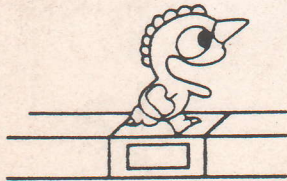
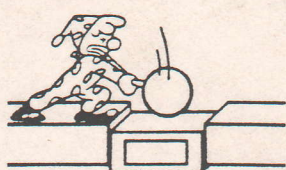
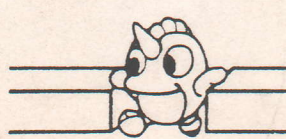


UNIVERSAL

I. HOW TO PLAY NO SOUND AMP REQUIRED

1. Operate Mr. Do! by means of the lever.
2. After dropping a block by use of the hammer, skillfully drop the unicorn into the hole. Then drop the block onto the unicorn and you can exterminate it.
3. You can also exterminate the unicorn by dropping a block onto it while it is walking.
4. You can hit and knock over a unicorn by use of the hammer in scenes 1 and 2.
5. Make good use of the skull blocks, and you can wipe out several unicorn at a time. When dropping both skull blocks, the blocks between them will also drop at the same time.
6. Only Mr. Do! can remove the ladder.
7. If Mr. Do! has been trapped between two unicorns on the blocks, you can help him escape by dropping a block with the hammer.
8. When three of the key blocks have been dropped, the door on the top level will open and a shield will appear. If you wipe it out the unicorns will change to EXTRA.
9. You can exterminate EXTRA by hammering it or dropping Mr. Do! on it. When it has been wiped out, a flag will be run up on the pole.
10. Another Mr. Do! will appear if you succeed in running up five flags, E X T R A on the pole.
11. The last unicorn in scenes 1 and 2, will change and split into the blue unicorns after 20 seconds — after a further 25 seconds, the blue unicorns will split into double unicorns, and then after another 5 seconds these will become eight — there will be no further increase.
12. Red unicorns will become green if Mr. Do! hits them four times with the hammer, and green unicorns will become blue when he hits them once with it.

ASSAULTING		SCORE	
When walking  ↓ 	When in the hole  ↓ 	 500~ 2,500 pts	 20 pts
		 1,000~ 5,000 pts	 1,500~ 8,000 pts
		 1,500~ 7,500 pts	 500~ 2,500 pts

II. VARIOUS OPTIONAL SETTINGS

DESCRIPTIONS OF DIP SWITCHES

• Dip Switch A

1. Number of Mr. Do! Given (SW1, 2)

No. of Mr. Do!	SW1	SW2
3	OFF	OFF
4	OFF	ON
5	ON	OFF
2	ON	ON

2. Game Style (SW3)

Style	SW3
Table	OFF
Upright	ON

3. Difficulty of EXTRA (SW4)

Difficulty	SW4
Easy	OFF
Difficult	ON

4. SW5 is not used.

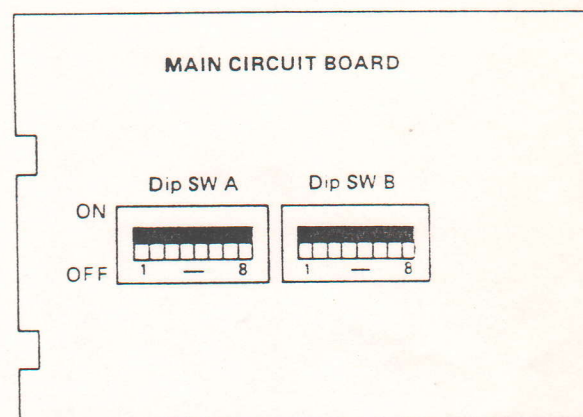
5. Automatic Renewal of Screen (SW6)

Automatic renewal	SW6
Made	OFF
Not made	ON

6. Difficulty of the Games (SW7, 8)

Difficulty	SW7	SW8
1 (Beginner)	OFF	OFF
2	OFF	ON
3	ON	OFF
4 (Advanced)	ON	ON

• Positions of Dip Switches



• Dip Switch B (Coin & Credit)

Coin	Credit	Left-side chute				Right-side chute			
		SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
1	1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	2	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
1	3	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
1	4	OFF	OFF	ON	ON	OFF	OFF	ON	ON
1	5	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
2	1	OFF	ON	OFF	ON	OFF	ON	OFF	ON
2	3	OFF	ON	ON	OFF	OFF	ON	ON	OFF
3	1	OFF	ON	ON	ON	OFF	ON	ON	ON
3	2	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
4	1	ON	OFF	OFF	ON	ON	OFF	OFF	ON
1	1	ON	OFF	ON	OFF	ON	OFF	ON	OFF
1	1	ON	OFF	ON	ON	ON	OFF	ON	ON
1	1	ON	ON	OFF	OFF	ON	ON	OFF	OFF
1	1	ON	ON	OFF	ON	ON	ON	OFF	ON
1	1	ON	ON	ON	OFF	ON	ON	ON	OFF
Free play		ON	ON	ON	ON	ON	ON	ON	ON

Standard and Custom Price Settings

The game price set by a combination of dip SWs is displayed on the monitor when coin credit is 0.

- When the settings for right and left chutes are the same, "1 coin - 1 credit", "2 coins - 3 credits", etc. are displayed.
- When the settings for right and left chutes are provided differently, their respective contents can be displayed.

V. WIRING DIAGRAM (CONNECTOR)

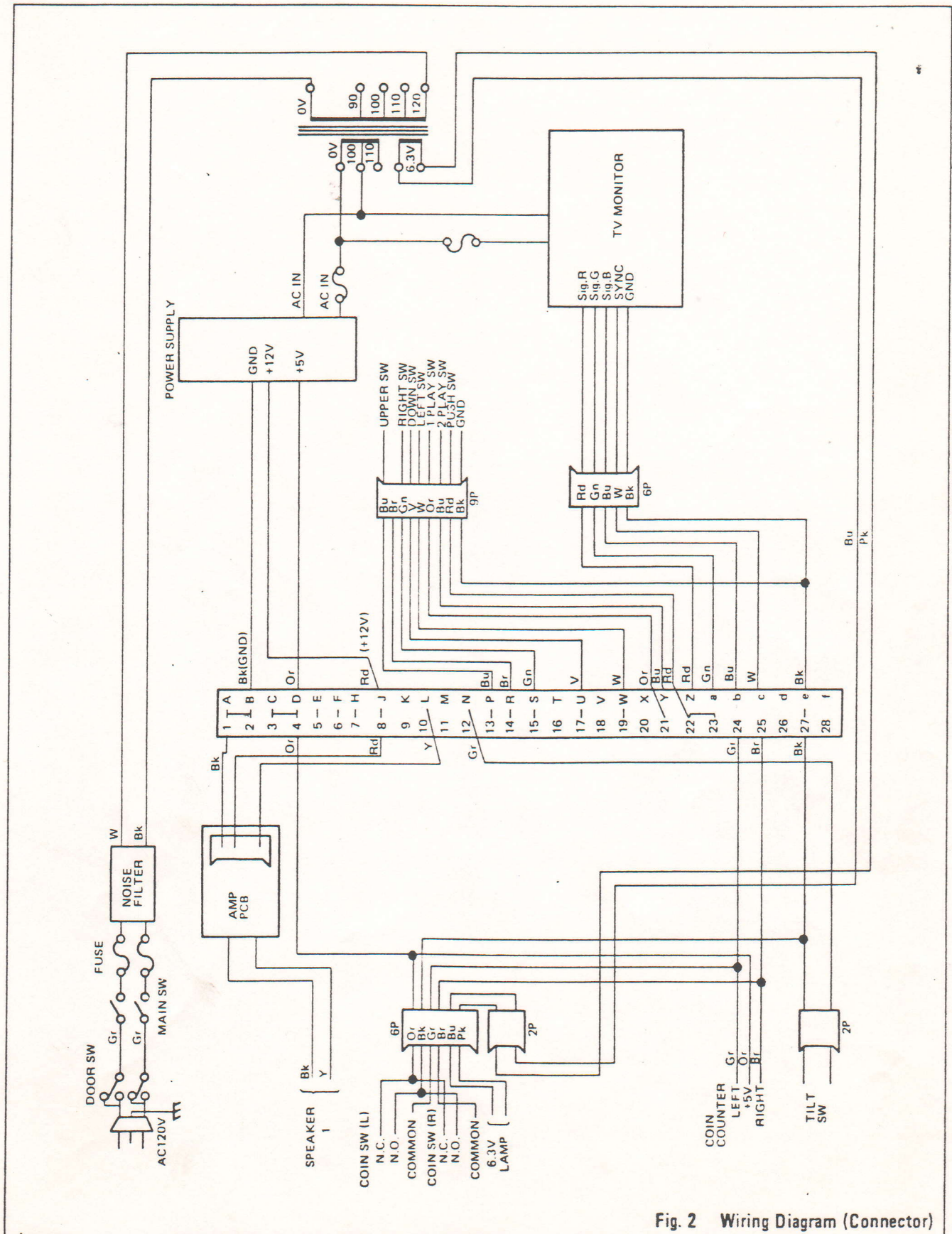


Fig. 2 Wiring Diagram (Connector)

III. HOW TO CONDUCT SELF-TESTING

★ This machine has a self-testor which locates any abnormalities with the machine should they occur.

[Self-Testing Procedure]

Turn power ON while pressing the push-button or either the 1st or the 2nd player side, and self-testing will follow automatically.

[Self-Testing Items]

(1) RAM Test:

When normal – "RAM OK" will appear on the screen, and the test will proceed to the next step.
When abnormal – "RAM ☐ " will appear, and the test will be suspended.

↓
Abnormal RAM No.

(2) ROM Test:

When normal – "ROM OK" will appear on the screen, and the test will proceed to the next step.
When abnormal – "ROM ☐ . ☐ " will appear, and the test will be suspended.

↓
Abnormal ROM data
↓
Abnormal ROM No.

(3) Sound OFF:

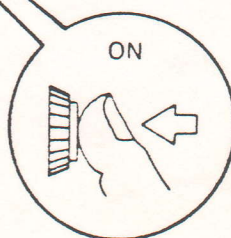
"SOUND OFF" will appear on the screen, and the sound that has been made to that time will stop, then, the test will proceed to the next step. The machine is out of order if the sound does not stop or the test does not proceed to the next step.

(4) Switch Test:

Switch names are displayed on the left side of the screen, while input conditions will be displayed on the right side. When the switch is ON, "0" is displayed for input, and when it is OFF, "1" is displayed. Conduct test while turning each switch ON-OFF – the test will advance to the next step after a minute.

Switch name	Input condition
2P DOWN	1
LEFT	1
UP	0
RIGHT	1
1P DOWN	1
LEFT	1
UP	1
RIGHT	1
2P START	1
NOT USED	1
2P JUMP	1
FIRE	1
1P START	1
NOT USED	1
1P JUMP	1
FIRE	1
NOT USED	1
NOT USED	1

Switch name	Input condition
COIN LEFT	1
COIN RIGHT	1
PAUSE	1
SERVICE	1
TEST	1
TILT	1



"0" will appear when pushing the pushbutton on the 1st player's side.

Dip switch A	1	0	1	1	0	1	1	1
" B	1	1	1	1	1	1	1	0

(5) TV Monitor Test:

Cross hatch pattern will appear on the entire screen. Monitor adjustment can be done by means of the pattern.

- Self-testing will stop at this point. Turn ON power again when you want to resume game or execute self-test again.

* In case you have found any abnormality as a result of the self-test, contact the dealer who sold the machine to you.

REVISED MR. DO'S CASTLE HARNESS PIN ASSIGNMENT

SOLDER SIDE

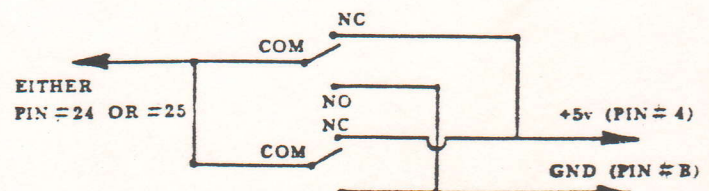
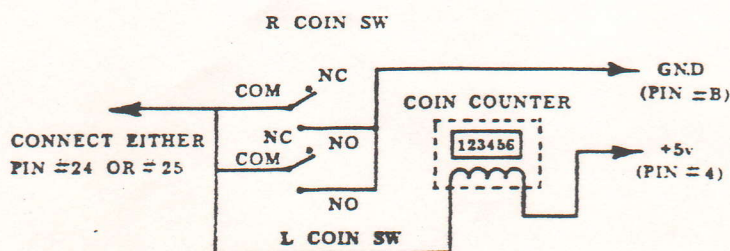
COMPONENT SIDE

USE	COLOR	COLOR		
GROUND	A	1	Blk.	GND (TO POWER SUPPLY)
	B	2	Blk.	GND (1st PLAYER & SELECT SW)
	C	3	Ora.	+5v (TO POWER SUPPLY)
	D	4	Ora.	+5v (COIN COUNTER)
	E	5	Ora.	VERT. SYNC HOR. SYNC) TO MONITOR
	F	6	Brn.	
	H	7		
	J	8	Red	+12v (TO POWER SUPPLY)
SPEAKER	K	9		
	L	10		
SLAM SW	M	11		
	N	12	Grn.	
FOR C. TABLE	P	13	Blue	1st PLAYER UP
	R	14		
	S	15	Brn.	1st PLAYER RIGHT
	T	16		
2nd PLAYER UP	U	17	Yel.	1st PLAYER DOWN
2nd PLAYER RIGHT	V	18		
2nd PLAYER DOWN	W	19	Pur.	1st PLAYER LEFT
2nd PLAYER LEFT	X	20		
TO MONITOR	Y	21	Ora.	1st PLAYER SELECT
	Z	22	Red	1st PLAYER THROW
	a	23	Red	2nd PLAYER THROW (FOR C. TABLE)
	b	24	Yel.	LEFT COIN SW/COUNTER
	c	25	Brn.	RIGHT COIN SW/COUNTER
	d	26		
	e	27		
	f	28		

NOTE:

CONNECTION FOR USE WITH COIN METER

CONNECTION FOR USE WITHOUT COIN METER



UNIVERSAL Connector Pinout
(Internal sound amplifier versions)

COMPONENT			SOLDER
Ground	1	A	Ground
Ground	2	B	Ground
+5 Volts	3	C	+5 Volts
+5 Volts	4	D	+5 Volts
Vert Sync (+)	5	E	Not Connected
Horiz Sync (+)	6	F	Not Connected
Not Connected	7	H	Not Connected
+12 Volts	8	J	+12 Volts
Not Connected	9	K	Not Connected
Not Connected	10	L	Speaker (+)
Not Connected	11	M	Speaker (-)
Not Connected	12	N	Tilt Switch
1P Up	13	P	2P Up
Not Connected	14	R	Not Connected
1P Right	15	S	2P Right
Not Connected	16	T	Not Connected
1P Down	17	U	2P Down
Not Connected	18	V	Not Connected
1P Left	19	W	2P Left
Not Connected	20	X	Not Connected
1P Start	21	Y	2P Start
1P Push 1	22	Z	Video Red
2P Push 1	23	a	Video Green
Coin 1	24	b	Video Blue
Coin 2	25	c	Comp Sync(-)
Not Connected	26	d	Not Connected
Ground	27	e	Ground
Ground	28	f	Ground