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### Palmer's Pursuit Shop

3951 Development Dr. #3

Sacramento, CA. 95838

Ph. (916) 923-9676

Fax (916) 923-9674

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# OWNERS MANUAL FOR BLAZER, PAINTBALL GUN

Congratulations and thank you for purchasing the BLAZER, Paintball shooter. Palmer's Pursuit Shop's latest in a long line of high performance Paintball equipment, the Blazer is precision manufactured with high quality materials and craftsmanship, in order to provide you with years of highly effective service on the Paintball field of play. The design criteria for the Blazer is pretty straight forward: User friendly, blazing speed, maximum effective range and accuracy with reliability and durability that are second to none. The Blazer is a finished product . Add air and paintballs. and go get em.:-) With over thirty years of background in gun-smithing and nearly fifteen years of air-smithing and tourney level play; I believe that we have learned what is needed in a paintgun and how to get it there. The Blazer is how I felt that I could get the most out of my game and we here at Palmer's Pursuit Shop have made every effort to provide you with something that you can be as comfortable with in your game. The development process of the Blazer is now six years old and I think we have covered all of the bases. Every gun that we have built has been a form of proto-typing and proofing, leading up to the Blazer that you now hold in your hands..

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## WARNING:

**THIS IS NOT A TOY!!**  
**HANDLE SAFELY AT ALL TIMES AND ALWAYS WEAR APPROVED SAFETY GOGGLES!!**  
**READ AND UNDERSTAND THIS MANUAL BEFORE ATTEMPTING TO OPERATE THIS PAINTGUN!!**  
**IF YOU DO NOT READ THIS, YOU MAY NOT BE HAPPY WITH THE RESULTS.**  
**ADULT SUPERVISION IS HIGHLY RECOMMENDED FOR YOUNGER USERS.**  
**READ AND REMEMBER THERE MAY BE A QUIZ!!**

**CAUTION:** This is not a toy and should be used only under adult supervision. Misuse or careless use may cause serious injury - especially to the eyes. Users and observers must wear approved eye and face protection!!! Do not insert fingers into action when the gun is cocked or gas supply is attached. This gun is powered by CO2 gas under very high pressure. Extreme care should be taken when any gas source is attached to the gun!!!!

NEVER leave the CO2 gas supply attached to any paintgun when it is not in use. May be dangerous up to 100 yards. (91 meters) Use a barrel plug when not on the playing field. Always assume that this paintgun is loaded and potentially dangerous. When handling, always CHECK to make sure that it is not loaded. NEVER use a CO2 bottle that is over heated. Follow DISCHARGE PROCEDURE immediately after playing! Point only at things that you INTEND to shoot! SPECIAL CAUTION!! Use only D.O.T. approved CO2 cylinders with a high quality pin-type screw-in valve that is properly installed and torqued (tightened) into the cylinder. A loose bottle valve can be extremely dangerous. A CO2 bottle could become a deadly, high velocity, projectile!!!!

The use of LIQUID CO2 should be reserved for very cold weather conditions ; 32 degrees or below. This paintgun is tolerant of liquid, but a steady diet of liquid CO2 will cause erratic behavior and may shorten the effective life-span of any paintgun.

Do Not use an expansion chamber on this equipment; especially in cold weather. Over expansion of the CO2 greatly reduces its natural potential energy and you will find it difficult, if not impossible, to reach and maintain effective and consistent velocities.

Maximum Velocity is 300 feet per second. - 205 miles per hour- Velocities over 300 fps must be avoided as Injuries may result or you could make somebody very angry !!! (275 fps to 285 fps should give you the best results).

Special Note: To maintain maximum effectiveness and consistent operation, the use of a GAS ONLY -ANTI-SIPHON- air supply source is strongly recommended for most Paintguns. Introduction of liquid CO2 into the system, while firing, will cause a sharp increase in velocities and may be hazardous to your opponents health. It is not good for the overall performance of the paintgun either.

## **START UP PROCEDURE**

- 1.Point the gun UP in a safe direction.
- 2.Pull and Hold trigger to the rear. (to know when gun is charged and to begin cycle of operation).
- 3.Screw in CO2 bottle (Operating cylinder should move the bolt to the rear, rapidly). Full rearward travel is indicated when the back of the bolt is flush with the rear of the body.
- 4.Release the trigger fully. (The bolt should return to the forward position, just as rapidly. The gun should now be cocked and ready to fire. If not, see REGULATOR instructions).
- 5.PULL and RELEASE the trigger fully for complete cycling. (the system should operate smoothly and quickly. If not, see REGULATOR instructions and adjust for proper operating pressure as needed).
- 6.PULL back and hold the trigger (to check for proper operating pressure), push on the back of the connecting link to the bolt while holding the trigger back. It should be spongy but hard to push forward. If it feels right, you are set and ready to go, if not, refer to REGULATOR instructions.
- 7.Put safety on and insert a barrel plug into the muzzle.
- 8.Install loader and ad paintballs.
- 9.Go to firing range or the Paintball field.
- 10.Remove the barrel plug, disengage safety and HAVE A GOOD TIME!! SAFELY, please. Set velocity to any level below 300 fps. Use a chronograph! Don't Guess !!!! Maximum Velocity is 300 feet per second. - 205 miles per hour- Velocities over 300 fps must be avoided as Injuries may result or you could make somebody very angry !!! (275 fps to 285 fps should give you the best results).

## **DISCHARGE PROCEDURE**

As soon as possible after using your paintgun, you should always remove the gas supply. NEVER leave a pressurized gun unattended!!! The best way to clear your gun is to unscrew the tank ONLY 1/8 to 1/4 turn counter clockwise then fire the gun in a safe direction until no gas remains in the gun. Then remove the tank completely. If you unscrew the tank while under pressure, the high pressure gas escaping past the O-ring can and will damage the O-ring. (A small stream of high pressure gas can cut like a knife.)

## **REGULATOR ADJUSTMENT INSTRUCTION**

Front right 3/16 allen screw.

The operating system regulator is the heart of this automation system. This regulator reduces the normally high pressure of CO2 down to a lower pressure (approx. 80 to 100 psi.) for safe and efficient use in the automation system; that is separate from the firing system. As the temperature rises and lowers, the pressure of stored CO2 will also go up and down (low temp. = lower pressures, high temp. = higher pressures). The variations in supply pressure make it necessary to adjust the system regulator from time to time to maintain proper operating pressures. This system's regulator is specifically designed for use with CO2 and to minimize the need for adjustment. After an initial break-in period of approx. 2000-4000 shots, you should find that the regulator has "taken it's SET" and will need no further adjustment. SPECIAL NOTE: as the supply pressure going into the regulator goes up or down, the pressure from the regulator to the system will go up and down exactly opposite. (I.E. Supply pressure up = regulated pressure down and vice versa.) As you become familiar with this system, you will discover that there is an operational SWEET SPOT. (The point of adjustment where everything is working just right) Find that SWEET SPOT and leave it there!! Adjustments should only be made when and if necessary; Which should only be because of extreme weather condition changes (or during the normal Break-in period). Adjusting the automation system regulator will not affect velocity. The way to find your paintgun's SWEET SPOT follows:

## REGULATOR ADJUSTMENT PROCEDURE

1. Be sure that the temperatures of the paintgun, the CO2 bottle and the air are all the same. This is important to establish an initial balance.

2. Check Pressure (This is done while holding the trigger back, thus keeping the bolt held back). While the bolt is back, check to see if the rear of the bolt is flush with the rear of the body. If the bolt is flush with the rear of the body it has at least enough pressure to function properly. Now, in order to be sure that there is not too much pressure, try to push it forward by pushing on the bolt-connecting link. It should move a little but be stiff, (about like trying to squeeze a super ball). If the pressure is too low, and the bolt does not come fully to the rear (not flush with the gun body) the gun probably will not cock and the bolt will be too easy to move forward. If the pressure is too high, the bolt will feel rigid and be almost unmovable. (Extreme high pressure may cause the trigger to stick in rear position when released or the OVER PRESSURE RELIEF system will activate, allowing gas to escape through the vent hole near the regulator adjusting screw).

3. ADJUST the OPERATING PRESSURE only as needed. To INCREASE pressure, turn the regulator adjusting screw CLOCKWISE; to DECREASE pressure turn the regulator adjusting screw COUNTER-CLOCKWISE. To make adjustments, use the 3/16" HEX (Allen type) wrench provided. Make adjustments only 1/4 turn at a time. Cycle the gun a few times and check pressure after each adjustment.

THE GOAL HERE IS TO FIND THE LOWEST PRESSURE THAT PROVIDES FULL CYCLING OPERATION. THEN, INCREASE THE PRESSURE BY 1/4 TO 1/2 TURN ON THE ADJUSTING SCREW.

The regulator should now be set properly and should only need to be re-adjusted occasionally during the short break-in period of about 2000-3000 shots. This break-in period is needed to allow the springs and seals of the regulator to take their "SET". Once the regulator has settled in, you may not find it necessary to ever adjust it again.

### SYMPTOMS THAT WOULD SHOW THAT ADJUSTMENT IS NEEDED AND PROBABLE SOLUTIONS

Bolt does not move at all when air is applied. Check gas supply, check safety, Increase pressure. Bolt comes only part way back and returns forward when the trigger is released. Check gas supply, increase pressure. Bolt comes almost all the way back but does not return when trigger is released Pull the bolt to the rear and release, it will return forward, increase pressure slightly. Bolt snaps to rear but does not return when the trigger is released and the trigger does not return to full forward position. Pressure is too high!!! Help the trigger forward, (bolt should also return forward). DECREASE pressure, check gas supply. Gas escaping at the hole near regulator adjusting screw means that the Over Pressure Relief is activated and is venting. (leaking) Pressure is way to high!!! DECREASE pressure immediately!! IMPORTANT NOTE: the OVER PRESSURE RELIEF valve will RESET itself when the regulated pressure has been lowered to normal operating pressure. REMINDER: Turn the regulator adjusting knob CLOCKWISE to INCREASE pressure and COUNTER CLOCKWISE to DECREASE pressure for the automation system. (Or, as LORI would say, "Righty - Tightly, Lefty - Loosey") ;-)

## VELOCITY ADJUSTMENT

This adjustment is to set the speed (velocity) that you want to fire a paintball. A 3/16" HEXagon wrench (Allen type wrench) is required and included with each Blazer (a 5/64" hex wrench is required and included with the optional back-bottle kit). The VELOCITY ADJUSTING SCREW is located at the very rear, lower section of the rear of the marker. (the adjuster is located at the top of the bottle valve receiver on the optional Back-bottle kit. ( See photos following this section.) Turn the adjusting screw CLOCKWISE to INCREASE the velocity or COUNTER-CLOCKWISE to DECREASE the velocity. What this adjustment does is change the spring tension behind the hammer. This determines how hard the hammer hits the valve open, to let air out, and push the ball down the barrel. For best results, adjust velocity to approximately 280 f.p.s. USE A CHRONOGRAPH, DON'T GUESS!!!

ANOTHER SPECIAL NOTE: The automation system regulator and the velocity adjusting system are completely separate: Neither adjustment should have any effect on the other!

## FEATURES

### GAS SUPPLY RECEIVER

The gas supply receiver (also known as A.S.A. Air System Adapter) is located in the vertical position on the front of the main body, just in front of the trigger guard. There is also an optional kit available to easily add "back-bottle" capabilities that enable the tank to be utilized

as a stock. The Gas Supply Receiver will accept only standard Pin-Valve type CO2 tanks or appropriate hose adapters that have an O-ring seal around the front edge of the valve. NOTE: STANDARD PIPE FITTINGS WILL NOT WORK! The pin valve is opened by a stud in the bottom of the gas supply receiver. To charge the gun, screw in the tank only far enough to open the valve and stop there. This will help to prolong the life of the O-ring. If you continue to turn the valve into the receiver under pressure, damage to the O-ring may result. A little oil or light grease on the threads of the valve and receiver will also reduce wear. If a tank with a hand operated on/off valve is used, be sure it is inserted fully into position before opening the valve. Best results will be achieved if manual on/off valves are only opened by 1/4 turn on the knob. Important---Keep the gas supply receiver and tank valves clean!! Grit in the gas supply will damage seals and other moving parts. Note: The plug at the back of the regulator can be removed or additional pressure access into the gun, like for connecting the optional back-bottle kit. Use Teflon tape on any fittings used there.

### **SAFETY**

The Safety is a functional part of this equipment and should be engaged whenever the paintgun is not in use. The Safety blocks the trigger from being pulled accidentally. On the Blazer, the Safety is a sliding pin located behind the trigger. Move the pin to the right for Safe and to the left for Fire. (opposite for left-handed models.) A red ring around the pin will be visible on the left when in the Fire position. SAVE THE EYES... KEEP PAINTBALL SAFE!!! ALWAYS USE THE SAFETY, a BARREL PLUG AND APPROVED FACE AND HEAD PROTECTION

### **TO REMOVE THE BOLT:**

The bolt is very quickly and easily extracted from the Blazer by retracting the head of the bolt connecting pin from the connecting link and pulling the bolt out through the rear of the body. This is the retractable brass knob with a pin that passes through and is affixed to the rear of the bolt. It allows for ultra quick removal of the bolt when cleaning is needed (which should not be very often). :- ) To remove the bolt: Pull out on the brass knob (located on the left hand side of the gun) to retract the base of the knob from the connecting link. While holding the knob out and clear of the pocket that it fits into, pull straight to the rear on the brass knob and the bolt will slide out to the rear. To reinstall the bolt, reverse the previous procedure. Place the bolt (o-rings first) into the rear of the gun with the connecting-pin knob pointed to the left. While sliding the bolt forward, pull out (to the left) on the brass knob, far enough for it to clear the side of the connecting link. When the bolt is in the full forward position, release the knob and let the base of the knob settle into the recess/pocket on the side of the link. Be certain that the base of the knob is fully down into the recess before operating the system.

### **BALL FEED CONTROL**

Proper alignment and indexing of the paintballs, during the feeding operation is important to consistent, trouble free operation. On your new Blazer, a spring-loaded ball détente prevents double feeding and a small ridge that is swaged into the barrel (chamber area), holds the paintball in the proper position, inside the barrel. This small ridge, that we call the "Wedgit", prevents the paintball from rolling forward in the barrel, prior to being fired. The Ball feed détente is the hex-head, part mounted through the left hand side of the gun; into the breech area. It consists of the brass body, a small stainless steel spring and a Delrin ball that is positioned to provide accurate feed indexing. In the event that the ball détente must be removed, it is very important that it be reinstalled to the proper depth into the breech prior to operating this paintgun.

### **REMOVABLE BARREL**

The precision made brass barrel for your Blazer is held in place by a simple clamp at the front of the main body. A small screw that passes through the front of the sight rail, provides adequate pressure to the clamping process, to securely hold the barrel in place. To remove the barrel, loosen the screw at the front sight rail (approximately 1/2 turn) with a hex-key wrench, and slide the barrel straight out from the front of the gun body. To reinstall the barrel, slide it straight into the front of the gun body until it is seated fully and gently tighten the clamping screw. Caution: tighten the barrel clamping screw only about 1/8 turn beyond "finger tight". Over-tightening of the clamping screw can cause damage. It is not necessary to remove the barrel to clean it or the whole paintgun. The less frequently the barrel is removed, the better off you will be. Consistent positioning of the barrel will help to maintain consistent placement of your shots. Warm water and a swab is usually all that is needed to clean the barrel thoroughly. However, the occasional use of a commercially available, non-abrasive, brass cleaner/polish -i.e. Brasso- is desirable to maintain the mirror finish of the bore. Effective accuracy depends on a clean and dry barrel. Any thing less than immaculate will not allow the accuracy that you expect.

## !!! MAINTENANCE !!!

MAINTENANCE = Regular CLEANING and LUBRICATION Keep your equipment clean and properly lubricated and you can expect many years of trouble free operation. Lack of proper maintenance can cause the early death of any machine!! You paid good money for this equipment; now, take care of it!!!

### CLEANING

The best thing that we have found to thoroughly clean your paintgun with is WARM WATER and lots of it. It is not necessary to disassemble this paintgun to thoroughly clean it. The bolt is the only part that you should have to remove, even for the most thorough cleaning. At the field, a spray bottle with a strong stream will do. At home, try the kitchen sink. Save water and take your paintgun into the shower with you. Flush the gun thoroughly with warm water. This will remove any dirt, paint, gelatin and most of the oil. Shake out any excess water. Compressed air or a home blow dryer, on WARM only, will help to get the water out. After drying the outside, charge up the gun and fire (in a safe direction with no paint) several times to get the moisture out of the internals. Remove the CO2 supply and lubricate as directed (next section). Recharge the paintgun and fire several more times to spread the lubrication throughout the system. Now its clean and ready for action or storage. Before shooting paintballs, swab the barrel with a clean, dry swab, cloth or paper towel, to remove any residual moisture or oil. Remember: Effective accuracy depends on a clean and dry barrel. On field cleaning can be done in just a few seconds by removing the bolt and pushing a swab through from the rear. A double ended swab works best. A mixture of water and alcohol helps speed up the drying process when at the field. Water will cause no harm to this paintgun because of the materials used in its manufacture. Thorough cleaning should only take a few minutes.

### LUBRICATION

A necessary part of proper maintenance!

If you want your paintgun to enjoy a long and trouble free life, proper lubrication is essential. There is a bottle of oil included with this gun; use it frequently but sparingly. Use only approved lubricants!! AIR TOOL oil or Light Machine oil (I.E. Sewing machine oil, 3 in 1 oil etc.) Air Tool oil is provided with your gun and is available at Palmer's or your local Hardware or Tool Supply. Do not use spray-on lubricants or white Lithium grease. Most spray lubricants contain solvents (used to thin out the oil to make it sprayable) that can be harmful to seals. CO2 and Lithium grease combine to become something close to chewing gum. Only about 7 to 9 drops of oil are required to lubricate your paintgun completely. One drop of oil on each of the O-rings of the bolt (3) (A light coating of petroleum jelly, aka Vaseline also works well on the bolt o-rings) Two or three drops to the hammer and mainspring (applied through the slot at the lower/left side of the gun) and two or three drops of oil into the pneumatic system will provide adequate lubrication for approximately two thousand shots/cycles. To lubricate the automation and firing systems internally, apply oil to the depression in the face of the tank valve or apply directly into the gas supply receiver. With oil in the tip of the tank or in the gas supply receiver; charge the gun up and fire/cycle it several times. Air moving through the gun while firing it, will distribute the oil to the internal components as needed. Any excess oil will pass through the gun and some excess oil will be deposited in the barrel, reducing accuracy if not removed. Internal lubrication of the Pneumatic system is only needed every 2000 to 3000 shots or after thorough cleaning. Remember, only 2 or 3 drops of oil at a time are all that is needed. A thorough cleaning and lubrication should be done after each day of use.

### TROUBLE SHOOTING

Our paintguns and this manual are products of many years of **research and development, heavy use and abuse, severe testing and critical evaluation.** We have strived to provide our customers with the most trouble free equipment possible. What you will read here comes from our experience over the years of trying to fulfill our goal of superior and lasting performance. Your understanding of this equipment will help us to meet these goals. If you should discover ways to improve on the product and/or this manual, please let us know so we can pass it on for others.

The most common causes of trouble are:

Regulator settings: See [Pressure Regulator Adjustments](#) section. Lack of proper maintenance (Too much dirt, not enough oil): Refer to [Maintenance](#) and [Lubrication](#) sections. Improper gas supply: Empty or nearly empty CO2 bottle, an over-filled bottle, or an improperly operating bottle valve will cause erratic operation and a wide range in velocity variation. (The gas supply is the first thing we check when a problem occurs). Improper re-assembly: Usually indicated by leaking seals, improper timing of the firing and re-cocking sequence and/or a failure of the Blazer to operate at all. (If you simply must take it apart, be sure you know what you are doing, have replacement seals and/or parts handy and use the proper tools with a firm but gentle

hand). If you have ANY doubts, call for assistance. Seek the help of a **QUALIFIED PROFESSIONAL!!** Breaking or cutting paintballs during rapid firing: Most commonly caused by improper trigger operation; (I.E. "SHORT STROKING" the trigger or a restriction or delay in the feeding process from the hopper/magazine being used. A FULL trigger pull and release is required for proper operation as well as a free-flowing paintball supply. Familiarize yourself with the operation of the trigger by shooting a bottle-full of air only before using paint. You will easily know when you have miss-stroked the trigger by the sound of the shot. Also be sure that the Ball Feed index unit is in proper position and that the regulator is properly adjusted. Also, refer to [Automation Timing](#).

#### **AIR LEAKS:**

Air heard escaping down the barrel suggests a damaged or contaminated exhaust valve (a.k.a.: cup seal) or the front o-ring of the exhaust valve seat/guide body. To replace either of these seals, it is necessary to remove the valve seat/guide body from the main body of the gun and should only be done by a qualified technician. SPECIAL NOTE: The retaining screw for the valve components is in the bottom of the gun body, between the body and the grip frame and must be removed to gain access to the firing valve components. An air leak (or venting) at the hole near the regulator adjusting screw at the front of the gun, indicates an over-pressured state in the regulator that has caused the "over-pressure" relief valve to activate and vent the system safely. Refer to [Pressure Regulator Adjustments](#) section and reduce the regulator's output pressure. Other air leaks can be easily pin-pointed by applying soapy water to the suspect area or fully submerging a pressurized paintgun in water. The bubbles will point out the component of the gun that needs attention. A qualified technician can easily replace seals Contact [Palmer Pursuit Shop](#) for assistance if you should encounter any leaks. (Especially any internal ones that you cannot locate with soapy water.) Inconsistent velocity can result from any one of several different conditions, including but not limited to the following: The state of the gas supply source being used; dirt or other foreign matter in the area of the hammer and mainspring; lack of lubrication; a loose velocity adjusting screw; a damaged exhaust valve; incorrect Automation System timing (see [Automation Timing](#) section); quality/condition of the paintballs being used; changing atmospheric conditions; etc. It could also just be D.O.T.S. (inside joke ) ( High temperature weather conditions, (above 90 degrees F.) may cause some erratic behavior due to the nature of CO2. At these temperatures CO2 just does not want to be a liquid anymore, and pressures will change quite noticeably and quickly with just a few degrees in temperature change or slight differences in the amount of liquid CO2 actually in the tank! This is really not a problem if you accept it as the nature of things, and adjust as needed. Refer to [Pressure Regulator Adjustments](#) section. Unstable velocity conditions are usually a result of gas supply source conditions. Conditions such as an overfilled or overheated tank or a nearly empty or very cold tank at start-up will cause wide variations in velocities during use. It is important to use a properly filled, tank that has been allowed to warm up to present (ambient) air temperature, at start-up. Ideally, a tank that is filled to slightly less than max. capacity should be used. (Example: 11oz. in a 12oz. tank) In warmer weather conditions; the use of a tank that is filled to a little (10-15%) less than stated capacity will provide more consistent output pressures and allow a much higher degree of consistent operation and firing performance. (i.e. 16 ounces in a 20oz tank & 10.5 oz. in a 12 oz. tank) Here is why: If you use a tank that is overfilled or overheated (relating to existing conditions, the pressure inside the gun will be higher than normal which means that there is higher pressure holding the valve closed. This then makes it necessary to increase the tension on the hammer spring to generate enough force to drive the valve open against the higher pressure. Then, as the gas is consumed the pressure in the tank and the gun goes down and there is less pressure holding the valve closed. With less resistance, the hammer will now drive the valve open further and hold it open longer causing the velocity to noticeably rise. (Commonly called "spiking") Just the opposite happens with a freshly filled, very cold tank. Lower pressure holding the valve closed = less hammer force needed to drive the firing valve open. Then the pressure goes up and there isn't enough hammer force to get the valve open far enough and the velocity goes down. Although, if you start out with the gun, a properly filled tank and the air all at the same temperature, you will see very little change in velocity during use.

#### **AUTOMATION TIMING**

The cycles of operation; Firing, Cocking, Feeding, Chambering, must happen in the right order or this paintgun will not work properly. In these paintguns, proper timing is accomplished by the trigger operation of two systems simultaneously, in proper sequence. The hammer must be released by the sear, to hit the valve and fire, just slightly BEFORE the 4-way valve is activated, by the connecting linkage from the trigger, to push the bolt rearward. The 4-way valve switches pressure to the side of the operating cylinder that pushes the bolt and hammer the rear for feeding and cocking. With the trigger held to the rear position, the bolt remains clear of the feed port so a ball can drop into the breech and the mainspring remains compressed behind the hammer. When the trigger is released to the forward position; the sear moves up in front of the hammer to hold it in the cocked position and the 4-way valve is switched to provide pressure to the opposite side of the operating cylinder. The cylinder then moves the bolt forward to chamber a ball and seal the breech in preparation for the next shot. The proper

positions of all of the components and linkage, relative to each other, is essential to the proper and effective operation (timing) of the system. There are two points of adjustment in the trigger system on the Blazer that are established to set the proper timing of the functions. One is a small set-screw at the back of the trigger where it meets the sear. It is used to control how high the sear sets up in front of the hammer. It controls just how far the trigger is pulled before the release of the hammer. The second adjustment is at the connection of the trigger rod linkage (inside the grip frame) This adjustment controls the timing of the activation of the 4-way valve by the trigger. The 4-way valve must activate slightly after the hammer is released so that the bolt is still in the full forward position when firing takes place. The activation of the 4-way valve is accomplished by way of a small bent rod that runs from the trigger linkage, along the top of the grip frame and up into a small slot at the bottom-front of the gun body. The vertical tip of that rod must fit between the two rings of the switch head (visible through the slot). If the tip of the connecting rod is not between the two rings, the gun will not function at all. In order to avoid "timing" difficulties, care must be taken to not bend the connecting rod during installation of the grip frame. If you should run into a situation that you do not understand about this paintgun, please refer back to earlier sections of this manual prior to calling Palmer's Pursuit Shop. (916) 923-9676 If and when you call for assistance, one of the first questions that you may be asked by our staff is; Did you read the Operators Manual? If you haven't read this manual, you may be asked to call back after you have done so.

## **REPAIRS AND SERVICE**

THERE ARE SOME THINGS THAT ARE BETTER LEFT TO A PROFESSIONAL!!!

We at Palmer's Pursuit Shop take great pride in offering to you, the customer, a high quality and a highly dependable piece of equipment. We want you to have that same pride and confidence, allowing you the highest levels of enjoyment and accomplishment in your game. To achieve this, we thoroughly test and very critically inspect each and every piece of equipment before delivery. As of yet, none of us here are able to walk on water! So, it is possible that you may find yourself in need of advanced service and/or repair to your paintgun. If so, we will be here to help keep your paintgun performing at the highest levels of effectiveness. We don't just stand behind our products; we stand WITH our products! Palmer's Pursuit Shop warrants this paintgun to be free from defects in materials and/or workmanship, to the original purchaser, for one year. [See enclosed warranty sheet.] Any needed service/repair under Palmer's warranty will be done at Palmer's Pursuit Shop only, unless otherwise directed by Palmer. Any and all warranty work needed will be done IMMEDIATELY upon arrival at our shop and returned ASAP. You may be shooting it but "it is still my baby, and I don't mind taking care of it" is the way GLENN PALMER feels about it. Always seek the help of a QUALIFIED PROFESSIONAL for service and repair of any equipment! "If it isn't broke, don't fix it!" If you mess with it you may find yourself responsible for it. Refer to the TROUBLE SHOOTING SECTION. Contact PALMER'S PURSUIT SHOP at (916) 923-9676 or via E-Mail at [glenn@palmer-pursuit.com](mailto:glenn@palmer-pursuit.com) for information, service, comments or suggestions regarding this equipment. Enjoy your equipment and enjoy your game!

PLAY SAFE! PLAY FAIR! HAVE FUN!

THANK YOU,  
GLENN PALMER  
aka PALADIN

Palmer's Pursuit Shop  
3951 Development Drive Suite #3  
Sacramento, Ca. 95838  
(916) 923-9676  
FAX (916) 923-9674  
E-Mail [glenn@palmer-pursuit.com](mailto:glenn@palmer-pursuit.com)

## **LIMITED WARRANTY**

There are no warranties, express or implied, of merchantability or fitness for any purpose except as follows. Palmer's Pursuit Shop warrants this product to be free from defect in workmanship and/or materials, under normal use and service, for a period of one (1) year from the validated date of purchase; to the original purchaser only. Our obligation under this warranty is limited to replacing or repairing, through and by Palmer's Pursuit Shop, any part or parts thereof which shall upon our examination, prove to be defective. This warranty shall not apply to any unit that has been subject to misuse, negligence, modification or accident. Products returned for repair or replacement under this warranty, must be shipped to Palmer's Pursuit Shop, freight paid, in a postal/freight carrier approved container; along with a letter describing the problem. Products will be returned at Palmer's Pursuit Shop's expense. Palmer's Pursuit Shop reserves the right to make changes, additions or improvements upon its products with no obligation to install same upon products theretofore manufactured. No warranty

services will be performed without prior warranty registration. No exceptions.

For your records:

Your BLAZER was purchased at :

Dealer's Name \_\_\_\_\_

Dealer's Address \_\_\_\_\_

Date of purchase \_\_\_\_\_ Serial Number \_\_\_\_\_

3951 Development Dr. #3

Sacramento, CA 95838

PH. (916) 923-9676

FAX (916) 923-9674

[glenn@palmer-pursuit.com](mailto:glenn@palmer-pursuit.com)

PLAY SAFE! PLAY FAIR!! HAVE FUN!!!

If you have questions or comments about Palmer Pursuit Shop, please email Glenn Palmer. If you have questions about this web site, please email Craig Palmer