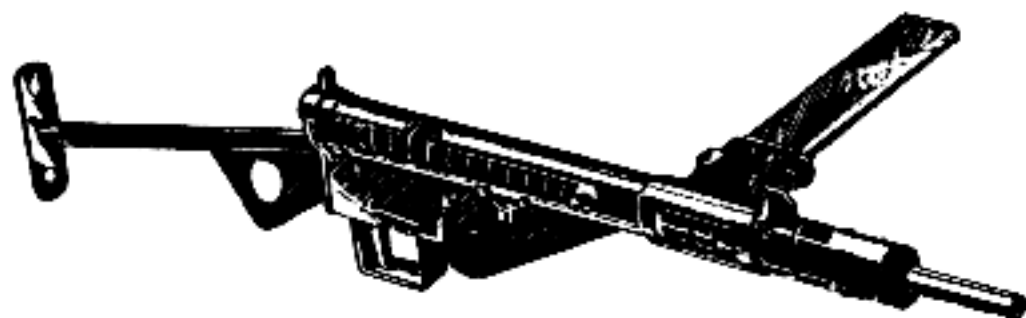


NOT TO BE PUBLISHED

The information given in this document is not to be communicated, either directly or indirectly, to the Press or to any person not holding an official position in His Majesty's Service.



Carbine Machine Sten 9 mm. Mk. II

General Instructions

**Handling
Stripping
Cleaning
Assembling**

FEB., 1942

CONTENTS

SEC.	PAGE
1. General description	1
2. Stripping and assembling	1
3. Action of mechanism	4
4. Care and cleaning	5
5. Stoppages and I.A.	5
6. Handling and sighting... ..	6
7. Points to note	7
8. Description and filling of magazine	7

CARBINE, MACHINE, STEN, 9 mm.

Mark II

1. GENERAL DESCRIPTION

This weapon can fire all types of 9 mm. round nose ammunition (I.C.I., Winchester, Sako, Beretta, German, etc.). It is of the blow back type, that is, it has no locking device, whereby in firing a cartridge, part of the explosive force drives the breech block rearward.

The firing pin is integral with the breech block and is in the form of a small projection in the cartridge recess.

Provision is made for automatic and single shot firing, by means of a change lever. The butt and barrel are readily detached from the casing, thereby facilitating carrying.

By raising the catch located on the front side of the magazine housing, the latter can be rotated to a downward position to facilitate stowage.

A box type magazine having a capacity of 32 rounds is used, being inserted into the left side of the carbine and retained by a spring-loaded catch.

Safety is ensured by cocking the breech block and rotating the cocking handle anti-clockwise until it is engaged in the short slot in the top of the casing.

2. STRIPPING AND ASSEMBLING

1. Ensure that the carbine is unloaded and the breech block is in its forward position.

2. *To remove the butt.*—Depress the circular-shaped end of the return spring housing from engagement with the front plate of the butt, at the same time slide the butt downward from engagement.

3. *To remove the breech block.*

(a) With thumb and forefinger, press forward the return spring cap about $\frac{1}{2}$ inch and partially rotate it anti-clockwise, whereupon the two small lugs on the cap will disengage from their respective grooves in the casing. Remove the return spring housing, cap and return spring.

- (b) Pull the breech block rearward and remove the cocking handle when opposite the safety slot. Insert the cocking handle in front of the breech block and pull the breech block rearward until clear of the casing.

(To strip the extractor.—Remove the extractor pin with a pin punch; the extractor and spring can then be removed.)

4. To remove the barrel.—Disengage the barrel nut catch, which is located in front of the magazine housing, rotate the magazine housing anti-clockwise (downward), unscrew the cylindrically shaped barrel nut, and remove with barrel.

5. To strip the trigger mechanism.—Place the carbine with its underside facing upward.

- (a) Remove the screw on either side of the trigger mechanism cover. Pull off cover.
- (b) Unhook the trigger coil spring from the tripping lever pawl and the trigger. Remove the tripping lever pawl which is in the form of a short coil spring.
- (c) Push out the sear axis pin and remove the sear.
- (d) Remove the split pin in the change lever, and, while holding the tripping lever clear, push out the change lever.
- (e) From the right side, remove the trigger axis pin which is in the form of a bent wire. Pull out the tripping lever, with trigger toward the front. Disconnect the tripping lever from the trigger by removing the tripping lever pin.

6. To remove the barrel nut catch.—Remove split pin. Pull out the magazine housing plunger and remove the magazine housing spring and the barrel nut catch.

6A. To remove magazine catch retainer screw from the rear side of the magazine housing. Prise off the retainer and remove the magazine catch with spring.

7. To assemble barrel nut catch.—While holding the magazine housing in position, insert the barrel nut catch in its respective hole and position the coil spring between the catch and the lug on the magazine housing. Insert the magazine housing plunger in the lug and the spring so that the end of the

plunger enters its respective hole in the casing. Using a screwdriver as a lever, raise the rear end of the catch and fit the split pin.

8. To assemble magazine catch.—Insert the magazine catch in its respective slot in the underside of the magazine housing. With the catch spring in position and using a screwdriver as a lever to compress the spring, push the catch into position. Lightly tap the magazine catch retainer until its screw hole is in position with a similar hole in the magazine housing. Insert the screw with washer.

9. To assemble trigger mechanism.—Position the carbine with its underside facing upward.

- (a) Enter the sear (with the sear bent pointing rearward) between the left and right side plates and insert sear axis pin.
- (b) Assemble the tripping lever to the trigger (when correctly assembled, the trigger spring hook is directionally opposite to the short arm of the tripping lever).
- (c) Enter the trigger and tripping lever (trigger first) between the side plates and, with the short arm of the tripping lever pointing towards the interior of the casing, raise the trigger to position in the trigger guard, insert the trigger pin and ensure that its short end is entered in its respective hole in the right side plate. Rotate the sear forward so that the tripping lever rests on the side of the sear. Rotate the sear to its former position, with the sear bent pointing rearward.
- (d) While holding the tripping lever clear, insert the change lever through the largest hole and replace the split pin.
- (e) Replace the tripping lever pawl (this is in the form of a short coil spring) on the tripping lever pawl pin which is riveted to the sear. When correctly assembled, the long arm of the tripping lever pawl should bear against the tripping lever.
- (f) Attach one end of the trigger spring to the trigger spring hook and the other end to short arm of the tripping lever pawl.
- (g) Assemble the trigger mechanism cover and replace the two screws and washers. Place the carbine with its underside facing downward.

10. *To assemble breech block.*—Insert the breech block in the casing with its cocking handle hole in line with the cocking handle slot in the casing. Pull the trigger and push the breech block forward until the cocking handle hole is opposite the safety slot in the casing. Insert the cocking handle into the breech block as far as it will go. Pull the trigger and push the breech block home to its forward position.

11. *To assemble return spring and housing.*—Insert the return spring. Replace the return spring housing and cap on the end of the return spring. Press forward so that the lugs on the cap enter their respective grooves in the end of the casing, rotate the cap clockwise and allow it to take up its position rearward.

12. *To assemble barrel.*—Raise the barrel nut catch and partially rotate the magazine housing until the catch is clear of the hole. Replace the barrel; before screwing the barrel nut fully home, return the catch to its former position so that the teeth of the catch engage the serrations on the end of the barrel nut. Tighten the barrel nut by hand only. Undue tightening is unnecessary, the barrel nut catch being sufficient to retain the barrel nut in position.

13. *To assemble butt.*—With the butt stud positioned in line with its respective slot, press the end of the return spring housing with the top of the front plate of the butt, and slide the butt upward to position.

3. ACTION OF MECHANISM

Preparation for firing

Put the gun at "Safety," that is, cocked and with the cocking handle in the safety slot. Insert a loaded magazine. Pull the cocking handle from "Safety" and allow the breech block to go forward until held by the sear. The gun is now ready for firing. For single shot firing, press the end of the change lever marked "R." Whilst for automatic firing the end marked "A" must be pressed.

Forward action (gun set for single shot firing)

On pressing the trigger, the sear is depressed from engagement with the bent on the rear underside of the breech block. The breech block goes forward under the action of the compressed return spring. The tripping lever, the end of which

protrudes into the casing, is depressed by the bent, thereby allowing the sear to rise under the action of the extended trigger spring. Continuing forward, the two horns on the breech block face contact the base of a cartridge and push it from the magazine into the chamber. The extractor engages the cannellure on the cartridge base. The firing pin, which is solid with the breech block, strikes the cartridge cap to fire the charge.

Backward action

Part of the explosive force drives the breech block rearward, the empty case being held by the extractor. The ejector, which protrudes into the runway between the two horns, contacts the base of the empty case to eject the case through the ejection opening on the right side of the gun. Continuing rearward and compressing the return spring, the breech block is held by the sear. This terminates the cycle of operation for single shot firing.

Gun set for automatic firing.

By pressing the end of the change lever marked "A," the tripping lever is pushed aside from the path of the bent on the underside of the breech block. Automatic firing will continue as long as pressure is maintained on the trigger or until the magazine is emptied.

4. CARE AND CLEANING

Normal cleaning should be carried out. No oiling is required; the carbine is designed to function without the use of oil.

The bore of the barrel can be cleaned with a rifle pull-through, but must be removed first, as the pullthrough weight is too long to go through the ejection opening.

For storage the breech block and barrel should be greased or oiled.

5. STOPPAGES AND I.A.

Apart from the breakages of components, stoppages may occur due to (a) fault in feed, (b) mal-ejection, (c) misfire, (d) burst case.

(a) *Fault in feed.* While a round is entering the chamber the succeeding round may become partly displaced from the magazine, thereby becoming jammed by the breech block, so that the latter cannot go forward to fire the charge. Stoppages may also occur due to the mal-functioning of the magazine.

firing of single shots, i.e. two or three cartridges may be fired (like automatic firing), indicates that the weapon is held loosely against the shoulder or hip; a firmer grip will remedy this tendency.

The fixed backsight enables accurate shooting up to a range of 200 yards.

7. POINTS TO NOTE

No oiling of the breech block or trigger mechanism is required; the weapon is designed to operate without the use of oil. **The weapon must be fired dry.**

The magazine (32 rounds) is common to the Lanchester Carbine.

8. DESCRIPTION AND FILLING OF MAGAZINES

Magazine

The magazine is of the box type and consists essentially of the case, platform, bottom plate, and retainer bottom plate.

The bottom plate retainer is attached to the end of the spring, a raised part of the retainer protruding through a hole in the bottom plate.

Stripping and assembling

Depress the bottom plate retainer and slide off the bottom plate, remove spring and platform; assemble in the reverse way.

Filler

There are two types of fillers available, Mk. I and II.

Mk. I consists essentially of a brass lever mounted on a case which is approximately $3\frac{1}{4}$ inches long and conforms to the shape of the magazine. When fitted to the magazine, the spring catch on its side engages the magazine catch recess on the magazine.

Mk. II is similar in design to the Mk. I, with the exception that the spring catch is located on the back of the case, and engages the rectangular recess on the back of the magazine.

To load the magazine with Mk. I or II filler

Fit the magazine filler to the magazine so that its catch engages its respective recess or hole. Place the four fingers of the left hand on the lever so that the third finger goes through the hole in the lever and the first rests on the toe.

(b) Mal-ejection. The empty case, on being extracted from the chamber, is not ejected through the ejection opening, but remains in the casing, whereupon the breech block cannot go fully forward to fire the charge.

(c) Misfire. Due to the accumulation of carbon or dirt on the breech block face and cartridge recess; the firing pin cannot reach the cartridge cap.

(d) Burst case. Due to blow back, i.e. round fired before it has entered chamber; may occur with a dirty chamber, or anything which impedes the free entry of the cartridge to the chamber. May also result in separated case.

The following immediate action will be used for all stoppages:—

1. Cock the gun and put at "safety."
2. Remove the magazine.
3. Remove any live round or empty case which may lie in the casing.
4. If there is a live round in the chamber, fire the gun *without the magazine*, cock the gun and put at "safety."
5. Replace the magazine.
6. Continue firing.

Notes.—If stoppage is due to burst case, shake out any fragments of the cartridge case through the ejection opening, and examine the barrel to ensure that a bullet is not lodged in the bore. To do this cock the carbine, place thumbnail behind the chamber and look down the bore of the barrel from the muzzle.

If the stoppage persists, change the magazine and examine the breech block face for dirt.

If stoppages still occur, examine the mechanism for burred, damaged or broken components.

6. HANDLING AND SIGHTING

When shooting, the weapon *must not* be held by gripping the magazine. The correct grip is the barrel nut. *Keep fingers clear of the ejection opening.* No appreciable heat is felt in the barrel nut until after 8 loaded magazines (of 32 rounds each) have been fired continuously in short bursts. When barrel and barrel nut are too hot to handle they can be cooled by removing and dipping in water. Double taps during the

Depress the tail, on which the fourth finger rests, and insert a round in the opening with the right hand. Raise the lever by means of the third finger and depress again to insert another round; repeat this procedure until 32 rounds have been inserted.

To remove ammunition from magazine

Hold the magazine in the left hand and push out the rounds with the thumb of the right hand.

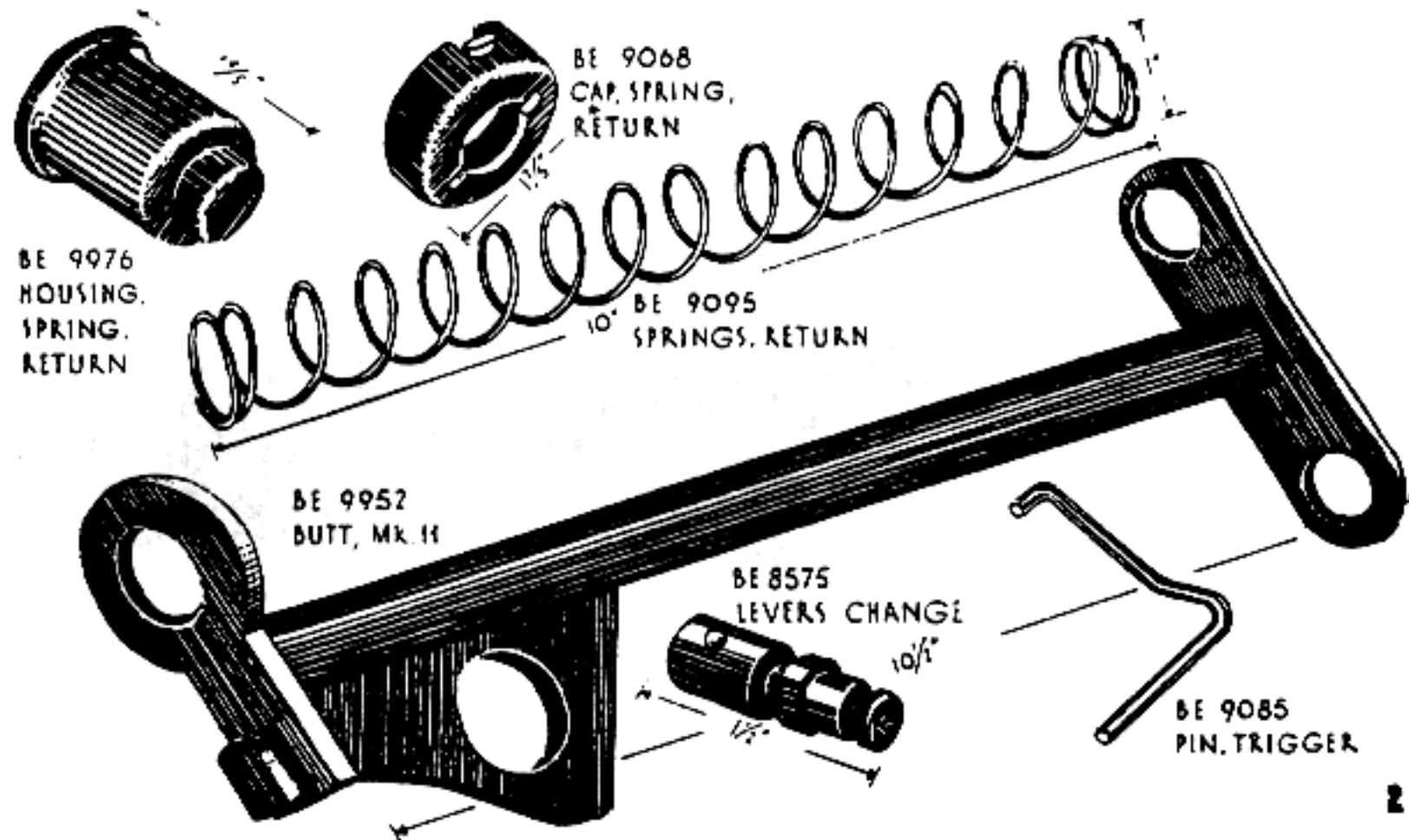
Note.—Faults in functioning will develop if the magazine case is dented or the lips damaged, or if dirt enters the case.

When assembling magazine into carbine, ensure that the magazine catch engages correctly.

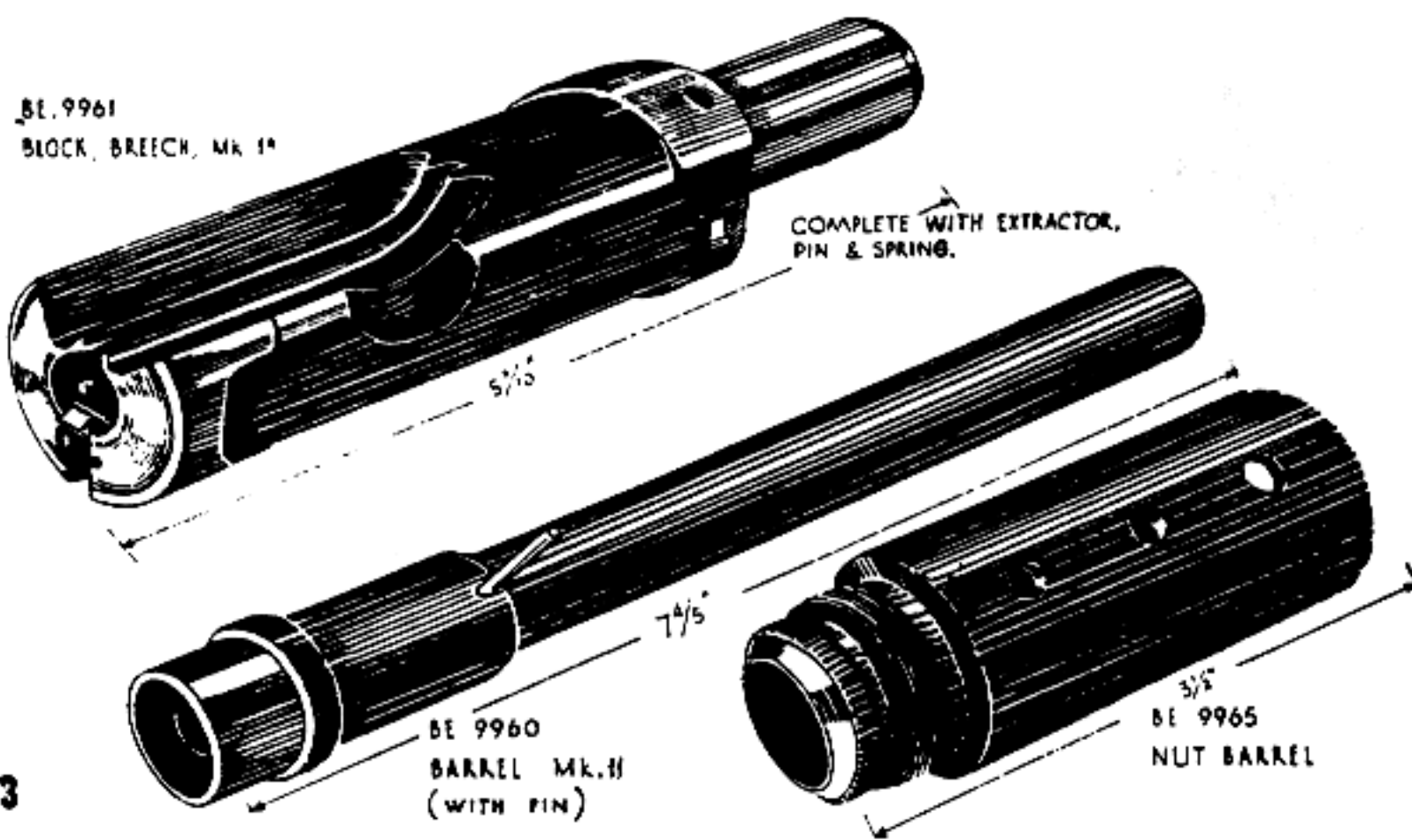
Should the magazine fail to feed the rounds during firing, remove magazine from carbine, knock the end of the magazine against the knee, re-insert magazine in carbine.



CARBINE, MACHINE, STEN, 9 mm. Mk II



2



3

BE 9967
PLUNGER, HOUSING
MAGAZINE

BE 9085 PIN, LEVER, TRIPPING A
BE 9083 PIN, PAWL, LEVER, TRIPPING B

BE 9959 WASHERS, SCREW, COVER, TRIGGER, MECHANISM 2
BE 9959 WASHERS, SCREW, RETAINER, CATCH, MAGAZINE 4



BE 9969
SPRING, PLUNGER,
MAGAZINE
HOUSING

BE 9962
CATCH, NUT,
BARREL

BE 9089 SCREW, COVER, TRIGGER, MECHANISM 2
BE 9089 SCREW, RETAINER, CATCH, MAGAZINE 4

BE 9966

A. PIN, SPLIT, PLUNGER, MAGAZINE, HOUSING
B. PIN, SPLIT, LEVERS, CHANGE

BE 9082 PIN, EXTRACTOR

BE 9951 COVER,
TRIGGER, MECHANISM

BE 9072 EXTRACTOR

BE 9094
SPRINGS, EXTRACTOR

BE 9096
SPRINGS
TRIGGER

BE 9079
LEVER, TRIPPING

BE 9080
PAWL, LEVER, TRIPPING

BE 9098
TRIGGER

BE 9092
SEAR

BE 9964
HANDLE COCKING MK II

BE 9081
PIN, AXIS, SEAR

