



SIG MCX-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.



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



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.



1.0 SAFETY WARNINGS - CONTINUED

Do not load a cartridge into the chamber until you are ready to use the firearm. Keep the firearm on SAFE until you are actually ready to use the firearm. Always move the selector fully to its engaged position and visually check it. The selector is not on SAFE unless it is completely on SAFE.

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.



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 firearm. The addition of any parts or accessories beyond the user level of maintenance described in this manual is not authorized.



1.0 SAFETY WARNINGS - CONTINUED

ACCESSORIES

It is your responsibility to ensure that all accessories, such as slings 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.

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.



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.



BASIC RULES OF SAFE FIREARMS HANDLING

- 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.
- 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.
- 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.
- 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.



1.1 FYE AND FAR 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.



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, "remanufactured" 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 firearm 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.



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 firearm 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.



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.





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



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).



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!"



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."



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."



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.



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.



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:



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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Contents

1.0	Safety Warnings	2
1.1	Eye And Ear Protection	9
	Ammunition	
1.3	State-By-State Warnings	. 14
	Locking Devices	
1.5	Safety Information	. 20
	Mechanical Characteristics and Firearm Theory	
	Firearm Description	
	Controls And Indicators	
	Cycle Of Operation	
	Operating The SIG MCX-SPEAR Firearm	
	Preparation Before Using The Firearm	
	Fire Control Selector	
	Side Charging Handle	
	Adjusting Gas Valve	
	Unload And Clear The SIG MCX-SPEAR	
	Loading/Reloading	
	Environmental/Special Conditions	
	Stoppages	
	Adjustable Stock	
	User Level Authorized Preventive Maintenance	
	Field Strip SIG MCX-SPEAR	
	Magazine Disassembly	
	Maintenance	
5.1	Oldaning	
5.2	Inspection	. 71

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.3 Lubrication
.1 Assemble Magazine
.2 Assemble SIG MCX-SPEAR
.0 Safety/Function Check
.1 Troubleshooting
.0 Parts Diagrams
.1 Lower Receiver Group Parts Diagram
.2 Upper Receiver Group Parts Diagram
.0 Storage And Transportation
0.0 Service And Replacement Parts Policy
0.1 Parts Policy
1.0 Shipping Firearms For Repair
IG SAUER® Limited Lifetime Firearms Warranty



2.0 MECHANICAL CHARACTERISTICS AND FIREARM THEORY

2.1 FIREARM DESCRIPTION

2.1.1 GENERAL

The SIG MCX-SPEAR is a gas operated semi-automatic, magazine fed, medium range, rifle chambered in .308 Win, .277 Fury and 6.5 mm Creedmoor. The rifle fires from the closed bolt position. The piston driven operating system enables optimum function under all enviormental conditions. The rifle is designed to be fired with or without a suppressor attached.





2.1.2 SPECIFICATIONS

The SIG MCX-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.

Scan the QR code to visit sigsauer.com where you will find additional information about SIG SAUER products, SIG SAUER Academy and the SIG Experience Center, Special Programs, and additional support.





2.2 CONTROLS AND INDICATORS

2.2.1 LEFT SIDE



FIGURE 1. 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.	3. Side Charging Handle Allows charging of rifle from left side.		
4.	4. Bolt Catch, Ambi Holds bolt open after last round is fired. Releases bolt when pres		
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

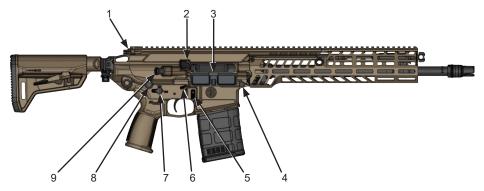


FIGURE 2. CONTROLS AND INDICATORS, RIGHT SIDE



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

Key	Control/Indicator	Function	
1.	Charging Handle	Allows for initial charging of rifle.	
Deflector Deflects ejected cartridge.		Deflects ejected cartridge.	
3. Ejection Port Cover Prevents debris fr		Prevents debris from entering upper receiver.	
4.	4. Pivot Pin Allows for field stripping of rifle.		
Magazine Release Button Releases magazine when pressed.		Releases magazine when pressed.	
6. Right Side Bolt Catch Releases bolt when pressed. Push up to		Releases bolt when pressed. Push up to lock bolt open.	
7. Fire Control Selector		Selects modes of fire. Places rifle on SAFE.	
8.	Takedown Pin	Allows for separation of receivers.	
Forward Assist Ensures bolt is fully closed.		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.	Upper Receiver Group	Upper Receiver Group consists of a non- reciprocating left side charging handle, ejection port cover assembly, forward assist assembly, handguard assembly, and barrel/gas block assembly with QD suppressor adapter.
2.	Charging Handle Assembly	Provides initial charging of the rifle.
3.	Stock Assembly	Can be adjusted for length of pull. Stock folds to the left
4.	Lower Receiver Assembly	Assists in the basic function of rifle. Houses fire control components.
5.	Magazine 20 Round	Cartridge magazine holds 20 cartridges for firing the rifle.
6.	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 SIG MCX-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 op rod and bolt carrier assembly rearward, this 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 and barrel extension, it is flipped out through the ejection 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 MCX-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 SIG MCX-SPEAR it is strongly suggested to:

- Field strip the rifle. See section, "4.1 Field Strip SIG MCX-SPEAR" on page 54.
- Clean any fouling that might have occurred during factory testing, Inspect, and lubricate the firearm. See section, "5.0 Maintenance" on page 66.
- Assemble the firearm. See section, "6.0 Assembly" on page 78.
- Upon assembly and prior to firing the rifle, conduct a Function Check. See section, "7.0 Safety/ Function Check" on page 89.
- If the rifle does not complete the function check as described, call customer service. See section, "10.0 Service And Replacement Parts Policy" on page 98.

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



3.2 FIRE CONTROL SELECTOR

The SIG MCX-SPEAR features an ambidextrous fire control selector. Rotating either fire control selector lever 90 degrees changes the firing mode from SAFE to SEMI-AUTO. Moving one lever automatically moves the opposite lever to the same position.



SAFE

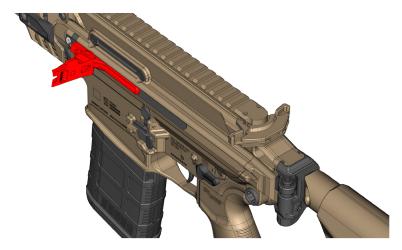


SEMI-AUTO



3.3 SIDE CHARGING HANDLE

The SIG MCX-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.



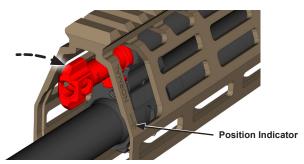
3.4 ADJUSTING GAS VALVE

The SIG MCX-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 suppressed operation. The handguard is clearly marked on each side to indicate which position the gas valve is set to. To adjust the position of the gas valve rotate the gas valve lever in the direction of the arrow.

3.4.1 NORMAL POSITION

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

Rotate gas valve in the direction of the position indicator until it stops in the vertical position.

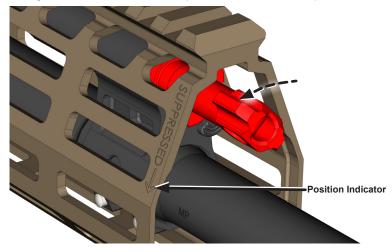




3.4.2 SUPPRESSED POSITION

Suppressed position is used to regilate the function of the rifle with a suppressor attached.

• Rotate the gas valve in the direction of the position indicator until it stops.





3.5 UNLOAD AND CLEAR THE SIG MCX-SPEAR



WARNING SAFETY



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

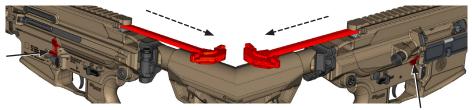
- 1. Place the fire control selector to SAFE.
- 2. Press magazine catch to remove magazine.







3. Pull back on charging handle while pressing in on bottom of left side bolt catch or up on right side bolt catch to lock the bolt to the rear. Visually watch ejection port for ejection of cartridge.



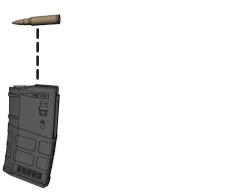
- 4. Return charging handle to the forward locked position.
- Conduct a three-point safety check to ensure there is no cartridge, foreign debris, or any physical damage.
 - A. Ensure the chamber is empty.
 - B. Inspect for no magazine.
 - C. Inspect bolt face.
- Press the upper part of the left side bolt catch or down on right side bolt catch to release the bolt to forward position.
- 7. Close ejection port cover.



3.6 LOADING/RELOADING

3.6.1 LOADING THE MAGAZINE

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

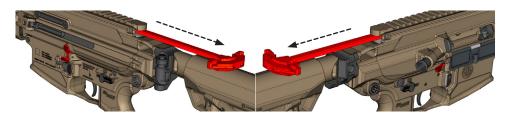


2. Align the next cartridge repeating step 1 until the magazine is loaded.



3.6.2 LOADING THE SIG MCX-SPEAR

- 1. Rotate fire control selector to SAFE.
- Pull back on charging handle while pressing in on bottom of left side bolt catch or up on right side bolt catch to lock the bolt to the rear. Visually watch ejection port for ejection of cartridge.



- 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.



- 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.





Press the upper part of the left side bolt catch or down on right side bolt catch to release the bolt to forward position.







WARNING

LOADED RIFLE





8. Tap forward assist to ensure bolt is fully forward, ensure bolt is fully forward and locked into barrel extension.





3.6.3 CHAMBERING CARTRIDGE FROM BOLT CLOSED POSITION

NOTE

Do not ride the charging handle forward as it may cause a stoppage.

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





WARNING LOADED RIFLE





3.6.4 FIRING THE SIG MCX-SPEAR



WARNING LOADED RIFLE



THE RIFLE IS LOADED AND READY TO FIRE

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

3.6.5 RELOADING (DEPLETED MAGAZINE, CHAMBER EMPTY)

- 1. Rotate fire control selector to SAFE.
- 2. Press magazine release to remove magazine from magazine well.
- Repeat steps 2-7 from section "3.6.2 Loading the SIG MCX-SPEAR" on page 42.

3.6.6 RELOADING (MAGAZINE PARTIALLY DEPLETED, LIVE ROUND CHAMBERED)

- 1. Rotate fire control selector to SAFE.
- 2. Press magazine release to remove magazine from magazine well.
- 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 ENVIRONMENTAL/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.
- · 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.

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, SERIOUS INJURY, OR DAMAGE TO PROPERTY.

If the SIG MCX-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.
- Rotate fire control selector to SEMI-AUTO and attempt to fire the rifle.



If the SIG MCX-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.
- 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

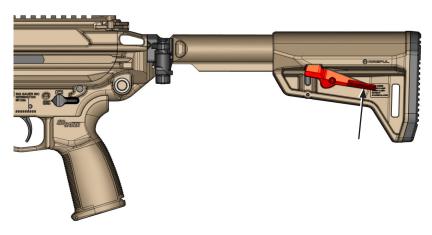
If after applying remedial action, the SIG MCX-SPEAR still fails to fire, unload and clear and contact an authorized SIG SAUER Armorer.



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.



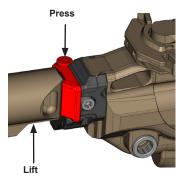


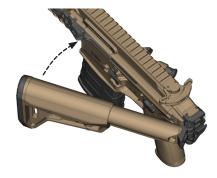
3.9.2 FOLDING THE STOCK

NOTE

The stock must be fully extened inorder to fold to maximum detent

- 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 PREVENTIVE MAINTENANCE

4.1 FIELD STRIP SIG MCX-SPEAR

- 1. Unload/Clear rifle see section, "3.5 Unload And Clear The SIG MCX-SPEAR" on page 39.
- 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.







WARNING PARTS UNDER SPRING PRESSURE



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

6. Press recoil spring guide inward then downward to remove from upper receiver.



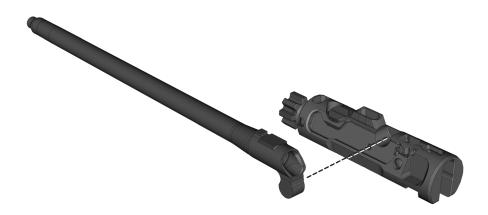


- 7. Pull back charging handle to expose bolt carrier.
- 8. Remove bolt carrier assembly from upper receiver.
- 9. Remove charging handle.





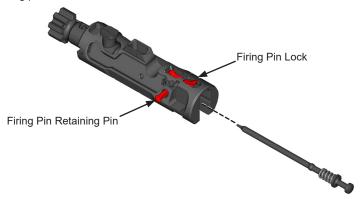
10. Remove op rod from bolt carrier.



CAUTION

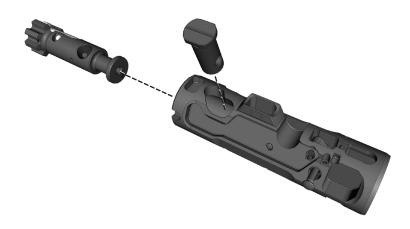
REMOVAL OF FIRING PIN SPRING FROM FIRING PIN MAY CAUSE DAMAGE TO SPRING. DO NOT REMOVE FIRING PIN SPRING UNLESS REPLACEMENT IS NECESSARY.

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





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



CAUTION

REMOVAL OF EXTRACTOR INSERT OR SPRING FROM EXTRACTOR MAY CAUSE DAMAGE TO THE INSERT OR SPRING. DO NOT REMOVE INSERT OR SPRING UNLESS REPLACEMENT IS NECESSARY.

- 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.





NOTE

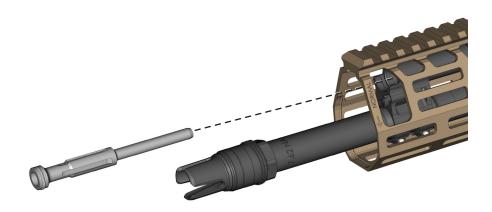
Steps 17-20 should only be done if function degrades indicating carbon buildup.

- 17. Push stop pin in.
- 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 PRESSURE



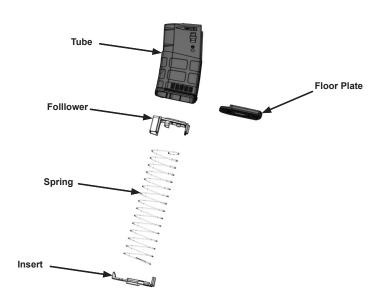
MAGAZINE SPRING IS UNDER PRESSURE. USE CAUTION WHEN REMOVING. KEEP MAGAZINE POINTED AWAY FROM FACE AND WEAR EYE PROTECTION TO PREVENT SERIOUS INJURY.

1. Push post of magazine 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.

SIG_{SAUER}





5.0 MAINTENANCE



WARNING UNLOAD/CLEAR



ALWAYS ENSURE THE FIREARM IS UNLOADED AND CLEARED OF ALL AMMUNITION PRIOR TO PROFORMING ANY MAINTENANCE. FAILURE TO COMPLY MAY RESULT IN DEATH, SERIOUS INJURY, OR DAMAGE TO PROPERTY.

- 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

5.1.1 CLEANING THE BOLT AND BOLT CARRIER ASSEMBLY

- 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.





5.1.2 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.

5.1.3 CLEANING THE BARREL/GAS BLOCK ASSEMBLY

- 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.



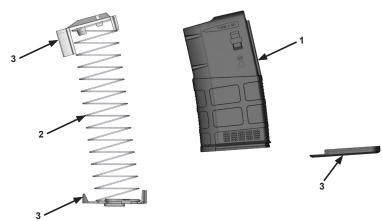
- 7. Clean flash hider base with rag soaked in CLP and Crocus cloth. Wipe dry.
- 8. Clean fouling residue from gas valve with rag soaked in CLP and cleaning brush.
- 9. Clean piston of fouling residue with rag soaked in CLP and cleaning brush. Wipe dry.





5.1.4 CLEANING THE MAGAZINE

- 1. Clean magazine body with a damp cloth to remove any debris. Wipe dry.
- 2. Clean spring with a rag soaked in CLP. Wipe dry.
- 3. Clean 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.

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



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

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.
- 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. Fire control 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 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

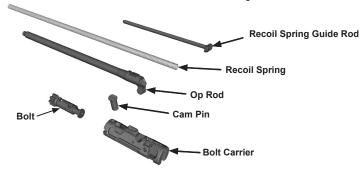
- 1. Lubricate exterior surfaces of charging handle and latch spring.
- 2. Lubricate ejection port cover spring.
- 3. Apply lubricant to side charging handle channel.
- 4. Generously lubricate all internal surfaces of upper receiver.





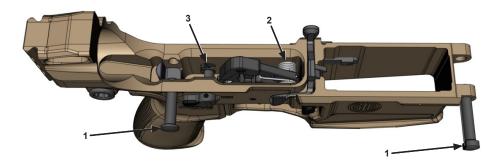
5.3.2 LUBRICATING THE RECOIL AND BOLT CARRIER ASSEMBLY

- 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 PRESSURE



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

1. Assemble magazine insert and follower to spring.





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





6.2 ASSEMBLE SIG MCX-SPEAR

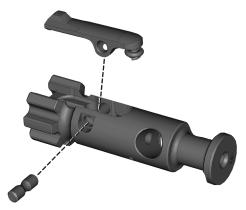
- 1. Install piston into gas block.
- 2. Install gas valve into gas block.
- 3. Press stop pin and rotate gas valve 180 degrees until detent holds valve in place.



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.







WARNING SAFETY



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

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



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.

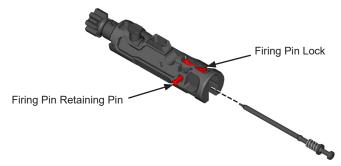
7. Insert cam pin into bolt.



NOTE

Holding bolt carrier assembly vertically and ensuring cam pin is properly aligned may aid in assembly.

- 8. Hold firing pin lock upward
- 9. Insert firing pin and spring into bolt through rear of bolt carrier.
- 10. Release firing pin lock.
- 11. Push firing pin in unill it stops.

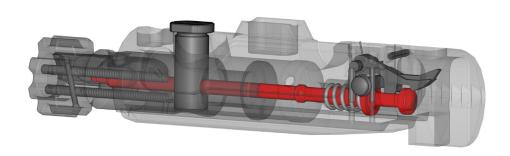




CAUTION

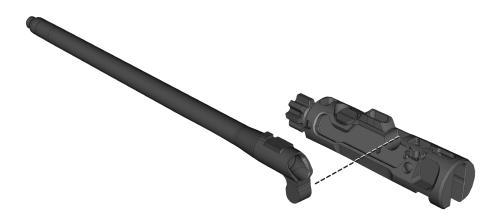
ENSURE FIRING PIN IS RETAINED IN BOLT CARRIER TO PREVENT A FAILURE TO FIRE AND DAMAGE TO EQUIPMENT.

12. Push firing pin retaining pin until completely seated into bolt carrier.





13. Attach op rod to bolt carrier.





- 14. Partially install charging handle into upper receiver.
- 15. Pull bolt forward to unlocked position.
- 16. Insert op rod into round channel in upper receiver, pushing op rod/bolt carrier assembly completely forward until bolt locks into barrel extension.





WARNING PARTS UNDER SPRING PRESSURE



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

- 17. Insert recoil spring guide assembly into rear of op rod.
- 18. Push recoil spring guide to compress recoil spring in rear of upper receiver. Once in line with notches slide head of recoil spring guide up.
- Release pressure on recoil spring guide. End of recoil spring guide should be horizontal in notches.





- 20. Attach upper to lower receiver.
- 21. Push in pivot pin until it stops.
- 22. Close receivers and push in takedown pin until it stops.



7.0 SAFETY/FUNCTION CHECK

- 1. Unload/clear rifle, see section, "3.5 Unload And Clear The SIG MCX-SPEAR" on page 39.
- 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.
- 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.



7.1 TROUBLESHOOTING

Stoppage	Test/Inspection	Corrective Action
Rifle will not fire	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
	Damaged firing pin	Replace part
	Defective ammunition	Discard and replace ammunition
	Light indent on primer	Clean associated parts replace ammunition
	Broken firing pin lock or spring	Replace part
	Debris in trigger group	Clean trigger group and lower receiver
Bolt will not unlock	Dirty bolt	Clean part



Stoppage	Test/Inspection	Corrective Action
Cartridge will not feed	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
Double feed	Defective magazine	Replace magazine
Cartridge will not	Dirty or corroded ammunition	Clean or replace ammunition
chamber	Damaged ammunition	Replace ammunition
	Dirty chamber	Clean chamber
	Weak or damaged op rod spring	Replace spring
Bolt will not lock	Dirt, corrosion, or carbon build up in barrel extension, bolt lugs, or barrel face	Clean barrel and bolt



Stoppage	Test/Inspection	Corrective Action
Bolt will not extract cartridge	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
Short recoil	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
Bolt fails to lock to the rear after last round	Broken bolt catch	Replace part
	Faulty magazine	Replace magazine
	Dirty upper receiver and bolt carrier	Clean and lubricate upper receiver and bolt carrier
Fire control selector binds	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 4. LOWER RECEIVER GROUP

TABLE 1. LOWER RECEIVER GROUP PARTS LIST

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



8.2 UPPER RECEIVER GROUP PARTS DIAGRAM



FIGURE 5. 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 STORAGE AND TRANSPORTATION



WARNING UNLOAD/CLEAR



YOU MUST VISUALLY AND PHYSICALLY CONFIRM THAT THE MAGAZINE IS REMOVED AND THE FIREARM IS UNLOADED AND CLEARED PRIOR TO TRANSPORT. SEE SECTION, "3.3 UNLOAD AND CLEAR THE SIG MCX-SPEAR" ON PAGE 36". FAILURE TO ENSURE THE MAGAZINE IS REMOVED AND THE FIREARM IS UNLOADED AND CLEARED PRIOR TO TRANSPORT COULD RESULT IN UNINTENTIONAL DISCHARGE, CAUSING INJURY OR DEATH TO YOURSELF OR OTHERS, OR DAMAGE TO PROPERTY.



WARNING STORAGE

NEVER PLACE OR STORE ANY FIREARM IN SUCH A MANNER THAT IT MAY BE DISLODGED. FIREARMS SHOULD ALWAYS BE STORED, LOCKED, UNLOADED, SEPARATE FROM THEIR AMMUNITION, AND INACCESSIBLE TO CHILDREN AND ANY OTHER UNAUTHORIZED PERSON. THE USE OF A LOCKING DEVICE OR SAFETY LOCK IS ONLY ONE ASPECT OF RESPONSIBLE FIREARMS STORAGE. FAILURE TO PROPERLY STORE YOUR FIREARMS MAY CAUSE INJURY OR DEATH TO YOURSELF OR OTHERS, OR DAMAGE TO PROPERTY.

Short Term Storage (90 days or less)

- 1. Ensure 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.

Long Term Storage (90 days or longer)

- 1. Ensure the firearm is thoroughly cleaned.
- 2. Apply a medium coat of CLP to the chamber and bore.
- 3. Apply a light coat of CLP to all other metal surfaces for corrosion protection.
- 4. Wrap the firearm with a waterproof material.
- 5. Place the firearm in a corrosion resistant barrier bag.

Environmental Storage Recommendations (Armory)

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



10.0 SERVICE AND REPLACEMENT PARTS POLICY

10.1 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 3rd 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.



WARNING PARTS REPLACEMENT



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.

Ordering Parts/Service - International Commercial Customers

- Go to sigsauer.com
- 2. Click on How to Buy.
- Click on CANADA or INTERNATIONAL.
- 4. Click on COMMERCIAL and follow the instructions to locate an authorized service facility.

Ordering Parts/Service - Government/Law Enforcement/Military

Option 1: Contact your authorized In-Country SIG SAUER representative.

Option 2: Go to sigsauer.com

- Click on How to Buy
- 2. Choose International
- 3. Select LAW ENFORCEMENT/MILITARY
- 4. Scroll to your country, then click on SEARCH
- 5. A link for your region will be displayed with contact information



11.0 SHIPPING FIREARMS FOR REPAIR

Returning Your Firearm for Service

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

- The first step is to contact Customer Service at (603) 610-3000 for 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.
- Make sure 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 which includes your name, street address, daytime phone number, model and serial number, and a detailed description of the problem you are experienced or the work you want performed. With the exception of extra magazines, do not include scopes, mounts, or other accessories.
- 4. An individual's ability to legally ship firearms to the manufacturer for repair or service varies according to state and local law. Some jurisdictions require that firearms be shipped and returned by a Federally Licensed Firearms Dealer. Consult applicable law to determine how your firearm should be returned.



- 5. Federal law prohibits persons who do not possess a Federal Firearms License 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.)
- 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



SIG SAUER® LIMITED LIFETIME FIREARMS WARRANTY

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.



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SIG SAUER, Inc. 72 Pease Boulevard, Newington, NH 03801 USA

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