

O W N E R ' S M A N U A L



320DEGREES

**PTJR**

**PAINTBALL MARKER**

**⚠ WARNING:** This is not a toy. Misuse may cause serious injury or death. Eye protection designed specifically for paintball must be worn by the user and persons within range. Recommend 18 years of age or older to purchase. Persons under 18 years of age must have adult supervision. READ OWNER'S MANUAL BEFORE USING.

## Rules of Safe Marker Handling

1. Treat every marker as if it were loaded.
2. Never look down the barrel of a paintball marker.
3. Keep your finger off the trigger until ready to shoot.
4. Never point the marker at anything you don't wish to shoot.
5. Keep the marker on "safe" until ready to shoot.
6. Keep the barrel blocking device in/on the marker's muzzle when not shooting.
7. Always remove paintballs and propellant source before disassembly.
8. After removing propellant source, point marker in safe direction and discharge until marker is degassed.
9. Store the marker unloaded and de-gassed in a secure place.
10. Follow warnings listed on propellant source for handling and storage.
11. Do not shoot at fragile objects such as windows.
12. Every person within range must wear eye, face and ear protection designed specifically to stop paintballs and meeting ASTM standard F1776.
13. Always measure your marker's velocity before playing paintball and never shoot at velocities in excess of 91.44 meters (300 feet) per second.

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**Welcome . . .** Thank you, for purchasing this PT Jr. Paintball marker. The PT Jr. represents the culmination of a great deal of research by 32 Degrees along with input from players such as you. We believe that the affordability of a reliable, feature packed marker will improve your playing experience and winning percentage. While winning isn't everything, it sure beats the alternative!

Play Hard, play safe, play to win!

## WARRANTY INFORMATION

### Standard Warranty:

The manufacturer warranties to the original customer that this product is free from defects in material and workmanship under normal use and service for a period of 90 days from the original date of purchase by the initial owner/purchaser. The manufacturer agrees to repair or replace (at its discretion) any product within a reasonable period of time. This warranty does not cover: o-rings, scratches, nicks, normal wear and tear of parts, any modifications or normal fading of anodizing or damage caused by dropping or hitting of the product. This warranty shall not apply if it is shown by the manufacturer that the consumer caused the defect or malfunction because of misuse. This warranty only covers original factory parts. Any modifications or tampering of original factory parts will not be covered by this warranty. Warranty work can only be conducted by the manufacturer technicians and or authorized technicians. If product needs to be repaired, package it carefully and send it together with your name, address, phone number and a brief description of the malfunction to:

Paintball Solutions  
570 Mantua Blvd  
Sewell, NJ 08080

### Extended Warranty:

By returning the enclosed warranty registration card or registering your warranty on-line at [www.PaintballSolutions.com](http://www.PaintballSolutions.com), within fifteen days of purchase the warranty will automatically be extended for an additional year.

Numbers shown in parentheses following part names correspond to the numbers on the Parts key located on the centerfold pages of this manual.

## Initial Assembly

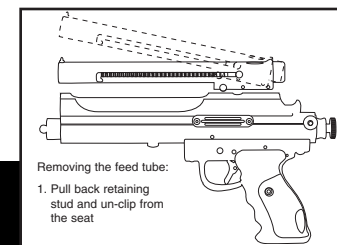
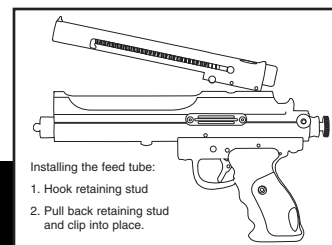
1. Screw the Velocity Adjuster (#4) into the Hammer Plug (#35) approximately two complete turns.
2. Place a Barrel Plug into the end of the barrel. The barrel is the top chamber of the Main Body (#23).
3. Push the safety (#25) into the "safe" position (pushing from left to right looking down the sights).

## Attaching Propellant Source

1. Confirm that the Barrel Plug is properly installed and the marker is on "Safe".
2. Cock the marker by pulling the Bolt (#14) in the rearward direction until it "clicks" into place. This compresses the Main Spring (#2) and allows the Cupseal (#8) to properly seat.
3. Point the marker downward and in a safe direction.
4. Unscrew the 12 Gram Plug (#19) from the front of the PT JR.
5. Place a few drops of non-corrosive lubricant made specifically for use in paintball (Empire Oil) into the center of the bottom chamber of the Main Body (#23), where the CO<sub>2</sub> will be punctured. This must be done for every 12 Gram CO<sub>2</sub> put into the marker. This will run the oil through the valve to ensure the puncture O-Rings stay moist and do not dry or crack. Failure to do so will cause the marker to leak.
6. Remove the pin from the front of the 12 Gram Plug (#19) by just pulling back on the ball on the end until it releases.
7. Place the 12 Gram CO<sub>2</sub> cylinder into the tube with the narrow end in first.
8. Screw back in the 12 Gram Plug (#19) clockwise into the front end of the PT JR. When almost closed by hand tightening, use the pin in the spaces provided in the 12 Gram Plug (#19) and use it to tighten the 12 Gram Plug into place. \*NOTE\* Once sealed, DO NOT OVERTIGHTEN.

## Attaching Feed Tube

1. Confirm that the Barrel Plug is properly installed on the marker and is on "Safe".
2. Taking the feed tube hook on the back retaining stud on the body of the PT JR (#23). Pulling back the front retaining stud clip into place. See Diagram below.





## Loading Paintballs

The performance of your marker is directly affected by the quality of paintballs used. We highly recommend Diablo™ paintballs to give you satisfaction and success on the playing field.

1. Confirm that the Barrel Plug is properly installed and the marker is on "Safe".
2. Push forward the pin on the side of the feed tube to the front and lock down the spring latch.
3. Point the marker into a safe direction, and remove the plug on the rear of the feed tube. Now proceed to load paintballs individually into the Feed Tube. Be sure to leave room for the plug.
4. Place plug back into the feed tube and ensure it is secure in place before unlatching the Feed Tube spring.

## Chronographing

Never operate your marker without first checking the velocity and confirming that you are firing below that required on the field of play. At no time should the marker fire paintballs in excess of 300 feet per second. Higher velocities are not only potentially dangerous; they often result in a substantial increase in paintballs broken in the marker.

1. Confirm that the Barrel Plug is properly installed and the marker is on "Safe".
2. Using a hex key provided with your marker, make sure the Velocity Adjuster (#4) set screw is backed out without removing it.
3. Make sure that you and anyone within range is wearing eye protection designed specifically for paintball.
4. While pointing the paintball marker in a safe direction, remove the Barrel Plug and move the safety to the fire position.
5. Point the marker over the chronograph and in a safe direction.
6. Pull the trigger and observe the reading on the chronograph.
7. To increase the velocity, turn the Velocity Adjuster (#4) clockwise.
8. To decrease the velocity, turn the Velocity Adjuster (#4) counter-clockwise.
9. Once the desired velocity has been reached, use the hex key provided to turn the Velocity Adjuster (#4) Set screw in until it binds against the Hammer Plug (#35). This will prevent the Velocity Adjuster from moving during play and is required by most competitions and fields.
10. Re-install the Barrel Plug and place the marker on "Safe".
11. Proceed to the playing field.
12. Keep the safety in the "Safe" position and the Barrel Plug in place until ready to play.

## De-Gassing

**⚠ NOTE:** Do NOT remove a 12 Gram CO2 unless it is completely empty. Failure to do so will crack and dry out the o-rings inside the marker; causing a leak.

1. Make sure that you and anyone within range is wearing eye protection specifically designed for paintball.
2. Set the safety in the "Safe" position.

3. Point the marker in a safe direction.
4. Lock forward the feed tube spring in preparation for unloading.
5. Open the feed tube plug on the back of the marker and remove all the paintballs from within the Feed Tube. Remove the Feed Tube from the top of the marker.
6. Take the Barrel Plug out of the marker, and face the marker into a safe direction. NOTE: There may still be a ball in the chamber! Make sure you are in a safe area to fire the marker safely!
7. Fire the marker until it runs out of CO2. NOTE: When the marker un-cocks, Re-cock the marker and fire it repeatedly until the gun doesn't release any more air.
8. Place your Barrel Plug back into your barrel and start screwing the 12 Gram Plug (#19) counter-clockwise and completely remove it from the marker.
9. Remove the 12 Gram CO2 and dispose of it properly. These cannot be reused.

## Maintenance

**⚠ WARNING:** All maintenance should be performed with an unloaded and degassed marker ONLY.

### Bolt and Hammer

1. De-gas the marker according to previous directions.
2. Always perform maintenance over a smooth clean work surface. This will help prevent the accidental loss of small parts.
3. Make sure the bolt is in the forward position before proceeding.
4. Remove the Quick Release Pin (#13).
5. Remove the Hammer Plug (#35) from the rear of the Main Body.
6. Pull the Bolt (#14) from the rear. This will also remove the Spring Strut (#34), Main Spring (#2), Recoil Pad (#3), and Hammer (#1).
7. Clean the Bolt thoroughly, includes rinsing in warm water if needed. Be sure to dry all parts well before the next step.
8. Lubricate the Bolt and Hammer with non-corrosive lubricant such as Empire Lube or Empire Oil.
9. Place the Bolt's Connecting Pin (#14A) into the hole on top of the Hammer and while pointing the marker downward. Guide this assembly in to the rear of the Main Body.
10. The Striker will likely stop when it makes contact with the top of the Sear (#27).
11. While putting slight pressure on the rear of the bolt, pull the trigger (this depresses the Sear and allows the Bolt/Hammer assembly to travel forward).
12. Return the Main Spring, Recoil Pad, and Spring Strut to their proper position following the schematic on Page 4-5.
13. Place the Hammer Plug into the rear of the Main Body with the longest portion of the Main Spring / Spring Strut.
14. Push the Hammer Plug in and replace the Quick Release Pin.

## Storage

Always set the marker on "Safe", and remove the Feed Tube, all paintballs and the propellant source. Place the marker in a secure location where it cannot be accessed by unauthorized persons.

## Troubleshooting Guide

Symptom	Cause	Cure
Does not Fire	Not Cocked	Cock the Bolt to the Rear
	On "Safe"	Push Safety to "Fire"
	Out of Gas	Replace 12 Gram CO <sub>2</sub>
Leaks air down Barrel	Bad Cup Seal	Replace/Reset Cupseal
	Not Cocked	Cock the Bolt to the rear
Leaks air from Exhaust Hole under 12 Gram plus	Bad Valve Face O-Ring	Replace Valve Face O-Ring
Does not Re-cock	Low on Gas	Replace 12 Gram CO <sub>2</sub>
	Bad Hammer or Hammer O-Ring	Replace Hammer O-Ring or Hammer
	Needs Lubrication	Lubricate Hammer/Bolt
	Debris Around Bolt/Hammer	Remove the Bolt/Hammer and clean parts and breach
Goes "Full Auto"	Sear not catching	Tighten Grip Frame Screws
	Low on Gas Propellant Source	Replace 12 Gram CO <sub>2</sub>
	Bad Hammer or Hammer O-Ring	Replace Hammer O-Ring or Hammer
	Needs Lubrication	Lubricate Hammer and Bolt
Excessive Ball Breakage	Low Quality Paintballs	Use better Paintballs, such as Diablo™ brand

When in doubt, thoroughly clean and lubricate the marker. Many marker function problems are caused by excessive dirt or lack of lubrication.

For further assistance go to [www.paintballsolutions.com](http://www.paintballsolutions.com) or call 1.800.220.3222

## Warranty Registration

To assist us in providing the best customer service possible and to increase your warranty from 90 days to one year at no additional cost Complete and mail this to:

Paintball Solutions  
570 Mantua Blvd.  
Sewell, NJ 08080

Or register online at [www.PaintballSolutions.com](http://www.PaintballSolutions.com)

**Marker Type: PT Jr.**

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Country: \_\_\_\_\_

Email Address: \_\_\_\_\_

Serial Number (located on left side of marker): \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Place of Purchase: \_\_\_\_\_