IREM AMERICA
CORPORATION

IN THE HUNT

OWNERS MANUAL

10. Disassemble the control panel of all the hardware. Do not remove the old panel overlay. Determine where to place the new joystick and buttons if they must be repositioned. Then, cut new holes.

    NOTE: If you are going to use plexiglass over the control panel, we suggest that you use a good 1/8" polycarbonate with a scratch resistant coating. We recommend GENERAL ELECTRIC LEXAN MR5 with margard or TUFFAK CM-2. These do not crack or break with abuse.

    Cut and drill plex as needed. Remove the old control panel overlay carefully and apply the new overlay on top of the old glue. Use an **Exacto** knife to cut out any button or bolt holes. Apply necessary decals over appropriate buttons. Now assemble the control panel.

11. Bolt the control panel to the cabinet. Now connect the appropriate wires to the correct switches. Connect the 1 player and 2 player start wires.

12. Be sure to install the FCC stickers on the back of the cabinet.

13. Power up the game. Look over your installation for errors, and then apply power, listening for unusual sounds. Check for smoke or sparks. If everything is okay, wire tie all wires to form a nice, neat wiring harness. Clean the cabinet inside and out. Measure the +5 volts on the furthest point from the edge connector and adjust 5 volts to 5.05 volts. Use a tinted plex over the monitor is there are burns in the screen. We suggest bronze or grey tinted plex. Touch up the cabinet with fresh paint, and then repair all cabinet dents or chips, using an auto body product called **Duraglass.** This is similar to bondo. You can consult your local auto body shop or auto parts supplier for this product, as well as advice on how to use it.

14. Be sure your ground plug is good. All metal exposed to the player must be grounded (coin door, control panel, etc.) including all metal inside exposed.

P.C. BOARD SPECIFICATIONS

POWER SUPPLY:

Voltage 5V ± 5%
12V ± 10%

Ampere 5V MAX. 5A
12V MAX. 1A

MONITOR INTERFACE:

Video Signals	TTL Positive
Sync Signals	TTL Negative (Composite Sync)
Horizontal Frequency	15.723KHz
H.Period	63.6 μs
H.Blank	15.6 μs
H.Sync Pulse	6.0 μa
Vertical Frequency	60.0Hz
V.Period	16.663ms
V.Blank	1.40ms
V.Sync Pulse	318 μs

TOLERABLE	WHILE OPERATING	IN STORAGE
TEMPERATURE RANGE	0 TO 50°C	-5 TO 60°C
RELATIVE HUMIDITY	20 TO 70%	NO MORE THAN 80%
VIBRATION RANGE	NO MORE THAN 0.5G	NO MORE THAN 1.0G
TOLERANCE FOR FALLING	NO MORE THAN 0 cm	(When Packed) NO MORE THAN 50cm

IN THE HUNT®
JAMMA EDGE CONNECTOR CABLE

COMPONENT SIDE			SOLDER SIDE		
FUNCTION	COLOR	POS	POS	COLOR	FUNCTION
GROUND	BLK	1	A	BLK	GROUND
GROUND	BLK	2	B	BLK	GROUND
+5 VOLTS	RED	3	C	RED	+5 VOLTS
+5 VOLTS	RED	4	D	RED	+5 VOLTS
	BRN	5	E	BRN	
+12 VOLTS	BLU	6	F	BLU	+12 VOLTS
PREVENT		7	H		PREVENT
COIN 1	BLU/BRN	8	J	WHT/PUR	COIN 2
GROUND		9	K		GROUND
AUDIO POS +	WHT/BLK	10	L	BLK	AUDIO NEG -
N.C.		11	M		N.C.
VIDEO RED	RED	12	N	GRN	VIDEO GRN
VIDEO BLU	BLU	13	P	WHT	VIDEO SYNC*
VIDEO GND	BLK	14	R	BRN/WHT	SERV. SW.
N.C.	YEL	15	S	WHT/BRN	N.C.
COIN INPUT 1	WHT/YEL	16	T	GRN/YEL	COIN INPUT 2
START 1	PNK/BLK	17	U	RED/BLK	START 2
1 P UP	ORG/BLU	18	V	BRN/BLU	2 P UP
1 P DOWN	GRN/ORG	19	W	ORG/WHT	2 P DOWN
1 P LEFT	GRN/BLU	20	X	ORG/GRN	2 P LEFT
1 P RIGHT	RED/YEL	21	Y	WHT/ORG	2 P RIGHT
1 P SW A Forward Attack	RED/WHT	22	Z	BRN/BLK	2 P SW A Forward Attack
1 P SW B Up/Down Attack	WHT/RED	23	a	YEL/WHT	2 P SW B Up/Down Attack
N.C.	YEL/BLK	24	b	BRN/GRN	N.C.
N.C.		25	c		N.C.
N.C.		26	d		N.C.
GROUND	BLK	27	e	BLK	GROUND
GROUND	BLK	28	f	BLK	GROUND

* Video sync composite negative

* Use a horizontally positioned CRT monitor and two 8-way joysticks, each with two push button switches.

KD/DYNAMO — UNIVERSAL VIDEO WIRING
56 PIN EDGE CONN. PIN-OUT CHART
(JAMMA COMPATIBLE)

COMPONENT SIDE			SOLDER SIDE		
FUNCTION	COLOR	POS	POS	COLOR	FUNCTION
GROUND	BLK	1	A	BLK	GROUND
GROUND	BLK	2	B	BLK	GROUND
+5 VOLTS	RED	3	C	RED	+5 VOLTS
+5 VOLTS	RED	4	D	RED	+5 VOLTS
-5 VOLTS	WHITE	5	E	WHITE	-5 VOLTS
+12 VOLTS	YELLOW	6	F	YELLOW	+12 VOLTS
KEY		7	H		KEY
COIN 1	BRN	8	J		COIN 2
COIN LOCK 1	RED	9	K		COIN LOCK 2
SP (+)	WHT	10	L	WHT/BLK	SP (-)
N.C.	BLUE-OPTION	11	M	OP. BLU/BLK	N.C.
VIDEO RED	RED	12	N	GRN	VIDEO GRN
VIDEO BLU	BLU	13	P	GRAY	VIDEO SYNC*
VIDEO GND	BLK	14	R	RED/BLACK	SERV. SW.
TEST SW.	BROWN	15	S	OP. BRN/BLK	TILT SW.
COIN SW. 1	WHITE	16	T		COIN SW. 2
START 1	GRAY	17	U	WHITE/GRAY	START 2
1 P UP	VIOLET	18	V	WHITE/VIOLET	2 P UP
1 P DOWN	BLUE	19	W	WHITE/BLUE	2 P DOWN
1 P LEFT	GREEN	20	X	WHITE/GREEN	2 P LEFT
1 P RIGHT	YELLOW	21	Y	WHT/YELLOW	2 P RIGHT
1 P PUSH 1	ORANGE	22	Z	WHT/ORANGE	2 P PUSH 1
1 P PUSH 2	RED	23	a	WHITE/RED	2 P PUSH 2
1 P PUSH 3	BROWN	24	b	WHT/BROWN	2 P PUSH 3
N.C.	BLUE/WHT	25	c	GREEN/WHT	N.C.
N.C.	RED/WHT	26	d	YELLOW/WHT	N.C.
GROUND	BLK	27	e	BLK	GROUND
GROUND	BLK-OPTION	28	f	BLK-OPTION	GROUND

* Video sync composite negative

IN THE HUNT® DIP SWITCH SPECIFICATIONS

DIP SWITCH 1

		1	2	3	4	5	6	7	8
NUMBER OF LIVES GIVEN AT START	3	OFF	OFF						
	2	ON	OFF						
	4	OFF	ON						
	5	ON	ON						
DIFFICULTY	NORMAL			OFF	OFF				
	EASY			ON	OFF				
	HARD			OFF	ON				
	VERY EASY			ON	ON				
SOUND IN ATTRACTING MODE	NO							OFF	
	YES							ON	
DIAGNOSTIC TEST	NO								OFF
	YES								ON

DIP SWITCH 2

			1	2	3	4	5	6	7	8
FLIP PICTURE		NO	OFF							
		YES	ON							
CABINET TYPE		NOT USED								
		NOT USED								
COIN CHUTES		NOT USED								
		NOT USED								
	COIN MODE 1	1 COIN / 1 PLAY				OFF	OFF	OFF	OFF	OFF
		2 COINS / 1 PLAY				OFF	ON	OFF	OFF	OFF
		3 COINS / 1 PLAY				OFF	OFF	ON	OFF	OFF
		4 COINS / 1 PLAY				OFF	ON	ON	OFF	OFF
		5 COINS / 1 PLAY				OFF	OFF	OFF	ON	OFF
		6 COINS / 1 PLAY				OFF	ON	OFF	ON	OFF
		1 COIN / 2 PLAYS				OFF	OFF	ON	ON	OFF
		1 COIN / 3 PLAYS				OFF	ON	ON	ON	OFF
		1 COIN / 4 PLAYS				OFF	OFF	OFF	OFF	ON
		1 COIN / 5 PLAYS				OFF	ON	OFF	OFF	ON
		1 COIN / 6 PLAYS				OFF	OFF	ON	OFF	ON
		2 COINS / 3 PLAYS				OFF	ON	ON	OFF	ON
		3 COINS / 2 PLAYS				OFF	OFF	OFF	ON	ON
		4 COINS / 3 PLAYS				OFF	ON	OFF	ON	ON
		1 COIN CONTINUE				OFF	OFF	ON	ON	ON
		FREE PLAY				OFF	ON	ON	ON	ON
	COIN MODE 2	* A 1 COIN / 1 PLAY				ON	OFF	OFF		
		* A 2 COINS / 1 PLAY				ON	ON	OFF		
		* A 3 COINS / 1 PLAY				ON	OFF	ON		
		* A 5 COINS / 1 PLAY				ON	ON	ON		
		** B 1 COIN / 2 PLAYS				ON			OFF	OFF
		** B 1 COIN / 3 PLAYS				ON			ON	OFF
		** B 1 COIN / 5 PLAYS				ON			OFF	ON
		** B 1 COIN / 6 PLAYS				ON			ON	ON

* COIN CHUTE A **COIN CHUTE B

- Please turn off the power switch before changing the DIP SW setting, or the change may not take effect.
- Continue Coin is the mode which starts the game with 2 coins, but continues it with 1 coin alone. When this mode is set, no other coin modes can be set.
- Dip SW 3 is not in use.

Diagnostic Test

(1) Test Items

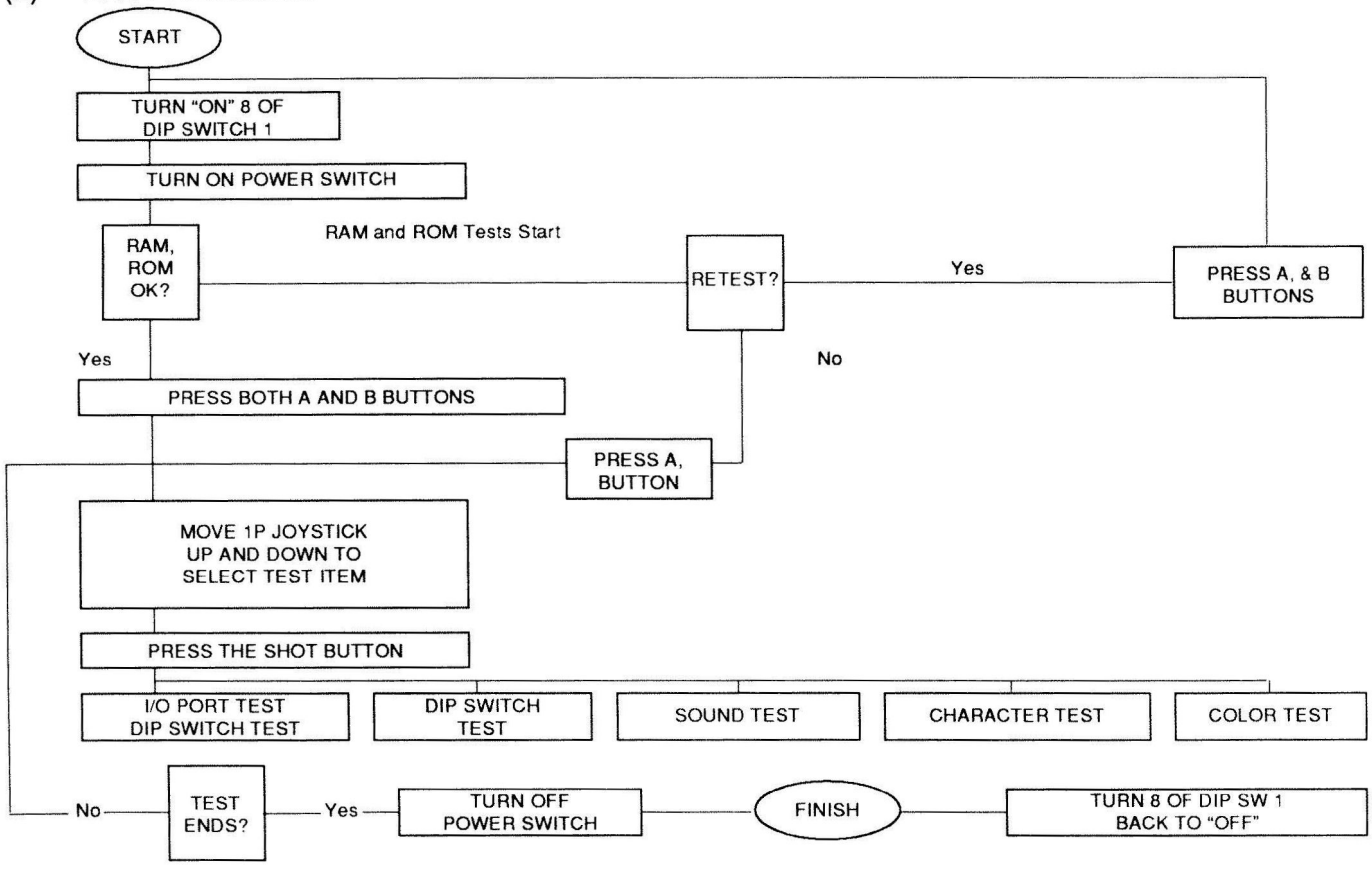
The following tests are made:

1 RAM Test
2 ROM Test
3 I/O PORT Test
4 DIP Switch Test
5 SOUND Test
6 CHARACTER Test
7 COLOR Test
8 CROSS HATCH Test

As soon as the number 8 of the DIP Switch 1 is turned "ON" and the Power Switch is switched on, the Test 1 and 2 are started.

To finish the Tests, turn off the Power Switch and then the number 8 of the DIP Switch 1 to "OFF".

(2) Test Procedures



(3) RAM and ROM TEST

Although the picture does not appear on the screen and only verious patterns appear on it for a while after turning on the power switch, RAM's for the picture are being tested during this time. If RAM's are found OK by the test, "RAM OK" and "ROM OK" will be displayed on the screen.

If RAM(s) is (are) not good, "RAM NG □" will appear on the screen.

The figure following the "RAM NG" indicates the location of the defective RAM.

00 WORK RAM (BYTE)
01 WORK RAM (WORD)
02 V_RAM A (WORD)
03 V_RAM B (WORD)
04 V_RAM C (WORD)
05 V_RAM D (WORD)
06 RASTER SCROLL RAM A (WORD)
07 RASTER SCROLL RAM B (WORD)
08 RASTER SCROLL RAM C (WORD)
09 PALLETE BUFFER BANK 0 (WORD)
10 PALLETE BUFFER BANK 1 (WORD)
11 PALLETE BUFFER BANK 2 (WORD)
12 PALLETE BUFFER BANK 3 (WORD)
13 OBJECT BUFFER BANK 0 (WORD)
14 OBJECT BUFFER BANK 1 (WORD)
15 PALLETE RAM BANK 0 (WORD)
22 PALLETE RAM BANK 7
23 OBJECT RAM (WORD)

If ROM(s) is(are) defective, "ROM NG □" will appear on the screen.

When RAM's and ROM's are found all good after completing this RAM and ROM TEST, you can move over to the next test item by pressing the 1P and 2P start buttons.

In case any RAM(s) or ROM(s) is(are) found faulty after completing the RAM and ROM TEST, press the 1P start button to repeat the test. Press the 2P start button to go to the next test.

(4) Display of the Test Items

The following test items are shown so that you may select a test item you want by moving the 1P joystick up and down:

1. I/O
2. SOUND
3. CHARACTER
4. COLOR
5. CROSS HATCH
6. OPTION
7. EXIT

Press the Shot button to get the test indicated in red started. Press the 1P and 2P start buttons to end the same test. Press the 1P start button to start "OPTION" test.

(5) I/O Port Test

The status when each joystick button, and coin is turned "ON" is shown.

	8 7 6 5 4 3 2 1	8 7 6 5 4 3 2 1
IN PORT 1	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
IN PORT 2	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
IN PORT 3	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0
DIP SWITCH	0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0

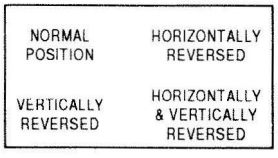
(0-OFF, 1-ON)

(6) Sound Test

The screen shows the number of each sound and the test is made about whether the corresponding sound is given. Push down the 1P joystick to move over to the next sound's test. To check the same sound, press button A for 1P.

(7) Character Test

The player character is displayed in the center of the screen.

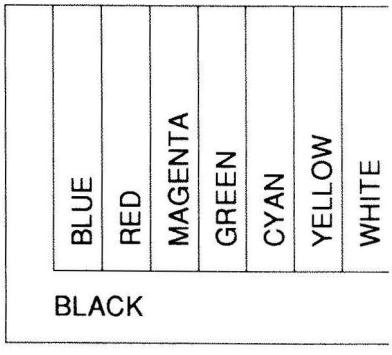


Make sure that the character is shown in four different positions, each vertically and horizontally reversed, as shown on the left.

(8) Color Test

By moving down the 1P joystick, the test can be advanced like
1—2—3—4—5—6—7—8—9—10—1, test of colors, balance and distortion on the monitor screen.

1 The whole screen shows only blue color.
2 The whole screen shows only red color.
3 The whole screen shows only magenta color.
4 The whole screen shows only green color.
5 The whole screen shows only cyan color.
6 The whole screen shows only yellow color.
7 The whole screen shows only white color.
8 Figure A is displayed on the screen.
9. Figure B is displayed on the screen.
10. Figure C is displayed on the screen.



(9) Cross Hatch Test

The white lines represent CROSS HATCH PATTERN on the screen.