

ADJUSTABLE FRONT SIGHT POST

The front sight post is moved up or down when zeroing the rear sight. Once the rear sight is zeroed, the front sight post should not be moved.

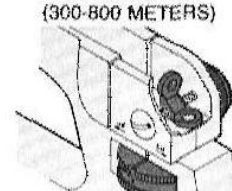
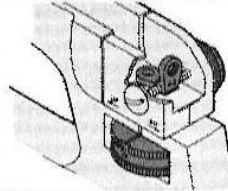


46

ADJUSTABLE REAR SIGHT HAS TWO APERTURES FOR RANGE

SHORT RANGE (0-200 METERS)

NORMAL RANGE (300-800 METERS)



SHORT RANGE - This "larger" aperture is used for 0 - 200 meters range. As shown above, the sight is set for 0 - 200 meters. This larger aperture is only used when the rear sight is all the way down. In other words, the 300-meter mark is aligned with the mark on the left side of the receiver.

NORMAL RANGE - The aperture is unmarked and used for most firing situations. It is used in conjunction with the elevation knob for 300, 400, 500, 600, 700, and 800 meter targets.

47

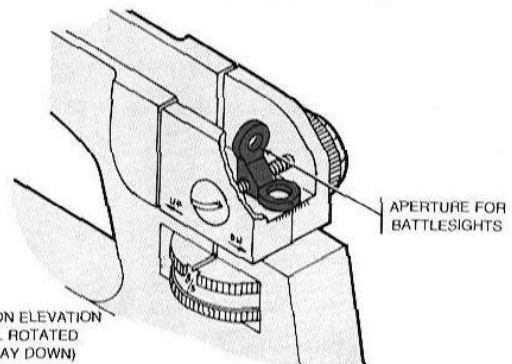
BATTLESIGHT ZERO

When battlesights are on your rifle:

- The front sight post and rear sight windage knob are adjusted so you can hit your point of aim at 300 meters.
- The unmarked aperture must be in the up position.
- The 300-meter mark is aligned with the mark on the left side of the receiver.

48

BATTLESIGHT ZERO (CONT)



300 METERS ON ELEVATION KNOB (DIAL ROTATED ALL THE WAY DOWN)

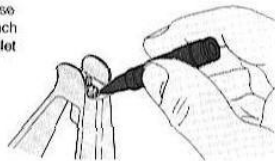
49

BATTLESIGHT ZEROING ADJUSTMENTS

- During zeroing procedures, only the front sight post and windage knob are adjusted to move the strike of the bullet on the target.
- If you are zeroing on a 25-meter range, the rear sight elevation knob is adjusted to the 300-meter mark plus one "click" up.
- Detailed zeroing procedures are on the following page.

FRONT SIGHT. To adjust elevation, depress detent and rotate post. To raise strike of bullet, rotate post in the direction of arrow marked UP. Reverse the direction of rotation to lower strike of bullet. Each graduation (notch) moves the point of impact of bullet as indicated.

IMPACT	DISTANCE
0.9 cm (3/8 in.)	25 meters
3.5 cm (1 3/8 in.)	100 meters
7.0 cm (2 3/4 in.)	200 meters



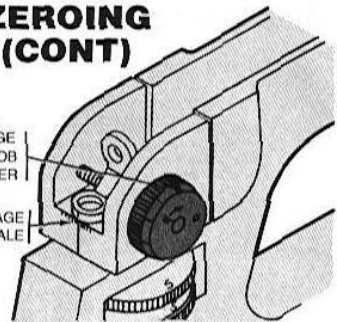
50

BATTLESIGHT ZEROING ADJUSTMENTS (CONT)

FOR WINDAGE KNOB (per click)*

IMPACT	DISTANCE
0.3 cm (1/8 in.)	25 meters
1.25 cm (1/2 in.)	100 meters
2.50 cm (1 in.)	200 meters
3.8 cm (1 1/2 in.)	300 meters
5.0 cm (2 in.)	400 meters
6.3 cm (2 1/2 in.)	500 meters
7.6 cm (3 in.)	600 meters
8.8 cm (3 1/2 in.)	700 meters
10.0 cm (4 in.)	800 meters

WINDAGE KNOB POINTER
WINDAGE SCALE



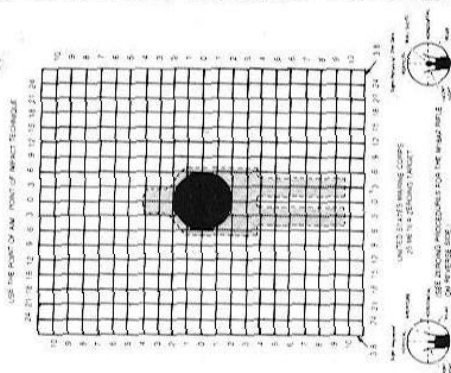
*All the above values have been rounded off.

To remember your correct battlesight zero windage, note location of windage scale and windage knob pointer (heavy mark on outside of knob).

Do not center rear sight aperture for inspections. Keep your correct battlesight zero windage on the rifle at all times.

51

U. S. MARINE CORPS TARGET



52

U.S. MARINE CORPS 25-METER ZEROING PROCEDURES

(BY FOLLOWING THE STEPS BELOW AND ESTABLISHING A ZERO AT 25 METERS, YOUR M16A2 RIFLE SIGHTS WILL BE SET WITH A 300-METER BATTLESIGHT.)

- DO NOT MOVE FRONT SIGHT POST AT THIS TIME. IT WAS SET AT THE FACTORY OR BY A PREVIOUS SHOOTER AND SHOULD BE VERY CLOSE TO YOUR ZERO.
- CENTER THE REAR SIGHT APERTURE BY TURNING THE WINDAGE KNOB LEFT OR RIGHT. (THIS IS CALLED **MECHANICAL ZERO WINDAGE**.)
- THE UNMARKED APERTURE SHOULD BE UP.
- ROTATE THE ELEVATION KNOB ALL THE WAY DOWN. THE RANGE SCALE'S 300-METER MARK SHOULD BE ALIGNED WITH THE MARK ON THE LEFT SIDE OF THE RECEIVER WHEN THE **LAST WHOLE "CLICK"** IS DETECTED BEFORE THE KNOB STOPS TURNING. IF YOUR RANGE SCALE WILL NOT LINE UP IN THE ABOVE MANNER, AN ARMORER WILL HAVE TO ADJUST THE RANGE SCALE FOR YOU. (THIS IS CALLED **MECHANICAL ZERO ELEVATION** FOR THE REAR SIGHT.)

53

U.S. MARINE CORPS 25-METER ZEROING PROCEDURES (CONT)

- 5 NOW ROTATE THE ELEVATION KNOB "UP" ONE CLICK PAST THE 300-METER MARK. FROM THIS POINT ON, THE REAR SIGHT ELEVATION KNOB SHOULD NOT BE MOVED. ANY CHANGES IN ELEVATION REQUIRED IN THE FOLLOWING ZEROING STEPS ARE MADE TO THE FRONT SIGHT POST ONLY.
- 6 CAREFULLY AIM AND FIRE AT THE CENTER OF THE TARGET BULL'S-EYE. TAKE YOUR TIME AND BE SURE TO USE THE SIGHT PICTURE ILLUSTRATED.
- 7 IF YOUR SHOT GROUP IS NOT IN THE CENTER OF THE BULL'S-EYE, USE THE SQUARES ON THE TARGET SHEET TO CALCULATE THE REQUIRED "CLICKS" NECESSARY TO MOVE YOUR NEXT SHOT GROUP INTO THE BULL'S-EYE. (REMEMBER THAT ANY CHANGES IN ELEVATION ARE MADE BY MOVING THE FRONT SIGHT POST.) THE SQUARES ARE NUMBERED AROUND THE EDGES OF THE TARGET TO EQUAL THE NUMBER OF CLICKS REQUIRED TO MOVE THE SHOT GROUP TO THE BULL'S-EYE.
- 8 IN ORDER TO RAISE YOUR NEXT SHOT GROUP, ROTATE THE FRONT SIGHT POST CLOCKWISE. (ONE CLICK WILL MOVE THE STRIKE OF THE BULLET ONE VERTICAL SQUARE ON THE TARGET SHEET.)
- IN ORDER TO LOWER YOUR NEXT SHOT GROUP, ROTATE THE FRONT SIGHT POST COUNTERCLOCKWISE (ONE CLICK, AS ABOVE, EQUALS ONE SQUARE).

54

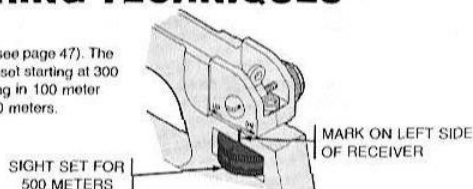
U.S. MARINE CORPS 25-METER ZEROING PROCEDURES (CONT)

- CHANGES IN WINDAGE ARE MADE WITH THE WINDAGE KNOB. (THREE CLICKS WILL MOVE THE STRIKE OF THE BULLET ONE HORIZONTAL SQUARE ON THE TARGET SHEET.)
- IN ORDER TO MOVE THE SHOT GROUP TO THE LEFT, TURN THE WINDAGE KNOB COUNTERCLOCKWISE.
- IN ORDER TO MOVE THE SHOT GROUP TO THE RIGHT, TURN THE WINDAGE KNOB CLOCKWISE.
- 9 CAREFULLY AIM AND FIRE ANOTHER GROUP AT THE CENTER OF THE TARGET BULL'S-EYE.
 - 10 REPEAT STEPS 7 THROUGH 9, IF REQUIRED.
 - 11 IF YOUR GROUP IS ON TARGET, YOUR SIGHT IS NOW "CALIBRATED." TO PLACE YOUR ACTUAL 300-METER ZERO ON THE RIFLE, YOU MUST ROTATE THE ELEVATION KNOB ONE CLICK "DOWN." (THE RANGE SCALE'S 300-METER MARK SHOULD NOW BE ALIGNED WITH THE MARK ON THE RECEIVER.)

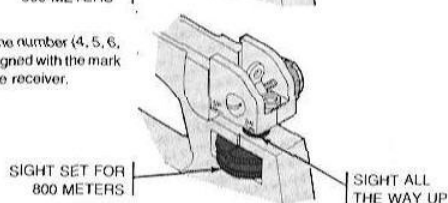
55

FIELD FIRING TECHNIQUES

- 1 Establish your zero (see page 47). The elevation dial is now set starting at 300 meters and continuing in 100 meter increments up to 800 meters.


SIGHT SET FOR
500 METERS

- 2 Rotate the dial until the number (4, 5, 6, 7, or 8) you want is aligned with the mark on the left side of the receiver.

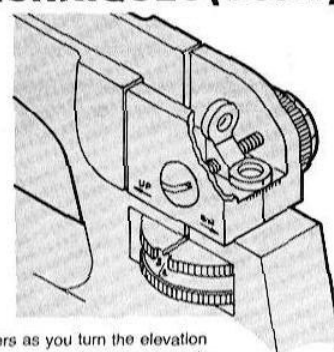

SIGHT SET FOR
800 METERS

SIGHT ALL
THE WAY UP

56

FIELD FIRING TECHNIQUES (CONT)

- 3 Obtain a good sight picture and good sight alignment with the unmarked aperture and the front sight post.
- 4 Squeeze the trigger and fire.



NOTE

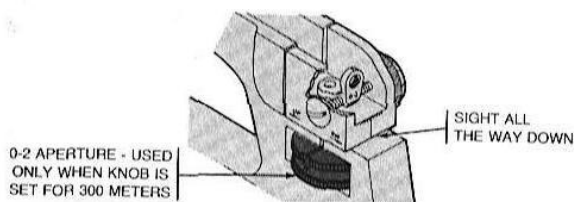
There are clicks between the numbers as you turn the elevation knob. Use these clicks if you need more elevation past a certain number to hit your target.

57

FIELD FIRING TECHNIQUES (CONT)

NOTE

The normal rear sight aperture (unmarked) flips forward to expose a larger aperture marked "0-2." Use the 0-2 aperture only when the 3 is aligned with the mark on the left side of the receiver and the sight is rotated all the way down. You will automatically get a zero of 200 meters. Use the 0-2 aperture when shooting at night or at close range, e.g., in a city or in dense jungle.


0-2 APERTURE - USED
ONLY WHEN KNOB IS
SET FOR 300 METERS

SIGHT ALL
THE WAY DOWN

58

ADDITIONAL INFORMATION CONCERNING YOUR M16A2 SIGHTS

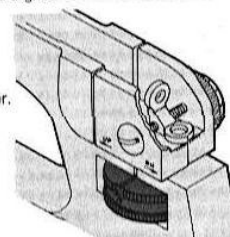
GENERAL. Your rifle sights should be set to a combat zero of 300 meters. If you are told to engage a target at longer range, e.g., 500 or 800 meters:

- a. Rotate the elevation knob so that the desired range mark is aligned with the mark on the left side of the receiver.
- b. Aim, squeeze the trigger, and fire.

NOTE

Return the dial to 300 meters when the mission is over.

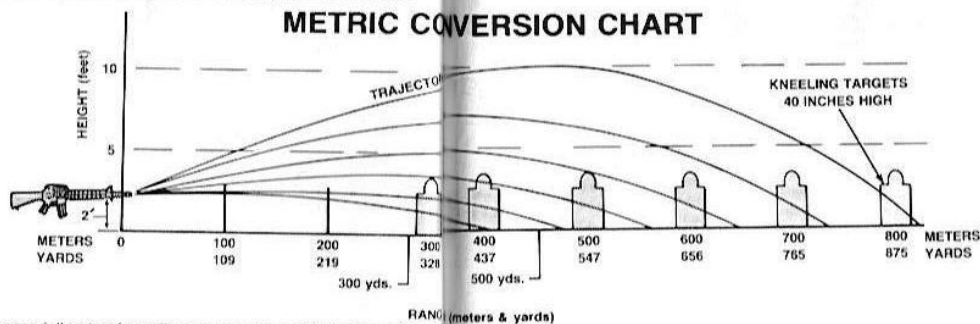
- c. See conversion chart in back of manual.



59

TRAJECTORIES OF AIMED RIFLE FIRE WITH CORRECT ELEVATION SET ON REAR SIGHT ELEVATION KNOB

METRIC CONVERSION CHART



Point of aim at each target, at all ranges, is "center of mass" or in center of chest. Point of impact is also center of mass. Note that fire on target at 300 meters is also effective on 400 meter target. At 600 meters, fire does not exceed the height of a man at any point along its trajectory.

18

111