

**OPERATING  
INSTRUCTIONS  
FOR X-CALIBER GAS  
FIRED PROJECTOR**

**X-CALIBER™**



[www.pneudart.com](http://www.pneudart.com)

**pneudart inc**



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Please read this owner's manual carefully before operating your projector. This manual contains valuable information to ensure that your equipment operates at its optimum level.

Feel free to contact us or visit our Web site for tips, more information, and further assistance.

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# Owner's Manual For X-Caliber Gas Fired Projector

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**READ ALL INSTRUCTIONS AND WARNINGS IN THIS MANUAL  
BEFORE USING DART PROJECTOR**



**WARNING: NOT A TOY. RECOMMENDED FOR ADULT USE ONLY. MISUSE OR CARELESS USE MAY CAUSE SERIOUS INJURY OR DEATH. DANGEROUS WITHIN 250 YARDS (230 METERS). YOU AND OTHERS WITH YOU SHOULD ALWAYS WEAR EYE PROTECTION TO PROTECT YOUR EYES. READ ALL INSTRUCTIONS BEFORE USING. BUYER AND USER HAVE THE DUTY TO OBEY ALL LAWS WITH THE USE AND OWNERSHIP OF THIS PROJECTOR.**

**STEPS FOR SAFE SHOOTING:** Never allow others to use or inspect your projector without first instructing them in the fundamentals of safe use. For everyone's protection, stress keeping the muzzle pointed in a safe direction at all times. Inform them of any other common sense rules of safety, which the situation may require.

**STEP 1. Learn the Parts of Your New Projector**

**STEP 2. Operating the Safety**

**STEP 3. Energizing Your Projector**

**STEP 4. Adjusting Velocity**

**STEP 5. Loading and Unloading Darts**

**STEP 6. Aiming and Firing**

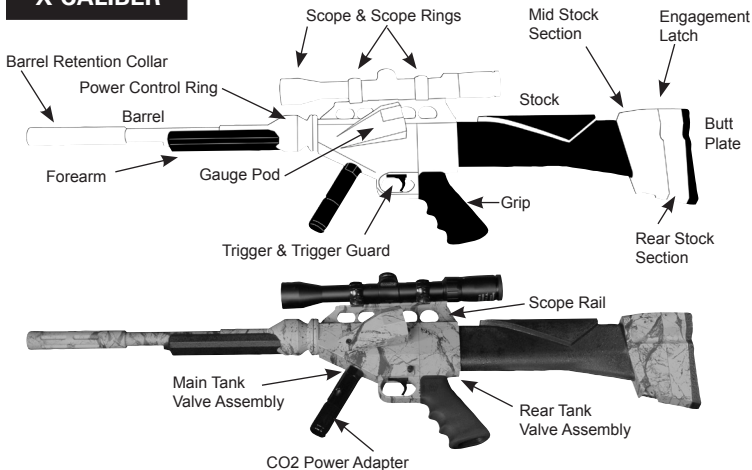
**STEP 7. Maintaining Your Projector**

**STEP 8. Reviewing Safety**

## STEP 1. LEARNING THE PARTS OF YOUR NEW PROJECTOR

Learning the names of the parts of your new projector will help you understand your owner's manual. Use this manual to increase your knowledge of the projector.

### X-CALIBER



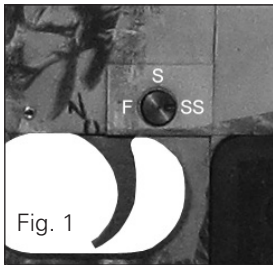
#### X-Caliber Specifications

- Stock and Action - Pneu Dart, Inc.
- Overall Length - 32"
- Dart Barrel - Rifled stainless steel 50 caliber with optional 11mm smooth bore barrel sleeve
- Sights - 3 X 9 adjustable scope
- Weight - 8.9 lbs
- Range - 2 feet to 100 yards with 1cc type "P" (Recommended) or type "C" disposable darts
- Metered pressure control - power control rotating ring.

## Step 2. OPERATING THE SAFETY

### A. To put the projector "ON SAFE":

- Locate the safety above the trigger.
- Rotate the safety clockwise, such that the knob is aligned with the letter "S"
- Push the safety from the left side all the way in. (Fig. 1).
- **The safety is not on unless it is pushed all the way in and the red ring around the safety is no longer visible.** The projector will not fire when "On Safe." Even when the safety is "On Safe," you should continue to handle the projector safely. Do not ever point the projector at any person. Do not ever point the projector at anything you do not intend to shoot.
- For your added value protection, the X-Caliber is equipped with a super safe mode. To take advantage of this feature (only in the safe mode) rotate the safety mark to the "SS" position. At this time the safety cannot slide nor can the projector fire".



### B. To Take The Dart Projector "OFF SAFE":

- With the safety indicator in the vertical position, push the safety from the right to the left all the way (exposing the red band) and using your left hand rotate the safety counter clockwise until it is aligned with the letter "F".
- The projector is ready to fire when "off safe."



**WARNING: KEEP THE PROJECTOR IN THE "ON SAFE" POSITION UNTIL YOU ARE ACTUALLY READY TO SHOOT. THEN PUSH THE SAFETY TO THE "OFF SAFE" POSITION.**

### Step 3. ENERGIZING YOUR PROJECTOR

**⚠ WARNING: WHEN ENGAGING OR DISENGAGING ANY AND ALL TANKS OR POWERLET ADAPTERS FROM THE MAIN TANK VALVE ASSEMBLY, ALWAYS OPEN AND LOCK THE REAR STOCK SECTION INTO A NINETY (90) DEGREE OPEN POSITION AS DEPICTED IN FIG 5B OF THIS MANUAL.**

**PLEASE NOTE: ALWAYS STORE YOUR PROJECTOR WITH THE SUPPLIED FLORESCENT ORANGE INTAKE PLUG THREADED INTO THE INTAKE PORT OF THE MAIN TANK VALVE ASSEMBLY.**

#### A. Activating disposable gas cylinder

- Put the projector "on safe" (See Step 2A)
- Thread O-ring male front section of the powerlet adapter into the "Tank Valve Assembly" (See FIG 2)
- Insert large end of disposable powerlet into back half of the powerlet adapter (See FIG 2a)
- With the smaller front section of the powerlet adapter firmly attached to the "Tank Valve Assembly" thread the back half of the adapter housing onto the front. (See FIG 2b)
- PLEASE NOTE: FAILURE TO FOLLOW THESE STEPS WILL RESULT IN A LOSS OF GAS PREMATURELY.



Fig. 2

#### B. Activating rechargeable Co2 cylinder (See FIG 3)

- Put the projector "on safe" (See Step 2A)



Fig. 2A

- Thread O-ring male front section of the rechargeable pin valve into the "Tank Valve Assembly" (See FIG 3)
- Firmly hand tighten the tank until it is fully engaged.



Fig. 2B

### C. Removing Power Sources

- Put the projector "on safe" (See Step 2A)
- For disposable gas cylinders, slowly rotate the powerlet adapter counter-clockwise until you can no longer hear the gas escape.
- For rechargeable gas cylinders, rotate the tank counter-clockwise.
- PLEASE INSPECT O-RING FOR ANY IRREGULARITIES. IMPERFECTIONS IN THE O-RING WILL CAUSE A LOSS OF GAS AROUND THE TANK VALVE ASSEMBLY
- NEVER ATTEMPT TO CHANGE POWER SOURCES WHEN PROJECTOR IS LOADED.

- ALWAYS OPEN THE REAR STOCK SECTION AND ALLOW IT TO REMAIN IN THE OPEN POSITION AS ILLUSTRATED IN FIG5B WHEN CHANGING POWER SOURCES.



Fig. 3

**NOTE:** Never try to force any gas cylinder.....Do not store your dart projector with a full, (or partially full) gas cylinder. Removing partially filled cylinders before storage can prolong the effective use of your projector.



**⚠ WARNING: CO<sub>2</sub> CYLINDERS MAY EXPLODE AT TEMPERATURES ABOVE 120° F (48.9° C). DO NOT MUTILATE OR INCINERATE THEM. DO NOT EXPOSE THEM TO HEAT OR STORE CO<sub>2</sub> CYLINDERS AT TEMPERATURES ABOVE 120°F (48.9°C).**

## STEP 4. VELOCITY ADJUSTMENT

The muzzle velocity of the dart can be increased or decreased by rotating the pressure control ring located behind the forearm (See FIG 4) To increase the pressure, rotate the ring counter-clockwise, to decrease the pressure rotate the ring in a clockwise direction.

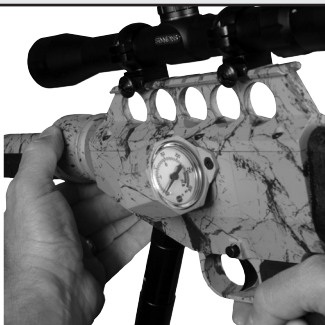


Fig. 4

**⚠ WARNING: USE EXTREME CAUTION WHEN HANDLING DARTS.**

## STEP 5. LOADING AND UNLOADING DARTS

### Loading and Unloading Darts

#### A. Loading Darts:

- Put the projector "on safe" (See Step 2A)



Fig. 5

- Point the projector in a **SAFE DIRECTION**
- Open rear stock section by depressing the top engagement latch with your index finger (See FIG 5)
- Pull in a rearward direction the back half of the stock section assembly until able to rotate (See FIG 5A)
- **PLEASE NOTE: ASSEMBLY IS SPRING LOADED**
- Rotate rear stock section 90 degrees (See FIG 5B)
- Place dart into dart barrel (See FIG 5C)
- Pull rear stock section in a rearward direction until able to rotate back to a vertical position
- Push rear stock section firmly into position (FIG 5D)



Fig. 5A



Fig. 5B



Fig. 5C



Fig. 5D

Fig. 5E

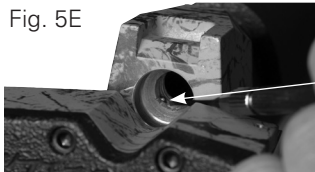


Fig. 5F



**⚠ WARNING: DO NOT LEAVE DARTS IN PROJECTOR FOR A LONG PERIOD OF TIME. DRUG MAY LEAK OUT AND CORRODE THE DART AND BARREL.**

- PLEASE NOTE: FAILURE TO LATCH REAR STOCK SECTION INTO FINAL POSITION WILL RESULT IN LOSS OF GAS UPON FIRING.
- Dart retention ball (See FIG 5E) ensures dart retention. Using a small flat-head screw driver you can adjust the dart retention ball depth by rotating the set screw found on the mid stock section (See FIG 5F)

Although not recommended, the dart retention ball must be retracted (backed off) when attempting to shoot Type C darts. Failure to do so will result in ripping the ball from within its socket thereby impeding performance until replaced.

## Unloading your Projector

### A. To unload your projector

- Put the projector "on safe" (See Step 2A)
- Open the rear stock section and rotate 90 degrees (see previous steps)
- Turn the projector upside down (scope facing down) and point the muzzle skyward
- Using the tip of our index finger, flick the tail of your dart and extract from the projector.

IN THE EVENT THE DART FAILS TO DROP DOWN FROM THE BARREL, LOOSEN THE DART RETENTION IN ASSOCIATION WITH FIG 5F.

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## Step 6. AIMING AND FIRING SAFELY

### A. Aiming and Firing the projector

- Put the projector "on safe" (See Step 2A)
- You and others with you, should always wear shooting glasses to protect your eyes.
- Using the OPPOSITE hand to your "trigger finger", rotate the power control ring in a counter clock-wise direction to increase pressure on the pressure gauge. (See Fig 4) When the pressure setting is equal to your desired muzzle velocity you are ready to deliver the dart. To decrease the pressure setting rotate the control ring in a clock-wise direction
- Always aim your projector in a safe direction. When you are sure of your target, and backstop, and the area around the target is clear, take to projector off SAFE (See FIG 2B) and pull the trigger to fire. PLEASE NOTE: SLOWLY SQUEEZING THE TRIGGER WILL RESULT IN LESS THAN DESIRED PERFORMANCE. PULLING THE TRIGGER IN A CRISP MOVEMENT (DO NOT JERK THE TRIGGER) IS REQUIRED FOR IDEAL DISCHARGE.
- Do not shoot at hard surfaces or at the surface of water. The dart may bounce off or ricochet and hit someone or something you had not intended to hit.
- Always choose your target carefully. THINK about what you will hit if you miss the target.

## Step 7. MAINTAINING YOUR PROJECTOR

IMPORTANT: For your convenience, the X-Caliber is equipped with spare O-rings for gas cylinder adapters, rechargeable tanks and projector O-rings (See FIG 7A & 7B). To access the spare O-rings remove the hidden allen wrench found in the mid stock

Fig. 7A

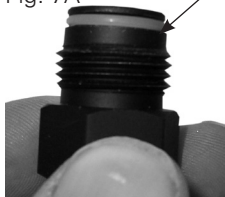
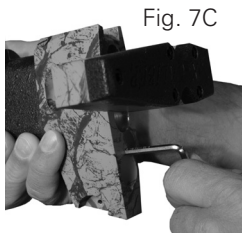


Fig. 7B



Fig. 7C



section (See FIG 7C). Remove the five bolts holding the rear butt plate (See FIG 7D) and locate the spare O-ring pack. (See FIG 7E).

- External metal surfaces should be wiped with a lightly oiled cloth after each use.
- If the accuracy of the projector falls off, the likelihood of barrel bore residue build-up has occurred. To remedy this, remove the barrel retention sleeve (See Fig 7F) and gently grasp the outside wall of the barrel with a dry cloth and extract the barrel. (See Fig 7G) PLEASE NOTE: NEVER PLACE ANY TOOL INSIDE THE BARREL THAT MAY CAUSE AN IMPERFECTION IN THE BORE. BORE DAMAGE CAN RESULT IN PREMATURE DART DETONATION. Slide a 50 caliber nylon (or brass) cleaning brush down the bore until clean. Lightly oil the OUTSIDE of the barrel and slide back into position. DO NOT PLACE ANY OIL INSIDE THE BARREL. Reattach the barrel retention sleeve and finger tighten. DO NOT HAND TIGHTEN AS THIS WILL CAUSE INTERNAL DAMAGE TO THE BARREL FITTINGS.
- Tampering with the projector or attempts to change the projector in any way may make it unsafe to use and will void the warranty.
- If you drop your projector, check to see that it works properly before you use it again. If anything seems



Fig. 7D



Fig. 7E



Fig. 7F

changed, like a shorter or weaker trigger pull, this may mean worn out or broken parts. Call Customer Service for assistance before using your projector again.

**DO NOT ATTEMPT TO DISASSEMBLE OR TAMPER WITH YOUR PROJECTOR.** Use an Authorized Service Station or return it to the factory for repair.



Fig. 7G

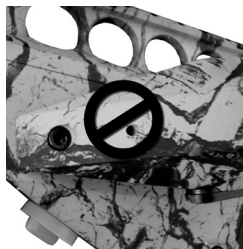


Fig. 7H



**WARNING: DO NOT ATTEMPT TO ADJUST THE RELIEF VALVE LOCATED ON TOP OF THE GAUGE POD (SEE FIG 7H) FOR YOUR SAFETY, THIS RELIEF VALVE PERMITS GAS TO ESCAPE WHEN PRESSURE EXCEEDS 300 PSI. SHOULD YOU NOT HEAR GAS ESCAPING AT A PRESSURE SETTING OF 300 PSI OR GREATER, PLEASE DO NOT ATTEMPT TO USE THE PROJECTOR AND CONTACT OUR CUSTOMER SERVICE DEPARTMENT IMMEDIATELY BY DIALING 1-570-478-7084**

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## Step 8. REVIEWING SAFETY

- Do not ever point the projector at any person. Do not ever point the projector at anything you do not intend to shoot. Always keep the muzzle of the projector pointed in a SAFE DIRECTION.
- Always treat the projector as though it is loaded and with the same respect you would a firearm.
- Always keep the projector "On Safe" until you are ready to shoot in a SAFE DIRECTION.
- Always check to see if the projector is "On Safe" and unloaded when getting it from another person or from storage.
- Always keep your finger off the trigger and out of the trigger guard until ready to shoot.
- You and others with you should always wear shooting glasses to protect your eyes.
- Use only darts made for this projector.
- Keep hands away from escaping CO<sub>2</sub> gas. It can cause frost-bite if allowed to come in contact with skin.
- Be careful if you shoot near hard surfaces or the surface of water. The dart may bounce off or ricochet and hit someone or something you had not intended to hit.
- When target shooting, replace the backstop if it becomes worn. Place the backstop in a location that will be safe should the backstop fail.
- Do not put the projector away loaded (See Step 5A) or charged with gas. (See Step 3A & 3B) Always store this projector in a secure location.

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## ATTACHMENT #1

**WARNING:** When engaging or disengaging any and all tanks or powerlet adapters from the main tank valve assembly, always open and lock the rear stock section into a ninety (90) degree open position as depicted in Fig 5B of this manual.

**Please note:** Always store your projector with the supplied florescent orange intake plug threaded into the intake port of the main tank valve assembly.

## ATTACHMENT #2

### Removing Power Sources

- Put the projector “on safe” (See Step 2A)
- ALWAYS OPEN AND LOCK THE REAR STOCK SECTION INTO A NINETY (90) DEGREE OPEN POSITION AS DEPICTED IN FIG 5B.
- For disposable gas cylinder, slowly rotate the powerlet adapter counter-clockwise until you can no longer hear the gas escape followed by fully removing the adapter.
- For rechargeable gas cylinders, rotate the tank counter-clockwise  $\frac{3}{4}$  of a turn then attempt to pressurize the projector by rotating the power control ring counter-clockwise as shown in Fig 4. This will allow residual gas to enter the main tank reservoir resulting in improving the life span of your adapter and tank O-Ring shown in Fig 7A & 7B respectively. Upon complete removal of the tank depressurize the projector by rotating the power control ring in a clockwise fashion.



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- **WARNING: NEVER STORE YOUR PROJECTOR WHEN PRESSURIZED. THE GUN CAN RETAIN PRESSURE WITHOUT A POWER SOURCE ATTACHED. TO VERIFY DEPRESSURIZE THE PROJECTOR BY ROTATING THE POWER CONTROL RING CLOCKWISE AND TRIP THE TRIGGER WITH THE REAR STOCK SECTION STILL IN A 90 DEGREE OPEN POSITION.**
  - **PLEASE INSPECT O-RING'S FOR ANY IRREGULARITY'S. IMPERFECTIONS IN THE O-RING WILL CAUSE A LOSS OF GAS AROUND THE MAIN TANK VALVE ASSEMBLY**

## **ATTACHMENT #3**

- **It is imperative the pressure setting be exact each and every time when delivering a dart. This is best achieved by passing the desired pressure setting by exceeding the desired setting and bleeding down the gas to the desired pressure setting.**

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## PERFORMANCE

Many factors affect velocity, including brand of projectile, type of projectile, wind conditions and barrel condition.

## REPAIR SERVICE

If your projector needs repair, we recommend that you take or send it to an Authorized Service Station. For an authorized service station near you, visit our web site at [www.pneudart.com](http://www.pneudart.com) or call customer service at 1-570-323-2710. International customers should contact their respective distributor. Your projector requires special tools and fixtures to repair it. If you take it apart, you probably will not be able to reassemble it correctly. Pneu-Dart assumes no warranty responsibility under such circumstances.

## IMPLIED WARRANTIES

ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE YEAR FROM DATE OF RETAIL PURCHASE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

To the extent any provision of this warranty is prohibited by federal, state, or municipal law, which cannot be preempted, it shall not be applicable. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state and country to country.



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## FIELD NOTES

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