

SIG SAUER®



SIG SPEAR™

OPERATOR'S MANUAL: HANDLING & SAFETY INSTRUCTIONS



**READ THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL CAREFULLY
BEFORE USING THIS FIREARM.
DO NOT DISCARD THIS MANUAL.**

**THIS MANUAL SHOULD ALWAYS ACCOMPANY THIS FIREARM AND BE TRANSFERRED WITH IT UPON
CHANGE IN OWNERSHIP, OR WHEN THE FIREARM IS PRESENTED TO ANOTHER PERSON.**



WARNINGS

1.0 SAFETY WARNINGS

READ THIS ENTIRE MANUAL THOROUGHLY AND CAREFULLY PRIOR TO USING THIS FIREARM.

The warnings in this operators manual are extremely important. By understanding the dangers inherent in the use of any firearm, and by taking the precautions described in this manual, you can experience a high level of safety in the use of your firearm. Failure to heed any of these warnings may result in serious injury or death to you or others, as well as severe damage to the firearm or other property.

WARNINGS in this manual identify a clear danger to the person performing that procedure. Warnings are identified by a red banner with the word **WARNING** in white, bold, uppercase letters and a **WARNING** icon. Failure to comply with a **WARNING** can result in serious injury or death to you or a bystander.



WARNING

CAUTIONS in this manual identify a risk of damage to the firearm being maintained. **CAUTIONS** are identified by a black banner with the word **CAUTION** in white, bold, uppercase letters.

CAUTION



WARNINGS

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As a valued SIG SAUER customer, we encourage you to visit sigsauer.com. There you will find links to product information and updates, merchandise promotions, and educational videos that will be of interest to you as an owner of SIG SAUER products.

SIG SAUER firearms are designed to function reliably with proper care and knowledgeable use. You must understand the safe operation and use of your SIG SAUER firearm. Read and follow these instructions carefully. Do not use the firearm unless you fully understand these instructions and the safe operation of your firearm. Failure to heed any of these instructions may result in serious injury or death to you or others, as well as severe damage to the firearm or other property.

Your firearm comes equipped with effective, well-designed safety features. However, never rely completely on any safety mechanism. Safety mechanisms are designed to augment, not replace safe handling practices. Careless and improper handling of any firearm can result in an unintentional discharge.

Only your safe firearm handling habits will ensure the safe use of your firearm. Like all mechanical devices, the safety mechanisms are subject to breakage or malfunction and can be negatively affected by wear, abuse, dirt, corrosion, incorrect assembly, improper adjustment or repair, or lack of maintenance. Moreover, there is no such thing as a safety mechanism that is “childproof” or that can completely prevent accidental discharge from improper usage, carelessness, “horseplay”, or abusive handling.

The best safety is proper and applied training in safe firearm handling. Always handle your firearm as though you expect the safeties not to work.



WARNINGS

1.0 SAFETY WARNINGS - CONTINUED

Do not load a cartridge into the chamber until you are ready to use the firearm. If your firearm is equipped with a manual safety, keep the safety ON until you are actually ready to use the firearm. Always move the safety fully to its engaged position and visually check it. The safety is not ON unless it is completely ON.

ABUSIVE HANDLING

SIG SAUER firearms incorporate effective mechanical safeties. However, like any mechanical device, exposure to abusive conditions may have a negative effect on these safety mechanisms and cause them to fail to work as designed. Do not subject your SIG SAUER firearm to any type of abusive handling. This includes the firearm being dropped, impact to the firearm, or the firearm being struck by another object. Make sure you always maintain control of your firearm at all times. If your firearm does suffer an abusive event such as previously described, do not attempt to use the firearm. Keep the firearm pointed in a safe direction, unload and clear the firearm of all ammunition immediately, and have it inspected by a certified SIG SAUER armorer or gunsmith prior to using the firearm.

A safe direction is defined as an area in which, if the firearm were to discharge, no property damage would occur and no personal injury would result.

As previously noted, if your SIG SAUER firearm does suffer an abusive event, unload it immediately and have it inspected by a certified SIG SAUER Armorer or gunsmith prior to using the firearm.

Intentional or repetitive abusive handling of any SIG SAUER firearm will void the manufacturer's warranty and could render the firearm unsafe.



WARNINGS

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REPLACEMENT PARTS

Do not attempt to disassemble your SIG SAUER firearm beyond the point explained in this manual. Disassembly beyond the instructions in this manual is restricted to a certified SIG SAUER armorer or professional gunsmith. Failure to comply with these restrictions will void your warranty.

Warnings and instructions about the use of some SIG SAUER replacement parts, assemblies, and accessories may be described in literature accompanying the specific products. Read and carefully follow those instructions. Such warnings and instructions are provided to assure the safe functioning of the firearm. Failure to heed them may result in improper functioning, damage to the firearm, and serious injury or death to you or others.

ALTERATIONS

This SIG SAUER firearm was designed to function properly in its original condition. Unauthorized alterations can make it unsafe. Do not alter any part or add or substitute any parts or accessories not manufactured by SIG SAUER for this pistol. The addition of any parts or accessories beyond the user level of maintenance described in this manual is not authorized.



WARNINGS

1.0 SAFETY WARNINGS - CONTINUED

ACCESSORIES

It is your responsibility to ensure that all accessories, such as holsters and firearm-mounted lights, are compatible with this firearm and that the accessories do not interfere with the safe operation and handling of the firearm. If you are lawfully carrying the firearm concealed, you must ensure that the holster you choose is made for your particular firearm and designed for the type of carry in which you intend to engage.

TRANSPORTING

When transporting your firearm, be sure the firearm is unloaded and cleared of all ammunition. It is your responsibility to familiarize yourself with the laws of any state you will be traveling through with your firearm.

STORAGE

The only safe way to store your firearm is unloaded, cleared of all ammunition, and secure. Safe and secure storage is one of your most important responsibilities. Store your unloaded firearm separate from your ammunition and in places inaccessible to children or unauthorized persons.

CHAMBER SAFETY FLAG

Every SIG SAUER firearm is shipped with a chamber safety flag. The chamber safety flag prevents the chambering of a round when installed and provides a readily visible indication that the firearm's chamber is empty. The chamber safety flag is to be installed in the firearm's chamber at all times when the firearm is not in use. Many public ranges require chamber safety flags be installed when the firing line is cold.



WARNINGS

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LIABILITY

This product is classified as a FIREARM and is sold by SIG SAUER with the specific understanding that we shall not be responsible in any manner whatsoever for malfunctioning of the firearm, physical injury, or property damage resulting in whole or in part from:

- Criminal or negligent discharge
- Improper, careless, or abusive handling
- Unauthorized modifications or parts replacement
- Defective, improper, hand-loaded, or reloaded ammunition
- Corrosion
- Neglect
- Other influences beyond our direct and immediate control

This limitation applies regardless of whether liability is asserted on the basis of contract, negligence, or strict liability (including any failure to warn). Under no circumstance shall SIG SAUER, Inc. be liable for incidental or consequential damages such as loss of use of property, commercial loss, and loss of earnings or profits.



WARNINGS

BASIC RULES OF SAFE FIREARMS HANDLING

1. ALWAYS treat every firearm as if it were loaded.
2. ALWAYS be sure the barrel is clear of any obstruction.
3. ALWAYS be sure of your backstop, what lies beyond, and the safety of bystanders before you shoot.
4. ALWAYS use clean, dry, original factory-made ammunition of the proper type and caliber for your firearm.
5. ALWAYS wear ear protection and safety glasses when shooting.
6. ALWAYS carry your firearm so that you can control the direction of the muzzle if you fall or stumble.
7. NEVER shoot at a flat surface or water.
8. DO NOT leave a loaded firearm unattended. Firearms and ammunition should be stored separately, locked if possible, beyond the reach of children, careless adults, or unauthorized users.
9. NEVER allow your firearm to be used by anyone who has not read and understood this operators manual.
10. DO NOT point any firearm, loaded or unloaded, at any undesired or unsafe target.
11. NEVER discharge your firearm near an animal unless the animal is trained to accept the noise. An animal's startled reaction could injure it or cause an accident.
12. NEVER drink alcoholic beverages or use drugs before or during shooting, as your vision and judgment could be seriously impaired, making your firearm handling unsafe.



WARNINGS

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1.1 EYE AND EAR PROTECTION



Always wear safety glasses that meet the requirements of American National Standards Institute (ANSI) z87.1 and ear plugs and “ earmuff”-type protectors whenever you are shooting. Always make certain that persons close to you are similarly protected. Unprotected eyes may be injured by powder, gas, carbon residue, lubricant, metallic particles, or similar debris that may emanate occasionally from any firearm in normal use. Without ear protection, repeated exposure to shooting noise may lead to cumulative, permanent hearing loss.

1.2 AMMUNITION

Use only high-quality, original, factory-manufactured ammunition. Do not use cartridges that are dirty, wet, corroded, bent, or damaged. Do not oil cartridges. Do not spray aerosol-type lubricants, preservative, or cleaners directly onto cartridges or where excess spray may flow into contact with cartridges. Lubricant or other foreign matter on cartridges can cause potentially dangerous ammunition malfunctions. Use only ammunition of the caliber for which your firearm is chambered. The proper caliber is permanently engraved on your firearm; never attempt to use ammunition of any other caliber.

The use of reloaded, “re-manufactured” hand-loaded, or other nonstandard ammunition voids all warranties. Reloading is a science and improperly loaded ammunition can be extremely dangerous.



WARNINGS

1.2 AMMUNITION - CONTINUED

Severe damage to the firearm and serious injury or death to the shooter or to others may result. Always use ammunition that complies with the industry performance standards established by the Sporting Arms and Ammunition Manufacturers' Institute, Inc. (SAAMI) or ammunition manufactured to U.S. military specifications.

SIG SAUER, Inc. specifically disclaims responsibility for any damage or injury whatsoever occurring in connection with, or as a result of, the use in any SIG SAUER firearm of faulty, nonstandard, "re-manufactured" hand-loaded (reloaded) ammunition, or cartridges other than those for which the firearm was originally chambered.

Firearms may be severely damaged and serious injury or death to the shooter or to others may result from any condition causing excessive pressure inside the chamber or barrel during firing. Excessive pressure can be caused by obstructions in the barrel, propellant powder overloads, the use of incorrect cartridges, or defectively assembled cartridges. In addition, the use of a dirty, corroded, or damaged cartridge can lead to a burst cartridge case and consequent damage to the firearm and personal injury from the sudden escape of high-pressure propellant gas within the firearm's mechanism.

OBSTRUCTED BORE

Immediately stop shooting, keep the pistol pointed in a safe direction whenever:

- You have difficulty in, or feel unusual resistance in, chambering a cartridge;
- A cartridge misfires (does not go off);
- The mechanism fails to extract a fired cartridge case;
- Unburned grains of propellant powder are discovered spilled in the mechanism;
- A shot sounds weak or abnormal. It is possible that a bullet is lodged part way down the barrel.



WARNINGS

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- Firing a subsequent bullet into the obstructed barrel can damage the firearm and cause serious injury to the shooter or to bystanders.

Bullets can become lodged in the barrel when:

- The cartridge has been improperly loaded without propellant powder, or if the powder fails to ignite (ignition of the cartridge primer alone will push the bullet out of the cartridge case, but usually does not generate sufficient energy to expel the bullet completely from the barrel);
- The bullet is not properly seated in the cartridge case. When such a cartridge is extracted from the chamber without being fired, the bullet may be left behind in the bore at the point where the rifling begins. Subsequent chambering of another cartridge may push the first bullet further into the bore.

If there is any reason to suspect that a bullet is obstructing the barrel, immediately unload and clear the firearm. Field strip the pistol and look through the bore of the barrel. It is not sufficient to merely look in the chamber. A bullet may be lodged some distance down the barrel where it cannot easily be seen.

If a bullet is in the bore, do not attempt to shoot it out by using another cartridge or by blowing it out with a blank or a cartridge from which the bullet has been removed. Such techniques can generate excessive pressure, damage the firearm, and cause serious personal injury or death.

If the bullet can be removed by tapping it with a cleaning rod, clean any unburned powder grains from the bore, chamber, and mechanism, before resuming shooting. If the bullet cannot be dislodged by tapping it with a cleaning rod, take the firearm to a gunsmith or certified SIG SAUER Armorer.



WARNINGS

1.2 AMMUNITION - CONTINUED

Dirt, corrosion, or other foreign matter on a cartridge can impede chambering and may cause the cartridge case to burst upon firing. A damaged or deformed cartridge may also impede chambering or cause the cartridge case to burst upon firing.

Do not lubricate cartridges, and be sure to wipe the chamber clean of any oil or preservative before shooting. Oil interferes with the friction between cartridge case and chamber wall that is necessary for safe functioning, and subjects the firearm to stress similar to that imposed by excessive pressure.

Use lubricants sparingly on the moving parts of your firearm. Avoid excessive spraying of any aerosol gun care product, especially where it might get on ammunition. All lubricants and aerosol spray lubricants in particular can penetrate cartridge primers and cause misfires. Some highly penetrative lubricants can also migrate inside cartridge cases and cause deterioration of the propellant powder; on firing, the powder might not ignite. If only the primer ignites, there is danger that the bullet may become lodged in the barrel.

Death, serious injury, and damage to the firearm can result from the use of wrong ammunition, bore obstructions, powder overloads, or incorrect cartridge components. Always wear shooting glasses and hearing protectors.



WARNINGS

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WARNING: CANCER AND REPRODUCTIVE HARM—www.P65warnings.ca.gov



DISCHARGING FIREARMS IN POORLY VENTILATED AREAS, CLEANING FIREARMS, OR HANDLING AMMUNITION MAY RESULT IN EXPOSURE TO LEAD AND OTHER SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS, REPRODUCTIVE HARM, AND OTHER SERIOUS PHYSICAL INJURY. MAINTAIN ADEQUATE VENTILATION AT ALL TIMES. WASH HANDS THOROUGHLY AFTER EXPOSURE. SHOOTING OR CLEANING FIREARMS MAY EXPOSE YOU TO LEAD



WARNINGS

1.3 STATE-BY-STATE WARNINGS

Certain states require, by law, that their own specified warning notices, in larger than-normal type be conspicuously included by the manufacturer, distributor, or retail dealer with firearms sold in that state. SIG SAUER sells its products in compliance with applicable laws and regulations. Because our products may be sold in these states, we include the following:



CALIFORNIA: WARNING

Firearms must be handled responsibly and securely stored to prevent access by children and other unauthorized users. California has strict laws pertaining to firearms, and you may be fined or imprisoned if you fail to comply with them. Visit the Web site of the California Attorney General at <https://oag.ca.gov/firearms> for information on firearm laws applicable to you and how you can comply. Prevent child access by always keeping guns locked away and unloaded when not in use. If you keep a loaded firearm where a child obtains and improperly uses it, you may be fined or sent to prison."

If you or someone you know is contemplating suicide, please call the National Suicide Prevention Lifeline at 1-800-273 TALK (8255).



ADVERTENCIA

Las armas de fuego deben manipularse de manera responsable y segura para evitar el acceso de niños y otros usuarios no autorizados. California tiene leyes estrictas relacionadas con armas de fuego, y usted puede ser multado o encarcelado si no las cumple. Visite el sitio web del fiscal general de California en <https://oag.ca.gov/firearms> para obtener información sobre las leyes de armas de fuego que son aplicables y cómo puede cumplirlas. Evite el acceso de niños manteniendo siempre las armas bloqueadas y descargadas cuando no estén en uso. Si mantiene un arma de fuego cargada donde un niño la puede obtener y la usa indebidamente, se le puede multar o enviar a prisión.

Si usted o alguien que conoce está contemplando el suicidio, llame a la Línea Nacional de Prevención del Suicidio al 1-800-273 TALK (8255).



WARNINGS

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CONNECTICUT:

"UNLAWFUL STORAGE OF A LOADED FIREARM MAY RESULT IN IMPRISONMENT OR FINE."

FLORIDA:

"IT IS UNLAWFUL, AND PUNISHABLE BY IMPRISONMENT AND FINE, FOR ANY ADULT TO STORE OR LEAVE A FIREARM IN ANY PLACE WITHIN THE REACH OR EASY ACCESS OF A MINOR UNDER 18 YEARS OF AGE OR TO KNOWINGLY SELL OR OTHERWISE TRANSFER OWNERSHIP OR POSSESSION OF A FIREARM TO A MINOR OR A PERSON OF UNSOUND MIND."

MAINE:

"ENDANGERING THE WELFARE OF A CHILD IS A CRIME. IF YOU LEAVE A FIREARM AND AMMUNITION WITHIN EASY ACCESS OF A CHILD, YOU MAY BE SUBJECT TO FINE, IMPRISONMENT OR BOTH. KEEP FIREARMS AND AMMUNITION SEPARATE. KEEP FIREARMS AND AMMUNITION LOCKED UP. USE TRIGGER LOCKS."

MARYLAND:

"WARNING: CHILDREN CAN OPERATE FIREARMS WHICH MAY CAUSE DEATH OR SERIOUS INJURY. IT IS A CRIME TO STORE OR LEAVE A LOADED FIREARM IN ANY LOCATION WHERE AN INDIVIDUAL KNEW OR SHOULD HAVE KNOWN THAT AN UNSUPERVISED MINOR WOULD GAIN ACCESS TO THE FIREARM. STORE YOUR FIREARM RESPONSIBLY!"



WARNINGS

MASSACHUSETTS:

“WARNING FROM THE MASSACHUSETTS ATTORNEY GENERAL: This handgun is not equipped with a device that fully blocks use by unauthorized users. More than 200,000 firearms like this one are stolen from their owners every year in the United States. In addition, there are more than a thousand suicides each year by younger children and teenagers who get access to firearms. Hundreds more die from accidental discharge. It is likely that many more children sustain serious wounds, or inflict such wounds accidentally on others. In order to limit the chance of such misuse, it is imperative that you keep this weapon locked in a secure place and take other steps necessary to limit the possibility of theft or accident. Failure to take reasonable preventative steps may result in innocent lives being lost, and in some circumstances may result in your liability for these deaths.”



WARNINGS

SIG SAUER

MASSACHUSETTS: - Continued

"IT IS UNLAWFUL TO STORE OR KEEP A FIREARM, PISTOL, SHOTGUN OR MACHINE GUN IN ANY PLACE UNLESS THAT WEAPON IS EQUIPPED WITH A TAMPER RESISTANT SAFETY DEVICE OR IS STORED OR KEPT IN A SECURELY LOCKED CONTAINER."

NEW JERSEY:

"IT IS A CRIMINAL OFFENSE TO LEAVE A LOADED FIREARM WITHIN EASY ACCESS OF A MINOR."

NEW YORK CITY, NY:

"THE USE OF A LOCKING DEVICE OR SAFETY LOCK IS ONLY ONE ASPECT OF RESPONSIBLE FIREARMS STORAGE. FOR INCREASED SAFETY, FIREARMS SHOULD BE STORED UNLOADED AND LOCKED IN A LOCATION THAT IS BOTH SEPARATE FROM THEIR AMMUNITION AND INACCESSIBLE TO CHILDREN AND OTHER UNAUTHORIZED PERSONS."



WARNINGS

NORTH CAROLINA:

Any person who resides in the same premises as a minor, owns or possesses a firearm, and stores or leaves the firearm (i) in a condition that the firearm can be discharged and (ii) in a manner that the person knew or should have known that an unsupervised minor would be able to gain access to the firearm, is guilty of a Class 1 misdemeanor if a minor gains access to the firearm without the lawful permission of the minor's parents or a person having charge of the minor and the minor:

- (1) Possesses it in violation of G.S. 14-269.2(b)
- (2) Exhibits it in a public place in a careless, angry, or threatening manner;
- (3) Causes personal injury or death with it not in self defense; or
- (4) Uses it in the commission of a crime.

TEXAS:

"IT IS UNLAWFUL TO STORE, TRANSPORT, OR ABANDON AN UNSECURED FIREARM IN A PLACE WHERE CHILDREN ARE LIKELY TO BE AND CAN OBTAIN ACCESS TO THE FIREARM."

WISCONSIN:

"IF YOU LEAVE A LOADED FIREARM WITHIN THE REACH OR EASY ACCESS OF A CHILD YOU MAY BE FINED OR IMPRISONED OR BOTH IF THE CHILD IMPROPERLY DISCHARGES, POSSESSES, OR EXHIBITS THE FIREARM."

Please check with your licensed retailer, state police, or local police for additional warnings, which may be required by local law or regulation. Such regulations change constantly, and local authorities are in the best position to advise you on such legal matters.



WARNINGS

SIG SAUER

1.4 LOCKING DEVICES



All firearms are originally shipped with a key-operated locking device, except for Custom Works firearms that are shipped with a lockable case.

Although it can help provide secure storage for your unloaded firearm, any locking device can fail.

All firearms are designed to fire if they are loaded and the trigger is pressed.

Therefore, never install the locking device inside the

trigger guard or in any way that makes it possible to press the trigger! Do not leave the keys in the lock.

The ultimate responsibility for secure storage of any firearm must depend upon its owner and his or her individual circumstances.

Firearms should be stored unloaded, in a secure location, separate from their ammunition.

To maximize effectiveness and reduce the chances of malfunction or damage to a firearm, ALWAYS refer to the locking device's manufacturer directions for installation and removal of the device.



WARNINGS

1.5 SAFETY INFORMATION

This operator's manual is designed to assist you in learning how to use and care for your SIG SAUER® firearm properly.

Only when you are certain that you fully understand this manual and can properly carry out its instructions, should you practice loading and firing your firearm with live ammunition. Having a firearm in your possession is a full-time job; you cannot guess and you cannot forget. You must know how to use your firearm safely.

If you have any doubts about your ability to handle or use this firearm safely, you should seek supervised instruction.

The SIG SAUER Academy provides all levels of firearms safety and skill training, from beginner to expert.

For more information contact:

SIG SAUER[®]
ACADEMY

sigsaueracademy.com • (603) 610-3400
Epping, New Hampshire

SAFETY MUST BE THE FIRST AND CONSTANT CONSIDERATION OF EVERY PERSON WHO HANDLES FIREARMS AND AMMUNITION.

For more information about safety, responsible firearms ownership, and shooting sports, contact:
National Rifle Association (NRA) of America
11250 Waples Mill Road, Fairfax, VA 22030-7400 • 1-800-672-3888
nra.com



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2.0 MECHANICAL CHARACTERISTICS AND FIREARM THEORY

2.1 FIREARM DESCRIPTION

2.1.1 GENERAL

The SIG SPEAR is a gas operated semi-automatic, magazine fed, medium range, rifle chambered in .277 Fury and 6.5mm Creedmoor. The rifle fires from the closed bolt position. The operating system is a short stroke piston system enabling optimum function under adverse conditions. The rifle is designed to be fired with or without the suppressor attached.

2.1.2 SPECIFICATIONS

The SPEAR provides a full length MIL-STD 1913 rail for the mounting of optics. The M-LOK® interface allows for the mounting of MIL-STD 1913 rail segments at multiple locations. The rifle features several sling mounting points enabling the use of multiple sling configurations.

Caliber	.277 SIG FURY / 6.8x51mm	6.5 CREEDMOOR
Length (stock collapsed)	30.80 in. (782.4 mm)	33.80 in. (858.5 mm)
Length (Stock Extended)	34.02 in. (864.1 mm)	37.02 in. (940.3 mm)
Length (Stock Folded)	23.97 in. (608.8 mm)	26.96 in. (684.8 mm)
Weight	8.38 lbs. (3.80 kg)	8.95 lbs. (4.06 kg)
Height	7.97 in. (202.4 mm)	7.97 in. (202.4 mm)
Width (Stock Folded)	4.70 in. (119.4 mm)	4.70 in. (119.4 mm)
Width (Stock deployed)	2.98 in. (75.7 mm)	2.98 in. (75.7 mm)
Barrel Length	13.0 in. (330.2 mm)	16.0 in. (406.4 mm)
Rifling	1:7 in. (177.8 mm)	1:8 in. (203.2 mm)
All specification data measured with an unloaded firearm with no magazine, sights or other accessories.		



2.2 CONTROLS AND INDICATORS

2.2.1 LEFT SIDE

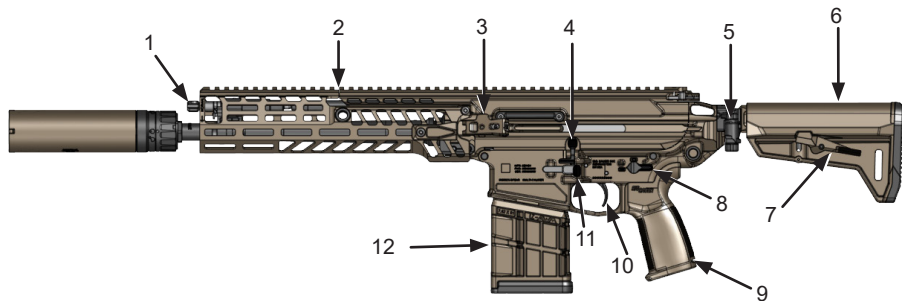


Figure 1. DESCRIPTION OF CONTROLS AND INDICATORS, LEFT SIDE

TABLE 1 - DESCRIPTION OF CONTROLS AND INDICATORS, LEFT SIDE.

Key	Control/Indicator	Function
1.	Gas Valve	Regulates gas system for optimum rifle function.
2.	MIL STD 1913 Rail	Allows for mounting of accessories.
3.	Side Charging Handle	Allows charging of rifle from left side.
4.	Bolt Catch, Ambi	Holds bolt open after last round is fired. Releases bolt when pressed.
5.	Stock Lock	Prevents stock from folding unless pressed. Press to fold stock.
6.	Stock	Allows for shouldering of rifle.
7.	Stock Latch	Releases stock to allow for length of pull adjustment.
8.	Fire Control Selector	Selects modes of fire. Places rifle on SAFE.
9.	Grip	Allows for supporting of rifle while firing.
10.	Trigger	Initiates cycle of function when pressed.
11.	Magazine Catch	Holds magazine in rifle. Releases magazine when pressed.
12.	Magazine	Cartridge magazine, holds 20 cartridges.



2.2.2 RIGHT SIDE

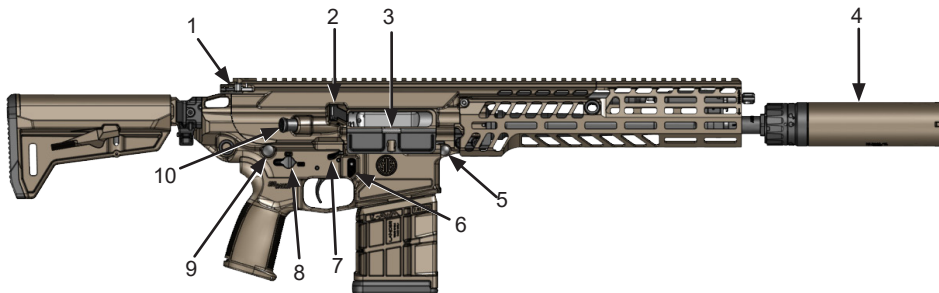


Figure 2. DESCRIPTION OF CONTROLS AND INDICATORS, RIGHT SIDE

TABLE 2 - DESCRIPTION OF CONTROLS AND INDICATORS, RIGHT SIDE.

Key	Control/Indicator	Function
1.	Charging Handle	Allows for initial charging of rifle.
2.	Deflector	Deflects ejected cartridge.
3.	Ejection Port Cover	Prevents debris from entering upper receiver.
4.	Suppressor	Reduces report of rifle
5.	Pivot Pin	Allows for field stripping of rifle.
6.	Magazine Release Button	Releases magazine when pressed.
7.	Right Side Bolt Catch	Releases bolt when pressed. Push up to lock bolt open.
8.	Fire Control Selector	Selects modes of fire. Places rifle on SAFE.
9.	Takedown Pin	Allows for separation of receivers.
10.	Forward Assist	Ensures bolt is fully closed.



2.2.3 MAJOR GROUPS AND ASSEMBLIES

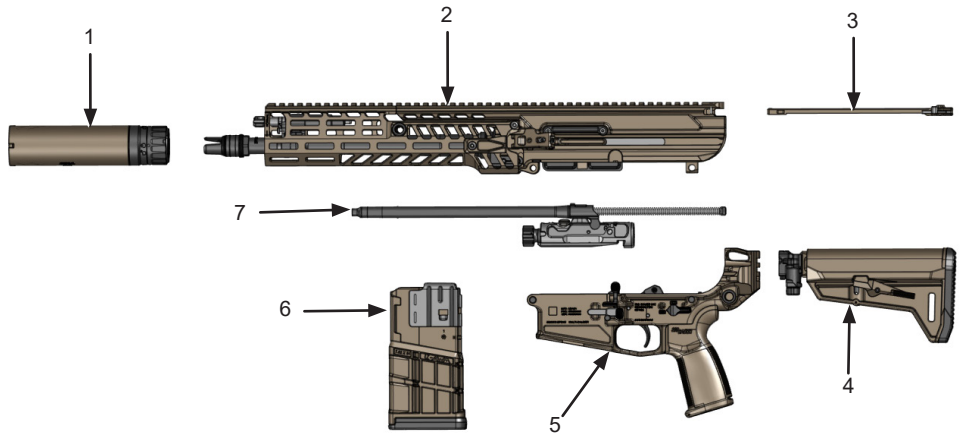


Figure 3. MAJOR GROUPS AND ASSEMBLIES

TABLE 3 - DESCRIPTION OF MAJOR GROUPS AND ASSEMBLIES

Key	Group/Assemblies	Description
1.	Suppressor	Reduces report of the fired cartridge.
2.	Upper Receiver Group	Upper Receiver Group consists of the charging handle, non-reciprocating side charging handle, ejection port cover assembly, forward assist assembly, handguard assembly, and barrel/gas block assembly with QD suppressor adapter.
3.	Charging Handle Assembly	Provides initial charging of the rifle.
4.	Stock Assembly, Folding/Adjustable	Provides a means to shoulder the rifle. Can be adjusted for length of pull.
5.	Lower Receiver Assembly	Assists in the basic function of rifle. Houses fire control components.
6.	Magazine 20 Round	Cartridge magazine holds 20 cartridges for firing the rifle.
7.	Op Rod / Bolt Carrier Assembly	Provides feeding, chambering, locking, firing,unlocking,extraction,and ejection of cartridges using recoil spring for power.



2.3 CYCLE OF OPERATION

There are eight steps in the cycle of operation of the SPEAR which begin after a loaded magazine is inserted into the rifle. The bolt is locked to the rear, and the chamber is clear.

FEEDING

As the bolt carrier is released, the carrier group moves forward. The lower lugs of the bolt make contact with the rear of the cartridge as it sits in the magazine. The cartridge is stripped from the magazine and begins its forward movement toward the chamber.

CHAMBERING

As the bolt moves forward, the bolt locking lugs move forward into the barrel extension. The ejectors are compressed against the left side of the cartridge head.

LOCKING

The bolt carrier continues to move forward until it is stopped by contact with the rear face of the barrel extension. The bolt rotates to the left, through the action of the cam slot in the carrier and the cam pin through the bolt. This engages the bolt lugs with the barrel extension lugs to lock the bolt into the barrel extension.

FIRING

The selector is rotated to the Semi position. The trigger is pressed and the hammer is released. The hammer spring drives the hammer forward against the firing pin, which in turn, strikes the primer in the cartridge causing detonation.

UNLOCKING

As the bullet passes the gas port in the barrel, a small amount of gas is bled off traveling up through the gas port and into the gas block. The gas then enters the gas valve and is regulated by gas ports in the valve. The gas acts upon the piston and drives the operating rod rearward. The op rod and bolt carrier assembly rearward movement causes the bolt cam pin to rotate the bolt to the unlocked position.

EXTRACTION

As the bolt carrier assembly moves rearward the spent case is pulled free from the chamber by the extractor. The twisting motion of the bolt aids in the extraction from the chamber.

EJECTION

The extractor continues to grip the rim of the spent case on the right side. The ejectors are applying forward pressure to the left side of the case. As the expended case clears the chamber, then the barrel extension, it is flipped out through the ejector port on the right side of the receiver.

COCKING

The rearward movement of the bolt carrier overrides the hammer, forcing it down into the receiver and compressing the hammer spring, cocking the hammer in the firing position.



3.0 OPERATING THE SIG SPEAR FIREARM

3.1 PREPARATION BEFORE USING THE FIREARM.

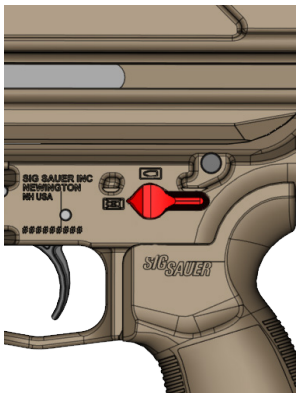
Ensure you have read, understand, and are capable of following all the safety warnings on pages 2-19 of this manual in addition to the safety rules, regulations, procedures or guidelines of your club or local shooting range.

Prior to using the firearm it is strongly suggested to field strip the firearm (Section 4.0) and clean any fouling that might have occurred during factory testing (Section 5.0). Inspect, lubricate, and re-assemble the firearm (Section 5.0). Upon re-assembly and prior to firing the rifle, conduct the Function Check (Section 6.4). If the rifle does not complete the function check as described, call customer service (See Section 8.1 page 105).

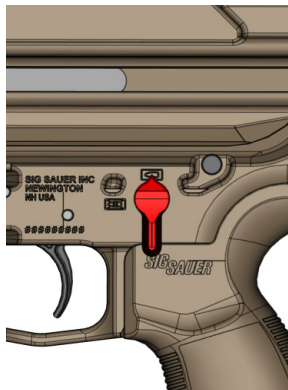
Any maintenance beyond the user level described in this manual is to be performed by a certified SIG SAUER Armorer specifically trained on the maintenance of the rifle.

3.2 FIRE CONTROL SELECTOR

The SIG SPEAR features an ambidextrous safety selector lever. Rotating either safety selector lever 90 degrees changes the firing mode from SAFE to FIRE. Moving one lever automatically moves the opposite lever to the same position.



SAFE



FIRE



3.3 UNLOAD AND CLEAR THE SIG SPEAR



WARNING

SAFETY

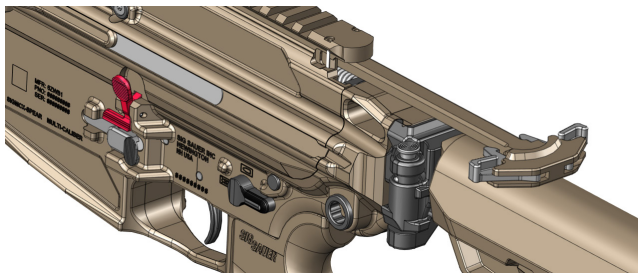


ALWAYS ENSURE RIFLE IS POINTED IN A SAFE DIRECTION. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY OR DEATH TO PERSONNEL.

1. Place the fire control selector to SAFE.
2. Press magazine catch to remove magazine.



3. Pull back on charging handle while pressing on the bottom of the bolt catch to lock the bolt to the rear, visually watch ejection port for ejection of cartridge.



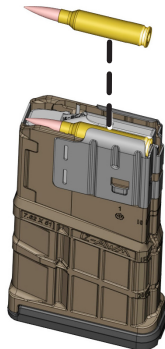
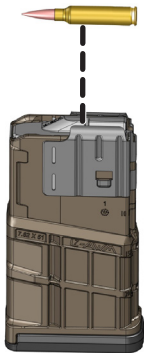
4. Return charging handle to the forward locked position.
5. Conduct a three-point safety check to ensure there is no cartridge, foreign debris, or any physical damage.
 - a. Ensure the chamber is empty.
 - b. Inspect for no magazine.
 - c. Inspect bolt face.
6. Press the upper part of the bolt catch to release the bolt to forward position. Close ejection port cover.



3.4 LOADING/RELOADING

3.4.1 LOADING THE MAGAZINE

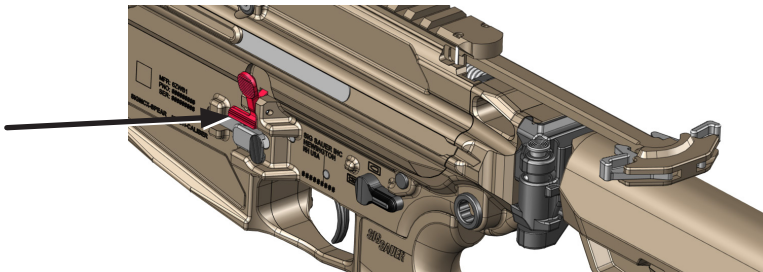
1. Press down on the magazine follower with the first cartridge and push the cartridge to the rear under the magazine lips.



2. Align the next cartridge repeat step 1 until the magazine is loaded.

3.4.2 LOADING THE SIG SPEAR

1. Rotate fire control selector to SAFE.
2. Pull back charging handle while pressing bottom of bolt catch to lock bolt to the rear.

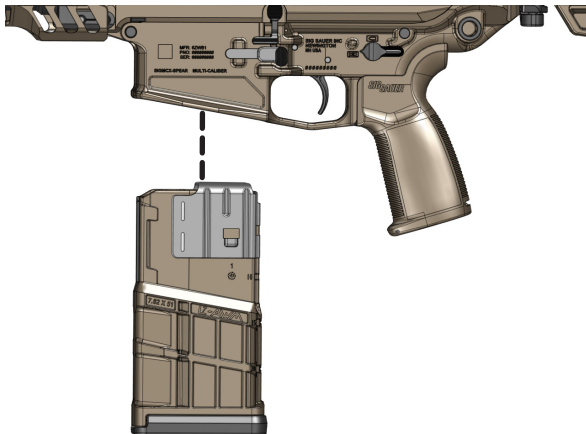


3. Return charging handle to forward locked position.
4. Conduct a three-point safety check to ensure there is no cartridge, foreign debris, or any physical damage.
 - a. Ensure the chamber is empty.
 - b. Inspect for no magazine.
 - c. Inspect bolt face.

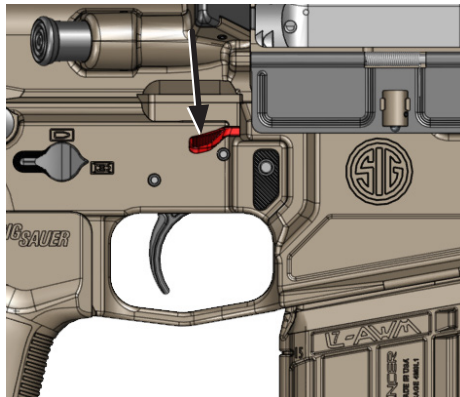
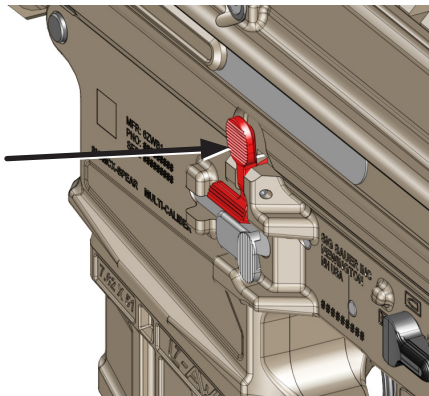


3.4.2 LOADING THE SIG SPEAR - CONTINUED

5. Insert a loaded magazine into magazine well until magazine catch engages and locks magazine in place.
6. Pull down on the magazine to ensure it is locked in place.



7. Press upper portion of bolt catch or press down on right side bolt release. The bolt should go forward into battery.

**WARNING****LOADED RIFLE****THE RIFLE IS NOW LOADED AND READY TO FIRE**



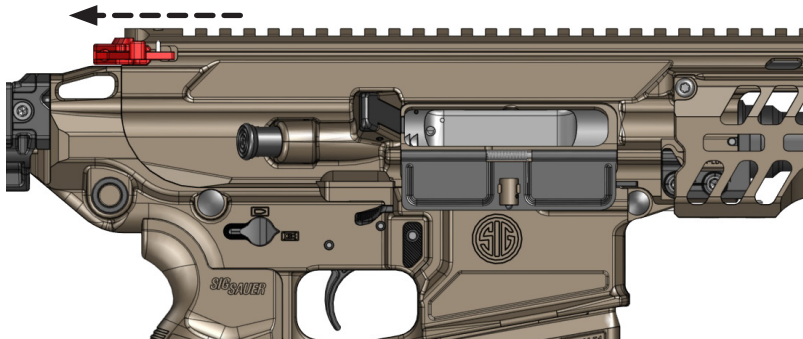
3.4.2 LOADING THE SIG SPEAR - CONTINUED

8. Tap forward assist to ensure bolt is fully forward.



3.4.3 CHAMBERING CARTRIDGE FROM BOLT CLOSED POSITION

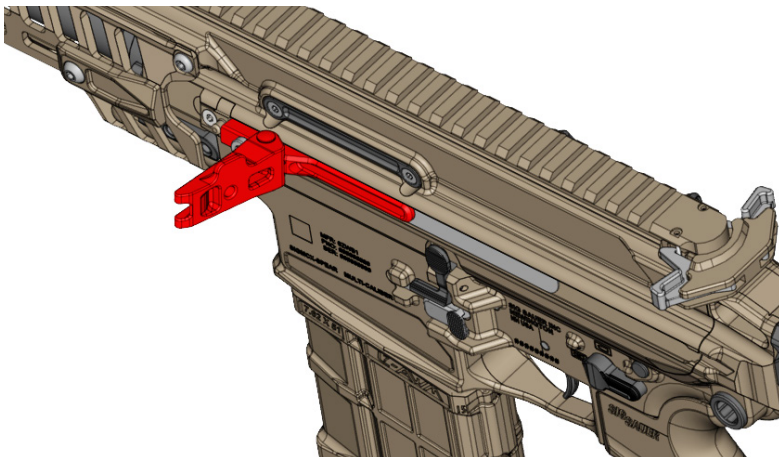
1. With rifle on SAFE and a loaded magazine inserted, pull charging handle completely rearward and release.

**WARNING****LOADED RIFLE****THE RIFLE IS NOW LOADED AND READY TO FIRE**



3.5 SIDE CHARGING HANDLE

The SIG SPEAR is equipped with a left side non-reciprocating charging handle. This charging handle can be used as an alternate method of charging the rifle or locking the bolt to the rear.



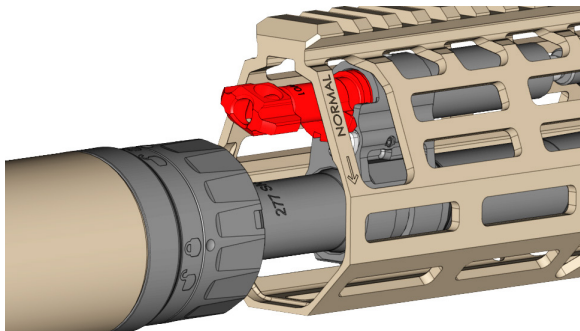
3.6 ADJUSTING GAS VALVE

The SPEAR has a two position gas valve. This gas valve assembly regulates the function of the rifle by metering the amount of gas that is required for the firearm to function. This allows for normal and adverse operation. The handguard is clearly marked on each side to indicate what position the gas valve is set to. To adjust the position of the gas valve push down on the gas valve lever until it stops.

3.6.1 NORMAL POSITION

Normal position is used for general everyday shooting with or without a suppressor attached.

- Push down on the left side of the gas valve lever until it stops.

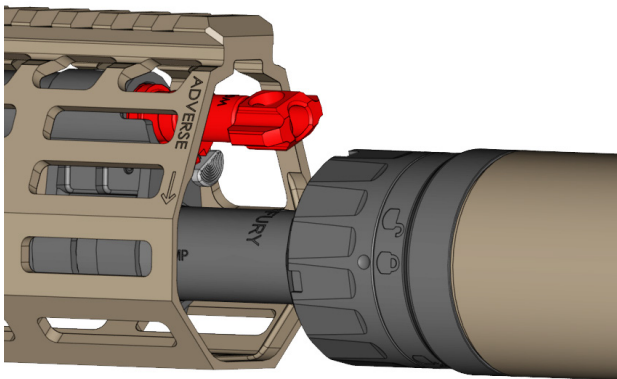




3.6.2 ADVERSE POSITION

Adverse position is used in special conditions to improve the function of the rifle with or without a suppressor attached. See section, “3.7 Adverse/Special Conditions” on page 48, for conditions that might require the use of adverse position.

- Push down on the right side of the gas valve lever until it stops.



3.6.3 FIRING THE SIG SPEAR

1. Face target, placing the firearm to your shoulder and point the muzzle downrange.
2. Rotate fire control selector from SAFE to FIRE.
3. Pressing trigger will result in one cartridge being fired.
4. Trigger must be released to reset and fire an additional cartridge.

3.6.4 RELOADING (DEPLETED MAGAZINE, CHAMBER EMPTY)

1. Rotate fire control selector to SAFE.
2. Press magazine release to remove magazine from magazine well.
3. Repeat steps 2-7 from section “3.4.2 Loading the SIG SPEAR” on page 39.

3.6.5 RELOADING (MAGAZINE PARTIALLY DEPLETED, LIVE ROUND CHAMBERED)

1. Rotate fire control selector to SAFE.
2. Press magazine release to remove magazine from magazine well.
3. Insert a loaded magazine until it engages, and is held by, the magazine release. Always pull down on the magazine to ensure that it is seated properly.



3.7 ADVERSE/SPECIAL CONDITIONS

Desert (Hot/Dry)

- Apply light lubrication to internal metal-on-metal moving parts only. If available, use dry graphite lubricant.
- Increase frequency of inspection and cleaning of firearm due to blowing dust and sand. Pay particular attention to the bolt assembly ensuring the striker is free of any foreign matter to include sand, dust, or mud.
- Use muzzle covers if available.
- Unload and clean ammunition and inside of magazines daily. Do not lubricate magazine.
- Cover the firearm when not in use.

Arctic (Extreme Cold/Sub Freezing)

- When exposed to subfreezing temperatures, thoroughly remove all existing lubricants and only apply lubricant that is designed to be used in temperatures of -65F or below. Do not use CLP as it may freeze and prevent the rifle from firing.
- Avoid bringing the firearm into heated shelters or buildings as this can cause condensation to form on moving parts, which may freeze when the firearm is brought back outdoors.

3.7 ADVERSE/SPECIAL CONDITIONS - CONTINUED

Arctic (Extreme Cold/Sub Freezing)

- If it is necessary for you to bring the firearm indoors allow it to warm to room temperature and then disassemble and clean it thoroughly to ensure that all moisture is removed from the firearm. Re-lubricate the firearm with the proper cold weather lubricant.
- When operating in snowy environments conduct frequent inspections of the firearm to ensure that snow has not gotten into operating parts. Work the action to ensure that it is not frozen. Use muzzle covers if available.
- If the bolt carrier becomes frozen with snow/moisture, warm the firearm using body heat or bring it indoors until free movement is restored, and then clean and re-lubricate the firearm.

Jungle (Hot/Humid)

- Increase the frequency of inspection and cleaning of the firearm to prevent corrosion. Apply a thin coat of lubricant on steel parts frequently.
- Inspect hidden surfaces of bolt, receiver, chamber, and barrel extension (locking lugs) for corrosion.
- Unload the magazine, clean ammunition, and inspect the inside of magazines daily for corrosion.
- Wipe ammunition dry before reloading the magazine.



3.8 STOPPAGES



WARNING

STOPPAGE



WHILE PERFORMING IMMEDIATE OR REMEDIAL ACTIONS AS LISTED BELOW, PLACE FIRE CONTROL SELECTOR ON SAFE, MAINTAIN TRIGGER FINGER DISCIPLINE AND MUZZLE AWARENESS. FAILURE TO COMPLY MAY RESULT IN DEATH, OR SERIOUS INJURY TO PERSONNEL OR DAMAGE PROPERTY.

If the SIG SPEAR stops firing apply immediate action as follows:

1. Slap up on the bottom of the magazine.
2. Pull charging handle completely rearward.
3. Observe the ejection of the case/cartridge and check the chamber for any obstruction.
4. Release the charging handle to feed a new cartridge.
5. Tap the forward assist to ensure the round is chambered and the bolt is locked.
6. Rotate fire control selector to FIRE and attempt to fire the rifle.

If the SIG SPEAR still fails to fire upon completion of the previous steps apply remedial action as follows:

1. Remove the magazine.
2. Check the chamber for a stuck cartridge case.
3. If a cartridge case is present separate the receivers and remove the op rod/bolt carrier assembly.
4. Attempt to tap out the case with cleaning rod from the muzzle end of the barrel.
5. If successful then reassemble, reload, and attempt to fire.

NOTE

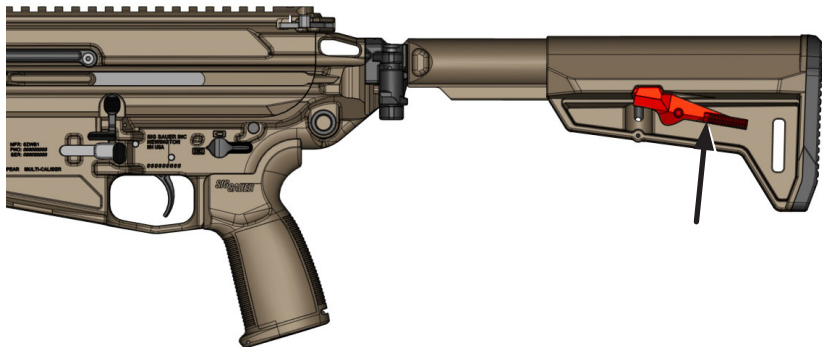
If after applying remedial action, the SPEAR still fails to fire, unload and clear and contact an authorized SIG SAUER Armorer.



3.9 ADJUSTABLE STOCK

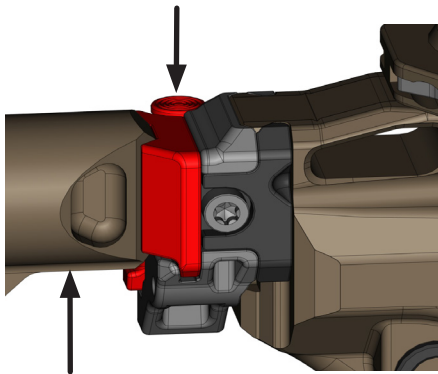
3.9.1 ADJUSTING THE LENGTH OF PULL

1. Grasp the stock, lifting up the stock latch.
2. Adjust to desired position, then release stock latch.



3.9.2 FOLDING THE STOCK

1. Press stock latch button to disengage folding hinge.
2. While button is pressed, lift up and fold stock to left.



3. Pull stock away from receiver to return to unfolded position.



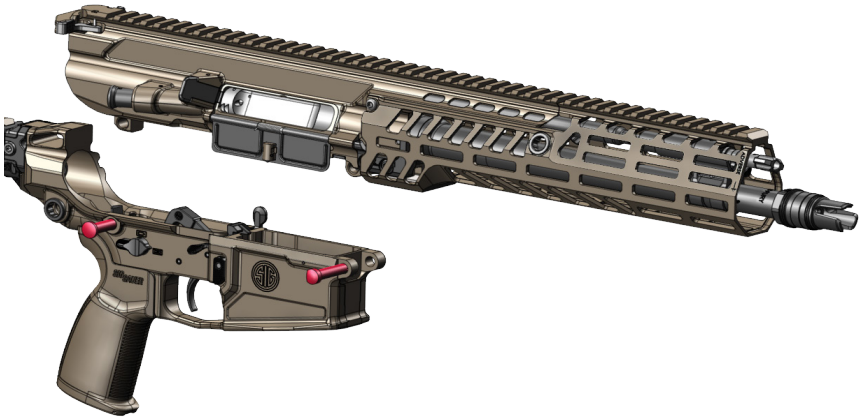
4.0 USER LEVEL AUTHORIZED PREVENTATIVE MAINTENANCE

4.1 FIELD STRIP SPEAR

1. Unload/Clear rifle see section, “3.3 Unload and Clear the SIG Spear” on page 36.
2. Push takedown pin left to right until it stops on detent.
3. Pivot upper receiver from lower receiver.



4. Push pivot pin from left to right until stopped by detent.
5. Separate upper receiver from lower receiver.





4.1 FIELD STRIP SPEAR - CONTINUED

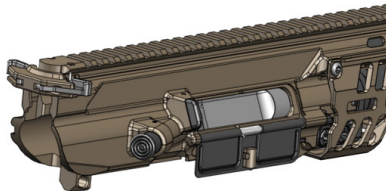


WARNING PARTS UNDER SPRING TENSION

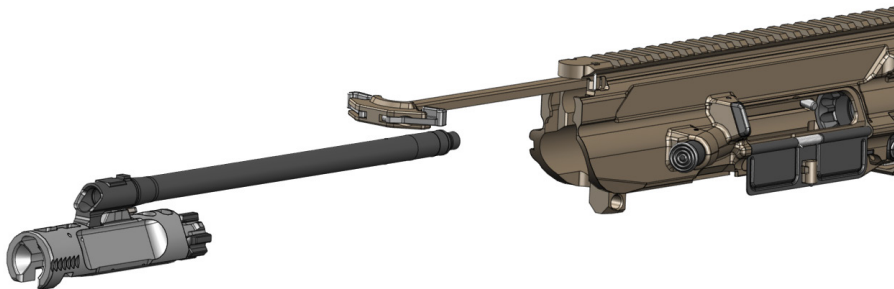


THE RECOIL SPRING GUIDE IS UNDER SPRING PRESSURE. USE CAUTION WHEN REMOVING. WEAR EYE PROTECTION.

6. Press recoil spring guide inward and down to remove from upper receiver.



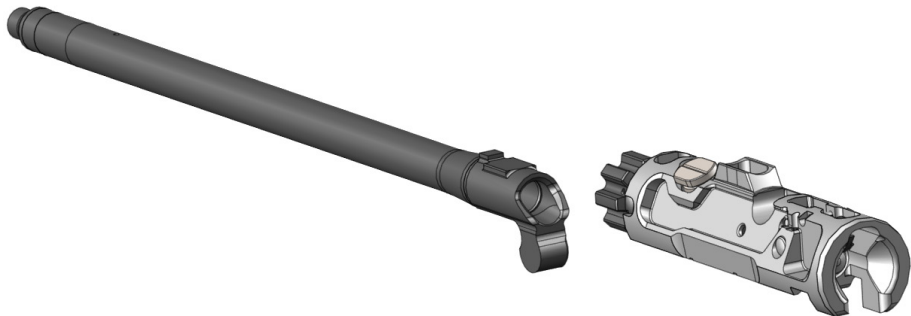
7. Pull back charging handle to expose bolt carrier.
8. Remove bolt carrier assembly from upper receiver.
9. Remove charging handle.





4.1 FIELD STRIP SPEAR - CONTINUED

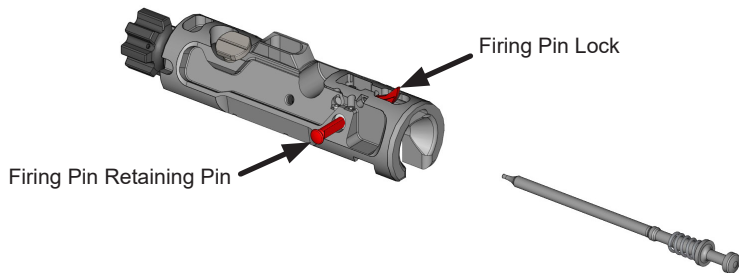
10. Remove op rod from bolt carrier.



CAUTION

DO NOT REMOVE SPRING FROM FIRING PIN UNLESS REPLACEMENT IS NECESSARY.

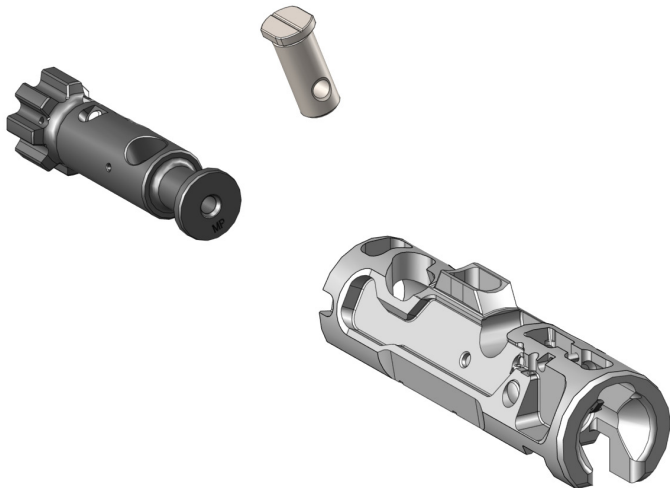
11. Pull firing pin retaining pin out until it stops.
12. Lift firing pin lock to remove firing pin with firing pin spring from bolt carrier.





4.1 FIELD STRIP SPEAR - CONTINUED

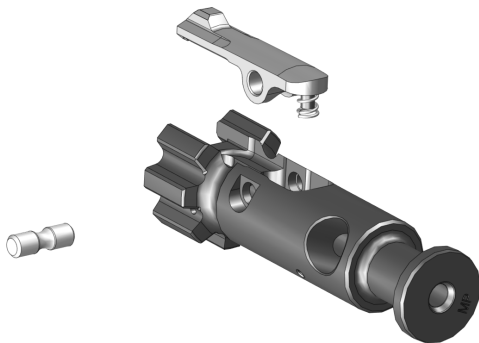
13. Remove cam pin from bolt carrier.
14. Remove bolt assembly from bolt carrier.



CAUTION

DO NOT REMOVE EXTRACTOR SPRING OR INSERT FROM EXTRACTOR UNLESS REPLACEMENT IS NECESSARY.

15. Apply pressure to extractor over extractor pin and push extractor pin from right to left to remove from bolt.
16. Remove extractor assembly from bolt.



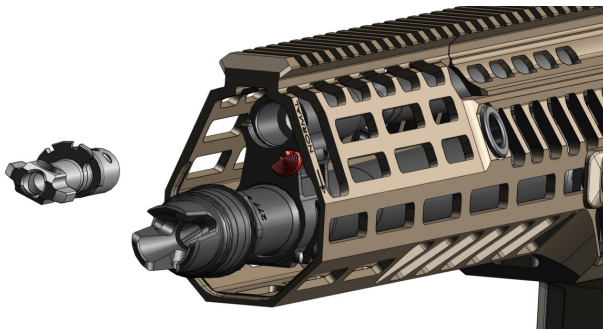


4.1 FIELD STRIP SPEAR - CONTINUED

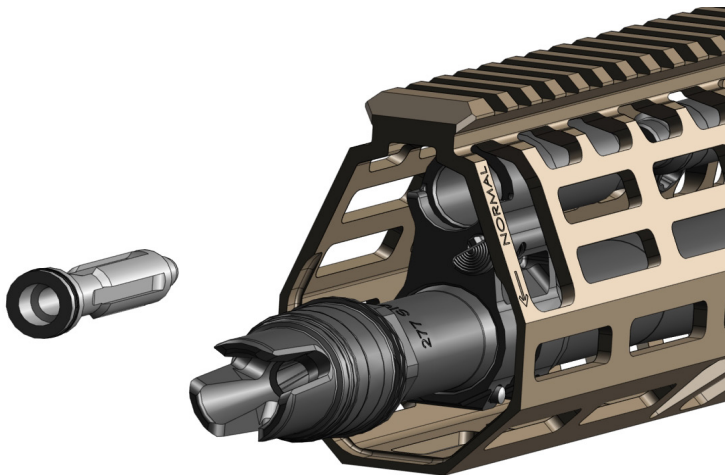
NOTE

Steps 17-20 should only be done if function degrades indicating carbon buildup.

17. Push in stop pin.
18. Rotate gas valve 180 degrees until large flange of valve is visible.
19. Pull gas valve from gas block.



20. Remove piston from gas block.





4.2 MAGAZINE DISASSEMBLY

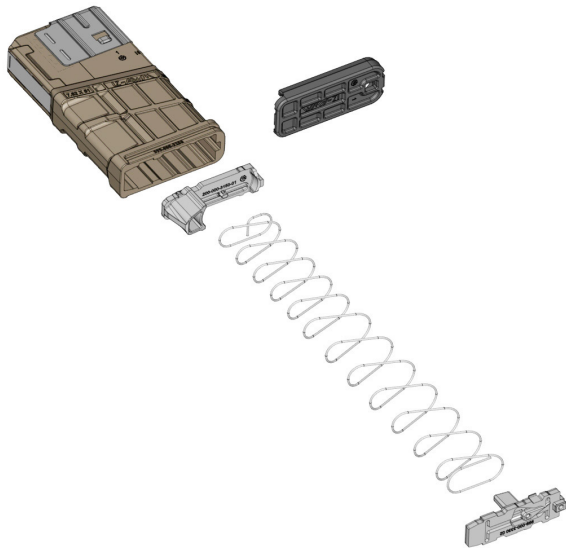


WARNING PARTS UNDER SPRING TENSION



MAGAZINE SPRING IS UNDER PRESSURE. USE CAUTION WHEN REMOVING. KEEP MAGAZINE POINTED AWAY FROM FACE TO AVOID SERIOUS INJURY. WEAR EYE PROTECTION.

1. Press the post on insert until magazine floorplate can be pushed off of magazine tube.
2. Remove magazine insert, spring, and follower from magazine tube.
3. Remove follower from spring by sliding it left to right.
4. Remove insert from spring by sliding it rearward on the spring.



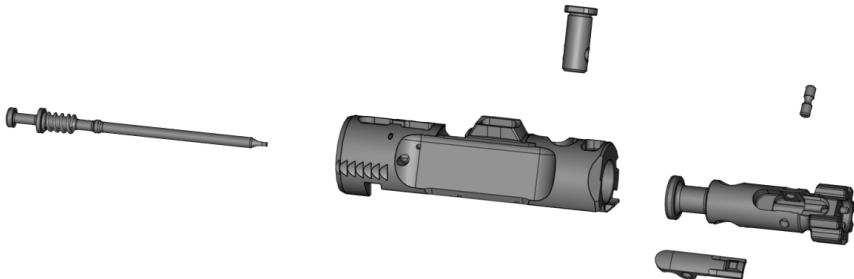


5.0 CLEANING/INSPECTION/LUBRICATION

- Always ensure the firearm is unloaded and cleared of all ammunition.
- Do not use wire brushes on aluminum surfaces such as the upper and lower receivers. This may damage the finish.
- Follow all manufacturers instructions and cautions when using cleaning and lubrication products
- Wherever the term “CLP” (Cleaner-Lubricant-Preservative) or the word “lubrication” are used in this manual, those terms should be interpreted to mean that you can use any cleaner, lubricant, and preservative designed for use on a firearm.

5.1 CLEANING THE BOLT AND BOLT CARRIER ASSEMBLY

1. Clean carbon fouling residue from bolt and bolt carrier with a rag soaked in CLP. Use receiver cleaning brush for any hard carbon.
2. Clean area of bolt beneath extractor of all residue. Wipe dry.
3. Clean bolt lugs of all fouling residue.
4. Clean firing pin channel of bolt. Ensure there is no lubricant in channel.
5. Clean firing pin and spring of all residue and carbon.
6. Clean carbon build up from beneath hook of extractor.
7. Clean cam pin of all fouling residue.





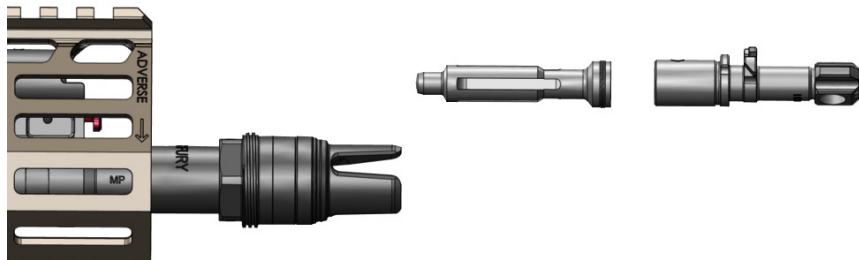
5.1.1 CLEANING THE OP ROD/RECOIL SPRING GUIDE ASSEMBLY

1. Clean recoil spring with a rag soaked in CLP. Wipe dry.
2. Clean op rod with a rag soaked in CLP. Wipe dry.

5.1.2 CLEANING THE BARREL/GAS BLOCK ASSEMBLY

1. Run a patch soaked in CLP through barrel bore. Let CLP soak for several minutes to loosen fouling residue.
2. Run another CLP soaked patch through the bore.
3. If heavy fouling is present scrub bore with bore brush.
4. Repeat step 2.
5. Run clean patches through bore until patch comes out clean.
6. Clean chamber.

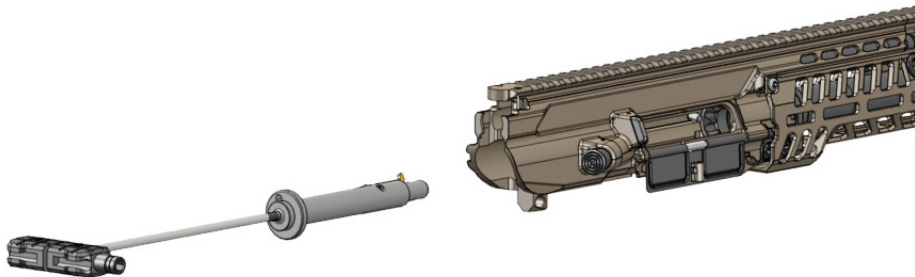
7. Clean flash hider base with rag soaked in CLP and Crocus cloth. Wipe dry.
8. Clean fouling residue from gas valve with rag soaked in CLP and cleaning brush.
9. Clean piston of fouling residue with rag soaked in CLP and cleaning brush. Wipe dry.





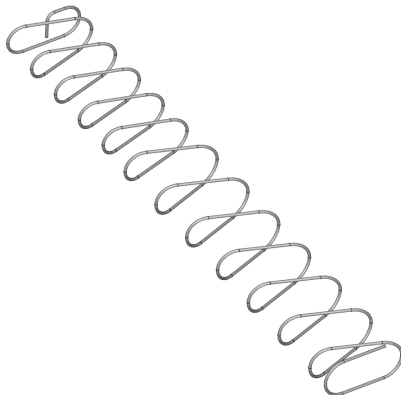
5.1.2 CLEANING THE BARREL/GAS BLOCK ASSEMBLY - CONTINUED

10. Take T-handle and connect it to the cleaning rod and scraper tool.
11. Insert combined tool through back of upper receiver into barrel extension.
12. Ensure brass blade is tight to barrel face and rotate T-handle to scrape carbon off barrel face and from behind barrel extension lugs.



5.1.3 CLEANING THE MAGAZINE

1. Wipe magazine body down with a damp cloth to remove any debris. Wipe dry.
2. Wipe spring down with a rag soaked in CLP. Wipe dry.
3. Wipe down the follower, floorplate, and insert with a damp cloth to remove any debris.





5.2 INSPECTION

5.2.1 INSPECTING THE UPPER RECEIVER/BARREL AND GAS BLOCK ASSEMBLY



WARNING

SAFETY



DO NOT INTERCHANGE BOLTS BETWEEN RIFLES. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY OR DEATH TO PERSONNEL.

1. Inspect handguard and all MIL-STD 1913 rails for cracks, broken rails, proper installation, or any other damage.
2. Inspect sights for proper operation and any damage to sight post or aperture.
3. Inspect flash hider base for looseness or damage to prongs.
4. Inspect barrel for cracks, burrs, bulging, pitting, or looseness.
5. Inspect charging handle for cracks, bends, or breaks. Latches should spring load.

6. Inspect forward assist for proper function.
7. Ejection port cover should stay in the spring loaded open position when not latched.
8. Side charging handle should move without binding. Handle should spring load to closed position when released.
9. Inspect gas valve assembly for cracks, burrs or erosion. Gas valve should move freely without binding when in gas block. Gas rings should not bind on valve.
10. Inspect piston for burrs, cracks, or galling.



5.2.2 INSPECTING THE BOLT CARRIER/OP ROD ASSEMBLY

1. Inspect op rod for straightness, dents, or damage to the dogleg end.
2. Inspect bolt carrier for burrs, cracks, or galling especially at cam pin through hole.
3. Firing pin retaining pin must move freely in carrier.
4. Recoil spring should be free of kinks and should stay attached to recoil spring guide.
5. Inspect bolt lugs for cracks or burrs.
6. Inspect firing pin for straightness or damaged tip.
7. Inspect firing pin spring for damage to coils.
8. Inspect cam pin for cracks or galling.
9. Inspect extractor for damage to hook, or cracks where pin passes through.
10. Inspect ejectors for binding or damage.

5.2.3 INSPECTING THE LOWER RECEIVER ASSEMBLY

1. Safety selector lever should move freely without binding to each position.
2. Ensure free movement of magazine catch.
3. Ensure free movement of bolt catch/bolt release
4. Check grip for tightness or damage.

5.2.4 INSPECTING THE SIGHTS

1. Inspect sights for damage.
2. Check for proper movement of sights.

5.2.5 INSPECTING THE SUPPRESSOR

1. Inspect suppressor locking device. Suppressor should lock to mount.
2. Inspect suppressor for end cap strikes.

5.2.6 INSPECTING THE MAGAZINE

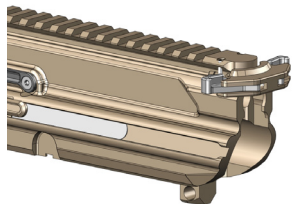
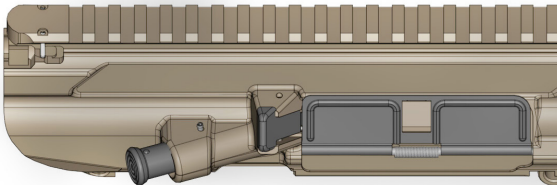
1. Inspect follower for free movement.
2. Ensure feed lips are not damaged.
3. Magazine is free from damage



5.3 LUBRICATION

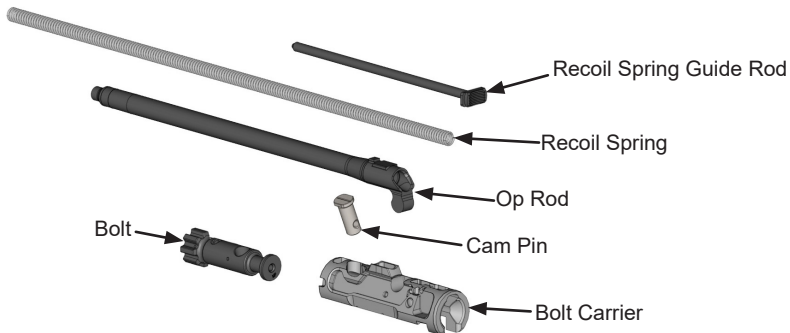
5.3.1 LUBRICATING THE UPPER RECEIVER/BARREL AND GAS BLOCK ASSEMBLY

1. Lubricate exterior surfaces of charging handle and latch spring.
2. Lubricate ejection port cover spring.
3. Apply lubricant to side charging handle channel .
4. Generously lubricate all internal surfaces of upper receiver.



5.3.2 LUBRICATING THE RECOIL AND BOLT CARRIER ASSEMBLY

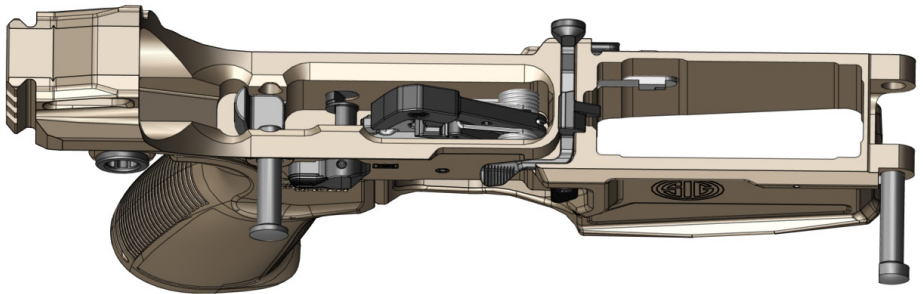
1. Lightly lubricate exterior surface of recoil spring.
2. Lightly lubricate recoil spring guide rod.
3. Lightly lubricate outside surface of op rod and surface where op rod engages bolt carrier.
4. Lubricate all contact surfaces of the bolt carrier.
5. Lightly lubricate cam pin where cam pin interacts with cam pin insert.
6. Lightly lubricate outside surfaces of bolt and back of bolt lugs.





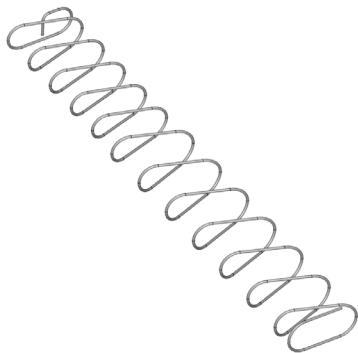
5.3.3 LUBRICATING THE LOWER RECEIVER ASSEMBLY

1. Generously lubricate takedown pin and pivot pin.
2. Lightly lubricate hammer spring.
3. Generously lubricate fire control selector.



5.3.4 LUBRICATING THE MAGAZINE

1. Lightly lubricate magazine spring using a rag soaked in CLP.





6.0 ASSEMBLY

6.1 ASSEMBLE MAGAZINE

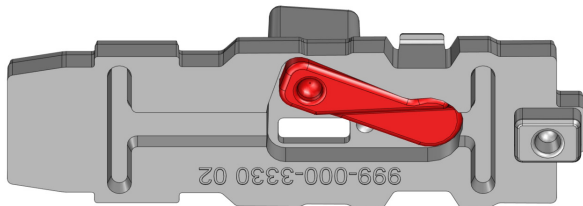


WARNING PARTS UNDER SPRING TENSION

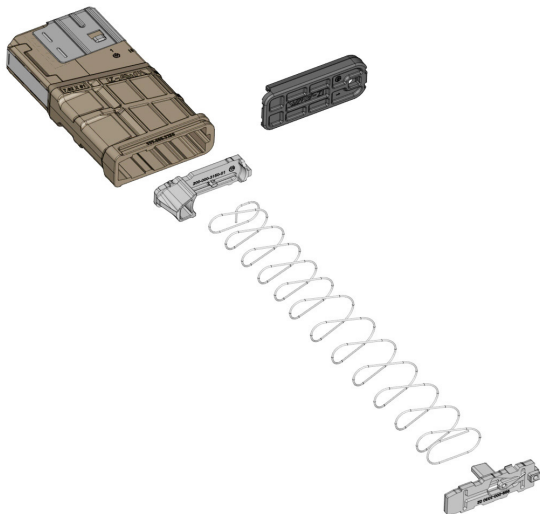


MAGAZINE SPRING IS UNDER PRESSURE. USE CAUTION WHEN INSTALLING. KEEP MAGAZINE POINTED AWAY FROM FACE TO AVOID SERIOUS INJURY. WEAR EYE PROTECTION.

1. Open magazine insert drain if operating in maritime/wet environments.
2. Assemble magazine spring to insert and follower.



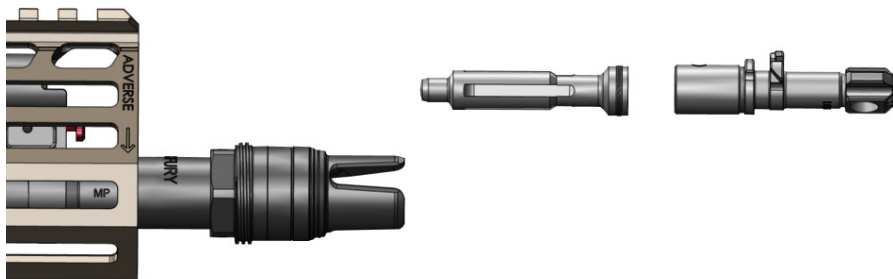
3. Insert follower into magazine tube and compress spring by pushing insert into magazine tube.
4. Slide floorplate onto magazine tube. Insert should snap into place.





6.2 ASSEMBLE SPEAR

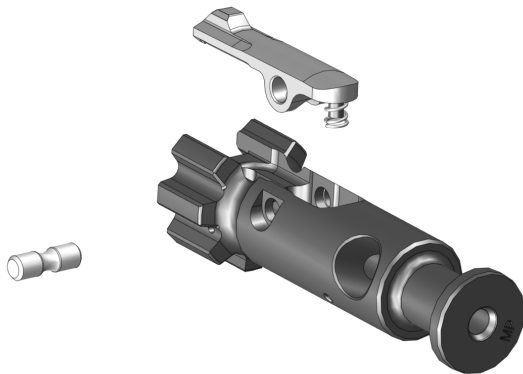
1. Install piston into gas block.
2. Install gas valve into gas block.
3. Press stop pin and rotate gas valve 180 degrees until detent holds valve in place.



NOTE

Extractor pin can only be installed in one direction.

4. Attach extractor assembly to bolt body.
5. Insert extractor pin from left to right into the bolt body until it stops.





6.0 - ASSEMBLY - CONTINUED



WARNING

SAFETY



DO NOT INTERCHANGE BOLTS BETWEEN RIFLES. FAILURE TO COMPLY MAY RESULT IN DEATH OR SERIOUS INJURY TO PERSONNEL.

6. Assemble bolt to bolt carrier. Extractor must face right side of bolt.



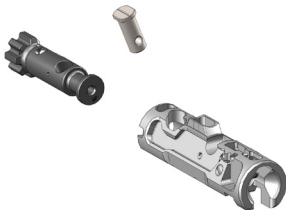
WARNING

SAFETY



ENSURE CAM PIN IS INSTALLED IN BOLT CARRIER. RIFLE WILL SUFFER A CATASTROPHIC FAILURE WHEN FIRED IF CAM PIN IS NOT INSTALLED. FAILURE TO COMPLY MAY RESULT IN DEATH OR SERIOUS INJURY TO PERSONNEL.

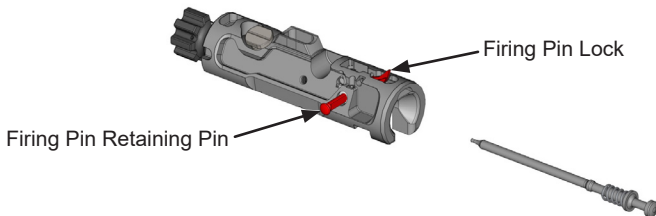
7. Insert cam pin into bolt.



CAUTION

FIRING PIN SHOULD NOT FALL OUT WHEN BOLT CARRIER IS TURNED UPSIDE DOWN. FAILURE TO COMPLY MAY RESULT IN A FAILURE TO FIRE AND DAMAGE TO EQUIPMENT.

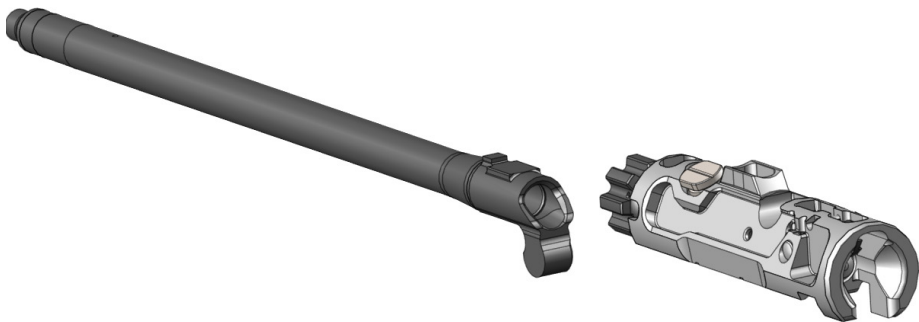
8. Push up firing pin lock and insert firing pin and spring into bolt through rear of bolt carrier. Keep firing pin lock pushed up.
9. With firing pin lock pushed up, push in firing pin then push firing pin retaining pin until o-ring is completely seated into bolt carrier. Release firing pin lock.



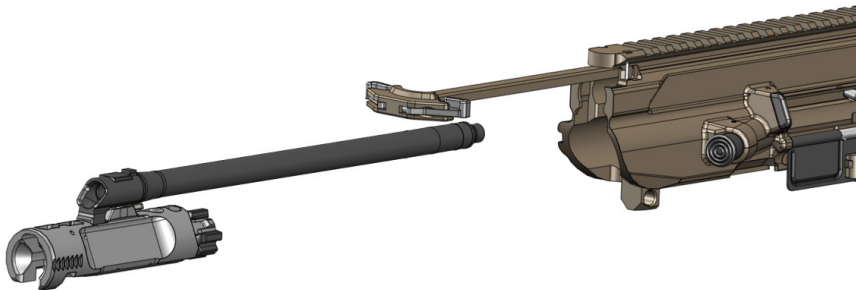


6.0 ASSEMBLY - CONTINUED

10. Attach op rod to bolt carrier.



11. Partially install charging handle into upper receiver.
12. Install bolt carrier /op rod assembly into upper receiver.
13. Push charging handle forward until it locks in place.





6.0 ASSEMBLY - CONTINUED

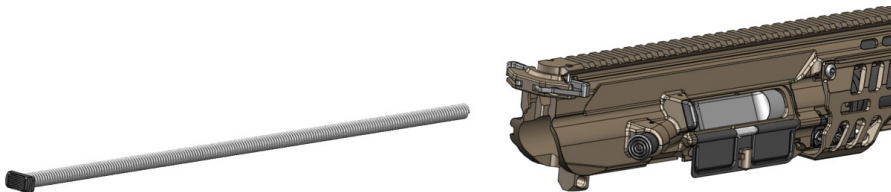


WARNING PARTS UNDER SPRING TENSION



THE RECOIL SPRING GUIDE IS UNDER SPRING PRESSURE. USE CAUTION WHEN INSTALLING. WEAR EYE PROTECTION.

14. Insert recoil spring into rear of op rod.
15. Push in recoil spring guide to compress recoil spring in rear of upper receiver, once in line with notches slide head of recoil spring guide up.
16. Release pressure on recoil spring guide. End of recoil spring guide should be horizontal in notches



17. Attach upper to lower receiver.
18. Push in pivot pin until it stops.
19. Close receivers and push in takedown pin until it stops.





7.0 SAFETY/FUNCTION CHECK

1. Unload/clear rifle, see section, “3.3 Unload and Clear the SIG Spear” on page 36.
2. Insert empty magazine. Magazine catch must lock magazine in place.
3. Pull charging handle completely rearward. Bolt should lock to the rear.
4. Push charging handle forward. Charging handle must lock in place.
5. Rotate fire control selector to SAFE.
6. Press magazine catch. Magazine must drop free under its own weight.
7. While observing bolt catch, slightly pull back charging handle and release. Bolt catch should drop and bolt should go forward into battery.
8. Press trigger to rear. Hammer should not fall.
9. Rotate fire control selector to FIRE position.
10. Press trigger and hold to rear. Hammer should fall.
11. Pull charging handle completely to rear and release.
12. Slowly release trigger. You should hear an audible click.
13. Rotate fire control selector back to SAFE.

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7.1 TROUBLESHOOTING

Stoppage	Test/Inspection	Corrective Action
<i>Rifle will not fire</i>	Fire control selector on SAFE.	Rotate fire control selector to FIRE
	Improper installation of firing pin	Assemble correctly
	Excessive lubricant in firing pin channel.	Clean firing pin channel
	Clean firing pin channel	Replace part.
	Defective ammunition.	Discard and replace ammunition
	Light indent on primer.	Clean associated parts
	Broken firing pin lock or spring.	Replace part
	Debris in trigger group.	Clean trigger group and lower receiver
<i>Bolt will not unlock</i>	Dirty bolt.	Clean part

Stoppage	Test/Inspection	Corrective Action
<i>Cartridge will not feed</i>	Dirty or corroded ammunition.	Clean or replace ammunition
	Dirty magazine.	Clean magazine
	Defective magazine.	Replace magazine
	Overloaded magazine.	Remove excess cartridges
	Magazine not fully seated.	Properly seat magazine and attempt to fire
	Bolt over base of round.	Clean magazine
<i>Double feed</i>	Defective magazine.	Replace magazine
<i>Cartridge will not chamber</i>	Dirty or corroded ammunition.	Clean or replace ammunition
	Damaged ammunition.	Replace ammunition
	Dirty chamber.	Clean chamber
	Weak or damaged op rod spring.	Replace spring.
<i>Bolt will not lock</i>	Dirt, corrosion, or carbon build up in barrel extension, bolt lugs, or barrel face.	Clean barrel and bolt



7.1 - TROUBLESHOOTING CONTINUED

Stoppage	Test/Inspection	Corrective Action
<i>Bolt will not extract cartridge</i>	Frozen extractor.	Remove bolt and clean extractor
	Dirty chamber.	Clean chamber
	Dirty or corroded ammunition.	Clean or replace ammunition
	Broken extractor.	Replace part
	Broken or weak extractor spring.	Replace part
<i>Short recoil</i>	Dirty gas valve.	Remove and clean gas valve and piston, clean gas block
	Dirty upper receiver and bolt carrier	Clean and lubricate upper receiver and bolt carrier
<i>Bolt fails to lock to the rear after last round</i>	Broken bolt catch.	Replace part
	Faulty magazine.	Replace magazine
	Dirty upper receiver and bolt carrier	Clean and lubricate upper receiver and bolt carrier
<i>Fire control selector binds</i>	Lack of lubrication.	Lubricate fire control selector
	Dirt or sand under trigger.	Clean lower receiver and trigger

8.0 PARTS DIAGRAMS

8.1 LOWER RECEIVER GROUP PARTS DIAGRAM

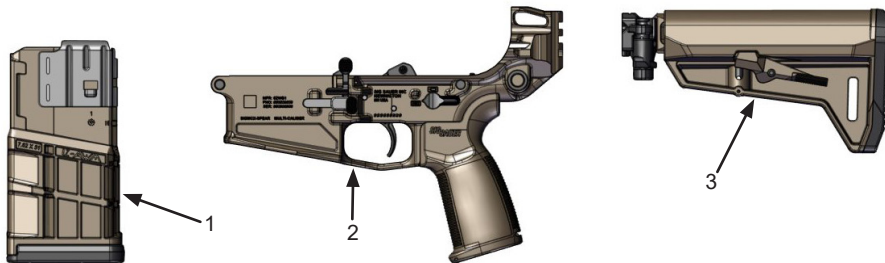


Figure 1. LOWER RECEIVER GROUP

TABLE 1. LOWER RECEIVER GROUP PARTS LIST

Key	Group
1.	Magazine, 20 Round
2.	Lower Receiver Assembly
3.	Stock Assembly, Folding Adjustable



8.2 UPPER RECEIVER GROUP PARTS DIAGRAM

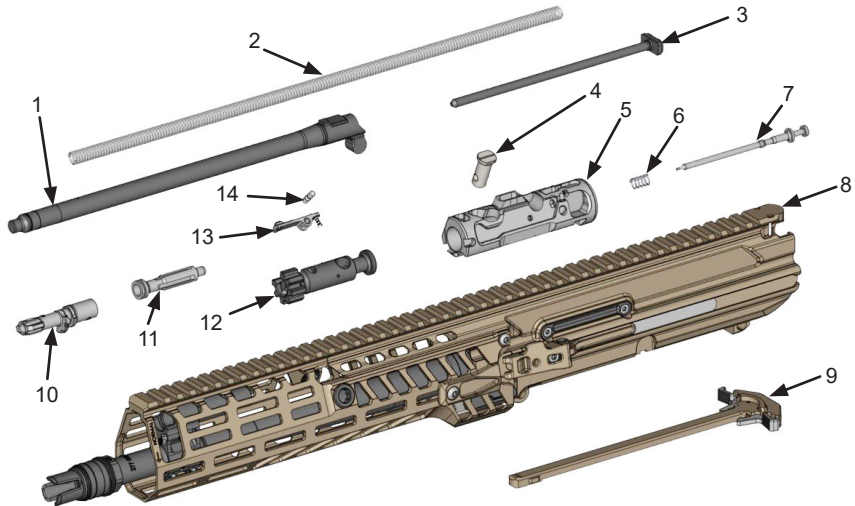


Figure 2. UPPER RECEIVER GROUP

TABLE 2. UPPER RECEIVER GROUP PARTS LIST

Key	Group
1.	Op Rod
2.	Op Rod Spring
3.	Recoil Guide
4.	Cam Pin
5.	Carrier Assembly
6.	Firing Pin Spring
7.	Firing Pin
8.	Upper Receiver Assembly
9.	Charging Handle Assembly
10.	Gas Valve
11.	Piston
12.	Bolt Assembly
13.	Extractor Assembly
14.	Extractor Pin



9.0 TRANSPORTATION AND STORAGE

When transporting your firearm to and from shooting activities, keep it unloaded for your safety and for the safety of others. When storing your firearm, keep it separated from ammunition, under lock and key if possible, and out of the reach of children and other inexperienced or unauthorized persons.



WARNING STORAGE

NEVER PLACE OR STORE ANY FIREARM IN SUCH A MANNER THAT IT MAY BE DISLODGED. FIREARMS SHOULD ALWAYS BE STORED SECURELY AND UNLOADED, AWAY FROM CHILDREN AND OTHER UNAUTHORIZED USERS. THE USE OF A LOCKING DEVICE OR SAFETY LOCK IS ONLY ONE ASPECT OF RESPONSIBLE FIREARMS STORAGE. FOR INCREASED SAFETY, FIREARMS SHOULD BE STORED UNLOADED AND LOCKED IN A LOCATION THAT IS BOTH SEPARATE FROM THEIR AMMUNITION AND INACCESSIBLE TO CHILDREN AND ANY OTHER UNAUTHORIZED PERSON. STORE SECURELY AND UNLOADED

Short-Term Storage (90 days or less)

1. Ensure that the chamber and magazine do not contain live ammunition.
2. Clean the bore and chamber
3. Apply a generous coat of CLP to the chamber and bore.
4. Apply a light coat of CLP to all other metal surfaces for corrosion protection.
5. Do not attempt to store an SPEAR with a warm or hot suppressor attached.
6. Adjust the buttstock to its shortest length to reduce the chances of damage.

Long-Term Storage (90 days or longer)

1. Ensure that the SPEAR is thoroughly cleaned.
2. Apply a medium coat of CLP to the chamber and bore.
3. Adjust the buttstock to its shortest length to reduce the chances of damage.
4. Apply a light coat of CLP to all other metal surfaces for corrosion protection.
5. Wrap the SPEAR with a waterproof material (MIL-B-121 or similar).
6. Place the SPEAR in a corrosion resistant barrier bag (MIL-DTL-117 or similar).

Environmental Storage Recommendations (Armory)

Provide humidity control to limit the relative humidity (RH) to no greater than 40% at 80°F (26.7°C). If personnel will be working in these areas, design to 68°F (20.0°C) dry bulb and 40% RH for indoor design heating conditions, and 75°F (23.9°C) dry bulb and 40% RH for indoor design cooling conditions.



10.0 SERVICE AND REPLACEMENT PARTS POLICY



WARNING

IT IS THE PURCHASER'S RESPONSIBILITY TO BE ABSOLUTELY CERTAIN THAT ANY PARTS ORDERED FROM THE FACTORY ARE CORRECTLY FITTED AND INSTALLED. FIREARMS ARE COMPLICATED MECHANISMS AND IMPROPER FITTING OF PARTS MAY RESULT IN A DANGEROUS MALFUNCTION, DAMAGE TO THE FIREARM, AND SERIOUS INJURY TO THE SHOOTER AND OTHER PERSONS. THE PURCHASER AND INSTALLER OF PARTS MUST ACCEPT FULL RESPONSIBILITY FOR THE CORRECT ADJUSTMENT AND FUNCTIONING OF THE FIREARM AFTER SUCH INSTALLATION.

Parts Policy

Our Service Department maintains a full complement of replacement parts. Even though most gunsmiths have the knowledge, training, and the ability to make necessary repairs to your firearm, the skill and workmanship of any particular third-party gunsmith is totally beyond our control. Should your firearm ever require service, we strongly recommend that you return it to SIG SAUER Inc. A firearm is a precision instrument and some replacement parts will require individual fitting to ensure correct operation. A wrong part, improper fitting, or incorrect mechanical adjustment may result in an unsafe condition or dangerous malfunction, damage to the firearm, or cause possible serious injury to the shooter or others **IF ANY PART IS ORDERED WITHOUT RETURNING THE FIREARM TO SIG SAUER Inc.**, the customer bears full responsibility for ensuring that the part supplied is correct for their particular firearm and is properly installed and fitted by a qualified gunsmith.

SIG SAUER INC. IS NOT RESPONSIBLE FOR THE FUNCTIONING OF ANY FIREARM IN WHICH REPLACEMENT PARTS ARE INSTALLED BY OTHERS. THE USE OF AFTER MARKET PARTS IS NOT AUTHORIZED AND WILL VOID THE WARRANTY OF THIS FIREARM. THE SPEAR USES PARTS THAT ARE SIMILAR IN APPEARANCE TO OTHER M16-M4/AR-15 PARTS. THE REPLACEMENT OF ORIGINAL EQUIPMENT MANUFACTURER (OEM) SIG SAUER SPEAR PARTS WITH THESE PARTS IS UNAUTHORIZED, AND IN SOME INSTANCES COULD ALTER THE FUNCTION OF THE SPEAR, CREATING A DANGER TO THE OPERATOR OF THIS FIREARM.

Service Policy

If you have questions concerning the performance or servicing of your firearm, please write or call:

SIG SAUER Inc.

Attention Customer Service

72 Pease Boulevard, Newington, NH 03801

Phone: (603) 610-3000 Ext. 1

Fax: (603) 766-7002

IF YOU DO NOT UNDERSTAND THE INSTRUCTIONS FOR OPERATING YOUR FIREARM, IT IS YOUR RESPONSIBILITY TO CALL OUR CUSTOMER SERVICE DEPARTMENT AT (603) 610-3000 Ext. 1 BEFORE USING YOUR FIREARM.



11.0 SHIPPING FIREARMS FOR REPAIR



WARNING

DO NOT SHIP AMMUNITION



BEFORE SHIPPING ANY FIREARM, BE ABSOLUTELY CERTAIN THAT THE FIREARM AND ITS MAGAZINE ARE UNLOADED. DO NOT SHIP AMMUNITION WITH A FIREARM.

In the event that you need to return your firearm to the SIG SAUER Service Department, here's what to do:

1. Contact Customer Service at (603) 610-3000 for a return merchandise authorization (RMA) number. This number allows SIG SAUER to track the status of your return from its receipt at SIG SAUER through its return to you. Please do not send your firearm until you obtain an RMA number.
2. Ensure that the chamber and magazine(s) are unloaded and that no ammunition is included with your returned firearm.
3. Package the firearm securely to prevent damage. Enclose a letter that includes your name, street address, daytime phone number, model and serial number, and a detailed description of the problem you have experienced or the work that you want performed. With the exception of extra magazines, do not include any other accessories such as scopes or mounts.
4. Generally, an individual may ship firearms to the manufacturer for repair or service. Some states and localities, however, prohibit this. If you live in such an area, the firearms must be shipped by and returned to a federally licensed firearms dealer.

5. Federal law prohibits persons who do not possess a Federal Firearms License (FFL) from shipping a firearm via the U.S. Postal Service. (Note: any shipment of firearms outside U.S. borders is subject to the export laws of the United States and to the valid laws of the specific country, which you must strictly follow; prior to exporting any firearm you should seek legal counsel.)
6. SIG SAUER is not responsible for any firearm until it is received, nor for damage incurred during shipment.
7. Ship your firearms insured and prepaid (we do not accept collect shipments) to:

SIG SAUER, Inc.

Attention: Service Department

18 Industrial Drive Exeter, NH 03833

Don't forget to write your RMA number on the package.

A copy of this instruction manual should always accompany this pistol and be transferred with it upon change of ownership.

Order Parts

In the event that you want to order parts for your SIG firearm, contact Customer Service at (603) 610-3000 Ext. 1. Have available the serial number of your firearm and the part diagram number for the part(s) you wish to order. A parts list and diagram of the firearm is provided in this manual.



SIG SAUER® Limited Lifetime Firearms Warranty

THIS WARRANTY APPLIES TO U.S. COMMERCIAL CUSTOMERS ONLY, AND DOES NOT APPLY TO GOVERNMENT, MILITARY, LAW ENFORCEMENT, OR NON-US CUSTOMERS. NON-US CUSTOMERS SHOULD CONTACT THEIR LOCAL DEALER OR DISTRIBUTOR FOR APPLICABLE WARRANTY COVERAGE.

SIG SAUER warrants that the enclosed firearm was originally manufactured free of defects in material, workmanship, and mechanical function. For the lifetime of the original purchaser, SIG SAUER agrees to correct any defect in the firearm for the original purchaser by repair, adjustment, or replacement, at SIG SAUER's option, with the same or comparable quality components (or by replacing the firearm at SIG SAUER's option); provided however that a Return Merchandise Authorization (RMA) is first obtained by contacting SIG SAUER Customer Service, and the firearm is returned unloaded and freight prepaid to:

SIG SAUER
18 Industrial Drive
Exeter, NH 03833.

This limited warranty is null and void if the firearm has been misused, damaged (by accident or otherwise), fired with handloaded, reloaded, or improper ammunition, fired with an obstruction in the barrel, damaged through failure to provide reasonable and necessary maintenance as described in the manual accompanying the firearm, or if unauthorized repair or any alteration, including of a cosmetic nature, has been performed on the firearm. This limited warranty does not apply to normal wear and tear of any parts.

Subject to the foregoing, this limited warranty confers the right to have the covered firearm or its parts repaired, adjusted, or replaced exclusively upon the original purchaser, which right is not transferable to any other person. This warranty does not apply to any accessory items attached or appurtenant to the firearm.

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Some states do not allow the exclusion or limitation of implied warranties, or the exclusion or limitation of incidental or consequential damages, so some or all of the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

THIS WARRANTY APPLIES TO U.S. COMMERCIAL CUSTOMERS ONLY, AND DOES NOT APPLY TO GOVERNMENT, MILITARY, LAW ENFORCEMENT, OR NON-US CUSTOMERS. NON-US CUSTOMERS SHOULD CONTACT THEIR LOCAL DEALER OR DISTRIBUTOR FOR APPLICABLE WARRANTY COVERAGE.



NOTES:

NOTES:

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