

INSTRUCTIONAL MANUAL FOR **D & L SPORTS, INC. AR-SEMI AUTO STYLE CARBINES AND RIFLES**



This manual should always accompany this firearm and be transferred with it upon change of possession. Please read and understand this owner's manual and all safety rules before handling, manipulating, loading, and/or firing your D & L Sports, Inc. firearm. It is vital to your safety and to the safety of others that you accurately follow the information contained in this manual, as well as the information supplied by reputable ammunition manufacturers. If you have any questions, please contact D & L Sports, Inc. Keep your firearms and ammunition secured separately, and out of the reach of children and other unauthorized personnel.

OVERVIEW OF THE D & L SPORTS, INC. AR STYLE FIREARM

CAUTION: PRIOR TO USING YOUR D & L SPORTS, INC. FIREARM, READ AND UNDERSTAND THESE INSTRUCTIONS THOROUGHLY AND COMPLETELY. IF THERE IS ANYTHING THAT YOU DO NOT UNDERSTAND, CONTACT D & L SPORTS FOR FURTHER INFORMATION.

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Congratulations! You have just acquired a premium grade AR style firearm. Your new D & L Sports, Inc. firearm has been handcrafted by D & L Sports, Inc. Years of development, research and testing have all been factored into the features and reliable operation of this firearm. This instruction manual has been provided to give you an overview of the operation and maintenance of the firearm for safe and proper use. Following these instructions will help ensure the firearm performs properly for years to come. Prior to handling, loading and/or firing your new firearm, be sure to read and understand all safety rules and instructions completely. Failure to do so could result in serious injury, death, or property damage.

Caliber: .223 cal/5.556 mm or .308 win/7.62 x 51 mm. (Be sure to only use the ammunition for which your rifle or carbine was chambered)

Barrel Length: 16.5 to 24 inches

Overall Length: approx. 33" for 16" model, 37" for 20" model and 41" for 24" model

Overall Weight: CQB carbine approx. 7.5 lbs., 20" model approx. 8.5 lbs., and 24" H-Bar model approx. 9.5 lbs.

FIREARMS SAFETY – IMPORTANT WARNINGS

READ THIS SECTION! DO NOT PROCEED WITHOUT FIRST READING THE SAFETY SECTION!

As the owner or custodian of a firearm, it is your responsibility to ensure the safe handling and storage of all your firearms and ammunition. The following is a brief list of basic safety rules. For additional safety information, refer to a qualified firearms instructor, the NRA, the D & L Sports, Inc. website at WWW.DLSports.COM or contact D & L Sports, Inc. directly.

- 1. CONSIDER ALL GUNS AS ALWAYS BEING LOADED! TREAT THEM WITH THIS IN MIND AT ALL TIMES!**
- 2. NEVER COVER ANYTHING WITH THE MUZZLE THAT YOU ARE NOT WILLING TO DESTROY!**
- 3. KEEP YOUR FINGER OFF OF THE TRIGGER UNTIL YOUR SIGHTS ARE ON TARGET AND YOU ARE READY TO FIRE.**
- 4. BE SURE OF YOUR TARGET AND WHAT IS BEYOND! ASSURE YOU HAVE THE CORRECT TARGET AND A SAFE BACKSTOP!**
- 5. ALWAYS WEAR YOUR SAFETY EQUIPMENT; EYE AND EAR PROTECTION AND BALLISTIC PROTECTION!**
- 6. IF YOUR FIREARM FAILS TO FIRE, KEEP IT POINTED IN A SAFE DIRECTION FOR ONE MINUTE PRIOR TO CLEARING THE CHAMBER IN CASE OF DELAYED FIRING (HANGFIRE)!**
- 7. DRUGS AND ALCOHOL DO NOT MIX WITH FIREARMS!**
- 8. STORE YOUR FIREARMS IN A QUALITY GUN SAFE AND KEEP YOUR AMMUNITION LOCKED UP SEPERATELY! KEEP YOUR FIREARMS AND AMMUNITION SECURED AWAY FROM CHILDREN AND UNAUTHORIZED PERSONNEL. DO NOT STORE LOADED FIREARMS!**

9. **DO NOT LEAVE YOUR FIREARM UNATTENDED!**
10. **SELECT A PROPER FIRING RANGE WITH A SAFE BACKSTOP AND PROPER VENTILATION. BE SURE TO HAVE AN EMERGENCY MEDICAL PLAN AND SUPPLIES AT YOUR RANGE LOCATION. DO NOT SHOOT AT SURFACES WHICH MAY CAUSE RICOCHETS, UNSAFE BULLET SPLATTER, OR FRAGMENTATION!**
11. **KNOW YOUR EQUIPMENT AND ITS CAPABILITIES, AS WELL AS YOUR OWN!**
12. **ALWAYS USE PROPER SPECIFICATION AMMUNITION, QUALITY MAGAZINES, AND CONDUCT ROUTINE PREVENTATIVE MAINTENANCE.**
13. **DO NOT KEEP OR CARRY FIREARMS FOR SELF DEFENSE OR OTHERWISE WITHOUT PROPER TRAINING AND PROFICIENCY!**
14. **ALWAYS SAFELY CHECK THE CONDITION OF ANY FIREARM YOU COME IN CONTACT WITH! OBTAIN COMPETANT ASSISTANCE IF YOU ARE UNSURE HOW TO CHECK THE CONDITION OF AN UNFAMILIAR FIREARM!**
15. **TO AVOID LEAD INGESTION, DO NOT EAT OR DRINK DURING SHOOTING ACTIVITIES. WASH HANDS THOROUGHLY AFTER SHOOTING AND BEFORE EATING OR DRINKING!**
16. **ASSURE THAT YOUR FIREARMS ARE PROPERLY ZEROED.**

DO NOT SACRIFICE SAFETY FOR ANY PERCEIVED ADVANTAGE!

Good safety habits will become second nature if they are always observed. Safe habits are especially important in high-stress situations; unintentionally shooting yourself or someone else will do little to help you complete the task at hand. *Make safety a habit at all times!*

Formal firearms training from a knowledgeable and competent firearms instructor should be obtained before using any firearm.

Anyone who possesses a firearm for defensive purposes needs to understand the legalities of defense situations. Consult the legal authority in your jurisdiction.

Feel free to contact D & L Sports, Inc. with any questions about the safe operation of your firearm, for information about gun safety, or to obtain additional firearm locks or security equipment. Additional copies of this manual are also available from D & L Sports, Inc. and on line at WWW.DLSPORTS.COM.

ADDITIONAL FIREARMS SAFETY RULES, NOTICES, AND WARNINGS

1. Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm, and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure, and before eating or drinking.
2. Always be sure the gun is safe to operate and the barrel is clear of any obstruction. Seek professional assistance as needed.
3. Your D & L Sports, Inc. firearm is equipped with effective and well designed safety devices. However, you should never completely rely on any mechanical safety, firearm, or other mechanical device. All mechanical devices have the potential of unexpected and/or unforeseen failures. If you carry a firearm for defensive and/or duty purposes, have it routinely professionally inspected for safety and function, and perform routine preventative maintenance. Acquire regular firearms training from a qualified instructor skilled in your area of activity. Carry additional devices to help assure your survival if this device should fail. Wear adequate ballistic protection.
4. **NO SAFETY MECHANISM IS A SUBSTITUTE FOR PROPER AND SAFE GUN HANDLING.** Safety mechanisms can break down or malfunction. **YOU AND YOU ALONE ARE THE ULTIMATE SAFETY MECHANISM.**
5. Using the wrong ammunition can result in malfunctions, serious injury, or death. Catastrophic damage could occur. Loading the wrong ammunition in your magazine or chamber can allow a cartridge or casing to move ahead of the chamber, and a live cartridge to chamber and fire behind it. This could cause catastrophic damage, injury, and/or death. Do not allow ammunition or cartridge cases to be intermixed. Your D & L Sports, Inc. firearm is not designed for, nor should you use overpressure, +P, or reloaded ammunition in your firearm. Doing so can cause catastrophic damage, injury, and/or death, as well as violate your service agreement.
6. Always be sure of your target and backstop as well as the maximum range and penetration of the ammunition that you are using. Consider the possibility of over-penetration before you fire.
7. If a bullet is stuck in the bore, do not attempt to shoot it out by using another cartridge, or by blowing it out with a blank or cartridge with the bullet removed. This can generate excessive pressure, damage the firearm and cause serious personal injury, or death. Consult a qualified gunsmith.

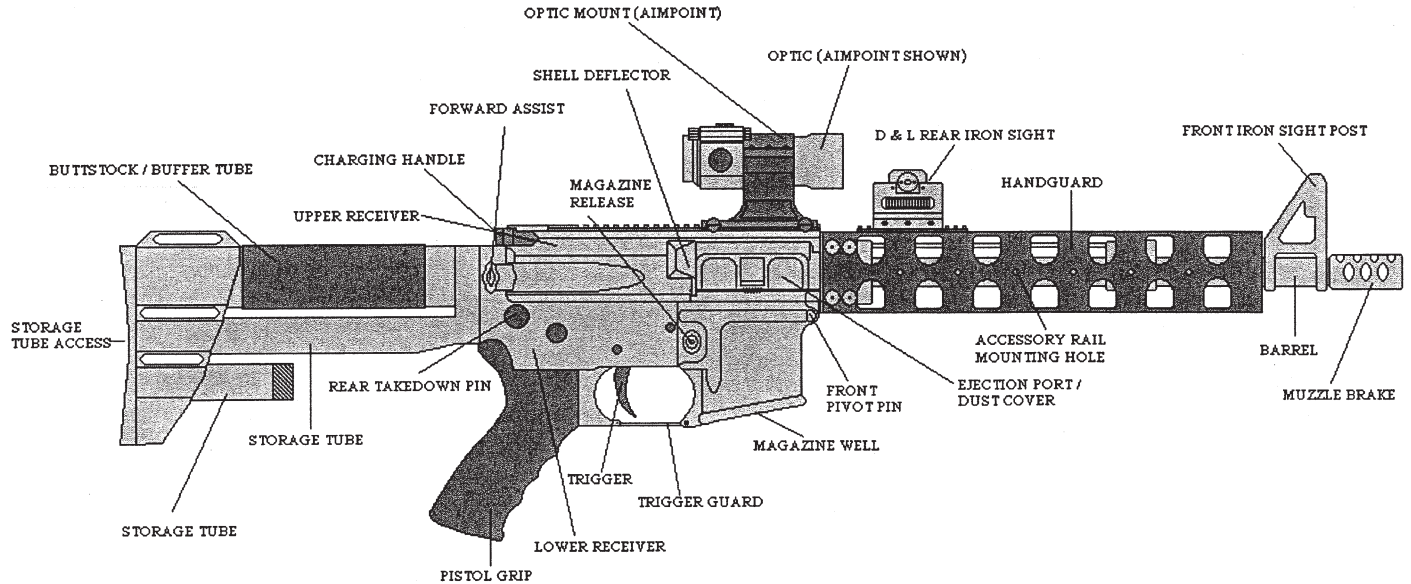
8. Before performing any cleaning or maintenance, make sure the firearm is completely unloaded. This includes the magazine and chamber. Allow no live ammunition in your work area. **WARNING:** Firearms are still capable of discharging when the magazine is removed.
9. Before performing any disassembly of the firearm, make sure you are wearing eye protection.
10. **PRIOR TO SHOOTING, MAKE SURE THE BORE IS DRY, CLEAN, AND UNOBSTRUCTED.**
11. You understand it is your personal responsibility to make final determination as to whether D & L Sports, Inc. products are suitable for your intended uses. You assume all liability for making such determination.
12. If you attempt to fire your firearm and it does not result in the normal loud bang, an improperly charged cartridge may have stuck a bullet in the barrel. Do not attempt to fire again. Have the firearm checked by a competent gunsmith for barrel obstructions.
13. All D & L Sports, Inc. firearms come with gun safety locks. Be sure to use them as needed. Contact your local gun store or D & L Sports, Inc. directly if you misplace your gunlock for a replacement. Firearms safety is your responsibility.
14. All D & L Sports, Inc. products must be used for legal purposes only or criminal penalties will result.

Based on the Magnuson-Moss Warranty Act, D & L Sports, Inc. offers no express warranty on its products, provides no written warranty card, and disclaims any and all express and implied warranties. However, D & L Sports, Inc. is concerned about delivering professional service to owners of D & L Sports, Inc. products. D & L Sports, Inc. continues to honor all requests for service which D & L Sports, Inc. considers reasonable.

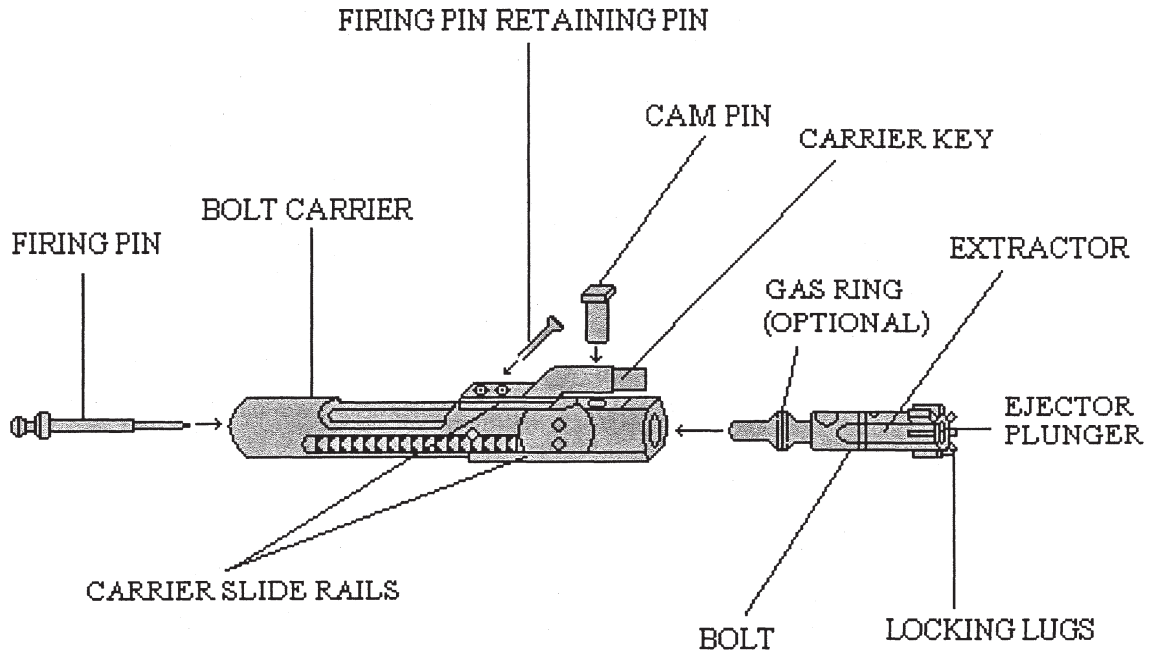
By purchasing products from D & L Sports, Inc., or doing any other business with D & L Sports, Inc., you are agreeing to arbitrate any controversy or claim you may have against D & L Sports, Inc. arising out of or related to or in connection with your purchase and/or the use of any product, such arbitration to be conducted in accordance with the Arbitration Rules of the American Arbitration Association and such arbitration, by agreement, shall be held in the city and state where D & L Sports, Inc. has its principal place of business at the time any demand or claim is made against D & L Sports, Inc.

Placing any order for any product from, or interacting with D & L Sports, Inc. in any way indicates you understand and agree with all information and statements contained in, and agree to abide by, the D & L Sports, Inc. liability waiver / hold harmless agreement.

GENERAL PARTS OF THE D & L AR STYLE FIREARM



AR STYLE BOLT AND CARRIER FEATURES



AMMUNITION SELECTION FOR THE D & L SPORTS, INC. AR STYLE CARBINE AND RIFLE

D & L Sports, Inc. AR style firearms are commonly chambered in .223 or (5.56 NATO) - .308 WIN or (7.62 x 51 mm). *Only factory loaded ammunition from a reputable company in these designations should be used in the operation of your firearm!* Be sure to only use the ammunition for which your rifle or carbine was chambered. Reloaded ammunition should not be used in your firearm. D & L Sports recommends the use of safe velocity, factory loaded ammunition only. Below is a list of acceptable ammunition. Failure to use proper ammunition is extremely dangerous and could cause serious injury or death, damage to your firearm, or cause your firearm to malfunction.

RECOMMENDED AMMUNITION

(Study, test, and understand what load will best suit your needs)

D & L Carbines:

.223 Rem or 5.56 NATO

Federal – TRU 55 grain BT (ballistic tip) bullets with cannelure and crimped primers

Black Hills – new manufactured 55 grain FMJ

Hornady – TAP 55 grain and 60 grain (protected tip only)

M193 – 55 grain FMJ

M855 – 62 grain FMJ

> **American made Milspec ammunition.**

Black Hills – 77 grain SMK (sierra match king) bullets with cannelure and crimped primers

D & L Match Grade, Precision AR Style Rifles:

.223 Rem or 5.56 NATO

Black Hills – 77 grain SMK (sierra match king) bullets with cannelure and crimped primers

Federal – TRU 55 grain BT (ballistic tip) bullets with cannelure and crimped primers

.308 WIN (7.62 x 51 mm) rifles and carbines.

Federal Tru .308 165 grn Ballistic tip bullets with cannelure and crimped primers.

Federal and new manufacture Black Hills ammunition 168-175 grn match ammo with cannelured bullets and crimped primers. American made Milspec FMJ 147-175 grain.

Different ammunition has different characteristics. It is your responsibility to test reliability, penetration, and other characteristics to assure they are well suited to your needs. No ammunition should be used for serious purposes without first successfully completing a 500 round minimum reliability test while using the exact magazines you plan to employ.

Always conduct a final, personal inspection on all ammunition prior to loading. Check for missing, damaged, or inverted primers, cartridge corrosion, overall cartridge weight variations, and general deformities. Do not load any improper or defective ammunition.

IMPORTANT: When considering different types of ammunition for your AR style firearm, keep in mind several important issues: Pointed, protected tip bullets feed more reliably and are less prone to bullet set back during the feeding cycle than blunt nose, hollow point, or exposed lead tip nose bullets. A bullet cannelure is a very important reliability feature for ammunition used in semi auto firearms. Properly crimped in mil-spec primers and waterproofing are also very important features to look for. Choose your ammunition wisely and conduct thorough test firing for reliability and ballistic performance before use. Contact D & L Sports, Inc. if you have any questions regarding what barrel twist rate and ammunition will be compatible.

CAUTION:

Failure to use ammunition with crimped in primers, can lead to primers coming out of the cartridge case and severely locking up the firearm. Failure to use cannelured bullets with a pointed tip can cause bullet set back, failure to feed and dangerous firing pressures.

DO NOT USE cheap/budget/imported ammunition in your rifles and carbines.

MAGAZINE SELECTION AND MAINTENANCE

Premium quality magazines are critical to the reliable functioning of your firearms. Only magazines designated by D & L Sports, Inc. are recommended for use in your firearm. (Consult WWW.DLSPORTS.COM for more information.)

Magazines tend to be handled roughly during shooting activities. It is important that you periodically inspect and care for your magazines. Avoid dropping and stepping on magazines as this can lead to irreversible damage which will affect the reliability of your firearm. It is wise to rig a drop pouch on your gear to accept empty magazines during the reload process.

If your carbine magazines are left loaded, the springs should be replaced every 6 months with high quality replacements designated by D & L Sports. You should service your magazines when you clean your firearm. Servicing includes, cleaning out dirt and debris, and keeping your magazines clean and dry.

Magazine Disassembly:

CAUTION: Be sure to wear your safety glasses. Springs are under pressure and can come out with force!

D & L SPORTS EXTREME DUTY MAGAZINES

The D & L Sports, Inc. magazines have a base plate held in place by 5 screws. Using the proper size screw driver, remove the 5 screws at the base of the magazine. **CAUTION: Hold on to the base plate when removing the last screw. The base plate has spring pressure on it by the magazine spring and can come out with force if not retained by you. Use Caution!** After removing the base plate, and releasing the spring pressure, the spring and follower can be pulled out together.

During the cleaning process, inspect your magazines for bent lips, cracks, deformities, and rough operation. Be sure to crush damaged magazines to assure they are not reused by mistake. All of your magazines should be initialed and numbered to assist in tracking any problems and/or servicing.

Magazine Cleaning: Using an aerosol degreaser, such as RemClean, spray the inside of the magazine tube. Brush the tube out with a small, soft bristled brush to remove all dirt, debris, and fouling. Be sure not to damage the feed lips on top of the magazine. When finished brushing, spray again with the aerosol degreaser and blow out with low pressure compressed air. Using a bore mop on a short cleaning rod, wipe out the inside of the magazine tube until it is clean and dry. Wipe off the spring, base plate, and follower with a clean dry rag. If needed, use a small, soft bristled brush to clean off all dirt, debris, and fouling. Once all parts are clean and dry, you are now ready to reassemble.

If it is time to replace the spring, destroy the old one and obtain a new proper replacement spring (available from D & L Sports, Inc.). Be sure to correctly orient and attach the magazine spring to the follower. Failure to do so can cause malfunctions.

D & L SPORTS MAGAZINES: REASSEMBLY

Insert the magazine follower with attached spring into the magazine tube. Invert the magazine and compress the spring with your thumb or hand until it is slightly below the bottom of the magazine tube. Orient the magazine base to the magazine with the grooves on the base matched up with the grooves on the magazine tube. Carefully insert the base into the magazine tube. While holding inward pressure, install the five screws and snug them into final position. If needed, use a small amount of #242 blue Loc-Tite on each screw. Be careful to not strip out the holes in the base plate by over tightening the screws.

.308 WIN Magazines

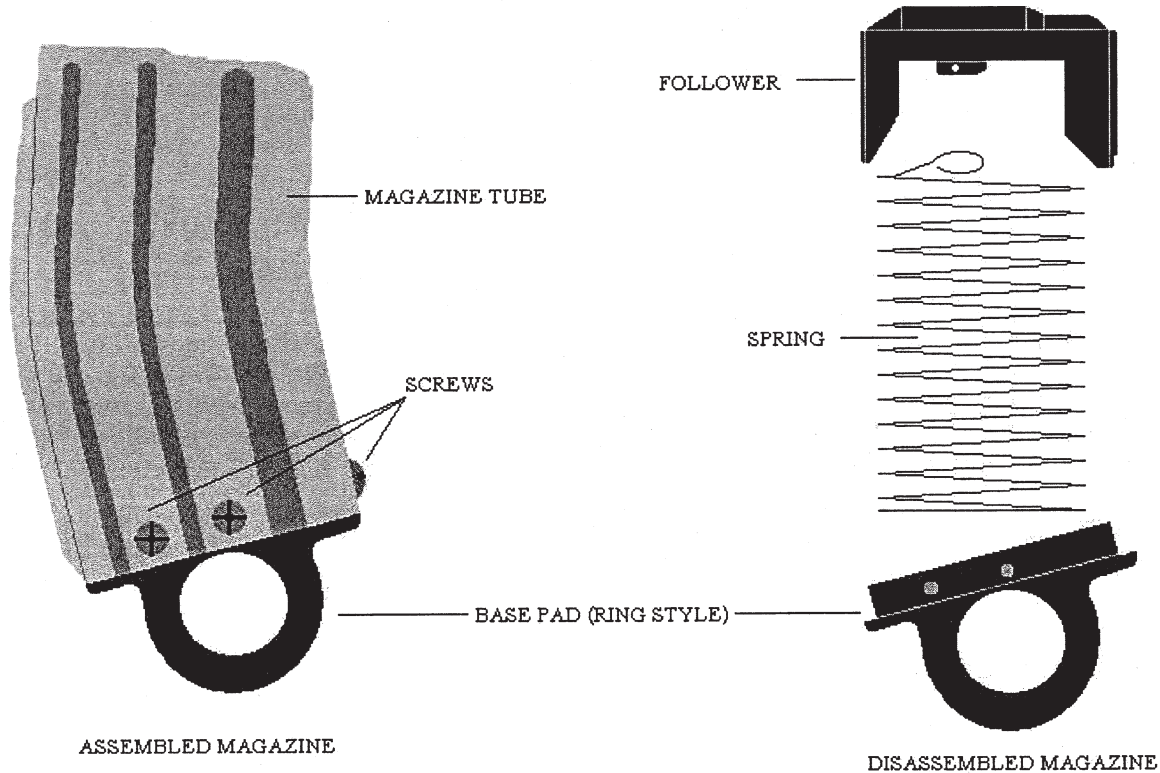
(Consult D & L Sports for instructions and recommendations)

Always perform a function test any time that you disassemble and reassemble your magazines and/or firearm. To do this, load the magazine to designated capacity with dedicated dummy cartridges and then remove the cartridges making sure there is no binding. **Caution: Do not push against the cartridge's primer if manually unloading.** The follower should move freely up and down in the magazine tube without being sluggish. This is an important step especially when utilizing a magazine clamp. Do not over clamp the magazine tube to the point where the cartridges and/or follower won't move freely up and down inside the magazine tube. A final function test should be to live fire the magazine and firearm at a designated safe range location. Do not attempt to load a magazine with more than it was designed to hold.

D & L Sports strongly recommends short loading magazines by a minimum of two rounds less than maximum capacity, or as directed on the body of D & L Extreme Duty Magazines. This is to help insure the magazine can still be locked in the gun when the bolt is forward, and to allow for proper function of the firearm and magazine.

Your ammunition and magazine choices are critical to the reliability of your firearm. Quality ammunition produced by a reputable factory is a must. A cannelured bullet is highly recommended to minimize the chances of bullet push back during the feeding cycle. A pointed, protected tip bullet nose, loaded to the correct overall length should be chosen to help assure feeding reliability. If you chose a bullet shape with a blunt nose, hollowpoint, or exposed lead soft point, you may reduce the reliability of your firearm. Use only mil-spec, crimped in primers in your AR style firearm. **IT IS YOUR PERSONAL RESPONSIBILITY TO THOROUGHLY TEST YOUR FIREARM WITH THE AMMUNITION AND MAGAZINES YOU INTEND TO USE TO ASSURE THEIR COMBINED RELIABILITY IS SUITABLE FOR YOUR INTENDED PURPOSES. A 500 ROUND TEST FIRE WITH ZERO MALFUNCTIONS SHOULD BE CONSIDERED THE MINIMUM TEST FOR AMMUNITION, MAGAZINES, AND A FIREARM.**

D & L SPORTS AR-15 STYLE MAGAZINE DIAGRAM



D & L SPORTS, INC. AR STYLE FIREARM REAR STOCKS

D & L Sports, Inc. manufactures two styles of buttstocks for the AR style firearm; A heavy duty fixed and an adjustable stock.

The fixed rear stock uses three visible “tubes” in its construction. The top tube houses the buffer spring and buffer. The middle tube is a storage tube that can be accessed through the slotted cap on the rear of the stock. The slot has been designed to be easily opened with commonly carried items, i.e.; coin, knife, screwdriver, etc. The third tube (short tube on the bottom) is another storage tube. To access this area, unscrew the tube counter-clockwise from the front of the shoulder piece. This tube is sized to hold spare batteries or a spare 5.56 mm bolt assembly. (**NOTE: Do not change bolts in your rifle without a gunsmith’s headspace inspection**)

The adjustable buttstock is designed to be rock solid once adjusted and locked in place, rather than being a quickly adjustable stock with a looser fit. The stock is adjustable in 1/2” increments by loosening the top locking set screws two turns counter-clockwise, then removing the two large cross bolts completely (1st generation). To loosen and remove the two large cross bolts, you will need two allen wrenches, one to operate each side of the cross bolt. Once the top set screws are loosened and the cross bolts are removed, you can tap the shoulder piece forward or rear to suit your needs. The 2nd generation stock only requires the removal of one cross bolt. **NOTE: You may have to trim a section off of the cheek piece if you want to move the shoulder piece forward. Do not move the shoulder piece any further to the rear than the position where the cross bolts both have proper engagement with the buffer tube.**

SLING ATTACHMENT

Slings are best attached via selected sling slot positions in the buttstock, then weaved through the vents in the handguard for a front sling position. Do not attach a sling to the front sight tower. Once the sling is adjusted, sew it in place to avoid slippage. Make sure the chosen sling position does not cause the firearm to hang with the muzzle pointed in an unsafe direction.

LOADING / UNLOADING

NOTE: These procedures should first be practiced with safety or “dummy” cartridges prior to using live ammunition.

Your new firearm has been shipped after being test fired and zeroed at D & L Sports, Inc. It is now ready for you to personally test fire and zero. The zeroing at D & L Sports, Inc. may not be exactly the same as your eye and hold, so you will need to confirm, and possibly fine tune the zero. Make sure the firearm’s reliability and zero meet your requirements before serious use. The following instructions are given to provide you with a safe method for loading and unloading ammunition. Failure to follow these directions could result in serious injury, death and/or damage to your firearm.

LOADING

CAUTION: Wear your safety glasses!

1. Loading the magazine.
 - Hold the magazine in either hand
 - With the other hand, place a cartridge on top of the feed lips of the magazine. Orient the cartridge in the same direction as the magazine follower indicator.
 - Push downward on the cartridge causing it to push the follower down. The cartridge will go under the feed lips, locking it into place. Once the cartridge is under the feed lips, be sure that it is pushed all the way to the rear. Do not use excessive force when loading cartridges into the magazine. Doing so could cause damage to the magazine which will cause unreliable functioning.
 - For the remaining cartridges, repeat the above procedure. The next cartridge will now be placed on top of the already loaded cartridge and also touching the feed lip on the opposite side.
 - Continue this until the magazine is almost full. **DO NOT** fully load the magazine. D & L Sports, Inc. recommends short loading the magazine. The magazine should be considered full when the entire cartridge stack can still be compressed approximately ½” below the feed lips. This will assure that the loaded magazine can still be locked into the magazine well of the carbine when the bolt is in the forward position. This is very important when conducting tactical reloads. (Consult the Tactical AR-15 book for further information.)

2. Seating the loaded magazine into the firearm.
 - Be sure the firearm is pointed in a safe direction and your finger is off of the trigger.
 - Place the top of the loaded magazine into the magazine well. The bullets should be facing the same direction as the muzzle.
 - Firmly push the magazine into the firearm until the magazine catch locks the magazine into place and then tug downward on the magazine to insure it is fully locked in place. Failure to lock the magazine in will result in the magazine falling out of the firearm or a failure to feed a cartridge into the chamber.

3. Chambering a cartridge.
 - Be sure the firearm is pointed at a safe backstop which will stop a bullet, and your finger is off of the trigger.
 - While firmly holding the pistol grip of the carbine/rifle, grasp the charging handle.
 - Pull the charging handle to the rear as far as it will go and release it. Do not keep your hand on the charging handle as it goes forward. Let it return freely. By doing this, the bolt assembly will **strip** the top round from the magazine and seat it into the chamber of the barrel. Immediately place or assure the thumb safety in the on "safe" position.
 - Check the chamber to insure it is loaded, then insure the bolt goes back in to the fully closed position, utilizing the forward assist if needed.
 - Snap the dust cover closed to prevent any dirt/foreign debris from entering the ejection port.

NOTE: Any time the hammer is cocked, the thumb safety should be engaged unless firing. **WARNING:** When a cartridge is in the chamber, your firearm will fire when the thumb safety is disengaged and the trigger is pulled. Your firearm will fire the chambered round with or without a magazine in place in the magazine well.

NOTE: The thumb safety selector on your AR style firearm is not designed to go on unless the hammer is cocked.

CAUTION: If you are new to the AR style firearm design, be aware that it takes thousands of repetitions to become reasonably familiar with the design and thumb safety operation. Obtain professional training and become highly skilled with this firearm prior to considering it for serious use. Be sure it meets your requirements for reliability, safety, and accuracy before service use.

UNLOADING

1. Remove the magazine.

- With the firearm pointed at a safe backstop which will stop a bullet, your finger off of the trigger, and the thumb safety in the on position, press the magazine release button and remove the magazine.

WARNING: Your AR style firearm can still fire the round in the chamber when the magazine is removed! Keep your finger off of the trigger, the muzzle pointed in a safe direction, and the thumb safety selector in the safe position!

2. Unloading the chamber.

- Keeping the firearm pointed in a safe direction and your finger off of the trigger, and the thumb safety in the “on” position.
- Firmly hold the pistol grip of the carbine/rifle and grasp the charging handle with the other hand.
- Pull the charging handle completely to the rear, ejecting the round out of the chamber on to a soft surface. Do not try to capture the ejecting cartridge in your hand. Binding the cartridge in the ejection port area can cause cartridge ignition and severe injury. – **Always wear your safety glasses!**
- The magazine can be carefully unloaded by carefully sliding the cartridge forward and out of the magazine **or removing the base from the magazine. Do not press against the primers.**
- Pull the charging handle all the way to the rear and depress the bottom portion of the bolt lock to lock the bolt open. Using the “peek and poke” method, visually and physically check the chamber and magazine well to be sure they are unloaded. Your firearm is now confirmed to be empty. Do not snap the bolt forward without a loaded magazine in place. Simply pull the charging handle all the way to the rear, causing the bolt to be released from the bolt stop, and ease the bolt forward into the battery position. The hammer should only be snapped down on an empty chamber when the muzzle is pointed in a safe direction and a safe backstop, one of which is capable of safely containing a live bullet. Use caution and follow all safety rules.

Remember, SAFETY FIRST!

FIRING YOUR AR STYLE FIREARM

After completely familiarizing yourself with the safety rules, carbine design and safety features, loading/unloading procedures, and obtaining proper factory ammunition and professional training, you will be ready to fire your carbine. Remember, all safety rules apply. You are responsible for all of your actions, and accept all risks associated with shooting activities and this firearm.

Eye, ear, and ballistic protection is mandatory for live fire shooting!

Be sure your range location and targets are safe for high velocity, centerfire rifle usage. Be sure first aid and trauma treatment gear are on hand. Be sure the route to the hospital is known and transportation is available. Be sure EMS personnel know the GPS coordinates of your range location in case life flight air service is required.

Your D & L Sports AR style carbine was properly zeroed following construction. You will need to confirm the zero is correct for you and your ammunition selection. This zero check should be accomplished from a solid rest to minimize human error. You may determine that you need to slightly adjust the zero for your personal sight hold.

NOTE: Do not decide to re-zero your firearm until you are a skilled marksman. Newer shooters will often have trouble grouping a firearm when they are still developing their shooting skills. Seek competent assistance anytime you have questions.

Primary fundamentals of accurate shooting include proper sight picture, sight alignment, and trigger control.

IRON SIGHT PICTURE



SHOT RIGHT



SHOT LEFT



**CORRECT SIGHT
PICTURE**



SHOT HIGH



SHOT LOW

Once you see and understand the sight picture, you will need to align this sight picture with the target. Maintaining the sight picture, and its alignment with the target throughout your trigger pull, will allow for consistent shot placement.

TRIGGER CONTROL

Prior to live fire, it is best to practice dry firing your firearm with a snap cap in the chamber to learn the trigger's pull weight, travel distance, and how the trigger "feels". (Only load the chamber with a snap cap by cycling it into the chamber from the magazine.) Dry fire only at a live fire range with the firearm pointed downrange at a safe backstop. Never "dry fire" at a backstop which is not capable of containing a live bullet. Remember the safety rules! Continue to dry fire practice under instructor observation until you feel comfortable with the firearm.

Trigger pull should be a controlled movement. It is often times referred to as a squeeze or press. There should be no jerking of the firearm due to anticipation of the shot. The shot should not be a surprise. You should know exactly when the firearm will fire. This is learned by getting the feel for your trigger from dry fire practice.

To begin your live firing, load the magazine and firearm as previously described. After chambering a live round into the chamber, immediately confirm the thumb safety to be on, or place the thumb safety on. Keep your finger off of the trigger until your sights are on target and you are ready to fire. Always keep a firm grip on the firearm and always keep the muzzle pointed in a safe direction.

When firing live ammunition, the firearm will automatically extract and eject the spent casing, re-cock the hammer, and reload the next live round into the chamber. This occurs during the recoil process which means the firearm is ready to fire again after each shot. This process will continue until the magazine and chamber are empty. At this point, the bolt carrier and bolt will lock back in the open position.

To reload the firearm from this condition, remove the empty magazine, insert a loaded magazine into the magazine well and firmly push up until it locks into place. Tug downward on the magazine to insure it is locked in place. With the palm of your weak hand, slap the bolt release. (Left handed shooters can release the bolt with their left index finger.) Be sure to keep the firearm pointed in a safe direction, the safety on, and your finger off of the trigger during this process.

If you stop shooting prior to all of the live rounds of ammunition being fired, immediately place the thumb safety selector “on safe”, keep your finger off of the trigger, and decide if you want to manually unload the firearm or resume firing.

When you have completed firing, remove the magazine from the firearm and the cartridge from the chamber. Check to be sure it is unloaded, then double check again with the “peek and poke” technique. CAUTION: Do not slam the bolt on your finger!

SIGHT ADJUSTMENT

Your firearm has been thoroughly test fired and zeroed prior to shipment. However, minor sight adjustments may be required for your particular sight hold or ammunition choice. Do not determine sight adjustments are required unless you are a skilled marksman. New shooters often have shot grouping problems until their skill develops. Obtain reputable instruction in this area. Contact D & L Sports, Inc. if you have sight adjustment questions.

IRON SIGHTS

If your firearm is equipped with forward mounted, D & L Sports CQB Iron Sights, and you decide to adjust them for your particular hold, ammunition, and/or zeroing distance, use the following procedures:

FRONT SIGHT ADJUSTMENT

Your front sight has the capability to screw into the sight base (clockwise) or outward from the sight base (counterclockwise) to change the elevation of your point of impact on target. To adjust the elevation setting of the front sight: make sure that the firearm is completely unloaded (including the magazine and chamber) and keep the muzzle pointed in a safe direction. Using a small punch or similar item, depress the front sight plunger. Gently, turn the sight the correct direction to change your point of impact on target. Small adjustments will result in noticeable point of impact changes on target. Make small sight changes and frequently check the point of impact changes with live fire until the desired result is achieved. Note: If you have a front night sight insert, you will need to turn the front sight one complete revolution per sight change to maintain the use of the insert. **Caution:** Do not leave your night insert in the forward position or it will give your position away.

Turning your front sight counterclockwise will cause your point of impact on target to go down. Turning your front sight clockwise will cause your point of impact on target to go up. The recommended zero distance is 50 yards. Leave the rear CQB iron sight turned all the way down and use your front sight to zero your impact elevation at 50 yards. Generally speaking, a 50 yard zero will cause your point of impact to be just low up close, on a 50 yards, just high at 100 yards, and back on at 200 yards. (Consult Tactical AR-15 book and test your zeros personally because they do vary.)

REAR SIGHT ADJUSTMENT

The forward mounted rear iron sight is also capable of elevation adjustment, as well as windage (right and left) adjustment. However, you should primarily adjust elevation with your front sight while leaving your rear sight turned all the way down in the protective housing. Only fine tune elevation with the rear sight if necessary, and adjust windage. There are 14 set screws in the rear sight to allow you to lock your sight in once it is precisely zeroed for your hold. These screws will help prevent the sight from moving due to hard use and/or unauthorized tampering. The goal is to achieve a precisely zeroed carbine then lock the sight in place to minimize the chances of zero disturbance.

You will need a small allen wrench to loosen these screws to allow for sight adjustment.

Loosen the set screws one full turn, but do not remove them. Only loosen the set screws necessary to make the required adjustment. For example; to adjust for windage, you only need to loosen four set screws, two in the sighting piece and two in the windage drum.

The large serrated drum lying horizontal at the bottom of the sight is your elevation drum. This drum will raise and lower the center portion of the rear sight. (Keep the rear sight bottomed out in the protective housing if you can get the elevation zeroed using the front sight only.)

Moving the rear sight up will cause your point of impact to go up. Moving the rear sight down will cause your point of impact to go down.

The sight's smaller serrated knob, or drum, on the side of the sight is the windage knob. This knob will move the rear sight's center aiming piece to the left or right. Your point of impact on target will move in the direction that you move the center aiming piece.

Note: When adjusting the sight, only make small adjustments between checking the live fire point of impact on a target at the recommended zero range of 50 yards. Even small sight adjustments will make a noticeable effect on point of impact.

When you have completed the zeroing process, be sure to retighten all of the set screws. #242 blue Loc-tite should be used on all set screws.

OPTICAL SIGHT ADJUSTMENT

If your firearm is equipped with an optical sight, be sure to follow all of the manufacturer's recommendations on adjusting the zero of the sight.

Conduct regular live fire zero checks with both your optic and iron sights to confirm your firearm is always properly zeroed.

NOTE: Changing sights, optics, or ammunition and cleaning and/or maintenance will always require reconfirming the firearm's zero.

GENERAL OPERATOR LEVEL DISASSEMBLY OF THE D & L SPORTS, INC. AR STYLE FIREARM

General disassembly of your AR style firearm will be required for cleaning and maintenance.

NOTE: No serious force or pounding is required to disassemble your firearm. Call D & L Sports, Inc. if you have any problems or questions before proceeding.

CAUTION: BE SURE THAT YOUR FIREARM IS COMPLETELY UNLOADED PRIOR TO BEGINNING GENERAL DISASSEMBLY! THIS INCLUDES THE MAGAZINE AND THE CHAMBER! DO NOT ALLOW LIVE AMMUNITION IN THE CLEANING AREA! NEVER COVER ANYTHING WITH THE MUZZLE THAT YOU ARE NOT WILLING TO DESTROY, EVEN DURING SERVICING AND CLEANING!

After completely unloading your firearm and double checking it, find a safe area to complete the disassembly process. If you are conducting maintenance in the field, use a ground cloth below and a retention cloth above to assure that you do not lose any parts. Be sure to wear safety glasses due to the possibility of compressed springs and/or parts coming out with force.

Step 1: Be sure the muzzle is pointed in a safe direction, the thumb safety selector is in the on/safe position, the chamber is empty, and the magazine is out of the firearm. Press in on the rear take down pin, located above and behind the thumb safety selector. This pin will partially push out toward the ejection port side of the firearm. Move to the ejection port side of the firearm and pull the pin out until it stops. Note: This pin does not come completely out to prevent loss. Stop pulling on the pin as soon as it stops moving. Do not try to pound it out of the receiver. The upper receiver will now open upward by pivoting on the front pivot pin. You will not need to remove the front pivot pin for general operator level disassembly.

NOTE: Field operators should obtain advanced maintenance training to allow for servicing under adverse conditions without tools. They should also consider having a parts kit for their individual firearm consisting of fitted replacement parts for those which may be lost or broken in the field.

Step 2: Carefully pull the charging handle to the rear until the bolt carrier is approximately half way out of the upper receiver. Grasp the bolt carrier, pull it back, and out of the upper receiver and place it aside. The charging handle can now be removed by pulling it back down and out. Note: There are two tabs on the side of the charging handle. These tabs have to meet with two cutouts inside the upper receiver for the charging handle to be removed down and out.

Step 3: Holding the bolt carrier, push out the firing pin retaining pin located on the side of the carrier and place it aside. The firing pin is now freed and will fall out if the bolt carrier is turned upward. Remove the firing pin.

Step 4: You will notice that the bolt protrudes from the end of the bolt carrier and moves forward and back. Push the bolt into the bolt carrier. There is a rectangular cam pin which needs to be turned $\frac{1}{4}$ turn. Once this is accomplished, remove the cam pin. You can now pull the bolt forward and out of the bolt carrier.

You have now successfully completed the general disassembly of your AR style firearm for standard cleaning and maintenance. DO NOT disassemble the firearm any further than what has been explained. More detailed disassembly work should be referred back to D & L Sports, Inc.

CAUTION: Improper disassembly and/or reassembly of your firearm may create an unsafe or unreliable operating condition, or a nonfunctioning firearm. Safely test fire with live ammunition to confirm proper operation before serious use.

CLEANING & LUBRICATING YOUR AR STYLE FIREARM

After disassembly is completed, you are now ready to clean and lubricate your firearm. The following steps should be followed for proper cleaning and lubrication.

Be sure to wear your safety glasses!

For proper cleaning and lubricating, the following items will be needed:

1. A high quality cleaning rod (a one piece, nylon coated rod is recommended).
2. A high quality rod guide.
3. A bronze bore brush designated for the specific caliber your firearm is chambered in, and a bronze caliber pistol brush to use for cleaning the chamber.
4. Numerous bore mops designated for the specific caliber your firearm is chambered in.
5. A high quality bore solvent (Shooter's Choice or Hoppes is recommended).
6. A toothbrush with nylon bristles.
7. A aerosol type solvent cleaner (RemClean is a good choice).
8. **A high quality lubricant (MC-3000 or Break Free CLP).**
9. Pipe cleaners.

NOTE: Cover the lenses of any optics to avoid contamination.

Step 1: Using your cleaning rod and rod guide with the correct size bore brush attached, place a generous amount of bore solvent on the brush. Push the brush through the barrel from the chamber end all the way out the muzzle end, allowing solvent to coat the bore. Place the barrel aside and allow solvent to soak while cleaning other parts.

Step 2: Wipe off the charging handle, bolt, bolt carrier, firing pin, lower receiver, and all associated parts with a clean, dry cloth. If needed, use solvent (either aerosol or liquid) and a toothbrush to scrub off heavy contamination. Be sure to completely clean underneath the extractor hook. Do not bend, scrape, or pry on the extractor hook, use only a soft bristled tooth brush. Some parts which have a heavy build-up of carbon may require soaking in solvent and brushing numerous times. Clean inside the firing pin tunnel with pipe cleaners and solvent. Clean all parts until they are free of dirt and fouling. Place aside.

NOTE: Check to assure the carrier key is not loose on the carrier.

Step 3: When you are finished, make sure there is no solvent left on any part. If your firearm is extremely dirty, it may require brushing with liquid solvent numerous times. Then use an aerosol cleaner/degreaser to blow off dirty solvent. Low pressure compressed air is also helpful. Always wear eye protection

CAUTION: Do not damage the gas rings by scrubbing. **NOTE:** Some designated bolt and carrier combinations do not use gas rings. (See WWW.DLSports.COM)

Step 4: After the bore of the barrel has soaked, use your cleaning rod and bronze brush to clean the bore. Brush the barrel working the brush from the chamber all the way out the muzzle and back. Do not brush from the muzzle end to the chamber. If needed, apply more solvent and repeat the brushing process. Install a bronze pistol brush on your cleaning rod and thoroughly clean the chamber and the locking lug area. Turn the brush clockwise in the chamber. Once you have finished brushing, wipe off your cleaning rod, remove the bronze brush, and place a bore mop on the end. Do not use patches as they can get stuck in the muzzle brake. Blow the barrel out with aerosol cleaner and then work the bore mop through the barrel from the chamber end. You will have to replace the bore mop with a clean one to complete the procedure. When you are finished, be sure the barrel is clean and has no solvent remaining inside. Also be sure there are no loose brush bristles left anywhere in your firearm.

Step 5: After cleaning the bore, wipe off the upper receiver assembly. You may need to use solvent or aerosol cleaner and a toothbrush to clean off heavy fouling. Be sure to remove all dirt and fouling. Make sure that the throat of the barrel and the locking lug recesses are free of fouling and solvent. Be careful not to bend or put excessive pressure on the end of the gas tube. This extends into the upper receiver above the locking lug recess and chamber area. Once this is complete, blow the barrel out again with an aerosol cleaner. Lastly, run a clean bore mop through the barrel again to be sure no solvent is left inside the barrel. Rotate a clean chamber mop clockwise in the chamber to assure it has been thoroughly dried.

When time permits for a more thorough cleaning of the carbon build up on the bolt tail, simply soak the bolt in bore solvent, then gently scrub off the carbon build up with a small chunk of fine scotch bright cloth from your cleaning kit.

DO NOT use the brushes with stainless steel bristles. Use an aerosol cleaner or quality solvent, bronze brushes, tooth brushes, and low pressure compressed air only.

NOTE: Make sure the breech face is clean and free from brass particles. Also make sure that the extractor and ejector operate properly.

Once all parts are clean and free of dirt, fouling, and solvent, you are ready to lubricate your firearm.

Place a coating of Milcom 3000 or Break Free CLP on the following areas:

1. Outside of the bolt carrier (there are four contact slide rails which need lubricant)
2. Outside of the bolt, including the locking lugs, gas rings, and all sliding contact surfaces
3. Stem of charging handle
4. The cam pin

Note: The bore, chamber, and breech face, are to remain dry and free from lubrication, but they previously mentioned areas should be kept wet with lubrication.

A well lubricated firearm is recommended in nearly all environments. If you are operating in conditions of extreme cold, make sure you are utilizing an arctic temperature compatible lubricant that will not freeze in the gun or make the gun sluggish. If an arctic compatible lube is not available, no lubrication or dry lube is wiser. Test your equipment under your use conditions to determine what works best. If operating in very dirty, dusty or sandy conditions, lubrication is still recommended but more frequent cleanings of the firearm, ammunition, and magazines will be required, even if the firearm has not been fired. Wet, hot, and humid conditions dictate the need for a well lubricated firearm which is frequently maintained.

Once all sliding surfaces are lubricated, proceed to the reassembly procedure.

OPTICS

If your firearm is equipped with an optical sight, you need to make sure that it is cleaned at least every time you perform general maintenance. Use only the products and procedures recommended by the optic manufacturer. Do not get oil or solvents on the lenses. Use of lens caps are highly recommended to avoid contamination in the field and/or while cleaning. Contact the optic manufacturer for detailed cleaning information.

Install fresh batteries as needed, and before all important operations. Be sure to carry spare batteries **and back up iron.**

REASSEMBLY OF YOUR FIREARM

NOTE: No serious force or pounding is required to reassemble your firearm. Contact D & L Sports, Inc. if you have any problems or questions before proceeding.

After properly cleaning and lubricating your AR style firearm, you are now ready for reassembly. The following steps should be followed to ensure the firearm is reassembled correctly.

Step 1: There are three small silver rings on the rear of some bolt assemblies (other bolt/carrier groups are designed to operate without gas rings, consult D & L Sports, Inc. for further information). These are the gas rings and they should be positioned properly for best function. In each ring, there is a small gap. Gently twist the rings around so the gaps are evenly spaced around the bolt with the gaps staggered before reassembly. **DO NOT** try to remove or open the gap in the rings.

NOTE: Step 1 does not apply to carbines equipped with one continuous loop gas ring, as there are no gaps, or bolts designed to operate without gas rings.

Step 2: After lubricating the bolt and gas rings, push the bolt all the way into the bolt carrier while rotating the bolt clockwise. The rear of the bolt (the small diameter “tail”) goes in first. Make sure the extractor is positioned to be on the ejection port side of the firearm. Position the cam pin hole in the bolt to align with the hole on top of the bolt carrier. After lubricating, insert the cam pin so that the long side is parallel with the bolt carrier key. Line up the firing pin hole in the cam pin with the firing pin tunnel in the bolt carrier.

Step 3: Insert the firing pin from the rear of the bolt carrier. The small tip of the firing pin goes in first so it will be able to protrude from the firing pin hole in the face of the bolt. Once the firing pin is all the way in, replace the firing pin retaining pin behind the firing pin flange. The head portion of the firing pin retaining pin must fully seat into the countersunk hole in the bolt carrier. To make sure that the firing pin is locked in, turn the bolt carrier vertical with the firing pin head downward and gently shake to assure the firing pin does not fall out.

Pull the bolt outward from the bolt carrier. It will rotate slightly and stop after a short way. **DO NOT** force it any further. Leave the assembled bolt carrier unit in this position.

Step 4: After lubricating, place the charging handle inside the upper receiver. The long hollow cavity on the stem of the handle should be facing down. Be sure to angle the handle into the upper receiver and align the tabs on the handle with the cutouts in the upper receiver. Push the handle in about half way.

Step 5: After lubricating, place the bolt carrier assembly inside the upper receiver from the rear. The carrier key will go inside the hollow underside of the charging handle. Push the bolt and charging handle all the way to the front of the receiver until you hear them lock in place.

Step 6: Close the upper receiver and lower receiver together. Once they are completely closed, push the rear takedown pin back into place. Do not push down on any optic that may be in place, simply hand squeeze the receivers together if necessary.

After completing reassembly, do an unloaded function/safety test with a safe backstop in front of the muzzle. Confirm the magazine is out of the gun and the chamber is empty. Once this is done, proceed with the function/safety test by pulling the charging handle back causing the hammer to cock on a completely empty gun. Allow the bolt to move forward into full battery position. Place the thumb safety selector switch in the on position and gently attempt to pull the trigger. The hammer should not fall. Next, place the thumb safety selector switch in the off position and pull the trigger. The hammer should now fall.

Next pull the charging handle back and forth. The bolt carrier should move back and forth freely without binding. Next, lock an empty magazine in the magazine well. Pull the charging handle fully to the rear. The bolt carrier should now lock back in the open position.

NOTE: Do not allow the bolt to slam forward when the firearm is empty. Only allow the bolt to spring forward when a loaded magazine is in place in the magazine well to chamber a cartridge and the muzzle is pointed in a safe direction.

Your final function test should be to live fire at least five rounds of proper ammunition through the firearm. This will assure that the final assembly process was correct and the firearm is functioning properly. It will also allow you to complete a live fire zero check on target.

If you experience any problems during the reassembly procedure, do not force anything. If any concerns arise during the function/safety check, contact D & L Sports, Inc. for further information. DO NOT fire, carry, or otherwise use your firearm if there are any concerns during the function/safety test.

GENERAL MAINTENANCE FOR THE D & L SPORTS, INC. AR STYLE FIREARM

For optimum performance, your FIREARM should be properly cleaned and lubricated following the directions in this manual after each live fire session, when exposed to adverse environmental conditions (ie; rain, snow, sand, dusty conditions, etc.), or when it has been stored without use for an extended period of time. Even if you have not fired your firearm since the last time you cleaned it, a maintenance cleaning may be required if it has been exposed to contamination. Your firearm will also need periodic lubrication even though it may not have been fired. Lubrication tends to disappear and needs to be occasionally reapplied when the firearm appears dry. This is a problem when using light oils. **MC-3000** stays in place much better. Do not allow your ammunition to be contaminated by exposure to solvents, oils, water, or moisture which can lead to misfires.

Anytime operational concerns arise with your firearm, or at 10,000 round intervals, an inspection by D & L Sports, Inc. is recommended. D & L Sports, Inc. will inspect for internal wear that is not visible during general disassembly and cleaning sessions. This is also the proper time to have internal springs replaced. (The buffer spring should be replaced every 2000 rounds.) Preventative maintenance and periodic inspections are necessary to maintain safety and reliability.

NO alterations or modifications are authorized to be performed on D & L Sports products outside of D & L Sports, Inc. Improper or inexperienced work on your firearms can cause safety and reliability problems.

If at any time you notice a potential problem with your firearm, immediately stop shooting, completely unload the firearm in a safe manner and contact D & L Sports, Inc. for guidance.

Proper maintenance of your AR style firearm will help insure many years of reliable functioning and service from it.

Remember: The reliability and/or safety of any firearm can be compromised if improper magazines and/or ammunition are introduced, or if improper maintenance procedures are followed. Only use products and procedures recommended by D & L Sports, Inc.

STORING OR TRANSPORTING YOUR FIREARMS AND AMMUNITION

Firearms and ammunition should be stored in separate locked, fireproof safes. Do not leave any firearms or ammunition in an area that is accessible by unauthorized personnel, especially children. DO NOT store loaded firearms or magazines.

Do not store your firearm with the bolt locked to the rear. This causes weakening of the buffer spring which could have an adverse affect on proper and reliable functioning.

When transporting, keep firearms and ammunition separate and in locked containers. Always understand and abide by laws regarding the transportation of firearms and ammunition. Abide by concealed carry laws and regulations.

Always use the individual gun locking device or lockable container supplied with your firearm. If your locking device or container becomes unavailable, obtain one from your local sporting goods store or contact D & L Sports, Inc. for a replacement **free of charge**.

WARNING: Gun locks and gun security devices can be defeated. Be sure to store ammunition and firearms in separate, locked containers. Partial disassembly of the firearm and separated locked parts storage is also helpful to prevent unauthorized use.

To install a firearm cable lock: Completely unload the firearm, including chamber and magazine, then double check again. Lock the bolt open with the bolt stop. Thread the cable through the ejection port and out the bottom of the magazine well. Lock the free end of the cable into the locking device. GENTLY let the bolt forward. Secure the cable lock keys where they will be inaccessible by unauthorized personnel.

CARRY OPTIONS FOR YOUR AR STYLE FIREARM

1. The firearm is unloaded with an empty chamber, dust cover closed, and the hammer down. An empty magazine is inserted in place. (This keeps dirt and debris out of the firearm.) Mechanically speaking, this is the safest method of carry.
2. The firearm's chamber is unloaded, dust cover closed, the bolt is forward, and the hammer is down. The magazine is loaded and is locked in place in the magazine well. This allows the shooter to fire after the first round is manually chambered and the firearm is brought into a firing position.
3. **FOR PROFESSIONALLY TRAINED SHOOTERS ONLY!** All safety rules must be followed at all times! The chamber is loaded and the safety is in the "on" position. A loaded magazine is inserted and locked in place and the dust cover is closed. Your finger is off of the trigger and the muzzle is pointed in a safe direction. The firearm must be controlled at all times to assure the safety is not brushed off.

NOTE: If you use a firearm sling, be sure to sew the sling once it is properly adjusted. This will help assure it does not come loose from the firearm. Be sure the sling holds the muzzle pointing in a safe direction at all times. Be sure your CQB tactics training adequately covers sling choke counter measures.

Your firearm should be completely unloaded and locked in a secure gun safe when it is not in your direct possession.

VEHICLE CARRY OPTIONS

1. General firearm transportation: The firearm and ammunition are locked in separate containers and compartments.

NOTE: Window mounted gun racks are not acceptable.

2. Fast response vehicle carry: A loaded magazine is inserted into place and the chamber is empty with the dust cover closed. The firearm is locked in a security rack which protects the carbine's sights and controls. The rack should have multiple methods of access, for example; a push button electronic release along with a key override in case of electrical failure.

WARNING: Always keep the muzzle pointed in a safe direction, including when you chamber the initial cartridge.

NOTICE, WARNING, AND DISCLAIMER

Firearms, ammunition and shooting activities can result in death, serious bodily injury, and/or property damage. You are responsible for adhering to gun laws and safety rules and obtaining proper training and safety equipment to minimize the potential for shooting related deaths, injuries, and/or hazards. You have agreed to accept all terms of the site posted D & L Sports, Inc. liability waiver including all liability for death, injuries and/or damages related to the use of, or association with, D & L Sports, Inc. custom or customized firearms, and/or products, even in the event of negligence, or gross negligence on the part of D & L Sports, Inc. D & L Sports, Inc. products are sold “as is” and “with all faults” and are used at your own risk. D & L products are not recommended for any specific task. The end user makes this determination. This is due to the unpredictable environments in which products may be used. D & L Sports, Inc. expressly disclaims liability for incidental or consequential damages. As a condition of sale, any claim arising out of any interaction with D & L Sports, Inc. will be settled in the jurisdiction D & L Sports, Inc. is primarily operating in at the time of the claim. Do not proceed with any firearms activities without complete understanding and agreement of and with the above information. Please take the time to read and understand all information in this manual. Feel free to call with any questions about this manual, gun safety, or mechanical issues before you proceed with any shooting activities. Consult the D & L Sports, Inc. website at WWW.DLSPORTS.COM for further information.

STATEMENT OF CUSTOMER SERVICE

LIFETIME CUSTOMER ASSISTANCE PROGRAM

D & L Sports, Inc. would like to relate the following important information:

Customer service, quality products, and after the sale assistance have been and always will be the foundation of D & L Sports, Inc. D & L Sports, Inc. continues this commitment by offering a lifetime assistance program with all D & L Signature firearms. This program is available to all reasonable and ethical D & L Sports, Inc. clients, for all reasonable requests. D & L Sports, Inc. reserves the right to make final determination on what requests are reasonable and what conduct is acceptable. Any anti-American or other behavior determined to be unacceptable by D & L Sports, Inc. will lead to the termination of business and assistance with and from D & L Sports, Inc. The D & L Sports' goal of complete customer satisfaction has been in place for decades. This has created a long list of satisfied, repeat clients. D & L Sports, Inc. looks forward to adding you to this list.

Thank you for your interest in D & L Sports, Inc.

**** WARNINGS ****

This firearm and all firearms should be inaccessible by children at all times. This firearm should **never** be kept where children or unauthorized personnel can gain access to it. You are responsible for safe and secure storage of your firearms and related gear. Contact D & L Sports, Inc. if you need assistance in obtaining gun locks, gun safes, or other safety equipment.

1911 style pistols, AR style rifles and carbines, bolt action rifles, shotguns, revolvers, and other custom or customized firearms and gear requires dedicated and specific training for their safe use. You should seek and obtain such training from a competent instructor. When you purchase firearms and gear from D & L Sports, Inc., you are affirmatively representing to D & L Sports, Inc. that you have obtained specific and dedicated training in the use of such items. This includes training related to legal concealed weapon carry and self defense situations.

This firearm **will still fire** with the magazine removed. If you remove the magazine, but leave a loaded cartridge in the chamber, this firearm **will discharge** if the trigger is activated. Personal injury or death could result from your failure to understand this.

No safety on this firearm should be removed, disabled, or rendered inoperable. Removing a safety or disabling a safety could result in personal injury or death. Each component of this firearm is critical to proper and safe functioning.

You should not attempt to perform “gunsmithing” repairs or any modifications on this firearm. As indicated elsewhere in this manual, if any concern arises, contact D & L Sports, Inc. immediately.

Individual components in D & L Sports, Inc. firearms, and those customized by D & L Sports, Inc., are professionally fit to operate safely and reliably with that specific firearm. Parts should not be interchanged with other firearms of any make or model. Other components, of any make, should not be installed in D & L Sports, Inc. firearms or D & L Sports, Inc. customized firearms. Doing so may cause the firearm to be unsafe and/or unreliable, which may cause death or injury. Failure to maintain your firearms and related gear in proper working order may result in death or injury. Obtain professional advice and assistance with these matters.

Never allow the muzzle to cover anything or any person that you are not willing to destroy. If you point this firearm at a person or object and discharge the firearm intentionally or accidentally, death or personal injury may result.

This AR style firearm is designed to fire every time that you depress the trigger until the firearm is empty.

Never trust any mechanical safety on any firearm. Firearms safety begins in your brain, and you **MUST** pay attention to what you are doing with a firearms at all times. Use common sense.

Never handle a firearm for any reason, without first determining whether the firearm is loaded. You must **ALWAYS** assume that firearms are loaded. You must **ALWAYS** follow **ALL** gun safety rules.

Piston Pushrod Gas System:

If your Carbine is equipped with the piston / push rod system gas rings are not required on the bolt inside the bolt carrier. Disassembly of the piston / pushrod system: Make sure the magazine is out of the firearm and the chamber is unloaded. Rotate the gas system plug (on the front of the barrel's gas block / front sight area) clockwise 1/4 turn after pushing in the plunger located on the gas system plug (The plunger is located on the plug on the non-ejection port side of the firearm). Pull the plug forward and out of the gas block and set aside. Now the gas piston and operating rod can be removed through the front of the gas block. The piston comes out first. NOTE: The gas piston has two sets of holes, one set near each end of the piston. One set of small holes and one set of larger holes. The small holes should be positioned closest to the muzzle of the firearm. This allows the correct amount of gas into the system for firearm operation under common conditions. Reversing the piston, and putting the large set of holes closest to the muzzle, will put additional gas into the system and cause increased recoil and battering of the firearm under common conditions. This piston position should not be used unless the firearm is being used under extreme conditions, is contaminated to the point of being sluggish and needing more gas impulse to operate the system. Do not operate the firearm for extended periods with the piston in this position. Clean and lubricate the firearm at first opportunity, and return the piston to the small ports forward position. NOTE: If the gas piston system is heavily contaminated and the piston and operating rod will not simply slide out of the op rod housing when the carbine is tipped muzzle downward, you can remove the bolt carrier unit from the rear of the upper receiver and push the piston and op rod forward and out of the firearm with a small caliber cleaning rod. Or you can use the carrier and buffer spring to loosen the piston and op rod by cycling the carrier manually which will tap the piston forward with the op rod. Use a cloth to assure no parts are lost. There are three primary removable parts; the plug, the piston, and the op rod. No gas rings or springs are required in this gas system. Clean the components with a rag and solvent. Make sure the gas holes in the piston are clear of dirt and carbon. Swab out the operating rod housing, making sure not to lodge anything in the housing. A quality cotton bore mop can be used. Blow out the housing with spray cleaner and compressed air if available. Inspect the inside of the housing to assure it is free of obstructions. Coat the op rod and piston with light gun oil, such as break free or milcom 3000 and reinstall WITH THE SMALL HOLES ON THE PISTON CLOSEST TO THE MUZZLE. Reinstall the gas block plug, and turn counterclockwise after pushing in the plug plunger, until the plug locks in place.

Adjustable Stock Adjustment Procedure:

The D&L adjustable stock is not meant to be quick adjustable. It is meant to be adjustable to suite the size and dress of the operator, then to be locked in place to become a solid unit and remove all noise and movement. To adjust, simply loosen the top two locking set screws one full turn each (on generation 1 stocks), and remove the two large stock cross bolts and round nuts completely (on generation 1 stocks. On generation 2 stocks, remove single large cross bolt). Slide the stock butt into the desired position and re-bolt in place. Loctite #242 can be added to the threads if needed. If the stock butt piece is still tight on the buffer tube after cross bolts and round nuts are completely removed, and top set screws are loosened, then you may have to tap the butt plate on a firm padded surface to collapse it, or tap it toward the rear with a rubber mallet to extend the stock. No serious force is needed. Move the butt plate in small increments at a time, as the adjustment recesses are every 1/2 inch. Only adjust the stock within its adjustment range, which is within the distance that both cross bolts can still be returned through the stock.

Non-Spring Loaded Buffer Stop/Lock:

The buffer stop is located inside the firearm, in front of the main stock tube and buffer/spring assembly. To view the buffer stop, the firearm needs to be completely unloaded, and the upper receiver pivoted upward on the front pivot pin, after pushing out the rear receiver pin. If your firearm is equipped with a non spring loaded buffer stop, the stop post cannot be depressed like a conventional spring loaded buffer stop post. A stop post which is locked in place is a more durable design because it cannot spring free and lock up the firearm durinig operation. To remove the buffer from the stock, rotate the buffer until a half moon recess lines up with the buffer stop post, then it will spring forward so it can be removed. A buffer which has half moon cuts allows the buffer to continue operation when there is contamination in the buffer tube. It also allows the buffer to occasionally spring forward and partially out of the buffer tube when the firearm is pivoted open. If this occurs, simply push it back into the buffer tube, and rotate it until it is held by the buffer stop post before pivoting the firearm closed. A fixed position buffer stop and a relieved buffer require a little more attention when performing maintenance, but the increased reliability they offer during live fire makes them worth the effort.

