

# **Hellion Manual**

**Operation & Safety Manual** 

## **IMPORTANT SAFETY INFORMATION INSIDE**

Read this manual before handling this firearm. Keep this manual with your firearm and review it before each use.

Do not allow others to handle or fire your firearm until they have read this manual.

Transfer this manual with the firearm upon ownership change.
THIS MANUAL IS FOR HELLION FIREARMS ONLY.

Be a responsible firearm owner. Use it safely, store it securely, and always transfer a firearm responsibly and legally.

### **READ & UNDERSTAND THIS MANUAL**

# BEFORE LOADING AND FIRING THIS FIREARM, READ AND UNDERSTAND THE INFORMATION IN THIS MANUAL.

This is an auto loading firearm. It is immediately loaded and ready to fire again after each shot until all cartridges loaded in magazine have been fired. The firearm is able to fire both with and without the magazine in place. REMOVING THE MAGAZINE DOES NOT UNLOAD THE FIREARM NOR DOES IT ENGAGE A SAFETY. THE FIREARM IS NOT UNLOADED UNTIL THE MAGAZINE IS REMOVED AND THE CHAMBER IS EMPTY.

### ABOUT YOUR OWNER'S MANUAL

This is an instruction booklet on how to operate this firearm with some basic safe handling rules. It does not attempt to provide information about using a firearm to defend yourself, how to hunt, or for competitive or target shooting. It is important to receive training from a competent firearms instructor prior to engaging in any of these activities. The National Rifle Association, your local or state authorities, or your firearm dealer may provide information regarding available instructors or training courses. If you have a license to carry concealed, never do so without prior instruction from a certified instructor. Using a firearm for self defense is a complex subject with dangers and risks for which you must be properly trained. Every safety rule has a reason behind it - read the rules carefully and understand why each is important for safety.

It is recommended that every person receive instructions from a competent firearms instructor before handling this or any other firearm.

Know and obey all firearms laws and regulations, which may vary from city to city and state to state. Do not give a firearm to someone who is not allowed to own a firearm or who may use it for a criminal purpose.

### **USED FIREARMS**

If you purchased this firearm as a used firearm, have it inspected and tested by a competent gunsmith before you use it. Guns are sometimes altered and may require repair before they can be used safely.

### STORE FIREARMS SAFELY IN THE HOME

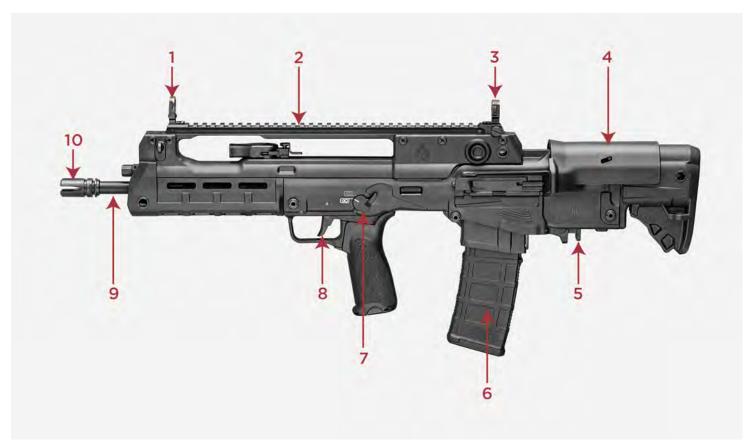
Store firearms unloaded, locked and in a secure place. Obey firearm storage laws. Store firearms and ammunition separately. Because your children may be in other homes where firearms are stored, you should show them what to do if they see or find a firearm by showing them the Eddie Eagle video available from the NRA by calling (703) 267-1000.

OBEY ALL FIREARMS LAWS WHEN BUYING AND SELLING FIREARMS. NEVER BUY A GUN INTENDING TO TRANSFER IT 3 TO SOMEONE WHO IS PROHIBITED FROM OWNING FIREARMS. NEVER, EVER BE A "STRAW PURCHASER."



WARNING: Altering your HELLION firearm Used firearms in any way could violate local, state or federal laws/regulations.

## **KNOW YOUR FIREARM**



Hellion - Parts List

- 1 Adj. Front Sight
- 2 Carrying Handle
- **3** Adj. Rear Sight

- 4 Adjustable Buttstock
- 5 Bolt Release
- 6 Magazine
- **7** Ambidextrous Safety Selector
- **8** Trigger
- **9** Barrel
- 10 Flash Suppressor



Hellion - Parts Llst

- 11 Bolt Carrier Group
- 12 Ambidextrous Charging Handle
- 13 Adj. Gas Block
- 14 QD Mount
- 15 Trigger Guard

- **16** Pistol Grip
- 17 Mag Release
- 18 QD Mount

### COLLAPSIBLE STOCK ADJUSTMENT

Your HELLION rifle is equipped with an adjustable buttstock. Follow the procedure below to adjust the stock to one of five positions.

- 1. Remove magazine and unload firearm (<u>See Loading/Unloading Section</u>). Rotate the safety selector to the "SAFE" position (<u>See Safety Device Section</u>).
- 2. POINT GUN IN SAFE DIRECTION WHILE KEEPING FINGER OFF THE TRIGGER.
- 3. Depress the latch lever (Figure 5) and slide the stock to the desired length, then ensure the latch is engaged by moving the stock back and forth.





Fig 5-1

## **SAFETY RULES**

READ AND UNDERSTAND THESE SAFETY RULES

### BE A SAFE SHOOTER.

ACCIDENT (ak' si dent) N. 1. An unintentional or unexpected happening that is undesirable or unfortunate, especially one resulting in injury, damage, harm or loss.

### DON'T BE THE CAUSE OF AN ACCIDENT.

A responsible firearm owner is safety minded and always handles firearms in a safe manner by following the basic rules of safe shooting and by using common sense in the handling of a firearm.

Store firearms unloaded, locked, and in a secure place. Keep keys for locks separate from lock and in a secure place away from children. Keep firearms out of reach of children. You are responsible for children's safety.

### BE A RESPONSIBLE GUN OWNER.

| • | rreat all firearms as it they | / are loaded at all times. |
|---|-------------------------------|----------------------------|
|   |                               |                            |

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- Never point a firearm at any person or thing you do not intend to shoot.
- Keep your finger off the trigger until you are on target and have made the DECISION to fire.
- Be sure you have positively identified your target.

### ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION.

- Do not drop your firearm. Make sure you maintain control of your firearm at all times. If it falls, it may fire. If you do drop it, unload it and examine it to be sure it works correctly. Do not attempt to fire it again until you have completed this safety check.
- Never put your hand over the muzzle of the firearm.
- Keep your finger(s) off the trigger and out of the trigger guard until you are actually aiming at your target, and made the decision to fire.

- Under no circumstances should the owner/purchaser of this firearm allow it to come into possession of or be handled by small children or a mentally handicapped individual.
- DO NOT COVER THE EJECTION PORT WITH YOUR HANDS WHEN LOADING/UNLOADING YOUR FIREARM.

TREAT EVERY GUN AS IF IT IS LOADED ... ALL THE TIME.

## **BE A RESPONSIBLE FIREARM OWNER!**

- Never rely on a firearm's "safety features" to protect you from unsafe firearm handling. A safety is only a mechanical device, not a substitute for common sense.
- Keep your finger off the trigger until you are on target and have made the DECISION to fire.
   Be sure of your target and backstop before you shoot. Ask yourself what your bullet will hit if it misses or goes through the target.
- Before shooting, be sure the barrel is clear of obstructions, including excessive oil and grease.
- Do not let water, snow, mud or other materials enter the barrel.
- Do not pull a firearm toward you by the muzzle.
- Always hold your firearm so you control the direction of its muzzle in case you fall or stumble.
- ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION.
- If anything does get into the barrel, remove cartridges, and clean bore immediately before attempting to shoot. Obstructed barrels can burst and injure you and/or bystanders.
- Maintain possession of your firearm at all times when you are on the firing range or during target practice. DO NOT ALLOW OTHERS TO HANDLE YOUR FIREARM

### UNLESS THAT PERSON IS BEING INSTRUCTED OR TRAINED.

- ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION.
- Firearms and alcohol or drugs do not mix. Do not take them before or during shooting activities. Your vision, coordination and judgment could be impaired, making firearm handling unsafe.
- When taking medication, seek a doctor's advice to be sure you can operate and handle your firearm safely.
- Receive training from a competent firearms instructor before using any firearm.
- Before attempting to shoot, practice operations by using snap caps (dummy rounds). Become familiar with the safety features, trigger control, and handling of the firearm.
- Make sure you maintain control of your firearm at all times.
- Always keep and carry your firearm with an empty chamber until you intend to shoot, so your firearm cannot be fired unintentionally.
- Firearms should be unloaded when not in use. This means both the chamber and magazine are empty.
- When transferring a firearm by hand, always open the action and check to assure that it is unloaded prior to handing it over to someone.
- Never take anyone's word that a firearm is unloaded. When receiving a firearm, always open the action and check that it is unloaded.

### BE A SAFE FIREARM OWNER!

Do not try to change your firearm's trigger pull, because alterations of trigger pull
usually affect the fit of critical parts and might cause accidental firing.

- Never use a firearm that jams or fails to function properly. Should this occur, return it to Springfield, Inc. for warranty/repair.
- If your shot sounds weak or underpowered, it could mean a bullet is in the chamber/bore. The gun should be immediately unloaded and the chamber/bore checked for obstructions before refiring.
- **DO NOT "HORSEPLAY"** with a firearm. Your firearm cannot think, but you can. Firearm safety depends on you.

### **READ THESE RULES!**

- Load firearm only when on range preparing to fire. Unload it before leaving range.
- Treat every firearm as if it is loaded... all the time!
- Load and unload with the firearm muzzle pointed in a safe direction.
- Be certain firearm is unloaded before cleaning.
- Completely unload your firearm before storing, travelling, standing it against an object, laying it down, entering a house, car, truck, boat, RV/camper, building, or handing it to someone.
- Never leave a loaded firearm unattended.
- Tragedy may result if a child finds your firearm and plays with it. Keep every firearm secure. Children do not understand firearms can kill.
- Store firearms and ammunition separately. Both should be placed beyond children's reach.
- Obey all laws regarding the storage and security of firearms in the home.
- Know and obey the laws regarding the transportation and carrying of firearms.

- Old or reloaded ammunition may cause damage to the firearm and/or injure you or others. Use only clean, dry, original, high-quality, commercially manufactured ammunition. Using reloaded ammunition may void the warranty.
- ALWAYS REMEMBER, REMOVING THE MAGAZINE DOES NOT UNLOAD THE RIFLE NOR DOES IT ENGAGE A SAFETY.
- ALWAYS REMEMBER, THE FIREARM IS NOT UNLOADED UNTIL THE MAGAZINE IS REMOVED AND THE CHAMBER IS EMPTY.
- ALWAYS REMEMBER, THIS FIREARM IS ABLE TO FIRE WITH OR WITHOUT THE MAGAZINE IN PLACE.

# TREAT EVERY FIREARM AS IF IT IS LOADED... ALL THE TIME!

- Many ammunition identifications sound similar. Make sure you use the right caliber/size ammunition in your firearm.
- If firearm fails to fire when the trigger is pulled, keep it pointed at the target for at least 30 seconds. Remove the magazine before opening the action. Remove the cartridge from the chamber. Sometimes slow primer ignition will cause a "hang fire" and the cartridge will go off after a short pause.
- When group firing, always appoint someone to maintain safety control. Obey his/her commands immediately and completely.
- While shooter is loading, firing, and unloading, spectators need to remain behind shooter.
- Always wear protective glasses when shooting.
- Always wear hearing protection when shooting.
- Never shoot at hard flat surfaces or water; bullets will ricochet unpredictably.

- Do not alter or modify your firearm.
- Have your firearm serviced regularly by a qualified gunsmith.
- Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm, cancer and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after firing your firearm, after cleaning your firearm, or whenever you have handled ammunition.
- Always use quality ammunition.

### ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION



WARNING: The firearm is a dangerous weapon if not handled properly.



IMPORTANT WARNING: There is no safe way to discharge a firearm in a home or apartment. Bullets will go through walls, floors, furniture, and appliances and still cause serious injury or death to persons in the house, next door, or outside. Accidental discharges indoors ALWAYS result in property damage or personal injury.



WARNING: When you squeeze the trigger, you must expect the firearm to fire.

You must take full responsibility for firing it. Your care can avoid accidental discharge and thereby avoid accidental injury and death.



WARNING: Always wear eye & ear protection when using any firearm.

### SAFETY DEVICE

The HELLION is equipped with a safety selector located just above and to the rear of the trigger. Any time the firearm is loaded the safety selector should be moved to the "SAFE" position (Figure 12-1). To fire simply rotate the safety selector to the "FIRE" position (Figure 12-2). Return to the "SAFE" position after firing.





Fig 12-1

Fig 12-2

## **AMMUNITION**

Locate the cartridge designation, for caliber, marked on the firearm's barrel. This information indicates the correct ammunition that must be used in your firearm (FIGURE 14-1).

HELLION firearms are gas operated firearms and as such rely on the amount of pressure of the gases developed when the cartridge is fired.

NOTE: If your HELLION is chambered in 5.56 NATO, it will fire both 5.56 NATO and .223 Remington ammunition.

You are responsible for selecting ammunition that meets industry standards and is appropriate in type and caliber for this firearm.

### Never mix ammunition.

A firearm and ammunition are a system and must work together. There are different types of ammunition for different types of firearms. Your firearm has been designed for

ammunition of a specific type and a specific gauge or caliber. It is important to select the proper ammunition for your firearm.

Different combinations of bullet velocity, bullet weight and firearm weight can have major impact on felt recoil; high felt recoil can be uncomfortable to some shooters.

**CAUTION**: Use of ammunition manufactured with corrosive primers in this firearm is not recommended and will cause oxidation to develop on any metal parts of the firearm. To prevent such oxidation, the residue from corrosive primers must be completely removed from all metal parts after each time ammunition with corrosive primers is used in this firearm. Conventional oil or solvent-based firearm cleaners WILL NOT dissolve the residue from corrosive primers. Residue from corrosive primers MUST be completely dissolved with a water-based cleaner. After the corrosive residue has been completely dissolved from all metal parts, remove any excess water-based cleaner from the firearm. Finally, lubricate the firearm as instructed in the Safety and Instruction Manual. Failure to follow these instructions will cause damage to the firearm and may affect the ability of the firearm to function properly.

Check with the ammunition manufacturer or a qualified gunsmith if you are unsure whether the particular ammunition you plan to use in this firearm has been manufactured with corrosive primers. If in doubt, follow all the instructions above to prevent oxidation caused by ammunition manufactured with corrosive primers.

Ammunition manufactured by SAAMI member companies does not have corrosive primers.



Fig 14-1



WARNING: Never use ammunition not specifically designated for use in your firearm. Failure to use the correct type or caliber of ammunition may cause the firearm to jam, or fail to fire, or may generate excessive pressure which can damage or even rupture your firearm, causing personal injury or death to the shooter or bystanders.

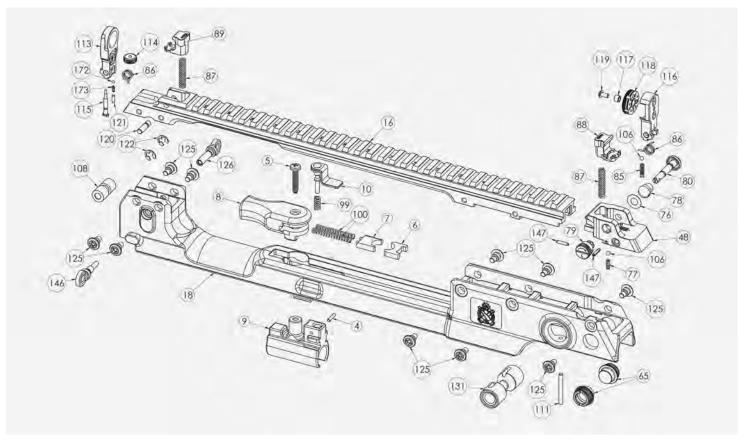


WARNING: Always inspect your ammunition before using it. Never use dirty, corroded or damaged ammunition. A burst cartridge may result, causing damage to the firearm and personal injury or death to the shooter or bystanders.



WARNING: In some cases, a round of ammunition not specified on your firearm and not listed as alternate ammunition in this manual, may fit into the chamber. Firing this ammunition may cause a rupture resulting in damage to the firearm and personal injury or death to the shooter or bystanders. For more information regarding usage of caliber combination, refer to: www.SAAMI.org

## **HELLION PARTS LIST**

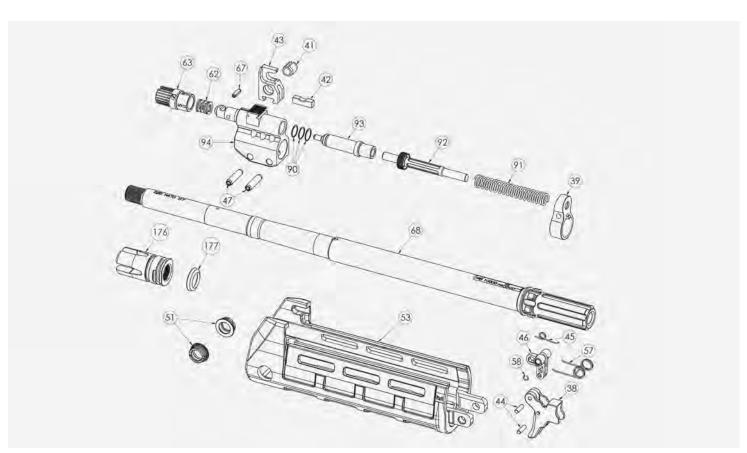


hellion-parts-list-1

- 4 Charging Handle Pin
- 5 Charging Handle Screw
- 6 Rear Charging Handle Positioner
- 7 Front Charging Handle Positioner
- 8 Charging Handle
- 9 Cocker

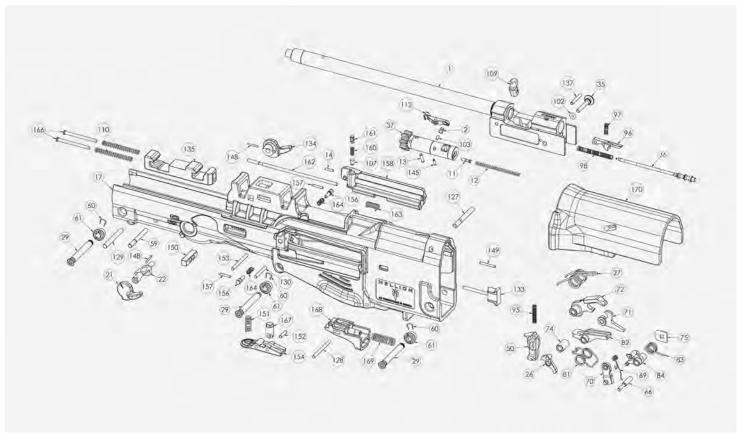
- 10 Cocker Pin Lever Assembly
- 16 Carrying Handle Picatinny Rail
- **18** Carrying Handle
- 48 Rear Sight Carrier
- 65 QD Mount
- **76** Rear Sight Screw Washer
- 77 Rear Sight Regulator Ball Spring
- 78 Rear Sight Screw Spring
- 79 Rear Sight Regulator
- **80** Rear Sight Screw
- **86** Sight Torsion Spring
- **87** Sight Torsion Spring
- 88 Rear Sight Lock
- 89 Front Sight Lock
- 99 Cocker Pin Spring
- **100** Charging Handle Spring
- 106 Rear Sight Regulator Ball
- **108** Carrying Handle Positioner
- **111** Pin 3x26.4
- 113 Front Sight
- 114 Front Sight Regulator
- 115 Front Sight Post
- 116 Rear Sight
- 117 Rear Sight Cylinder Insert

- 118 Rear Sight Cylinder
- 119 Rear Sight Screw
- 120 Front Sight Retainer Pin
- 121 Front Sight Regulator Ball Plunger
- 122 Sling Catch E-Clips
- 125 Carrying Handle Picatinny Rail Screw
- 126 Sling Catch, Right
- **131** Carrying Handle Lock/Release Button
- 146 Sling Catch, Left
- **147** Roll Pin 2x10
- 172 Sight Regulator Ball
- 173 Pistol Grip Washer



hellion-parts-list-2

- **38** Trigger
- **39** Pistol Spring Support
- **41** Spring Pin for Carrying Handle Carrier
- 42 Positioner for Carrying Handle Carrier
- **43** Carrying Handle Carrier
- 44 Trigger Carrier Pin
- **45** Trigger Middle Spring
- **46** Trigger Carrier
- **47** Roll Pin 5x20
- 51 Handguard QD Mount
- 53 Handguard
- **57** Trigger Spring
- 58 Trigger Carrier Pin Retainer Spring
- 62 Gas Block Regulator Spring
- 63 Gas Block Regulator Spring
- **67** Roll Pin 3x10
- **68** Barrel
- 90 Piston Ring
- 91 Pistol Spring
- 92 Pistol Rod
- 93 Piston
- 94 Gas Block
- **176** Flash Hider
- 177 Crush Washer



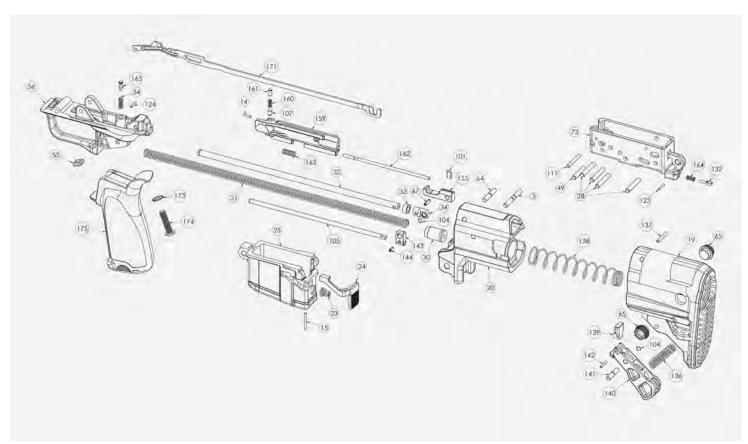
hellion-parts-list-3

- 1 Bolt Carrier w/ Guide Rod Assembly
- 2 Extractor Spring
- 11 Ejector
- 12 Ejector Spring
- 13 Extractor Pin
- 14 Dust Cover Lock Axle
- 17 Receiver
- 21 Safety Selector Left Lever
- 22 Safety Selector
- 26 Bolt Catch Release Lever
- 27 Spring Hammer
- 29 Receiver/Buttstock Retaining Pin

- 35 Firing Pin Pin
- **36** Firing Pin
- **37** Bolt
- 50 Bolt Catch
- 59 Trigger Pin
- 60 Receiver & Buttstock Safety Pin
- 61 Carrier for Receiver & Buttstock Safety Pin
- 66 Sear Lever Safety Pin
- 69 Sear Lever Spring
- **70** Sear Lever Safety
- **71** Disconnector
- **72** Hammer
- **75** Sear Lever Positioner
- 81 Sear & Disconnector Spring
- 83 Sear Lever Spring
- 84 Sear Lever
- 95 Bolt Catch Spring
- 96 Firing Pin Block Safety
- 97 Firing Pin Block Spring
- 98 Firing Pin Spring
- 102 Firing Pin Pin Safety
- 103 Extractor Elastomer Spring
- 107 Dust Cover Lock Pin
- **109** Cam Pin

- 110 Carrying Handle Lock Spring
- **112** Extractor
- 127 Buttstock Catch
- 128 Bolt Catch Release Crank Pin
- 129 Pistol Grip Pin
- 130 Barrel Block Pin
- 133 Dust Cover Block Pin
- 134 Safety Selector Right Lever
- **135** Carrying Handle Lock
- 137 Buttstock Limiter
- **145** Roll Pin 2x8
- 148 Firing Selector Pin
- **149** Roll Pin 2x18
- **150** Carrying Handle Spring Carrier
- 151 Barrel Lock Spring
- 152 Barrel Lock Pin
- 153 Barrel Lock LEver Pin
- 154 Barrel Lock Lever
- **156** Dust Cover Plunger
- 157 Dust Cover Plunger Retainer Pin
- **158** Dust Cover Retainer Pin
- **160** Dust Cover Lock Spring
- 161 Dust Cover Lock
- 162 Dust Cover Pin

- 163 Dust Cover Spring
- 164 Dust Cover Releaser Spring
- 166 Carrying Handle Spring Rod
- **167** Barrel Lock
- 168 Bolt Catch Release Crank
- 169 Bolt Catch Release Crank Spring
- 170 Cheek Rest



hellion-parts-list-4

- 3 Recoil Spring Pin
- 14 Dust Cover Lock Pins
- 15 Magazine Release Pin
- 19 Buttstock
- 20 Buttstock Carrier

- 23 Magazine Release Spring
- 24 Magazine Release
- 25 Magazine Well
- 28 Trigger Mechanism
- **30** Buffer
- 31 Recoil Spring
- 32 Recoil Spring Guide Rod
- 33 Recoil Spring Ring
- 34 Recoil Spring Carrier
- 49 Pin for Bolt Catch Release Lever
- **54** Firing Selector Positioner Spring
- **55** Piston Grip Nut
- **56** Trigger Guard
- 64 Buttstock Pin
- 65 QD Mount
- **67** Roll Pin 3x10
- 73 Triggering Housing
- 101 Buttstock Connector
- **104** Pin 4.5
- 105 Locking Bolt Block
- 107 Dust Cover Lock Pin
- **111** Pin 3x26.4
- 123 Trigger Mechanism Lock Pin
- **124** Firing Selector Position Pin

- **132** Triggering Mechanism Lock
- 136 Buttstock Lever Spring
- 137 Buttstock Limiter
- **138** Buttstock Spring
- 139 Buttstock Lock
- 140 Buttstock Lever
- **141** Buttstock Lever Pin
- **142** Buttstock Lock Pin
- 143 Locking Bolt Block Holder
- **144** Roll Pin 2x10
- 155 Buttstock Connector
- 159 Dust Cover Left
- **160** Dust Cover Lock Spring
- 161 Dust Cover Lock
- 162 Dust Cover Pin
- **163** Dust Cover Spring
- 164 Dust Cover Releaser Spring
- **165** Safety Selector Positioner
- 171 Trigger Bar
- **173** Pistol Grip Washer
- 174 Pistol Grip Screw
- **175** Pistol Grip

## LOADING/PREPARING TO FIRE

The Hellion rifle is configurable to eject spent cartridges to the right or to the left. The rifle is set up for right side ejection from the factory. If you fire from the left shoulder you will need to reconfigure the rifle for left side ejection! (See Field Strip Section)

- 1. Place the **EMPTY** magazine in the magazine well, locate in bottom of firearm. Make sure the magazine is **EMPTY** or you will inadvertently load the firearm. Push firmly enough on bottom of magazine to make sure it is properly seated. A distinctive "click" will confirm the magazine has been properly inserted. Pull the charging handle completely to the rear until the bolt carrier locks back. Return the charging handle to the latched position and rotate the safety selector to "SAFE" (See Safety Device Section).
- 2. Depress magazine release and remove magazine (Figure 16-1).
- 3. Ensure that you are using the proper caliber ammunition for your firearm. Place rim of first cartridge on top of follower (Figure 16-2) then push the cartridge down on the follower until the lips capture the round (Figure 16-3). Load successive rounds by pushing cartridge down on previously loaded cartridge. Use only clean, dry, original, high quality, commercially manufactured ammunition. Using reloaded ammunition may void warranty.
- 4. **POINT FIREARM IN A SAFE DIRECTION AND KEEP FINGER OFF TRIGGER**. Reinsert **LOADED** magazine into magazine well, located in bottom of firearm. Push firmly enough on bottom of magazine to make sure it is properly seated.
- 5. Charge the firearm by firmly pulling the charging handle to the rear and releasing it. The bolt carrier group will thrust forward and load a cartridge into the chamber. Or depress bolt catch (Figure 16-4) to release BCG forward.
- 6. Rotate the safety selector to "SAFE" (<u>See Safety Device Section</u>) if not there already.
- 7. The firearm is now loaded and ready to fire.







Fig 16-2



Fig 16-3 Fig 16-4



WARNING: Do not slam or forcefully jam magazine into magazine well.



WARNING: Never load cartridge by hand directly into the chamber.

### **FIRING**

If you have never fired a firearm before, follow the sequence of operations shown here without ammunition or with snap caps.

Then load only one cartridge into the magazine for your first live ammunition firing.

**WARNING:** The Hellion rifle is configurable to eject spent cartridges to the right or to the left. The rifle is set up for right side ejection from the factory. If you fire from the left shoulder you will need to reconfigure the rifle for left side ejection! (See Field Strip Section)

- 1. POINT FIREARM IN A SAFE DIRECTION WHILE KEEPING YOUR FINGER OFF OF THE TRIGGER.
- 2. Load cartridge into chamber from magazine following the procedure described on page 16. Rotate safety selector to "SAFE" (<u>See Safety Device Section</u>) if not there already.
- 3. Grasp grip of firearm firmly. (Place buttstock against shoulder.) **CAUTION: THE FIREARM IS NOW READY TO FIRE. BE PREPARED FOR NOISE AND RECOIL**WHEN FIREARM FIRES.
- 4. Aim firearm at target by aligning sights. Rotate safety selector to "Fire" (<u>See Safety Device Section</u>).
- 5. Now lightly place finger on trigger, and slowly squeeze trigger to fire the firearm. Spent cartridge is expelled up and to the right. **NOTE: This is an auto loading** firearm. It is immediately loaded and ready to fire again after each shot until all cartridges loaded in magazine have been fired. The firearm is able to fire both with and without the magazine in place.

- 6. Rifle will automatically be ready to fire again after each shot until all cartridges loaded in magazine have been fired.
- 7. When last cartridge has been fired, the bolt catch is automatically engaged and the bolt carrier group is locked open (Figure 18-1).
- 8. Put safety selector on "SAFE" (See Safety Device Section).
- 9. Press magazine release to remove magazine.
- 10. Carefully inspect chamber to make sure it is empty (Figure 18-1).





Fig 18-1 Fig 18-2



WARNING: Firearm is not empty or unloaded until the magazine is removed and the chamber is empty. Never touch the trigger when loading or unloading the firearm.



WARNING: Loading the HELLION by manually inserting a round in the chamber is improper and could cause accidental discharge, possible damage to the firearm or personal injury. Always load the firearm using the magazine. When loading the firearm, always point the muzzle in a safe direction.



WARNING: Always wear eye & ear protection when using any firearm.

### UNLOADING

| 1. Rotate safety selector to | SAFE POSITION | r ( <u>see safety Device section</u> ). |  |
|------------------------------|---------------|---|--|
|                              |               |   |  |

- 2. While pointing the muzzle in a safe direction, remove the magazine by depressing the magazine release and pulling the magazine out (Figure 19-1).
- 3. With your finger off trigger fully retract charging handle, ejecting cartridge.
- 4. Release/lower charging handle.
- 5. Push charging handle in closed position.
- 6. Re-inspect chamber to insure firearm is unloaded. Retract charging handle and insert chamber flag and slowly lower charging handle. Push charging handle to the closed position.

CAUTION: Step 3 is a crucial part of the unloading process. Do not depend on the fact that no casing was ejected on clearing. There could still be a live round in the chamber for any number of reasons. Make certain that you inspect the chamber to make sure that it is clear.



Fig 19-1



WARNING: Never touch the trigger when loading or unloading the firearm.

## **DETERMINE FIREARM IS UNLOADED/SAFE**

Always make sure firearm is unloaded before handling.

- 1. POINT FIREARM IN SAFE DIRECTION WHILE KEEPING YOUR FINGER OFF OF THE TRIGGER.
- 2. Press magazine release to remove magazine (Figure 13-1).
- 3. With finger off trigger fully retract charging handle (Figure 13-2).
- 4. Carefully inspect chamber to make sure it is empty.

5. Slowly lower charging handle.

When chamber is empty, rotate the safety selector to "SAFE" (<u>See Safety Device</u> Section) and close the ejection port cover.





Fig 13-1 Fig 13-2



WARNING: Do not cover the ejection port with your hand when loading/unloading your firearm



WARNING: Even though the chamber is empty there may be cartridges in the magazine. The firearm is not completely unloaded until the magazine is removed and the chamber is empty.

### MALFUNCTION WARNING!

If cartridge hangs up, jams or binds when being chambered from magazine into chamber, do not attempt to force it into the chamber by pushing.

DO NOT COVER THE EJECTION PORT WITH YOUR HANDS WHEN LOADING/UNLOADING YOUR FIREARM.

### WHAT TO DO:

| 2. | Remove magazine.   |
|----|--|
| 3. | Pull back on charging handle and allow cartridge to fall from firearm.   |
| 4. | Do not cover the ejection port with your hands when loading / unloading your firearm.  |
| 5. | If cartridge does not fall free, pull charging handle back and lock it in the rear position.   |
| 6. | Carefully dislodge cartridge.  |
| 7. | If cartridge cannot be removed, lock bolt carrier back, carefully store your firearm and magazines and take it to a competent gunsmith or call Springfield Armory® customer service.   |
|    | st failures to feed or chamber a cartridge are the result of a damaged magazine,<br>proper firearm handling or defective ammunition.   |
| Wh | natever the cause, a jammed cartridge can be a dangerous situation.  |
| T  | O ELIMINATE MALFUNCTIONS   |
| •  | First try changing type/brand of ammunition and/or magazine.   |
| •  | If changing to another type/brand of ammunition and/or magazine does not at once result in smooth feeding of cartridges from magazine to chamber, the following steps should be taken: |

• Check chamber to be sure it and magazine well are clear of cartridges.

• Magazine should be removed first.

1. Point firearm in a safe direction while keeping your finger off of the trigger.

- Thoroughly clean magazine, paying particular attention to removing accumulated residue.
- Thoroughly clean breech mechanism of firearm. Use a bristle brush and solvent to remove residue and fouling from breech face, extractor, chamber and feed ramp. (See Detailed Maintenance Section).
- Check that magazine spring tension is adequate; the spring should hold the follower tightly against the lips of the magazine.
- Check that magazine lips are free of nicks and burrs and are not deformed.
- Remove excess oil and solvent from all cleaned components, load magazine and try firearm again.



WARNING: An obstructed, cracked, or damaged barrel should never be used and the firearm should be returned to Springfield for inspection.

**↑** POINT FIREARM IN A SAFE DIRECTION AT ALL TIMES.

## **ADJUSTABLE GAS BLOCK**

Hellion rifles are equipped with a two-mode adjustable gas block. One mode is for firing with a sound suppressor "S" and the other is for normal firing "N" (Figure 31-1). To change modes simply depress the selector knob and rotate to the desired firing mode (S or N) (Figure 31-2). If not using a sound suppressor, make sure the device is in normal "N" mode. Firing the rifle in "S" mode without a sound suppressor may cause malfunctions.





Fig 31-1 Fig 31-2

## ADJUSTABLE GAS BLOCK CLEANING

- 1. Remove the handguard and carrying handle as described in the <u>Field Stripping</u> <u>Section</u>.
- 2. Retract the rod from the piston and lift and remove the rod and spring (Figure 31-3).
- 3. Remove the piston (Figure 31-4).
- 4. Clean the piston and piston bore of the gas block with a quality cleaning solvent. Dry both parts thoroughly and re-assemble.





Fig 31-3 Fig 31-4

## SIGHT ADJUSTMENT

Your HELLION rifle is equipped with adjustable sights. The rear sight adjusts the bullet impact horizontally (windage) and the front sight changes bullet impact vertically (elevation).

The rear sight has an adjustment knob on the left side of the sight (Figure 40-1). Turning the knob "clockwise" moves the bullet impact to the left. Counter clockwise moves the impact to the right. As the knob is rotated you will hear and feel distinctive "clicks". Each click moves the bullet impact 1/2" at 100 yards.

There are five apertures on the rear sight (Figure 40-2). Turn the aperture selector in either direction to your desired setting. There are five apertures to choose from, 0-1, 2, 3, 4 & 5 which are 100 Meter increments (5=500 meters).

The front sight is adjusted by turning the sight knob. Clockwise rotation lowers the bullet impact and counter rotation raises the impact (Figure 40-3). Each 1/4 turn of the sight post moves the bullet impact 2" at 100 yards.







Fig 40-1 Fig 40-2 Fig 40-3

#### FIELD STRIPPING & CLEANING

cleaned in this condition.

NOTE: FIELD STRIPPING PROCEDURES ON THE HELLION ARE THE SAME REGARDLESS OF CALIBER. Before performing any cleaning or maintenance, make sure the firearm is completely unloaded (this includes the magazine and chamber).

ALWAYS REMEMBER THE FIREARM IS ABLE TO FIRE WITH OR WITHOUT THE MAGAZINE IN PLACE.

| 1. | Always use proper eye protection when cleaning firearms.   |
|----|--|
| 2. | POINT GUN IN SAFE DIRECTION WHILE KEEPING FINGER OFF THE TRIGGER.  |
| 3. | Remove magazine and unload firearm.  |
| 4. | Fully retract the charging handle then release to completely close the bolt.   |
| 5. | Rotate safety selector to "SAFE" position ( <u>See Safety Devices Section</u> ).   |
| 6. | Extend the buttstock to its maximum length ( <u>See Collapsible Stock Section</u> ).   |
| 7. | Push buttstock retaining pin outward, to its limit, from right to left (Figure 22-1) and grasp buttstock and rotate butt pad upwards slightly (5°) and withdraw buttstock assembly which contains the captured recoil spring and guide.  |
| 8. | Retract charging handle to the rear which will expose rearward portion of bolt carrier. Grasp carrier and withdraw from receiver (Figure 22-2). Return charging handle to the forward position. <b>NOTE: This level of disassembly is all that is required for routine cleaning. NOTE: The safety should be applied and the hammer must be cocked to remove or install trigger pack.</b> |
| 9. | Remove the trigger pack by pressing upwards on the exposed locking tab (Figure 23-1), this will release the mechanism, grasp the rear of the pack and withdraw from the receiver. <b>DO NOT</b> attempt further disassembly the trigger pack, it can be  |

- 10. Remove the handguard by pushing the retaining pin outward to its limit, from right to left (Figure 23-2). Grasp the handguard and slide it forward and off the rifle (Figure 23-3). **NOTE: The bolt carrier group must be removed prior to removing the carrying handle.**
- 11. Remove the carrying handle by depressing the carrying handle button from either side (Figure 23-4) and lift rear of the handle slightly, then pull rearward and off the rifle.
- 12. Remove the magazine well by pushing the retaining pin outward to its limit, from right to left. Rotate the front of the magwell down, then pull the magwell from the rifle (Figure 23-5).





Fig 22-1

Fig 22-2



Fig 23-11





Fig 23-12



Fig 23-3





Fig 23-4

Fig 23-5

# BOLT CARRIER GROUP (BCG) CAN BE EASILY DISASSEMBLED FOR MORE DETAILED CLEANING IF NEEDED.

- 1. With a suitable punch, remove the firing pin retainer from left to right (Figure 24-1), then lift the firing pin safety lever to remove the firing pin and spring (Figure 24-2).
- 2. Depress the bolt into the carrier and rotate the bolt to the right until it stops. Insert the firing pin into the hole in the bottom of the carrier and press out the bolt cam key (Figure 24-3). Remove bolt from carrier.

## NOTE: We do not advise extractor removal unless you are experiencing extractor issues.

BCG disassembly is now complete. Clean all parts with a quality powder solvent, rinse, dry and inspect. Lightly lubricate the bolt, wipe away any excess lubricant.







Fig 24-1 Fig 24-2 Fig 24-3

#### REASSEMBLY OF THE BOLT CARRIER GROUP (BCG)

NOTE: The Hellion can be configured to eject from either side of the rifle by changing the assembly procedure for the bolt. The ejection port covers must also be properly configured.

- 1. For right side ejection: insert the bolt into the carrier with the extractor on the right side at the 10 o'clock position until the bolt bottoms in the carrier (Figure 25-1).
- 2. For left side ejection: insert the bolt into the carrier with the extractor on the left side at the 2 o'clock position until the bolt bottoms in the carrier (Figure 25-2).
- 3. Insert the cam key in the bolt with the top of the key angled/inclined to the chosen ejection port (extractor side of the bolt) (Figure 25-3).
- 4. Install the firing pin and spring into the bolt, then insert the firing pin retainer from right to left. **BCG reassembly is now complete.**
- 5. Before reinstalling the BCG the ejection port covers must be configured for the chosen ejection side/direction.







Fig 25-1 Fig 25-2 Fig 25-3



WARNING: Make certain to re-install the cam pin in the BCG. The firearm can fire without cam pin and this creates a catastrophic EXTREMELY hazardous condition, that could cause property damage, personal injury or death.



WARNING: If you disassemble your Springfield Armory® firearm, do so properly. Improper disassembly and/or assembly will create unsafe conditions that could result in injury or death, or a firearm that simply will not work. Don't take chances. Do not attempt to disassemble this or any other firearm until you have received training and instructions from a competent gunsmith.

#### RECONFIGURING EJECTION PORT COVERS

- 1. Retract cheekpiece rearward 1/2" and then rotate the rear of the cheekpiece downward (Figure 26-1). This will allow access to the port cover locking pin.
- 2. Slide the pin rearward to remove (Figure 26-2) and re-install the pin in the ejection port cover that is not used and open the cover that will be used.
- 3. Clean the barrel bore and chamber with a quality bore solvent following the manufacturer's instructions.
- 4. Use a quality powder solvent to clean the carrier way (tunnel) of the receiver and lightly lubricate.

- 5. Brush or wipe away excessive fouling. Using a quality aerosol cleaning product is a simple method to clean the receiver. Follow the manufacturer's instructions.
- 6. Lightly oil all exposed metal surfaces of the BCG, receiver carrier way. Wipe away any excessive lubricant





Fig 26-2

Fig 26-2

### **REASSEMBLY**

## NOTE: REASSEMBLY PROCEDURES ON THE HELLION ARE THE SAME REGARDLESS OF CALIBER.

- 1. Install the magazine well by inserting the round features at the rear of the magwell into their home in the receiver, then rotate upwards and press the retaining pin home (Figure 28-1).
- 2. Install the carrying handle by raising the rear of the handle about 15 degrees and pressing the handle forward into the fitment feature on top of the gas block, (Figure 28-2) and press down on the rear of the handle snapping it into place.
- 3. Replace the handguard by sliding it rearward over the and into the fitment tabs at the front of the carrying handle (Figure 28-3) and press the retaining pin home.

  NOTE: The hammer must be cocked and the safety selector on safe before the trigger pack is installed.

- 4. Replace the trigger pack by inserting the assembly onto the lower rear of the receiver at a front down angle of about 15° (Figure 29-1) pushing forward until it bottoms out in the receiver. Then press the rear downward until the tab snaps into position (Figure 29-2) completing installation.
- 5. Insert the bolt carrier group into the rear of the receiver above the trigger pack and press forward until the rear of the carrier is flush with the cheek riser.
- 6. Install the buttstock by inserting the recoil spring into the rear of the bolt carrier pressing forward while aligning and inserting the cam key in its passage in the carrier (Figure 29-3). Slightly tilt the rear of the stock upwards and push the stock into position (Figure 29-4). Press the retaining pin home.

NOTE: After re-assembly insure proper function of the trigger assembly by manipulating the charging handle, moving the selector to fire, and dry firing the rifle without ammunition.





Fig 28-1 Fig 28-2



Fig 28-3



Fig 29-2



Fig 29-1



Fig 29-3



Fig 29-4



CAUTION: Never allow live ammunition in the area while you are maintaining your firearm.



WARNING: Make certain to re-install the cam pin in the BCG. The firearm can fire without cam pin and this creates a catastrophic EXTREMELY hazardous condition, that could cause property damage, personal injury or death.

#### **DETAILED MAINTENANCE**

Detailed maintenance should be performed every 2,000 rounds.

- 1. Check to make sure firearm is not loaded.
- 2. Field strip the firearm as detailed in the Field Strip/Cleaning Section.
- 3. Scrub the bolt (including the extractor) with a nylon brush dipped in solvent. Pay particular attention to removing build up of any type in the extractor groove. Wipe away any remaining solvent with a rag or cloth.
- 4. Scrub the bolt carrier, firing pin and the interior of the receiver with a nylon brush dipped in cleaning solvent.
- 5. Clean the firing pin hole and firing pin cavity of the bolt with a pipe cleaner.
- 6. Wipe away any remaining solvent thoroughly with a rag.
- 7. Apply a moderate coat of lubricant to the cavity on the carrier into which the bolt is installed.

### **LUBRICATION POINTS**

- 1. Bolt carrier body and cam pin, especially along the runners on the bottom of the carrier and the bosses on the rear. Place two drops of lubrication into cam pin slot.
- 2. Inside of the receiver

#### CABLE LOCK

This cable lock is supplied as an aid to your security measures. Store key separately away from lock and out of reach of children. Springfield Armory® firearm boxes are also designed for an exterior lock. (Not Included)

1. Point gun in safe direction while keeping your finger off the trigger.

- 2. Press magazine release and remove magazine.
- 3. Check to see that no cartridge is in the chamber.
- 4. Insert cable through the ejection port and out magazine well.
- 5. Lock cable into cable lock.
- 6. Grasp charging handle and ease forward.



Fig 41-1



CAUTION: Guns should always be locked and stored in complete compliance with all applicable laws and regulations.