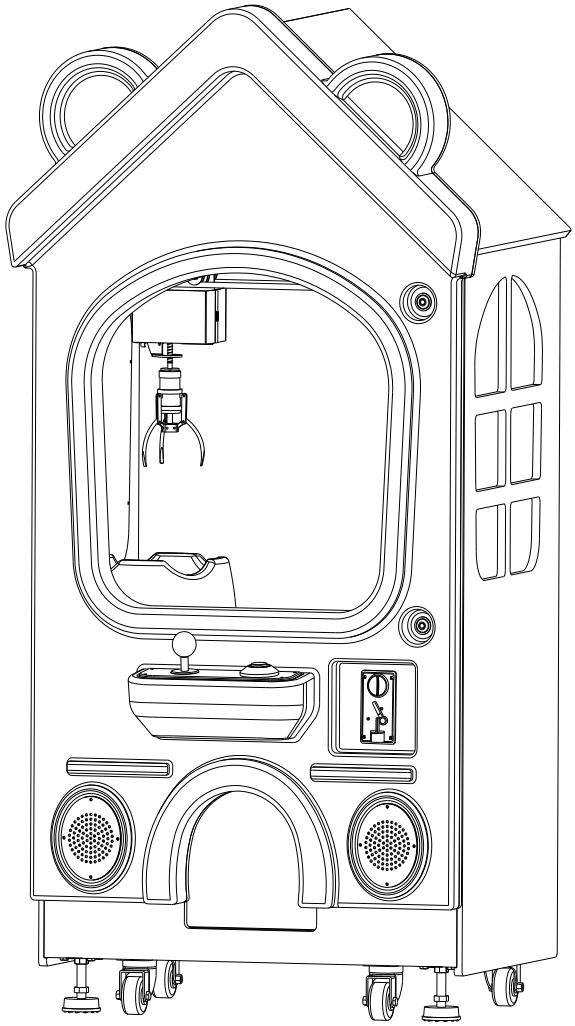

Happy Dog Operation Manual

Tel:(TAIWAN):+886-2-2255-2636 Fax(TAIWAN):+886-2-2255-6366
Tel:(CHINA):+8620-84851613 Fax(CHINA):+8620-84559322
www.tecway.com.tw www.mecpower.com.cn

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1. GAME PLAY OPERATION

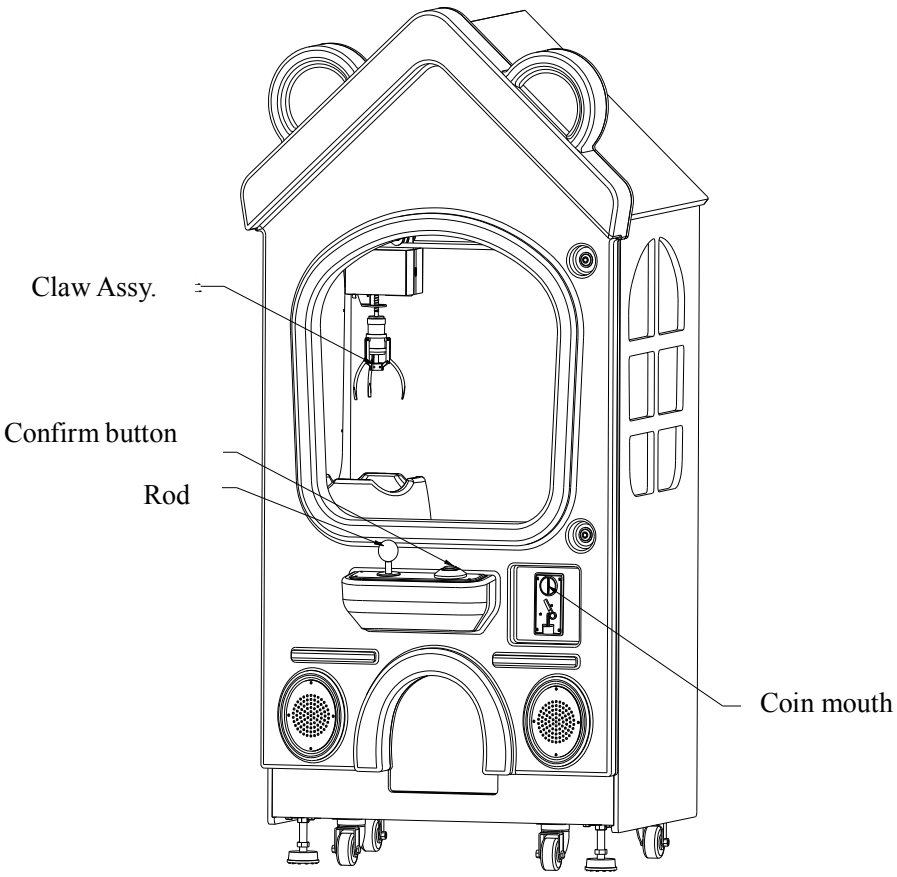
Game Play Operation：

1) Insert coin, display board will show 1 that can start game.

2) Control the rod to move forward/back; left/right, stop at the figure you want to pick up.

3) Press confirm button, claw will fall down to pick up the figure.

4) After seconds, claw will raise and move to mouth of prize out, jaw opening prize will come out in the prize out mouth.



2. TECHNICAL PARAMETER

Voltage：AC220V/110V（50/60HZ）

Max. Current：0.55A/1.1A

（Note: The proper voltage and current used accords to the nameplate at the back door of the game）

Max. Power：60W

Min. Power：35W

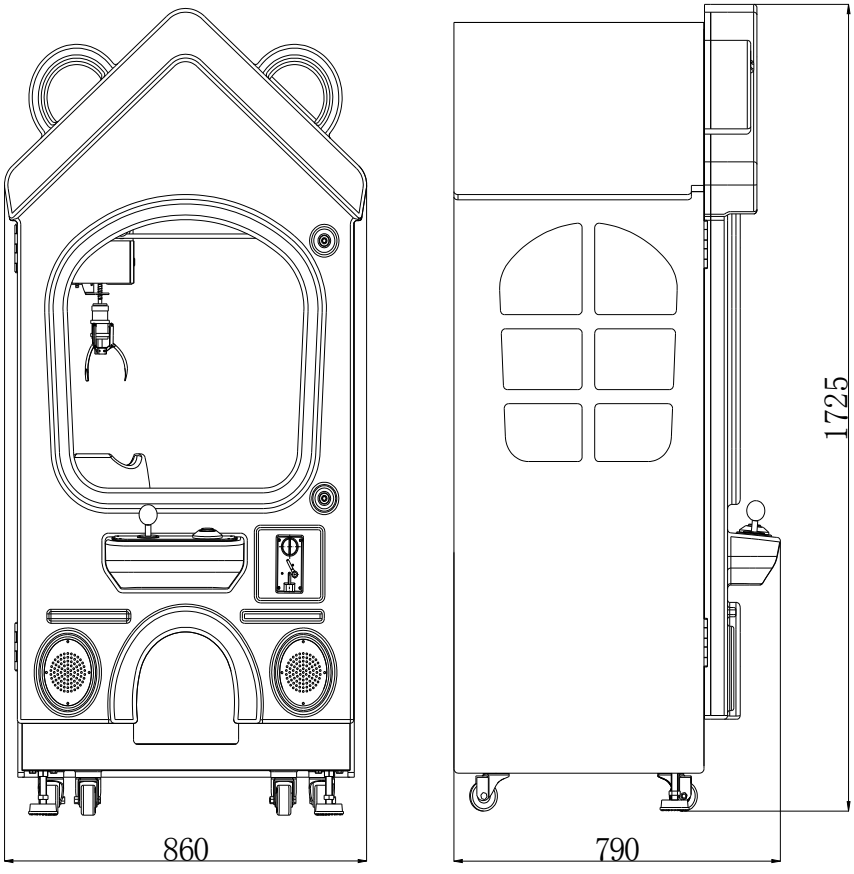
Coin Size：φ21mm～φ30mm (diameter)

1.2mm～2.5mm (thickness)

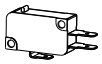
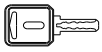
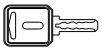
Capacity of coin box：about 2300 pcs with coin sizeφ25mm*1.5mm

Location required：indoor use; temperature: -5 ~ 40 ° C, no contact with any corrosive, greasiness and dirt.

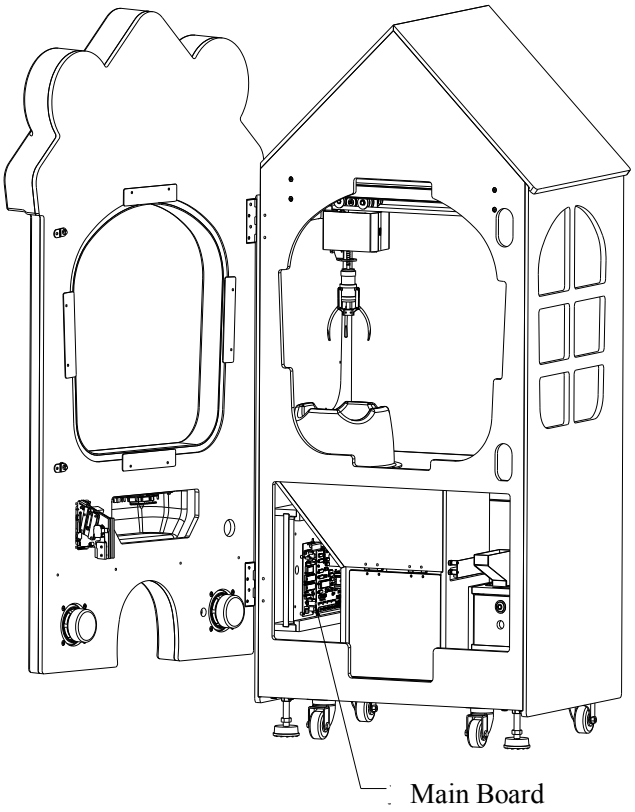
Dimensions：L860mm*W790mm*H1725mm

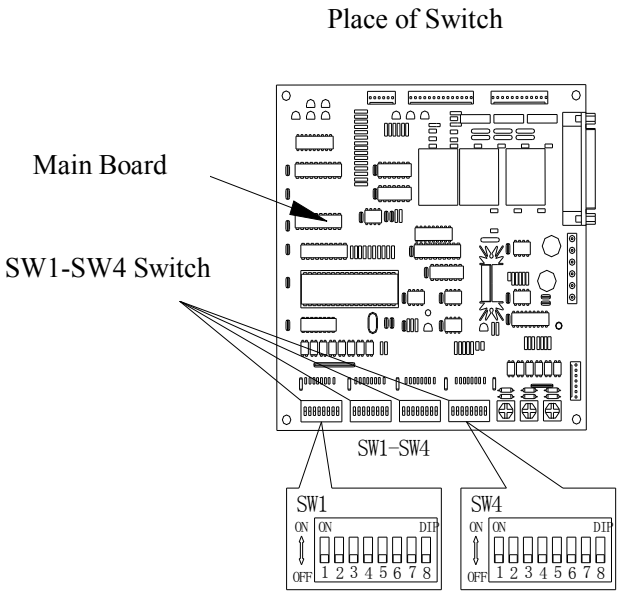


Spare Part List：

NO.	PICTURE	ITEM	SPEC./MODEL	QTY
1		LED light	12V White	1pc
2		Micro Switch		1pc
3		Key	1285#	2pcs
4		Key	1396#	2pcs
5		Manual		1pc

3. SETTING





There are four sets switches SW1, SW2, SW3, SW4, every set has eight small switches, set for ON switch open; set for OFF switch close. It need to set for the switches to change for the game.

DIP SW1 on main board, do not use.

DIP SW2 on main board setting diagram

Content \ Main board DIP SW2		1	2	3	4	5	6	7	8
Coin	**1 coin/1 play**	**OFF**	**OFF**						
	1 coin/2 play	ON	OFF						
	2 coins/1 play	OFF	ON						
	5 coins/6 play	ON	ON						
Time for pick up figure	**3 seconds(must choose)**			**OFF**	**OFF**				
	4 seconds			ON	OFF				
	5 seconds			OFF	ON				
	6 seconds			ON	ON				
Time for move claw	**10 seconds**					**OFF**	**OFF**		
	15 seconds					ON	OFF		
	20 seconds					OFF	ON		
	25 seconds					ON	ON		
Time for press confirm button	**No delay**							**OFF**	
	delay 0.1 second							ON	
No effect	no effect								**OFF**
	no effect								ON
The bold letter is for factory setting									

Main Board DIP SW2 setting instruction:

- **Coin/Play：** This setting is to decide how many coins to need for one play. If setting for "1 coin/1 play", then insert 1 coin can play one time.
- **Time for claw to pick up the figure： This setting is decided the time for claw to pick up the figures. As the cabinet is not tall, the rope for claw is limit, so that the time for claw fall down is 3 seconds, then raise up. The machine will not in disorder for claw excessive discharge then blocked in shop traveler do not fall down. If for long time claw and rope blocked in shop** traveler will cause possibility damage for

motor and main board. Please pay attention for this setting item.

✧ **Time for claw move front/back; left/right：** This setting is for time of claw move front/back; left/right. If setting for “10 seconds”, then the time for move is 10 seconds, after 10 seconds do not press the confirm button to get the figure, claw will fall down automatically to get the figure.

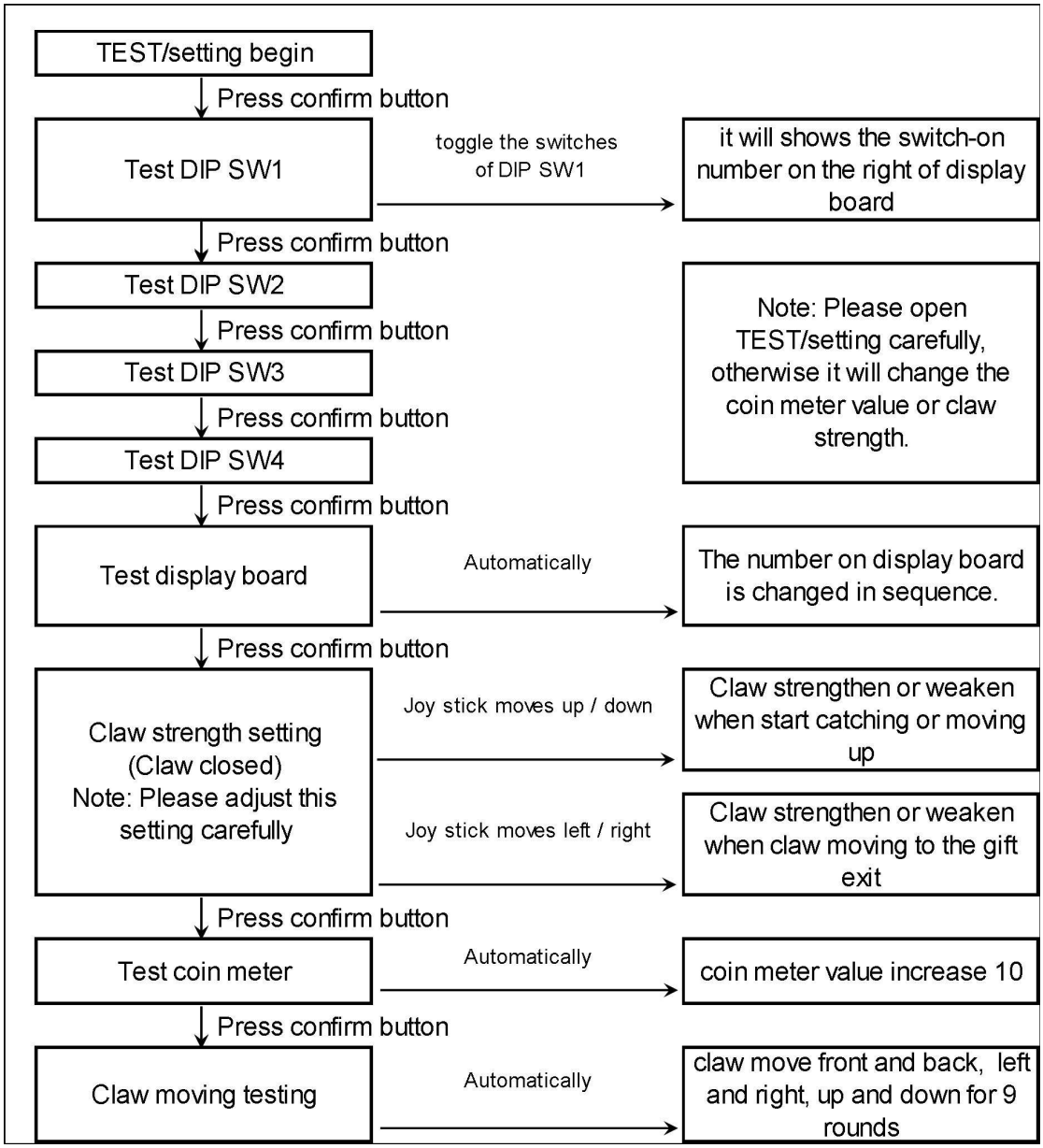
✧ **Delay time for get the figure：** This setting is for when claw fall down, press confirm button if have the delay time to get figures. If setting for “No Delay”, then when claw fall down, press confirm button, claw will start to get figure.

Main Board DIP SW3 switches setting sheet

main board DIP SW3 / content		1	2	3	4	5	6	7	8
open or not TEST/setting	**Close TEST**	**OFF**							
	Open TEST	ON							
Whether to open the reverse	Open		OFF						
	Not open		**ON**						
Turn off the electric data whether to	Save			OFF					
	Not Save			**ON**					
Wether open the claw strength	**Not open**				**OFF**				
	Open				ON				
The strong jaw to the weak claw is no	Delay 0.2 seconds					OFF			
	No delay					**ON**			
The strength of the claw in the reward	Set strong claw value						OFF		
	Strongest value						**ON**		
Gift export state electric eye plate	Normally closed							OFF	
	Normally open							**ON**	
Whether to open the gift export electric	**Not open**								**OFF**
	Open								ON
The letter in bold is for factory setting									

Main Board DIP SW3 setting instruction:

✧ **Whether open TEST/setting：** This setting is for whether open TEST/part of setting. If setting for "Open TEST", when reset the machine will enter into TEST/part of setting condition.

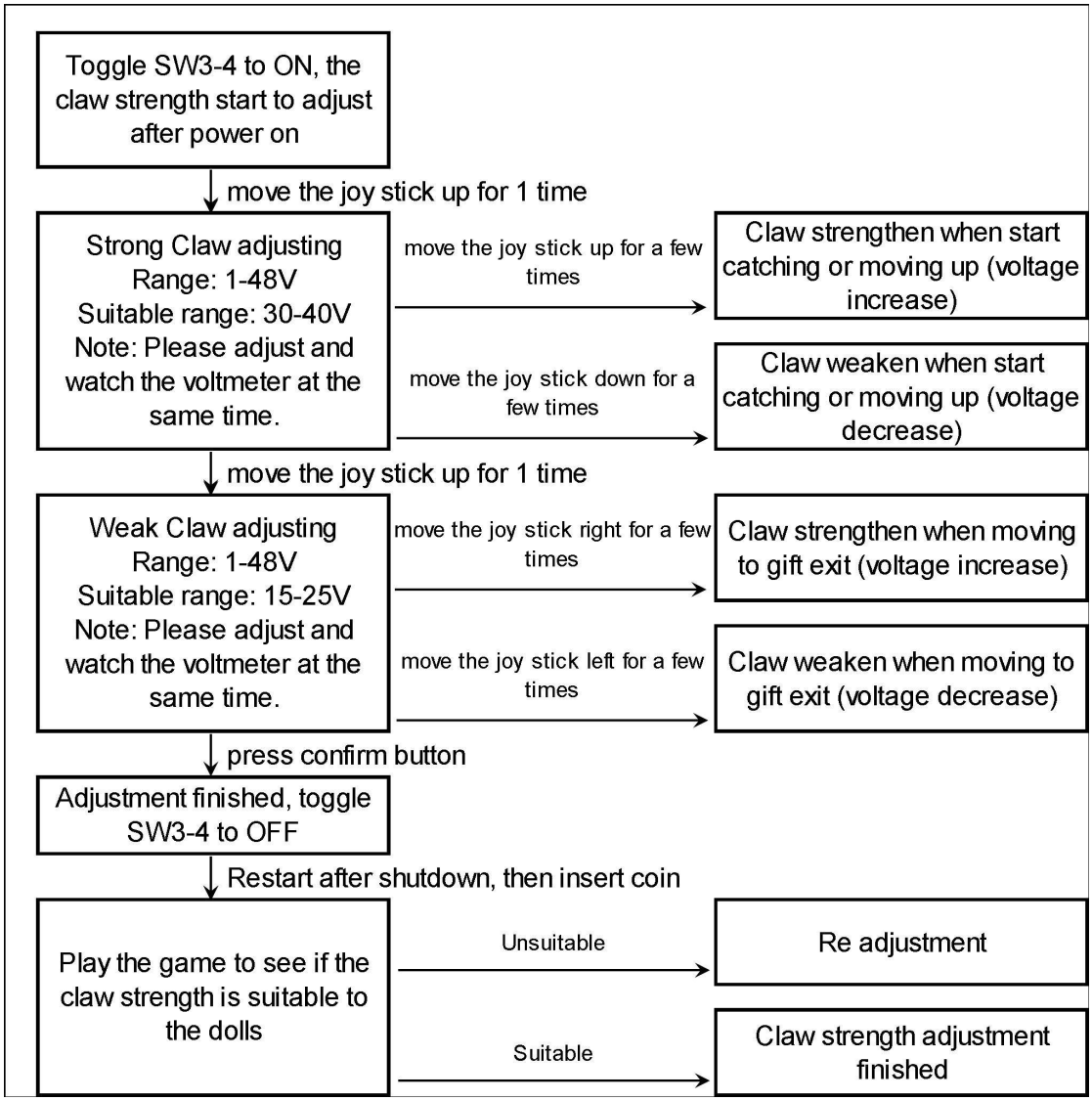


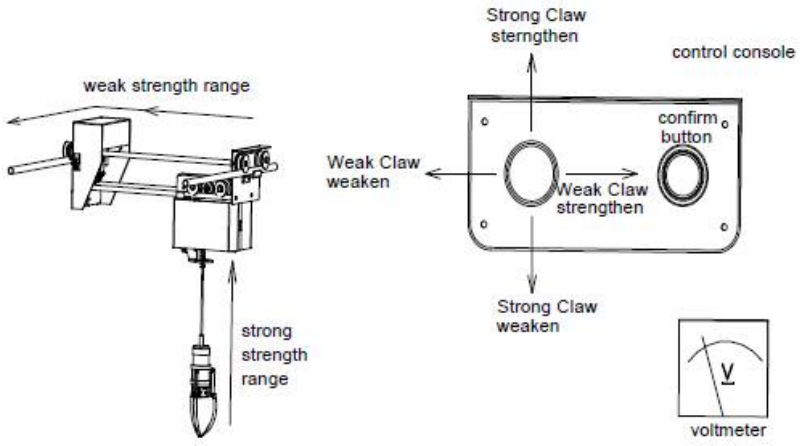
✧ **Whether to open the reverse position stop crane：** This setting is decided for whether to open the reverse position stop crane. The machine must be set for “Not Open”, otherwise can not operate properly.

✧ **Whether save for coin information when turn off：** This setting is decided when power off whether to save the coin or play times data before power off. Suggest to setting for “Not Save”.

✧ **Whether open claw strength adjustment：** This setting is decided whether open claw strength adjustment.

Claw Strength adjust method：





- **Strong jaw to the weak claw is no delay：** This setting is decided when strong jaw change to weak claw has delay or not. If setting for “No Delay”, then strong jaw change to weak claw is no delay.
- **The strength of the claw in the reward mode：** This setting is decided the strength of claw in reward mode. If setting for “strongest value”, then the claw is strongest in reward mode (48V), no strong or weak claw.
- **Gift out sensor condition：** This setting is for limit for the sensor. The machine is used for normally open sensor, it must set for “Normally open”, otherwise will get error for “44”, the machine can not play normally.
- **Whether to open gift sensor test：** This setting is for decided whether to open gift sensor test. If setting for “Open”, after power off, machine will enter into gift sensor test program, use gift or other things to blocked for the mouth, gift sensor board light will turn on or turn off. After finish test please set for SW3-8 switch OFF.

Main Board DIP SW4 Switch Setting

main board DIP SW4 / setting content		1	2	3	4	5	6	7	8
Play time added in reward mode	exclude	OFF							
	add 1	**ON**							
	exclude		OFF						
	add 2		**ON**						
	exclude			OFF					
	add 4			**ON**					
	exclude				**OFF**				
	add 8				ON				
	exclude					**OFF**			
	add 16					ON			
	exclude						**OFF**		
	add 32						ON		
	exclude							**OFF**	
	add 64							ON	
	exclude								**OFF**
	add 1280								ON
The letter in bold is for factory setting									

✧ **Play time added in the reward mode：** This setting is decided for the how many play time in reward mode. Note: in reward mode, open the strongest claw, customer no need insert coin that can play until to catch the figure.

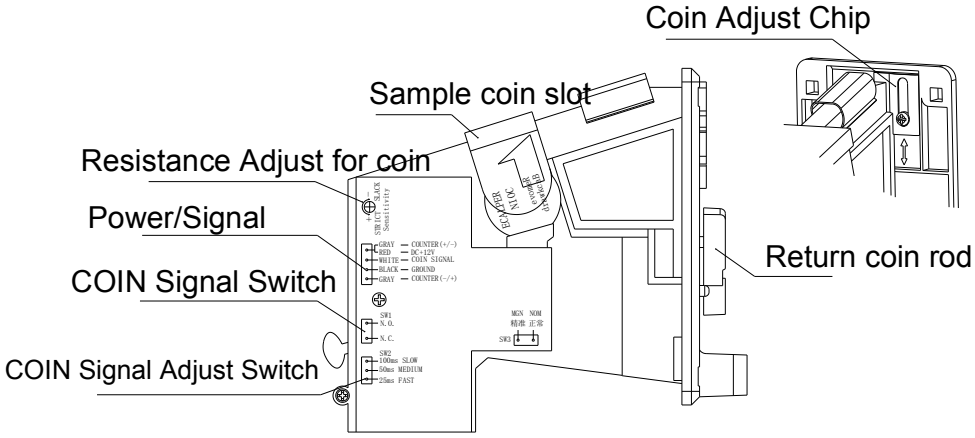
Play time in open reward mode=fixed value 1+the number switch open.

If setting for play 8 times in reward mode, it need to set for SW4-1、2、3 ON. In meantime the open reward mode play time=**1+1+2+4=8 times.**

If machine set for play 8 times in reward mode, digital board will display for 8, open for reward mode, customer do not need to insert coin, then it can use strongest claw to pick up the figures.

4. ADJUSTMENT

4.1 Adjustment for coin mech



Coin Mech

Adjustment of coin mech usage:

1) Please take out the plastic coin from sample coin chute and replace it with token.

2) Remove the screws on back of coin entrance. Adjust the fixing chip on back of coin entrance according to the token's diameter to prevent blocking the coin mech as inserting the large coin in by mistake.

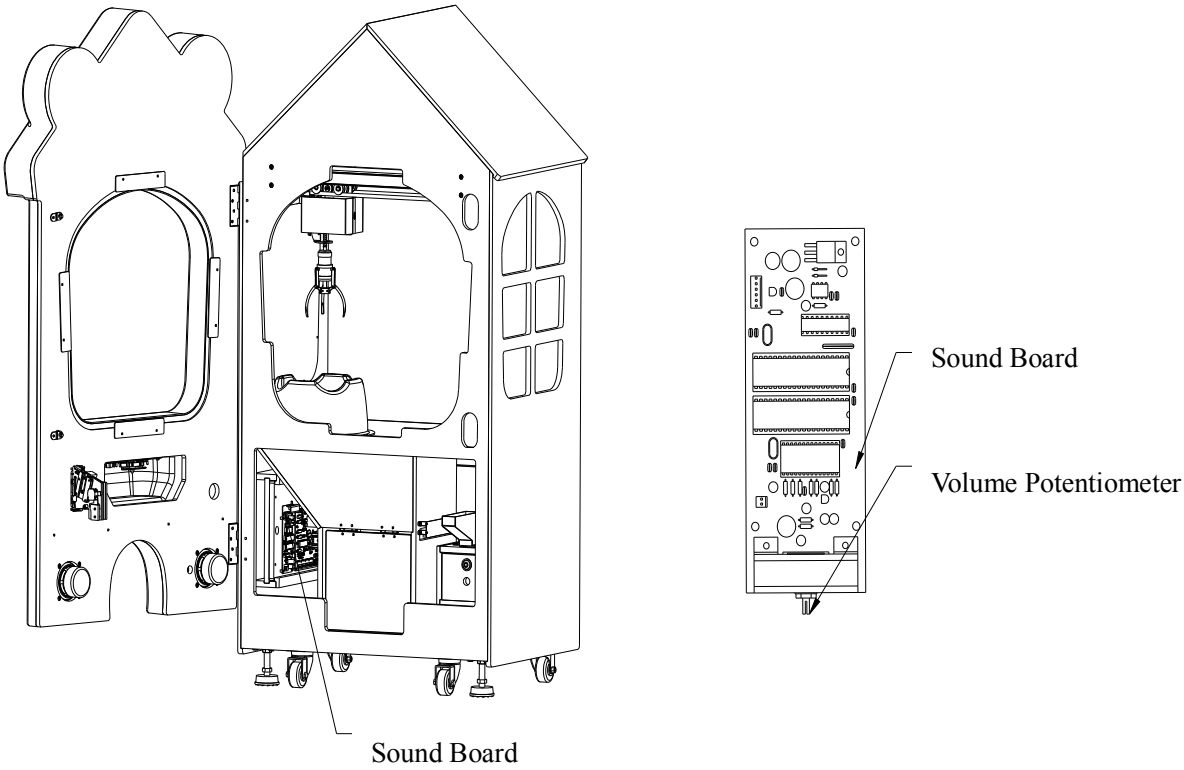
3) Turn the COIN Switch on "ON(COIN Signal wire and GND should be disconnected at usual time). Turning the switch can be used as the coin-insert switch when the game is power on.

4) Adjust the COIN signal wavelength to 50MS.

5) Adjust the micro-adjust resistance of token tolerance. Clockwise:

increase the sensitivity of token tolerance, that is, the range of accepting the token tolerance will be larger. Counterclockwise: decrease the sensitivity, that is, the range will be smaller and choose the token more strictly.

4.2 Volume Adjustment



Volume Adjustment: Open the front door, find out the potentiometer on the sound board, screw the volume potentiometer to adjust the volume. Screw the potentiometer CW will get loud, screw potentiometer CCW will get low.

4.3 Daily Checking

Item	Content
Coin Mech	Check coin mech can work or not
Claw movement	Check claw can move front/back; left/right
Claw catch	Check claw can catch or not.
Rod、Confirm button	Check rod, confirm button can work or not.
Display board	Check display board can display or not.
Sound	Check if have sound or not.
Prize out sensor board	Check prize out sensor board work or not.
Humidity、Temperature	Check if the humidity and temperature is high or not.

4.4 Daily Maintenance

Item	Content
Outlook	Use water and absorbing paper to clear machine outlook
Arylic	Use water and absorbing paper to clear the arylic
Figure Out	Use water and absorbing paper to clear figure out mouth.
Circuit Board	Use small brush clear the dust on circuit board.

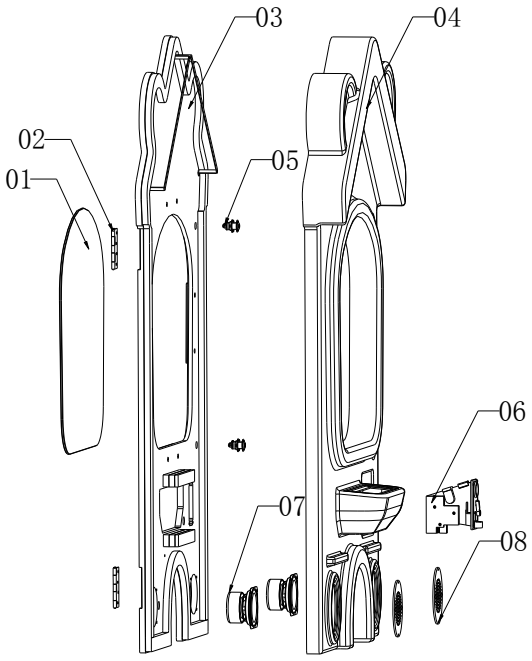
5. TROUBLE SHOOTING

Trouble Shooting：

Faulty	Cause	Solution
Do not insert coin	No sample coin	Snap the sample coin
	Get through for the coin	
	Sensitive is high	Adjust the coin mech sensitive
	Coin mech damage	Change coin mech
Light do not light up	Light wire blocked.	Connect the light wire.
	Light damage	Change the light.
Motor do not move for front/back left/right	Motor wire blocked.	Connect the motor wire.
	Motor main board failure.	Change main board.
	Motor damage.	Change motor.
Claw do not move	Claw wire blocked.	Connect claw solenoid wire.
	Claw solenoid damage.	Change claw solenoid.
No effect for button	Switch wire blocked.	Connect the switch wire.
	Switch damage.	Change the switch.
No effect for rod	Rod switch wire blocked	Connect the rod switch wire.
	Rod switch damage	Change the rod.
No display for display board	Display board wire blocked.	Connect the wire for display board.
	Display board damage.	Change the display board.
	Main board damage.	Change the main board.
No sound	Speaker wire loosen.	Connect the speaker wire
	Volume too low.	Adjust the volume potentiometer.
	Speaker damage.	Change the speaker.
No movement	No voltage for AC110/220V	Check the power wire.
	Do not power on.	Power on switch
	No output for power supply	Repair or change power supply
	No operate for main board	Change main board.

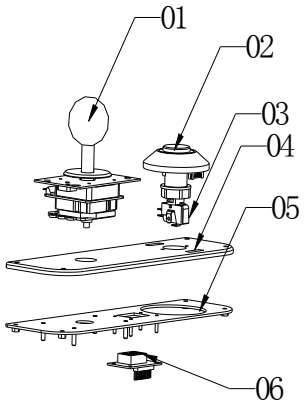
6. Part Assy. Diagram & Part List

6.1 Door Assy. Diagram & Part List



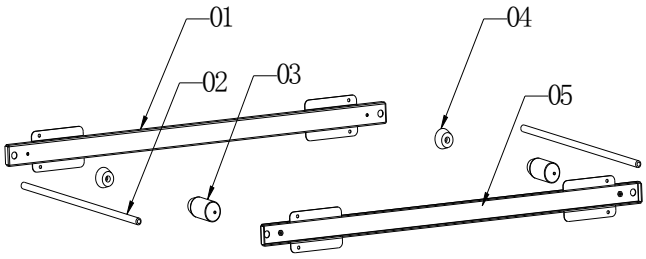
NO.	NAME	QTY
01	Door Arylic	1
02	Door Leaflet	2
03	Door Board Set	2
04	Door PVC	1
05	Lock 1285	2
06	Coin Acceptor	1
07	Speaker	2
08	Speaker Net Arylic	2

6.2 Cabinet Assy. Diagram & Part List



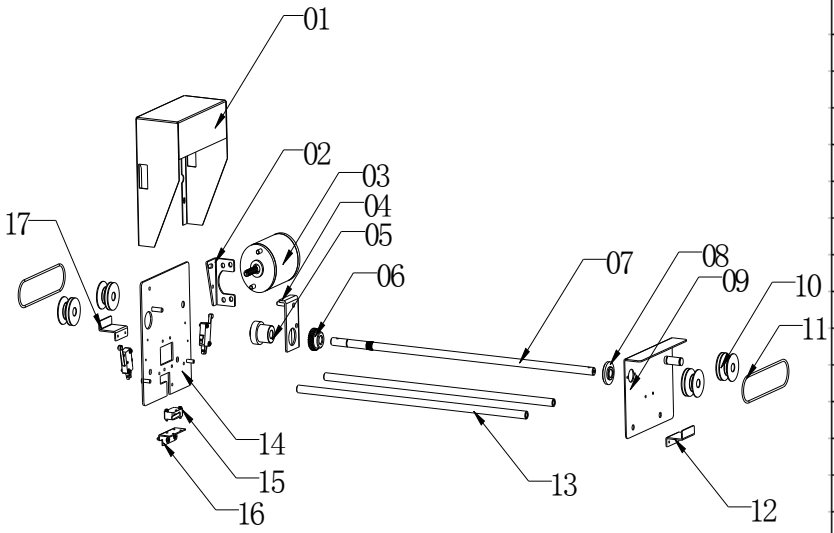
NO.	NAME	QTY
01	Rocking Bar	1
02	Middle Light Button	1
03	Micro Switch	1
04	Cabinet Arylic	1
05	Cabinet Board	1
06	Display Board	1

6.3 Supporting Frame Assy. Diagram & Part List



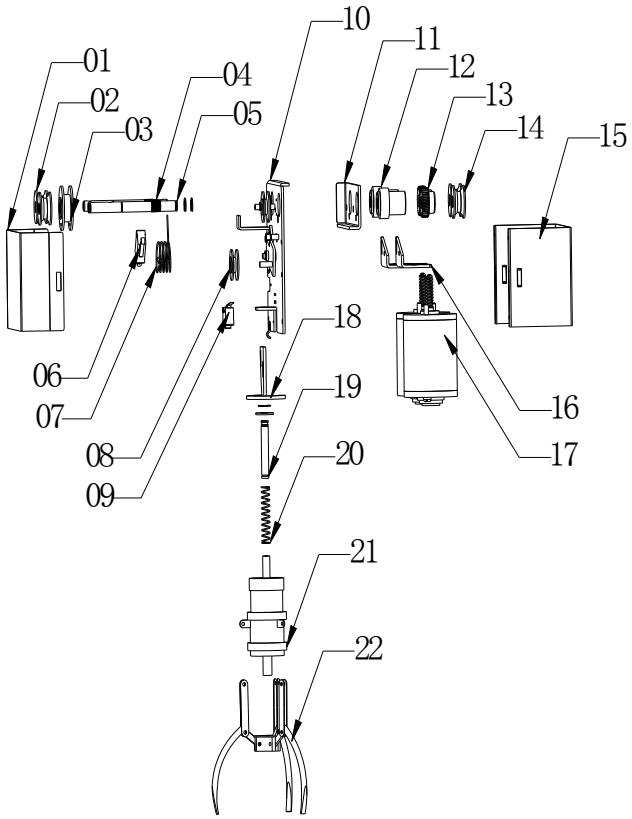
NO.	NAME	QTY
01	Supporting Fixed Frame 1	1
02	Supporting Rod	2
03	Long Limit Adhesive	2
04	Short Limit Adhesive	2
05	Supporting Fixed Frame 2	1

6.4 Claw Assy. Diagram & Part List



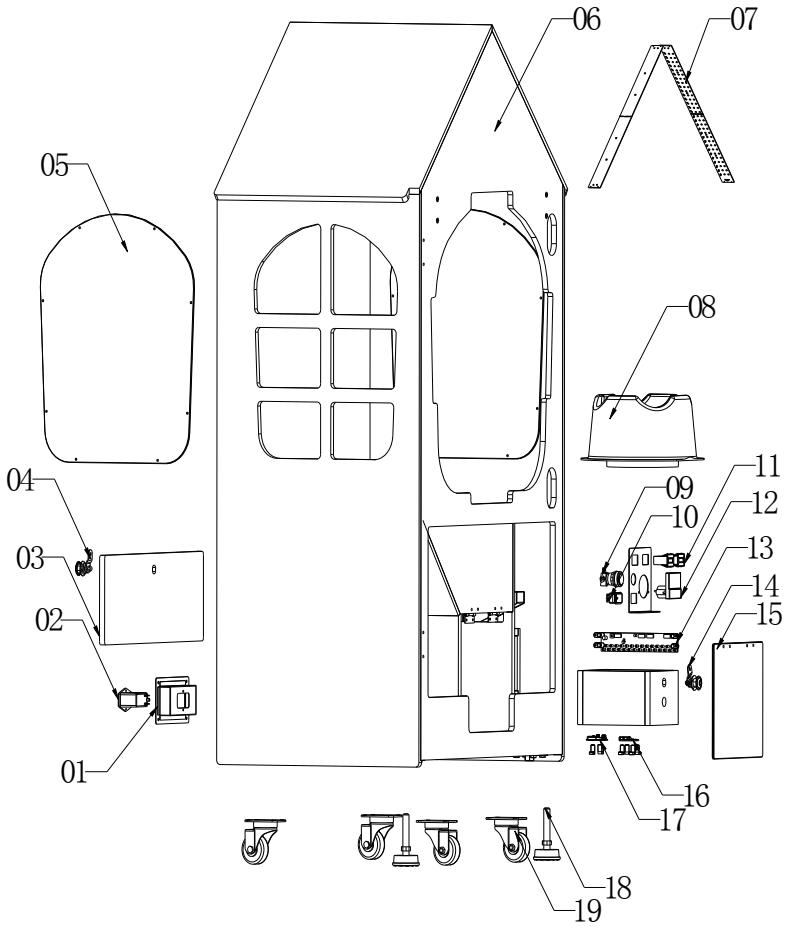
NO.	NAME	QTY
01	Motor Cover	1
02	Motor Fixed Part	1
03	Motor	1
04	Shaft Seat Fixed Part 1	1
05	Shaft Seat 1	1
06	Drive Gear	1
07	Drive Saft Rod	1
08	Shaft Seat 2	1
09	Shaft Seat Fixed Part 2	1
10	Belt Wheel	4
11	Belt	2
12	Claw Assy. Limit Part 1	1
13	Fixed Shaft Rod	2
14	Driving Set Fixed Part	1
15	Micro Switch	3
16	Switch Fixed Part	1
17	Claw Assy. Limit Part 2	1

6. 5 Claw Assy. 2 Diagram & Part List



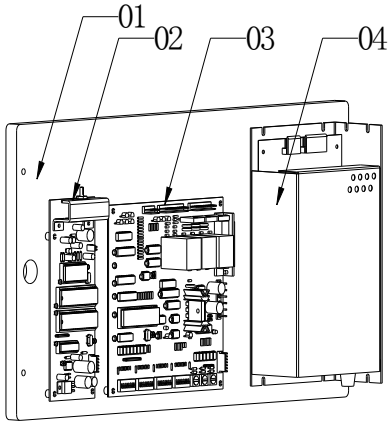
NO.	NAME	QTY
01	Claw Assy. Front Cover	1
02	Drive Moving Wheel	2
03	Active Moving Wheel	1
04	Drive Wheel Rod	1
05	Active Wheel Rod	1
06	Micro Switch	1
07	Spring	1
08	Rope Driving Wheel	2
09	Micro Switch	1
10	Claw Rope Fixed Part	1
11	Shaft Rod Fixed Part	1
12	Shaft Rod Base	2
13	Motor Driving Gear	2
14	Drive Moving Wheel	2
15	Claw Assy. Back Cover	1
16	Motor Fixed Part	2
17	Motor	2
18	Claw Limit Hook	1
19	Top Rod	1
20	Spring	1
21	Claw Solenoid	1
22	Claw Hoop Set	1

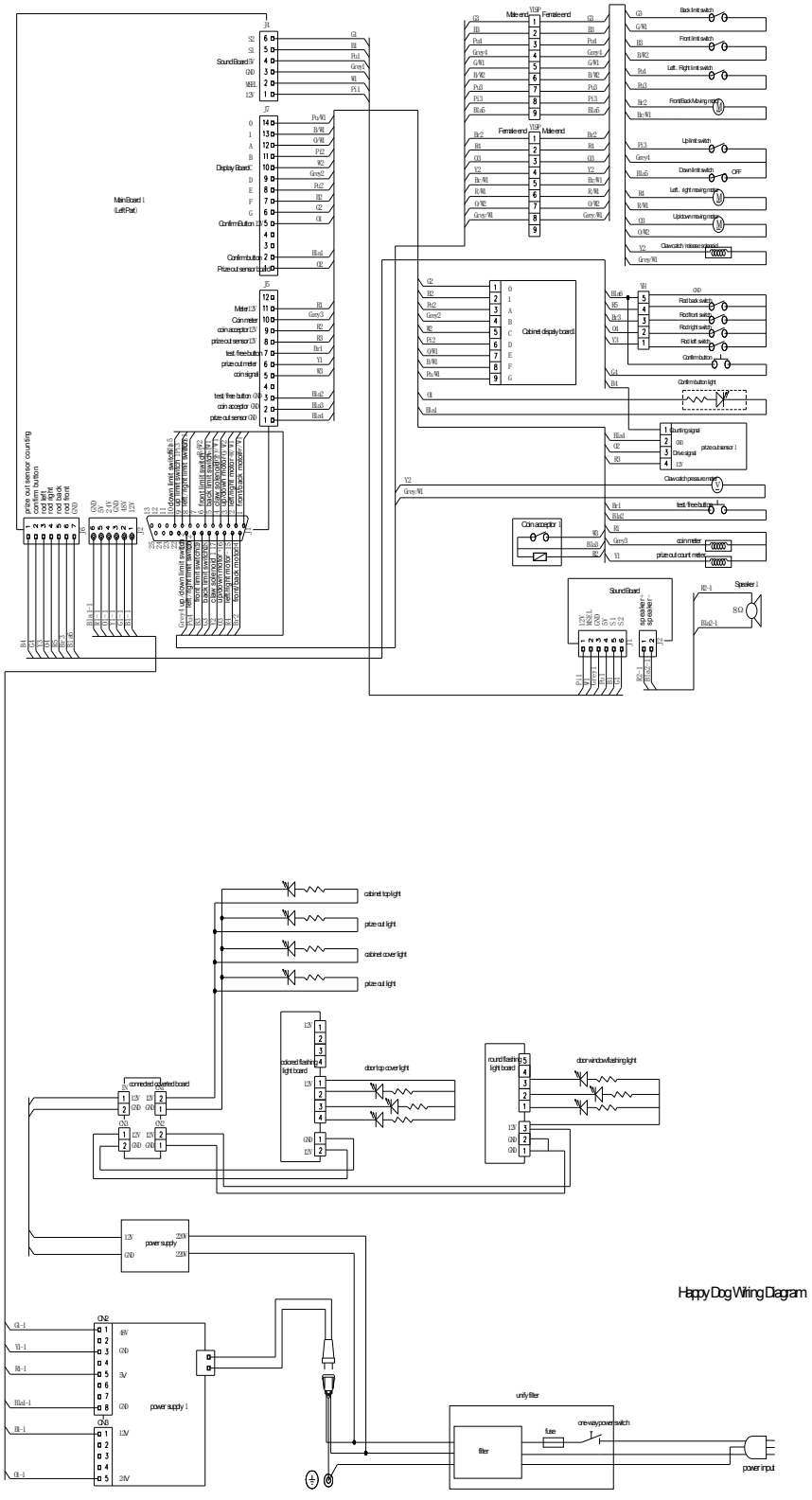
6.6 Cabinet Assy. Diagram & Part List



NO.	NAME	QTY
01	Power Supply	1
02	Unify Filter	1
03	repairing Door	1
04	Lock #1285	1
05	Side Window Arylic	2
06	Cabinet	1
07	LED light board	4
08	Prize out Arylic Cover	1
09	Small button	1
10	Cymbiform Switch	1
11	Stopwatch	2
12	Voltmeter	1
13	Prize out sensor board	1
14	Lock #1396	1
15	Prize out Arylic Cover	1
16	Flashing light control board	1
17	Round light control board	1
18	Fixed Anchor	2
19	Active Anchor	4

6.7 PC Board Assy. Diagram & Part List



NO.	NAME	QTY
01	PC Board Fixed Board	1
02	Sound Board	1
03	Main Board	1
04	Power Supply	1

7. **WIRING DIAGRAM**