

# 

Important operating instructions for:

#### BROWNING T-BOLT™ RIMFIRE RIFLES

If you have any questions about your new firearm, this owner's manual or other Browning products, contact:

Browning Consumer Information One Browning Place Morgan, UT 84050-9326 Phone: (801) 876-2711 browning.com

Please use the space below to record information about your new firearm.

Model
Serial Number
Purchased From

Date of Purchase

#### THANK YOU FOR CHOOSING BROWNING.

This next generation T-Bolt is the latest in a revered line of dependable, accurate Browning rimfire rifles. The T-Bolt rifle incorporates the best of traditional Browning craftsmanship and advanced technology. The straight-pull bolt-action design allows fast cycling and eliminates wasted energy, while being exceptionally accurate.

With a reasonable amount of care, your T-Bolt rifle is designed to give you many years of dependable, enjoyable service.

Specifications within this owner's manual are correct at the time of printing and subject to change without notice.

#### **C O N T E N T S**

State Warning	2
WARNING: You are Responsible for Firearms Safety	2
General Description and Operation	10
Nomenclature	10
Serial Number	11
Initial Cleaning	11
Operation of the "Safety"	12
Cocking Indicator	12
Inserting and Removing the Bolt	13
Ammunition	14
Magazine	15
Loading	16
Firing	19
Unloading	20
Mounting a Scope	21
Trigger Adjustment	22
Magazine Storage (Composite Stock)	23
Muzzle Brakes and Suppressors	24
Cleaning and Maintenance Suggestions	25
Maintenance of Oil Finish Stocks	30
Models with Special Finishes	30
Service or Repair	31

#### STATE WARNING

According to state law, California requires that firearm manufacturers, distributors and retailers include conspicuous, specific warnings with firearms sold in that state.

#### 

Firearms must be handled responsibly and securely stored to prevent access by children and other unauthorized users.

California has strict laws pertaining to firearms, and you may be fined or imprisoned if you fail to comply with them. Visit the Web site of the California Attorney General at https://oag.ca.gov/firearms for information on firearm laws applicable to you and how you can comply.

Prevent child access by always keeping guns locked away and unloaded when not in use. If you keep a loaded firearm where a child obtains and improperly uses it, you may be fined or sent to prison.

#### 

Las armas de fuego deben de ser manipuladas responsablemente y almacenadas en sitios seguros para prevenir el acceso a ellas por parte de niños y personas sin autorización.

California cuenta con leyes estrictas sobre las armas de fuego, y puede ser multado y encarcelado si no las obedece. Visire la página web de California Attorney General, https://oag.ca.gov/firearms para más información sobre cómo cumplir con las leyes de armas de fuego.

Prevenga el acceso de los niños a las armas de fuego manteniêndolas siempre en un lugar seguro, bajo llave y descargadas cuando no estên en uso. Si usted deja un arma cargada al alcance de un niño, y éste luilita indebidamente,usted podría ser multado e incluso enviado a la cárcel.

#### WARNING: YOU ARE RESPONSIBLE FOR FIREARMS SAFETY

#### 

# FAILURE TO FOLLOW ANY OF THE FOLLOWING WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

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 this firearm and all other firearms with intense respect for their power and potential danger. Please read and understand all of the cautions, warnings, notices, proper handling procedures and instructions outlined in this owner's manual before using your new firearm.

- 1 ALWAYS KEEP THE MUZZLE OF YOUR FIREARM POINTED IN A SAFE DIRECTION EVEN THOUGH YOU ARE CERTAIN IT IS UNLOADED. 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. LIKE ANY MECHANICAL DEVICE, A "SAFETY" CAN SOMETIMES FAIL; IT CAN BE JARRED OR INADVERTENTLY MANIPULATED INTO AN UNSAFE CONDITION.

The word "safety" describes a firearm's trigger block mechanism, sear block mechanism, hammer block mechanism or firing pin block mechanism. Mechanical "safeties" are designed to place your firearm in a safer status, and no guarantee can be made that the firearm will not fire even if the "safety" is in the on safe position. Mechanical "safeties" merely aid safe gun handling and are no excuse for pointing your firearm's muzzle in an unsafe direction. See "Operation of the Safety" on page 12 for instructions on the operation of this firearm's "safety."

Remember, safe gun handling does not stop with your firearm's mechanical "safety" devices, it starts there. Always treat this firearm with the respect due a loaded, ready-to-fire firearm.

Some firearms do not have a mechanical "safety." Many target firearms, lever-action firearms and pistols do not have manual "safety" mechanisms. Therefore it is critical to read and understand the owner's manual for every firearm which explains the safe operation of the firearm.

While it is a good idea to "test" your firearm's mechanical "safety" periodically for proper function, never test the "safety" while your firearm is loaded or pointed in an unsafe direction.

#### 3 WHENEVER YOU HANDLE ANY FIREARM, OR HAND IT TO SOMEONE, ALWAYS OPEN THE ACTION IMMEDIATELY AND VISUALLY CHECK THE FIREARM'S CHAMBER TO MAKE CERTAIN THAT THE FIREARM IS COMPLETELY UNLOADED.

Make certain the firearm does not inadvertently contain any ammunition. Remember, merely removing the magazine does not mean the chamber is unloaded. Always keep the chamber empty and the "safety" in the on safe position unless shooting is imminent.

#### 4 ALWAYS WEAR EAR AND EYE PROTECTION WHEN SHOOTING.

Unprotected, repeated exposure to gunfire can cause hearing damage. Wear hearing protection (shooting earplugs or muffs) to guard against such damage.

Wear shooting glasses to protect your eyes from flying particles. Allow proper distance (eye relief) between a scope and your eye when firing a scoped rifle, shotgun or pistol. Do not use unorthodox shooting methods that could cause the rearward travel of the slide or bolt of a firearm to contact your eyes, face or hands. Always keep a safe distance between the muzzle of your firearm and any persons nearby, as muzzle blast, debris and ejecting cartridges could inflict serious injury.

Always wear eye protection when disassembling and cleaning any firearm to prevent the possibility of springs, spring-tensioned parts, solvents or other agents from contacting your eyes.

#### 5 KEEP ALL FIREARMS UNLOADED DURING TRANSPORT, EVEN WHEN STORED IN A HOLSTER, GUN CASE, SCABBARD OR OTHER CONTAINER.

# 6 DROPPING OR JARRING A LOADED FIREARM CAN CAUSE ACCIDENTAL DISCHARGE.

This can occur even with the "safety" in the on safe position. Be extremely careful while hunting or during any shooting activity to avoid dropping any firearm.

# 7 HUNTING FROM ELEVATED SURFACES SUCH AS TREESTANDS IS DANGEROUS.

Doing so may increase the risk of mishandling 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.

# 8 STORE YOUR FIREARM AND AMMUNITION SEPARATELY, WELL BEYOND THE REACH OF CHILDREN.

Take prudent safeguards to ensure your firearm does not become available to untrained, inexperienced or unwelcome hands. Store all firearms in secure, locked cases or a gun safe. Keep your firearm unloaded when not in use.

#### 9 BEWARE OF BARREL OBSTRUCTIONS.

Mud, snow and an infinite variety of other objects may inadvertently lodge in a barrel bore. It only takes a small obstruction to cause dangerously increased pressures that can damage your firearm and cause serious injury to yourself and others.

#### BEFORE CHECKING FOR A BARREL OBSTRUCTION, BE CERTAIN YOUR FIREARM IS COMPLETELY UNLOADED, THERE IS NOT A LIVE CARTRIDGE IN THE CHAMBER AND THE "SAFETY" IS IN THE ON SAFE POSITION.

After assuring yourself that the firearm is completely unloaded, open the breech or action and look through the barrel to be sure it is clear of obstructions. If an obstruction is seen, no matter how small it may be, clean the bore with a cleaning rod and patch as described on pages 25-28 of this owner's manual.

#### 10 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.

If your firearm fails to fire, keep the muzzle pointed in a safe direction for a minimum of 30 seconds. Rotate the ejection area of the firearm away from you, carefully open the action and remove the cartridge from the chamber. If the cartridge rim (primer) is indented, the defective cartridge should be disposed of in a way that cannot cause harm. If the cartridge rim (primer) is not indented, your firearm should be examined by a qualified gunsmith and the cause of the malfunction corrected before further use. Glance down the barrel to make sure that no obstructions remain in the barrel. Completely clear the barrel before loading and firing again. Failure to follow these instructions can cause extensive damage to your firearm and possible serious injury to yourself and others.

#### 11 NEVER INSERT A CARTRIDGE OF THE INCORRECT CALIBER INTO ANY FIREARM.

The caliber of your firearm is marked on the barrel. Store all cartridges of different calibers in completely separate and well-marked containers. Never store cartridges of mixed calibers in a common container or in your pockets. See pages 14-15 for more information on the correct ammunition for your firearm.

#### 12 EXAMINE EVERY CARTRIDGE YOU PUT IN YOUR FIREARM.

We assume no responsibility for the use of unsafe or improper firearm and ammunition combinations or damage or injury caused by damaged ammunition. It is your responsibility to read and heed all warnings in this owner's manual and on ammunition boxes. See pages 14-15 for more information on the correct ammunition for your firearm.

#### 13 USE ONLY SAAMI APPROVED AMMUNITION.

The barrel and action of this firearm have been made with safety margins over the pressures established by the Sporting Arms and Ammunition Manufacturers' Institute (SAAMI) for Service Cartridges. However, we assume no responsibility for incidents which occur through the use of cartridges of nonstandard dimension or those developing pressures in excess of SAAMI established standards.

- 14 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.
- 15 DO NOT SNAP THE FIRING PIN ON AN EMPTY CHAMBER; THE CHAMBER MAY NOT BE EMPTY!

Treat every firearm with the respect due a loaded firearm, even though you are certain the firearm is unloaded.

- 16 KEEP YOUR FINGERS AWAY FROM THE TRIGGER WHILE LOADING AND UNLOADING UNTIL SHOOTING IS IMMINENT.
- 17 BE SURE OF YOUR TARGET AND BACKSTOP, PARTICULARLY DURING LOW LIGHT PERIODS.

Know the range of your ammunition. Never shoot at water or hard objects.

18 ALWAYS UNLOAD YOUR FIREARM'S CHAMBER BEFORE CROSSING A FENCE, CLIMBING A TREE, JUMPING A DITCH OR NEGOTIATING OTHER OBSTACLES.

Never place your firearm on or against a fence, tree, car or other similar object.

### **19 BE DEFENSIVE AND ON GUARD AGAINST UNSAFE GUN HANDLING AROUND YOU AND OTHERS.**

Don't be timid when it comes to firearm safety. If you observe other shooters violating any of these safety precautions, politely suggest safer handling practices.

#### 20 BE CERTAIN YOUR FIREARM IS UNLOADED BEFORE CLEANING.

Because so many firearm accidents occur when a firearm is being cleaned, special and extreme care should be taken to be sure your firearm 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.

21 TEACH AND SUPERVISE FIREARMS SAFETY TO ALL MEMBERS OF YOUR FAMILY, ESPECIALLY TO CHILDREN AND NON-SHOOTERS. Closely supervise newcomers to the shooting sports. Encourage enrollment in hunting and shooting safety courses.

#### 22 NEVER DRINK ALCOHOLIC BEVERAGES OR TAKE ANY TYPE OF DRUGS BEFORE OR DURING SHOOTING.

Your vision, motor skills and judgment could be dangerously impaired, making your gun handling unsafe to you and to others.

23 READ AND HEED ALL WARNINGS IN THIS OWNER'S MANUAL, 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 of your Browning firearm. We assume no liability for incidents which occur when unsafe or improper firearm accessories or ammunition combinations are used.

#### 24 PRACTICE PERIODIC MAINTENANCE, AVOID UNAUTHORIZED SERVICING.

Your firearm is a mechanical device which will not last forever, and as such, is subject to wear and requires periodic inspection, adjustment and service. Browning firearms should be serviced by a Browning Recommended Service Center or by our Service Facility in Arnold, Missouri. We assume no responsibility for injuries suffered or caused by unauthorized servicing, alterations or modifications of Browning firearms.

#### 25 DO NOT, UNDER ANY CIRCUMSTANCES, ALTER THE TRIGGER, "SAFETY" OR OTHER PARTS OF THE FIRING MECHANISM OF THIS OR ANY OTHER FIREARM EXCEPT AS OTHERWISE DESCRIBED IN THIS MANUAL.

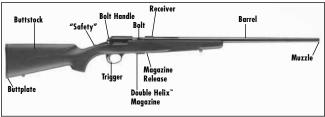
We reserve the right to refuse service on firearms that have been altered, added to or substantially changed. Removal of metal from the barrel, or modifications of the firing mechanism and/or operating parts may lead to a refusal of service on such firearms. You will be charged for parts and labor to return the firearm to original specifications prior to servicing your firearm.

With respect to AFTERMARKET PARTS OR COMPONENTS (including, for example, aftermarket trigger systems, barrels, muzzle brakes, suppressors, magazines, etc.), USE AT YOUR OWN RISK. Browning firearms are designed and engineered to meet stringent safety standards. Browning is not responsible for personal injuries or property damage caused by alterations to a firearm. This includes the incorporation of aftermarket parts or components that may or may not satisfy Sporting Arms and Ammunition Manufacturers' Institute (SAAMI) standards (for example, an aftermarket trigger system may not satisfy SAAMI minimum trigger pull standards, etc.) or may create other dangerous conditions. These conditions may or may not be apparent to the user (for example, installing an aftermarket barrel may have the effect of altering critical firearm dimensions, including headspace, and may create an unsafe firing condition, etc.). Aftermarket parts or components that do not satisfy SAAMI standards, or that could create other dangerous conditions, should not be used.

# FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS INJURY OR DEATH, AS WELL AS CAUSE DAMAGE TO YOUR FIREARM.

#### **BE CAREFUL!**





#### GENERAL DESCRIPTION AND OPERATION

The Browning T-Bolt rifle is a rimfire rifle that utilizes a straight-pull bolt. It is capable of firing a single cartridge fed from a detachable rotary box magazine each time the bolt is cycled and the trigger is pulled. The bolt is cycled by simply pulling straight rearward and then pushing fully forward. The rifle is then ready to fire the next cartridge with a pull of the trigger. When cycling the bolt, it should be operated smoothly but positively through both the opening and closing movements to ensure proper ejection and feeding. This sequence of operation may be followed until both the magazine and chamber are empty.

#### NOMENCLATURE

In conventional firearm terminology the position and movement of firearm parts are described as they occur with the firearm horizontal and in the normal firing position: i.e., the muzzle is forward or in front; the buttstock is rearward or to the rear; the trigger is downward or underneath; the sights are upward or on top. For general parts nomenclature, refer to Figure 1.

#### SERIAL NUMBER

The serial number of your T-Bolt rifle is found on the right side of the receiver, forward of the ejection port. Record this number at the front of this owner's manual for future reference.

#### INITIAL CLEANING

#### NOTICE

PLEASE TAKE NOTE OF THE FOLLOWING INFORMATION BEFORE CLEANING YOUR FIREARM.

#### CLEANING PARTS WITH SPECIAL FINISHES

Be especially careful when cleaning firearms with camouflage, Dura-Touch<sup>\*</sup> Armor Coating and other special finishes. Always prevent these surfaces from coming in contact with cleaning solvents, barrel scrubbers and other strong chemicals. It is preferable to clean these surfaces with a lightweight gun oil containing no solvents, or with a damp cloth and mild dish soap (be sure to keep water out of the action). When cleaning your firearm's bore and action, protect the external finishes from any contact with chemicals used. Also, avoid any contact between external finishes and other strong chemicals like those found in DEET-containing insect repellents, sunscreens, etc. Damage to camouflage, Dura-Touch and other finishes caused by chemicals is irreversible and not repairable.

#### CLEANING

Various exposed metal parts of your new firearm have been coated at the factory with a rust preventative compound. Before assembling and firing your rifle, clean the anti-rust compound from the inside of the barrel, receiver and action/chamber areas. It is not necessary to disassemble your rifle to perform these operations. A high-quality lightweight gun oil is ideal for removing this compound, and for giving your new firearm its first lubrication. Clean the barrel using a cleaning rod and patch as explained under "Cleaning and Maintenance Suggestions" on pages 25-28. FIGURE 2



The "safety" shown in the on safe position.

FIGURE 3



The "safety" shown in the off safe position.

#### **OPERATION OF THE "SAFETY"**

#### 

#### ALWAYS KEEP THE "SAFETY" IN THE ON SAFE POSITION UNLESS SHOOTING IS IMMINENT. ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

The "safety" is located on the top rear portion of the receiver. To move the "safety" to the on safe position slide the "safety" rearward with your thumb so that the red warning dot is covered (Figure 2).

To move the "safety" to the off safe position, slide the "safety" forward with your thumb, exposing the red warning dot, indicating that the firearm is ready to fire (Figure 3).

#### 

#### DO NOT DEPEND ON THE RED COLOR ALONE TO INDICATE YOUR FIREARM'S SAFETY STATUS. TIME, EXPOSURE TO THE ELEMENTS, AND THE ABRASIVE ACTION OF CLEANING AGENTS CAN ERASE IT. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS INJURY OR DEATH.

#### COCKING INDICATOR

Located on the top of the bolt is a red cocking indicator (Figure 4, page 13). When the rifle is cocked the red cocking indicator is easily

seen with a quick glance at the top of the bolt.

When the rifle is fired, the cocking indicator moves forward, retracting underneath the extractor band and disappearing from view.

#### 

DO NOT DEPEND ON THE RED COLOR ALONE TO INDICATE YOUR FIREARM'S SAFETY STATUS. TIME, EXPOSURE TO THE ELEMENTS, AND THE ABRASIVE ACTION OF CLEANING AGENTS CAN FIGURE 4



The cocking indicator showing the firing pin is in the cocked position.

ERASE IT. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS INJURY OR DEATH.

#### INSERTING AND REMOVING THE BOLT

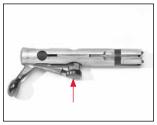
#### 

ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. BEFORE INSERTING OR REMOVING THE BOLT, VISUALLY INSPECT THE CHAMBER TO BE ABSOLUTELY CERTAIN THE FIREARM IS COMPLETELY UNLOADED. PLACE THE "SAFETY" IN THE ON SAFE POSITION. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN SERIOUS INJURY OR DEATH.

#### INSERTING THE BOLT

The T-Bolt rifle comes packed in a foam-padded box with the bolt removed from the rifle. To install the bolt into the receiver perform the following procedure:

- 1 Place the "safety" in the off safe position.
- 2 Make sure the bolt handle is in the unlocked position (Figure 5, page 14). If the bolt is not in the unlocked position, grasp and hold the bolt with your left hand, while pulling rearward on the bolt handle with your right hand. The bolt will lock to the rear.



The bolt handle must be in the unlocked position prior to installation.

FIGURE 6



Insert the bolt into the receiver until it latches into place.

3 Align the forward end of the bolt in the rear opening of the receiver and push the bolt completely forward until it locks in place (Figure 6). The rifle is now completely assembled.

#### **REMOVING THE BOLT**

- 1 Place the "safety" in the on safe position.
- 2 With the bolt in the closed position, grasp the bolt handle and draw the bolt rearward slightly, just far enough to unlock the bolt handle, but far enough forward to allow access to the bolt release.
- Press the bolt release down with your finger until it clicks and pull the bolt handle rearward, removing the bolt from the rear of the receiver (Figure 7).

#### AMMUNITION

#### 

DISCHARGING FIREARMS IN POORLY VENTILATED AREAS, CLEANING FIREARMS OR HANDLING AMMUNITION MAY RESULT IN EXPOSURE TO LEAD AND OTHER SUBSTANCES KNOWN TO CAUSE



Draw the bolt to the rear just far enough to expose the bolt release.

#### BIRTH DEFECTS, REPRODUCTIVE HARM AND OTHER SERIOUS PHYSICAL INJURY. HAVE ADEQUATE VENTILATION AT ALL TIMES. WASH HANDS THOROUGHLY AFTER EXPOSURE.

DO NOT USE AMMUNITION OTHER THAN WHAT IS INSCRIBED ON THE RIGHT SIDE OF THE BARREL. EXAMINE EVERY CARTRIDGE YOU PUT IN YOUR FIREARM.

# FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

The barrel and action of this firearm have been made with safety margins over the pressures established by the Sporting Arms and Ammunition Manufacturers' Institute (SAAMI) for Service Cartridges. However, we assume no responsibility for incidents which occur through the use of cartridges of nonstandard dimension or those developing pressures in excess of SAAMI established standards.

#### MAGAZINE

The Browning T-Bolt utilizes a unique detachable Double Helix<sup>™</sup> rotary magazine (Figure 8). This detachable box magazine uses a torsion drive spring and interlocking gear design for smooth, reliable feeding.

The translucent body allows you to see the number of remaining

cartridges. The magazine capacity for 22 L.R., 17 HMR and 22 WMR calibers is 10 rounds.

#### NOTICE

DO NOT TAMPER WITH THE ASSEMBLY SCREW ON THE REAR OF THE MAGAZINE. DOING SO WILL RENDER THE MAGAZINE INOPERATIVE.



The Double Helix™ 10-round magazine (rear view).

#### 

REMOVING THE MAGAZINE FROM THE RIFLE DOES NOT PREVENT THE RIFLE FROM BEING FIRED. IF A CARTRIDGE IS IN THE CHAMBER, THE "SAFETY" IS IN THE OFF SAFE POSITION, AND THE TRIGGER IS PULLED, THE RIFLE WILL FIRE EVEN IF NO MAGAZINE IS PRESENT IN THE RIFLE. FIGURE 9



Press the magazine release button to eject the magazine. The magazine will drop into your hand.

#### LOADING

#### 

WHEN LOADING YOUR RIFLE ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION, ALWAYS PLACE THE "SAFETY" IN THE ON SAFE POSITION AND KEEP YOUR FINGERS AWAY FROM THE TRIGGER. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

DO NOT CARRY YOUR RIFLE WITH A CARTRIDGE IN THE CHAMBER TO AVOID ACCIDENTAL DISCHARGE. WHEN FIRING IS NO LONGER IMMINENT, MAKE SURE THE "SAFETY" IS IN THE ON SAFE POSITION AND UNLOAD THE CHAMBER. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

#### REMOVING AND LOADING THE MAGAZINE

- 1 Press the magazine release button located underneath the rifle, in front of the magazine, with the index finger of your free hand (Figure 9). The magazine will drop into your free hand.
- 2 Pull the bolt completely rearward and inspect the chamber to make sure it is empty.
- 3 Close the bolt and place the "safety" in the on safe position.
- 4 Use your thumb to rotate the gear located on the right rear side of the magazine counterclockwise and insert the cartridge

base first into the magazine (Figure 10).

Care should be exercised in positioning each cartridge so that its base is flush with the rear of the magazine. If the nose of a cartridge protrudes beyond the front of the magazine, it could cause feeding problems or interfere with the insertion of the magazine into the rifle. Continue to load the magazine in this manner. FIGURE 10



Rotate the gear located on the right side of the magazine and insert cartridges.

5 After loading the magazine, insert the magazine into the magazine well of the rifle until it is retained by the magazine latch. The bolt may be cycled at any time you wish to load the chamber.

#### NOTICE

# IF THE NOSE OF A CARTRIDGE PROTRUDES BEYOND THE FRONT OF THE MAGAZINE, IT COULD CAUSE FEEDING PROBLEMS OR INTERFERE WHEN INSERTING THE MAGAZINE INTO THE RIFLE.

#### LOADING THE CHAMBER FROM THE MAGAZINE

- 1 Eject the magazine from the rifle as explained previously.
- 2 Pull the bolt completely rearward and inspect the chamber to make sure it is empty.
- 3 Close the bolt and place the "safety" in the on safe position.
- 4 Load the magazine as explained previously.
- 5 Insert the loaded magazine into the rifle by inserting it into the magazine well until it is retained in place by the magazine latch.
- 6 Load the chamber by pulling the bolt fully rearward and then pushing it fully forward to the closed, locked position to load a cartridge from the magazine into the chamber.

7 Immediately verify that the "safety" is in the on safe position.

#### 

# THE RIFLE IS NOW READY TO FIRE BY SIMPLY MOVING THE "SAFETY" TO THE OFF SAFE POSITION AND PULLING THE TRIGGER.

#### LOADING THE RIFLE TO FULL CAPACITY

- 1 Eject the magazine from the rifle as explained previously.
- 2 Pull the bolt completely rearward and inspect the chamber to make sure it is empty.
- 3 Close the bolt and place the "safety" in the on safe position.
- 4 Load the magazine as explained previously.
- 5 Insert the loaded magazine into the rifle by inserting it into the magazine well until it is retained in place by the magazine latch.
- 6 Load the chamber by pulling the bolt fully rearward and then pushing it fully forward to the closed, locked position to load a cartridge from the magazine into the chamber.
- 7 Immediately verify that the "safety" is in the on safe position.

#### 

# THE RIFLE IS NOW READY TO FIRE BY SIMPLY MOVING THE "SAFETY" TO THE OFF SAFE POSITION AND PULLING THE TRIGGER.

- 8 Eject the magazine from the rifle by pulling the magazine release button rearward with your index finger. The magazine will drop into your hand.
- 9 Load a single cartridge into the magazine as explained previously.
- 10 Insert the fully-loaded magazine into the rifle.

#### SINGLE SHOT LOADING FROM THE MAGAZINE

If you wish to use your T-Bolt as a single-shot rifle, it is recommended that you use the following single-shot loading procedure.

- 1 Eject the magazine from the rifle as explained previously.
- 2 Pull the bolt completely rearward and inspect the chamber to make sure it is empty.
- 3 Close the bolt and place the "safety" in the on safe position.
- 4 Load a single cartridge into the magazine.
- 5 Insert the magazine into the rifle.
- 6 When ready to shoot, load the chamber by pulling the bolt fully rearward and then pushing it fully forward to the closed, locked position to load the single cartridge from the magazine into the chamber.
- 7 Immediately verify that the "safety" is in the on safe position.

#### 

# THE RIFLE IS NOW READY TO FIRE BY SIMPLY MOVING THE "SAFETY" TO THE OFF SAFE POSITION AND PULLING THE TRIGGER.

#### FIRING

#### 

#### NEVER CHAMBER A CARTRIDGE OR MOVE THE "SAFETY" FROM THE ON SAFE POSITION UNLESS SHOOTING IS IMMINENT. ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

- 1 Load a cartridge into the chamber as explained previously.
- 2 Immediately verify that the "safety" is in the on safe position.
- 3 With a cartridge in the chamber, you need only move the "safety" to the off safe position to make the rifle ready for firing.
- 4 When ready to fire, move the "safety" into the off safe position, take aim and squeeze the trigger.
- 5 After a cartridge is fired, cycle the bolt rearward to eject the empty case. If you wish to continue shooting, push the bolt fully forward.

This picks up a loaded cartridge from the magazine and chambers it. You may continue to load and fire the rifle in this manner until the magazine is empty.

6 If you are done shooting, leave the bolt to the rear, with the breech in the open position so that you may visually inspect the chamber, bore and magazine to be sure they contain no cartridges.

#### 

AFTER FIRING, OR WHEN SHOOTING IS NO LONGER IMMINENT, IMMEDIATELY PLACE THE "SAFETY" IN THE ON SAFE POSITION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

EVEN WITH THE BOLT OPEN AFTER SHOOTING, DO NOT ASSUME THE RIFLE IS UNLOADED. ALWAYS INSPECT THE CHAMBER, BARREL, FEED MECHANISM AND MAGAZINE TO BE CERTAIN THE RIFLE IS COMPLETELY UNLOADED. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

#### UNLOADING

#### 

WHEN UNLOADING YOUR RIFLE ALWAYS PLACE THE "SAFETY" IN THE ON SAFE POSITION. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION AND YOUR FINGERS AWAY FROM THE TRIGGER. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

ALWAYS INSPECT THE CHAMBER, BARREL AND MAGAZINE CAREFULLY AFTER UNLOADING TO BE SURE ALL LIVE CARTRIDGES ARE CLEARED FROM THE FIREARM.

REMOVING THE MAGAZINE FROM THE RIFLE DOES NOT PREVENT THE RIFLE FROM BEING FIRED. IF A CARTRIDGE IS IN THE CHAMBER, THE "SAFETY" IS IN THE OFF SAFE POSITION, AND THE TRIGGER IS PULLED, THE RIFLE WILL FIRE EVEN IF NO MAGAZINE IS PRESENT IN THE RIFLE.

#### UNLOADING THE RIFLE

- 1 Press the magazine release button rearward and remove the magazine.
- 2 Draw the bolt to its rear or open position. This will extract and eject any live cartridge that may be in the chamber. As a good safety practice, always visually inspect the chamber to be absolutely certain a live cartridge is not present in the chamber. Leave the bolt in the rearward position with the action open.
- 3 With the chamber empty and the magazine removed, close the bolt.
- 4 If you are finished shooting, strip the cartridges from the magazine as explained in the next section and insert the empty magazine into the magazine well of the rifle.

#### UNLOADING THE MAGAZINE

- 1 Angle the front of the magazine down.
- 2 Rotate the gear slightly with your thumb. This releases spring pressure, allowing the cartridges in the magazine to be easily removed from the magazine.

#### MOUNTING A SCOPE

#### 

BEFORE MOUNTING A SCOPE, SIGHT OR OTHER ACCESSORIES TO YOUR RIFLE, PLACE THE "SAFETY" IN THE ON SAFE POSITION. OPEN THE ACTION AND MAKE CERTAIN YOUR RIFLE IS COMPLETELY UNLOADED. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

The top of the T-Bolt receiver is drilled and tapped for scope bases. See your Browning dealer to purchase the scope mount bases and rings designed for the T-Bolt.

#### NOTICE

ALWAYS USE THE CORRECT BASES FOR THIS RIFLE AND THE APPROPRIATE LENGTH SCREWS, OR DAMAGE COULD OCCUR TO THE RIFLE.

- 1 Place your rifle in a gun vise or on a table or other safe/secure location with the top of the receiver upward. Protect the finish with rags or other padding.
- 2 Remove the bolt as instructed on page 14.
- 3 You should have compatible two-piece style bases and four screws of the correct length.
- 4 Clean all oil, grease or dirt from the receiver top and from the scope base parts.
- 5 Remove all four filler screws from the top of the receiver using a very small, thin-bladed gunsmithing-type screwdriver.
- 6 Pre-position the bases on the receiver top to determine the best orientation of the bases.
- 7 Insert the screws through the bases and screw them into the receiver top using the correct tool. Be careful to assure that the threads of each screw engage properly in the receiver threads to prevent stripping the threads in the receiver. You must use screws of the appropriate length to ensure proper thread engagement. Once the bases are installed, check inside the receiver to verify that the base mounting screws are not too long and interfering with the operation of the bolt. Many gunsmiths use a drop of serviceable thread locking compound to ensure the screws stay tight. Make sure the thread locking compound does not get into the action.
- 8 Tighten the screws snugly, but do not overtighten.
- 9 Mount your scope rings and scope as outlined in the instructions supplied with your scope rings and/or scope. Always make sure you have the proper eye relief.

#### TRIGGER ADJUSTMENT

#### 

BEFORE ADJUSTING THE TRIGGER, ALWAYS PLACE THE "SAFETY" IN THE ON SAFE POSITION. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION AND YOUR FINGERS AWAY FROM THE TRIGGER. ALWAYS INSPECT THE

#### CHAMBER, BARREL AND MAGAZINE CAREFULLY TO BE SURE ALL LIVE CARTRIDGES ARE CLEARED FROM THE FIREARM. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

The T-Bolt's trigger is pre-set at the factory. The trigger pull weight can be adjusted within a range of approximately 3<sup>1</sup>⁄<sub>4</sub> to 5<sup>1</sup>⁄<sub>4</sub> pounds. Though additional trigger

#### FIGURE 11



Adjust the trigger using a 1/16" Allen wrench.

adjustments should be unnecessary, the trigger pull weight can be tuned to your specifications by performing the following procedures:

- 1 Remove the magazine from the rifle by pressing the magazine release button. Open the bolt and verify the rifle is unloaded.
- 2 Locate the trigger pull adjustment screw, located just in front of the trigger guard (Figure 11).
- 3 To increase the weight of the trigger pull, turn the adjustment screw in a clockwise direction using a <sup>1</sup>/16" Allen wrench.

To decrease the weight of the trigger pull, turn the adjustment screw in a counterclockwise direction.

IMPORTANT: If trigger pull is increased too much, the trigger cannot be pulled. Turn the screw counterclockwise until trigger can be pulled.

4 Trigger pull can be measured, with the rifle unloaded and the bolt closed, using a very accurate spring scale or a commercially available set of trigger pull measuring weights. Most gunsmiths can also measure trigger pull for you.

#### MAGAZINE STORAGE (COMPOSITE STOCK)

T-Bolt models with composite stocks feature magazine storage in the butt of the rifle. This handy feature allows you to carry a spare

magazine at the ready. The magazine fits flush with the buttplate and is virtually imperceptible when shouldering the rifle.

To remove the magazine just press downward on the tab above the magazine (Figure 12). The magazine will pop into your hand under light spring pressure.

To replace the magazine insert it into the buttstock with the rear of

#### FIGURE 12



Press the magazine latch above the magazine to eject the magazine from the buttstock.

the magazine downward. It will simply lock into place.

#### MUZZLE BRAKES AND SUPPRESSORS

#### 

THE ADDITION OF A RECOIL REDUCING MUZZLE BRAKE SIGNIFICANTLY INCREASES NOISE AND MUZZLE BLAST. YOU, AND EVERYONE IN CLOSE PROXIMITY TO THE FIREARM, SHOULD ALWAYS WEAR HEARING PROTECTION TO HELP PREVENT HEARING LOSS OR DAMAGE AND SAFETY GLASSES TO HELP PREVENT DEBRIS FROM INJURING THE EYES.

WHEN USING A SUPPRESSOR, ALWAYS WEAR HEARING AND EYE PROTECTION. EVEN THOUGH SOUND IS REDUCED WHEN USING A SUPPRESSOR, THE NOISE LEVELS ARE STILL SIGNIFICANT ENOUGH TO CAUSE PERMANENT HEARING LOSS. BE AWARE THAT USING A SUPPRESSOR INCREASES THE BACK PRESSURE IN THE BARREL WHEN A CARTRIDGE IS FIRED. THE INCREASE IN BACK PRESSURE MAY CAUSE DEBRIS FROM THE CARTRIDGE TO EXIT THE EJECTION PORT OF THE FIREARM AND CONTACT YOUR EYES, EARS AND FACE, OR THOSE OF ANYONE IN CLOSE PROXIMITY TO THE FIREARM. THE INCREASE IN BACK PRESSURE MAY ALSO RESULT IN THE DEPOSIT OF ADDITIONAL DEBRIS IN YOUR FIREARM; ACCORDINGLY, AN ACCELERATED CLEANING SCHEDULE FOR YOUR FIREARM MAY BE NECESSARY. ENSURE THAT ANY MUZZLE BRAKE OR SUPPRESSOR THAT YOU INTEND TO USE ON YOUR FIREARM IS DESIGNED FOR USE WITH YOUR FIREARM'S CALIBER. NEVER USE A MUZZLE BRAKE OR SUPPRESSOR THAT IS DESIGNED FOR RIMFIRE USE ONLY ON A CENTERFIRE FIREARM. BEFORE INSTALLING OR REMOVING A MUZZLE BRAKE OR SUPPRESSOR TO/FROM YOUR FIREARM, READ THIS OWNER'S MANUAL AND ANY OWNER'S MANUAL INCLUDED WITH THE DEVICE, AND PRECISELY FOLLOW ALL INSTALLATION AND MAINTENANCE INSTRUCTIONS PROVIDED BY THE SUPPRESSOR OR MUZZLE BRAKE MANUFACTURER. DURING INSTALLATION OR REMOVAL, ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION AND MAKE CERTAIN THAT THE FIREARM IS COMPLETELY UNLOADED, WITH THE MAGAZINE REMOVED AND THE ACTION IN THE OPEN POSITION.

PERIODICALLY CHECK THE MUZZLE BRAKE OR SUPPRESSOR TO ASSURE THAT IT IS TIGHT AND FIRMLY SEATED. BEFORE CHECKING, FOLLOW ALL SAFETY GUIDELINES PREVIOUSLY OUTLINED. ENSURE THE MUZZLE BRAKE OR SUPPRESSOR IS COOL BEFORE TOUCHING IT.

# FAILURE TO FOLLOW THESE WARNINGS MAY RESULT IN INJURY OR DEATH TO YOU OR THOSE AROUND YOU!

Most Browning rifles equipped with a muzzle brake also include a thread protector that can be installed in place of the muzzle brake. Whether using the thread protector, muzzle brake or suppressor, be aware that your firearm's point of impact may change as the harmonics of the barrel are affected when changing the weight at the end of the barrel.

# CLEANING AND MAINTENANCE SUGGESTIONS

# PLEASE TAKE NOTE OF THE FOLLOWING INFORMATION BEFORE CLEANING YOUR FIREARM.

#### CLEANING PARTS WITH SPECIAL FINISHES

Be especially careful when cleaning firearms with camouflage, Dura-Touch<sup>\*</sup> Armor Coating and other special finishes. Always prevent these surfaces from coming in contact with cleaning solvents, barrel scrubbers and other strong chemicals. It is preferable to clean these surfaces with a lightweight gun oil containing no solvents, or with a damp cloth and mild dish soap (be sure to keep water out of the action). When cleaning your firearm's bore and action, protect the external finishes from any contact with chemicals used. Also, avoid any contact between external finishes and other strong chemicals like those found in DEET-containing insect repellents, sunscreens, etc. Damage to camouflage, Dura-Touch and other finishes caused by chemicals is irreversible and not repairable.

#### **AWARNING**

BEFORE PERFORMING CLEANING PROCEDURES, PLACE THE "SAFETY" IN THE ON SAFE POSITION. OPEN THE ACTION AND MAKE CERTAIN YOUR RIFLE IS COMPLETELY UNLOADED. KEEP THE MUZZLE POINTED IN A SAFE DIRECTION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

#### 

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, RESULTING IN INJURY.

#### 

#### KEEP ALL AMMUNITION AWAY FROM THE CLEANING AREA. NEVER TEST THE MECHANICAL FUNCTION OF YOUR RIFLE WITH LIVE AMMUNITION. FAILURE TO FOLLOW THESE WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.

#### CLEANING PROCEDURES

Your T-Bolt rifle will function better and more reliably over a longer period of time if it is properly maintained and kept clean. Clean your firearm after every day of shooting, and more often if it becomes excessively dirty. A minimum cleaning includes wiping down the firearm and oiling key parts. Regular maintenance will also include cleaning the barrel. If you encounter a function problem be sure to give your firearm a thorough cleaning to see if it solves the problem before seeking the services of a Browning Recommended Service Center or our Service Facility in Arnold, Missouri, or a qualified gunsmith.

- 1 Remove the magazine and bolt as explained previously.
- 2 Use a cleaning rod with a tip and patch large enough for a snug fit in the bore. Insert the rod and patch into the barrel at the action end and run it back and forth several times. Care should be exercised to ensure that the cleaning rod does not strike the crown of the muzzle, as damage to this area can affect the accuracy of your rifle.
- 3 Inspect the chamber and bore for powder fouling. A normal amount of powder residue can be expected and is not serious. It can usually be removed with a patch saturated with nitro solvent. If, or when, fouling should become heavy, it can be removed with a brass bore brush. Dip or spray the brush with nitro solvent and scrub the chamber and bore until the fouling is removed. To prevent brass bristles from breaking off, the brush should be pushed completely through the barrel before being withdrawn.

Browning offers a complete line of products to make cleaning the bore of your firearm fast and easy. Be sure to follow all instructions when using any product to clean your firearm.

- 4 After all fouling has been removed, the chamber and bore should be wiped dry. When the bore is dry, pass a slightly oiled patch through it for preservation. A fine, light gun oil is recommended.
- 5 Inspect the barrel and chamber to be certain no patches have inadvertently been left in them. Remove any that remain.
- 6 Use a small brush or rag to remove dirt or other foreign matter from inside the receiver and other parts of the action. Lightly lubricate all moving parts with a high-quality, light gun oil. Use oil sparingly, a very light film is sufficient.

#### NOTICE

#### DO NOT POUR LARGE QUANTITIES OF OIL INTO THE RECEIVER OR OTHER PARTS. IT CAN DRAIN DOWN TO THE WOOD AND SOFTEN IT, CAUSING PERMANENT DAMAGE AND LOOSENING OF THE STOCK.

- 7 Wipe all exposed metal surfaces with a lightly oiled cloth making certain that all finger marks are removed. Finger marks provide a place where moisture can accumulate. The metal of the gun should receive a light film of oil any time the rifle has been exposed to weather or handling.
- 8 Wood surfaces can also be wiped with a quality, lightweight gun oil or they can be polished with any quality furniture wax (but not both).

#### CLEANING THE MAGAZINE

It is not recommended that the Double Helix<sup>™</sup> magazine be disassembled. Frequently inspect magazines to determine the need for cleaning as lubricant and dirt will gradually collect in the mechanism.

#### NOTICE

# DO NOT TAMPER WITH THE ASSEMBLY SCREW ON THE REAR OF THE MAGAZINE. DOING SO WILL RENDER THE MAGAZINE INOPERATIVE.

- 1 Clean the magazine by spraying it with a gun cleaning solvent that will not adversely affect the polymer magazine or corrode the metal components. Spray the magazine with this solvent, both inside and out, to loosen debris.
- 2 Fill the magazine body with plastic-safe gun cleaning solvent. Place your finger over the loading port and shake it vigorously (with the loading port away from you) to loosen residue in the magazine.
- 3 Drain the solvent and residue from the magazine.
- 4 Use compressed air to dry the magazine or allow it to air dry.

#### NOTICE

NEVER ATTEMPT TO TAKE YOUR FIREARM APART FURTHER THAN EXPLAINED IN THIS OWNER'S MANUAL. YOUR FIREARM IS A SPECIALIZED, FINELY FITTED MECHANISM. YOU MAY PERMANENTLY DAMAGE IT BY ATTEMPTING TO DISASSEMBLE THE INNER MECHANISM ASSEMBLIES. IF FURTHER DISASSEMBLY FOR SERVICE OR CLEANING IS REQUIRED, TAKE YOUR FIREARM TO A QUALIFIED GUNSMITH, OR CONTACT OUR ARNOLD, MISSOURI SERVICE FACILITY AS EXPLAINED UNDER "SERVICE OR REPAIR" ON PAGE 31.

#### MAINTENANCE OF OIL FINISH STOCKS

Keeping the oil finished wood surface on your firearm looking its best requires only a small amount of maintenance. When the surface becomes spotted or dull, the affected area(s) can be cleaned using rubbing alcohol on a soft, lint free cloth and allowed to dry. A small amount of a linseed oil-based finish, such as Watco<sup>\*</sup> Danish Oil Finish, Deft<sup>\*</sup> Danish Oil Finish or Formby's<sup>\*</sup> Tung Oil Finish should then be applied to the surface of the wood with a soft, lint free cloth according to the manufacturer's instructions. To treat the checkering, a small amount of oil-based finish can be applied and then distributed evenly using a toothbrush or other soft bristled brush.

#### MODELS WITH SPECIAL FINISHES

As with any firearm, the only way to preserve its pristine condition and collector appeal is to never handle or fire it, which in turn would deprive you of much of the enjoyment that comes with owning a fine Browning firearm.

While special finishes such as engraving and gold plating greatly enhance the aesthetic appeal of your rifle, please be aware that they are no more durable, and in some cases may even be slightly less durable than more common firearm finishes.

As you use your rifle, you can expect special finishes to wear in much the same manner as any other firearm finish. These marks are the honest product of the hours spent enjoying your firearm and each scuff and scratch will probably have a good story to go along with it.

#### SERVICE OR REPAIR

If your firearm should require service or repairs, we suggest you first contact a local recommended Browning Firearms Service Center. To locate a service center visit browning.com, contact our Customer Service Department or your Browning firearms dealer for the address of the Service Center nearest you. Otherwise, you may send your firearm directly to our Service Department in Arnold, Missouri.

Parts listings, Firearm Service Center lists, service procedures, service/ repair form and general product information are also found on the internet at browning.com. For technical questions about your firearm or service, contact:

United States customers contact: Browning Firearm Status and Technical Service 3005 Arnold Tenbrook Rd Arnold, MO 63010-9406 Phone: (800) 322-4626 Canadian customers contact: Browning Canada Sports Ltd/Ltée 5583 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 Remove any optics, optic mounts or other accessories.
- 3 Package it securely in a cardboard container.
- 4 Enclose the service/repair form available at browning.com or a letter that clearly describes the trouble experienced, the ammunition used and the repairs desired. Also include your name, e-mail address (if possible) and a daytime phone number where you can be reached.
- 5 Never return ammunition with your firearm. It is against postal and most commerce regulations.

#### NOTES

# BROWNING



#### BROWNING.COM

US: Morgan, Utah 84050-9326 CANADA: Browning Canada Sports Ltd/Ltée, St-Laurent, Quebec H4S 1W6 INTL: Parc Industriel des Hauts-Sarts, B-4040 Herstal, Belgium A02004/20132