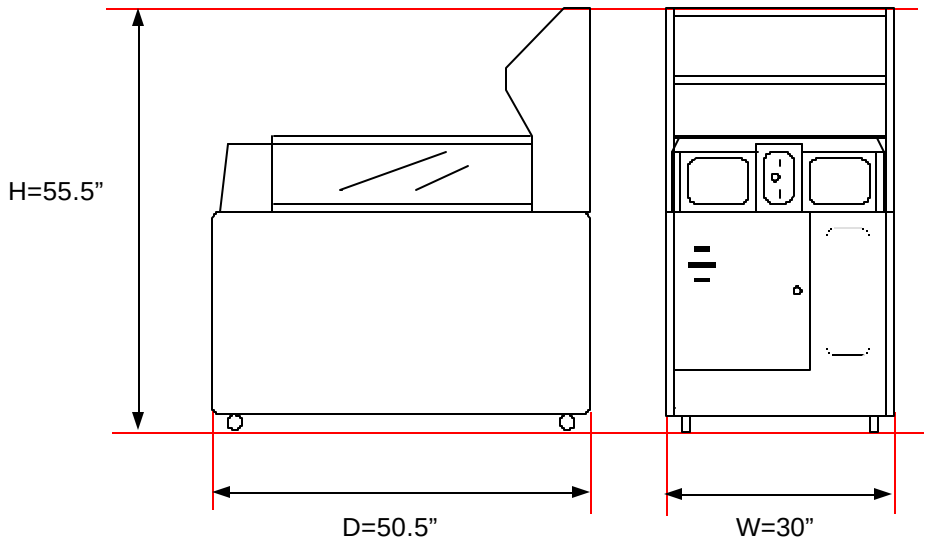
# 1. SPECIFICATIONS

| | | |
|---|---|---|
| **POWER** | Domestic 120VAC 3 Amps @ 60 Hz | |
| **DIMENSIONS** | **W**idth : | 30" (Approx.) |
| | **D**epth : | 50.5" (Approx.) |
| | **H**eight : | 55.5" (Approx.) |

*** Outside carton measurement: W= 33", D(L)= 53", H=60"**

| | |
|---|---|
| **WEIGHT** | 330 lbs. |

**DIMENSIONS**

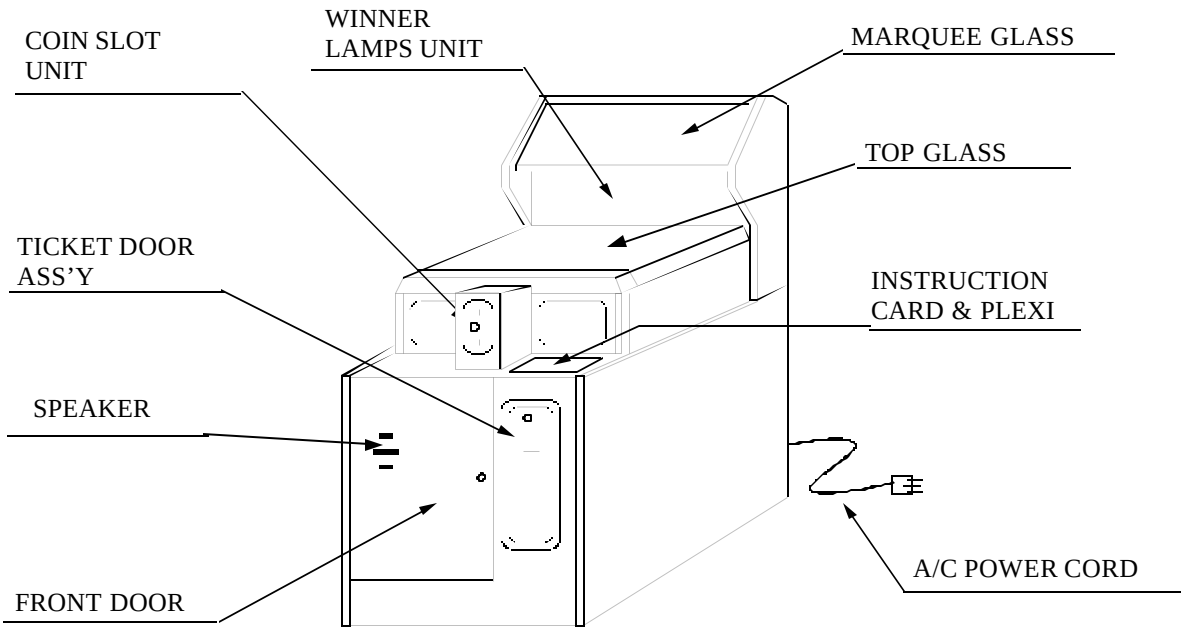



**SPARE PARTS INCLUDED**

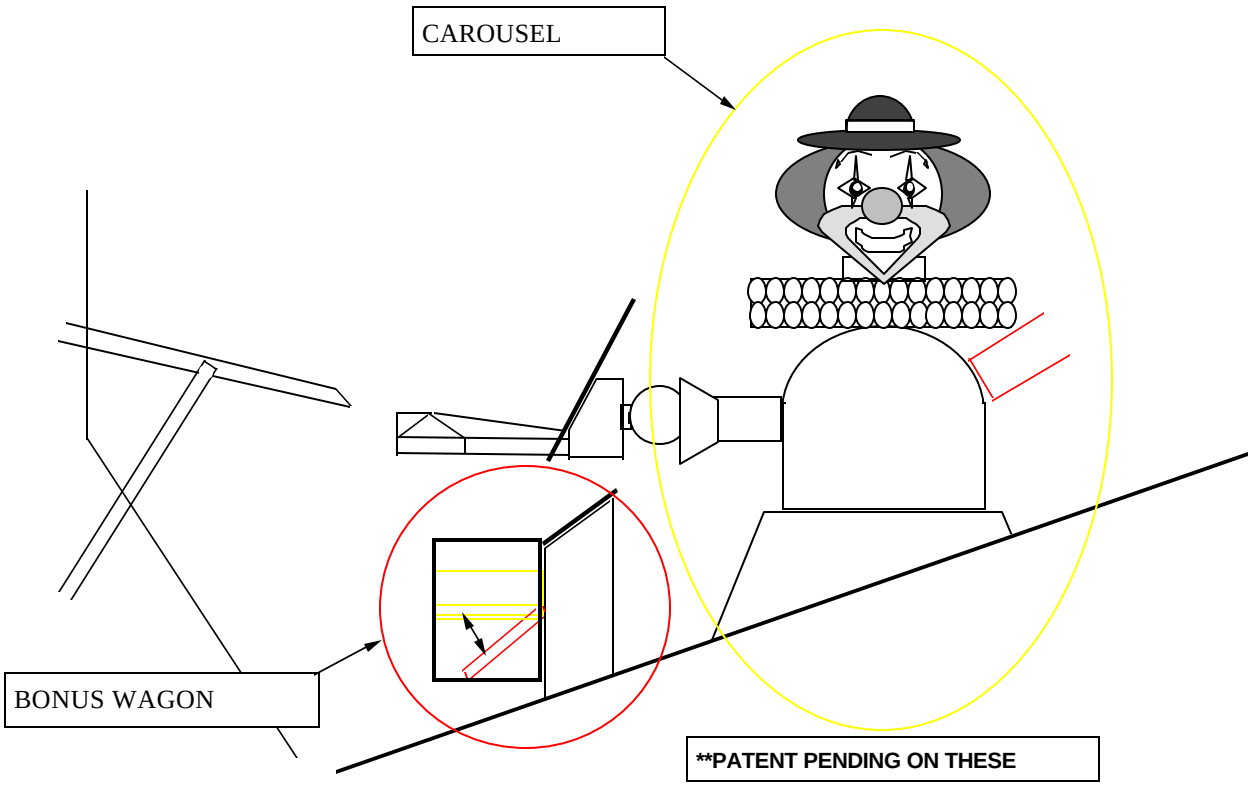
| | |
|---|---|
| **1) Allen wrench** | 1 pc |
| **2) Score Value Sticker set for Arm Buterates** | 1 Set |
| **3) Sticker set for Instruction Card** | 1 Set |

## 2. MAIN PARTS OF MACHINE

### MAIN CABINET

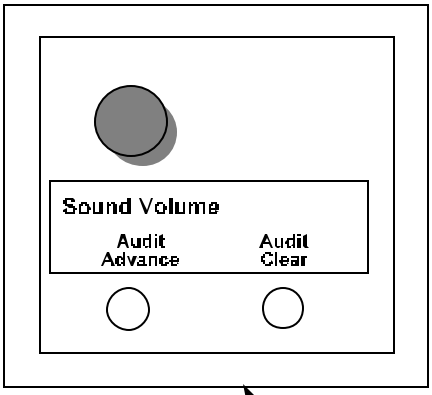



### PLAYFIEL



## FRONT DOOR

### a) TEST SW & VOLUME BRACKET

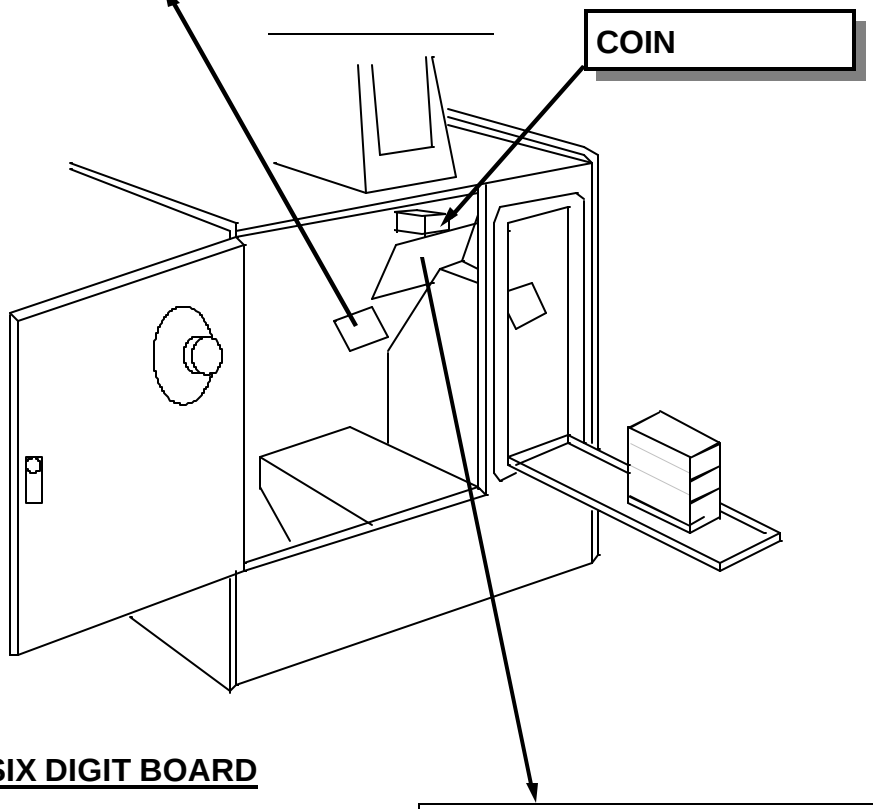



**Audit Advance Button & Audit Clear Button**

Used for “TEST MODE”. See pages 13-15.

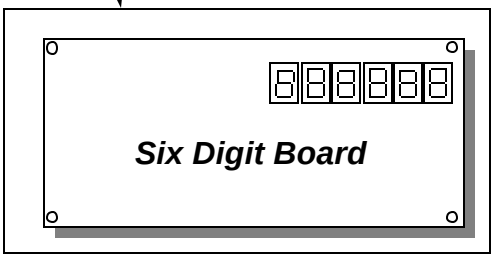
**Sound Volume**

Turn clockwise to increase volume.




### b) SIX DIGIT BOARD

During “**GAME MODE**” the payout number of ticket(s) is shown. During “**TEST MODE**” the audit data and any contents of test mode will be shown. See pages 13-15.

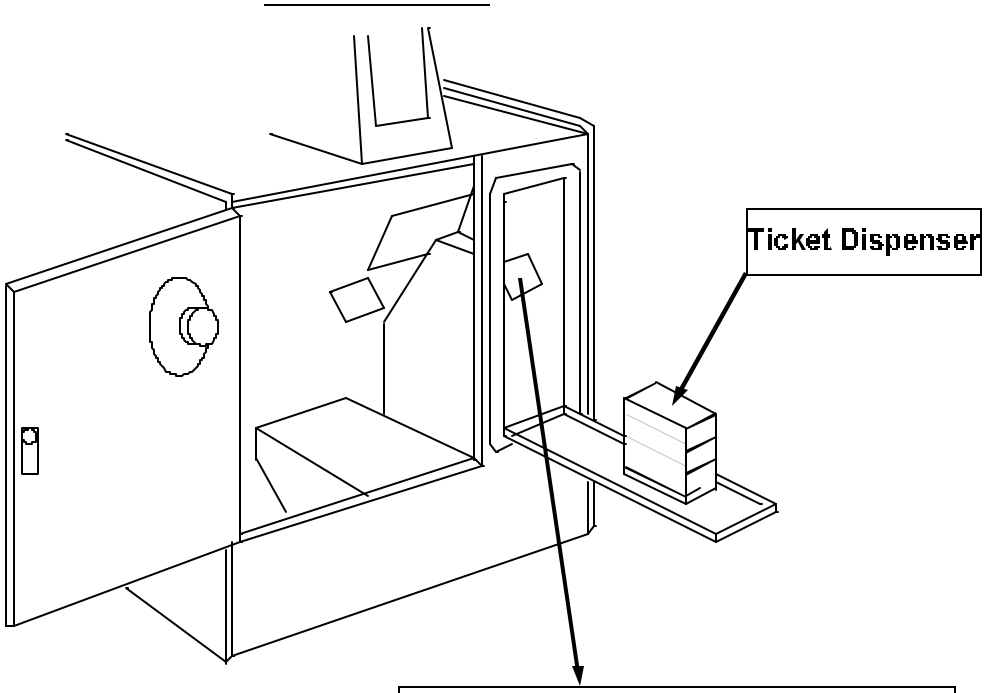



**Memo:**
**You can see the “Six Digit board” from Front Door Side or Ticket Door Side.**

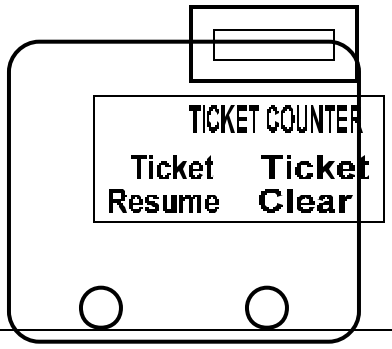
## TICKET DOOR ASS'Y

### TICKET RESUME BUTTON & TICKET CLEAR BUTTON

The two buttons in the ticket door determine how the machine handles the ticket payout when the machine runs out of tickets. One button is labeled **TICKET RESUME**, the other is labeled **TICKET CLEAR**.
The first button, -the **TICKET RESUME button**-, will restart the ticket dispenser, after it is reloaded, from where it left off when it ran out.
The second, -the **TICKET CLEAR button-**, will end the "Out of Tickets" condition and clear the remaining ticket count.



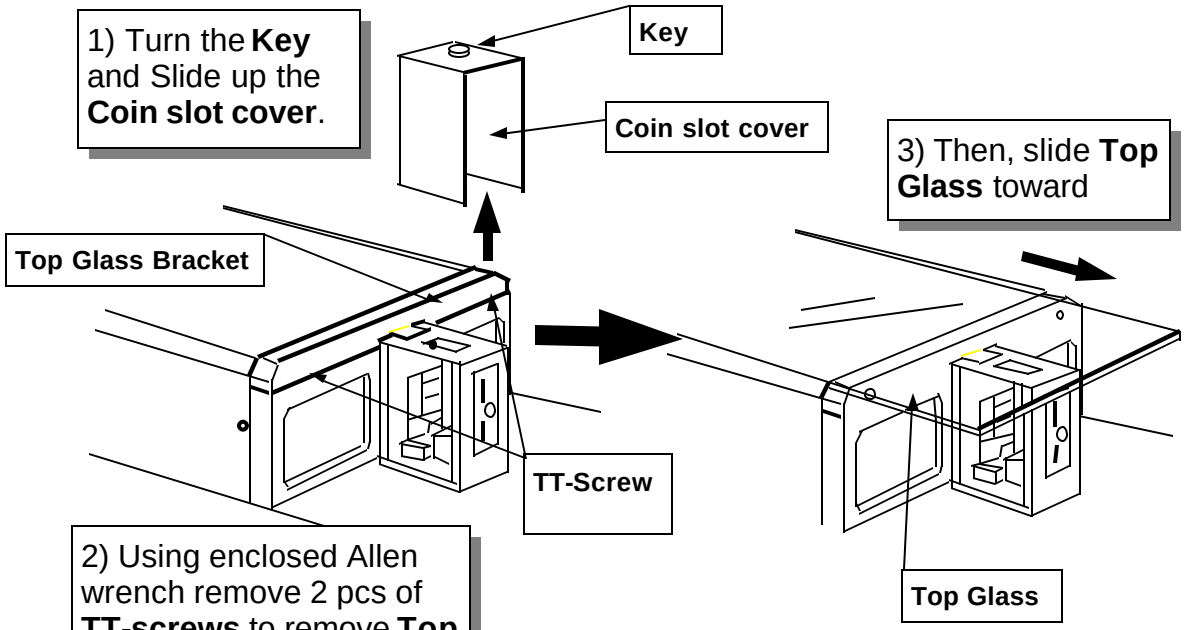

**TICKET SW & COUNTER BRACKET**



## COIN SLOT

**HOW TO OPEN THE TOP GLASS.**

1) Turn the **Key** and Slide up the **Coin slot cover**.




## CASH BOX

**HOW TO REMOVE THE CASH BOX.**

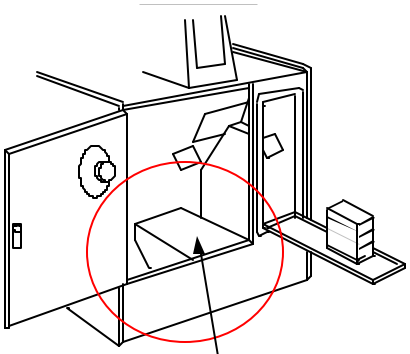
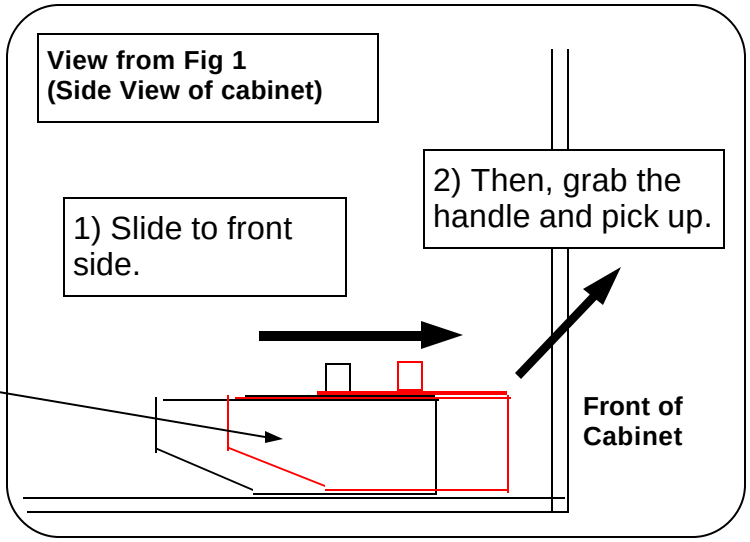



Fig-1




**Note:**
**This Game does not include a "Cash Box Lock & Key".**
**(It has a "Lock Bracket" on Cash Box.)**

# 3. INSTALLATION

## SET UP MACHINE

***Please take a moment to read the following before you turn on your new game.***

Unpack your game carefully. Be careful of the shipping staples, they can be sharp. Your game is assembled and will not need anything done to it. The keys are taped to Game Top Glass.

Open up the Ticket door and remove the other keys. Open all doors and inspect for shipping damage. Are the PC boards in place? Are the connectors seated? It is a good idea to "**RESEAT"** all connectors as they may become loose during shipping. Carefully walk around your game, and inspect the cabinet for cracks and separation of the joints. If **OK**, plug in line cord and turn game on. Drop in a few coins and play a game. If you have not put in tickets, the game will say "**CALL ATTENDANT-OUT OF TICKETS,**" if you earned tickets that cannot be paid out. The "**TICKET CLEAR**" button in the ticket dispenser door will clear this problem.

Your new game has carefully been percentaged. We suggest you keep this setting for a few weeks and find out what your ticket average per coin is. This information is available through the built-in audit system discussed later in the manual.

(See page 13)

## SAFETY PRECAUTIONS

1) Be sure to turn the power **OFF**, or unplug the game, before working on the machine.
2) Do not unplug game by pulling on the line-cord.
3) Use only a grounded outlet.
   **YOUR GAME MUST BE GROUNDED!!!**
4) Replace line cord ; if the insulation is damaged in any way, with one of equal quality.
5) Replace blown fuses with same type and rating.
6) This game is for **INDOOR USE ONLY.**

## LIMITED WARRANTY

American Sammy Corporation warrants all products to be free from defective materials and workmanship for a period of thirty (30) days from the American Sammy Corporation invoice date unless otherwise specified in writing by American Sammy Corporation. The extent of this warranty applies to all electronic assemblies only, and does not include lamps and fuses.
This limited warranty is invalid for any product that upon examination, is deemed to have been subject to misuse, improper repair or installation, neglect or violation of specification or other instructions published by American Sammy Corporation.
There are no additional warranties which extend beyond those limited warranties described above. The limited warranties described above shall be in lieu of any other warranty, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose.

## F.C.C. REGULATION COMPLIANCE

This equipment complies with the limits for a Class A digital device pursuant to Part 15 of the F.C.C. Rules.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
This equipment 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 their own expense.

## U.L. LISTED

This game has been tested & listed by Underwriters Laboratory. This listing is subject to no modifications done by operator of this game. Any modifications not approved by American Sammy Corporation will void such U.L. listing.

# 4. GAME PLAY

## GAME THEME & HOW TO PLAY

**As the calliope music plays and the Circus Barker calls to the player, Coin Circus adds a new dimension to coin drop redemption games!**

**Coin Circus** revolves around a circus theme, where a bright, colorful, 3-dimensional clown is the center of attention in an attractive mirror lined cabinet. He holds four arms which rotate around in a circle and move up and down. Each arm represents a different ticket value which are set at different difficulty levels. This is the most unique coin drop game in the industry!

As the drum roll plays, the players can test their skill as they drop a coin or token and try to have the arms "catch" the coin. Miss the shot, and the coin drops into a ***"Bonus Wagon"*** . The clown laughs and taunts the player to try again. Make the shot and light up the first of a bank of lights on the **"Bonus Wagon"!** This adds a whole new dimension to the game! Now, not only can the player continue to test their skill, but they have 60 seconds to make another shot! If any player successfully makes 5 shots, the **Bonus Wagon** lets down a cascade of coins similar to the effect of a coin pusher paying out a jackpot! The jackpot is paid out in bonus tickets.

**Coin Circus** is completely operator adjustable for both bonus pay-out and individual arm ticket values. Its compact cabinet makes it fit in any location and can be set for no ticket operation for those locations that do not operate redemption! **Coin Circus** is more than just a redemption game!

**Game Features:**

* **Cabinet** quality built with tongue and groove construction.
* Metal Ticket Door and **Deltronics ticket dispenser**.
* **Ticket Resume & Clear button** inside of ticket door.
* **New Audit System** with **Six Digit Board** in Front door.
* Additional **Score Value Sticker sets** included to customize arm ticket payout.
* **Leg Levelers** and **Recessed wheels** for easy installation.
* Shipped with either a **.984 Token** or **Quarter Coin Mech**.
* All **U.S. made components**.
* **Patent Pending** on certain game assemblies.

# 5. DIP SW SETTING

**DIP SW 4 (sw41~48)**

**: Factory setting**

| CONTENTS / SWITCH NUMBER | sw41 | sw42 | sw43 | sw44 | sw45 | sw46 | sw47 | sw48 |
|---|---|---|---|---|---|---|---|---|
| ***Normal game*** | ***OFF*** | | | | | | | |
| Any time No ticket payout | ON | | | | | | | |
| ***5 coins in Arms to win "Bonus Wagon"*** | | ***OFF*** | | | | | | |
| 3 coins in Arms to win "Bonus Wagon" | | ON | | | | | | |
| ***Bonus Lights reset only after Bonus Wagon is won*** | | | ***OFF*** | | | | | |
| Bonus Lights reset after 60 seconds | | | ON | | | | | |
| Pays out 0 tickets when no score is made | | | | OFF | OFF | | | |
| ***Pays out 1 ticket when no score is made*** | | | | ***OFF*** | ***ON*** | | | |
| Pays out 2 tickets when no score is made | | | | ON | OFF | | | |
| Pays out 4 tickets when no score is made | | | | ON | ON | | | |
| ***Attract sound ON*** | | | | | | ***OFF*** | | |
| Attract sound OFF | | | | | | ON | | |
| Payout number for "Bonus Wagon" = 50 tickets | | | | | | | OFF | OFF |
| Payout number for "Bonus Wagon" = 100 tickets | | | | | | | OFF | ON |
| ***Payout number for "Bonus Wagon" = 80% of the Number of Coins inserted since Last Bonus Wagon payout **** | | | | | | | ON | OFF |
| ***Payout number for "Bonus Wagon" = 70% of the Number of Coins inserted since Last Bonus Wagon payout **** | | | | | | | ***ON*** | ***ON*** |

* For example, if 100 coins are "counted" since last Bonus Wagon payout; the # of tickets dispensed would be 70 (70%) or 80 (80%) tickets. Keep in mind that when you set the Bonus Wagon payout to a specific # (50 or 100) you are automatically raising your % payout on the Bonus Wagon based on how "skillful" your players are.

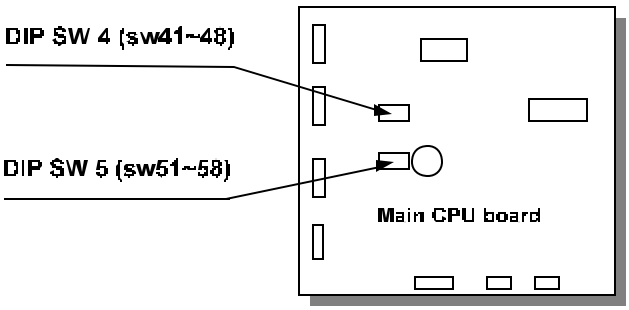
**Illustration**: Assume 2,700 plays for the day and the Bonus Wagon drops 100 times-
With Bonus Wagon set at 50 tickets per payout, a total of 5,000 tickets will be "paid out" for Bonus Wagon.
If the Bonus Wagon were set at 70% of coins in (counted), no matter how many times the Bonus Wagon is dropped, the # of tickets paid out would be a total of 1,890 tickets (70% of 2,700).

## DIP SW 5 (sw51~58)

: Factory setting

| CONTENTS / SWITCH NUMBER | sw51 | sw52 | sw53 | sw54 | sw55 | sw56 | sw57 | sw58 |
|---|---|---|---|---|---|---|---|---|
| ***Payout value for Arm #1 (Man)*** | | | | | | | | |
| 5 tickets | OFF | OFF | | | | | | |
| 10 tickets | OFF | ON | | | | | | |
| 15 tickets | ON | OFF | | | | | | |
| ***25 tickets*** | ***ON*** | ***ON*** | | | | | | |
| ***Payout value for Arm #2 (Elephant)*** | | | | | | | | |
| 5 tickets | | | OFF | OFF | | | | |
| 10 tickets | | | OFF | ON | | | | |
| 25 tickets | | | ON | OFF | | | | |
| ***50 tickets*** | | | ***ON*** | ***ON*** | | | | |
| ***Payout value for Arm #3 (Tiger)*** | | | | | | | | |
| 10 tickets | | | | | OFF | OFF | | |
| 25 tickets | | | | | OFF | ON | | |
| ***50 tickets*** | | | | | ***ON*** | ***OFF*** | | |
| 100 tickets | | | | | ON | ON | | |
| ***Payout value for Arm #4 (Clown)*** | | | | | | | | |
| 25 tickets | | | | | | | OFF | OFF |
| 50 tickets | | | | | | | OFF | ON |
| 75 tickets | | | | | | | ON | OFF |
| ***100 tickets*** | | | | | | | ***ON*** | ***ON*** |

## Location of DIP SWs



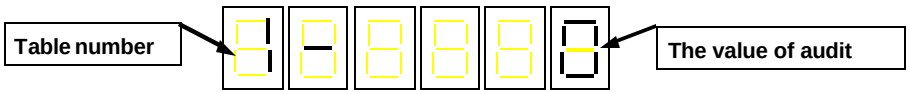
# 6. TEST MODE

**There are 11 tables as below.....**

**8 tables of AUDITS &**

## How to enter and control the TEST MODE

1) Enter by hitting ***AUDIT ADVANCE* switch** once in Attract Mode ONLY.
2) The number of each audit is shown on **Six Digit Board** as below *(See "Special Note" on following page for #'s over 10,000)*:




Six Digit Display on **Six Digit Board**

3) Advance through Audits by repeatedly pressing ***AUDIT ADVANCE Button*.** You can check 8 kinds of audits as listed below.
4) If needed, clear Audit by hitting ***AUDIT CLEAR Button*** at each audit.
5) When you need to go to ***TESTS(Tables 9,10 & 11)***, please keep hitting ***AUDIT ADVANCE Button*** until table number 9 appears on Six Digit Board.
6) TEST MODE terminates after ***TEST 11*** is viewed.

***Miscellaneous notes***

* Clearing Audit #8 (Average Tickets per coin) has no permanent effect on Audits since it is automatically recalculated each time Audit Mode is entered.
* The #'s shown in Audit #8 are "rounded."

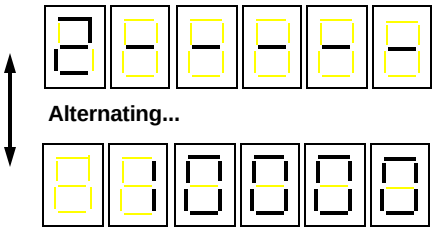
| | Table Number | Description |
|---|---|---|
| **Tables 1 ~ 8 AUDITS** | 1 | Number of coins played |
| | 2 | Number of tickets dispensed |
| | 3 | Number of coins through Arm # 1 |
| | 4 | Number of coins through Arm # 2 |
| | 5 | Number of coins through Arm # 3 |
| | 6 | Number of coins through Arm # 4 |
| | 7 | How many time(s) "Bonus Wagon" was made |
| | 8 | Average Tickets per coin |
| **Tables 9 ~ 11 TESTS** | 9 | Test for "Bonus Wagon" movement |
| | 10 | Test for "Switches" & "Sensors" |
| | 11 | Test for "Ticket Dispenser" & "Six digits display" |

*** How to Exit from TEST MODE ***

* ***SPECIAL NOTE-*** *If the # in Audits goes over "10,000".....*

**When the "Audit #" is 10,000 or over the Six Digit Display will change as shown below...**
(Example shown for Audit Table #2)

When the Audit number goes up to 10,000, the Table # (2) will be shown with 5 "Bars" and will alternate with the actual Audit value (10000) on the Six Digit Board.

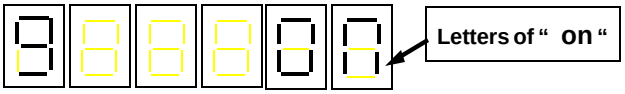


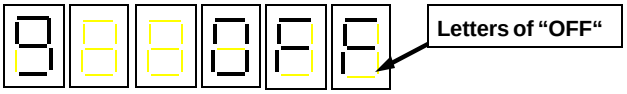

***Note: WHEN THE AUDIT NUMBER REACHES 1,000,000; THE RESULTS ARE***

## Table 9
## Test for "Bonus Wagon" movement

**This is the test for Motor movement and Micro switch for Bonus Wagon.**

1) When you press the ***AUDIT CLEAR Button*** once, The ***Bonus Wagon*** will move (Open & Close) once.
2) Also, the letters of "**on**" are briefly shown on the Six Digit Board when the Bonus Wagon is opened.
3) The letters of "**OFF**" are shown on the Six Digit Board when the Bonus Wagon is closed.



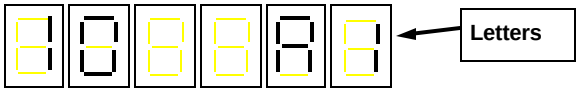




* Note: *The letters of "**on**" & "**OFF**" illustrate the action of the "Micro switch of Bonus Wagon". If the Display shows "**on**" after Bonus Wagon is closed, this means that the Bonus Wagon Motor is continuing to run. This is not a serious problem if the Bonus Wagon stops in the correct "closed" position as the software program will stop the motor. If the Bonus Wagon stops in a position other than closed; however, there might be a problem with the Micro switch.*

4) In addition the **5** pcs of the "**Bonus Lamp**" will chase and the "**Winner**" lamps will flash in order to check those lamps.

## Table 10
## Test for "Sensors" & "Switches"

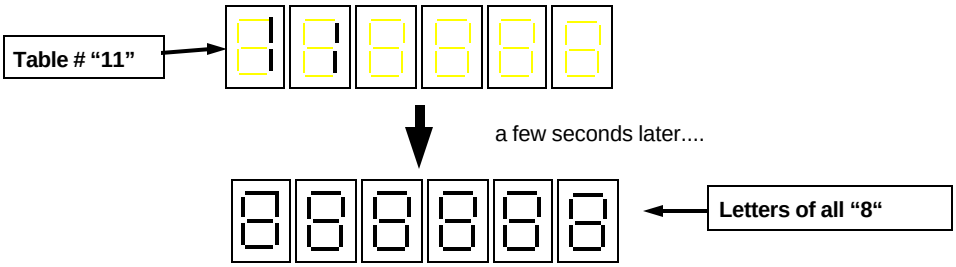
This is the test to check if switches are functioning properly. When one of the Switches is pressed, their activation will be displayed on the Six Digit Board. *And also, a sound will be produced.*
** Please reference the table & picture shown below...*
*(The Letters will stay on until you press the next switch.)*



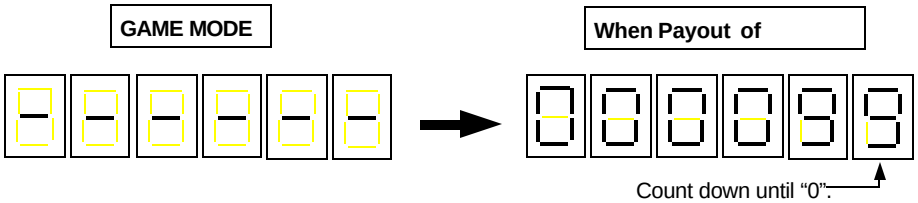

| *Letters* | *Comment* |
|---|---|
| **A1** | ***Will display when you activate the <u>Sensor of Arm #1</u>*** |
| **A2** | ***Will display when you activate the <u>Sensor of Arm #2</u>*** |
| **A3** | ***Will display when you activate the <u>Sensor of Arm #3</u>*** |
| **A4** | ***Will display when you activate the <u>Sensor of Arm #4</u>*** |
| **CS** | ***Will display when you activate the <u>Coin Switch</u>*** |
| **AC** | ***Will display when you press the AUDIT CLEAR switch.*** |

## Table 11
## Test for "Six Digit Display" & "Ticket Dispenser"

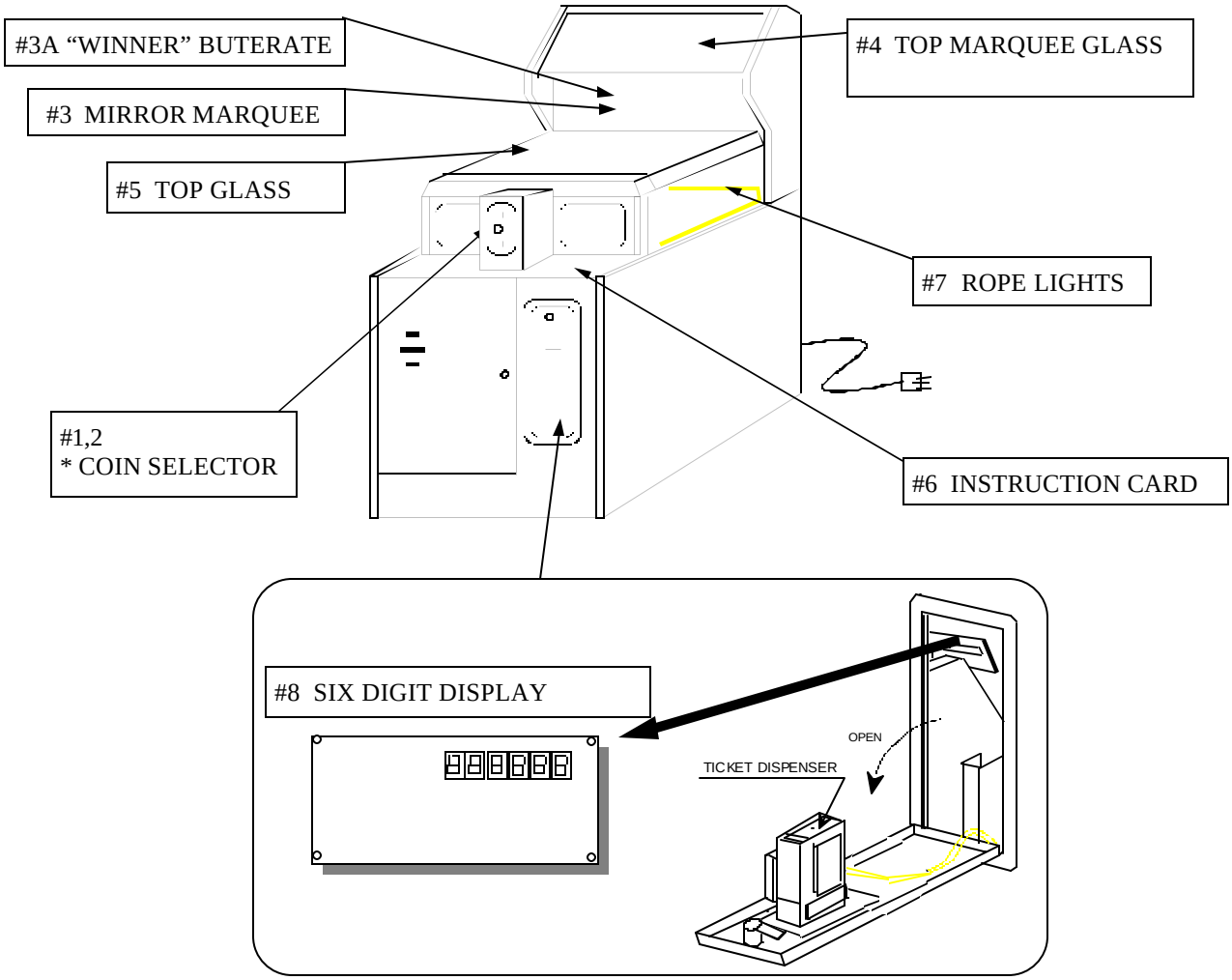
At first, the Table # of "**11**" will be displayed and a few second later, the number of "**8**" will be displayed on all Six Digit Display.
When you press the AUDIT CLEAR switch, the Ticket Dispenser will payout 1 ticket.




**<u>* How to Exit from TEST MODE *</u>**
Press **<u>AUDIT ADVANCE Button</u>** to return to **GAME MODE.** At the GAME MODE, the Six Digit Display usually shows 6 "Bars". But, during payout of tickets, the # of tickets will be displayed and start to count down on the Six Digit Display.

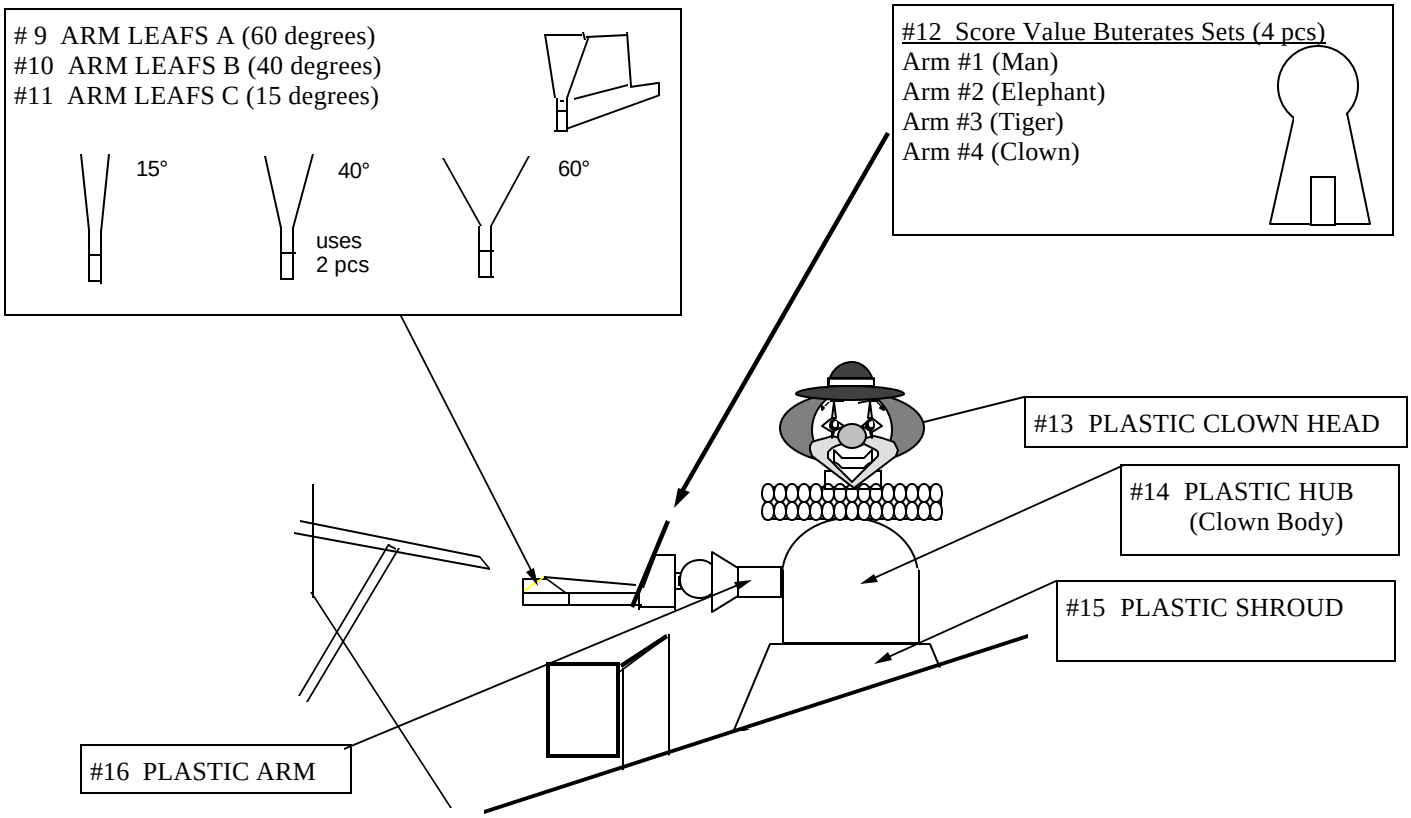


## 7. PARTS LISTS



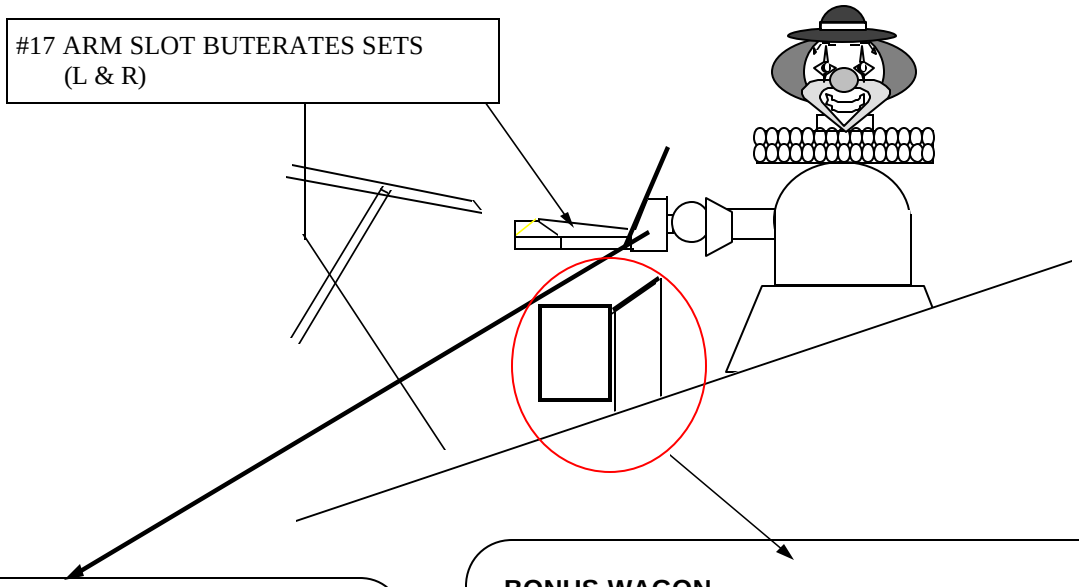

| No. | Description | Part Number |
|---|---|---|
| #1 | Coin Selector (25 cents) | 04-70-151 |
| #2 | Coin Selector (.984 Token) | 04-70-152 |
| #3 | Mirror Marquee for "WINNER" lights | 04-30-351 |
| #3A | "WINNER" Buterate | 04-30-702 |
| #4 | Top Marquee Glass for "COIN CIRCUS" | 04-30-120 |
| #5 | Top Glass | 04-70-700 |
| #6 | Instruction Card | 04-30-210 |
| #7 | Rope Lights | 04-60-250 |
| #8 | Six Digit Display Board | 04-20-215 |

## PARTS LIST (continued...)

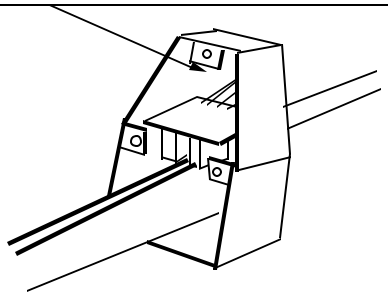



| No. | Description | Part Number |
|---|---|---|
| #9 | Arm Leafs A (60 degrees) | 04-70-251 |
| #10 | Arm Leafs B (40 degrees) (2 pcs) | 04-70-252 |
| #11 | Arm Leafs C (15 degrees) | 04-70-253 |
| #12 | Score Value Buterates Sets (4 pcs) | 04-30-701 |
| #13 | Plastic Clown Head | 04-70-451 |
| #14 | Plastic Hub (Clown Body) | 04-70-452 |
| #15 | Plastic Shroud (Bottom Piece, Silver) | 04-70-010 |
| #16 | Plastic Arm | 04-70-453 |

## PARTS LIST (continued...)




* #18 SENSOR BOARD
* #19 SENSOR BOARD (.800 TYPE)

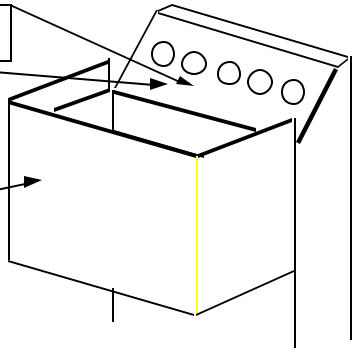


**BONUS WAGON**

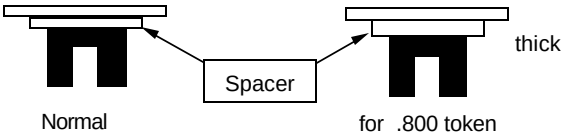
#20 5 LAMP BOARD

#20A BONUS LAMP BUTERATE

#21 BONUS WAGON

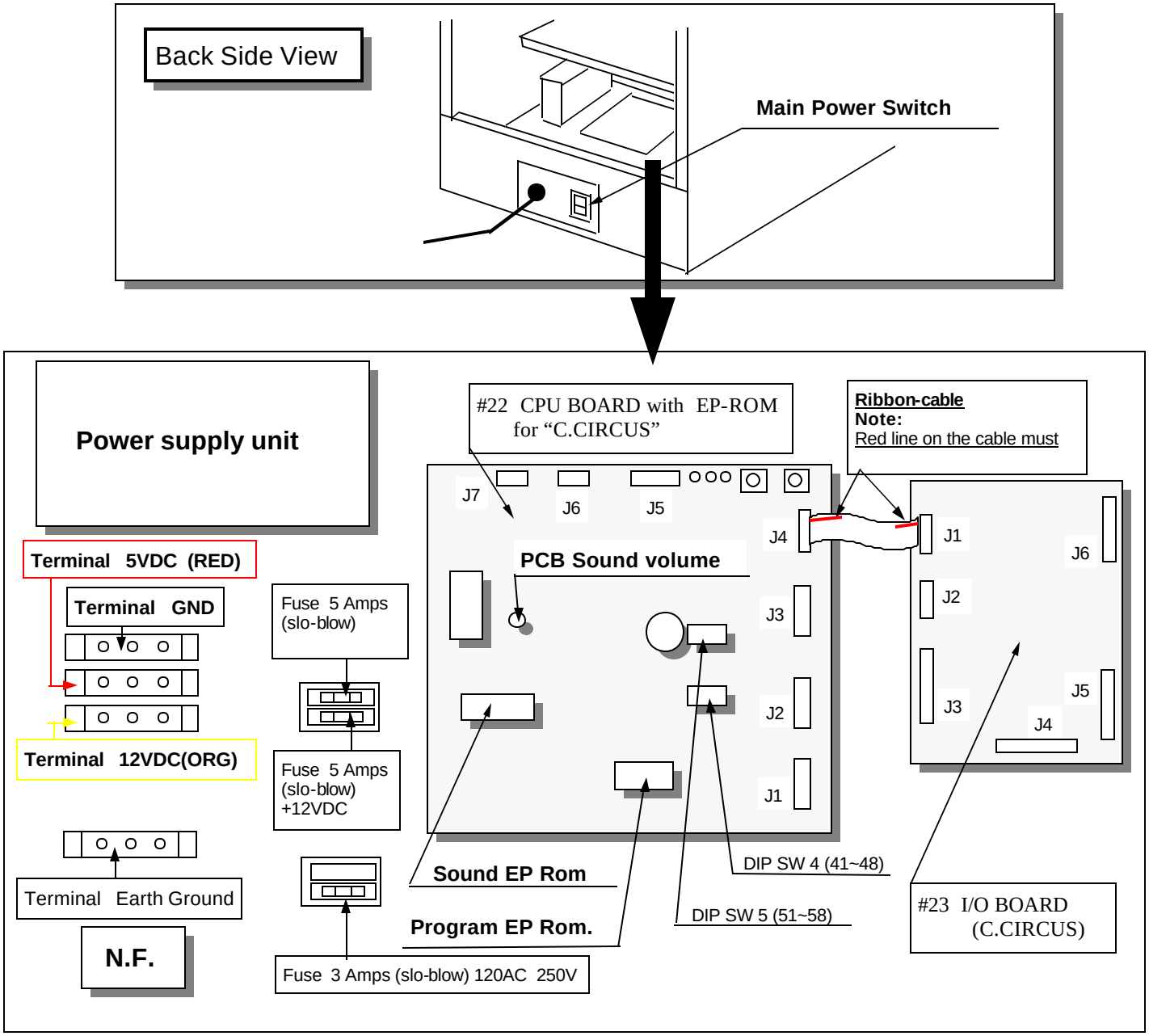


* For an under .800 Token, you will need a different Sensor Board which has a thicker spacer between the Opto Sensor and Board. You will need to special order them.



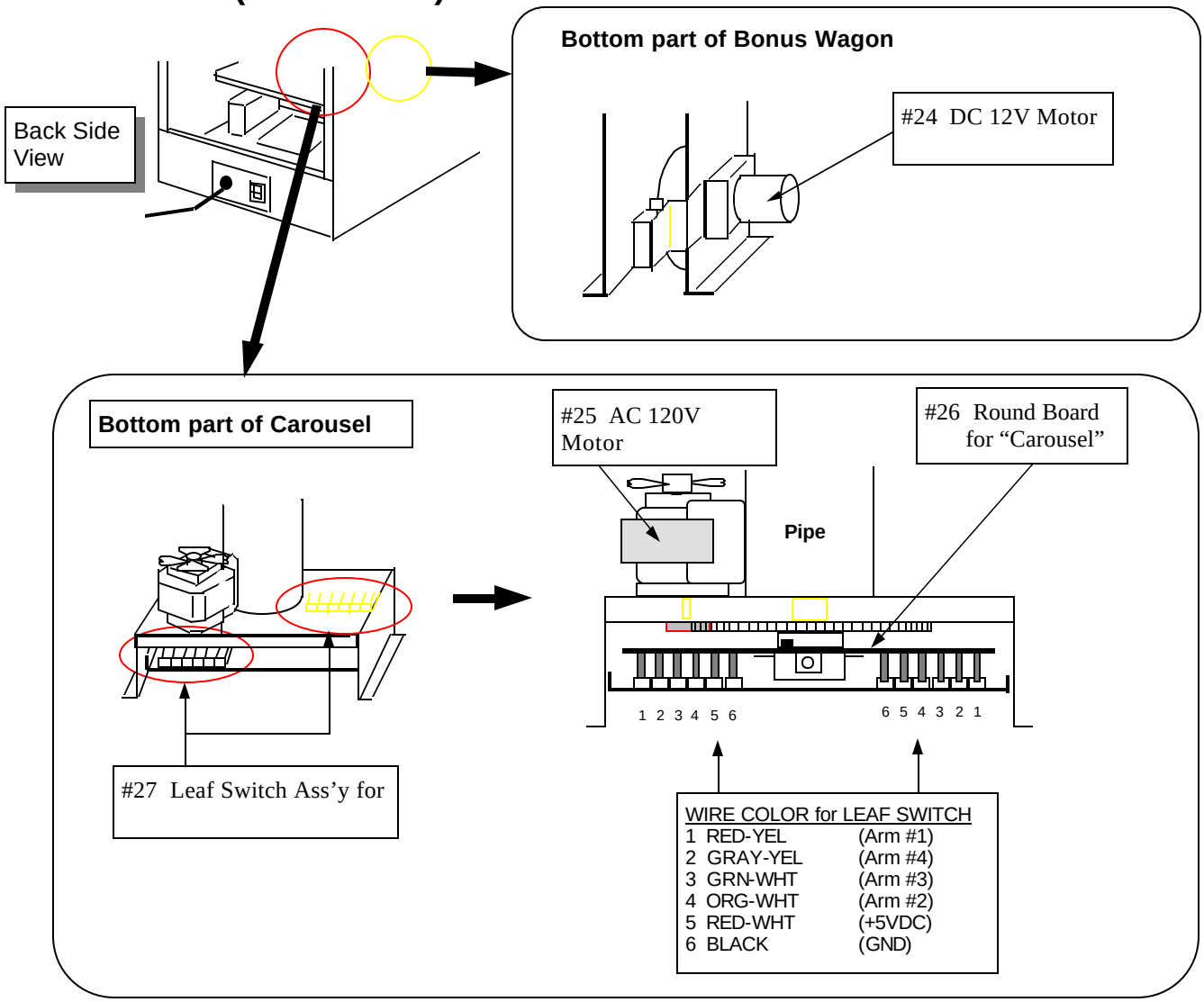

| No. | Description | Part Number |
|---|---|---|
| #17 | Arm Slot Buterates Sets (L & R) | 04-30-704 |
| #18 | Sensor Board on Arm | 04-20-021 |
| #19 | Sensor Board on Arm (.800 Token type) | 04-20-022 |
| #20 | 5 Lamp Board | 04-20-010 |
| #20A | Bonus Lamp Buterate | 04-30-703 |
| #21 | Bonus Wagon Buterate | 04-30-700 |

## PARTS LIST (continued...)




| No. | Description | Part Number |
|---|---|---|
| #22 | CPU Board with EP-ROM for "C.Circus" | 04-10-001 |
| #23 | I/O Board for "C.Circus" | 04-20-001 |

## PARTS LIST (continued...)




| No. | Description | Part Number |
|---|---|---|
| #24 | DC12V Motor for "Bonus Wagon" | 04-60-310 |
| #25 | AC120V Motor for "Carousel" | 04-60-320 |
| #26 | Round Board for "Carousel" | 04-20-020 |
| #27 | Leaf Switch Ass'y for "Round Board" | 04-60-440 |
| #28 | Score Value Sticker set (16 pcs) | 04-30-220 |
| #29 | Sticker sets for Instruction card | 04-30-210 |

## 8. OTHER

**% Setting Advice**

Some locations may find that the factory settings are not suitable to their location. The factory settings of the game should yield a payout ratio of approx ***30%***. But your payout ratio may be either too high or too low in your location depending on your players.

Please reference the following advice when you have a problem with the payout # of tickets.
-Begin by checking **Audit Table #8, "Average tickets per coin".** (Refer to page 13 in "Audit Mode".)
If this # is "7 [tickets per coin]" (28%) or "8 [tickets per coin]" (32%), payout % is approx. 30%.

Raising the %

**But**, if you get a result under "6 [tickets per coin]"(24%) for Audit Table #8 *and/or* you would like to **raise your %,** re-adjust ***any*** of the following:
*- Increase Ticket Payout when no score is made -*
Reset DIP SW 4 #44 ON/#45 OFF for 2 ticket payout *-or-*
Reset DIP SW 4 #44 ON/#45 ON for 4 ticket payout
*- Increase Payout number on "Bonus Wagon" -*
Reset DIP SW 4 #47 ON/#48 OFF for 80% payout *-or-*
Reset DIP SW 4 #47 OFF/#48 OFF for 50 ticket payout *-or-*
Reset DIP SW 4 #47 OFF/#48 ON for 100 ticket payout
*- Increase the "frequency" of Bonus Wagon payout -*
Reset DIP SW 4 #42 ON for payout of Bonus Wagon after only 3 wins
*- Change Arm Leafs -*
Adjust Arm Leafs to "easier" setting (see page 17)

Lowering the %

**But**, if you get a result over "10 [tickets per coin]"(40%) for Audit Table #8 and/*or* you would like to **lower your %,** re-adjust ***any*** of the following:
*- Reset "Bonus Lights" to 0 after 60 seconds of non-play -*
Reset DIP SW 4 #43 ON to extinguish the Bonus Lights after 60 sec
*- Lower one or all of the "Arm Values" -*
Reset one or all DIP SW 5 #51~58 (see page 12). You will need to put Score Value additional stickers on Arm Buterates.
*- Change Arm Leafs -*
Adjust Arm Leafs to "harder" setting (see page 17)
*- Raise the Coin Track -*
Adjust Coin Track higher to make shots more difficult (see page 23)

***Remember to repeat procedures in Test Mode and "Audit Clear" Tables #1 ~ #7 (see page 13) after making any of the above change(s) to get a true reading on the results of your change(s).***

## "Tip" for the "Skillful" Player

From time to time the operator may experience those players that are more skillful or have "mastered" the game of "Coin Circus." Based on our experience the best way to discourage the player from receiving a huge amount of tickets through multiple payouts of the Bonus Wagon is to be sure that DIP SW 4 #47 & #48 is not set at a specific payout # (50 or 100). See example and illustration on page 11. In addition please check the recommendations on the previous page for **lowering** the %.

## Handling Ticket Values of 2¢

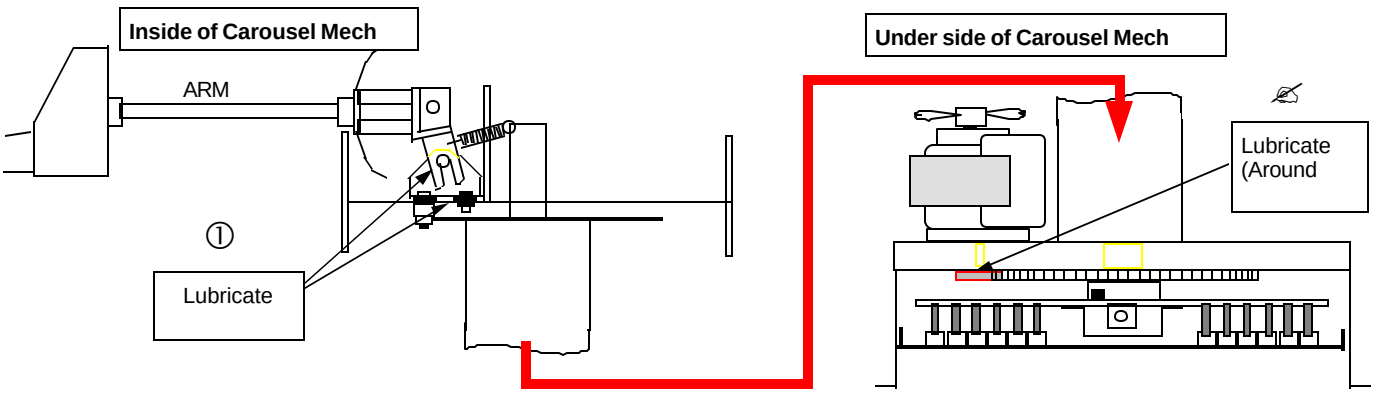
The factory settings and percentages (approx 30%) stated in this operating manual are based on a **1¢ ticket value**. Some locations will use a **2¢ ticket value**. In this case we make the following suggestions prior to operating the game:

1) Reset DIP SW 5 #51 ~ 58 as follows (see page 12):
   - #51 OFF/#52 OFF (Arm #1 will payout 5 tickets)
   - #53 OFF/#54 ON (Arm #2 will payout 10 tickets)
   - #55 OFF/#56 ON (Arm #3 will payout 25 tickets)
   - #57 OFF/#58 ON (Arm #4 will payout 50 tickets)
2) Replace the above numbers *over* the existing Arm values using the additional **Score Value Sticker Set** included (see page 25).

* Review the results of these settings in the **Test Mode** function (see page 13) paying particular attention to Table #8. The value should read "3" or "4" which is approx 24% or approx 32%.
If you feel that this is still too high of a payout %, you need to change to 0 ticket payout when no win is made. Reset DIP SW 4 #44 OFF/#45 OFF.

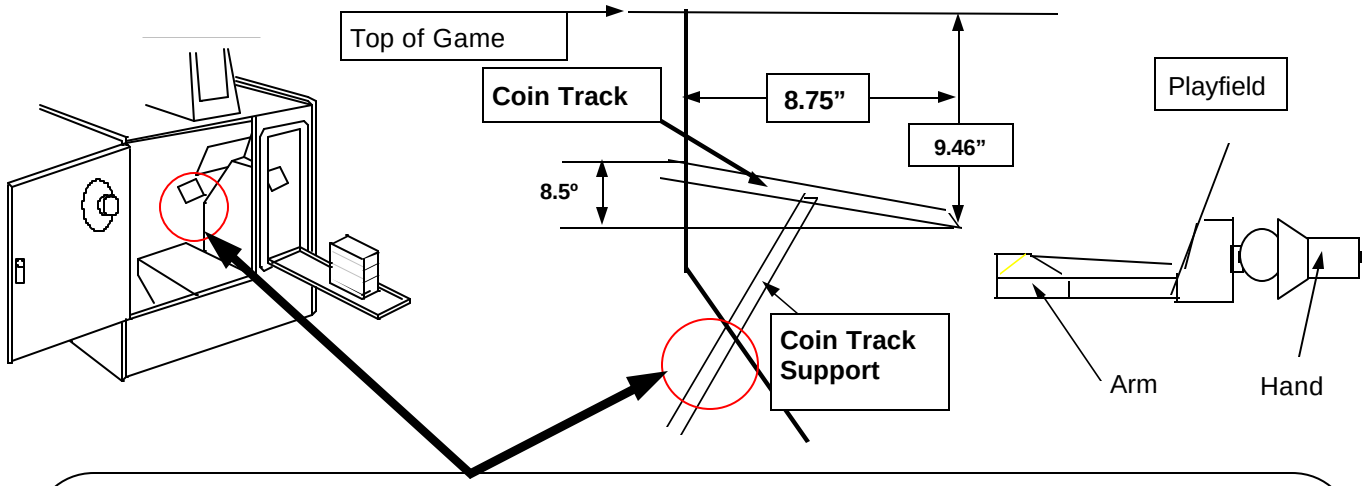
## Lubrication

Once a month, you should lubricate the following:
(Remove Clown head & Clown body to access)



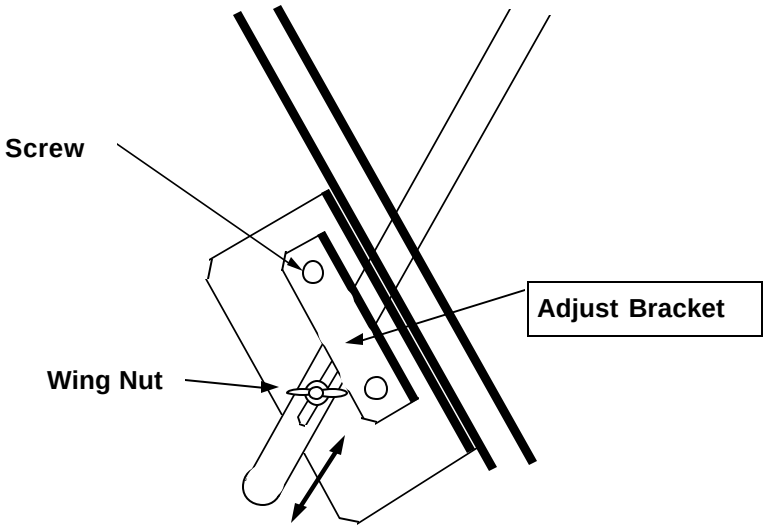
## How to Adjust "Coin Track"

GAME IS FACTORY POSITIONED AT BEST ANGLE FOR COIN SPEED! Only adjust if your players have become "skillful" at the game (see page 22) or you notice that through time the coin track has shifted from its original position.



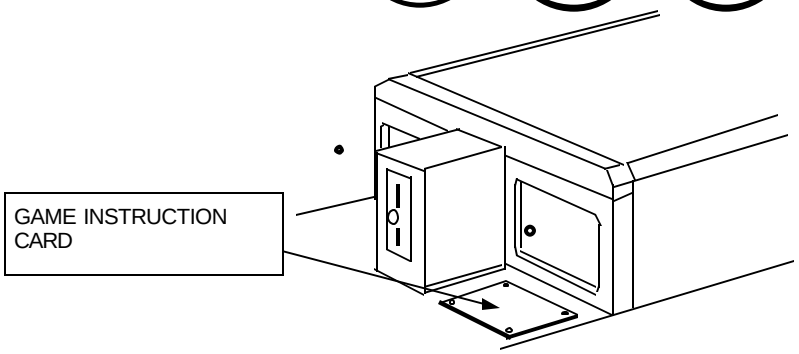

**Adjusting Bracket for "Coin Track"**

1) Open the Top Glass (see page 7) and Front Door .
2) *Loosen* (but do not remove) Screws on Adjust Bracket.
3) Reach up and hold the Coin Track and Support by hand, then loosen Wing Nut (but do not remove).
4) Move Coin Track to position and tighten Wing Nut. Then test the Coin (Token) roll.
5) After you have the best position, re-tighten Wing Nut and Screws.



# COIN CIRCUS

**GAME PLAYER INSTRUCTION CARD**




## COIN CIRCUS

### HOW TO PLAY

*** Drop Coin through Coin Slot and Aim at the moving arms.**
*** Get Coin in Slot of Moving Arm, Win Ticket(s)!**
*** Each winning shot lights up number on Bonus Wagon!**

### BONUS WAGON

*** Get 5 Coins into arm slots, light all *5* lights, and Win Bonus Tickets.**

B

A

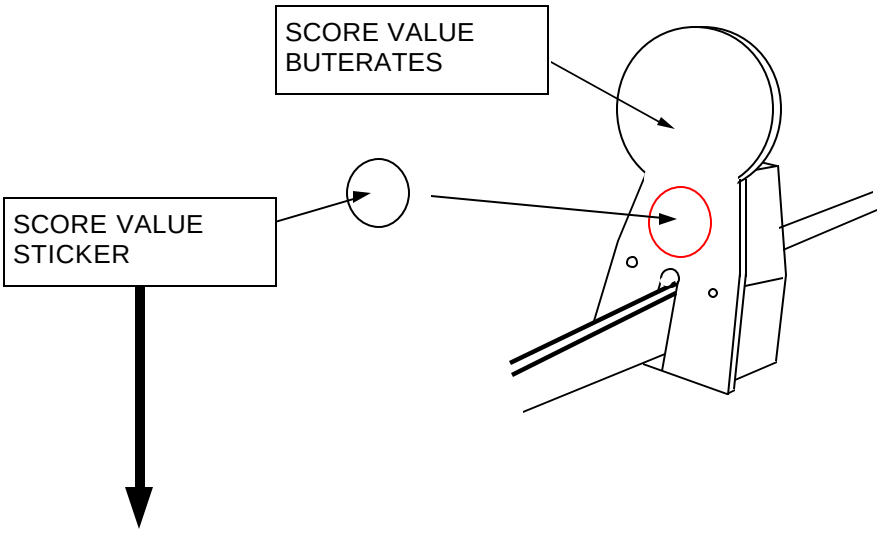
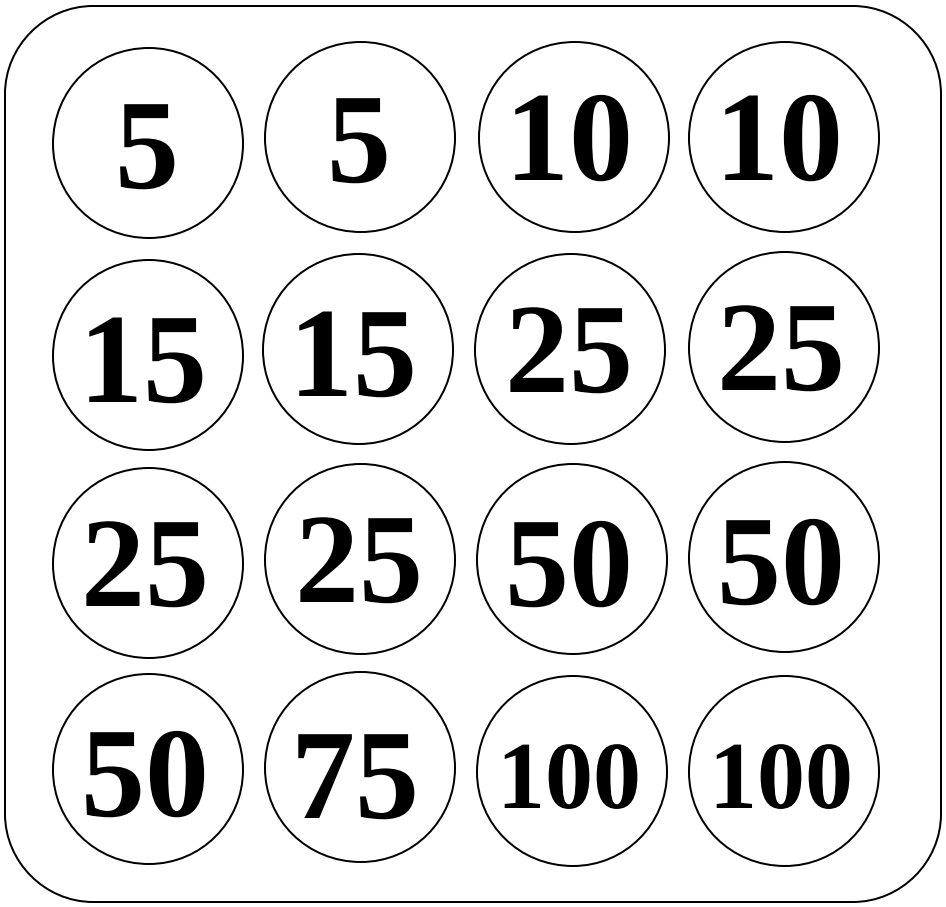
C

**STICKER SET for INSTRUCTION CARD**

Additional **"Stickers for Instruction Card"** is included. When you change the Dip Switch settings, you will need to change the Instruction Card.

A → *** 60 seconds from the coin last dropped to advance each light.**

| B → 50 Tickets | 100 Tickets | 3 ← C |
|---|---|---|

**SCORE VALUE STICKER SET**

If you change the Score Value of Arms, You need to put **"SCORE VALUE STICKER"**. Please reference as below...