

OWNER'S MANUAL

TO BE USED WITH THOMPSON/AUTO-ORDNANCE TAO50, CALIBER .50BMG RIFLE



Thompson®

Auto-Ordnance®

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SPECIFICATIONS:

MODEL: TA050 | TA050FDE
ACTION: Bolt Action Repeater with Detachable Box Magazine
CALIBERS: .50BMG
WEIGHT: 25.5 lbs Rifle, 27 lbs with Bipod
O/A LENGTH: 61"
BARREL: 29", 1:15 Twist
MAGAZINE: M107A1 Barrett® 10RD Box Magazine
STOCK: Magpul® PRS GEN-3
TRIGGER: Custom Single-Stage Timney® Trigger, AR15 type
GRIP: Magpul® MOE+
RAIL: MIL-SPEC 1913 Continues 12 o'clock 31" Flat Rail, M-LOK @ 3-6-9 o'clock
BIPOD: ACCU-TAC® 50BMG Heavy Duty Bipod
FINISH: Anodized Type III Hard Coat Black or Flat Dark Earth (FDE)



WARNING

ONLY use factory loaded ammunition.

SAFETY WARNINGS

This manual should always accompany this rifle. When you lend, give or sell this rifle, make sure this manual goes with it. If there is anything you do not understand regarding the safe use of this rifle contact the factory.

CAUTION: CAREFULLY READ AND UNDERSTAND THIS INSTRUCTION MANUAL PRIOR TO LOADING AND FIRING THIS FIREARM. FOLLOW ALL INSTRUCTIONS ON THE PROPER HANDLING AND SAFE USE OF THIS FIREARM.

Do not disassemble the rifle beyond what this operating manual instructs.



Children and Firearms – WARNINGS

Children can be attracted to and can operate firearms which can cause severe injuries or death. Prevent child access to firearms by keeping them locked and unloaded. It is illegal in many jurisdictions to leave a loaded firearm accessible to a minor.

Firearm Safety Depends on You

A gun is only as safe as the person operating it. You can never be overly careful when handling a firearm. Carelessness is often the cause of shooting accidents, such as failing to keep the muzzle pointed in a safe direction, not being sure of

your target and what is behind it, failing to engage the safety properly, leaving ammunition in the chamber or using improper loads. Since a bullet can never be called back once fired, such errors in gun handling can result in the loss of life, severe injury or property damage. It is thus crucial for your safety and the safety of those around you that you learn the principles of safe gun handling and storage before you begin to use your new firearm. Be a safe shooter - please read this owner's manual thoroughly even if this is not your first firearm purchase as not all firearms are the same. The first step in being a safe shooter is to learn the rules for the safe operation and handling of firearms. There is nothing more important in gun handling than safety.



Firearm Safety Rules – WARNINGS

Failure to follow any of these rules will result in personal injury, destruction of your rifle or death.

SAFETY RULE 1 – Always Keep the Muzzle Pointed in a Safe Direction

A safe direction is one in which an accidental discharge will not cause injury to yourself or to others, or cause property damage. This is particularly important when loading or unloading your firearm. Never point your gun at anything you do not intend to shoot. Treat every gun as if it were loaded at all times.

SAFETY RULE 2 – Firearms Should Be Unloaded When Not Actually In Use

Firearms should only be loaded when you are in the field or on the target range or shooting area, ready to shoot. When not in use, firearms and ammunition should be secured in a safe place, separate from each other. Remember to unload your firearm completely so that there is no ammunition in the chamber or magazine. Before handling this or any other firearm, or handing it to someone else, visually check the chamber and magazine to ensure they do not contain ammunition. Always keep the gun's action open when not in use. Never assume a gun is unloaded - even if you were the last person to use it. Never cross a fence, climb a tree, wade through a stream, or perform any awkward movement with a loaded gun. When in doubt, unload your gun! Never pull or push a loaded firearm toward yourself or another person.

SAFETY RULE 3 - Don't Completely Rely on Your Gun's Safety

Treat every gun as though it could fire at any time, even if you are not applying pressure to the trigger. The "safety" on a firearm is a mechanical device which, like any such device, can become inoperable at the worst possible time and fail to function. By mistake, you may think the safety is "ON" when it actually is not. Or you may think your gun is unloaded when there is actually a round of ammunition in it. The safety serves as a supplement to proper gun handling, but cannot serve as a substitute for common sense. Never handle a gun carelessly and assume that the gun won't fire just because "the safety is on." Never touch the firearm's trigger until you are ready to shoot. Keep your fingers away from the trigger when loading or unloading. Never pull the trigger when the safety is engaged or when the safety is positioned between the "SAFE" and "FIRE" positions. Never place your finger on the trigger unless you intend to fire.

SAFETY RULE 4 - Alcohol, Drugs and Guns don't mix. Make no mistake about it!

Never handle firearms after consuming alcohol or taking drugs that can affect your mental concentration or your physical function. You cannot handle a firearm safely after consuming alcohol or drugs. Never consume anything that can impair your judgment or physical coordination when handling a firearm.

SAFETY RULE 5 - Be Sure of Your Target - And What Is Beyond It!

Once fired, a bullet can never be called back, so before you shoot know where the bullet is going and what it will strike, IF YOUR RANGE DOES NOT HAVE A BACK STOP RATED FOR .50BMG DO NOT SHOOT AT THAT RANGE. Be certain your shot will not injure someone or strike something beyond the target. Never fire in the direction of noise, a movement, or at any object you cannot positively identify. Keep in mind

how far the bullet will travel if it misses your intended target. Once fired, the effect of a bullet cannot be undone.

SAFETY RULE 6 - Use the Correct Ammunition

Every firearm is designed to use a certain caliber of ammunition. It is important that you use the correct ammunition for this firearm.

This rifle is chambered in .50BMG

Use only high quality, new, clean, dry, factory ammunition in the proper caliber for the rifle. **Never use damaged, corroded or otherwise defective ammunition, ammunition which is dirty, wet, dented or deformed or in which the bullet has been pushed back into the cartridge case, foreign military surplus ammunition, or other ammunition of questionable quality, age or origin.** The use of reloaded, "remanufactured" or handloaded ammunition will void your warranty.

Keep ammunition dry, and free of oil, solvent, or grease. Firing ammunition with oil, solvent or grease on it can cause dangerously high pressure, with possible damage to the firearm, serious injury or death. Oils and solvents can also penetrate ammunition, causing misfires.

Form the habit of examining every round of ammunition before you put it into your gun to ensure it is of the proper gauge or caliber and that it is in good condition.

SAFETY RULE 7 - If your Rifle Fails to Fire When the Trigger Is Pulled, Handle With Care

If a cartridge does not fire when the trigger is pulled, follow Safety Rule #1 and keep the firearm's muzzle pointed in a safe direction. Keep the muzzle pointed away from you and anything you do not intend to shoot, wait at least 30-seconds (to ensure that the ammunition is not delayed in firing) before carefully opening the action, unloading the firearm and disposing of the ammunition safely.

SAFETY RULE 8 - Always Wear Eye & Ear Protection When Shooting

Exposure to shooting noise can permanently damage hearing and flying debris, such as powder residue and ejected cartridge cases, can injure your eyes. Thus, it is only common sense to wear both eye protection (such as shooting glasses) and ear protection (such as a sound muffling headset) whenever shooting. Also, wear eye protection when cleaning or disassembling your gun to ensure that cleaning solvent and tensioned parts (such as springs) do not come into contact with your eyes.

SAFETY RULE 9 - Be Sure the Barrel Is Clear of Obstructions Before Shooting

Discharging a firearm with an obstruction in the barrel can result in personal injury, property damage or death. Before you load your firearm, check the chamber and magazine to ascertain that no ammunition is inside. Also, check the inside of the bore to ensure it is free of obstructions. Even a small amount of mud, snow or excess lubricating oil or grease in the bore can cause excessive pressures resulting in a bulged or burst barrel which can injure or kill the shooter and bystanders. It is a good idea to make a habit of cleaning the bore and checking for obstructions with a cleaning rod just before each shooting session. If the noise or recoil experienced

upon firing seems low or weak, or something doesn't feel "right," cease firing immediately and check to make sure that there is no obstruction in the barrel.

SAFETY RULE 10 - Do Not Alter or Modify Your Rifle

Firearms are complex mechanisms that are designed to function properly in their original condition. Any alterations or changes made to a firearm after its manufacture can make the gun unsafe and will void its warranty. Do not jeopardize your safety or the safety of others by altering the trigger, mechanical safety or other mechanisms of your firearm. You should have your firearm periodically checked for proper functioning and serviced by a qualified gunsmith.

SAFETY RULE 11 - Learn the Mechanical and Handling Characteristics of Your Firearm

Not all firearms operate the same way. The method of carrying, handling and operating firearms varies with the mechanical characteristics of each gun. Thus, you should never handle any firearm until you become familiar with the safe handling, loading, unloading and carrying procedures for that particular firearm, as well as the rules for safe gun handling in general.

SAFETY RULE 12 - LEAD WARNING

Discharging firearms in poorly ventilated areas, cleaning firearms or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm and other serious injury. Have adequate ventilation at all times when shooting. Wash your hands thoroughly.

Most ammunition and cartridge primers contain lead, which is a toxic (poisonous)

substance! With most types of ammunition, shooting a firearm produces vapor and particles of lead, which is a toxic (poisonous) substance. Especially (but not only) in poorly ventilated range areas, breathing air which contains the lead vapor and particles is harmful to one's health, and can result in lead poisoning. Pregnant women, unborn fetuses, nursing mothers, infants and young children are especially susceptible to the risks of lead ingestion. Handling, firing and cleaning firearms, and handling ammunition, empty cartridge cases, target frames and other range equipment can deposit lead on one's hands and face, which can then be ingested (swallowed) if one drinks, eats or chews gum or tobacco products without first washing the hands and face. Lead poisoning can result in brain damage, nervous system disorders, digestive ailments, birth defects, and other serious physical effects or death. Shoot only in well ventilated areas. Minimize the period of time you remain on indoor shooting ranges, leaving when you are done firing. Do not eat, drink, chew, smoke, or engage in any other hand-to-mouth activity while shooting. Wash the hands and face thoroughly with soap and cool water as soon as you are finished shooting, and before eating or drinking. Do not collect fired brass in your hat, or put fired brass in your pockets. When you return

from shooting, especially on an indoor range, change and wash your clothing. Do not allow children to handle or play with fired cases, shooting equipment, range bags, or shooting clothing. Consider using rubber gloves when cleaning firearms, to prevent lead and solvent from being absorbed into your skin. Wash thoroughly with soap and cool water after cleaning firearms. Take proper precautions if you reload ammunition or cast lead bullets. If you notice any symptoms or believe you may have been exposed to excessive amounts of lead, consult your physician.

SAFETY RULE 13 - FIREARM TRAINING

Even if you understand everything in this manual, no manual can provide you with the benefits of hands-on firearms instruction. If you are not already an experienced firearms user, you should obtain training in the safe and proper use of firearms by attending one of the many firearms safety and shooting courses offered in all parts of the country by the National Rifle Association (telephone 703-267-1000), gun clubs and ranges, gun shops, shooting schools and other qualified sources of instruction.

SAFETY PRECAUTIONS FOR FIRING AND USE OF THIS RIFLE

CAUTION: Keep your RIFLE's safety lever engaged in the "Safe" ("S") position until you are aimed at a proper target and you have decided to fire. Failure to do so could cause serious injury or death.

Use the RIFLE's safety lever, but don't trust or rely on it as a substitute for safe gun handling practices. The safety is a mechanical device which could fail. Or, by mistake, you may think the safety is on when it is not. Or the safety may become disengaged without your knowledge. Or you could think your gun is unloaded when there is a cartridge in it. Always follow the safe gun handling rules and procedures in this manual, whether you think the safety is on or off, and whether you think the rifle is loaded or unloaded. Don't pull the trigger when the safety

is engaged, or when it is positioned part way between Safe (“S”) and Fire (“F”). Don’t use or rely on the safety lever to try to “childproof” your rifle or keep it safe from untrained persons – instead, your rifle should be unloaded and securely locked up, out of access of children and other unauthorized users.

So that the rifle may be used as a single loader, it will fire whether or not a magazine is in the gun if a cartridge is in the chamber. **Removing the magazine does not unload the rifle, and does not prevent the rifle from firing!** A round left in the chamber after the magazine is removed can cause serious injury or death if the trigger is pulled! Unload your rifle properly, including checking the chamber both visually and physically.

Keep your finger off the trigger and outside the trigger guard until you are aimed at a proper target and have decided to fire. Failure to do so could cause serious injury or death.

Fired cartridge cases ejected from the RIFLE are extremely hot, and can cause serious burns. In addition, the painful burn from a hot cartridge case can distract a shooter from keeping his firearm pointed safely and from other safe handling practices, causing a dangerous situation or an accident. When firing, stay clear, and keep others clear, of the right side of the rifle, from which the hot cartridge cases are ejected.

Keep hands, fingers and other body parts from touching the muzzle, barrel, ejection port area or chamber after firing, as they could be burned by hot metal.

If dropped or struck, whether the safety is “on” or “off,” the rifle may fire, causing serious injury or death. Keep the chamber empty unless actually firing! Keep the safety “on” (“S”) unless actually firing! When carrying or handling the rifle, keep it

pointed in a safe direction, and carry it in such a way that you can safely control the direction in which the rifle points even if you should slip, stumble or fall. See other safety warnings regarding carrying or transporting the rifle in an unloaded condition, unloading the rifle before crossing obstacles or areas with poor footing, etc.

Never transport or carry a loaded firearm in a vehicle or otherwise. Always transport or carry your rifle unloaded, with the action locked open. A suitable carrying case should be used to transport or carry your unloaded rifle to and from the range or other safe shooting area. Check the laws to determine and follow legal requirements in transporting a firearm in your jurisdiction. Close the rifle’s action and load the rifle only when you are at the range or other safe shooting area, ready to begin shooting.

Never climb a fence, ladder, tree or other object, jump across a brook or ditch, crawl under a fence or other obstacle, walk across an icy surface, steep slope or other area with poor footing, or cross other slippery or precarious terrain or obstacles with a loaded firearm. Instead, unload your firearm first. When carrying your rifle in the field, keep the muzzle pointed in a safe direction and carry the rifle so you can safely control the direction in which it points in the event you stumble, slip or fall.

Never shoot at a hard surface (rock, pavement, metal, ice, etc.) or at the surface of water, as the bullet may ricochet (glance off) the surface and travel in any direction, causing serious injury or death to someone you cannot see. Shoot only where there is a safe backstop (one which will safely stop and contain the fired bullets), free from rocks, hard objects and obstructions that could cause ricochets or splash-back of bullets, fragments, pebbles or rock particles. Check local and state laws to be sure shooting is permitted at the place you intend to shoot.

When shooting, be alert to be sure no one comes into the line of fire. Check the backstop and target area carefully to be sure it is free of people each time before you begin to fire.

When firing with a group of people, put a responsible person in charge to maintain safety, discipline and control to reduce the chance of accidents.

On a firing range, be alert to the commands of the range officer, and follow them precisely and immediately.

Do not handle a firearm when anyone is forward of the firing position. Before anyone moves downrange to post or check targets or for any other purpose, all firearms should be unloaded, with safeties engaged and actions locked open, and placed safely on the bench where they should not be touched or handled until everyone returns from downrange.

Do not handle firearms when you are tired, cold or impaired physically or mentally, in any way.

Never fire your rifle near an animal, unless it is trained to accept the noise of gunfire. An animal's startled reaction to the sound of gunfire could injure it or could cause an accident.

Never continue to use your rifle if it is not functioning properly. Never force a jammed action, as the jammed cartridge may explode if the primer is crushed or pressed against any metal part of the rifle or against another cartridge.

Use only appropriate accessories for your rifle. Be sure all accessories, including slings, ammunition carriers, sights and sight mounts, lighting devices, etc. are compatible with the firearm and do not interfere with its safe operation.

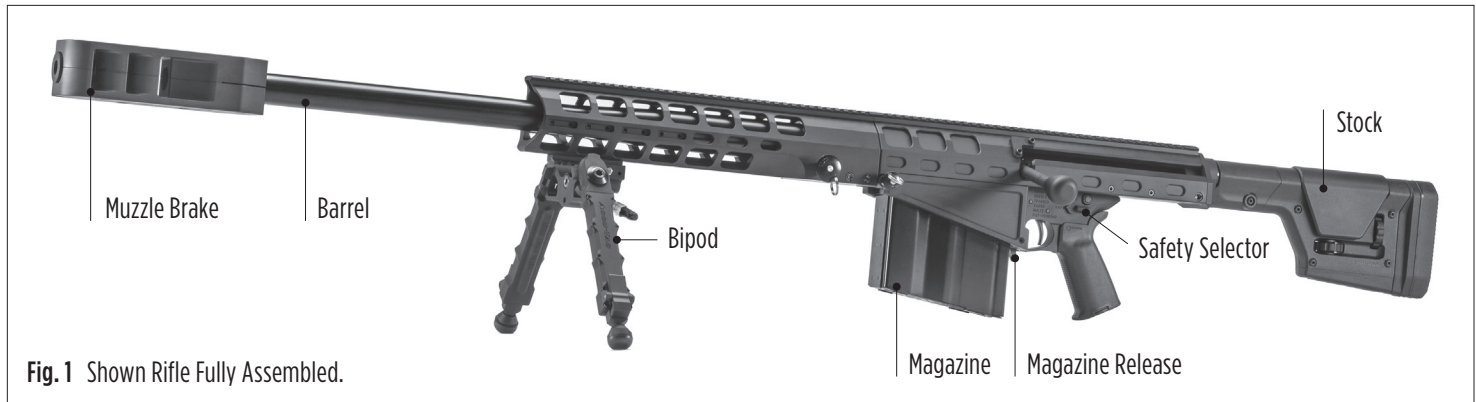


Fig. 1 Shown Rifle Fully Assembled.

OPERATION OF RIFLE

TA050 is a precision long range bolt action rifle chambered in 50BMG caliber (Fig. 1). It is manufactured in the USA from US raw materials. Rifle ships in a hardcase with wheels in custom cut high density foam (Fig. 2). Rifle ships with one magazine, tools and owner's manual.

Due to the overall length of the rifle it is shipped with the PRS stock removed from the rifle.

To assemble the rifle, follow this procedure:



Fig. 2 Rifle shown in hardcase.

Remove the rifle from the hardcase, rotate the bipod legs to 6 o'clock position and set the rifle down on the bipod and grip. Now push the rear AR10 style rear take down out from left to right and swing the lower down. (Fig. 3) Then push the hammer back and put the selector on SAFE.

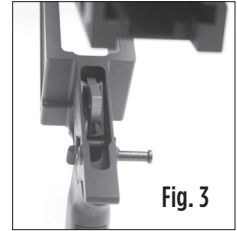


Fig. 3

Take the bolt carrier assembly out of the hardcase. (Fig. 4) Make sure the bolt retaining pins with bearings do not fall out, if you turn it upside down they can fall out. Now hold on the bolt carrier and rotate the handle up to unlock position. Then slide it in the upper receiver with bolt facing towards the muzzle, the roller bearings will go in the 3 & 9 o'clock slots and bolt pin with bearings will go in the 12 o'clock slot (Fig. 5). Keep the lower receiver rotated down while sliding the bolt assembly in the upper. Using the bolt handle move it forward and down. Then close the lower with the upper and push the rear pin back in the lower.

Bolt Carrier Group Assembly



Fig. 4



Fig. 5

Take the Magpul stock out of the hardcase. It has the stock block mounted with a buffer tube. Insert the stock with the round portion at 12 o'clock in the back of the upper receiver.



Fig. 6

Insert the flat head 1/4 x 28 screw in the 1:30 o'clock position as shown in Fig-6, using the 5/32 T-handle screw it in just snug. Then insert the shoulder bolt from right to left as shown in Fig-6. Using the same tool screw it in all the way and hand tighten. Then hand tighten the flat head screw.

CAUTION

Do not dry fire without the Bolt assembly installed, the hammer can cause damage to your lower receiver.

TA050 is designed to use Barrett M107A1 magazines. Insert the front portion of the magazine at a 45 degree angle, looking thru the ejection port insert the magazine hook above the hinge pin in the lower receiver, then swing the bottom back of the

magazine in the magazine well till it locks in the rifle with an audible click of the magazine catch. Pull down to make sure it is properly seated.

Now with the muzzle pointed in the safe direction at your target with a solid back stop you can pull the bolt handle up and back and push it forward and down to chamber a round. The rifle can now be fired one round, then cycle the bolt handle again to shoot another round. Once the magazine and chamber are empty dry cycle the bolt, then rotate the selector to safe. This is an AR style fire control so if the hammer is not cocked back the safety cannot rotate to safe position.

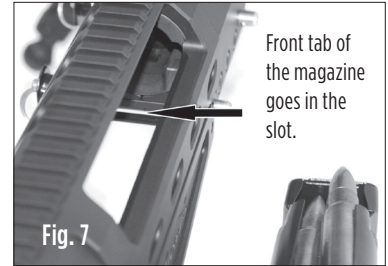


Fig. 7

CLEANING THE RIFLE

Rifle should be cleaned and lubricated after each shooting session.

Break the rifle down by rotating the lower down, removing the stock and slide the bolt carrier group out of the upper. Using a nylon brush clean the bolt face and carrier group then lightly lubricate it. Using a cleaning rod run wet cleaning patches using bore cleaner. Once wet use nylon bore brush to clean the bore. A 50BMG chamber brush can be used to clean the chamber. Once clean run clean dry patch thru the chamber and bore. Now it can be store away back in the hardcase.

MANUFACTURER'S DISCLAIMER:

21st TEC will not be responsible for injury, death, or damage to property resulting from either intentional or accidental discharge of this firearm or from its function when used for purposes or subjected to treatment for which it was not designed.

WARRANTY AND SERVICE

For one year from date of purchase, warrants to the original owner, that this product was manufactured free of defects in materials and workmanship. 21st TEC will correct any defect covered under the warranty by repair or replacement with the same or comparable model. 21st TEC will not be responsible for injury, death, or damage to property resulting from either intentional or accidental discharge of this firearm or from its function when used for purposes or subjected to treatment for which it was not designed. 21st TEC will not honor claims involving this product which result from careless or improper handling, unauthorized adjustment or parts replacement, corrosion, neglect, the use of the wrong caliber ammunition, or the use of other than commercially manufactured ammunition in good condition, or any combination thereof. Please email taoservice@21st-tec.com for any additional information. If you need factory service, whether covered under warranty or not, please contact us for instructions on how to have your rifle repaired.



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