



STEREO CASSETTE DECK

MODEL GXC-710D

| | | |
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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. SPECIFICATIONS

An asterisk next to a figure indicates the minimum guaranteed performance.

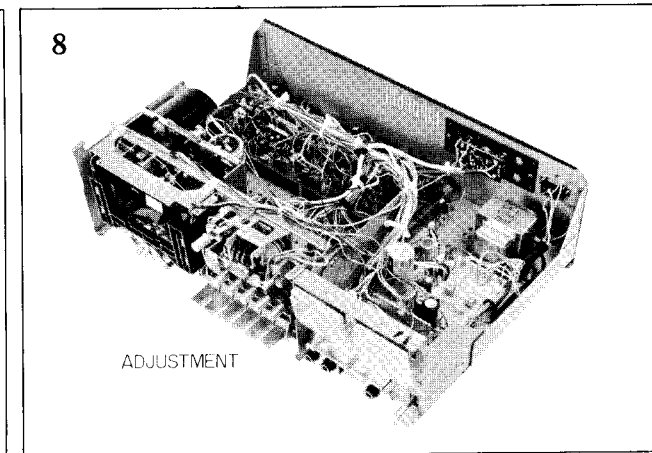
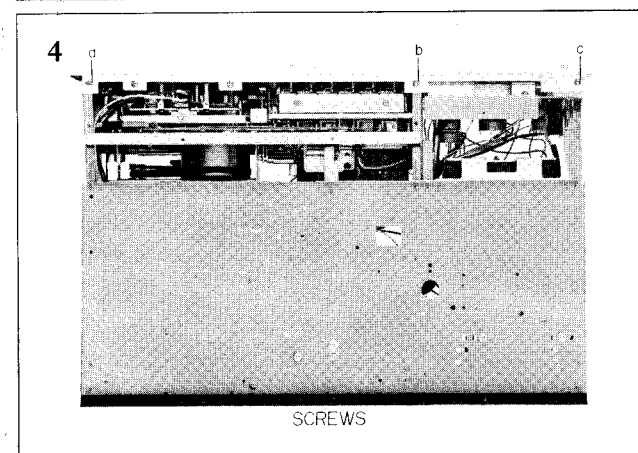
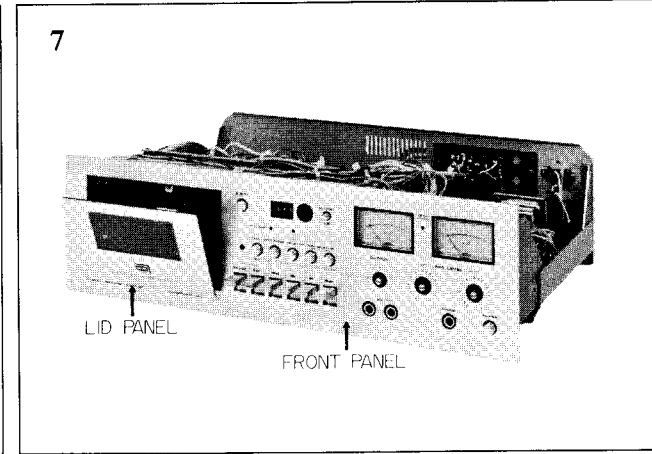
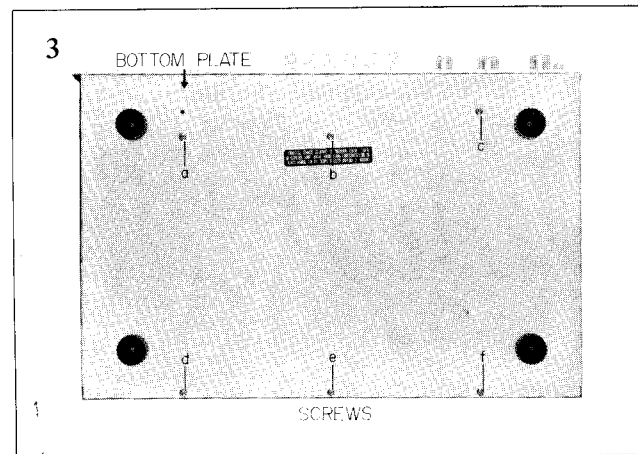
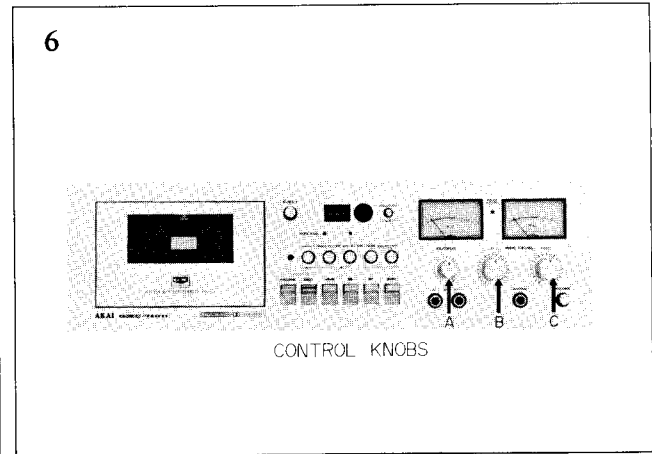
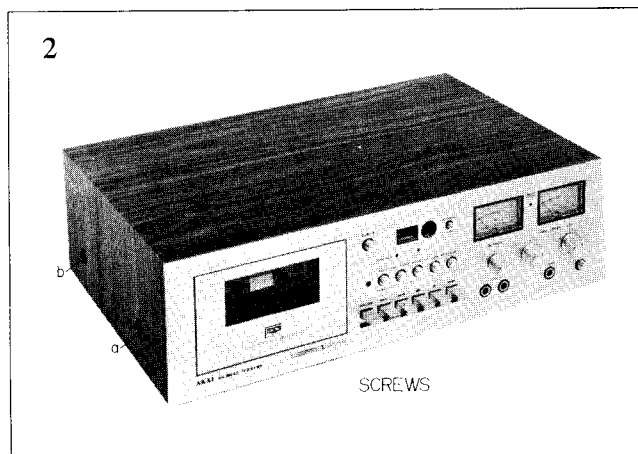
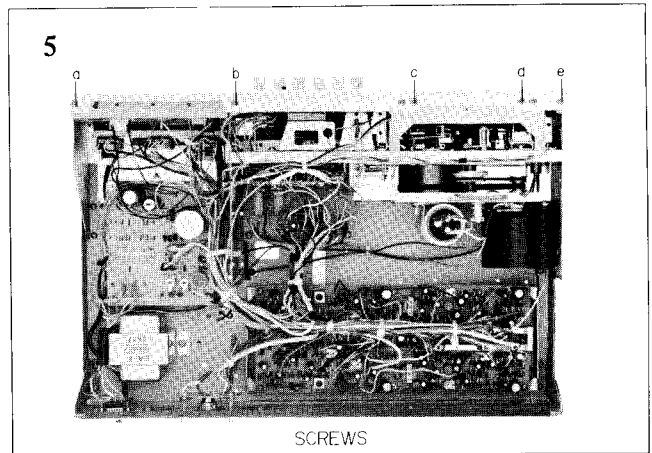
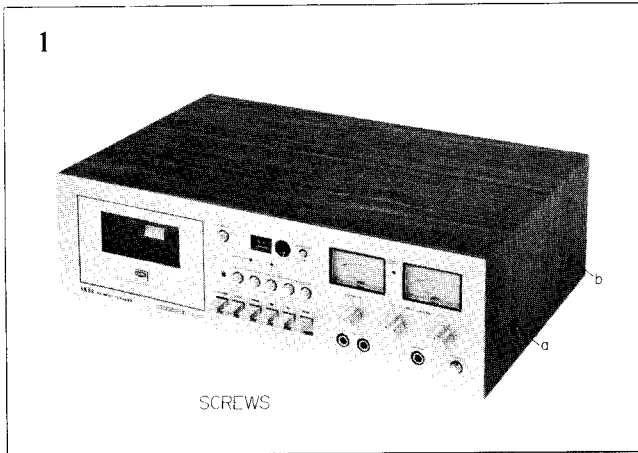
| | |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| TRACK SYSTEM | 4 track, 2 channel stereo system |
| TAPE SPEED | 1-7/8 ips (4.75 cm/sec) $\pm 2\%$ |
| WOW AND FLUTTER | Less than 0.08% WRMS *Less than 0.2% RMS |
| TOTAL WOW AND FLUTTER | *Less than 0.22% RMS |
| FREQUENCY RESPONSE | |
| LOW NOISE TAPE | 30 to 14,000 Hz ± 3 dB *50 to 13,000 Hz ± 4 dB |
| Cr-O ₂ TAPE | 30 to 16,000 Hz ± 3 dB *50 to 14,000 Hz ± 4 dB |
| Fe-Cr TAPE | 30 to 17,000 Hz ± 3 dB *50 to 16,000 Hz ± 4 dB |
| DISTORTION FACTOR | Less than 1.5% at 1,000 Hz "0" VU recording |
| TOTAL DISTORTION FACTOR | |
| LOW NOISE TAPE | *Less than 3% at 1,000 Hz "0" VU recording |
| Cr-O ₂ TAPE | *Less than 5% at 1,000 Hz "0" VU recording |
| Fe-Cr TAPE | *Less than 3% at 1,000 Hz "0" VU recording |
| SIGNAL TO NOISE RATIO | Better than 50 dB (Dolby N.R. OFF) *Better than 44 dB (Dolby N.R. OFF) Better than 60 dB (Dolby N.R. ON) *Better than 48 dB (Dolby N.R. ON) |
| TOTAL SIGNAL TO NOISE RATIO | *Better than 43 dB |
| OUTPUT | |
| LINE | 0.775V (0 ± 1 dBm), using a 333 Hz "0" VU pre-recorded tape |
| DIN | 0.55V |
| HEADPHONE | 50 mV/8 ohms, using a 333 Hz "0" VU pre-recorded tape |
| INPUT IMPEDANCE | |
| MIC | More than 0.3 mV/4.7 k ohms *0.5 mV/4.7 k ohms |
| LINE | More than 70 mV/100 k ohms *80 mV/100 k ohms |
| DIN | More than 3 mV/30 k ohms *4 mV/30 k ohms |
| RECORDING/PLAYBACK LEVEL | |
| LOW NOISE TAPE | 0 ± 2 dBm, 1,000 Hz "0" VU recording |
| Cr-O ₂ TAPE | -3 ± 1.5 dBm, 1,000 Hz "0" VU recording |
| CROSS TALK | Better than 25 dB, 1,000 Hz +3 VU recording |
| ERASE RATIO | Better than 70 dB, 1,000 Hz +3 VU recording |
| RECORDING BIAS FREQUENCY | 61 ± 5 kHz |
| BIAS LEAK | *Less than -25 dB (Dolby N.R. OFF) *Less than -40 dB (Dolby N.R. ON) |
| FAST FORWARD AND REWIND TIME | Approximately 1 min and 45 seconds using a C-90 cassette tape |
| HEAD | |
| RECORDING/PLAYBACK HEAD | 4 track 2 channel recording/playback head Type: P4-341 Impedance: 1,000 ohms at 1 kHz DC Resistance: 190 ohms |
| ERASE HEAD | 2 track 1 channel erase head Type: HF213853 Impedance: 330 ohms at 50 kHz DC Resistance: 5.0 ohms |
| MOTOR | Hysteresis Synchronous outer rotor motor Type: HM1-12CS Revolutions: 1,500/1,800 rpm at 50/60 Hz |

| | | |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| TRANSISTOR | 2SA628(E) (F) . . . 2 2SA733 (P) (Q) . . . 1 2SC458LG (C) . . . 4 2SC458LG (D) . . . 2 2SC945L (P) . . . 3 2SC945L (P) (Q) . . . 4 | 2SC945L (Q) (R) . . . 12 2SC1061 (C) . . . 1 2SC1096 (K) (L) . . . 1 2SC1247A(B) (V) . . . 3 2SC1312 R (G) (H) . . . 4 |
| FET | 2SK30A (D) . . . 2 | |
| DIODE | 1S1588 . . . 2 1S2473VE . . . 26 WZ085A . . . 4 1N34A . . . 6 | 10D05 . . . 5 SEL-103R . . . 1 SEL-303E . . . 2 WZ-240 . . . 1 |
| POWER REQUIREMENT | Universal Models: 110 to 240V AC 50/60 Hz JPN Models: 100V AC 50/60 Hz CSA Models: 120V AC 60 Hz CEE Models: 220V AC 50 Hz BSI Models: 240V AC 50 Hz | |
| POWER CONSUMPTION | 30W | |
| DIMENSIONS | 440 (W) x 142 (H) x 304 (D) mm (17.3" x 5.6" x 12") | |
| WEIGHT | 8.8 kg (19.4 lbs) | |

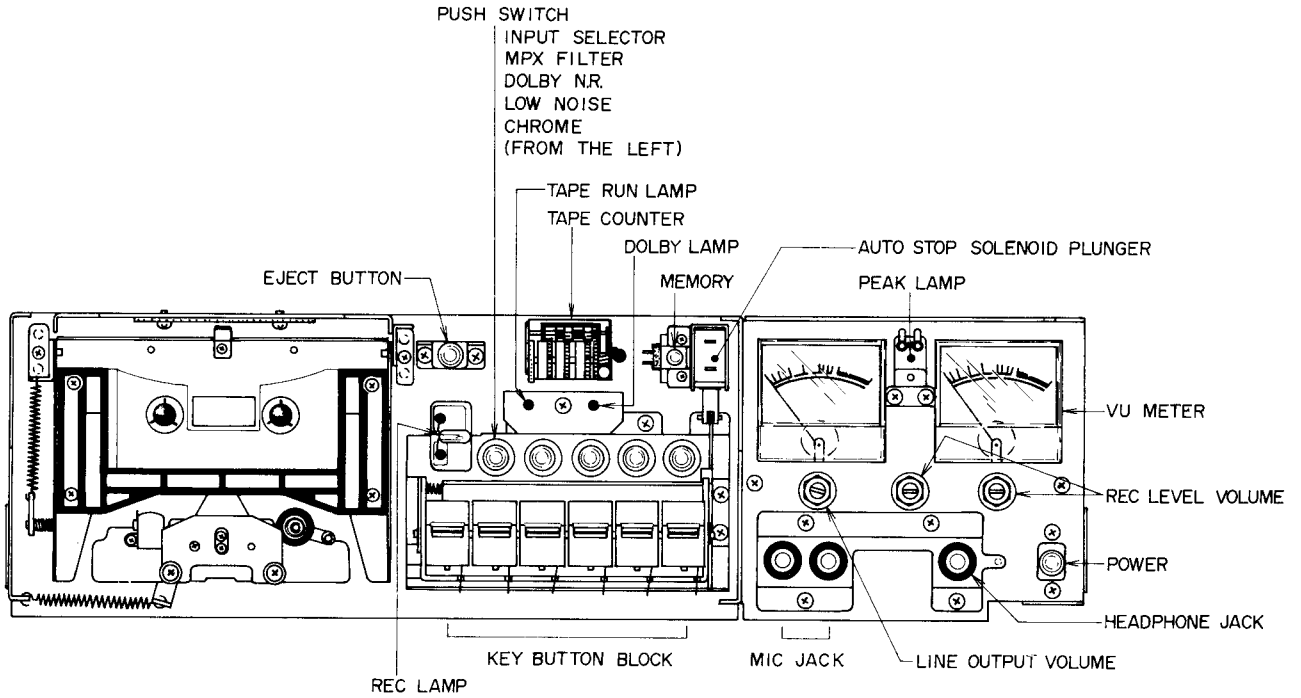
NOTE: Specifications subject to change without notice.

II. DISMANTLING OF UNIT

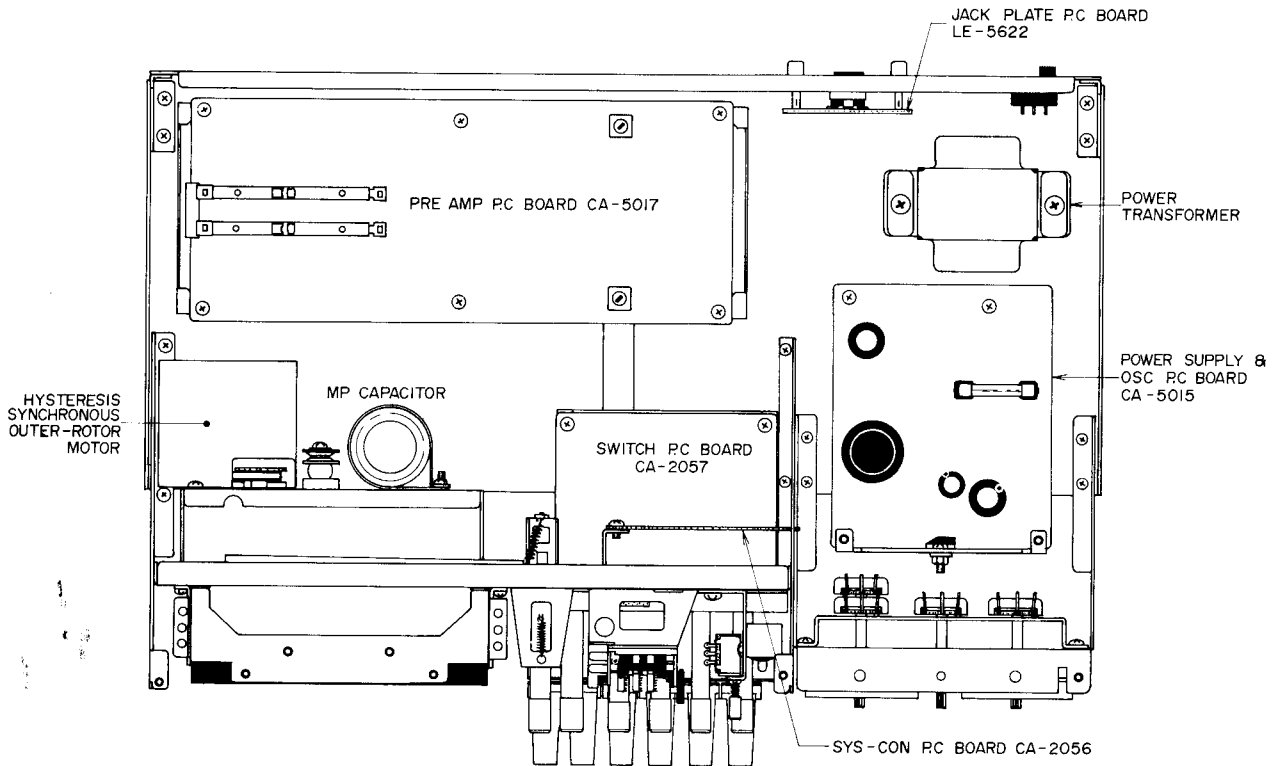
In case of trouble, etc. necessitating disassembly, please disassemble in the order shown in photographs. Reassemble in reverse order.



III. ARRANGEMENT OF PRINCIPAL PARTS



FRONT VIEW



TOP VIEW

IV. MECHANISM ADJUSTMENT

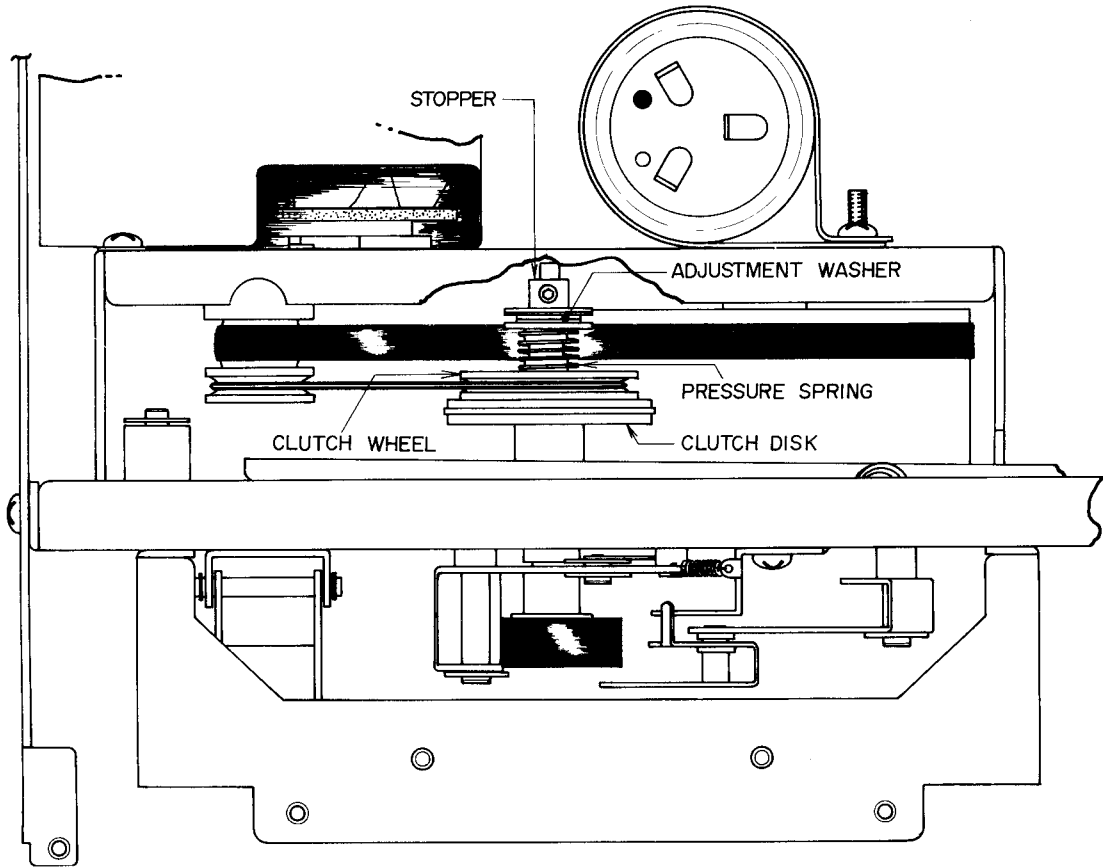


Fig. 1

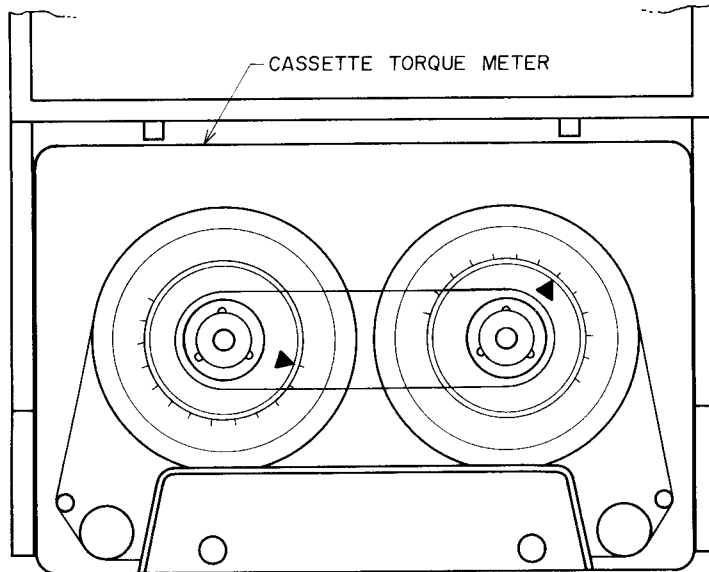


Fig. 2

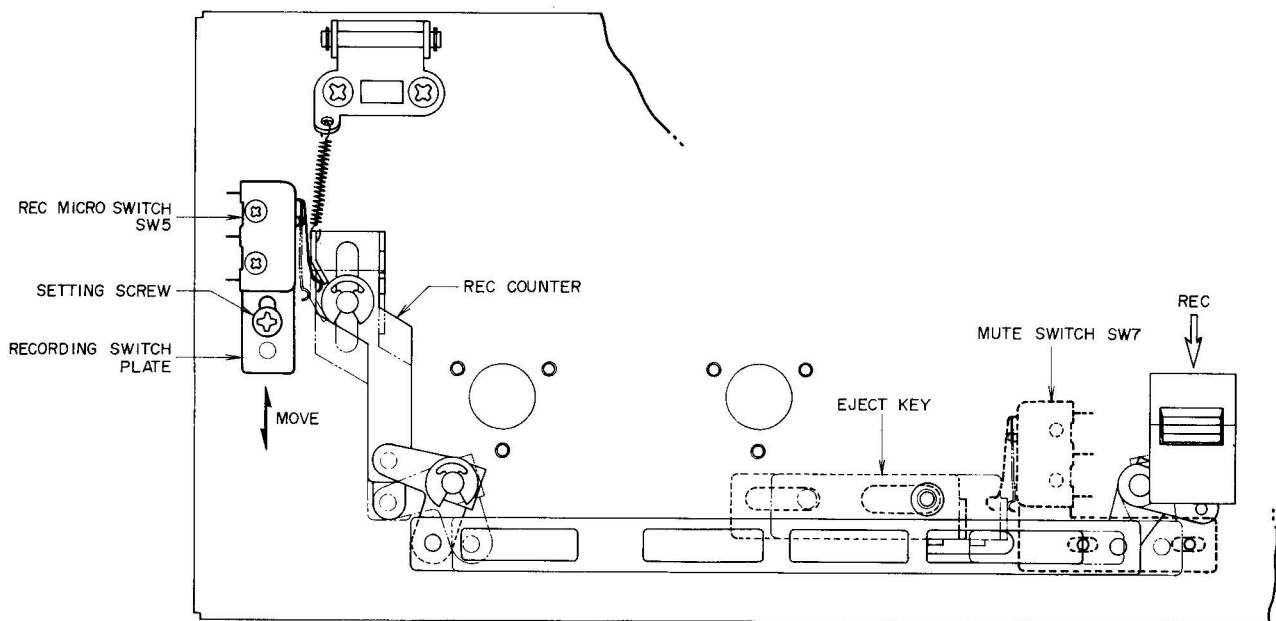


Fig. 3

1. FAST FORWARD AND REWIND TORQUE MEASUREMENT (Refer to Figs. 1 and 2)

Use a cassette torque meter and measure torque at the point at which the tape ends and stop mode is effected from Rewind and Fast Forward mode respectively.

Proper rewind and fast forward torque is 100 ± 20 gr-cm.

If torque is not within specifications, adjust friction pressure by changing the number of washers inserted between the pressure spring and stopper.

In case specified torque cannot be attained after above adjustment, replace clutch disk assembly.

NOTE: In case of replacement of clutch disc only, be sure to adjust torque only after aging (after the new clutch disc has been used for awhile).

2. TAKE-UP AND SUPPLY REEL TABLE TORQUE MEASUREMENT

Use a cassette torque meter as shown in Fig. 2, and at play mode, measure the reel table torque of both reels during tape travel.

Take-up reel table: 50 ± 10 gr-cm

Supply reel table: 10 ± 3 gr-cm

If torque of each reel table is not within specifications, replace reel table assembly.

NOTE: When adjusting clutch disk, because Fast Forward and Rewind Torque as well as Take-up and Supply table torque is changed, it is necessary to adjust Fast Forward and Rewind torque first and then Take-up and Supply reel table torque.

3. REC MICRO SWITCH POSITION ADJUSTMENT (Refer to Fig. 3)

When the Recording Button is depressed, Recording Switch SW-5 and Mute Switch SW-7 are turned ON. Move Recording Switch Plate as indicated by the arrow mark in the figure, and adjust so that Recording Switch SW-5 is activated first and then Mute Switch SW-7 is activated. Tighten setting screw to maintain optimum adjusted position.

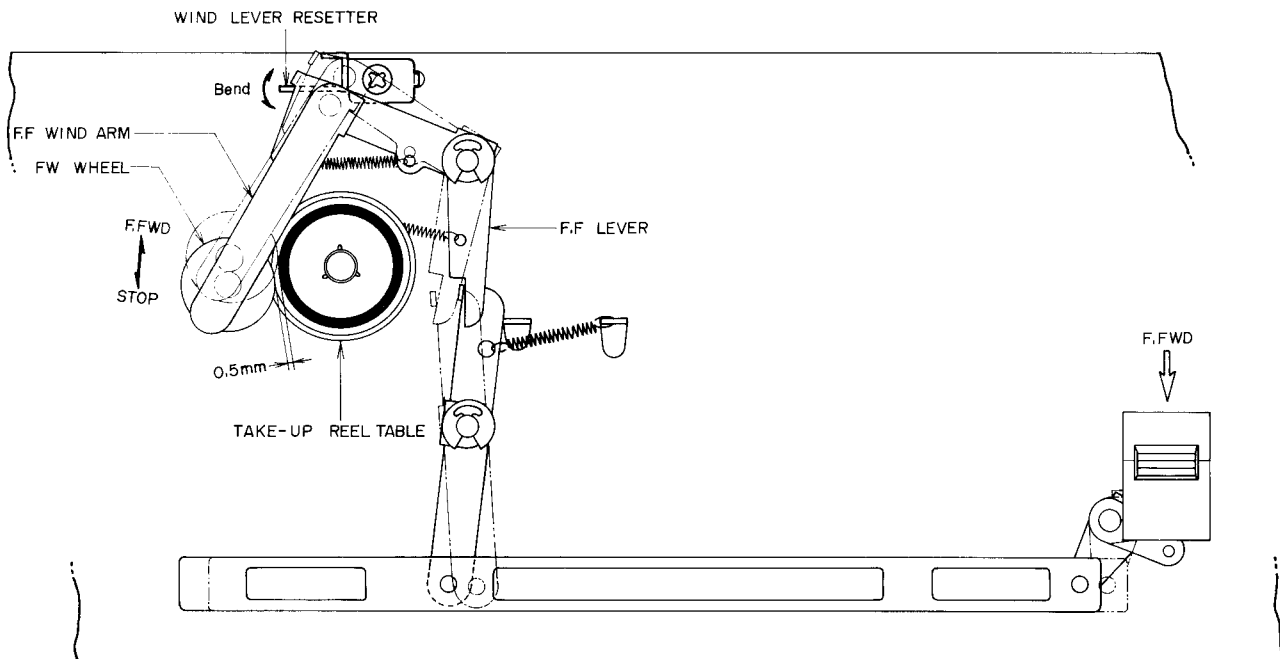


Fig. 4

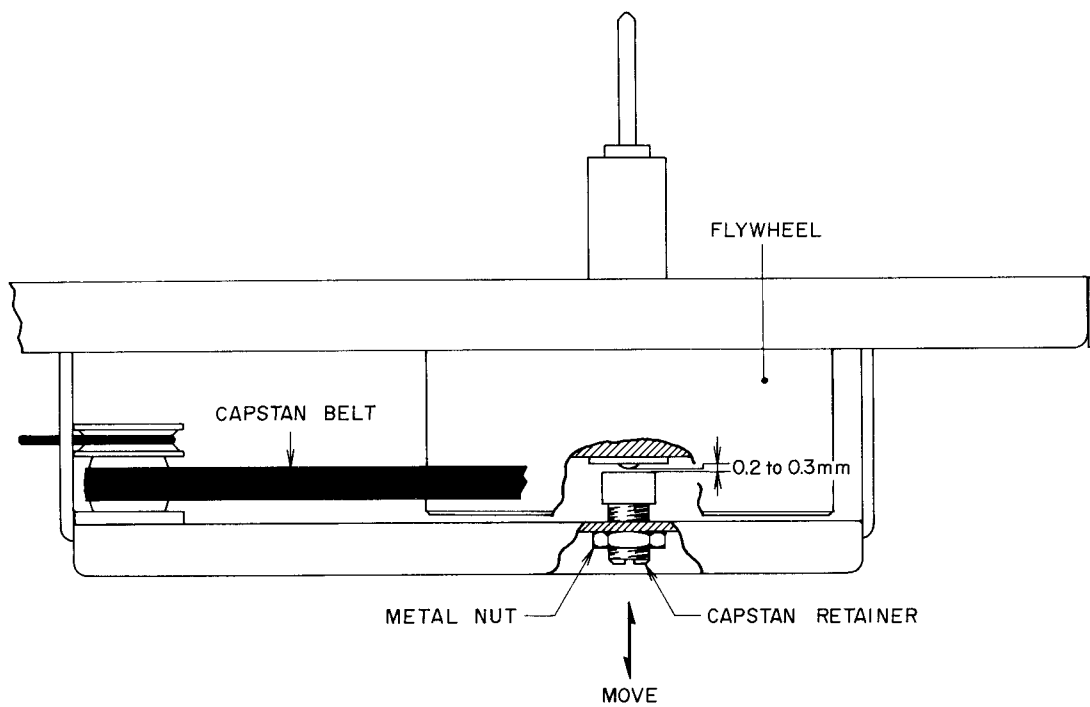


Fig. 5

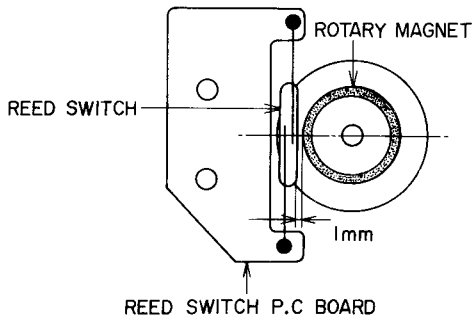


Fig. 6

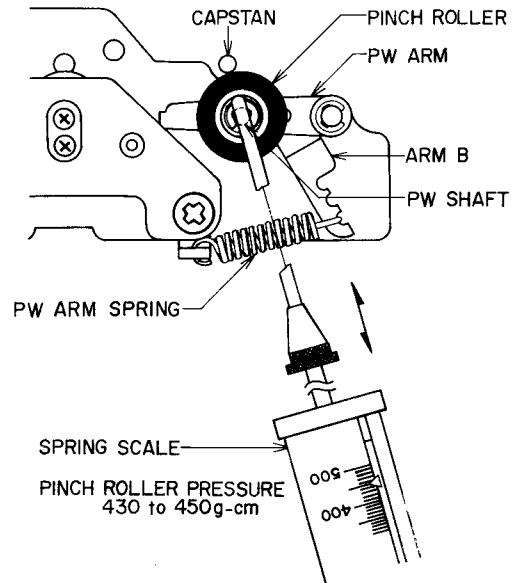


Fig. 7

4. FW WHEEL POSITION ADJUSTMENT

(Refer to Fig. 4)

At stop and rewind modes, adjust by bending Wind Lever Resetter so that the gap width between FW Wheel and Take-up table is 0.5 mm.

5. FLYWHEEL LOOSE PLAY ADJUSTMENT

(Refer to Fig. 5)

Adjust by turning Capstan Retainer to obtain a 0.2 to 0.3 mm flywheel gap. Tighten Metal Nut to stabilize Capstan Retainer and maintain optimum adjusted position.

6. REED SWITCH POSITION ADJUSTMENT

(Refer to Fig. 6)

Adjust installation position of reed switch to obtain a 1 mm gap between the reed switch and rotary magnet and so that both parts are perfectly centered in relation to each other. If centering is off, reed switch operation becomes unstable, and automatic stop may also be effected.

7. PINCH ROLLER PRESSURE ADJUSTMENT

(Refer to Fig. 7)

At playback mode, pull back the Pinch Roller Arm in the direction of arrow mark with a spring gauge, and then gently return. Take a reading of the spring gauge at the time the Pinch Roller touches the capstan and begins to rotate.

Proper pressure is 430 to 450 gr-cm. If pressure is not within specifications, bring to within specifications by adjusting position of the PW ARM SPRING on Arm B.

V. HEAD ADJUSTMENT

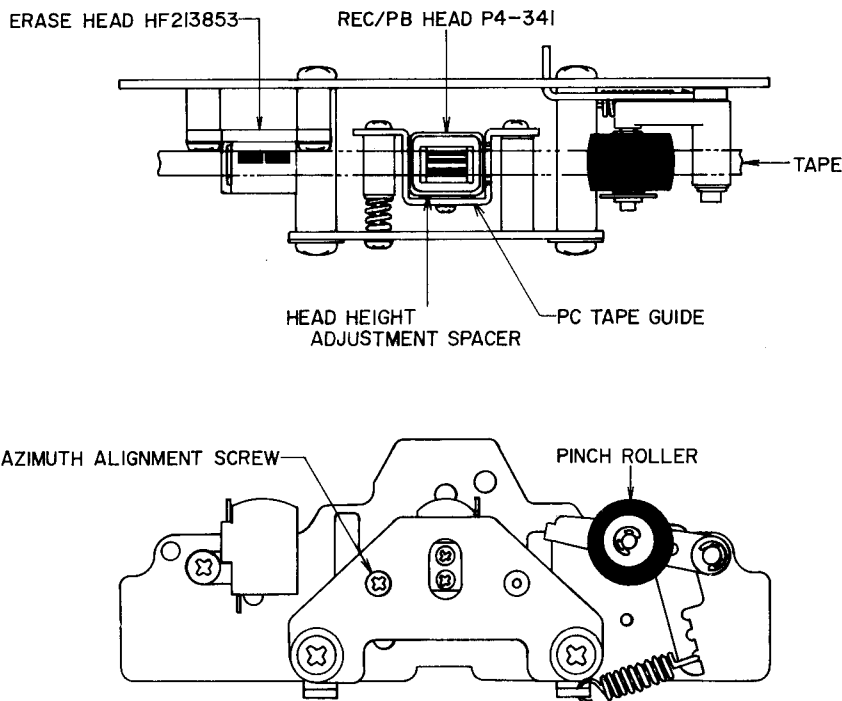


Fig. 8

1. RECORDING/PLAYBACK HEAD HEIGHT ADJUSTMENT (Refer to Fig. 8)

Playback a 1,000 Hz recorded test tape and adjust the number of spacers between the head and P.C tape guide so that equal maximum output level between 0 +1 VU to 3 VU is obtained on both channels.

2. RECORDING/PLAYBACK HEAD AZIMUTH ALIGNMENT ADJUSTMENT (Refer to Fig. 8)

Playback a 10 kHz recorded test tape and adjust Azimuth Alignment Screw shown in Fig. 8 to obtain maximum output on both channels.

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) Use only new tape as level variation is likely to occur when using old tape.
- 4) Be sure to demagnetize the heads with a Head Demagnetizer before and after head adjustment.

VI. AMPLIFIER ADJUSTMENT

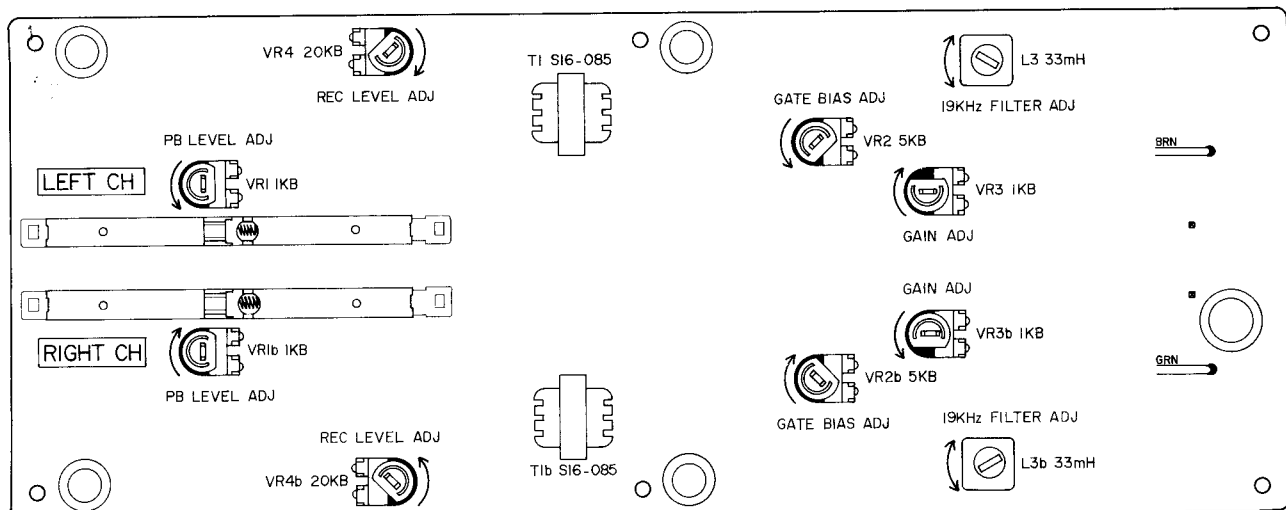


Fig. 9 Pre Amp P.C Board CA-5017

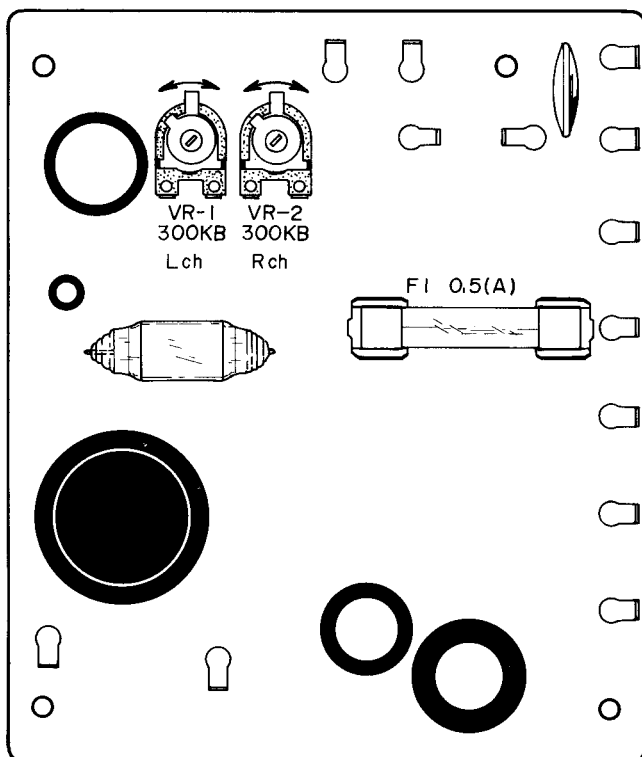


Fig. 10 Power Supply & OSC P.C Board CA-5015

RECORDING/PLAYBACK LEVEL ADJUSTMENT

| Step | Adjustment Item | Test Tape Supply Signal | Mode | Adjustment Point | Result | Remarks |
|------|---------------------------------------------------------|------------------------------------------------------------------|--------------------|---------------------------------------|-------------------------------------------------------------|-------------------------------------------|
| 1 | Playback Level Adjustment | 333 Hz 0 VU Test Tape | PLAY | VR1, 1 kB CA-5017 | 0 ± 1.5 dBm | |
| 2 | Recording Level Adjustment (low noise tape) | Low Noise Blank Tape 1,000 Hz 0 VU recording | REC and PLAY | VR4, 20 kB CA-5017 | 0 ± 2 dBm | Set Tape Selector to LOW NOISE |
| 3 | Recording Level Adjustment (chrome tape) | Chromium Dioxide Blank Tape 1,000 Hz 0 VU recording | REC and PLAY | | -3 ± 1.5 dBm | Set Tape Selector to CHROME |
| 4 | Frequency Response Adjustment (low noise tape) | Low Noise Blank Tape 1,000 Hz 10,000 Hz -20VU recording | REC and PLAY | VR1, 300 kB VR2, 300 kB CA-5015 | Flat frequency response from 1,000 Hz to 10,000 Hz | Deviation ± 1.5 dB (See Note 5) |

NOTE:

- 1) Set output volume to maximum position.
- 2) Set Dolby Noise Reduction switch to "OFF".
- 3) Use only new tape as level variation is likely to occur when using old tape.
- 4) Set tape selector switch to "LOW NOISE" except in Step 3.
- 5) Following frequency response adjustment, check to confirm that recording/playback level is the same. If levels differ, carry out Step 2 adjustment again.

Chart-1

VII. DOLBY N.R. CIRCUIT ADJUSTMENT

Connect measuring instruments as shown in Fig. 11.

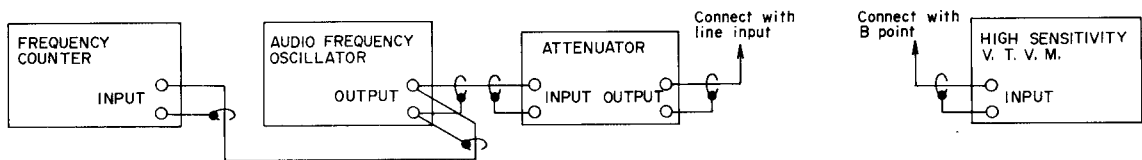


Fig. 11

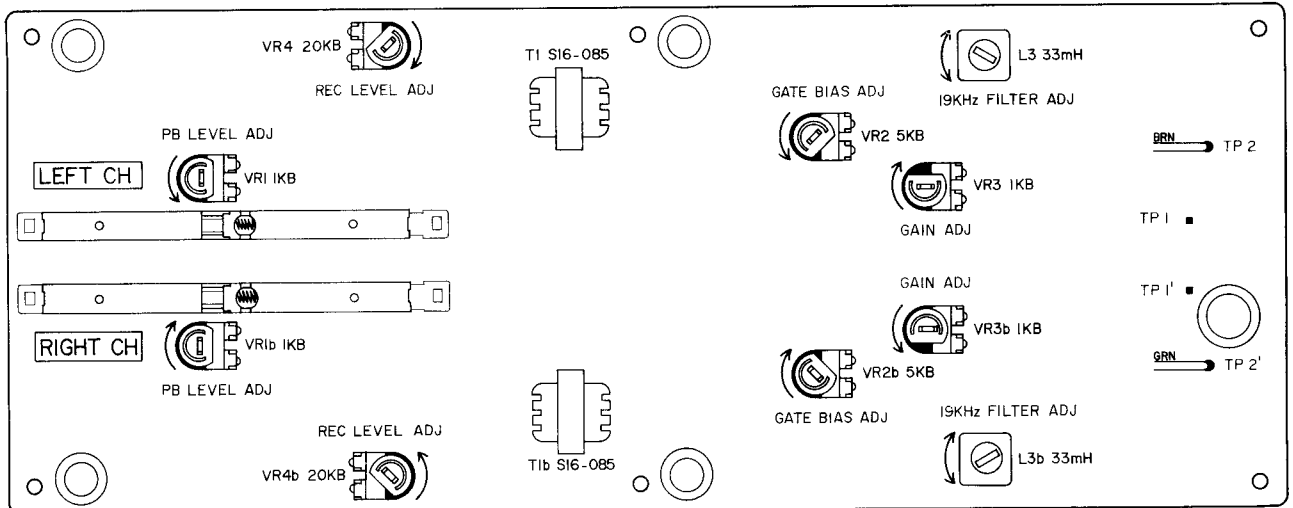


Fig. 12

1. 19 kHz FILTER ADJUSTMENT

(Refer to Fig. 12)

- 1) Set Monitor Switch to "SOURCE" and set Dolby Noise Reduction Switch to "ON" position. With Recording Level Control set to 12 o'clock position, supply a 19 kHz signal to the line input to obtain a 0 dBm line output level.
- 2) Set MPX Filter switch to "ON" and adjust core of ferri-inductor L-3, 33 mH to obtain minimum level at test point 2.

2. RECORDING DOLBY NOISE REDUCTION AMPLIFIER ADJUSTMENT

(Refer to Fig. 12)

- 1) Set Monitor Switch to "SOURCE", Dolby N.R. Switch to "OFF", Tape Selector Switch to "LOW NOISE" and Recording Level Control to 12 o'clock position.
- 2) Ground test point 1. and supply a 5 kHz signal to the line input through an attenuator to obtain a +2 dBm level at test point 2.
- 3) Decrease input level by 30.5 dBm to obtain a -28.5 dBm level at test point 2.
- 4) Set Dolby N.R. switch to "ON" and adjust semi-fixed resistor VR3 (1 kB) to obtain a -18.5 dBm level at test point 2.
- 5) Disconnect test point A from ground and adjust semi-fixed resistor VR2 (5 kB) to obtain -20.5 dBm (a decrease of 2 dBm) level at test point 2.

3. PLAYBACK DOLBY NOISE REDUCTION AMPLIFIER CONFIRMATION

- 1) Set Dolby switch to "OFF" and record a 1 kHz -20 dBm signal.
- 2) Rewind the cassette tape and set Dolby switch to "ON".
- 3) Playback the signal recorded in Item-1) and confirm that when the Dolby switch is switched to "ON" position, the line output level is decreased by 6 dB as compared to when the Dolby switch is turned "OFF". (Line output should be -26 dBm with Dolby N.R. Switch at ON).

If level differs less or more than 6 dB, repeat Recording Dolby Noise Reduction amplifier adjustment.

- NOTE:
1. When making Dolby Noise Reduction circuit adjustments, use only calibrated measuring instruments.
 2. Level deviation must be within ± 0.5 dBm.
 3. Paint lock semi-fixed resistors following adjustment.
 4. To prevent adjustment discrepancy caused by recording bias leakage, disconnect power supply (+B) lead wire from oscillator circuit prior to adjustment.

VIII. DC RESISTANCE OF VARIOUS COILS

| Part | Designation | DC Resistance |
|------------------------------|-------------|-------------------------------------------------------------------------------------|
| Oscillator Coil | OT-903 | Between 1-3: 0.04 ohms Between 4-6: 0.14 ohms Between 7-9: 0.65 ohms |
| Motor | HM1-12CS | Between YLW-BLU: 205 ohms Between BLU-RED: 186 ohms Between RED-YLW: 193 ohms |
| Headphone Output Transformer | S16-083 | Primary: 205 ohms Secondary: 1.3 ohms |
| Auto Stop Solenoid | 0730THT1 | 15 ohms |
| Recording/Playback Head | P4-341 | 190 ohms |
| Erase head | HF213853 | 5.0 ohms |

NOTE: The resistance values shown in this chart are average values.

Chart - 2

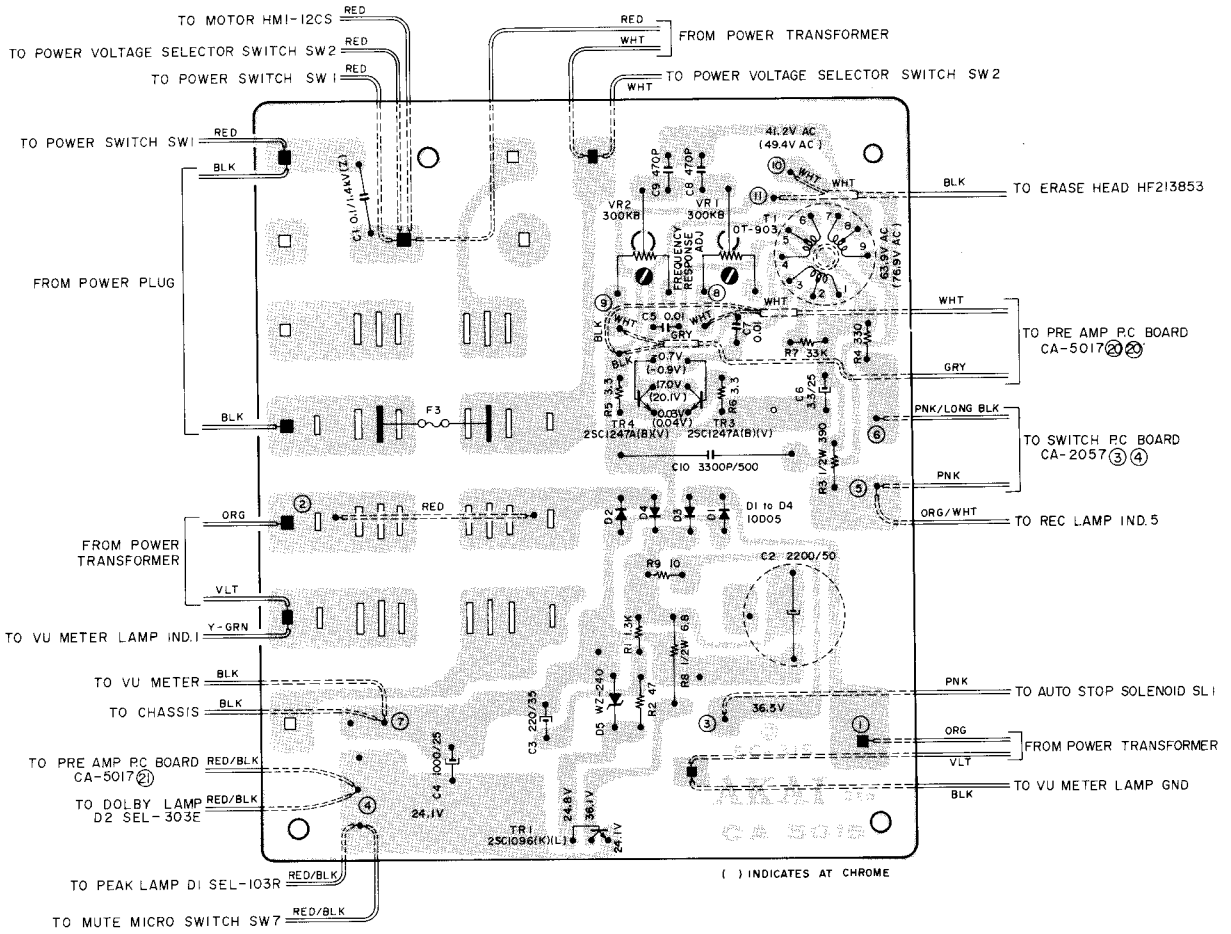
IX. CLASSIFICATION OF VARIOUS P.C BOARDS

1. RELATION OF P.C BOARD TITLE AND NUMBER

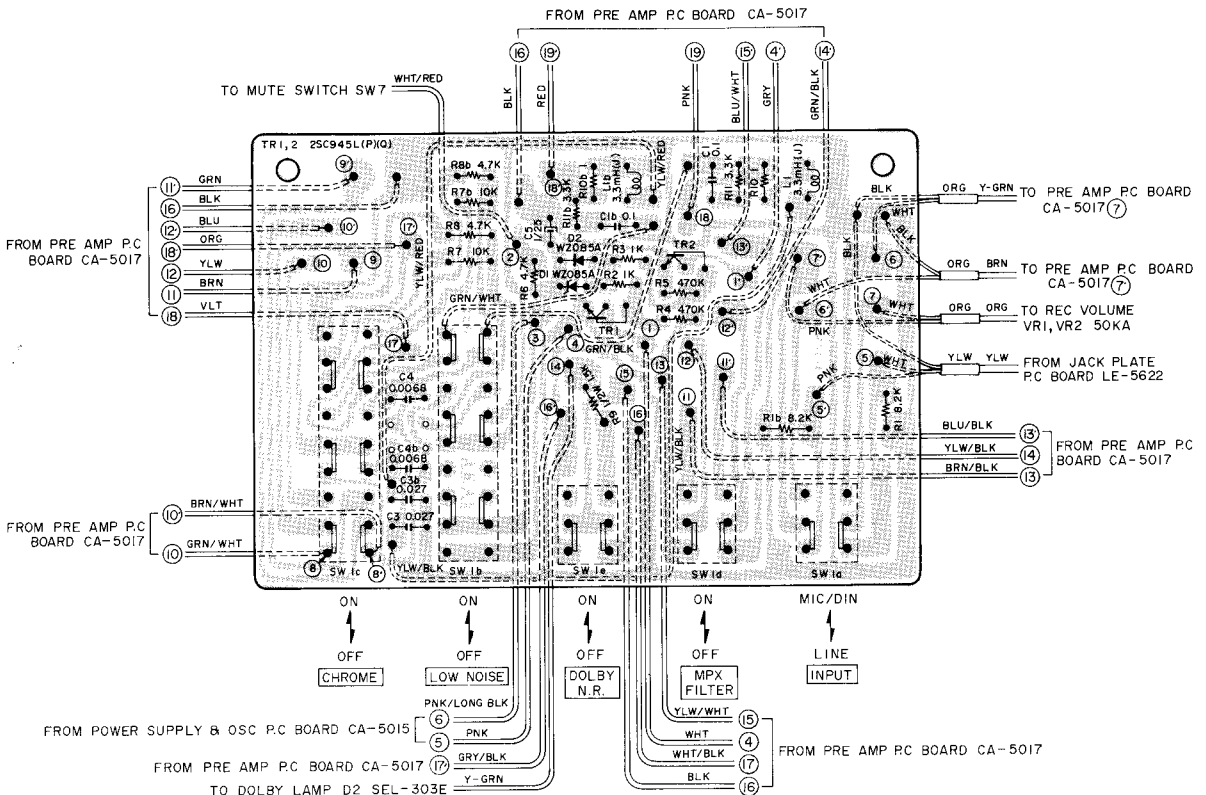
| P.C Board | Number of P.C Board |
|----------------------------|---------------------|
| Pre Amp P.C Board | CA-5017 |
| Power Supply/OSC P.C Board | CA-5015 |
| Sys. Con P.C Board | CA-2056 |
| Switch P.C Board | CA-2057 |
| Reed Switch P.C Board | CA-1095 |
| Jack Plate P.C Board | LE-5622 |
| Lamp P.C Board | CA-2069 |
| Lamp P.C Board | CG-5003 |
| Peak Lamp P.C Board | CA-2051 |

Chart - 3

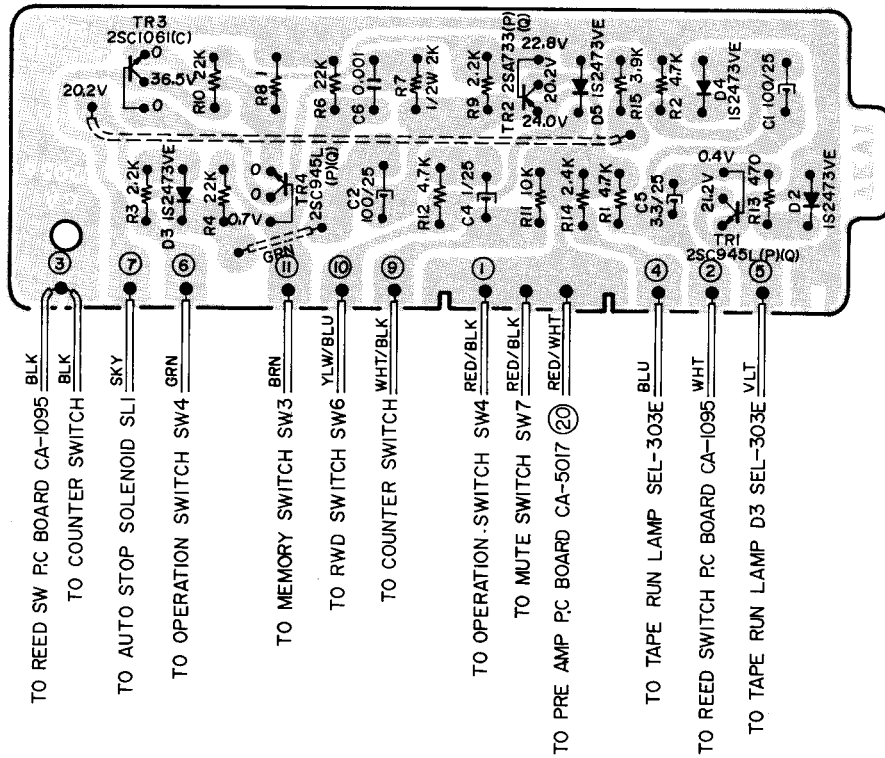
2. POWER SUPPLY & OSC P.C BOARD CA-5015



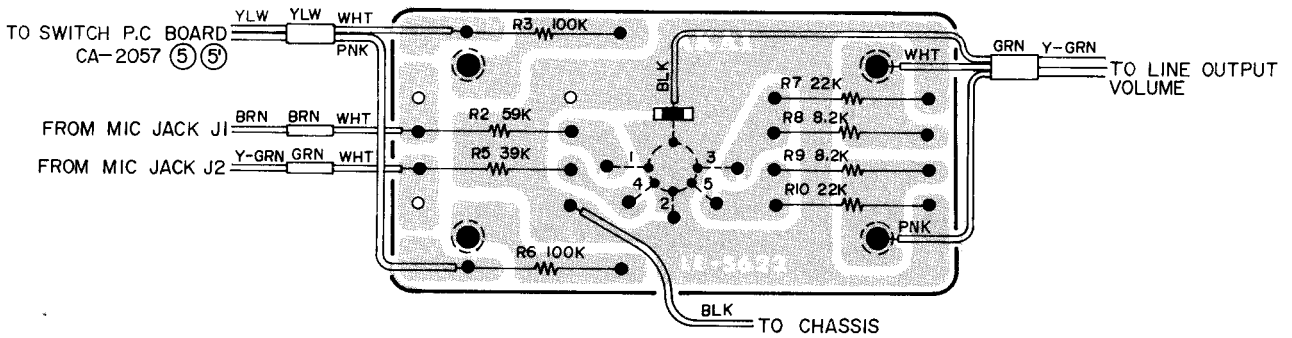
3. SWITCH P.C BOARD CA-2057



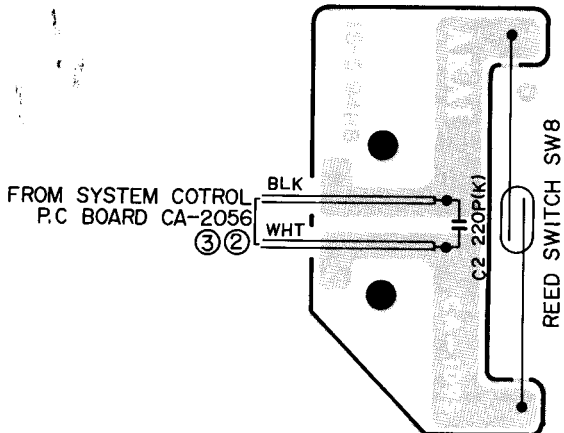
4. SYS. CON P.C BOARD CA-2056



5. JACK PLATE P.C BOARD LE-5622



6. REED SWITCH P.C BOARD CA-1095



SECTION 2

PARTS LIST

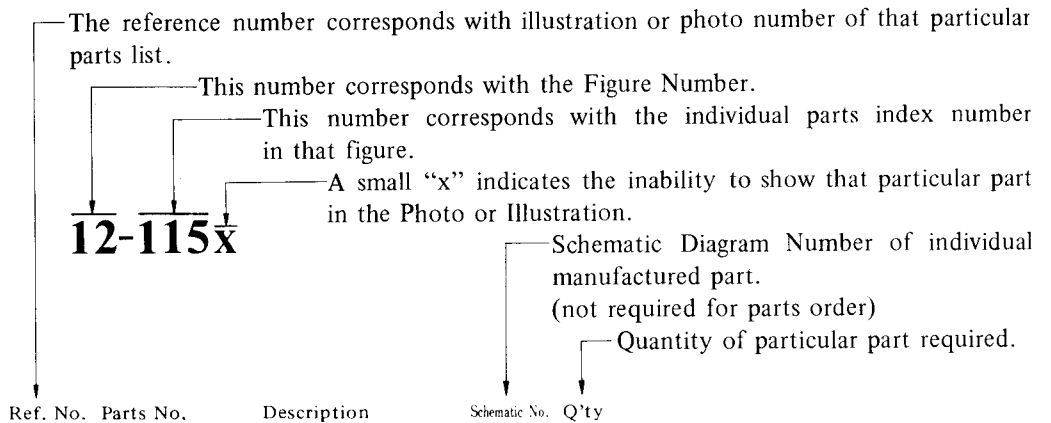
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| | (2) POWER SUPPLY & OSC P.C BOARD (CA-5015) BLOCK | 32 |
| | (3) SW. P.C BOARD (CA-2057) BLOCK | 33 |
| | (4) SYS. CON P.C BOARD (CA-2056) BLOCK | 33 |
| 10. | AMP ASSEMBLY BLOCK | 34 |
| 11. | FINAL ASSEMBLY BLOCK | 36 |
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Some of the parts in this parts list are only available as a complete assembly, and can not be supplied as individual 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.



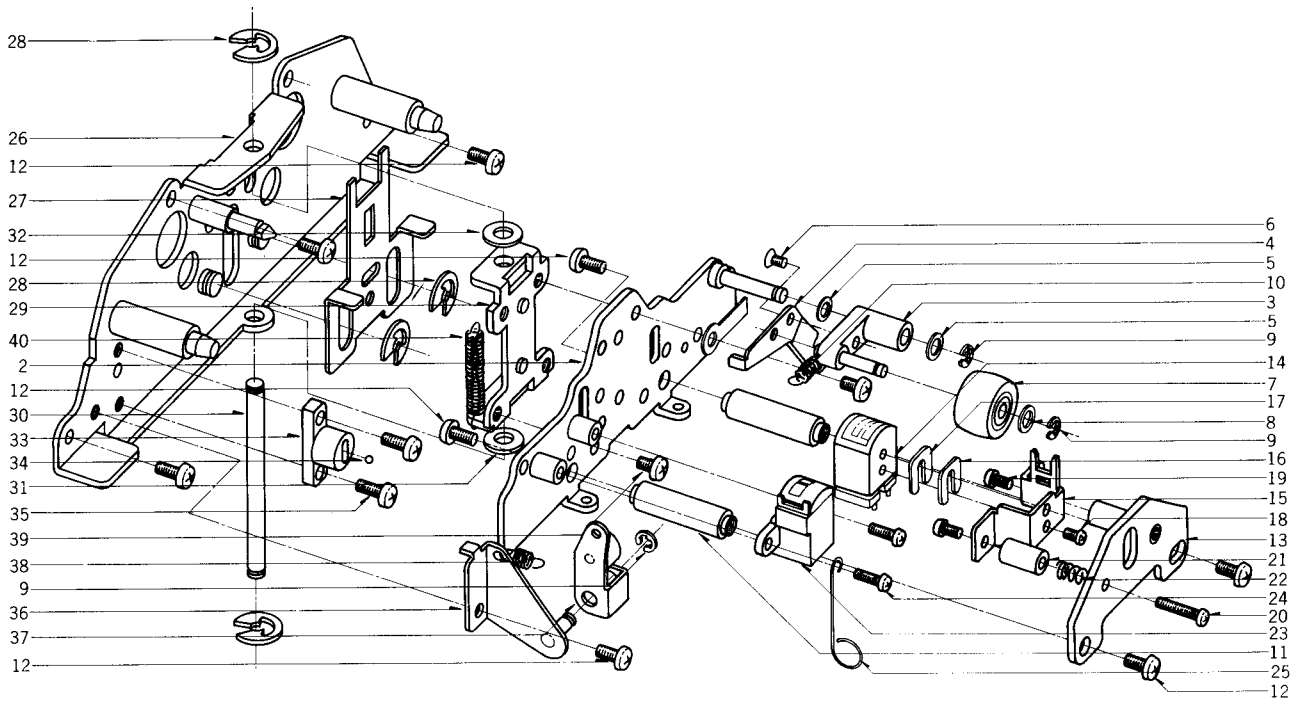
| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|---------------------------|-----------|----------------------------|---------------|------|
| FLYWHEEL BLOCK #13 | | | | |
| 12-115x | 800425 | Flywheel Block Assy. Comp. | RDG #13 | 1 |
| 12-116 | 244506 | Flywheel Only | RD-233 | 1 |
| 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.

ELECTRICAL PARTS LIST TABLE

| | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Because the indication of resistors and capacitors in the P. C. Board photos are being eliminated, please confirm parts name and shape by comparing them with the parts shown in this table.</p> | <p>1</p>  <p style="text-align: center;">Solid Resistor</p> | <p>2</p> <p style="text-align: right;">Stopper Type</p>  <p style="text-align: center;">Insulator Type</p> <p style="text-align: center;">Carbon Resistor</p> | <p>3</p>  <p style="text-align: center;">Metal Oxide Film Resistor</p> | |
| | <p>4</p>  <p style="text-align: center;">Cement Resistor</p> | <p>5</p>  <p style="text-align: center;">Wire-Wound Resistor</p> | <p>6</p>  <p style="text-align: center;">Thermister</p> | <p>7</p>  <p style="text-align: center;">Enamel Resistor</p> |
| | <p>1</p>  <p style="text-align: center;">MP Capacitor (Tubular Type)</p> | <p>2</p>  <p style="text-align: center;">Plastic Capacitor</p> | <p>3</p>  <p style="text-align: center;">Mylar Capacitor</p> | <p>4</p>  <p style="text-align: center;">VFM (Hi-Q) Capacitor</p> |
| | <p>5</p>  <p style="text-align: center;">Mylar Capacitor</p> | <p>6</p>  <p style="text-align: center;">Tantalum Capacitor</p> | <p>7</p>  <p style="text-align: center;">Oil Capacitor (Tubular Type)</p> | <p>8</p> <p style="text-align: right;">Vertical Type</p> <p>(Tubular Type)</p>  <p style="text-align: center;">Styrol Capacitor</p> |
| <p>9</p>  <p style="text-align: center;">Electrolytic Capacitor (Tubular Type)</p> | <p>10</p> <p style="text-align: right;">Vertical Type</p> <p>(Tubular Type)</p>  <p style="text-align: center;">Electrolytic Capacitor</p> | <p>11</p>  <p style="text-align: center;">Ceramic Capacitor</p> | <p>12</p>  <p style="text-align: center;">Metalized Mylar (Paper) Capacitor</p> | |
| <p>13</p>  <p style="text-align: center;">Trimmer Condenser</p> | <p>VR</p>  <p style="text-align: center;">Semi-Fixed Volume</p> | | | |
| <p>L</p>  <p style="text-align: center;">Ferri Inductor</p> | <p>TR</p>  <p style="text-align: center;">Transistor</p> | | | |
| <p>CR</p>  <p style="text-align: center;">Spark Quencher</p> | <p>D</p>  <p style="text-align: center;">Diode (Silicon, Zener, Germanium)</p> | | | |

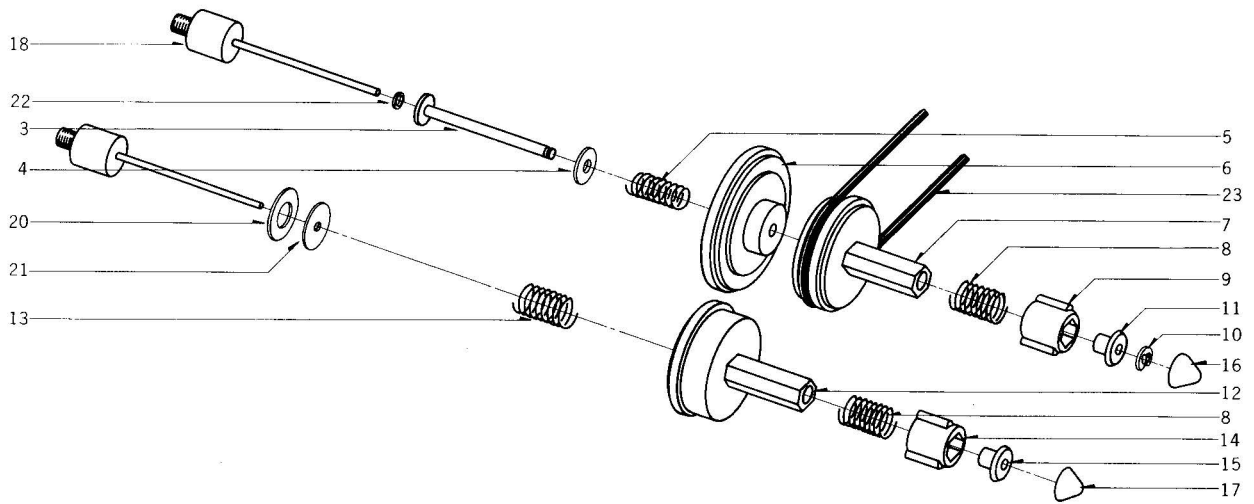
1. ILLUSTRATION OF HEAD BASE/SUB FRAME BLOCK



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 | BH661061 | Head Base Block Comp. | CA-1 | 1 | 1-26 | TC646942 | Sub Frame | CA-2009 | 1 |
| 1-2 | HZ646907 | Head Base | CA-0001 | 1 | 1-27 | ML642082 | Pause Slider | CA-2014 | 1 |
| 1-3 | TC645063 | PW Arm, w/shaft | CA-0004 | 1 | 1-28 | ZW290283 | 'U' Ring 2.85M | 6-1-1 | 4 |
| 1-4 | TC641632 | Arm B | CA-0006 | 1 | 1-29 | HZ642093 | Head Base Guide | CA-2015 | 1 |
| 1-5 | ZW364364 | Washer (Polyslider) D3.1x5x0.25t | | 1 | 1-30 | MS644872 | Guide Shaft | CA-2012 | 1 |
| 1-6 | ZS399148 | Screw, countersunk head 2x3 | | 1 | 1-31 | ZW434338 | Washer (Nylon) D4.1x8x1t | | 1 |
| 1-7 | MP468292 | Pinch Roller CG D=13 | CG-0032 | 1 | 1-32 | ZW675753 | Washer D4.1x8x0.5t | | 1 |
| 1-8 | ZW364364 | Washer (Polyslider) D3.1x5x0.25t | | 1 | 1-33 | MS645153 | Ball Guide | CA-2013 | 1 |
| 1-9 | ZW270088 | 'E' Ring 1.9M | 6-1-9 | 2 | 1-34 | MV522235 | Steel Ball 3/32" | | 1 |
| 1-10 | ZG644411 | PW Arm Spring | CA-0009 | 1 | 1-35 | ZS379350 | Screw, pan head 3x6 | | 2 |
| 1-11 | HZ644400 | Head Hanger Post | CA-0007 | 2 | 1-36 | MZ642104 | Arm Shaft Bracket, w/shaft | CA-2016 | 1 |
| 1-12 | ZS323728 | Screw, binding head 3x5 | | 4 | 1-37 | TC642115 | Pressure Roller Arm, w/roller | CA-2018 | 1 |
| 1-13 | HZ641643 | Head Hanger A | CA-0012 | 1 | 1-38 | ZG569384 | Selector Spring | CP-1166 | 1 |
| 1-14 | HP564085 | REC/PB HEAD P4-341 | CG-2.4.7.CH | 1 | 1-39 | ZS417216 | Screw, pan head 3x4 | | 1 |
| 1-15 | MS366625 | PC Tape Guide | RCC-1012 | 1 | | | | | |
| 1-16 | ZW414235 | Height Adjust Washer A | CS-0025 | 1 | 1-40 | ZG365218 | Brake Lever Return Spring | RCC-1374 | 2 |
| 1-17 | ZW414246 | Height Adjust Washer B | CS-0025 | 1 | | | | | |
| 1-18 | ZS477876 | Screw, pan head 2x3 | | 2 | | | | | |
| 1-19 | ZS391386 | Screw, pan head 2.3x3 | | 2 | | | | | |
| 1-20 | ZS364397 | Screw, pan head 2.3x10 | | 1 | | | | | |
| 1-21 | ZS644433 | Space Screw B | CA-0011 | 1 | | | | | |
| 1-22 | ZG465636 | Angle Adjust Spring | CG-0029 | 1 | | | | | |
| 1-23 | HE656098 | ERASE HEAD HF213853 | 37-2-2 | 1 | | | | | |
| 1-24 | ZS464692 | Screw, binding head 2.3x6 | | 2 | | | | | |
| 1-25 | HZ668327 | Head Wire Retainer | CA-0014 | 1 | | | | | |

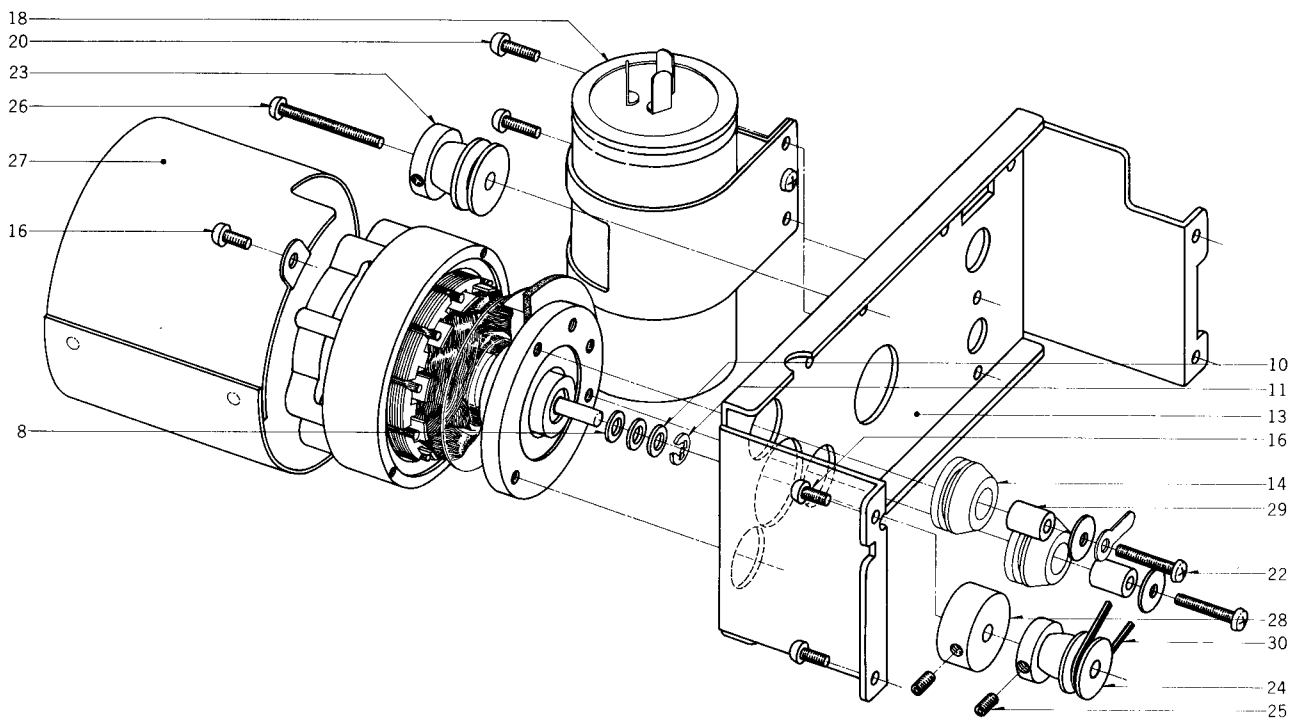
2. ILLUSTRATION ON SUPPLY/TAKE-UP REEL TABLE BLOCK



2) SUPPLY/TAKE-UP REEL TABLE BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|----------|-----------|----------------------------|---------------|------|
| 2-1x | BR637716 | Take-up Reel Table Block | | |
| | | Comp. | CA-1, 2 | 1 |
| 2-2x | BR637705 | Supply Reel Table Block | | |
| | | Comp. | CA-1 | 1 |
| 2-3 | MS387573 | Take-up Reel Table Shaft | | 1 |
| 2-4 | ZW355307 | Washer (BSP) D2.6x6.9x0.5t | CS-2007 | 1 |
| 2-5 | ZG387584 | Clutch Spring | CS-2008 | 1 |
| 2-6 | TC668305 | Take-up Reel Table Pulley | | |
| | | B Comp. | CA-2089 | 1 |
| 2-7 | MT387630 | Take-up Reel Table Comp. | CS-2012B | 1 |
| 2-8 | ZG385075 | Reel Table Spring | CS-2014 | 2 |
| 2-9 | MT370361 | C Type Reel Table Blade | RCC-1345 | 1 |
| 2-10 | ZW270088 | 'E' Ring 1.9M | 6-1-9 | 1 |
| 2-11 | MT387641 | Take-up Reel Table Bush | CS-2015 | 1 |
| 2-12 | TC389790 | Supply Reel Table Comp. | CS-2016B | 1 |
| 2-13 | ZG615205 | Back Tension Spring | CH-1072 | 1 |
| 2-14 | MT605766 | Reel Table Blade (V Type) | CH-1070 | 1 |
| 2-15 | MT370348 | C Type Reel Table Bush | RCC-1343 | 1 |
| 2-16 | MT394200 | Take-up Reel Cap | CS-2105 | 1 |
| 2-17 | MT370372 | C Type Reel Shaft Cap | RCC-1346 | 1 |
| 2-18 | MT644534 | Reel Table Shaft | CA-1012 | 2 |
| 2-19x | ZW413188 | Nut M4 | | 2 |
| 2-20 | ZW615216 | Reel Table Washer 1 | CH-1073 | 1 |
| 2-21 | ZW615227 | Reel Table Washer 2 | CH-1074 | 1 |
| 2-22 | ZW621426 | Washer D1.7x3.2x0.25t | | 1 |
| 2-23 | MB415743 | Counter Belt D96x1x1 | CC-1034 | 1 |

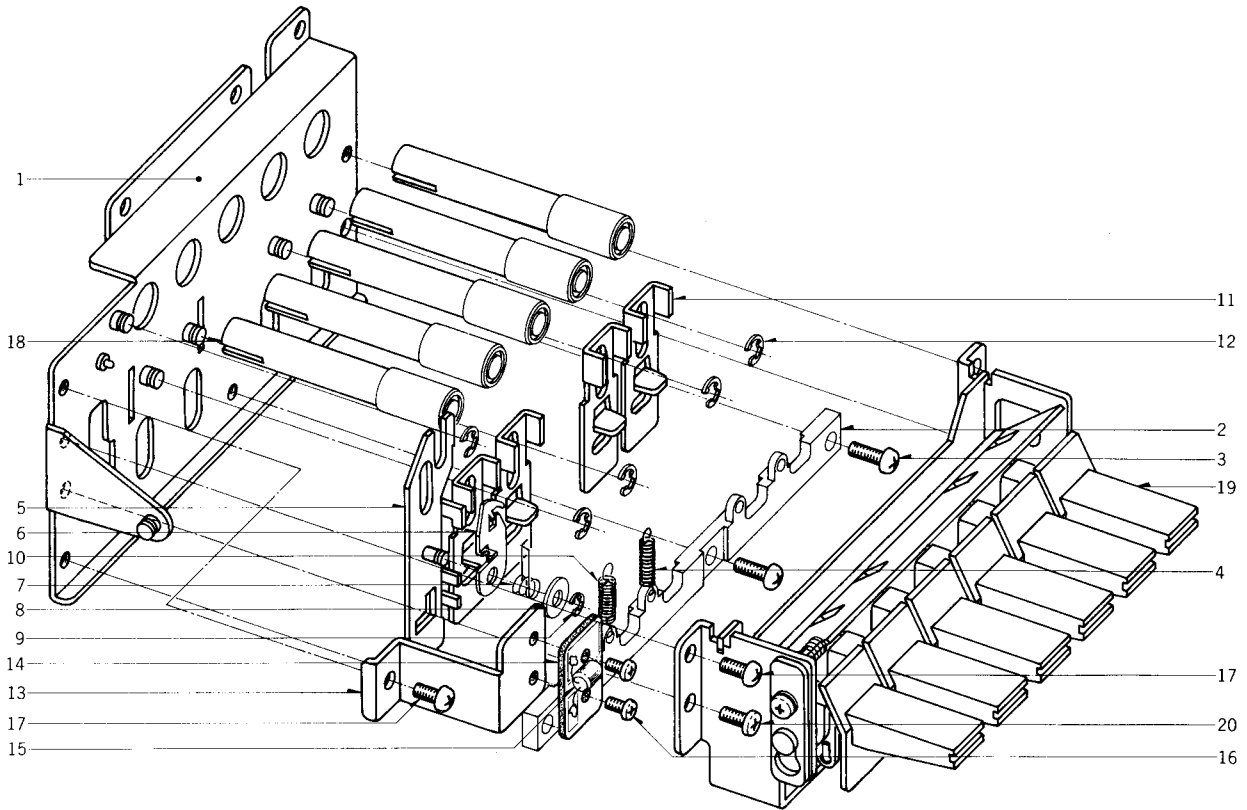
3. ILLUSTRATION OF MOTOR BLOCK



3) MOTOR BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty | Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|----------|-----------|-------------------------------------------|---------------|------|----------|-----------|-----------------------------------------------|---------------|------|
| 3-1x | BM637683 | Motor Block (HM1-12CS) Comp. | CA | 1 | 3-18 | EC641316 | MP/C. 7+1μF 150WV AC (Lug Type Uni/D.) | 24-9-96 | 1 |
| 3-2x | BM637694 | Motor Block (HM1-12CS) Comp. (CSA) | CA | 1 | 3-19x | EC648538 | MP/C. 7μF 150WV AC (Lug Type Uni/D.) (CSA) | 24-9-108 | 1 |
| 3-3x | BM663434 | Motor Block (HM1-12CS). Comp. (CEE) | CA | 1 | 3-20 | ZS447840 | Tapping Screw #2 3x8 (BR) | | 2 |
| 3-4x | EA391331 | Motor Lead Terminal P.C. Board | CS-7025 | 1 | 3-21x | ZW406247 | Washer (SUP) D3.2x10x0.5t | | 3 |
| 3-5x | ZS422076 | Screw, pan head 3x5 | | 2 | 3-22 | ZS422965 | Screw, pan head 3x15 | | 3 |
| 3-6x | MZ414224 | CS Insulating Fiber A | CS-7030 | 1 | 3-23 | MR645041 | Motor Pulley A | CA-7002 | 1 |
| 3-7x | ZS356804 | Set Screw, hexagon socket 3x4 (Cup/p.) | | 2 | 3-24 | MR645052 | Motor Pulley B | CA-7003 | 1 |
| 3-8 | ZW396415 | Thrust Washer A, CS (Teflon) 0.5t | CS-7029 | 3 | 3-25 | ZS356815 | Set Screw, hexagon socket 3x6 (Cup/P.) | | 3 |
| 3-9x | ZW396426 | Thrust Washer B, CS (Nylon) 0.5t | CS-7029 | 3 | 3-26 | ZS650013 | Tapping Screw #1 3x25 BR | | 1 |
| 3-10 | ZW259738 | Washer (Polyslider) D4.1x7x0.25t | | 2 | 3-27 | MZ642385 | Motor Shield | CA-7005 | 1 |
| 3-11 | ZW270101 | 'E' Ring 3M | 6-1-9 | 1 | 3-28 | MZ676440 | Oil Cut B | CA-7008 | 1 |
| 3-12x | TC394075 | Oil Cut | CS-7028 | 1 | 3-29 | MZ646290 | Spacer 3x8.5 | 7-2-6 | 3 |
| 3-13 | MZ646918 | Motor Mt. Base | CA-7004 | 1 | 3-30 | MB666123 | Drive Belt 41x1.4x1.4 | CA-1100 | 1 |
| 3-14 | TC384164 | Rubber Cushion Bush | 24X0-717 | 3 | | | | | |
| 3-15x | ZW562476 | Earth Lug M3 | | 6 | | | | | |
| 3-16 | ZS325495 | Tapping Screw #2 3x6 (BR) | | 5 | | | | | |
| 3-17x | SM582210 | Motor Name Plate | CP-7004 | 1 | | | | | |

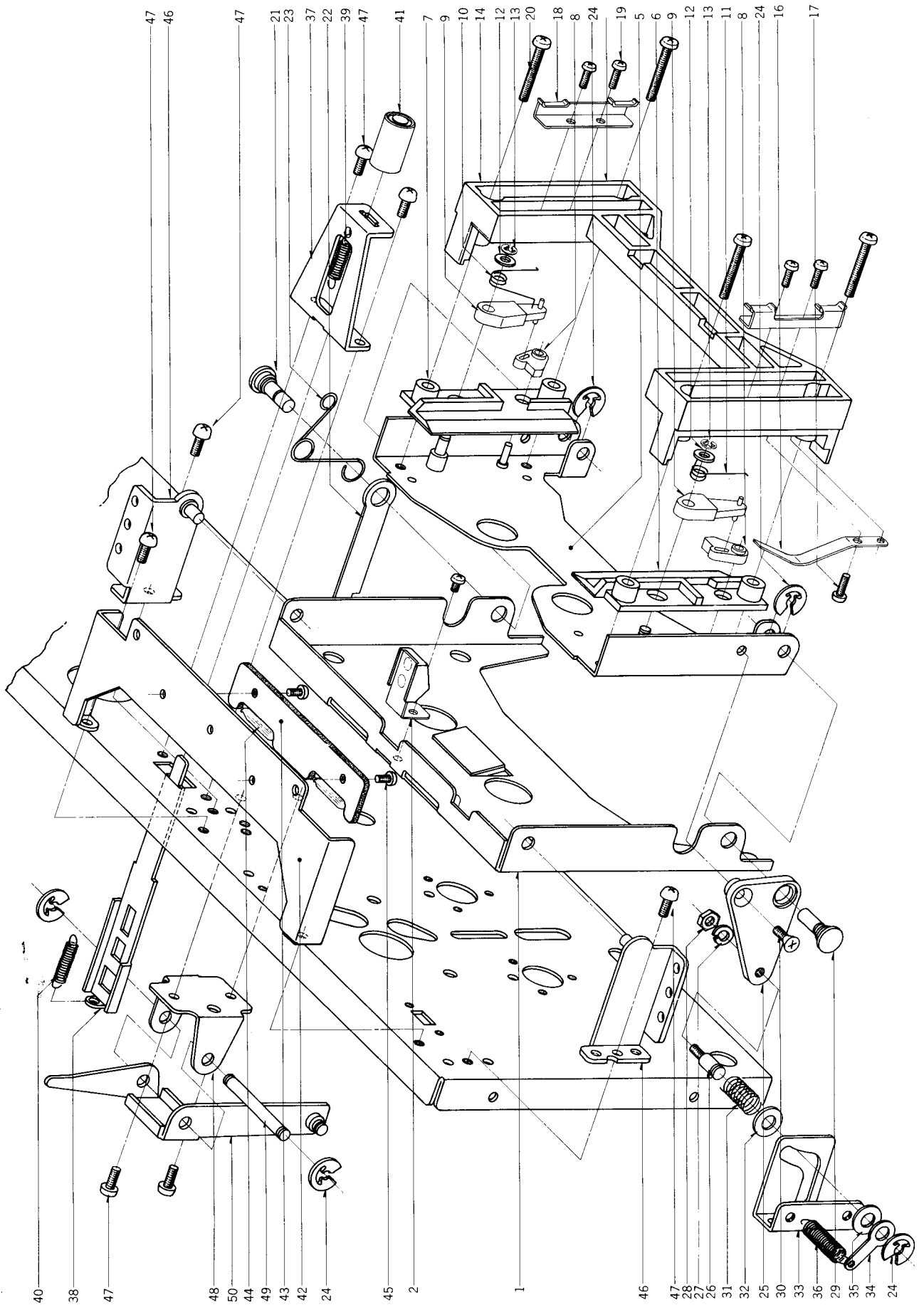
4. ILLUSTRATION OF SUB CHASSIS BLOCK



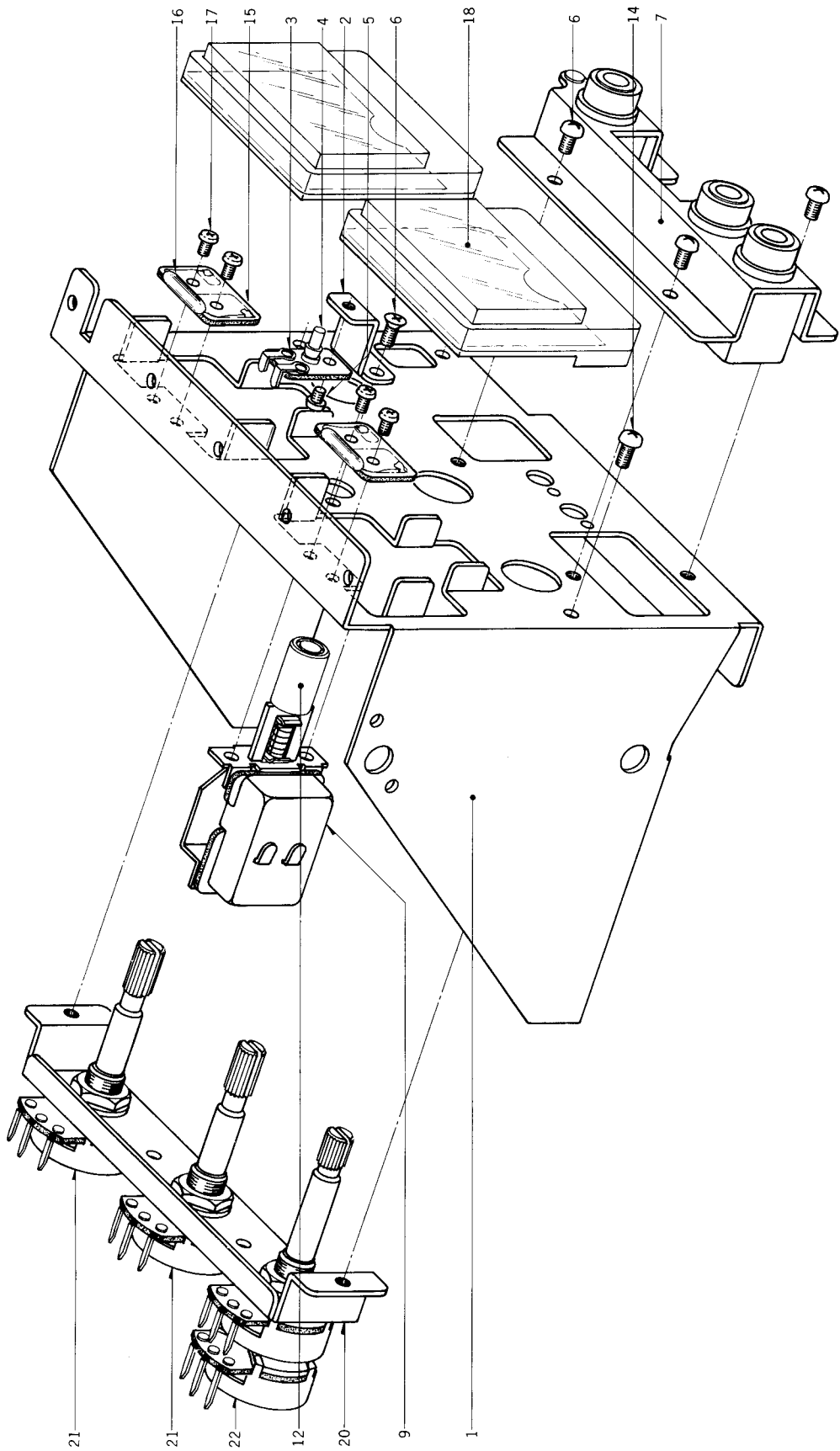
4) SUB CHASSIS BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|----------|-----------|----------------------------|---------------|------|
| 4-1 | MZ646953 | Sub Chassis | CA-2032 | 1 |
| 4-2 | MS645175 | Slider Guide | CA-2035 | 1 |
| 4-3 | ZS609208 | Tapping Screw #2 3x8 (PAN) | | 3 |
| 4-4 | ZG525306 | Spring 2 | CV-2070 | 1 |
| 4-5 | MZ642172 | Pause Slider | CA-2034 | 1 |
| 4-6 | TC515575 | SW. Lock Cam B | CG-2301 | 1 |
| 4-7 | ZG632553 | Button Lock Spring C | CG-2303 | 1 |
| 4-8 | ZW425002 | Washer (SPC) D3.1x8x0.5t | | 1 |
| 4-9 | ZW270088 | 'E' Ring 1.9M | 6-1-9 | 1 |
| 4-10 | ZG392848 | Operation Lever Spring | CS-2102 | 1 |
| 4-11 | MZ642161 | Inter Lock Slide | CA-2033 | 4 |
| 4-12 | ZW270101 | 'E' Ring 3M | 6-1-9 | 5 |
| 4-13 | MZ642183 | LP Mount | CA-2036 | 1 |
| 4-14 | EA457176 | Lamp P.C Board | CG-5003 | 1 |
| 4-15 | EL390576 | Lamp (L/T) RM6-24V-50MA | 28-2-6 | 1 |
| 4-16 | ZS417161 | Screw, pan head 2.3x4 | | 2 |
| 4-17 | ZS325495 | Tapping Screw #2 3x6 (BR) | | 5 |
| 4-18 | SB645232 | Selector Button | | 5 |
| 4-19 | BK650070 | Keyboard | CA-6011 | 1 |
| 4-20 | ZS379350 | Screw, pan head 3x6 | 25-5-200 | 2 |

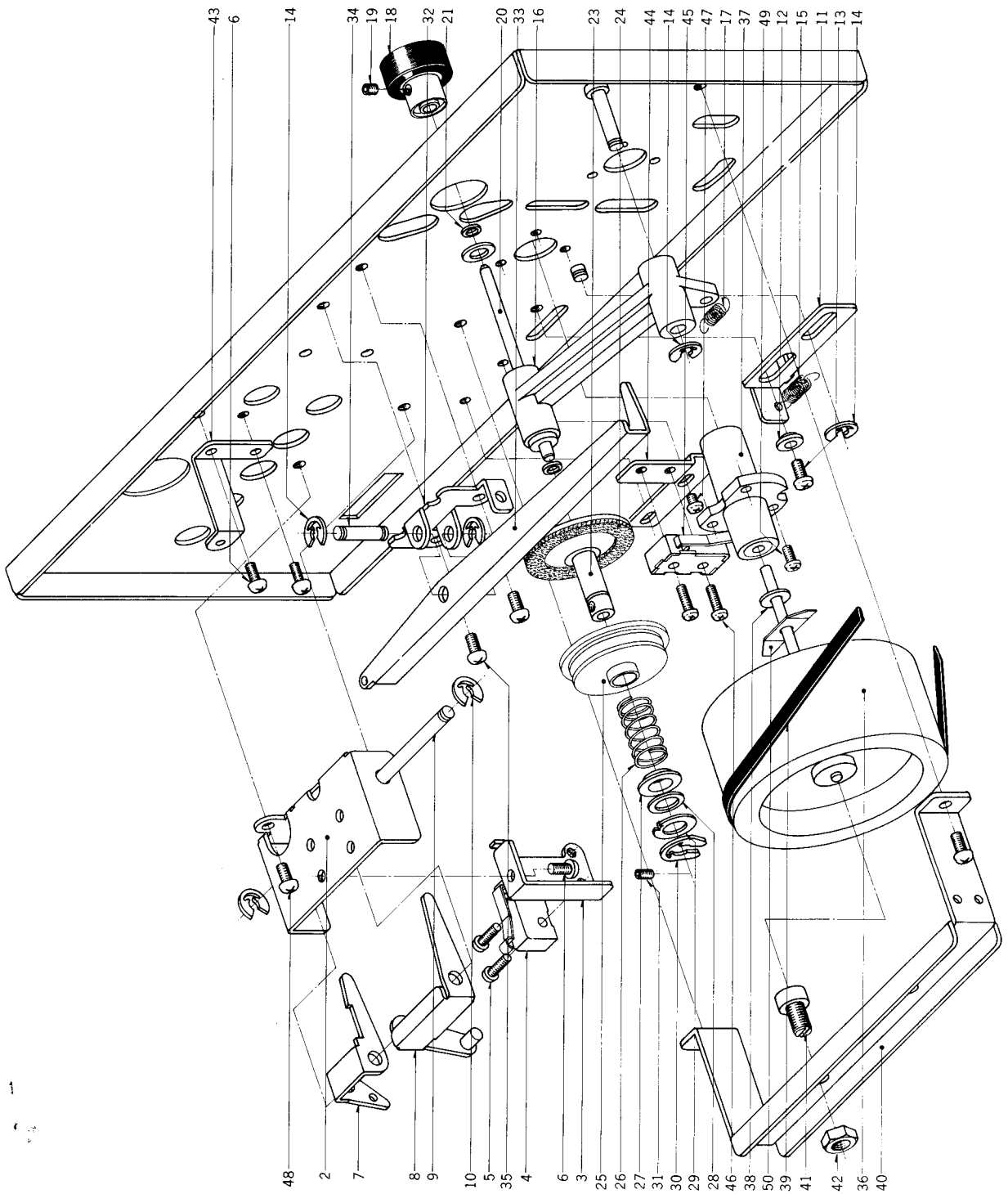
5. ILLUSTRATION OF CASSETTE HOLDER BLOCK



6. ILLUSTRATION OF FRONT CHASSIS BLOCK



7. ILLUSTRATION OF MECHA. FRAME BLOCK (1)



5) CASSETTE HOLDER BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|------------------------------|-----------|------------------------------------|---------------|------|
| CASSETTE HOLDER BLOCK | | | | |
| 5-1 | MZ646931 | Trap, w/boss | CA-2020 | 1 |
| 5-2 | ZG642126 | Set Spring | CA-2022 | 1 |
| 5-3x | ZS201407 | Screw, pan head 2.3x3 | | 1 |
| 5-4x | TC678475 | Cassette Retainer | CA-2091 | 1 |
| 5-5 | MZ646920 | Cassette Rack, w/pin | CA-2023 | 1 |
| 5-6 | MS595563 | Cassette Guide L | CH-2007 | 1 |
| 5-7 | MS595552 | Cassette Guide R | CH-2006 | 1 |
| 5-8 | ML595574 | Detector Lever A | CH-2008 | 2 |
| 5-9 | ML595585 | Cassette Lever B | CH-2009 | 2 |
| 5-10 | ZG595618 | Spring A | CH-2004 | 1 |
| 5-11 | ZG595620 | Spring B | CH-2005 | 1 |
| 5-12 | ZW592391 | Washer (PBP) D3.2x6x0.3t | | 2 |
| 5-13 | ZW270088 | 'E' Ring 1.9M | 6-1-9 | 2 |
| 5-14 | SZ647065 | Cassette Case | CA-2024 | 1 |
| 5-15x | MZ645186 | Reflector | CA-2071 | 1 |
| 5-16 | ZG642137 | Sheet Spring | CA-2025 | 2 |
| 5-17 | ZS669104 | Tapping Screw #2 2.3x6 pan head | | 2 |
| 5-18 | MZ642148 | Lid Chuck | CA-2026 | 2 |
| 5-19 | ZS669104 | Tapping Screw #2 2.3x6 pan head | | 4 |
| 5-20 | ZS592402 | Screw, pan head 3x18 | | 4 |
| 5-21 | MH664064 | Hinge Pin B | CB-2029 | 1 |
| 5-22 | TC666156 | Band Plate B | CB-2024 | 1 |
| 5-23 | ZG644938 | Click Spring | CA-2031 | 1 |
| 5-24 | ZW290283 | 'U' Ring 2.85M | 6-1-1 | 5 |
| 5-25 | MZ645164 | Eject Guide Arm | CA-2027 | 1 |
| 5-26 | MH644927 | Guide Pin | CA-2029 | 1 |
| 5-27 | ZW273914 | Spring Washer M4 | | 1 |
| 5-28 | ZW516993 | Nut M3 | | 1 |
| 5-29 | MH644916 | Hinge Pin | CA-2028 | 1 |
| 5-30 | ZS414033 | Screw, countersunk head 3x8 | | 1 |
| 5-31 | ZG316765 | REC. Button Spring | MR-252 | 1 |
| 5-32 | ZW345442 | Washer (Nylon) D4.2x9x1t | | 1 |
| 5-33 | MS642374 | Eject Guide | CA-2066 | 1 |
| 5-34 | ZW273881 | Earth Lug M4 | | 1 |
| 5-35 | ZW420682 | Washer (Nylon) D4.2x9x0.5t | | 1 |
| 5-36 | ZG580746 | Tension Spring | TD-2074 | 1 |
| EJECT BUTTON BLOCK | | | | |
| 5-37 | TC642273 | Eject Slot | CA-2052 | 1 |
| 5-38 | TC642284 | Eject Key | CA-2053 | 1 |
| 5-39 | ZG542204 | Spring A | CZ-1010 | 1 |
| 5-40 | ZG422223 | Return Spring | PX-A132 | 1 |
| 5-41 | SK631304 | Push Button Knob I | 91-5051 | 1 |
| LAMP STAND BLOCK | | | | |
| 5-42 | TC642363 | Lamp Stand | CA-2065 | 1 |
| 5-43 | EA647190 | Lamp P.C Board | CA-2064 | 1 |
| 5-44 | EL295312 | Lamp (L/T) 8V 0.2A | 28-2-8 | 2 |
| 5-45 | ZS417161 | Screw, pan head 2.3x4 | | 3 |
| 5-46 | MZ642071 | Pin Stand, w/pin | CA-1099 | 2 |
| 5-47 | ZS325495 | Tapping Screw #2 3x6 (BR) | | 12 |
| 5-48 | MZ614700 | Eject Lever Pillow | CA-1038 | 1 |
| 5-49 | MH644646 | Eject Lever Pin | CA-1036 | 1 |
| 5-50 | ML641698 | Eject Lever, w/pin | CA-1037 | 1 |

6) FRONT CHASSIS BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|----------------------------|-----------|---------------------------|---------------|------|
| FRONT CHASSIS BLOCK | | | | |
| 6-1 | MZ647021 | Front Chassis | CA-5009 | 1 |
| 6-2 | MZ644343 | P.C Board Mount B | CA-5011 | 1 |
| 6-3 | EA647188 | LED P.C Board | CA-2051 | 1 |
| 6-4 | ED645816 | Luminous Diode SEL-103R | 45-15-5 | 1 |
| 6-5 | ZS499331 | Screw, pan head 2.3x5 | | 1 |
| 6-6 | ZS325495 | Tapping Screw #2 3x6 (BR) | | 6 |
| 6-7 | EJ645827 | 3-throw Jack B | 31-2-70 | 1 |
| 6-8x | BS665706 | Power SW. Comp. | CA-5026 | 1 |
| 6-9 | ES469541 | Push SW. TV-3 JB52 | 25-5-60 | 1 |

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|----------|-----------|--------------------------|---------------|------|
| 6-10x | ES499972 | Push SW. JS-09 (CEE) | 25-5-67 | 1 |
| 6-11x | ZS422076 | Screw, pan head 3x5 | | 2 |
| 6-12 | SK631304 | Push Button Knob I | 91-5051 | 1 |
| 6-13x | TC666134 | Illumination for Acrylic | CA-5019 | 1 |
| 6-14 | ZS422076 | Screw, pan head 3x5 | | 2 |
| 6-15 | EA457176 | Lamp P.C Board | CG-5003 | 2 |
| 6-16 | EL295312 | Lamp (L/T) 8V 0.2A | 28-2-8 | 2 |
| 6-17 | ZS417161 | Screw, pan head 2.3x4 | | 4 |

| | | | | |
|----------------------------------|----------|------------------------------------------|----------|---|
| 6-18 | EM666450 | VU Meter D18A68R | 46-1-118 | 2 |
| 6-19x | EM619705 | VU Meter D18A41R (JPN) | 46-1-96 | 2 |
| VOL. RETAINING BASE BLOCK | | | | |
| 6-20 | MZ647087 | Volume Mt. Base A | CA-5012 | 1 |
| 6-21 | EV645840 | Volume VJ10E 50 kA | 36-2-38 | 2 |
| 6-22 | EV645851 | Co-axial 2-throw Volume GJ10E 10 kBx2 | 36-1-40 | 1 |

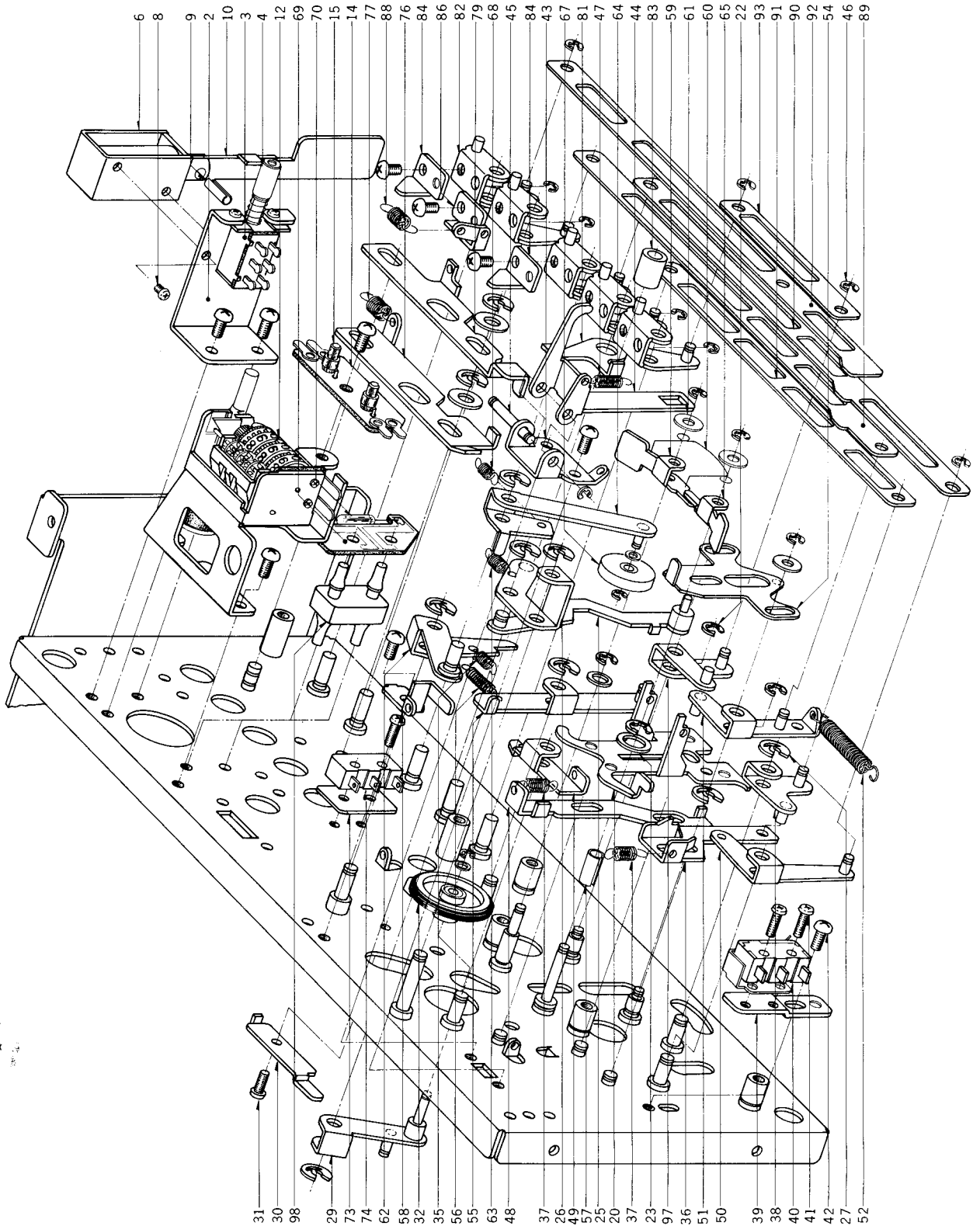
7) MECHA. FRAME BLOCK (1)

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|-------------------------|-----------|---------------------------|---------------|------|
| SWITCH BOX BLOCK | | | | |
| 7-1x | BS637828 | SW. Box Block Comp. | CA-1 | 1 |
| 7-2 | EZ642328 | SW. Box | CA-2059 | 1 |
| 7-3 | MZ642341 | Switch Bracket | CA-2061 | 1 |
| 7-4 | ES494188 | Micro SW. SS-5GL-13 | 25-1-25 | 1 |
| 7-5 | ZS487091 | Screw, pan head 2.3x8 | | 2 |
| 7-6 | ZS325495 | Tapping Screw #2 3x6 (BR) | | 4 |
| 7-7 | ML642330 | Switch Lever A | CA-2060 | 1 |
| 7-8 | ML642352 | Switch Lever B-1, w/pin | CA-2062 | 1 |
| 7-9 | MS644962 | Switch Lever Shaft | CA-2063 | 1 |
| 7-10 | ZW290283 | 'U' Ring 2.85M | 6-1-1 | 2 |

MECH. FRAME BLOCK

| | | | | |
|-------|----------|--------------------------------------------|---------|---|
| 7-11 | MZ641654 | Eject Key | CA-1018 | 1 |
| 7-12 | ZW644578 | Step Washer | CA-1019 | 1 |
| 7-13 | ZS379350 | Screw, pan head 3x6 | | 1 |
| 7-14 | ZW290283 | 'U' Ring 2.85M | 6-1-1 | 4 |
| 7-15 | ZG394378 | Return Spring | CS-2106 | 1 |
| 7-16 | MZ645074 | Wheel Arm | CA-1020 | 1 |
| 7-17 | ZG580252 | Lock Plate A Spring | TD-2015 | 1 |
| 7-18 | M1644624 | Driving Wheel | CA-1030 | 1 |
| 7-19 | ZS434160 | Set Screw, hexagon socket 3x3 (CUP/P.) | | 1 |
| 7-20 | MS644613 | Drive Wheel Shaft | CA-1028 | 1 |
| 7-21 | ZW484762 | Washer (Teflon) D3.1x5x0.2t | | 2 |
| 7-22x | BZ687453 | Clutch Disk Block Comp. | CA-1118 | 1 |
| 7-23 | MZ641665 | Clutch Disk, w/shaft | CA-1026 | 1 |
| 7-24 | MZ644591 | Clutch Felt | CA-1025 | 1 |
| 7-25 | M1645085 | Clutch Wheel | CA-1027 | 1 |
| 7-26 | ZG651183 | Clutch Spring | CA-1104 | 1 |
| 7-27 | MZ651194 | Spring Holder | CA-1105 | 1 |
| 7-28 | ZW560215 | Washer (Teflon) D6.1x10x0.5t | | 1 |
| 7-29 | ZW231693 | Thrust Washer, w/claw | 900-235 | 1 |
| 7-30 | ZW659766 | 'U' Ring 5 | 6-1-15 | 1 |
| 7-31 | ZS521987 | Set Screw, hexagon socket 2.6x4 (CUP/P) | | 1 |
| 7-32 | MZ641676 | Escapement Pillow | CA-1034 | 1 |
| 7-33 | MZ641687 | Escapement | CA-1035 | 1 |
| 7-34 | MH644635 | Escapement Pin | CA-1033 | 1 |
| 7-35 | ZS325495 | Tapping Screw #2 3x6 (BR) | | 2 |
| 7-36 | M1644681 | Capstan Flywheel, w/shaft | CA-1042 | 1 |
| 7-37 | MZ644657 | Capstan Metal Case, w/metal | CA-1039 | 1 |
| 7-38 | ZW675246 | Washer D3.1x8x0.5t | | 1 |
| 7-39 | MB645107 | Capstan Belt | CA-1044 | 1 |
| 7-40 | MZ641711 | Flywheel Table | CA-1045 | 1 |
| 7-41 | TC653218 | Capstan Support | CH-1078 | 1 |
| 7-42 | ZW413278 | Nut M5 | | 1 |
| 7-43 | MZ641722 | Sys. Con P.C Board Table | CA-1046 | 1 |
| 7-44 | MZ642060 | Micro SW. Table | CA-1096 | 1 |
| 7-45 | ES494188 | Micro SW. SS-5GL-13 | 25-1-25 | 1 |
| 7-46 | ZS587091 | Screw, pan head 2.3x8 | | 2 |
| 7-47 | ZS201407 | Screw, pan head 2.3x3 | | 2 |
| 7-48 | ZS422076 | Screw, pan head 3x5 | | 2 |
| 7-49 | ZS499331 | Screw, pan head 2.3x5 | | 3 |
| 7-50 | MZ678486 | Thrust For Plate Spring | CA-1109 | 1 |

8. ILLUSTRATION OF MECHA. FRAME BLOCK (2)



8) MECHA. FRAME BLOCK (2)

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|----------------------------|-----------|---------------------------|---------------|------|
| MEMORY SWITCH BLOCK | | | | |
| 8-1x | BS637795 | Memory Switch Block Comp. | CA-1, 2 | 1 |
| 8-2 | TC642295 | Memory SW. Bracket | CA-2054 | 1 |
| 8-3 | ES619053 | Push SW. SPJ-10114B | 25-5-144 | 1 |
| 8-4 | SZ645221 | Memory Cap | CA-6010 | 1 |
| 8-5x | ZS460440 | Screw, pan head 2x4 | | 2 |
| 8-6 | EP494425 | Plunger Solenoid 0730THT1 | 44-1-48 | 1 |
| 8-7x | ED494583 | Silicon Diode 10D05 | 45-2-42 | 1 |
| 8-8 | ZS592378 | Screw, pan head 2.6x3 | | 2 |
| 8-9 | MH620572 | Spring Pin SPP 2.5x12 | | 1 |
| 8-10 | TC642306 | Auto Stop Slider | CA-2055 | 1 |

COUNTER BLOCK

| | | | | |
|-------|----------|---------------------------|----------|---|
| 8-11x | TC642262 | Counter Mount | CA-2049 | 1 |
| 8-12 | MC645985 | Counter SMP-390-62 | 9-1-42 | 1 |
| 8-13x | ZS422076 | Screw, pan head 3x5 | | 2 |
| 8-14 | EA647166 | Luminous Diode P.C Board | CA-2069 | 1 |
| 8-15 | ED656346 | Luminous Diode SEL-305-GC | 45-15-10 | 2 |

MECHA. FRAME BLOCK

| | | | | |
|-------|----------|---------------------------------|---------|----|
| 8-16x | MZ647100 | Mecha. Side Plate A | CA-1015 | 1 |
| 8-17x | MZ647111 | Mecha. Side Plate B | CA-1015 | 1 |
| 8-18x | ZS325495 | Tapping Screw #2 3x6 (BR) | | 4 |
| 8-19x | MZ644567 | Sub Frame Post | CA-1017 | 1 |
| 8-20 | MZ641733 | Play Slider | CA-1047 | 1 |
| 8-21x | ZW270123 | 'E' Ring 4M | 6-1-9 | 1 |
| 8-22 | ZW270101 | 'E' Ring 3M | 6-1-9 | 10 |
| 8-23 | ZW260008 | Washer (SUP) D6.1x10.3x0.15t | | 1 |
| 8-24x | ZW601075 | Washer (PBP) D4.1x7x0.1t | | 1 |
| 8-25 | MZ641755 | Relay Plate, w/pin | CA-1049 | 1 |
| 8-26 | ML641744 | Play Idler Lever, w/shaft | CA-1048 | 1 |
| 8-27 | ZW290283 | 'U' Ring 2.85M | 6-1-1 | 20 |
| 8-28x | ZG385986 | Safety Lever Return Spring | CS-2539 | 1 |
| 8-29 | MZ641766 | Play Idler Arm, w/pin | CA-1051 | 1 |
| 8-30 | TC651161 | Set Plate | CA-1106 | 1 |
| 8-31 | ZS201407 | Screw, pan head 2.3x3 | | 1 |
| 8-32 | MI644736 | Idler, w/metal | CA-1054 | 1 |
| 8-33x | ZW645952 | Washer D2.1x4x0.2t | | 2 |
| 8-34x | ZW356657 | 'E' Ring 1.5M | 6-1-9 | 2 |
| 8-35 | ZG469315 | Take-up Lever Spring | CG-1091 | 1 |
| 8-36 | MC641845 | REC Counter | CA-1069 | 1 |
| 8-37 | ZG567696 | Azimuth Spring 2 | CP-0041 | 2 |
| 8-38 | ML641856 | Rec Lever, w/pin | CA-1070 | 1 |
| 8-39 | MZ641880 | Rec SW. Table | CA-1074 | 1 |
| 8-40 | ES494188 | Micro SW. SS-5GL-13 | 25-1-25 | 1 |
| 8-41 | ZS487091 | Screw, pan head 2.3x8 | | 2 |
| 8-42 | ZS325495 | Tapping Screw #2 3x6 (BR) | | 10 |
| 8-43 | MZ641867 | Rec Detector Lever Holder | CA-1071 | 1 |
| 8-44 | ML641878 | Rec Detector Lever | CA-1072 | 1 |
| 8-45 | ML644815 | Rec Detector Lever Pin | CA-1073 | 1 |
| 8-46 | ZW270088 | 'E' Ring 1.9M | 6-1-9 | 9 |
| 8-47 | ZG394378 | Return Spring | CS-2106 | 1 |
| 8-48 | MZ641812 | RWD Slide Beam | CA-1065 | 1 |
| 8-49 | ML641823 | RWD Lever | CA-1066 | 1 |
| 8-50 | ML641834 | RWD Lever B, w/pin | CA-1067 | 1 |
| 8-51 | ML641935 | Play Lever A, w/pin | CA-1080 | 1 |
| 8-52 | ZG644848 | PR Spring | CA-1081 | 1 |
| 8-53x | ZW317171 | Washer (PBP) D3.1x8x0.1t | | 1 |
| 8-54 | ML641902 | Brake Slide, w/senser | CA-1076 | 1 |
| 8-55 | ML641788 | F.F. Joint Lever, w/pin | CA-1058 | 1 |
| 8-56 | ZG595506 | Stop Spring | CH-3007 | 1 |
| 8-57 | MZ653308 | Spacer 3x9 | 7-2-6 | 1 |
| 8-58 | MZ641801 | Wind Lever Resetter | CA-1064 | 1 |
| 8-59 | ML641924 | Brake Lever B | CA-1078 | 1 |
| 8-60 | ZG644837 | Brake Spring | CA-1079 | 1 |
| 8-61 | ZW259468 | Washer D3.1x8x0.2t | BT-104 | 2 |
| 8-62 | ML641777 | F.F. Lever, w/pin | CA-1056 | 1 |
| 8-63 | ZG469315 | Take-up Lever Spring | CG-1091 | 1 |
| 8-64 | MZ641790 | F.F. Wind Arm, w/shaft | CA-1060 | 1 |
| 8-65 | ML675022 | Brake Lever C | CA-1097 | 1 |
| 8-66x | ZW645952 | Washer D2.1x4x0.2t | | 2 |
| 8-67 | MI644804 | FW Wheel, w/metal | CA-1063 | 1 |
| 8-68 | ZG385986 | Safety Lever Return Spring | CS-2539 | 1 |

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|----------|-----------|------------------------------------------|---------------|------|
| 8-69 | EA647201 | Reed SW. P.C Board | CA-1095 | 1 |
| 8-70 | ES516036 | Reed SW. ORD-225 | 25-11-1 | 1 |
| 8-71 | EC290564 | VFM/C. 220PF(K) 50WV | 24-6-2 | 1 |
| 8-72x | EC350875 | Mylar/C. 0.001μF(J) 50WV (Vert. Type) | 24-1-1 | 1 |
| 8-73 | EZ595653 | Insulator Plate | CH-1055 | 1 |
| 8-74 | ES494188 | Micro SW. SS-5GL-13 | 25-1-25 | 1 |
| 8-75x | ZS487091 | Screw, pan head 2.3x8 | | 2 |
| 8-76 | MZ641957 | Switch Slider | CA-1083 | 1 |
| 8-77 | ZG385413 | Auto. Stop Spring B | CS-1033 | 1 |
| 8-78x | ZW450753 | Washer (Nylon) D4.1x9x1t | | 2 |
| 8-79 | MZ641968 | Switch Slider B | CA-1084 | 1 |
| 8-80x | ZW659755 | Washer D4.3x11x0.5t | | 2 |
| 8-81 | ML641992 | Pause Lever B | CA-1087 | 1 |
| 8-82 | MZ641970 | Joint Arm, w/pin | CA-1085 | 5 |
| 8-83 | MZ675202 | Spacer 4x9 | 7-2-6 | 1 |
| 8-84 | MZ641981 | Joint Arm Side A | CA-1086 | 2 |
| 8-85x | ZS455207 | Tapping Screw #2 3x5(BR) | | 2 |
| 8-86 | MZ642003 | Joint Arm Side B | CA-1088 | 1 |
| 8-87x | ZS455207 | Tapping Screw #2 3x5 (BR) | | 6 |
| 8-88 | ZG580285 | Button Lever Spring | TD-2018 | 1 |
| 8-89 | MZ642025 | Play Joint | CA-1090 | 1 |
| 8-90 | MZ642047 | RWD Joint | CA-1092 | 1 |
| 8-91 | MZ642036 | REC Joint | CA-1091 | 1 |
| 8-92 | MZ642058 | F.F. Joint | CA-1093 | 1 |
| 8-93 | MZ642014 | Pause Joint | CA-1089 | 1 |
| 8-94x | ZS422076 | Screw, pan head 3x5 | | 8 |
| 8-95x | ZS417216 | Screw, pan head 3x4 | | 2 |
| 8-96x | ZS421806 | Screw, pan head 3x8 | | 1 |
| 8-97 | ML641946 | Pause Lever, w/pin | CA-1082 | 1 |
| 8-98 | MZ645118 | P.C Board Retainer | CA-1094 | 2 |

9. P.C BOARDS

(1) PRE AMP. P.C BOARD (CA-5017) BLOCK

| Symbol No. | Parts No. | Description | Q'ty |
|---------------------------------|-----------|------------------------------|------|
| (1)-1 | BA637615 | Pre-Amp P.C Board Comp. | 1 |
| (1)-TR1 | ET352146 | Transistor 2SC458LG(D) | 2 |
| (1)-TR2,3 | ET234854 | Transistor 2SC458LG(C) | 4 |
| (1)-TR4to6 | ET398711 | Transistor 2SC945L(Q)(R) | 6 |
| (1)-TR7 | ET517263 | Transistor 2SC1312(G)(H) | 2 |
| (1)-TR8 | ET398711 | Transistor 2SC945L(Q)(R) | 2 |
| (1)-TR9 | ET645917 | FET Transistor 2SK30A(D) | 2 |
| (1)-TR10 | ET517263 | Transistor 2SC1312(G)(H) | 2 |
| (1)-TR11 | ET557976 | Transistor 2SA628(E)(F) | 2 |
| (1)-TR12to14 | ET398711 | Transistor 2SC945L(Q)(R) | 6 |
| (1)-TR15 | ET511920 | Transistor 2SC1247A(B)(V) | 1 |
| (1)-TR16 | ET638504 | Transistor 2SC945(L)(P) | 2 |
| (1)-D1 | ED219464 | Germanium Diode 1N34A | 2 |
| (1)-D2 | ED491130 | Zener Diode WZ-085 | 2 |
| (1)-D3, 4 | ED560913 | Silicon Diode 1S2473 VE | 4 |
| (1)-D5 | ED219464 | Germanium Diode 1N34A | 2 |
| (1)-D6 | ED557447 | Silicon Diode 1S1588 | 2 |
| (1)-D7 | ED219464 | Germanium Diode 1N34A | 2 |
| (1)-D8to16 | ED560913 | Silicon Diode 1S2473 VE | 17 |
| (1)-VR1 | EV478686 | Semi-fixed/Vol. V8K4-1 1 kB | 2 |
| (1)-VR2 | EV464207 | Semi-fixed/Vol. V8K4-1 5 kB | 2 |
| (1)-VR3 | EV523620 | Semi-fixed/Vol. V8K4-1 500B | 2 |
| (1)-VR4 | EV522797 | Semi-fixed/Vol. V8K4-1 20 kB | 2 |
| (1)-SW1 | ES494076 | Slide SW. CL-109B | 2 |
| (1)-T1 | BT667394 | Headphone Trans. S16-083 | 2 |
| (1)-L1 | EO368403 | Ferri Inductor FL9H 33 MH(J) | 2 |
| (1)-L2 | EO496350 | Inductor 146LY 36 MH(J) | 2 |
| (1)-L3 | EO624857 | Inductor GE6070A 23 MH | 2 |
| (1)-L4to6 | EO368403 | Ferri Inductor FL9H 33MH(J) | 6 |
| (1)-2 | EJ539662 | Wrapping Post 1x17 | 36 |
| Capacitor, Vertical Type | | | |
| (1)-C1 | EC516745 | Styrol 330PF(K) 50WV | 2 |
| (1)-C2 | EC432810 | Elect. 10 μ F 16WV NL | 2 |
| (1)-C3 | EC516767 | Styrol 470PF(K) 50WV | 2 |
| (1)-C4 | EC556525 | FM 22PF(K) 500WV | 2 |
| (1)-C5 | EC493637 | Elect. 47 μ F 10WV | 2 |
| (1)-C6 | EC220127 | Elect. 100 μ F 16WV | 2 |
| (1)-C7, 8 | EC320051 | Elect. 10 μ F 16WV | 4 |
| (1)-C9 | EC389485 | Mylar 0.018 μ F(J) 50WV | 2 |
| (1)-C10 | EC350875 | Mylar 0.001 μ F(J) 50WV | 2 |
| (1)-C11 | EC450527 | Elect. 4.7 μ F 25WV | 2 |
| (1)-C12 | EC290531 | VFM 100PF(K) 50WV | 2 |
| (1)-C13 | EC320051 | Elect. 10 μ F 16WV | 2 |
| (1)-C14 | EC493637 | Elect. 47 μ F 10WV | 2 |
| (1)-C15 | EC556525 | FM/C. 22PF(K) 500WV | 2 |
| (1)-C16, 17 | EC331705 | Elect. 22 μ F 16WV | 4 |
| (1)-C18 | EC539842 | VFM 200PF(K) 50WV | 2 |
| (1)-C19 | EC648628 | Elect. 0.47 μ F 16WV | 2 |
| (1)-C20 | EC495865 | Styrol 3000PF(J) 50WV | 2 |
| (1)-C21 | EC250683 | Mylar 0.0022 μ F(J) 50WV | 2 |
| (1)-C22 | EC379787 | Mylar 0.0039 μ F(J) 50WV | 2 |
| (1)-C24to26 | EC320051 | Elect. 10 μ F 16WV | 6 |
| (1)-C27 | EC556525 | FM22PF(K) 500WV | 2 |
| (1)-C28 | EC320051 | Elect. 10 μ F 16WV | 2 |
| (1)-C29 | EC313121 | Elect. 220 μ F 25WV | 2 |
| (1)-C30 | EC329883 | Mylar 0.0056 μ F(J) 50WV | 2 |
| (1)-C31 | EC337500 | Mylar 0.0047 μ F(J) 50WV | 2 |
| (1)-C32 | EC251291 | Mylar 0.01 μ F(K) 50WV | 2 |
| (1)-C33 | EC329861 | Mylar 0.027 μ F(J) 50WV | 2 |
| (1)-C34 | EC320051 | Elect. 10 μ F 16WV | 2 |
| (1)-C35 | EC493637 | Elect. 47 μ F 10WV | 2 |
| (1)-C36 | EC290531 | VFM 100PF(K) 50WV | 2 |
| (1)-C37 | EC251291 | Mylar 0.1 μ F(K) 50WV | 2 |
| (1)-C38 | EC320051 | Elect. 10 μ F 16WV | 2 |
| (1)-C39 | EC251291 | Mylar 0.1 μ F(K) 50WV | 2 |
| (1)-C40 | EC320051 | Elect. 10 μ F 16WV | 2 |
| (1)-C41 | EC251291 | Mylar 0.1 μ F(K) 50WV | 2 |
| (1)-C42 | EC395504 | Mylar 0.33 μ F(K) 50WV | 2 |
| (1)-C43,44 | EC320051 | Elect. 10 μ F 16WV | 4 |
| (1)-C45 | EC450055 | Elect. 1 μ F 25WV | 2 |
| (1)-C46 | EC487157 | NP 0.47 μ F(M) 50WV | 2 |
| (1)-C47 | EC320051 | Elect. 10 μ F 16WV | 2 |

| Symbol No. | Parts No. | Description | Q'ty |
|-------------|-----------|------------------------------|------|
| (1)-C48 | EC220678 | Elect. 47 μ F 25WV | 2 |
| (1)-C49 | EC391004 | Mylar 0.0033 μ F(J) 50WV | 2 |
| (1)-C50 | EC450527 | Elect. 4.7 μ F 25WV | 2 |
| (1)-C51, 52 | EC539842 | VFM 200PF(K) 50WV | 4 |
| (1)-C53 | EC516756 | Styrol 390PF(K) 50WV | 1 |
| (1)-C54 | EC220590 | Elect. 33 μ F 10WV | 1 |
| (1)-C55 | EC220127 | Elect. 100 μ F 16WV | 1 |
| (1)-C56 | EC392332 | VFM 82PF(J) 50WV | 2 |
| (1)-C57 | EC250841 | Mylar 0.01 μ F(J) 50WV | 2 |
| (1)-C58 | EC377212 | VFM 47PF(J) 50WV | 2 |

Carbon Resistor Omitted

(2) POWER SUPPLY & OSC P.C BOARD (CA-5015) BLOCK

| Symbol No. | Parts No. | Description | Q'ty |
|---------------------------------|-----------|-----------------------------------------------------|------|
| (2)-1 | BA637571 | Power Supply & OSC P.C Board Comp. (CA-5015) | 1 |
| (2)-2 | BA637582 | Power Supply & OSC P.C Board Comp. (CA-5015) (CEE) | 1 |
| (2)-3 | BA637593 | Power Supply & OSC P.C Board Comp. (CA-5015) (CSA) | 1 |
| (2)-4 | BA637604 | Power Supply & OSC P.C. Board Comp. (CA-5015) (JPN) | 1 |
| (2)-TR1 | ET453611 | Transistor 2SC1096 (L) (K) (Z Type) | 1 |
| (2)-TR2, 3 | ET511920 | Transistor 2SC1247A (B)(V) | 2 |
| (2)-D1 to 4 | ED494583 | Silicon Diode 10D05 | 4 |
| (2)-D5 | ED511918 | Zener Diode WZ-240 | 1 |
| (2)-VR1, 2 | EV499882 | Semi-fixed/Vol. V10K8-4-2 300 kB | 2 |
| (2)-T1 | EC496844 | OSC Coil OT-903 | 1 |
| (2)-5 | EZ644354 | Power Supply Heat-sink Plate | 1 |
| (2)-6 | ZW273756 | Nut M3 | 1 |
| (2)-7 | ZS421806 | Screw, pan head 3x8 | 1 |
| (2)-8 | ZS379350 | Screw, pan head 3x6 | 2 |
| (2)-9 | EJ514822 | Fuse Holder, P.C Board S-N5051 | 2 |
| (2)-10 | EJ592503 | Fuse Clip, P.C Board H0426 (CEE) | 6 |
| (2)-11 | EJ539662 | Wrapping Post 1x17 | 14 |
| (2)-R8 | ER672502 | Wire Wound/R. RW1/2W 6.8 ohms (K) (P Type) | 1 |
| Capacitor, Vertical Type | | | |
| (2)-C1 | EC551160 | Ceramic NB821YZ 0.01 μ F(Z) 1.4 kWV | 1 |
| (2)-C2 | EC645895 | Elect. 2200 μ F 50WV | 1 |
| (2)-C3 | EC372148 | Elect. 220 μ F 35WV | 1 |
| (2)-C4 | EC450270 | Elect. 1000 μ F 25WV | 1 |
| (2)-C5 | EC250841 | Mylar 0.01 μ F(J) 50WV | 1 |
| (2)-C6 | EC331828 | Elect. 3.3 μ F 25WV | 1 |
| (2)-C7 | EC250841 | Mylar 0.01 μ F(J) 50WV | 1 |
| (2)-C8, 9 | EC516767 | Styrol 470PF(K) 50WV | 2 |
| (2)-C10 | EC460091 | Plastic Film 3300PF(J) 500WV | 1 |
| (2)-C11 | EC379214 | Mylar 0.047 μ F(J) 50WV | 1 |

Carbon Resistor Omitted

(3) SW. P.C BOARD (CA-2057) BLOCK

| Symbol No. | Parts No. | Description | Q'ty |
|--------------------------|-----------|------------------------------|------|
| (3)-1 | BA637817 | SW. P.C Board Comp. | 1 |
| (3)-TR1 | ET639437 | Transistor 2SC945L(Q)(P) | 2 |
| (3)-D1, 2 | ED674605 | Zener Diode WZ-085A | 2 |
| (3)-SW1 | ES645930 | Push SW. 5FT-0003 EF1320 | 1 |
| (3)-L1, 2 | EO243988 | Ferri Inductor FL7H 3.3MH(J) | 2 |
| (3)-2 | TC642317 | P.C Board Bracket | 1 |
| (3)-3 | EJ539662 | Wrapping Post 1x17 | 33 |
| Capacitor, Vertical Type | | | |
| (3)-C1 | EC379170 | Mylar 0.1 μ F(J) 50WV | 2 |
| (3)-C3 | EC329861 | Mylar 0.027 μ F(J) 50WV | 2 |
| (3)-C4 | EC380621 | Mylar 0.0068 μ F(J) 50WV | 2 |
| (3)-C5 | EC450055 | Elect. 1 μ F 25WV | 1 |

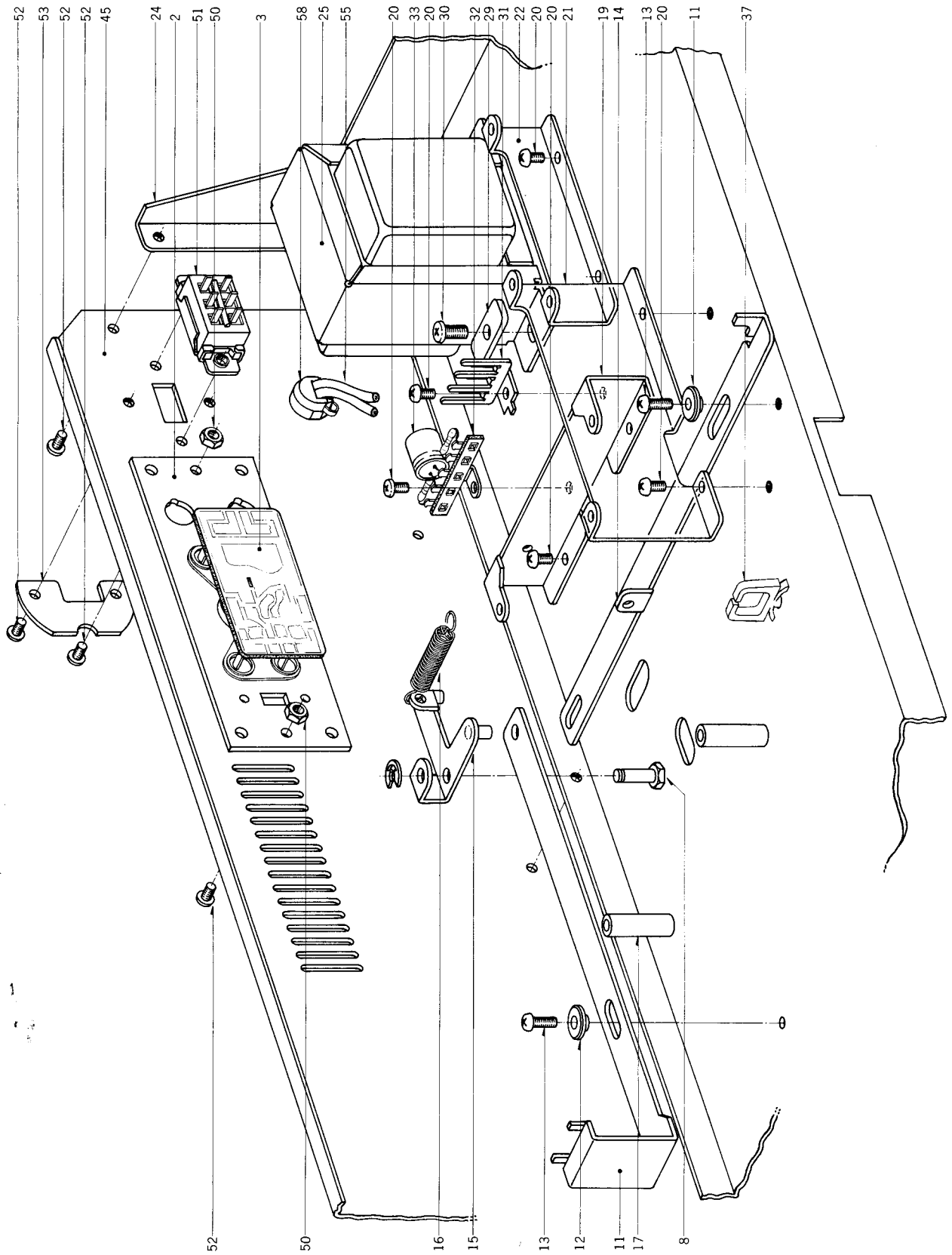
Carbon Resistor Omitted

(4) SYS. CON P.C BOARD (CA-2056) BLOCK

| Symbol No. | Parts No. | Description | Q'ty |
|--------------------------|-----------|---------------------------------------|------|
| (4)-1 | BA637806 | Sys. Con P.C Board Comp. (CA-2056) | 1 |
| (4)-TR1 | ET639437 | Transistor 2SC945L(Q)(P) | 1 |
| (4)-TR2 | ET554657 | Transistor 2SA733(P)(Q) | 1 |
| (4)-TR3 | ET402682 | Transistor 2SC1061(C) | 1 |
| (4)-TR4 | ET639437 | Transistor 2SC945L(Q)(P) | 1 |
| (4)-D2to5 | ED624903 | Silicon Diode 1S2473 | 4 |
| Capacitor, Vertical Type | | | |
| (4)-C1, 2 | EC220151 | Elect. 100 μ F 25WV | 2 |
| (4)-C4 | EC450055 | Elect. 1 μ F 25WV | 1 |
| (4)-C5 | EC331828 | Elect. 3.3 μ F 25WV | 1 |
| (4)-C6 | EC350875 | Mylar 0.001 μ F(J) 50WV | 1 |

Carbon Resistor Omitted

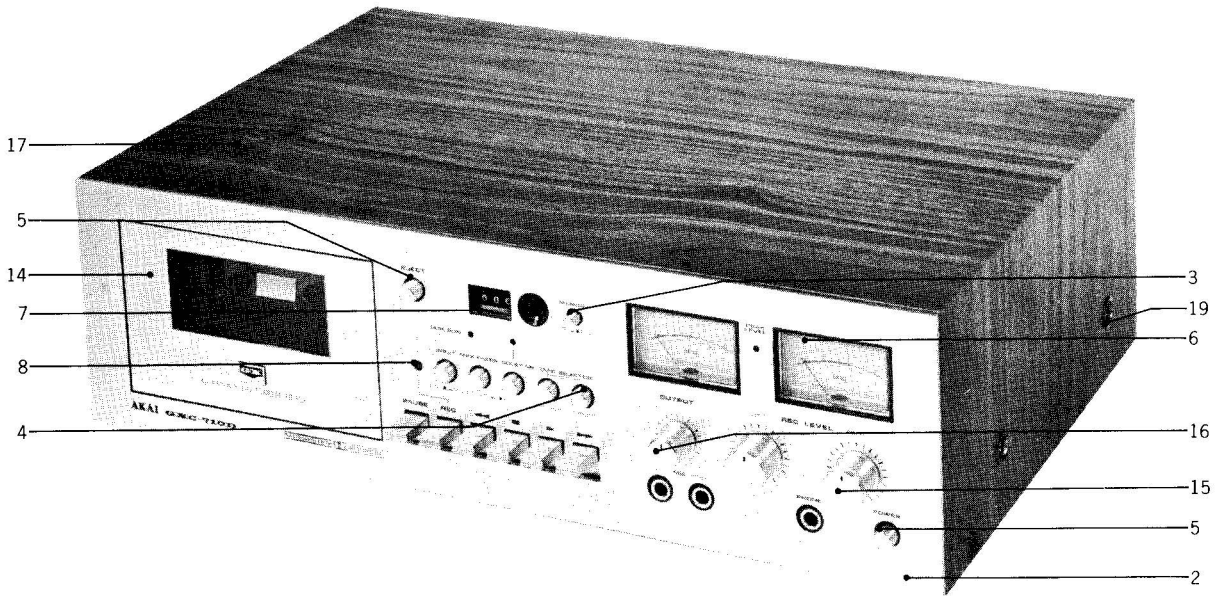
10. ILLUSTRATION OF AMP ASSEMBLY BLOCK



10) AMP ASSEMBLY BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty | Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|--------------------------|-----------|-----------------------------------------------|---------------|------|---------------------------|-----------|-------------------------------------|---------------|------|
| JACK PLATE BLOCK | | | | | REAR CHASSIS BLOCK | | | | |
| 10-1x | BJ637661 | Jack Plate Block Comp. | CA-1 | 1 | 10-45 | SP675292 | Rear Panel B | CA-5208 | 1 |
| 10-2 | EJ624104 | Jack Plate J-2 | 31-5-121 | 1 | 10-46x | SP647008 | Rear Panel 2 (CSA) | CA-5013 | 1 |
| 10-3 | EA628222 | P.C Board For Jack | 1.E-5622 | 1 | 10-47x | SP648450 | Rear Panel 3 (CEE) | CA-5013 | 1 |
| 10-4x | ER364994 | Carbon/R. RD1/4 39k(J) (Insu. Type) | 35-9-5 | 2 | 10-48x | SP648448 | Rear Panel 5 (JPN) | CA-5013 | 1 |
| 10-5x | ER213715 | Carbon/R. RD1/4 100k(J) (Insu. Type) | 35-9-5 | 2 | 10-49x | EJ669745 | 4P Jack Plate | 31-5-130 | 1 |
| 10-6x | ER315213 | Carbon/R. RD1/4 8.2k(J) (Insu. Type) | 35-9-5 | 2 | 10-50 | ZW516993 | Nut M3 | | 1 |
| 10-7x | ER345712 | Carbon/R. RD1/4 22k(J) (Insu. Type) | 35-9-5 | 2 | 10-51 | ES479485 | Slide SW. S-1 | 25-3-66 | 1 |
| AMP CHASSIS BLOCK | | | | | 10-52 | ZS608488 | Screw, pan head 3x5 | | 2 |
| 10-8 | MS645017 | REC Lever Shaft | CA-5020 | 1 | 10-53 | TC613697 | Volt Indication Palte | CW-5018 | 1 |
| 10-9x | ZW273892 | Toothed Lock Washer M4 | | 1 | 10-54x | ZS447761 | Tapping Screw #2 3x6(BR) (Black) | | 2 |
| 10-10x | ZW413188 | Nut M4 | | 3 | 10-55 | EW374894 | AC Cord U/L 3M | 26-3-19 | 1 |
| 10-11 | MZ644264 | REC Slide Plate | CA-5002 | 1 | 10-56x | EW524845 | AC Cord 2.5M (JPN) | 26-3-31 | 1 |
| 10-12 | ZW628288 | Graduated Collar | 1.E-5602 | 2 | 10-57x | EW516600 | AC Cord VM-0065 (CEE) | 26-3-28 | 1 |
| 10-13 | ZS447840 | Tapping Screw #2 3x8 (BR) | | 2 | 10-58 | EJ631945 | Strain Relief SR-4N-4 | 2-7-49 | 1 |
| 10-14 | MZ644275 | REC Joint Slide | CA-5003 | 1 | 10-59x | EZ246936 | Strain Relief SR-6W-1 (CEE) | 2-7-8 | 1 |
| 10-15 | ML644286 | REC Lever, w/pin | CA-5004 | 1 | 10-60x | ZW273881 | Earth Lug M4 (CEE) | | 1 |
| 10-16 | ZG369606 | Field Lever, Sping | RCC-110 | 1 | 10-61x | ZW273992 | Toothed Lock Washer M4 (CEE) | | 1 |
| 10-17 | MH421986 | Assy. Base Prop | PX-A153 | 2 | 10-62x | ZW413188 | Nut M4 (CEE) | | 1 |
| 10-18x | ZS421806 | Screw, pan head 3x8 | | 2 | 10-63x | ZS413201 | Screw, pan head 4x8 (CEE) | | 1 |
| 10-19 | MZ644310 | P.C Board Base | CA-5006 | 2 | | | | | |
| 10-20 | ZS325495 | Tapping Screw #2 3x6 (BR) | | 15 | | | | | |
| 10-21 | MZ644321 | SW. P.C Board Foot | CA-5007 | 1 | | | | | |
| 10-22 | MZ644332 | Power Supply P.C Board Foot | CA-5008 | 1 | | | | | |
| 10-23x | HZ644297 | Panel Angle A | CA-5005 | 1 | | | | | |
| 10-24x | TC644308 | Panel Angle B | CA-5005 | 1 | | | | | |
| 10-25 | BT645805 | Power Trans. CA-1 | 38-4-344 | 1 | | | | | |
| 10-26x | BT648617 | Power Tans. CA-4 (CEE) | 38-4-372 | 1 | | | | | |
| 10-27x | BT648595 | Power Trans. CA-3 (CSA) | 38-4-371 | 1 | | | | | |
| 10-28x | BT648606 | Power Trans. CA-2 (JPN) | 38-4-370 | 1 | | | | | |
| 10-29 | TC516598 | Trans. Retainer | CS-5337 | 2 | | | | | |
| 10-30 | ZS413201 | Screw, pan head 4x8 | | 2 | | | | | |
| 10-31 | EJ551035 | Wrapping Terminal, 4P T-5251 | 32-1-36 | 1 | | | | | |
| 10-32 | EJ255115 | Lug Plate VB2L2 | 33-4-3 | 1 | | | | | |
| 10-33 | EC662422 | Elect./C. 47μF 25WV (Vert. Type) | 24-12-21 | 1 | | | | | |
| 10-34x | ER664863 | Carbon/R. F 1/4W 100 ohms (J) (Insu. Type) | 35-11-12 | 1 | | | | | |
| 10-35x | ZW273802 | Toothed Lock Washer M3 | | 1 | | | | | |
| 10-36x | EJ510333 | Wire Clip 220-JD481610-0104 (Nylon) | 2-7-17 | 1 | | | | | |
| 10-37 | EJ618524 | Wire Clip 220-JD482010-0010 (Nylon) | 2-7-45 | 1 | | | | | |
| 10-38x | EZ638965 | Cord Support | 2-7-50 | 1 | | | | | |
| 10-39x | EF601953 | Fuse (SEMKO T Type) 800MAT (CEE) | 39-1-53 | 3 | | | | | |
| 10-40x | EF623103 | Fuse (SEMKO T Type) 1 AT (CEE) | 39-1-53 | 1 | | | | | |
| 10-41x | EF277413 | Fuse ST-2 2A (CSA) | 39-1-26 | 1 | | | | | |
| 10-42x | EF539515 | Fuse ST-2 1.2A (CSA) | 39-1-26 | 2 | | | | | |
| 10-43x | EF558066 | Fuse 2A 125V (JPN) | 39-1-47 | 1 | | | | | |
| 10-44x | EF662207 | Fuse 1.2A 125V (JPN) | 39-1-47 | 2 | | | | | |

11. PHOTO OF FINAL ASSEMBLY BLOCK



11) FINAL ASSEMBLY BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Qty |
|--------------------------|-----------|-----------------------------------|---------------|-----|
| FRONT PANEL BLOCK | | | | |
| 11-1x | BZ637492 | Front Panel Block Comp. | CA-1 | 1 |
| 11-2 | SP647032 | Front Panel A | CA-6001 | 1 |
| 11-3 | SE613585 | Button Escutcheon D | CG-6814 | 1 |
| 11-4 | ZW526577 | Collar B, Jack | MC-5006 | 5 |
| 11-5 | SE613888 | Button Escutcheon A | CW-6021 | 2 |
| 11-6 | SE645210 | VU Escutcheon | CA-6004 | 2 |
| 11-7 | SE630156 | Counter Escutcheon | CJ-6007 | 1 |
| 11-8 | SZ639685 | Lamp Lens B-1 | NE-6005 | 1 |
| 11-9x | TC494267 | Lamp Cover | CG-2206 | 1 |
| 11-10x | ZS325495 | Tapping Screw #2 3x6 (BR) | | 8 |
| 11-11x | MZ646986 | Frame (Black) | CA-6005 | 1 |
| 11-12x | ZS447840 | Tapping Screw #2 3x8 (BR) | | 8 |
| 11-13x | ZW603797 | Adjust. Washer (U) D4x1.3x0.5t | | 2 |
| 11-14 | BD681120 | Lid Case Block Comp. | CA-6023 | 1 |
| 11-15 | SK645028 | Single Knob A | CA-6012 | 2 |
| 11-16 | SK645030 | Single Knob B | CA-6013 | 1 |
| 11-17 | BC647076 | Cabinet | CA-6008 | 1 |
| 11-18x | ZW548010 | Spot Facing Washer | MU-6028 | 4 |
| 11-19 | ZS510344 | Screw, binding head 4x12 | | 4 |
| 11-20x | SP647054 | Bottom Plate | CA-6009 | 1 |
| 11-21x | SZ645243 | Circular Foot A, w/rubber | CA-6014 | 4 |
| 11-22x | ZS417150 | Screw, pan head 4x6 | | 4 |
| 11-23x | EF563670 | Fuse 0.5A 250V | 39-1-50 | 1 |
| 11-24x | MT553948 | Wire Band B | 2-35-3 | 3 |

12. 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 | CA-5017 | 2SA640(E)(F) 2SA733(Q)(R) | ET623790 ET557965 |
| 2SA733(P)(Q) | ET554657 | CA-2056 | 2SA628(D)(E)(F) 2SA640(E)(F) | ET515700 ET623790 |
| 2SC458LG(C) | ET234854 | CA-5017 | 2SC1000(GR)(BL) | ET622181 |
| 2SC458LG(D) | ET352146 | CA-5017 | 2SC1312S(G)(H) 2SC693U(F) | ET603257 ET315472 |
| 2SC945L(P) | ET639448 | CA-5017 | 2SC711(E)(F) | ET453486 |
| 2SC945L(P)(Q) | ET639437 | CA-2056 | 2SC1647(R)(S) | ET658181 |
| 2SC945L(Q)(R) | ET635837 | CA-2057 | 2SC1641(Q)(R)(S)(E) | ET603843 |
| 2SC1061(C) | ET402682 | CA-2056 | | |
| 2SC1096(K)(L) | ET471025 | CA-5015 | 2SD325(D)(E) 2SD360(D)(E) | ET631855 ET517375 |
| 2SC1247A(B)(V) | ET511920 | CA-5015 | 2SC1211(D)(E) | ET511694 |
| 2SC1312R(G)(H) | ET517263 | CA-5017 | 2SC458LG(C)(D) 2SC1000(GR)(BL) | ET391768 ET622181 |
| 2SK30A(D) | ET645917 | CA-5017 | | |
| 1N34A | ED417442 | CA-5017 | 1N60 | ED428264 |
| 10D05 | ED494583 | CA-5015 | 1N4001 | ED511097 |
| WZ240 | ED511918 | CA-5015 | | |
| WZ085 | ED491130 | CA-5017 CA-2057 | RD6A(M) | ED468303 |
| 1S2473VE | ED560913 | CA-2056 CA-5017 | 1S1588 WG599 | ED557447 ED514721 |
| SEL-103R | ED645816 | | | |
| SEL-303E | ED645996 | | | |

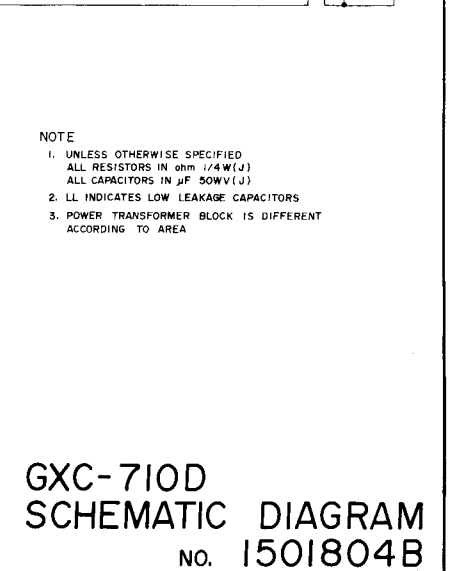
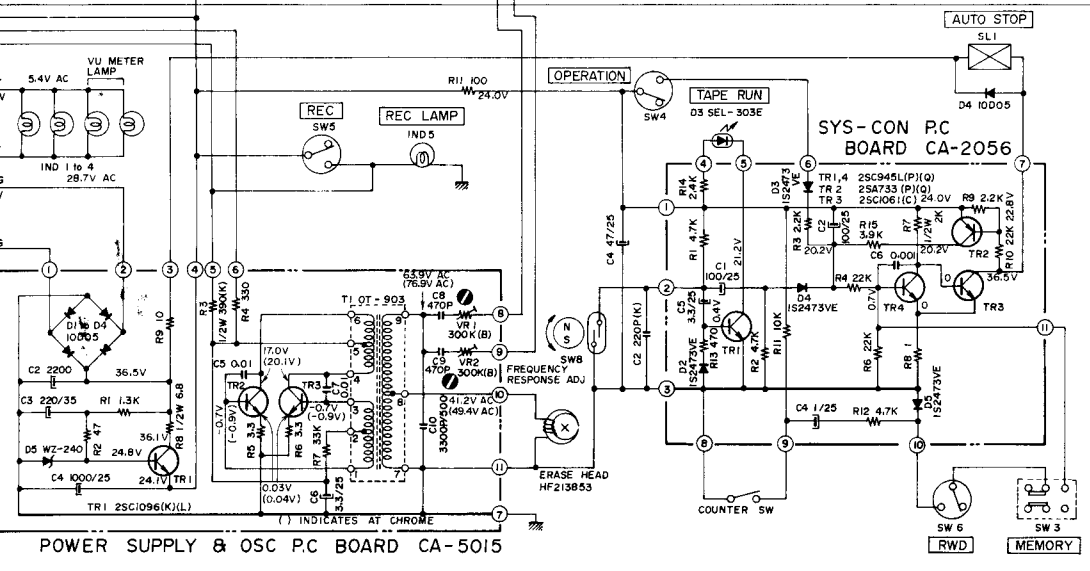
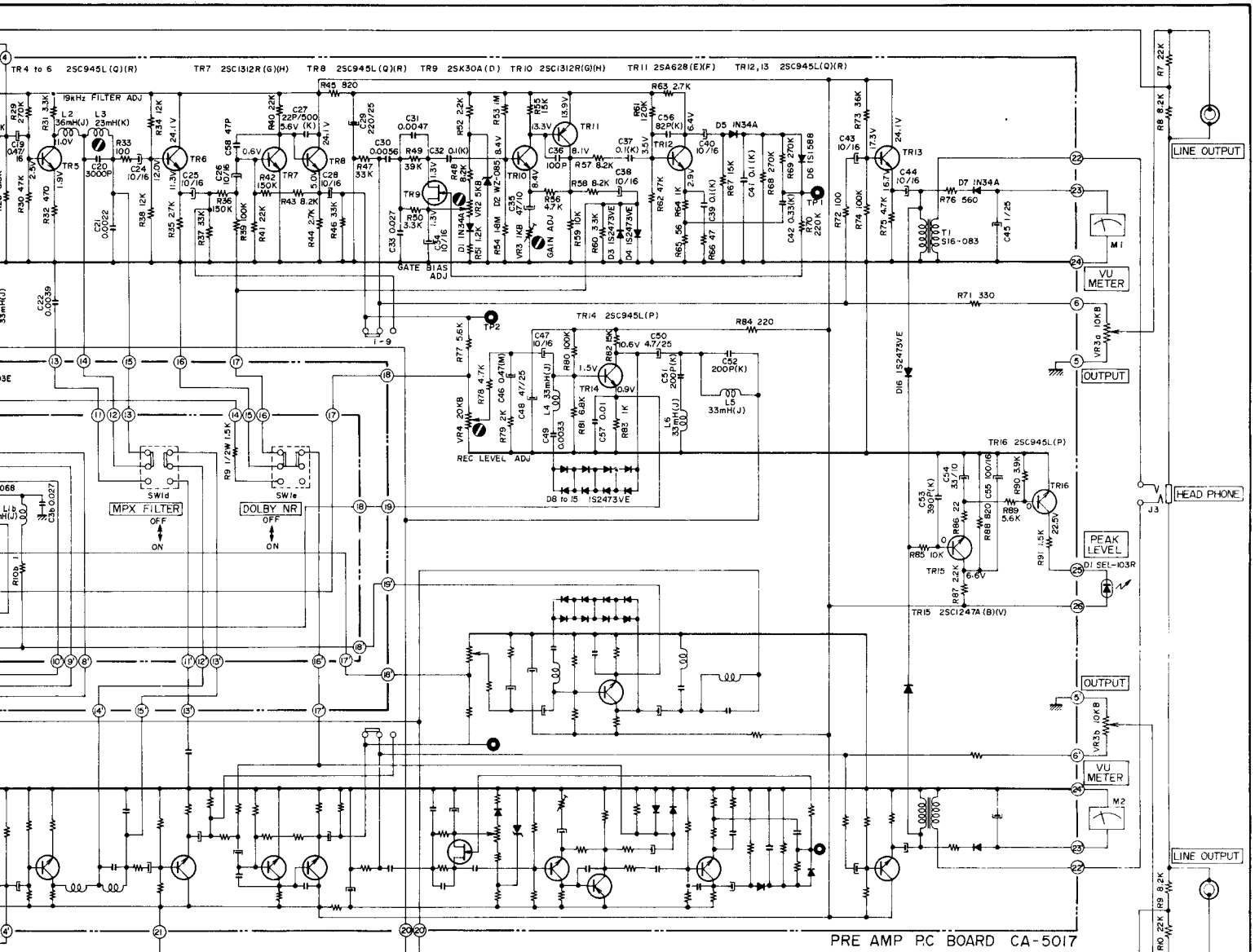
INDEX

| 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. |
|-----------|-----------------------|-----------|-----------------------|-----------|-----------------------|-----------|-----------------------|-----------|-----------------------|
| BA637571 | (2)-1 | EC395504 | (1)-C42 | ER672502 | (2)-R8 | ML641878 | 8-44 | MZ645074 | 7-16 |
| BA637582 | (2)-2 | EC432810 | (1)-C2 | ES469541 | 6-9 | ML641902 | 8-54 | MZ645118 | 8-98 |
| BA637593 | (2)-3 | EC450055 | (1)-C45 | ES479485 | 10-51 | ML641924 | 8-59 | MZ645164 | 5-25 |
| BA637604 | (2)-4 | EC450055 | (3)-C5 | ZS487091 | 8-75x | ML641935 | 8-51 | MZ645186 | 5-15x |
| BA637615 | (1)-1 | EC450055 | (4)-C4 | ES494076 | (1)-SW1 | ML641946 | 8-97 | MZ646290 | 3-29 |
| BA637806 | (4)-1 | EC450270 | (2)-C4 | ES494188 | 7-4 | ML641992 | 8-81 | MZ646918 | 3-13 |
| BA637817 | (3)-1 | EC450527 | (1)-C11 | ES494188 | 7-45 | ML642082 | 1-27 | MZ646920 | 5-5 |
| BC647076 | 11-17 | EC450527 | (1)-C50 | ES494188 | 8-40 | ML642330 | 7-7 | MZ646931 | 5-1 |
| BD681120 | 11-14 | EC460091 | (2)-C10 | ES494188 | 8-74 | ML642352 | 7-8 | MZ646953 | 4-1 |
| BH661061 | 1-1x | EC487157 | (1)-C46 | ES499972 | 6-10x | ML644286 | 10-15 | MZ646986 | 11-11x |
| BJ637661 | 10-1x | EC493637 | (1)-C5 | ES516036 | 8-70 | ML644815 | 8-45 | MZ647021 | 6-1 |
| BK650070 | 4-19 | EC493637 | (1)-C14 | ES619053 | 8-3 | ML675022 | 8-65 | MZ647087 | 6-20 |
| BM637683 | 3-1x | EC493637 | (1)-C35 | ES645930 | (3)-SW1 | MP468292 | 1-7 | MZ647100 | 8-16x |
| BM637694 | 3-2x | EC495865 | (1)-C20 | ET234854 | (1)-TR2,3 | MR645041 | 3-23 | MZ647111 | 8-17x |
| BM663434 | 3-3x | EC516745 | (1)-C1 | ET352146 | (1)-TR1 | MR645052 | 3-24 | MZ651194 | 7-27 |
| BR637705 | 2-2x | EC516756 | (1)-C53 | ET398711 | (1)-TR4to6 | MS366625 | 1-15 | MZ653308 | 8-57 |
| BR637716 | 2-1x | EC516767 | (1)-C3 | ET398711 | (1)-TR8 | MS387573 | 2-3 | MZ675202 | 8-83 |
| BS637795 | 8-1x | EC516767 | (2)-C8,9 | ET398711 | (1)-TR12to14 | MS595552 | 5-7 | MZ676440 | 3-28 |
| BS637828 | 7-1x | EC539842 | (1)-C18 | ET402682 | (4)-TR3 | MS595563 | 5-6 | MZ678486 | 7-50 |
| BS665706 | 6-8x | EC539842 | (1)-C51,52 | ET453611 | (2)-TR1 | MS642374 | 5-33 | SB645232 | 4-18 |
| BT645805 | 10-25 | EC551160 | (2)-C1 | ET511920 | (1)-TR15 | MS644613 | 7-20 | SE613888 | 11-5 |
| BT648595 | 10-27x | EC556525 | (1)-C4 | ET511920 | (2)-TR2,3 | MS644872 | 1-30 | SE630156 | 11-7 |
| BT648606 | 10-28x | EC556525 | (1)-C15 | ET517263 | (1)-TR7 | MS644962 | 7-9 | SE631585 | 11-3 |
| BT648617 | 10-26x | EC556525 | (1)-C27 | ET517263 | (1)-TR10 | MS645017 | 10-8 | SE645210 | 11-6 |
| BT667394 | (1)-T1 | EC641316 | 3-18 | ET554657 | (4)-TR2 | MS645153 | 1-33 | SK631304 | 5-41 |
| BZ637492 | 11-1x | EC645895 | (2)-C2 | ET557976 | (1)-TR11 | MS645175 | 4-2 | SK631304 | 6-12 |
| BZ687453 | 7-22x | EC648538 | 3-19x | ET638504 | (1)-TR16 | MT370348 | 2-15 | SK645028 | 11-15 |
| EA391331 | 3-4x | EC648628 | (1)-C19 | ET639437 | (3)-TR1 | MT370361 | 2-9 | SK645030 | 11-16 |
| EA457176 | 4-14 | EC662422 | 10-33 | ET639437 | (4)-TR1 | MT370372 | 2-17 | SM582210 | 3-17x |
| EA457176 | 6-15 | ED219464 | (1)-D1 | ET639437 | (4)-TR4 | MT387630 | 2-7 | SP647008 | 10-46x |
| EA628222 | 10-3 | ED219464 | (1)-D5 | ET645917 | (1)-TR9 | MT387641 | 2-11 | SP647032 | 11-2 |
| EA647166 | 8-14 | ED219464 | (1)-D7 | EV464207 | (1)-VR2 | MT394200 | 2-16 | SP647054 | 11-20x |
| EA647188 | 6-3 | ED491130 | (1)-D2 | EV478686 | (1)-VR1 | MT553948 | 11-24x | SP648448 | 10-48x |
| EA647190 | 5-43 | ED494583 | (2)-D1to4 | EV499882 | (2)-VR1,2 | MT605766 | 2-14 | SP648450 | 10-47x |
| EA647201 | 8-69 | ED494583 | 8-7x | EV522797 | (1)-VR4 | MT644534 | 2-18 | SP675292 | 10-45 |
| EC220127 | (1)-C6 | ED511918 | (2)-D5 | EV523620 | (1)-VR3 | MV522235 | 1-34 | SZ639685 | 11-8 |
| EC220127 | (1)-C55 | ED557447 | (1)-D6 | EV645840 | 6-21 | MZ414224 | 3-6x | SZ645221 | 8-4 |
| EC220151 | (4)-C1, 2 | ED560913 | (1)-D3,4 | EV645851 | 6-22 | MZ641654 | 7-11 | SZ645243 | 11-21x |
| EC220590 | (1)-C54 | ED560913 | (1)-D8to16 | EW374894 | 10-55 | MZ641665 | 7-23 | SZ647065 | 5-14 |
| EC220678 | (1)-C48 | ED624903 | (4)-D2to5 | EW516600 | 10-57x | MZ641676 | 7-32 | TC384164 | 3-14 |
| EC250683 | (1)-C21 | ED645816 | 6-4 | EW524845 | 10-56x | MZ641687 | 7-33 | TC389790 | 2-12 |
| EC250841 | (1)-C57 | ED656346 | 8-15 | EZ246936 | 10-59x | MZ641700 | 5-48 | TC394075 | 3-12x |
| EC250841 | (2)-C5 | ED674605 | (3)-D1,2 | EZ595653 | 8-73 | MZ641711 | 7-40 | TC494267 | 11-9x |
| EC250841 | (2)-C7 | EF277413 | 10-41x | EZ638965 | 10-38x | MZ641722 | 7-43 | TC515575 | 4-6 |
| EC251291 | (1)-C32 | EF539515 | 10-42x | EZ642328 | 7-2 | MZ641733 | 8-20 | TC516598 | 10-29 |
| EC251291 | (1)-C37 | EF558066 | 10-43x | EZ644354 | (2)-5 | MZ641755 | 8-25 | TC613697 | 10-53 |
| EC251291 | (1)-C39 | EF563670 | 11-23x | HA644297 | 10-23x | MZ641766 | 8-29 | TC641632 | 1-4 |
| EC251291 | (1)-C41 | EF601953 | 10-39x | HE656098 | 1-23 | MZ641790 | 8-64 | TC642115 | 1-37 |
| EC290531 | (1)-C12 | EF623103 | 10-40x | HP644085 | 1-14 | MZ641801 | 8-58 | TC642262 | 8-11x |
| EC290531 | (1)-C36 | EF662207 | 10-44x | HZ641643 | 1-13 | MZ641812 | 8-48 | TC642273 | 5-37 |
| EC290564 | 8-71x | EJ255115 | 10-32 | HZ642093 | 1-29 | MZ641867 | 8-43 | TC642284 | 5-38 |
| EC313121 | (1)-C29 | EJ510333 | 10-36x | HZ644400 | 1-11 | MZ641880 | 8-39 | TC642295 | 8-2 |
| EC320051 | (1)-C7, 8 | EJ514822 | (2)-9 | HZ646907 | 1-2 | MZ641957 | 8-76 | TC642306 | 8-10 |
| EC320051 | (1)-C13 | EJ539662 | (1)-2 | HZ668327 | 1-25 | MZ641968 | 8-79 | TC642317 | (3)-2 |
| EC320051 | (1)-C24to26 | EJ539662 | (2)-11 | MB415743 | 2-23 | MZ641970 | 8-82 | TC642363 | 5-42 |
| EC320051 | (1)-C28 | EJ539662 | (3)-3 | MB645107 | 7-39 | MZ641981 | 8-84 | TC644308 | 10-24x |
| EC320051 | (1)-C34 | EJ551035 | 10-31 | MB666123 | 3-30 | MZ642003 | 8-86 | TC645063 | 1-3 |
| EC320051 | (1)-C38 | EJ592503 | (2)-10 | MC641845 | 8-36 | MZ642014 | 8-93 | TC646942 | 1-26 |
| EC320051 | (1)-C40 | EJ618524 | 10-37 | MC645985 | 8-12 | MZ642025 | 8-89 | TC651161 | 8-30 |
| EC320051 | (1)-C43,44 | EJ624104 | 10-2 | MH421986 | 10-17 | MZ642036 | 8-91 | TC653218 | 7-41 |
| EC320051 | (1)-C47 | EJ631945 | 10-58 | MH620572 | 8-9 | MZ642047 | 8-90 | TC666134 | 6-13x |
| EC329861 | (1)-C33 | EJ645827 | 6-7 | MH644635 | 7-34 | MZ642058 | 8-92 | TC666156 | 5-22 |
| EC329861 | (3)-C3 | EJ669745 | 10-49x | MH644646 | 5-49 | MZ642060 | 7-44 | TC668305 | 2-6 |
| EC329883 | (1)-C30 | EL295312 | 5-44 | MH644916 | 5-29 | MZ642071 | 5-46 | TC678475 | 5-4x |
| EC331705 | (1)-C16,17 | EL295312 | 6-16 | MH644927 | 5-26 | MZ642104 | 1-36 | ZG316765 | 5-31 |
| EC331828 | (2)-C6 | EL390576 | 4-15 | MH664064 | 5-21 | MZ642148 | 5-18 | ZG365218 | 1-40 |
| EC331828 | (4)-C5 | EM619705 | 6-19x | MI644624 | 7-18 | MZ642161 | 4-11 | ZG369606 | 10-16 |
| EC337500 | (1)-C31 | EM666450 | 6-18 | MI644681 | 7-36 | MZ642172 | 4-5 | ZG385075 | 2-8 |
| EC350875 | (1)-C10 | EO243988 | (3)-L1, 2 | MI644736 | 8-32 | MZ642183 | 4-13 | ZG385413 | 8-77 |
| EC350875 | (4)-C6 | EO368403 | (1)-L1 | MI644804 | 8-67 | MZ642341 | 7-3 | ZG385986 | 8-28x |
| EC350875 | 8-72x | EO368403 | (1)-L4to6 | MI645085 | 7-25 | MZ642385 | 3-27 | ZG385986 | 8-68 |
| EC372148 | (2)-C3 | EO496350 | (1)-L2 | ML595574 | 5-8 | MZ644264 | 10-11 | ZG387584 | 2-5 |
| EC377212 | (1)-C58 | EO496844 | (2)-T1 | ML595585 | 5-9 | MZ644275 | 10-14 | ZG392848 | 4-10 |
| EC379170 | (3)-C1 | EO624857 | (1)-L3 | ML641698 | 5-50 | MZ644310 | 10-19 | ZG394378 | 7-15 |
| EC379214 | (2)-C11 | EP494425 | 8-6 | ML641744 | 8-26 | MZ644321 | 10-21 | ZG394378 | 8-47 |
| EC379787 | (1)-C22 | ER213715 | 10-5x | ML641777 | 8-62 | MZ644332 | 10-22 | ZG422223 | 5-40 |
| EC380621 | (3)-C4 | ER315213 | 10-6x | ML641788 | 8-55 | MZ644343 | 6-2 | ZG465636 | 1-22 |
| EC389485 | (1)-C9 | ER345712 | 10-7x | ML641823 | 8-49 | MZ644567 | 8-19x | ZG469315 | 8-35 |
| EC391004 | (1)-C49 | ER364994 | 10-4x | ML641834 | 8-50 | MZ644591 | 7-24 | ZG469315 | 8-63 |
| EC392332 | (1)-C56 | ER664863 | 10-34x | ML641856 | 8-38 | MZ644657 | 7-37 | ZG525306 | 4-4 |

SECTION 3

SCHEMATIC DIAGRAM

1. GXC-710D SCHEMATIC DIAGRAM



- NOTE
1. UNLESS OTHERWISE SPECIFIED ALL RESISTORS IN OHM, 1/4W(J) ALL CAPACITORS IN μ F 50WV(J)
 2. LL INDICATES LOW LEAKAGE CAPACITORS
 3. POWER TRANSFORMER BLOCK IS DIFFERENT ACCORDING TO AREA

GXC-710D
SCHEMATIC DIAGRAM
 No. 1501804B