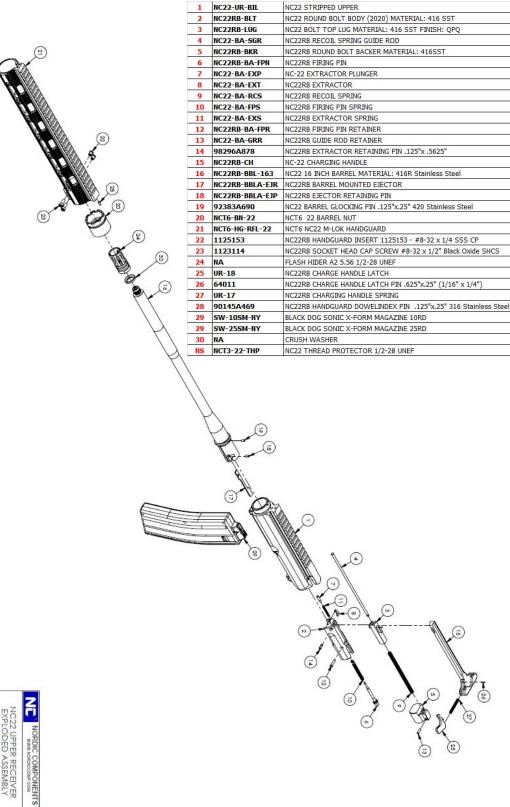


OWNER'S MANUAL





22RB DEDICATED UPPER



22RB Dedicated Upper



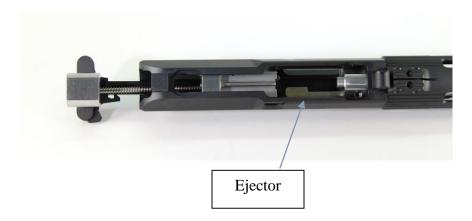
22RB Dedicated Upper (Field Stripped)



22RB Bolt Components



Underside of 22RB Upper Receiver



Thank you for choosing Nordic Components!

Your new 22RB Dedicated Upper is ready to use right out of the box, but before you get started, please carefully study and diligently practice the safety and operational procedures outlined in this instructional manual. Doing so will ensure years of reliable service while maintaining a safe and enjoyable shooting experience for yourself and those around you.

LIMITATION OF LIABILITY

PRODUCTS ARE SOLD BY US WITH THE EXPRESS AND SPECIFIC UNDERSTANDING THAT NORDIC COMPONENTS, INC. IS NOT RESPONSIBLE IN ANY WAY FOR: PHYSICAL INJURY, INCLUDING, BUT NOT LIMITED TO, HEARING LOSS OR EYE DAMAGE RESULTING FROM FAILURE TO TAKE ADEQUATE PRECAUTIONS WHILE SHOOTING; PROPERTY DAMAGE RESULTING IN WHOLE OR IN PART FROM CRIMINAL OR NEGLIGENT DISCHARGE; UNSAFE, IMPROPER USE, OR CARELESS HANDLING BY THE USER; UNAUTHORIZED MODIFICATIONS; DEFECTIVE, IMPROPER, RELOADED, HAND LOADED, OR NON-STANDARD AMMUNITION OR IMPROPER CALIBER USAGE; CORROSION, ABUSE OR NEGLECT; OR OTHER INFLUENCES BEYOND OUR DIRECT AND IMMEDIATE CONTROL. PURCHASE AND USE OF THIS PRODUCT IMPLIES CONSENT TO THESE TERMS.

Warranty Information

NO WARRANTY CARD HAS BEEN INCLUDED WITH THIS NEW NORDIC COMPONENTS PRODUCT

The Magnuson-Moss Act (Public Law 93-637) does not require any seller or manufacturer of a consumer product to give a written warranty. It does provide that if a written warranty is given, it must be designated as "limited" or as "full" and sets minimum standards for a "full" warranty. Nordic Components, Inc. has elected not to provide any written warranty, either "limited" or "full", rather than to attempt to comply with the provisions of the Magnuson-Moss Act and the regulations issued thereunder. There are certain implied warranties under state law with respect to sales of consumer goods. As the extent and interpretation of these implied warranties varies from state to state, you should refer to your state's law.

Local, State & Federal Restrictions

According to the NRA-ILA website; "There are estimated to be more than 20,000 gun laws in America at the federal, state and local levels and laws vary greatly from state to state and, in some states, from locality to locality. Since 1968 virtually every aspect of lawful firearms commerce from manufacture to retail sales has been strictly controlled and regulated by the federal government." It is your responsibility to educate yourself on the laws pertaining to firearms ownership, transfer, transport, and storage in your area.

Questions/Concerns

If, at any time, you are unclear on any of the safety or operational procedures discussed in this manual or are having difficulties with your firearm, please contact Nordic Components, Inc. for assistance at 952-442-8900 or email sales@nordiccomp.com. Our customer service and technical support departments are available to you should you have any questions or concerns.

Problems/Returns

We make every effort to supply products in the best possible condition; however, issues can arise from time to time. If there is a problem with our product, or if a shipment was damaged in transit, call us immediately for assistance and instructions at 952-442-8900. Remember that it is illegal to ship a firearm and ammunition in the same package. Ammunition must be shipped separately.

ATTENTION:

EYE AND EAR PROTECTION IS STRONGLY
RECOMMENDED WHEN ENGAGED IN, OR SIMPLY
OBSERVING, SHOOTING ACTIVITIES. RICOCHETS ARE
COMMONPLACE AND CAN TRAVEL GREAT
DISTANCES OUTSIDE OF AN OTHERWISE
CONTROLLED SHOOTING AREA. IT IS HIGHLY
RECOMMENDED THAT EYE PROTECTION BE WORN AT
ALL TIMES AND IN ALL AREAS OF THE FIRING RANGE.

ATTENTION:

USE ONLY HIGH QUALITY, COMMERCIALLY PRODUCED, HIGH VELOCITY .22LR AMMUNITION, THE APPROPRIATE CALIBER IN THIS UPPER RECEIVER. DO NOT USE .22 SHORT, .22 LONG, .22 SHOT, .22 STINGER, OR CARTRIDGES WITH SHARP SHOULDERED, FLAT NOSE, OR "EXPLOSIVE" BULLETS.

WARNING:

CARELESS OR NEGLIGENT HANDLING, OR FAILURE TO FOLLOW THE RECOMMENDED SAFETY PROCEDURES OUTLINED HEREIN, MAY RESULT IN DAMAGE TO PROPERTY, SEVERE INJURY, OR DEATH. ANY RESULTING DAMAGE TO THE FIREARM IS NOT COVERED UNDER WARRANTY BY NORDIC COMPONENTS, INC.

WARNING:

DO NOT, UNDER ANY CIRCUMSTANCES, ATTEMPT TO ALTER OR MODIFY YOUR FIREARM OR PERFORM SERVICE BEYOND GENERAL MAINTENANCE. DOING SO MAY VOID YOUR FACTORY WARRANTY AND JEOPARDIZE YOUR SAFETY. PLEASE CONTACT NORDIC COMPONENTS. INC. IF THERE IS A PROBLEM.

WARNING:

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 AND WASH HANDS THOROUGHLY AFTER EXPOSURE.

WARNING:

UNFIRED ROUNDS MAY NOT ALWAYS EJECT OUT OF THE FIREARM'S CHAMBER. ALWAYS VISUALLY CHECK TO SEE THAT THE CHAMBER IS CLEAR! Simply retracting the charging handle is not verification of an empty chamber. You must LOOK at the chamber.

Safety

Firearms safety is everyone's responsibility. Do your part by ensuring that you and those around you are consistently practicing the safe handling of all firearms. Although the list does not stop here, the five fundamental rules for the safe handling of firearms are:

ALWAYS treat every firearm as though it is loaded. It is up to you alone to verify the condition of every firearm, every time you pick it up.

NEVER point any firearm at anything you are not willing to destroy. This includes muzzle awareness, both on and off the range, even when the firearm is known to be unloaded.

ALWAYS verify your target and what is around and beyond it. Choosing a suitable backstop is imperative. This includes the handling of firearms in the home. Do not assume that your target will stop a bullet.

ALWAYS keep your finger off of the trigger and out of the trigger guard until the firearm is intentionally pointed downrange at a verified target, in front of a suitable backstop, and you are ready to fire.

ALWAYS store firearms unloaded and in a locked location away from children. Each state has specific regulations that may change and it is your responsibility to know and follow these regulations.

Compatibility

Lower Receiver

The 22RB Dedicated Upper is designed for use on any properly assembled and maintained **mil-spec** AR15-type lower receiver. Nordic Components only recommends **straight face hammers** (Mil-Spec, JP, etc.). Any hammer with an angled strike face may result in damage to the firing pin (AR Gold, Hiperfire, etc.) due to the 22RB firing pin sitting higher in the bolt than an AR15 firing pin. Damage caused to the 22RB Dedicated Upper by an improperly assembled or maintained lower receiver or lower receiver parts will not be covered under warranty.

Function with NFA-regulated Devices

The 22RB Dedicated Upper is designed to accommodate suppressor/silencer use. The muzzle is cut with standard ½-28TPI threads to accept most suppressors and muzzle devices. Additionally, a tenon is machined at the front of the muzzle threads to accommodate suppressors that utilize O-rings to reduce gas and debris blowback. The 22RB Dedicated Upper is **not compatible** with registered drop-in auto sears, registered full-auto lower receivers, or any other mechanism designed to facilitate automatic fire.

22RB Features & Operation

Barrel Assembly

The 22RB Dedicated Upper features a match quality .22 Long Rifle barrel with 1:16" right-hand twist and an 11-degree target crown for peak accuracy potential.

Handguard Assembly

The aluminum handguard assembly featured on your 22RB Dedicated Upper offers a light-weight, yet remarkably strong platform for your support hand, bipod, bag rest, vertical grip, or any other rifle accessory you wish to install, including lights, back-up sights and slings. The series of slots and pre-tapped holes allow you to install any number of Nordic Components Picatinny rail sections or standard sling studs to configure the rifle in a way that works for your individual needs.

Charging Handle

The charging handle, located at the rear of the receiver rail, allows you to manually retract the bolt assembly in order to verify the loaded/unloaded condition of the rifle, chamber a live cartridge, or manipulate the action to clear a spent case or malfunction. The left side of the charging handle features a latch which locks into a relief in the upper receiver. The charging handle does not reciprocate with the action under live fire.

Bolt Assembly

The 22RB bolt assembly consists of a bolt body and a backer connected by a recoil spring and guide rod. The bolt body houses the firing pin and extractor, and reciprocates during firing. The backer is stationary and supports the recoil spring and guide rod.

Black Dog Machine "Bolt-Saver"

With this device installed on the underside of the upper assembly when shipped from the factory, it is not possible for your bolt assembly to inadvertently fall out of the back of the receiver during handling or transport. This device must be removed in order to mate the upper and lower assemblies.

Magazine

All 22RB Dedicated Uppers are supplied with one 10-round *Black Dog Machine* magazine. *Black Dog Machine* magazines are the only magazines we recommend with 22RB Dedicated Uppers.

CAUTION: The bolt does not lock back on the bolt catch after the last round is fired out of the magazine. Rather, it locks back against the magazine follower. As soon as the empty magazine is removed, the bolt will be released and will close forward under its own spring tension. You can manually lock the bolt back against the bolt catch; this will allow the user to look in the entry of the chamber. Releasing the bolt by using the bolt catch will not chamber a round from a loaded magazine.

Loading, Firing, and Unloading

Loading the Magazine

- With the rifle set aside, pick up the empty magazine in one hand and a .22 Long Rifle cartridge in the other.
- Holding the magazine upright and with the bullet facing forward (the front of the magazine curves forward and the back of the magazine has a rib along its length), position the cartridge on top of the follower, about half way back.
- Press down and back on the cartridge with your thumb so that the rim of the case clears the front of the magazine feed lips and slides back underneath them, where the magazine will retain it.
- To load additional cartridges, repeat the process. Once you have loaded to the desired capacity, set the loaded magazine aside.

Loading the Rifle

- Pick up the rifle, keeping your finger off of the trigger and out of the trigger guard.
- Disengage the charging handle latch and pull the charging handle fully to the rear.
- While holding the handle back, look in through the ejection port and visually verify that the chamber is clear. If clear, release the charging handle so the bolt closes. The hammer will be cocked during this process.
- You should now flip the safety selector to the "SAFE" position.
- As you continue to point the rifle in a safe direction, pick up the loaded magazine and orient it so that it is upright and the bullets are pointing forward (toward the muzzle).
- Insert the magazine up into the lower receiver through the magazine well and push up until you sense the "click" of the magazine catch locking it in place.
- Verify that the magazine is seated fully by gently pulling down on the magazine. If seated fully, the magazine will lock in place. Avoid slamming the magazine into place. This is unnecessary and may cause over-insertion and damage to the magazine.
- Fully retract the charging handle again.
- Now release the charging handle. Do not ease the handle forward. It must be released sharply and from the rearward most position to reliably chamber a new cartridge.

YOU NOW HAVE A LOADED FIREARM IN YOUR HANDS.

Since you have been following all of the safety rules detailed above, this does not change how you handle the rifle. You are now ready to fire. Be sure to follow all proper safety precautions listed in this manual, all safety precautions required by the range or facility, and all safety precautions you know are appropriate under the circumstances.

To Clear the Rifle

- Press the magazine release and remove the magazine. If the
 magazine was empty, the bolt will have locked back on the
 magazine follower and the bolt will close when the magazine is
 released. If the magazine was loaded, the bolt will be closed and
 there will be a live cartridge in the chamber, which must be
 extracted.
- With the magazine removed, pull the charging handle back until it stops. Visually verify that the chamber is empty.
- If you experience a failure to fire, do not immediately clear the rifle. Cartridges may experience delayed ignition), and clearing the rifle immediately upon failure to fire may result in the cartridge firing while the bolt is not in battery. Keeping the muzzle pointed in a safe direction, allow 30 seconds to 1 minute before clearing the cartridge to ensure that the cartridge is, in fact, a dud.
- To clear a jam, make sure the gun is on safe and the muzzle is pointed in a safe direction. Remove the magazine and pull the charging handle back, examining the chamber through the ejection port to verify that the jam has been cleared. Once the jam is cleared, follow the procedure outlined in the previous section to load the rifle and resume shooting.
- If a fired case is stuck in the chamber and will not extract by
 pulling the charging handle back to retract the bolt, the case may
 have to be manually removed. Use caution not to damage any
 components of the rifle. Keep the rifle on safe and pointed in a
 safe direction, and contact a gunsmith or Nordic Components
 technical support at 952-442-8900.

WARNING: Whether the magazine is empty or loaded when you remove it after shooting, you must manually retract the charging handle to clear the chamber and visually verify that the chamber is empty. Simply removing the magazine is not verification of an unloaded rifle and simply retracting the charging handle is not verification of an empty chamber. You must LOOK at the chamber.

Disassembly/Reassembly

This section will detail disassembly to a "field stripped" condition, sufficient for routine maintenance and inspection. We do not recommend disassembly of your 22RB Dedicated Upper beyond what is detailed herein. If you feel there is cause for further disassembly, please contact Nordic Components, Inc. for assistance.

ALWAYS WEAR EYE PROTECTION WHEN USING SOLVENTS AND COMPRESSED AIR, OR WORKING WITH SPRINGS.

WARNING: BEFORE PERFORMING ANY CLEANING, MAINTENANCE, OR INSPECTION OF ANY FIREARM, VISUALLY VERIFY THAT IT IS COMPLETELY UNLOADED AND REMOVE ALL AMMUNITION AND LOADED MAGAZINES FROM THE AREA.

Upper Disassembly

- Lay the upper in front of you on its right side (ejection port down).
- Disengage the charging handle latch and pull the handle out until it stops. The bolt assembly will follow.
- Grab the rear portion of the bolt assembly and draw it straight back out of the receiver.
- Grab the charging handle and pull it toward you (away from the receiver rail) until the two tabs on the charging handle clear the relief cut in the charging handle track.
- The upper assembly should not be disassembled any further for routine cleaning, maintenance, or inspection.

Upper Reassembly

Reassembly is essentially the reverse order of disassembly.

- First, place the charging handle in the receiver and fit the two tabs through the relief cuts in the charging handle track.
- Slide the handle in about half way.
- Start the bolt assembly into the back of the receiver and be sure the raised portion at the top of the bolt assembly sits inside the channel in the underside of the charge handle.
- Push the bolt assembly in until it stops, then latch the handle into the relief cut in the receiver. Note that the bolt assembly protrudes from the back of the receiver about a quarter inch. This is normal.

Joining of the Upper and Lower Assemblies

Lay the upper on its left side (ejection port up). Align the front holes between the upper and lower and push the front pivot pin all the way in. Now, swing the back of the lower up until the rear holes align. The tailpiece of the lower will automatically push the protruding bolt assembly into the receiver. Push the rear takedown pin all the way in. Now that the rifle is assembled, cycle the action a few times to ensure everything feels normal before engaging in live fire.

Cleaning & Maintenance

SEPARATE THE UPPER AND LOWER ASSEMBLIES WHEN CLEANING AND PERFORMING MAINTENANCE.

Upper Assembly

Fieldstrip the upper assembly as detailed above. For bore cleaning, it is helpful to support the upper in a bench vise with padded jaws. Use only enough force to support the weight of the upper, clamping toward the base of the handguard where it is most solid. This leaves your hands free to do the work. DO NOT OVERTIGHTEN VISE JAWS.

- Start with a quality one-piece stainless .22 caliber rod with a pointed or loop style jag. Push a .22 caliber patch, saturated with a bore solvent such as *Hoppe's #9* or equivalent, through the bore from the breech to the muzzle. ALWAYS AVOID CLEANING FIREARMS FROM THE MUZZLE END. Let the bore soak for a couple minutes while you clean the receiver.
- Use the same solvent-saturated patch you started with and run it through the bore several times, then follow up with dry patches until the patches come out clean.
- Scrub out the inside of the receiver, breech face and feed ramp with a nylon brush and solvent and wipe with a clean rag.
- Mop out any excess solvent or debris from the receiver and remove the upper from the vise.
- Hold the upper toward a light source and look through the bore, examining for dark spots or areas of fouling that may need more work. When satisfied, set the upper aside.

- Now thoroughly clean the entire bolt assembly and charging handle with a nylon brush, solvent, and rag. Be sure to scour the bolt face and extractor and use liberal amounts of compressed air to clear out all of the passages.
- Add a drop of gun oil to each of the tabs and the top of the charging handle.
- Add a small amount of oil to the sides of the forward bolt section, both on the upper (narrow) sections and the lower (widest) section.

Periodically, you may wish to clean the crown of the muzzle, particularly if using a compensator. The crown must be cleaned very carefully, as even very minor imperfections can wreak havoc with your rifle's accuracy.

- Using a non-abrasive cloth and bore solvent, wet the crown and let it soak for a few minutes.
- Come back with the cloth and carefully wipe/scrub clean.
- If you have a compensator, you will need to remove the compensator to access the crown and should also clean the inside of the compensator.

No further cleaning or maintenance is required with the upper assembly.

<u>Magazine</u>

It may be necessary to clean the magazines periodically. Disassemble by depressing the small button on the bottom of the magazine and sliding the floor plate out the back of the magazine body. Use caution, as the spring will want to eject when the floor plate is removed. Draw the spring and follower out of the magazine body. Wipe all surfaces inside and out and blow clear with compressed air. Reassemble in reverse order. You may wish to add a bit of powdered graphite (optional) to the inside of the magazine for smoother operation. DO NOT USE WET LUBES IN MAGAZINES.

A Note about Lubrication

Lubricating the 22RB Dedicated Upper requires you to tailor the type and amount of oil used for the various conditions encountered. As a rule, a moderate amount of mid-weight oil, combined with a reasonably clean rifle, will give you reliable function in most climates and situations. If you are unable to service your rifle for extended periods of time due to logistics or other considerations, you can maintain reliable function by applying a higher volume of oil at more frequent intervals. The same holds true for particularly hot and dusty conditions. Conversely, if you are using your rifle in extreme cold conditions (35 degrees F and colder) you will need to use smaller amounts of much lighter weight oil or, in some cases, no oil whatsoever.

Factory Service & Replacement Parts

Please contact our Technical Support staff at 952-442-8900 for any of the following:

- Technical questions regarding your 22RB upper assembly
- Diagnostic and troubleshooting assistance
- Warranty claims
- Instructions for returning your 22RB upper assembly for service or repair