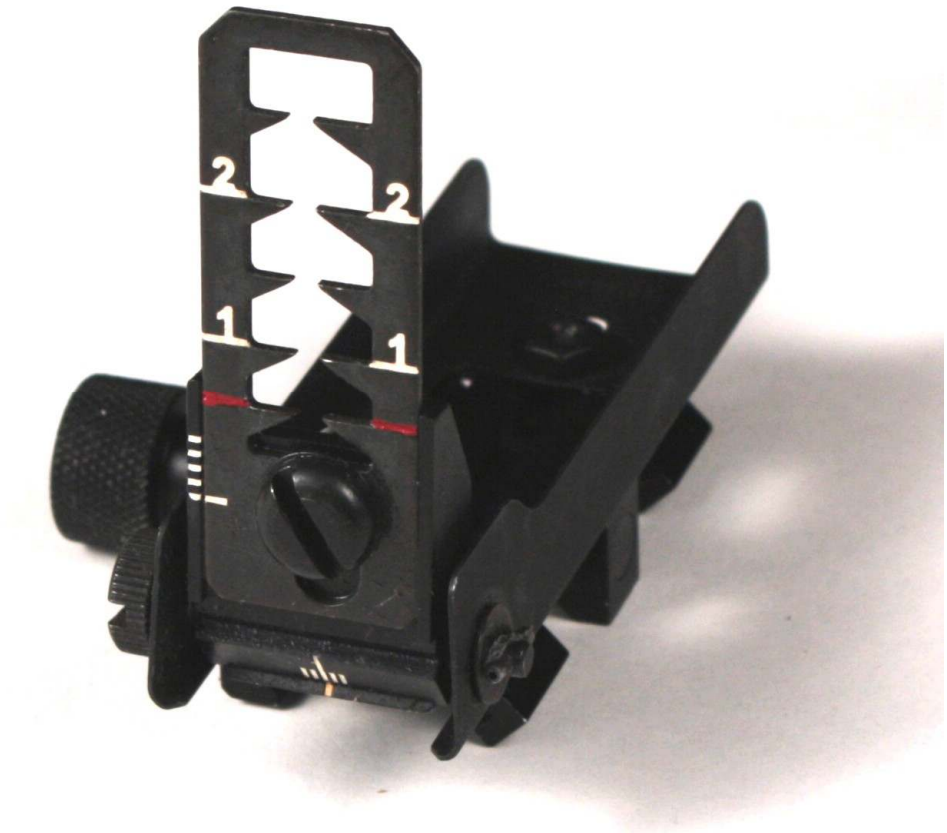
Using the GI M203 Ladder (Leaf) Sight with Ordnance Group 37mm Launchers

The M203 Ladder Sight was developed for use on M16 rifles equipped with the M203 40mm Grenade Launcher. It is called both a ladder and leaf sight, even within government publications. This sight was designed to be fixed to the forward edge of the upper Picatinny rail of an AR type rifle and provided calibrated ranges out to 250 meters. It uses the existing post front sight of the AR to which it is mounted. Note that this sight can also be mounted without the Picatinny clamp which is attached to it. There are two screw holes in the sight base which would align with holes in non-Picatinny equipped military AR weapons.



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

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

Parts of the Leaf Sight

Leaf Sight Assembly. The leaf sight assembly is attached to the top of the handguard. The leaf sight assembly consists of the sight, its base and mount, an elevation adjustment screw, and a windage adjustment screw. Elevation and windage scales are marked on the mount. The folding, adjustable, open ladder design of the sight permits rapid firing without sight manipulation. The front sight post of the M16-series rifle serves as the front aiming post for the M203 leaf sight.

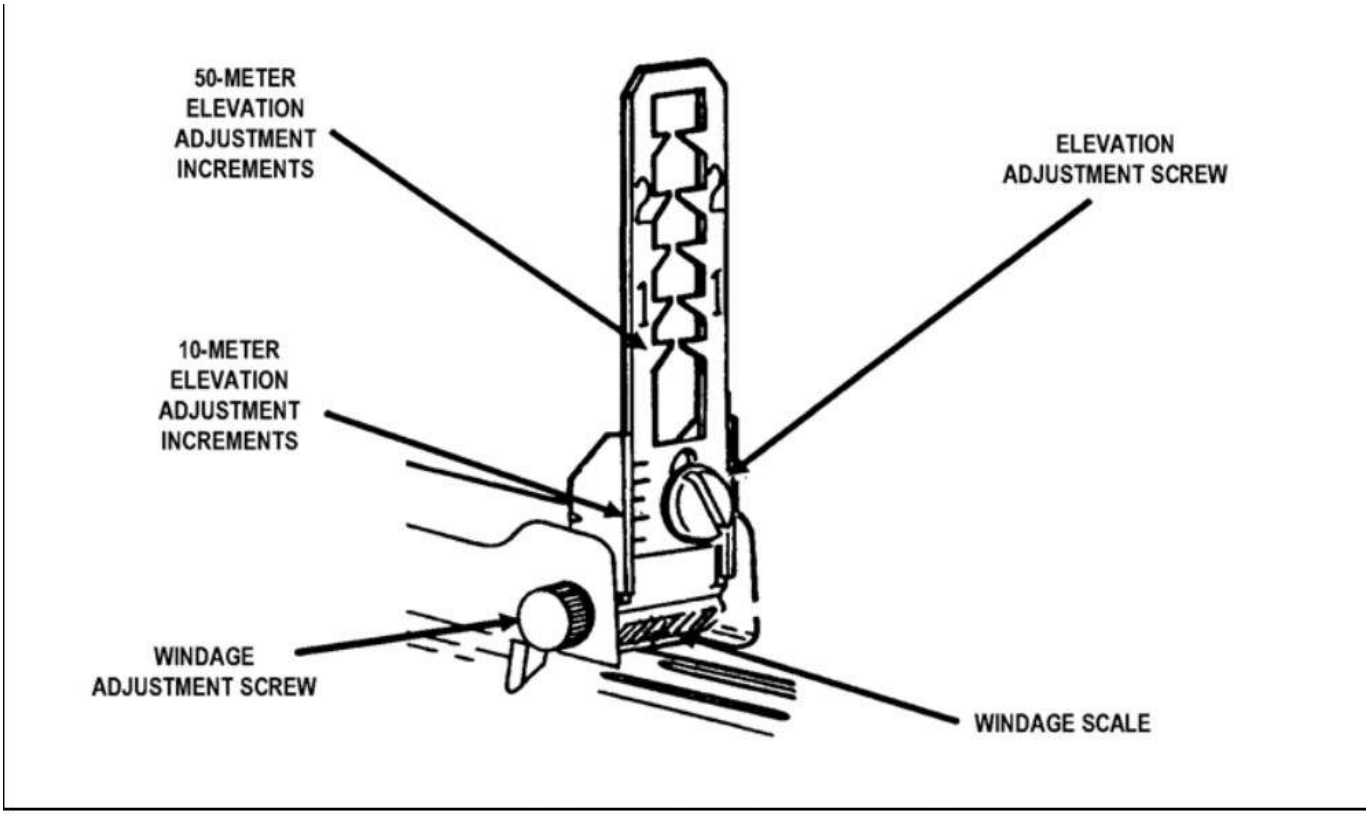


Figure 3-6. Leaf sight assembly.

(1) Sight Base. A knurled bolt tightens a clamp which mates with a mil spec Picatinny rail. When the sight is down or not in use, the base protects it from damage. **(2) Sight Mount and Sight**. The grenadier uses the sight mount, which is attached to the sight base, to raise or lower the sight. Though the range is not marked on the sight in meters, the sight is graduated in 50-meter increments from 50 to 250 meters, which are marked with a “1” at 100 meters and a “2” at 200 meters. **(3) Elevation Adjustment Screw and Elevation Scale.** The screw attaches the sight to its mount. When the screw is loosened, the sight can be moved up or down to make minor adjustments in elevation during the zeroing procedure. The rim of a 40-mm cartridge case is useful for turning the screw. Raising the sight increases the range; lowering the sight decreases the range. The elevation scale consists of five lines spaced equally on the sight. The index line is to the left of the sight. Moving the sight one increment moves the impact of the projectile 10 meters in elevation at a range of 200 meters. **(4) Windage Screw and Windage Scale.** The knob on the left end of the windage screw is used to make minor deflection adjustments during the zeroing procedure. The scale has a zero line in its center and two lines spaced equally on each side of the zero line. At a range of 200 meters, turning the knob on the windage scale one increment to the left moves the impact of the projectile 1.5 meters to the right.

DANGER
THE 50-METER MARK ON THE LEAF SIGHT BLADE IS MARKED IN RED TO EMPHASIZE THAT THIS RANGE MUST NOT BE USED FOR ZEROING PROCEDURES. DUE TO FRAGMENTATION, ZEROING IS EXTREMELY DANGEROUS AT 50 METERS OR LESS.

Mounting the M203 Ladder Sight

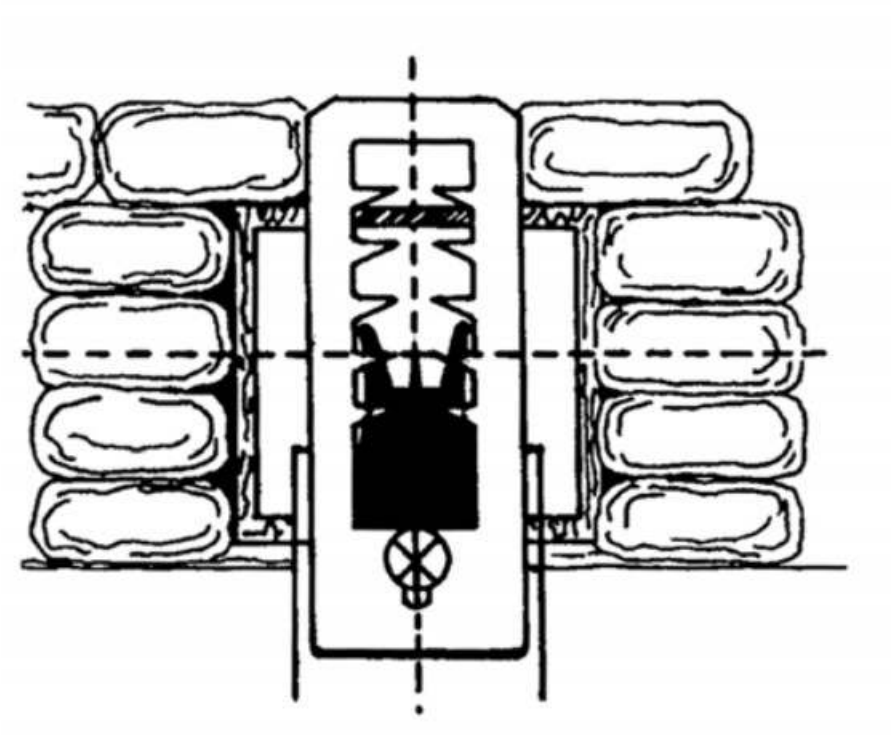
This sight requires a standard mil spec Picatinny rail for mounting. The photo below shows the underside of the sight with the fixed and movable parts of the Picatinny clamp, locating bar and tightening screw.

One simply positions the sight at the far end of the upper Picatinny rail and tightens the screw. The screw is connected to the clamp via a torque ratchet so that when it is the correct tightness, the knob slips: it cannot be over tightened.

The picture below shows the correct installation and the sight deployed for use.

Using the M203 Ladder Sight

The sight is used as you would any other ladder sight. The correct sight picture looks like this:



100 and 200 meters are indicated on the sight. Both elevation and windage can be adjusted as described above.

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.