



## **WARNING**

Before using your DAVINCI Rifle,  
Read the instruction and warning in this  
Manual carefully

## **WARNING**

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## **Individual State Warnings**

**DAVINCI MACHINING** sells its products in accordance with federal, state, and local laws. Accordingly, and by law, certain states require specified warning notices, which **DAVINCI MACHINING** has included below. Because firearms laws frequently change, **DAVINCI MACHINING** recommends that you inquire with local law enforcement regarding additional laws and regulations that may be applicable to the storage or use of this rifle.

**ALABAMA:** “NO PERSON SHALL DELIVER A RIFLE TO ANY PERSON UNDER THE AGE OF 18 OR TO ONE WHO HE HAS REASONABLE CAUSE TO BELIEVE HAS BEEN CONVICTED OF A CRIME OF VIOLENCE OR IS A DRUG ADDICT, A HABITUAL DRUNKARD, OR OF UNSOUND MIND.”

**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 ARMAS 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 ESTÉ 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 A 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 FIREARM 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 UNSUPER- VISED MINOR WOULD BE ABLE TO GAIN ACCESS TO THE FIRE- ARM, 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 CARE- LESS, ANGRY, OR THREATENING MANNER; (3) CAUSES PERSON- AL 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.”

### **General Disclaimer**

**SAFETY AND SECURITY ARE YOUR  
RESPONSIBILITY!!!**

THE SAFETY WARNINGS IN THIS MANUAL ARE OF THE UTMOST IMPORTANCE BECAUSE USING A FIREARM IS AN INHERENTLY DANGEROUS ACTIVITY. THE USER MUST SHOW A GRAVE CONCERN FOR SAFETY AND HEED THE WARNINGS, PROCESSES, AND PROCEDURES OUTLINED IN THIS MANUAL IN ORDER TO PREVENT DESTRUCTION OF PROPERTY, SERIOUS BODILY

INJURY, DEATH, OR OTHER UNFORSEEN DAMAGES.

BY PURCHASING, RECEIVING, FINDING, OR USING THIS FIRE- ARM, IT IS UNDERSTOOD THAT UNDER NO CIRCUMSTANCE AND IN NO MANNER WHATSOEVER SHALL DAVINCI MACHINING BE HELD RESPONSIBLE NOR LIABLE FOR DAMAGES RESULTING FROM THE FUNCTIONING OR MALFUNCTIONING OF THE FIREARM. DAVINCI MACHINING FURTHER DISCLAIMS RESPONSIBILITY AND LIABILITY FROM DAMAGES RESULTING IN WHOLE OR IN PART FROM NEGLIGENCE; IMPROPER OR CARELESS HANDLING; CRIMINAL, NEGLIGENT, OR ACCIDENTAL DISCHARGE; UNAUTHORIZED MODIFICATIONS; IMPROPER, RELOADED, OR HAND-LOADED AMMUNITION; RUST OR CORROSION; OR ANY OTHER INFLUENCES OUTSIDE OF THE CONTROL OF DAVINCI MACHINING.

THIS LIMITATION APPLIES REGARDLESS TO THE BASIS OF ANY LIABILITY ASSERTED, TO INCLUDE ANY FAILURE TO WARN. UNDER NO CIRCUMSTANCE SHALL DAVINCI MACHINING BE HELD LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, SUCH AS COMMERCIAL LOSS, LOSS OF EARNINGS OR PROFITS, OR LOSS OF THE USE OF PROPERTY.

**SAFETY AND SECURITY ARE YOUR RESPONSIBILITY!!!**

### **Basic Rifle Safety Rules**

**SAFETY IS YOUR RESPONSIBILITY. ALWAYS TREAT YOUR RIFLE AS IF IT IS LOADED AND READY TO FIRE!!!**

**The National Rifle Association (NRA), the Nation's premier resource for firearms safety and standards, provides Three Fundamental Rules of Safe Firearms Handling:**

1. Always keep the rifle pointed in a safe direction.
2. Always keep the rifle unloaded until ready to use.

3. Always keep the finger off the trigger until ready to  
Shoot.

**The NRA provides additional guidance:**

1. Know your target and what is beyond.
2. Know how to use your rifle safely.
3. Be sure the rifle is safe to operate
4. Use only the correct and recommended factory-new ammunition for your rifle
5. Always wear eye and ear protection
6. Never use alcohol, over the counter, nor prescription drugs before or while shooting

**DAVINCI MACHINING adds:**

1. Always follow the law
2. Always shoot with adequate ventilation
3. Never cross obstacles with a loaded rifle
4. Never rely on mechanical features alone for the safe use of your rifle
5. Never shoot at flat surfaces or water
6. Never leave an unattended rifle loaded
7. Never allow your rifle to be used by someone who is not familiar with its operation or this manual, and the safety rules contained herein
8. Before cleaning your rifle, make absolutely sure that it is unloaded
9. Never disassemble your firearm beyond the field-stripping procedures outlined in this manual
10. Never allow any alteration or replacement of parts in your rifle unless performed by a qualified gunsmith using genuine DAVINCI MACHINING parts

## **Safe Storage and Transportation**

**When not in use, your rifle should be kept unloaded and secure!**

**WARNING: A RIFLE THAT IS IMPROPERLY STORED IS INHERENTLY DANGEROUS AND CAN LEAD TO A DISASTROUS OUTCOME, TO INCLUDE PROPERTY DAMAGE, SERIOUS BODILY INJURY, AND DEATH. FOR YOUR SAFETY AND THE SECURITY OF OTHERS, IT IS IMPERATIVE THAT YOU KEEP YOUR RIFLE UNLOADED AND LOCKED IN A SECURE PLACE, WITH AMMUNITION STORED IN A SEPARATE AND LOCKED CONTAINER. YOUR FAILURE TO FOLLOW THESE RULES CAN ALSO RESULT IN CRIMINAL AND CIVIL PENALTIES.**

1. Always use a lock to secure your rifle and ensure it is rendered inaccessible to unauthorized users.  
\*\*Remember: Never load a locked firearm, and never lock a loaded firearm
2. Always store your rifle and ammunition separately, in locked containers, inaccessible to unauthorized persons
3. A "Hiding Place" is not a secure storage method.
4. Never transport a loaded firearm
5. Follow the law.

**Remember: YOU are RESPONSIBLE for YOUR rifle's safety and security at all times.**

## **Ammunition**

**WARNING: DEATH, SERIOUS PERSONAL INJURY, AND PROPER- TY DAMAGE CAN RESULT FROM THE USE OF IMPROPER AMMUNITION. IT IS YOUR RESPONSIBILITY TO ENSURE THAT THE AMMUNITION YOU CHOOSE TO UTILIZE IS OF THE APPROPRIATE CALIBER AND SAFE TO FIRE. DAVINCI MACHINING SPECIFICALLY DISCLAIMS ANY LIABILITY ARISING IN PART OR IN WHOLE FROM THE USE OF IMPROPER, HAND-LOADED, RELOADED, OR DEFEC- TIVE AMMUNITION.**

1. Use only the correct type or caliber of ammunition designated on the rifle's barrel.
2. Use only high-quality, original, factory-manufactured ammunition that is loaded to the specifications prescribed by the Sporting Arms and Ammunition Manufacturer's Institute (SAAMI)
3. Never use reloaded or hand loaded ammunition, or even new ammunition that has not been professionally manufactured by a federally licensed ammunition manufacturer.
4. Never use ammunition of undefined pressure; doing so will void the warranty and may result in the premature wear or catastrophic failure of your rifle.
5. Always inspect your ammunition for appropriate caliber, condition, and specification prior to placing your ammunition and rifle into service

Note: Characteristics of ammunition performance vary from manufacturer to manufacturer, and some brands may lead to difficulty in extracting spent cases from the chamber and chambering a round from the magazine. If feeding problems occur change magazine and ammo.

### **WARNINGS**

**FIRST: To avoid accidental firing, ALWAYS BE SURE THE FIREARM IS UNLOADED. Failure to do so could result in serious injury or death.**

ALWAYS keep the muzzle pointed in a safe direction.

ALWAYS know what is between you and your target and beyond your target.

Never fire unless you know exactly where your shot is going, and what it will strike.

Make sure the target has a safe backstop, such as a hillside or sand. Bullets can ricochet off any surface, including water.

Do not fire into the sky.

You are responsible for your firearm at all times.

Safely store and secure your firearm and ammunition separately.

Store your firearm and ammunition so that they are not accessible to children or unauthorized persons.

Evaluate your personal situation to be sure children and unauthorized persons cannot access your firearm.

You must protect yourself and others against injury or death from misuse of a firearm.

Always wear appropriate eye and ear protection while shooting and cleaning a firearm. Be sure others in the vicinity have protection as well. Never use drugs or alcohol before or during use of firearm.

Never use your firearm if you are taking any medication which impairs, even slightly, your mental or physical ability.

### **CHECK YOUR FIREARM**

Verify the barrel is clear of obstructions before loading and firing.

Completely unload the firearm and check the barrel for any obstructions or debris. Never let water, snow, mud, or other materials enter the barrel. Excess lubricants or grease can dangerously increase pressure and may cause barrel to burst when firing. If the barrel is obstructed, remove ammunition, and clean the barrel immediately.

Every firearm is designed to use a certain gauge or caliber of ammunition. Never use the wrong ammunition, non-standard, or "hand-loaded" ammunition, which has not been subjected to internal ballistic pressure testing. Always read and follow the instructions on the ammunition box.

Obey all laws regarding the storage, security, transportation, and carrying of firearms. You must be familiar with all local, state, and federal laws regarding the safe use, storage, and transportation of your firearm. Your local police department can answer any questions you may have regarding the legal use, storing and transporting of your firearm.

Discharging firearms in poorly ventilated areas, cleaning the firearm, and the handling of ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm, cancer, and other physical injury. Wash hands thoroughly after exposure.

Read the warnings and labels on all ammunition and cleaning products carefully.

If your firearm fails to fire when the trigger is pulled, handle it with care. Keep the firearm pointed in a safe direction. Keeping your face away from the breach, put the safety on. Unload your firearm and dispose of the ammunition safely.

### **Never alter or modify your firearm.**

Never disassemble your firearm beyond what is outlined in this manual. Improper manipulation of any internal components and / or improper disassembly or reassembly may be dangerous and may lead to serious injury or death.

Do not try to change your firearm's trigger pull, alterations might cause accidental firing. Only a qualified gunsmith should service, repair, or modify your firearm in any way.

Be sure all accessories are compatible with your firearm. Accessories must not interfere with the safe operation of your firearm.

Never allow your firearm to be used by an individual who does not understand its safe operation or has not read these firearm safety guidelines. The safe use of your firearm is your personal responsibility. You, the owner, are the most important safety device when it

comes to the use of your firearm.

## **AMMUNITION**

Use only high quality, commercial ammunition that has been kept clean and dry, and is in good condition. We do not recommend the use of remanufactured or hand-loaded ammunition due to the risk of improper loading, which can damage the rifle and injure you or others. Use of improper ammunition will void your warranty.

Avoid shooting cartridges loaded with bi-metal bullets as they can prematurely wear the rifling of the barrel. If steel cased ammunition is used, the frequency of thorough chamber cleaning must increase to prevent the buildup of carbon and debris in the chamber.

## **RESPONSIBILITY**

You, the owner, are the most important safety device when it comes to the use of your firearm.

Under no circumstances will Davinci Machining be responsible for any injury, death or property damage that results from:

- A disregard of the safety guidelines and warnings
- The criminal or negligent use of the firearm
- Improper or careless handling of the firearm
- Improper or negligent modifications or repairs to the firearm
- The use of non-standard, defective, improper, or reloaded ammunition

If you do not understand any part of this manual or are unsure about

the operation of your firearm, please contact Davini Machining before proceeding.

## **LOCATION OF COMPONENTS**



- A. Compensator
- B. Hand Guard/Rail
- C. Upper Receiver w. Picatinny Rail
- D. Charging Handle
- E. Butt Stock
- F. Safety Selector
- G. Grip
- H. Trigger
- I. Trigger Guard
- J. Magazine Well/ Adapter
- K. Lower Receiver
- L. Bolt Release (Left Side)
- M. Magazine Release

## BASIC RIFLE COMPONENTS

**A. Buffer System**



**B. Lower**

**C. Upper**



**D. Rail**



**E. Bolt (Ambidextrous Rear Charging Handle option)**



**BASIC RIFLE COMPONENTS**

**F. Bolt (Ambidextrous Side Charging option)**



**G. Charging Handle**



**H. Butt Stock/ Buffer Tube**



### **LOCATION OF SERIAL NUMBER**

The serial number is located on the left side above the fire control group pins. Please record this number and keep it in a secure place.



SERIAL NUMBER: \_\_\_\_\_

## UNLOADING THE FIREARM

Perform this operation prior to performing any cleaning or maintenance on the firearm.

1. Place the safety selector lever on SAFE.



2. Hold the grip of the firearm while keeping your finger off the trigger. Press the magazine release button and pull the magazine down to remove.



3. Observe that the chamber is clear



Unlock and pull the charging handle all the way out and press in on the lower portion of the bolt catch. Release charging handle. This locks the bolt in the open position.



Look into the receiver through the ejection port and verify that there are no cartridges in the chamber.



## DISASSEMBLY FOR CLEANING

Verify that the firearm is not loaded. See "Unloading Firearm" on pg.

Once the firearm has been unloaded, push the bolt catch lever and allow the bolt carrier to move forward.



Push in the takedown pin (A), located above and to the rear of the safety lever on the left hand side of the lower receiver.



You may then pull the pin from the right side of the receiver until it stops (it will not pull out). Grasp the rear of the upper receiver and pull up, allowing it to pivot on the front pin. This will expose the fire control group.



Unlatch the charging handle and pull it back. This will extract the bolt carrier group.



## **BOLT CARRIER GROUP**



## **BOLT CARRIER GROUP DISASSEMBLY**



- A. Carrier Body**
- B. 3/32" Hex Extractor Retaining Pin**
- C. Firing Pin Spring**
- D. Firing Pin Retaining Pin**
- E. Firing Pin**

### **IMPORTANT INFORMATION:**

- a. For Side Charging Carrier Assembly option, the side charging handle must be removed with a 3/16 Hex head wrench prior to removal. The charging handle features a 3/16 Hex head bolt that is removable.**
- b. The firing pin is under spring pressure, before removing the firing pin retaining pin, please ensure that the firing pin is pressed inward to prevent loss of parts.**

## **CLEANING**

Before any cleaning or disassembly, always make sure the rifle is unloaded. See "Unloading the Firearm" on page 8 of this manual.

**WARNING.** Risk of serious injury or death. Always point the firearm in a safe direction. **NOTICE:** Some cleaning solutions and solvents may damage your firearm. Use a cleaning solution that is designed for use on firearms. **NOTICE:** Do not allow cleaning rods to scratch the inside of the barrel or chamber. Commercial firearm cleaning kits are available from your local firearms retailer. Follow the instructions included with the cleaning kit. Clean the firearm before the first use to remove excess oil.

### **CLEANING THE BARREL**

Remove the magazine and verify that the firearm is not loaded, and safety is on **SAFE**. Clean the barrel with a cotton patch attached to a cleaning rod. Moisten the patch with cleaning solution. Repeat with clean patches until patch stays clean. Apply cleaning solvent to a bronze bore brush to help loosen particles inside the barrel. After cleaning, run a dry patch through the barrel and then follow with a lightly oiled patch. We do not recommend solvents that remove copper from the barrel unless you notice after several thousand rounds your shot groups are opening. Leaving copper in the barrel will increase accuracy.

### **CLEANING THE CHAMBER**

Remove the magazine and verify that the firearm is not loaded and safety is on **SAFE**. Clean the chamber with a chamber cleaning brush, and a bore solvent or CLP. Move the brush through the chamber several times to scrub the inside of the chamber. Use a clean patch to wipe the chamber after cleaning. Repeat with clean patches until patch stays clean. After cleaning, run a dry patch through the chamber. Do not oil the chamber.

### **CLEANING THE BOLT CARRIER GROUP**

Remove the magazine and verify that the firearm is not loaded and safety is on **SAFE**. Disassemble the bolt carrier assembly. Clean with CLP or a suitable solvent. Be sure to remove excess oil from the bolt assembly before reassembly. Do not lubricate the inside of the carrier. Lubricate the exterior of carrier only if operating in non-dry conditions. See Page 13 that illustrates the BCG disassembly process.

### **CLEANING THE EXTERIOR**

Remove the magazine and verify that the firearm is not loaded, and safety is on SAFE. Wipe all metal surfaces with a clean cloth and then follow up with a lightly oiled cloth.

## LOADING & USE

If this firearm is carelessly or improperly handled, unintentional discharge may result and could cause injury, death, or damage to property.

Place selector on SAFE and make sure rifle is pointed in a safe direction.



Insert loaded magazine into the magazine well.



Give a slight push to the body of the magazine to ensure it is securely seated. NOTE: The magazine can be inserted with the bolt open or closed.

If the bolt is open, press the top of the bolt release button to close the bolt and chamber a cartridge. If the bolt is closed, pull

the charging handle completely to the rear and let it go. Do not allow your hand to "ride" the charging handle, as this may cause mis-feeding of rounds from the magazine into the chamber.



Face the target, shoulder the rifle and aim. With your finger off the trigger, move the selector lever from SAFE to FIRE.



With your target in sight, place your finger on the trigger and

squeeze.



If you are done engaging the target, immediately move the safety selector from FIRE to SAFE.



**When you have finished shooting, immediately unload the firearm before transporting to another location.**

To unload the firearm, depress the magazine release button and pull the magazine down to remove.



Unlock and pull the charging handle all the way out and press in on the lower portion of the bolt catch to engage the bolt face. Release the charging handle. This locks the bolt in the open position.



Look into the receiver and verify that there are no cartridges in the chamber.



## **PRINCIPLES OF OPERATION**

NOTE: Magazine may be inserted into the rifle with bolt assembly open or closed.

1. Place selector on SAFE and make sure rifle is pointed in a safe direction.
2. Insert loaded magazine into the magazine well and chamber a cartridge by releasing the bolt-catch or using the charging handle.
3. Face the target, shoulder the rifle and aim. With your finger off the trigger, move the selector lever from SAFE to FIRE.
4. With your target in sight, place your finger on the trigger and squeeze.

5. Squeezing the trigger hammer, which engages the firing pin and allows it to impact the primer on the cartridge.

6. The primer ignites the propellant in the cartridge.

7. The bullet moves forward out of the crimp and into the land of the rifling while waiting for the rest

7. Gas from the burning propellant pushes the projectile along the barrel of the rifle.

8. The rifling in the barrel causes the projectile to rotate, which provides stability during flight to the target.

9. When the gas pressure becomes higher than the strength of the recoil spring, the carrier will begin to move to the rear.

10. The rearward moving bolt carrier re-cocks the hammer, and compresses the recoil spring.

11. During the rearward movement the case will strike the fixed ejector and exit the upper receiver.

11. The compressed spring then pushes the bolt back towards the barrel as the bolt carrier assembly moves forward, the bottom of the assembly strips a fresh cartridge from the magazine and pushes it into the chamber.

## **TROUBLESHOOTING**

If a cartridge jams or hangs up while moving into the chamber, do not attempt to force the cartridge into the chamber.

If your firearm misfires or jams:

1. Remove your finger from the trigger area and rotate the safety selector to SAFE while keeping the muzzle pointed in a safe direction for 15 seconds.

2. Press the magazine release button and pull the magazine down to

remove.

3. Unlock and pull the charging handle all the way out and press in on the lower portion of the bolt catch to engage the bolt face. Release the charging handle. This locks the bolt in the open position.

4. Look into the receiver and verify that there are no cartridges in the chamber. **DO NOT LOOK DOWN THE MUZZLE END OF THE BARREL.**

5. If you cannot physically pull the charging handle to the rear or a cartridge is visible in the chamber and cannot be removed, safely store the firearm and take it to a qualified gunsmith for inspection. In either condition described, the firearm is loaded and must be handled as such.

## **Suggestions and Tips**

### **Break In period:**

The recommended break-in period is 600 rds. During this Davinici Machining recommends to not change the buffer system or clean the firearm. , just lubricate. Lubricate the BCG bearing surfaces and buffer systems, this includes the Scheel Manufacturing Buffer system.

### **Compensator Maintenance:**

Anti spatter spray (welders spray), heavy silicone spray, case lube spray or any heavy-duty spray lubricant is recommended to use every time you run not less than 24 rds. Rule of thumb is after every stage. Soak inside comp ports. Keep a small fabric or paper towel in the side so you can place between handguard and comp while spraying and wipe off excess from the outside when done. It will help with a slower build up of crust inside

ports and easier cleanup. Off course is also recommended to apply generously before and during break in time.

### **Lubrication:**

Good quality oil is important, but Davinci Machining has found that synthetic ones, such as Gun Butter, work best, however you can use any other of your preference.

### **Breakages:**

The most frequent failure of any PCC is the firing pin. It is recommended to keep a spare firing pin to ensure your day is not ruined. Conduct frequent inspections to ensure the firing pin contacts the primer. A worn firing pin will cause light strikes and failure to fire. Firing pins normally do not break, however gun configuration and combination with ammo and buffer weight may increase chances of breakage.

### **Side Charging BCG**

Our BCG features two firing pin retaining pin recesses unlike other brands.

### **Right Hand Shooters**

The Side Charging Knob will be located on the left hand side of the upper receiver. The firing pin retaining pin must be located opposite of the charging knob

### **Left-Handed Shooters**

The Side Charging Knob will be located on the right-hand side of the upper receiver. The firing pin retaining pin must be located on the left-hand side of the BCG.

### **Side Charging Knob Construction**

Charging Knob has 2 pieces, 1 fastener 1/4x28x1 and 1 aluminum shroud which works like a crush washer and

profiled for easy grip. The threaded hole in the BCG does not go all the way through, so do not overtighten or damage will occur.

We recommend RED Loctite by applied to the Charging Knob fastener after removal of the BCG. Apply one drop in threaded area every time you must reinstall the BCG. We recommend the fastener be snug but not overtight. A flame is not required for removal as it only grabs 5-6 treads and hand force will be enough to loosen it.

A loose Charging Knob could break the fastener prematurely and potentially damage the BCG thread.

### **Ammo Recommendations:**

Davinci Machining recommends the following data:

Round nose COAL (Combined Overall Length) = 1.125"  
Max

Truncated cone COAL = 1.095 Max.

Power factor in the 132-138 Range depending of preference.

Keeping 1000 to 1100 fps in 124-125 grain bullets.

### **Powder Recommendations:**

Davinci Machining recommends:

Ramshot Competition

Alliant E3

BE86

Sport Pistol

Vihtavuori 320-330

Shooters World Clean Shot

Davinci Machining DOES NOT RECOMMEND:

Tite Group

A7

Vectan BA 7 ½

Ammo loaded with powders can cause malfunctions, trigger reset issues, and premature compensatory fowling. Davinci Machining does not recommend these powders do to burn rate, melting of FMJ projectiles, increase of receiver fowling, and unburnt powder falling into the trigger area.

## CONTACT US

**Customer Service and Technical Support**      727-525-0070

Located At  
[www.davincimachining.com](http://www.davincimachining.com)

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Pinellas Park, FL

33781

Find us on



**DavinciMachining**



**DavinciMachining**



**Davincimachining826**



**Davinci-machining**

**NOTE:**

This manual must accompany this firearm and be  
transferred  
with it upon change of ownership or when presented to

