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# BSR-3000 Roll-A-Ball™



**Operator's Manual** 

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# A. Introduction

#### A.1 Overview

This manual contains informative information about Roll-A-Ball<sup>TM</sup>. Such as: Setup, instructions how to play, printing the accounting report, maintenance, tech tips, troubleshooting, game options settings, and service. Appendixes A-C contain information about policies, warranty, and service. Appendix D has a choice selection of parts pertaining to this specific game.

### A.2 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.

# A.3 Maintenance for the games

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

### A.4 Average Power Requirements Amperage & Watts will vary depending on game.

					Service Power
		Voltage	Amps	Watts Hertz	Recommendation
A.4.1	Domestic Game Power:	$110V \pm 10V$	~ 8.0 Amps	~ 960 W at 60Hz	15 Amps
A.4.2	Domestic Water Pump Power:	$220V \pm 10V$	~ 9.6 Amps	~ 2112 W at 60Hz	15 Amps
A.4.3	Domestic Lights Power:	$110V \pm 10V$	~ 5.0 Amps	~ 600 W at 60Hz	10 Amps
A.4.4	Export Game Power:	220V + 10V	~ 5 0 Amps	~ 1100 W at 50/60Hz	10 Amps
A.4.5	Export Water Pump Power:				15 Amps
A.4.6				~ 600 W at 50/60Hz	10 Amps

#### **WARNING!**

Ensure that this product is compatible with your facilities power supply, voltage and frequency requirement. A label describing Electrical Specifications is attached to the product. Non-compliance with the Electrical Specifications can cause a fire and electric shock. Ensure the game is level before applying power.

# A.5 Check Packing List

Check the packing list prior to installation. Verify that all parts that have been received and are in good condition.

# B. Setup

# B.1 The initial setup up of the game.

B.1.1 Initial setup involves clearing a spot for the game.

B.1.1.1 Ensure the game is level.

B.1.1.2 Make necessary game connections.

B.1.2 Hook up the power to the game.

B.1.3 Test each unit separately on the game. See chapter one.

B.1.3.1 Ensure all players work properly.

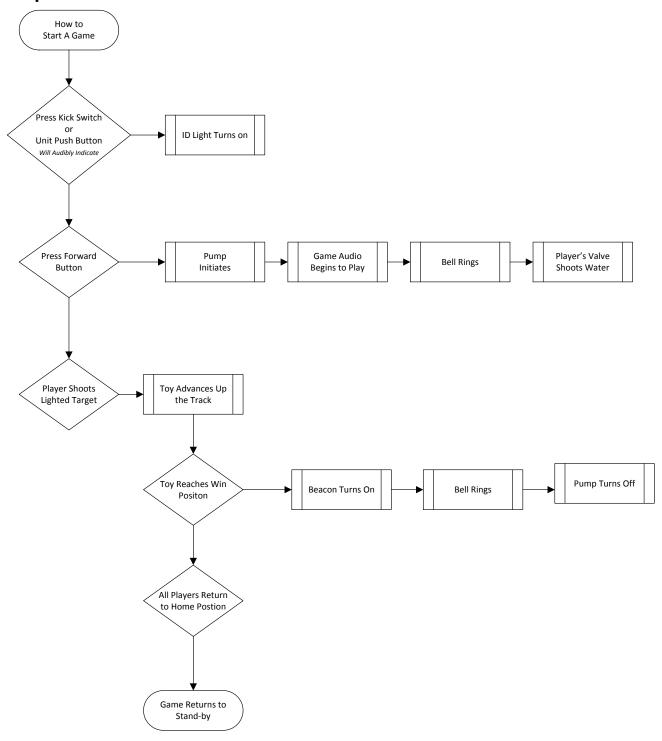
Note: If there is a problem, call BSR's tech support: 386-677-0761.

# **Chapter 1: Operator's Procedures**

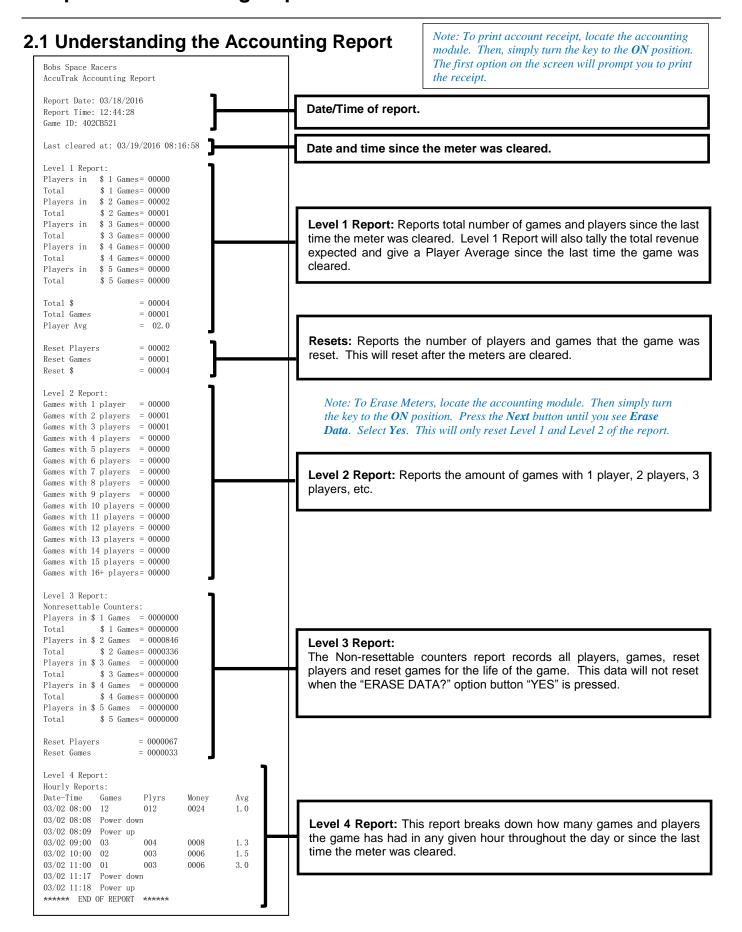
# 1.1 Object of Game.

Shoot lighted target with water gun. This will advance the toy upwards. Players shoot the target until the toy reaches the win position.

# 1.2 Operate / Race



# **Chapter 2: Accounting Report**



# **Chapter 3: Maintenance**

#### 3.1 Maintenance Recommendations

- 3.1.1 Clean the outer surfaces of the game with a commercial spray type cleaner.
- 3.1.2 **DO NOT USE** commercial chemical sprays on vinyl graphics.
- 3.1.3 **DO USE** a good quality spray type furniture polish to keep the game looking good.
- 3.1.4 Vacuum the inside of the game occasionally to help keep the dust and ticket debris off of all the electronics.

# 3.2 Periodic Maintenance Never Add Lime-Away ®, bleach, or any other corrosives to cleaning solutions.

- 3.2.1 Daily Cleaning
  - 3.2.1.1 Cleaning Formica (Clean-On-The-Go Glass®, De-Solve-It®, Furniture Polish, Baby oil)
  - 3.2.1.2 Cleaning Glass (Windex®, Clean-On-The-Go Glass®, Brillianize®)
  - 3.2.1.3 Cleaning Stainless Steel (Clean-On-The-Go Glass®, Furniture Polish, Baby oil)
  - 3.2.1.4 Cleaning Plexiglas® (De-Solve-it®, Brillianize®, 3812S Enamel Reducer®)
  - 3.2.1.5 Cleaning Other Metals (Soft Scrub®, Furniture Polish, Baby oil)

#### 3.2.2 Daily & Monthly Check

- 3.2.2.1 Check all individual unit push buttons.
- 3.2.2.2 Check all ID lights.
- 3.2.2.3 Check to see that each unit turns on and wins when played by shooting each gun.
- 3.2.2.4 Check all lights.
- 3.2.2.5 Check all microphone and sound equipment. Working and physical condition.
- 3.2.2.6 Check Accounting system. See Chapter 6 for more information.
- 3.2.2.7 Check each target switch for activation and proper motion.
- 3.2.2.8 Check to see that all guns work properly. Repair as needed.

#### 3.2.3 Yearly. *Includes daily, weekly, and monthly maintenance.*

3.2.3.1 Run the game in bally mode. Lubricate sprockets as needed.

# **Chapter 4: Tech Tip**

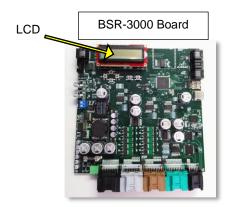
# **4.1 Tech Tip Introduction** A tech tip is a simple guide to quickly identify game problem(s) and how to resolve them.

4.1.1 Section **4.2.1** will discuss the common errors that can happen on the BSR-3000 board. *Note: If at any time you require more assistance, please do not hesitate to call tech support: 386-677-0761.* 

#### 4.2 3000 Electronics Error Codes

#### Introduction

On the 3000 Electronics the LCD Flashes red on the master board and on unit(s) boards that malfunction.



### Tools Needed

- ¼ inch socket screwdriver
- > #2 Phillips Screwdriver
- Pliers

Figure 1.

Note: On the Back of the game, the Master board can be labeled as **Master Board**, **Master**, or **M**. The master will display the error. The boards with the error, the LCD, will turn **Red**.

#### 4.2.1.1 Error: Win Switch Error

 Win switch error will have the master and specific unit's board flash red.

#### Master

RAB3K.V20 ERROR UNIT:1 Unit

RAB3K.V20 NoSD ERROR:WIN ID=1

#### 4.2.1.2 Error: Home Switch Error

 Home switch error will have the master and specific unit's board flash red.

#### Master

RAB3K.V20 ERROR UNIT:1

#### Unit

RAB3K.V20 NoSD ERROR:HOME ID=1

#### 4.2.1.3 Error: *Target Switch Error*

 Target switch error will have the master and specific unit's board flash red.

#### Master

RAB3K.V20 ERROR UNIT:1

#### Unit

RAB3K.V20 NoSD ERROR:TARGET = 1

#### 4.2.1.4 Error: Communication Switch Error

 Communication switch error will have the master and specific unit's board flash red.

#### Master

RAB3K.V20 COMM ERROR

#### Unit

RAB3K.V20 NoSD COMM ERROR ID=1

Note: For a solution see Chapter 7 section 2.

# **Chapter 5: Troubleshooting**

### **5.1 Troubleshooting Philosophy.** When troubleshooting any product, certain general guidelines should be followed.

- 5.1.1 Always check to be sure that your game power is turned on. Ensure that all of the fuses in the game are functional and that the AC voltage is in the proper operating range for your game.
- 5.1.2 Ensure 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.
- 5.1.3 Inspect game harnessing to be sure that none of the wires have become or are damaged. Utilize a handheld multi-meter, and check continuity of the wires to make sure they are not broken.
- 5.1.4 Inspect for obvious damage to the P.C. Boards or electrical components.
- 5.1.5 If you have multiple similar games or multiple parts for a game, swap or exchange the parts to see if the problem goes away or moves to another location. You can quickly eliminate certain parts as being the problem within the game.
- 5.1.6 When changing electronic or electrical components, ALWAYS turn off all external power and unplug the game.
- 5.1.7 Ensure that all power supplies are delivering the specified voltages to the P.C. Boards and components as shown in the manual.

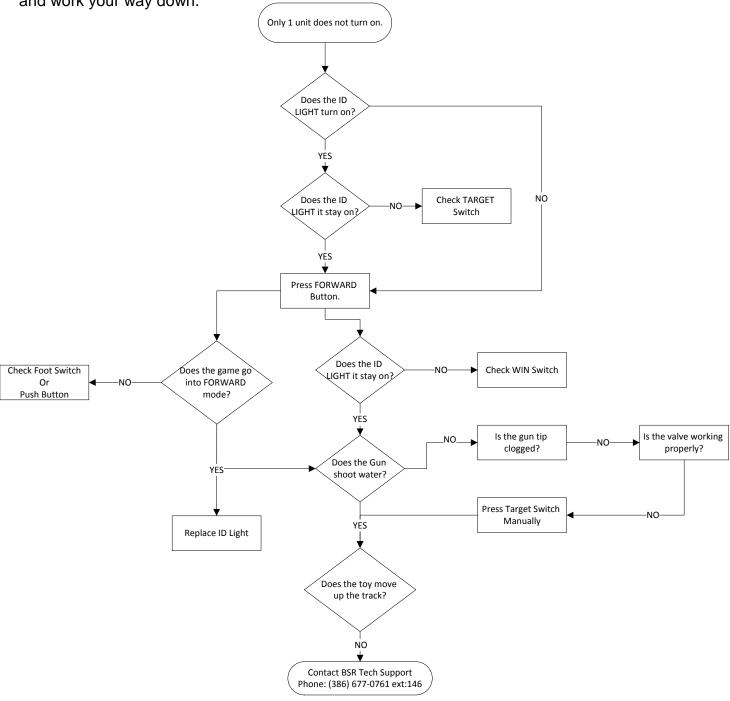
# 5.2 Unit(s) Troubleshooting Flowchart

#### Introduction

This is a flowchart that will provide easy solutions based on a "Yes" or "No" response. Start from the top and work your way down.

#### Step 1 Start at the Beginning

- Each question has a response.
- "Yes" or "No"



# **Chapter 6: Options Settings – BSR 3000 Electronics**

BSR Roll-A-Ball™ Program: RAB3K.V20 Revision Approved January 3, 2017

Name	Description	Default	Min	Max
UNIT ID NUMBER	Each Unit(s) ID assignment. When Programmed: 0 = Master   33 = Factory Reset Default ID Number	0	0	32
# of Players	Set to the total number of players in a game. << FEC only supports up to 12-players>>		1	32
Game Volume	The decibel level of the output audio	8	1	10
Bell Volume	The decibel level of the bell audio	10	0	10
Bell Time	The amount of time the bell is active. << In Seconds>>	2	2	6
Win Lite Time	The amount of time the beacon is active. << In Seconds>>	10	1	12
Win Lite Chase	Turns win globe chasing on and off. $0 = Off / 1 = On$	1	0	1
Forward Speed	Sets the speed how quickly the Toy(s) or LEDs move up the track. Lower the number the faster it goes.	40	25	90
Reverse Speed	Sets the speed how quickly the Toy(s) or LEDs return to the home position. Lower the number the faster it goes.	35	25	90
Track Length	This is specific to this game's track length or LEDs. << In Inches>>	113	2	180
Attract Mode	NOT USED FOR GROUP GAME << Leave at Default Value >>	1	0	1
Attract Interval	The time it takes from the game is turned on until the start of attract mode. << In Minutes>>	3	0	30
Cost Per Play	Dollar amount displayed on Dollar Sign and used for accounting.	2	1	5
Game Time Limit	When a game starts and if inactive will run for a set time. << In Seconds>>   Factory Default is 90 seconds	90	0	180
Game Difficulty	NOT USED FOR GROUP GAME << Leave at Default Value >>	1	0	5
Money Prompt	NOT USED FOR GROUP GAME << Leave at Default Value >>	0	0	1
Stack Credits	NOT USED FOR GROUP GAME << Leave at Default Value >>	0	0	1
Ticket Mode	NOT USED FOR GROUP GAME << Leave at Default Value >>	0	0	2
Winner Ticket	NOT USED FOR GROUP GAME << Leave at Default Value >>	0	0	300
Minimum Ticket	NOT USED FOR GROUP GAME << Leave at Default Value >>	0	0	25
Ticket Divider	NOT USED FOR GROUP GAME << Leave at Default Value >>	1	1	2
Reset Defaults	Allows User to reset the board to its default settings. If need, set option to "1" and then press ENTER	0	0	1

#### **WARNING!**

DO NOT ENTER PROGRAMMING MODE UNLESS YOU ABSOLUTELY HAVE TO!

Inadvertently, changing program settings can cause undesirable results to your game. Bob's Space Racers® Inc. has set these options to achieve the highest turn-around time and optimal game performance.

### **Programming Mode**

1. Locate the Master Board.

Note: This is located on the backside of the game. It may be labeled Master, Master Board or M.

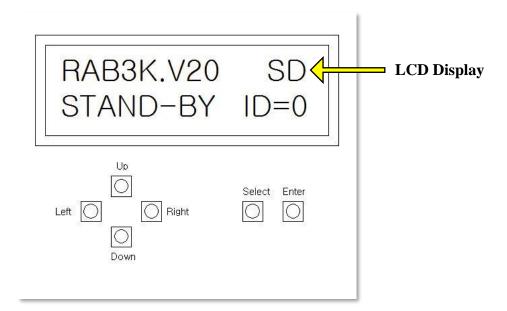
- 2. Hold down the **Select** and **Enter** buttons for 4 seconds to enter program mode.
- 3. Press either *Up* or *Down* to scroll through the options.
- **4.** Press either *Left* or *Right* to change the options value.

Note: Changing the value, sets and saves the value.

**5.** Press the **Select** button to exit programming mode.

Note: While programing, the master board has a timed limit and if left idle, the master board will exit programing mode.

For further assistance, please call Bob's Spacer Racers Technical Support at 386-677-0761 ext:146 or e-mail at tech@bsrgames.com.



# **Chapter 7: Service**

### 7.1 Calling for Service

- 7.1.1 When calling for service, please check the operator's manual first. You may find a solution to your problem within this manual.
- 7.1.2 Please make sure you have the serial number of the game ready when you call.
- 7.1.3 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 efficiently serve you better.
- 7.1.4 Please retain serial number for your product. This may be requested for warranty repairs.
- 7.1.5 If at all possible, please call us from and with access to the game as we may need you to check certain things on the game while we are on call with you.

### IF YOU HAVE ANY QUESTIONS OR COMMENTS PLEASE CALL BSR.

#### **BSR's Parts Contact Info**

Phone: 1-(386) 677-0761 Opened: Monday – Friday Office Hours: 8:30AM – 5:00PM EST E-mail: Parts@bsrgames.com EXCLUDING HOLIDAYS

#### **BSR's Tech Contact Info**

Phone: 1-(386) 677-0761
Opened: Monday – Friday
Office Hours: 8:30AM – 5:00PM EST
Has afterhours support, charges may apply.
E-mail: Tech@bobsspaceracers.com
EXCLUDING HOLIDAYS

Visit Our Website for More Information WWW.BOBSSPACERACERS.COM
A great resource on our website is the CUSTOMER "SUPPORT" page.

# **Appendix A: Policies**

### A.1 Service Policy

A.1.1 Here at BOB'S SPACE RACERS® INC., we pride ourselves in providing the highest quality, long lasting, and easy to maintain equipment.

A.1.2 Technical Support Service hours are from 8:30 am to 5:00 pm, EST, Monday through Friday, excluding holidays. The direct technical number is (386) 677-0761 ext:146. During all other times, follow the prompts on our Automated Phone System to relay your problem to the technician on call. Technical Support will assist you in troubleshooting a service problem or setting equipment options.

A.1.3 You can also e-mail your technical question to: tech@BobsSpaceRacers.com.

A.1.4 Customer Service hours are from 8:30 am to 5:00 pm, EST, Monday through Friday, excluding holidays. Customer Service staff can be reached at (386) 677-0761. They will also take parts orders and research the status of previous orders.

# A.2 Replacement Policy

A.2.1 After speaking with our Technical Department it may be necessary for Bob's Space Racers® Inc., to ship an assembly item or part to repair your game.

Note: We will not ship anything to P.O. Boxes via the US Postal Service. You will be billed per your account status for the total cost of the shipment, which includes shipping charges.

A.2.2 Upon shipment of the new item(s) a Return Merchandise Authorization Number (RMA #) will be issued for you to use when returning the defective item(s) to Bob's Space Racers® Inc., or you may use the order number. After the defective item(s) is received by Bob's Space Racers® Inc. your account will be issued either a:

A.2.2.1 Warranty credit: if your game is under warranty. See the Warranty Policy page.

Note: this credit does not include return shipping charges.

A.2.2.2 Credit for the item(s).

Note: this credit does not include return shipping charges, nor does it include the repair charges for the item(s).

# **Appendix B: Warranty**

# **B.1 Game Warranty**

#### BOB'S SPACE RACERS® INC. ©1976-2018 1 YEAR GAME WARRANTY

- B.1.1 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 one-year 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 1-year (365-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. 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 its 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.
- B.1.2 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.; light bulbs are excluded and shall be the sole responsibility of the purchaser; (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; 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.
- B.1.3 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.
- B.1.4 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.
- B.1.5 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.

- B.1.6 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 1-year (365-days) following delivery of the equipment.
- B.1.7 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.
- B.1.8 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 HE HAS READ THIS AGREEMENT, UNDERSTANDS IT, AND IS BOUND BY ITS TERMS.
- B.1.9 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.

# **B.2 Replacement Item(s) Shipping Requirements**

- B.2.1 When you request an Advanced Replacement item from us, we recommend you to follow
- B.2.2 **DO NOT** try to repair the defective item(s) on your own; **DO NOT** disassemble the defective item(s) prior to returning it to Bob's Space Racers® Inc. this could cause further damage and the possibility of you not receiving any credit at all on the item(s). There are no user serviceable parts contained within, and our vendors may void their warranty on disassembled parts.
- B.2.3 Wait for the Replacement item(s) to arrive prior to returning the defective item(s).
- B.2.4 When the Replacement item(s) arrive, verify that it is the correct part. If it is not, please note what the differences are and contact Bob's Space Racers® Inc. at 386-677-0761.
- B.2.5 Return the defective item(s) in the exact same packaging the Replacement item(s) came in. This insures no more damage will be done to the item(s) during the return shipping.

Thank You!

# C. Federal Communications Commission (FCC) Statement

#### **C.1 FCC Statement**

C.1.1 This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate frequency energy, and, if not installed and used in accordance with the instruction manual may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

Note:

All games from Bob's Space Racers® Inc. are shipped with the same factory keys and lock sets. Bob's Space Racers® Inc. recommends changing the keys and locks on your games upon receipt.

# **Appendix D: Parts List**

# **D.1 Customer Parts List**

Item #	Part #	Descriptions	Qty	Picture
1	EM080318	BOARD-ASSY BSR-3000 REV C	1	
13	EX007650	MOTOR STEPPING ASSY-NEW VERSION	1	
16	E0012900	SWITCH PUSHBUTTON	1	
17	E0013350	HORIZONTAL TRACK SWTICH	1	The state of the s
21	E0024400	FUSEPOST PANEL MOUNT	1	
22	EX033550	ACCOUNTING LCD	1	OFF ON SEEM BOTT THE RECENT OF COLUMN
23	E0900000	PRINTER DOT IMPACT IN GAME ACCTG	1	
24	E0900015	THERMAL PRINTER STAR MICRONICS ® – PRINTING RIBBON	1	

25	E00900005	PRINTER PAPER 3" NON-THERMAL	1	
26	E0023200	TRANSFORMER 120/240 12-24 .5KVA BK/BST	1	Description of the second of t
27	E0030635	12V BLUE DOME BEACON ASSEMBLY	1	
28	E0029107	BULB: 1156 HAPP BEACON REPLACEMENT	1	
29	E0029800	ID LIGHT 12V AMBER	1	

# **Appendix E: Revision Information**

Revision	Date of Revision	Description of Revision	Approved by
A	January 3, 2017	1.0	Jack Cook



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