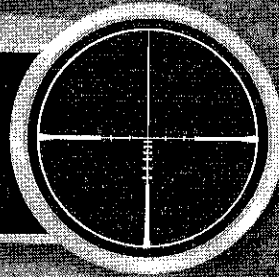




**SUPER  
MAG 17  
RETICLE**  
*Patent Pending*



**17SM-624X44AOCP**  
**17SM-4514X44AOCP**  
**17SM4514X44AORGBCP**

**INSTRUCTION MANUAL**

BSA 17 Super Mag™ Scopes are designed specifically for the  
Winchester 17 Super Mag™ Cartridge - 20 grain and 25 grain rounds

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BSA 17 Super Mag™ Rifle Scopes are designed for the serious hunter. The main features of the BSA 17 Super Mag™ are their ability to compensate for bullet trajectory by specific grain weight. The elevation drum will compensate for the Winchester® 17 Super Mag 20 Grain and 25 Grain Rounds.

The Windage and Elevation turrets have zero reset with "Allen" screws. Each model in the BSA 17 Super Mag™ series have an adjustable parallax setting of 10 to ∞.

Models available in the BSA 17 Super Mag™ series: 17SM-624X44AO, 17SM-4514X44AO, and 17SM4514X44AORGB (with a RGB-red, green, blue GE glass etched reticle.)

Each BSA 17 Super Mag™ model scope includes:  
Hex Wrench and Micro Fiber Lens Cloth

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7. PARALLAX CORRECTION
8. MAINTENANCE

**! CAUTION:** DIRECT VIEWING OF THE SUN CAN CAUSE PERMANENT EYE DAMAGE. DO NOT ATTEMPT TO VIEW THE SUN WITH EITHER THIS PRODUCT OR THE NAKED EYE.

**1.) FOCUSING YOUR SCOPE**

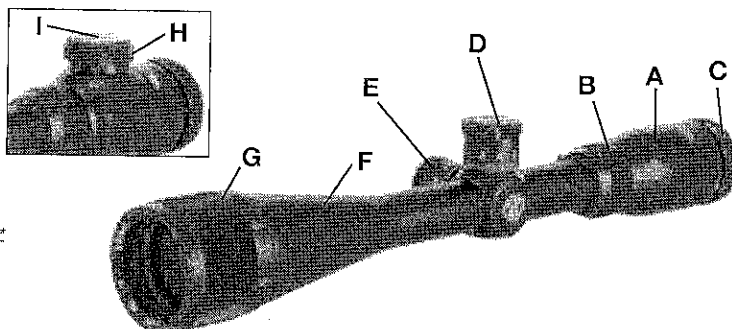
BSA 17 Super Mag™ scopes are "fast focus" and the standard eye relief on the BSA 17 Super Mag™ is 3". The zoom ring is equipped with markings on the outside drum annotating the zoom power desired when turned.

**KEY:**

- A.) Ocular Bell
- B.) Zoom Ring
- C.) Fast Focus Ring
- D.) Elevation Adjustment
- E.) Windage Adjustment
- F.) Objective Bell
- G.) Adjustable Objective

*\*ONLY ON - 17SM4514X44AORGB\**

- H.) Rheostat
- I.) Battery Compartment



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Hold the scope and look through the eye piece at a flat, featureless well lit area. The reticle should appear sharp and well defined. To make adjustments rotate the ocular bell focus in either direction. Look through the scope again. If the focus of the reticle has improved but is not perfect, continue to rotate in the same direction. If the condition has worsened you will need to rotate the bell in the opposite direction.

**!** **CAUTION:** BE SURE THAT THE FIREARM IS NOT LOADED.  
PRACTICE SAFE FIREARM HANDLING AT ALL TIMES.

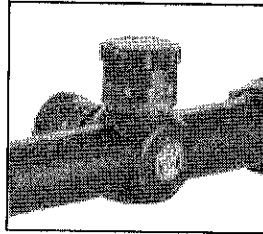
## 2.) MOUNTING

The BSA 17 Super Mag™ scopes have a one-inch tube diameter. Depending on your rifle you will need to purchase the correct base diameter to insure fitment of mount and rail. Using a rest or gun vise is highly recommended. (One piece or two piece mounting rings can be used.)

- Separate the upper and lower halves of your ring(s).
- Install the lower half of your ring(s) on the rifle rail.
- Set the scope in the cradle.
- Replace the tops loosely (do not tighten).

Position the scope as far forward as possible and rotate the elevation turret to be vertical. Slowly pull the scope backward until your full FOV (field of view) is visible, check to make sure the reticle is aligned both vertically and horizontally with the bore axes of the firearm.

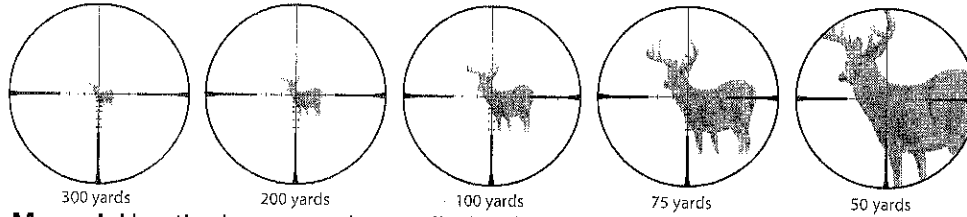
Once properly positioned, tighten the top halves of your ring(s) mount using a non-permanent thread lock.



**!** **CAUTION:** BE SURE THAT THE FIREARM IS NOT LOADED.  
PRACTICE SAFE FIREARM HANDLING AT ALL TIMES.

## 3.) PRE-ZEROING

Locate an appropriate location to fire your rifle and set up a target at a distance of 100 yards from your shooting location. You should use a comfortable gun rest to eliminate as much human error as possible. Make certain the rifle is empty with no cartridge in the chamber and the breech open. Rotate the parallax ring to 100 yards.



**Manual:** Use the hex wrench supplied to loosen the top screw on each adjustment knob.

**For windage adjustment** turn clockwise to move the point of impact right, and counter clockwise to move the point of impact left.

**For the elevation adjustment** turn clockwise to lower the point of impact and counterclockwise to raise the point of impact. (See #5. Bullet Compensation)

**Using a boresighter:** Follow the instructions that came with your boresighter and install the boresighter in the muzzle of your rifle lining it up with the scope as close as possible.

Looking through the scope as though you were going to shoot you should see (2) two sets of crosshairs. One set is a plain crosshair (this is the one in the scope itself) and another set which is graduated or on a grid (this is the one in the boresighter). These crosshairs should line up with each other vertically, horizontally and in complete alignment. If the vertical and horizontal crosshairs are not parallel with each other, adjust the boresighter in the direction it needs to turn in order to achieve this.

Make sure the crosshairs cross or meet at precisely the same location. Proceed to adjust your scope right, left, up, or down until the cross-hairs match. **Remove the boresighter from the muzzle.**

**! CAUTION:** BE SURE THAT THE FIREARM IS NOT LOADED.  
PRACTICE SAFE FIREARM HANDLING AT ALL TIMES.

#### 4.) ZEROING

The next step is to test ammunition. No two ammunitions will behave in the same manner when fired from the same rifle. This may be one of the most important steps in sighting in any firearm and is the one that is most frequently omitted. **DO NOT bypass this step.**

- Holding the crosshairs steady on the target, squeeze off a round.
  - Repeat this two more times to get a three shot group.
  - Retrieve your target and triangulate the shots to get an average point of impact. Measure from that POI to the bulls eye where you aimed.
  - This measurement can now be adjusted with adjusting screws located on each turret knob.
  - The arrows on the dial show which direction they will move the bullet.  
Turn the adjusting screws according to the MOA scale on the dial.
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The BSA 17 Super Mag™ is 1/8 MOA, that means one click will move the bullet 1/8" at 100 yards. (Note, if you zero at a different yardage, say 50 yards, one click will move the bullet only 1/16" at 50 yards.)

Once you have adjusted the windage and the elevation, you are now ready for another 3 shot group. Repeat this process until you are satisfied with the results.

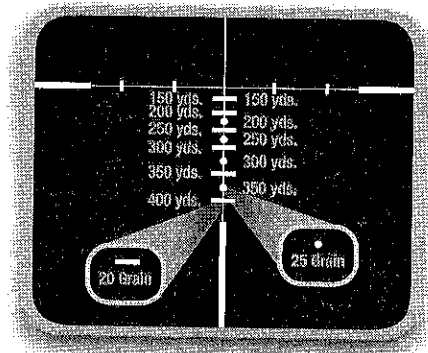
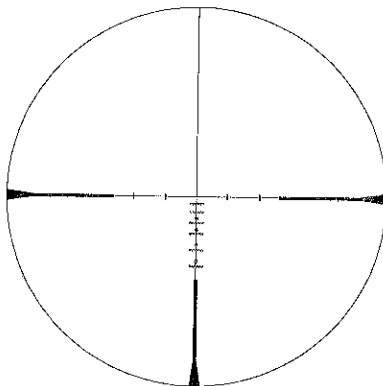
**Note:** It is important to allow the barrel to cool down in between the three shot groups as heating of the barrel can cause bullet flight to vary. It is also recommended to swab the bore between shots with a dry patch to reduce buildup. DO NOT use any cleaning fluid or oil on the swab as this can affect bullet flight. If you are sighting in the firearm for hunting deer, you may want to adjust the elevation an inch or two above bulls eye at 100 yards. This will give your firearm extended range and still keep you in the kill zone at 100 yards and less. After zeroing use the hex wrench provided to remove the windage and elevation drums and reposition them so the that the ("0") lines up with the indicator line on the spindle. Any further windage and elevation adjustments can be made more precisely by calculating the amount of clicks from the zero point.

#### 5.) BSA 17 SUPER MAG™ RETICLE

BSA 17 Super Mag™ is calibrated for two bullet weights, 20 and 25 grains. The 20 grain bullet uses the horizontal lines and and the 25 grain uses the dots. With this rifle scope zeroed at 100 yards the first bar is shared by the 20 and 25 grain bullets at 150 yards.

The 20 grain bars are spaced 50 yards apart, 150, 200, 250, 300, 250, and 400.

The 25 grain bullet shares the 20 grain 150 yard bar and then has 50 yard spacing dots, 200, 250, 300, and 350 yards.



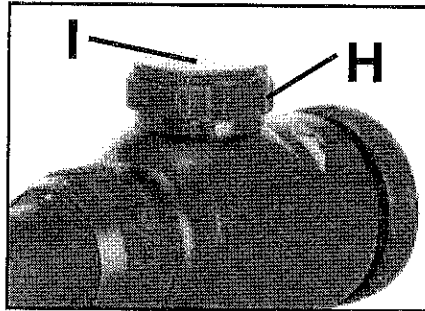
*Graphic Illustration & Explanation  
of BSA 17 Super Mag Reticle™*

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## 6.) ILLUMINATED MODELS

Located on the top side of the ocular bell is a rheostat knob, which controls the degree of illumination. The lower the number the dimmer the setting. The "0" position indicates the illumination is off. Included with illuminated models is a 3V lithium battery, type 2032. To install remove the battery cover and insert the battery positive side up. Replace the cover. (Note: If the reticle dims or does not light at all, replacing the batteries may be necessary).

*ONLY ON MODEL  
17SM4514X44AORGB  
WITH ILLUMINATED RETICLE*



## 7.) PARALLAX CORRECTION

Parallax is a condition that occurs when the image of the target is not focused precisely by misalignment of shooter's eye on the reticle plane. This condition exists in all scopes and accounts for more enlarging of rifle group sizes than anything else. Parallax is visible as an apparent movement between the crosshairs and the target when a shooter moves their head and changes eye alignment in the scope. The higher the magnification the more visible this is.

The Parallax will manifest itself as apparent movement of the reticle against the target. For a scope to be Parallax-free the target must be located at the same distance for which scope is focused. This means that the target image and the reticle must be focused at the same focal plain. Rifle scopes equipped with variable Parallax adjustment allow focusing at different chosen distances.

Without touching the rifle, move your eye around behind the scope. Do the crosshairs appear to move on the target? If they do, the parallax is not set for the range of the target you are using. Your BSA 17 Super Mag™ rifle scope has an adjustable objective to correct this at all yardages.

If your crosshairs move to the right on the target's image when you move your head to the left, the image plane must be further away than the crosshairs. Pull the image plane in by turning the knob clockwise and the objective moves closer to you. In this set up, the image is essentially tied to the objective so moving the parallax knob 0.1 mm moves the image 0.1 mm. Adjust outward (counter-clockwise) to pull back.

**8.) MAINTENANCE**

DO NOT ATTEMPT TO DISSASSEMBLE OR CLEAN THE SCOPE INTERNALLY. IF THE SCOPE REQUIRES REPAIRS OR ADJUSTMENT, SEE WARRANTY CARD FOR INSTRUCTIONS.

Start by brushing away dust and dirt particles from the lenses of the scope. Using the included lens cloth designed to clean optical surfaces brush dust or dirt particles away from the center of the lens towards the outside edges.

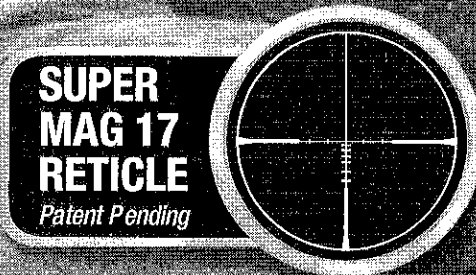
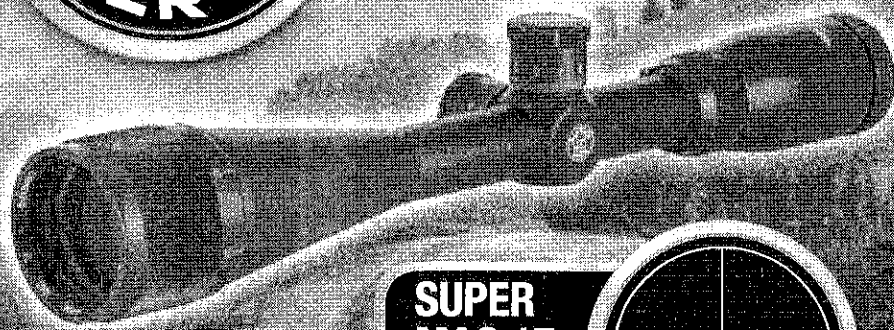
To remove minor smudges or fingerprints, start in the middle of the lens and using a circular motion clean towards the outside edges of the lens. If more aggressive cleaning is needed put a few drops of liquid lens cleaner on the cloth. Store the rifle scope in a moisture-free environment.

(Note: Not all cloth material like a handkerchief will remove smudges or fingerprints. Round fibers found in many cloth materials will tend to spread smudges and fingerprints. Use cleaning tools specifically designed for rifle scope cleaning).

BALLISTICS TABLE FOR WINCHESTER 20GR. & 25 GR. BULLETS				
Cal.	Maker	Model	WT (grs)	Bullet Type
0.172	Win.	17HMR (Rimfire)	20	XTP
0.172	Win.	17WSM (Rimfire)	20	XTP
0.172	Win.	17WSM (Rimfire)	20	VMax
0.172	Win.	17WSM (Rimfire)	25	VMax
0.172	Win.	17 Hornet (Centerfire)	20	Vmax

Model	Velocity Muzzle	Velocity (fps)				Energy (ft-lb)				
		50	100	150	200	Muz	50	100	150	200
17HMR	2375	2063	1776	1520	1304	250	189	140	103	75
17WSM	3000	2641	2309	2002	1721	400	310	237	178	131
17WSM	3000	2745	2504	2275	2058	400	335	278	230	188
17WSM	2600	2411	2230	2057	1892	375	323	276	235	199
17 Hornet	3650	3353	3307	2817	2572	592	499	420	352	294

Model	Trajectory (in)+				
	50 yds.	100 yds.	125 yds.	150 yds.	200 yds.
Winchester	1.3	2	1.3	0	-5.8
17HMR	.4	1	.4	0	-3.2
17WSM	.2	.8	.2	0	-2.5
17WSM	.6	1.2	.6	0	-3.2
17 Hornet	-.02	.04	-.02	0	-1.5



17SM-624X44AOCP  
17SM-4514X44AOCP  
17SM4514X44AORGBCP

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