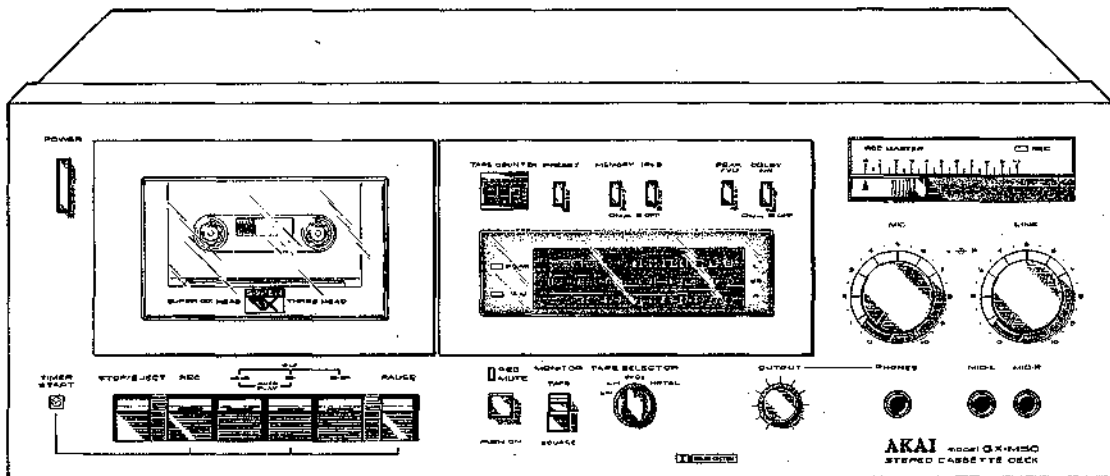


# AKAI SERVICE MANUAL

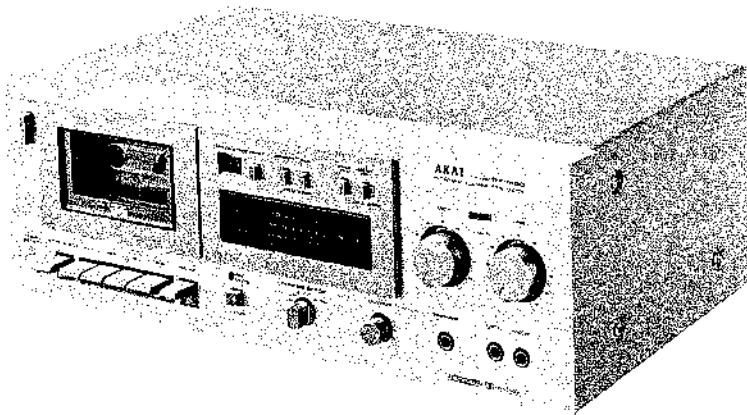


STEREO CASSETTE DECK

MODEL **GX-M30**

STEREO CASSETTE DECK

MODEL **GX-M50**



GX-M30



GX-M50

**STEREO CASSETTE DECK**

**GX-M30**  
**MODEL GX-M50**

ALSO APPLICABLE TO BLACK PANEL MODEL

SECTION 1	SERVICE MANUAL .....	3
SECTION 2	PARTS LIST .....	41
SECTION 3	SCHEMATIC DIAGRAM .....	75

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SECTION 1

**SERVICE MANUAL**

TABLE OF CONTENTS

<b>I. TECHNICAL DATA</b> .....	4
1. Model GX-M30 .....	4
2. Model GX-M50 .....	5
<b>II. DISMANTLING OF UNIT</b> .....	6
<b>III. CONTROLS</b> .....	7
1. Model GX-M30 .....	7
2. Model GX-M50 .....	8
<b>IV. PRINCIPAL PARTS LOCATION</b> .....	9
1. Model GX-M30 .....	9
2. Model GX-M50 .....	10
<b>V. VOLTAGE CONVERSION</b> .....	11
<b>VI. IPLS OPERATION</b> .....	12
1. IPLS (Instant Program Locating System) .....	12
2. DESCRIPTION OF KEYBOARD OPERATION .....	14
<b>VII. MECHANISM ADJUSTMENT</b> .....	16
1. FLYWHEEL LOOSE PLAY ADJUSTMENT .....	16
2. PINCH ROLLER PRESSURE MEASUREMENT .....	16
3. TAKE-UP TORQUE AT VARIOUS MODES .....	16
4. BACK TENSION MEASUREMENT .....	16
5. PLUNGER POSITION ADJUSTMENT .....	16
6. LEAF SWITCH TIMING ADJUSTMENT .....	17
7. TAPE SPEED ADJUSTMENT .....	17
<b>VIII. HEAD ADJUSTMENT</b> .....	18
1. TAPE GUIDE HEIGHT ADJUSTMENT .....	19
2. REC/PB HEAD PROJECTION ADJUSTMENT .....	19
3. RECORDING/PLAYBACK HEAD HEIGHT ADJUSTMENT .....	19
4. RECORDING/PLAYBACK HEAD AZIMUTH ALIGNMENT ADJUSTMENT .....	19
<b>IX. AMPLIFIER ADJUSTMENT</b> .....	20
1. Model GX-M30 .....	20
2. Model GX-M50 .....	24
<b>X. DC RESISTANCE OF VARIOUS HEADS</b> .....	28
<b>XI. CLASSIFICATION OF VARIOUS P.C BOARDS</b> .....	28
1. P.C BOARD TITLES AND IDENTIFICATION NUMBERS .....	28
2. Model GX-M30 COMPOSITION OF VARIOUS P.C BOARDS .....	29
3. Model GX-M50 COMPOSITION OF VARIOUS P.C BOARDS .....	33

For basic adjustments, measuring methods, and operating principles, refer to GENERAL TECHNICAL MANUAL.

# I. TECHNICAL DATA

## 1. Model GX-M30

TRACK SYSTEM	4 track 2 channel stereo system
TAPE	Philips type cassette
TAPE SPEED	4.76 cm/s $\pm$ 1.0% (1-7/8 ips)
WOW & FLUTTER	Less than 0.04% WRMS, 0.14% (DIN 45500)
FREQUENCY RESPONSE	30 to 15,000 Hz $\pm$ 3 dB (-20 VU) LN tape 30 to 16,000 Hz $\pm$ 3 dB (-20 VU) LH tape 30 to 16,500 Hz $\pm$ 3 dB (-20 VU) CrO <sub>2</sub> (SA) tape 30 to 9,000 Hz $\pm$ 3 dB (0 VU) CrO <sub>2</sub> (SA) tape 30 to 19,000 Hz $\pm$ 3 dB (-20 VU) Metal tape 30 to 13,000 Hz $\pm$ 3 dB (0 VU) Metal tape
DISTORTION (1,000 Hz "0" VU)	Less than 0.8% using LN tape 0.8% using LH tape 0.7% using CrO <sub>2</sub> (SA) tape 0.6% using Metal tape
SIGNAL TO NOISE RATIO	Better than 58 dB using LN tape 59 dB using LH tape 60 dB using CrO <sub>2</sub> (SA) tape 61 dB using Metal tape (measured via tape with peak recording level) Dolby NR switch ON: Improves up to 10 dB above 5 kHz
ERASE RATIO	Better than 70 dB
BIAS FREQUENCY	100 kHz
HEADS	(2): Twin-field Super GX head for record & playback one erase head
MOTOR	(1): Electronically speed controlled DC motor
F.F. & REWIND TIME	90 sec. using a C-60 cassette tape
OUTPUT JACKS	Line (2): 410 mV (0 VU) Required load impedance: more than 20 kohms Phone (1): 100 mV/8 ohms
INPUT JACKS	Microphone (2): 0.3 mV (Input impedance 4.7 kohms) Required microphone impedance: 600 ohms Line (2): 70 mV (Input impedance 100 kohms)
DIN JACK	Input: 2 mV (Input impedance 10 kohms) Output: 0.3V
DIMENSIONS	440 (W) $\times$ 158 (H) $\times$ 276 (D) mm (17.3 $\times$ 6.2 $\times$ 10.9")
WEIGHT	8.0 kg (17.6 lbs)
POWER REQUIREMENT	100V 50/60 Hz for Japan 120V 60 Hz for U.S.A & Canada 220V 50 Hz for Europe except U.K. 240V 50 Hz for U.K. & Australia 110/120/220/240V switchable 50/60 Hz for the other countries
POWER CONSUMPTION	JPN 14 W CSA, AAL 15 W U/T, CEE, U.K. 16 W

\* For improvement purposes, specifications and design are subject to change without notice.

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## 2. Model GX-M50

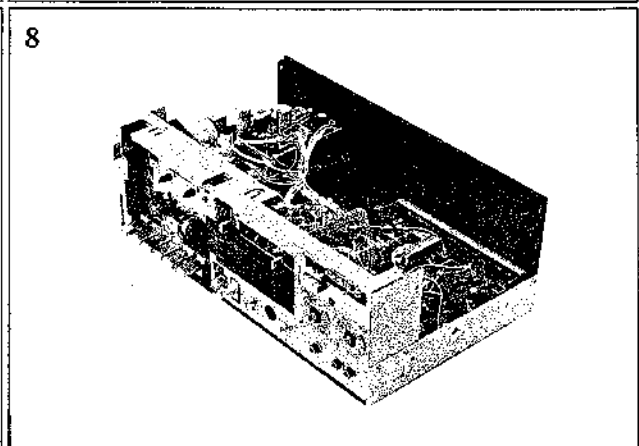
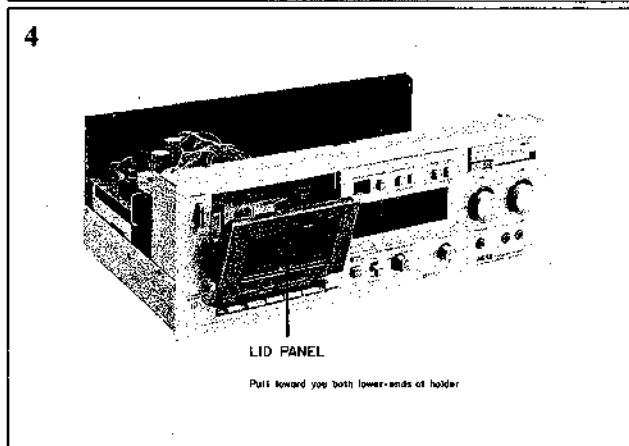
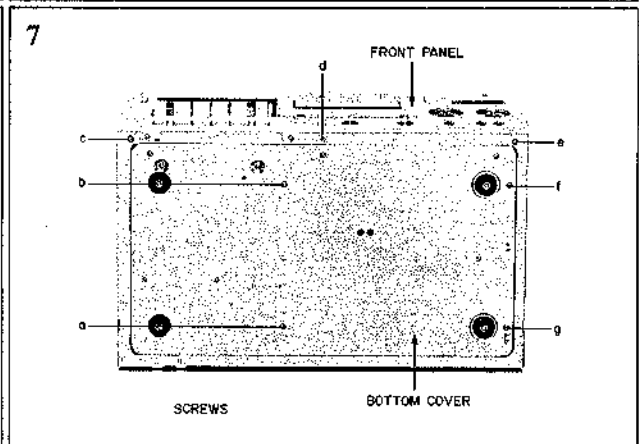
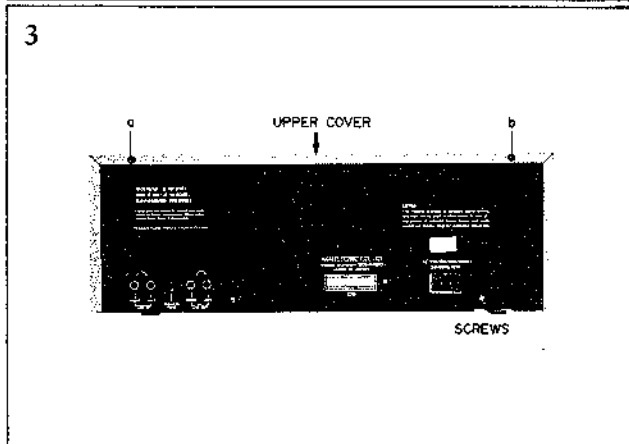
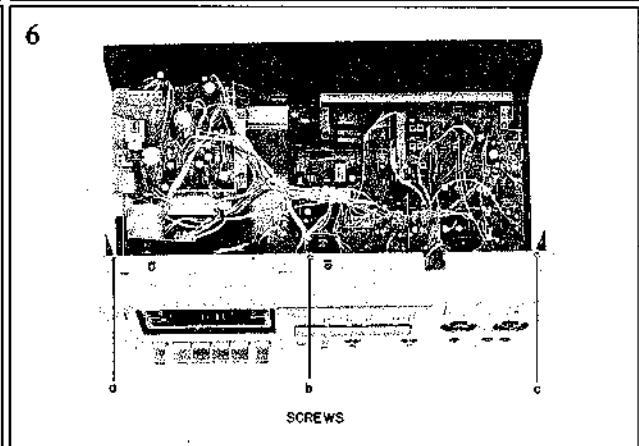
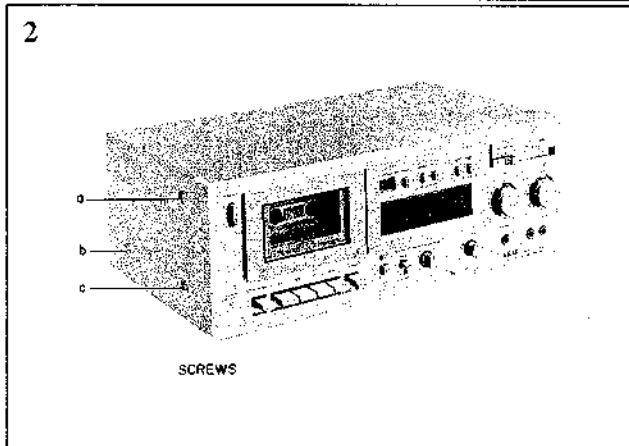
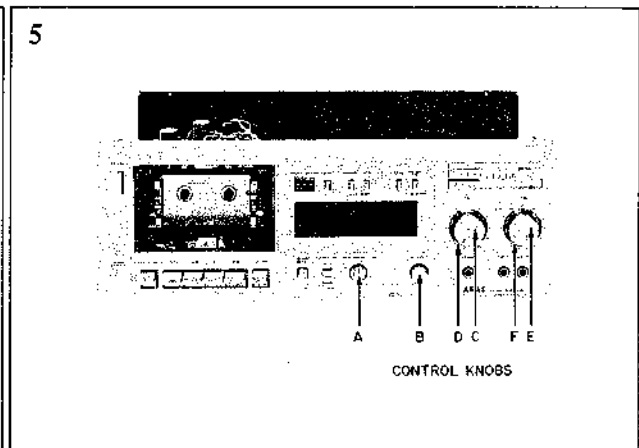
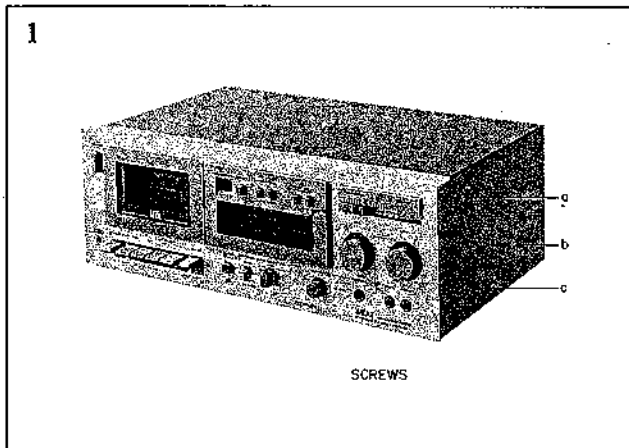
TRACK SYSTEM	4 track 2 channel stereo system
TAPE	Philips type cassette
TAPE SPEED	4.76 cm/s $\pm$ 1.0% (1-7/8 ips)
WOW & FLUTTER	Less than 0.04% WRMS, 0.14% (DIN 45500)
FREQUENCY RESPONSE	25 to 15,000 Hz $\pm$ 3 dB (-20 VU) LN tape 25 to 17,000 Hz $\pm$ 3 dB (-20 VU) LH tape 25 to 17,500 Hz $\pm$ 3 dB (-20 VU) CrO <sub>2</sub> (SA) tape 25 to 21,000 Hz $\pm$ 3 dB (-20 VU) Metal tape
DISTORTION (1,000 Hz "0" VU)	Less than 0.8% using LN tape 0.8% using LH tape 0.7% using CrO <sub>2</sub> (SA) tape 0.6% using Metal tape
SIGNAL TO NOISE RATIO	Better than 58 dB using LN tape 60 dB using LH tape 61 dB using CrO <sub>2</sub> (SA) tape 62 dB using Metal tape (Measured via tape with peak recording level) Dolby NR switch ON: Improves up to 10 dB above 5 kHz
ERASE RATIO	Better than 70 dB
BIAS FREQUENCY	100 kHz
HEADS	(3): Super GX recording head, Super GX playback head and erase head (3 head system)
MOTOR	(1): Electronically speed controlled DC motor
F.F. & REWIND TIME	90 sec. using a C-60 cassette tape
OUTPUT JACKS	Line (2): 410 mV (0 VU) Required load impedance: more than 20 kohms Phone (1): 100 mV/8 ohms
INPUT JACKS	Microphone (2): 0.25 mV (Input impedance 4.7 kohms) Required microphone impedance: 600 ohms Line (2): 70 mV (Input impedance 100 kohms)
DIN JACK	Input: 2 mV (Input impedance 10 kohms) Output: 0.3V
DIMENSION	440 (W) $\times$ 158 (H) $\times$ 276 (D) mm (17.3 $\times$ 6.2 $\times$ 10.9")
WEIGHT	8.0 kg (17.6 lbs)
POWER REQUIREMENT	100V 50/60 Hz for Japan 120V 60 Hz for U.S.A. & Canada 220V 50 Hz for European countries except U.K. 240V 50 Hz for U.K. & Australia 110/120/220/240V switchable 50/60 Hz for the other countries
POWER CONSUMPTION	JPN 15 W CSA, AAL, U/T 18 W CBE, U.K. 17 W

\* For improvement purposes, specifications and design are subject to change without notice.

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## II. DISMANTLING OF UNIT

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



### III. CONTROLS

#### 1. Model GX-M30

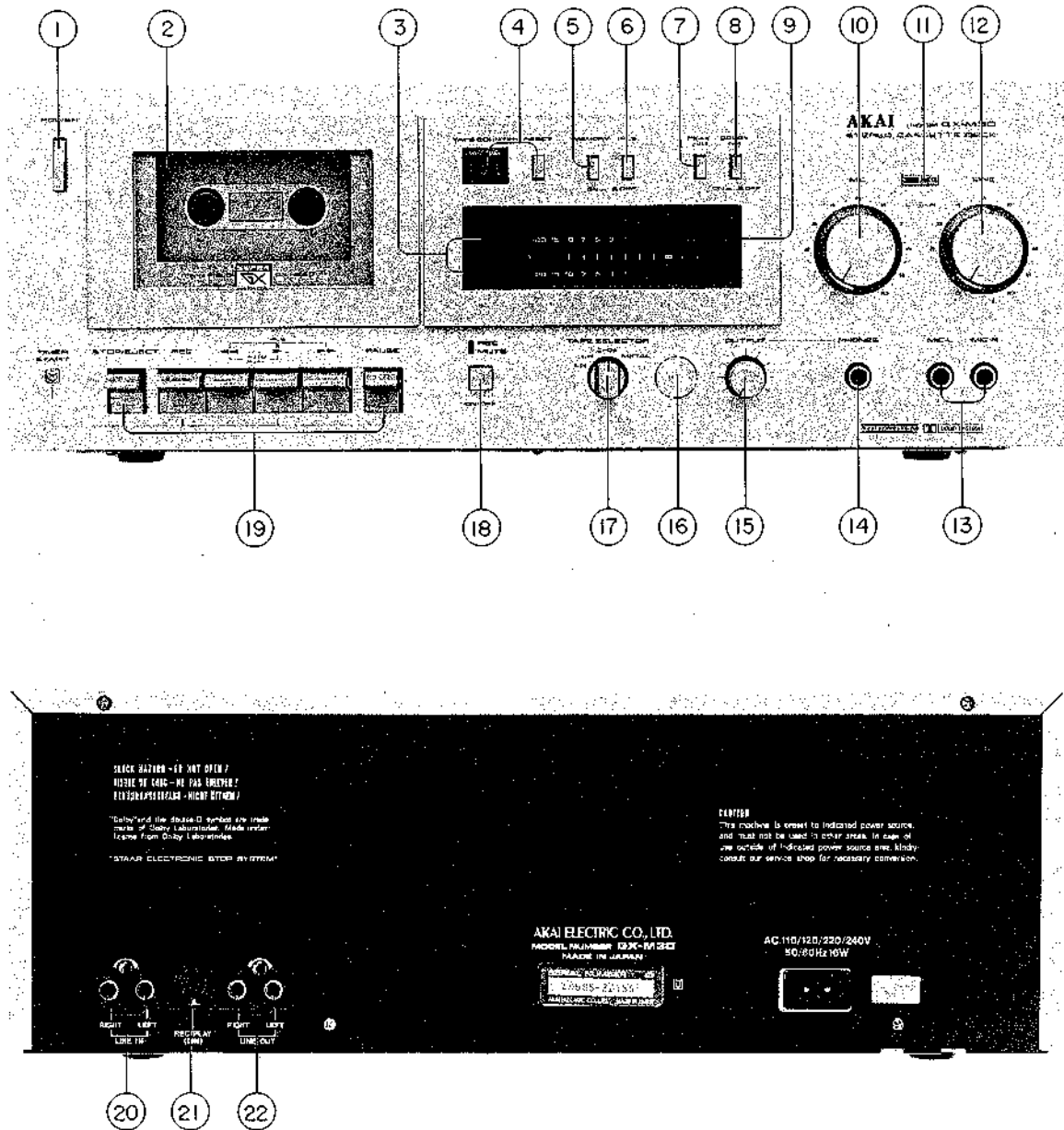


Fig. 1 Controls

- |   |  |
|---|--|
| 1. POWER SWITCH                             | 12. LINE RECORDING LEVEL CONTROLS              |
| 2. CASSETTE RECEPTACLE                      | 13. LEFT AND RIGHT MICROPHONE JACKS            |
| 3. PEAK/VU INDICATORS                       | 14. HEADPHONE JACK                             |
| 4. INDEX COUNTER AND RESET BUTTON           | 15. OUTPUT LEVEL CONTROL                       |
| 5. MEMORY BUTTON                            | 16. BIAS ADJUSTER (JPN, AAL MODELS ONLY)       |
| 6. IPLS BUTTON                              | 17. TAPE SELECTOR SWITCH                       |
| 7. PEAK/VU SELECTOR BUTTON                  | 18. REC MUTE                                   |
| 8. DOLBY NR BUTTON                          | 19. OPERATING KEYS                             |
| 9. FL DISPLAY BAR METERS                    | 20. LINE INPUT JACKS                           |
| 10. MICROPHONE/DIN RECORDING LEVEL CONTROLS | 21. DIN JACK (U/T, CSA, CEE, U.K. MODELS ONLY) |
| 11. RECORDING INDICATOR LAMP                | 22. LINE OUTPUT JACKS                          |

## 2. Model GX-M50

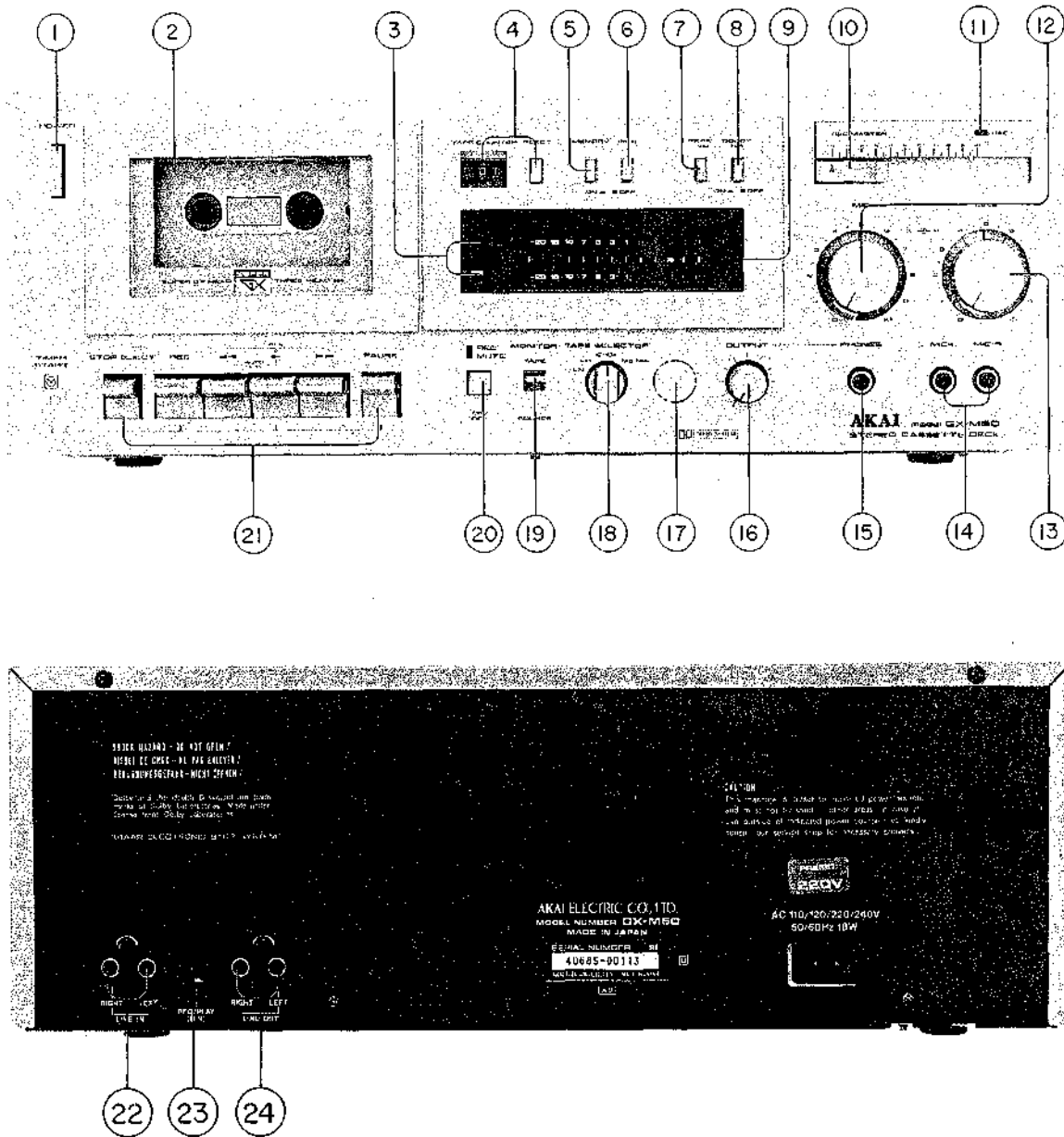


Fig. 2 Controls

- |   |  |
|---|--|
| 1. POWER SWITCH                             | 13. LINE RECORDING LEVEL CONTROLS              |
| 2. CASSETTE RECEPTACLE                      | 14. LEFT AND RIGHT MICROPHONE JACKS            |
| 3. PEAK/VU INDICATORS                       | 15. HEADPHONE JACK                             |
| 4. INDEX COUNTER AND RESET BUTTON           | 16. OUTPUT LEVEL CONTROL                       |
| 5. MEMORY BUTTON                            | 17. BIAS ADJUSTER (JPN, AAL MODELS ONLY)       |
| 6. IPLS BUTTON                              | 18. TAPE SELECTOR                              |
| 7. PEAK/VU SELECTOR BUTTON                  | 19. MONITOR SWITCH                             |
| 8. DOLBY NR BUTTON                          | 20. REC MUTE WITH INDICATOR                    |
| 9. FL DISPLAY BAR METERS                    | 21. OPERATING KEYS                             |
| 10. REC MASTER                              | 22. LINE INPUT JACKS                           |
| 11. RECORDING INDICATOR LAMP                | 23. DIN JACK (U/T, CSA, CEE, U.K. MODELS ONLY) |
| 12. MICROPHONE/DIN RECORDING LEVEL CONTROLS | 24. LINE OUTPUT JACKS                          |





## 2. Model GX-M50

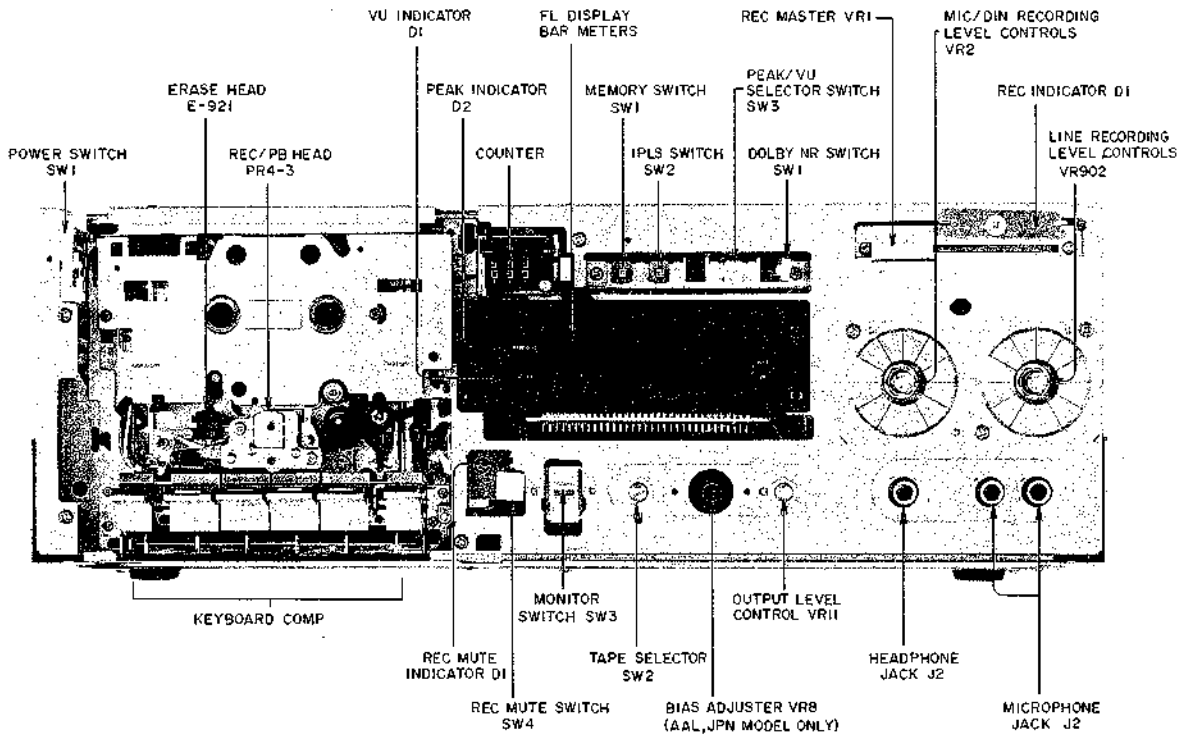


Fig. 5 Front View

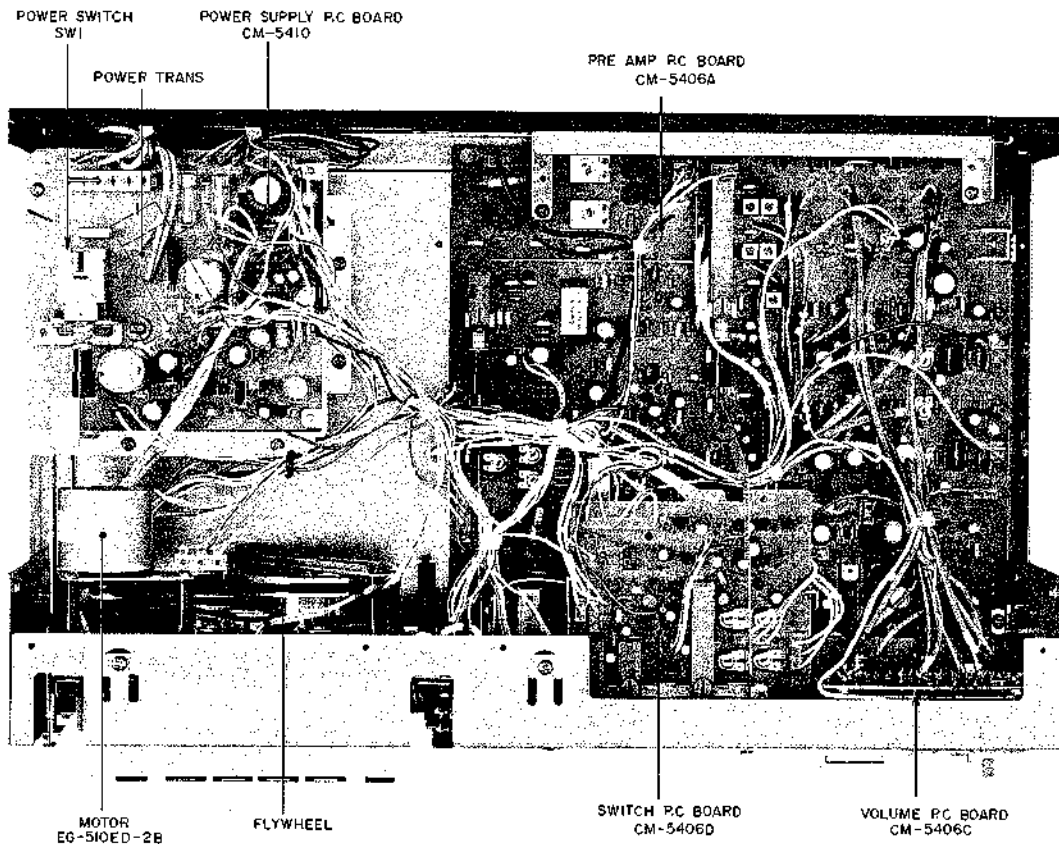


Fig. 6 Top View

## V. VOLTAGE CONVERSION

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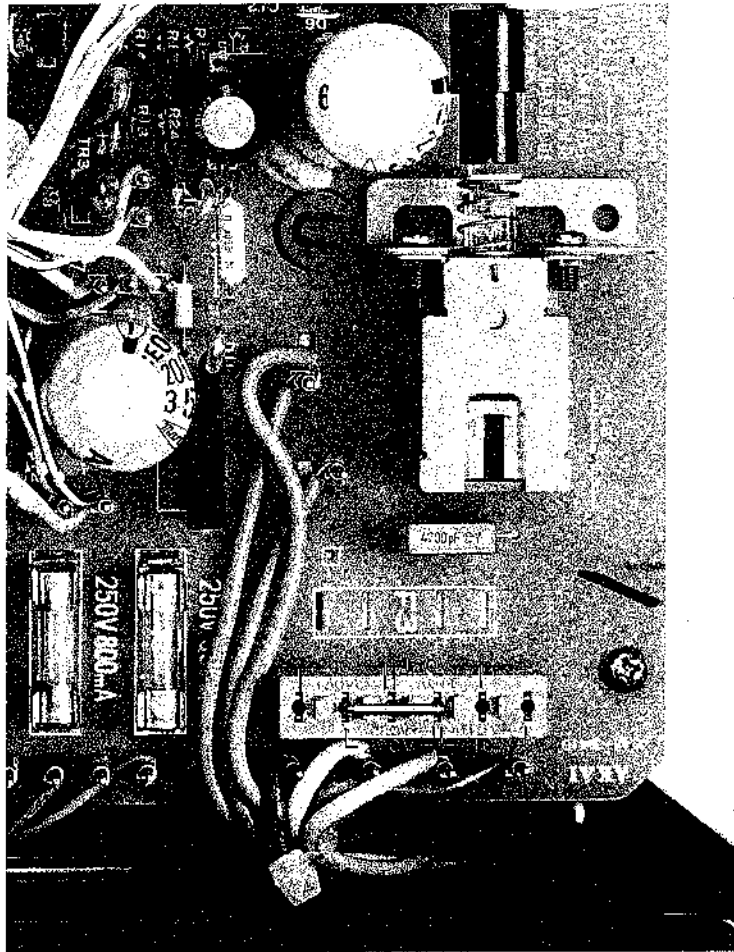


Fig. 7 Voltage Conversion

Models for Canada, Europe, USA, UK and Australia are not equipped with this facility. Each machine is preset at the factory according to destination, but some machines can be set to 110V, 120V, 220V, or 240V as required. If voltage change is necessary, this can be accomplished as follows:

1. Disconnect power cord.
2. Loosen holding screws and remove top panel.
3. Remove short pin plug from present holes and replace in correct holes. Follow the markings explicitly.

# VI. IPLS OPERATION

## 1. IPLS (Instant Program Locating System)

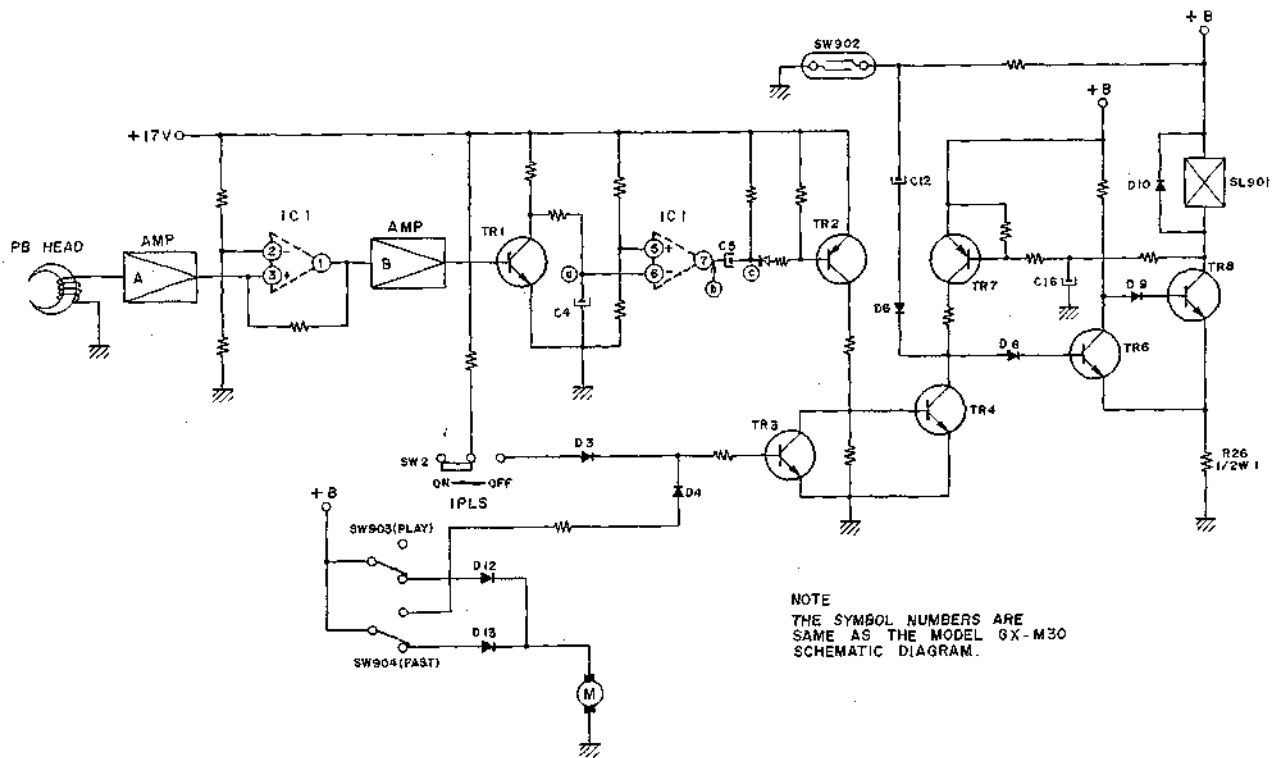


Fig. 8

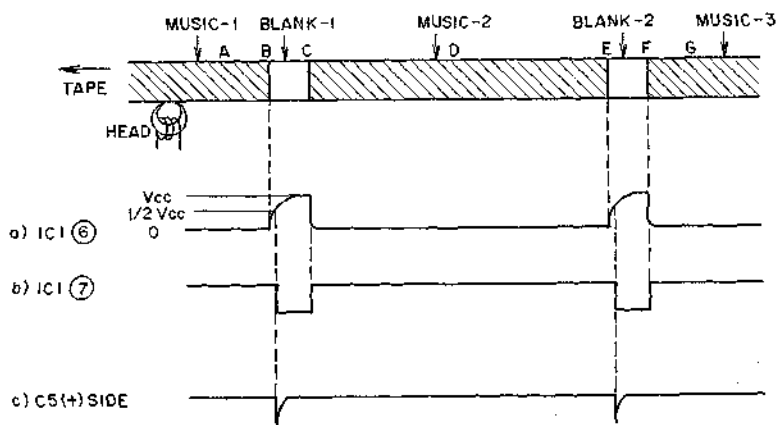


Fig. 9

### 1) General

The IPLS is a circuit to select a piece of music out of the two adjacent to the music which is now being played back by a cassette tape.

For instance, depress the PLAY and RWD keys at a time and the IPLS will release the RWD key only when the tape comes between the music now being played back and the one played back just before. Thus, the system will be put in the PLAYBACK mode. The RWD key only is mechanically released. Depressing the PLAY and FF keys at a time will likewise cause the IPLS to function. To detect the IPLS, the playback head is utilized but it stands back a little as compared with the head in the normal PLAYBACK mode. (about 1.2 mm).

### 2) When tape is made to travel from the portion with a signal (Refer to Figs. 8, 9)

- (a) Depressing the PLAY and FF keys at a time in the MUSIC-1 portion will cause the playback head to pick up the signals on the tape.

These signals are amplified in AMP A, IC1 and AMP B and applied to the base of TR1, thus turning the TR1 on. With the TR1 turned on, terminal ⑥ of the IC-1 will be changed over to the low level while output terminal ⑦ of the IC-1 will be at a high level, with the TR2 positioned at OFF. With the TR2 at OFF, the TR4 and TR8 are at the OFF position while the TR6 is at ON so that solenoid SL901 does not operate.

- (b) When the tape comes to portion B in Fig. 9, the signal components on the tape will disappear. Since no signal comes to the base of the TR1, it will be turned off. With the TR1 at the OFF position, terminal ⑥ of the IC1 will be at a high level while terminal ⑦ of the IC1 will be at a low level. As shown in Fig. 9 c) the C5 causes the TR2 to have a base potential lowered and the TR2 will be turned on. With the TR2 positioned at ON, the TR4 and TR8 will be turned on while TR6 will be at the OFF position. As a result, solenoid SL901 will operate and release the FF key, thus putting the system into the PLAYBACK mode.

### 3) When tape is made to travel from a portion without any signal.

Depressing the PLAY and FF keys at a time in Blank 1 on the tape as shown in Fig. 9 will turn the TR1 off. As a result, terminal ⑥ of the IC1 will be at the high level while terminal ⑦ of the IC1 will be at the low level. Since no pulse comes out of the C5, therefore, the TR2 is at the OFF position and solenoid SL901 does not operate. Beyond the next MUSIC-2 portion, the same operation as referred to in preceding paragraph 2)-(b) will be performed. In other words, a piece of music is skipped and then the system is put in the PLAYBACK mode when the PLAY and FF keys are depressed from the blank portion on the tape.

## 2. DESCRIPTION OF KEYBOARD OPERATION

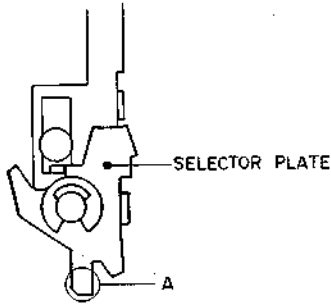


Fig. 10 STOP, PLAY MODE

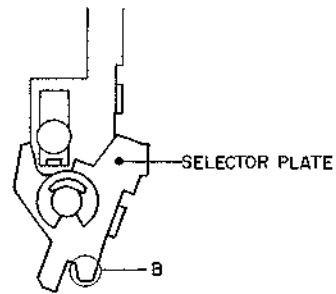


Fig. 11 IPLS, FF RWD MODE

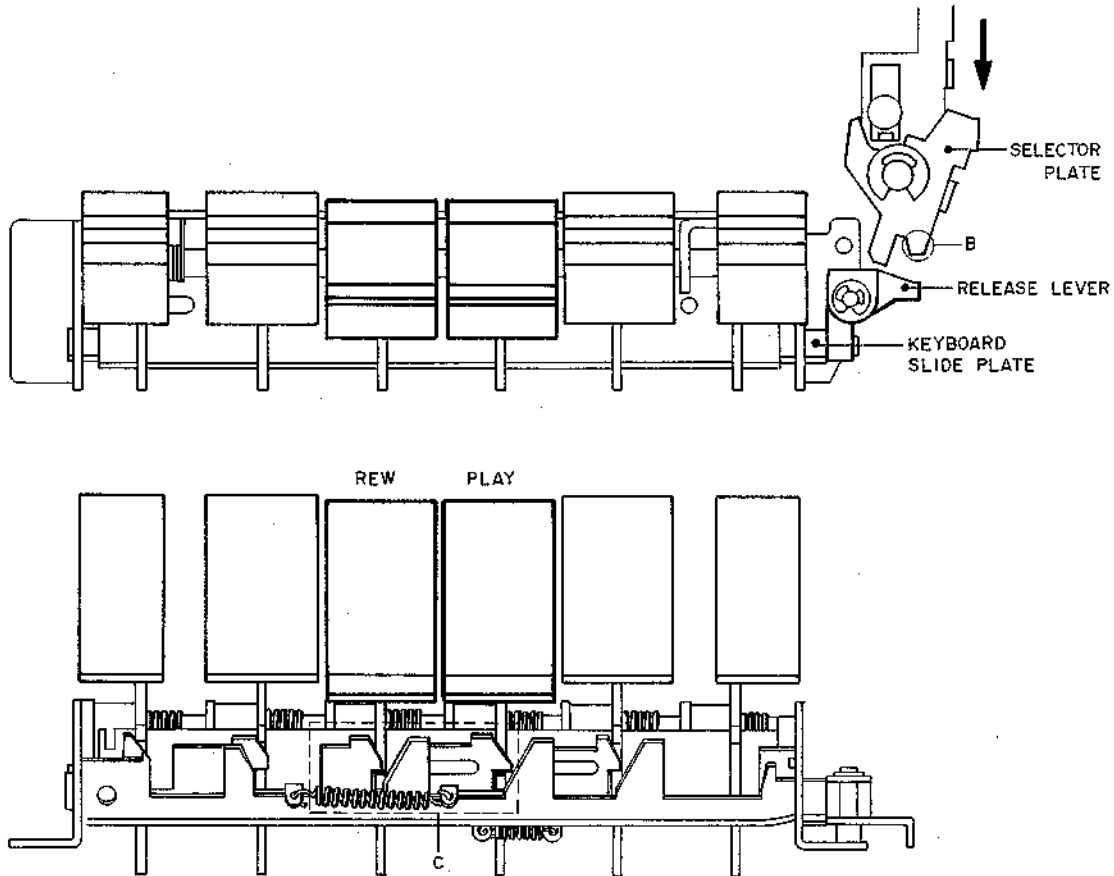


Fig. 12 IPLS MODE

When the RWD (or FF) and PLAY keys are depressed at a time, the IPLS circuit will operate to release the RWD (or FF) key only and will automatically put the system in the PLAY mode. This operation is mechanically carried out by the keyboard and the selector plate.

The selector plate is interlocked with the RWD and FF keys.

Upon stop or play, portion A of the selector plate is located just below. Depressing the RWD (or FF) key will move the selector plate to the position where B of the selector plate comes just below. (See Figs. 10 and 11).

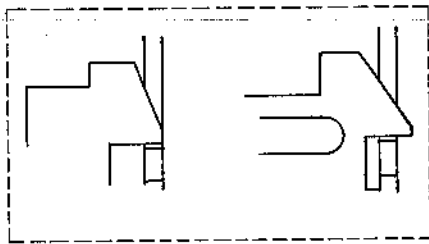


Fig. 13 Enlarged Fig. 12 C (IPLS MODE)

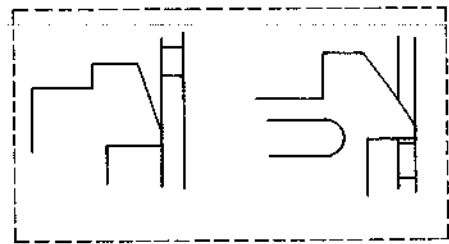


Fig. 14 Enlarged Fig. 12 C (PLAY MODE)

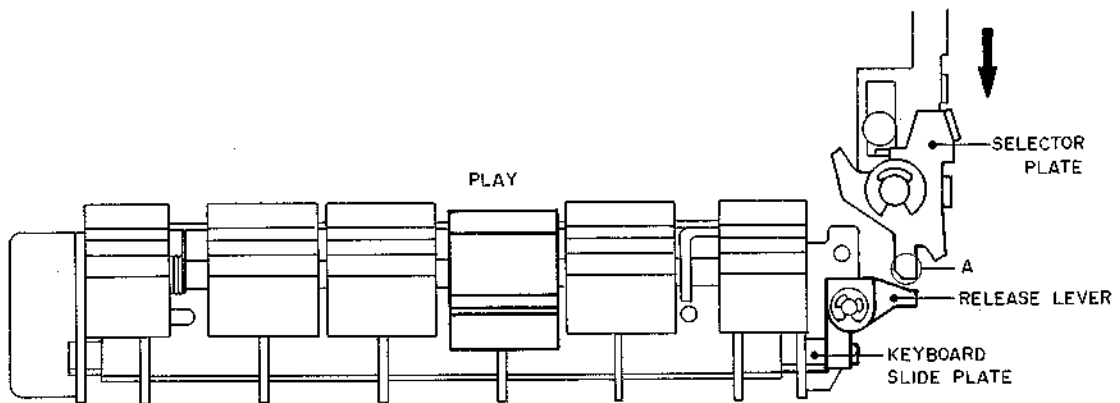


Fig. 15 PLAY MODE

Since A and B of the selector plate have a difference in length, B is shorter than A in stroke to push the keyboard slide plate upon operation of the plunger. B of the selector plate has a stroke enough only to release the RWD (or FF) key, with the RWD (or FF) and PLAY keys depressed at a time. (See Figs. 13 and 14). With the RWD (or FF) and PLAY keys depressed at a time as shown in Fig. 12, therefore, the IPLS will operate and B of the selector plate will kick the release lever, push the keyboard slide plate and release the RWD (or FF) key only, thus putting the system into the PLAY mode. With the system in the PLAY mode, A of the selector plate will return to the position just below. This situation is as shown in Fig. 15. When the plunger is operated again in the PLAY mode with the auto stop circuit functioning, A of the selector plate will kick the release lever, push the keyboard slide plate and release the PLAY key.

## VII. MECHANICAL ADJUSTMENT

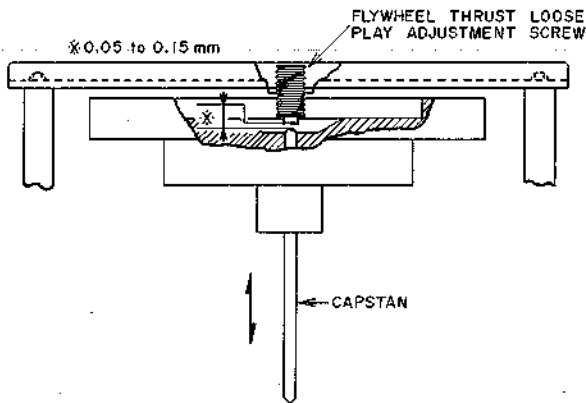


Fig. 16 Flywheel Loose Play Adjustment

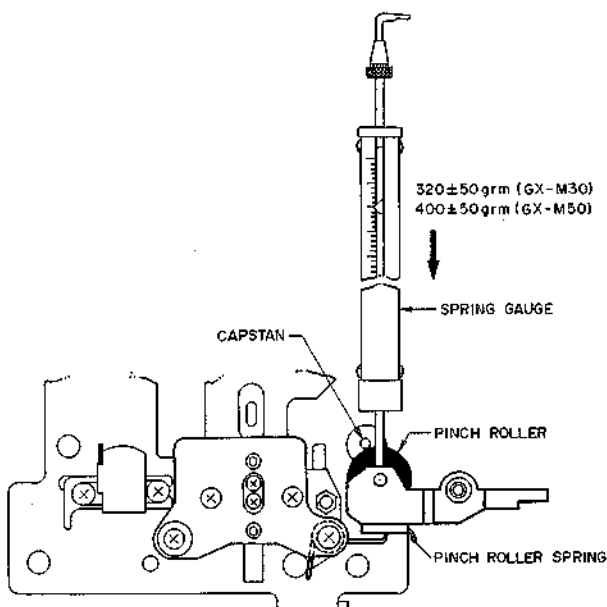


Fig. 17 Pinch Roller Pressure Measurement

### 1. FLYWHEEL LOOSE PLAY

#### ADJUSTMENT (Refer to Fig. 16)

Adjust by turning flywheel loose play adjustment screw to obtain a 0.05 to 0.15 mm of loose play when the flywheel is moved as indicated by the arrow mark. Paint lock the adjustment screw.

### 2. PINCH ROLLER PRESSURE

#### MEASUREMENT (Refer to Fig. 17)

At playback mode, push the pinch roller with a spring gauge until the pinch roller separates from the capstan by about 1 mm to 2 mm and then gently return. Take a reading of the spring gauge indication at the moment the pinch roller touches the capstan and begins to rotate

Specified Pinch Roller Pressure:

- 320 ± 50 gm (GX-M30)
- 400 ± 50 gm (GX-M50)

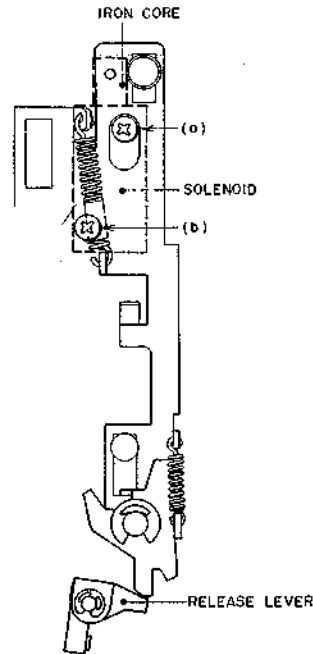


Fig. 18 Plunger Position Adjustment

In case specified pressure cannot be attained, replace the pinch roller spring.

### 3. TAKE-UP TORQUE AT VARIOUS MODES

- Playback mode : 35 to 55 gm-cm
- Fast Forward mode : 95 to 135 gm-cm
- Rewind mode : 95 to 135 gm-cm

In case specified take-up torque cannot be attained.  
Playback mode : Replace Take-up Reel Table Block Comp.

- Fast Forward or Rewind mode : Replace Wind Arm Part.

### 4. BACK TENSION MEASUREMENT

#### 1) Fast Forward Back Tension

Mount a cassette torque meter (SRK-CT-W) and slowly depress the PLAY key. Then, read the meter.

- GX-M30 : 4 gm-cm ± 1.5 gm-cm
- GX-M50 : 2 gm-cm ± 1 gm-cm

#### 2) Rewind Back Tension

Switch the system off. Mount the cassette torque meter (SRK-CT-WR) and depress the RWD key. Then manually turn the flywheel counterclockwise and read the meter.

- GX-M30 : 4 gm-cm ± 1.5 gm-cm
- GX-M50 : 6 gm-cm ± 1.5 gm-cm

### 5. PLUNGER POSITION ADJUSTMENT

1. Loosen plunger-fitting screws (a) and (b).
2. Put the plunger iron core in the solenoid to the bottom and lower it to a point where the release lever stops.
3. Tighten screws (a) and (b).



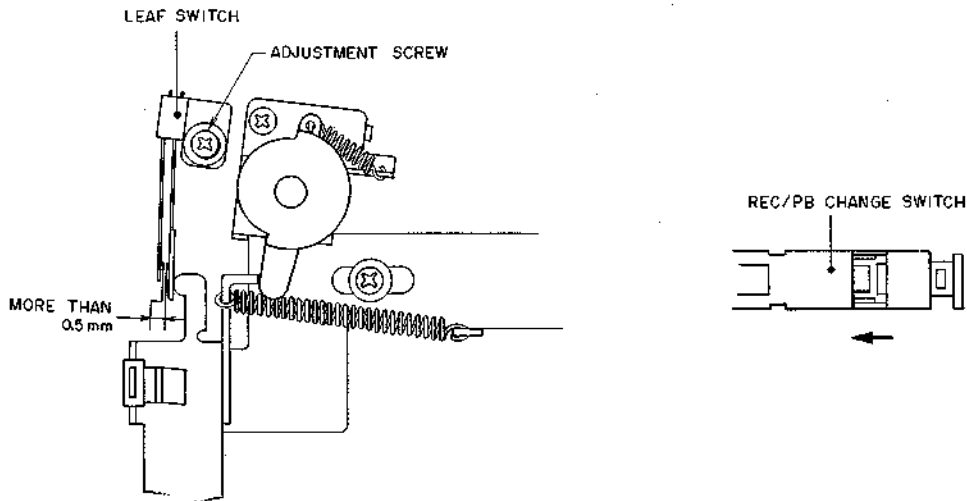


Fig. 19 Leaf Switch Adjustment (REC ON Mode)

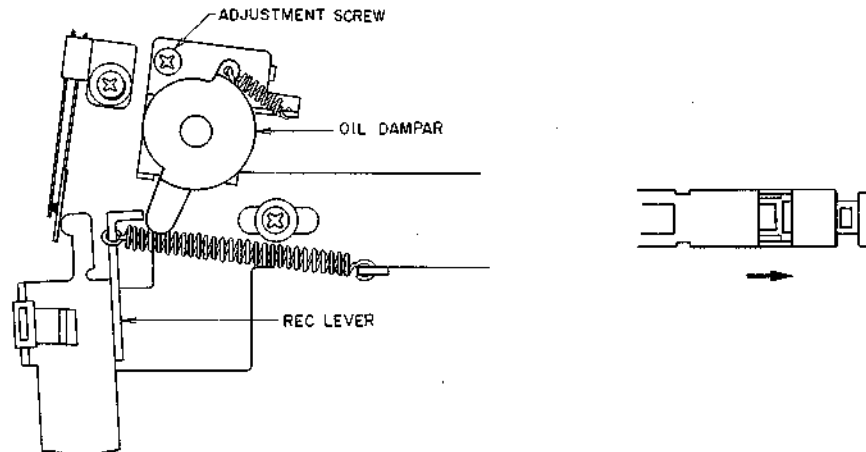


Fig. 20 Leaf Switch Adjustment (REC OFF Mode)

## 6. LEAF SWITCH TIMING ADJUSTMENT (GX-M30 only)

### 1) REC ON Mode

Slowly depress the REC key and adjust the adjustment screw so that the leaf switch contact will have a clearance of 0.5 mm or more at the position where the REC/PB selector switched is completely changed over (movable parts move fully to the left).

### 2) REC OFF Mode

Slowly return the REC key and confirm that the oil damper is in perfect touch with the REC lever when the leaf switch is put off.

If not, loosen the oil damper adjustment screw and correct the oil damper position. After completion of correcting the position, make sure of the timing with which the system is put in the REC mode.

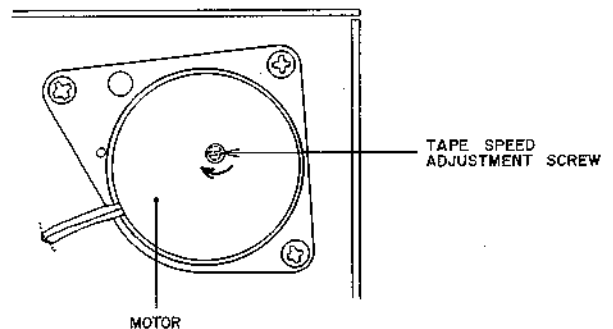


Fig. 21 Tape Speed Adjustment

## 7. TAPE SPEED ADJUSTMENT

Playback a 1,000 Hz pre-recorded test tape and adjust the tape speed adjustment screw to obtain a tape speed of 1,000 Hz  $\pm$  1%.

# VIII. HEAD ADJUSTMENT

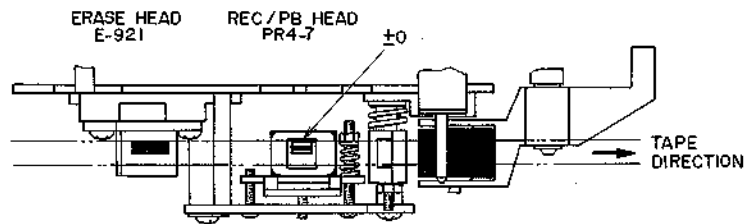
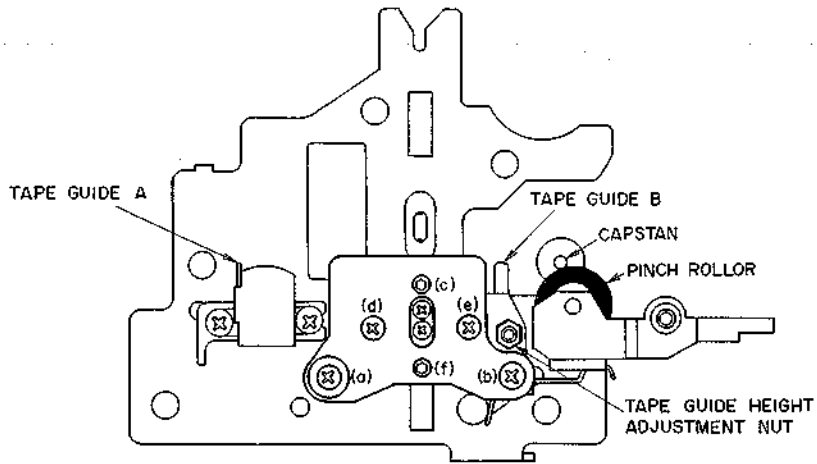


Fig. 22 Head Adjustment (GX-M30)

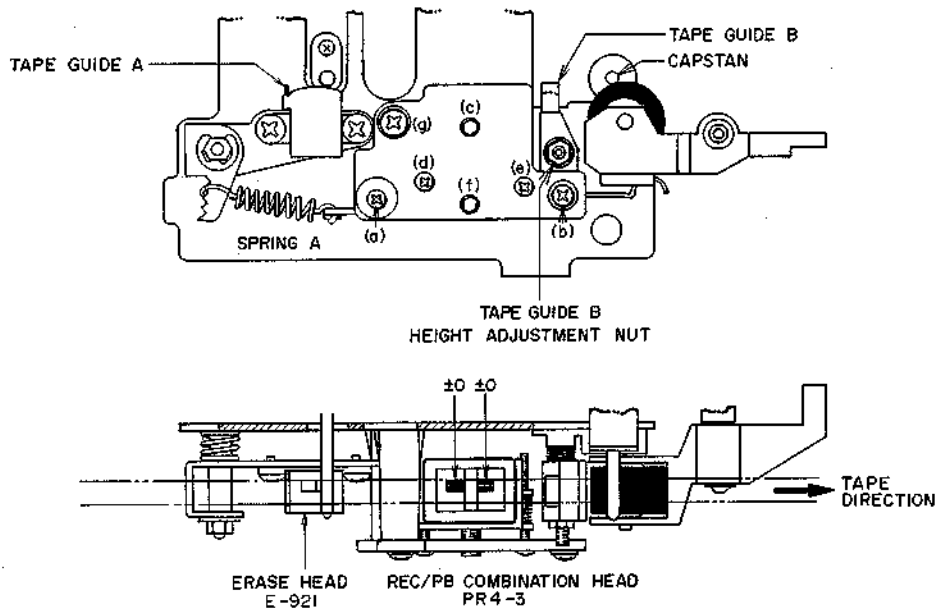


Fig. 23 Head Adjustment (GX-M50)

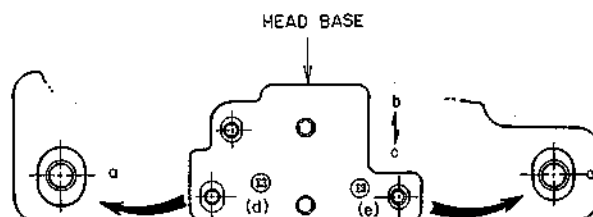


Fig. 24

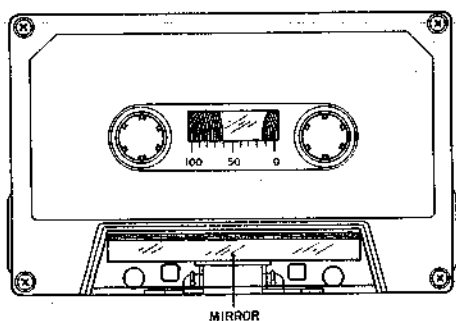


Fig. 25 Mirror Cassette

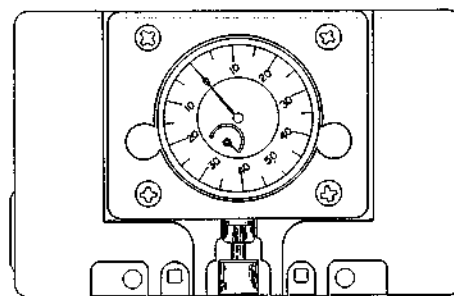


Fig. 26 AKAI Head Projection Gauge

### 1. TAPE GUIDE HEIGHT ADJUSTMENT

(Refer to Figs. 22, 23 and 25)

- 1) When using an ordinary cassette, the tape guides and heads, etc. are not visible. As shown in Fig. 25 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 tape guide A shown in Figs. 22, 23 as standard for height, adjust tape guide B height with tape guide height adjustment nut so that the tape runs smoothly and does not catch on the tape guides.

### 2. REC/PB HEAD PROJECTION

#### ADJUSTMENT

Set the AKAI Head Projection Gauge (Fig. 26) and adjust (a) (b) and (g) screws (Figs. 22, 23) so that it reads:  $2.3 \pm 0.1$  mm in the IPLS Mode,  
 $3.5 \pm 0.15$  mm in the Play Mode.

NOTE: Screw (g) is GX-M50 only.

### 3. RECORDING/PLAYBACK HEAD HEIGHT ADJUSTMENT (Refer to Figs. 22, 23)

- 1) Utilise the cassette tape used in Tape Guide Height Adjustment above, and playback the leader tape part of cassette tape.
- 2) As shown in Figs. 22, 23 adjust head height with screws (c), (d), (e) and (f) until the upper edge of the tape is the same height as the upper edge of the left channel REC/PB head core.

### 4. RECORDING/PLAYBACK HEAD AZIMUTH ALIGNMENT ADJUSTMENT

(Refer to Figs. 22, 23)

- 1) Playback a 10 kHz pre-recorded cassette azimuth alignment test tape and adjust screw (e) shown in Figs. 22, 23 to obtain maximum output on both channels.
- 2) Invert cassette and confirm that the output level does not change from that obtained in Item 4-1) above. If the output level differs, adjust in the same way as in Item 4-1) above until both sides of the test tape display equal output.
- 3) After adjustment, better to check again head height and azimuth alignment.

- 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. 25 is required, it can be ordered from AKAI Electric Co.

# IX. AMPLIFIER ADJUSTMENT

## 1. Model GX-M30

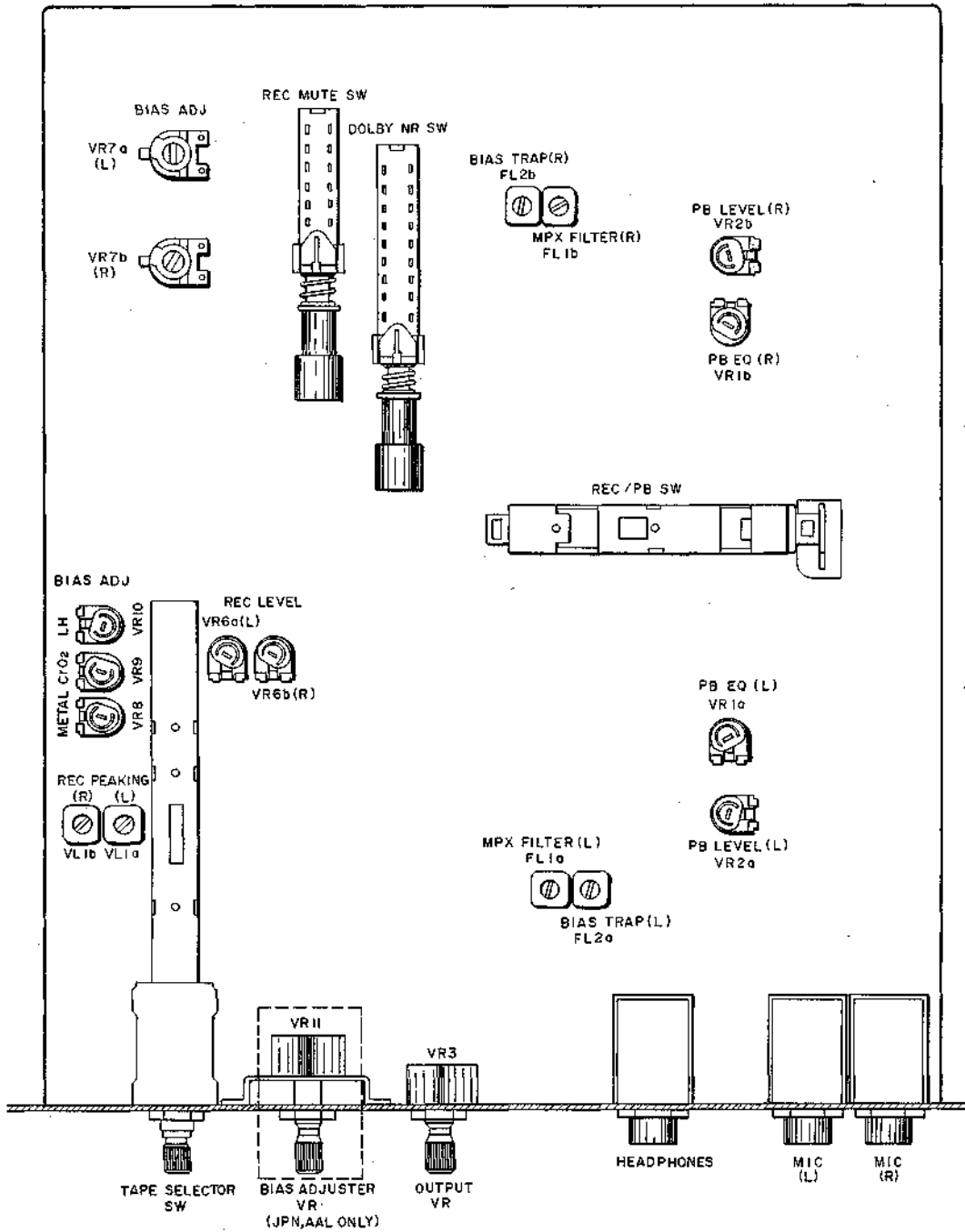


Fig. 27 Pre Amp P.C Board CM-5318

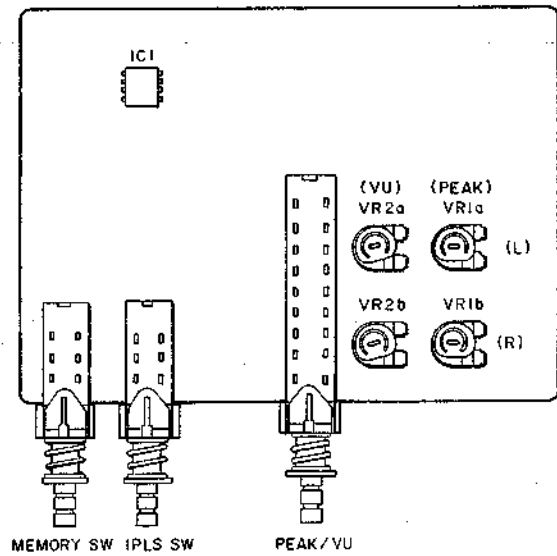


Fig. 28 Switch P.C Board CM-5322A

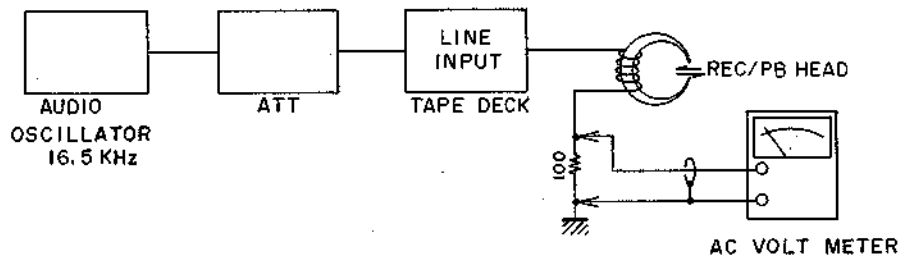


Fig. 29 Instruments Connection

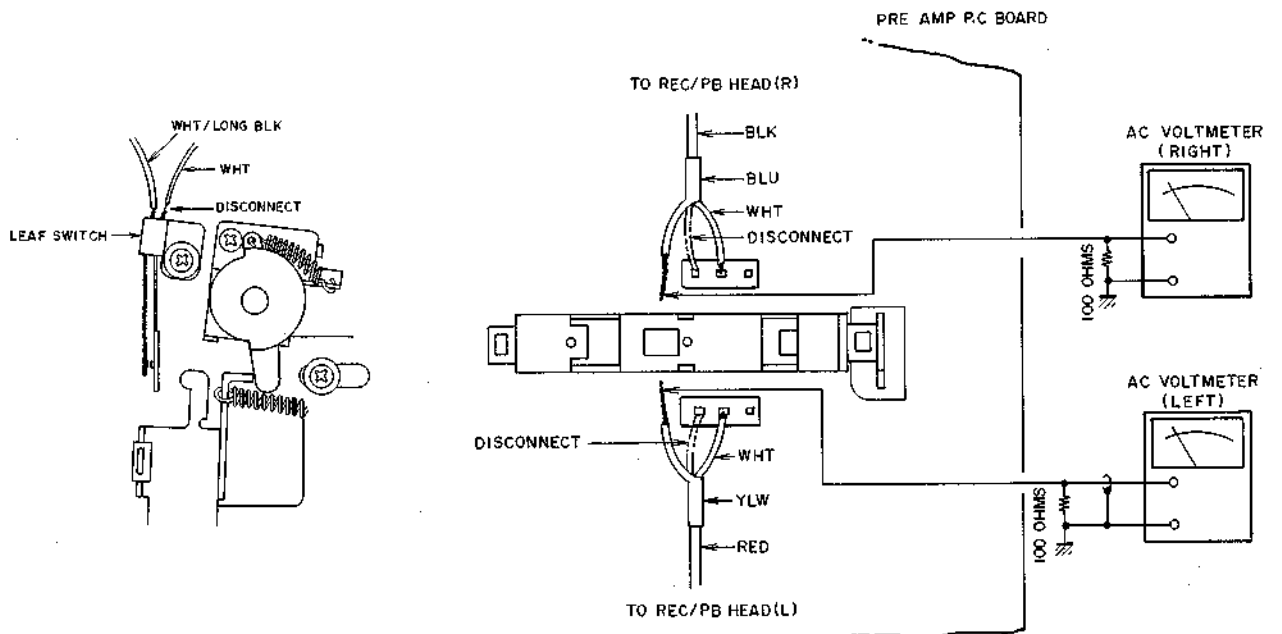


Fig. 30 Rec Peaking Adjustment

Step	Adjustment Item	Test Tape Supply Signal	Mode	Adjustment Point	Result	Remarks
1	Playback Level	333 Hz, 0 VU Test Tape	PB	VR 2a VR 2b 50 kB	$-5.5 \pm 0.5$ dBm (410 mV)	
2	Playback Equalizer	10 kHz Test Tape	PB	VR 1a VR 1b 5 kB	$-19 \pm 0.5$ dBm	
3	VU Meter Sensitivity	1,000 Hz $-5.5$ dBm from oscillator	REC	VR 2a VR 2b 20 kB (Switch PCB)	0 VU indication	NOTE 3
4	Peak Meter Sensitivity	1,000 Hz 1.2 dBm from oscillator	REC	VR 1a VR 1b 20 kB (Switch PCB)	0 VU indication	NOTE 3
5	LN Position Frequency Response	Low Noise blank tape, 1,000 Hz, 10,000 Hz $-25.5$ dB recording	REC/PB	VR 7a VR 7b	1,000 Hz to 10,000 Hz flat	NOTE 5
6	LH Position Frequency Response	LH blank tape 1,000 Hz, 10,000 Hz $-25.5$ dB recording	REC/PB	VR 10 5 kB	1,000 Hz to 10,000 Hz flat	NOTE 5
7	CrO <sub>2</sub> Position Frequency Response	CrO <sub>2</sub> blank tape 1,000 Hz, 10,000 Hz $-25.5$ dB recording	REC/PB	VR 9 5 kB	1,000 Hz to 10,000 Hz flat	NOTE 5
8	Metal Position Frequency Response	Metal blank tape 1,000 Hz, 10,000 Hz $-25.5$ dB recording	REC/PB	VR 8 5 kB	1,000 Hz to 10,000 Hz flat	NOTE 5
9	Recording Level	LN blank tape 1,000 Hz $-5.5$ dB recording	REC/PB	VR 6a VR 6b 20 kB	$-5.5 \pm 0.5$ dBm	NOTE 5 Set the mic volume to minimum.
10	Distortion Factor Confirmation	1,000 Hz $-5.5$ dB recording	REC/PB		LN < 0.8% LH < 0.8% CrO <sub>2</sub> < 0.7% Metal < 0.6%	
11	Rec Peaking Adjustment	16.5 kHz $-25.5$ dB from oscillator	REC	VL 1a VL 1b	AC Voltmeter indicates to maximum	Tape selector to LN. See the Figs. 27, 29, 30. NOTE 6
12	Bias Leak	No signal input	REC	VL 2a VL 2b	AC Voltmeter indicates to minimum	Set Tape Selector to Metal position Set Mic & Line Volume to maximum. NOTE 7

Step	Adjustment Item	Test Tape Supply Signal	Mode	Adjustment Point	Result	Remarks
13	19 kHz Filter adjustment	19 kHz from oscillator	REC	FL 1a FL 1b	AC Voltmeter indicates to minimum	NOTE 8

Chart-1

- NOTES:**
1. The Output Level Control should be at maximum.
  2. Because each of these adjustments is vital to perfect Dolby N.R. circuit operation, ensure that they are carried out with as few errors as possible.
  3. After completion of the adjustment, bar meter readings are not to vary.
  4. Use the following cassette measuring tape:
    - LN Tape : TDK LN-2 C-60
    - LH Tape : MAXELL UD C-60
    - CrO<sub>2</sub> Tape : TDK SA C-60
    - Metal Tape : TDK MA-C C-60
  5. Bias Adjuster (VR 11 5 kB) at front panel, please set to the click position. (JPN, AAL MODEL)
  6. Before the adjustment, remove lead wires from the REC/PB head and the leaf switch. (Fig. 30)
  7. The noise is to be -45.5 dB or less at every tape position.
  8. Unless the core is moved intentionally this adjustment is not necessary.

## 2. Model GX-M50

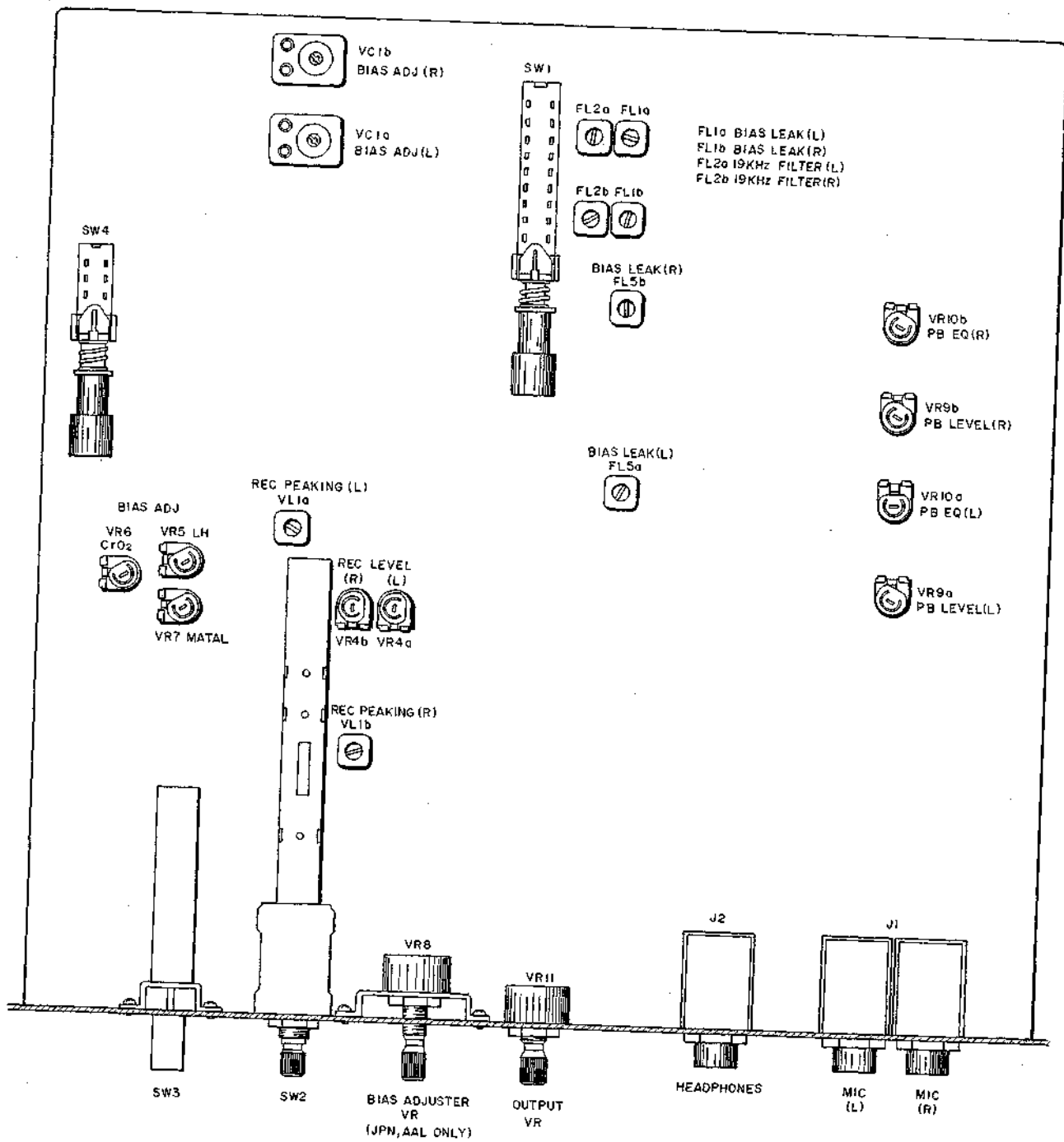


Fig. 31 Pre Amp P.C Board CM-5406A



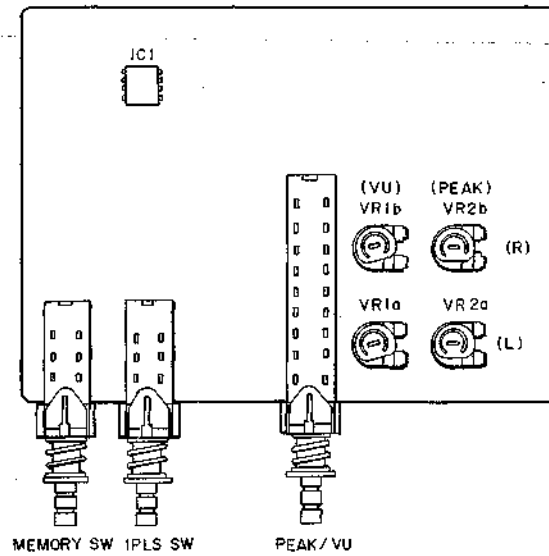


Fig. 32 Switch P.C Board CM-5406D

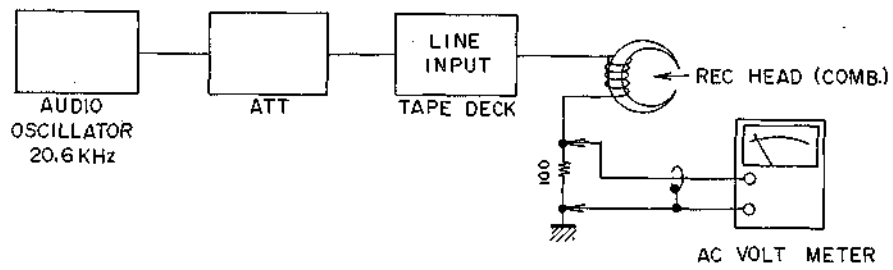


Fig. 33 Instruments Connection

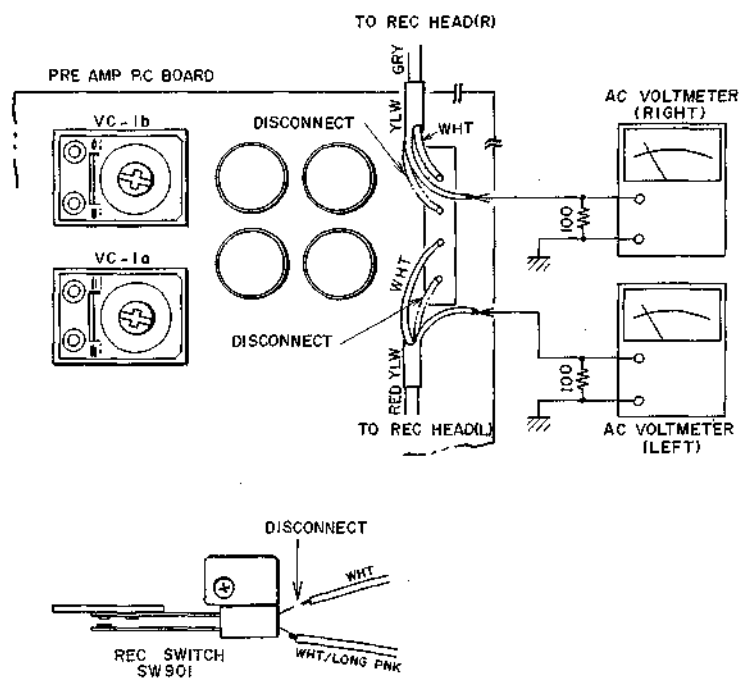


Fig. 34 Rec Peaking Adjustment

Step	Adjustment Item	Test Tape Supply Signal	Mode	Adjustment Point	Result	Remarks
1	Playback Level	333 Hz, 0 VU Test Tape	PB	VR 9a VR 9b 50 kB	$-5.5 \pm 0.5$ dB (410 mV)	
2	Playback Equalizer	10 kHz Test Tape	PB	VR 10a VR 10b 10 kB	$-19 \pm 1.5$ dBm	
3	VU Meter Sensitivity	1,000 Hz $-5.5$ dBm from oscillator	SOURCE	VR 1a VR 1b 20 kB (Switch PCB)	0 VU indication	Set Peak/VU meter Selector to VU. NOTE 3
4	Peak Meter Sensitivity	1,000 Hz $-5.5$ dBm from oscillator	SOURCE	VR 2a VR 2b 20 kB (Switch PCB)	$-7$ VU indication	Set Peak/VU meter Selector to Peak. NOTE 3
5	LN Position Frequency Response	Low Noise Blank tape. 1,000 Hz, 10,000 Hz $-25.5$ dB recording	REC/PB	VC 1a VC 1b	1,000 Hz to 10,000 Hz flat	Set tape Selector to LN position. NOTE 5
6	LH Position Frequency Response	LH Blank tape 1,000 Hz, 10,000 Hz $-25.5$ dB recording	REC/PB	VR 5 5 kB	1,000 Hz to 10,000 Hz flat	Set tape Selector to LH position. NOTE 5
7	CrO <sub>2</sub> Position Frequency Response	CrO <sub>2</sub> Blank tape 1,000 Hz 10,000 Hz $-25.5$ dB recording	REC/PB	VR 6 10 kB	1,000 Hz to 10,000 Hz flat	Set tape Selector to CrO <sub>2</sub> position. NOTE 5
8	Metal Position Frequency Response	Metal blank tape 1,000 Hz 10,000 Hz $-25.5$ dB recording	REC/PB	VR 7 20 kB	1,000 Hz to 10,000 Hz flat	Set tape Selector to Metal position. NOTE 5
9	Recording Level	Low Noise Blank tape. 1,000 Hz $-5.5$ dB recording	REC/PB	VR 4a VR 4b 50 kB	$-5.5 \pm 0.5$ dBm (410 mV)	Set tape Selector to LN position. NOTE 5
10	Rec Peaking adjustment	20.6 kHz $-25.5$ dB from oscillator	REC	VL 1a VL 1b	AC Voltmeter indicates to maximum	See the Fig. 31, 33, 34 Tape selector to Metal. NOTE 6
11	Distortion Factor Confirmation	1,000 Hz $-5.5$ dB recording	REC/PB		LN < 0.8% LH < 0.8% CrO <sub>2</sub> < 0.7% Metal < 0.6%	NOTE 5
12	Bias Leak	No Signal	REC	FL 1a FL 1b FL 5a FL 5b	AC Voltmeter indicates to minimum	Set the Selector to Metal position Set Mic & Line Volume to Maximum. NOTE 7

Step	Adjustment Item	Test Tape Supply Signal	Mode	Adjustment Point	Result	Remarks
13	19 kHz Filter	19 kHz from oscillator	REC	FL 2a FL 2b	AC Voltmeter indicates to minimum	NOTE 8

Chart-2

- NOTES:**
1. The Output Level Control should be at maximum.
  2. Because each of these adjustments is vital to perfect Dolby N.R. circuit operation, be sure that they are carried out with as few errors as possible.
  3. When the input is made to vary within  $\pm 0.4$  dB, the bar meter readings are not to vary.
  4. Use the following cassette measuring tape:
    - LN Tape : TDK LN-2 C-60
    - LH Tape : MAXELL UD C-60
    - CrO<sub>2</sub> Tape : TDK SA C-60
    - Metal Tape : TDK MA-C C-60
  5. Bias Adjuster (VR 8 5 kB) at front panel, please set to the click position 0. (JPN, AAL MODEL)
  6. Prior to the adjustment, remove lead wires from the REC head and the REC switch. (+B REC)
  7. The noise is to be  $-45.5$  dB or less at every tape position.
  8. Unless the core is moved intentionally this adjustment is not necessary.

### 3. Making sure that the IPLS is operating

- 1) Switch the IPLS on and the memory off.
- 2) Put in the IPLS 4.5 sec. (700 Hz,  $-27$  VU) test tape and depress the RWD and PLAY keys. Thus, confirm that the IPLS is put in operation at the initial winding of tape and that the system is put in the PLAYBACK mode, with the RWD key only released. Check the system for the same operation three times or more.
- 3) Insert an IPLS 0.6 sec. (700 Hz, 0 VU) test tape and depress the FF and play keys. Confirm that IPLS does not operate at the tape end.

## X. DC RESISTANCE OF VARIOUS HEADS

Parts	Designation	DC Resistance	Utilizing Model
REC/PB Head	PR4-7	650 ohms $\pm$ 10%	GX-M30
REC/PB Head	PR4-3	250 ohms $\pm$ 10%	GX-M50
Erase Head	E-921	1.6 ohms $\pm$ 20%	GX-M30, GX-M50

Chart-3

## XI. CLASSIFICATION OF VARIOUS P.C BOARDS

### I. P.C BOARD TITLES AND IDENTIFICATION NUMBERS

#### 1) Model GX-M30

P.C Board Title	P.C Board Number
Pre Amp P.C Board	CM-5318
Switch P.C Board	CM-5322A
Meter P.C Board	CM-5325
Power Supply P.C Board (JPN, CSA, AAL)	CM-5320
Power Supply P.C Board (U/T, CEE, U.K.)	CM-5326
LED P.C Board (A)	CM-5321
LED P.C Board (B)	CM-5322B
LED P.C Board (C)	CM-5319
Lamp P.C Board	CM-1034

Chart-4

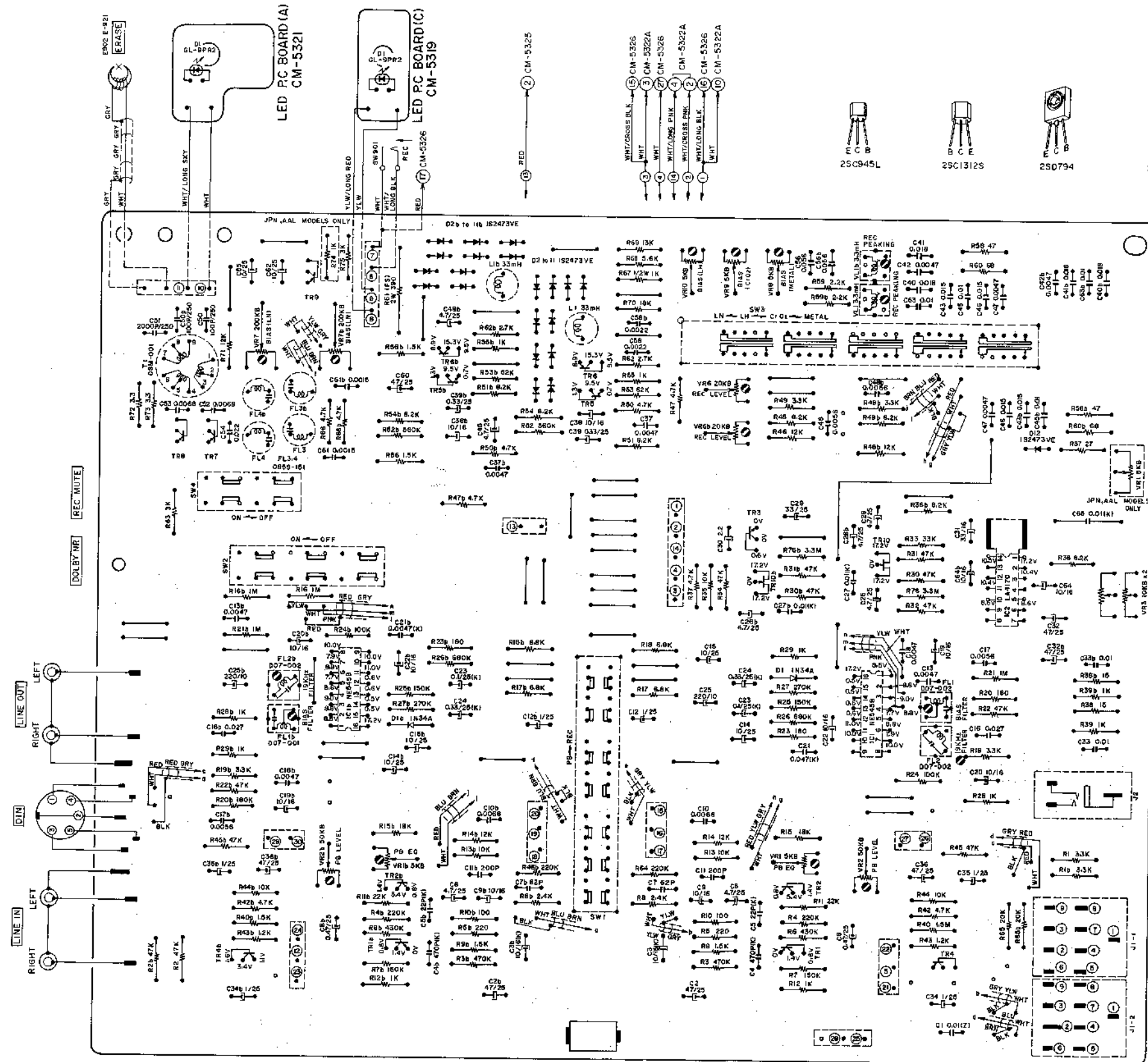
#### 2) Model GX-M50

P.C Board Title	P.C Board Number
Pre Amp P.C Board	CM-5406A
Volume P.C Board (A)	CM-5406B
Volume P.C Board (B)	CM-5406C
Switch P.C Board	CM-5406D
Meter P.C Board	CM-5325
Power Supply P.C Board	CM-5410
LED P.C Board (A)	CM-5321
LED P.C Board (B)	CM-5411
LED P.C Board (C)	CM-5408
Lamp P.C Board	CM-1034

Chart-5

2. Model GX-M30 COMPOSITION OF VARIOUS P.C BOARDS

1) PRE AMP P.C BOARD CM-5318 (3ED), LED P.C BOARD (A) CM-5321 and LED P.C BOARD (C) CM-5319

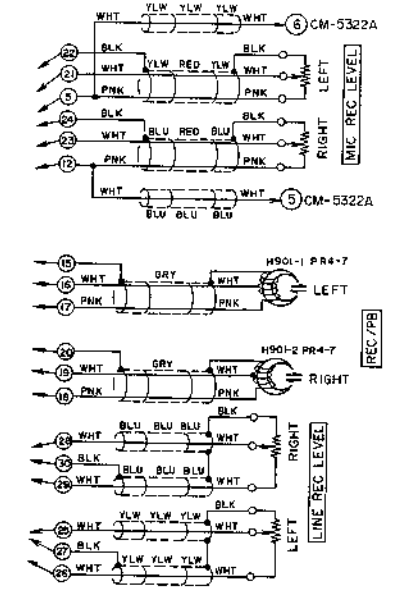


PRE AMP P.C BOARD CM-5318

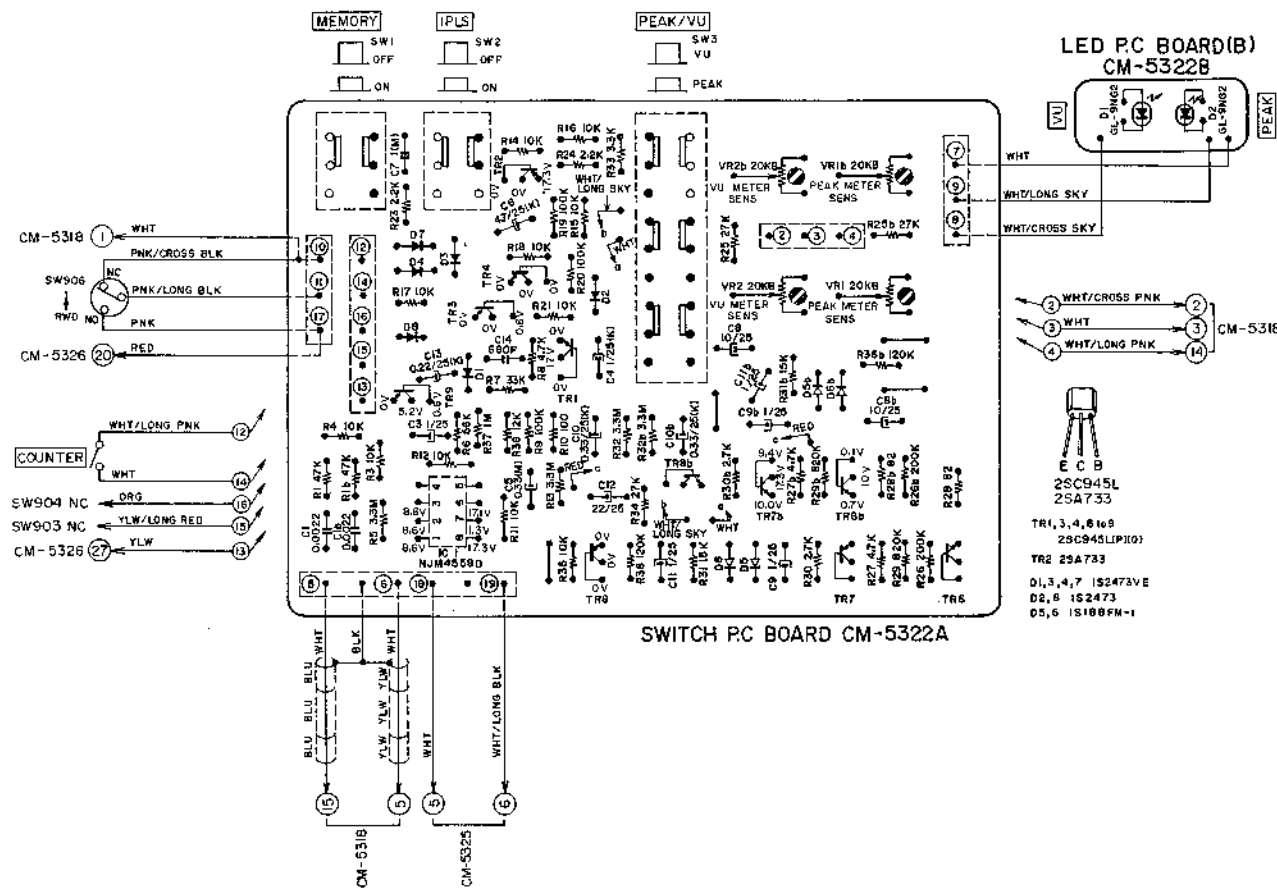
- TR1,2 2SC1325(H)
- TR3,4 2SC945L(P/NQ)
- TR5,6 2SC945L(D)
- TR7,8 2SC639(G)
- TR9 2SD794(P/NQ)
- TR10 2SK117(G/R)

	LN	LM	C/OV	METAL
YRY	E	0.1V	0.1V	0.2V
	C	5.5V	6.2V	9.1V
	B	0.5V	0.5V	0.4V
TR9	E	0.1V	0.1V	0.2V
	C	5.5V	6.2V	9.1V
	B	0.5V	0.5V	0.4V
TR9	E	5.3V	6.2V	12.5V
	B	0.6V	0.6V	0.5V
	C	18.2V	18.2V	18.2V
OSC COIL	ⓐ	AC14V	AC18V	AC24V
	ⓑ	AC39V	AC45V	AC67V
	ⓒ			AC95V

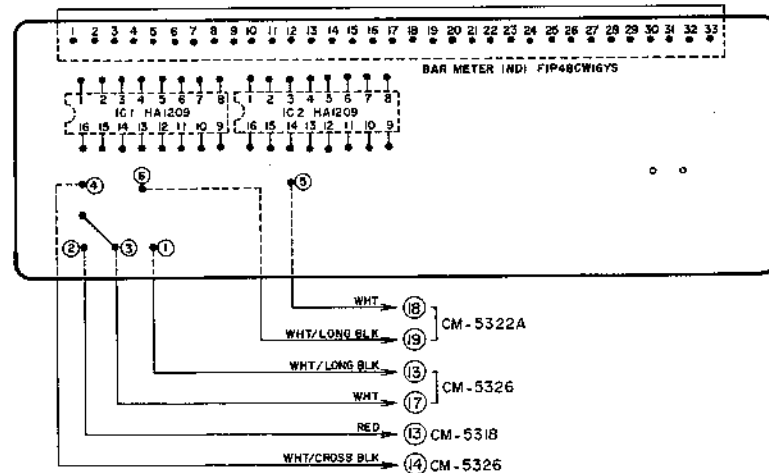
VOLTAGE OF TR7 to 9 AND OSC COIL INDICATES REC MODE



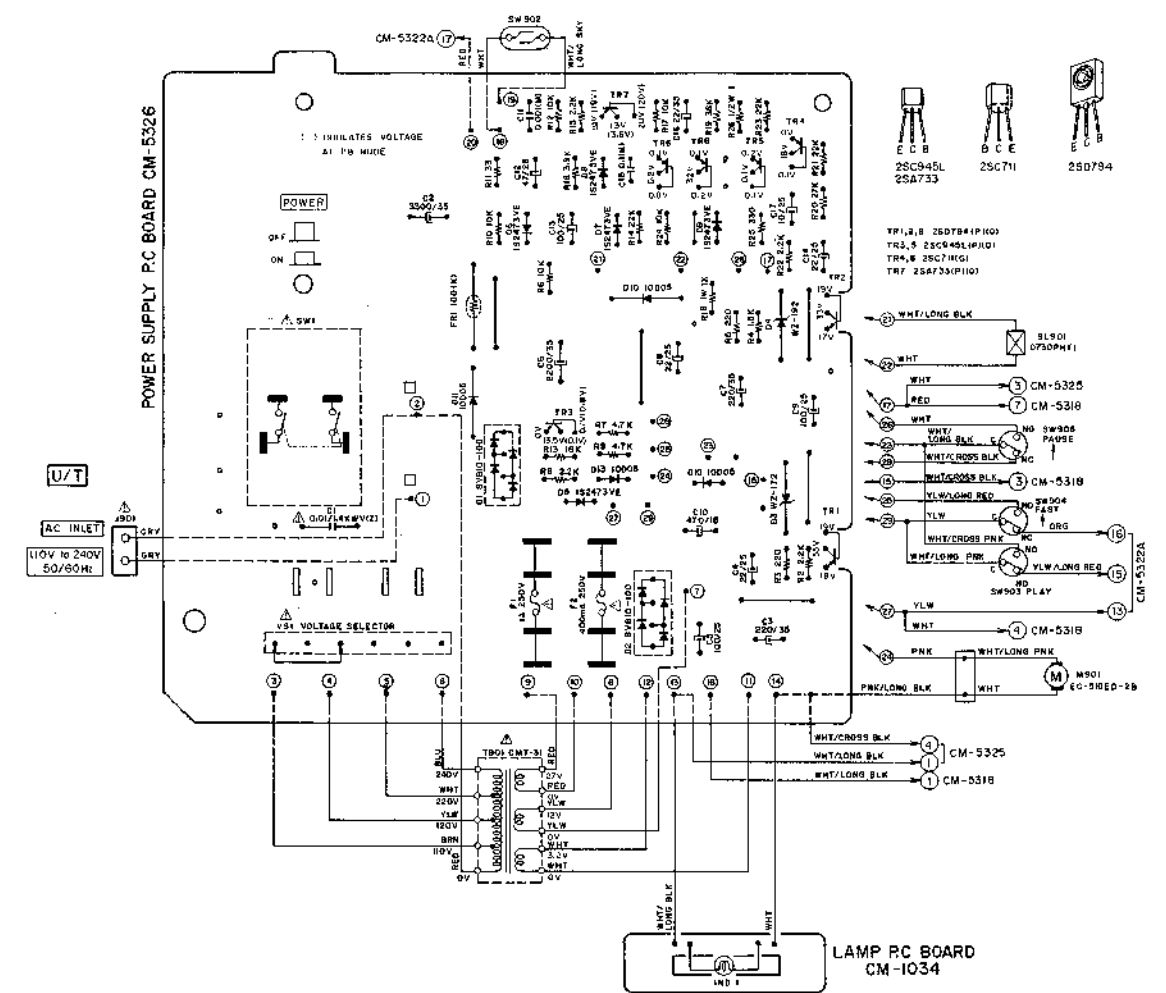
2) SWITCH P.C BOARD CM-5322A and LED P.C BOARD (B) CM-5322A



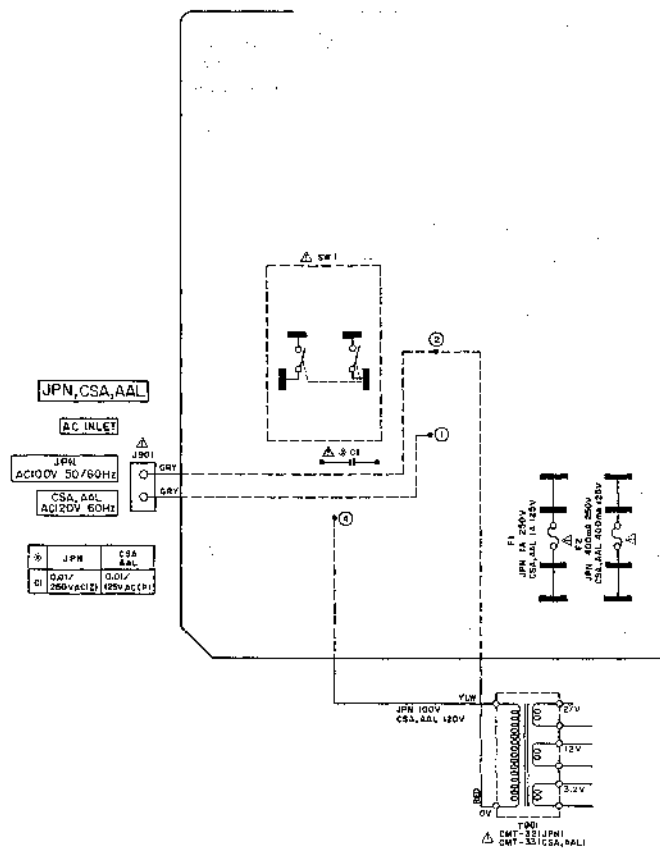
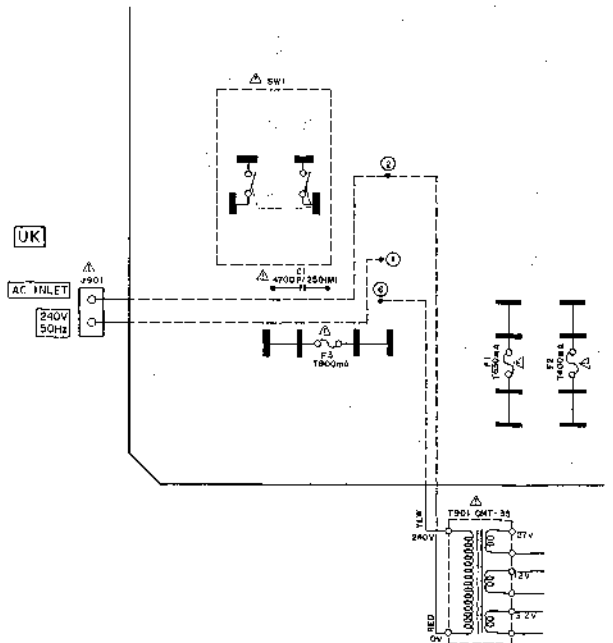
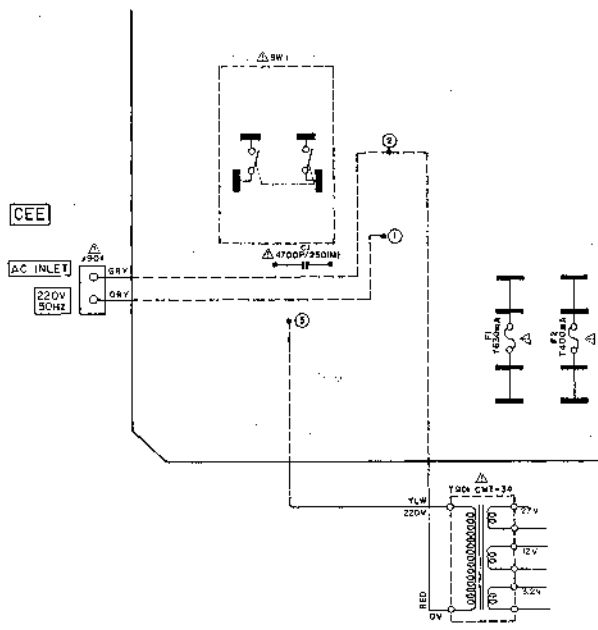
3) METER P.C BOARD CM-5325



4) POWER SUPPLY P.C BOARD CM-5320 (JPN, CSA, AAL), POWER SUPPLY P.C BOARD CM-5326 (U/T, CEE, UK) and LAMP P.C BOARD CM-1034



WARNING: INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.  
 AVERTISSEMENT: AIL INDIQU LES COMPOSANTS CRITIQUES DE SURETE POUR MAINTENIR LE NIVEAU DE SECURITE DE L'APPAREIL. NE REMPLACEZ CES COMPOSANTS QU'AVEC LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT.



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

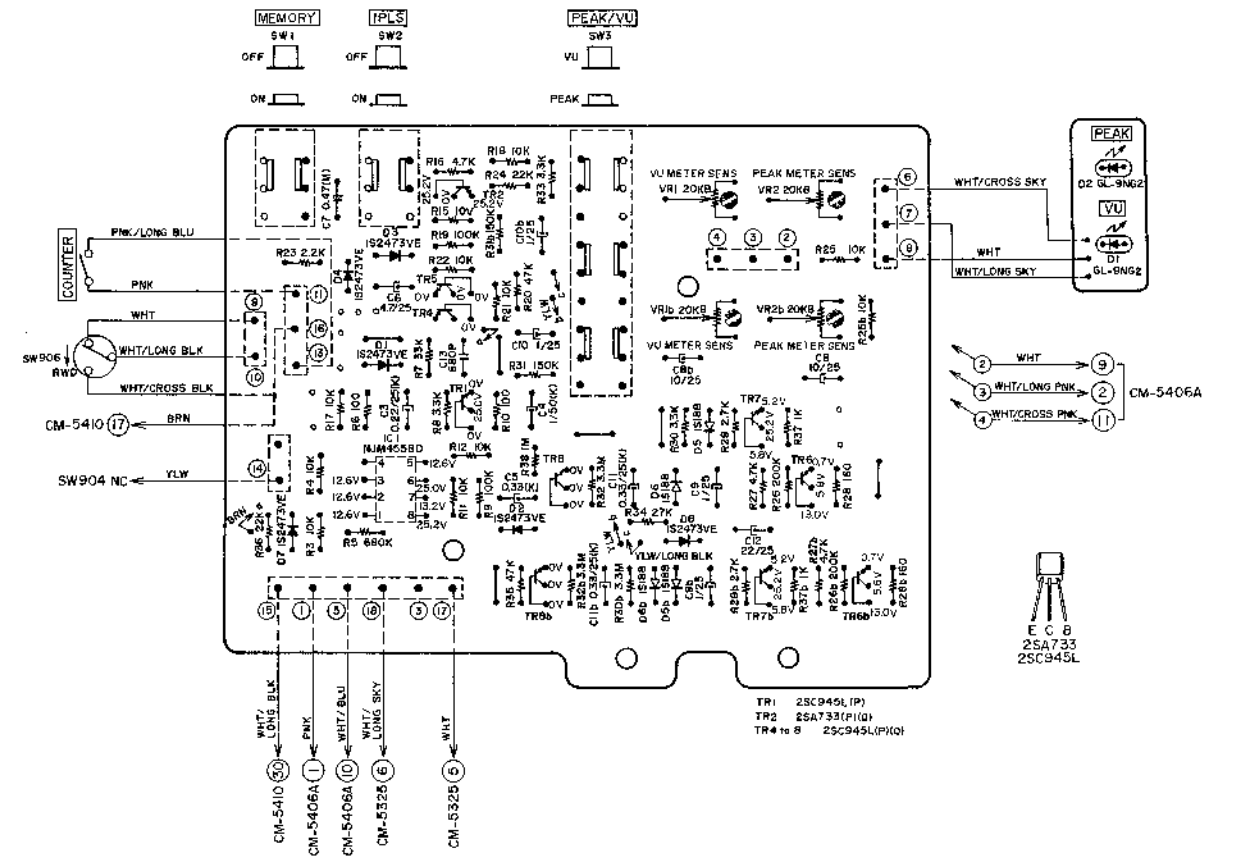
AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL, NE REMPLACER LES COMPOSANTS QU'AVEC LE FONCTIONNEMENT EST CRITIQUE POUR LA SÛRETÉ QUE FAIT DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.



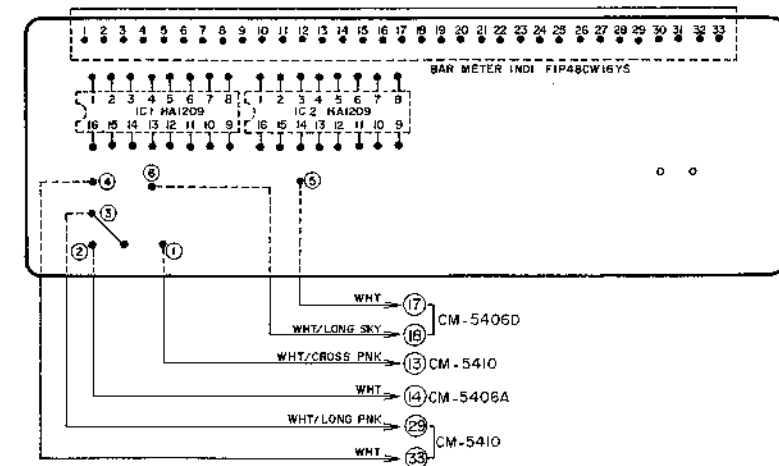




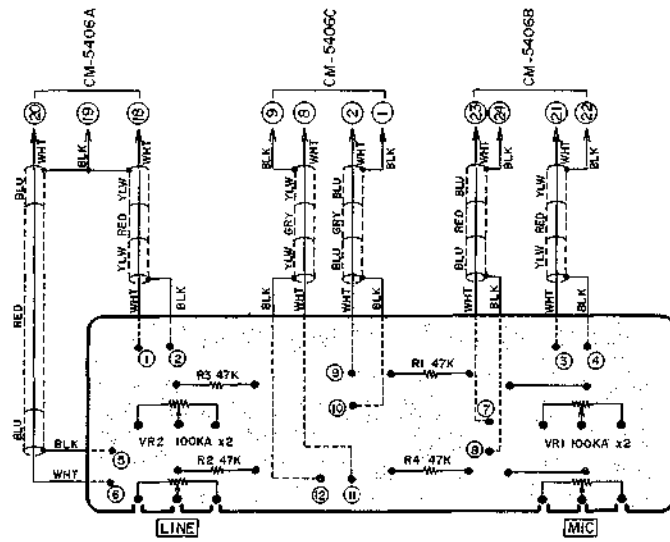
2) SWITCH P.C BOARD CM-5406D and LED P.C BOARD (B) CM-5411



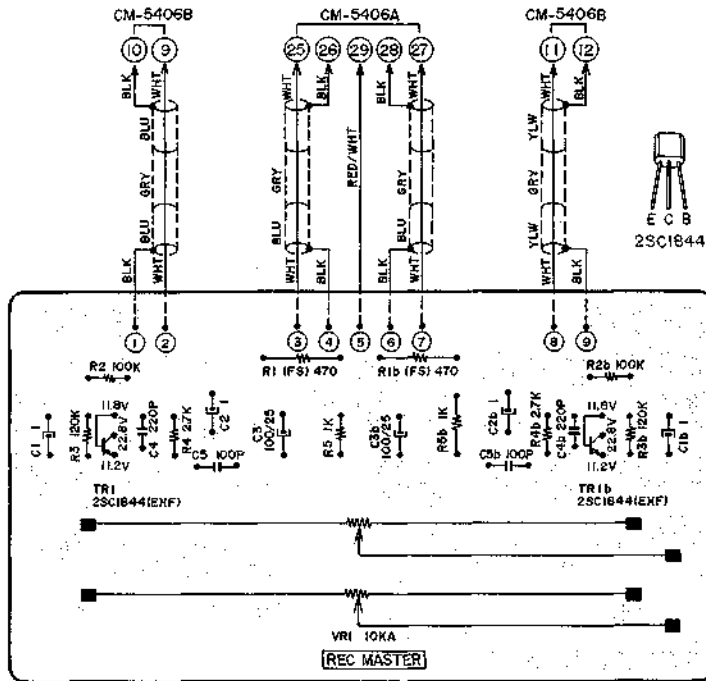
3) METER P.C BOARD CM-5325



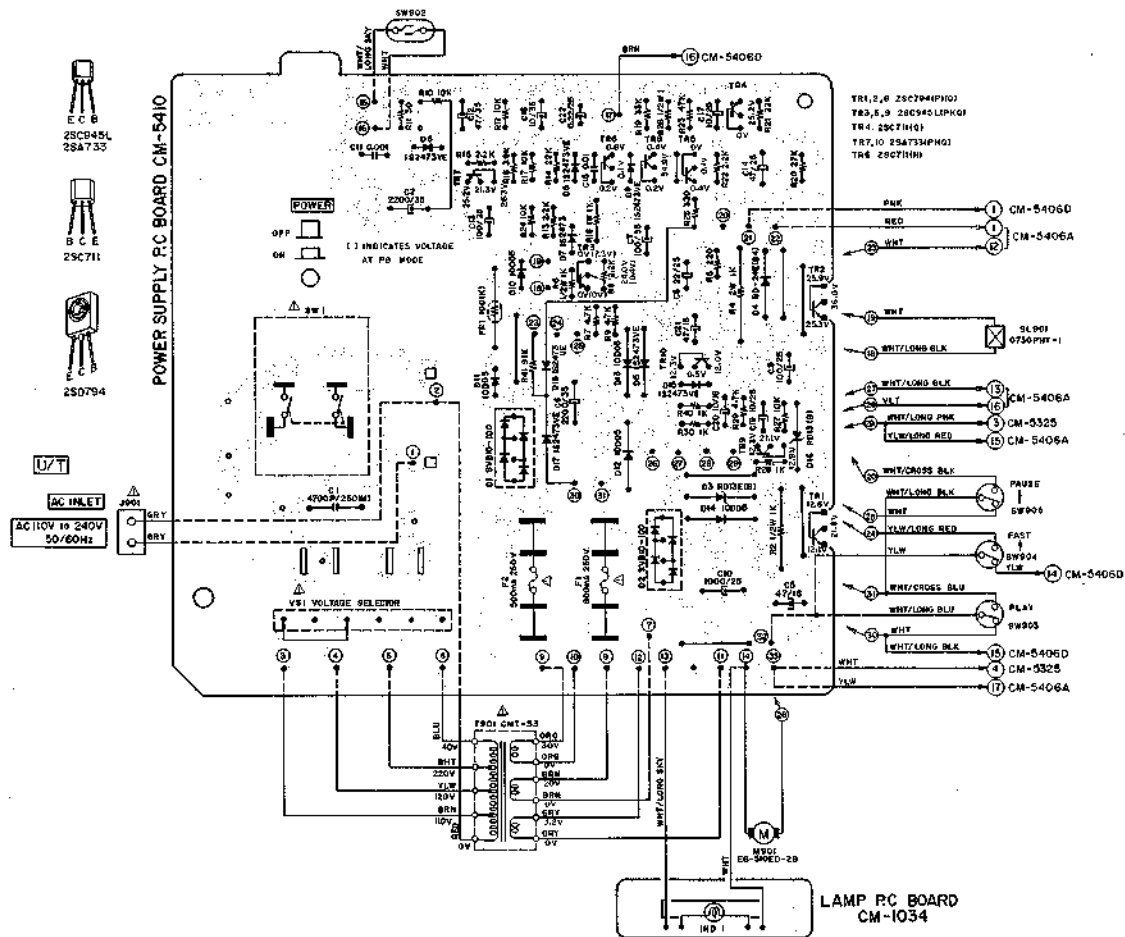
4) VOLUME P.C BOARD (A) CM-5406B



5) VOLUME P.C BOARD (B) CM-5406C

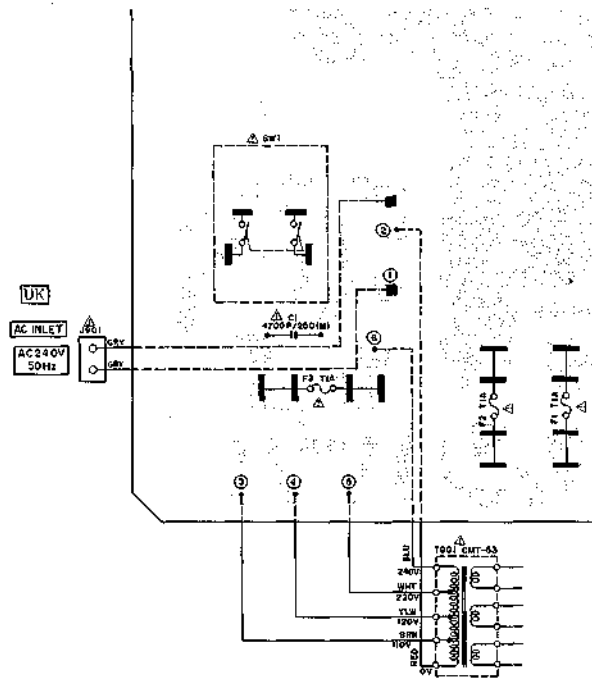
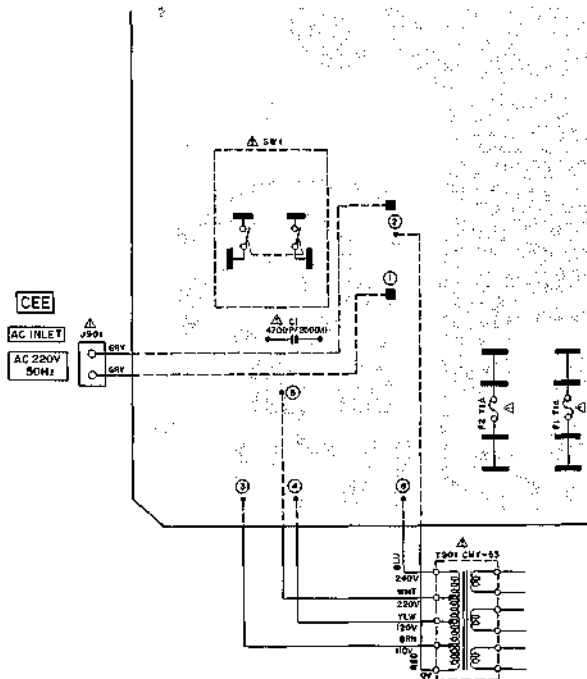
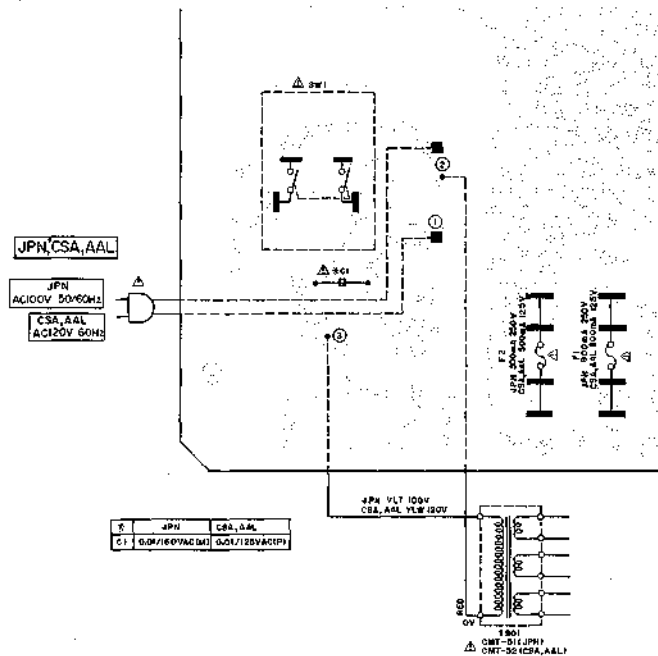


6) POWER SUPPLY P.C BOARD CM-5410 and LAMP P.C BOARD CM-1034



WARNING:  $\Delta$  INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT:  $\Delta$  IL INDIQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL, NE REMPLACER LES COMPOSANTS DON'T LE FONCTIONNEMENT EST CRITIQUE POUR LA SÛRETÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.



WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS  
 AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRÉ DE SÛRETÉ DE L'APPAREIL, NE REMPLACEZ LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SÛRETÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

MEMO

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MEMO

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MEMO

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SECTION 2

**PARTS LIST**

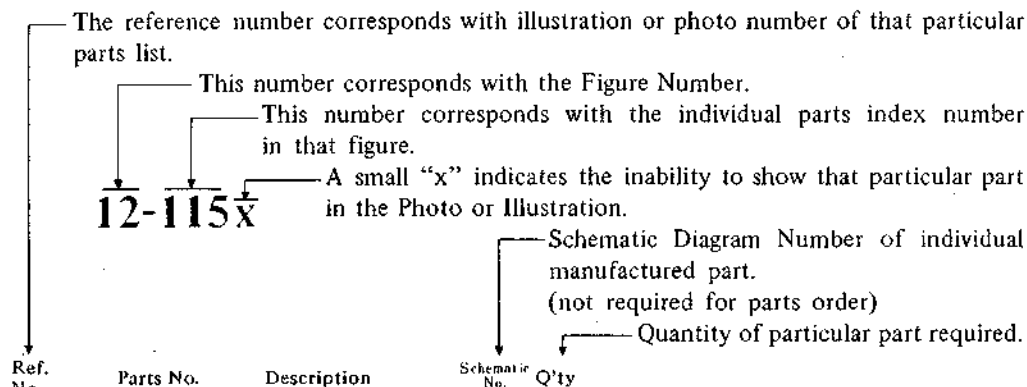
TABLE OF CONTENTS

I.	MODEL GX-M30	
	1. RECOMMENDED SPARE PARTS LIST .....	44
	2. HEAD BASE BLOCK .....	46
	3. MECHA BLOCK (1) .....	48
	4. MECHA BLOCK (2) .....	50
	5. PRE AMP P.C BOARD (CM-5318) BLOCK .....	52
	6. POWER SUPPLY P.C BOARD (CM-5316/5320) BLOCK .....	52
	7. SW. P.C BOARD (CM-5322A) BLOCK .....	53
	8. BAR METER P.C BOARD (CM-5325) BLOCK .....	53
	9. ASSEMBLY BLOCK .....	54
	10. FINAL ASSEMBLY BLOCK .....	56
II.	MODEL GX-M50	
	1. RECOMMENDED SPARE PARTS LIST .....	58
	2. HEAD BASE BLOCK .....	60
	3. MECHA BLOCK (1) .....	62
	4. MECHA BLOCK (2) .....	64
	5. PRE AMP P.C BOARD (CM-5406A) BLOCK .....	66
	6. POWER SUPPLY P.C BOARD (CM-5410) BLOCK .....	67
	7. SW. P.C BOARD (CM-5406D) BLOCK .....	67
	8. BAR METER P.C BOARD (CM-5325) BLOCK .....	67
	9. VOL. P.C BOARD (A) (CM-5406D) BLOCK .....	67
	10. VOL. P.C BOARD (B) (CM-5406C) BLOCK .....	67
	11. ASSEMBLY BLOCK .....	68
	12. FINAL ASSEMBLY BLOCK .....	70
III.	INDEX	
	1. MODEL GX-M30 .....	72
	2. MODEL GX-M50 .....	73

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



<b>FLYWHEEL BLOCK #13</b>				
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.

- CAUTION:**
1. When placing an order for parts, be sure to list the parts no. model no., and description. There are instances in which if any of this information is omitted, parts cannot be shipped or the wrong parts will be delivered.
  2. Please be careful not to make a mistake in the parts no. If the parts no. is in error, a part different from the one ordered may be delivered.
  3. Because parts number and parts unit supply in the Preliminary Service Manual (Basic Parts List) may be partially changed, please use this parts list for all future reference.

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

**AVERTISSEMENT:** ⚠ IL INDIQU LES COMPOSANTS CRITIQUES DE SURETE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT.

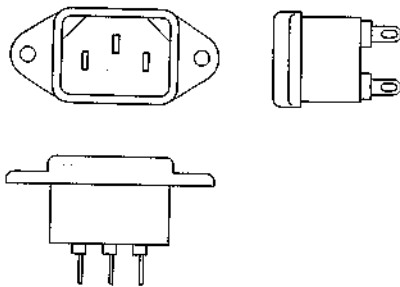
## AC INLET SYSTEM

This model is equipped with an AC INLET SYSTEM. Please refer to the AC INLET SYSTEM CHART below for the specific type. By the AC INLET SYSTEM, AC (mains) cord can be connected to and disconnected from the model because the model is provided with socket exclusively for AC (mains) cord on its main body.

Please note, however, that certain models are not equipped with this system and has a built-in AC (mains) cord as before.

### AC INLET SYSTEM CHART

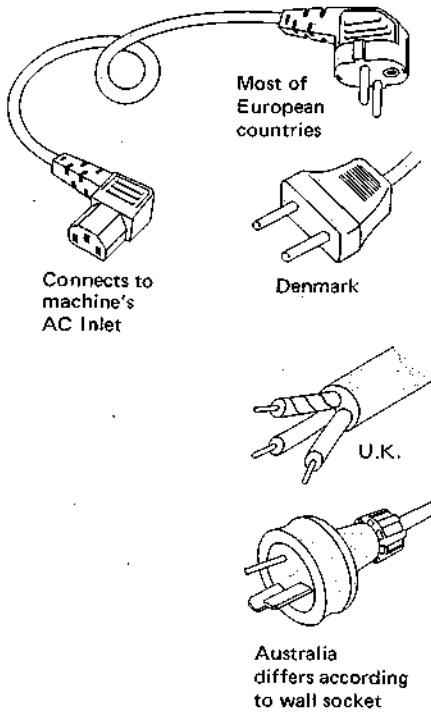
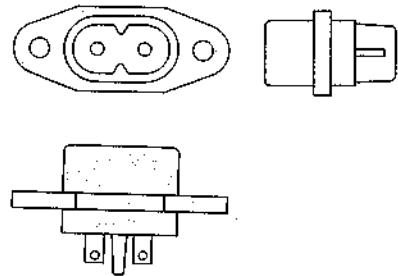
#### CLASS I



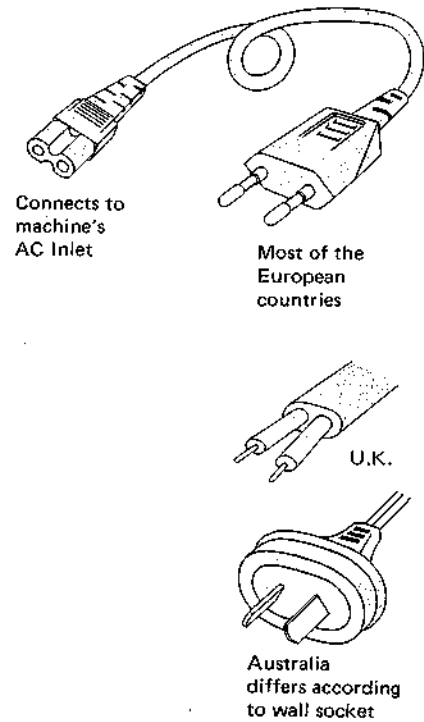
Picture 1  
AC INLET  
to be  
installed  
on machines

#### CLASS II

☐ This mark indicating double insulation will be attached to machine's rear panel



Picture 2  
AC (mains)  
cord



#### Parts List for AC (mains) Cord Set

	Standard	Description	Type of AC Inlet	Parts No.
Class I	CEE	Cord Set CEE (3 cores)	3P	EW302993
	BEAB	Cord Set BEAB (3 cores)	3P	EW302994
	SAA	Cord Set SAA (3 cores)	3P	EW302996
	U/T	Cord Set U/T (3 cores)	3P	EW302646
Class II	CEE	Cord Set CEE (2 cores)	2P	EW638144
	BEAB	Cord Set BEAB (2 cores)	2P	EW302995
	SAA	Cord Set SAA (2 cores)	2P	EW302991
	U/T	Cord Set U/T (2 cores)	2P	EW302899

# I. MODEL GX-M30

## 1. RECOMMENDED SPARE PARTS LIST

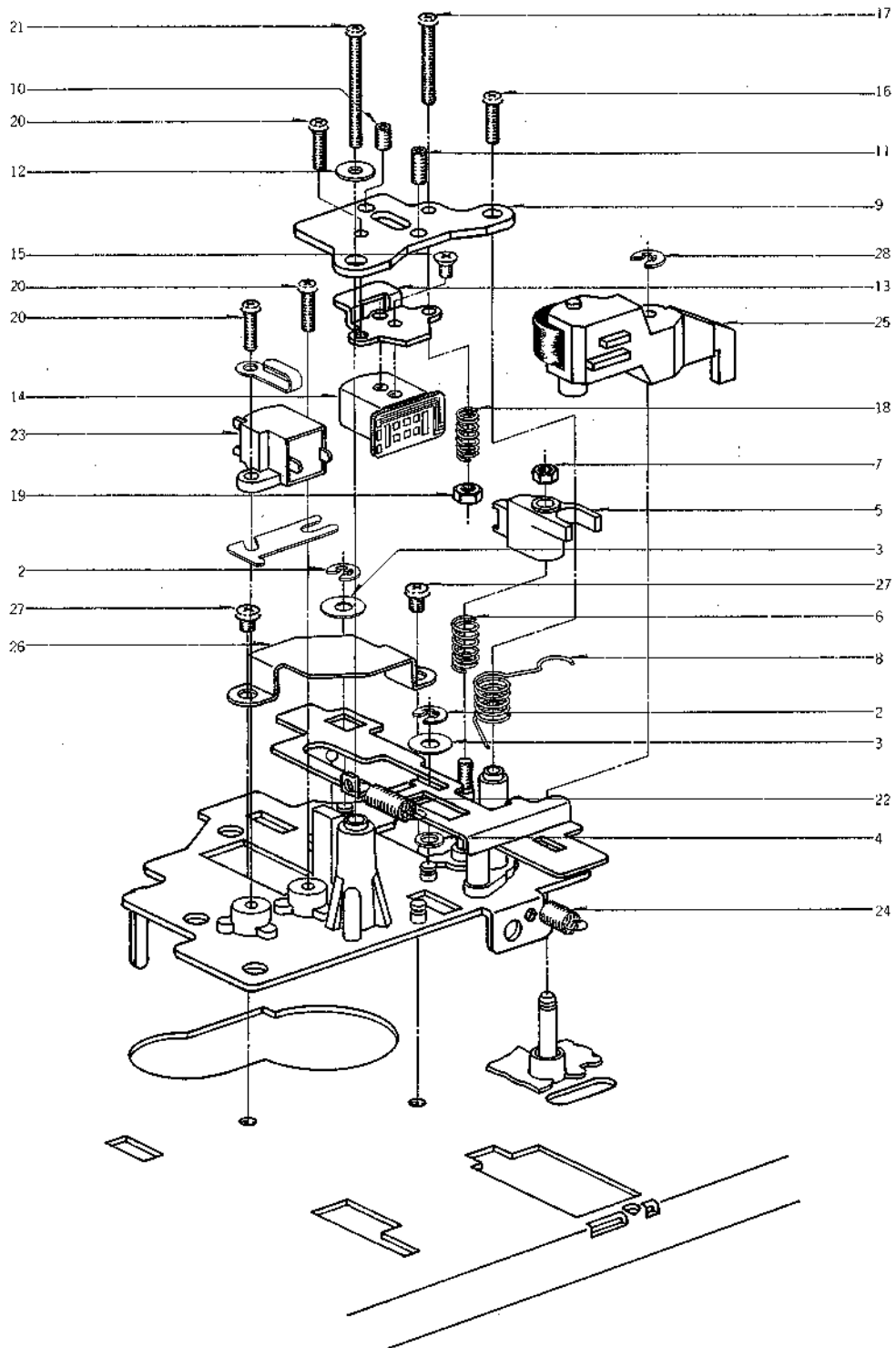
Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

### GX-M30

Parts No.	Description	Notes
BA319144	Power Supply P.C Board Comp. GX-M30 (AAL)	CM5327
BA319145	Power Supply P.C Board Comp. GX-M30 (CEE)	
BA319143	Power Supply P.C Board Comp. GX-M30 (CSA)	
BA319142	Power Supply P.C Board Comp. GX-M30 (JPN)	
BA319141	Power Supply P.C Board Comp. GX-M30 (U/T)	
BA319146	Power Supply P.C Board Comp. GX-M30 (UK)	UK, SAA
BA319044	Pre Amp P.C Board Comp. GXC-M30 (JPN)	JPN, AAL
BA319043	Pre Amp P.C Board Comp. GXC-M30 (U/T)	U/T, CSA, CEE, UK, SAA
BA319056	SW. P.C Board Comp. GX-M30	
BF319561	Flywheel Part GXC-709D	
BH319078	Head Base Block Comp. GX-M30	
BK319074	Key Board Block Comp. GX-M30	
BK319075	Key Board Block Comp. GX-M30-BL	
BL305015	Middle Lever Comp. CM	
BL311391	Pinch Roller Block Comp. GXC-704D	
BL321112	Take-up Lever BLK	
BL321113	Wind Arm BLK	
BM319077	Motor Block Comp. w/Pulley GX-M30	
BR321110	Supply Reel Table BLK	
BR321109	Take-up Reel Table BLK	
BT317341	△ Power Trans. CMT-32	JPN
BT317339	△ Power Trans. CMT-31	U/T
BT317342	△ Power Trans. CMT-33	CSA, AAL
BT317343	△ Power Trans. CMT-34	CEE
BT317344	△ Power Trans. CMT-35	UK, SAA
ED308952	Germanium Diode 1K34A-LR	
ED562397	Germanium Diode 1S188FM-1	
ED318408	LED GL-9NG2	
ED310584	LED GL-9PR2	
ED310584	LED GL-9PR2	
ED308945	Silicon Diode SVB10-100	
ED560913	Silicon Diode 1S2473 VE	
ED494583	Silicon Diode 10D05	
ED316519	Zener Diode WZ-172	
ED498150	Zener Diode WZ-192	
EF309387	△ Fuse 1A 250V	U/T, JPN
EF310229	△ Fuse 1A 125V	CSA, AAL
EF308848	△ Fuse 400MA 125V	CSA, AAL
EF309389	△ Fuse 400MA 250V	U/T, JPN
EF668474	△ Fuse (SEMKO T-Type) 400MAT	CEE, UK, SAA
EF601942	△ Fuse (SEMKO T-Type) 630MAT	CEE, UK, SAA
EF258344	△ Fuse (SEMKO T-Type) 800MAT	UK, SAA
EI605013	IC NE545B	IC1
EI315799	IC HA12019	
EI306141	IC LA4170	IC2
EI213390	IC NJM4558D	
EJ308985	DIN, 4P Pin Jack	U/T, CSA, CEE, UK, SAA

Parts No.	Description	Notes
EJ316156	Head Phone Jack HLJ0315-01-020	J2
EJ316531	Jack HLJ0315-01-010	J1
EJ308986	4P Pin Jack	JPN, AAL
EL315798	Lamp (Fuse Type) 3.5V 400MA	SW902
EM315859	Bar Meter FIP48CW16YS	
EO310831	OSC Coil OSM-001	T1
EP300424	Plunger 0730PHTI	SL1
ES315159	△ Push SW. SDG1P (JPN)	JPN
ES665875	△ Push SW. SDG1P-J TV-3 UL/CSA	AAL
ES655806	△ Push SW. SDG1P-J TV3 CSA	CSA
ES665807	△ Push SW. SDG5P-E 5A/80A 250V	U/T, CEE, SAA
ES310460	Leaf SW. BSW-IFTX3	
ES310348	Leaf SW. BSW-31CA0	SW901
ES316533	Push SW. SUF12	SW3
ES316534	Push SW. SUF12	SW2
ES516036	Reed SW. ORD-225	
ES316536	Rotary SW. SRZ-W04S	SW3
ES295773	Skeleton SW. MSW-S201U	SW903, 4
ES295784	Skeleton SW. MSW-S202U	SW905, 6
ES316535	Slide SW. I42031	SW1
ES316435	3-Throw Push SW. SUF32	
ET303697	FET 2SK117 (GR)	
ET554657	Transistor 2SA733 (P) (Q)	
ET554657	Transistor 2SA733 (P) (Q)	
ET242684	Transistor 2SC1312S (H)	
ET399870	Transistor 2SC711 (G)	
ET638504	Transistor 2SC945L (P)	
ET399846	Transistor 2SC945L (Q)	
ET399846	Transistor 2SC945L (Q)	
ET639437	Transistor 2SC945L (Q) (P)	
ET318405	Transistor 2SD639 (Q)	
ET307349	Transistor 2SD794 (P) (Q)	
ET307349	Transistor 2SD794 (P) (Q)	
EV317126	Double-Axial 2-Throw/Vol. DM20R 50KA×2	
EV316582	Vol. VM10E095A 5KB	VR11, JPN Only
HE315742	Erase Head E-921	
HP319079	REC/PB Head PR4-7	
MB296458	Counter Belt	
MB304807	Wind Belt	
MC316526	Counter SMP-390-235	
MC316527	Counter SMP-390-236	BL
TC319084	Oil Clutch Assy GX-M30	

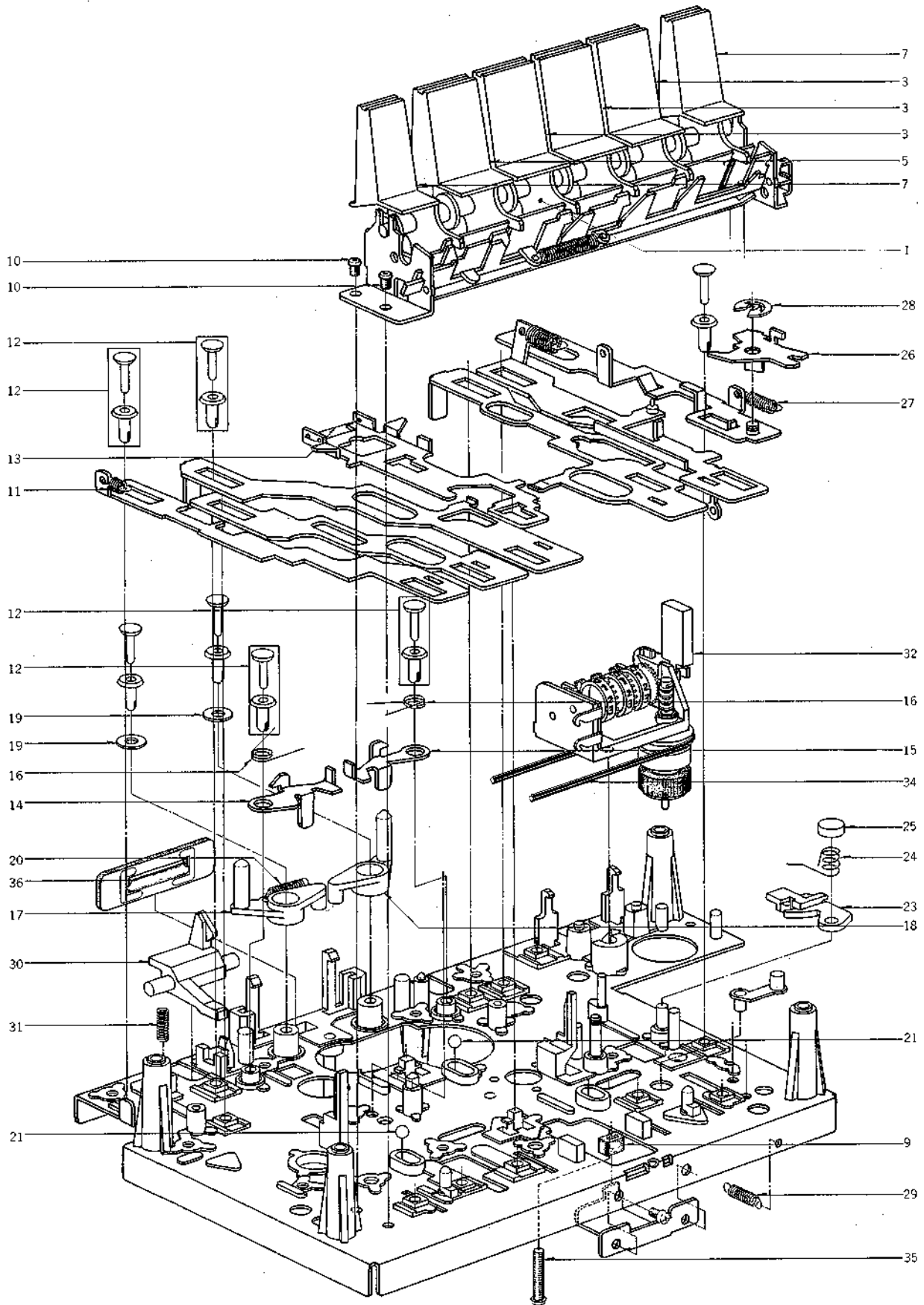
## 2. HEAD BASE BLOCK



## HEAD BASE BLOCK

Ref. No.	Parts No.	Description	Schematic No.
2-1x	BH319078	Head Base Block Comp. GX-M30	
2-2	ZW357164	'E' Ring 2.3M	6-1-9
2-3	ZW432753	Washer (PBP) D3.1x8x0.2t	
2-4	ZW259683	Washer (Nylon) D3x5x1t	
2-5	TC286007	Tape Guide (B)	CM-0002
2-6	ZG289236	Tape Guide Spring	CM-0005
2-7	ZW273734	Nut, #1 M2	
2-8	ZS296515	Pinch Roller Spring	CM-1028
2-9	HZ316253	Head Hanger	CM-0305
2-10	ZS356804	Set Screw, Hexagon Socket 3x4 (CUP/P.)	
2-11	ZS356815	Set Screw, Hexagon Socket 3x6 (CUP/P.)	
2-12	ZW452395	Washer (SPC) D2.3x7x0.5t	
2-13	HZ316253	Head Angle	CM-0304
2-14	HP319079	REC/PB Head PR4-7	
2-15	ZS524812	Screw, Countersunk Head 2x4	
2-16	ZS391522	Screw, Pan 2.3x8	
2-17	ZS303625	Screw, Pan 2.3x16	
2-18	ZG465636	Angle Adjust Spring	CG-0029
2-19	ZW273690	Nut, #1 M2.3	
2-20	ZS300436	Tapping Screw, #2 Bind 2.3x8	
2-21	ZS303660	Screw, Pan 2.3x23	
2-22	ZG317649	Head Base Plate Spring	CM-0325
2-23	HE315742	Erase Head E-921	37-2-25
2-24	ZG316817	Head Base Return Spring	CM-0328
2-25	BL311391	Pinch Roller Block Comp. GXC-704D	
2-26	ZG286018	Head Spring	CM-1012
2-27	ZS592378	Screw, Pan Head 2.6x3	
2-28	ZW357164	'E' Ring 2.3M	6-1-9

### 3. MECHA BLOCK (1)

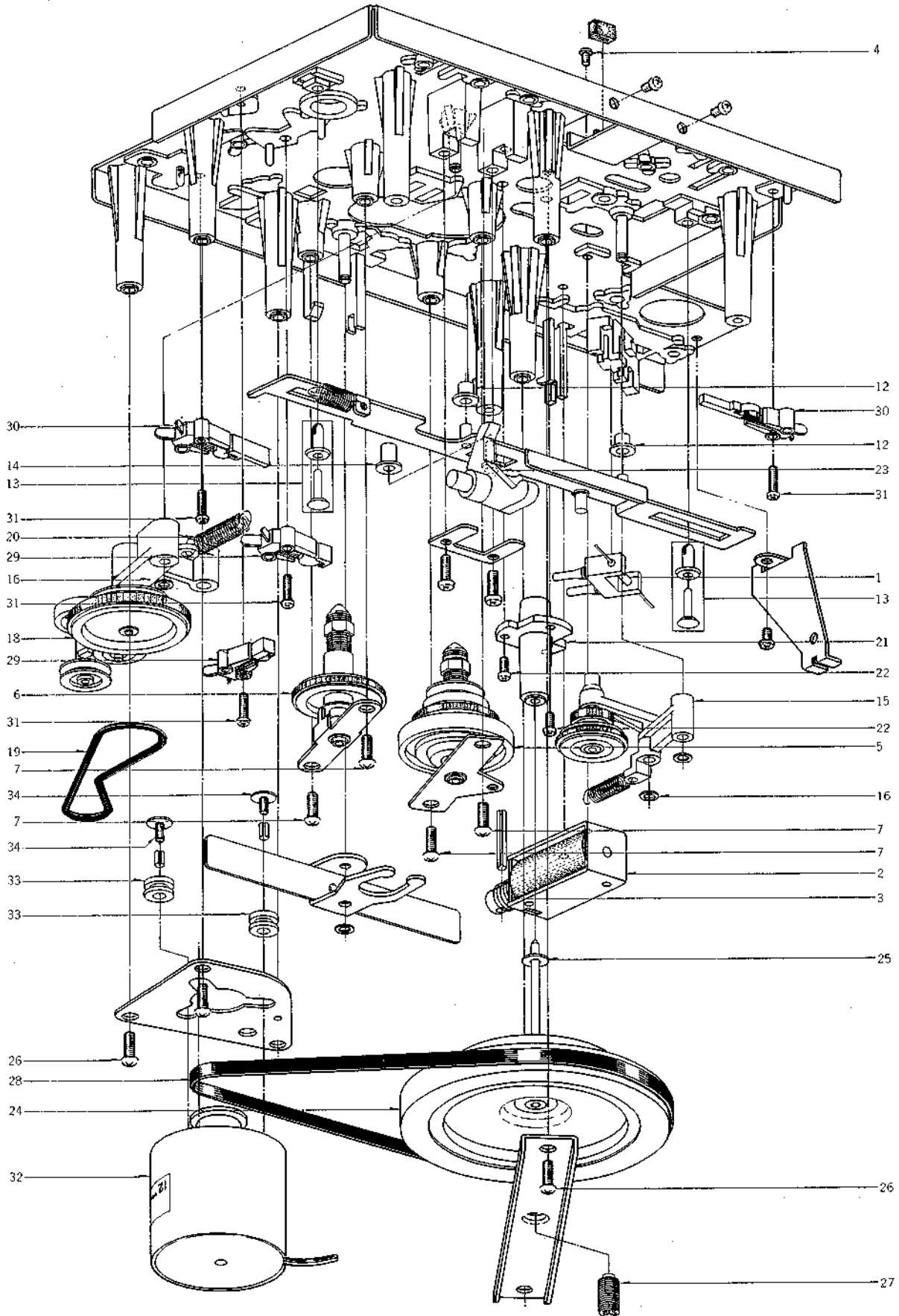




**MECHA BLOCK (1)**

Ref. No.	Parts No.	Description	Schematic No.
<b>KEY BOARD BLOCK</b>			
3-1	BK319074	Key Board Block Comp. GX-M30	9-3-49
3-2x	BK319075	Key Board Block Comp. GX-M30-BL	9-3-50
3-3	SK316220	Key Board Knob (A)	CM-3304
3-4x	SK316219	Key Board Knob (A-BL)	CM-3304
3-5	SK316218	Key Board Knob (B)	CM-3304
3-6x	SK316268	Key Board Knob (B-BL)	CM-3304
3-7	SK316269	Key Board Knob (C)	CM-3305
3-8x	SK316270	Key Board Knob (C-BL)	CM-3305
<b>MECHA BLOCK</b>			
3-9	MB282104	Brake Rubber	CN-1020
3-10	ZS432843	Screw, Pan 2.6x4	
3-11	ZG300206	Eject Spring	CM-1053
3-12	ZW295907	Nylon Rivet CM-1	2-7-59
3-13	ZG289934	Cassette Support Spring	CM-1032
3-14	TC289888	Brake (1)	CM-1017
3-15	TC289890	Brake (2)	CM-1018
3-16	ZG286187	Brake Spring	CM-1027
3-17	ML286176	Cassette Support (1)	CM-1020
3-18	TC286165	Cassette Support (2)	CM-1021
3-19	ZW460787	Washer (Polyslider) D3.1x8x0.25t	
3-20	ZG394378	Return Spring	CS-2106
3-21	MV296403	Steel Ball D3.5	
3-22x	MV357208	Steel Ball D2	
3-23	TC289675	Lock Cam	CM-1041
3-24	ZG289822	Lock Cam Spring	CM-1030
3-25	TC282396	Cap	CN-1055
3-26	ML316228	Selector Plate	CM-1310
3-27	ZG300162	Selector Spring	CM-1051
3-28	ZW290283	'U' Ring 2.85M	6-1-1
3-29	ZG312947	Coil Spring T1-3.2/0.29-18.0	
3-30	TC286020	REC Detection Piece	CM-1013
3-31	ZG296447	REC Safety Spring	CM-1044
3-32	MC316526	Counter SMP-390-235	9-1-77
3-33x	MC316527	Counter SMP-390-236 (BL)	9-1-79
3-34	MB296458	Counter Belt	CM-1023
3-35	ZS422965	Screw, Pan Head 3x15	
3-36	EL315798	Lamp (Fuse Type) 3.5V 400MA	28-2-77

#### 4. MECHA BLOCK (2)



## MECHA BLOCK (2)

Ref. No.	Parts No.	Description	Schematic No.
4-1	ES516036	Reed SW. ORD-225	25-11-1
4-2	EP300424	Plunger 0730PHTI	44-1-88
4-3	ZG494403	Return Spring	CG-1204
4-4	ZS592378	Screw, Pan Head 2.6x3	
4-5	BR321109	Take-up Reel Table BLK	9-3-54
4-6	BR321110	Supply Reel Table BLK	9-3-55
4-7	ZS447840	Tapping Screw, #2 BR 3x8	
4-8	ZW317171	Washer (PBP) D3.1x8x0.1t	
4-9x	ZW432753	Washer (PBP) D3.1x8x0.2t	
4-10x	ZW259492	Washer (PBP) D3.1x8x0.3t	
4-11x	ZW357164	'E' Ring 2.3M	6-1-9
4-12	MH316258	Wind Collar	CM-1305
4-13	ZW295907	Nylon Rivet CM-1	2-7-59
4-14	MH316259	Head Base Collar	CM-1306
4-15	BL321112	Take-up Lever BLK	9-3-57
4-16	ZW282407	Push Washer (B)	CN-1056
4-17	BL305015	Middle Lever Comp. CM	CM-1039
4-18	BL321113	Wind Arm BLK	9-3-58
4-19	MB304807	Wind Belt	CM-1057
4-20	ZG580770	Pinch Roller Spring	TD-2078
4-21	MZ300158	Main Case Part CM	CM-1036
4-22	ZS479474	Screw, Pan 2.6x5	
4-23	TC286031	REC Lever	CM-1014
4-24	BF319561	Flywheel Part GXC-709D	CM-1015
4-25	ZW301934	Thrust Washer Nylon	CM-1054
4-26	ZS447840	Tapping Screw, #2 BR 3x8	
4-27	ZG289811	Box Screw	CM-1024
4-28	MB699118	Drive Belt (B)	CG-1831
4-29	ES295773	Skeleton SW. MSW-S201U	25-1-43
4-30	ES295784	Skeleton SW. MSW-S202U	25-1-42
4-31	ZS310337	Screw, Pan Head 2x8	
4-32	BM319077	Motor Block Comp. w/Pully GX-M30	CM-7301
4-33	MB282778	Rubber Bush	CN-7003
4-34	ZS321030	Screw, Pan 2.6x6 (W=7.5)	

## 5. PRE AMP P.C BOARD (CM-5318) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
5-1	BA319043	Pre Amp P.C Board Comp. GXC-M30 (U/T) (U/T, CSA, CEE, UK, SAA)	CM-5318
5-2	BA319044	Pre Amp P.C Board Comp. GXC-M30 (JPN) (JPN, AAL)	CM-5318
5-IC1	EI605013	IC NE545B	45-8-117
5-IC2	EI306141	IC LA4170	45-8-305
5-TR1,2	ET242684	Transistor 2SC1312S(H)	45-1-182
5-TR3,4	ET639437	Transistor 2SC945L(Q)(P)	45-1-85
5-TR5	ET399846	Transistor 2SC945L(Q)	45-1-85
5-TR6	ET638504	Transistor 2SC945L(P)	45-1-85
5-TR7,8	ET318405	Transistor 2SD639(Q)	45-1-372
5-TR9	ET307349	Transistor 2SD794(P)(Q)	45-1-334
5-TR10	ET303697	FET 2SK117(GR)	45-12-15
5-D1	ED308952	Germanium Diode 1K34A-LR	45-3-47
5-D2to12	ED560913	Silicon Diode 1S2473 VE	45-3-23
5-L1	EO368403	Ferri Inductor FL9H 33MH(J)	23-1-4
5-VR1	EV322814	Semi-fixed/Vol. D8 Axial 5KB	36-10-285
5-VR2	EV322486	Semi-fixed/Vol. D8 Axial 50KB	36-10-285
5-VR3	EV316581	Single-Axial 2-Throw/Vol. GM70R-10KBx2	36-22-48
5-VR6	EV322485	Semi-Fixed/Vol. D8 Axial 20KB	36-10-285
5-VR7	EV648527	Semi-Fixed/Vol. V10K8-4-2 B200K	36-10-250
5-VT8to10	EV322814	Semi-fixed/Vol. D8 Axial 5KB	36-10-285
5-VR11	EV316582	Vol. VM10E095A 5KB	36-6-43
5-FL1	ER309119	Dolby Filter D07-001	53-1-143
5-FL2	ER309361	Dolby Filter D07-002	53-1-143
5-FL3,4	EO309363	Trap Coil 085S-1 5I	23-1-302
5-SW1	ES316535	Slide SW. 142031	25-3-177
5-SW2	ES316534	Push SW. SUF12	25-5-336
5-SW3	ES316536	Rotary SW. SRZ-W04S	25-6-130
5-SW4	ES316533	Push SW. SUF12	25-5-336
5-VL1	EO310608	Ferri Inductor FE-001 3.3MH	23-1-304
5-T1	EO310831	OSC Coil OSM-001	23-4-48
5-J1	EJ316531	Jack HLJ0315-01-010	31-2-106
5-J2	EJ316156	Head Phone Jack HLJ0315-01-020	31-2-106
5-J3	EJ308985	Din, 4P Pin Jack (U/T, CSA, CEE, UK, SA)	31-5-144
5-J3	EJ308986	4P Pin Jack (JPN, AAL)	31-5-145
5-R61	ER303044	Metal Oxide Film/R. 2W 390 ohm (J)	35-19-2
5-C3	EC310429	Elect./C. (LL, Homing) 10μF(K) 16WV	24-20-19
5-C4	EC315616	Styrol/C. (Homing) 470PF(K) 50WV	24-11-17
5-C11	EC312011	Styrol/C. 200PF(J) 50WV	24-11-17
5-C23	EC313826	Solid Aluminum/C. (Homing) 0.1μF(K) 25WV	24-19-3
5-C24	EC313825	Solid Aluminum/C. (Homing) 0.33μF(K) 25WV	24-19-3
5-C39	EC313825	Solid Aluminum/C. (Homing) 0.33μF(K) 25WV	24-19-3
5-C50	EC316570	Styrol/C. 100PF(J) 250WV	24-11-17
5-C51	EC316573	Styrol/C. 200PF(J) 250WV	24-11-17
5-3	ZW263946	Nylon Rivet 4x5	2-7-57
5-4	ZS325495	Tapping Screw, #2 BR 3x6	

## 6. POWER SUPPLY P.C BOARD (CM-5326/5320) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
6-1	BA319141	Power Supply P.C Board Comp. GX-M30 (U/T)	CM-5327
6-2	BA319142	Power Supply P.C Board Comp. GX-M30 (JPN)	CM-5327
6-3	BA319143	Power Supply P.C Board Comp. GX-M30 (CSA)	CM-5327
6-4	BA319144	Power Supply P.C Board Comp. GX-M30 (AAL)	CM-5327
6-5	BA319145	Power Supply P.C Board Comp. GX-M30 (CEE)	CM-5327
6-6	BA319146	Power Supply P.C Board Comp. GX-M30 (UK) (UK, SAA)	CM-5327
6-TR1,2	ET307349	Transistor 2SD794(P)(Q)	45-1-334
6-TR4	ET399870	Transistor 2SC711(G)	45-1-67
6-TR5	ET639437	Transistor 2SC945L(O)(P)	45-1-85
6-TR6	ET399870	Transistor 2SC711(G)	45-1-67
6-TR7	ET554657	Transistor 2SA733(P)(Q)	45-1-124
6-TR8	ET307349	Transistor 2SD794(P)(Q)	45-1-334
6-D1,2	ED308945	Silicon Diode SVB10-100	45-2-82
6-D3	ED316519	Zener Diode WZ 172	45-6-67
6-D4	ED498150	Zener Diode WZ-192	45-6-67
6-D5to9	ED560913	Silicon Diode 1S2473 VE	45-3-23
6-D10to13	ED494583	Silicon Diode 10D05	45-2-42
6-SW1	ES665807	Δ Push SW. SDG5P-E 5A/80A 250V (U/T, CEE, UK)	25-5-182
6-SW1	ES315159	Δ Push SW. SDG1P(JPN)	25-5-330
6-SW1	ES655806	Δ Push SW. SDG1P-J TV3 CSA (CSA)	25-5-187
6-SW1	ES665875	Δ Push SW. SDG1P-J TV-3 UL/CSA (AAL)	25-5-199
6-VS1	MZ283140	Voltage Changer 12M-60031 (U/T)	40-2-13
6-FR1	ER561216	Fuse/R. 1/4W 100 ohms(K) 200MA	35-14-9
6-R18	ER309417	Metal Oxide Film/R. 1W 1K (J)	35-15-10
6-C1	EC551160	Δ Ceramic/C. DB821 NA 0.01μF(Z) 1.4KW (U/T)	24-5-55
6-C1	EC321302	Δ Ceramic/C. E 0.01μF(Z) 250VAC(JPN)	24-5-90
6-C1	EC314688	Δ Ceramic/C. DE71 50 FZ 0.01μF(P) 125WV (CSA, AAL)	24-5-87
6-C1	EC301320	Δ MP/C. 4700PF(M) 250WV (CEE, UK, SAA)	24-9-122
6-C2	EC321043	Elect./C. (Vert.) 3300μF 35WV	24-12-61
6-7	ZS422076	Screw, Pan 3x5	
6-8	ZS325495	Tapping Screw, #2 BR 3x6	
6-9	ZS379350	Screw, Pan 3x6	
6-TR3	ET639437	Transistor 2SC945L(Q)(P)	45-1-85

When ordering parts, please describe Parts Number, Description, and Model Number in detail.

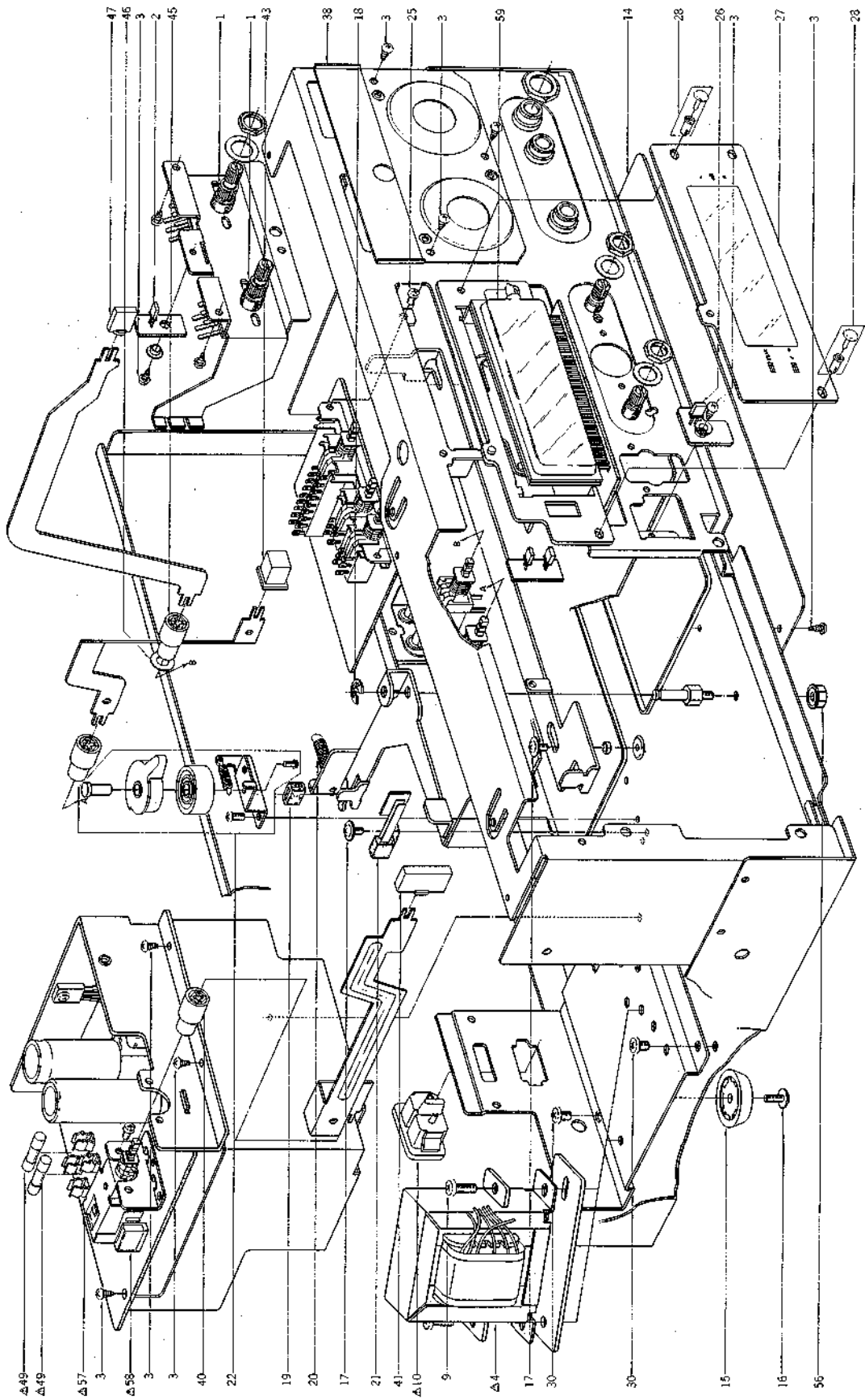
## 7. SW. P.C BOARD (CM-5322A) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
7-D1,2	ED318408	LED GL-9NG2	45-15-35
7-1	BA319056	SW. P.C Board Comp. GX-M30	CM-5330
7-IC1	EI213390	IC NJM4558D	45-8-191
7-TR1	ET639437	Transistor 2SC945L(Q)(P)	45-1-85
7-TR2	ET554657	Transistor 2SA733(P)(Q)	45-1-124
7-TR3to8	ET639437	Transistor 2SC945L(Q)(P)	45-1-85
7-TR9	ET399846	Transistor 2SC945L(Q)	45-1-85
7-D1to4	ED560913	Silicon Diode 1S2473 VE	45-3-23
7-D5,6	ED562397	Germanium Diode 1S188FM-1	45-3-25
7-D7,8	ED560913	Silicon Diode 1S2473 VE	45-3-23
7-SW1to3	ES316435	3-Throw Push SW. SUF32	25-5-337
7-VR1,2	EV305639	Semi-Fixed Vol. D8 Axial Type 20 KB	36-10-273
7-C7	EC657044	NP/C. (Vert. Type) 1 $\mu$ F (M) 50WV	24-17-26
7-C10	EC313825	Solid Aluminum/C. (Homing) 0.33 $\mu$ F(K) 25WV	24-19-3
7-C13	EC316569	Solid Aluminum/C. 0.22 $\mu$ F(K) 25WV	24-19-3
7-C14	EC321074	Styrol/C. 680PF(K) 50WV	24-11-17

## 8. BAR METER P.C BOARD (CM-5325) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
8-IC1,2	EI315799	IC HA12019	45-8-366
8-IND1	EM315859	Bar Meter FIP48CW16YS	53-1-175

# 9. ASSEMBLY BLOCK

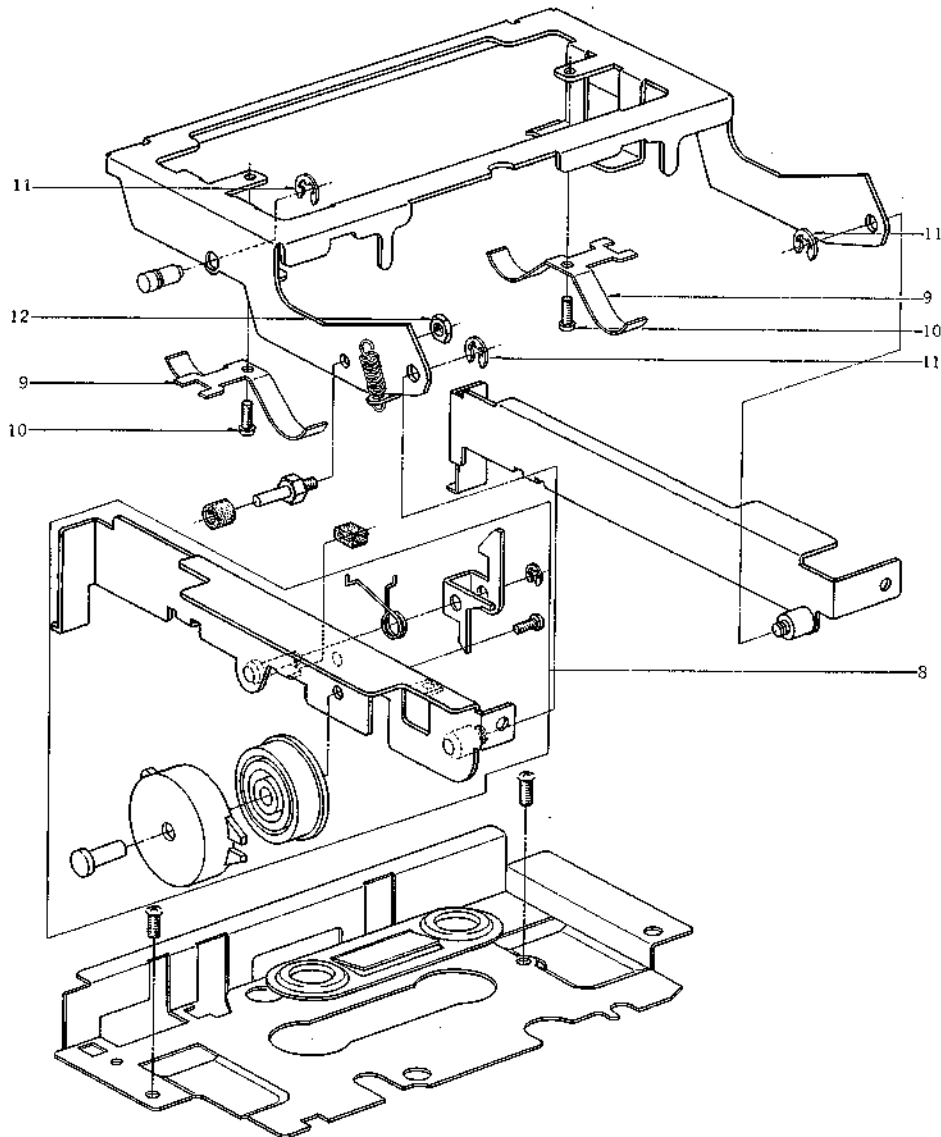
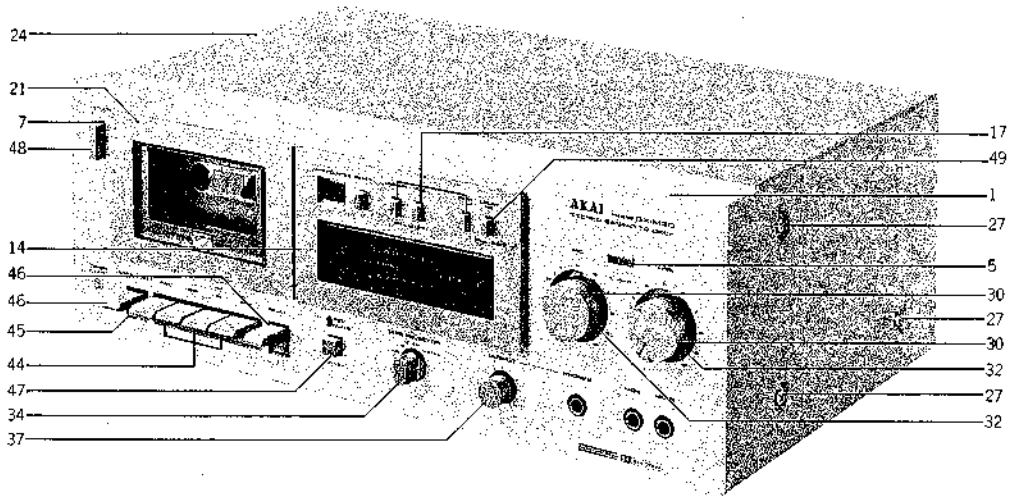


## ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Ref. No.	Parts No.	Description	Schematic No.
<b>VOL. HOLDER BLOCK</b>							
9-1	EV317126	Double-Axial 2-Throw/Vol. DM20R 50KA×2	36-18-17	9-58	EC551160	△ Ceramic/C. DB821 NA 0.01μF(Z) 1.4KWV (U/T)	24-5-55
9-2	ED310584	LED GL-9PR2	45-15-21	9-59	EM315859	Bar Meter FIP48CW16YS	53-1-175
9-3	ZS325495	Tapping Screw, #2 BR 3×6					
<b>TRANS. BASE BLOCK</b>							
9-4	BT317339	△ Power Trans. CMT-31 (U/T)	38-4-731				
9-5x	BT317341	△ Power Trans. CMT-32 (JPN)	38-4-732				
9-6x	BT317342	△ Power Trans. CMT-33 (CSA, AAL)	38-4-733				
9-7x	BT317343	△ Power Trans. CMT-34 (CEE)	38-4-734				
9-8x	BT317344	△ Power Trans. CMT-35 (UK, SAA)	38-4-735				
9-9	ZS301576	S-Tight Screw, Pan 4×10					
9-10	EJ301513	△ 2P Inlet (U/T, CEE, UK, SAA)	31-1-200				
9-11x	EW306427	△ AC Cord (JPN)	26-3-63				
9-12x	EW305691	△ AC Cord CUL (CSA, AAL)	26-3-65				
9-13x	EZ631945	△ Strain Relief SR-4N-4 (JPN, CSA, AAL)	2-7-49				
<b>ASSEMBLY BLOCK</b>							
9-14	SP316284	Bottom Plate	CM-5303				
9-15	SA305646	Rubber Foot (A) (Black)	CN-5323				
9-16	ZS309415	S-Tight Screw, Pan 3×8 w/Washer					
9-17	ZS313490	S-Tight Screw, Pan 3×6 w/Washer					
9-18	ZW290283	'U' Ring 2.85M	6-1-1				
9-19	MB510164	Cushion Rubber	CG-7306				
9-20	ZG318436	Coil Spring T2-5.0/0.55-28					
9-21	ES310460	Leaf SW. BSW-IFTX3	25-10-37				
9-22	TC319084	Oil Clutch Assy GX-M30	CM-5313E				
9-23	ZS306021	S-Tight Screw, Pan 3×6					
9-24x	ZS455207	Tapping Screw, #2 BR 3×5					
9-25	ZS422076	Screw, Pan 3×5					
9-26	ED310584	LED GL-9PR2	45-15-21				
9-27	TC316290	Meter Filter	CM-5309,5310				
9-28	ZW241200	Nylon Rivet (NRB) 3×8 Black	2-7-54				
9-29x	ZS447840	Tapping Screw, #2 BR 3×8					
9-30	ZS316567	S-Tight Screw, Pan 4×5					
9-31	SP316338	△ Rear Panel (U) (U/T)	CM-6312,6317				
9-32x	SP316342	△ Rear Panel (J) (JPN)	CM-6312,6313				
9-33x	SP316340	△ Rear Panel (C) (CSA)	CM-6312,6315				
9-34x	SP316341	△ Rear Panel (A) (AAL)	CM-6312,6314				
9-35x	SP316339	△ Rear Panel (E) (CEE)	CM-6312,6316				
9-36x	SP316337	△ Rear Panel (B) (UK, SAA)	CM-6312,6318				
9-37x	ZS447761	Tapping Screw, #2 BR 3×6 (Black)					
9-38	SP316291	Vol. Panel	CM-5311,5312				
9-39x	SP316292	Vol. Panel (BL)	CM-5311,5312				
9-40	TC289484	SW. Joint	CM-6015				
9-41	SB316498	Button (B)	CU-6009				
9-42x	SB316499	Button (B-BL)	CU-6009				
9-43	SB316316	Button (B)	CM-6305				
9-44x	SB316317	Button (B-BL)	CM-6305				
9-45	ML321550	Joint	CE-6205				
9-46	ZW675033	Washer (SPC) D5.1×10.3×0.8t					
9-47	SB316314	Button (A)	CM-6304				
9-48x	SB316315	Button (A-BL)	CM-6304				
9-49	EF309387	△ Fuse 1A 250V (U/T, JPN)	39-1-64				
9-50x	EF309389	△ Fuse 400MA 250V (U/T, JPN)	39-1-64				
9-51x	EF310229	△ Fuse 1A 125V (CSA, AAL)	39-1-65				
9-52x	EF308848	△ Fuse 400MA 125V (CSA, AAL)	39-1-65				
9-53x	EF601942	△ Fuse (SEMKO T Type) 630MAT (CEE, UK, SAA)	39-1-53				
9-54x	EF668474	△ Fuse (SEMKO T Type) 400MAT (CEE, UK, SAA)	39-1-53				
9-55x	EF258344	△ Fuse (SEMKO T-Type) 800MAT (UK, SAA)	39-1-53				
9-56	ZW413267	Flange Nut M4					
9-57	ES665807	△ Push SW. SDG5P-E 5A/80A 250V (U/T, CEE, UK, SAA)	25-5-182				

When ordering parts, please describe Parts Number, Description, and Model Number in detail.

# 10. FINAL ASSEMBLY BLOCK





## FINAL ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.
10-1	BD319153	Front Panel Block Comp. GX-M30(U/T)	
		(U/T, CSA, CEE, UK, SAA)	CM-6337
10-2x	BD319154	Front Panel Block Comp. GX-M30(JPN) (JPN, AAL)	CM-6337
10-3x	BD319155	Front Panel Block Comp. GX-M30-BL	CM-6337
10-4x	SE316343	Mute Escatcheon	CM-6320
10-5	SZ316344	REC Support	CM-6321
10-6x	SZ316345	REC Support (BL)	CM-6321
10-7	SE316393	Power Button Escatcheon	CU-6010
10-8	BZ319163	Eject Base (L) Assy GX-M30	CM-6336
10-9	ZG282690	Set Spring	CN-6009
10-10	ZS201407	Screw, Pan 2.3x3	
10-11	ZW270101	'E' Ring 3M	6-1-9
10-12	ZW273756	Nut, #1 M3	
10-13x	ZS558101	Screw, Pan 3x6 w/Washer	
10-14	BZ319161	Meter Window Assy GX-M30	CM-6340
10-15x	BZ319162	Meter Window Assy GX-M30-BL	CM-6340
10-16x	ZG316392	Buttom Spring	CU-6008
10-17	SB316355	Button (A)	CU-6005
10-18x	SB316356	Button (A-BL)	CU-6005
10-19x	ZS609074	Tapping Screw, #2 Pan 2x5	
10-20x	ZW429120	Washer (SPC) D2.3x9x0.5t	
10-21	BD319165	Lid Cover Assy GX-M30	CM-6339
10-22x	BD319166	Lid Cover Assy GX-M30-BL	CM-6339
10-23x	ZS447840	Tapping Screw, #2 BR 3x8	
10-24	BC316307	Upper Cover (A) (Except AAL)	CM-6301
10-25x	BC316309	Upper Cover (B) (AAL)	CM-6301
10-26x	BC316308	Upper Cover (A-BL)	CM-6301
10-27	ZS315878	S-Tight Screw, Bind 4x8 (Except AAL)	
10-28x	ZS310588	S-Tight Screw, Bind 4x8 (Black) (AAL)	
10-29x	ZS447761	Tapping Screw, #2 BR 3x6 (Black)	
10-30	SK316310	Double Knob (Upper)	CM-6302
10-31x	SK316311	Double Knob (Upper-BL)	CM-6302
10-32	SK316312	Double Knob (Lower)	CM-6303
10-33x	SK316313	Double Knob (Lower-BL)	CM-6303
10-34	SK316320	Knob (B)	CM-6307
10-35x	SK316321	Knob (B-BL)	CM-6307
10-36x	SK316318	Knob (A) (JPN, AAL)	CM-6306
10-37	SK315932	Knob (C)	CM-6308
10-38x	TC310497	Mask (B) (BL)	CN-6403
10-39x	SK315933	Knob (C-BL) (BL)	CM-6308
10-40x	EW306152	Δ AC Cord Set U/T Type 2 (U/T)	26-3-71
10-41x	EW315767	Δ AC Cord Set CEE 2 Cores (CEE)	26-3-72
10-42x	EW322400	Δ AC Cord Set BASEC 2 Cores (UK)	26-3-73
10-43x	EW322401	Δ AC Cord Set SAA 2 Cores (SAA)	26-3-77
10-44	SK316220	Key Board Knob (A)	CM-3304
10-45	SK316218	Key Board Knob (B)	CM-3304
10-46	SK316269	Key Board Knob (C)	CM-3305
10-47	SB316316	Button (B)	CM-6305
10-48	SB316498	Button (B)	CU-6009
10-49	SB316314	Button (A)	CM-6304

## II. MODEL GX-M50

### 1. RECOMMENDED SPARE PARTS LIST

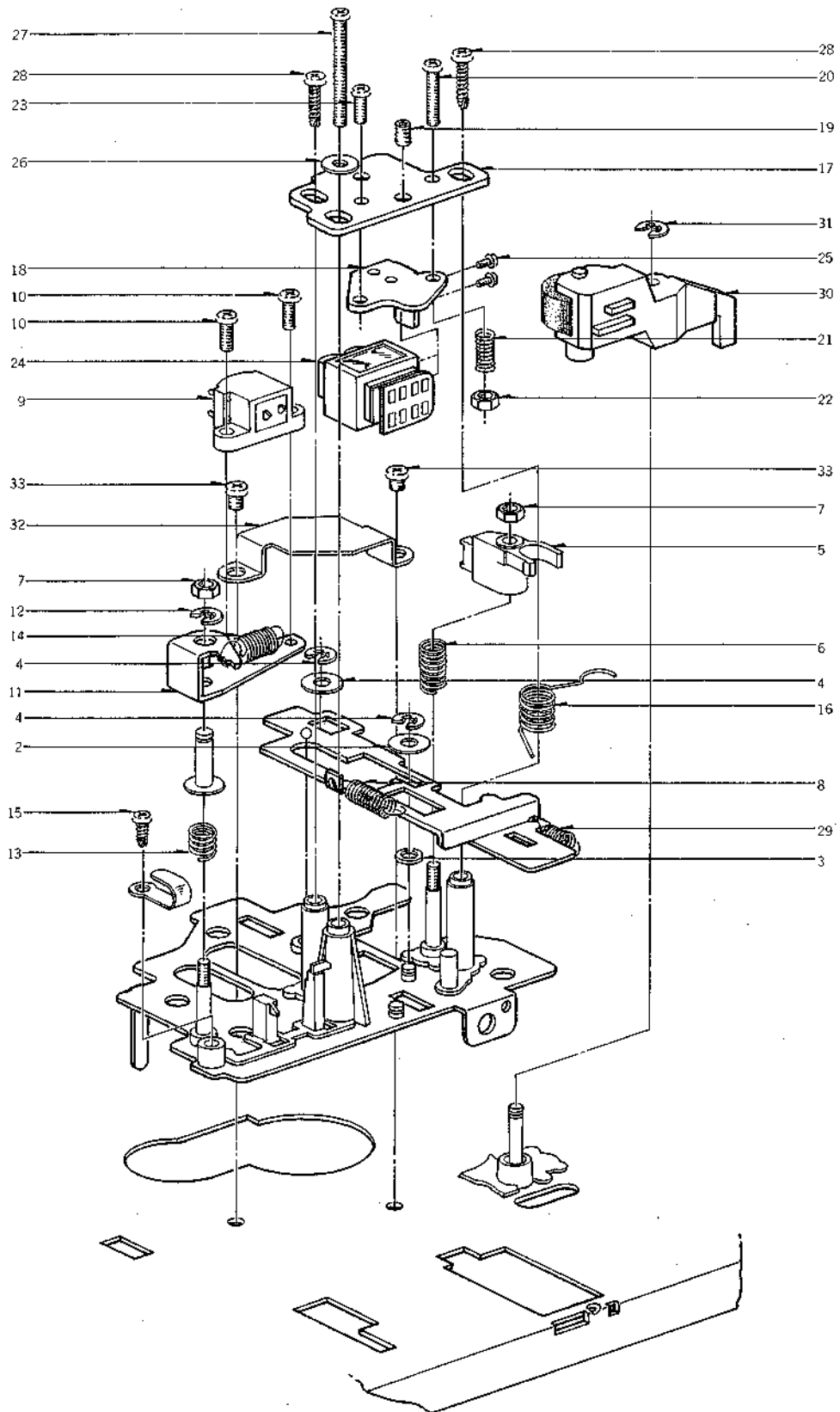
Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

#### GX-M50

Parts No.	Description	Notes
BA319584	Power Supply P.C Board Comp. GX-M50 (JPN)	
BA319583	Power Supply P.C Board Comp. GX-M50 (U/T)	
BA319586	Power Supply P.C Board Comp. GX-M50 (AAL)	
BA319587	Power Supply P.C Board Comp. GX-M50 (CEE)	
BA319585	Power Supply P.C Board Comp. GX-M50 (CSA)	
BA319588	Power Supply P.C Board Comp. GX-M50 (UK)	UK, SAA
BA319590	Pre Amp P.C Board Comp. GX-M50 (JPN)	JPN, AAL
BA319589	Pre Amp P.C Board Comp. GX-M50 (U/T)	U/T, CSA, CEE, UK, SAA
BA319611	SW. P.C Board Comp. GX-M50	
BA319255	Vol. P.C Board (A) Comp. GX-M50	
BF319562	Flywheel (B) Part GX-M50	
BH319128	Head Base Block Comp. GX-M50	
BK319074	Key Board Block Comp. GX-M30	
BK319075	Key Board Block Comp. GX-M30-BL	
BL305015	Middle Lever Comp. CM	
BL321170	Pinch Roller BLK GX-M50	
BL321113	Wind Arm BLK	
BM319077	Motor Block Comp. w/Pulley GX-M30	
BR321111	Supply Reel Table BLK	
BR321109	Take-up Reel Table BLK	
BT316820	△ Power Trans. CMT-51	JPN
BT316437	△ Power Trans. CMT-52	CSA, AAL
BT316436	△ Power Trans. CMT-53	U/T, CEE, UK, SAA
EC558202	Trimmer/C. TM-80A 80PF	
ED219464	Germanium Diode 1N34A	
ED562397	Germanium Diode 1S188FM-1	
ED318408	LED GL-9NG2	
ED310584	LED GL-9PR2	
ED308945	Silicon Diode SVB10-100	
ED624903	Silicon Diode 1S2473	
ED560913	Silicon Diode 1S2473 VE	
ED494583	Silicon Diode 10D05	
ED321099	Zener Diode RD-24E (B4)	
ED223558	Zener Diode RD13E (B)	
ED223558	Zener Diode RD13E (B)	
ED223558	Zener Diode RD13E (B)	
EF310199	△ Fuse 0.5A 250V	U/T, JPN
EF310229	△ Fuse 1A 125V	CSA, AAL
EF309387	△ Fuse 1A 250V	U/T, JPN
EF309390	△ Fuse 500MA 125V	CSA, AAL
EF309391	△ Fuse 800MA 125V	CSA, AAL
EF309388	△ Fuse 800MA 250V	U/T, JPN
EF623103	△ Fuse (SEMKO T-Type) 1AT	CEE, UK, SAA
EF593706	△ Fuse (SEMKO T-Type) 500MAT	CEE, UK, SAA
EF258344	△ Fuse (SEMKO T-Type) 800MAT	CEE, UK, SAA
EI301463	IC CR-713B	IC1, 2
EI315799	IC HA12019	IC1, 2

Parts No.	Description	Notes
EI306141	IC LA4170	IC3
EI213390	IC NJM4558D	IC1
EJ316156	Head Phone Jack HLJ0315-01-020	J2
EJ316531	Jack HLJ0315-01-010	J1
EL315798	Lamp (Fuse Type) 3.5V 400MA	SW902
EM315859	Bar Meter FIP48CW16YS	
EO301466	OSC. Coil 28N-503	T1
EP300424	Plunger 0730PHTI	SL1
EP308973	Relay LAB2NS	RL1
ES315159	△ Push SW. SDG1P (JPN)	JPN
ES665875	△ Push SW. SDG1P-J TV-3 UL/CSA	AAL
ES655806	△ Push SW. SDG1P-J TV3 CSA	CSA
ES665807	△ Push SW. SDG5P-E 5A/80A 250V	U/T, CEE, UK, SAA
ES310348	Leaf SW. BSW-31CA0	SW901
ES315747	Lever SW. 42388	SW3
ES316577	Push SW. SUF12	SW4
ES316578	Push SW. SUF12	SW1
ES516036	Reed SW. ORD-225	
ES316536	Rotary SW. SRZ-W04S	SW2
ES295773	Skeleton SW. MSW-S201U	SW903, 4
ES295784	Skeleton SW. MSW-S202U	SW905, 6
ES316435	3-Throw Push SW. SUF32	
ET301464	Fet 2SK68 (M) (N)	
ET554657	Transistor 2SA733 (P) (Q)	
ET554657	Transistor 2SA733 (P) (Q)	
ET554657	Transistor 2SA733 (P) (Q)	
ET311832	Transistor 2SC1844 (E)	
ET308954	Transistor 2SC1844 (E) (F)	
ET308954	Transistor 2SC1844 (E) (F)	
ET301249	Transistor 2SC1846 (Q) (R)	
ET302502	Transistor 2SC2001 (K)	
ET399870	Transistor 2SC711 (G)	
ET429748	Transistor 2SC711 (H)	
ET638504	Transistor 2SC945L (P)	
ET639437	Transistor 2SC945L (Q) (P)	
ET307349	Transistor 2SD794 (P) (Q)	
ET307349	Transistor 2SD794 (P) (Q)	
EV316579	Double-Axial 2-Throw/Vol. DM-20R-100K(A)×2	
EV316581	Single-Axial 2-Throw/Vol. GM70R-10KB×2	VR11
EV316582	Vol. VM10E095A 5KB	VR8, JPN Only
EV316580	2-Throw Slide/Vol. MDE 10K(A)×2	
HE315742	Erase Head E-921	
HR314483	REC/PB Head PR4-3	
MB296458	Counter Belt	
MC316526	Counter SMP-390-235	
MC316527	Counter SMP-390-236	BL

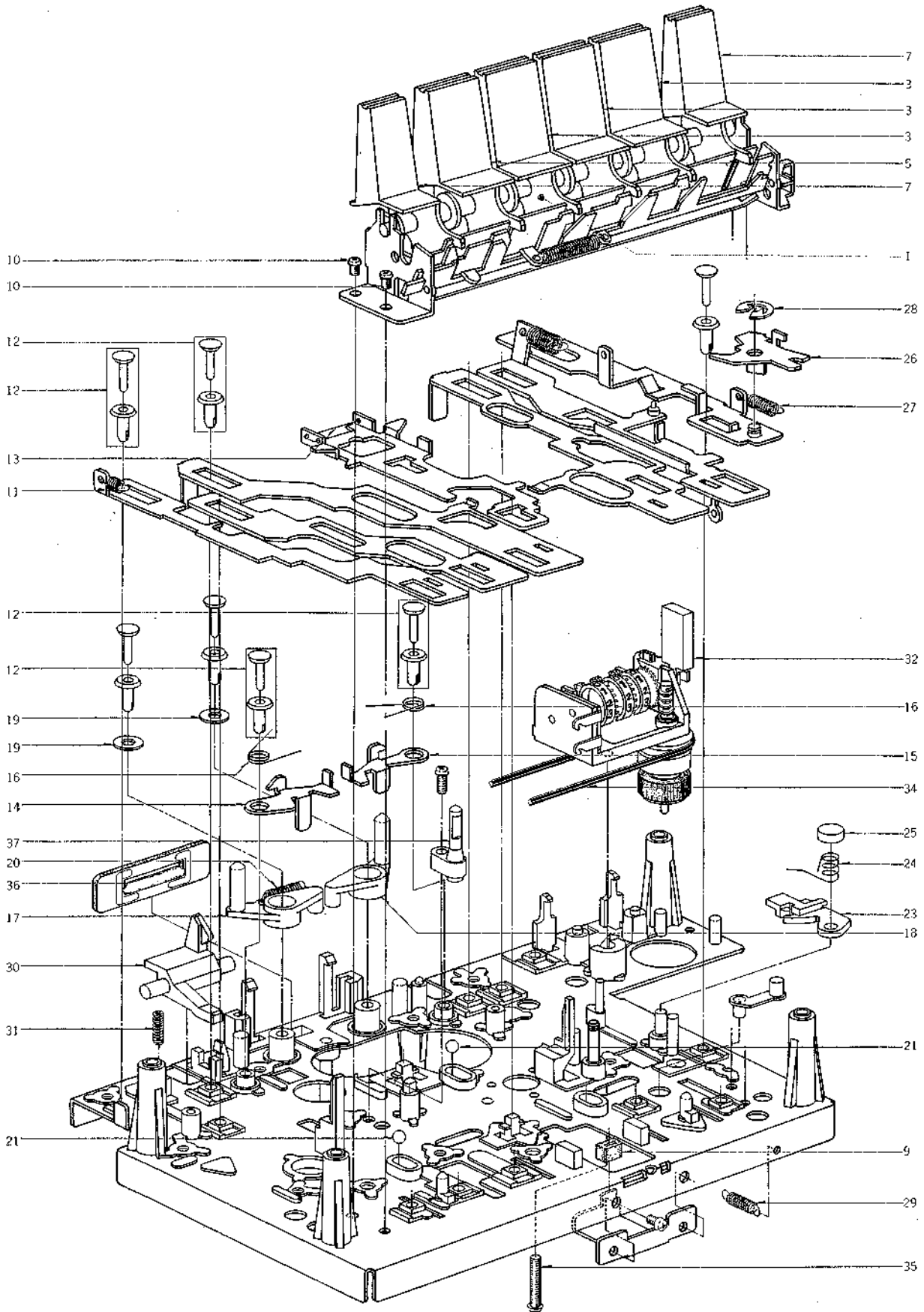
## 2. HEAD BASE BLOCK



## HEAD BASE BLOCK

Ref. No.	Parts No.	Description	Schematic No.
2-1x	BH319128	Head Base Block Comp. GX-M50	
2-2	ZW432753	Washer (PBP) D3.1x8x0.21	
2-3	ZW259683	Washer (Nylon) D3x5x1t	
2-4	ZW357164	'E' Ring 2.3M	6-1-9
2-5	TC286007	Tape Guide (B)	CM-0002
2-6	ZG289236	Tape Guide Spring	CM-0005
2-7	ZW273734	Nut, #1 M2	
2-8	ZG317336	Head Base Plate Spring (B)	CM-0326
2-9	HE315742	Erase Head E-921	37-2-25
2-10	ZS464692	Screw, Binding Head 2.3x6	
2-11	HZ316367	Erase Head Base	CM-0403
2-12	ZW270112	'E' Ring 3.2	6-1-9
2-13	ZG317345	E Shaft Spring	CM-0327
2-14	ZG317128	EH Clamp Spring	CM-0407
2-15	ZS669104	Tapping Screw, #2 Pan 2.3x6	
2-16	ZG301494	Pinch Roller Spring	CM-1203
2-17	HB316368	Head Base	CM-0404
2-18	HZ302180	Head MT. Parts	CI-0205
2-19	ZS356804	Set Screw, Hexagon Socket 3x4 (CUP/P.)	
2-20	ZS462947	Screw, Pan Head 2.3x12	
2-21	ZG465636	Angle Adjust Spring	CG-0029
2-22	ZW273690	Nut, #1 M2.3	
2-23	ZS590804	Screw, Pan Head 2.3x6	
2-24	HR314483	Rec/PB Head PR4-3	
2-25	ZS300626	Screw, Pan Head 2x2.5 (Camera Standard)	
2-26	ZW452395	Washer (SPC) D2.3x7x0.5t	
2-27	ZS303660	Screw, Pan 2.3x23	
2-28	ZS446940	Tapping Screw, #2 Bind 2.3x10	
2-29	ZG316817	Head Base Return Spring	CM-0328
2-30	BL321170	Pinch Roller BLK GX-M50	
2-31	ZW357164	'E' Ring 2.3M	6-1-9
2-32	ZG286018	Head Spring	CM-1012
2-33	ZS592378	Screw, Pan Head 2.6x3	

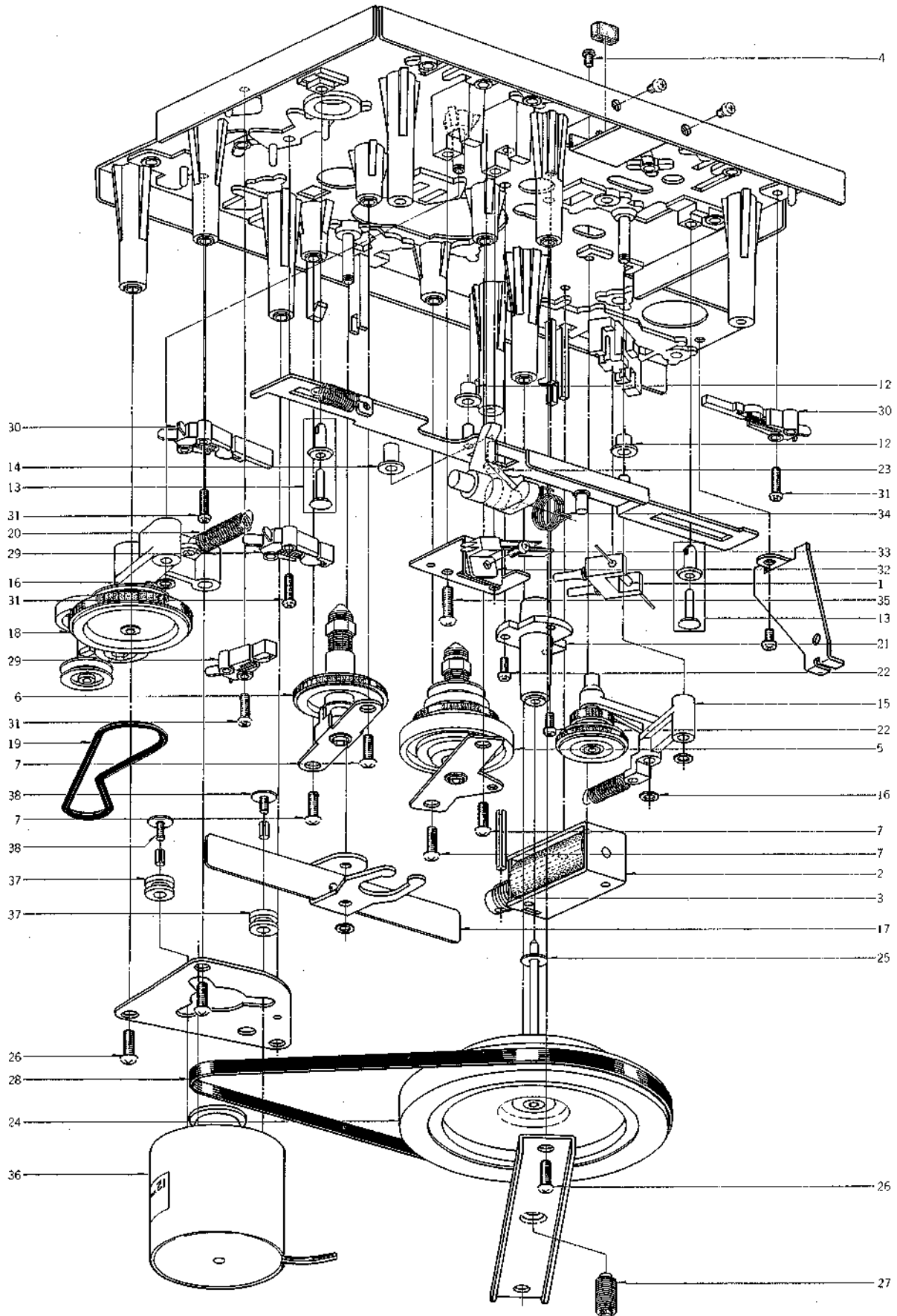
### 3. MECHA BLOCK (1)



**MECHA BLOCK (1)**

Ref. No.	Parts No.	Description	Schematic No.
<b>KEY BOARD BLOCK</b>			
3-1	BK319074	Key Board Block Comp. GX-M30	9-3-49
3-2x	BK319075	Key Board Block Comp. GX-M30-BL	9-3-50
3-3	SK316220	Key Board Knob (A)	CM-3304
3-4x	SK316219	Key Board Knob (A-BL)	CM-3304
3-5	SK316218	Key Board Knob (B)	CM-3304
3-6x	SK316268	Key Board Knob (B-BL)	CM-3304
3-7	SK316269	Key Board Knob (C)	CM-3305
3-8x	SK316270	Key Board Knob (C-BL)	CM-3305
<b>MECHA BLOCK</b>			
3-9	MB282104	Brake Rubber	CN-1020
3-10	ZS432843	Screw, Pan 2.6x4	
3-11	ZG300206	Eject Spring	CM-1053
3-12	ZW295907	Nylon Rivet CM-1	2-7-59
3-13	ZG289934	Cassette Support Spring	CM-1032
3-14	TC289888	Brake (1)	CM-1017
3-15	TC289890	Brake (2)	CM-1018
3-16	ZG286187	Brake Spring	CM-1027
3-17	ML286176	Cassette Support (1)	CM-1020
3-18	TC286165	Cassette Support (2)	CM-1021
3-19	ZW460787	Washer(Polyslider) D3.1x8x0.25t	
3-20	ZG394378	Return Spring	CS-2106
3-21	MV296403	Steel Ball D3.5	
3-22	MV357208	Steel Ball D2	
3-23	TC289675	Lock Cam	CM-1041
3-24	ZG289822	Lock Cam Spring	CM-1030
3-25	TC282396	Cap	CN-1055
3-26	ML316228	Selector Plate	CM-1310
3-27	ZG300162	Selector Spring	CM-1051
3-28	ZW290283	'U' Ring 2.85M	6-1-1
3-29	ZG312947	Coil Spring T1-3.2/0.29-18.0	
3-30	TC286020	REC Detection Piece	CM-1013
3-31	ZG296447	REC Safety Spring	CM-1044
3-32	MC316526	Counter SMP-390-235	9-1-77
3-33x	MC316527	Counter SMP-390-236 (BL)	9-1-79
3-34	MB296458	Counter Belt	CM-1023
3-35	ZS422965	Screw, Pan Head.3x15	
3-36	EL315798	Lamp (Fuse Type) 3.5V 400MA	28-2-77
3-37	TC305840	Head Base Part GXC-725D	

#### 4. MECHA BLOCK (2)





## MECHA BLOCK (2)

Ref. No.	Parts No.	Description	Schematic No.
4-1	ES516036	Reed SW. ORD-225	25-11-1
4-2	EP300424	Plunger 0730PHTI	44-1-38
4-3	ZG494403	Return Spring	CG-1204
4-4	ZS592378	Screw, Pan Head 2.6x3	
4-5	BR321109	Take-up Reel Table BLK	9-3-54
4-6	BR321111	Supply Reel Table BLK	9-3-56
4-7	ZS447840	Tapping Screw, #2 BR 3x8	
4-8	ZW317171	Washer (PBP) D3.1x8x0.1t	
4-9x	ZW432753	Washer (PBP) D3.1x8x0.2t	
4-10x	ZW259492	Washer (PBP) D3.1x8x0.3t	
4-11x	ZW357164	'E' Ring 2.3M	6-1-9
4-12	MH316258	Wind Collar	CM-1305
4-13	ZW295907	Nylon Rivet CM-1	2-7-59
4-14	MH316259	Head Base Collar	CM-1306
4-15	BL321112	Take-up Lever BLK	9-3-57
4-16	ZW282407	Push Washer (B)	CN-1056
4-17	BL305015	Middle Lever Comp. CM	CM-1039
4-18	BL321113	Wind Arm BLK	9-3-58
4-19	MB304807	Wind Belt	CM-1057
4-20	ZG580770	Pinch Roller Spring	TD-2078
4-21	MZ300158	Main Case Part CM	CM-1036
4-22	ZS479474	Screw, Pan 2.6x5	
4-23	TC286031	REC Lever	CM-1014
4-24	BF319561	Flywheel Part GXC-709D	CM-1015
4-25	ZW301934	Thrust Washer Nylon	CM-1054
4-26	ZS447840	Tapping Screw, #2 BR 3x8	
4-27	ZG289811	Box Screw	CM-1024
4-28	MB699118	Drive Belt (8)	CG-1831
4-29	ES295773	Skeleton SW. MSW-S201U	25-1-43
4-30	ES295784	Skeleton SW. MSW-S202U	25-1-42
4-31	ZS310337	Screw, Pan Head 2x8	
4-32	ES310348	Leaf SW. BSW-31CA0	25-10-35
4-33	ZS608095	Screw, Pan Head 2x5	
4-34	ZG316373	Return Spring	CM-1403
4-35	ZS523664	Tapping Screw, #2 BR 3x10	
4-36	BM319077	Motor Block Comp. w/Pully GX-M30	CM-7301
4-37	MB282778	Rubber Bush	CN-7003
4-38	ZS321030	Screw, Pan 2.6x6 (W=7.5)	

## 5. PRE AMP P.C BOARD (CM-5406A) BLOCK

Symbol No.	Parts No.	Description	Schematic No.	Symbol No.	Parts No.	Description	Schematic No.
5-1	BA319589	Pre Amp P.C Board Comp. GX-M50 (U/T) (U/T, CSA, CEE, UK, SAA)	CM-5406A	5-C22	EC321066	Solid Aluminum/C. 0.15 $\mu$ F(K) 25WV	24-19-3
5-2	BA319590	Pre Amp P.C Board Comp. GX-M50 (JPN) (JPN, AAL)	CM-5406A	5-C23	EO306295	Elect./C. (Homing Type) 10 $\mu$ F 25WV	24-12-25
5-IC1,2	EI301463	IC CR-7138	45-8-225	5-C24	EC322492	Solid Aluminum/C. 0.68 $\mu$ F(K) 25WV	24-19-3
5-IC3	EI306141	IC LA4170	45-8-305	5-C38	EC316524	Styrol/C. 1300PF(J) 250WV	24-11-10
5-TR1	ET311832	Transistor 2SC1844(E)	45-1-327	5-C47	EC313298	Elect./C. (LL) 10 $\mu$ F 16WV	24-23-7
5-TR2	ET308954	Transistor 2SC1844(E)(F)	45-1-327	5-C50	EC313298	Elect./C. (LL) 10 $\mu$ F 16WV	24-23-7
5-TR3,4	ET639437	Transistor 2SC945L(Q)(P)	45-1-85	5-C53	EC321066	Solid Aluminum/C. 0.15 $\mu$ F(K) 25WV	24-19-3
5-TR5,6	ET554657	Transistor 2SA733(P)(Q)	45-1-124	5-C78	EC321482	Styrol/C. 270PF(J) 50WV	24-11-14
5-TR7	ET639437	Transistor 2SC945L(Q)(P)	45-1-85	5-C82	EC313298	Elect./C. (LL) 10 $\mu$ F 16WV	24-23-7
5-TR8,9	ET302502	Transistor 2SC2001(K)	45-1-272	5-C90	EC306980	Styrol/C. 220PF(J) 50WV	24-11-14
5-TR10	ET301249	Transistor 2SC1846(Q)(R)	45-1-267	5-3	ZW263946	Nylon Rivet 4x5	2-7-57
5-TR11,12	ET639437	Transistor 2SC945L(Q)(P)	45-1-85	5-4	ZS325495	Tapping Screw, #2 BR 3x6	
5-TR13	ET311832	Transistor 2SC1844(E)	45-1-327				
5-TR14,15	ET308954	Transistor 2SC1844(E)(F)	45-1-327				
5-TR16	ET301464	FET 2SK68(M)(N)	45-12-14				
5-TR17	ET639437	Transistor 2SC945L(Q)(P)	45-1-85				
5-TR18	ET301249	Transistor 2SC1846(Q)(R)	45-1-267				
5-TR19	ET639437	Transistor 2SC945L(Q)(P)	45-1-85				
5-D1	ED219464	Germanium Diode 1N34A	45-3-1				
5-D2	ED560913	Silicon Diode 1S2473 VE	45-3-23				
5-D3	ED624903	Silicon Diode 1S2473	45-3-28				
5-D4	ED219464	Germanium Diode 1N34A	45-3-1				
5-D5	ED624903	Silicon Diode 1S2473	45-3-28				
5-D6	ED560913	Silicon Diode 1S2473 VE	45-3-23				
5-D7to10	ED624903	Silicon Diode 1S2473	45-3-28				
5-D11	ED223558	Zener Diode RD13E (B)	45-6-72				
5-VL1	EO310608	Ferri Inductor FE-001 3.3MH	23-1-304				
5-T1	EO301466	OSC. Coil 28N-503	23-4-46				
5-RL1	EP308973	Relay LAB2NS	47-2-30				
5-VR4	EV315413	Semi-fixed/Vol. D8 Axial 50KB	36-10-280				
5-VR5	EV315412	Semi-fixed/Vol. D8 Axial 5KB	36-10-280				
5-VR6	EV315416	Semi-fixed/Vol. D8 Axial 10KB	36-10-280				
5-VR7	EV315414	Semi-fixed/Vol. D8 Axial 20KB	36-10-280				
5-VR8	EV316582	Vol. VM10E095A 5KB (JPN)	36-6-43				
5-VR9	EV315413	Semi-fixed/Vol. D8 Axial 50KB	36-10-280				
5-VR10	EV315412	Semi-fixed/Vol. D8 Axial 5KB	36-10-280				
5-VR11	EV316581	Single-Axial 2-Throw/Vol. GM70R-10KBx2	36-22-48				
5-FL1	ER309120	Dolby Filter D07-003	53-1-143				
5-FL2	ER309119	Dolby Filter D07-001	53-1-143				
5-FL3,4	EO315758	Trap Coil 100S-431	23-1-331				
5-FL5	ER309120	Dolby Filter D07-003	53-1-143				
5-SW1	ES316578	Push SW. SUF12	25-5-342				
5-SW2	ES316536	Rotary SW. SRZ-W04S	25-6-180				
5-SW3	ES315747	Lever SW. 42388	25-12-61				
5-SW4	ES316577	Push SW. SUF12	25-5-341				
5-VC1	EC558202	Trimmer/C. TM-80A 80PF	24-2-26				
5-J1	EJ316531	Jack HLJ0315-01-010	31-2-106				
5-J2	EJ316156	Head Phone Jack HLJ0315-01-020	31-2-106				
5-J3	EJ308985	Din, 4P Pin Jack (U/T, CSA, CEE, UK, SAA)	31-5-144				
5-J3	EJ308986	4P Pin Jack (JPN, AAL)	31-5-145				
5-R28	ER316802	Carbon/R. F 1/4WS 470 ohms(J)	35-11-30				
5-C3	EC313298	Elect./C. (LL) 10 $\mu$ F 16WV	24-23-7				
5-C4	EC306987	Styrol/C. 470PF(J) 50WV	24-11-14				
5-C7	EC317693	Elect./C. (LL) 47 $\mu$ F(M) 25WV	24-20-19				
5-C12	EC321066	Solid Aluminum/C. 0.15 $\mu$ F(K) 25WV	24-19-3				

When ordering parts, please describe Parts Number, Description, and Model Number in detail.

## 6. POWER SUPPLY P.C BOARD (CM-5410) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
6-1	BA319583	Power Supply P.C Board Comp. GX-M50 (U/T)	CM-5410
6-2	BA319584	Power Supply P.C Board Comp. GX-M50 (JPN)	CM-5410
6-3	BA319585	Power Supply P.C Board Comp. GX-M50 (CSA)	CM-5410
6-4	BA319586	Power Supply P.C Board Comp. GX-M50 (AAL)	CM-5410
6-5	BA319587	Power Supply P.C Board Comp. GX-M50 (CEE)	CM-5410
6-6	BA319588	Power Supply P.C Board Comp. GX-M50 (UK) (UK, SAA)	CM-5410
6-TR1,2	ET307349	Transistor 2SD794(P)(Q)	45-1-334
6-TR3	ET639437	Transistor 2SC945L(Q)(P)	45-1-85
6-TR4	ET399870	Transistor 2SC711(G)	45-1-67
6-TR5	ET639437	Transistor 2SC945L(Q)(P)	45-1-85
6-TR6	ET429748	Transistor 2SC711(H)	45-1-67
6-TR7	ET554657	Transistor 2SA733(P)(Q)	45-1-124
6-TR8	ET307349	Transistor 2SD794(P)(Q)	45-1-334
6-TR9	ET639437	Transistor 2SC945L(Q)(P)	45-1-85
6-TR10	ET554657	Transistor 2SA733(P)(Q)	45-1-124
6-D1,2	ED308945	Silicon Diode SVB10-100	45-2-82
6-D3	ED223558	Zener Diode RD13E (B)	45-6-72
6-D4	ED321099	Zener Diode RD-24E(B4)	45-6-72
6-D5,6	ED560913	Silicon Diode 1S2473 VE	45-3-23
6-D7	ED624903	Silicon Diode 1S2473	45-3-23
6-D8,9	ED560913	Silicon Diode 1S2473 VE	45-3-23
6-D10to14	ED494583	Silicon Diode 10D05	45-2-42
6-D15	ED560913	Silicon Diode 1S2473 VE	45-3-23
6-D16	ED223558	Zener Diode RD13E (B)	45-6-72
6-D17,18	ED560913	Silicon Diode 1S2473 VE	45-3-23
6-SW1	ES665807	Δ Push SW. SDG5P-E 5A/80A 250V (U/T, CEE, UK, SAA)	25-5-182
6-SW1	ES315159	Δ Push SW. SDG1P(JPN)	25-5-330
6-SW1	ES665806	Δ Push SW. SDG1P-J TV3 CSA (CSA)	25-5-187
6-SW1	ES665875	Δ Push SW. SDG1P-J TV-3 UL/CSA (AAL)	25-5-199
6-FR1	ER561216	Fuse/R. 1/4W 100 ohms(K) 200MA	35-14-9
6-VS1	MZ283140	Δ Voltage Changer 12M-60031 (U/T)	40-2-13
6-R4	ER321098	Metal Oxide Film/R. 2W 1K(J)	35-15-8
6-R18	ER309417	Metal Oxide Film/R. 1W 1K(J)	35-15-10
6-C1	EC301320	Δ MP/C. 4700PF(M) 250WV (U/T)	24-9-122
6-C1	EC310542	Δ Polypro. Film/C. 0.01μF(M) 160VAC(JPN)	24-22-2
6-C1	EC314688	Δ Ceramic/C. DE7150 FZ 0.01μF(P) 125WV(CSA, AAL)	24-5-87
6-C1	EC301320	Δ MP/C. 4700PF(M) 250WV (CEE, UK, SAA)	24-9-122
6-C2	EC295997	Elect./C. (Vert. Type) 2200μF 35WV	24-12-9
6-C6	EC295997	Elect./C. (Vert. Type) 2200μF 35WV	24-12-9
6-C10	EC316188	Elect./C. 1000μF 25WV	24-12-49
6-C22	EC316569	Solid Aluminum/C. 0.22μF(K) 25WV	24-19-3
6-7	ZS422076	Screw, Pan 3x5	
6-8	ZS325495	Tapping Screw, #2 BR 3x6	
6-9	ZS379350	Screw, Pan 3x6	

## 7. SW. P.C BOARD (CM-5406D) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
7-1	BA319611	SW. P.C Board Comp. GX-M50	CM-5406D
7-IC1	EI213390	IC NJM4558D	45-8-191
7-TR1	ET638504	Transistor 2SC945L(P)	45-1-85
7-TR2	ET554657	Transistor 2SA733(P)(Q)	45-1-124
7-TR4to8	ET639437	Transistor 2SC945L(Q)(P)	45-1-85
7-D1to4	ED560913	Silicon Diode 1S2473 VE	45-3-23
7-D5,6	ED562397	Germanium Diode 1S188FM-1	45-3-25
7-D7,8	ED560913	Silicon Diode 1S2473 VE	45-3-23
7-SW1to3	ES316435	3-Throw Push SW. SUF32	25-5-337
7-VR1,2	EV315414	Semi-fixed/Vol. DS Axial 20KB	36-10-280
7-C3	EC316569	Solid Aluminum/C. 0.22μF(K) 25WV	24-19-3
7-C7	EC316529	NP/C. (Vert.) 0.47μF(M) 50WV	24-17-17
7-C13	EC306419	Styrol/C. 680PF(J) 50WV	24-11-14
7-C14	EC321074	Styrol/C. 680PF(K) 50WV	24-11-17

## 8. BAR METER P.C BOARD (CM-5325) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
8-IC1,2	EI315799	IC HA12019	45-8-366
8-IND1	EM315859	Bar Meter FIP48CW16YS	53-1-175

## 9. VOL. P.C BOARD (A) (CM-5406D) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
9-1	BA319255	Vol. P.C Board (A) Comp. GX-M50	CM-5406C
9-TR1	ET308954	Transistor 2SC1844(E)(F)	45-1-327
9-VR1	EV316580	2-Throw Slide/Vol. MDE 10K(A)x2	36-27-7
9-R11	ER316802	Carbon/R. F 1/4WS 470 ohms (J)	35-11-30

## 10. VOL. P.C BOARD (B) (CM-5406C) BLOCK

Symbol No.	Parts No.	Description	Schematic No.
10-VR1,2	EV316579	Double-Axial 2-Throw/Vol. DM-20R-100K(A)x2	36-18-18

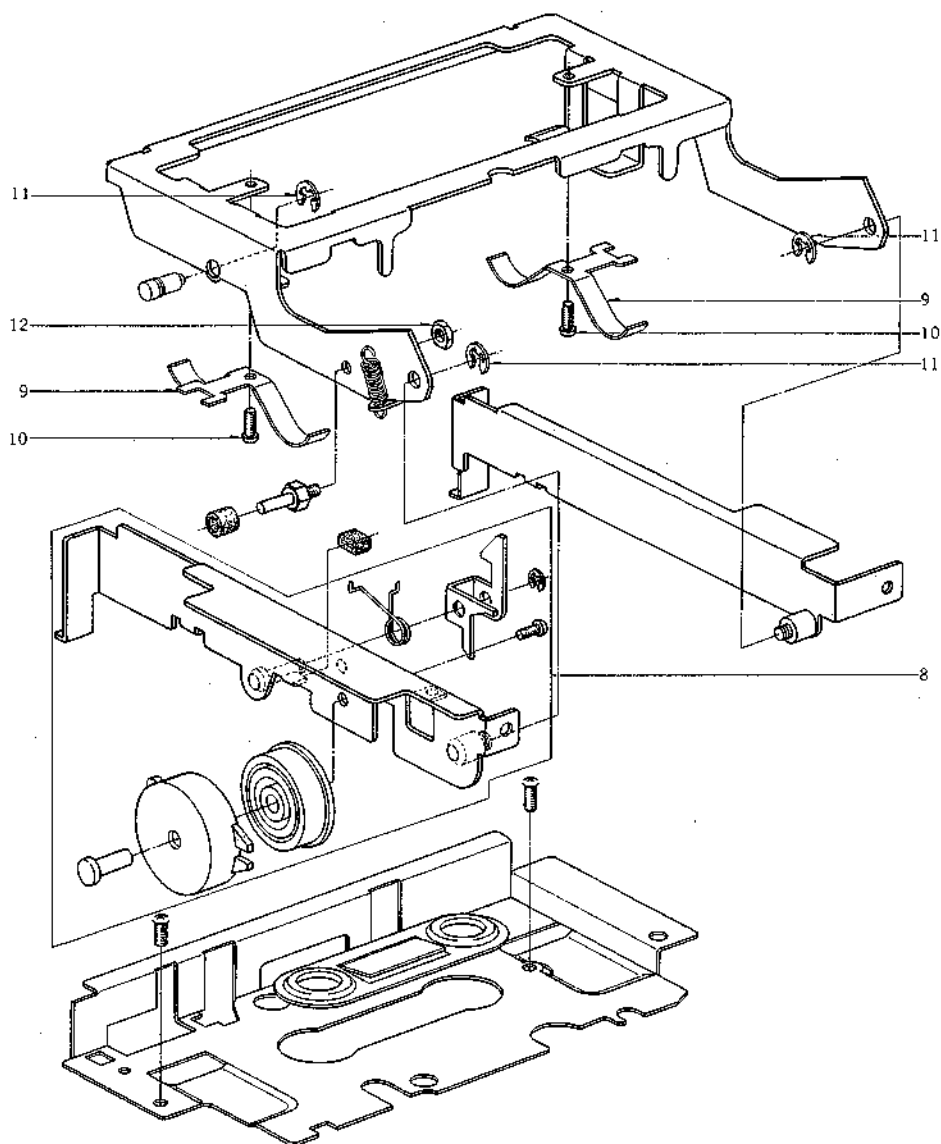
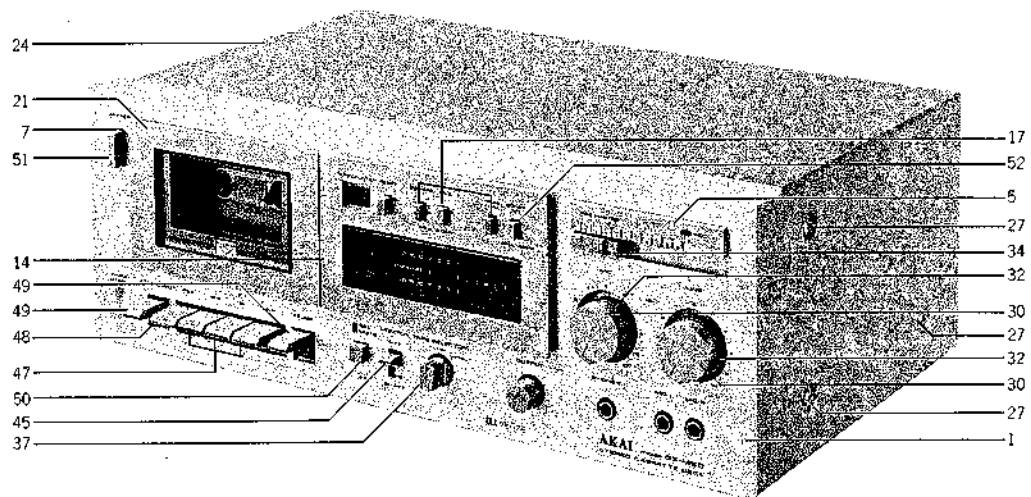


## ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Ref. No.	Parts No.	Description	Schematic No.
<b>TRANS. BASE BLOCK</b>							
11-1	EJ301513	△ 2P Inlet (U/T, CEE, UK, SAA)	31-200	11-53	MZ283140	△ Voltage Changer 12M-60031	40-2-13
11-2x	EW306427	△ AC Cord (JPN)	26-3-63	11-54	EV316579	Double-Axial 2-Throw/Vol. DM-20R-100K (A)x2	36-18-18
11-3x	EW305691	△ AC Cord CUL (CSA, AAL)	26-3-65				
11-4x	EZ631945	Strain Relief SR-4N-4 (JPN, CSA, AAL)	2-7-49				
<b>ASSEMBLY BLOCK</b>							
11-5	SP316284	Bottom Plate	CM-5303				
11-6	ZS325495	Tapping Screw, #2 BR 3x6					
11-7	SA305646	Rubber Foot (A) (Black)	CM-5323				
11-8	ZS309415	S-Tight Screw, Pan 3x8 w/Washer					
11-9	ZS455207	Tapping Screw, #2 BR 3x5					
11-10x	ZS306021	S-Tight Screw, Pan 3x6					
11-11x	ZS447840	Tapping Screw, #2 BR 3x8					
11-12	ZS422076	Screw, Pan 3x5					
11-13	ZS455207	Tapping Screw, #2 BR 3x5					
11-14	ED310584	LED GL-9PR2	45-15-21				
11-15	ZS200676	Tapping Screw, #2 Countersunk 3x6					
11-16	ED318408	LED GL-9NG2	45-15-35				
11-17	TC316290	Meter Filter	CM-5309,5310				
11-18	ZW241200	Nylon Rivet (NRB) 3x8 Black	2-7-54				
11-19	BT316436	△ Power Trans. CMT-53 (U/T, CEE, UK, SAA)	38-4-764				
11-20x	BT316820	△ Power Trans. CMT-51 (JPN)	38-4-762				
11-21x	BT316437	△ Power Trans. CMT-52 (CSA, AAL)	38-4-763				
11-22	ZS300519	Tapping Screw, #3 Pan 4x8					
11-23	ZS316567	S-Tight Screw, Pan 4x5					
11-24	SP316332	Rear Panel (U-2) (U/T)	CM-6312,6409				
11-25x	SP316336	Rear Panel (J-2) (JPN)	CM-6312,6405				
11-26x	SP316334	Rear Panel (C-2) (CSA)	CM-6312,6407				
11-27x	SP316335	Rear Panel (A-2) (AAL)	CM-6312,6406				
11-28x	SP316333	Rear Panel (E-2) (CEE)	CM-6312,6408				
11-29x	SP316331	Rear Panel (B-2) (UK, SAA)	CM-6312,6410				
11-30x	ZS447761	Tapping Screw, #2 BR 3x6 (Black)					
11-31	SP316291	Vol. Panel	CM-5311,5312				
11-32x	SP316292	Vol. Panel (BL)	CM-5311,5312				
11-33	TC289484	SW. Joint	CM-6015				
11-34	SB316498	Button (B)	CU-6009				
11-35x	SB316499	Button (B-BL)	CU-6009				
11-36	SB316316	Button (B)	CM-6305				
11-37x	SB316317	Button (B-BL)	CM-6305				
11-38	SB316314	Button (A)	CM-6304				
11-39x	SB316315	Button (A-BL)	CM-6304				
11-40	EF309388	△ Fuse 800MA 250V (U/T, JPN)	39-1-64				
11-41	EF310199	△ Fuse 0.5A 250V (U/T, JPN)	39-1-64				
11-42x	EF309391	△ Fuse 800MA 125V (CSA, AAL)	39-1-65				
11-43x	EF309390	△ Fuse 500MA 125V (CSA, AAL)	39-1-65				
11-44x	EF623103	△ Fuse (SEMKO T-Type) 1AT (CEE, UK, SAA)	39-1-53				
11-45x	EF623103	△ Fuse (SEMKO T-Type) 1AT (UK, SAA)	39-1-53				
11-46x	EF309387	△ Fuse 1A 250V (U/T, JPN)	39-1-64				
11-47x	EF310229	△ Fuse 1A 125V (CSA, AAL)	39-1-65				
11-48x	EF258344	△ Fuse (SEMKO T-Type) 800MAT (CEE, UK, SAA)	39-1-53				
11-49x	EF593706	△ Fuse (SEMKO T-Type) 500MAT (CEE, UK, SAA)	39-1-53				
11-50x	EF258344	△ Fuse (SEMKO T-Type) 800MAT (UK, SAA)	39-1-53				
11-51	EM315859	Bar Meter FIP48CW16YS	53-1-175				
11-52	ES665807	△ Push SW. SDG5P-E SA/80A 250V	25-5-182				

When ordering parts, please describe Parts Number, Description, and Model Number in detail.

## 12. FINAL ASSEMBLY BLOCK



## FINAL ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.
<b>FRONT PANEL BLOCK</b>			
12-1	BD319135	Front Panel Block Comp. GX-M50 (U/T) (U/T, CSA, CEE, UK, SAA)	
12-2x	BD319136	Front Panel Block Comp. GX-M50 (JPN) (JPN, AAL)	
12-3x	BD319160	Front Panel Block Comp. GX-M50-BL	
12-4x	SE316343	Mute Escatcheon	CM-6320
12-5	SZ316386	Slide Cover	CM-6411,6412
12-6x	SZ316387	Slide Cover (BL)	CM-6411,6412
12-7	SE316393	Power Button Escatcheon	CU-6010
12-8	BZ319163	Eject Base (L) Assy GX-M30	CM-6336
12-9	ZG282690	Set Spring	CN-6009
12-10	ZS201407	Screw, Pan 2.3x3	
12-11	ZW270101	'E' Ring 3M	6-1-9
12-12	ZW273756	Nut, #1 M3	
12-13x	ZS558101	Screw, Pan 3x6 w/Washer	
12-14	BZ319161	Meter Window Assy GX-M30	CM-6340
12-15x	BZ319162	Meter Window Assy GX-M30-BL	CM-6340
12-16x	ZG316392	Button Spring	CU-6008
12-17	SB316355	Button (A)	CU-6005
12-18x	SB316356	Button (A-BL)	CU-6005
12-19x	ZW429120	Washer (SPC) D2.3x9x0.5t	
12-20x	ZS609074	Tapping Screw, #2 Pan 2x5	
12-21	BD319261	Lid Cover Assy GX-M50	
12-22x	BD319262	Lid Cover Assy GX-M50-BL	
<b>FINAL ASSEMBLY BLOCK</b>			
12-23x	ZS447840	Tapping Screw, # BR 3x8	
12-24	BC316307	Upper Cover (A) (Except AAL)	CM-6301
12-25x	BC316309	Upper Cover (B) (AAL)	CM-6301
12-26x	BC316308	Upper Cover (A-BL)	CM-6301
12-27	ZS315878	S-Tight Screw, Bind 4x8 (Except AAL)	
12-28x	ZS310588	S-Tight Screw, Bind 4x8 (Black) (AAL, BL)	
12-29x	ZS447761	Tapping Screw, #2 BR 3x6 (Black)	
12-30	SK316310	Double Knob (Upper)	CM-6302
12-31x	SK316311	Double Knob (Upper-BL)	CM-6302
12-32	SK316312	Double Knob (Lower)	CM-6303
12-33x	SK316313	Double Knob (Lower-BL)	CM-6303
12-34	SK316382	Knob (A)	CM-6401
12-35x	SK316383	Knob (A-BL)	CM-6401
12-36x	SK316318	Knob (A)	CM-6306
12-37	SK316320	Knob (B)	CM-6307
12-38x	SK316321	Knob (B-BL)	CM-6307
12-39	SK315932	Knob (C)	CM-6308
12-40x	SK315933	Knob (C-BL)	CM-6308
12-41x	EW306152	△ AC Cord Set U/T Type 2 (U/T)	26-3-71
12-42x	EW638144	△ AC Cord Set (CEE) VM0364-VM0305 (CEE)	26-3-40
12-43x	EW322400	△ AC Cord Set Base 2 Cores (UK)	26-3-73
12-44x	EW322401	△ AC Cord Set SAA 2 Cores (SAA)	26-3-77
12-45	TC316384	Lever (A)	CM-6402
12-46x	TC316385	Lever (A-BL)	CM-6402
12-47	SK316220	Key Board Knob (A)	CM-3304
12-48	SK316218	Key Board Knob (B)	CM-3304
12-49	SK316269	Key Board Knob (C)	CM-3305
12-50	SB316316	Button (B)	CM-6305
12-51	SB316498	Button (B)	CU-6009
12-52	SB316314	Button (A)	CM-6304

# III. INDEX

## 1. Model GX-M30

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.
BA319043	5-1	EJ308986	5-J3	ML321550	9-45	ZS296515	2-8		
BA319044	5-2	EJ316156	5-J2	MV296403	3-21	ZS300436	2-20		
BA319056	7-1	EJ316531	5-J1	MV357208	3-22x	ZS301576	9-9		
BA319141	6-1	EL315798	3-36	MZ283140	6-VS1	ZS303625	2-17		
BA319142	6-2	EM315859	8-IND1	MZ300158	4-21	ZS303660	2-21		
BA319143	6-3	EM315859	9-59	SA305646	9-15	ZS306021	9-23		
BA319144	6-4	EO309363	5-FL3,4	SB316314	9-47	ZS309415	9-16		
BA319145	6-5	EO310608	5-VL1	SB316314	10-49	ZS310337	4-31		
BA319146	6-6	EO310831	5-T1	SB316315	9-48x	ZS310588	10-28x		
BC316307	10-24	EO368403	5-L1	SB316316	9-43	ZS313490	9-17		
BC316308	10-26x	EP300424	4-2	SB316316	10-47	ZS315878	10-27		
BC316309	10-25x	ER303044	5-R61	SB316317	9-44x	ZS316567	9-30		
BD319153	10-1	ER309119	5-FL1	SB316355	10-17	ZS321030	4-34		
BD319154	10-2x	ER309361	5-FL2	SB316356	10-18x	ZS325495	5-4		
BD319155	10-3x	ER309417	6-R18	SB316498	9-41	ZS325495	6-8		
BD319165	10-21	ER561216	6-FR1	SB316498	10-48	ZS325495	9-3		
BD319166	10-22x	ES295773	4-29	SB316499	9-42x	ZS356804	2-10		
BF319561	4-24	ES295784	4-30	SE316343	10-4x	ZS356815	2-11		
BH319078	2-1x	ES310460	9-21	SE316393	10-7	ZS379350	6-9		
BK319074	3-1	ES315159	6-SW1	SK315932	10-37	ZS391522	2-16		
BK319075	3-2x	ES316435	7-SW1to3	SK315933	10-39x	ZS422076	6-7		
BL305015	4-17	ES316533	5-SW4	SK316218	3-5	ZS422076	9-25		
BL311391	2-25	ES316534	5-SW2	SK316218	10-45	ZS422965	3-35		
BL321112	4-15	ES316535	5-SW1	SK316219	3-4x	ZS432843	3-10		
BL321113	4-18	ES316536	5-SW3	SK316220	3-3	ZS447761	9-37x		
BM319077	4-32	ES516036	4-1	SK316220	10-44	ZS447761	10-29x		
BR321109	4-5	ES655806	6-SW1	SK316268	3-6x	ZS447840	4-7		
BR321110	4-6	ES665807	6-SW1	SK316269	3-7	ZS447840	4-26		
BT317339	9-4	ES665807	9-57	SK316269	10-46	ZS447840	9-29x		
BT317341	9-5x	ES665875	6-SW1	SK316270	3-8x	ZS447840	10-23x		
BT317342	9-6x	ET242684	5-TR1,2	SK316310	10-30	ZS455207	9-24x		
BT317343	9-7x	ET303697	5-TR10	SK316311	10-31x	ZS479474	4-22		
BT317344	9-8x	ET307349	5-TR9	SK316312	10-32	ZS524812	2-15		
BZ319161	10-14	ET307349	6-TR1,2	SK316313	10-33x	ZS558101	10-13x		
BZ319162	10-15x	ET307349	6-TR8	SK316318	10-36x	ZS592378	2-27		
BZ319163	10-8	ET318405	5-TR7,8	SK316320	10-34	ZS592378	4-4		
EC301320	6-C1	ET399846	5-TR5	SK316321	10-35x	ZS609074	10-19x		
EC310429	5-C3	ET399846	7-TR9	SP316284	9-14	ZW241200	9-28		
EC312011	5-C11	ET399870	6-TR4	SP316291	9-38	ZW259492	4-10x		
EC313825	5-C24	ET399870	6-TR6	SP316292	9-39x	ZW259683	2-4		
EC313825	5-C39	ET554657	6-TR7	SP316337	9-36x	ZW263946	5-3		
EC313825	7-C10	ET554657	7-TR2	SP316338	9-31	ZW270101	10-11		
EC313826	5-C23	ET638504	5-TR6	SP316339	9-35x	ZW273690	2-19		
EC314688	6-C1	ET639437	5-TR3,4	SP316340	9-33x	ZW273734	2-7		
EC315616	5-C4	ET639437	6-TR5	SP316341	9-34x	ZW273756	10-12		
EC316569	7-C13	ET639437	6-TR3	SP316342	9-32x	ZW282407	4-16		
EC316570	5-C50	ET639437	7-TR1	SZ316344	10-5	ZW290283	3-28		
EC316573	5-C51	ET639437	7-TR3to8	SZ316345	10-6x	ZW290283	9-18		
EC321043	6-C2	EV305639	7-VR1,2	TC282396	3-25	ZW295907	3-12		
EC321074	7-C14	EV316581	5-VR3	TC286007	2-5	ZW295907	4-13		
EC321302	6-C1	EV316582	5-VR11	TC286020	3-30	ZW301934	4-25		
EC551160	6-C1	EV317126	9-1	TC286031	4-23	ZW317171	4-8		
EC551160	9-58	EV322485	5-VR6	TC286165	3-18	ZW357164	2-2		
EC657044	7-C7	EV322486	5-VR2	TC289484	9-40	ZW357164	2-28		
ED308945	6-D1,2	EV322814	5-VR1	TC289675	3-23	ZW357164	4-11x		
ED308952	5-D1	EV322814	5-VT8to10	TC289888	3-14	ZW413267	9-56		
ED310584	9-2	EW648527	5-VR7	TC289890	3-15	ZW429120	10-20x		
ED310584	9-26	EW305691	9-12x	TC310497	10-38x	ZW432753	2-3		
ED316519	6-D3	EW306152	10-40x	TC316290	9-27	ZW432753	4-9x		
ED318408	7-D1,2	EW306427	9-11x	TC319084	9-22	ZW452395	2-12		
ED494583	6-D10to13	EW315767	10-41x	ZG282690	10-9	ZW460787	3-19		
ED498150	6-D4	EW322400	10-42x	ZG286018	2-26	ZW675033	9-46		
ED560913	5-D2to12	EW322401	10-43x	ZG286187	3-16				
ED560913	6-D5to9	EZ631945	9-13x	ZG289236	2-6				
ED560913	7-D1to4	HE315742	2-23	ZG289811	4-27				
ED560913	7-D7,8	HP319079	2-14	ZG289822	3-24				
ED562397	7-DS,6	HZ316252	2-13	ZG289934	3-13				
EF258344	9-55x	HZ316253	2-9	ZG296447	3-31				
EF308848	9-52x	MB282104	3-9	ZG300162	3-27				
EF309387	9-49	MB282778	4-33	ZG300206	3-11				
EF309389	9-50x	MB296458	3-34	ZG312947	3-29				
EF310229	9-51x	MB304807	4-19	ZG316392	10-16x				
EF601942	9-53x	MB510164	9-19	ZG316817	2-24				
EF668474	9-54x	MB699118	4-28	ZG317649	2-22				
EI213390	7-IC1	MC316526	3-32	ZG318436	9-20				
EI306141	5-IC2	MC316527	3-33x	ZG394378	3-20				
EI315799	8-IC1,2	MH316258	4-12	ZG465636	2-18				
EI605013	5-IC1	MH316259	4-14	ZG494403	4-3				
EJ301513	9-10	ML286176	3-17	ZG580770	4-20				
EJ308985	5-J3	ML316228	3-26	ZS201407	10-10				



2. Model GX-M50

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.
BA319255	9-1	ED624903	5-D3	ET639437	6-TR9	SP316332	11-24	ZS608095	4-33
BA319583	6-1	ED624903	5-D5	ET639437	7-TR4to8	SP316333	11-28x	ZS609074	12-20x
BA319584	6-2	ED624903	5-D7to10	EV315412	5-VR5	SP316334	11-26x	ZS669104	2-15
BA319585	6-3	ED624903	6-D7	EV315412	5-VR10	SP316335	11-27x	ZW241200	11-18
BA319586	6-4	EF258344	11-48x	EV315413	5-VR4	SP316336	11-25x	ZW259492	4-10x
BA319587	6-5	EF258344	11-50x	EV315413	5-VR9	SZ316386	12-5	ZW259683	2-3
BA319588	6-6	EF309387	11-46x	EV315414	5-VR7	SZ316387	12-6x	ZW263946	5-3
BA319589	5-1	EF309388	11-40	EV315414	7-VR1,2	TC282396	3-25	ZW270101	12-11
BA319590	5-2	EF309390	11-43x	EV315416	5-VR6	TC286007	2-5	ZW270112	2-12
BA319611	7-1	EF309391	11-42x	EV316579	10-VR1,2	TC286020	3-30	ZW273690	2-22
BC316307	12-24	EF310199	11-41	EV316579	11-54	TC286031	4-23	ZW273734	2-7
BC316308	12-26x	EF310229	11-47x	EV316580	9-VR1	TC286165	3-18	ZW273756	12-12
BC316309	12-25x	EF593706	11-49x	EV316581	5-VR11	TC289484	11-33	ZW282407	4-16
BD319135	12-1	EF623103	11-44x	EV316582	5-VR8	TC289675	3-23	ZW290283	3-28
BD319136	12-2x	EF623103	11-45x	EW305691	11-3x	TC289888	3-14	ZW295907	3-12
BD319160	12-3x	EL213390	7-IC1	EW306152	12-41x	TC289890	3-15	ZW295907	4-13
BD319261	12-21	EL301463	5-IC1,2	EW306427	11-2x	TC305840	3-37	ZW301943	4-25
BD319262	12-22x	EL306141	5-IC3	EW322400	12-43x	TC316290	11-17	ZW317171	4-8
BF319561	4-24	EL315799	8-IC1,2	EW322401	12-44x	TC316384	12-45	ZW357164	2-4
BH319128	2-1x	EJ301513	11-1	EW638144	12-42x	TC316385	12-46x	ZW357164	2-31
BK319074	3-1	EJ308985	5-J3	EZ631945	11-4x	ZG282690	12-9	ZW357164	4-11x
BK319075	3-2x	EJ308986	5-J3	HB316368	2-17	ZG286018	2-32	ZW429120	12-19x
BL305015	4-17	EJ316156	5-J2	HE315742	2-9	ZG286187	3-16	ZW432753	2-2
BL321112	4-15	EJ316531	5-J1	HR314483	2-24	ZG289236	2-6	ZW432753	4-9x
BL321113	4-18	EL315798	3-36	HZ302180	2-18	ZG289811	4-27	ZW452395	2-26
BL321170	2-30	EM315859	8-IND1	HZ316367	2-11	ZG289822	3-24	ZW460787	3-19
BM319077	4-36	EM315859	11-51	MB282104	3-9	ZG289934	3-13		
BR321109	4-5	EO301466	5-T1	MB282778	4-37	ZG296447	3-31		
BR321111	4-6	EO306295	5-C23	MB296458	3-34	ZG300162	3-27		
BT316436	11-19	EO310608	5-VL1	MB304807	4-19	ZG300206	3-11		
BT316437	11-21x	EO315758	5-FL3,4	MB699118	4-28	ZG301494	2-16		
BT316820	11-20x	EP300424	4-2	MC316526	3-32	ZG312947	3-29		
BZ319161	12-14	EP308973	5-RL1	MC316527	3-33x	ZG316373	4-34		
BZ319162	12-15x	ER309119	5-FL2	MH316258	4-12	ZG316392	12-16x		
BZ319163	12-8	ER309120	5-FL1	MH316259	4-14	ZG316817	2-29		
EC295997	6-C2	ER309120	5-FL5	ML286176	3-17	ZG317128	2-14		
EC295997	6-C6	ER309417	6-R18	ML316228	3-26	ZG317336	2-8		
EC301320	6-C1	ER316802	5-R28	MV296403	3-21	ZG317345	2-13		
EC301320	6-C1	ER316802	9-R11	MZ357208	3-22	ZG394378	3-20		
EC306419	7-C13	ER321098	6-R4	MZ283140	6-VS1	ZG465636	2-21		
EC306980	5-C90	ER561216	6-FR1	MZ283140	11-53	ZG494403	4-3		
EC306987	5-C4	ES295773	4-29	MZ300158	4-21	ZG580770	4-20		
EC310542	6-C1	ES295784	4-30	SA305646	11-7	ZS200676	11-15		
EC313298	5-C3	ES310348	4-32	SB316314	11-38	ZS201407	12-10		
EC313298	5-C47	ES315159	6-SW1	SB316314	12-52	ZS300519	11-22		
EC313298	5-C50	ES315747	5-SW3	SB316315	11-39x	ZS300626	2-25		
EC313298	5-C82	ES316435	7-SW1to3	SB316316	11-36	ZS303660	2-27		
EC314688	6-C1	ES316536	5-SW2	SB316316	12-50	ZS306021	11-10x		
EC316188	6-C10	ES316577	5-SW4	SB316317	11-37x	ZS309415	11-8		
EC316524	5-C38	ES316578	5-SW1	SB316335	12-17	ZS310337	4-31		
EC316529	7-C7	ES516036	4-1	SB316356	12-18x	ZS310588	12-28x		
EC316569	6-C22	ES655806	6-SW1	SB316498	11-34	ZS315878	12-27		
EC316569	7-C3	ES665807	6-SW1	SB316498	12-51	ZS316567	11-23		
EC317693	5-C7	ES665807	11-52	SB316499	11-35x	ZS321030	4-38		
EC321066	5-C12	ES665875	6-SW1	SE316343	12-4x	ZS325495	5-4		
EC321066	5-C22	ET301249	5-TR10	SE316393	12-7	ZS325495	6-8		
EC321066	5-C53	ET301249	5-TR18	SK315932	12-39	ZS325495	11-6		
EC321074	7-C14	ET301464	5-TR16	SK315933	12-40x	ZS356804	2-19		
EC321482	5-C78	ET302502	6-TR8,9	SK316218	3-5	ZS379350	6-9		
EC322492	5-C24	ET307349	6-TR1,2	SK316218	12-48	ZS422076	6-7		
EC558202	5-VC1	ET307349	6-TR8	SK316219	3-4x	ZS422076	11-12		
ED219464	5-D1	ET308954	5-TR2	SK316220	3-3	ZS422965	3-35		
ED219464	5-D4	ET308945	5-TR14,15	SK316220	12-47	ZS432843	3-10		
ED223558	5-D11	ET308954	9-TR1	SK316268	3-6x	ZS446940	2-28		
ED223558	6-D3	ET311832	5-TR1	SK316269	3-7	ZS447761	11-30x		
ED223558	6-D16	ET311832	5-TR13	SK316269	12-49	ZS447761	12-29x		
ED308945	6-D1,2	ET399870	6-TR4	SK316270	3-8x	ZS447840	4-7		
ED310584	11-14	ET429748	6-TR6	SK316310	12-30	ZS447840	4-26		
ED318408	11-16	ET554657	5-TR5,6	SK316311	12-31x	ZS447840	11-11x		
ED321099	6-D4	ET554657	6-TR7	SK316312	12-32	ZS447840	12-23x		
ED494583	6-D10to14	ET554657	6-TR10	SK316313	12-33x	ZS455207	11-9		
ED560913	5-D2	ET554657	7-TR2	SK316318	12-36x	ZS455207	11-13		
ED560913	5-D6	ET638504	7-TR1	SK316320	12-37	ZS462947	2-20		
ED560913	6-D5,6	ET639437	5-TR3,4	SK316321	12-38x	ZS464692	2-10		
ED560913	6-D8,9	ET639437	5-TR7	SK316382	12-34	ZS479474	4-22		
ED560913	6-D15	ET639437	5-TR11,12	SK316383	12-35x	ZS523664	4-35		
ED560913	6-D17,18	ET639437	5-TR17	SP316284	11-5	ZS558101	12-13x		
ED560913	7-D1to4	ET639437	5-TR19	SP316291	11-31	ZS590804	2-23		
ED560913	7-D7,8	ET639437	6-TR3	SP316292	11-32x	ZS592378	2-33		
ED562397	7-D5,6	ET639437	6-TR5	SP316331	11-29x	ZS592378	4-4		



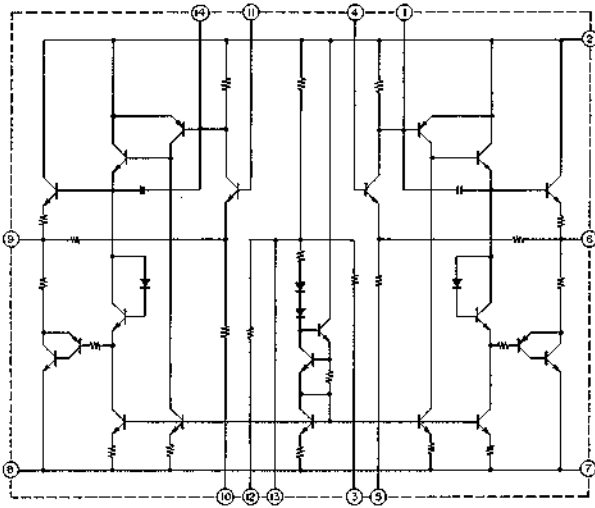
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SECTION 3

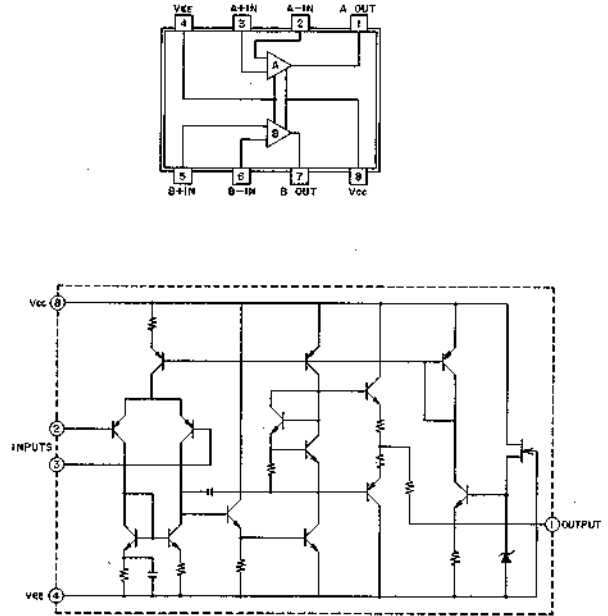
**SCHEMATIC DIAGRAM**

1. SCHEMATIC DIAGRAM OF ICs
2. GX-M30 NO. 4-1 1581828A SCHEMATIC DIAGRAM
3. GX-M30 NO. 4-2 1581829A SCHEMATIC DIAGRAM
4. GX-M50 NO. 4-3 1581830A SCHEMATIC DIAGRAM
5. GX-M50 NO. 4-4 1581831A SCHEMATIC DIAGRAM

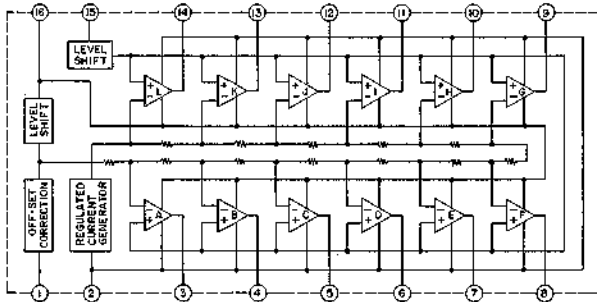
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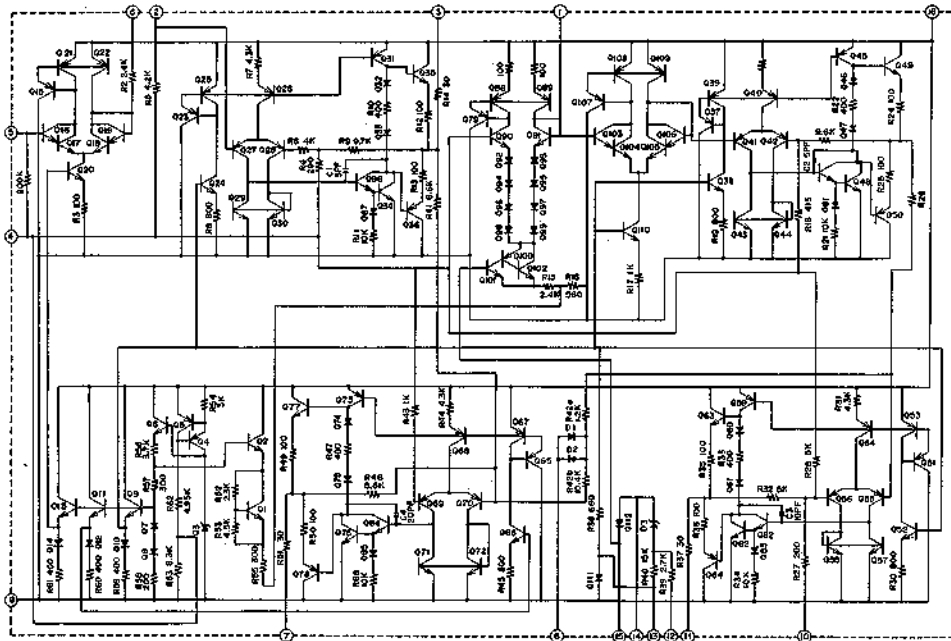
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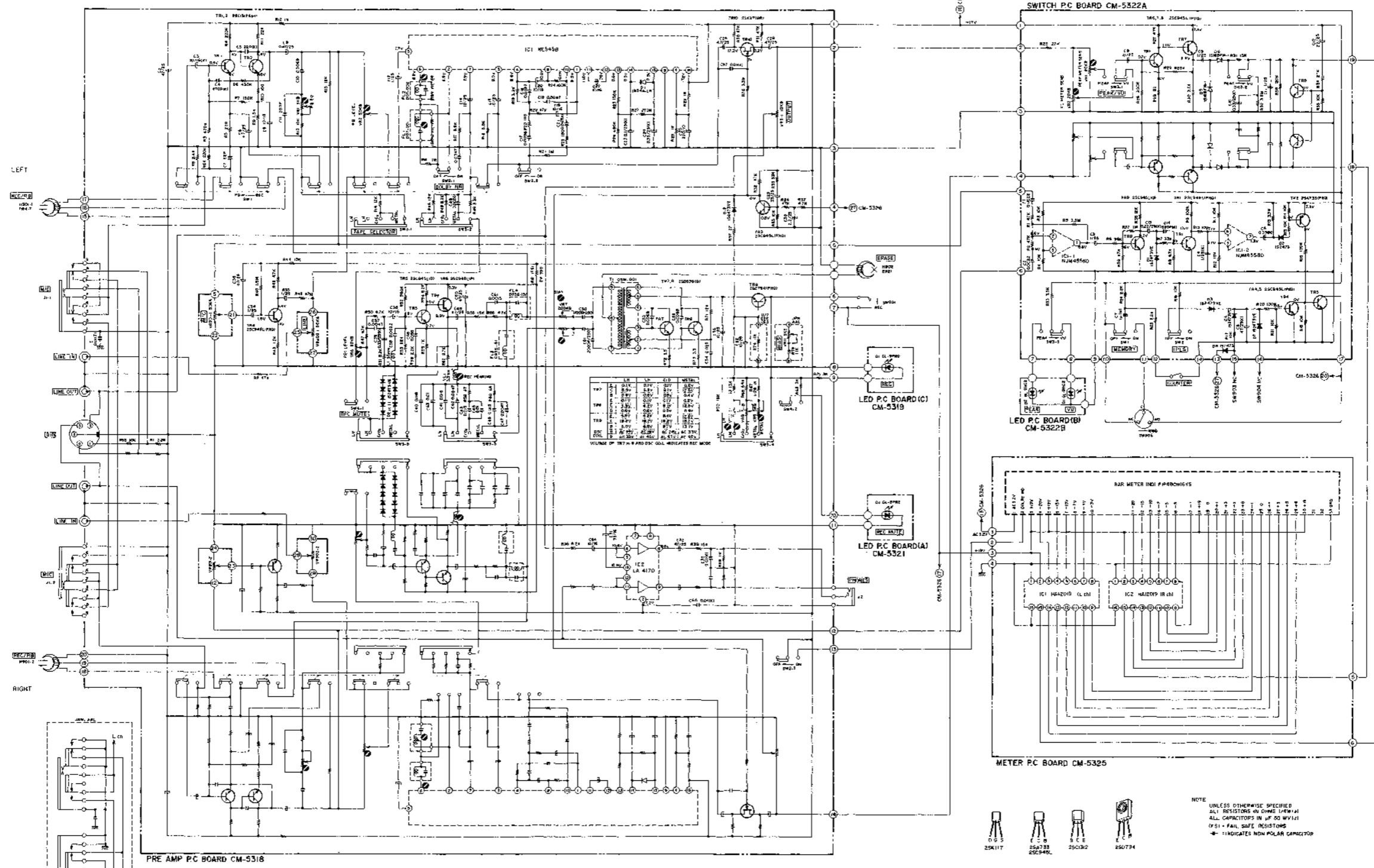
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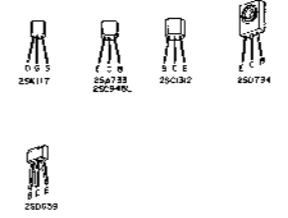
CR713B



GX-M30



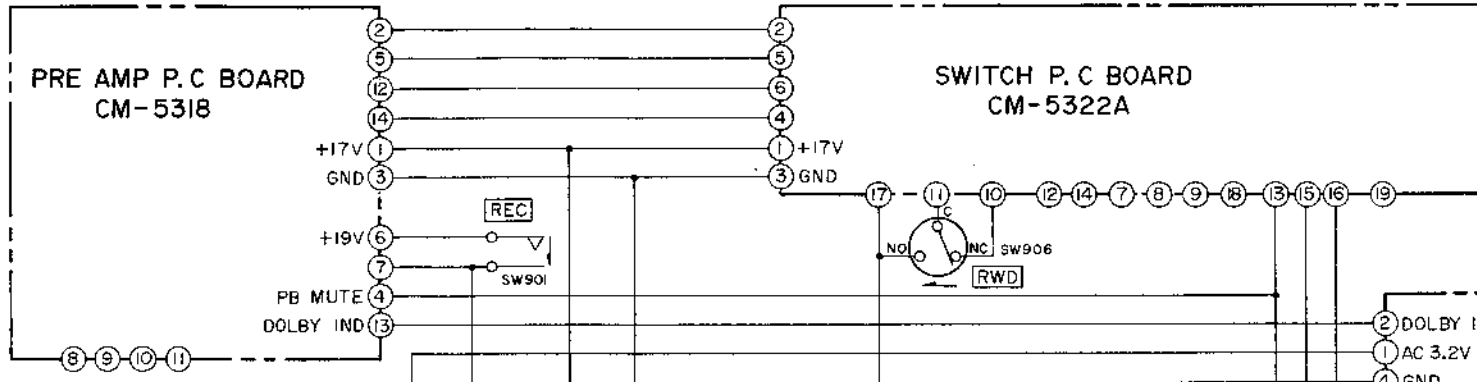
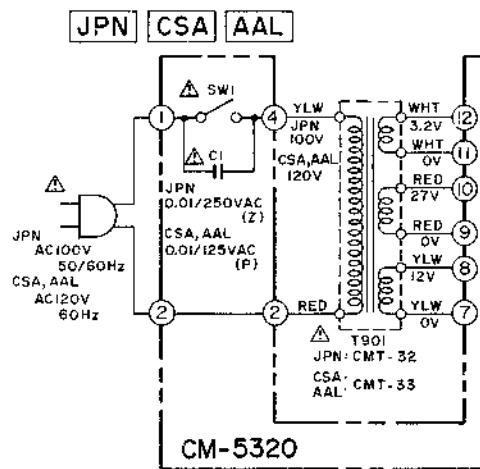
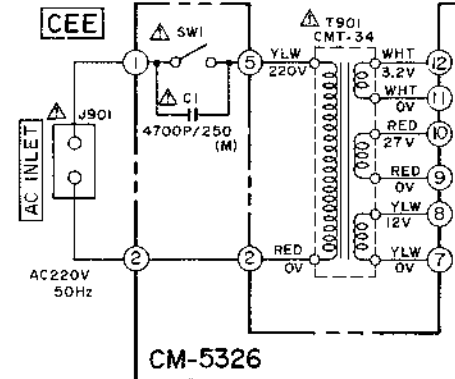
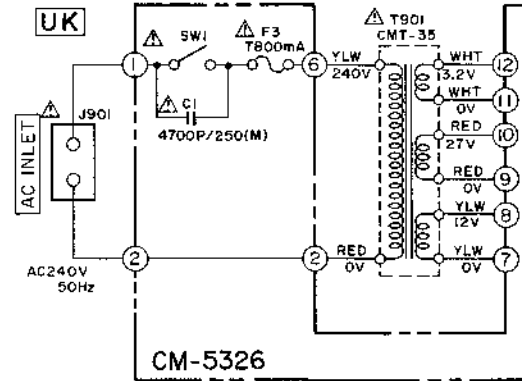
NOTE  
 UNLESS OTHERWISE SPECIFIED  
 ALL RESISTORS IN OHMS (Ω)  
 ALL CAPACITORS IN μF (μF)  
 C.F. = FILL SAFE INDICATORS  
 \* INDICATES NON-POLAR CAPACITOR



GX-M30  
 SCHEMATIC DIAGRAM  
 NO.4-1 1581828A

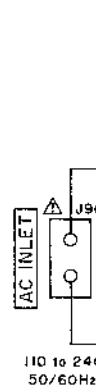
GX-M30

WARNING: INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.  
 AVERTISSEMENT: IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER LES COMPOSANTS QU'UN FONCTIONNEMENT EST CRITIQUE POUR LA SÉCURITÉ QUE PAR DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.



LAMP P.C BOARD CM-1034

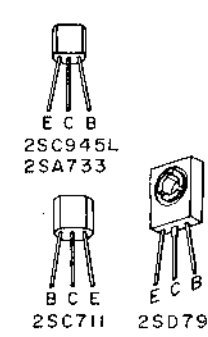
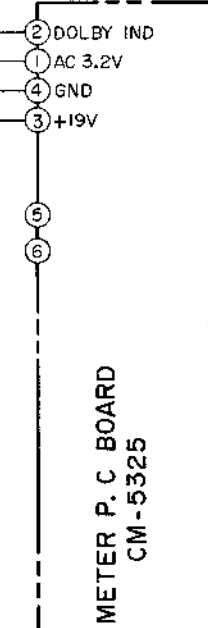
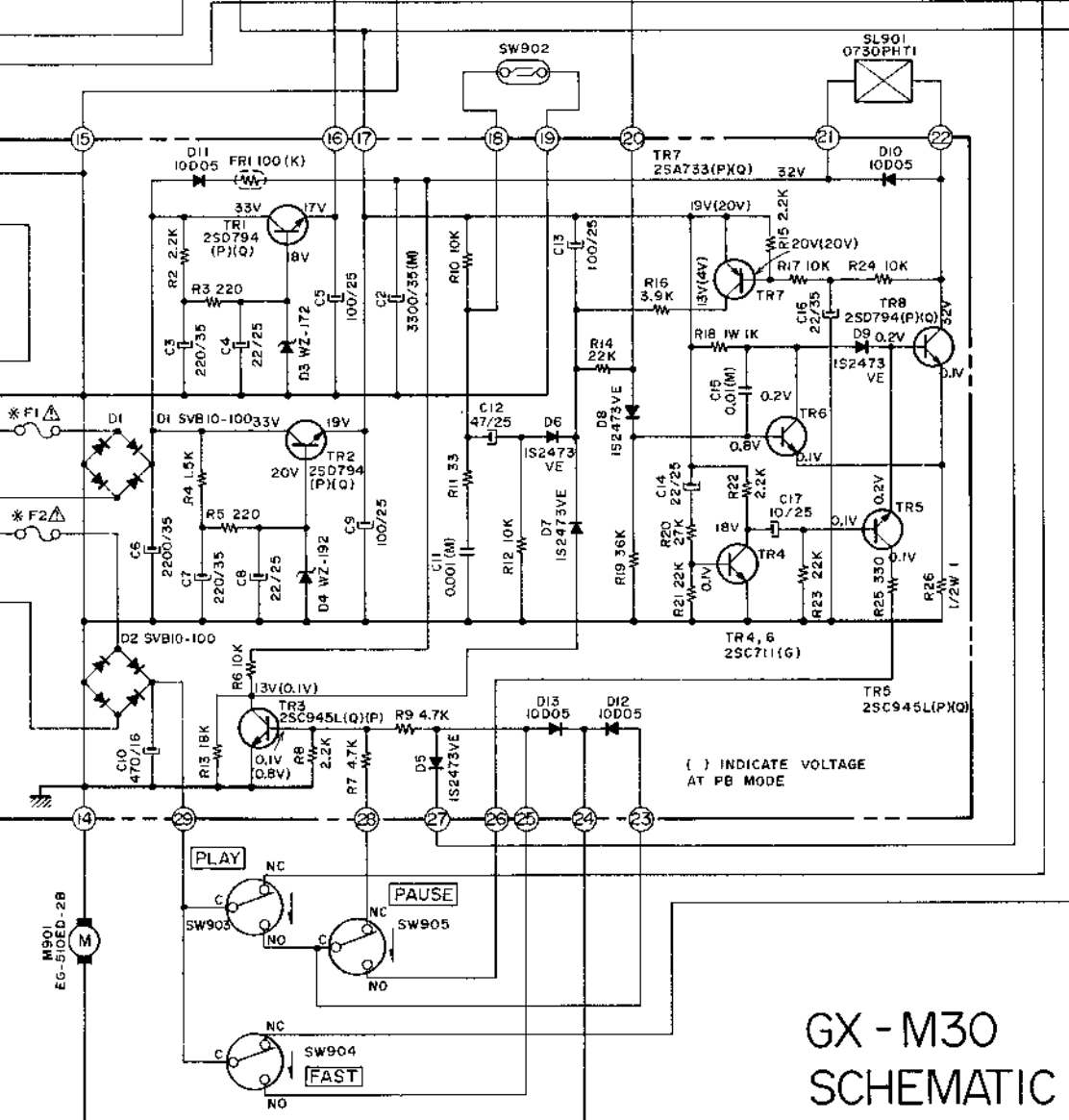
U/T



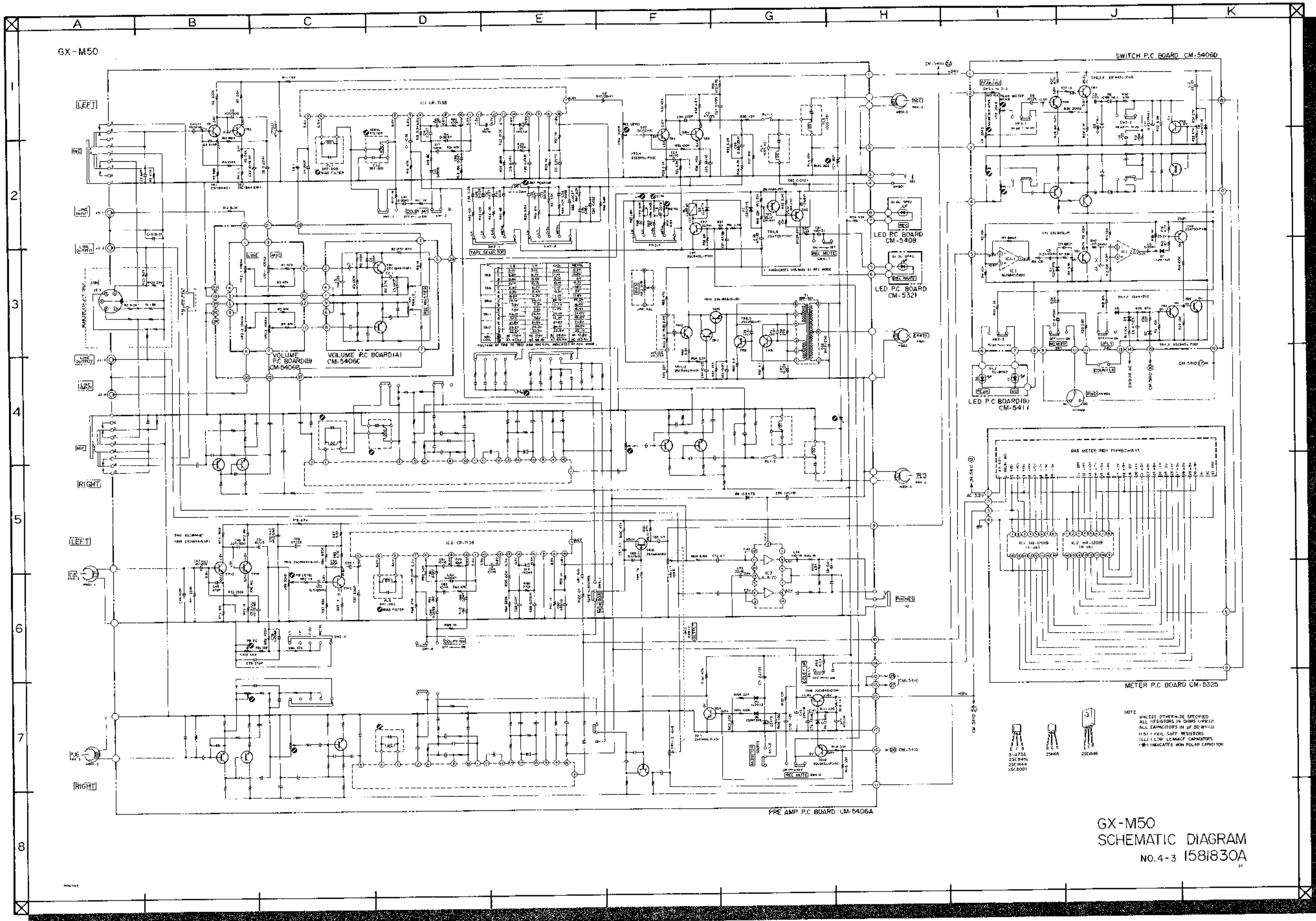
	U/T, JPN	CSA, AAL	CEE UK
F1	1A/250V	1A/125V	630mA
F2	400mA/250V	400mA/125V	400mA

POWER SUPPLY P.C BOARD CM-5326

NOTE  
 UNLESS OTHERWISE SPECIFIED  
 ALL RESISTORS IN OHMS 1/4W(J)  
 ALL CAPACITORS IN µF 50WV(J)  
 POWER TRANSFORMER IS DIFFERENT  
 ACCORDING TO AREA



GX-M30  
 SCHEMATIC DIAGRAM  
 NO.4-2 1581829A



GX-M50  
SCHEMATIC DIAGRAM  
NO. 4-3 1581830A

NOTE  
UNLESS OTHERWISE SPECIFIED  
ALL RESISTORS IN OHMS UNLESS  
ALL CAPACITORS IN P.F. UNLESS  
INDICATED OTHERWISE  
ALL TUBES ARE 6X4 AND 6AR5  
ALL CAPACITORS ARE NON-POLAR UNLESS  
INDICATED OTHERWISE

