



TA Targets Grounder Target System



Thank you for purchasing one of our Grounder 500 or Grounder 550 Target Systems.

The Grounder Target Systems are a simple, strong, and reliable target system available in two variations. Users can purchase an AR500 version (Grounder 500), or an AR550 version (Grounder 550). This system is designed for fast deployment, easy transport, and a long life of safe service. **BEFORE SHOOTING: FULLY READ THIS MANUAL AND THE INCLUDED SAFE SHOOTING PAMPHLET WE INCLUDE WITH EACH SHIPMENT. ADDITIONALLY, READ THE STICKER ON THE BACK OF YOUR TARGET PLATE PRIOR TO SHOOTING. ALWAYS OBEY OUR SAFETY REQUIREMENTS. UNDER NO CIRCUMSTANCES SHOULD YOU ALTER OR MISUSE YOUR SYSTEMS. ALWAYS WEAR APPROVED HEARING AND SAFETY GEAR WHENEVER HANDLING A FIREARM.** As always, if you have ANY questions, please contact us via email PRIOR to using our products. The Customer Service email is info@tatargets.com. You may also call 1-833-746-4785 M-F during business hours. If questions EVER exist, cease use of your target until we can address your questions and/or concerns.

Extra Points of Caution:

***BEFORE YOU BEGIN:**

⚠1.) The Grounder 500 and Grounder 550, while similar in appearance, feature DIFFERENT caliber and distance ratings. Please refer to the tables in this document for proper ammunition types, velocities, and distance ratings. Note: These distance ratings are MINIMUM requirements. Under NO circumstance should you EVER engage the Grounder target systems at improper distances or with improper ammunition types. Disregarding our requirements can be deadly to yourself and bystanders as well as your property.

⚠2.) **PINCH NOTICE:** As the Grounder legs can pivot, it is EXTREMELY important that you NEVER place your fingers in the path of the leg pivots. Use care when installing the legs into the target plate, and always keep hands, fingers, and skin free of the slot and pivot points.

⚠3.) Grounder 550 target plates feature a distinct set of notches on the bottom of the target plate, near the handle. These notches are your quick reference to determine which target plate you own. As you shoot, the paint will wear off, but these notches will remain. Grounder 500 target plates do NOT have these notches. You MUST properly identify your target plate and follow the proper distance and caliber requirements found in this document.

****Lost Components:** During setup, tear-down and transport it is extremely important to make sure you do not lose any of your hardware or components. Always be mindful of how and where you tear down your base to reduce the risk of losing hardware or components.

A complete Grounder Target System will consist of the following components

- A single Piece target plate:
 - o Grounder 500: 3/8" Thick AR500 reversible target plate, powder coated Mineral Bronze
 - o Grounder 550: 3/8" Thick AR550 reversible target plate, powder coated White.
 - ⚠NOTE: Grounder 550 target plate has two notches on the bottom near the handle, designating that it is AR550 material.
- (2) Sets of grounder legs
 - o (2) Front legs bolted to:
 - o (2) Rear legs
- All necessary hardware is included for setup and installation:
 - o (2) 3/8" Carriage bolts
 - o (2) 3/8" Locking Nuts
 - o (2) Clevis Pins (For leg storage and to keep the system together when in use)
 - o (2) Hairpin Clips for keeping clevis pins in their proper locations.

⚠**Please read each individual section of this instruction manual to understand assembly, use and maintenance of each component**

I.) Grounder Target System Assembly Instructions:

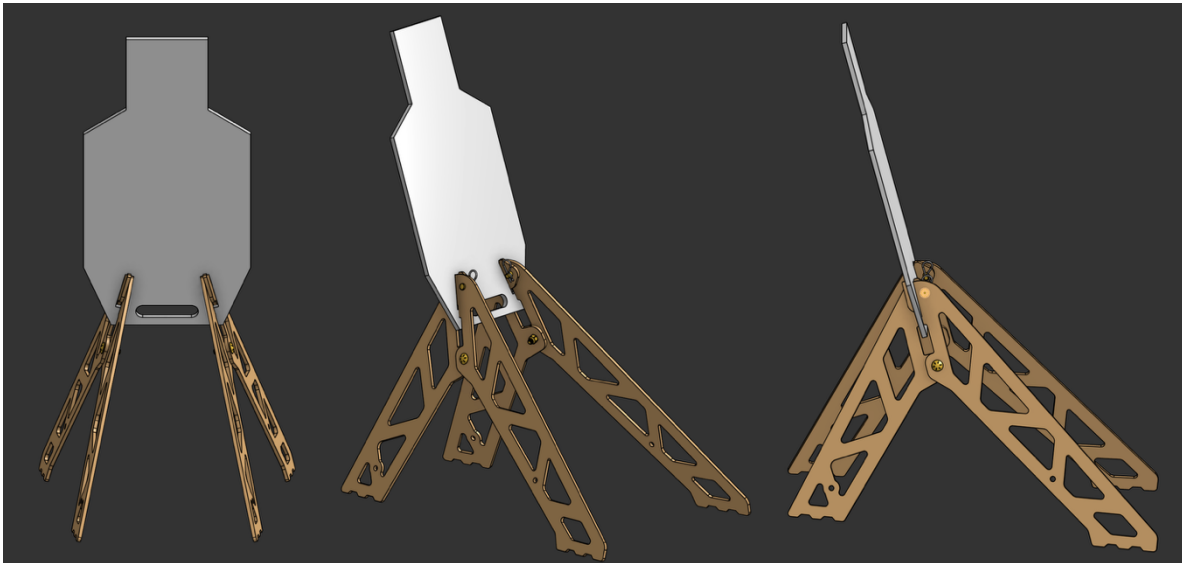
Note: Grounder Legs will arrive PRE-ASSEMBLED. You will simply need to remove the clevis pin that locks them into the collapsed position and install into the target plate.

⚠️ PINCH WARNING: Always be sure your hands, fingers, skin, and other body parts do not get between the legs and the target plate. If you are careless during assembly, you could get pinched. Go slow, do not force the legs into the plate. If you have difficulty, immediately stop and email our team. Do not use until we are able to assist you.

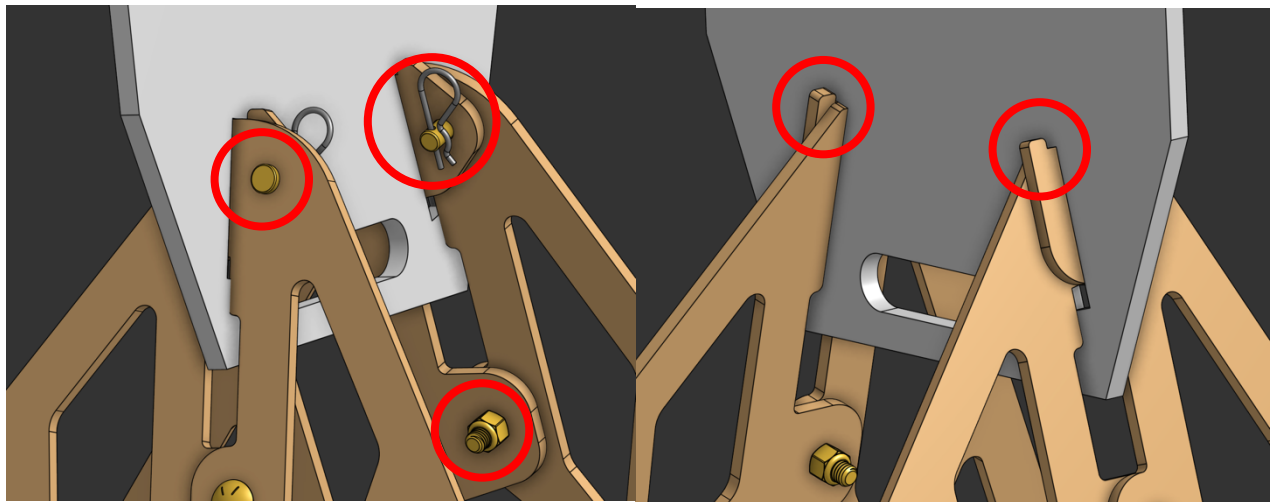
- 1.) Verify all components are present.
- 2.) Lay your Grounder target plate on the ground
- 3.) Remove Clevis Pin and Clip holding legs into the folded position. Set to the side, **DO NOT LOSE!**
- 4.) Place your legs on the ground in the proper position.
Note: The threaded side of the carriage bolts should face **INSIDE** the legs. If the threaded section of the bolt sticks **OUTSIDE** the legs, you have installed the legs backwards.
- 5.) Gently raise the target plate with the help of another person. Open the leg and slide one half of the leg through the plate opening. *****Note: The SHORT leg faces the FRONT of the target system. Target should lean TOWARDS the shooter*****
- 6.) Rotate the other half of the leg through the plate opening. Note: It will be a snug fit. Be sure that the target plate is fully seated between the raised portion of the tabs of the legs.
- 7.) Install the small clevis pin behind the target plate, through both legs. Clevis pin should be pointing toward the inside of the legs.
- 8.) Install hairpin clip into clevis pin.
- 9.) Repeat steps 3 – 7 for the second leg
- 10.) Set your grounder target on the ground, and make sure the legs are fully spread apart for stability.
- 11.) Inspect your target for damage. If damage is present, flip or replace the target plate.
- 12.) Your Grounder Target System is now ready for training.



The Following images are to assist you in the installation and setup of the Grounder 500 and Grounder 550 target systems.



In the above images, note the leg positioning. Shorter legs will always face towards shooter. Also note the direction of the clevis pins, clips, and carriage bolts in the below images.



⚠ Take careful note of the tabs that the target plate will rest into. When the two legs pivot together, through the plate, they create a saddle, effectively locking the plate into position. Failure to ensure the plate fully rests in this saddle could result in an unstable target system.

*Note: Upon full assembly with the clevis pins clipped into place, the Grounder Target System may be picked up and moved around as a single unit. The Clevis pins keep the legs and plate locked together.

II.) Grounder Target System Disassembly Instructions:

Disassembly is the opposite of the assembly process. Please be sure to retain all hardware. Be sure you do not lose any small components.

⚠️ PINCH WARNING REMINDER: Always be sure your hands, fingers, skin, and other body parts do not get between the legs and the target plate. If you are careless during assembly, you could get pinched. Go slow, do not force the legs into the plate. If you have difficulty, immediately stop and email our team. Do not use until we are able to assist you.

- 1.) Remove the hairpin clip from one clevis pin from either leg, set aside.
- 2.) Remove the Clevis Pin, set aside
- 3.) Gently Lift UP on the target plate. At the same time, rotate the legs OPEN.
 - a. **⚠️ REMINDER: Be CERTAIN your hands, fingers, skin, or other objects are CLEAR of the pivot points and overlap points. Failure to do so could result in a pinch.**
- 4.) Place this first set of legs off to the side
- 5.) Remove the other clevis pin and hairpin clip.
- 6.) Gently lift the plate once again, rotating the second set of legs out of the target plate.
- 7.) Place this set of legs off to the side. Place the target plate off to the side.
- 8.) Fold the legs together in their closed / storage position.
- 9.) Reinstall the Clevis Pin and hairpin clips towards the bottom of the legs, effectively locking the legs into the folded position.
- 10.) Your target system is now ready for transport and/or storage.

III.) Grounder Target Plates:

The Grounder is available in two variations: AR500 and AR550 steel. The Grounder 500 utilizes the same steel found in our Genesis Line of Steel Targets. The Grounder 550 utilizes the same premium AR550 steel as found in our Exodus Line of targets. BOTH variants feature armored / AR500 legs for durability and resistance to damage.

Note:

- Although the Grounder Legs are made from ¼" AR500 steel, they should never be treated as a target.
- Intentional shooting of the legs will cause wear and tear, leading to replacement over time
- Distance requirements in the below tables are MINIMUM distances. Never shoot closer than our distance requirements.
- Grounder 500 and Grounder 550 systems have DIFFERENT caliber and distance ratings. Please be sure of which system you have, study the table, and always follow these minimum distances.

⚠️ UNDER NO CIRCUMSTANCES SHOULD YOU ENGAGE THIS TARGET AGAINST THESE REQUIREMENTS. DOING SO WILL LIKELY RESULT IN DAMAGE TO THE TARGET SYSTEM, PROPERTY, AND MAY RESULT IN SERIOUS INJURY OR EVEN DEATH. ALWAYS FOLLOW OUR POSTED SAFETY REQUIREMENTS.

IV.) Grounder 500 Safe Shooting Distances:

Weapon Type	Caliber	Velocity	Bullet Make	Distance
Pistol	22LR	All Velocities	FMJ, HP, Lead	10 Yards
Rifle	22LR	All Velocities	FMJ, HP, Lead	10 Yards
Centerfire Pistol	.380, 9mm, 40, 45ACP, 10mm, 357 Sig	Up to 1500 FPS	FMJ, HP, TMJ, LEAD, Soft Point	10 Yards
Magnum Pistol Calibers	44 Mag, 454 Casull, etc.	Up to 1800 FPS	FMJ, HP, TMJ, Lead, Soft Point	25 Yards
Pistol Caliber Carbines	9mm, 40, 45, 10mm, 44 mag, 357 mag, etc.	Up to 2,400 FPS	FMJ, HP, TMJ, Lead, Soft Point	75 Yards
Light Rifles	5.45X39, 5.56/.223, 7.62X39, 6.8SPC, 6.5 Grendel ETC	3,000 FPS OR LESS	FMJ, HP, TMJ, Lead, Soft Point, Ballistic Tip, Copper Expanding	100 yards
Larger Bore Rifles	.243, .308, 7mm-08, etc.	3,000 FPS OR LESS	FMJ, HP, TMJ, Lead, Soft Point, Ballistic Tip, Copper Expanding	100 Yards
Magnum Rifles	.300 Win mag, 7mm mag, etc.	3,000 FPS OR LESS	FMJ, HP, TMJ, Lead, Soft Point, Ballistic Tip, Copper Expanding	200 Yards
Shotgun Slugs	.410, 20GA, 12 GA	ALL RIFLED SLUG VELOCITIES	Rifled Slugs	100 yards
Shotgun Buck Shot	.410, 16 GA, 20 GA, 28 GA, 12 GA	All Lead Buck Shot Variants	Buck Shot	30 Yards
Shotgun Bird Shot	.410, 16GA, 20 GA, 28 GA, 12 GA	All Lead Bird Shot Variants	Bird Shot	10 Yards
50BMG & Wildcat	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED

⚠️ Additional notes:

- RIFLE CALIBERS MUST BE 3,000 FPS OR LESS MUZZLE VELOCITY
- IF OVER 3,000 FPS, INCREASE DISTANCE BY 25 YARDS OVER ADVERTISED DISTANCE FOR EACH ADDITIONAL 100 FPS VELOCITY INCREASE

V.) Grounder 550 Safe Shooting Distances:

Weapon Type	Caliber	Velocity	Bullet Make	Distance
Pistol	22LR	All Velocities	FMJ, HP, Lead	10 Yards
Rifle	22LR	All Velocities	FMJ, HP, Lead	10 Yards
Centerfire Pistol	.380, 9mm, 40, 45ACP, 10mm, 357 Sig	Up to 1500 FPS	FMJ, HP, TMJ, LEAD, Soft Point	10 Yards
Magnum Pistol Calibers	44 Mag, 454 Casull, etc	Up to 1800 FPS	FMJ, HP, TMJ, Lead, Soft Point	25 Yards
Pistol Caliber Carbines	9mm, 40, 45, 10mm, 44 mag, 357 mag, etc.	Up to 2,400 FPS	FMJ, HP, TMJ, Lead, Soft Point	25 Yards
Light Rifles	5.45X39, 5.56/.223, 7.62X39, 6.8SPC, 6.5 Grendel ETC	3,000 FPS OR LESS	FMJ, HP, TMJ, Lead, Soft Point, Ballistic Tip, Copper Expanding	50 yards
Larger Bore Rifles	.243, .308, 7mm-08, etc	3,000 FPS OR LESS	FMJ, HP, TMJ, Lead, Soft Point, Ballistic Tip, Copper Expanding	50 Yards
Magnum Rifles	.300 Win mag, 7mm mag, 7 PRC, 300 PRC etc.	3,000 FPS OR LESS	FMJ, HP, TMJ, Lead, Soft Point, Ballistic Tip, Copper Expanding	100 Yards
Shotgun Slugs	.410, 20GA, 12 GA	ALL RIFLED SLUG VELOCITIES	Rifled Slugs	100 yards
Shotgun Buck Shot	.410, 16 GA, 20 GA, 28 GA, 12 GA	All Lead Buck Shot Variants	Buck Shot	30 Yards
Shotgun Bird Shot	.410, 16GA, 20 GA, 28 GA, 12 GA	All Lead Bird Shot Variants	Bird Shot	10 Yards
50BMG & Wildcat	NOT ALLOWED W/ Tee Post	NOT ALLOWED W/ Tee Post	NOT ALLOWED W/ Tee Post	NOT ALLOWED W/ Tee Post

▲ Additional notes:

- RIFLE CALIBERS MUST BE 3,000 FPS OR LESS MUZZLE VELOCITY
- IF OVER 3,000 FPS, INCREASE DISTANCE BY 25 YARDS OVER ADVERTISED DISTANCE FOR EACH ADDITIONAL 100 FPS VELOCITY INCREASE

VI.) Distance Considerations:

Higher velocity will often equate to more wear and tear on steel targets. Small, fast bullets will cause more damage than larger, slower bullets. When using ANY rifle, ALWAYS ensure the muzzle velocity is 3,000 FPS OR LESS. Damage will occur if you disobey the distance ratings above. As stated previously, the Grounder 500 and Grounder 550 systems feature different distance ratings. ALWAYS follow our distance requirements, never shoot closer than listed above. If your caliber is not listed, or you are unsure, please email us at info@tatargets.com and we will happily guide you to the proper distance ratings.

VII.) Bullet Construction:

⚠ The following bullet types are approved for use on the Genesis target plates

- Full Metal Jacket (FMJ)
- Ballistic / Plastic tip hunting ammunition
- Match Grade ammo (Boat Tail Hollow Points)
- Hollow Point Ammunition
- Soft Point Ammunition
- Bi-Metal Ammunition provided the velocity is 3,000 FPS OR LESS muzzle!
 - o See special note below

⚠ The Following bullet/ammo types are incompatible with the Grounder 500 and Grounder 550 AND SHOULD NEVER UNDER ANY CIRCUMSTANCE BE FIRED AT A GROUNDER TARGET PLATE!

- M855 Steel Core Projectiles
- Solid Copper Machined Bullets (non-expanding solid copper)
- Expanding solid copper bullets over posted velocity limits
- SS109
- Russian Steel Core Ammunition
- Incendiary projectiles
- Tungsten core projectiles
- M855A1
- Any Armor Piercing or penetrating bullet construction not listed.
- Stainless Steel shotgun shot (Never acceptable on steel targets)

VIII.) Special Notes and Considerations:

Hollow point ammunition, especially larger bore calibers, can leave slight impressions on the steel target faces. This is normal and will not create an unsafe condition. If heavy impressions are occurring (i.e. greater than 1/32" depth), increase distance until impressions cease. Shotgun slugs may also exhibit the same tendencies.

IX.) Expected wear and tear during use:

Over time it is normal to experience wear and tear on your system. This is expected. During normal use you may see:

- Chipped Powder coat or paint
- Worn out hardware/nuts/and bolts
- Edge chips from close edge impacts
- Chips around UNUSED holes (extra square holes) on target plates
- Worn out 2X4 posts
- Surface deformations on strike plate (OK to use unless craters with a depth of 1/8" or 3/16" in diameter or more exist)

Please note: Each Grounder Target System is guaranteed to arrive and be in working condition/working order. Normal wear and tear / expected wear and tear is always excepted from ANY warranty claims. The Grounder 500 features a 90-Day warranty. The Grounder 550 features a limited (One-Replacement if Defective) Lifetime Warranty. Additionally, you can purchase an extended warranty for the Grounder 500 target system, if desired. For full information on our warranties, please see our website at:

<https://tatargets.com/warranty/>

X.) Maintenance Considerations:

<u>Component</u>	<u>What to look for</u>	<u>Maximum Threshold</u>	<u>Action Step</u>
Target Plate	Curve / Bending of Plate	Maximum of >3/16" across the face of the target plate. If the curve is 3/16" or greater, it is time to replace.	Replace the Target Plate if the curve is 3/16" or greater.
Target Plate	Pitting of Target Plate	1/8" Depth and / or 3/16" in diameter (Or both are present)	Replace Plates that are pitted
Target Plate	Cracking	If Cracks are present, the target plate must be replaced.	Replace Cracked Target Plates
Grounder Legs	Chipped Edges that impede installation	If chips are present or the legs are no longer able to slide through the plate, order a replacement set.	Replace legs that show visible wear and tear.
Hardware	Hardware that is worn out	If the hardware shows visible wear and tear from impacts and/or bullet fragmentation, replace the hardware	Replace any hardware that shows visible wear and tear.
Complete System	Chipped Paint and Rust	Keep your target system painted and touch it up at the end of each range session. This lengthens the life of the system.	Keep targets freshly painted to avoid rust and corrosion and to be able to track impacts accurately.

Grounder Target Plates:

The Grounder 500 and Grounder 550 target plates must be inspected prior to each range day. If the plate has holes, craters, or is curved more than 3/16" over the surface of the plate, it is time to replace it. Consider flipping the plate to the opposing side every few months or every few thousand rounds. This will lengthen the lifespan of the system. Edge chips can happen, and they will not affect the performance or safety of the system. Slight impressions may be present when using soft point or hollow point ammunition, especially from calibers such as 45-70. This is normal, however if these small impressions are present on your system, we do recommend changing ammo or increasing distance to avoid future wear and tear. Keep your target plates painted each range day to resist rust and corrosion.

If you are experiencing wear and tear on your system, you are likely doing something improper. The Grounder was designed for a lifetime of hard use. When used properly, the Grounder will perform range day after range day.

Grounder Legs:

Always inspect the grounder leg hardware. If any of the hardware is damaged, order replacements and swap your hardware out. Inspect the legs, especially the portion through the target plate, for wear and tear. The Grounder legs are NOT targets. Direct impacts or intentionally shooting them will result in accelerated wear and tear. This is not covered under any warranties. If your legs show visible signs of damage, order replacements. If sharp edges are present, we recommend using a file to remove the burrs / sharp edges, touching up with sandpaper and coating with a fresh coat of paint.

Other Accessories:

Please see our website for additional products and components that will complement our Grounder Target Systems.

Video For Grounder Assembly:

Please consider watching our Grounder video for proper use demonstration:

<https://youtu.be/e141s0kL6tM>

If you have any other questions, please feel free to email our team and we'll be able to further assist you with setting up your new target system.

Customer Service Email: info@tatargets.com

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