

*Isaiah Arms*  
CORPORATION

***MACH 1***

Owner's Manual-v1.00

## **WARNINGS**

### **Warning/ Liability Statement**

This launcher is NOT a toy and by purchasing this product it is acknowledged that IAC has surrendered the product to purchaser with the understanding that purchaser assumes all liability from personal injury, loss of property, or life resulting from use of this product or any products sold by IAC under any circumstance, including any intentional, reckless, negligent or accidental discharges without limitations.

All information in this manual is subject to change without notice. By purchasing this products from IAC you agree to all our terms and conditions found on our website [www.isaiaharms.com](http://www.isaiaharms.com) including privacy policy.

If you as a user do not accept liability, IAC requests that you do not use IAC products. By using ANY products you release IAC from any and ALL liability associated with its use.



**Warning : Launchers and launcher accessories are not toys!**

- Careless or misuse may result in serious injury or death!
- Eye protection designed for paintball must be worn by user and all persons within range
- Must be 18 years or older or have parental supervision
- Do not aim at any persons or animals
- Designed to be use with approved darts only
- Read and understand cautions, warnings and manual before operating

Any tampering with product voids warranty. Contact support center before performing work.

**Warning: This product may be mistaken as a firearm. Follow all local laws.**



## Table of Contents

Overview.....	3
Safety.....	4
Darts.....	4
Air Supply.....	5
Velocity Adjustment.....	6
Loading.....	7
Barrel.....	8
Maintenance.....	8
Disassembly.....	9
Warranty & Repairs.....	9
O-ring Size Chart.....	10



## **Overview**

Congrats and thank you for purchasing Isaiah Arms Mach 1, made in Portland, Oregon USA. The IAC Mach 1 is a premium launching system. Unlike all other competitors this system is fully regulated, extremely durable and very versatile. For this reason it is important to fully read and understand the manual before operating.

Below you will find a brief overview of operation.

## **Basic Operation**

The Mach 1 can be used with compressed air (HPA) or Nitrogen. CO2 is NOT a recommended propellant for the Mach 1.

1. Upon receiving unit safety will be engaged. See page 4 for further instructions.
2. Air system can be installed either in the back of the unit or with a lower bottom line ASA if that accessory was purchased. Installation instructions on page 5.
3. Using the bottom line ASA ensure the plug is in place before screwing in air system. See page 6 for instructions.
4. Use the latch to load our KR2 Darts and close keeping the dart as far back as possible.
5. Remove safety and fire.
6. Should require little to no maintenance.

## Safety

Safety should be engaged at all times when unit is not in play or being operated. The unit will not fire with the safety engaged. See below images.



## Darts

IAC Mach 1 is extremely violent with air. Because air is released so fast and violently, dart speed will slow over time as the darts degrade upon use.

We highly recommend customers use our KR2 darts as they are harder and slicker than the standard Nerf darts. Nerf darts are soft and expand too much in the barrel causing a loss in velocity and damage upon impact.

Over time the tail and center stem of the dart may get pushed in due to the force of air continually hitting the dart or the darts impact on objects. This will slow FPS.

## Air Supply

The Mach 1 is uniquely designed to run out the back with a stock or to have a bottom line ASA attached. You can use a 13CU air system with a modular stock or a larger tank down below.

Compressed air (HPA) or Nitrogen can be used to operate the Mach 1 Launcher; however CO2 is NOT a recommended propellant.



A bottom line ASA can easily be installed by using a 5/64 Allen key to remove the (2) 8-32 button head screws at the bottom of the launcher. Then use a 9/64 Allen key to install the long 8-32 socket cap screws and ASA.



If you are using the bottom line ASA you will need to ensure the provided plug is in place before you install your tank, if not the air will drain from your tank.



### **Velocity Adjustment**

The Mach 1 is a fully regulated launching system. Velocity can be adjusted by turning the adjustor set screw clockwise to increase or counter clock wise to decrease. This can be done using a 1/8 Allen key.



Increasing velocity will cause the chamber to fill with air. That said due to the kind of projectile's that will be fired it is not always the best option to max out velocity. The more violently the air hits the darts the faster they degrade and in some cases the dart may expand too quickly in the barrel giving no jump in velocity or very little. The Mach 1 will come preset to 180FPS.

You can very easily tune your launcher over chronograph.

**PLEASE NOTE:** Old or used darts will lower velocity while longer barrel will increase velocity (in some cases). Additionally velocity does change by location i.e. we are located in Oregon and the launcher velocity may go up in Florida. Location, time of year, humidity does effect velocity.

## **Loading**

To load and unload your launcher, use the quick release at the top of the barrel to open and close your barrel.

Ensure the dart is as far back as possible as this will affect velocity.

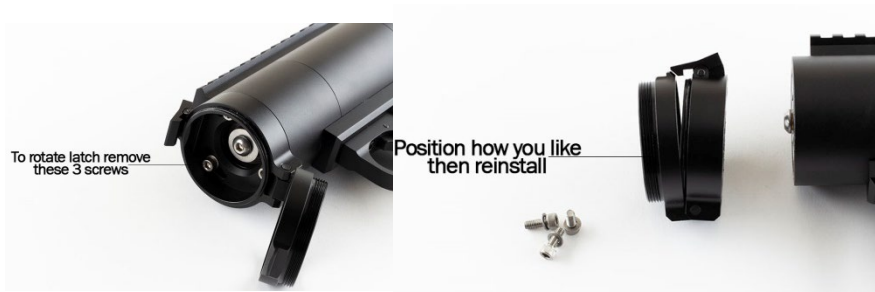




## Barrel

The Mach 1 comes with the ability to adjust barrel hinge position. Given the circumstance of use you may want to move the latch to a different position.

Using a 9/64 Allen key unscrew the (3) 8-32 screws and then position the latch to your liking then reinstall.



## Barrel Length

The barrel length will be a factor in determining the feet per second or FPS of projectiles. Having a longer barrel in most cases will raise the FPS while having a shorter barrel may reduce FPS.

The reason we specify “in some cases” is due to the fact that not all aftermarket barrels are made the same and some may reduce FPS.

## Maintenance

The Mach 1 is designed to be extremely durable. You should not need to remove or maintain anything during its normal life.



## **Disassembly**

We do not advise customer's disassembly their launcher. In some cases this may void manufacture warranty.

If you are wanting a custom anodize job we can sell you the RAW parts for you to anodize but highly recommend having our team assemble them.

We do not warranty products we have not assembled.

## **Warranty Repair**

Isaiah Arms warranties to the original purchaser of this product or accessories to ensure products are free from defects in material and workmanship under normal use and service for a period of 12 months from the original purchase date by the initial owner/ purchaser.

Warranties do not cover aftermarket accessories or launchers that have been modified, not assembled by our staff, nicks, dings, o-rings or normal wear and tear of parts during normal use. Warranties also do not cover damage cause by negligence or misuse by user.

**If you need service please contact us at: [info@isaiaharms.com](mailto:info@isaiaharms.com)**

<b>O-ring Size Chart</b>	
Trigger Activation Pin	014 70 DURA
Mounting Rail to Main Valve	105 70 DURA
Mounting Rail to OBT ASA	005 70 DURA
Forward Air Chamber Front	032 70 DURA
Forward Air Chamber Rear	032 70 DURA
Rear Air Chamber Rear	024 70 DURA
Rear Air Chamber Front	032 70 DURA
Main Valve Bumper	121 70 DURA
Poppet Shaft Center	109 70 DURA
Poppet Shaft Rear	011 70 DURA
Poppet Shaft Rear	011 70 DURA
Poppet Shaft Piston	121 70 DURA
Barrel Retaining Seal	028 70 DURA
Barrel Front	030 70 DURA
Poppet	013 70 DURA
OTB ASA Plug	015 70 DURA
Grip Frame to Mounting Rail	1 x 6 70 DURA
Grip Frame to Mounting Rail	1 x 17 70 DURA
Grip Frame to Block Off	006 70 DURA
Inline Reg	1 x 6 70 DURA
Inline Reg to Grip Frame	1 x 7.5 70 DURA
Inline Reg Piston	014 70 DURA
Inline Reg Follower	009 70 DURA
Inline Adjust Housing	1 x 7 70 DURA
Floating Union Front	1 x 4 70 DURA
Floating Union Rear	1 x 4.5 70 DURA
On/ Off ASA Knob	015 70 DURA
On/ Off ASA Center	005 70 DURA

QR Code to Manual



Made in United States