OPERATING INSTRUCTIONS
FOR X-2 CO₂ FIRED PROJECTOR
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.

www.pneudart.com
Owner’s Manual For X-2 CO₂ Fired Projector

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 Specifications
- Stock and Action - Pneu Dart, Inc.
- Overall Length - 17”
- Dart Barrel - 50 caliber 14” fluted stainless steel barrel with optional 11mm smooth bore barrel sleeve
- Sights - shown with holographic sight, and optional green beam laser. Fiber-optic open sights available upon request.
- Weight - 3.5 lbs. with Holographic Sight and Green Beam Laser
- Range - 2 feet to 30 yards with 1cc type "P" (Recommended) or type "C" disposable darts
- Metered pressure control - velocity control dial
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-2 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 ROTATE THE REAR BARREL PORT 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)
     Note: O-Ring first.
   • 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)
   • As shown in FIG 3 (page 8), tighten firmly with your fingers.
   • PLEASE NOTE: FAILURE TO FOLLOW THESE STEPS WILL RESULT IN A LOSS OF GAS PREMATURELY.
   • Fill rate may be slower under cooler (50° or below) temperatures.
B. Removing Power Source

- 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.
- PLEASE INSPECT O-RING FOR ANY IRREGULARITIES. IMPERFECTIONS IN THE O-RING WILL CAUSE A LOSS OF GAS.
- NEVER ATTEMPT TO CHANGE POWER SOURCES WHEN PROJECTOR IS LOADED.
- ALWAYS ROTATE THE REAR BARREL PORT AND ALLOW IT TO REMAIN IN THE OPEN POSITION AS ILLUSTRATED IN FIG5 WHEN CHANGING POWER SOURCES.

**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.

Snug up adapter so it remains on the gun for changing gas cylinders. This prolongs its O-Ring. *Warning, do not overtighten.*
STEP 4. VELOCITY ADJUSTMENT

The muzzle velocity of the dart can be increased or decreased by rotating the Velocity Control Dial located on the left side of the projector (See FIG 4) To increase the pressure, rotate the dial counter-clockwise, to decrease the pressure rotate the dial in a clockwise direction.

NOTE: It is always recommended to exceed your desire pressure setting and bleed down to final setting.

STEP 5. LOADING AND UNLOADING DARTS

Loading and Unloading Darts

A. Loading Darts:
   • Put the projector "on safe" (See Step 2A)
   • Point the projector in a SAFE DIRECTION
   • Open the rear barrel (See FIG 5)
   • Place "P" type dart into dart barrel (See FIG 5B) Note: for flight stabilizers you may need to push the dart in with a cleaning rod to clear the drum. This would be for your larger volume darts.
Unloading your Projector

B. To unload your projector
   • Put the projector "on safe" (See Step 2A)
   • Open the rear barrel port by rotating knob (see previous steps)

WARNING: USE EXTREME CAUTION WHEN HANDLING DARTS.

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

• Dart retention ball (See FIG 5C) 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 rear section (See FIG 5D)
• Close the rear barrel
• Turn the projector upside down (scope facing down) and point the muzzle skyward
• Tap or shake the dart until free. A cleaning rod may be used if necessary to extract from the projector.
• IN THE EVENT THE DART FAILS TO DROP DOWN FROM THE BARREL, Reduce the dart retention ball depth as depicted in FIG 5D by rotating the set screw counter clockwise"

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 Velocity Control Dial 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 Velocity Control Dial 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 1) 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

• The X-2 is equipped with O-rings for gas cylinder adapters. (See Fig 7A)
• 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. Slide a 50 caliber nylon (or brass) cleaning brush down the bore until clean. DO NOT PLACE ANY OIL INSIDE THE BARREL.
• 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 changed, like a shorter or weaker trigger pull, this may suggest worn out or broken parts. In this instance contact customer service immediately for assistance at 570-323-2710.
• Found within male front section of the male powerlet adapter is a opaque colored gasket. (See Fig 7B)
• Inspect your projector regularly to ensure this gasket is intact
• To adjust the fill or release valve of CO2 pressure in the chamber, adjust the flat head screws on the bottom of your projector. (See Fig 7C) Note: Screws require little movement for adjustments.
DO NOT ATTEMPT TO DISASSEMBLE OR TAMPER WITH YOUR PROJECTOR. Use an Authorized Service Station or return it to the factory for repair.

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 "P" type darts made for this projector.
- Keep hands away from escaping CO₂ gas. It can cause frostbite 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 5B) or charged with gas. (See Step 3B) Always store this projector in a secure location.
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 or call customer service at 1-570-323-2710. International customers should contact their respective distributor. Tampering with the projector may cause irreparable damage and will void the warranty.

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.

Pneu-Dart, Inc.
15223 Route 87 Hwy.
Williamsport, PA 17701

www.pneudart.com
1-866-299-3278 (DART)
1-570-323-2710
1-570-323-2712 (fax)
<table>
<thead>
<tr>
<th>Distance</th>
<th>1/2 cc</th>
<th>Reticle Position</th>
<th>1 cc</th>
<th>Reticle Position</th>
<th>1 1/2 cc</th>
<th>Reticle Position</th>
<th>2 cc</th>
<th>Reticle Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 yds =</td>
<td>2.5 BAR</td>
<td>(+) 2”</td>
<td>3.0 BAR</td>
<td>(+) 1”</td>
<td>3.0 BAR</td>
<td>(+) 4”</td>
<td>3.0 BAR</td>
<td>(+) 1”</td>
</tr>
<tr>
<td>10 yds =</td>
<td>4.0 BAR</td>
<td>(-) 1”</td>
<td>4.0 BAR</td>
<td>(+) 1”</td>
<td>4.5 BAR</td>
<td>(+) 1”</td>
<td>5.0 BAR</td>
<td>0</td>
</tr>
<tr>
<td>15 yds =</td>
<td>5.0 BAR</td>
<td>0”</td>
<td>5.5 BAR</td>
<td>(+) 1”</td>
<td>6.5 BAR</td>
<td>(-) 3/4”</td>
<td>6.0 BAR</td>
<td>0</td>
</tr>
<tr>
<td>20 yds =</td>
<td>7.5 BAR</td>
<td>(+) 2”</td>
<td>7.5 BAR</td>
<td>(+) 4”</td>
<td>8.0 BAR</td>
<td>0</td>
<td>9.5 BAR</td>
<td>(+) 1”</td>
</tr>
<tr>
<td>25 yds =</td>
<td>9.0 BAR</td>
<td>(-) 2”</td>
<td>8.5 BAR</td>
<td>0”</td>
<td>10.0 BAR</td>
<td>0</td>
<td>N/R</td>
<td>N/R</td>
</tr>
</tbody>
</table>

- (+) implies hold above intended point of impact
- (-) implies hold below intended point of impact
- N/R = not recommended

Please note: This chart is a general guideline when using fully loaded Pneu Dart darts. Intended impact velocities may require alternate settings and/or altered points of aim.