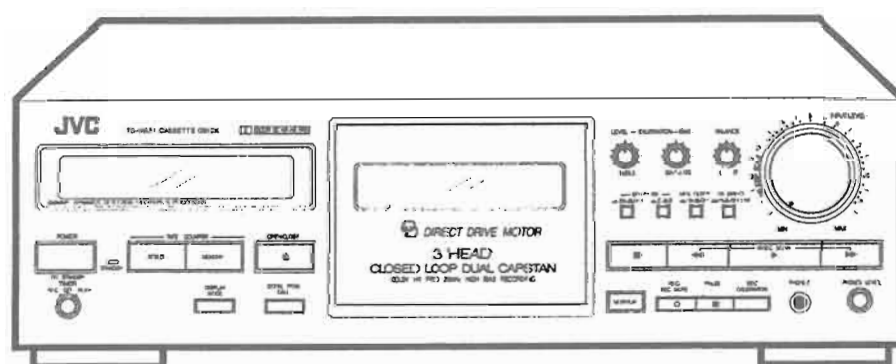


JVC

SERVICE MANUAL

CASSETTE DECK

TD-V662BK A/B/E/EN/G/U/UT
TD-V661TN C/J



COMPU LINK
Component

Area Suffix

A		Australia
B		U.K.
C		Canada
E		Continental Europe
EN		North Europe
G		Germany
J		U.S.A.
U		Other Areas
UT		Taiwan

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■ Safety Precautions

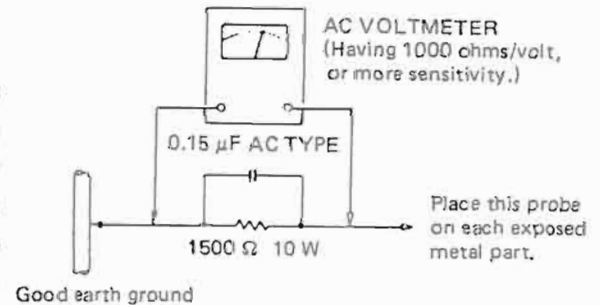
1. The design this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacture's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety — related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of service manual. Electrical components having such features are identified by shading and (Δ) on the schematic diagram and by (Δ) on the parts list in the service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
5. Leakage current check (Electrical shock hazard testing)

After re — assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet, using a "Leakage current tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC(r.m.s.)

- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 ohms 10W resistor paralleled by a 0.15 μ F AC type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each



exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC(r.m.s.). This corresponds to 0.5mA AC(r.m.s.).

◆ Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

JVC

SERVICE MANUAL

CASSETTE DECK

TD-V662BK A/B/E/EN/G/U/UT
TD-V661TN C/J

Supplement

This supplement is issued as errata of [10] Packing Parts List of the Service Manual (No. 4348) previously issued for the above models.

Please cut the following list and paste it on the page 41 for correction of the Packing Parts List of the original service manual.

● Packing parts List

BLOCK NO. **1333**

Δ	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	1	VMP0039-00D	PIN CORD		1		
A	2	VNN2319-671M	INSTRUCTIONS		1	A, B, J	
		VNN2319-661M	INSTRUCTIONS		1	C, E, EN, G, U, UT	
		VNN2319-271M	INSTRUCTIONS		1	EW	
A	3	BT20060	WARRANTY CARD		1	B	
		BT-20066A	WARRANTY CARD		1	B	
		BT-20122	WARRANTY CARD		1	A	
		BT-20122-1-A	WARRANTY CARD		1	A	
		BT-20025K	WARRANTY CARD		1	C	
		BT-20047F	WARRANTY CARD	(EES&PX)	1	J, U, UT	
		BT-20134	WARRANTY CARD		1	G	
A	5	BT20071A	JVC CENTER LIST		1	C	
		BT-20137	SERVICE NETWORK	(PX)	1	J, U, UT	
A	6	E43486-340A	SAFETY I. SHEET		1	B	
		BT-20044G	SAFETY INST.		1	J	
A	8	EW805-001E	REMOTE WIRE		1		
A	9	VNC5311-203	LINE V CAUTION	(EES&PX)	1	U, UT	
A	10	VNC5311-204	LINE V CAUTION	(EES)	1	U, UT	
P	1	VPC2321-M002	CARTON		1		BK
		VPC2319-M002	CARTON		1		TN
P	2	VPH2456-001	CUSHION (L)		1		
P	3	VPH2457-001	CUSHION (R)		1		
P	4	E300196-031B	ENVELOPE		1		
P	6	TDV662BKB-LAB	COMPUTER LABEL		1	B	
		TDV662BKUT-LAB	COMPUTER LABEL		1	UT	
		TDV662BKU-LAB	COMPUTER LABEL		1	U	
		TDV662BKA-LAB	COMPUTER LABEL		1	A	
		TDV661TNC-LAB	COMPUTER LABEL		2	C	
		TDV662BKEN-LAB	COMPUTER LABEL		1	EN	
		TDV662BKE-LAB	COMPUTER LABEL		1	E	
		TDV661TNJ-LAB	COMPUTER LABEL		2	J	
		TDV662BKG-LAB	COMPUTER LABEL		1	G	
P	7	VPE3005-007	POLY BAG	FOR INSTRUCTION	1		
P	8	Q04141H	WIRE CLAMP		1		
P	9	E66416-003	ENVELOPE	(EES&PX)	1	J, U, UT	
P	10	VYN2321-901	NAME PLATE		1	UT	
P	11	QZLA001-005	GREEN POINT LAB		1	G	

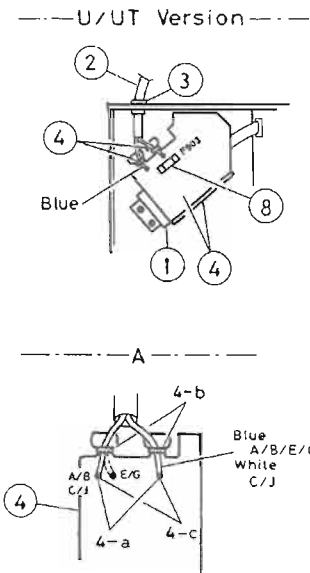
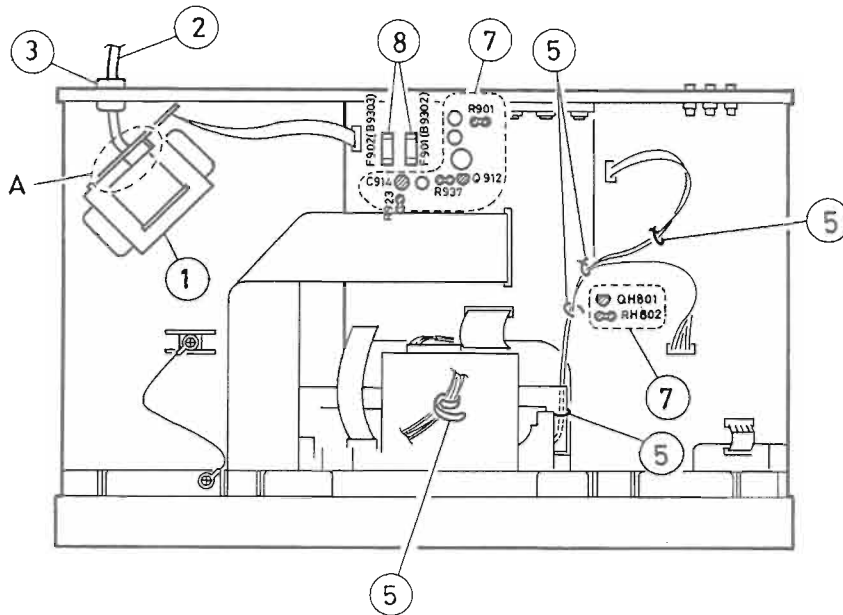
JVC

VICTOR COMPANY OF JAPAN, LIMITED.
AUDIO PRODUCTS DIVISION

10-1, 1-chome, Ohwatari-cho, Maebashi-city 371, Japan

No. 4348B
May 1993

◆ Important Management Points Regarding Safety (Items Demanding Special Safety Precautions)



1. Securely fix the power transformer while confirming its marking specified in the following.

Suffix	Marking	Discription	Model
J	5216507	UL approved No.	TD-V661
C	VTP52A5-011F		TD-V661
A/B/E/EN/G	VTP52Z5-011F		TD-V662
U/UT	VTP52G5-011F		TD-V662

2. Power cord : Make sure of the following markings and inspect exterior scratch and damage.

	Power cord	Attachment plug
J	SPT-2	KP-10W or SU-1P
C	SPT-2	KP-10
E/EN/G	<VDE>	KP-419C or SE-1
B	BASEC BS6500	KP-610 3A
U/UT	<VDE>	KP-8K
A	LTSA-2F	KP-560

3. Install the cord bushing by the specified tool while confirming the marking. Bushing : NIFCO 10P1

4. Wiring terminal

- When installing the power cord, wind it around the terminal by the end before soldering.
- Arrange the wires while binding them nearby the terminal.
- The end of respective power cords is soldered in the air and the space from others must be 3.2 mm or more in the distance.

5. When arranging every wire and cable, avoid the active power parts, mobiles, heat generating parts, sharp edged parts, etc.

7. Since the following parts are heat generation ones, they must no contact with electrolytic capacitors, wires, etc.

- Parts are inflammables. Make sure of their lift-up condition for the purpose.

- Parts in box are out of JVC's control.

D902 **Q905** **Q912** **QH851** **R901** R921 R923
R937 R938

Other parts

C903 C904 2200uF/25V C/J version (VEND TYPE)

8. All fuses must securely be connected. In A/B/E/EN/G/U/UT version, F901 and F902 must be specified by the rating of 800 mA shown on the surface as well as by the marking of Ⓢ or in U/UT version, F903 must be specified by the rating of 200 mA shown on the surface as well as by the marking Ⓢ or Ⓢ.

■ Features

1. Pure and direct design with 3-head combination mechanism
 - Closed-loop dual-capstan mechanism
 - Pulse servo capstan D.D. (direct drive) system
 - METAPERM combination (rec + play) head and 2-gap ferrite erase head
 - PCOCC (Pure Copper by Ohno Continuous Casting) head winding wire for the superior signal transmission
 - 2 pairs of line input jacks including CD direct input
 - High bias frequency of 210 kHz for improved recording
2. Electrically driven cassette holder
3. Dolby® HX PRO headroom extension
4. Dolby B/C noise reduction systems provided for recording and playback independently
5. Calibration function for according to the characteristics of individual tapes
 - Recording bias and level can be adjusted (built-in oscillator).

6. Multi music scan mechanism for either direction
"Under License of Staar S.A., Brussels, Belgium"
7. Timer start mechanism
8. DDRP (Dynamics Detection Recording Processor) —
With the DDRP function, the recording level is adjusted automatically so that recording is performed in optimum condition.
9. COMPU LINK-3/SYNCHRO terminal
10. Other features
 - 2-color fluorescent peak level indicator
 - Digital peak/peak level meter (with peak hold function)
 - 4-digit linear counter
 - Auto monitor
 - Auto tape select mechanism
 - MPX filter switch
 - Headphone volume control

■ Specifications

Type	: Cassette deck
Track system	: 4-track, 2-channel
Tape speed	: 4.8 cm/sec (1-7/8 inch/sec)
Frequency response	: (-20 dB recording) Type IV tape : 10 – 21,000 Hz 15 – 19,000 Hz (±3dB) Type II tape : 10 – 19,000 Hz 15 – 17,000 Hz (±3dB) Type I tape : 10 – 19,000 Hz 15 – 17,000 Hz (±3dB)
S/N ratio	: 59 dB (S = 315 Hz, k3 = 3 %, N = A-weighted, Type IV tape) The S/N is improved by about 15 dB at 500 Hz and by max. 20 dB at 1 kHz to 10 kHz with Dolby C NR on and improved by 5 dB at 1 kHz and by 10 dB at above 5 kHz with DOLBY B NR on.
Improvement of MOL	: 4 dB at 10 kHz with Dolby C NR on.
Wow and flutter	: 0.035 % (WRMS), ±0.09 % (DIN/IEC)
Channel separation	: 40 dB (1 kHz)
Crosstalk	: 60 dB (1 kHz)
Harmonic distortion	: k3; 0.7 % (Type IV tape, 315Hz, 0 VU)
Heads	: Record (METAPERM: PCOCC winding wire) × 1 Playback (METAPERM: PCOCC winding wire) × 1 Erase (2-Gap Ferrite) × 1

Motors	: Pulse servo direct drive motor for capstan × 1 DC motor for reel × 1 DC motor for mechanism drive × 1
Fast forward/ Rewind time	: Approx. 100 sec. with C-60 cassette
Input terminals	: CD DIRECT (× 1 circuit) LINE IN (× 1 circuit)
Output terminals	: LINE OUT (× 1 circuit) PHONES × 1
Other terminals	: COMPU LINK-3/SYNCHRO × 2
Power requirement	: AC 240 V, 50/60 Hz (Australia/U.K.) AC 120 V, 60 Hz (U.S.A.)
Power consumption	: 20 W with power switch ON 5.8 W with power switch STANDBY
Dimensions (W × H × D)	: 435 × 133 × 332 mm (17-3/16 × 5-1/4 × 13-1/8)
Weight	: 3.2 kg (11.5 lbs.)
Accessories	: Pin plug cord 2 Remote cable 1

Design and specifications are subject to change without notice.

Instructions (Extraction)

◆ Connections

1. Connection to a stereo amplifier

- Do not switch the power on until all the connections are completed.
- Insert the plugs firmly, or poor contact will result, causing noise.
- When the pin-plug cords are employed, always connect the white plug to the left channel terminal. This helps to avoid reversed connections.
- When using the Compu Link Control System version 3, do not connect the power cord to the SWITCHED AC OUTLET of an amplifier or receiver. Otherwise, the automatic power on/off (STANDBY) function cannot be carried out.

Note:

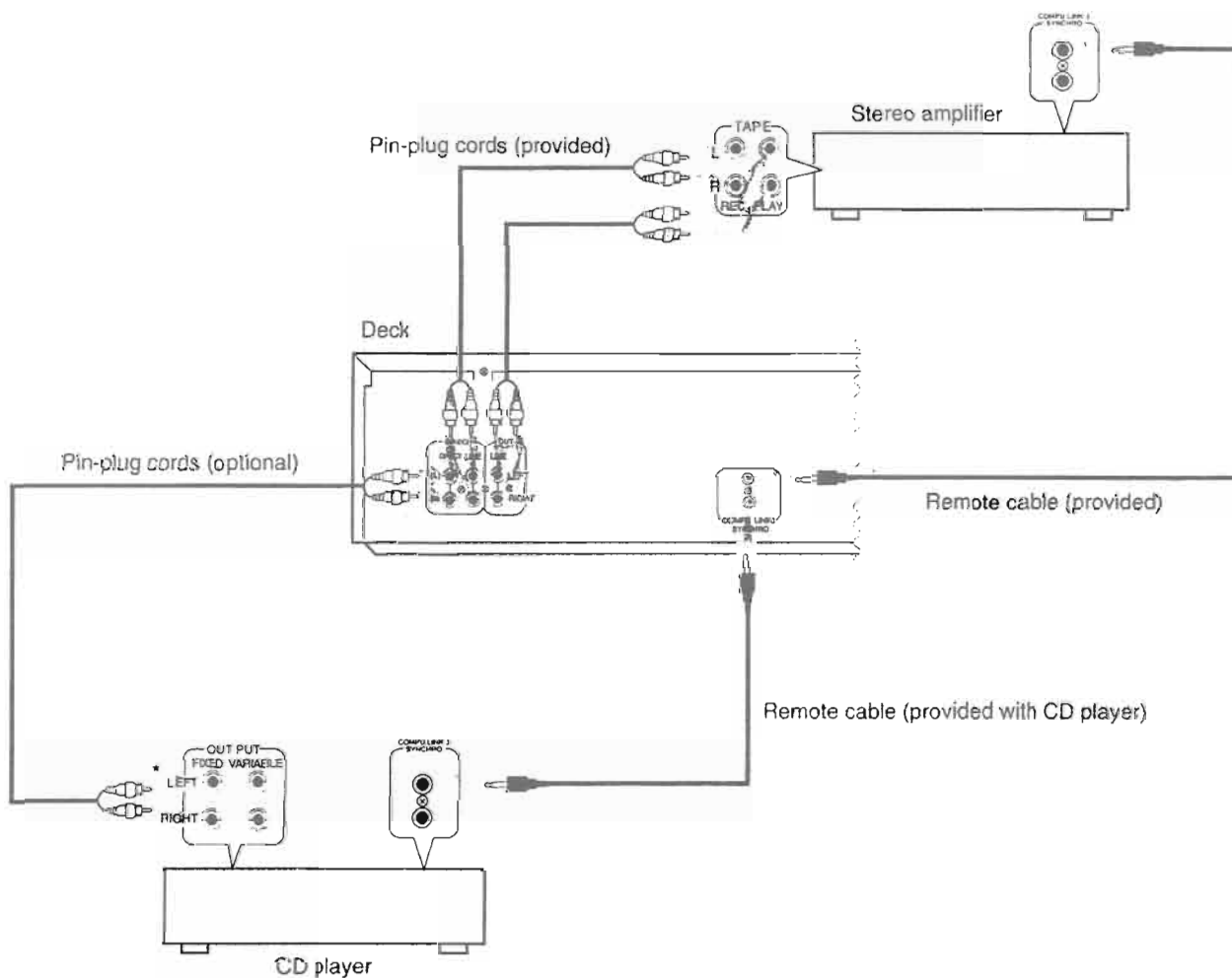
When installing the deck, be sure to install at a distance from your amplifier. If they are stacked, noise (hum) may occur.

2. Remote cable connection for COMPU LINK

- By connecting a remote cable, COMPU LINK functions (automatic power on/off (STANDBY), automatic source selection, synchronized recording and DDRP recording) can be performed. In this time the provided pin-plug cords must be also connected.
- When making synchronized recording with a CD player, connect the remote cable to the COMPU LINK-1/SYNCHRO or COMPU LINK-3/SYNCHRO jacks.

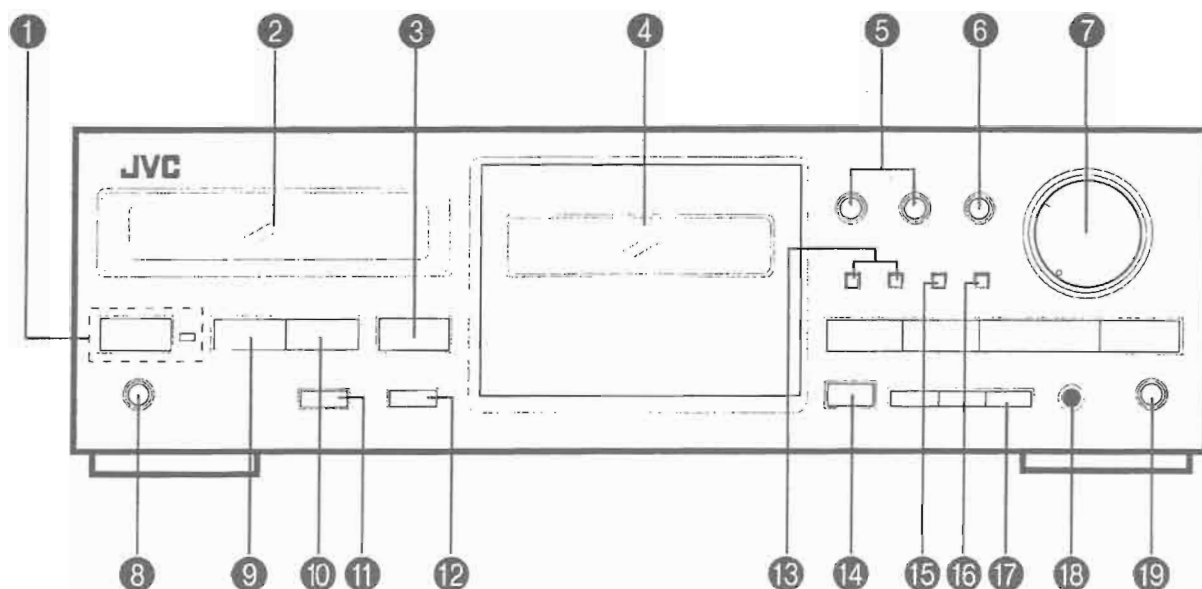
Notes:

1. When making synchronized recordings, only a single deck should be connected to the amplifier.
2. If a component is not a JVC COMPU LINK component, bypass it when making the remote cable connections.
3. This deck can be connected with an amplifier and a CD player which have the COMPU LINK-1/SYNCHRO jacks for COMPU LINK performance.(see page 10 for detail)



* When making DDRP recording connect pin-plug cords with the terminals "VARIABLE".

◆ Name of Parts and Their Functions



1 POWER switch and STANDBY Indicator

2 Multi mode display

① CALIBRATION indicator

② Peak level meter

These indicators light according to the level of the signal being recorded or the level of the signal recorded on the tape.

0 dB : IEC (DIN) STANDARD LEVEL (250 nWb/m)

0 VU : Signal level at 160 nWb/m

□ : DOLBY NR STANDARD LEVEL

③ MEMORY indicator

④ Tape counter/Digital peak indicator

This functions as a tape counter or digital peak indicator according to the setting of the DISPLAY MODE button.

⑤ DDRP indicator

⑥ Monitor indicator

⑦ Mechanism mode indicators

⑧ Tape types and recording guide indicators

⑨ HX PRO indicator

3 ▲ OPEN/CLOSE button

4 Cassette holder

5 CALIBRATION controls

To adjust the recording bias and sensitivity according to the tape to be used. If adjustment is not performed, set to the center position.

6 BALANCE control

Adjusts the balance between the signals input via the left and right LINE IN jacks.

7 INPUT LEVEL control

Adjust the recording level with this control.

8 TIMER switch

When an optional timer is used, recording and playback can be performed at any desired time.

9 RESET button

Press to reset the counter to "0.00" and to clear the memory

mode.

10 MEMORY button

Use this button stop the tape automatically at the position which the tape counter is "0.00" in either rewind or fast forward mode.

11 DISPLAY MODE button

Use this button to change the mode between "tape counter" and "digital peak".

12 DIGITAL PEAK CALL button

Press to call up the stored (memorized) maximum value or to reset the memory in the digital peak mode.

13 DOLBY NR switches

Set to B or C for recording using the Dolby NR system or for playing back a tape that was recorded using the Dolby NR system.

14 MONITOR button

When this button is pressed, it changes between source monitoring and tape monitoring.

15 MPX FILTER switch

When an FM stereo broadcast is to be recorded using Dolby NR, set this to ON to prevent the Dolby NR circuit from malfunctioning (otherwise the sound quality could deteriorate.)

16 CD DIRECT switch

ON : Set to ON when selecting the CD DIRECT input mode.

OFF/LINE : Set to OFF/LINE when recording from a stereo amplifier.

17 CALIBRATION button

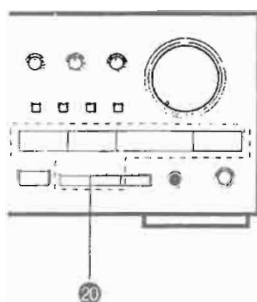
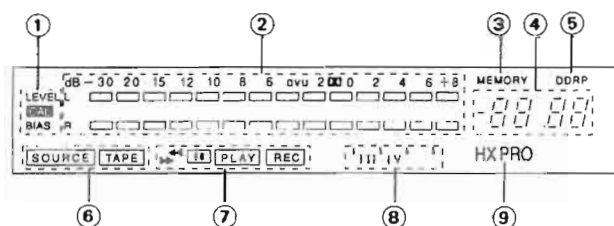
18 PHONES Jack

Connect headphones (with an impedance of 8Ω to 1 kΩ).

19 PHONES LEVEL control

20 Cassette operation buttons

- (stop) : Press to stop the tape.
- ◀ (rewind) : Press to rewind the tape.
- ▶ (play) : Press to start recording or playback.
- ▶▶ (fast forward) : Press to fast forward the tape.



○ REC/REC MUTE : Press the ► (play) button while pressing this button to start recording, and press to leave an appropriate non-recorded section. (See page 7.)

■ PAUSE : Press to stop the tape temporarily during recording and playback. Press the ► (play) button to release the pause mode. When pressed together with the ○ REC/REC MUTE before recording, the unit will enter the record-pause mode.

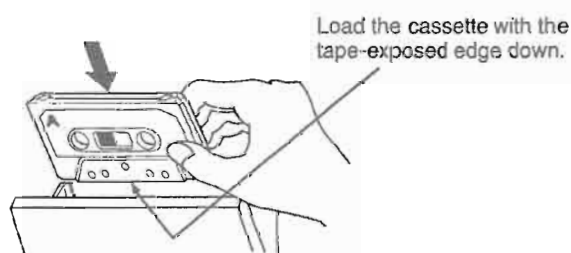
◆ Cassette loading

(With the POWER switch set to STANDBY.)

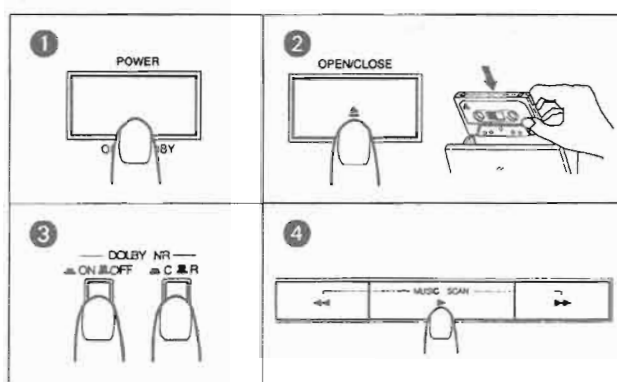
1. Press the ▲ OPEN/CLOSE button to open the cassette holder.
2. Load a cassette as shown.
3. Press the ▲ OPEN/CLOSE button to close the cassette holder.
 - It can also be closed by pushing the cassette holder.
 - After pressing the ► (play) button, closing the cassette holder, playback begins immediately.

Note:

- When the ► (play) or ■ PAUSE button is pressed instead of pressing the ▲ OPEN/CLOSE button, the cassette holder closes automatically and the operation corresponding to the pressed button is performed.



◆ Playback



Operate in the order of the numbers in the illustration.

- 1 Press the POWER switch to set to ON .
 - 2 Load a prerecorded cassette.
 - 3 Press the same DOLBY NR switches that were pressed when the tape was recorded.
 - 4 Press the ► (play) button to start playback.
- When the deck contains a tape, the deck is turned on automatically and the tape is played back by only pressing the ► (play) button.
 - It changes to the tape monitor mode automatically and "TAPE" will appear on the display.
 - To stop playing back midway Press ■ (stop) button.

Tape counter display

When the power is turned on, the counter value which the POWER switch was set to STANDBY, appears on the display. When the tape runs, the counter functions as a 4 digit linear tape counter. The running time is displayed in minutes and seconds (countdown function included). Since the counter is not a clock, there may be a discrepancy between the actual recording and playback times. This discrepancy will vary depending on the length of the tape and the hub diameter.

To set the counter to "0.00".

Press the RESET button.

MEMORY BUTTON

Memory function operates at the point where the tape counter is "0.00". Press the RESET button to set the counter to "0.00" at the point to which you want the tape to be rewound and from which you want to listen to during recording or playback. The tape stops automatically at the point where the counter is "0.00" in either the fast forward or rewind mode.

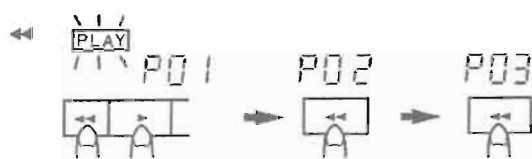
- The point where the counter is "0.00" is stored during any mode (recording, playback or stop), but the memory function (automatic stop) operates only in the fast forward or rewind mode.
- If pressing the MEMORY button again, the memory will be cleared. It will also be cleared if pressed the RESET button and reset the counter to "0.00".

MULTI MUSIC SCAN

- The multi music scan mechanism of this unit allows you to quickly locate the beginning of a specific tune (up to 99 tunes before or after the current tune).
- Fast forward scan



- Rewind scan



Procedure

- Press the ► (play) and ◀◀ (or ▶▶) buttons simultaneously.
- When more than 2 tunes are to be skipped, after procedure 1 press the ►► (or ◀◀) button the number of times you want to skip tunes. The number of tunes to be skipped is displayed in the counter.

Notes:

In the following cases, the mechanism may not operate correctly. This is not a malfunction; use the mechanism according to the type of program.

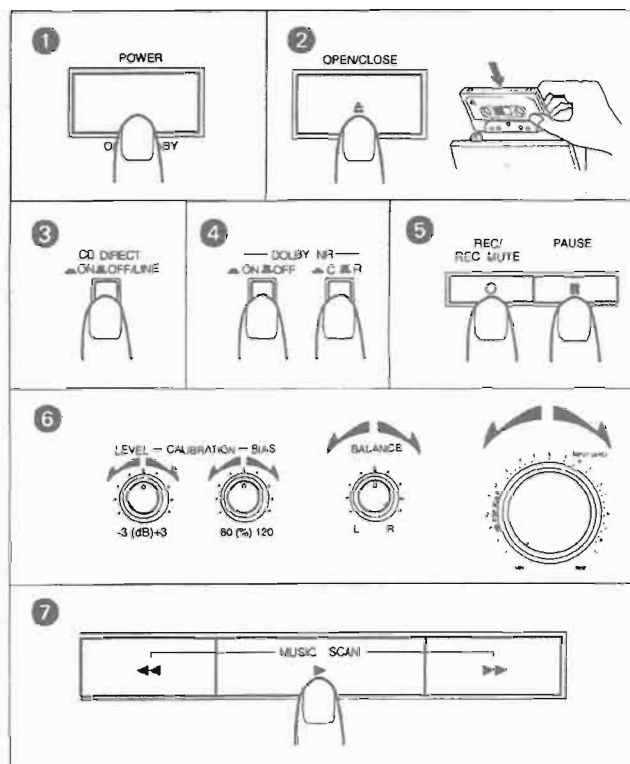
- Tapes with tunes having long pianissimo passages (very quiet parts) or non-recorded portions during tunes.
- Tapes with short non-recorded sections.

◆ Recording

Operate in the order of the numbers in the illustration.

- Make sure the safety tab of the cassette has not been broken off.

It should be noted that it may be unlawful to re-record prerecorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic work embodied therein.



Manual recording

- Press the POWER switch to set to ON.
- Load a cassette for recording.
- Select the recording input.
- Set the DOLBY NR switch as required.
- Press the ■ PAUSE button and ○ REC/REC MUTE button (record-pause mode).
The ■ and REC indicators light.
- Adjust the recording level, bias and balance.
(See pages 8 & 9.)
The BALANCE control only works with line input.
- Press the ► (play) button to start recording.

DDRP (Dynamics Detection Recording Processor) recording

- DDRP recording is performed with suitable JVC CD players and the recording level adjustment is performed automatically.
- Since recording level adjustment is performed automatically for different types of tape (normal, CrO₂ and metal), the adjustment of INPUT LEVEL and BALANCE controls are not required.
- Read the instruction book of your CD player carefully.

DOLBY NR and DOLBY HX PRO

Dolby NR System

To reduce the hiss inherent in tape recording, use the Dolby NR System when making recordings. When listening to a tape recorded with the Dolby NR System, set the DOLBY NR switch to B or C according to the system selected in the recording mode.

Note:

The sound quality will change if the positions of the DOLBY NR switch are different in recording and playback.

Dolby HX PRO headroom extension

When a source which contains many high-frequency components is recorded, these high-frequency signals have the same function as bias and therefore, the effective bias current changes.

This will result in phenomena such as changes in the level of low-frequency signal and subsequent distortion and reduction of the high-frequency saturation level.

Dolby HX PRO headroom extension system controls the bias current so that the effective bias is constant even when there are fluctuations in the high-frequency components of the input signal.

This greatly improves the high-frequency saturation level while reducing the low-frequency signal level variations and distortion.

- The dynamic sound recorded with this system sounds the same even when the tape is played back in a deck that does not have Dolby HX PRO.
- This system automatically works when in recording; however, Dolby HX PRO is not a noise reduction system.

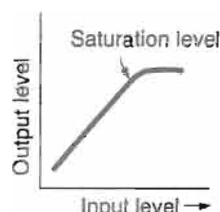
RECORDING LEVEL ADJUSTMENT

It is best to adjust so that the maximum sound level of the source to be recorded reaches the very limit of the saturation level of the tape to be used.

- When the recording level is too low, the hiss noise inherent in the tape will be conspicuous.
- When the recording level is too high, exceeding the saturation level, the recording will contain cracking noise and will be distorted.

Saturation level means:

When the recording input is increased gradually, the output increases proportionally. However, once it reaches a certain level, the output cannot increase any further. Moreover, the output will be distorted if the input is increased beyond this point. The level at which this occurs is called the tape's "saturation level".



How to adjust the recording level

- ① Set to the source mode (record-pause).
- ② Adjust the recording level using the INPUT LEVEL control.



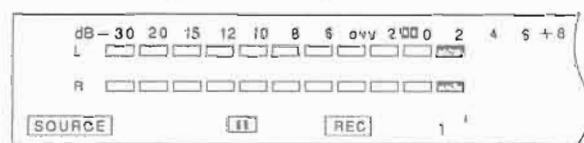
With Type IV (metal) tape

Because of metal tape's higher saturation level, it is OK that "+ 6" lights occasionally.



With Type I (normal) or Type II (chrome) tape

It is OK that "+ 2" lights occasionally.



Digital Peak Indicator

This is a digital display that shows the recording/playback level and is interlocked with the peak level meter under the control of the meter microcomputer. A maximum peak level memory function is provided so that the peak level can be checked after as well as during recording.

For 0 dB and under:

For +8 dB and over:

Calling up the maximum level and resetting the memory

When the "DIGITAL PEAK CALL" button is pressed once, the peak level held in memory flickers in the display for approximately 5 seconds. If the CALL button is pressed again while the peak value is displayed, the previous contents of memory will be cleared and this newly input maximum level will be held in memory as the peak level.

In addition, the digital peak function holds the level of whichever of the left or right channels is the higher and displays it.

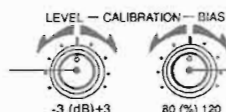
CALIBRATION OPERATION

There are various types of cassette tapes, and their characteristics differ slightly even when they are of the same type. Generally, the bias current and equalization characteristics suitable for the type of tape being used can be obtained by the Auto Tape Select system.

However, to optimize the response of the tape to be used, it is better to adjust the recording bias so that distortion is minimized and the frequency characteristics are as flat as possible.

When recording using Dolby NR, the recording and playback levels should be matched to achieve the best Dolby NR effect.

Compensate for the tape sensitivity within ± 3 dB.

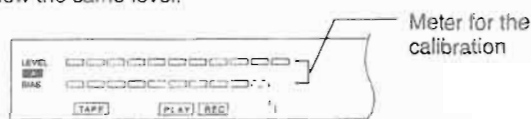


Adjust the bias current within $\pm 20\%$.

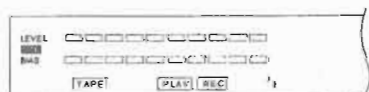
How to adjust

Adjust the bias current to compensate for the tape sensitivity while recording the test tone.

1. Press the **▶** button while pressing the CALIBRATION button. The meter changes to calibration mode and the test tone is recorded.
2. Adjust the BIAS control so that the upper and lower meters show the same level.



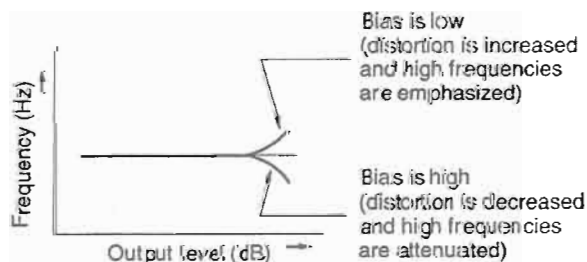
3. Adjust the LEVEL control that the upper and lower meters read "▲".



4. Press the **■** (stop) button to stop the tape. The level meter works when the **■** (stop) button is pressed. This is not a malfunction.

The optimum bias is set and the tape sensitivity is compensated for by the above procedures. To start recording, rewind the tape and erase the test tone. (See the following "Erasing".)

When the bias is low (80% position) or high (120% position), the frequency response is as shown in the following diagram.



Notes:

- When using Type IV (metal) tape, the change in the frequency characteristic when the bias control is adjusted is small compared with the change when using Type I (normal)- or Type II (high position) tape. The optimum bias may not be obtained within adjusting range ($\pm 20\%$) of this deck due to tape characteristic difference.
- During calibration, monitoring is impossible regardless of whether the monitor mode is set to "tape" or "source".

Erasing

When recording on a prerecorded tape, the previous recording is automatically erased and only the new program is recorded on the tape.

To erase a tape without making a new recording...

Follow the section "RECORDING" but in step 6, set the INPUT LEVEL control to MIN.

AUTOMATIC RECORD MUTING

This facility is used to eliminate undesired sections and leave an appropriate non-recorded section.

A. To leave non-recorded sections of about 4-5 seconds automatically

1. When the undesired section comes during recording, press the **○** REC/REC MUTE button and release it.
2. The REC indicator flashes and a non-recorded section is made during record muting operation. About 4-5 seconds later, the tape automatically stops, and the unit enters the record-pause mode.
3. Press the **▶** (play) button to restart recording.

B. To leave non-recorded sections of more than 4-5 seconds

1. Keep the **○** REC/REC MUTE button pressed continuously as long as you want to make a non-recorded section. By releasing the finger from the button after the above operation, the unit enters the record-pause mode.
2. Press the **▶** (play) button to restart recording.

C. To leave non-recorded section of less than 4 seconds

- When the undesired section comes during recording... After the **○** REC/REC MUTE button is pressed, press the **▶** (play) button before the unit enters the pause mode to start recording again, or press the **■** PAUSE button to enter the record-pause mode.
- The PEAK LEVEL INDICATOR lights even during record muting according to the input level which can be heard from the speakers or headphones so that recording can be resumed at the exact point on the tape.

MONITOR BUTTON

Since the unit is a three-head deck with separate record, play and erase heads, the sound from the source can easily be compared with that recorded on the tape by switching this button.

A. Source monitoring

Press the MONITOR button to indicate "SOURCE" in the display to monitor the sound from the source. The PEAK LEVEL METER and DIGITAL PEAK indicators show the level of the input signal; adjust the recording level while monitoring the source.

B. Tape monitoring

Press the MONITOR button to indicate "TAPE" in the display to monitor the signal picked up by the play head after it has been recorded on the tape. In this way, you can check whether it has deteriorated because of dirt on the head, etc.

This unit automatically enters the source monitor mode when the record-pause mode is engaged, and the tape monitor mode when the record or playback mode is engaged.

CD DIRECT INPUT

When a CD player or other component is connected to the CD DIRECT terminals as shown in "CONNECTIONS" on page 4, a direct signal will be input without passing through the stereo amplifier.

◆ Compu-Link Control System



The Compu Link Control System controls relative operations between components automatically and facilitates various operations.

This is a system originated and developed by JVC for facilitating various system operations. There are two versions of this system; version 1 and 3. (For version 1 components, "COMPU LINK-1 / SYNCHRO" is marked on the rear panel. For version 3 components, "COMPU LINK-3 / SYNCHRO" is marked on the rear panel. This unit belongs to version 3.)

The version 3 system controls relative functions between this unit and an amplifier or receiver, in addition to all of the functions of version 1.

Automatic Power On/Off (STANDBY) Function (COMPU LINK-3)

This function is available when an amplifier or receiver having a COMPU LINK-3/SYNCHRO terminal is connected. For example, if a deck contains a tape, the deck is turned on automatically and the tape is played back by only pressing the ► (play) button. When the amplifier or receiver is switched STANDBY, the source unit is automatically switched STANDBY.

Automatic Source Selection (COMPU LINK -1,3)

When the provided remote cables are used for connecting this unit to other components which have COMPU LINK-1 or 3/SYNCHRO terminals, the switch-over of all system components is possible with simple one-touch of the source selector button of JVC's amplifier or receiver.

By doing this, the corresponding component will start playing automatically.

The source select button of the remote control unit or the activation button of the desired component can be also used for this purpose. When the components have been switched over, the previous component will stop playing within five seconds.

Synchronized Recording (COMPU LINK -1,3)

Synchronized recording refers to the process in which the deck starts recording in synchronism with the CD player. Perform the synchronized recording as follows:

1. Set the cassette deck to the record-pause mode in accordance with the recording procedures on page 8.
2. If you want the programmed recording, program the desired tunes in any order you wish to hear.
3. Press the PLAY/PAUSE button of the CD player. By so doing, the cassette deck is placed in the record mode and synchronized with the CD player for recording. Synchronized recording thus can be made possible.

DDRP (Dynamics Detection Recording Processor) recording

The DDRP function makes possible fully automatic recording when used with a suitable JVC CD player. When the DDRP button of a suitable JVC CD player is pressed, the recording level is first adjusted automatically, then recording starts; it is not necessary to start recording by the normal procedure.

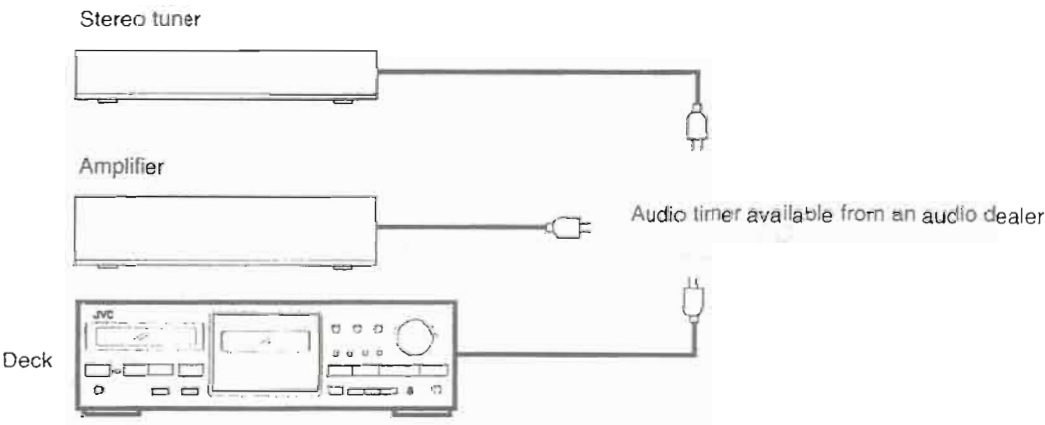
Notes:

- Synchronized recording or DDRP recording stops automatically when the CD player stops playing.
- To cancel synchronized recording or DDRP recording, press the STOP button of the CD player or cassette deck.
- Synchronized recording does not start except when the record-pause mode is set by simultaneously pressing the ○ REC/REC MUTE and ■■ PAUSE buttons in the stop mode.
- The source is locked to the CD position during synchronized recording or DDRP recording to avoid accidental stops or switch-over to another component. To switch over the components, cancel synchronized recording or DDRP recording first.
- The INPUT LEVEL control does not function during DDRP recording.

◆ **Timer Recording / Playback**

- Recording or playing back at any desired time can be performed using an audio timer.
- Read the instruction manual of the timer carefully before using it.
- Timer recording cannot be performed if the cassette's safety tabs are removed.

In case the amplifier is not provided with AC outlets, use a multi-plug connector for each connection.



Procedure	Time recording	Timer playback
1. Timer operation	• Set the timer so that the power of units are switched on.	
2. Amp and tuner operation	• Set the source selector of the amplifier to TUNER. • Tune to the station to be recorded.	• Set to the playback mode. • Adjust the volume and tone of the amplifier.
3. Deck operation	• Load a cassette and perform the recording operations. (See page 7.)	• Load a recorded cassette and perform the playback operations. (See page 6.)
4. Timer operation	• Set the timer to the desired start and stop times. When you are recording, allow about 1 extra minute at the beginning and end of the program to be sure to record everything. • Confirm that the units connected to the timer are turned off.	
5. Deck operation	• Set the TIMER switch to REC. • Recording will start at the time set on the timer. 	• Set the TIMER switch to PLAY. • Playback will start at the time set on the timer. 

- Before starting timer recording, wind the tape beyond the leader section.
- Turn the TIMER switch "OFF" when you finish timer operation.

1 Location of Main Parts

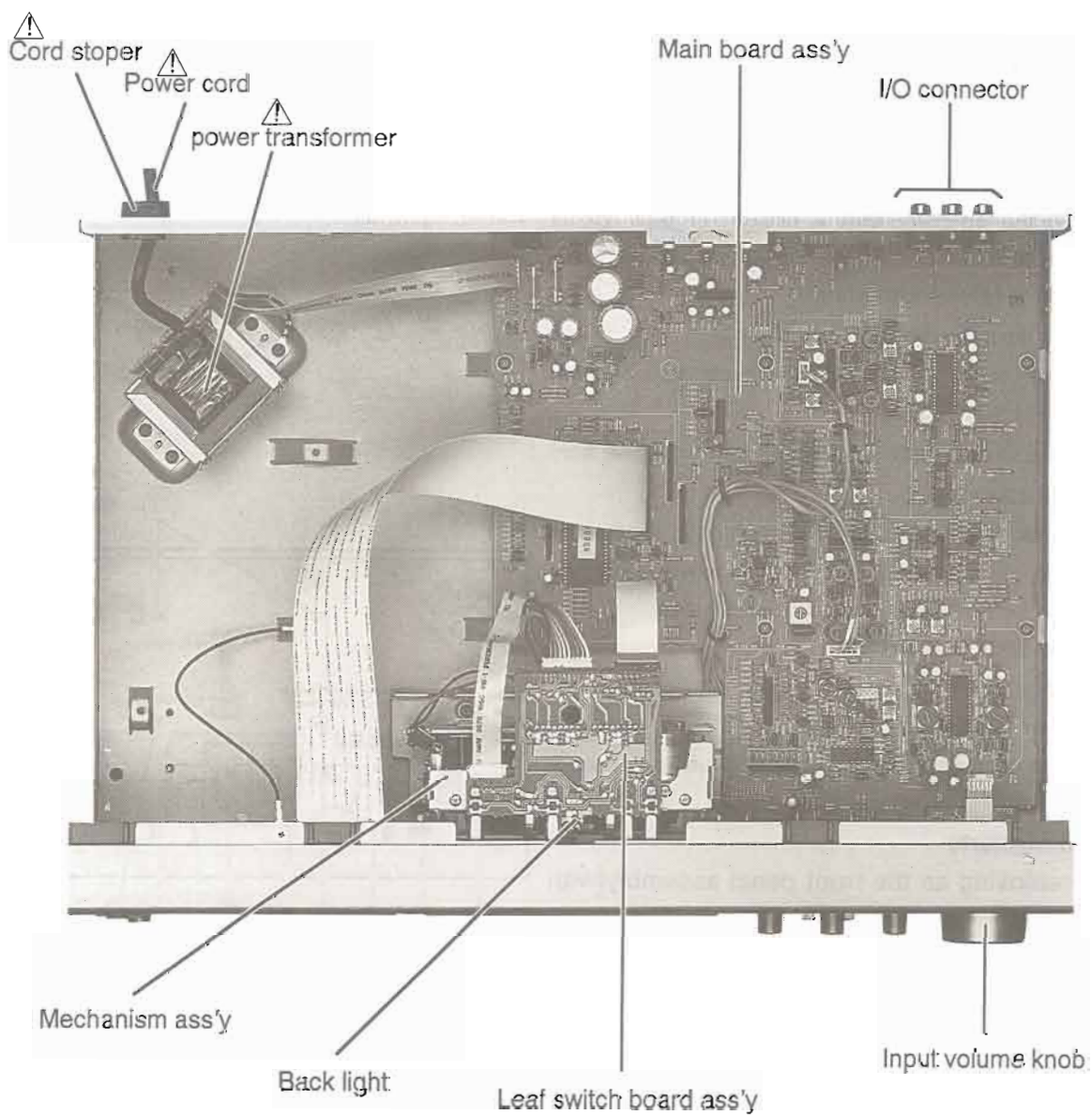


Fig.1 - 1

2 Removal of Main Parts

External parts

◆ top cover

1. Remove the four screws ① on the left and right sides and the two attachment screws ② on the back side.
2. To remove the top cover, slide in direction of arrow and lift away. (refer to Fig. 2-1)

◆ Front cover (aluminum plate)

1. Pull out the input volume knob (see Fig. 1-1).
2. Remove the screw ③ retaining the earth wire on front plate. (see Fig. 2-3)
3. Remove the three screws ④ retaining the front cover from bottom side. (see Fig. 2-2)
4. Press the four points ⑤ on the mold section to remove the catches on the inner side of the front cover and then remove the front cover towards you. (see Fig. 2-2)

◆ Cassette door cover (Lid)

1. Turn the power ON and press the eject button (open/close) to open the cassette door.
2. Slide off the cassette lid section upward to unlatch its pawls on both sides.

Assembly parts

◆ When removing as the front panel assembly (with mechanism.)

1. Remove the top cover of the external parts, remove the front plate to prevent scratching.
2. Remove the cassette door cover.
3. Remove the three screws ⑤ retaining the front panel assembly from bottom side. (see Fig. 2-3)
4. Disconnect all connectors between the mechanism assembly or front panel assembly and main board assembly. (see Fig. 2-2, Fig. 2-4)
 - a) Remove the CN508 from the headphone board assembly.
 - b) Remove the wires CNA81, CNB81 for record/playback and erasing heads.
 - c) Remove CN501 going to the FL p.c. board.
 - d) Remove CN602 and CN603 going to the leaf switch board.
6. Remove the cam switch wire (FW501) from the mechanism board connector. (see Fig. 2-2 or Fig. 2-6)
7. Remove the two screws ⑥ retaining the mechanism assembly on the chassis. (see Fig. 2-2)

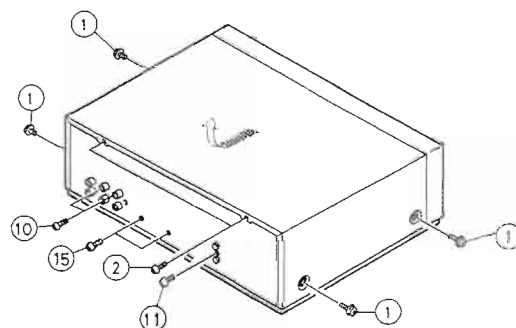


Fig. 2 - 1

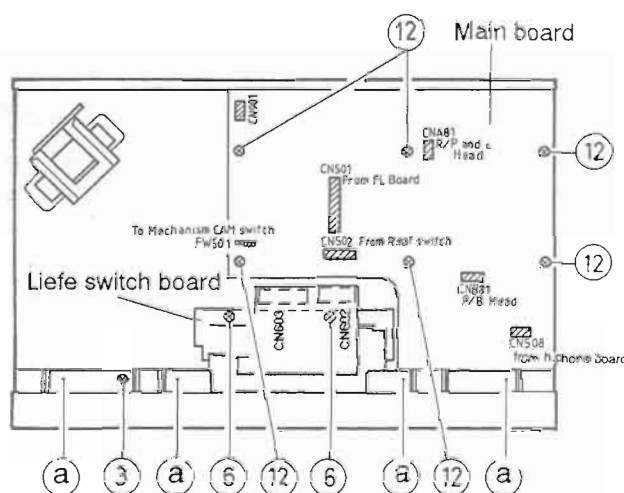


Fig. 2 - 2

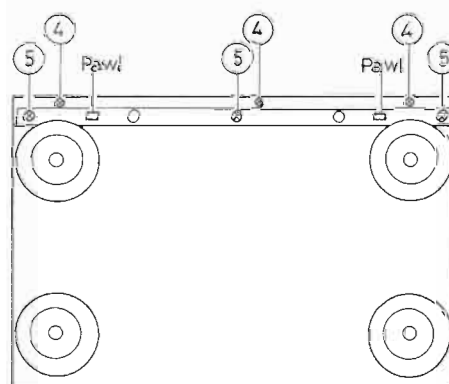


Fig. 2 - 3

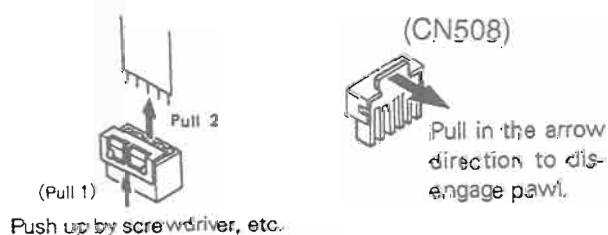


Fig. 2 - 4

■ P.C.board ass'y inside of front panel

◆ FL Board assembly(see Fig. 2-5)

1. Remove the front cover(aluminum plate).
2. Remove the seven screws ⑦ retaining the FL board assembly.
3. Remove the FL board ass'y and then pull out the timer switch knob.
4. Remove the operation button assembly.

◆ Volume/key switch board and H.phone board assembly (see Fig.2-5)

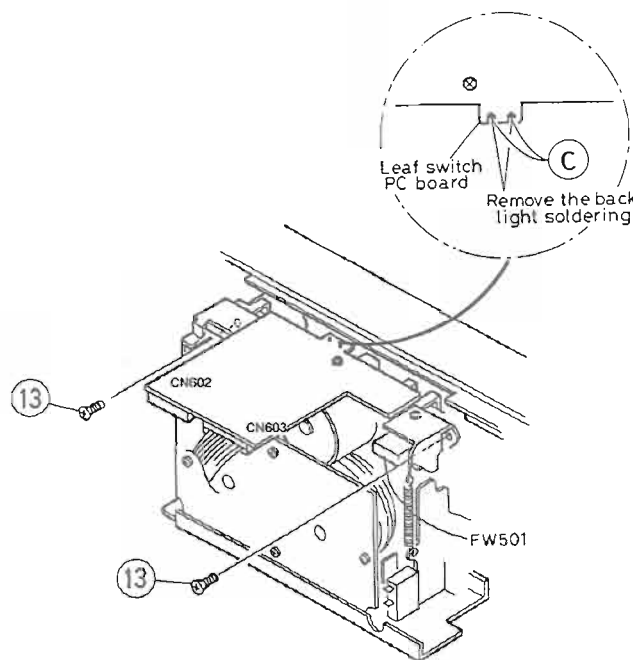
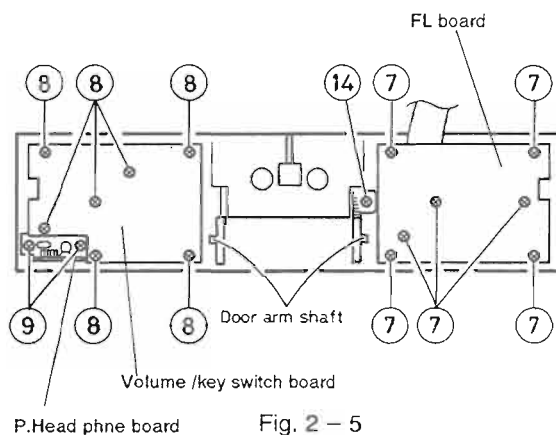
1. Remove seven screws ⑧ retaining the volume/key switch board assembly.
2. Remove the volume/key switch board assembly.
3. Remove two screws ⑨ retaining the H.phone board assembly.

◆ Main P.C.Board assembly (see Fig. 2-1, Fig.2-2)

1. Remove the two screw ⑩ retaining the pin-jacks.
2. Remove the screw ⑪ retaining the DCS jack.
3. Remove two screws ⑮ retaining the heat sink.
4. Remove the six screws ⑫ retaining the amplifier board assembly.
5. Pull the main P.C.board assembly slightly forward and bring it up from the back.

■ Cassette holder assembly (see Fig. 2-5, Fig.2-6)

1. Remove the two screws ⑬ retaining the mechanism assembly.
2. Remove the one screw ⑭ retaining the damper holder.
3. Remove the mechanism assembly (Removing the back light soldering ㉔).
4. Remove the cassette holder arm from the front panel assembly.



■ When removing only the mechanism assembly

1. Remove the top cover.(see Fig. 2-1)
2. Remove the one screw ③ retaining wire from the chassis .
(see Fig. 2-2)
 - a)Remove the wires CNA81and CNB81 for record/playback and erase head.
 - b)Remove the CN602 and CN603 going to the leaf switch board.
3. Remove the cam switch wire (FW501)from the mechanism p.c.board connector. (see Fig. 2-6)
4. Remove the cassette back light soldering ㊦ on thr center of the upper surface of the mechanism.
5. Remove the two screws ㊦ retaining the mechanism on the front panel assembly. (see Fig. 2-6)
6. Remove the two screws ㊦ retaining the mechanism assembly on the chassis. (see Fig. 2-2)

■ When removing the front panel assembly.

(after removing the mechanism)

1. In case the mechanism assembly is included,carry out steps 1,2,3, of assembly parts .
2. Remove the wires from the main p.c.board .
 - a)Remove the CN501 for the FL board assembly. (see Fig. 2-2)
 - b)Remove the CN602 and CN603 going to the leaf switch board. (see Fig 2-2, Fig 2-6)
 - c)Remove the CN508 going to the headphone p.c.board. (see Fig 2-2, Fig. 2-4)
3. Remove the cam switch wire (FW501)from the mechanism p c board. see Fig 2-2 or Fig 2-6)
4. Remove the three screws ⑤ retaining the front panel assembly. (see Fig. 2-3)
5. Remove two screws ㊦ retaining the mechanism assembly. (see Fig. 2-2)
6. Remove the front panel assembly.
7. Remove the two screws ㊦ retaining the mechanism assembly to the front panel assembly and removing the back light soldering. (see Fig. 2-6)

■ Mechanism section

● Remove the mechanism assembly from mechanism holder.

◆ Leaf switch replacement (see Fig. 2-7)

1. Remove the three screws ② retaining the leaf switch board assembly.
2. Remove the leaf switch.

◆ Pinch roller replacement (see Fig 2-7)

(Right side)

1. take out one E washer ③ from pinch roller shaft.
2. Pull the pinch roller assembly in the upward direction slightly, remove the return spring(thin and black color)side of chassis, from pinch roller.

(Left side)

NOTE : After replacing, make sure adjust the hight adjustment using M300 gauge.

1. Remove the hight adjustment screw, using the nut driver(4mm), from pinch roller shaft.
2. Remove the return spring to side of chassis.

◆ Head parts (see Fig. 2-8)

1. Remove the three screws ④ , ⑤ and ⑥ to remove the head block.
2. Remove one screw ⑦ to remove the Erase head.
3. Remove the two screws ⑧ and ⑨ to remove the REC/PB head assembly.

Note : When remove the REC/PB head assembly, the spring is removed at the same time.

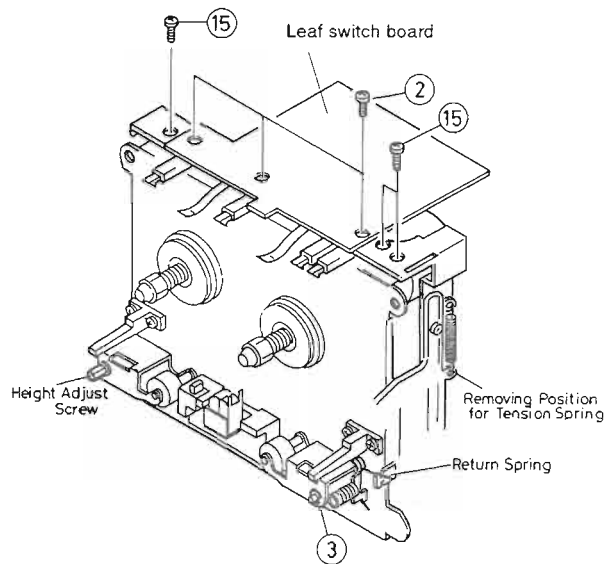


Fig. 2 - 7

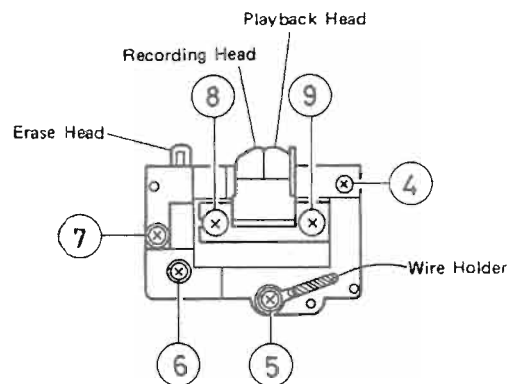


Fig. 2 - 8

◆ **Capstan motor assembly with flyweheel**

1. Remove the pinch roller assemblies both of the right and left ones.
2. Remove the two screws ⑬ retaining the mechanism bracket. (see Fig. 2-12)
3. Remove the five screws ⑭ and ⑮ retaining the side bracket of mechanism both side. (see Fig. 2-9, Fig. 2-10)
4. Remove four screws ⑯ and ⑰ retaining the FG bracket. (ss Fig.-10)
5. Draw the capstan motor assembly.

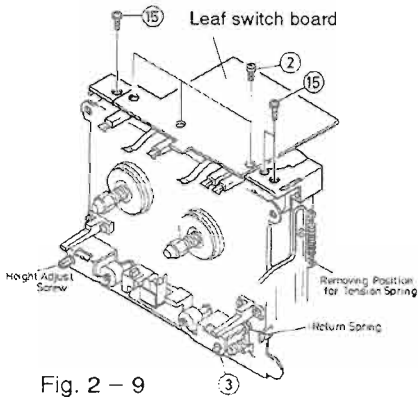


Fig. 2 – 9

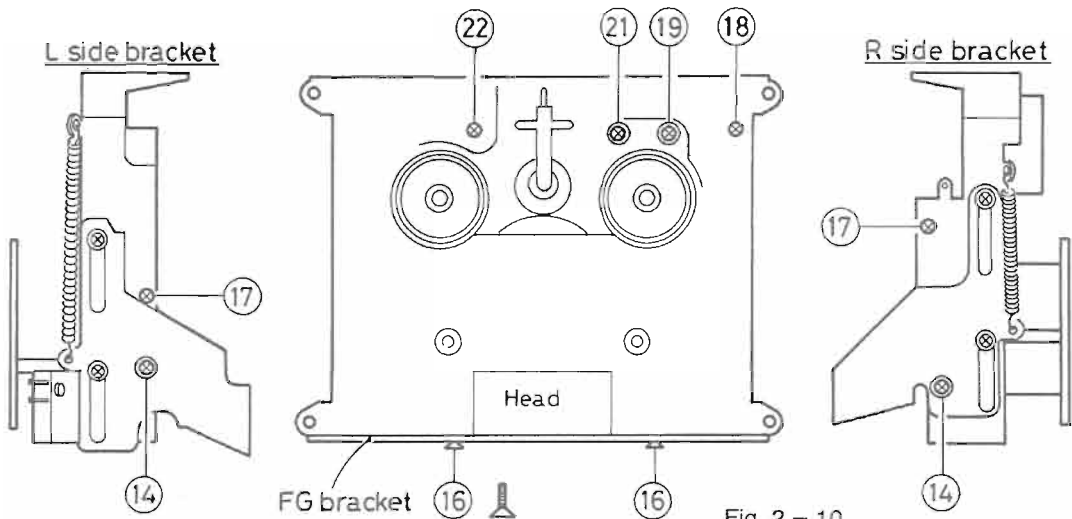


Fig. 2 – 10

◆ **Cam motor and reel motor assembly** (see Fig. 2-10)

1. Remove the motor terminal board and then remove two screws ⑮ and ⑯ retaining the cam motor assembly. Remove the motor terminal board and then remove two screws ⑰ and ⑱ retaining the reel motor assembly.
2. Otherwise, the terminal board assembly can be removed by removing the cam motor assembly and the reel motor assembly at the same time.

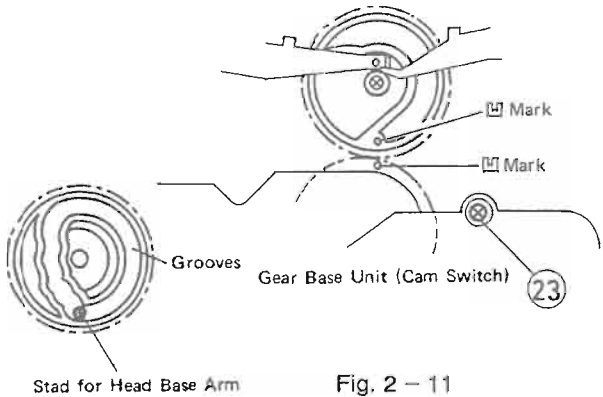


Fig. 2 – 11

◆ **Cam switch assembly** (see Fig. 2-11)

1. Remove the screw ㉓ retaining the cam switch assembly and remove the disk brake lever from the reel disk. and the cam switch assembly can be remove.

◆ **Replacement of motor belt and flyweheel**

(see Fig. 2-12)

1. Remove the three screws ㉔ retaining the motor bracket.
- Note : Pay attention to grease not to stain the belt since it will be disengaged at that time.

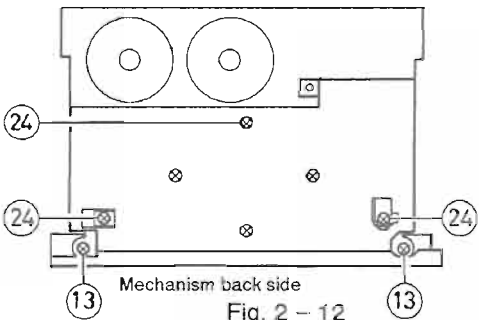


Fig. 2 – 12

3 Main Adjustment

◆ Measuring instruments required for adjustment

- (1) Low-frequency oscillator(oscillation frequency 50Hz~20kHz, 0dB output with 600 Ω impedance)
- (2) Attenuator(600 Ω impedance)
- (3) Electronic voltmeter
- (4) Standard tapes
VTT712(tape speed, wow and flutter measurement)
VTT724(reference level)
TMT735, VTT739(playback frequency)
VTT704(12.5kHz)(azimuth)
- (5) Recording reference tapes
TS-12(UD1), TS-10(AC-513)(SA),
TS-11(AC-712)(MA)or equivalent
- (6) 600 Ω resistors(for attenuator matching)
- (7) Distortion meter(bandpass filter)
- (8) Torque gauge(cassette)for CTG-N, TW2111, TW2121 and TW2231 mechanism adjustments.
- (9) Wow & flutter meter
- (10) Frequency counter meter
- (11) M300 gauge
- (12) Band pass filter
- ◇ Power supply voltage

Set the line voltage selector switch to 240V/ 230V/ 220V/ 127V/ 120V/ 110V according to $\longleftrightarrow$ your local voltage.

AC240V, 50/60Hz :A/B version

AC230V, 50/60Hz :E/EN/G version

AC120V, 60Hz :C/J version

AC230/127/110V, 50/60Hz:U/UT version

- (14) Standard level (0dBs) is 0.775V unless otherwise specified.

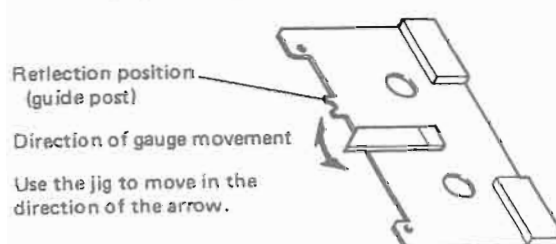
◆ Mechanical adjustment

After head replacements,use the following method to check after the hight, direction (rough of each head have been adjusted.

Tape travel adjustment

Use the M300lig. Be careful not to damage the head.

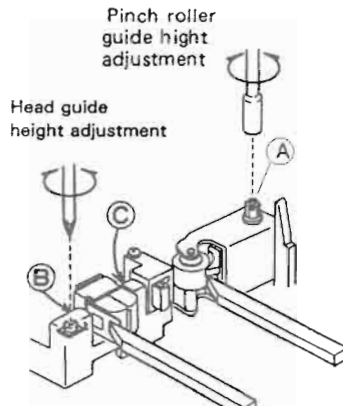
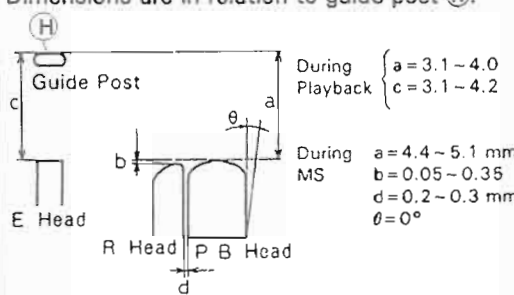
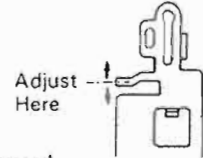
Tape guide adjustment method



- (13) Standard position of the switch and volume knob

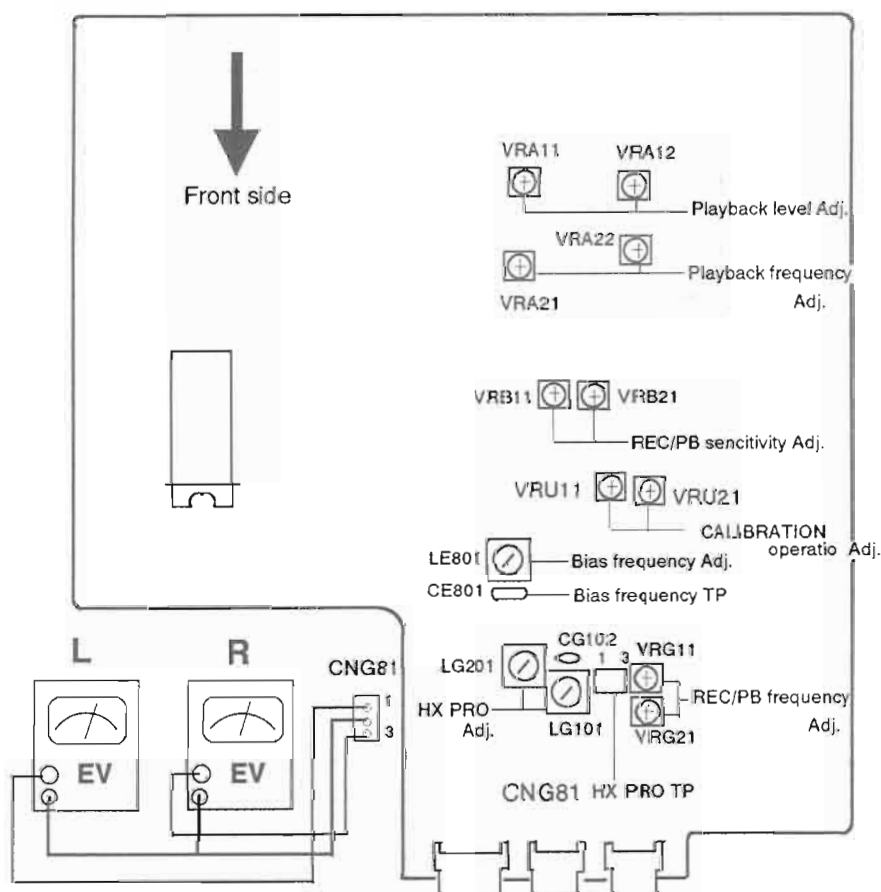
Switches and volume knobs Setting position.

INPUT LEVEL	:	MAXIMUM
DOLBY NR SWITCH	:	OFF
BALANCE CONTROL	:	CENTOR
BIAS CONTROL	:	CENTOR
TIMERSWITCH	:	OFF
MPX FILTER	:	OFF
INPUT SELECT	:	LINE
H.PHONE VOLUME	:	MAXIMUM

	Adjustment and Check Items	Method	Standard	
1	Flywheel and thrust check	Check by feel.	0.2~0.5 mm	
2	Pinch roller contact timing check	The right side pinch roller must contact the capstan shaft before the left side pinch roller.		
3	Pinch roller guide height adjustment	Use M300 gauge to adjust (A) so that the 3.8 mm gauge passes.		
4	Playback head height and tilt adjustment	Use the M300 gauge and adjust screw (B) so that the 3.8 mm gauge passes the playback head tape guide.		
5	Playback azimuth adjustment	Playback the VTT704 tape and use screw (C) to adjust the output maximum and phase.		
6	Tape travel check	Use a C-90 padded tape and check for tape curl at the head when the tape starts winding.		Use mirror tape to check the tape travel.
7	Head mounting position	Use the M300 gauge to check that the playback head protrudes slightly beyond the recording head. The other ratings are as follows. Dimensions are in relation to guide post (H).  Adjust the bend in the head base as shown below so that "a" moves inward 4.4~5.1 during MS.  Excessive: bend upward Insufficient: bend downward	0.05~0.35 mm	

	Adjustment and Check Items	Method	Standard	
8	Checking tape speed	Confirm that frequency counter reads $3000 \pm 15\text{Hz}$ while playing back VTT712 test tape.	$3000 \pm 15\text{ Hz}$	
9	Checking wow and flutter	Connect a wow and flutter meter to LINE OUT terminals. Play back the VTT712 test tape. Check to see if the reading of the meter is within 0.08% (WTD).	0.08% (WTD)	If the reading becomes moving value even if conforming to the standard, a re-claim may be raised. Repairs are necessary.
10	Checking playback torque	Employ a torque testing cassette tape for the checking, or remove the cassette cover and use a torque gauge.	35~70 gr-cm	If the standard torque is not obtained, replace the take-up disc assembly.
11	Checking fast forward torque	Measure the torque in the fast forward mode in the same manner as in the above.	70~200 gr-cm	CT-120M: torque gauge.
12	Checking rewind torque	Measure the torque in the rewind mode in the same manner as in the above.	70~200 gr-cm	CT-F: torque gauge

◆ Location of Adjusting Point



■ Electrical Circuit Adjustment procedures

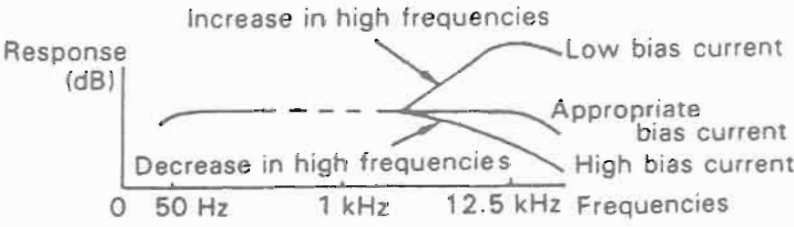
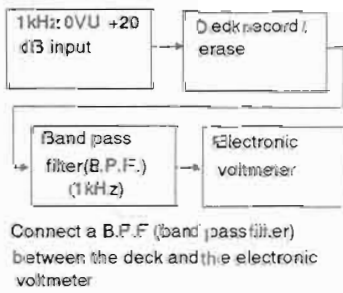
Make the following adjustments after the tape travel and head angle adjustments.

● In principle, the adjustments should be made in the order described.

● Adjustments required head replacement are marked with an asterisk(*).

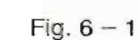
Item	Adjustment and Checking Methods		Frequency Level	Output Value and Deviation
1.DOLBY NR circuit recoding check	Signal Input : LINE IN cal.level 400Hz - 8dBs Output terminal : NRICA01 21 & 22 pin	DOLBY B (REC)	1kHz Cal - 40dB	+5.7dB ± 2dB
			5kHz Cal - 20dB	+3.5dB ± 1.5dB
			1kHz Cal 0dB	0dB ± 0.5dB
		DOLBY C (REC)	1kHz Cal - 40dB	+16dB ± $\frac{3}{2}$ dB
			5kHz Cal - 20dB	+2.9dB ± 2.9dB
			1kHz Cal 0dB	0dB ± 1dB

Item	Conditions	Adjustment and Confirmation	Standard Values	Adjusting
*2.Playback level adjustment	Output terminal : LINE OUT Test tape : VTT724	1. Play the VTT724(1kHz) test tape and adjust VRA11 and VRA21 so that the LINE OUT output is - 7.5dBs(the L-R channel output differential must be 0.5dB or less). 2. Head phone output check - 17.5dBs ± 3dB (L-R differential 2dB or less)	LINE OUT - 7.5dBs ± 0.5dB Phones level - 17.5dBs ± 3dB	Lch VRA11 Rch VRA21
*3.Playback equalizer adjustment	Output terminal : LINE OUT NR switch: OFF Test tape : VTT739 TMT735	1. Play the TMT735 (1kHz,12.5kHz) test tape and adjust VRA12 and VRA22 so that the output value is standard at 1kHz and 12.5kHz. 2. Play the VTT739(1kHz,63Hz) test tape and check of 63Hz.	With 1kHz as reference, 0.5dB ± 0.5dB at 12.5kHz +1dB ± 3dB at 63Hz(VTT739)	Lch VRA12 Rch VRA22
4. Bias frequency adjustment	Record mode Test point : CE801 Frequency counter	Connect a frequency counter to the body of CE801 and adjust LE801 so that the counter reads 105kHz ± 1kHz.	105kHz ± 1kHz	LE801
5. HX PRO coil adjustment	Record mode Test point : CNG81 (L: 1-2 PIN,R: 2-3 pin) DC volt meter	1. This step must be performed after the bias frequency adjustment . 2. Load a metal tape and set the deck to the recording mode. 3. Adjust LG101(Lch) and LG201(Rch) to minimum respective voltage of CNG81.	Minimum output value	Lch LG101 Rch LG201
6. Caribration adjustment	Normal tape	1. With a normal tape loaded, press thw REC caribration key and play key simultaneously. 2. Adjust VRU11(level)and VRU21(bias) so that the FL indicators LEVEL and BIAS respectively light in the range up to ▲-marked position.		VRU11 : LEVEL VRU21 : BIAS

Item	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
*7 Recording / playback frequency adjustment	Input terminal : LINE IN Output terminal : LINE OUT Ref - 20dB : value - 20dB below the reference input value = - 28dBs Center the bias volume VR701 (Control on the front panel)	1. Record 1kHz at the ref - 20dB input, then record 63Hz and 12.5kHz and adjust VRG11 and VRG21 so that the difference between the 63Hz and 12.5kHz output is standard value in relation to the 1kHz output during playback. (Basically, adjust so that the 1kHz and 12.5kHz output are the standard values.) 	With 1kHz as reference, 0.5dB $\pm$ 0.5dB at 12.5kHz	Lch VRG11 Rch VRG21
*8 Recording / playback sensitivity adjustment	Input terminal : LINE IN Output terminal : LINE OUT	1. Input to the LINE IN terminal so that the source monitor output is - 7.5dBs. 2. Adjust VRB11 and VRB21 so that the recording signal current is - 7.5dBs during recording and playback.	Normal : - 7.5dBs $\pm$ 0.5dB Chrome, metal : - 8dBs + 2dB, - 1 dB	Lch VRB11 Rch VRB21
9. Recording / playback distortion check	Input terminal : LINE IN Output terminal : LINE OUT	1. Record a 1kHz signal so that the LINE OUT output is - 2dBs and the level indicator is +6dB. 2. Use a distortion meter to check if the output is the standard value during playback.	Normal tape : 2% or less Chrome tape : 3% or less Metal tape : 3% or less	
10. Recording / playback S/N ratio check	Input terminal : LINE IN Output terminal : LINE OUT	1. Record a 1kHz, 0dB input and then remove the input and record without a signal. 2. Playback this recording and measure the difference between the 0dB recording and no-signal recording. The standard values must be satisfied.	Normal tape : 40dB or more Chrome tape : 41dB or more Metal tape : 41dB or more	
11. Erase ratio check	Input terminal : LINE IN Output terminal : LINE OUT Band pass filter	1. Apply a 1kHz signal from LINE IN and adjust the input level knob so that the input level is - 8dBs. 2. Increase the signal level to 20dB and record. 3. rewind and erase the recorded section of the tape. 4. Measure the output ratio between the signal and no-signal sections of the tape with an electronic voltmeter.	55dB or more 	



■ FL and Other Circuit



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Rec/PB Amplifier Circuit

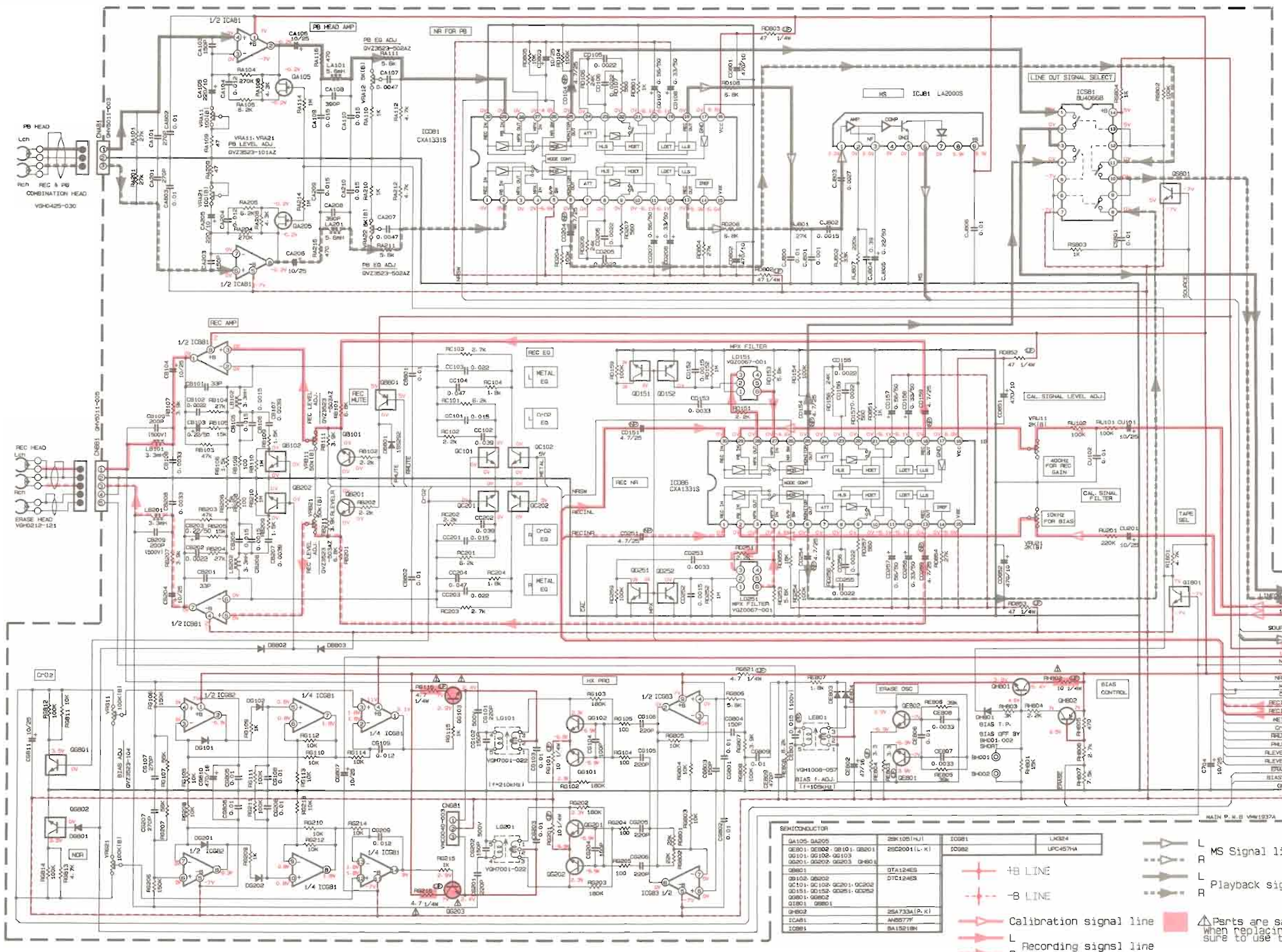


Fig. 6 - 2

System Control /Power Supply Circuit

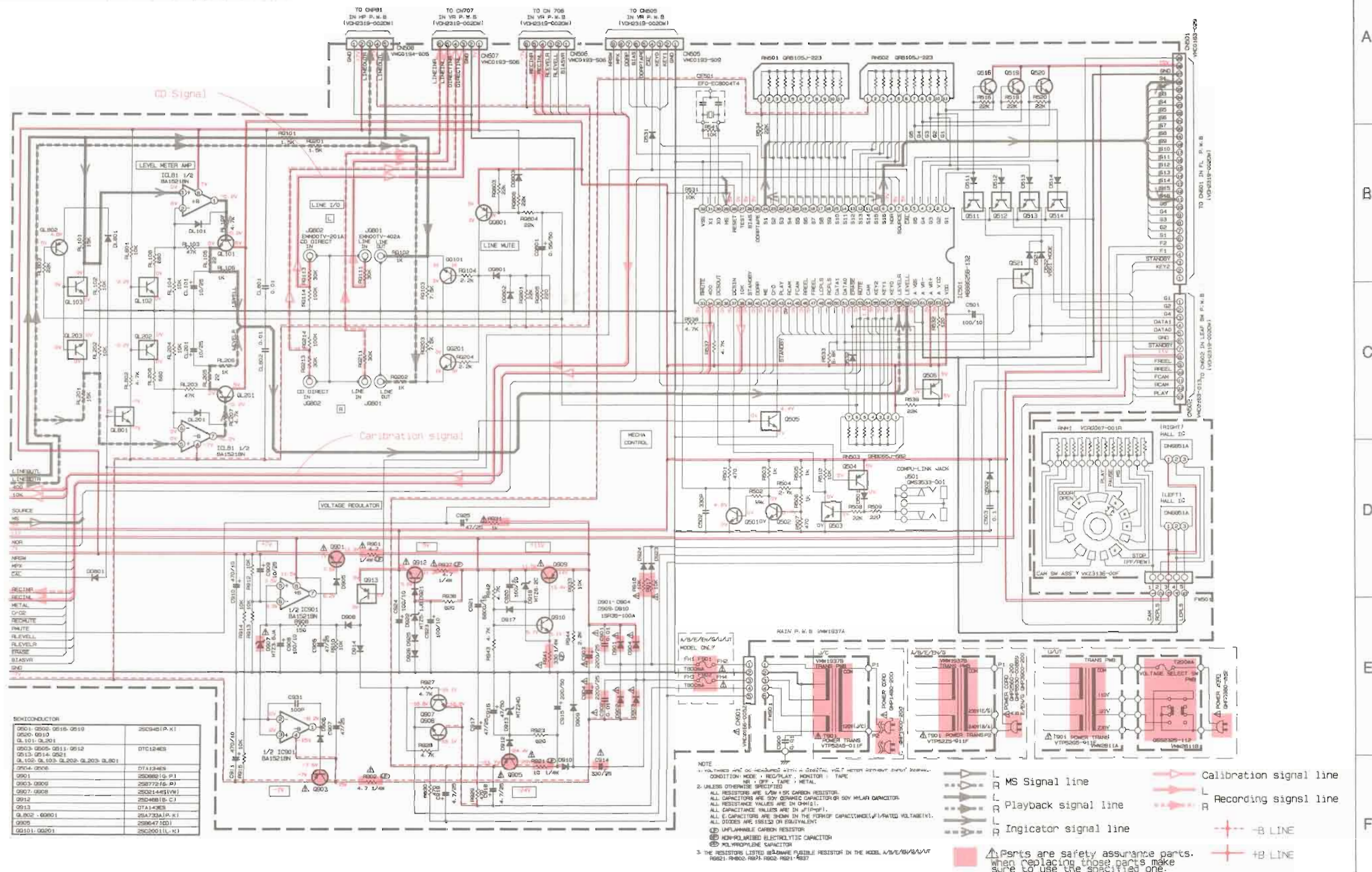


Fig 6 - 3

7 Location of P.C.Board Parts and Parts List

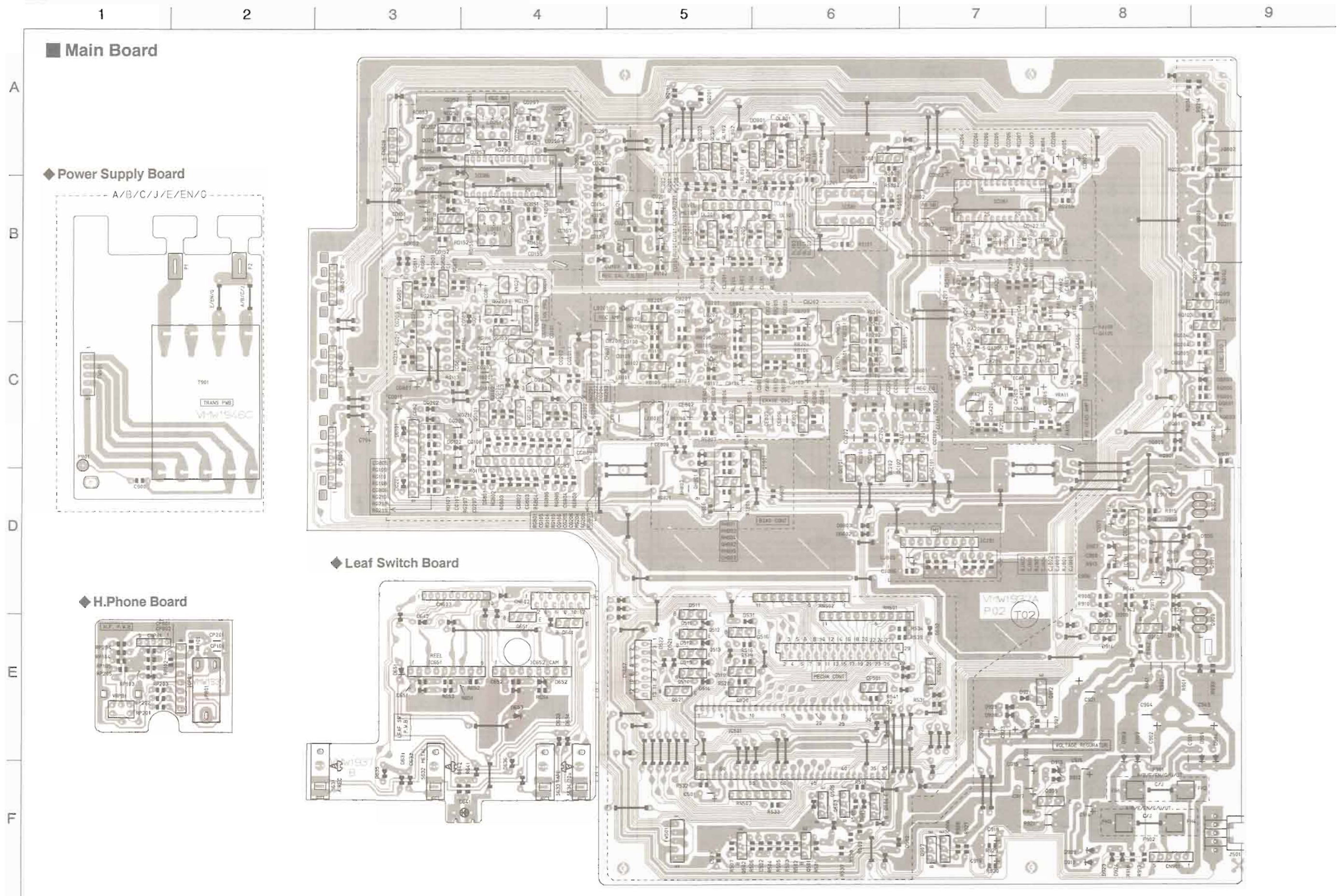


Fig. 7 - 1

Main Board Parts List

BLOCK NO. 01

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 501	QETC1AH-1072N	E CAPACITOR	100MF 20% 10V	
C 502	QCB81HK-331Y	C CAPACITOR	330PF 10% 50V	
C 503	QCF81HJ-201	C CAPACITOR	10MF +80:-20%	
C 651	QCVB1CM-103Y	C CAPACITOR	0.01MF 20% 16V	
C 652	QCVB1CM-103Y	C CAPACITOR	0.01MF 20% 16V	
C 704	QETC1EM-1062N	E CAPACITOR	10MF 20% 25V	
C 901	QCF11HP-103	C CAPACITOR	0.01MF +100:-0%	
C 902	QCF11HP-103	C CAPACITOR	0.01MF +100:-0%	
C 903	QET81EM-228N	E CAPACITOR	2200PF 20% 25V	
C 904	QET81EM-228N	E CAPACITOR	2200PF 20% 25V	
C 906	QETC1EM-4762N	E CAPACITOR	47MF 20% 25V	
C 907	QETC1EM-4762N	E CAPACITOR	47MF 20% 25V	
C 908	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V	
C 909	QETC1EM-1062N	E CAPACITOR	10MF 20% 25V	
C 910	QETC1AM-4772N	E CAPACITOR	470MF 20% 10V	
C 911	QETC1AM-4772N	E CAPACITOR	470MF 20% 10V	
C 914	QETB1EM-337N	E CAPACITOR	330MF 20% 25V	
C 915	QETC1EM-2272N	E CAPACITOR	220MF 20% 50V	
C 916	QETC1EM-4762N	E CAPACITOR	47MF 20% 50V	
C 917	QETC1EM-4762N	E CAPACITOR	47MF 20% 25V	
C 918	QETC1EM-475	E CAPACITOR	4.7MF 20% 25V	
C 919	QETC1EM-475	E CAPACITOR	4.7MF 20% 25V	
C 920	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V	
C 921	QETB1CM-688N	E CAPACITOR	6800MF 20% 16V	
C 923	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V	
C 924	QETC1AM-1072N	E CAPACITOR	100MF 20% 10V	
C 925	QETC1EM-4762N	E CAPACITOR	47MF 20% 25V	
C 931	QCB81HK-101Y	C CAPACITOR	100PF 10% 50V	
CA101	QCB81HK-271Y	C CAPACITOR	270PF 10% 50V	
CA103	QCB81HK-151Y	C CAPACITOR	150PF 10% 50V	
CA104	QFLC1HJ-1232M	M CAPACITOR	0.12MF 5% 50V	
CA105	QETC1AM-2272N	E CAPACITOR	220MF 20% 10V	
CA106	QETC1EM-1062N	E CAPACITOR	10MF 20% 25V	
CA107	QCVB1CM-472Y	C CAPACITOR	4700PF 20% 16V	
CA108	QCB81HK-391Y	C CAPACITOR	390PF 10% 50V	
CA109	QFLC1HJ-1532M	M CAPACITOR	0.15MF 5% 50V	
CA110	QFLC1HJ-1532M	M CAPACITOR	0.15MF 5% 50V	
CA201	QCB81HK-271Y	C CAPACITOR	270PF 10% 50V	
CA203	QCB81HK-151Y	C CAPACITOR	150PF 10% 50V	
CA204	QFLC1HJ-1232M	M CAPACITOR	0.12MF 5% 50V	
CA205	QETC1AM-2272N	E CAPACITOR	220MF 20% 10V	
CA206	QETC1EM-1062N	E CAPACITOR	10MF 20% 25V	
CA207	QCVB1CM-472Y	C CAPACITOR	4700PF 20% 16V	
CA208	QCB81HK-391Y	C CAPACITOR	390PF 10% 50V	
CA209	QFLC1HJ-1532M	M CAPACITOR	0.15MF 5% 50V	
CA210	QFLC1HJ-1532M	M CAPACITOR	0.15MF 5% 50V	
CA802	QCVB1CM-103Y	C CAPACITOR	0.01MF 20% 16V	
CB103	QCVB1CM-103Y	C CAPACITOR	0.01MF 20% 16V	
CB101	QCS11HJ-330	C CAPACITOR	33PF 5% 50V	
CB102	QCVB1CM-222Y	C CAPACITOR	2200PF 20% 16V	
CB103	QETC1EM-2242N	E CAPACITOR	22MF 20% 50V	
CB104	QETC1EM-1062N	E CAPACITOR	10MF 20% 25V	
CB105	QFLC1HJ-1532M	M CAPACITOR	0.15MF 5% 50V	
CB106	QCVB1CM-152Y	C CAPACITOR	1500PF 20% 16V	
CB107	QFLC1HJ-3922M	M CAPACITOR	3900PF 5% 50V	

BLOCK NO. 02

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CB108	QCVB1CM-332Y	C CAPACITOR	3300PF 20% 16V	
CB109	QCS12HJ-201	C CAPACITOR	200PF 5% 500V	
CB201	QCS11HJ-330	C CAPACITOR	33PF 5% 50V	
CB202	QCVB1CM-222Y	C CAPACITOR	2200PF 20% 16V	
CB203	QETC1EM-2242N	E CAPACITOR	22MF 20% 50V	
CB204	QETC1EM-1062N	E CAPACITOR	10MF 20% 25V	
CB205	QFLC1HJ-1532M	M CAPACITOR	0.15MF 5% 50V	
CB206	QCVB1CM-152Y	C CAPACITOR	1500PF 20% 16V	
CB207	QFLC1HJ-3922M	M CAPACITOR	3900PF 5% 50V	
CB208	QCVB1CM-332Y	C CAPACITOR	3300PF 20% 16V	
CB209	QCS12HJ-201	C CAPACITOR	200PF 5% 500V	
CB801	QCVB1CM-103Y	C CAPACITOR	0.01MF 20% 16V	
CB802	QCVB1CM-103Y	C CAPACITOR	0.01MF 20% 16V	
CC101	QCC31EM-1532V	C CAPACITOR	0.015MF 20% 25V	
CC102	QCC31EM-3932V	C CAPACITOR	0.039MF 20% 25V	
CC103	QCC11EM-223V	C CAPACITOR	0.022MF 20% 25V	
CC104	QCC11EM-473V	C CAPACITOR	0.047MF 20% 25V	
CC201	QCC31EM-1532V	C CAPACITOR	0.015MF 20% 25V	
CC202	QCC31EM-3932V	C CAPACITOR	0.039MF 20% 25V	
CC203	QCC11EM-223V	C CAPACITOR	0.022MF 20% 25V	
CC204	QCC11EM-473V	C CAPACITOR	0.047MF 20% 25V	
CD104	QEN61ER-4752N	NP.E.CAPACITOR	4.7MF +30:-10%	
CD105	QFLC1HJ-2222M	M CAPACITOR	2200PF 5% 50V	
CD106	QFLC1HJ-2222M	M CAPACITOR	2200PF 5% 50V	
CD107	QETC1HM-5642N	E CAPACITOR	56MF 20% 50V	
CD108	QETC1HM-3342N	E CAPACITOR	33MF 20% 50V	
CD151	QEN61ER-4752N	NP.E.CAPACITOR	4.7MF +30:-10%	
CD152	QFLC1HJ-1522M	M CAPACITOR	1500PF 5% 50V	
CD153	QFLC1HJ-3322M	M CAPACITOR	3300PF 5% 50V	
CD154	QEN61ER-4752N	NP.E.CAPACITOR	4.7MF +30:-10%	
CD155	QFLC1HJ-2222M	M CAPACITOR	2200PF 5% 50V	
CD156	QFLC1HJ-2222M	M CAPACITOR	2200PF 5% 50V	
CD157	QETC1HM-5642N	E CAPACITOR	56MF 20% 50V	
CD158	QETC1HM-3342N	E CAPACITOR	33MF 20% 50V	
CD159	QEN61ER-4752N	NP.E.CAPACITOR	4.7MF +30:-10%	
CD204	QEN61ER-4752N	NP.E.CAPACITOR	4.7MF +30:-10%	
CD205	QFLC1HJ-2222M	M CAPACITOR	2200PF 5% 50V	
CD206	QFLC1HJ-2222M	M CAPACITOR	2200PF 5% 50V	
CD207	QETC1HM-5642N	E CAPACITOR	56MF 20% 50V	
CD208	QETC1HM-3342N	E CAPACITOR	33MF 20% 50V	
CD251	QEN61ER-4752N	NP.E.CAPACITOR	4.7MF +30:-10%	
CD252	QFLC1HJ-1522M	M CAPACITOR	1500PF 5% 50V	
CD253	QFLC1HJ-3322M	M CAPACITOR	3300PF 5% 50V	
CD254	QEN61ER-4752N	NP.E.CAPACITOR	4.7MF +30:-10%	
CD255	QFLC1HJ-2222M	M CAPACITOR	2200PF 5% 50V	
CD256	QFLC1HJ-2222M	M CAPACITOR	2200PF 5% 50V	
CD257	QETC1HM-5642N	E CAPACITOR	56MF 20% 50V	
CD258	QEN61ER-4752N	NP.E.CAPACITOR	4.7MF +30:-10%	
CD801	QETC1AM-4772N	E CAPACITOR	470MF 20% 10V	
CD802	QETC1AM-4772N	E CAPACITOR	470MF 20% 10V	
CD803	QETC1EM-1062N	E CAPACITOR	10MF 20% 25V	
CD851	QETC1AM-4772N	E CAPACITOR	470MF 20% 10V	
CD852	QETC1AM-4772N	E CAPACITOR	470MF 20% 10V	
CE801	QFP32AJ-1532M	PP CAPACITOR	0.015MF 5% 100V	

TD - V662BK A/B/E/EN/G/U/UT
TD - V661TN C/J

BLOCK NO. 001111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C602	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V	
C606	QFLC1HJ-103ZM	M CAPACITOR	.010MF 5% 50V	
C607	QFLC1HJ-332ZM	M CAPACITOR	3300PF 5% 50V	
C608	QFLC1HJ-332ZM	M CAPACITOR	3300PF 5% 50V	
C609	QCB81HK-471Y	C CAPACITOR	470PF 10% 50V	
C6501	RFU-GC8004T4	CERAMIC RESONAT		
CG101	QCB81HK-221Y	C CAPACITOR	220PF 10% 50V	
CG102	QCS32HJ-151ZV	C CAPACITOR	150PF 5% 500V	
CG103	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CG104	QCB81HK-101Y	C CAPACITOR	100PF 10% 50V	
CG105	QCB81HK-221Y	C CAPACITOR	220PF 10% 50V	
CG106	QCB81HK-221Y	C CAPACITOR	220PF 10% 50V	
CG107	QCB81HK-271Y	C CAPACITOR	270PF 10% 50V	
CG108	QFLC1HJ-103ZM	M CAPACITOR	.010MF 5% 50V	
CG109	QFLC1HJ-123ZM	M CAPACITOR	.012MF 5% 50V	
CG201	QCB81HK-221Y	C CAPACITOR	220PF 10% 50V	
CG202	QCS32HJ-151ZV	C CAPACITOR	150PF 5% 500V	
CG203	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CG204	QCB81HK-101Y	C CAPACITOR	100PF 10% 50V	
CG205	QCB81HK-221Y	C CAPACITOR	220PF 10% 50V	
CG206	QCB81HK-221Y	C CAPACITOR	220PF 10% 50V	
CG207	QCB81HK-271Y	C CAPACITOR	270PF 10% 50V	
CG208	QFLC1HJ-103ZM	M CAPACITOR	.010MF 5% 50V	
CG209	QFLC1HJ-123ZM	M CAPACITOR	.012MF 5% 50V	
CG801	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CG802	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CG803	QCB81HK-151Y	C CAPACITOR	150PF 10% 50V	
CG804	QCB81HK-151Y	C CAPACITOR	150PF 10% 50V	
CG805	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CG806	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CG807	QETC1EM-106ZM	E CAPACITOR	10MF 20% 25V	
CG809	QFLC1HJ-103ZM	M CAPACITOR	.010MF 5% 50V	
CG810	QETC1CM-477ZM	E CAPACITOR	470MF 20% 16V	
CG811	QETC1EM-106ZM	E CAPACITOR	10MF 20% 25V	
CJ800	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CJ801	QCB81HK-102Y	C CAPACITOR	1000PF 10% 50V	
CJ802	QCB81CM-152Y	C CAPACITOR	1500PF 20% 16V	
CJ803	QCB81CM-272Y	C CAPACITOR	2700PF 20% 16V	
CJ804	QFV71HJ-394ZM	FILM CAPACITOR	.39MF 5% 50V	
CJ805	QETC1HM-224ZM	E CAPACITOR	.22MF 20% 50V	
CJ806	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CL101	QETC1EM-106ZM	E CAPACITOR	10MF 20% 25V	
CL201	QETC1EM-106ZM	E CAPACITOR	10MF 20% 25V	
CL801	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CL802	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CN881	GMV5011-003	CONNECTOR		
CN881	GMV5011-005	CONNECTOR		
CN881	VMC0040-005Z	CONNECTOR		
CN881	VMC0194-P05	CONNECTOR		
CN501	VMC0262-029	CONNECTOR		
CN502	VMC0163-013	CONNECTOR		
CN503	VMC0193-S09	CONNECTOR		
CN506	VMC0193-S06	CONNECTOR		
CN507	VMC0193-S06	CONNECTOR		
CN508	VMC0194-S05	CONNECTOR		

BLOCK NO. 001111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CN602	VMC0163-R13	CONNECTOR		
CN603	VMC0075-R10N	CONNECTOR		
CN901	VMC0166-005Z	CONNECTOR		
CP101	QCF11HP-103	C CAPACITOR	.010MF +100%-0%	
CP201	QCF11HP-103	C CAPACITOR	.010MF +100%-0%	
CP801	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CP802	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CB801	QETC1HM-564ZM	E CAPACITOR	.56MF 20% 50V	
CS801	QCVB1CM-103Y	C CAPACITOR	.010MF 20% 16V	
CU101	QETC1EM-106ZM	E CAPACITOR	10MF 20% 25V	
CU102	QFLC1HJ-103ZM	M CAPACITOR	.010MF 5% 50V	
CU201	QETC1EM-106ZM	E CAPACITOR	10MF 20% 25V	
D 501	1SS133	DIODE		
D 502	1SS133	DIODE		
D 511	1SS133	DIODE		
D 512	1SS133	DIODE		
D 513	1SS133	DIODE		
D 514	1SS133	DIODE		
D 521	1SS133	DIODE		
D 522	1SS133	DIODE		
D 531	1SS133	DIODE		
D 532	1SS133	DIODE		
D 631	1SS133	DIODE		
D 632	1SS133	DIODE		
D 633	1SS133	DIODE		
D 634	1SS133	DIODE		
D 642	1SS133	DIODE		
D 651	1SR35-100A	SI DIODE		
D 652	MT28.2C	ZENER DIODE		
D 901	1SR35-100A	SI DIODE		
D 902	1SR35-100A	SI DIODE		
D 903	1SR35-100A	SI DIODE		
D 904	1SR35-100A	SI DIODE		
D 905	1SS133	DIODE		
D 906	1SS133	DIODE		
D 907	MT23.6JA	ZENER DIODE		
D 908	1SS133	DIODE		
D 909	1SR35-100A	SI DIODE		
D 910	1SR35-100A	SI DIODE		
D 912	1SS133	DIODE		
D 913	MT22.4JD	ZENER DIODE		
D 914	1SS133	DIODE		
D 917	1SS133	DIODE		
D 918	MT26.2CI-7?	ZENER DIODE		
D 921	1SS133	DIODE		
D 922	MT25.1JB	ZENER DIODE		
D 923	1SS133	DIODE		
D 924	1SS133	DIODE		
D 925	1SS133	DIODE		
D 926	1SS133	DIODE		
DB801	1SS292	SI DIODE		
DB802	1SS133	DIODE		
DB803	1SS133	DIODE		
DB801	1SS133	DIODE		

BLOCK NO. 01

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q 506	DTA124ES	TRANSISTOR		
Q 511	DTIC124ES	TRANSISTOR		
Q 512	DTIC124ES	TRANSISTOR		
Q 513	DTIC124ES	TRANSISTOR		
Q 514	DTIC124ES	TRANSISTOR		
Q 516	2SC945	TRANSISTOR		
Q 519	2SC945	TRANSISTOR		
Q 520	2SC945	TRANSISTOR		
Q 521	DTIC124ES	TRANSISTOR		
Q 641	DTIC124ES	TRANSISTOR		
Q 651	DTIC124ES	TRANSISTOR		
Q 901	2SD882(P,Q)	TRANSISTOR		
Q 903	2SB772(Q,P)	TRANSISTOR		
Q 905	2SB647(CD)	TRANSISTOR		
Q 907	2SD2144S(VW)	TRANSISTOR		
Q 908	2SD2144S(VW)	TRANSISTOR		
Q 909	2SB772(Q,P)	TRANSISTOR		
Q 910	2SC945	TRANSISTOR		
Q 912	2SD468(B,C)	TRANSISTOR		
Q 913	DTA143ES	TRANSISTOR		
QA105	2SK105(HJ)	FET TRANSISTOR		
QA205	2SK105(HJ)	FET TRANSISTOR		
QB101	2SC2001(L,K)	TRANSISTOR		
QB102	DTIC124ES	TRANSISTOR		
QB201	2SC2001(L,K)	TRANSISTOR		
QB202	DTIC124ES	TRANSISTOR		
QB801	DTA124ES	TRANSISTOR		
QC101	DTIC124ES	TRANSISTOR		
QC102	DTIC124ES	TRANSISTOR		
QC201	DTIC124ES	TRANSISTOR		
QC202	DTIC124ES	TRANSISTOR		
QD151	DTIC124ES	TRANSISTOR		
QD152	DTIC124ES	TRANSISTOR		
QD251	DTIC124ES	TRANSISTOR		
QD252	DTIC124ES	TRANSISTOR		
QE801	2SC2001(L,K)	TRANSISTOR		
QE802	2SC2001(L,K)	TRANSISTOR		
QG101	2SC2001(L,K)	TRANSISTOR		
QG102	2SC2001(L,K)	TRANSISTOR		
QG103	2SC2001(L,K)	TRANSISTOR		
QG201	2SC2001(L,K)	TRANSISTOR		
QG202	2SC2001(L,K)	TRANSISTOR		
QG203	2SC2001(L,K)	TRANSISTOR		
QG801	DTIC124ES	TRANSISTOR		
QG802	DTIC124ES	TRANSISTOR		
QH801	2SC2001(L,K)	TRANSISTOR		
QH802	2SA733A(P,K)	TRANSISTOR		
QI801	DTIC124ES	TRANSISTOR		
QI101	2SC945	TRANSISTOR		
QI102	DTIC124ES	TRANSISTOR		
QI103	DTIC124ES	TRANSISTOR		
QI201	2SC945	TRANSISTOR		
QI202	DTIC124ES	TRANSISTOR		
QI203	DTIC124ES	TRANSISTOR		
QI801	DTIC124ES	TRANSISTOR		

BLOCK NO. 01

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
DE803	1SS133	DIODE		
DE804	1SS133	DIODE		
DG101	1SS133	DIODE		
DG102	1SS133	DIODE		
DG201	1SS133	DIODE		
DG202	1SS133	DIODE		
DG801	1SS133	DIODE		
DH801	1SS133	DIODE		
DL101	1SS133	DIODE		
DL201	1SS133	DIODE		
DL801	1SS133	DIODE		
D801	1SS133	DIODE		
D802	1SS133	DIODE		
D803	1SS133	DIODE		
FH1-4	VMZ0087-001Z	FUSE CLIP	FOR F901,F902	A,B,E,EN
FH1-4	VMZ0087-001Z	FUSE CLIP	FOR F901,F902	G,U,UT
H 901	VMH4011-201	HEAT SINK		
IC801	AN6557F	IC	PB HEAD AMP	
IC801	XRA15218N	IC	REC AMP	
IC801	CXA1331S	DOLBY IC		
IC806	CXA1331S	DOLBY IC		
IC801	LM324N	IC	HX PRO	
IC802	UPC4570HA	IC	HX PRO	
IC803	UPC4570HA	IC	HX PRO	
IC801	LA2000S	IC	MS	
IC801	XRA15218N	IC		
ICP81	XRA15218N	IC	H.PHONE	
IC801	BU4066B	IC	LINE SIG SEL	
IC501	MB88625B-132	IC	SYSTEM MICON	
IC651	TAB409S	IC	REEL MOTOR DRIVE	
IC652	TAB409S	IC	CAM MOTOR DRIVE	
IC901	XRA15218N	IC		
J 501	QMS3533-001	JACK	DCS JACK	
JP801	QMS6032-V01	JACK	PIN JACK	
J801	EMN001V-402A	PIN JACK	PIN JACK	
J802	EMN001V-201A	PIN JACK	PIN JACK	
LA101	VQP0001-5621S	INDUCTOR		
LA201	VQP0001-5621S	INDUCTOR		
LB101	VQP0001-3321S	INDUCTOR		
LB102	VQP0001-3321S	INDUCTOR		
LB201	VQP0001-3321S	INDUCTOR		
LB202	VQP0001-3321S	INDUCTOR		
LD151	VQZ0067-001	FILTER	MPX	
LD251	VQZ0067-001	FILTER	MPX	
LE801	VQH1008-057	OSC COIL(BIAS)		
LG101	VQH7001-022	OSC COIL(BIAS)		
LG201	VQH7001-022	OSC COIL(BIAS)		
P 801	VMZ0015-005	POST PIN		
P 802	VMZ0015-005	POST PIN		
P 803	VMZ0015-005	POST PIN		
Q 501	2SC945	TRANSISTOR		
Q 502	2SC945	TRANSISTOR		
Q 503	DTIC124ES	TRANSISTOR		
Q 504	DTA124ES	TRANSISTOR		
Q 505	DTIC124ES	TRANSISTOR		

BLOCK NO. 01

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 933	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	A-B-E, EN
R 937	GR20077-4R7X	CARBON RESISTOR	4.7 5% 1/4W	G-U, UT
R 937	GR20077-4R7X	CARBON RESISTOR	4.7 5% 1/4W	C-J
R 937	GR14CJ-4R7SX	CARBON RESISTOR	4.7 5% 1/4W	
R 938	GRD161J-821	CARBON RESISTOR	820 5% 1/6W	
R 941	GRD14CJ-331SX	CARBON RESISTOR	330 5% 1/4W	
R 942	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 943	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 944	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RA101	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RA104	GRD161J-274	CARBON RESISTOR	270K 5% 1/6W	
RA105	GRD161J-432	CARBON RESISTOR	6.2K 5% 1/6W	
RA108	GRD161J-432	CARBON RESISTOR	4.3K 5% 1/6W	
RA109	GRD161J-470	CARBON RESISTOR	47 5% 1/6W	
RA110	GRD161J-471	CARBON RESISTOR	470 5% 1/6W	
RA201	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RA211	GRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RA212	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RA214	GRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RA216	GRD161J-471	CARBON RESISTOR	470 5% 1/6W	
RB101	GRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RB102	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RB103	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RB104	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RB105	GRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RB106	GRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RB107	GRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
RB108	GRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RB109	GRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RB110	GRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RB111	GRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
RB201	GRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RB202	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RB203	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RB204	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RB205	GRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RB206	GRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RB207	GRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
RB208	GRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RB209	GRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RB210	GRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RB211	GRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
RC101	GRD161J-622	CARBON RESISTOR	6.2K 5% 1/6W	
RC102	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RC103	GRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RC104	GRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q1802	2SA733A(P,K)	TRANSISTOR		
Q101	2SC2001(L,K)	TRANSISTOR		
Q201	2SC2001(L,K)	TRANSISTOR		
Q801	2SA733A(P,K)	TRANSISTOR		
Q801	DT124ES	TRANSISTOR		
R 501	GRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 502	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 503	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 504	GRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 505	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 506	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 507	GRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 508	GRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 509	GRD161J-221	CARBON RESISTOR	220 5% 1/8W	
R 510	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 516	GRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 519	GRD161J-223	CARBON RESISTOR	22K 5% 1/8W	
R 520	GRD161J-223	CARBON RESISTOR	22K 5% 1/8W	
R 531	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 532	GRD167J-121	CARBON RESISTOR	120 5% 1/8W	
R 533	GRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 534	GRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 537	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 538	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 539	GRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 541	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 641	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 642	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 651	GRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 652	GRD161J-422	CARBON RESISTOR	1.2K 5% 1/4W	
R 653	GRD161J-422	CARBON RESISTOR	2.4K 5% 1/6W	
R 654	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 901	GR20077-4R7X	CARBON RESISTOR	4.7 5% 1/4W	A-B-E, EN
R 901	GR20077-4R7X	CARBON RESISTOR	4.7 5% 1/4W	G-U, UT
R 901	GRD14CJ-4R7SX	CARBON RESISTOR	4.7 5% 1/4W	C-J
R 902	GR20077-4R7X	CARBON RESISTOR	4.7 5% 1/4W	A-B-E, EN
R 902	GR20077-4R7X	CARBON RESISTOR	4.7 5% 1/4W	G-U, UT
R 902	GRD14CJ-4R7SX	CARBON RESISTOR	4.7 5% 1/4W	C-J
R 908	GRD161J-151	CARBON RESISTOR	150 5% 1/6W	
R 910	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 912	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 913	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 914	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 915	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 917	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 918	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 921	GR20077-100	CARBON RESISTOR	10 5% 1/4W	A-B-E, EN
R 921	GR20077-100	CARBON RESISTOR	10 5% 1/4W	G-U, UT
R 921	GRD14CJ-100SX	CARBON RESISTOR	10 5% 1/4W	C-J
R 923	GRD14CJ-821SX	CARBON RESISTOR	820 5% 1/4W	
R 927	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 928	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 929	GRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 930	GRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R 931	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	

BLOCK NO. 0411111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
RC201	QRD161J-622	CARBON RESISTOR	6.2K 5% 1/6W	
RC202	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RC203	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RC204	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
RD106	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RD107	QRD161J-243	CARBON RESISTOR	24K 5% 1/6W	
RD108	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
RD109	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RD151	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RD152	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RD153	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RD154	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RD156	QRD161J-243	CARBON RESISTOR	24K 5% 1/6W	
RD157	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
RD159	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RD204	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RD206	QRD161J-243	CARBON RESISTOR	24K 5% 1/6W	
RD207	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
RD208	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W	
RD251	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RD252	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
RD253	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RD254	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RD256	QRD161J-243	CARBON RESISTOR	24K 5% 1/6W	
RD257	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
RD259	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RD801	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RD802	QRD14CJ-4705X	CARBON RESISTOR	47 5% 1/4W	
RD803	QRD14CJ-4705X	CARBON RESISTOR	47 5% 1/4W	
RD804	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RD805	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RD851	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RD852	QRD14CJ-4705X	CARBON RESISTOR	47 5% 1/4W	
RD853	QRD14CJ-4705X	CARBON RESISTOR	47 5% 1/4W	
RD854	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RD855	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
RE803	QRD14CJ-3R3S	CARBON RESISTOR	3.3 5% 1/4W	
RE804	QRD14CJ-3R3S	CARBON RESISTOR	3.3 5% 1/4W	
RE805	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
RE806	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
RE807	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
RE808	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
RG101	QRD14CJ-100SX	CARBON RESISTOR	10 5% 1/4W	
RG102	QRD161J-184	CARBON RESISTOR	180K 5% 1/6W	
RG103	QRD161J-184	CARBON RESISTOR	180K 5% 1/6W	
RG104	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RG105	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RG106	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
RG107	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
RG108	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG109	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RG110	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG111	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RG112	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG113	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	

BLOCK NO. 0411111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
RG114	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG115	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RG116	QRD14CJ-4R7SX	CARBON RESISTOR	4.7 5% 1/4W	
RG201	QRD14CJ-100SX	CARBON RESISTOR	10 5% 1/4W	
RG202	QRD161J-184	CARBON RESISTOR	180K 5% 1/6W	
RG203	QRD161J-184	CARBON RESISTOR	180K 5% 1/6W	
RG204	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RG205	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
RG206	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
RG207	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
RG208	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG209	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RG210	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG211	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RG212	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG213	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG214	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG215	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RG216	QRD14CJ-4R7SX	CARBON RESISTOR	4.7 5% 1/4W	
RG801	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RG802	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RG803	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG804	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG805	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG806	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
RG807	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
RG808	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RG811	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RG812	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RG813	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RG814	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RG821	QRZ0077-4R7X	CARBON RESISTOR	4.7 5% 1/4W	A,B,E,EN G,U,UT C,J
RG821	QRZ0077-4R7X	CARBON RESISTOR	4.7 5% 1/4W	
RG821	QRD14CJ-4R7SX	CARBON RESISTOR	4.7 5% 1/4W	
RH801	QRD161J-153	CARBON RESISTOR	35K 5% 1/6W	
RH802	QRZ0077-100	CARBON RESISTOR	10 5% 1/4W	A,B,E,EN G,U,UT C,J
RH802	QRZ0077-100	CARBON RESISTOR	10 5% 1/4W	
RH802	QRD14CJ-100SX	CARBON RESISTOR	10 5% 1/4W	
RH803	QRD161J-302	CARBON RESISTOR	3.0K 5% 1/6W	
RH804	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RH805	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
RH806	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
RH807	QRD161J-752	CARBON RESISTOR	7.5K 5% 1/6W	
RI801	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RJ801	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
RJ802	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
RJ807	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
RL101	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RL102	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RL103	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RL104	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RL105	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
RL106	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RL107	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RL108	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	

TD - V662BK A/B/E/EN/G/U/UT
TD - V661TN C/J

● Main Board Parts List

BLOCK NO. 01111111				
A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
RL201	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
RL202	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RL203	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
RL204	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RL205	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
RL206	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RL207	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RL208	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
RL801	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
RL802	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
RL803	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RM501	QRB105J-223	R-NETWORK	22K 5% 1/0W	
RM502	QRB105J-223	R-NETWORK	22K 5% 1/0W	
RM503	QRB055J-682	R-NETWORK	6.8K 5% 1/6W	
RP101	QRD161J-820	CARBON RESISTOR	82 5% 1/6W	
RP102	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
RP103	QRD161J-752	CARBON RESISTOR	7.5K 5% 1/6W	
RP104	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
RP105	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
RP201	QRD161J-820	CARBON RESISTOR	82 5% 1/6W	
RP202	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
RP203	QRD161J-752	CARBON RESISTOR	7.5K 5% 1/6W	
RP204	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
RP205	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
RQ101	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RQ102	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RQ103	QRD161J-752	CARBON RESISTOR	7.5K 5% 1/6W	
RQ104	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RQ111	QRD161J-303Y	CARBON RESISTOR	30K 5% 1/6W	
RQ113	QRD161J-303Y	CARBON RESISTOR	30K 5% 1/6W	
RQ114	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RQ201	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
RQ202	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RQ203	QRD161J-752	CARBON RESISTOR	7.5K 5% 1/6W	
RQ204	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
RQ211	QRD161J-303Y	CARBON RESISTOR	30K 5% 1/6W	
RQ213	QRD161J-303Y	CARBON RESISTOR	30K 5% 1/6W	
RQ214	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RQ801	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RQ803	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RQ804	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RQ805	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
RQ806	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
RS802	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RS803	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RS804	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
RU101	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RU102	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
RU201	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
S 631	VSH1140-005	LEAF SWITCH	F-REC	
S 632	VSH1140-005	LEAF SWITCH	METAL TAPE	
S 633	VSH1140-005	LEAF SWITCH	70U	
S 634	VSH1140-005	LEAF SWITCH	(PB LEVEL ADJ.)	
VRA11	QVZ3523-101	V-RESISTOR	(PB EQ ADJ.)	
VRA12	QVPA601-502	V-RESISTOR	(PB EQ ADJ.)	

■ Power Supply Board (U/UT only)

BLOCK NO. 01111111				
A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
VRA21	QVZ3523-101	V-RESISTOR	(PB LEVEL ADJ.)	
VRA22	QVPA601-502	V-RESISTOR	(PB EQ ADJ.)	
VRB11	QVPA601-503A	V RESISTOR	(REC LEVEL ADJ.)	
VRB21	QVPA601-503A	V RESISTOR	(REC LEVEL ADJ.)	
VRG11	QVZ3523-104	V-RESISTOR	BIAS ADJ.	
VRG21	QVZ3523-104	V-RESISTOR	BIAS ADJ.	
VRP81	QVAB26A-V01	V-RESISTOR	H.PONE LEVEL	
VRU11	QVZ3523-202AZ	V RESISTOR	CAL-SIGNAL	
VRU21	QVZ3523-202AZ	V RESISTOR	CAL-SIGNAL	
Z 801	VMA4142-001	SHIELD PLATE(B)		
Z 901	VMA4142-001	SHIELD PLATE(B)		

■ Power Supply Board (U/UT)

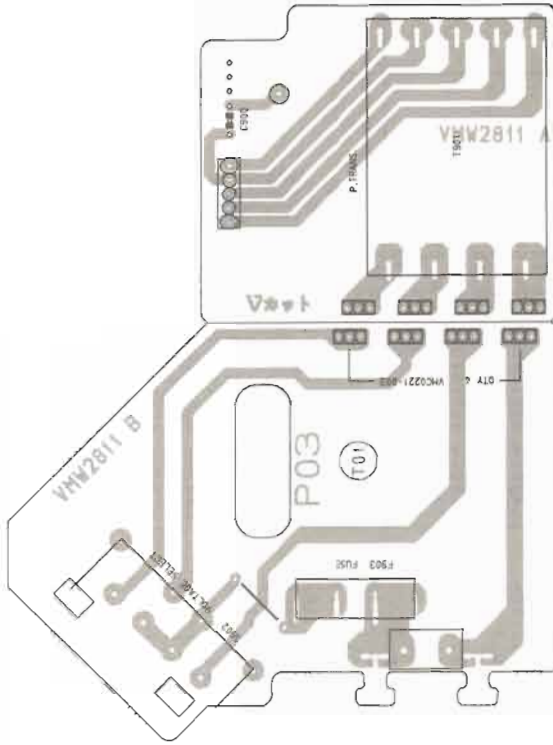


Fig.7 - 2

● Power Supply Board Parts List

BLOCK NO. 01311111				
A REF.	PARTS NO.	PARTS*NAME	REMARKS	SUFFIX
C 900	QCF11HP-103	C CAPACITOR	.010MF +100%-0%	U-UT
CN921	VMC0221-003	CONNECTOR		U-UT
CN921	VMC0221-003	CONNECTOR		U-UT
FH1-2	VMZ0043-001S	FUSE CLAMP	FOR F903	U-UT
TAB	VMZ0034-002	TAB	QTY 2	U-UT
V-SEL	QSS2325-112	SLIDE SWITCH	VOLT. SELECT	U-UT

Sub Board

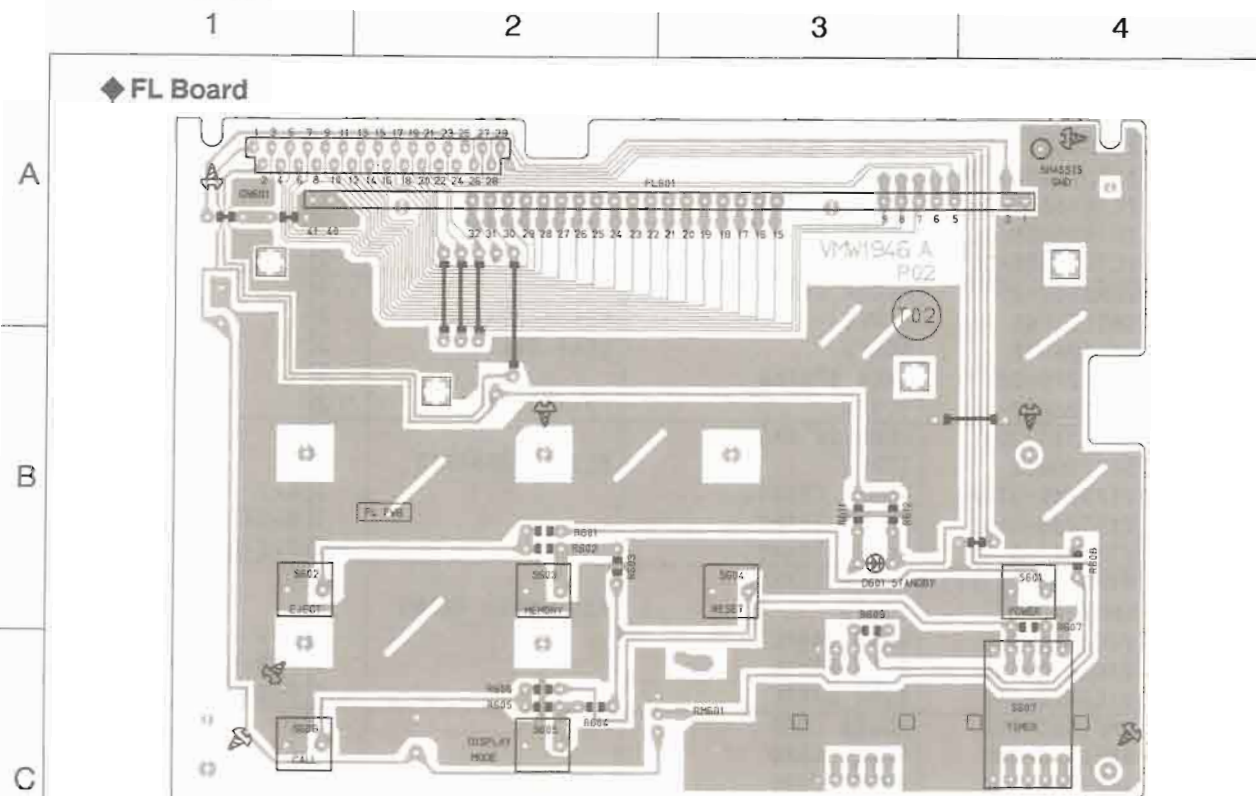


Fig. 7 - 3

Volume/Switch Board

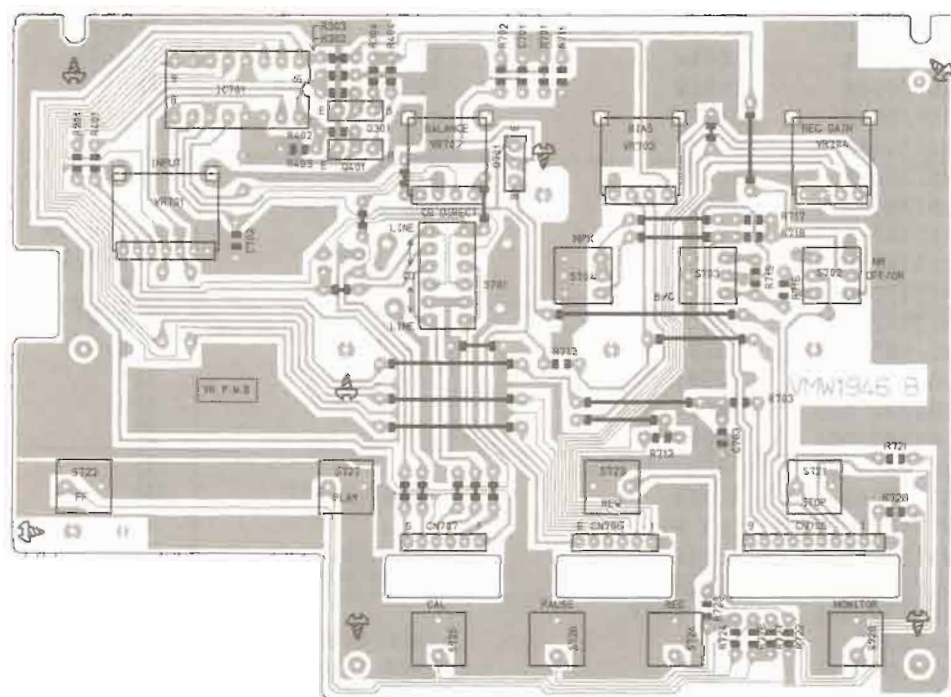


Fig. 7 - 4

Sub Board Parts List

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
S 607	QSR2D13-V01	ROTARY SWITCH	TIMER SWITCH	
S 701	QST4011-V01M	PUSH SWITCH	LINE	
S 702	QST4011-V02M	PUSH SWITCH	NR ON/OFF	
S 703	QST4011-V02M	PUSH SWITCH	NR B/C	
S 704	QST4011-V02M	PUSH SWITCH	MPX	
S 721	QSQ4H11-V01	TACT SWITCH	STOP	
S 722	QSQ4H11-V01	TACT SWITCH	FF	
S 723	QSQ4H11-V01	TACT SWITCH	REW	
S 724	QSQ4H11-V01	TACT SWITCH	REC	
S 725	QSQ4H11-V01	TACT SWITCH	CAL	
S 726	QSQ4H11-V01	TACT SWITCH	PAUSE	
S 728	QSQ4H11-V01	TACT SWITCH	PLAY	
VR701	QVDB27A-V02	V-RESISTOR	MONITOR	
VR702	QVGA17B-V02	V-RESISTOR	INPUT VR	
VR703	QVGA17B-V01	V-RESISTOR	BALANCE VR	
VR704	QVGB17A-V01	V-RESISTOR	BIAS VR	
			REC GAIN VR	

Sub Board Parts List

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 701	QCVB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
C 702	QCVB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
C 703	QCVB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
C 900	QCVB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
C 900	QCVB1CM-103Y	C CAPACITOR	0.010MF 20% 16V	
CN601	VMC02A2-029	CONNECTOR		
CN705	VMC0193-P09	CONNECTOR		
CN706	VMC0193-P06	CONNECTOR		
CN707	VMC0193-P06	CONNECTOR		
D 401	SLR-SSVCFOR	LED	STANDBY LED	
FL601	FIP9RWSY	FL TUBE		
IC701	UPD4053BC	IC	INPUT SELECT	
P1-P2	VMZ0034-001	TAB		A-B-E-EN G-U-UT
P1-P2	VMZ0034-001	TAB		
Q 401	2SC945	TRANSISTOR		
Q 701	DT124ES	TRANSISTOR		
R 301	GRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 302	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 303	GRD161J-513	CARBON RESISTOR	51K 5% 1/6W	
R 304	GRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 401	GRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 402	GRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 403	GRD161J-513	CARBON RESISTOR	51K 5% 1/6W	
R 404	GRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 601	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 602	GRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 603	GRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
R 604	GRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 605	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 606	GRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
R 607	GRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 611	GRD161J-151	CARBON RESISTOR	150 5% 1/6W	
R 612	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 701	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 702	GRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 703	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 711	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 712	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 713	GRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 715	GRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
R 716	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 717	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 721	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 722	GRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 723	GRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
R 724	GRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 726	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 727	GRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
S 601	QSQ4H11-V01	TACT SWITCH	POWER SWITCH	
S 602	QSQ4H11-V01	TACT SWITCH	EJECT SWITCH	
S 603	QSQ4H11-V01	TACT SWITCH	MEMOREY SWITCH	
S 604	QSQ4H11-V01	TACT SWITCH	RESET SWITCH	
S 605	QSQ4H11-V01	TACT SWITCH	DISPLAY SWITCH	
S 606	QSQ4H11-V01	TACT SWITCH	CALL SWITCH	

8 Exploded View of Enclosure component Parts and Parts List

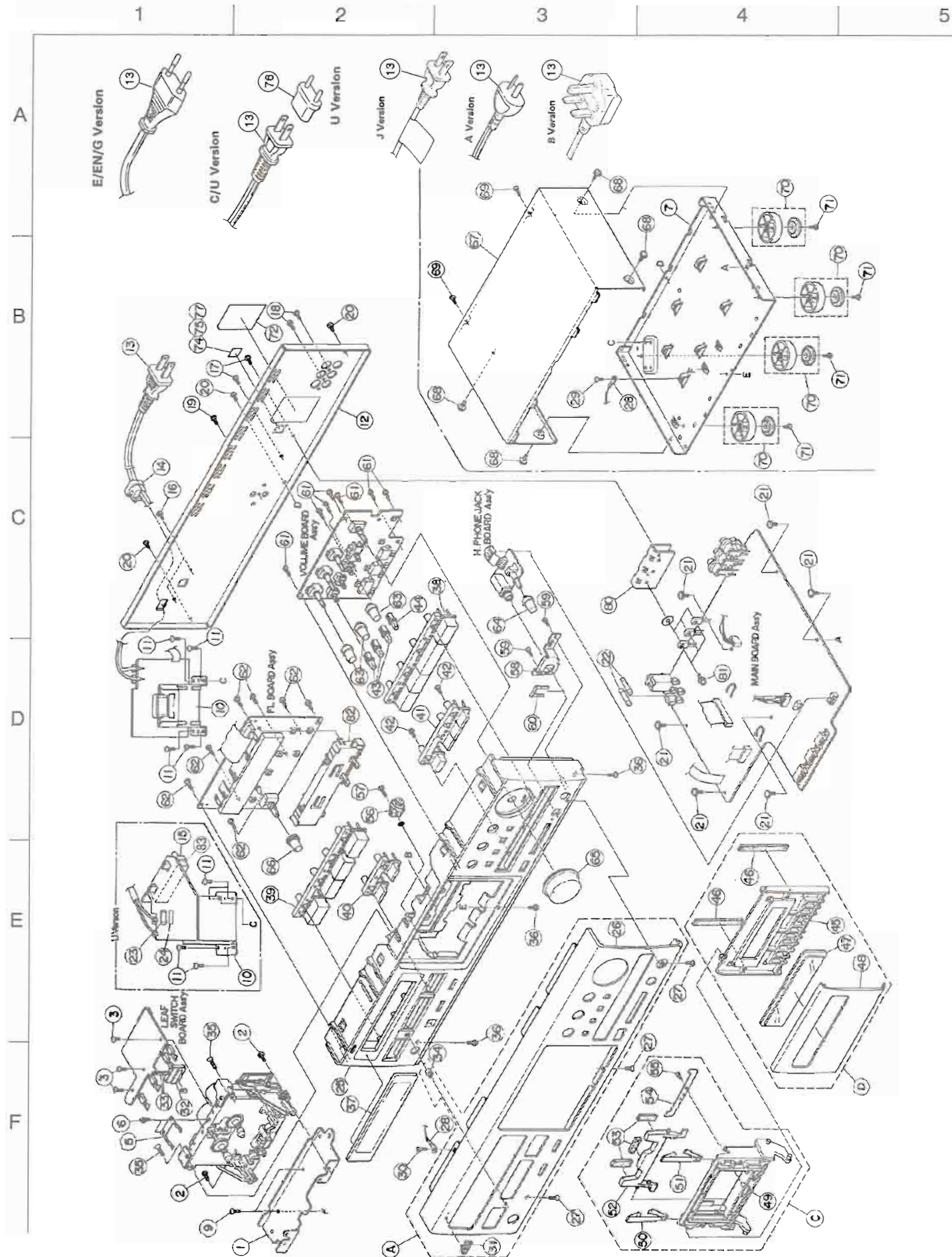


Fig. 8 - 1

Enclosure Component Parts List

BLOCK NO. 111111

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	ZCTDV661J-FTN	FRONT PLATE	SERVICE PARTS	1		TN
	ZCTDV662K-FBK	FRONT PLATE	SERVICE PARTS	1		BK
C	ZCTDV661K-CH	CASSETTE HOLDER	SERVICE PARTS	1		
D	ZCTDV661K-CL	CASSETTE LID	SERVICE PARTS	1		TN
	ZCTDV662K-CL	CASSETTE LID	SERVICE PARTS	1		BK
1	VKM3662-002	MECHA BRACKET		1		
2	SBST3006Z	SCREW	MECHA BRACKET	2		
3	SDST2608Z	SCREW	LEAF SWITCH	3		
5	VKY4279-001	PACK SPRING		1		
6	SDST2604Z	SCREW	PACK SPRING	2		
7	VKL1333-008	CHASSIS BASE		1		
9	SBST3006Z	SCREW	MECHA. BRACKET	2		
10	VTP52A5-011F	POWER TRANS.		1	C, J	
	VTP52G5-011F	POWER TRANS.		1	U, UT	
	VTP52Z5-011F	POWER TRANS.		1	A, E, EN, G	
	VTP52Z5-011FBS	POWER TRANS.		1	B	
11	SBST3006Z	SCREW	FOR POWER TRANS	4		
12	VJC2410-040	REAR PANEL		1	C, J	TN
	VJC2410-044	REAR PANEL		1	A, B, E, EN, G	BK
	VJC2410-046	REAR PANEL		1	U, UT	BK
13	QMP1480-200	POWER CORD		1	J	
	QMP1900-200	POWER CORD		1	C	
	QMP2560-200	POWER CORD		1	A	
	QMP3900-200	POWER CORD		1	E, EN, G	
	QMP5530-0085BS	POWER CORD		1	B	
	QMP7380-200	POWER CORD		1	U, UT	
14	QHS3771-108	CORD STOPPER		1	A, E, G	
	QHS3771-108	S R BUSHING		1	EN, U, UT	
	QHS3771-108BS	CORD STOPPER		1	B	
	QHS4077-108	S R BUSHING		1	C, J	
15	VKS5011-001	VOLTAGE CONTACT		1	U, UT	
16	SBSF3008M	SCREW	V. CONTACT	2	U, UT	
17	SBSF3008M	SCREW	FOR HEAT SINK	2		
18	SBSF3008M	SCREW	FOR PIN JACK	2		
19	SBSF3008M	SCREW	FOR DCS JACK	1		
20	SBST3006M	SCREW	FOR REAR+CHASSI	3		
21	GBST3006Z	SCREW	FOR MAIN BOARD	6		
22	QMF51A2-R80	FUSE	F901, F902	2	A, E, EN	
	QMF51A2-R80	FUSE	F901, F902	2	G, U, UT	
	QMF51E2-R80BS	FUSE	F901, F902	2	B	
23	QMF51A2-R20	FUSE	F903	1	U, UT	
24	VND4003-032	FUSE LABEL	FOR F903	1	U, UT	
25	VJG1229-002UL	FRONT PANEL	C/J ONLY	1		TN
	VJG1229-003	FRONT PANEL		1		BK
26	VJG1230-006	FRONT PLATE		1		BK
	VJG1230-005	FRONT PLATE		1		TN
27	SSSF3008Z	SCREW	FRONT PLATE	3		
28	VWE240-18NTNT	LUG WIRE		1		
29	SBST3006Z	SCREW	LUG WIRE	1		
30	SSSF3010Z	SCREW	FRONT PANEL+LUG	1		
31	VJD5429-001	JVC MARK		1		
32	LD-702MG	LED	BACK LIGHT	1		
33	QXT3100-015	TUBE	BACK LIGHT	2		
34	VJK4402-001	LENS	POWER STANDBY	1		
35	SSSF3012Z	SCREW	FOR MECHANISM	2		
36	SBST3006M	SCREW	FOR FRONT PANEL	3		
37	VJK3614-002	FINDER		1		BK
	VJK3614-001	FINDER		1		TN
38	VXP3582-002	MECHA BUTTON	STOP/PLAY	1		BK
	VXP3582-001	MECHA BUTTON	STOP/PLAY	1		TN

BLOCK NO. M1MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
39	VXP3583-002	OPERAT.BUTTON	POWER,RES,OPEN	1		BK
	VXP3583-001	OPELAT.BUTTON	POWER,RES,OPEN	1		TN
40	VXP3596-002	PUSH BUTTON(L)	D MODE,D.P.CAL	1		BK
	VXP3596-001	PUSH BUTTON(L)	D MODE,D.P.CAL	1		TN
41	VXP3597-002	PUSH BUTTON(R)	MUTE,PAUSE,R.CA	1		BK
	VXP3597-001	PUSH BUTTON(R)	MUTE,PAUSE,R.CA	1		TN
42	SBSF2610Z	SCREW	FOR P.BUTTON	2		
43	VXP5202-002	PUSH BUTTON	DOLBY,MPX FILTE	3		BK
	VXP5202-001	PUSH BUTTON	DOLBY,MPX FILRE	3		TN
44	VXP5202-002	PUSH BUTTON	FOR CD DIRECT	1		BK
	VXP5202-001	PUSH BUTTON	FOR CD DIRECT	1		TN
45	VJT3348-001	CASSETTE LID		1		
46	VJD5341-001	PAD		2		
47	VJD3961-001	CASSETTE LENS		1		
48	VJT3349-002	LID PLATE		1		BK
	VJT3349-001	LID PLATE		1		TN
49	VJT2322-001	CASSETTE HOLDER		1		
50	VKY4382-007	CASSETTE SPRING	LEFT	1		
51	VKY4382-008	CASSETTE SPRING	RIGHT	1		
52	VJT3314-003	C. STABILIZER		1		
53	VJD5341-001	PAD		3		
54	VKY4638-001	SPRING		1		
55	SDSF2605Z	SCREW		1		
56	E305654-001	DUMPER ASS'Y		1		
57	SBSF3010Z	SCREW	FOR DAMPER	1		
58	VYH7797-002	JACK BRACKET	FOR HEAD PHONE	1		
59	SBSF2610Z	SCREW	FOR JAC BRACKET	2		
60	VKL6752-001	SNAP PLATE	FOR HEAD PHONE	1		
61	SBSF2610Z	SCREW	FOR TIMER BOARD	7		
62	SBSF2610Z	SCREW	FL BOARD	7		
63	VXL4432-002	KNOB	BALANCE&BIAS	3		BK
	VXL4432-001	KNOB	BALANCE&BIAS	3		TN
64	VXL4432-002	KNOB	HP LEVEL	1		BK
	VXL4432-001	KNOB	HP LEVEL	1		TN
65	VXL3022-004	INPUT KNOB	INPUT	1		BK
	VXL3022-003	INPUT KNOB	INPUT	1		TN
66	VXL4425-002	KNOB	TIMER	1		BK
	VXL4425-001	KNOB	TIMER	1		TN
67	VJG1236-002	TOP COVER		1		BK
	VJG1236-001S	TOP COVER		1		TN
68	VKZ4614-001	SPECIAL SCREW	FOR TOP COVER	4		
69	SBST3006M	SCREW	FOR TOP COVER	2		
70	E406379-008SS	FOOT ASS'Y		4	B,E,EN,G	BK
	VJF4039-00F	FOOT ASS'Y		4	A,U,UT	BK
	VJF4039-00E	FOOT ASS'Y		4	C,J	TN
71	SBST3008Z	SCREW	FOR FOOT	4		
72	VYN2319-M004PA	NAME PLATE		1	C	
	VYN2319-M006PA	NAME PLATE		1	J	
	VYN2321-M002PA	NAME PLATE		1	B	
	VYN2321-M003PA	NAME PLATE		1	A	
	VYN2321-M005PA	NAME PLATE		1	E,EN	
	VYN2321-M007PA	NAME PLATE		1	U,UT	
	VYN2321-M008PA	NAME PLATE		1	G	
74	T44362-001	CSA LABEL		1	C	
75	E407097-001	HYATT L LABEL	HYATT LICENSE	1	J	
76	VO4062-001	CONTI.PLUG		1	U,UT	
80	VMH4011-201	HEAT SINK		1		
81	DPSP3008Z	SCREW	Q901,Q903,Q909	3		
82	VYH3671-002	FL TUB HOLDER		1		
83	QSS2325-112	SLIDE SWITCH	U VERSION	1	U,UT	

9 Exploded View of Mechanism Component Parts

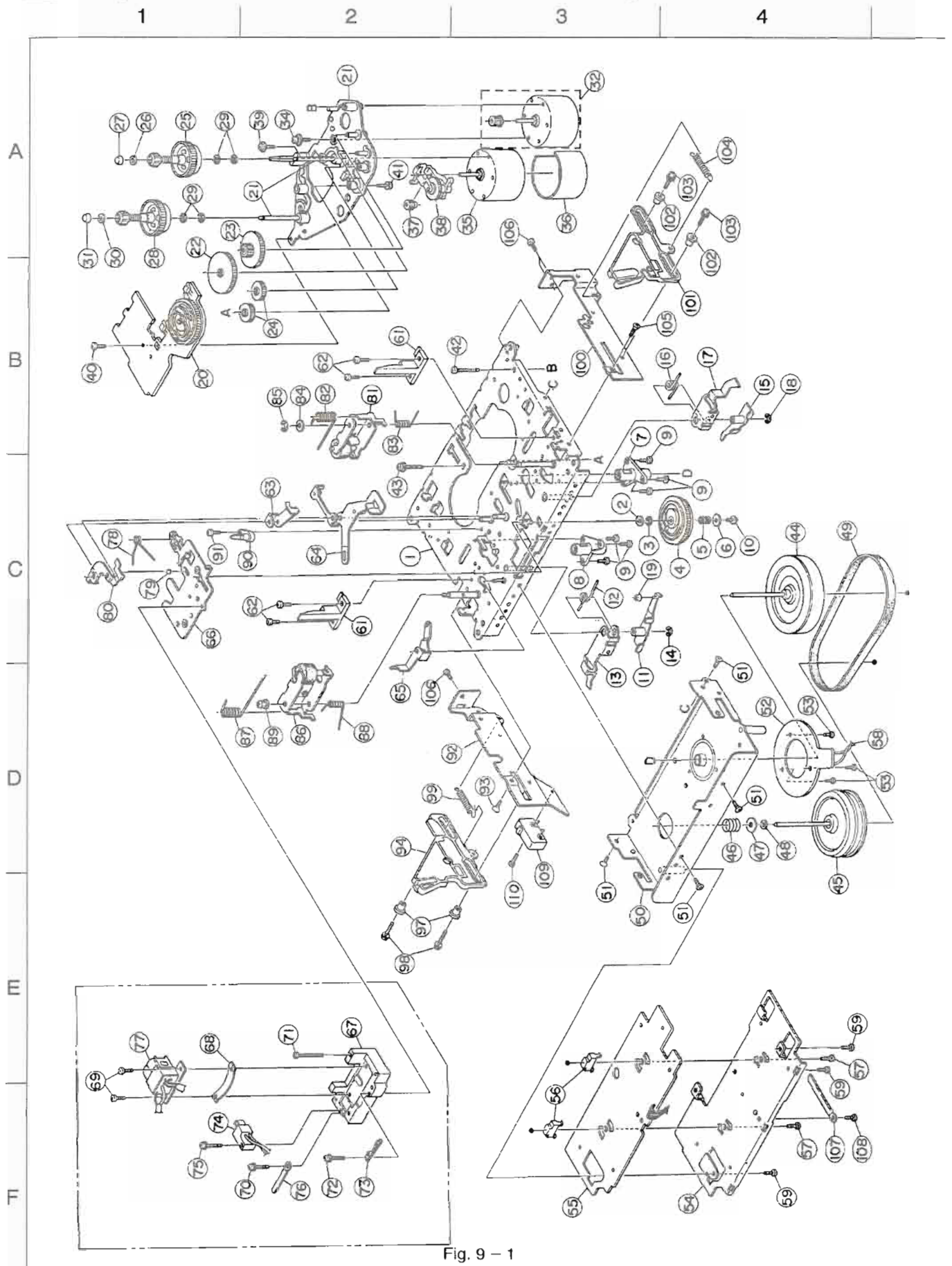


Fig. 9 - 1

Mechanism Component Parts List

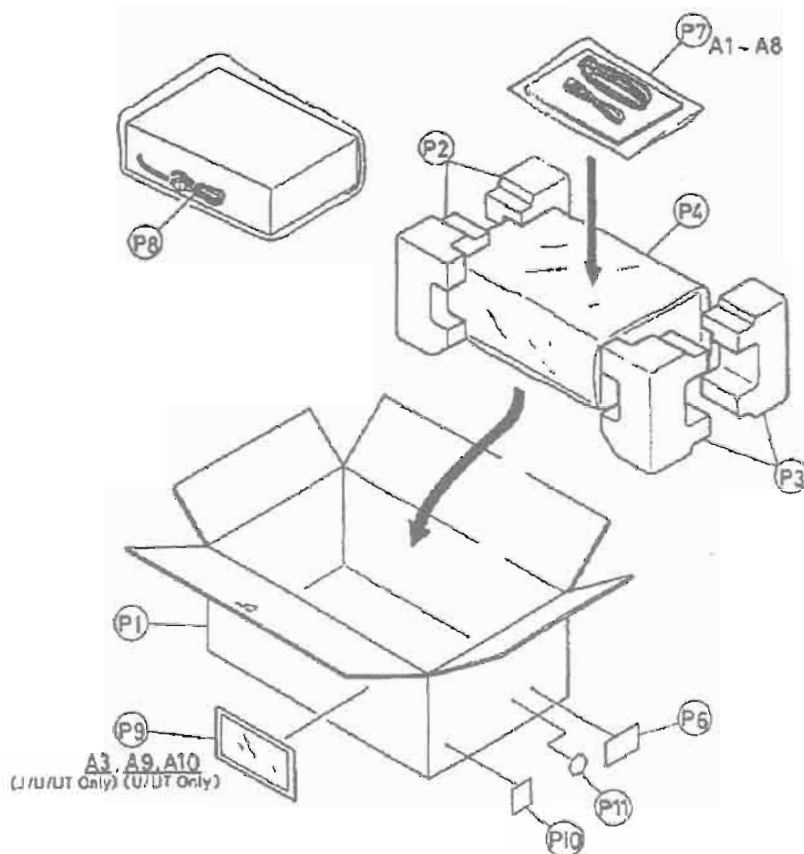
BLOCK NO. M2MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	VKL2449-0AB	CHAS.BASE ASS'Y		1		
2	VKZ4003-015	FELT	P.ROLLER CAM	1		
3	WFM467550	WASHER	P.ROLLER CAM	1		
4	VKS2202-002	P.ROLLER CAM		1		
5	VKW3001-276	C.SPRING	P.ROLLER CAM	1		
6	VKL5116-005	PLATE	P.ROLLER CAM	1		
7	VKF4199-00A	C.M.HOUSING	FOR R SIDE	1		
8	VKF4199-00B	C.M.HOUSING	FOR L SIDE	1		
9	SDST2605Z	SCREW	C.M.HOUSING	6		
10	VKZ4340-002	SCREW	P.ROLLER CAM	1		
11	VKL6830-00E	LEVER L1 ASS'Y		1		
12	VKW4872-001	T.SPRING	FOR LEVER L1	1		
13	VKL6832-001	LEVER L2		1		
14	REE2500X	E.RING	LEVER L1 ASS'Y	1		
15	VKL6843-00C	LEVER R1 ASS'Y		1		
16	VKW4873-001	T.SPRING	FOR LEVER R2	1		
17	VKL6845-001	LEVER R2		1		
18	REE2500X	E.RING	FOR LEVER R2	1		
19	VKH3000-147	COLLAR	FOR LEVER L1	1		
20	VKZ3136-00F	CAM SWITCH ASSY		1		
21	VKL2173-00E	DISK BASE	WITH R.SHAFT	1		
	VKH4188-002	REEL SHAFT	ASS'Y PARTS	2		
22	VKR3001-001	GEAR(2)		1		
23	VKR3001-002T	GEAR 2		1		
24	VKR3000-001	GEAR(1)		2		
25	VKR4598-00A	REEL DISK ASS'Y		1		
26	VKR4170-001	RING		1		
27	VKS4131-001	REEL STOPPER		1		
28	VKR4598-00A	REEL DISK ASS'Y		1		
29	VKZ4003-010	FELT		4		
30	VKR4170-001	RING		1		
31	VKS4131-001	REEL STOPPER		1		
32	MMN6F2RA8Z-SA1	DC MOTOR ASS'Y	CAM MOTOR	1		
34	DPSP2608Z	SCREW	CAM MOTOR	1		
35	MMN-6F4RA38	D.C.MOTOR	REEL	1		
36	FE-ZMS409	SHIELD CORE		1		
37	VKR3000-004	GEAR(1)		1		
38	VKS4503-00D	F/R ARM ASS'Y		1		
39	SWSP2608Z	SCREW	REEL	1		
40	SDST2605Z	SCREW	DISK BASE UNIT	1		
41	LPSP2608Z	SCREW	DISK BASE UNIT	1		
42	SPSP2615Z	SCREW	CAM MOTDR	1		
43	LPSP2614Z	SCREW	REEL MOTOR	1		
44	M35689B	ROTOR ASS'Y		1		
45	VKF3192-00D	FLYWHEEL(L) ASSY		1		
46	VKW3001-306	C.SPRING		1		
47	Q03093-622	WASHER		1		
48	Q03093-829	WASHER		1		
49	VKB3001-056	BELT		1		
50	VKM3660-00A	F.G.BKT.ASSY		1		
51	SSST2605Z	SCREW		4		
52	M40689	F.G BOARD		1		
53	SPSN2025M	TAP SCREW		3		
54	VKM3591-003	DD BKT		1		

BLOCK NO. **M2MM** **111**

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
55	M35688A	STATOR ASS'Y		1		
56	VKS5415-001	THRUST		2		
57	SDSF2605Z	SCREW		2		
58	VWE290-05A1A1	WIRE		2		
59	SDST2605Z	SCREW	DD BKT	3		
61	VKS4901-002	CASSETTE GUIDE	J24	2		
62	SDST2605Z	SCREW		4		
63	VKL5316-00G	H.BASE ARM ASSY		1		
64	VKL3879-00B	P.R.LEVER(1)		1		
65	VKL6190-00C	P.R.LEVER(2)		1		
66	VKL3881-005	HEAD BASE		1		
67	VKZ3159-003	E/R HEAD BASE		1		
68	18400310AT	SPRING PLATE		1		
69	SDSP2006Z	SCREW	R/P HEAD	2		
70	LPSP2010Z	SCREW	WIRE HOLDER	1		
71	SPSP2016N	SCREW	E/R HEAD BASE	1		
72	LPSP2010Z	SCREW	WIRE HOLDER	1		
73	VKZ4604-001	WIRE HOLDER		1		
74	VGH0212-121	ERASE HEAD		1		
75	LPSP2012N	SCREW	E HEAD	1		
76	VKZ4001-009	WIRE HOLDER		1		
77	VGH0425-030	R.P HEAD ASS'Y		1		
78	VKW4467-004	TORSION SPRING	R HEAD	1		
79	T41615-004	STEEL BALL		1		
80	VKY4278-002	SPRING PLATE		1		
81	VKP4210-00B	P.R.ARM ASY.(R)		1		
82	VKW3006-056	TORSION SPRING	PINCH ROLLER	1		
83	VKW3006-057	TORSION SPRING	RET	1		
84	WFM316025	S.WASHER	P.ROLLER ARM	1		
85	REE2500X	E.RING	P.ROLLER ASS'Y	1		
86	VKP4129-00L	P.R.ARM ASY(L)		1		
87	VKW4735-004	TORSION SPRING	PINCH ROLLER	1		
88	VKW3006-060	TORSION SPRING	RETURN	1		
89	VKS4513-001	ADJUST SCREW	P.ROLLER ARM	1		
90	VKS4512-003	GUID POST		1		
91	SDST2605Z	SCREW	GUIDE POST	1		
92	VKM3336-006	SIDE BRACKET L		1		
93	SSST2605Z	SCREW	SIDE BRACKET L	1		
94	VKS2211-004	SLIDE LEVER L		1		
97	VKH3001-085	F.COLLAR	SLIDE LEVER L	2		
98	LPSP2010Z	SCREW	SLIDE LEVER	2		
99	VKW3002-277	SPRING	SLIDE LEVER	1		
100	VKM3337-003	SIDE BRACKET R		1		
101	VKS2212-003	SLIDE LEVER R		1		
102	VKH3001-085	F.COLLAR	SLIDE LEVER R	2		
103	LPSP2010Z	SCREW	SLIDE LEVER R	2		
104	VKW3002-268	SPRING	SLIDE LEVER	1		
105	SSST2605Z	SCREW	SIDE BRACKET	1		
106	SDST2605Z	SCREW	SIDE BRACKET R	3		
107	VKZ4001-111	WIRE HOLDER		1		
108	SDST2605Z	SCREW	WIRE HOLDER	1		
109	VSH1162-002	SWITCH	DOOR SENSOR	1		
110	SDSP2010Z	SCREW	SENSOR SWITCH	1		

10 Packing



● Packing parts List

BLOCK NO. M3MMTTTT

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A 1	VMP0039-00D	PIN CORD		1		
A 2	VNN2328-671M	INSTRUCTIONS		1	A, B, J	
	VNN2328-661M	INSTRUCTIONS		1	C, E, G, EN, UT,	
	VNN2328-271M	INSTRUCTIONS		1	EN	
A 3	BT-20047F	WARRANTY CARD	FOR PX EES	1	U	
	BT20060	WARRANTY CARD		1	B	
	BT-20066A	WARRANTY CARD		1	B	
	BT-20122	WARRANTY CARD		1	A	
	BT-20122-1-A	WARRANTY CARD		1	A	
	BT-20025K	WARRANTY CARD		1	C	
	BT-20047F	WARRANTY CARD		1	J, U, UT	
	BT-20134	WARRANTY CARD		1	G	
A 5	BT-20137	SERVICE NETWORK	FOR JED	1	U, UT	
	BT20071A	JVC CENTER LIST	FOR PX EES	1	C	
	BT-20137	SERVICE NETWORK		1	J, U, UT	
A 6	E43486-340A	SAFETY I.SHEET		1	B	
	BT-20044G	SAFETY INST.		1	J	
A 8	EWP805-001E	REMOTE WIRE		1		
A 9	VNC5311-203	LINE V CAUTION	FOR PX EES	1	U, UT	
A 10	VNC5311-204	LINE V CAUTION	FOR EES	1	U, UT	
P 1	VPC2329-M002	CARTON	TD-V562	1		BK
	VPC2328-M002	CARTON	TD-V561	1		TN
P 2	VPH2456-001	CUSHION (L)		1		
P 3	VPH2457-001	CUSHION (R)		1		
P 4	E300196-031B	ENVELOPE	FOR SET	1		
P 6	TDV562BKUT-LAB	SERIAL TICKET	COMPUTER LABEL	1	UT	
	TDV562BKEN-LAB	SERIAL TICKET	COMPUTER LABEL	1	EN	
	TDV561TNC-LAB	SERIAL TICKET	COMPUTER LABEL	2	C	
	TDV562BKA-LAB	SERIAL TICKET	COMPUTER LABEL	1	A	
	TDV562BKB-LAB	SERIAL TICKET	COMPUTER LABEL	1	B	
	TDV562BKE-LAB	SERIAL TICKET	COMPUTER LABEL	1	E	
	TDV561TNJ-LAB	SERIAL TICKET	COMPUTER LABEL	2	J	
	TDV562BKG-LAB	SERIAL TICKET	COMPUTER LABEL	1	G	
	TDV562BKU-LAB	SERIAL TICKET	COMPUTER LABEL	1	U	
P 7	VPE3005-007	POLY BAG	FOR INST	1		
P 8	QO4141H	WIRE CLAMP	FOR POWER CORD	1		
P 9	E66416-003	ENVELOPE	FOR WARRANTY	1	J, U, UT	
P 10	VYN2329-901	NAME PLATE		1	UT	
P 11	GZLA001-005	GREEN POINT LAB	GREEN POINT	1	G	