



Operators Manual
Mauser Model 66 S/SM

Mode d'emploi
Mauser Modèle 66 S/SM



Basic Safety Rules

Never take aim at a person, even when your weapon is not loaded. Make it a habit to carry your weapon in a manner that will not endanger people, animals and property.

Make sure that a bullet trap is available during practice shooting to prevent danger from stray bullets.

Remember that a bullet may fly as far as 5000 m and ricochets may occur after it impacts on water and hard objects at unfavourable angles.

Handling and Maintenance

Before shooting, make certain that the barrel bore is free from oil, dirt and foreign matter.

The most suitable method is to clean the bore from the breech end using a plastic-coated cleaning rod and cotton or felt. For this purpose, you have to remove the bolt.

Be sure to never use force.

Surplus oil on the receiver and bolt should be removed with a clean, soft cloth.

There are two versions of the Mod. 66:

a) Mod. 66 S – standard and magnum action

b) Mod. 66 SM – standard and magnum action

They differ from each other in the trigger system and stock configuration.

66 S with single stage trigger, double set trigger or two stage hair trigger. The Mod 66 S Big Game version comes equipped with a single-stage, adjustable trigger. Optional double-set triggers available by special order at additional costs.

66 SM comes equipped with a special Mauser set trigger system, which is activated by a push button, easy to reach located on the top of the pistol grip behind the receiver. This means added safety while hunting because it is not necessary to touch the trigger until you are ready to fire.

When the activator button for the set-trigger is pushed forward with the thumb, it sets the trigger. When released by the thumb it is pushed back to its initial position by a spring.

Caution: After the trigger is set, it is ready for firing at the lightest touch.

If the trigger is not set it will work like a conventional trigger (single stage trigger).

In order the set trigger without firing, the safety lever is moved to the safe position, the set trigger is discharged, the safety is then moved back to the fire position and the bolt can now be opened.

Technical Data Model 66 S/SM

General Facts:

The Models 66 S and 66 SM have a rear sight which is adjustable for windage and elevation and displaceable on the dovetail rail of the barrel. All models offer an exquisite walnut stock, oiled and polished, a rubber recoil pad, (Mod. 66 S with rosewood tips on forearm and pistol grip cap), equipped with our patented short action and our silent operating safety. A specially designed grooved bolt handle allows rapid follow-up shots.

The magazine capacity for all models is 3 cartridges plus 1 shot in the barrel. All barrels are made of high quality alloy steel.

Model 66 is available in the following calibers:

Standard:

Cal. 5,6 x 57; .243Win.; 6,5 x 57; .270Win.; 7 x 64; .30-06; .308Win.; 9,3 x 62; Barrel length 600 mm.

High Performance:

Cal. 6,5 x 68; 7 mm Rem. Mag.; 8 x 68 S; .300Win.Mag.; 9,3 x 64; Barrel length 650 mm.

Full stock version:

Cal. .243Win; .270Win.; 7 x 64; .30-06; 9,3 x 62
Barrel length 530 mm.

Big Game:

Cal. .375 H&H Mag.; .458Win.Mag.
Barrel length 650 mm.

Instructions for use:

Mauser repeating rifles model 66 S/SM have a unique telescopic, short-stroke action which allows an overall length approximately 9 cm shorter than competitive rifles that have the same barrel length.

The loading procedure works in 2 steps due to the telescopic slide.

Step One:

Open the chamber by turning the bolt handle upward and then pull to the rear. The telescopic slide remains in its forward position until the bolt handle engages the front of the slide bridge.

Step Two:

During further movement of the bolt to the rear, the telescopic slide is taken back being guided by two rails. Thus the alignment between the chamber, bolt and guide rail is maintained. The telescopic slide is stopped in the rearward movement by the bolt catch which is located to the right rear end of the guide rails. Now the bolt face is in a position to pick up the first cartridge from the magazine. As the bolt moves forward the

activities are reversed. At first the telescopic slide remains stationary, and only the bolt moves forward about halfway and inserts the cartridge into the chamber.

As the bolt is moved further forward, the bolt sleeve engages the rear part of the telescopic slide, and the latter is pushed forward. By turning the bolt handle to the right and down 90 degrees, the bolt locking lugs are engaged into the barrel bridge. The rifle is now ready to fire. To apply the safety, the lever on the right hand side of the bolt sleeve must be moved backward, so that the striker sleeve will be disengaged from the sear, and simultaneously the bolt action will be blocked. An additional safety operated by the plunger located at the top of the safety lever prevents accidental disengagement of the safety. By purposely depressing the safety plunger and pushing the safety lever forward, a red dot will appear: the rifle is ready to fire.

Loading

Loading the rifle is done by opening the bolt action until the magazine opening is cleared. The magazine is charged by loading each cartridge (total of 3) one by one, staggered, on top of each other by means of depressing the magazine follower with each cartridge as it is loaded. (Figure 1)

By closing the bolt, the top cartridge is caught by the bolt face and inserted into the chamber. By turning the bolt handle to the right and fully downward, the chamber is locked and the rifle is loaded, cocked, and ready to fire.



Reloading

After firing, by repeating the rearward movement of the bolt handle, the empty case is extracted and ejected. Then, by repeating the forward movement of the bolt handle, the next cartridge will be inserted into the chamber.

How to set and reset the trigger

Mod. 66 S

To set the double set trigger for “firing” with only a light touch, pull the rear trigger with the index finger – rifle is now set to fire with the lightest touch on the front trigger.

To de-activate the set trigger “without firing”, pull safety lever rearward = safety is in ON position. With the middle finger of your right in the rear trigger and the index finger on the front trigger, pull both triggers and release them slowly.

Note: It is not necessary to set the double set trigger in order to fire the rifle. The rifle may be fired at any time with only the pull of the front trigger.

Mod. 66 SM

To set the trigger for “firing” with a light touch on this model, push activator button on top of the pistol grip forward with your right thumb. Release slowly – activator will return to initial position. You are now ready to fire with only a light touch to the trigger.

To de-activate the set trigger “without firing” pull the safety lever rearward = safety is in ON position. Push the activator button forward with the thumb of your right hand and hold it in this position. Pull the trigger with the index finger of the right hand. Release both slowly – activator and trigger will return to initial position.

Safety:

In order to engage, the thumb operated safety is pushed backwards all the way, accomplishing the following:

- a) Firing pin is blocked positively
- b) Bolt is locked
- c) Fail-safe button is engaged

The fail-safe button prevents the safety from accidentally disengaging. Unloading is only possible while safety is disengaged.

In order to disengage the safety, push the fail-safe button down and move safety all the way to the forward position. When the safety catch is off, two red dots will appear.

Disassembling and Assembling of the Bolt:

To take the action apart the bolt and the telescopic slide have to be removed from the rifle by depressing the bolt stop. (Figure 2)

To screw the bolt sleeve off the bolt the sleeve is turned counter-clockwise until the striker sleeve will engage into the notch of the bolt sleeve stop. (Figure 3)

Now the striker sleeve is pushed upward about 2 mm, and at the same time the safety lever is engaged.

Further turning of the bolt sleeve assembly clears the latter from the housing. (Figure 5)

To take the striker apart push the firing pin on a hard surface until the striker sleeve can be turned by 90°.

Then the bolt sleeve can be cleared from the striker.

To reassemble the above operations should be reversed. (Figure 6)

Be cautious – the cocked spring can be dangerous and cause injury if not properly handled.

Note: It is not necessary to use the activator button and set the trigger for a light touch in order to fire the rifle.

The rifle may be fired at any time with only the pull of the trigger.



2



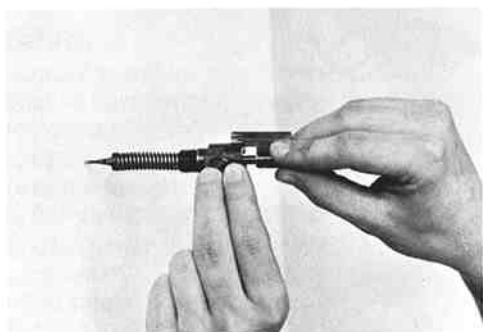
3



4



5



6

Maintenance

For cleaning and servicing of your rifle, we recommend the following procedure:

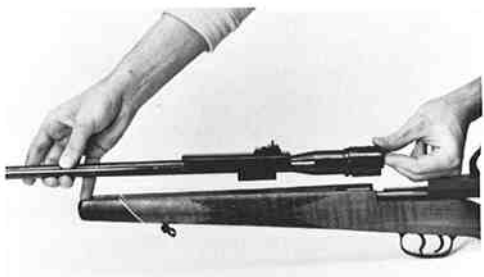
1. First, make sure that the weapon is unloaded and the magazine is empty.
2. Open the bolt and remove it while depressing the bolt stop.
3. It is recommended to clean the bore using a cleaning rod with cotton or felt inserted into the barrel from the breech end.
4. After cleaning, slightly oil the bore
5. If you have fired the rifle, we recommend that you repeat the bore cleaning operation one or two days later, as described above.
6. It will be sufficient to slightly oil all other parts from time to time, using an oil-saturated cloth.
7. It goes without saying that the rifle should be cleaned and oiled if it was used under poor weather conditions.

Barrel changing

To change a barrel unscrew the two Allen screws in front of the trigger-guard by means of an Allen-wrench. By opening the action the barrel assembly can be taken out of the stock. The new barrel (of the same caliber-group) is assembled vice versa. (Figure 7 and 8)



7



8

The advantage of the interchangeability of barrels is obvious, because, no matter what caliber is being used, the balance and feeling of the rifle are always the same.

However, interchangeability is only possible within these caliber groups:

1st group

Bolt Face diameter 12,2 mm

Calibers: 5,6x57; 243Win.; 6,5x57; 7x64; .308Win.;
.30-06; .270Win.; 9,3x62

2 nd group

Bolt Face diameter 12,65 mm

Caliber: 9,3x64

3rd group

Bolt Face diameter 13,1 mm

Calibers: 6,5x68; 8x68 S

4th group

Bolt Face diameter 13,58 mm

Calibers: 7 mm Rem. Mag.; .300Win.Mag.;

.300Weath.Mag.; .375 H&H Mag.; .458Win.Mag.

Within group 1. all barrels are interchangeable.

The exchange from group 1 to group 2 and 3 is possible, provided that the bolt with the larger bolt face diameter and extractor is used.

If you change from group 1 to group 4, you need a second bolt with suitable extractor.

Cal. .243Win and .308Win cannot be used in Magnum and Big Game rifles, as the cartridge is too short for the magazine to guarantee proper feeding.

If you intend to change barrels, please take into consideration, that the outside diameter of cal. .375 H&H Mag. and .458Win.Mag. is 32 mm.

Test Firing

The model 66 is shot at a distance of 110 yards with 3 shots. The original target indicating the ammunition used is supplied with each rifle. We recommend testing the rifle after the barrel has been changed.

Exchange of the trigger system

Trigger types may be changed from single stage to double-set and vice versa; however, this operation should only be done at the Mauser factory or by a competent gunsmith. Call for prices and information.

Adjusting of the trigger-pull (for single stage trigger)

Take out the bolt system. On the left side of the guiding rail there is a slot for turning the adjusting screw fitted to the sear. By turning this screw to the right the trigger weight is increased to 2,6 kilopounds. Turning the screw to the left will relieve the trigger spring to a minimum of approx. 1,2 kilopounds.

From the factory the trigger pull is adjusted to approx. 1,8 kilopounds. (Figure 14 and 15)



14



15

Adjusting the way of travel

The triggers are adjusted at the factory with all factors optimally balanced.

For safety reasons, all modifications of the trigger should be done by a competent gunsmith.

Suggestions for telescopic mounts

1. Pivot Mount (Figure 16)

2. Suhler Claw Hawk Mount (Figure 17)



16



17

Technical Details

Barrel: Corrosion-resisting hammer forged chromium molybdenum steel, barrel-band front sling swivel (except on Safari models)

| | |
|----------------|-------|
| length: | 53 cm |
| standard cal.: | 60 cm |
| magnum cal.: | 65 cm |

Stock: 66 S:
Choice walnut, oiled and waxed, rosewood trimmings on fore-end and pistol grip cap, rubber recoil pad, fine checkering on fore-end and pistol-grip, hog back comb and Bavarian cheekpiece.
Big Game cal.:
Monte Carlo comb, German cheekpiece

66 SM:
Choice walnut, oiled and waxed, rubber recoil pad, Monte Carlo comb, Bavarian cheekpiece, specially shaped pistol grip, Mauser "Schnabel" fore-end tip, fore-end and pistol grip checkering.

Full Stock:
With hog back comb, Bavarian cheekpiece

Action: Mauser telescopic short-stroke action, two locking-lugs at the front of the bolt, allows an overall length approximately 9 cm shorter than competitive rifles that have the same barrel length.

Trigger: 66 S:
Single-stage, crisp trigger or double set trigger-standard. Two-stage hair trigger as an option.

66 SM:
Mauser double set trigger combined with two-stage hair trigger, single/set trigger on tang.

Safety: Silent safety blocking the firing pin with additional lock to eliminate accidental bolt opening.

Magazine: internal, capacity 3 shots

Sights: Special open rear sight, adjustable for elevation and windage. Rectangular front blade and front sight hood.

Weight: Standard + Full Stock: approx. 3,4 kg
Magnum cal.: approx. 3,6 kg
Big Game: approx. 4,2 kg

Length: 66 S:
Full Stock: approx. 99 cm
Standard: approx. 106 cm
Magnum cal. + Big Game: approx. 112 cm
66 SM:
Full Stock: approx. 100 cm
Standard: approx. 108 cm
Magnum cal. + Big Game: approx. 113 cm
