SEGA®

BG-X005SGA

MANUAL

SONIC
SPORTS
AIR HOCKEY

Forward

First, we would like to thank you for purchasing the Sonic 4-Player Air Hockey Table. The product can be a 2 or 4 player game for the whole family to enjoy.

For your own safety, please carefully read through the instruction that indicates precautions to be taken prior to the assembly of the product. We hope that you can quickly be accustomed to it and comfortably play the product.

Note before assembling

1.Ensure there is sufficient space assembling the Air Hockey Table.

2.Need at least 4 people to do the assembly, please ensure safety when moving the components.

3.Please ensure all parts are accessible before assembling.

Tools required for assembling

Screw Driver

Scissors (Pliers)

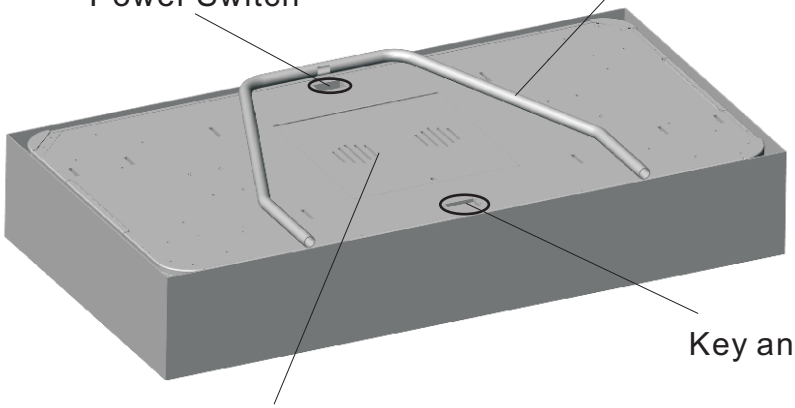
Electronic Screw Driver

Air Hockey Access Key (game key)

* Note: Self preparation on the tools indicated above
Be careful not to damage the product when using the tools to assemble.

List of Parts

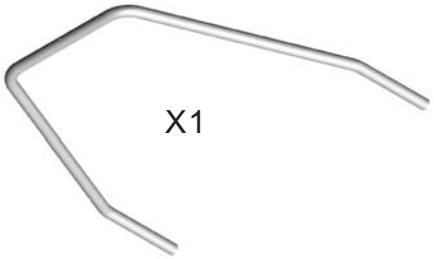
Main Body



Legs & Leg Levelers

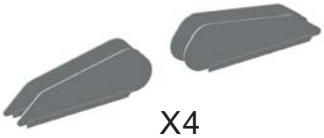
4 Sets

Overhead Bar



X1

Side Guards



X4

Center Guard

X1

Scoreboard

X1

Plastic Bar Bracket Cover (black)

X2

Puck and Mallet Box

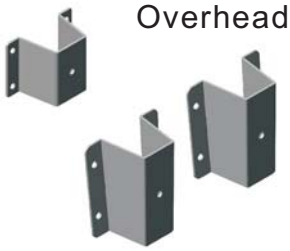
X2

Center Guard Bracket

X2

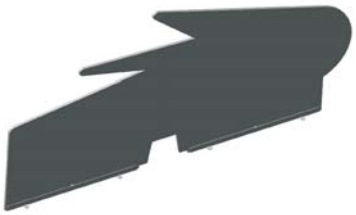
Scoreboard Brackets (1 set)

Overhead Bar Bracket (2 sides)



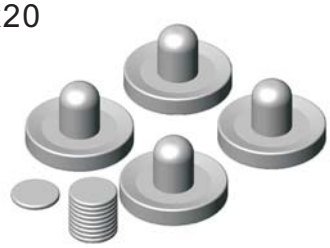
List of Parts

Plastic Sonic Sign



Power Cable

Mallets x8
Pucks x20



Spray Wax for Tabletop

X2

List of Screws

Big Flathead Screw (4mm x 12mm)

Scoreboard x 12
Aluminum Side Guard Brackets x 12

<X24>

Big Flathead Screw (5mm x 35mm)

Plastic Bar Bracket Cover(black) x 8

<X8>

Roundhead Screw (8mm x 25mm)

Legs x 16

<X16>

Flat Washer (8mm x 16mm)

Legs x 16

<X16>

Big Flathead Screw (5mm x 15mm)

Sonic Sign Fastener x 3
Overhead Bar Bracket x 12
Center Guard x 4

<X19>

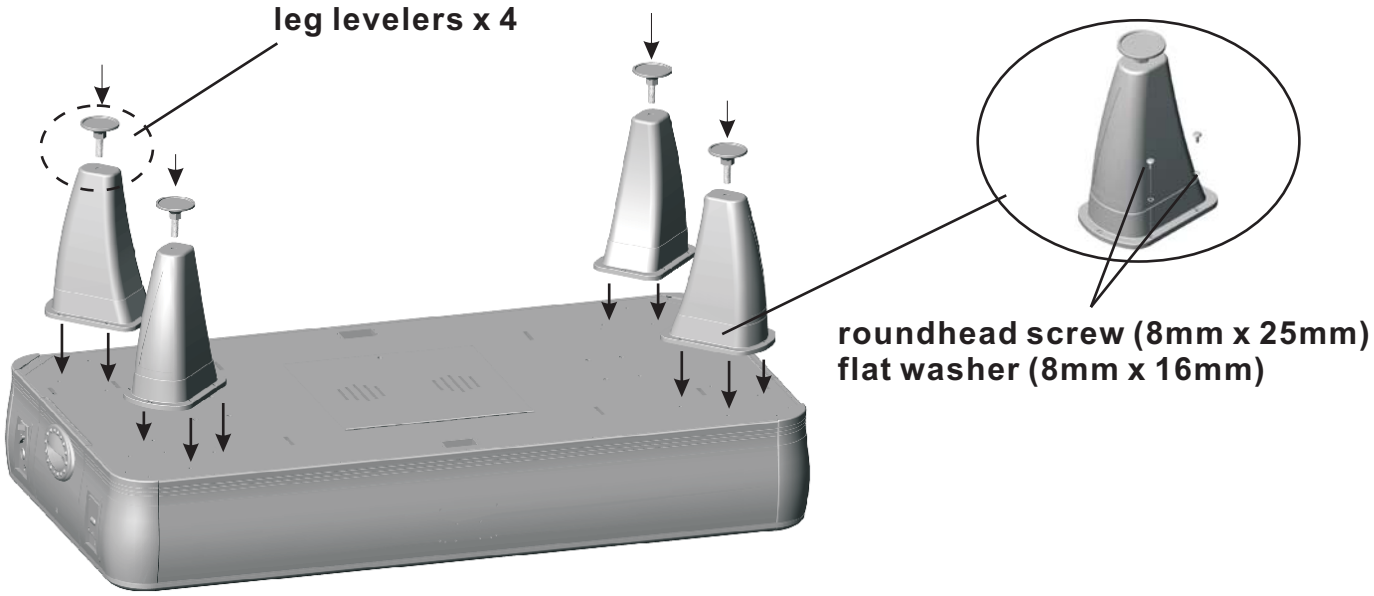
Big Flathead Screw (4mm x 8mm)

Side Guards x 8

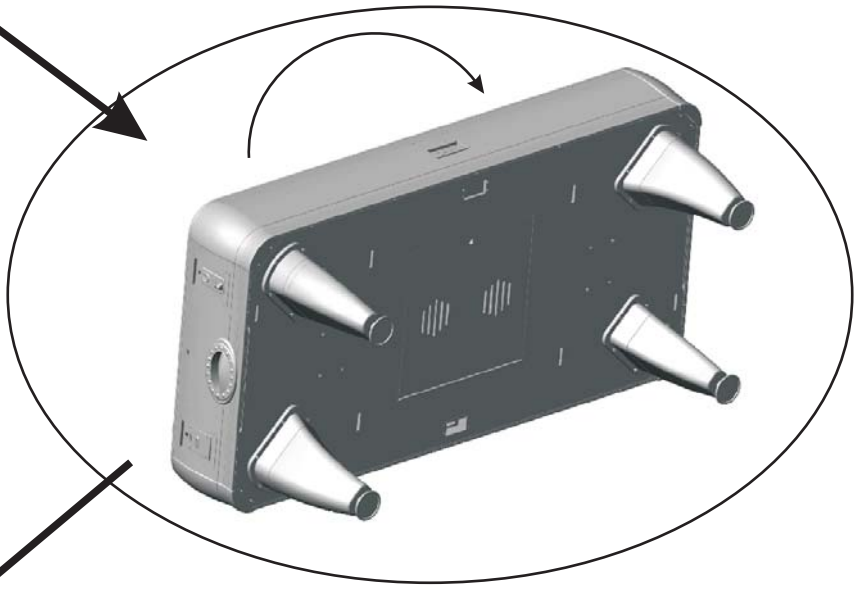
<X8>

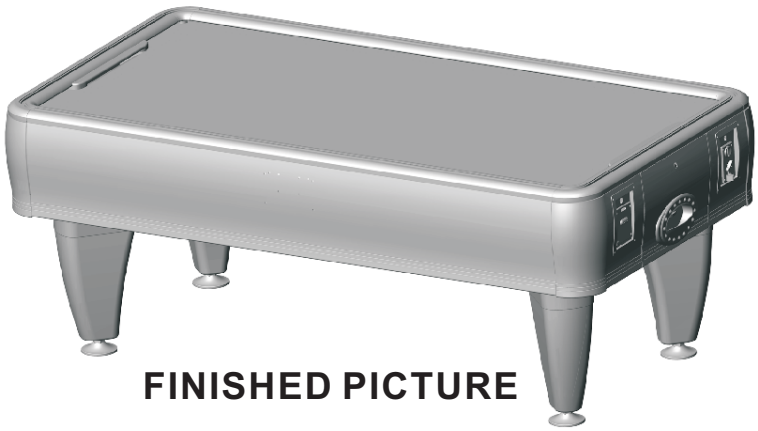
Assembly Instruction

Step 1: Remove the 4 legs from the box; screw the leg levelers onto it. Attach onto the bottom of the table. Align the holes of legs to the holes on the bottom of the table, and then secure it with big flathead **screw (5mm x 35mm)** and flat **washer (8mm x 16mm)**



Step 2: Once the legs are tightly screwed on to the table base, flip and position the table by 90 degree angle; this action would require at least 3~4 people, then flip it again in same manner to conclude with the upright position as shown on the diagram:

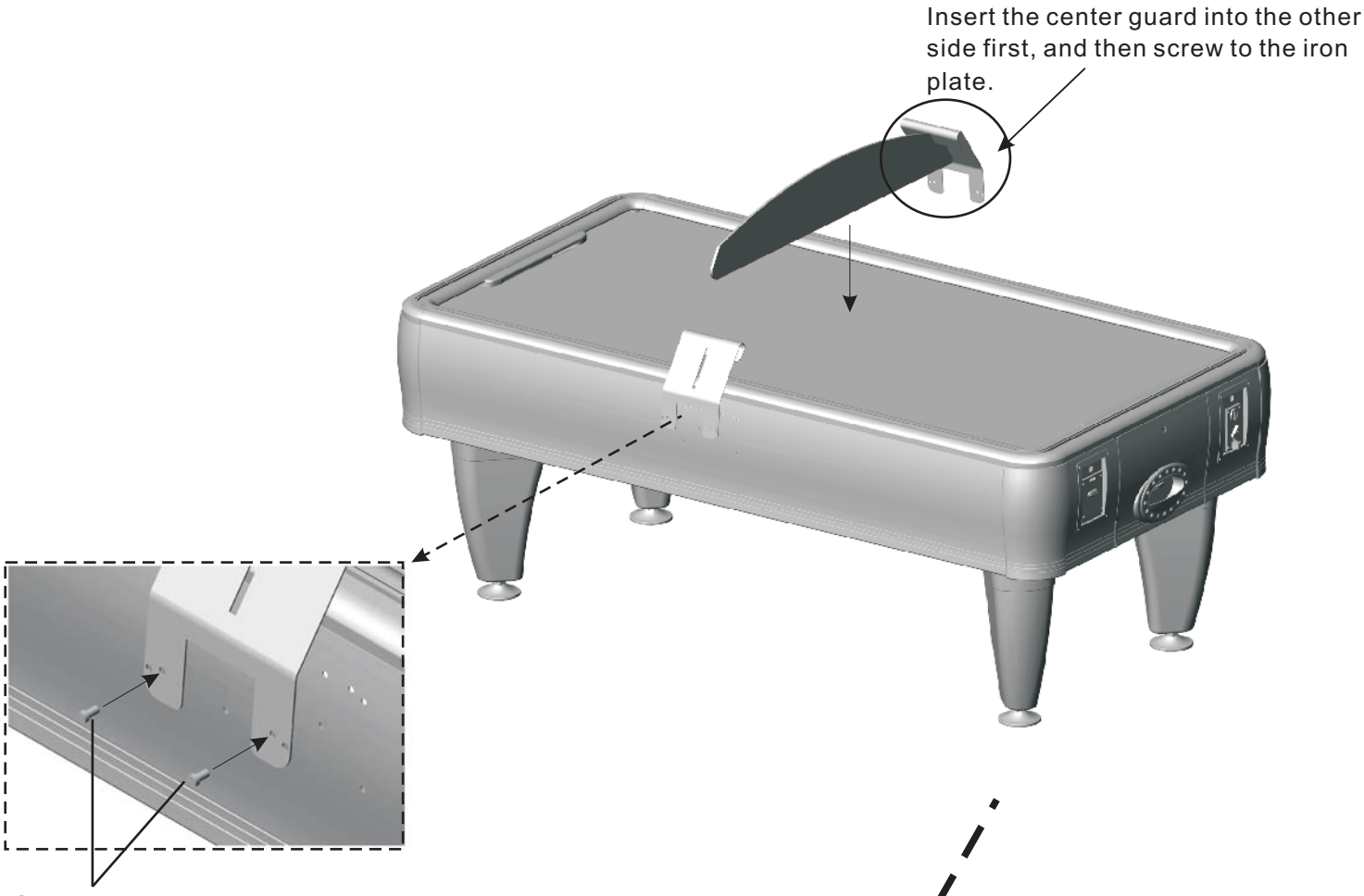




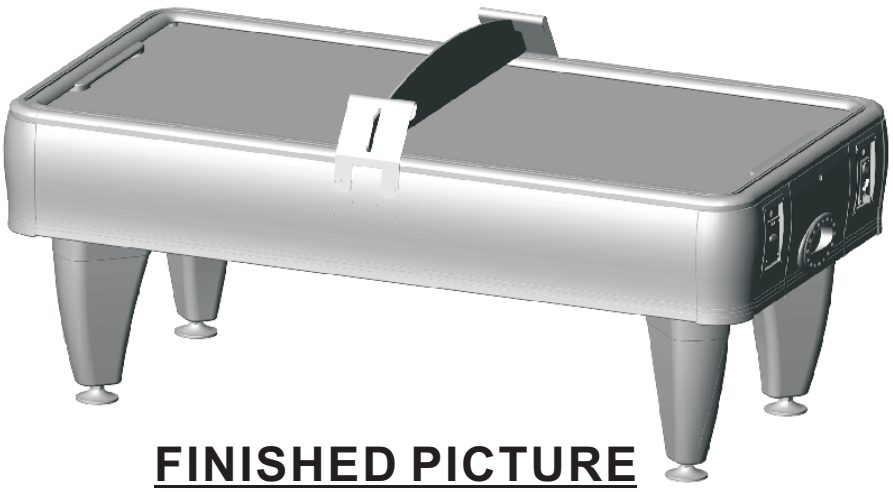
FINISHED PICTURE

Assembling Instruction

Step 3：Attach the center guard on one side with big flathead screw (5mm x 15mm). As to the other side, insert the center guard into the iron plate first before screw it tightly.



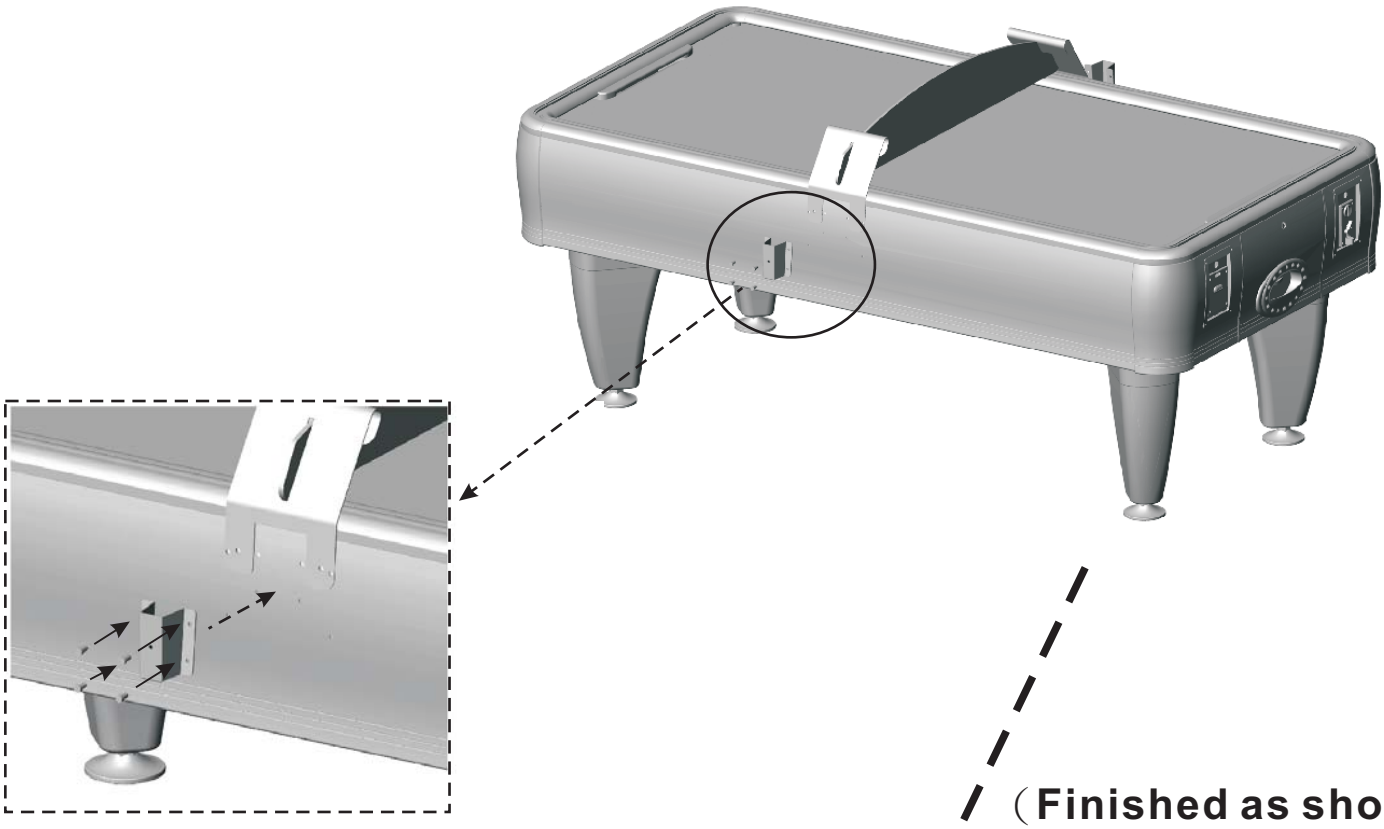
（**Finished as shown**）



FINISHED PICTURE

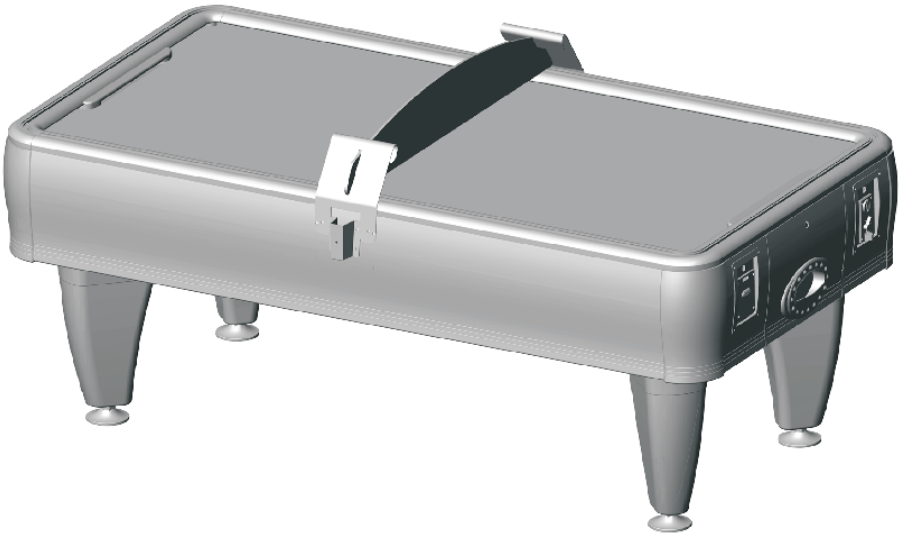
Assembling Instruction

Step 4 : Attach the overhead bar bracket with big flathead screw (5mm x 15mm).
Note: DO NOT screw it too tightly, only screw-in by 1/3 as overhead bars need to be placed in first, so do not tightly screw on both sides.



Use (4) of the big flathead screw (5mm x 15mm) to screw-in the overhead bar bracket, but not tightly.

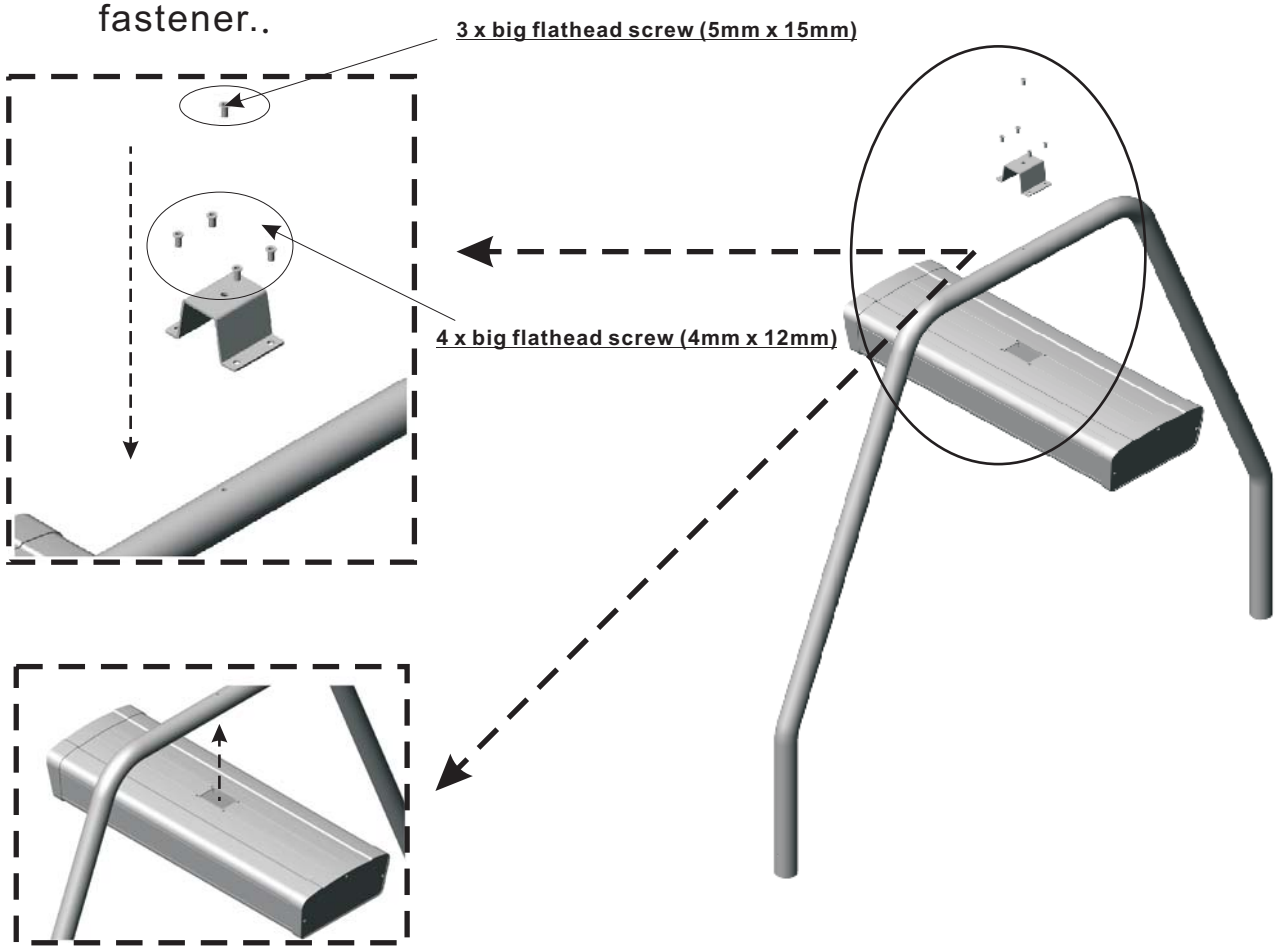
(**Finished as shown**)



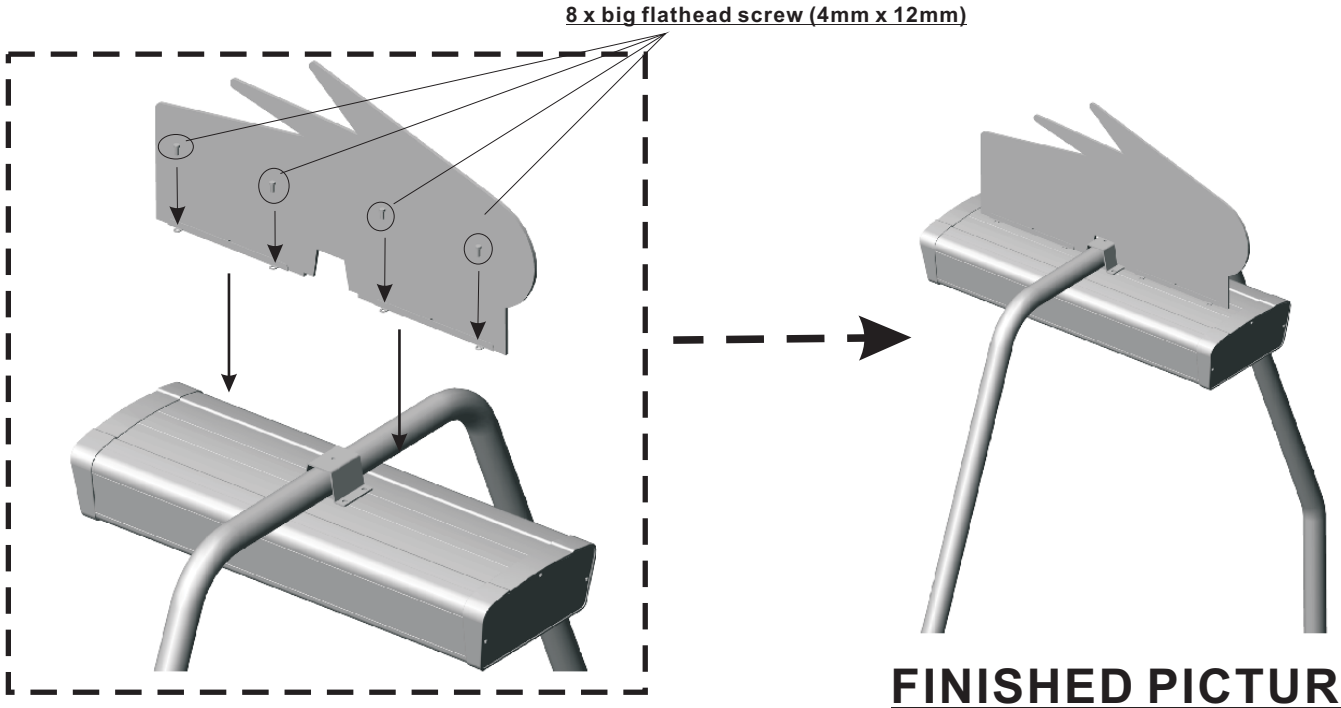
FINISHED PICTURE

Assemble Instruction

Step 5: Connect the Scoreboard and the overhead bar. Place the sonic sign fastener on the centre of the overhead bar then tightly screw it with (3) big flathead screw (5mm x 15mm). Then use (4) big flathead screw (4mm x 12mm) to connect the Scoreboard with the sonic sign fastener..



Step 6: Screw the sonic sign fastener on the scoreboard. Use (8) big flathead screw (4mm x 12mm) to screw the sonic sign fastener tightly onto the scoreboard.

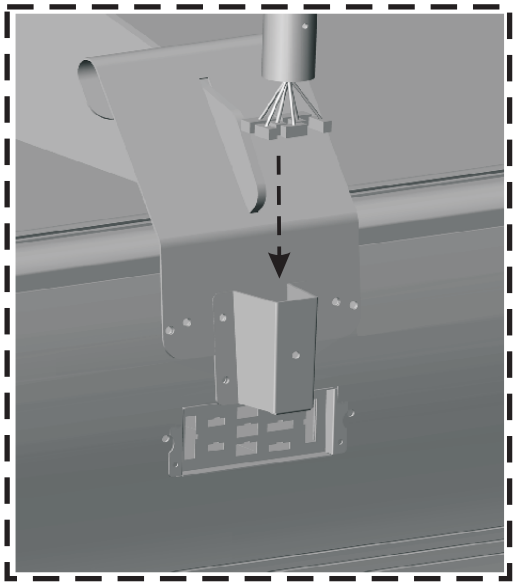


FINISHED PICTURE

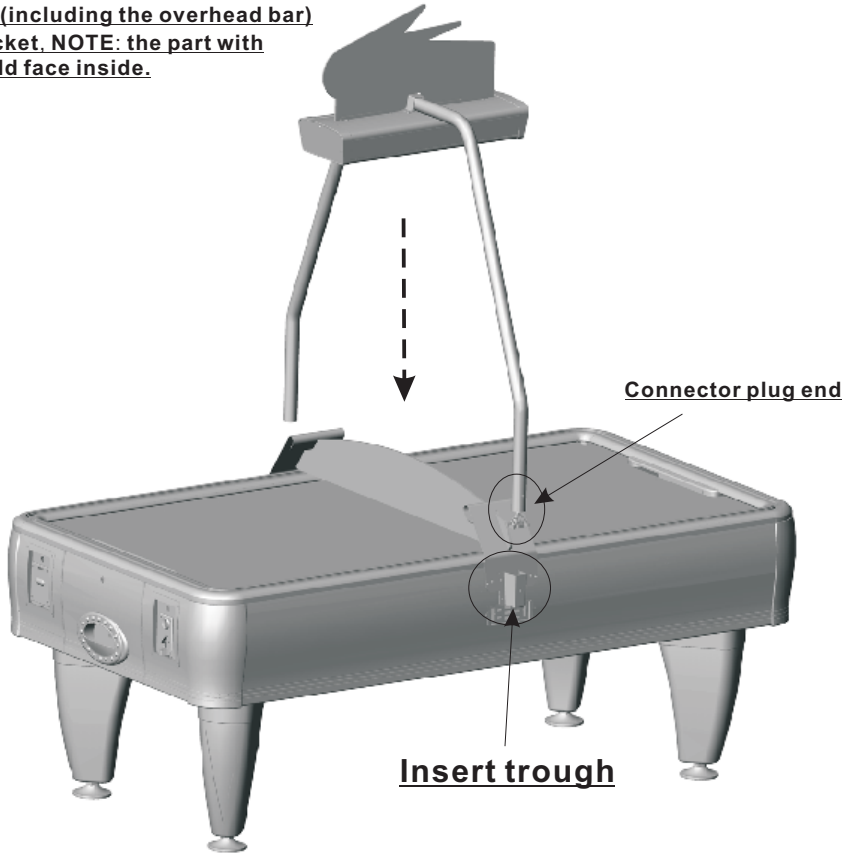
Assemble Instruction

Step 7:Connect the Scoreboard with the overhead bar then insert the set into the overhead bar bracket. Note: the connector plugs need to be inserted into the overhead bar bracket first. Please do not bend or press the connector wires.

Insert the Scoreboard set (including the overhead bar) into the overhead bar bracket, NOTE: the part with the connector plugs should face inside.

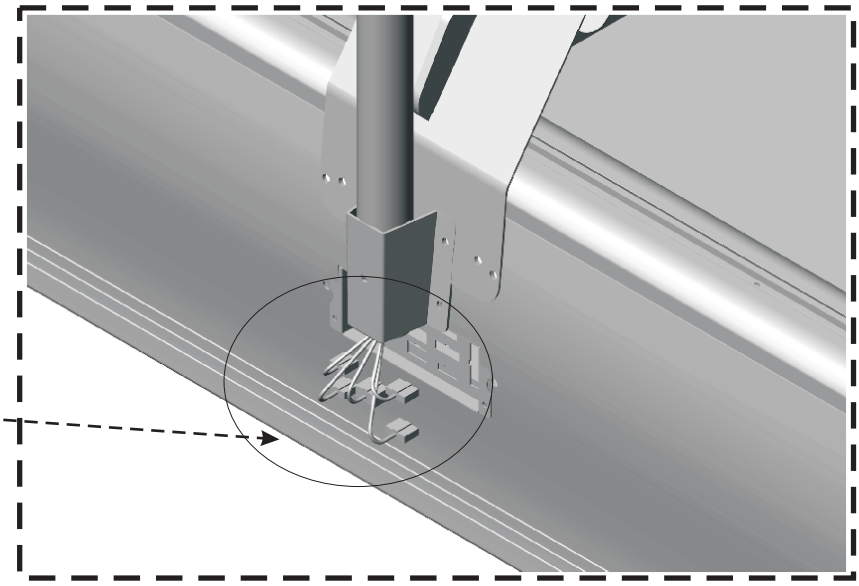


Connector plug end need to pass through the overhead bar bracket first set



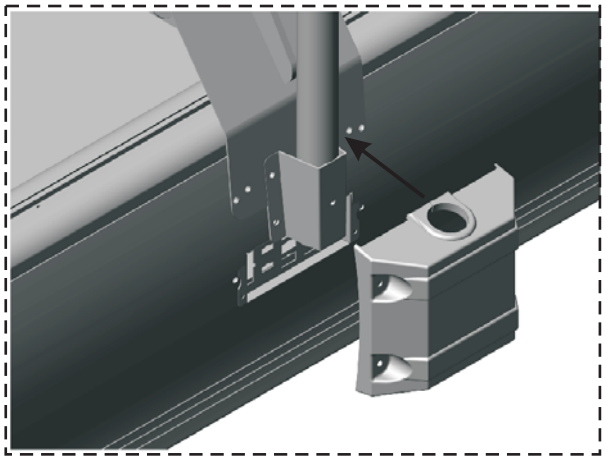
Step 8:Plug-in all the plugs on the connector plug end in accordance to its colors.
NOTE: plug-in tightly.

All plugs are separated by colors

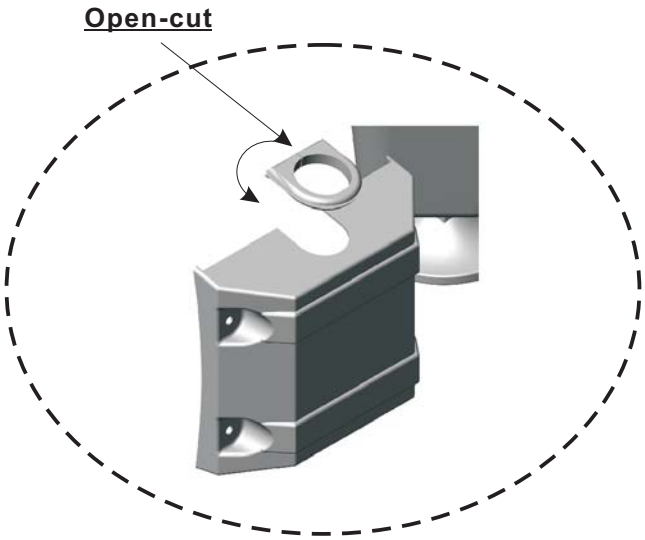


Assemble Instruction

Step 9:Use the open-cut side of the overhead bar plastic cover, and then insert it into the overhead bar protection cover. Lastly attach the whole cover onto the side panel. Before attaching it on, ensure the overhead bar is placed into the open-cut of the overhead bar plastic cover. Then cover it with the overhead bar protection cover.



Plastic cover with the plastic bar bracket cover then place the set onto the overhead bar

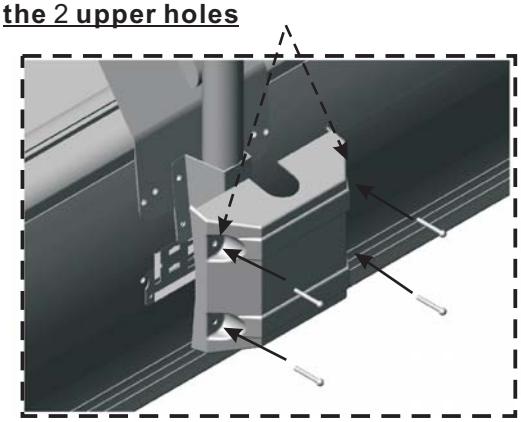


Place the plastic bar bracket cover onto the overhead bar plastic cover

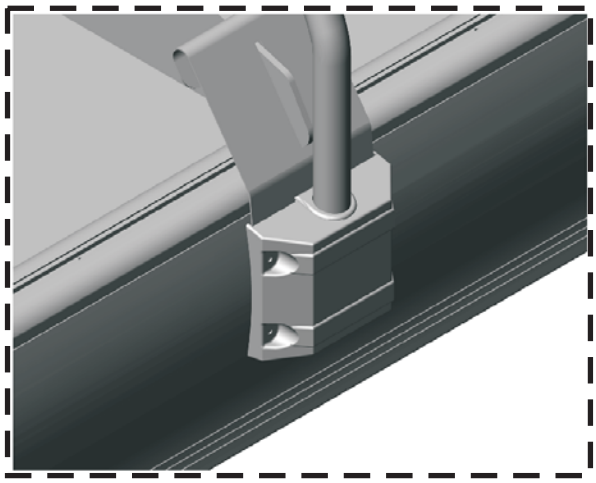
---

Step 10:Tightly screw on the plastic bar bracket cover on both sides with (4) big flathead screw (5mm x 35mm). The center guard needs to be attached into the(2)upper holes of the plastic bar bracket cover.

Center guard needs to be attached into the 2 upper holes



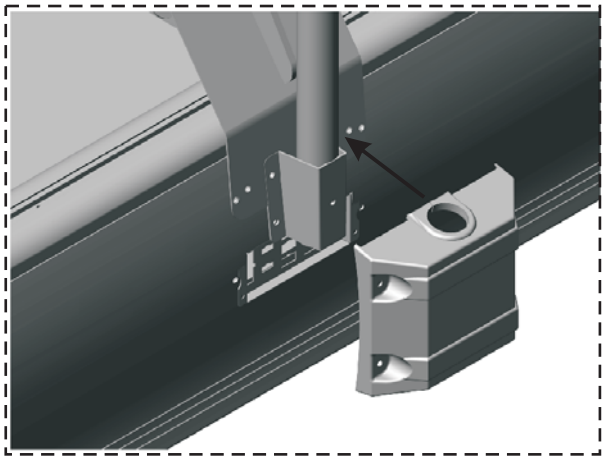
Use 4 big flathead screw (5mm x 35mm)



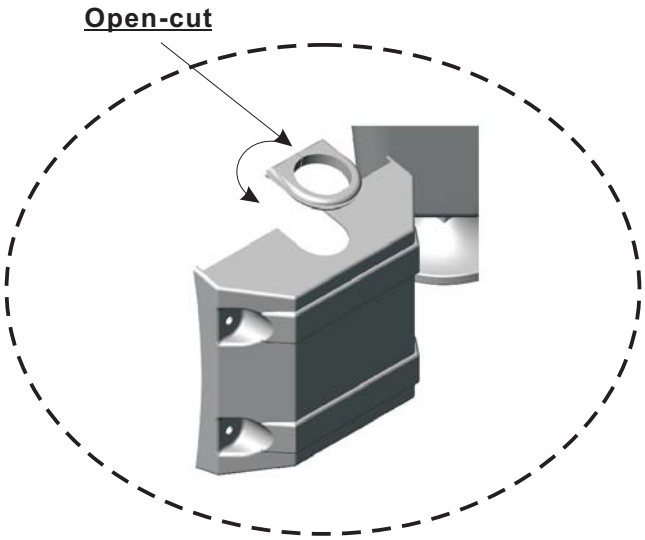
FINISHED PICTURE

Assemble Instruction

Step 9:Use the open-cut side of the overhead bar plastic cover, and then insert it into the overhead bar protection cover. Lastly attach the whole cover onto the side panel. Before attaching it on, ensure the overhead bar is placed into the open-cut of the overhead bar plastic cover. Then cover it with the overhead bar protection cover.



Plastic cover with the plastic bar bracket cover then place the set onto the overhead bar

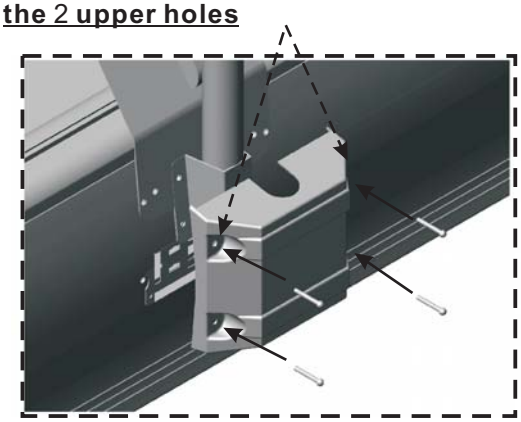


Place the plastic bar bracket cover onto the overhead bar plastic cover

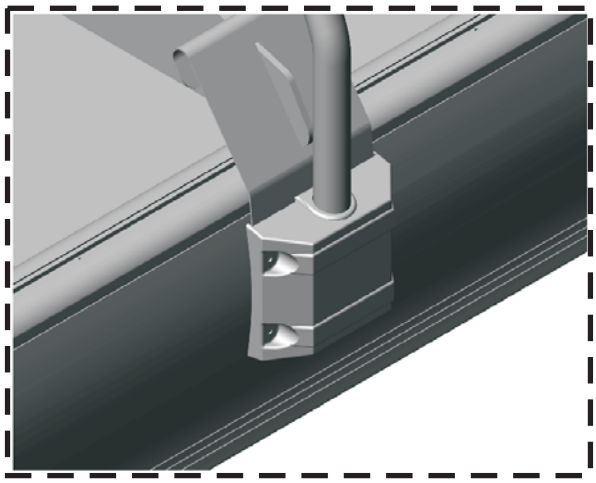
---

Step 10:Tightly screw on the plastic bar bracket cover on both sides with (4) big flathead screw (5mm x 35mm). The center guard needs to be attached into the(2)upper holes of the plastic bar bracket cover.

Center guard needs to be attached into the 2 upper holes



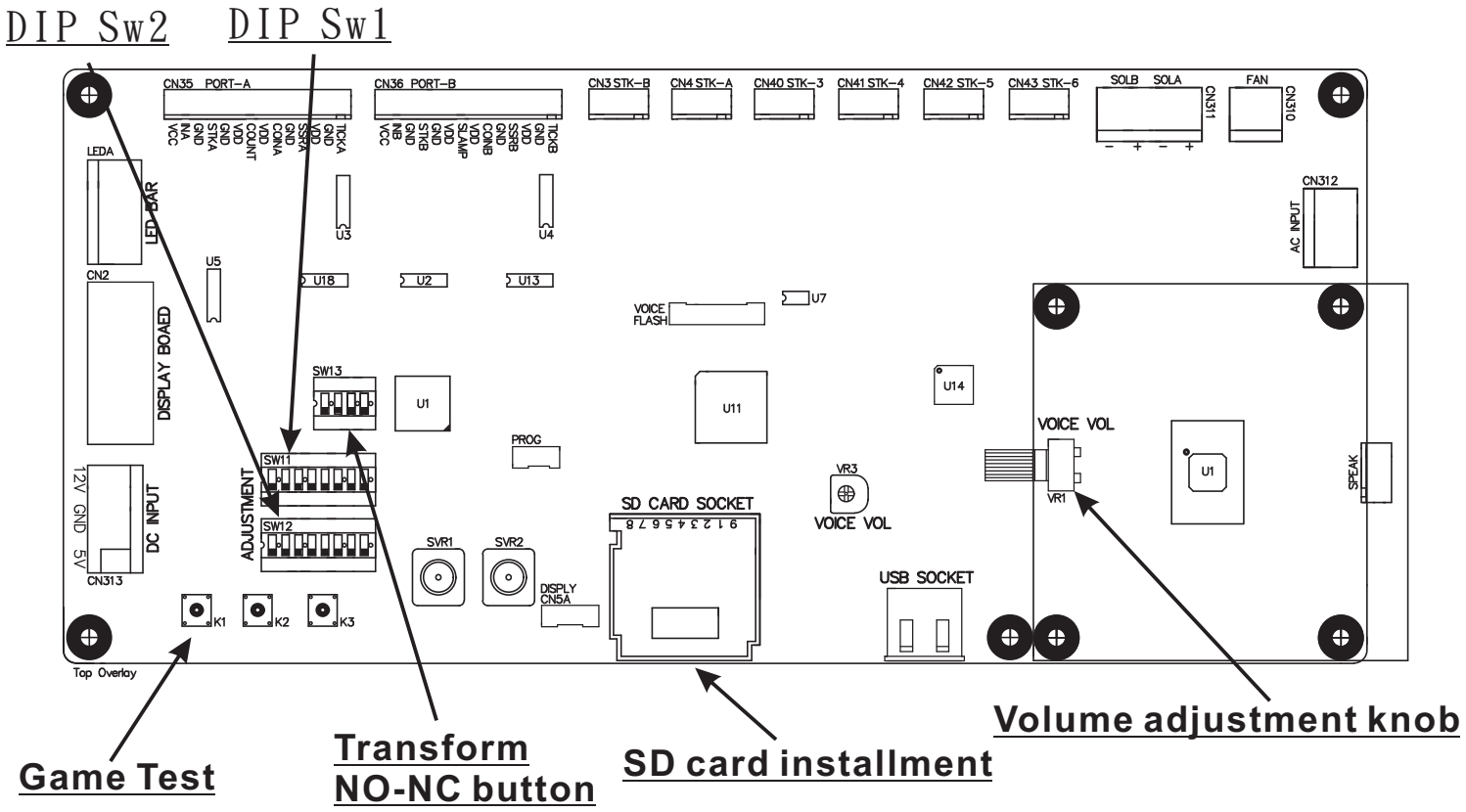
Use 4 big flathead screw (5mm x 35mm)



FINISHED PICTURE

BG-X005-SGA

Description of Motherboard Controls



LEDA: Running LED lights around table

NC2 : Display panel connection outlet

NC313 : Direct Current (DC) Input outlet

NC35 : A1 Output Control point

NC36 : B1 Output Control point

NC311 : Electro-magnet switch for goal gates (solenoid)

Nc3 : Rail Strike Detector

NC4 : Rail Strike Detector

NC40 : Rail Strike Detector

NC41 : Rail Strike Detector

NC42 : Rail Strike Detector

NC43 : Strike Detector

NC310 : Blower output

NC312 : Alternating Current (AC) Output

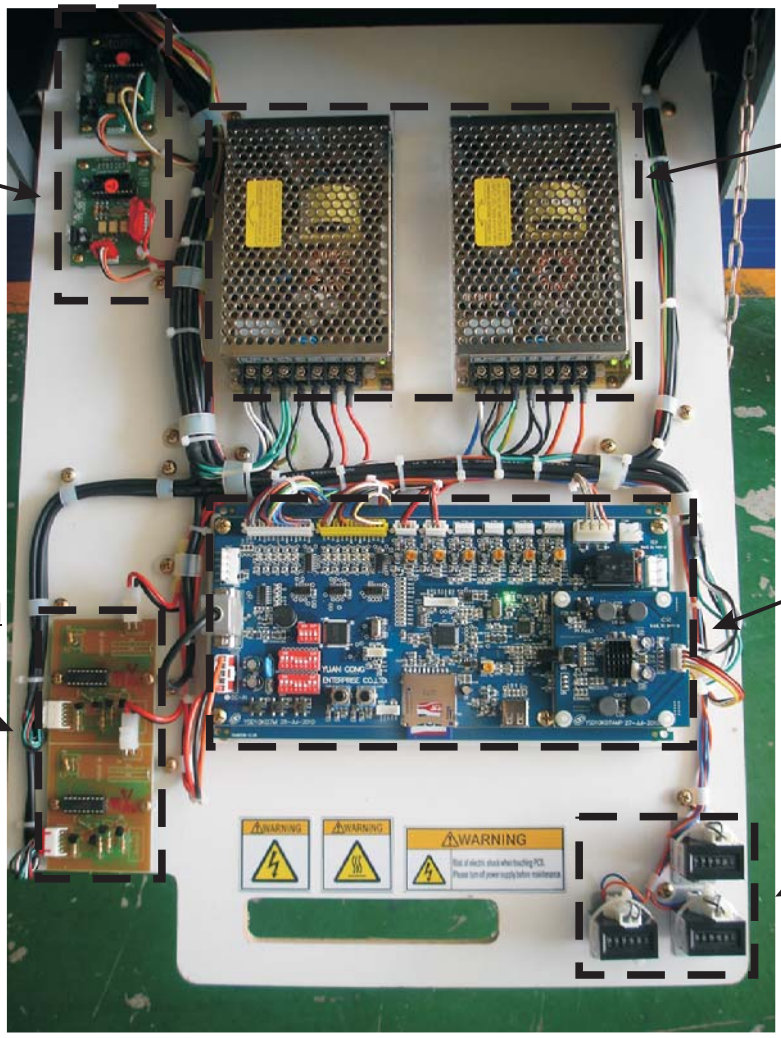
R3 : Sound Effect and Volume adjustment

VF1 : Total Volume Adjustment

SPEAK : Sound Output

BG-X005-SGA

Description on locations of controls



Motherboard: Controls the game operation, light signals and sounds of the machine.

Power for Motherboard: Supplies the power to motherboard and other control cards.

Winning light control card: Controls the winning lights on the score board.

Display panel light and puck exit slot light control card: Controls the display panel lights and puck slot lights.

Counters: Counts the number of games, coins inserted and lottery tickets given.

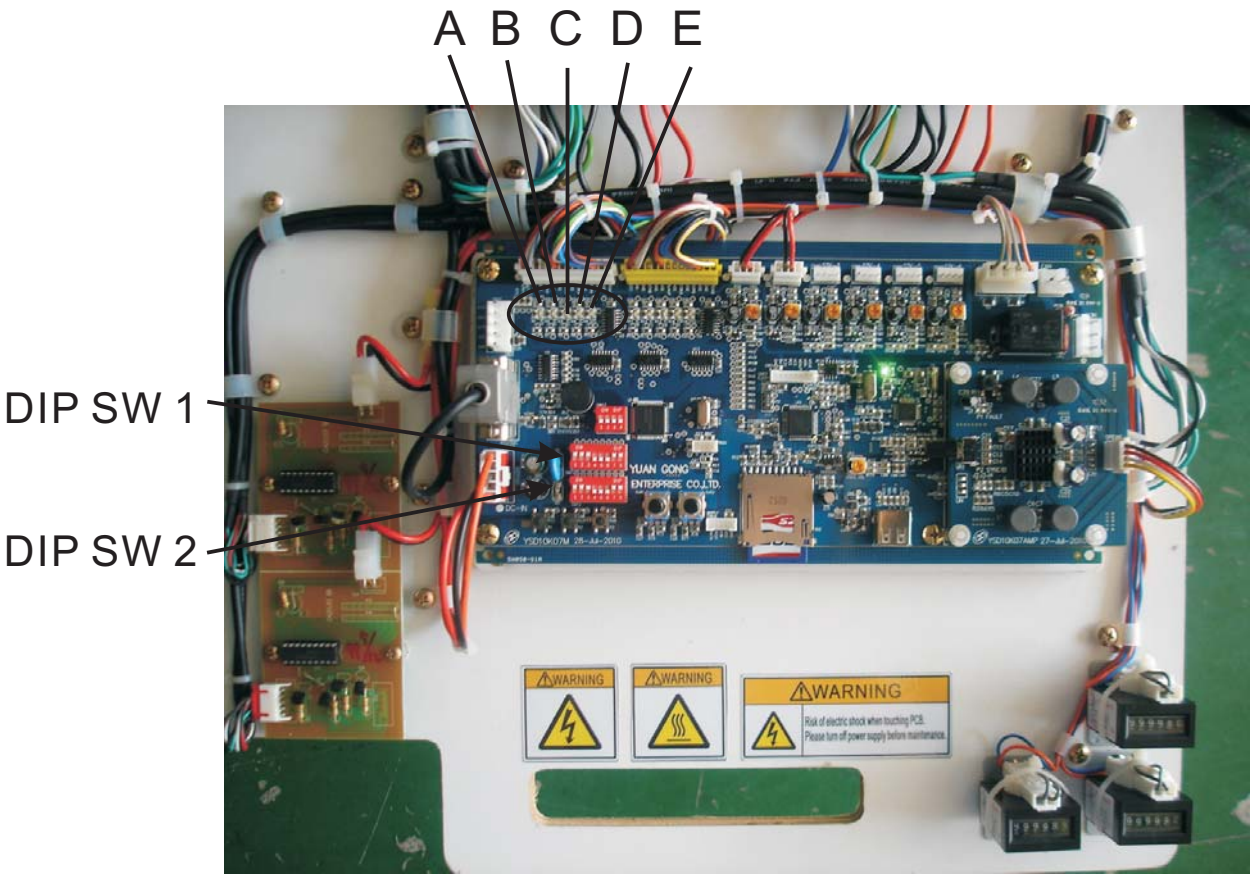
BG-X005-SGA

Description of light signals and DIP SW

Error Message Lights

Light A Goal Sensor signal
Light B Start button Light signal
Light C Insert Coin mechanism Light signal
Light D Ticket Light signal
Light E Rail Noise strike Light signal

Note : If these lights are on there is an error .



BG-X005-SGA DIP SW----------ADJUSTMENT

O=OFF I=ON

DIP	Sw11	1	2	3	4	5	6	7	8
COIN1	CREDIT1	I	I	I					
1	2	O	I	I					
1	3	I	O	I					
1	4	O	O	I					
2	1	I	I	O					
3	1	O	I	O					
4	1	I	O	O					
FREE	PLAY	O	O	O					
	NONE				I	I	I		
TICKET OUT PUT	W3/L1				O	I	I		
	W6/L2				I	O	I		
	W9/L3				O	O	I		
	W18/L4				I	I	O		
	W22/L5				O	I	O		
	W26/L6				I	O	O		
	W36/L7				O	O	O		
SRTIKE SOUND	A							I	I
	B							O	I
	C							I	O
	NO SOUND							O	O

DIP SW 1

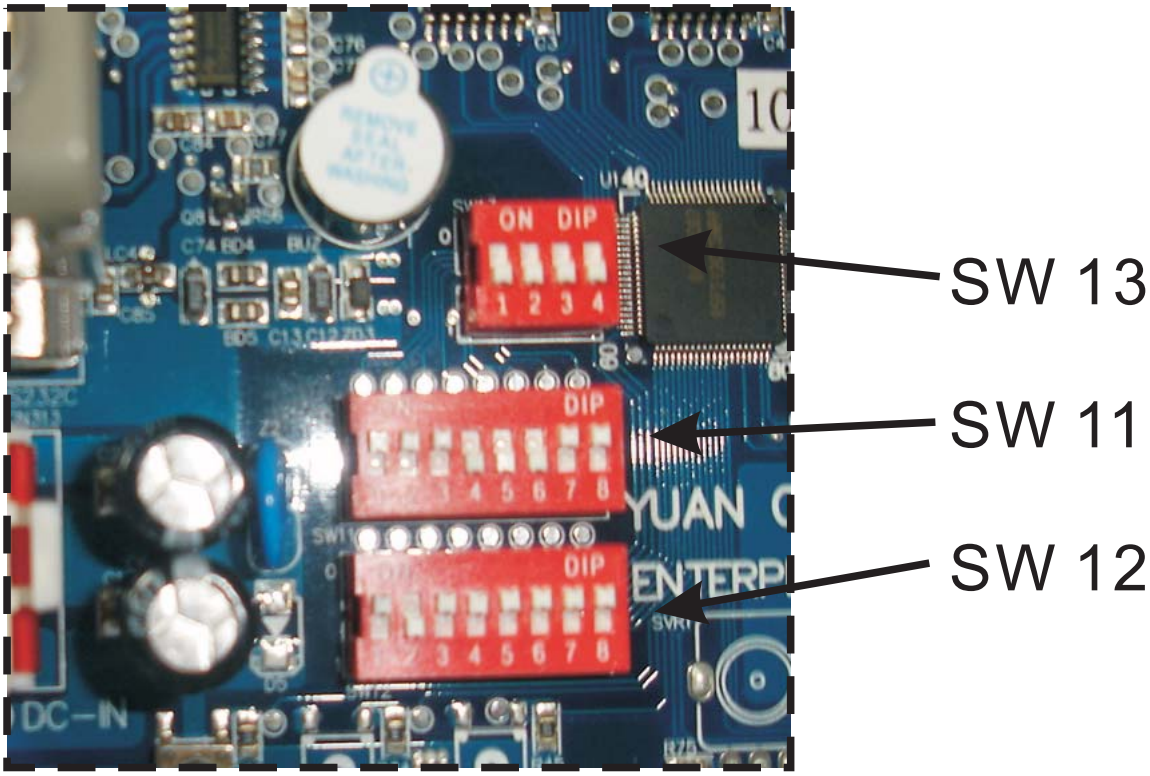
DIP	Sw11	1	2	3	4	5	6	7	8
GOAL TO WIN	NO LIMIT	O	O	O					
	9	I	O	O					
	8	O	I	O					
	7	I	I	O					
	6	O	O	I					
	5	I	O	I					
	4	O	I	I					
	3	I	I	I					
TIME OUT	NO LIMIT				O	O	O		
	10				I	O	O		
	8				O	I	O		
	6				I	I	O		
	4				O	O	I		
	3				I	O	I		
	2				O	I	I		
	1				I	I	I		
TICKET	WINNER ONLY							I	
	BOTH							O	
DEMO SOUND	ON								I
	OFF								O

DIP SW 2

BG-X005-SGA

Explanation and Analysis of machine components

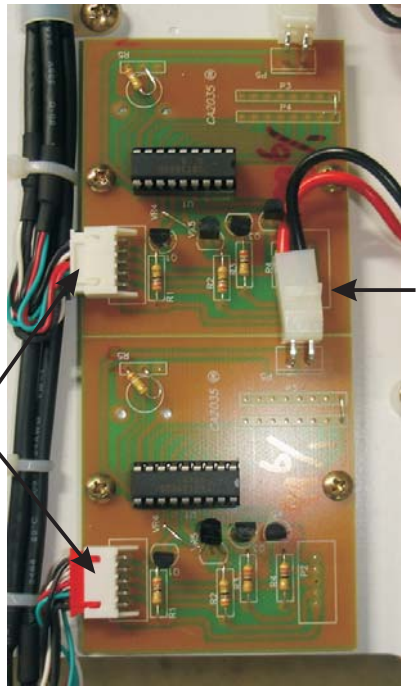
DIP SW



SW 11: Adjust numbers of coins inserted and lottery tickets given and sound of strikes
SW12: Adjust numbers of balls, time, which lottery ticket exit slot to use when winning / loosing and demonstrating sound
SW13: Adjust money course signal NO or NC

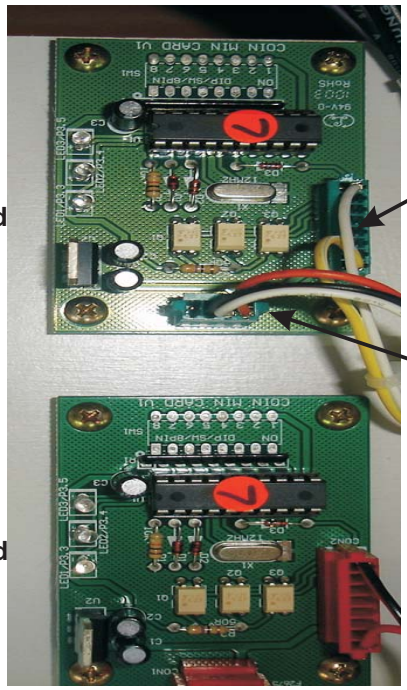
Bounced Light Control Card

Lights control card for 4 handrails



Puck exit slot light control card

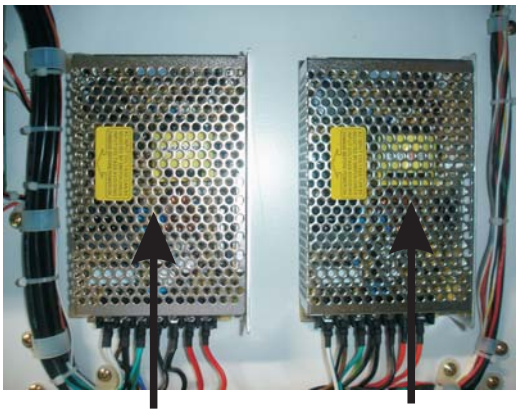
Winning Light Control Card



BG-X005-SGA

Explanation and Analysis of machine components

Power Supply



DC +5 , 20A DC +12 , 8.5A

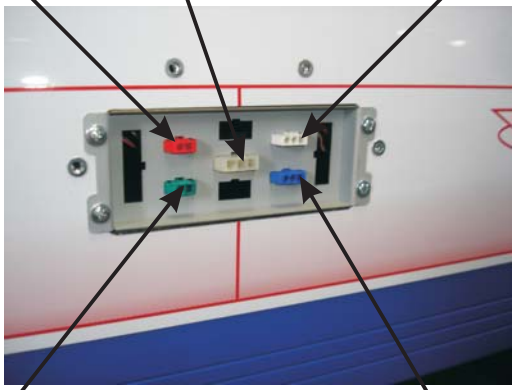
Counter

Puck Exit Slot Light Set

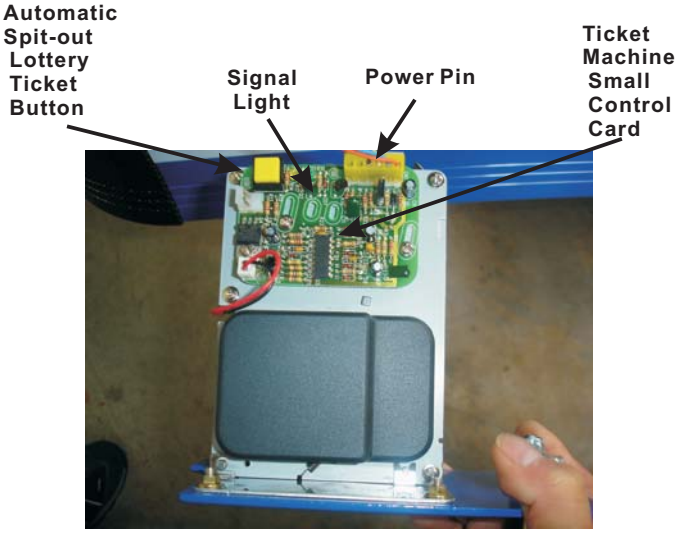
Transformer

220V , 3A , 660W
110V US ONLY

Platform connected to Main body

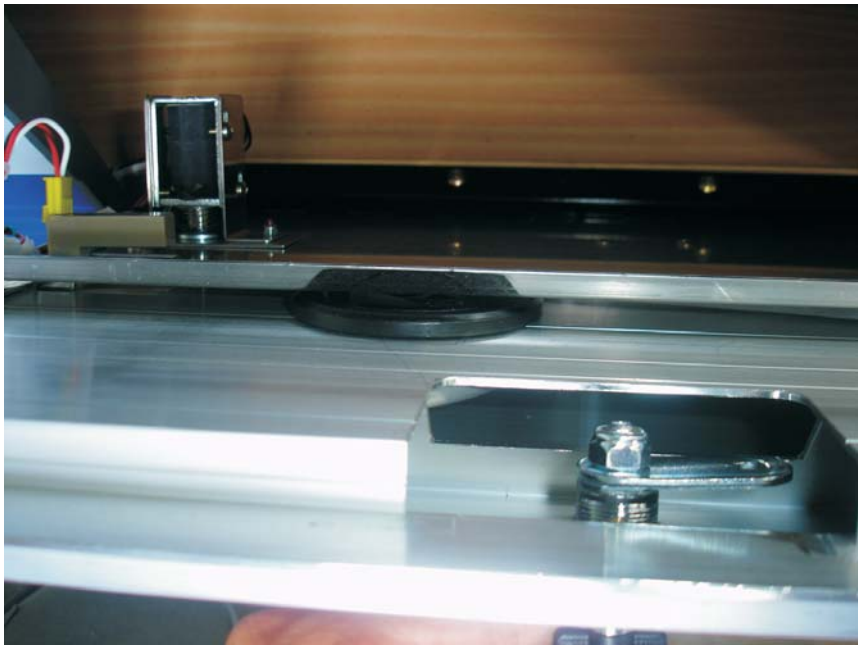


Ticket Machine



BG-X005-SGA

To Eliminate Malfunction on goal gate



When puck cannot emerge, check whether the puck course is blocked with foreign object(s). Clean it if needed.

Magnetic puck solenoid

IR Goal Sensor (puck detector)

If the puck cannot be emerged when the game begins (stuck), please check whether the magnetic puck solenoid is in force or whether the course is blocked with foreign object (s)... etc.

If goal sensor cannot detect, please block the goal sensor first to see whether the sensor is working by checking on whether the goal sensor light signal is on or not on the motherboard. If there is no light or the light stays on continuously, then it means the goal sensor is broken. Please change it accordingly.

Troubleshooting

I. PC Board Lights

If lights on Pc Board are on for coin mechanism and/or ticket dispenser , there is an error for the corresponding light(s).

II. Ticket Dispenser

Flashing light on ticket dispenser means out of tickets.
Restart table if light does not appear with new tickets inserted.

III. Coin Mechanism/Acceptor

Make sure to replace the sample plastic coin with the desired number of coins. Coin Acceptor must be on N.O.(normally open)setting.

IV. Puck Release

If puck is grtting stuck inside of the release door , the following need to be check for possible errors :

1) Check for debris , shavings , paper and other emains lodged inside the return unit.
2) Puck has chips not allowing it to fall through the return unit. Replace or sand puck.
3) Wire connector to release solenoid has become unplugged/ damaged/stuck/broken.
4) Release solenoid needs to be replaced.

V. Push Start Sound

If you hear “PUSH START” , the following need to be checked and corrected. It is an error message. Restart the table after every time changes/new settings are made. ON/OFF switch is underneath the table , next to the power display.

1) Machine is out of tickets.
2) Both coin acceptors and ticket dispensers are properly plugged in and connected.
3) Any damage to connection pins/other wirse.
4) Make sure both ticket dispensers are on the following settings N.O (Normally Open) and not on continuous dispense.
5) Both coin acceptors are on the N.O (Normal Open) settings.
6) The correct numbers of coins have inserted to play the game.

VI. NOTE

There is no start button located on commercial air hockey machines.

Care & Maintenance

Keep these tips in mind for best operating performance

- Turn the adjustable leg bolts to create a leveled playing field.
- Place puck in the middle of the table: if it moves to a certain side, raise accordingly.
- Avoid direct sunlight if table is placed outdoors.
- Avoid exposure to wetness when placed in basement or wet area.
- Do not shake or drop when transporting.
- Replace puck when moving slowly during game play. Light sanding of puck can also smooth puck.
- Check air holes periodically to ensure smooth air hockey play.
- Do not use sharp objects on playfield.
- Keep table surface always clean and dust free.
- When cleaning table surface use a soft dry cloth and polishing spray. DO NOT APPLY WATER.
- DO NOT APPLY AMMONIA BASED PRODUCTS such as window/glass cleaner.
- Polish spray/wax is provided inside the mallet kit.
- Polish spray/wax table monthly to ensure best playfield.
- Wax the table surface periodically to ensure smooth air hockey play.

SEGA®
BARRON
GAMES
INTERNATIONAL