

Bob Long Technologies 209-293-4440 www.boblongdirect.com

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Warning

This paintball marker is not a toy. Misuse or mishandling can result in serious injury or death. Every person within range of a loaded paintball gun must wear eye protection specifically designed for paintball. It is recommended at least 18 years of age to purchase, 14 years old to use with adult supervision or 10 years old to use on paintball fields meeting ASTM standards F1777-97. Ensure you read the entire instruction manual before operating your marker.

Warranty

Bob Long Technologies warrants our paintball markers to be free from defect in materials and workmanship for a period of 1 year from purchase date. This warranty will only be honored for the initial retail purchaser and is non-transferable. Wear items such as batteries and seals are not covered under warranty. Main PCB, electro-pneumatic solenoid, eye PCB's and wire harnesses will be covered under warranty for a period of 6 Months from purchase date.

This warranty does not cover:

> Any system failure resulting from the use of a non-authorized propellant. The only authorized propellants are nitrogen or compressed air.

> Damage to electro-pneumatic solenoid resulting from external air source regulation failure. The use of an external regulated air source is your choice, so research well and choose wisely.

> Damage to electro-pneumatic solenoid from foreign objects, specifically Teflon® tape.

> Surface damage such as scratches, nicks, or dings.

> Improper disassembly or re-assembly.

> Improper lubrication. The only authorized grease for maintaining a Bob Long marker is Molykote® 55 made by the Dow Corning Corporation (Dow 55). Authorized oil is limited to Triflow® or any other synthetic oil made specifically for maintaining a paintball marker.

> Modification or any other alteration of a marker or its parts. Dremels, acid, most things involving a show on the Bravo network or HGTV fit in this category.

> Misuse of any conceivable kind. Yes, letting a hipster use your marker may damage your warranty.

This warranty is limited to repair or replacement of defective items with the initial retail purchaser to pay shipping costs. The initial retail purchaser must enclose a copy of the original sales receipt with the marker to be repaired for this warranty to be honored.

Introducing the G6R

The sixth generation Intimidator platform, G6R, brings new advances to the stacked tube poppet valve marker. These advances include the front/rear split body and internally routed, macroline free air channels. The front/rear split enables more choices in milling, internal air routing, and weight reduction than standard one piece designs. Internally routed air channels prevent the failures possible in macroline systems and allow more hand positioning options for YOU when switching hands. The G6R is designed, machined, and built in the USA.

Ready for the Field

While the G6R is tournament ready out of the box, certain components may be upgraded for increased performance.

	Stock	Available Upgrade
Feedneck	LeverLock	n/a
Control Board	Tadao Odoshi	Tadao Ebisu
Eyes	2C	4C
Bolt	Dust Resistant (DR) Bolt	Pillow Bolt

Amount of Time	Estimated Cases of paint	Recommended Upkeep
While talking smack with your friends in between games	meh	 Remove the bolt and barrel Run a clean swab through the firing chamber Put a drop of oil on the bolt o-rings if your friends are still failing to get on the field Reinstall bolt
After a day of play	1-2 Cases	 Repeat above steps Wipe down marker outside Clean and oil bolt
After a Weekend	2-4 Cases	 Repeat above steps Remove the Ram Cap and Ram Clean debris and old grease from ram interior Inspect o-rings for damage Clean and grease ram
A Month	10 Cases	 Repeat above steps Clean, inspect, and grease HPR Piston o-ring
6 Months or when consistency issues appear	20 Cases	 Clean, inspect, and grease LPR Piston o-ring Clean, inspect, and grease poppet shaft o-ring

Trigger Adjustment and Maintenance

The G6R comes with a roller bearing trigger which you can adjust for the feel which is most comfortable with your style of play. To simplify maintenance the trigger can be removed from the marker without requiring the removal of the grip frame.

- 1. The G6R has two adjustment screws. The bottom screw is for trigger posttravel and the top screw adjusts the activation point (where the marker fires). To adjust the screws insert a hex key and turn the screw. The screws have Loctite to prevent the adjustment from slipping so a firm, steady pressure is needed for the initial adjustment.
- 2. To remove the trigger begin by removing the trigger pivot pin
- 3. If the trigger spring encounters resistance when partially removed it may be catching on the micro switch of the control board. Simply push up on the spring with a hex key and it will slide free.
- 4. Use swabs dipped in alcohol to clean any residual paint or grime from the trigger area. If necessary open the grip panels and clean inside the frame as well.
- 5. When reinstalling the trigger press up on the spring slightly to prevent snagging the microswitch.







Maintaining the Eyes and Detents

In the event of a chopped ball or debris in the breach, the eyes in your G6R may need cleaning. The most common ways for debris to enter the ball chamber is through the hopper when using a rapid/ speed feed type system. Tournament grade balls may break in the stack if the loader applies too much pressure.

- 1. Remove the eye cover screw using a 5/64" hex wrench, then remove the eye cover.
- 2. Remove the detent and spring by pressing on the detent from inside the chamber.
- 3. Carefully unscrew the PCB retaining screw. (Phillips head)
- 4. Gently tilt the eye PCB away from the body of the marker.
- 5. Use a cotton swab to clean the surface of the eye, the eye holes, detent and detent hole. Dampen the swab with alcohol if necessary. NOTE: If removing the eyes from the wiring harness unplug the harness from the eye PCB by pulling on the white plug and not the wires. Pulling on the wires could potentially damage your harness.
- 6. After the eye, detent, and mounting area have been sufficiently cleaned, reinstall the PCB and reinstall the PCB retaining screw and eye cover.
 - The 4C eye system will allow for higher rates of fire through quicker cycling times.
 - To determine whether the 4C eyes are installed refer to the picture to the right. The 4C eyes have more components as well as the number 4 silk screened onto the PCB.
 - The standard Delrin detents can be replaced with Super Ds - an upgraded Type III anodized detent set. If Super Ds are used, the sides of the detents must be greased lightly. Also, Super Ds must be rotated slightly each time the eyes are cleaned in order to ensure even wear.

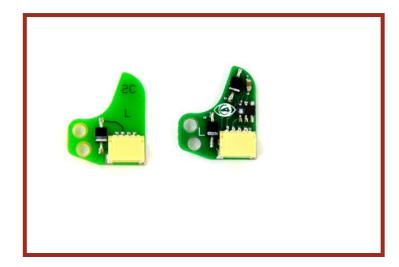












Maintaining the HPR (In-Line-Regulator)

Your G6R comes equipped with the best regulators on the market. To ensure the highest consistency and the maximum flow possible, we recommend that you clean and lubricate them according to the maintenance schedule or whenever you encounter inconsistency. The regulators typically perform flawlessly for many cases of paint before requiring any maintenance.

- 1. Degas the marker and ensure that there are no paintballs in the breech or barrel of the marker.
- 2. Unscrew the bottom half of the regulator from the marker. Note that the top half is factory tightened and should not be removed.
- 3. Reach into the regulator base with tweezers or needle nose pliers to remove the regulator piston.
- 4. After the piston is removed turn the regulator base upside down and tap the spring stack and spring follower into your hand. The picture to the right shows the regulator body, spring stack, and piston.
- 5. The main valve located in the top portion of the regulator which is still connected to the marker does not need to be removed from the marker body or serviced. Never replace or attempt to service a working main valve.
- 6. Inspect the surface of the piston and piston o-ring for excessive wear or nicks and replace as necessary.
- 7. Inspect the interior walls of the regulator base. Use a swab on the interior of the regulator base to clean debris and old grease.
- 8. When reassembling the spring follower (spring stack assembly) make sure that the top and bottom spring washers curve to the outside. A close up of the spring assembly with the retaining o-ring is shown to the right. The retaining o-ring does not require lubrication If in doubt – just stack the spring washers like this:

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9. Grease the piston o-ring then gently replace the spring follower (spring stack assembly) and piston into the regulator base. There is a concave area around the o-ring that holds additional lube and reduces the need for frequent maintenance. Reassemble the regulator to the marker.

Maintaining the LPR

The LPR contains both right and left hand threaded parts. Following the disassembly instructions below will prevent damaging your marker.

- Unscrew the LPR assembly from the front of the marker. Remember Lefty Loosy and Rightie Tightie. If you have trouble loosening the LPR use one of those things your mom has in the kitchen to help grab jar lids. Don't use pliers. Yes, someone tried and so now we have to make sure everyone knows it is a bad idea.
- 2. Remove the adjustment screw from the end of the LPR..
- Insert a 1/4 hex wrench in the front of the LPR cap and a 5/16 hex wrench in the back of the LPR housing. Turn the wrenches CLOCKWISE to separate the LPR cap and housing. Yes, this one part is Rightie Loosie and Lefty Tighty.
- 4. Once you separate the LPR cap and housing remove the piston from the back of the body using needle nose pliers to grasp the nubbin on the end. Our main engineer is annoyed that the term nubbin stuck, so we enjoy tormenting him with it.
- 5. Inspect the surface of the piston and oring for excessive wear or nicks. Wipe off the old grease and replace the o-ring if necessary.
- 6. Use a swab to clean the interior of the LPR housing. Never replace or attempt to service a working main valve.
- Lubricate the piston o-ring with grease. There is a concave area around the oring that holds additional lube and reduces the need for frequent maintenance. Gently replace the piston, and spring back into the LPR body.



8. Tightly screw the LPR cap to the LPR body – lefty tighty! Put a drop of blue Loctite on the adjustment screw threads. In general you should always test the pressures after performing maintenance on the LPR.

Setting Pressures Using the Pressure Tester

Setting the pressures after regulator service is the best method to get your marker performing well. The LPR controls marker cycling and contributes to noise and kick experienced when firing the marker. Setting the LPR too low will result in problems with consistency. The HPR controls the velocity of the marker. Once you have performed the initial settings use a chronograph to fine tune the marker's velocity.

- 1. Remove the LPR by unscrewing counterclockwise from the front of the marker
- 2. Screw the tester into the marker body. Then screw the LPR into the front of the tester.
- 3. The tester has two gauges opposing each other. The HPR reads to 300 psi and the LPR gauge reads to 160 psi.
- 4. Connect air system to the marker and turn on the air by screwing the knob at the front of the Air Source Adapter (ASA) in clockwise.
- Turn on the marker by pressing the button on the back of the frame.
 Pressing and holding for one full second will disable the eye system without turning off the board.
- 6. Set the HPR pressure first by turning the adjustment screw in the bottom of the regulator. Turning the screw clockwise increases the pressure and therefore the velocity. Turning it counterclockwise will lower the pressure and velocity. Only turn the wrench in small increments for example 1/16th -1/8th of a turn with each adjustment. NOTE: While adjusting the regulators pull the trigger to allow pressures to equalize when you decrease either setting. Set the HPR 165 to 185 PSI. A suggested initial setting is 180 PSI.



7. After adjusting the HPR, adjust the LPR by turning the adjustment screw on the front of the LPR. Adjust the LPR using small increments – 1/8 of a turn at a time. Keep pulling the trigger while making the adjustment to allow pressure to equalize. Set the LPR pressure between 65 and 75 PSI. A suggested initial setting is 70 PSI.

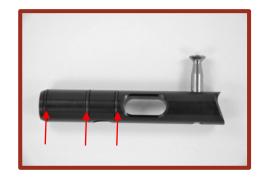
Maintaining the bolt

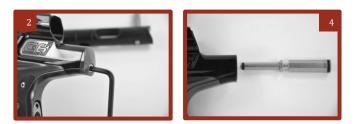
- 1. De-gas the marker and insure that there are no paintballs in the breech or barrel of the marker.
- 2. Remove the bolt from the marker by pulling upward on the pull pin.
- 3. Slide the bolt to the rear of the marker body.
- 4. Inspect the surface of the bolt and orings for excessive wear or nicks, and replace as necessary.
- 5. Place one drop of oil on each o-ring and spread it around the ring with your finger to ensure an equal coating.
- Inspect the breach and body if necessary run a clean swab through the body to clean out any dust or debris.

Maintaining the Ram

- 1. Remove the bolt from the marker
- 2. Remove the back cap retaining screw from the marker
- 3. Remove the back cap
- Tap the ram out into the palm of your hand – if you have trouble tapping it out use a hex key or chopstick to push it back from the top where the bolt sits.
- 5. Wipe off any old grease or debris.
- 6. Wipe out any old grease from the ram housing using a swab.
- 7. Inspect the o-rings for excessive wear or nicks, and replace as necessary.
- 8. Apply a thin coat of grease to the o-rings.
- 9. Reinsert the ram with the smaller diameter section to the front of the marker.
- 10. Replace the back cap by placing the bottom of the cap into position and then rotating the top into position. This will prevent the o-ring from shifting during installation.

7. Reinsert the bolt into the marker ensuring to place the pin into the groove of the ram.







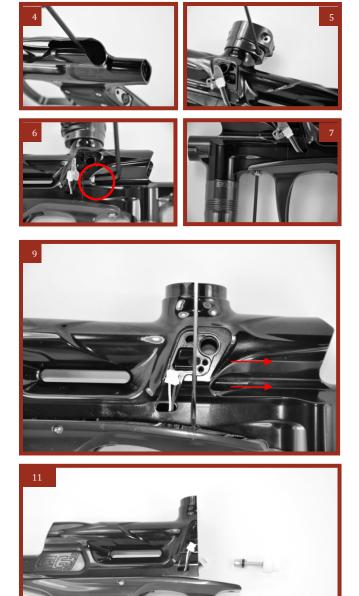
11. Install the back cap retaining screw.

Maintaining the Poppet Valve

Accessing the Poppet

Poppet valve maintenance is rarely required and incorporates parts of previous maintenance steps.

- 1. Begin by removing the bolt, back cap, and ram.
- 2. Remove the eye cover screws, detents, and the eye PCB retaining screws. You can leave the eyes connected to the wiring harness.
- 3. Remove the LPR from the front of the marker.
- Loosen the rear grip frame screw, accessible from the top of the marker through the ram area, approximately 1.5 turns. This screw does not need to be removed.
- Loosen the bottom screw on the feed neck. Leave the feedneck in place until you remove the other screws.
- 6. Remove the two forward facing body screws.
- 7. Remove the front grip frame screw located between the HPR and the trigger guard.
- 8. Tilt the body up slightly from the grip frame
- 9. Remove the feedneck then slide the front body half forward and off of the back half.
- 10. The tapered poppet return spring may fall free from the poppet, if not, pull it off and place it to the side.
- 11. Remove the poppet valve from the rear of the marker. Fingers, needle nose pliers, or pushing it from the ram area with a wooden chopstick all work.



Cleaning the Poppet and Reassembly

Once all the parts are disassembled and cleaned, the poppet can be lubricated then the marker reassembled.

- 1. Clean debris and excess grease from the poppet surface then inspect and grease the poppet o-ring. Replace the o-ring if any nicks or deformations are visible.
- 2. Slide the poppet back into the rear of the body.
- Inspect the four air passage holes to ensure the o-rings are in place and undamaged. Lightly lubricate these if no grease is visible.
- 4. Place the poppet return spring into the main body front. The larger portion of the spring goes towards the front.
- 5. Tilt the rear of the main body rear up slightly and slide the two halves together. Make sure the poppet return spring remains seated in the main body front while the small diameter portion slides over the poppet.
- 6. Slide the body halves fully together. The tab at the bottom of the main body front will slide into the main body rear. Make sure the top of the tab is against the top of the opening in the main body rear.
- 7. To verify correct alignment take a look at the feedneck area. If they are even, things look good. Place the feedneck in position and continue with reassembly.
- 8. Insert and tighten the left and right front facing body screws
- 9. Tighten the lower feedneck screw
- 10. Insert and tighten the front grip frame screw
- 11. Tighten the rear grip frame screw.
- 12. Install the eye retaining screws, detents, eye covers, ram, back cap, bolt, ham sandwich, and any other parts you removed during disassembly. If you have extra parts when you get finished you have a problem.





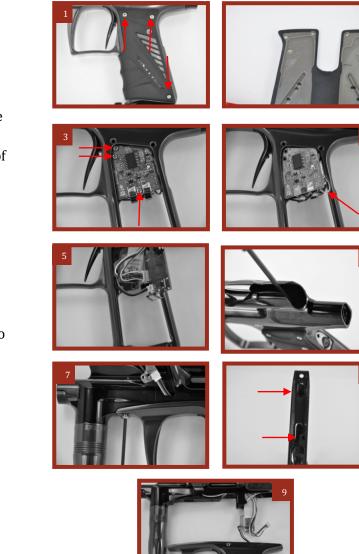




Grip Frame Removal

For most maintenance the grip frame doesn't require removal. However, in case of excessive paint on the grip frame, excessive curiosity, or excessive free time, here is how to go about doing it moderately sanely. The trigger can be removed any time during this process before removing the front and rear frame screws.

- 1. Begin by removing the six grip screws three on either side of the grip.
- Remove the wrap around grips. Notice that these truly wrap – they are not molded in a U shape like some other manufacturers do. Also notice the ribbed for your protection design on the inside of the grip panels. The rib helps align and secure the grip along the top of the grip opening while making it harder for your paint, rain, or your friend's drool to get into the frame.
- 3. Remove the three screws holding in the control board.
- 4. Lift the back of the control board out first, making sure the power switch clears the frame. Then slide the board slightly back while removing the front to prevent catching the micro-switch.
- 5. Turn the board over and disconnect the eye and solenoid wires. Always pull on the plug itself, not the actual wires.
- 6. Remove the ram and remove the rear grip frame screw accessed from the top of the marker in the ram area
- 7. Remove the front grip frame screw
- 8. Slide the frame down and off the body. Use care to not snag any wires or connectors as they pass through the frame.
- 9. Clean out any debris, paint, or other gunk. Lubricate the two o-rings on the top of the grip frame then reassemble.



CAUTION: READ ALL WARNINGS BEFORE USING OR ATTEMPTING ANY WORK ON YOUR MARKER. SHOULD YOU BE UNSURE AT ANY POINT, STOP AND SEEK PROFESSIONAL SUPPORT.

8

O-Rings and Fasteners

O-rings

Part Name	Specifications	Quantity
Mainbody Rear to Manifold	1 x 2mm Buna Durometer 70	2
Grip Frame to Manifold	1 x 4mm Buna Durometer 70	1
ASA to Grip Frame	1 x 4.5mm Buna Durometer 70	1
Manifold to Mainbody Front	1 x 5mm Buna Durometer 70	2
Manifold to Mainbody Rear	1 x 8mm Buna Durometer 70	1
Mainbody Rear to Manifold	1 x 13mm Buna Durometer 70	1
Back Block Cap to Mainbody Rear	1 x 15mm Buna Durometer 70	1
Mainbody Front to Mainbody Rear	1 x 18mm Buna Durometer 70	1
Mainbody Front to Inline Reg Center	1.5 x 20mm Buna Durometer 70	1
ASA Plunger	004 Buna Durometer 70	1
Poppet Shaft	006 Buna Durometer 70	1
Front of Ram	006 Buna Durometer 70	1
Leverlock Adjuster Bolt	008 Buna Durometer 70	1
Rear of Ram	011 Buna Durometer 70	1
Bellville Spring Stack Retainer O-ring	011 Buna Durometer 70	1
Reg Center to Mainbody Front	011 Buna Durometer 70	1
ASA Knob	011 Buna Durometer 70	1
LPR Piston	012 Buna Durometer 70	1
LPR Housing	014 Buna Durometer 70	3
Grip Frame to Mainbody Front	014 Buna Durometer 70	1
Outside of Bolt	015 Buna Durometer 70	3
360 Inline Reg Piston	016 Buna Durometer 70	1
Inline Reg Center to Reg Base	018 Buna Durometer 70	1

Fasteners

Part Name	Specifications	Quantity
Bottom PCB to Grip frame	M2 x 4 Pan Head Machine Screw 18-8 SS	1
Top PCB to Grip Frame	M2 x 10 Pan Head Machine Screw	2
Solenoid to Solenoid Manifold	M2 x 20mm Flat Head Machine Screw 18-8 SS	2
Left & Right Eye PCB's to Mainbody Front	2-56 x 3/16" Flat Head Machine Screw 18-8 SS	2
Rear Manifold to Mainbody Rear	2-56 x 1/4" Socket Head Cap Screw 18-8 BO	2
Left & Right Eye Covers to Mainbody Front	2-56 x 5/16" Socket Head Cap Screw 18-8 SS	2
Front Manifold to Mainbody Rear	2-56 x 3/8" Socket Head Cap Screw 18-8 BO	1
ASA Knob Retainer	4-40 x 3/8" Socket Head Cap Screw 18-8 SS	1
Leverlock Universal Collar	4-40 x 7/16" Socket Head Cap Screw BO	1
Trigger Switch Activation	6-32 x 1/4" Cup Point Socket Set Screw 18-8 SS	1
Trigger Stop	6-32 x 1/4" Cup Point Socket Set Screw 18-8 SS	1
2010 Wrap Around Grip to Grip Frame	6-32 x 1/4" Modified Button Head 18-8 SS	6
ASA to Grip Frame	8-32 x 3/8" Button Head Socket Cap 18-8 SS	2
Grip Frame to Mainbody Front	8-32 x 7/16" Button Head Socket Cap 18-8 SS	1
Mainbody Front to Mainbody Rear	8-32 x 9/16" Socket Head Cap Screw 18-8 SS	2
Back Block Cap to Mainbody Rear	8-32 x 9/16" Socket Head Cap Screw 18-8 BO	1
Mainbody Rear to Grip Frame	8-32 x 9/16" Socket Head Cap Screw 18-8 SS	1
Inline Reg Adjustment Screw	1/4-28 x 3/8" Cup Point Socket Set Screw 18-8 SS	1

O-Ring Size Table

1x2mm	0	1x4mm	Ο
1x4.5mm	0	1x5mm	0
1x8mm	0	1x13mm	\bigcirc
1x15mm	\bigcirc	1x18mm	\bigcirc
1.5x20mm	\bigcirc	004	0
006	Ο	008	0
011	Ο	012	Ο
014	0	015	0
016	0	018	\bigcirc

Q&A

- Q: My G6R is VERY bouncy and I can't do anything! I've topped out the debounce and AMB and I put the trigger in like every position possible.
 A: Make sure the trigger spring is installed. Make sure the trigger activates near the end of the pull. If necessary back out the trigger activation set screw ½ turn.
- 2. Q: Where can I get an o-ring kit?A: Bob Long Technologies and authorized resellers have o-ring and parts kits available.
- 3. Q: What is the recommended dwell setting?
 A: Dwell should be at 6 from the factory. There's no advantage to running a higher dwell to "break it in". There are exactly zero heavy springs in the HPR or LPR that need broken in.
- 4. Q: I am seeing large velocity fluctuations what should I do?
 A: Check for a good paint to barrel match. Ensure the HPR spring stack is assembled correctly and that your ram, HPR, LPR and poppet o-rings are lubed with Dow 55. Apply a drop of blue Loctite to the threads of the LPR adjustment screw then check the regulator pressures.
- 5. **Q:** I lowered my bolt delay and now the eyes registering an eye malfunction and lowered my bps to 12. What should I do?

A: The bolt delay is too low at 8ms, the eyes are activating too early while the bolt is still cycling backwards to prepare itself for the next paintball to drop. The eyes activate, see your bolt, and never register a change from the bolt to the ball coming in place. Raising the setting to 10 will normally clear this problem.

6. **Q:** So what is this bolt delay setting?

A: Bolt delay is actually an eye activation setting and not a bolt setting. Essentially you need a delay added in so the eyes don't turn on while the bolt travels backwards after a shot. If they turn on too soon, the marker thinks the bolt is a ball and will queue the next shot. This causes skipped shots and occasional chops. Keep it at 10 (or higher

- 7. Q: What weight is the stock G6R micro switch?A: 80g
- 8. **Q:** How much oil should I put on the bolt?

A: Just a drop on each o-ring. Put a drop on, then use your finger to put it around the entire ring. Too much oil can cause bolt movement problems or result on oil splattering on the eye system in extreme cases.

- 9. **Q:** What threading is the barrel? A: Autococker
- 10. Q: Is the Stock trigger a roller bearing?A: Yes

11. **Q:** What items are recommended to keep in my toolkit?

A: Each of the following:

- Pressure tester
- Dow 55
- Triflow oil
- 0-rings
- One wooden chopstick (occasionally helpful for poppet or ram removal)
- Hex key set
- 12. **Q**: How do I reset the settings to factory on the stock board?
 - **A:** Hold the tourny lock for 10 seconds once in programming mode.
- 13. Q: My feedneck isn't tightly clamping my loader- what should I do?A: Use a hex wrench to tighten the adjustment screw.
- 14. Q: I can't seem to get an adjustment screw on my trigger to move what should I do?A: Most triggers have blue Loctite on the adjustment screw. Just apply some steady force with the hex wrench and the screw will move.
- 15. Q: Where can I find additional information and other users of Bob Long Markers?
 A: <u>www.intimidatorowners.com</u> also the PBNation subforums dedicated to Bob Long products located at <u>http://www.pbnation.com/forumdisplay.php?f=146</u>
- 16. Q: I need to ship my marker in for technical support what is the address?A: The address varies depending on whether shipping by postal service or another method.

USPS/postal shipping:

Bob Long Technologies P.O. Box 457 Mokelumne Hill, CA 95245

Other shipping methods:

Bob Long Technologies 11669 Highway 26 Mokelumne Hill, CA 95245

Troubleshooting Guide

Markenseilleret term en est of the here	For some that the hattern that is the structure in the
Marker will not turn on out of the box	-Ensure that the battery that you're using in your new marker is a high quality alkaline 9 volt.
	-Verify that your battery is correctly oriented (matching
	with the correct terminals), and that it is making firm
	contact with the prongs on the circuit board.
	-Make sure that the wiring harness is correctly inserted
	into the receptacle, and that the on\off pad is making
	contact with the switch on the circuit board.
Velocity is inconsistent over the	-Always check that your paintballs are of high quality,
chronograph	and consistent in size, as well as using a good paint to bore match.
	-Make sure the LPR and the HPR are set to the proper
	pressures.
	-Replace your battery.
	-Inspect the ram o-rings for nicks and that they are
	properly greased
Marker is breaking paint	- Always check that your paintballs are of high quality,
	and consistent in size, as well as using a good paint to bore match.
	-Make sure the HPR and the LPR are set to the proper
	pressures.
	-Ensure that your detents and bolt face are in good
	condition, and there is no debris in the breech of the
	marker.
	-Reset your board settings to factory settings and use a force-fed loader.
	-Check the tension/pressure settings if you are using a
	force fed loader. Having too high of a feed pressure with
	fragile paint can cause balls in the stack to break

Marker does not gas up after tank is connected	 -Verify that the pin valve on your tank is outputting pressure to the regulator—some tanks will not work properly with certain ASAs. -Attempt gassing up the marker with another tank to see if this remedies the issue.
Marker does not display correct LED indicator color when turned on	-Verify that your battery is correctly oriented (matching with the correct terminals), and that it is making firm contact with the prongs on the circuit board.
	-Verify that the breech of the maker is clear of obstructions, the bolt is in the back position, and that the eyes are clean and plugged into the harness.
Marker is leaking from the ASA	-Check the tank o-ring (015 Urethane D90) for nicks or tears.
	-Pull out the ASA plunger (the item which presses against the tank pin) using needle nose pliers. Clean and relube the o-ring.
Air is leaking from the front of the marker frame	-Verify that the racetrack o-ring in the front of the frame is free of nicks and has a light coat of grease to induce swelling.
	-Verify that the grip frame is tight to the main body.
Air is leaking from inside the marker frame	-Remove the trigger frame from the marker and lubricate the air transfer hole o-rings
	-Separate the front and back body halves and inspect/replace the o-rings in the air transfer locations
Marker leaks down the barrel	-Ensure that your ram o-rings are free of nicks, and properly lubricated.
	-Verify that your poppet seal is in good condition, with its shaft o-ring is free of nicks and properly lubricated.

Marker fires more than one shot per pull, or has trigger bounce	- Verify that your trigger has the spring installed and that it is properly seated
	- Verify that your marker is in semi-automatic mode
	- Raise your marker's debounce level, and make sure that your trigger activation point is not too short.
Marker double feeds	-Verify that detent springs are in place and detents move freely
	-Replace the marker's ball detents if they are excessively worn
	-If using Super Ds make sure the detents are lubricated on the sides