

Vortex Scope Mounting Checklist and Step-by-Step Guide



TOOLS REQUIRED

- Gun cradle
- Quality in-lb torque wrench with correct bits (like the Vortex CTW)
- Mounting levels (flat bottomed)
- Ring lapping kit (if necessary)
- Blue loctite or surethread adhesive
- Boresighter (if desired)

NOTE ON SCOPE MOUNTS

Be sure to use optic mounts that are compatible with the specific model of firearm that you are using and the correct height and size of rings for your scope, ensuring the scope is mounted as low as possible.

NOTE ON TORQUING

Always use a quality in-lb torque wrench like the Vortex CTW. Adjust torque wrench to relaxed position upon completion of mounting to ensure precise torquing.

STEP ONE - RING SET UP

Degrease rings and bases using a degreaser/acetone. Don't allow top and bottom halves to mix or rotate. Draw an arrow and a letter F for front and R for rear with a marker on the inside of both halves of each ring to ensure your rings remain mated and facing the correct direction.

STEP TWO - BASE INSTALLATION

With firearm action open, install base(s) onto receiver, using the correct screws for each side of the receiver, a pic rail or one-piece base is recommended. Put a small amount of blue Loctite or Surethread onto base screws and wipe off any excess to prevent adhesive from dripping into breach area.

STEP THREE - BASE SCREWS

Snug all screws, then tighten each screw 1/4 turn at a time, alternating between all screws until torqued to the base manufacturer's suggested torque. Cycle firearm action to ensure correct length screws were used - if action is tight or won't open or close, you may have mixed up base screws. If this occurs, remove screws and repeat from step 2.

STEP FOUR - PLACE BOTTOM RINGS

Fit the bottom portion of the ring to the base with the base-ring screws mounted on the same side. *Please do not use locktite for these screws.*

STEP FIVE - BOTTOM RING SCREWS

While pushing the ring bottoms forward in their rail/base slots (toward the muzzle), tighten to finger tight and then tighten to the ring manufacturer's suggested torque.



STEP SIX - TO LAP OR NOT TO LAP

Place scope in bottom rings and ensure scope objective is not touching firearm or front part of base, as close to barrel as possible with enough room for scope caps. Lightly roll scope in rings to determine if lapping is required.

Vortex rings used on a pic rail or one-piece base generally do not need lapping. Two piece bases may require lapping due to machining and drilling/tapping inconsistencies. Scope should roll freely without marking.

If successful, move to step 8.

For bolt-action firearms, cycle firearm action to ensure bolt clears the scope - higher mounts may be required if it fails to clear.

STEP SEVEN - LAPPING RINGS

If your scope does not slide and move freely in the rings (prior to tightening), lapping of the rings to ensure full contact with the scope may be required. **Always use the correct precision lapping tool (1", 30mm, etc.). You may wish to have the assistance of a gunsmith.**

STEP EIGHT - EYE RELIEF

Set the scope in the rings, turn the magnification of the scope to the highest setting (critical to ensure proper eye relief) and move the scope as far forward in the rings as possible. Ensure at least 3/8" space between the rear ring and the zoom-ring of the riflescope.

Carefully shoulder the firearm ensuring the scope does not move or fall (installing the top portion of the rings with 1 or 2 screws loosely can help). Move the scope back to your eye until the black ring in your vision disappears. Place the firearm back in the cradle carefully, so the scope does not move from its position.



STEP NINE - LEVELING

Using a set of scope mounting levels, place the long flat bottomed thin one in the breach or a flat section of the base to aid in setting the firearm straight in its cradle and adjust firearm to level. Place the bubble level on top of the elevation turret and turn scope until it shows level, along with the firearm.

Note: If your scope features removeable turret caps or a removeable outer turret, remove those pieces to get as close to the actual inner turret as possible.

This is a great time to install a bubble level - highly recommended. Mount on the scope tube in clear view when shouldering - left side for right-handed shooters and right side for left handed shooters.

STEP TEN - TOP RING SCREWS

Install the top ring by first placing the correct ring in the correct direction on the bottom ring. Refer to your arrow and letter you marked on the ring earlier.

Please do not use loctite for these screws. Install the top ring screws and finger tighten. Using your in-lb torque wrench set to 15-18 in-lbs, snug all top ring screws, then tighten according to ring manufacturer's suggested tightening sequence until fully torqued.

Ring halves are not supposed to touch. There should be equal gaps between the ring halves when complete. Ensure crosshairs remain straight by checking levels throughout the tightening process.

OVER-TORQUING OF RINGS (PAST 18 in-lbs) OFTEN RESULTS IN ERRATIC SCOPE BEHAVIOR AND CAN PERMANENTLY DAMAGE THE SCOPE'S INTERNAL AND EXTERNAL PARTS.



STEP ELEVEN - DOUBLE CHECK

Once torqued, shoulder the firearm, ensure eye-relief is adequate (not too close to the eye) and cross-hair appears straight. If necessary, adjust by loosening the top ring screws and repeating steps 8-10.

In the event your crosshair and turret are not level with each other, the plumb bob method may be required. Video instructions can be found at vortexcanada.net

On bolt actions, cycle action and ensure bolt moves freely and does not touch scope.

STEP TWELVE - SIGHT IN

Boresight and/or sight in at the range using the correct calibre and type of ammunition suited to the firearm.

Always use your shoulder when sighting in at the range. Never use a lead sled or lockdown rest as these are potentially damaging to both your scope and mounts.

Enjoy your properly mounted scope!

This step-by-step guide covers most basic mounting issues. If you would like further information or would like to talk with one of our professional technicians, please do not hesitate to contact us:

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