

German K98 Sniper Scope Mount Set/Closed Loop 26.5mm (No.1007)



*Note; it has come to our attention that many consumers believe that all “reproduction” optics and mounts emanate from one Asian manufacturer but are sold by a variety of companies. This is **not** the case at all; in fact there are several manufacturers of these optics and mounts located in the same geographical area of the world. Subsequently, not all reproduction optics or mounts are made the same or to the same quality. Red Star Mountain (RSM) uses known vendors and stringently controls the quality of all of its products to ensure consistency. Our products are manufactured as close to the originals as possible. Keep in mind that we do not have the original manufacturing drawings; rather we use original samples as models for our products. At times this can lead to missteps but we try our best to make our products as accurate and authentic as we possibly can.*

If you are reading this you most likely have an interest in obtaining or building a K98 sniper rifle and are considering optics and mounts. As you may (or will) discover, the Germans used a wide variety of optic mounts pre and during WWII. As the title says, this document is specific to the Closed Ring Set which the Germans called the “Turret Mount”.

The Turret Mount optics mount was derived from hunting scopes/mounts of the era proceeding WWII. As Germany began to build up its armed forces leading up to the beginning of what would be called WWII, Germany adopted known designs and pressed them into service. Of course this is a very generic and ambiguous description of the development and use, however RSN strongly recommends those interested in this subject to do their own research and learn as much about this subject as they feel is adequate.

The Turret Mount system was relatively unique in its day because it allowed the removal of the optics without the use of tools. That said, the German Army did not recommend the removal of the optics during combat operations in fear that the zero would be lost in the process. The system uses different mounting systems for the front and rear mounts. In the front base which is mounted to the weapon using 2 screws features a female receptacle into which the male component (mounted on the optic) is placed at 90 degrees, and then the optic is rotated 90 degrees wherein the rear mount slides over the rear base which is held onto the rifle via 2 screws and the optic is locked into position via a throw lever on the left side.

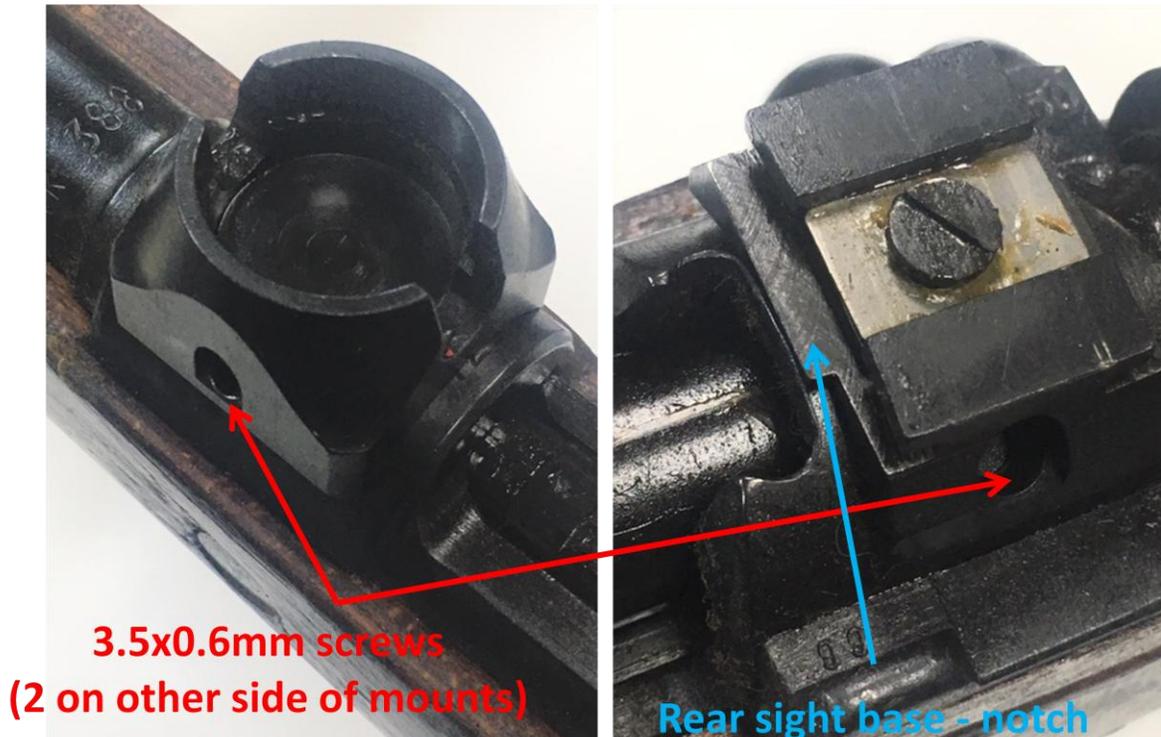
The following information is suggestive in nature, meaning there may be other ways to mount and assemble these mounts and the optic. RSM **HIGHLY** recommends professional installation of this product and is not responsible for incorrect mounting, alignment or damage of the mounts or the optic during installation.

WHAT THIS MOUNT FITS

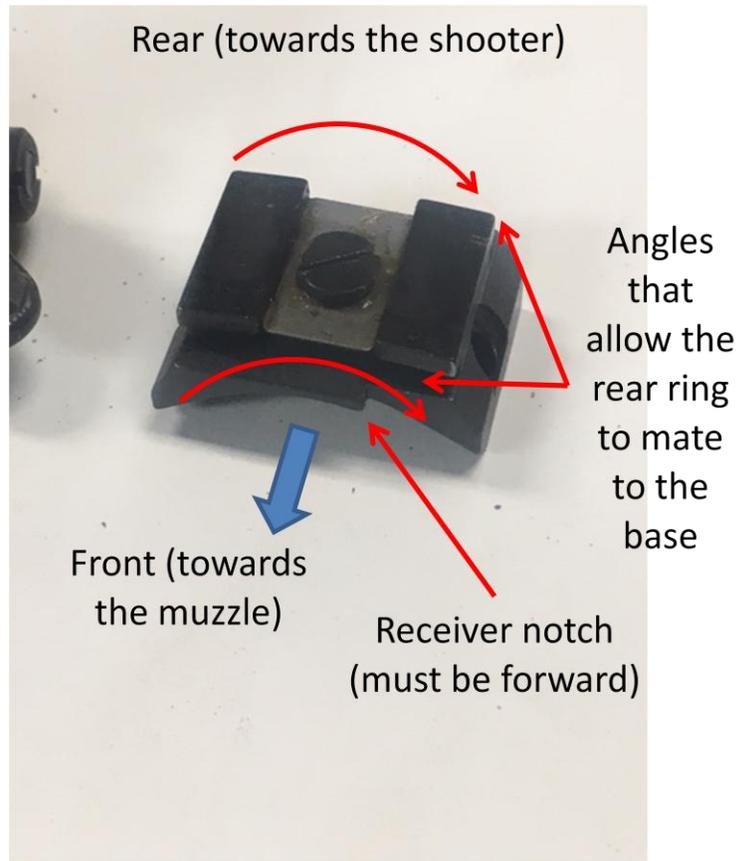
As noted above, RSM patterns its products off of original examples; subsequently the German K98 Scope Mount Set/Closed Loop 26.5mm (No.1007) was designed to fit the German K98 rifle. The German K98 was made in the thousands, additionally many other countries made copies and variants of this rifle for many years. In general the K98 Mauser is termed a “large ring” Mauser, subsequently this mount may fit other Large Ring Mausers. Those interested in building a specific rifle should thoroughly research the actual rifle they have to determine if this optic mount will fit the rifle and meet their needs.

HOW THE BASES ATTACH

As stated above, the sight bases mount to the rifle via two 3.5 x 0.6mm screws. There are reports that at least in some cases; the bases were “soft” soldered to the rifle receiver as well. Again as noted, RSM highly recommends that the bases are professionally installed. It is imperative that the bases are mounted perfectly in line, both with the bore of the rifle and with each other.



NOTE: The rear base MUST be put on correctly or the optic will not be able to be installed or removed. The base has an angle cut into the front and back of it (relative to the receiver, the angle is slightly circular).



There are several ways to mount these bases and as mentioned, the bases can be soft soldered to the receiver in order to position them prior to drilling and tapping. One product that can be used is TIX soldier, it has a very low melting point (will melt and flow at 275 degrees) and has a good adhesion tinsel strength.



In order to do this, you need to follow the instructions for the solder that will be used; however in general these are the steps;

1. Ensure the weapon is unloaded and clear
2. Remove all coating, lubricants and foreign matter from both the base and the receiver
 - a. Degrease both parts
 - b. Use some sand paper or emery cloth to remove the coating
 - c. Remove the dust/debris by blowing off or wiping
 - d. Use a solvent like alcohol or acetone to wipe down the parts
3. Tin the parts
 - a. Apply the appropriate flux to the part (either part)
 - b. Heat the part
 - c. Apply the solder (it should flow and not ball up)
 - d. Repeat A through C on the other part
4. Position the base onto the receiver
5. Heat the base until the solder sticks
6. Remove any excess (use a wire brush or damp rag)
7. Allow to cool completely

If you incorrectly position the base, it can be reheated and repositioned. Once the bases are correctly positioned, the screw holes can then be marked, drilled and tapped. If the holes are to be drilled with the bases in place, care must be taken not to damage or move the bases.

HOW THE RINGS ATTACH

Originally the rings were soldered to the optic main tube; however the optic tubes were completely disassembled during this process so as not to damage them. Once the rings were positioned correctly, the optic was reassembled. All of this was done by trained professionals who were very knowledgeable in them. Since this isn't the case for many of today's buyers and users, it is **HIGHLY** recommended that this **NOT** be attempted. Therefore, the current buyer's/users of the German K98 Scope Mount Set/Closed Loop 26/5mm (No.1007) and ZF39 optic are faced with determining a method to hold the optic into the desired position (more on this later).

The ocular and objective bells of the optic must be removed in order to fit the rings. The bells are removed by unscrewing them carefully. Some special notes about removing and installing the bells;

- They use very fine threads and must be handled carefully
- Do not leave the main tube exposed when grinding the rings as dust and debris can get into the optic potentially causing malfunction
- Do not force the bells when starting them into the main tube, they must be inserted carefully and rotated slowly until the threads catch correctly



In order to position the rings on the optic, they must be correctly sized to the main tube. AS received, the rings will be undersize; this is due to a variety of factors to include the coating process they undergo during manufacturing. In order to size the rings, the installed must remove a **SLIGHT** amount of material from the inside of the ring. DO NOT REMOVE MATERIAL FROM THE MAIN TUBE OF THE OPTIC.

In order to fit the rings, it is recommended that a rotary tool such as a Dremel tool or Foredom tool equipped with a sanding drum. A $\frac{1}{4}$ or a $\frac{1}{2}$ " sanding drum may be used, however the $\frac{1}{2}$ " drum will prove more effective.



The process to remove the material is as such;

1. Using the rotary tool and sanding drum, set the rotary on a medium setting
2. Insert the sanding drum into one side of one ring
3. Rotate the drum around the inside of the ring several times

4. Remove the rotary tool/sanding drum
5. Rotate the ring and repeat the procedure from the other side
6. Blow off/clean the inside of the ring
7. Test fit the ring onto the main tube
8. Repeat 1-7 until the ring just slides over the main tube
9. Repeat 1-8 with the other ring

This should not take very long, approximately 3-8 minutes per ring. Essentially the coating is about all that is to be removed plus perhaps a slight amount of ring material (steel).



Once done correctly, the ring should slide over the main tube with the minimum of clearance between the ring and the main tube. This is important in the next step which is affixing the ring to the main tube.

AFFIXING THE RINGS TO THE MAIN TUBE

Again, as stated the original optics had the rings soldered to the main tube, however this is not recommended with this product. The installer's option outside of soldering is to glue or use an adhesive to lock the rings to the main tube.

While glue such as an epoxy may work, over time it may harden and fail. This is especially true if the rifle is fired subjecting the rings/optic to the forces of repeated recoil. Another option which may prove more durable solution is the use of locking compound such as Loctite 638 which is designed specifically for spherical surfaces and tight fittings.



Regardless of which product is to be used, the process is the same for applying it.

1. Assemble the optic with the rings on (loose) onto the bases
2. Move the optic back and/or forth to determine the desired position
 - a. Move the optic to establish the correct eye relief
 - b. Ensure the optic is positioned perfectly vertical (optic/reticle must be square with relation to the rifle)
3. Mark the position of the rings on the main tube of the optic.
 - a. Use tape or a pencil
 - b. Mark on one side only
 - c. Mark the vertical position



4. Slide the optic away from the marks
5. Measure the width of the rings
6. Mark the optic main tube the width of the rings



7. Using sand paper or emery cloth completely remove any coating between the marks (the area that will be covered by the rings)
8. Thoroughly clean the sanded area on the optic main tube
 - a. Wipe off with a cloth
 - b. Clean with alcohol or acetone
 - c. Allow to dry completely
9. Apply the glue or locking compound to the sanded/clean areas on the optic main tube
10. ***If tape was used to establish the ring width prior to sanding/cleaning, remove this second piece of tape***
11. Slide the optic back into position
 - a. Wipe off any excess
 - b. Ensure the optic is **EXACTLY** where it needs to be
12. Allow the glue/locking compound to cure completely

