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THE K98k MAUSER OBERNDORF

PART I and PART II

By Robert Jensen as edited by Peter Kuck 06/18/2002



In February of 1934 the Heereswaffenamt (Army Weapons Office) ordered the adoption of a new military rifle. The new rifle was a version of the Mauser "STANDARD MODELL" (also known as the Banner Mauser) that had been in production at Mauser Oberndorf since 1924. This new rifle differed only in proof and chamber markings. The first rifles produced in 1934 used the letter "K" on top of the receiver ring to disguise the year of manufacture. These Mauser "K" date rifles are often referred to as "prototype or pre-production" rifles due to their limited production numbers and the fact that they were not "officially" adopted until the June 21, 1935 announcement in the official publication of the German War Ministry.

The 1934 "S/42K" rifles produced by Mauser Oberndorf established the standard for all German military K98k rifles. Mauser would supply the blueprints, tooling, gauges, etc. to other manufacturers and receive a royalty for each K98k produced. The "K" date Mauser K98k had a solid walnut stock with a flat milled buttplate. All of the metal parts were milled, polished, and blued. Each of the small parts on the rifle including the 10 inch long cleaning was also serial numbered and proofed. There was no provision for a sight hood. (All pre-1940 rifles



from any manufacturer that have a sight hood were reworked later during the war) This rifle has a Weimar style proof and the inspectors "box type" proofs. The known serial number range 1934 is from 1728 to 5408 with an estimated production run of 10,000 rifles. The "S/42K" is certainly one of the rarest of the K98k rifles. All known examples were issued to the Army although some naval issue rifles are possible.

The 1935 "S/42G" rifles are identical to 1934 production with the exception of the receiver code. The proofing remained the "box" of "S92", "K185", and "K176". Weimar style proofs were retained. The known serial number range is from 3526 to 2335s with an estimated production run of 193,000 rifles. "G" date rifles produced for the German Navy are known to exist and are marked with either an "M" on the stock or with a Nord or Ost property mark on the bolt takedown washer. There are no known Luftwaffe "G" date rifles.



In 1936 Mauser made the switch to a full four-digit date and changed the receiver code to "S/42". In this year Waffenamts "63" appears on the "S/42" rifles. The proof eagle changes from the earlier Weimar type but still retains downward turned wings without a swastika. Army "H", Navy "M", and Luftwaffe "L" branch of service marks can be found on this year's production. A 1936 dated "S/42" Luftwaffe marked rifle with all the correct external numbers and proofs in a laminate stock has been noted even though the use of laminate stocks was not officially authorized until 1937. An army marked, 1936 dated rifle which was diverted to the SS has also been noted. It has the required eagle N commercial proof in addition to the expected Waffenamts. The SS proofs are on the left rear side of the barrel and on the pistol grip of the stock. It is a "death's head" surmounted by the two runes and a star. These early SS rifles, like the SS Gew.98 reworks, were issued to concentration camp guards. The known serial number range for 1936 production is from 1326 to 6392z with an estimated production run of 270,000 rifles.

All three services received "S/42" rifles in 1937. Laminated stocks with flat buttplates appear in enough numbers to be noticeable (1937 dated K98k's with original, rather than replacement stocks are difficult to find). Nazi Waffenamts "WaA63" proofs can be found in conjunction with the earlier shaped Weimar eagles. The known serial number range is from 1064 to 6291z with an estimated production run of 270,000 rifles. SS acquired and issued rifles from Mauser Oberndorf which are dated 1937 are known to exist.



In 1938 the Mauser Oberndorf manufacturing code was changed from "S/42" to "42". The "S/42" coded K98k is more difficult to find than the "42" coded rifle. The "S/42" coded rifles differ from the earlier years only in the use of the Nazi eagles rather than the earlier down-turned wing eagles. Service branch "H", "M", and "L" rifles exist. The known serial number range is from 67 to 5968I with an estimated production run of 100,000 rifles. With the exception of the receiver code, the 1938 code "42" rifles are the same as the 1938 code "S/42" rifles. The known serial number ranges for the "42" rifles are from 5102g to 1631z with an estimated production run of 190,000 rifles. That "42" code rifles can be found in the "g" range while "S/42" rifles are found in the "i" range can be explained. Older "S/42" marked receivers would be in the parts bins when a supply of newly made "42" receivers would arrive and be put on top them. When this happened, receivers that were placed last into the parts bin would be first to be used from the parts bin. Once again SS rifles are known in 1938.

The 1939 code "42" rifle follows the 1938 standard. Production continued to be sent to all three military branches. The known serial number range is from 199 to 8259bb with an estimated production run of 290,000 rifles. The double letter suffix, (previously used in WWI rifle production after the "z" serial number block) appeared. The most notable change was the change from the 10-inch to the 12-inch cleaning rod that alleviated the breakage problem, which existed with the shorter cleaning rod. Three of the longer cleaning rods could now clean the entire bore of the K98k. instead of four. [Clay Dutton has reported a "U" block 1939 code "42" rifle with E/63 E/655 E/655 receiver proofs. This same sequence is repeated on the rear sight base while the triggerguard and floorplate have WaA 655 waffenamts and the balance of the rifle has E/63 proof marks. \(01/18/2004\)](#)

The waffenamts on the code "42" rifle changed in 1940 from Waffenamt "63" to Waffenamt "655". Some "no" letter range rifles can be found with the "63" proofs. A Mixture of "63" and "655" proofs can be found on the same rifle in the "a" range but as soon as the "63" proofed parts were used only the "655" proofed rifles appear. Flat buttplates were discontinued late in 1940 and cupped buttplates were used to prevent the separation of the Butt stock. The known serial number for the code "42" 1940 rifle is from 1660 to 5499gg with an estimated production run of 340,000 rifles. Subcontracted parts, such as the buttplates coded "bpr" and "brg" appear. Kriegsmarine, and Luftwaffe rifles are known to have been produced in 1940 but no examples have yet been reported.

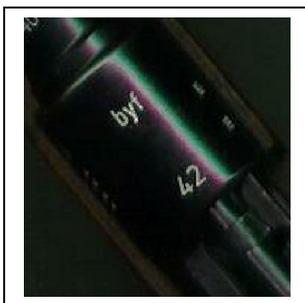


In 1941 the Mauser Oberndorf manufacturing code was changed from "42" to "byf" and the receiver date was changed from a four-digit to a two-digit date. Army and Luftwaffe rifles were produced in 1941. The front sight hood was introduced. Small parts (bolt parts, floorplates, followers, and front sight bases) with Waffenamt "WaA103" and "WaA140" proofs were used (made by F.N. in occupied Belgium). The known serial number range for the 1941 "byf" K98k is from 4514 to 6474hh with an estimated production run of 350,000 rifles. Luftwaffe issued s/n 1059I has the luft acceptance proof stamped on the right side of the butt stock.



Lt. Col. Robert D Whittington III in his book [GERMAN PISTOLS AND HOLSTERS 1934 / 1945](#), reports that five component parts were made for the K98k by F.N. They included barrels, bolts, floorplates, followers, sight bases, and grenade launchers. He further cites production figures as follows:

year	Bolts	Barrels
1940	1,000	1,000
1941	170,000	53,000
1942	548,000	55,000
1943	565,000	10,000
1944	630,000	140,000



In 1942 the waffenamt "135" proof appears on the "byf" 98k rifles. Mauser Oberndorf would use this waffenamt until production ceased in 1945. It appears on the receiver ring for the first time as a final assembly proof over the manufacturer's code. A solid "speed milled" front band (without the "H" style cutouts) appears creating the variation known as the intermediate or mid-war style. All small parts were still numbered. The known serial number range is from 209 to 459nn with an estimated production run of 410,000 rifles. A waffenamt over "WaA135" was substituted for the branch of service stamp on the Butt stock. Beginning within the "aa" block serial number range the underside of the rear sight leaf was left without range marks in an attempt to speed up and simplify production.



The 1943 “byf” K98k’s follow the 1942 standard. Solid walnut, laminated beechwood and solid oak stocks can be found in the “k” block serial number range. Stamped trigger guards, front bands, and band springs are used in Mauser production. Cupped buttplates made by the subcontractor “gqm” appear. Greater emphasis was now being placed on production and lower costs, due to the staggering losses of men and weapons at Stalingrad, Tunisia and on other fronts as the tide turned against the Germans. The known serial number range is from 4298 to 29369 1 for an estimated production run of 1,142,336 rifles.



1944 was the peak year of production for “byf” K98k’s. The 44 “byf” is the most commonly encountered K98k in this country. The known serial number range was from 3342 to 87559 “1”. Production went through the single letter, double letter, five digit no letter, and into the five digit single letter block culminating with the five digit “1” block. As the year progressed milled parts were phased out in favor of stamped parts and by the end of the year Mauser was using all stamped parts for the front and lower bands, band springs, trigger guards, floor plates, and followers (some supplied by other manufacturers). Many collectors refer to these as the late war or “Kriegs Modell (war model)” rifles. 1944 saw the appearance of a recoil lug, which resembled a “button” instead of the flat-sided lug, which was used earlier. Fewer parts were numbered and as the year progressed (he by the five digit “1” block) the most common configuration was to have only the receiver, bolt, gas shield, and cocking piece numbered to the gun. Stocks, which are not numbered late in the “1” block, are sometimes found with the corresponding serial number written in pencil. In the five-digit “1” block phosphate parts (bolts) were used for the first time. These were the first dual tone guns. Some late five digit “1” block rifles can be still be found with a “speed milled” front band. The simplified bolt with two round gas holes appeared in 1944 replacing the bolt using oval gas holes. Exterior finish deteriorated due to the loss of skilled workmen as the military manpower needs of the Army and Luftwaffe became critical. Unskilled foreign workers replaced these workers effecting the quality of the fit and finish. However, no short cuts were made in quality control with regard to safety features or material composition of the firing parts. The “byf” barrel shield was used for the first time in 1944.



In 1945 the Mod 98 marking was moved from the receiver siderail to the top of the receiver ring. The known serial number range is from 988 to 8268a. Both dual tone and all phosphate rifles can be found. Stocks can be either solid walnut or laminated beech with bands held on by the customary stamped spring or be wood screws. Stocks with and without the cleaning rod channel drilled out when bayonet lugs are present exist as well as stocks without the bayonet lug. When the bayonet lug is not found the front and rear bands are held on with simple wood screws. A sheet metal cap is used to cover the tip of the stock and is held in place with a wood screw. Stocks with the usual bolt-takedown washer in the rear and with the simple hole in the toe of the buttplate are also quit right—in all cases the “WaA135” should be present. No small parts are numbered and often the bolts are only numbered on the stem of the bolt handle. The late war simplified bolt is common by 1945. Correct “byf” 45 rifles are very scarce. Many have had post war alterations. “byf” 45 rifles in 7.92 Kurz are known to exist.



In early 1945 Mauser’s code was again changed from “byf” to “svw”. The configuration of the rifle remained unchanged. The known serial number range is from 1377a to 5593b. Comments concerning the “byf” 45 apply to the svw 45. This variation is very hard to find in its original configuration. Finally, it was decided, for reasons as yet unknown, to change the date to a code rather than digits and the “svw 45” became the “svwMB”. The story of the Mauser Oberndorf K98k as far as date is concerned had now come full circle from the “S42/K” date, through the four digit and two digit and back again to a the letter code of “MB” for a date. The known serial number range for the “svwMB” is from 6890b to 924gb. This is certainly a rare rifle as most of the ones we see are post war French issue.

Mauser Oberndorf made K98k's equipped with rails for the ZF41 exist in all the years from 1941 through 1945. Most of the 1944 and 1945 dated rifles equipped with the ZF41 scope rails were issued as standard rifles without scopes as the production of ZF41 scopes was discontinued in mid-1943. The rear sight sleeves with the rails were perfectly useable and were issued as standard K98k's. Through the years most of these rifles have had scopes put on them by stateside collectors who also alter the stock so that the ZF41 will slide on. To find a 1944 or a 1945 rifle with both a rail and an unaltered stock is rare.



Addenda: correction made to estimated production totals for 1935 S/42G. Error caught by Johnny_mustang 1/16/2004

1941 Luftwaffe variant byf by Mauser Oberndorf

Early 1941 variant

Proofing & serial numbers (sample rifle 1941 byf)

Receiver code	byf (41)	receiver proofs	waf 135(3) (on side)
Side rail	Mod.98		
Serial number	4 digits possible alpha suffix		
Upper band	s/n	waf WaA135	milled "H"
Lower band	s/n	waf 135	
Trigger guard	s/n	waf 135(2)	milled with lock screws (replacement)
Bolt	ribbed & blued (N/A miss-matched)		
Root	rear firing proof	top s/n	underside
Gas shield	s/n		
Safety			
Cocking piece			
Extractor s/n			
Extractor collar			
Front sight	hood	waf 135(2)	
Rear sight	meter scale both sides	s/n	waf 135(2)
Rear sight base	no s/n	waf 135	
Stock	Laminate		

Stock Markings (external reported only)

	Side	waf WaA135 (2) & "L" (Luftwaffe)	
	Pistol grip	waf WaA135	
	Spine	s/n, & Waf WaA135 (2), P	
Bayonet lug		s/n	waf 135
Magazine follower		s/n	waf 135

1941 byf by Mauser Oberndorf

The early 1941 Heer variant byf by Mauser Oberndorf

Proofing & serial numbers (sample rifle 1941 byf)

Receiver code **byf (41)** receiver proofs **waf 655(3)** (on side)

Side rail **Mod.98**

Serial number 4 digits possible alpha suffix (1059 i)

Upper band s/n **waf WaA655 milled "H"**

Lower band s/n **waf 655**

Trigger guard s/n **waf 655(2)** milled with lock screws

Bolt **miss-matched** ribbed & blued

Root

Gas shield

Safety

Cocking piece

Extractor

Extractor collar

Front sight hood **waf 655**

Rear sight meter scale both sides s/n **waf 655(2)**

Rear sight base no s/n **waf 655**

Stock Laminate

Stock Markings (external reported only)

Side **waf WaA655 (2) & "L" (Heer)**

Pistol grip **waf WaA655 (2)**

Spine **s/n, & Waf WaA655 (2), P**

Bayonet lug s/n **waf 655**

Magazine follower s/n **waf 655** (replacement)

1942 byf by Mauser Oberndorf

The early 1942 variant

Proofing & serial numbers (sample rifle 1942 byf)

Receiver code	byf (42)	receiver proofs	waf 135(2) (on side)
Side rail	Mod.98		
Serial number	4 digits possible alpha suffix (s/n 1721 C)		
Upper band	s/n	waf WaA135	milled "H"
Lower band	s/n	waf 135	
Trigger guard	no s/n	none	milled with lock screws (replacement)
Bolt	ribbed & blued		
Root	rear firing proof	top s/n	underside waf 135, waf 140
Gas shield	s/n	waf 135(2)	
Safety	s/n	waf 135	
Cocking piece	s/n	waf 140	
Extractor s/n		waf 135	
Extractor collar		waf 135	
Front sight	hood	waf 140	
Rear sight	meter scale both sides	s/n	waf 135(2)
Rear sight base	no s/n	waf 135	
Stock	Laminate		

Stock Markings (external reported only)

	Side	waf WaA135 (2) & "H" (Heer)	
	Pistol grip	waf WaA135	
	Spine	s/n, & Waf WaA135 (2), C, P	
Bayonet lug		no s/n	waf 135
Magazine follower		no s/n	waf 135 (replacement)

1942 byf by Mauser Oberndorf

The mid 1942 variant (rebuilt)

Proofing & serial numbers (sample rifle 1942 byf)

Receiver code **byf (42)** receiver proofs **waf 135(1)** (on top)

Side rail **Mod.98**

Serial number 4 digits possible alpha suffix (s/n 57850)

Upper band **stamped**

Lower band **stamped**

Trigger guard **stamped phosphate**

Bolt ribbed & blued

Root rear firing proof top s/n underside **waf 140**

Gas shield s/n **no waf**

Safety s/n **no waf**

Cocking piece s/n **waf 140**

Extractor s/n **no waf**

Extractor collar **waf 54**

Front sight hood **waf 140**

Rear sight meter scale both sides s/n **no waf**

Rear sight base no s/n **no waf**

Stock Laminate

Stock Markings **miss-matched**

Side

Pistol grip

Spine

Bayonet lug

Magazine follower

Note ** this rifle has a replacement barrel with a firing proof, the letter "D" and a waf 135

1943 byf by Mauser Oberndorf

The mid 1943 variant

Proofing & serial numbers (sample rifle 1943 byf) (Hal Kolding)

Receiver code **byf (43)** receiver proofs **waf 135(1)** (on side) **waf 135(1)** (on top)

Side rail **Mod.98**

Serial number 5 digits possible alpha suffix (s/n 38533g)

Upper band s/n **no waf** **speed milled**

Lower band s/n **no waf** **milled**

Trigger guard **s/n (5 digits)** **waf 135(1)** **milled with lock screws**

Bolt ribbed & blued

Root rear firing proof top s/n **no waf**

Gas shield s/n (4) **no waf**

Safety s/n (4) **no waf**

Cocking piece s/n (4) **no waf**

Extractor s/n **no waf**

Extractor collar **no waf**

Front sight hood **waf (1)**

Rear sight meter scale one side s/n (4) **no waf**

Rear sight slide **s/n (4)**

Rear sight base **no s/n** **no waf**

Stock **Walnut**

Stock Markings (external reported only)

Side **Waf WaA135**

Pistol grip **Waf WaA135**

Spine **Waf WaA135**

Bayonet lug **no s/n** **no waf**

Butt Plate **gqm 43 WaA98**

Floor Plate s/n (5) **no waf** **Milled**

Magazine follower **no s/n** **no waf** **Milled**

Barrel Band **43R170**

1943 byf by Mauser Oberndorf

The mid 1943 variant

Proofing & serial numbers (sample rifle 1943 byf)

Receiver code	byf (43)	receiver proofs	waf 135(1) (on side)	waf 135(1) (on top)
Side rail	Mod.98			
Serial number	5 digits possible alpha suffix (s/n 13694k)			
Upper band	s/n	no waf	stamped	
Lower band	s/n	no waf	milled	
Trigger guard	s/n (5 digits)	waf 135(1)	milled with lock screws	
Bolt	ribbed & blued			
Root		rear firing proof	top s/n	no waf
Gas shield	s/n(4)		no waf	
Safety	s/n(4)	no waf		
Cocking piece	s/n (4)	no waf		
Extractor	no s/n	no waf		
Extractor collar		no waf		
Front sight	hood	waf 140(1)		
Rear sight	meter scale one side	s/n (4)	no waf	
Rear sight base		no s/n	no waf	
Stock	Walnut			

Stock Markings (external reported only)

	Side	Waf WaA135		
	Pistol grip	Waf WaA135		
	Spine	Waf WaA135		
Bayonet lug		no s/n	no waf	
Floor Plate		s/n (5)	no waf	Milled
Magazine follower		no s/n	no waf	Milled

1944 byf by Mauser Oberndorf

The early 1944 variant

Proofing & serial numbers (sample rifle 1944 byf)

Receiver code	byf (44)	receiver proofs	waf 135(1) (on side)	waf 135(1) (on top)
Side rail	Mod.98			
Serial number	5 digits possible alpha suffix (s/n 27552)			
Upper band	s/n	no waf	stamped	
Lower band	s/n	waf 135	stamped	
Trigger guard	s/n (5 digits)	waf 135(1)	milled with lock screws	
Bolt	ribbed & blued			
Root		rear firing proof	top s/n	waf 135
Gas shield	s/n	no waf		
Safety	s/n	no waf		
Cocking piece	s/n	no waf		
Extractor	s/n	no waf		
Extractor collar		no waf		
Front sight	hood	waf		
Rear sight	meter scale one side		no s/n	no waf
Rear sight base	no s/n			
Stock	Walnut			
Stock Markings (external reported only)			stock drilled for cleaning rod	
	Side	Waf WaA135		
	Pistol grip	Waf WaA135		
	Spine	Waf WaA135		
Bayonet lug	no s/n	no waf		
Floor Plate	s/n (5)	waf 135	milled	
Magazine follower	no s/n	no waf	Milled	
Barrel band	43D931 waf135 (1)			

1944 byf by Mauser Oberndorf

The early 1944 variant

Proofing & serial numbers (sample rifle 1944 byf)

Receiver code	byf (44)	receiver proofs	waf 135(1) (on side)	waf 135(1) (on top)
Side rail	Mod.98			
Serial number	5 digits possible alpha suffix (s/n 26579d)			
Upper band	s/n	no waf	stamped	
Lower band	s/n	no waf	milled	
Trigger guard	s/n (4 digits)	waf 135(2)	stamped with lock screws	
Bolt	ribbed & blued			
Root		rear firing proof	top s/n	no waf
Gas shield	s/n		no waf	
Safety	s/n	no waf		
Cocking piece	s/n	no waf		
Extractor s/n		no waf		
Extractor collar		no waf		
Front sight	hood	waf		
Rear sight	meter scale one side	no s/n	waf 135(1)	
Rear sight base	no s/n	i		
Stock	Laminate			
Stock Markings (external reported only)			stock drilled for cleaning rod	
	Side	no marks		
	Pistol grip	no marks		
	Spine	Waf WaA135		
Bayonet lug	no s/n	waf 135		
Floor Plate	s/n (2)	waf 135	stamped	
Magazine follower	no s/n	no waf	Milled	

1944 byf by Mauser Oberndorf

The early 1944 variant

Proofing & serial numbers (sample rifle 1944 byf)

Receiver code	byf (44)	receiver proofs	waf 135(2) (on side) waf 135(1) (on top)
Side rail	Mod.98		
Serial number	5 digits possible alpha suffix (s/n 56070k)		
Upper band	no s/n	no waf	stamped
Lower band	no s/n	no waf	stamped
Trigger guard	no s/n	no waf qnw	stamped <u>no</u> lock screws
Bolt	ribbed & blued		
Root	rear firing proof	top s/n	no waf
Gas shield	s/n	no waf	
Safety	no s/n	no waf	
Cocking piece	s/n	no waf	
Extractor s/n		no waf	
Extractor collar	no s/n	no waf	
Front sight	hood	waf	
Rear sight	meter scale one side	no s/n	waf 18(1)
Rear sight base	no s/n	waf unreadable	
Stock	Laminate		
Stock Markings (external reported only)			stock <u>not</u> drilled for cleaning rod
	Side	no marks	
	Pistol grip	no marks	
	Spine	Waf WaA135	
Bayonet lug	no s/n	waf 135	
Floor Plate	no s/n	byf	stamped
Magazine follower	no s/n	waf	Stamped phosphate

1944 byf by Mauser Oberndorf

The mid 1944 variant

Proofing & serial numbers (sample rifle 1944 byf)

Receiver code **byf (44)** receiver proofs **waf 135(2)** (on side) **waf**
Receiver blued

Side rail **Mod. 98**

Serial number 5 digits possible alpha suffix (s/n **404991**) (lower case **L block**)

Upper band no s/n **no waf** stamped

Lower band no s/n **no waf** stamped

Trigger guard **no s/n waf 135(2) byf** stamped phosphate no lock screws

Bolt ribbed & blued

Root rear firing proof top s/n "04991" **waf 140**

Gas shield no s/n "0499" **waf 221** preceded by an "e"

Safety no s/n **no waf phosphate**

Cocking piece no s/n "99" **no waf phosphate**

Extractor no s/n **no waf**

Extractor collar no s/n **no waf**

Front sight hood **waf**

Rear sight meter scale one side no s/n **waf 18(1)**

rear sight slide no sn **waf 135(1)**

Rear sight base no s/n **waf unradable**

Stock Laminate

Stock Markings (external reported only) stock drilled for cleaning rod

Side no marks

Pistol grip **no marks**

Spine **Waf WaA135**

Bayonet lug missing

Floor Plate **no s/n byf** stamped phosphate

Magazine follower **no s/n waf** Stamped phosphate

1945 byf by Mauser Oberndorf

The early 1945 variant

Proofing & serial numbers (sample rifle 1945 byf 45)

Receiver code	Mod. 98 byf 45	receiver proofs	waf 135(2) (on side)	waf 135(1) (on top)
Side rail	blank			
Serial number	5 digits possible alpha suffix (s/n 8654a)			
Upper band	no s/n	no waf	speed milled	
Lower band	no s/n	no waf	stamped	
Trigger guard	no s/n byf & waf 135(2) stamped with any lock screws			
Bolt	ribbed & blued			
Root		rear firing proof	top s/n	no waf
Gas shield		no s/n	no waf	
Safety	no s/n	no waf		
Cocking piece	no s/n	no waf		
Extractor	no s/n	no waf		
Extractor collar	no s/n	no waf		
Front sight	hood	no waf		
Rear sight	meter scale one side	no s/n	no waf	
Rear sight base	no s/n	waf 135(1)	stamped phosphate	
Stock	Laminate			
Stock Markings (external reported only)				
	Side	unreadable waf		
	Pistol grip	unreadable waf		
	Spine	* C		
Bayonet lug	no s/n	waf 135		
Floor Plate	no s/n	no waf	stamped phosphate	
Magazine follower	no s/n	waf 135	stamped	