3rowninG

BUCK MARK RIFLE

OWNER'S MANUAL

THANK YOU FOR CHOOSING A BROWNING BUCK MARK RIFLE

The Buck Mark 22 Rifle is another in a long line of dependable, high quality Browning rimfire rifles. Each Buck Mark .22 caliber semi-automatic rifle uses a dependable blow-back action design with a removable magazine. John M. Browning invented his first semi-automatic pistol in 1894. Since then, the Browning company has produced a variety of models designed for the sportsman and competitive target shooter. In every sense, the Buck Mark 22 Rifle is a true Browning. It gives you the kind of shooting enjoyment you've come to expect from the world's most respected gun company.

WARNING: THIS RIFLE HAS A STRAIGHT BLOW-BACK ACTION. THE SLIDE TRAVELS REARWARD UPON FIRING. DO NOT PLACE ANY PART OF YOUR BODY IN THE PATH OF THE MOVING SLIDE. SEE FIGURE 8 ON PAGE 12. ALWAYS WEAR EYE PROTECTION WHEN SHOOTING THIS OR ANY OTHER FIREARM.

YOU ARE RESPONSIBLE FOR FIREARMS SAFETY.

As a gun owner, you accept a set of demanding responsibilities. How seriously you take these responsibilities can be the difference between life and death. THERE IS NO EXCUSE FOR CARELESS OR ABUSIVE HANDLING OF ANY FIREARM. AT ALL TIMES HANDLE YOUR BUCK MARK 22 RIFLE AND ANY OTHER FIREARM WITH INTENSE RESPECT FOR ITS POWER AND POTENTIAL DANGER. PLEASE READ AND UNDERSTAND THE CAUTIONS AND PROPER HANDLING PROCEDURES OUTLINED IN THIS BOOKLET BEFORE USING YOUR NEW FIREARM.

- 1. ALWAYS KEEP THE MUZZLE OF YOUR BUCK MARK 22 RIFLE POINTED IN A SAFE DIRECTION. Never point any firearm at anything you do not intend to shoot. Be extremely alert and aware of all persons and property within the range of your ammunition.
- 2. NEVER RELY TOTALLY ON YOUR FIREARM'S MECHANICAL "SAFETY"

 DEVICE. The word "safety" describes a guns blocking or disengaging mechanism for the trigger, sear, hammer and/or firing pin. Although mechanical devices place your Buck Mark 22 rifle in a SAFER status, no guarantee can be made that the gun will not fire even if the "safety" is on the "on safe" position. LIKE ANY MECHANICAL DEVICE, A "SAFETY" CAN SOMETIMES FAIL; IT CAN BE JARRED OR INADVERTENTLY MANIPULATED INTO AN UNSAFE CONDITION. Mechanical "safeties" merely aid safe gun handling and are no excuse for pointing your guns muzzle in an unsafe direction. While it is a good idea to "test" your guns mechanical "safeties" periodically for proper function, NEVER TEST IT WHILE YOUR GUN IS LOADED OR POINTED IN AN UNSAFE DIRECTION. Safe gun handling does not stop with your guns mechanical "safety" devices it starts there. Always treat this rifle with the respect due a loaded, ready-to-fire firearm.
- 3. DO NOT CARRY YOUR BUCK MARK RIFLE WITH A ROUND IN THE CHAMBER. For good safety practice, it is recommended that a round not be chambered until immediately before your rifle is to be fired.

- 4. WHENEVER YOU HANDLE YOUR BUCK MARK 22 RIFLE, OR HAND IT TO SOMEONE, MAKE SURE IT IS COMPLETELY UNLOADED. To fully unload your Buck Mark Rifle, you must first remove the magazine, open and lock the slide rearward, and visually inspect the chamber to be certain it does not contain a cartridge. It is vital that you remove the magazine from your rifle so a cartridge is not automatically chambered when you close the action. Always keep the chamber empty and "safety" in the "on safe" position unless shooting is imminent (see page 7 & 11 for unloading procedures.)
- 5. DO NOT TRANSPORT YOUR BUCK MARK 22 RIFLE LOADED. Keep it unloaded, whether stored in a holster, gun case or other container.
- 6. HUNTING FROM ELEVATED SURFACES SUCH AS TREE STANDS IS DANGEROUS, and may increase the risk of handling a firearm. The following rules should always be observed by you and those you hunt with: Always make certain that the stand being used is safe and stable. Always make certain that your firearm is unloaded when it is being taken up and down from the stand. Always make certain that your firearm is not dropped from the stand, or dropped while it is being taken up or down from the stand. Remember, a loaded firearm may discharge when dropped, even with the safety in the on safe position.
- 7. BEWARE OF BARREL OBSTRUCTIONS. When preparing to shoot your rifle, check for a barrel obstruction as follows: First, fully unload the rifle by removing the magazine, locking the action open and inspecting the chamber. BE CERTAIN NO LIVE ROUND IS IN THE CHAMBER. Then glance down the barrel to be sure it is clear of any obstruction. It takes only one small obstruction to dangerously increase pressures. Before the first firing, clean the bore with a cleaning rod and patch, and wipe away any anti-rust compounds in the chamber and around the action.
- 8. BE ALERT TO THE SIGNS OF AMMUNITION MALFUNCTION. If you detect an off sound or light recoil when a cartridge is fired, do not load another cartridge into the chamber. Fully unload by removing the magazine and removing the cartridge from the chamber. With the action open, glance down the barrel to make sure that an obstruction

does not remain in the barrel. If there is an obstruction, completely clear the barrel before loading and firing again. Failure to follow these instructions can cause extensive damage to your gun and possible serious injury to yourself and others.

- 9. BE CERTAIN YOUR RIFLE IS UNLOADED BEFORE CLEANING. Because so many gun accidents occur when a firearm is being cleaned, special and extreme care should be taken to be sure your gun is unloaded before disassembly, cleaning and reassembly. Keep ammunition away from the cleaning location. Never test the mechanical function of any firearm with live ammunition.
- 10. ALWAYS UNLOAD YOUR RIFLE WHEN NOT IN USE. Your responsibilities do not end when your firearm is unattended. Store your rifle and ammunition separately and well beyond the reach of children. Take all safeguards to ensure your rifle does not become available to untrained, inexperienced or unwelcome hands.
- 11. USE THE PROPER AMMUNITION. The barrel and action of this rifle have been made with substantial safety margins over the pressures developed by established American commercial loads. HOWEVER, BROWNING ASSUMES NO LIABILITY FOR ACCIDENTS WHICH OCCUR THROUGH THE USE OF CARTRIDGES OF NON-STANDARD DIMENSIONS OR THAT DEVELOP PRESSURES IN EXCESS OF COMMERCIALLY AVAILABLE AMMUNITION THAT HAS BEEN LOADED IN ACCORDANCE WITH STANDARDS ESTABLISHED BY THE SPORTING ARMS AND AMMUNITION MANUFACTURERS INSTITUTE (SAAMI).

EXAMINE EVERY CARTRIDGE YOU PUT IN YOUR BUCK MARK RIFLE.

Your Buck Mark rifle is designed and chambered for 22 Long Rifle cartridges only. Browning cannot assume any responsibility for the use of unsafe or improper arms and ammunition combinations. It is your responsibility to read and heed all warnings in this instruction manual and on ammunition boxes.

- 12. 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 EXPOSIRE
- 13. DO NOT SNAP THE FIRING PIN ON AN EMPTY CHAMBER THE CHAMBER MAY NOT BE EMPTY! Treat every gun with the respect due a loaded gun, even though you are certain the gun is unloaded.
- 14. KEEP YOUR FINGER AWAY FROM THE TRIGGER WHILE UNLOADING AND LOADING UNTIL YOU ARE READY TO SHOOT.
- 15. **BE SURE OF YOUR TARGET AND BACKSTOP.** Take additional care during low light periods. Know the range of your ammunition. Never shoot at water or hard objects.
- 16. DROPPING YOUR BUCK MARK 22 RIFLE WHEN LOADED CAN CAUSE AN ACCIDENTAL DISCHARGE EVEN WITH THE "SAFETY" ON. Be extremely careful while hunting or during any shooting activity, to avoid dropping a loaded firearm.
- 17. ALWAYS COMPLETELY UNLOAD YOUR RIFLE'S CHAMBER BEFORE CROSSING A FENCE, CLIMBING A TREE, JUMPING A DITCH OR NEGOTIATING OTHER OBSTACLES. Never place your Buck Mark 22 on a car, or on any unstable object.
- 18. IF YOUR BUCK MARK 22 RIFLE FAILS TO FIRE, KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. Hold this position for a minimum of 30 seconds. Carefully open the action and remove the cartridge. If the rim is indented, the cartridge should be disposed of in a way that cannot cause harm. If the rim is not indented, your firearm should be examined by a qualified gunsmith and the cause of the malfunction should be corrected before further use.

- 19. WEAR EYE AND EAR PROTECTION WHEN SHOOTING. Unprotected, repeated exposure to gunfire can cause hearing damage. Wear hearing protectors (shooting ear plugs or muffs) to guard against such damage. Wear shooting glasses to protect your eyes from flying particles. Always keep a safe distance between the muzzle of your firearm and any persons nearby, as muzzle blast, debris and ejecting shells could inflict serious injury. Also, wear eye protection when disassembling and cleaning your rifle to prevent the possibility of springs, spring-tensioned parts, solvents or other agents from contacting your eyes.
- 20. BE DEFENSIVE AND ON GUARD AGAINST UNSAFE GUN HANDLING AROUND YOU AND OTHERS. Don't be timid when it comes to gun safety. If you observe other shooters violating any of these safety precautions, politely suggest safer handling practices.
- 21. SUPERVISE AND TEACH FIREARMS SAFETY TO ALL MEMBERS OF YOUR FAMILY. This is especially important when children and nonshooters are involved. Closely supervise newcomers to the shooting sports. Encourage enrollment in hunting/shooting safety courses.
- 22. NEVER DRINK ALCOHOLIC BEVERAGES OR TAKE ANY TYPE OF DRUGS BEFORE OR DURING SHOOTING. Vision and judgment could be dangerously impaired, making your gun handling unsafe to you or to others.
- 23. PERIODIC MAINTENANCE AVOID UNAUTHORIZED SERVICING. Your Buck Mark 22 Rifle is a mechanical device which will not last forever, and as such, is subject to wear and requires periodic inspection, adjustment, and service. Like all Browning firearms, your Buck Mark 22 Rifle should be serviced by a Browning Recommended Service Center or by Browning's service facility in Arnold, Missouri.

Browning cannot assume any responsibility for injuries suffered or caused by unauthorized servicing, alterations or modifications of Browning firearms. Read and heed all warnings in this instruction book, on ammunition boxes and with all accessories that you install

on your firearm. It is your responsibility to secure the most up-to-date information on the safe handling procedures for your Browning gun. Browning assumes no liability for incidents which occur when unsafe or improper gun accessories or ammunition combinations are used.

DO NOT, UNDER ANY CIRCUMSTANCE, ALTER THE TRIGGER, SAFETY OR PARTS OF THE FIRING MECHANISM OF THIS OR ANY OTHER FIREARM. FAILURE TO OBEY THIS WARNING MAY RESULT IN INJURY OR DEATH TO YOURSELF OR OTHERS.

BE CAREFUL!

FIGURE 1



NOMENCLATURE

In conventional gun terminology, the position and movement of rifle parts are described as they occur with the rifle horizontal and in normal firing position; i.e. the muzzle is forward or front; the rifle butt is rearward or rear; the trigger is downward or underneath; the sights are upward or on top. For general nomenclature refer to Figure 1. General functions and procedures are illustrated using the standard Buck Mark rifle. Procedures unique to an individual model are illustrated separately.

SERIAL NUMBER

The serial number of your Buck Mark 22 rifle can be found stamped on the front of the grip of the rifle, below of the trigger guard.

GENERAL OPERATION

Your new Browning is a blow-back operated, semi-automatic rifle. With the chamber and magazine loaded and the safety in the off safe or fire position, the rifle will fire a single round with each successive pull of the trigger until the magazine and chamber are empty. The slide of the rifle is designed to stay open after the last cartridge has been fired.

SAFETY

The Buck Mark 22 rifle incorporates a thumb operated sear block "safety." To put the mechanism "on safe" the slide must be fully forward with the hammer cocked. The thumb safety lever is then pressed

FIGURE 2



upward into the recess provided for it in the slide (Figure 2). Note: this may require firm pressure. Be sure the lever travels its maximum upward movement and is completely engaged in the recess. Although the sear is now blocked, abusive handling or dropping can cause this or any other firearm to discharge. Be careful when handling any firearm.

SLIDE STOP OPEN LATCH

When the slide is drawn rearward, the stop open latch can be raised to lock the slide in its open position. With a magazine loaded into the frame, this latch is automatically actuated to lock the slide open after the last shot is fired (Figure 3).

FIGURE 3



REMOVING THE MAGAZINE

To remove the magazine simply push the magazine release button located on the left side of the frame, behind the trigger. This releases the magazine which can be caught with the other hand and extracted (Figure 4).

LOADING AND FIRING

1. At all times while

loading, BE CERTAIN THE MUZZLE IS POINTED IN A SAFE DIRECTION.

With the slide locked to the rear, using the stop open latch, and with the magazine out of the gun, inspect the chamber to be sure it is empty (Figure 5). Close the slide and place the manual thumb "safety" in the "on safe" position.

2. Depress the magazine's follower button with the thumb of one hand while inserting the cartridges with the other hand (Figure 6). Insert the loaded magazine into the rifle, being certain









that the magazine is pressed completely in and is being retained by the magazine latch.

- 3. To load the chamber, move the manual thumb "safety" lever down into the "off safe" position and pull the slide completely back. Release the slide. It will move forward under spring pressure and feed the first cartridge from the magazine into the chamber (Figure 7). THE RIFLE IS NOW READY FOR FIRING.
- 4. After pulling the trigger and firing the cartridge, the rifle automatically ejects the fired cartridge and feeds a fresh cartridge from the magazine into the

Loading the magazine

FIGURE 6

chamber ready for a second shot. Thus the shooter may fire the rifle until the magazine is empty, merely by pulling the trigger for each shot. After the last shot is fired, the stop open latch automatically holds the slide in its open or rearward position.

5. During reloading, it is recommended that you remove the empty magazine, inspect the chamber to be sure it is empty, then close the slide and place the manual thumb "safety" in the "on safe" position.

By inserting the loaded magazine with the slide closed, there is no danger of inadvertently tripping the stop open latch and feeding a live cartridge into the chamber from the magazine.





WARNING: YOU WILL

HAVE OBSERVED BY COCKING THE RIFLE THAT THE SLIDE MOVES REARWARD ABOUT ONE INCH PAST THE FRAME (FIGURE 8). IN SHOOTING, NEITHER HAND

FIGURE 8



YOUR FACE OR ANY OTHER BODY PART SHOULD BE IN A POSITION WHERE IT COULD BE HIT BY THE SLIDE IN ITS REARWARD MOVEMENT. ALWAYS WEAR SAFETY GLASSES WHEN SHOOTING THIS OR ANY FIREARM.

DO NOT USE UNORTHODOX SIGHTING METHODS WHERE THE SLIDE OF THE RIFLE IS HELD CLOSE TO THE EYE. KEEP ALL PARTS OF YOUR BODY BEHIND THE RED DOT MARKED ON THE RECEIVER.

SINGLE SHOT LOADING AND SHOOTING

If you should wish to teach a newcomer to the sport how to shoot with this rifle, we recommend single shot loading during training. However, do not load the single round directly into the chamber. The recommended procedure is:

- 1. Remove the magazine from the rifle.
- 2. Inspect the chamber to sure it is empty.
- 3. Close the slide and place the thumb "safety" in the "on safe" position.
- 4. Load a single round into the magazine.
- 5. Insert the magazine into the rifle.
- 6. When shooting is desired, place the manual thumb "safety" in the "off safe" position.
- 7. With the finger away from the trigger, cycle the slide, feeding the single round from the magazine to the chamber.
- 8. THE RIFLE IS NOW READY FOR FIRING.

UNLOADING

To remove the cartridge remaining in the chamber, be certain the muzzle is pointed in a safe direction, raise the thumb "safety" lever to its "on safe" position, press the magazine release

FIGURE 9



button and withdraw the magazine from the rifle. Then move the "safety" to the "off safe" position and slowly pull rearward on the slide to extract and eject the cartridge from the chamber. INSPECT THE ACTION AND CHAMBER TO BE SURE NO LIVE CARTRIDGE REMAINS IN THE RIFLE. With the magazine removed, the stop open latch must be raised manually to hold the slide open.

SIGHT ADJUSTMENT

Target model — The heavy-barreled target model comes with an integral scope rail and no sights. It is intended to be used with a scope or electronic sights only. These optical sights are sold separately. To adjust them, follow their manufacturers' instructions.

Sporter model — The tapered-barreled sporter model comes with an integral scope mount and high-visibility fiber optic sights. No adjustment of the front sight is necessary. Adjust the rear sight as follows: Elevation — Forward adjustment screw (Figure 9). To raise the point of impact, turn clockwise. To lower the point of impact, turn counter-clockwise. Windage — Adjustments are made by loosening the rear set screw and sliding the sight assembly to the left or right by hand. Be sure to tighten the set screw after adjusting. Move the assembly in the direction you would like point of impact to go.

CAUTION: Use only a damp cloth to clean the fiber optic light pipes. Use of solvents or other chemicals could damage the light pipes.

DISASSEMBLY

CAUTION: WEAR EYE
PROTECTION WHEN
DISASSEMBLING
AND CLEANING
YOUR PISTOL TO
PREVENT THE
POSSIBILITY OF
SPRINGS, SPRINGTENSIONED PARTS,
SOLVENTS OR





OTHER AGENTS FROM CONTACTING YOUR EYES.

BE CERTAIN YOUR PISTOL IS UNLOADED. REMOVE THE MAGAZINE AND INSPECT THE CHAMBER. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION.

- 1. Be certain the muzzle is pointed in a safe direction. Remove the magazine. Draw the slide rearward and lock open with the stop open latch. Visually inspect the chamber to be certain it is empty. Release the stop open latch and allow the slide to close.
- 2. Remove scope or optical sight if installed.
- 3. Remove the two scope base screws and lift the scope base from the frame. Be careful not to lose the two lock-

Removing the guide rod

to lose the two lock-washers (Figure 10).

CAUTION: WHEN

REINSTALLING THE
SCOPE BASE SCREWS
MAKE CERTAIN TO
REPLACE THE
LOCKWASHERS.
ALWAYS USE THE
SCOPE BASE SCREW
LOCKWASHERS
SUPPLIED WITH
YOUR RIFLE. IF





LOST, ORDER NEW LOCKWASHERS FROM BROWNING. FAILURE TO USE A BROWNING SCOPE BASE SCREW LOCKWASHER MAY MAKE IT VERY DIFFICULT TO REMOVE THE REAR SCOPE BASE SCREW.

- 4. Move the slide to the rear approximately one inch and lift the recoil guide rod upward from the slide (Figure 11). The firing pin assembly and buffer will remain attached to the guide rod and come out with it.
- 5. Lift the slide from the frame.
- 6. Remove the forearm. To do this, unscrew the forearm screw located on the bottom of the forearm, in the center. Lift the forearm away from barrel.
- 7. Loosen the barrel mounting screw found below the barrel, at the front of the frame. (Figure 12).

- 8. To remove the barrel, pull the barrel forward and pivot it down and then lift the barrel off of the frame (Figure 13).
- 9. This is sufficient disassembly for all practical cleaning and lubrication required for a fully disassem-





bled Standard Buck Mark (Figure 14). Further disassembly should be performed only by a competent gunsmith or the Browning service facility. Do not remove the grips from the pistol, as they serve to retain and position internal parts.

REASSEMBLY

- 1. Replace the barrel. Tip the barrel block into the recess in the frame. (See Figure 13 again) Pivot the barrel up until the barrel comes into alignment with the frame.
- 2. Tighten the barrel mounting screw.
- 3. Replace the forearm on the barrel.
- 4. Replace the slide on the frame.
- 5. Make sure the buffer is in place on the recoil post, with the guide rod attached at the top. Push the firing pin

FIGURE 14



assembly against the recoil spring and slide the assembly into the appropriate recess in the slide (Figure 15).

6. Align the lockwashers over the screw holes in the scope base.

ALWAYS USE THE SCOPE BASE SCREW





SUPPLIED WITH YOUR RIFLE. FAILURE TO USE A BROWNING SCOPE BASE SCREW LOCKWASHER MAY MAKE IT VERY DIFFICULT TO REMOVE THE RASE SCREWS

- 7. Position the sight base in place and install the screws. The rear screw is the longer of the two.
- 8. Check all screws to make sure they are tight.

CLEANING SUGGESTIONS

WEAR EYE PROTECTION WHEN DISASSEMBLING AND CLEANING YOUR RIFLE

- 1. Disassemble the rifle as previously described in the section "Disassembly" on page.
- 2. The Slide assembly my be cleaned with any good cleaning solvent or light oil and then dried with a clean cloth, or preferably blown clean with air pressure, if available. Be sure to wear eye protection whenever cleaning your rifle.
- 3. Clean the barrel using a cleaning rod with a tip and a patch made for .22 caliber rifles. Depending on the amount of use, the barrel may

need to be cleaned with a good quality nitro solvent. Ordinarily, a light lubricating oil will suffice for this purpose.

- 4. Use a small brush to remove dirt or other foreign matter from the other parts of the action. Lightly lubricate all moving parts with a good, light gun oil. Use oil sparingly; a very light film is sufficient.
- 5. Frequently inspect your rifle and magazine to determine a need for cleaning. Normally, the magazine should be cleaned at least every 500 to 1000 rounds.

CAUTION: MOST SOLVENTS ARE HIGHLY FLAMMABLE. APPROPRIATE SAFETY MEASURES SHOULD BE PRACTICED WHEN WORKING WITH SOLVENTS.

NOTES

NOTES

SERVICE OR REPAIR

If your firearm should require service or repairs, we suggest you first contact a local recommended Browning Firearms Service Center. Contact your Browning sporting goods dealer or call our Service Department for the address of the Service Center nearest you. Otherwise, you may send your firearm directly to our own Service Department. For technical questions about your firearm or service call our Service Department.

Browning Service Department 3005 Arnold Tenbrook Road Arnold, Missouri 63010-9406 Phone 1-800-322-4626

Canadian customers call or write:

Browning Canada Sports Ltd./Ltee, 5617 Chemin St-François St-Laurent, Quebec H4S 1W6 Phone: (514) 333-7261

When returning your firearm for servicing, you must do the following:

- 1. Be sure it is completely unloaded.
- 2. Package it securely in a cardboard container.
- Enclose a letter with your firearm that clearly describes the trouble experienced and the repairs desired. Be sure to include your name, address and a phone number where you can be reached.
- Though not required, we suggest sending a copy of the letter to us separately.
- Never return ammunition with your firearm. It is against postal and most commerce regulations.

If you have any questions about this manual or about any other Browning products, call or write our Consumer Information Department:

Browning Consumer Information Morgan Utah 84050 Phone: (385) 876-2711



WWW.BROWNING.COM

BROWNING US: Morgan, Utoh 84050-9326
BROWNING CANADA: Browning Canada Sports Ltd/Ltee,St-Laurent, Quebec, H4S 1W6
BROWNING INTL: Parc Industriel des Hauts-Sarts, B-4040 Herstal, Belgium

MADE IN USA

KP00105/99611