

namco America Inc.

鉄拳 TEKKEN 2™

KIT

Installation Manual

Important

**Read PRECAUTIONS and INSTALLATION
Sections before operating game.**

FCC Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

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1.0 SPECIFICATIONS

Conversion Game Requirements

Power Supply:	150 Watt computer-grade, +5 VDC +/- 5%, 5 Amp Minimum +12 VDC +/- 5%, 2 Amp Minimum
Harness:	56 pin JAMMA-Type, Key installed at pins H & 7.
Monitor:	Horizontally mounted color monitor, accepting RGB video inputs from kit PCB.

Kit Specifications

Control panel: 2-Player configuration.

(2) 8-Way Joystick, black:	(1P, 2P, 1 each)
(4) Push-button switch, red:	(1P, 2P, 2 each)
(4) Push-button switch, yellow:	(1P, 2P, 2 each)
(2) Start switch:	(1P, 2P, 1 each)

Marquee and Graphics Set

Kit Game PCB

- (1) Namco System 11 Tekken II PCB

48 Pin Connector

- (1) DDK 225D-10024C2-2312 only

! IMPORTANT NOTE !

**The 48-pin connector supplied with the TEKKEN 2 kit has
a small pitch or distance between connection pads.
DO NOT SUBSTITUTE OTHER 48 PIN CONNECTORS.**

Note: *Specifications subject to change without prior notice. Modification and/or alteration of the Tekken 2 game kit with kits or parts not supplied by NAMCO may void the warranty.*

**REMOVAL OF SERIAL NUMBERS AND/OR BAR-CODES FROM PRODUCT OR
COMPONENTS WILL VOID THE WARRANTY**

2.1 GAME PLAY

Two new default characters are available to select from. LEI WULONG is a master of Chinese Marshall Arts and JUN KAZAMA is a highly skilled master of Kazama Classic Bu-Jutsu.

Players(s) begin by selecting the game mode of their choice. A best-out-of-three rounds determines who wins a match.

A one-player game first pits the player against seven randomly selected computer opponents. Next the player is matched against his/her corresponding sub-boss. Then there is a fight against the main boss and finally a battle versus the last boss. In total, a player must defeat ten opponents to reach the end in a one-player game.

In a two-player game, players begin by each selecting their own character. Players may select the same character if they choose. Each character has two costumes that differ in both color and attire for easy identification. The winner will automatically enter a match vs. the computer unless the loser decides to re-coin and go for a rematch!

It's up to the players (and half the fun) to discover all the fighting moves of each character in TEKKEN 2. Experiment with different joystick and button combinations!

2.2 MAXIMIZING EARNINGS

To achieve optimum earnings it is recommended that you set the game to Namco's USA RECOMMENDED FACTORY SETTINGS. We believe that these settings are the most suitable for a wide variety of locations. These default settings appear in GREEN in both the "Coin Options" and "Game Options" screens. However, as all locations are not alike, they are easily adjustable through the TEST MODE.

3.0 INSTALLATION

Note: Shipping damage may void the warranty. In case of shipping damage, contact your distributor and the transportation carrier immediately.

Before beginning the installation, verify that the kit contents match the enclosed kit parts list.

3.1 PRECAUTIONS

1. Turn power to the cabinet off when installing any electrical or electronic device.
2. The TEKKEN 2 PCB is a state of the art custom polygon graphics system that is very sensitive to electro-static discharge (ESD). Be sure to use appropriate ESD reduction procedures such as use of ground straps and handling the PCB using the anti-static material provided.

3.4 CONTROL PANEL

1. Locate the joystick and push-button holes as available in a standard cabinet control panel, or use the layout drawing provided in this installation guide.

The hole sizes and positions are dimensioned in the provided drawing. Be sure to check the clearance for the push buttons and joysticks under the control panel before punching the holes.

To fabricate a metal control panel, the easiest method is to drill a 1/4 inch pilot hole and then use an appropriate size metal hole style punch and wrench to punch the holes by hand.

2. Install the TEKKEN 2 control panel overlay provided in the kit. Using the control panel cutouts as a guide, trim the overlay to fit. Apply the kick, punch and start labels provided with the kit.
3. Install and connect the push button switches provided in the kit.
4. Install and connect the joysticks provided in the kit.
5. Install the control panel on the cabinet and connect the control panel wire harness to the game wire harness.
6. Use the enclosed TEKKEN 2 dedicated game wiring diagram as a guide to verify system connections prior to turning on power.

3.5 CABINET GRAPHICS

1. Install the cabinet side graphics provided. Float the graphics on by applying a spray of general purpose cleaner to the side wall. Smooth out the bubbles and liquid with a paint squeegee. Wipe the side decal dry with a soft cloth. Repeat for the opposite side.
2. Install the marquee overlay provided in the kit in place of the existing marquee.
3. Install the game play and game moves instruction cards provided with the kit.
4. If needed, trim the graphics to fit the particular cabinet.

4.3.1 Coin Options

COIN OPTIONS

GAME COST:	2 START 2 CONTINUE		(A)
DISCOUNT TO CONTINUE:	NO		(B)
COIN 1 MECH VALUE:	1 COIN COUNTS AS 1 COIN		(C)
COIN 2 MECH VALUE:	1 COIN COUNTS AS 1 COIN		(D)
BONUS FOR QUANTITY BUY-IN:	NONE		(E)
CREDIT MODE:	COMMON		(F)
COIN COUNTER:	TYPE A: 1 COUNTER		(G)
CHARACTER CHANGE AT VS GAME:	NO		(H)

PRESS R-PUNCH TO EXIT

COIN OPTION SCREEN

(A)	Game Cost	1-9 Coins = 1 Credit
(B)	Discount to Continue	Yes/No
(C)	Coin 1 Mech Value	1 Coin = 1-9 Credits
(D)	Coin 2 Mech Value	1 Coin = 1-9 Credits
(E)	Bonus for Quantity Buy-In	None/1-9 Coins give 1-3 Coins
(F)	Credit Mode	Common/Each
(G)	Coin Counter	Type A: 1 Counter/Type B: 2 Counters
(H)	Free Play	Yes/No

4.3.3 A.D.S. Screens

A.D.S. MODE			
ON TIME:		0H00M00S	
COIN 1 TOTAL 0*			
COIN 2 TOTAL 0			
SERVICE TOTAL			
	<u>TOTAL TIME</u>	<u>COUNT</u>	<u>AVERAGE</u>
1P PLAY	0H00M00S	1	0H00M00S
1P CONT	0H00M00S	0	0H00M00S
VS PLAY	0H00M00S	0	0H00M00S
ALL PLAY	0H00M00S	1	0H00M00S
ON TIME	0H00M00S		
PLAY RATIO	0.0%		
1P PLAY RATIO	100%	FREE PLAY	
VS PLAY RATIO	0%	0	
CLEAR: PRESS P1	LEFT UP & P1 START		
NEXT: PRESS P1	LEFT PUNCH		
EXIT: PRESS P1	RIGHT PUNCH		

A.D.S. Screen #1

A.D.S. MODE				
ON TIME:			0H00M00S	
CHARACTER DATA				
	<u>RATE</u>	<u>TOTAL</u>	<u>1P</u>	<u>VS</u>
PAUL	0%	0	0	0
LAW	0%	0	0	0
JACK-2	0%	0	0	0
NINA	0%	0	0	0
KING	0%	0	0	0
YOSHIMITSU	0%	0	0	0
MICHELLE	0%	0	0	0
HEIHACHI	0%	0	0	0
LEI	0%	0	0	0
JUN	0%	0	0	0
CLEAR: PRESS P1		LEFT UP & P1 START		
NEXT: PRESS P1		LEFT PUNCH		
EXIT: PRESS P1		RIGHT PUNCH		

A.D.S. Screen #2

5.0 SOUND VOLUME ADJUSTMENTS

Two methods of volume adjustment are provided: a main adjustment on the System PCB, and, if wired in stereo, individual left/right control knobs located on the Service Panel. The volume may be set during bench testing by adjusting the PCB Volume potentiometer (located near the heat sink-mounted component). The Namco recommended setting is fully clockwise.

6.0 MONITOR ADJUSTMENT

Various screens are provided in the Monitor Test Menus to aid in the adjustment of such aspects as brightness, contrast, vertical size, scan width, and centering.

Since these adjustments tend to be specific to a given monitor application, NAMCO can only supply general information. If you have questions regarding applicability of a particular monitor, contact NAMCO Customer Service.

IMPORTANT

Some monitors require use of an isolation transformer in the monitor power supply. Do not attempt to operate the TEKKEN 2 PCB without this transformer or damage to the game PCB will result.

7.2 EXTENDED EDGE CONNECTOR

(48 Pin 2.54 mm pitch)

Solder side	Terminal No.		Parts side
Speaker R (-)	A1	B1	Speaker R (+)
	A2	B2	
	A3	B3	
	A4	B4	
	A5	B5	Insertion error preventing key
	A6	B6	
	A7	B7	
2P Kick button 1	A8	B8	2P kick button 2
	A9	B9	
	A10	B10	
	A11	B11	
	A12	B12	
	A13	B13	
	A14	B14	
	A15	B15	
	A16	B16	
	A17	B17	
	A18	B18	
	A19	B19	1P Kick button 2
1P Kick button 1	A20	B20	
	A21	B21	
	A22	B22	
	A23	B23	
	A24	B24	

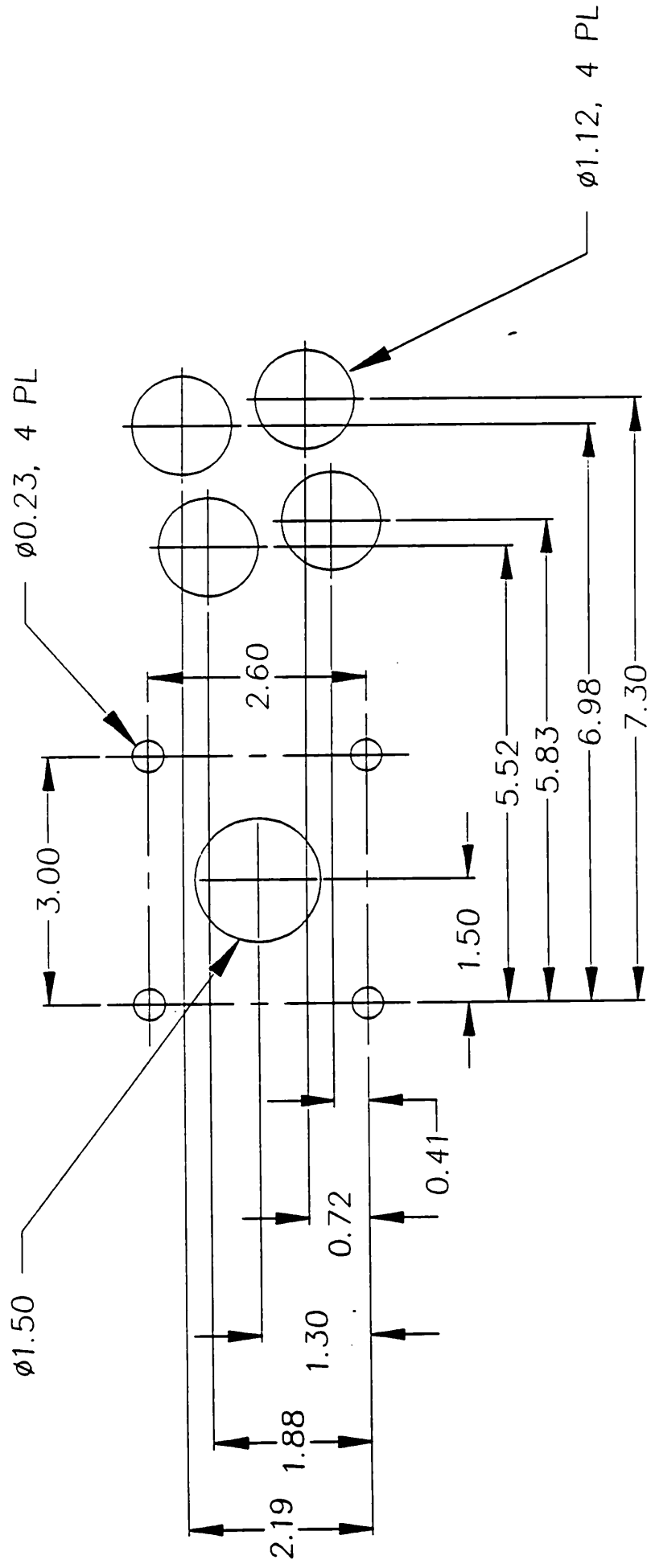
Notes:

- Do not connect leads to blank pins.
- For Stereo and Mono setting select the speaker output in the game option screen in test mode.
- Monophonic cabinets output only left channel sound when the stereo sound setting is selected.

Speaker connections

- Connect the (L) speaker to the speaker output of 56 Pin JAMMA edge connector.
- Connect the Right speaker to the speaker output of the 48 Pin edge connector.

APPENDIX A: CONTROL LAYOUT DRAWING

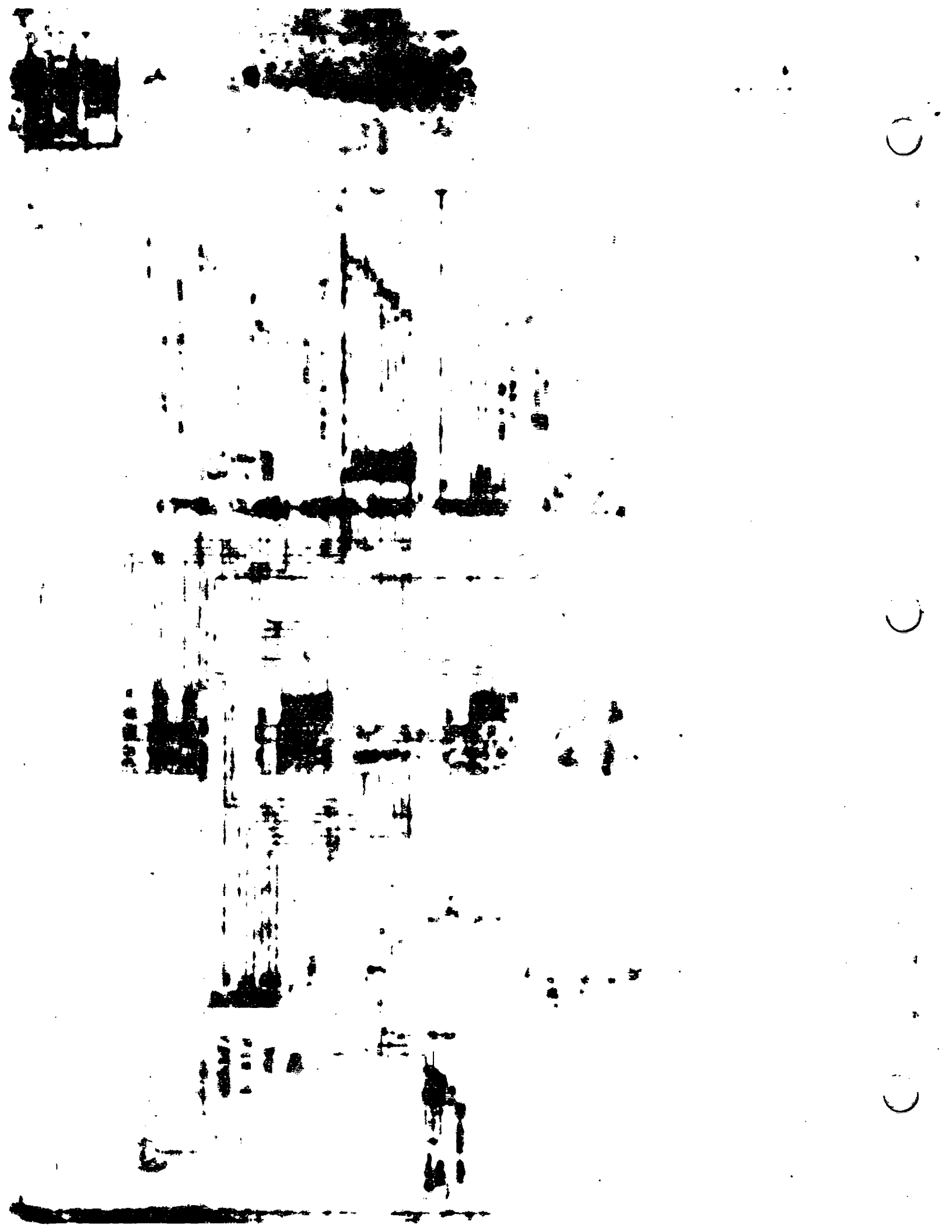


APPENDIX B: PARTS LIST

TEKKEN 2 KIT PARTS LIST

[illegible]

APPENDIX C: WIRING DIAGRAM





1

2

3

4

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6

7

1

2

3

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7

8

7.0 PCB CONNECTOR TABLES

7.1 JAMMA EDGE CONNECTOR

(56 Pin 3.96 mm pitch)

Solder side	Terminal	No.	Parts side
GND	A	1	GND
GND	B	2	GND
+5V	C	3	+5 V
+5 V	D	4	+5 V
	E	5	
+12 V	F	6	+12 V
Insertion error preventing	H	7	Insertion error preventing
Coin counter 2	J	8	Coin counter 1
	K	9	Coin lock out 1
Speaker (-)	L	10	Speaker(+)
Audio (GND)	M	11	Audio (+)
Video GREEN	N	12	Video RED
Video SYNC	P	13	Video BLUE
Service Switch	R	14	Video GND
	S	15	Test switch
Coin switch 2	T	16	Coin switch 1
2P start switch	U	17	1P start switch
2P lever UP	V	18	1P lever UP
2P lever DOWN	W	19	1P lever DOWN
2P lever LEFT	X	20	1P lever LEFT
2P lever RIGHT	Y	21	1P lever RIGHT
2P Punch button 1	Z	22	1P Punch button 1
2P Punch button 2	a	23	1P Punch button 2
	b	24	
	c	25	
	d	26	
GND	e	27	GND
GND	f	28	GND

+5V $\pm$ 5% 5A or more, +12V $\pm$ 5% 2.0A or more

Notes:

- Do not connect leads to blank pins.
- The lockout solenoid and coin counter operate on +12 volts
- Connect the switches to N.O. terminals and the GND to the COM terminal
- The +5V 2.5 A and +12 V 2.0 A supplies must be at + or - 5%.

A.D.S. MODE
ON TIME:
VS GAME WINNING AVERAGE DATA

	<u>W. AVE</u>	<u>TOTAL</u>	<u>WIN</u>	<u>LOSE</u>
PAUL	0%	0	0	0
LAW	0%	0	0	0
JACK-2	0%	0	0	0
NINA	0%	0	0	0
KING	0%	0	0	0
YOSHIMITSU	0%	0	0	0
MICHELLE	0%	0	0	0
HEIHACHI	0%	0	0	0
LEI	0%	0	0	0
JUN	0%	0	0	0

CLEAR: PRESS P1 LEFT UP & P1 START
 NEXT: PRESS P1 LEFT PUNCH
 EXIT: PRESS P1 RIGHT PUNCH

A.D.S Screen Page #3

4.3.2 Game Options

GAME OPTIONS		
DIFFICULTY LEVEL:	HARD	(A)
FIGHT COUNT (1P GAME):	2	(B)
FIGHT COUNT (VS GAME):	2	(C)
LIFE BAR (1P GAME):	110	(D)
LIFE BAR (VS GAME):	125	(E)
GUARD DAMAGE:	OFF	(F)
BASIC GUARD:	ON	(G)
ROUND TIME:	40 SEC	(H)
CHARACTER CHANGE AT CONTINUE:	YES	(I)
CHARACTER CHANGE AT VS GAME:	YES	(J)
NEW CHARACTER:	JUN & LEI	(K)
VS GAME WINS SHOWN BY:	NUMBER	(L)
MUSIC IN ATTRACT:	YES	(M)
SPEAKER OUT:	STERO	(N)
EVENT MODE:	NO	(O)
HIT COLOR:	RED	(P)
PRESS R-PUNCH TO EXIT		

GAME OPTION SCREEN

(A)	Difficulty Level	Easy, Medium, Hard, Extra Hard, Ultra Hard
(B)	Flight Count (1P Game)	1 thru 4
(C)	Flight Count (VS Game)	1 thru 4
(D)	Life Bar (1P Game)	95, 110, 125, 140, 160
(E)	Life Bar (VS Game)	95, 110, 125, 140, 160
(F)	Guard Damage	On/Off
(G)	Basic Guard	On/Off
(H)	Round Time	20, 30, 40, 60
(I)	Character Change at Continue	Yes/No
(J)	Character Change at VS Game	Yes/No
(K)	New Character	Jun/Baek
(L)	VS Game Wins Shown By	Number/Fruit
(M)	Music in Attract	Yes/No
(N)	Speaker Out	Stereo/Mono
(O)	Event Mode	Yes/No
(P)	Hit Color	Red/Green

4.0 SET UP AND TEST

4.1 TEST MODE

TEST mode allows the operator to test the game controls, set various game options, set coin options and test and adjust the video monitor.

4.2 TEST MODE PROCEDURE

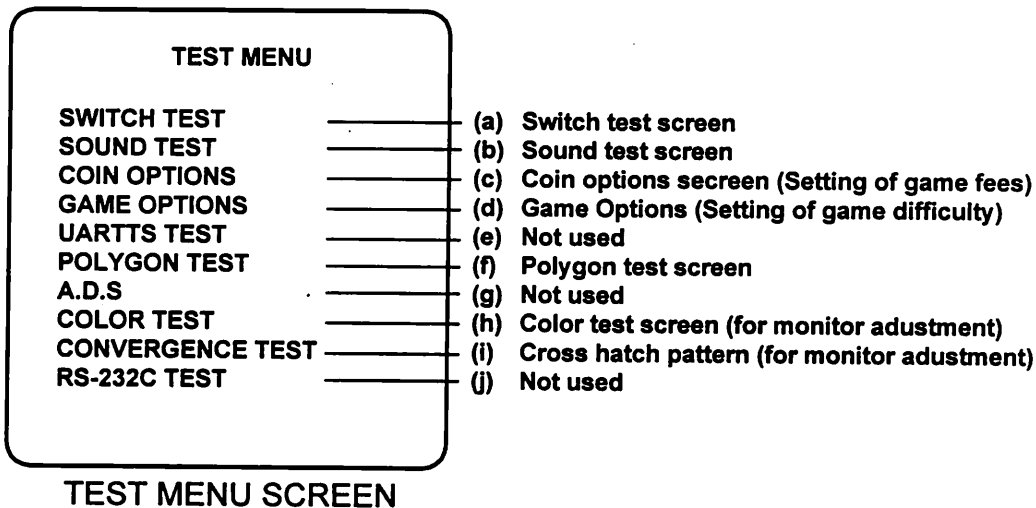
To enter TEST Mode, open the coin door and set the TEST switch to the ON Position.

Alt. Method: Flip SW2 No. 1 on the System PCB to the ON position. SW2 No. 2 must remain OFF at all times.

To adjust the setup options, follow these steps in sequence:

- | | |
|------------------|------------------------|
| A. Select | Use Joystick |
| B. Adjust | Use Left Punch Button |
| C. Exit | Use Right Punch Button |

4.3 TEST MENU



3. The TEKKEN 2 PCB can be damaged by even the small internal voltage of a multimeter or similar device. Never test the PCB for conductivity with such devices.
4. In the event of a PCB failure please contact your distributor for factory repairs.
5. Wrap return PCBs with a suitable anti-static foam or bubble wrap and label the return carton with the serial number and RMA number.
6. Dust or foreign matter may cause PCB failure. Dust can be removed using canned compressed air available at electronics supply stores. Turn the power off before cleaning the PCB.

3.2 CABINET PREPARATION

Remove the following from the existing game or standard cabinet:

1. Game PCB
2. Control Panel
3. Marquee
4. Decals
5. Clean and fill all blemishes and dents and paint the exterior of the cabinet as needed.

3.3 GAME INSTALLATION

1. Mount the game PCB to the inside of the game cabinet and enclose in the FCC EMI Shield Box provided. Be sure the ferrite core provided with the kit is located close to the shield.
2. Connect the JAMMA connector and the 48 pin connector to the game PCB.
3. Connect the monitor.
4. Connect the coin door and the coin meter to the wire harness.
5. Connect the test/service panel.
6. Connect the speakers to the wire harness.

1.1 GAME CONVERSION OVERVIEW

The TEKKEN 2 kit consists of the TEKKEN 2 PCB set, a standard JAMMA (56 pin) wire harness, an extended JAMMA (48 pin) wire harness for stereo and extra controls, a set of player controls and TEKKEN 2 graphics. This kit can be installed in an industry standard 25 or 27 inch color monitor kit cabinet. Optimum results are achieved by installing TEKKEN 2 in a cabinet with stereo speakers and a large 4 player size control panel.

2.0 INTRODUCTION

TEKKEN 2 is the sequel to the original TEKKEN, a realistic two-player 3-D fighting game. It is a high performance, low-cost, polygon texture-mapped fighting game! Improvements to TEKKEN 2 include enhancements to graphics, audio, added characters and moves and a first-of-it's-kind character TIME RELEASE SYSTEM.

Each player has an 8-way joystick and four buttons to control their character. Each of the four buttons control the action of an arm and leg. When used in conjunction with the joystick, characters can punch and kick high, medium and low. Defending against a punch and/or kick is controlled by moving the joystick away from the opponent at the appropriate height.

TEKKEN 2 includes "Throwing Techniques" for each character. to perform a throw, stand close to the opponent and press both left punch & kick buttons or right punch & kick buttons simultaneously. These throws can be executed as offensive moves and as counters to an opponents attack.

The TIME RELEASE SYSTEM is an industry first! According to a predetermined schedule, the TIME RELEASE SYSTEM automatically releases new selectable characters. The system is activated as soon as the game is powered up. Approximately one month later (provided the game is operated on a daily basis), one new selectable character is released each week for a ten week period. Until this time, some of these characters are sub-bosses that can only be challenged (not controlled) in games versus the computer. In the last 7 weeks of the schedule, 5 more characters will be released. At the end of 20 weeks there is a total of 25 characters to select from! Try to find that in any other fighting game!

Through the use of SECRET CODES, players can activate sub-bosses and hidden characters prior to their scheduled release. These codes are performed by inputting a combination of joystick and button commands. When sub-bosses are activated in this manner they remain selectable (continues, buy-in's included) until the game returns to the attract mode.

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- b) Such products are returned prepaid to Seller's plant; and
- c) Seller's examination of said products discloses to Seller's satisfaction that such alleged defects existed and were not caused by accident, misuse, neglect, alteration, improper repair, improper installation, or improper testing.

In any event shall Seller be liable for loss of profits, loss of use, incidental or consequential damages.

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