

FIRST PRINTING -August '96

SEGATM

**DIE HARD
ARCADE**

Game Service Manual

SEGA ENTERPRISES, INC., (USA)

MANUAL NO. STVV-00609





INTRODUCTION OF THE OWNERS MANUAL

SEGA ENTERPRISES, LTD. , supported by its high electronic technology of LSIs, microprocessors, etc. and a wealth of experience, has for more than 30 years been supplying various innovative and popular game machines to the world market. This Service Manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electromechanicals, servicing control, spare parts, etc. as regards ST-V, the SEGA Titan Video Games System.

This manual is intended for those who have knowledge of electricity and technical expertise especially in ICs, CRTs, microprocessors, etc. Carefully read this manual to acquire sufficient knowledge before working on the machine. Should there be a malfunction, nontechnical personnel should under no circumstances touch the interior system. Should such a case arise, contact our Main Office or the closest branch office as follows:

SEGA ENTERPRISES, INC. (U.S.A)

CUSTOMER SERVICE

45133 Industrial Drive, Fremont, California 94538 USA

Phone: (415) 802-1750 FAX: (415) 802-1754

Monday thru Friday, 7:30 am to 4 pm, Pacific Time

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First Printing July 1996.

The specifications note herein are subject to change without notice.



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PLACING & REMOVING THE CARTRIDGE

CAUTION The following procedures should be done by service personnel only.

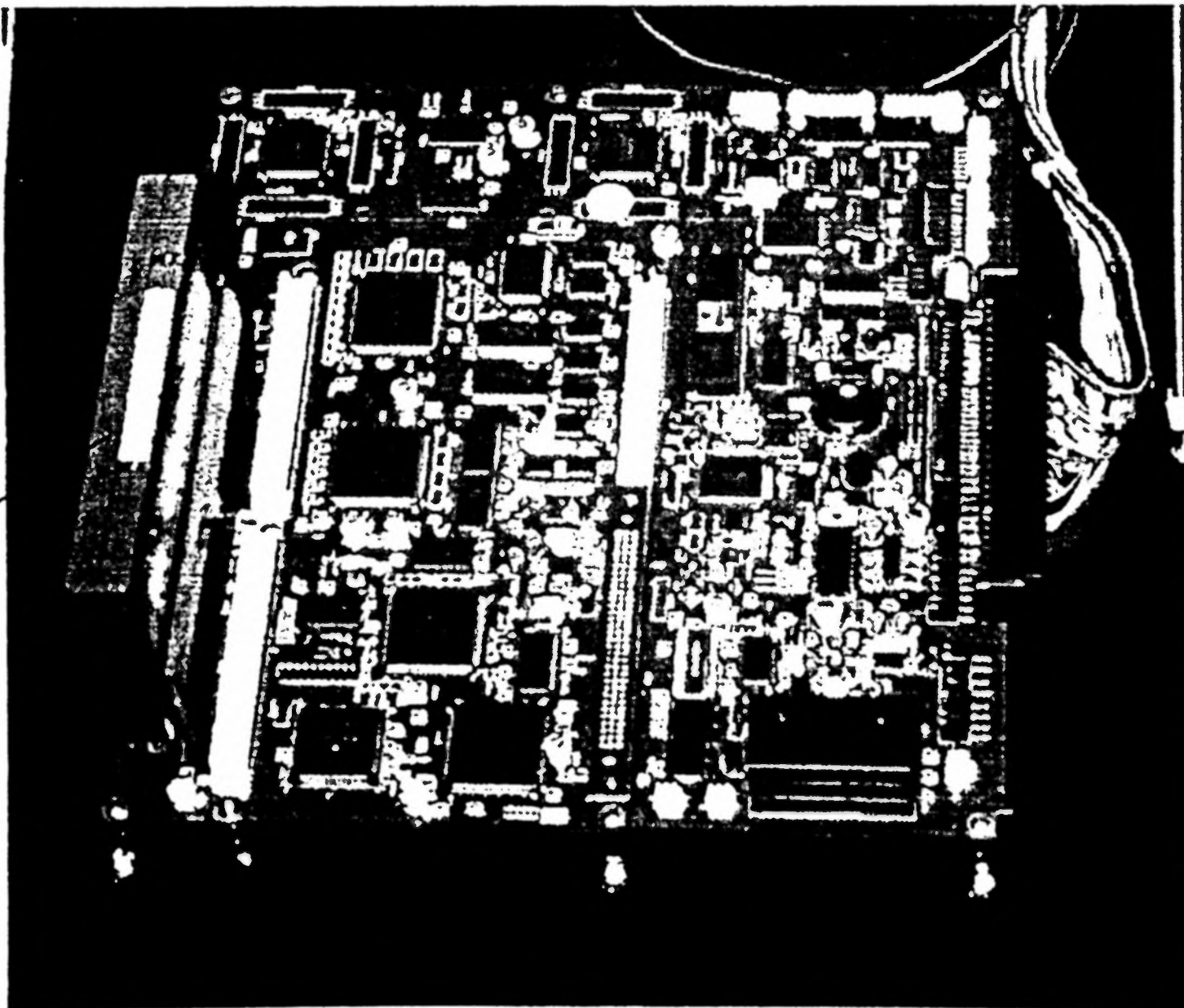
Die Hard Arcade software is a modular game cartridge for the ST-V Titan Cabinet. You simply insert the cartridge onto the Game Board located behind the rear service door of the Titan Cabinet. Open the rear service door by removing the two shipping screws and using the key. For shipping purposes, the Cartridge is inside the cash box.

When installing /removing a Cartridge: ensure that the Cabinet's main power is OFF.

Completely insert the Game Cartridge vertically, with the back side facing away from the Board.

When removing the Cartridge, do not try to pull it up with the Holder still remaining in a secured status. Slightly incline the Holder, and bend the catch toward the outside. Applying excessive force to the Board may cause damage such as soldering defects, etc.

*DIE HARD arcade
Game Cartridge*



TEST MODE

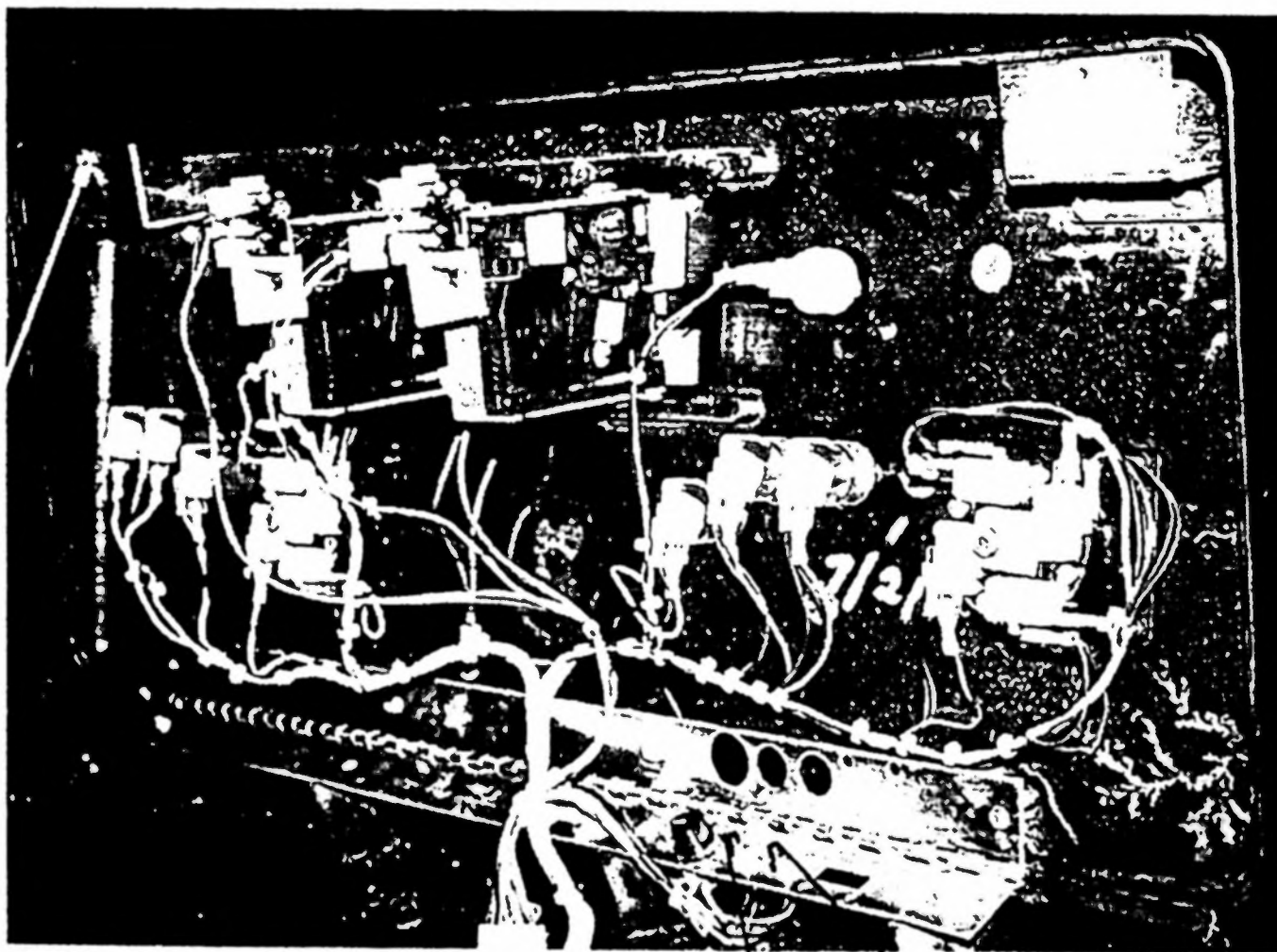
You can adjust the Coin Assignments, Systems Bookkeeping, and game play options (Each Game Test) by using the Service and Test buttons. Open the Control Panel by unlocking the two locks located underneath it. Swing open the Control Panel and note the Service and Test buttons on the hinge of the Control Panel. Push the Test button to have the ST-V Test Menu appear. Use the Service button to select a setting and Test button to enter the selection. Select Exit to finish.

ST-V TEST MENU

- MEMORY TEST
- C.R.T. TEST
- INPUT TEST
- CLOCK ADJUSTMENTS
- SYSTEM ASSIGNMENTS
- COIN ASSIGNMENTS
- SYSTEM BOOKKEEPING
- BACKUP DATA CLEAR
- EACH GAME TEST
 - [DIE HARD ARCADE
 - [
 - [
 - [
 - [

---> EXIT

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON



Test Button Service Button

COIN ASSIGNMENTS	
COIN CHUTE TYPE	COMMON
CREDIT TO START	1 CREDIT
COIN/CREDIT SETTING	#1
COIN CHUTE #1	1 COIN 1 CREDIT
COIN CHUTE #2	1 COIN 1 CREDIT
MANUAL SETTING	
--> EXIT	
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON	

Common

COIN ASSIGNMENTS	
COIN CHUTE TYPE	INDIVIDUAL
CREDIT TO START	1 CREDIT
COIN/CREDIT SETTING	#1
COIN CHUTE #1	1 COIN 1 CREDIT
MANUAL SETTING	
--> EXIT	
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON	

Individual

1. COIN ASSIGNMENTS

In this mode, the setting of credit increments, etc. as against coin insertions can be changed.

- 1) Press the Service button to bring the "—>" to the desired item.
- 2) Press the Test button to change the setting.
- 3) After the desired setting is finished, bring the "—>" to Exit and press the Test button.

CAUTION:

Changing the contents of Coin Assignments settings results in clearing the contents of System Bookkeeping and the Bookkeeping of each game.

(A) Coin Chute Type (COMMON, INDIVIDUAL)

Set this in accordance with the Cabinet Coin Chute Specifications.

COMMON

Used for the type of the cabinet whose coin acceptance is a common type for multiple players. Regardless of the number of players, COIN 1/COIN 2 ports are useful.

INDIVIDUAL

Used for the type of the cabinet which has a coin acceptance chute for each player. For the COIN SW port, refer to Control Panel on page 13.

(B) Credit to Start (1 CREDIT, 2 CREDITS)

Sets the number of credits required when starting the game (1 CREDIT, 2 CREDITS).

Note that in both settings, the number of credits required for CONTINUE is one.

C) Coin/Credit Setting (#1-#26)

Sets the CREDIT increase increment per coin insertion. There are 26 settings from #1 to #26, expressed in 00 credits as against 00 COINS inserted. #26 refers to FREE PLAY. For details, refer to Table 1 (COMMON) and Table 2 (INDIVIDUAL) on the next page.

(D) Manual Setting

The CREDIT'S incremental increase settings as against a coin insertion are shown in further details than in (C) above (refer to Table 3 on the next page). Also, note that when this MANUAL setting is performed, the COIN/CREDIT setting becomes ineffective.

(E) Coin to Credit

Determines COIN /CREDIT setting.

(F) Bonus Adder

This sets how many COINs should be inserted to obtain one SERVICE COIN.

(G) Coin Chute #1/#2 Multiplier

This sets how many tokens one COIN represents.

MANUFACTURER'S RECOMMENDED SETTINGS FOR COIN ASSIGNMENTS AND NUMBER OF COINS

2 COINS, 1 CREDIT (Setting #12)

COIN ASSIGNMENTS MANUAL SETTING									
COIN TO CREDIT					1 COIN 1 CREDIT				
BONUS ADDER					NO BONUS ADDER				
COIN CHUTE #1					MULTIPLIER				
COIN					1 COIN COUNTS AS 1 COIN				
1	2	3	4	5	6	7	8	9	
1	2	3	4	5	6	7	8	9	
CREDIT									
COIN CHUTE #2					MULTIPLIER				
COIN					1 COIN COUNTS AS 1 COIN				
1	2	3	4	5	6	7	8	9	
1	2	3	4	5	6	7	8	9	
CREDIT									
--> EXIT									
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON									

Manual Setting Screen- Common

COIN ASSIGNMENTS MANUAL SETTING									
COIN TO CREDIT					1 COIN 1 CREDIT				
BONUS ADDER					NO BONUS ADDER				
COIN CHUTE #1					MULTIPLIER				
COIN					1 COIN COUNTS AS 1 COIN				
1	2	3	4	5	6	7	8	9	
1	2	3	4	5	6	7	8	9	
CREDIT									
--> EXIT									
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON									

Manual Setting Screen - Individual

* MANUFACTURER'S
RECOMMENDED SETTING

NAME OF SETTING	COIN CHUTE 1	COIN CHUTE 2
SETTING #1	1 COIN 1 CREDIT	1 COIN 1 CREDIT
SETTING #2	1 COIN 1 CREDIT	1 COIN 2 CREDITS
SETTING #3	1 COIN 1 CREDIT	1 COIN 3 CREDITS
SETTING #4	1 COIN 1 CREDIT	1 COIN 4 CREDITS
SETTING #5	1 COIN 1 CREDIT	1 COIN 5 CREDITS
SETTING #6	1 COIN 2 CREDITS	1 COIN 2 CREDITS
SETTING #7	1 COIN 2 CREDITS	1 COIN 5 CREDITS
SETTING #8	1 COIN 3 CREDITS	1 COIN 3 CREDITS
SETTING #9	1 COIN 4 CREDITS	1 COIN 4 CREDITS
SETTING #10	1 COIN 5 CREDITS	1 COIN 5 CREDITS
SETTING #11	1 COIN 6 CREDITS	1 COIN 6 CRETIS
SETTING #12*	2 COINS 1 CREDIT	2 COINS 1 CREDIT
SETTING #13	2 COINS 1 CREDIT	1 COIN 1 CREDIT
SETTING #14	2 COINS 1 CREDIT	1 COIN 2 CREDITS
SETTING #15	1 COIN 1 CREDIT	1 COIN 1 CREDIT
	2 COINS 3 CREDITS	2 COINS 3 CREDITS
SETTING #16	1 COIN 1 CREDIT	1 COIN 3 CREDITS
	2 COINS 3 CREDITS	
SETTING #17	3 COINS 1 CREDIT	3 COINS 1 CREDIT
SETTING #18	4 COINS 1 CREDIT	4 COINS 1 CREDIT
SETTING #19	1 COIN 1 CREDIT	1 COIN 1 CREDIT
	2 COINS 2 CREDITS	2 COINS 2 CREDITS
	3 COINS 3 CREDITS	3 COINS 3 CREDITS
	4 COINS 5 CREDITS	4 COINS 5 CREDITS
SETTING #20	1 COIN 1 CREDIT	1 COIN 5 CREDITS
	2 COINS 2 CREDITS	
	3 COINS 3 CREDITS	
	4 COINS 5 CREDITS	
SETTING #21	3 COINS 1 CREDIT	1 COIN 2 CREDITS
	5 COINS 2 CREDITS	
SETTING #22	2 COINS 1 CREDIT	2 COINS 1 CREDIT
	4 COINS 2 CREDITS	4 COINS 2 CREDITS
	5 COINS 3 CREDITS	5 COINS 3 CREDITS
SETTING #23	2 COINS 1 CREDIT	1 COIN 3 CREDITS
	4 COINS 2 CREDITS	
	5 COINS 3 CREDITS	
SETTING #24	1 COIN 1 CREDIT	1 COIN 1 CREDIT
	2 COINS 2 CREDITS	2 COINS 2 CREDITS
	3 COINS 3 CREDITS	3 COINS 3 CREDITS
	4 COINS 4 CREDITS	4 COINS 4 CREDITS
	5 COINS 6 CREDITS	5 COINS 6 CREDITS
SETTING #25	1 COIN 1 CREDIT	1 COIN 6 CREDITS
	2 COINS 2 CREDITS	
	3 COINS 3 CREDITS	
	4 COINS 4 CREDITS	
	5 COINS 6 CREDITS	
SETTING #26	FREE PLAY	FREE PLAY

TABLE 1: Coin/Credit Setting (Coin Chute Common Type)

NAME OF SETTING	EACH STATION'S COIN CHUTE
SETTING #1	1 COIN 1 CREDIT
SETTING #6	1 COIN 2 CREDITS
SETTING #8	1 COIN 3 CREDITS
SETTING #9	1 COIN 4 CREDITS
SETTING #10	1 COIN 5 CREDITS
SETTING #11	1 COIN 6 CREDITS
SETTING #12	2 COINS 1 CREDIT
SETTING #15	1 COIN 1 CREDIT 2 COIN 3 CREDITS
SETTING #17	3 COINS 1 CREDIT
SETTING #18	4 COINS 1 CREDIT
SETTING #19	1 COIN 1 CREDIT 2 COINS 2 CREDITS 3 COIN 3 CREDITS 4 COIN 5 CREDITS
SETTING #21	3 COINS 1 CREDIT 5 COINS 2 CREDITS
SETTING #22	2 COINS 1 CREDIT 4 COINS 2 CREDITS 5 COINS 3 CREDITS
SETTING #24	1 COIN 1 CREDIT 2 COIN 2 CREDITS 3 COINS 3 CREDITS 4 COINS 4 CREDITS 5 COINS 5 CREDITS
SETTING #26	FREE PLAY

TABLE 2: Coin/Credit Setting (Coin Chute Individual Type)

COIN TO CREDIT	1 COIN 1 CREDIT
	2 COINS 1 CREDIT
	3 COINS 1 CREDIT
	4 COINS 1 CREDIT
	5 COINS 1 CREDIT
	6 COINS 1 CREDIT
	7 COINS 1 CREDIT
	8 COINS 1 CREDIT
	9 COINS 1 CREDIT

ADDITIONAL BONUS	NO ADDITIONAL BONUS
	2 COINS GIVE 1 EXTRA COIN
	3 COINS GIVE 1 EXTRA COIN
	4 COINS GIVE 1 EXTRA COIN
	5 COINS GIVE 1 EXTRA COIN
	6 COINS GIVE 1 EXTRA COIN
	7 COINS GIVE 1 EXTRA COIN
	8 COINS GIVE 1 EXTRA COIN
	9 COINS GIVE 1 EXTRA COIN

COIN CHUTE #1/#2 MULTIPLIER	1 COIN COUNTS AS 1 COIN
	1 COIN COUNTS AS 2 COINS
	1 COIN COUNTS AS 3 COINS
	1 COIN COUNTS AS 4 COINS
	1 COIN COUNTS AS 5 COINS
	1 COIN COUNTS AS 6 COINS
	1 COIN COUNTS AS 7 COINS
	1 COIN COUNTS AS 8 COINS
	1 COIN COUNTS AS 9 COINS

TABLE 3: Manual Setting

SYSTEM BOOKKEEPING		PAGE 1/2
COIN CHUTE #1		0
COIN CHUTE #2		0
COIN CHUTE #3		0
COIN CHUTE #4		0
TOTAL COINS		0
COIN CREDITS		0
SERVICE CREDITS		0
TOTAL CREDITS		0
NUMBER OF GAMES		0
TOTAL TIME	0D00H00M00S	
GAME PLAY TIME	0D00H00M00S	
SERVICE BUTTON TO OTHER PAGE		
TEST BUTTON TO RETURN		

SYSTEM BOOKKEEPING					PAGE 2/2
CART #1	[]	
CART #2	[]	
CART #3	[]	
CART #4	[]	
	CART #1	CART #2	CART #3	CART #4	
NUMBER OF GAMES					
NEW GAME	0	0	0	0	0
CONT GAME	0	0	0	0	0
TOTAL GAME	0	0	0	0	0
GAME TIME					
AVERAGE	0M00S	0M00S	0M00S	0M00S	
LONGEST	0M00S	0M00S	0M00S	0M00S	
SHORTEST	0M00S	0M00S	0M00S	0M00S	
SERVICE BUTTON TO OTHER PAGE					
TEST BUTTON TO RETURN					

Multi-Cartridge Mode

2. SYSTEM BOOKKEEPING

Allows for checking data such as number of coins inserted/number of credits/time/game frequency.

Depending on Cabinet Type setting and Coin Chute setting, the number of display items and meanings are different.

When the Coin Chute Type is COMMON

Regardless of the Cabinet Type setting, Items #1/#2 are displayed.

Displays the number of coins inserted per COIN 1 and COIN 2 are displayed.

(When the Coin Chute Type is INDIVIDUAL

Depending on the Cabinet Type setting (1P-4P), the number of items vary. Each value for #1-#4 represents the number of coins inserted by the corresponding 1P-4P Players. The display on page 2/2 varies depending on the cartridge mode. Press the SERVICE button to alternate page 1/2 and 2/2. Press the TEST button the have the MENU mode return to the screen.

SYSTEM BOOKKEEPING		PAGE 2/2
NUMBER OF GAMES		0
NEW GAME		0
CONT GAME		0
TOTAL GAME		0
GAME TIME		0M00S
AVERAGE		0M00S
LONGEST		0M00S
SHORTEST		0M00S
SERVICE BUTTON TO OTHER PAGE		
TEST BUTTON TO RETURN		

Stand Alone Mode

3. BACKUP DATA CLEAR

Clears the contents of BOOKKEEPING.

Press the SERVICE button to bring the "—>" to the desired item and press the TEST button to execute the desired item as follows:

(A) System Data Clear

Clears the contents of SYSTEM BOOKKEEPING.

(B) All Data Clear

Clears each game's BOOKKEEPING in addition to clearing the SYSTEM BOOKKEEPING.

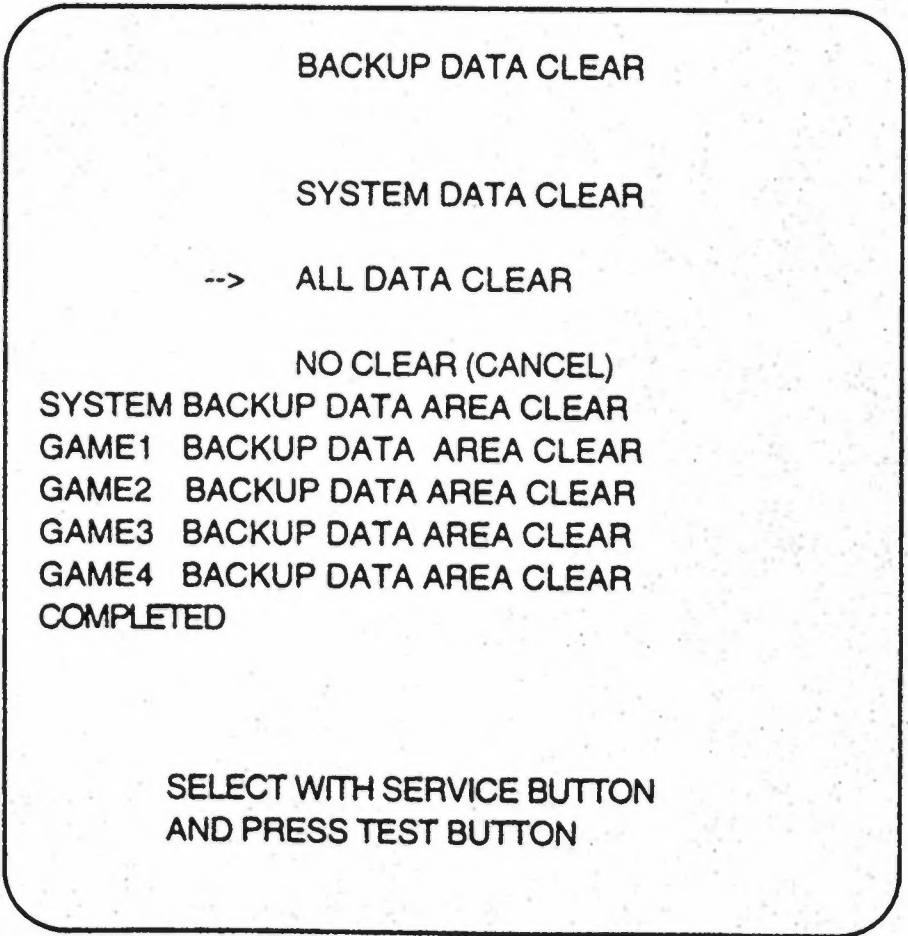
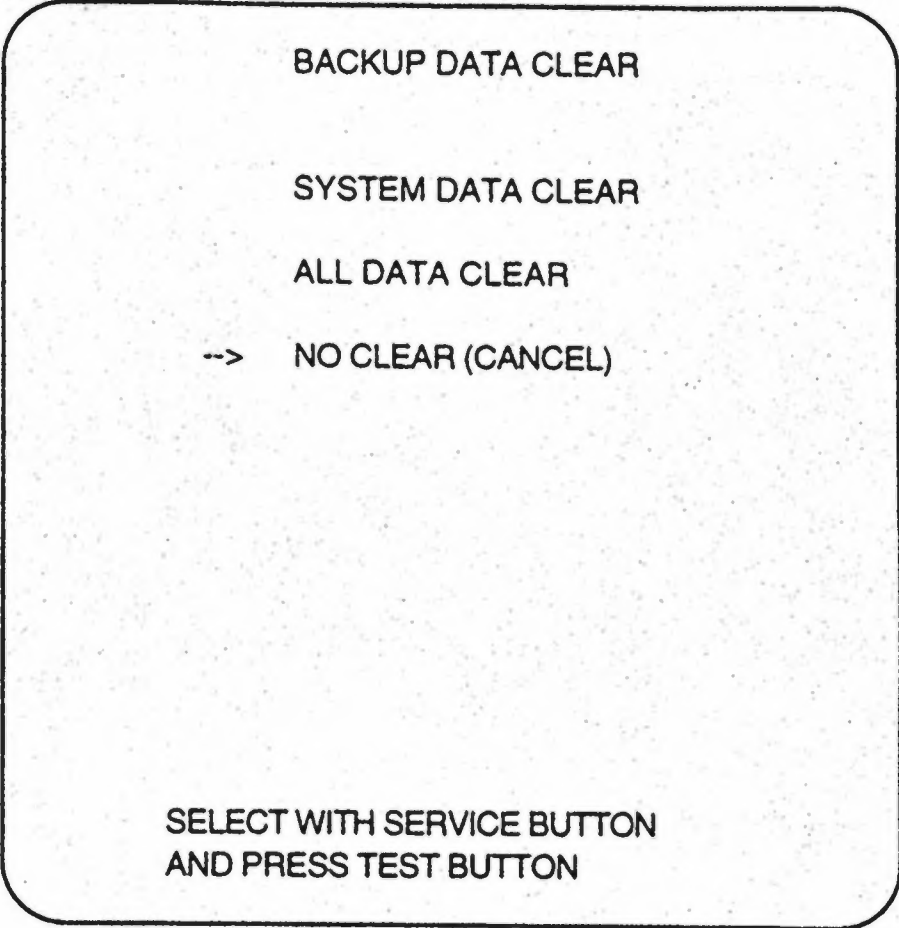
Each time a new game cartridge is installed in your Sega Titan cabinet, the back up data clear must be performed.

(C) No Clear (CANCEL)

This does not execute clearing and causes the MENU mode to return to the screen.

CAUTION:

Apart from the above, the contents of BOOKKEEPING can be cleared as in (B) ALL DATA CLEAR above by changing the setting of CABINET TYPE or ALONE/MULTI of System Assignments (on page 18 in the Titan Cabinet Service Manual).



All Data Clear

TEST MODE

INPUT TEST

SOUND TEST

GAME ASSIGNMENTS

BOOKKEEPING

BACKUP DATA CLEAR

OUTPUT TEST

EXIT

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON

4. EACH GAME TEST

Input Test

This test displays the state of each switch on the control panel.

Sound Test

This allows sound in the game to be tested.

Game Assignments

In this mode, game difficulty, levels, etc. can be changed (refer to screen below).

Bookkeeping

This allows for checking the selected frequency of each team as well as the frequencies of 1P play and Player vs. Player games.

Backup Data Clear

Clears the contents of BOOKKEEPING.

Output Test

In this mode the lamps and 7-SEG display, which are incorporated into the marquee of the Titan Video Cabinet, are tested.

5. GAME ASSIGNMENTS

1. GAME DIFFICULTY

Range: 1-8 (hardest)

2. INITIAL VITALITY

Range:

64, 85, 93, 102, 114, 128, 146, 171

Determines the vitality (health) of the player's character at game start.

3. INITIAL PLAYERS

Range: 1-4

Number of players to start game.

4. PAUSE BUTTON

Range: USE- NO_USE

Must be set at NO_USE. This feature is not available on this game.

5. VIOLENCE MODE

Range: ON-OFF

Controls depiction of graphic violence during game play.

GAME ASSIGNMENTS

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON

1	GAME DIFFICULTY	(4)
2	INITIAL VITALITY	(114)
3	INITIAL PLAYERS	(1)
4	PAUSE BUTTON	(NO_USE)
5	VIOLENCE MODE	(ON)

GAME FEATURES

Characters have over 1000 moves.

Over 30 characters.

Multiple weapons, including:

Hand Gun, Machine Gun, Missile Launcher, Anti-Tank rifle, Knife, Fire Axe, Broken bottle, Club, Iron Pipe, Pepper Spray, Hair Spray w/ lighter (Flamethrower)

Players operate characters to advance while attacking enemies with the punch and kick features and weapons.

Defeat all enemies in a stage to advance to the next stage.

It is possible to take weapons from the enemy and use them.

Game is over when life gauge reaches zero.

Players may join the game at any time during play.

Building map is displayed between stages.

PIN ASSIGNMENTS

The following < > refers to the Coin Setting set to "INDIVIDUAL"
(JAMMA)

COMPONENT SIDE		SOLDER SIDE
GND	1 A	GND
GND	2 B	GND
+5V	3 C	+5V
+5V	4 D	+5V
(NOT USED)	5 E	(NOT USED)
+12V	6 F	+12V
(NOT USED)	7 H	(NOT USED)
COIN METER 1	8 J	COIN METER 2
(COIN LOCKOUT 1)	9 K	(COIN LOCKOUT 2)
SPEAKER (+)	10 L	SPEAKER (-)
(NOT USED)	11 M	(NOT USED)
RED	12 N	GREEN
BLUE	13 P	SYNC.
GND (SYNC.)	14 R	SERVICE
TEST	15 S	(NOT USED)
<1P COIN> COIN 1	16 T	COIN 2 <2P COIN>
1P START	17 U	2P START
1P UP	18 V	2P UP
1P DOWN	19 W	2P DOWN
1P LEFT	20 X	2P LEFT
1P RIGHT	21 Y	2P RIGHT
1P SW1	22 Z	2P SW1
1P SW2	23 a	2P SW2
1P SW3	24 b	2P SW3
(NOT USED)	25 c	(NOT USED)
(GAME SELECT)	26 d	(PAUSE)
GND	27 e	GND
GND	28 f	GND

56P P=3.96mm

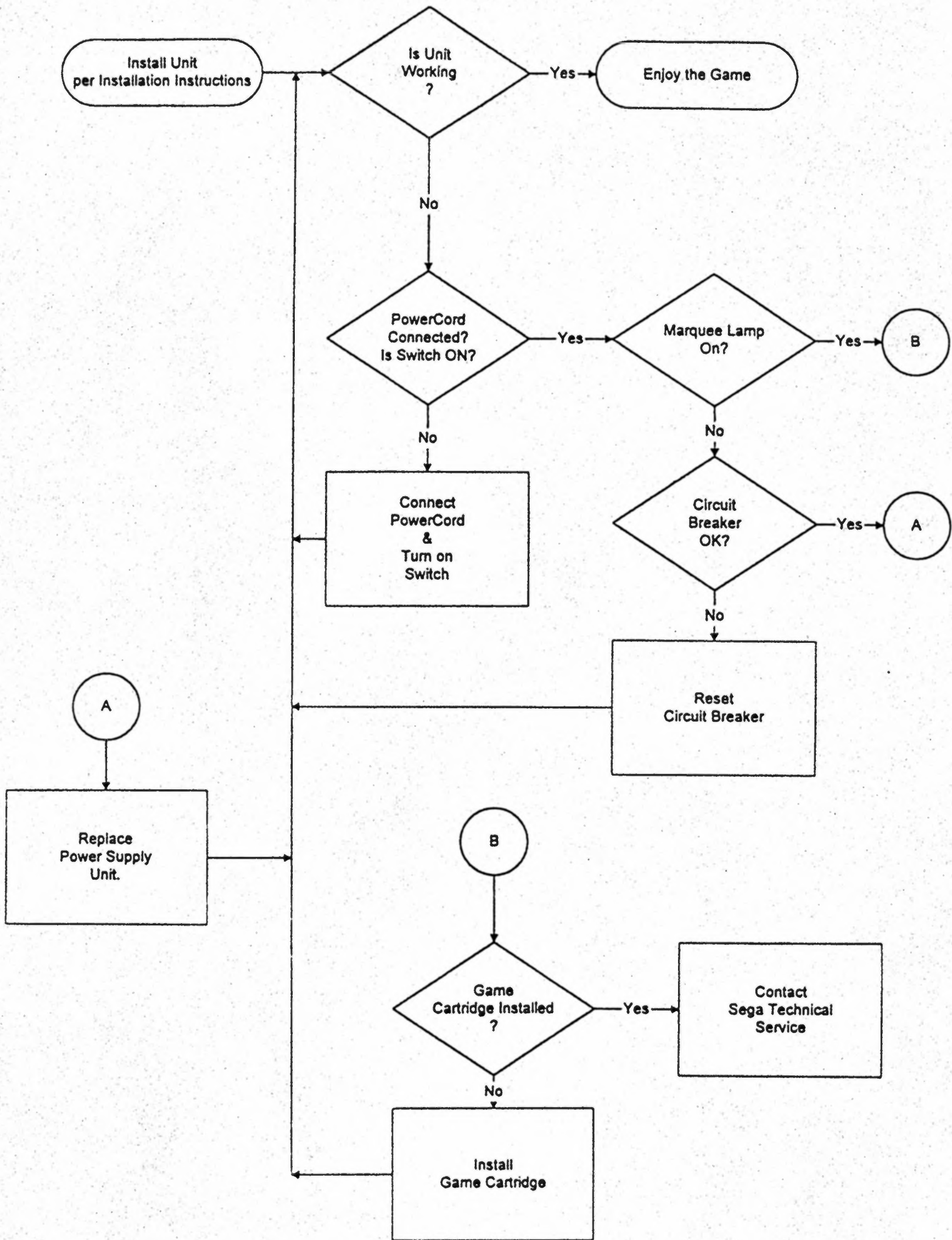
SW1: Swing/Pitch
SW2: Steal
SW3: Bunt/Time out

Extension I/O Port (2L12B)

CN 21 JST 11P	
1	GND
2	GND
3	1P SW4
4	1P SW5
5	1P SW6
6	(1P SW7) NOT USED
7	2P SW4
8	2P SW5
9	2P SW6
10	(2P SW7) NOT USED
11	GND

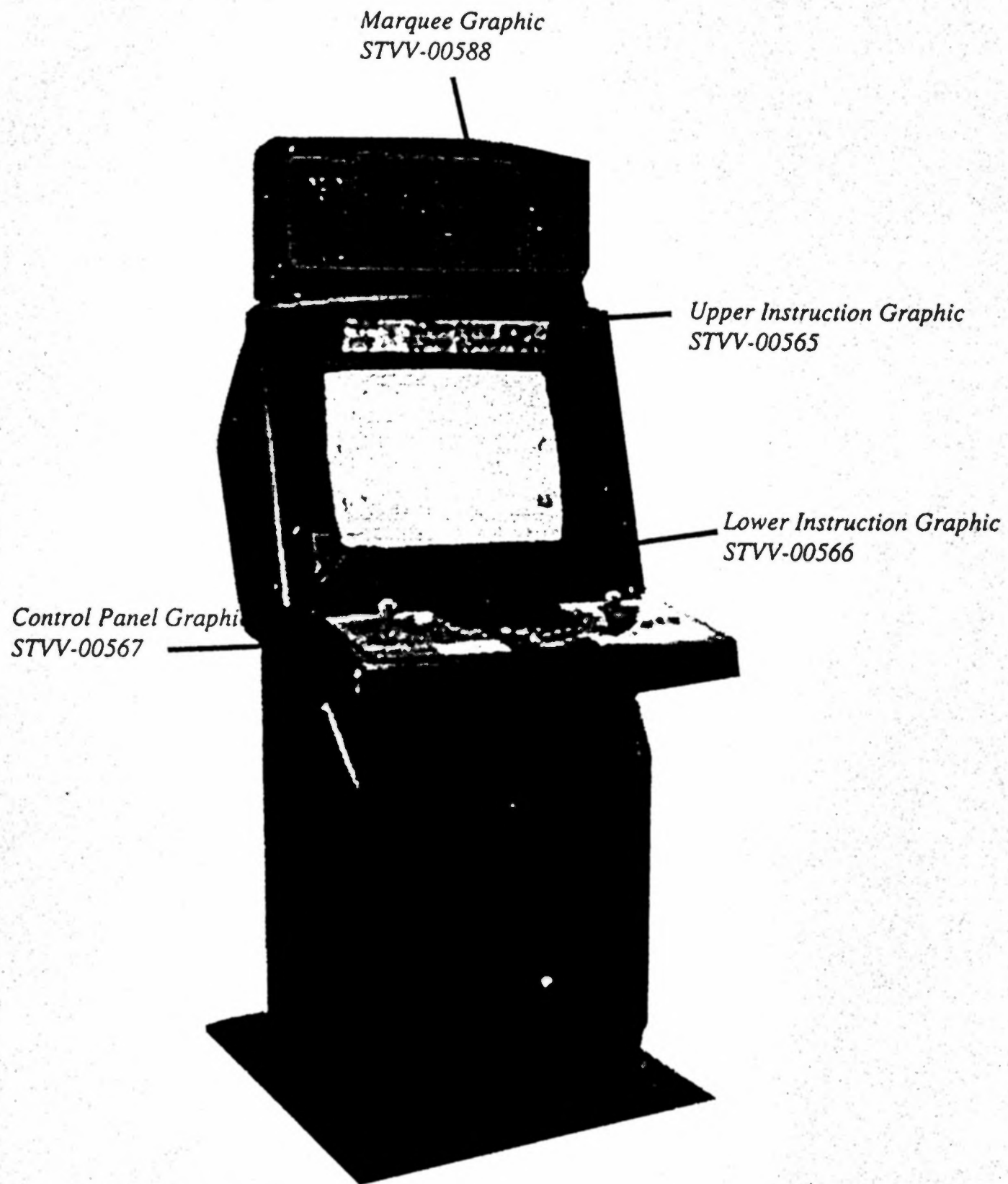
CN 32 JST 8P	
1	3P SW1
2	3P SW2
3	3P SW3
4	3P START
5	3P DOWN
6	3P UP
7	3P RIGHT
8	3P LEFT
9	GND

CN 21 JST 11P	
1	GND
2	GND
3	4P SW1
4	4P SW2
5	4P SW3
6	4P START
7	4P DOWN
8	4P UP
9	4P RIGHT
10	4P LEFT
11	GND



TROUBLESHOOTING CHART

GRAPHICS IDENTIFICATION



HARDWARE and FASTENERS

ITEM NO.	DESCRIPTION	LOCATION
80	BOLT,CARRIAGE,#10-24X1,BLK,ZNC	Joystick to Control Panel Top
81	NUT,KEP,#10-24,CLR,ZNC	Joystick to Control Panel Top
82	BOLT,CARRIAGE,1/4-20X 1-1/2",CLR,ZNC	Bottom Control Panel to Cabinet
83	NUT,KEP,1/4-20,CLR,ZNC	Bottom Control Panel to Cabinet
84	SCR,#6-19X3/8,PAN,PHIL,P/T,BLK,NIC	Speaker Grill to Monitor Bezel
85	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Control Panel Hinge to Control Panel Upper and Lower
86	SCR,1/4-10X3/4,PAN,PHIL,P/T,BLK,NIC	Marquee Housing to Main Cabinet
87	SCR,1/4-10X3/4,PAN,PHIL,P/T,BLK,NIC	Marquee Bracket to Main Cabinet
88	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Coin Chute to Front Panel Main Cabinet
89	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Panel Support Lanyard to Main Cabinet
90	SCR,#8X3/8, SHEETMETAL	Rear Door Support Lanyard
91	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Fluorescent Fixture to Marquee Box
92	SCR,1/4-10X3/4,PAN,PHIL,P/T,BLK,NIC	Upper an Lower Monitor Brackets
93	SCR,1/4-10X3/4,PAN,PHIL,P/T,BLK,NIC	Lower Front Cabinet to Main Cabinet
94	WSR,FLT,#6,CLR,ZNC	Lanyard to Rear Door
95	SCR,1/4-10X3/4,PAN,PHIL,P/T,BLK,NIC	Cabinet Kickplate
96	SCR,#6-19X3/4,PAN,PHIL,P/T,BLK,NIC	Marquee Glass to Bezel
97	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Marquee Bezel to Marquee Box
98	SCR,#10-14X3/4,PAN,PHIL,P/T,BLK,NIC	Monitor Bezel to Main Cabinet
99	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Speaker to Monitor Bezel
100	SCR,#6-32X1/2, PAN,PHIL, BLK NIC	Titan PCB to Rear Door
101	NUT,KEP,1/4-20,CLR,ZNC	Secure Monitor to Monitor Brackets
111	WSR,1/4,FLT,CLR ZNC,750 OD	Secure Monitor to Monitor Brackets
112	BOLT,CARRIAGE,1/2-13X2-1/2,CLR,ZNC	Secure Base Plate to Main Cabinet

113	WSR,FENDER,1/2",CLR,ZNC,USS	Secure Base Plate to Main Cabinet
114	WSR,LCK.1/2",CLR,ZNC	Secure Base Plate to Main Cabinet
115	NUT,1/2-13,CLR,ZNC	Diamond PlateBase to MainCabinet
116	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Power Supply to Main Cabinet
117	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Hinge to Upper Control Panel
118	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Hinge to Lower Control Panel
119	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Grnd Srtip to Main Cabinet
120	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Lanyard to Control Upper and Lower
121	SCR,#8X3/8, SHEETMETAL	Monitor Remote PCB to Control Panel Lower
122	SCR,#8-16X1/2,PAN,PHIL,P/T,BLK,NIC	Control Panel Lock Latch
123	SCR,#10-14X1/2,PAN,PHIL,P/T,BLK,NIC	Control Panel Lock Latch
124	BOLT,CARRIAGE,#10-24X1,BLK,ZNC	Coin Mech to Control Panel Upper
125	NUT,KEP,#10-24,CLR,ZNC	Coin Mech to Control Panel Upper
126	NUT,KEP,#8-32,CLR,ZNC	Gnd Strip
127	SCR,#4-40X3/8,PAN,PHIL,BLK,NIC	Coin Meter to Hinge
128	WSR,FLT,#6,CLR,ZNC	Back Door Gnd to Titan PCB

DIE HARD ARCADE COMMENTS

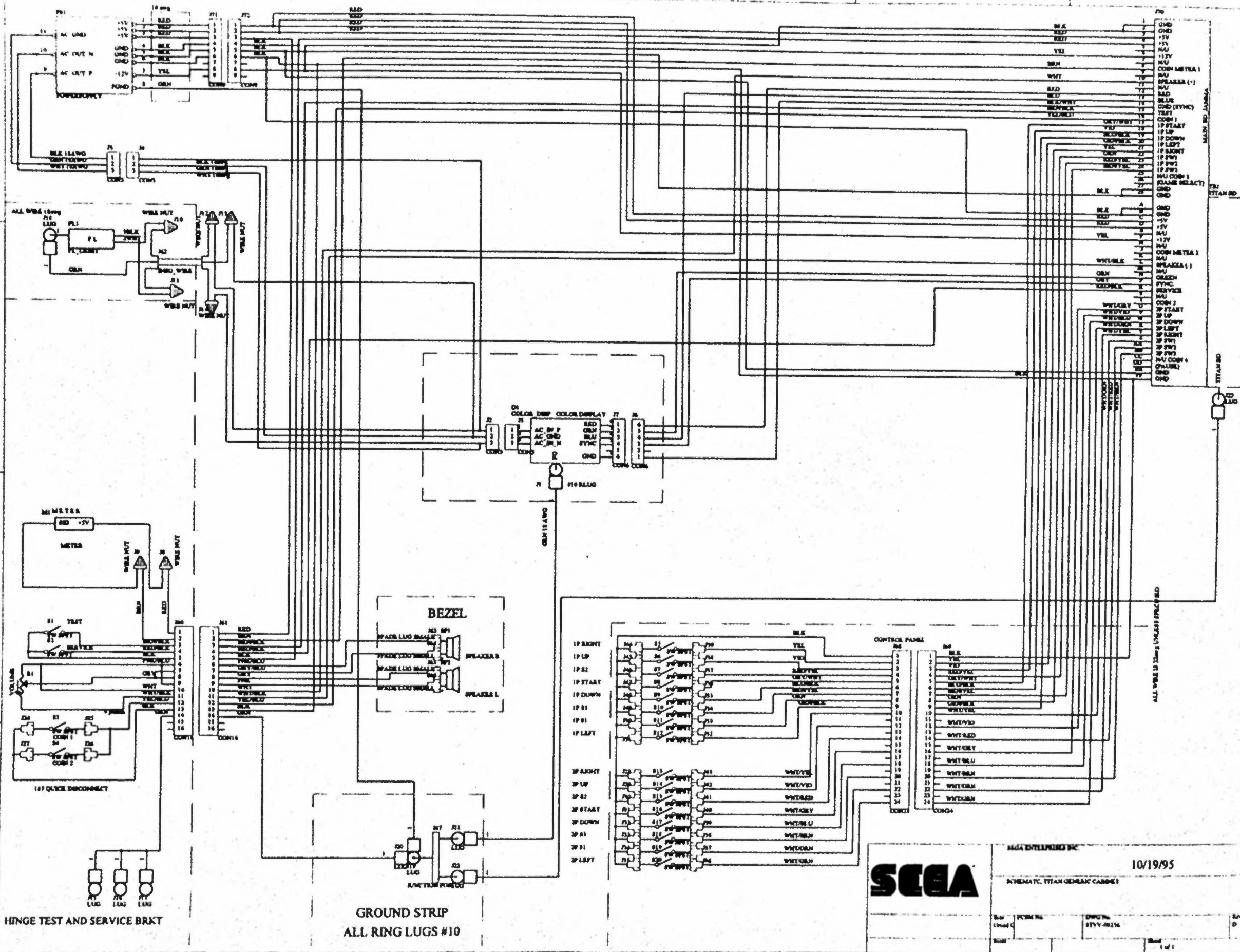
SEGA has made every effort to ensure that this manual is accurate. If you find any errors or omissions, or have other comments on the Super Major League manual, please write them below, detach, and deliver this page by FAX or mail to:

SEGA ENTERPRISES INC. (USA)
ATTN: Engineering Dept.
45133 Industrial Drive
Fremont, CA 94538 USA
FAX: (415) 802-1754

Comments: _____

Optional Identification Information:

Name: _____
Company: _____
Address: _____
City, State, Zip: _____
Phone: _____
FAX: _____



10/19/95
 SCHEMATIC: ATARI 2600/2600 CARTRIDGE
 Rev (Prod C) PCB No. DWG No. 817V-48214
 1 of 1





SEGATM

Sega Enterprises, Inc. (USA)

45133 Industrial Drive
Fremont, CA 94538
415-802-1750 phone
415-802-1754 fax



Die Hard Arcade

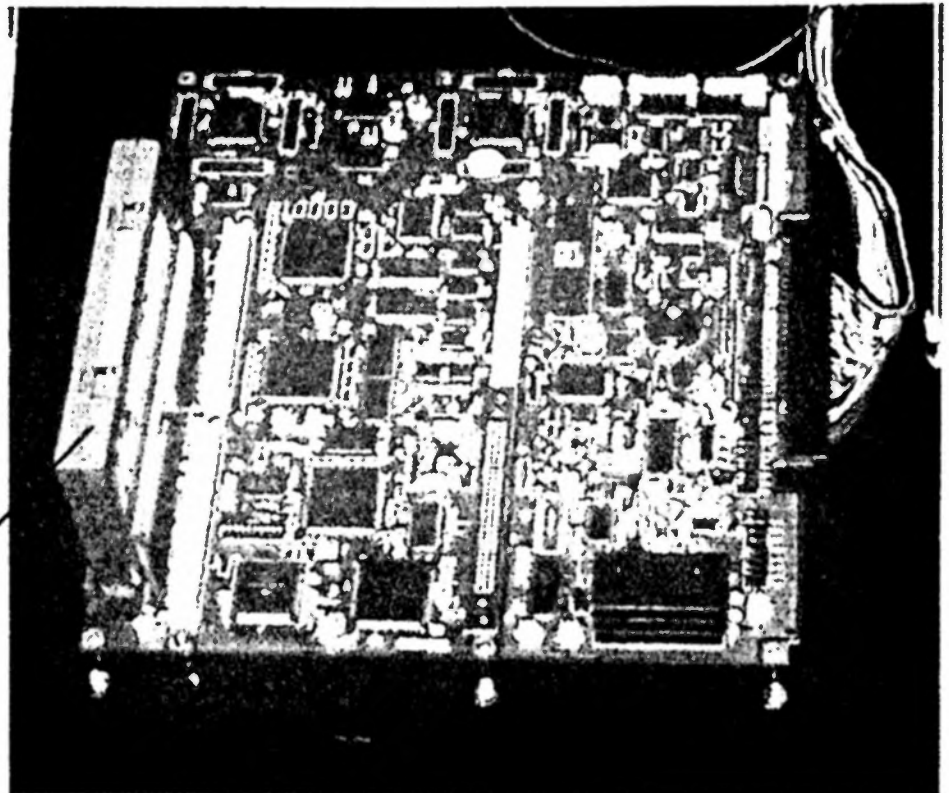
ST-V Cartridge - Quick Setup

Should be done by Service Personnel only!

Die Hard arcade software is a modular game cartridge for the ST-V Titan Cabinet. You simply insert the cartridge onto the Game Board located behind the rear service door of the Titan Cabinet. For shipping purposes, the Cartridge is inside the cash box. Here are directions for installing the game:

- 1) Open the rear service door of the Titan Cabinet by removing the two shipping screws and using the key.
- 2) Turn the power OFF for the Cabinet.
- 3) Carefully insert the Game Cartridge into the game board. The angle of insertion is predetermined and excessive force can cause damage to the cartridge.

*Die Hard Arcade
Game Cartridge*



4) Be sure that the Game Cartridge is inserted properly. The cartridge is inserted vertically onto the Game Board, with the back side facing away from the Board, as shown in the adjacent photo.

- 5) Close the back door of the Titan Cabinet.
- 6) Turn the Power ON for the Cabinet.

7) You can adjust the coin settings (Coin Assignments Screens) and game play options (Each Game Test Screens) by using the Service and Test buttons. Open the Control Panel by unlocking the two locks located underneath it. Swing open the Control Panel and note the Service and Test buttons on the hinge of the Control Panel. Push the TEST button to have the **ST-V Test Menu** appear. Use the **Service** button to select a setting and **Test** button to enter the selection. Select **Exit** to finish.

8) Simply follow the prompts on the screen. Refer to the Die Hard Arcade Game Service Manual for further details.