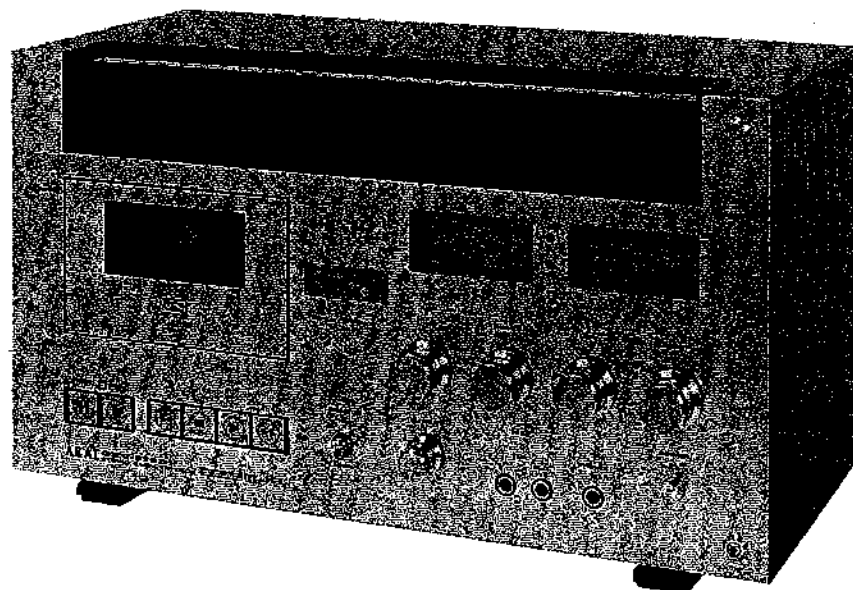


SERVICE MANUAL

PARTS LIST

MODEL GXC-570D

AKAI



CASSETTE STEREO TAPE DECK

MODEL **GXC-570D**

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SECTION 1

SERVICE MANUAL

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For basic adjustments, measuring methods, and operating principles, refer to GENERAL OPERATING PRINCIPLES AND ADJUSTMENTS.

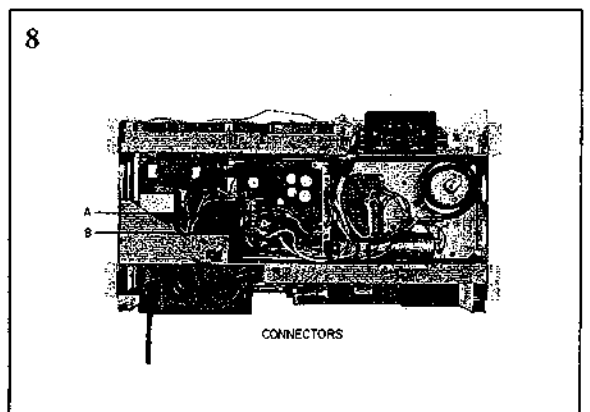
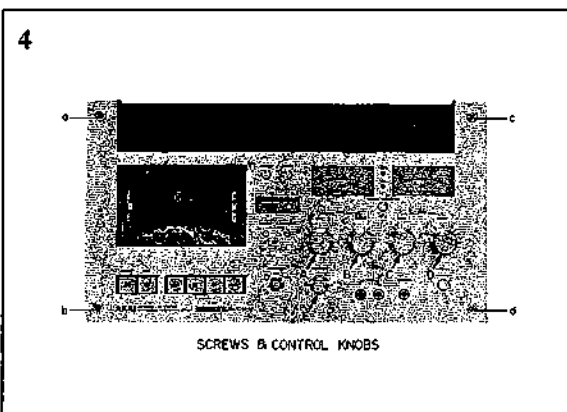
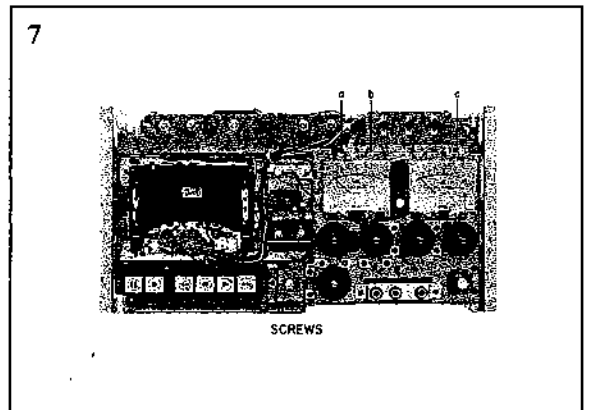
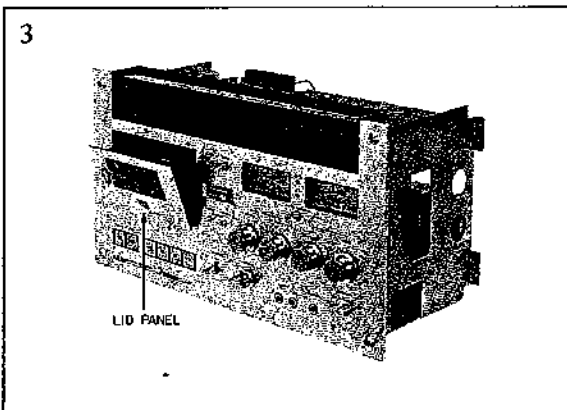
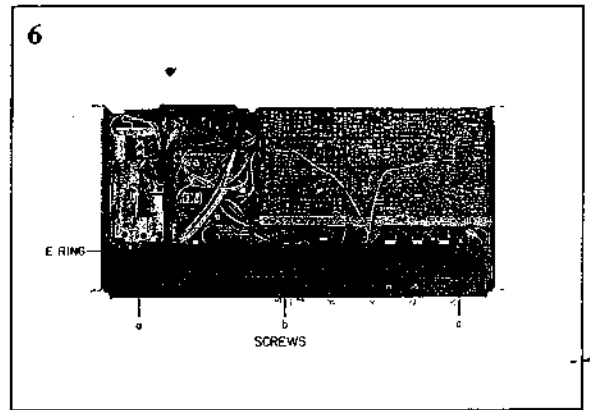
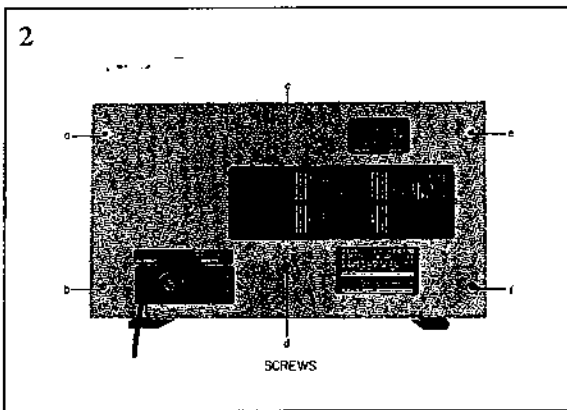
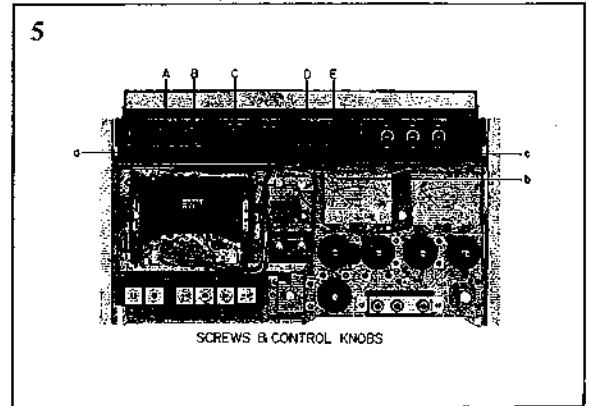
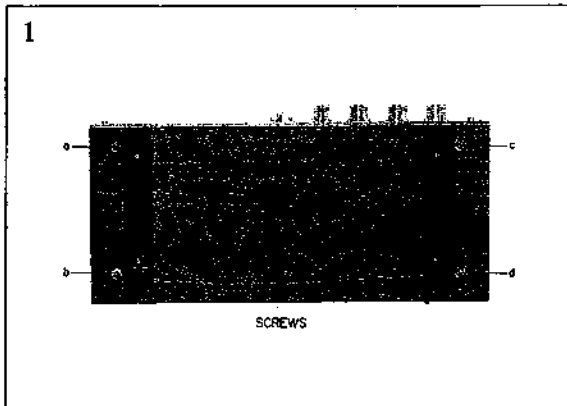
I. TECHNICAL DATA

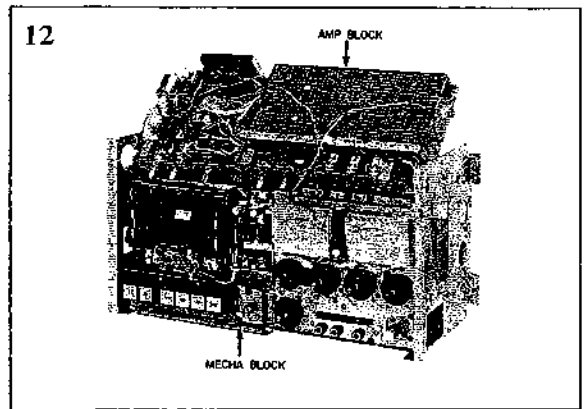
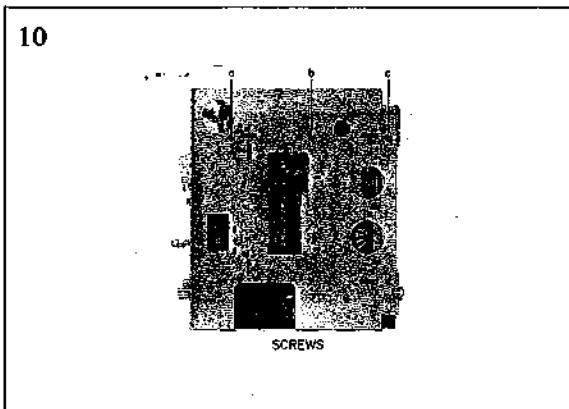
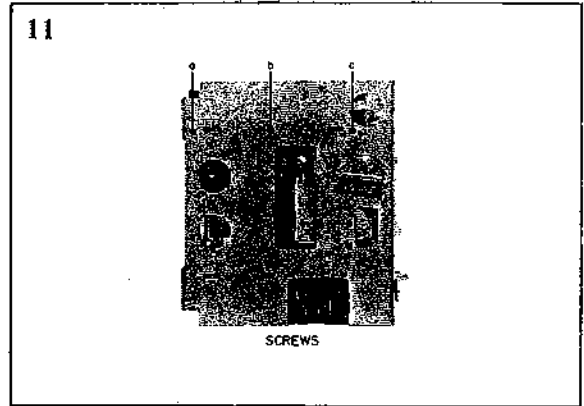
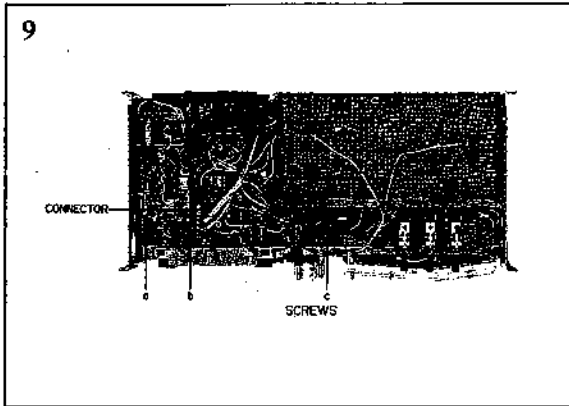
TRACK SYSTEM	4 track 2 channel stereo system
TAPE	Philips type cassette
TAPE SPEED	1-7/8 ips (Pitch Control $\pm 5\%$)
WOW AND FLUTTER	Less than 0.06% WRMS Less than 0.17% (DIN 45500)
FREQUENCY RESPONSE	30 Hz to 15,000 Hz (± 3 dB) using low noise tape 30 Hz to 16,000 Hz (± 3 dB) using CrO_2 tape 30 Hz to 19,000 Hz (± 3 dB) using Fe-Cr tape
DISTORTION	Less than 1% (1,000 Hz "0" VU) using low noise tape
SIGNAL-TO-NOISE RATIO	Better than 52 dB (measured via tape with peak recording level of +5 VU) Dolby Switch ON: Improves up to 10 dB above 5 kHz
ERASE RATIO	Better than 70 dB
BIAS FREQUENCY	100 kHz
HEADS	GX recording/playback head and erase head (3 head system)
MOTORS	One AC Servo outer rotor motor for capstan drive and two DC motors for reel drive
FAST FORWARD AND REWIND TIME	60 to 80 seconds (variable) using a C-60 cassette tape
OUTPUT JACKS	Line (2): 0.775V ("0" VU) Required load impedance: More than 20 k ohms Phono (1): 50 mV/8 ohms
INPUT JACKS	Microphone (2): 0.3 mV Required microphone impedance: 600 ohms Line (2): 70 mV/100 k ohms
TRANSISTOR	2SA628 (E) (F) 3 2SB605 (K) (L) 2 2SC458LG (C) 8 2SC945L (P) (Q) (R) 75 2SC1175 (E) (F) 3 2SC1211 (E) (F) 1 2SC1222 (E) (F) 4 2SC1647 (S) (E) 6 2SC1683 (P) (Q) 1 2SD360 (D) (E) 1 2SD361 (D) (E) (D1) 2 2SD401 (K) (L) 1 2SD571 (K) (L) (M) 6
FET	2SK30A (D) (GR) 10 2SK68A (L) (M) 2
IC	μ PC1023H 2 μ PC1024H 4 TA7122AP 2 DN835 1
DIODE	1N34A 8 1S2473 59 1S2473VE 88 10D2 4 10D4 1 10D5 6 WZ085 2 WZ240 2
POWER REQUIREMENTS	CSA, UL and LA Models: 120V, 60 Hz only CEE Models: 220V, 50 Hz only Other Models: 100V to 240V, 50/60 Hz, (switchable)
DIMENSIONS	440(W) \times 255(H) \times 225(D) mm (17.3 \times 10.0 \times 8.9")
WEIGHT	13.5 kg (28.5 lbs)

- NOTES: 1. For improvement purposes, specifications and design are subject to change without notice.
2. Noise reduction circuit made under license from Dolby Laboratories Inc.
The word 'DOLBY' and the Double-D symbol are trademarks of Dolby Laboratories Inc.

II. DISMANTLING OF UNIT

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





III. PRINCIPAL PARTS LOCATION

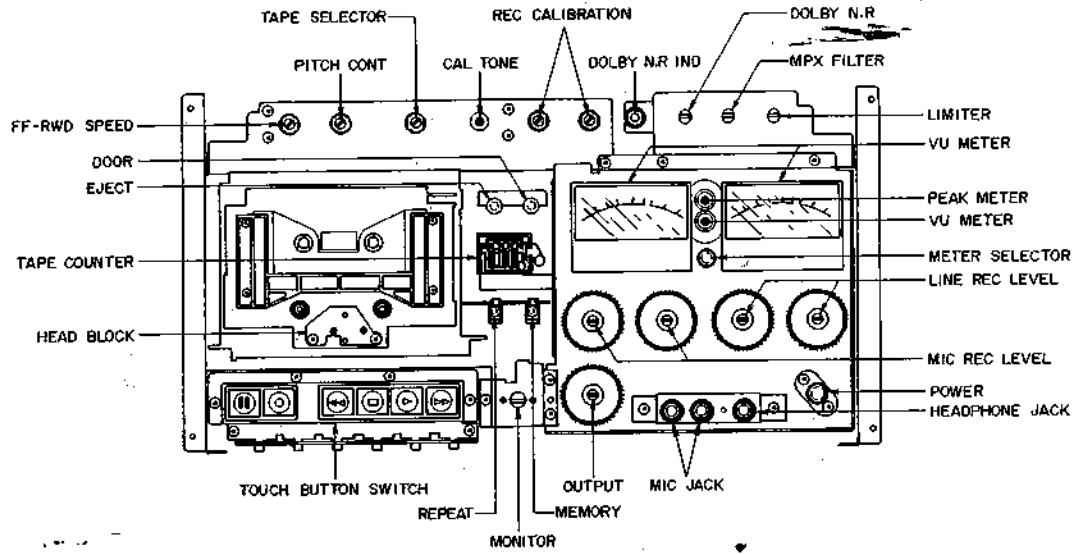


Fig. 1 Front View

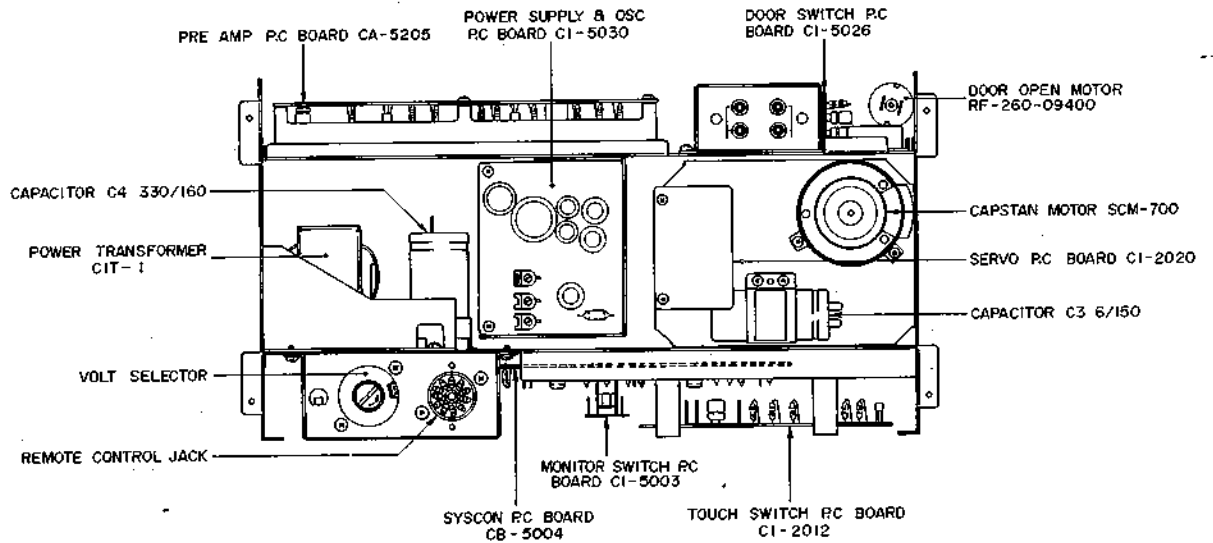
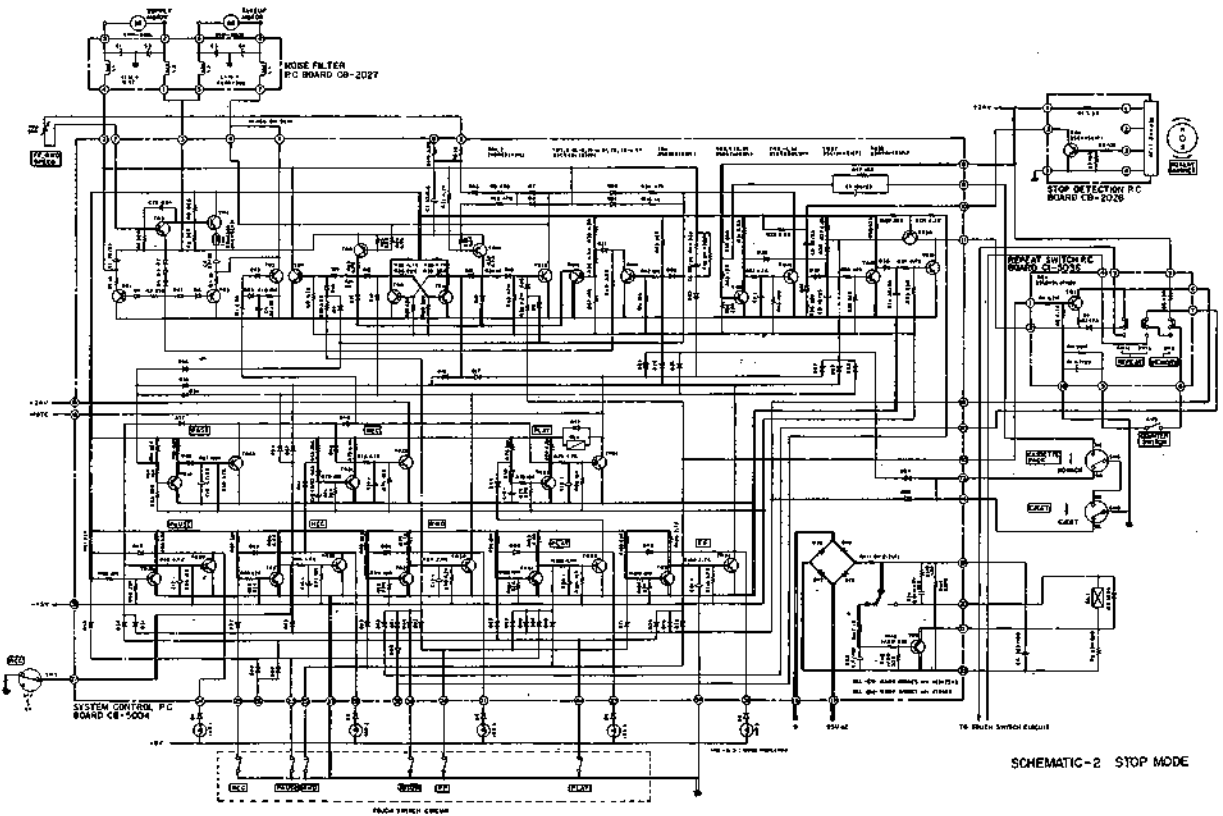
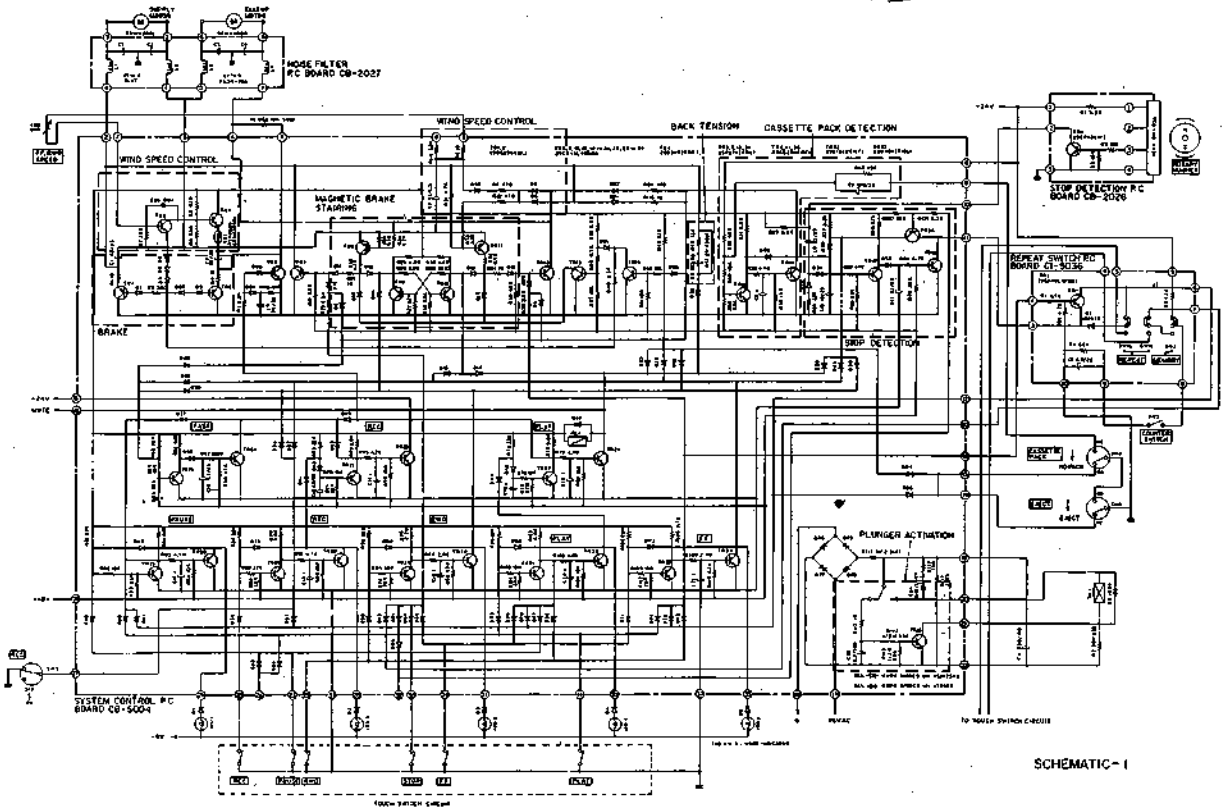
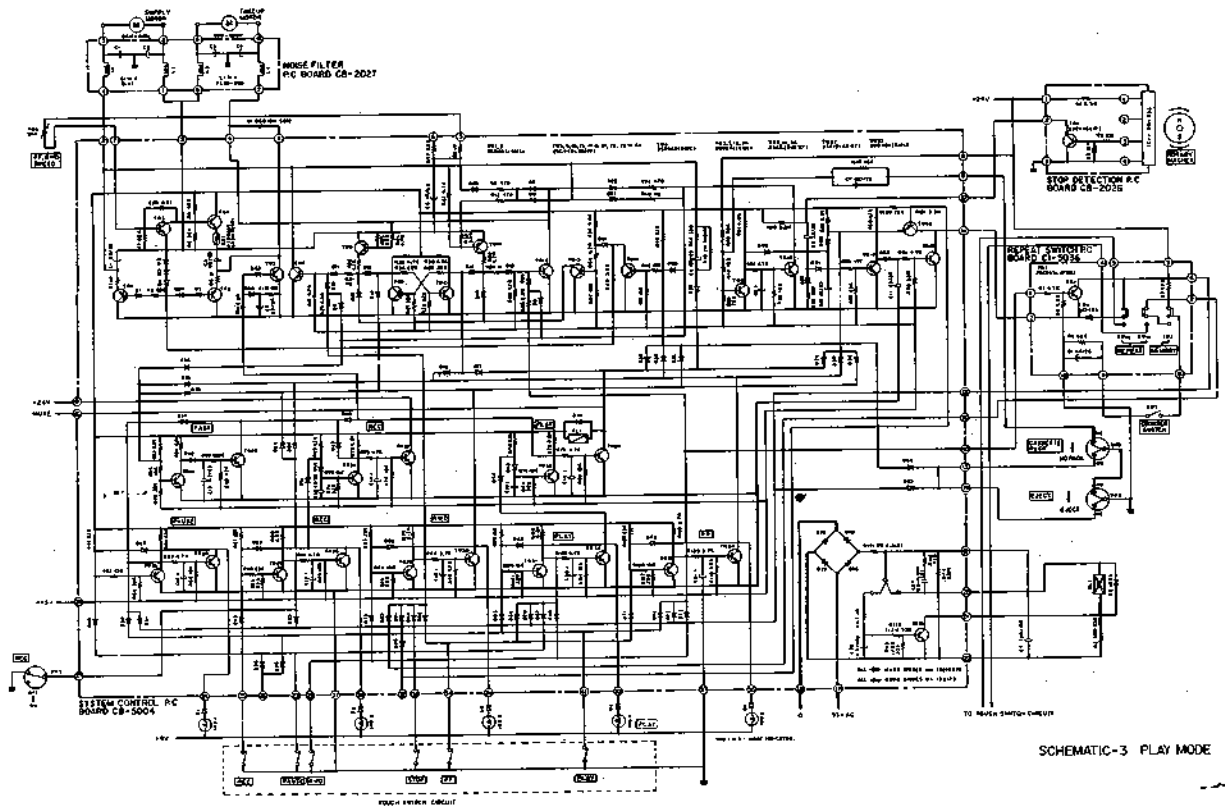


Fig. 2 Rear View

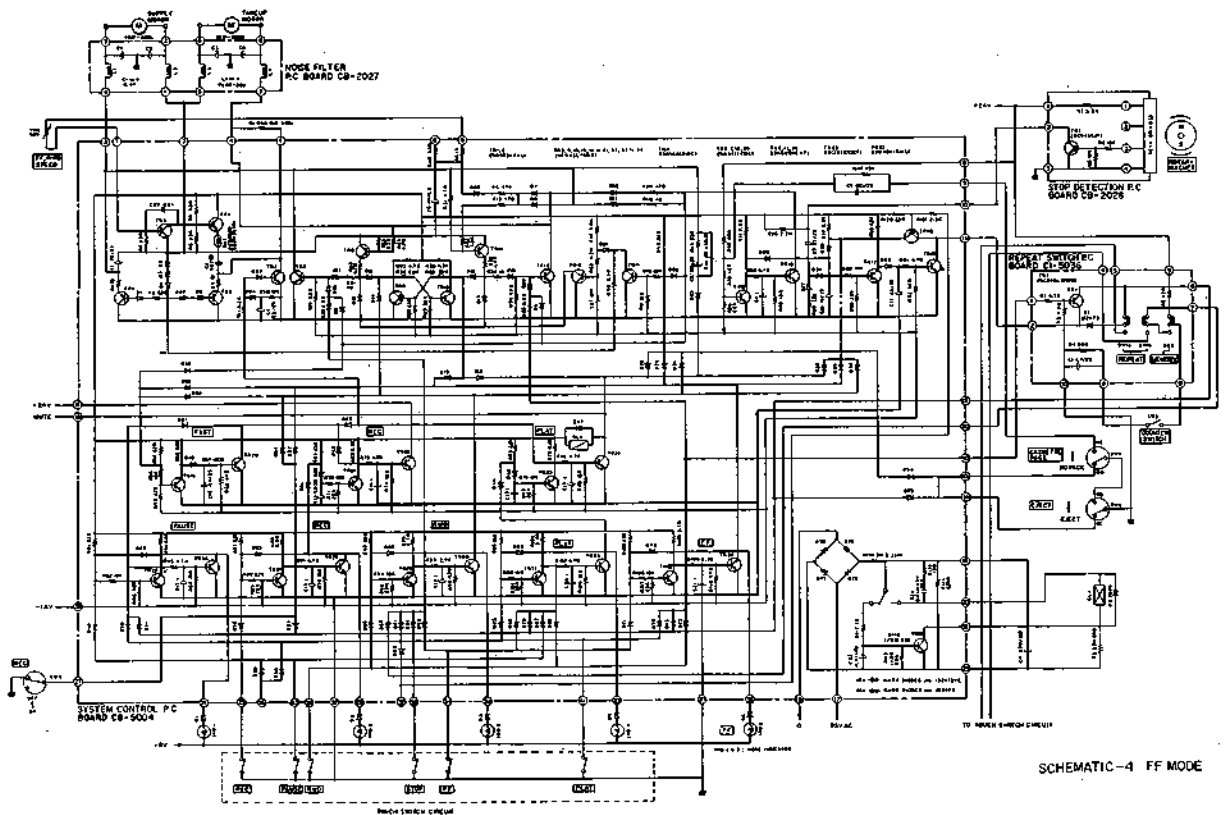
IV. CIRCUIT OPERATING PRINCIPLES

I. SYSTEM CONTROL OPERATION

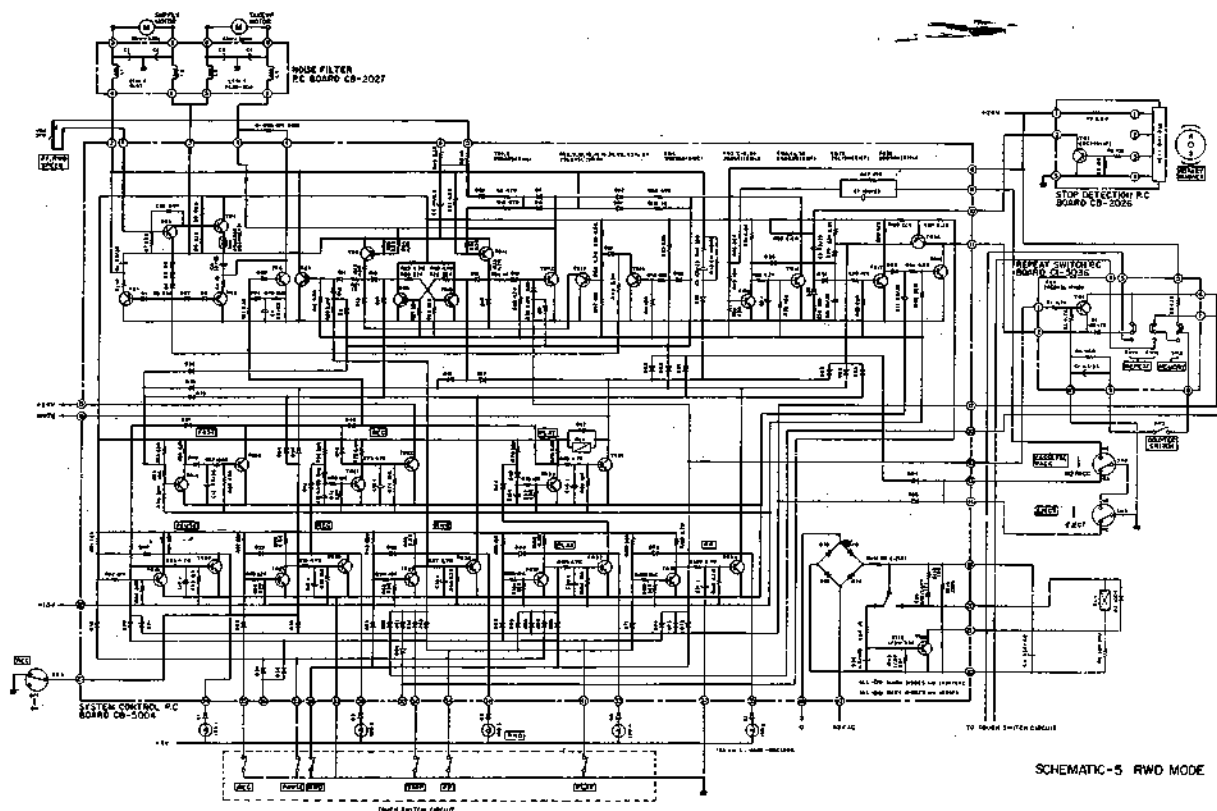




SCHEMATIC-3 PLAY MODE



SCHEMATIC-4 FF MODE



1-1. TAPE SLACK ELIMINATION CIRCUIT

- 1) Because this deck employs a double capstan drive system, if tape with a great deal of slack is used, trouble with the tape tangling around the capstan is likely to occur. Even if only slight tape slack exists, it takes time after effecting a forward mode to obtain proper tape tension, which results in a continuous poor head-to-tape contact condition. The purpose of this circuit is to prevent such trouble by taking up tape slack prior to operation for proper tape tension at all times.
- 2) When a cassette is not loaded, TR15 assumes an ON condition and TR16 an OFF condition. When a cassette is loaded, cassette detection micro switch SW6 contacts NC side (contact point), and a charge current flows to C7. Within this charge current period, TR15 is turned OFF and collector voltage increases. Charge current flows to R52 and C8 and at the end of the charge current period, TR16 is turned ON and collector current flows. This current passes D81, causing the take-up motor to rotate, and at the same time passes D82, causing the supply motor to rotate. Thus, the tape is pulled from both directions, and any existing slack is eliminated. This process continues until the C7 charge current ends, at which time the circuit returns to its previous state, stopping both reel motors.

1-2. PINCH ROLLER OPERATION AND REEL MOTOR ROTATION TIMING CIRCUIT

- 1) If reel motor starts to rotate before the pinch roller reaches the capstan, momentary brake tension will be applied, causing the tape to break or stretch. This circuit is for the purpose of eliminating such trouble by activating reel motor revolutions after the pinch roller has contacted the capstan when playback mode is effected.
- 2) When the deck is set to Play mode, TR23 collector voltage is increased, TR24 is turned ON, the relay functions, and the pinch roller plunger operates. At the same time, as a result of an increase in TR23 collector voltage, charge current passes R11 and D84 and flows to C4. During the period of this flow of charge current, TR5 base voltage is lowered, and because TR5 is turned OFF, the take-up motor does not rotate. However, at the end of this flow of charge current, TR5 base voltage increases, TR5 is turned ON, and motor starts to rotate.
The period of time until TR5 is turned ON is about 0.1 to 0.2 seconds.

1-3. FAST FORWARD AND REWIND SPEED

CONTROL CIRCUIT

- 1) The reel motors employed in this deck are DC motors which at a non-load condition rotates at about 3,000 rpm. Consequently, when Fast Forward or Rewind is effected, there is a possibility of tape damage due to a gradual build-up of inertia and increased revolutions. This circuit is for the purpose of controlling supply voltage to the take-up reel motor for suppression of increased motor revolutions.

- 2) When the deck is set to Fast Forward mode, TR12 is turned ON and the take-up motor begins to rotate. When the supply reel motor is not rotating, because bias is not supplied to the base of TR3, the resistance between TR3 collector and emitter is infinite, and a fixed bias is supplied to TR4 through R8 and R9, a fixed DC voltage is supplied to the take-up reel motor, and there is a build-up of inertia and gradual increase in motor revolutions.

However, at Fast Forward Mode, the supply reel motor of this deck functions as a generator. Consequently, the electromotive force generated by the supply reel motor passes D6, D85, R6 and R119 and becomes TR3 base bias, and the resistance between TR3 collector and emitter is varied proportionately according to the extent of the generator's electromotive force.

That is to say, R9 and the resistance between TR3 collector and emitter becomes parallel composite resistance and bias to TR4 is varied by this composite resistance. Momentarily, when the take-up reel motor begins to rotate at high speed, this counterbalanced electromotive force is generated by the supply reel motor and this generated voltage increases the resistance between TR4 collector and emitter and the supply voltage to the take-up reel motor is decreased. Thus, motor revolutions are slowed for a decrease in speed. In this manner, the take-up speed always corresponds with the supply reel motor speed, thus avoiding high speed motor revolutions.

- 3) Speed control also functions in exactly the same way at Rewind mode. However, in this case, the right hand side reel motor functions as a generator, and left hand side reel motor revolutions are controlled by means of supply voltage control. Therefore, Rewind speed is controlled in the same way as at Fast Forward.

1-4. MAGNETIC BRAKING CIRCUIT

- 1) This deck differs from other 3 motor system decks to date in that instead of a mechanical braking system, tape travel is stopped electrically, and a magnetic braking system is employed. When Fast Forward or Rewind is being effected, the take-up motor rotates while being controlled by the rotation of the supply side motor.

This circuit is for the purpose of applying mag-

netic braking to the proper motor when stop mode is being effected from Fast Forward or Rewind.

- 2) At Fast Forward, TR7 is turned ON and the take-up motor rotates. The supply side motor rotates and functions as a generator to maintain proper take-up motor revolutions. At this time, the magnetic braking circuit maintains TR8 and TR10 at ON, and TR9 and TR11 at OFF condition. D12 is grounded through D13 and D12 anode becomes identical to grounding electrical potential. Consequently, TR7 assumes an OFF condition. (In other words, current does not flow to the supply side motor).

- 3) When the deck is stopped from Fast Forward mode, TR12 is turned OFF, and the current to the take-up motor ceases. Also TR14 is turned ON and TR13 turned OFF, and at the same time, D1 anode assumes a floating condition. Current flows by means of the electromotive force from the take-up side motor, and this current turns ON TR7 and voltage is supplied to the supply side motor. This voltage becomes the braking voltage of the supply side motor.

- 4) When magnetic braking is first applied, because the take-up motor is rotating fairly fast, a large electromotive force is generated, TR17 is turned completely ON, and maximum voltage is supplied to the supply side motor. Thus, speed is reduced and at the same time, this voltage is decreased. Also the take-up motor electromotive force disappears, and at the same time, the supply side motor rotation stops.

- 5) When the deck is stopped from Fast Forward mode, the operation is the same as described above. Only the circuit components differ.

1-5. AUTOMATIC SHUT-OFF MECHANISM CIRCUIT

- 1) This circuit is for the purpose of effecting automatic shut-off when tape travel has stopped after play, recording, fast forward, or rewind mode.

- 2) During tape travel, because the rotary magnet rotates, Stop Detection circuit TR1 performs the ON ↔ OFF switching operation. Also during tape travel, because D30 anode becomes grounding electrical potential, TR17 is turned OFF. However, charge and discharge current alternately flows to C9 by means of the Stop Detection circuit. At charging time, current flows to R55 → C9 → D31 → C10, and TR17 is turned ON. At discharging time, current flows to R56 → D27 → C9 → TR1 (stop detection circuit). During this time, C10 discharge current passes R58 and TR17 is maintained at ON condition. When tape travel has stopped, C9 charge and discharge current will not flow, C10 discharge current also ends, and TR17 is turned OFF. Then TR18 is turned ON, and the diode connected to TR18 collector for instance, if automatic shut off is effected from play mode, D70 is grounded, play circuit TR32 is turned OFF, and Shut-off mode is effected.

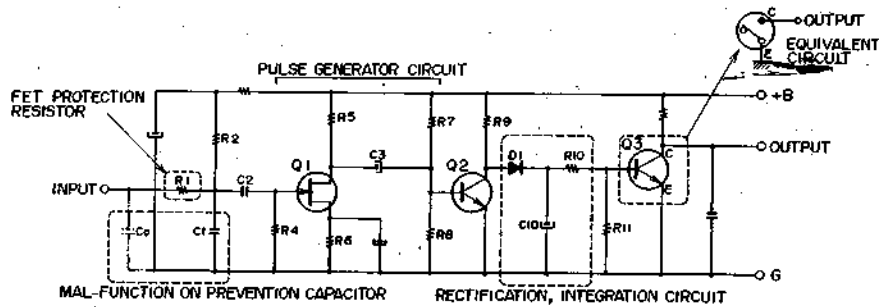


Fig. 3

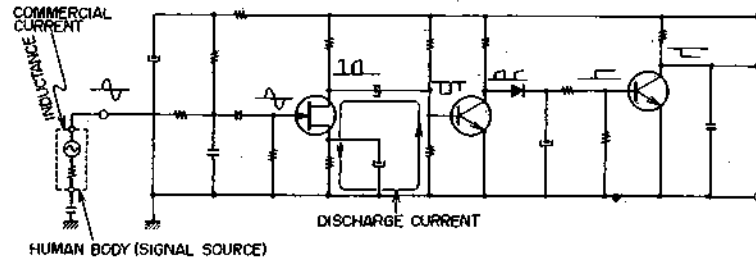


Fig. 4

2. TOUCH BUTTON SYSTEM OPERATION

2-1. TOUCH BUTTON SYSTEM CIRCUIT

COMPONENT (Refer to Fig. 13)

As shown in Fig. 3, generally divided, the touch button system circuit is comprised of a pulse generator circuit, a rectifier circuit, and an integration circuit and includes a malfunction prevention capacitor and FET protection resistor, etc.

Because it is necessary for the malfunction prevention capacitor shown by the dotted line to have a fairly high voltage, a shielded wire distribution capacitor is used with a capacitance of 50 to 60 PF.

As shown by the equivalent circuit in the diagram, last stage transistor Q3 performs the exact same function as a micro switch.

2-2. WHEN TOUCH BUTTON IS TOUCHED WITH FINGER, OPERATION IS SAME AS MICRO SWITCH SYSTEM USED TO DATE (Refer to Figs. 4, 6)

Because of inductance in our bodies from commercial power supply (50 Hz or 60 Hz), if we touch one of the touch buttons with our finger, our body becomes a signal source as shown in Fig. 4 and the same thing takes place as in the case of a micro switch system to date. Therefore, when a button is touched with a finger, a signal is supplied to FET Q1 gate as shown in Fig. 4.

The charge at C3 when a signal is not supplied is only equivalent to the drain voltage. Base bias is supplied to Q2 from R7 and R8 and no signal is emitted at Q2 collector. Consequently, Q3 base becomes unbiased and Q3 does not function.

The signal supplied to Q1 gate works to reduce the impedance between FET drain and source, and the electric charge charged at C3 passes Q1 → R6 → and R8 and is discharged.

C3 discharge causes a large minus bias at Q2 base, collector voltage increases, and this pulse is rectified at D1 and integrated at C10, R10 and supplied to Q3 as base bias. Consequently, Q3 is turned ON and functions in exactly the same way as a micro switch has functioned to date.

2-3. WHEN A BUTTON IS TOUCHED WITH A FINGER AND AT THE SAME TIME THE DECK CHASSIS IS TOUCHED WITH ANOTHER FINGER OR A HAND (See Fig. 5)

As previously explained our body acts as a signal source to operate the touch buttons, but when considering that in this case the high resistance of the human body is utilized, the Q1 gate circuit operation is different. As shown in Fig. 5, when a button is touched with a finger and the chassis is touched simultaneously, by means of the resistor shown in the circuit diagram, C2 electric charge passes R1 → R0 → R4 and is discharged. From looking at the circuit, it can be understood that discharge is completed in an extremely short time. In this very short discharge time period, FET is cut, the drain voltage increases, and condenser C3 is charged. When C2 discharge is complete and the voltage of both terminals becomes equal, FET drain current flows and the electric charge charged at C3 is discharged. Consequently, Q2 base is minus biased and ceases to operate. Thus, Q3 functions in the same way as a micro switch as outlined in item 2-2 above.

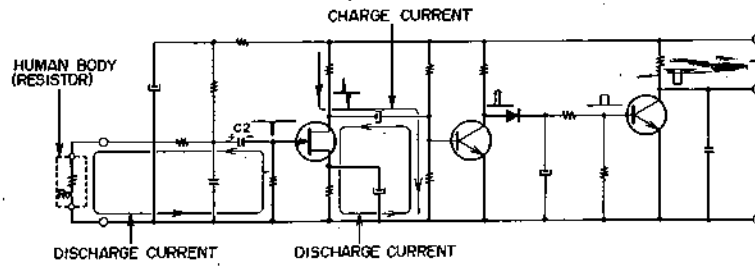


Fig. 5

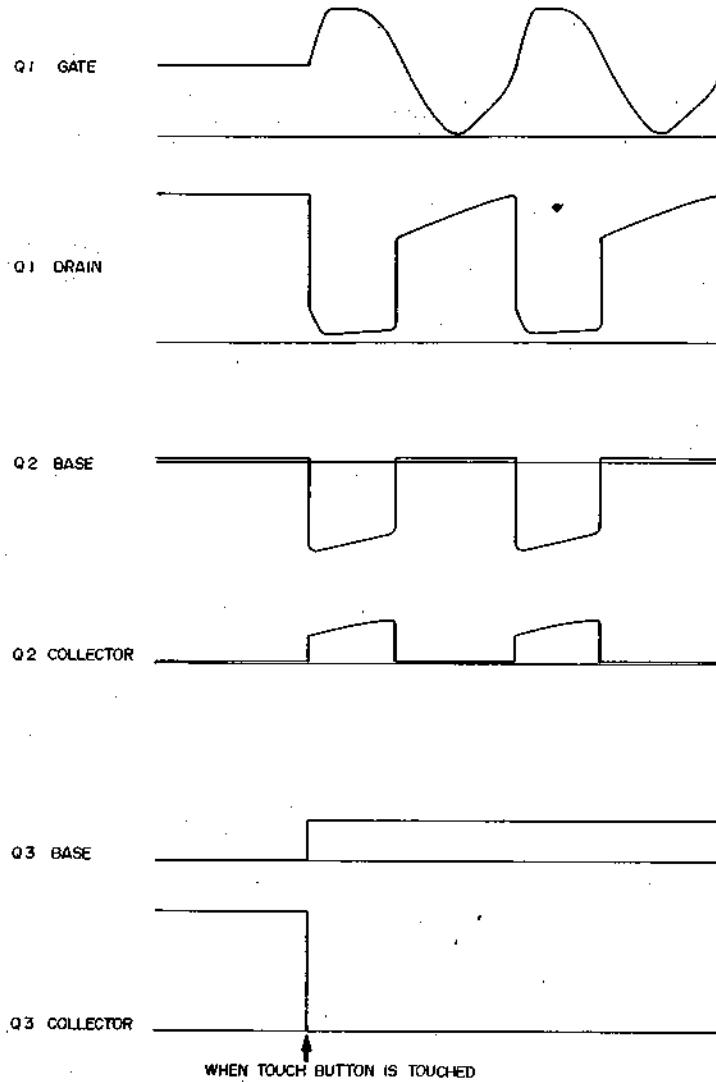


Fig. 6

V. MECHANISM ADJUSTMENT

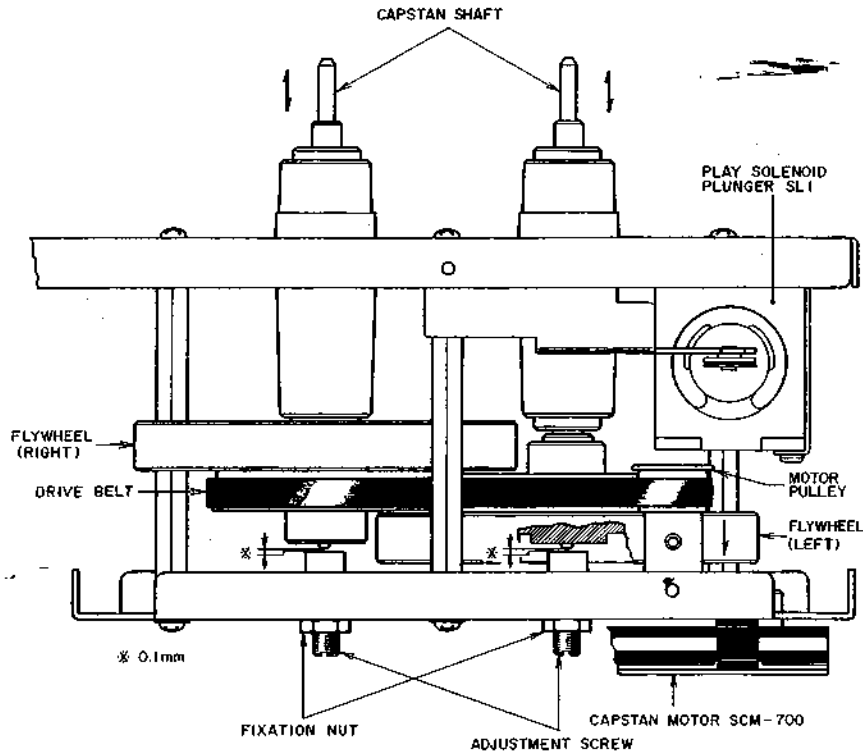


Fig. 7

1. CAPSTAN SHAFT LOOSE PLAY

ADJUSTMENT (Refer to Fig. 7)

Adjust by turning adjustment screws to obtain a 0.1 mm degree of loose play (space indicated by * mark in Fig. 7) when the capstan shaft is moved as indicated by the arrow mark. Tighten fixation nut to maintain optimum adjusted condition.

2. MOTOR PULLEY INSTALLATION

POSITION ADJUSTMENT (Refer to Fig. 8)

Tighten fixation screw at position at which the parts indicated by the * mark in Fig. 8 makes contact with the rotor plate.

NOTE: After above adjustment, in case the drive belt does not run on the center of Motor Pulley, re-adjust installation position of Motor Pulley so that the drive belt comes to the center of the Pulley.

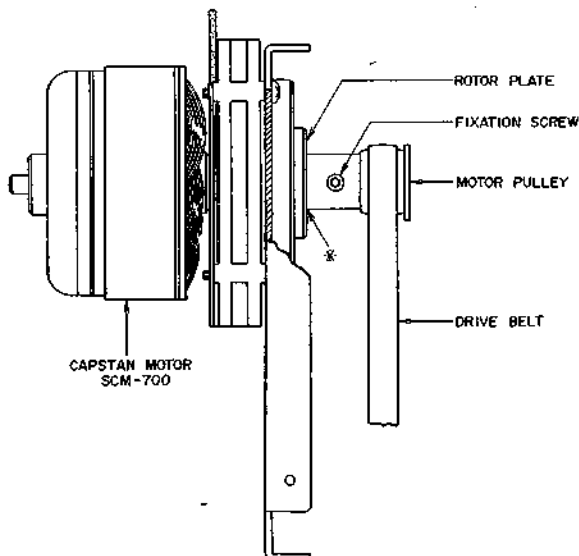


Fig. 8

3. REEL TABLE INSTALLATION POSITION

ADJUSTMENT (Refer to Fig. 9)

As shown in Fig. 9, with reel table firmly and completely fitted on motor shaft, tighten fixation screw.

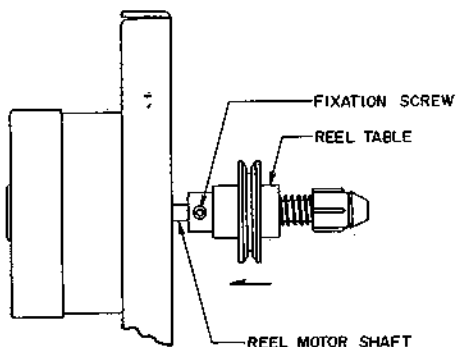


Fig. 9

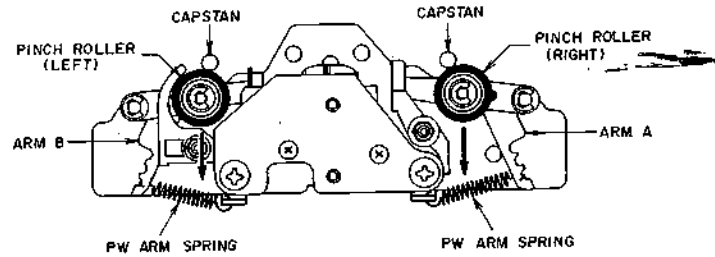


Fig. 10

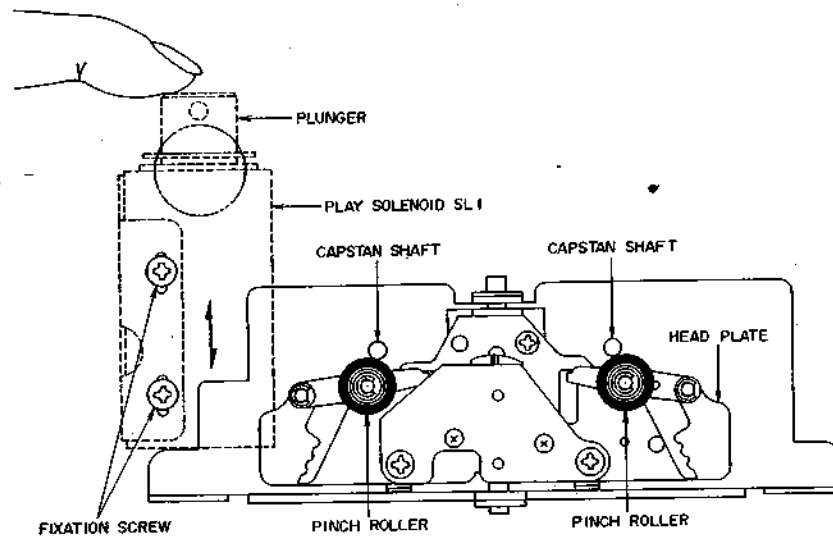


Fig. 11

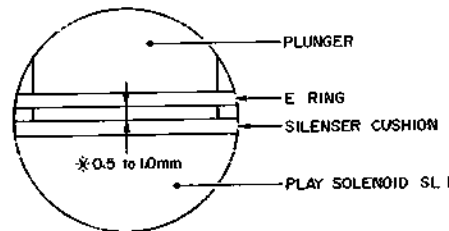


Fig. 12

4. PINCH ROLLER PRESSURE

ADJUSTMENT (Refer to Fig. 10)

Pull back the Pinch Roller with a spring gauge, and then gently return. Take a reading of the spring gauge scale indication at the moment the Pinch Roller touches the capstan and begins to rotate. Adjust pressure to specified value by changing position of the PW ARM SPRING.

Specified Pinch Roller Pressure:

Pinch Roller (right)	400 ± 50 gr
Pinch Roller (left)	300 ± 50 gr

5. PLAY SOLENOID INSTALLATION POSITION ADJUSTMENT

(Refer to Fig. 11 and Fig. 12)

As shown in Fig. 11, at stop mode, when the tip of plunger is gently depressed, the pinch roller contacts the capstan shaft, at this time confirm that the gap between "E" ring and silencer cushion is 0.5 to 1.0 mm. (See Fig. 12)

If not, adjust play solenoid installation position as indicated by the arrow mark in Fig. 10 to obtain specified gap.

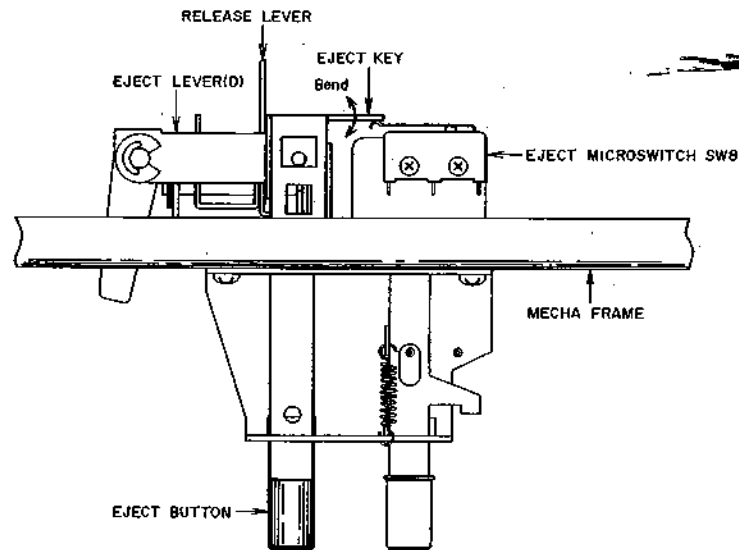


Fig. 13

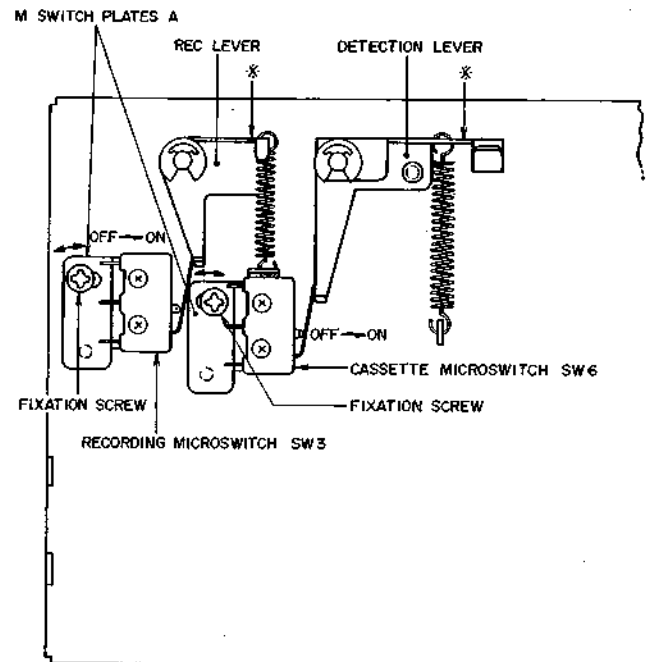


Fig. 14

6. ADJUSTMENT OF EJECT MICRO SWITCH ACTUATING POSITION (Refer to Fig. 13)

Adjust by bending Eject Key so that when the Eject Key is depressed, Eject Micro Switch (SW8) shown in Fig. 13 is perfectly actuated. After adjustment, depress Eject Button and confirm that Eject Micro Switch (SW8) switches before the Release Lever operates.

7. ADJUSTMENT OF RECORDING MICRO SWITCH (SW3) AND CASSETTE MICRO SWITCH (SW6) ACTUATING POSITION

(Refer to Fig. 14)

Move M Switch Plate A as indicated by the arrow marks in the figure and adjust so that when the parts of Recording and Detection Levers marked with * mark in Fig. 14 are at a horizontal level, Recording Micro Switch (SW3) and Cassette Micro Switch (SW6) are turned ON respectively. Further, confirm that when a cassette from which the recording safety tabs have been removed is loaded, Recording Micro Switch (SW3) switches, and when the cassette is removed, Cassette Micro Switch (SW6) switches. Tighten fixation screws to maintain ideally adjusted positions of M Switch Plates A.

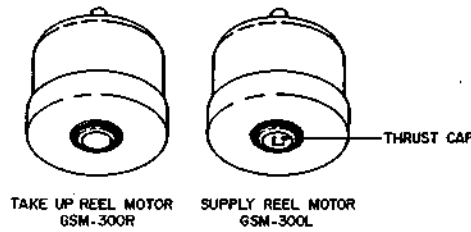


Fig. 15

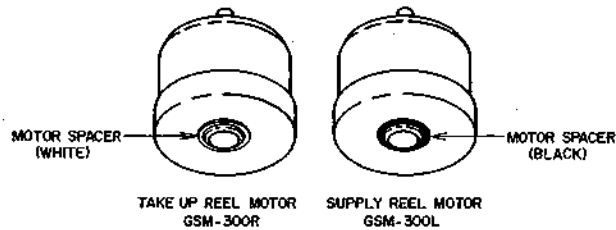


Fig. 16

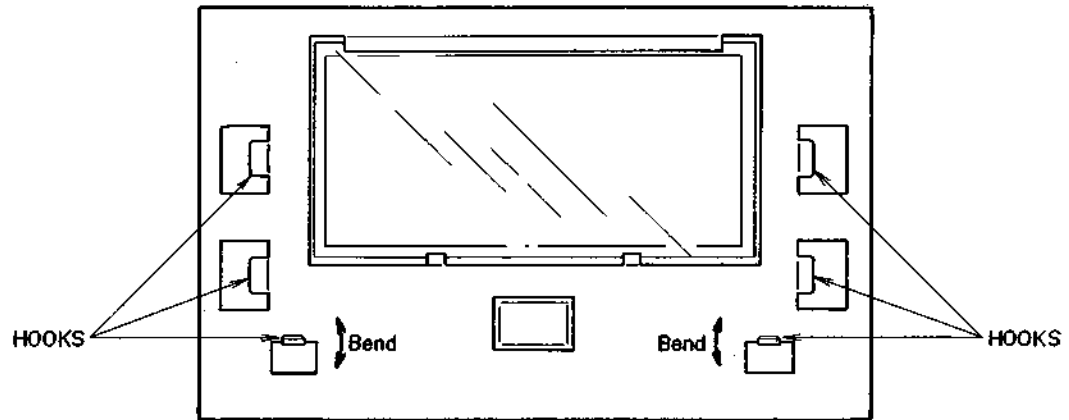


Fig. 17 Inner Side of Lid Panel

8. REEL MOTOR (GSM-300) REPLACEMENT (Refer to Fig. 15)

While the reel motors of this Deck are basically the same, because left and right characteristics differ, check as described below prior to replacement.

- 1) Serial No. 10216-0001 to 10216-0060
10511-0001 to 10511-0150
10612-0001 to 10612-0300

Supply Reel Motor: L mark on thrust cap

Take up Motor: No marking

- 2) Serial No.: From 10716-0001

Motor Spacers of Supply Reel Motor and Take Up Motor are of different colors as shown in Fig. 16.

- NOTES: 1. Because brush noise, etc. will occur if left or right motor is substituted, be sure to replace with the correct type for left or right.
2. For the reason outlined in NOTE 1, the motors are clearly distinguishable, but the motors themselves are uniform.

9. FRONT PANEL LID CASE SPACING ADJUSTMENT (Refer to Fig. 17)

In case the Lid Case comes too far toward either side, adjust by bending the two lower hooks as indicated by the arrow marks in Fig. 17.

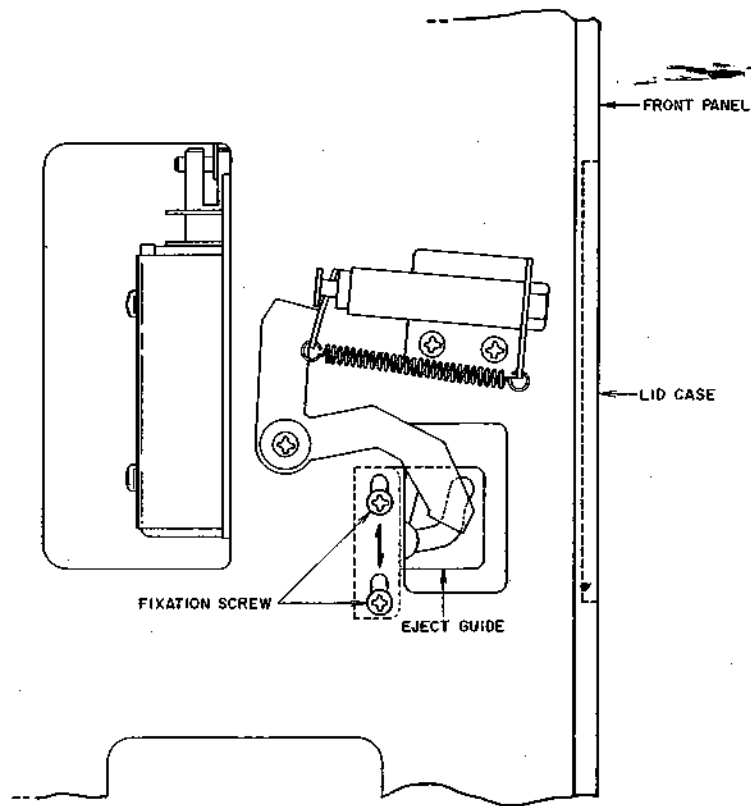


Fig. 18 Left Side of the Deck

10. POSITION ADJUSTMENT OF LID CASE

(Refer to Fig. 18)

Move the Eject Guide shown in Fig. 18 (direction indicated by arrow mark) up and down and adjust Lid Case so that it is even with the front panel. If the upper part of Lid Case comes too far inward, raise the eject guide, and if too far outward, lower eject guide.

11. CLEARANCE ADJUSTMENT BETWEEN HALL IC AND ROTARY MAGNET

(Refer to Fig. 19)

This adjustment is necessary for the perfection of the Automatic Stop Function. If adjustment is necessary due to poor Automatic Stop Function or instability, proceed as follows:

- 1) As shown in Fig. 19, move Stop Detection P.C. Board as indicated by the arrow mark in the figure, and adjust position so that the clearance between the HALL IC and rotary magnet is 1 mm.
- 2) In case this clearance is over 1 mm, faulty Automatic Stop Function will occur.

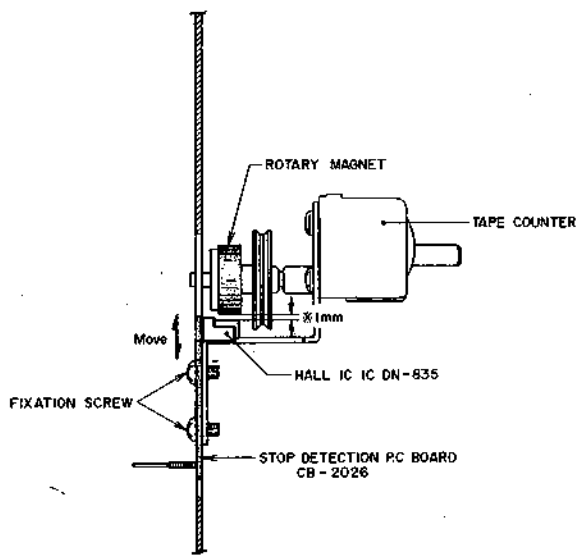


Fig. 19

VI. HEAD ADJUSTMENT

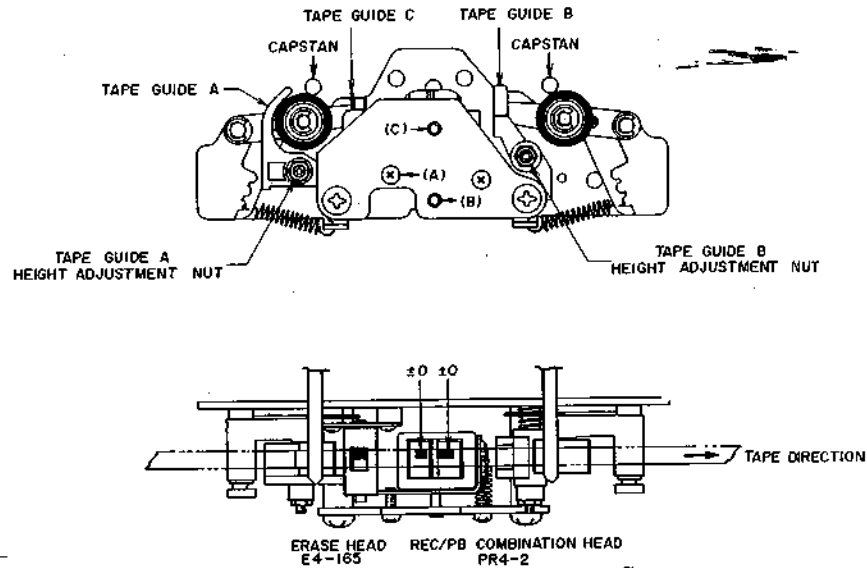


Fig. 20

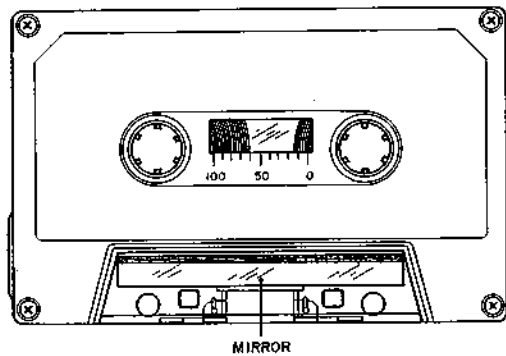


Fig. 21

1. TAPE GUIDE HEIGHT ADJUSTMENT

(Refer to Fig. 20 and Fig. 21)

- 1) When using an ordinary cassette, the tape guides and heads, etc. are not visible. As shown in Fig. 21, use a cassette tape from which part of the cassette case has been cut out and a mirror installed for easy visibility of the head area when making tape guide height adjustment.
- 2) At playback mode, using the erase head guide C shown in Fig. 20 as standard for height, adjust tape guide A and tape guide B height with tape guide height adjustment nuts so that the tape runs smoothly and does not touch on the tape guides.

2. HEIGHT ADJUSTMENT OF RECORDING/PLAYBACK COMBINATION HEAD

(Refer to Fig. 20)

- 1) Utilize the cassette tape used in Tape Guide Height Adjustment above, and playback the leader tape part of cassette tape.
- 2) As shown in Fig. 20, adjust head height with screws (A), (B), and (C) until the upper edge of the tape is the same height as the upper edge of the left channel REC/PB Comb. head core.

3. AZIMUTH ALIGNMENT ADJUSTMENT OF RECORDING/PLAYBACK COMBINATION HEAD (Refer to Fig. 20)

- 1) Playback a 10 kHz pre-recorded cassette azimuth alignment test tape and adjust screw (A) shown in Fig. 20 to obtain maximum output on both channels.
- 2) Invert cassette and confirm that the output level does not change from that obtained in Item 3-1) above. If the output level differs, adjust in the same way as in Item 3-1) above until both sides of the test tape display equal output.
- 3) Supply a 10 kHz signal from an audio frequency oscillator to the line inputs and record at -20 VU on a blank tape.
- 4) Set Monitor Switch to "TAPE" position and adjust screw (A) shown in Fig. 21 to obtain maximum output on both left and right channels.
- 5) The recording and playback heads are joined to form a single structure. Therefore, when making azimuth alignment adjustments, because both head cores (recording and playback) move, repeat adjustments outlined in Items 3-1) through 3-4) above until optimum azimuth alignment of the two head cores are obtained.

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.
4. When a mirror installed cassette test tape as shown in Fig. 21 is required, it can be ordered from AKAI Electric Co.

VII. AMPLIFIER ADJUSTMENT

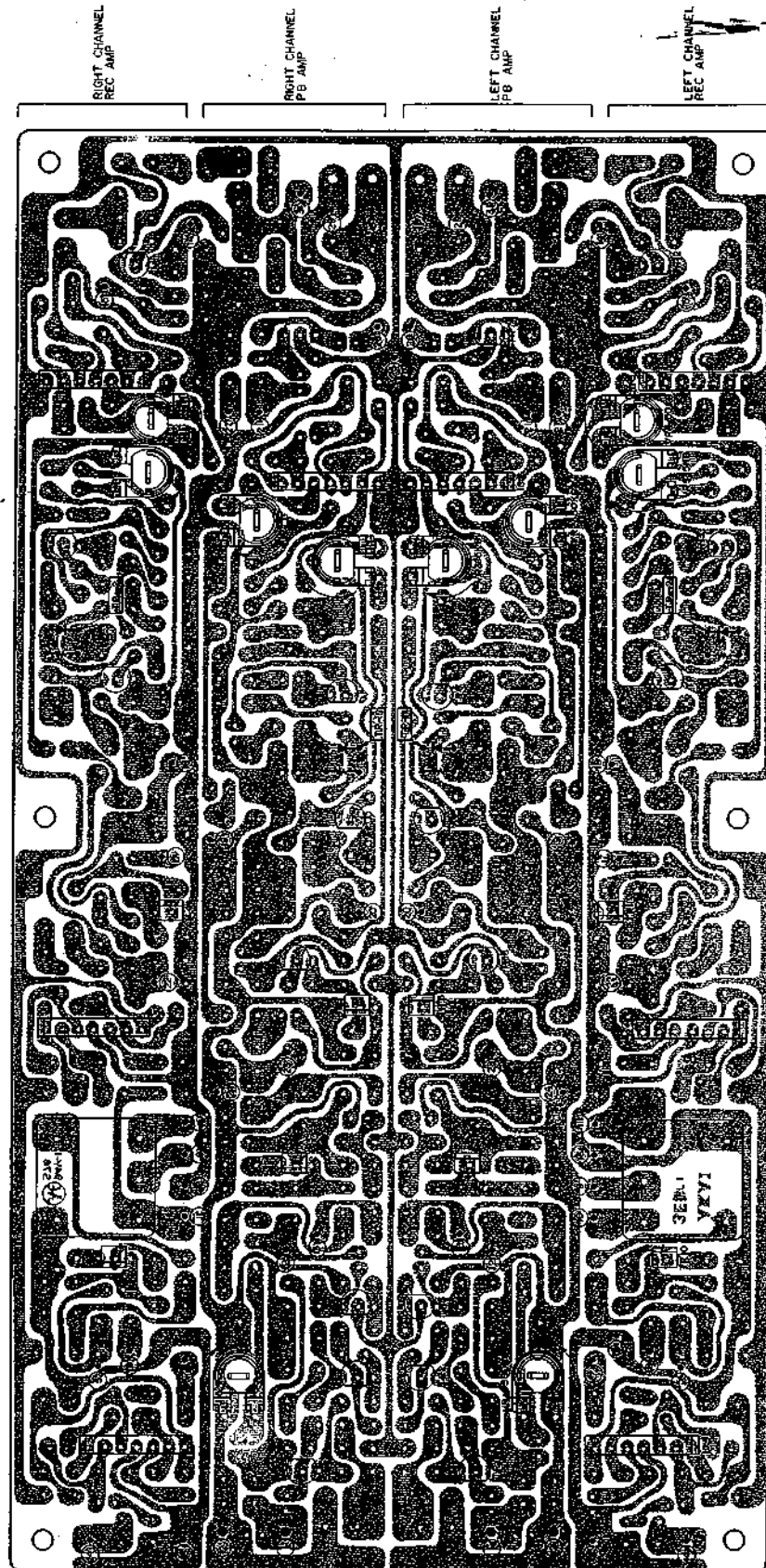


Fig. 22 Pre Amp P.C Board CA-5205

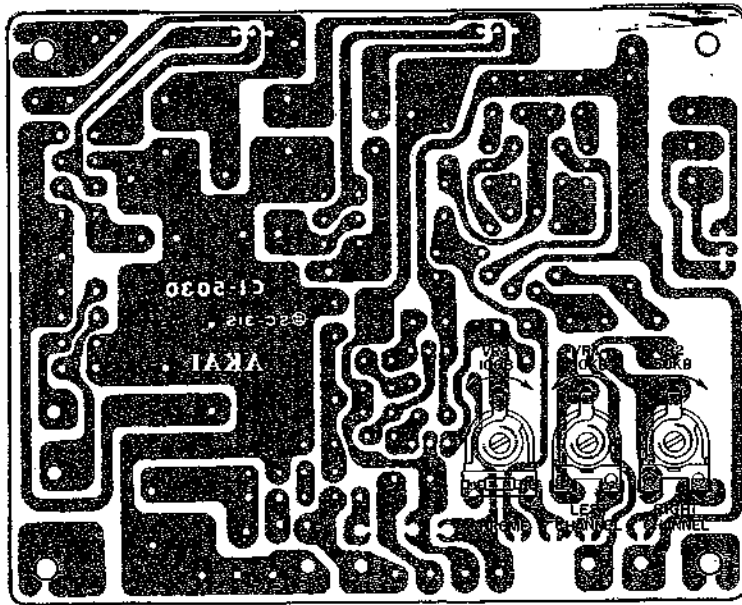


Fig. 23 Power Supply & OSC P.C Board CI-5030

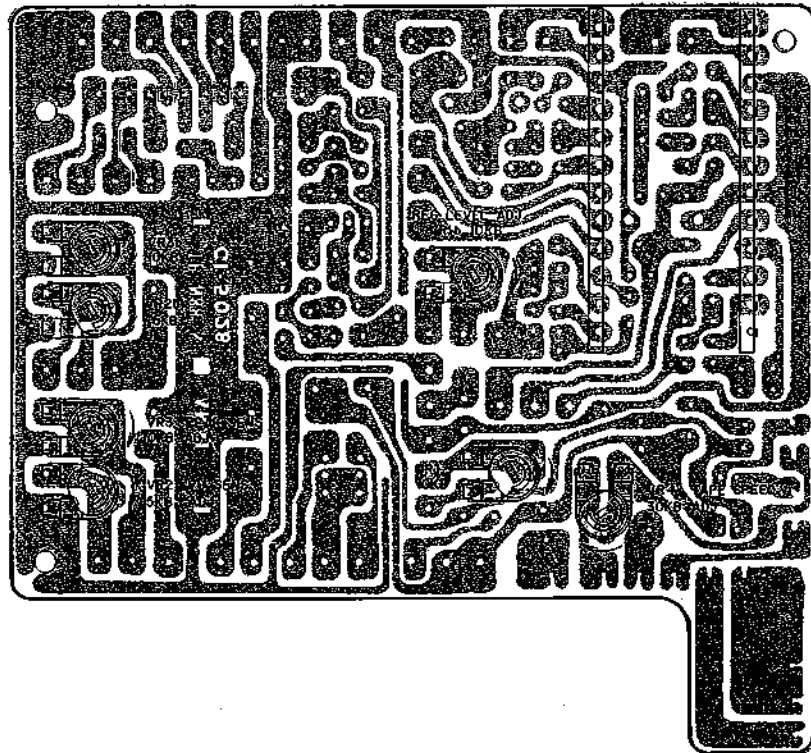


Fig. 24 Equalizer P.C Board CI-5028

I. RECORDING/PLAYBACK AMPLIFIER ADJUSTMENT (Refer to Fig. 22, 23 and 24 and Chart 1)

Step	Adjustment Item	Test Tape Supply Signal	Mode	Adjustment Point	Result	Remarks
1	Playback Level Adjustment	333 Hz 0 VU Test Tape	PLAY	VR1 500B (CA-5205)	0±0.5 dBm (0.775V)	Set Monitor Switch to "TAPE"
2	Recording Level Adjustment (low noise tape)	Low Noise Blank Tape 1,000 Hz 0 VU recording	REC	VR1 10 kB (left channel) VR1b 10 kB (right channel) (CI-5028)	0±0.5 dBm (0.775V)	Set Monitor Switch to "TAPE" Refer to Note -1)
3	Recording Level Adjustment (chrome tape)	Chrome Blank Tape 1,000 Hz 0 VU recording	REC	None	0±0.5 dBm	Set Monitor Switch to "TAPE" Refer to Note -2)
4	Frequency Response Adjustment (low noise tape)	Low Noise Blank Tape 1,000 Hz 10,000 Hz -20 VU recording	REC	VR1 50 kB (left channel) VR2 50 kB (right channel) (CI-5030)	1,000 Hz 10,000 Hz Flat response	Set Tape selector to "LOW NOISE"
5	Frequency Response Adjustment (chrome tape)	Chrome Blank Tape 1,000 Hz 10,000 Hz -20 VU recording	REC	VR3 100B (CI-5030)	1,000 Hz 10,000 Hz Flat response	Set Tape selector to "CHROME"
6	Recording Level Confirmation (low noise tape)	Low Noise Blank Tape 1,000 Hz 0 VU recording	REC	VR1, VR1b 10 kB (CI-5028)	0±0.5 dBm	Refer to Note -3)
7	VU Meter Sensitivity Adjustment	1,000 Hz	STOP	VR2, VR2b 5 kB (CI-5028)	0 VU	Set Meter selector to "VU METER" Refer to Note -4)
8	Peak Meter Indication Adjustment	1,000 Hz	STOP	VR3, VR3b 10 kB (CI-5028)	-8 VU	Set Meter selector to "PEAK METER" Refer to Note -4)

Chart 1

- NOTES: 1. Recording level adjustment volumes (REC CAL) VR5 and VR6 are not located on the Pre-Amp P.C Board as in the case of an ordinary tape deck, but are installed on the front panel. When adjusting VR1 and VR1b, set VR5 and VR6 to center position.
2. After low noise tape adjustments, confirm recording level only.
3. Following Step 4 frequency response adjustment, because the recording level may be slightly changed, confirm level and if necessary, carry out Step 2 Adjustment again.
4. Set Monitor Switch to "SOURCE" and supply a 1,000 Hz signal to line input to obtain a 0 dBm line output level.
5. Because each of these adjustments are vital to perfect Dolby N.R. circuit operation, be sure that they are carried out with as little error as possible.
6. Use the following cassette measuring tape:
 Low Noise Tape: Fuji C-60LN
 Chrome Tape: BASF #SM Chrome C-60

2. DOLBY NOISE REDUCTION CIRCUIT

ADJUSTMENT (Refer to Fig. 22)

- NOTES:
1. Because the establishment of the (5 kHz) adjustment signal and level etc. is vital to correct Dolby Noise Reduction circuit adjustment, use only calibrated measuring instruments.
 2. Level deviation must be within ± 0.5 dB.
 3. After Dolby Noise Reduction circuit adjustments have been made, do not change recording and playback levels.

3. RECORDING DOLBY NOISE REDUCTION AMPLIFIER ADJUSTMENT

(Refer to Fig. 22)

- 1) Set Monitor Switch to "SOURCE", and Tape Selector Switch to "LOW NOISE".
- 2) Ground Test Point TP2 and turn adjustment semi-fixed resistors VR4 (50 k Ω) and VR5 (5 k Ω) as far as they will go in the direction of the arrow mark.
- 3) With Line Recording Level Volume set to 12 o'clock position, supply a 5 kHz signal to the line input and obtain a -28.5 dBm line output level.
- 4) Connect a Voltmeter to the center terminal of EQ P.C Board Rec Level Volume VR1 (left channel) and VR1b (right channel), and adjust Rec Level Volume obtain a -30 dBm AC Voltmeter indication.
- 5) With the Dolby Noise Reduction Switch at ON, adjust semi-fixed resistor VR4 (50 k Ω) shown in Fig. 18 to obtain a -20 dBm level at center terminal of Rec Level Volume.
- 6) Disconnect Test Point TP2 from ground and adjust semi-fixed resistor VR5 (5 k Ω) shown in Fig. 22 to obtain a -22 dBm level at center terminal of Rec Level Volume.

4. PLAYBACK DOLBY NOISE REDUCTION AMPLIFIER ADJUSTMENT

(Refer to Fig. 22)

- 1) Set Monitor Switch to "TAPE" and Tape Selector Switch to LOW NOISE.
- 2) Ground Test Point TP1 and turn adjustment semi-fixed resistors VR2 (50 k Ω), and VR3 (5 k Ω) as far as they will go in the direction of the arrow mark.
- 3) Set deck to playback mode.
- 4) Supply a 5 kHz signal to terminal (13) shown in Fig. 18 and obtain a -20 dBm line output level.
- 5) Set the Dolby Noise Reduction Switch to ON and adjust semi-fixed resistor VR3 (5 k Ω) to obtain a -30.5 dBm line output level.
- 6) Disconnect Test Point TP1 from ground and adjust semi-fixed resistor VR3 (5 k Ω) to obtain a -28.5 dBm line output level.

Noise reduction circuit made under license from Dolby Laboratories Inc. The word 'DOLBY' and the Double-D symbol are trademarks of Dolby Laboratories Inc.

VIII. DC RESISTANCE OF VARIOUS COILS

Part	Designation	DC Resistance
Main Motor	SCM-700	Between YLW-BLU 210 ohms Between YLW-RED 197 ohms Between RED-BLU 190 ohms Pick-up coil 670 ohms
Play Solenoid	1660THT2	700 ohms $\pm 10\%$
Relay	MTS-2	1,000 ohms $\pm 10\%$
Relay	LC1-C-JT	1,140 ohms $\pm 10\%$
Headphone Output Transformer	N19-349S	Primary 160 ohms $\pm 15\%$ Secondary 0.64 ohms $\pm 15\%$
Oscillator Coil	OT-925	Between 1-3 0.3 ohms Between 4-6 1.5 ohms Between 7-9 6.1 ohms
Recording, Playback Combination Head	PR4-2	Recording 22 ohms $\pm 5\%$ Playback 250 ohms $\pm 5\%$
Erase Head	E4-165	2.5 ohms

Chart 2

IX. CLASSIFICATION OF VARIOUS P.C BOARDS

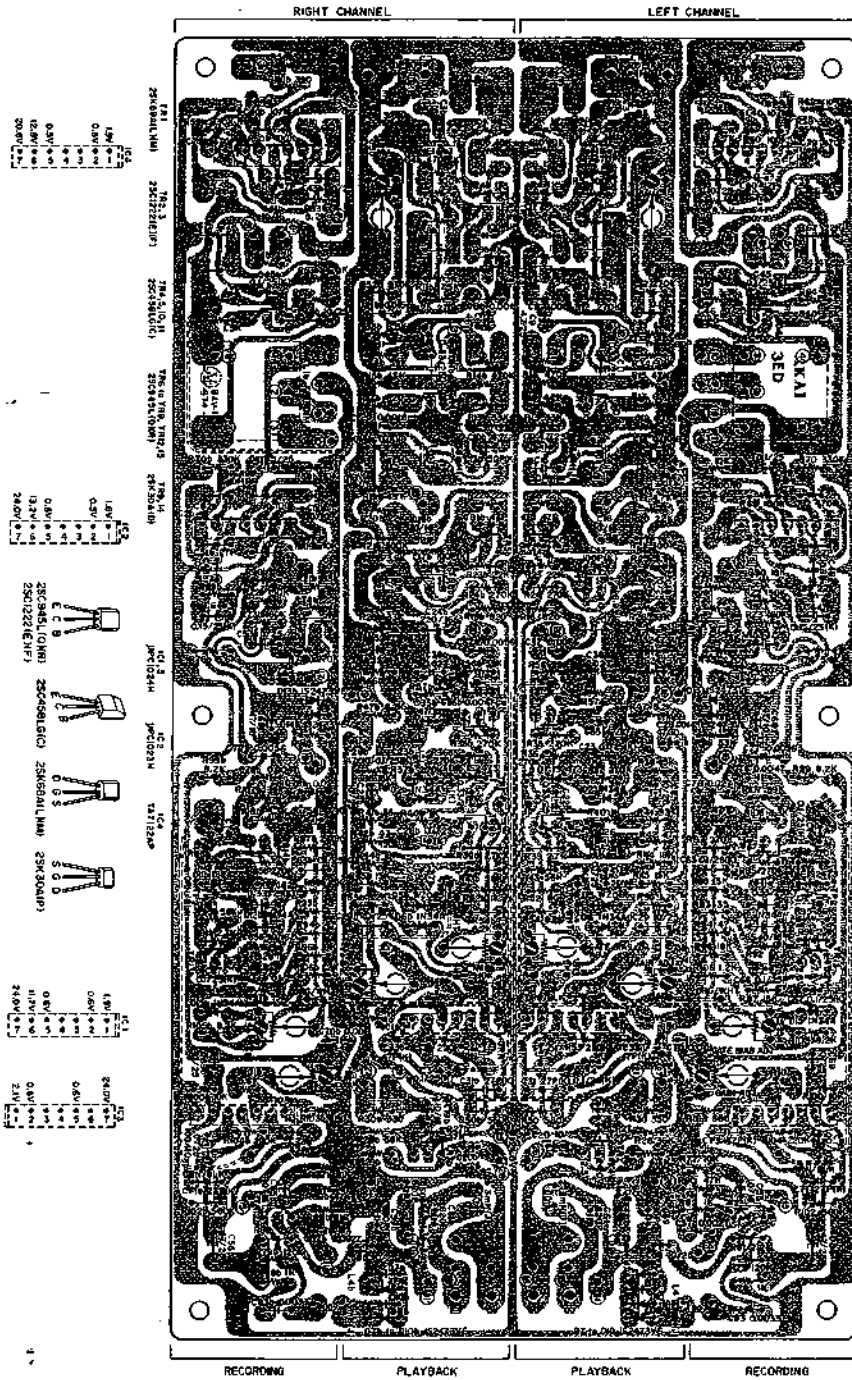
1. RELATION OF VARIOUS P.C BOARDS TITLE AND NUMBER

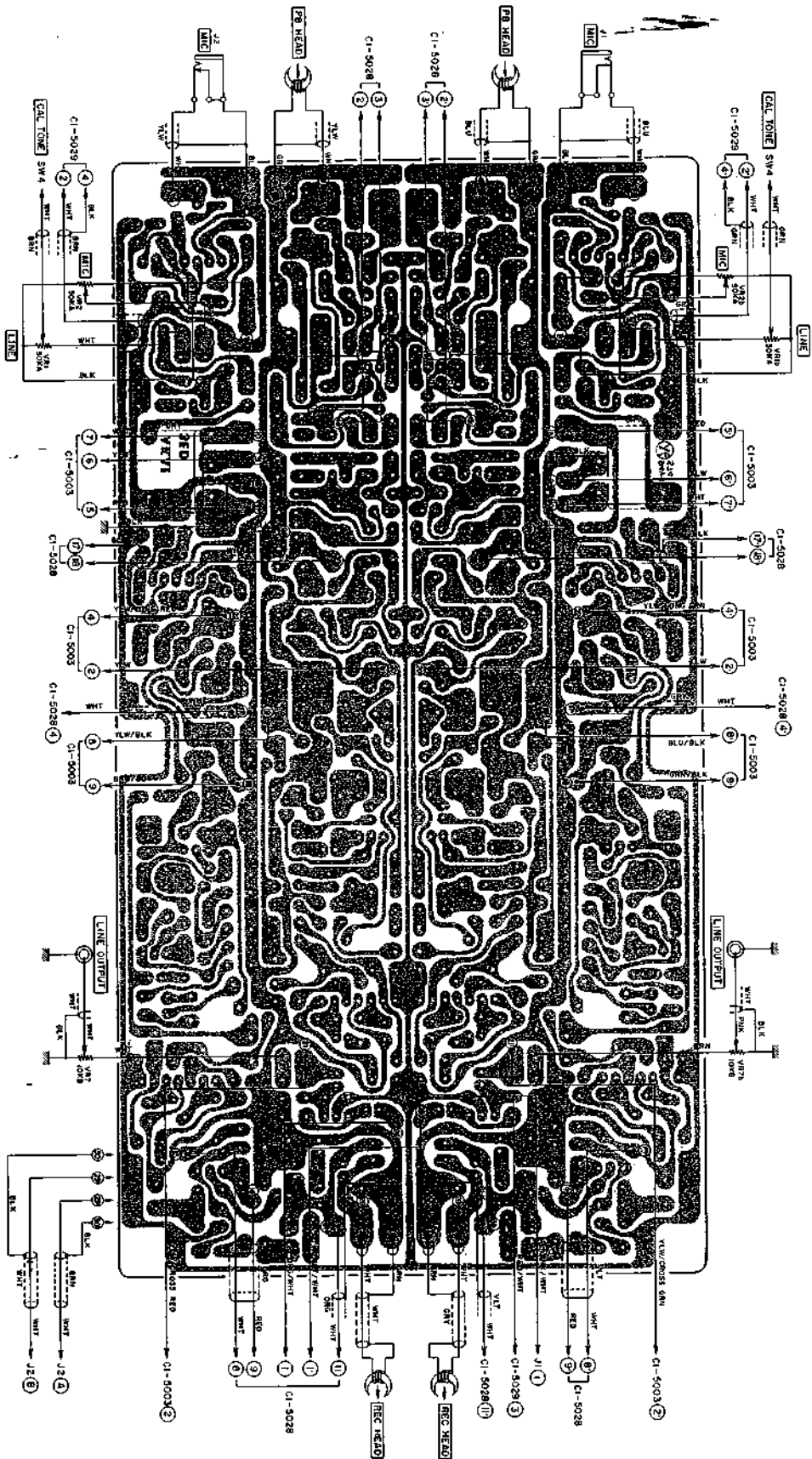
P.C Board Title	P.C Board Number
Pre Amp P.C Board	CA-5205
Power Supply & OSC P.C Board	CI-5030
Servo P.C Board	CB-2025
System Control P.C Board	CB-5004
Touch Switch P.C Board	CI-2012
Repeat Switch P.C Board	CI-5036
Stop Detection P.C Board	CB-2026
Noise Filter P.C Board	CB-2027
Switch P.C Board	CI-5029
Monitor Switch P.C Board	CI-5003
Equalizer P.C Board	CI-5028
Peak Switch P.C Board	CI-5005
Door Switch P.C Board	CI-5026
Door Switch P.C Board	CI-5045
Protection P.C Board	CB-5028
Lamp P.C Board	CA-2064

Chart 3

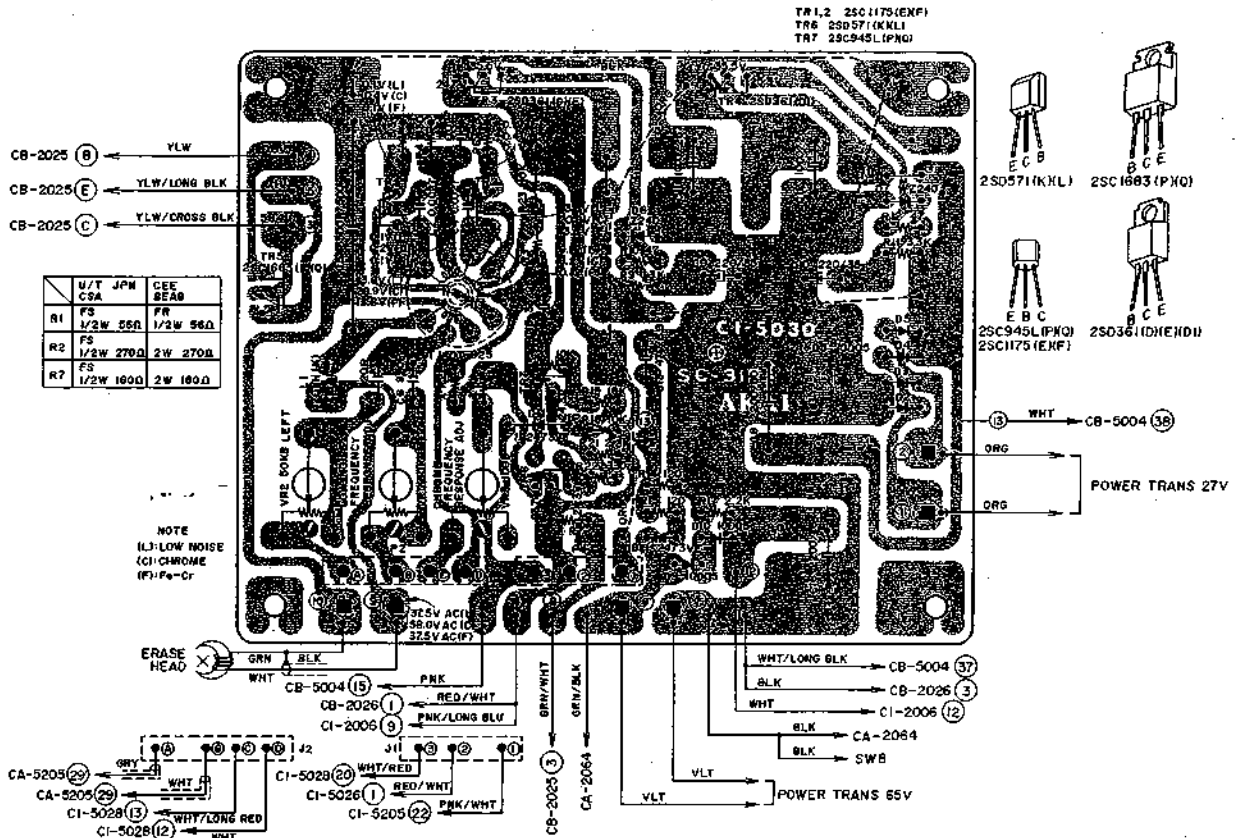
2. COMPOSITION OF VARIOUS P.C BOARDS

1) PRE AMP P.C BOARD CA-5025

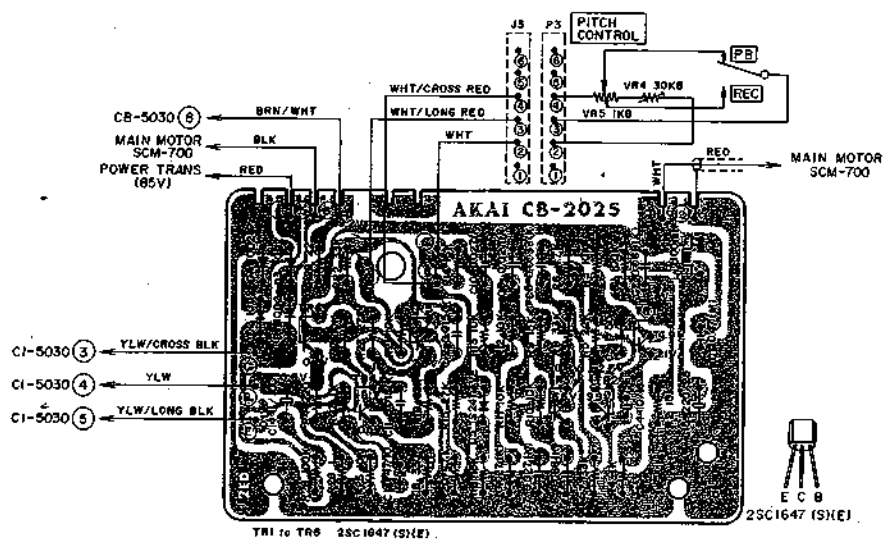




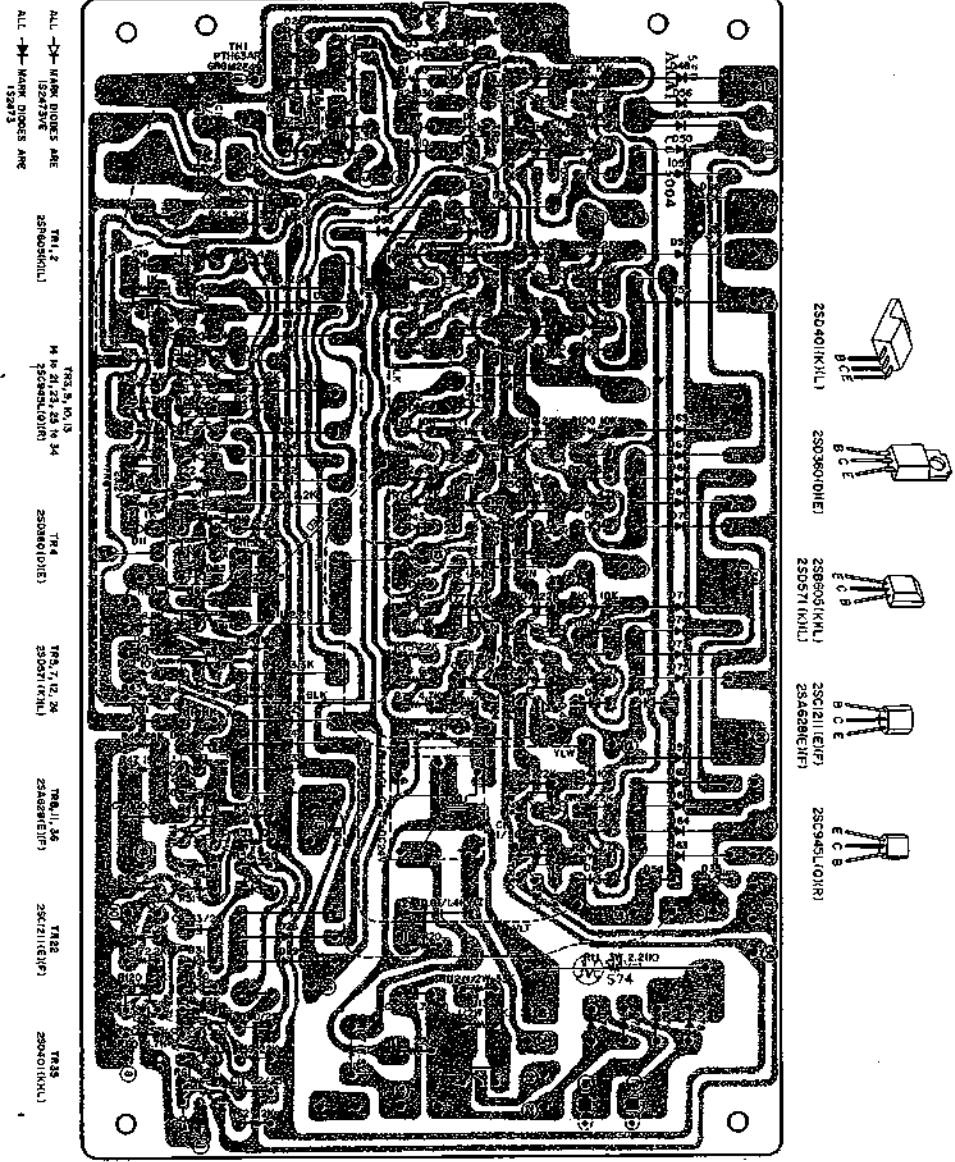
2) POWER SUPPLY & OSC P.C BOARD CI-5030



3) SERVO P.C BOARD CB-2025



4) SYSTEM CONTROL P.C BOARD CB-5004



ALL MARK DIODES ARE IS2073VE
 ALL MARK DIODES ARE 152473

TR1, 2 257005(K/L)

TR3, 9, 10, 13 M 10 21, 23, 25 to 34 250345(L/O/H/R)

TR4 250901(D/E)

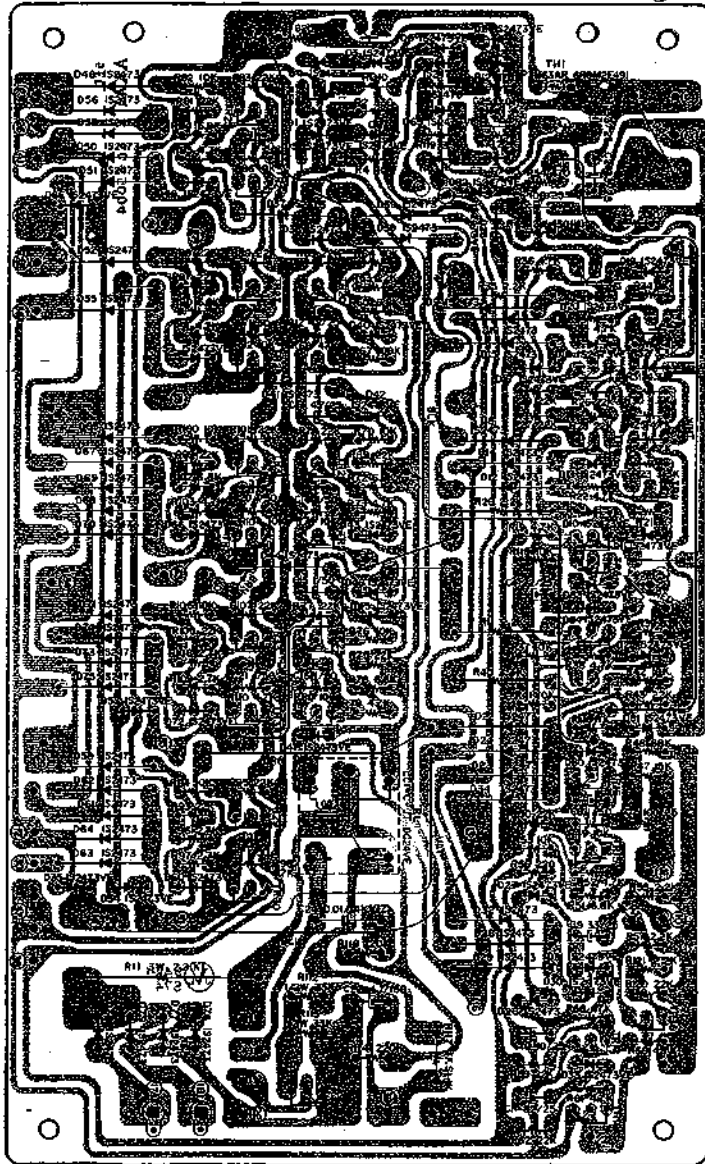
TR5, 7, 12, 26 250571(K/K/L)

TR6, 11, 36 254628(E/F)

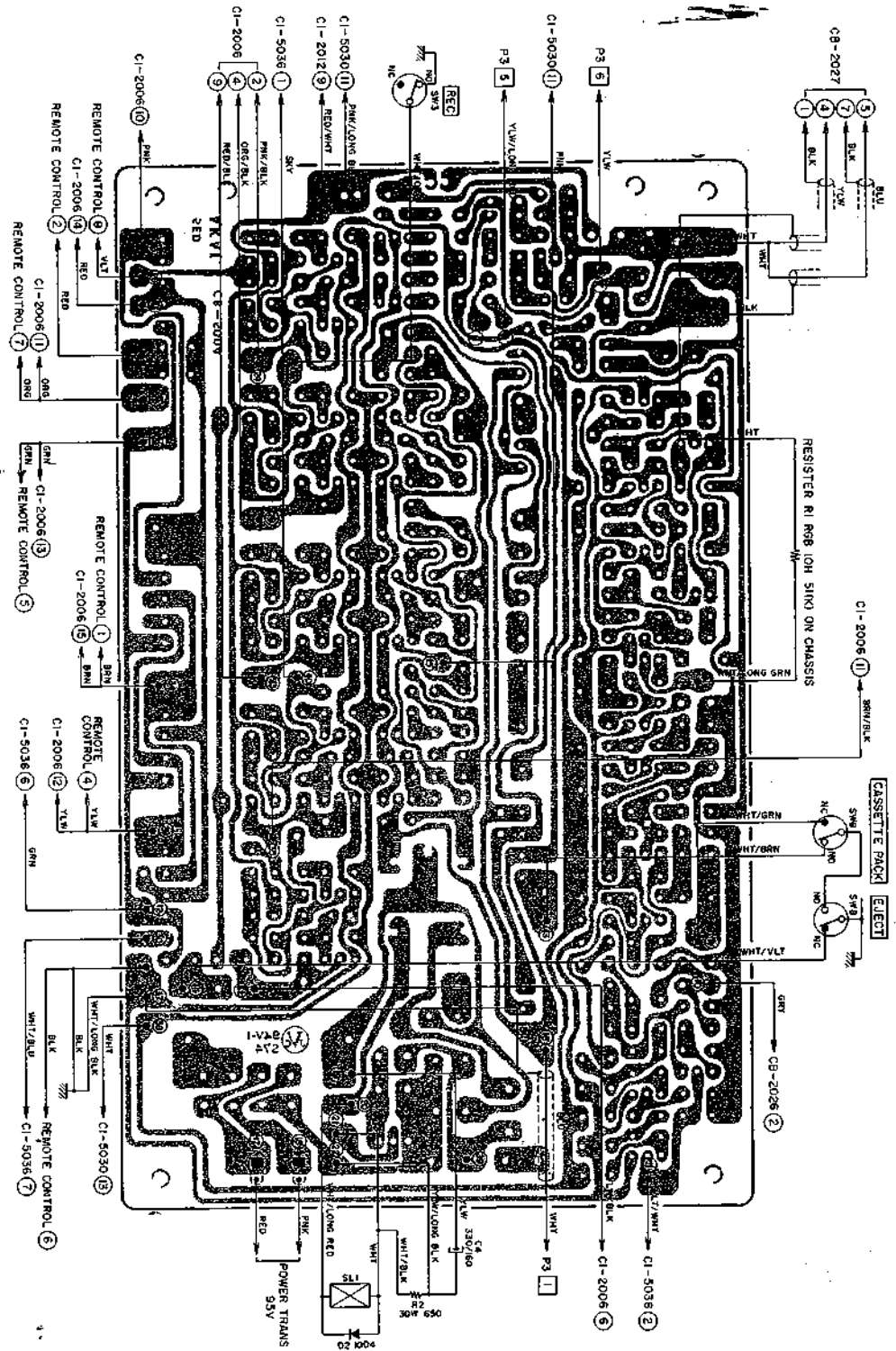
TR8 252711(E/F)

TR55 250401(K/K/L)

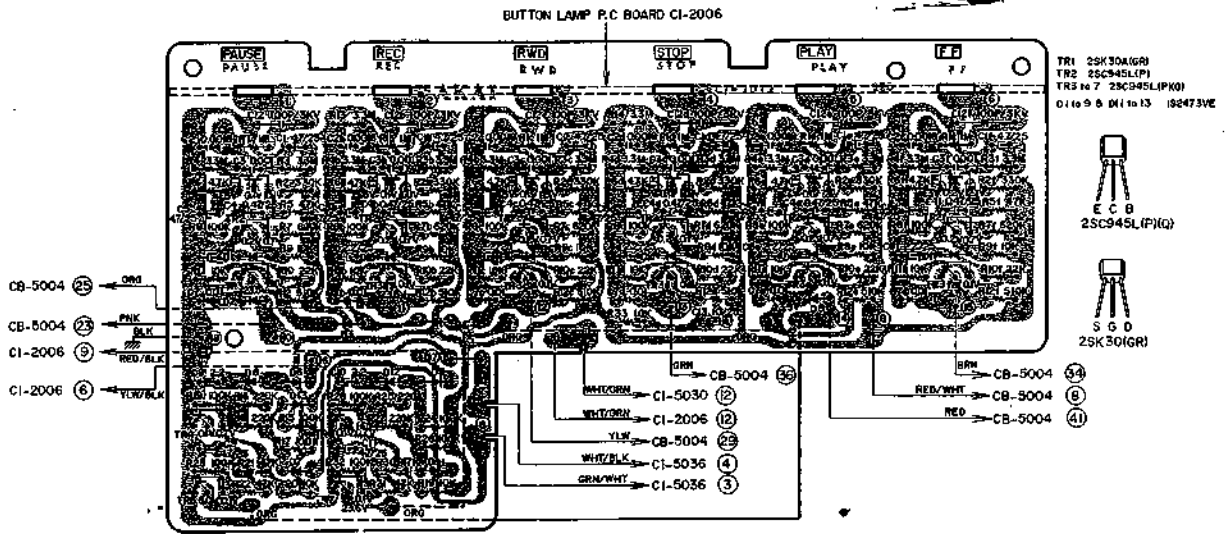
- 250401(K/K/L) B C E
- 250360(D/H/E) B C E
- 258605(K/K/L) 250571(K/K/L) E C B
- 2501211(E/F) 254628(E/F) B C E
- 250345(L/O/H/R) E C B



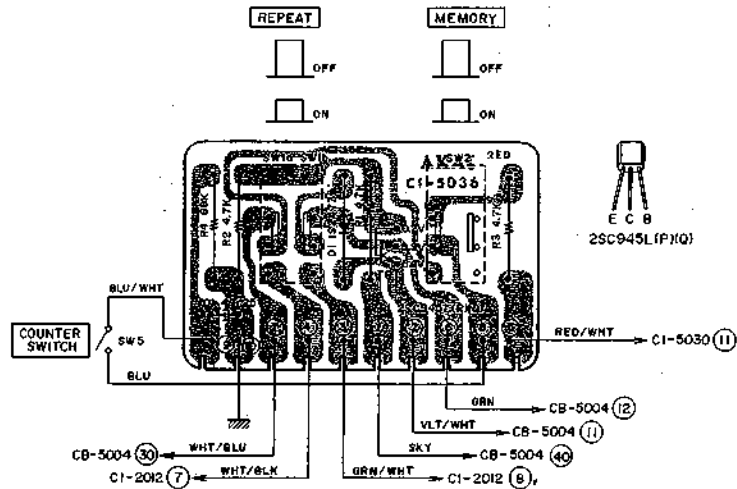
- 280401K(1) B C E
- 280501(1) B C E
- 280601(1) E C B
- 280701(1) B C E
- 280801(1) E C B



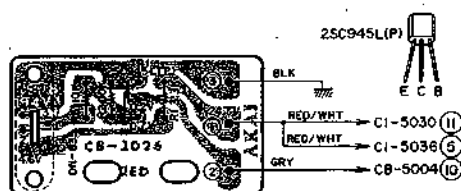
5) TOUCH SWITCH P.C BOARD CI-2012



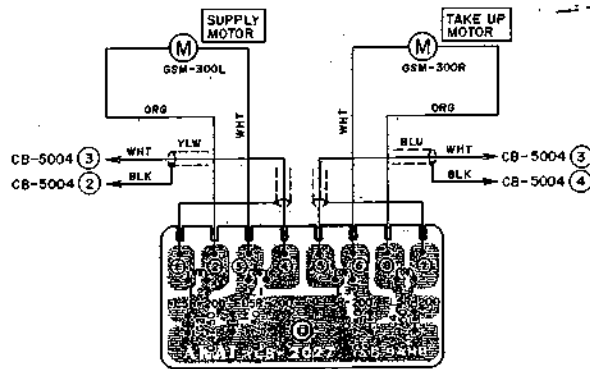
6) REPEAT SWITCH P.C BOARD CI-5036



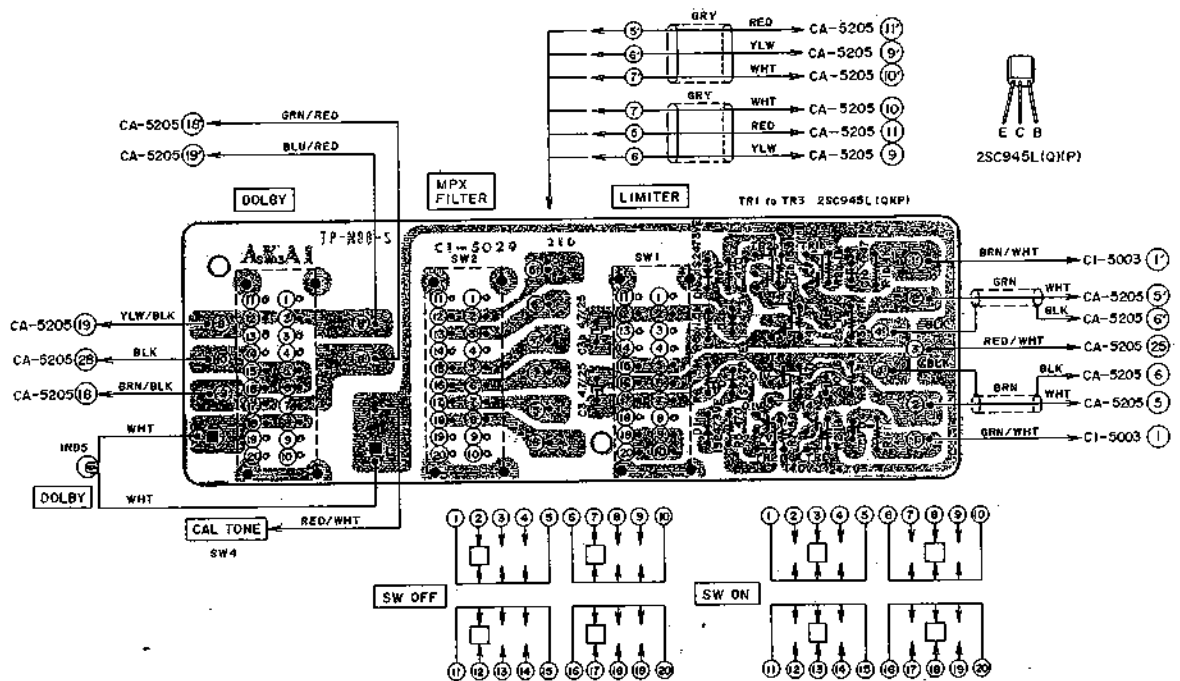
7) STOP DETECTION P.C BOARD CB-2026



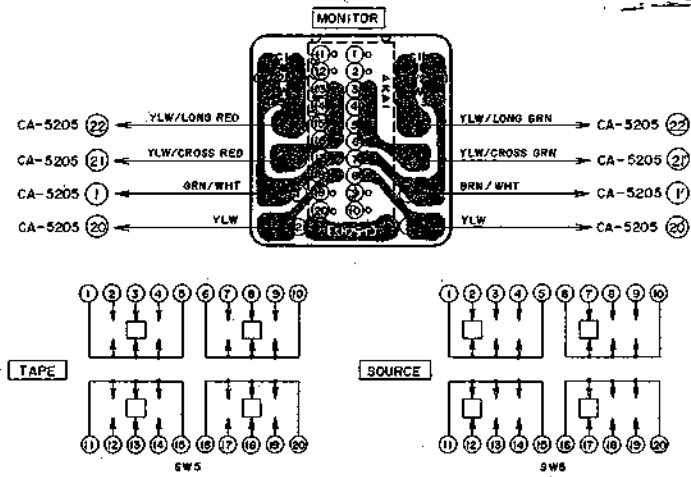
8) NOISE FILTER P.C BOARD CB-2027



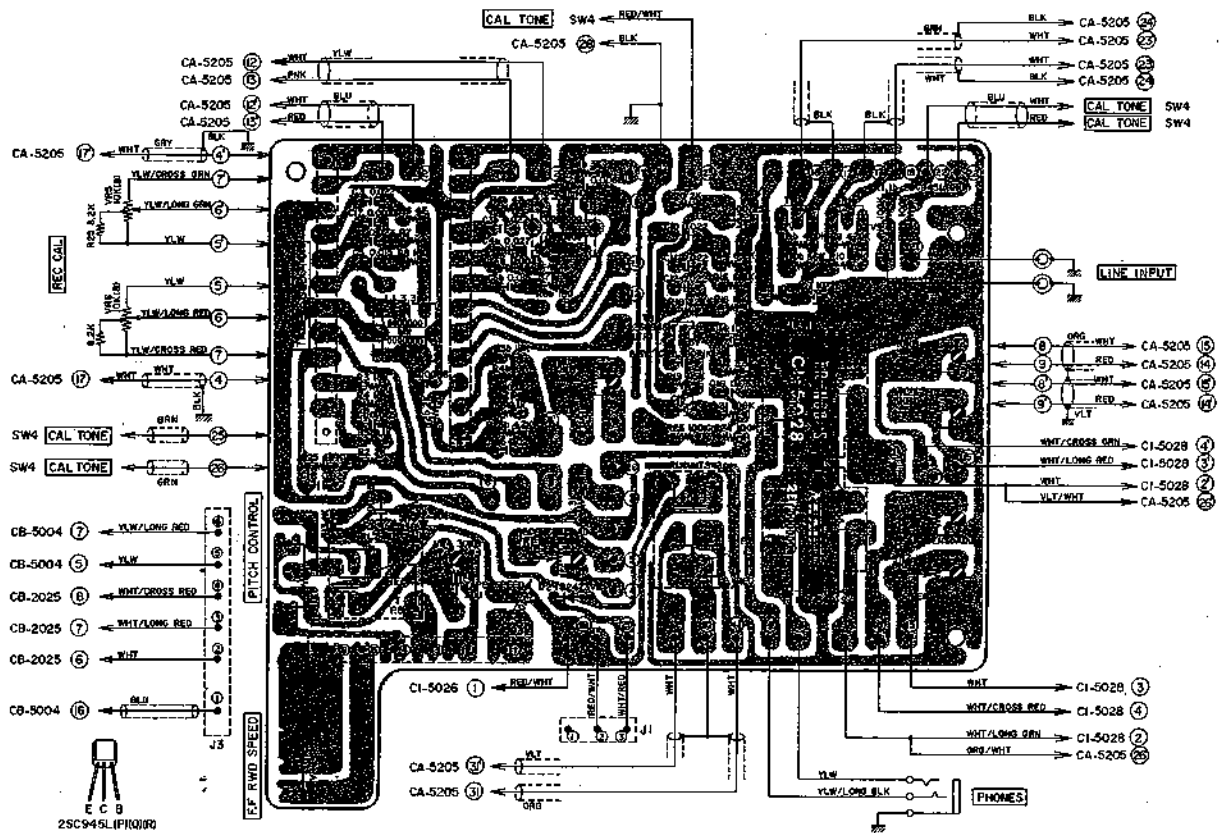
9) SWITCH P.C BOARD CI-5029



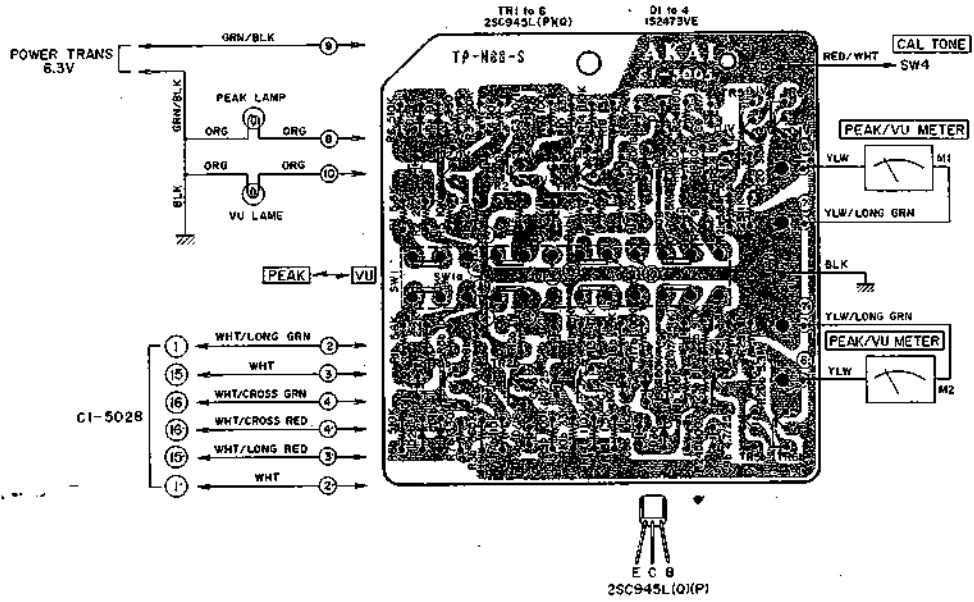
10) MONITOR SWITCH P.C BOARD CI-5003



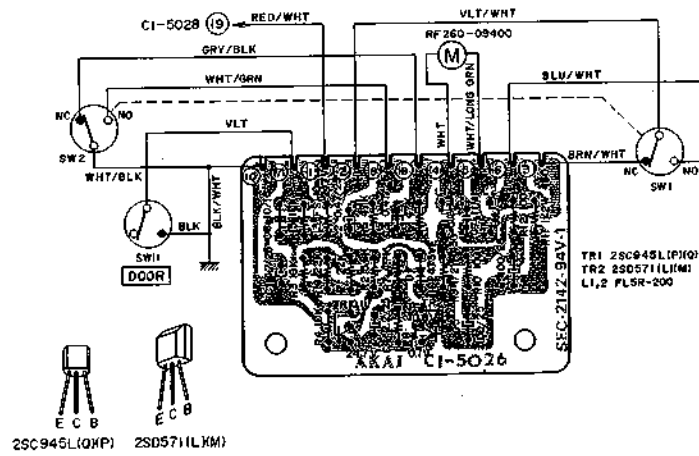
11) EQUALIZER P.C BOARD CI-5028



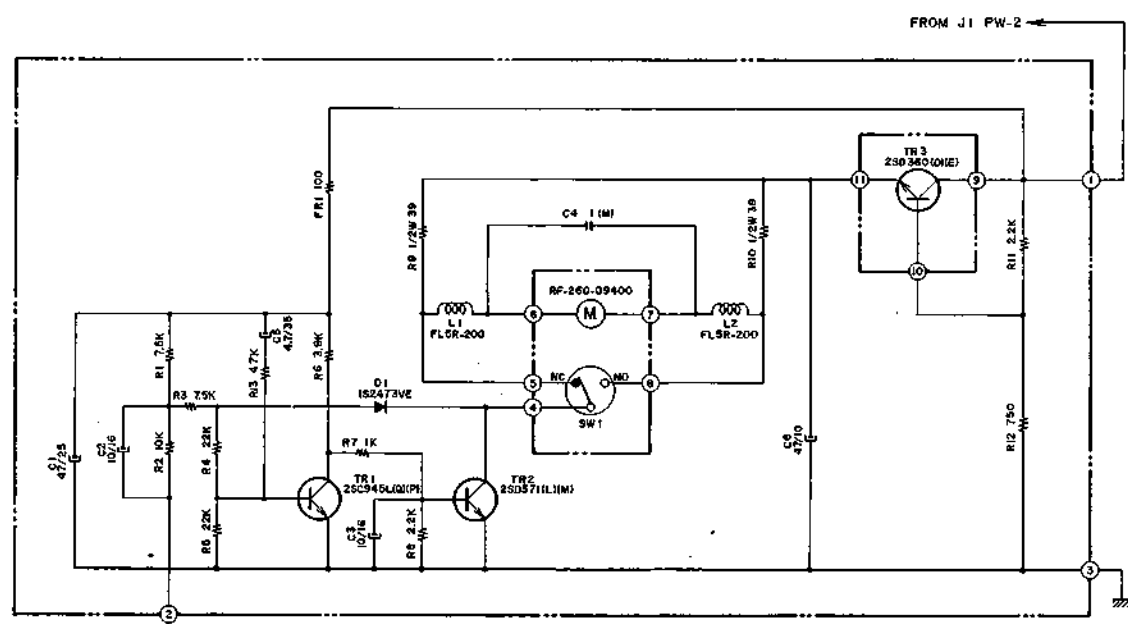
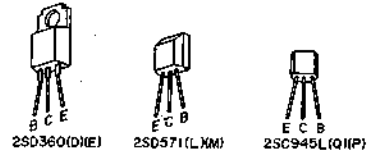
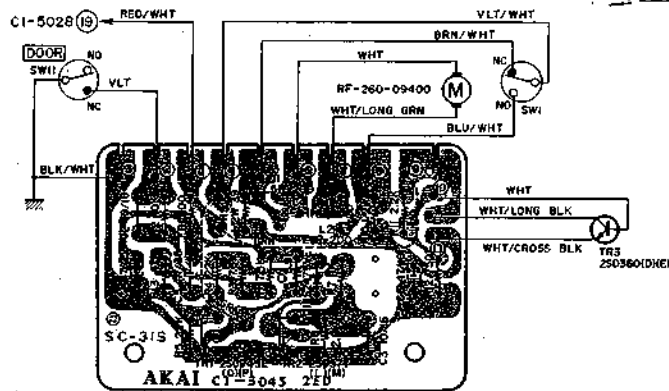
12) PEAK SWITCH P.C BOARD CI-5005



13) DOOR SWITCH P.C BOARD CI-5026

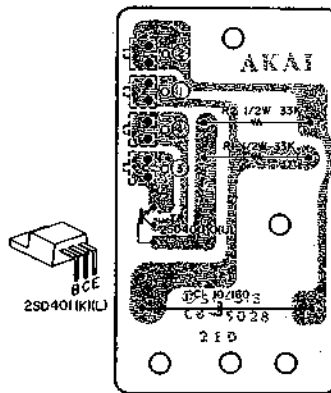


14) DOOR SWITCH P.C BOARD CI-5045

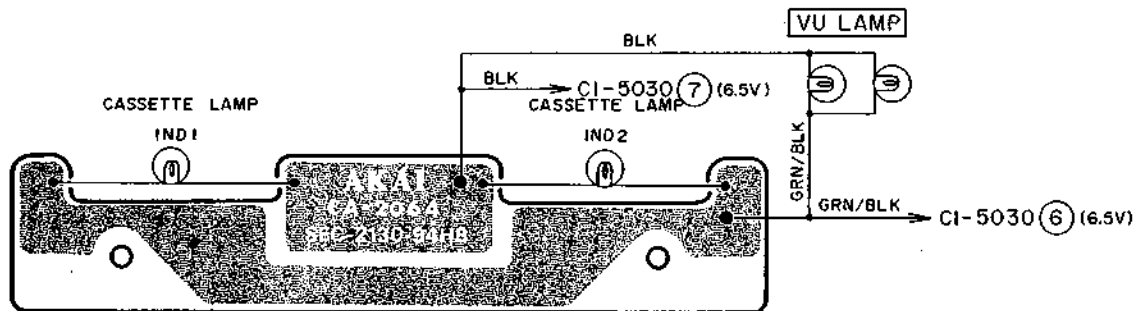


NOTE
 1. PLEASE REFER TO THIS SCHEMATIC
 DIAGRAM FROM SERIAL NUMBER 10736-0001
 2. UNLESS OTHERWISE SPECIFIED
 ALL RESISTOR IN 1/4W (J)
 ALL CAPACITORS IN 50WV (J)

15) PROTECTION P.C BOARD CB-5028



16) LAMP P.C BOARD CA-2064



MEMO

MEMO

SECTION 2

PARTS LIST

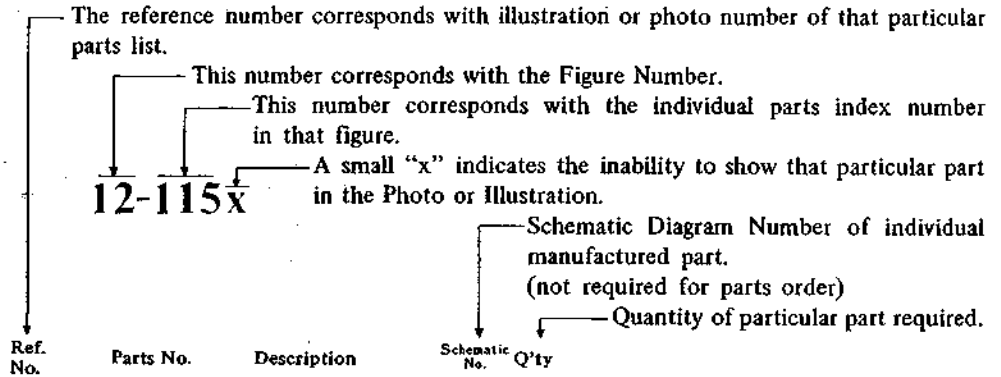
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(12) PEAK SW. P.C BOARD (CI-5005) BLOCK	54
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Resistor and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

HOW TO USE THIS PARTS LIST

1. This parts list is compiled by various individual blocks based on assembly process.
2. When ordering parts, please describe parts number, serial number, and model number in detail.
3. How to read List



Ref. No.	Parts No.	Description	Schematic No.	Q'ty
FLYWHEEL BLOCK #13				
12-115x	800425	Flywheel Block Assy. Comp.	RDG #13	1
12-116	244506	Flywheel Only	RD-233	1
12-117x	244754	Felt, Flywheel	RD-275	1
12-118	251324	Main Metal Case	RD-236	1
12-119	253080	Main Metal	RD-237	1

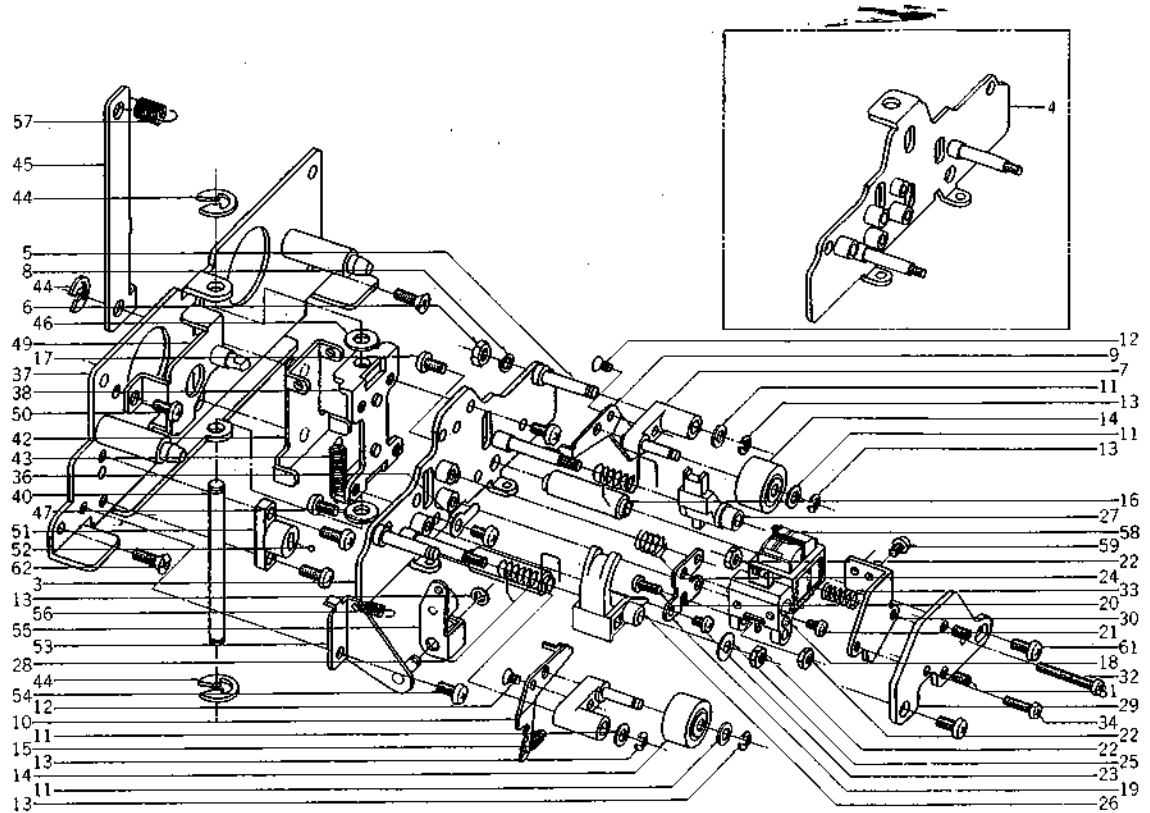
4. The symbol numbers shown on the P.C. Board list can be matched with the Composite Views of Components of the Schematic Diagram or Service Manual.
5. Please utilize separate "Common List for Service Parts" for Resistor Parts orders.
6. The shape of the parts and parts name, etc. can be confirmed by comparing them with the parts shown on the Electrical Parts Table of P.C. Board.
7. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List.
It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index. (meaning of ref. no. outlined in Item 3 above).
8. Utilize separate "Price List for Parts" to determine unit price. The most simple method of finding parts Price is to utilize the reference number.

RECOMMENDED SPARE PARTS LIST

Parts No.	Description	Note
BA647190	Lamp P.C Board Comp. CA-2064	
BA681287	Switch P.C Board Comp. CI-5029	
BA670230	Noise Filter P.C Board Comp. CB-2027	Same as GXC-740D, GXC-760D
BA681175	Servo P.C Board Comp. CI-2020	
BA681210	Syscon P.C Board Comp. CB-5004	
BA681276	Pre Amp P.C Board Comp. CA-5205	
BA681254	Touch Switch P.C Board Comp. CI-2012	BA681254
BA681221	Power Supply & OSC P.C Board Comp. CI-5030	
BA671207	Protection P.C Board Comp. CB-5028	CEE, CSA, JPN Models Same as GXC-760D
BA670195	Stop Detection P.C Board Comp. CB-2026	
BA681333	Monitor Switch P.C Board Comp. CI-5003	
BA681344	Peak Switch P.C Board Comp. CI-5005	
BA681930	Repeat Switch P.C Board Comp. CI-5036	
BA681311	Door Switch P.C Board Comp. CI-5026	
BA681295	EQ. P.C Board Comp. CI-5028	
BC691301	Case CI-6024	
BC694708	Dust Cover	
BD681118	Front Panel Block Comp. CI-9723	
BD681120	Lid Panel Block Comp.	
BF667618	Flywheel A CB-1018	
BF669071	Flywheel B CB-1018	
BH211105	Head Base Block Comp.	
BK681232	Touch Button Block	
BM681164	Main Motor SCM-700	
BM670140	Reel Motor GSM-300R	Right Reel Motor
BM670138	Reel Motor GSM-300L	Left Reel Motor
BM692550	Door Opening Motor RF-260-09400	
BR670173	Reel Table Block	
BT699287	Power Transformer CIT-1	Switchable model
BT694822	Power Transformer CIT-4	CEE model
BT694811	Power Transformer CIT-3	CSA model
BT694800	Power Transformer CIT-2	JPN model
BZ681186	Door Key Block	
BZ681952	Cassette Holder Block	
BZ681300	Door Open Block	
BZ681131	Selector Box Block	
BC412582	MP Capacitor 6 μ F 150WV AC	
EF563692	Fuse 1.5A 250V	
EF593706	Fuse 500 mA T	
EF623103	Fuse 1A T	
EF668610	Fuse 250V 1.2A	
EF590692	Fuse 1.2A 250V	
EL295312	Lamp 8V 0.2A	
EM692583	VU Meter KL-250L-8	
EP616500	Relay LC1-C-JT DC24V	
EP621808	Relay MTS-2	
EP537906	Solenoid Plunger 1660THT2	

Parts No.	Description	Note
ES477966	Micro Switch SS-5GL	
ES494188	Micro Switch SS-5GL-13	
ES691457	Micro Switch VU-SR	
ES691378	Push Switch UEG-42L	
ES469541	Push Switch TV-3 JB52	
ES499972	Push Switch JS-09	
ES691323	Tape Switch A5056BD-H12	
ES419286	Push Switch UEG-22DE	
ES557908	Single Push Switch IFS-8U-48	
ES691424	Lever Switch SLK04251	
ES691435	Rotary Switch SRE-273	
EV691391	Volume VM10E076 1 kB	
EV691380	Volume VM10R840 5 kB	
EV691402	Volume VM10E050 5 kB	
EV691468	Volume VJ10R670 50 kA	
EV691470	Co-axial 2-throw Volume GJ70R519	
EZ535432	Click Gear TW-5018	
HE636963	Erase Head E4-165	Same as GXC-325D, GXC-740D, GXC-760D
HP671174	REC, PB Combination Head PR4-2	Same as GXC-325D, GXC-740D, GXC-760D
MB669036	Capstan Belt CB-1034	
MB690390	Counter Belt CI-1014	
MC233021	Counter SMP-390-86	
MH691198	Damping Pin CI-6010	
MP612628	Pinch Roller	
MV522235	Steel Ball	
SK634410	Push Button Knob J	
SK631304	Push Button Knob I	
SK691312	Dolby Knob CI-6027	
SK691288	Selector Knob CI-6020	
SK691290	Adjustment Knob CI-6021	
SK694710	Knob 1 (Rec Level) CI-6022	
SK694721	Knob 2 (Output) CI-6023	
SK665223	Memory Cap A AA-5521	
TC691187	Cylinder CI-6009	
ZG535454	Click Gear TW-5020	
ZS691277	Panel Screw CI-6019	
ZW691266	Panel Washer CI-6018	

1. ILLUSTRATION OF HEAD BASE/SUB FRAME BLOCK

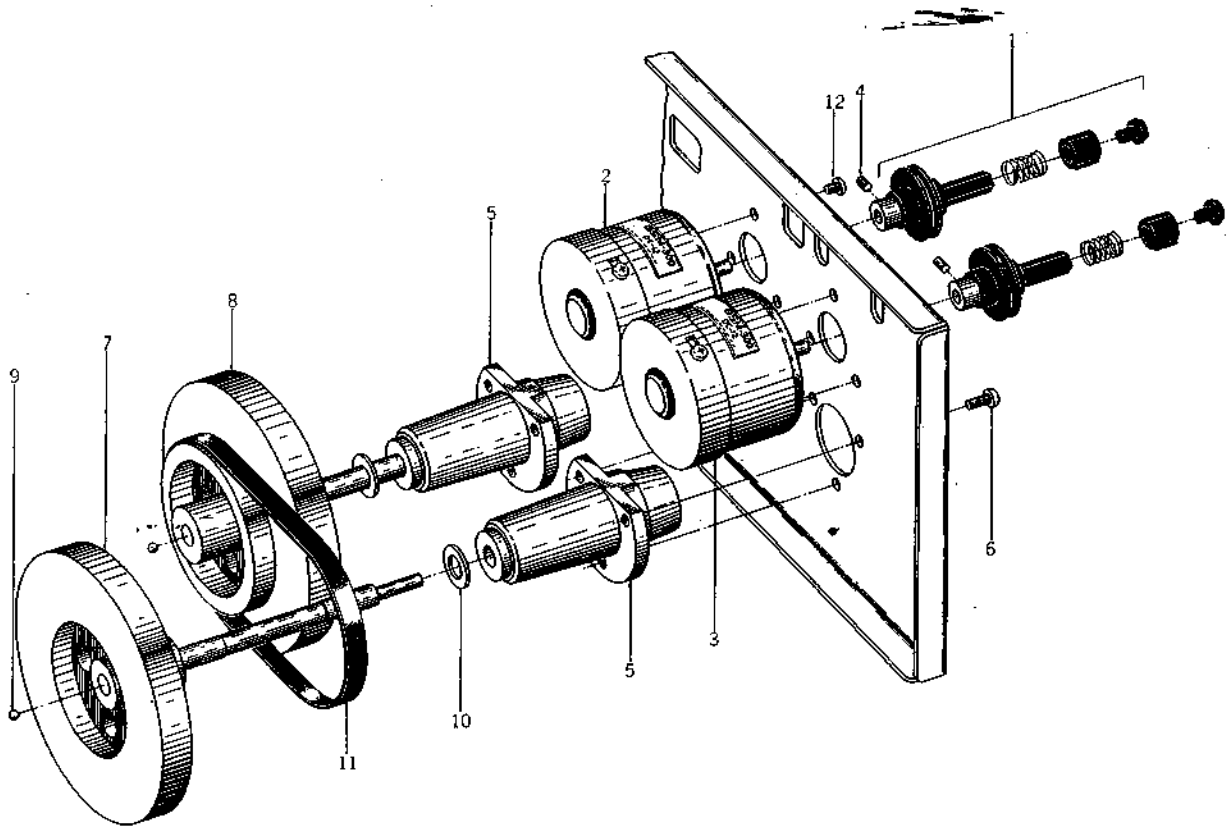


1) HEAD BASE/SUB FRAME BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty	Ref. No.	Parts No.	Description	Schematic No.	Q'ty
HEAD BASE BLOCK					SUB FRAME BLOCK				
1-1x	BH211105	Head Base Block Comp. (Old)	CA2,CB,CI	1	1-32	ZS303625	Screw, pan head 2.3x16		1
1-2x	BH272338	Head Base Block Comp. (New)	CB,CI	1	1-33	ZG465636	Angle Adjust Spring	CG-0029	1
1-3	HZ227158	Head Base D, w/base & stud	(Old) CA-0018	1	1-34	ZS391522	Screw, pan head 2.3x8		1
			(New) CA-0020	1	1-35x	ZW562476	Earth Lug M3 (Old)		1
1-4	HZ236834	Head Base F, w/base & stud	(New) CA-0017	1	1-36	ZW273881	Earth Lug M4 (New)		1
1-5	MS227136	PW Arm Shaft B	CA-0017	2	SUB FRAME BLOCK				
1-6	ZW273756	Nut M3, #1	CA-0004	2	1-37	TC668092	Sub Frame, w/pin	CB-0001	1
1-7	TC645063	PW Arm, w/shaft	CA-0004	2	1-38	TC667416	Head Table Guide (Old)	CB-0002	1
1-8	ZW273745	Spring Washer M3	CA-0006	2	1-39x	MS667473	Guide Shaft B (Old)	CB-0007	1
1-9	HZ641621	Arm A	CA-0006	1	1-40	MS644872	Guide Shaft (New)	CA-2012	1
1-10	TC641632	Arm B	CA-0006	1	1-41x	HZ667427	Head Base Slide (1) (Old)	CB-0003	1
1-11	ZW364364	Washer (Polyslider)		4	1-42	HZ260392	Head Base Slide (2) (New)	CB-0010	1
		D3.1x4.8x0.25t		4	1-43	ZG542215	Spring B	CZ-1011	2
1-12	ZS524812	Screw, countersunk head 2x4		2	1-44	ZW290283	'U' Ring 2.85M	5-1-1	4
1-13	ZW270088	'E' Ring 1.9M	5-1-9	5	1-45	TC667451	Play Lever Joint	CB-0006	1
1-14	MP612628	Pinch Roller (2x)	CW-0010	2	1-46	ZW450753	Washer (Nylon) D4.2x9x1t		1
1-15	ZG644411	PW Arm Spring (Old)	CA-0009	2	1-47	ZW222388	Washer (Rubber)	24X-739	1
1-16	HZ644400	Head Hanger Post	CA-0007	2	1-48x	ZWS62476	Earth Lug M3		1
1-17	ZS379405	Screw, binding head 3x6		4	1-49	TC667438	Reference Table, w/pin	CB-0004	1
1-18	HE636963	ERASE HEAD E4-165	CW,CA2,CI,CB 1		1-50	ZS422076	Screw, pan head 3x5	CA-2013	4
1-19	HZ227103	Erase Head Plate B	CA-0213	1	1-51	MS645153	Ball Guide	CA-2013	1
1-20	ZS464692	Screw, binding head 2.3x6		1	1-52	MV522235	Steel Ball 3/32 inch		1
1-21	ZS477876	Screw, pan head 2x3		2	1-53	MZ642104	Arm Shaft Bracket, w/arm	shaft CA-2016	1
1-22	ZW485728	Nut M2.3		4	1-54	ZS417216	Screw, pan head 3x4		1
1-23	ZS608106	Screw, pan head 2x6		1	1-55	TC642115	Pressure Roller Arm,		1
1-24	ZG227114	EH Adjust Spring	CA-0214	1			w/roller & pin	CA-2018	1
1-25	ZW273666	Spring Washer M2.3		1	1-56	ZG569384	Selector Spring	CP-1166	1
1-26	MS659913	Tape Guide B	CA-0208	1	1-57	ZG386335	Stop Lever Spring	CS-3011	1
1-27	MS659902	Tape Guide	CA-0207	1	1-58	HP671174	REC/PB HEAD PR4-2	CW1,CA2,CB,CI	1
1-28	ZG659880	Tape Guide Spring	CA-0205	2	1-59	ZS461395	Screw, round head 2x3		2
1-29	HZ669892	Head Hanger B	CA-0201	1	1-60x	EA669510	PR4-1 Terminal P.C Board	CW-0045	1
1-30	HZ669903	Head Mt. Parts	CA-0203	1	1-61	ZS379350	Screw, pan head 3x6		4
1-31	ZS356804	Set Screw, hexagon socket		2	1-62	ZS559056	Screw, countersunk head 3x6		4
		3x4 (CUP/P.)		2					

When ordering parts, Please describe Parts Number, Serial Number, and Model Number in detail.

2. ILLUSTRATION OF REEL MOTOR/FLYWHEEL BLOCK

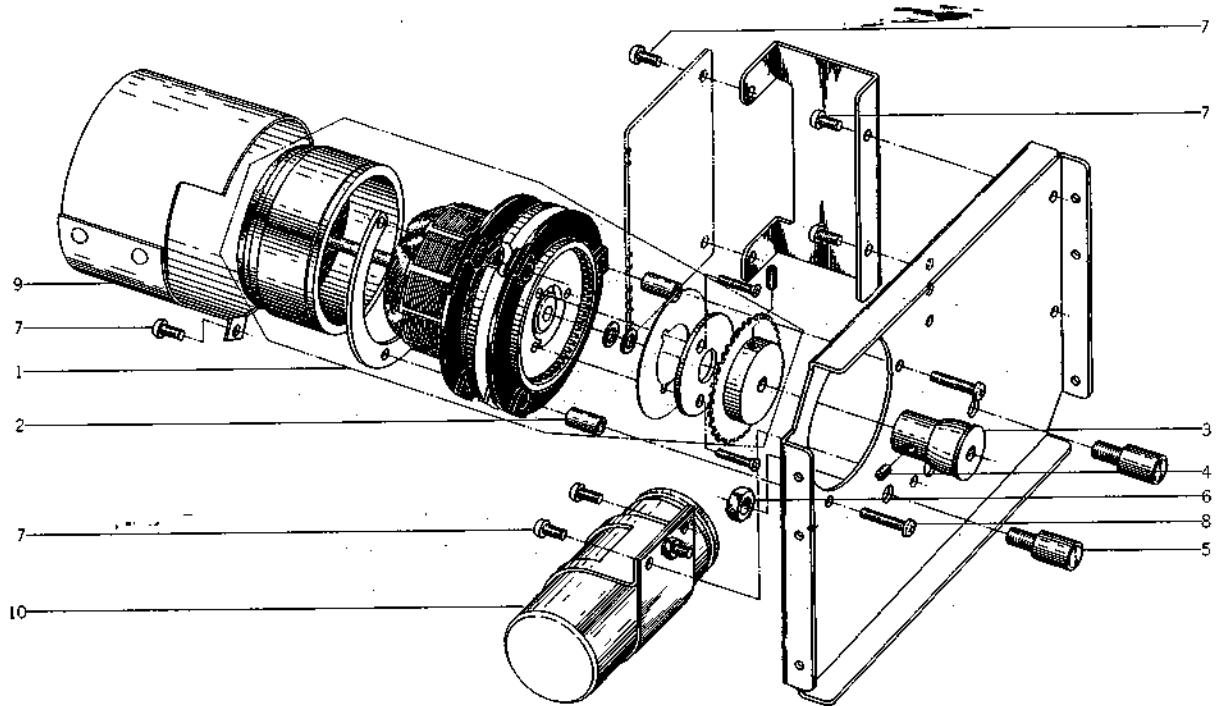


2) REEL MOTOR/FLYWHEEL BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Qty
2-1	BR670173	Reel Table Block Comp.	CB,CI	2
2-2	BM670138	Motor Block Comp. (GSM-300L)	CB,CI	1
2-3	BM670140	Motor Block Comp. (GSM-300R)	CB,CI	1
2-4	ZS499454	Set Screw, hexagon socket 2.6x3 (CUP/P.)		2
2-5	TC667620	Main Case	CB-1020	2
2-6	ZS379350	Screw, pan head 3x6		6
2-7	BF667618	Flywheel A, w/capstan shaft	CB-1018	1
2-8	BF668790	Flywheel B, w/capstan shaft	CB-1018	1
2-9	MV666887	Steel Ball D2.5		2
2-10	ZW597543	Thrust Washer A (Nylon) 1t	KJ-7009	2
2-11	MB669036	Capstan Belt	CB-1034	1
2-12	ZS432674	Screw, pan head 3x3		6

When ordering parts, Please describe Parts Number, Serial Number, and Model Number in detail.

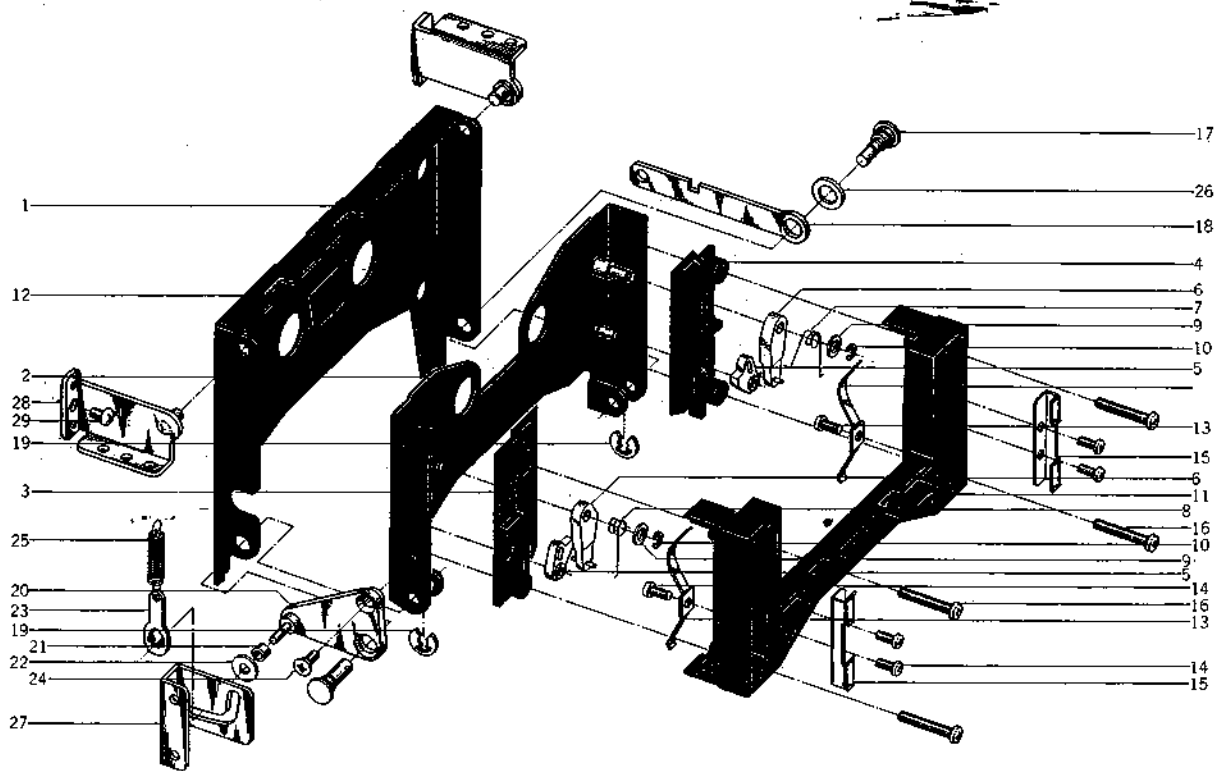
3. ILLUSTRATION OF MOTOR BLOCK



3) MOTOR BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
3-1	BM661241	Motor (SCM-700) Block		
		Comp.	CA2,CB,C1	1
3-2	MZ659981	Stop Tube	CA-2205	3
3-3	MR668068	Motor Pulley	CB-7003	1
3-4	ZS356804	Set Screw, hexagon socket 3x4 (CUP/P.)		2
3-5	MZ668057	Capstan Support	CB-7002	2
3-6	ZW668452	Metal Nut	7-1-64	2
3-7	ZS325495	Tapping Screw #2 3x6 (BR)		10
3-8	ZS422965	Screw, pan head 3x15		3
3-9	MZ668968	Motor Shield	CB-7034	1
3-10	EC412582	MP/C. 6 μ F 150WV AC (Lug Type UNI/D.)	24-9-55	1

4. ILLUSTRATION OF CASSETTE HOLDER BLOCK

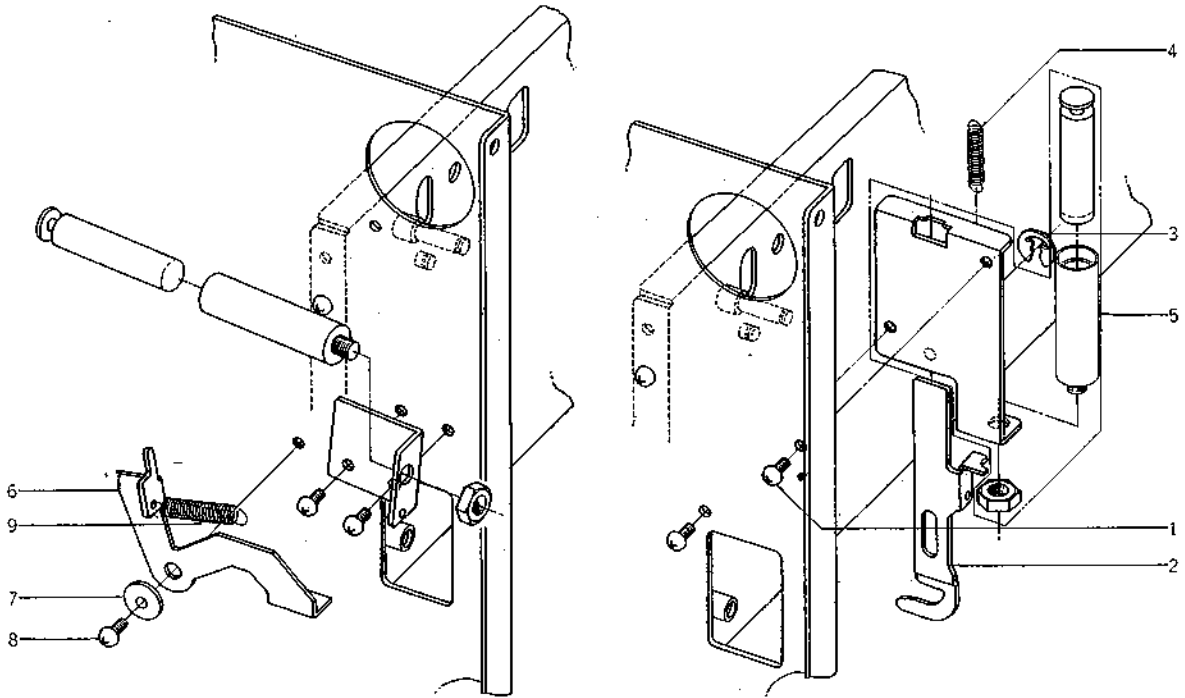


4) CASSETTE HOLDER BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
4-1	TC646931	Trap	CA-2020	1
4-2	TC646920	Cassette Rack, w/detector lever pin A.	CA-2023	1
4-3	MS595563	Cassette Guide L	CH-2007	1
4-4	MS595552	Cassette Guide R	CH-2006	1
4-5	ML595574	Detector Lever A	CH-2008	2
4-6	ML595585	Cassette Lever B	CH-2009	2
4-7	ZG595618	Spring A	CH-2004	1
4-8	ZG595620	Spring B	CH-2005	1
4-9	ZW592391	Washer (PBP) D3.3x6x0.3t		2
4-10	ZW270088	'E' Ring 1.9M	6-1-9	2
4-11	TC647065	Cassette Case	CA-2024	1
4-12	TC645186	Reflector	CA-2071	1
4-13	ZG207257	Sheet Spring B	CI-2019	2
4-14	ZS669104	Tapping Screw #2 2.3x6 pan head		6
4-15	TC642148	Lid Chuck	CA-2026	2
4-16	ZS592402	Screw, pan head 3x18		4
4-17	MH644916	Hinge Pin	CA-2028	2
4-18	TC666156	Band Plate B	CB-2024	1
4-19	ZW290283	'U' Ring 2.85M	6-1-1	2
4-20	ML699412	Eject Guide Arm A. w/guide pin	CA-2027	1
4-21	MR203804	Roller	CB-1056	1
4-22	ZW259503	Washer (Nylon) D3.1x8x0.5t		1
4-23	TC203815	Spring Hook	CB-1057	1
4-24	ZS414033	Screw, countersunk head 3x8		1
4-25	ZG227452	Spring D	900-118	1
4-26	ZW322110	Washer (Nylon) D6.1x10x1t		1
4-27	MS642374	Eject Guide	CA-2066	1
4-28	TC642071	Pin Stand	CA-1099	2
4-29	ZS325495	Tapping Screw #2 3x6 (BR)		2

When ordering parts, Please describe Parts Number, Serial Number, and Model Number in detail.

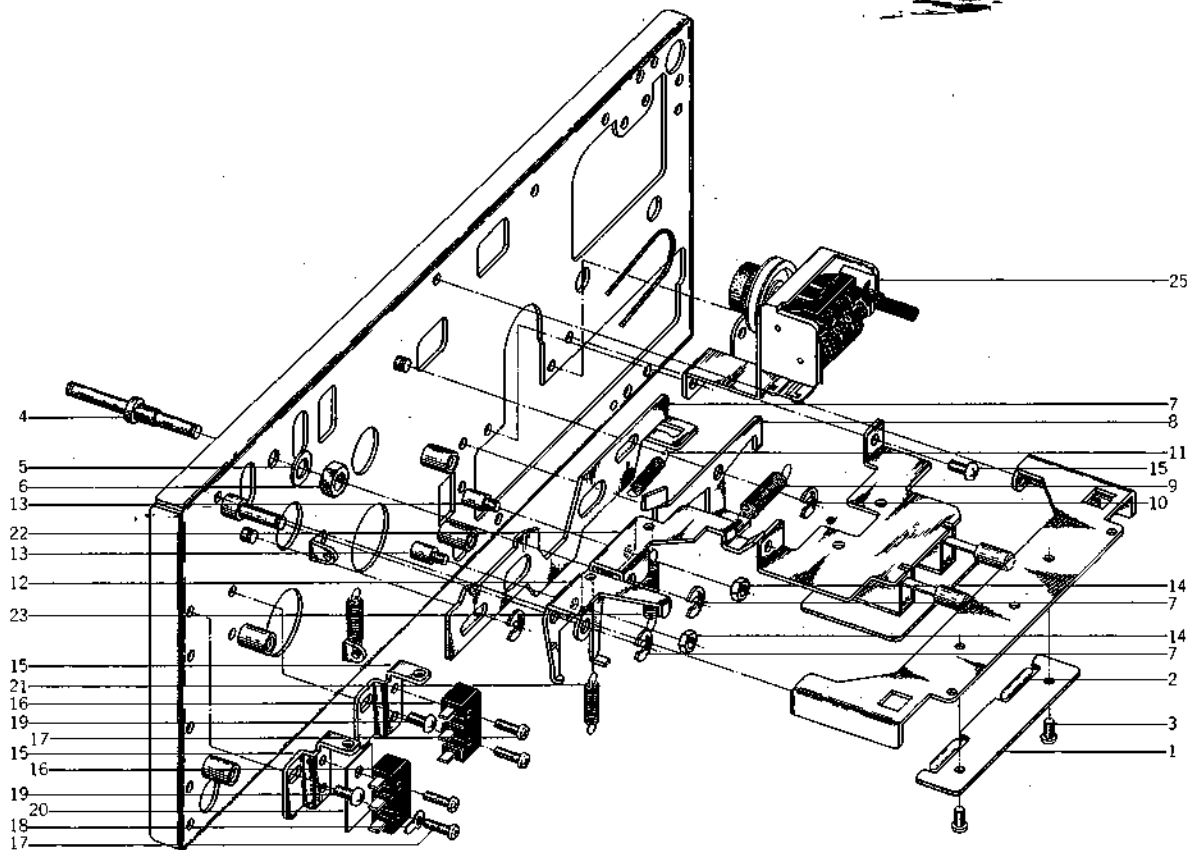
5. ILLUSTRATION OF DAMPER BLOCK



5) DAMPER BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
5-1	ZS379350	Screw, pan head 3x6		2
5-2	ML203861	Slide Lever	CB-1054	1
5-3	ZW290283	'U' Ring 2.85M	6-1-1	1
5-4	ZG366761	Spring, Slide D	RCC-1209	1
5-5	BZ283847	Cylinder Comp.		1
5-6	TC691200	Damper Connecting plate		
		(Old)	CI-6011	1
5-7	ZW542158	Decorative Washer B (Old)	CZ-1005	1
5-8	ZS325495	Tapping Screw #2 3x6 (BR)		
		(Old)		1
5-9	ZG232121	Tension Lever Spring	μB-143	1

6. ILLUSTRATION OF MECHA FRAME BLOCK (1)

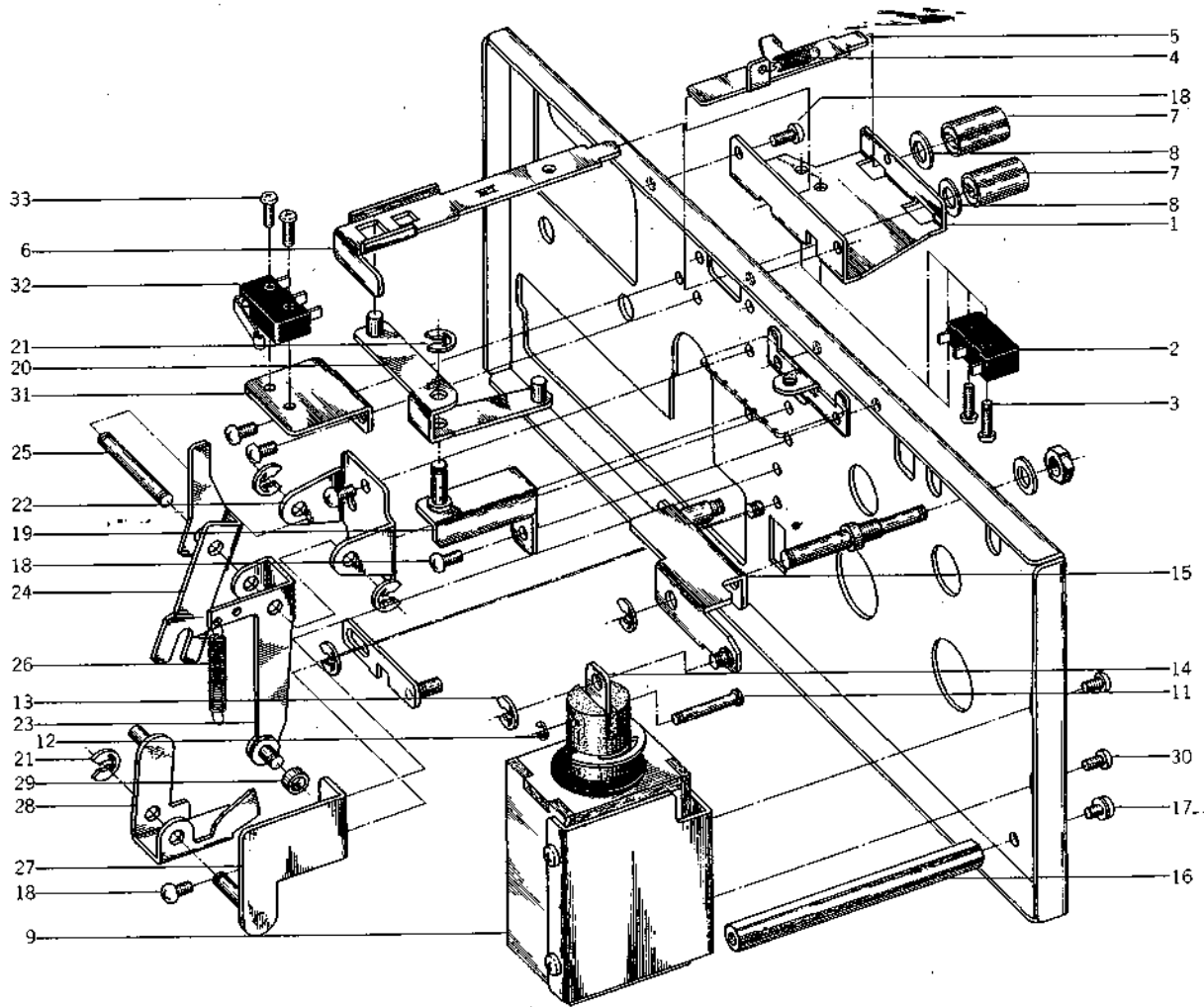


6) MECHA FRAME BLOCK (1)

Ref. No.	Parts No.	Description	Schematic No.	Q'ty	Ref. No.	Parts No.	Description	Schematic No.	Q'ty
LAMP STAND BLOCK									
6-1	EA647190	Lamp P.C Board	CA-2064	1	6-15	TC667574	M SW. Table A	CB-1012	2
6-2	EL295312	Lamp (L/T) 8V 0.2A	28-2-8	4	6-16	ES477966	Micro SW. SS-5GL	25-1-23	2
6-3	ZS417161	Screw, pan head 2.3x4		3	6-17	ZS465298	Screw, pan head 2.3x10		4
MECHA. FRAME BLOCK									
6-4	MH667506	Head Table Arm Prop.	CB-1004	1	6-18	ZW273633	Earth Lug M2.3		1
6-5	ZW675033	Washer D5.1x10.3x0.8t		1	6-19	ZS325495	Tapping Screw #2 3x6 (BR)		6
6-6	ZW668452	Metal Nut	7-1-64	1	6-20	EZ595653	Insulator Plate	CH-1055	2
6-7	TC693303	Joint Slide	CI-1006	1	6-21	ZG359638	FF Idler Wheel A Spring	PX-146	1
6-8	TC690412	Protector Plate	CI-1017	1	6-22	ML667528	Detector Lever	CB-1007	1
6-9	ZG217337	Belt Return Spring	4TR-224	1	6-23	ZG431291	Slide Spring	ED-B108	1
6-10	ZW290294	'U' Ring 2.85M	6-1-1B	4	6-24x	ZW290294	'U' Ring 2.85M	6-1-1B	2
6-11	ZG224796	New Spring D	MH-142	1	6-25	MC666674	Counter Part	9-1-44	1
6-12	ML667462	REC Lever	CB-1006	1	6-26	MB690390	Counter Belt	CI-1014	1
6-13	TC667708	Slide Pin	CB-1029	2	6-27x	ZS422076	Screw, pan head 3x5		2
6-14	ZWS16611	Nut M3		2	6-28x	ZS325495	Tapping Screw #2 3x6 (BR)		4

When ordering parts, Please describe Parts Number, Serial Number, and Model Number in detail.

7. ILLUSTRATION OF MECHA FRAME BLOCK (2)



7) MECHA FRAME BLOCK (2)

Ref. No.	Parts No.	Description	Schematic No.	Q'ty	Ref. No.	Parts No.	Description	Schematic No.	Q'ty
DOOR KEY BLOCK					MECHA FRAME BLOCK				
7-1	TC693347	Door Slot	CI-1012	1	7-16	MH667517	Motor Prop	CB-1005	3
7-2	ES477966	Micro SW. SS-5GL	25-1-23	1	7-17	ZS369900	Screw, pan head 3x8, w/washer		3
7-3	ZS465298	Screw, pan head 2.3x10		2	7-18	ZS325495	Tapping Screw #2 3x6 (BR)		12
7-4	ZG365433	Idler Tension Spring	RCC-1365	1	7-19	TC694697	Eject Lever Table B, w/lever shaft	CB-1015	1
7-5	TC693336	Door Key	CI-1011	1	7-20	ML693325	Eject Lever D, w/reverse lever pin	CI-1009	1
7-6	TC667653	Eject Key	CB-1024	1	7-21	ZW290283	'U' Ring 2.85M	6-1-1	5
7-7	SK631304	Push Button Knob I	91-5051	2	7-22	TC641700	Eject Lever Pillow	CA-1038	1
7-8	ZW259986	Washer (Nylon)D5.1x10.3x1t		1	7-23	ML693281	Spring Lever, w/S lever pin	CI-1004	1
PLUNGER BLOCK					7-24	ML690232	Cancellation Lever	CI-1002	1
7-9	EP537906	Plunger Solenoid 1660THT2	44-1-54	1	7-25	MH644646	Eject Lever Pin	CA-1036	1
7-10x	ED224550	Silicon Diode 10D4	45-2-16	1	7-26	ZG314818	D Lever Spring	MR-114	1
7-11	MH533913	Connecting Pin	TW-2010	1	7-27	TC690221	Lock Plate Table, w/wind lever 3 shaft	CI-1001	1
7-12	ZW270088	'E' Ring 1.9M	6-1-9	1	7-28	MZ221916	Lock Plate B, w/lid pin (2)	CB-1060	1
7-13	ZW270101	'E' Ring 3M	6-1-9	1	7-29	MR221927	Roller	CB-1059	1
7-14	TC667945	Plunger Joint	CB-2022	1	7-30	ZS422076	Screw, pan head 3x5		2
7-15	ML667675	Head Table Arm, w/arm pin A & B	CB-1026	1	7-31	TC667585	M SW. Table B	CB-1013	1
					7-32	ES494188	Micro SW. SS-5GL-13	25-1-25	1
					7-33	ZS487091	Screw, pan head 2.3x8		2

8. P.C BOARDS

(1) PRE AMP P.C BOARD (CA-5205) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(1)-1	BA681276	Pre Amp. P.C Board Comp. (CA-5205)	1
(1)-IC1	E1669655	IC μ PC1024H	2
(1)-IC2	E1669666	IC μ PC1023H	2
(1)-IC3	E1669655	IC μ PC1024H	2
(1)-IC4	E1669712	IC TA7122AP	2
(1)-TR1	ET669633	FET 2SK68A (L) (M)	2
(1)-TR2,3	ET459810	Transistor 2SC1222 (E) (F)	4
(1)-TR4,5	ET234854	Transistor 2SC458LG (C)	4
(1)-TR6to8	ET398711	Transistor 2SC945L (Q) (R)	6
(1)-TR9	ET645917	FET 2SK30A (D)	2
(1)-TR10,11	ET234854	Transistor 2SC458LG (C)	4
(1)-TR12,13	ET398711	Transistor 2SC945L (Q) (R)	4
(1)-TR14	ET645917	FET 2SK30A (D)	2
(1)-D1	ED557447	Silicon Diode 1S1588	2
(1)-D2	ED219464	Germanium Diode 1N34A	2
(1)-D3,4	ED560913	Silicon Diode 1S2473VE	4
(1)-D5	ED491130	Zener Diode WZ085	2
(1)-D6	ED219464	Germanium Diode 1N34A	2
(1)-D7to10	ED560913	Silicon Diode 1S2473VE	8
(1)-D11	ED624903	Silicon Diode 1S2473	2
(1)-D12	ED219464	Germanium Diode 1N34A	2
(1)-D13,14	ED560913	Silicon Diode 1S2473VE	4
(1)-D15	ED219464	Germanium Diode 1N34A	2
(1)-L1	EO496350	Inductor 146LY 36 MH (J)	2
(1)-L2,3	EO308395	Ferri Inductor FL7H 3 MH (J)	4
(1)-L4	EO368403	Ferri Inductor FL9H 33 MH (J)	2
(1)-VR1	EV523620	Semi-fixed/Vol. V8K4-1 500 ohmsB	2
(1)-VR2	EV464220	Semi-fixed/Vol. V8K4-1 50 kB	2
(1)-VR3	EV464207	Semi-fixed/Vol. V8K4-1 5 kB	2
(1)-VR4	EV464220	Semi-fixed/Vol. V8K4-1 50 kB	2
(1)-VR5	EV464207	Semi-fixed/Vol. V8K4-1 5 kB	2
(1)-FL1	EO669734	MPX Filter FB1801M	2
(1)-2	TC693628	Pre Amp P.C Board Table 1 (CI-5032)	1
(1)-3	ZS325495	Tapping Screw #2 3x6 (BR)	3
Capacitor, Vertical Type			
(1)-C1	EC516723	Styrol 270PF (K) 50WV	2
(1)-C3	EC572613	Tantalum 10 μ F (M) 16WV (DTS Type)	2
(1)-C4	EC516767	Styrol 470PF (K) 50WV	2
(1)-C5	EC572444	Tantalum 47 μ F (M) 6.3WV (DTS Type)	2
(1)-C11	EC604102	Solid Aluminum 0.33 μ F (K) 25WV	2
(1)-C22	EC604102	Solid Aluminum 0.33 μ F (K) 25WV	2
(1)-C23	EC619650	Solid Aluminum 0.1 μ F (K) 25WV	2
(1)-C26,27	EC619650	Solid Aluminum 0.1 μ F (K) 25WV	4
(1)-C34	EC619650	Solid Aluminum 0.1 μ F (K) 25WV	2
(1)-C45	EC619650	Solid Aluminum 0.1 μ F (K) 25WV	2
(1)-C59	EC516778	Styrol 680PF (K) 50WV	2
(1)-C60,61	EC623002	Styrol 820PF (K) 50WV	4
(1)-C62	EC604102	Solid Aluminum 0.33 μ F (K) 25WV	2
(1)-C63	EC619650	Solid Aluminum 0.1 μ F (K) 25WV	2
(1)-C64	EC662308	Solid Aluminum 0.15 μ F (K) 25WV	2
(1)-C66,67	EC619650	Solid Aluminum 0.1 μ F (K) 25WV	4
(1)-C74	EC619650	Solid Aluminum 0.1 μ F (K) 25WV	2
(1)-C79	EC516767	Styrol 470PF (K) 50WV	2
(1)-C82	EC516767	Styrol 470PF (K) 50WV	2
(1)-C85	EC676754	Styrol 680PF (J) 50WV	2

(2) POWER SUPPLY & OSC P.C BOARD (CI-5030) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(2)-1	BA681221	Power Supply & OSC P.C Board (CI-5030)	1
(2)-2	BA272417	Power Supply & OSC P.C Board (CI-5030) (CEE)	1
(2)-TR1,2	ET622080	Transistor 2SC1175 (E) (F)	2
(2)-TR3	ET537300	Transistor 2SD361 (D) (E)	1
(2)-TR4	ET699388	Transistor 2SD361 (D1)	1
(2)-TR5	ET635826	Transistor 2SC1683 (P) (Q)	1
(2)-TR6	ET666404	Transistor 2SD571 (K) (L)	1
(2)-TR7	ET639437	Transistor 2SC945L (Q) (P)	1
(2)-D2to5	ED494583	Silicon Diode 10D05	4
(2)-D6,7	ED511918	Zener Diode WZ-240	2
(2)-D8	ED560913	Silicon Diode 1S2473VE	1
(2)-D9,10	ED494583	Silicon Diode 10D05	2
(2)-D11	ED560913	Silicon Diode 1S2473VE	1
(2)-L1	EO464668	Ferri Inductor FL9H 470 μ H (K)	1
(2)-VR1,2	EV650891	Semi-fixed/Vol. V10K8-4-2 50KB	2
(2)-VR3	EV560103	Semi-fixed/Vol. V10K8-4-2 100 ohmsB	1
(2)-T1	EO620482	OSC Coil OT-925	1
(2)-3	EJ207854	3P Plug, PC	1
(2)-4	EJ207865	4P Plug, PC	1
(2)-5	EZ668147	Power Supply Heat-sink Plate (CB-5021)	1
(2)-6	ZS421806	Screw, pan head 3x8	2
(2)-7	ZW273756	Nut M3, #1	2
(2)-8	ZS558101	Screw, pan head 3x6 w/washer	2
(2)-R1	ER264947	Fuse/R, FRN 1/4W 56 ohms (J) (CEE)	1
(2)-R2	ER265048	Metal Oxide Film/R. 2W 270 ohms (J) (CEE)	1
(2)-R7	ER265072	Metal Oxide Film/R. 2W 180 ohms (J) (CEE)	1
(2)-C5	EC460091	Plastic Film/C. 3300PF (J) 500WV	1
(2)-C6,7	EC663715	Styrol/C. 820PF (J) 50WV	2

(3) SERVO P.C BOARD (CA-2218) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(3)-1	BA681175	Servo P.C Board Comp. (CA-2218)	1
(3)-TR1to6	ET592424	Transistor 2SC1647 (S) (E)	6
(3)-D1to4	ED224548	Silicon Diode 10D2	4
(3)-D5	ED560913	Silicon Diode 1S2473VE	1
(3)-L1	EO538391	Ferri Inductor FL11H 100MH (J)	1
(3)-C1	EC487157	NP/C. 0.47 μ F (M) 50WV (Vert. Type)	1

(4) SYS. CON P.C BOARD (CB-5004) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(4)-1	BA681210	Sys. Con P.C Board Comp. (CE-5004)	1
(4)-TR1,2	ET666415	Transistor 2SB605 (K) (L)	2
(4)-TR3	ET398711	Transistor 2SC945L (Q) (R)	1
(4)-TR4	ET517375	Transistor 2SD360 (D) (E)	1
(4)-TR5	ET666404	Transistor 2SD571 (K) (L)	1
(4)-TR7	ET666404	Transistor 2SD571 (K) (L)	1
(4)-TR8	ET557976	Transistor 2SA628 (E) (F)	1
(4)-TR9,10	ET398711	Transistor 2SC945L (Q) (R)	2
(4)-TR11	ET557976	Transistor 2SA628 (E) (F)	1
(4)-TR12	ET666404	Transistor 2SD571 (K) (L)	1
(4)-TR13to21	ET398711	Transistor 2SC945L (Q) (R)	8
(4)-TR22	ET666393	Transistor 2SC1211 (E) (F)	1
(4)-TR23	ET398711	Transistor 2SC945L (Q) (R)	1
(4)-TR24	ET666404	Transistor 2SD571 (K) (L)	1
(4)-TR25to34	ET398711	Transistor 2SC945L (Q) (R)	10
(4)-TR35	ET666707	Transistor 2SD401 (K) (L)	1
(4)-TR36	ET557976	Transistor 2SA628 (E) (F)	1
(4)-D1to5	ED560913	Silicon Diode 1S2473VE	4
(4)-D6,7	ED219464	Germanium Diode 1N34A	2
(4)-D8,9	ED624903	Silicon Diode 1S2473	2
(4)-D10,11	ED560913	Silicon Diode 1S2473VE	2
(4)-D12	ED624903	Silicon Diode 1S2473	1
(4)-D13	ED560913	Silicon Diode 1S2473VE	1
(4)-D14,15	ED624903	Silicon Diode 1S2473	2
(4)-D16,17	ED560913	Silicon Diode 1S2473VE	2
(4)-D18	ED624903	Silicon Diode 1S2473	1
(4)-D19to21	ED560913	Silicon Diode 1S2473VE	3
(4)-D22to24	ED624903	Silicon Diode 1S2473	3
(4)-D25	ED560913	Silicon Diode 1S2473VE	1
(4)-D26	ED624903	Silicon Diode 1S2473	2
(4)-D27	ED560913	Silicon Diode 1S2473VE	1
(4)-D28,29	ED624903	Silicon Diode 1S2473	2
(4)-D30,31	ED560913	Silicon Diode 1S2473VE	2
(4)-D32	ED624903	Silicon Diode 1S2473	1
(4)-D33	ED560913	Silicon Diode 1S2473VE	1
(4)-D34	ED624903	Silicon Diode 1S2473	1
(4)-D35	ED560913	Silicon Diode 1S2473VE	1
(4)-D36to39	ED624903	Silicon Diode 1S2473	4
(4)-D40	ED560913	Silicon Diode 1S2473VE	1
(4)-D41	ED624903	Silicon Diode 1S2473	1
(4)-D42,43	ED560913	Silicon Diode 1S2473VE	2
(4)-D44	ED624903	Silicon Diode 1S2473	1
(4)-D45to47	ED560913	Silicon Diode 1S2473VE	3
(4)-D48	ED624903	Silicon Diode 1S2473	1
(4)-D49	ED560913	Silicon Diode 1S2473VE	1
(4)-D50,51	ED624903	Silicon Diode 1S2473	2
(4)-D53,54	ED560913	Silicon Diode 1S2473VE	2
(4)-D55,56	ED624903	Silicon Diode 1S2473	2
(4)-D57	ED560913	Silicon Diode 1S2473VE	1
(4)-D58,59	ED624903	Silicon Diode 1S2473	2
(4)-D60	ED560913	Silicon Diode 1S2473VE	1
(4)-D61to65	ED624903	Silicon Diode 1S2473	5
(4)-D66	ED560913	Silicon Diode 1S2473VE	1
(4)-D67to71	ED624903	Silicon Diode 1S2473	5
(4)-D72	ED560913	Silicon Diode 1S2473VE	1
(4)-D73to75	ED624903	Silicon Diode 1S2473	3
(4)-D76to79	ED224550	Silicon Diode 10D4	4
(4)-D80to84	ED560913	Silicon Diode 1S2473VE	5
(4)-D85	ED219464	Germanium Diode 1N34A	1
(4)-D86,87	ED560913	Silicon Diode 1S2473VE	2
(4)-TH1	ED666314	Thermister PTH63AR6R8M2E491	1
(4)-RL1	EP616500	Relay LC1-C-JT DC24V	1
(4)-2	MZ668035	Heat-sink plate B (CB-5013)	1
(4)-3	ZS421806	Screw, pan head 3x8	1
(4)-4	ZW273756	Nut M3, #1	1
(4)-5	ZS379350	Screw, pan head 3x6	2
(4)-6	MT553948	Wire Band B-100 (2-35-3)	1
(4)-R45	ER389507	Metal Oxide Film/R. 2W 430 ohms (K)	1
(4)-R111	ER563253	Cement/R. 3W 2.2 ohms (K) (Wire-wound Type)	1

(5) TOUCH SW. P.C BOARD (CI-2012) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(5)-1	BA681254	Touch SW. P.C Board Comp. (CI-2012)	1
(5)-TR1	ET491051	FET 2SK30A (GR)	6
(5)-TR2	ET638504	Transistor 2SC945L (P)	6
(5)-TR3to7	ET639437	Transistor 2SC945L (Q) (P)	10
(5)-D1to9	ED560913	Silicon Diode 1S2473VE	9
(5)-D11to13	ED560913	Silicon Diode 1S2473VE	3
(5)-C4	EC523282	Solid Aluminum/C. 0.1μF (M) 25WV (Vert. Type)	6

(6) REPEAT SW. P.C BOARD (CI-5036) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(6)-1	BA661930	Repeat SW. P.C Board Comp. (CI-5036)	1
(6)-TR1	ET639437	Transistor 2SC945L (Q) (P)	1
(6)-D1	ED624903	Silicon Diode 1S2473	1
(6)-SW1,2	ES419286	Push SW. UEG-22DE	2
(6)-2	TC693358	Memory Table (CI-1013)	1
(6)-3	ZS592378	Screw, pan head 2.6x3	2
(6)-4	SK665223	Memory Cap A (AA-5521)	2

(7) STOP DETECTION P.C BOARD (CB-2026) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(7)-1	BA670195	Stop Detection P.C Board Comp. (CB-2026)	1
(7)-IC1	EI620640	IC DN835	1
(7)-TR1	ET638504	Transistor 2SC945L (P)	1
(7)-2	TC613541	IC Retainer (CW-5002)	1

(8) NOISE FILTER P.C BOARD (CB-2027) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(8)-1	BA237317	Noise Filter P.C Board Comp. (CB-2027)	1
(8)-L1to4	EO669273	Inductor FL5R-200	4
(8)-2	MZ669251	P.C Board Holder D (CB-2028)	1
(8)-3	ZS558101	Screw, pan head 3x6 w/washer	1

(9) SW. P.C BOARD (CI-5029) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(9)-1	BA681287	SW. P.C Board Comp. (CI-5029)	1
(9)-TR1to3	ET639437	Transistor 2SC945L (Q) (P)	6
(9)-D1,2	ED560913	Silicon Diode 1S2473VE	4
(9)-SW1to3	ES691413	Lever SW. SLK04201	3

(10) MONITOR SW. P.C BOARD (CI-5003) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(10)-1	BA681333	Monitor SW. P.C Board Comp. (CI-5003)	1
(10)-SW5	ES691424	Lever SW. SLK04251	1
(10)-C1	EC621257	Solid Aluminum/C. 0.47 μ F(M) 25WV (Vert. Type)	2

(11) EQ. P.C BOARD (CI-5028) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(11)-1	BA681298	EQ. P.C Board Comp. (CI-5028)	1
(11)-TR1	ET398711	Transistor 2SC945L (Q) (R)	2
(11)-TR2	ET638504	Transistor 2SC945L (P)	1
(11)-D1,2	ED560913	Silicon Diode 1S2473VE	2
(11)-SW1	ES691435	Rotary SW. SRE-273	1
(11)-RL1	EP621808	Relay MTS-2	1
(11)-RL2	EP691446	Relay MZ-24HG	1
(11)-T1	BT490702	Headphone Trans. N19-349S	2
(11)-L1	EO692741	Ferri Inductor 33Y-740	2
(11)-VR1	EV520806	Semi-fixed/Vol. V8K4-1 10 kB	2
(11)-VR2	EV464207	Semi-fixed/Vol. V8K4-1 5 kB	2
(11)-VR3	EV520806	Semi-fixed/Vol. V8K4-1 10 kB	2
(11)-VR4	EV464218	Semi-fixed/Vol. V8K4-1 30 kB	1
(11)-VR5	EV691391	Vol. VM10E076 1 kB	1
(11)-VR6	EV691380	Vol. VM10R840 5 kB	1
(11)-2	EJ699355	6P Plug, PC	1
(11)-C13	EC516756	Styrol/C. 390PF (K) 50WV (Vert. Type)	1

(12) PEAK SW. P.C BOARD (CI-5005) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(12)-1	BA681344	Peak SW. P.C Board Comp. (CI-5005)	1
(12)-TR1to6	ET639437	Transistor 2SC945L (Q) (P)	12
(12)-D1to4	ED560913	Silicon Diode 1S2473VE	8
(12)-SW1	ES557908	Single Push SW. 1FS-8U-48	1
(12)-IND3,4	EL604372	Lamp 8V 50MA (Cord Type)	2
(12)-2	TC690816	Peak SW. Table (CI-5004)	1
(12)-3	ZS417216	Screw, pan head 3x4	2
(12)-4	ZS325495	Tapping Screw #2 3x6 (BR)	1
(12)-5	EZ586326	Lamp Holder (LF-5324)	2
(12)-C8	EC675178	Solid Aluminum/C. 0.47 μ F (K) 25WV (Vert. Type)	2

(13) DOOR SW. P.C BOARD (CI-5045) BLOCK

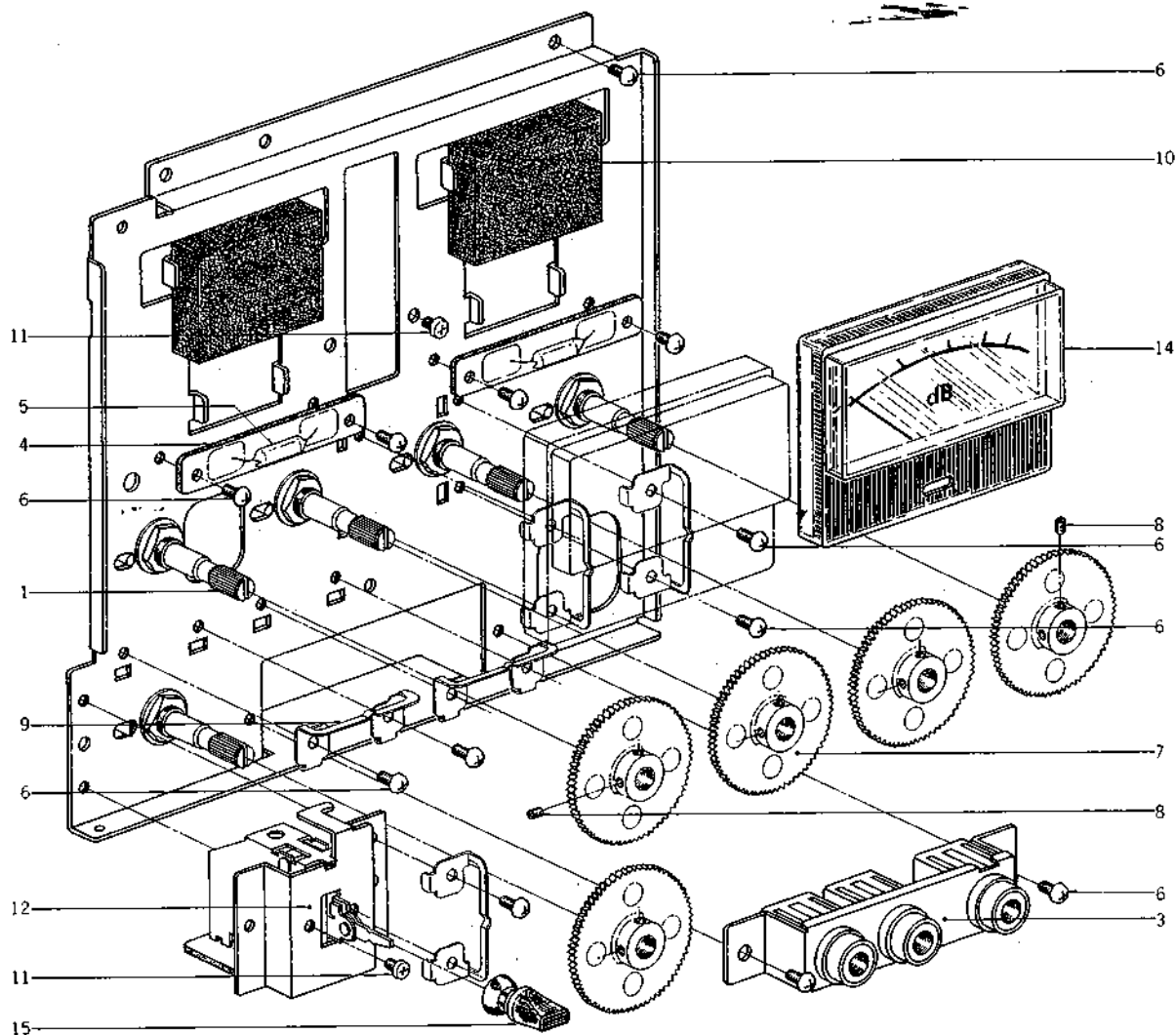
Symbol No.	Parts No.	Description	Q'ty
(13)-1	BA273341	Door SW. P.C Board Comp. (CI-5045)	1
(13)-2	BA681311	DOOR SW. P.C Board Comp. (CI-5026) (Old Type)	1
(13)-TR1	ET639437	Transistor 2SC945L (Q) (P)	1
(13)-TR2	ET655356	Transistor 2SD571 (L) (M)	1
(13)-D1	ED560913	Silicon Diode 1S2473VE	1
(13)-L1,2	EO669273	Inductor FL5R-200	2
(13)-FR1	ER561216	Fuse/R. FRN1/4 100 ohms (K) 50MA	1
(13)-C4	EC657044	NP Elect./C. 1 μ F (M) 50WV (Vert. Type)	1

(14) PROTECTION P.C BOARD (CB-5028) BLOCK

Symbol No.	Parts No.	Description	Q'ty
(14)-1	BA272542	Protection P.C Board Comp. (CB-5028)	1
(14)-TR1	ET666707	Transistor 2SD401 (K) (L)	1
(14)-2	EJ524700	Canoe Clip	1

When ordering parts, Please describe Parts Number, Serial Number, and Model Number in detail.

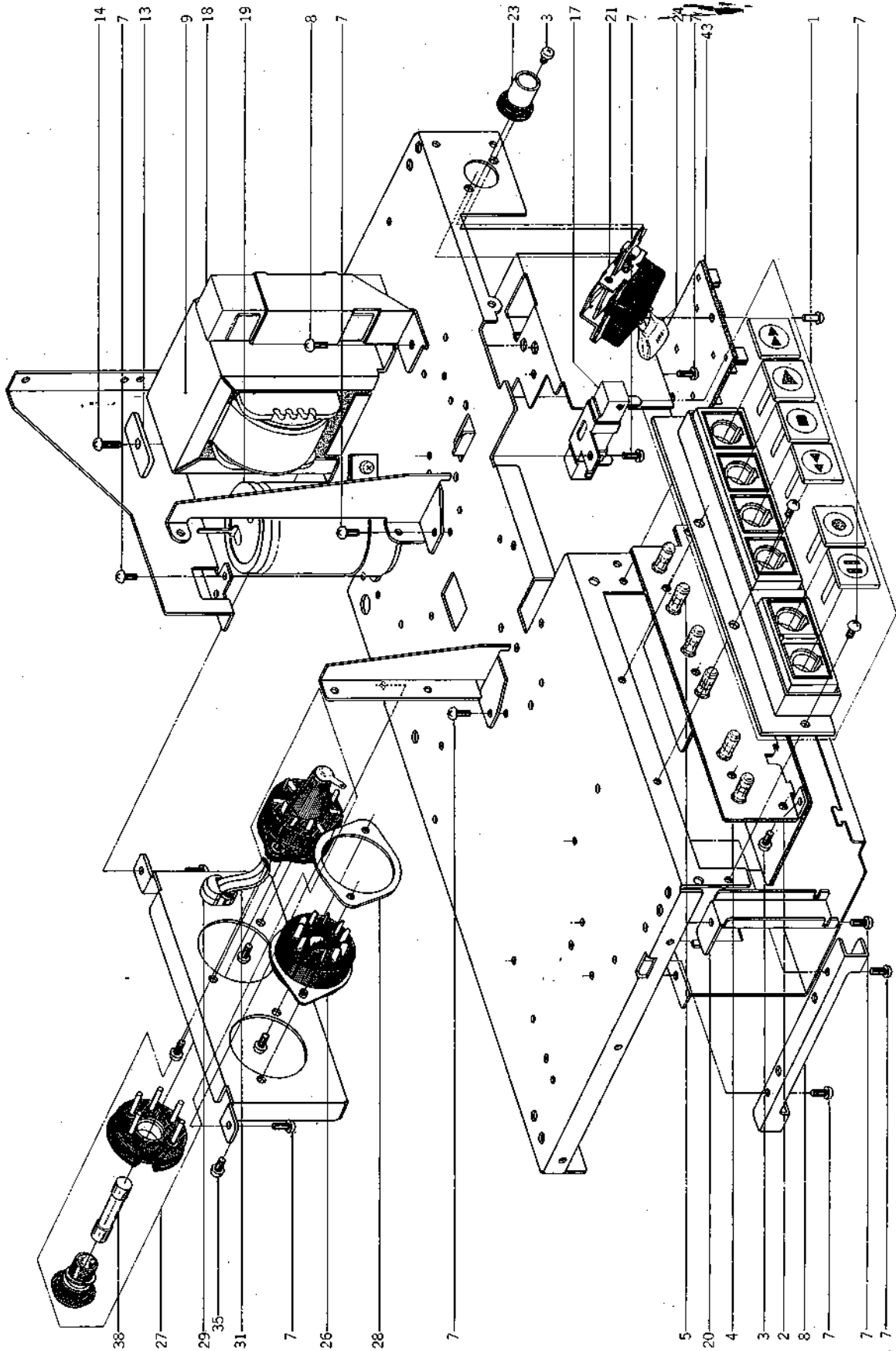
9. ILLUSTRATION OF CONTROL CHASSIS BLOCK



9) CONTROL CHASSIS BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
9-1	EV691468	Vol. VJ10R670 50 kA	36-2-41	4
9-2	EV691470	Co-axial 2-throw Volume GJ70R519 10kBX2	36-1-46	1
9-3	EJ692561	3-throw Jack	31-2-73	1
9-4	EA449414	Lamp P.C Board	BS-5005	2
9-5	EL295312	Lamp (L/T) 8V 0.2A	28-2-8	2
9-6	ZS325495	Tapping Screw #2 3x6 (BR)		19
9-7	EZ535432	Clic Gear	TW-5018	5
9-8	ZS609232	Set Screw, hexagon socket 3x3 (CUP/P.)		10
9-9	ZG535454	Click Spring	TW-5020	5
9-10	EZ203771	Meter Cushion	CI-5039	2
9-11	ZS417216	Screw, pan head 3x4		4
9-12	TC690794	Tape Source Table	CI-5002	1
9-13x	TC203782	Lamp Shield	CI-5040	1
9-14	EM692583	VU Meter KL-250L-8	46-1-131	2
9-15	ES691323	Tape SW. (I)	CI-6028	1

10. ILLUSTRATION OF SYS. CON CHASSIS BLOCK

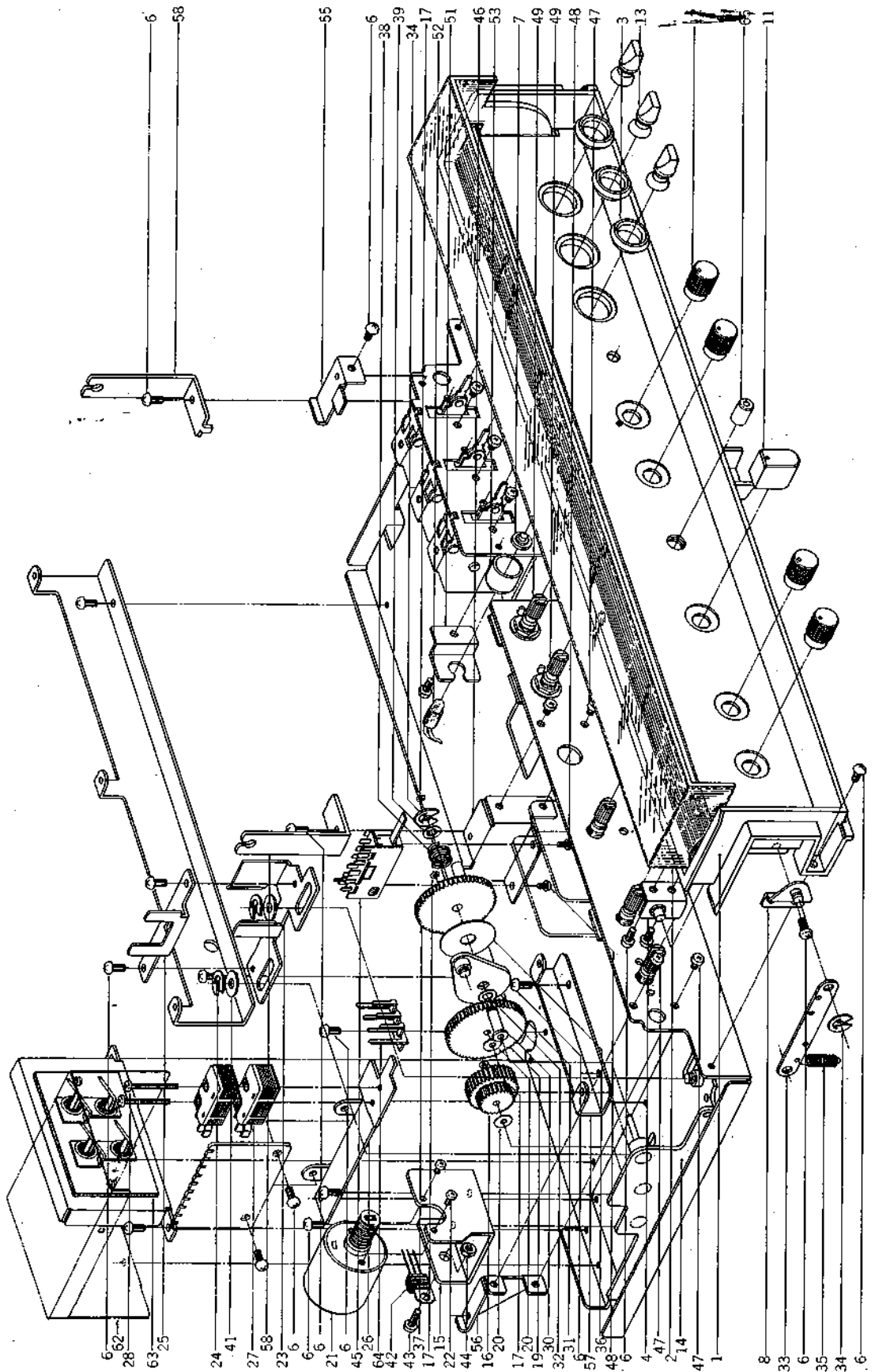


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10) SYS. CON CHASSIS BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Qty
TOUCH BUTTON BLOCK				
10-1	BK207674	Touch Button Holder Comp.	CF-2018	1
10-2	TC690636	Card Connecting Plate	CI-2015	2
10-3	ZS417216	Screw, pan head 3x4		6
10-4	EA690535	Button Lamp P.C Board	CF-2005	1
10-5	EL621167	Lamp (L/T) 5.5V 60MA	28-2-36	5
10-6x	ED624903	Silicon Diode 1S2473	45-3-28	5
SYS. CON CHASSIS BLOCK				
10-7	ZS325495	Tapping Screw #2 3x6 (BR)		22
10-8	TC667967	P.C Board Support A	CB-5009	2
10-9	BT699287	Power Trans. CIT-1 (U/T)	38-4-421	1
10-10x	BT694822	Power Trans. CIT-4 (CEE)	38-4-424	1
10-11x	BT694811	Power Trans. CIT-3 (CSA)	38-4-423	1
10-12x	BT694800	Power Trans. CIT-2 (JPN)	38-4-422	1
10-13	EZ486617	Trans. Reinforcement Plate B	LF-5222	2
10-14	ZS447840	Tapping Screw #2 3x8 (BR)		2
10-15x	ZS434250	Screw, pan head 4x8, w/washer		4
10-16x	ZW413188	Nut M4, #1		4
10-17	ER261821	Cement/R. RGB 10H 51 ohms (K)	35-16-68	1
10-18	ER666775	Cement/R. 30W 650 ohms (K) (Wire-wound Type)	35-16-62	1
10-19	EC684472	Elect./C. 330μF 160WV (Wrapping Type)	24-10-108	1
10-20	TC693516	P.C Board Holder	CI-2014	2
10-21	ES469541	Push SW. TV-3 JB52 (U/T, CSA, JPN)	25-5-60	1
10-22x	ES499972	Push SW. JS-09 (CEE)	25-5-67	1
10-23	SK567472	Knob 2	CP-5019	1
10-24	EC699298	PE-9P Film/C. 0.1μF (K) 600WV	24-3-8	1
10-25x	EC565896	Ceramic/C. DP6600YM 0.01μF (P) 125WV (CSA)	24-5-58	1
10-26	EJ222748	Socket, sub magnale #311SG	31-1-39	1
10-27	EJ233370	Socket (Volt. Selector) S-18010	40-2-3	1
10-28	MZ302400	Remote Control Socket Mt. Plate	RX-515	1
10-29	EZ631945	Strain Relief SR-4N-4	2-7-49	1
10-30x	EZ246936	Strain Relief SR-6W-1 (WG, 3 Core)	2-7-8	1
10-31	EW540123	AC Cord (CUL) 2.5M	26-3-20	1
10-32x	EW641248	AC Cord (CEE) VM-0065	26-3-28	1
10-33x	EW556704	AC Cord (J) 2.5M	26-3-31	1
10-34x	EW516475	AC Cord CUL	26-3-45	1
10-35	ZS201150	Screw, truss head 3x6 (Black)		4
10-36x	ZS201150	Screw, truss head 3x6 (Black)		2
10-37x	EJ254957	Lug Plate KP1L (KMA only)	33-3-2	1
10-38	EF590692	Fuse 1.2A 250V	39-1-50	1
10-39x	EF593706	Fuse (SEMKO T Type) 500 MAT	39-1-53	1
10-40x	EF623103	Fuse (SEMKO T Type) 1 AT	39-1-53	1
10-41x	EF668610	Fuse ULMF61M 250V 1.2A (CSA)	39-1-45	2
10-42x	EF590692	Fuse 1.2A 250V (JPN)	39-1-50	2
10-43	EJ666742	2P Fuse Holder (Large)	40-1-90	1
10-44x	EJ666753	2P Fuse Holder (Small)	40-1-91	1
10-45x	ZW273881	Earth Lug M4 (BEAB only)		1
10-46x	ZW413188	Nut M4, #1 (BEAB only)		1
10-47x	ZS434250	Screw, pan head 4x8, w/washer (BEAB only)		1
10-48x	EJ539447	Earth Terminal 2P T4460	32-1-32	1
10-49x	ZS325495	Tapping Screw #2 3x6 (BR)		7

11. ILLUSTRATION OF AMP CHASSIS BLOCK

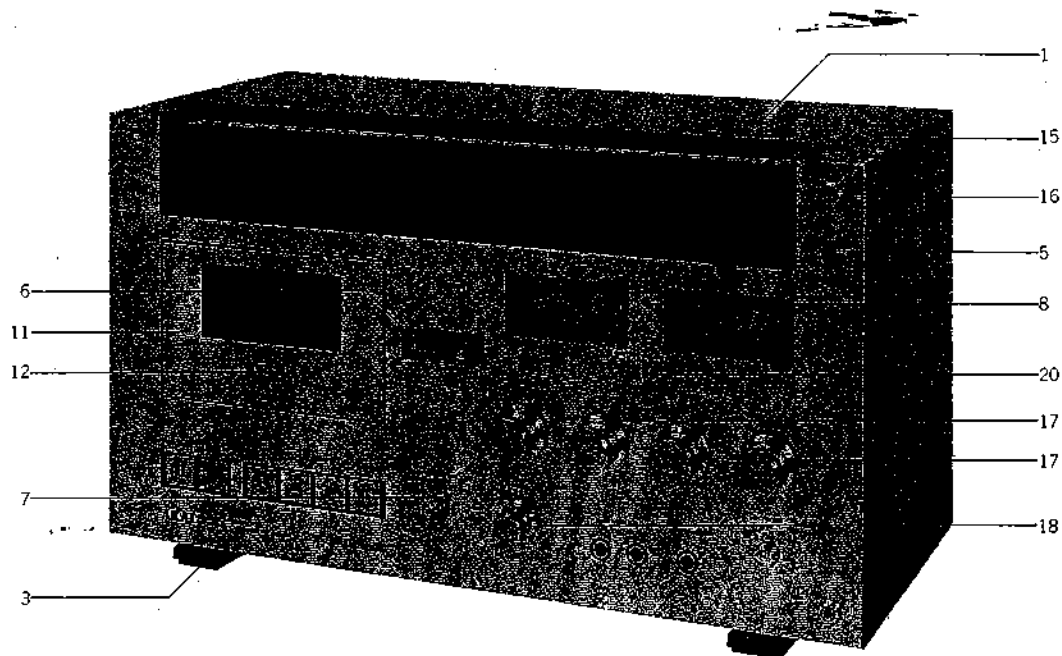


When ordering parts, Please describe Parts Number, Serial Number, and Model Number in detail.

11) AMP CHASSIS BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty	Ref. No.	Parts No.	Description	Schematic No.	Q'ty
SELECTOR BOX BLOCK									
11-1	TC693641	Selector Box	CI-6001	1	11-61x	ZS325495	Tapping Screw #2 3x6 (BR)		2
11-2	BC694708	Dust Cover	CI-6002	1	11-62	TC265050	Motor Shield Plate	CI-5044	1
11-3	SZ691154	SW. Collar	CI-6006	3	11-63	EJ669745	4P Jack Plate	31-5-130	1
11-4	TC691121	Cover Table A, w/door shaft	CI-6003	1	11-64	EJ551035	Wrapping Terminal, 4P TS251	32-1-36	1
11-5	TC692471	Cover Table B, w/door shaft	CI-6003	1	11-65	SB613618	Memory Button	CW-5007	1
11-6	ZS325495	Tapping Screw #2 3x6 (BR)		16					
11-7	SF639696	Lamp Lens B-2	NE-6005	1					
11-8	TC691143	Lid Stop Plate, w/slide pin	CI-6005	1	11-66x	ZS325495	Tapping Screw #2 3x6 (BR)		16
11-9x	ZS379350	Screw, pan head 3x6		1					
11-10x	ZW273756	Nut M3, #1		1					
11-11	SK691288	Selector Knob	CI-6020	1					
11-12	SK691290	Adjust Knob	CI-6021	4					
11-13	SK691312	Dolby Knob	CI-6027	3					
DOOR OPEN BLOCK									
11-14	TC690917	Door Open Table, w/shaft & gear shaft table	CI-5014	1					
11-15	TC693551	Motor Table	CI-5025	1					
11-16	TC693527	Wheel Gear	CI-5018	1					
11-17	ZW356657	'E' Ring 1.5M	6-1-9	3					
11-18	ZW474592	Washer (Teflon) D2.1x7x0.2t		1					
11-19	TC690952	Middle Gear	CI-5019	1					
11-20	ZW394007	Washer (Rubber) D2.1x7x0.5t		1					
11-21	BM692550	Motor RF-260-09400, w/warning gear & motor shield		1					
11-22	ZS432843	Screw, pan head 2.6x4		2					
11-23	TC690974	SW. Slide	CI-5021	1					
11-24	ZW290294	'U' Ring 2.85M	6-1-1B	2					
11-25	TC690985	Detector Plate	CI-5022	1					
11-26	MZ693538	SW. Table	CI-5023	1					
11-27	ES691457	Micro SW. VU-SR	25-1-36	1					
11-28	ZS467796	Screw, pan head 2.6x12		2					
11-29x	ZW562476	Earth Lug M3		1					
11-30	TC568361	Wheel Collar	CP-1054	1					
11-31	TC693540	Friction Plate, w/mute shaft	CI-5024	1					
11-32	ZW589893	Washer (PBP) D4.1x7x0.4t		1					
11-33	TC693573	Connecting Plate	CI-5027	1					
11-34	ZW290294	'U' Ring 2.85M	6-1-1B	2					
11-35	ZG244067	Door Open Spring	CI-5043	1					
11-36	MT632733	Clutch Felt	CW-1078	1					
11-37	TC690963	Friction Gear	CI-5020	1					
11-38	ZG227586	Spring K	900-214	1					
11-39	ZW259773	Washer (Nylon) D4.1x7x0.5t		1					
11-40x	ZW474592	Washer (Teflon) D2.1x7x0.2t		1					
11-41	ZW565200	Washer (BSP) D4.1x10x0.3t		2					
11-42	ET517375	Transistor 2SD360 (D) (E)	45-1-142	1					
11-43	ZS421806	Screw, pan head 3x8		1					
11-44	ZW273756	Nut M3, #1		1					
AMP CHASSIS BLOCK									
11-45	ES691378	Push SW. UEG-42L	25-5-212	1					
11-46	TC693707	Tone SW. Table	CI-5010	1					
11-47	ZS417216	Screw, pan head 3x4		4					
11-48	ZS592378	Screw, pan head 2.6x3		2					
11-49	EV691402	Vol. VM10E937 10 kΩ	36-6-21	2					
11-50x	EJ207887	4P Mini. Socket, PC	31-1-165	1					
11-51	TC693674	Lamp Table	CI-5007	1					
11-52	EL623788	Lamp (Cord Type) 24V 35MA (100MMx2)	28-2-24	1					
11-53	EZ586326	Lamp Holder	LF-5324	1					
11-54x	EJ207876	3P Mini. Socket, PC	31-1-164	1					
11-55	TC693718	Case Stopper 1	CI-5011	1					
11-56	TC693720	Case Stopper 2	CI-5012	1					
11-57	TC693685	Selector Plate Stopper	CI-5008	1					
11-58	TC693617	Hinge Plate	CI-5031	2					
11-59x	ZS325495	Tapping Screw #2 3x6 (BR)		3					
11-60x	ZS417216	Screw, pan head 3x4		6					

12. PHOTO OF FINAL ASSEMBLY BLOCK



12) FINAL ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
CASE BLOCK				
12-1	BC691301	Case	CI-6024	1
12-2x	SE641597	Ventilation	AA-5249	1
12-3	SA640934	Square Foot	TE-6020	2
12-4x	ZS200610	Tapping Screw #1 4x12 (Truss)		4
FRONT PANEL BLOCK				
12-5	BD681118	Front Panel Block Comp.		1
12-6	SE691255	Counter Escutcheon	CI-6017	1
12-7	TC691233	SW. Collar B	CI-6015	1
12-8	SE639707	Lamp Lens B-3	NE-6005	2
12-9x	BA693360	Frame	CI-1015	1
LID PANEL BLOCK				
12-10x	BD681120	Lid Panel Block Comp.	CA,CI	1
12-11	BD644365	Lid Panel	CA-6007	1
12-12	SM518310	Name Plate (GX) B	CG-6411	1
ASSEMBLY BLOCK				
12-13x	ZW381881	Washer D4.1x13x1t		10
12-14x	ZS447805	Tapping Screw #2 3x12(BR)		10
12-15	ZW691266	Panel Washer	CI-6018	4
12-16	ZS691277	Panel Screw	CI-6019	4
12-17	SK694710	Knob 1	CI-6022	4
12-18	SK694721	Knob 2	CI-6023	1
12-19x	ZW290283	'U' Ring 2.85M	6-1-1	1
12-20	SK634410	Push Button Knob J	9I-5051	1

When ordering parts, Please describe Parts Number, Serial Number, and Model Number in detail.

13. LIST OF INTERCHANGEABLE SEMICONDUCTORS

As far as service is concerned, in case the original parts cannot be obtained, the interchangeable parts listed below can be substituted.

Original Parts			Interchangeable Parts	
Description	Parts No.	Utilizing P.C Board	Description	Parts No.
2SA628 (E) (F)	ET557976	CB-5004	2SA564 (Q) (R) 2SA733 (P) (Q)	ET538154 ET554657
2SB605 (K) (L)	ET666415	CB-5004		
2SC458LG (C)	ET234854	CA-5205	2SC458 (C) 2SC693U (F) 2SC1312S (G) (H)	ET329218 ET315472 ET603257
2SC945L (P)	ET638504	CI-2012 CI-5028 CB-2026	2SC711 (E) (F) 2SC1641 (R) (S) (E) 2SC1647 (R) (S) (E)	ET453486 ET603843 ET623733
2SC945L (Q) (P)	ET639437	CI-5030 CI-5005 CI-5029 CI-5036 CI-2012		
2SC945L (Q) (R)	ET398711	CB-5004 CI-5028 CA-5205		
2SC1175 (E) (F)	ET622080	CI-5030	2SC1211 (E) (F)	ET666393
2SC1211 (E) (F)	ET666393	CB-5004	2SC1175 (E) (F) 2SC1247A (B) (V)	ET622080 ET511920
2SC1222 (E) (F)	ET469810	CA-5205	2SC458LG (C) 2SC1000GR (BL)	ET234854 ET622181
2SC1647 (S) (E)	ET592424	CI-2020	2SC536 (F) (G) (H) 2SC945L (K) (P) (Q)	ET632215 ET632204
2SC1683 (P) (Q)	ET635826	CI-5030	T1P47 T1P48	ET621775 ET621786
2SD360 (D) (E)	ET517375	CB-5004	2SC1098 (L) (K) 2SD325 (D) (E)	ET465208 ET631855
2SD361 (D) (E)	ET537300	CI-5030	2SC1098 (L) (M)	ET476886
2SD401 (K) (L)	ET666707	CB-5004		
2SD571 (K) (L)	ET666404	CB-5004 CI-5030		
2SD571 (L) (M)	ET650553	CI-5026		
2SK30A (D) 2SK30A (GR)	ET645917 ET491051	CA-5205 CI-2012		
2SK68A (L) (M)	ET669633	CA-5205	2SK34 (D)	ET603270
μPC1023H	EI669666	CA-5205	TA7122P	EI669712
μPC1024H	EI669655	CA-5205	TA7129P	EI657000
TA7122AP	EI669712	CA-5205		
DN-835	EI620640	CB-2026		
1N34A	ED219464	CA-5205 CB-5004	1N60 1S188AM	ED428264 ED562386

Original Parts			Interchangeable Parts	
Description	Parts No.	Utilizing P.C Board	Description	Parts No.
1S2473 1S2473VE	ED624903 ED560913	CA-5205 CB-5004 CI-2006 CI-5036 CI-5005 CI-5030 CI-2012 CI-2020 CI-5029 CI-5028 CI-5026	1S1588 WG599 WG713	ED557447 ED514721 ED515790
WZ085	ED491130	CA-5205	RD9A	ED384096
10D05	ED494583	CI-5030	1N4001	ED538615
10D2	ED224548	CI-2020	1N4003	ED570295
10D4	ED224550	CB-5004	1N4004	ED570273

NOTE: The electrical characteristics of diodes 1S2473 and 1S2473VE are exactly the same. VE indicates "Vertical Type"

INDEX

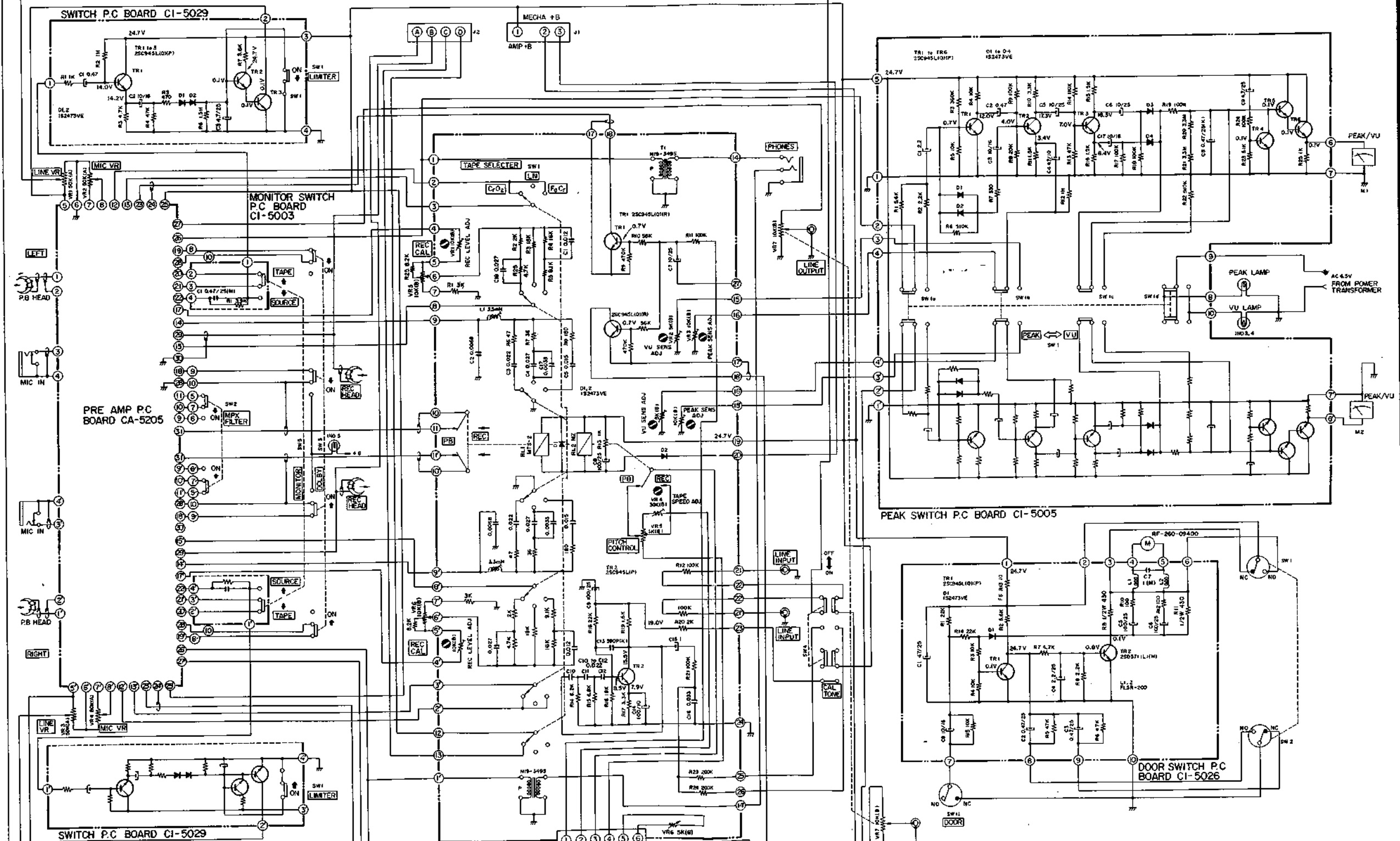
Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.
TC693358	(6)-2	ZS303625	1-32	ZS422965	3-8	ZW273756	11-10x		
TC693516	10-20	ZS325495	(1)-3	ZS432674	2-12	ZW273756	11-44		
TC693527	11-16	ZS325495	3-7	ZS432843	11-22	ZW273881	1-36		
TC693540	11-31	ZS325495	4-29	ZS434250	10-15x	ZW273881	10-45x		
TC693551	11-15	ZS325495	5-8	ZS434250	10-47x	ZW290283	1-44		
TC693573	11-33	ZS325495	6-19	ZS447805	12-14x	ZW290283	4-19		
TC693617	11-58	ZS325495	6-28x	ZS447840	10-14	ZW290283	5-3		
TC693628	(1)-2	ZS325495	7-18	ZS461395	1-59	ZW290283	7-21		
TC693641	11-1	ZS325495	9-6	ZS464692	1-20	ZW290283	12-19x		
TC693674	11-51	ZS325495	10-7	ZS465298	6-17	ZW290294	6-10		
TC693685	11-57	ZS325495	10-49x	ZS465298	7-3	ZW290294	6-24x		
TC693707	11-46	ZS325495	11-6	ZS467796	11-28	ZW290294	11-24		
TC693718	11-55	ZS325495	11-59x	ZS477876	1-21	ZW290294	11-34		
TC693720	11-56	ZS325495	11-61x	ZS487091	7-33	ZW322110	4-26		
TC694697	7-19	ZS325495	11-66x	ZS499454	2-4	ZW356657	11-17		
ZG207257	4-13	ZS325495	(12)-4	ZS524812	1-12	ZW364364	1-11		
ZG217337	6-9	ZS356804	1-31	ZS558101	(2)-8	ZW381881	12-13x		
ZG224796	6-11	ZS356804	3-4	ZS558101	(8)-3	ZW394007	11-20		
ZG227114	1-24	ZS369900	7-17	ZS559056	1-62	ZW413188	10-16x		
ZG227452	4-25	ZS379350	1-61	ZS592378	11-48	ZW413188	10-46x		
ZG227586	11-38	ZS379350	2-6	ZS592378	(6)-3	ZW450753	1-46		
ZG232121	5-9	ZS379350	(4)-5	ZS592402	4-16	ZW474592	11-18		
ZG244067	11-35	ZS379350	5-1	ZS608106	1-23	ZW474592	11-40x		
ZG314818	7-26	ZS379350	11-9x	ZS609232	9-8	ZW485728	1-22		
ZG359638	6-21	ZS379405	1-17	ZS669104	4-14	ZW516611	6-14		
ZG365433	7-4	ZS391522	1-34	ZS691277	12-16	ZW542158	5-7		
ZG366761	5-4	ZS414033	4-24	ZW222388	1-47	ZW562476	1-35x		
ZG386335	1-57	ZS417161	6-3	ZW259503	4-22	ZW562476	1-48x		
ZG431291	6-23	ZS417216	1-54	ZW259773	11-39	ZW562476	11-29x		
ZG465636	1-33	ZS417216	9-11	ZW259986	7-8	ZW565200	11-41		
ZG535454	9-9	ZS417216	10-3	ZW270088	1-13	ZW589893	11-32		
ZG542215	1-43	ZS417216	11-47	ZW270088	4-10	ZW592391	4-9		
ZG569384	1-56	ZS417216	11-60x	ZW270088	7-12	ZW597543	2-10		
ZG595618	4-7	ZS417216	(12)-3	ZW270101	7-13	ZW668452	3-6		
ZG595620	4-8	ZS421806	(2)-6	ZW273633	6-18	ZW668452	6-6		
ZG644411	1-15	ZS421806	(4)-3	ZW273666	1-25	ZW675033	6-5		
ZG659880	1-28	ZS421806	11-43	ZW273745	1-8	ZW691266	12-15		
ZS200610	12-4x	ZS422076	1-50	ZW273756	1-6				
ZS201150	10-35	ZS422076	6-27x	ZW273756	(2)-7				
ZS201150	10-36x	ZS422076	7-30	ZW273756	(4)-4				

SECTION 3

SCHEMATIC DIAGRAM

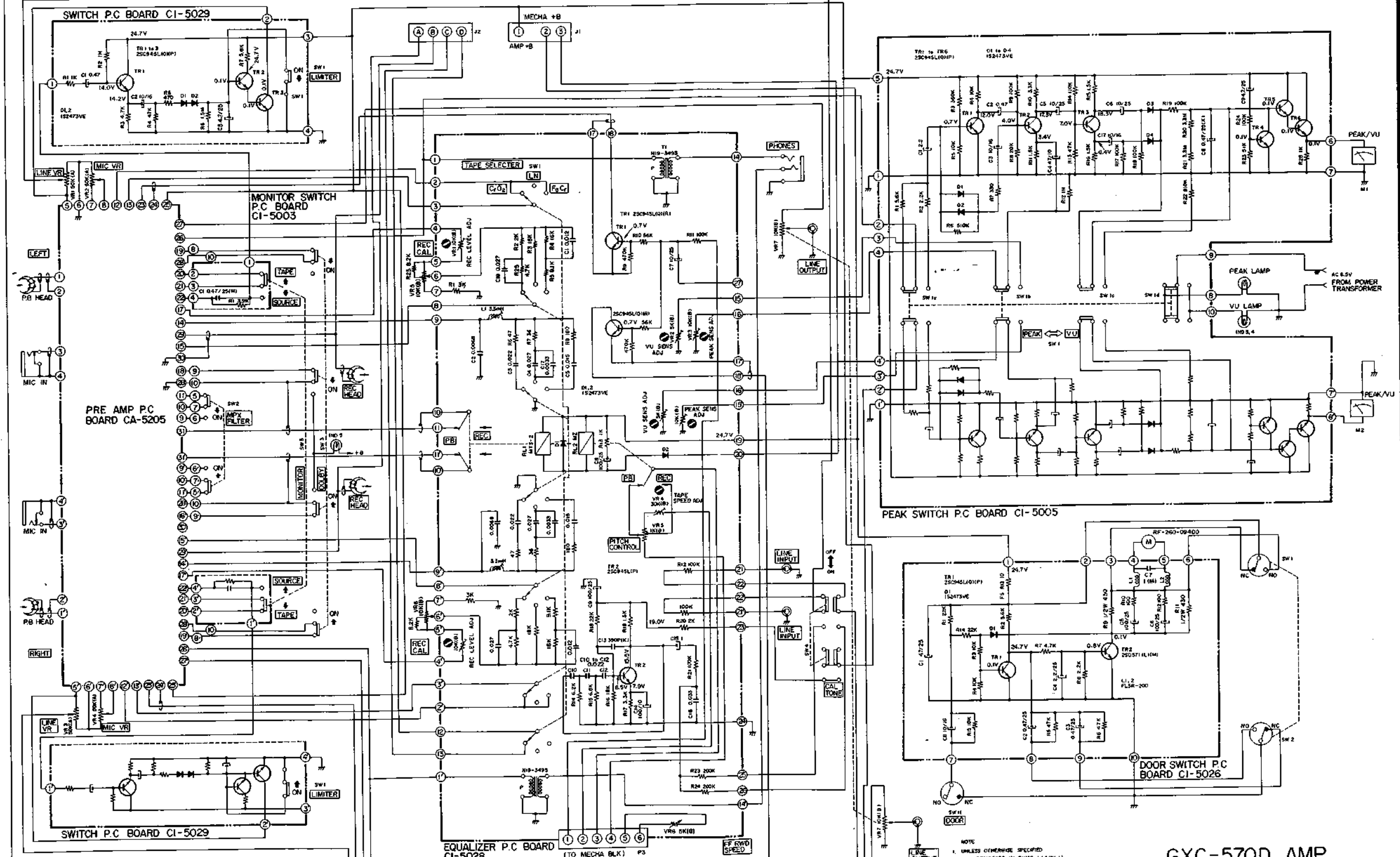
1. GXC-570D NO. 3-1 1521626B CONNECTION DIAGRAM
2. GXC-570D NO. 3-2 1521627A SCHEMATIC DIAGRAM
3. GXC-570D NO. 3-3 1521628B CONNECTION DIAGRAM

GXC-570D



NOTE
 1. UNLESS OTHERWISE SPECIFIED:
 ALL RESISTORS IN OHMS 1/4 WATT
 ALL CAPACITORS IN P.F. 50WV(4)
 2. F2 - FAIL SAFE RESISTORS

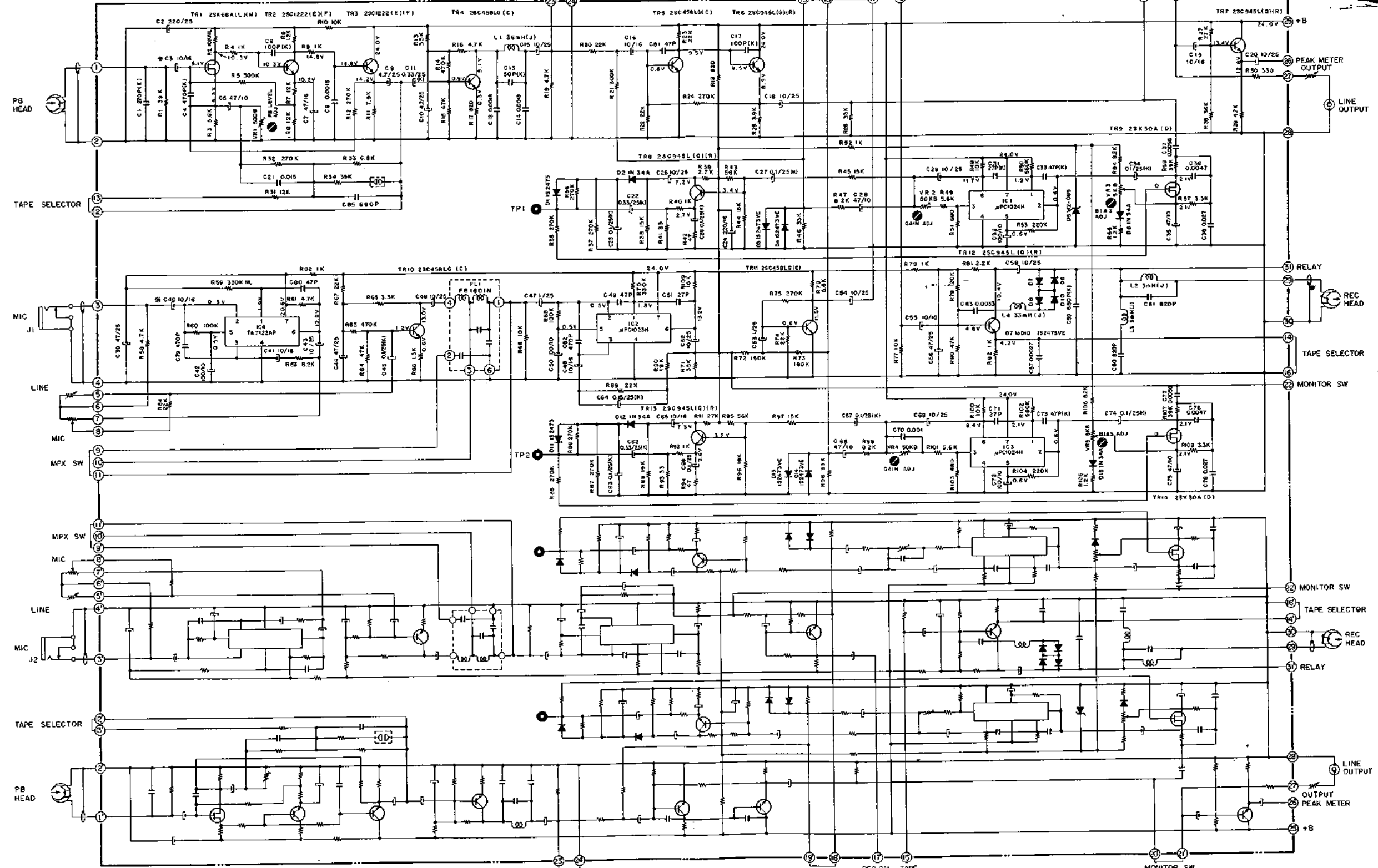
GXC-570D AMP
 CONNECTION DIAGRAM
 NO. 3-1 1521626B



NOTE
 1. UNLESS OTHERWISE SPECIFIED
 ALL RESISTORS IN OHMS (1.4K Ω)
 ALL CAPACITORS IN PF (30V/1)
 2. FS = FAIL SAFE RESISTORS

GXC-570D AMP
 CONNECTION DIAGRAM
 NO. 3-1 1521626B

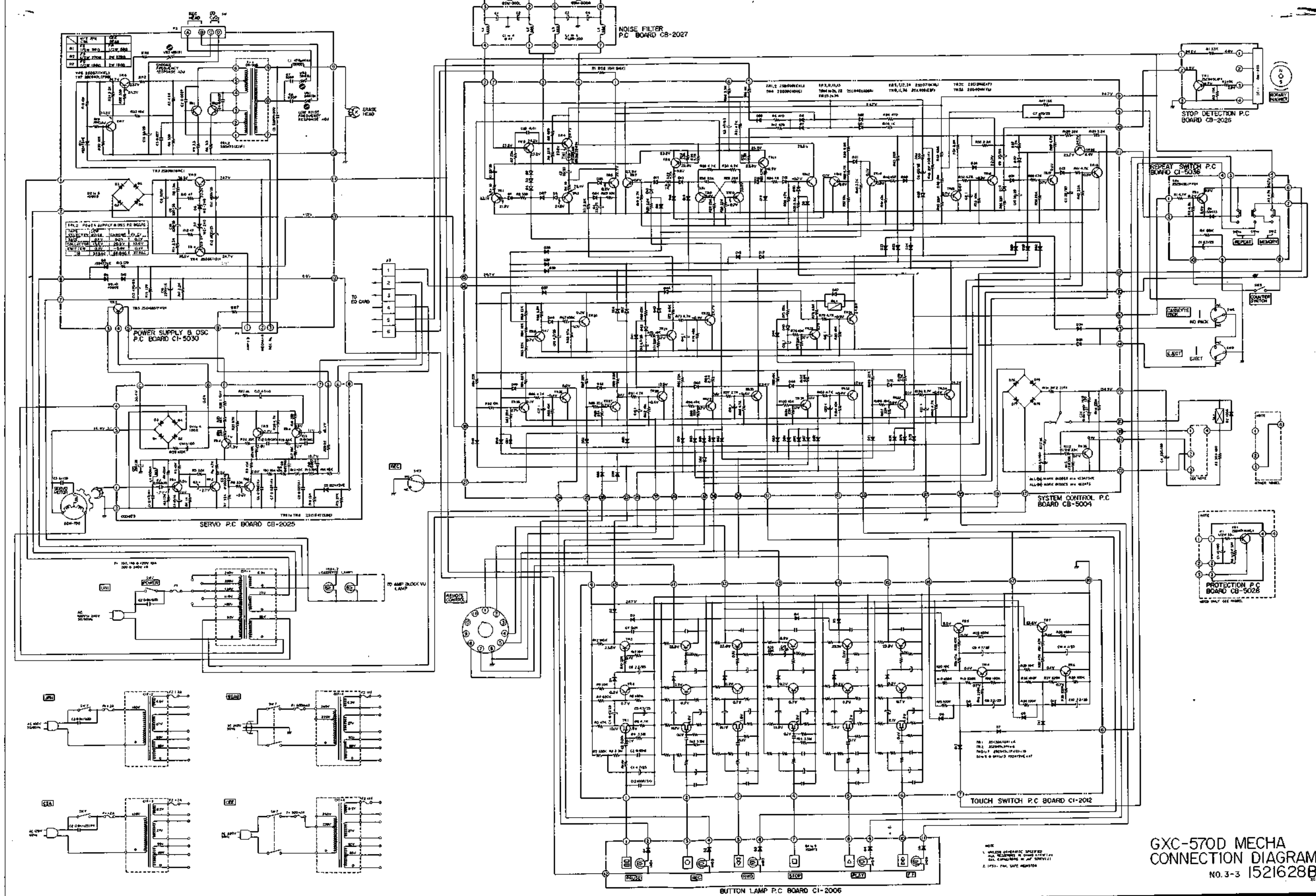
GXC-570D



PRE AMP P.C BOARD CA-5205

- NOTES
1. UNLESS OTHERWISE SPECIFIED ALL RESISTORS IN OHMS (1/4W)
 2. * MARK INDICATES LOW LEAKAGE CAPACITORS
 3. N.L. INDICATES NOISE LESS RESISTORS

**GXC-570D PRE AMP
SCHEMATIC DIAGRAM**
NO. 3-2 1521627A



GXC-570D MECHA CONNECTION DIAGRAM NO. 3-3 1521628B

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CVC PAPER

**AKAI ELECTRIC CO., LTD.
AKAI TRADING CO., LTD.**

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