



PRIZE 2 BOXER

Punch-Force measuring machine

Technical Information



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1. Introduction

Main purpose of this Technical Information is to:

- familiarize user with machine construction,
- provide proper setup parameters, installation and power line hookup,
- familiarize user with proper and safe usage procedures, exploitation and conservation.



WARNING: USER MUST FOLLOW ALL GUIDELINES INCLUDED IN THIS DOCUMENT FOR SAFE AND LONG LASTING MACHINE USAGE.

2. Technical Data

Model		PRIZE2
Dimensions	Depth [cm]/[in]	131 / 52
	Width [cm]/[in]	70 / 28
	Height [cm]/[in]	222 / 87
Overall Mass [kg]/[Lb]		145 / 320
Power consumption [Wh]		200

Table 1 - technical data of Prize 2 Boxer

3. Assembly/Construction description

Punch force-measuring machine Boxer is built out of three main components:

- base,
- middle assembly,
- top assembly.

The key component is a mother board (electronic board) placed inside boxer's body (block schematics drawing # 1) to which mechanical elements and user interface components are connected.

Electric /electronic part contains following:

- measuring mechanism – consists of sending and receiving diodes that measure blade fly speed thru assembly,
- verbal information mechanism – built using potentiometer and speaker, used to send voice messages,
- punching bag lowering mechanism – consists of 'START' button with backlight and electromagnets – actual lowering mechanism,
- visual information assembly – assembled out of diodes used for visual representation of punch force measurement, warning siren (informs player of breaking top record) also displays on electronic panel (shows measurement result, credit amount, top day record),
- coin acceptor – used to deposit coins (can be reprogrammed to tokens or other currencies),
- bill acceptor – used to deposit bills (option),
- mother board.

4. Transport

Machine should be transported in vertical position. Machines are shipped on a 34" x 50" wooden palette, and sides are covered with special (~3/8") thick 93" tall (from the bottom of the pallet) multi-layer cardboard. The total weight of the box is approx. 290 lbs.

After the machine is taken out of the box, it should be transported in horizontal position with the help of two wheels. Machine can, in special cases (exp. if it does not fit in doorway), be taken apart and then reassembled. This procedure should be done by a specialist or someone familiar with all technical information.

5. Installation

Machine after being taken out of the box should be placed in vertical position and base should be leveled. To level the machine appropriate tools should be used (exp. laser level or typical manual construction heavy duty level). Turning several screws under the base allows level adjustment. After plugging the machine to power outlet it should be ready to use.

Make sure that there is enough clearance on the sides and in the front of the machine, so the player will not hit any objects after punching the bag. The **installer** of the machine is responsible for defining the safe clearance.

6. Usage instructions

- 1) It is recommended to take some warm-up punches.
- 2) Before pressing the "START" button player must stand in front of the Boxer.

- 3) If the randomized prize numbers mode is active, “RANDOMIZE” button blinks: press the “RANDOMIZE” button to draw.*
- 4) After pressing the ”START” button player has to wait in front of the machine for the punching bag to be released from the upper position.
- 5) After the punching bag is released, player should make a fist so the thumb would be on the outside of the pointing and the middle finger.
- 6) The punch must be placed in the center of the punching bag.
- 7) After the punch, a score would be displayed on the front panel.
- 8) Follow the same instructions before the next game.

* See details in 10. “Machine setup”, PRIZE No1..4 settings. Randomize range is same as for each PRIZE No VALUE setting (see Menu Tree table for reference).

Game rules

The machine allows winning prizes (PRIZE No 1 to 4) when the following conditions are met for each prize:

1. Number of loaded prizes is set correctly (setting No→QUANTITY);
2. Price is bigger than 0 (setting No→PRICE);
3. Money gathered towards winning (counter No→MONEY) must be equal to setting No→PRICE;

If these conditions are not met, the player cannot win Prize No 1 to 4.

7. Maintenance check list, problem prevention and day-to-day fixes

Every two weeks (recommended):

- check the air pressure of the bag. It should be **NO MORE** than 2psi,
- check if the bag is not rotating about it's own axis. If it is see point d) in this section,
- check the position of the arm protector. See point h) in this section,
- check all of the connections on the main board,
- check the level/balance of the machine. If needed use adjusting legs under the machine to bring the machine to level,
- check if the usage instructions are readable.

Every month:

- check mounting cover screws/nuts,
- check the lubrication of the mechanism. For the instructions see point C in this section,
- check the display lights,
- clean the bill acceptor.

a) Coin acceptor maintenance

Coin acceptor should be cleaned periodically (every 2000 - 3000 credits). Best way to clean it is by using simple cloth slightly soaked in distilled alcohol. Focus should be placed on cleaning the area where coins slide thru (make sure sliding part is in open position).

b) Sound volume regulation

Volume potentiometer (see Main Board Layout, back side) used to control volume is placed on the top right side of the electronic board. The volume adjustment can be done by rotating the potentiometer to the left or right.

c) Maintenance of mechanism and regulating spring

Periodically (once a month or more often, or if the lowering speed of punching bag is fairly low) all moving elements should be rubbed/sprayed with WD-40 or grease.

If punching bag lowers slowly or too fast one should check if spring is properly stretched. Spring can be adjusted with screw that is in the front/left side after taking the masking net.

In case of forced lowering mechanism replacement one should unscrew plastic casing, and then take off masking board (black from the bottom) and remember about the retro cop light.

d) Manual punching bag reposition

In case the punching bag is vibrating too much (or if it is rotating around its own axis), the top nut located on the punching bag screw should be tightened (loosen the lower nut first) until the bag is not rotating any more.

e) Replacement of inner punch bag bladder

To replace inner bladder of the punch bag one should untie rope, take out old insert and replace it with a new rubber bladder. A special attention must be given to the location of the bladder valve. The valve must be placed in the opening of the leather cover.

f) Bulb replacement, "START" button

In case of bulb failure in the "START" button one should take out micro-switch from the casing (by slight turn and then pull) and then proceed with bulb replacement [bulb spec: 12 Volt & 3 Watt].

g) Fuse replacement

Machine is equipped with two long term fuses on the main electronic board [specs: 250V & 5 A (2 pieces) and 12V & 25A (1 piece)]. In case of short circuit situation and/ or insufficient power supplied to the electronic main board one should first check the fuses and if they are

burned, proceed with replacement. Make sure fuses used to replace old ones have the same specifications.

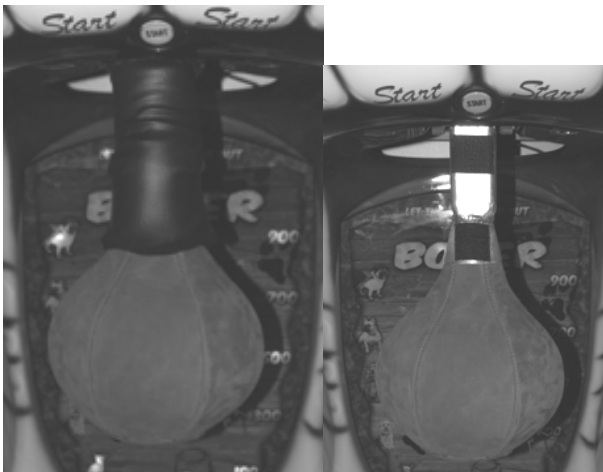
h) Position of the arm protector

The position of the arm protector should be like on the picture:



**DO NOT PLAY THE
GAME WITHOUT
PROPERLY PLACED
ARM PROTECTOR.**

The following two pictures illustrate an improper setup of the punching bag. NEVER leave the machine in this state. The picture on the left shows the arm protector placed too high. The second picture shows a missing arm protector. Both of these cases may result in serious injury to the user.



8. Potential problems and their resolution

Main board is not functioning:

- 1 Check all fuses (5A).
- 2 Check connection between transformer and the main board.
- 3 Make sure that connectors are well seated.
- 4 The main display can be checked by turning the switch # 1 to “ON” position then turning machine off and back on.

Coin Acceptor is not functioning:

- 1 Check if it is not plugged up.
- 2 Check for dust and dirt.
- 3 Check strip connecting main board with the acceptor.

Mechanism is not functioning:

- 1 Using just power supply check if it is possible to lower punching bag (using SOLENOID TEST on the right side of main board).
- 2 Check for burned fuse 25A (left side of the main board)
- 3 Check button functionality and if they have proper connection.
- 4 Check for unhooked cable from power supply spools.
- 5 Check strip connecting main board with the power supply (transformer).

Sensor is not functioning:

- 1 Check sensors in diagnostic mode (go to menu to DIAGNOSTIC MODE then SENSOR TEST Hi Lo. If punching bag is moving UP / DOWN and on the main board (depending on bag position) HI – LO shows this would indicate that the sensor is working.
- 2 Check if sensor cable is firmly connected to the main board.
- 3 Check all wires to / from sensor.

Halogen lights are not functioning:

- 1 Check power supply cable connection.
- 2 Check power supply wire integrity.

- 3 Check connector plug for loose bulb.
- 4 Check if halogen is not burned by swapping it with a new one (12V 20W).

Button START is not functioning:

- 1 Check for main board cable connection.
- 2 Check switch/button cable connection.

Power supply is refusing to work:

- 1 Check if “car” fuse in main board (left bottom) is not burned 30A (green).
- 2 Check if transformer cable is correctly hooked up to power supply socket.

Machine is not starting:

- 1 Check power cable fuse 5A.
- 2 Check if filter is not damaged.

Bill Acceptor is not functioning:

- 1 Check if power supply cable is hooked up to main board (BILL).
- 2 Check if cable from bill acceptor is correctly hooked up.
- 3 Check acceptor settings. For switches 1-8 set switch no 7 at ON, and for switches 1-4, set switches no 3 and 4 at ON.

Sound is not working:

- 1 Check if it is not at low volume or mute (Volume)
- 2 Check if cable is correctly connected to the main board.
- 3 Check if cable to speaker is correctly connected.

9. Board layouts

Motor Board layout

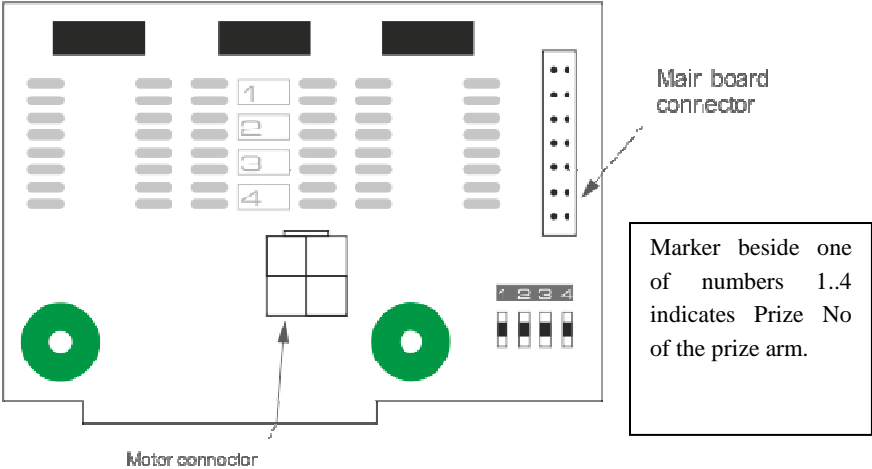


Figure 1 – Motor Board layout

Main Board layout (back side)

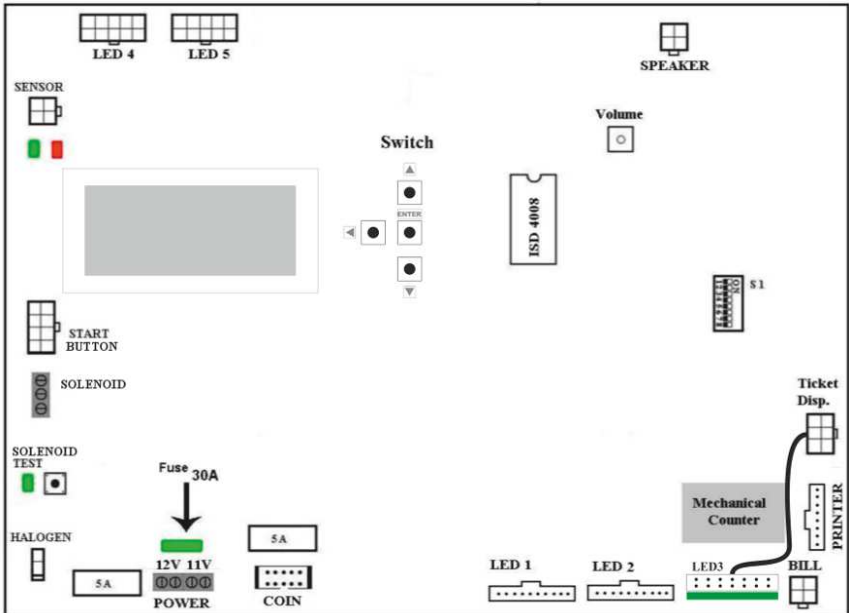


Figure 2 - Main Board layout (back)

COIN – connector for coin acceptor

BILL – connector for bill acceptor

LED 4, LED 5 – front panel backlight

POWER – connector for power

SENSOR – sensor connector

START BUTTON – connector for “START” button

SPEAKER – connector for speaker

VOLUME – potentiometer for volume control

ISD4008 – speech synthesizer

SOLENOID - connector for solenoid

LED1, LED2 – not used

S1 – service settings switch

SOLENOID TEST – for manual solenoid test

HALOGEN – connector for halogens

TICKET DISP. – connector for small displays

PRINTER – not used

LCD – display showing

changing of settings

SWITCH – set of buttons

LED3 – connector for small displays

Layout (Front)

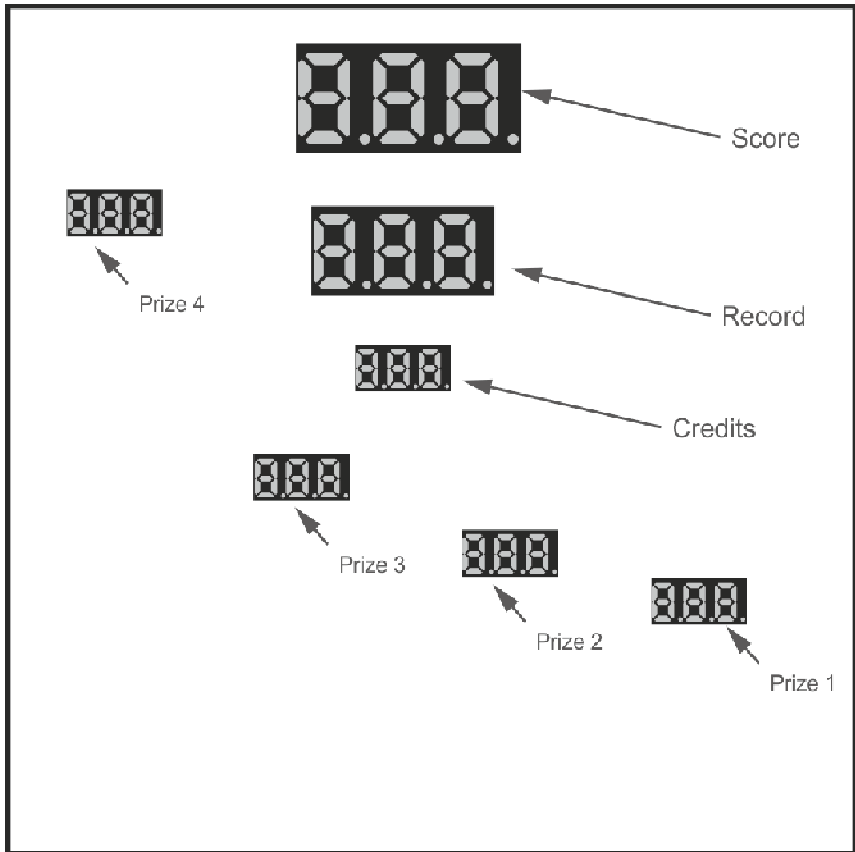
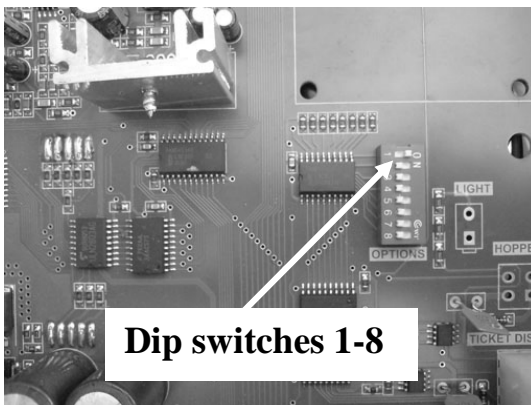


Figure 3 – Front layout

10. Machine setup

SWITCHES

Dip Switch 1-8 (S1 “OPTIONS”)



Switch #1

Not used.

Switch #2

When **ON**, machine is set for free punch.

Switch #3

ON/OFF function for sound in Relax Mode. When **ON**, music autoplays after time set in function FACTORY SETTINGS/ TIME VOICE RELAX.

Switch #4

When **ON**, the highest score for each game will be reset to value set in DEFAULT RECORD (see Menu Tree for reference) after you push the **START** button for 10 seconds. When **OFF**, the top score will stay displayed.

Switch #5

Randomized prize numbers mode (when **ON**). See 6. “Usage instructions” and 10. “Machine setup” PRIZE No1..4 settings for more info. To deactivate this mode and come back to last saved prize numbers, restart the machine.

Switch #6

Not used

Switch #7

Not used

Switch #8

Not used

FRONT DISPLAY MENU

This menu is accessible from the front of the machine without opening the machine's back and allows to check and reset some of the counters. From the front of the machine press RANDOM button for 5 seconds. Front menu will be activated. The big display will show function number (F01-F05). Middle and bottom display show function value. Pressing RANDOM button changes function value (up and in loop). Resettable functions are reset by 5 seconds pressing of START button. After ten seconds of inactivity (START or RANDOM buttons are not pressed) the menu will be deactivated.

For F01 to F04:

Middle front display shows time in hours and minutes in format H.MM; bottom display shows time in seconds in format SS.

Functions F01 to F04 correspond to Prize No of each prize arm.

F05 – short counter (for details see Point 10. COUNTERS/ SHORT COUNTER).

Front menu	Function	Options
F01	Time after last prize No1 win	<i>manual reset or reset after turn off/on machine</i>
F02	Time after last prize No2 win	<i>manual reset or reset after turn off/on machine</i>
F03	Time after last prize No3 win	<i>manual reset or reset after turn off/on machine</i>
F04	Time after last prize No4 win	<i>manual reset or reset after turn off/on machine</i>
F05	Short counter	<i>Not resettable using front menu</i>

MAINBOARD DISPLAY MENU - CHANGING SETTINGS

To change any settings and check counters, buttons (arrows)

▲ (up) and ▼ (down), ◀ (left) and **ENTER** (center button) need to be used. All information will be shown on the LCD display.

If the display is black, use left button ◀ to lighten up the display.



Mainboard display menu structure

Main Menu - use ▲ and ▼ buttons to choose main menu function. To access its submenu press **ENTER**.

Submenu - use ▲ and ▼ buttons to choose submenu function. To access its setting mode press **ENTER**. To go back to main menu press ◀.

Setting mode - use ▲ and ▼ buttons to adjust value. Then press ◀ button to accept new setting and go back to submenu. Fast forward of value is done by keeping ▲ or ▼ button pressed.

Menu tree

Main menu	Submenu	Setting mode (range)	Default value	Page
COUNTERS	SHORT COUNTER	<i>counter, resettable to 0</i>	0	23
	LONG COUNTER	<i>counter</i>	0	23
	FREE CREDITS	<i>counter</i>	0	23

	BROKEN RECORDS	<i>counter, resettable to 0</i>	0	23
	PRIZE No1→WON	<i>counter, resettable to 0</i>	0	23
	PRIZE No2→WON	<i>counter, resettable to 0</i>	0	23
	PRIZE No3→WON	<i>counter, resettable to 0</i>	0	24
	PRIZE No4→WON	<i>counter, resettable to 0</i>	0	24
	CREDITS	<i>counter, resettable to 0</i>	0	24
CREDITS	RECORD→CREDITS	OFF, 1..20	1	24
	POINTS→CREDITS	1..10	*	24
	BONUS POINTS 1	0..100	0	24
	BONUS CREDITS 1	0..100	0	24
	BONUS POINTS 2	0..100	0	25
	BONUS CREDITS 2	0..100	0	25
PRIZE Nx100	Nx100→CREDITS	OFF, 1..20	OFF	25
	Nx100→BALL	OFF, 1..5	OFF	25
PRIZE Nx111	Nx111→CREDITS	OFF, 1..20	OFF	26
	Nx111→BALL	OFF, 1..5	OFF	26
LUCKY NUMBER	LUCKY1→CREDITS	OFF, 1..20	OFF	26
	LUCKY1→BALL	OFF, 1..5	OFF	26
	LUCKY2→CREDITS	OFF, 1..20	OFF	26
	LUCKY2→BALL	OFF, 1..5	OFF	27
	LUCKY NUMBER 1	0..999	0	27
	LUCKY NUMBER 2	0..999	0	27
RECORD	RECORD→CREDITS	OFF, 1..20	1	27
	RECORD→BALL	OFF, 1..5	OFF	27
	UNAVAILAB.RECORD	OFF, 1..999	OFF	27
	CURRENT RECORD	<i>resettable to DEFAULT RECORD</i>		27
	DEFAULT RECORD	100..999	650	28
NUMBER	NUMBER	0..999	0	28
	NUMBER→BALL	OFF, 1..5	OFF	28
PRIZE No1	No1→VALUE	400..599	555	28
	No1→QUANTITY	0..2	0	28
	No1→PRICE	0..5000	0	29
	No1→MONEY	<i>counter, resettable to 0</i>	0	29
	No1→RANGE-HELP	0..30	10	29
	No1→MOTOR-TIME	15..45 [s]	30 [s]	29
PRIZE No2	No2→VALUE	600..699	666	29
	No2→QUANTITY	0..2	0	29
	No2→PRICE	0..5000	0	29
	No2→MONEY	<i>counter, resettable to 0</i>	0	30
	No2→RANGE-HELP	0..30	10	30
	No2→MOTOR-TIME	15..45 [s]	30 [s]	30
PRIZE No3	No3→VALUE	700..799	777	30
	No3→QUANTITY	0..2	0	30

	No3→PRICE	0..5000	0	31
	No3→MONEY	<i>counter, resettable to 0</i>	0	31
	No3→RANGE-HELP	0..30	10	31
	No3→MOTOR-TIME	15..45 [s]	30 [s]	31
PRIZE No4	No4→VALUE	800..990	888	31
	No4→QUANTITY	0..2	0	31
	No4→PRICE	0..5000	0	31
	No4→MONEY	<i>counter, resettable to 0</i>	0	32
	No4→RANGE-HELP	0..30	10	32
	No4→MOTOR-TIME	15..45 [s]	30 [s]	32
PRIZE No 1..4	DRAW	SINGLE, MULTIPLE**	SINGLE	32
FACTORY SETTINGS	CRED.NATION.SET	UNITED STATES, CANADA, SPAIN, EUROPE, CROATIA, SWITZERLAND, GERMANY, RUSSIA, POLAND, LITHUANIA, ENGLAND, UKRAINE, CZECH REPUBLIC, ISRAEL, DENMARK	UNITED STATES	33
	VOICE.NATION.SET	ENGLAND, GERMANY, RUSSIA, SPAIN, POLAND, RESERVED 1, RESERVED 2, RUSSIA II, FRANCE, RESERVED 3, RESERVED 4, ITALY, CZECH REPUBLIC ***	ENGLAND	33
	SENSITIVITY	0..9	5	33
	TIME VOICE RELAX	OFF, 10s..3h	5m	33
	TIME DISPL RELAX	OFF, 10s..3h	2m	33
	DIAGNOSTIC MODE	SENSOR TEST HI LO	BALL DOWN, BALL UP	
DISPLAYS TEST		<i>All displays</i> →888		33
MOTORS TEST		M1, M2, M3, M4, ALL		33
GAME TEST		OFF, 1..999	OFF	34
PRIZE-2 VER.		<i>Software version</i>		35

*: It depends on the setting of the function: FACTORY SETTINGS/ CRED.NATION.SET

** : This option will be working only with Switch #5 on ON.

***: It depends on hardware configuration. Do not change.

COUNTERS

SHORT COUNTER

Temporary counter of points, e.g.US: 1 point = 0,25 USD, EU: 0,50 EUR (currency settings are available in FACTORY SETTINGS/CRED.NATION.SET).

You can reset it to 0000 by pushing **ENTER**, then pushing **▲** or **▼** button and pushing **◀** button.

LONG COUNTER

Counter of points – counts all the points from the beginning of machine's work. This is life long - not erasable.

FREE CREDITS

Counter of free punches. Free punches (free game) is activated by setting dip switch # 2 at **ON** position.

BROKEN RECORDS

This counter tells us how many times a record had been broken. The counter can be reset by pressing **ENTER**, then **▲** or **▼** and next **◀** button.

PRIZE No1→WON

This counter tells us how many times a Prize No1 had been won. The counter can be reset by pressing **ENTER**, then **▲** or **▼** and next **◀** button.

PRIZE No2→WON

This counter tells us how many times a Prize No2 had been won. The counter can be reset by pressing **ENTER**, then **▲** or **▼** and next **◀** button.

PRIZE No3→WON

This counter tells us how many times a Prize No3 had been won. The counter can be reset by pressing **ENTER**, then ▲ or ▼ and next ◀ button.

PRIZE No4→WON

This counter tells us how many times a Prize No4 had been won. The counter can be reset by pressing **ENTER**, then ▲ or ▼ and next ◀ button.

CREDITS

Temporary counter of credits. Shows the current number of credits. Can be reset by pressing **ENTER**, then ▲ or ▼ and next ◀ button.

CREDITS

RECORD→CREDITS

Allows to set number of credits given for breaking a record.

POINTS→CREDITS

Tells how many credits are needed for one game (how much a game is worth).

Example:

For US - 1 game is worth \$1 (which corresponds to 4 points), so POINTS→CREDITS will be set to 4.

BONUS POINTS 1 and BONUS CREDITS 1

You can set additional credits (bonus credits) when a set amount of money is inserted (BONUS POINTS 1 and BONUS CREDITS 1 are connected).

First go to BONUS POINTS 1 where you will assign number of points that have to be accumulated to gain bonus game. Second, go to BONUS CREDITS 1 and then assign number of bonus credits given to player.

Example: if you want to set 6 punches for \$5, you should set:

Bonus Points 1 : 20

Bonus Credits 1 : 6


BONUS POINTS 2 and BONUS CREDITS 2

Function of this setting is same as in BONUS POINTS 1 and BONUS CREDITS 1 but **always for bigger value** than in BONUS POINTS 1 and BONUS CREDITS 1.

PRIZE Nx100


Nx100→CREDITS

Sets bonus credits for a player gained after scoring multiples of 100, e.g. score is 200, 300, 800.

To turn this option off, while in setting mode, keep button  pressed until display shows OFF.

Nx100→BALL

Sets number of surprise balls gained after scoring multiples of 100, e.g. score is 200, 300, 800.

To turn this option off, while in setting mode, keep button  pressed until display shows OFF.

PRIZE Nx111


Nx111→CREDITS

Sets bonus credits for a player gained after scoring multiples of 111, e.g. score is 222, 333, 888.

To turn this option off, keep button  pressed until display shows OFF.

Nx111→BALL

Sets number of surprise balls gained after scoring multiples of 111, e.g. score is 222, 333, 888.

To turn this option off, while in setting mode, keep button  pressed until display shows OFF.

LUCKY NUMBER


LUCKY1→CREDITS

Sets bonus credits for a player gained after scoring value of LUCKY NUMBER 1.

To turn this option off, keep button  pressed until display shows OFF.

LUCKY1→BALL

Sets number of surprise balls gained after scoring value of LUCKY NUMBER 1.

To turn this option off, while in setting mode, keep button  pressed until display shows OFF.


LUCKY2→CREDITS

Sets bonus credits for a player gained after scoring value of LUCKY NUMBER 2.

To turn this option off, keep button  pressed until display shows OFF.

LUCKY2→BALL

Sets number of surprise balls gained after scoring value of LUCKY NUMBER 2.

To turn this option off, while in setting mode, keep button  pressed until display shows OFF.

LUCKY NUMBER 1

Sets the value of LUCKY NUMBER 1.


LUCKY NUMBER 2

Sets the value of LUCKY NUMBER 2.

RECORD


RECORD→CREDITS

Allows to set number of bonus credits given to player for breaking a record.

To turn this option off, while in setting mode, keep button  pressed until display shows OFF.

RECORD→BALL

Allows to set number of surprise balls given to player for breaking a record.

To turn this option off, while in setting mode, keep button  pressed until display shows OFF.

UNAVAILAB. RECORD

Allows to set unattainable record. When this is set to e.g. 970, player cannot score 970 or more.

CURRENT RECORD

Method 1 – using service settings

You can reset it to 650 (minimal value) by pushing **ENTER**, then **▲** and next **◀** button – the record will be reset.

Method 2 – without opening the machine

This method works when switch # 4 on dip switch S1 (see connectors on the main board layout - back side) is at **ON** position. Without opening the machine's back, the highest score can be reset by pressing **START** button for 10 seconds (the main display shows 650).

DEFAULT RECORD

Allows to set default record value to which all the resets will be done.

NUMBER

NUMBER

Sets score value that has to be beaten.

NUMBER→BALL

Sets number of surprise balls that will be given to player after scoring **NUMBER** or more.

To turn this option off, while in setting mode, keep button **▼** pressed until display shows OFF.

PRIZE No1

No1→VALUE

Sets score value of Prize No 1. This setting applies when **RANDOMIZE** function is OFF (switch #5 on OFF).

No1→QUANTITY

Sets number of Prize No 1 prizes loaded in dispenser.

No1→PRICE

Sets amount of money (in points = basic coins, e.g.US: 1 point = 0,25 USD, EU: 0,50 EUR) which need to be accumulated before the possibility of winning Prize No 1.

No1→MONEY

Counter of money accumulated for Prize No 1. The counter is resettable. Max value shown on the display is the amount set in No1→PRICE. When the counter meets max value, the prize is ready to be won.

No1→RANGE-HELP

The function works when No1→PRICE max value is met. When score falls within the range of “No1→VALUE” to “No1→VALUE + No1→RANGE-HELP” the assisting function helps scoring Prize No 1, eg. No1→VALUE = 555, No1→RANGE-HELP = 10, machine measured: 564, score shown: 555, prize dispensed.

No1→MOTOR-TIME

Sets the time of motor work when dispensing Prize No 1.

PRIZE No2

No2→VALUE

Sets score value of Prize No 2. This setting applies when RANDOMIZE function is OFF (switch #5 on OFF).

No2→QUANTITY

Sets number of Prize No 2 prizes loaded in dispenser.

No2→PRICE

Sets amount of money (in points = basic coins, e.g.US: 1 point = 0,25 USD, EU: 0,50 EUR) which need to be accumulated before the possibility of winning Prize No 2.

No2→MONEY

Counter of money accumulated for Prize No 2. The counter is resettable. Max value shown on the display is the amount set in No2→PRICE. When the counter meets max value, the prize is ready to be won.

No2→RANGE-HELP

The function works when No2→PRICE max value is met. When score falls within the range of “No2→VALUE” to “No2→VALUE + No2→RANGE-HELP” the assisting function helps scoring Prize No 2, e.g. No2→VALUE = 660, No2→RANGE-HELP = 20, machine measured: 675, score shown: 660, prize dispensed.

No2→MOTOR-TIME

Sets the time of motor work when dispensing Prize No 2.

PRIZE No3

No3→VALUE

Sets score value of Prize No 3. This setting applies when RANDOMIZE function is OFF (switch #5 on OFF).

No3→QUANTITY

Sets number of Prize No 3 prizes loaded in dispenser.

No3→PRICE

Sets amount of money (in points = basic coins, e.g.US: 1 point = 0,25 USD, EU: 0,50 EUR) which need to be accumulated before the possibility of winning Prize No 3.

No3→MONEY

Counter of money accumulated for Prize No 3. The counter is resettable. Max value shown on the display is the amount set in No3→PRICE. When the counter meets max value, the prize is ready to be won.

No3→RANGE-HELP

The function works when No3→PRICE max value is met. When score falls within the range of “No3→VALUE” to “No3→VALUE + No3→RANGE-HELP” the assisting function helps scoring Prize No 3, e.g. No3→VALUE = 777, No3→RANGE-HELP = 20, machine measured: 782, score shown: 777, prize dispensed.

No3→MOTOR-TIME

Sets the time of motor work when dispensing Prize No 3.

PRIZE No4

No4→VALUE

Sets score value of Prize No 4. This setting applies when RANDOMIZE function is OFF (switch #5 on OFF).

No4→QUANTITY

Sets number of Prize No 4 prizes loaded in dispenser.

No4→PRICE

Sets amount of money (in points = basic coins, e.g.US: 1 point = 0,25 USD, EU: 0,50 EUR) which need to be accumulated before the possibility of winning Prize No 4.

No4→MONEY

Counter of money accumulated for Prize No 4. The counter is resettable. Max value shown on the display is the amount set in No4→PRICE. When the counter meets max value, the prize is ready to be won.

No4→RANGE-HELP

The function works when No4→PRICE max value is met. When score falls within the range of “No4→VALUE” to “No4→VALUE + No4→RANGE-HELP” the assisting function helps scoring Prize No 4, e.g. No4→VALUE = 880, No4→RANGE-HELP = 15, machine measured: 889, score shown: 880, prize dispensed.

No4→MOTOR-TIME

Sets the time of motor work when dispensing Prize No 4.

PRIZE No1..4

DRAW

Sets type of draw (single, multiple). Works only with Switch #5 set to ON. Single draw means a player can draw Prize Numbers only once before each game; multiple draw means player can draw Prize Numbers several times before each game. Prize Numbers in single draw mode can be drawn only when credits are available or free game is on; Prize Numbers in multiple draw mode can be drawn even without credits.

FACTORY SETTINGS

CRED.NATION.SET

Parameter used by manufacturer.

VOICE.NATION.SET

Parameter used by manufacturer.

SENSITIVITY

Sets the difficulty level (range 0 – 9). Lower level numbers correspond to greater difficulty, i.e. 0 – hard, 9 – easy.

TIME VOICE RELAX

Sets time (counted from last game) after which music is activated.

TIME DISPL RELAX

Sets time (counted from last game) after which displays start flashing.

DIAGNOSTIC MODE

SENSOR TEST HI LO

Testing of the sensor.

Sensor is working correctly: while the punching bag is in the vertical position the display shows "LO" and while the punching bag is in the horizontal position the display shows "HI". Different behavior indicates improper sensor work. This option is used for diagnostic only.

DISPLAYS TEST

Testing of the displays.

All displays show "8"s.

MOTORS TEST

This function enables to verify if any of the motors (M1, M2, M3, M4) or all motors work correctly.

This function works the same as “Motor testing” with prize arm button described in “Prize arm buttons” below.

Choose motor number (M1, M2, M3, M4) or ALL by pushing ▲ or ▼ button and press **ENTER** to start test. Press ◀ button to stop test.

Function ALL tests motors one by one.

Example for testing motor M1 of Prize No1.

Hang both prizes on Prize No1 arm (see “Prize loading” for reference).

In diagnostic mode choose M1 and press **ENTER**. Motor works for time set in setting No1→MOTOR-TIME. The No1→MOTOR-TIME setting is correct when the first prize from the arm is dispensed and the second prize takes place marked **1** on the arm. If the second prize is placed between **2** and **1** mark, No1→MOTOR-TIME is too short. If the second prize is placed after the **1** mark, No1→MOTOR-TIME is too long. Adjust accordingly.

The settings are correct when the test is carried out three times and each time after test the first prize is dispensed and the second prize is placed on **1** mark.

GAME TEST

This function lets user test the machine’s work for a set result.

Example: Our test result will be 555.

After entering GAME TEST diagnostic mode use ▲ or ▼ buttons to set 555, then press ◀ button to accept. The display will show TESTING: 555. Press START button to initiate test and punch the ball.

Player’s score will be 555, unless the conditions described in GAME RULES (Point 6) are not met or the unbreakable record is lower than the tested value.

After the test is over, the GAME TEST function is deactivated. GAME TEST function is also deactivated when the display fades (after 1 minute).

PRIZE-2 VER.

Shows software version.

Prize arm buttons

Each prize arm button has different functions:



- **Showing number of prizes loaded** - Short pressing shows number of prizes loaded (same as e.g. function No3→QUANTITY), after 2,5 sec. the value vanishes and display shows prize value;
- **Changing number of prizes loaded** – short press and then keep

pressing the button until the display shows desired number, after 2,5 sec. the value vanishes and display shows prize value and the value is saved (e.g. to function No3→QUANTITY);

- **Motor testing** – long press the button (for 3 sec.) to test the motor. The test takes the time set in e.g. No3→MOTOR-TIME function.

Prize loading



For the prize mechanism to work correctly it is necessary to load the prizes in the proper places marked **1** and **2** shown on the photo below.

If only one prize of each type is loaded then it needs to be placed in a place marked **1** on prize arm.



Placing prizes in places other than marked can cause improper prize pay-out, including releasing two prizes at the same time.

Proper prize placement on prize arm is shown on the photos below.



1. Unscrew prize arm bar (clockwise) and take it out.



2. Using durable hanger, hang the prize on the prize arm spring in a marked place.



3. Screw the prize arm bar again (counterclockwise). Prize hanger need to be placed BELOW the bar.

PLEASE REMEMBER!

If the value of any loaded prize changes please remember to check (and update) values of according function: No1→PRICE, No2→PRICE, No3→PRICE and/or No4→PRICE.

IMPORTANT!

For the Prize Pay-out to work correctly it is required that functions No1→QUANTITY, No1→PRICE, No2→QUANTITY, No2→PRICE, No3→QUANTITY, No3→PRICE, No4→QUANTITY, No4→PRICE are set. Without it the prize dispensing feature will not work and the money counters of each Prize will not count the money towards winning possibility.

11. Spare parts and equipment

Leveling legs 4 pieces.

Punching bag pump 1 piece.

Bladder 1 piece.

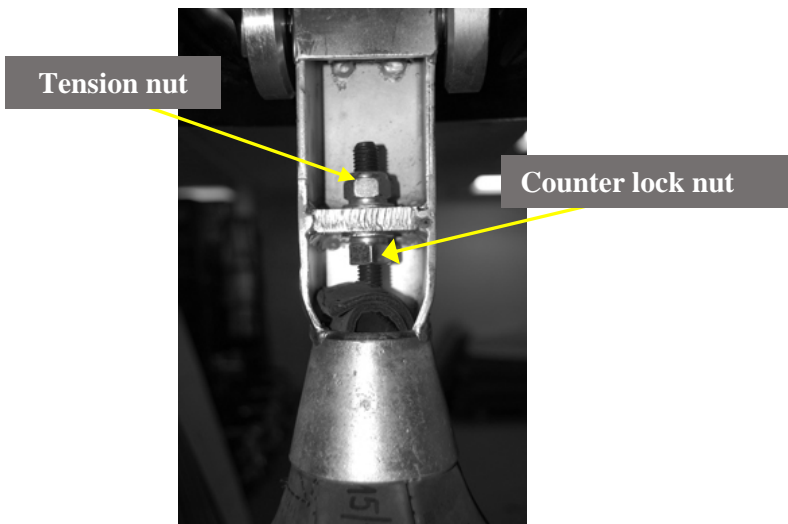
12. Standard replacement parts

- Front panel bulbs
- 'START' button bulb
- Halogen bulb (12v 20W, MR11/C (GU4) – 35mm DIA)

13. Step-by-step setup and maintenance instructions

How to change the punching bag

Changing the punching bag is required in some cases. Lower the bag arm as in the play mode. Take off the front protector and unscrew the top nut using 19 mm wrench (use wrench with a ratchet). This will release the bag assembly.



To install a new bag first make sure that the tension nut is taken off and the second nut is screwed all the way on the bolt. Otherwise the second

bolt will prevent the bag from proper tightening of the assembly.



Insert the bag in its place, replace the tension nut and tighten it until the bag cannot be twisted by manual tests. To test this, grab the bag in your arm and simply use your body's weight to try to twist the bag on the bolt's axis.

If it is secured tight enough, then finish by unscrewing the second nut until it tightens on the metal arm.

How to release the punching bag manually



Sometimes it is necessary to release the punching bag when the machine has no power. This can still be done manually. You must reach over the bag and find the mechanical hammer holding the entire arm

in position. Then using your thumb press the hammer which is under compression by a spring behind it and the bag should be free to come down.

How to change the fuse in the main switch

Locate the power cord connection on the back of the machine. The fuse can be found hidden between the power cord socket and the main ON/OFF switch. In order to replace it, use a flat screwdriver to pry open the fuse holder and pull it out.



									Date of Service	MAINTENANCE LOG
									Punching bag condition	
									Punching bag pressure	
									Arm protector condition	
									Arm protector position	
									Legibility of disclaimer	
									Legibility of instruction	
									Level of machine	
									Grease on mechanism	
									Bulbs	
									Button	
									Bill and coin validators	
									Safe condition (Yes/No)	
									If not working or condition not safe for use what was replaced	
									Comments	
									Signature	