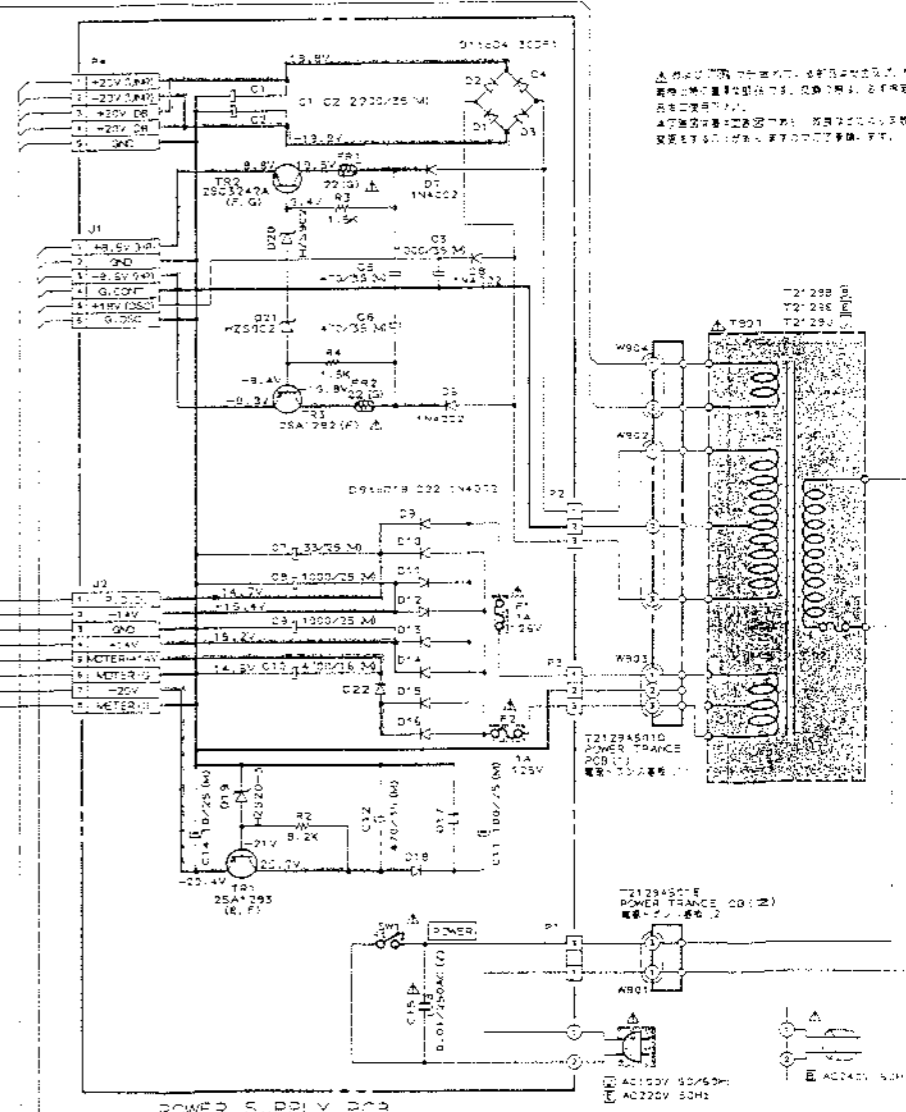
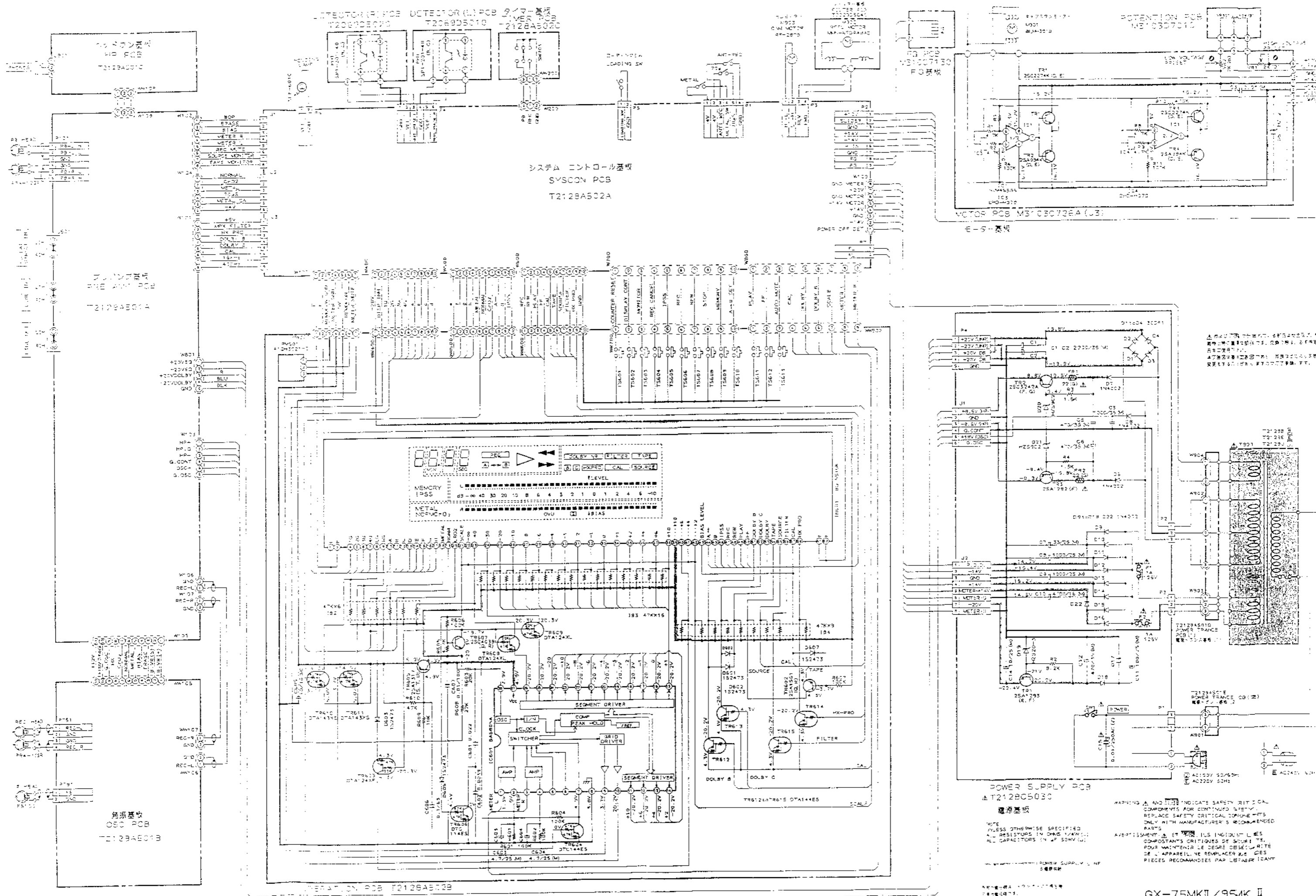
POWER TRANS PCB (2)
T2129A501E



OPERATION PCB T2128A502B



TO SYSCON PCB W200
TIMER PCB T2128A502C



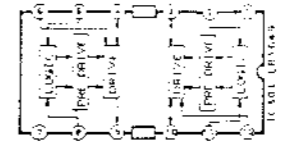
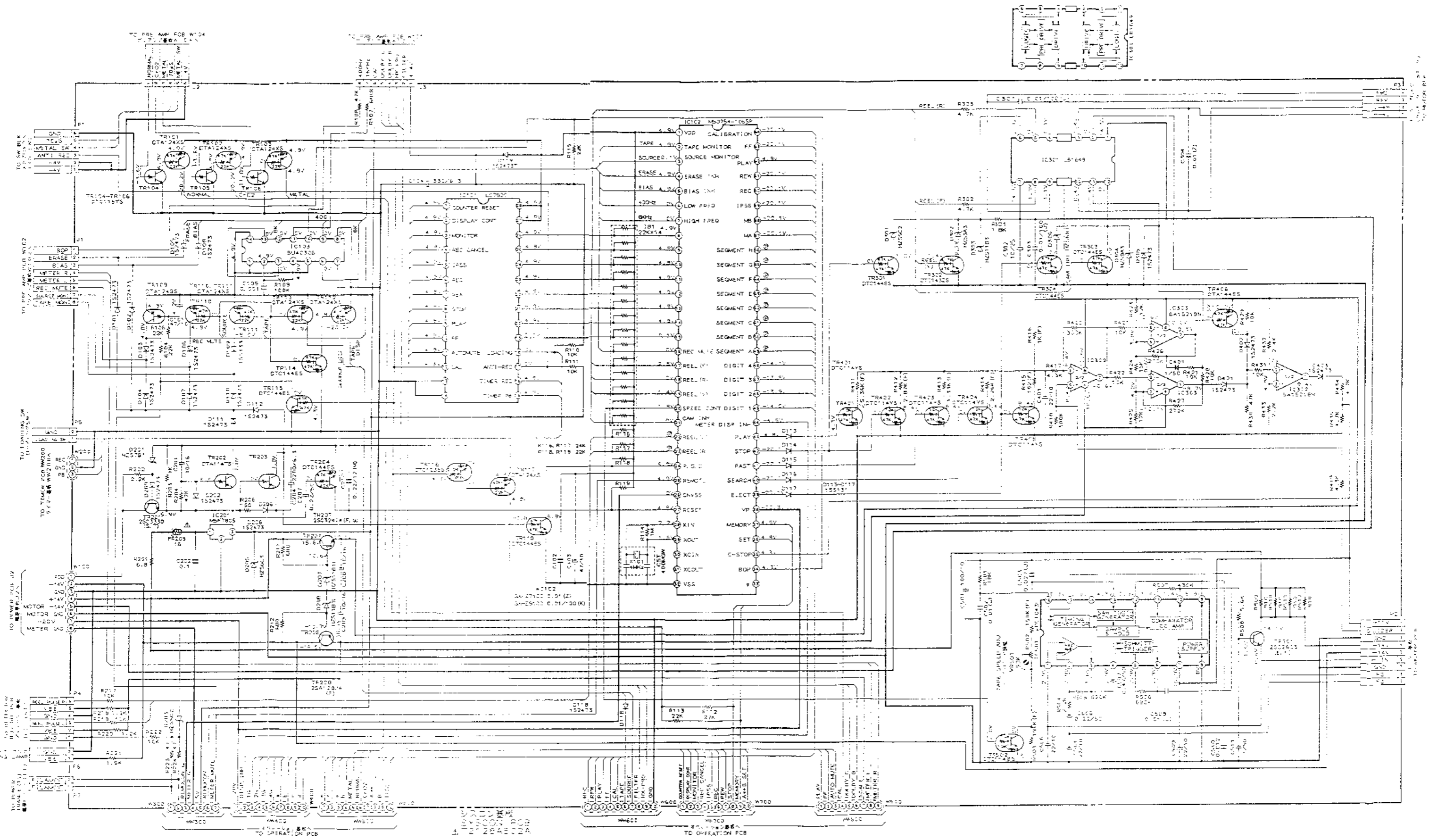
WARNING: A and B indicate safety critical components for continued safety. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: A et B indiquent les composants critiques de sécurité. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACEZ PAS LES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

NOTE: UNLESS OTHERWISE SPECIFIED, ALL RESISTORS IN OHMS, 1/4W/1%. ALL CAPACITORS IN μF, 50V/10%.

UNLESS OTHERWISE SPECIFIED, ALL RESISTORS IN OHMS, 1/4W/1%. ALL CAPACITORS IN μF, 50V/10%.

GX-75MKII/95AK II
CONNECTION 31 AGRAM
NO.3-1 T21 2804M

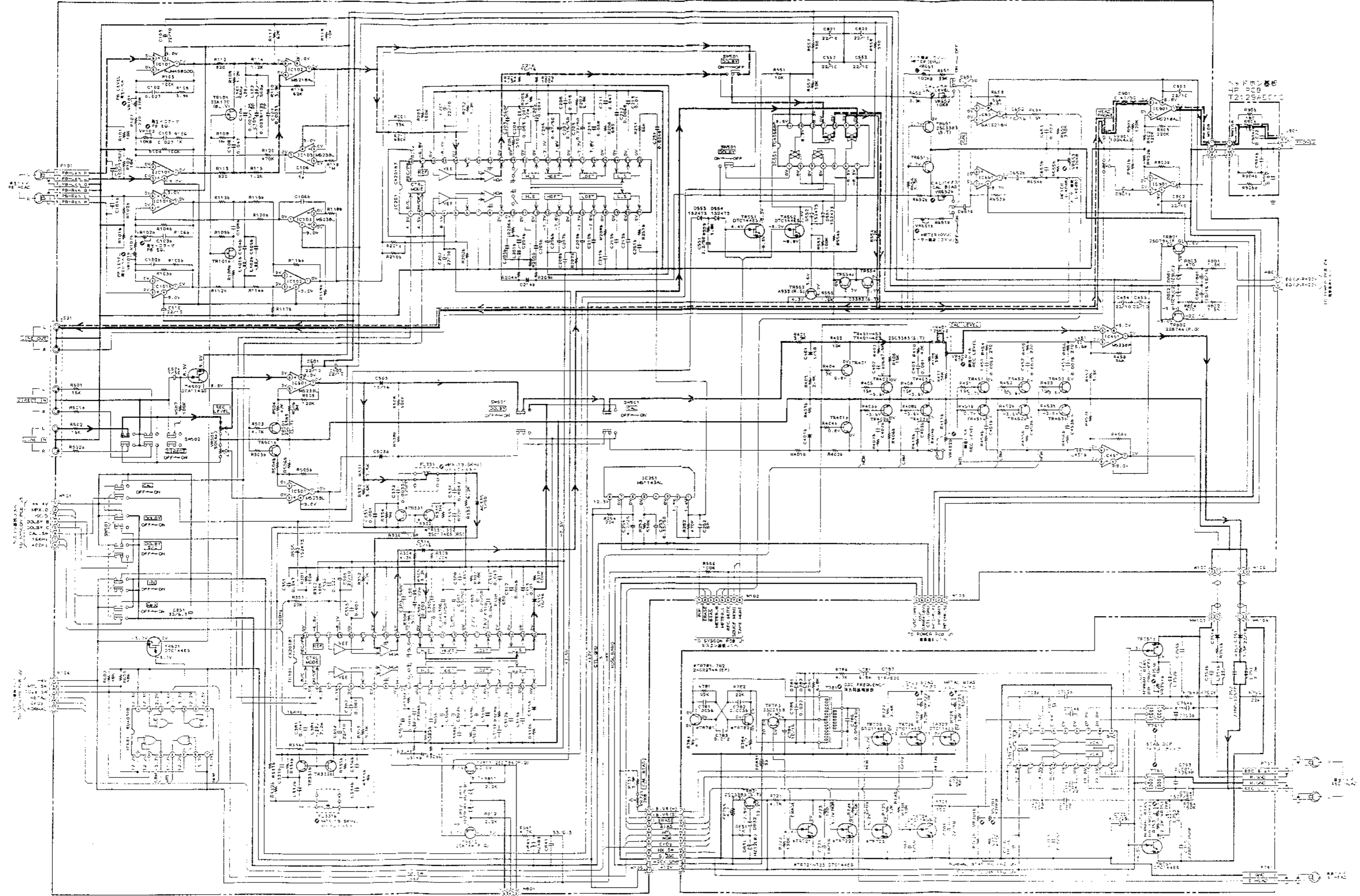


RESISTOR VALUES IN OHMS UNLESS OTHERWISE SPECIFIED.
RESISTOR VALUES IN KILOHMS (K) OR MEGOHMS (M) UNLESS OTHERWISE SPECIFIED.

NOTE: UNLESS OTHERWISE SPECIFIED, ALL RESISTORS IN OHMS (R), KILOHMS (K), OR MEGOHMS (M) UNLESS OTHERWISE SPECIFIED.

WARNING: AND INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: ET INDICENT LES COMPOSANTS CRITIQUES DE SECURITE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL, NE REMPLACEZ QUE DES PIECES RECOMMANDEES PAR LE FABRICANT.

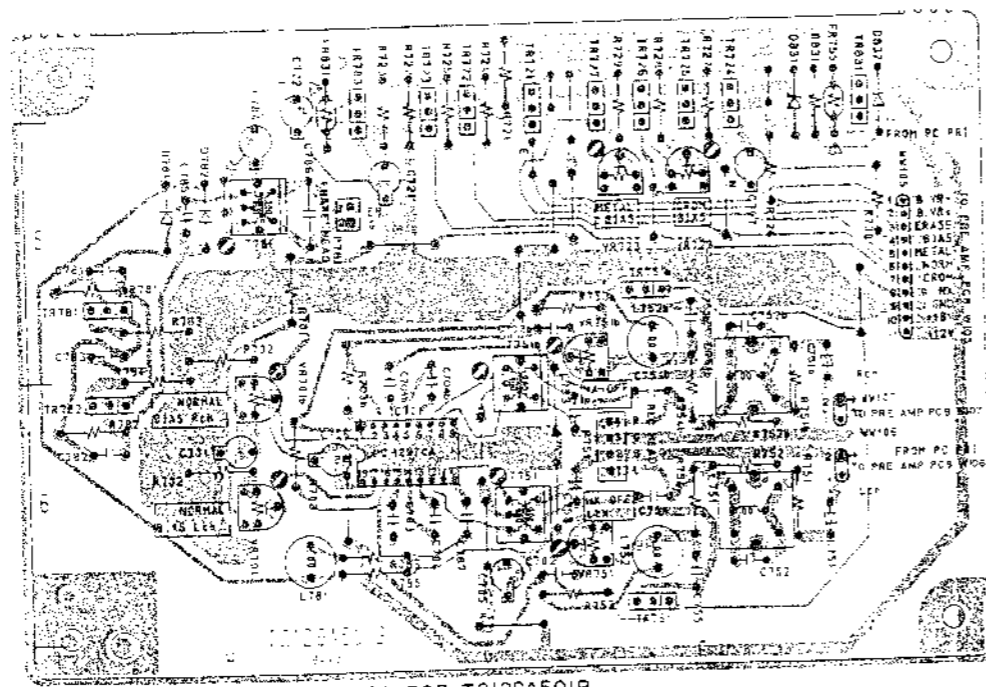


PRE AMP & OSC SCHEMATIC DIAGRAM

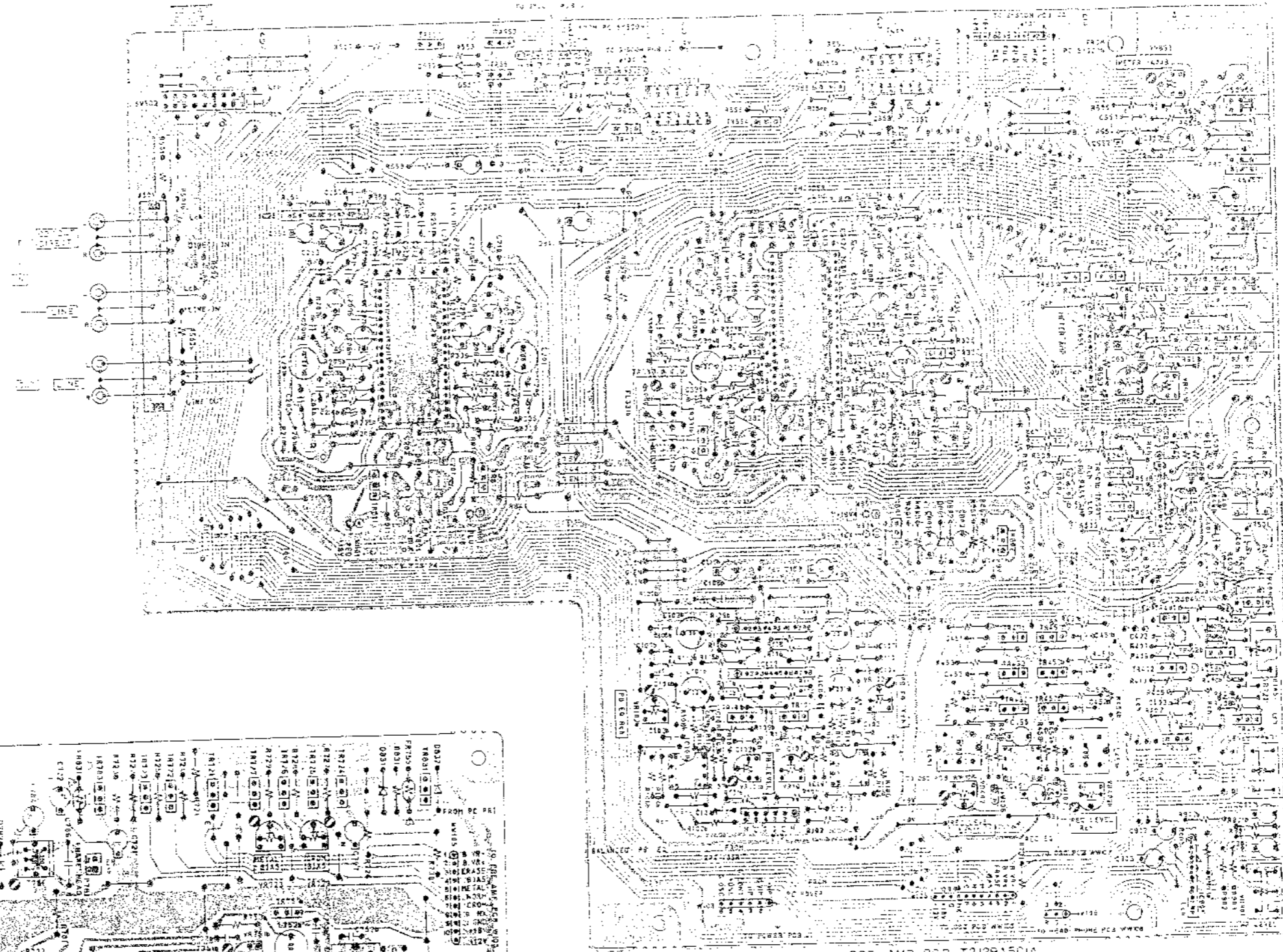
CSC PUB T2128A5010

——— POWER SUPPLY LINE
 - - - - - RF SIGNAL LINE
 ······ OTHER SIGNAL LINE
 INDICATED VALUES ARE MEASURED BY
 ON A RESISTOR OF METAL TAPE PLATE 10

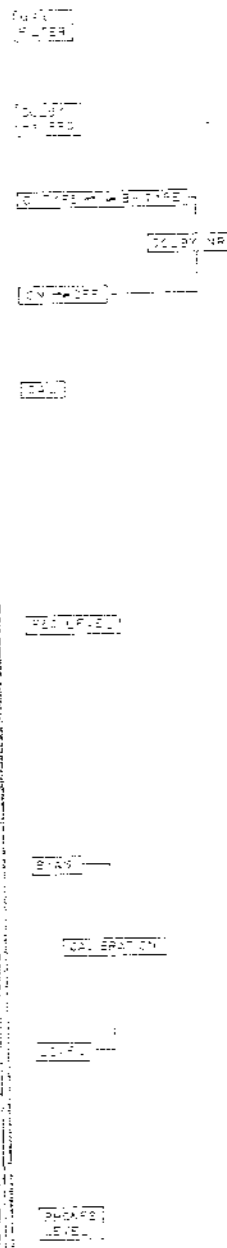
GX-75MKII/95MKII
 PRE AMP & OSC
 SCHEMATIC DIAGRAM
 NO. 3-3 T212806M

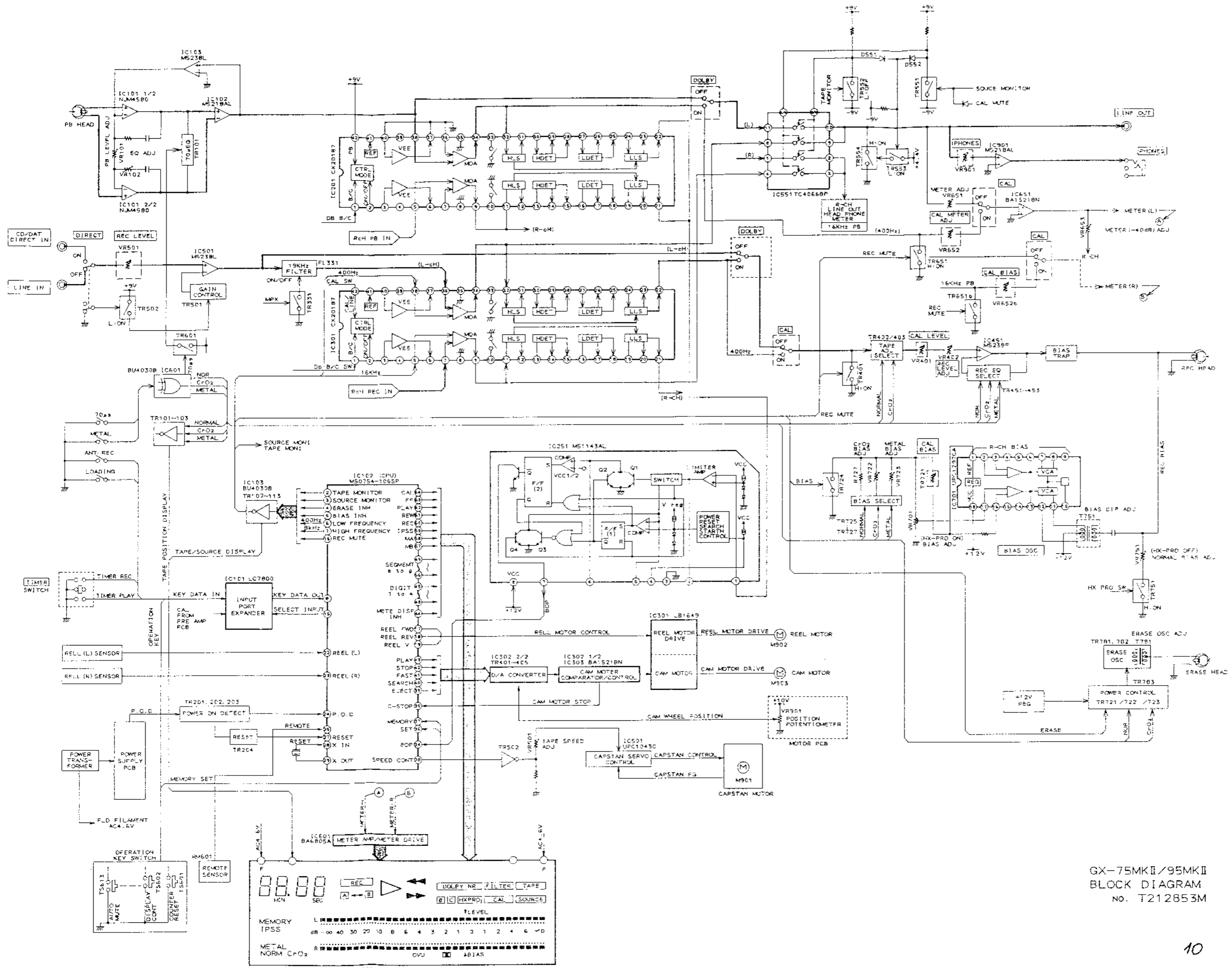


OSC PCB T2129A5019



PRE AMP PCB T2129A501A





GX-75MKII/95MKII
BLOCK DIAGRAM
NO. T212853M