READ THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL CAREFULLY BEFORE USING THIS FIREARM; DO NOT DISCARD THIS MANUAL.
This instruction manual should always accompany this firearm and be transferred with it upon ownership, or when the firearm is loaned or presented to another person.
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**

“Children are attracted to and can operate firearms that can cause severe injuries or death. 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.”

**ADVERTENCIA**

“A los niños atraen las amas de fuego y las pueden hacer funcionar. Ellos pueden causarse lesiones graves y la muerte. Evite que los niños tengan acceso a las armas de fuego guardándolas siempre con llave y descargadas cuando no las está utilizando. Si usted tiene una arma de fuego cargada en un lugar en que un niño tiene acceso a ella y la usa indebidamente, le pueden dar una multa o enviarlo a la carcel.”

**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.”

“It is unlawful to store or keep a firearm, rifle, 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.
WARNING - LOCKING DEVICES

This firearm was originally sold with a key-operated locking device. While it can help provide secure storage for your unloaded firearm, any locking device can fail. All guns are designed to fire if they are loaded and the trigger is pulled. Therefore, never install the locking device inside the trigger guard or in any way that makes it possible to pull 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.

NEVER INSTALL THE LOCKING DEVICE INSIDE THE TRIGGER GUARD

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.
FIREARMS SAFETY IS YOUR RESPONSIBILITY

This owner’s manual is designed to assist you in learning how to use and care for your SIG SAUER® pistol 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 gun 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:

www.sigsaueracademy.com • (603) 679-2003

Main campus: Epping, New Hampshire
Satellite Facilities: Range 82, Midland, VA
NRA Whittington Center, Raton, NM

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 • www.nra.com
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locking Device</td>
<td>6</td>
</tr>
<tr>
<td>General Safety Information and Mechanical Characteristics</td>
<td>14</td>
</tr>
<tr>
<td>1.0 Safety Information</td>
<td>14</td>
</tr>
<tr>
<td>1.1. Protect Your Eyes And Ears</td>
<td>15</td>
</tr>
<tr>
<td>2.0 Mechanical Characteristics and Weapon Theory.</td>
<td>15</td>
</tr>
<tr>
<td>2.1. Weapon Description</td>
<td>15</td>
</tr>
<tr>
<td>2.1.1 General</td>
<td>15</td>
</tr>
<tr>
<td>2.1.2 Barrel With Receiver And Gas System.</td>
<td>16</td>
</tr>
<tr>
<td>2.1.3 Bolt</td>
<td>17</td>
</tr>
<tr>
<td>2.1.4 Hand Guards</td>
<td>18</td>
</tr>
<tr>
<td>2.1.5 Trigger Casing Assembly And Butt Stock</td>
<td>19</td>
</tr>
<tr>
<td>2.1.6 Butt Stock Operation</td>
<td>21</td>
</tr>
<tr>
<td>2.1.7 Trigger Guard Operation</td>
<td>22</td>
</tr>
<tr>
<td>2.1.8 Gas Valve Position</td>
<td>23</td>
</tr>
<tr>
<td>2.1.9 Sights</td>
<td>25</td>
</tr>
<tr>
<td>2.1.10 Magazine</td>
<td>29</td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Operation of Safety</td>
<td>29</td>
</tr>
<tr>
<td>Operation of Safety in Select Fire Version</td>
<td>31</td>
</tr>
<tr>
<td>The Bolt Catch Lever</td>
<td>35</td>
</tr>
<tr>
<td>Ammunition</td>
<td>36</td>
</tr>
<tr>
<td>To Load and Fire (With Magazine)</td>
<td>40</td>
</tr>
<tr>
<td>3.0 Handling</td>
<td>40</td>
</tr>
<tr>
<td>3.1 Important Instructions</td>
<td>40</td>
</tr>
<tr>
<td>3.2 Loading The Rifle</td>
<td>41</td>
</tr>
<tr>
<td>3.3 Loading The Magazine</td>
<td>42</td>
</tr>
<tr>
<td>3.4 Changing the Magazine</td>
<td>42</td>
</tr>
<tr>
<td>3.5 Reloading</td>
<td>43</td>
</tr>
<tr>
<td>4.0 Function</td>
<td>44</td>
</tr>
<tr>
<td>4.1 General Weapon Function of the 551-A1</td>
<td>44</td>
</tr>
<tr>
<td>4.1.1 Ready to Fire</td>
<td>44</td>
</tr>
<tr>
<td>4.1.2 Discharging the Shot</td>
<td>46</td>
</tr>
<tr>
<td>4.1.3 Unlocking and Recoil of Bolt</td>
<td>47</td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>4.1.4 Bolt Advance</td>
<td>50</td>
</tr>
<tr>
<td>4.2 Trigger Functions</td>
<td>51</td>
</tr>
<tr>
<td>4.2.1 General</td>
<td>51</td>
</tr>
<tr>
<td>4.2.2 Trigger Safe Position “S”</td>
<td>51</td>
</tr>
<tr>
<td>4.2.3 Semiautomatic Fire</td>
<td>51</td>
</tr>
<tr>
<td>4.2.4 3-Round Burst Control System</td>
<td>53</td>
</tr>
<tr>
<td>4.2.5 Full Auto Fire</td>
<td>56</td>
</tr>
<tr>
<td>To Unload Magazine and Rifle</td>
<td>59</td>
</tr>
<tr>
<td>5.0 Unloading</td>
<td>60</td>
</tr>
<tr>
<td>To Extract and Eject a Chambered Cartridge</td>
<td>61</td>
</tr>
<tr>
<td>To Clear a Malfunction (“Jam”)</td>
<td>62</td>
</tr>
<tr>
<td>6.0 Procedures In Case Of Malfunction.</td>
<td>62</td>
</tr>
<tr>
<td>To Minimize Malfunctions (“Jams”)</td>
<td>64</td>
</tr>
<tr>
<td>To Disassemble</td>
<td>65</td>
</tr>
<tr>
<td>7.0 Field Strip Disassembly</td>
<td>65</td>
</tr>
<tr>
<td>7.1 Reassembly</td>
<td>72</td>
</tr>
<tr>
<td>7.2 Function Check</td>
<td>75</td>
</tr>
<tr>
<td>Magazine Inspection and Care</td>
<td>78</td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Care and Cleaning</td>
<td>79</td>
</tr>
<tr>
<td>Transportation &amp; Storage</td>
<td>79</td>
</tr>
<tr>
<td>8.0 Sight Options</td>
<td>81</td>
</tr>
<tr>
<td>Troubleshooting</td>
<td>82</td>
</tr>
<tr>
<td>Maintenance</td>
<td>84</td>
</tr>
<tr>
<td>9.0 Maintenance</td>
<td>84</td>
</tr>
<tr>
<td>9.1 Cleaning</td>
<td>85</td>
</tr>
<tr>
<td>Service and Parts Policy</td>
<td>86</td>
</tr>
<tr>
<td>Shipping Firearms for Repair</td>
<td>88</td>
</tr>
<tr>
<td>Ordering Parts</td>
<td>90</td>
</tr>
<tr>
<td>10.0 Technical Specifications</td>
<td>91</td>
</tr>
<tr>
<td>10.1 SIG551-A1 Parts List</td>
<td>92</td>
</tr>
<tr>
<td>SIG551-A1 Parts Diagram</td>
<td>93</td>
</tr>
<tr>
<td>10.2 SIG551-A1 Select Fire Parts List</td>
<td>94</td>
</tr>
<tr>
<td>SIG551-A1 Select Fire Parts Diagram</td>
<td>95</td>
</tr>
<tr>
<td>The Basic Rules of Safe Firearms Handling</td>
<td>96</td>
</tr>
<tr>
<td>Warranty Information</td>
<td>97</td>
</tr>
</tbody>
</table>
WARNINGS OF GREAT IMPORTANCE ARE FOUND WITHIN THIS MANUAL

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locking Devices</td>
<td>6</td>
</tr>
<tr>
<td>Alterations</td>
<td>13</td>
</tr>
<tr>
<td>Sights</td>
<td>27</td>
</tr>
<tr>
<td>Manual Safety</td>
<td>30, 34</td>
</tr>
<tr>
<td>Ammunition</td>
<td>36, 39</td>
</tr>
<tr>
<td>Lead Exposure</td>
<td>39</td>
</tr>
<tr>
<td>Handling</td>
<td>40, 58</td>
</tr>
<tr>
<td>Loading</td>
<td>41</td>
</tr>
<tr>
<td>Firing</td>
<td>44, 58</td>
</tr>
<tr>
<td>Unloading</td>
<td>60</td>
</tr>
<tr>
<td>Storage</td>
<td>80</td>
</tr>
<tr>
<td>Parts Purchasers</td>
<td>87</td>
</tr>
<tr>
<td>Shipping</td>
<td>89</td>
</tr>
</tbody>
</table>

OTHER CAUTIONS AND WARNINGS APPEAR THROUGHOUT THE MANUAL

FIREARMS ARE DANGEROUS WEAPONS

READ THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL THOROUGHLY AND CAREFULLY BEFORE USING.


WARNING - ALTERATIONS

This product was designed to function properly in its original condition. Alterations can make it unsafe. Do not alter any part or add or substitute any parts or accessories not manufactured by SIG SAUER Inc.

DO NOT ALTER ANY GUN
GENERAL SAFETY INFORMATION AND MECHANICAL CHARACTERISTICS

1.0 Safety Information

The safety warnings in this manual are important. By understanding the dangers inherent in the use of any firearm, and by taking the precautions described herein, you can enjoy complete safety in the use of your rifle. Failure to heed any of these warnings may result in serious injury to you or others, as well as severe damage to the firearm or other property. SIG SAUER Inc. 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:

1) criminal or negligent discharge;
2) improper or careless handling;
3) unauthorized modifications;
4) defective, improper, hand-loaded, or reloaded ammunition;
5) corrosion;
6) neglect; or
7) 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.
1.1 Protect Your Eyes And Ears

Always wear safety glasses and ear plugs or “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 which may emanate occasionally from any firearm in normal use. Without ear protection, repeated exposure to shooting noise may lead to cumulative, permanent hearing loss.

2.0. Mechanical Characteristics and Weapon Theory

2.1 Weapon Description

2.1.1 General

The SIG551-A1 Rifle is a gas operated weapon with a rotary bolt mechanism capable of semi-automatic, three round burst or automatic operation. Semi-automatic means one round will fire each time the trigger is pulled until the magazine is emptied of ammunition. Three round burst means 3 rounds will fire whenever the trigger is depressed and held. Automatic means the rifle will continue to fire as long as the trigger is depressed or the magazine is emptied of ammunition. Releasing the trigger in three round burst or automatic fire mode will interrupt the firing cycle. The rifle is chambered in 5.56mm NATO and is compatible with .223 Remington ammunition.
2.1.2 Barrel With Receiver And Gas System

The barrel is mechanically mated to the receiver. The flash suppressor is screwed onto the muzzle end of the barrel which features a 0.5 x 28 TPI thread pattern. The gas block, which is fixed on the barrel, contains the gas port, locates the gas system (gas tube and operating rod), accepts the front sight and also serves as support for the hand guards. The receiver guides the bolt and bolt carrier, and houses the locking system. An accessory mounting rail is fixed to the upper part of the receiver, providing an attachment point for sighting systems and other accessories.
2.1.3 Bolt

The bolt consists of two main parts:
- Bolt Carrier
- Bolt Head

a. Bolt Carrier: The bolt carrier guides the bolt head, controls the locking and unlocking by means of the cam, holds the operating rod, and cocks the hammer.

b. Bolt Head: The bolt head locks the bolt assembly, houses the firing pin and extractor and feeds the cartridges from the magazine to the chamber.
2.1.4 Hand Guards

The hand guards protect the barrel and the gas system from damage and provide protection from burning. The integrated accessory mounting rails provide attachment points for various devices, such as lights, lasers, sights, and bipods.
2.1.5 Trigger Casing Assembly and Butt Stock

The trigger casing assembly contains the internal components of the firing and safety mechanisms, bolt catch, magazine well, magazine release, and butt stock assembly.

The safety lever, located on both sides of the trigger casing, can be set to four positions (Auto or 2 position Semi-only):

Position “S”: The weapon is locked in the safe position.
Position “F”: The weapon will fire semi auto.
Position “3”: The weapon fires 3-round burst. After each burst, the trigger must be released and then pulled again.
Position “A”: The weapon fires in the full auto mode.
The trigger guard may be released from its normal position to make the trigger accessible for shooting with gloves. For safety reasons the trigger guard must not be released until just before firing the weapon, and after firing should be immediately returned to the normal (closed) position.

**CAUTION:** Be careful of accidental discharges when inserting gloved fingers into the trigger guard.

The SIG551-A1 rifle is equipped with a side folding stock, featuring integral sling attachment point and a rubber recoil pad.
2.1.6 Butt Stock Operation

STOCK LATCH
2.1.7 Trigger Guard Operation

1. The trigger guard opens to accommodate firing the rifle with gloves or mittens.

2. To open the trigger guard, depress the spring loaded pin on the front right and rotate downward.

3. When glove access is no longer required, rotate the trigger guard back into place, depressing the spring loaded pin and ensure the trigger guard is locked closed.

**WARNING:** Do not manipulate the trigger guard unless the rifle’s safety lever is on “S” (SAFE) and unloaded.
2.1.8 Gas Valve Position

The gas volume required for the function of the SIG51-A1 rifle can be controlled by the gas valve. The gas valve has two positions:


Under normal conditions, the gas valve should remain in Position 1. This will give the best all-around performance and function.

b. Position 2 (Rib of gas valve in the slanted position).
When cycling or ejection problems are encountered due to heavy fouling, the gas valve can be moved to Position 2 by rotating clockwise as far as the stop. In this position, a larger gas volume is released against the operating rod. The need to use the gas valve in Position 2 is an indication that the rifle requires cleaning.

**CAUTION:** In the case of a hot or heavily fouled weapon, use a cartridge or auxiliary aid to prevent burns to your fingers.

**CAUTION:** Firing with the gas valve in Position 2 is an exception. As soon as normal function returns, the gas valve must be returned to Position 1. Continued operation with the gas valve in Position 2 will increase recoil and place unnecessary stress on the rifle. The rifle should be cleaned as soon as conditions permit.

**WARNING:** Always ensure the rifle is unloaded and clear of ammunition when manipulating the gas valve.
2.1.9 Sights

The SIG551-A1 rifle features integrated accessory mounting rails on the upper receiver and hand guards. These rails may be used for attaching a variety of sighting systems, both optical and fixed. The accessory rails are compatible with all Picatinny standard mounting systems. Some models feature “emergency” flip up blade sights as a standard option. These sights are designed to provide a backup aiming solution in the event your optics should fail but are certainly capable of being used as the sole sighting system for the rifle.

Windage (left / right) adjustment:

Windage adjustments are made by rotating the front sight screw left or right. The adjustment screw head is located on the left side of the front sight assembly. Adjustments are made using a 4mm allen key, available at any hardware store.

- Rotate front sight screw right (clockwise) to move impact right.

- Rotate front sight screw left (counter-clockwise) to move impact left.

One full rotation of the front sight screw will move the impact of the rounds approximately 1” at 100 yards.
Elevation (up / down) adjustment:

Elevation adjustments are made by raising or lowering the sight plate, inset on the back side of the rear sight blade.

- Loosen the phillips head screw
- Move the sight plate in the direction required for adjustment.
- Tighten the phillips head screw.

- Slide rear sight blade up to move impact up.

- Slide rear sight blade down to move impact down.

One mark of movement on the rear sight blade will move the impact of the rounds approximately 3/4” to 1” at 100 yards.
WARNING - SIGHTS

Do not adjust or otherwise manipulate any sight system on the rifle without first confirming the magazine is removed, the rifle is on “SAFE” and fully unloaded.

Failure to heed this warning could result in unintentional discharge, resulting in injury or death.

UNLOAD RIFLE BEFORE MANIPULATING SIGHTS.
Emergency sight deployment

The rifle’s emergency sight are normally stored in a “stowed” condition to protect them from damage and prevent interference with optical sighting systems.

To deploy the emergency sight for use, do the following:

1. Flip the rear sight blade into the “up” position. The rear sight blade is held in position by spring tension.

3. When the emergency sight is no longer required, rotate the rear sight blades to the stowed position.
2.1.10 Magazine

The rifle ships with our Swiss transparent magazine. If more than one magazine is purchased, they can be attached together by integral clips built into the magazine body.

OPERATION OF SAFETY

The SIG551-A1 has a manual safety which is located on the left and right side of the trigger casing, just forward of the pistol grip and above the trigger. The safety levers may be operated from either side.
The safety is “ON” when the safety lever is in the “S” (SAFE) position and the trigger guard is closed. In this position, the rifle cannot be fired with a normal pull of the trigger.

The safety lever should always be in the “S” (SAFE) position except when the shooter is actually firing the rifle. The safety lever should be moved to the “S” (SAFE) position whenever the shooter ceases firing, even temporarily.

The safety is “OFF” when the safety lever is in the “F” (FIRE) position. When the safety lever is in the “F” (FIRE) position the rifle will fire in the semi-automatic mode each time the trigger is pulled until all the ammunition is expended.
OPERATION OF SAFETY FOR SELECT FIRE VERSIONS

The SIG551-A1 Select Fire has a manual safety which is located on the left and right side of the trigger casing, just forward of the pistol grip and above the trigger. The safety levers may be operated from either side.

The safety is “on” when the safety lever is in the “S” (SAFE) position and the trigger guard is closed. In this position, the rifle cannot be fired with a normal pull of the trigger.
The safety lever should always be in the “S” (SAFE) position except when the shooter is actually firing the rifle. The safety lever should be moved to the “S” (SAFE) position whenever the shooter ceases firing, even temporarily.

The safety is “OFF” when the safety lever is in the “F” (FIRE), “3” (3 SEMI-AUTOMATIC BURST) or “A” (AUTOMATIC) positions. When the safety lever is in the “F” position the rifle will fire in the semiautomatic mode each time the trigger is pulled until all the ammunition is expended. When the safety lever is in the “3” position the rifle will fire a three round burst when the trigger is depressed and held. Releasing the trigger prior to firing three rounds will reset the three round burst mechanism, so the next time the trigger is depressed and held a three round burst will fire. When the safety lever is in the “A” position the rifle will continue to fire until the trigger is released or all ammunition is expended. Releasing the trigger in “3” or “A” modes will interrupt firing until the trigger is again depressed.
WARNING - MANUAL SAFETY

Keep the safety “ON” unless actually firing. Always move the safety to its intended position and check it. The safety is not “ON” unless it is completely “ON.” Never depend on a safety mechanism or any other mechanical device to justify careless handling or permitting the rifle to point in an unsafe direction. The only “safe” rifle is one in which the bolt is open, the chamber is empty, and there is no magazine in the gun.

KNOW HOW TO USE THE SAFETY
Bolt Catch Lever

The SIG551-A1 rifle is equipped with a bolt catch lever. The purpose of the bolt catch lever is two-fold. The bolt catch may be manually engaged with the bolt pulled to the rear (open position). This action locks the bolt open, allowing an unobstructed view of the chamber area. During firing, with a magazine inserted, the bolt catch will lock the bolt open after the last round in the magazine has been expended, giving a visual indication the magazine is empty and allowing the shooter to visually check that the chamber is clear. The bolt is engaged by the bolt catch lever when the bolt catch lever is pushed upward by the magazine follower during the cycle of operation. The bolt can be manually released (closed) by either depressing the bolt catch lever or by pulling rearward on the charging handle and releasing.

**CAUTION:** Dropping or jarring the rifle with the bolt locked open can cause the bolt catch lever to disengage. If a magazine, loaded with ammunition, is inserted in the rifle when this occurs, a round will chamber with the potential for an unintentional discharge. ALWAYS handle the rifle as if loaded whenever a magazine is inserted in the rifle. ALWAYS place the safety lever in the “S” (SAFE) position and unload the rifle whenever shooting is complete.
Ammunition

1. 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.

2. The use of reloaded, “remanufactured” hand-loaded, or other non-standard ammunition voids all warranties. Reloading is a science and improperly loaded ammunition can be extremely dangerous. Severe damage to the firearm and serious injury 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. of the United States (SAAMI) or ammunition manufactured to military specifications.

![WARNING – AMMUNITION (CARTRIDGE) NOTICE](image)

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, NON-STANDARD, “REMANUFACTURED” HAND LOADED (RELOADED) AMMUNITION, OR CARTRIDGES OTHER THAN THOSE FOR WHICH THE FIREARM WAS ORIGINALLY CHAMBERED.
3. Firearms may be severely damaged and serious injury 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.

4. Immediately stop shooting and check the barrel for a possible obstruction 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. In such cases it is possible that a bullet is lodged part way down the barrel.
   - Firing a subsequent bullet into the obstructed barrel can wreck the firearm and cause serious injury to the shooter or to bystanders.

5. Bullets can become lodged in the barrel:
   - If 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);
   - If 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.
6. If there is any reason to suspect that a bullet is obstructing the barrel, immediately unload the firearm and look through the bore. 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 ONE FROM WHICH THE BULLET HAS BEEN REMOVED. SUCH TECHNIQUES CAN GENERATE EXCESSIVE PRESSURE, WRECK THE FIREARM, AND CAUSE SERIOUS PERSONAL INJURY.**

If the bullet can be removed 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.

7. Dirt, corrosion, or other foreign matter on a cartridge can impede complete chambering and may cause the cartridge case to burst upon firing. The same is true of cartridges which are damaged or deformed.

8. Do not oil cartridges, and be sure to wipe the chamber clean of any oil or preservative before commencing to shoot. 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.

9. Use lubricants sparingly on the moving parts of your firearm. Avoid excessive spraying of any aerosol gun care product, especially where it may 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 may not ignite. If only the primer ignites, there is danger that the bullet may become lodged in the barrel.
**WARNING - AMMUNITION**

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

**IMPROPER AMMUNITION DESTROYS GUNS**

**WARNING - LEAD EXPOSURE**

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 GUNS MAY EXPOSE YOU TO LEAD**
TO LOAD AND FIRE (WITH MAGAZINE)

3.0 Handling

3.1 Important Instructions

- Before manipulating the weapon, ensure the safety lever is in the “S” (SAFE) position and the trigger guard is in the closed position.
- Use only factory-new ammunition which corresponds to the caliber of the weapon.
- During all manipulations of the rifle, point the weapon in a safe direction.
- Do not place your finger on the trigger until the target has been verified and you intend to shoot.
- Do not load the weapon until immediately before use.
- Unload weapon immediately after shooting is finished.
- Remove the bolt carrier assembly and magazine from the weapon prior to transportation.

WARNING - HANDLING:

Never carry the rifle loaded with the safety lever in the “F” (FIRE) position. If dropped or struck with the safety off (“F”), the rifle may fire. Such a discharge can occur with or without the trigger being directly struck or touched. Never rest a loaded rifle against any object (wall, tree, fence, vehicle, etc.) because there is always the possibility that the rifle will be jarred or slide from its position and fall with sufficient force to discharge. Keep the safety lever on “S” (SAFE) unless actually firing.

ANY GUN MAY FIRE IF DROPPED
3.2 Loading The Rifle

1. Ensure the safety lever is in the “S” (SAFE) position;
2. Insert the magazine and check that it is properly seated;
3. Bolt forward: Pull the charging handle back fully and release; or
4. Bolt locked open: Depress bolt catch fully to release bolt.

**WARNING**

DO NOT LOAD A RIFLE WITH A HOT CHAMBER BECAUSE A ROUND MAY “COOK” OFF (i.e., a round may detonate (fire) unexpectedly just because it is exposed to the heat of the rifle’s chamber).
3.3 Loading The Magazine

1. Ensure the magazine is the proper type and caliber for the rifle;
2. Hold the magazine vertically;
3. Place a round between the feed lips and press down - ensure the bullet is facing the front of the magazine; and
4. Place the next round on top of the previous round and repeat until the desired number of rounds are loaded.

3.4 Changing The Magazine

1. Ensure the safety lever is in the “S” (SAFE) position;
2. Remove the magazine by pressing the magazine catch lever forward and rocking the magazine down and out of the magazine well;
3. Engage the front lip of the magazine into the magazine well and then rock the magazine upward engaging the magazine catch until the magazine it locked into place.
3.5 Reloading (Rifle Empty, Bolt Locked Open)

1. Ensure the safety lever is in the “S” (SAFE) position;
2. Remove the magazine by pressing the magazine catch;
3. Insert a loaded magazine and check that it is properly seated;
4. Release the bolt catch fully by:
   a. Depress the bolt catch upward; or
   b. Pull the charging handle back slightly and release.

Always make sure the muzzle is pointed in a safe direction!

Never attempt to load or unload any firearm inside a vehicle, building, or other confined space (except a properly constructed shooting range). Enclosed areas frequently offer no completely safe direction to point the firearm; if an accidental discharge occurs, there is great risk of bodily injury or property damage.

Before loading, always clean all grease and oil from the bore and chamber, and check to be certain that no obstruction is in the barrel. Any foreign matter in the barrel could result in a bulged or burst barrel or other damage to the firearm, and could cause serious injury to the shooter or to others.
4.0 Function

4.1 General Weapon Function of SIG551-A1

4.1.1 Ready to Fire

When the rifle is in a “ready to fire” condition the bolt is closed and locked.

- the recoil spring (2) holds the bolt carrier (4) in the front final position, via the gas piston (1).
- the bolt head (5) is rotated by the control cam (3) of the bolt carrier (4) in such a way that its locking lugs (8) engage in the corresponding recesses of the locking piece (9).
- in this position the hammer (7) is cocked and the release bar (6) is depressed.

⚠️ WARNING

DO NOT TOUCH THE TRIGGER UNTIL YOU ARE ACTUALLY READY TO FIRE THE RIFLE.
WEAPON LOADED - READY TO FIRE
4.1.2 Discharging the shot

By pressing the trigger (11) the hammer (7) is released. The hammer is under pressure of the hammer spring (12) and strikes the firing pin (10) which, in turn, impacts against the cartridge primer of the cartridge (P) thus discharging the shot.

ILLUS. 57) DISCHARGING THE SHOT
4.1.3 Unlocking and Recoil of Bolt

The gas pressure, generated by the burning powder, drives the bullet through the barrel (13). As soon as the projectile passes the gas port (15), propellant gas flows through the adjustable gas valve (14). The gas pressure acts on the gas piston (1) which pushes the bolt carrier (4) to the rear.

During the rearward motion of the bolt carrier (4) the bolt head (5) is rotated by the control cam (3) so that the locking lugs (8) are disengaged. The bolt is now unlocked.
The bolt assembly moves back along the rails in the receiver (16) as far as the stop (17) whereby:

- the recoil spring (2) is compressed;
- the hammer (7) is cocked;
- the extractor (18) extracts the case from the chamber;
- the ejector (19) ejects the case through the port in the receiver (16).
ILLSU. 60)
CASE EJECTION
4.1.4 Bolt advance

The force of the compressed recoil spring (2) thrusts the bolt forward. The bolt head (5) feeds the next round from the magazine (20) into the chamber.

In the final stage of the advance, the bolt head (5) locks up and the release bar (6) is depressed. The weapon is ready to be fired.

ILLUS. 64) BOLT ADVANCE

ILLUS. 64A) BOLT LOCK
4.2 Trigger functions

4.2.1 General

Home position for describing the trigger functions:
• the hammer (3) is held by the sear (4)
• the release bar (2) is depressed by the bolt carrier (1)
• auto sear (5) is not engaged.

4.2.2. Trigger in safe position “S”

The safety lever (6) is set to “S”. The safety shaft (7) locks the trigger (8).

4.2.3. Semiautomatic fire

The safety lever (6) is set to “F” and the hammer (3) is held by the sear (4).
By pulling the trigger (8) and after having overcome the pressure point, the sear (4) releases the hammer (3) which strikes the firing pin (9). The sear (4) falls downwards.

The recoiling bolt presses the hammer (3) down and releases the auto sear (5) via the release bar (2). The auto sear (5) catches the hammer (3).

During the bolt advance, the bolt presses down the release bar (2). The auto sear (5) is thereby moved to the rear and releases the hammer (3) to the sear (4). When the trigger is released, the sear (4) moves to its upper end position.
4.2.4 3-round burst control system

The safety lever (6) is set to “3”. The automatic fire pawl (11) lies in the groove of the safety shaft (7). The segment (10) is controlled by the safety shaft (7) and moved upward.

By pulling the trigger (8), the sear (4) is withdrawn and simultaneously retained by the automatic fire pawl (11). The segment (10) is pressed to the rear by the driving cam (12) in the trigger (8) so that the pawl (13) is allowed to register.
When the hammer (3) is thrust forward, the chargeover (14) presses the pawl (13) via its eccentric (15) on the segment (10). The segment (10) jumps up by one notch.

The recoiling bolt cocks the hammer (3) which is retained by the auto sear (5) (refer to illus. 67).

The advancing bolt presses the auto sear (5) via the release bar (2) to the rear thus releasing the hammer (3).

The segment (10) moves up another notch.
When the third round is fired – just like the second round – via the release bar, the segment (10), pressed by the chargeover (14) jumps on the driving cam (12) of the trigger (8) and interrupts the support of the sear (4) by the automatic fire pawl (11).

The auto sear (5) catches the hammer (3) (refer to illus. 67).

The advancing bolt drives the release bar (2) downward. The release bar (2) presses the auto sear (5) to the rear and releases the hammer (3) (refer to illus. 71).

The hammer is retained by the sear. When the trigger (8) is released the segment (10) moves back to its home position (refer to illus. 68).
4.2.5 Full auto fire

The safety lever (6) is set on “A”. The automatic fire pawl (11) which supports the sear (4) lies in the groove of the safety shaft (7). By pulling the trigger (8) the sear (4) is drawn to the rear and supported by the automatic fire pawl (11).

The hammer (3) is released and strikes forward (refer to illu. 66).

The recoiling bolt cocks the hammer (3) which is retained by the auto sear (5) (refer to illu. 67).

The advancing bolt presses on the release bar (2) which pushes the auto sear (5) to the rear thus releasing the hammer (3) (refer to illu. 71).

This trigger function is only interrupted when the trigger (8) is released. In doing so the link between the automatic fire pawl (11) and the sear (4) is disconnected. The sear (4) moves downward and catches the hammer (3).
Keep the muzzle pointed in a safe direction and your finger away from the trigger when cocking any firearm.

Never carry or leave unattended any firearm which is cocked and ready to fire! When cocked, it could fire from slight pressure on the trigger. An accidental discharge could easily result if you fall or drop the firearm, or if the firearm is struck or disturbed by someone or something.

Never fire any firearm with your finger, hand, face, or other part of your body over or adjacent to the ejection port, or in any position where you may be struck by reciprocating movement of the breech. Both the ejection of empty cartridge cases and the movement of the breech are part of the normal operating cycle of firearms, and pose no safety hazard to the shooter if the firearm is held in a normal grip and fired at arm’s length. Never allow other persons to stand beside you where they might be struck by an ejected cartridge case. The case is hot, and may be ejected with sufficient force to cause a burn, cut or injury to an unprotected eye. Make certain there is a clear, unobstructed path for safe ejection of the fired case. Remember, the case may bounce off a hard object nearby and strike you or someone else.

If, while shooting, your firearm develops a mechanical malfunction or binding, or “spits” powder/gas, or if a cartridge primer is punctured or a cartridge case is bulged or ruptured, or if the report on firing does not sound quite right, STOP SHOOTING IMMEDIATELY! It may be dangerous to continue. UNLOAD THE FIREARM — do NOT try “one more shot”. Take the firearm and the ammunition to a gunsmith for examination.

While shooting any firearm, an unfired cartridge or fired cartridge case may occasionally become jammed between the bolt and the barrel. Clear the jam as follows, WHILE KEEPING THE MUZZLE POINTED IN A SAFE DIRECTION: Remove the magazine, then pull back the bolt by way of the charging handle and lock it to the rear by pushing up the slide catch. The jammed cartridge or case now can be removed by shaking it out or picking it out.
**WARNING - FIRING**

The bolt automatically opens and shuts quickly while firing. Keep face and hands away from it. Hot brass and powder gas is ejected quickly and can burn you. The rifle should be fired from the right shoulder. Always wear shooting glasses and hearing protectors.

**BOLT OPENS FAST – HOT BRASS EJECTED**

---

**WARNING - HANDLING**

If dropped or struck with the safety “off,” the rifle may fire. Keep chamber empty unless actually firing! Keep safety in the “S” (SAFE) position unless actually firing!

**ANY GUN MAY FIRE IF DROPPED**
TO UNLOAD MAGAZINE AND RIFLE

5.0 Unloading

1. Ensure the safety lever is in the “S” (SAFE) position.

2. Ensure bolt is locked open (chamber visible);

3. Remove magazine by depressing the magazine catch; and

4. Verify the chamber is empty, both visually and physically.

Always make sure the muzzle is pointed in a safe direction!

Remember to clear the chamber after the magazine has been removed.

Never assume that any gun is unloaded until you have personally checked it, visually and physically!

After every shooting practice, make a final check to be certain the firearm is unloaded before leaving the range.
**WARNING - UNLOADING**

Removing cartridges from the magazine does not prevent the rifle from being fired! When there is a cartridge in the chamber and the safety lever is in the “F” (FIRE) position, the cartridge will discharge if the trigger is pulled. It is absolutely essential for the user to know how to completely unload the rifle.

“Completely” means emptying the magazine and removing a chambered cartridge. **The safety lever should always be in the “S” (SAFE) position when the rifle is being unloaded.**

**THE RIFLE WILL FIRE EVEN IF THE MAGAZINE IS EMPTY OR REMOVED**
TO EXTRACT AND EJECT A CHAMBERED CARTRIDGE

When the rifle is fired, the same gas pressure which drives the bullet forward also acts through the cartridge case to push the bolt to the rear. That action causes extraction and ejection of the fired case. But, when the bolt is operated by hand, there can be a failure to extract the cartridge from the chamber, or a failure to eject the cartridge clear of the rifle. These failures usually are the result of the bolt not being pulled rearward vigorously, coupled with an accumulation of firing residue in the chamber. From the foregoing it is clear that the gun user must:

1. Always visually check the chamber after opening the bolt to eject a chambered cartridge. If the bolt is not vigorously retracted when being operated by hand, the extracted cartridge can be “ejected” into the magazine area instead of outside the rifle. (Remember that the magazine should be removed prior to unloading the chamber.)

2. Thoroughly clean the chamber and the extractor as often as necessary to prevent accumulation of grease and dirt.

3. If an empty magazine is in the rifle when the bolt is being hand retracted to extract a cartridge, the cartridge may drop on top of the magazine. Then, when the bolt goes forward, the cartridge will be chambered again! Always remove the magazine before clearing the chamber, and visually ensure that no cartridges remain in the rifle.
TO CLEAR A MALFUNCTION ("JAM")

6.0 Procedures In Case Of Malfunction

Should the rifle fail to fire, perform the following actions:

- Cycle the bolt; and
- Continue firing.

If the rifle does not fire after cycling the bolt:

- Insert a fresh magazine;
- Cycle the bolt; and
- Continue firing.

If the rifle still does not fire:

- Put safety lever in the “S” (SAFE) position;
- Remove magazine;
- Lock the bolt to the rear;
- Ensure the chamber is clear of all ammunition and foreign matter (visual & physical check);
- Turn gas valve on Position 2 when weapon is heavily fouled;
- Insert fresh magazine;
- Release bolt; and
- Place safety lever in the “F” (FIRE) position, continue firing.
If the rifle still will not fire:
• Put safety lever in the “S” (SAFE) position;
• Unload per section 5.0;
• Clean weapon per section 9.1;
• Load; and
• Place safety lever on position “F” (FIRE), and continue firing.

If the rifle malfunction cannot be corrected, the rifle should be returned to SIG SAUER Inc. for evaluation by a factory trained technician.

In the case of a malfunction, the following steps must be followed:
• If the weapon cannot be unloaded immediately and there is any danger of self-ignition due to a hot barrel, wait at least 15 minutes before manipulating the weapon.
• The weapon must remain pointed in a safe direction as long as it is loaded.

**WARNING:** If your rifle stops firing with a live round in the chamber of a hot barrel (a misfire or jam), remove the round immediately. If you cannot remove the round within 10 seconds, remove the magazine and wait at least 15 minutes with the rifle pointing in a safe direction. This way, neither the user nor any other person would be injured by the possibility of a round “cooking-off” (a round detonating due to the heat of the barrel). Keep your face away from the ejection port while clearing a hot chamber.
WARNING: A cartridge fires when the firing pin impacts the primer, and also can be “discharged” before it is chambered if its primer receives a sharp blow. If a cartridge hangs up, jams, or binds when being chambered or when fed from the magazine into the chamber, do not attempt force it into the chamber by pushing or striking the charging handle. Any jam or feeding problem is a signal to immediately stop using the rifle until the issue can be determined. Most failures of a cartridge to feed or to chamber are caused by a damaged magazine, improper handling, or defective ammunition. Cartridge jams can result in the potentially dangerous situation of a cartridge discharging before it is chambered. If this occurs, the cartridge case will rupture and its fragments will fly out of the rifle with sufficient force to cause injury. Always wear shooting glasses and hearing protectors, and keep your face away from the chamber!

TO MINIMIZE MALFUNCTIONS (“JAMS”)

Malfunctions can largely be avoided by cleaning the rifle per section 9.1:
• After each firing session;
• When performance requires switching the gas valve to position 2;
• Whenever a buildup of firing residue is suspected; or
• Whenever the rifle is exposed to extreme environmental conditions (rain, snow, freezing temperatures, etc.).
TO DISASSEMBLE

7.0 Field Strip Disassembly

1. Unload rifle (see section 5.0) – visually and physically check to ensure the rifle is clear of all ammunition;

2. Ensure the bolt is forward;

3. Retract the takedown pin (rear pin) – this pin is captured and does not fully remove;

4. Remove the pivot pin (forward pin): unscrew the pivot pin screw (left side) and remove the pivot pin from the trigger casing;

5. Separate the trigger casing from the receiver;
6. Depress the charging handle catch and remove the charging handle;

7. Using the charging handle, push the bolt carrier assembly to the rear and remove it from the receiver;
8. Rotate the bolt head counterclockwise until the lug clears the cam and pull to remove it from the bolt carrier;

9. Pull lower hand guard or lower quad rail to the rear and down and remove;

10. Lift upper hand guard at the rear and pull away from gas block;
11. Depress the stop pin and hold. Rotate the gas valve to the left and pull forward to remove;

12. Push the operating rod assembly forward and remove from the gas tube;
13. Depress the stop pin and rotate the gas tube to the left ninety degrees (90°) until the gas tube notch faces the barrel;

14. Remove the gas tube from the gas block;
15. Remove the firing pin:

   a. Depress the firing pin by pressing the rear of the bolt head against a flat surface until flush and hold;

   b. Remove the firing pin stud using an aid (small punch, nail, or pencil) and SLOWLY raise the bolt head until tension is released on the firing pin spring; and

   c. Remove firing pin and firing pin spring from the bolt head.

**CAUTION:** The firing pin is under spring tension when installed in the bolt head. Use caution during removal to prevent injury to yourself and others. The use of eye protection is recommended.
7.1 Reassembly

The rifle should always be reassembled in the reverse order of disassembly:

1. Install the firing pin:
   a. Insert the firing pin and firing spring into the bolt head. The spring should be at the rear. Ensure that the notch on the firing pin is aligned with the firing pin stud.
   b. With one hand, place the bolt head (firing pin at the bottom) on a flat surface and depress the firing pin until the notch in the firing pin is aligned with the hole in the bolt shaft for the firing pin stud.
   c. With the other hand, insert the firing pin stud and release tension on the firing pin. Ensure the firing pin stud is centered.

2. Install the gas tube:
   a. Slide the gas tube (notch down) through the gas block and insert into the gas tube opening in the receiver.
   b. Press the gas tube against the gas block (compressing the stop pin) and rotate the gas tube to the right beyond ninety degrees (90°) until the stop pin locks into the gas tube notch.

3. Install the operating rod assembly:
   a. Insert the operating rod assembly into the gas tube. Ensure the end with the charging handle notch enters first, notch facing down.
   b. Push the operating rod in until fully seated. The operating rod should move freely through the gas tube.
4. Install the gas valve:
   a. Ensure the stop pin recesses on the back of the gas valve tab face the barrel.
   b. Insert the gas valve into the gas tube (the gas valve will seat over the operating rod).
   c. Depress the stop pin and rotate the gas valve to the right to Position 1.
   d. Release the stop pin. Check to ensure the gas valve indexes in Positions 1 and 2.

5. Install the upper hand guard:
   a. Insert the front into the gas block.
   b. Push the rear downward until seated.

6. Install the lower hand guard:
   a. Press the hand guard upward against the upper hand guard, ensuring the locking tabs are aligned with each other.
   b. Press the lower hand guard forward until the front is secured by the gas block and the pivot pin notch is aligned.

7. Assemble the bolt head and bolt carrier:
   a. Place the bolt carrier in your hand, upside down, cam to the front.
   b. With the notch facing up, slide the bolt head shaft fully into the bolt carrier.
   c. Rotate the bolt head to the left until the notch rests in the cam.
   d. Press forward on the firing pin until the bolt head is fully forward.
8. Install the bolt assembly into the receiver:
   a. Hold the receiver muzzle down.
   b. Holding the bolt carrier, align the left lug on the bolt head with the lug channel in the receiver.
   c. Ease the bolt assembly forward until the left and right receiver rails are riding in the rail channels on the bolt carrier.
   d. Release the bolt carrier — it should drop freely into the receiver until the bolt is fully locked.
   e. Depress the charging handle catch and insert the charging handle into the slot on the bolt carrier.
   f. Release the charging handle catch. Tug on the charging handle to ensure it is secured by the charging handle catch.
   g. Verify correct installation by pulling the bolt to the rear — it should be connected to the operating rod and move under the tension of the recoil spring.

9. Connect trigger casing assembly to receiver assembly:
   a. Mate the receiver and trigger casing together at the front takedown pin, ensuring the pivot pin holes overlap.
   b. Install the pivot pin from the right side and secure the pivot pin screw.
   c. Rotate the trigger casing until the rear takedown pin holes in the trigger casing assembly and receiver are aligned.
   d. Press the rear takedown pin in fully

10. Perform a function check in accordance with Section 7.2.
7.2 Function Check

Each time the weapon is stripped, verify its functions as follows:

Sequence of Procedure

1. Unload in accordance with section 5.0.

2. Remove magazine.

3. Ensure that charging handle is forward and bolt is closed.

4. Functions:
   
   a. With safety lever on “S” execute loading cycle, pull the trigger. • Hammer must not drop, the trigger must be blocked.
   
   b. With safety lever on “F”, pull the trigger and hold it back. • Hammer must drop.

   With the trigger held down, cycle the weapon once. • Hammer must not drop.

   Release the trigger and pull it again. • Hammer must drop.

   NOTE: Steps c, d and e apply only to Select-Fire rifles. For Semi-Auto proceed to Step 6.
For Select-Fire rifles only:

c. Cycle the action (for Select-Fire rifles)

d. Safety lever on “3”, pull the trigger and hold it back. • Hammer must drop.

With hammer held back, cycle the action (allow bolt to slide forward slowly). • Hammer must drop immediately as the bolt locks up.

Repeat the loading cycle. • On the third loading cycle, the hammer must not drop.

Release the trigger.

e. With safety lever on “A”, repeat procedure as under “3”. • Hammer must drop each time. f) Cycle the trigger several times to verify tension and movement of the pressure point spring.

WARNING: Visually and physically verify the magazine is empty before performing the next step.
6. Insert empty magazine, check that it is firmly seated.

7. Bolt catch
   a. Cycle action (charging handle to rear). • Bolt must be caught in its rear position.
   b. Release bolt catch. • Bolt must release and fully close.
   c. Pull the trigger, apply the safety lever.
MAGAZINE INSPECTION AND CARE

Inspect the magazine frequently. The magazine follower must move freely and have adequate spring tension so that each cartridge is quickly raised to the feeding position. The magazine lips should be clean and free of cracks, dents, or nicks, so that cartridges are held in their proper feeding position.

When cleaning is necessary, use a solvent that will not rust the metal components or adversely affect the magazine follower. After the magazine has been soaked in solvent to loosen foreign matter, be certain to shake it vigorously (with the loading opening away from you) to remove solvent or residue from within the magazine. **Penetrating oils and solvent inside a magazine can “kill” or weaken cartridge primers, which can result in failures to fire or other possibly dangerous malfunctions, such as leaving a bullet in the bore!**

After cleaning, always check to be certain that the magazine follower movement and spring tension are correct, and that no solvent or debris remain. **Improper reassembly of the magazine spring can cause a potentially dangerous malfunction. If cleaning does not restore proper tension, or if you experience a problem with the magazine, do not use it. Get a new one.**

**DAMAGED, NON-STANDARD, OR IMPROPERLY ASSEMBLED MAGAZINES SHOULD NOT BE USED. THEY CAN CAUSE THE RIFLE TO MALFUNCTION.**
CARE AND CLEANING

1. Your rifle is delivered factory packaged and preserved with a light coating of protective grease and oils. Before loading make certain that all packing grease and oil has been cleaned from the bore and exposed mechanism.

2. Before you begin to disassemble your firearm for cleaning, always double-check to make sure it is unloaded!

3. After cleaning always check to be sure that no cleaning patch or other obstruction remains in the bore or chamber!

4. For maintenance guidelines, see section 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. Use the locking device originally supplied with this firearm for storage. 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 & UNLOADED
SIGHTS

8.0 Sight Options

1. The SIG551-A1 rifle is equipped with accessory mounting rails that allow a wide variation of sighting systems to be utilized. The gas block provides a dovetail mount that allows installation of a fixed front sight (optional on certain models). This optional front sight can be combined with a fixed type rear sight designed for mounting on the receiver accessory rail.

2. Always follow the manufacturer’s instructions when mounting a sighting system.

3. ALWAYS ensure the rifle is unloaded and clear of ammunition when installing or removing a sighting system or other accessory.
## Troubleshooting Guide

<table>
<thead>
<tr>
<th>Malfunction</th>
<th>Cause</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No round fed into the chamber</td>
<td>Magazine not properly inserted or magazine is deformed or dirty</td>
<td>Insert magazine properly or change magazine</td>
</tr>
<tr>
<td>Bolt does not close easily or completely</td>
<td>Rifle or cartridge is fouled (dirty) or rifle is too heavily lubricated</td>
<td>Clean and lubricate rifle and/or replace the ammunition</td>
</tr>
<tr>
<td></td>
<td>Incorrect ammunition</td>
<td>Replace ammunition</td>
</tr>
<tr>
<td></td>
<td>Rifle requires service</td>
<td>Return to SIG SAUER</td>
</tr>
<tr>
<td><strong>Extraction/Ejection</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After firing, the case stays in the chamber or is jammed in the ejection port</td>
<td>Insufficient recoil due to dirt</td>
<td>Clean and lubricate the rifle</td>
</tr>
<tr>
<td></td>
<td>Light hold or limp wrist</td>
<td>Solid grip, rigid hold</td>
</tr>
<tr>
<td></td>
<td>Low-powered ammunition</td>
<td>Change ammunition</td>
</tr>
<tr>
<td></td>
<td>Rifle requires service</td>
<td>Return to SIG SAUER</td>
</tr>
<tr>
<td>Malfunction</td>
<td>Cause</td>
<td>Correction</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>---------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td><strong>Ignition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hammer drops but round does not fire</td>
<td>Firing pin obstructed</td>
<td>Inspect, clean and lubricate the rifle</td>
</tr>
<tr>
<td></td>
<td>Faulty ammunition</td>
<td>Manually cycle in next round</td>
</tr>
<tr>
<td></td>
<td>Rifle requires service</td>
<td>Return to SIG SAUER</td>
</tr>
</tbody>
</table>
MAINTENANCE

9.0 Maintenance

All firearms require periodic maintenance and inspection which may reveal a need for adjustment or repair. Have your firearm checked by a competent gunsmith annually even if it seems to be working well, since breakage, improper functioning or corrosion of some components may not be apparent from external examination. **If you notice any mechanical malfunction, DO NOT continue to use the firearm. UNLOAD the firearm and take it to a competent gunsmith immediately for a thorough examination.** Similarly, if water, sand, or other foreign matter enters the internal mechanism, immediately dismantle the firearm for a complete and thorough cleaning. **Failure to keep your firearm clean and in proper working order can lead to a potentially dangerous condition and an accident causing serious bodily injury or property damage may result.**
9.1 Cleaning

The SIG551-A1 rifle must be cleaned after each shooting session or whenever performance is suspect. Clean the rifle as follows:

1. Unload the weapon per Section 5.0;

2. Field strip the weapon per Section 7.0;

3. Clean the barrel and chamber from the rear;

4. Clean other parts of the rifle, using care to remove carbon and firing residue. Pay particular attention to the operating rod, gas valve, and chamber areas;

5. Lightly lubricate areas of metal contact with a high quality firearms lubricant or grease, paying particular attention to the bolt/bolt carrier, receiver rails, operating rod, and gas valve;

6. Apply a light coating of high quality firearms lubricant or grease to exposed metal surfaces to enhance corrosion protection;

7. Reassemble the rifle per section 7.1; and

8. Perform a function check in accordance with section 7.2.
SERVICE AND PARTS POLICY

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 gunsmith is totally beyond our control.

Should your firearm ever require service, we strongly recommend that you return it to SIG SAUER Inc. (see page 53). 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. CANNOT BE RESPONSIBLE FOR THE FUNCTIONING OF ANY FIREARM IN WHICH REPLACEMENT PARTS ARE INSTALLED BY OTHERS.
WARNING - PARTS PURCHASE:

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 rifle after such installation.

PARTS MUST FIT CORRECTLY
Service Policy

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

SIG SAUER Inc.
Attention: Customer Service
72 Pease Boulevard, Newington, NH 03801
Phone: (603) 610-3000 ext. 3
Fax: (603) 766-7002

IF YOU DO NOT UNDERSTAND THE INSTRUCTIONS FOR OPERATING YOUR RIFLE, IT IS YOUR RESPONSIBILITY TO CALL OUR CUSTOMER SERVICE DEPARTMENT AT (603) 610-3000 EXT. 3 BEFORE USING YOUR RIFLE.

Shipping Firearms for Repair

Returning Your Firearm For Service In the event you need to return your rifle to the SIG SAUER Service Department, here’s what to do:

1. The first step is to contact Customer Service at (603) 610-3000 ext. 3 for an 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. Make sure 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 which 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 you want performed. With the exception of extra magazines, do not include scopes, mounts, or other accessories.

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 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

This instruction manual should always accompany this rifle and be transferred with it upon change of ownership.

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

In the event you want to order parts for your SIG551-A1 rifle, contact Customer Service at (603) 610-3000 ext. 3.

Have available the serial number of your rifle and the part diagram number for the part(s) you wish to order. A parts list and diagram of the rifle is provided in sections 10.0 and 10.1.

Please refer to the Service & Parts Policy on pages 86-89.
### 10.0 Technical Specifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Caliber</td>
<td>5.56mm NATO (.223 Remington)</td>
<td></td>
<td></td>
<td>5.56 x 45mm NATO</td>
</tr>
<tr>
<td>Action Type</td>
<td></td>
<td>Select Fire (Single, 3rd Burst, Auto)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate of Fire</td>
<td></td>
<td></td>
<td>625-775 RMP 650-800 RPM</td>
<td></td>
</tr>
<tr>
<td>Overall Length</td>
<td>37.0”</td>
<td>37.2”</td>
<td>30.5”</td>
<td>31.4”</td>
</tr>
<tr>
<td>Length with Stock Folded</td>
<td>27.2”</td>
<td>20.1”</td>
<td>21.6”</td>
<td></td>
</tr>
<tr>
<td>Barrel Length</td>
<td>16”</td>
<td>16.3”</td>
<td>10”</td>
<td>10”</td>
</tr>
<tr>
<td>Rifling</td>
<td></td>
<td>1 in 7”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight w/o Mag</td>
<td>7.8 lbs</td>
<td>8.5 lbs</td>
<td>6.9 lbs</td>
<td>7.4 lbs</td>
</tr>
<tr>
<td>Operating System</td>
<td></td>
<td>Full Length Gas Piston, Rotating Bolt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mag Type &amp; Capacity</td>
<td></td>
<td>Uses Original Swiss 550 Series transparent magazines</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All specifications are approximate and will vary with configuration. Specifications subject to change without notice.
# 10.1 SIG551-A1 Parts List

**Upper Receiver Group**
- 111 Receiver assembly
- 112 Accessory rail
- 113 Accessory rail fastener
- 114 Bolt cover
- 115 Bolt cover rivet
- 211 Barrel
- 212 Flash suppressor
- 213 Crush washer
- 214 Gas block
- 215 Roll pin 4x28mm
- 216 Stop pin
- 217 Compression spring
- 218 Roll pin 2x6mm
- 219 Gas valve
- 220 Gas tube
- 221 Operating rod
- 222 Recoil spring
- 223 Spring pin 2.5x12mm
- 224 Support washer
- 225 Dovetail block
- 311 Upper handguard
- 312 Lower handguard

**400 Bolt Group**
- 401 Bolt head
- 402 Firing pin
- 403 Firing pin stud
- 404 Firing pin spring
- 405 Extractor
- 406 Extractor spring
- 407 Pin
- 408 Bolt carrier
- 409 Charging handle catch
- 410 Charging handle catch pin
- 411 Charging handle catch spring
- 412 Charging handle

**Lower Receiver Group**
- 413 Trigger casing, semi hinged
- 414 Hammer pivot pin
- 415 Hammer spring
- 416 Trigger pivot pin
- 417 Trigger bushing
- 418 Trigger assembly
- 419 Trigger spring
- 420 Sear
- 421 Safety shaft
- 422 Safety detent spring
- 423 Safety lever
- 424 Slotted spring pin
- 425 Buffer plate
- 426 Trigger casing plug
- 427 Mag catch assembly
- 428 Mag catch button
- 429 Mag catch spring
- 430 Bolt catch pin
- 431 Bolt catch spring
- 432 Pressure point screw
- 433 Bushing, pressure point screw
- 434 Front take down pin
- 435 Rear take down pin
- 436 Take down pin plunger
- 437 Take down plunger spring
- 438 Trigger guard assembly

**Magazine Group**
- 701 Magazine, 30 rd
### 10.2 SIG551-A1 Select Fire Parts List

#### Upper Receiver Group
- **111** Receiver assembly
- **112** Accessory rail
- **113** Accessory rail fastener
- **114** Bolt cover
- **115** Bolt cover rivet
- **211** Barrel
- **212** Flash suppressor
- **213** Crush washer
- **214** Gas block
- **215** Roll pin 4x28mm
- **216** Stop pin
- **217** Compression spring
- **218** Roll pin 2x6mm
- **219** Gas valve
- **220** Gas tube
- **221** Operating rod
- **222** Recoil spring
- **223** Spring pin 2.5x12mm
- **224** Support washer
- **225** Dovetail block
- **311** Upper handguard
- **312** Lower handguard
- **411** Bolt head
- **412** Firing pin
- **413** Firing pin stud
- **414** Firing pin spring
- **415** Extractor
- **416** Extractor spring
- **417** Pin
- **418** Bolt carrier
- **419** Charging handle catch
- **420** Charging handle catch pin
- **421** Charging handle catch spring
- **422** Charging handle

#### Lower Receiver Group
- **1** Trigger casing, Auto, Hinged
- **2** Pistol grip assembly
- **3** Mag catch assembly
- **5** Pistol grip bolt
- **6** Pistol grip nut
- **7** Stop nut
- **8** Bushing pressure point screw
- **9** Trigger guard assembly
- **10** Slotted spring pin
- **11** Hinge pin
- **12** Trigger
- **13** Pressure point screw
- **14** Hammer auto
- **15** Hammer pivot pin
- **16** Hammer spring auto
- **17** Trigger bushing
- **18** Trigger pivot pin
- **19** Safety lever
- **20** Safety shaft auto
- **21** Safety detent spring
- **22** Slotted spring pin
- **23** Trigger spring
- **24** Sear
- **25** Take down plunger spring
- **26** Front take down pin
- **27** Rear take down pin
- **28** Take down pin plunger
- **29** Bolt catch, mim
- **30** Bolt catch spring
- **31** Bolt catch pin
- **32** Stock latch pin
- **33** Buttstock assembly, adj/fld
- **34** Hinge disc spring
- **35** Mag catch button
- **36** Mag catch spring
- **37** Sear spring
- **38** Stock latch
- **39** Pressure point spring
- **40** Latch spring
- **41** Sling attachment, single
- **42** Screw, single sling attachment
- **43** Release bar stud
- **44** 3-round burst facility
- **45** Retaining ring
- **46** Partition plate
- **47** Sear, auto assembly
- **48** Fire pawl assembly, auto
- **49** Release bar assembly
- **50** Fire pawl assembly spring
- **51** Retaining ring
THE BASIC RULES OF SAFE FIREARMS HANDLING

1. ALWAYS treat every gun 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 gun.
5. ALWAYS wear ear protection and safety glasses when shooting.
6. ALWAYS carry your gun 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 an unattended gun loaded. Guns and ammunition should be stored separately, locked if possible, beyond the reach of children, careless adults, and unauthorized users.
9. NEVER allow your firearm to be used by anyone who has not read and understood this operator’s manual.
10. DO NOT point any gun, loaded or unloaded, at any undesired target.
11. NEVER fire your rifle near an animal unless it is trained to accept the noise: an animal’s startled reaction could injure it or cause an accident.
12. NEVER drink alcoholic beverages or take drugs before or during shooting, as your vision and judgment could be seriously impaired, making your gun handling unsafe.
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 firearms at SIG SAUER’s option); provided, however, that the firearm is returned unloaded and freight prepaid to SIG SAUER at 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. No implied warranties of any kind are made herein and this warranty does not apply to any accessory items attached or appurtenant to the firearm. In no event shall SIG SAUER be liable for any incidental or consequential damages arising from or in connection with this limited warranty.