

DL Sports Inc SLR Carbines

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 on obtaining a premium grade DL Sports Inc. firearm. Years of development, research and testing have been factored into the features, safety 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 or firing this carbine be sure to read and thoroughly understand all the safety rules and instructions in this manual**. Failure to do so could result in injury, death or property damage.

Caliber 7.62mm x 39mm or as 5.45 x 39mm

Carbine Barrel 16.25 inches

Carbine Length 35 inches (depending on how stock is adjusted)

Weight approximately 7.5 pounds/ for 7.62/ 6.5 pounds for 5.45 models

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 <u>WWW.DLSPORTS.COM</u>.

ADDITIONAL FIREARMS SAFETY RULES, NOTICES, AND WARNINGS

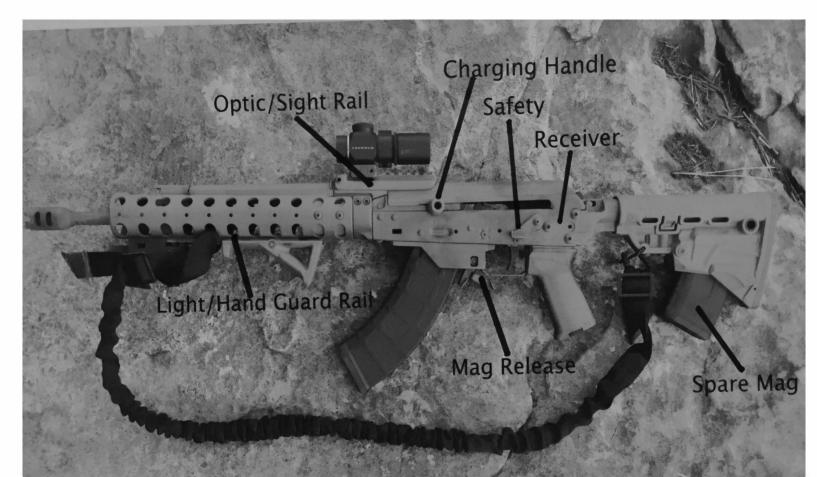
- 1. Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm, and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure, 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 unforseen 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 AND CHAMBER 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.



Ammunition Selection

The DL Sports Inc Custom SLR Carbine is chambered in 7.62mm x 39m or 5.45 x 39mm. Only the specified caliber of ammunition should be loaded or fired in the firearm. Only use high quality ammunition in new condition, manufactured by reputable companies. Safety, reliability and accuracy are critical concerns for proper functioning of the carbine.

Full metal jacket (FMJ) bullets have the historic reputation as being the most reliable and durable feeding bullets in self loading firearms. Hollow point and most soft point bullets should not be used. Ballistic tip style bullets need to be thoroughly tested before serious use. Hornady SST has been proven to work well in our tests.

Some brands of 7.62mm x 39mm commercial ammunition have been found to be under powered and will not reliably cycle the carbine in semi automatic mode. Some ammunition coatings can contaminate the chamber and cause cartridges to stick and not fully chamber. Keep your bore and chamber clean. Do not use corrosive ammunition. Do not use reloaded ammunition in the SLR carbine. Do not use cheap ammo of undetermined origin.

Consult DL Sports Inc for ammunition recommendations.

Detailed Instructions for disassembly and cleaning of the DL Sports Inc. SLR Carbine are in the appendix at the back of this manual for convenience - See page 26.

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 <u>WWW.DLSPORTS.COM</u> 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! Be sure to check federal, state and local laws regarding the legality of various magazine capacities.

Note: Magazine specifications may vary, and can adversely affect the reliability of your carbine. Only use magazine brands recommended by DL Sports Inc. Do not attempt to modify your carbine to work with various magazine brands. Consult DL Sports if magazines need to be fitted to your carbine.

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 live ammunition. 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 tighten the clamp on 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 Inc strongly recommends short loading magazines by a minimum of two rounds less than maximum capacity. 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. Use only mil-spec, crimped in primers in your 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.

Magazine Cleaning and Maintenance

When cleaning the carbine do not forget to inspect and clean the magazines. Often during shooting activities the magazines are dropped onto the ground and can pick up dirt, sand and pebbles, etc. Such objects may result in poor functioning of the magazine. Using a magazine brush will help with the cleaning process. Some brands of approved magazines may have a button on the floor plate that can be depressed to disassemble the magazine for a thorough cleaning. Do this carefully while wearing protective glasses as the magazine springs are compressed and can release unexpectedly.

Carbine Rear Stock

The buttstock of the carbine is adjustable and should be adjusted to a length that promotes a good firing position with a solid cheek weld when looking thru the sights or optic. To adjust the stock length remove the two dome head screws in the underside of the stock, slide the stock to the desired length and replace the two screws. The stock has a recess for carrying an extra magazine. The magazine is inserted with the normal magazine rotary motion used to load the carbine magazine well. In the rear of the stock is a cap that can be removed giving access to a space for storing a sectional cleaning rod and or other materials. Slings can be attached by using a flush cup sling attachment in the provided stock recess. A preferred method of sling attachment is to tie a loops of 550 or 850 paracord through the holes in the stock and attach the sling to the paracord loop.

Loading the Magazine

Prior to loading the carbine one must place rounds in the magazine. Be sure you are attempting to load the magazine with the correct caliber of ammunition and then proceed. Holding the magazine in one hand press the cartridges firmly downward one at a time, snapping the cartridge under the magazine feed lips. Do not load by trying to slide the cartridge base first into the magazine from the front.

If the magazine is going to be stored in a loaded condition for a period of time it is best not to load the maximal number of cartridges in the magazine.

If unfamiliar with magazine loading it is best to practice with some dummy cartridges.

note: wear safety glasses when loading the magazine(s)

Loading and Unloading the Carbine

First be sure the carbine's muzzle is pointed in a safe direction and your finger or other object is not inside the trigger guard or touching the trigger in any manner.

Holding the magazine in the free hand start with the magazine almost parallel to the plane of the barrel and with and upward motion, insert the front top corner of the magazine into the magazine well first. Then pull the magazine to the rear until it positively clicks into place. This evolution may be a bit foreign to those used to simply pushing a magazine straight into a magazine well. It will take dedicated practice and possibly some instruction to become proficient.

Once the magazine is properly locked in place, then a live round of ammunition is chambered by fully cycling the charging handle of the carbine firmly, all the while keeping the muzzle pointed in a safe direction. After chambering a round immediately move the safety lever upward until it clicks in the safe position. There is a small "S" engraved on the right side of the receiver indicating the safe position.

To fire the carbine, once the firearm is on target, move the safety lever downward to the fire "F" position, move your finger into the trigger guard and onto the trigger and press the trigger. The carbine will fire one round, eject the spent case and chamber another live round. As you release the trigger you will hear and feel and slight click which is the reset of the firing mechanism, The trigger may be depressed and subsequent rounds fired in this manner. Upon finishing the firing cycle move the safety lever upward to the "Safe" position.

Note: The safety lever must be in the down postion to allow the charging handle to fully cycled.

To unload the carbine, first be sure the muzzle is pointed in a safe direction and your finger is off the trigger and out of the trigger guard. Activate the magazine release to unlock the magazine. Now firmly rotate the magazine forward with some downward pressure and remove the magazine from the magazine well. Now unload the chamber by keeping the muzzle pointed in a safe direction move the safety lever down.

Continuing with the safety practice of muzzle control, now pull the charging handle fully rearward and hold it open. This will eject the live round from the chamber, and give you a chance to carefully visually and manually inspect the chamber and magazine well to confirm that no cartridges remain in the carbine. The bolt can be retained in the open position by using the bolt hold open notch on the safety lever.

The process of loading and unloading is one that requires practice, with dummy cartridges, to be accomplished in a safe, smooth and error free manner.

Note: Remember, when the Safety lever is in the upward on "Safe" position you cannot fully operate the charging handle of the SLR.

Suggestions for Firing your Carbine

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!

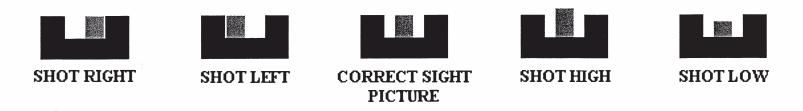
Be sure your range location and targets are safe for high velocity, centerfire rifle usage. Be sure first aid and trauma treatment gear are on hand. Be sure the route to the hospital is known and transportation is available. Be sure EMS personnel know the GPS coordinates of your range location in case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

Your D & L Sports Inc. SLR carbine was properly test fired and zeroed upon completion of 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



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 dummy cartridge 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, and safe gun handling practices are achieved.

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 cycling a live round into the chamber, immediately move the safety upward to the "Safe" position. Do not move the safety to the "Fire" position until you are ready to fire at your target. 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 extract and eject the spent casing, re-cock the hammer, and reload the next live round into the chamber as part of the firing sequence. This means the firearm is ready to fire again after each shot. This process will continue until the magazine and chamber are empty.

Sight Adjustment

FRONT SIGHT: Your front sight has the capability to screw clockwise into the sight base to lower the sight. Conversely, counterclockwise rotation of the sight raises the sight post in the sight base. The elevation setting of the carbine can thus be changed by changing the height of the front sight post.

Prior to making any adjustment point the firearm in a safe direction and be sure the magazine is removed and the chamber is empty. Using a sight adjustment tool, depress the plunger and gently rotate in the sight post in the correct direction to obtain the desired elevation setting. Small adjustments will have a significant effect on point of impact, especially at longer distances. Make small changes and check the effect on the point of impact with each adjustment. Completely unload the carbine before making any sight adjustments. If your sight has a night insert you will need to be sure the adjustment leaves the insert facing the rear sight of the firearm. Clockwise turns will raise the bullet's point of impact on the target, while counterclockwise turns will lower the point of impact.

Windage adjustment of the front sight is accomplished by loosening the dome head screw on one side and subsequently tightening the screw on the opposite side.

REAR SIGHT: The forward mounted rear sight is also capable of windage (left and right) adjustment in a manner similar to the front sight. The goal is to achieve proper carbine sight zero and then lock the sights in place to prevent accidental disturbance of that zeroed condition.

When zeroing your carbine start with targets at a relatively short range and as point of impact becomes centered move to longer ranges and repeat until you have achieved zero at the desired range.

Optical Sight Adjustment

If your firearm is equipped with an optical sight be sure to follow the manufacturer's recommendations on sight adjustment and zeroing.

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

Changing sights, optics or ammunition, as well as cleaning or maintenance will require reconfirming, and perhaps adjusting, the firearm's zero.

Recommended Zeroing Distance for the SLR Carbine is 50 yards:

Range (yards)	Bullet Path (Inches) 123 grain/2300fps MV
300	-20.2
275	-15.2
250	-11.0
200	-4.7
150	-1.0
100	0.5

Carry Options for the SLR Carbine

- 1. The firearm is unloaded with an empty chamber and the hammer down. An empty magazine is inserted in place. (This helps keep dirt and debris out of the firearm.) Mechanically speaking, this is the safest method of carry.
- 2. The firearm's chamber is unloaded, 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. 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. Never case or store a firearm with a loaded chamber.

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. 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 <u>WWW.DLSPORTS.COM</u> 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 <u>never</u> 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, semi automatic 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 <u>will still fire</u> with the magazine removed. If you remove the magazine, but leave a loaded cartridge in the chamber, this firearm <u>will discharge</u> 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 semi automatic 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 <u>MUST</u> 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 <u>ALWAYS</u> assume that firearms are loaded. You must <u>ALWAYS</u> follow <u>ALL</u> gun safety rules.

D & L SPORTS, INC. is dedicated to personal, professional service. If you have any questions regarding your firearm, firearms safety, or shooting activities, contact D & L Sports, Inc.

MAINTENANCE LOG / NOTES



Cleaning the DL Sports Inc. SLR Carbine

With the firearm pointed in a safe direction, remove the magazine. Pull the bolt fully to the rear and visually and manually insure there are no rounds remaining in the chamber of the firearm. After double confirmation that the firearm is unloaded and the magazine is removed you can proceed with cleaning. Start disassembly as shown in Step 1 below.

1.Depress the black button at the rear of the dust cover. Gently pull the dust cover rearward and upward to remove it.* You may have to wiggle it gently; DO NOT use any force. When the dust cover clears the underside of the picatinney rail it can be lifted out and placed aside after removing dust and dirt with a clean rag.



Step 1 Dust Cover Release & dust cover removal. Note 2 roll pins in recoil block in 3rd picture

- 2. Push the carrier spring retaining block forward until it can be removed from the retaining notch in the rear of the receiver cutout. Carefully let the spring decompress and remove the carrier spring assembly from the rifle. It can be cleaned with a solvent and then very <u>lightly</u> oiled and placed aside. Check to be sure the roll pin in the rubber recoil block is flush and seated properly (see above photo).
- 3. Carefully pull the bolt carrier rearward until the bolt side lugs align with the rear notches in the receiver rails. Now lift the bolt carrier group upwards and to the rear to remove the assembly.

*If you have a hinged top cover, remove the hold down bolt and then push in the black button allowing the cover to pivot open. It may take some gentle wiggling of the bolt carrier group to get it to clear the picatinney rail.

4. After noting the correct postion of the bolt in the bolt carrier, the bolt can be removed for cleaning with solvent. After the bolt and carrier are cleaned with a brush and solvent, the recess in the bolt carrier, the bolt lugs, and the bottom flat of the bolt that rides over the trigger assembly can be lightly lubricated before re assembly of the bolt carrier group.



Underside of bolt carrier Bolt removed from carrier showing lube points In warmer weather a good quality grease that withstands high temperature, such as Milcom TW 25 may be used. In cold or hot weather a high quality oil, such as Milcom 3000 is recommended. In a field situation even the motor Oil off the vehicle dipstick can be used.

5. Now carefully clean the rails that carry the bolt on the inside of the receiver on both sides using a solvent and a brush. After the solvent is removed, lubricate both sets of rails lightly with the oil or grease. Also lightly lubricate the flat on the top of the hammer as the bolt rides over this during self-loading. Lastly put a thin coat of oil or grease on the bolt itself and in the recess of the bolt carrier. Thoroughly clean and dry the bore and chamber. Using a flexible cleaning cable or rod always pull brushes from chamber forward to exit out of the muzzle. Use chamber brush for chamber.



Receiver: showing one of the rails and the hammer that are lube points

- 6. Reassembly is done in a reverse manner. First place the bolt back in the carrier in the proper alignment noted during disassembly. Hold the bolt forward in the carrier. Then Insert the gas piston into the gas tube and gently push it forward until the bolt carrier side lugs are positioned over the rear notches in the receiver rails allowing the bolt and bolt carrier to pressed downward into the receiver and properly align with, and engage the rails. This may take a bit of gentle manipulation of the bolt carrier to clear the picatinney rail and align properly. Do not use force.
- 7. Insert and compress the recoil spring assembly until the assembly block can be fitted into the notch in the rear of the receiver.
- 8. Now with some gentle forward motion slide the dust cover under the picatinney rail and align it with the front recess. While maintaining a gentle pressure push the rear of the dust cover downward until it clicks into place over the black button on the rear of the receiver.

This process may require some gentle manipulation of the cover, as well as visually confirming proper alignment of the cover with the receiver. This maneuver does not require excessive force but finesse and gentle pressure.

 Now cycle the charging handle several repetitions to insure uniform coverage of lubricated elements. With the carbine pointed in a safe direction, perform function checks of the firearm's firing and safety mechanisms.

NOTE: A live fire firing check of 5 rounds is recommended after cleaning and reassembly to confirm proper function of the carbine.

Important Warnings, Notes and Tips on the SLR Carbine

The D&L custom SLR carbine is available as a full size model with iron sights, about 7.5 lbs for the base rifle. Two LW models are also available with hinged flat top optic mounts and no iron sights, about 6.5 Lbs. Two caliber selections are available; 7.62 x 39mm and 5.45x 39 mm.

The Barrel is chromed lined, and is also properly fit for headspace and has a recessed precision cut crown protected by the muzzle brake. The DLS inc handguard design free floats the barrel, with the exception of where the gas system attaches. Do not attach things directly to the barrel, or rest the barrel directly on support while firing as that spoils accuracy. Shooting for accuracy with this carbine and aimpoint sight is possible even tho the optic is only 1x. Just turn the dot intensity down as low as possible and the dot will get very fine on target, and allow a precision hold all the way through the trigger press.

The rear end of the bolt carrier stroke is cushioned by a firm rubber bolt stop cross pinned on the rear end of the recoil spring guide. (Either one large pin or two smaller cross pins) This rubber bolt stop cushions recoil for the shooter and stops steel components from slamming against each other. The rubber bolt stop and cross pins should be monitored on a regular basis. The pins should not be protruding from either side of the rubber bolt stop, the pins should be centered. The rubber bumper and the recoil spring should both be replaced any time there is any damage to the rubber bolt stop observed.

DO NOT under any circumstances operate the carbine without the rubber bolt stop in place. The rubber bolt stop limits the bolt carrier's rearward travel and stops the bolt carrier from coming off the inner receiver rails. DO NOT operate the carbine without the rubber bolt stop in place. **The rubber buffer needs to be carefully inspected at each cleaning for wear or damage**. If it is found to be damaged or worn it needs to be replaced immediately to insure top notch function of the SLR. Replacement drop in spring/rubber buffer assembles can be obtained from DL Sports.

The handguard can be equipped with picatinny rails for accessory mounting. It is wise to keep it very simple and not overweight the gun. A vertical grip and a light at the 6 oclock position keeps everything ambidextrious for usage and keeps the carbine slim. The light can be activated with the index finger of the support hand. The picatinny mount can be best positioned to fit hand size and finger length. Do not mount any accessories in a position that will interfere with inserting or removing magazines.

This carbine allows many points to attach the sling of preference, whether it be by flush cups, studs, or heavy duty cord. Cord mounting is the preferred method as when it is done properly it is both secure and quiet. Make sure all safety rules are

always followed, especially when using the carbine on a sling. Make sure the muzzle never covers anything you are not willing to destroy and take full responsibility for doing so.

Some carbines have iron sights and optic capability. Other carbines have an optic only mounting platform. If you do not have back up iron sights on your carbine, it is wise to carry a pre-zeroed back up optic in case of optic failure. If your carbine has a hinged top cover with a rear 1/4 x 20 hold down bolt, it is wise to carry an extra hold down bolt in a storage compartment on the carbine. Be sure to use blue #242 loctite on your hold down bolt. There is no need to slam or pound on your top cover to close it. A hinged top cover only needs to be closed, the rear spring guide pushed inward, and the cover closed into final position. Then install the hold down bolt. To re-install a removable sheet metal top cover, simply guide the front of the cover into position under the picatinny rail / scope mount while holding the rear of the cover just high enough to clear the rear receiver retaining lip. Push the cover forward and down until the rear spring guide snaps out the rear square hole of the top cover. Proper technique is required, not force.

Iron Sights; Locking iron sights were developed to assure a proper zero is maintained. The sights on this carbine are lockable, and foldable for people who run magnified optics. No need to fold them when using 1x red dots though. When you bring the carbine up you will see both red dot and the iron sight picture through the optic tube. This is part of the design. The problem with floating red dot aiming points is that there is no way to confirm that the sight is still zeroed by just looking through the tube. This is a problem when an important shot needs to be made. A dual sight set up of locking iron sights and red dot optic allows you to look through the red dot optic tube, align the locked and zeroed iron sights into a proper sight picture, then confirm whether or not your red dot aiming point comes into proper position at the tip of the front sight. If it does not, you know the red dot is not properly zeroed.

Iron sight adjustment: Elevation of the front sight moved up and down by depressing the detent in the sight base and rotating the front sight blade. If you screw the sight down into the sight base, this will raise your bullet's point of impact on target.

Both the front and rear sight are adjustable for windage. Loosen one screw on one side of the sight and tighten the screw on the other side of the sight to move sights in the desired direction. If you move the rear sight to the right, your bullet's impact on target will move to the right. If you move the front sight to the right, your bullet's impact on target will move to the left.

Magwell; One of the most common mag change problems people have with an 'rock and lock' mag insertion design is snagging the feed lip on the side of the sheet metal receiver. The magwell solves this problem as it guides the mag into

position. The other issue many people have with rock and lock magazine insertion designs is forgetting to insert the magazine into the well with the top front corner going into the magazine well first. Once operators learn to insert the mag in a near horizontal position to the mag well, so the front top corner of the mag gets into proper position for the rock and lock, it becomes simple and positive. Bolt lock open after the last shot is an option for the SLR carbine.

Magazines; DLS custom carbines are tested with Circle 10 and Magpul magazines. There is no guarantee that random battlefield pick up mags are going to work in all guns. Do not depend on it. Wise shooters get all the mags they may need when they order a carbine, then all magazines can be tested for fit and function, and the carbines serial number put on the bottom of the magazine. Use a drop pouch to retain expended magazines and avoid dropping them on the ground. Do not abuse your magazines as they are a critical part of the reliability chain.

Magazine fit is critical to reliability. Steel, polymer and overmolded mags often require fitting to individual carbines for proper performance. DO NOT modify your carbine in any way in attempt to make various magazines fit the carbine. Obtain professional assistance if you need magazines properly fitted to the carbine. DO NOT modify the carbine to fit magazines.

Box mags are available in 5,10,20,30,and 40 rounds capacities. With a dual magwell carbine / stock set up you can always have two mags on board. If you get shot in the mag and it stops running, you can switch them out. If you want to go prone and do supported precision shooting, you can put in a short mag in and get the gun close to the ground.

Mag catch; note that the mag release on the DLS inc custom carbine is ambidextious. It can be operated by the thumb in a conventional manner, or by the trigger finger on the tabs reaching back along the trigger guard. Using your trigger finger keeps your finger off the trigger, and allows you to unlock the magazine as the fresh mag is being brought up for the reload. The support hand with the fresh mag just pushes the empty mag out of position and locks the fresh mag in place. There is no need to scrape, claw, or hit the mag catch and the old mag out of place with the fresh mag when you use the correct technique. Retaining the expended mag in your magazine drop pouch avoids magazine damage that can occur if the magazine hits the ground.

The notch cut in the safety lever allows you to manually lock the bolt open as needed. To do so, pull the charging handle back until the knob on the right side of the receiver aligns with the notch in the safety lever, then move the safety lever upward to capture the knob. To release the bolt, pull the charging handle back slightly, move the safety lever down, and release the charging handle.

Safety Lever; The safety lever on this carbine can be in the up or down position whether the internal hammer is cocked or not. The bolt handle cannot be fully retracted to chamber a round unless the safety lever is in the down / off position. Once a round is cycled into the chamber the safety lever should be immediately put into the up / on position. With the safety lever in the up / on position the firearm can be chamber checked by pulling the charging handle slightly to the rear to confirm the presence of a round in the chamber. Then assure the charging handle returns fully forward.

The pistol grip and or vertical grip will commonly have storage compartments. It is wise to carry an extra battery for your optic and a couple allen wrenches for your sight and stock movements. There is another storage compartment in the stock tube. The tube cap is accessed through the butt plate or by removing the stock from the stock tube. The rear access cap has both an allen wrench socket and a flat blade screwdriver slot. DLS inc recommends shooters have a gun maintenance kit in their pack for common cleaning duties and leave cleaning supplies in the stock tube for use in case of emergency. If you are separated from your pack and you get the muzzle full of mud or get a case stuck in the chamber, having a LW sectional alum rod in the stock tube can be used as a knock out rod. For brush cleaning the bore, it is recommended to insert the bare rod in from the muzzle end, THEN screw the brush on the rod near the chamber. Pull the brush out the muzzle. This is because there is not a straight line from the rear of the receiver out the front of the muzzle. A flexible cable also works well to pull the brush forward during general cleaning. Chamber cleaning can be done with the flexible brass brush.

It is best to do all cleaning at the live fire range. Then once cleaning is complete you can do a final zero confirmation with a few rounds of live ammunition. This will allow you to leave the range with a slightly fouled carbine which you know is precisely zeroed.

Ammunition; American made Hornady ammunition in 7.62x39mm and 5.45x39 feature pointed SST bullets and has proven to be a good ammunition choice. They feed like FMJs and impact like a soft points, as well as have reasonable accuracy within the expected use distance of the carbine; 0 - 200 yards. Do not use cheap, poorly manufactured, or corrosive ammunition in your carbine. Safety and reliability must remain your top priorities.



Neopod on SLR



Muzzle Brake



DL Sports 5.45 SLR Carbine