



Using the GI M203 Tangent Sight with Ordnance Group 37mm Launchers

The M203 Tangent Sight was developed for use on M16 rifles equipped with the M203 40mm Grenade Launcher. This sight was designed to be fixed to the carrying handle and provided calibrated ranges out to 450 meters. It uses a peep rear sight and an adjustable post front sight.

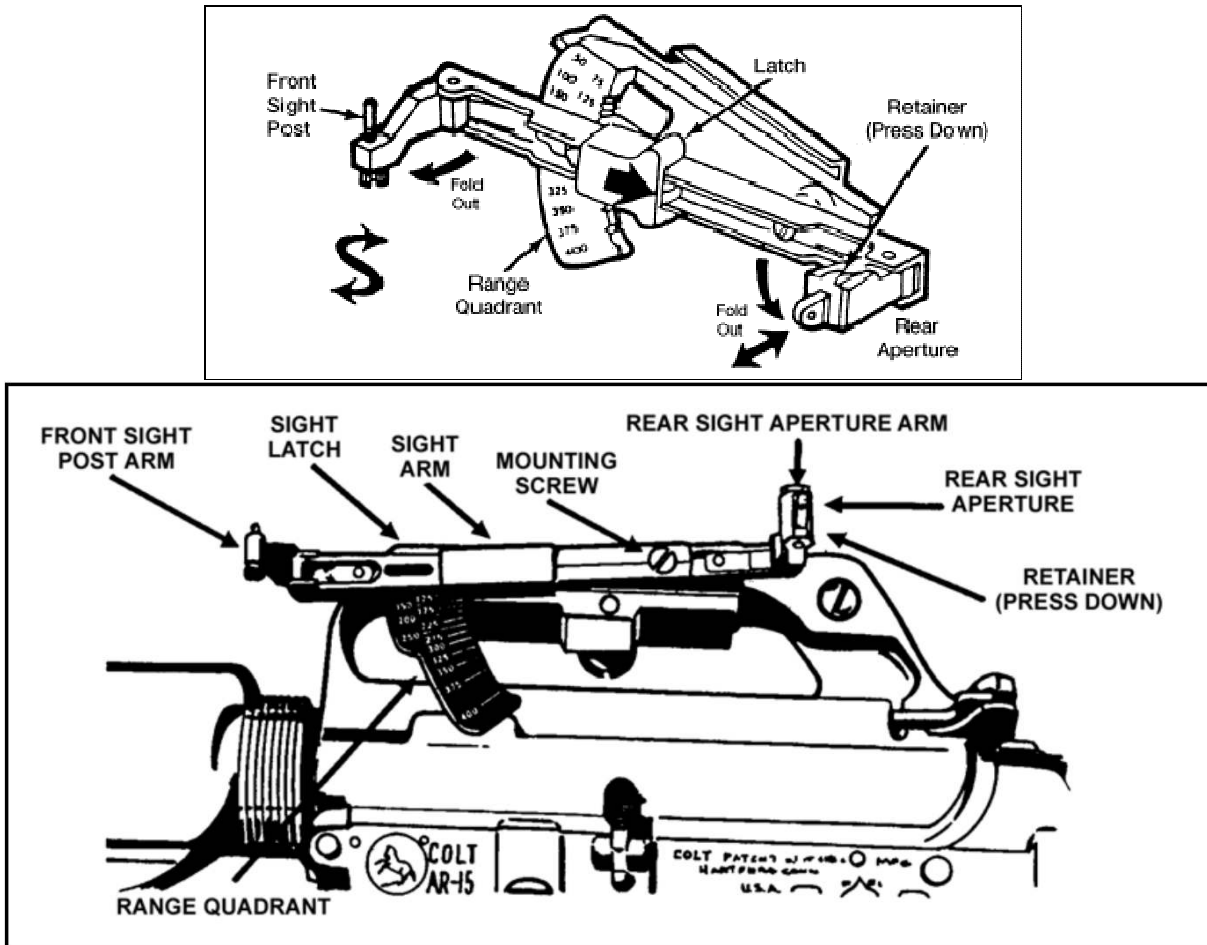


This sight can be employed with Ordnance Group 37mm launchers affixed to weapons that either have top Picatinny rails or a carrying handle.

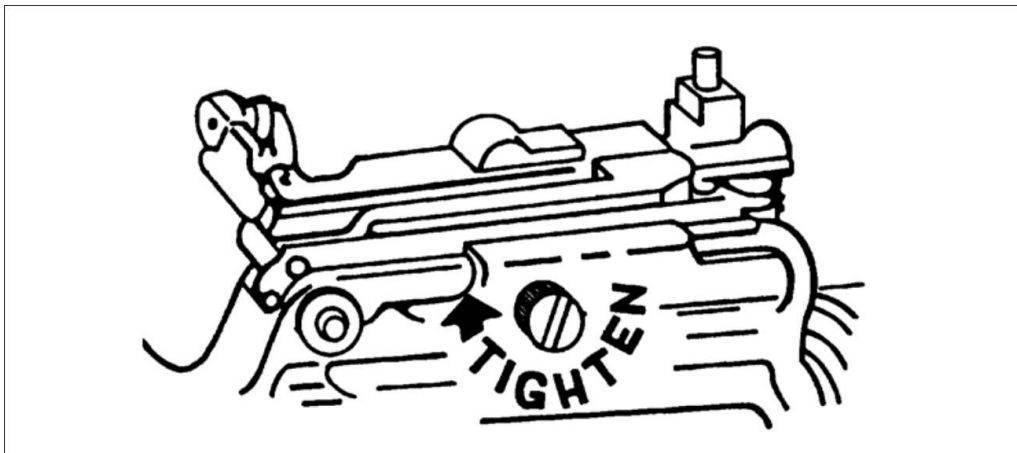
The following section is excerpted from FM-3-22.31 40-MM GRENADE LAUNCHER, M203.

Parts of the Quadrant Sight

Quadrant Sight Assembly. The quadrant sight assembly, which attaches to the left side of the rifle's carrying handle, enables the grenadier to adjust for elevation and windage. This assembly consists of the sight, mounting screw, sight latch, rear sight aperture, sight aperture arm, front sight post, and sight post arm.



(1) Clamp, Bracket Assembly, and Mounting Screw. The clamp and the bracket assembly hold the quadrant sight on the rifle's carrying handle. The mounting screw inserts through the right side of the clamp and into the bracket assembly.



(2) Sight Arm and Range Quadrant. The sight arm mounts both the sight aperture arm (which holds the rear sight aperture) and the sight post arm (which holds the front sight post). This procedure allows the sight to pivot on the range quadrant to the desired range setting. The range quadrant is graduated in 25-meter increments from 50 to 400 meters. Applying rearward pressure on the sight latch releases the quadrant sight arm so it can move along the range quadrant. Centering the number in the rear sight aperture selects the desired range. Releasing the sight latch locks the sight in position.

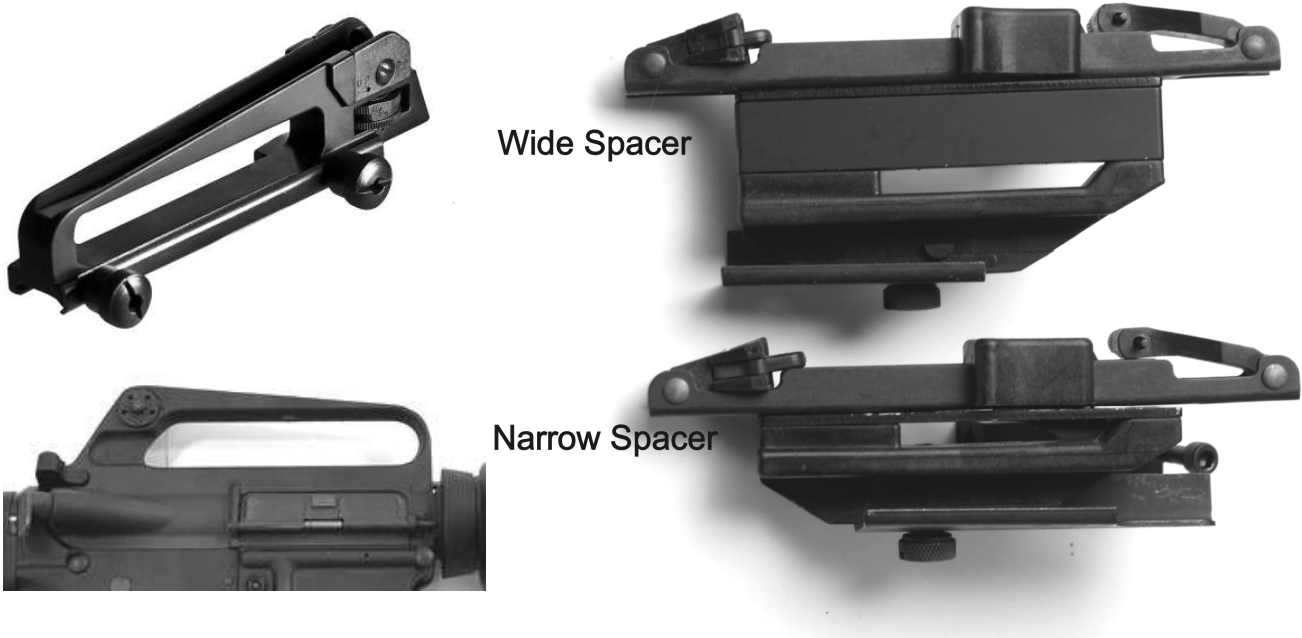
(3) Front Sight Post. The front sight post mounts on the sight post arm by means of a pivot bracket. To prevent damage to the sights, keep the bracket closed when the sights are not in use. Use the sight post as follows to make minor adjustments in elevation when zeroing the launcher: (a) To decrease elevation, turn the elevation adjustment screw on the sight post clockwise; to increase elevation, turn it counterclockwise. (b) To move the impact of the projectile 5 meters at a range of 200 meters, turn the elevation adjustment screw one full turn--360 degrees. To move the impact of the projectile 2.5 meters at a range of 200 meters, turn the elevation adjustment screw one half turn--180 degrees.

(4) Rear Sight Aperture. The rear sight aperture is on the sight aperture arm, which is attached to the rear portion of the quadrant sight arm. Use the rear sight aperture as follows to make minor adjustments in deflection (windage) when zeroing the launcher: (a) To move the impact to the left, press the rear sight aperture retainer down and move the rear sight aperture away from the barrel; to move to the right, move it toward the barrel. (b) To move the impact of the projectile 1.5 meters at a range of 200 meters, move the rear sight aperture one notch.



Mounting the M203 Quadrant Sight

If you have a carrying handle the sight can be attached using the integral clamp and screw as described above. Note that a removable carrying handle can be purchased and used with AR style rifles/carbines to mount the sight. Similarly, the removable handle can be mounted on an Ordnance Group launcher that is configured as a stand alone. This is a simple solution for obtaining sighting capability at a reasonable price. Note that if you are using a removable handle, like the one in the picture, you must get an M203 sight with a large spacer that allows the sight arm to clear the knobs. If your AR has an integral handle, you can use a sight with a narrow spacer, either will work for you though. We have both types available.

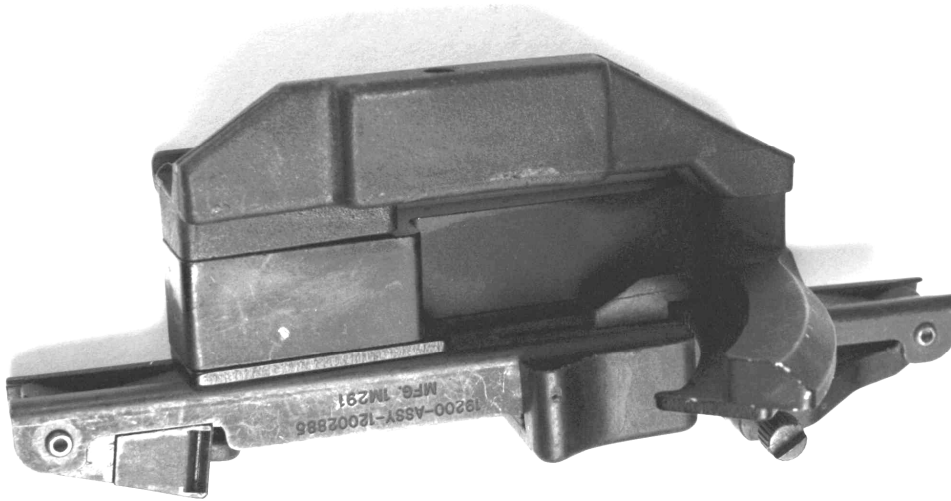


An alternative to using a handle is to employ the Ordnance Group 2" Picatinny to Picatinny clamp in order to mount the sight directly to a weapon's Picatinny Rail. To accomplish this:

- 1) remove the sight mounting screw and clamp from the sight.



- 2) place the launcher/rifle so that it's Picatinny rail is facing upward.
- 3) position the clamp on the Picatinny rail
- 4) Locate the rectangular projection on the bottom of the sight.



- 4) place the sight so that the rectangular projection is resting on the two screws



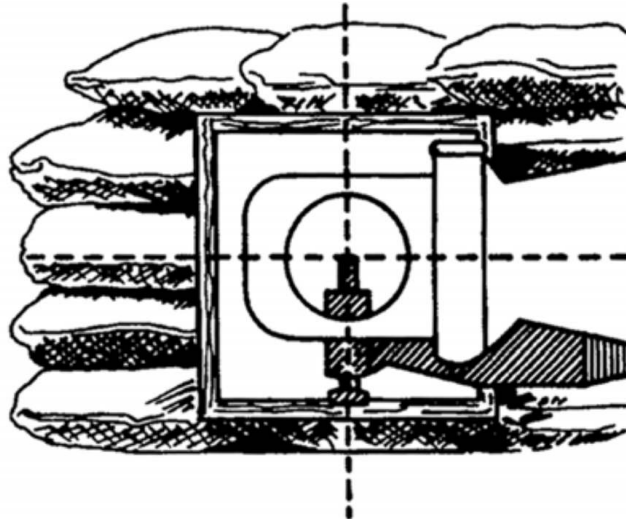
5) tighten

6) You are ready to rock.



Using the M203 Quadrant Sight

The sight is used as you would any other peep/post sight combination. The correct sight picture looks like this:



By pulling the lock on the sight arm rearward you can set the distance. Aim and fire.

You will have to experiment in order to ascertain the elevation necessary to obtain various distances with the rounds you have available to you. That is to say that an indicated distance (on the sight) of 200 meters is for impact distance of a 40mm HE round. At that setting a 26mm smoke round might travel 100 meters. The shooter will have to calibrate the sight for the rounds of interest. The illustration below shows some distances that one can expect with different launcher rounds.

