

The  
**ORIGINAL**  
Mannlicher-Schoenauer  
Sporting Carbine

**MODEL 1950**



STEYR-DAIMLER-PUCH AKTIENGESELLSCHAFT

STEYR

VIENNA  
AUSTRIA

GRAZ

THE ORIGINAL

**Mannlicher-Schoenauer Sporting Carbine**

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STEYR, AUSTRIA

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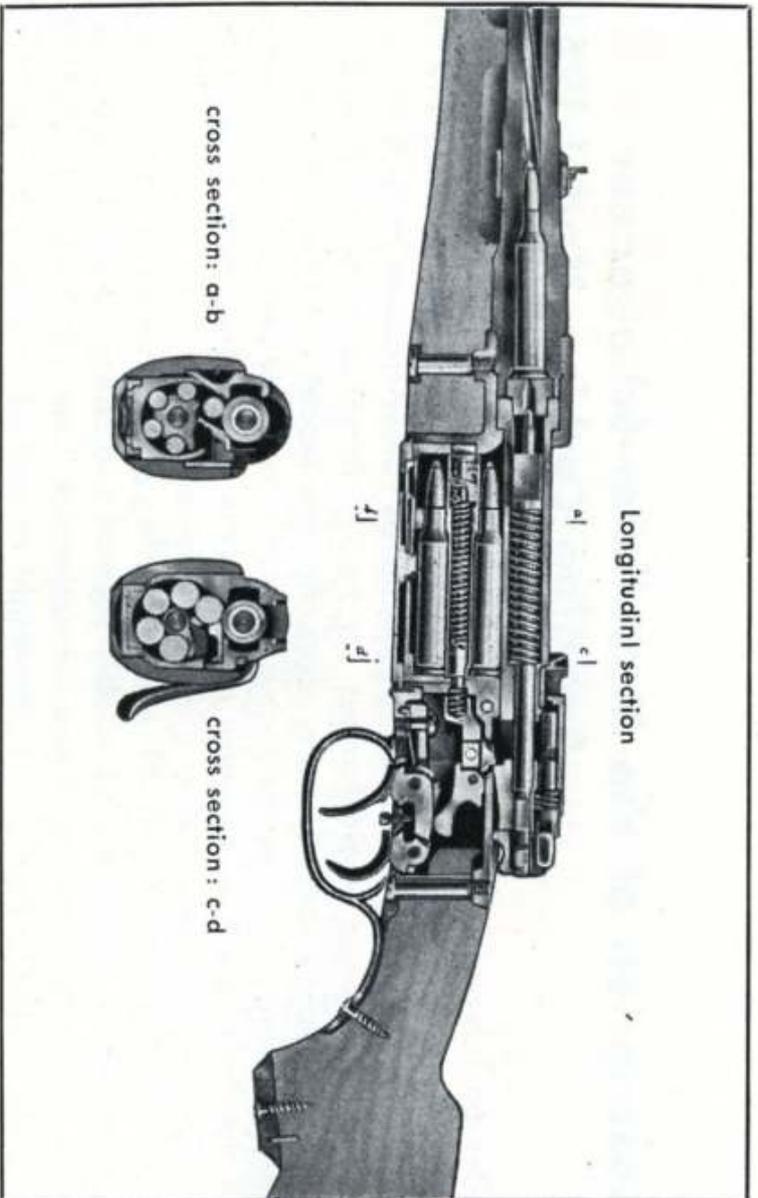


## **Description of the Mannlicher-Schoenauer Sporting Carbine Model 1950**

After an interval of a few years, MANNLICHER-SCHOENAUER sporting carbines (repeating-rifles) are once more being manufactured. They are the classic make of sporting rifle produced by Steyr-Daimler-Puch A. G. and as such have been world-famous for nearly three score years. Emanating from the experiences of many years, the new model 1950 follows the latest manufacturing principles, the high quality of its material remaining unchanged. All the spare parts of the new sporting rifle are again being made interchangeable, thus warranting utmost precision.

The MANNLICHER-SCHOENAUER sporting carbine unites in a most typical manner all the attributes of quality such as precision, durability and regularity. — Besides these qualities, the universal fame of the MANNLICHER-SCHOENAUER is due to its light weight as well as its beauty and practical construction which makes it very easy to handle. — Its elegant lines again, are due to the inherent Austrian sense for fine taste.

The MANNLICHER-SCHOENAUER sporting carbine or rifle is a repeater operated by bolt action having a two-way (turning) movement for opening (extracting and ejecting), unlocking and cocking of the firing pin; the locking being effected by means of cam surfaces arranged symmetrically behind the bolt head, the bolt-handle being arranged and located at the right side of the breech.



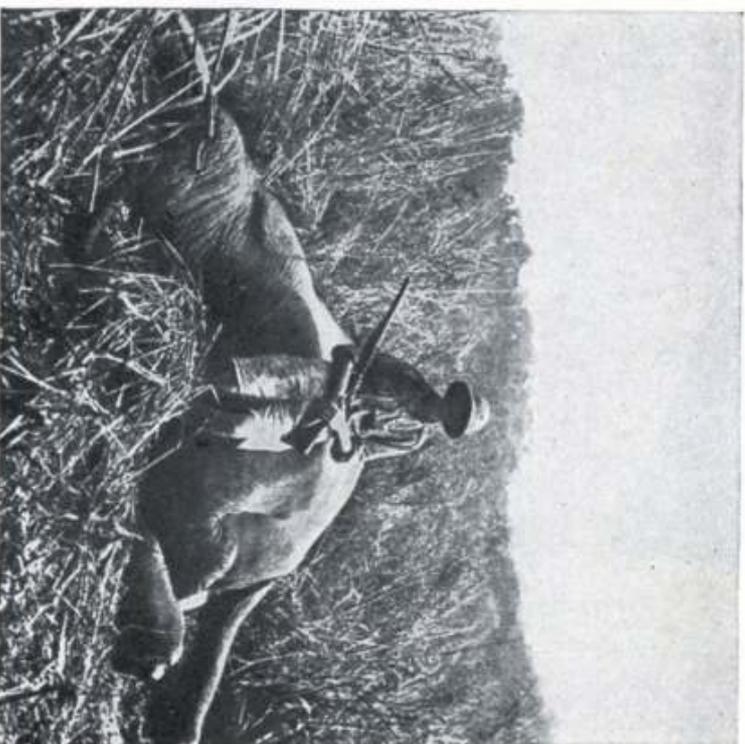
The feeding of 5 cartridges is effected from the magazine situated under the body within the stock, by means of a rotary cartridge carrier (feeder) around which the cartridges are arranged concentrically. The cartridges are put into the magazine from clips or singly. A sixth cartridge can be introduced into the cartridge chamber of the barrel by pressing down the fifth cartridge with the thumb of the left hand while pushing forward the bolt handle. — All the cartridges can be extracted simultaneously from the magazine, the bolt being opened by pressing a finger-tip upon the cartridge carrier on the right-hand side window of the cartridge chamber.

This rifle is provided with a well tried and proved adjustable hair-trigger. It is, of course, also possible to use the ordinary (front) trigger for firing in the usual way. The normal sight consists of a fixed leaf for 100 m (107 yds) and 200 m (214 yds) and a folding leaf or collapsible sight for 300 m (321 yds) and a silver bead front-sight.

The stock is furnished with a pistol grip and horn cap. Its length from front trigger to heel plate is 35 cm (12 $\frac{3}{4}$ "').

The principal advantages of the MANNLICHER-SCHOENAUER repeater as distinct from rifles of other systems are as follows:

1. Absolute safety of loading: By employing a rotary cartridge carrier or rotating feeder device, the cartridges are carried to a place precisely below the bolt and fed into the barrel which method altogether excludes any possibility of jamming.
2. Cartridges with hollow- or lead pointed projectiles are securely housed within the rotary magazine. In this manner, projectile heads cannot be damaged thus providing for utmost precision of marksmanship.
3. The drum-shaped rotary magazine is housed absolutely dust-proof within the stock. The spring of the feeder, too, is totally protected within this device.
4. Entirely secure locking of the bolt mechanism when shut. Also it is very easy to handle.
5. A spring loaded safety catch of bolt prevents the bolt from being pulled open by tree branches &c. when the rifle is carried at the trail in bush or jungle. It will never miss fire.
6. The safety catch is very easy to handle and operates directly upon the firing pin and the bolt.
7. The lock-mechanism and the cartridge-carrier can be easily and quickly dismantled and re-assembled for cleaning, all without the aid of tools.
8. Superlative marksmanship because of the mirrorlike polish of the bore and the rifling. All parts are made to resist corrosion.
9. The rifle provides for utmost safety of the marksman, the barrel overlapping the head of the bolt.
10. The select quality of materials used in the manufacture of Steyr—made MANNLICHER-SCHOENAUER repeaters has been determined by the experience of three score years.
11. All parts can easily be replaced by spares, production methods being based on strictest and most minute precision in manufacture.
12. The light weight of the rifle.
13. The beauty of its design and its fine looks together with its highly serviceable nature have contributed largely to its world-wide fame as the finest of sporting rifles.



## Mannlicher-Schoenauer Sporting Carbine (Repeater) Model 1950

Calibre 6,5 x 54 M. Sch.  
Standard model with full stock and hair-trigger  
length of barrel 46 cm ( $18\frac{7}{16}$ "")  
Total length 0.99 m (39") Weight 3,10 kg (appr.  $6\frac{3}{4}$  lbs)



For calibres "Winchester", "Roberts", "Springfield" and 7 x 57 lengths of barrels provided are 20" (508 mm), overall length 41" (1.05 m) while the weight of the rifle will be abt 7.01 lbs (abt .3.19 kg)

## Mannlicher-Schoenauer Sporting Carbine (Repeater) Model 1950

Calibre 7 x 64 (.276") or, respectively .270 (American Winchester cartridge)  
" 7 x 57 Calibre .257 (Roberts)  
" 8 x 57 JS " 30-06 (7,62 x 63 Springfield)  
" 9,3 x 62



High speed model half stocked. Length of barrel 60 cm ( $23\frac{5}{8}$ "")  
Total length 1.13 m ( $44\frac{3}{8}$ ""), Weight 3.35 kg (appr.  $7\frac{3}{8}$  lbs)

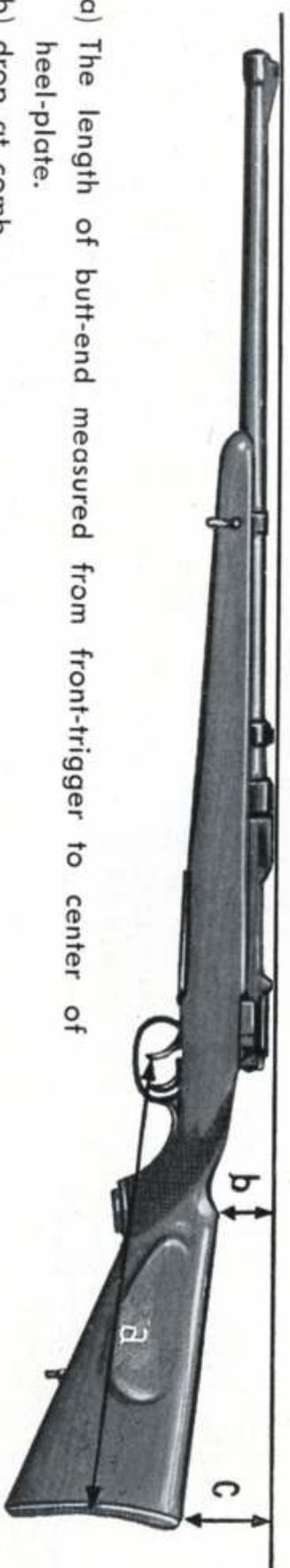
## Mannlicher-Schoenauer with patented Steyr pivotally mounted telescope sight Model 1950

a novelty distinguished by its ease of adjustment and by its basic constructional principle of being pivoted in situ. As also by being mounted on the rifle without exercising any tension.



The disposition of our attachment also allows of aiming with the ordinary fore sight and sight notch below the telescope. Our telescope attachment can be at any time easily fitted to all MANNLICHER-SCHOENAUER Model 1950 rifles.

If a special kind of stock is required, please let us have the following measurements:



- a) The length of butt-end measured from front-trigger to center of heel-plate.
- b) drop at comb.
- c) drop at heel-plate.

## **Additional equipment:**

If required, any MANNLICHER-SCHOENAUER rifle can be supplied at an extra charge with:

Barrel of Antinit-Steel  
Single trigger

Front-sight protector  
Stock of selected wood  
Special stock

Fixed telescope and shooting-in  
with telescope  
Sliding safety catch  
Engraving of customer's name

## **Dismantling and Re-Assembling the Mannlicher-Schoenauer Sporting Carbine**

The entire mechanism of the breech (i. e. the bolt and magazine) can be taken to pieces and again be re-assembled without the aid of tools.

For this purpose proceed as follows:

Pull back (open) bolt at the same time depressing bolt retaining catch spring. Bolt assembly will now come out and remain in your hand. Now grip it in your left so that the lug of the firing pin stands upright. Slowly release tension of spring of firing pin by turning the tensioning (or cocking-) sleeve to left (anti-clockwise). Then depress the winged grip of the safety catch against the cocking-sleeve at the same time revolving it 180° towards the right hand side (clockwise). Now the lug of the firing pin can be taken down from off the back end of the bolt by turning the former 90° to left (anti-clockwise) when it will come off. By turning backward the winged grip of the safety catch, the latter may be extracted from the cocking piece (device) when this piece (No 38) can be extracted. The bolt then is gripped in a way so that the bolt-head stands upright. Then the bolt head must be carefully turned from the right to the left (anti-clockwise) until the ejector and the bolt-handle stand in line. The bolt head and the firing pin being pressed from out of the bolt by the force of its spring, can now be removed. When re-assembling the bolt mechanism, the same procedure may be followed but in reversed order. To facilitate assembling, it may be pointed out that the bolt-head, after it has been put in must subsequently be turned quite to the right (clockwise sense) and to its very limit.

For the purpose of removing the cartridge-carrier (feeder), the cover-plate at the bottom of the stock must be turned laterally and outward until it leaves (comes off from) the grooves in the housing. This can be done by depressing the flat locking spring holding down the base- or cover-plate of the feeder (carrier) by means of the point of the projectile of a cartridge while simultaneously turning the base- or cover-plate.

In order to still further dismantle the feeder from the now free block of the cartridge carrier and feeder, the latter must be detached from the block by lifting (removing) the feeder off its cylindrical forepart when the flattened conical part of the tensioning-shaft leaves the slit in the shoulder of the feeder block. By slightly turning this conical part of the wing of the tensioning shaft, from right to the left (anti-clockwise) the tension of the carrier spring is released and the tension shaft as well as the carrier spring and the bolt of the spring can now be removed from the bore of the carrier.

To re-insert the feeder, the carrier spring with the spring bolt must be replaced in such a way that the carrier face of the spring bolt is brought to engage with the larger bore of the carrier, just protruding slightly from the latter.

The best way to do this when introducing the tension shaft is to turn it simultaneously first briefly to the left and then to the right.

The flat pin of the tension shaft is then held by thumb and index of the right hand while the left hand grips the carrier and the tension shaft which is simultaneously being pushed into the carrier, turning it at the same time slightly from right to left (anti-clockwise).

In this way the left-threaded spiral groove of the tensioning shaft is pushed of itself over the appendage-pin which protrudes into the larger bore of the feeder. No need to continue turning as soon as the appendage-pin engages the ring groove of the tensioning shaft.

The cartridge-carrier spring is thus given its initial tension. Now, the protruding pivot-pin of the spring-bolt is introduced to its seating (small groove at rear of the shoulder of the feeder frame housing) and the carrier is pressed down into its frame, the flattened conical piece of the tension shaft slipping into the slit in the front part of the shoulder of the frame of the carrier.

The frame as well as the cartridge-carrier are now introduced into the housing in such a manner that the cover-plate-catch-spring should be so placed as to face in the direction of the muzzle of the gun barrel.

The cover-plate block of the carrier with feeder is turned in the direction of the axis of the barrel when the shoulders of the plate engage into the grooves in the housing and the lock spring, springing into engagement, fixes the carrier plate in its correct position. In this manner the feeder and its frame are now attached to their housing.

## **Steyr Pivotal Mounting of Telescopic Sight on the Mannlicher-Schoenauer High-Power Rifle (Carbine).**

The pivotal mounting of the telescopic sight is based on a completely novel principle whereby for the first time the telescopic sight is mounted on the rifle free of tension. Because of adjusting the telescopic sight by turning it around a pivot, tension in the telescopic tube is no longer possible. Sight corrections are no longer made with the help of a hammer depending on "feel" but with the help of a screw and counterscrew whereby change of aiming point is proportional to the extent of turning the screw.

This new type is mounted directly on the breech without weakening the latter. The barrel remains unaffected by this new mounting so that in shooting either with or without telescopic sight the aiming point will not be affected. The new type mounting can be fixed to any MANNLICHER-SCHOENAUER rifle.

With the new mounting the loss of the mounted sight while carrying the rifle slung over the shoulder in the usual way (i. e. continental type) cannot occur because the weight of the weapon pressing towards the body prevents loosening.

A particularly broad sight blade giving a large field of sight makes it possible to aim over open sights. The elevation is being adjusted in the usual way with the help of a screw. The easy way of making corrections results in a simple and ammunition-saving try-out of the gun.

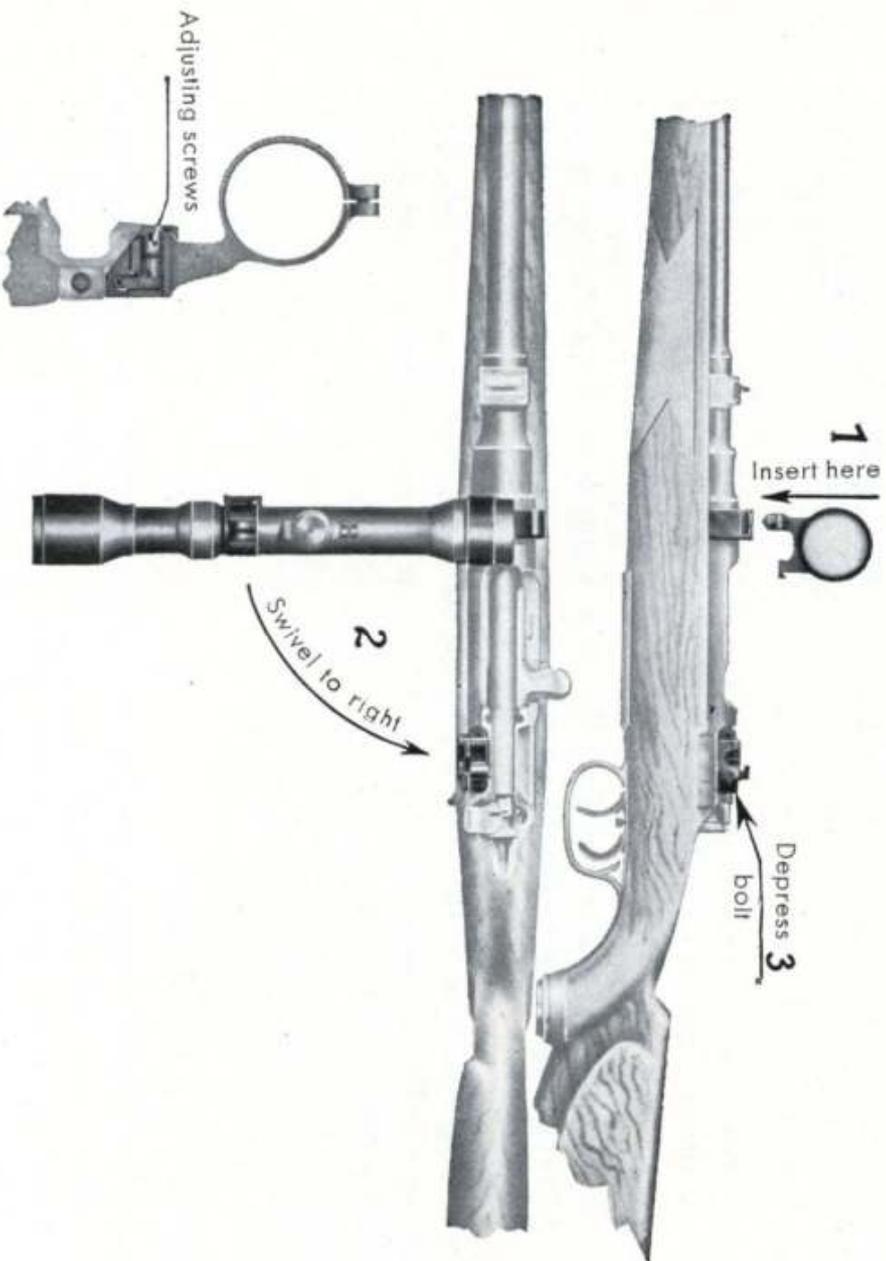
### **How to mount a Telescope sight** (See sketch on next page).

The telescope sight is held with the right hand in a horizontal position but at a right angle to the rifle. The pivot on the front leg is then inserted into the hole in the telescope sight ring located on the breech. After that the telescopic sight is given a quarter turn counter clock way (anti-clockwise) which will couple it securely with the breech. In order to fasten the rear leg of the telescopic sight, a bolt on the rear part of the breech is being pressed forward with the thumb of the right hand until it snaps in. For removing sight proceed in reversed order.

### How to make Side Corrections.

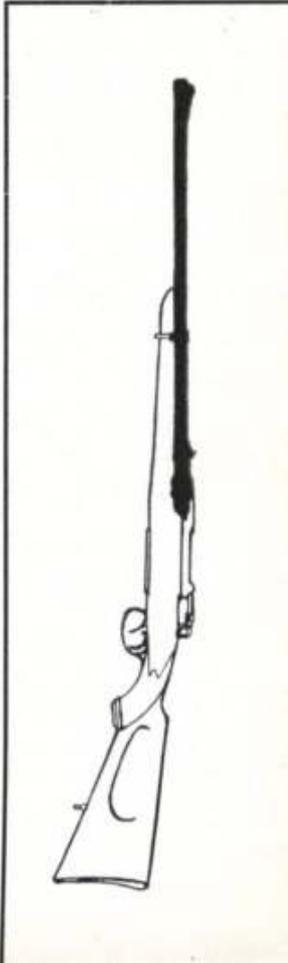
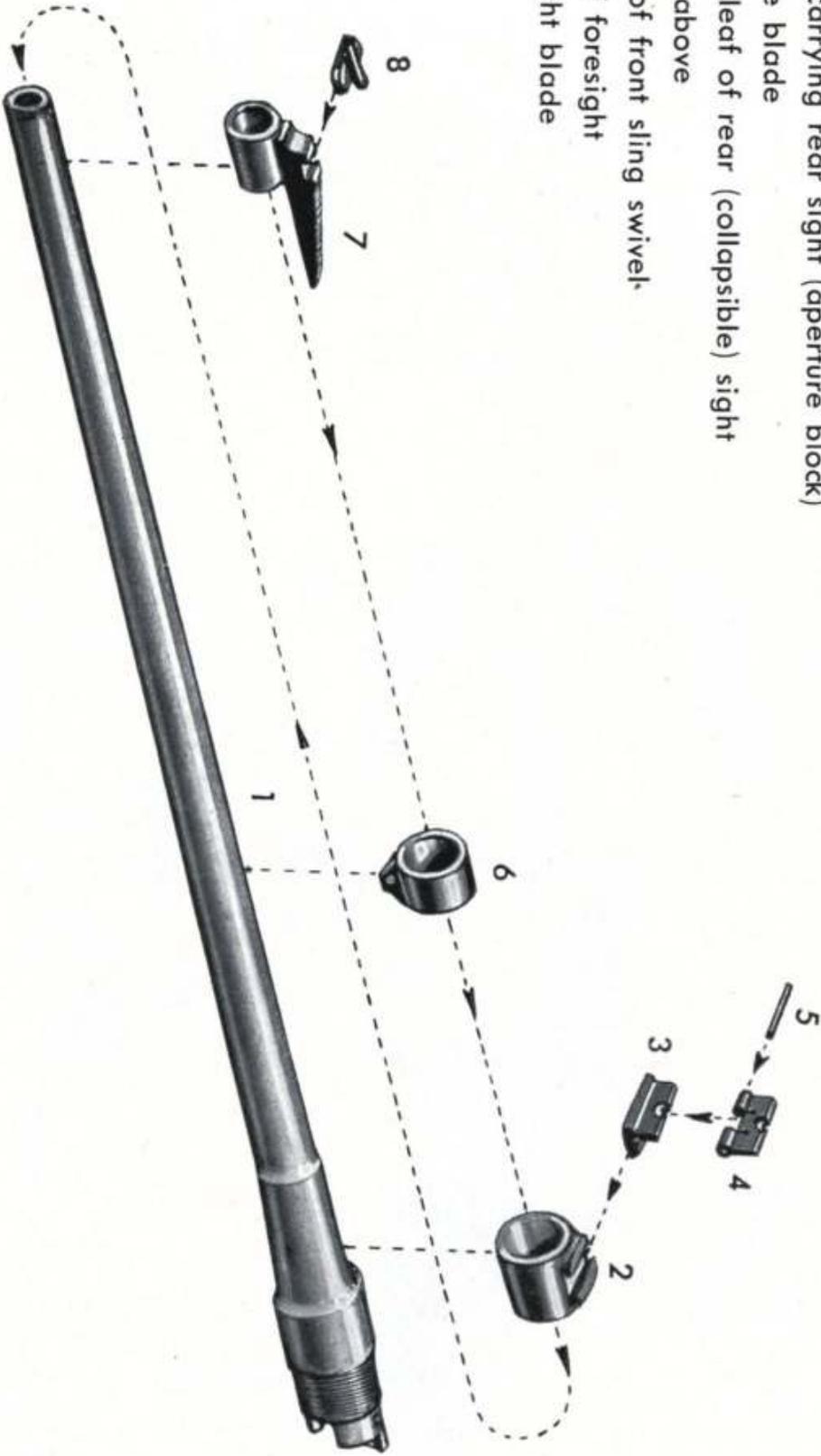
To make side corrections a screw driver is required. An eighth turn of the screw and counter screw on the rear leg of the telescopic sight effects aim corrections of 4 cm on a target 100 meter distant. Corrections are made in the following way: first take off telescopic sight. Then adjust the screw and counter screw on the

rear leg of the telescopic sight by unscrewing that screw which is on the side of the deviation by the proper distance. Thereafter the counter screw is tightened to the same extent. From this follows that unscrewing of the screw on the right side makes corrections towards the left and unscrewing on the left side makes corrections towards the right.

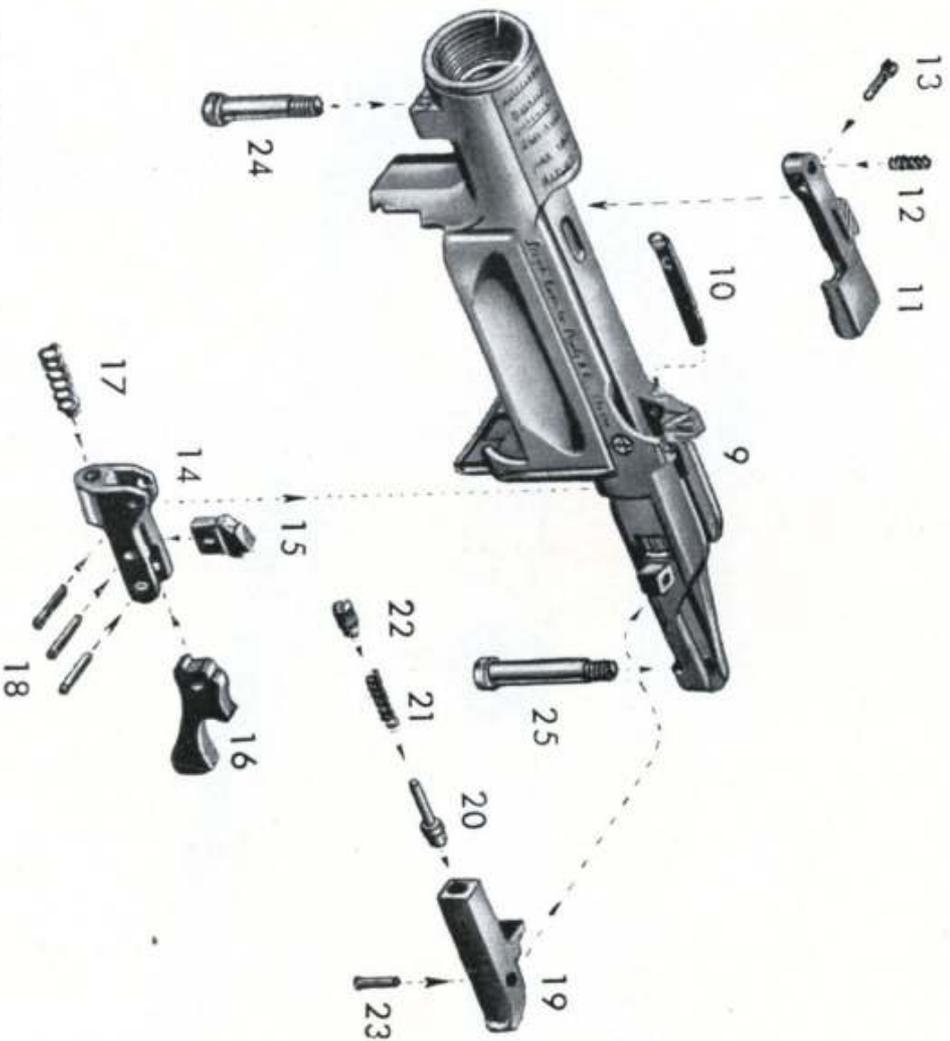
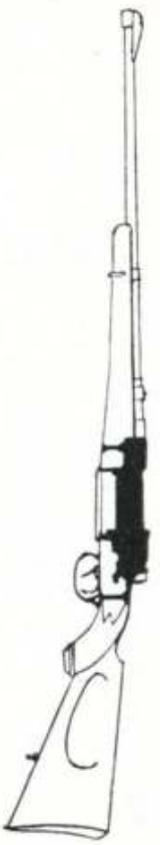


# List of Spare Parts for the M-5 Sporting Carbine

- 1 Barrel
- 2 Sleeve carrying rear sight (aperture block)
- 3 Aperture blade
- 4 Hinged leaf of rear (collapsible) sight
- 5 Pin for above
- 6 Sleeve of front sling swivel
- 7 Block of foresight
- 8 Fore sight blade



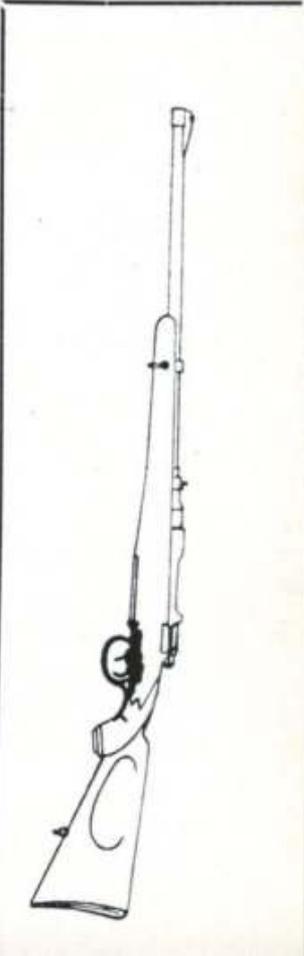
**BARREL**



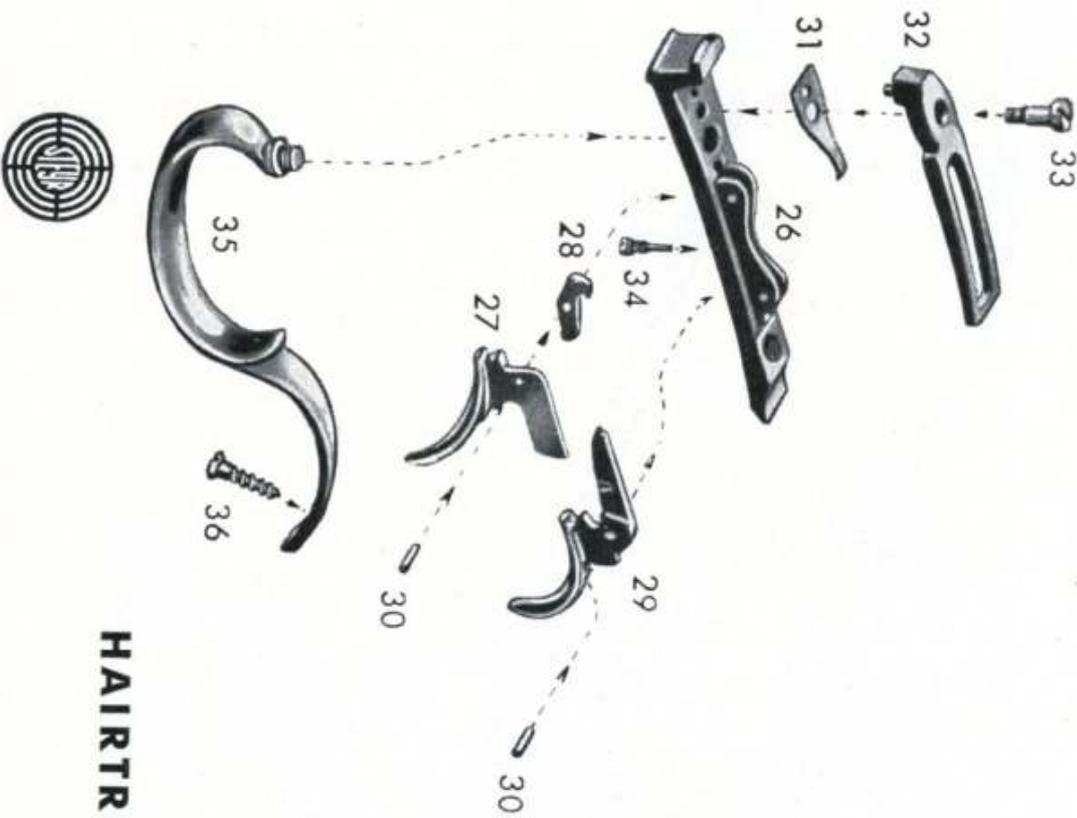
- 9 Bolt: Housing of bolt-mechanism
- 10 Lock-spring of firing chamber
- 11 Cartridge carrier
- 12 Spring for above
- 13 Screw for above
- 14 Yoked lever of trigger
- 15 Passage
- 16 Trigger lever
- 17 Trigger spring
- 18 Trigger pins
- 19 Block retaining breech
- 20 Pressure pin holding down bolt-housing
- 21 Pressure spring for fixing bolt-housing
- 22 Nut of pressure pin holding down bolt-housing
- 23 Fixing pin for holding down bolt-housing
- 24 Front connecting screw
- 25 Rear connecting screw

**BREACH**

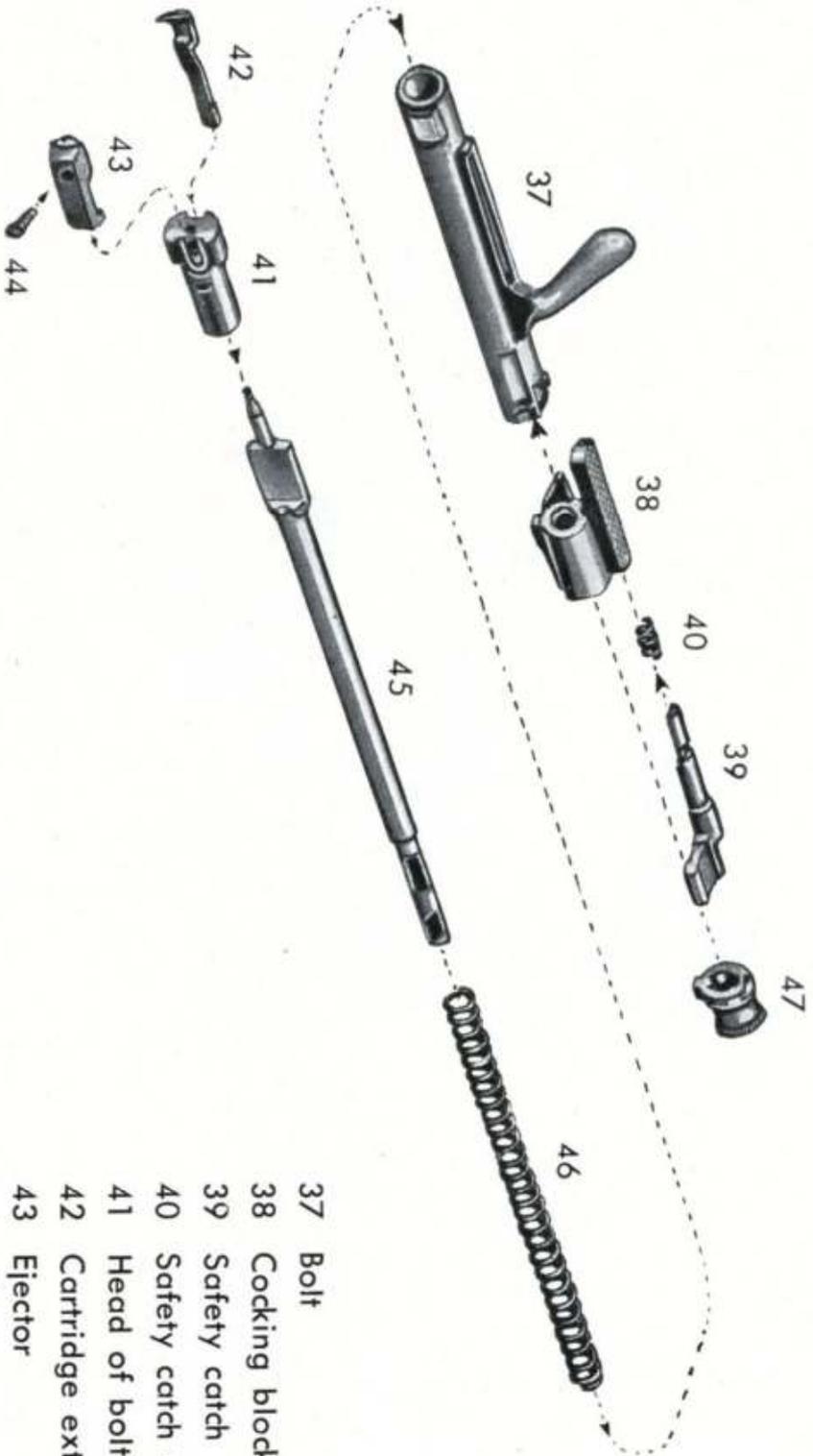




- 26 Trigger base plate
- 27 Hairtrigger
- 28 Link of 27
- 29 Set (cocking) trigger
- 30 Trigger pins
- 31 Trigger spring
- 32 Set (cocking) spring
- 33 Screw of trigger setting spring
- 34 Adjustment screw for set trigger
- 35 Trigger guard
- 36 Screw for above



**HAIRTRIGGER**

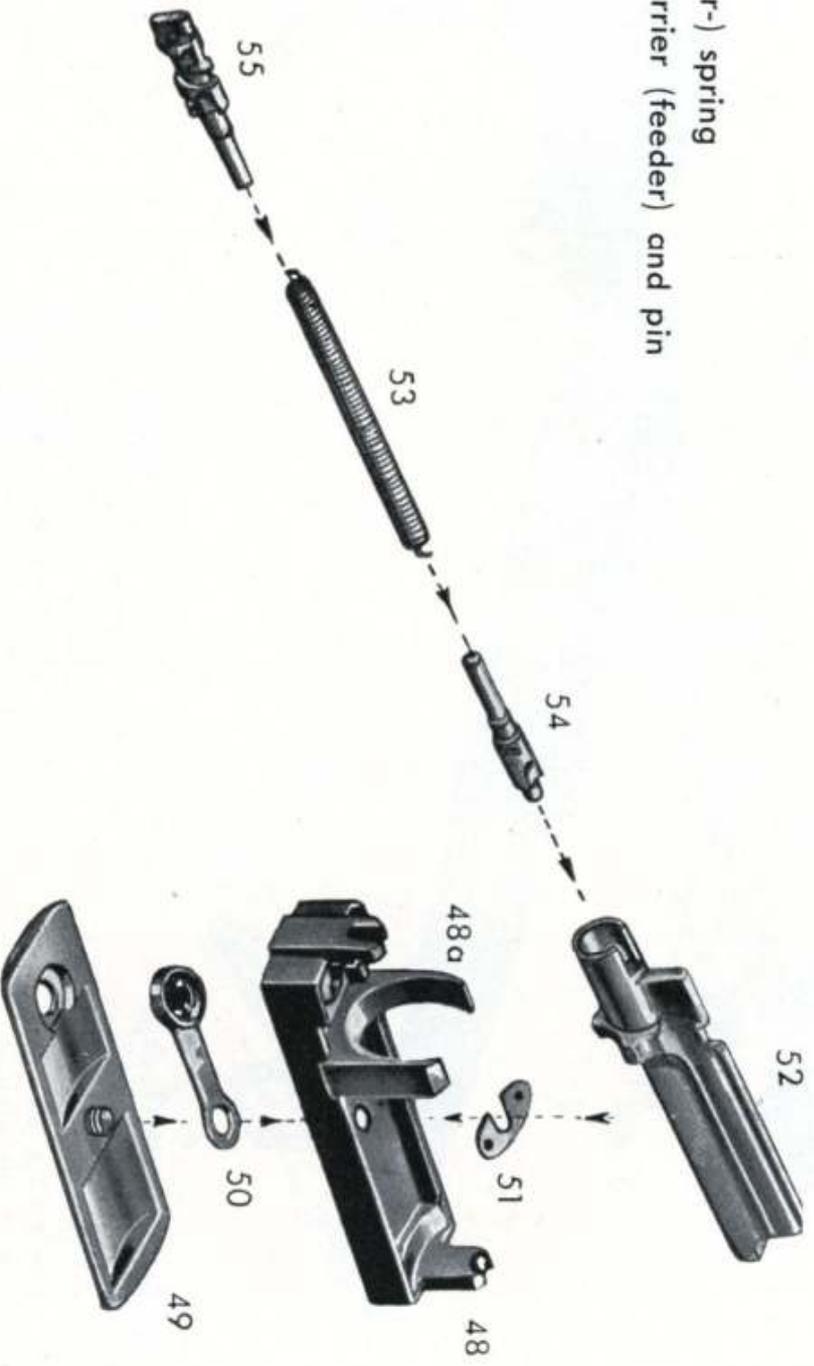


- 37 Bolt
- 38 Cocking block
- 39 Safety catch
- 40 Safety catch spring
- 41 Head of bolt
- 42 Cartridge extractor
- 43 Ejector
- 44 Ejector screw
- 45 Firing pin
- 46 Spring for firing pin
- 47 Nut for firing pin

**BOLT AND FIRING PIN**

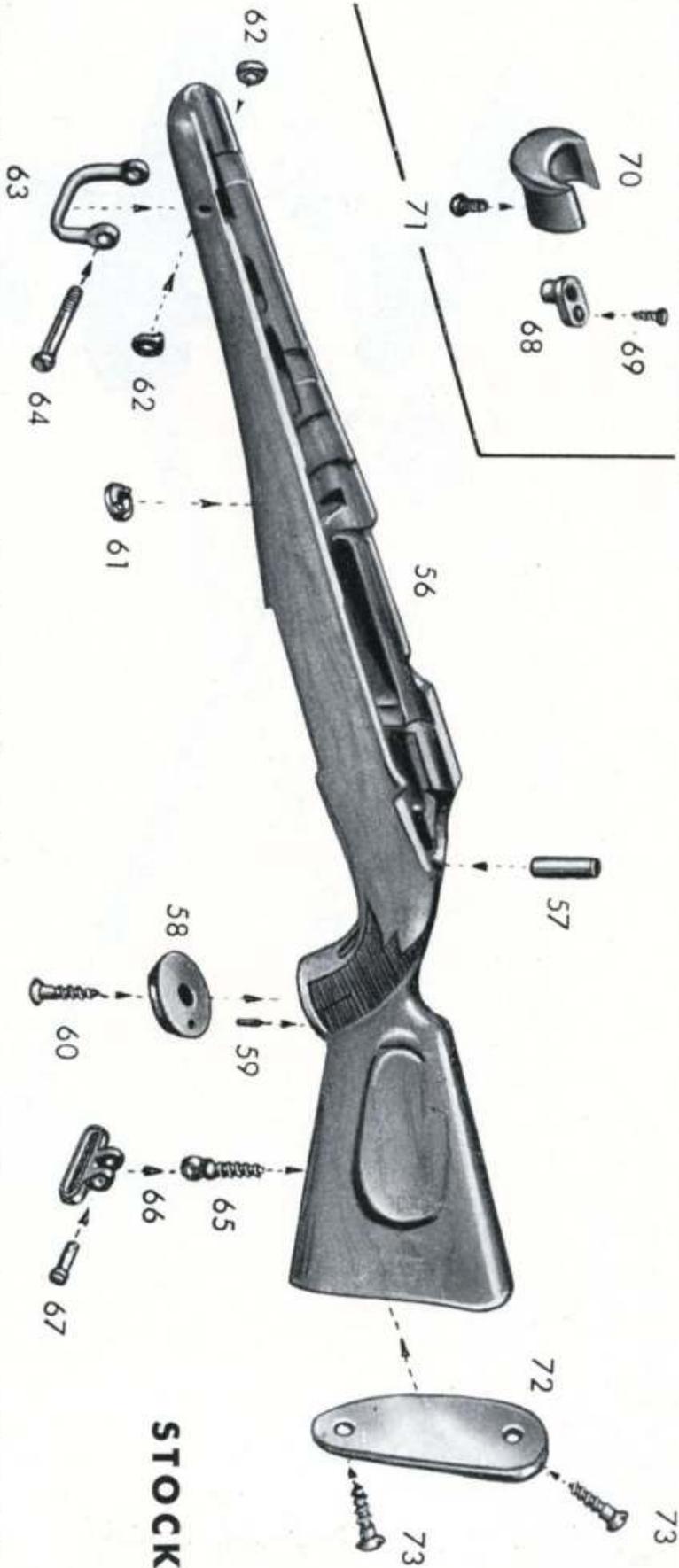


- 48 Block of cartridge carrier (feeder) frame with bosses (48a)
- 49 Cover-plate of cartridge carrier
- 50 Cover-plate locking spring
- 51 Spring for cover-plate bolt
- 52 Feeder
- 53 Feeder spring
- 54 Bolt of carrier (feeder-) spring
- 55 Tension spindle of carrier (feeder) and pin



**MAGAZINE WITH ROTARY  
CARTRIDGE CARRIER (FEEDER)**





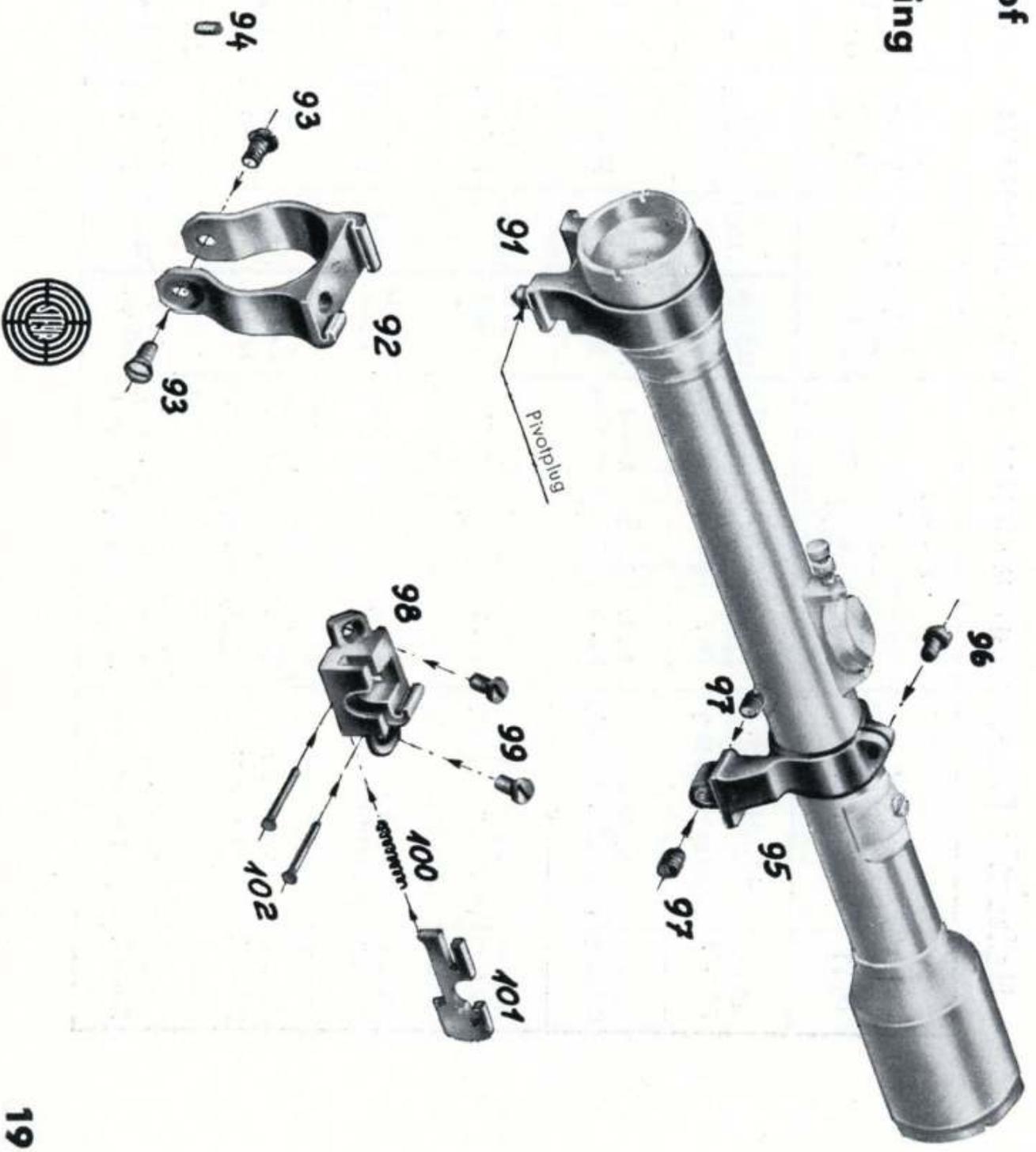
**STOCK**

- 56 Stock (half stock)
- 57 Screwsleeve
- 58 Horn cap for grip end
- 59 Horn cap pin
- 60 Horn cap screw
- 61 Washer of front connecting screw
- 62 Washer for front sling swivel
- 63 Front sling swivel
- 64 Screw of front sling swivel
- 65 Lower sling swivel screw
- 66 Rear sling swivel
- 67 Rearslingswivelconnecting screw
- 68 Basepiece of fore cap nut (for full stock only)
- 69 Screw for cap of fore-stock (for full stock only)
- 70 Cap of fore-stock (for full stock only)
- 71 Screw for 70 (for full stock only)
- 72 Butt-end plate
- 73 Butt plate screws



# Parts Designations of the Steyr Telescope Sight Pivotal Mounting

- 91 Front leg of telescope sight
- 92 Ring for mounting telescope sight
- 93 Screws for ring
- 94 Fixing pin for ring 92
- 95 Rear leg of telescope sight
- 96 Shackle screw for rear leg
- 97 Adjustment screw for rear leg
- 98 Base plate for mounting sight
- 99 Screw for base
- 100 Spring for bolt
- 101 Bolt
- 102 Rivets for base



## Ballistic Data for the MANNLICHER - SCHOENAUER Sporting Carbine Model 1950

Length of barrel cm (")	Cartridge Calibre mm (in)	Powder		Bullet weight grains	Length in.	Muzzle Velocity V <sub>0</sub> m/sec (yds)	Muzzle Energy E <sub>0</sub> m kg	Elevation of Trajectories in inches			
		Kind	weight g (grains)					Type	100 m i. e. at 50	200 m i. e. at 100	300 m i. e. at 150
45 cm (17.71")	6.5×54 M.-Sch. mm (0.2559"×2.1259")	Rott- weiler R 1	2.9 g (44. <sup>3</sup> / <sub>4</sub> grains)	Round Top Part. Amu.	158.949 grains	1.220"	704 (755.6 yds)	260	0.630"	4.684"	11.598"
60 cm (23.62")	7×64 mm (0.27559"×2.5196")	Bl. P. No. 2	3.3 g (50.925 grains)	Round Part. Amu.	172.838 grains	1.181"	770 (826 yds)	338	0.590"	3.858"	10.236"
60 cm (23.62")	7×64 mm (0.27559"×2.5196")	R No. 1	3.75 g (57.869 grains)	Torp.	172.838 grains	1.496"	843 (904 yds)	405	0.394"	2.677"	6.888"
60 cm (23.62")	9.3×64 mm (0.3661"×2.4409")	Sp. P.	3.85 g (59.412 grains)	Part. Amu.	247.714 grains	1.023"	790 (847 yds)	531	0.501"	3.543"	10.236"
60 cm (23.62")	Winchester Super Speed	American Rifles Stick Powder	3.55 g (54.783 grains)	Hollow Top S (OPFT Ex P)	8.43 g = 130 grs	1.062"	958 (1028 yds)	394	$\frac{100 \text{ yds}}{0.475}$ "	$\frac{200 \text{ yds}}{1.999}$ "	$\frac{300 \text{ yds}}{5.399}$ "
60 cm (23.62")	Winchester Super Speed	American Rifles Stick Powder	3.2 g (50.925 grains)	Round Top Part. Amu. (S. P.)	9.73 g = 150 grs.	1.106"	845 (906 yds)	354	0.598"	2.999"	6.998"

## Ballistic Data for the MANNLICHER-SCHOENAUER Sporting Carbine Model 1950

Length of barrel in cm (and inches)	Cartridge Calibre mm (inch)	Gunpowder		Projectile			Muzzle Velocity $V_0$ m/sec (yds)	Muzzle Energy $E_0$ m/kg	Elevation of Trajectories in inches at		
		Kind	Weight g (grains)	Type	Weight of projectile g (grains)	Length mm (in.)			100 m 107.33 yds at 50	200 m 214.66 Yds at 100	300 m 321.99 Yds at 150
60 cm (23.62")	7 × 57 0.27559" × 2.24"	R 2	3.05 g (74.068 grains)	Conical Top Part.Amu.	10 g (154.432 grains)	33 (1.189")	806 (865.08 yds)	331	0.1968"	2.4999"	8.4645"
60 m (23.62")	8 × 57 JS 0.3149" × 2.24"	W 1919	3.00 g (46.296 grains)	Conical Round Top Part.Amu.	12.0 g (185.184 grains)	29.6 (1.1653")	778 (845.75 yds)	380	0.4714"	3.5826"	9.644"
60 cm (23.62")	.257" Roberts Super Speed	American Rifle Stick Powder	—	H. P. Hollow Head	6.48 g (100 grains)	—	885 (949.86 yds)	259	at 100 yds 0.6692"	at 200 yds 2.4999"	at 300 yds 7.0078"
60 cm (23.62")	30—06 Springfield Super Speed (7.62 × 63)	American Rifle Stick Powder	—	H. P. Hollow Head	9.73 g (150 g grains)	—	909 (975.62 yds)	409	0.5983"	2.4999"	6.4960"
60 cm (23.62")	30—06 Springfield Super Speed (7.62 × 63)	American Rifle Stick Powder	—	S. P. Conical Head Part.Amu.	11.66 g (180 grains)	—	827 (887.61 yds)	407	0.6967"	3.0039"	7.4921"