High-Precision Marksman's Rifle PSG 1

Maintenance Instructions



High-Precision Marksman's Rifle PSG1

Instructions for Maintenance and Repair

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PRELIMINARY NOTE:

- 1. These instructions apply to the PSG 1 marksman's rifle.
- 2. These maintenance instructions comprise service, maintenance and repair regulations.
- 3. If not particularly referred to, the components and assemblies must be re-assembled in the reverse sequence of their disassembly.
- 4. The reference numbers in the illustrations and in the text are identical with those in the spare parts list.
- 5. Subject to technical modifications.



1. Basic information on maintenance

1.1. General

Weapons in need of repair are detected during weapon inspections, musters and during practical and technical service.

Weapons with defects are immediately repaired by the competent ordnance personnel.

1.2. Maintenance

In case of malfunctions and poor shooting results of a weapon, the causes of the trouble must first be determined in a weapon inspection. The ordnance personnel must have sufficient knowledge in the field of ordnance engineering.

The personnel must be familiar with:

- 1. Design and operation of the weapon.
- 2. Function, stressing and limits of wear of the various components.
- 3. Application of gauges and testing equipment.
- 4. Correct and systematic carrying out of a weapon inspection.

Spare parts must only be installed if after rectification of all other defects the required correct function of the weapon cannot be achieved.

2. <u>Service description</u>

2.1. Special notes on service equipment

Use the following items for cleaning and service of the weapon:

- Cleaning kit for caliber 7.62 to 9 mm;
- Chamber cleaning brushes.
- Clean pull-throughs and cleaning rags;
- Multi-purpose-corrosion preventing oil.

Never clean the weapon with

- Metallic objects;
- Synthetics (e.g. nylon, perlon etc.);
- Chemical agents (e.g. petroleum ether, trichloroethylene etc.);
- Water.



2.2. <u>Instruction on service work</u>

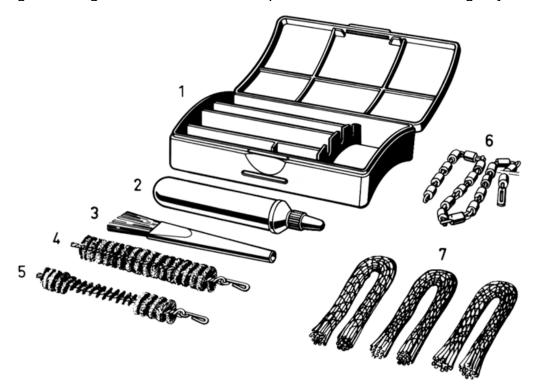
2.2.1. Main cleaning

This cleaning comprises the following operations:

- Disassembly of the rifle.
- Cleaning and drying by means of cleaning rags.
- Removal of dirt and dust from slots and corners by means of the cleaning brush.
- Pull a cleaning brush soaked with gun oil through the barrel when the barrel is at body temperature (not hot).
- Let the gun oil react for several hours.
- Pull a cleaning brush soaked with oil repeatedly through the barrel.
- Then pull dry cleaning pull-throughs through the barrel until the bore is clean.
- Lightly oil the barrel and sliding parts.
- Re-assemble the rifle.

IMPORTANT NOTE

Cleaning and oiling of the barrel must be repeated on the three following days after firing.



Cleaning kit, drawing No. 100 200

- 1 Storage box
- 2 Oil tube
- 3 Cleaning brush
- 4 Oil brush
- 5 Cleaning brush
- 6 Cleaning chain
- 7 Pull-throughs



2.2.2. Normal cleaning

2.2.3. Time schedule for service work

			Interval			
No	o. Location	Work	After Use	Before Use	After Firing	Monthly
1	Barrel Barrel	Clean and oil Free from oil	X	x	X*	Х
2	Receiver	Clean, check and oil	X		Х	Х
3	Bolt assembly	Disassemble, clean and oil	X		X	Х
	Recoil spring guide rod with recoil spring	Clean and oil	X		X	X
4	Butt stock	Clean and oil	X		X	Х
5	Grip assembly with trigger mechanism	Clean, check and oil	X		X	Х
6	Magazines	Clean, check and oil	Х		Х	Х
7	Accessories	Clean, check and oil	X		X	X

^{*} Clean and oil on three following days after firing.



2.3. Functional test

2.3.1. Loading

Safety lever at safe!

- Pull back cocking lever and engage it in the recess in the cocking lever housing.
- Make sure that the barrel is clear.
- Insert magazine filled with dummy cartridges into the weapon.
- Let the cocking lever snap forward; a cartridge must be fed into the chamber.
- Pull back cocking lever again; the cartridge in the chamber must be extracted and ejected and the second cartridge in the magazine must be fed.
- Unload the rifle.

2.3.2. <u>Safety</u>

- The safety lever must be free to turn and must firmly engage into its settings.

2.3.3. <u>Trigger mechanism</u>

- Disengage the safety.
- When the hammer is <u>cocked</u>, it must be possible to squeeze the trigger against the increased trigger pull at the let off point until the hammer is released.
- When the hammer is <u>uncocked</u>, it must be possible to squeeze the trigger against the slight pull.
- Set the safety lever at safe.

2.4. Safety precautions

Loaded weapons must never be put aside.

Safe handling is provided by

- The safety mechanism,
- The design of the trigger mechanism,
- The bolt system.

2.4.1. Procedure in case of exceptional events

In case of exceptional events, e.g. explosion-type noises during firing, the rifle must be left uncleaned and in the state which found. It must be kept at a safe place to be inspected by experts, if necessary.



2.5. <u>Trouble shooting chart</u>

Trouble	Cause	Remedy
Cartridges are not fed	Magazine not properly inserted	Insert magazine properly
	Magazine loose	Check magazine catch and notch on magazine. If worn out, turn in for repair.
	Magazine lips distorted	Replace magazine and turn damaged magazine in for repair
Cartridge case not properly ejected	Ejector broken or distorted or bore for ejector axle in ejector out of true	Replace ejector
	Extractor broken, extractor spring lame or broken	Replace extractor; Replace extractor spring
Hammer cannot be cocked, cartridge does not ignite when the trigger is pulled.	Hammer spring lame or distorted or bore for ejector axle in ejector out of true	Replace ejector
	Extractor broken, extractor spring lame or broken.	Replace extractor; Replace extractor spring
Cartridge does not ignite	Insufficient firing pin front protrusion, hammer spring lame	Check firing pin front protrusion
	Bolt head locking lever spring lame	Replace defective parts
Recoil too hard	Buffer blocked	Replace buffer



3. <u>Maintenance instructions</u>

Sheet No. PSG 1, complete 3.1 - 3.63.7 - 3.8Receiver with barrel **Bolt assembly** 3.9 - 3.13Grip assembly with trigger mechanism 3.14 Trigger housing, complete 3.15 - 3.16**Butt stock** 3.17 - 3.18Handguard 3.19 Magazine 3.20





Maintenance Instructions

Part:

PSG 1, complete

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Inspection before use - rifle unloaded, safety engaged

Description of operation (s):

- Inspect exterior condition of the rifle
- Check assembly groups for proper fitting.
- Clean the rifle (see paragraph "instructions on service work" and operation instructions).



Tools:

Gauges:

Cleaning rod for brush Auxiliaries:

Chamber cleaning brush

(Pos. 5)

(Pos. 6)

Sheet No.:



Maintenance Instructions

Part:

PSG 1, complete

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Checking of the weapon before firing – safety engaged, weapon unloaded

- Functional tests -

Description of operation (s):

Slid ability of the breech

- Pull bolt to the rear and engage the cocking lever in the recess of the cocking lever housing. The bolt must be easily movable to the rear.
- Release the bolt; it must snap forward all the way, driven by the recoil spring, and lock properly.

Cartridge feeding and case ejection

- Insert a magazine, filled with dummy rounds.
- Pull the breech several times back all the way and let it snap forward again. During this action the cartridges must be trouble free fed, extracted and ejected.

Forward assist

- Pull the breech to the rear and let it slowly slide forward again.
- By actuating the forward assist the bolt must lock completely.

Magazine catch

-	Insert	: magazine	into the	e magazine	guide;	the magazi	ne catch	must	engage	into tl	he magazine	and	firmly	hold	it.

٦	oo	ls	•

Gauges:

Auxiliaries: Dummy rounds cal. 7.62 mm x 51

Sheet No.:



Maintenance Instructions

Part:

PSG 1, complete

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Inspection before use - rifle unloaded, safety engaged

- Functional tests -

Description of operation (s):

Safety - and trigger mechanism

- It must be possible to easily actuate the safety lever which must firmly engage in its individual positions. If the stop spring on the safety lever is lame, the lever must be replaced. (See sheet No. 3.14).

Set the safety lever at safe

- Pull back the breech and let it snap forward.
- Pull the trigger; it must be blocked, the hammer must be caught by the sear.

Set the safety lever at fire

- Pull the trigger; it must be movable all the way and release the hammer.

Disconnector

- Set the safety lever at fire.
- Pull the trigger and hold it.
- Pull the breech back and let it snap forward; the hammer must be caught by the sear. The hammer must only snap forward after the trigger has been released and actuated again.

Trigger pull			
The trigger pu	ıll must be between 10 N and 15 N.		
Tools:			
Gauges:			
Auxiliaries:	Control gauge for trigger pull	(Pos. 20)	Sheet No.:



Maintenance Instructions

Part:

PSG 1, complete

Weapon: PSG 1

Edition: 1a/TD 2208

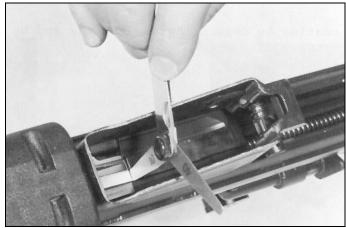
Designation of operation (s):

Checking the head space (gap between bolt head and bolt head carrier)

Description of operation (s):

- Close the breech.
- Un-cock the hammer.
- Place the weapon on a support with the magazine guide to the top.
- Check head space by means of the feeler gauge.

Note: The gap between bolt head and bolt head carrier must not be less than 0.1 mm (0.004) and must not exceed 0.4 mm (0.016) by the manufacturer, when the weapon leaves the plant. This head space will not increase but only decrease due to the wear and tear on the functional parts. In case of an oversized head space, the barrel extension and the interior of the bolt head must be checked for residues and must be carefully cleaned.



For correction of the head space see sheet 3.11.

Gauges:	Feeler gauge	962 235	(Pos. 16)	
Auxiliaries:				Sheet No.:
				3.4



Tools:

Maintenance Instructions

Part:

PSG 1, complete

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Inspection before use – weapon unloaded, safety lever at safe

- telescope 6x42 -

Description of operation (s):

- Make sure that the telescope is seated tight, if necessary; tighten the screws by means of single-headed wrench DIN 894-10.
- Check the telescopic sight for external damages
- Inspect entrance and exit lenses for cleanliness. If the lenses are dirty, do not touch them with your fingers, just breathe on them and clean them with a special cleaning cloth or with a dust brush which you will find in the accessory kit. Minor smudges (scratches) on the outside lenses do not impair the function of the scope.

Cracked glass parts, however, must be replaced (send the scope to the manufacturer).

- Remove dust and dirt with a dry cloth or brush from the exterior surfaces. Remove bad fouling (e.g. oil or grease) with a cloth that is soaked with benzene. Mechanical parts and fitting surfaces must be very carefully cleaned.
- Disinfect rubber parts by wiping them clean with a cloth that has been soaked in a disinfectant.
- Repair the varnish coating by decreasing the surface and by bringing on of air-drying lacquer, type RAL 9005
- If necessary, replace rubber parts.

Tools:	Single-headed wrench	DIN 894-10	(Pos. 31)
Gauges:			

Auxiliaries:

Sheet No.:



Maintenance Instructions

Part:

PSG 1, complete

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Inspection before use – weapon unloaded, safety lever at safe.

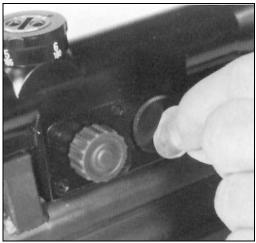
- telescope 6x42 – battery exchange

Description of operation (s):

The power supply for the illumination of the reticle of the 6x42 scope is provided by a pile of rechargeable Nickel-Cadmium round cells (3/60 DK register No. 05635 303052). Use the following current replacement (Varta-V625PX, Eveready-EPX625, Duracell-PX625A, Panasonic-HD, Kodak-KX625, Rayovac-RPX625 or Sony-MR9)

Battery exchange:

- Unscrew cover of battery housing with a coin and take off.
- Take out the head battery pile.
- Insert new or charged battery pile. Mind correct polarity.



Unscrew battery housing cover



Insert battery pile

Tools:

Gauges:

Auxiliaries: Coin

Batter pile, Varta 3/60 DK (see above for replacements)

Battery charger

(Pos. 15)

(Pos. 14)

3.6

Sheet No.:



Maintenance Instructions

Part:

Receiver with barrel

Weapon: PSG 1

Edition: 1a/TD 2208

OBERNDORF/NECKAR

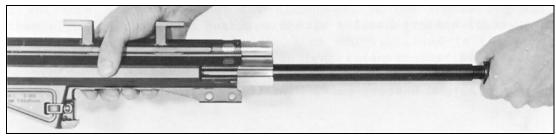
Designation of operation (s):

Removing of dents

- Cleaning and checking the barrel -

Description of operation (s):

- Clamp the receiver at the barrel extension into a vise. Check the receiver with the symmetry gauge which must smoothly slide inside the housing.



Check receiver with go and symmetry gauge

- Remove dents on the cocking lever tube by expanding the straightening mandrel at the dented section.



Inspection and straightening of cocking lever tube

Note: The barrel has a service life of more than 20,000 rounds. If this approximate limit is exceeded there is the probability of a decline in accuracy. The barrel exchange must only be carried out in the manufacturing plant.

Tools:	Extension rod	1013-100 W71	(Pos. 2)	
	Straightening mandrel, cone shape	1013-100 W73	(Pos. 3)	
	Go gauge, cylindrical	1013-100 W72	(Pos. 4)	
Caugas	Co and symmetry gauge	0222 100 1 1	(Doc. 1)	
Gauges:	Go and symmetry gauge	9233-100 L1	(Pos. 1)	
	Bore scope	ST 510 115	(Pos. 17)	
	Rod for cleaning brushes		(Pos. 5)	
	Chamber cleaning brushes		(Pos. 6)	
Auxiliaries:	Hammer		(Pos. 13)	Sheet No.:
, taxtillarioo.	Plastic hammer		(Pos. 12)	01100111011
	Flastic Hallillei		(FUS. 12)	
				3.7



Maintenance Instructions

Part:

Receiver with barrel

Weapon: PSG 1

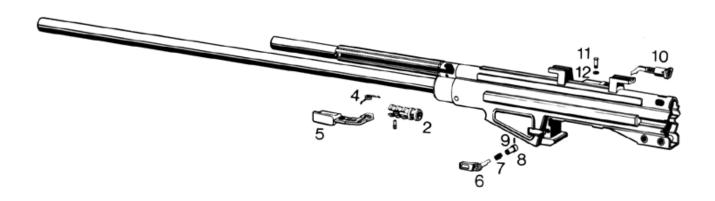
Edition: 1a/TD 2208

Designation of operation (s):

Inspect and if necessary replace cocking lever unit, magazine catch and forward assist.

Description of operation (s):

- Check cocking lever unit for damages.
- Check smooth operation of cocking lever (5) and it support (2).
- Inspect cocking lever elbow spring (4) for deformation and spring tension.
- Check magazine catch (6) for smooth operation.
- Replace parts, if necessary.



- Check forward assist (10) for smooth operation and proper function.
- Replace forward assist, if necessary.
- For this purpose remove locking washer (12), pull out guide bolt (11) and detach forward assist.

Pin punch 0 5 mm		(Pos. 22)
Drift punch 0 1.8 mm		(Pos. 28)
Pin fitting adapter 0 2.5 mm	1013-101 W4	(Pos. 26)
Circlip fitting adapter RS 1.9	DIN 6799	(Pos. 30)
	Drift punch 0 1.8 mm Pin fitting adapter 0 2.5 mm	Drift punch 0 1.8 mm Pin fitting adapter 0 2.5 mm 1013-101 W4

Gauges:

Auxiliaries: Hammer

Universal pliers

(Pos. 13)

(Pos. 9)

Sheet No.:



Maintenance Instructions

Part:

Bolt assembly

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Dismounting, cleaning and checking of the bolt

Description of operation (s):

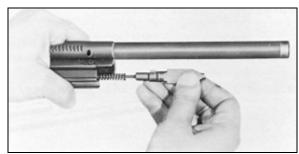
- Dismount the bolt.
- Clean parts.
- Inspect parts for damages, indents and wear and tear. If necessary, replace parts.
- Lubricate bolt components.
- Reassemble the bolt.



Rotate bolt head



Preassembled locking piece



Detach parts



Preassembled bolt head

Tools: Pin punch 0 5 mm (Pos. 22)

Gauges:

Auxiliaries:

Sheet No.:



Maintenance Instructions

Part:

Bolt assembly

Weapon: PSG 1

Edition: 1a/TD 2208

OBERNDORF/NECKAR

Designation of operation (s):

Replacing parts of the bolt assembly

Description of operation (s):

- Dismount the bolt.
- Replace defective or worn out parts by new ones.
- For dismounting the bolt head locking lever, drift cylindrical pin (4) out of bolt head carrier.
- Remove bolt head locking lever (3) and its compression spring (2).
- Mount new parts, if necessary.



Note: For dismounting of the extractor (13) press pin (14) forward by means of a screw driver and pull it out with the universal pliers.

When mounting the extractor, mind that the pressure spring (12) properly fits in the recess of the extractor.

Tools:

Screw driver 3.5 x 90

Pin punch 0 4 mm

Universal pliers

(Pos. 10) (Pos. 23)

(Pos. 23 (Pos. 9)

Gauges:

Auxiliaries:

Hammer

(Pos. 13)

Sheet No.:



Maintenance Instructions

Part:

Bolt assembly

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Correcting the headspace (gap between bolt head and bolt head carrier)

Description of operation (s):

After replacement of bolt components the headspace may be too large. An incorrect headspace is corrected by replacement of parts.

The following locking rollers are available:

Locking rollers 0 mm	Marking
7.92	-8
7.94	-6
7.96	-4
7.98	-2
8.00	w/o markings
8.02	+2
8.04	+4

(-8)

<u>-6</u>

-4

(-2)

 \bigcirc

(+2)

<u>+4</u>

The marking is applied on the smooth side of the rollers.

Always replace the locking rollers in pairs.

When replacing locking rollers by rollers of the next size, the headspace will be changed by approx. 0.1mm. If it is not possible to adjust the headspace within the prescribed tolerances by replacing the locking rollers, the locking piece (7) must be checked for indentations on the contact surfaces of the locking rollers and must be replace, if necessary.

Replacing the locking rollers

- Punch out clamping sleeve (11) in bolt head (8)
- Remove holder for locking rollers (10) and locking rollers (9).
- Insert new pair of rollers and holder for locking rollers and drift in new clamping sleeve.

Tools:	Pin fitting adapter	1013-02.06 WZ	(Pos. 25)
	Drift punch 0 1.8 mm		(Pos. 28)

Gauges:

Auxiliaries: Sheet No.:



Maintenance Instructions

Part:

Bolt assembly

Weapon: PSG 1

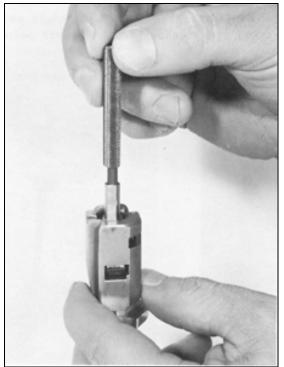
Edition: 1a/TD 2208

Designation of operation (s):

Checking the extractor protrusion

Description of operation (s):

- Insert extractor protrusion gauge into firing pin aperture and turn the gauge blade under the extractor.
- The extractor protrusion gauge is correct when the "Go" side of the gauge fits under the extractor and when the "No Go" side which is marked with red color does not fit.



Tools:	

Auxiliaries: Sheet No.:

3.12

1013-02.06 LZ (Pos. 19)



Gauges:

Extractor protrusion gauge



Maintenance Instructions

Part:

Bolt assembly

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Inspection of the firing pin protrusion

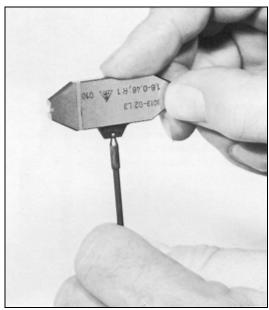
- Checking the shape of the firing pin -

Description of operation (s):

- For measuring of the firing pin protrusion, both firing pin and locking piece must be inserted all the way into the bolt head so that the firing pin protrudes at the bolt face.
- Place the "Go" side of the gauge on the firing pin. The front side of the gauge must entirely contact the bolt face.
- The firing pin protrusion is correct, if the protrusion tolerance is between 1.14 mm 1.60 mm



Inspection of firing pin protrusion



Checking the shape of the firing pin

Tools:

Gauges: Limit gauge for firing pin protrusion

1013-02 L3 (Pos. 18)

Auxiliaries:

Sheet No.:



Maintenance Instructions

Part:

Grip assembly with trigger mechanism

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Disassembly of grip assembly with trigger mechanism

Description of operation (s):

- Loosen trigger shoe (2) with hexagonal spanner DIN 911-3
- Set safety lever in a vertical position and take it out to the left
- Take out trigger housing to the top.

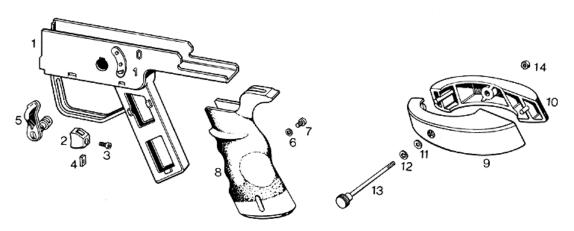
Removal of the hand rest

- Loosen and screw out clamping screw (13)
- Remove both hand rest shells.
- Remove nut M5 (14) from right hand rest shell (10) by tapping it out.

Removal of grip (8)

- Loosen grip screw (7) and screw it out.
- Take off grip downwards.

Reassembly of the grip must be carried out analogously vice versa.



Tools: Hexagonal spanner DIN 911-3 (Pos. 32) Screw driver 5.5 x 120 (Pos. 11)

Gauges:

Auxiliaries:

Sheet No.:



Maintenance Instructions

Part:

Trigger housing, complete

Weapon: PSG 1

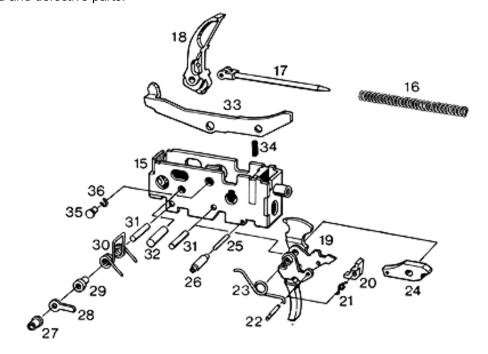
Edition: 1a/TD 2208

Designation of operation (s):

Disassembly of the trigger housing

Description of operation (s):

- Un-cock the hammer.
- Press out ejector spindle (35) and detach ejector (33) and ejector pressure spring (34).
- Press out hammer spindle (32) and detach hammer (18) with pressure shank (17) and hammer spring (16).
- Press out axle (25) and remove bush (26).
- Press out trigger spindle (31) and remove trigger (19), sear (24) and trigger spring (23).
- Press out axle for finger (31) and remove finger (28), bushes (27 and 29) and elbow spring (30).
- Replace damaged and defective parts.



Tools: Drift punch 0 1.8 mm (Pos. 28)
Drift punch 0 2.4 mm (Pos. 27)

Gauges:

Auxiliaries:

Sheet No.:





Maintenance Instructions

Part:

Trigger housing, complete

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Assemble the trigger housing

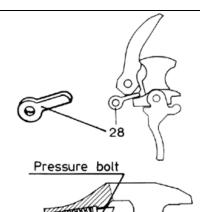
Description of operation (s):

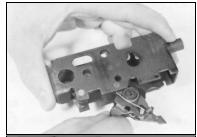
- Reassembly of the trigger mechanism must be carried out the same but in reverse order.

Mind the following items:

- When the finger (28) is mounted, its radius must be on the top.
- Inspect position of the pressure bolt in the sear (see illustration).
- Preassemble trigger (19), sear (24) and elbow spring (23) and insert them into the trigger housing. Fix the parts with the assembly pin and press in axle (31), whereby the assembly pin is pushed out.
- Preassemble shank (17) and hammer spring (16), stick drift punch through the drill-holes in the pressure shank, insert the parts into the trigger housing by pressing the pressure shank with the drift punch downwards until the drift punch contacts the trigger housing.

Pull out drift punch and let the pressure shank engage in the hammer by pressing it downwards.







Tools: Drift punch 0 2.4 mm (Pos. 27)

Gauges:

Auxiliaries: Assembly pin 0 5x50 (Pos. 24) Sheet No.:



Maintenance Instructions

Part:

Butt stock

Weapon: PSG 1

Edition: 1a/TD 2208

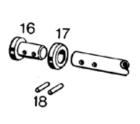
OBERNDORF/NECKAR

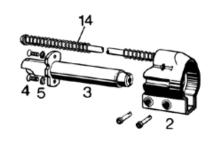
Designation of operation (s):

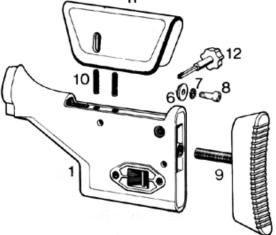
Inspect butt stock

Description of operation (s):

- Make sure that the recoil spring (14) is not lame or broken.
- Stop pin (16) must be tightly seated in the recoil spring guide rod.
- Guide ring (17) must smoothly glide on the recoil spring guide rod.
- Cheek rest (11) must be adjustable and must be lockable by means of adjusting key (12).
- When the cheek rest is loosened it must automatically be pushed upwards by the pressure springs (10).
- Butt plate (9) must be adjustable and must be lockable by means of the adjusting key.
- When the clamping screw is loosened, the butt plate must be easily able to be rotated.







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Gauges:

Auxiliaries:

Sheet No.:



Maintenance Instructions

Part:

Butt stock

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

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Description of operation (s):

Dismounting the recoil spring

- Pull recoil spring back on guide rod and clamp it in place with a lathe dog.
- Punch out riveted pins (18) by means of drift punch 0 2.4 mm.

Mounting the recoil spring

- Slide recoil spring all the way onto recoil spring guide rod.
- Place guide ring on recoil spring guide rod and pull recoil spring and guide ring back by means of the lathe dog and clamp it in place.
- Insert stop pin into recoil spring guide rod.
- Drift in riveting pins and calk them slightly with a center punch.

Note: The riveting pins must not project out of the surface of the recoil spring guide rod, into the path of the guide ring.

Removal of the cheek rest

- Loosen clamping screw with adjustment key (12) until cheek rest (11) is disengaged.
- Lift off check rest.
- Take out spring (10).

Reassembly must be carried out in the reverse order.

Removal of the butt plate

- Loose clamping screw with adjusting key and turn out butt plate.

Tools: Lathe dog 0 15 mm (Pos. 29)

Drift punch 0 2.4 mm (Pos. 27)

Center punch (Pos. 21)

Gauges:

Auxiliaries: Hammer (Pos. 13)

Sheet No.:



Maintenance Instructions

Part:

Handguard

Weapon: PSG 1

Edition: 1a/TD 2208

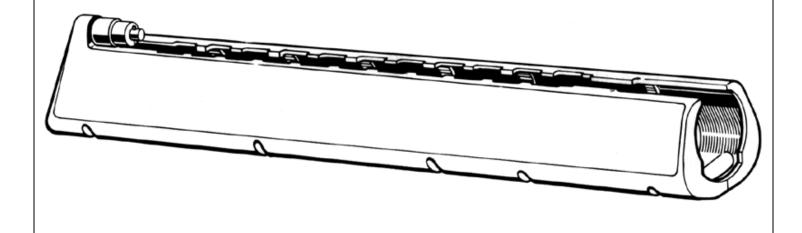
Designation of operation (s):

Inspect handguard

Description of operation (s):

Check handguard for

- Proper seat
- Damages
- Working of the locking bolts
- Replace handguard, if necessary



Tools: Screw driver 5.5 x 120 (Pos. 11)

Gauges:

Auxiliaries:

Sheet No.:





Maintenance Instructions

Part:

Magazine

Weapon: PSG 1

Edition: 1a/TD 2208

Designation of operation (s):

Inspect magazine

Description of operation (s):

- Clean and oil magazine.

- Check magazine for : Damages,

Indentations,

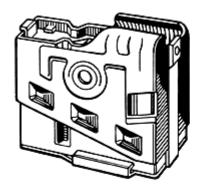
Working of the follower (2),

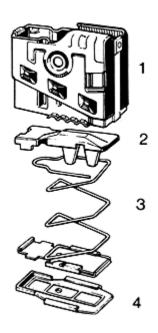
Proper seat of the cartridges at the magazine lips,

Tight seat of magazine floor plate (4),

Proper seat of the magazine in the magazine guide.

- Damaged magazines must be repaired or replaced.





Tools: Drift punch 0 2.4 mm (Pos. 27)

Gauges:

Auxiliaries: Gun oil

Sheet No.:



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4. Special tools, fixtures and gauges







Special tools, fixtures and gauges for the PSG 1 Sniper Rifle

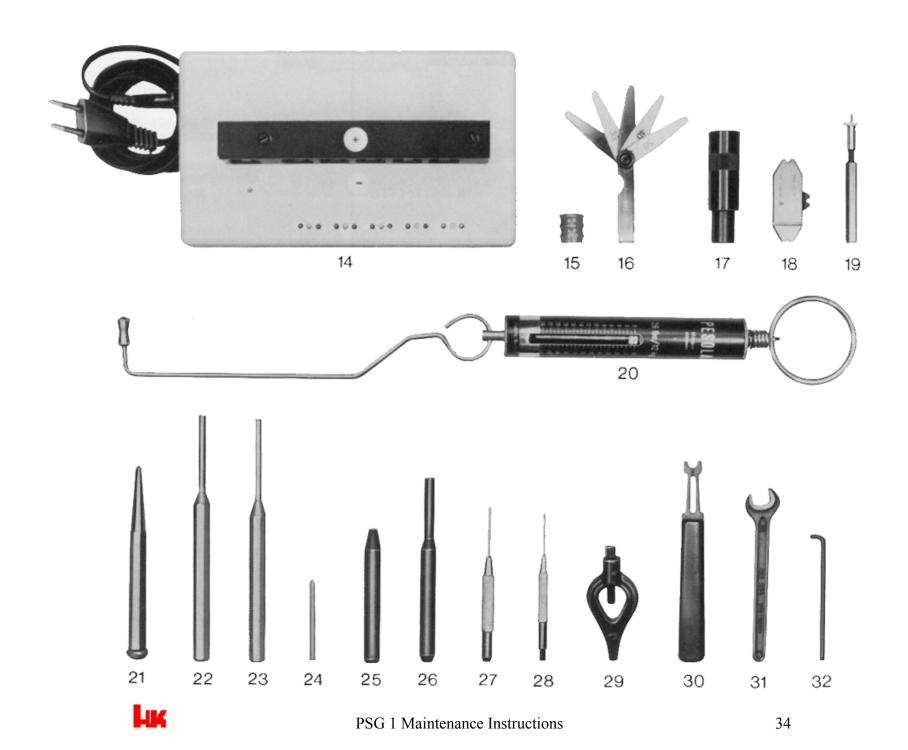
Edition:

1a/TD 2387-0185

Page: 1/2

Item	Parts Designation	Part No.	Ident. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
1	Go and symmetry gauge Straightening mandrel for cocking lever housing, complete	9233-100 L1 1013-100 W7	330 287 300 575		
	Consisting of: Item 2 - 4				
2	Rod	1013-100 W71	322 166		
3	Straightening mandrel, cone shaped	1013-100 W73	322 168		
4	Go gauge, cylindrical	1013-100 W72	322 167		
5	Rod (for brush)	1013-W3/1	300 007		
6	Chamber cleaning brush	1013-W3/2	300 008		
7	Cleaning kit	100 200	211 023		
8	Flexible cleaning rod	9233-1100 W1	327 894		
9	Universal pliers		957 298		
10	Screw driver 3.5 x 90		952 653		
11	Screw driver 5.5 x 120		952 655		
12	Plastic hammer		957 422		
13	Hammer 200 g		957 416		







Special tools, fixtures and gauges for the PSG 1 Sniper Rifle

Edition:

1a/TD 2387-0185

Page: 2/2

Item	Parts Designation	Part No.	ldent. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
14	Battery charger	Type 335 026	941 978		
15	Battery pile, Varta 3/60 DK	05625 303 052	941 979		
16	Feeler gauge	962 235	329 830		
17	Bore scope	ST 510 115	954 610		
18	Limit gauge for firing pin protrusion	1013-02 L3	322 164		
19	Extractor protrusion gauge	1013-02.06 LS	301 106		
20	Control gauge for trigger pull	1013-100 L4	300 579		
21	Center punch		957 323		
22	Pin punch 0 5 mm		957 315		
23	Pin punch 0 4 mm		958 215		
24	Assembly pin	962 438	332 893		
25	Pin fitting adapter 0 2 mm	1013-02.06 W2	301 105		
26	Pin fitting adapter 0 2.5 mm	1013-101 W4	300 591		
27	Drift punch 0 2.4 mm		957 311		
28	Drift punch 0 1.8 mm		957 310		
29	Lathe dog 0 15 mm		956 860		
30	Circlip fitting adapter RS 1.9 mm	DIN 6799	955 772		
31	Single-headed wrench 10 mm	DIN 894-10	916 076		
32	Hexagonal spanner	DIN 911-3	958 512		





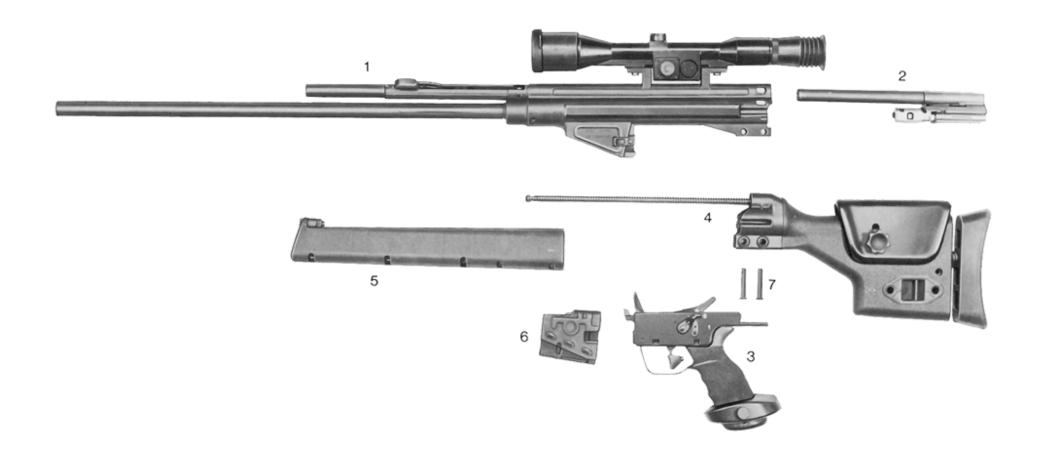
5. Spare parts catalogue



PSG 1 Rifle

Assembly Groups

Fig. 1







PSG 1 Rifle

Assembly groups

Drawing No. 9233

Edition:

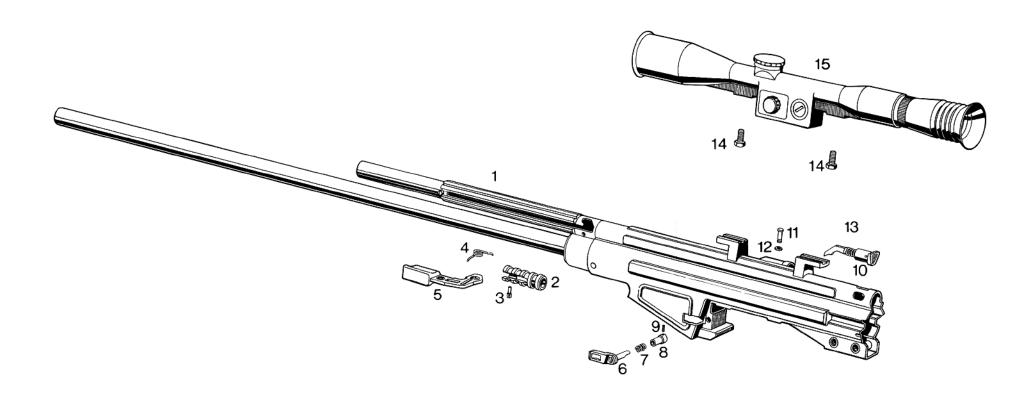
1a/TD 2380-0485

Page: 1

Ident. No. 224 658

Item	Parts Designation	Part No.	Ident. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
1	Receiver with barrel, complete (without telescope 6 x 42 (PSG1)	9233-1000	224 744		Fig. 2
2	Bolt assembly	9233-200	224 688		Fig. 3
3	Grip assembly, complete	9233-200	224 693		Fig. 4
4	Butt stock, complete	9233-4000	224 721		Fig. 5
5	Handguard, complete	9233-6000	224 660		
6	Magazine, capacity 5 cartridges	1015-1200	206 709		Fig. 6
-	Magazine, capacity 20 cartridges	1015-10	205 554		
7	Butt stock locking pin, complete (2x)	1013-04.01	200 520		-









Receiver with barrel, complete 2 PSG 1 Rifle

Edition: 1a/TD 2380-0485

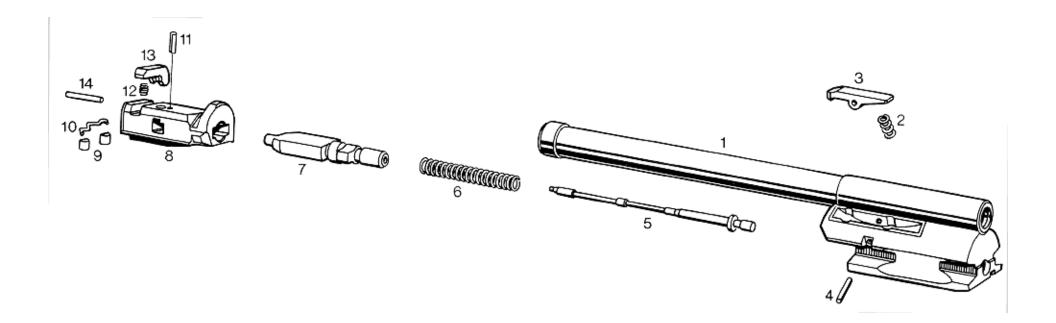
Drawing No. 9233-1000

Ident. No. 224 744 Page: 1

Fig.

Item	Parts Designation	Part No.	ldent. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
1	Receiver with barrel	9233-1100	224 745		
2	Support for cocking lever	1013-01.36	200 402		
3	Spindle for cocking lever	1013-01.37	200 403		
4	Elbow spring for cocking lever	1013-01.42	200 404		
5	Cocking lever, finished part	100229-01.43	224 886		
6	Magazine catch, complete	1013-01.20/1	205 618		
7	Compression spring for magazine catch	1013-01.25	200 393		
8	Push button for magazine catch	9211-10000.01	202 538		
9	Dowel pin	DIN 1481 - 2.5x10	929 473		
10	Forward assist	9231/001-180	222 586		
11	Guide bolt	9231/001-100.07	222 565		
12	Safety washer	DIN 6799 - 1.9	914 231		
13	Compression spring	9231/001-100.06	222 564		
14	Hexagon head screw (2x)	9233-0000.01	224 807		No. 9233-1000 does not comprise Pos. 14 & 15
15	Telescope 6 x 42 PSG1	330124-0000.000	224 785		•









PSG 1 Rifle

Bolt assembly

Fig. 3

Edition: 1a/TD 2380-0485

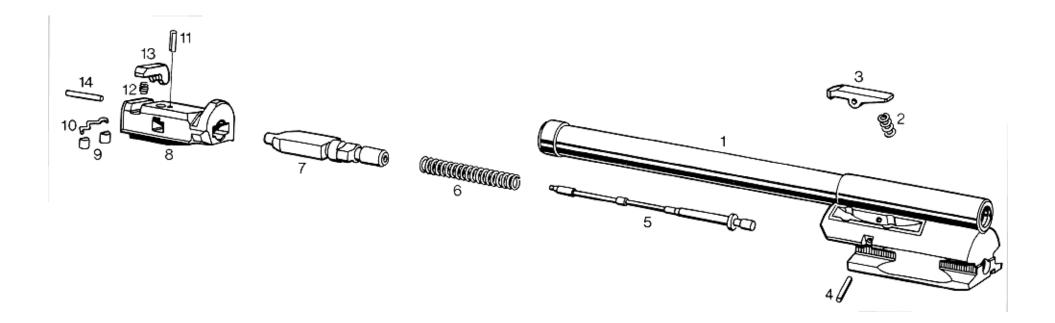
Drawing No. 9233-2000

Ident. No. 224 688

Page: 1/2

Item	Parts Designation	Part No.	Ident. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
	Bolt head carrier, complete	9233-2200	224 689		
	Consisting of: Pos. 1 - 4				
1	Bolt head carrier, welded	9233-2210	224 690		
2	Compression spring for bolt head carrier	1013-02.16	200 453		
3	Bolt head locking lever	1013-02.15	200 452		
4	Cylindrical pin 4 m 6 x 18	1013-02.18	200 454		
5	Firing pin	9230-200.01	221 187		
6	Firing pin return spring	9230-200.02	221 188		
7	Locking piece	9233-2000.03	225 023		
8	Bolt head, complete	9233-2100	225 022		
	Consisting of: Pos. 8 – 14				
9	Bolt head	9233-2100.01	225 024		
9.1	Locking rollers 0 7.92 mm (2x)	9233-2100.23	225 018		
9.2	Locking rollers 0 7.94 mm (2x)	9233-2100.24	225 019		
9.3	Locking rollers 0 7.96 mm (2x)	9233-2100.25	225 020		
		9233-2100.26	225 021		









PSG 1 Rifle

Bolt assembly

Fig. 3

Edition: 1a/TD 2380-0485

Drawing No. 9233-2000

Ident. No. 224 688

Page: 2/2

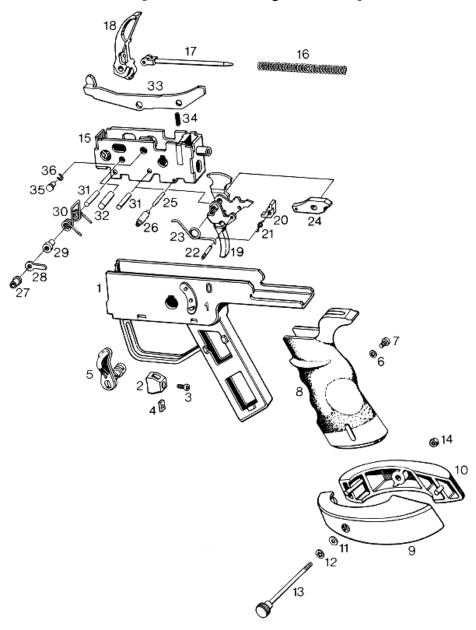
Item	Parts Designation	Part No.	Ident. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
9.4	Locking rollers 0 8.00 mm (2x)	9233-2100.20	225 015		
9.5	Locking rollers 0 8.02 mm (2x)	9233-2100.21	225 016		
9.6	Locking rollers 0 8.04 mm (2x)	9233-2100.22	225 017		
10	Holder for locking rollers	9230-220.02	221 125		
11	Dowel pin 2 x 6.9	1013-02.12	200 450		
12	Compression spring for extractor	9230-220.05	221 198		
13	Extractor	9230-220.04	221 197		
14	Cylindrical pin	9230-220.06	221 199		



PSG 1 Rifle

Grip assembly, complete

Fig. 4







PSG 1 Rifle

Grip assembly, complete

Fig. 4

Edition:

1a/TD 2380-0485

Drawing No. 9233-3000

Ident. No. 224 693 | Page: 1/3

Item	Parts Designation	Part No.	ldent. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
1	Grip assembly <u>Trigger shoe, complete</u> Consisting of: Pos. 2 – 4	9233-3100 9233-3400	224 694 224 713		
2 3	Trigger shoe Cheese head screw	9233-3400.01 9233-3400.02	224 719 224 820		
4	Square nut	DIN 562- M4-04	928 699		
5 6	Safety, complete Toothed lock washer	9233-3200 DIN 6797- J 5.3	224 695 922 616		
7	Lens head cylindrical screw	DIN 85–M5x10- 8.8 9233-3500	928 708 224 823		
	Grip, complete Consisting of: Pos. 8 – 14	9233-3500	224 623		
8	Grip	9233-3500.01	224 831		
9	Shell, left	9233-3500.02	224 832		
10	Shell, right	9233-3500.03	224 833		
11	Disc	DIN 1440-5-St	929 149		
12	Toothed lock washer	DIN 6797- J 5.3	922 616		





PSG 1 Rifle

Grip assembly, complete

Fig. 4

Edition:

1a/TD 2380-0485

Drawing No. 9233-3000

Ident. No. 224 693 | Page: 2/3

Item	Parts Designation	Part No.	Ident. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
13	Clamping screw	9233-3500.04	224 834		
14	Hexagon nut	DIN 934-M5-8	928 734		
	Trigger housing, complete	9233-3300	224 696		
	Consisting of: Pos. 15 - 36				
15	Trigger housing, soldered	9233-3350	224 699		
16	Hammer spring	9233-3300.03	224 704		
17	Pressure shank	9230-315.02	222 238		
18	Hammer	9233-3300.02	224 703		
	<u>Trigger, complete</u>	9233-3310	224 697		
	Consisting of: Pos. 19 – 22				
19	Trigger, welded	9233-3311	224 698		
20	Sear release latch	9233-3310.01	224 707		
21	Elbow spring for sear release latch	9233-3310.02	224 708		
22	Axle for sear release latch	9234-3330.01	224 433		
23	Elbow spring for trigger	9233-3300.05	224 705		
24	Sear, complete	9233-3320	224 701		





PSG 1 Rifle

Grip assembly, complete

Fig. 4

Edition:

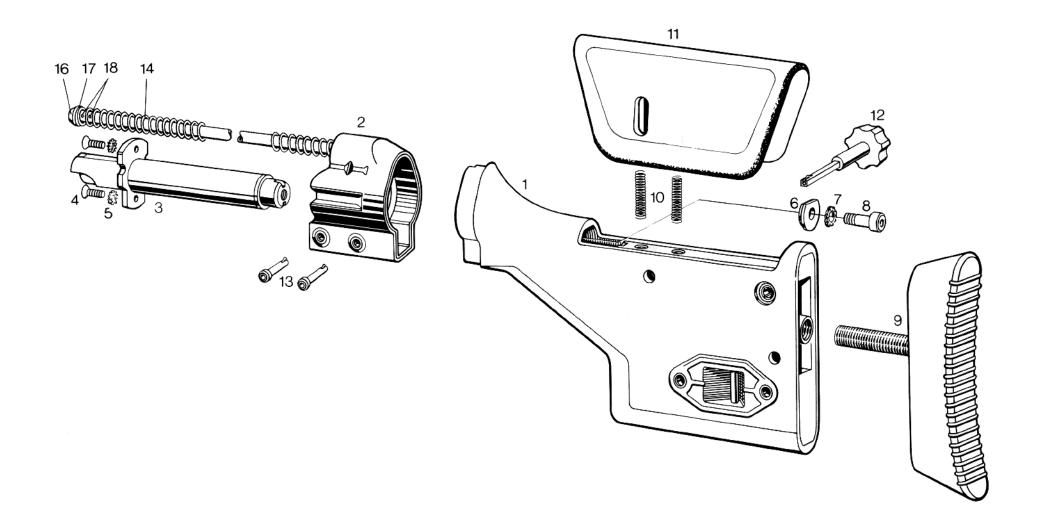
1a/TD 2380-0485

Drawing No. 9233-3000

Ident. No. 224 693 | Page: 3/3

1 25 Axl 26 Bus 27 Bus 28 Fin 29 Bus	ish ish	9234-3300.07 9233-3300.81 9233-3300.09	224 423 224 493	5	7
26 Bus 27 Bus 28 Fin	ish ish	9233-3300.81			
27 Bus 28 Fin	ısh		224 493		
28 Fin		9233-3300.09			
	nger		224 826		
29 Bus	igei	100229/10- 3300.04	205 718		
	ısh	9233-3300.10	224 827		
30 Elb	oow spring	9233-3300.06	224 706		
31 Axl	tle for trigger, sear and finger (2x)	1013-03.40	200 482		
32 Ha	ammer spindle	1013-03.61	200 494		
33 Eje	ector	9233-3300.01	224 702		
34 Eje	ector pressure spring	1013-03.37	200 478		
<u>Eje</u>	ector spindle, complete	1013-03.33	200 479		
Co	onsisting of: Pos. 35 & 36				
35 Eje	ector spindle	1013-03.35	200 480		
36 Spi	oring ring	1013-03.34	200 481		









PSG 1 Rifle

Butt stock, complete

Fig.

Edition: 1a/TD 2380-0485

Drawing No. 9233-4000

Ident. No. 224 721

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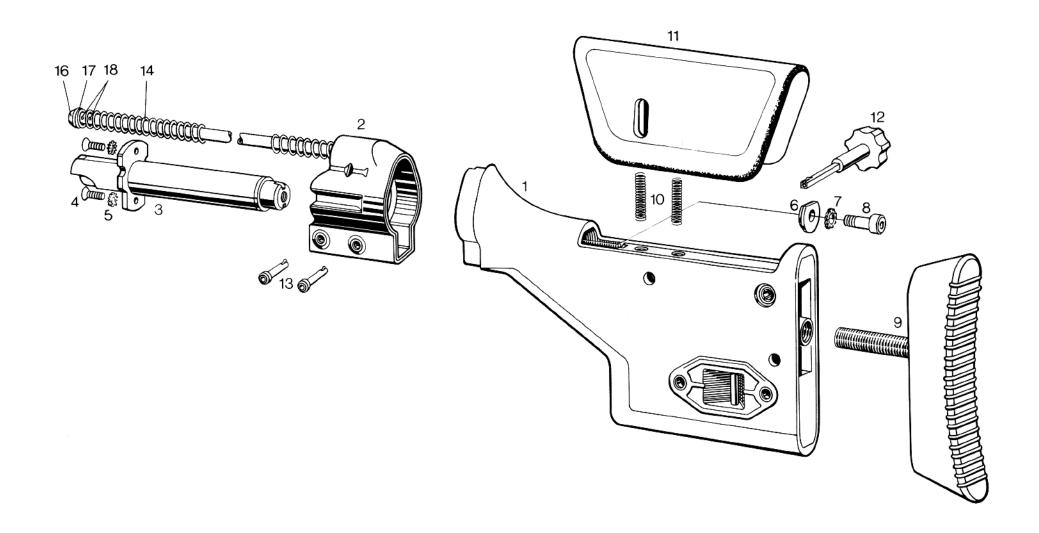
Item	Parts Designation	Part No.	ldent. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
1	Butt stock, finished	9233-4900	225 231		
2	Back plate, complete	100229/10- 410.40	206 282		
3	Buffer SK 37	1013-410.550/41	200 883		
4	Countersunk screw, self-locking for buffer (2x)	1013-041.31	200 543		
5	Toothed lock washer (2x)	DIN 6798 - V 5.3	922 615		
6	Disc	9230-400.01	221 224		
7	Toothed lock washer	DIN 6798 – J 8.4	922 614		
8	Cylinder head screw	9233-4000.05	224 735		
9	Butt plate	9233-4300	224 724		
10	Compression spring (2x)	9233-4000.04	224 727		
11	Cheek rest, complete	9233-4200	224 723		
12	Adjusting key, complete	9233-4500	224 802		
13	Locking pin (2x)	1013-04.01	200 520		
14	Recoil spring	1013-04.08	200 525		
15	Spare parts for back plate	St 1013-200	200 992		
	Consisting of: Pos. 15 - 18				



PSG 1 Rifle

Butt stock, complete

Fig. 5







PSG 1 Rifle

Butt stock, complete 5

Fig.

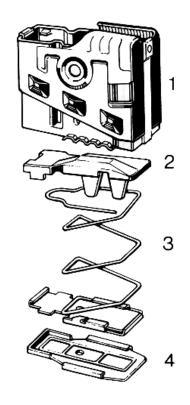
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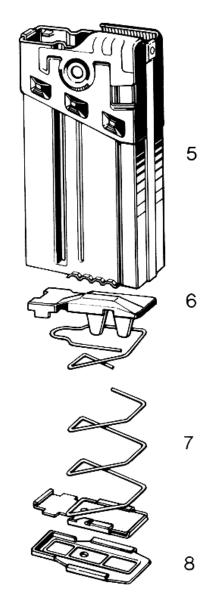
Drawing No. 9233-4000

Ident. No. 224 721 | Page: 2/2

Item	Parts Designation	Part No.	Ident. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
16	Stop pin for recoil spring	1013-04.09	200 523		
17	Guide ring for recoil spring	1013-04.10	200 524		
18	Riveting pin (2x)	1013-04.11	200 526		











PSG 1 Rifle

7.62 mm x 51 Magazine 6

Fig. Edition:

1a/TD 2380-0485

Page: 1

Item	Parts Designation	Part No.	Ident. No.	Qty of parts Per 100 arms/devices	Remarks
1	2	3	4	5	7
	Magazine, capacity 5 cartridges	1015-1200	206 709		
1	Magazine housing, complete	1015-1210	206 710		
2	Follower, complete	1015-1220	206 714		
3	Follower spring with safety plate	1015-1230	206 716		
4	Magazine floor plate	1015-11.10	200 587		
	Magazine, capacity 20 cartridges	1015-10	205 554		
5	Magazine housing, complete	1015-10.04	205 555		
6	Follower, complete	1015-01.12	200 595		
7	Follower spring with safety plate	1015-10.02	206 659		
8	Magazine floor plate	1015-11.10	200 587		



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