ORDI 7-101

SOVIET RIFLES AND CARBINES IDENTIFICATION AND OPERATION

ORDNANCE CORPS

MAY 1954

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ORDI 7-101, Soviet Rifles and Carbines — Identification and Operation, is published for the information and guidance of all concerned.

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CHAPTER 1

GENERAL

1. PURPOSE

This pamphlet is published as a guide for Ordnance personnel in the identification and operation of Soviet military rifles and carbines.

2. SCOPE

a. The information contained herein includes data on Soviet bolt action, semiautomatic, and automatic rifles and carbines.

(1) The chapter on bolt action weapons includes the original M1891, the M1891 Dragoon, the M1891/30 sniper, and the M1891/30 rifles, and the M1910, M1938, and M1944 carbines.

(2) The chapter on automatic and semiautomatic weapons covers the Simonov M1936 (AVS), Tokarev M1938 (SVT), Tokarev sniper M1938, Tokarev M1940 (SVT), Tokarev M1940 (AVT), and Tokarev sniper M1940 rifles; while mention is made of the Tokarev semiautomatic carbine M1940, this weapon is not treated in detail.

b. Although basic information on disassembly and assembly of each weapon is included, no attempt has been made to provide all the details necessary for complete maintenance and repair of the weapons described.

c. Information is given for the superficial maintenance of the weapon; common malfunctions are listed, causes of such malfunctions are cited, and the proper remedial action is given.

d. All the weapon models covered within a chapter are discussed in each section of the chapter. For example, section I of chapter 1 gives a general description of each bolt action model, section II points out the differences between all the bolt action models, section III has to do with interchangeability of parts for each bolt action model, and so on.

3. REFERENCES

The information presented herein is based upon the latest and best material available. Much of the information is the result of actual examination and operation of the weapons described.

4. CORRECTIONS AND ADDITIONS

Suggestions for correction and addition should be forwarded to Chief of Ordnance, Washington 25, D. C., ATTN: ORDGU-IN, so that any revision of the text can incorporate the change.

CHAPTER 2

BOLT ACTION RIFLES AND CARBINES

SECTION I. GENERAL

5. ORIGIN AND BASIC QUALITIES

The Mosin-Nagant rifle was adopted in 1891 by Imperial Russia. The action of the rifle was developed by Colonel S. I. Mosin of the Imperial Russian Army, and the magazine was developed by Nagant, a Belgian. All Soviet bolt action military rifles and carbines are Mosin-Nagant weapons and all are basically similar to the original Mosin-Nagant rifle adopted by Russia in 1891. These weapons can be considered reasonably effective infantry weapons. Fairly good shooting can be done with them at combat ranges, although their sights do not lend themselves to the finer degrees of accuracy which can be obtained with similar United States weapons. They suffer from an overcomplicated bolt, but in other respects are relatively simple to service and maintain. The safety, in that it is extremely hard to engage and disengage, represents a shortcoming of the weapons.

6. BOLT ACTION RIFLES

a. The original rifle M1891 was considerably different than later versions of the same model. The original rifle M1891 had no handguard, was fitted with sling swivels instead of the sling slots used on later versions, and had a leaf rear sight which was designed for the old conical-nosed 7.62-mm ball cartridge. In 1908 the Spitzer pointed light ball round (which is still used) was introduced and the rear sight was changed. About this time handguards were added and the swivels were replaced by sling slots bored in the stock. The original M1891 is now a collector's item, and is unlikely to be encountered in the field. The later versions of the rifle M1891 (fig. 1) are no longer being manufactured, and are believed to be obsolete.

b. The Dragoon rifle M1891 (fig. 2) was originally developed as a weapon for heavy cavalry. Manufacture of this rifle was discontinued about 1930, when it was replaced by the rifle M1891/30. The Dragoon rifle M1891 is believed to be obsolete, but it may be found in limited quantity in satellite armies.

FIGURE 1. 7.62-MM RIFLE M1891.

FIGURE 2. 7.62-MM RIFLE M1891, DRAGOON.

c. The rifle M1891/30 (fig. 3) is about the same length as the M1891 Dragoon, but it represents many improvements over the Dragoon. The sights used on the M1891/30 are superior to those of the Dragoon, and, because the metric system of measurement was adopted in Russia during this period, the sights of the M1891/30 are calibrated in meters rather than in arshins. (One arshin equals 0.71 meters or 0.78 yards.) Manufacture of the M1891/30 was initiated in 1930. Although this model is used in large numbers in the Soviet and satellite armies, it is apparently being replaced by the carbine M1944 as the standard Soviet infantry shoulder weapon.

FIGURE 3. 7.62-MM RIFLE M1891/30.

d. The sniper rifle M1891/30 (fig. 4), which is basically the M1891/30 adapted for use with a telescope, is a standard weapon in Soviet and satellite armies. The telescopes employed are somewhat similar to those used on United States hunting rifles.

FIGURE 4. 7.62-MM SNIPER RIFLE M1891/30.

7. BOLT ACTION CARBINES

a. Although Imperial Russia adopted the Mosin-Nagant rifle in 1891, a true carbine did not appear until 1910. The carbine M1910 (fig. 5), with its leaf sight and sling slots, has characteristics of both the original and later versions of the rifle M1891. The carbine M1910 has a hexagonal receiver and does not take a bayonet. This model is comparatively rare and is believed to be obsolete.

FIGURE 5. 7.62-MM CARBINE M1910.

b. The carbine M1938 (fig. 6) replaced the M1910. It is similar in many respects to the rifle M1891/30. It has a tangent-type rear sight, hooded front sight, and rounded receiver. It does not take a bayonet. This model may be encountered in Soviet and satellite forces although it is not believed to be manufactured at present.

FIGURE 6. 7.62-MM CARBINE M1938.

c. The carbine M1944 (fig. 7), introduced during the latter part of World War II, is now considered standard. The permanently fixed bayonet folds down along the right side of the carbine stock when not in use. Except for a slightly longer barrel and the addition of the bayonet, the carbine M1944 is identical to the M1938.

FIGURE 7. 7.62-MM CARBINE M1944.

8. CHARACTERISTICS OF 7.62-MM BOLT ACTION RIFLES AND CARBINES

Basic characteristics of 7.62-mm bolt action rifles and carbines are presented in table I.

Table I. Characteristics of 7.62-mm Mosin-Nagant Bolt Action Rifles and Carbines

Characteristics	Rifle M1891	Dragoon rifle M1891	Rifle M1891/30	Sniper rifle M1891/30	Carbine M1910	Carbine M1938	Carbine M1944
Weight, w/o bayonet & sling	9.63 lb.	8.75 lb.	8.7 lb.	11.3 lb.	7.5 lb.	7.62 lb	.....
w/bayonet & sling	10.63 lb.	9.7 lb.	9.7 lb.	.....	7.7 lb.	....	8.9 lb.
Length, w/o bayonet	51.37 in.	48.75 in.	48.5 in.	48.5 in.	40 in.	40 in.	40 in. (folded)
w/bayonet	68.2 in.	65.5 in.	65.4 in.	65.4 in.	.....	.....	52.25 in. (extended)
Barrel length	31.6 in.	28.8 in.	28.7 in.	28.7 in.	20 in.	20 in.	20.4 in.
Magazine capacity	5 rounds	5 rounds	5 rounds	5 rounds	5 rounds	5 rounds	5 rounds
Instrumental velocity at 78 ft. w/hvy ball	2,660 f.p.s.	2,660 f.p.s.	2,660 f.p.s.	2,660 f.p.s.	2,514 f.p.s.	2,514 f.p.s.	2,514 f.p.s.
Rate of fire	8 - 10 rds./min.	8 - 10 rds./min.	8 - 10 rds./min.	8 - 10 rds./min.	8 - 10 rds./min.	8 - 10 rds./min.	8 - 10 rds./min.
Maximum sighting range	3,200 arshins (2,496 yd.)	3,200 arshins (2,496 yd.)	2,000 meters (2,200 yd.)	2,000 meters* (2,200 yd.)	2,000 arshins (1,560 yd.)	1,000 meters (1,100 yd.)	1,000 meters (1,100 yd.)
Front sight	Unprotected blade	Unprotected blade	Hooded post	Hooded post	Unprotected blade	Hooded post	Hooded post
Rear sight	Leaf	Leaf	Tangent	Tangent	Leaf	Tangent	Tangent
Ammunition	**	**	**	**	**	**	**

*For iron sights when scope is dismounted. Maximum sighting range for the telescopic sight on this weapon is: PE scope: 1,400 meters (1,540 yd.); PU scope: 1,300 meters (1,420 yd.).

**Soviet 7.62-mm rifle and ground machinegun ammunition.

SECTION II. DIFFERENCES BETWEEN MODELS

9. RIFLE M1891

The rifle M1891 (fig. 1) is the basic bolt action model. Later bolt action rifle and carbine models are variations and attempted improvements of the M1891.

a. This rifle has a notched-ramp leaf-type rear sight (fig. 8) which has no provision for windage. The sight is graduated from 400 to 3,200 arshins (312 to 2,496 yards).

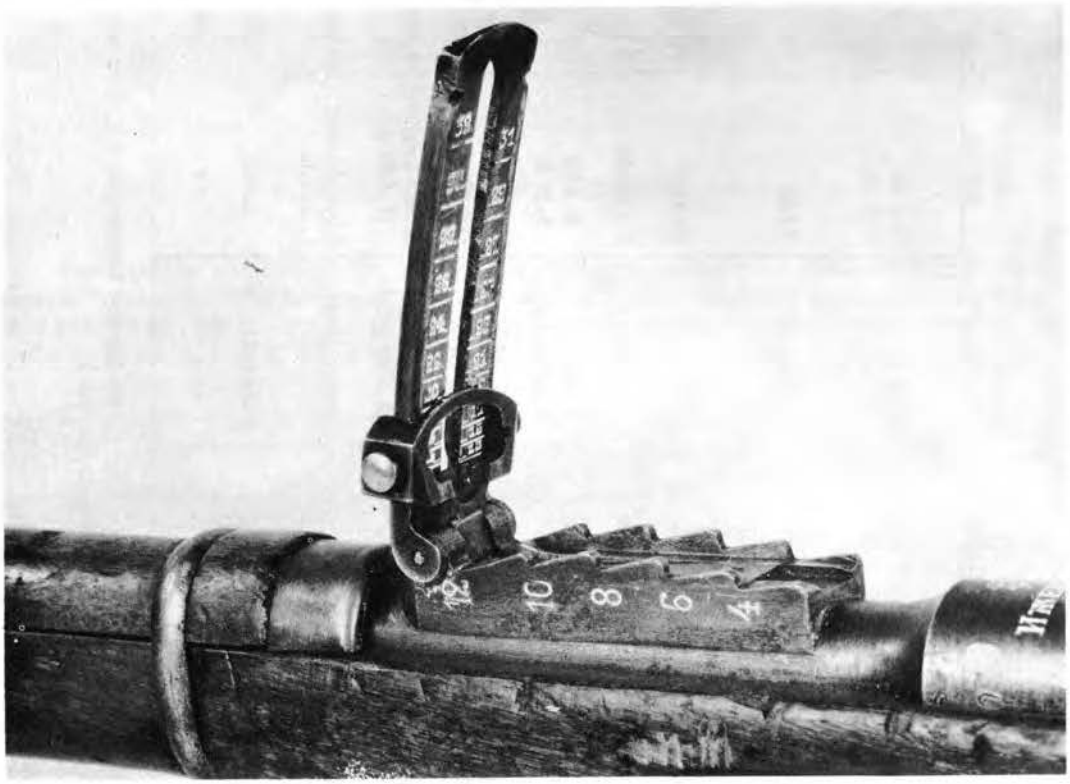


FIGURE 8. REAR SIGHT FOR RIFLE M1891.

b. The front sight is the unprotected blade type of sight.

c. The detachable fluted bayonet (fig. 9), with an offset sleeve for the barrel, is fastened to the rifle by a locking ring.

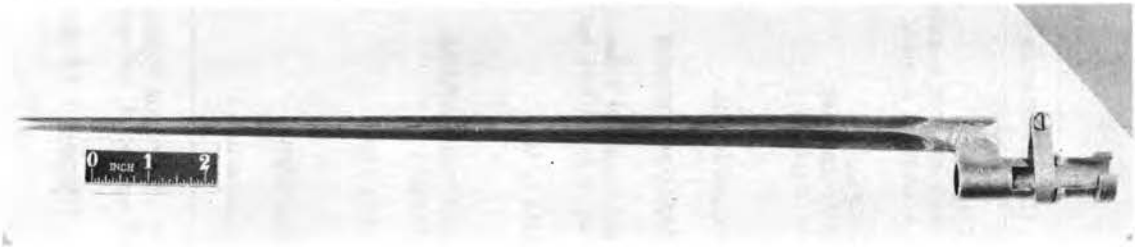


FIGURE 9. BAYONET FOR RIFLE M1891.

d. The two stock bands (fig. 10) are screw expanded (turn to the right to expand and to the left to close). The upper band is at the forward end of the handguard (fig. 11). The lower band is 2 inches forward of the rear sight.

e. The interrupter-ejector is one piece; it is illustrated in figure 12.

f. This rifle has a hexagonal receiver.

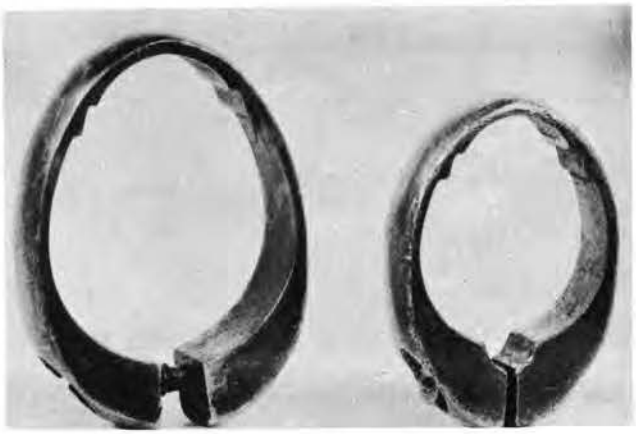


FIGURE 10. STOCK BANDS FOR RIFLE M1891.

FIGURE 11. LOCATION OF UPPER BAND ON RIFLE M1891.

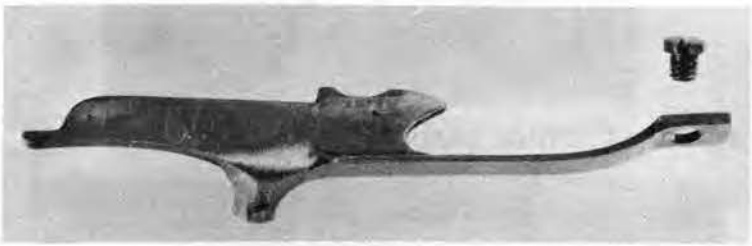


FIGURE 12. INTERRUPTER-EJECTOR FOR RIFLE M1891.

10. DRAGOON RIFLE M1891

a. The Dragoon rifle M1891 is shorter than the rifle M1891.

b. The front and rear sights are the same as those of the rifle M1891 (par. 9a and b).

c. The bayonet is the same as that of the rifle M1891 (par. 9c).

d. The Dragoon rifle M1891 has solid stock bands (fig. 13). The upper band is placed about 3-1/2 inches from the front end of the stock (fig. 14).

e. The interrupter-ejector is the same as that of the rifle M1891 (par. 9e).

f. This rifle has a hexagonal receiver.

11. CARBINE M1910

a. This weapon is a short rifle, or carbine. It is basically a cut-down version of the rifle M1891. The M1910 is 40 inches in length (about 11 inches shorter than the rifle M1891).

b. The carbine M1910 has almost a full stock.

c. The leaf-type rear sight (fig. 15) is graduated from 400 to 2,000 arshins (312 yards to 1,560 yards).

d. The front sight is the unprotected blade type.

e. This weapon does not take a bayonet.

f. The stock bands are solid.

g. The interrupter-ejector is the same as that of the rifle M1891 (par. 9e).

h. This carbine has a hexagonal receiver.

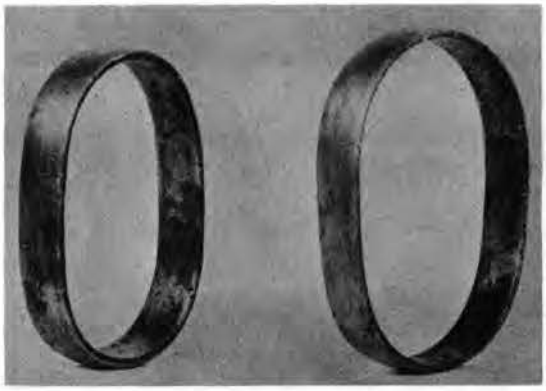


FIGURE 13. STOCK BANDS FOR DRAGOON RIFLE M1891.

FIGURE 14. LOCATION OF UPPER BAND ON DRAGOON RIFLE M1891.

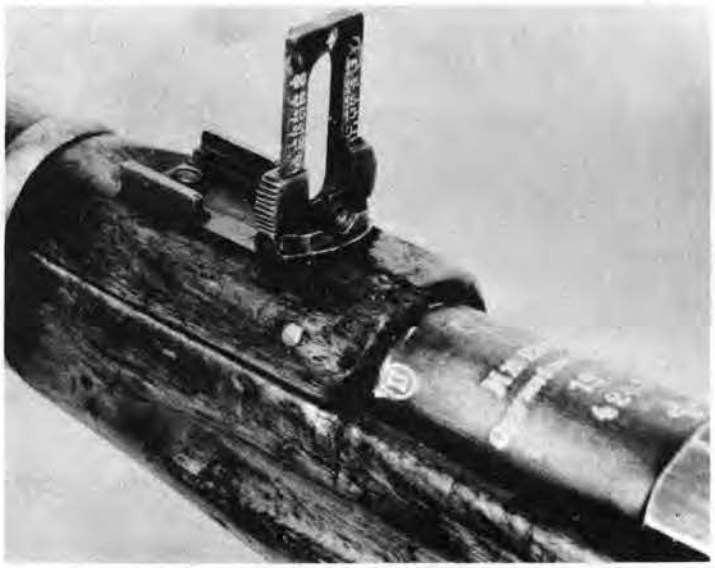


FIGURE 15. REAR SIGHT FOR CARBINE M1910.

12. RIFLE M1891/30

a. The rifle M1891/30 is about the same length as the Dragoon rifle M1891 and 2.8 inches shorter than the rifle M1891.

b. The weapon has a curved-ramp tangent-type rear sight (fig. 16). There is no provision for windage adjustment. The sight is graduated from 1 to 20; that is, for ranges of 100 meters to 2,000 meters (fig. 17). The relationship between meters and yards is given below:

Meters	Yards	Meters	Yards
100	110	1,100	1,200
200	220	1,200	1,300
300	330	1,300	1,420
400	440	1,400	1,530
500	550	1,500	1,670
600	660	1,600	1,750
700	770	1,700	1,860
800	880	1,800	1,970
900	990	1,900	2,080
1,000	1,100	2,000	2,200

c. The rifle M1891/30 has a hooded post-type front sight (fig. 18).

d. The bayonet (fig. 19) is fastened to the rifle by means of a spring-loaded catch, but is otherwise similar to the bayonet of the rifle M1891.

e. The two stock bands are of the split-ring type (fig. 20).

f. The two-piece interrupter-ejector for the rifle M1891/30 is illustrated in figure 21.

g. This rifle has a round receiver.

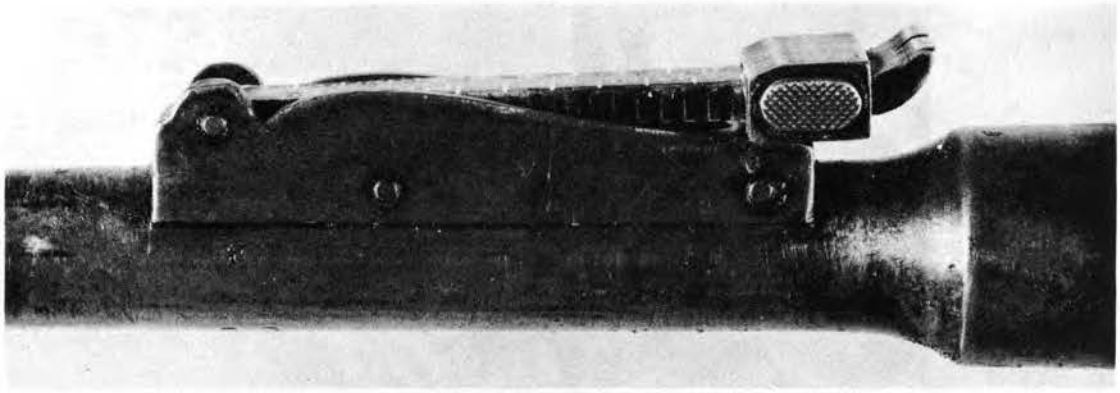


FIGURE 16. REAR SIGHT FOR RIFLE M1891/30 (SIDE VIEW).

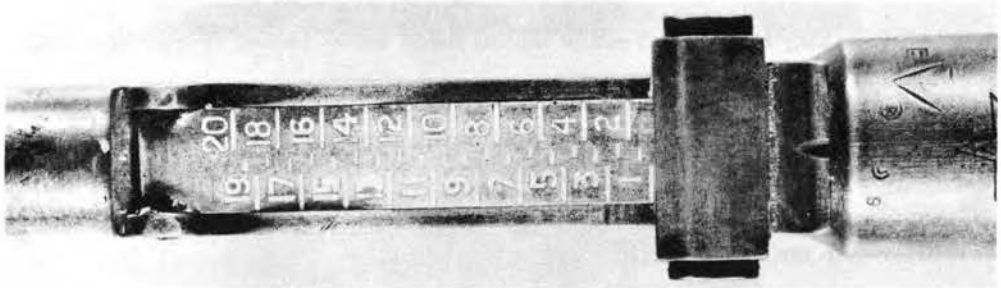


FIGURE 17. REAR SIGHT FOR RIFLE M1891/30 (TOP VIEW).

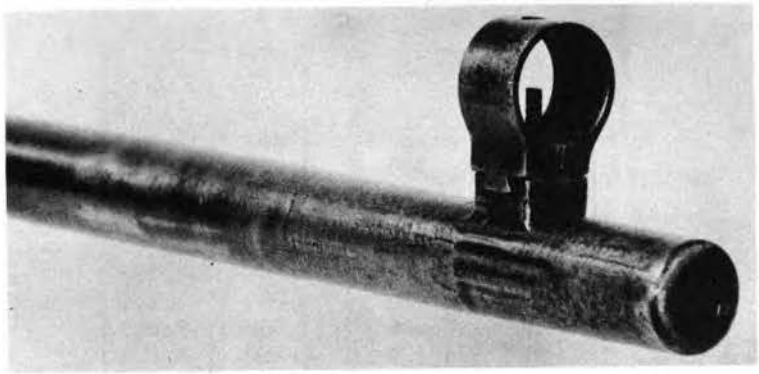


FIGURE 18. FRONT SIGHT FOR RIFLE M1891/30.

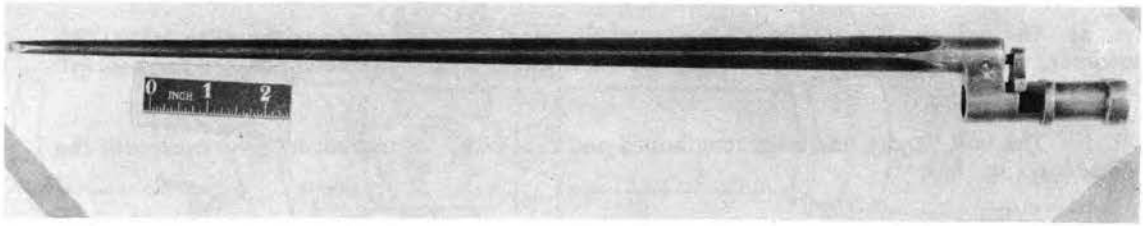


FIGURE 19. BAYONET FOR RIFLE M1891/30.

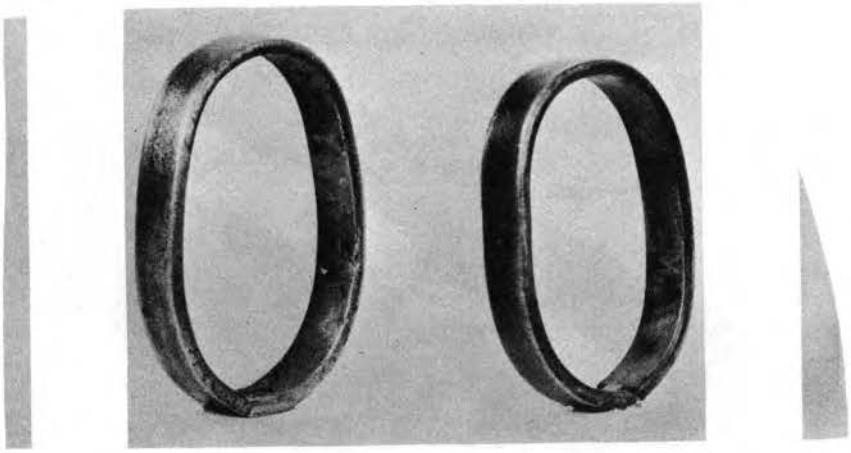


FIGURE 20. STOCK BANDS FOR RIFLE M1891/30.

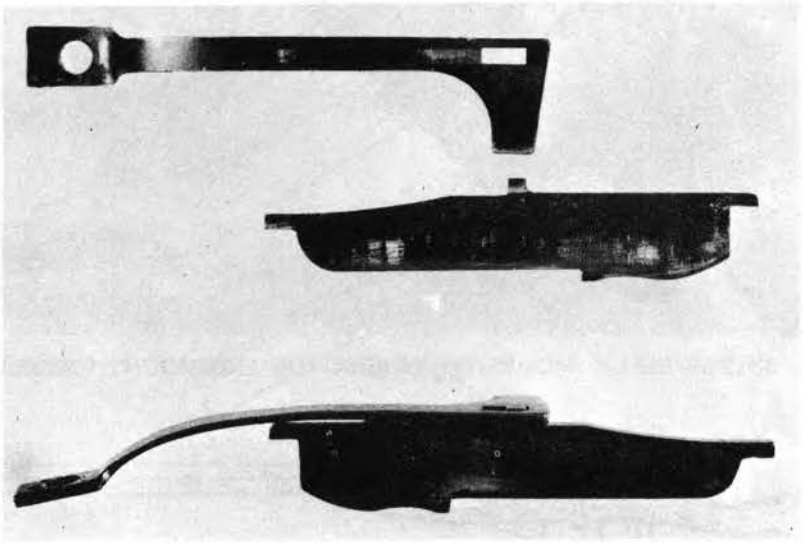


FIGURE 21. TWO-PIECE INTERRUPTER-EJECTOR FOR RIFLE M1891/30.

13. SNIPER RIFLE M1891/30

a. The sniper rifle M1891/30 is almost identical in appearance to the rifle M1891/30; however, it has been selected specially for its accuracy, and has been adapted for use with telescopes.

b. The bolt handle has been lengthened and bent down to prevent interference with the telescope (fig. 22).

c. Additional machining and tapping on the receiver of the sniper rifle M1891/30 permits the installation of three different types of mounts and telescopes. The different types of telescopes and mounts used on the sniper rifles are illustrated in figures 23 through 30.

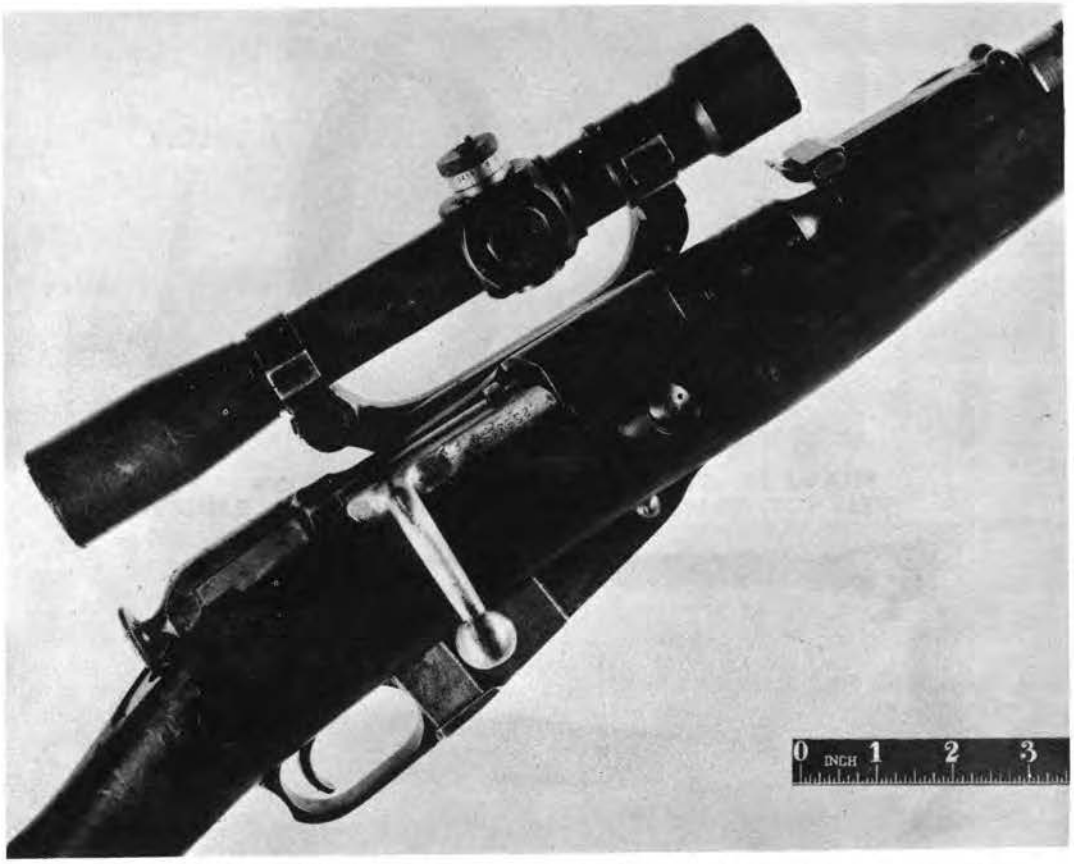


FIGURE 22. SNIPER RIFLE (MODEL OF TELESCOPE AND MOUNT UNKNOWN).

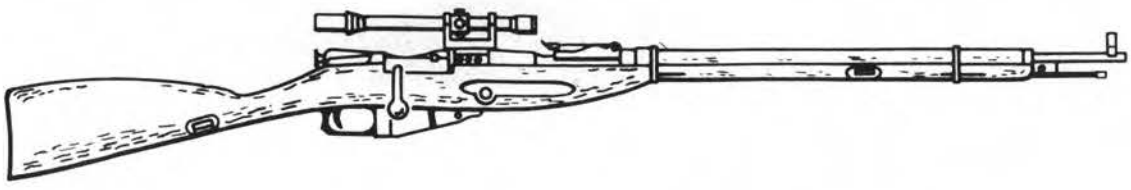


FIGURE 23. SNIPER RIFLE WITH PE TELESCOPE AND MOUNT.

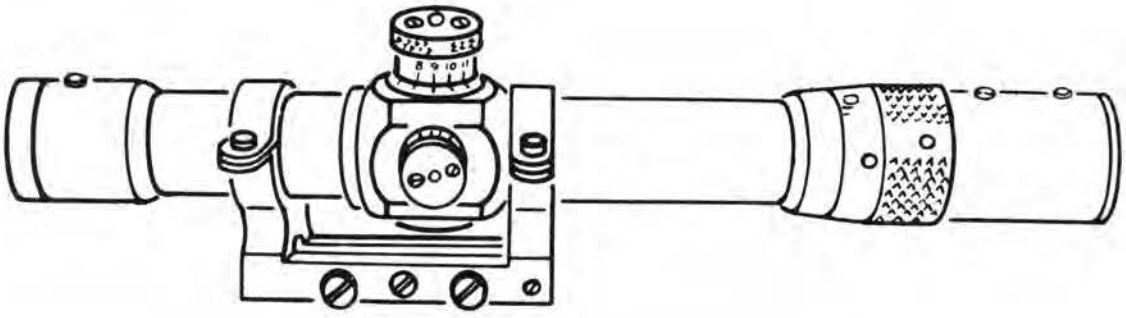


FIGURE 24. MODEL PE TELESCOPE, WITH BODY OF MOUNT.

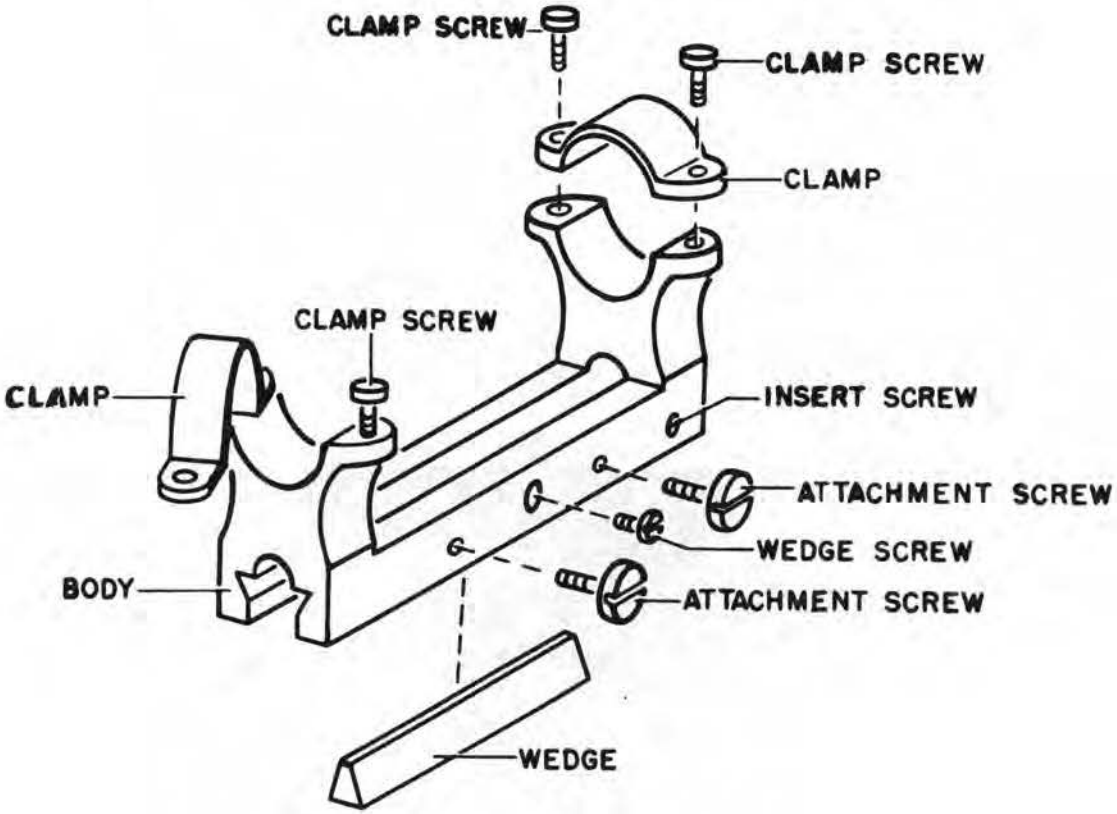


FIGURE 25. BODY OF PE TELESCOPE MOUNT.

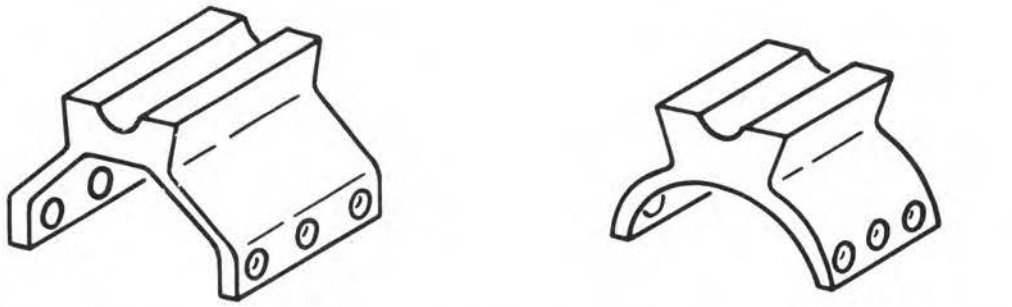


FIGURE 26. BASE OF PE TELESCOPE MOUNT.

FIGURE 27. SNIPER RIFLE WITH PU TELESCOPE AND MOUNT (RIGHT SIDE).

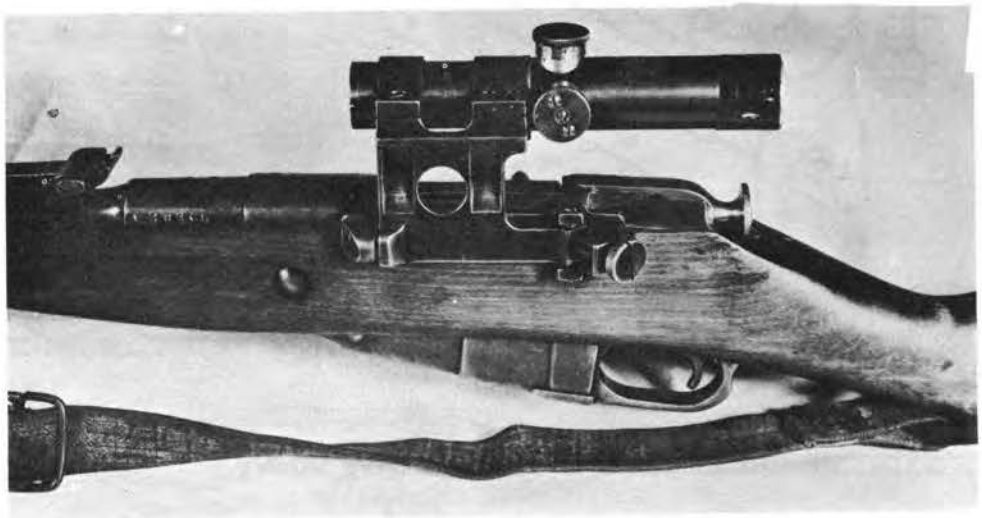


FIGURE 28. SNIPER RIFLE WITH PU TELESCOPE AND MOUNT (LEFT SIDE).

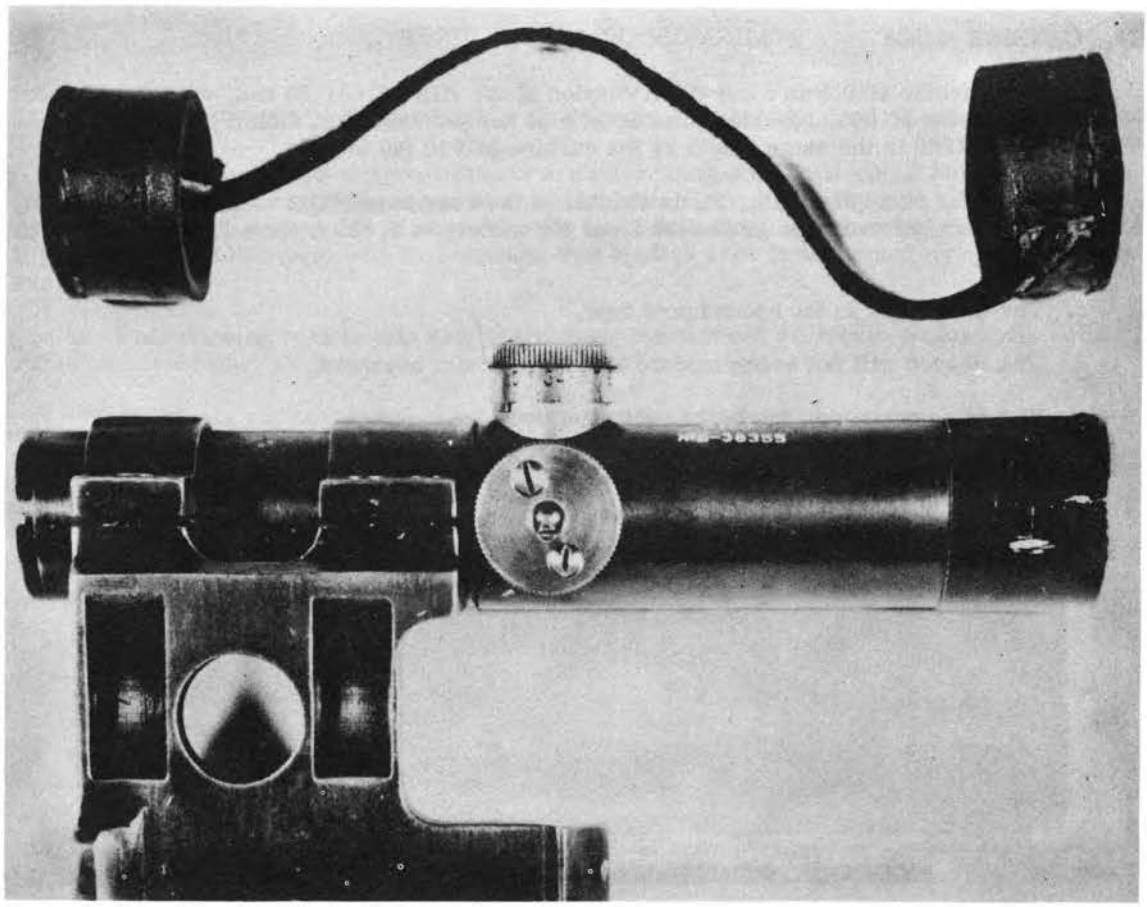


FIGURE 29. PU MOUNT AND TELESCOPE (LEFT SIDE VIEW).

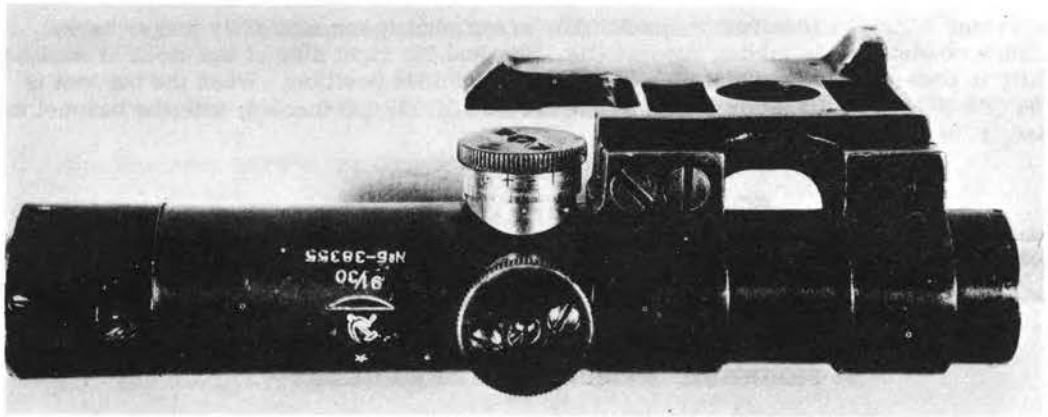


FIGURE 30. PU MOUNT AND TELESCOPE (TOP VIEW).

14. CARBINE M1938

a. The carbine M1938 is a cut-down version of the rifle M1891/30 and, until the introduction of the carbine M1944, replaced it as an arm of troops other than infantry and cavalry. The carbine M1938 is the same length as the carbine M1910 (40 inches).

b. The rear ramp sight (fig. 31) is similar to the rear ramp sight of the rifle M1891/30, except that it is shorter and is graduated from 100 meters to 1,000 meters (110 yards to 1,100 yards).

c. The front sight is the hooded post type.

d. The weapon will not accommodate any of the Soviet bayonets.

e. The two stock bands are of the split-ring type.

f. The two-piece interrupter-ejector is the same as that of the rifle M1891/30.

g. This carbine has a round receiver.

FIGURE 31. REAR RAMP SIGHT FOR CARBINE M1938.

15. CARBINE M1944

The carbine M1944 is identical to the M1938, except that it has a slightly longer barrel, carries a nondetachable folding bayonet (fig. 32), and the right side of the stock is modified slightly in order to accommodate the bayonet in the folded position. When the bayonet is folded, the M1944 is the same length as the carbine M1938 (40 inches); with the bayonet extended, it is 52.25 inches in length.

FIGURE 32. BAYONET FOR CARBINE M1944.

SECTION III. INTERCHANGEABILITY

16. COMPONENTS INTERCHANGEABLE BETWEEN ALL MODELS

a. While many of the component parts are interchangeable between all Mosin-Nagant bolt action rifles and carbines, these weapons function more efficiently with their original components. Each component is stamped with the serial number of the original weapon and, if possible, should be used with that weapon; this applies even to individual weapons of the same models.

b. The following components are interchangeable between all Mosin-Nagant bolt action rifles and carbines:

(1) Bolts and bolt assemblies (except that the bolt body of other models can not be used in the sniper rifle M1891/30).

(2) Trigger assemblies.

(3) Interrupter-ejectors (both one- and two-piece).

(4) Magazines and magazine assemblies.

(5) Front sights.

(6) Butt plates and screws.

(7) Stock bands and retaining springs.

(8) Trigger guard screws.

17. COMPONENTS INTERCHANGEABLE BETWEEN SPECIFIED MODELS

Handguards, stocks, rear sights, and bayonets are interchangeable between certain Mosin-Nagant models, as cited below.

a. Rifle M1891. The following parts of the weapons specified can be used on the rifle M1891.

(1) The stock of the Dragoon rifle M1891, rifle M1891/30, or sniper rifle M1891/30.

(2) The rear sight of the Dragoon rifle M1891.

(3) The bayonet of the Dragoon rifle M1891, rifle M1891/30, or sniper rifle M1891/30.

b. Dragoon rifle M1891. The following parts of the weapons specified can be used on the Dragoon rifle M1891.

(1) The handguard of the rifle M1891/30 or sniper rifle M1891/30.

(2) The stock of the rifle M1891/30 or sniper rifle M1891/30. (The stock of the M1891 also can be used, but will prevent attaching the bayonet.)

(3) The rear sight of the rifle M1891.

(4) The bayonet of the rifle M1891, rifle M1891/30, or sniper rifle M1891/30.

c. Carbine M1910. The stock of the carbine M1938 or M1944 can be used on the M1910.

d. Rifle M1891/30. The following parts of the weapons specified can be used on the M1891/30.

(1) The handguard of the Dragoon M1891 or sniper rifle M1891/30.

(2) The stock of the Dragoon M1891 or sniper rifle M1891/30. (The stock of the rifle M1891 also can be used, but will prevent attaching the bayonet.)

(3) The bayonet of the sniper rifle M1891/30.

e. Sniper rifle M1891/30. The following parts of the weapons specified can be used on the sniper rifle M1891/30.

(1) The stock of the Dragoon rifle M1891 or rifle M1891/30. (The stock of the rifle M1891 also can be used, but will prevent attaching the bayonet.)

NOTE: If the PU telescope mount is to be used, these stocks must be cut away so that the mount may rest flush against the receiver. (Use of the unidentified sight mount shown in figure 22 may likewise necessitate cutting away part of the stock.)

(2) The bayonet of the rifle M1891/30.

f. Carbine M1938. The following parts of the weapons specified can be used on the carbine M1938.

(1) The handguard of the carbine M1944.

(2) The stock of the carbine M1910 or M1944.

(3) The rear sight of the carbine M1944.

g. Carbine M1944. The following parts of the weapons specified can be used on the carbine M1944

(1) The handguard of the carbine M1938.

(2) The rear sight of the carbine M1938.

SECTION IV. AMMUNITION

18. DESCRIPTION

Standard Soviet rifle ammunition (fig. 33) is of 7.62-mm caliber (cal..30), has a rimmed bottlenecked case, and is 3.03 inches in length. Ground machinegun ammunition, which is identical in appearance except for color markings, may be used in rifles and carbines; however, only the light ball M1908 and heavy ball M1930 are recommended for this purpose by the Soviet Army. No color marking is found on the ammunition for the light bullet M1908. The heavy bullet M1930 has a yellow tip.

NOTE: ShKAS aircraft machinegun ammunition should not be used in rifles since it may damage the extractor. ShKAS ammunition can be identified by the Russian symbol III (Sh) stamped on the base; in addition to the stamped symbol, ShKAS rounds sometimes have red shellac coloring on the primer.

FIGURE 33. SOVIET RIFLE AMMUNITION (LIGHT BALL ON LEFT, HEAVY BALL ON RIGHT).

19. PACKAGING

Ammunition for rifles is usually packed in five-round clips (fig. 34), three clips to a cardboard package, twenty packages to a hermetically sealed zinc-coated metal container (a total of 300 cartridges), and two metal containers to a wooden box (a total of 600 cartridges). The wooden boxes are marked as illustrated in figure 35. Rifle ammunition also may be packed in twenty-round packages tied with a string or tape; twenty-two such packages are hermetically sealed in a metal container (a total of 440 cartridges), and two metal containers are then packed in a wooden box (a total of 880 cartridges). Machinegun ammunition is packed in this same manner. There are no color markings on the packaging of the light bullet M1908; however, the heavy bullet M1930 has a yellow stripe on both the inner metal and the outer wooden packing boxes.

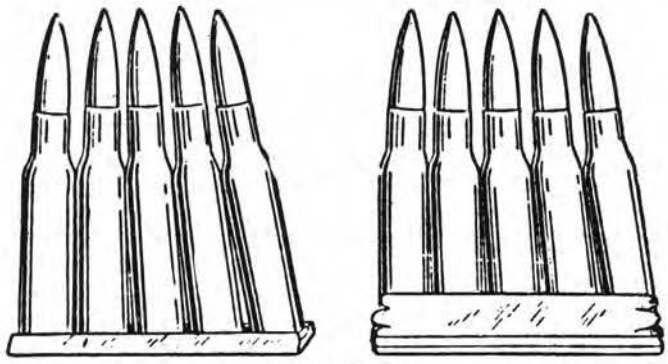


FIGURE 34. SOVIET FIVE-ROUND CARTRIDGE CLIPS.

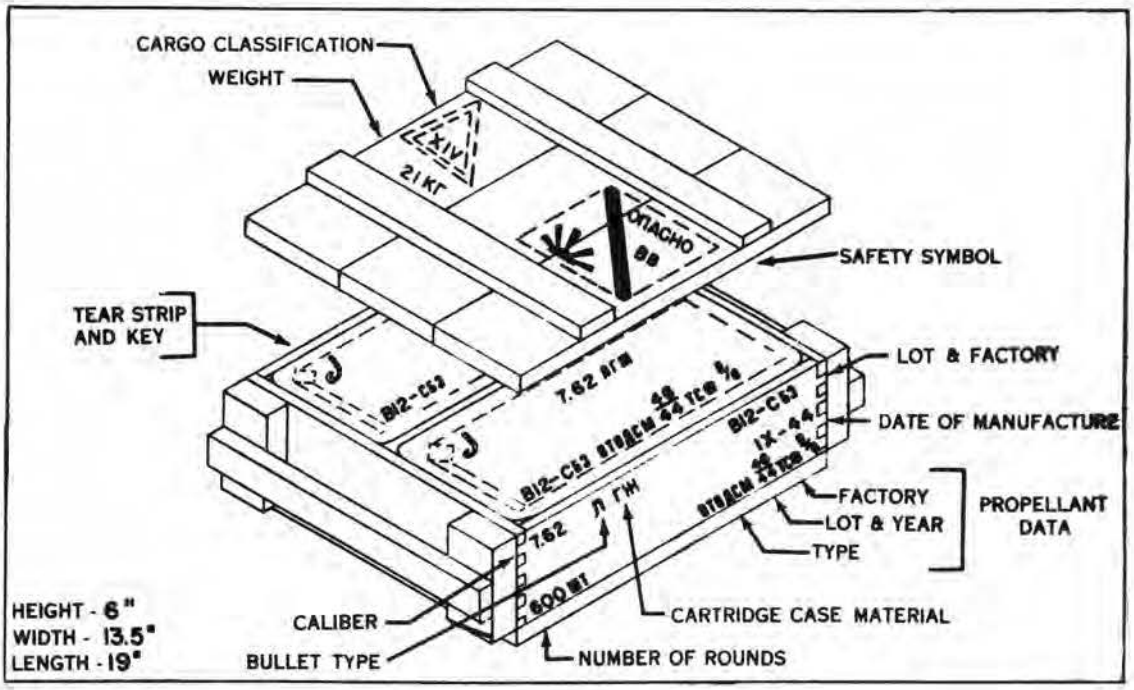


FIGURE 35. SOVIET AMMUNITION BOX.

SECTION V. SIGHTING EQUIPMENT

20. RIFLE M1891

The front sight is of the unprotected blade type and is dovetailed into the sight base, which is soldered to the barrel. The notched-ramp leaf-type rear sight (fig. 8) is graduated from 400 to 3,200 arshins (312 to 2,496 yards), but has no provisions for windage adjustment.

21. DRAGOON RIFLE M1891

The sighting equipment of this rifle is identical to that of the rifle M1891.

22. CARBINE M1910

The front sight is of the unprotected blade type and is identical to that of the rifle M1891. The leaf-type rear sight is graduated from 400 to 2,000 arshins (312 to 1,560 yards).

23. RIFLE M1891/30

The front sight (fig. 18) is a hooded post type and is dovetailed into the sight base, which is welded to the barrel. The curved-ramp tangent-type rear sight (fig. 17) is graduated from 100 to 2,000 meters (110 to 2,200 yards). There is no provision for windage adjustment.

24. SNIPER RIFLE M1891/30

a. The front and rear iron sights of this rifle are not removed when the telescope is attached, and are identical to those used on the rifle M1891/30. These sights may be used for ranges up to 700 meters (770 yards) without removing the telescope, when the rifle is equipped with the unidentified scope and mount shown in figure 22. The iron sights may be used up to 600 meters (660 yards) when the PE scope (fig. 23) is mounted, and up to 2,000 meters (2,200 yards) with the PU scope (fig. 27).

b. Basic characteristics of the PE and PU telescopes are given below:

Characteristics	PE scope	PU scope
Power	4^x	3.5^x
Field of view	5^o 30'	4^o 30'
Diameter of exit pupil	0.273 in.	0.234 in.
Eye relief*	3.24 in.	2.80 in.
Length	10.68 in.	6.59 in.
Weight	1.3 lb.	0.59 lb.

*Eye relief is the distance from the eyelens to the focal point.

c. External features of the PE and PU optical sights are given below:

(1) A thumbscrew with sight graduations at 100-meter intervals is located on top of both telescopes. This thumbscrew is used for setting angles of elevation.

(a) In the PE system, the scale of graduations is from 1 to 14; therefore, the PE scope may be sighted from 100 to 1,400 meters (110 to 1,540 yards).

(b) In the PU system the scale of graduations is from 1 to 13; therefore, the PU scope may be sighted from 100 to 1,300 meters (110 to 1,420 yards).

(2) A thumbscrew for lateral corrections (windage, drift, and in the case of a moving target, lead) is located on the left side of these telescopes. It has 10 graduations in either direction, beginning with zero; the plus markings are used for corrections to the right and the minus markings for corrections to the left. Each graduation is equal to one mil and only the 5th and 10th graduations are numbered.

(3) On the tube of the PE sight there is a knurled collar with a diopter scale, to make adjustments for defects of vision. The plus markings on the scale are used to make adjustments for farsightedness, and the minus markings for nearsightedness. With the PU optical sight, such corrections are made by moving the eye nearer to or farther away from the eyepiece, until the optimum acuity of vision is achieved.

25. CARBINE M1938

The hooded post-type front sight of the carbine M1938 is very similar to the front sight of the rifle M1891/30, but is mounted on a barrel band. The curved-ramp tangent-type rear sight is also very similar in construction to that of the M1891/30; however, it is graduated from 100 to 1,000 meters (110 to 1,100 yards) (fig. 31).

26. CARBINE M1944

The front and rear sights of the carbine M1944 are identical to those of the carbine M1938.

SECTION VI. OPERATING INSTRUCTIONS

27. RIFLE M1891

a. To set the safety, draw back the cocking piece and turn it to the left. This prevents the bolt from opening. To put off safe, pull the cocking piece back, turn it to the right, and allow it to move forward.

b. The rifle M1891 is loaded in the same manner as the United States Springfield or any Mauser rifle. Open the bolt, place a clip of cartridges in the clip guides, and press the rounds down into the magazine (fig. 36). Close the bolt; the clip will then fall out of the clip guides onto the ground. The position of the rifle parts before and after loading is illustrated in figures 37 and 38. Before squeezing the trigger, observe all the safety precautions used when firing United States rifles.

c. To unload the rifle M1891, open the magazine floor plate and remove the cartridges. The magazine floor plate catch is located on the lower rear part of the magazine, forward of the trigger guard. Press the catch rearward; the follower and floor plate (fig. 39) will swing down and forward on a pivot pin, and the cartridges will spill out. Open the bolt and extract the round from the chamber.

d. The M1891 bayonet (fig. 9) is attached by a locking ring; if the M1891/30 bayonet (fig. 19) is used, a spring-loaded catch holds the bayonet in place.

FIGURE 36. CLIP-LOADING THE RIFLE.

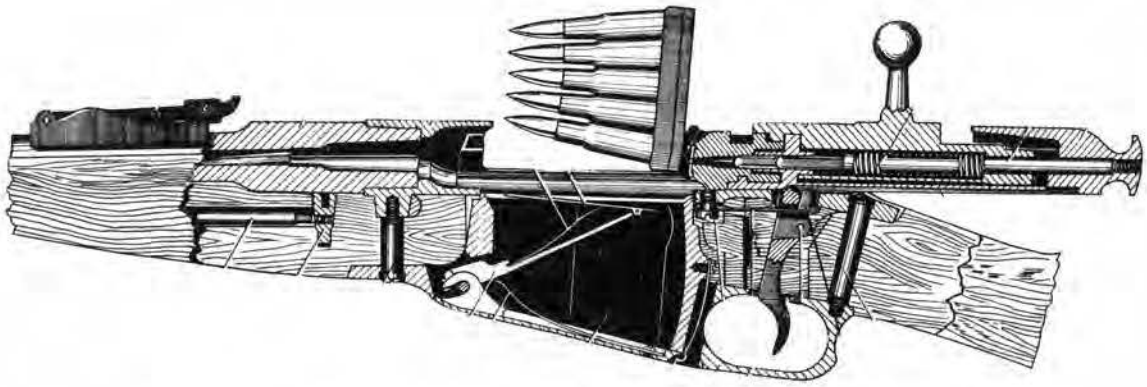


FIGURE 37. POSITION OF PARTS PRIOR TO LOADING THE RIFLE.

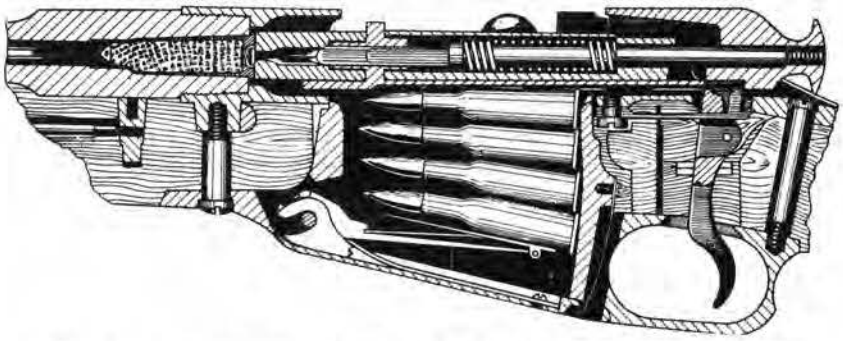


FIGURE 38. POSITION OF PARTS AFTER RIFLE IS LOADED.

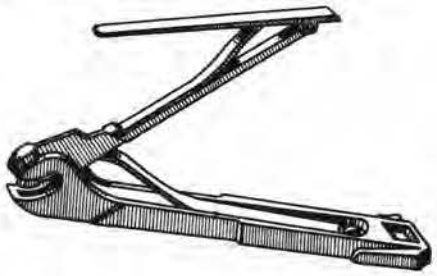


FIGURE 39. FOLLOWER AND FLOOR PLATE.

28. DRAGOON RIFLE M1891

a. Operating instructions for the Dragoon M1891 are the same as for the rifle M1891.

b. The bayonet of the rifle M1891 or M1891/30 is attached to the Dragoon M1891 in the same manner as described for the rifle M1891.

29. CARBINE M1910

Operating instructions for the carbine M1910 are the same as those for the rifle M1891; however, bayonets are not provided for this carbine.

30. RIFLE M1891/30

a. Operating instructions for the rifle M1891/30 are the same as those for the rifle M1891.

b. The bayonet is attached by means of a spring-loaded catch.

31. SNIPER RIFLE M1891/30

a. Operating instructions for this rifle are the same as those for the rifle M1891. The bayonet for the rifle M1891/30 is attached to the sniper rifle by means of a spring-loaded catch.

b. Instructions for operating the rifle telescopes are given in paragraph 24.

32. CARBINE M1938

Operating instructions for this carbine are the same as those for the rifle M1891; however, bayonets are not provided for this carbine.

33. CARBINE M1944

Operating instructions for this carbine are the same as those for the rifle M1891; however, this carbine has a nondetachable bayonet which may be folded or extended by forcing the spring-loaded bayonet tube away from the pivot pin and then swinging the bayonet to either marching or combat position.

SECTION VII. MAINTENANCE

34. ACCESSORIES

Each Mosin-Nagant bolt action rifle and carbine is provided with a one-piece cleaning rod (fig. 40) which is fitted in the stock. The rod is threaded on the end to take the tapped retaining nut embedded in the stock just below the chamber (fig. 37). An accessory pouch (fig. 41) is carried by each rifleman. It contains a screwdriver, oil can, cleaning rod head, cleaning rod brush, cleaning rod attachment, rod collar, and cleaning rod stop (fig. 42). There are variations in the design of the oil can and screwdriver (fig. 43).

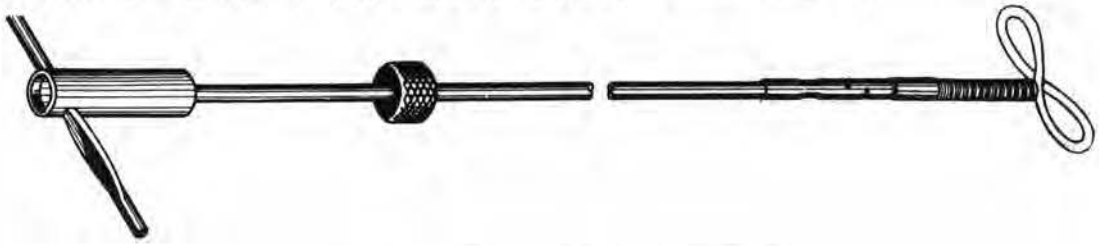


FIGURE 40. CLEANING ROD ASSEMBLY.

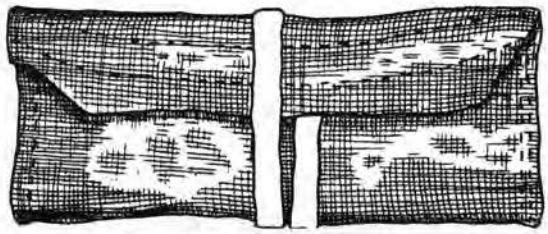


FIGURE 41. ACCESSORY POUCH.

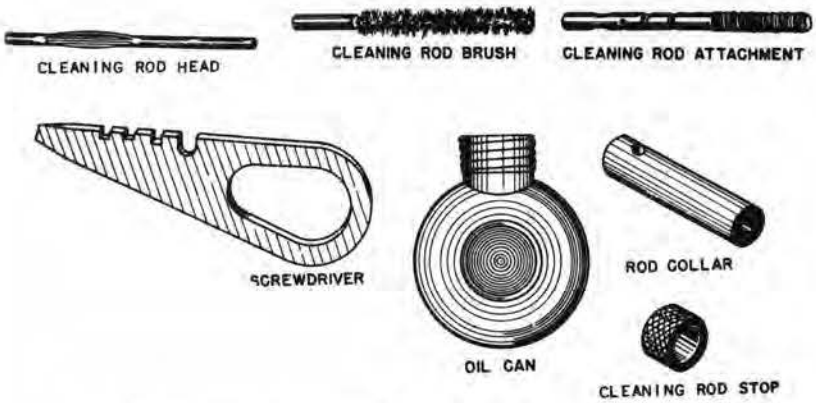


FIGURE 42. ACCESSORY POUCH CONTENTS.

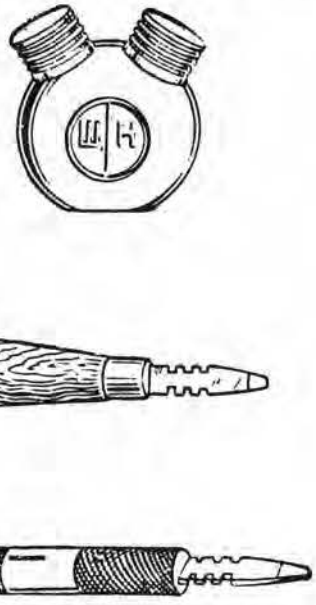


FIGURE 43. VARIATION IN DESIGN OF ACCESSORIES.

35. CARE AND CLEANING

The care and cleaning of the Soviet Mosin-Nagant bolt action weapons are the same as that required for the United States service rifle M1903.

36. RIFLE M1891

a. Disassembly.

(1) To remove the bolt (fig. 44), squeeze the trigger and, at the same time, pull the bolt all the way to the rear (fig. 45).

(2) To disassembly the bolt, draw the cocking piece back and turn it to the left to relieve spring tension (fig. 46). Remove the bolt head and guide. Place the firing pin on a solid surface, push the bolt body down, and unscrew the cocking piece (fig. 47); then remove the firing pin and spring. The components of the bolt assembly are illustrated in figure 48.

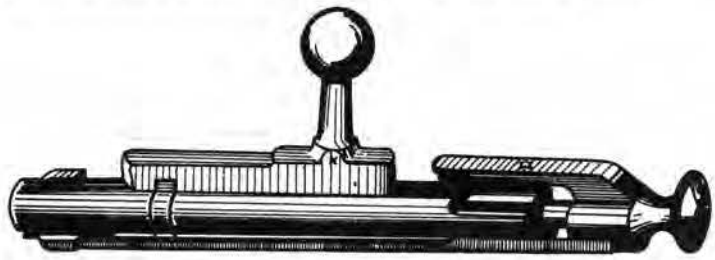
(3) To remove the magazine follower, push the magazine floor plate catch rearward (the catch is on the bottom of the magazine, just forward of the trigger guard); at the same time, pull the floor plate down. The follower and floor plate (fig. 39) will swing down and forward on a pivot pin. Grasp the follower and floor plate with the forefinger and thumb, press them together, and pull down to remove them.

(4) To remove the magazine and trigger guard, extract the rear trigger guard screw from the top of the stock just forward of the small of the stock, and the front trigger guard screw from the forward part of the magazine on the bottom of the stock (figs. 49 and 50). (A screwdriver provided in the accessory kit is used for this purpose.) Pull the magazine and trigger guard (fig. 51) out of the stock.

(5) The stock bands are removed by turning the screw to the right to expand the bands, then slipping the bands forward and off the stock.

(6) To remove the one-piece interrupter-ejector, remove the screw and push the interrupter-ejector forward until it is disengaged from the dovetail.

b. Assembly. Assembly is accomplished in the reverse order of disassembly, described in a above. It is necessary to make certain that the rear of the firing pin is flush with the cocking piece, and that the marks on the rear of the firing pin are alined with those on the cocking piece, in order to assure correct protrusion of the firing pin.



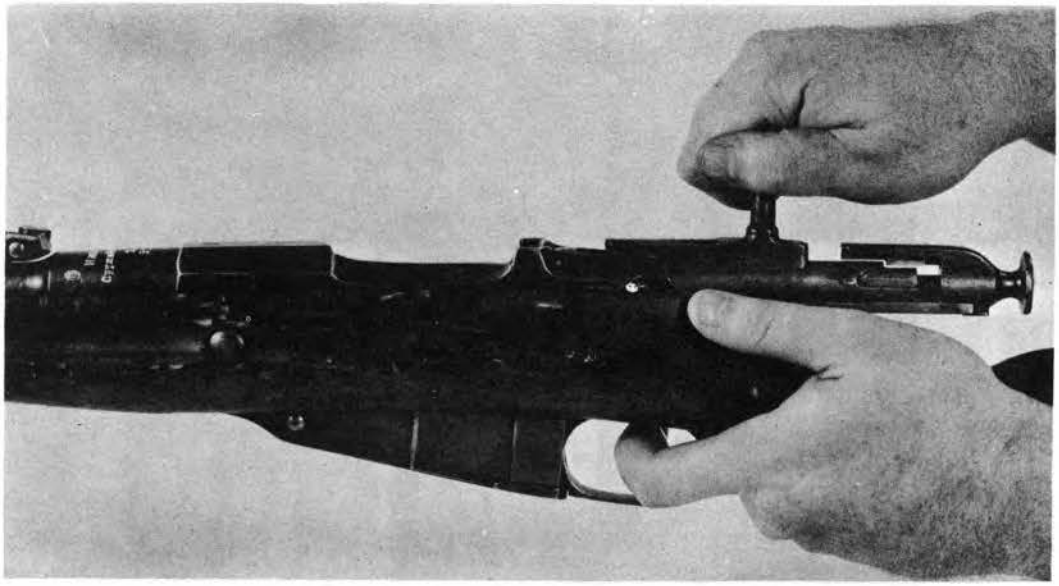


FIGURE 45. REMOVING THE BOLT.

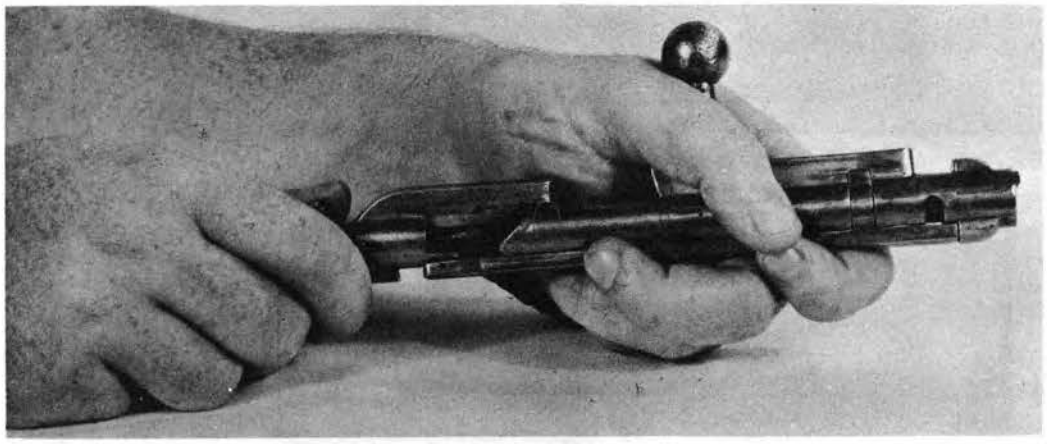


FIGURE 46. DRAWING COCKING PIECE BACK.

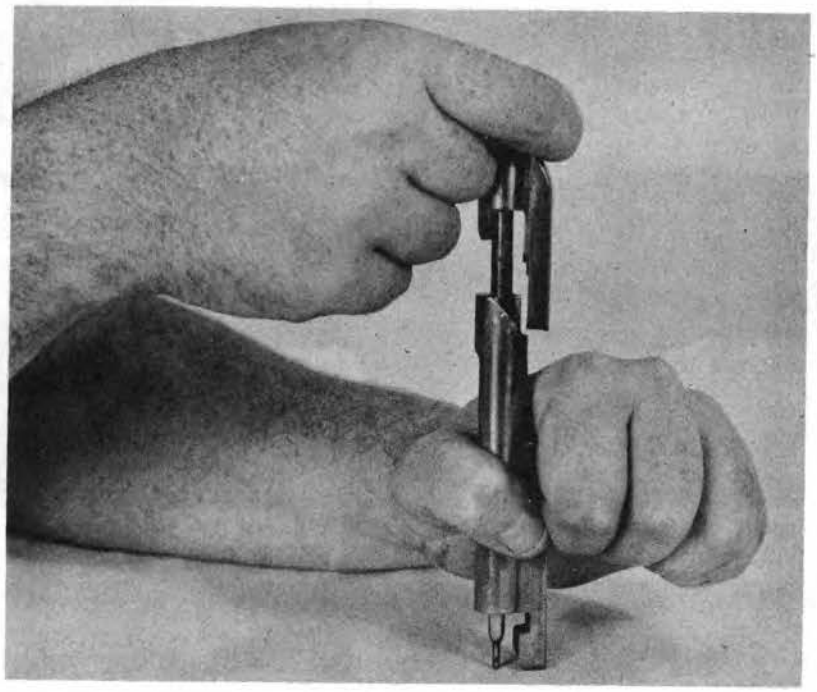


FIGURE 47. REMOVING COCKING PIECE.

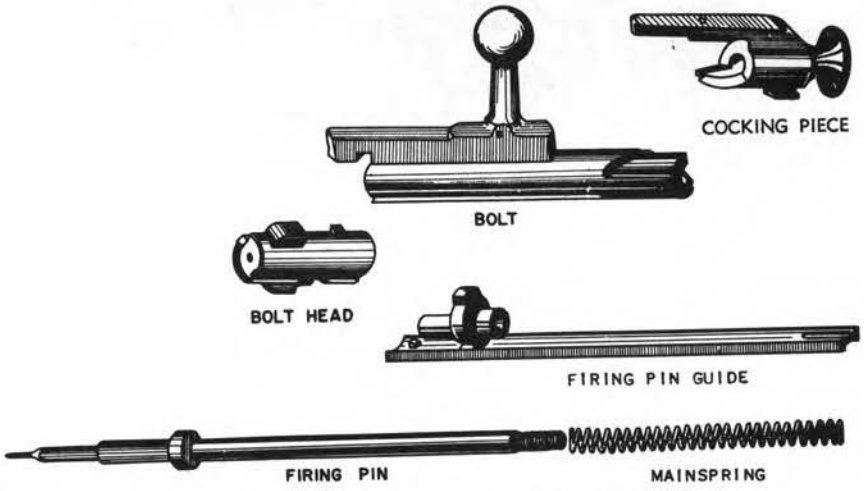


FIGURE 48. BOLT ASSEMBLY COMPONENTS.

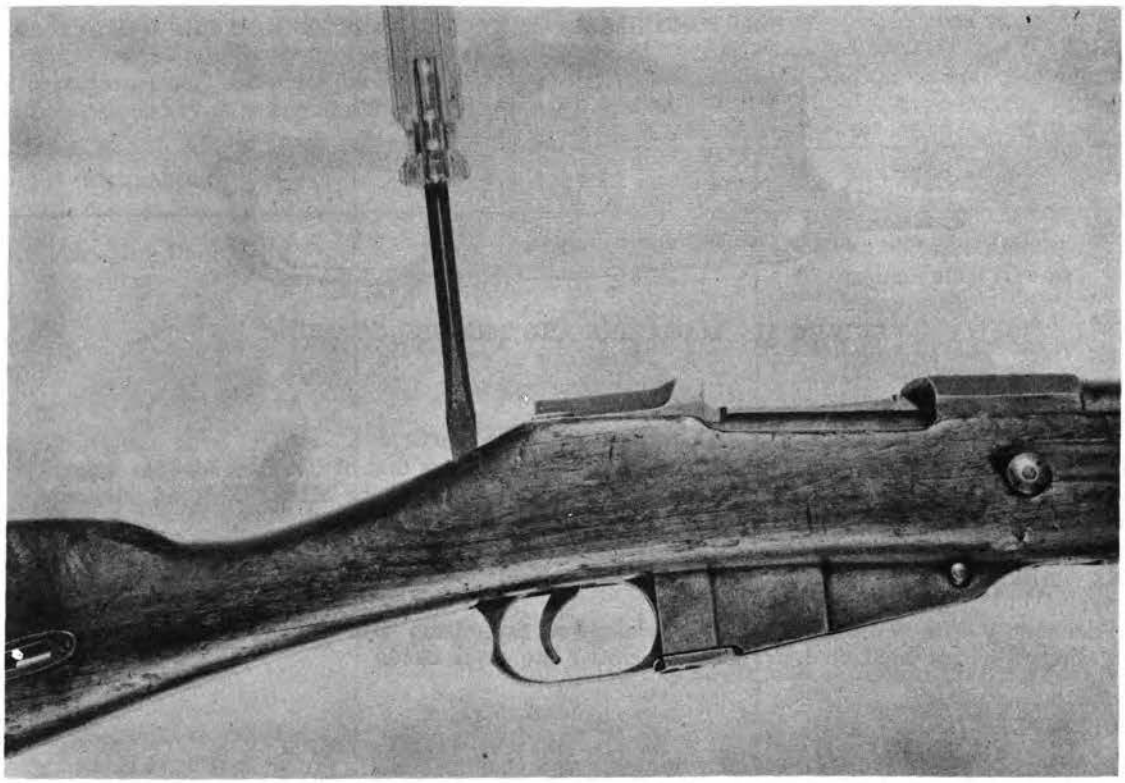


FIGURE 49. REMOVING REAR TRIGGER GUARD SCREW.

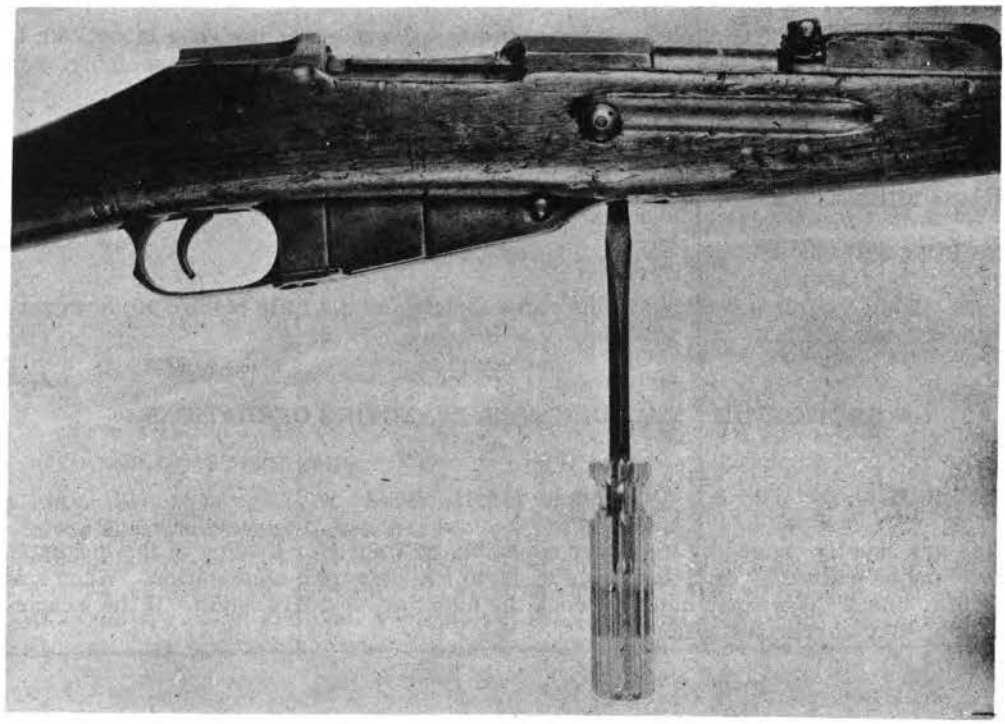


FIGURE 50. REMOVING THE FRONT TRIGGER GUARD SCREW.

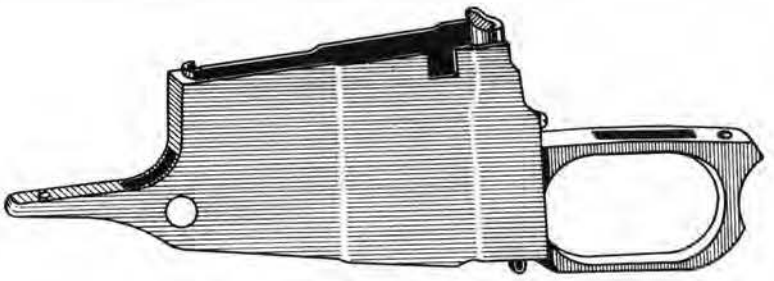


FIGURE 51. MAGAZINE AND TRIGGER GUARD.

37. DRAGOON RIFLE M1891

The disassembly of the Dragoon rifle M1891 is the same as that of the rifle M1891, except with regard to the stock bands. To remove the stock bands of the M1891 Dragoon, depress the band retaining springs and slide the bands forward.

38. CARBINE M1910

Disassembly of the carbine M1910 is the same as that of the rifle M1891, except that band retaining springs must be depressed to remove the stock bands.

39. RIFLE M1891/30

Disassembly of the rifle M1891/30 is the same as that of the M1891, except that band retaining springs must be depressed to remove the split-ring stock bands.

40. SNIPER RIFLE M1891/30

The sniper rifle M1891/30 is disassembled in the same manner as the rifle M1891/30; however, the telescope must be sent to a fire control maintenance unit for disassembly, repairs, or adjustment.

41. CARBINE M1938

The carbine M1938 is disassembled in the same manner as the rifle M1891/30.

42. CARBINE M1944

The carbine M1944 is disassembled in the same manner as the rifle M1891/30; however, the bayonet is not detachable.

SECTION VIII. MALFUNCTIONS AFFECTING OPERATIONS

43. GENERAL

Stoppages are usually caused by improper assembly or improper loading of the magazine, but they also may be caused by dirt, breakage of parts, or defective ammunition. When a stoppage occurs, check the weapon quickly, cock the hammer, and fire again. If the weapon still fails to fire, take corrective action.

44. CAUSES AND CORRECTION OF COMMON MALFUNCTIONS

The malfunctions occurring most frequently, their probable cause, and the proper remedial action necessary to overcome the stoppage are listed below.

Malfunction	Probable cause	Remedial action
1. Magazine floor plate falls open.	a. Defective floor plate catch.	a. Load and fire single rounds until fire is completed.
	b. Screw is weakened, tooth worn or chamfered.	b. Tighten screw.
2. Cartridge jams in process of being chambered.	a. Defective interrupter-ejector.	a. Clean and oil interrupter-ejector blade.
	b. Cartridge not positioned below interrupter-ejector blade.	b. Correct position of cartridge by hand and chamber round.
3. Cartridge is chambered with difficulty.	a. Dented cartridge case.	a. Remove defective cartridge.
	b. Dirty chamber.	b. Clean chamber.
	c. Excessive primer protrusion.	c. Remove defective cartridge.
4. Misfire.	a. Defective primer.	a. Reload and continue firing.
	b. Firing pin protrusion insufficient.	b. Adjust firing pin protrusion.
	c. Firing pin spring weak or broken.	c. Turn in weapon to Ordnance.
	d. Dirt in firing mechanism.	d. Clean mechanism.
5. Fails to extract.	Defective extractor.	Turn in weapon to Ordnance.
6. Fails to eject.	a. Interrupter-ejector spring-portion is bent.	a. Turn in weapon to Ordnance.
	b. Dirt in interrupter-ejector slot.	b. Clean and oil.
7. Bolt is pulled out of receiver during process of opening bolt.	a. Loose trigger-spring screw.	a. Tighten trigger-spring screw.
	b. Worn bolt stop.	b. Turn in weapon to Ordnance.

CHAPTER 3

AUTOMATIC AND SEMIAUTOMATIC RIFLES AND CARBINES

SECTION I. GENERAL

45. SIMONOV RIFLE

The Simonov automatic rifle M1936 (AVS)[1] (fig. 52) was the first automatic and semiautomatic rifle produced by the U. S. S. R. in 7. 62-mm caliber. Imperial Russia had previously produced the Federov automatic rifle M1916, in 6. 5-mm caliber, but the weapon did not prove successful and very few were manufactured. The Simonov rifle M1936 evidently did not meet requirements either, for it is no longer used in the Soviet Army and has not been encountered in the field.

FIGURE 52. 7. 62-MM AUTOMATIC RIFLE M1936 (AVS).

46. TOKAREV RIFLES AND CARBINES

a. The Tokarev 7. 62-mm semiautomatic rifle M1938 (SVT)[2] (fig. 53), was the first of a series of Tokarev rifles. This model has a two-piece stock and is very lightly built. It is believed obsolete in Soviet and satellite forces.

FIGURE 53. 7. 62-MM SEMIAUTOMATIC RIFLE M1938 (SVT).

[1]AVS: Avtomaticheskaya Vintovka Simonova — Automatic Rifle Simonov.

[2]SVT: Samozaryadnaya Vintovka Tokarev — Semiautomatic Rifle Tokarev.

b. The Tokarev 7.62-mm semiautomatic rifle M1940 (SVT) (fig. 54), as well as the 7.62-mm automatic and semiautomatic rifle M1940 (AVT)[3] (fig. 55), while considerably sturdier than the M1938, still proved rather flimsy for military use. Considerable difficulty was experienced in repair and maintenance of these weapons during World War II, and it is believed that they are no longer standard weapons.

FIGURE 54. 7.62-MM SEMIAUTOMATIC RIFLE M1940 (SVT).

FIGURE 55. 7.62-MM AUTOMATIC RIFLE M1940 (AVT).

c. The Tokarev semiautomatic sniper rifles M1938 (fig. 56) and M1940 (fig. 57), because of their flimsy construction and the difficulties experienced in their repair and maintenance, are no longer standard weapons. These sniper rifles are merely Tokarev semiautomatic rifles M1938 (SVT) and M1940 (SVT) which have been specially selected for accuracy and adapted for mounting telescopic sights.

FIGURE 56. 7.62-MM SEMIAUTOMATIC SNIPER RIFLE M1938.

[3]AVT: Avtomaticheskaya Vintovka Tokarev — Automatic Rifle Tokarev.

FIGURE 57. 7.62-MM SEMIAUTOMATIC SNIPER RIFLE M1940.

d. The Tokarev 7.62-mm semiautomatic carbine M1940 was made only in small numbers. Its weaknesses, with regard to durability, repair, and maintenance, were the same as those of the Tokarev rifles. This carbine is not a standard weapon, and is unlikely to be found in the field.

47. BASIC CHARACTERISTICS OF AUTOMATIC AND SEMIAUTOMATIC RIFLES

Basic characteristics of Soviet 7.62-mm automatic and semiautomatic rifles are presented in table II.

SECTION II. DIFFERENCES BETWEEN MODELS

48. AUTOMATIC RIFLE M1936 (AVS)

a. The automatic rifle M1936 (fig. 52), which has been superseded by the Tokarev series, is capable of either semi- or full-automatic fire. It is difficult to field strip and is subject to malfunction.

b. The gas port, cylinder, and operating rod are mounted above the barrel and are protected by a handguard.

c. A gas regulator, with five different apertures, is incorporated in the gas port assembly and may be adjusted by means of a small wrench, without disassembling the rifle.

d. This rifle is fitted with a large three-baffle muzzle brake.

e. The detachable, slightly curved magazine has a capacity of fifteen rounds.

f. The stock is of one-piece design.

g. The handguard is clamped to the barrel and stock by a perforated sheet-metal guard.

h. The blade-type front sight, with open guard, may be adjusted for windage by tapping on the outside of the guard.

i. The safety is located inside the trigger guard, just to the rear of the trigger.

j. The tangent rear sight, as found on the rifle M1891/30, has no provision for windage adjustment.

k. The cleaning rod is secured on the right side of the weapon, between the stock and the handguard, by means of three retainers.

Table II. Characteristics of 7.62-mm Automatic and Semiautomatic Rifles

Characteristics	Automatic rifle M1936	Semiautomatic rifle M1938	Semiautomatic rifle M1940	Automatic rifle M1940	Semiautomatic sniper rifle M1938	Semiautomatic sniper rifle M1940
Weight, w/o bayonet & magazine	8.93 lb.	8.70 lb.	8.59 lb.	8.35 lb.	9.52 lb.	9.18 lb.
w/bayonet & magazine	....	10.8 lb.	9.48 lb.	9.24 lb.	....	....
Length, w/o bayonet	48.6 in.	48.1 in.	48.1 in.	48.1 in.	48.1 in.	48.1 in.
w/bayonet	59.3 in.	60.84 in.	57.1 in.	57.1 in.	60.84 in.	57.1 in.
Barrel length	24.16 in.	25 in.	24.6 in.	24.6 in.	25 in.	24.6 in.
Magazine capacity	15 rounds	10 rounds	10 rounds	10 rounds	10 rounds	10 rounds
Instrumental velocity at 78 ft. w/hvy ball	2,519 f.p.s.	2,519 f.p.s.	2,519 f.p.s.	2,519 f.p.s.	2,519 f.p.s.	2,519 f.p.s.
Rate of fire (semiautomatic)	30 - 40 rds./min.	25 rds./min.	25 rds./min.	30 - 40 rds./min.	25 rds./min.	25 rds./min.
Maximum sighting range	1,500 meters	1,500 meters	1,500 meters	1,500 meters	Iron sights: 600 m. (660 yd.). Telescope: 1,300 m.(1,430 yd.).	Iron sights: 600 m. (660 yd.). Telescope: 1,300 m.(1,430 yd.).
Front sight	Open guard blade	Hooded post	Hooded post	Hooded post	Hooded post	Hooded post
Rear sight	Tangent	Tangent	Tangent	Tangent	Tangent and telescope	Tangent and telescope
Principle of operation	Gas	Gas	Gas	Gas	Gas	Gas
Ammunition	*	*	*	*	*	*

*7.62-mm U.S.S.R., standard rifle and ground machinegun ammunition.

l. This rifle is fitted with a knife-type bayonet.

49. SEMIAUTOMATIC RIFLE M1938 (SVT)

a. The semiautomatic rifle M1938 (fig. 53) uses the same type of gas port, gas regulator, and operating rod mounted above the barrel as the automatic rifle M1938.

b. This rifle is capable of semiautomatic fire only.

c. It has a two-piece stock (fig. 58) and two stock bands.

FIGURE 58. TWO-PIECE STOCK OF THE SEMIAUTOMATIC RIFLE M1938.

d. The slightly curved ten-round magazine is slightly shorter than the magazine for the automatic rifle M1936.

e. The six-baffle muzzle brake is permanently attached.

f. The front sight is the protected post type.

g. The rear sight is the tangent type, the same as found on the rifles M1891/30 and M1936, and has no provision for windage adjustment.

h. The knife-type bayonet is generally similar to that of the United States cal. .30 rifle M1 except that the bayonet catch is mounted on the rear of the bayonet grip.

i. A groove is cut out on the right side of the two-piece stock for the cleaning rod. The two stock bands serve as cleaning rod retainers.

j. This rifle has a one-piece magazine release.

k. The safety is in the trigger guard, at the rear of the trigger.

50. SEMIAUTOMATIC RIFLE M1940 (SVT)

a. The mechanism of the semiautomatic rifle M1940 (fig. 54) is identical to that of the M1938.

b. It has a perforated sheet-metal guard forward of the stock and handguard.

c. The one-piece cleaning rod is fitted into the stock under the barrel, and is held in place by a spring catch on the bayonet lug.

d. The stock is of one-piece design.

e. The magazine release is the two-piece type.

f. The front sling swivel is on the left side of the rifle and is integral with the front band.

g. The bayonet is shorter than the M1938 bayonet.

h. The two- or three-baffle muzzle brake is permanently attached (fig. 59).

FIGURE 59. SOVIET TWO-BAFFLE MUZZLE BRAKE.

51. AUTOMATIC RIFLE M1940 (AVT)

The automatic rifle M1940 (fig. 55) is identical in appearance to the semiautomatic rifle M1940. A notch has been cut into the right side of the stock, at the trigger guard opening, in a position that will permit the safety lever to swing to the right for automatic fire.

52. SEMIAUTOMATIC SNIPER RIFLE M1938

This model (fig. 56) is the same as the semiautomatic rifle M1938 except that the barrel has been more carefully machined, and the receiver has been drilled and tapped to attach the telescope.

53. SEMIAUTOMATIC SNIPER RIFLE M1940

This model (fig. 57) is the same as the semiautomatic rifle M1940 except that the barrel has been more carefully machined, and the receiver has been drilled and tapped to attach the telescope.

SECTION III. INTERCHANGEABILITY

54. AUTOMATIC RIFLE M1936 (AVS)

Interchangeability of parts for this model has not been established. The action, however, is subject to malfunction and it is believed that changing of components will increase stoppages.

55. SEMIAUTOMATIC RIFLE M1938 (SVT)

a. Although the components of rifles of this model are interchangeable, the weapon will function more satisfactorily with the original components. Each component has been stamped with the serial number of the weapon and, if possible, should be used with that weapon.

b. The following component parts from other models of Tokarev rifles can be used on the rifle M1938:

(1) The bolt, bolt slide, bolt cover, trigger and hammer group, operating rod, and gas cylinder from any of the 7.62-mm Tokarev models.

(2) The bayonet of the rifle M1940.

(3) The magazines of any of the 7.62-mm Tokarev models.

NOTE: Because of variations in manufacture, some magazines may not function as well as others.

(4) The stock of the semiautomatic sniper rifle M1938.

56. SEMIAUTOMATIC RIFLE M1940 (SVT)

a. Although the components of rifles of this model are interchangeable, the weapon will function more satisfactorily with its original components. Each component, as is the case for all Soviet small arms, has been stamped with the serial number of the weapon and, if possible, should be used with that weapon.

b. The following component parts from other models of Tokarev rifles can be used on the rifle M1940:

(1) The bolt, bolt slide, bolt cover, trigger and hammer group, operating rod, and gas cylinder from any of the 7.62-mm Tokarev models.

(2) The bayonet of the rifle M1938.

(3) The stock of the automatic rifle M1940 and the semiautomatic sniper rifle M1940.

(4) The magazine of any 7.62-mm Tokarev model. (See note, par. 55b(3).)

57. AUTOMATIC RIFLE M1940 (AVT)

The interchangeability of component parts for this model has not been established.

58. SEMIAUTOMATIC SNIPER RIFLE M1938

a. Interchangeability is the same as for the semiautomatic rifle M1938 described in paragraph 55.

b. The telescope and mount for the sniper rifle M1940 apparently can be used on this rifle.

59. SEMIAUTOMATIC SNIPER RIFLE M1940

a. Interchangeability is the same as for the semiautomatic rifle M1940 described in paragraph 56.

b. The telescope and mount for the sniper rifle M1938 apparently can be used on this rifle.

SECTION IV. AMMUNITION

60. AMMUNITION

The ammunition used in the semiautomatic and automatic rifles is the same as that used in the bolt action rifles and carbines. See section IV, chapter 2, for a description of the ammunition.

SECTION V. SIGHTING EQUIPMENT

61. AUTOMATIC RIFLE M1936 (AVS)

a. The base of the open guard, blade-type front sight is a band; an extension of the band, below the barrel, serves to mount the bayonet.

b. The curved ramp, tangent-type rear sight is identical to that of the bolt action rifle M1891/30. The base for the rear sight also serves as a stop for the cocking sleeve; consequently, the sight leaf hinge pin is loosened and often broken by the shocks which arise from stopping rearward travel of the cocking sleeve. The sight then becomes loose, and inaccuracy results.

62. SEMIAUTOMATIC RIFLE M1938 (SVT)

a. The front sight is a hooded post-type sight, dovetailed into a sight base which is an integral part of the barrel extension; the barrel extension assembly screws onto the muzzle of the barrel.

b. The curved ramp, tangent-type rear sight is similar to that of the bolt action rifle M1891/30. It is attached to the barrel just forward of the receiver.

63. SEMIAUTOMATIC RIFLE M1940 (SVT)

The front and rear sights of the semiautomatic rifle M1940 are identical to the front and rear sights of the semiautomatic rifle M1938.

64. AUTOMATIC RIFLE M1940 (AVT)

Front and rear sights are identical to the sights of the semiautomatic rifle M1940.

65. SEMIAUTOMATIC SNIPER RIFLE M1938

a. Front and rear iron sights are identical to those on the rifle M1938. It is believed that the iron sights can be used up to 900 meters (990 yards) with the telescope attached.

b. The telescope for this rifle may be identical to the M1940 optical sight used on the sniper rifle M1940. The telescope mount is apparently interchangeable with that of the sniper rifle M1940.

66. SEMIAUTOMATIC SNIPER RIFLE M1940

a. The front and rear iron sights of this weapon are identical to those of the semiautomatic rifle M1940. They may be used for ranges up to 900 meters (990 yards), without removing the telescope.

b. The telescope M1940 used on the sniper rifle M1940 is believed to be the same as the PU telescope shown in figure 27, which is used on the sniper rifle M1891/30. Soviet documents show the two telescope nomenclatures; however, the appearance and characteristics of the telescopes identified variously as "M1940" and "PU" are identical. The telescope mount for the sniper rifle M1940 is not interchangeable with that of the sniper rifle M1891/30.

NOTE: Characteristics of the PU telescope are shown in paragraph 24b.

SECTION VI. OPERATING INSTRUCTIONS

67. AUTOMATIC RIFLE M1936 (AVS)

a. Set the safety with the thumb of the right hand. Rotate the safety forward until it rests against the trigger.

b. Place the change lever in the upper position for semiautomatic fire, and in the lower position for automatic fire.

c. This rifle is loaded in the same manner as the United States carbine M2. Insert the loaded magazine from the bottom; pull the bolt back, and release it. As the bolt moves forward, it slides a round out of the magazine and chambers it. The rifle also may be loaded from the top, with five-round clips, without removing the magazine. To load in this manner, pull the bolt back, insert the rounds, then allow the bolt to slide forward. Turn the safety rearward. The rifle is then ready for either semiautomatic or automatic fire, depending on the setting of the change lever. Before squeezing the trigger, observe all safety precautions used when firing United States rifles. After the last shot, the bolt remains open.

NOTE 1: Care should be taken in loading the magazine to make certain that the rim of each round is placed forward of the preceding round.

NOTE 2: A loaded weapon may be accidentally discharged by a jolt. This is due to the peculiar construction of the sear and sear spring, and the failure of the designer to provide the necessary safety features.

d. Unload the weapon as follows:

(1) Place the rifle on safe.

(2) Press the magazine release forward and remove the magazine.

(3) Open the bolt and extract the cartridge from the chamber.

(4) After inspecting the chamber, release the bolt.

e. To remove the bayonet, place the rifle stock on the ground and, grasping the rifle in the area of the gas cylinder with one hand and the bayonet with the other hand, pull the bayonet up until it stops; then force the bayonet outward, swing it downward to the stop, pull the handle forward, and remove the bayonet from the rifle.

f. Remove the cleaning rod by pulling the head of the cleaning rod away from the rifle, and withdrawing the rod with a forward motion.

68. SEMIAUTOMATIC RIFLE M1938 (SVT)

a. The safety is set by rotating it downward into a vertical position behind the trigger.

b. This rifle is loaded in the same manner as the M1936 Simonov. After the magazine has been inserted, swing the safety to the left, pull the bolt back and release it. The weapon is now ready to fire. Before squeezing the trigger, observe all safety precautions used in firing United States rifles. The bolt will remain open after the last round has been fired.

c. To unload the rifle, place the rifle on safe (swing the safety into vertical position in line with the trigger); press the magazine catch forward, and at the same time remove the magazine; pull the bolt back and extract the cartridge. After inspecting the chamber, release the bolt.

d. To remove the bayonet, press the catch found on the left side of the bayonet handle to the right, and at the same time push the bayonet forward and remove it. When the bayonet is not mounted on the rifle, it is carried in a scabbard attached to the soldier's belt.

e. To remove the cleaning rod, press the catch at the rear end, and push it forward. Pull the catch to the side and then remove the rod with a rearward motion.

69. SEMIAUTOMATIC RIFLE M1940 (SVT)

The operating instructions for the semiautomatic rifle M1940 are the same as those for the M1938 semiautomatic, except that the cleaning rod is removed by pressing the cleaning rod

catch (located on the right side of the bayonet lug) to the left and, at the same time, pulling the cleaning rod forward. The attachments for the cleaning rod are carried in a canvas pouch by each individual soldier.

70. AUTOMATIC RIFLE M1940 (AVT)

The operating instructions for the automatic rifle M1940 are the same as those for the semiautomatic rifle M1940, except that the safety is so constructed as to permit movement to the right for full automatic fire, in addition to the safety and semiautomatic positions found on the M1940 semiautomatic.

71. SEMIAUTOMATIC SNIPER RIFLE M1938

The operating instructions for this rifle are the same as those for the M1938 semiautomatic. For operating instructions concerning the telescope, see section V of this chapter.

72. SEMIAUTOMATIC SNIPER RIFLE M1940

The operating instructions for this rifle are the same as those for the semiautomatic rifle M1940. For the telescope, see section V of this chapter.

SECTION VII. MAINTENANCE

73. AUTOMATIC RIFLE M1936 (AVS)

a. The following instructions are given for the disassembly of the rifle:

(1) Set the rifle on safe.

(2) Remove the magazine.

(3) Make certain the rifle is not loaded.

(4) Remove the bayonet.

(5) Remove the cleaning rod.

(6) To remove the change lever (which also serves as a receiver pin), make certain the bolt is in the forward position. Move the operating spring cover forward by lifting up on the rear portion and pushing it forward. Grasp the change lever with the right hand and pull it out; at the same time rotate it upward and backward ninety degrees. Pull the lever to the right and remove it; however, use caution, as the bolt cover is under the tension of the operating spring.

(7) Remove the bolt cover by pressing on the forward part of the bolt cover with the left thumb; at the same time lift the rear part of the cover with the right hand and pull it rearward about three-fourths of an inch. Then lift it up and remove it from the rifle, along with the operating spring.

(8) Remove the bolt by pulling it to the extreme rear position, then upward.

NOTE: When the bolt is removed from the rifle the firing pin is always cocked. Care should be taken to prevent the release of the firing pin, in order to avoid pinching the fingers between the bolt body and the firing pin catch.

(9) Release the firing pin by holding the bolt handle and jarring the bolt. Cock the bolt by pulling back on the bolt handle.

NOTE: No further disassembly of the bolt is necessary for cleaning and oiling.

(10) Remove the feedway cover shutter from the receiver grooves by pulling it back along the grooves of the receiver.

(11) Separate the stock from the barrel and receiver. Hold the trigger guard up and unscrew the rear guard screw. Make sure the spring catch, which prevents the screw from loosening, becomes disengaged. Remove the screw and separate the barrel and receiver from the stock.

(12) To separate the handguard from the barrel, remove the pins and push the handguard forward.

b. Assembly is accomplished in the reverse order of disassembly.

(1) Make certain the forward end of the trigger mechanism is under the sear nose.

(2) If the rear guard screw catch does not seat properly, unscrew it until it jumps into place; then tighten the screw.

(3) Check the trigger mechanism to see that it is properly assembled, by squeezing the trigger; this action should depress the sear nose. After releasing the trigger, the sear nose should rise. When the trigger is squeezed and the disconnecting pawl of the sear lever is depressed with the finger, the sear should rise.

(4) Place the bolt in the receiver. First, depress the bolt handle stop with the thumb of the left hand and the firing pin stop with the index finger; at the same time hold the rear portion of the bolt with the thumb of the right hand, and pull the bolt handle back with the index finger until the bolt stops are depressed into the sides of the bolt; then place the bolt in the receiver.

(5) Move the bolt forward.

(6) Set the bolt cover in position and assemble the pin (change lever).

c. The care and cleaning of this rifle is extremely important because the rifle is of complex and fragile construction. Wear and breakage of parts are common causes of malfunctions.

d. Each rifle is equipped with a one-piece cleaning rod. The oil can and attachments for cleaning rod are carried in an accessory pouch by each individual rifleman, as is the case with the accessories for the rifle M1940.

74. SEMIAUTOMATIC RIFLE M1938 (SVT)

a. Disassembly of this rifle is almost identical to that of the M1940.

(1) Set the rifle on safe.

(2) Remove the magazine (figs. 60 and 61).

(3) Make certain the rifle is not loaded.

(4) Remove the bayonet.

(5) Remove the cleaning rod.

FIGURE 60. REMOVING MAGAZINE FROM TOKAREV RIFLE.

FIGURE 61. MAGAZINE FOR TOKAREV RIFLES.

(6) Remove the bolt. Slide the bolt cover forward to give space to press the driving spring rod forward and down sufficiently to release it from the notch in the cover. Slide the cover forward and remove it (fig. 62); at the same time release the driving spring rod slowly, letting it move backward out of the bolt until it stops on the rear of the receiver. Both the operating spring and the guide rod are in two sections. Grasp the forward section with one hand and the rear section with the other hand, and compress the two sections. Remove them while they are compressed (fig. 63). Pull the bolt back almost to the rear, and then move it upward to remove it (fig. 64). Grasp the bolt with the thumb and index finger, and lift it out of the bolt slide (fig. 65).

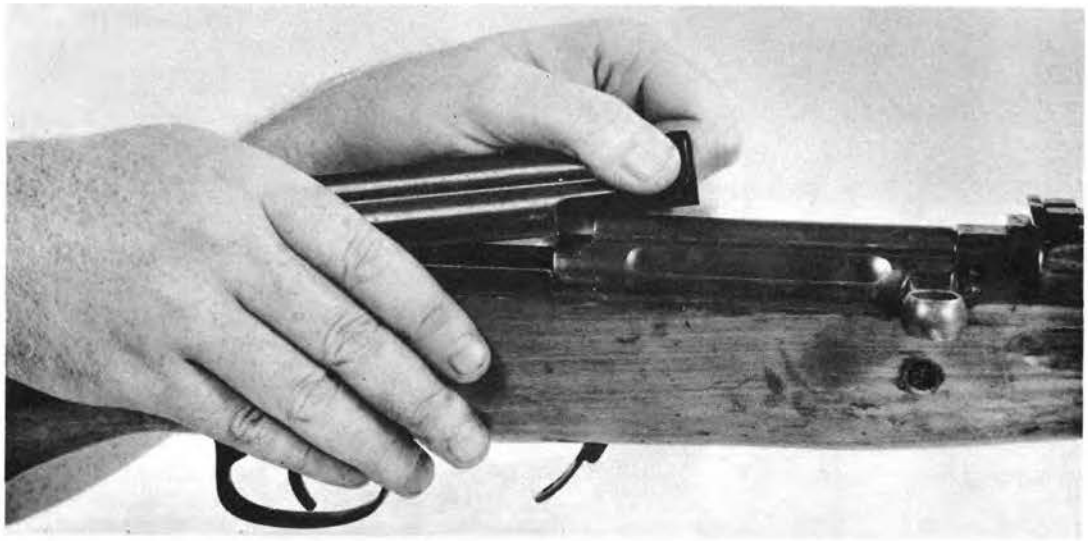


FIGURE 62. REMOVING BOLT COVER.

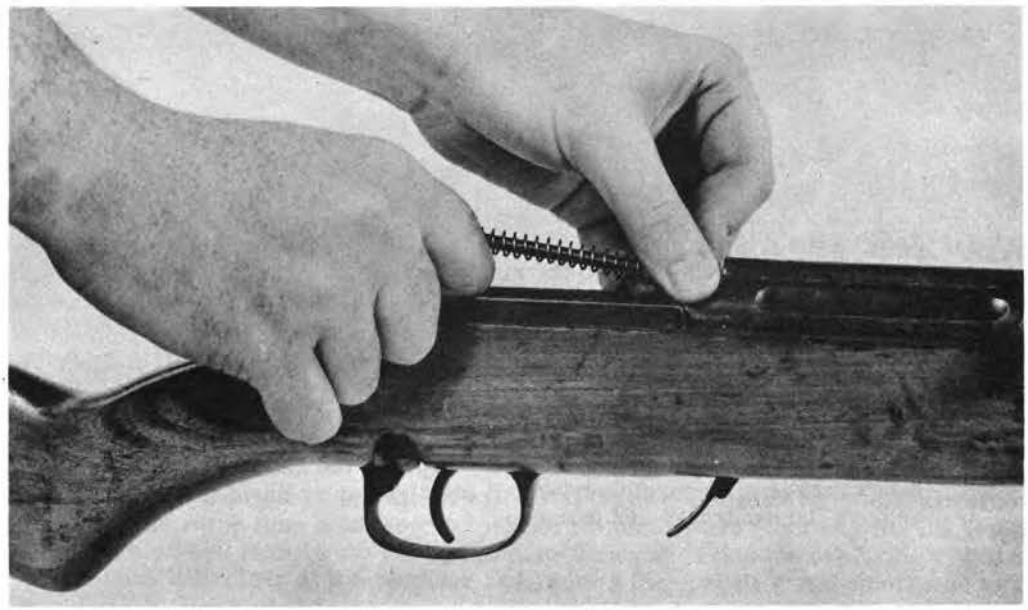


FIGURE 63. REMOVING DRIVING SPRING.

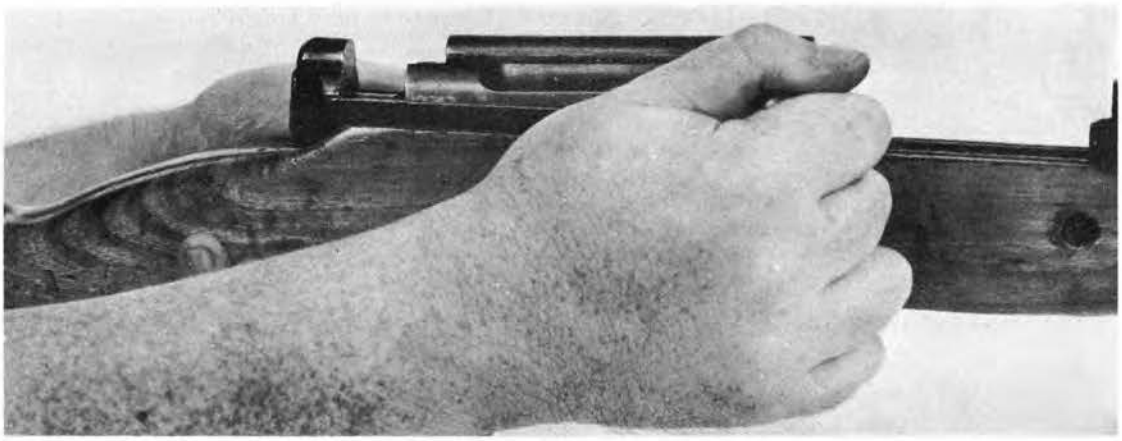


FIGURE 64. REMOVING BOLT AND SLIDE.

FIGURE 65. REMOVING BOLT FROM SLIDE.

(7) Remove the trigger mechanism. Turn the serrated cover on the rear of the receiver one-quarter turn to the right, and press the detent through the hole in the rear of the receiver (fig. 66). This actuates the trigger group locking bar, which unlocks the trigger mechanism. The mechanism is then forced out of the receiver by a small spring on the underside of the stock (fig. 67). Remove the split screw on the side of the stock, just forward of the magazine opening. The butt of the two-piece stock can now be removed.

(8) Remove the forestock and handguard. Depress the stock band catch and slide the bands forward. Separate perforated metal cover by pushing it rearward, then remove the handguard and forestock.

FIGURE 66. REMOVING TRIGGER MECHANISM (STEP 1).

FIGURE 67. REMOVING TRIGGER MECHANISM (STEP 2).

(9) Remove the operating rod and cylinder. Press the operating rod rearward and at the same time hold the gas cylinder in the forward position over the gas piston. Then remove the gas cylinder to the rear. Slide the operating rod forward until it is clear of the receiver and remove the operating rod spring and plunger.

b. This rifle is assembled in the reverse order of disassembly.

c. The care and cleaning of this rifle is the same as that required for United States rifles.

d. Each rifle is furnished with a full-length cleaning rod which is fitted in the stock. An accessory pouch (fig. 68) is issued to, and carried by, each rifleman.

FIGURE 68. ACCESSORY POUCH AND CONTENTS.

75. SEMIAUTOMATIC RIFLE M1940 (SVT)

a. Disassembly for the semiautomatic rifle M1940 is the same as that for the rifle M1938, with the following exceptions:

(1) Remove the one-piece stock. After the trigger mechanism has been removed as described for the rifle M1938, press the band retaining catch and slide the stock band forward. This permits removal of the two perforated metal guards, which are placed forward of the handguard and stock (fig. 69). This also permits the removal of the handguard (fig. 70). Then remove the screw from the right side of the stock, just forward of, and above, the magazine opening (fig. 71). Separate the stock from the barrel and receiver assembly (fig. 72).

(2) To remove the operating rod of the M1940 (fig. 73), pull the rod to the rear and grasp the end of the operating rod plunger, which protrudes from the receiver just above the breech. Maintain a firm grasp on the operating rod plunger and pull the operating rod forward until its rear end clears the rear sight base; then pull it to the side and back out of the gas cylinder. The operating rod plunger, which is under the pressure of the operating rod spring, should be slowly released and removed, along with the operating rod spring. The gas cylinder can then be pulled to the rear and removed (fig. 74).

b. The assembly of this rifle is the same as that of the rifle M1938 with the exception of the stock and operating rod assembly, which is described in a(1) and (2) above.

NOTE: Care should be exercised to make certain that the trigger mechanism is properly assembled to the receiver. Considerable pressure is required to force it against the stock and into the catch; if it is not properly connected it will loosen and fall out.

c. The care and cleaning of this rifle is the same as that required for United States rifles.

d. Each rifle is furnished with a one-piece cleaning rod which is fitted in the stock. An accessory pouch (fig. 68) is carried by each rifleman. A bayonet and scabbard is issued with each rifle, as shown in figure 75.

FIGURE 69. REMOVING THE TOP BARREL JACKET.

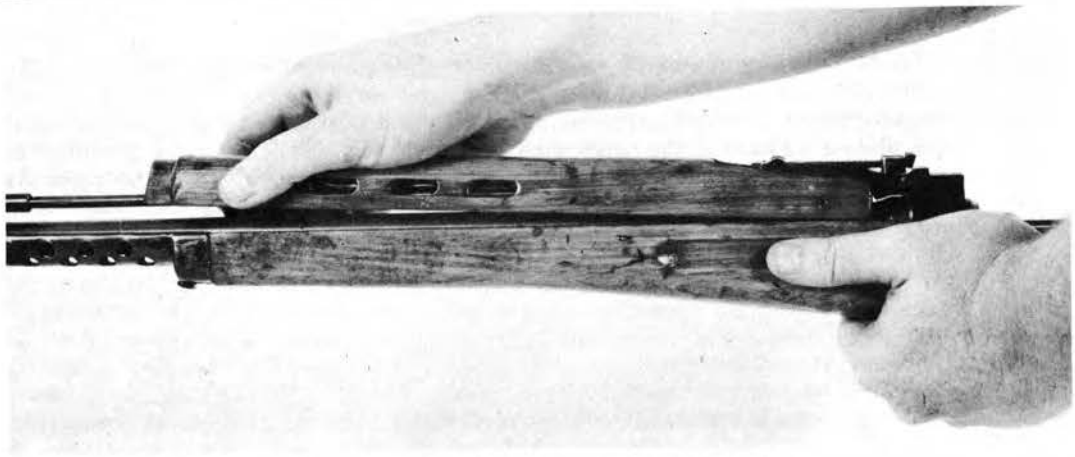


FIGURE 70. REMOVING THE HANDGUARD.

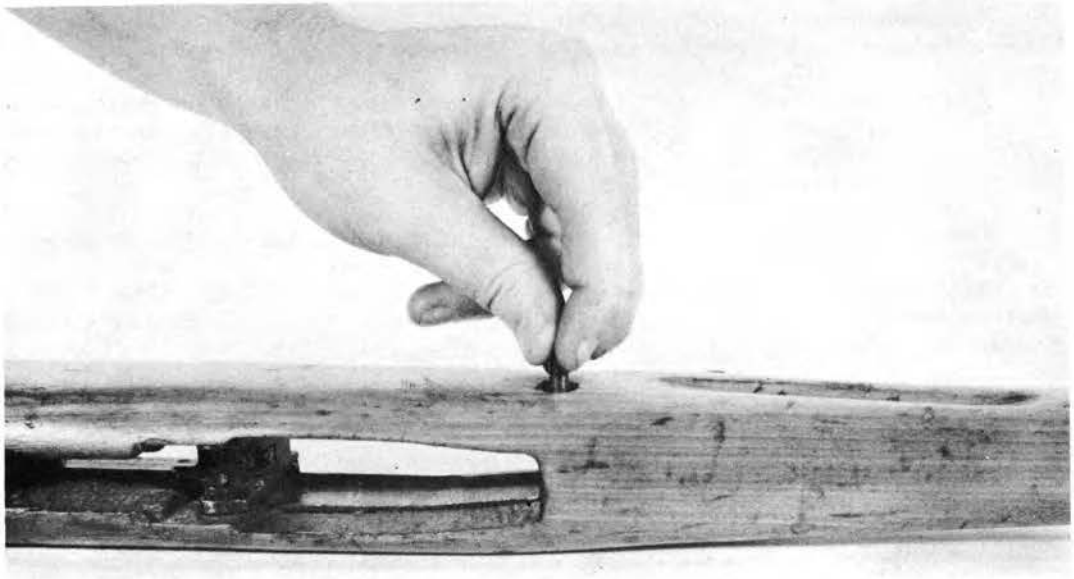


FIGURE 71. REMOVING THE STOCK SCREW.

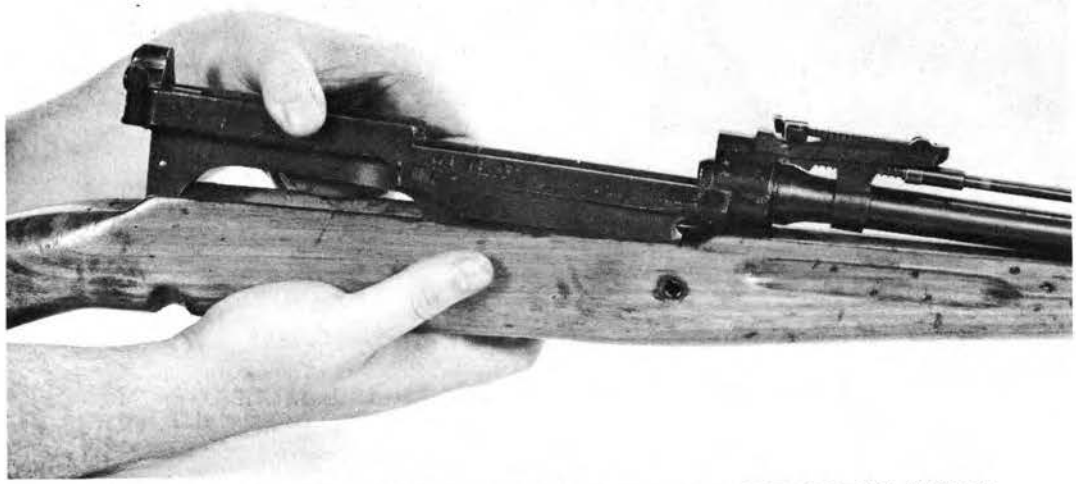


FIGURE 72. LIFTING THE RECEIVER AND BARREL OUT OF THE STOCK.

FIGURE 73. REMOVING THE OPERATING ROD

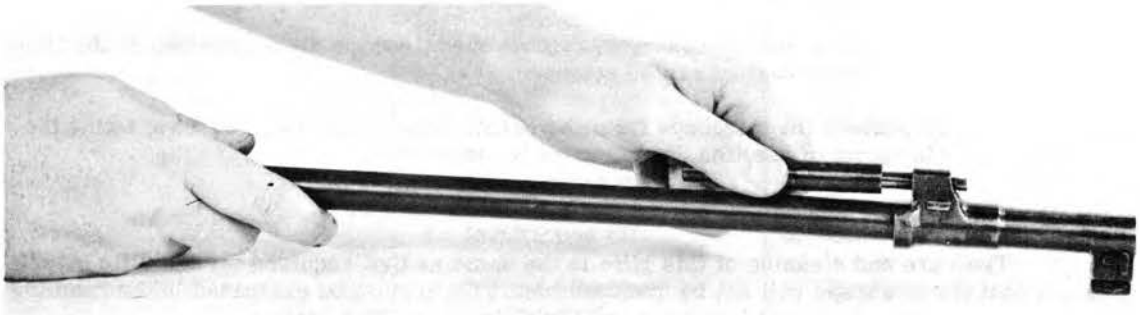


FIGURE 74. REMOVING THE GAS CYLINDER

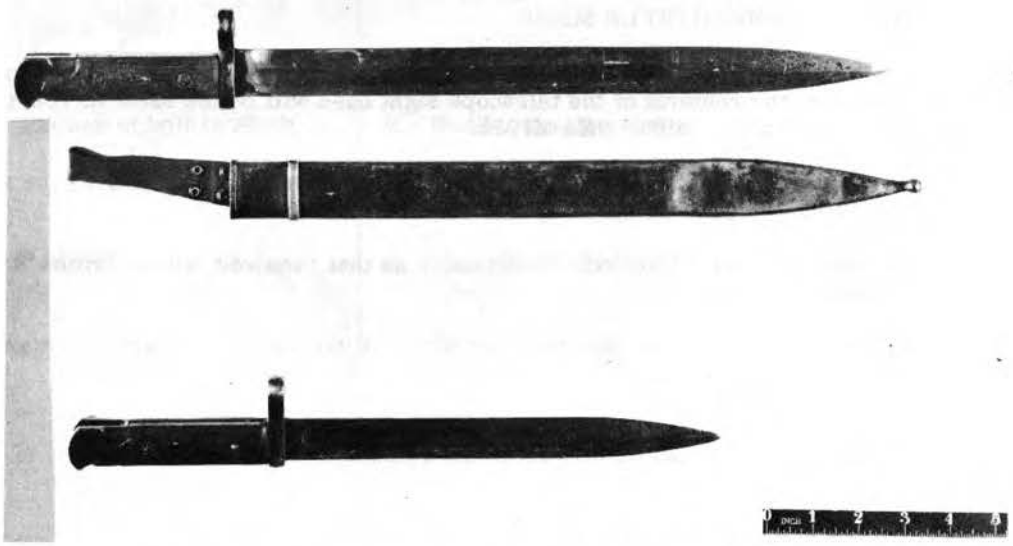


FIGURE 75. BAYONET AND SCABBARD FOR TOKAREV RIFLES.

76. AUTOMATIC RIFLE M1940 (AVT)

a. Disassembly for this rifle is the same as that for the M1940 semiautomatic.

b. Assembly for the automatic rifle M1940 is the same as that for the M1940 semiautomatic.

c. The care and cleaning of this rifle is the same as that required for United States semiautomatic rifles.

d. The accessories for this rifle are the same as those for the M1940 semiautomatic.

77. SEMIAUTOMATIC SNIPER RIFLE M1938

a. Disassembly of the semiautomatic sniper rifle M1938 is the same as that for the semiautomatic rifle M1938, with the following exceptions:

(1) The telescope sight base is removed by punching out the pin with the point of a cartridge. Slide the base rearward and remove it.

NOTE: It is not necessary to remove the telescope sight base before the firing mechanism can be removed.

(2) To remove the telescope from the base, remove the clamp screws; swing the clamp out of position, and remove the telescope.

b. This rifle is assembled in the same manner as the M1938.

c. The care and cleaning of this rifle is the same as that required for the rifle M1938, except that the telescope will not be disassembled. Care must be exercised in the handling of the telescope sight to prevent breakage and the disturbing of the settings.

d. The accessories for this rifle are the same as those for the M1938.

78. SEMIAUTOMATIC SNIPER RIFLE M1940

a. The disassembly will be conducted in the same manner as that for the semiautomatic rifle M1940 except that the removal of the telescope sight base will be the same as that described for the semiautomatic sniper rifle M1938.

b. The semiautomatic sniper rifle M1940 is assembled in the same manner as the semiautomatic rifle M1940.

c. The care and cleaning of this rifle is the same as that required for the United States semiautomatic rifles.

d. The accessories for the semiautomatic sniper rifle M1940 are the same as those for the semiautomatic rifle M1940.

SECTION VIII. MALFUNCTIONS AFFECTING OPERATIONS

79. MALFUNCTIONS

a. Stoppages are sometimes caused by improper assembly or improper loading of magazines. They may also be due to dirt, breakage of parts, or defective ammunition. When a stoppage occurs, check the weapon, cock the weapon, and fire again. If the weapon fails to fire, take corrective action.

b. Common malfunctions, their probable cause, and methods of correction are given below.

Malfunction	Probable cause	Remedial action
1. Misfire.	a. Broken firing pin.	a. Replace firing pin.
	b. Insufficient firing pin protrusion.	b. Replace firing pin.
	c. Operating spring becomes weak or broken.	c. Replace operating spring.
	d. Defective primer.	d. Remove defective cartridge.
2. Failure to eject.	a. Broken ejector	a. Turn in weapon to Ordnance.
	b. Dirty receiver.	b. Clean weapon.
	c. Clogged gas port.	c. Clean weapon.
	d. Insufficient oil	d. Oil weapon.
3. Failure to extract.	a. Worn or broken extractor.	a. Replace extractor.
	b. Broken extractor spring.	b. Replace extractor spring.
	c. Dirty extractor recess or chamber.	c. Clean weapon.
4. Failure of bolt to close completely.	a. Weak operating spring.	a. Replace operating spring.
	b. Dirty receiver grooves.	b. Clean weapon.
5. Failure of cartridge to enter chamber.	a. Magazine fouled or dented.	a. Replace magazine.
	b. Follower spring broken.	b. Replace magazine.

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