# OWNERS MANUAL

WAWFIEWE

Manufactured by Paintball Guns International

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**IMPORTANT:** Read through this manual before operating your paintball marker. Read all directions before proceeding to make any repairs of modifications to this marker.

# SAFETY

- · Read the entire manual before using the Mayhem.
- The Mayhem is not a toy. It can cause serious injury or death.
- · Wear approved eye and head protection, even when test firing.
- · The compressed air source used with the Mayhem can cause serious injury or death.
- Sale or use of the Mayhem is not intended for individuals under the age of 18.
- · The Mayhem is to be used only as described in this manual.
- · Fire only 0.68 caliber paintballs from the Mayhem.
- Check the velocity of your Mayhem before each use. Not to exceed 300 fps.
- The Mayhem can fire when dropped.
- · Keep the Mayhem unloaded and unpressurized when not in use.
- Install a barrel plug in the barrel when not in use. (One is included.)
- Replacement barrel plugs are available from your PGI dealer.
- · Handle the Mayhem as if it is always ready to fire. It recocks during firing.
- The Mayhem can be dangerous up to 200 yards (180 meters).
- · Don't shoot at opponents closer than 20 feet.
- · Never shoot toward individuals not wearing approved eye and head protection.
- · Never disassemble the Mayhem while it is pressurized.
- · Do not touch a chilled CO2 container with bare skin; frostbite can occur.
- Do not use the Mayhem while under the influence of drugs or alcohol.
- · Never shoot at the property of others.
- · Learn and follow the rules of the field where you are playing.
- · Always maintain control of the Mayhem while it is pressurized.
- · Never store the Mayhem while it is pressurized.
- Do not modify your gun, especially your trigger assembly.

# **Mayhem Specifications**

#### Caliber

• 0.68 Paintballs only

#### **Closed Bolt Semi-Automatic Powered By**

- Compressed CO2
- Regulated Compressed Air
- Regulated Nitrogen

### Weight

• 3.0 lbs. (not including loader or air source)

## Ball Feed

- Can be located in any of the three positions
- ▶ 7/8 inch O.D. accepts standard feed loader adapters

#### **Muzzle Velocity**

- Under 100 fps to over 300 fps
- Adjustable External Pressure Regulator

#### Barrel

- Aircraft Quality Aluminum
- Microhoned and Polished

#### 45 Grip One-Piece Trigger Frame

- Ergonomic "Point and Shot" Design
- Accepts Standard 45 Grip Pads
- D Complies with Industry Standard 2 Hole Bottomline

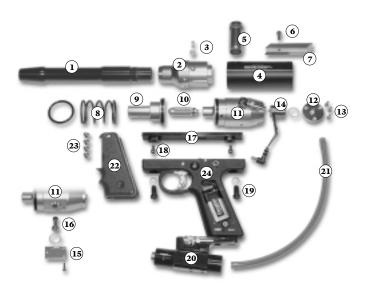
#### **Optional accessories**

- Expansion Chamber
- Rechargeable 9 Volt Battery and Charge



## **Parts Diagram Listing**

Barrel	1
Breech	2
Ball Detent and Spring	3
Cylinder	4
Drop Tube	5
Top Mounting Screw	
Site Rail	7
Mainspring	8
Bolt	9
Poppet	10
Valve Housing	
Valve Housing Cap	12
Valve Housing Cap Screws	13
Solenoid	14
Cover and cover screws	15
Spool Valve	16
Adapter Plate	17
Bottom Mounting Screws	18
Large Mounting Screws	19
Pressure Regulator	20
Hose	2
Grip	22
Grip Mounting Screws	23
Grip Frame	2.4



## **Description of Markers Operation**

The Mayhem is a fully pneumatic paintball marker. It fires from a closed bolt position. This means that the ball is loaded into the breech, and is at rest before the trigger is pulled. Accuracy is improved with this method. Unlike other markers the angle of the drop tube can be changed from the left side to the right side as well as center. This allows for playing different positions on the field. Operation is as follows:

- 1. A CO<sub>2</sub> or HPA source is connected to the bottom line.
- The pressure regulator reduces the incoming gas pressure to approximately 100 PSI.
- 3. The air flow is administered to the gun body through the rear base connection. Gas flows through the spool valve and the poppet into the main chamber pushing the bolt closed, and loading a ball into the breech.
- 4. When the trigger is pulled the poppet moves to the rear allowing the gas trapped in the main chamber to escape through the bolt propelling the ball out of the barrel

- 5. When the pressure in the main chamber is reduced to 0 PSI the main spring pushes the bolt open allowing the next ball to fall into the breech.
- 6. When the trigger is released the process is reset.

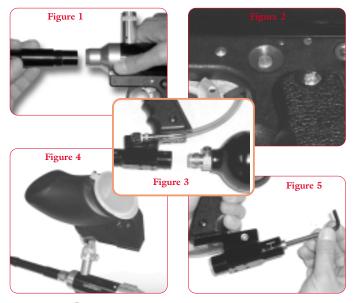
*Note:* Breeches to fit all barrel threads are available. There are three main parts to the marker body, they can all be interchanged with different colors to customize the marker. Drop Tubes are screwed in and can also be interchanged.

> *Caution:* The Ball Detent in this marker uses a small spring that is under tension. When sliding the cylinder off of the breech, the spring will pop out and can be easily lost, take care to prevent this from occurring as the spring is small and difficult to see!

## **Getting Started**

- Unpack the paintball marker from the box and inspect for any damage.
- 2. Install 9 volt battery. (See battery installation instructions on page 8)
- 3. Install barrel by screwing it clockwise into the breech. (*See figure 1*)
- 4. Set the safety to safe position. (See figure 2)
- 5. Connect propellant source to the back of the pressure regulator. (*See figure 3*)
- 6. Inspect the gun and tank for any leaks.
- 7. Connect hopper to the gun. (See figure 4)
- 8. Remove barrel plug and take the gun off of safety.
- 9. Cycle the trigger. The gun should operate with a sharp popping sound.
- 10. Load paintballs into the hopper and chronograph the gun, at approximately 280 ft/sec.

Set the ball velocity by adjusting the screw on the front of the regulator. Clockwise increases the velocity, and counterclockwise reduces the velocity. Allow several shots for the velocity to stabilize after making any changes. (*See figure 5*)



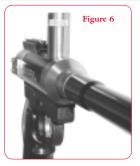
# Changing Angle of the Drop Tube

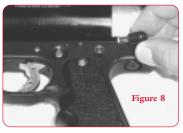
The angle of the drop tube may be changed between left side, right side, and center drop, as the player prefers. (*See figure 6*)

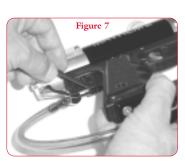
#### ! WARNING !

Never put your finger down the drop tube as serious injury could occur.

- To accomplish this the large mounting screws on the frame of the Grip must be removed. (*See figure 7*)
- The next step is to disconnect the electrical plug from the side of the grip frame. (*See figure 8*)
- 3. Next separate the grip frame from the gun body. (*See figure 9*)







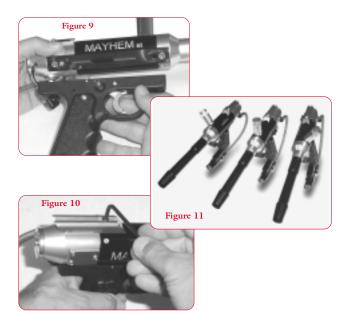
#### Changing Angle of the Drop Tube (continued)

- 5. Remove the front bottom mounting screw from the adapter plate.
- 6. Remove the top mounting screw from the gun body. (See figure 10)
- 7. The Drop tube angle can now be changed by rotating the gun body to the desired position. (*See figure 11*)

To reinstall just reverse the procedure.

## Bolt and Poppet Removal

- 1. Unscrew drop tube.
- 2. Separate tube from valve housing.
- 3. The bolt can now be removed.
- 4. Access to the Poppet is also available.
- 5. To install, lubricate O-rings and reverse the procedure.



## **Cleaning and Maintenance**

#### **Battery Replacement**

The 9 volt battery is located in the grip of the gun.(*See figure 12*) To access the battery the four screws that hold the grip to the gun must be removed. (*See figure 13*) Install the battery, terminals first. (*See figure 14*)

#### NOTE

The battery should last approximately 40,000 shots. Rechargeable batteries and charger's are available as an option.







## **Ball Detents**

#### Caution

The Ball Detent uses a small spring that is under tension. When sliding the cylinder off of the breech, the spring will pop out and can be easily lost, take care to prevent this from occurring, as the spring is small and difficult to see! To prevent spring loss, remove cylinder slowly and cover spring loaded ball detent with a finger when separating the cylinder from the breech.

- 1. There are two detents used in the marker. The first is a spring loaded detent to stop double ball loading. (*See figure 15*)
- 2. A second ball detent is used to hold balls in the breech before shooting. (*See figure 16*)

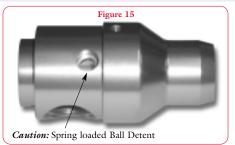


Figure 16 Second Ball Detent

## Warranty and Repair Policy

PGI offers a 90 day warranty from date of purchase on all of our products. This warranty covers any defects in manufacturing or workmanship and will be free of charge. This does not include lost parts or damage incurred after the purchase of the marker. If any parts need replacement they can be ordered directly from PGI. All repairs made after warranty, or not covered by warranty will be charged for parts and labor. If your marker requires additional work or repairs, call our gun techs and they will inform you if you need to send your gun in for repairs. When you send your gun in for repairs, as well as your name, return address, and a telephone number where you can be reached during normal business hours.

All Warranty Inquiries, Parts Replacement and Returns need to be addressed to:

PGI Paintball Guns International 1-714-998-7085