



MXG SERIES

Uni-mount Scope Ring Set Manual



MANSON REAMERS: A NEW CHAPTER OF PRECISION AND INNOVATION

Manson Reamers, founded in 1998 by Dave Manson, entered a new chapter in 2022 when aerospace experts Steve and Jeff Blevins took ownership, bringing decades of precision manufacturing that now push the company's quality and innovation even further.

MODERN CUSTOMER EXPERIENCE:

Implementing modern standards, including a fully functional e-commerce store with live inventory, a custom design a reamer experience for those into wildcatting, and helpful how-to's.

INNOVATIVE MANUFACTURING:

Leveraging the advanced machining abilities found within their existing Aerospace Company including top of the line CNC Mills, Swiss-style lathes, and metrology like CMM's and Vision Systems.

PRODUCT EXPANSION:

Manson tooling has always been part of your firearm without actually being on your firearm. Beginning with the MXG Series Scope Ring Set, high-quality scope rings are being manufactured at our Aerospace facility. This strategic move allows the original Manson Reamers facility to remain focused on producing its core line of gunsmithing tooling and gauges, while new product lines benefit from the capabilities of our aerospace production.

HAVE QUESTIONS? WE'RE HERE TO HELP.



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INSTALLING THE DETACHABLE PICATINNY RAIL (OPTIONAL)

This step is only necessary if you plan to use the detachable rail for accessories (like a laser rangefinder or red dot sight).

REQUIRED TOOLS: Torque Wrench (capable of 18 inch-pounds); Torx bit (included with set).

INSTRUCTIONS

ALIGN THE RAIL: Place the detachable Picatinny rail onto the front MXG scope cap. The orientation does not matter—you can install it in either direction.

INSERT THE SCREWS: Insert the two included screws into the rail and the cap.

INITIAL SNUGGING: Use a hand driver to gently tighten both screws until they are snug. This ensures the rail sits flat before final torquing.

FINAL TORQUE: Using your torque wrench, tighten the two screws to the final specification of inch-pounds. Tighten one screw fully, then tighten the second screw.

PRODUCT OVERVIEW

The MXG Series (Manson Xtreme Game) is our first-ever scope ring set, bringing our three decades of world-class precision from the workshop to the field. Specifically engineered for big game hunters, the MXG Series delivers uncompromising stability for your optics.

UNI-MOUNT, SINGULAR PIECE DESIGN:

Machined as a precision match set for quick, easy alignment to the optical centerline and height on any Picatinny rail.

AEROSPACE-GRADE MATERIALS:

Constructed from durable, light-weight 7075 aluminum and finished with a robust, black hard coat anodization to MIL-A-8625 Type III. Screws are custom made in house out of 303 Stainless Steel and finished with a black oxide coating.

INTEGRATED FORWARD RAIL:

The front ring includes a fully detachable Picatinny rail for quickly mounting laser rangefinders, red dots, or levels.

MADE IN MICHIGAN, USA:

Everything, down to the screws and hardware, is manufactured in-house to guarantee the precise Manson quality our customers expect. Even the packaging is sourced through American made manufacturers!

PRODUCT FEATURES

- Each set is precision bored together in a single, inline operation to ensure perfect matching.
- Steel guide pins ensure alignment between the base and caps.
- All components - scope rings, hardware, and packaging - are produced entirely from American-sourced materials.
- The rings have a total weight of only 8 oz, for minimal weight addition to your rifle.
- Separate rail clamping bars maximize grip on the Picatinny rail while simultaneously reducing unnecessary weight

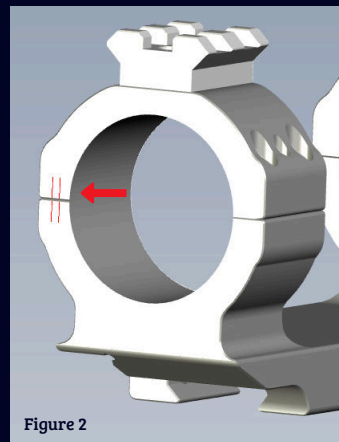
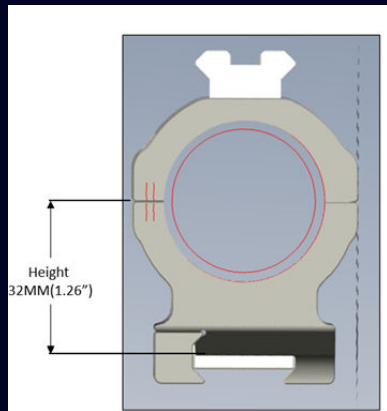


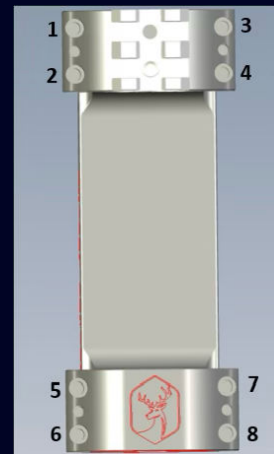
Figure 2

4. FINAL TORQUE SEQUENCE:

Using your torque wrench, begin tightening the screws to the final specification of 18 inch-pounds. Follow the Crisscross Pattern shown on page 6 to ensure even pressure and scope retention.

Ring 1 (Front)	Ring 2 (Rear)
1 → 4	5 → 8
2 → 3	6 → 7

Figure 3



Repeat the pattern until all eight screws are consistently torqued to 18 inch-pounds.

INSTALLING THE MXG SERIES SCOPE RING CAPS

OBJECTIVE: Secure the scope within the rings and achieve the correct torque specification for maximum precision.

REQUIRED TOOLS: Torque Wrench (capable of 18 inch-pounds); Torx bit (included with set).

INSTRUCTIONS

1. **PLACE THE SCOPE:** Carefully place your rifle scope into the bottom half of the MXG Uni-mount. Ensure the scope's reticle is plumb (level) and set to your desired eye relief.
2. **ATTACH THE CAPS:** Place the two scope ring caps over the scope. Make sure the correct cap is in the correct orientation by matching them to the witness marks (Figure 2). Because these rings are bored in unison as a match set, their orientation is critical.
3. **INITIAL THREADING (SNUG):** Thread each of the eight screws in by hand or with a hand driver until they are snug, but do not tighten any single screw fully. This ensures the cap seats evenly.

PARTS AND HARDWARE LIST

Please ensure all parts are present before beginning assembly.

DESCRIPTION	QUANTITY	DESCRIPTION	QUANTITY
Body	1	Mounting Screws	4
Clamps	2	Top Cap Screws	8
Rear Scope Cap	1	Rail Screws	2
Front Rail Scope Cap	1	Torx T20 Screwdriver Bit	1
Picatinny Rail	1	User Manual	1

SAFETY AND PREPERATION

WARNING: Always confirm your firearm is unloaded before performing any work.

TORQUE REQUIREMENTS: The correct use of a calibrated inch-pound torque wrench is critical for safe and accurate installation.

PRE-REQUISITE: A Picatinny rail must be correctly installed on your firearm prior to this step.

ASSEMBLY INSTRUCTIONS

ASSEMBLY SEQUENCE OVERVIEW

- 1 Mounting the MXG Body to the Picatinny Rail (Torque: 34 in-lbs)
- 2 Installing the MXG Series Scope Ring Caps (Torque: 18 in-lbs, Crisscross Pattern)
- 3 Installing the Detachable Picatinny Rail (Optional) (Torque: 18 in-lbs)

MOUNTING THE MXG BODY TO THE PICATINNY RAIL

PRE-REQUISITE: A Picatinny rail must be correctly installed on your firearm prior to this step.

REQUIRED TOOLS: Torque Wrench (capable of inch-pounds); Torx bit (included with set).

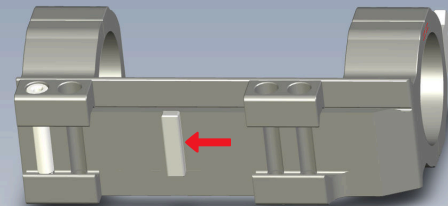


Figure 1

INSTRUCTIONS

POSITION THE MOUNT: Place the MXG scope ring body onto your firearm's Picatinny rail.

ENGAGE THE RECOIL LUG: Slide the mount forward until the Recoil Lug Tab (located on the underside of the mount, shown on figure 1) is seated firmly against the front face of one of the Picatinny rail slots. This ensures maximum recoil resistance.

ORIENT THE CLAMPS: Ensure the two side clamps are correctly oriented. The witness marks on the two clamps must be facing up when mounting.

INITIAL SNUGING: Using the four mounting screws, begin threading them in by hand. Use an alternating pattern (similar to tightening lug nuts on a tire) to snug all four screws evenly. Do not tighten any single screw fully yet.

FINAL TORQUE: Once all four screws are snug, use your torque wrench to tighten them to the final specification of 34 inch-pounds. Continue using the alternating pattern until all four screws reach the required torque.