

# Service Manual

Digital Audio Cassette Recorder

## SV-P100

[E], [EK], [XL], [EG], [EB],  
[EF], [XA], [EH], [Ei]



### Areas

- \* [E] is available in Switzerland and Scandinavia.
- \* [EK] is available in United Kingdom.
- \* [XL] is available in Australia.
- \* [EG] is available in F.R. Germany.
- \* [EB] is available in Belgium.
- \* [EF] is available in France.
- \* [XA] is available in Southeast Asia, Oceania, Africa, Middle Near East and Central South America.
- \* [EH] is available in Holland.
- \* [Ei] is available in Italy.

## Specifications

Specifications are subject to change without notice for further improvement.  
Weights and dimensions shown are approximate.

<b>Power supply:</b>	~ 110/120/220/240 V, 50 or 60 Hz
<b>Power consumption:</b>	90 W
<b>Dimensions:</b>	43 (W) x 27.8 (H) x 34.6 (D) cm
<b>Weight:</b>	21 kg
<b>Application:</b>	Digital audio cassette recorder
<b>PCM standard:</b>	EIAJ stereo technical committee and video technical committee file: "Commercial PCM encoder/decoder" specification.
<b>Quantization:</b>	Linear 14-bit
<b>Decoding:</b>	Linear 14 bit
<b>Tape:</b>	VHS type video cassette
<b>Signal recording system:</b>	PCM signal converted to NTSC TV signal and recorded according to VHS standard.
<b>Recording time:</b>	About 2-hour maximum (using NV-E180)
<b>Audio Channels:</b>	2-channel (L, R, Stereo)
<b>Frequency response:</b>	2 Hz ~ 20 kHz ( $\pm 0.5$ dB)
<b>Total harmonic distortion:</b>	0.01% or less (1 kHz, 0 dB)
<b>Dynamic range:</b>	better than 86 dB

### [Input terminals]

<b>Line input:</b>	30 mV/50 k $\Omega$ (head room 15 dB)
<b>Microphone input:</b>	0.7 mV/600 $\Omega$ (head room 15 dB)
<b>Digital input:</b>	Video format (1 Vpp/75 ohms)

### [Output terminals]

<b>Line output:</b>	400 mV/600 $\Omega$ (head room 15 dB)
<b>Digital output:</b>	Video format (1 Vpp/75 ohms)
<b>Remote control jack:</b>	8-pin DIN terminal

### Accessory functions and facilities:

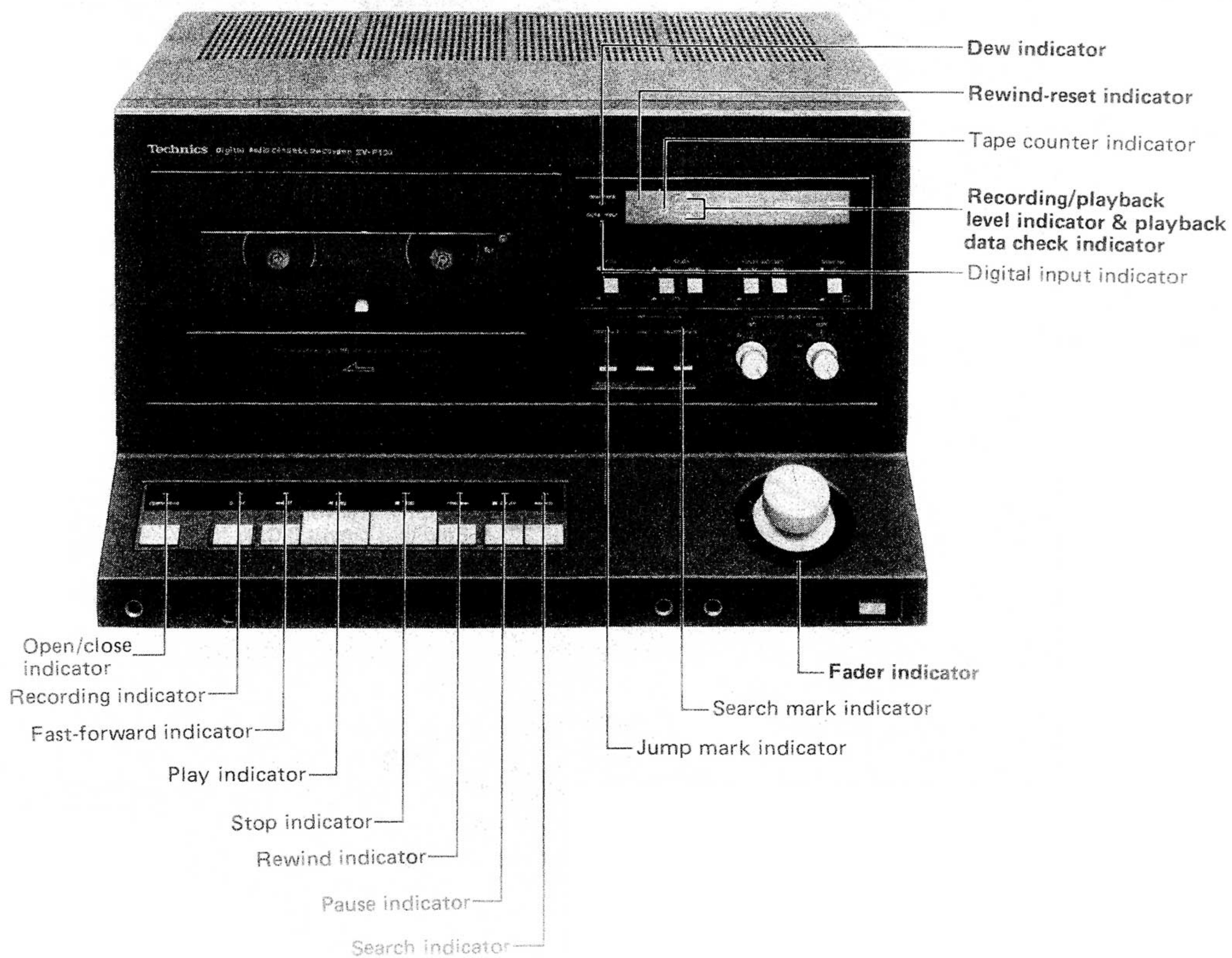
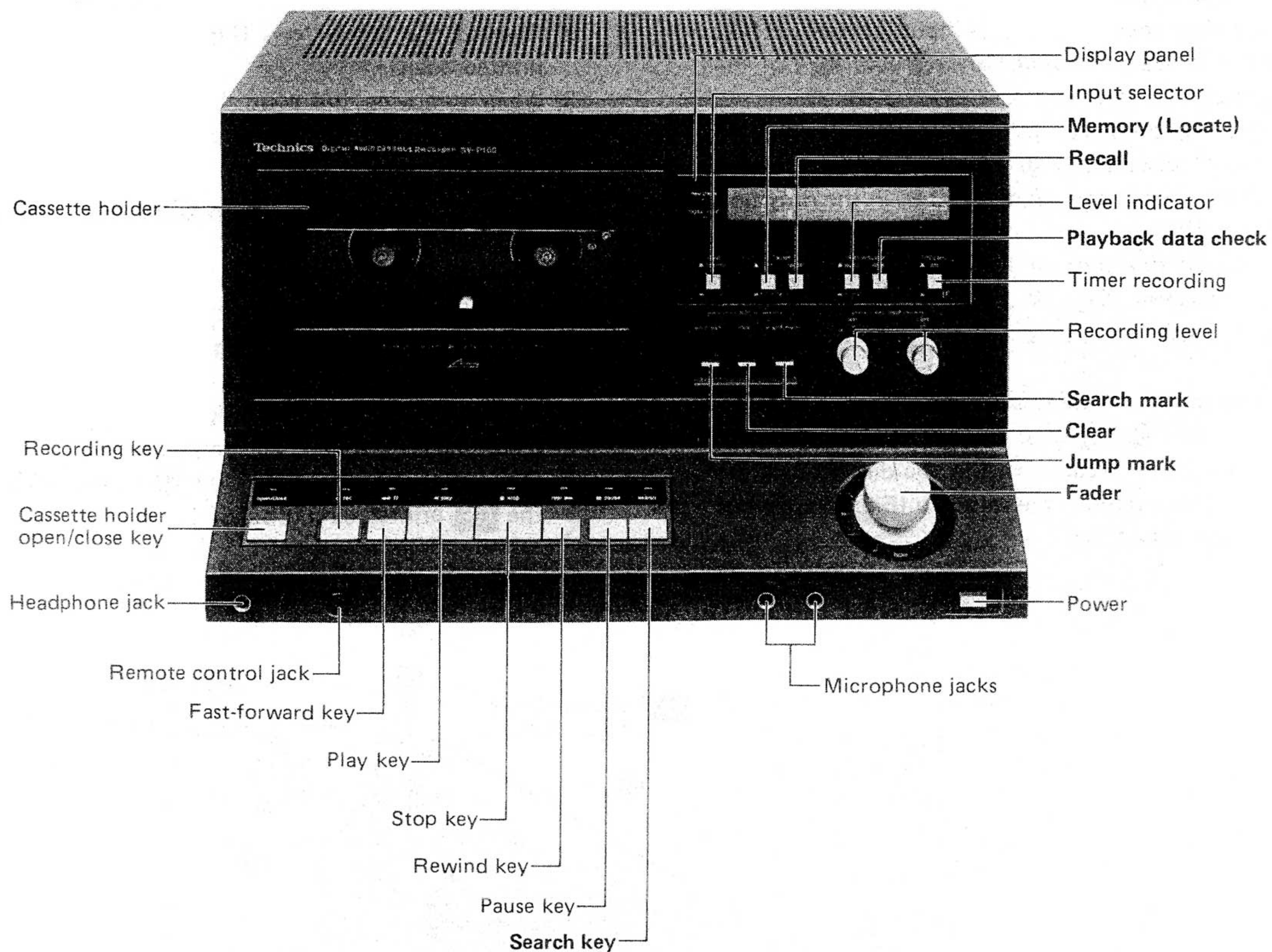
Jump  
Search  
Memory, memory recall  
Playback data check  
Tracking adjustment  
Timer recording & 1-hour delay recording  
Digital recording terminals  
Headphone and microphone jacks

# Technics

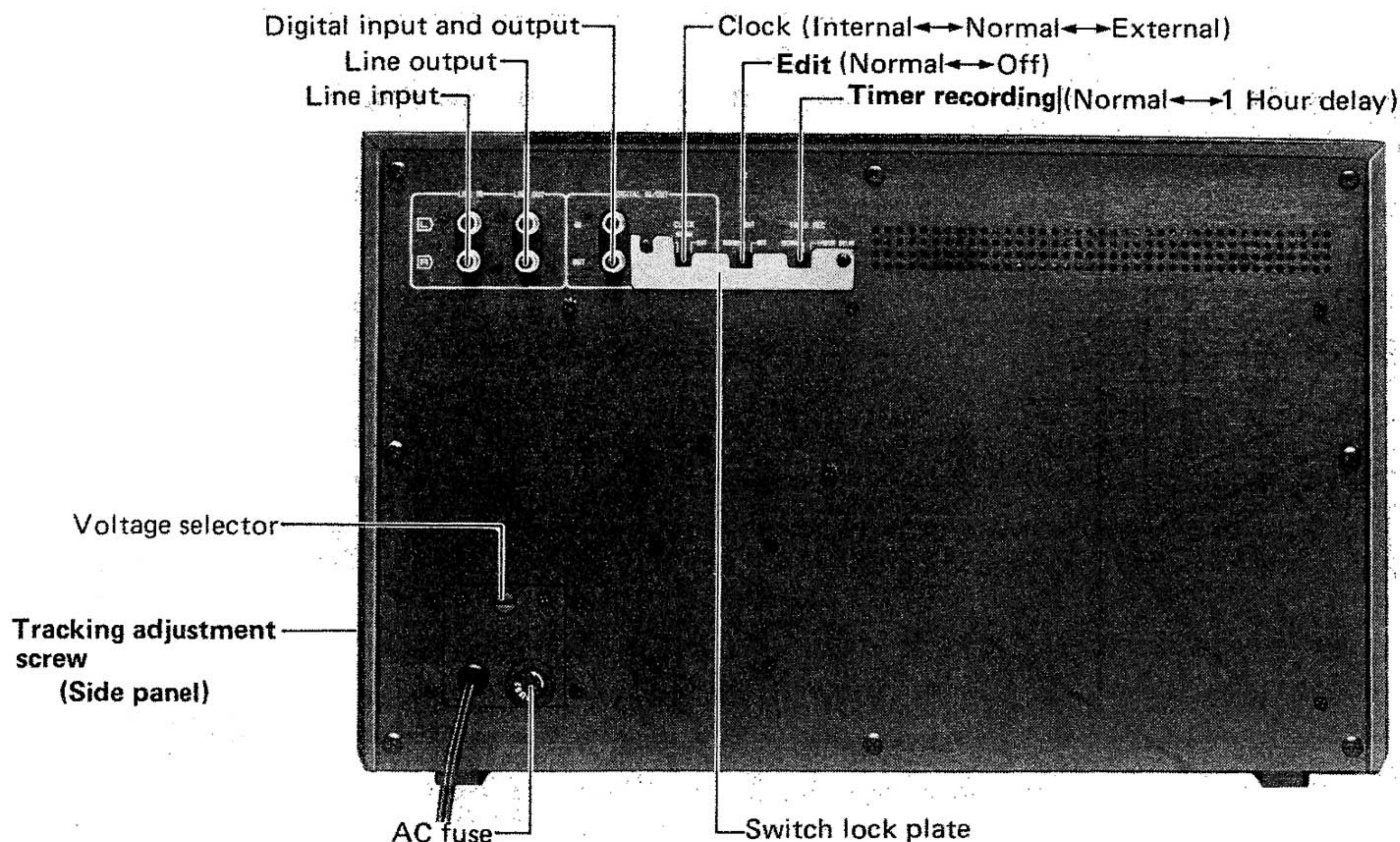
Matsushita Electric Trading Co., Ltd.  
P.O. Box 288, Central Osaka Japan

# LOCATION OF CONTROLS

## • Front panel view



## ● Rear panel view



## ■ FUNCTIONS

### ● Front panel facilities

#### Fader knob (fader)

- \* Used for adjusting recording and playback level and for fade-in and fade-out operations.
- \* At the "0" position, recording and playback level attenuation is 0 dB (the normal level); when the knob is turned counterclockwise, the fader indicator lights and signal level is attenuated by the amount marked (calibrated in dB).
- \* At the "∞" position, attenuation is complete.
- \* Limited to the case of digital dubbing with a digital input; digital muting can be applied by turning this knob counterclockwise (when the indicator lights).

#### Fader indicator

- \* This indicator lights if the fader knob is turned counterclockwise, even by a slight amount.

#### Search key

- \* Press to find search marks recorded on the tape using the search lever in the editing controls section.
- \* When this button is pressed, the search indicator lights and tape transport shifts to the cue or review mode, stopping when the beginning of the search mark is reached. However, if the end of the tape is reached, then tape transport changes to the review mode, stopping when the beginning of the search mark is reached.
- \* This key functions only when the rear panel edit switch has been set to the normal (NORM) position.
- \* If this key is pressed when no search mark has been recorded on the tape, transport continues in the cue mode

until the end of the tape, then shifts to the review mode, stopping at the beginning of the tape.

#### Dew indicator (dew check)

- \* Lights when condensation is detected inside the unit. To protect the tape, this unit will not operate when this indicator is lit. Turn on the power and wait until the indicator goes out.

#### Rewind-reset indicator (rew-reset)

- \* This lights when the cassette holder is out, or when a tape is inserted which has not been rewound to the beginning.
- \* When this indicator is lit, the tape counter indication does not correspond to tape position.
- \* This indicator goes out only after the tape has been rewound to the beginning and the tape counter indicates "0".

#### Playback data check button (data)

- \* Used to check tape playback quality.
- \* When this button is depressed, the left channel level indicator becomes the playback data check indicator.

#### Recording/playback level indicator & Playback data check indicator

##### [Recording/playback level check indicator]

- \* Acts as a peak meter during recording and playback.
- \* Indication is independent for the left and right channels. Response is from -40 dB to +5 dB in 1.5 dB steps.
- \* Both the audio peak and digital peak-hold indication modes are useful for setting recording level.

### [Playback data check indicator]

- \* The meter's left channel indicates playback signal quality when the playback data check button is held down.

### Memory button (locate: ■ off; ▬ memory)

- \* Press to put tape counter position into the memory.
- \* After pressing this button to memorize a tape counter position, the fast-forward and rewind controls can be used to automatically locate that same position.
- \* The locate function does not operate if this button is at the off (extended) position.

### Recall button (recall)

- \* This button is used to recall the tape counter position put into the memory by the memory (locate) button.
- \* By holding down the recall button and then pressing the memory button, the previously memorized tape counter position will be put back into the memory. (Useful if the memory button has been turned off).

### ( Editing facilities )

Editing controls only operate when the rear panel editing switch is at the normal (NORM) position.

### Jump mark lever (jump mark)

- \* Press this lever down during recording or playback if reproduction of a portion of the tape is not desired. The jump mark indicator flashes and a jump mark is recorded on the tape when this lever is down. This portion of the tape will then be skipped over during playback (during which period the jump mark indicator will stay lit).
- \* To erase a jump mark, press down the clear lever during playback.

### Clear lever (clear)

- \* If this lever is down during playback, jump marks and search marks will be erased. Jump mark and search mark indicators flash during this operation.
- \* Remember to return the clear lever to the up position after use.

### Search mark lever (search mark)

- \* This is used to record search marks on the tape during recording or playback. Although the lever returns to its normal position as soon as it is released, the search mark is recorded on the tape for 70 seconds, during which time the search mark indicator flashes on and off.
- \* The search key can then be used to make the tape stop at the beginning of a search mark.
- \* A search mark is recorded automatically at the beginning of each recording, regardless of whether the search mark lever is pressed or not.
- \* To erase a search mark, press down the clear lever during playback.

### ● Rear panel facilities

#### Edit switch (EDIT)

- \* This has been set to the normal (NORM) position at the factory.
- \* It may be set to the OFF position if the editing facilities will not be used. Nevertheless, it should always be set to the normal (NORM) position if recording.

#### Timer recording switch (TIMER REC : NORM/1 HOUR DELAY)

- \* This has been set to the normal (NORM) position at the factory.
- \* When set to the 1 HOUR DELAY position, the unit is allowed to warm up for one hour before timer operated recording or playback begins, so eliminating any condensation.

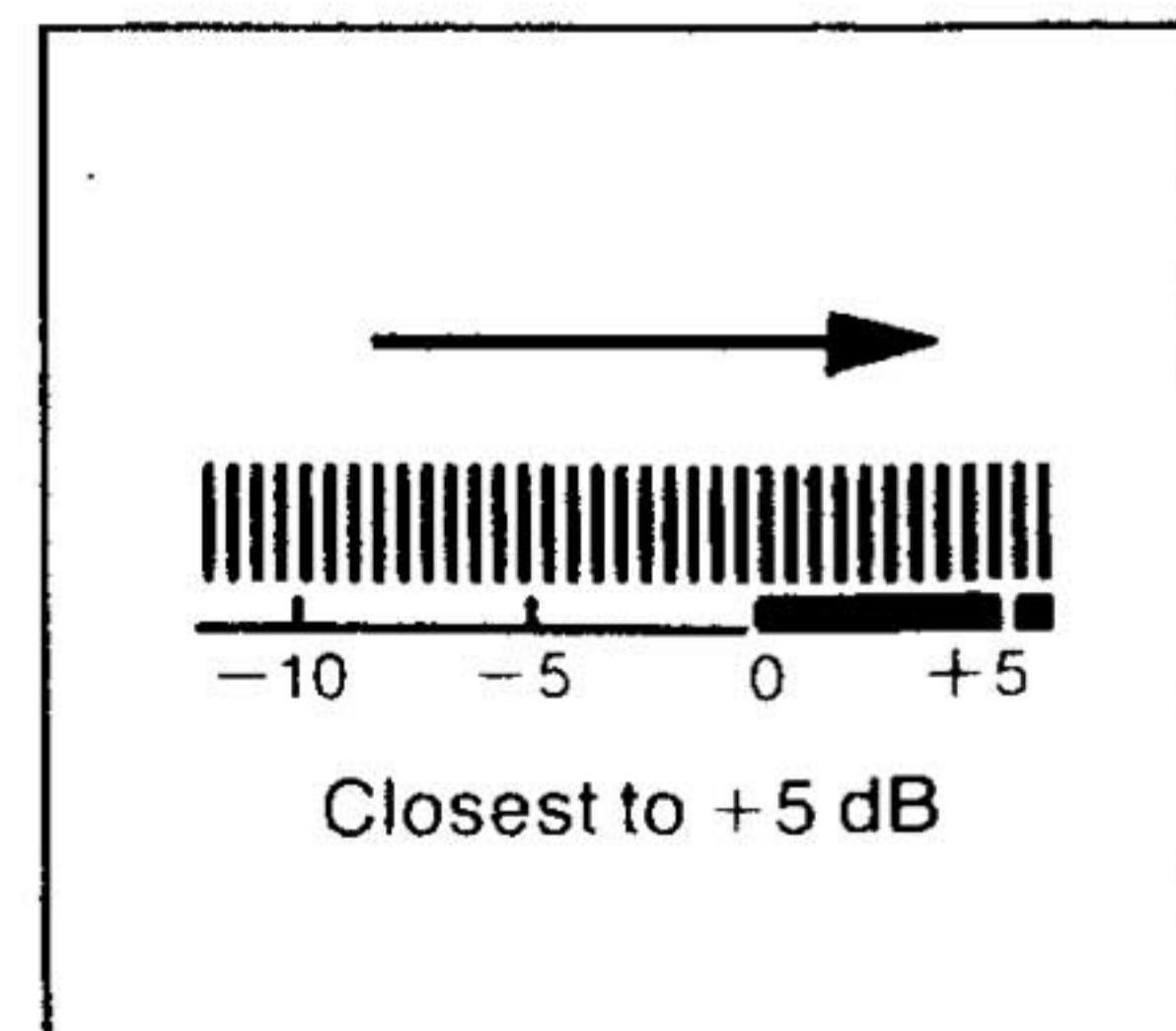
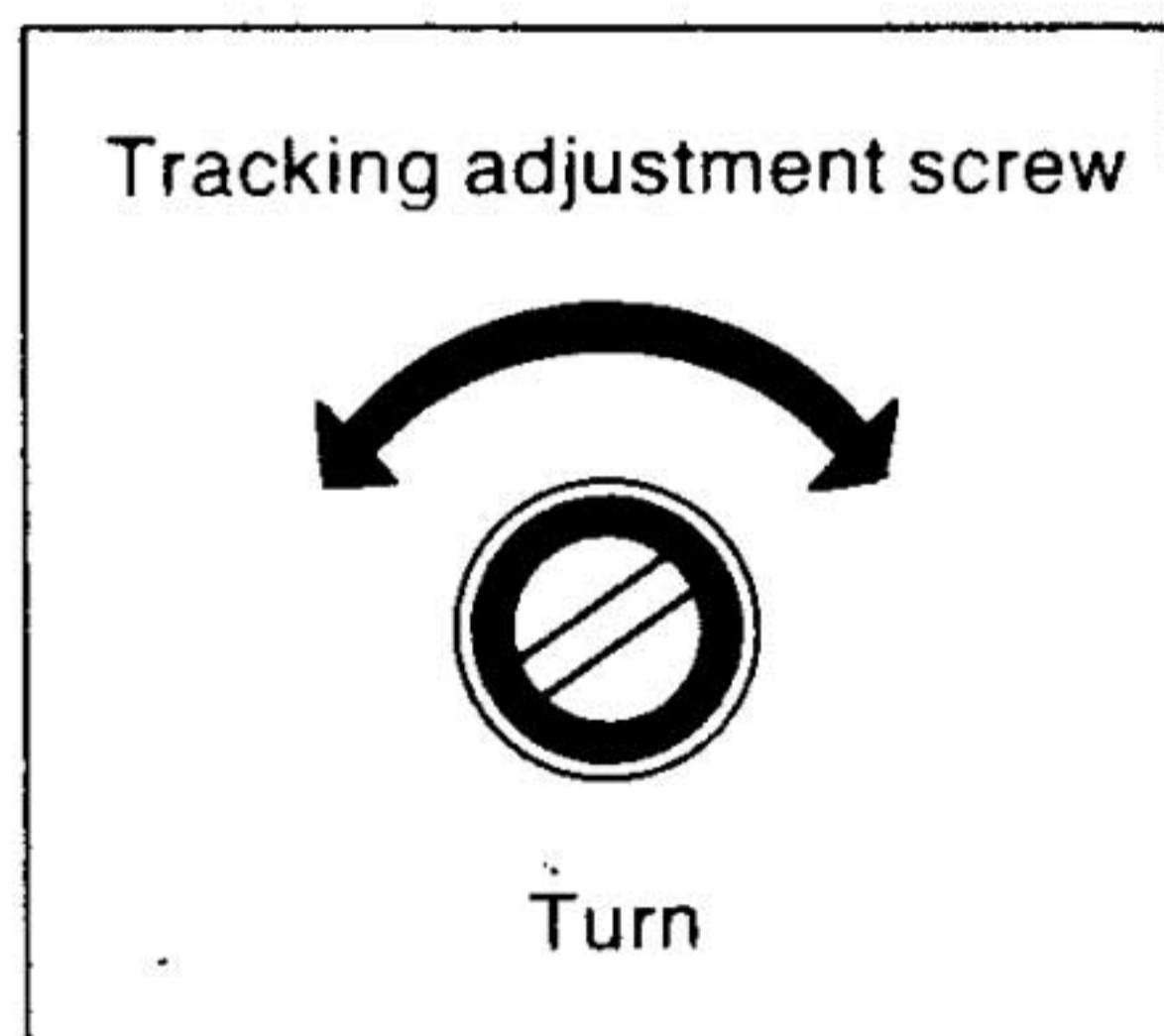
#### Tracking adjustment screw (TRACKING)

- \* For adjusting tracking to assure best playback quality.
- \* This has been factory adjusted for optimum performance. Ordinarily adjustment is only needed in cases when the tape to be played back was recorded on another unit.

When playing tapes recorded on a different machine it may be difficult to attain the same quality as you are accustomed to with tapes recorded on this machine.

Tracking adjustment may help improve playback quality in this case. Proceed as follows:

- \* Remove the protective cap on the side panel.
- \* Press the playback data check button and watch the display, turning the tracking adjustment screw (with the accessory screwdriver) in either direction until you find the point which results in the highest attainable playback data check indication (i.e., the closest to +5 dB).
- \* Remember to return the tracking adjustment screw to the center click-stop position when playing tapes recorded on this machine.



# DISASSEMBLY INSTRUCTIONS

## How to remove the cabinet

1. Remove the 8 setscrews (Fig. 1 : ① ~ ⑧) of the cabinet.

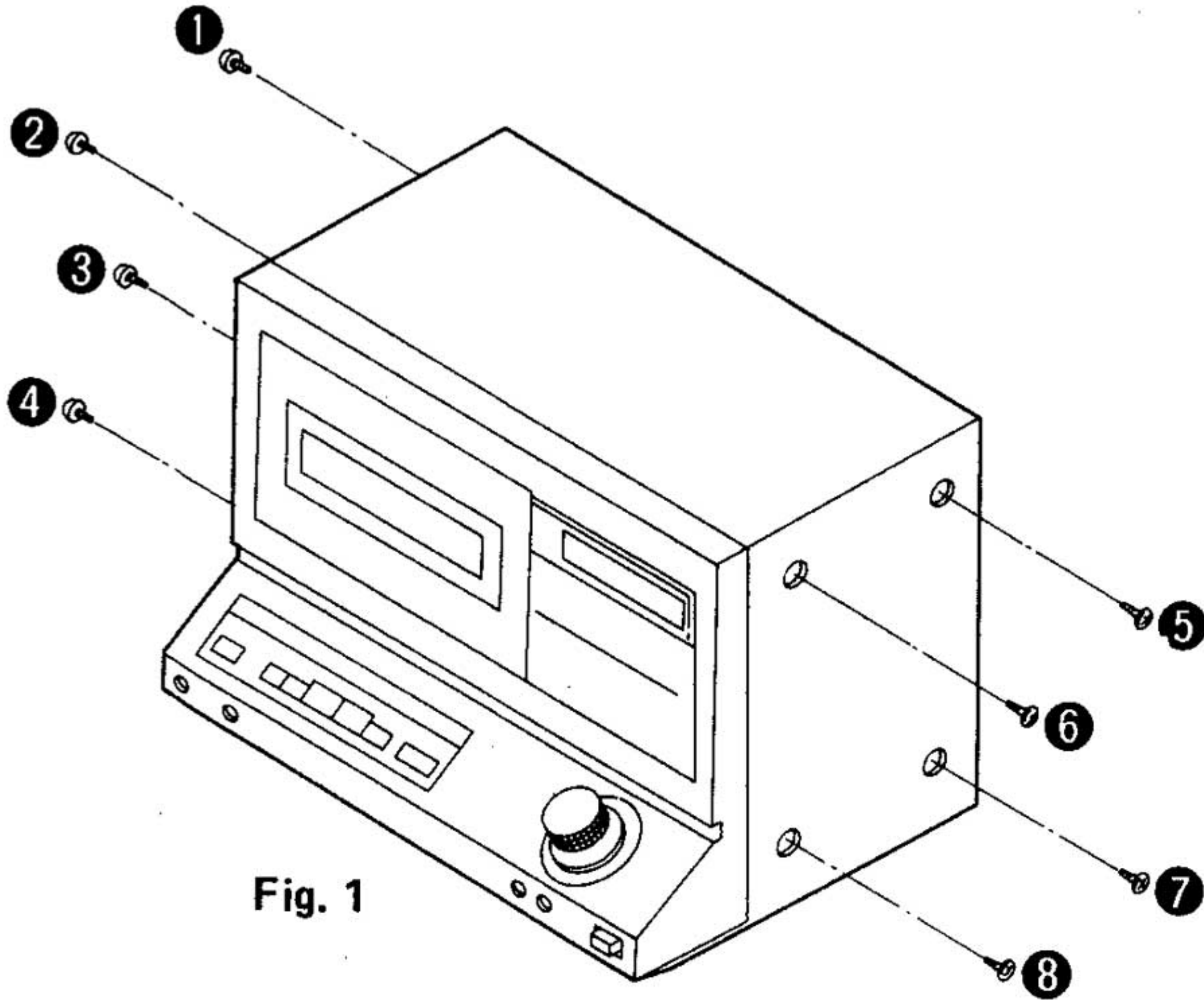


Fig. 1

## How to remove the rear panel

1. Remove the 8 setscrews (Fig. 3 : ⑳ ~ ㉓) of the rear panel.

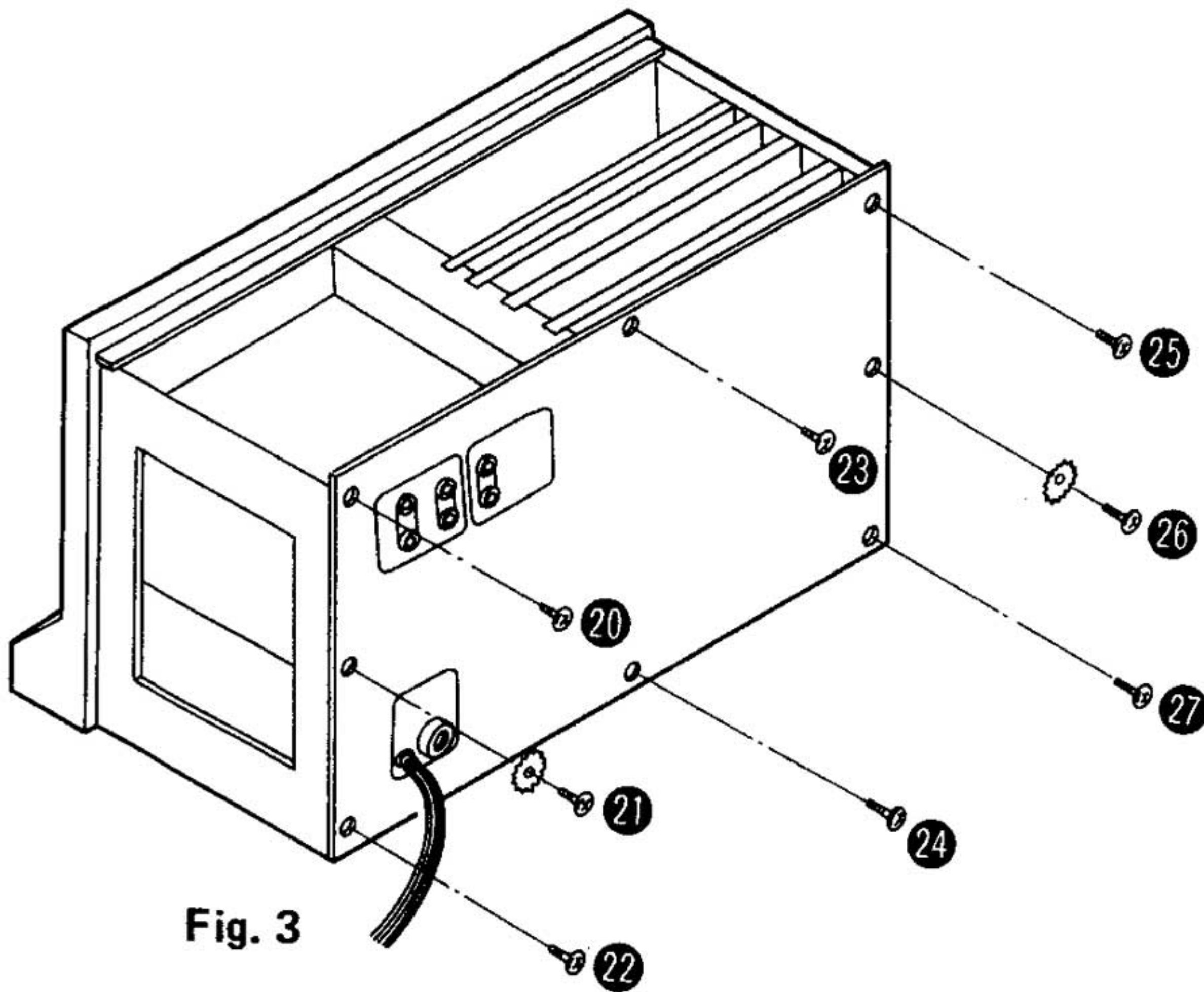


Fig. 3

## How to remove the front panel

1. Remove the cabinet and cassette holder panel.
2. Press the cassette holder open/close key to close the cassette holder.
3. Remove the 7 setscrews (Fig. 5 : ㉔ ~ ㉙) of the front panel.
4. Check the front panel as in Fig. 6.

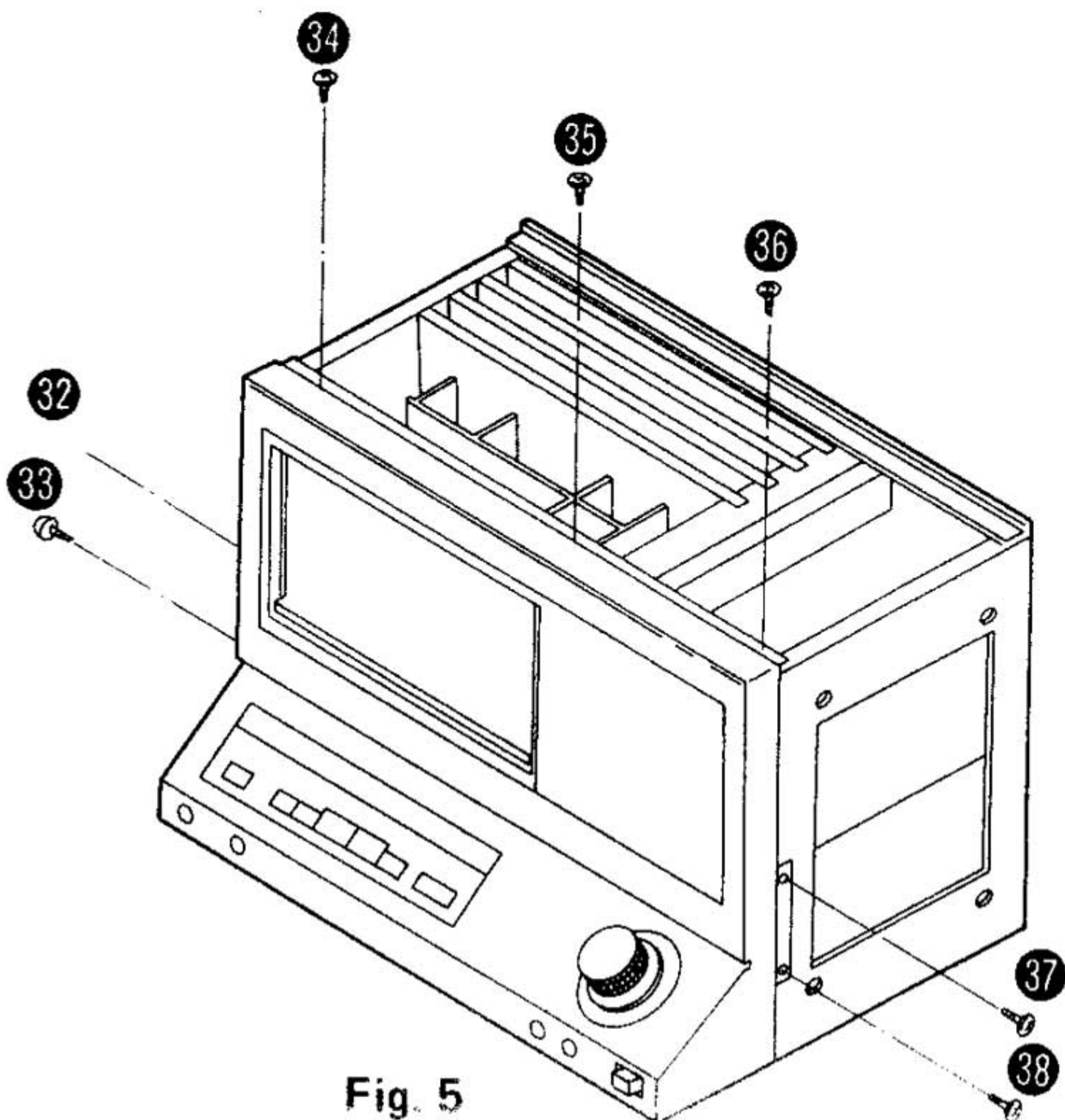


Fig. 5

## How to remove the bottom board

1. Remove the 11 setscrews (Fig. 2 : ⑨ ~ ⑲) to the bottom board.

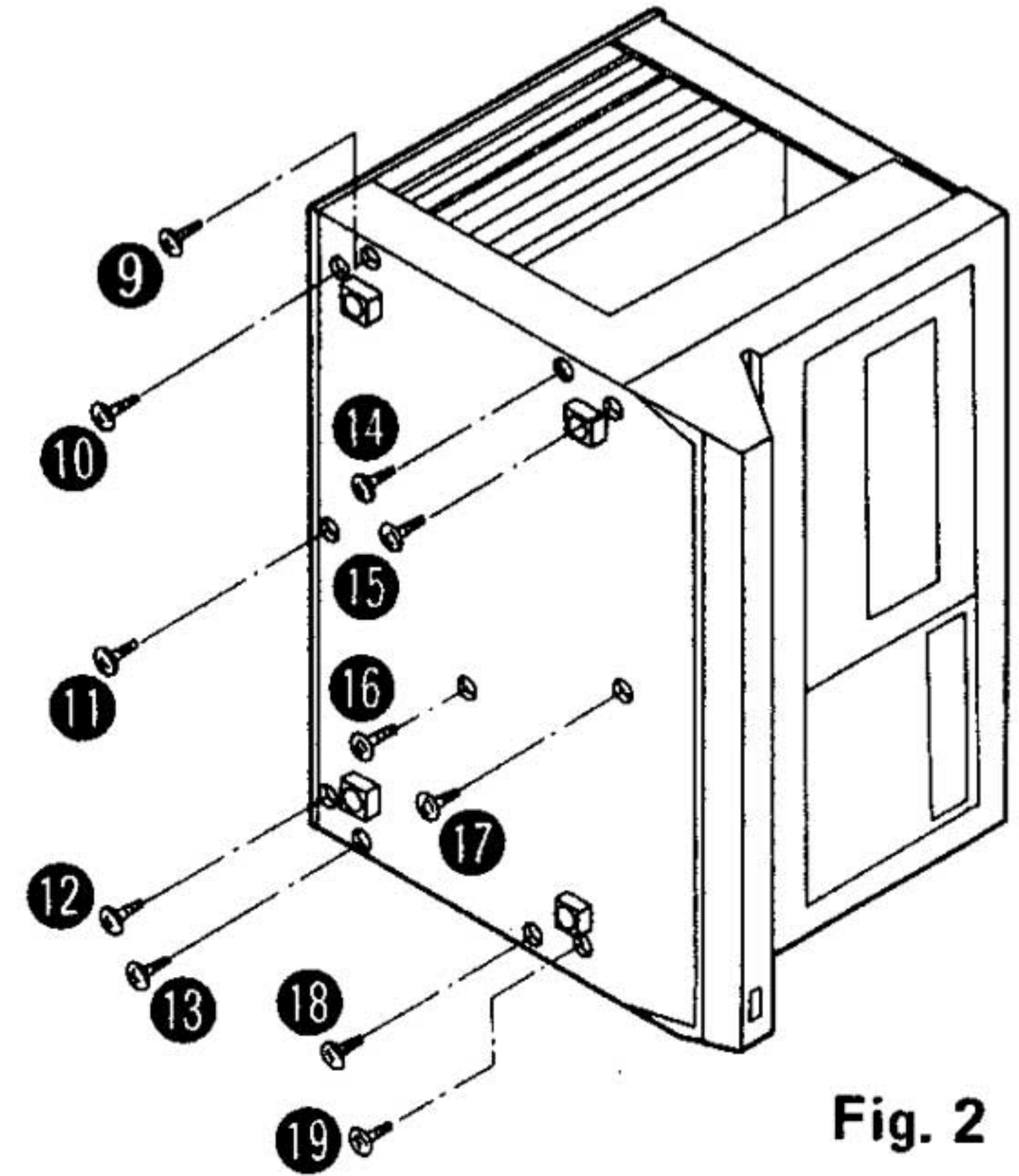


Fig. 2

## How to remove the cassette holder panel

1. Press the power switch "on" to supply power.
2. Press the cassette holder open/close key to open the cassette holder.
3. Remove the 4 setscrews (Fig. 4 : ㉘ ~ ㉛) of the cassette holder panel.

**Note:** The cassette holder does not open and close when power supply is OFF.

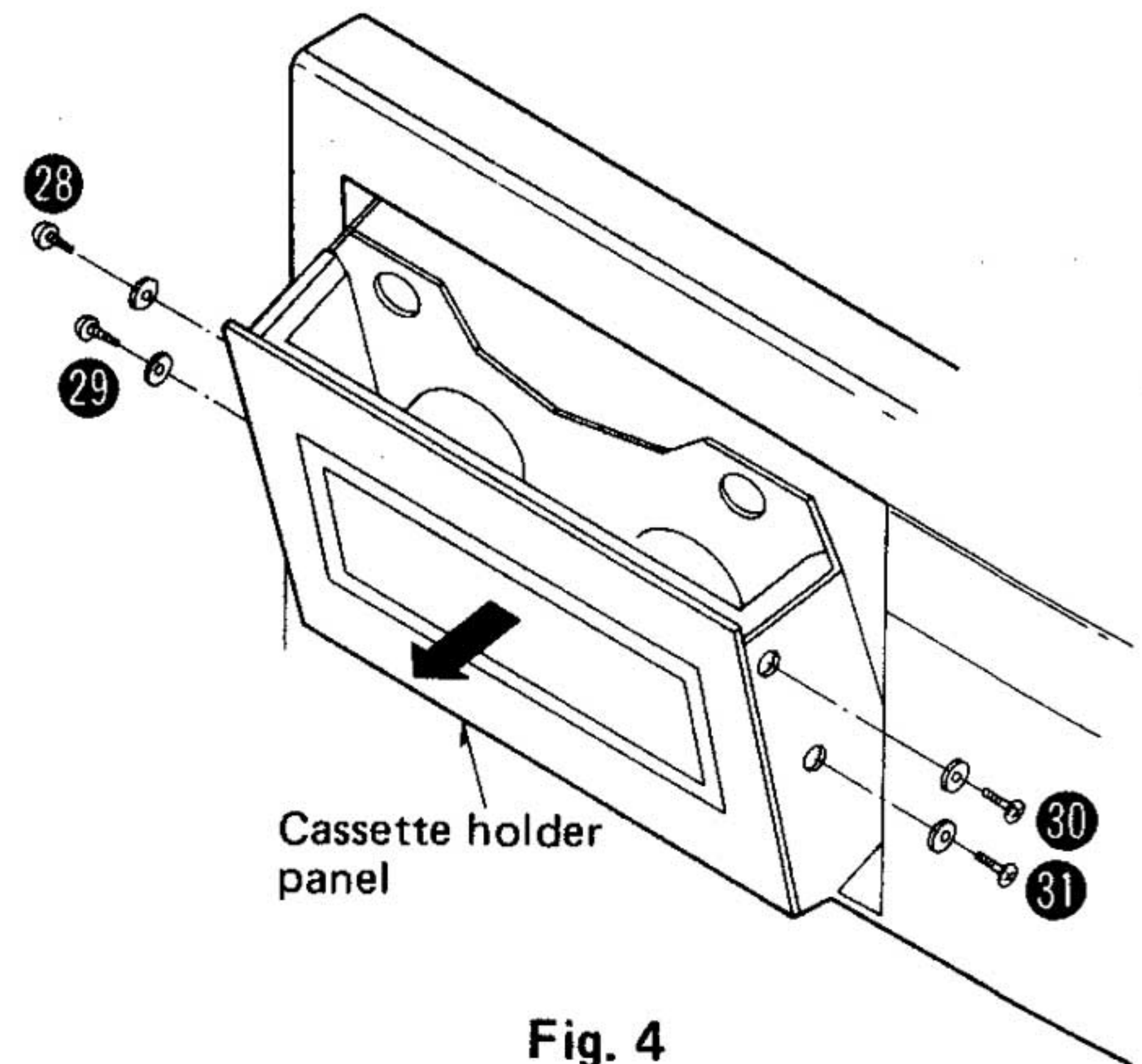


Fig. 4

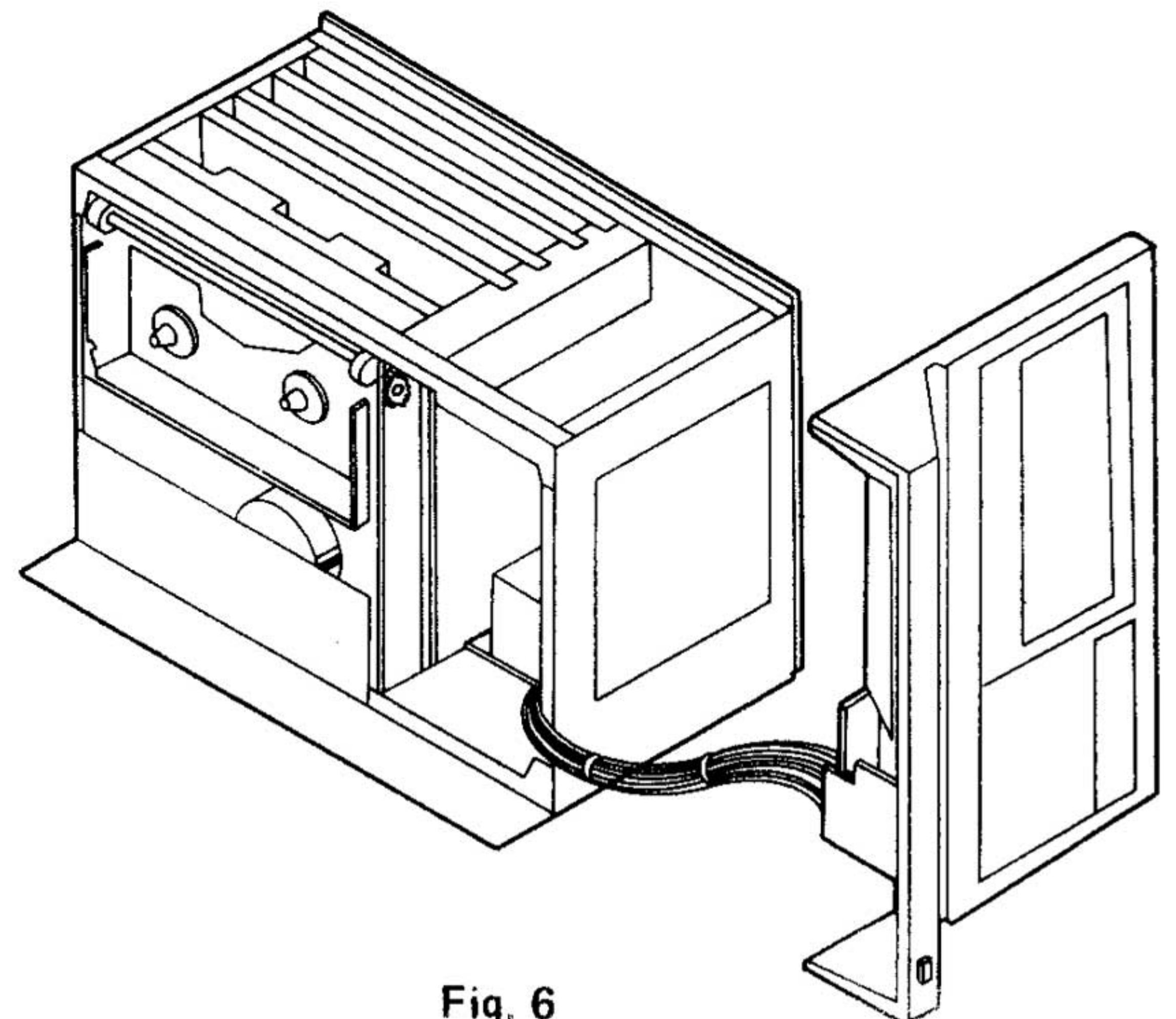


Fig. 6

● **How to remove the knobs (fader, recording level)**

1. Remove them with a hexagonal wrench (M3) as in Fig. 7.

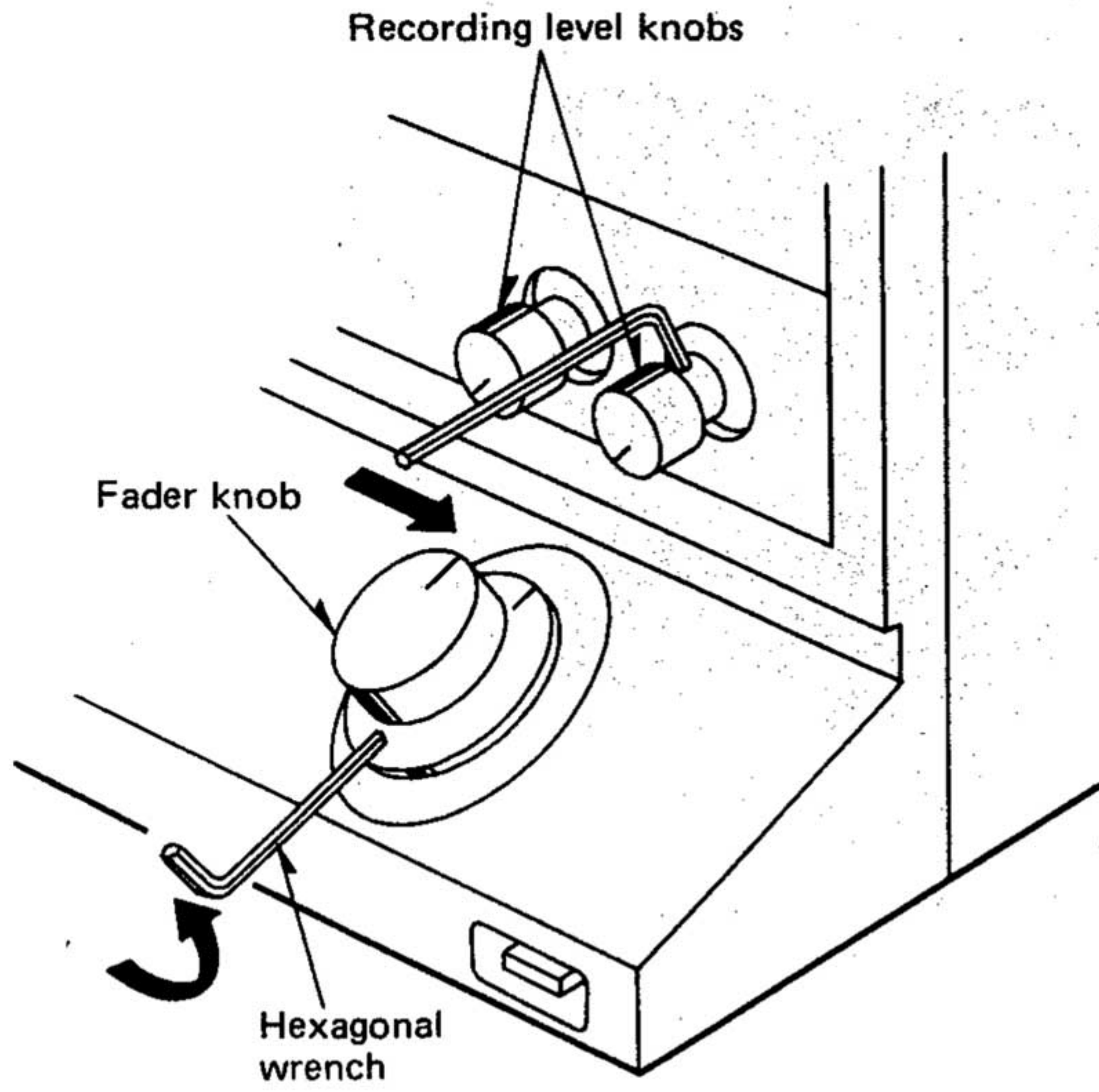


Fig. 7

● **How to remove the Mic P.C.B.**

1. Remove the front panel.
2. Remove the 2 setscrews (Fig. 8 : 39 , 40 ) of the power switch.
3. Remove the 4 setscrews (Fig. 8 : 41 ~ 44 ) of the fader board and the setscrew (Fig. 8 : 45 ) of the earth plate.
4. Remove the 2 setscrews (Fig. 8 : 46 , 47 ) of the Mic board.

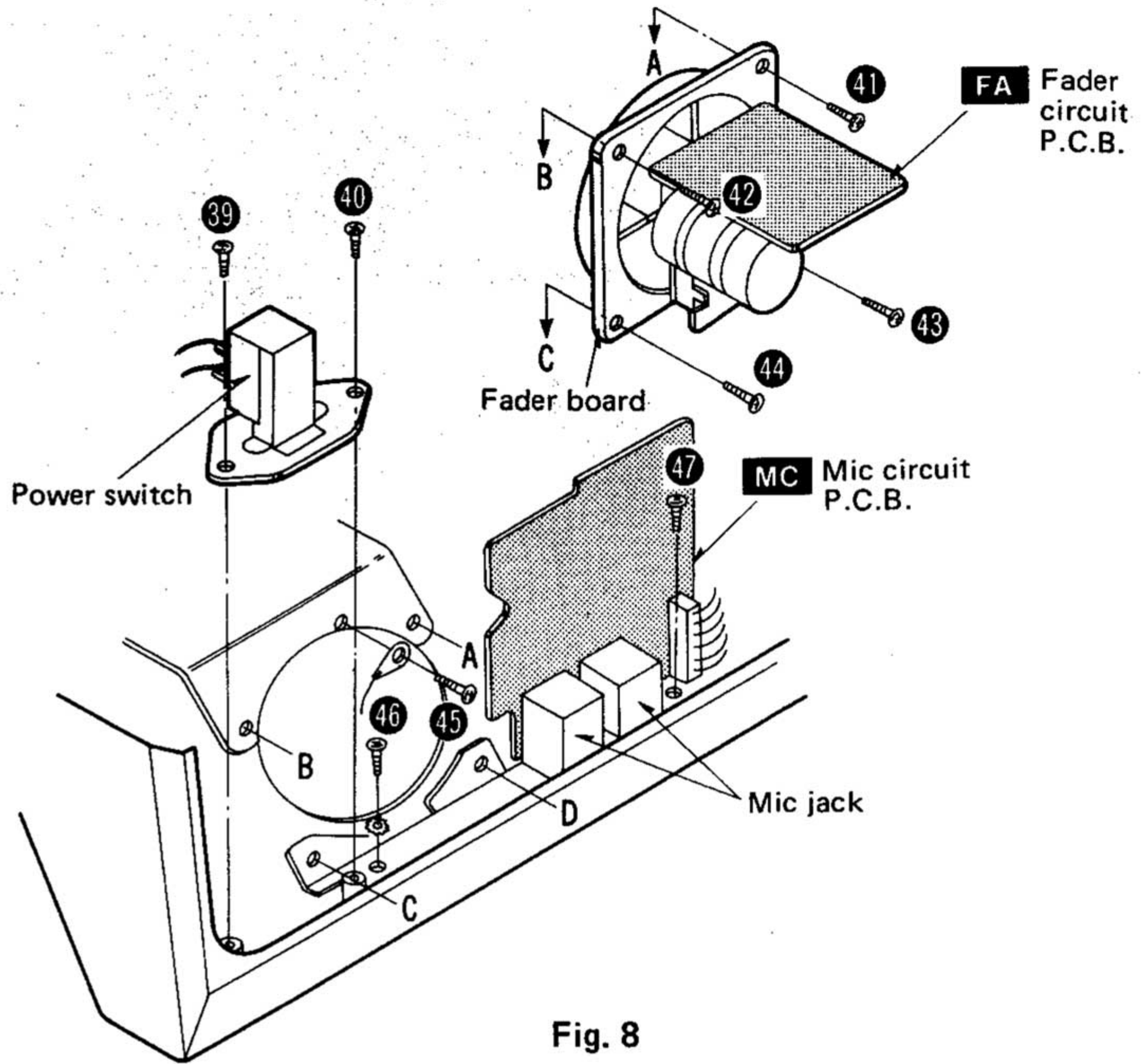


Fig. 8

● **How to remove the control key P.C.B.**

1. Remove the front panel.
2. Remove the 5 setscrews (Fig. 9 : 48 ~ 52 ) of the printed circuit board and release the claws of the knob guide upward, and remove the printed circuit board. (See Fig. 9).
3. When removing the control key buttons, remove the 8 setscrews (Fig. 9 : 53 ~ 60 ) of the control key board.

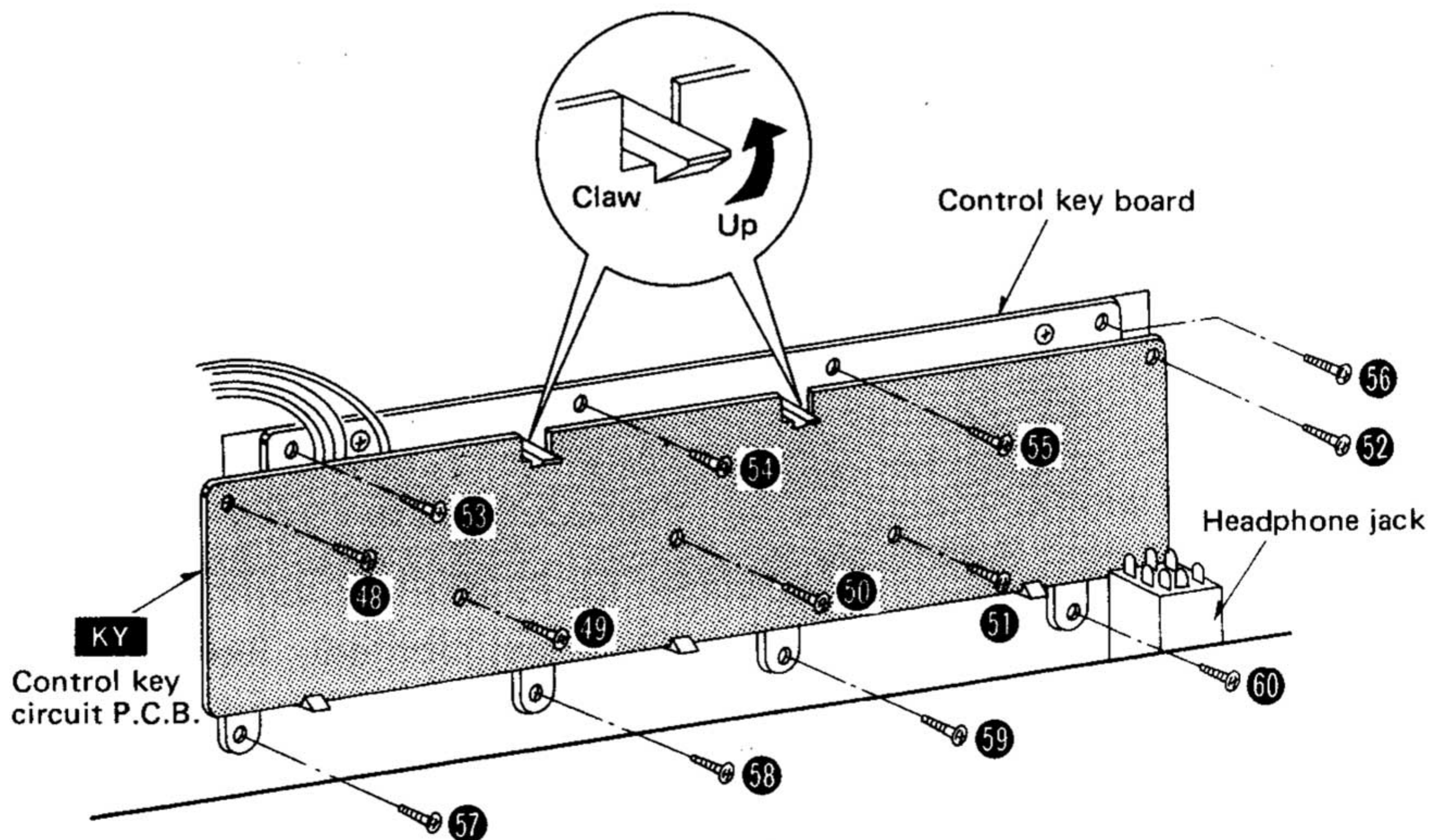


Fig. 9

- **How to remove the display unit**

1. Remove the front panel.
2. Release the claws of the display board upward and remove the dew check and digital input indicator P.C.B.
3. Remove the 3 setscrews (Fig. 10 : 61 ~ 63 ) of the display unit.
4. When replacing the parts of L channel display P.C.B., remove the 4 setscrews (Fig. 10 : 64 ~ 67 ) of the printed circuit board and lift the P.C.B. in the direction of the arrow **A**.
5. When replacing the parts of R channel display P.C.B., remove 2 setscrews (Fig. 10 : 68 , 69 ) of the printed board and lower the P.C.B. in the direction of the arrow **B**.
6. When removing the fluorescent tube, remove the setscrews (Fig. 10 : 66 , 67 ) of L channel display P.C.B., and lift the printed circuit board in the direction of the arrow **A**. Then, remove the setscrew (Fig. 10 : 70 ) of the fluorescent tube P.C.B..

- **How to remove the switch P.C.B. (the display control circuit)**

1. Remove the front panel.
2. Remove the 3 setscrews (Fig. 10 : 71 ~ 73 ) of the printed board.
3. When removing the control button, remove the 2 setscrews (Fig. 10 : 74 , 75 ) of the switch P.C.B.

- **How to remove the recording level volume and emphasis circuit P.C.B.**

1. Remove the front panel.
2. Remove the recording level knob.
3. Remove the 2 setscrews (Fig. 10 : 76 , 77 ) of the edit indicator P.C.B.
4. Remove the 3 setscrews (Fig. 10 : 78 ~ 80 ) of the recording level volume and emphasis P.C.B..
5. Remove the setscrews 81 and 82 in Fig. 10 to remove the **CF** printed circuit board.

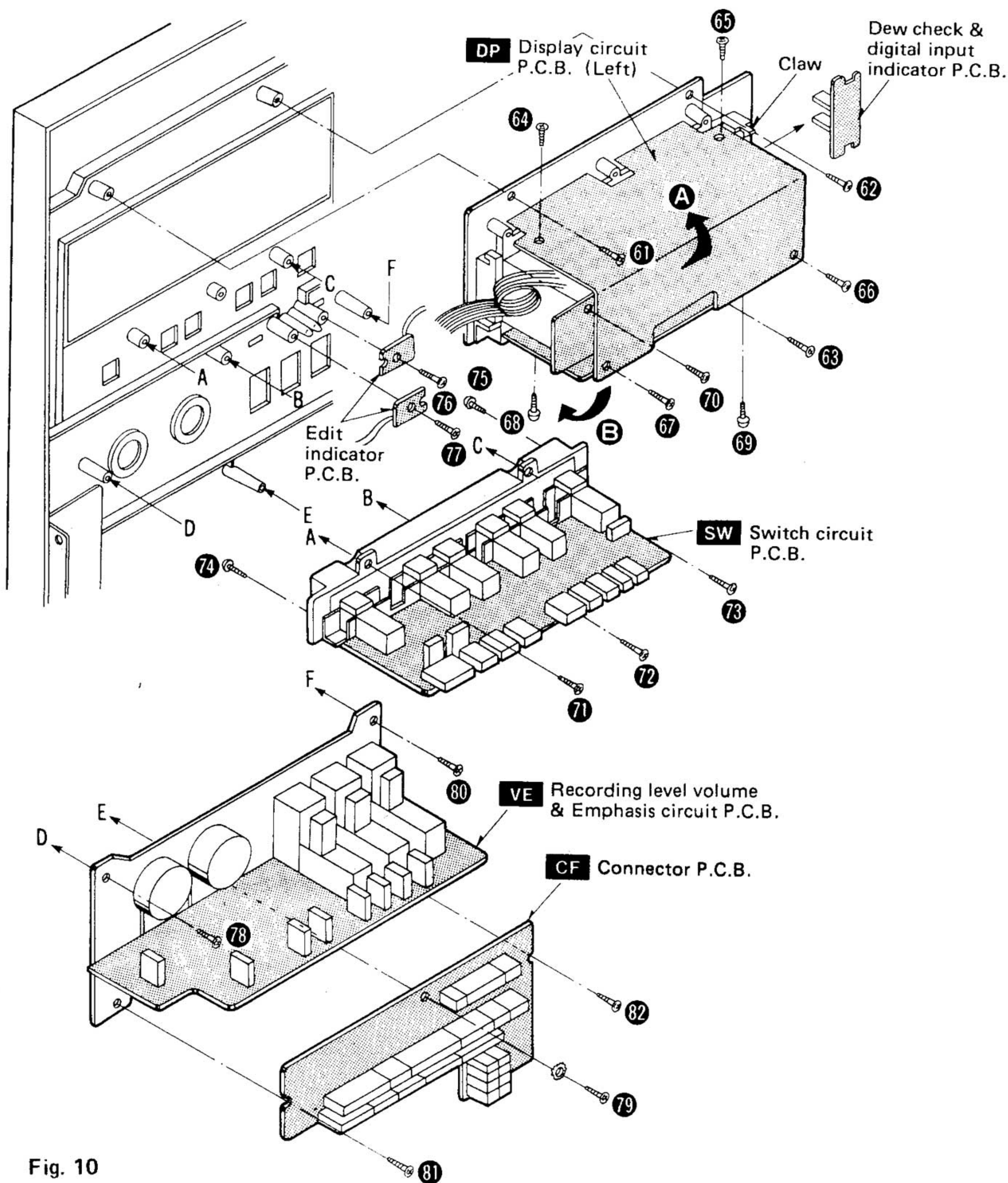


Fig. 10

• How to check the printed circuit board  
(Operation control, Video, Digital and Audio circuit P.C.B.)

1. Remove the cabinet.
2. Remove the 8 setscrews (Fig. 11 : 83 , 84 ) of the P.C.B. fixture.
3. Lift the printed circuit board in the direction of the arrow.
4. Raise the printed circuit board and check it as shown in Photo 1.

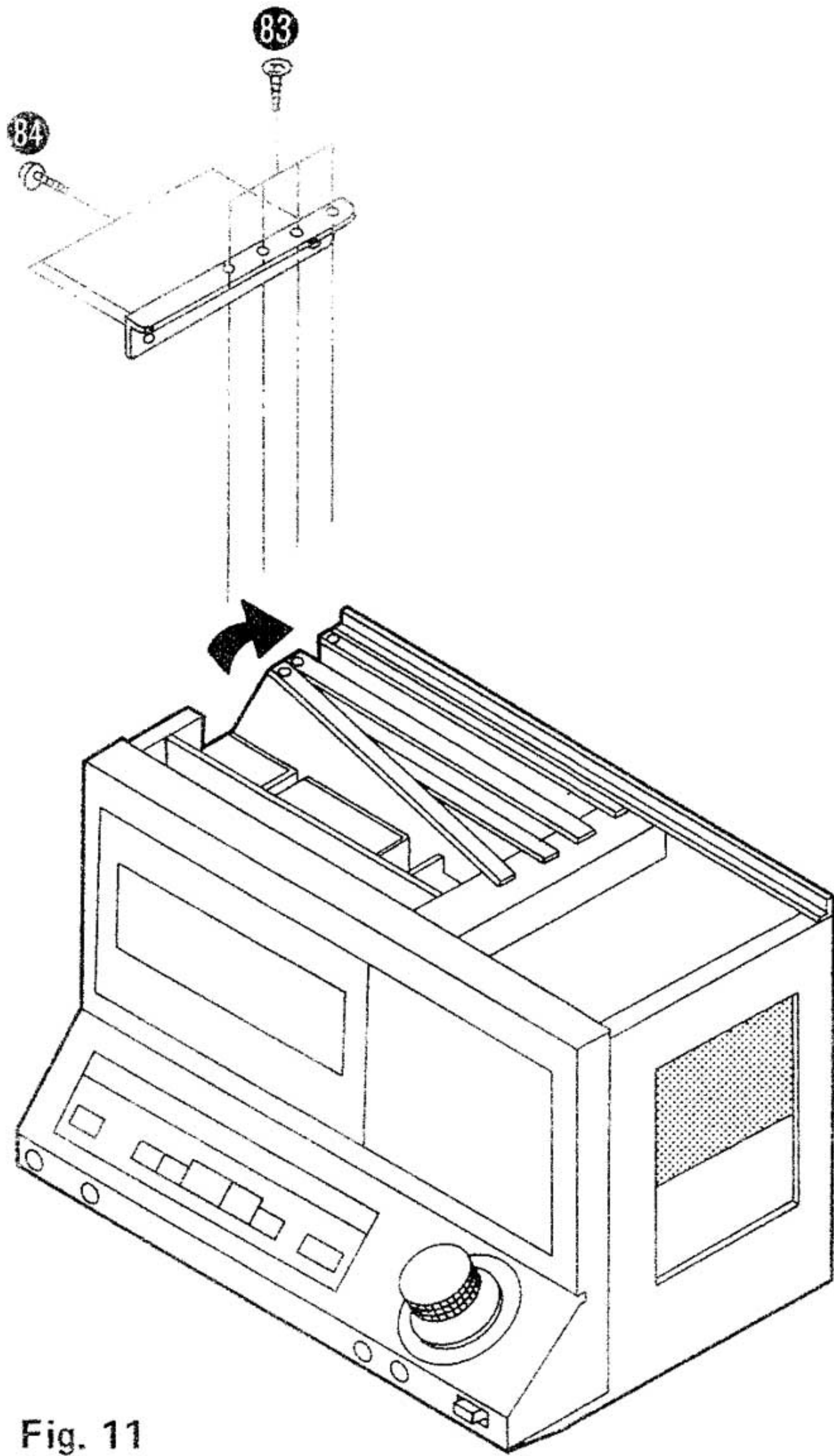


Fig. 11

• How to remove the power supply circuit P.C.B.

1. Remove the cabinet.
2. Remove the insulating plate.
3. Remove the 6 setscrews (Fig. 12 : 85 ~ 90 ) of the P.C.B.

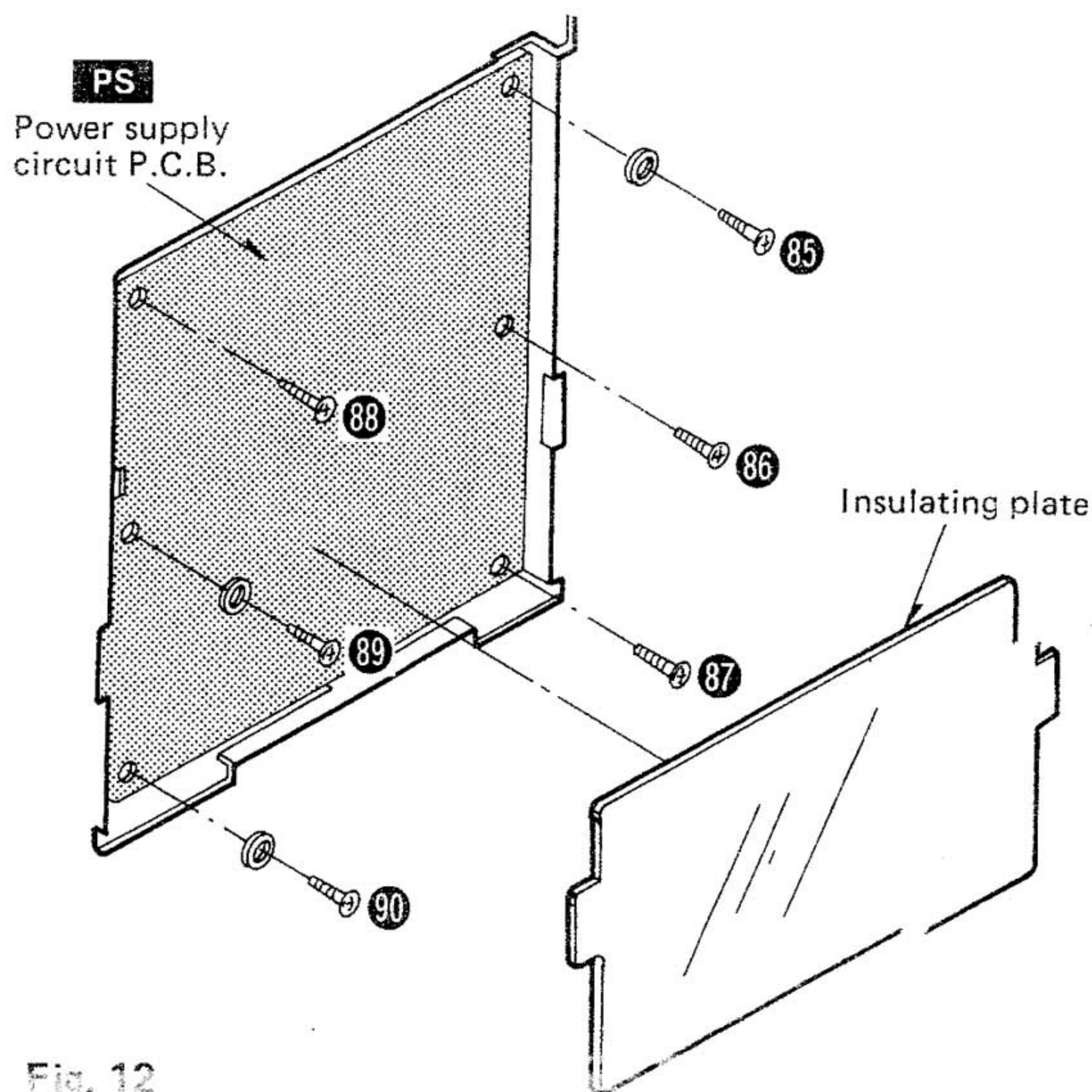


Fig. 12

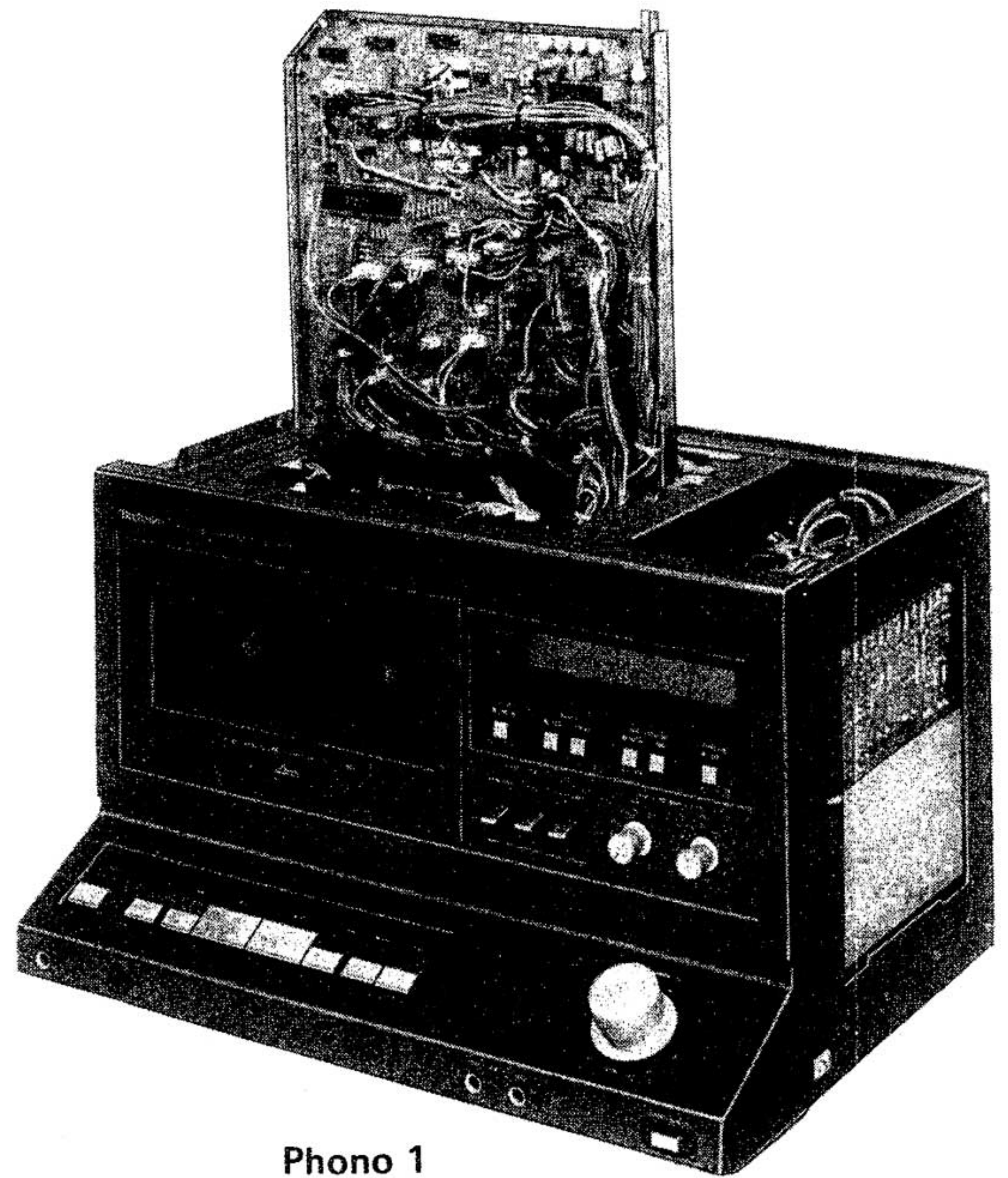


Photo 1

• How to remove the video head circuit P.C.B.

1. Remove the cabinet.
2. Raise the operation control and video circuit P.C.B.
3. Remove the 2 setscrews (Fig. 13 : 91 , 92 ) of the P.C.B.

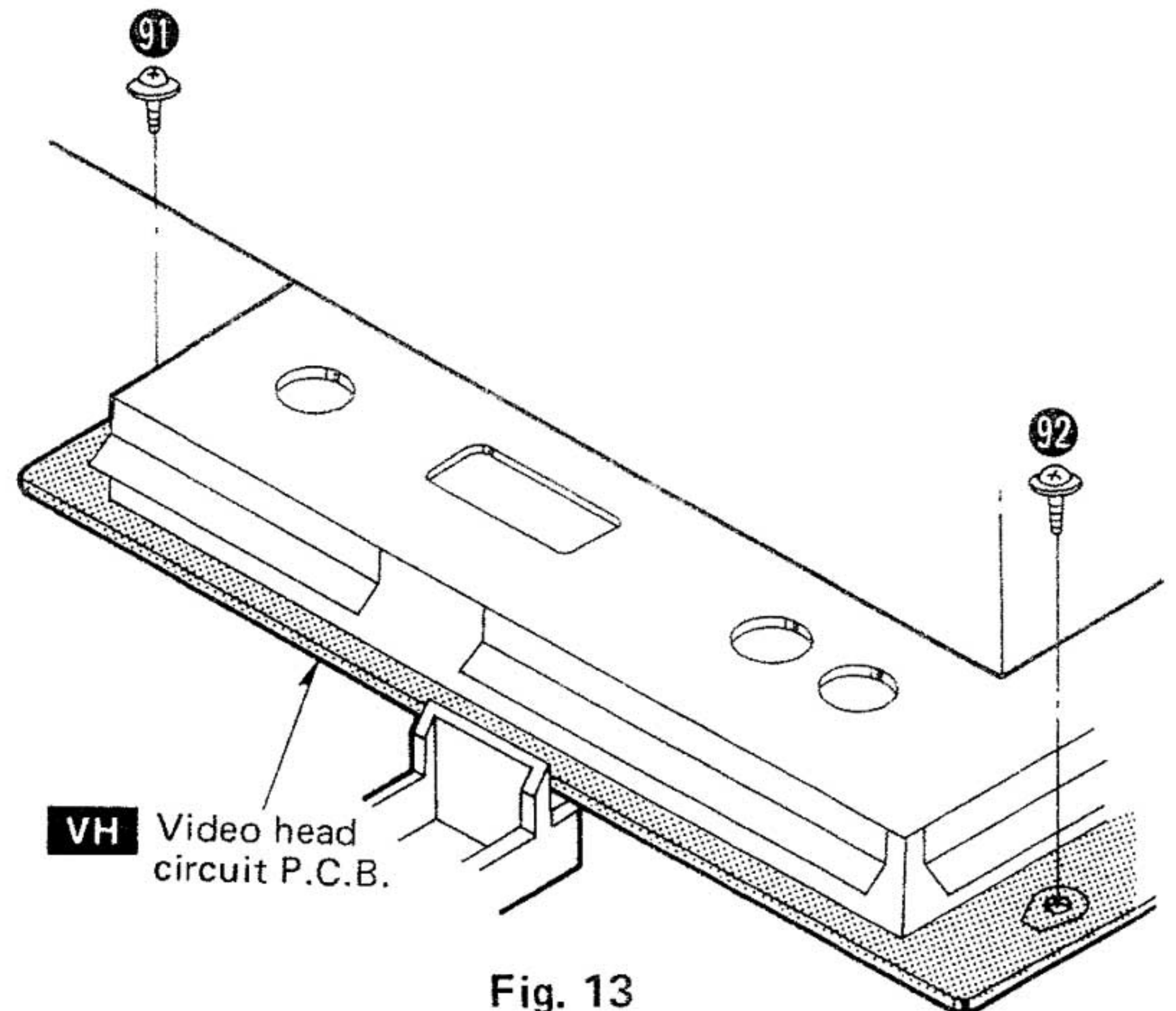


Fig. 13

• How to remove AC fuse

1. Remove the fuse holder with screwdriver.

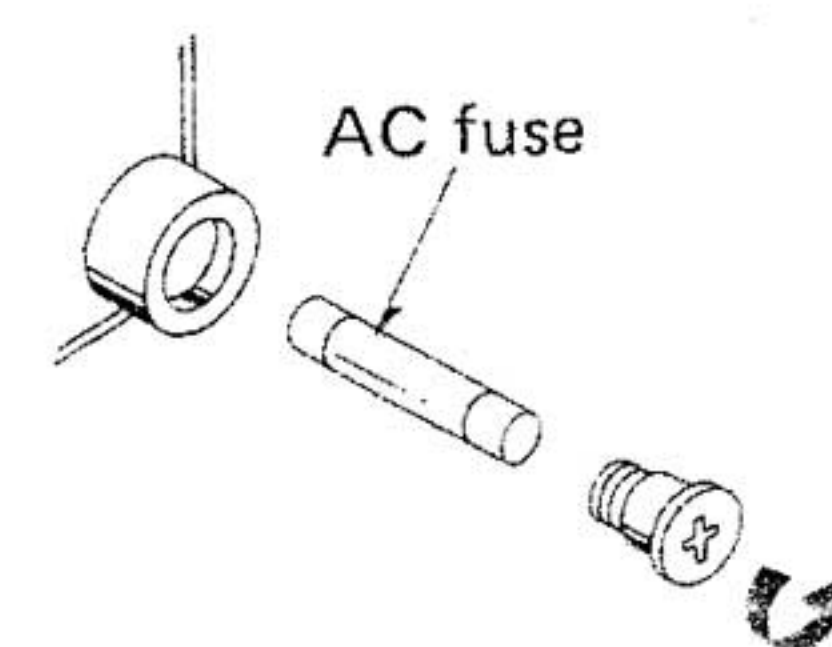


Fig. 14



◆ How to check the rear video cassette mechanism

1. Remove the cabinet.
  2. Remove the rear panel and open the cabinet in the direction of the arrow. (See Fig. 15).
  3. Raise the printed circuit board as in Fig. 15.
  4. Remove the 2 setscrews (Fig. 16 : 93 , 94 ) of the connector P.C.B., and then pull out the connector **CM8**.
  5. Press the lug of the lead holder and pull out the lug. (2 protions)
  6. Remove the 3 setscrews (Fig. 16 : 95 ~ 97 ) of the shield cover.
- Then the rear cassette mechanism can be checked.

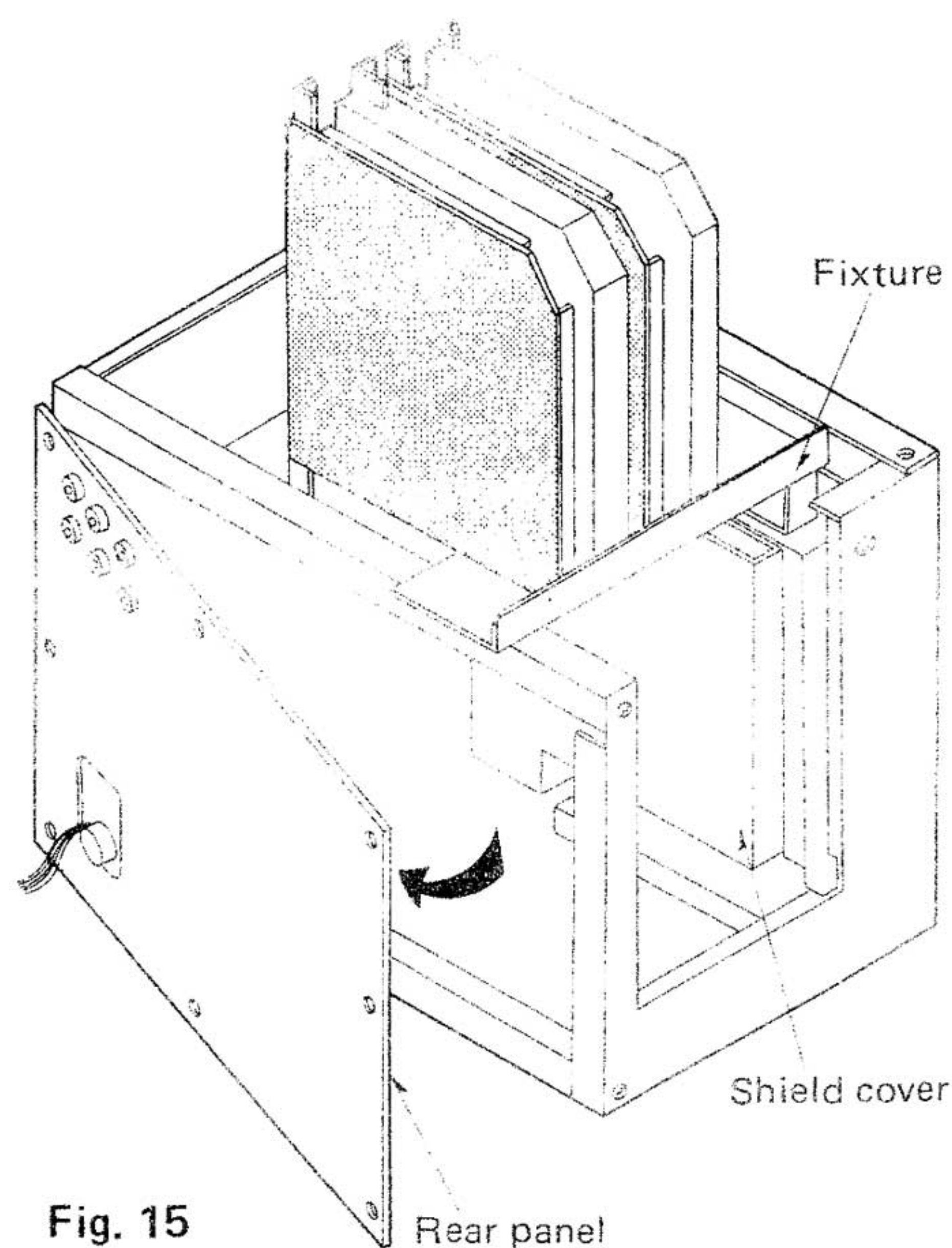


Fig. 15

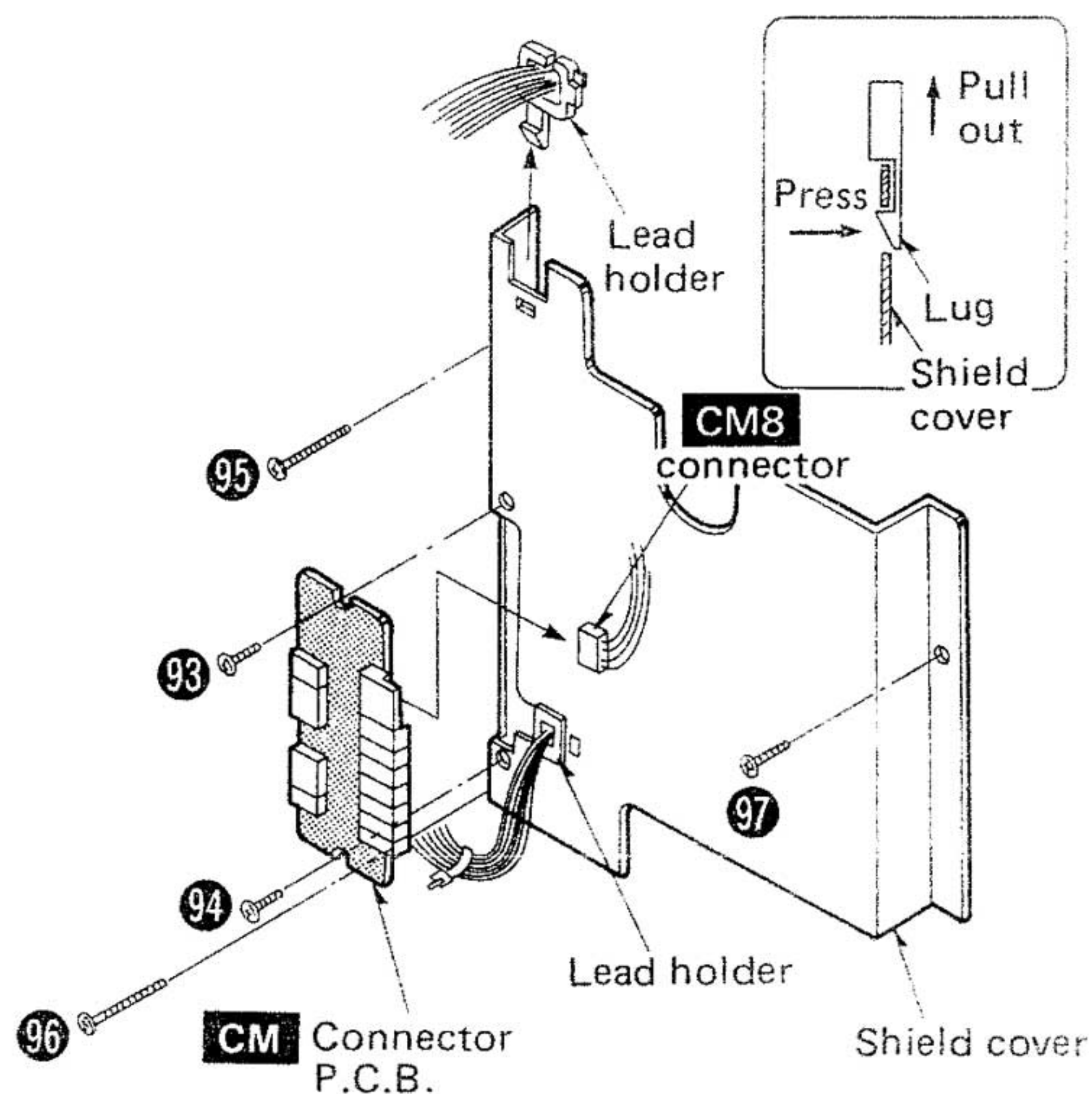


Fig. 16

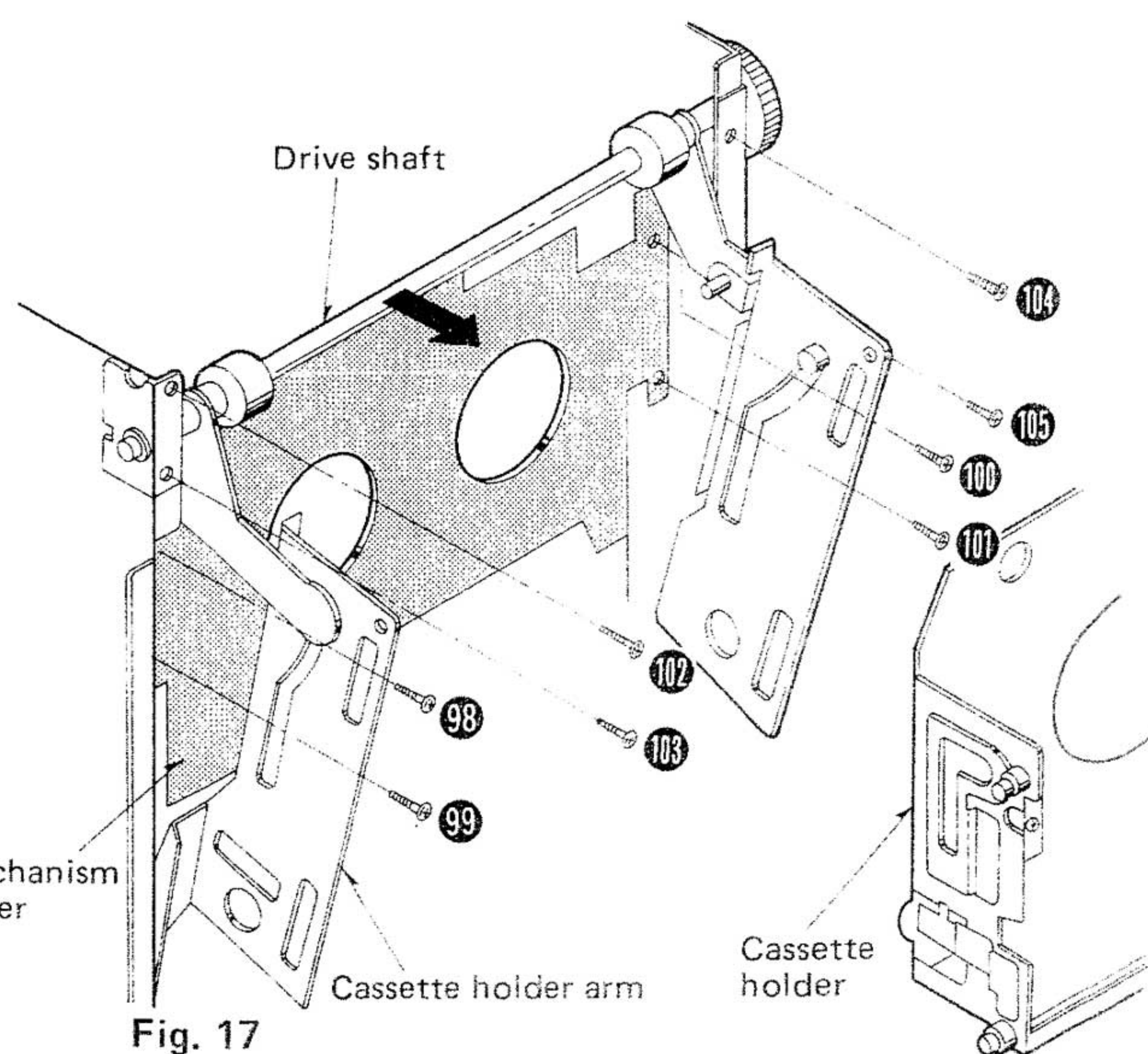


Fig. 17

◆ How to check the front video cassette mechanism

1. Remove the front panel.
2. Unfold the cassette holder arms to the right and left to remove the cassette holder. (See Fig. 17)
3. Remove the 4 setscrews (Fig. 17 : 98 ~ 101 ) of the mechanism cover.
4. Remove the 4 setscrews (Fig. 17 : 102 ~ 105 ) of the drive shaft. Draw the shaft in the direction of the arrow and lift up the mechanism cover.
5. Remove the 3 setscrews (Fig. 18 : 106 ~ 108 ) of the soundproof plate and check the front cassette mechanism.

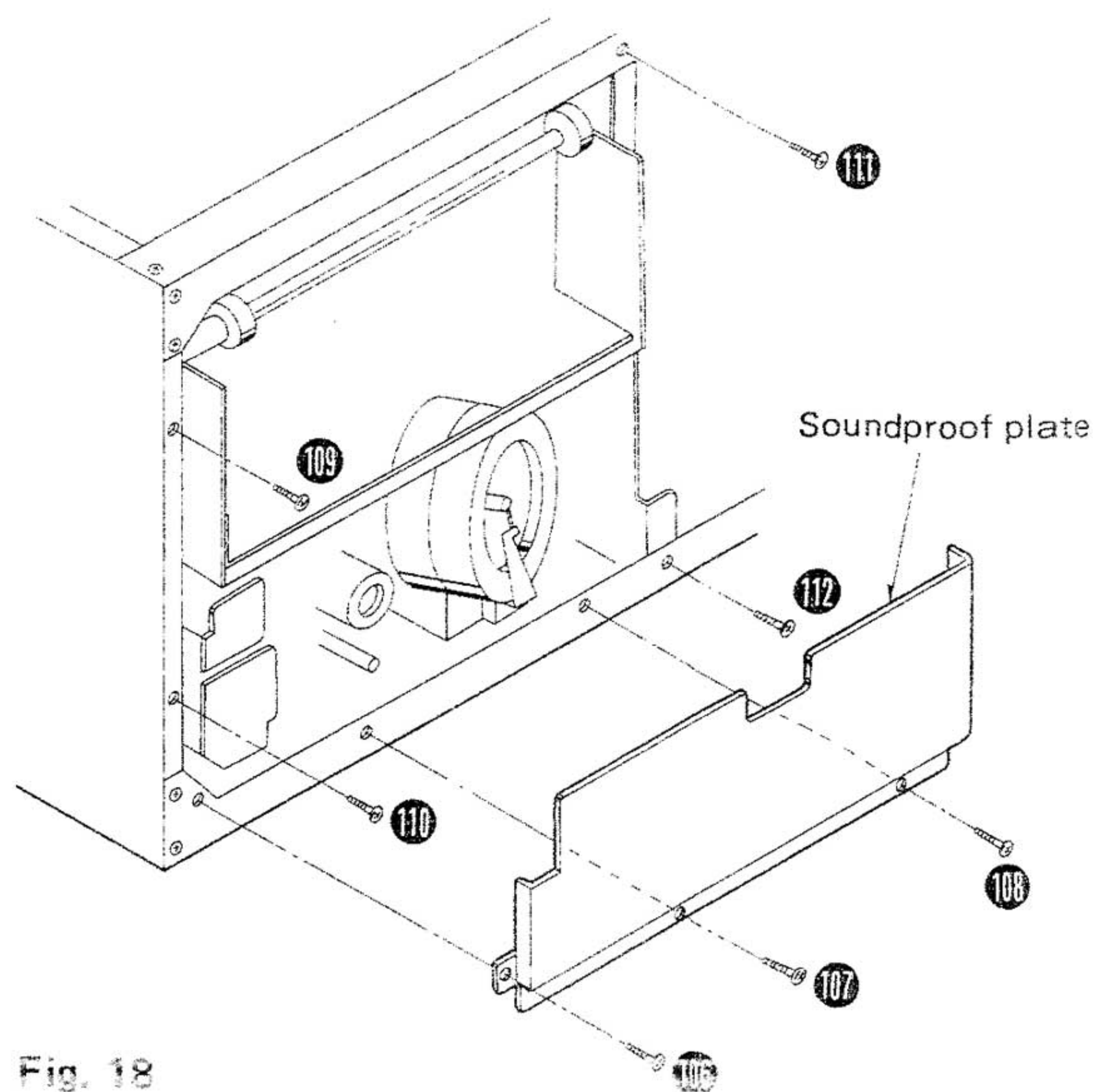


Fig. 18

● **How to remove the video cassette deck (chassis)**

1. Remove the front panel.
2. Remove the soundproof plate. (See Fig. 18)
3. Raise the operation control P.C.B. and pull out 12 connectors (OP25, OP21, OP11, OP10, OP6, OP5, OP1, OP2, OP28, OP14, OP3 and OP27).
4. Raise the video P.C.B. and pull out the connectors VD20 and VD21. Then cut off the lead wire clamber. (See Fig. 21)
5. Pull out the 4 connectors (CM10 ~ CM13) of the connector P.C.B. mounted on the back of the cassette deck.
6. Remove the 4 setscrews (Fig. 18 : 109 ~ 112 ) of the cassette deck.
7. Remove the 11 setscrews (Fig. 19 : 113 ~ 123 ) of the side panel (left) and the 5 setscrews (Fig. 20 : 124 ~ 128 ) of the fixture front top).
8. Draw out the cassette deck in the direction of the arrow as in Fig. 19.

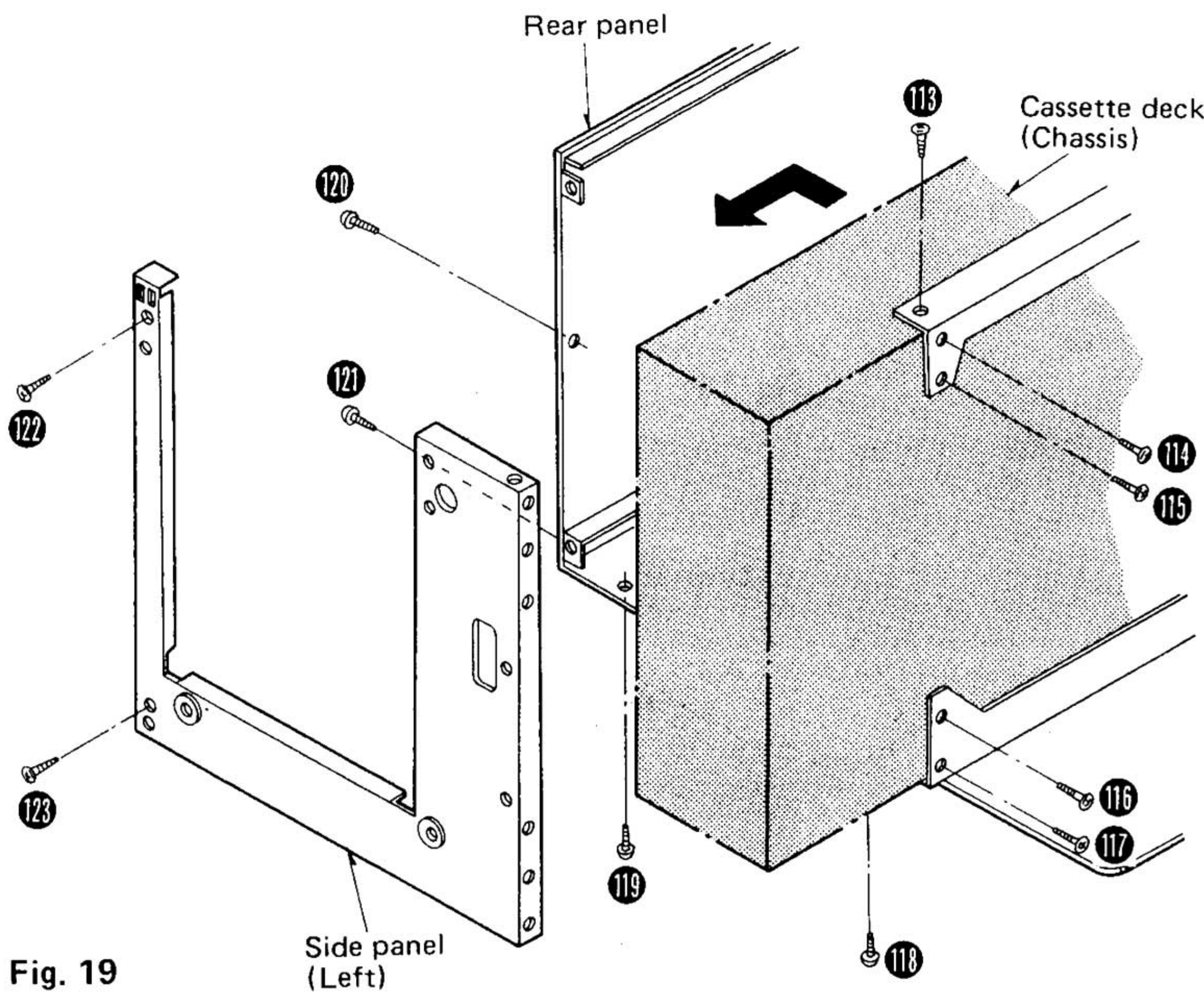


Fig. 19

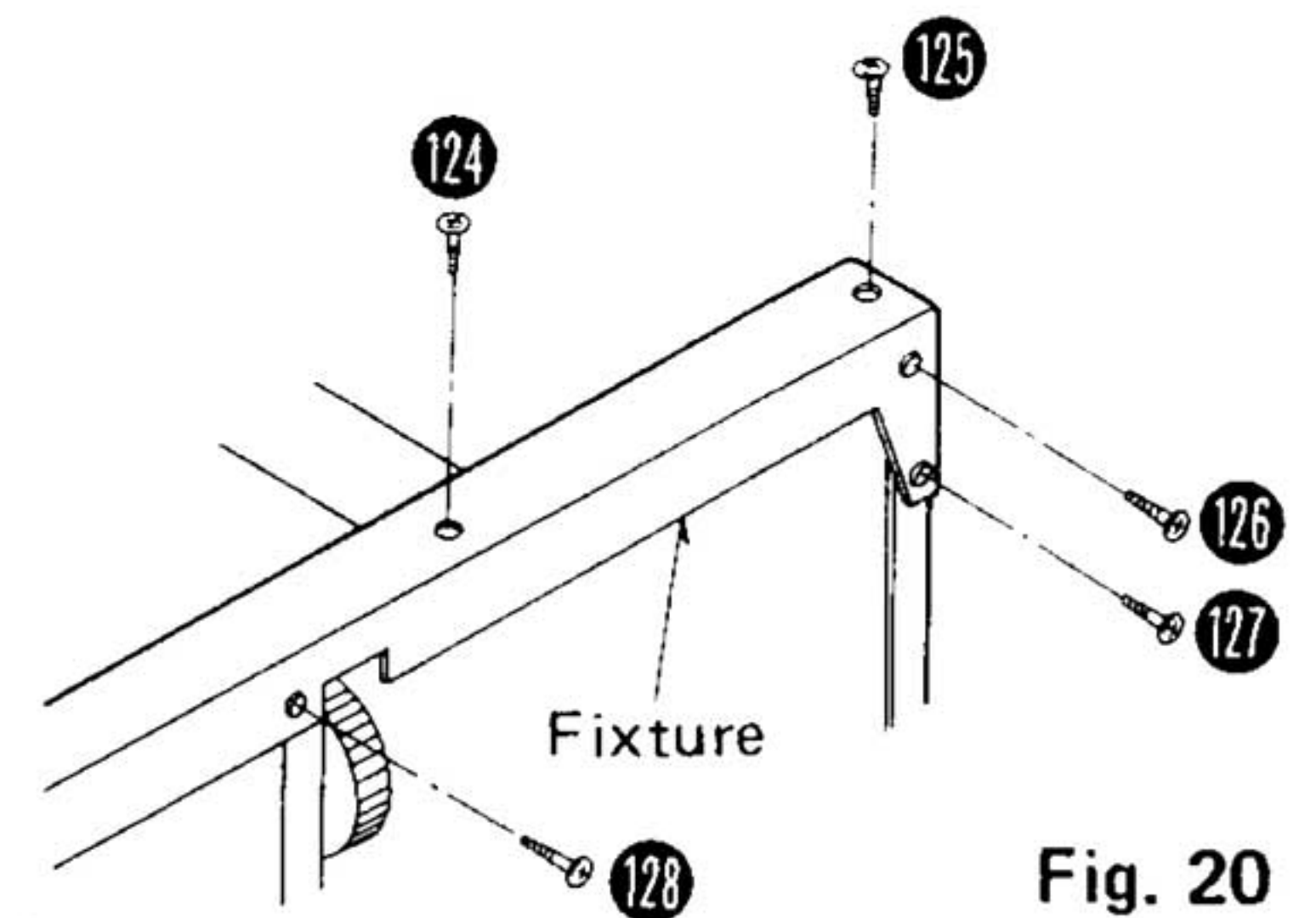


Fig. 20

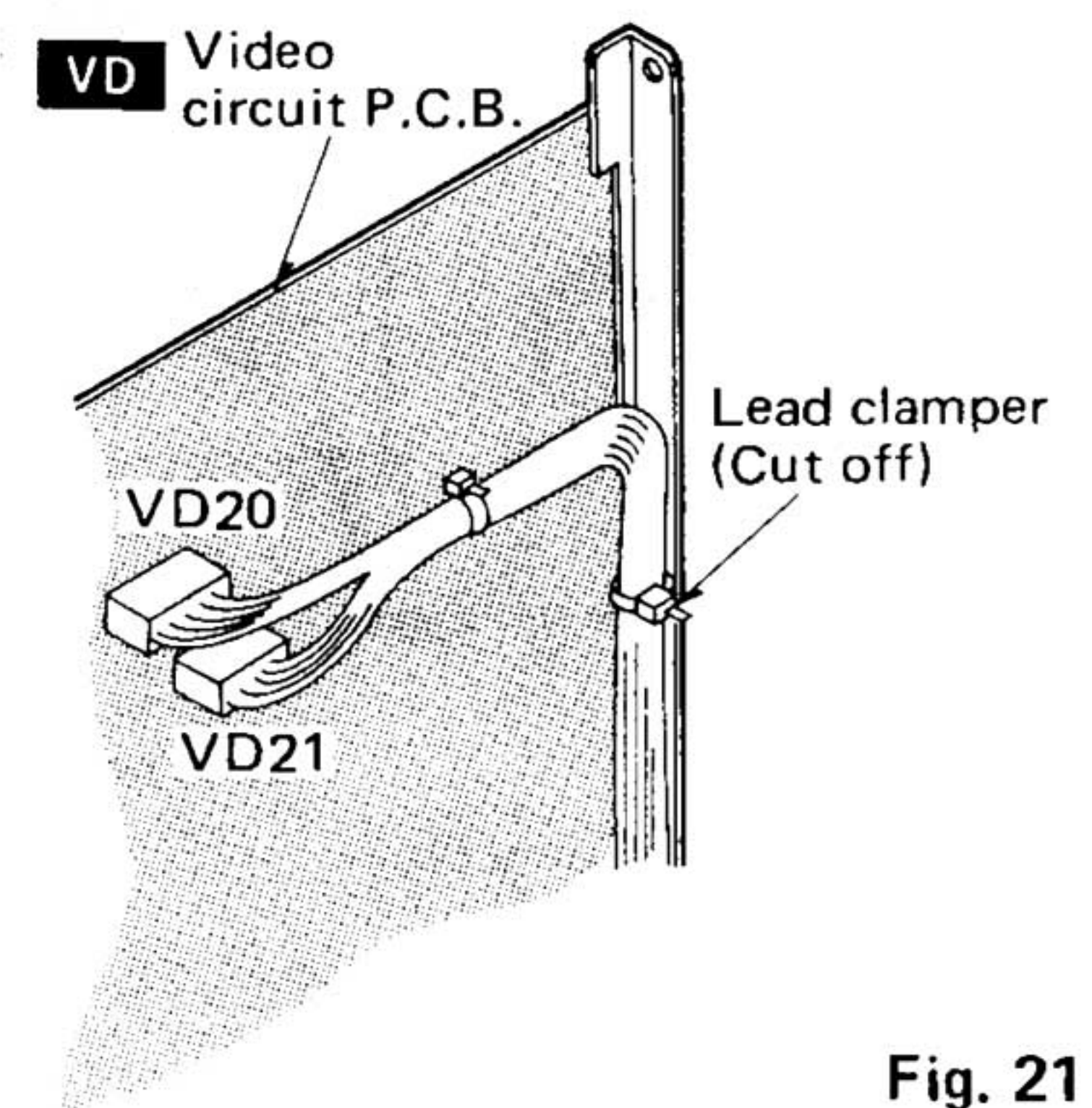


Fig. 21

● **How to remove the upper cylinder**

1. Remove the front panel.
2. Remove the soundproof plate.
3. Remove the setscrew (Fig. 22 : 129 ) of the brush.
4. Remove the 2 setscrews (Fig. 22 : 130 , 131 ) of the wire guide.
5. Unsolder the 4 lead wires of the video heads from the head relay board.
6. Fasten the head cylinder release (VFK0158) to the upper cylinder with setscrews. (Evenly tighten the 2 setscrews on the right and left.)
7. The upper cylinder can be removed by turning the head cylinder release knob clockwise. (See Fig. 23)

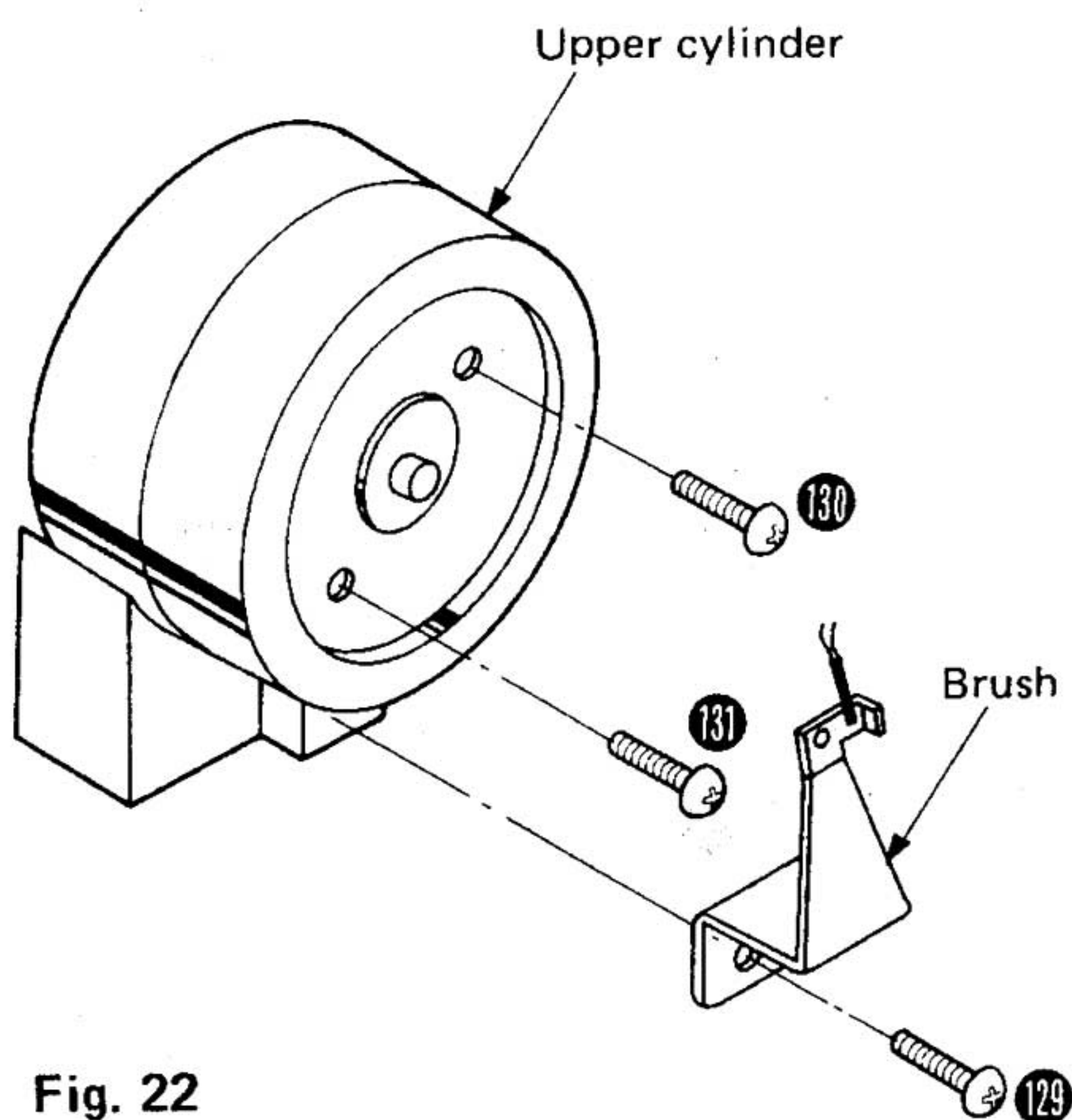


Fig. 22

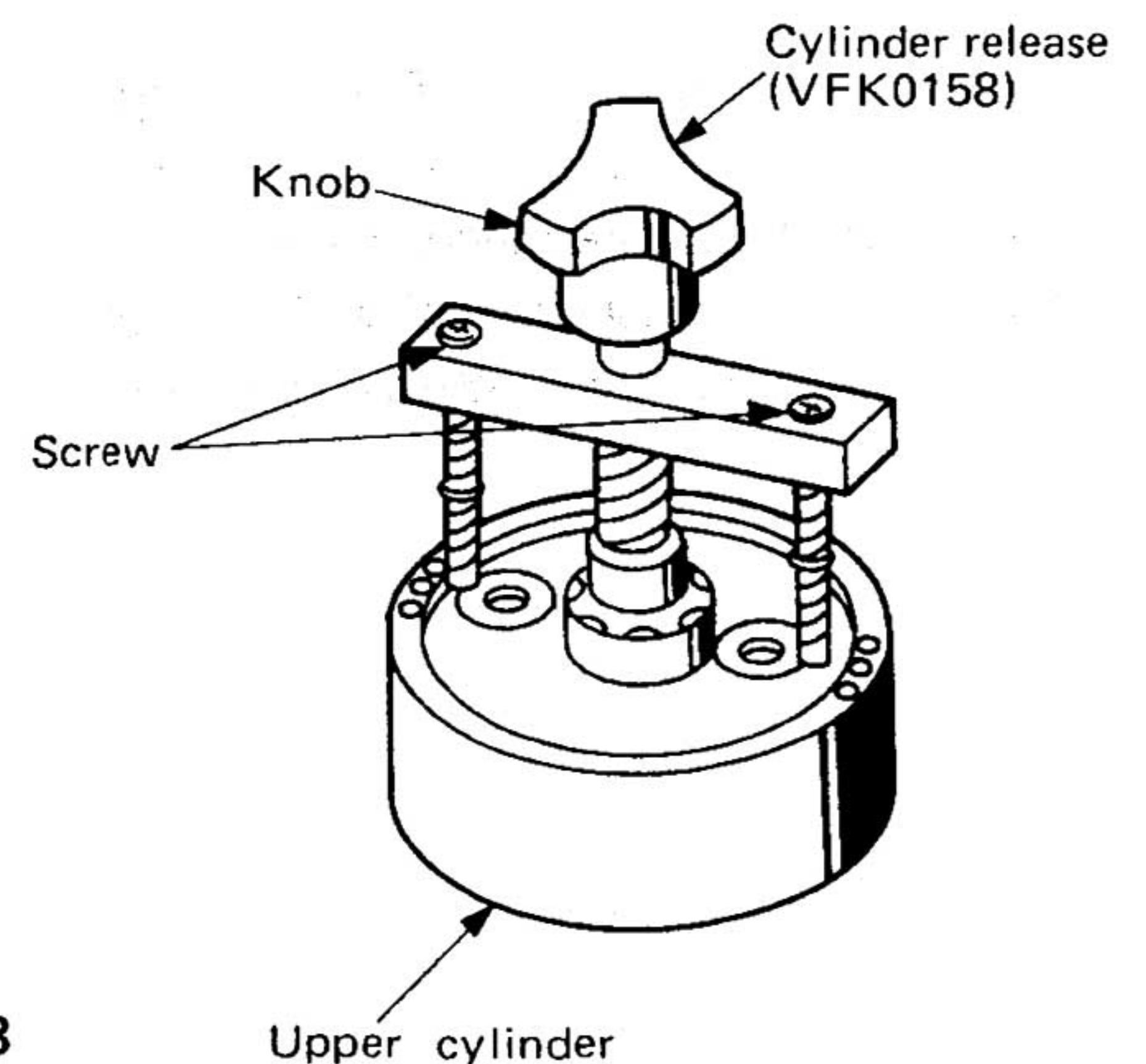


Fig. 23

\* **The method of handling the upper cylinder (How to replace the upper cylinder)**

1. Remove the setscrews of the brush and wire guide.
2. Unsolder the 4 lead wires of the video heads from the head relay board.
3. Remove the upper cylinder. (See notes 1 & 2 below.)
4. Place the new upper cylinder on the head disc base so that the screw holes match. (See notes 1 & 2 below.)

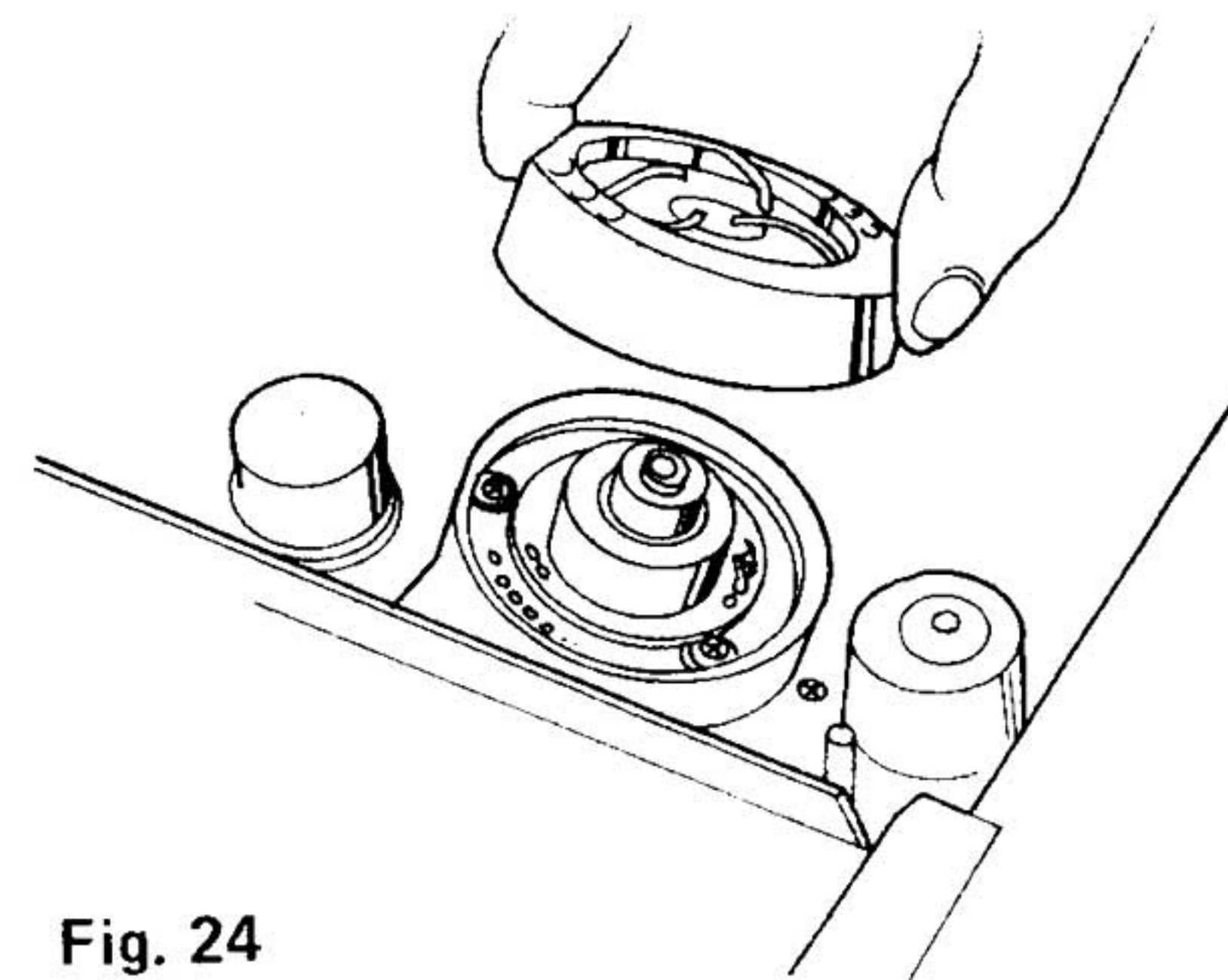


Fig. 24

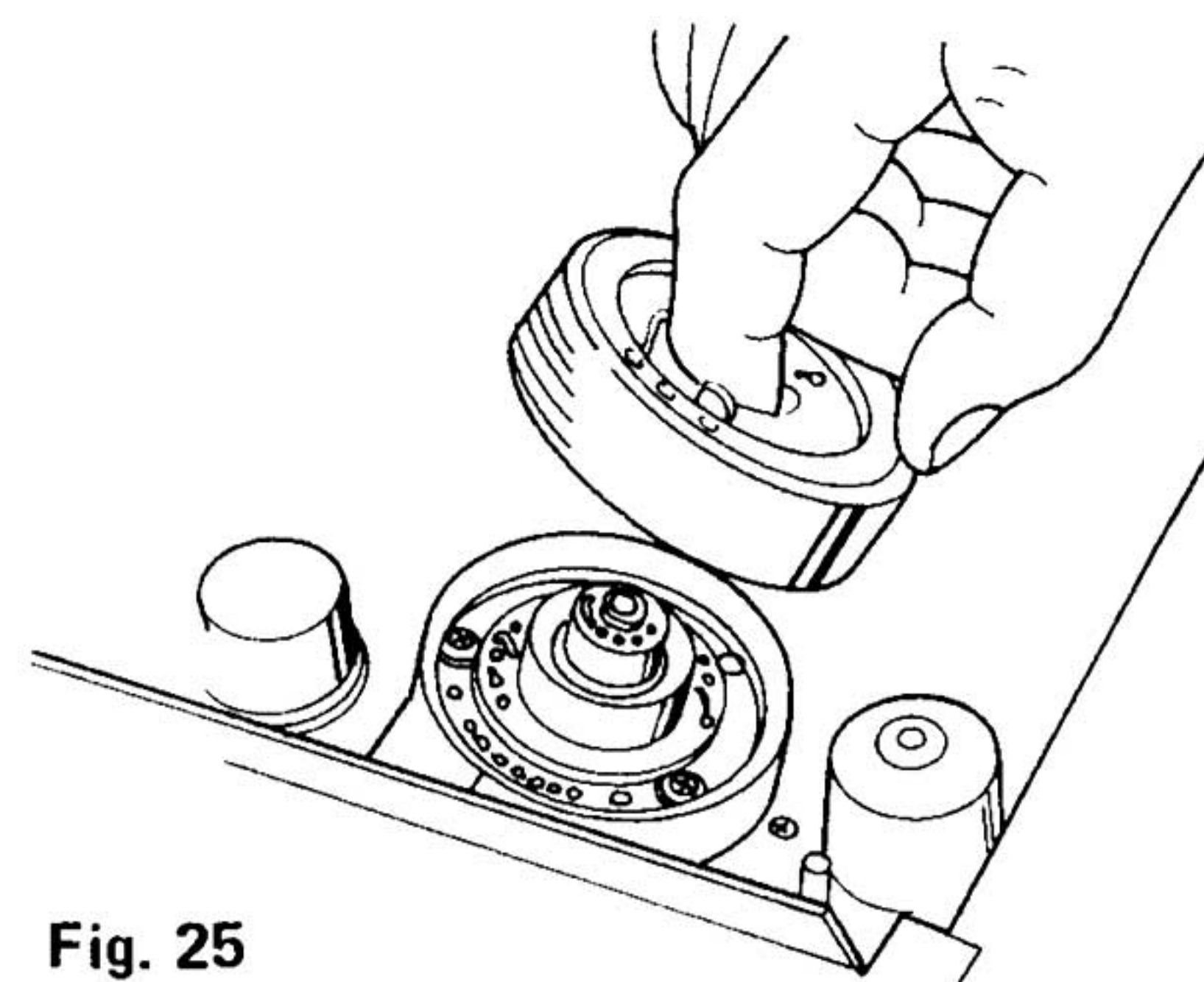


Fig. 25

**Notes for handling the upper cylinder:**

- 1) When handling the upper cylinder, be sure to wear silk gloves. Do not touch the head tip or the surface of the upper cylinder with your bare hands.
- 2) When removing the upper cylinder, carefully grasp its outer edges and lift it out.
- 3) When replacing the upper cylinder, insert your index finger in the center hole, and carefully lower it into position.

● **How to remove the display panel**

1. Remove the front panel and then the display block. (Refer to "How to remove the display unit".)
2. Remove the 3 latches (Fig. 26 : 132 ~ 134 ) which fasten the display panel. Then the display panel can be removed.
3. Remove the 6 setscrews (Fig. 26 : 135 ~ 140 ). Then the liquid crystal, polarizing plate and conduction rubber can be removed.
4. How to set up the display panel
  - (1) Secure the display panel fixture and display panel with latches (Fig. 26 : 132 ~ 134 ).
  - (2) Place the polarizing plate on the diffusion plate. (Be careful of the face and back of the polarizing plate.) The side which darkens when viewed through the liquid crystal should be faced up.
  - (3) Place the conduction rubber on the display circuit P.C.B. (See Fig. 26)
  - (4) Connect the tester (1KΩ or 10KΩ range) to terminal **DP8**.
  - (5) Place the liquid crystal on the conduction rubber and move the crystal to the right or left so that the tester reading is about 10KΩ, and then secure it.
  - (6) Place the display panel on the liquid crystal and secure it with setscrews (Fig. 26 : 135 ~ 140 ).

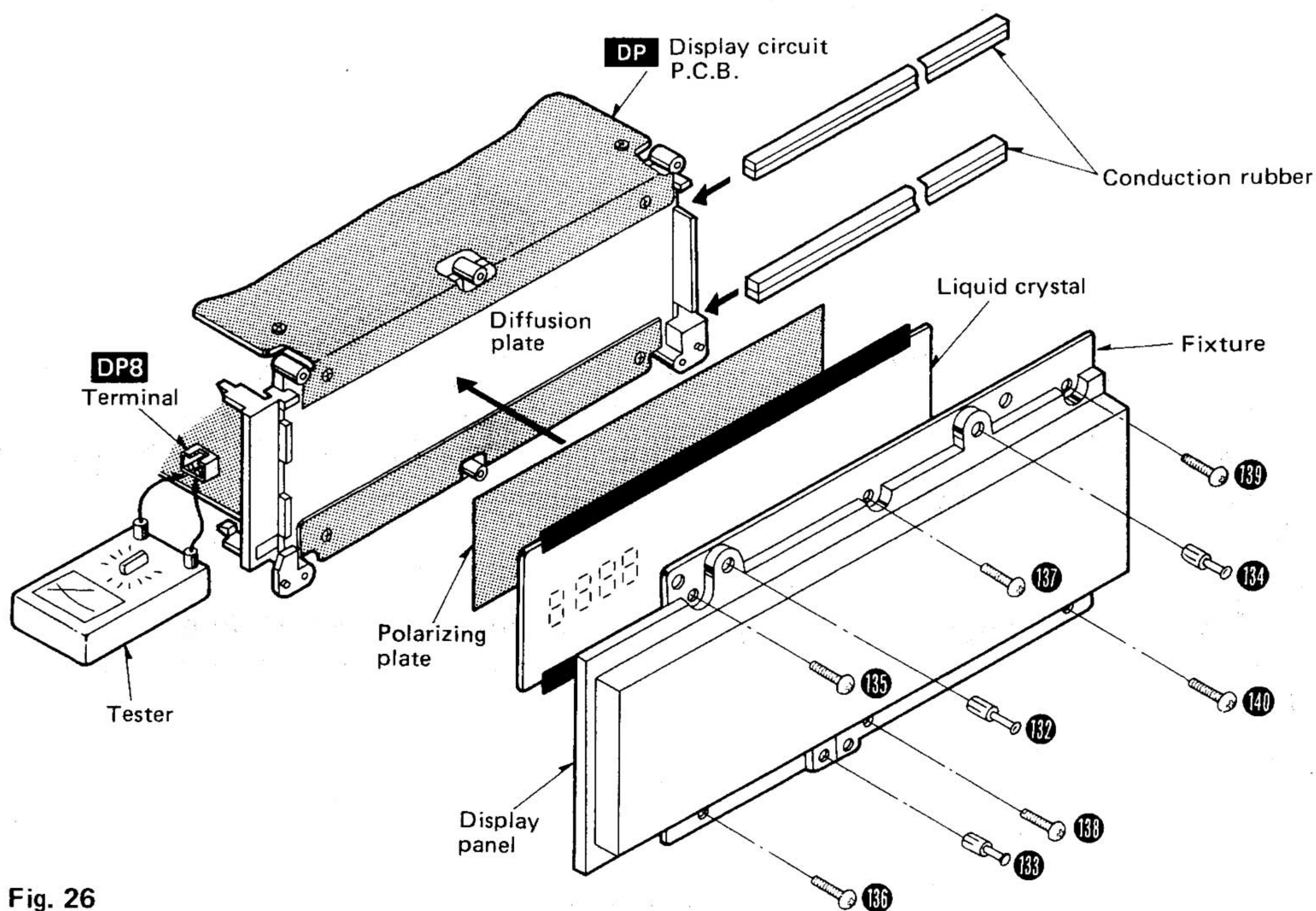
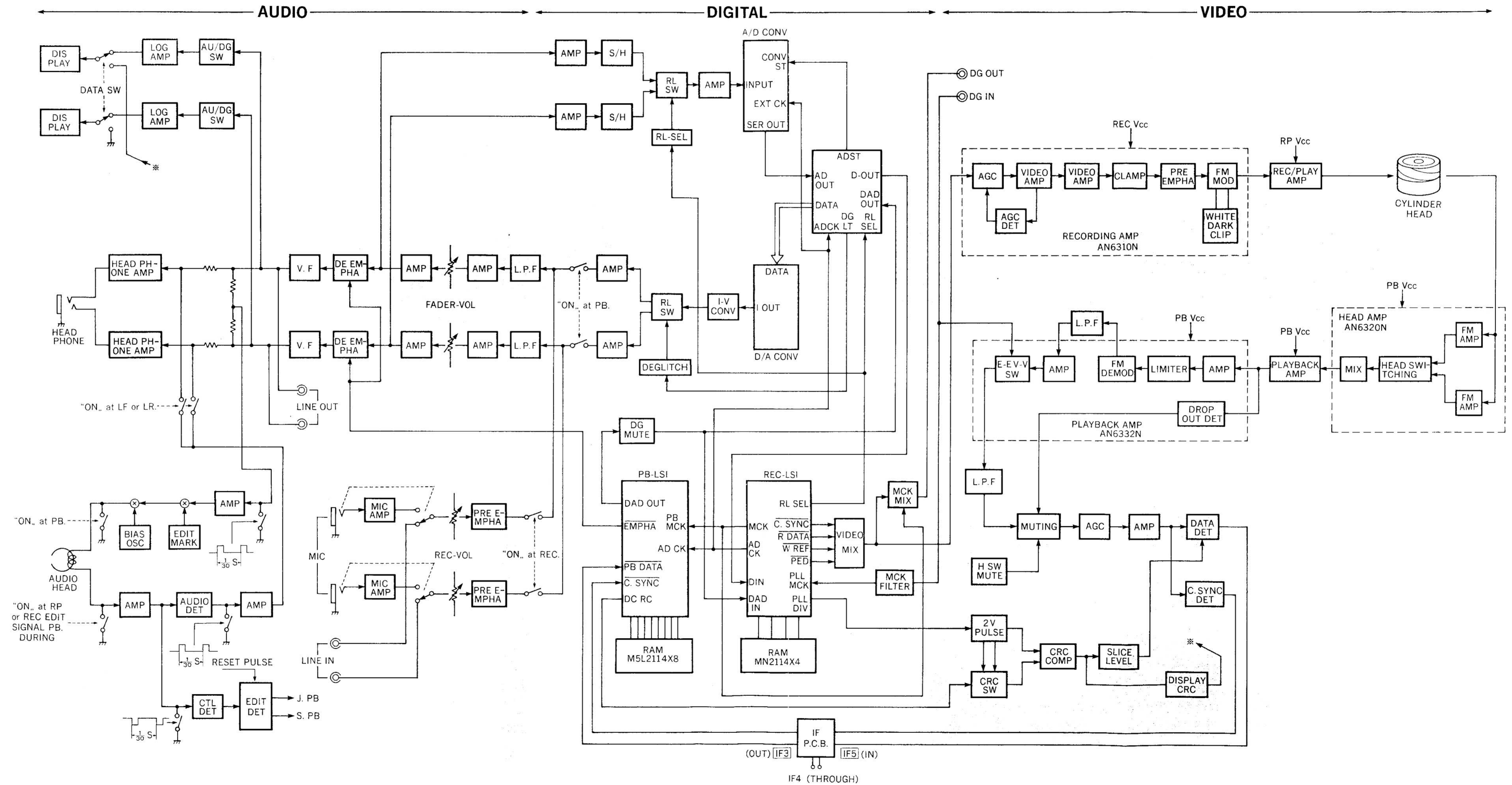


Fig. 26

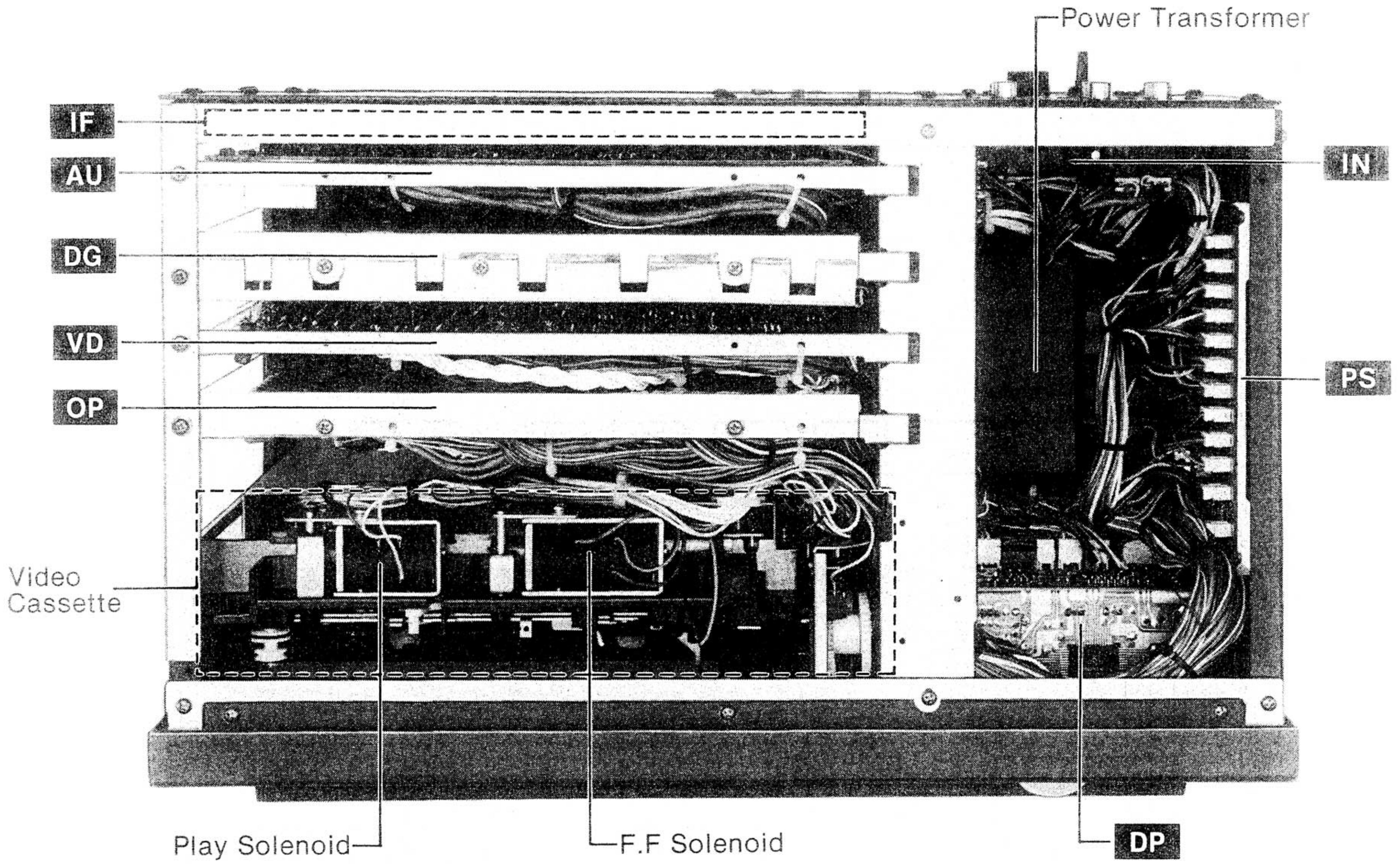
# ■ BLOCK DIAGRAM

- Main signal line

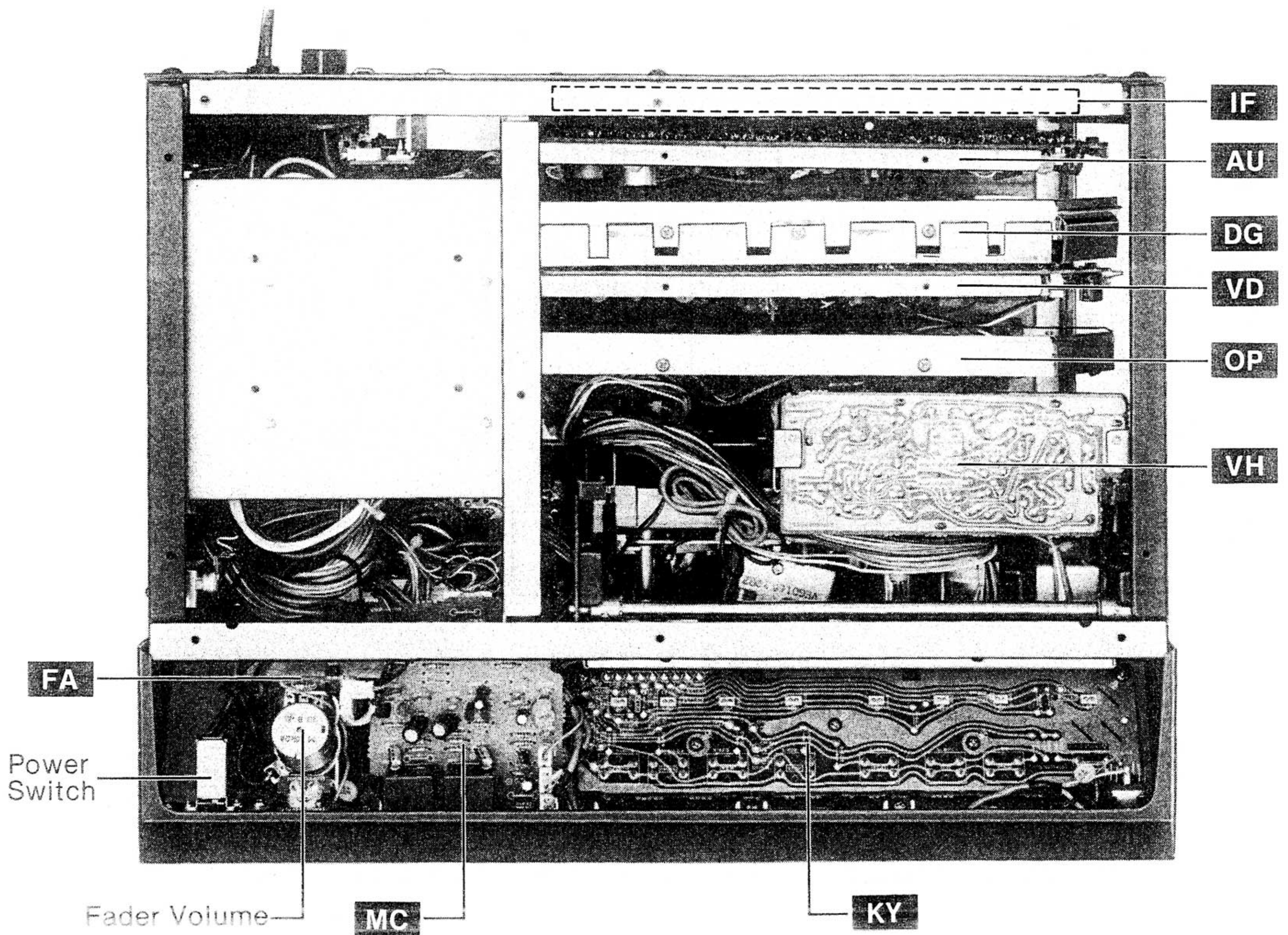


# PRINTED CIRCUIT BOARDS LOCATION

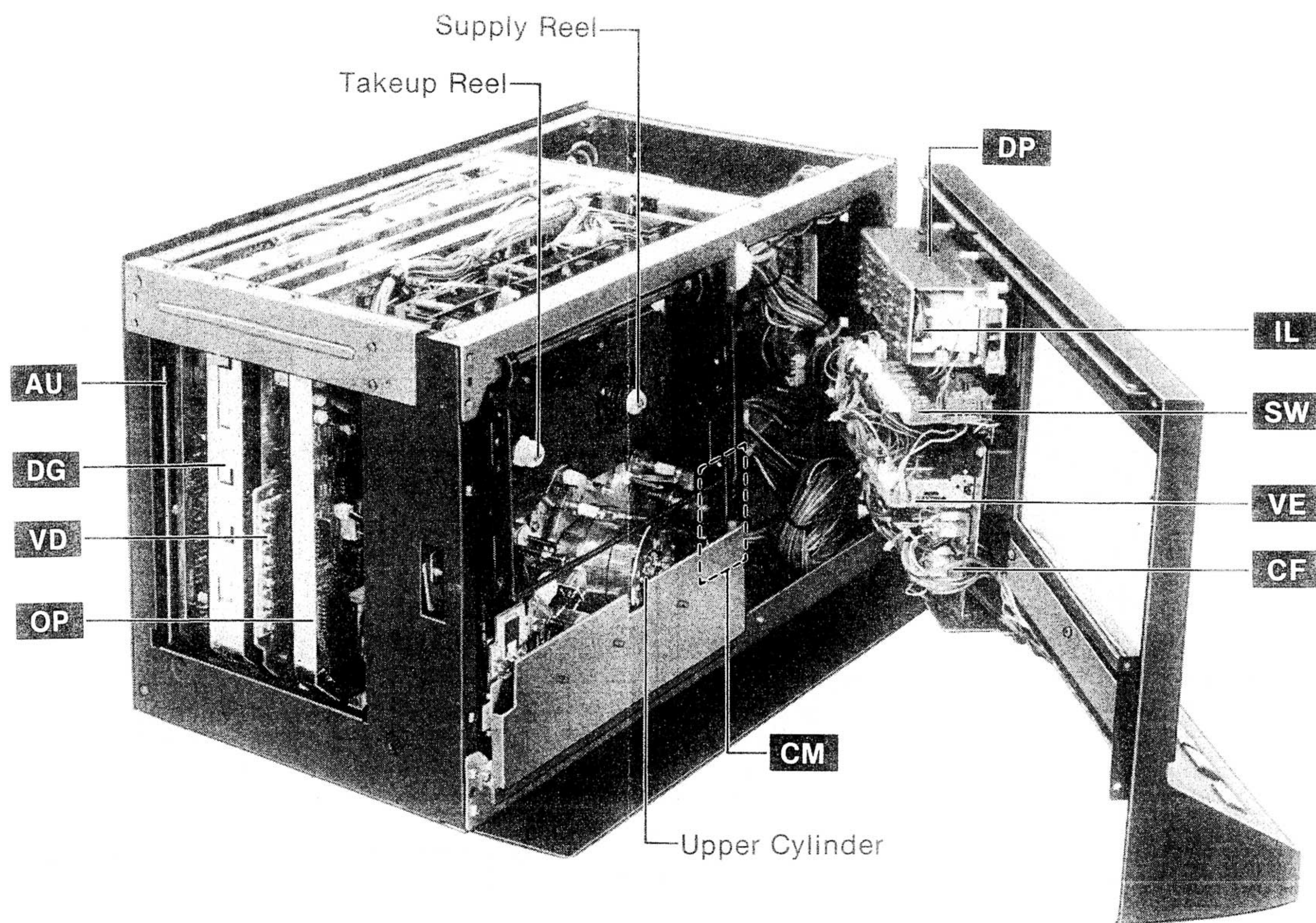
## • Top view



## • Bottom view



• Inside view

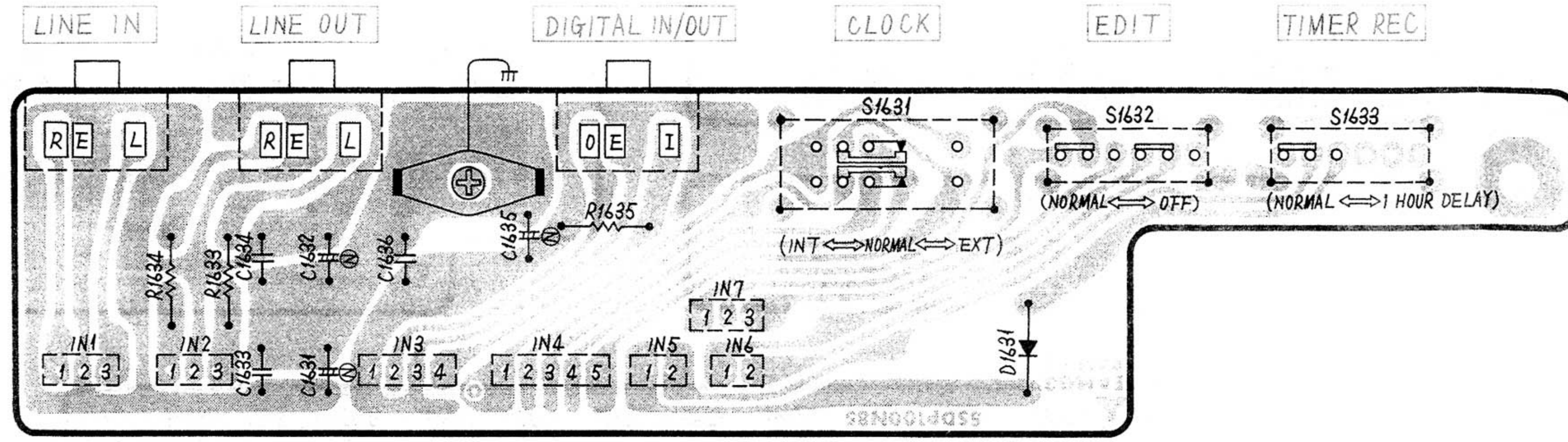


- IN** Input/output terminal circuit board
- PS** Power supply circuit board
- DP** Display circuit board
- OP** Operation control circuit board
- VD** Video circuit board
- DG** Digital circuit board
- AU** Audio circuit board
- KY** Cassette control keys circuit board
- MC** Mic circuit board
- FA** Fader volume circuit board
- VH** Video head circuit board
- SW** Control switch circuit board
- VE** Recording level volume and Emphasis circuit board
- CF** Connection board (Front)
- IF** Inter face circuit board
- CM** Connection board (Mechanical)
- IL** Illuminate board

**PRINTED CIRCUIT BOARDS**

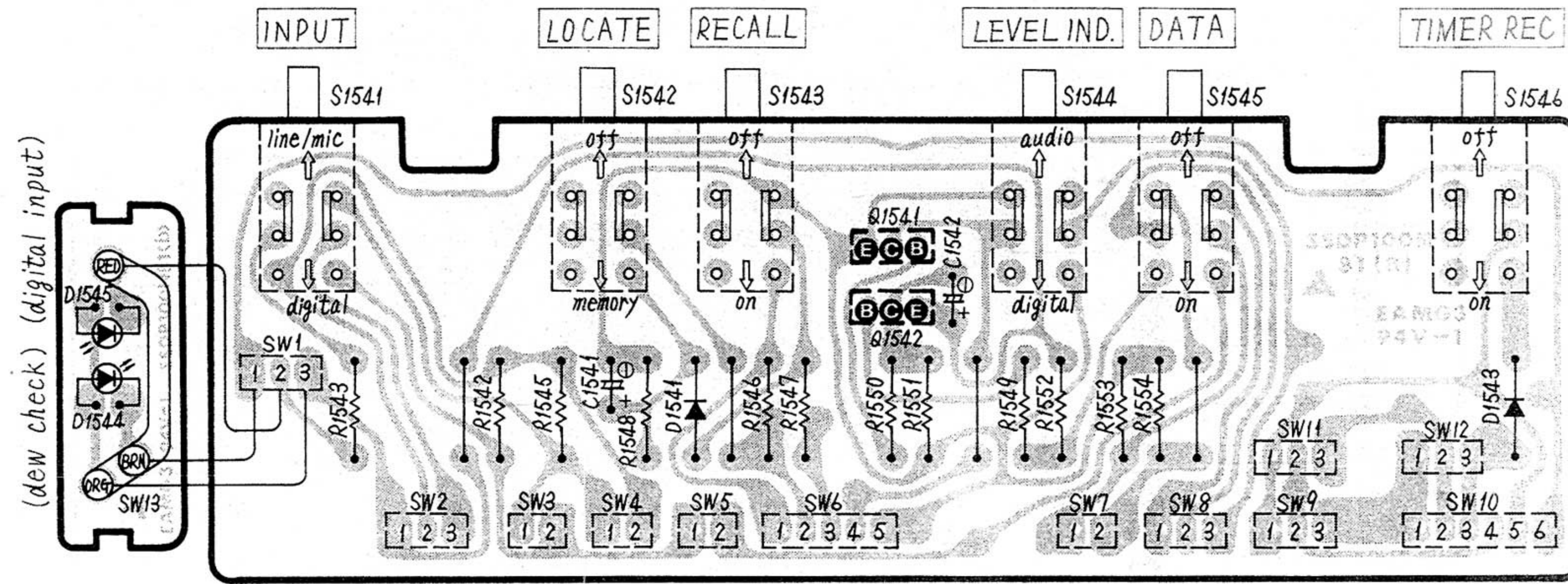
**IN**

• Input/output terminal circuit



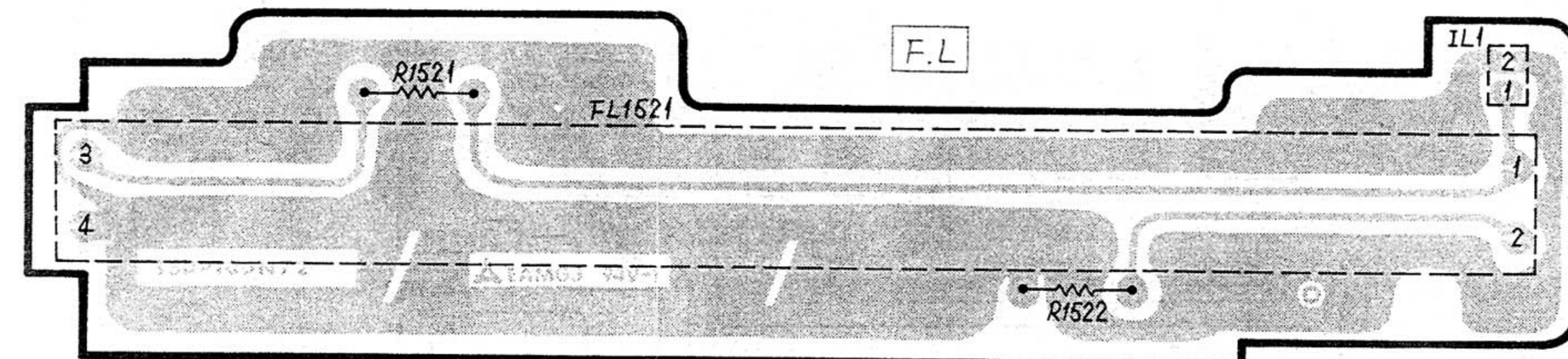
**SW**

• Control switch circuit



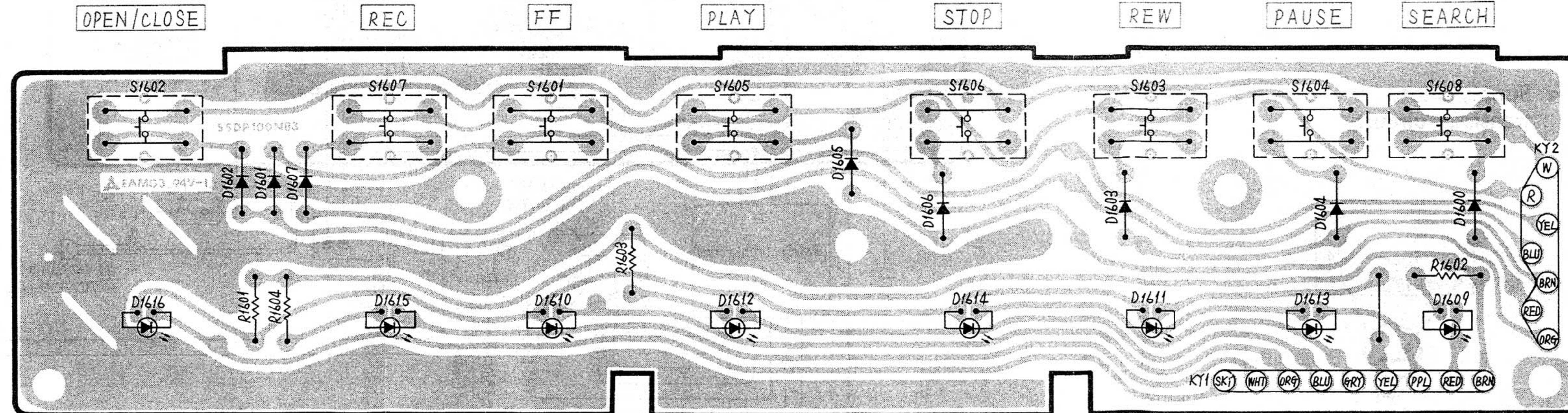
**IL**

• Illuminate circuit



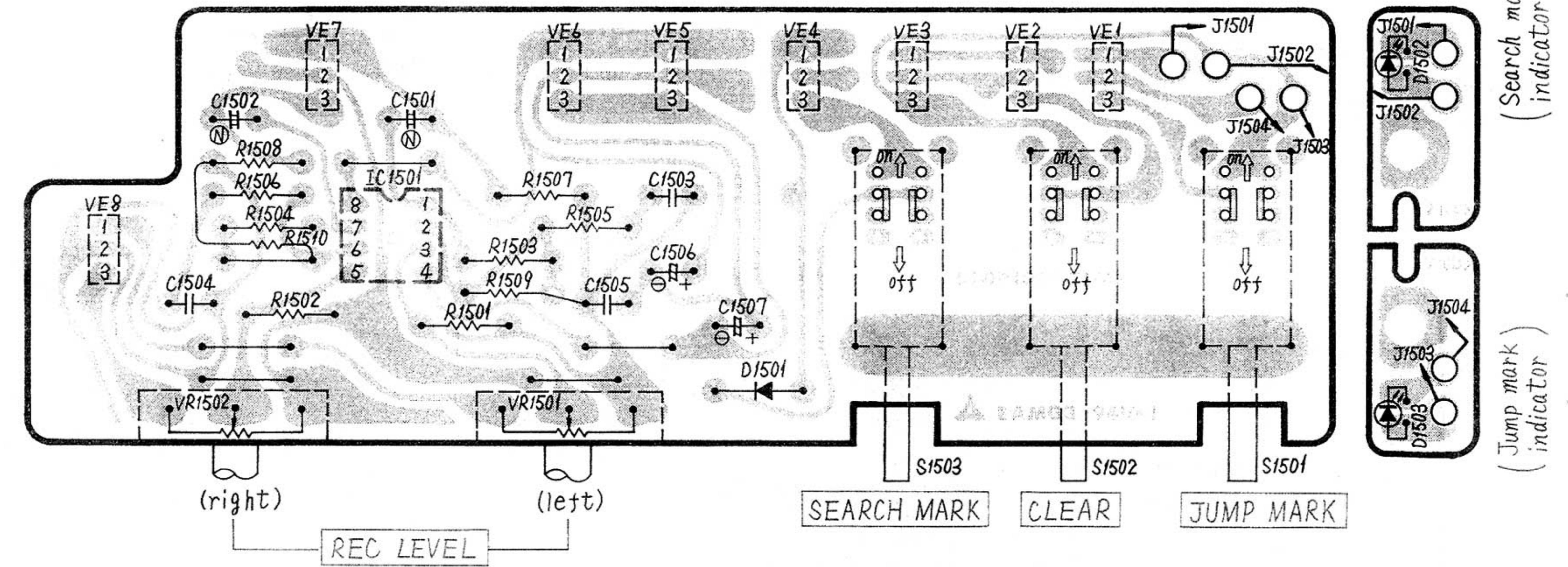
**KY**

• Cassette control key circuit



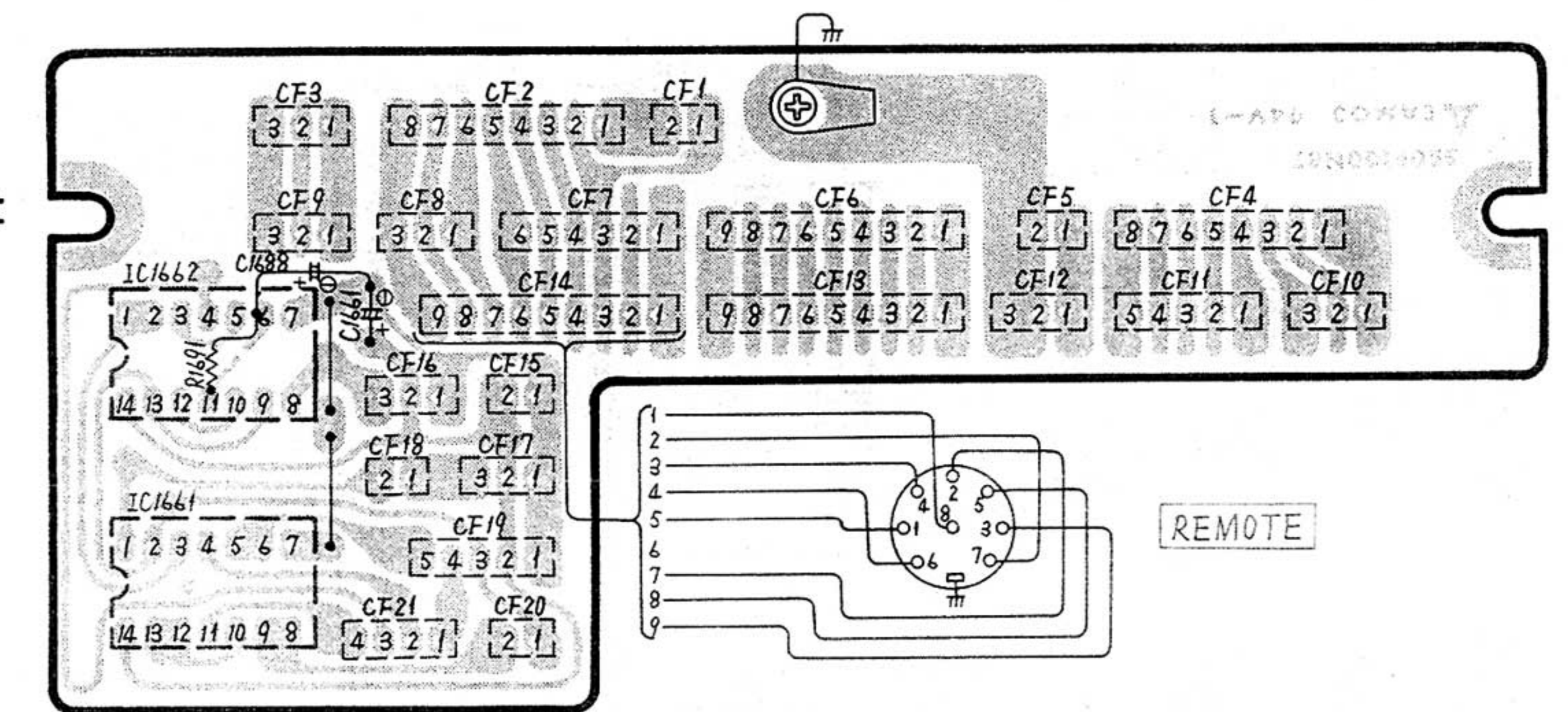
**VE**

• Recording level volume and Emphasis circuit



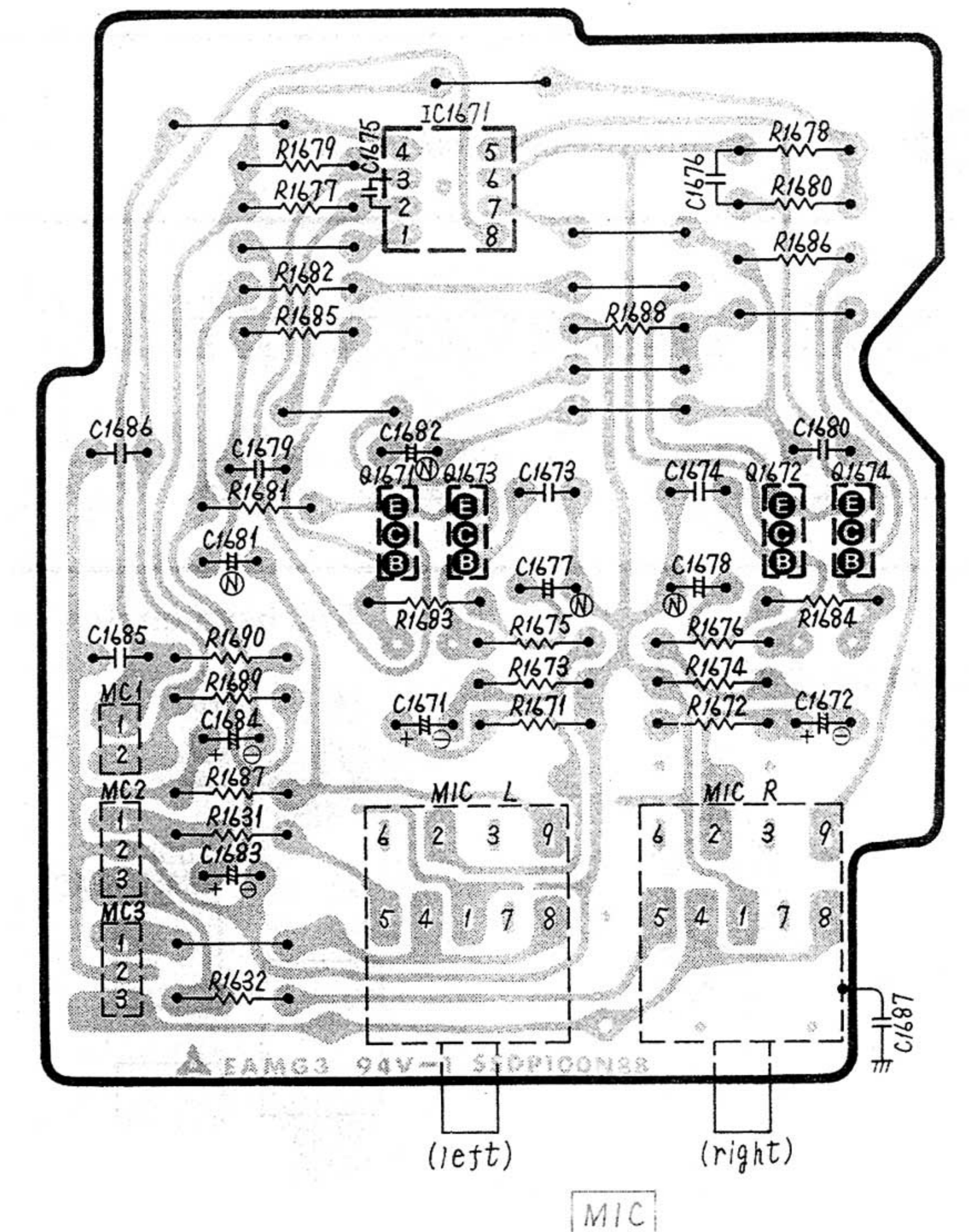
**CF**

• Connection (Front) circuit

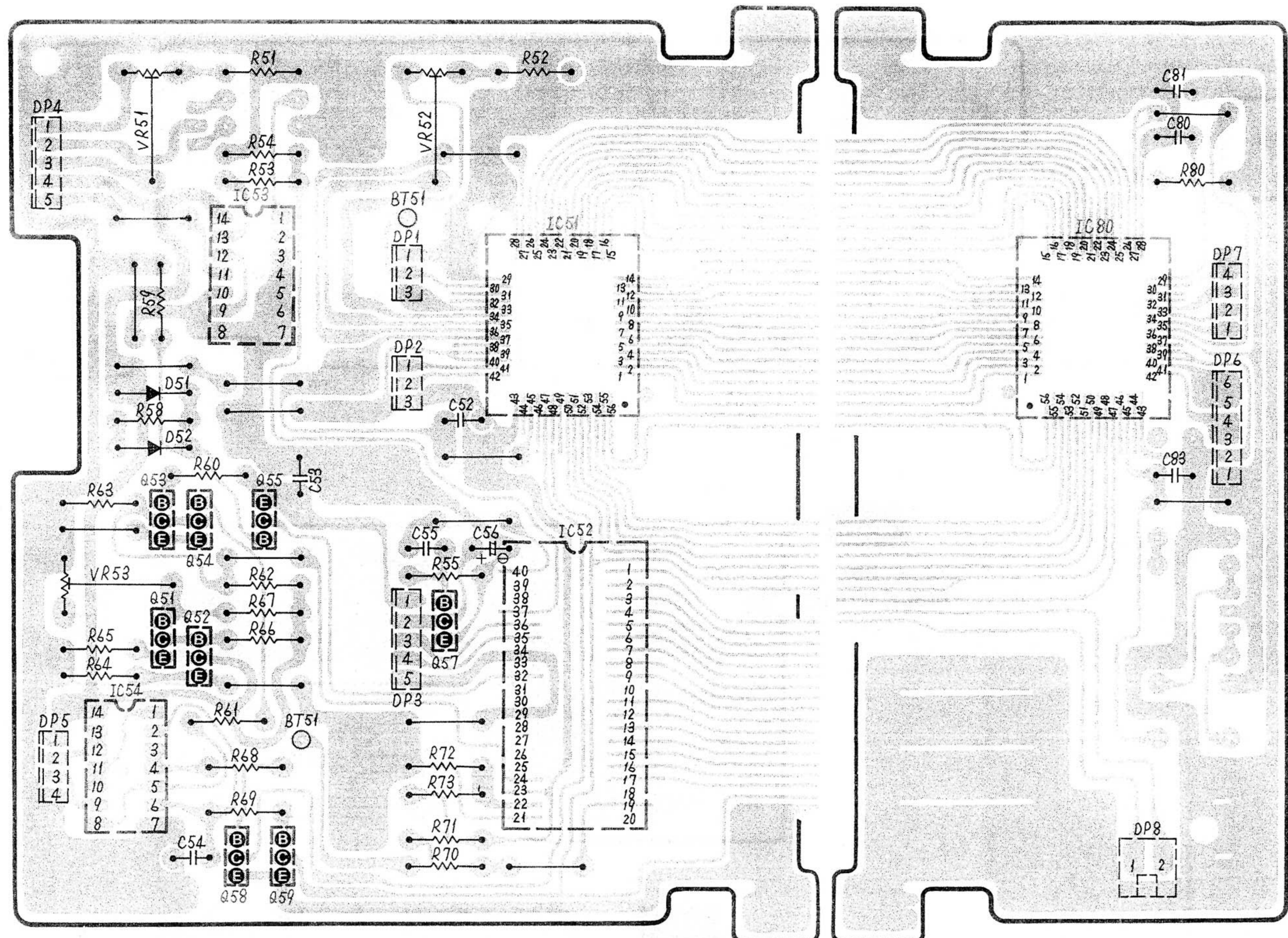


**MC**

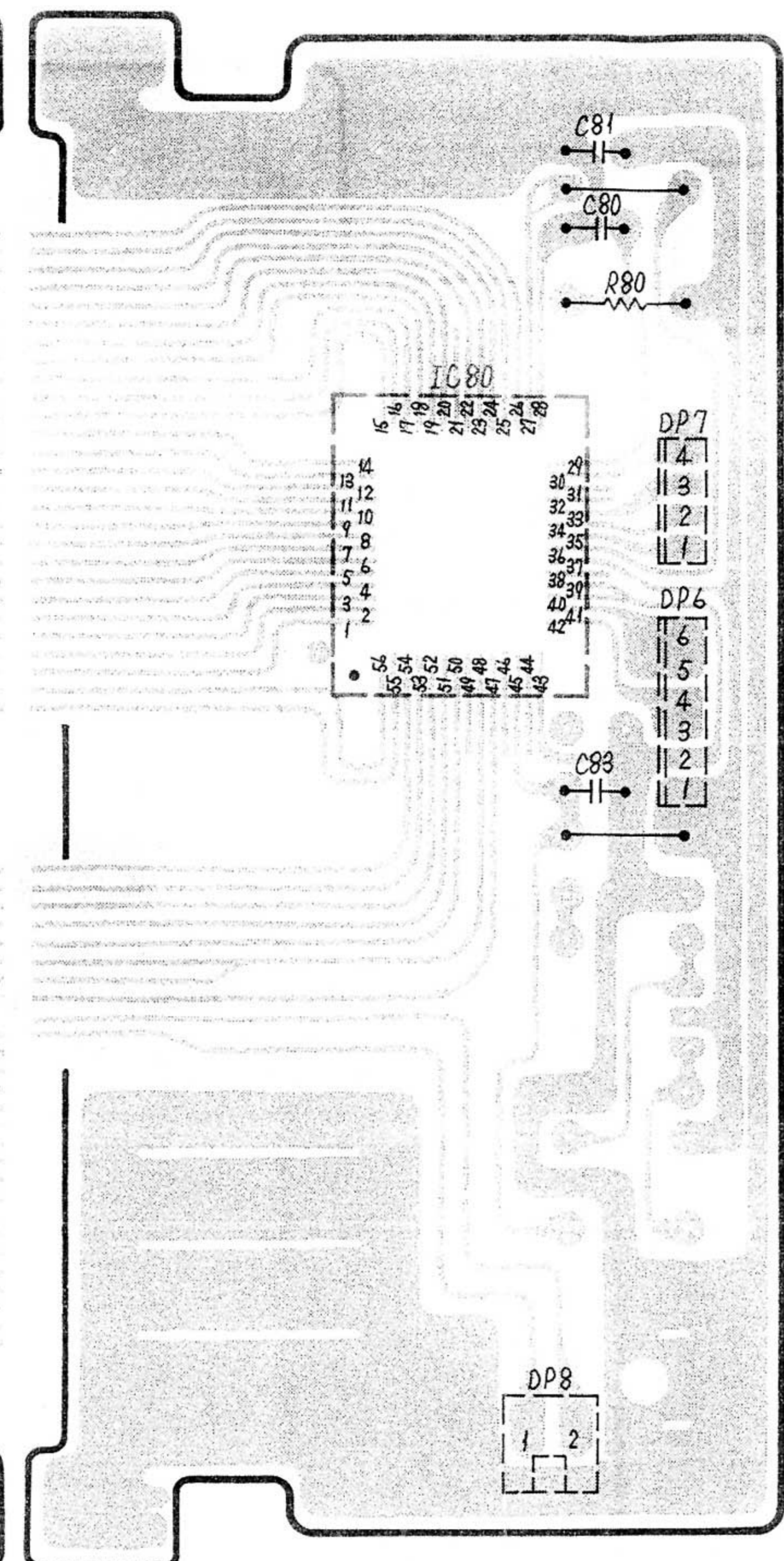
• Mic circuit



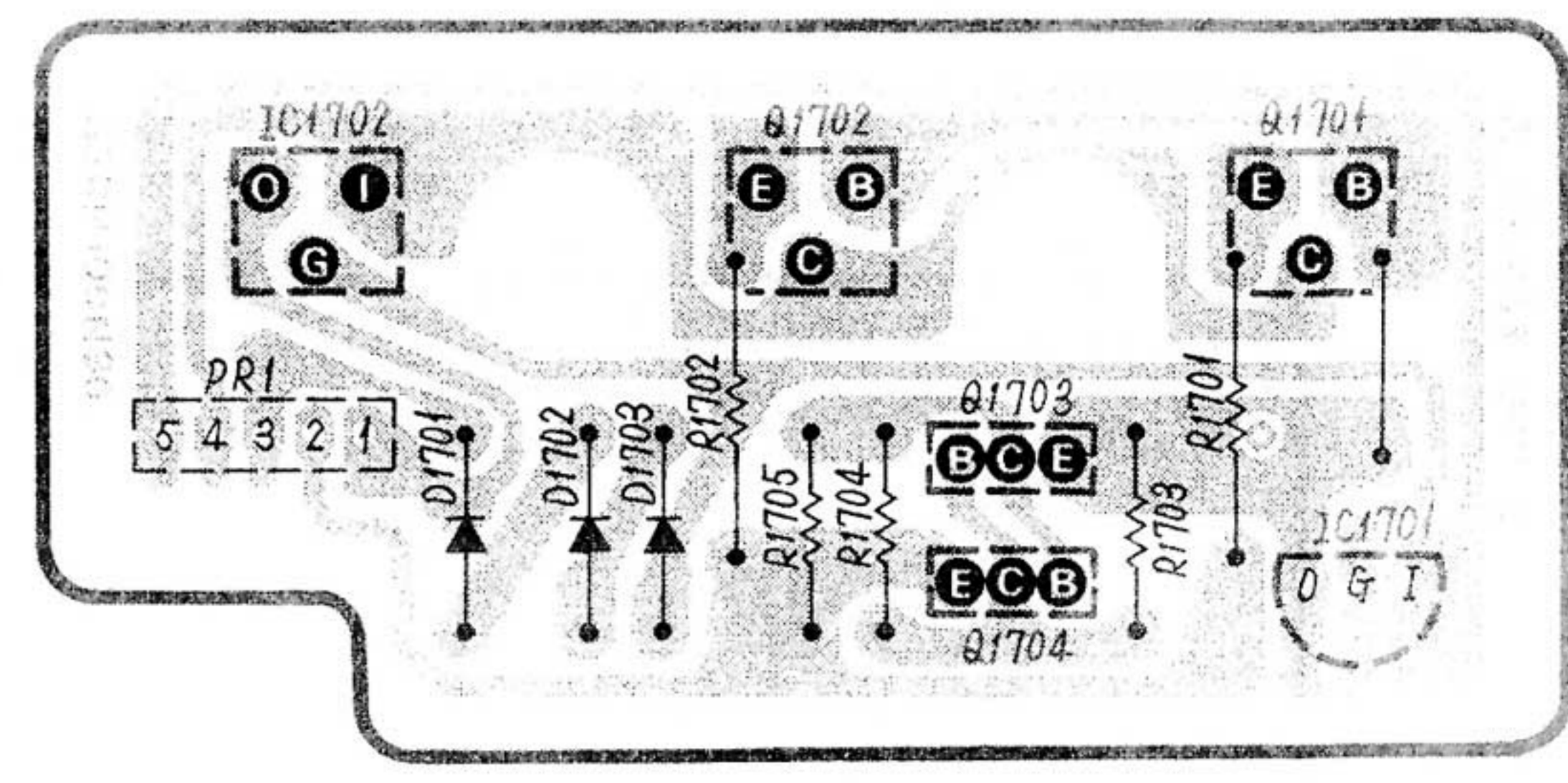
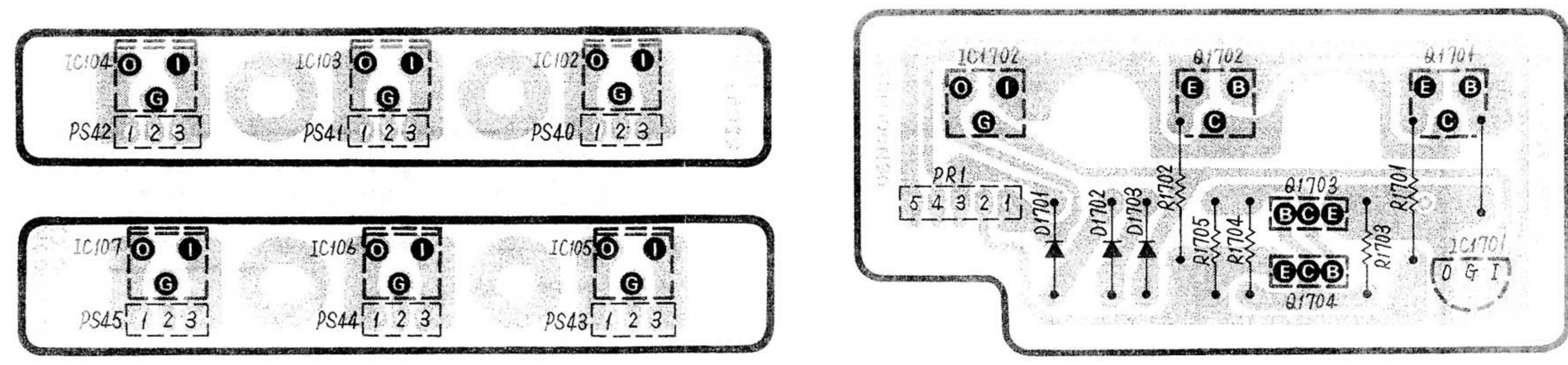
**DP** • Display circuit (Left channel)



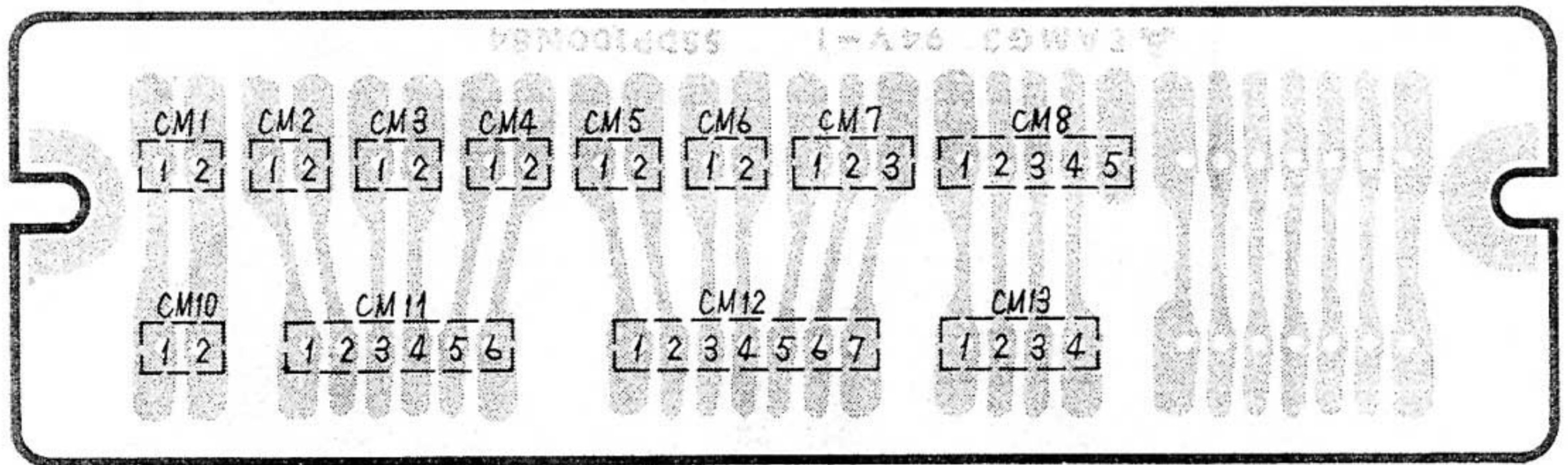
(Right channel)



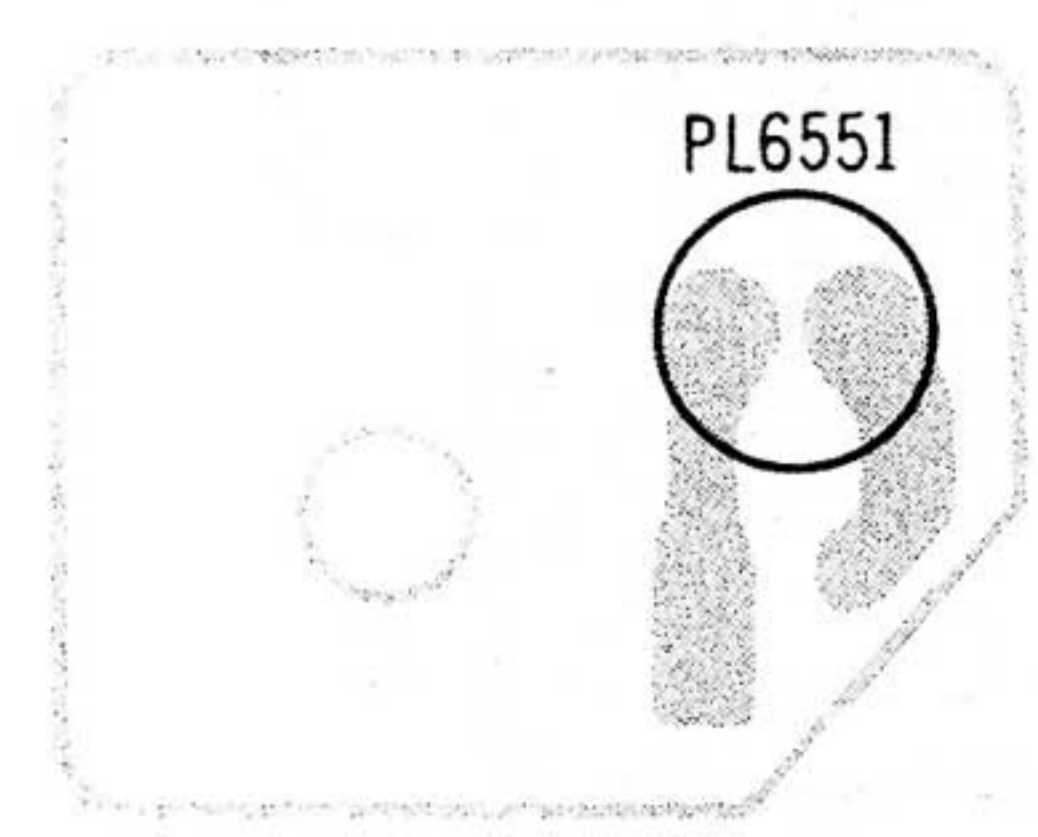
**PS** • Power supply circuit



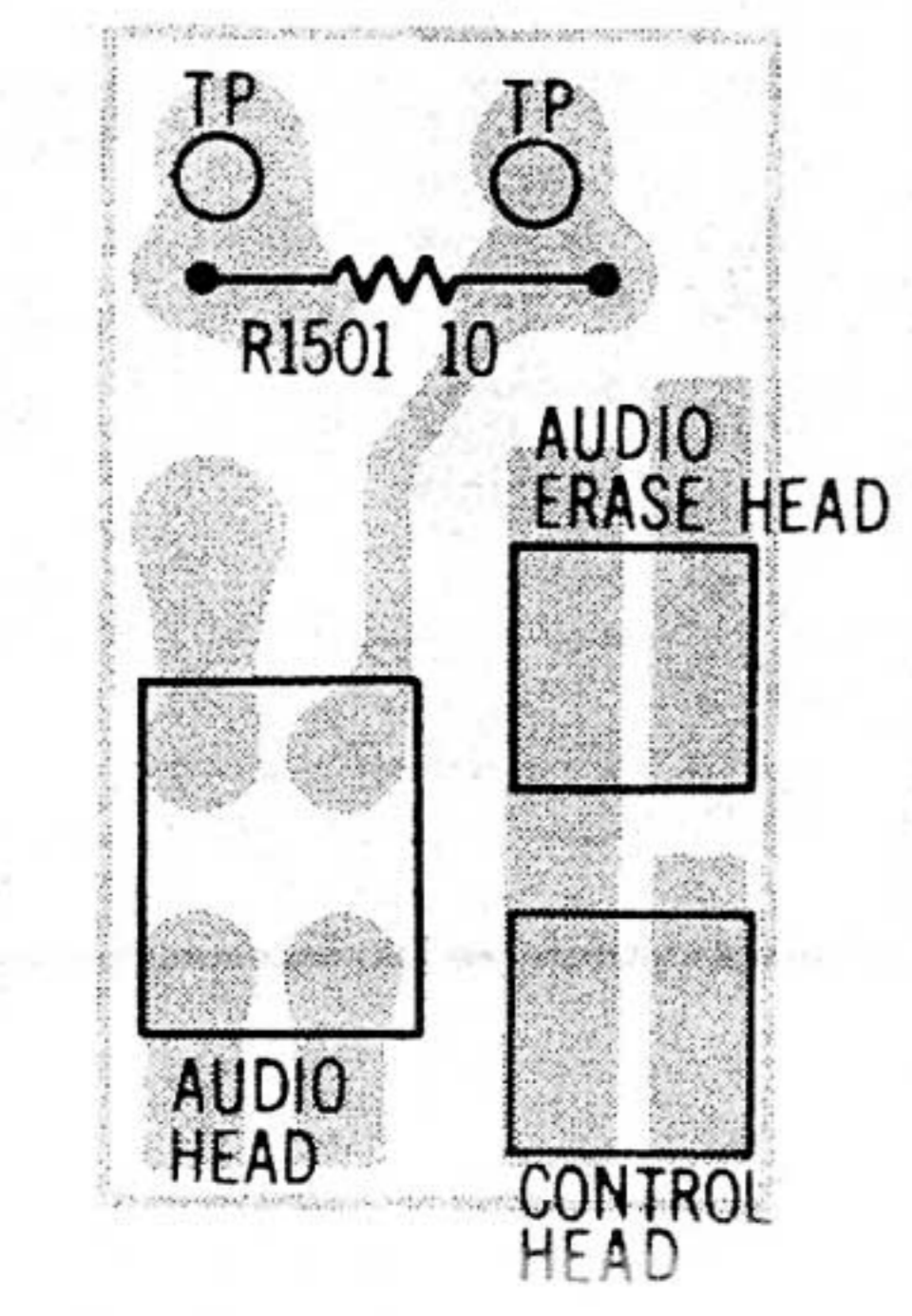
**CM** • Connection (Mechanical) circuit



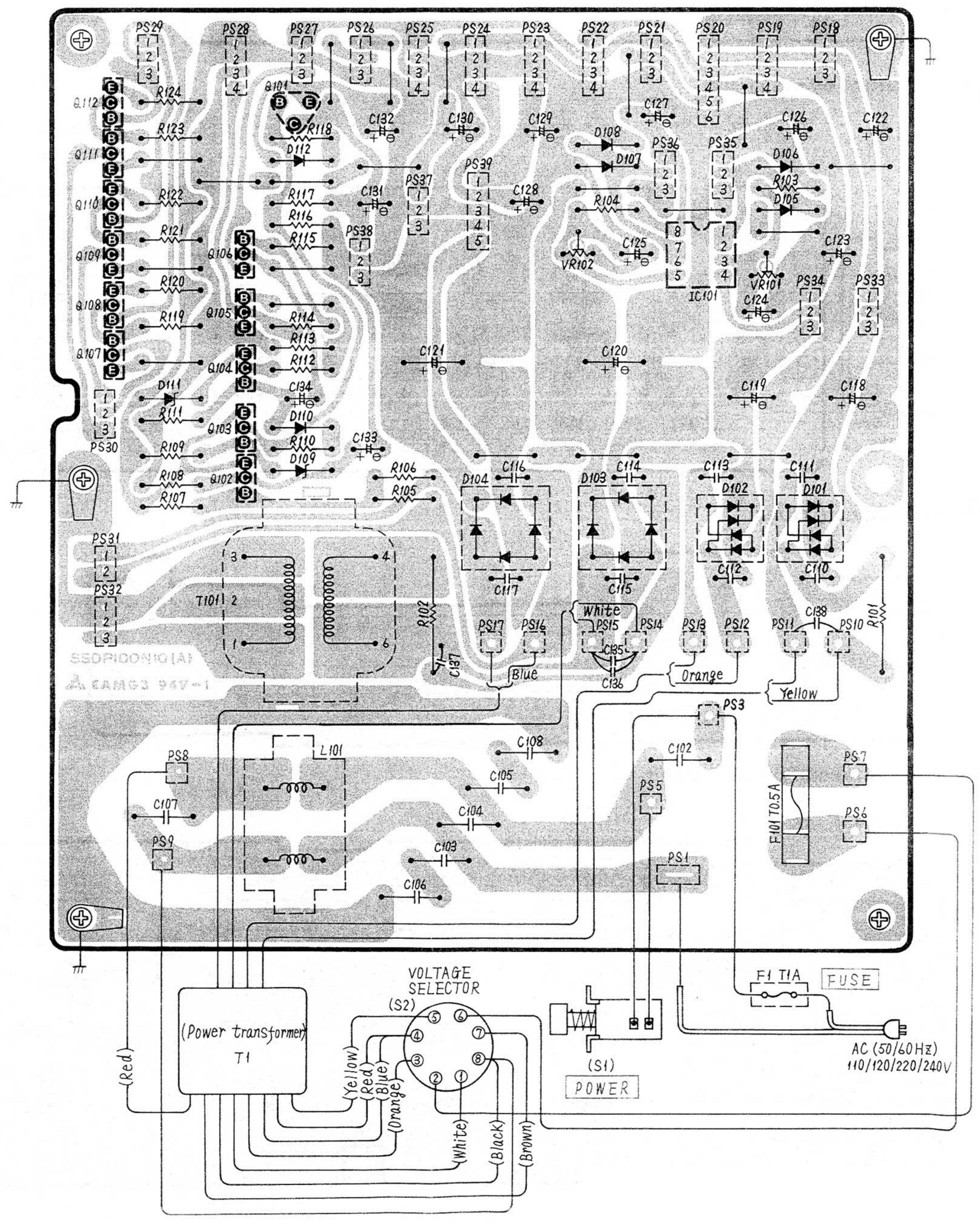
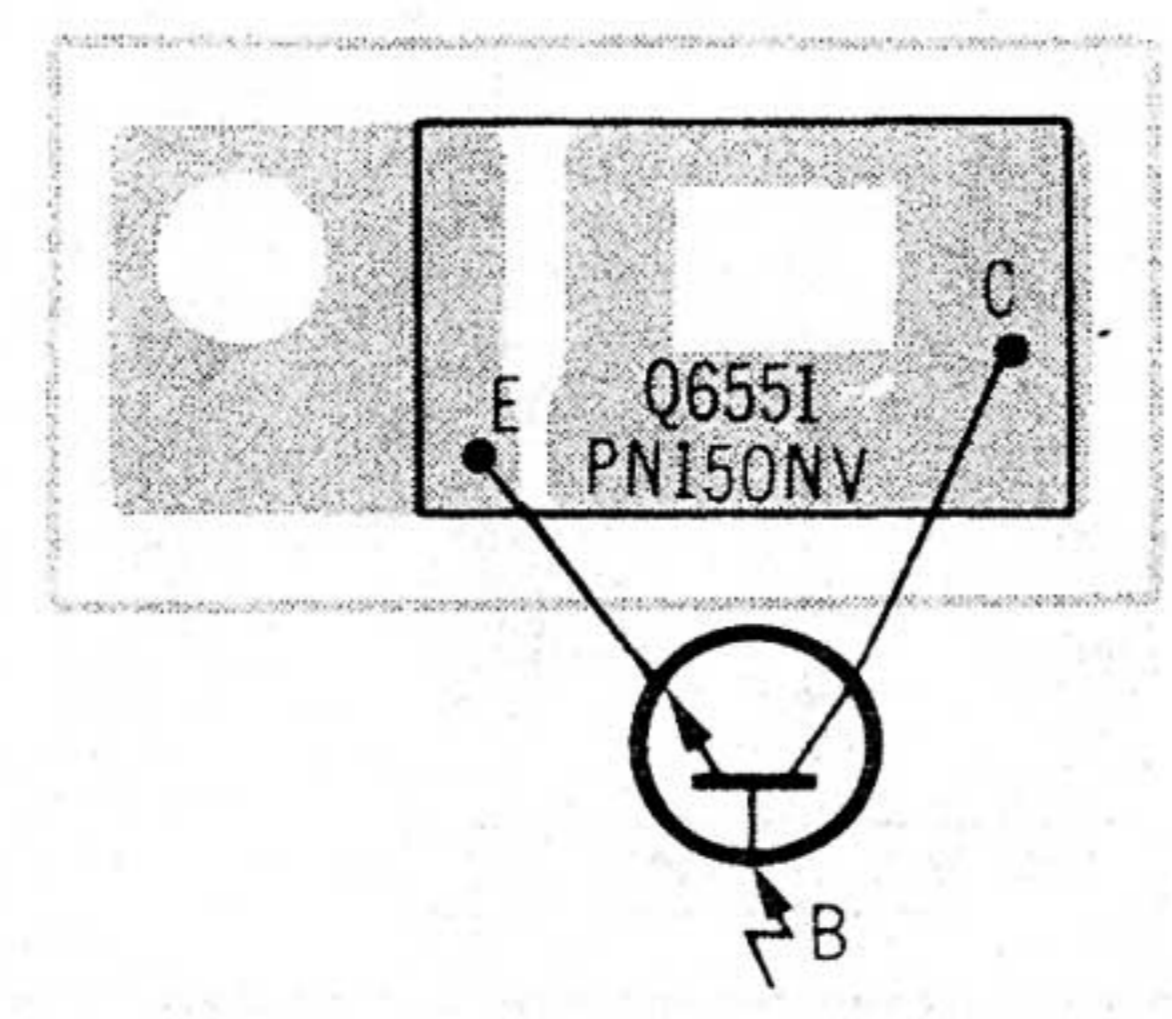
• Sensor lamp circuit



• A/C head circuit

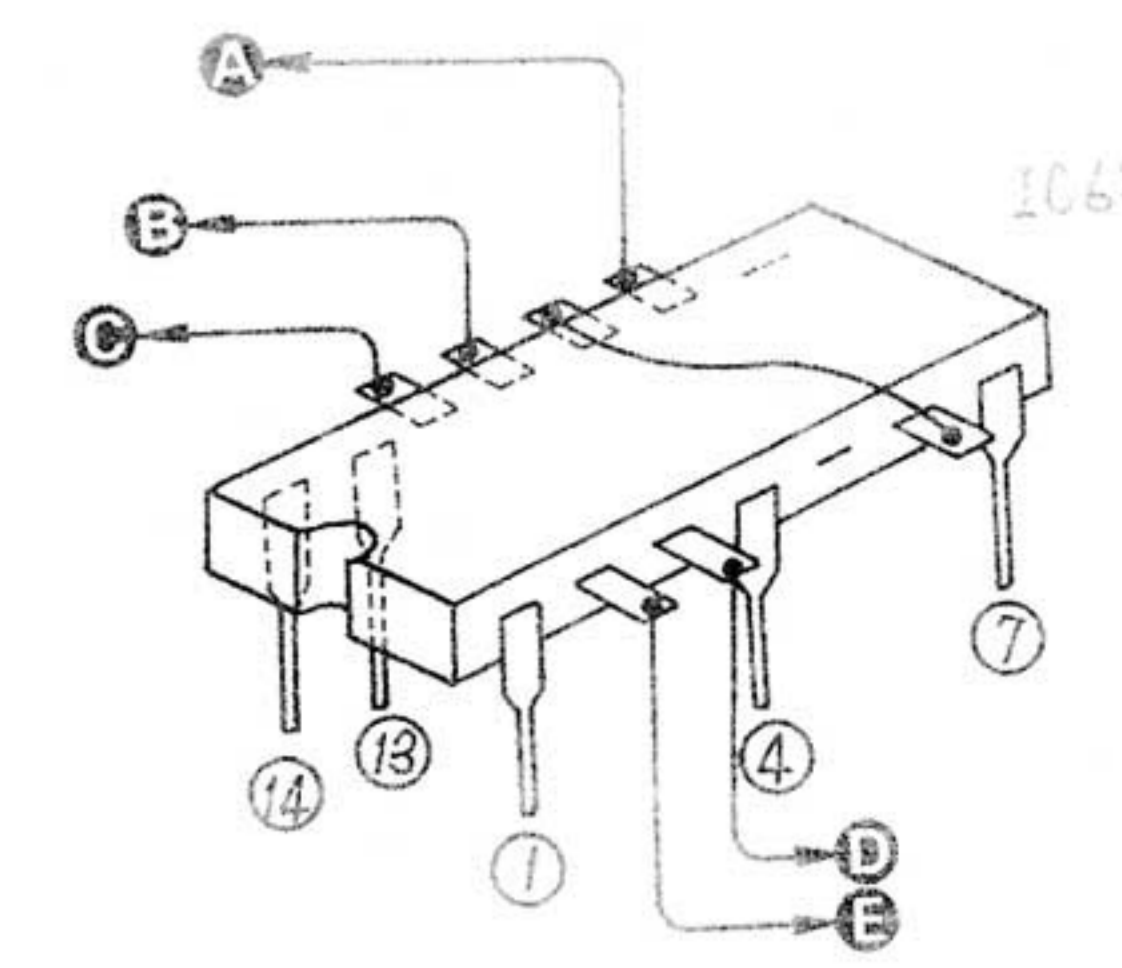
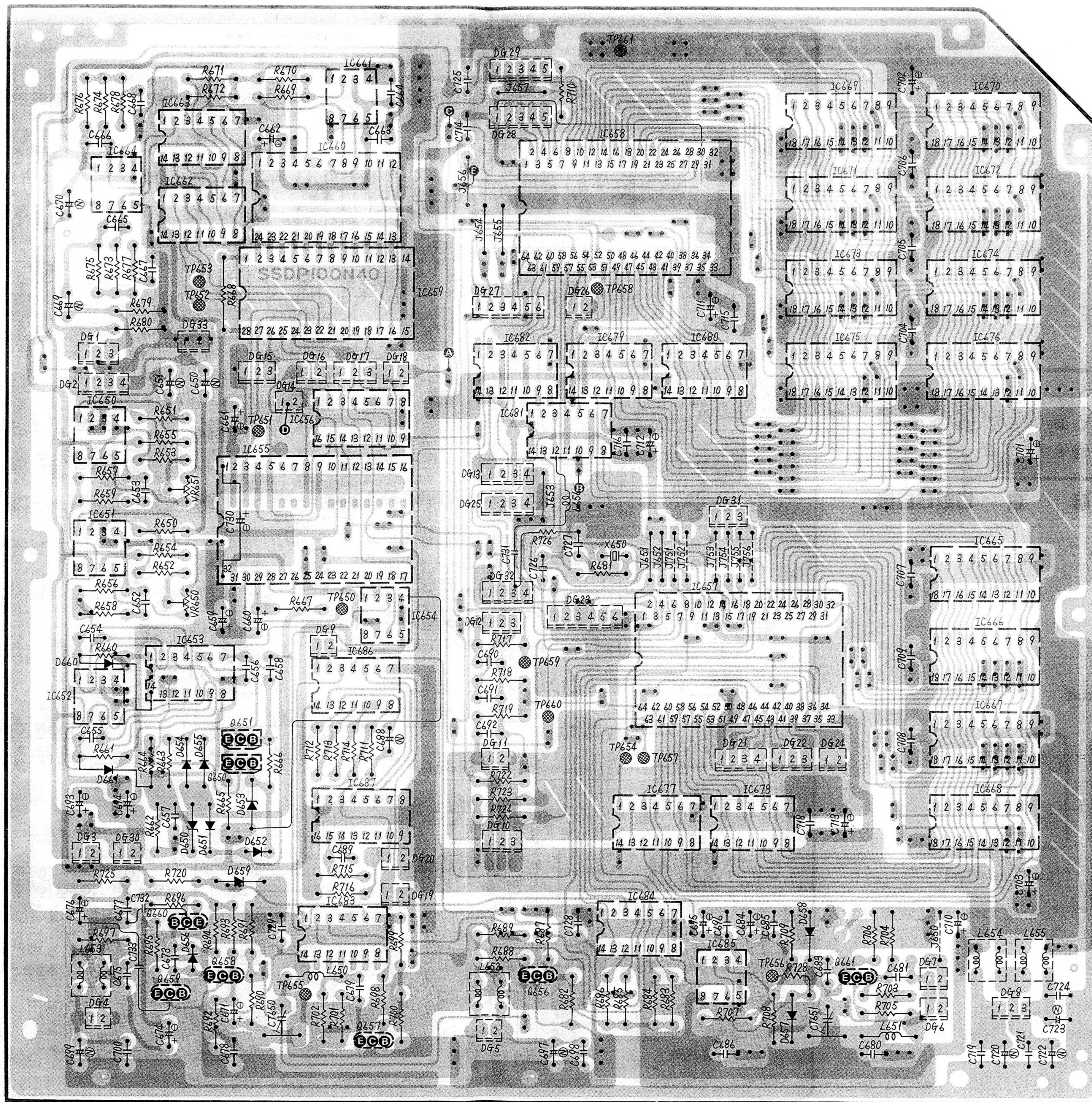


• Supply photo transistor circuit





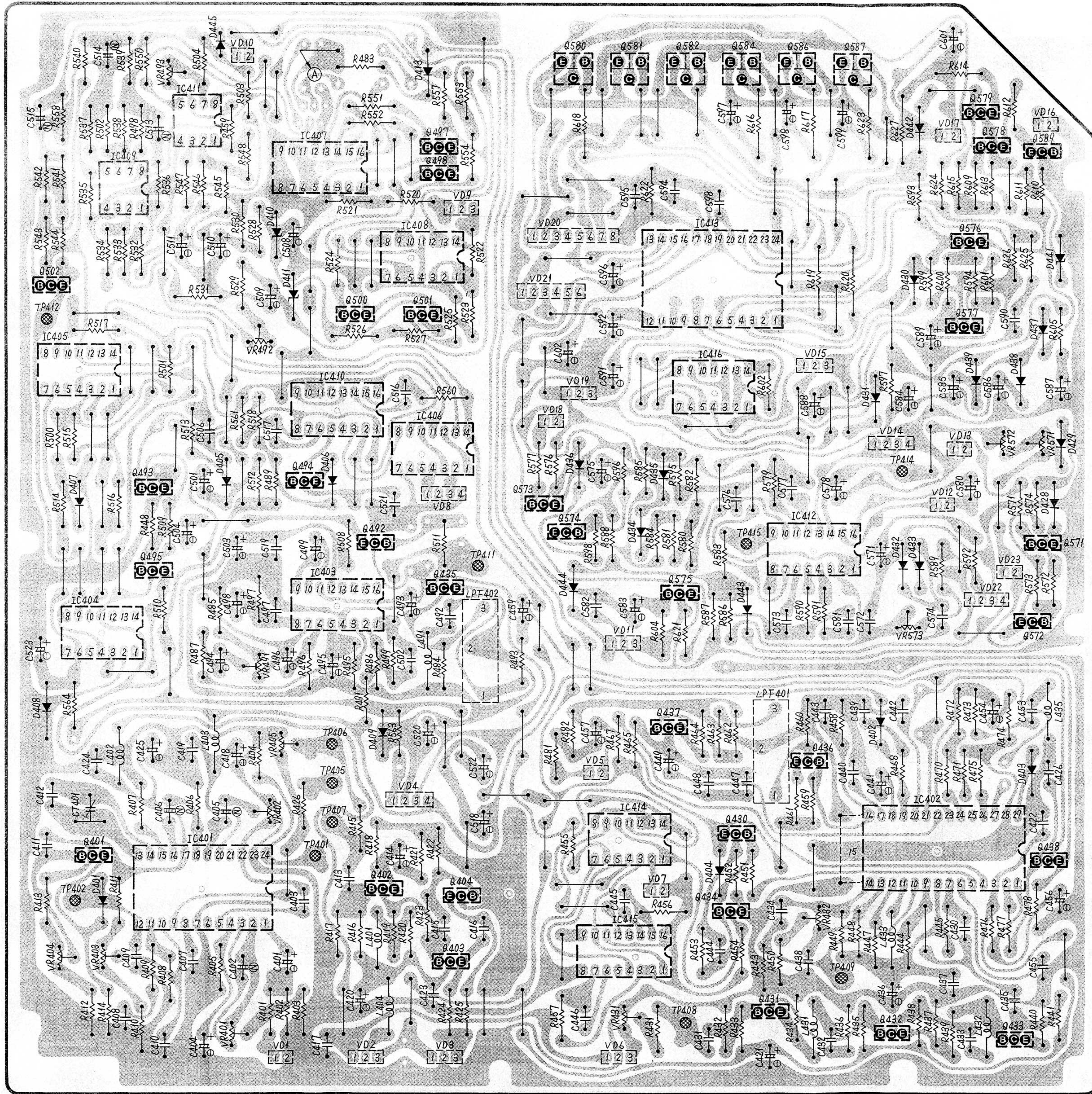
Circuit view on top of P.C.B.



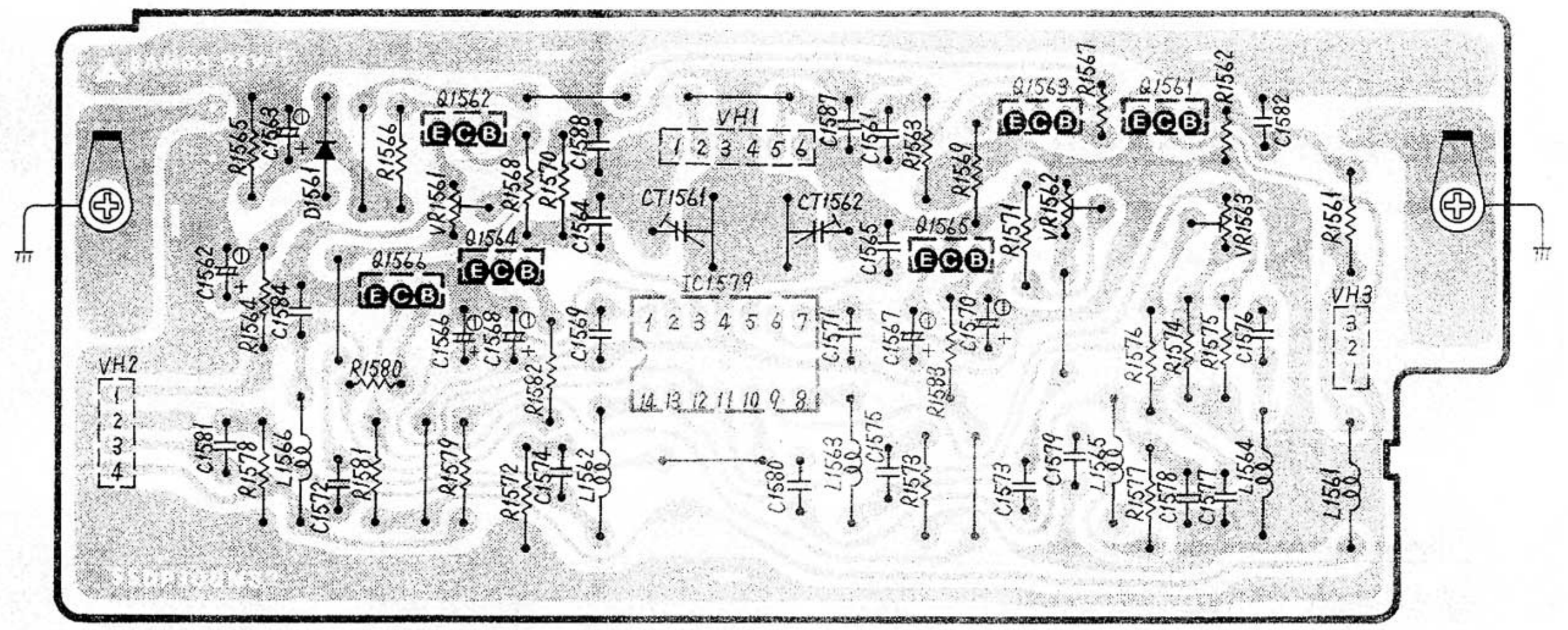
- Notes:
- |       |   |          |   |
|-------|---|----------|---|
| IC688 | ① | To IC662 | ① |
| IC688 | ④ | To IC662 | ④ |
| IC688 | ⑦ | To IC662 | ⑦ |
| IC688 | ⑬ | To IC662 | ⑬ |
| IC688 | ⑭ | To IC662 | ⑭ |



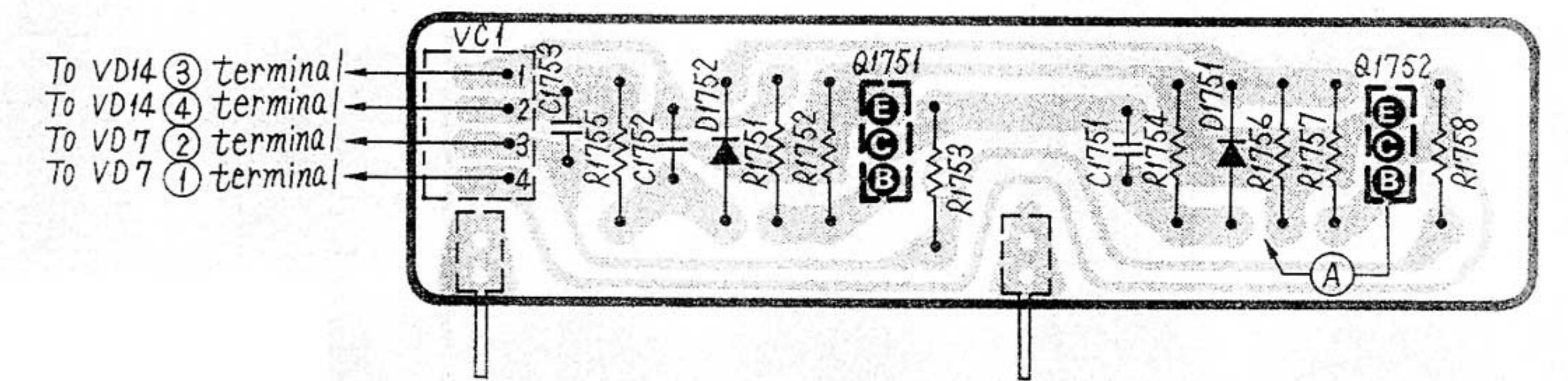
**VD** • Video circuit



**VH** • Video head circuit

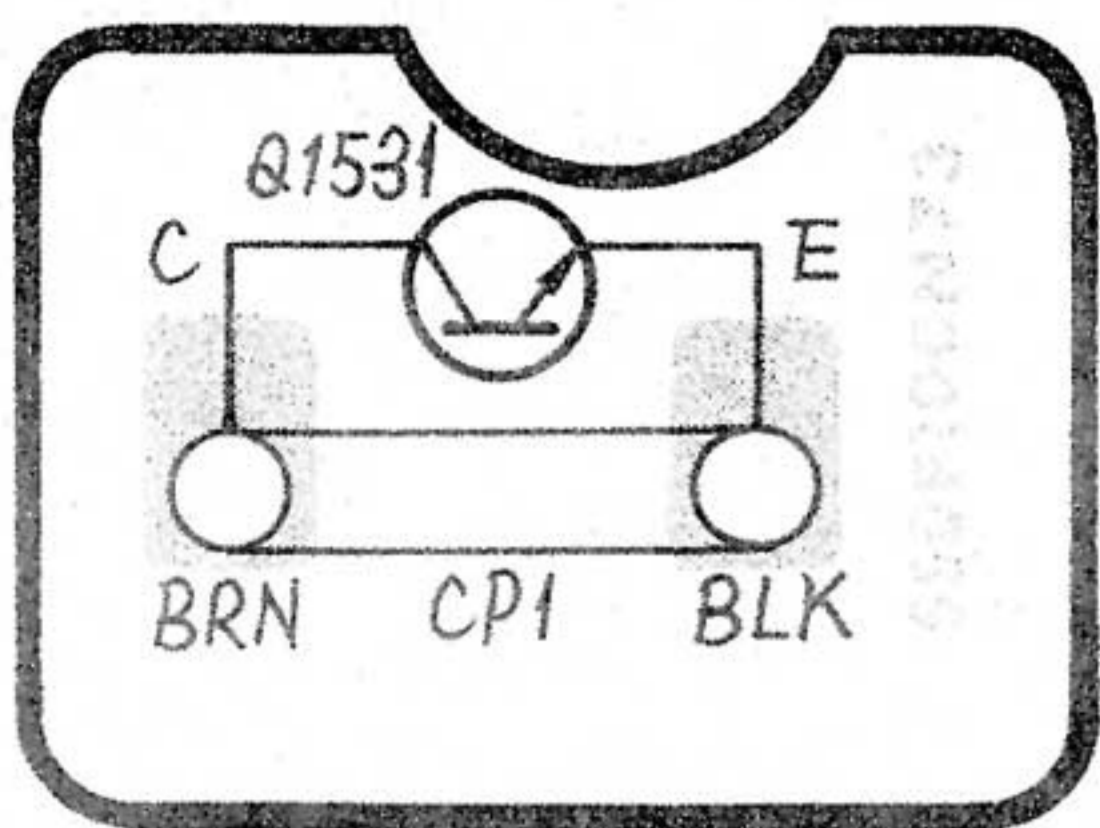


**VC** • Video control circuit

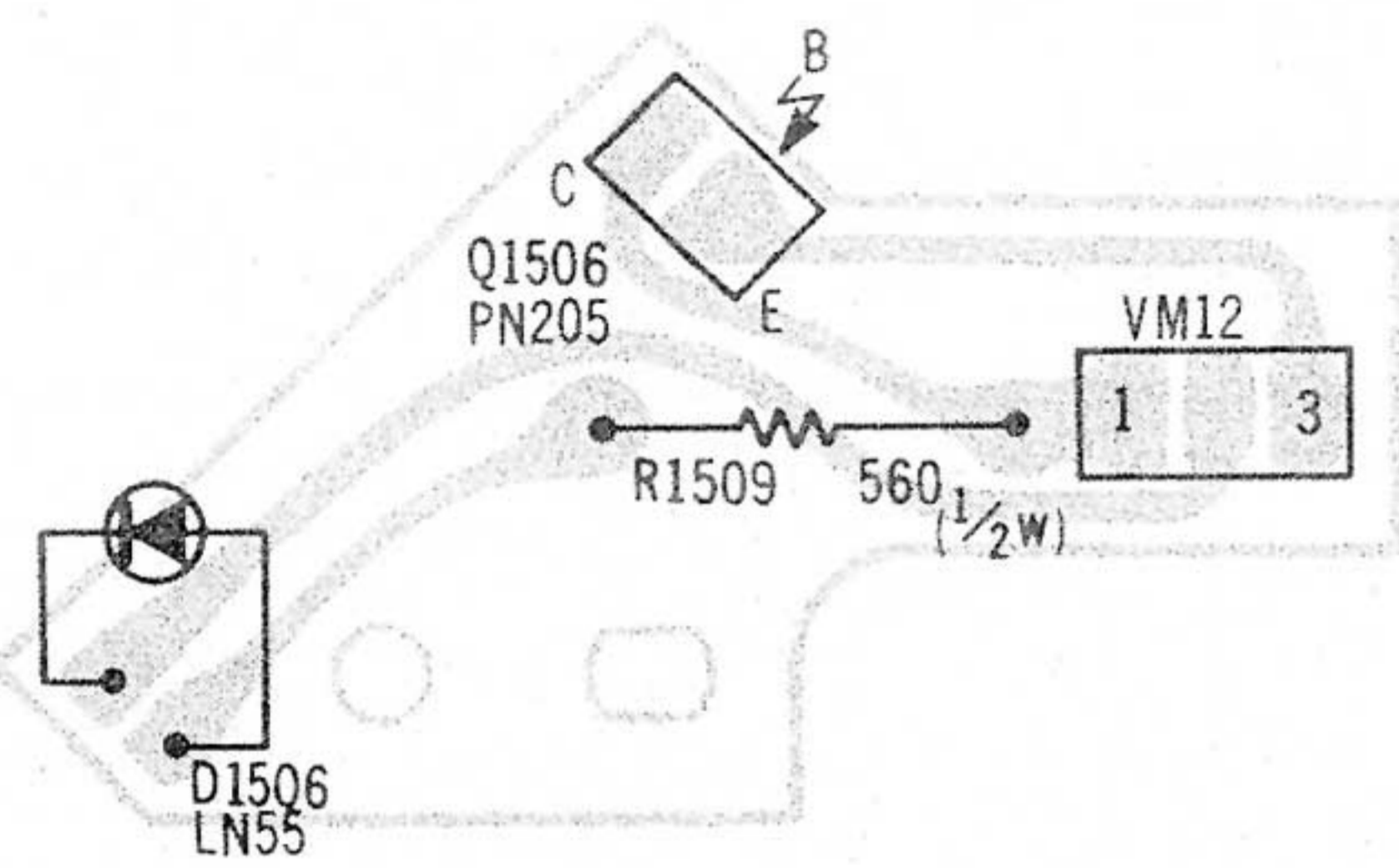


To VD14 (3) terminal  
 To VD14 (4) terminal  
 To VD7 (2) terminal  
 To VD7 (1) terminal

• Photo transistor circuit



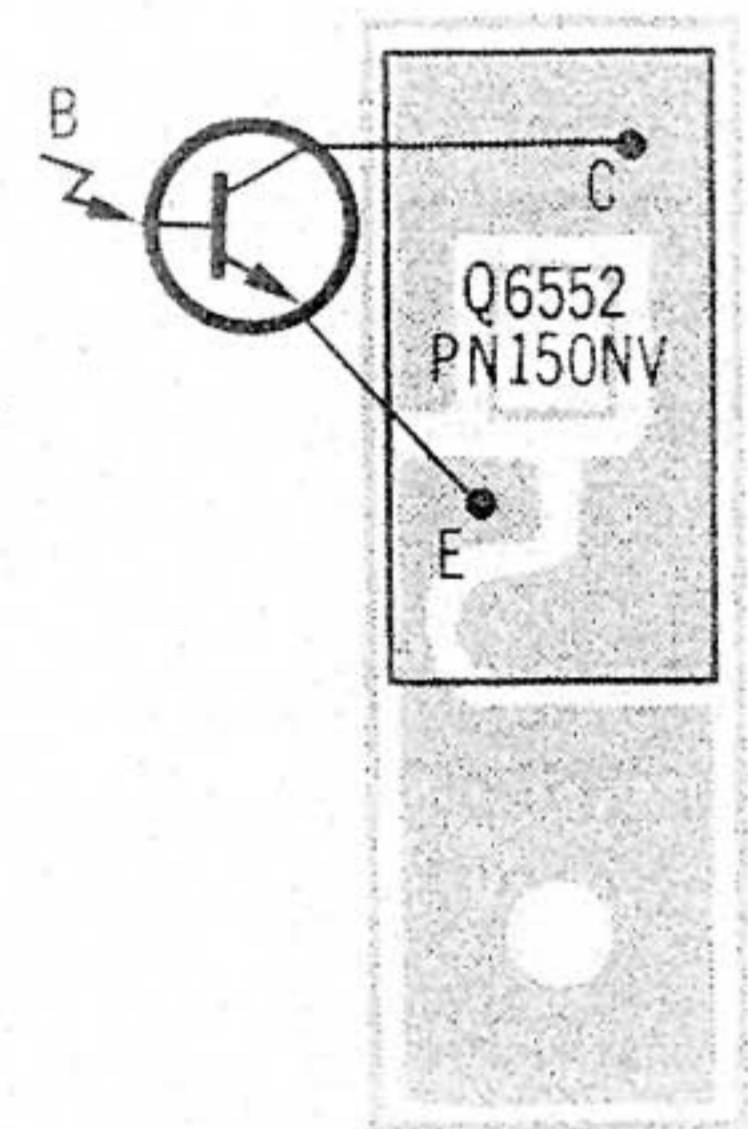
• Tape slack sensor circuit



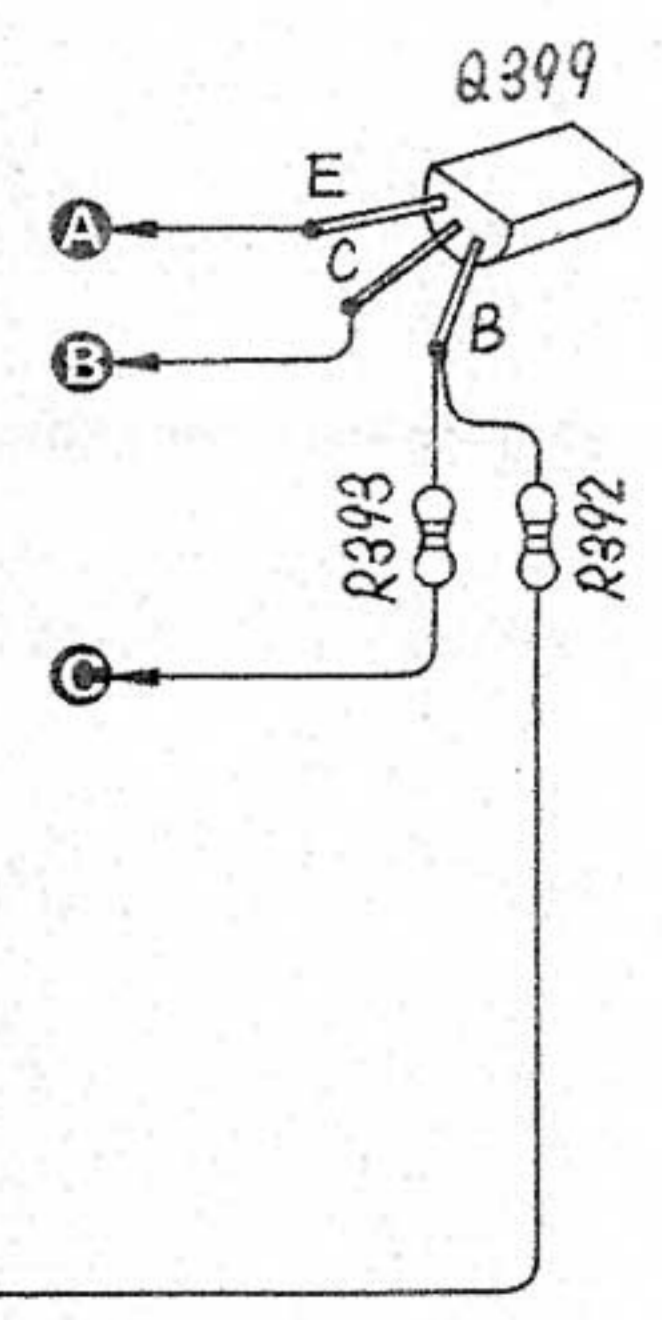
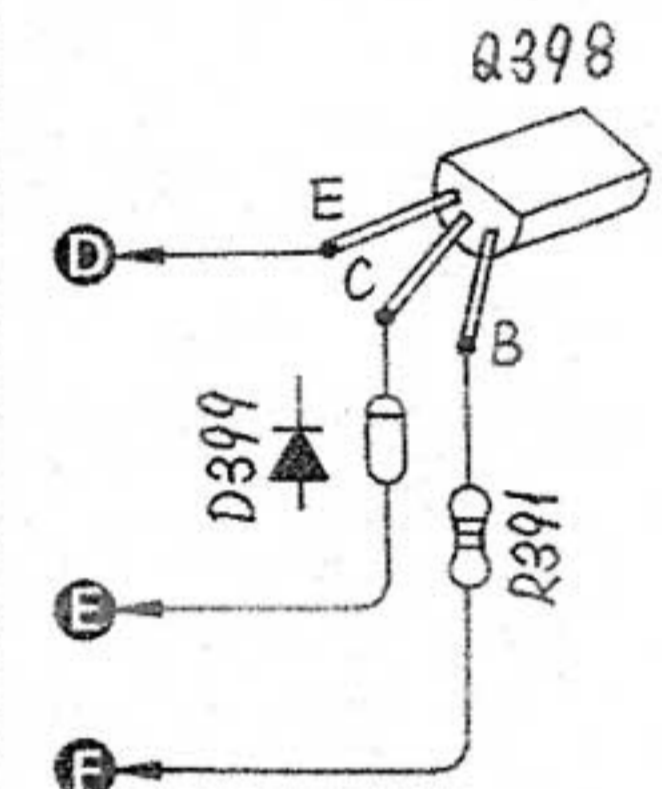
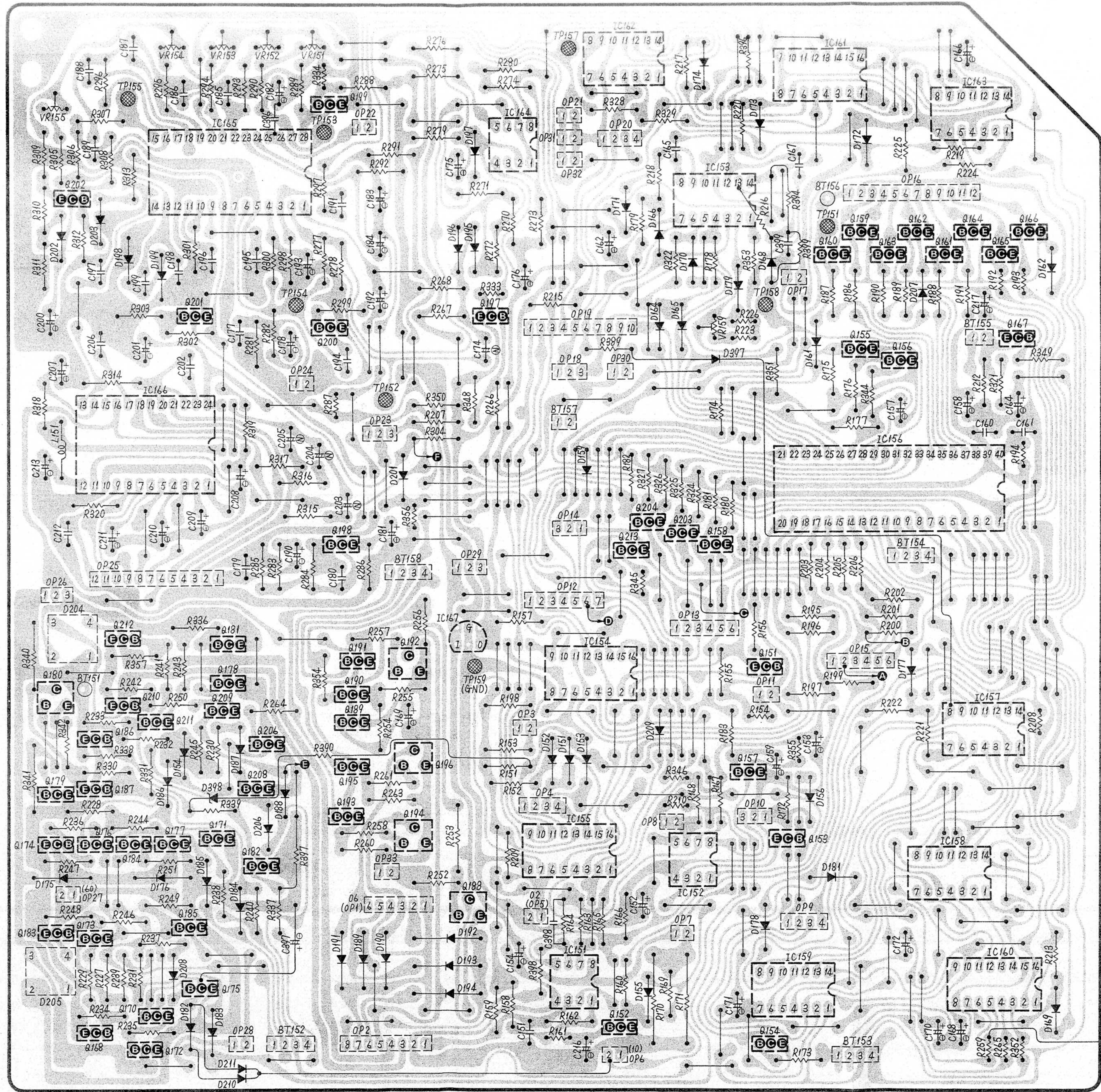
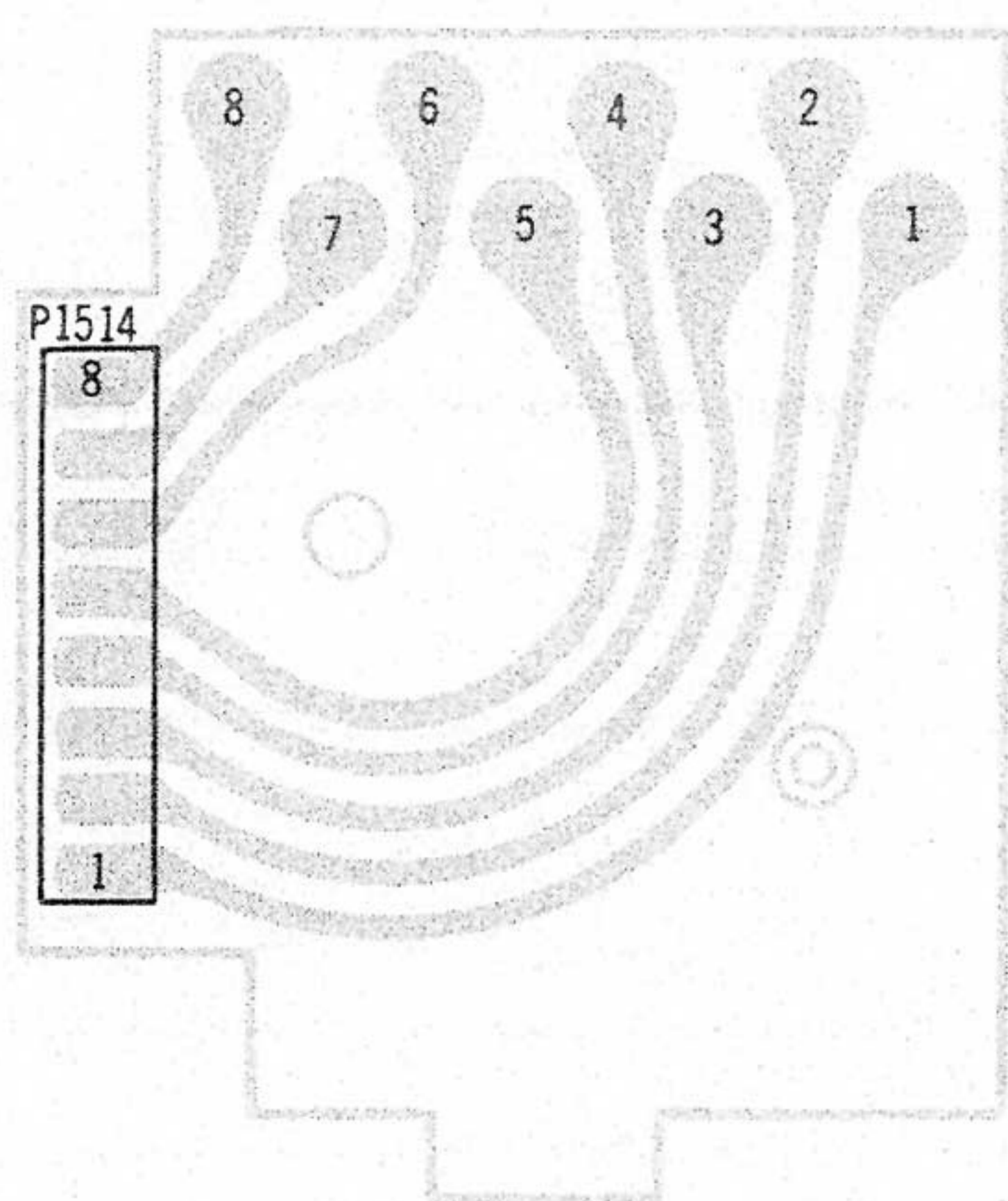
• Review sensor circuit



• Takeup photo transistor circuit



• Connection circuit



# REPLACEMENT PARTS LIST... Electrical Parts

- Notes:**
1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
  2. Important safety notice:  
Components identified by **Δ** mark have special characteristics important for safety.  
When replacing any of these components use only manufacturer's specified parts.
  3. Bracketed indications in Ref. No. columns specify the area.  
Parts without these indications can be used for all areas.
  4. The "**S**" mark is service standard parts and may differ from production parts.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
<b>INTEGRATED CIRCUITS</b>			IC686	SVIM74LS00P	2-Input NAND Gate	Q105, 107, 109, 111	2SB643	Mute and Power Selector Circuit
IC51, 80	SVIMSL9355GS	Level indicator Drive	IC687	SVIM74LS123P	Monostable Multivibrator	Q106	2SB641	Power Selector Circuit
IC52	SVITP0400N2L	Tape Counter	IC801, 807	SVITL082CP	Operational Amplifier	Q151, 153, 167, 197, 202	2SB641	Sensor, Operation Control, CTL Detector and Cylinder Servo Circuit
IC53	SVIUPD4013C	D-Type Flip-Flop	IC802, 803	SVINJM4559DS	Operational Amplifier	Q152, 154 ~ 166, 170, 171, 173, 175, 176, 179, 182, 184, 190, 191, 193, 195, 198 ~ 201, 203, 204, 206, 208, 209, 211, 213	2SD636	Sensor, Motor Driver, LED Driver, Solenoid Driver and Cylinder Servo Circuit
IC54	SVIM74LS00P	2-Input NAND Gate	IC804 ~ 806	AN6552	Operational Amplifier	Q168, 174, 183	2SB819	Motor Driver Circuit
IC101	AN6552	Voltage Stabilizer	IC811, 813	811, 813	2-Input AND Gate	Q186, 187, 210		
IC102, 105	SVIUPC7805H	Regulator	IC808	SVITC4081BP	2-Input AND Gate	Q188	2SB762	Solenoid Driver
IC103, 106	SVIUPC78M15H	Regulator	IC810, 814, 818	AN6914	Comparator	Q189	2SD638	Solenoid Driver
IC104, 107	SVIUPC7812H	Regulator	IC812	SVITA7136P	Operational Amplifier	Q192, 196	2SD836-Q	Solenoid Driver
IC151, 152, 164	AN6914	Comparator	IC815, 819 ~ 825	SVITC4001BP	2-Input NOR Gate	Q194	2SD837	Solenoid Driver
IC153, 157	SVIUPD4069C	Inverter	IC816	SVIUPD4013C	D-Type Flip-Flop	Q398, 399	<b>S</b> 2SC1328-T	Operation Control Circuit
IC154, 155	SVITC5012BP	Non-Inverting Buffer	IC817	SVITC4528BP	Monostable Multivibrator	Q401, 431 ~ 435	2SD636	Video Recording, Playback Carrier Amplifier, Dropout Muting, Porch Clump, Capstan Servo and Capstan Motor Drive Circuit
IC156	MN1405PMB	Micro-Computer (Cassette Operation Control)	IC1501	SVITL082CP	Pre Emphasis	437, 438, 493 ~ 495, 497, 498, 500 ~ 502, 571, 573, 575 ~ 579		
IC158, 159	SVIUPD4023C	3-Input NAND Gate	IC1502	DN838	Hall IC	Q402	2SC2206	Video Recording Circuit
IC160, 161	SVIUPD4520C	Binary Up Counter	IC1579	AN6320N	Video Head Amplifier	Q403	2SC2377	Video Recording Circuit
IC162, 163	SVIUPD4013C	D-Type Flip-Flop	IC1661	SVITC4001BP	2-Input NOR Gate	Q404, 430, 436, 492, 572, 574, 589,	2SB641	Video Recording, Dropout Muting, Playback Carrier Amplifier, Porch Clump, Capstan Servo and Capstan Motor Drive Circuit
IC165	AN6350	Cylinder Servo Control	IC1662	SVITC4011BP	2-Input NAND Gate	Q580 ~ 582	2SD856	Capstan Motor Drive Circuit
IC166	AN6677	Motor Drive Control	IC1671	SVINJM4559DS	Mic Amplifier	Q584, 586, 587	2SB761	Capstan Motor Driver Circuit
IC167	SVITA78L005A	Regulator	IC1701	SVITA78L015A	Regulator	Q650, 651	2SD636	Sample Hold Circuit
IC401	AN6310	Recording Amplifier	IC1702	SVIUPC7818H	Regulator	Q656 ~ 659	<b>S</b> 2SC1328-T	Video Signal Output Circuit
IC402	AN6332	Playback Amplifier	IC1801, 1805	SVIM74LS74P	D-Type Flip-Flop	Q660	<b>S</b> 2SA722-S	Video Signal Output Circuit
IC403	AN302	AGC Amplifier	1819, 1822			Q661	2SC829-C1	Digital Signal Amplifier
IC404, 405	SVILM710CN	Comparator	1825 ~ 1827			Q801, 802, 809	<b>S</b> 2SC1328-T	Analog, Head-Phone Amplifier and Audio Track Recording Circuit
IC406	SVIM74LS14P	Schmitt Trigger Inverter	IC1802, 1854	SVIM74LS161P	4-Bit Binary Counter	810, 843, 862		
IC407	SVIUPD4027C	J-K Flip-Flop	IC1803, 1810	SVIM74LS02P	2-Input NOR Gate	Q803, 808	2SB641	Analog and Headphone Amplifier Circuit
IC408	SVIUPD4066C	Quad Bilateral Switch	1813, 1816			Q804 ~ 807	2SK301-S	Analog, Headphone Amplifier and Display Logic Amplifier Circuit
IC409, 411	AN6552	Operational Amplifier	1830			Q811, 812	<b>S</b> 2SA722-S	Headphone Amplifier
IC410, 415	SVIM74LS123P	Monostable Multivibrator	IC1804, 1809	SVIM74LS32P	2-Input NOR Gate	Q815, 816	<b>S</b> 2SA684-QNC	Headphone Amplifier
IC412	AN6341N	Capstan Servo Control	1835, 1839					
IC413	AN640G	Motor Drive	IC1806, 1807	SVIM74LS123P	Monostable Multivibrator			
IC414	SVIM74LS00P	2-Input NAND Gate	1814, 1820					
IC416	SVITC4011BP	2-Input NAND Gate	1821, 1828					
IC650, 651, 654	SVITL081CP	Operational Amplifier	IC1808	SVIM74LS86P	2-Input Exclusive OR Gate			
IC652, 661, 664	SVITL082CP	Operational Amplifier	IC1811, 1841	SVIM74LS30P	8-Input NAND Gate			
IC653, 663	SVIUPD4066C	Quad Bilateral Switch	1847					
IC655	EHKMA6193	A-D Converter	IC1812, 1832	SVIM74LS04P	Inverter			
IC656	SVIM74LS174P	D-Type Flip-Flop	1842					
IC657	MN6601	PCM Recording	IC1815, 1845	SVIM74LS125P	Quadruple Bus Buffer Gate			
IC658	MN6602	PCM Playback	IC1817, 1831	SVIM74LS174P	D-Type Flip-Flop			
IC659	AN6860	PCM Signal Processing Circuit	1836, 1837					
IC660	EHKMD6192	D-A Converter	1846, 1847					
IC662, 688	SVIM74LS74P	D-Type Flip-Flop	IC1818, 1840	SVIM74LS08P	2-Input AND Gate			
IC665 ~ 668	MN2114-4S	Static Random Access Memory	IC1823, 1824	SVISN74S260	5-Input NOR Gate			
IC669 ~ 676	SVIM5L2114LP	Static Random Access Memory	IC1829	SVIM74LS27P	3-Input NOR Gate			
IC677 ~ 681, 683	SVIM74LS04P	Inverter	IC1833	SVIM74LS20P	4-Input NAND Gate			
IC682	SVIM74LS14P	Schmitt Trigger Inverter	IC1834	SVIM74LS107P	J-K Flip-Flop			
IC684	SVIM53206P	Inverter	IC1838, 1843	SVIM74LS91P	8-Bit Shift Register			
IC685	SVILM360N	Comparator	1844, 1850					
			1851, 1852					
			1853					
			IC1849	SVIM74LS14P	Schmitt Trigger Inverter			
			<b>TRANSISTORS</b>					
			Q51, 52	2SD638	Display Tape Counter Drive	Q804 ~ 807	2SK301-S	Analog, Headphone Amplifier and Display Logic Amplifier Circuit
			Q53, 54, 57 ~ 59	2SD636	Display Tape Counter Drive	Q811, 812	<b>S</b> 2SA722-S	Headphone Amplifier
			Q55	2SB641	Display Tape Counter Drive	Q815, 816	<b>S</b> 2SA684-QNC	Headphone Amplifier
			Q101	2SD762-O	Regulator			
			Q102, 104, 108, 110, 112	2SD636	Mute and Power Selector Circuit			
			Q103	2SD638	Mute Circuit			



Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value
<b>RESISTORS</b>			R212	S ERD25FJ103	10k	R315, 316	S ERD25FJ470	47	R456	S ERD25TJ223	22k
R51, 52	S ERD25FJ392	3.9k	R213	S ERD25TJ473	47k	R317	S ERD25FJ470	47	R457	S ERD25TJ473	47k
R53	S ERD25FJ272	2.7k	R215	S ERD25FJ472	4.7k	R318	S ERD25TJ124	120k	R458	S ERD25FJ392	3.9k
R54	S ERD25FJ392	3.9k	R216	S ERD25TJ474	470k	R319	S ERD25FJ332	3.3k	R459	S ERD25FJ821	820
R55, 56	S ERD25TJ104	100k	R217	S ERD25FJ103	10k	R320	S ERD25TJ153	15k	R460	S ERD25FJ182	1.8k
R58	S ERD25TJ183	18k	R218	S ERD25TJ104	100k	R321, 322	S ERD25TJ104	100k	R461	S ERD25FJ391	390
R59	S ERD25FJ103	10k	R219, 220	S ERD25TJ473	47k	R324	S ERD25FJ152	1.5k	R462	S ERD25FJ821	820
R60, 61	S ERD25TJ473	47k	R221, 222	S ERD25FJ103	10k	R325	S ERD25FJ103	10k	R463	S ERD25FJ181	180
R62	S ERD25FJ103	10k	R223	S ERD25TJ333	33k	R326	S ERD25FJ152	1.5k	R464	S ERD25FJ821	820
R63	S ERD25TJ153	15k	R224	S ERD25FJ103	10k				R465	S ERD25FJ102	1k
R64, 65	S ERD25FJ272	2.7k	R225	S ERD25TJ153	15k	R327	S ERD25FJ103	10k			
			R226, 227	S ERD25FJ472	4.7k	R328	S ERD25TJ473	47k	R467	S ERD25FJ271	270
R66	S ERD25FJ103	10k				R329	S ERD25TJ393	39k	R468	S ERD25FJ182	1.8k
R67	S ERD25FJ272	2.7k	R228	S ERD25FJ472	4.7k	R330	S ERD25FJ103	10k	R470	S ERD25FJ472	4.7k
R68, 69	S ERD25TJ473	47k	R229	S ERD25FJ561	560	R331	S ERD25FJ561	560	R471	S ERD25FJ562	5.6k
R70	S ERD25TJ393	39k	R230, 231	S ERD25FJ103	10k	R333	S ERD25FJ103	10k	R472	S ERD25FJ332	3.3k
R71	S ERD25TJ104	100k	R232	S ERD25FJ472	4.7k	R334	S ERD25TJ223	22k	R473	S ERD25FJ222	2.2k
R72, 73	S ERD25FJ272	2.7k	R233, 234	S ERD25FJ103	10k	R336, 337	S ERD25FJ103	10k	R474	S ERD25FJ152	1.5k
R80	S ERD25FJ103	10k	R235	S ERD25FJ103	10k	R338	S ERD25FJ103	10k	R475	S ERD25FJ103	10k
R101	ΔS ERQ12HJ2R2	2.2	R236	S ERD25FJ561	560	R339	S ERD25FJ561	560	R476	S ERD25TJ474	470k
R102	S ERG2ANJ120	12	R237, 238	S ERD25FJ103	10k				R477	S ERD25FJ102	1k
R103, 104	S ERD25FJ472	4.7k	R239, 240	S ERD25FJ103	10k	R340	S ERG1ANJ330	33			
			R241	S ERD25FJ561	560	R341	S ERX1ANJ6R8	6.8	R478	S ERD25FJ103	10k
R105, 106	S ERD25TJ183	18k				R342	S ERD25FJ561	560	R481, 482	S ERD25FJ103	10k
R107	S ERD25TJ123	12k	R242, 243	S ERD25FJ103	10k	R344	S ERD25FJ150	15	R483	S ERD25FJ103	10k
R108	S ERD25FJ472	4.7k	R244, 245	S ERD25FJ103	10k	R345	S ERD25TJ473	47k	R484, 485	S ERD25FJ102	1k
R109	S ERD25FJ103	10k	R246	S ERD25FJ561	560	R346	S ERD25FJ103	10k	R486	S ERD25FJ272	2.7k
R110	S ERD25FJ470	47	R247, 248	S ERD25FJ103	10k	R348	S ERD25TJ333	33k	R487	S ERD25FJ152	1.5k
R111	S ERD25TJ473	47k	R249	S ERD25FJ103	10k	R349, 350	S ERD25FJ472	4.7k	R488	S ERD25TJ223	22k
R112	S ERD25FJ222	2.2k	R250	S ERD25FJ561	560	R351	S ERD25FJ472	4.7k	R489	S ERD25FJ103	10k
R113	S ERD25FJ472	4.7k	R251	S ERD25FJ103	10k	R352	S ERD25FJ562	5.6k	R491	S ERD25TJ273	27k
R114	S ERD25FJ682	6.8k	R252	S ERD25FJ471	470				R493	S ERD25FJ102	1k
R115	S ERD25FJ472	4.7k	R253	S ERG1ANJ151	150	R353	S ERD25TJ474	470k	R495	S ERD25TJ334	330k
			R254	S ERD25FJ102	1k	R354	S ERD25FJ103	10k	R496	S ERD25TJ824	820k
R116	S ERD25FJ821	820	R255	S ERD25FJ103	10k	R355	S ERD25FJ472	4.7k	R497	S ERD25TJ473	47k
R117	S ERD25FJ101	100	R256	S ERD25TJ153	15k	R356	S ERD25TJ473	47k	R498	S ERD25FJ391	390
R118	S ERD25FJ680	68	R257	S ERD25FJ152	1.5k	R357	S ERD25FJ103	10k	R499	S ERD25FJ822	8.2k
R119	S ERD25FJ103	10k	R258	S ERD25FJ102	1k	R389	S ERD25FJ103	10k			
R120	S ERD25FJ221	220	R259	S ERD25FJ562	5.6k	R390	S ERD25FJ101	100	R500	S ERD25FJ821	820
R121	S ERD25FJ103	10k				R391, 392	S ERD25TJ473	47k	R501	S ERD25TJ223	22k
R122	S ERD25FJ221	220	R260	S ERD25FJ103	10k	R393	S ERD25TJ473	47k	R502	S ERD25FJ182	1.8k
R123	S ERD25FJ103	10k	R261	S ERD25FJ152	1.5k	R394	S ERD25TJ184	180k	R503	S ERD25FJ682	6.8k
R124	S ERD25FJ221	220	R263	S ERD25TJ153	15k				R504	S ERD25FJ471	470
R151, 152	S ERD25FJ472	4.7k	R264	S ERD25FJ103	10k	R396, 397	S ERD25FJ103	10k	R508	S ERD25FJ222	2.2k
			R265	S ERD25FJ562	5.6k	R398	S ERD25FJ103	10k	R509	S ERD25TJ124	120k
R153	S ERD25FJ472	4.7k	R266	S ERD25TJ473	47k	R399	S ERD25TJ473	47k	R510	S ERD25TJ223	22k
R154	S ERD25FJ561	560	R267, 268	S ERD25TJ104	100k	R401, 402	S ERD25FJ102	1k	R511	S ERD25FJ102	1k
R155	S ERD25FJ471	470	R270	S ERD25FJ103	10k	R403	S ERD25FJ103	10k	R512	S ERD25TJ334	330k
R156	S ERD25FJ103	10k	R271	S ERD25FJ472	4.7k	R404	S ERD25FJ822	8.2k			
R157	S ERD25TJ334	330k	R272	S ERD25TJ104	100k	R405	S ERD25TJ684	680k	R513	S ERD25FJ102	1k
R158	S ERD25FJ472	4.7k				R406	S ERD25FJ562	5.6k	R514	S ERD25FJ103	10k
R159	S ERD25FJ103	10k	R273	S ERD25TJ473	47k	R407	S ERD25FJ102	1k	R515	S ERD25TJ333	33k
R160	S ERD25FJ271	270	R274, 275	S ERD25TJ104	100k	R408	S ERD25FJ222	2.2k	R516, 517	S ERD25FJ222	2.2k
R161	S ERD25TJ153	15k	R276, 277	S ERD25TJ104	100k				R518	S ERD25FJ332	3.3k
R162	S ERD25TJ104	100k	R278	S ERD25TJ104	100k	R409	S ERD25FJ331	330	R520	S ERD25FJ102	1k
			R279	S ERD25TJ393	39k	R410	S ERD25FJ562	5.6k	R521	S ERD25TJ473	47k
R163	S ERD25FJ472	4.7k	R280	S ERD25FJ821	820	R411	S ERD25FJ103	10k	R522	S ERD25FJ102	1k
R164	S ERD25TJ104	100k	R281	S ERD25FJ272	2.7k	R412	S ERD25TJ123	12k	R523	S ERD25TJ473	47k
R165, 166	S ERD25FJ103	10k	R282	S ERD25FJ152	1.5k	R413	S ERD25FJ392	3.9k	R524, 525	S ERD25FJ103	10k
R167	S ERD25FJ472	4.7k	R283	S ERD25FJ471	470	R414	S ERD25FJ332	3.3k			
R168	S ERD25TJ104	100k	R284	S ERD25TJ273	27k	R415	S ERD25FJ102	1k	R526, 527	S ERD25TJ823	82k
R169	S ERD25FJ103	10k				R416	S ERD25FJ682	6.8k	R528	S ERD25TJ154	150k
R170, 171	S ERG2ANJ151	150	R285	S ERD25TJ153	15k	R417	S ERD25FJ122	1.2k	R529	S ERD25TJ124	120k
R172	S ERD25FJ103	10k	R286	S ERD25FJ561	560	R418	S ERD25FJ221	220	R530, 531	S ERD25TJ104	100k
R173	S ERD25TJ473	47k	R287	S ERD25FJ152	1.5k	R419, 420	S ERD25FJ122	1.2k	R532, 533	S ERD25FJ103	10k
R174	S ERD25TJ123	12k	R288	S ERD25TJ473	47k	R421	S ERD25FJ560	56	R534, 535	S ERD25TJ564	560k
R175	S ERD25FJ102	1k	R289	S ERD25FJ103	10k	R422, 423	S ERD25FJ682	6.8k	R536, 537	S ERD25FJ103	10k
R176	S ERD25FJ222	2.2k	R290	S ERD25TJ563	56k	R424, 425	S ERD25FJ560	56	R538	S ERD25TJ104	100k
R177	S ERD25FJ102	1k	R291, 292	S ERD25TJ105	1M	R426	S ERD25TJ153	15k	R539	S ERD25TJ124	120k
R178	S ERD25FJ103	10k	R293, 294	S ERD25FJ682	6.8k				R540	S ERD25TJ563	56k
			R295	S ERD25TJ393	39k	R431	S ERD25FJ271	270			
R179	S ERD25TJ104	100k	R296, 297	S ERD25FJ103	10k	R432	S ERD25FJ332	3.3k	R541	S ERD25FJ152	1.5k
R180	S ERD25FJ152	1.5k				R433	S ERD25FJ822	8.2k	R542	S ERD25FJ562	5.6k
R181	S ERD25FJ103	10k	R298	S ERD25FJ103	10k	R434	S ERD25FJ331	330	R543	S ERD25TJ683	68k
R182	S ERD25FJ472	4.7k	R299, 300	S ERD25TJ104	100k	R435	S ERD25FJ102	1k	R544	S ERD25FJ103	10k
R183	S ERD25FJ103	10k	R301	S ERD25TJ123	12k	R436	S ERD25FJ101	100	R545, 546	S ERD25TJ104	100k
R186, 187	S ERD25FJ103	10k	R302	S ERD25TJ104	100k	R437, 438	S ERD25FJ331	330	R547, 548	S ERD25TJ473	47k
R188, 189	S ERD25FJ103	10k	R303	S ERD25TJ223	22k	R439	S ERD25FJ821	820	R549, 550	S ERD25FJ103	10k
R190, 191	S ERD25FJ103	10k	R304	S ERD25FJ472	4.7k	R440	S ERD25FJ331	330	R551, 552	S ERD25FJ103	10k
R192, 193	S ERD25FJ103	10k	R305	S ERD25TJ683	68k	R441	S ERD25FJ681	680	R553, 554	S ERD25FJ103	10k
R194	S ERD25TJ183	18k	R306	S ERD25TJ184	180k				R557	S ERD25TJ683	68k
R195, 196	S ERD25TJ473	47k	R307	S ERD25TJ683	68k	R443	S ERD25FJ222	2.2k			
R197, 198	S ERD25TJ473	47k	R308	S ERD25FJ332	3.3k	R444, 445	S ERD25FJ102	1k	R558	S ERD25FJ182	1.8k
R199, 200	S ERD25FJ472	4.7k	R309	S ERD25FJ472	4.7k	R447	S ERD25FJ391	390	R560	S ERD25FJ822	8.2k
R201, 202	S ERD25FJ472	4.7k	R310	S ERD25FJ271	270	R448, 449	S ERD25FJ102	1k	R561	S ERD25FJ562	5.6k
R203, 204	S ERD25FJ103	10k	R311	S ERD25FJ222	2.2k	R450	S ERD25TJ473	47k	R563	ΔS ERD25FJ470	47
R205, 206	S ERD25FJ103	10k	R312	S ERD25TJ473	47k	R451	S ERD25FJ392	3.9k	R564	ΔS ERD50FJ101	100
R207, 208	S ERD25FJ472	4.7k	R313	S ERD25TJ123	12k	R452	S ERD25FJ472	4.7k	R571	S ERD25TJ104	100k
R209, 210	S ERD25FJ472	4.7k	R314	S ERX12ANJR47	0.47	R453	S ERD25FJ				

Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value
R576	S ERD25FJ472	4.7k	R705	S ERD25FJ220	22	R873, 874	S ERO25CKF4700	470	R980	S ERO25CKF2202	22k
R577	S ERD25TJ104	100k	R706	S ERD25FJ221	220	R875, 876	S ERO25CKF1002	10k	R981	S ERD25FJ102	1k
R579	S ERD25TJ153	15k	R707	S ERD25TJ223	22k	R877, 878	S ERD25TJ104	100k	R982	S ERD25CKF2202	22k
R580	S ERC14GK685	6.8M	R708, 709	S ERD25FJ103	10k	R879, 880	S ERD25TJ273	27k	R983	S ERD25FJ222	2.2k
R581	S ERD25FJ222	2.2k	R710	S ERD25FJ561	560				R984	S ERD25TJ104	100k
R582	S ERD25FJ392	3.9k	R711	S ERD25FJ221	220				R985	S ERD25TJ274	270k
			R712	S ERD25FJ681	680	R881, 882	S ERD25TJ104	100k			
R583	S ERD25TJ104	100k	R713	S ERD25FJ221	220	R883, 884	S ERD25TJ683	68k	R986	S ERD25FJ102	1k
R584, 585	S ERD25FJ221	220				R885, 886	S ERD25FJ472	4.7k	R987	S ERD25TJ104	100k
R586	S ERD25TJ563	56k	R714	S ERD25FJ681	680	R887, 888	S ERD25FJ103	10k	R988	S ERD25FJ222	2.2k
R587	S ERD25TJ124	120k	R715	S ERD25TJ474	470k	R889	S ERD25TJ474	470k	R989, 990	S ERD25TJ153	15k
R588	S ERD25FJ682	6.8k	R716	S ERD25FJ102	1k	R890	S ERD25TJ394	390k	R991	S ERD25FJ151	150
R589	S ERO25CKF3602	36k	R717, 718	S ERD25FJ561	560	R891, 892	S ERD25FJ271	270	R992, 993	S ERD25TJ153	15k
R590	S ERD25FJ682	6.8k	R719	S ERD25FJ561	560	R893, 894	S ERD25TJ154	150k	R994	S ERD25FJ151	150
R591	S ERD25FJ102	1k	R720	ΔS ERD25FJ471	470	R900	S ERO25CKF2202	22k	R1501	S ERD25TJ824	820k
R592	S ERD25FJ332	3.3k	R722, 723	S ERD25TJ153	15k	R901	S ERO25CKF3302	33k	R1502	S ERD25TJ824	820k
R593	S ERD25TJ223	22k	R724	S ERD25TJ153	15k				R1503	S ERO25CKF7501	7.5k
			R725	ΔS ERD25FJ561	560	R902	S ERO25CKF2202	22k			
R594	S ERD25FJ103	10k	R726	S ERD25FJ103	10k	R903	S ERO25CKF3302	33k	R1504	S ERO25CKF7501	7.5k
R595	S ERD25FJ821	820				R904	S ERO25CKF1502	15k	R1505	S ERO25CKF1501	1.5k
R596	S ERD25TJ153	15k	R728	S ERD25FJ103	10k	R905	S ERO25CKF2202	22k	R1506	S ERO25CKF1501	1.5k
R597	S ERD25FJ103	10k	R750, 751	S ERD25TJ474	470k	R906, 907	S ERD25FJ821	820	R1507	S ERD25TJ104	100k
R598	S ERD25TJ104	100k	R752, 753	S ERD25TJ474	470k	R908, 909	S ERD25FJ101	100	R1508	S ERD25TJ104	100k
R599	S ERD25TJ474	470k	R754	S ERD25TJ393	39k	R910	S ERG1ANJ151	150	R1509	S ERO25CKF6201	6.2k
R600	S ERD25FJ100	10	R755	S ERD25FJ472	4.7k	R911	S ERD25TJ473	47k	R1510	S ERO25CKF6201	6.2k
R601	S ERD25FJ472	4.7k	R756	S ERD25TJ393	39k	R912	S ERD25FJ102	1k	R1521	S ERD25TJ224	220k
R602	S ERD25TJ223	22k	R757	S ERD25TJ223	22k	R913	ΔS ERD25FJ5R6	5.6	R1522	S ERD25TJ224	220k
R604	S ERD25TJ104	100k	R758	S ERD25TJ104	100k				R1542	S ERD25FJ103	10k
			R759	S ERD25FJ222	2.2k	R914, 915	S ERD25FJ101	100	R1543	S ERD25FJ271	270
R605	S ERD25FJ222	2.2k	R760	S ERD25TJ104	100k	R916	S ERG1ANJ181	180	R1545	S ERD25FJ103	10k
R609	S ERD25FJ122	1.2k	R761	S ERD25TJ153	15k	R917	S ERD25TJ473	47k	R1546	S ERD25FJ103	10k
R610	S ERD25FJ562	5.6k	R762	S ERD25FJ222	2.2k	R918	S ERD25FJ102	1k	R1547	S ERD25FJ101	100
R611	S ERD25FJ152	1.5k	R763, 764	S ERD25TJ474	470k	R919	ΔS ERD25FJ6R8	6.8	R1548	S ERD25FJ103	10k
R612	S ERD25FJ102	1k	R765, 766	S ERD25TJ474	470k	R920	S ERD25FJ332	3.3k			
R613	S ERD25FJ331	330	R767	S ERD25TJ154	150k	R921	S ERD25TJ123	12k	R1549	S ERD25FJ472	4.7k
R614	S ERD25FJ471	470				R922	S ERD25TJ154	150k	R1550	S ERD25FJ472	4.7k
R615	S ERD25FJ103	10k	R768	S ERD25TJ333	33k	R923	S ERD25FJ392	3.9k	R1551	S ERD25FJ103	10k
R616, 167	S ERG1ANJ150	15	R769	S ERD25FJ272	2.7k	R924	S ERD25FJ222	2.2k	R1552	S ERD25TJ104	100k
R618, 619	S ERG1ANJ330	33	R770	S ERD25FJ222	2.2k				R1553	S ERD25FJ472	4.7k
			R771	S ERO25CKF2403	240k	R925, 926	S ERD25TJ563	56k	R1554	S ERD25FJ472	4.7k
R620	S ERG1ANJ330	33	R772	S ERD25FJ222	2.2k	R927	S ERD25TJ393	39k	R1561	S ERD25FJ332	3.3k
R621	S ERD25TJ223	22k	R773	S ERO25CKF1803	180k	R928	S ERD25FJ332	3.3k	R1562	S ERD25FJ102	1k
R622	S ERD25FJ472	4.7k	R774	S ERD25FJ222	2.2k	R929	S ERD25FJ332	3.3k	R1563	S ERD25FJ681	680
R623	S ERG1ANJ150	15	R775	S ERD25FJ103	10k	R930	S ERD25TJ333	33k	R1564	S ERD25TJ271	27
R624	S ERD25TJ123	12k	R776, 777	S ERD25TJ104	100k	R931	S ERD25TJ473	47k			
R625	S ERD25FJ470	47	R780	S ERD25FJ122	1.2k	R932, 933	S ERD25FJ103	10k	R1565	S ERD25TJ473	47k
R626	S ERD25FJ562	5.6k				R934	S ERD25FJ103	10k	R1566	S ERD25FJ182	1.8k
R627	S ERX1ANJ1R0	1	R781	S ERD25TJ683	68k	R935	S ERD25TJ473	47k	R1567	S ERD25FJ182	1.8k
R650, 651	S ERO25CKF1002	10k	R782, 783	S ERO25CKF2202	22k	R936	S ERD25TJ104	100k	R1568	S ERD25FJ100	10
R652, 653	S ERD25FJ822	8.2k	R801	S ERD25TJ473	47k				R1569	S ERD25FJ100	10
			R802	S ERD25TJ223	22k	R937	S ERD25TJ154	150k	R1570	S ERD25TJ473	47k
R654, 655	S ERO25CKF1002	10k	R803, 804	S ERD25FJ272	2.7k	R938	S ERD25TJ104	100k	R1571	S ERD25TJ473	47k
R656, 657	S ERO25CKF1001	1k	R805, 806	S ERD25FJ272	2.7k	R939	S ERD25TJ473	47k	R1572	S ERD25FJ681	680
R658, 659	S ERO25CKF1801	1.8k	R807, 808	S ERD25TJ104	100k	R940	S ERD25TJ104	100k	R1573	S ERD25FJ681	680
R660, 661	S ERO25CKF1001	1k	R809, 810	S ERO25CKF2701	2.7k	R941	S ERD25TJ333	33k	R1574	S ERD25FJ822	8.2k
R662	S ERD25FJ681	680	R811, 812	S ERO25CKF4702	47k	R942	S ERD25TJ183	18k			
R663, 664	S ERD25FJ103	10k	R813, 814	S ERD25TJ104	100k	R943	S ERD25TJ473	47k	R1575	S ERD25FJ822	8.2k
R665	S ERD25FJ222	2.2k				R944	S ERD25FJ103	10k	R1576	S ERD25FJ471	470
R666	S ERD25TJ473	47k	R815, 816	S ERO25CKF1002	10k	R945	S ERD24FJ103	10k	R1577	S ERD25FJ102	1k
R667	S ERD25FJ4R7	4.7	R817, 818	S ERO25CKF1002	10k	R946	S ERD25TJ473	47k	R1578	S ERD25FJ472	4.7k
R668	S ERD50FJ101	100	R819, 820	S ERO25CKF1003	100k	R947	S ERD25TJ104	100k	R1579	S ERD25TJ183	18k
R669, 670	S ERO25CKF3301	3.3k	R821, 822	S ERO25CKF4301	4.3k	R948	S ERD25TJ474	470k	R1580	S ERD25FJ472	4.7k
R671, 672	S ERO25CKF4702	47k	R823, 824	S ERO25CKF1502	15k	R949	S ERD25FJ560	56	R1581	S ERD25FJ472	4.7k
R673, 674	S ERO25CKF4302	43k	R825	S ERD25FJ472	4.7k	R950	S ERD25TJ473	47k	R1582	S ERD25TJ223	22k
R675, 676	S ERO25CKF4301	4.3k	R826	S ERD25TJ153	15k	R951	S ERD25FJ103	10k	R1583	S ERD25TJ223	22k
R677, 678	S ERO25CKF5602	56k	R827, 828	S ERD25TJ104	100k				R1601	S ERD25FJ561	560
			R829, 830	S ERO25CKF1501	1.5k	R952, 953	S ERD25TJ393	39k			
R679, 680	S ERD25TJ104	100k	R831, 832	S ERD25TJ104	100k	R954	S ERD25FJ103	10k	R1602	S ERD25FJ561	560
R681	S ERD25TJ224	220k				R955	S ERD25TJ684	680k	R1603	S ERD25FJ561	560
R682	S ERO25CKF3010	301	R833, 834	S ERD25FJ103	10k	R956	S ERD25TJ473	47k	R1604	S ERD25FJ561	560
R683	S ERO25CKF3160	316	R835, 836	S ERD25TJ104	100k	R957	S ERO25CKF3302	33k	R1631	S ERD25FJ102	1k
R684	S ERO25CKF6650	665	R837, 838	S ERD25FJ103	10k	R958, 959	S ERD25CKF6801	6.8k	R1632	S ERD25FJ102	1k
R685	S ERO25CKF1011	1.01k	R839	S ERD25TJ104	100k	R960	S ERD25CKF3302	33k	R1633	S ERD25FJ561	560
R686	S ERO25CKF1471	1.47k	R840, 841	S ERD25FJ472	4.7k	R961, 962	S ERD25FJ222	2.2k	R1634	S ERD25FJ561	560
R687	S ERO25CKF6980	698	R843, 844	S ERD25FJ472	4.7k	R963	S ERD25TJ473	47k	R1635	S ERD25FJ820	82
R688	S ERD25FJ220	22	R845, 846	S ERD25FJ103	10k	R964	S ERD25FJ103	10k	R1651	S ERD25TJ104	100k
R689	S ERD25FJ221	220	R847, 848	S ERD25TJ473	47k				R1652	S ERD25FJ221	220
			R849, 850	S ERD25TJ473	47k	R965	S ERD25TJ684	680k			
R690	S ERD25FJ102	1k	R851, 852	S ERD25TJ394	390k	R966	S ERD25TJ333	33k	R1671	S ERD25FJ681	680
R691	S ERD25TJ104	100k				R967	S ERD25TJ393	39k	R1672	S ERD25FJ681	680
R692	S ERD25TJ333	33k	R853, 854	ΔS ERD25FJ220	22	R968	S ERD25TJ683	68k	R1673	S ERD25TJ473	47k
R693	S ERD25TJ473	47k	R855, 856	ΔS ERD25FJ220	22	R969	S ERD25FJ332	3.3k	R1674	S ERD25TJ473	47k
R694	S ERD25FJ221	220	R857, 858	ΔS ERD50FJ330	33	R970	S ERD25TJ123	12k	R1675	S ERD25FJ221	220
R695, 696	S ERD25FJ101	100	R859, 860	S ERO25CKF1002	10k	R971	S ERD25TJ223	22k	R1676	S ERD25FJ221	220
R697	S ERD25TJ104	100k	R861, 862	S ERO25CKF1002	10k	R972, 973	S ERD25TJ473	47k	R1677	S ERD25FJ472	4.7k
R698	S ERD25FJ182	1.8k	R863, 864	S ERO25CKF4301	4.3k	R974	S ERD25FJ471	470	R1678	S ERD25FJ472	4.7k
R699, 700	S ERD25TJ123	12k	R866	S ERD25TJ104	100k	R975	S ERD25FJ222	2.2k	R1679	S ERD25FJ472	4.7k
R701	S ERD25FJ102	1k	R867, 868	S ERD25FJ472	4.7k				R1680	S ERD25TJ472	4.7k
R702	S ERD25TJ473	47k	R869	S ERD25TJ683	68k	R976	S ERD25FJ273	27k	R1681	S ERD25FJ562	5.6k
R703, 704	S ERD25FJ182	1.8k	R870	S ERD25TJ104	100k	R977	S ERD25TJ564	560k	R1682	S ERD25FJ562	5.6k
			R871, 872	S ERO25CKF1002	10k	R978	S ERD25TJ824	820k	R1683	S ERD25FJ271	270
						R979	S ERD25TJ154	150k			



Ref. No.	Part No.	Value
R1684	S ERD25FJ271	270
R1685	S ERD25TJ123	12k
R1686	S ERD25TJ123	12k
R1687	S ERD25TJ104	100k
R1688	S ERD25TJ104	100k
R1689	S ERD25FJ102	1k
R1690	S ERD25FJ102	1k
R1691	S ERD25TJ333	33k
R1701	S ERX1ANJR39	0.39

Ref. No.	Part No.	Value
R1702	S ERX1ANJR39	0.39
R1703	S ERD25FJ102	1k
R1704	S ERD25FJ122	1.2k
R1705	S ERD25FJ102	1k
R1751	S ERD25FJ562	5.6k
R1752	S ERD25FJ103	10k
R1753	S ERD25FJ222	2.2k
R1754	S ERD25TJ153	15k
R1755	S ERD25TJ153	15k

Ref. No.	Part No.	Value
R1756	S ERD25TJ153	15k
R1757	S ERD25FJ332	3.3k
R1758	S ERD25FJ472	4.7k
R1801	S ERD25TJ224	220k
R1802	S ERD25TJ184	180k
R1803	S ERD25TJ224	220k
R1804	S ERD25TJ224	220k
R1805	S ERD25FJ222	2.2k
R1806	S ERD25TJ563	56k

Ref. No.	Part No.	Value
R1807	S ERD25TJ683	68k
R1808	S ERD25FJ472	4.7k
R1809	S ERD25FJ472	4.7k
R1810	S ERD25TJ153	15k
R1811	S ERD25TJ184	180k
R1812	S ERD25TJ223	22k
R1901	S ERD25TJ473	47k
R1902	S ERD25TJ684	680k

Ref. No.	Part No.	Value
<b>CAPACITORS</b>		
C52	S ECKD1H103MD	0.01
C53	S ECQM1H103JZ	0.01
C54	S ECEA50ZR1	0.1
C55	S ECQM1H473JZ	0.047
C56	S ECEA50ZR33	0.33
C80	S ECQM1H333JZ	0.033
C81	S ECKD1H103MD	0.01
C83	S ECKD1H103MD	0.01
C102	Δ S ECKDKC103PF	0.01
C103	Δ S ECKDHS222MD	0.0022
C104	Δ S ECKDKC103PF	0.01
C105, 106	Δ S ECKDHS222MD	0.0022
C107	Δ S ECKDKC103PF	0.01
C108	Δ S ECKDHS222MD	0.0022
C110, 111	Δ S ECKD1H103MD	0.01
C112, 113	Δ S ECKD1H103MD	0.01
C114, 115	Δ S ECKD1H103MD	0.01
C116, 117	Δ S ECKD1H103MD	0.01
C118, 119	S ECEA1VS102	1000
C120	S ECE1CR153Z	15000
C121	S ECET35R103SW	10000
C122, 123	S ECEA1ES470	47
C124, 125	S ECEA1ES100	10
C126, 127	S ECEA1AS101	100
C128, 129	S ECEA1ES470	47
C130, 131	S ECEA1ES470	47
C132	S ECEA1ES470	47
C133	S ECEA25Z4R7	4.7
C134	S ECEA1AS221	220
C135, 136	S ECKF1E104ZV	0.1
C137	S ECKF1E104ZV	0.1
C138	S ECKF1H104ZV	0.1
C151	S ECQM1H103JZ	0.01
C152	S ECEA50Z1	1
C153	S ECEA1AS101	100
C154	S ECEA1HS100	10
C157	S ECEA1CS330	33
C158, 159	S ECEA1HS100	10
C160	S ECKD1H103MD	0.01
C161	S ECCD1H101K	100p
C162	S ECEA1HS100	10
C164	S ECEA50ZR1	0.1
C165	S ECQM1H472JZ	0.0047
C166	S ECEA1HS100	10
C167	S ECQM1H224JZ	0.22
C168	S ECEA1HS100	10
C169	S ECEA50Z1	1
C170, 171	S ECEA50Z3R3	3.3
C172	S ECEA50Z1	1
C174	S ECEA1HN010S	1
C175, 176	S ECEA1HS100	10
C177	S ECQM1H103JZ	0.01
C178	S ECEA1ES470	47
C179	S ECQM1H103JZ	0.01
C180	S ECQM1H472JZ	0.0047
C181	S ECEA1HS100	10
C182	S ECEA50MR47R	0.47
C183, 814	S ECEA50Z1	1
C185, 186	S ECQM1H563JZ	0.056
C187	S ECQM1H223JZ	0.022
C188, 189	S ECQM1H104JZ	0.1
C190	S ECEA50ZR33	0.33
C191	S ECQM1H103JZ	0.01
C192	S ECEA1ES101	100
C193	S ECEA1ES470	47
C194, 195	S ECQM1H104JZ	0.1
C196, 197	S ECQM1H104JZ	0.1
C198	S ECQM1H124JZ	0.12
C199	S ECQM1H823JZ	0.082
C200	S ECEA1ES101	100
C201	S ECEA1ES470	47
C202	S ECQM1H103JZ	0.01

Ref. No.	Part No.	Value
C203, 204	S ECEA1HN010S	1
C205	S ECEA1HN010S	1
C206	S ECQM1H333JZ	0.033
C207	S ECEA50M3R3	3.3
C208	S ECEA50Z2R2	2.2
C209, 210	S ECEA50ZR22	0.22
C211	S ECEA50ZR22	0.22
C212	S ECQM1H822JZ	0.0082
C213	S ECEA1HS100	10
C216, 217	S ECEA1HS100	10
C396	S ECQM1H472JZ	0.0047
C397	S ECEA0JS471	470
C398	S ECQM1H103JZ	0.01
C399	S ECQM1H472JZ	0.0047
C401	S ECEA1AS470	47
C402	S ECEA1AN470S	47
C403	S ECQM1H473JZ	0.047
C404	S ECEA50ZR47	0.47
C405, 406	S ECEA1AN470S	47
C407	S ECQM1H333JZ	0.033
C408	S ECKD1H561JB	560p
C409	S ECCD1H470K	47p
C410, 411	S ECKD1H103MD	0.01
C412	S ECCD1H820KC	82p
C413	S ECCD1H331K	330p
C414	S ECEA1HS100	10
C415, 416	S ECKD1H103MD	0.01
C417	S ECKD1H103MD	0.01
C418	S ECEA1ES470	47
C419	S ECKD1H103MD	0.01
C420, 421	S ECEA1ES470	47
C422, 423	S ECKD1H103MD	0.01
C424	S ECKD1H103MD	0.01
C425	S ECEA1ES470	47
C426	S ECCD1H470K	47p
C430, 431	S ECKD1H103MD	0.01
C432	S ECKD1H561KB	560p
C433	S ECCD1H101K	100p
C434	S ECKD1H103MD	0.01
C435	S ECCD1H331K	330p
C436	S ECEA1ES470	47
C437, 438	S ECKD1H103MD	0.01
C439	S ECCD1H560K	56p
C440	S ECCD1H270K	27p
C441	S ECEA1HS100	10
C442	S ECCD1H151K	150p
C443	S ECCD1H680K	68p
C444	S ECQM1H102JZ	0.001
C445, 446	S ECQM1H102JZ	0.001
C447	S ECKD1H561JB	560p
C448	S ECKD1H681JB	680p
C449	S ECEA1ES470	47
C453	S ECCD1H470K	47p
C454	S ECEA1CS330	33
C455	S ECCD1H101K	100p
C456	S ECEA50Z1	1
C457	S ECEA1ES470	47
C459	S ECEA1AS101	100
C492	S ECCD1H470K	47p
C493	S ECEA1ES470	47
C494	S ECEA1HS100	10
C495	S ECEA1ES470	47
C496	S ECEA50ZR15	0.15
C497	S ECKD1H103MD	0.01
C498, 499	S ECEA1ES470	47
C501	S ECEA1ES100	10
C502	S ECCD1H030CC	3p
C503	S ECEA1HS100	10
C504	S ECEA50ZR33	0.33
C506	S ECCD1H150K	15p

Ref. No.	Part No.	Value
C508, 509	S ECEA50ZR47	0.47
C510, 511	S ECEA1HS100	10
C513	S ECEA1CN100S	10
C514, 515	S ECEA1CN330S	33
C516	S ECCD1H331J	330p
C517	S ECKD1H681JB	680p
C518	S ECEA1ES470	47
C519	S ECKD1H103MD	0.01
C520	S ECEA1AS470	47
C521	S ECKD1H103MD	0.01
C522	S ECEA1ES470	47
C523	S ECEA1AS470	47
C571	S ECEA1HS100	10
C572	S ECQP1683JZ	0.068
C573	S ECQM1H473JZ	0.047
C574	S ECQP1273JZ	0.027
C575	S ECEA1ES470	47
C576, 577	S ECQM1H104JZ	0.1
C578	S ECEA50MR33R	0.33
C580	S ECEA1HSR47	0.47
C581	S ECQM1H333JZ	0.033
C582	S ECQM1H153JZ	0.015
C583	S ECEA50Z1	1
C584, 585	S ECEA1CS330	33
C586	S ECEA50ZR22	0.22
C587	S ECEA25Z4R7	4.7
C588	S ECEA1AS470	47
C589	S ECEA1HS100	10
C590	S ECQM1H104JZ	0.1
C591, 592	S ECEA50ZR33	0.33
C593	S ECQM1H104JZ	0.1
C594, 595	S ECQM1H103JZ	0.01
C596	S ECEA50ZR33	0.33
C597, 598	S ECEA1VS330	33
C599	S ECEA1VS330	33
C601	S ECEA1VS101	100
C602	S ECEA1ES470	47
C650, 651	Δ S ECEA1CN470	47
C652, 653	S ECQK1102GZ	0.001
C654, 655	S ECQK1102GZ	0.001
C656	S ECKD1H103MD	0.01
C657	S ECKF1H104ZV	0.1
C658	S ECKD1H103MD	0.01
C659	S ECEA1ES101	100
C660	S ECEA25Z4R7	4.7
C661, 662	S ECEA1AS470	47
C663, 664	S ECKD1H103MD	0.01
C665, 666	S ECCD1H470J	47p
C667, 668	S ECCD1H121J	120p
C669, 670	S ECEA1CN101S	100
C671	S ECEA1HS100	10
C673	S ECKD1H103MD	0.01
C674	S ECEA0JS471	470
C675	S ECKD1H103MD	0.01
C676	S ECEA1CS330	33
C677, 678	S ECKD1H103MD	0.01
C679, 680	S ECKD1H103MD	0.01
C681	S ECCD1H181J5	180p
C683	S ECKD1H102KB	0.001
C684	S ECEA1HS100	10
C685, 686	S ECKD1H103MD	0.01
C688	S ECEA1CN100	10
C689	S ECQM1H103JZ	0.01
C690, 691	S ECKD1H103MD	0.01
C692	S ECKD1H103MD	0.01
C693, 694	S ECEA1CS330	33
C695	S ECEA1HS100	10
C696	S ECKD1H103MD	0.01
C697	S ECEA1CN100	10

Ref. No.	Part No.	Value
C698	S ECKD1H103MD	0.01
C699	S ECEA1CN100	10
C700	S ECKD1H103MD	0.01
C701, 702	S ECEA1AS101	100
C703	S ECEA1AS101	100
C704, 705	S ECKD1H103MD	0.01
C706, 707	S ECKD1H103MD	0.01
C708, 709	S ECKD1H103MD	0.01
C710, 711	S ECEA1AS101	100
C712, 713	S ECEA1AS101	100
C714, 715	S ECKD1H103MD	0.01
C716	S ECKD1H103MD	0.01
C718, 719	S ECKD1H103MD	0.01
C720	S ECEA1CN100S	10
C721	S ECMD1H103MD	0.01
C722, 723	S ECEA1CN100S	10
C724, 725	S ECKD1H103MD	0.01
C726, 727	S ECCD1H470J	47p
C728, 729	S ECKD1H103MD	0.01
C730	S ECEA1ES100	10
C731	S ECCD1H270JC	27p
C732, 733	S ECKD1H103MD	0.01
C801, 802	S ECEA1CN100S	10
C803, 804	S ECKD1H103MD	0.01
C805, 806	S ECEA1AN470S	47
C807, 808	S ECEA1CN100S	10
C809, 810	S ECKD1H103MD	0.01
C811, 812	S ECCD1H151J	150p
C813, 814	S ECQK1103GZ	0.01
C817, 818	S ECEA1CN100S	10
C819, 820	S ECEA1CN100S	10
C821	S ECEA1HS100	10
C822, 823	S ECCD1H680J	68p
C824, 825	S ECKD1H103MD	0.01
C826, 827	S ECEA1ES220	22
C828, 829	S ECEA1ES331	330
C831, 832	S ECQP1102JZ	0.001
C833, 834	S ECQP1392JZ	0.0039
C835, 836	S ECCD1H181K	180p
C837, 838	S ECQP1473JZ	0.047
C839	S ECEA50Z1	1
C840, 841	S ECKD1H103MD	0.01
C844, 845	S ECKD1H103MD	0.01
C850	S ECCD1H101J	100p
C853, 854	S ECQM1H682JZ	0.0068
C855	S ECEA1CS221	220
C857	S ECKD1H103MD	0.01
C858, 859	S ECQM1H682JZ	0.0068
C860	S ECEA1CS221	220
C861	S ECQF6272KZ	0.0027
C862	S ECQF6222KZ	0.0022
C863	S ECQP1472JZ	0.0047
C864	S ECQF1H562JZ	0.0056
C865	S ECEA1EN4R7S	4.7
C867	S ECQM1H223JZ	0.022
C868	S ECEA1AN470S	47
C869	S ECEA1EN3R3S	3.3
C871	S ECCD1H470K	47p
C872	S ECCD1H100K	10p
C873	S ECQM1H103JZ	0.01
C874	S ECEA1ES470	47
C875	S ECQM1H472JZ	0.0047
C876	S ECCD1H101K	100p
C877	S ECQM1H223JZ	0.022
C878	S ECEA50Z1	1
C879	S ECKD1H103MD	0.01
C881	S ECQM1H102KZ	0.001
C883	S ECKD1H103MD	0.01
C884	S ECQM1H223JZ	0.022

Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value
C885	S ECQM1H123JZ	0.012	C1563	S ECEA1HS100	10	C1636	S ECKD1H103MD	0.01	C1807	S ECQM1H152JZ	0.0015
C886, 887	S ECQM1H223JZ	0.022	C1564	S ECKD1H103MD	0.01	C1661	S ECEA1HS100	10	C1808	S ECQM1H152JZ	0.0015
C888, 889	S ECQM1H224JZ	0.22	C1565	S ECKD1H103MD	0.01	C1671	S ECEA16M10R	10	C1809	S ECQM1H152JZ	0.0015
C890	S ECEA25Z4R7	4.7	C1566	S ECEA50Z1	1	C1672	S ECEA16M10R	10	C1810	S ECQM1H152JZ	0.0015
C891	S ECQM1H104JZ	0.1	C1567	S ECEA50Z1	1	C1673	S ECKD1H102MD	0.001	C1811	S ECQM1H102JZ	0.001
C892	S ECEA25Z4R7	4.7	C1568	S ECEA1ES470	47	C1674	S ECKD1H102MD	0.001	C1812	S ECQM1H152JZ	0.0015
C893	S ECKD1H103MD	0.01	C1569	S ECKD1H103MD	0.01	C1675	S ECKD1H103MD	0.01	C1813	S ECEB1AS220	22
C894, 895	S ECEA1AS470	47	C1570	S ECEA1HS100	10	C1676	S ECKD1H103MD	0.01	C1814	S ECEB1AS220	22
C896	S ECQM1H472JZ	0.0047	C1571	S ECKD1H103MD	0.01	C1677	S ECEA0JN101S	100	C1815	S ECEB1AS220	22
C897	S ECQM1H224JZ	0.22	C1572	S ECKD1H103MD	0.01	C1678	S ECEA0JN101S	100	C1816	S ECQM1H392JZ	0.0039
C898, 899	S ECQM1H153JZ	0.015	C1573	S ECKD1H103MD	0.01	C1679	S ECCD1H680K	68p	C1817	S ECQM1H392JZ	0.0039
C901	S ECKD1H103MD	0.01	C1574	S ECCD1H680K	68p	C1680	S ECCD1H680K	68p	C1818	S ECQM1H392JZ	0.0039
C902	S ECEA1CS221	220	C1575	S ECCD1H680K	68p	C1681	S ECEA1CN100S	10	C1819	S ECQM1H392JZ	0.0039
C903	S ECKD1H103MD	0.01	C1576	S ECQM1H563JZ	0.056	C1682	S ECEA1CN100S	10	C1820	S ECQM1H392JZ	0.0039
C904	S ECEA1AS221	220	C1577	S ECCD1H560K	56p	C1683	S ECEA1HS100	10	C1821	S ECQM1H392JZ	0.0039
C905	S ECKD1H103MD	0.01	C1578	S ECCD1H560K	56p	C1684	S ECEA1HS100	10	C1822	S ECQM1H392JZ	0.0039
C906	S ECEA1CS221	220	C1579	S ECKD1H103MD	0.01	C1685	S ECKD1H103MD	0.01	C1823	S ECQM1H392JZ	0.0039
C907	S ECKD1H103MD	0.01	C1580	S ECKD1H103MD	0.01	C1686	S ECKD1H103MD	0.01	C1824	S ECQM1H392JZ	0.0039
C1501	S ECEA1CN101S	10	C1581	S ECKD1H103MD	0.01	C1687	S ECKD1H103MD	0.01	C1825	S ECQM1H103KZ	0.01
C1502	S ECEA1CN101S	10	C1582	S ECKD1H103MD	0.01	C1688	S ECEA50ZR15	0.15	C1826	S ECQM1H103KZ	0.01
C1503	ECQK1103GZ	0.01	C1584	S ECQM1H102JZ	0.001	C1751	S ECQM1H102JZ	0.001	C1827	S ECQM1H103KZ	0.01
C1504	ECQK1103GZ	0.01	C1585	S ECKD1H103MD	0.01	C1752	S ECQM1H102JZ	0.001	C1828	S ECQM1H103KZ	0.01
C1505	S ECKD1H103MD	0.01	C1586	S ECEA1AN330S	33	C1753	S ECKD1H103MD	0.01	C1829	S ECQM1H103KZ	0.01
C1506	S ECEA1HS100	10	C1631	S ECEA1CN100S	10	C1801	S ECQM1H472JZ	0.0047	C1830	S ECQM1H103KZ	0.01
C1507	S ECEA1HS100	10	C1632	S ECEA1CN100S	10	C1802	S ECQM1H102JZ	0.001	C1831	S ECQM1H103KZ	0.01
C1541	S ECEA1HS100	10	C1633	S ECKD1H103MD	0.01	C1803	S ECQM1H103KZ	0.01	C1832	S ECQM1H103KZ	0.01
C1542	S ECEA50Z1	1	C1634	S ECKD1H103MD	0.01	C1804	S ECQM1H392JZ	0.0039	C1833	S ECCD1H101K	100P
C1561	S ECQM1H104JZ	0.1	C1635	S ECEA1CN100S	10	C1805	S ECQM1H122JZ	0.0012	C1901	S ECEA1ES220	22
C1562	S ECEA1ES470	47				C1806	S ECQM1H152JZ	0.0015			

### • Numbering system of Resistor

Resistor Type	Wattage	Tolerance
ERD : Carbon	10 : 1/8W	F : ± 1%
ERG : Metal Oxide	12 : 1/2W	J : ± 5%
ERO : Metal Film	25 : 1/4W	K : ± 10%
ERQ : Fuse Type Metal	1AN : 1W	
ERX : Metal Film	2AN : 2W	
ERC : Solid		

Example

ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value
ERQ	1	C	J	680
Type	Wattage	Shape	Tolerance	Value

All resistors are in OHMS (Ω) k = 1000Ω ,, M = 1000kΩ

### • Numbering system of Capacitor

Capacitor Type	Voltage		Tolerance
	ECEA Type	Others	
ECEA : Electrolytic	OJ : 6.3V	1H : 50V DC	C : ± 0.25pF
ECEA...N : Non-Polar Electrolytic	1A : 10V	2H : 500V DC	J : ± 5%
ECCD : Ceramic	1C : 16V	MY : 125V AC	K : ± 10%
ECKD : Ceramic	1E : 25V	AL : 125V AC	Z : +80%, -20%
ECQM : Polyester	1H : 50V		P : +100%, -0%
ECQP : Polypropylene	1J : 63V		G : ± 2%
ECET : Electrolytic	50Z : 50V		M : ± 20%
ECEB : Electrolytic	25Z : 25V		
ECES : Electrolytic	16M : 16V		

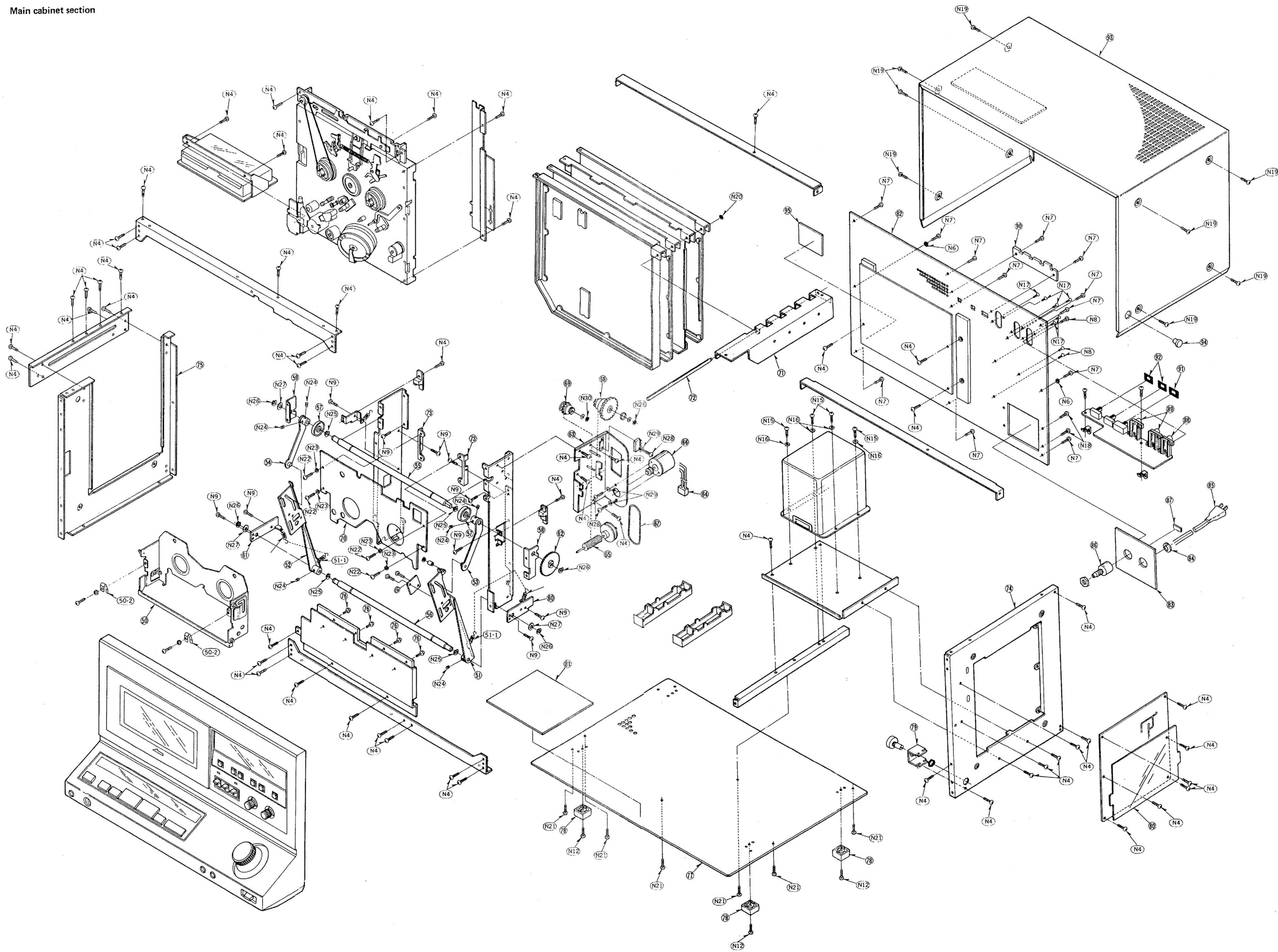
All capacitors are in MICROFARDAS (μF)

$$P = \mu\mu F$$

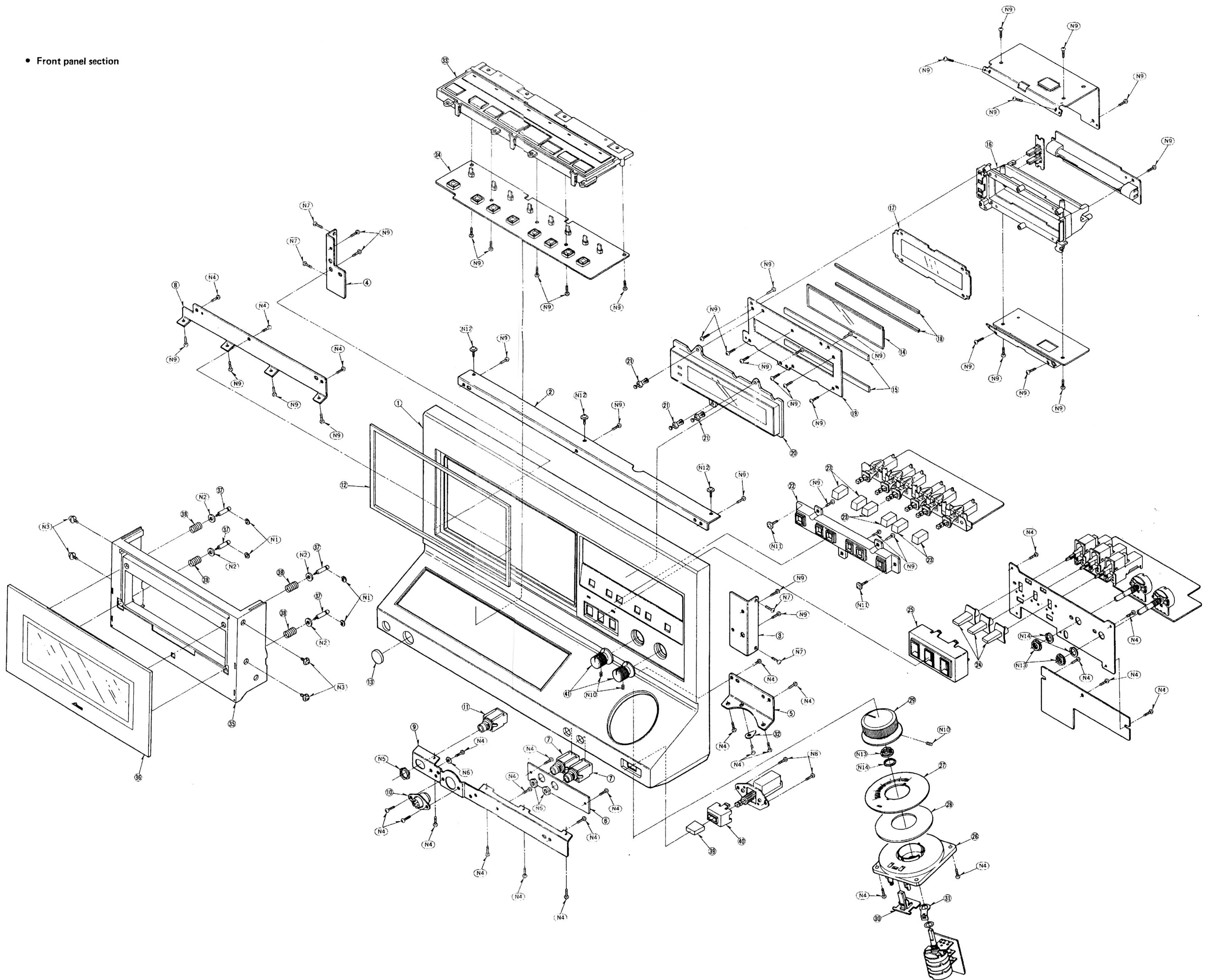
Example

ECKD	1H	102	Z	F
Type	Voltage	Value	Tolerance	Peculiarity
ECEA	50	M	R47	R
Type	Voltage	Peculiarity use	Value	Special use

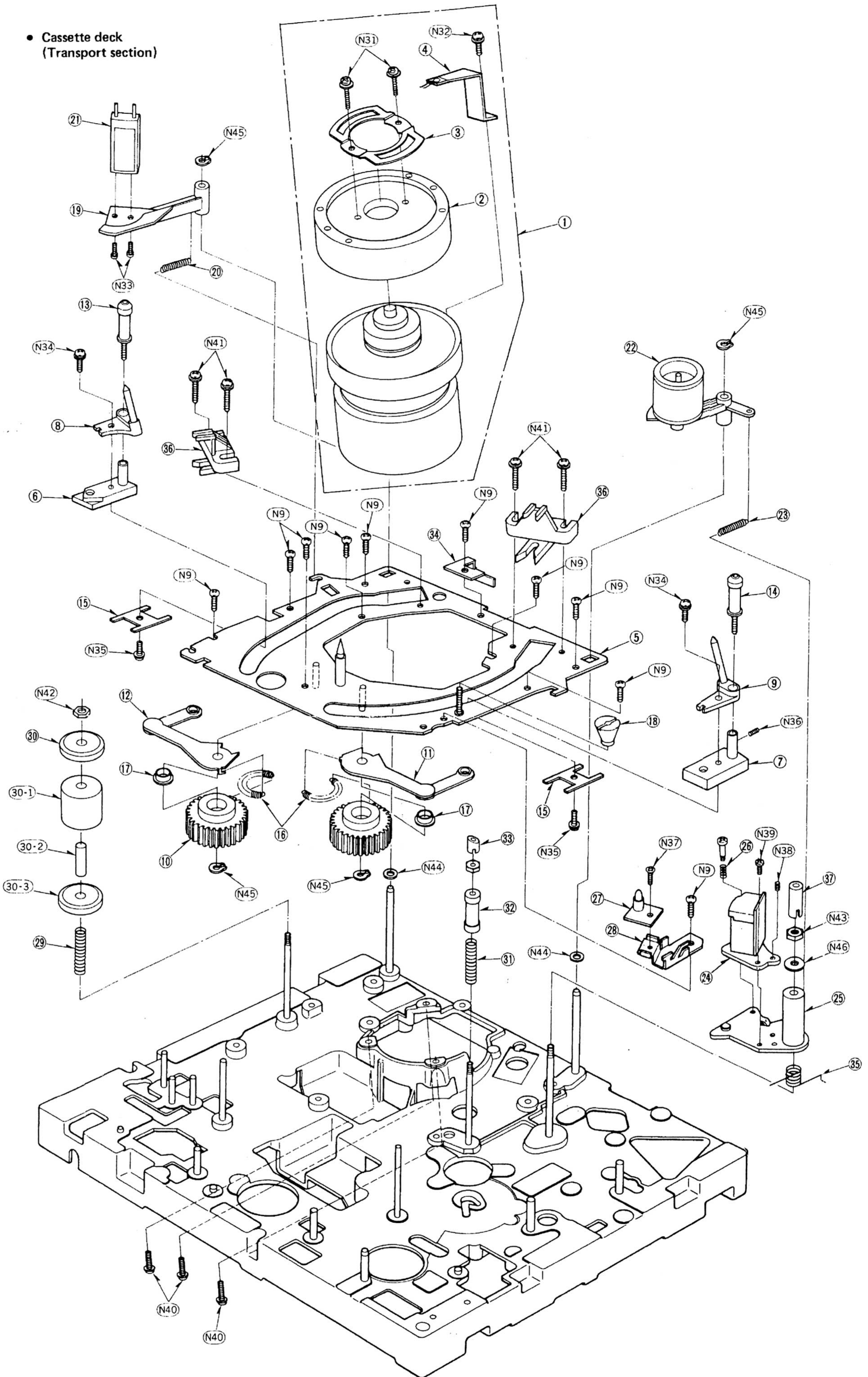
Main cabinet section



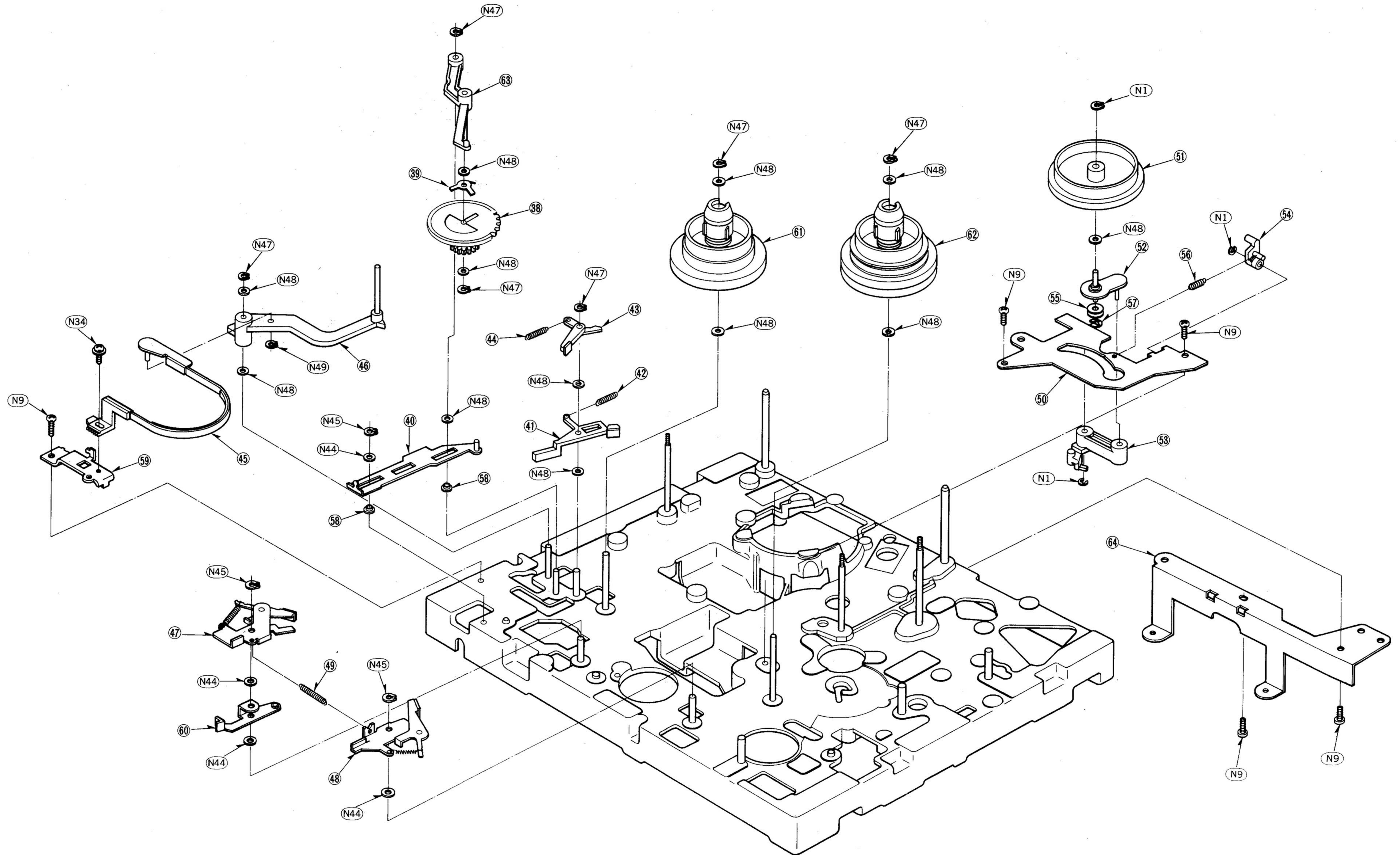
• Front panel section



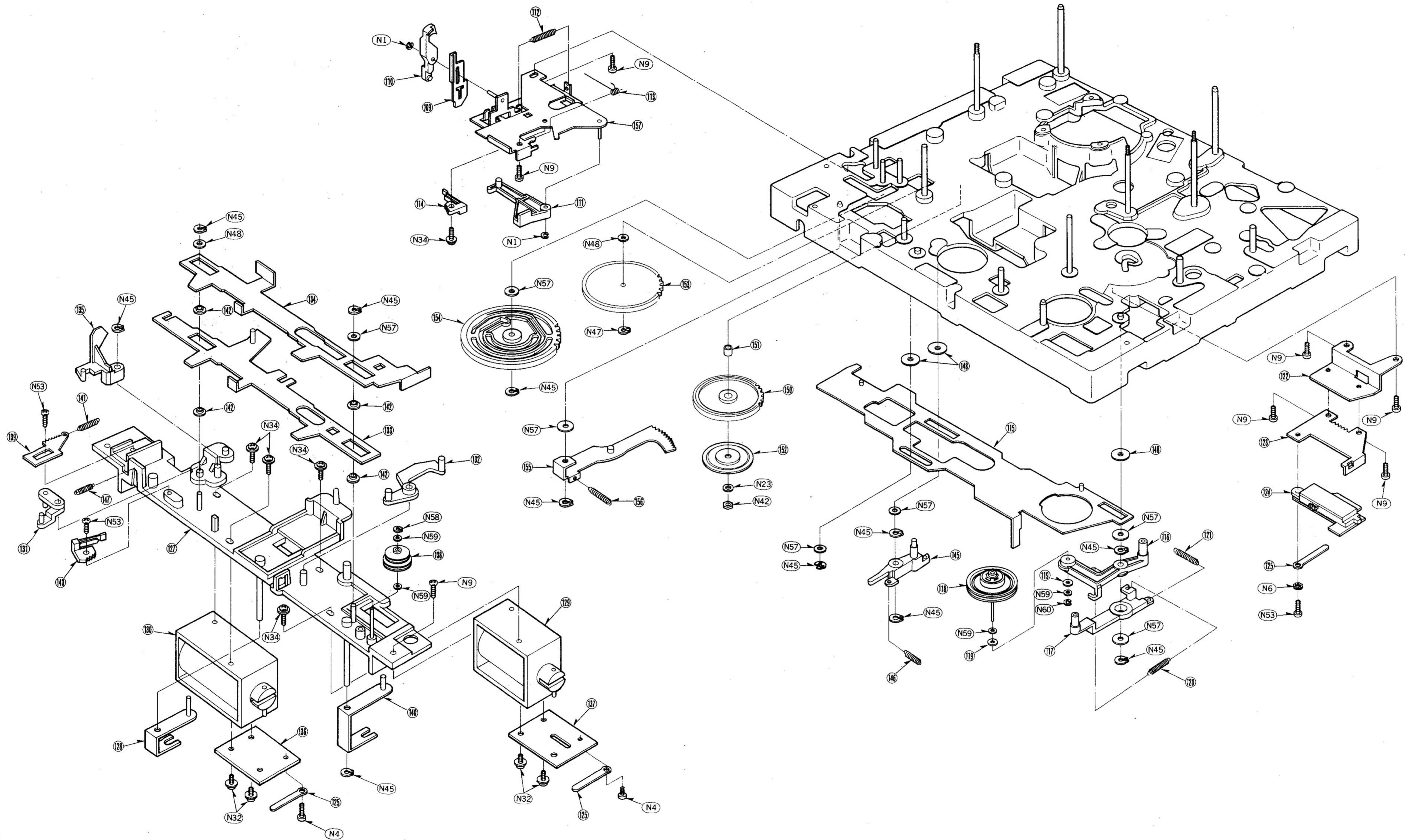
• Cassette deck  
(Transport section)



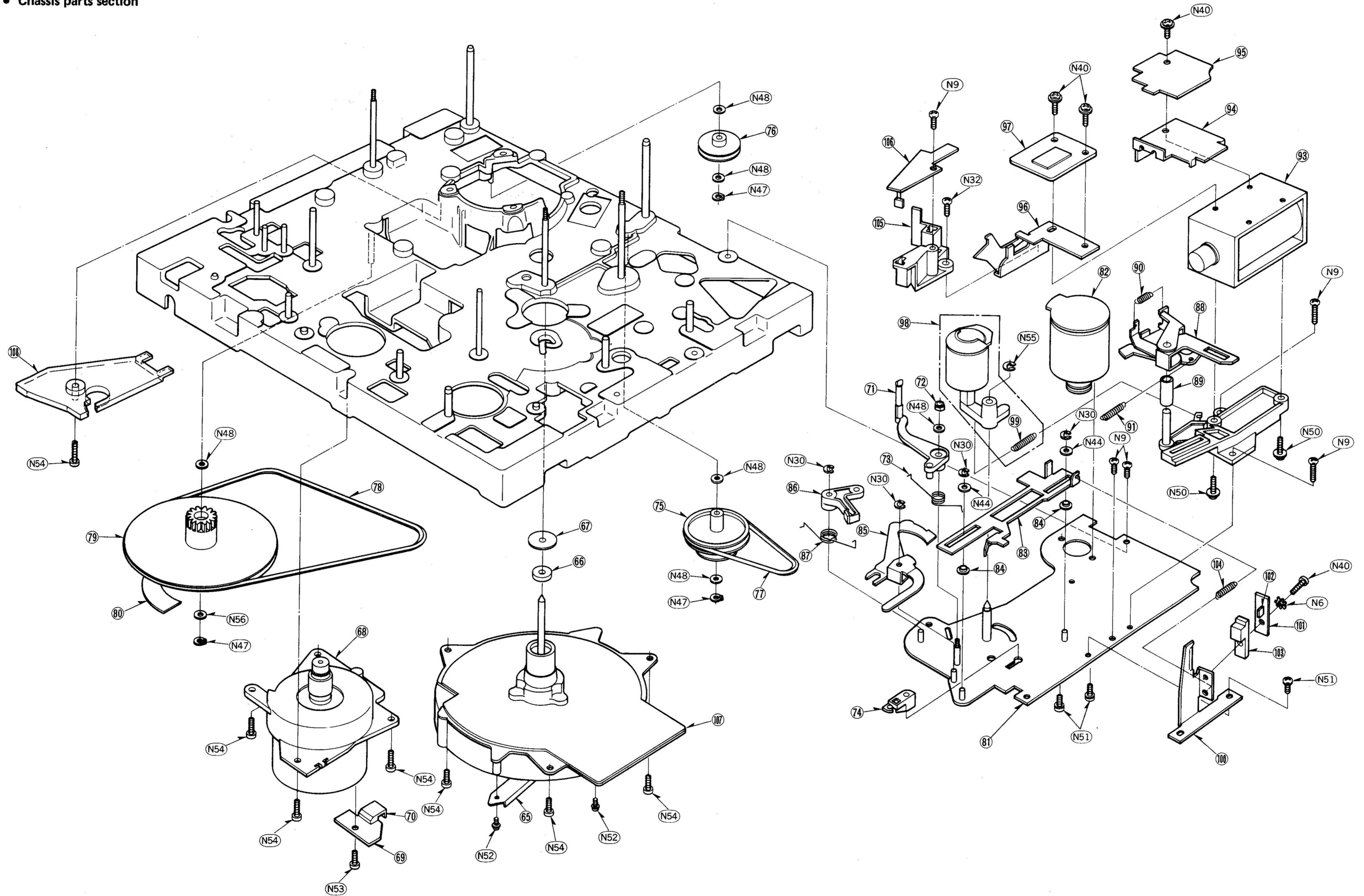
• Moving mechanism section (1)



● Moving mechanism section (2)



• Chassis parts section





# REPLACEMENT PARTS LIST . . . . . Mechanism

- Notes:**
1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
  2. Important safety notice:  
Components identified by **▲** mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
  3. Bracketed indications in Ref. No. columns specify the area.  
Parts without these indications can be used for all areas.
  4. The "S" mark is service standard parts and may differ from production parts.
  5. The circled numbers in the column of description stand for the quantity per set.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
<b>FRONT PANEL PARTS</b>			55	SSXJ100N03	Driving Shaft (1)	6	VXA1189	Shaft Holder (1)
1	SSAC100N01	Panel, Front (1)	56	SSXJ100N04	Support Shaft (1)	7	VXA1190	Shaft Holder (1)
2	SSUP100N34	Angle, Front Panel (1)	57	SSUM100N22	Guide, Driving Shaft (2)	8	VXA1191	Inclined Base (1)
3	SSUP100N51	Angle, Front Panel (1)	58	SSUP100N69	Bracket, Driving Shaft (1)	9	VXA1084	Inclined Base (1)
4	SSUP100N52	Angle, Front Panel (1)	59	SSUP100N70	Bracket, Driving Shaft (1)	10	VXP0325	Loading Gear Unit (2)
5	SSUP100N48	Angle, Fader Volume (1)	60	SSUP100N30	Bracket, Support Shaft (1)	11	VXL0754	Loading Arm (1)
6	SSUP100N47	Angle, Mic Jack (1)	61	SSUP100N31	Bracket, Support Shaft (1)	12	VXL0753	Loading Arm (1)
7	XCJ6P21F-A	Jack, Mic (2)	62	SSUG100N05	Gear, Driving (1)	13	VXP0302A	Roller Post Unit (1)
8	SSUP100N49	Angle, Key Board (1)	63	SSUP100N08E	Plate, Driving Board (1)	14	VXP0302C	Roller Post Unit (1)
9	SSUP100N50	Angle, Remote Control (1)	64	SSDJ100N02E	Connector Ass'y 2P (1)	15	VMA3997	Shaft Holder Stopper (2)
10	SSDJTCS209	Jack, Remote Control (1)	65	SSUG100N01A	Worm Ass'y (1)	16	VMB0669	Loading Spring (2)
11	XCJ6N21F-A	Jack, Headphones (1)	66	MXN12AD08G	Motor, Cassette Holder (1)	17	VMX0257	Arm Sleeve (2)
12	SSGH100N01	Spacer, Cassette (1)	67	SFGB172-51	Belt (1)	18	VHN0014	"X" Adjust Nut (1)
13	SSGK100N01	Cap, Remote Control (1)	68	SSUG100N04	Gear (1)	19	VML1032	E, H Lever (1)
14	SSBZ100N01	Plate, Display (1)	69	SSUG100N03A	Gear, Crutch (1)	20	VMB0665	E, H Lever Spring (1)
15	SSGC100N01	Cushion Rubber, (2)	70	SSUP100N13	Protection Plate (1)	21	VBS0014	Erase Head (1)
16	SSUM100N04	Cover Indicator (1)	71	SSUP100N32	Angle (1)	22	VXP0324	Inertia Roller Unit (1)
17	SSUM100N11	Plate, Scatter Plate (1)	72	SSXJ100N09	Shaft (1)	23	VMB0667	Inertia Roller Arm (1)
18	SSGZ100N01	Rubber, Electric (2)	73	SSUP100N15	Angle, Protection (2)	24	VBR0036	A/C Head Unit (1)
19	SSUP100N14	Plate, Display Holder (1)	74	SSUP100N21	Plate, Right Side (1)	25	VXA1184	Head Base Unit (1)
20	SSKC100N03	Ornament, Indicator (1)	75	SSUP100N22	Plate, Left Side (1)	26	VMB0404	Adjust Spring (1)
21	SHR401-1	Latch (3)	76	SHR401-1	Latch (4)	27	VAMV0019	Sensor Lamp (1)
22	SSUM100N02	Guide, Input Selectors (1)	77	SSUP100N23	Bottom Board (1)	28	VMA4097	Sensor Lamp Angle (1)
23	SSKT100N03	Button, Input Selectors (6)	78	SSUM100N18A	Foot, Set (4)	29	VMB0688	Supply Limiter Spring (1)
24	SSKT100N05	Knob, Edit Selectors (3)	79	SSUP100N78	Angle, Tracking (1)	30	VMO297	Upper Limiter (1)
25	SSUM100N03	Guide, Edit Selectors (1)	80	SSUM100N19	Protection Plate (1)	30-1	VDP0759	Supply Roller (1)
26	SSUM100N07	Base, Fader Volume (1)	81	SSGH100N04	Rubber (1)	30-2	VMX0288	Curler (1)
27	SSKK100N01	Ornament, Fader (1)	82	SSUP100N16	Rear Panel (1)	30-3	VMS1768	Under Limiter (1)
28	SSUZ100N01	Adhesive Tape, Fader (1)	83	SSUP100S73	Plate, Fixed AC Cord (1)	31	VMB0699	Spring (1)
29	SSKT100N06	Knob, Fader Volume (1)	84 [EK,XL]	SFSR5N-5	Bushing, AC Cord (1)	32	VMX0267	Post Sleeve (1)
30	SFUMC10-43	Holder, Light Emitting (1)	84 [Other Areas]	SFSR4N-4	Bushing, AC Cord (1)	33	VMX0271	Cap (1)
31	SJT203	Terminal, Ground (1)	85 [EK] ▲	SJA139	AC Cord (1)	34	VMA4122	Lead Wire Angle (1)
32	SFER1C	Terminal (1)	85 [XL] ▲	SJAG23	AC Cord (1)	35	VMB0668	A/C Spring (1)
33	SSUM100N05A	Button Ass'y (1)	85 [Other▲ Areas]	SJA137	AC Cord (1)	36	VMD0100	Post Stopper (2)
34	SSUM100N24	Spacer, Light Emitting (8)	86	SJFA4	Holder, Fuse (1)	37	VMX0256	Stopper (1)
35	SSUM100N01	Holder, Cassette (1)	87	SFNZ100S01	Label, Fuse (1)	<b>Moving Mechanism Section 1</b>		
36	SSKC100N01E	Ornament, Cassette (1)	88	SJF3225SA	Jack, Line In (1)	38	VDG0015	Winding Gear (1)
37	SSXJ100N06	Shaft, Cassette Holder (4)	89	SJF3225A	Jack, Line Out (2)	39	VMA3999	Thrust Spring (1)
38	SSQA100N01	Spring, Cassette Holder (4)	90	SSUM100N20	Plate (1)	40	VXL0778	Tension Release Lever (1)
39	SSKT100N04	Button, Power Switch (1)	91	SSUM100N26	Spacer (1)	41	VXZ0082	Loading Brake Arm (1)
40	SSUM100N08	Holder, Power Switch (1)	92	SSUM100N25	Spacer (2)	42	VMB0726	Loading Brake Spring (1)
41	SSKT100N07	Knob, Rec Level (2)	93	SSUP100N20E	Cabinet (1)	43	VXZ0077	F.F Soft Brake Unit (1)
<b>MAIN CABINET</b>			94	SFGK133S01	Cap, Tracking (1)	44	VMB0727	F.F Soft Brake Spring (1)
50	SSUP100N10E	Holder, Cassette (1)	95 [E]	SSNN100S01	Name Plate (1)	45	VXL0787	Tension Arm Board (1)
50-1	SSQP100N02	Spring (Right) (1)	95 [EK,XL]	SSNN100G01	Name Plate (1)	46	VXL0786	Tension Arm Unit (1)
50-2	SSQP100N03	Spring (Left) (1)	95 [XA]	SSNN100X01	Name Plate (1)	47	VXL0788	Brake Lever (1)
51	SSUP100N02A	Arm, Cassette Holder (1)	95 [Other Areas]	SSNN100R01	Name Plate (1)	48	VXL0789	Brake Lever (1)
51-1	SSQH100N02	Spring (2)	<b>CASSETTE PARTS</b>			49	VMB0729	Brake Arm Spring (1)
52	SSUP100N03A	Spring (1)	<b>Transport Section</b>			50	VXA1228	Idler Base Unit (1)
53	SSUP100N09E	Driving Arm (Right) (1)	1	VEG0166	D.D Cylinder Unit (1)	51	VXP0344	Idler Unit (1)
54	SSUP100N99E	Driving Arm (Left) (1)	2	VEH0121	Upper Crylinder Unit (1)	52	VXL0772	Idler Arm Unit (1)
			3	VMA3165	Wire Cover (1)	53	VML1107	Idler Lever (1)
			4	VXA0869	Erase Angle Unit (1)	54	VML1068	Flection Lever (1)
			5	VXA1188	Loading Base Unit (1)	55	VDP0770	Guide Roller (1)
						56	VMB0714	Flection Lever Spring (1)
						57	VMX0122	Slide Washer (1)
						58	VMX0274	Slide Washer (2)
						59	VMA4189	Tension Band Base (1)
						60	VML1072	F.F Lever (1)
						61	VXR0103	Supply Reel Table Unit (1)
						62	VXR0102	Takeup Reel Table (2)
						63	VXL0780	Winding Gear Arm (1)
						64	XMA4185	Chassis Bracket (1)



# ■ PACKINGS

