

Bushnell®

TROPHY® TRS-25

ILLUMINATED RED DOT SCOPE • OWNER'S MANUAL

MODEL #: 731303

LIT. #: 93-0512/07-10

The Bushnell TRS-25 is a small, light and rugged red dot sight, designed for use on shotguns, rifles and handguns. It is constructed and assembled by highly skilled craftsmen to Bushnell's high quality standards. The precision and craftsmanship with which this scope was built ensures its performance under demanding conditions. This scope will provide the shooting accuracy and repeatability which have made Bushnell legendary.

This sight can be easily used with both eyes open (eye relief is unlimited), increasing the shooter's awareness of the surrounding environment and providing faster target acquisition. There is no need for centering, due to the parallax free design in which the dot follows the movement of the user's eye while remaining fixed on the target. The TRS-25 delivers full size performance in a sight with reduced size and low power consumption.

The following diagram is a guide to the description and location of the parts mentioned throughout this manual.



SETUP AND OPERATION

WARNING: *Insure the weapon is unloaded and the safety selector is in the "safe" position before attempting to install, remove or perform maintenance on the sight.*

Installing the Battery

- a) Remove Battery Cap by turning it counter clockwise.
- b) Insert a battery (type CR2032) with positive (+) end toward Cap.
- c) Install Battery Cap by turning clockwise until snug. Hand tighten only, using a coin or similar item. Using tools could damage the equipment.
Note: (not necessary when the sight is new) Before installing the Battery Cap (2), inspect that the O-ring is present and not damaged. Failure to do so could result in water leakage into the battery compartment.
- d) Verify that red dot is present by turning the Rotary Switch clockwise.

Installing the Sight on the Firearm

The Micro Sight is designed for installation on most types of weapons, which have a MIL-Std 1913 Picatinny Rail or Weaver Rail. If your weapon does not have or support an appropriate base(s), please consult your dealer, gunsmith or other qualified source.

Installing the Sight on a Picatinny/Weaver Rail

- a) Loosen the Shaft by means of the Allen Wrench, so that the Locking Bar (12) can clamp around the Picatinny/ Weaver Rail.
- b) Install the Sight to the weapon Rail by tightening the Shaft). First, ensure that the Sight is correctly positioned and that the Shaft (=recoil stop) fits into a groove on the Picatinny/Weaver Rail.
To make sure that the Shaft is firmly tightened, screw the Shaft clockwise until a light resistance can be encountered.
After that, screw another 1/4 to 1/2 turn. **WARNING!** Do not overtighten.
- c) When using Lens Covers, ensure that they are correctly positioned and can easily be opened.
- d) Finally, make sure that the Shaft with Locking Bar is firmly tightened around the weapon Rail.
- e) Complete zeroing according to the "Zeroing" section below.

Lens Covers

In order to preclude the loss of the lens covers when removed from the optical path of the Sight, the lens covers should be removed downwards. The rubber string will then grab around the Sight and Base.

Zeroing

The TRS-25 is delivered with the red dot in a centered position. Normally this means that only small adjustments are necessary, providing that the weapon rail (Picatinny/Weaver Rail) is properly aligned.

CAUTION: Do not continue to adjust windage and elevation mechanisms if you encounter resistance.

The Elevation Adjustment Screw is located on top of the sight, while the Windage Adjustment Screw is located on the right side.

- a) Open (remove) Lens Covers.
- b) Turn the Switch Knob clockwise until the red dot has a sufficient intensity to contrast against the target.
- c) Remove the Adjustment Cap for windage and elevation adjustment, one at a time. The two knobs incorporated on top of the Adjustment Cap (1) shall be used for adjusting the Screw. Reverse the Adjustment Cap and the knobs will fit into the two recesses on the Adjustment Screw.

NOTE: Each click of the Adjustment Screw corresponds to a 13 mm movement of the point of impact at 100 meters, (3 mm at 25 meters and 26 mm at 200 meters or 1/2" at 100 yds).

- d) Insert the two knobs on top of the Adjustment Cap in the two holes on the Adjustment Screw and turn as follows:

- To move the point of impact to the right, turn windage adjustment screw counter clockwise
- To move the point of impact to the left, turn windage adjustment screw clockwise
- To move the point of impact up, turn elevation adjustment screw counter clockwise.
- To move the point of impact down, turn elevation adjustment screw clockwise.

- e) Confirm zeroing by firing at least three shots at a zeroing target. Check points of impact on zeroing target to confirm accuracy and repeat above procedure if required.

- f) After initial firing, ensure that the sight is secure.

- g) Turn Rotary Switch to OFF position (counter clockwise).

- h) Close front and rear Lens Covers.

OPERATION UNDER EXTREME CONDITIONS

- a) Extreme heat (moist or dry): No special procedures required.
- b) Extreme cold: Extreme cold might shorten battery life. It could also make the Rotary Switch a little harder to turn than at normal temperatures.
- c) Salt air: No special procedures required.
- d) Sea spray, water, mud and snow: Ensure that Battery Cap and the two

OPERATION UNDER EXTREME CONDITIONS *(continued)*

Adjustment Caps are tightened before exposing the Sight to sea spray, mud, snow or before immersing the sight in water. Hand tighten only. Keep Lens Covers closed when sight is not being used. Clean lenses with lens paper/cloth and wipe the sight dry as soon as possible after exposure to water, sea spray, mud or snow.

e) Dust storms and sand storms: Keep Lens Covers closed when sight is not being used.

f) High altitudes: No special procedures required.

CAUTION: *The lenses shall never be cleaned with fingers but with lens paper/cloth. If no lens paper/cloth available :*

- To clear away debris (sand, grass etc): blow away the dirt.

- To clean lenses: mist up the lenses and clean them with a soft piece of cloth.

TROUBLE SHOOTING

Problem: Red Dot Does Not Appear

Possible Causes/Solutions:

- Discharged battery: Replace battery.
- Battery installed incorrectly: Remove and reinstall battery with (+) toward Cap.
- Battery is not making good contact: Clean contact surfaces and reinstall battery.
- Defective Rotary Switch: Notify dealer/armourer.

Problem: Impossible To Zero

Possible Causes/Solutions:

- Adjustment screw is at its limit: Check alignment of mount to barrel.
- Impact point is moving: Check mount and weapon rail (or carry handle) stability.

MAINTENANCE

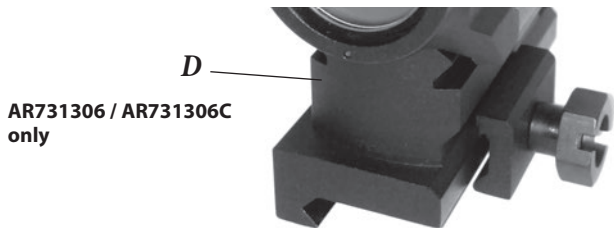
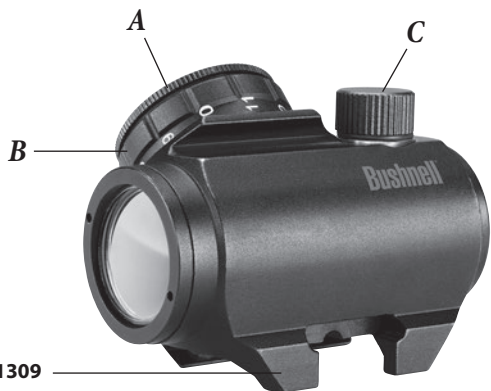
a) This reflex sight does not require any particular maintenance while used under normal conditions.

b) Under severe weather conditions please refer to "Operation Under Extreme Conditions".

c) Keep lens covers closed whenever the sight is not in use.

d) Warehouse storage: Remove battery and allow lens surfaces to dry completely (if wet) before closing the lens covers.

e) To clean lenses refer to the **CAUTION** statement above.



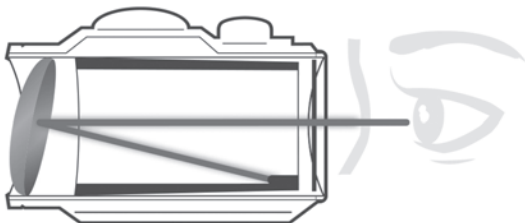
The Bushnell® TRS-25 is a small, light and rugged red dot sight, designed for use on shotguns, rifles and handguns. It is constructed and assembled by highly skilled craftsmen to Bushnell's high quality standards. The precision and craftsmanship with which this scope was built ensures its performance under demanding conditions. This scope will provide the shooting accuracy and repeatability which have made Bushnell legendary.

This sight can be easily used with both eyes open (eye relief is unlimited), increasing the shooter's awareness of the surrounding environment and providing faster target acquisition. There is no need for centering, due to the parallax free design in which the dot follows the movement of the user's eye while remaining fixed on the target. The TRS-25 delivers full size performance in a sight with reduced size and low power consumption.

The model# AR731306/AR731306C versions of the TRS-25 include a tall riser block (**D, pg. 2**) to position the sight at an optimum height on AR-15 flat tops or tactical shotguns.

About Red Dot Lens Positioning

All red dot sights have an objective lens at the front of the unit that is spherical in shape. However, unlike a conventional riflescope with all lenses mounted perpendicular (at a 90 degree angle) to the axis of the tube, ***the objective lens in a red dot sight is positioned off axis and appears to be tilted when looking at the sight*** (see below). This angle of the front lens allows the light generated by the battery powered LED light source inside the unit to be reflected back into the sight. The reflected light becomes the "dot" or aiming reference that the shooter sees when a red dot sight is switched on. This engineered "bending" of light is what makes today's red-dot sights so popular and easy to use.



SETUP AND OPERATION

WARNING: *Insure the weapon is unloaded and the safety selector is in the "safe" position before attempting to install, remove or perform maintenance on the sight.*

Installing the Battery

1. Remove Battery Cap (**A**) by turning it counter clockwise.
2. Insert a battery (type CR2032) with positive (+) end toward Cap.
3. Install Battery Cap by turning clockwise until snug. Hand tighten only, using a coin or similar item. Using tools could damage the equipment.
Note: *(not necessary when the sight is new) Before installing the Battery Cap, inspect that the O-ring is present and not damaged. Failure to do so could result in water leakage into the battery compartment.*
4. Verify that red dot is present by turning the Rotary Switch (**B**) clockwise.

Installing the Sight on the Firearm (w/o Hi-Rise Block)

The TRS-25 is designed for installation on most types of weapons, which have a MIL-Std 1913 Picatinny Rail or Weaver Rail. If your weapon does not have or support an appropriate base(s), please consult your dealer, gunsmith or other qualified source.

Installing the Sight on a Picatinny/Weaver Rail (w/o Hi-Rise Block)

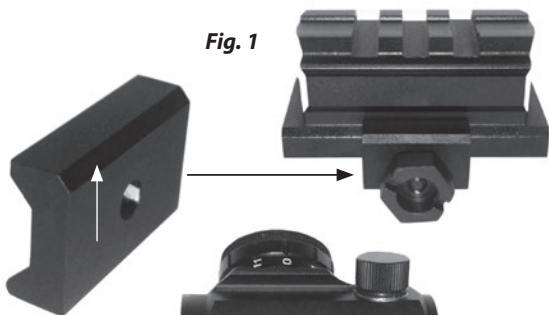
1. Loosen the Shaft by means of the Allen Wrench, so that the Locking Bar can clamp around the Picatinny/ Weaver Rail.
2. Install the Sight to the weapon Rail by tightening the Shaft. First, ensure that the Sight is correctly positioned and that the Shaft fits into a groove on the Picatinny/Weaver Rail. To make sure that the Shaft is firmly tightened, screw the Shaft clockwise until a light resistance can be encountered. After that, screw another 1/4 to 1/2 turn. **WARNING! Do not overtighten.**
3. When using Lens Covers, ensure that they are correctly positioned and can easily be opened.
4. Finally, make sure that the Shaft with Locking Bar is firmly tightened around the weapon Rail.
5. Complete zeroing according to the "Zeroing" section on page 6.

Installing the Sight on the Firearm with Hi-Rise Block (AR models only)

The AR731306/AR731306C versions of the TRS-25 are supplied with a "Hi-Rise" mounting block that can be used to position the sight at the correct height for optimum performance on an AR-15 style rifle with a flat top receiver.

In order to use the riser block, first install the sight onto the block by following steps 1-4 in the previous section ("*Installing the sight on a Picatinny/Weaver Rail*"). Once the sight is installed on the Hi-Rise block, the entire assembly can be mounted on the weapon by following these steps:

1. Loosen the mounting screw so that the clamp will fit over the tapered side of the firearm's Picatinny or Weaver rail.
2. Insure that the tapered clamp on the riser is oriented with the chamfered (beveled) end of the clamp at the top (*Fig. 1*).
3. Ensure that the riser's cross screw with nut is tightened to clamp it firmly to the weapon's rail (*Fig. 2*). Turn the large nut on the riser block $\frac{1}{4}$ to $\frac{1}{2}$ turn with a coin, screwdriver or $\frac{1}{2}$ " wrench. **WARNING! Do not over tighten.**
4. Complete zeroing according to the "Zeroing" section on page 6.



Lens Covers

In order to preclude the loss of the lens covers when removed from the optical path of the Sight, the lens covers should be removed downwards. The rubber string will then grab around the Sight and Base.

Zeroing

The TRS-25 is delivered with the red dot in a centered position. Normally this means that only small adjustments are necessary, providing that the weapon rail (Picatinny/Weaver Rail) is properly aligned.

CAUTION: Do not continue to adjust windage and elevation mechanisms if you encounter resistance.

The Elevation Adjustment Screw is located on top of the sight, while the Windage Adjustment Screw is located on the right side.

1. Open (remove) Lens Covers .
2. Turn the Switch Knob (**B**) clockwise until the red dot has a sufficient intensity to contrast against the target.
3. Remove the Adjustment Cap (**C**) for windage and elevation adjustment, one at a time.
4. Confirm zeroing by firing at least three shots at a zeroing target. Check points of impact on zeroing target to confirm accuracy and repeat above procedure if required.
5. After initial firing, ensure that the sight is secure.
6. Turn Rotary Switch to OFF position (counter clockwise).
7. Close front and rear Lens Covers.

OPERATION UNDER EXTREME CONDITIONS

- **Extreme heat (moist or dry):** No special procedures required.
- **Extreme cold:** Extreme cold might shorten battery life. It could also make the Rotary Switch a little harder to turn than at normal temperatures.
- **Salt air:** No special procedures required.
- **Sea spray, water, mud and snow:** Ensure that Battery Cap and the two Adjustment Caps are tightened before exposing the Sight to sea spray, mud, snow or before immersing the sight in water. Hand tighten only. Keep Lens Covers closed when sight is not being used. Clean lenses with lens paper/cloth and wipe the sight dry as soon as possible after exposure to water, sea spray, mud or snow.

- **Dust storms and sand storms:** Keep Lens Covers closed when sight is not being used.

CAUTION: *The lenses shall never be cleaned with fingers but with lens paper/cloth. If no lens paper/cloth is available:*

- **To clear away debris (sand, grass etc):** blow away the dirt.
- **To clean lenses (after any debris is removed):** breathe on the lenses and clean them with a soft cloth.

TROUBLE SHOOTING

Problem: Red Dot Does Not Appear

Possible Causes/Solutions:

- **Discharged battery:** Replace battery.
- **Battery installed incorrectly:** Remove and reinstall battery with (+) toward Cap.
- **Battery is not making good contact:** Clean contact surfaces and reinstall battery.
- **Defective Rotary Switch:** Notify dealer/armourer.

Problem: Impossible To Zero

Possible Causes/Solutions:

- **Adjustment screw is at its limit:** Check alignment of mount to barrel.
- **Impact point is moving:** Check mount and weapon rail (or carry handle) stability.