



OWNER'S MANUAL

(Version 1 Programming)



Be sure to read this Operation Manual before using your machine to ensure safe operation.



©2012 Bob's Space Racers, Incorporated 427 15th Street Daytona Beach, Florida 32117 Tel: 386-677-0761 Fax: 386-677-0794

WATER BLAST[™] (FEC)



TABLE OF CONTENTS

1. INTRODUCTION

- 1-1. Overview and Technical Features:
- **1-2. Important Safety Information:**
- 1-3. Game Operation
 - 1-3-1. Automatic Operation:
 - 1-3-2. Manual Operation:

2. PROGRAMMING

- 2-1. Entering Programming Mode:
- 2-2. Volume:
- 2-3. Coins per Credit:
- 2-4. Attract Mode:
- 2-5. Just for Playing Tickets:
- 2-6. Winner Tickets:
- 2-7. Game Time to Win:
- 2-8. Time Out:
- 2-9. Drain Water:
- 2-10. Link ID:
- 2-11. Money:
- 2-12. Reset Defaults:
- 2-13. Programming Options:
- 2-14. Reprogram Linking Games (Also covers how to reset settings):

3. MAINTENANCE AND TROUBLESHOOTING

- 3-1. Quick Troubleshooting:
- 3-2. Detailed Troubleshooting and Repair:
 - 3-2-1. Glass Cleaning:
 - 3-2-2. Cleaning Gun Parts:
 - 3-2-3. Target Sensors:
 - 3-2-4. Display P.C. Board Removal and Installation:
 - 3-2-5. Display P.C. Board Servicing:

4. PARTS LISTINGS

5. SCHEMATICS

6. WARRANTY

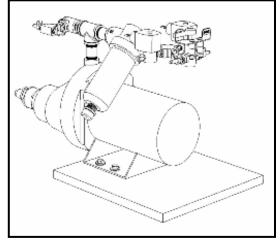
1. INTRODUCTION 1-1. Overview and Technical Features:

Thank you for purchasing the new WATER BLAST[™] (FEC) from Bob's Space Racers[®]. Built on a long tradition of value, the WATER BLAST[™] (FEC) retains all of the great game play you have come to expect from a game from BSR. It has been designed and engineered by taking years of experience in producing industry leading Water games and combining this experience with modern manufacturing technology developed for this application. All of this is brought together to provide the operator and customer with the best possible experience.

FEATURES

WATER – The water tank is an enclosed re-circulating system designed to be easy to maintain and service. It also features the low water warning light as a safety feature and reminder to fill the water.

WATER PUMP ASSEMBLY - The water pump assembly uses an all plastic impeller and housing to completely eliminate any rusting or corrosion in the water system. This greatly extends the time between water changes. The pump assembly also uses a basket type washable water filter in a clear-view housing to keep the game working properly. The entire pump assembly can be easily removed from the game making bench top servicing possible.



SCORE DISPLAYS - The solid state score displays (AKA Display P.C. Boards) are replaceable as a subassembly making service easier.

SIMPLE ELECTRONICS - The new design uses 3-4 electronic boards (AKA the Main P.C. Boards,) making troubleshooting far easier than ever.

NEW TARGET SENSORS - The game utilizes fully encapsulated magnetic switches for the target sensing, greatly extending the reliability of the game.

GAME PLAY (IN AUTOMATIC MODE)

The object of the game is to shoot water from the gun into a target "pan" making the display indicator rise to the top of the game to win.

The game can be played by 2 to 8 players. The game is designed to be played in a traditional player versus player RACE with 2 players needed to start the game.

When the game is idle, it will normally say SWIPE CARD or INSERT COIN on each display. Unless it is playing the attract mode.

When a player puts enough money into the game to start, the display on his/her side will say "GET READY" and the other side will still say SWIPE CARD or INSERT COIN. Under the side with get ready, a count down from 9-0 will be visible.

Once both players have inserted enough money to play, the count down will continue and the game will start when the timer runs out. If a game is in progress and additional players walk up to play and inserts money, the display at that station will flash "WAIT" until the game in progress has ended. At that time, the previous game play scenario will begin.

In a game, the winning player will win the dispensed PRIZE TICKETS. PRIZE TICKETS are larger 2x4 tickets used for a direct exchange for a prize. They are larger then the conventional redemption game tickets. And the amount of PRIZE TICKETS is dependent on the number of players in each game.

In a 2-4 player game, the game is set to dispense 1 PRIZE TICKET to the winner. The loosing players don't receive any tickets.

In a 5-8 player game, the game is set to dispense 2 PRIZE TICKETS to the winner. The loosing players don't receive any tickets.

At the end of the game, "WINNER" will flash on the winning station. The beacon light will also rotate when winner is flashing.

1-2. Important Safety Information:

IMPORTANT SAFETY INFORMATION

WARNING: Unplug the game from the AC wall receptacle when servicing this product. Failure to do so could result in serious injury to yourself or others.

Use only a GROUNDED AC receptacle. Failure to do so could result in improper operation or damage to the game and could void your warranty. If you are unsure that your AC receptacle is properly grounded, have a qualified electrician perform this check for you.

Always be sure power to the game is turned off when doing even routine maintenance. Otherwise, moving parts could activate unexpectedly causing injury.

This product is heavy, necessitated by the design. When moving this game, be sure you have adequate help. Use a suitable dolly or hand truck where practical. Use back support when needed.

Depending on the potentially hazardous degrees, the terms of NOTICE, WARNING CAUTION, etc. are used. Be sure to understand the content of the displays before reading the text.



High Voltage Warning:

High voltage can cause an electric shock. Turn off power before servicing

High voltage can cause an electric shock. Turn off power before servicing.



No Touching Warning: This part may cause an electric shock or the surface is overheating. Do not touch this part.

NOTE: ONLY QUALIFIED TECHNICAL PERSONNEL SHOULD WORK ON THIS GAME. FAILING TO COMPLY CAN CAUSE SEVERE INJURY.

1-3. Game Operation:

When starting the game, make sure the power switch has been turned on from the lock cabinet behind unit #6

The Water Blast FEC model operates in 2 different ways:

- 1) Automatic Operation where tickets are exchanged for prizes
- 2) Manual Operation where an operator will start the game and manually hand out the prizes to the winner.
- 1-3-1. Automatic Operation:

Operational Guideline for Automatic Operation (TICKET REDEMPTION)

NOTE: BE SURE SELECTOR KEY IS SET TO AUTOMATIC OPERATION OR (ON). THIS IS WITH THE KEY STRAIGHT UP AND MEANS THERE IS GOING TO BE NO OPERATOR PRESENT, WHICH REQUIRES 2 PLAYERS TO RACE. (SEE PICTURE TO THE RIGHT)

GAME WILL DISPENSE 2"X4" TICKETS TO THE WINNER

GAME WILL NOT START UNTIL GAME HAS 2 PLAYERS ACTIVATED

AFTER 2 PLAYERS ENTER, THE GAME TIMER WILL START A COUNTDOWN TILL THE START OF THE GAME

THE MORE PLAYERS WHO PLAY THE MORE TICKETS THE PLAYER WINS

2-4 PLAYERS RECEIVE 1 TICKET AND 5-8 PLAYERS RECEIVE 2 TICKETS

PRIZE TICKETS CAN BE REDEMED AT THE REDEMPETION CENTER OR SELECTED LOCATION FOR EXCHANGE OF THE PRIZE WON.

GAME SHOULD HAVE 2 PRIZE LEVELS 1 & 2, THE OVERALL PRIZE VALUE SHOULD EQUAL 25% TO 30% OF THE GAME REVENUE

GAME SHOULD OPERATE IN AUTOMATIC MODE DURING SLOW PERIODS AND BE SWITCHED TO MANUAL MODE DURING PEAK HOURS OF OPERATION



1-3-2. Manual Operation:

Operational Guideline for Manual Operation (WITH OPERATOR AND MANUAL PRIZE HANDOUT)

NOTE: BE SURE SELECTOR KEY IS SET TO MANUAL OPERATION OR (OFF). THIS IS WITH THE KEY FLAT ACROSS AND MEANS THERE 'IS' GOING TO BE AN OPERATOR PRESENT, WHICH REQUIRES 2 PLAYERS TO RACE. WHEN IN THE OPERATOR MODE, IN ORDER TO START A GAME, THE OPERATOR MUST HIT BLACK BUTTON TO START GAME. (SEE PICTURE TO THE RIGHT)

* GAME OPERATOR BASIC JOB REQUIREMENT *

MAKE EYE CONTACT AND BE FRIENDLY WITH CUSTOMERS

TALK TO AND INTERACT WITH CUSTOMERS Ask are they having fun today Ask if they would like to play Ask if they know how to play Ask if you can explain the game to them

EXAMPLES OF WHAT TO ASK THE POSSIBLE CUSTOMERS TO PLAY THE GAME OR ENTICE:

"How you doing would you like to play the game?" "Hey Mom if it is just the two of you, one of you has to win!" "Win stuffed animals here" "Check it out, a brand new game, are you ready to have fun?!."

ENCOURAGE MORE PLAYERS TO JOIN THE GAME

GIVE AWAY PROPER PRIZES TO THE WINNING PLAYER

ENCOURAGE REPLAY AND GAME REPETITION

* HOW AND WHAT TO DO TO MANUALLY OPERATE THE GAME *

- 1. LOCATE OPERATION SELECTOR SWITCH IN GAME
- INSERT KEY AND SWITH GAME TO MANUAL OPERATION MODE Game requires 2 players to be able to start the game Start Button beside selector key switch starts the game Red light indicates LOW WATER warning
 If the red light comes on beside the switch that means that the water level is low. FILL IMMEDIATELY.

WARNING: DO NOT WAIT FOR THE RED LIGHT TO INDICATE THE WATER LEVEL IS LOW. THE WATER LEVEL SHOULD BE VISUALLY CHECKED DAILY.

 ABOVE THE OPERATOR WALKWAY IS THE STOCK BIN LOCATION Unlock the grid doors Lift the grid doors up and over until they lay on top of bin Doors can also be swung up and hooked together to remain open Bins need to have enough merchandise to operate before starting Bins also need to be sorted so proper sizes and type can be located



- WHEN OPERATING GAME DIFFERENT PRIZE LEVELS ARE USED 2-4 players receive a level 1 prize 5-8 players receive a level 2 prize A player can trade 2 level 1 prizes for a level 2 prize Other prize structures can be used but above is a basic operation
- 5. SWITCHING FROM MANUAL TO AUTOMATIC OPERATION Reverse #2 and #3 procedures above

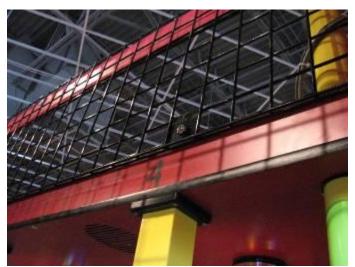
* DAILY OPERATIONAL CHECKLIST *

- 1. ENSURE GAME BINS ARE FULL OF MERCHANDISE (Stock needs to be replenished every day in the stock chute when an operator is working in the game. When an operator is in the game unlock the stock chute and have it open and ready for the operator to hand the winner the prize. The chute will flip all the way over to a 180 degree angle.)
- 2. TURN ON GAME POWER SWITCH
- 3. CHECK LOWER WATER LIGHT AND PHYSICALLY CHECK WATER LEVEL IN WATER TANK
- 4. CHECK TICKET LEVELS IN TICKET DISPENCERS BEFORE OPENING EACH DAY
- 5. CLEAN, WIPE DOWN, AND DRY OFF GAME NIGHTLY OR AS NEEDED
- 6. CHECK ALL LIGHT BULBS FOR WORKING ORDER (THIS INCLUDES TARGET PAN LIGHTS)
- 7. TURN OFF GAME POWER AND UNPLUG THE RUNNING LIGHTS

NOTE: STOCK AVERAGES WILL RUN SLIGHTLY HIGHER WHEN YOU ARE RACING JUST TWO PLAYERS BUT WILL CATCH EVERYTHING UP LATER IN THE DAY WHEN MORE PLAYERS RACE.

* MERCHANDISING RECOMMENDATIONS *

The Water Blast FEC is not designed to be a typical redemption game that gives tickets to redeem in a normal redemption center. The game is designed to be a mass merchandiser for the FEC. BSR has long recognized the fact that when players win and display their prizes won that it fuels the desire of other players to get a prize of there own. With that age-old lesson the game is designed to distribute merchandise directly and quickly to the players. The more quantity of merchandise distributed the more the player will look for where the prizes are coming from and the more the desire to win their own becomes.



OVERHEAD STOCK BIN PICTURED

The idea of the Water Blast FEC is to send as many customers home with a prize as possible in the short window of opportunity. This is something that a traditional redemption machine cannot do consistently. The Water Blast FEC brings the true Midway game to your FEC to be able to operate in both slow and busy times with the ability to mass merchandise.

It is also recommended that the merchandise used in this game is different than what is used in the redemption center, and uses an item that is unique to the Water Blast FEC. This will also avoid the game affecting revenue from the redemption games. The Water Blast FEC is designed to produce incremental revenue and not just take revenue form the other games.

2. PROGRAMMING 2-1. ENTERING PROGRAMMING MODE:

The programming options are readable only by the game operator for the purpose of customizing the game to suit their location.

The operator will press the "PROGRAMMING" button once to enter the programming mode.

The operator will press the "SELECT" button to scroll through the various options that are on the left-hand display.

The operator will press the "STEP" button to scroll through the various settings for each option that are shown on the right-hand display.

The operator will press the "PROGRAMMING" button once again to EXIT the programming mode and save all of the new values to the games memory.



Below is detailed information for the operation of each of the programming options.

PROGRAMMING PANEL

2-2. VOLUME:

This option controls the sound volume for the speaker. The range for this option is **1-6** (6 being the loudest). The default value for this option is 3.

2-3. COINS PER CREDIT (COIN/CR):

This option determines how many coins are needed to earn a credit. Each credit will automatically start a game. The range for this option is **1-10**; the default value for this option is **1**.

NOTE: There is no "free play" option for this game. If free play is desired, set the game to 1 coin per credit and install a momentary contact push button to start the game.

2-4. ATTRACT MODE (ATTRACT TIME):

This option determines how often the attract sounds or (player taunting) will be heard from the game. The range for this option is **0-5** (minutes). Setting a **0** shuts the attract mode off. The default value for this option is **3**.

2-5. JUST FOR PLAYING TICKETS:

2-6. WINNER TICKETS:

This option determines how many tickets the player gets for winning the game. This is a preset option and the only option is "1". For 2-4 player

2-7. GAME TIME TO WIN:

This option determines how many seconds it takes to win the game when the target is kept depressed. The range for this option is 5-20 seconds. The default value for this option is "12".

2-8. TIME OUT:

This option determines how many seconds of inactivity (target not depressed) are necessary for the game to automatically end. The range for this option is 30, 40, 50, 60, 70, 80 or 90 seconds. The default value for this option is "30". NOTE: If the game auto ends, no tickets will be dispensed and there are no "winners".

2-9. DRAIN WATER:

This option is used as a convenient way to run the pump when setting up, changing water, or draining the game. Pressing the VALUE button will turn the pump on or off. The options are 00 or 01. 00 being off and 01 being on.

2-10. LINK ID:

This option is based on how many boards are being used in the game. The value determines which players are assigned to each board. (*Ex. Board 1 would control players 1 and 2. Board 2 would control players 3 and 4. Board 3 would control players 5 and 6. And so on...*)

The range for this option is 0-4 since there can be up to 4 boards allowing for 8 players. "1" is the factory default value.

2-11. MONEY:

This option determines whether the board is set up for Coin Play or for a Card Swipe. The options for this setting are 0 or 1.0 sets the game up for Coin Play, while 1 sets the game up for a Card Swipe. "1" is the factory default for the Money option.

2-12. RESET: (Default programming value - reset)

This option will reset the game to factory default values. The range for this option is 0-1. Setting a "1" will reset the values to factory default. The default value for this option is "0".

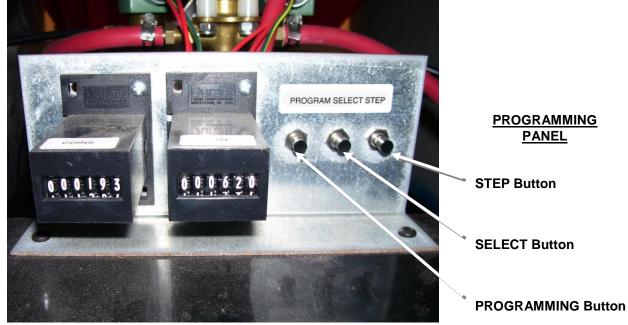
STANDARD ARCADE OPTIONS				
REGISTER MIN/MAX		BSR	ACTUAL	DESCRIPTION
Volume	1-6	3		Volume Control
Coins/Credit	1-10	1		Number of Coins per Game
Attract Mode	1-5	3		Minutes Between Bally Music
Default Tickets	0	0		Tickets Just for Playing
Winner Tickets	1	1		Winning Tickets Per game
Time to Win	5-20	12		Time to Win in Seconds
Time Out	30, 40, 50, 60, 70, 80, 90	30		Time of Inactivity/Auto Win
Drain Water	0-1	On/Off		Pump ON/OFF (Manual)
Link ID	1-4	1		Controls which board number
Money	0-1	0		Coin Play or Coin Swipe
Reset Defaults	0-1	0		Reset Factory Default Settings

2-13. PROGRAMMING OPTIONS:

2-14. REPROGRAM LINKING GAMES (ALSO COVERS HOW TO RESET SETTINGS):

(RESETING THE BOARDS)

- 1. Unplug all the networking cables running from each board to another. (They are the cables that resemble phone cables)
- 2. Go to the main control board (the board for players 1 and 2). Enter the programming mode by pressing the PROGRAMMING button. (The first black button on programming panel to the left)

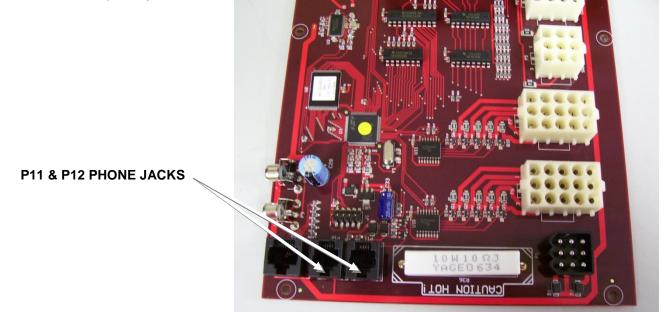


- 3. After entering the programming mode, press the SELECT button (The center black button on the programming panel) until the first two front displays read "Reset Defaults".
- 4. Once the first two front displays read "Reset Defaults" press the STEP button until the corresponding displays read a 1 at the bottom.
- 5. To lock in the change to the settings press the SELECT button and then to exit the programming mode press the PROGRAM button.

6. Proceed to the next control board and follow the exact steps for that board starting at step #2 above, and proceed through to step #5. (Continue in this fashion for the remainder of the boards.)

(REPROGRAMMING THE BOARDS)

7. Once all stations have been reset, reconnect all of the phone cables to each board. The cables must be plugged into P11 or P12 phone jacks.



- 8. Once all the phone cables are plugged back into the proper jacks go back to the board one, which is the main control board (the board for players 1 and 2) and enter the programming mode once again by pressing the PROGRAMMING button on the programming panel. And press the SELECT button (The center button on the programming panel) until the corresponding displays read "Link ID".
- 9. Once "Link ID" is visible on the corresponding displays (If networked properly) the corresponding display should read a "1" to express that the board has been set to "board 1"
- 10. Proceed to the next boards control panel, make sure the corresponding displays still read "Link ID" and press the STEP button to set that specific board to show a 2 for board 2. (Do this for the following boards setting the "Link ID" to 3 for board 3 etc. etc. for however many boards your game has, up to 4 boards)
- 11. Go back to the main control board (the board for players 1 and 2) and press the PROGRAMMING button to get out of the programming mode.
- 12. Once the game links up and you see the displays go through a brief track mode (the game will light up several ways) you should see the displays list the unit #s 1-8 (for a 8 player game) at the bottom.

NOTE: TO RESET DEFAULTS FOLLOW INSTRUCTIONS STARTING AT #3, GOING INTO THE PROGRAMMING MODE AND PRESS THE SELECT UNTIL THE FIRST TWO FRONT DISPLAYS READ "RESET DEFAULTS" THEN PRESS THE "STEP" BUTTON.

3. MAINTENANCE AND TROUBLESHOOTING

3-1. Quick Troubleshooting:

For your safety and to reduce risk of damage to your game read the Important Safety Information in Chapter 1-2 before attempting any troubleshooting procedure.

TROUBLESHOOTING PHILOSOPHY

When troubleshooting any product, certain general guidelines should be followed.

1. Always check to be sure that you game is turned on. Be sure that all of the fuses in the game are functional and check to see that the AC voltage is in the proper operating range for your game.

2. Check to be sure that all of the game harnessing is plugged in properly and that all of the pins are firmly seated in the connectors. It is always possible that a harness can be damaged by rough shipping or moving.

3. Check game harnessing to be sure that none of the wires have become damaged. Using a handheld multi-meter, check continuity of the wires to make sure they are not broken.

4. Check for obvious damage to any P.C. Boards or electrical components.

5. If you have multiple games or multiple parts on a game, change or exchange the parts and see if the problem goes away or moves to another location. This way you can quickly eliminate certain parts as being the problem with the game.

6. When changing electronic or electrical components, ALWAYS turn off and unplug the game.

7. Check to see that all power supplies are delivering the specified voltages to the P.C. Boards and components as shown in the manual.

For detailed servicing and repair information see the full the full repair section of this manual.

Symptom	Possible Problem	Solution
	Power	Power
Sound Problems	Low Volume	Check Volume Control and adjust as necessary
-No sound	Faulty speaker harnessing	Check connections and/or repair harnessing
-Low Sound	Faulty speaker	Check and/or replace speaker
-Intermittent Sound	Faulty sound board or sound board harnessing	Check connections or Replace Sound Board
	Faulty Main P.C. Board	Check and/or repair or replace Main P.C. Board
Game does not take or add	Card Swipe dirty or improperly adjusted	Clean and adjust Card Swipe as necessary
money correctly	Faulty Card Swipe	Check and/or replace Card Swipe
	Faulty Card Swipe harness or connector	Check and/or repair Card Swipe harnessing
	Improperly programmed electronic mech	Reprogram or replace electronic mech
	Game improperly programmed	Check programming options and adjust
	Faulty Main P.C. Board or component	Repair and/or replace Main P.C. board
Ticket Dispenser not	No tickets in the game	Refill ticket dispenser and press the reset button
working properly, or no	Tickets jammed in dispenser	Clear ticket jam
tickets being dispensed	Ticket dispenser sensor blocked with debris	Clean off sensor
	Poor connection on the ticket dispenser	Check and/or replace connectors
	Game improperly programmed	Check ticket programming options
	Faulty ticket dispenser	Replace dispenser
	Faulty ticket dispenser harnessing	Check and/or repair harnessing
	Faulty Main P.C. Board	Replace or repair Main P.C. Board
Game will not start or pump	Game power off	Check on/off switch and power cord
will not run	Main fuse blown	Check and/or replace fuse as necessary
	Faulty solid state relay	Check and replace solid state relay
	Faulty pump	Check and replace pump
	Power Supply problem or failure	Check Power Supply output and connections
	Faulty P.C. board or component	Repair and/or replace main P.C. board
Game stops or is stopped	The power connector is disconnected.	Reconnect the connector securely.
with nothing displayed	Possible faulty connection or short circuit.	Check all circuitry for faulty connections or short circuits.
		onound.
Water stream crooked or	Clogged gun tip	Check and clean gun tip
weak	Partially clogged filter	Check filter and clean if necessary
	Kinked hose	Check all hoses
	Low water level or no water	Check water level and fill if necessary
Display lights won't move	Faulty target switch	Check target switch
Display lights worth move	Faulty or disconnected harness	Check and repair harnessing
	Faulty Main P.C. board	Repair or replace main P.C. board
		Repair of replace main F.C. board
Water not coming out of gun	Clogged gun tip	Clean tip with paper clip
	Kinked hose	Check hoses for kinks
	Low water level or no water	Check water level and fill if necessary
	Faulty solenoid valve	Check or replace solenoid valve
	GFI circuit tripped	Start game and push GFI reset button
	Faulty Pump	Repair or replace pump
	Faulty Main P.C. board	Repair or replace Main P.C. Board
		Ohadu aanaa taa
Programming button and	Disconnected programming	Check connector
counters	Panel harness	Check connector

3-2. Detailed Troubleshooting and Repair:

3-2-1. Glass Cleaning:

1. Clean the inside of the glass with a plastic scrub pad to remove dirt and sediment from the glass. DO NOT use any steel wool or scotch bright pads as these will damage the plastic side glass panels.

NOTE: IF THE GLASS IS BADLY STAINED, USE C.L.R. MINERAL REMOVAL. SPRAY FIRST TO GET RID OF TOUGH MINERAL DESPOSITS.

2. Spray RAIN-X on the inside of the glass to help prevent minerals from forming on the glass.

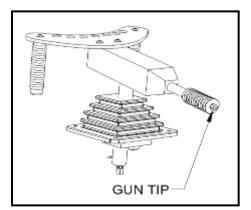
3. Clean the outside of the glass with any good commercial glass cleaner.

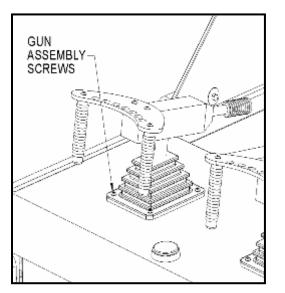
3-2-2. Cleaning Gun Parts:

It is possible after extended periods of time, or if the water you use is very high in mineral content, that you may have to clean deposits or debris from the gun assembly.

1. To clean the gun tip, try cleaning with a paper clip first. If that doesn't work, unscrew the tip to clean. (See image to the right)

2. For larger debris, unscrew the gun assembly from the top of the control panel. Disconnect the spring from underneath. (See image below)





3. Remove the hose and nozzle tip from the gun.

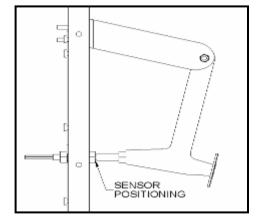
4. Run a coat hanger or thick wire through the gun passages to remove any blockage.

- 5. With the tip off the gun, re-install the gun and connect the hose.
- 6. Play a few games to allow any debris to escape the gun body.
- 7. Re-install the gun tip and check for proper operation.

3-2-3. Target Sensors:

- 1. Unscrew the target pan from the game.
- 2. Unscrew the magnetic sensor from the tank back.
- 3. Unplug the sensor.

4. Re-install the new sensor using the other sensor as a guide to proper positioning. (See image to the right)



- 5. Check for proper alignment between the magnetic sensor and the magnet that is located on the target arm.
- 6. Re-install the target pan.
- 7. Play a couple of games to check for proper operation.

3-2-4. Display P.C. Board Removal and Installation:

WARNING: BE SURE TO UNPLUG THE GAME BEFORE SERVICING TO AVOID SERIOUS INJURY OR DAMAGE TO THE GAME.

- 1. Unplug selected display from Main P.C. Board
- 2. Remove the 4 screws on the mounting bezel at the top and bottom of the display.
- 3. Tilt the display back and slide the harness out from the counter.
- 4. Assemble in reverse order.

3-2-5. Display P.C. Board Servicing

- 1. Slide the display filter (Plexiglass cover) out of the housing.
- 2. Remove the 8 bolts that hold the Display mounting bracket to the Display housing. (See image to the right)
- 3. Slide the mounting bracket out of the housing.
- 4. Remove the connectors and defective display P.C. Board.
- 5. Assemble in reverse order.

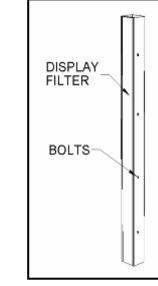
4. PARTS LISTING

MECHANICAL PARTS

ARWB1017	GUN BODY
ARWB1018	GUN HANDLE MOUNT
ARWB1019	WATER GUN HANDLE
ARWB1020	GUN MOUNTING PLATE
ARWB1021	GUN BOOT BEZEL (STAINLESS)
ARWB1025	TARGET MOUNTING BRACKET
ARWB3001	WATER GUN SWIVEL BLOCK
ARWB3016	TARGET PIVOT SWING
ARWB3017	TARGET DISK
ARWB6002	PRESSURE GAUGE
CX800085	DISPLAY FILTER (SMOKED GREY)
M0006905	GUN CENTERING SPRING
MX006103	GUN BARREL TIP
MX006330	GUN BARREL
MX007203	PAINTED TARGET PAN ASSEMBLY

GRAPHICS / DECALS

	SERVICE MANUAL
ARWB7017	LEVER DECAL "DRAIN"
ARWB7018	LEVER DECAL "GAME"

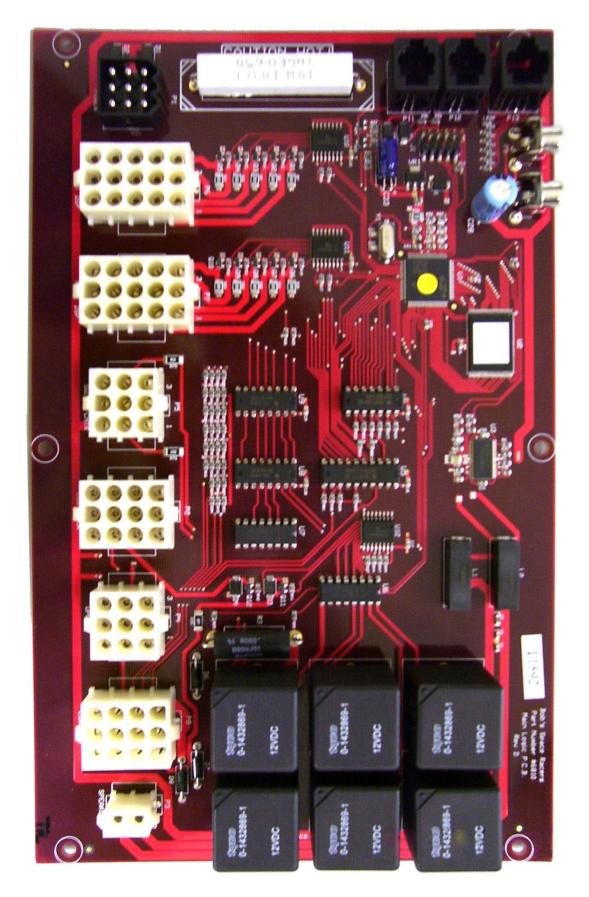


ELECTRONIC / ELECTRICAL PARTS

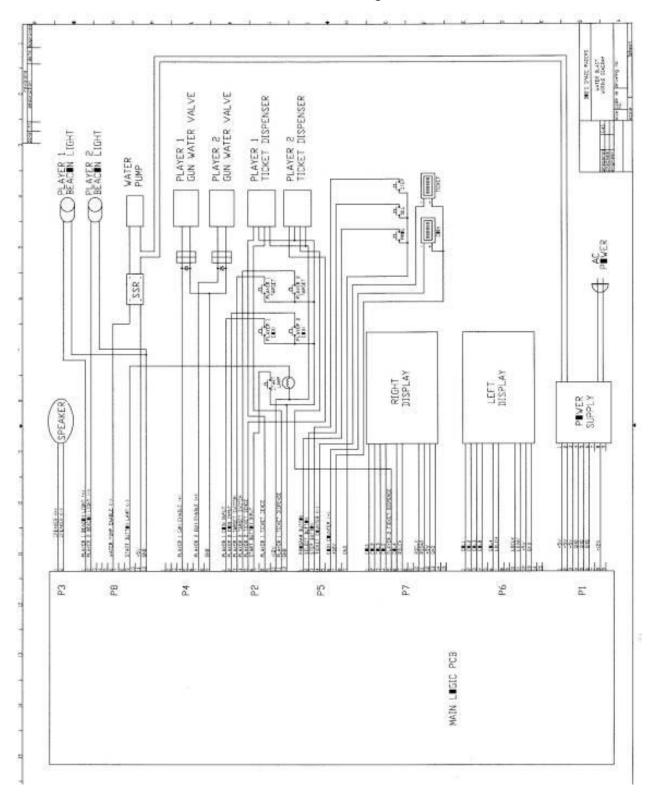
		K (FEC)MAIN P.C. BOARD
	ARWB2002	MAGNETIC TARGET SENSOR
	ARWB2003	TARGET MAGNET
	ARWB2004	MARQUEE LIGHT FLASHER
	UNIT	
	ARWB6001	1/2 HP PUMP ONLY
	E0025100	12 VOLT COUNTER
	E0028300	TURBO BULB (FLASHING
	LIGHTS)	
	E0030630	BEACON LIGHT BASE
	E0030632	BEACON LIGHT CHROME RING
	E0030635-RED	BEACON LIGHT RED DOME
	E0070012-CLR	LENS BODY (FLASHING LIGHTS)
	E0070015-CL	CLEAR LENS CAP
	E0070016-BL	BLUE LENS CAP DOT
	E0070016-RED	RED LENS CAP DOT
	E0070016-YE	YELLOW LENS CAP DOT
	E0800044	BULB RETAINING CLIP
	E0800070	6" X 9" SPEAKER
	E0800157	DISPLAY P.C. BOARD
ļ	E0800201	200 WATT POWER SUPPLY

BOB'S SPACE RACERS [®]

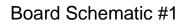
Main P.C. Board (Linkable) Part# ARWB2001-LINK

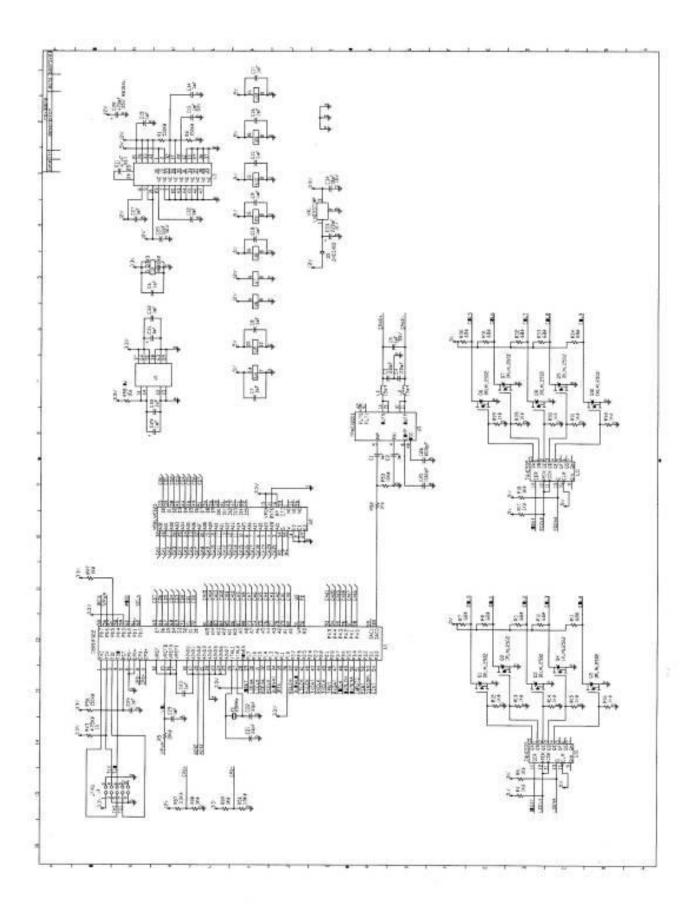


5. SCHEMATICS

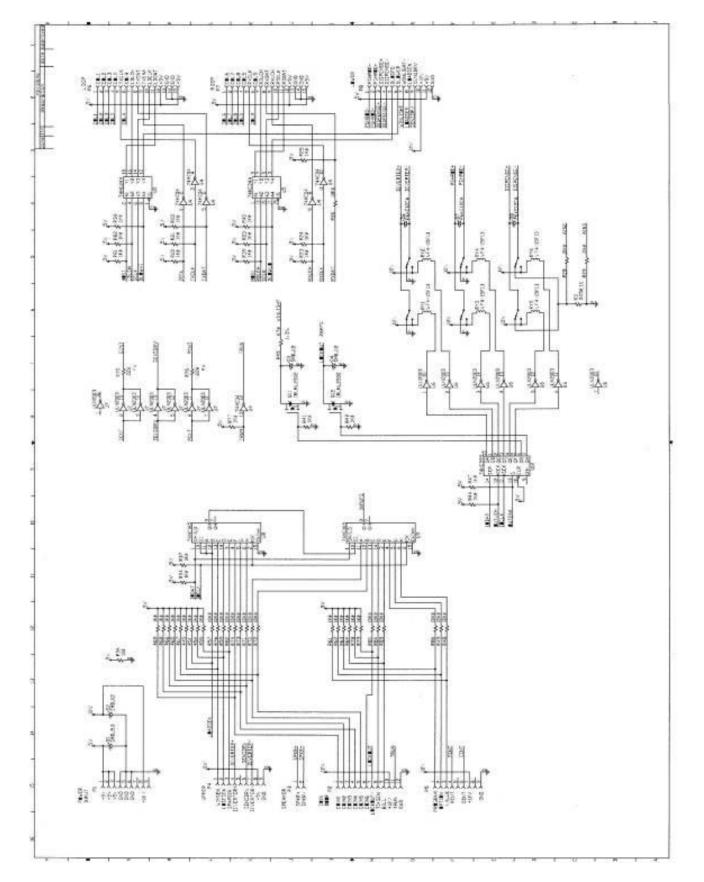


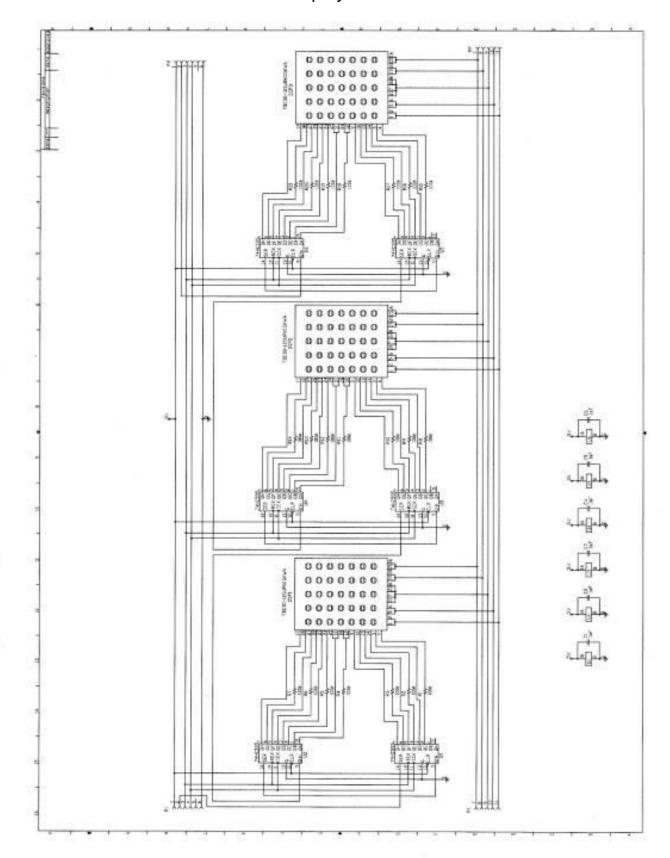
Water Blast Wiring Harness





Board Schematic #2





LED Display Schematic

6. WARRANTY

BOB'S SPACE RACERS INC. 90 DAY COIN-OPERATED GAME WARRANTY

1. INCLUDED IN THIS WARANTY Bob's Space Racers[®], Inc. warrants to the original purchaser only that the equipment that is the subject of this sale conforms to its specifications, and is free from defects under normal service for a 90 day period from the original date of deliver. This warranty does not include any damages resulting from occurrences listed in paragraph 2 below. This warranty is not transferable under any circumstance. Any claims under this warranty must be received in writing by Bob's Space Racers[®], Inc. within 120 days from date of delivery. Within a reasonable time of such written notification Bob's Space Racers[®], Inc. will replace or repair any defective component of the equipment or part thereof which fails for reasons other than normal service, use, or wear. Bob's Space Racers[®], Inc. reserves the right to request dated proof of purchase by the end user (original purchaser) at any time. Light bulbs are specifically excluded from this warranty and shall be the sole responsibility of the purchaser. Bob's Space Racers[®], Inc., within its sole discretion, makes the final determination as to whether to repair or replace any component and whether any such repair or replacement shall be performed where the equipment is located or at it's home facility in Volusia County, Florida, or another facility of its sole choice. Any and all freight charges for the purposes of repair or replacement shall be paid by the original purchaser. All defective parts shall be returned to Bob's Space Racers[®], Inc. if requested. Bob's Space Racers[®], Inc. does not warrant that the equipment will meet any original purchaser's specific requirements or that the operation of the equipment will be uninterrupted. These remedies are the original purchaser's exclusive remedies for breach of warranty.

2. EXCLUDED BY THIS WARRANTY Bob's Space Racers[®], Inc. does not warrant (a) any product, components or parts not manufactured by Bob's Space Racers[®], Inc.; (b) damages caused by use of the equipment for purposes other than those for which it was designed; (c) defects caused by failure to provide a suitable installation environment for the equipment; (d) damage caused by unauthorized attachments, modification, or service; (e) damage caused by normal wear and tear or improper power supply; (f) damage caused by accident or disaster such as fires, flood, lightning, and wind; or (g) any other abuse or misuse of the equipment.

3. EXCLUSIVE WARRANTY. THE FORGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OR REMEDIES, WHETHER WRITTEN, ORAL OR IMPLIED. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF DEALING OR USAGE OF TRADE ARE HEREBY EXPRESSLY DISCLAIMED AND EXCLUDED.

4. REMEDIES LIMITED. UNDER NO CIRCUMSTANCES, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, SHALL BOB'S SPACE RACERS[®], INC. BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, SPECIAL INCIDENTAL OR CONSEQUENTIAL ARISING OUT OF THE USE OR INABILITY TO USE THIS EQUIPMENT INCLUDING BUT NOT LIMITED TO ANY CLAIM FOR LOSS OR PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF USE OF THE EQUIPMENT, OR ANY ASSOCIATED EQUIPMENT, FACILITIES OR SERVICE, DOWNTIME, THE CLAIMS OR COSTS OF THIRD PARTIES INCLUDING CUSTOMERS AND INJURY TO PROPERTY. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

5. NO OTHER WARRANTIES. Unless modified in writing and signed by both parties, this agreement is understood to be the complete and exclusive agreement between the parties, superseding all prior agreements, oral or written, and all other communications between the parties relating to the subject matter of this agreement. No employee or representative of Bob's Space Racers[®], Inc. or any other party is authorized to make any other warranty or to assume any other liability in connection with the sale of its equipment.

6. TIME LIMIT FOR CLAIMS. Any claim for breach of warranty or claims under this warranty must be received in writing by Bob's Space Racers[®], Inc. within 120 days following delivery of the equipment.

7. FUTURE CHANGES. Bob's Space Racers[®], Inc. reserves the right to reserve, change or modify the construction and design of its equipment or any component part or parts thereof without incurring the obligations to make such changes or modifications in present equipment.

8. ALLOCATION OF RISKS. This agreement allocates the risks of equipment failure between Bob's Space Racers[®], Inc. and the original purchaser. This allocation is recognized by both parties and is reflected in the price of the goods. THE PURCHASER ACKNOWLEDGES THAT IT HAS READ THIS AGREEMENT, UNDERSTANDS IT, AND IS BOUND BY ITS TERMS.

9. TO OBTAIN WARRANTY SERVICE. The original purchaser must, at his/her own expense, bring or ship the equipment to an authorized location for service. Additionally, the original purchaser must pay all freight, shipping or transportation charges for the return of the equipment from Bob's Space Racers[®], Inc. to the original purchaser. Telephone or write:

Bob's Space Racers[®], Inc. 427 15th Street Daytona Beach, FL 32117 Telephone number: 386/677-0761 FAX: 386/677-0794

WHEN CALLING FOR SERVICE

1. When calling for service, please check the service manual first. Many times the answer to your problem has been addressed in this documentation.

2. Please make sure you have the serial number of the game ready when you call.

3. If this is a repeat call, please tell the service technician that you have made a previous call regarding this problem. This way we will be able to retrieve the history on your game allowing us to serve you better and save you time.

4. Please retain proof of purchase for your product. This might be requested for warranty repairs.

5. Please call from the game if possible since we might need you to check certain things on the game while we are on the telephone with you.

IF YOU HAVE ANY QUESTIONS OR COMMENTS, PLEASE CALL OUR SERVICE DEPARTMENT AT

(386) 677-0761

(MONDAY – FRIDAY, 8:30AM – 5:00PM EST, EXCLUDING HOLIDAYS)

(or)

EMAIL QUESTIONS TO: Tech@BobsSpaceRacers.com

(or)

VISIT THE "CUSTOMER SUPPORT" SECTION ON OUR WEBSITE: WWW.BOBSSPACERACERS.COM