

INSTALLATION INSTRUCTIONS



PLEASE READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS
BEFORE USE AND INSTALLATION

WARNING: All firearms are classified as dangerous weapons. Injury or death may result from unsafe or improper use. Before installing or adjusting your Advantage Tactical Sight (ATS), or shooting any firearm, understand and be mindful of behaviors and attitudes of responsible firearm ownership. If your pistol does not have a manual, one can and should be requested from your pistol's manufacturer. If you are uncomfortable performing the installation of this sight, seek the assistance of a reputable gunsmith. WrenTech Industries, LLC and its owners or agents will not be held responsible for the result of unauthorized repairs and/or adjustments, or faulty installation. WrenTech Industries, LLC and its owners or agents will not be held responsible for careless, unreasonable, unsafe firearm use, or personal injury or property damage of any kind resulting from such use. It is the responsibility of the ATS user to determine the suitability of the ATS for any specific use.

- **Always treat a firearm as if it were loaded**
- **Be sure your firearm is unloaded before making adjustments or installation**
- **Never take anyone's word that a firearm is unloaded**
- **When a firearm is handed to you, always check that it is unloaded**
- **Always keep the muzzle pointed in a safe direction**
- **Never point a firearm at an unintended target**
- **Never put your hand over the muzzle of a firearm**

- **Always keep your finger(s) off the trigger and outside the trigger guard until aiming at your target and ready to shoot**
- **Do not drop your firearm. Unload any dropped firearm and have a qualified gunsmith examine it for damage and proper mechanical functioning**
- **Before shooting, make sure of your target and backdrop**
- **Always keep your firearm unloaded until you intend to shoot**
- **Firearms, alcohol, drugs, and certain medications do not mix. Vision, coordination, and judgment may be impaired. Seek your doctor's advice about shooting when taking any medication**
- **Always wear protective eyewear when shooting**
- **Always wear hearing protection when shooting**

KNOWLEDGE OF COMPLETE FIREARMS SAFETY AND ONE'S RESPONSIBILITIES IS NECESSARY BEFORE ALL FIREARMS USAGE. PLEASE REFER TO THE WEBSITE OF THE NRA FOR A COMPREHENSIVE REVIEW OF FIREARMS SAFETY: <http://www.mynra.com>

-
- 3/32 Allen Wrench
 - 3/16 Punch
 - Small Hammer
 - Small Pin Punch
 - Loctite 242 Blue Threadlocker
 - Loctite 290 Green Threadlocker Wicking Grade

SIGHT INSTALLATION INSTRUCTIONS: Sight installation by a professional gunsmith is preferred and recommended. Should you opt to install the sight yourself, **PLEASE OPEN AND LEAVE OPEN ALL ACTIONS AND CYLINDERS DURING THE INSTALLATION PROCESS.**

TO INSTALL THE ATS ON A GLOCK, SIG SAUER OR SPRINGFIELD XD AUTO PISTOL: **MAKE SURE YOUR FIREARM IS UNLOADED.** Follow the manufacturer's to remove the slide from the frame of the pistol. Remove the current front sight and rear sights from the pistol.

TO INSTALL THE REAR SIGHT ON A GLOCK, SIG SAUER OR SPRINGFIELD XD AUTO PISTOL: Loosen the screw on the front of the rear sight almost to the point of extraction (unloosened screws will make installation difficult). Tap the rear sight into the rear sight notch about 1/4th of the way from right to left (as viewed from the rear of the slide). Then tap or, preferably, push the ATS rear sight in the rest of the way. Push or tap the rear sight into the rear notch from right to left (as viewed from the rear of the slide). Make sure the dovetail nut is not catching in the dovetail. The sight is engineered for a tight fit and may require a sight installation tool for easy installation. A competent gunsmith may modify your slide or sight, for those requiring more frequent sight adjustments. Center the sight in the rear notch and tighten the screw. Center the rear sight in the notch and tighten the screw until snug only, **NOT TIGHT!** Windage adjustment instructions below.

TO INSTALL THE FRONT SIGHT ON A GLOCK AUTO PISTOL: Remove the screw from the front sight assembly. Insert the front base into the oval hole on the front of the slide with the opening facing the rear of the slide. Use a punch and small hammer or arbor press to press the base flush with the top of the slide. A small drop of Loctite 242 Blue thread-locking compound between the base and slide will bed the base for best installation. Place the front sight into the base and attach the screw from below with the included tool. **USE HAND TENSION ONLY! DO NOT USE A WRENCH ON THE FRONT SIGHT TOOL!**

Loctite 242 Blue is highly recommended on all screws to ensure all sight parts remain tight.

SIGHT ALIGNMENT

TO ADJUST ELEVATION ON THE FRONT OF YOUR GLOCK AUTO PISTOL: **MAKE SURE YOUR PISTOL IS UNLOADED** and then remove the slide. Loosen and remove the front screw. Insert enclosed shim (washer) between the front sight base and the front sight to lower bullet impact. The shim is laminated and is

.030" thick. There are 15 layers, .002" thick each, layered together in this single shim. Each .002 sheet of shim will lower bullet impact approximately 3/8" @ 50 yards. The full shim will move bullet impact approximately 6", depending on your load. The shims in our newer shim system come pre-separated into .002", .004", .008", and .016". Below is a shim elevation chart for your convenience. After correct sight alignment is attained, blue Loctite 242 Blue is highly recommended for the final locking of the screw. **DO NOT** use a wrench on the front sight tool.

TO ADJUST WINDAGE ON THE REAR SIGHT OF A GLOCK, SIG SAUER OR SPRINGFIELD XD AUTO PISTOL: First make a mark with a pencil on the top of your slide at the small notch in the front of the rear sight. Loosen the screw and move the sight in the direction of the desired bullet impact. One pencil line thickness equals approximately 1/4" at 25 yards. Re-tighten the locking screw to snug only, NOT TIGHT, when your windage adjustments have been completed. After correct sight alignment has been attained, wipe off all pencil marks.

NOTE: For Sig Sauer pistols it is best to keep the rear sight centered on the slide and make windage adjustments on the front sight. To move bullet impact to the right, drift the front sight to the left; to move bullet impact to the left, drift the front sight to the right.

TO INSTALL THE ATS FRONT SIGHT ON A SPRINGFIELD XD AUTO PISTOL: **MAKE SURE YOUR PISTOL IS UNLOADED** and then remove the slide. With a wooden or plastic mallet, or sight-pushing tool, drift the front sight in place. Center the front sight in place on the slide, using your mallet with a brass or other soft metal punch or sight-pushing tool. Take care not to damage the dovetailed slide by using improperly sized or improperly shaped punches or insertion tools during this process.

TO ADJUST ELEVATION ON THE FRONT SIGHT OF YOUR SPRINGFIELD XD AUTO PISTOL: **MAKE SURE YOUR PISTOL IS UNLOADED** and then remove the slide. Remove the front sight from the dovetail. Loosen and remove the recessed elevation set screw from underneath the front sight. To lower bullet impact, add the proper amount of shim between the front sight and the front sight base. To raise bullet impact, remove the proper amount of shim from between the front sight and the front sight base. Our new shim system is pre-separated into .002", .004", .008", and .016" thicknesses. The aggregate amount of shim with each sight package will equal .030". One may add or remove shims in .002" increments, as shown in the shim elevation chart below.

When all shims are used the difference in bullet impact will be approximately 6" @ 50 yards. When you have established the correct amount of shim for the desired point of impact, re-insert and re-tighten the elevation set screw. Re-

center the front sight in the slide. The usage of Loctite 242 Blue is highly recommended for the final locking of the set screw. Take care not to damage the front sight set screw by over-tightening.

TO INSTALL THE ATS ON A SMITH & WESSON REVOLVER: MAKE SURE YOUR FIREARM IS UNLOADED. Remove the current front and rear sights from the revolver. There are many variants of the S&W revolver. If the sight does not look like it will work with your particular revolver, see a gunsmith.

TO INSTALL THE REAR SIGHT ON A SMITH & WESSON REVOLVER: Loosen the screw on the front of the rear sight (it must be almost all the way out, before commencing insertion). Push or tap the rear sight into the rear notch from right to left (as viewed from the rear of the mount). MAKE SURE THE DOVETAIL NUT IS NOT CATCHING ON THE DOVETAIL. Center the sight in the rear notch and tighten the screw. Hold the rear base firmly when tightening the rear screw. Make sure the cavity for the rear mount is clean and clear of debris. Install mount and sight with original mounting screw. Windage adjustment instructions are described below.

TO INSTALL THE FRONT SIGHT ON A SMITH & WESSON REVOLVER: Place the front sight into the existing notch. Make sure the sight sits flush with the top edge of the opening. Depending on your particular revolver, you might need to remove a small amount of material to get the sight to fit flush. The drill sizes below are intended as references only. It is up to the installer to measure the existing cross pin diameter and determine the correct drill bit for the job. Please proceed carefully, once correct drill bit size has been established. With the front sight held tightly in place, use a #55 drill bit (.052") to drill slightly the front sight through the existing hole in the pinned sight mount slot. If your revolver has a notch, but was not originally drilled for a pinned sight, it is best to set up in a milling machine to get this hole drilled correctly. After drilling the hole in the front sight through, use the existing pin to secure the front sight in place. If the hole is too tight for the pin, try a #54 drill bit (.055") through the front sight hole only.

Loctite 242 Blue is highly recommended on all screws to ensure all sight parts remain tight, after final sighting in. Loctite 290 Green medium strength, wicking grade thread locker, works well to set the elevation screw in place without the need for disassembly, or moving the adjustment screw; Loctite 290 Green comes pre-applied to the elevation screw from the factory. In the rare occasion the elevation screw seems too tight, or if you cannot get the screw to move at all, heating the part with a hair dryer will loosen the locking compound.

SIGHT ALIGNMENT

TO ADJUST ELEVATION ON THE REAR SIGHT OF THE S&W REVOLVER: **MAKE SURE YOUR REVOLVER IS UNLOADED!** Turn elevation adjustment screw (.05" Allen wrench) clockwise (in) to raise bullet impact. Turn elevation adjustment screw counter clockwise (out) to lower bullet impact. 1/8" turn moves impact approximately 1" at 50 yards. After correct alignment is obtained, a very small amount of Loctite 290 Green on the screw is recommended.

TO ADJUST WINDAGE ON THE REAR SIGHT OF THE S&W REVOLVER: First make a small pencil mark that indicates the edge of the rear sight. Loosen screw and move the rear sight in the direction of the desired bullet impact. Once pencil line thickness equals approximately 1/4" @ 25 yards. **Re-tighten the locking screw to snug only, NOT TIGHT, while you firmly hold the rear sight in place.** After correct sight alignment is attained, wipe off pencil marks.

COLOR INSERT CHANGES FOR ALL FIREARMS: Carefully remove front or rear cross pin with a punch or pin no larger than .031" (1/32"). Try different color combinations and then re-insert the pins after selecting the desired color combination. Make sure all inserts are pressed fully into their respective cavities before re-installing the pins. Care in punch choice as well as in pin removal and re-insertion is necessary in ensure against pinhole damage. Do not fire live ammunition until holding pins have been re-inserted. Installing pins with blue Loctite 242 Blue will create a semi-permanent installation.

SIGHT ALIGNMENT TIPS: Sight alignment should look just like our logo...upper edges of the front sight and rear sight aligned. Bullet impact should be adjusted to hit at the very point of the front sight. Give yourself a few outings with your new sight and you will soon find it to align naturally.

SHIM ELEVATION CHART: Your shim system includes four shims: .002", .004", .008", and .016". Each .002" change will effect bullet impact elevation by approximately 3/8" at 50 yards. By combining these different thicknesses in increments of .002" once can go from .002" to .030".

SHIM CHART

<p>.002" = .002"</p> <p>.004" = .004"</p> <p>.006" = .002" + .004"</p> <p>.008" = .008"</p> <p>.010" = .002" + .008"</p> <p>.012" = .008" + .004"</p> <p>.014" = .008" + .004" + .002"</p> <p>.016" = .016"</p>	<p>.018" = .016" + .002"</p> <p>.020" = .016" + .004"</p> <p>.022" = .016" + .004" + .002"</p> <p>.024" = .016" + .008"</p> <p>.026" = .016" + .008" + .002"</p> <p>.028" = .016" + .008" + .004"</p> <p>.030" = .016" + .008" + .004" + .002"</p>
---	--

NOTE:

A good place to start when adding elevation shims to your Glock.

For 9mm and .40 calibers, start with about .020" of shim. Glock .45's may require less shim. The degree of needed shim will depend on the individual shooter, one's barrel, and one's load.

A good place to start when adding elevation shims to your Springfield XD and Sig Sauer pistols.

For most XD's you may start with about .020" of shim. With the Sig Sauer's in 9mm start with about .030"; for .45's .036" to .038" is a good starting place; for .40 and .357 Sig calibers start with .045" of shim. These shim recommendations are approximate and will depend on the individual shooter, one's barrel and one's load

For more information or technical questions, please visit our website at <http://www.advantagetactical.com>, or call us at (310) 316-6413.

U.S. Patents #6,711,846 B1 and U.S. Patent #D489,115 S

