



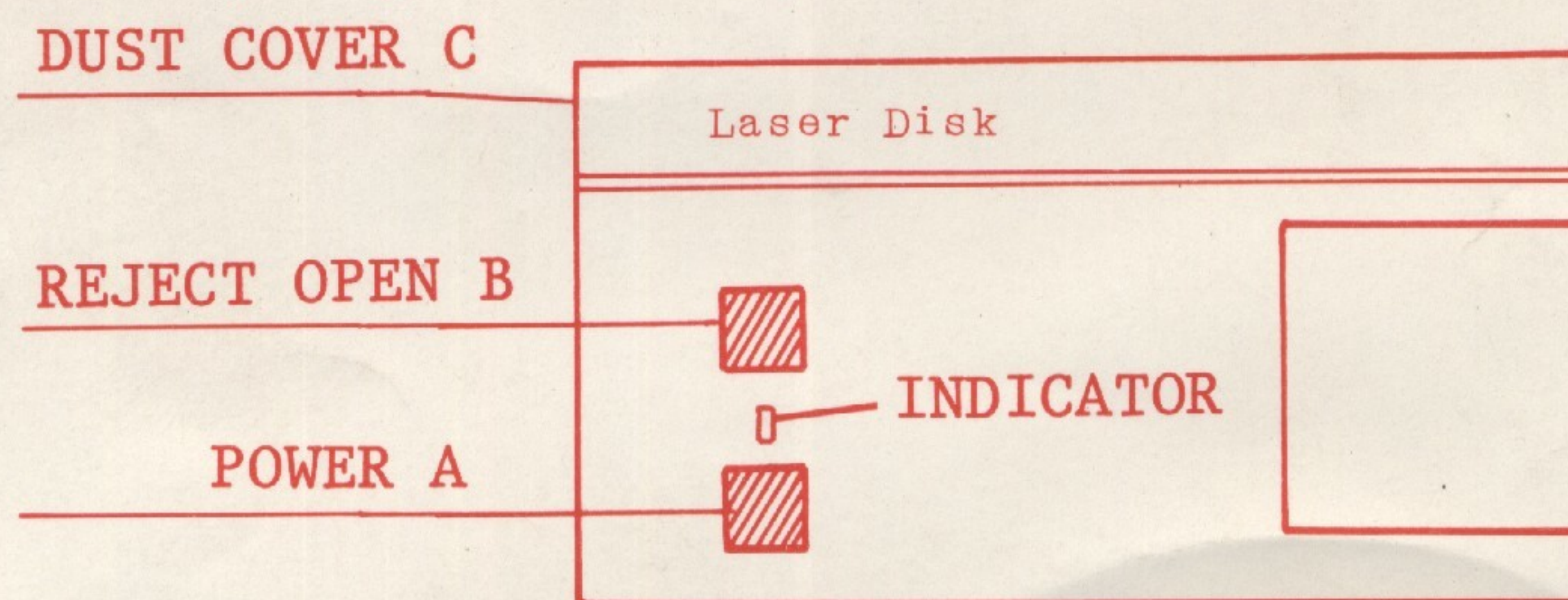
**SERVICE MANUAL
SERVICE PARTS**

(LAMP 1)
(FUSE 5A 1)

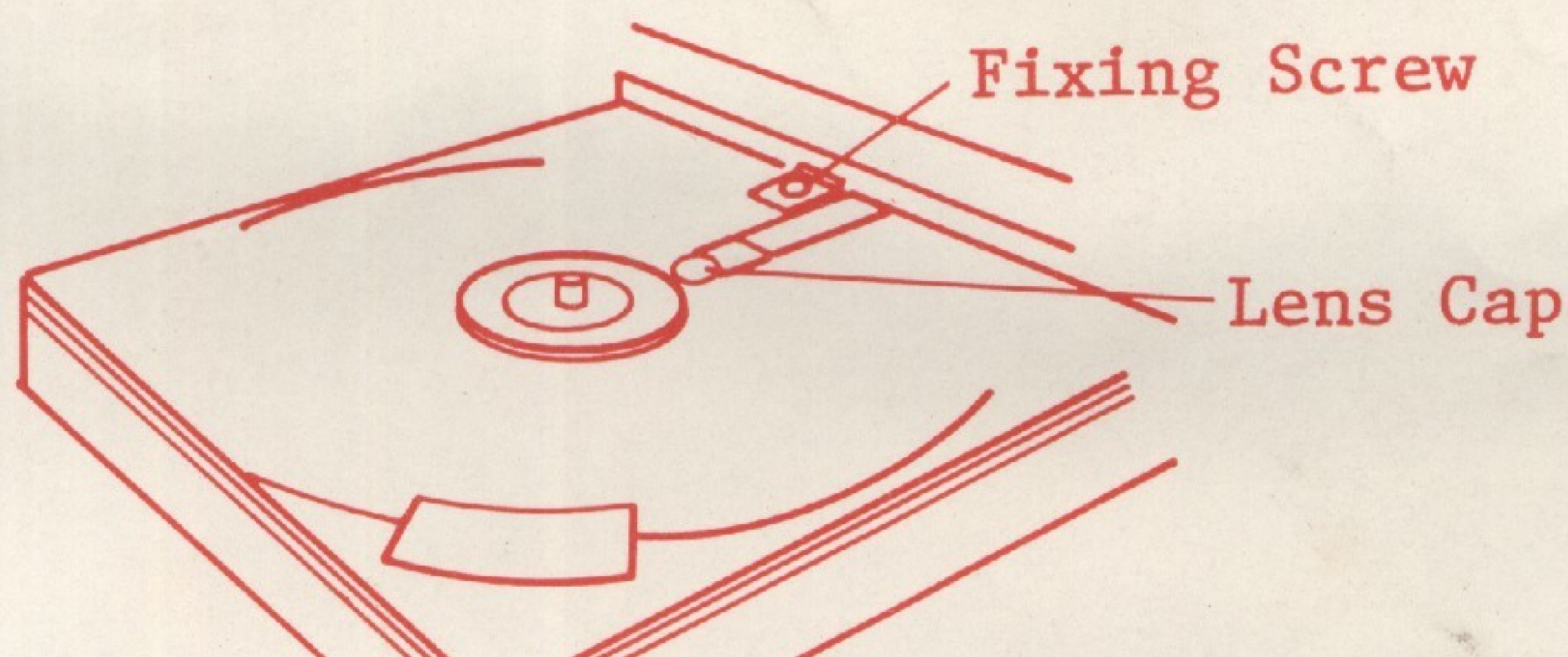
FUNAI

Installation of Laser Disc Player

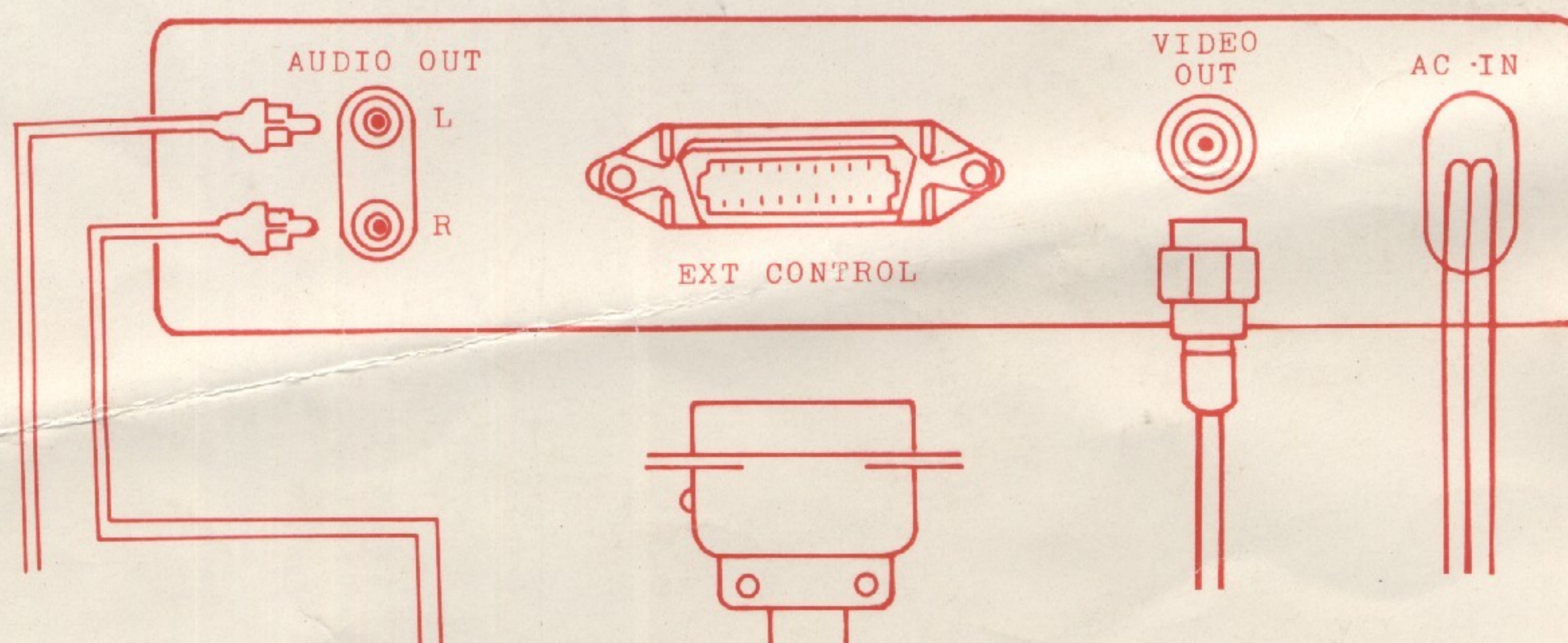
- 1) Dismantle the maintenance door of the machine by unlocking and unscrewing bolts.
Pull back the board by pressing down the stopper positioning at the right side of the laser disc player board.
- 2) For opening the dust cover
 - Plug the AC cord from the game machine into the AC socket.
 - Plug the Laser disc player AC cord into "LASER DISC" socket on AC outlet terminal.
 - Unlock the key upper side of the coin selector, and put POWER SW of the machine ON.
 - Push ON the POWER A switch of Laser disc player, and the indication lamp will turn on.
 - Push REJECT OPEN Button B, and push up the DUST COVER C by hand to open it.
(Unless power source is fed the dust cover will not open even pushing REJECT OPEN Button, then after opening it switch OFF power of the machine).

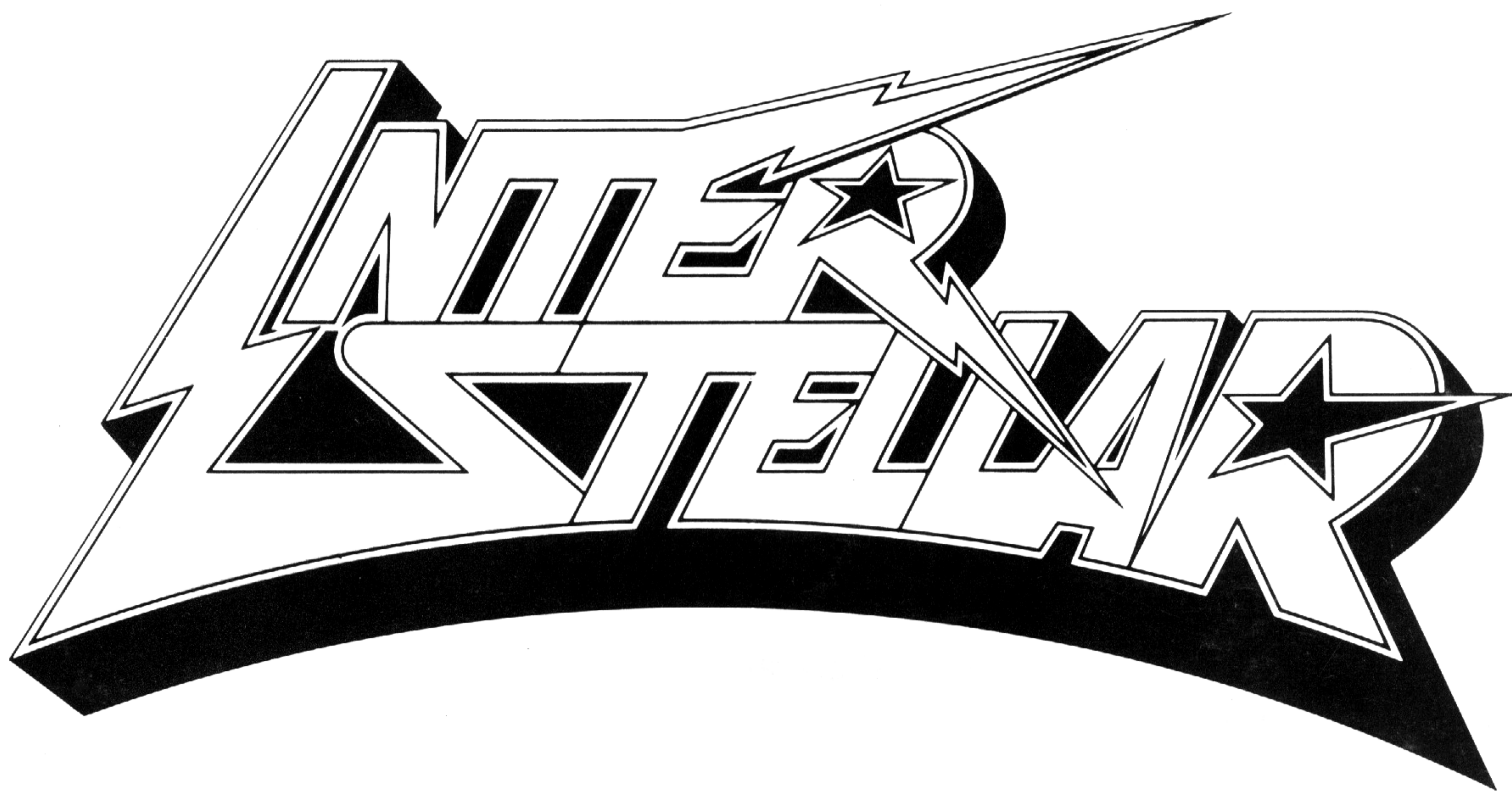


- 3) How to dismantle the fixing screw and lens cap
 - In order to protect internal function during transportation, the fixing screw and lens cap are provided, which have to be dismantled and kept before setting the disc.
 - To stop operation for long time and for transportation, please fix the screw and lens cap without fail.
- 4) How to fit the disc
 - Set the laser disc, putting the label side downward, onto the spindle and close the dust cover.



- 5) Put Laser disc player on the laser disc board facing the connector side to the front and push it with the laser disc player board onto the extreme inside of the machine. Then check the board is certainly locked.
- 6) Connect each connectors of laser disc player as shown below and check if all the lead wires are connected, but handle carefully and gently.





Laser

Fantasy

**SERVICE MANUAL
(UPRIGHT)**

FUNAI // ESP

INTRODUCTION FOR MANUAL

We are very much appreciated for your using "INTER STELLAR", the 1st series of LASER FANTASY.

INTER STELLAR have been developed on our latest technology and experience, thus we put our full confidence on it. Three-dimensional computer graphic is adopted for display as well 4 channel sound system for music, and this is an innovating game machine compared with conventional video-games. We are confident that you will be fully satisfied with it.

This manual is so edited aiming for engineers who are specialized for IC, CRT, LASER DISC and so on that particular caution has to be paid not to perform any service work inside of the system except by speciality engineers.

In case when it gets wrong, users in general are strictly requested not to touch anything inside of the game machine, electrical circuit, laser disc player for instance.

Warning — This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

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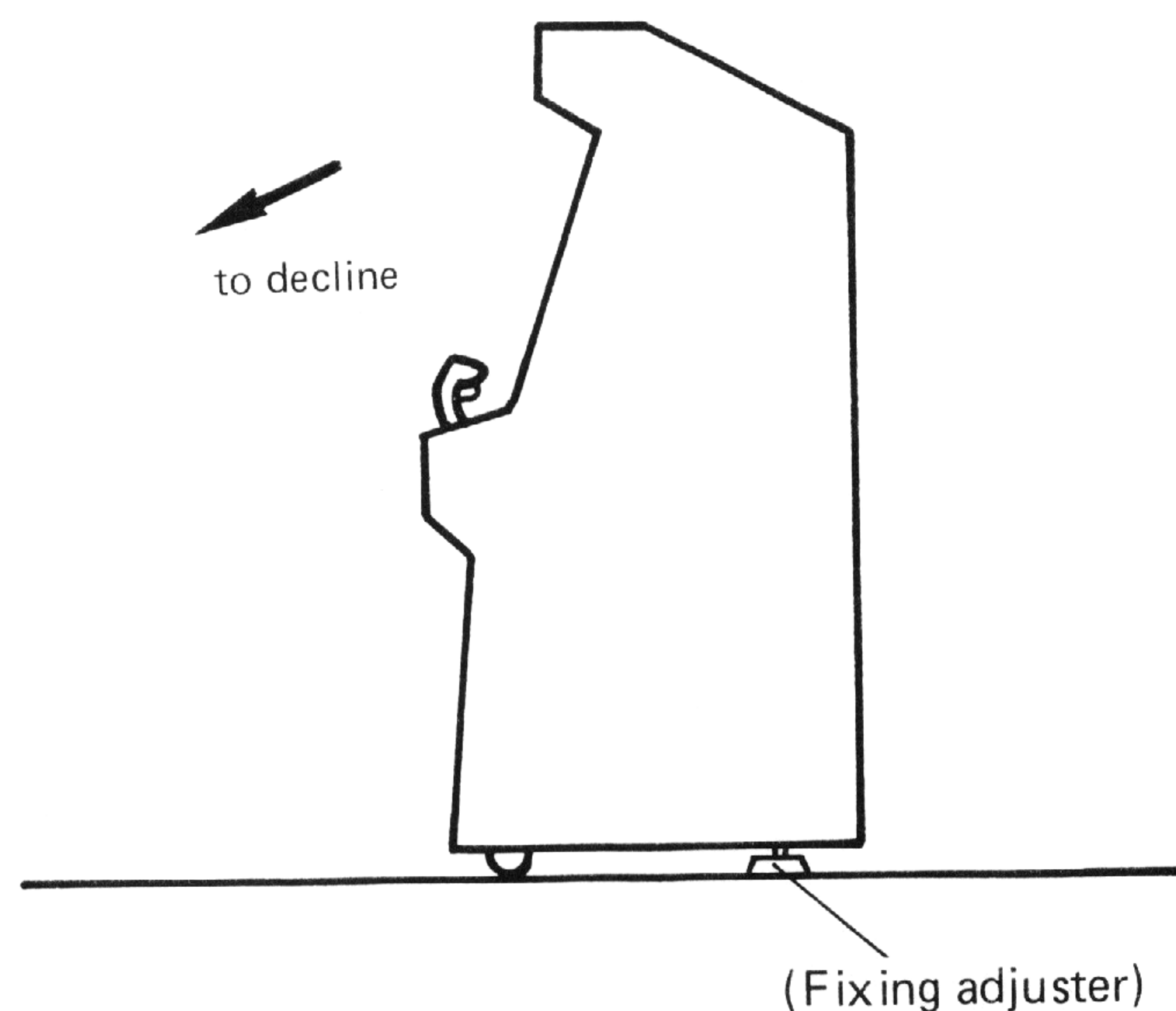
1. Specification

Power source	AC 120V \pm 5 V (60 Hz)
Power consumption	210 W
Game fee	25 cents x 2 per game (available to change)
Dimensions	Width 706 mm Depth 780 mm Height 1750 mm
Weight	155 Kg
CRT Monitor	19 inch colour monitor

* Specification subjects to be changed without notice.

2. Installation

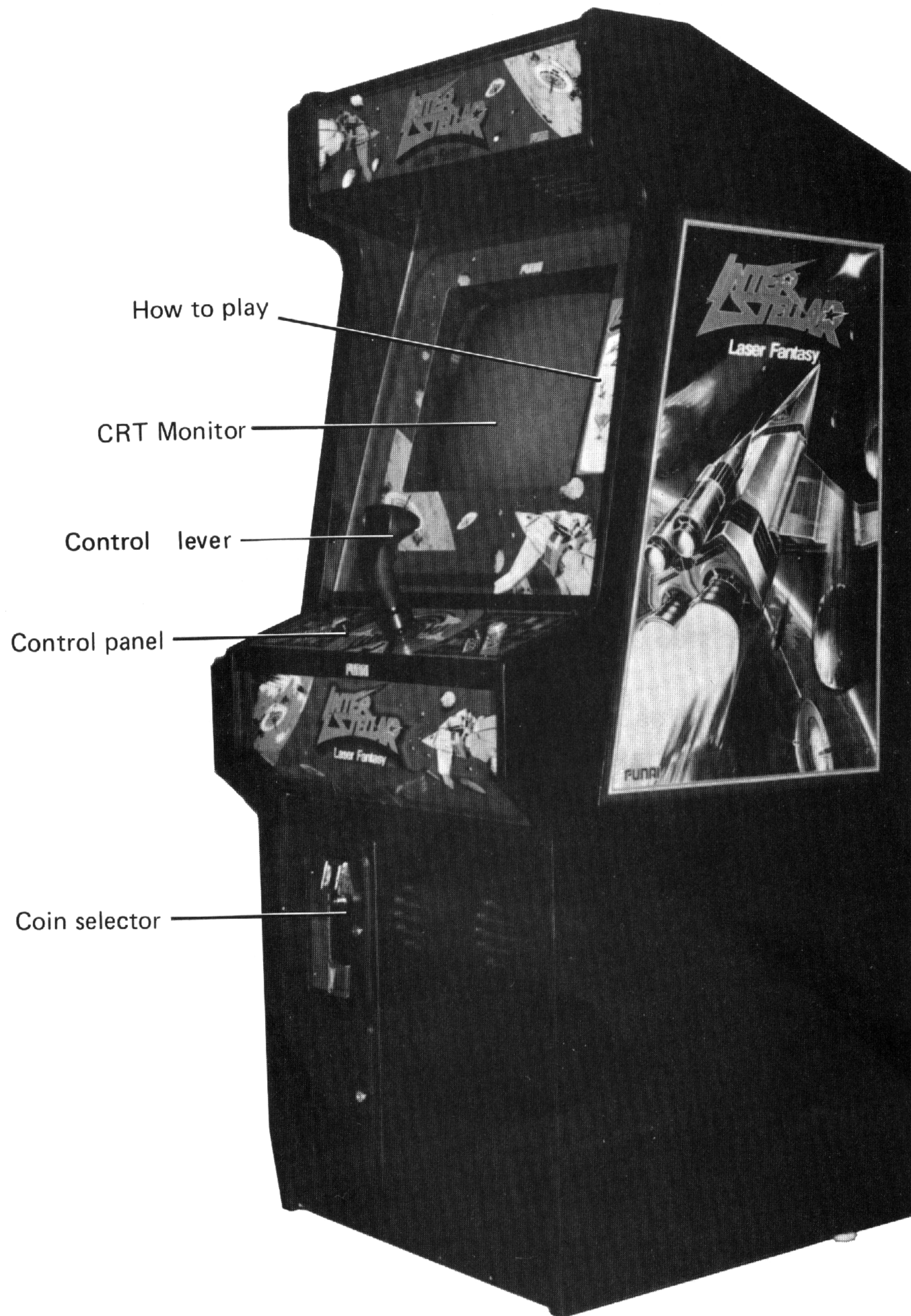
- (1) Due to containing precision system like CRT Monitor, Laser disc player and so on, caution has to be taken not to give big shock during transportation and installation.
- (2) This machine INTER STELLAR is made for placing indoor, and it is strictly prohibited to install outdoor. Even for indoor use following care must be taken for right usage.
 1. To avoid locating it under direct sun-shine, humid, dusty and water spattering places. If it should be showered with water, being afraid of electrical shock, power source must be cut immediately, dry thoroughly then switch on again.
 2. To avoid putting on places where it may hinder emergency activity, near to emergency exit, fire extinguisher and so on.
 3. Be sure to put on solid and horizontal base. When placing it on unstable and vibrating base it may not only cause damage to the machine but also cause dangerous circumstances.
 4. Earth terminal of the machine should be grounded without fail.
 5. Applied voltage can be AC 115V – 125V, but please be care to feed 120V or as nearest as possible on which the machine is designed. By using beyond the range of 115 – 125V, it will damage itself or even result fire, so maximum care must be paid on this point.
 6. Upon deciding installation spot, decline the cabinet to move to your desired point then fix with the fixing adjusters (2 points at the right and the left) and, at the same time, adjust height. Fix firmly on the floor.



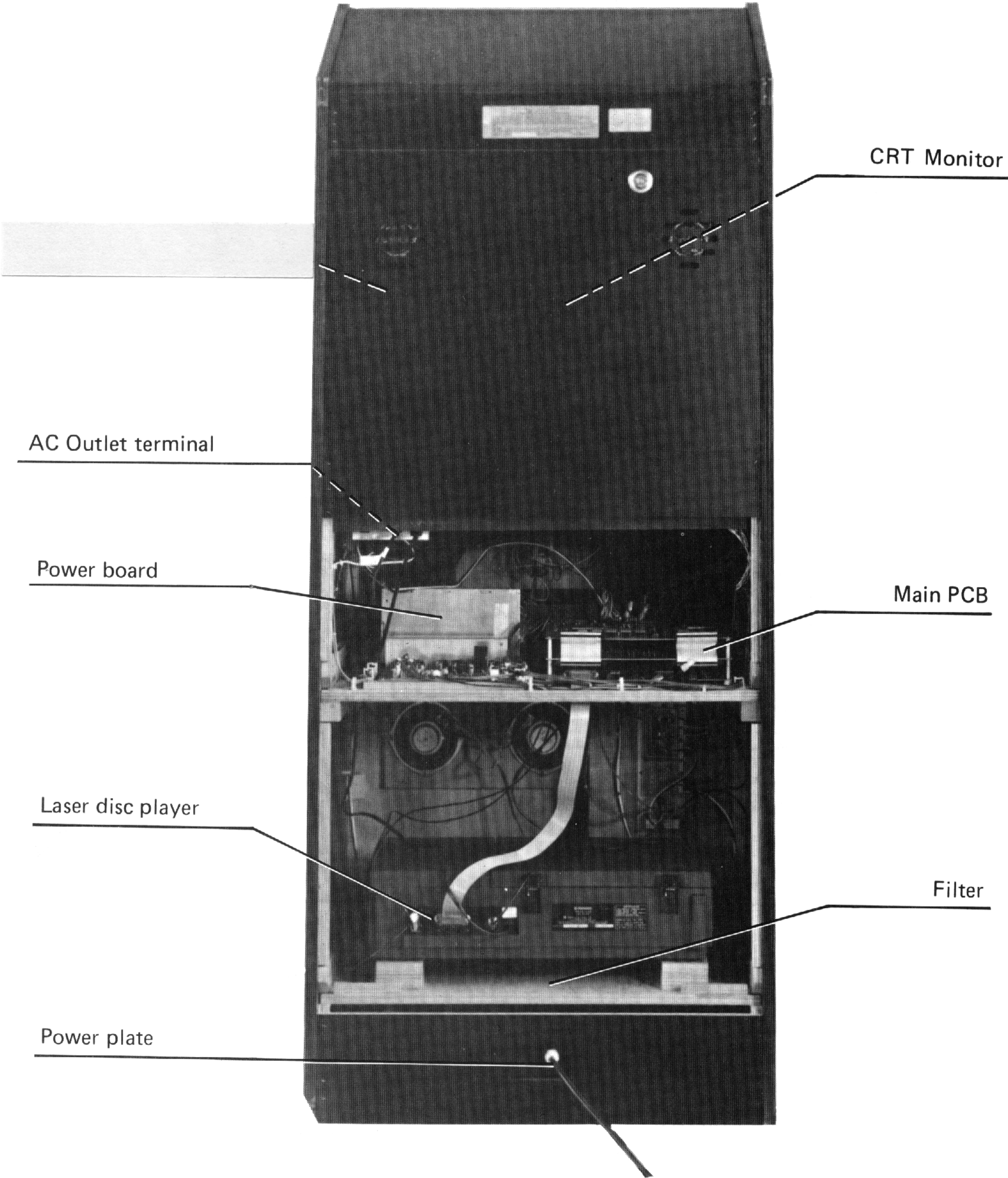
3. Handling

- (1) Due to containing precision system like CRT Monitor, Laser disc player and so on, caution has to be taken not to give big shock during transportation and installation.
- (2) Laser disc player should be fitted on the local spot and, for doing it, be sure to read through the pages of reference items.
- (3) For moving the machine from one place to the other, detouch the laser disc player, on which adapt fixing screws and lens cap, then pack and transport. When moving the player without the fixing screws and lens cap it may be damaged itself by vibration and dusts.
- (4) One should not touch inside of the player, which is very dangerous as being with high voltage and laser beam.
- (5) Laser disc player must be completely free from dusts, thus the disc and the filter (to refer p. 6, naming of inside of machine) must be cleaned once in fortnight without fail.
- (6) Laser disc can be handled like normal sound disc, do not touch the face directly.
- (7) High voltage is loaded on CRT Monitor, please be careful for inspection and adjustment.
- (8) Our specified fuses must be adapted. If otherwise is applied it may damage the machine and possibly cause fire (our ref. No. 1790382). When being cut frequently even with our specified one please cut power source and stop using the machine.
- (9) Each fixing points may probably be coming loose during transportation, and all the PC boards fitting, connectors and so on must be checked once again.
- (10) One must avoid applying circuit tester on the PC boards for inspection, for IC can be damaged even by internal voltage of the tester.
- (11) Cut power source when working on changing parts, putting connectors in and out and changing DIP SWITCH.
- (12) Please avoid to switch on immediate after cutting it off, for which one should wait at least 10 seconds.
- (13) For an event of voltage fluctuation CRT picture may stop sometimes. On that case, switch off once and put on again.

4. Naming of Each Sections

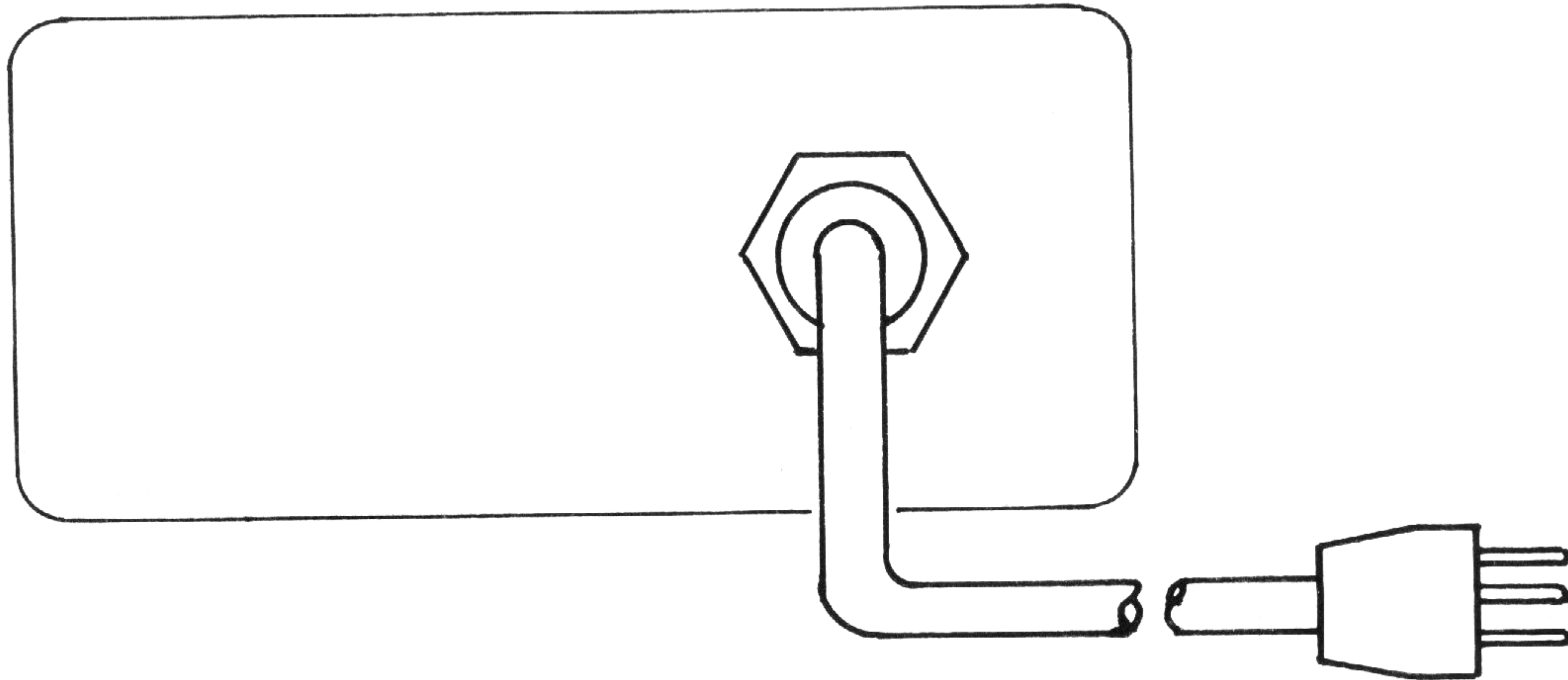


5. Naming of Inside of Machine

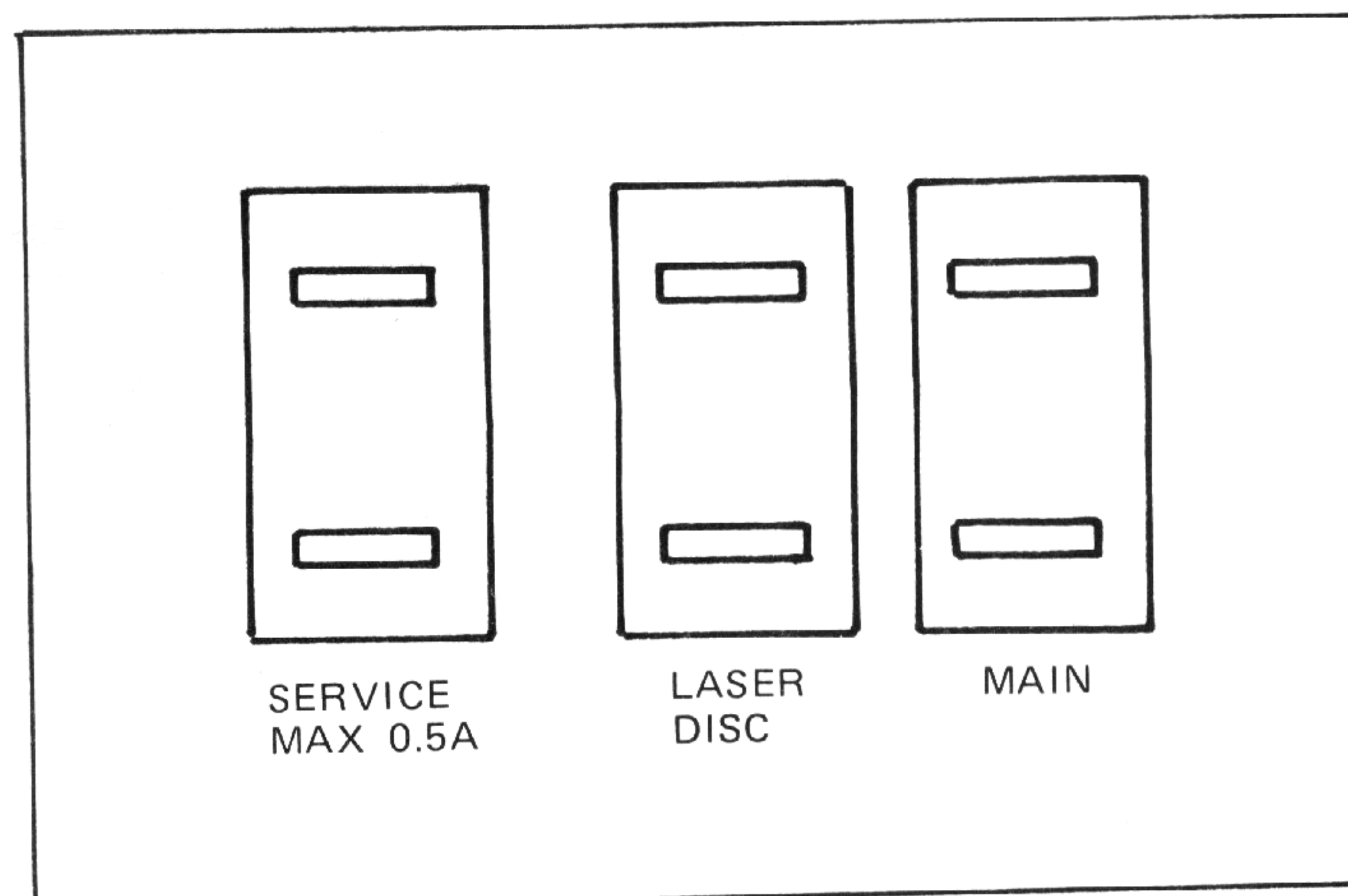


6. Explanation of Inside of Machine

6-1) Power plate



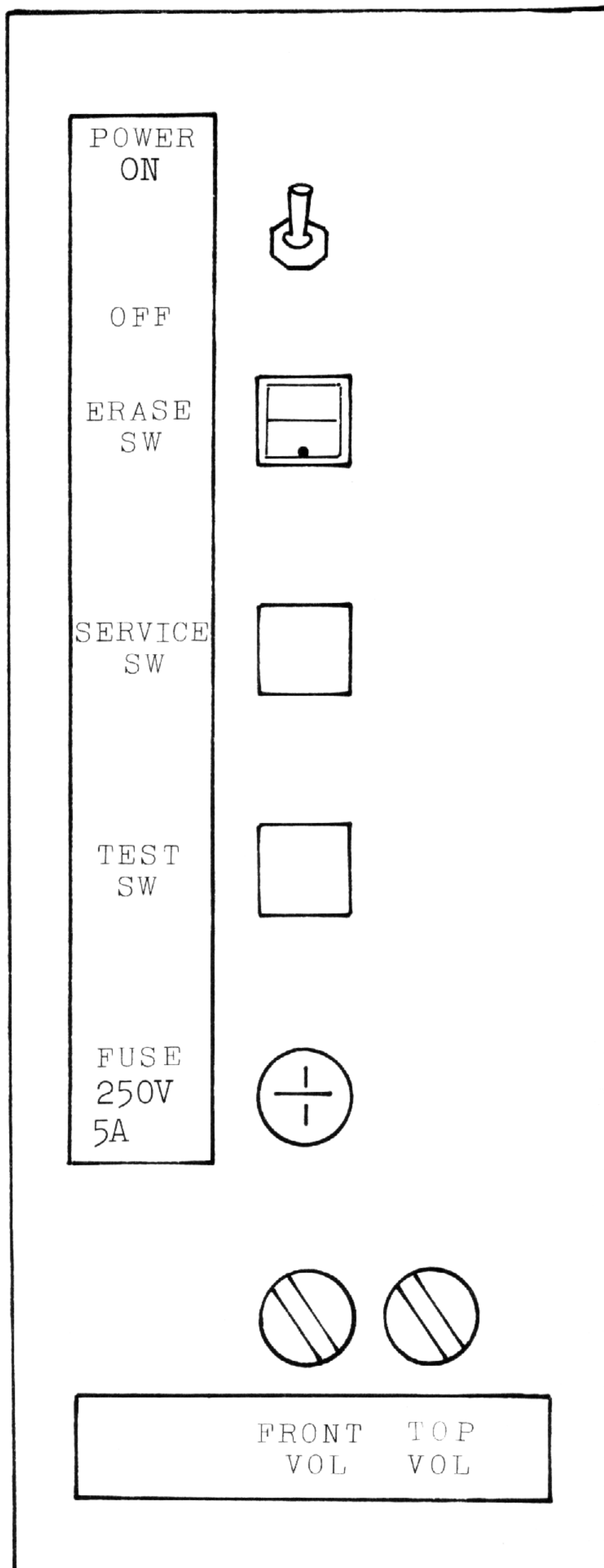
6-2) AC Outlet terminal



- Service Max. 0.5A – To be used for soldering iron and so on for service engineer
- LASER DISC – Specially for the laser disc
- MAIN – MAIN power socket for CRT Monitor, PC boards, fan and illumination lamp.

6-3) Switch board

- Unlock the key located upper side of the coin selector, open the door and you will find the switch board, with which following operation can be done.

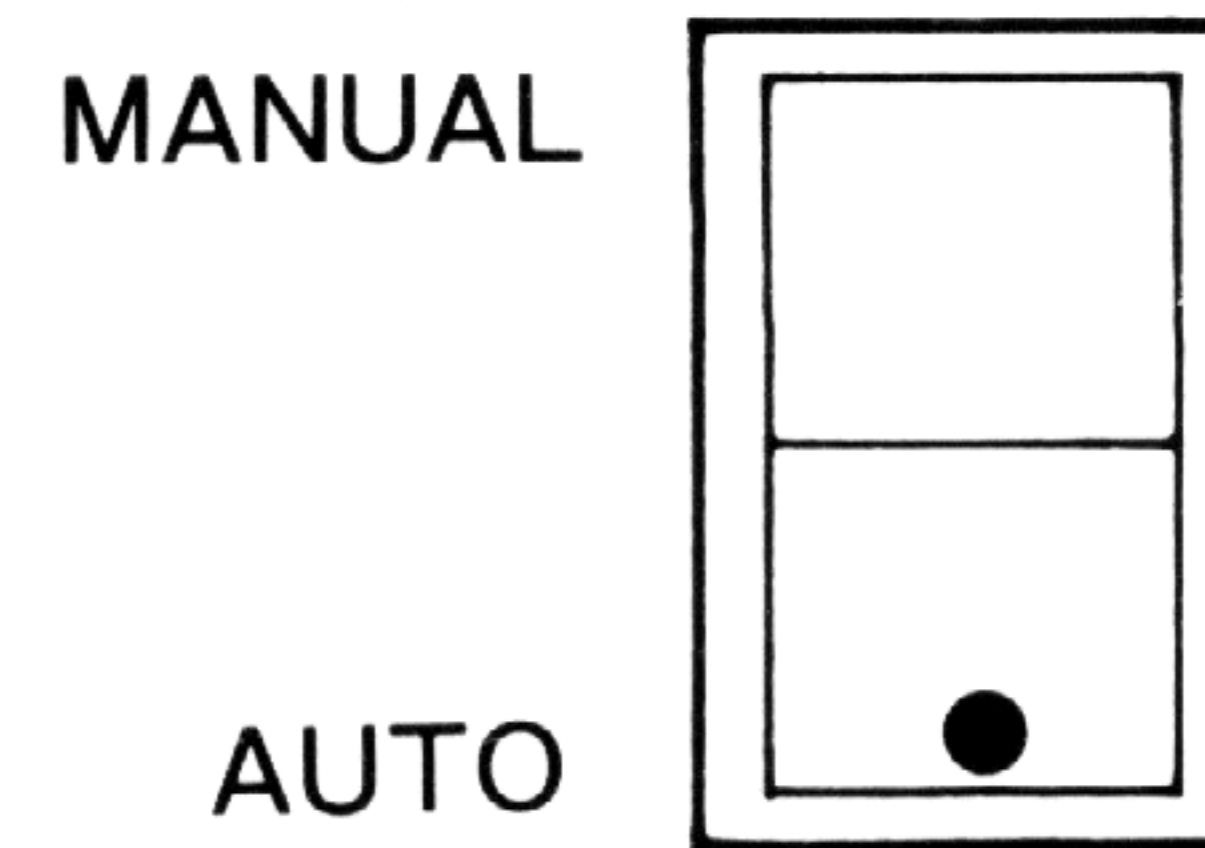


Power Switch

- For ON and OFF at main power source.
- Do not put COIN until demonstration pattern will appear, upon switching ON.

Erase Switch

- To use for eliminating magnetic field on CRT.



MANUAL POSITION

- MANUALLY DEMAGNETIZE CRT MONITOR WHEN UNIT IS BEING OPERATED, KEEP MANUAL POSITION FOR TEN MINUTE THEN TURN TO AUTO POSITION. (DO NOT MAINTAIN MANUAL POSITION)

AUTO POSITION

- AUTOMATICALLY DEMAGNETIZE CRT MONITOR WHEN POWER SWITCH ON. (NORMAL USE)

Service Switch

- To display Credit instead of Counter.

Test Switch

- For self testing (to refer corresponding item).

Fuse

- Be sure to use 5 A fuse (Ref. No. 1790382).

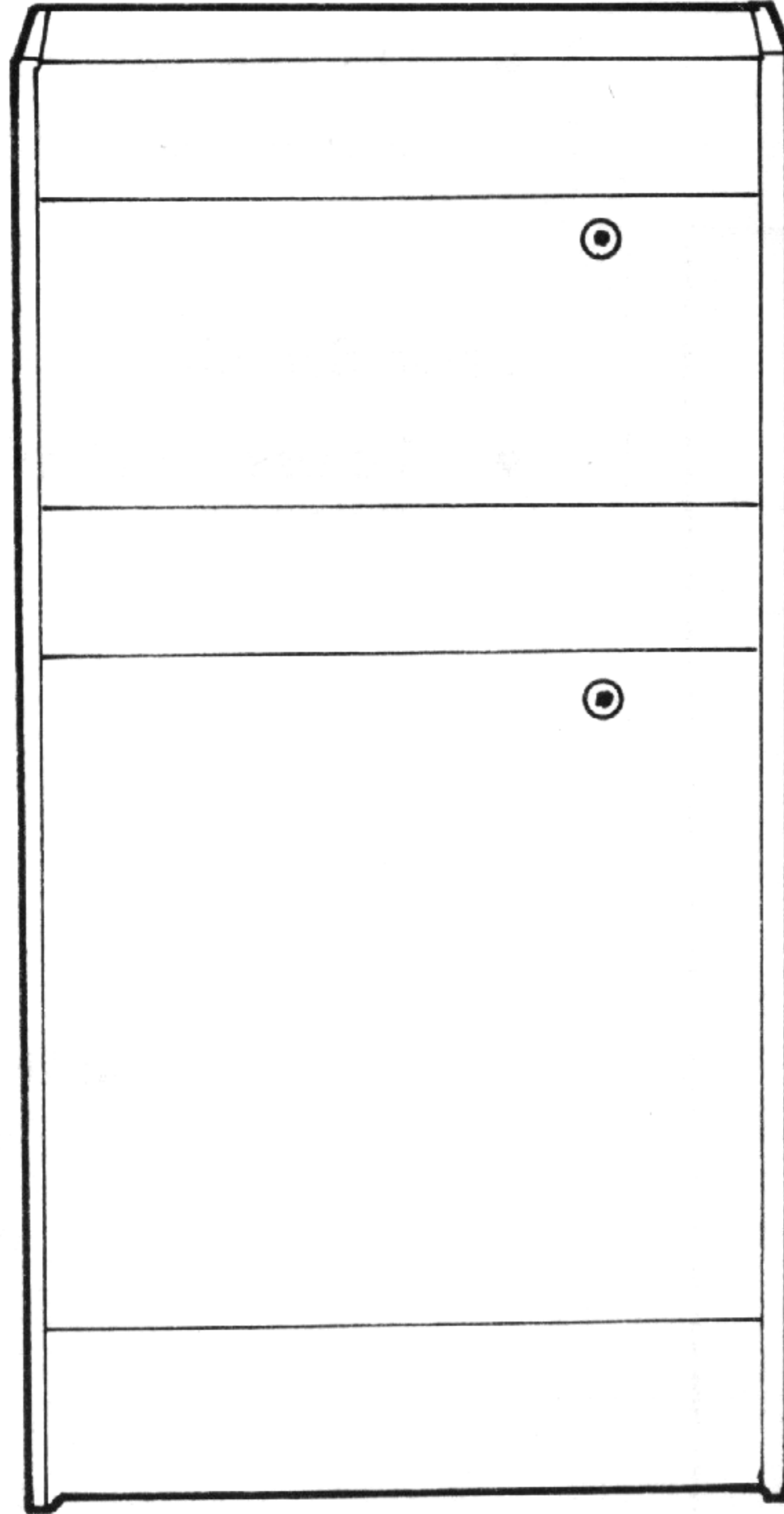
Volume

- To adjust sound volume from the speakers at each Front and Top.

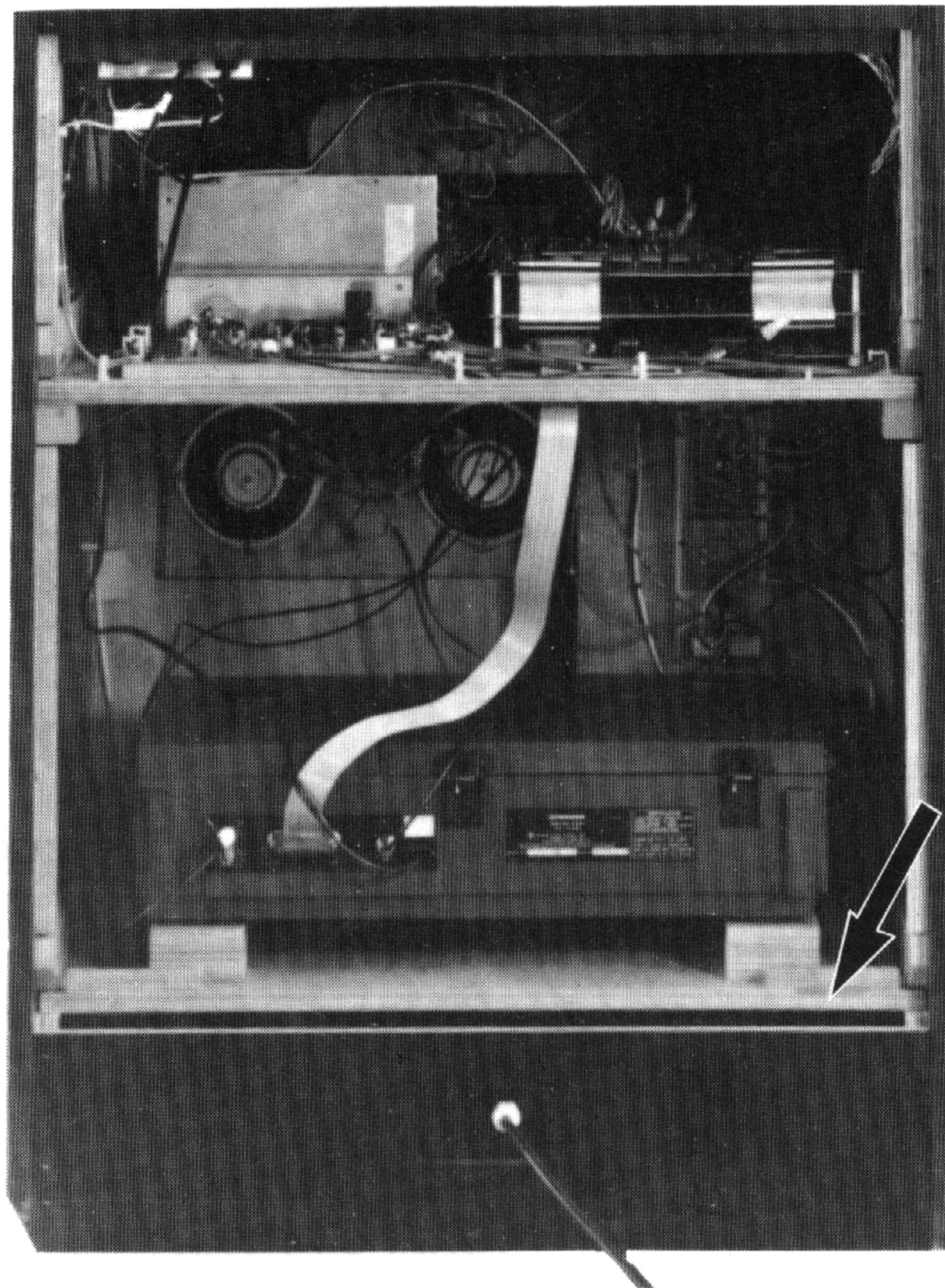
7. Installation of Laser Disc Player

Laser disc player has to be so insulated from vibration, dusts and magnetic field that it is packed separately from the game machine. Please take following procedure to fit on the machine.

- 1) Dismantle the maintenance door of the machine by unlocking,

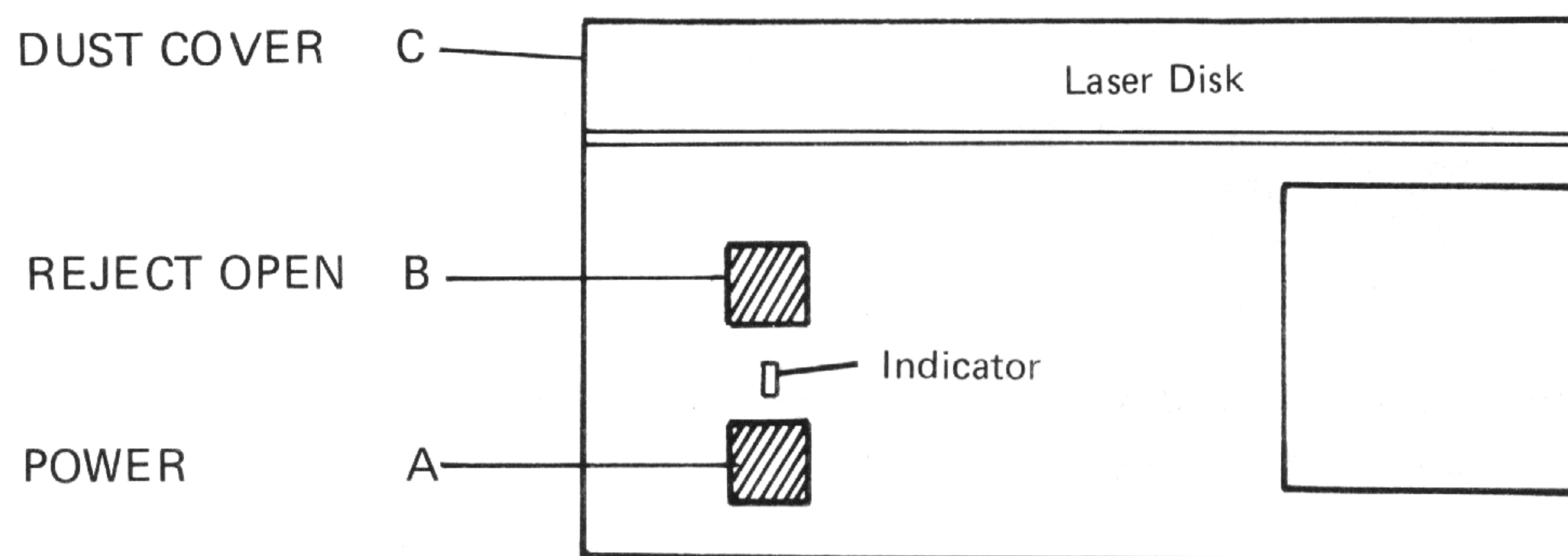


- 2) Pull back the board by pressing down the stopper positioning at the right side of the laser disc player board.



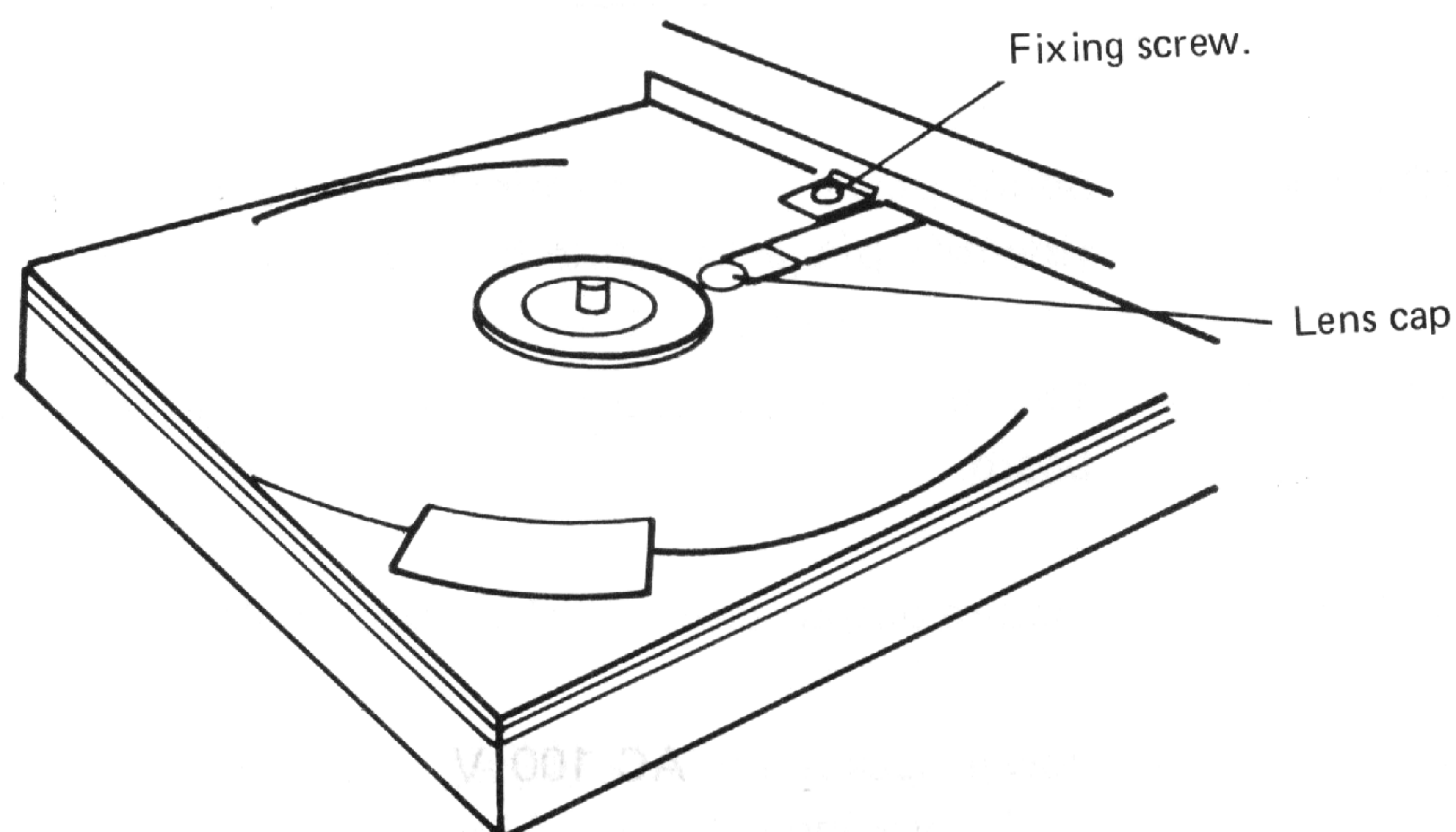
3) For opening the dust cover

- Plug the AC cord from the game machine into the AC socket.
- Plug the Laser disc player AC cord into "LASER DISC" socket on AC outlet terminal.
- Unlock the key upper side of the coin selector, and put POWER SW of the machine ON.
- Push ON the POWER A switch of Laser disc player, and the indication lamp will turn on.
- Push REJECT OPEN Button B, and push up the DUST COVER C by hand to open it. (Unless power source is fed the dust cover will not open even pushing REJECT OPEN Button, then after opening it switch OFF power of the machine).



4) How to dismantle the fixing screw and lens cap

- In order to protect internal function during transportation, the fixing screw and lens cap are provided, which have to be dismantled and kept before setting the disc.

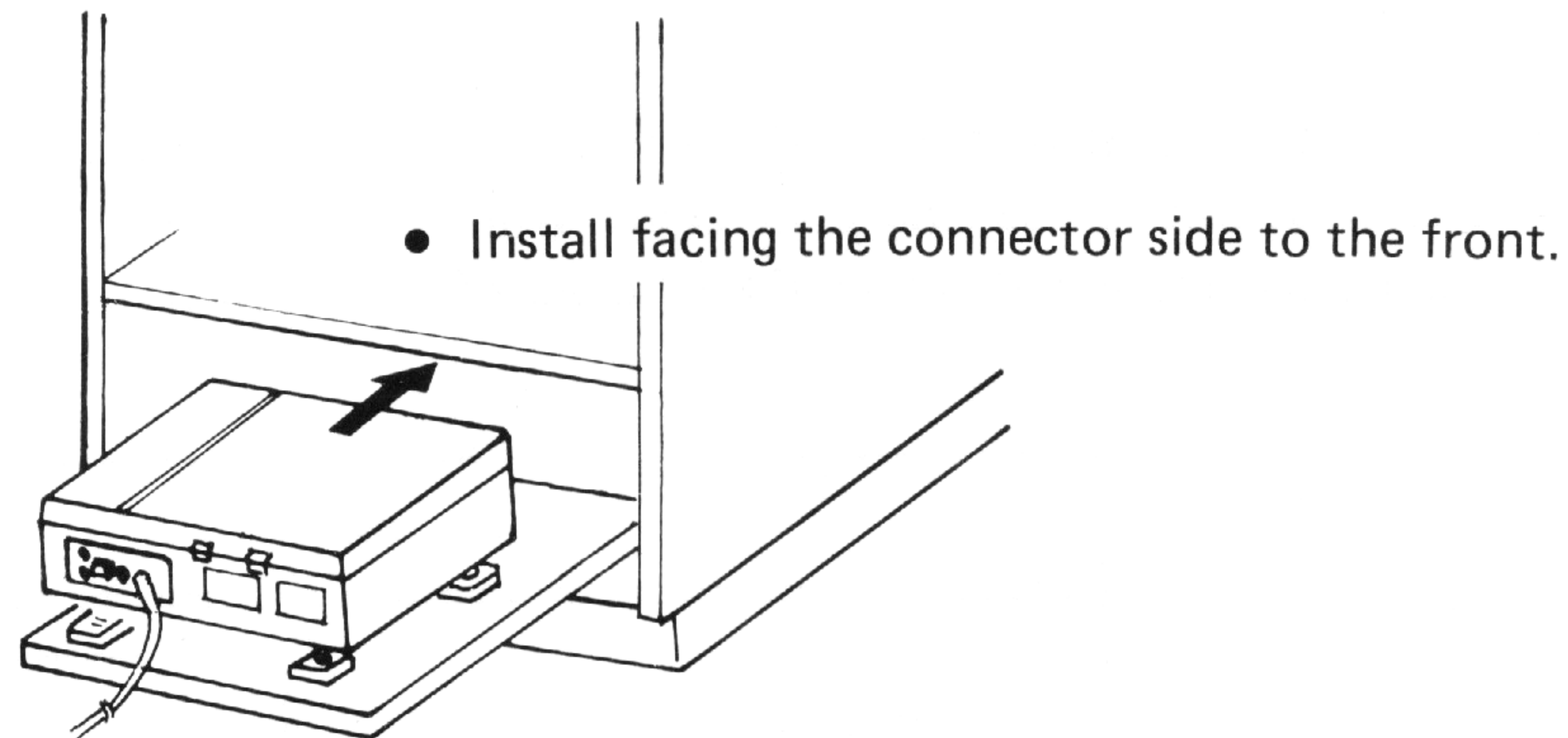


- To stop operation for long time and for transportation, please fix the screw and lens cap without fail.

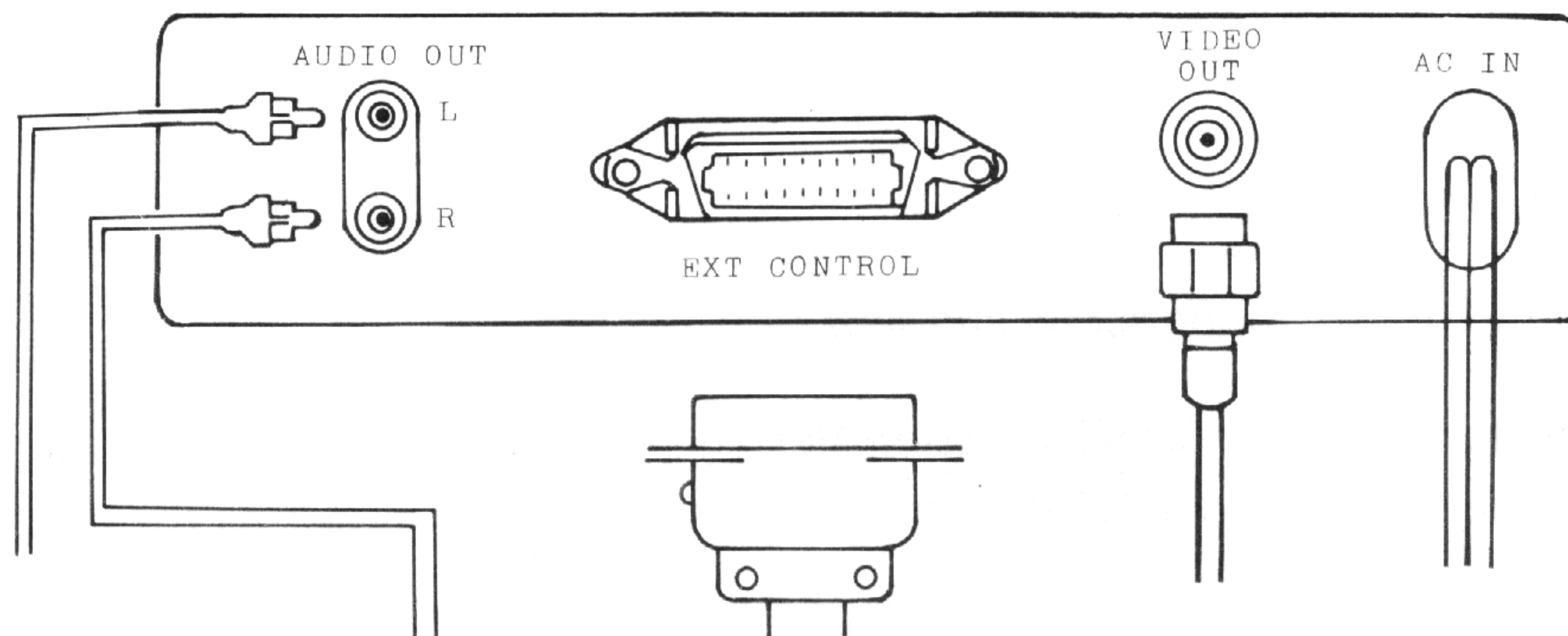
5) How to fit the disc

- Set the laser disc, putting the label side downward, onto the spindle and close the dust cover.

6) Put Laser disc player on the laser disc board facing the connector side to the front (FIG. 1) and push it with the laser disc player board onto the extreme inside of the machine. Then check the board is certainly locked.



7) Connect each connectors of laser disc player as shown below and check if all the lead wires are connected, but handle carefully and gently.



- AUDIO OUT — Sound power output terminal for Laser disc player (Identify pin-jacks, white for L and red for R)
- EXT CONTROL — The terminal to control Laser disc player through the game PC board.
- VIDEO OUT — Picture output terminal of Laser disc player
- AC IN — Power socket for **AC 120V**. Be sure to plug in the socket inside of the box indicated as LASER DISC.

8) Great care must be paid for lead wires not be pulled to damage when taking Laser disc player in and out.

8. Self Test

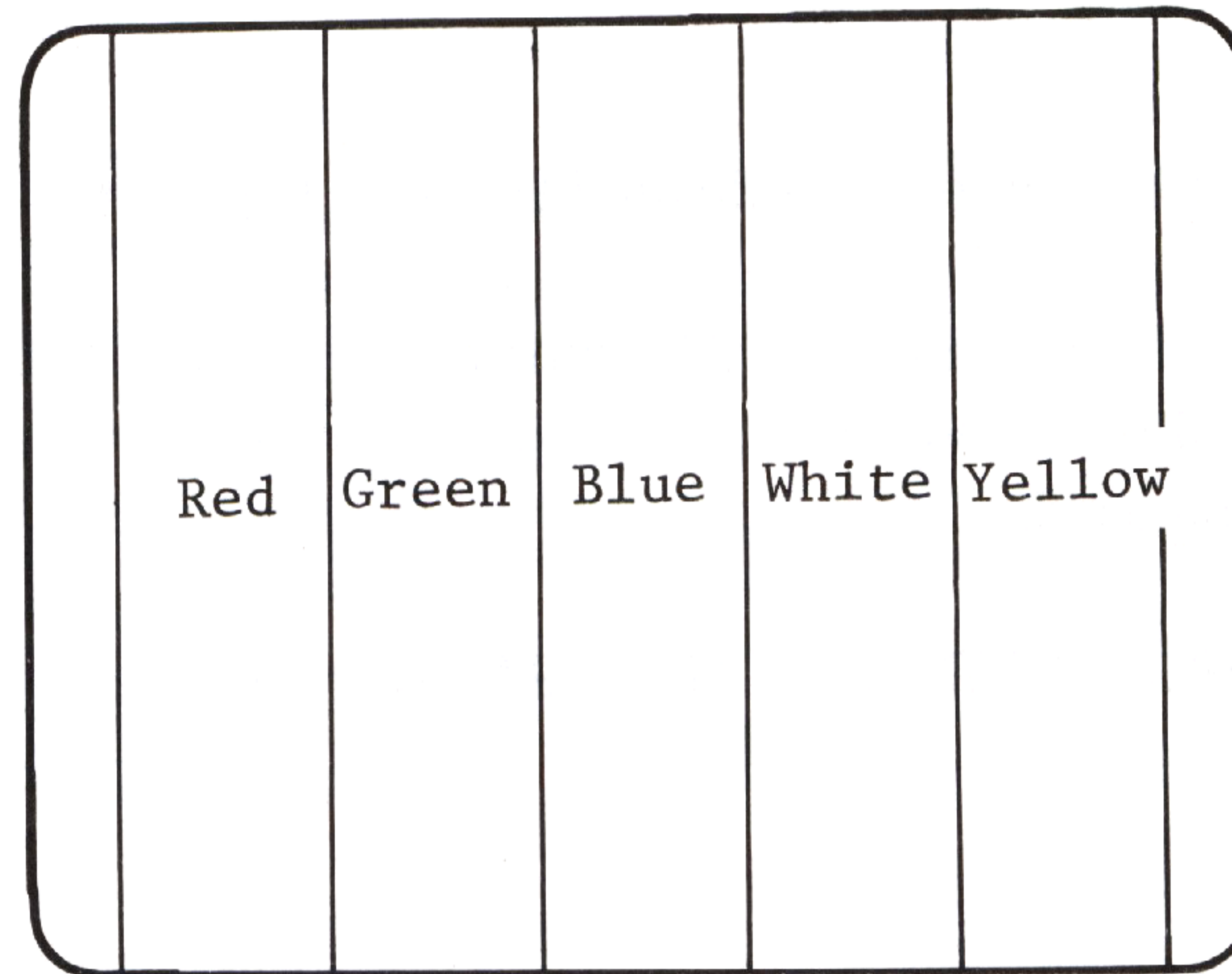
This machine accommodate SELF TEST function, INPUT TEST, COLOR TEST and CRT POSITION TEST can be performed under the following procedure.

1. While pushing TEST SW on the control board inside of the coin selector, turn POWER SW ON, then INPUT TEST will be coming out on the screen as being indicated below, 2.
2. INPUT TEST
 - 1) Setting condition of Dip switch is indicated (to refer Dip switch table).
 - 2) Putting each switches indicated to ON, indication at the right side of the corresponding switches turn from 0 to 1, thus confirming normal switching function be done. (COIN 2 is not being used).
 - 3) Upon finishing INPUT TEST push TEST SW, then proceed to the next COLOR TEST.

INPUT TEST						
	1	2	3	4	5	6
DSW 1	0	0	0	0	0	0
DSW 2	0	0	0	0	0	0
FR RIGHT			0		COIN 1	0
FR LEFT			0		COIN 2	0
FLAP RIGHT			0	1	START	0
FLAP LEFT			0	2	START	0
FAZER			0			
BURN			0			

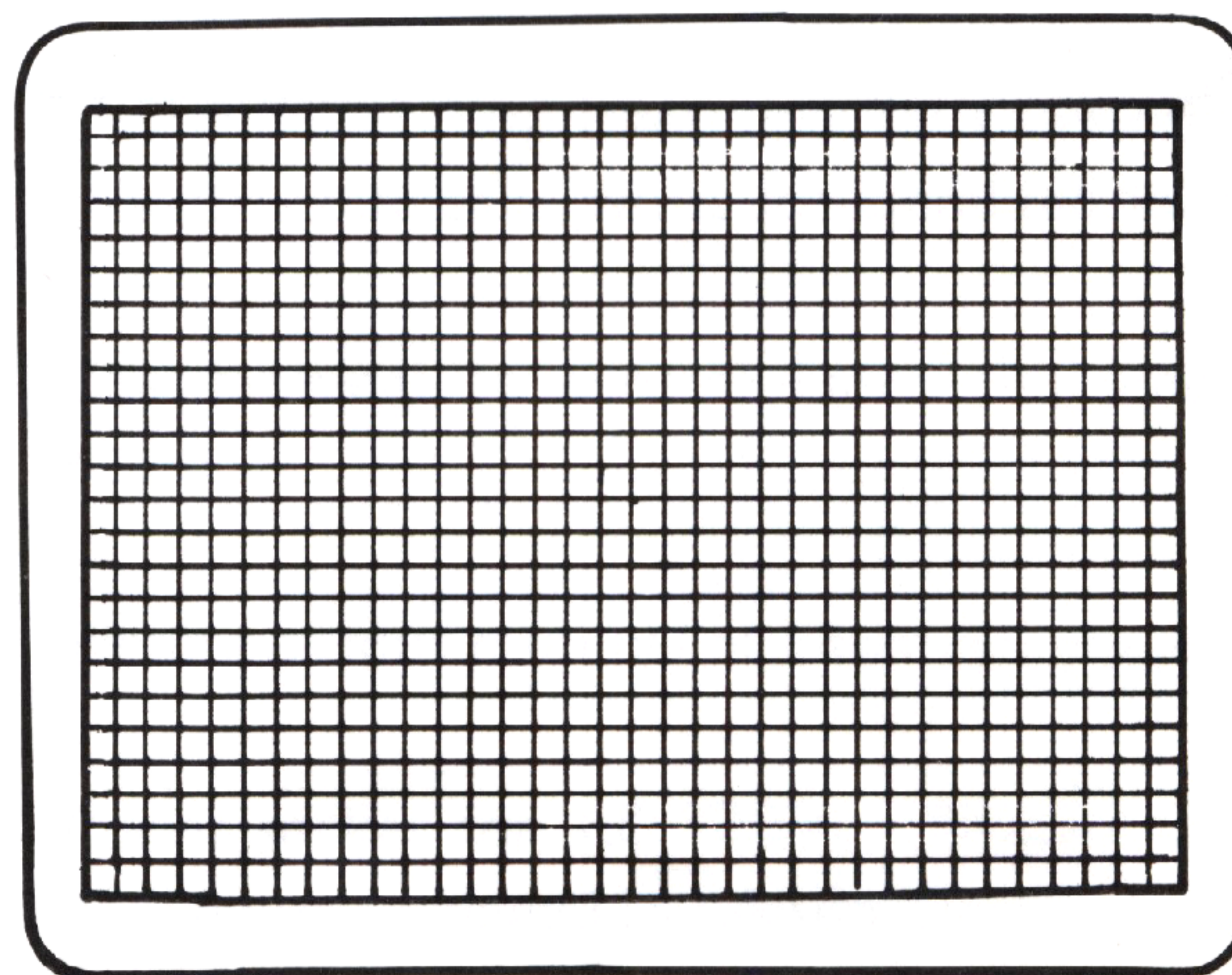
3. COLOR TEST

- 1) Avail it for color balance adjustment of CRT Monitor (to refer adjustment of CRT monitor).
(Do not adjust CRT Monitor when not required.)
- 2) When finishing COLOR TEST adjustment, push TEST SW, and proceed to the next CRT POSITION TEST.



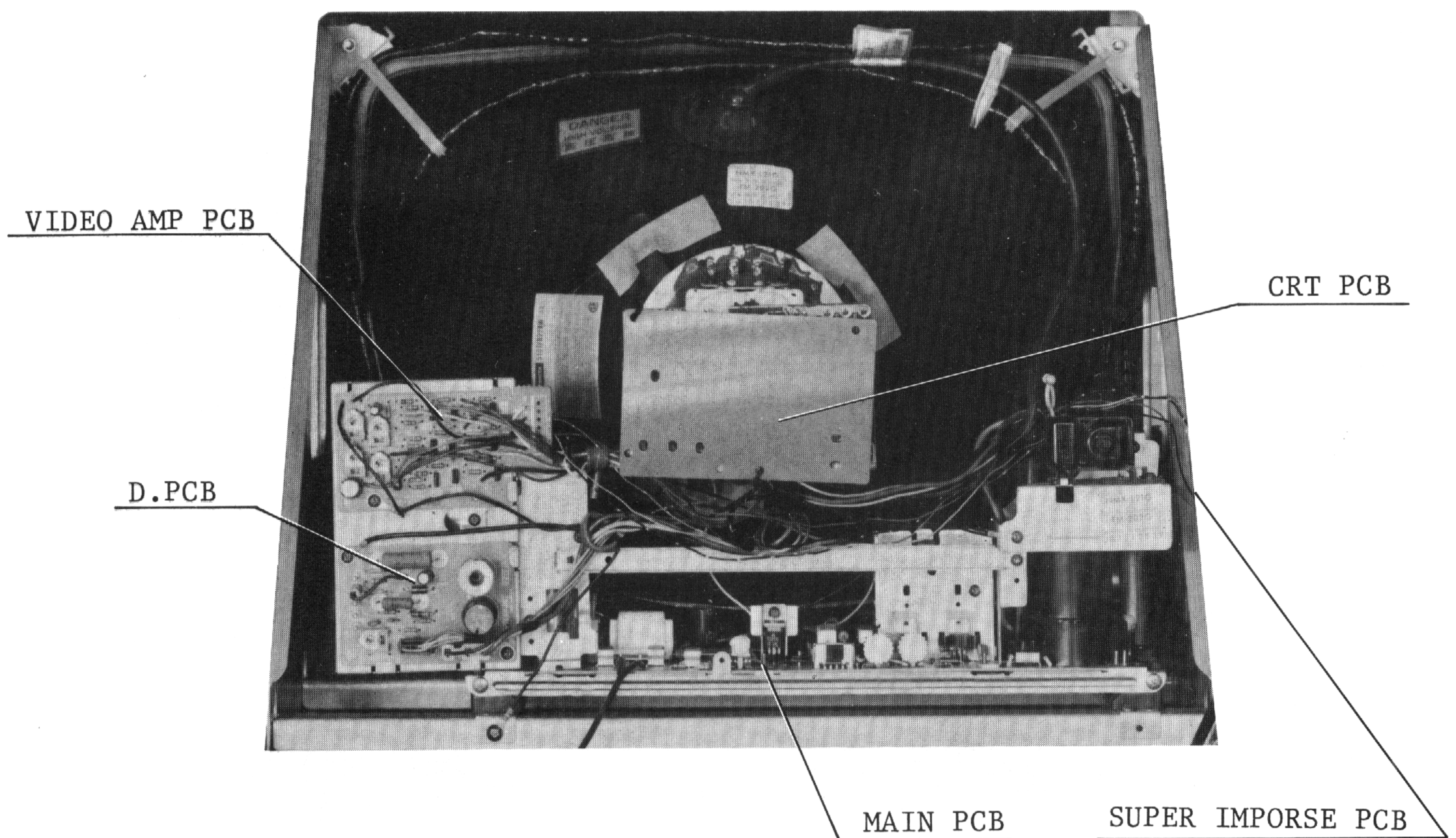
4. CRT POSITION TEST

- 1) Available to check linearity of monitor by CROSS HATCH (to refer CRT Monitor adjustment).
- 2) When CRT POSITION TEST is over, push TEST SW again.
- 3) STAND BY will be coming out on the screen, then, after a while, it will be back to game position.



9. Adjustment of CRT Monitor

- Adjustment of CRT monitor is already done in the factory for the best condition, but slight trimming may be required depending on location.
- This machine contains super-impose circuit which composes NTSC signal from Laser disc player and RGB input signal of game machine PCB, so careless adjustment will cause disorder on synchronization, picture and color balance, if wrong adjustment is done.
- High voltage is loaded on CRT Monitor part, so please be carefull to adjust it.



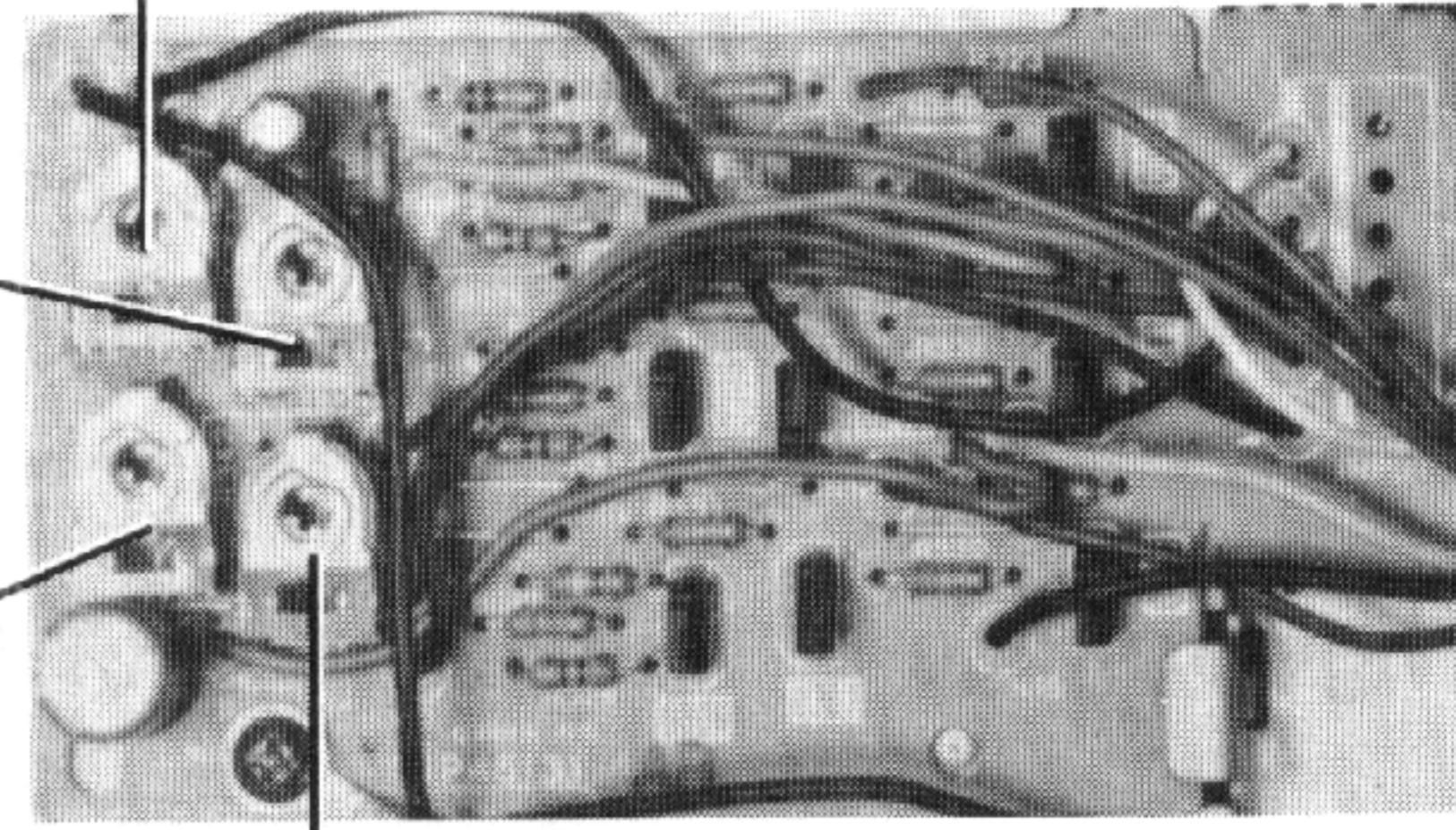
1. VIDEO AMP PRINT PCB (avoid to adjust normally)

BRIGHT (Potentiometer for brightness)

R.GAIN (Potentiometer for RED contrast)

G.GAIN (Potentiometer for GREEN contrast)

B.GAIN (Potentiometer for BLUE contrast)

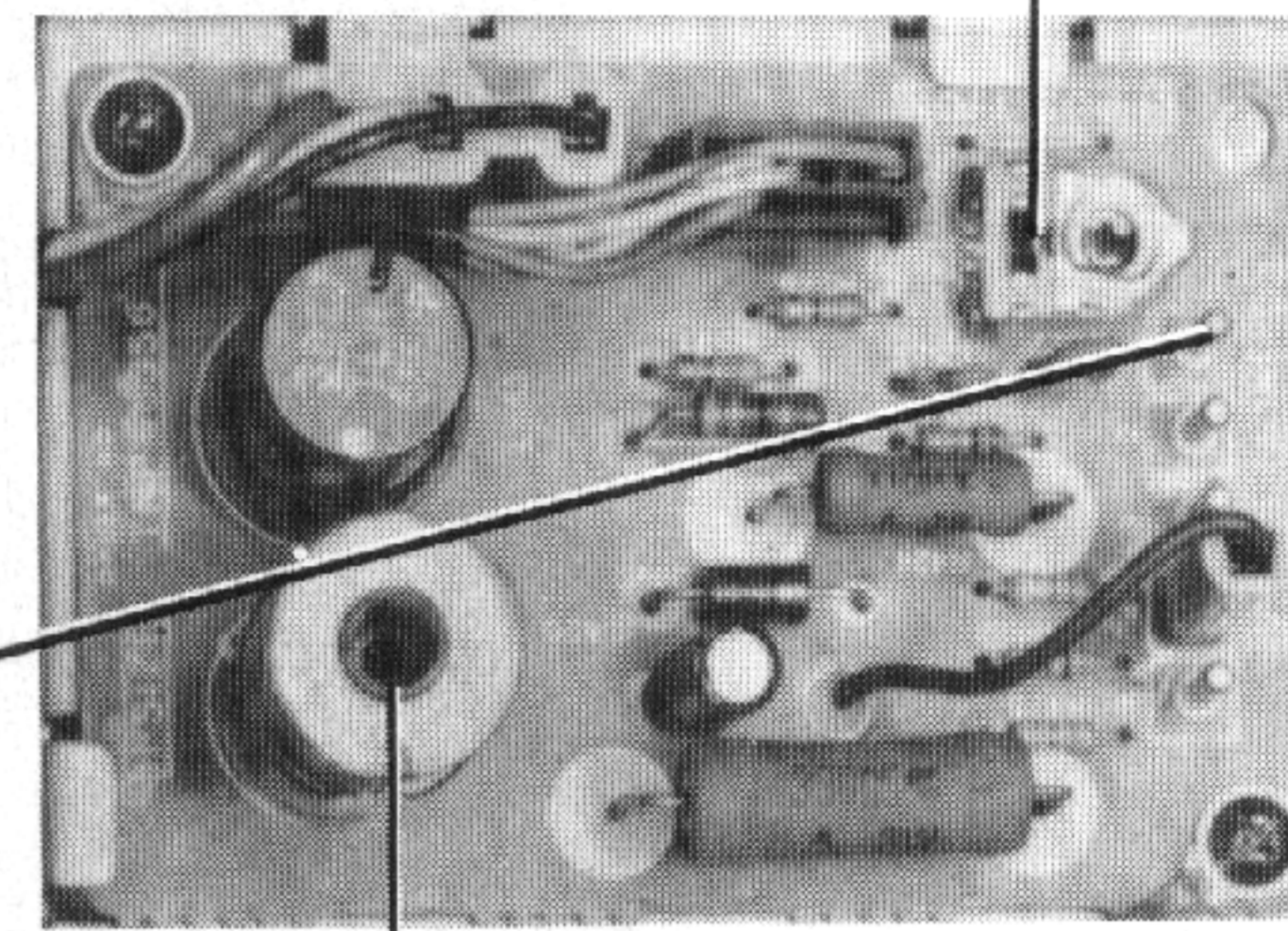


2. D. PRINT PCB

H. POSITION (Potentiometer for Horizontal position)

V. POSITION (Change over tip for Vertical position).
Depending on plug-in direction of the
connectors, position will be different.

H. SIZE (Adjusting coil for Horizontal gain)



3. MAIN PRINT PCB

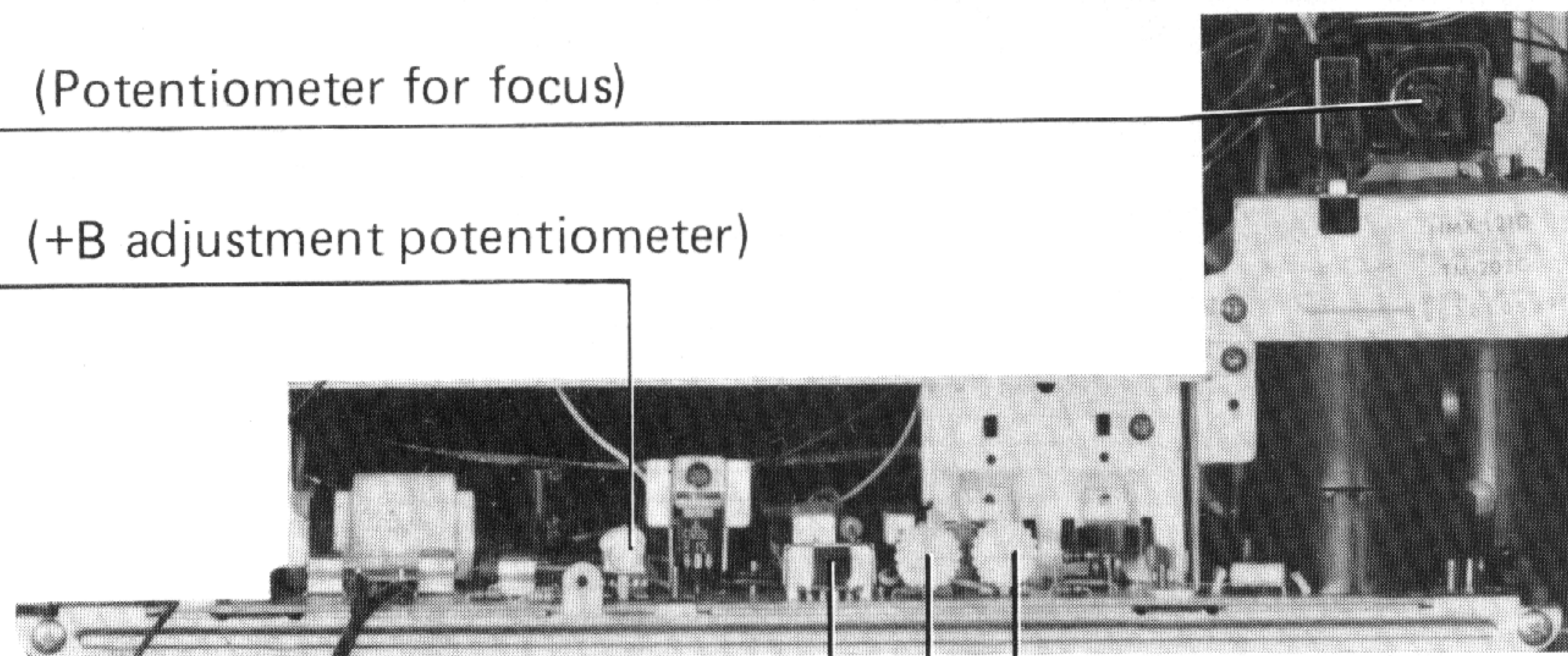
FOCUS (Potentiometer for focus)

+B ADJ (+B adjustment potentiometer)

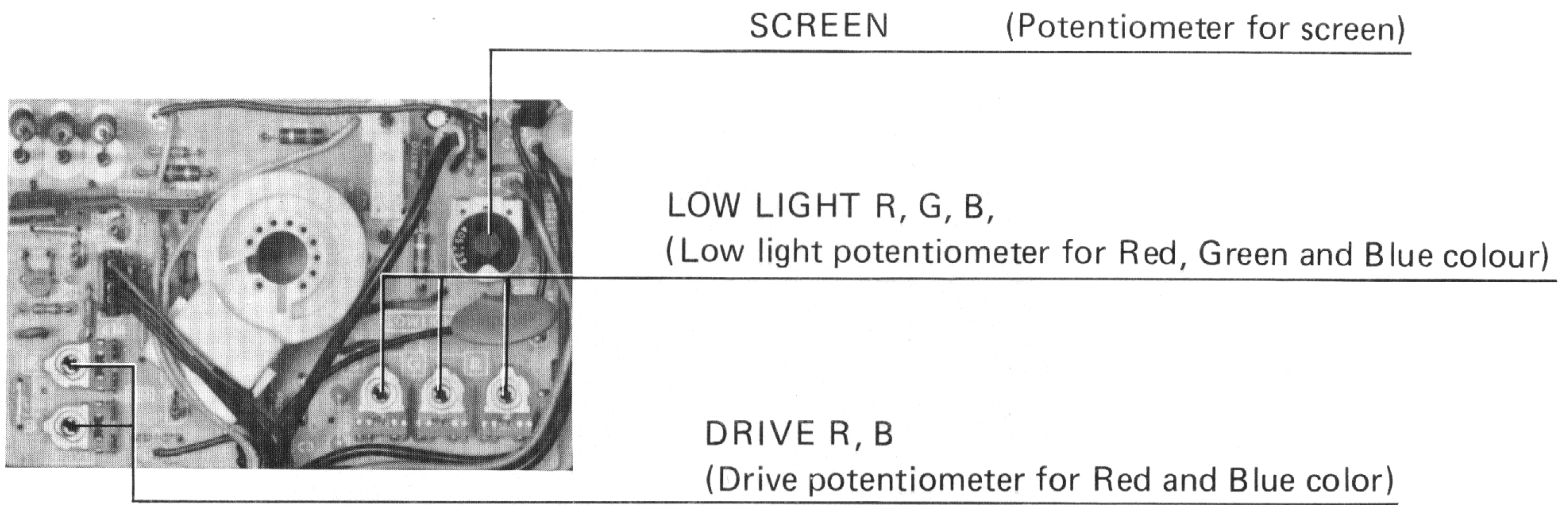
SVC SW (Service switch)

V-HOLD (Potentiometer for Vertical
synchronization)

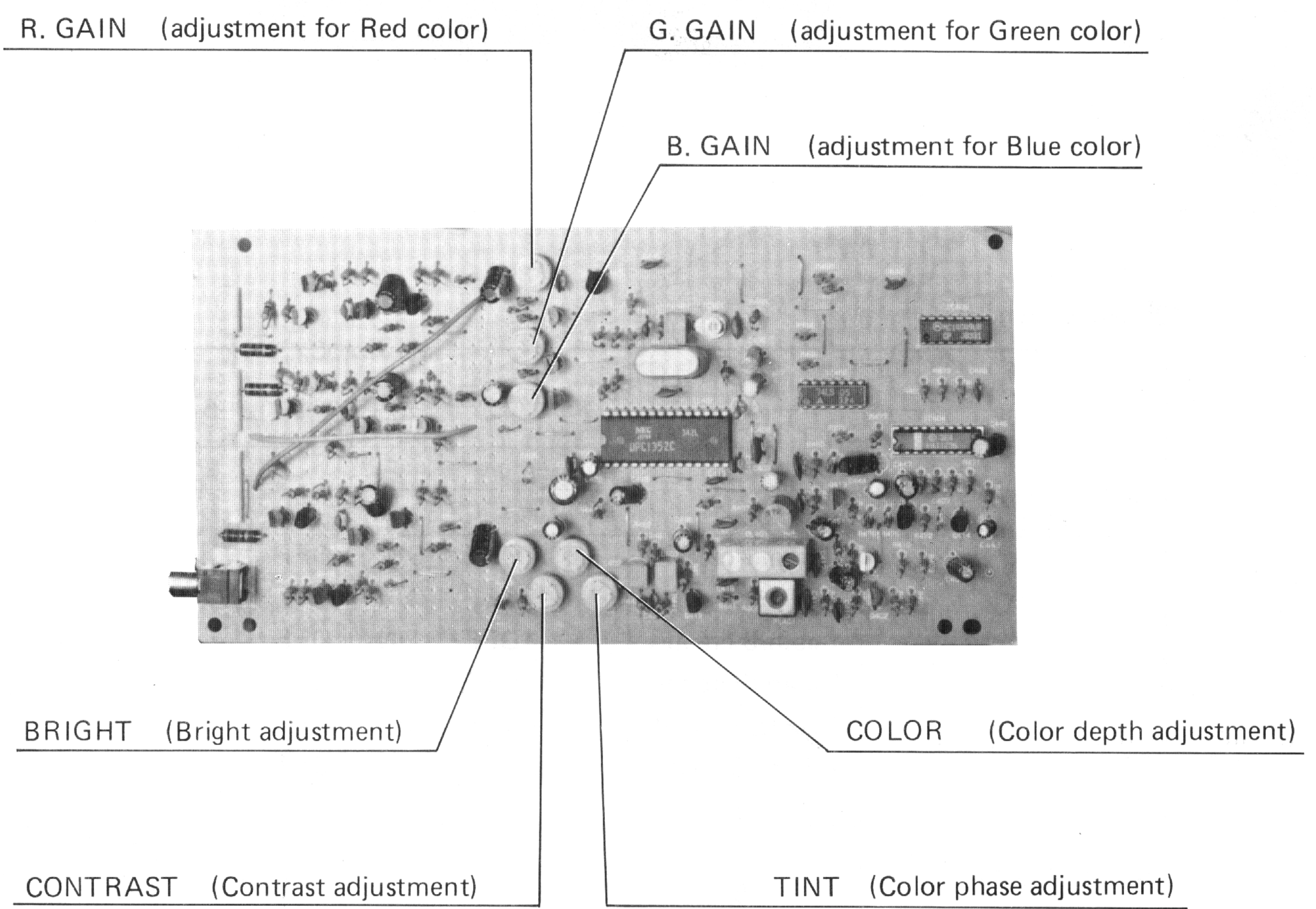
V-SIZE (Potentiometer for
Horizontal gain)



4. CRT Printed circuit board (not to adjust normally)

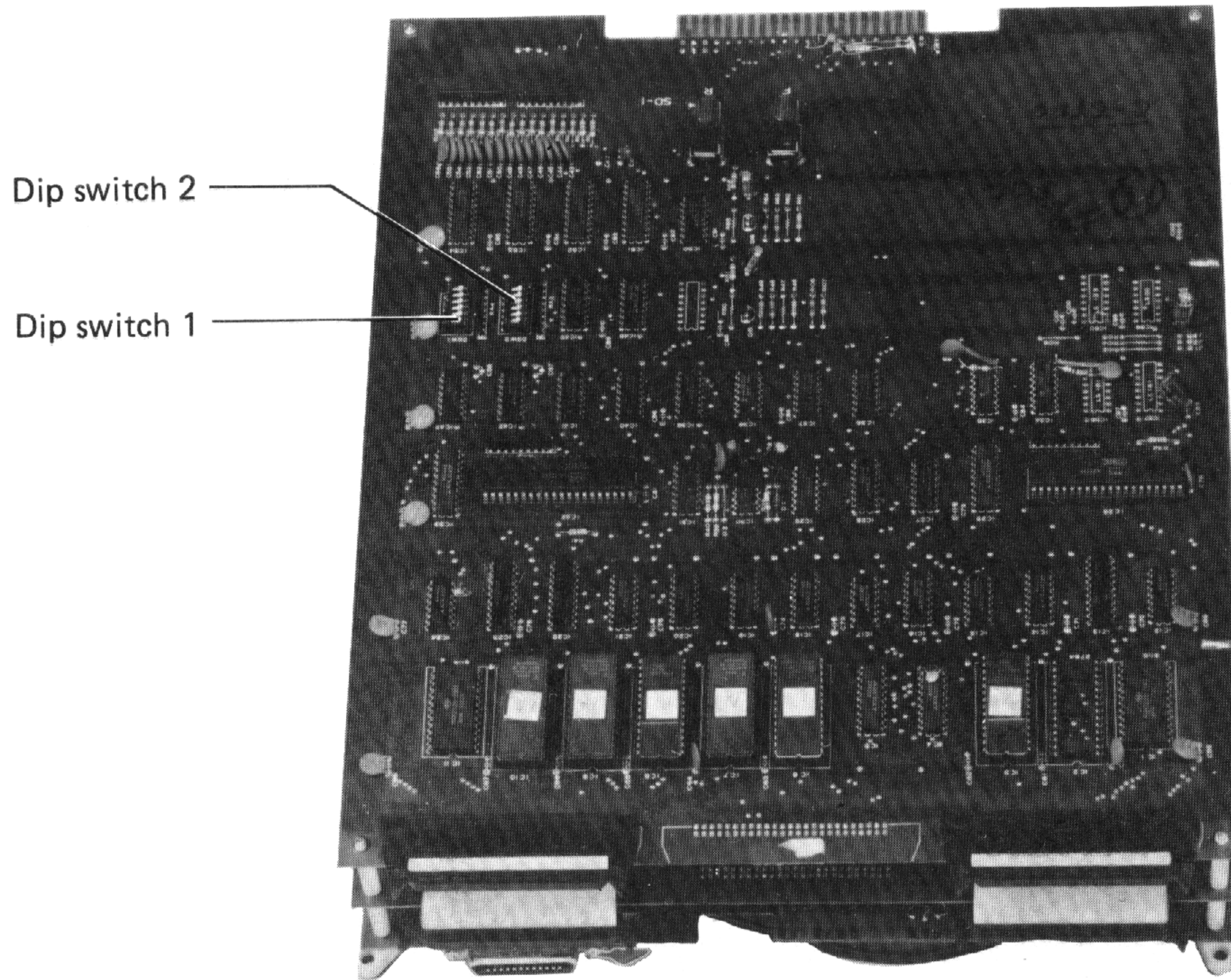


5. Super-impose printed circuit board (not to adjust normally)



10. Dip Switch Table

(1) Location of the dip switch



(Control PC. Board)

(2) Dip switch 1

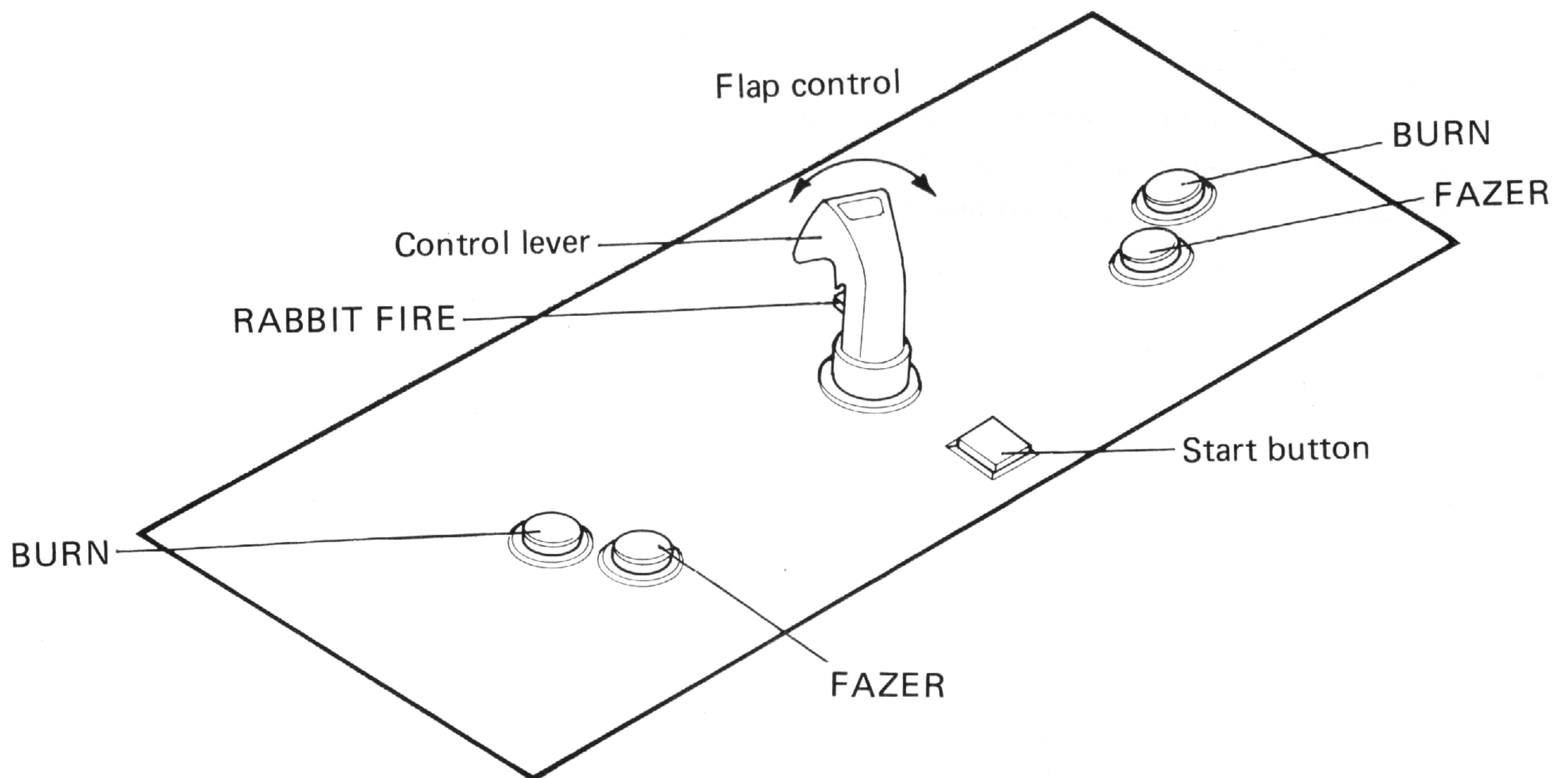
Contents		SW					
		1	2	3	4	5	6
Demonstration sound FROM PC BOARD	Yes	ON					
	No	OFF					
Coin switch 1	1 coin/1 credit		OFF	OFF	OFF		
	1 coin/2 credit		OFF	OFF	ON		
	1 coin/3 credit		OFF	ON	OFF		
	1 coin/6 credit		OFF	ON	ON		
	2 coins/1 credit		ON	OFF	OFF		
	2 coins/3 credit		ON	ON	OFF		
No. of flights	3					OFF	OFF
	4					ON	OFF
	5					OFF	ON
	10					ON	ON

(3) Dip switch 2

In case of inter-stellar upright type the coin switch 2 is not used.

Contents		SW	1	2	3	4	5	6
		Barrier UFO	YES	OFF				
NO	ON							
Coin switch 2	1 coin/1 credit			OFF	OFF	OFF		
	1 coin/2 credit			OFF	OFF	ON		
	1 coin/3 credit			OFF	ON	OFF		
	1 coin/6 credit			OFF	ON	ON		
	2 coins/1 credit			ON	OFF	OFF		
	2 coins/3 credit			ON	ON	OFF		

11. Game Procedure

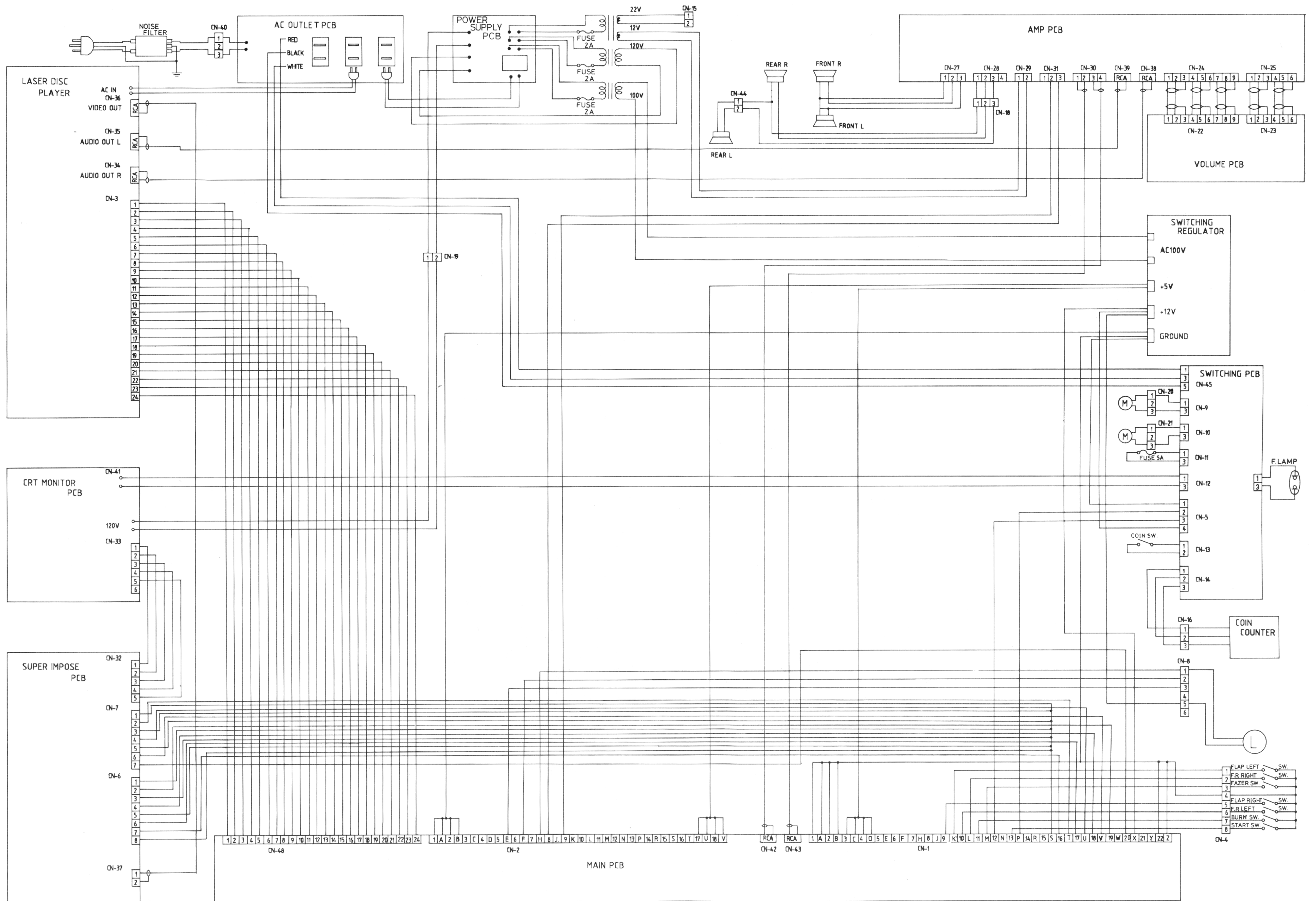


- 1) Game can be started upon pushing START button after putting in specified coin (available to change).
- 2) Move FRALD RANCER (Main character) to the right and to the left, and escape from enemy flights and attack.
- 3) Change direction of FRALD RANCER by flap control, and be prepared to attack them.
- 4) FAZER and RABBIT FIRE are used to attack enemy flights for battle in the air.
- 5) Depending on screen MAIN computer "RABIT" will come down to the middle and be the target (+). At this moment, aim the target on the ground and attack by BURN. (When target (+) is not on the screen you can not attack by BURN).
- 6) As being mentioned above, escape from enemy flights, and at the same time attack and destroy enemy flights.

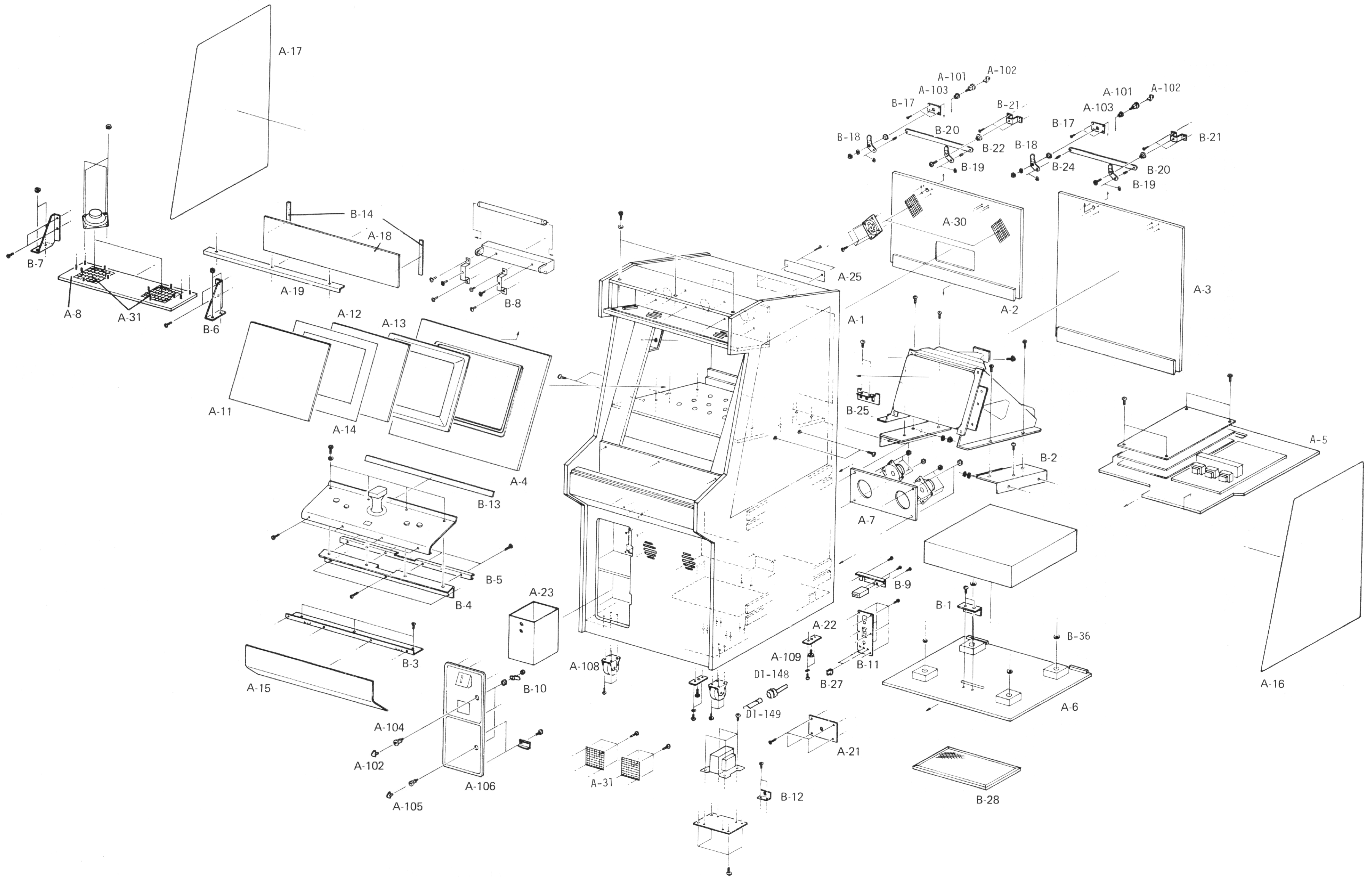
12. Cleaning of Filter

- Laser disc should not be dusted by any means.
Cleaning of filter must certainly be done once in fortnight.
Take out the maintenance door and detouch the filter positioned at the bottom, wash it out with water, then dry thoroughly in shadow.
For fixing it, please take care to eliminate gap.
Cleaning with chemical agent like Alcohol, Benzene and so on may damage the filter, it should be avoided absolutely.

WIRING DIAGRAM



FRONT CABINET



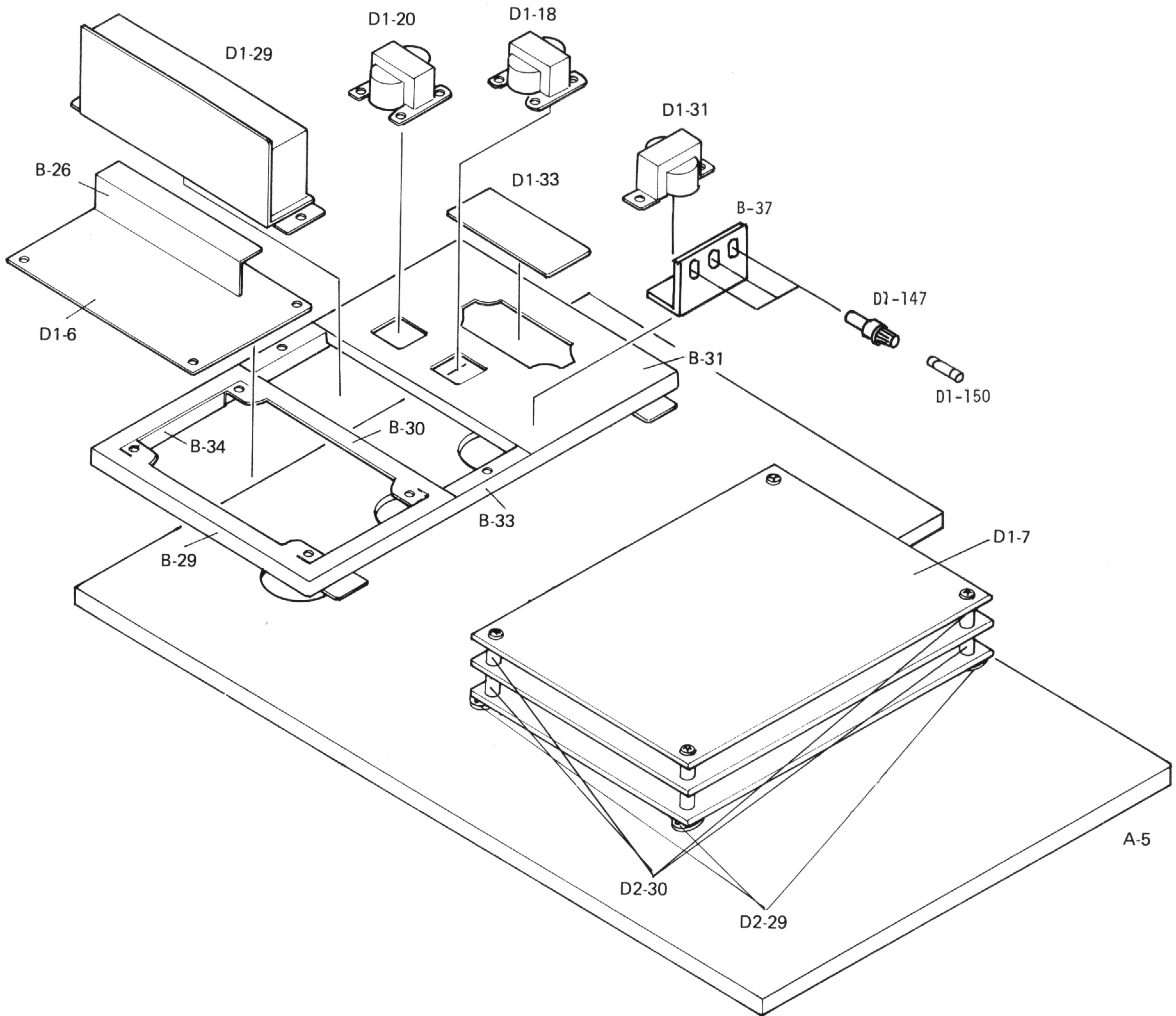
MAIN CABINET

REF. NO.	DESCRIPTION	MFG. NO.	QTY.
A-1	MAIN CABINET	8B00090	1
A-2	MAINTENANCE DOOR (TOP)	8B00068	1
A-3	MAINTENANCE DOOR (BOTTOM)	8B00077	1
A-4	FRONT PANEL BASE	8B00078	1
A-6	LASER DISC PLAYER BOARD	8B00072	1
A-7	FRONT SPEAKER BOARD	8B00079	1
A-8	TOP SPEAKER BOARD	8B00087	1
A-11	FRONT PANEL	8P00025	1
A-12	GLASS	8B00057	1
A-13	CRT MASK	8B00041	1
A-14	FRONT DECORATION SHEET	8E00082	1
A-15	FRONT DECORATION LABEL	8E00069	1
A-16	SIDE DECORATION LABEL (R)	8E00073	1
A-17	SIDE DECORATION LABEL (L)	8E00074	1
A-18	ILLUMINATION PANEL	8E00068	1
A-19	ILLUMINATION PANEL MOUNTING ANGLE	8S00081	1
A-21	AC CORD STOPPER	8G00051	1
A-22	ADJUSTER PLATE	8S00054	2
A-23	CASH BOX	8R00084	1
A-25	RATING PLATE	8E00072	1
A-30	FAN MOTOR COVER SHEET	8P00021	2
A-31	PUNCHED METAL	8H00026	4
A-101	LOCK	8A00011	2
A-102	KEY	8A00013	3
A-103	TRIM RING	6H00152	2
A-104	LOCK	51S0R9S	1
A-105	CASH BOX KEY	71S2R9R	1 KIT
A-106	COIN SELECTOR ASS'Y	8A00032	1 KIT
A-108	CASTER	KHN-50HR	2
A-109	ADJUSTER	AJ-36	2
B-1	LASER DISC PLAYER BOARD STOPPER	8S00061	1
B-2	CRT BASE REINFORCEMENT ANGLE	8R00074	2
B-3	CONTROL PANEL MOUNTING ANGLE (A)	8R00086	1
B-4	CONTROL PANEL MOUNTING ANGLE (B)	8R00087	1
B-5	CONTROL PANEL MOUNTING ANGLE (C)	8R00082	1
B-6	SP PLATE MOUNTING BRACKET (R)	8S00085	1
B-7	SP PLATE MOUNTING BRACKET (L)	8S00084	1
B-8	FLUORESCENT LAMP MOUNTING BRACKET	8S00082	2
B-9	COIN COUNTER MOUNTING BRACKET	8R00085	1
B-10	KEY LOCK LEVER	8S00086	2
B-11	SWITCH PLATE	8R00083	1
B-12	AC CORD STOPPER	8S00089	1
B-13	CONTROL PANEL CUSHION	8P00026	1
B-14	ILLUMINATION PANEL CUSHION	8P00027	3
B-17	KEY HOLDER PLATE	8S00010	2
B-18	KEY LOCK (A)	8S00045	2
B-19	KEY LOCK (B)	8S00046	2
B-20	JOINT	8R00067	2
B-21	KEY LOCK HOLDER	8S00044	2
B-22	SPACER	8U00009	2

REF. NO.	DESCRIPTION	MFG. NO.	QTY.
B-24	JOINT STUD	8U00010	4
B-25	AC OUTLET HOLDER	8S00035	1
B-27	VOLUME KNOB	21NF781	2
B-28	FILTER	8A00016	1
B-36	LASER DISC PLAYER CUSHION	8G00018	4
B-37	FUSE HOLDER MOUNTING BRACKET	8S00091	1
D1-5	CRT MONITOR ASS'Y	1810539	1
D1-23	NOISE FILTER	1810542	1
D1-102	SPEAKER (WOOFER)	1520410	2
D1-113	COIN COUNTER	1670189	1
D1-145	POWER SW.	1623332	1
D1-146	ERASE SW.	1623338	1
D1-148	FUSE HOLDER	1790383	1
D1-149	FUSE 5A	1790401	1
D1-155	FAN MOTOR	1640224	4
D1-196	SERVICE SW.	1622899	1
D1-197	TEST SW.	1622934	1
D1-225	SWITCH PC BOARD ASS'Y	1613205A	1
D4-21	SUPER IMPOSE PC BOARD ASS'Y	1613161A	1
D5-1	VOLUME IPC BOARD ASS'Y	1613163A	1
D5-3	VOLUME	5390519	3
S-2	CONTROL LABEL	8E00011	1
S-3	VOLTAGE LABEL	8E00045	1
S-7	CONTROL LABEL	8E00079	1
S-8	AC OUTLET LABEL	8E00019	1
S-44	HOW TO PLAY LABEL	8E00044	1
LA-1	SCREW, M8 x 35	SRC0835	4
LA-6	SCREW, M4 x 20	SKK5420	3
LA-10	SCREW, M6 x 25	CPM3625	8
LA-12	SCREW, M6 x 20	SPM3660	4
LA-17	SCREW, ϕ 4.1 x 13	SWU3R13	4
LA-18	SCREW, ϕ 2.7 x 10	SWU3V10	2
LA-25	SPRING WASHER, M8	WSM815A	4
LA-27	SPRING WASHER, M6	WSM612W	4
LA-30	WASHER, M4	WPK4138	4
LA-31	WASHER, M4	WPK4138	3
LA-35	NUT, M8	NHM3080	4
LA-301	SCREW, M4 x 7	SZKA407	8
LB-4	SCREW, M3 x 6	CPM3306	2
LB-5	SCREW, M3 x 6	CPM3306	2
LB-7	SCREW, M3 x 10	FPM3310	9
LB-9	SCREW, M3 x 20	FPM3320	4
LB-11	SCREW, M3 x 40	FPM3340	2

REF. NO.	DESCRIPTION	MFG. NO.	QTY.
LB-14	SCREW, M4 x 6	CPM3406	4
LB-20	SCREW, M4 x 10	FPM3410	2
LB-21	SCREW, M4 x 20	FPM3420	4
LB-22	SCREW, M4 x 20	CPM3420	2
LB-23	SCREW, M4 x 20	FPM3420	4
LB-24	SCREW, M4 x 20	CPM3420	2
LB-25	SCREW, M4 x 25	FPM3425	4
LB-30	SCREW, M6 x 20	FPM3620	3
LB-31	SCREW, M6 x 20	CPM3620	2
LB-33	SCREW, M6 x 35	FPM3635	3
LB-34	SCREW, M6 x 35	FPM3635	4
LB-35	SCREW, M6 x 35	FPM3635	2
LB-44	SCREW, M3.5 x 35	DPM1T35	8
LB-47	SCREW, ϕ 3.1 x 32	SVM3U32	4
LB-48	SCREW, ϕ 3.5 x 13	SWU3T13	30
LB-49	SCREW, ϕ 3.1 x 13	SWU3U13	2
LB-50	SCREW, ϕ 4.1 x 13	SWU3R13	4
LB-51	SCREW, ϕ 4.1 x 13	SWU3R13	4
LB-52	SCREW, ϕ 2.7 x 10	SWU3V10	8
LB-54	SCREW, ϕ 4.1 x 16	SVU3R16	2
LB-55	NUT, M4	NHM3040	8
LB-56	NUT, M4	NHM3040	8
LB-57	NUT, M4	NHM3040	4
LB-58	NUT, M4	NHM3040	4
LB-60	WASHER, ϕ 8.2 x ϕ 18 x t1.6	WPM818X	2
LB-75	E-RING, ϕ 4	EEU0040	4

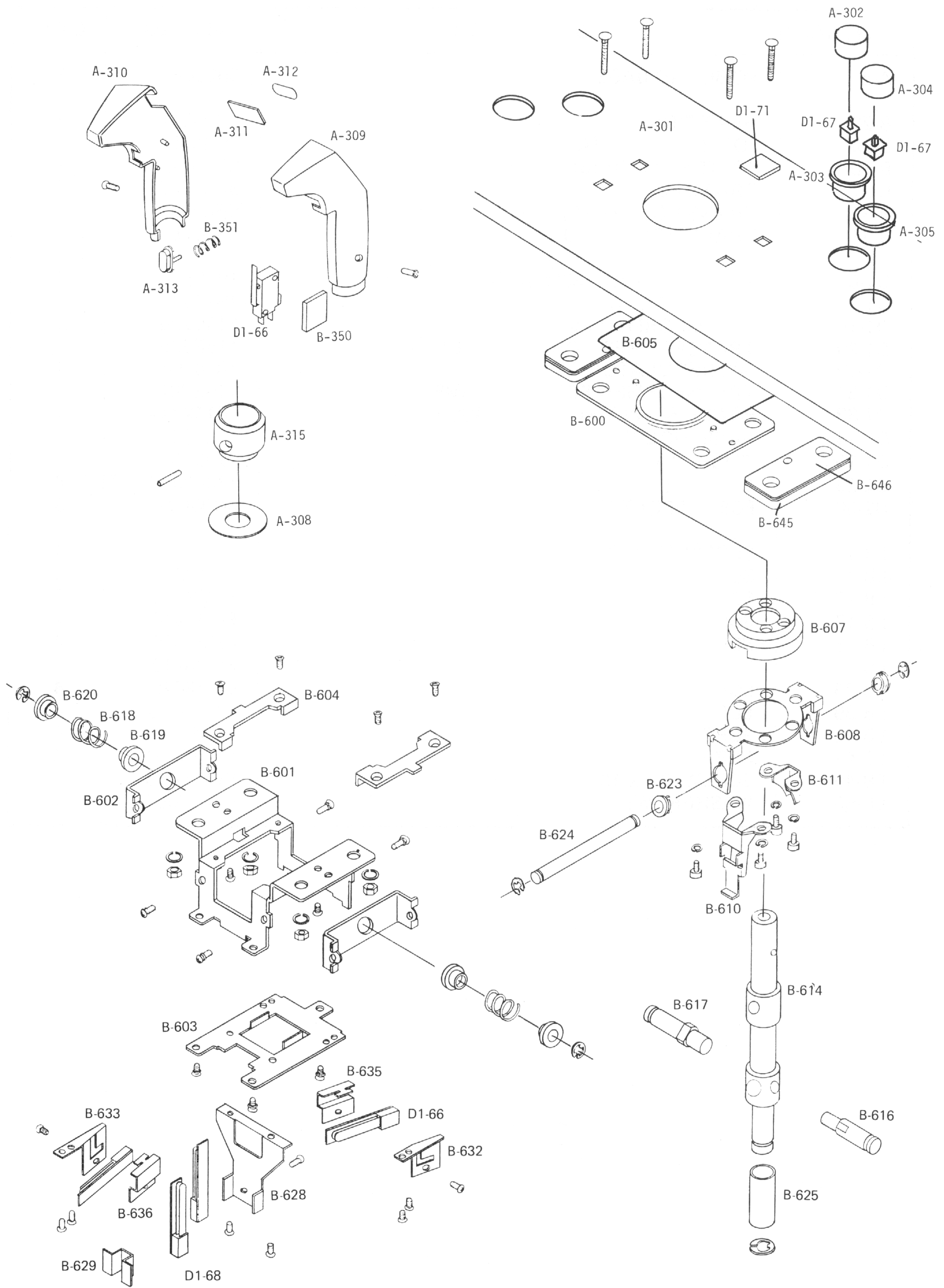
MAIN PC BOARD ASS'Y



MAIN PC BOARD ASS'Y

REF. NO.	DESCRIPTION	MFG. NO.	QTY.
A-5	PC BOARD BASE	8B00089	1
B-26	HEAT SINK	8R00042	1
B-29	JOINT HOLDER (A)	8S00041	1
B-30	JOINT HOLDER (B)	8S00042	1
B-31	TRANS PLATE	8R00080	1
B-33	TRANS HOLDER (R)	8R00062	1
B-34	TRANS HOLDER (L)	8R00063	1
D1-6	AMP PC BOARD ASS'Y	1810508	1
D1-7	MAIN PC BOARD ASS'Y	1810505	1
D1-18	TRANSFORMER FOR CRT	115E236	1
D1-20	TRANSFORMER FOR SW. REGULATER	115E235	1
D1-29	SW. REGULATOR ASS'Y	1810506	1
D1-31	TRANSFORMER FOR AMP. LAMP.	115E237	1
D1-33	POWER SUPPLY PC BOARD ASS'Y	1613204A	1
D1-147	FUSE HOLDER	1790386	3
D1-150	FUSE 2A	1790402	3
D2-29	PCB LEG.	1790393	4
D2-30	PCB SUPPORT	8N00007	8
LB-1	SCREW, M3 x 70	SPM3370	4
LB-7	SCREW, M3 x 10	FPM3310	9
LB-16	SCREW, M4 x 10	FPM3410	2
LB-17	SCREW, M4 x 10	FPM3410	2
LB-18	SCREW, M4 x 10	FPM3410	4
LB-19	SCREW, M4 x 10	FPM3410	4
LB-29	SCREW, M6 x 20	CPM3620	4
LB-39	SCREW, M3 x 10	DLM3310	8
LB-40	SCREW, M3 x 10	DLM3310	4
LB-41	SCREW, M3 x 10	DLM3310	4
LB-46	SCREW, 2.7 x 16	SVM3V16	4
LB-63	WASHER, M3	WDU3064	1

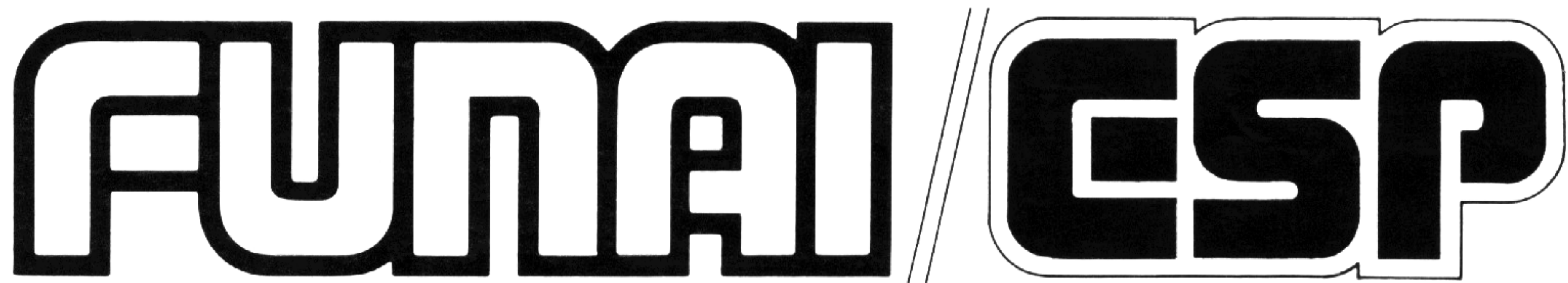
JOY STICK ASS'Y



JOY STICK ASS'Y

REF. NO.	DESCRIPTION	MFG. NO.	QTY.
A-301	CONTROL PANEL	8G00052	1
A-302	PUSH SWITCH (B)	8D00008	2
A-303	PUSH SWITCH HOLDER (B)	8D00009	2
A-304	PUSH SWITCH (A)	8D00010	2
A-305	PUSH SWITCH HOLDER (A)	8D00011	2
A-308	SHAFT COVER	8P00024	1
A-309	SHIFT KNOB (L)	8M00003	1
A-310	SHIFT KNOB (R)	8M00002	1
A-311	NAME PLATE	8N00020	1
A-312	FUNAI LABEL	8E00075	1
A-313	FIRE KNOB	8N00021	1
A-315	SHIFT KNOB SOCKET	8J00004	1
B-350	CUSHION	8N00022	1
B-351	SPRING	8V00006	1
B-600	BASE	8S00030	1
B-601	JOY STICK CHASSIS	8R00081	1
B-602	SUB CHASSIS	8S00079	2
B-603	SWITCH BASE U	8S00075	1
B-604	GUIDE	8N00013	2
B-605	BASE (B)	8S00090	1
B-607	SHAFT HOLDER	8N00015	1
B-608	SHAFT BRACKET U	8S00074	1
B-610	SWITCH ARM U	8S00073	1
B-611	BRACKET U	8S00078	1
B-614	SHAFT U	8U00015	1
B-616	SPRING SHAFT U	8U00018	1
B-617	SPRING STUD U	8U00016	1
B-618	SHAFT SPRING	8V00002	2
B-619	SPRING BUSH LU	8N00019	2
B-620	SPRING BUSH SU	8N00018	2
B-623	BUSH, $\phi 8$	8N00017	2
B-624	SHAFT PIN	8U00014	1
B-625	SHAFT SLEEVE	8N00016	1
B-628	LEAF SWITCH STAND	8S00077	1
B-629	LEAF SWITCH BASE	8S00076	1
B-632	LEAF SWITCH HOLDER (L)	8S00069	1
B-633	LEAF SWITCH HOLDER (R)	8S00070	1
B-635	LEAF SWITCH SET PIECE (L)	8S00071	1
B-636	LEAF SWITCH SET PIECE (R)	8S00072	1
B-639	SWITCH PLATE	8N00014	4
B-645	JOY STICK SPACER	8S00080	2
B-646	JOY STICK SPACER (B)	8S00087	4
D1-66	LIMIT SWITCH	1624090	1
D1-68	LEAF SWITCH	1624108	4
D1-67	PUSH SWITCH, PCB	1622935/1613240	4
D1-71	START SWITCH ASS'Y	1622904	1
LA-302	SCREW, M4 x 7	SZKA407	2
LA-305	SCREW, M4 x 25	SRK0425	4
LA-309	SCREW, M8 x 16	SKK5816	1
LA-315	SPRING WASHER, M4	WSM4081	4

REF. NO.	DESCRIPTION	MFG. NO.	QTY.
LA-320	NUT, M4	NHM3040	4
LB-601	SCREW, M4 x 8	SZK6408	4
LB-610	SCREW, M4 x 6	CPM3406	3
LB-611	SCREW, M4 x 6	CPM3406	4
LB-613	SCREW, M3 x 6	CPM3306	2
LB-614	SCREW, M3 x 6	CPM3306	2
LB-615	SCREW, M3 x 6	CPM3306	2
LB-618	SCREW, M3 x 6	GDMS306	4
LB-620	SCREW, M3 x 6	GBMS306	2
LB-621	SCREW, M3 x 6	GBMS306	1
LB-622	SCREW, M3 x 6	GBMS306	1
LB-623	SCREW, M3 x 6	GBMS306	1
LB-627	SCREW, M4 x 5	STU3405	4
LB-632	SPRING WASHER, M4	WSM4081	4
LB-639	E-RING, $\phi 6$	EEU0060	2
LB-640	E-RING, $\phi 6$	EEU0060	1
LB-641	E-RING, $\phi 6$	EEU0060	1
LB-642	E-RING, $\phi 9$	EEU0090	1



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