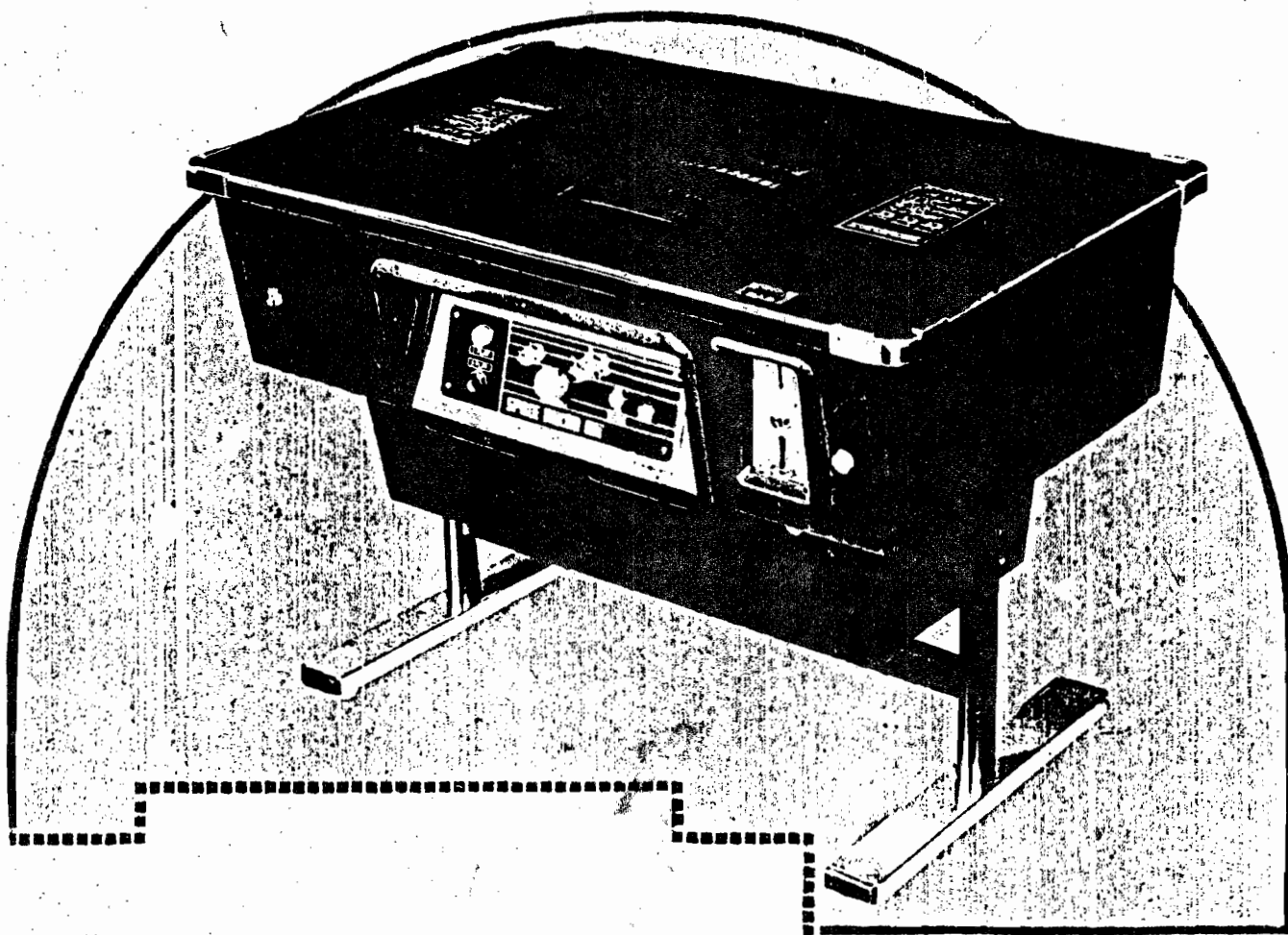


# PHOENIX

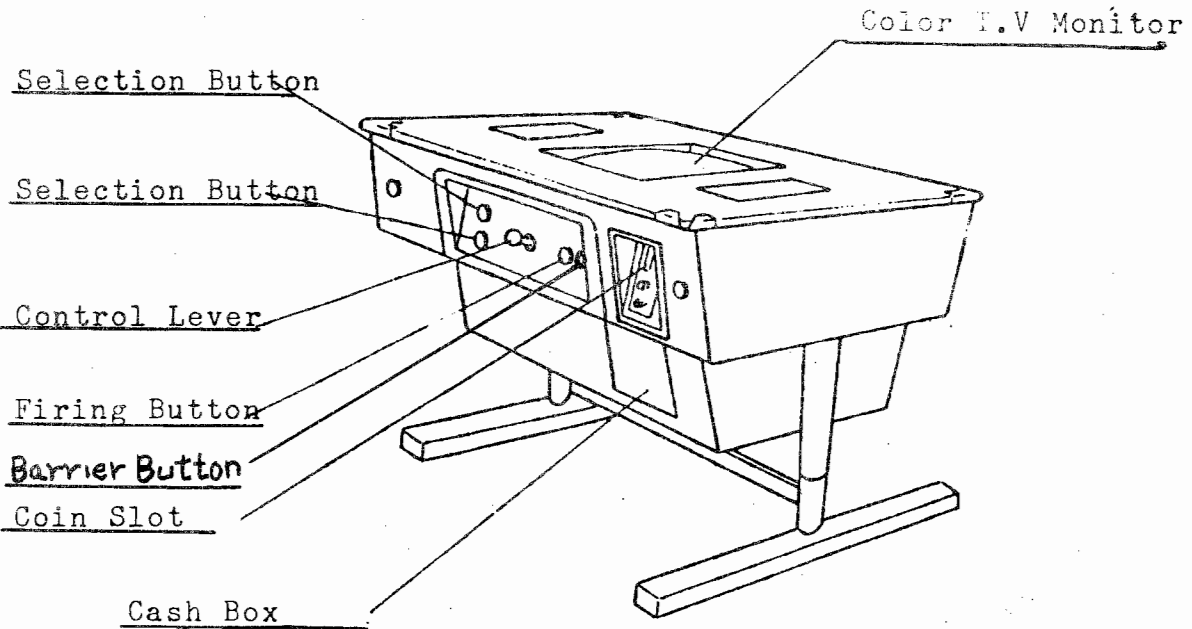
## SERVICE INSTRUCTION



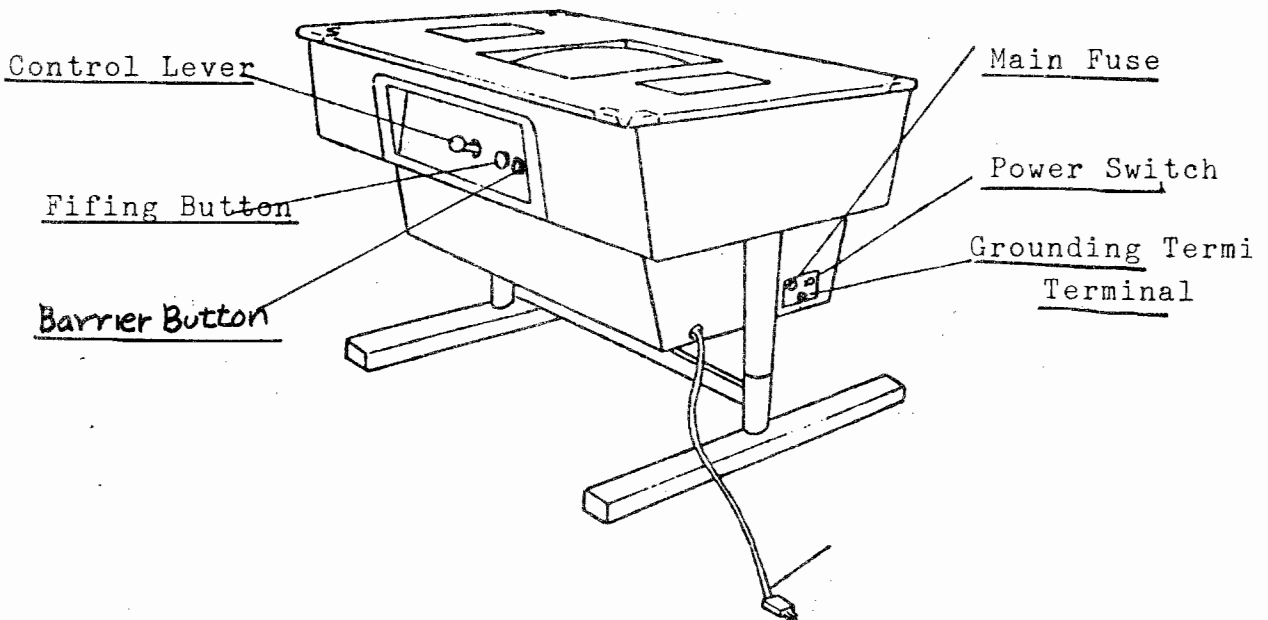
# PHOENIX

## EACH PARTS NAME (TABLE MODEL)

PLAYER 1 SIDE



PLAYER 2' SIDE



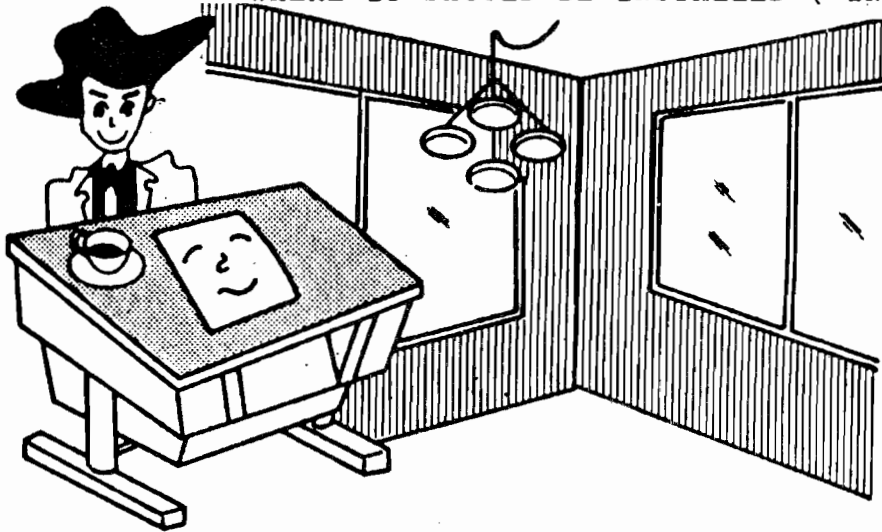
# PHOENIX

## SPECIFICATIONS

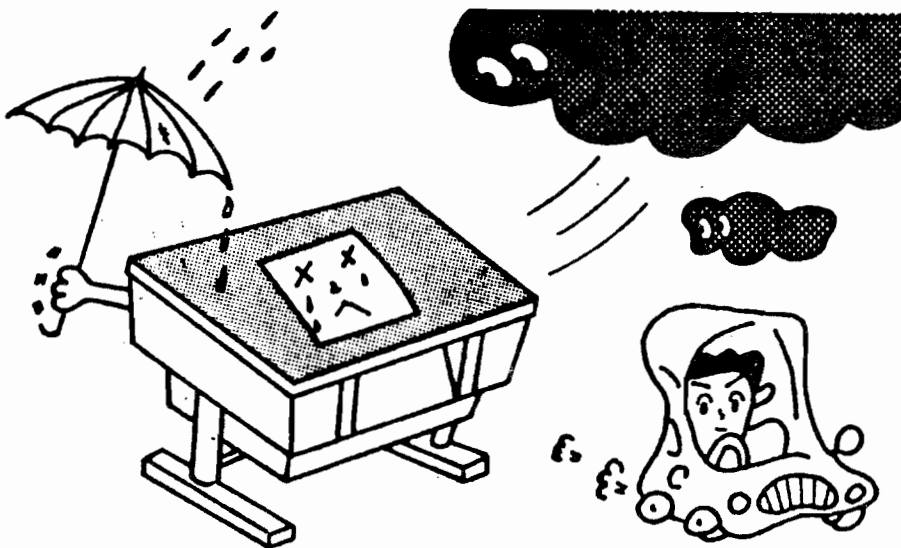
For protection of the color Video Monitor used in the machine, care must especially be taken not to give impact on this machine during its transportation and transfer.

This machine is designed for indoor installation. It should not be installed anywhere outdoors.

WHERE IT SHOULD BE INSTALLED ( INDOORS )



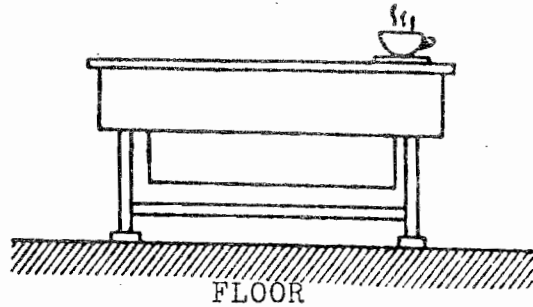
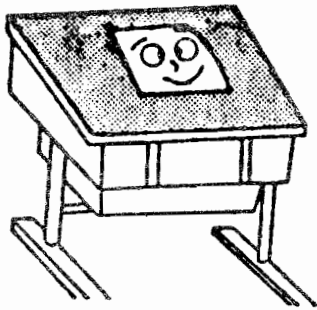
WHERE IT SHOULD NOT BE INSTALLED ( OUTDOORS )



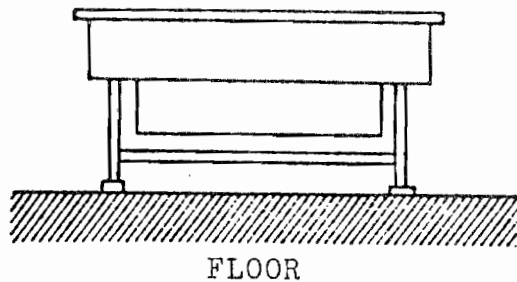
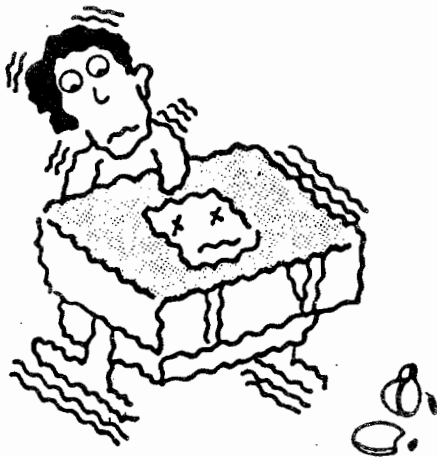
# PHOENIX

## SPECIFICATIONS

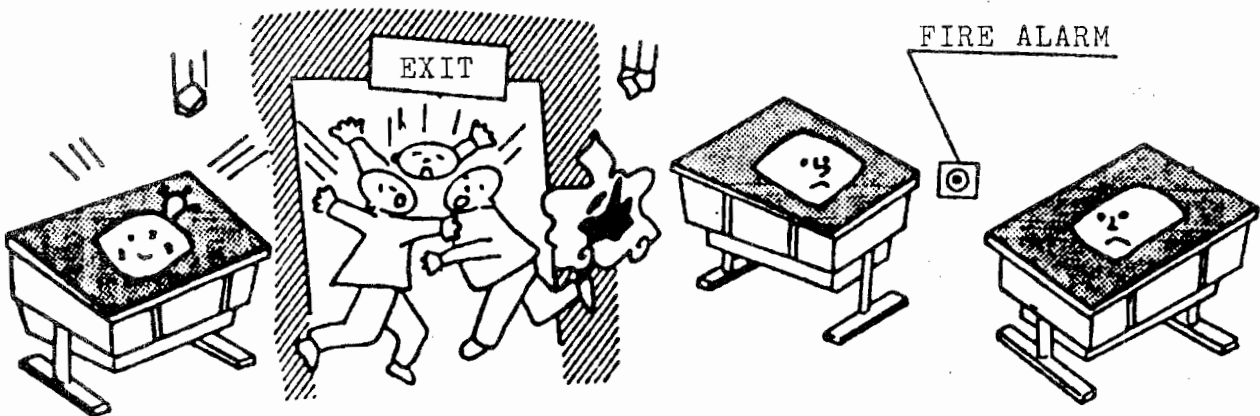
It should be installed on a flat surface such as floor or concrete bed etc... with adequate space taken around the machine.



It should not be installed even on a floor with a flat surface, if any vibrations are transmitted through the floor.



It should not be installed in places obstructive of emergency protection or in the neighborhoods of places where fire protection provision are located.

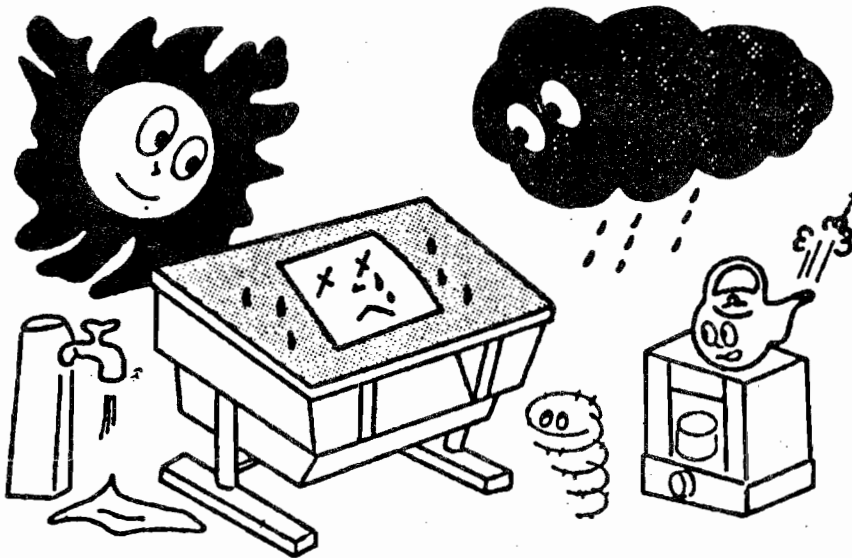


# FHOENIX

## SPECIFICATIONS

Place exposed to direct sun rays, high humidity and abundant dust should be avoided.

It should not be placed near heating apparatuses, So far as practicable for prevention of temperature rise inside the machine.



BEFORE THE POWER SWITCH ON !

It should be checked to see whether or not all P.C boards are properly installed, and the connectors are perfectly provided.

The grounding terminal provided on the machine should be wired to earth without fail.

Power switch is thrown in after inserting the power supply plug into the power supply plug socket.

The case of abnormal if the power switch on !

This machine should not move normal without legal voltage.

# PHOENIX

## NOTES

For a short time after connecting to power, The picture may be temporarily distorted. This is for a special character of C.P.U. It should be reformed after power switch on once more.

This machine is the combination of the I.C all Transister Video Monitor and around C.P,U,so it have along life but it should be broken for a moment for use circumstances.

### PLEASE ATTENTION ABOUT FOLOW THING

Do not check the solids states module with a TESTER even if you find our there is something wrong with it.

The I.C may be destroyed by the voltage of a TESTER.

Be sure to power switch off when the solid state modure insert or out with the socket.

For a short time connecting to power , The picture may be temporarily distorted , When the temperature of the room below zero.

### SAFETY CONTROL

Even if it have planned with full safety standard, It should be the case of abnormal in long time. Therefore the orner of machine or playing manager should be check the safety condition of the machine and attention for the checkin control usual.

# FHOENIX

## HOW TO PLAY

For 1 player or 2 players

1 coin for 1 player with 3 spaceships.

2 coins 2 players.

Insert coin and press button for 1 player or 2 players.

Move the control lever and attack with fire beam to comming  
attack the FHOENIX ARMY 

Avoid the attack from FHOENIX with barrier button.

For 2 players , change to one mistake each.




waiting..... 20 points attacking..... 40 points  
(the time of consecutive attack will be double point)



frying..... 200 points



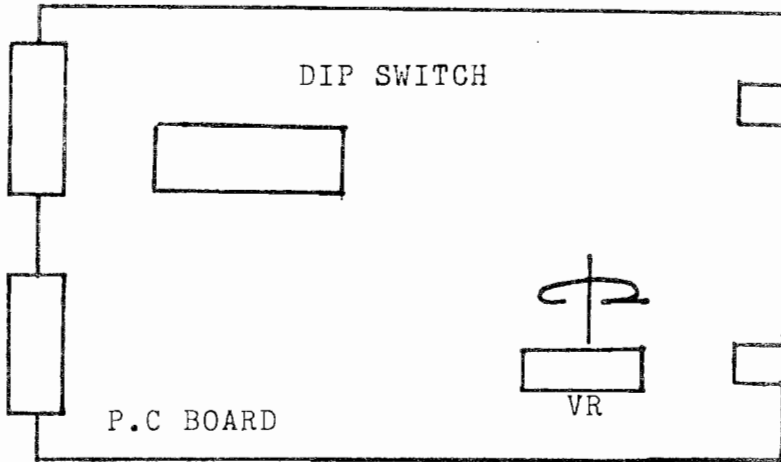
egg.....50 points lower the wing .... 100 points  
spread the wing..... 100-800 points  
(For get highscore is shooting down the  in  
the MATHER SHIP.) 9,000 points Max.

Spaceship have added one more with 3,000 points and pass over  
every 30,000 points. ♣ ( possible to change the score )

The consecutive attacking is only two pattern.

# FHOENIX

## OPERATER ADJUSTMENTS



VR.....For the adjustment of SOUND VOLUME.

It will become smaller in turning it to the arrow mark.

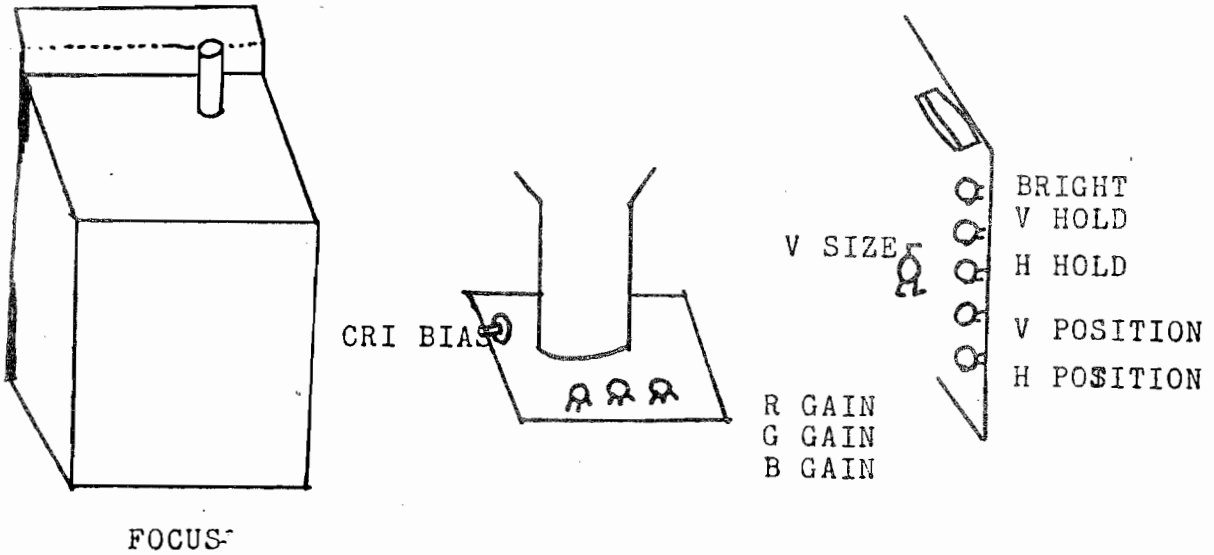
### CHANGE OF DIP SWITCH

	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
SPACESHIP					NOT FOR USE			
3	ON	OFF						
4	OFF	ON						
5	ON	OFF						
6	OFF	OFF						
BONUS SCORE								
3,000 & 30,000			ON	ON				
4,000 & 40,000			OFF	ON				
5,000 & 50,000			ON	OFF				
6,000 & 60,000			OFF	OFF				
MODEL								
TABLE								ON
UPRIGHT								OFF



# FHOENIX

## MONITOR ADJUSTMENTS



The monitor is adjusted in best condition when the shipping if there is need to adjust it as follows.

### H.HOLD

Adjustment for keeping the picture horizontally.

### V.HOLD

Adjustment for vertical height.

### BRIGHT

Adjustment for the place of location.

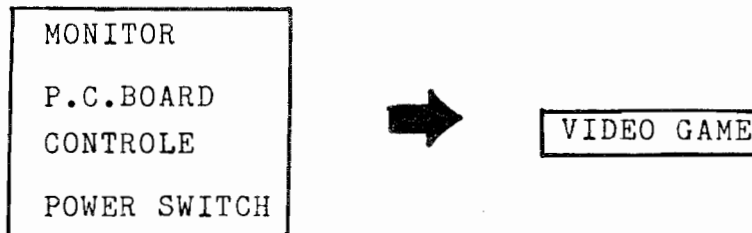
### FOCUS

Adjustment for color.

# FHOENIX

## MEASURE FOR TROUBLE

Video game is made up of four parts for divide into electrick.



4 each parts is connected by wiring. The game machine do not move normal that if the each parts have trouble.

When it have trouble checking where is wrong of the parts of wiring.

Even if it check the parts is not wrong, checking to relevancy parts.

### CHECK THE EACH PARTS

Prepare the TESTER for checking the each parts and make sure the number of connector and color of wiring.

Next checking each with the way of check (2) .

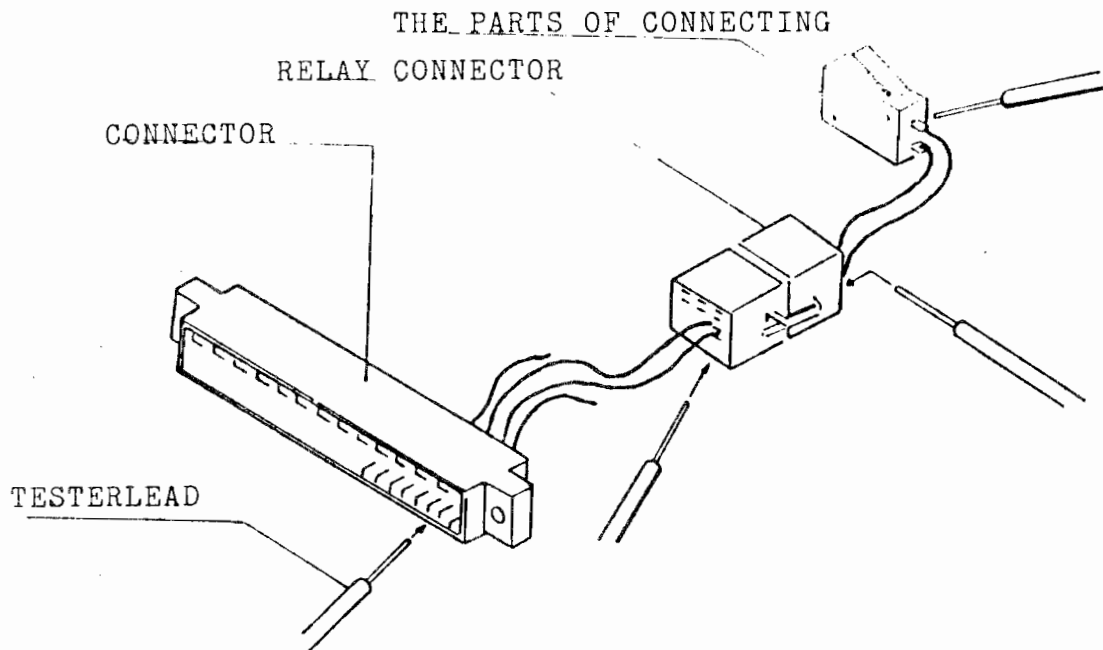
The checking have (a) transefer check (b) voltage check.

#### A. TRANSFER CHECK

Each parts and connector of game P.C board are combined with wiring and relay connector. Please check in the folow way that the current is on to this combination or not.

1. Prepare the TESTER and put the register range.
2. The tester lead put to the connector's contact and the other lead put to the terminal of parts. if the all  $0\Omega$ , transfer is OK.

# FHOENIX



## B. CHECKING OF VOLTAGE

### (1) Measurement of AC voltage

Put the Tester to AC voltage and change the range to higher than measure voltage.

Put the Testerlead to the connector contact and check the each voltage.

The voltage must be same with the top of wiring and the tail of wiring.

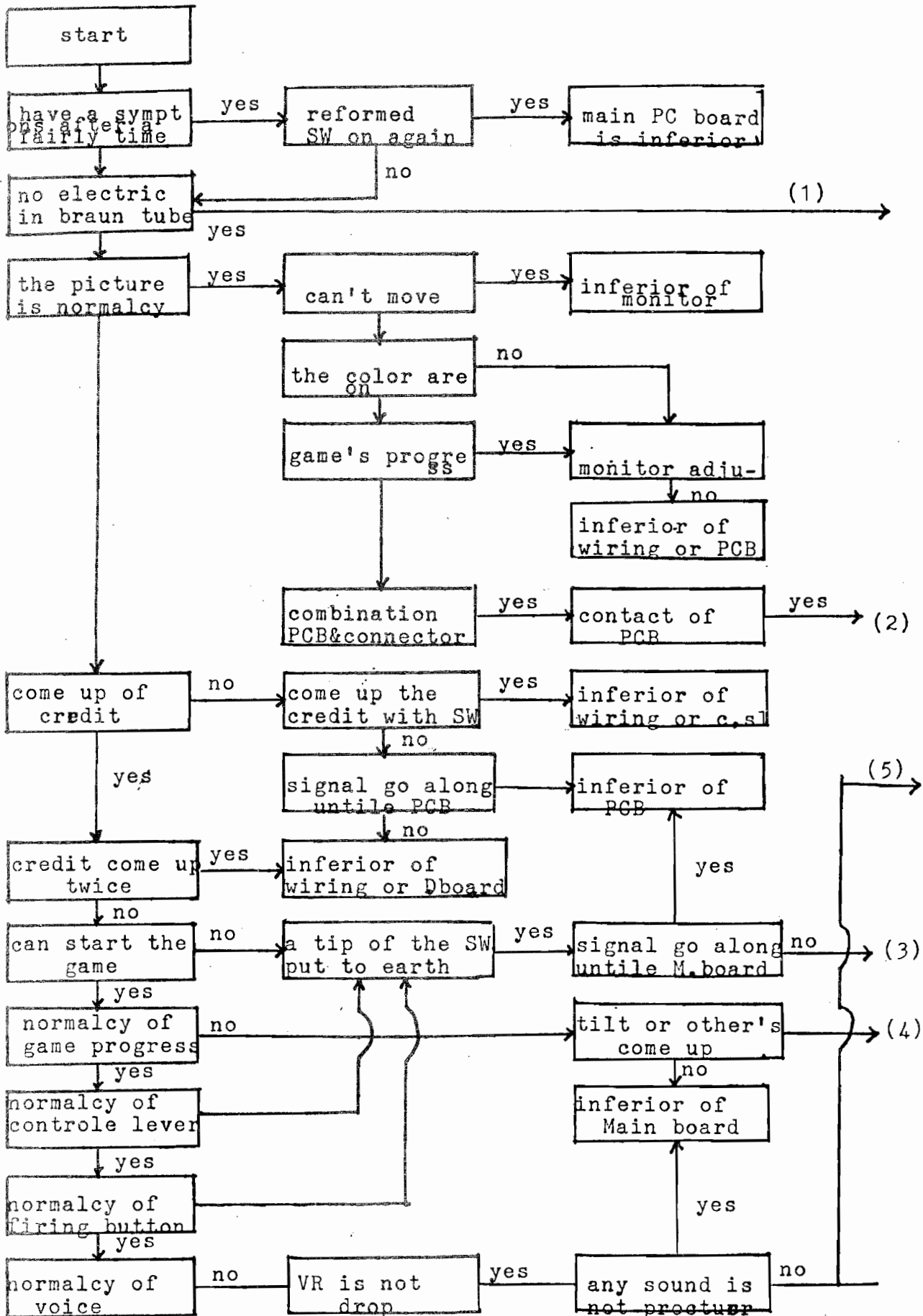
### (2) Measurement of DC voltage

Put the DC range of the TESTER and change the range to higher than the measure voltage.

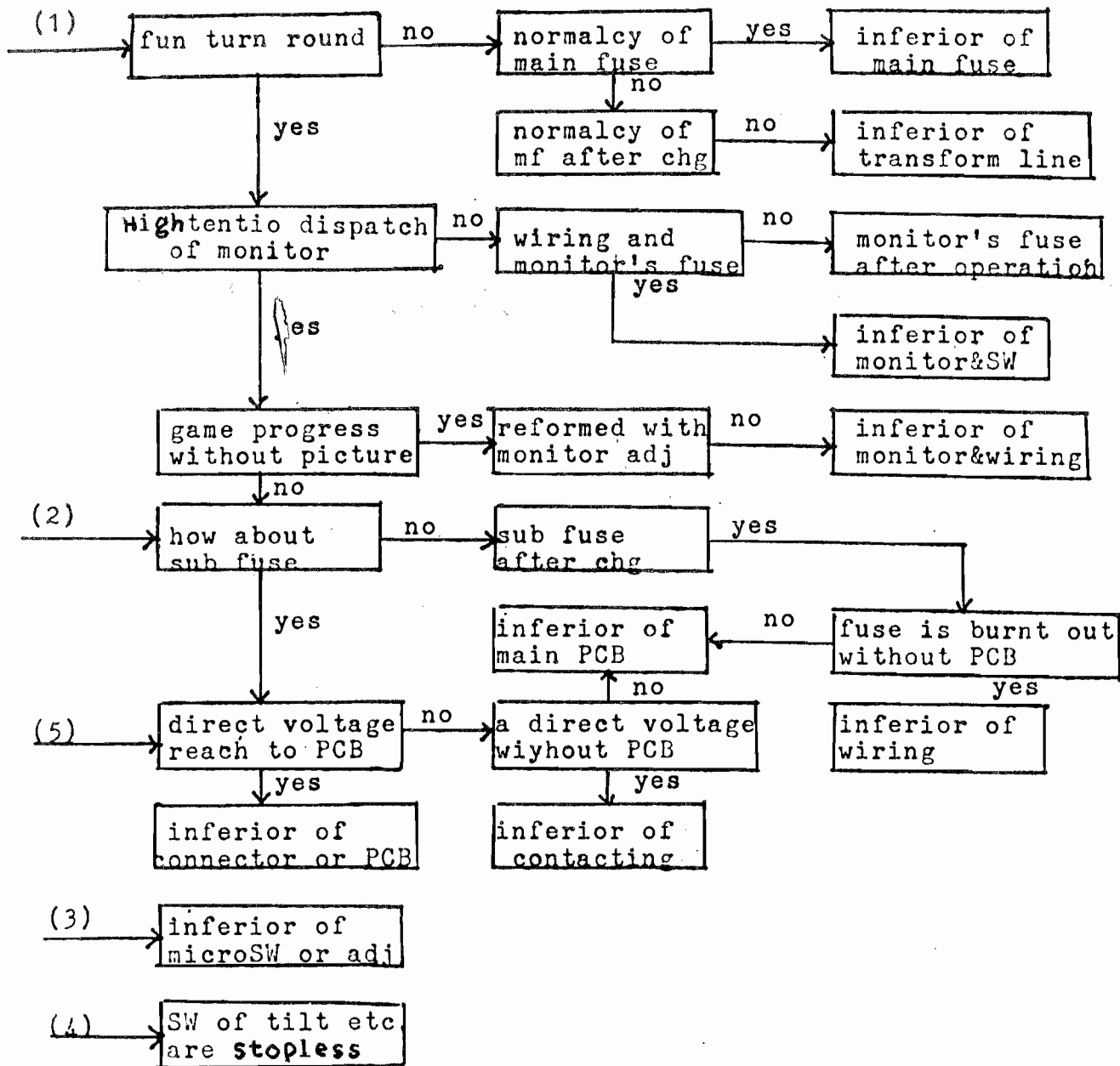
Put the blacklead to GND line (0V blacklead line) the other red lead put the place of measure.

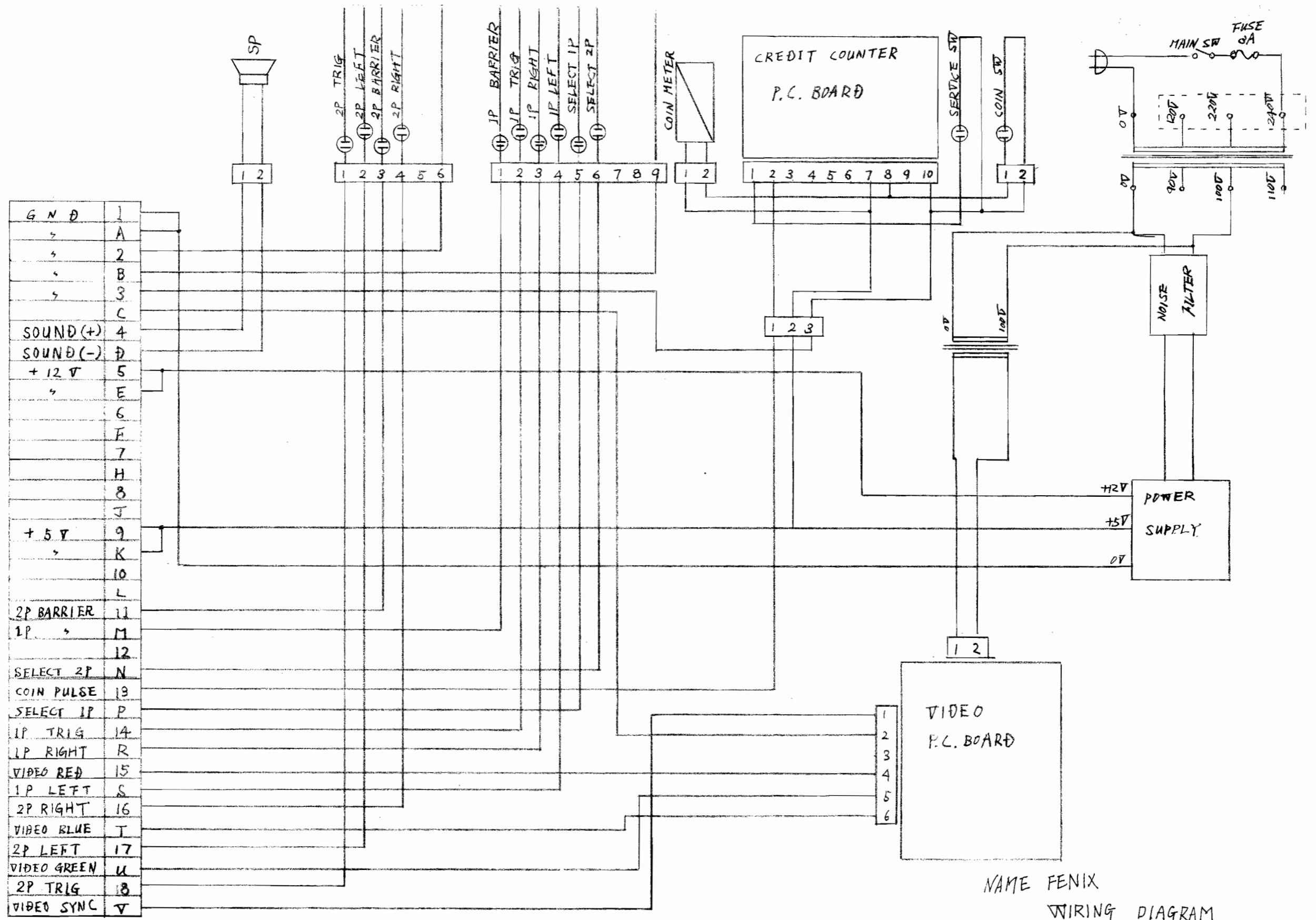
The voltage must be same with the top and tail.

# PHOENIX



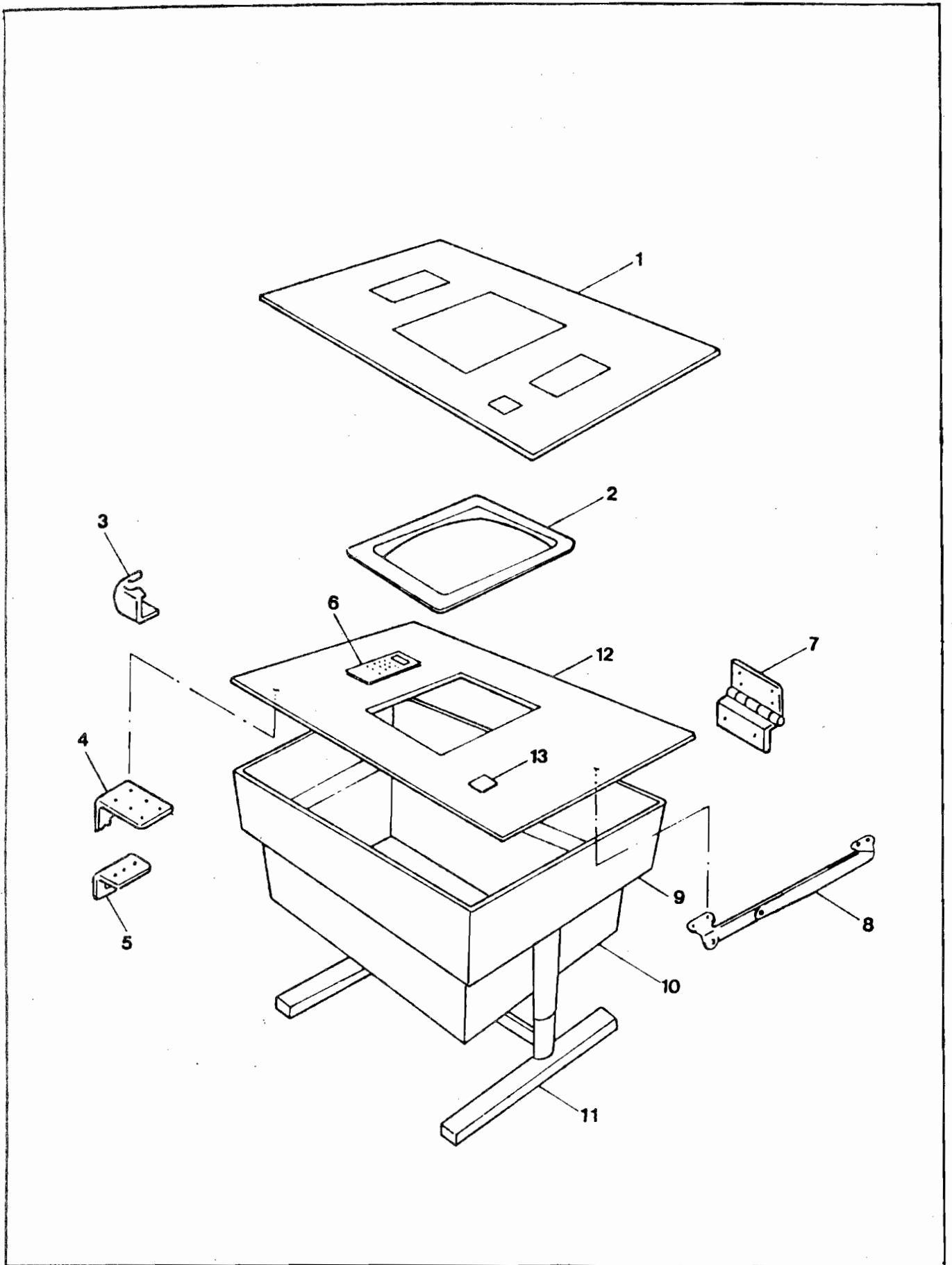
# PHOENIX





NAME FENIX  
WIRING DIAGRAM

# FHOENIX



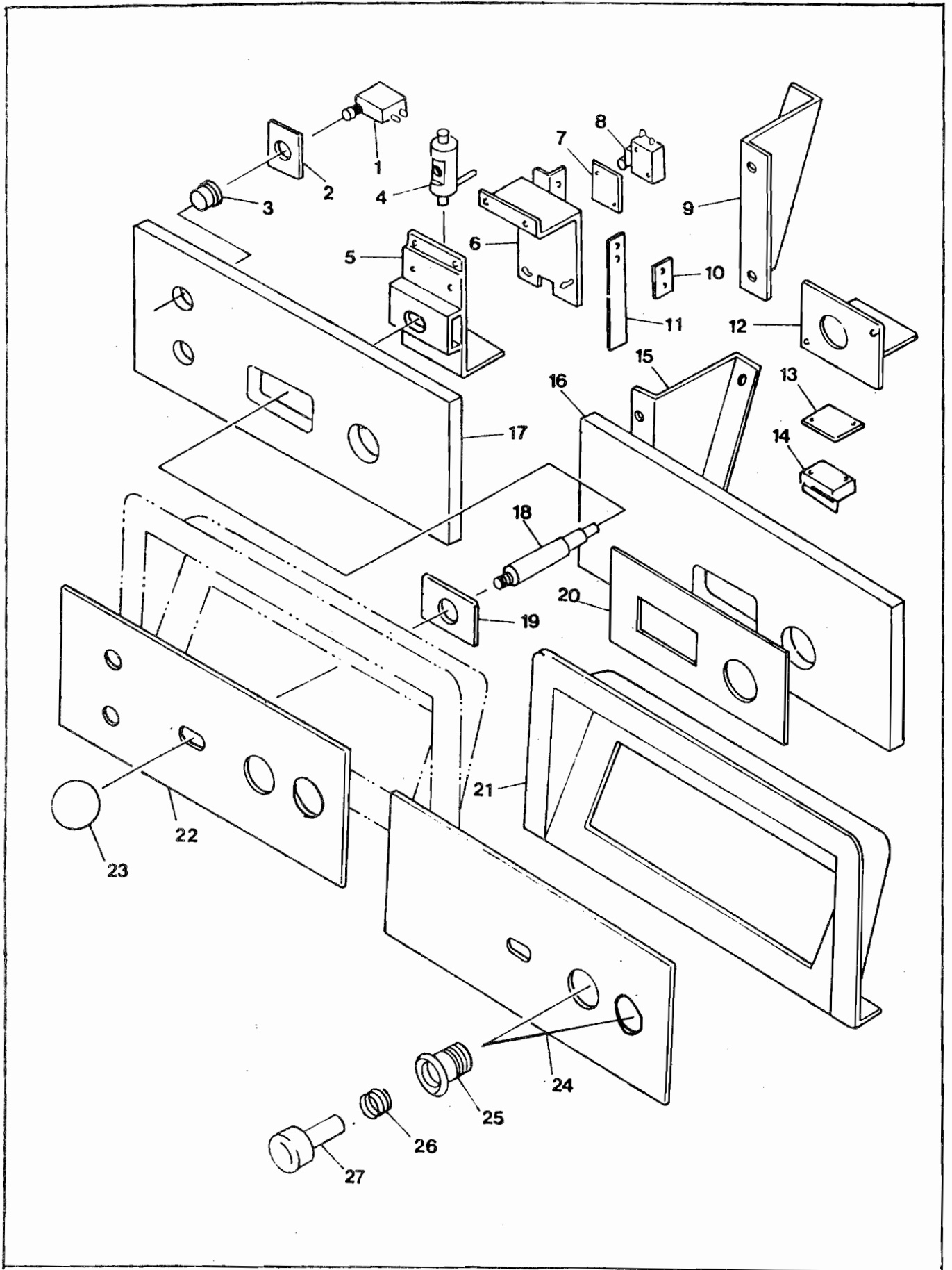
# FHOENIX

## 8 EXTERIOR ASSEMBLY

Item	Parts No.	Description
1	SC 10110	Table Top Glass
2	SC 10111	Video Mask
3	SC 10112	Corner Bracket
4	SC 10113	Lock Bracket
5	SC 10114	Hook
6	SC 10115	Instruction Card
7	SC 10116	Hinge Ass'y
8	SC 10117	Hinge Ass'y
9	SC 10118	Table Box
10	SC 10119	Bottom Box
11	SC 10120	Table Leg
12	SC 10121	Top Board
13	SC 10122	Coin Sticker



# FHOENIX

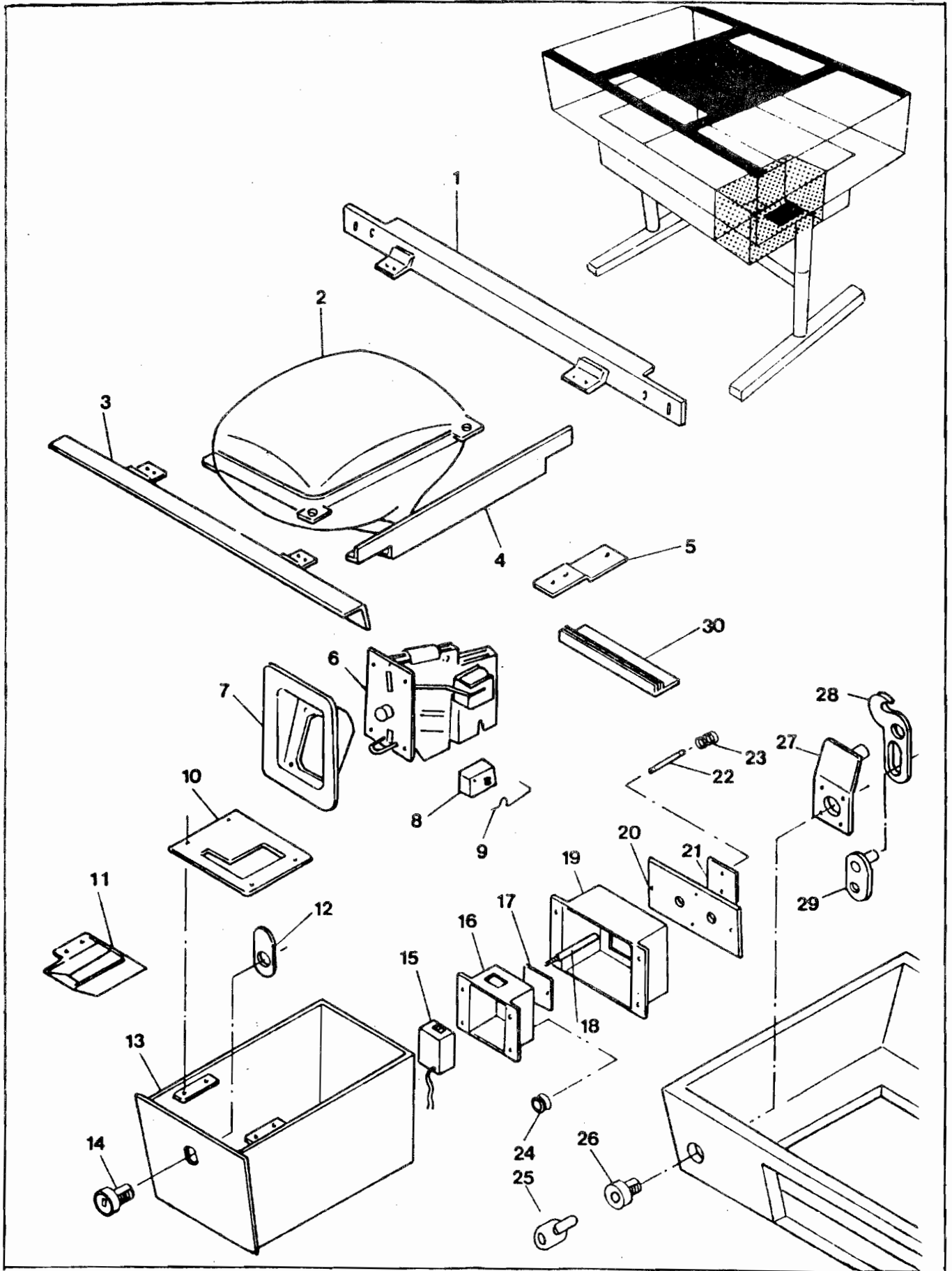


# FHOENIX

## 9 CONTROL PANEL ASSEMBLY

Item	Parts No.	Description
1	SC 10123	Switch VAQ-4R
2	SC 10124	Switch Plate
3	SC 10125	Push Button
4	SC 10126	Shaft
5	SC 10127	Base Bracket
6	SC 10128	MS Mounting Bracke
7	SC 10129	Insulator Type - V
8	SC 10130	Micro Switch AH 71555
9	SC 10131	Control Board Bracket (B)
10	SC 10132	Washer
11	SC 10133	Plate Spring
12	SC 10134	Push Switch Bracket
13	SC 10135	Insulator Type - V
14	SC 10136	Micro Switch VL-11L
15	SC 10137	Control Board Braeket (A)
16	SC 10138	Control Board (B)
17	SC 10139	Control Board (A)
18	SC 10140	Lever
19	SC 10141	Mask Plate
20	SC 10142	Spacer
21	SC 10143	Control Panel
22	SC 10144	Control Plate (A)
23	SC 10145	Color Ball
24	SC 10146	Control Plate (B)
25	SC 10147	Push Button Housing
26	SC 10148	Spring (A)
27	SC 10149	Push Button Red

# FHOENIX

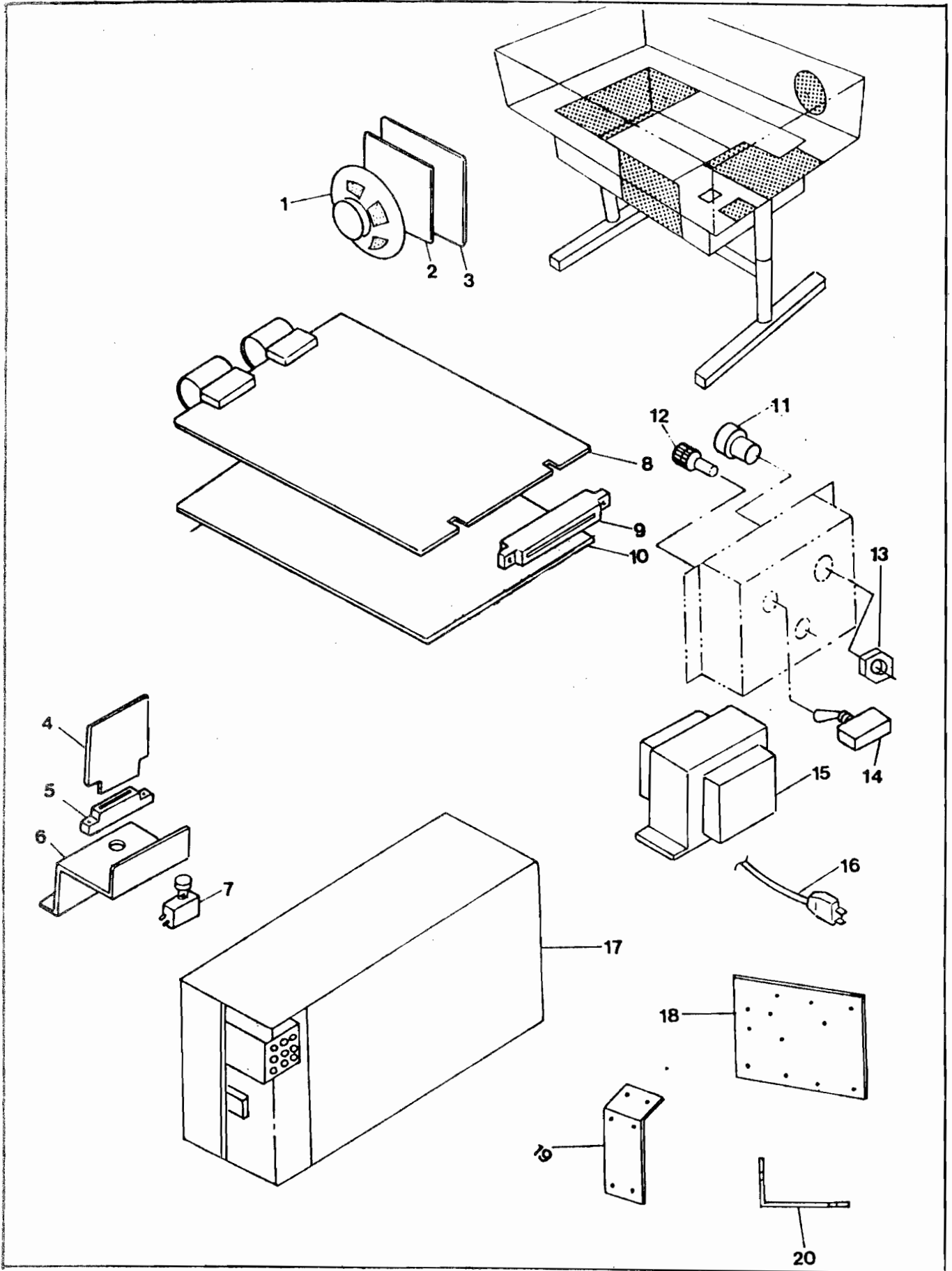


# FHOENIX

## 10 VIDEO AND CABINET ASSEMBLY

Item	Parts No	Description
1	SC 10150	Support Bracket (C)
2	SC 10151	Video
3	SC 10152	Support Bracket (D)
4	SC 10153	Video Bracket
5	SC 10154	Video Circuit Board Support
6	SC 10155	Rejector for
7	SC 10156	Coin Entry Cover
8	SC 10157	Micro Switch C 5G3-3
9	SC 10158	Actuator CAA-1
10	SC 10159	Guide Plate
11	SC 10160	Coin Chute
12	SC 10161	Lock Plate
13	SC 10162	Cash Box
14	SC 10163	Lock & Key
15	SC 10164	Counter ME-5
16	SC 10165	Counter Box
17	SC 10166	Pin Base
18	SC 10167	Finger Pin
19	SC 10168	Pin Guide Mounting Bracket
20	SC 10169	Pin Guide
21	SC 10170	Contact P.C. Board
22	SC 10171	Ring Terminal
23	SC 10172	Spring
24	SC 10173	Grommet NG 79-C
25	SC 10174	Service Key No 7800
26	SC 10175	Service Lock No.7800
27	SC 10176	Lock Plate
28	SC 10177	Lock Lever
29	SC 10178	Lock Lever Pin
30	SC 10179	Guide Rail

# PHOENIX



# PHOENIX

## 11 PRINTED BOARD AND REGULATOR ASSEMBLY

Item	Parts No.	Description
1	SC 10180	Speaker
2	SC 10181	Net
3	SC 10182	Punching Metal
4	SC 10183	Counter Drive P.C. Board Ass'y
5	SC 10184	Print Connector
6	SC 10185	Counter & Switch Bracket
7	SC 10186	Push Button Switch
8	SC 101-87	C.V.— Game P.C. Board Ass'y
9	SC 10188	AMPLEAF Connector
10	SC 10189	C.V.— CPV—P.C. Board Ass'y
11	SC 10190	Molde Cord Bush
12	SC 10191	Fuse Holder
13	SC 10192	Mold Cord Bush Nate
14	SC 10193	Toggle Switch
15	SC 10194	Transformer
16	SC 10195	AC Cord & Plug Ass'y
17	SC 10196	Switching Cess
18	SC 10197	Monitor Plate
19	SC 10198	Focus Plate
20	SC 10199	Monitor Look Plate

"PHOENIX" Part List PC Board

3/1

Description	Serial No.	Q'ty
CPU	8085	1 pcs
P-ROM	2716	12 "
RAM	2114	8 "
Fuse ROM	6301	2 "
TTL IC	74LS00	4 "
"	74LS08	3 "
"	74LS14	1 "
"	74LS32	4 "
"	74LS74	4 "
"	74LS86	4 "
"	74LS107	1 "
"	74LS125	1 "
"	74LS132	1 "
"	74LS136	2 "
"	74LS138	4 "
"	74LS151	4 "
"	74LS157	7 "
"	74LS163	6 "
"	74LS174	5 "
"	74LS244	3 "
"	74LS245	3 "
"	74LS283	3 "
"	74LS374	6 "
"	7404	1 "
"	7405	2 "
"	7407	1 "
IC	LM555	5 "
"	LM324	2 "

Description	Serial No.	Q'ty
IC	LM380	1 pcs
"	MN6221AA	1 "
C MOS	4006	1 "
X' Tal	11MHz	1 "
Transistor	2SA564	1 "
Diode	1S1588	8 "
Dip SW	8P	1 "
VR	10K-ohm	1 "
Connector	50P	4 "
Ribbon	50P	2 "
IC Socket	40P	1 "
"	24P	12 "
"	18P	9 "
"	16P	2 "
Resistor Array	1K-ohm 8R	3 "
"	1K-ohm 4R	1 "
Ceramic Capacitor	50V 50PF	1 "
"	" 300PF	1 "
"	" 0.001MFD	10 "
"	" 0.01MFD	1 "
"	" 0.047MFD	50 "
"	" 0.1MFD	2 "
Tantalum Capacitor	16V 0.47MFD	1 "
"	" 1MFD	2 "
"	" 2.2MFD	1 "
"	" 6.8MFD	3 "
"	" 10MFD	10 "
Electrolytic Capacitor	16V 47MFD	2 "
"	" 100MFD	1 "
"	25V 22MFD	1 "

3/2



Description	Serial No.	Qty	3/3
Electrolytic Capacitor	25V 47MFD	1 pcs	
"	" 470MFD	1 "	
Carbon Resistor RD 1/4W (S) 5%			
	100 ohm	2 "	
	270 ohm	10 "	
	330 ohm	2 "	
	470 ohm	2 "	
	1 K-ohm	11 "	
	1.2 K-ohm	2 "	
	2.7 K-ohm	3 "	
	4.7 K-ohm	2 "	
	5.1 K-ohm	2 "	
	10 K-ohm	11 "	
	20 K-ohm	6 "	
	33 K-ohm	6 "	
	47 K-ohm	8 "	
	100 K-ohm	4 "	
	200 K-ohm	1 "	
	510 K-ohm	2 "	



CRT MONITOR PC BOARD DIAGRAM

