



HD-18 Sporting Rifle

Technical Description and Service Manual READ BEFORE USE!



1. Figure

Version: 1.3



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1. OVERVIEW

1.1 INTRODUCTION

We thank you for chosen the HD-18 Sporting Rifle at FÉG! We are confident that the Firearm you have chosen will live up to your highest expectations.

 **Attention!**
Please, read this document carefully before using your Sporting Rifle; -for your Safety and the Safety of Others. The Technical Description and Service Manual of the 7,62x54R HD-18 Sporting Rifle (Hungarian Dragunov) is intended for studying and understanding the rifle operation and keeping it in constant using ready for action. Please pay special attention to the Safety Precautions in handling the rifle.

This document includes specifications and data of the rifle design and operation, as well as main rules necessary to provide for the proper maintenance of the rifle full using of their technical capabilities.

1.2 PURPOSE OF THE PRODUCT

The 7,62x54R HD-18 is a Sporting Rifle version of the SzVD Sniper Rifle and is designed to fight down or hunting various single targets, which may be collapsible, moving, open and screened. The Sporting Rifle uses rifle cartridges with ordinary bullets or rifle sniper cartridges. The fire is delivered in single shots.

1.3 MAIN FEATURES

The Sporting Rifle has a gas-operated system, and operates in the semi-auto firing mode only. The metal parts are made of high-quality alloyed steels. The receiver is machined from a single solid-piece steel block. The Modular Muzzle Device shipped with Muzzle-Bushing which can be remove by gunsmith and change to provided extra SzVD type elongated Flash Hider by the 5/8-24 UNEF 3A thread. The wooden parts are made of walnut with pickled protected finish. The front guard has unique ventilation holes according to USA Magpul M-Lok Standard. The top row is usable to attach M-Lok based RAS Picatinny rails. Wooden buttstock is sporting style; elongated, rubber-padded (damped), and ergonomic.

1.4 MARKINGS

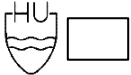
Marked on the Sporting Rifle *Receiver* (25) are Manufacturing Plant and Country (FÉG, Hungary) product designation (HD-18) and number, as well as the following special signs:

CIP

Unified mark of the Permanent International Commission for the proof of firearm (CIP);

N

Stamp of the test station (Budapest, Hungarian Republic – Magyar Köztársaság) admitted by Permanent International Committee for testing the hand firearm (CIP) and year of certification tests;



Product designation;

HD-18 SPORTING RIFLE

Manufacturing Plant;

FÉG ARMS AND MACHINE COMPANY

Manufacturing Country, City;

MADE IN HUNGARY, BUDAPEST

Designation of the cartridge, used;

Cal. 7,62x54R

Importer Company;

B&T USA LLC, Tampa, FL

Serial Number;

02NNNNNNNN

Manufacturing Plant Logo;



Quick Response code;



Quality Control Stamp “Laughing Moonman”.





1.5 GENERAL INSTRUCTIONS

Due to permanent Design & Development & Innovation of the HD-18 Sporting Rifle there could be some differences between these Technical Description and Service Manual and the Product.

⚠ Attention!

Prior to servicing the Sporting Rifle, read and understand the Technical Description and Service Manual and study the rifle design. Pay special attention to the Safety Precautions!

To fire the rifle, use the 7,62x54R cartridges, accompanied with "Certificate of conformity", containing data on effective date of cartridges.

To begin servicing of the rifle it is necessary to unpack the rifle, accessories and tools, to remove corrosion preventive compound, to check set of delivery and check that the rifle is serviceable.

⚠ Attention!

The Sporting Rifle design ensures its safe operation, provided that requirements of the present Technical Description and Service Manual are adhered to.

1.6 TECHNICAL CHARACTERISTICS

For basic ballistic and design characteristics of the Sporting Rifle and the ordinary FMJ rifle cartridge refer to 1. Table.

Description	Value	Unit
Designation:	HD-18	
Type:	Hungarian Dragunov-18 Sporting Rifle	
Place of origin:	Hungary	
Manufacturer:	FÉG Arms and Machine Company Limited	
Mode of fire:	Semi-Automatic	
Operating principle:	Gas operated, rotating bolt	
Weight (unloaded):	4,06 (8.95)	kg (lb)
Weight (unloaded) with PSzO-1M2:	4,65 (10.25)	kg (lb)
Length:	123 (48.6)	cm (“)
Effective firing range:	~1300 (0.8)	m (mile)
Maximum travel range:	~3800 (2.36)	m (mile)
Open Sighting Range:	Iron Sights with target position: 100-1200	m
Optical Sighting Range:	PSzO-1M2 Target Scope: 1300	m
Rate of fire:	~30	rounds /min
Feed system:	Detachable box magazine with capacity: 10	rounds
Cartridge:	7,62×54R	mm
Caliber:	7,62	mm
Number of grooves:	4	pcs
Barrel length:	620 (24.41)	mm (“)
Barrel twist:	1 in 320 (12.60) right-hand	mm (“)
Bullet weight:	11,3 (174)	g (grains)
Muzzle velocity:	790 (2592)	m/sec (ft/sec)
Average cartridge weight:	24,1 (372)	g (grains)

1. Table



1.7 COMPLETE SET FOR DELIVERY

Designation	Quantity	Unit
Semi-Automatic 7,62x54R HD-18 Sporting Rifle	1	pcs
Stamped steel 10 rounds Magazine	2	pcs
Disassembling, Cleaning set-Accessories	1	pcs
Lubricating Accessories	1	pcs
Cleaning rod	1	pcs
Qualification Reports according to C.I.P. specification	1	copy
Technical Description and Service Manual	1	copy

Designation	Quantity	Unit
PSzO-1M2 Target Scope (Optical Sight)	1	set

2. Table



2. Figure

1.8 BILL OF MATERIALS – MAIN ASSEMBLIES

The Sporting Rifle consists of the following main Assembly Groups (see Figure 3):



Figure 3

ID.	Designation
1	Barrel with Receiver Assembly
2	Rear Sight Leaf Subassembly
3	Handguard Retainer Subassembly
4	Left Handguard Subassembly
5	Right Handguard Subassembly
6	Front Sight Base Subassembly
7	Buttstock Assembly
8	Trigger Mechanism Assembly
9	Safety Lever Subassembly
10	Bolt(head) with Bolt Carrier Assembly
11	Receiver Cover with Recoil Mechanism Assembly
12	Magazine Assembly

3. Table

1.9 BILL OF MATERIALS - ACCESSORIES

The Sporting Rifle Accessories (see Figure 4) are used in disassembling, cleaning and lubricating the Sporting Rifle. The set of Accessories includes: *Cheek Pad (20)*, a *Cleaning Rod (21)*, a *Scourer (16)*, a *Bristle Brush (14)*, a *Screwdriver (15)*, a *Drift / Temporary-Axis (17)*, a *Accessories Container (18)* and an *Oiler Can (19)*.



Figure 4

ID.	Designation
13	Accessories Container Cover
14	Bristle Brush
15	Screwdriver
16	Scourer
17	Drift / Temporary-Axis
18	Accessories Container Body
19	Oiler Can
20	Cheek Pad
21	Cleaning rod
22	Accessories Container-Wrench
23	Spare Spring Set for Firing Pin (28)

4. Table

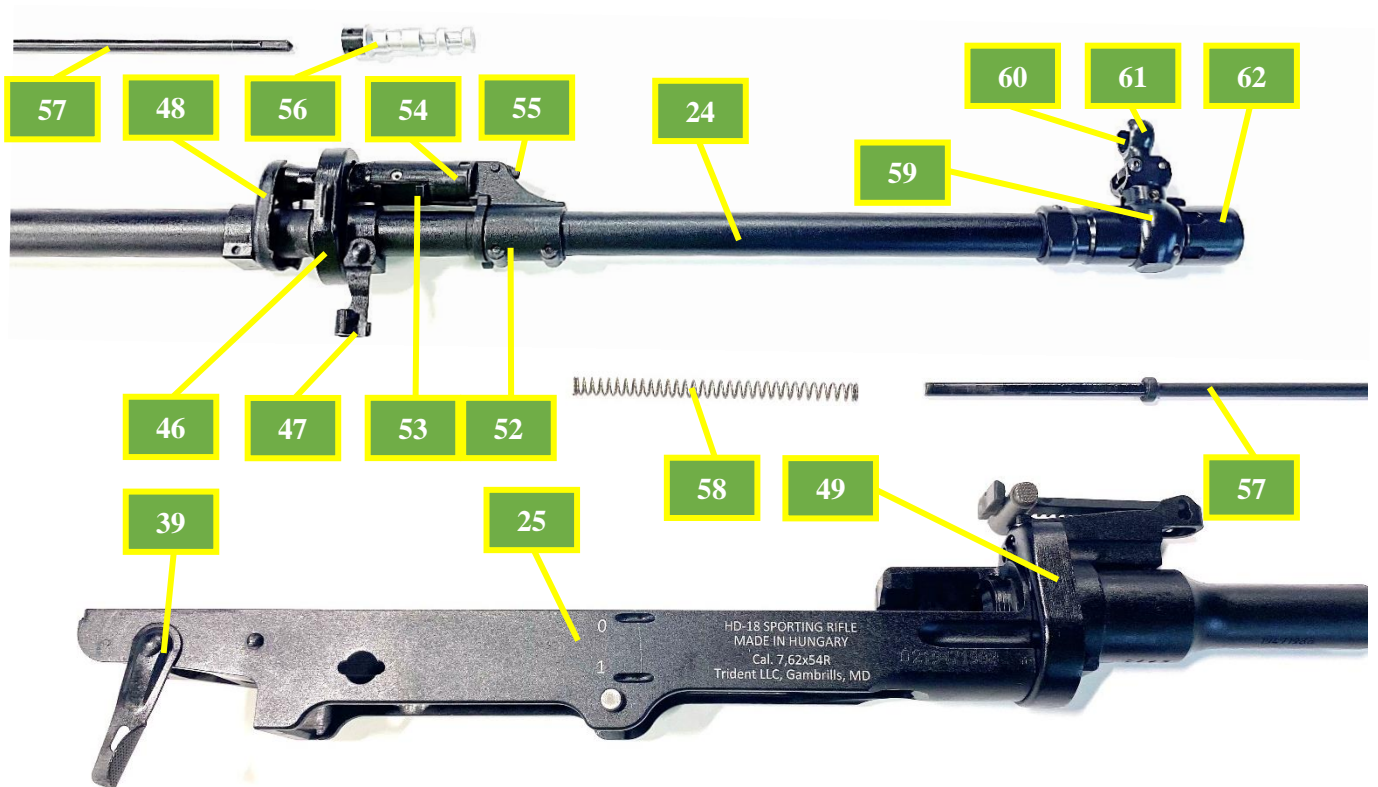
- The *Cheek Pad (20)* is used when firing the rifle with the PSzO-1M2 Optical Sight. In this case it is put on the rifle butt and fixed on the latter by means of the lock.
- The *Cleaning Rod (21)* is used to clean and lubricate the *Barrel (11)* bore, passages and cavities of other parts of the rifle.
- The *Scourer (16)* is used for cleaning and lubricating the *Barrel (11)* bore as well as the passages and cavities of other rifle parts.
- The *Bristle Brush (14)* is intended for cleaning the *Barrel (11)* bore with the RCHS solution.
- The *Screwdriver (15)* is used in disassembling, assembling the rifle and in cleaning the *Gas Chamber (11)* and the *Gas Tube (53) (11)*. It is also used as a wrench to adjust the front sight position in height.
- The *Drift / Temporary-Axis (17)* is used for driving the pins and studs out.
- The *Accessories Container (18)* houses the *Scourer (16)*, the *Bristle Brush (14)*, the *Screwdriver (15)* and the *Drift / Temporary-Axis (17)*. It consists of two component parts: a container-wrench and a *Accessories Container Cover (13)*.
- The *Accessories Container-Wrench (22)* is used as a handle of the *Cleaning Rod (21)*, when cleaning and lubricating the rifle and as a handle of the *Screwdriver (15)* when disassembling and assembling the rifle, and as a wrench when detaching the *Gas Tube (53) (11)*.
- The *Accessories Container Cover (13)* is used as a muzzle protector in cleaning the barrel.
- The *Oiler Can (19)* is used for storage of the lubricant.

1.10 BILL OF MATERIALS - EXPANDED

The Sporting Rifle consists of the following expanded Assemblies and Parts (see Figure 5):



Figure 5



6. Figure



7. Figure



Figure 8

ID.	Designation
24	Barrel
25	Receiver
26	Bolt carrier
27	Bolt(head)
28	Firing Pin
29	Firing Pin Retaining Pin
30	Firing Pin Spring
31	Firing Pin Bushing



ID.	Designation
32	Extractor
33	Extractor Spring
34	Extractor Pin
35	Trigger Housing
36	Hammer
37	Trigger
38	Receiver Cover
39	Receiver Cover Latching Lever
40	Guiding Rod
41	Guiding Bushing
42	Recoil Spring
43	Rear Sight Leaf
44	Rear Sight Leaf Slide
45	Rear Sight Leaf Catch
46	Handguard Retainer
47	Handguard Latching Lever
48	Handguard Front Collar
49	Handguard Rear Collar
50	Left Handguard Shell
51	Right Handguard Shell
52	Gas Chamber
53	Gas Tube
54	Gas Regulator
55	Gas Regulator Latching Lever
56	Gas Piston
57	Piston Rod
58	Piston Rod Spring
59	Front Sight Base
60	Front Sight Post
61	Front Sight Ring
62	Muzzle-Bushing
63	Magazine Body
64	Magazine Follower
65	Magazine Follower Spring
66	Magazine Bottom Plate
67	Magazine Floor Plate
68	Magazine Catch
69	Bolt Catch
70	Buttstock
71	Buttstock Screw
72	Buttstock Washer
73	Buttstock Wooden Screw
74	Buttstock Bottom Plate
75	Buttstock Bottom Plate Screw

5. Table

2. SETUP

2.1 MOUNTING OF OPTICAL SIGHT

⚠ Attention!

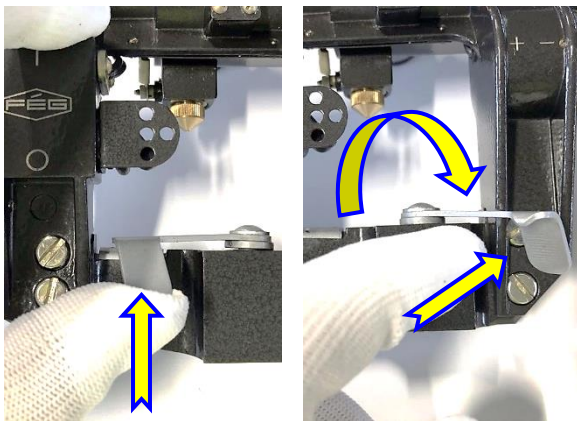
Shooting with an improperly installed Optical Sight may cause damage due to recoil!

Please find details in Technical Description and Operations Manual of PSzO-1M2 Target Scope.

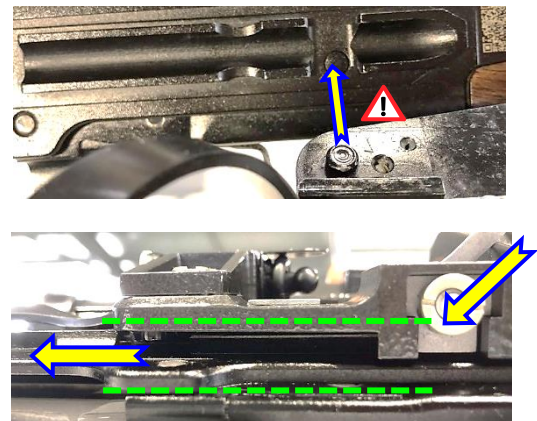
Before mounting make sure that the guide rail of "dovetail" type on the weapon corresponds to the size of mounting bracket and does not have any dimples and handling marks.

The Sight has a nondetachable mount that will fit a regular 14 mm swallow-tail siderail placed on the left side of your rifle. The mounting procedure consists of the following steps:

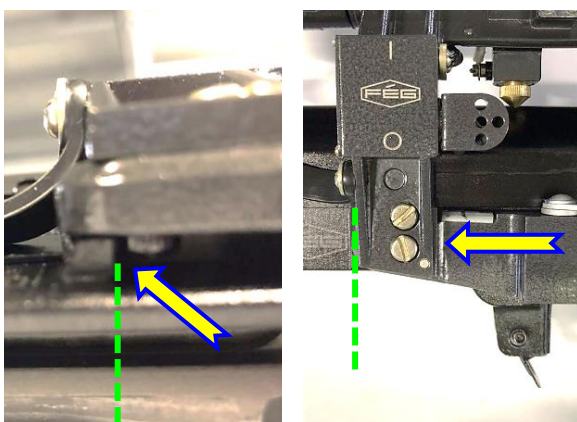
- Loosen the *Locking Clamp* by turning the *Latching Lever* counter clockwise up to its extreme outer position (see Figure 9). When in home position the lever is firmly locked to avoid occasional detachment of the Sight. To unlock the *Latching Lever* pull it up and then turn it aside counter clockwise;
- Orient and guide-in the *Mounting Stopper Pin* into the middle groove of the Siderail (see Figure 10); Lay on the Sight onto the Siderail parallel and straight;
- Slide the Sight onto your Siderail moving it forward towards the barrel until it reaches the forward position (see Figure 11);
- Then turn the *Latching Lever* clockwise to tighten the *Locking Clamp* (see Figure 12). Make sure that the lever is latched into its initial home position and won't come off spontaneously.



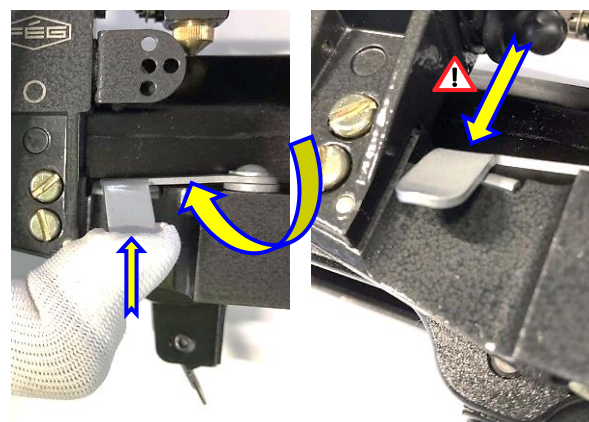
9. Figure



10. Figure



11. Figure



12. Figure

2.2 MOUNTING OF CHEEK-PAD

Connect the *Cheek Pad (20)*. Put the *Cheek Pad (20)* on the *Buttstock Assembly (7)* with its fastener to the right, fit the loop onto the hook of the clip and turn fastener upward.



13. Figure

3. USING THE DEVICE

3.1 SAFETY PRECAUTIONS

Attention!

The Sporting Rifle design ensures its safe operation provided that the 7,62x54R cartridges are used and proper rules of operation are adhered to.

To ensure safety in handling the rifle, it is necessary to follow the precautions below:

- Always handle the rifle as if it is loaded;
- Never point the rifle at any person;
- Bear in mind that a bullet flight is up to 3 km;
- Take the rifle in hands and check to make sure that there is no cartridge in the *Magazine (12)* and in the cartridge chamber, to this end retract the *Bolt carrier (26)*;
- Prior to loading the rifle inspect the barrel bore and cartridge chamber, they should be free of any obstruction;
- In case of misfire, don't open the *Bolt(head) with Bolt Carrier Assembly (10)* for 3 min as it may be a "hang fire";
- Always keep the rifle with safety engaged in the SAFE (Division "0") position to avoid an accidental discharge;
- Unload the rifle on approaching a settlement, halt, prior to boarding a vehicle, as well as when crossing the forest;
- Store the rifle and cartridges separately;
- Keep records of fired shots.

When in service, pay attention to changes in your rifle, which may affect its safety.

When any visible defects of the *Barrel (24)*, *Receiver (25)* or *Bolt(head) (27)* have been detected or when ruptures have appeared in the bottom portion of the cartridge case, stop using the rifle.

Attention!

The 7,62x54R cartridges, used for firing from rifle, should be accompanied with the "Certificate of conformity", containing their effective date.

NEVER USE CARTRIDGES OF OTHER BRANDS OR HAND-LOADED ONES.



Bear in mind, that usage of hand-loaded cartridges, expired ones, or those with traces of corrosion or improper may result in damage of the rifle because of impressive high pressure of powder gases.

An unusual sound upon firing, failure of recharging or tight entering of next cartridge into the chamber are signals to cease firing, to unload and disassemble the rifle, to inspect the bore and chamber and then to check that the rifle operates properly.

The cracks, appeared on fired case at 5 mm (0.2 inch) distance from the case rim, on case shoulder and mouth, are not an index of the rifle damage, provided that there is no blow of powder gases between the case body and wall of the cartridge first cone as specifications for the cartridges admit appearing of cracks on fired cases.

The Manufacturing plant bears no responsibility for breakage of the Sporting Rifle (damage of main components) as result of non-observance of the Safety Precautions, laid down in the present Section, by the User.

⚠ Attention!

The Manufacturing plant bears no responsibility for breakage of the Sporting Rifle (damage of main components) as result of non-observance of the Safety Precautions, laid down in the present Section, by the User.

To carry out training in disassembly and assembly of the rifle use blank rifles only. Training with service rifles is allowed only in exceptional cases keeping particular care when handling parts and mechanisms.

⚠ Attention!

Prior to preparing the rifle for firing and also prior to its cleaning and lubricating be sure that it is not loaded.

⚠ Attention!

During firing practice with the loaded rifle never direct the rifle to people or domestic animals!

Firing practice is carried out in the closed shooting gallery only when the suction-and-exhaust ventilation is provided there, because powder gases, liberated when shooting, are toxic.

⚠ Attention!

On finishing the fire unload the rifle and set it at SAFE (Division "0")!

⚠ Attention!

To prevent the *Firing Pin* (28) from breakage, never do dry shots if no need be.

Avoid hard strikes to the Target Scope or dropping it. (When the Sporting Rifle is delivered complete with an matched PSzO-1M2 Optical Sight)

After using the Sight in wet conditions wipe it with dry soft cloth and leave it to dry out at temperature not exceeding 45°C (112 F°)

To protect the *Objective* surfaces of the Sight, always use *Objective Lens Protective Cap* when the device is not in use.

Use the *Cleaning Cloth* to wipe or defog the *Objective* and *Ocular Lens (Eyepiece)*.

When not in use keep the Sight in a dry place at room temperature with humidity not exceeding 80%.

⚠ Attention!

NEVER ATTEMPT TO FIX THE SCOPE YOURSELF OR TAKE IT APART FOR WHATEVER REASON. VIOLATION WILL VOID ALL THE WARRANTIES.



3.2 OPERATION OF RIFLE

The HD-18 Sporting Rifle is a self-loading weapon. The reloading of the rifle is based on utilizing the energy of powder gases which are channelled from the barrel bore to the gas piston.

Upon firing, a certain amount of the powder gases following the bullet flows through the *Gas Chamber (52)* in the barrel bore wall into the *Gas Tube (53)*, exerts pressure upon the front wall of the *Gas Piston (56)* and throws back the *Gas Piston (56)* with *Piston Rod (57)* and, consequently, the *Bolt carrier (26)* into the rearward position.

As the *Bolt carrier (26)* travels rearward, the *Bolt(head) (27)* opens the barrel bore, the cartridge case gets removed from the cartridge chamber and ejected out of the *Receiver (25)*. The *Bolt carrier (26)* compresses the *Recoil Spring (42)* and cocks the *Hammer (36)*;

The *Bolt(head) with Bolt Carrier Assembly (10)* return to the front position under the action of *Receiver Cover with Recoil Mechanism Assembly (11)*; as a result, the *Bolt(head) (27)* feeds the next cartridge from the *Magazine (12)* into the cartridge chamber and closes the barrel bore. The *Hammer (36)* gets cocked. The *Bolt(head) (27)* gets locked, after it has been turned to the left and its locking lugs engaged with recesses of the *Receiver (25)*.

To fire a shot, it is necessary to release the *Trigger (37)* and press it anew. After the *Trigger (37)* has been released, the rod moves forward. The *Hammer (36)* actuated by the mainspring turns round its pin and strikes the *Firing Pin (28)*. The latter travels forward and impinges the primer. Thus, a shot is fired.

With the last cartridge fired and the *Bolt(head) (27)* returned to the rearward position, the *Magazine (12)* follower lifts the *Bolt Catch (69)*; the latter engages the *Bolt(head) (27)* to stop the *Bolt carrier (26)* in the rearward position.

Thus, it is necessary to load the rifle anew.

The *Bolt(head) (27)* is locked by three locking lugs while it turns around its axis by means of the sliding *Bolt carrier (26)*.

The *Trigger Mechanism Assembly (8)* of a *Hammer (36)* type provides delivering of fire and setting at SAFE (Division "0").

3.3 PREPARING OF SPORTING RIFLE FOR FIRING

While preparing the rifle for operation, it is necessary to:

- Wipe the barrel bore and cartridge chamber dry to remove grease and powder fouling, if be;
- Check that the *Trigger Mechanism Assembly (8)* and *Safety Lever Subassembly (9)* are serviceable;
- Check that the *Magazines (12)*, attached to the rifle in turn, are reliably held by the *Magazine Catch (68)*;
- Retract the action by the *Bolt carrier (26)* handle till the stop and let it off, do a dry release to check that the rifle is serviceable;
- Inspect the cartridges and load the *Magazine (12)* with them.

While attaching the matched PSzO-1M2 Optical Sight is required to:

- Setup the *Cheek Pad (20)*;
- Inspect the Sight. Remove dirt, if any, from the surfaces of the *Objective* and *Ocular Lens (Eyepiece)* using a *Cleaning Cloth*;
- Attach the sight to the rifle according to the Technical Description and Operations Manual for the Sight;
- Adjust force of a clamp and tightening of the optical-sight mount screws, if need be.

The rifle is ready for operation.



Preparation of the Sporting Rifle for firing is accomplished with a view to ensure their trouble-free operation during firing. To prepare the rifle for firing, proceed as follows:

- Clean the rifle;
- Inspect the disassembled rifle and lubricate it;
- Inspect the assembled rifle and sight;
- Check the rifle mechanisms and parts for proper interaction and operation;


3.4 SIGHTING AND ZEROING

Zeroing is the process of aligning the Point of Middle (PMI) with the Average Point of Impact (API), so that the two become one.

Point of Middle: The spot where you are aiming at, denoted as the spot where the crosshairs on your reticle intersect.

Average Point of Impact: The averaged spot where your bullets actually impact the target.

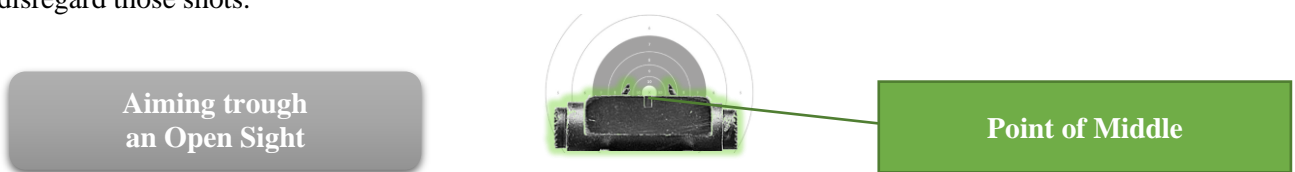
Keep in mind that the trajectory of a bullet is more or less a parabolic arc rather than a straight line, due to the gravity of the Earth. This fact brings us to conclusion that we must zero the rifle at a certain range, and since gravity affects the bullet, the rifle is only zeroed to that range – any other range will require corrective input on the *Rear Sight Leaf (43)* by adjusting the *Rear Sight Leaf Slide (44)*. That is why first of all we should define the preferred range to zero a rifle (and therefore zero the scope) at.

 **Attention!**
Iron Sight was Pre-zeroed with a laser bore sight by the Manufacturer at 50 m.

The Iron Sight provides delivering of effective fire at 300m range.

The safe bet for most shooters that are shooting .308 (7,62×54R) and .30-06 (7,62×39 mm) is to zero at 100 meters, as this is an easily obtainable distance. These cartridges shoot relatively flat out to 500 yards, so there isn't much if any adjustments that need to be made inside those distances. Beyond those distances, simple elevation corrections are dialled in via the *Rear Sight Leaf (43)*.

Tightly secure the Sporting Rifle at the firing station using sandbags or special sighting rack to avoid shooter related inaccuracy. Using your iron sights fire 4-5 shot group. Without moving the rifle look through the Target Scope and determine Average Point of Impact (API). One or two shot may deviate, this it is normal, disregard those shots.



For setting up windage at *Front Sight Ring (61)*, first loosen the side Retainer/Set Screw on the *Front Sight Base (59)* (see Figure 14). Then, rotate the opposite Retainer/Set Screw to aligning the Point of Middle (PMI) to the Average Point of Impact (API). Now rotate back the first Retainer/Set Screw to secure the settings.



14. Figure

3.5 WORK WITH THE OPEN SIGHT.

While aiming you must put your eye on the imaginary axis of the line of iron sights. There are three planes to focus on: the target and both sides of the *Rear Sight Leaf (43)* and the *Front Sight Post (60)*. All three point must be aligned and must be on target before the *Trigger (37)* is pulled. When you aim, you focus all your attention on the *Front Sight Post (60)*, observing its alignment with the *Rear Sight Leaf (43)* edge. The *Rear Sight Leaf (43)* should be slightly blurred, but the *Front Sight Post (60)* should be crystal clear.

⚠ Attention!
 ALWAYS USE SAFETY GLASSES OR PROTECTIVE EYEWEAR BY THE SHOOTING, IN ORDER TO PREVENT LIGHT AND SERIOUS INJURIES!

3.6 AIMING AND SHOOTING AT FIXED TARGETS.

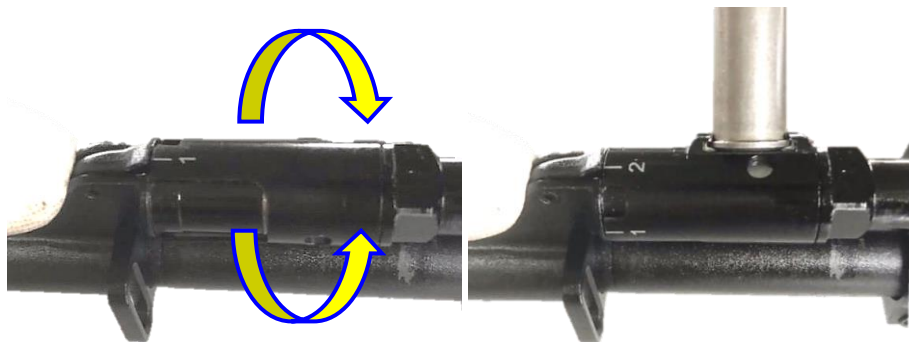
Adjust the *Rear Sight Leaf (43)* elevation position by pressing the *Rear Sight Leaf Slide (44)* and *Rear Sight Leaf Catch (45)* simultaneously and chose the appropriate divide with respect to the range to the target. Divisions will move the Point of Middle for every 100 m / 333 ft of the distance. The “A” position means the basic settings which corresponds to division 4 (400 m).



15. Figure

3.7 ADJUSTMENT OF GAS REGULATOR

The rifle has a *Gas Regulator (54)*, which serves to change recoil speeds of moving parts. Under conditions of proper servicing with the parts lubricated, the *Gas Regulator (54)* is set at Division “1”. On firing during a long time without cleaning and lubricating and heavy soiling of the rifle, stoppage may occur incomplete recoil of the moving parts. In this case the *Gas Regulator (54)* is set at Division “2”. To change the *Gas Regulator (54)* from one position to another use the rim of the cartridge case or the cartridge.



16. Figure



4. SERVICE MANUAL

4.1 GENERAL

The Sporting Rifle and Optical Sight (when the Sporting Rifle is delivered complete with a matched PSzO-1M2 Optical Sight) should be kept in good repair and in a ready-for use condition, which can be obtained by timely and skilful cleaning and lubricating, careful handling, proper storage, timely technical inspection and remedying of the troubles.

4.2 TECHNICAL CONDITION INSPECTION, TROUBLES AND REMEDIES

To check the rifle for good condition, as well as to set its further ready-for-use condition periodically inspect the rifle.

During inspection make sure that all the rifle parts are present and the external parts are free of rust, dirt, dents, scratches, nicks, chipping and other damage, since they may interfere with the normal operation of the rifle mechanisms and the Optical Sight.

Besides, check condition of the lubricant on the rifle parts visible without disassembling the rifle. Make sure that the Magazines, the Accessories are not missed, make sure that there is no foreign matter in the barrel bore.

Check the parts and mechanisms for proper operation. When checking the operation of the rifle parts and mechanisms, release *Safety Lever (9)*, retract the *Bolt carrier (26)* by the reloading handle all the way back and release it; the *Bolt carrier (26)* should be stopped in the rear position by the *Bolt Catch (69)*.

Detach the *Magazine (12)*, slightly retract the *Bolt carrier (26)* by the handle and release it; the *Bolt carrier (26)* should energetically return to the front position. Set the rifle at safe (0 position) and press the *Trigger (37)*; the *Trigger (37)* should not move rearward completely, and the *Hammer (36)* should remain cocked.

Release *Safety Lever (9)* and press the *Trigger (37)*; a click should be heard, which is indicative of the energetic blow delivered by the *Hammer (36)* against the *Firing Pin (28)*.

Set the rifle at safe again and attach the *Magazine (12)*; the *Bolt carrier (26)* should not move backward, the *Safety Lever (9)* should be reliably retained in the required position.

Check the feed of cartridges into the cartridge chamber, extraction and ejection of fired cases (cartridges). Fill the *Magazine (12)* with dummy cartridges, attach it to the rifle, and without pressing the *Magazine (12) Catch (68)*, try to detach the *Magazine (12)* with the effort of the hand, the *Magazine (12)* should freely enter the opening of the *Receiver (25)* and should be securely retained by the *Magazine Catch (68)*.

Reload the rifle several times, the dummy cartridges should be fed, without any delay, from the *Magazine (12)* into the cartridge chamber and rushly extracted from the receiver outward.

Inspect cartridges before firing. When inspecting the cartridges, make sure that the cartridge cases are not bent and free of rust, the bullet does not play in the cartridge case mouth; the primer is free of verdigris and cracks, no setback of the primer occurs; are there some dummy cartridges among live cartridges or not. All the defective cartridges are to be transferred to the depot.

All defects of the rifle, the Optical Sight, Magazines and Accessories should be immediately eliminated. If there is no opportunity to eliminate the troubles in the subunit, transfer the rifle (the Optical Sight, Magazines, Accessories) to the repair shop.



Careful handling the rifle and proper care of it provide reliable, trouble-free operation and long service life of Sporting Rifle parts and mechanisms. However, in case of clogging and wear of rifle parts and mechanisms and in case of careless handling the rifle or in case of cartridges damage, stoppages in fire may occur.

If during firing stoppages occur, reload the rifle, for which purpose energetically retract the *Bolt carrier* (26) by the handle, release it and proceed with firing.

If the stoppage is not eliminated, determine the cause of the trouble and eliminate the stoppage as instructed in the 6. Table.

Trouble	Cause	Remedy
Cartridge not fed into chamber. <i>Bolt(head)</i> (27) in front position, but no shot fired (no cartridge in cartridge chamber)	Dirty or faulty <i>Magazine</i> (12). Faulty <i>Magazine Catch</i> (68)	Reload the rifle and proceed with firing. Replace the <i>Magazine</i> (12), if stoppage is repeated. Transfer the rifle to the repair shop, if the <i>Magazine Catch</i> (68) is faulty
Misalignment of cartridge. Cartridge with its bullet rests on barrel breech face, moving parts stop in middle position	Bent guiding lugs of <i>Magazine</i> (12) side walls	Holding the <i>Bolt carrier</i> (26) reloading handle, remove the misaligned cartridge and proceed with firing. If the stoppage is repeated, replace the <i>Magazine</i> (12)
Misfire. <i>Bolt(head)</i> (27) in front position, cartridge in cartridge chamber, <i>Hammer</i> (36) released, no shot fired	Faulty cartridge. Faulty <i>Firing Pin</i> (28) or <i>Trigger Mechanism Assembly</i> (8), dirty or thick lubricant	Reload the rifle and proceed with firing. If stoppage is repeated, inspect and clean the <i>Firing Pin</i> (28) and the <i>Trigger Mechanism Assembly</i> (8); if they are broken or worn, transfer the rifle to the repair shop
Fired case fails to be extracted. Fired case in cartridge chamber, the next cartridge with its bullet rests on fired case, moving parts are in middle position	Dirty cartridge or dirty cartridge chamber. Dirty or faulty <i>Extractor</i> (32) or its <i>Extractor Spring</i> (33)	Retract the <i>Bolt carrier</i> (26) reloading handle, and holding it in the rear position, detach the <i>Magazine</i> (12) and remove the misaligned cartridge. Extract the fired case by the <i>Bolt(head)</i> (27) or by the <i>Cleaning rod</i> (21) and proceed with firing. If the stoppage is repeated, clean the cartridge chamber. Inspect and clean the <i>Extractor</i> (32), then proceed with firing. If the <i>Extractor</i> (32) is faulty, transfer the rifle to the repair shop
Fired case stuck or fails to be ejected. Fired case is not ejected from Receiver (25), it is in the Receiver (25), in front of <i>Bolt(head)</i> (27) or rammed by the <i>Bolt(head)</i> (27) into cartridge chamber again	Dirty friction parts, Gas Tube (53) (53) or cartridge chamber Dirty or faulty <i>Extractor</i> (32)	Retract the <i>Bolt carrier</i> (26) reloading handle, remove the fired case and proceed with firing. If the stoppage is repeated, clean the <i>Gas Tube</i> (53) (53), the friction parts and the cartridge chamber. If the <i>Extractor</i> (32) is unserviceable, transfer the rifle to the repair shop

6. Table

4.3 DISASSEMBLY OF RIFLE

To check the rifle for good condition, as well as to set its further ready-for-use condition periodically inspect the rifle.

The disassembly of the Sporting Rifle may be partial and complete: partial disassembly is performed for cleaning, oiling and inspection of the rifle. Complete disassembly is required for cleaning the rifle if it is heavily soiled and after it has been exposed to the rain or snow, or when the rifle is to be newly lubricated and repaired.

⚠ Attention!
The frequent disassembly of the Sporting Rifle is harmful to the weapon, as it tends to increase the wear of its parts and mechanisms. When disassembling and assembling the Sporting Rifle do not apply an extra effort and sharp blows.

When assembling the Sporting Rifle, check the numbers on its parts; the number stamped on the *Receiver* (25) should correspond to the numbers available on all its parts.

For partial disassembly of the Sporting Rifle, adhere to the following procedure:

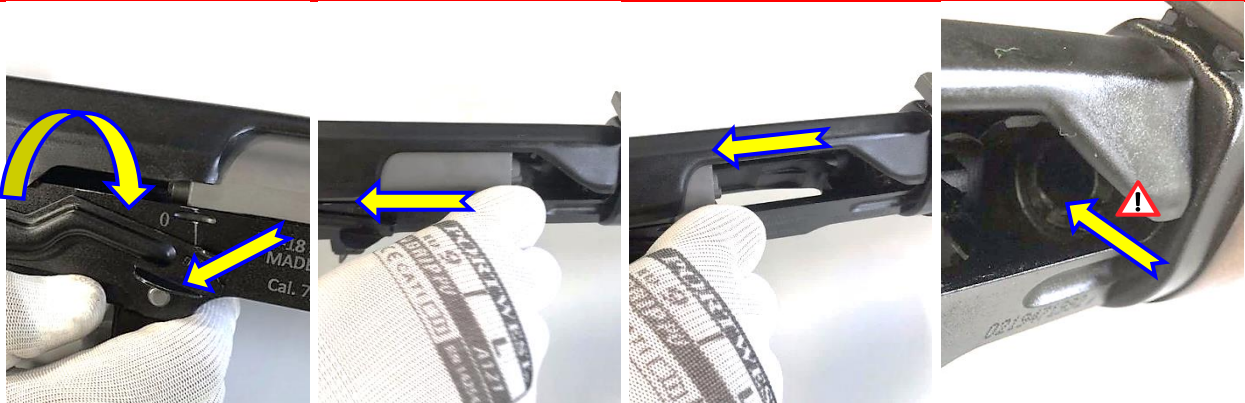
- a) Detach the *Magazine* (12). Take the *Magazine* (12) with the hand, press the *Magazine Catch* (68), move the *Magazine Floor Plate* (67) forward and detach it.



17. Figure

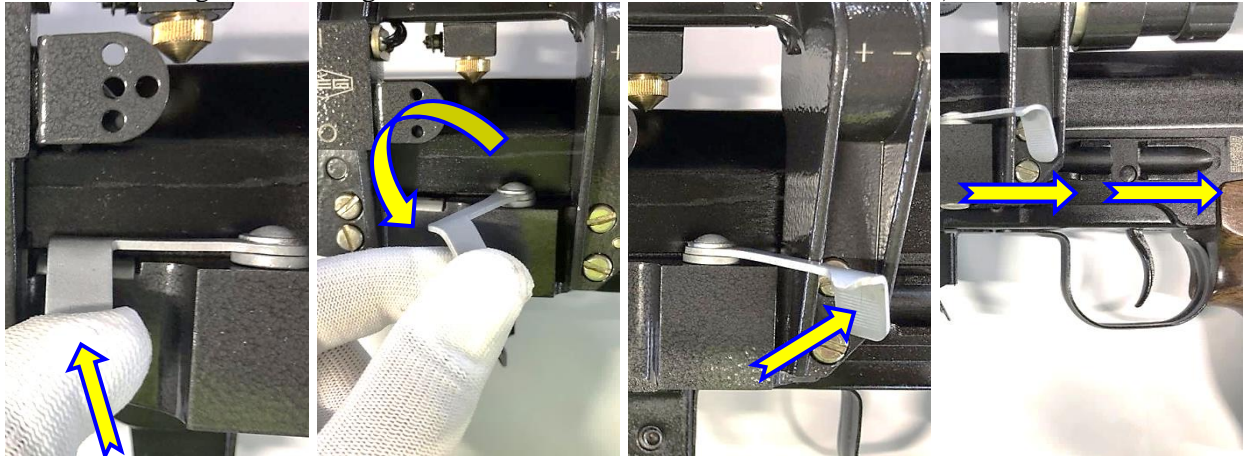
- b) Then make sure that there is no cartridge in the cartridge chamber, for which purpose lower (0 position) the *Safety Lever* (9), retract the reloading handle of the *Bolt carrier* (26), inspect the cartridge chamber and release the reloading handle.

⚠ Attention!
ALWAYS DOUBLE CHECK THAT THE FIREARM IS SAFE AND THERE IS NO CARTRIDGE IN THE CARTRIDGE CHAMBER BY ANY ASSEMBLY OR MAINTENANCE OPERATION.



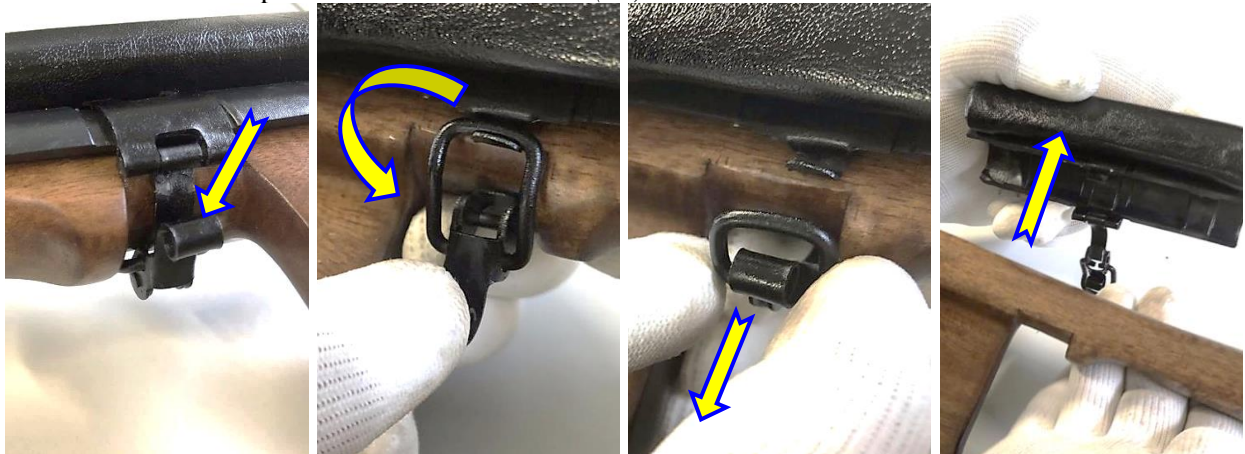
18. Figure

- c) Detach the *Optical Sight*. Raise the *Latching Lever* and turn it towards the *Ocular Lens (Eyepiece)* as far as it will go; shift the sight backward and detach it from the *Receiver (25)*.



19. Figure

- d) Detach the *Cheek Pad (20)*. Turn the fastener of the Cheek Pad lock downward, remove the loop from the hook of the clip and detach the *Cheek Pad (20)*.



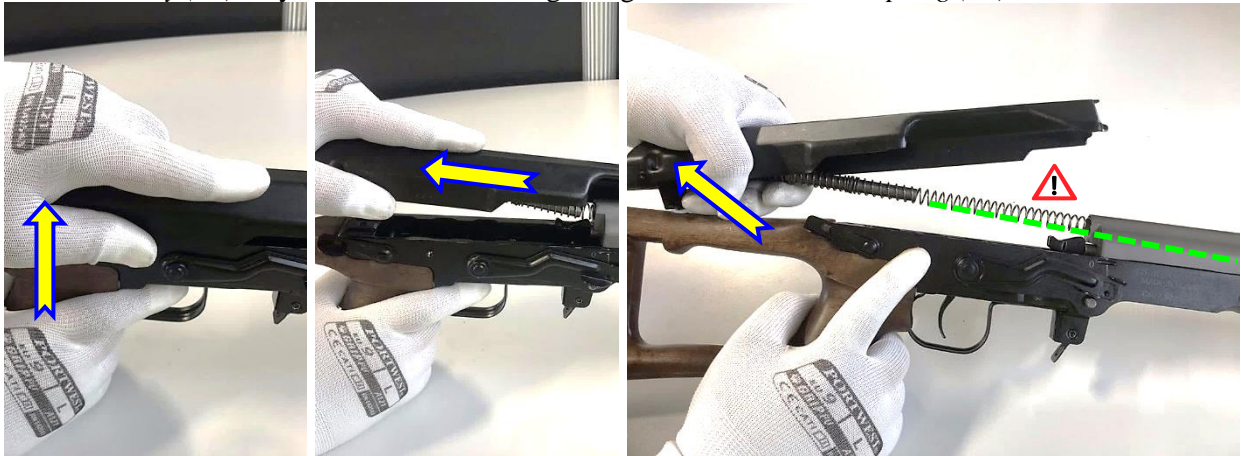
20. Figure

- e) Detach the *Receiver Cover with Recoil Mechanism Assembly (11)*. Turn the *Receiver Cover Latching Lever (39)* of the *Receiver Cover (38)* backward so as to engage it with the *Receiver Cover Latching Lever (39)*.



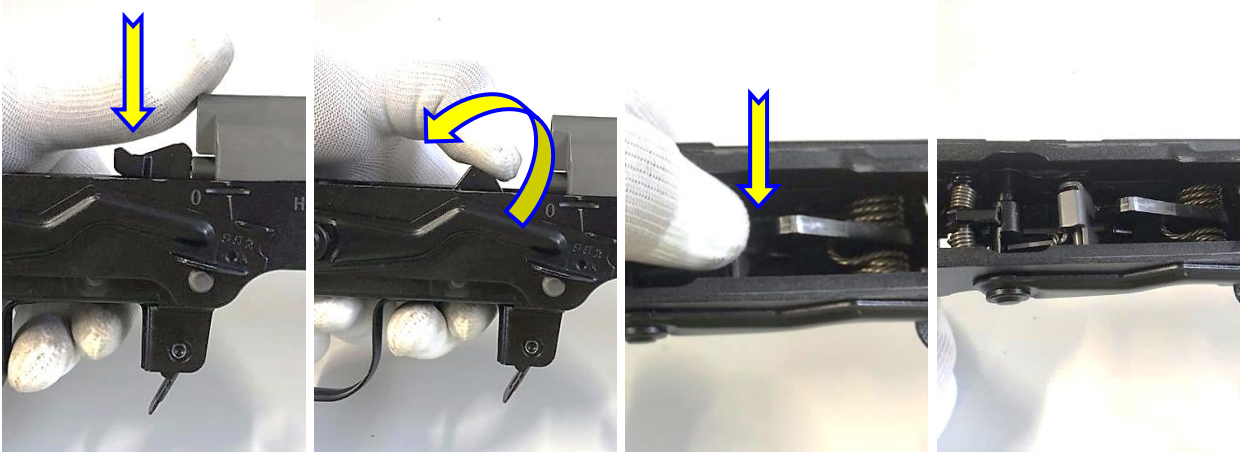
21. Figure

f) Raise the rear part of the *Receiver Cover* (38) and detach *Receiver Cover with Recoil Mechanism Assembly* (11). Pay attention for the straight alignment of the *Recoil Spring* (42)



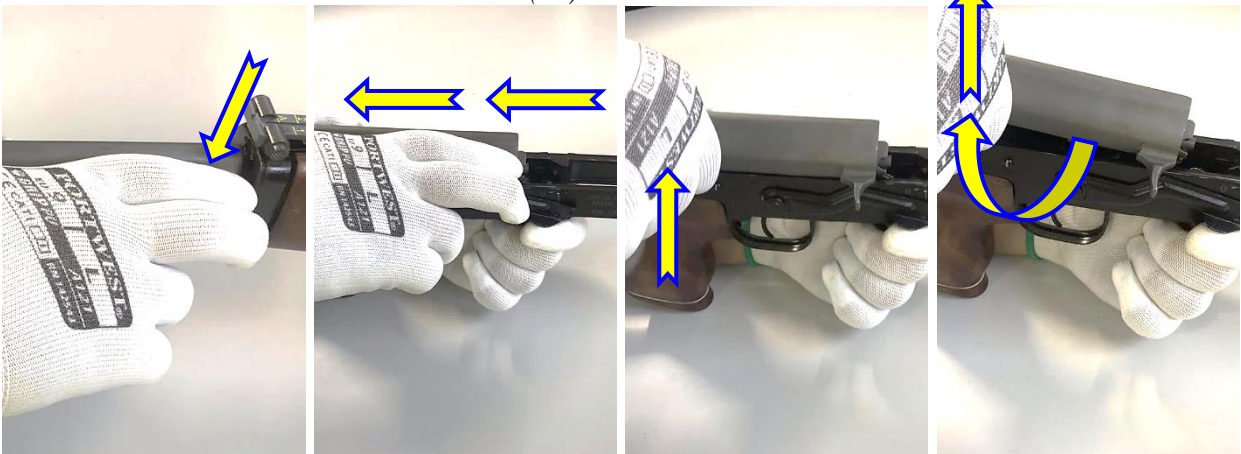
22. Figure

g) Cocking the *Hammer* (36) with turning it back and tense into the *Trigger Mechanism Assembly* (8).



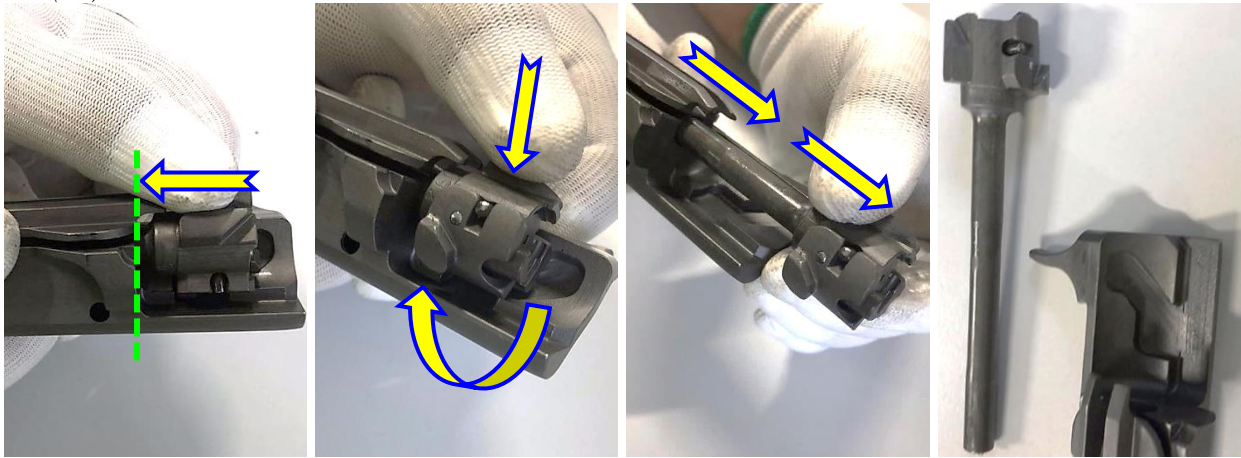
23. Figure

h) Detach *Bolt(head) with Bolt Carrier Assembly* (10). Pull back the *Bolt carrier* (26) as far as it will go, raise it and detach it from the *Receiver* (25).



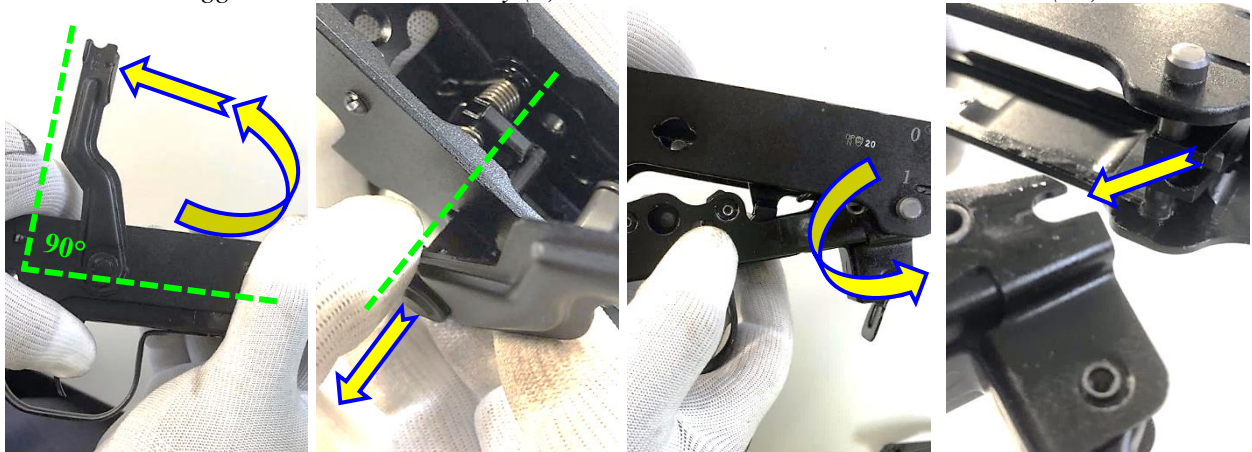
24. Figure

- i) Detach the *Bolt(head)* (27) from the *Bolt carrier* (26). Pull the *Bolt(head)* (27) backward, turn it so that its guiding lug comes out of the shaped recess of the *Bolt carrier* (26) and move the *Bolt(head)* (27) forward.



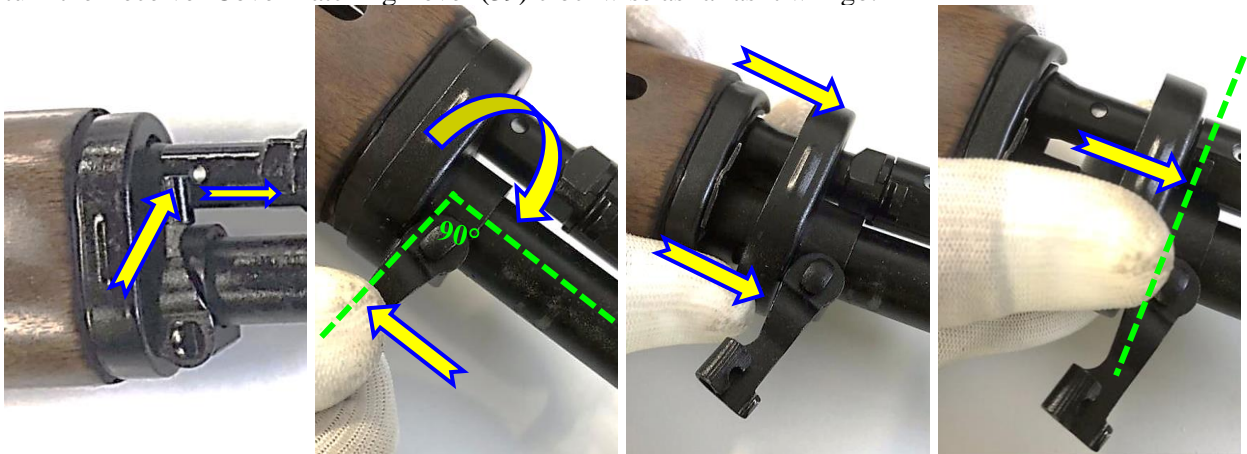
25. Figure

- j) Detach the *Trigger Mechanism Assembly* (8). Turn the *Safety Lever* (9) upward till it occupies the vertical position, shift it to the right and detach from the *Receiver* (25); holding the trigger guard move the *Trigger Mechanism Assembly* (8) downward to detach it from the *Receiver* (25).



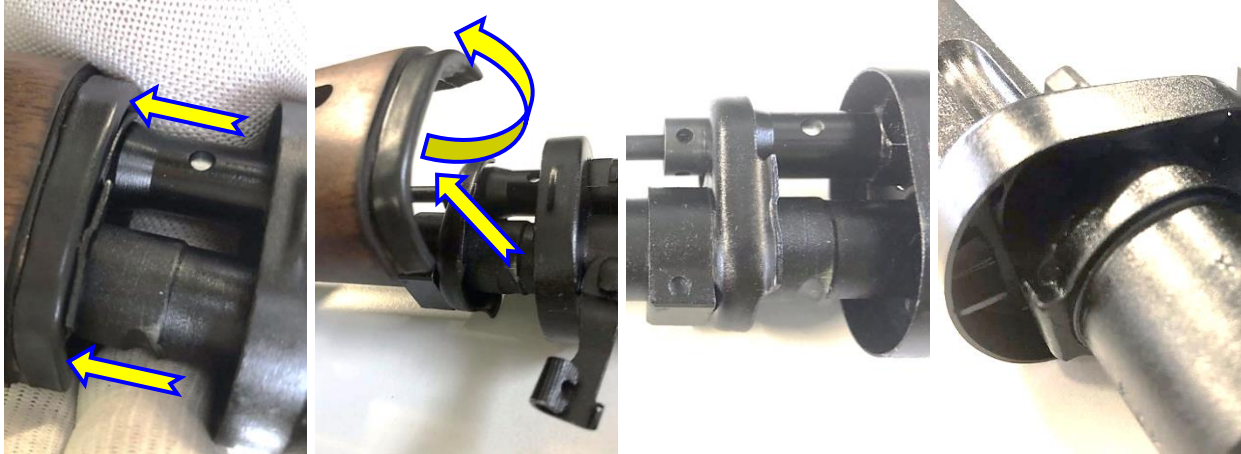
26. Figure

- k) Detach the *Handguard Subassembly* (4-5). Press the *Receiver Cover Latching Lever* (39) to the *Gas Tube* (53) so that the lug *Receiver Cover Latching Lever* (39) comes out of the *Handguard Retainer* (46) and turn the *Receiver Cover Latching Lever* (39) clockwise as far as it will go.



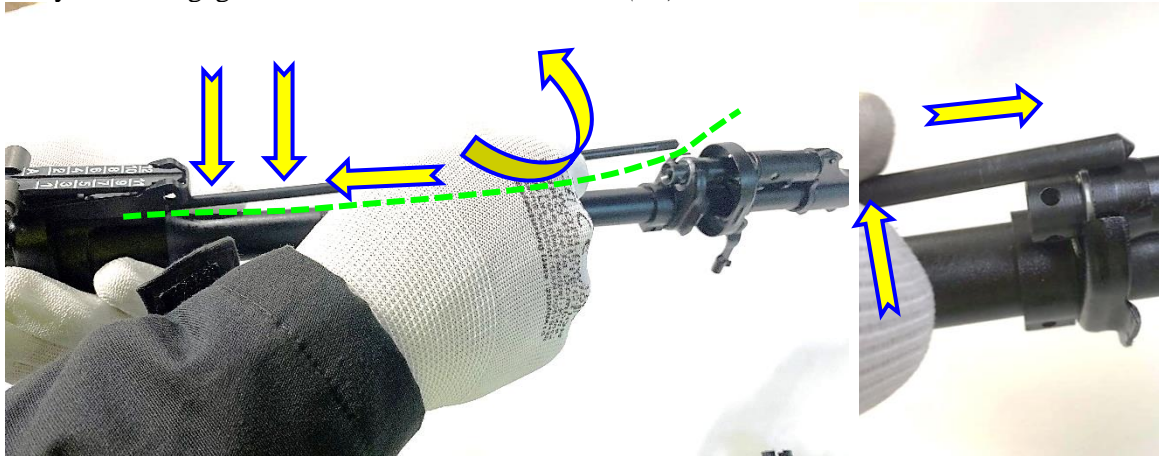
27. Figure

- l) Shift the *Handguard Retainer* (46) to the *Front Sight Base Subassembly* (6); pressing the *Handguard Subassembly* (4-5) downward and shifting it sideways, detach it from the *Barrel* (24).



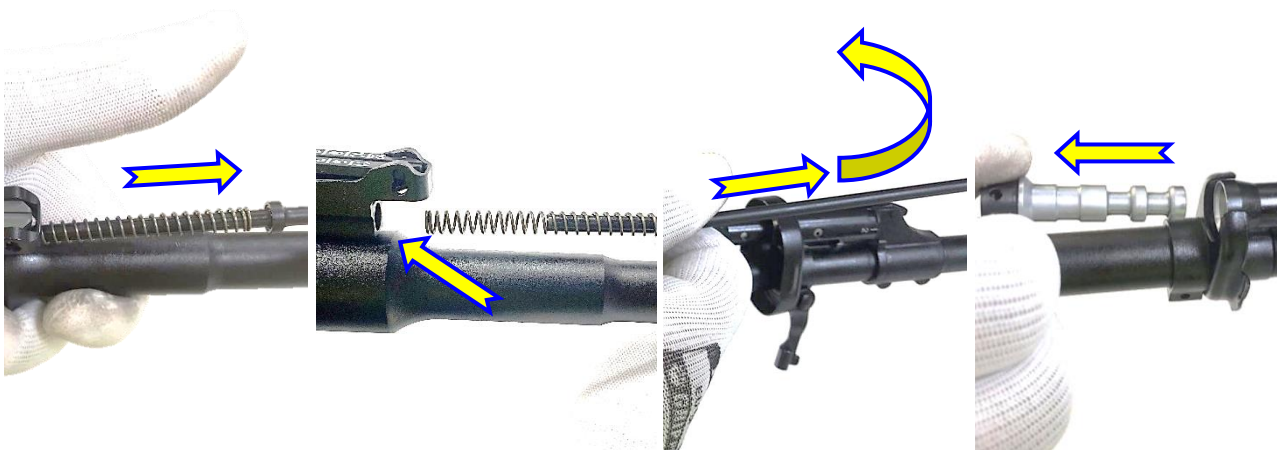
28. Figure

- m) Detach the *Gas Piston* (56) and the *Piston Rod* (57) together with the *Piston Rod Spring* (58). Pull the *Piston Rod* (57) backward and compress the *Piston Rod Spring* (58). Bend-out the *Piston Rod* (57) softly and disengage its front end from the *Gas Tube* (53).



29. Figure

- n) Detach the *Piston Rod Spring* (58) from the *Piston Rod* (57) by pulling down. Detach the *Gas Piston* (56) from the *Gas Tube* (53).



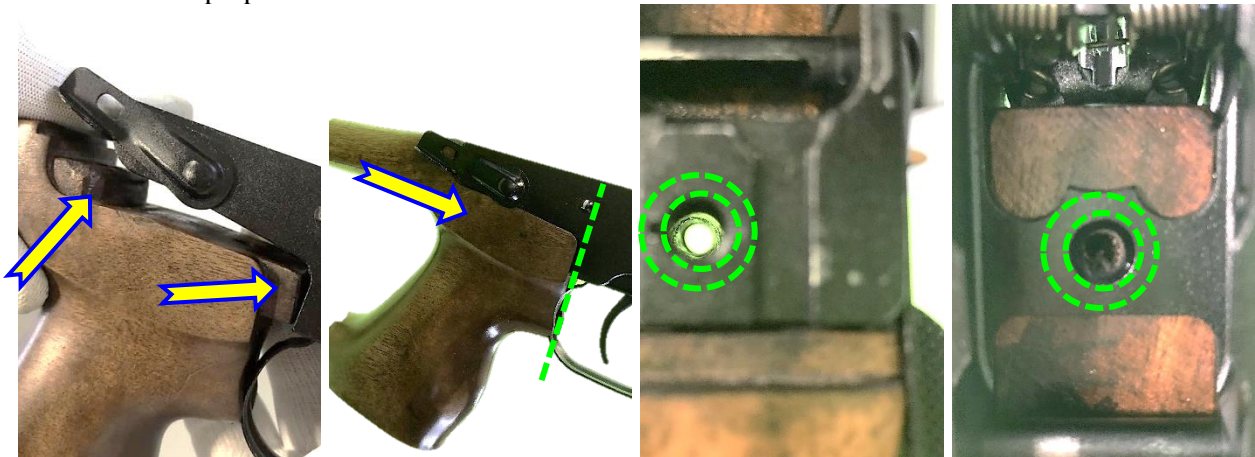
30. Figure

4.4 ASSEMBLY OF RIFLE

To assemble the Sporting Rifle after partial disassembly, adhere to the following procedure;

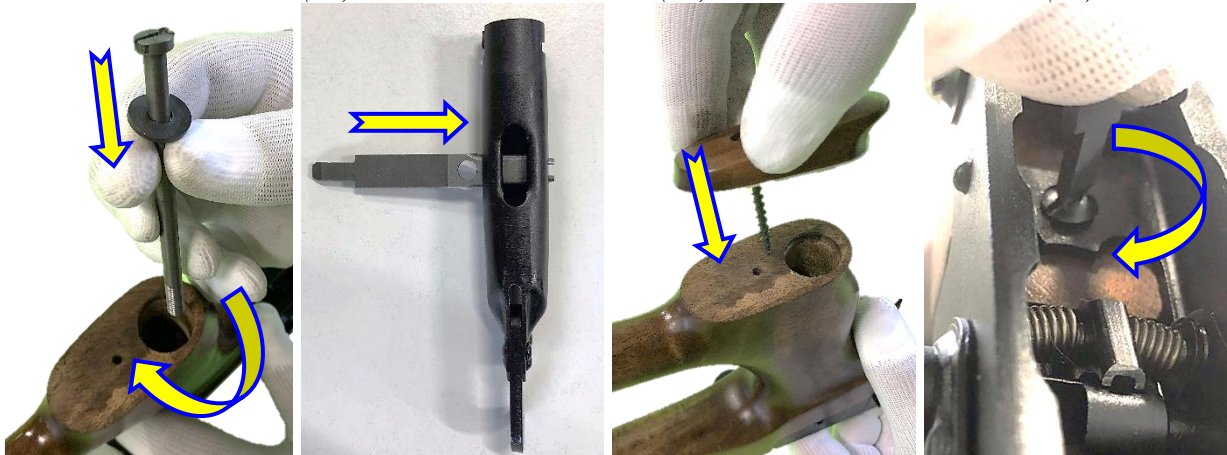
⚠ Attention!
 Basically, the reverse operation of the Disassembly procedure. Only the crucial points will be highlighted and illustrated here with figures

- a) Connect *Buttstock Assembly (7)*. Insert the *Buttstock (70)* into the passage of the rear end of the *Receiver (25)*, and press it forward toward the *Front Sight Base Subassembly (6)*. Check the concentricity of the screw holes for proper connection.



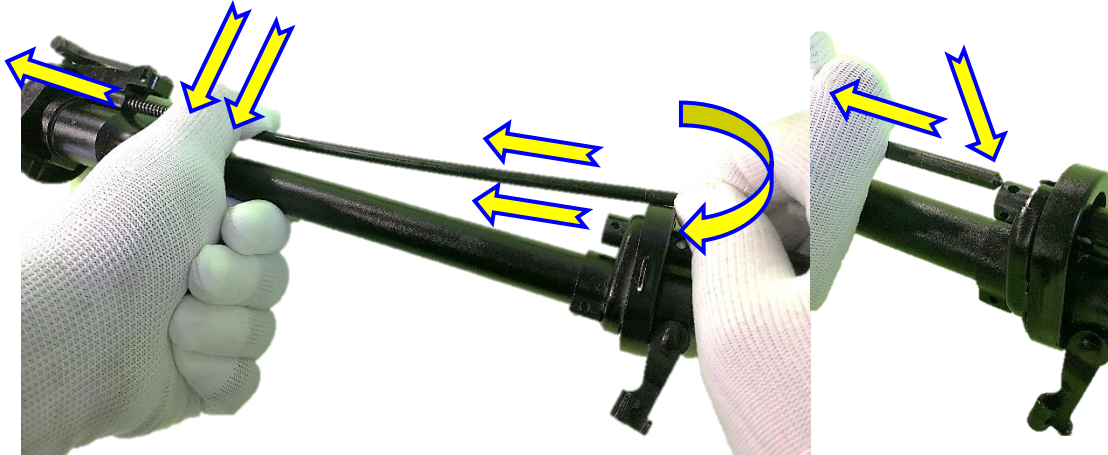
31. Figure

- b) Put on the *Buttstock Washer (72)* onto the *Buttstock Screw (71)* and insert the to the lower hole of *Buttstock (70)*. Combine the *Screwdriver (15)* and *Accessories Container Body (18)* as wrench-tool. Fasten the *Buttstock Screw (71)*. Put on the *Buttstock Bottom Plate Screw (75)* onto the *Buttstock Bottom Plate (74)* and insert the to the lower hole of *Buttstock (70)*. Fasten the *Buttstock Bottom Plate Screw (75)*. Insert the *Buttstock Screw (71)* into hole on the *Receiver (25)*. Fasten the *Buttstock Screw (71)*.



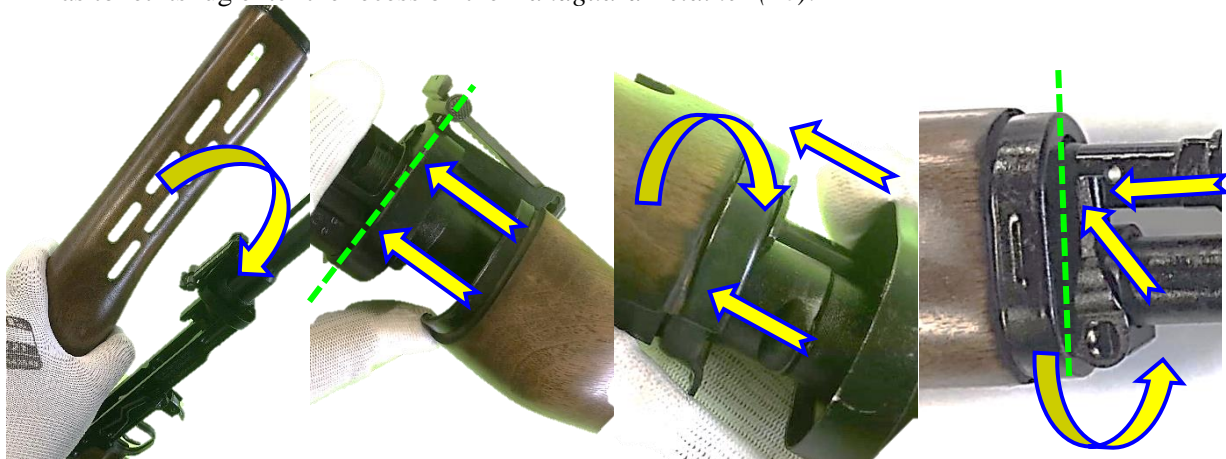
32. Figure

- c) Connect the *Gas Piston (56)* and the *Piston Rod (57)* with the *Piston Rod Spring (58)*. Fit the *Piston Rod Spring (58)* onto the rear end of the *Piston Rod (57)*; insert the front end of the *Piston Rod (57)* into the *Gas Tube (53)*, compress the *Rod Spring (58)* and insert the rear end of the *Piston Rod (57)* together with the *Rod Spring (58)* into the passage of the *Front Sight Base Subassembly (6)*; pull the *Piston Rod (57)* backward and remove its front end from the *Gas Tube (53)* sideways; insert the *Gas Piston (56)* into the *Gas Tube (53)*, and the front end of the *Piston Rod (57)* into the *Gas Piston (56)* socket.



33. Figure

- d) Connect the *Handguard Subassembly (4-5)*. Insert the rear end of the *Handguard Subassembly (4-5)* into the *Handguard Rear Collar (49)*, press the *Handguard Shell (50-51)* downward and fasten it on lugs of the *Handguard Front Collar (48)*; fit the *Handguard Retainer (46)* onto the end pieces of the *Handguard Subassembly (4-5)* and turn the *Handguard Latching Lever (47)* to the *Gas Tube (53)* so as to let its lug enter the recess on the *Handguard Retainer (46)*.



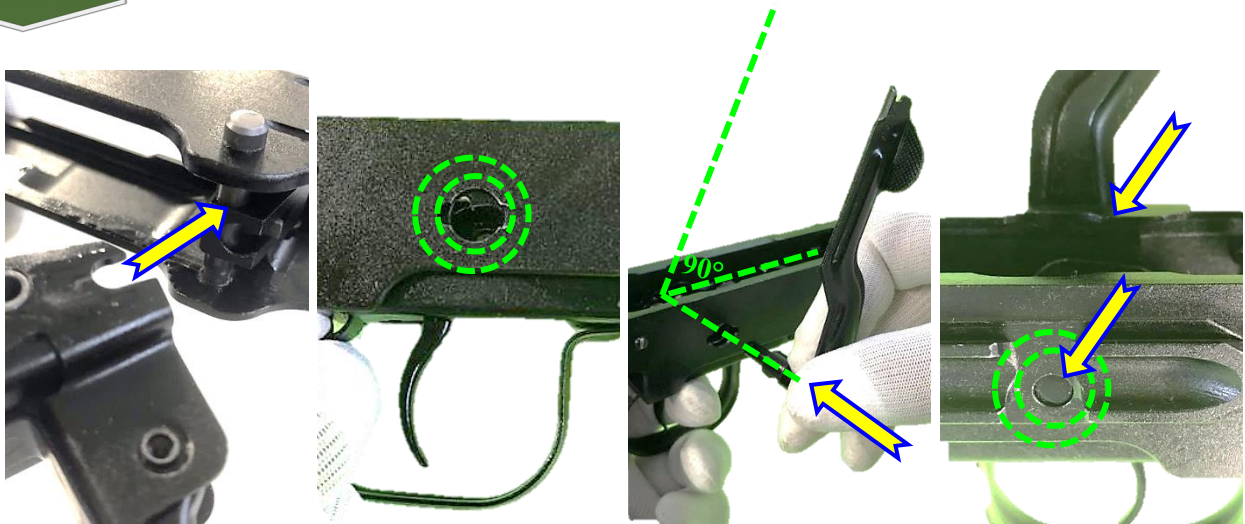
34. Figure

- e) Connect the *Trigger Mechanism Assembly (8)*. Engage the recesses of the *Trigger Mechanism Assembly (8)* with the *Stop Pin* and press the *Trigger Housing (35)* to the *Receiver (25)*; insert the *Safety Lever (9)* into the hole of the *Receiver (25)* concentric, then turn the *Safety Lever (9)* in the clockwise direction so as to let the lug of the *Safety Lever (9)* enter the lower recess of the *Receiver (25)*.



Attention!

Never insert the *Bolt(head) with Bolt Carrier Assembly (10)* into *Receiver (25)* before attaching of the *Trigger Mechanism Assembly (8)*. The *Hammer (36)* should be cocked.

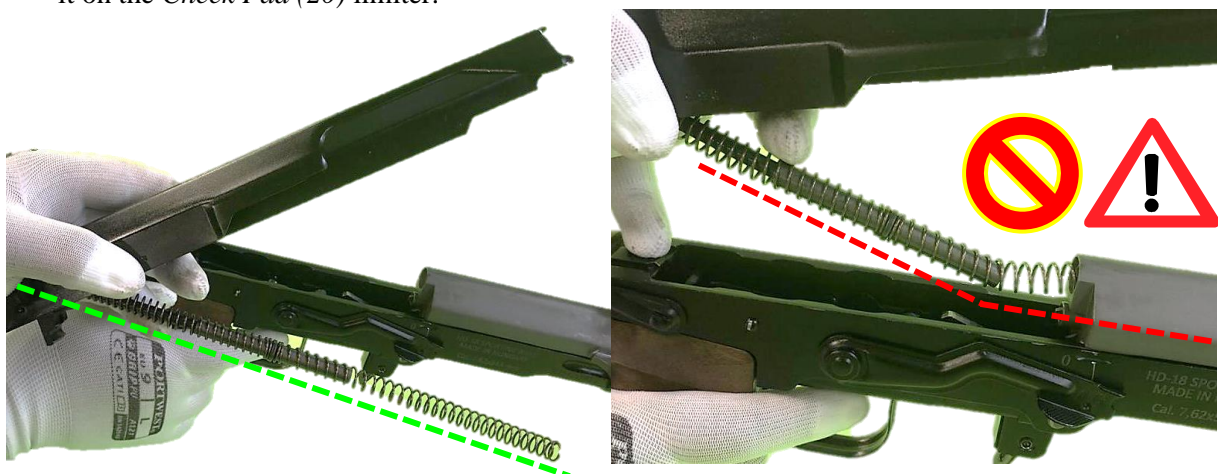


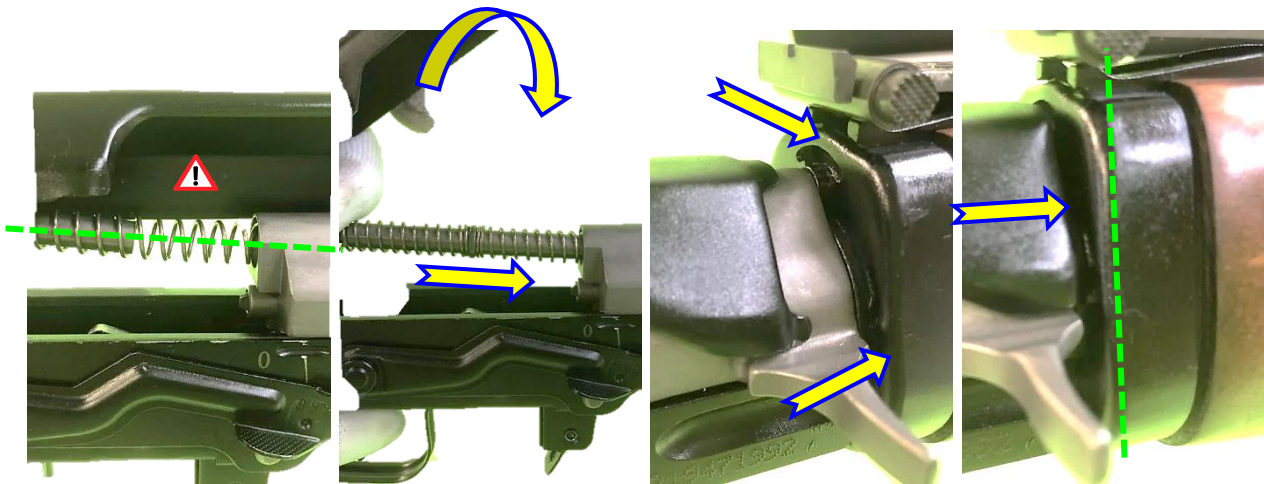
35. Figure

- f) Connect the *Bolt(head)* (27) to the *Bolt carrier* (26), insert the *Bolt(head)* (27) into the passage of the *Bolt carrier* (26), turn the *Bolt(head)* (27) so that its driving lug enters the shaped recess of the *Bolt carrier* (26) and move the bolt forward as far as it will go.
- g) Connect the *Bolt(head)* with *Bolt Carrier Assembly* (10). Insert the guiding lugs of the *Bolt carrier* (26) into recesses of the *Receiver* (25), press down the *Hammer* (36) with the lower lug of the *Bolt(head)* (27) and move the *Bolt carrier* (26) forward.



- h) Connect the *Receiver Cover with Recoil Mechanism Assembly* (11). Insert the *Recoil Spring* (42) STRAIGHT into the passage of the *Bolt carrier* (26) until the *Guiding Rod* (40) reach the passages as well. Insert the lugs on the front end of the *Receiver Cover* (38) into recesses on the *Handguard Rear Collar* (49) press the rear end of the *Receiver Cover* (38) to make the *Receiver Cover* (38) fit tightly to the *Receiver* (25), turn the *Handguard Latching Lever* (47) of the *Receiver Cover* (38) forward to set it on the *Cheek Pad* (20) limiter.






36. Figure

- i) Connect the *Cheek Pad (20)*. Put the *Cheek Pad (20)* on the *Buttstock Assembly (7)* with its fastener to the right, fit the loop onto the hook of the clip and turn fastener upward.
- j) Connect the *Optical Sight*. Match the slots on the *Mounting Bracket* with the *Mounting Stopper Pin* on the left rail of the *Receiver (25)* shift the *Optical Sight* forward as far as it will go and turn the *Latching Lever* towards the *Objective with Extendable Sun Shade* so as to let the *Latching Lever* enter the recess of the *Mounting Bracket*.
- k) Connect the *Magazine (12)*. Insert the front hook of *Magazine (12)* into the opening of the *Receiver (25)* and turn the *Magazine (12)* to yourself to let the *Magazine Catch (68)* engage the rear hook of the *Magazine (12)*.

To completely disassemble the Sporting Rifle, proceed as follows:

 **Attention!**
Only for Gunsmith:

- a) Perform the partial disassembly as instructed in item 5.5.
- b) Disassemble the *Magazine (12)*. Depress the lug of the *Magazine Bottom Plate (66)* into the hole of the *Magazine Floor Plate (67)* and shift the *Magazine Floor Plate (67)* somewhat forward; holding the *Magazine Bottom Plate (66)* remove the *Magazine Floor Plate (67)* from the *Magazine Body (63)*; releasing the *Magazine Follower Spring (65)* gradually, remove it together with the *Magazine Bottom Plate (66)* from the *Magazine Body (63)*, then detach the *Magazine Follower (64)*.
- c) Disassemble the *Bolt(head) (27)*. Use the *Drift / Temporary-Axis (17)* to drive out the *Firing Pin Axis (29)* securing the *Firing Pin (28)*; remove the *Firing Pin (28)* from the *Bolt(head) (27)* passage, then remove the *Extractor (32)* and the *Extractor Spring (33)* from the bolt in the same way.
- d) Detach the *Gas Tube (53)* together with the *Gas Regulator (54)*. Turn the *Gas Regulator (54)* so as to match the recess on its front part with the *Gas Regulator Latching Lever (55)*, press the *Gas Regulator Latching Lever (55)*, and use the *Accessories Container-Wrench (22)* to unscrew the *Gas Tube (53)*, then remove the *Gas Regulator (54)* from it.



Reassembling the Sporting Rifle after complete disassembly. For this purpose, proceed as follows:

⚠ Attention!

Only for Gunsmith:

- a) Connect the *Gas Tube (53)* and the *Gas Regulator (54)*. Fit the *Gas Regulator (54)* onto the *Gas Tube (53)*, press the *Gas Regulator Latching Lever (55)*, and screw in the *Gas Tube (53)* with the aid of the *Accessories Container-Wrench (22)* to match the recess on the *Gas Tube (53)* front part with the *Gas Regulator Latching Lever (55)*, depress the *Gas Regulator Latching Lever (55)* lug into the recess of the *Gas Tube (53)*, set the *Gas Regulator (54)* at the required division.
- b) Assemble the *Bolt(head) (27)*. Insert the *Extractor (32)* together with its *Extractor Spring (33)* into the seat of the *Bolt(head) (27)*. Pressing the *Extractor (32)*, insert the *Extractor Axis (34)*; insert the *Firing Pin (28)* into the passage of the *Bolt(head) (27)*. and insert the *Firing Pin Axis (29)* into the hole of the *Bolt(head) (27)* from the side of the guiding lug and push the *Firing Pin Axis (29)* as far as it will go.
- c) Assemble the *Magazine (12)*. Insert the *Magazine Follower (64)* and the *Magazine Follower Spring (65)* into the *Magazine Body (63)*; compress the *Magazine Follower Spring (65)* to fit the *Magazine Bottom Plate (66)* into the *Magazine Body (63)*; and, holding it in that position, put the *Magazine Floor Plate (67)* on the *Magazine Body (63)*; so that the lug of the *Magazine Bottom Plate (66)* enters the hole of the *Magazine Floor Plate (67)*.
- d) Further on proceed with assembly as instructed in item 5.6.

4.5 CLEANING AND LUBRICATION

The rifle should be cleaned in the following cases:

- a) when preparing the rifle for firing;
- b) after firing with live and blank ammunition, immediately after finishing the fire;
- c) after activities or field exercises without firing, just on return to home
- d) in sporting activities and prolonged tactical exercises, daily during lulls of the sporting and during the intervals in the exercises;
- e) if the Sporting Rifle is not in use, at least once a week.

In winter carry out cleaning in enclosed premises with temperature of $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ ($68^{\circ}\text{F} \pm 9^{\circ}\text{F}$) after the rifle has been warmed up to the indoor temperature.

Lubricate the Sporting Rifle after cleaning. Apply lubricant only to the well-cleaned and dry surfaces of the metal immediately after cleaning to avoid the adverse effect of moisture on the metal.

For cleaning and lubricating the rifle following materials are used:

- liquid rifle oil for cleaning the rifle and lubricating its parts and mechanism, when the ambient temperature is within -50°C to $+50^{\circ}\text{C}$ (-58°F to 122°F)
- rifle oil for lubricating the barrel bore, the rifle parts and mechanisms after their cleaning, the said oil is used when the ambient temperature exceeds $+5^{\circ}\text{C}$ (41°F)
- RCHS solution for scouring out the barrel bore and other parts affected by the powder gases.

⚠ Attention!

The RCHS solution is prepared in a subunit. The composition of the solution is as follows:

- drinking water: 1L;
- ammonium carbonate: 200g;
- potassium bichromate: 3-5g.



The RCHS solution is prepared in the amount required for scouring the weapon in the course of 24 hours. Small amount of the RCHS solution may be stored in tightly plugged glass vessels, away from heaters (in a dark place) for not more than 7 days.



Attention!

It is prohibited to fill the oilers with the RCHS solution.

- waste or special paper KB-22 for wiping, scouring and lubricating the Sporting Rifle;
- tow free from boon only for scouring the barrel bore out.

To clean the Sporting Rifle, proceed as follows:

- a) Prepare materials for cleaning and lubrication;
- b) Disassemble the Sporting Rifle;
- c) Prepare Accessories for use during cleaning;
- d) Scour out the barrel bore.
To scour out the barrel bore with liquid rifle oil put the tow on the *Scourer (16)* end and place the tow fibers along the scourer rod; soak the tow in liquid rifle oil. Insert the *Cleaning rod (21)* with the *Scourer (16)* and the tow into the barrel bore and secure the *Accessories Container Cover (13)* on the *Muzzle-Bushing (62)*. Holding the rifle with one hand smoothly move the *Scourer (16)* with the tow forward along the entire length of the barrel bore several (8-10) times. Remove the *Cleaning rod (21)*, change the tow, soak it in liquid rifle oil and, adhering to the above procedure, scour the bore several times. Then thoroughly wipe the barrel bore with the clean dry tow, then with a clean waste cloth. To clean the barrel bore with the RCHS solution, use the brush soaked in the solution; then wipe the barrel bore with tow. Proceed with cleaning the bore with the RCHS solution to completely remove the fouling. Having cleaned the rifled portion of the bore, clean the cartridge chamber.
- e) To ensure proper operation of the rifle, it is required to remove fouling from the *Gas Chamber (52)*, *Gas Tube (53)* and *Gas Piston (56)* in due time. Clean the *Gas Chamber (52)* and the *Gas Tube (53)* with the help of the *Cleaning rod (21)* or a wooden stick, wrapped with waste cloth around, washed with liquid rifle oil or the RCHS solution; wipe the *Gas Chamber (52)* and the *Gas Tube (53)* dry after they have been cleaned; wipe the barrel bore with waste cloth once more and inspect it to see that no tow, waste cloth, rags or foreign matter are left therein;
- f) Clean the *Receiver (25)*, the *Bolt(head) (27)* and the *Gas Piston (56)* with waste cloth soaked in liquid rifle oil or the RCHS solution, then wipe them dry;
- g) Wipe dry the rest metal parts with waste cloth;
- h) Wipe the wooden parts with dry waste cloth.

Lubricate the Sporting Rifle as follows:

- a) Lubricate the barrel bore with the help of the *Scourer (16)* and the waste cloth, soaked in lubricant; lubricate the cartridge chamber. Two-three double travels of *Cleaning rod (21)* along entire length of the barrel bore)
- b) Lubricate all the remaining metal parts and mechanisms with oiled waste cloth;
- c) Apply a thin layer of lubricant, as excessive lubrication tends to increase soiling of the rifle parts and may result in stoppages during firing;
- d) Do not lubricate wooden parts with liquid rifle oil or RCHS solution;
- e) Use a thin layer of dedicated linseed oil to care and polish the wooden furniture.

Thickening of lubricant in the *Bolt(head) (27)* channel for the *Firing Pin (28)*, in seat for *Extractor (32)*, on the *Extractor Spring (33)* and on the *Firing Pin Spring (30)* is impermissible.

Assemble the rifle and check the functioning of its parts and mechanisms.



5. SAFEKEEPING AND STORAGE

5.1 TARE AND PACKING

The Sporting Rifles are supplied to the Distributor in polymer hard case with universal inlay. The Magazines and Accessories are packed in zippered pouch.



Attention!

Polymer hard case is dimensioned for the factory assembled Muzzle-Bushing length.

5.2 STORAGE AND TRANSPORTATION



Attention!

The Sporting Rifle should be always kept unloaded, the Optical Sight and the Magazine (12) should be detached; the Hammer (36) released, the rifle set at SAFE (Division "0") accordingly the Safety Lever (9) set at the division "0".

At the Shooting Range and at home keep the rifle in arm racks, keep the Optical Sight covered, keep Magazines, and Accessories in a special section of the same arm rack.

In case of a temporary stay in some building keep the rifle in a dry place, away from a door, stoves and heaters. In sporting activities hold the rifle with the hands.

In field exercises or hunting, carry the rifle in the "slung" position. The sling should be so adjusted as to prevent the rifle from striking against the hard objects of the accoutrements. The rifle is carried with one Magazine attached. The rest Magazines are in the carrier.

While moving in a vehicle carry the rifle in soft cover preventing it from blows and falls.

When transported by railway or by water, place the rifle on a special arm rack. If the carriage or the ship is not furnished with arm racks, hold the rifle with the hands or put it on the shelf, in doing so make sure that it will not drop or be damaged.

To keep the rifle in serviceable condition, it should always be clean and lubricated with a thin layer of rifle oil.

Store the rifle in dry premises without sharp temperature fluctuations far from heating devices without aggressive impurities in ambient air.

Keep the hammer un-cocked (released), when storing, to prevent the mainspring from residual strain.

Prevent the Sporting Rifle from dropping, protect it from sharp blows, and prevent moisture and dust from getting inside the Barrel (24).



Attention!

To prevent the Barrel (24) from building or rupture, never plug the bore with anything.



6. CERTIFICATES

6.1 CERTIFICATE OF MANUFACTURER

We, FÉG Fegyver és Gépgyártó Zrt. (FÉG Arms and Machine Company Ltd.) hereby certify that our developed and manufactured firearm model HD-18 (see Figure 37), Caliber 7,62x54R; which has exported for B&T USA LLC, U.S. 33619 TAMPA, FL 1911 US HWY 301 N SUITE 480 & 470; was submitted to the Application and Permit for Importation of Firearms, and approved by the U.S. Department of Justice Bureau of Alcohol, Tobacco, Firearm and Explosives (ATF) as a Sporting Rifle.

The product model was developed, manufactured and assembled by FÉG Fegyver és Gépgyártó Zrt. (FÉG Arms and Machine Company Ltd.) in Hungary as a Dedicated Sporting Rifle, accordingly to meet the importation guidelines enumerated in the Gun Control Act. Our FÉG product was tested, qualified and certified by the Hungarian Civilian Small Arms and Ammunition Testing Facility ("PKLV" Proof House of Budapest) in conformity with C.I.P. specification.



37. Figure

Budapest, 3 November 2022



Márk SZÍVÓS
Technical Director
FÉG Arms and Machine Company Ltd.



FÉG Fegyver és Gépgyártó Zrt.
Celgep Street 1-5.
HU-1211 Budapest, Hungary
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www.feg-defense.com



6.2 C.I.P. Qualification

 Issued for: FÉG Arms and Machine Company Ltd. HU-1211 Budapest, Célgép street 1-5.		Examinat. date: 03.11.2022.			
Excerpt of Official Evaluation Report of the Firearm					
Translation of Master print					
Firearm	Serial Number	Type	HD-18	Caliber1	7,62x54 R mm
	Manufacturer	Category	B4		
	Manufacturer Country				
Description	Semi-automatic	Long conventional rifling-bore		Centrefire ignition	
Function, condition			Gauge		
Pulling up	Appropriate		Taper Leade / Go	Appropriate	
Loading	Appropriate		Chambering / Go	Appropriate	
Locking	Appropriate		Chambering / No-Go	Appropriate	
Barrel construction	Appropriate		Bore + Rifling / Go	Appropriate	
Triggering	Appropriate		Rim Deep Size / Go	Appropriate	
Extraction	Appropriate		Rim Deep Size / No-Go	Appropriate	
Pulling force	Appropriate		Magnum Band / Go	n/a	
Number of chambers	1		Magnum Band / No-Go	n/a	
Surface roughness of bore	Appropriate		Firehole / Go	n/a	
Surface roughness of chamber	Appropriate		Headspace / No-Go	Appropriate	
Normality of construction elements	Appropriate				
			Measuring 1		
			1. Barrel		
			Bore dimension	7,63	mm
			Choke dimension		
			Measuring 2		
			Weight of barrel construction		
			Length of barrel	695	mm
			Length of Firearm	1220	mm
Examination after Firing test			Firing test		
			1. Barrel		
Barrel tester	Appropriate		Barrel tester	Appropriate	
Construction tester	Appropriate		Construction tester	Appropriate	
Operation	Appropriate		Operation	Appropriate	
Buttstock, forend, grip	Appropriate		Issued	First examination	
Comment	n/a				
			 ESTABLISHED 1891		



7. WARRANTY

7.1 WARRANTY RESPONSIBILITY

- The Sporting Rifle meets or exceeds the quality standards set forth by the manufacturer and its technical specifications match those listed in this manual.
- The Sporting Rifle carries 12 months limited warranty against manufacturing defects from the date of sale.
- The retailer cannot store the Sporting Rifle for more than 3 years from the date of the manufacture.
- The Sporting Rifle can still be sold after the expiration of the 3-year storing limit after receiving an approval from the manufacturer.
- If the Sporting Rifle fails during the warranty period, the Customer is entitled to the product repaired at the discretion of the manufacturer and dealer. Each party is responsible for shipping cost of the Sporting Rifle at their end.
- The Sporting Rifle must be shipped to the manufacturer or to the party providing the warranty support well packaged to avoid additional undue damage. The package must contain the detailed description of the problem and the clearly written return address.
- If the date of sale cannot be determined the warranty period assumed to begin at the date of manufacture of the Sporting Rifle.
- If maintenance or feasible and justifiable repairs have to be done upon expiration of the warranty period, all costs related to these services is responsibility of the Customer.

7.2 ACCEPTANCE CERTIFICATE

HD-18 **Sporting Rifle** Nr. _____ corresponds to specifications of
FÉG HD-18 technical requirements and is qualified.

Manufacture date:

Controller of Technical Control Department:

(signature or stamp)

Packer:

(signature or stamp)



Retailer:

Importer:

Manufacturer:



FÉG Fegyver és Gépgyártó Zrt.

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