

## STATISTICS

#### PLEASE READ CAREFULLY

→ VITAL STATISTICS	
LENGTH/HEIGHT/WEIGHT:	12.5"/7.5"/2lb, 5oz
OPERATING PRESSURE:	Approx 160 to 200 psi max
PAINTBALLS:	.68 caliber - Compliant to ASTM F1979 Specification
POWER SOURCE:	9-volt alkaline battery
PROPELLANT:	CO <sub>2</sub> or Nitrogen/Compressed Air
RATE OF FIRE:	Up to 11bps
OPERATION:	Low-Pressure Electropneumatic
MODES OF FIRE:	Semi-Automatic
ANTI CHOP SYSTEM:	Low Bolt Pressure
BARREL THREAD:	Smart Parts (Impulse/Ion
LUBRICANT:	For proper and consistent operation, the SP-1 should only be lubricated with SL33K lubricating grease.

While every effort has been made to ensure that the information contained in this guide is accurate and complete, no liability can be accepted for errors or omissions.

Smart Parts, Inc. reserves the right to change the specifications of the SP-1 at any time without prior notice. The latest version of this manual may be downloaded free of charge at www.smartparts.com.

#### **MAINTENANCE**

The SP-1 has been designed with simplicity in mind so that you can concentrate on your game instead of your marker. It has a minimal number of moving parts and seals so that you can maintain the marker with little effort. This DOES NOT mean that you should neglect your marker. If you take care of it off the field, your SP-1 will take care of you on the field. For best performance, clean and grease your SP-1 frequently. Many players clean their marker after every use. While this may seem a bit extreme, being vigilant in the upkeep of your marker will extend its useful life considerably. Playing in the rain will not damage your SP-1, but you should NEVER immerse it in water. If your marker should become waterlogged, remove the barrel, body cover and rubber grips and allow them to dry out, then follow the disassembly instructions for full cleaning. Clean out mud and paint with a damp cloth and alcohol. Grease the SP-1 ONLY with SL33K pneumatic grease. For best performance, use high quality paintballs.



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## SP-1 WARNINGS

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- THE SP-1 IS NOT A TOY.
- MISUSE OF THE SP-1 MAY RESULT IN SERIOUS INJURY OR DEATH.
- EYE PROTECTION SPECIFICALLY DESIGNED FOR PAINTBALL USE MUST BE IN COMPLIANCE WITH ASTM SPECIFICATION F1776 AND MUST BE USED BY THE USER AND ANYONE WITHIN RANGE OF THE SP-1.
- WEAR EYE PROTECTON DURING DISASSEMBLY OR MAINTENANCE.
- SMART PARTS RECOMMENDS THAT THE SP-1 ONLY BE SOLD TO PERSONS 18 AND OLDER.
- THOROUGHLY READ THE SP-1 MANUAL BEFORE OPERATING.
- TREAT EVERY PAINTBALL MARKER AS IF IT WERE LOADED.
- NEVER LOOK DOWN THE BARREL OF A PAINTBALL MARKER.
- KEEP YOUR FINGER OFF THE TRIGGER UNTIL READY TO SHOOT.
- NEVER POINT THE SP-1 AT ANYTHING YOU DON'T WISH TO SHOOT.
- KEEP THE SP-1 ON SAFE (POWER OFF) UNTIL READY TO SHOOT.
- KEEP THE BARREL BLOCKING DEVICE ON THE SP-1'S MUZZLE WHEN NOT SHOOTING.
- ALWAYS REMOVE PAINTBALLS AND DEGAS THE SP-1 BEFORE DISASSEMBLY.
- STORE AND TRANSPORT THE SP-1 UNLOADED AND DEGASSED IN A SECURE PLACE.
- FOLLOW ALL MANUFACTURER'S WARNINGS AND INSTRUCTIONS FOR PROPELLANT SOURCE HANDLING, STORAGE, AND FILLING.
- DO NOT SHOOT FRAGILE OBJECTS SUCH AS WINDOWS.
- ALWAYS MEASURE THE VELOCITY OF PAINTBALLS FIRED BY THE SP-1 BEFORE USE, AND NEVER ADJUST TO FIRE ABOVE 300FPS (91.44 M/S.)

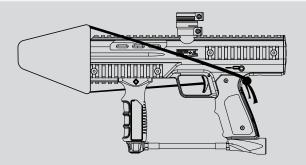


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## SETUP

### **01** BARREL BLOCKER



Screw the included barrel into the SP-1. Slide the included barrel blocker over the barrel and secure its cord as far back on the SP-1 body as possible, cinching it tight. The barrel blocker is a critical piece of paintball safety equipment – nearly as important as paintball goggles. The barrel blocker must be fully seated on the marker's muzzle and secured in place with its strap any time the marker is stored or handled in an area where people or property are not properly protected by paintball goggles or paintball field netting.

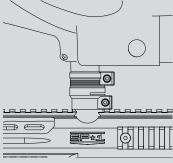
### **02** PROPELLANT GAS

The SP-1 is compatible with both CO<sub>2</sub> and high pressure compressed air (HPA.) Screw-in style HPA systems and CO<sub>2</sub> tanks are screwed into the Air System Adapter (ASA) on the bottom of the SP-1 grip frame. For best performance with CO<sub>2</sub>, use an anti-siphon tank, or a regular tank with a remote hose. Screw the tank in slowly so that its valve opens slowly, creating a gentle rise in pressure, rather than a rapid pop. Note – CO<sub>2</sub> and HPA tanks are sold empty, and must be filled before use. When using CO<sub>2</sub>, you may notice occasional bursts of gas released from the bottom of the regulator. This is the normal function of the relief valve protecting your marker from liquid CO<sub>2</sub>.

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Never use oil or any petroleum based cleaner or lubricant in an HPA system. Use only manufacturer recommended lubricants, and strictly follow the manufacturer's instructions.

### 03 LOADER



While an un-powered hopper will work, powered loaders will provide better performance, and minimize paint breakage. Snap the SP-1's clamping feedneck over the body's feed port, narrow end facing the marker. Insert the loader's feedneck into the larger end. Align the loader, and tighten both the top and bottom sides of the clamping feedneck with a 7/64-inch allen wrench.

### **04** TURN POWER ON



SP-1 turns on, the power button will glow red. The SP-1 is turned off by pressing and holding the power button for two seconds. To conserve battery power, the SP-1 will turn itself off if it is not fired for more than 30 minutes.

Turn the marker on by pressing

the power button, and holding

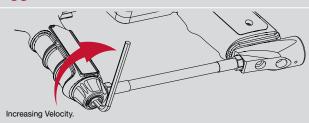
it in for a full second. When the

Although the power button serves as the SP-1's safety switch to prevent accidental firing, it should never be relied upon in place of a barrel blocker and proper paintball eye protection.

### **05** TRIGGER ADJUSTMENT

The length of the SP-1's trigger pull is adjustable. A 0.050-inch allen wrench can be used to adjust the trigger's post travel limit – how far back the trigger can continue to move past the firing point – with the adjustment screw located on the lower portion of the trigger. A 1/8-inch allen wrench can be used on the pre-travel adjuster screw, located where the trigger guard meets the grip frame, to adjust how far forward the trigger can move once it is released.

## **06** ADJUST VELOCITY

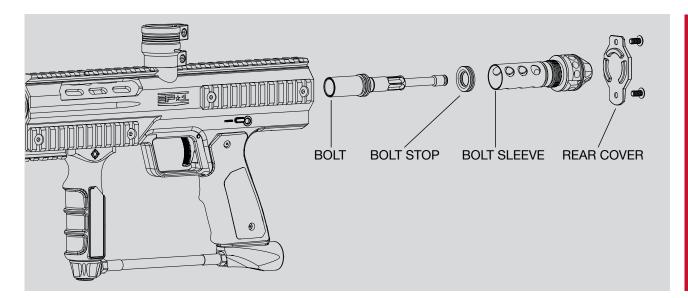


Fill the hopper with paintballs and turn it on. While wearing ASTM compliant paintball goggles, in an area where all bystanders are protected, remove the barrel blocker and fire over a chronograph to measure the velocity. Using a 5/32-inch allen wrench on the adjuster in the bottom of the vertical regulator, turn clockwise to increase velocity/pressure, and counter-clockwise to decrease. Take three or four shots after every adjustment to allow the gas pressure inside the SP-1 to stabilize. Adjust until the marker is firing consistently within the limits for the field where you are playing (for safety reasons, never adjust the SP-1 to fire at greater than 300 feet per second.)

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## DISASSEMBLY/CLEANING



#### WET WEATHER NOTE:

PLAYING IN THE RAIN WILL NOT DAMAGE YOUR SP-1, BUT YOU SHOULD NEVER IMMERSE IT IN WATER. IF YOUR MARKER SHOULD BECOME WATERLOGGED, REMOVE THE BARREL AND RUBBER GRIPS AND ALLOW THEM TO DRY OUT, THEN FOLLOW THE DISASSEMBLY/ CLEANING INSTRUCTIONS.

The SP-1 valve system has only one major moving part, making it simple to maintain, but this does not mean maintenance can be ignored. The SP-1 should be disassembled and cleaned any time it shows erratic performance, becomes contaminated with paint, dirt or other debris, or for general maintenance after 3 or 4 days of use.

- Unload and degas the SP-1. Remove the barrel and use a 1/8-inch allen wrench to remove the two rear cover screws from the back of the marker. Remove the rear cover, then use a 5/16-inch allen wrench to unscrew and remove the bolt sleeve from the back of the SP-1.
- 02 Using a soft tool, like a wooden chopstick or plastic toothbrush, push the bolt and bolt stop out the back of the SP-1.
- 03 Clean the interior of the body, the bolt sleeve, bolt and bolt stop with a clean cloth or paper towel. Inspect their o-rings for signs of damage such as rips or cuts and replace if necessary.
- Lubricate o-rings with SL33K marker lubricant. Slide the bolt stop onto the bolt from the rear. Slide the rear of the bolt into the front of the bolt sleeve. Hold this assembly vertically, with the front of the bolt pointing up, and insert it, upwards into the rear of the SP-1. Screw the bolt sleeve into place with a 5/16-inch allen wrench do not overtighten. Reinstall the rear cover and its screws.

This is all that is required for routine maintenance. Further disassembly of the SP-1 receiver and grip frame should be avoided unless necessary for repair, as it may shorten the life of the marker. For additional information, please visit the support section at www.SmartParts.com

#### **IMPORTANT**

# UNLOADING/DEGASSING

Before storage, transport or maintenance, your marker will need to be unloaded and degassed. In an area where it is safe to shoot and while wearing paintball goggles, loosen the SP-1's clamping feedbeck and remove the loader. By turning the marker upside down, you can empty any extra paintballs from the feedneck into your hand. Remove the CO<sub>2</sub> or HPA tank.

#### //////////////WARNING

Although the power button serves as the SP-1's safety switch to prevent accidental firing, it should never be relied upon in place of a barrel blocker and proper paintball eye protection.

Turn on the marker and dry fire in a safe direction until all of the gas pressure inside has been released. Turn the SP-1 off by pressing and holding the power button for one second.

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If the marker is not degassed, its regulator may hold enough pressure to fire 3 or more shots, even if the gas supply is removed.

## TROUBLESHOOTING

#### SP-1 WILL NOT TURN ON

 Battery may be low or dead. Replace with a name brand 9-volt alkaline battery by removing the rubber wraparound grip. Unplug the battery by carefully pulling away the battery clip – do not pull on the battery clip wires.

#### SP-1 IS LEAKING OR SHOWS INCONSISTENT VELOCITY

- Disassemble and clean the bolt assembly. Inspect all o-rings and replace any that show signs of wear or damage. Re-lubricate with SL33K and reassemble.
- Use a fresh 9-volt name-brand alkaline battery.
- If using CO<sub>2</sub>, an anti-siphon tank, or regular tank and remote hose will improve consistency.

#### SP-1 IS LEAKING OR SHOWS INCONSISTENT ACCURACY

- This can be caused by poor quality, out of round paint. Use high-quality paintballs and store them in a sealed container in a cool, dry place.
- Gas may occasionally vent near the bottom of the Max-Flo R vertical regulator. This is a normal function as the regulator protects your marker and does not indicate a problem.
- Use a fresh 9-volt name-brand alkaline battery.
- If using CO<sub>2</sub>, an anti-siphon tank, or regular tank and remote hose will improve consistency.

#### SP-1 WILL TURN ON BUT WILL NOT FIRE

- Battery may be low. Replace with a name brand alkaline battery.
- CO<sub>2</sub> or compressed air tank may be very low or empty refill.

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#### TECH SUPPORT

## WARRANTY

Smart Parts warrants for one (1) year to initial retail purchaser that the paintball marker and regulator are free from defects in materials and workmanship. Disposable parts (batteries, o-rings, seals, springs, etc.) are not warranted. The valve assembly is warranted for six (6) months. The solenoid and electronics on the marker are warranted for six (6) months, plus an additional warranty of six months for electronic parts only (installation and labor are not included.) This warranty does not cover surface damages (scratches and nicks), misuse, improper disassembly and re-assembly, attempts made to drill holes or remove metal from the external surfaces which could degrade performance and reduce pressure safety factors of the marker. Do not make changes to the basic marker parts without written approval. The only authorized lubricant for the marker is SL33K Lubricant. Use of any other lubricant could result in voiding your warranty. Paintball markers are non-refundable. This warranty is limited to repair or replacement of defective parts with the customer to pay shipping costs. This warranty is effective only if the customer returns the warranty registration card enclosed with the marker. The warranty is non-transferrable. Do not attempt to alter the trigger assembly in any way, as this will void your Smart Parts Inc. warranty. Trigger alteration of any kind may result in serious injury. Replacement or alteration of the Max-Flo R Vertical regulator will void warranty and may result in serious damage and or injury.

#### **U.S. EAST COAST**

Smart Parts, Inc. 100 Station Street Loyalhanna, PA 15661 800.992.2147

#### **U.S. WEST COAST**

West Coast Repair Center 27326 Jefferson Ave #2 Temecula, CA 92590 951,296,1000

#### U.K.

Unit A6 Larkfield Trading Estate New Hythe Lane Aylesford,Kent ME20 65W ++40 (0) 1622.719.995

Additional support and downloadable product manuals are available through our web site, www.smartparts.com.