



Bob's Space Racers® Inc. ©1976-2020
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Operator's Manual

<https://www.bobsspacracers.com>

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1.0 Introduction

Overview

This manual contains informative information about the Arcade Whac-A-Mole. Such as: Setup, instructions how to play, maintenance, 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.

Safety

This game has moving parts. Improper operation or use of this game can result in injury. Actuators under power can cause bodily harm. **DO NOT** insert any foreign object, such as fingers, into mole holes during operation, testing, or maintenance.

Use Only a GROUNDED AC Receptacle

If you are unsure if your AC receptacle is properly grounded, notify a qualified electrician to perform this check. Failure to do so could result in improper operation or damage to the game and could void this product's warranty.

Maintenance

Always ensure power is off and fully disconnected from power source when performing routine or in-depth maintenance. Failure to do so can result in damage to the game or injury to personnel.

Power Requirements

Domestic Game Power: 110V ± 10V ~4.0 Amps ~480Watts at 50/60Hz

Service Power Recommendations: 15 Amps for Game Power

Export Game Power: 220V ± 10V ~2.0 Amps ~480Watts at 50/60Hz

Service Power Recommendations: 10 Amps for Light Power

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.

Setup

- Locate the game near an adequate power source.
- Ensure the game is level.
- Add game power.

Plug included power cable into back of Whac-A-Mole Arcade cabinet and then into a 120v wall outlet.

PC Power Cable



2.0 Operator's Procedure

Object of the Game

Whack the mole that pops up. This will advance the score by 10 points. The Player whacks the mole to the highest score!

Operate

- Player Insert Coin / Swipe Card / Free Play.
 - Audio Announces, "Let's Play Whac-A-Mole."
 - Game music starts
- Moles pops up
 - Whac Mole on Head with Mallet to increase Score.
- Time runs out.
 - Audio Announces, "Wow, Let's see if you can do it even faster next time."
- If Player gets a High Score
 - Audio Announces, "A New High Score!"
- Tickets dispense / Points get added to Card. *If game is equipped with ticket mech or card swipe system.*
- Game returns to Standby

3.0 Maintenance

Maintenance Recommendations

Clean the outer surfaces of the game with a mild general-purpose cleaner.

DO NOT USE commercial chemical sprays on vinyl graphics.

Vacuum the inside of the game occasionally to help keep the dust debris off of all the electronics.

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

Daily Cleaning and Check.

Clean all surfaces with a mild general-purpose cleaner.

Check Mole Start-up sequence.

Check Coin / Ticket mechs

Add tickets if needed

Check Lights

Check Sound

Monthly Check. *Repair as needed*

Clean debris from Mole Box solenoids

4.0 Troubleshooting

Troubleshooting Philosophy

When troubleshooting any product, certain general guidelines should be followed

- 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.
- 2) Ensure that all of the game harnesses are 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) 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.
- 4) Inspect for obvious damage to the P.C. Boards or electrical components.
- 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.
- 6) When changing electronic or electrical components, ALWAYS turn off all external power and unplug the game.
- 7) Ensure that all power supplies are delivering the specified voltages to the P.C. Boards and components as shown in the manual.

Warning!

Do not use graphite spray. It is conductive and can short out the electrical wiring and or the Printed Circuit Board (PCB).

Troubleshooting Quick fix Guide

Improper Start-up Sequences

Mole heads not coming up / Mole heads coming up slowly / Mole heads not scoring

- **Service Coil Bed Assembly.**

- The Coil Bed Assembly houses: The solenoids, Score Sensors and Whac-A-Mole™ heads.
- Remove the two bolts that attach the playfield to the top of the main cabinet.



- Lift the playfield up and pull back towards you to remove it from the unit.



- Remove the four bolts and washers (7/16-inch) that secure the coil bed to the cabinet.



- Remove the coil bed assembly by carefully lifting it up.



- Remove connectors from Master board.
- Remove the e-clip using needle nose pliers or a small flathead screwdriver. *Note: Make note of the order of the washers on the top and bottom of the shaft*



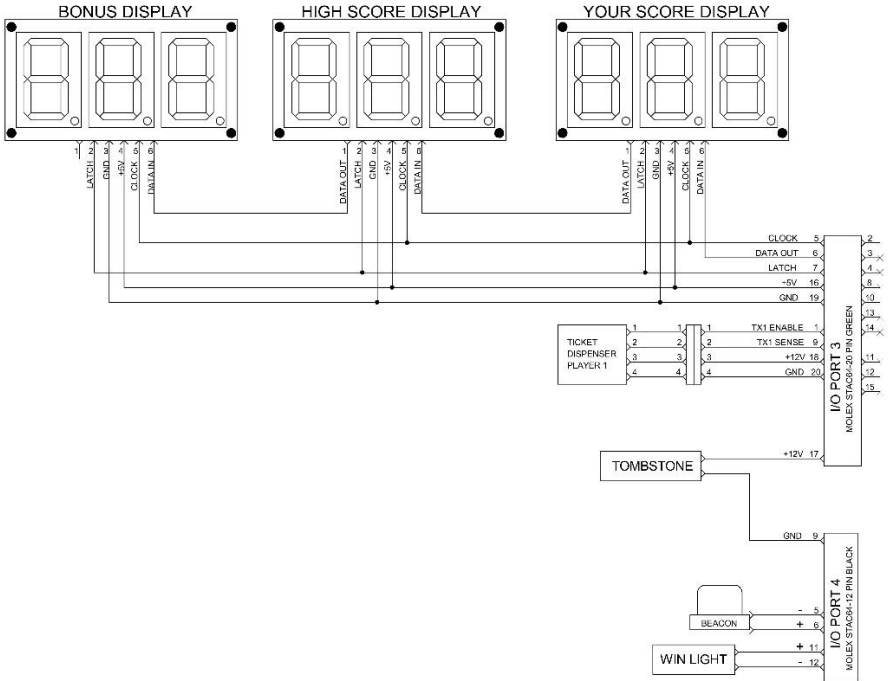
- Clean the shaft using a soft cloth and an electrical contact / anti corrosion cleaner.
- Polish the shaft with Scotch-Brite™
- Remove any rust spots with an emery cloth
- Clean the bore in the assembly with a pipe brush.



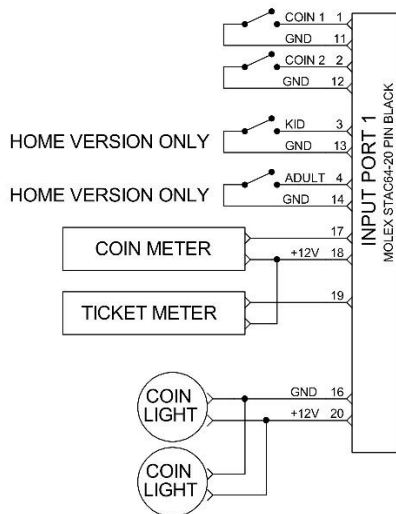
- Reassemble in Reverse.
- Coin up or swipe and play the game to ensure everything runs smoothly.
- The game is now ready for normal operation.

Schematics

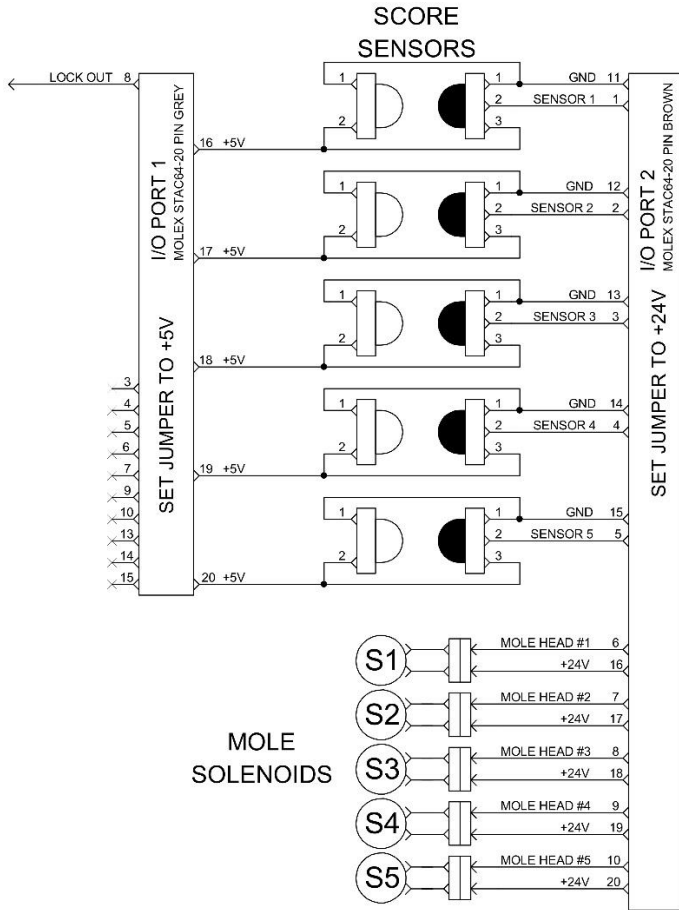
Displays



Play Versions



Sensors & Solenoids



3000 Electronics Error Codes

BSR-3000 Board

LCD



*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**.*

Error: *Mole 1*

Mole Error 1 Indicates there is something wrong with Mole 1 Sensor and the display board will flash red.

Master

WAM3KA.Vxx
ERROR: MOLE 1

Error: *Mole 2*

Mole Error 2 Indicates there is something wrong with Mole 2 Sensor and the display board will flash red.

Master

WAM3KA.Vxx
ERROR: MOLE 2

Error: *Mole 3*

Mole Error 3 Indicates there is something wrong with Mole 3 Sensor and the display board will flash red.

Master

WAM3KA.Vxx
ERROR: MOLE 3

Error: *Mole 4*

Mole Error 4 Indicates there is something wrong with Mole 4 Sensor and the display board will flash red.

Master

WAM3KA.Vxx
ERROR: MOLE 4

Error: *Mole 5*

Mole Error 5 Indicates there is something wrong with Mole 5 Sensor and the display board will flash red.

Master

WAM3KA.Vxx
ERROR: MOLE 5

Error: *Comm Error*

Communication switch error and the display board will flash red.

Master

WAM3KA.Vxx
COMM ERROR

Note: If at any time you require more assistance, please do not hesitate to call tech support: 386-677-0761.

5.0 Options Settings – 3000 Electronics

RECOMMENDED OPTION SETTINGS

BSR-3K- Whac-A-Mole Arcade

Program: WAM3KA.Vxx

Option	Description	BSR	MIN/MAX
Game Volume	Level of output audio	8	1/10
Bell Volume	Level of bell audio	6	0/10
Cost Per Play	How many credits to play-dollar sign value	2	1/12
Stack Credits	0 = No Stacking 1 = Stacking	0	0/1
Game Time Limit	Inactive game time limit	30	10/180
Minimum Ticket	Amount of tickets given just for playing	1	0/25
Points Per Ticket	Amount of points needed for 1x ticket	20	0/1500
Attract Mode	0=Audio only; 1=Mole heads and Audio	1	0/1
Attract Interval	Interval of time between attract mode.	3	0/30
Bonus Minimum	Starting bonus value	3	0/100
Bonus Increase	Amount of to increase bonus value if not won	1	0/25
Bonus Max	Maximum bonus value	100	0/250
High Score	Score to reach to win	150	50/300
Win Lite Time	Duration of win light (in seconds)	10	1/12
Game Difficulty	NO Random (0-2): Random (3-5) 0/3=slow, 1/4 = faster, 2/5 = fastest	4	0/5
Money Prompt	0=Swipe Card; 1=Insert Coin; 2=GET READY	0	0/1
Ticket Divider	NOT USED	1	1/2
Reset Defaults	Reset the board to default settings.	0	0/1

HOW TO PROGRAM

Press and hold SELECT and ENTER until the LCD turns BLUE

Press UP/DOWN to change the option

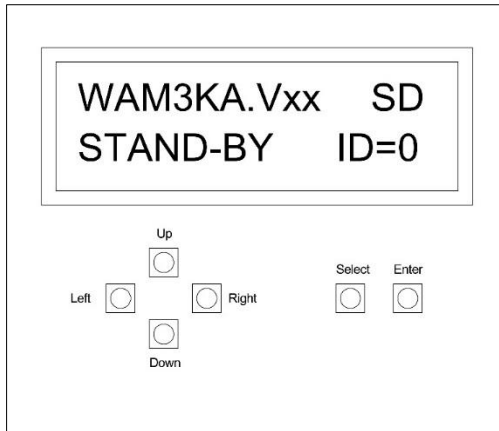
Press LEFT/RIGHT to change option values

Press SELECT to exit program mode

For Free Play Options Set Value

Minimum Ticket	0
Points Per Ticket	0
Attract Interval	0
Bonus Increase	0

Note: These settings are BSR's recommended settings, additional settings may vary per customer at their request.



6.0 Service

Calling for Service

When calling for service, please check the operator's manual first. You may find a solution to your problem within this manual.

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

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.

Please retain serial number for your product. This may be requested for warranty repairs.

Please call with game info and be at the game so we can walk you through troubleshooting.

**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@bobsspac Racers.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

Service Policy

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

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.

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

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.

Replacement Policy

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.

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:

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

Note: this credit does not include return shipping charges.

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

Game Warranty

BOB'S SPACE RACERS® INC. ©1976-2019 90 Days GAME WARRANTY

INCLUDED IN THIS WARRANTY 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 90-Days 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 90-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.

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.

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.

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.

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.

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 90-days following delivery of the equipment.

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.

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.

Replacement Item(s) Shipping Requirements

When you request an Advanced Replacement item from us, we recommend you to follow

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.

Wait for the Replacement item(s) to arrive prior to returning the defective item(s).

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.

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!

Appendix C: Federal Communications Commission Statement



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

Part #	Description	Picture
EM080318	MASTER BOARD	
M0800606	WHAC-A-MOLE HEAD W/ UPPER SHAFT	
W0800701	LOWER SHAFT	
MX010100	HAMMER	
EX700719	SESNORS	
E0022863	24V POWER SUPPLY	
TBD	SMALL DISPLAY	
M0008601	SMALL TICKET 1-in x 2-in	
EM3K0084	DISPLAY HARNESS	
EM3K0085	MOLE BOX HARNESS	

Parts List *Continued*

EM3K0086	COIN HARNESS	
EM3K0089	PLAY BUTTON HARNESS	

Appendix E: Revision

Revision	Date of Revision	Description of Revision	Approved by
A	December 10, 2019	1.0	Jack Cook



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