



E. ARTHUR BROWN

Company, Inc.

Instruction Manual

MODEL 97D™ RIFLE

and

BF PISTOL



**READ THIS MANUAL CAREFULLY
BEFORE OPERATING YOUR FIREARM.**





WARNING

READ THESE INSTRUCTIONS CAREFULLY. BE SURE YOU UNDERSTAND THESE WARNINGS AND INSTRUCTIONS BEFORE USING THIS FIREARM. FAILURE TO READ AND FOLLOW THESE INSTRUCTIONS AND WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH TO YOU OR OTHERS AND DAMAGE TO PROPERTY.

**Always Keep Your Firearm Pointed In A Safe Direction,
Even If It Is Unloaded.**

Never Point Your Firearm At Anything You Do Not Intend To Shoot.

DO NOT BREAK THIS GUN

Never force the action open with the hammer cocked.

This will damage (break) the polished surfaces of the trigger/hammer sear engagement.

Never force the action open with the trigger in the rearward position.

This will drag the firing pin across the face of the breech. Always push the trigger to the forward (safety) position before opening the action.

Never dry fire a Rimfire gun.

The hardened firing pin may shatter when it hits against the steel rim. Or, it may peen the edge of the chamber making it hard for cartridges to fit.

**Always push the extractor forward to seat it before
chambering a Rimfire round.**

This assures that a cartridge cannot get wedged around to the front of the extractor. Rimfire extractors damaged from prying rims out of this predicament are not covered in the warranty.

YOUR RESPONSIBILITIES AS A GUN OWNER

Handle your firearm with respect at all times. Careless handling may result in serious injury or death to you or others, or damage to property.

You are responsible for safety wherever the firearm is. If you feel uncertain about any aspect of your firearm, do not shoot it. Contact E. Arthur Brown Company before operation.

This manual should always remain with the firearm upon a change of ownership.

NEVER point your firearm at anyone or anything you do not intend to shoot, whether or not the firearm is loaded.. Keep muzzle pointed in a safe direction.

NEVER place your finger inside the trigger guard or on the trigger unless you intend to fire. Ensure that objects do not touch the trigger.

ALWAYS treat every firearm as if it were loaded and ready to fire. Never take someone's word that the firearm is unloaded, check for yourself. Never pass your gun to another person until you visually check that it is unloaded.

ALWAYS be sure of what is beyond your target. Be sure you have a safe back stop free of obstructions or water.

ALWAYS store and carry this firearm empty, with the hammer forward. Do not carry, transport or store this firearm cocked, loaded and ready to fire, this could easily result in an unintentional discharge.

NEVER carry a loaded gun while walking, running or crossing any obstacles, where there is any possibility of slipping or falling, as this could lead to an unintentional discharge.

ALWAYS keep out of reach of children.

YOU are responsible for the firearm at all times. You must undertake full-time responsibility for your firearm's safety and security.

ALWAYS store this firearm unloaded and locked up when not in use.

ALWAYS use your firearm for legal purposes only. You are responsible for complying with laws and ordinances regarding the use of your firearm.

NEVER rely on safety features alone. Only your safe gun-handling habits will ensure the safe use of your firearm.

ALWAYS store ammunition and firearms separately so that they are not accessible to children and/or other unauthorized persons.

ALWAYS use eye protection when handling, firing and cleaning your gun. Use appropriate ear protection when firing your gun.

NEVER use alcohol or drugs before or while shooting. Do not use your firearm if your mental or physical ability is impaired.

ALWAYS use the correct ammunition for your particular firearm. Never use non-standard, reloaded, or handloaded ammo which has not been subjected to internal ballistic pressure testing.

NEVER manipulate or change any of the internal components of your firearm. This may cause serious injury or death.



SAFE USE OF THIS FIREARM IS YOUR PERSONAL RESPONSIBILITY AND THE FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS MAY RESULT IN SEVERE PERSONAL INJURY OR DEATH TO YOU OR OTHERS AND DAMAGE TO PROPERTY. YOU ARE THE MOST IMPORTANT SAFETY DEVICE WHEN IT COMES TO THE USE OF YOUR FIREARM.

E. ARTHUR BROWN COMPANY, INC WILL NOT BE RESPONSIBLE FOR ANY PERSONAL INJURY, DEATH OR PROPERTY DAMAGE.

Preliminary Instructions

by Eben Brown

How To Open the Action

Congratulations on your purchase of a Model 97D Rifle or BF Pistol. It is a unique firearm with its own set of peculiarities and special capabilities. These considerations are especially critical to shooters who load their own ammunition.

Spend a few moments reading here and you may avoid having problems!

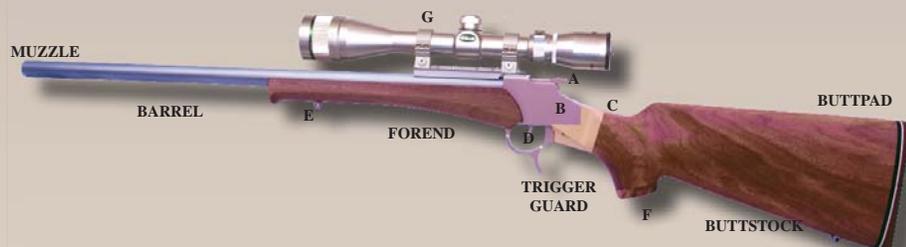
First, make sure the hammer is not cocked and push the trigger to a full forward position. This is your safety and also moves the trigger mechanism out of the way of the trigger guard.

NEVER open the action unless these two conditions are correct! (NOTE: Actually the trigger will snap forward without pushing when the hammer is drawn slightly rearward **NOT COCKED** - to relieve spring tension.)

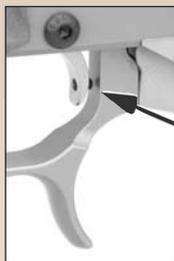
The action opens with a swiveling motion rather than a straight pull. Wrap your index finger around the lever and brace your thumb against the front of the trigger guard. Using your thumb for a fulcrum, twist the lever down and forward.

Observe the action of the extractor/ejector at the left of the chamber. This extractor is not a heavy leverage affair so it serves well to warn you when your handloads are too hot. If your spent cartridges stick, you should check immediately to see that they're loaded within safe limits.

Features of the Model 97D & BF Pistol



- A. HAMMER
- B. ACTION
- C. TRANSITION
- D. TRIGGER
- E. SLING SWIVEL
- F. GRIP CAP
- G. SCOPE BASE



OVERTRAVEL
ADJUSTMENT
SCREW ON
TRIGGER



How To Close The Action

Holding the gun by its buttstock/grip, push the front of the lever rearward until spring tension takes over and the action snaps shut. If it hangs up, drags, or stops before the chamber is completely closed, something is wrong. **DO NOT** squeeze or bump the lever to close the chamber. **WHEN THE GUN IS CLEAN AND THE AMMUNITION IS CORRECT, THE CHAMBER SHOULD SNAP SHUT WITH LITTLE OR NO PHYSICAL ASSISTANCE.** If this is not the case, read the suggestions in the special "Falling Block" sections of these instructions.



The Safety Mechanism

Your 97D/BF is equipped with a transfer bar safety mechanism. When the hammer is un-cocked and the trigger is all the way forward (toward the muzzle) the firing pin is protected and cannot be accidentally impacted...such as what might happen if you were to drop the gun on the hammer. This is your safety. Once you cock the hammer, the safety is no longer operable and the gun will fire. In effect, the act of cocking the hammer takes your 97D/BF "OFF SAFE". NEVER cock the hammer until you are ready to shoot. NEVER carry your 97D/BF in a holster or in your hand with the hammer cocked. NO safety will work unless it is used; in the 97D/BF, the safety is having the hammer down/un-cocked and the trigger forward.

How To Chamber A Round

Open the Action.

Insert a loaded cartridge so that it is seated flush with the face of the breech. Be sure the cartridge is seated completely forward before closing your action.

Close the Action.

***Rimfire Cartridge** - It is important to push the extractor forward so that it is seated before inserting a 22LR cartridge. Having the extractor forward avoids the possibility of getting the rim of a cartridge wedged in front of the extractor. Extractors damaged from prying a rim out of this condition are not covered in the warranty.

***Rimmed Centerfire** - It is not so critical to push the extractor in before chambering, but it does help.

***Rimless Centerfire** - With the new "rimless" version extractor, you should leave the ejector extended when chambering a rimless cartridge (like .223 Rem).



Adjusting the Trigger OverTravel

Your 97D/BF is equipped with an overtravel adjustment screw through the middle of the trigger. This screw is adjusted by the gunsmith that assembled your gun at our factory and should not need additional adjustment. The idea behind this screw is to end all movement of the trigger finger and hand at the moment the gun is fired...it's an accuracy enhancement. However, if the overtravel is adjusted too closely it can defeat the cocking engagement and even jam the trigger and hammer in an unsafe, almost firing condition. This can also happen if the adjustment screw is not locked properly and vibrates to a too close adjustment. Here is how to adjust and lock it correctly as well as how to un-jam the trigger and hammer if you over adjust.



Make sure our 97D/BF is unloaded and pointed in a safe direction. Cock the hammer and observe how the trigger moves rearward and how close the overtravel screw comes to the rear of the trigger guard. Hold your thumb over the hammer and squeeze the trigger until you feel the hammer release. Observe how far the trigger traveled after the release. If you feel you'd like it to travel less, then here's how to adjust it....

Cock the hammer and use an allen wrench to turn the overtravel screw in to the point where pulling the trigger doesn't release the hammer. Now, while pressing the trigger rearward, turn the overtravel screw back out until the trigger is able to push far enough to release the hammer. Turn an additional 1/4 turn and your overtravel is adjusted properly.

To lock the overtravel adjustment, we recommend a thread locker such as Locktite. Degrease the threads of the overtravel screw and the hole in the trigger (acetone and a pipe cleaner work well for this) and apply the Locktite. Adjust the overtravel to where you want it and let the Locktite set overnight.

In the event you adjust too tightly and your trigger and hammer lock up, KEEP THE GUN POINTED IN A SAFE DIRECTION. Hold the hammer from releasing with your thumb. And simply turn the overtravel screw further until the trigger can travel far enough rearward to release the hammer. Use the Locktite procedure above to lock your overtravel screw in the proper adjustment.

Firing your 97D Rifle / BF Pistol

MAKE SURE THE GUN IS ALWAYS POINTED IN A SAFE DIRECTION

Do Not Load Your Gun Until You Are Ready To Fire.

1. Grip the firearm with one hand under the forend.
2. With the other hand, grasp the stock.
3. Rest the butt pad on your shoulder and hold it firmly.
4. Pull the hammer back to the “cocked” position.
5. Place your finger on the trigger and squeeze until the gun fires.
6. Should you chose not to fire, carefully lower the hammer from the “cocked” position.
7. Open the action and remove the cartridge until you are ready to shoot.



IF YOUR FIREARM GIVES YOU ANY INDICATION THAT IT IS NOT PERFORMING AS USUAL, STOP SHOOTING. UNLOAD THE FIREARM AND HAVE IT INSPECTED.



Scope Mounting

Your 97D/BF is already drilled and tapped for scope mounting and may have come with a scope mount already installed. If it didn't come with a mount/base, all you have to do is remove the plug screws on top of the barrel and install any standard Thompson/Center Contender style scope mount. Or, install one of the stronger and straighter Keylock™ Scope Mounts custom made by EABCO.



Sights and Sight Adjustment

Your new 97D/BF has several sight options which are extremely precise and delicate pieces of machinery. Please take a moment to learn how to use them properly to avoid damaging them.

The ScopeRib III sight packages for silhouette guns need to be set up properly to suit the cartridge you are firing.

First, adjust the rear sight elevation for 15 clicks: Turn it all the way down and then adjust it back up 15 clicks.

Second, use an allen wrench to loosen the screws holding the front sight hood to its base and slide it off the base. Loosen the lock screw that secures the sight post.

Third, fire at a target at 50 yards. Use the up and down adjustment of the front sight post to zero in on the 50 yard target. This sets your sight up so that from now on, all the proper amount of elevation adjustment can be accomplished with the rear sight adjustment screw.

Fourth, set the front sight post so that the viewed width through your rear sight is clearest for your eyes. You need to see the squareness of the edges first and then as close a fit as possible to the sides of the rear notch. When you're satisfied with the sight picture, set the lock screw gently so that the post will stay on this setting.

Fifth, re-install the front sight hood and proceed to use the rear sight for windage and elevation adjustments.



Cleaning and Maintenance

Always be sure your firearm is not loaded before cleaning. Remember, this is a close-tolerance, match quality firearm. Protect the crown of the barrel, bore and chamber with proper cleaning rod technique. A cleaning rod should regularly be wiped with a rag to insure that it does not have sand or other abrasive debris clinging to it.

We prefer to clean from the chamber end, pushing the cleaning rod through to the muzzle. Remember that cleaning rods will always rub against the bore and the crown. Use a rod made of something softer than barrel steel...such as aluminum or our stainless steel rods from ProShot. ALWAYS wipe the rod clean before inserting it into your barrel.

Your new 97D/BF has been treated inside and out with a special fluoropolymer lubricant call TetraGun L. This not only enhances performance, it makes fowling less likely to stick. After cleaning, we recommend that you simply run a few cleaning patches through with TetraGun SLC to clean out residual bore solvent and re-treat the fluoropolymer. Finally, run a patch through with light coating of TetraGun L lubricant/protectant. Brush/wipe any debris out of the action and lubricate with well shaken TetraGun L.

Periodic Extensive Cleaning Procedure

Remove the stock (or grip) and forend and soak the mechanism in Hoppe's #9. Work it open and closed to loosen grime. Work the hammer and trigger as well. Rinse thoroughly with a cleaner-degreaser solvent. Birchwood Casey or KG Products have aerosol degreasers. Allow the clean action to drain off this solvent before applying fresh TetraGun L lubricant. Lubricant must be applied to the front axis of the lever, the firing pin, the transfer bar slide slots, the pivot and the sear points of the hammer and trigger, and the main spring and guide rod which sockets into the rear face of the hammer. These are the lubrication points for proper function. You should also apply a thin coat of RustePrufe protectant to all other surfaces.

Traditional lubricants are quite often made up of a slippery component and a solvent. If the slippery component settles out, all you're using is solvent...which is a poor lubricant. The block of your 97D/BF is fit to close tolerances to insure proper head spacing and will seize or bind with inferior lubrication. Be sure to shake lubricants well before using.

We recommend well shaken TetraGun L as a lubricant and protectant. Drip a drop on the sides of the falling block and into the bottom of the block onto the trigger bearing surfaces. Cock the hammer and drip a drop of TetraGun L onto the firing pin, transfer bar and hammer. Wipe the excess TetraGun L off with a rag.

The original Hoppes #9 is a good bore solvent. And, we recommend RustePrufe as a good exterior coating to protect from moisture and rust. Our website contains many more advanced products for gun cleaning... go to www.eabco.com.



WARNING: ALWAYS WEAR EYE PROTECTION WHEN CLEANING OR MAINTAINING YOUR FIREARM.



WARNING: ALWAYS CLEAN YOUR FIREARM IN A WELL VENTILATED AREA. POOR VENTILATION MAY RESULT IN EXPOSURE TO LEAD AND OTHER SUBSTANCES WHICH MAY CAUSE HARM OR SERIOUS INJURY.

CAUTION:

Some cleaners may be harsh and damaging to your firearm. Use only solvents specifically designed for firearms. Damage to the finish of your firearm may occur.

TIP: Do not store your firearm in a case that will hold or attract moisture. This may cause corrosion or wear.

Special Consideration of a Fall Block Firearm

The Falling Block action is nothing new, but most people aren't familiar with its special requirements for proper function. The number one consideration in this type of firearm is that the ammunition must fit easily into the chamber in order for the action to close. Unlike a bolt action rifle, there is no camming, leveraged capabilities to push an ill-fitting round into the chamber. The block merely slides up behind a cartridge that is already fitted into the chamber. Likewise, there is no camming, high leverage capability to pry an ill-fitting round back out. So, those who load their own ammunition need to be aware of a few tips:

Neck Sizing is most often a No-No. Neck sized cartridges will not fit reliably back into your 97D/BF chamber. You will have chambering problems and extracting problems if you neck size. Since many 97D/BF cartridges head space on their rims, neck sizing serves little purpose. Avoid neck sizing and full length resize your brass all the way down so that the shell holder makes firm contact with the base of your sizing die.

Seat your bullets deep enough. Some reloaders like to seat bullets far enough out to engage the rifling. If your bullet engages rifling before the cartridge is completely seated in the chamber of your 97D/BF, your action may not close. If it does close, your cartridge may not fire because the impact of the firing pin will be cushioned as it drives the bullet into the rifling. You can surely seat your bullets to a close proximity of the rifling. Just be aware if you try to get too close, you may sabotage your gun's functionality.

Check the Trim Length of Brass Regularly. Brass that is too long will not chamber reliably and will fire with excessive pressure.. causing extraction problems.

Seat Your Primers Properly. High primers will cause the block to hang up. Keep primer pockets reamed to the proper depth and take the time to be sure primers are seated completely. Incompletely seating primers can cushion the impact of the firing pin as it drives the primer deeper....causing a misfire.

Keep your ammunition clean. A speck of sand or dust can keep a cartridge from chambering completely and cause a jam. Keep extractor slot clear of debris. Reliable firing can be jeopardized by dirt under you extractor. If your extractor cannot rest completely against its slot, it may prohibit your cartridge from chambering fully. In such a case, you may not be able to close the action or, if you can close the action, the gun may not fire reliably. Make a cleaning rod part of your shooting/hunting kit. If a cartridge gets stuck and won't eject, you'll have to clear it with the cleaning rod. Be sure to protect the crown with the rod guide and KEEP THE GUN POINTED IN A SAFE DIRECTION.

Shipping for Service

E. Arthur Brown Company Inc. Shipping Address:

E. Arthur Brown Company, Inc.
4088 County Road 40 NW
Garfield, MN 56332

Should your firearm need service, please read the following:

- Call 320-834-3000 for an authorization/order number
- Remove all ammunition from the firearm, do NOT ship a loaded firearm.
- Do not ship a firearm through the US Postal Service.
- Enclose the following information: Full name and address, daytime phone, e-mail address, serial number of firearm and details of the work to be done.
- Pack your firearm securely in a case and insure it for the value.
- In the rare circumstance that your firearm must be replaced, it may need to be shipped to a licensed FFL dealer rather than directly to you.



One Year Limited Warranty

Unlike mass production firearm companies, the vast majority of our pistols/ rifles are used heavily by competition and target/ varmint shooters. They don't sit in a closet and take one deer hunting shot per year. We warrant the parts and workmanship of the actions of our 97D/BFs for one (1) year from ship date. This excludes damage you may cause to the gun yourself. (See "Don't Break This Gun" - page 1). We also warrant the match-grade barrels on pro-rated basis. If you discover a non-cosmetic flaw in the chamber or bore within two months of purchase, we will re-barrel the gun at no charge. If the flaw is not reported until 2-12 months after the purchase, we will pro-rate the cost of the re-barrel job discounting the number of months use you have received out of the original barrel. We do not warrant cosmetic aspects of our guns. A lot of hand work goes into them and the idea of throwing away a perfectly good barrel or other part simply because of an obscure machine mark or scratch has not been factored into the price you paid. We do not guarantee satisfaction with regard to trigger pull or let off. We do our best to deliver a good trigger that is safe. If your trigger is not safe, we'll fix it free inside the one year warranty. If you don't like the way it feels, you'll have to have a qualified gunsmith do a trigger job. If your gun needs repair during the first year of ownership, call us at 320-834-3000 for a return authorization number. Then pack your gun carefully and send it postpaid via insured carrier to the address below. We will repair and return your gun to you FOB Garfield.

E. Arthur Brown Company, Inc.
4088 County Road 40 NW, Garfield, Minnesota 56332

Terms of Purchase

We agree to sell this firearm to you only if you agree to our terms of purchase and waiver of liability. If you cannot agree to these terms, return the gun to your dealer within 10 days of purchase in an unused condition. We will refund the dealer's purchase price and he will refund your purchase price. If you use this firearm for even one shot or keep it for longer than 10 days, you are indicating your agreement to our terms of purchase and waiver of liability.

We refuse to sell this firearm to anyone who may use it in a State, County, District, or City where firearm manufacturers may be held liable for misuse of a weapon.

You must agree that you are responsible for the safe handling, loading, and secure storage of this firearm. We have no control over where this firearm points or whether it is loaded in an unsafe manner. We can fix a defect but a defect can't hurt anyone unless you happen to be pointing this firearm at someone or handling it in some other unsafe manner. For this reason, you must agree not to hold us liable for any injuries or property damage resulting from your ownership of this firearm and any intentional or accidental discharges. If you cannot agree to these terms of sale, we refuse to sell you this firearm. By purchasing this firearm and not returning it within 10 days or by firing it even once you indicate your acceptance of these terms.



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