

## **! WARNING !**

### **IMPORTANT SAFETY INSTRUCTION AND GUIDELINES**

- This Paintball Marker is NOT A TOY. Misuse can cause serious injury or death.
- It is recommended that a person be 18 years or older to purchase this product. Person under the age of 18 must have adult supervision or consent.
- Please read the manual and follow the instructions for using this product.
- Eye and face protection specially designed for paintball, must be worn by users and persons within range at all times.
- Treat all paintball markers as if it were loaded and able to fire.
- Never look down the barrel or breech area of a marker.
- Always use barrel blocking device when the marker is not in use.
- Always chronograph this marker before playing paintball.
- Never shoot any marker at velocities exceeds 300 FPS (Feet Per Second), or velocities which is greater than local fields or national laws allow.
- Always chronograph the marker before playing.
- Ensure all air lines and fittings are tightened and secured before installing the air tanks.
- Do not shoot at people, animals, houses, cars or objects that are not related to the sport of paintball.
- Always keep the marker in Safe mode until ready for use.
- Only use 0.68 caliber paintballs with this marker.
- Always make sure the bolt is in the un-cocked position when marker is not in use.
- Any modifications or tampering of original factory parts will void all warranties and liabilities from Azodin.
- This owner's manual should always accompany this marker for reference and should be presented to the new owner if there is transfer of ownership.

## **! WARNING !**

### **IMPORTANT HPA AIR TANK SAFETY INSTRUCTION AND GUIDELINES**

- Tank Regulators must be installed or removed by qualified personnel.
- All tanks must be retested before the expiration date.
- Improper use, filling, storage of this air tank may cause death, serious injury and property damage.
- Air tanks must be filled only by properly trained personnel.
- Do not over pressurize. Do not expose pressurized tanks to temperatures in excess of 130F° degrees (54°C).
- Do not expose tanks to corrosive materials and do not clean with caustic cleaners.
- Do not alter tanks in any way.
- Tanks heated up to a temperature of 250F° degrees (54°C) or more must be condemned or re-qualified.
- Keep air tanks out of reach of children.
- The Regulator should NEVER detach from the tank canister. Should this occur, seek assistance from a qualified airsmith immediately.
- Air tanks are to be used for the sport of paintball.



HPA / N2 Air tanks have enough force to become a projectile and cause serious injury or death if the regulator unscrews from the tank head.

When removing the tank from the marker, please check to see if the regulator is unscrewing from the tank and staying on the On/Off ASA. If the two pieces are separating contact a qualified airsmith for further assistance.

The regulator should unscrew from the marker's **On/Off ASA (A091)** when the tank is turned. Both the regulator and tank should disconnect from the marker at the same time.

## GETTING STARTED

1. First, place the BARREL BLOCKING DEVICE over the barrel.
2. Always point your marker at a "SAFE" direction before use. To use, push the safety button from the "PUSH SAFE" side of the grip frame. Doing this will put the marker in a lock safe mode.  
To unlock the safe mode, point the marker in the safe direction, and push the safety button towards the "PUSH SAFE" side of the grip frame.
3. Firmly screw in the HPA / N2 air tank to the **On/Off Bottom ASA (A091)**.  
Tighten the air tank clockwise all the way in the marker's bottom ASA.  
**CAUTION: Never use any hand tool to screw air tank to the bottom ASA.**
4. Attach a paintball hopper/ loader to the marker's feed neck.
5. Turn the **On/off Bottom ASA Cap (A092)** clockwise to let air go into the marker.
6. Remove the barrel blocking device and unlock the safe mode.  
**CAUTION: Now the marker is LIVE, pulling the trigger will fire a paintball. Only test your marker at the safe direction or in a proper organized paintball field.**
7. **Check marker's velocity FPS (Feet Per Second).**  
Turning the **Velocity Adjuster (P023)** clockwise will increase the velocity.  
Counterclockwise will decrease the velocity.
8. After playing, take out all paintballs from the hopper.  
Then detach the hopper from the marker.  
**CAUTION: There may be 1-2 paintballs in the breach area; take a couple more shots in a safe direction to make sure the marker is empty of paintballs.**
9. Place the barrel blocking device over the barrel and push the safety button in the safe mode.
10. Counterclockwise the **On/off Bottom ASA Cap (A092)** to release air pressure in the marker.
11. Unscrew the HPA / N2 air tanks from the marker's bottom ASA.  
**CAUTION: Never use any hand tool to screw air tanks to the bottom ASA.**
12. Store the marker in a paintball bag or in a safe place.

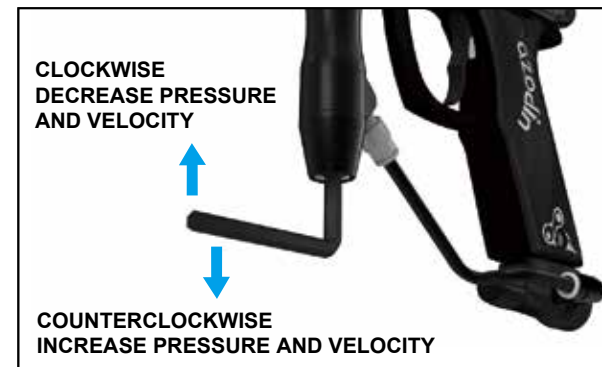
## VELOCITY ADJUSTMENT



To increase your velocity FPS (Feet Per Second), use the allen wrench to turn the **Velocity Adjuster (P023)** clockwise.

To decrease your velocity FPS (Feet Per Second), use the allen wrench to turn the **Velocity Adjuster (P023)** counterclockwise.

## REGULATOR ADJUSTMENT



To increase the input pressure, use the allen wrench to turn the **Rock Steady Seat (P086)** counterclockwise.

To decrease the input pressure, use the allen wrench to turn the **Rock Steady Seat (P086)** clockwise.

**NOTE:** Contact [tech@azodin.com](mailto:tech@azodin.com) for more information on tuning the KD-II.  
Always use **Velocity Adjuster (P023)** to increase velocity first then increase input pressure.

### RESET THE REGULATOR TO FACTORY PRESSURE

1. Please remove air source and clear the air stored in the marker.
2. Turn the Rocksteady Seat clockwise till it stops (DO NOT FORCE IT PAST THE STOP POINT).
3. Turn the RockSteady Seat counterclockwise two and half turns.

## ZeRO-D SYSTEM

The ZeRO-D is a revolutionary system that combines the Feather Striker and Mass Flow Valve to achieve a low operating pressure. This gives the KD-II an unparalleled shooting profile for a Stacked Tube Blow Back (STBB) Marker.

The ZeRO-D System is designed to reduce the mechanical recoil of the marker by balancing the output pressure of the inline regulator with the timing of the valve.

## ZeRO-D SYSTEM ADJUSTMENT

- 1: Insert 3 mm allen wrench into the [ZeRO-D Adjustment Screw \(Z031\)](#).
- 2: Turning the ZeRO-D Adjustment Screw clockwise will increase the ZeRO-D spring tension and decrease valve timing.
3. Turning the ZeRO-D Adjustment Screw counterclockwise will decrease the ZeRO-D spring and increase valve timing.

**NOTE: Increasing the valve timing will decrease air efficiency, but will also decrease the amount of mechanical recoil experienced.**

### RESET ZeRO-D SYSTEM TO FACTORY SETTINGS

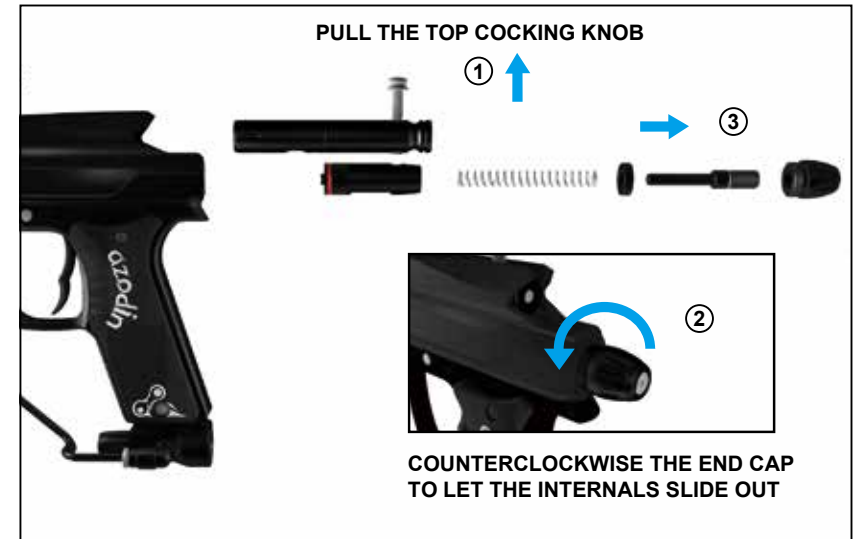
Unscrew/Screw the [ZeRO-D Adjustment Screw \(Z031\)](#) to be flush with the [ZeRO-D Housing \(Z041\)](#).

Turn the [ZeRO-D Adjustment Screw \(Z031\)](#) clockwise 2 full turns.

If there is a C-Clip, turn the [ZeRO-D Adjustment Screw \(Z031\)](#) counterclockwise till it meets the C-Clip.

## ASSEMBLY AND CLEANING THE MARKER

### Turn the End Cap Counterclockwise to access the internals



**WARNING: Never remove the internals of the marker while the tank is attached to the marker. Always remove the loader, the air tank, and all paintballs from the marker before disassembly.**

### CLEANING AND DISASSEMBLE REAR INTERNALS

1. Lift upward on the Top Cocking Knob at the rear of Delrin Bolt.  
This will let the [Delrin Bolt \(P041\)](#) slide out from the rear of the receiver.
2. Turn the [End Cap \(A051\)](#) counterclockwise. This will let the End Cap and the marker's internals to slide out from the rear of the receiver. Remember to place the marker in the de-cock position and place light pressure behind the End Cap during the removal of the End Cap, this way will prevent the internals to spring out.
3. Slide the [Feather Striker \(P021\)](#) out of the rear of the receiver.
4. Once all the internal parts are removed, use a squeegee or barrel swab to clean the inside of the receiver and use a towel to clean the dirt or paint off of Delrin bolt. Apply some Azodin lube on the Striker O-Ring and striker regularly.

## REASSEMBLE REAR INTERNALS

1. Insert the [Feather Striker \(P021\)](#) thru the rear of the receiver with the O-Ring facing towards the front of the marker and with the hole on the Feather Striker facing upright. While inserting the Feather Striker, apply pressure behind the Feather Striker and at the same time pull the Trigger to let Feather Striker enter the rear chamber of the receiver.
2. Insert the [Feather Bumper \(P024\)](#) thru the receiver and insert the [Feather Spring \(P025\)](#) Thru the Feather Bumper.
3. Insert the [Bolt Assembly \(P041\)](#) thru the rear of the receiver. Press downward on the Top Cocking Knob (At the rear of Bolt Assembly) to connect and enter the hole of Feather Striker to fasten with the Feather Striker. Use a small tool such as allen wrench to align the hole of the Feather Striker.
4. Insert the [End Cap \(A051\)](#) with the [Velocity Adjuster \(P023\)](#) Thru the Feather Bumper and Feather Spring.
5. Turn the [End Cap \(A051\)](#) clockwise to tighten it and hold the internals in place.

## MAINTENANCE

### KD-II Bolt Assembly

Lift the top cocking knob (silver knob on top of the bolt) and slide out the bolt assembly from the KD-II body.

Use a cotton swab and/or microfiber cloth to clean the paint, grease, and debris from the surface of the bolt.

Apply a thin layer of Azodin lube to the bolt assembly.

Reinsert bolt and lock the bolt pin into the designated slot on the Feather Striker.

### ZeRO-D System

To remove the ZeRO-D system, firmly grip the ZeRO-D System and turn counterclockwise. Check to see that the ZeRO-D Cup Seal and the ZeRO-D Cup Seal Stem are tight and check for damage.

Apply Azodin Lubricant or a Dow 33 base lube to the end of [ZeRO-D Cup Seal \(Z012\)](#) that enters the [ZeRO-D Housing \(Z041\)](#). Do NOT apply lube to the face of the Cup Seal that makes contact with the valve, this will cause leaks or recocking issues.

DO NOT USE OIL.

## TROUBLESHOOTING

**WARNING: Always remove loader, air tank, and all paintballs from the marker before disassembly.**

### RECOCKING ISSUES

Need Lubrication (Dow 33 based or Azodin Lube) on the [Striker O-Ring \(R011\)](#) and Striker.

Striker O-Ring is damaged or missing. Replace with correct O-Ring ([R011](#)).

The pressure in the tank is low and needs to be refilled.

Check, clean, and disassemble rear internals.

Check the setting on the pressure of inline Regulator and ZeRO-D System.

### AIR LEAKS

Air leaks down the barrel and/or from inside the marker. Check for wear or damage on the following parts: [Front Valve O-Ring \(R012\)](#), [ZeRO-D Cup Seal \(Z012\)](#), and Valve face where the Cup Seal makes contact.

Air leaks from body and out of the frame.



Check the [Front Valve O-Ring \(R012\)](#) and check the orientation of the valve.

The opening on the side of the valve should be facing up.












Contact [tech@azodin.com](mailto:tech@azodin.com) for more information or for technical assistance.

## KD-II PART LIST

KD-II SCREW CHART SIZE: 1:1	PART NUMBER AND NAME
	M5 X 10L MAIN BODY SCREW
	M8 X 8L VALVE RETAINING SCREW
	M4 X 8L GRIP PANEL SCREW
	M5 X 12L VERTICAL ASA SCREW
	M5 X 14L CLAMP SCREW
	M3 X 3.5L EYE COVER SCREW
	M4 X 4 RETAINING SCREW

KD-II SCREW CHART SIZE: 1:1	PART NUMBER AND NAME
	S091 ON/OFF BOTTOM ASA RETAINING SCREW
	S092 1/8-27 NPT ON/OFF BOTTOM ASA HOSE PLUG
	M5 X 10L ON/OFF BOTTOM ASA SCREW
	Z031 ZeRO-D ADJUSTMENT SCREW

## KD-II PART LIST

KD-II O-RING CHART SIZE: 1:1	PART NUMBER AND NAME
	R011 STRIKER O-RING (RED)
	R012 FRONT VALVE O-RING (CLEAR)
	R013 VELOCITY ADJUSTER O-RING (BLACK)
	R015 AZ O-RING (BLACK)
	R016 BARREL O-RING (BLACK)
	R017 END CAP O-RING (BLACK)
	R031 REGULATOR PISTON O-RING (CLEAR)
	R032 REGULATOR SWIVEL MOUNT O-RING (BLACK)
	R033 INNER O-RING (BROWN)
	R034 REGULATOR SEAL O-RING (CLEAR)
	Z021 ZeRO-D CUP SEAL O-RING (BROWN)

## ZeRO-D SYSTEM EXPLODED VIEW



ZeRO-D PARTS LIST	
NO	PART NAME
PH11	HP VALVE
Z087	ZeRO-D C CLIP
Z011	ZeRO-D CUP SEAL STEM
Z012	ZeRO-D CUP SEAL
Z013	ZeRO-D SPRING GUIDE
Z014	ZeRO-D SPRING
R012	FRONT VALVE O-RING (CLEAR)
R015	AZ O-RING
Z021	ZeRO-D CUP SEAL O-RING
Z031	ZeRO-D ADJUSTMENT SCREW
Z041	ZeRO-D HOUSING

## INLINE REGULATOR EXPLODED VIEW



REGULATOR PARTS LIST	
NO	PART NAME
P064	STRAIGHT ELBOW
P081	MAIN REGULATOR HOUSING
PZ82	REGULATOR SWIVEL 45 MOUNT
P083	REGULATOR END CAP
P084	REGULATOR PISTON
P085	REGULATOR SPRING
P086	ROCK STEADY SEAT
P087	REGULATOR C CLIP
R015	AZ O-RING
R031	REGULATOR PISTON O-RING
R032	REGULATOR SWIVEL MOUNT O-RING
R033	REGULATOR INNER O-RING
R034	REGULATOR SEAL O-RING
S031	RETAINING SCREW

## ON/OFF BOTTOM ASA EXPLODED VIEW



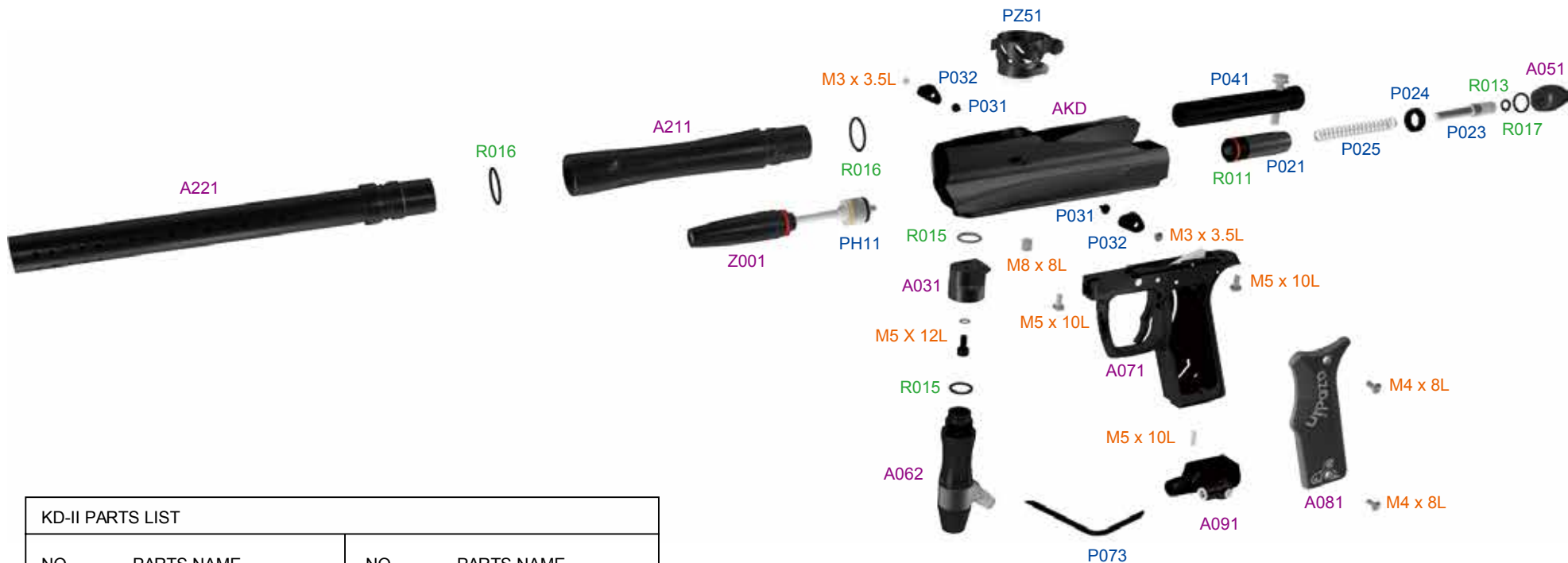
ON / OFF BOTTOM ASA PARTS LIST	
NO	PART NAME
P063	90 DEGREE ELBOW
P091	ON/OFF BOTTOM ASA STEM
R033	INNER O-RING
S091	ON/OFF BOTTOM ASA RETAINING SCREW
S092	ON/OFF BOTTOM ASA HOSE PLUG
A091	ON/OFF BOTTOM ASA MAIN BODY
A092	ON/OFF BOTTOM ASA CAP

## CLAMP FEEDNECK EXPLODED VIEW



CLAMP FEEDNECK PARTS LIST	
NO	PART NAME
PZ51	FEEDNECK BODY
PZ52	CLAMP
PZ53	CLAMP SCREW
PZ54	FEEDNECK ELBOW
M5x14L	FEEDNECK SCREW

# KD-II EXPLODED VIEW



KD-II PARTS LIST			
NO	PARTS NAME	NO	PARTS NAME
PH11	HP VALVE	M5 x 10L	MAIN BODY SCREW
P021	FEATHER STRIKER	M8 x 8L	VALVE RETAINING SCREW
P023	VELOCITY ADJUSTER	M4 x 8L	GRIP PANEL SCREW
P024	FEATHER BUMPER	M3 x 3.5L	EYE COVER SCREW
P025	ZERO FEATHER SPRING	M5 x 10L	ON/OFF BOTTOM ASA SCREW
P031	BALL DETENT	AKD	KD-II BODY
P032	DETENT COVER	A051	END CAP
P041	BOLT ASSEMBLY	A062	ROCK STEADY REGULATOR
P073	KD-II MACROLINE HOSE	A071	GRIP FRAME ASSEMBLY
PZ51	CLAMP FEEDNECK	A081	GRIP PANEL
R011	STRIKER O-RING (RED)	A091	ON/OFF BOTTOM ASA
R013	VELOCITY ADJUSTER O-RING	A211	5" .689 BARREL BACK
R015	AZ O-RING	A221	9" BARREL FRONT
R016	BARREL O-RING	Z001	ZeRO-D SYSTEM
R017	END CAP O-RING		