VICTORY ROAD

SERVICE INSTRUCTIONS

TRADEWEST

TRADEWEST, INC.
2400 SOUTH HWY. 75
CORSICANA, TEXAS 75110

214-874-2683

USER INFORMATION - F.C.C.

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 SUB-PART J OF PART 15 OF F.C.C. RULES, WHICH ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST SUCH INTERFERENCE WHEN OPERATED IN A COMMERCIAL ENVIROMENT.

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.

INTRODUCTION

"VICTORY ROAD" is a microprocessor based coin-operated electronic game that makes extensive use of digital integrated circuitry and television monitor concepts. This Manual is designed for the use of maintenance technicians who possess a general knowledge of solid-state circuitry and video monitor theory. Any individual NOT knowledgeable in these areas SHOULD NOT attempt repair of the electronic portions of the game.

In addition to this manual and training in electronics, troubleshooting and repair will be facilitated by access to general-type handtools, a multimeter, a 50 or 100 MHZ oscilloscope and a logic probe would be helpful.

Technical assistance is available at your Tradewest Distributor. Questions or comments concerning "Victory Road" are welcome and should be directed to :

TRADEWEST, INC.
2400 South Highway 75
Corsicana, Texas 75110

HOW TO PLAY

* 1P or 2P game
* 2nd player can join the game anytime after the 1st player starts and either player can join anytime and any stage during playing.
* Control players' HERO by Joystick (LS-30) and 2-firing buttons.
* Control direction of players' HERO by 8-way Joystick and control direction of firing by rotating switch.
* Players' HERO will be protected ocassionally with armor when player get "POW" appears from earths' surface.
* Right firing button is for GRENADE only. Operate left firing button for many other weapons.
* Get POWER POINTS hidden inside of Rocks, Walls and Pyramids, etc.

  Thunder : "SUPER POWER"....All enemies can be destroyed.
  Earthquake: Stops all enemies' action.
  Eye Mark : Secret "POW" appears in sight.
  Key : This key allows you to move through the multi-dimentional space.
  Star mark : Watch the angel, it tells you which "POW" will help you.

  Dozens of "POW" are hidden in secret place.

* Player can destroy almost obstacles in sight.
* Select your weapons : Sword, boomerang, bazooka, hand grenades, machine gun, etc.
* Become a master with your sword.
  It will destroy your enemies and stop their bullets.
  When your super-powered lightening swords are crossed, you will discover a secret power.
* Watch the panels flying from multi-dimentional space.
  If you touch these panels, you will be lost in the Black Hole.

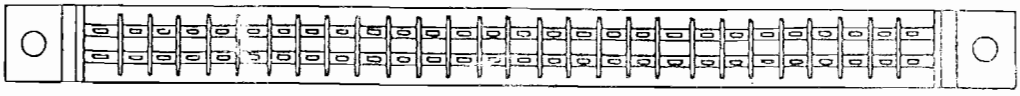
CONTINUE PLAY

* Receive additional warriors during play by inserting coin and and pushing 1 or 2 player button.
* You can play continuously from the stage finished the game by inserting coin and pushing start button within 10 seconds after indication of "GAME OVER".

HARNESS

CONNECTOR CR7E-56DA-3.96E (HRS) 3.96mm Pitch

(1) PARTS SIDE (28)



(A) SOLDER SIDE (f)

SOLDER SIDE	PIN NO.		PARTS SIDE
GND	A	1	GND
GND	B	2	GND
+5V	C	3	+5V
+5V	D	4	+5V
−5V	E	5	−5V
+12V	F	6	+12V
IN-CORRECT INSERT PREVENTING KEY	H	7	IN-CORRECT INSERT PREVENTING KEY
COIN COUNTER 2	J	8	COIN COUNTER 1
	K	9	
SPEAKER (−)	L	10	SPEAKER (+)
	M	11	
VIDEO GREEN	N	12	VIDEO RED
VIDEO SYNC	P	13	VIDEO BLUE
SERVICE SWITCH	R	14	VIDEO GND
	S	15	
COIN SWITCH 2	T	16	COIN SWITCH 1
START SWITCH 2	U	17	START SWITCH 1
2P CONTROL 1 UP	V	18	1P CONTROL 1 UP
2P CONTROL 2 DOWN	W	19	1P CONTROL 2 DOWN
2P CONTROL 3 LEFT	X	20	1P CONTROL 3 LEFT
2P CONTROL 4 RIGHT	Y	21	1P CONTROL 4 RIGHT
2P CONTROL 5 PUSH1	Z	22	1P CONTROL 5 PUSH1
2P CONTROL 6 PUSH2	a	23	1P CONTROL 6 PUSH2
	b	24	
	c	25	
	d	26	
GND	e	27	GND
GND	f	28	GND

OPTIONAL DIP SWITCH SETTINGS

DIP SWITCH

DIP SW No. 1

ITEM	SPECIFICATION	1	2	3	4	5	6	7	8
		OFF							
	UNITED STATES	ON							
GAME STYLE	UPRIGHT		OFF						
BONUS	* EVERY BONUS			OFF					
	* SECOND BONUS			ON					
NUMBER OF HERO	3				OFF				
	5				ON				
PLAY FEE COIN 1	1 COIN 1 PLAY					OFF	OFF		
	2 COIN 1 PLAY					ON	OFF		
	3 COIN 1 PLAY					OFF	ON		
	4 COIN 1 PLAY					ON	ON		
PLAY FEE COIN 2	1 COIN 6 PLAY							OFF	OFF
	1 COIN 4 PLAY							ON	OFF
	1 COIN 3 PLAY							OFF	ON
	1 COIN 2 PLAY							ON	ON

* EVERY BONUS·····CREDIT EACH ONE HERO IN EVERY 2ND BONUS.
* SECOND BONUS····CREDIT ONE HERO AT 1ST AND 2ND BONUS ONLY.
NO FURTHER HERO CREDITED AFTERWARD.

OPTIONAL DIP SWITCH SETTINGS

Dip Switch No.2

GAME LEVEL OF DIFFICULTY

DIP SW NO. 2

ITEM	SPECIFICATION	1	2	3	4	5	6	7	8
GAME LEVEL OF DIFFICULTY	EASY	OFF	OFF						
	NORMAL	ON	OFF						
	HARD	OFF	ON						
	DIFFICULT	ON	ON						
ATTRACTION SOUND	WITHOUT SOUND			OFF	OFF				
	WITH ATTRACTION SOUND			ON					
MONITOR SETTING	STOP VIDEO DISPLAY			ON	ON				
	NEVER FINISH			OFF	ON				
BONUS POINTS SETTING 1ST/2ND	50000/100000					OFF	OFF		
	60000/120000					ON	OFF		
	100000/200000					OFF	ON		
	NO BONUS					ON	ON		
CONTINUE PLAY	WITHOUT CONTINUE							OFF	
	WITH CONTINUE							ON	
									OFF

INSTALLATION

YOUR GAME WAS SHIPPED FROM THE FACTORY IN READY-TO-PLAY CONDITION.
A BRIEF INSPECTION IS SUGGESTED BEFORE THE MACHINE IS REMOVED FROM THE CARTON. IF THERE IS DAMAGE TO THE SHIPPING CARTON, CONTACT THE FREIGHT CARRIER FOR CLAIM PURPOSES. EXTERNAL DAMAGE COULD INDICATE POSSIBLE DAMAGE TO THE CABINET AND/OR ELECTRONIC COMPONENTS.

AFTER THE CARTON HAS BEEN SATISFACTORILY INSPECTED, REMOVE THE MACHINE FROM THE SHIPPING CARTON.

EXAMINE THE INTERIOR OF THE GAME FOR DISCONNECTED WIRES, CABLES OR HARNESSES. MAKE SURE THE ELECTRONIC DEVICES ARE SECURELY MOUNTED IN THEIR SOCKETS, ETC. RECORD ANY PROBLEM AND CONTACT YOUR CUSTOMER SERVICE REPRESENTATIVE FOR TECHNICAL ASSISTANCE.

ELECTRICAL REQUIREMENTS

UNLESS OTHERWISE SPECIFIED, THIS GAME IS SET TO OPERATE AT 110 VOLTS A.C.

ROUTINE MAINTENANCE & SERVICE

Because of the solid state electronic circuitry, this machine should require very little maintenance, and only occassional adjustment. However, it is necessary to take steps to insure this.

The Game volume controls are located on the printed circuit board and can be accessed through the rear cabinet door.

The video monitor was properly adjusted for best color and sharp picture display before shipping. Occassionally minor adjustments are necessary. All adjustment controls for the monitor are located on the rear of the monitor assembly.

This machine should only be adjusted by a "Qualified" Technician.
"DO NOT MAKE ANY ADJUSTMENTS ON THIS MACHINE WHILE THE POWER IS ON.!"

POWER SUPPLY

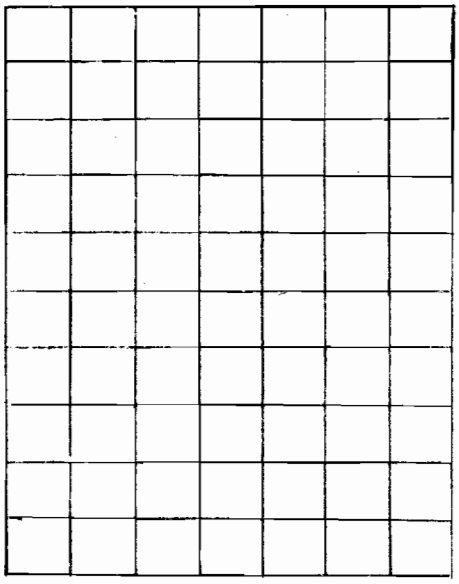
The Computer Board in this game operates most efficiently and reliably when the power supply is set so the voltage on the Board is +5.0 volts. To check voltage, place a digital multimeter across +5 volts (pin-3, pin-4) and ground (27,28) on the P.C. Board edge connector. Adjust, if necessary, the +5 volt Pot (control) located on the power supply so the meter reads between +4.9 and +5.1 volts.

FOR SERVICE INFORMATION CONTACT:

Your Local
Tradewest Distributor
or
Tradewest, Inc.
Attn: Service
214/874-2683

P.C. BOARD DIAGNOSTIC TEST

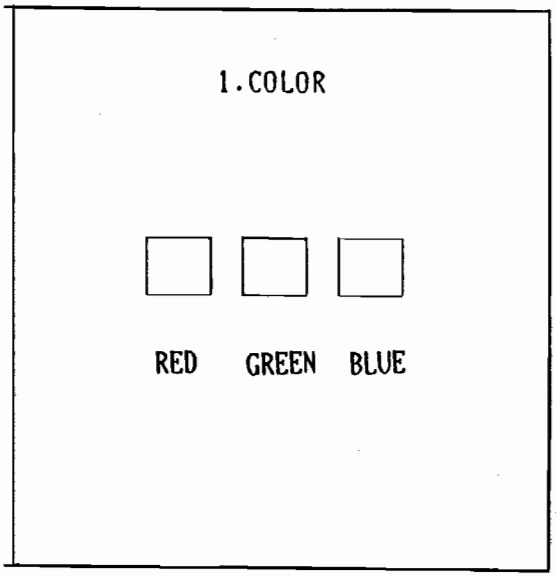
A MANUAL TEST MAY BE PERFORMED BY DEPRESSING THE "PLAYER 1" START BUTTON DURING POWER-UP. WHEN THE "CROSS-HATCH" PATTERN APPEARS, RELEASE THE BUTTON AND PROCEED AS FOLLOWS:



Picture 1 "Cross Hatch"

Adjustment to the monitor may be made to center and/or extend the borders of the picture.

Press "PLAYER 1" button to change to picture 2.



Picture 2 "Color Test"

Adjustment of colors on the monitor may be made.

Press "PLAYER 1" button to change to picture 3.

```
        2. LEVER
P1 UP      0   P2 UP      0
P1 DOWN    0   P2 DOWN    0
P1 RIGHT   0   P2 RIGHT   0
P1 LEFT    0   P2 LEFT    0
P1 NOBU    0   P2 NOBU    0
P1 PUSH1   0   P2 PUSH1   0
P1 PUSH2   0   P2 PUSH2   0
COIN       0   PLAY2      0
```

Picture 3 "Joystick & Switch Test"

The screen will display all switches with a zero (0) to the right. The zero (0) should change to one (1) and increase by one each time Joystick is moved to the right. Moving Joystick to the left decreases each number by one. Inserting coin or pushing service switch increases coin number by one.

Press "PLAYER 1" button to change to picture 4.

```
        3. MODE
DIP1   12345678
       00000000
DIP2   12345678
       00000000
TYPE       TABLE
HERO 3
1COIN1 1PLAY  1COIN2 6PLAY
BONUS1  50000P
BONUS2  100000 EVERY
LEVEL 1
```

Picture 4 "Mode Check"

The screen will automatically display all programmable features with their respective settings. Settings should correspond to the position of the dip switches on the P.C. Board. The actual set mode is displayed at the bottom of the screen.

Press "PLAYER 1" button to change to picute 5.

PICTURE 5

4. FRONT

COLOR 00

FRONT CHARACTOR

PICTURE 5. FRONT TEST
Confirm if Characters are displayed on the monitor.

PICTURE 6

5. SOUND

SOUND CODE = ?

MUSIC 41-7B

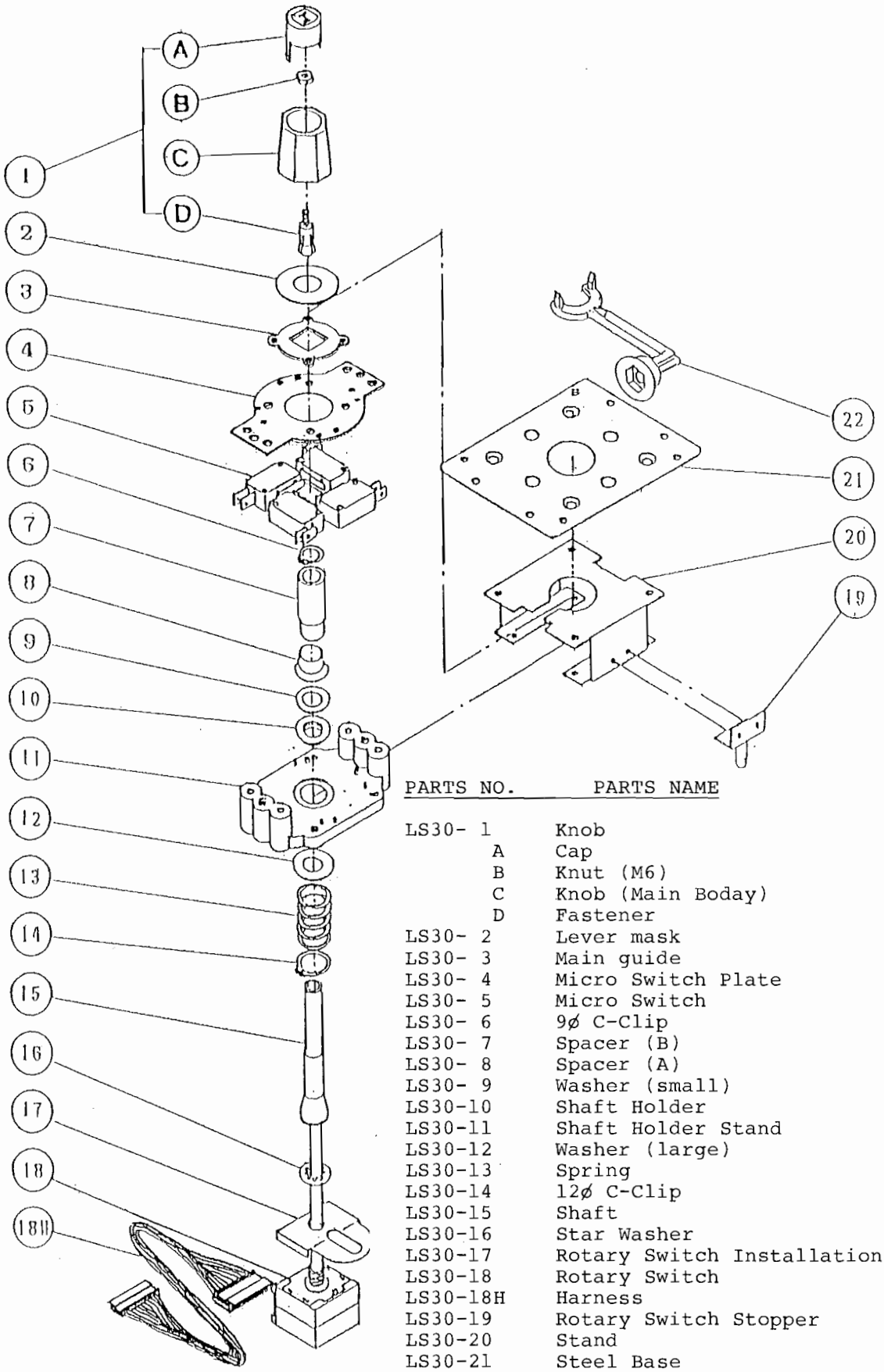
EFECT 81-BB

VOICE CO-FF

STOP OE

PICTURE 6 SOUND TEST
Set up Music Code ("?" of Picture 6) to 41-7B or 81-BB or CO-FF by lever and push firing button. Then music or effective sound; or voice comes out. If you wish to stop it, set up Music Code to OE and push firing button.

L S 3 0 - 24 JOYSTICK ASSEMBLY

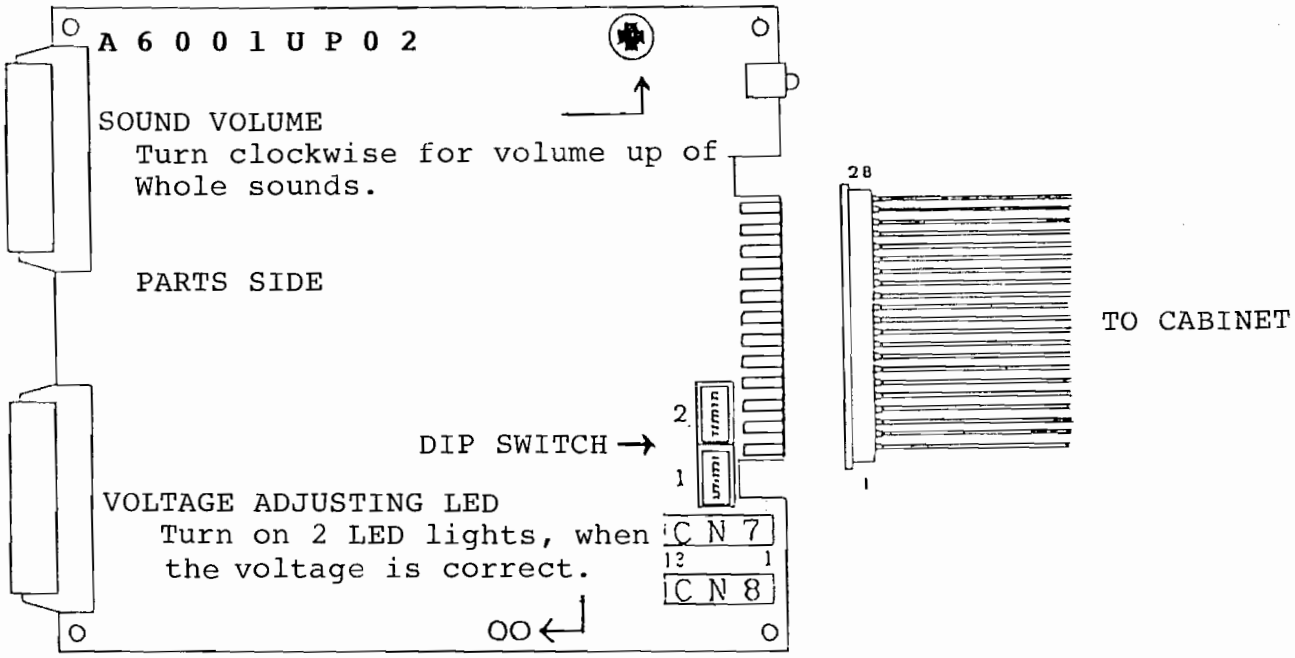


PARTS NO.	PARTS NAME
LS30- 1	Knob
A	Cap
B	Knut (M6)
C	Knob (Main Boday)
D	Fastener
LS30- 2	Lever mask
LS30- 3	Main guide
LS30- 4	Micro Switch Plate
LS30- 5	Micro Switch
LS30- 6	9ø C-Clip
LS30- 7	Spacer (B)
LS30- 8	Spacer (A)
LS30- 9	Washer (small)
LS30-10	Shaft Holder
LS30-11	Shaft Holder Stand
LS30-12	Washer (large)
LS30-13	Spring
LS30-14	12ø C-Clip
LS30-15	Shaft
LS30-16	Star Washer
LS30-17	Rotary Switch Installation Plate (SUS)
LS30-18	Rotary Switch
LS30-18H	Harness
LS30-19	Rotary Switch Stopper
LS30-20	Stand
LS30-21	Steel Base
LS30-22	Knob setting tool
Ls30-24	Complete Assembly

P. C. B. SPECIFICATIONS

1	EDGE CONNECTOR	CR7E-56DA-3. 96E(56PIN) : HRS		
2	SWITCHING	DC	+5V	7A
	REGURATOR	DC	+12V	1A
		DC	-5V	1A

*Use with voltage on P.C.B. between the range of +5.00V -- +5.10V



1. Even if Solid State Module is clearly found defective, please do not check Circuit with a Tester, etc. The ICs may be destroyed by the voltage of a Tester.

2. Turn on 2 LED lights, when the voltage is correct. If only one LED light turns on, adjust by 5VADJVR of switching regurator. When no LED light turns on, check electric voltage of power source.

3. Don't forget to cut off Power Source when you change Parts or insert/pull off of Connector.

4. Please be sure to Disconnect Power Source by pulling Plug. (Not by Cord)

5. Be careful for handling Monitor and it's part of High Tension.

A lot of ICs and Memories are used, by which Electric power consumption for +5V (Volts) is about 5A (Amperes).
Please connect P.C.B. to Cabinet and adjust electric voltage of Power Source to be +5V at each Edge Connector (56pin) of P.C.B.

In case voltage does not indicate more than +5V even by fully adjusted by Voltage Adjustor,
it is because of insufficient Power Source or lack of capacity of Electric Current. So, please change Power Supply of which rated voltage is higher.

For +5V, please use sufficient cable (1.25mm x 2 or 3.5mm) which is capable for Electric Currency.

Voltage of intermediate Harness descend by contact resistance, so please avoid to connect several intermediate Harnesses to keep sufficient voltage.
If +6V Coin counter is connected from +5V, which causes Voltage drop, so please use +12V Coin Counter.

R O T A R Y S W I T C H W I R I N G

Connect Joystick of PLAYER 1 with CN7 of PCB and PLAYER 2 with CN8 of PCB.