

Advanced Avionics, Inc (734) 332-0256

Vest Troubleshooting - Resetting *AGAIN?*

By Gary Supplee

Feature

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Many of you have noticed that your vests seem to be resetting again and again, and when you send them in to us for repair, we can't get the problem to occur here on our bench. We understand the frustration!

Whereas *Vest Reset* (caused by any interruption or short in the DC power to the phaser) can be caused by the failure of different components or cables in a vest, we have just in the last few days discovered that corroded **Coiled Cords** may be the culprit.

After a lengthy and exhaustive search, we have discovered that our cable supplier somehow during manufacture introduced a corrosive agent into only the white wire of the coiled cords we use between the vest and the phaser. This agent, after time, may erode away the copper strands in that

wire to the point where there is noticeable resistance from one end of the cable to the other, sometimes measurable up to 300K Ohms! This resistance, combined with other factors such as a low-charged or older battery can cause enough of a reduction in voltage to the phaser that a reset occurs. This reset can manifest itself through unusually high accuracy scores when the shot count of a certain vest resets to zero, but other vests in the arena still attribute their hits to that certain vest.

We are still trying to determine the extent of this problem. So far, we have seen it only in cables from the latter months of 2004 through early 2005. It appears that the corrosive action may take more than a year before significant

damage occurs.

If you suspect that some of your resetting vests may have a failing coiled cord, call us for a Return Authorization to send the vests in for testing. If you would rather, have your own technician use an Ohm Meter to measure the resistance from one end of the white wire in the coiled cord to the other. This can be tricky as it is difficult to get a meter probe to the cable through the connector, but you can grab it at the right-angled connectors on the chest and phaser boards, exposed between the connector and the board. A good cable should read 5 ohms or less resistance. Anything over that should be suspected.

From this point on, every vest sent in to us for repair will be tested for this cable problem.

New Sites Using the *LaserBlast* Point Of Sale System

Although the new Networked *LaserBlast* Point of Sale System is still undergoing tweaks in its final rounds of beta testing, we are happy to announce

that the **Zap Zone** stores in Waterford, Canton, Ann Arbor, Farmington, Lansing and Taylor are now all using it. The feedback we are receiving from the

managers and employees at these stores is extremely valuable in making this product even better, and also that much closer to availability nationwide.

Advanced Avionics, Inc

6659 Warren Rd.
Ann Arbor, MI, 48105

PHONE / FAX:
(734) 332-0256

E-MAIL:
Info@Laser-Blast.com

or

Repairs@Laser-Blast.com

Check out our
Web Site

www.Laser-Blast.com

*Happy
Spring!*

Be Careful When You Ship

Every once in a while, we receive vests in for repair that have not been packed carefully, and damage occurs in transit. Be sure to call ahead for a **Return Authorization Number**, and write that number on the label or on a sheet of paper inside. Fill the portions of the box not used up by the vest or item with padding, packing material (or even crumpled newspaper) to prevent the box from collapsing in on itself. Thanks!

LaserBlast Vests 101 – Hardware

With more and more of you performing your own vest maintenance, we are getting increasing amounts of requests for replacement screws and hardware that break or get lost. Many times, the plastic parts on vests returned to us for repair have actually been damaged more through using the wrong screw size or type than by abusive customers. Here is a list of the proper screws and their locations.

We can provide these items, or you can obtain them from any good hardware store.

Phaser Screws – 8/32 x 1/2" Socket Cap Screw
(older systems use a 8/32 x 7/8" screw)

Phaser Trigger – #6 x 1/4" Philips Pan Head Screw

Trigger Switch – #2 x 1/2" Philips Pan, metal, tapered Screw

Vest Chest and Back Top Plastics

– 6/32 x 1 1/8" Philips Pan Head Machine Screw
with #6 Lock Washers

To Attach Chest, Back and Shoulders to Vest Material

– 6/32 x 3/8" Philips Pan Head Machine Screw
(with locking strip or lock washer)
with #6 5/8" OD Fender Washers

Whenever I screw circuit boards down, I like to slip in a small, nylon washer to protect the circuit board surface and eliminate the possibility of damage to any nearby traces.

New Facilities Using LaserBlast Systems

Welcome to Our New Partners!

We wish to thank Tom Fogle for choosing to include LaserBlast at **Triple Play Fun Zone**, his new Baseball-themed facility in Sheyboygan, Wisconsin. His maze, designed and built by Jeff Shilling, includes 20 vests, a Red and Blue Base, and twenty MicroBlasters.

Also deciding to go with LaserBlast equipment was **Power Play Family Entertainment** of Shawnee Kansas. Chad and Dennis bought the works with 44 vests, Red and Blue Bases, a MegaBlaster, twenty MicroBlasters, membership, and a Kiosk.

Jim Bemer of Cleveland,

Ohio, purchased **Lazer Xtreme** a few years ago, and just replaced the tag equipment there with a LaserBlast system of 30 vests. Before, a weekend of 800 games was all he could handle, but now he can run 2000 games in a weekend!

Laser Tag at the **Joe Dumars Fieldhouse** in Shelby, Michigan is now using LaserBlast equipment as well. We thank Brian Siegel for choosing us to replace his old system. He has thirteen vests, Red and Blue Bases, and ten MicroBlasters. Go Pistons!

Our new **LightBlast Portable System**, featuring vests that don't need a main computer, is sweeping the country as well. **Party Vision** in Nashua, New Hampshire, **Fun Runners** in Phoenix, Arizona, and **Blue Apple Productions** of Pittsford, New York each just bought one of our eight-vest portable systems.

Good Luck to all of you, and may the warm, Spring weather bring you all more money than you know what to do with!

About Our Organization...

We are located in Ann Arbor, Michigan, in the United States. All of our products are designed, assembled, and serviced in our Ann Arbor, Michigan headquarters.