

The Kar.98a

(Updated 08/24/2012)

Compiled by Peter Kuck with
Line art from the Bannerman Catalog



History

The original Kar.98 was adopted in June of 1902 and was produced starting in 1903. With the adoption of the new 8mm "S" cartridge in 1903 all of these Carbines were modified for the new round. The heavy recoil and foot long muzzle flash from these modified carbines with the new cartridge lead to the suspension of production in 1905. To fix this problem the GPK (Gewehr Prüfungs Kommission) developed the Kar98a with a longer barrel and a different stock. The Carbine they accepted into service in January 1908. This is the Kar.98a that we are familiar with today.

Production figures through 1918

All Kar.98a's were produced at Government arsenals. The Germans produced no Kar98a Carbines after 1918. The Post War 1 Polish Government produced a Carbine, which was in most respects identical to the Kar.98a. According to John Walter's, The German Rifle, and the total estimated production figure for the Kar98a from all German government arsenals was over 1.5 million Carbines. The German arsenals, which produced the Kar98a, were located in Amberg, Danzig, Erfurt, and Spandau.

I have used the Serial numbers originally published by noted collector Mark Wieringa in 1998 (and updated 11/15/2004) to estimate the production totals for each of the German arsenals.

Kar98a Production figures at Amberg

Amberg	1909	1910	1911
Estimated totals	17,056	11,612	9,000

According to known serial numbers Amberg produced an estimated total of 37,668 Kar98a's in the 3 year period from 1909 thru 1911. (Storz uses a total of 44,362 carbines produced in Amberg (pg69) but it is unclear as to whether he is also counting carbines repaired carbines at Amberg during the war.)

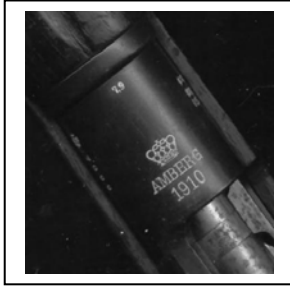
Kar98a Production figures at Danzig

Danzig	1909	1910	1911	1912
Estimated totals	49,000	42,000	39,000	15,000
Danzig	1913	1914		1918
Estimated totals	23,000	20,000		127,000



Siderail marking of a
Kar98

Danzig produced an estimated total of 315,000 Kar98a's in the 5 year period from 1906 thru 1914 and then after a production switch again in 1918.



Kar98a Production figures at Erfurt

Erfurt	1907	1908	1909	1910
Estimated totals	358	14,164	13,426	16,796
Erfurt	1911	1912	1913	1914
Estimated totals	18,345	15,000	22,000	54,000
Erfurt	1915	1916	1917	1918
Estimated totals	313,869	405,722	495,267	348,193

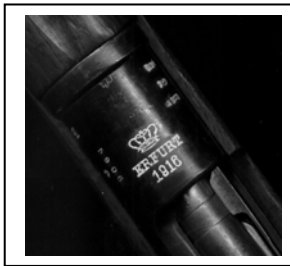
Erfurt produced an estimated total of 1,715,000 Kar98a's from 1907 thru 1918.



Kar98a Production figures at Spandau

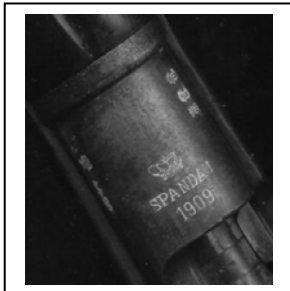
Spandau	1908	1909	1910
Estimated totals	10,700	1,000	400

Spandau produced an estimated total of 12,000 Kar98a's from 1908 thru 1910.



Chamber Marks

The chamber marks on an imperial Kar98a are limited to a crown, the name of the arsenal which made the carbine, and the date the carbine was manufactured. Carbines that were used by the Weimar republic may also be "double dated" with 1920 stamped on the receiver (The current belief is that the 1920 date was only applied in 1920 and not afterward). Imperial 98a's will NOT have a blued bolt. Some of these carbines soldiered on through the end of World War 2



Proof Strings

German proof marks will be found on the right side of the receiver. Reading them from left to right they indicate Hardness testing, assembly testing and final fit. A smaller crown over RC proof will indicate that the original inspection failed and that the weapon was sent to the "revisor committee" for re-inspection.



Note on Kar98a Stocks

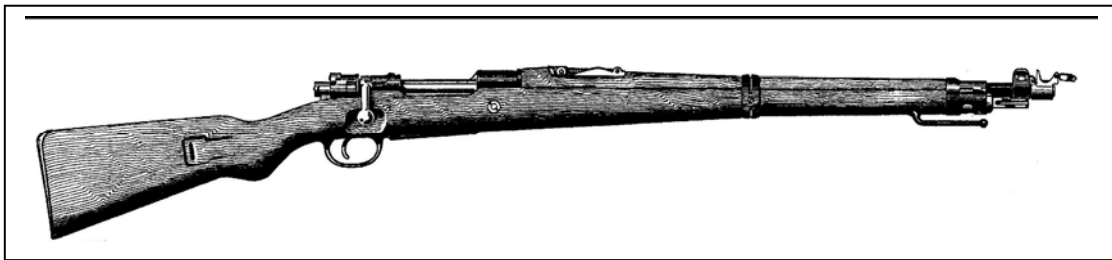
The First World War was both dirty and nasty and as a result you will find many Kar98a Carbines that were rebuilt during the war. A Kar98a Carbine that has a non-matching stock and bands may be legitimate WWI German rebuild. Like wise you will regularly find a carbine with a bolt that has been renumbered to the carbine (with a firing pin assembly which still retains the serial numbers of the rifle it came from). If you find these types of mismatched Kar98a's look closely for German rework marks. Dieter Storz in his book Rifle & Carbine 98 (pg. 129) lists 11 known repair depots that worked on damaged rifles and carbines during the First World War. These repair depots can be identified by the 5mm numeric code that was stamped on the carbines buttplate. (These codes are listed in a table at the end of this article). You may also find late war beech stocks on pre-war or early Kar98a's as proof of a wartime rebuild.

Stock differences

I have identified 4 different types of Kar98a stocks. I have classified these stock types as follows:

Type 1 stock

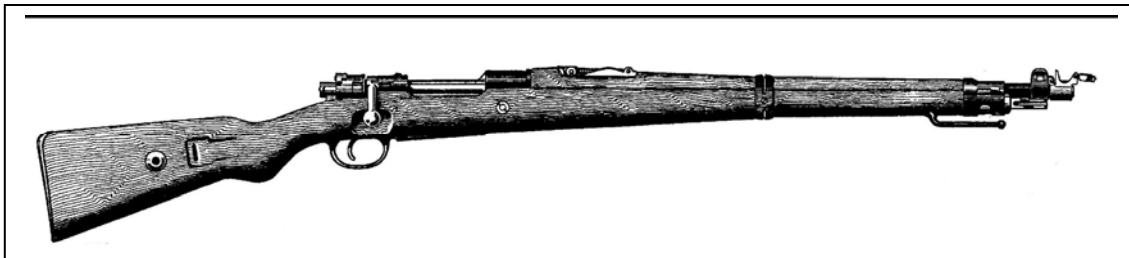
Solid Walnut Stock with no grasping grooves and no bolt- and no takedown washers



This is the early style stock which was used up until 1915 / 1916

Type 2 stock

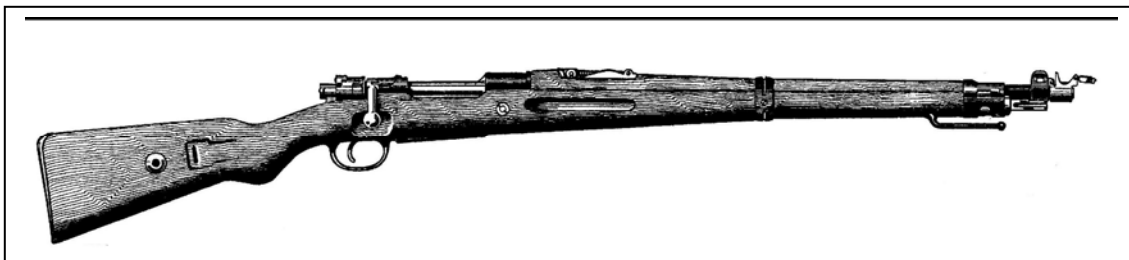
Walnut Stock with Bolt takedown washer



This type stock appears in 1915, but examples of the type 1 stock also continue to be used in 1916.

Type 3 stock

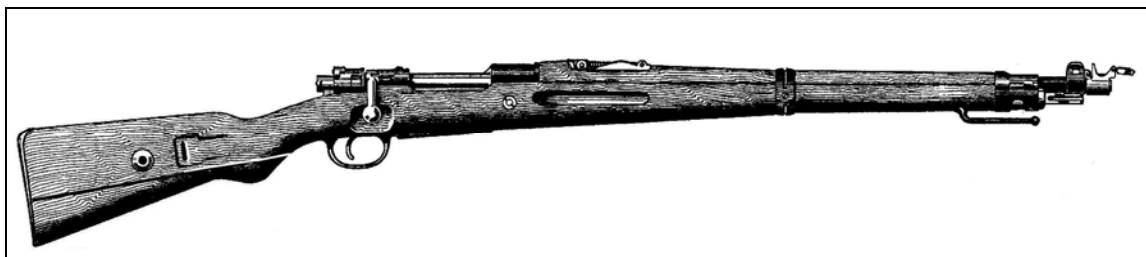
Walnut or Beech Stock with Bolt takedown washers and finger grasping grooves



This combination of stock features appears in 1917, but examples of the other stock types continue to be used.

Type 4 stock

Two piece Beech Stock with Bolt takedown washers and finger grasping grooves.



I have a single example of this stock type on a 1918 Erfurt Kar98a. The stock appears to be an originally issued two piece type three Kar98 beech stock. I know of four other examples of two piece stocks that have been described to me as Post World War 1 Weimar or Police issue rebuilds, one of them is a two piece type two stock. Dieter Storz in his book Rifle & Carbine 98 (pg. 96) states that two piece stocks were authorized for rifle and carbine repairs in 1915 and that Amberg began manufacturing two piece stocks in 1917.

Physical Characteristics of the Kar98a

Turnbolt, box magazine repeating rifle

Weight:	8.0 lbs.
Total Length:	43.3 inches
Barrel Length:	23.62 inches
Caliber:	7.9 mm S bore
Magazine capacity	5 rounds

Developmental History and usage:

Military carbines were developed for non-infantry formations, which needed to protect themselves in combat environments. In the German Army of the early 20th century the units armed with carbines included: Artillery, bicycle, cavalry, engineer, machine gun, military police, motor transport, supply, and telephone and telegraph units. These units were initially armed with the older Kar88 (kav), the Gew91 (art), as well as the newer Kar98, that were chambered the 7.92-mm "J", bore cartridge.

The Kar98a design was forced on the German military by the introduction of the newer 7.92 "S" bore Cartridge (adopted in 1903). With the adoption of this military cartridge the Kar88 and the original Kar98 carbines with their shorter 17.7-inch barrels became unusable due to the violent recoil and intense muzzle blast felt with the new cartridge.

To solve these problems the Germans military moved to a longer 23.62-inch barrel. These change required a new sight which was calibrated from 300 to 2000 meters in place of 200 to 1200 meter sight that had been the standard for the older Kar98 carbines for use with the older 7.92 J bore cartridge.

These design changes turned the Kar98a into a better weapon for trench warfare than the Gewehr 98 infantry rifle and when the German army re-evaluated their trench warfare tactics during the First World War, they picked the Kar98a to place in the hands of highly trained assault troops due to its handiness in the tight quarters of the western front trenches.

Kar98a Imperial slings:

Kar98a slings will be 53-56 inches long (variance is due to shrinkage or stretching). They are 15/16 inches wide, and have 9 adjustment holes (Graf's sample has included more than twenty Kar98a slings each with 9 adjustment holes and has supported his research with period images).

Small Arms repair depots and codes:

Code	Depot	Code	Depot	Code	Depot
1	Danzig	5	Koblenz	9	Konigsberg
2	Kustrin	6	Mainz	10	Thorn
3	Spandau	7	Rastatt	11	Posen
4	Cologne	8	Ingolstadt		

Source Dieter Storz, Rifle & Carbine 98 (pg. 129)



Accessories



Open Muzzle cover (photo Peter Kuck)



Flash suppressor (photos from Bill Reed)



Flash suppressor attachment (photos from Bill Reed)



Open Breech Cover (photo from Bill Reed)



Breech cover with makers mark (photo from Bill Reed)

Bibliography

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Shomper, Paul, aka "Graf", friend

Storz, Dieter, Rifle & Carbine 98, 1st edition 2006 ISBN 3-902526-05-x

Weringa, Mark, aka Mauser98 known serial numbers via internet

Reed, William, aka The Great Billdildoe