

ARCADE OPERATION MANUAL



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



© 2011 Bob's Space Racers® Incorporated 427 15th Street, Daytona Beach, Florida 32117

Tel: (386) 677-0761 Fax: (386) 677-0794

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www.bobsspaceracers.com

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MODEL VIEW

Tune Town™ Arcade Game



SPECIFICATIONS

Rated power supply:

110VAC ± 10%, 60 Hz ± 3 Hz.

(Note: Please refer to the label on the game for the actual voltage).

Power consumption:

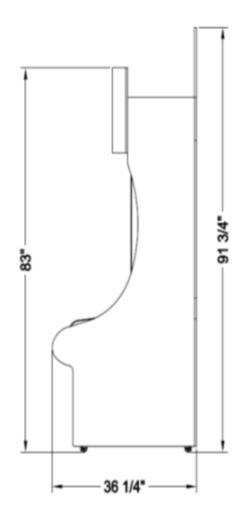
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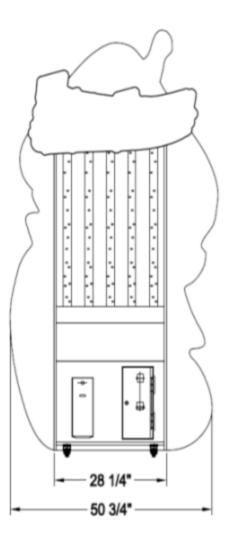
Dimensions:

36 /4" L x 50 3/4" W x 91 3/4" H

Game Weight:

265 LBS.





NOTE: Game parameters are subject to change without notice.

INTRODUCTION

Overview:

Thank you for purchasing the new TUNE TOWN™ from Bob's Space Racers®. Built on a long tradition of value, the new TUNE TOWN™ retains all of the great game play you have come to expect of a game from BSR, and is specifically designed for today's Arcade environment. The new game uses technology specifically developed for this application.

This owner's Manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, servicing control, spare parts, etc. pertaining to the game.

This manual is intended for the owner, personnel and managers in charge of operation of the product. Operate the product after carefully reading and sufficiently understanding the instructions. If the product fails to function satisfactorily, non-technical personnel should under no circumstances touch the internal system.

To Maintain Safety:

To ensure the safe usage of the product, be sure to read the following before using the product. The following instructions are intended for the users, operators and the personnel in charge of the operation of the product. After carefully reading and sufficiently understanding the warning display and cautions, handle the product appropriately. Be sure to keep this operation manual nearby the product or elsewhere convenient for referring to it when necessary.

Herein, explanations which require special attention are in sign of warning. Depending on the potentially hazardous degrees, the terms of NOTICE, WARNING, and CAUTION, etc. are used. Be sure to understand the content of the displays before reading the text.

WARNING: (or) CAUTION:

Disregarding this text could result in serious injury or damage to the machine.

WARNING: To Avoid Risk of Shock, Refer Service To Qualified Personnel.



NOTE (or) NOTICE:

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

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.

SET UP:

- 1. Be sure that the game is on a level surface. If the game is rocking on the floor adjust the legs to remove the rocking of the game.
- 2. Be sure to plug the game into the proper A.C. GROUNDED receptacle. Do not use long extension cords unless absolutely necessary and if so, be sure it is a heavy duty cord of at least 16 Ga. and no longer than 20 ft. Check the label on the back of the game to make sure the power requirements of the game match that of your location.
- 3. Turn the game on and check to be sure there are no unusual sounds and that everything appears to be working correctly.

PACKAGE CONTENTS

Be sure to check that you have received all packages indicated below. **Game Unit Accessories**

No	Name	Regulation	Qty	Picture	Note
1	Power wire	10A/250V 1.8m	1		
2	Fuse	6.3 A/250V Ф5- 20ММ	1		220V
3	Manual		1		
4	Key	M0009601	2		Front and back door
•	,	M0009613	1	= 3	Coin box





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

Play zone (Operation Zone):

This machine requires space for playing the game. Be sure to leave enough space when installing the machine.



- Be sure to check the Electrical Specifications. Ensure that this product is compatible with your location's power supply, voltage and frequency requirement. A plate describing Electrical Specifications is attached to the product. Noncompliance with the Electrical Specifications can cause a fire and electric shock.
- Putting many loads on one electrical outlet can cause generation of heat and a fire resulting from overload.

Locations to avoid:



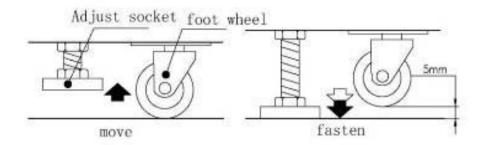
The machine is designed for indoor use only. Never install this machine outdoors or in any of the following:

- Locations exposed to direct sunlight
- Locations subject to rain or water leakage.
- Unstable locations or locations subject to vibration.
- Dusty, hot, or damp locations.

GAME LEVELING:

Install this machine on a flat surface. Adjust levelers to lift the legs and level game.

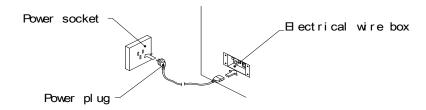
Make sure that the machine is level with the floor. If the machine is not level, the game may not play well.



⚠ WARNING

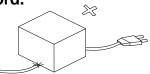
- Disconnect game power before moving
- Make sure all wheels are intact. Replace any wheels that are damaged or broken before moving the game.
- When moving the game, **DO NOT** slide the game across the floor
- Ensure the game is level before connecting the power

CONNECTING THE POWER CORD





• Do not put heavy items on power cord.



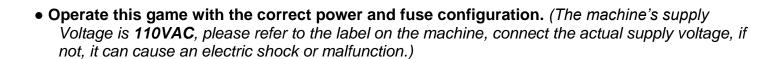
• Hold the power plug instead of the wire to draw the power cord out of the socket.



• Do not touch the power plug with wet hands.



- Do not draw or twist the cord or near a heat source.
- Do not place the cord where the player can easily trip over or come in contact with it.



INSTRUCTION FOR PLAY

- 1. Insert coin(s), the game starts.
- 2. When the game play starts, press the lighted keys. Keep pressing the keys as they light up to try to beat the high score.
- 3. Tickets will be awarded for each game play.
- 4. Bonus Tickets are awarded for beating the high score and the bonus score.

OPTION SETTINGS

Credit, Score/Ticket, Bonus Ticket, Demo

Itam	Content			SW	/1-DIP	POSIT	ION		
Item	Content	1	2	3	4	5	6	7	8
	1	on	on						
Credit	2 3	OFF	ON						
Cledit	3	on	off						
	4	off	off						
	0			on	on	on			
	1			off	on	on			
	2			ON	OFF	ON			
Score/	3			off	off	on			
Ticket	4			on	on	off			
	5			off	on	off			
	10			on	off	off			
	15			off	off	off			
	0						on	on	
Bonus	10						OFF	OFF	
Ticket	25						on	off	
	50						off	off	
Dame	ON								ON
Demo	OFF								off

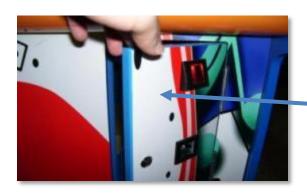
Difficult, Speed, Bonus Score, Bonus +

Item	Content	SW2-DIP POSITION							
Item	Content	1	2	3	4	5	6	7	8
	Easy	on	on						
Difficult	Mid	off	on						
Difficult	Hard	on	off						
	AUTO	OFF	OFF						
	2.0s			on	on				
Speed	1.2s			off	on				
Speed	0.65s			on	off				
	AUTO			OFF	OFF				
Bonus									
Score		Set to: 21							
				-					
	0							on	on
Bonus	1							OFF	ON
+	2							on	off
	3							off	off

Mercy Ticket, Playing Time, Background Music

Itom	Content	SW3-DIP POSITION							
Item	Content	1	2	3	4	5	6	7	8
	0	ON	ON						
Mercy	1	off	on						
Ticket	2	on	off						
	4	off	off						
	20			ON	ON	ON			
	25			off	on	on			
	30			on	off	on			
Playing	35			off	off	on			
Time	40			on	on	off			
	50			off	on	off			
	60			on	off	off			
	90			off	off	off			
Background	ON						on		
Music	OFF						OFF		

SETTING THE BONUS SCORE



First open the coin door to gain access to the ticket and coin counter assembly.



Press and hold the program button directly below the Ticket counter for 10 seconds to enter into programming mode.



When in programming mode the center display will display the current Bonus Score setting. The two other displays will display 99.



Use the keys to increment and decrement the score. The right most key is the decrement and the one to the left of that key is the increment

Decrement

Increment

Press and hold the program button for 10 seconds to exit.

MAINTENANCE AND INSPECTION

Maintenance:

Due to the design of the machine, very little periodic maintenance is required.

Start the game and verify the correct operation before putting the game into everyday operations.

Clean the surface of the game as needed.

After about a month of game operation, check to be sure all parts are secure and in proper working order.

1. Remove power before servicing game.

To avoid a short circuit, the power must be removed before touching the inside of the game. If you have to turn on the power, please refer to section 2-2.

2. Choose the appropriate replacement parts.

Using the wrong parts could lead to malfunction or damage to the game and components.

3. Do not substitute or change equipment, without authorization.

Doing so could lead to a short circuit and machine malfunction, or fire.

4. Do not put containers of water, cups or soda cans on the machine. In addition, chemicals or heavy items should not be allowed around the game.

The spill could cause a short circuit. Falling items could injure people or destroy the machine.

Cleaning:

CLEANING - Clean the outer surfaces of the game with a commercial spray type cleaner. DO NOT however, use glass cleaner or commercial sprays on the marquee graphic panel. Use a good quality spray type furniture polish to keep the game looking good.

Vacuum the inside of the game occasionally to help keep the dust and ticket debris off of all the optical sensors.

TROUBLESHOOTING

WARNING

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

TROUBLESHOOTING PHILOSOPHY

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

- 1. Always check to be sure that your 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 or are damaged. Using a handheld multi-meter, check continuity of the wires to make sure they are not broken.
- 4. Check for obvious damage to the 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 disconnect power by unplugging the game.
- 7. Test power supplies for the specified voltages to the P.C. Boards and components as shown in the manual.

General Troubleshooting:

Symptom	Possible Problem	Solution
Game will not score	Power not on switch Switch not working Signal not getting to mainboard Signal gets to main board but board doesn't see it	Check wiring harness on switch Repair / Replace switch Repair / Replace harness Replace mainboard
Sound Problems -No sound -Low Sound -Intermittent Sound	Low Volume Faulty speaker harnessing Faulty speaker Faulty sound board or sound board harnessing Faulty Main P.C. Board	Check Volume Control and adjust as necessary Check connections and/or repair harnessing Check and/or replace speaker Check connections or Replace Sound Board Check and/or repair or replace Main P.C. Board
Game does not take or add money correctly	Coin switch out of adjustment Coin mech dirty or improperly adjusted Faulty Coin switch Faulty coin switch harness or connector Game improperly programmed Faulty Main P.C. Board or component	Re-bend coin switch wire Clean and adjust mech as necessary Check and/or replace switch Check and/or repair harnessing Check programming options and adjust Repair and/or replace Main P.C. board
Ticket Dispenser not working properly, or no tickets being dispensed	No tickets in the game Tickets jammed in dispenser Ticket dispenser sensor blocked with debris Poor connection on the ticket dispenser Game improperly programmed Faulty ticket dispenser Faulty ticket dispenser harnessing Faulty Main P.C. Board	Refill ticket dispenser Clear ticket jam Clean off sensor Check and/or replace connectors Check ticket programming options Replace dispenser Check and/or repair harnessing Replace or repair Main P.C. Board
Game will not start.	Game power off Electrical Power Switch Open Main fuse blown Power Supply problem or failure Faulty P.C. board or component	Check on/off switch and power cord Close Electrical Power Switch Check and/or replace fuse as necessary Check Power Supply output and connections Repair and/or replace main P.C. board
Game stops or is stopped with nothing displayed	The power connector is disconnected. Possible faulty connection or short circuit.	Reconnect the connector securely. Check all circuitry for faulty connections or short circuits.

NOTE: CONTACT YOUR DISTRIBUTOR IF NONE OF THE CASES LISTED IN THIS MANUAL APPLIES TO THE PROBLEM, OR IF THE ACTION LISTED DOES NOT APPEAR TO RESOLVE THE PROBLEM.

Reference Number	Part Number	Description	Image
TT100-001-000	A0801500	Decal, Top	
TT100-001-001	A0801501	Decal, Left Side	
TT100-001-002	A0801502	Decal, Left Back	A Track
TT100-001-003	A0801503	Decal, Right Side	
TT100-001-004	A0801504	Decal, Right Back	W W W W W W W W W W W W W W W W W W W
TT100-001-005	A0801505	Decal, Key Board	
TT100-001-006	A0801506	Decal, Lower Front	
TT100-001-007	E0801500	Main Board (MB003b.PCB)	
TT100-001-008	E0801906	DC Power Supply (EPT- S150-S12)	
TT100-001-009	E0801501	Driver Board (Tube Back LEDs) (MB-LampV1-1PCB)	6 P 6.

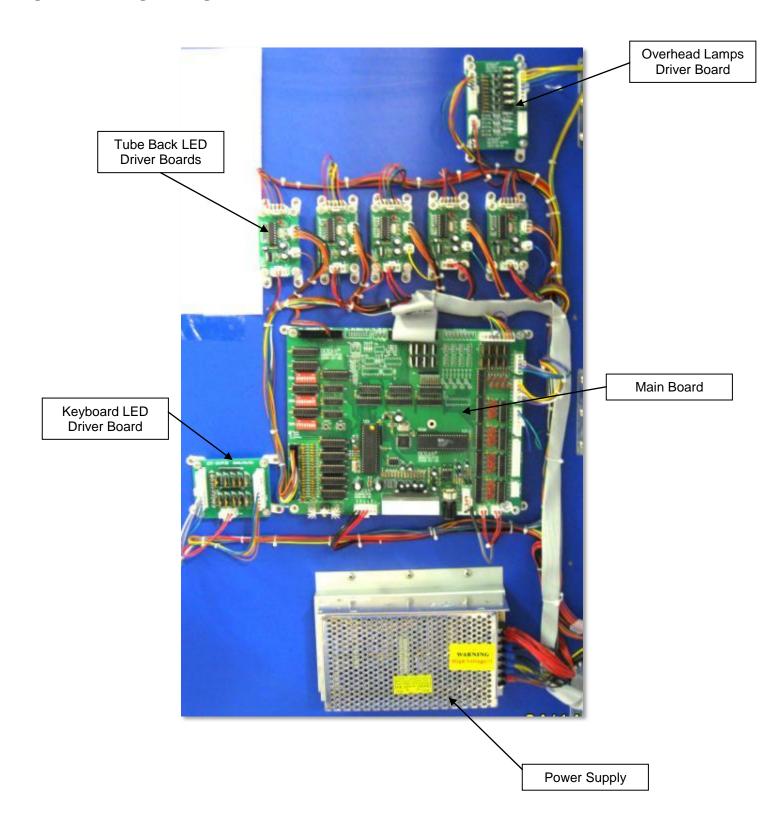
TT100-001-010	E0801502	Driver Board (Overhead Lamps) (MJ13007-8PCB)	111111111111111111111111111111111111111
TT100-001-011	E0800907-A	Driver Board (Ticket Mech) (RS001T.PVB)	69 1 69
TT100-001-012	E0801503	Driver Board (Keyboard LEDs) (127-10.PCB)	
TT100-001-013	E0801504	3 Digit Display (Your Score) (SEG1803c.PCB)	888
TT100-001-014	E0801505	2 Digit Display (Time / Missed) (SEG1502b.PCB)	88
TT100-001-015	E0801506	Speaker Assembly	
TT100-001-016	E0801507	Speaker (2.5X4" 8 Ohms)	
TT100-001-017	E0801508	Speaker LED Board (RGB-RDT.PCB)	DEDUNDEDEDED
TT100-001-018	E0801509	Tube Back LED Assembly (LED + LED front fixed board + back fixed board)	
TT100-001-056	E0801510	Tube LED Board (RGB-LMP-58.PCB)	/
TT100-001-057	TBD	Tube LED Front Fixed Board	
TT100-001-058	E0801512	Tube LED Back Fixed Board	

TT100-001-019	E0801513	Power Entry Module	\$ T
TT100-001-020	E0801514	Electric Fan Assy. (SP100A 4")	
TT100-001-021	E0801516	Overhead Lamp (RED) (MR16DC12V) (3*1W)	
TT100-001-022	E0801517	Overhead Lamp (BLUE) (MR16DC12V) (3*2W)	
TT100-001-023	E0801518	Overhead Lamp (PURPLE) (MR16DC12V) (3*3W)	
TT100-001-024	E0801519	Overhead Lamp (GREEN) (MR16DC12V) (3*4W)	
TT100-001-025	E0801520	Overhead Lamp (YELLOW) (MR16DC12V) (3*5W)	
TT100-001-026	E0801521	Marque Lamp Board (6" White LEDs) (EAN-RGB.PCB)	
TT100-001-027	E0801522	Marque Lamp Board (39" White LEDs) (LMP-RGB.PCB)	
TT100-001-059	E0801523	Key Button LED Board	
TT100-001-028	E0801524	Key Button Switch (M5-06N-45-U10)	
TT100-001-029	M0801500	Coin Mech Holder	

TT100-001-030	M0800906	Coin Mech Electronic	
TT100-001-031	M0009060	Coin Mech Machanical (CA-CALLE)	160
TT100-001-032	M0801501	Coin Mech Lamp	
TT100-001-033	M0801502	Coin Mech Lamp Holder	
TT100-001-034	M0801503	Coin Mech Switch	
TT100-001-035	E0800907	Ticket Mech (TD-963CR)	S
TT100-001-036	M0801504	Counter Assembly	
TT100-001-037	M0801505	Key Button	
TT100-001-038	M0801506	Key Button Standoff	
TT100-001-039	M0801507	Key Button Bushing	30
TT100-001-040	M0801508	Key Button Spring	
TT100-001-041	M0801509	Key Button Stop	2

TT100-001-042	M0801510	Door Hinge	2 3 3
TT100-001-043	E0801515	Fan Cover	
TT100-001-044	M0801511	Speaker Grill	
TT100-001-045	M0801512	Speaker Support Bracket	
TT100-001-046	M0801514	Speaker Gasket	
TT100-001-047	M0801515	Plexiglas Support Bracket	
TT100-001-060	M0801516	Plexiglas Support Bracket Gasket	
TT100-001-048	M0801517	Lexan Speaker Cover w/Graphic	(S)
TT100-001-049	M0801518	Speaker / Display Cover	
TT100-001-050	M0801519	Marque Plastic Cover w/Graphic	
TT100-001-051	M0801520	Plexiglas Game Shield Assembly	100
TT100-001-052	M0801513	Mirror Top	

BOARD DIAGRAMS



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 HE 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

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