

AK



SEMI-AUTOMATIC HUNTING CARBINE

TR3

SERVICE MANUAL

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1 GENERAL INFORMATION

1.1 General guidelines



1.1.1 IMPORTANT! BEFORE USING THE CARBINE, FOR YOUR SAFETY AND THE SAFETY OF OTHERS READ CAREFULLY AND UNDERSTAND THIS SERVICE MANUAL PAYING SPECIAL ATTENTION TO THE FIREARM SAFETY RULES AND PRECAUTIONS.

This Service Manual (hereinafter referred as the Manual) describes the design, principle of operation, specifications of the TR3 semi-automatic hunting carbine (hereinafter referred as the carbine) under 5.45x39, designation ИЖ-1614, or 7.62x39, designation ИЖ-1615, as well as contains the information for its correct and safe use.

The carbine design provides its safe functioning if observing requirements of the Manual.

Some minor design alterations may be not included in the Manual since the carbine is under constant improvement.

1.2 Information about Manufacturer

1.2.1 The TR3 semi-automatic hunting carbine is produced by Joint Stock Company "Concern "Kalashnikov", website www.kalashnikovgroup.ru.

2 DESCRIPTION AND OPERATION

2.1 Purpose of carbine

The TR3 semi-automatic hunting carbine under 5.45x39 or 7.62x39 is intended for shooting in different climatic conditions from minus 50 to plus 50 °C.

The general view of the carbines is shown in Figure 1.1.



Figure 1.1 - TR3 semi-automatic hunting carbine

2.2 Specifications

2.2.1 The carbine specifications are given in Table 1.

2.3 Carbine set

2.3.1 Main parts and components of the TR3 semi-automatic hunting carbine are specified in Appendix B.

Table 1

Parameter	Value	
	Caliber, mm	5.45
Cartridge	5.45x39	7.62x39
Magazine capacity, rounds, max	10	10
Sighting range over iron sight, m	800	800
Carbine weight with empty magazine, kg, max	3.8	3.8
Carbine weight with empty magazine, kg, max		
- total length	from 880 to 940	from 880 to 940
- width	72	72
- height	270	270
Barrel length, mm	415	415



2.4 Design and operation of carbine

2.4.1 The carbine is reloaded automatically due to the energy of powder gases bled from the barrel bore to the gas cylinder as well as the energy of the return spring.

The barrel bore is locked by the bolt rotating about its axis at the longitudinal slide of the bolt carrier.

The hammer-type trigger-and-firing mechanism provides for delivering fire and setting at safe.

The barrel bore and cartridge chamber are chrome lined.

The receiver cover features a unified Picatinny rail to accept an optical sight.

The iron sight consists of an aperture tangent sight and a front sight.

The aperture sight comprises a sight bed, sight leaf assembly and a sight leaf spring and is placed in the rearmost portion of the receiver cover rail.

The iron sight allows for delivering aimed fire at up to the 800 m range.

For the convenient storage and transportation, the carbine features a foldable telescopic buttstock. Its length

can be adjusted in four positions at 20 mm intervals within the 60 mm range. The buttstock features a rubber butt plate that is adjustable 20 mm up or 40 mm down.

The buttstock has an internal compartment to house a container with accessories. The pistol grip houses a box.

The carbine is equipped with a trigger lock that blocks firing with the folded buttstock and makes firing possible only when the buttstock is unfolded and fixed.

2.4.2 The principle of the carbine operation:

- when the bolt carrier group moves forward under the action of the return spring, a cartridge is fed from the magazine to the cartridge chamber. The bolt rotates and locks the barrel bore. The hammer cam sets at the trigger shaped lug, and the extractor engages with the extractor groove of the cartridge case;

- when the trigger is pulled, the hammer releases from the trigger and while being turned by the mainspring strikes the firing pin. A shot is fired;

- while the bolt carrier group is forced rearward by the powder gases, the bolt gets unlocked; the fired case gets extracted from the chamber, interacts with the ejector and gets expelled from the receiver;

- the hammer gets cocked due to the bolt carrier and sets at the sear. The bolt carrier group comes to the rearmost position and due to the return spring moves forward; the bolt feeds a fresh cartridge from the magazine to the chamber;

- when the trigger is released, the hammer disengages from the sear and sets at the trigger shaped lug;

- when pulling the trigger anew, the cycle repeats.

2.5 Marking



- logo trademark of JSC "Concern "Kalashnikov" used to designate civilian (sport and hunting) firearms.

The carbine receiver is marked with the Manufacturer's info and country, model name (TR3) and the serial number as well as the following special marks and symbols:



- proof mark of the C.I.P. (Permanent International Commission for the Proof of Small Arms) accredited Proof House (PH) and the carbine proofing year.



CIP
N

- standard proof mark of the C.I.P. for normal proof-tests.

5,45x39, – designation of the cartridge

7,62x39 used.

The PH proof mark and C.I.P. standard proof mark are also imprinted on the barrel and the bolt.

3 USE FOR DESIGNATED PURPOSE

3.1. General

3.1.1 Before using the carbine, carefully read this Manual and understand the carbine design and mechanics. Pay special attention to the safety precautions.

For shooting, use 5.45x39 or 7.62x39 hunting cartridges with the relevant Certificate of Conformity.

To prepare the carbine for use, remove the packaging from the carbine, tools and accessories, remove protective grease, check the complete set and make sure the carbine is serviceable.

After depreservation burn the packaging paper or film since they are toxic.

To avoid breaking of the firing pin, do not dry fire, unless necessary.

3.2 Safety precautions



IMPORTANT! WHEN USING THE CARBINE, THE DANGER MAY COME FROM:

- AT SHOOTING – THE BULLET DISCHARGED AT SHOT; HOT POWDER GASES; BURST WAVE; CARBINE RECOIL; EXTRACTED CARTRIDGE CASE; PROTRUDING CHARGING HANDLE; CARBINE HOT PARTS (BARREL, MUZZLE BRAKE, FRONT SIGHT BED, GAS CYLINDER).

- AT MAINTENANCE – PRESERVATION AGENTS OF THE FACTORY PACKAGING; SPRINGS THAT ARE COMPRESSED OR ARE TO BE COMPRESSED DURING THE DISASSEMBLY-REASSEMBLY PROCESS.

3.2.1 The carbine design provides its safe functioning if using ammunition specified in Section 3.1 and observing the carbine operating rules and procedures.

To ensure safe handling of the carbine, observe the following precautions:

- always treat the carbine as if it is loaded;
- never point the muzzle to people;
- keep in mind that the bullet flying range is up to 3 km;

- having taken the carbine, make sure the magazine and the chamber do not contain ammunition, for this purpose retract the bolt carrier to the rear;
- when loading and unloading, keep the muzzle pointed to a safe direction;
- before loading the carbine, make sure to visually inspect the barrel bore and the chamber - they should be free of obstructions;
- if misfire occurs, do not unlock the bolt for 3 min due to the risk of the hang fire;
- to avoid accidental discharge, always keep or hold the carbine with the safety selector lever set at S;
- unload the carbine before approaching an inhabited area and halts, before boarding a vehicle or when moving within hunting areas;
- store the carbine in a location separate from the ammunition
- keep record of fired shots.



WARNING: IT IS PROHIBITED TO INTRODUCE ANY CHANGES INTO THE CARBINE DESIGN OR USE PARTS OF OTHER ARTICLES IN THE CARBINE.

3.2.2 While using the carbine, pay attention to any changes in it that may affect the safety.

If any visible defects of the barrel, receiver or bolt or ruptures of the case bottom occur, immediately stop using the carbine.

3.2.3 For shooting, make sure to use 5.45x39 or 7.62x39 factory-loaded non-corroded and unexpired ammunition with the relevant Certificate of Conformity.



WARNING: IT IS STRICTLY PROHIBITED TO USE AMMUNITION OF INCORRECT CALIBER AND HAND-LOADED AMMUNITION.

Remember that the use of hand-loaded, expired, corroded or improper ammunition may result in the carbine destruction due to the dangerously high pressure of powder gases.

3.2.4 If the sound of the shot is irregular, reloading after the shot does not occur or the next cartridge fits into the chamber too tightly, stop firing, unload and disassemble

the carbine, visually check the bore and the chamber, then check the shotgun functioning.

3.3 To prepare carbine for use

3.3.1 Use the following procedure to prepare the carbine:

- wipe the bore and the chamber dry if any grease or fouling;
- set the buttstock into the operating position, for this purpose press the spring loaded hook and turn the buttstock until it is engaged by the retainer as shown in Fig. B.1.
- adjust the buttstock length, for this purpose:
 - press the lever fully and disengage the spring loaded buttstock latch from the tube as shown in Fig. B.2;
 - shift the buttstock body along the tube as necessary;
 - secure the selected position by releasing the lever and make sure the buttstock latch is in the tube hole;
 - adjust the height of the butt plate, for this purpose pull the spring loaded retainer

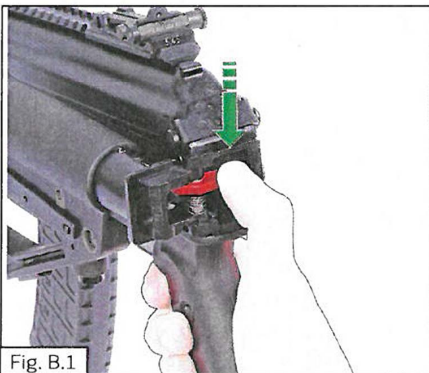


Fig. B.1

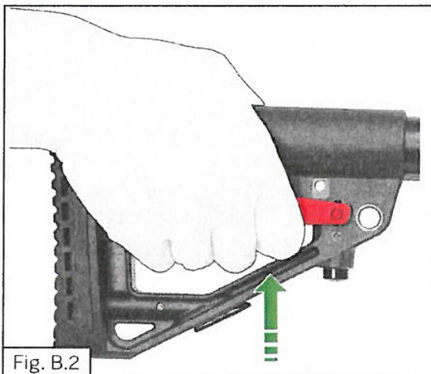


Fig. B.2

of the butt plate to the front and at the same time shift the butt plate up or down.

Secure the butt plate by releasing the retainer to the initial position.

- check the operation of the trigger mechanism and safety selector lever;
- make sure each attached magazine is firmly held with the latch;
- check the carbine proper functioning, for this purpose retract the charging handle rearward to the stop and release it, then make a dry fire. The carbine is ready for use.

3.4 To use carbine

3.4.1 To engage/disengage the safety selector lever:

- to engage the safety - shift the safety selector lever up to the S (safety) position as shown in Fig. B.3. The trigger is blocked.
- to disengage the safety - shift the safety selector lever down to the F (fire) position as shown in Fig. B.4.

3.4.2 Loading and firing procedure:

- press the magazine latch and detach the magazine by moving it downward and forward from the carbine as shown in Fig. B.5;

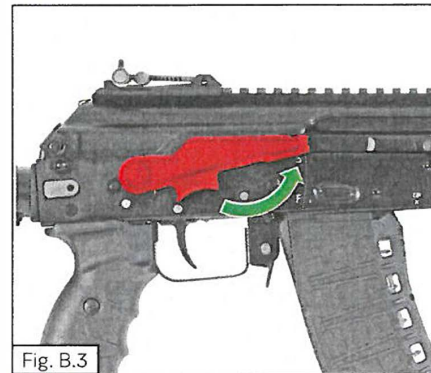


Fig. B.3



Fig. B.4

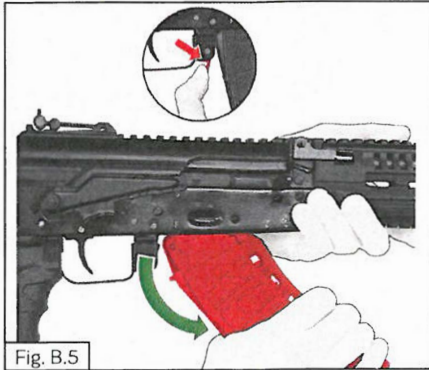


Fig. B.5

- load the magazine by inserting cartridges one by one under the magazine lips and forcing each cartridge to the stop against the magazine rear wall;
- attach the loaded magazine to the carbine as shown in Fig. B.6;
- disengage the safety;
- pull the bolt carrier fully rearward as shown in Fig. B.7 and release it abruptly. Make sure it is fully forward.

The carbine is loaded and ready for firing.

Aim and press the trigger.

To make the next shot, release the trigger

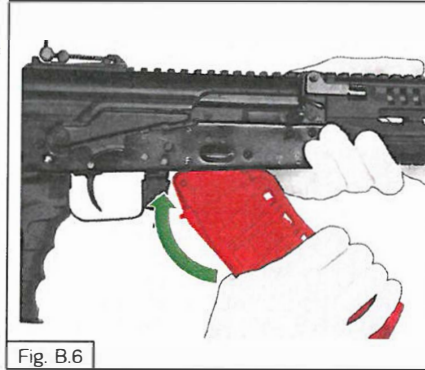


Fig. B.6

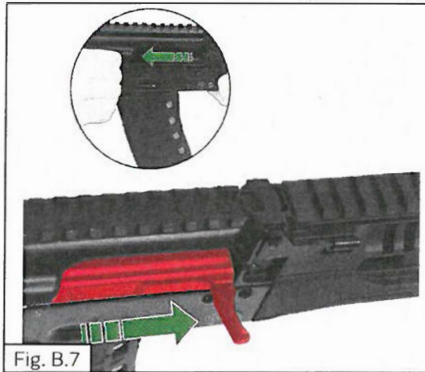


Fig. B.7

and press it anew.

As soon as the magazine is empty, the bolt carrier remains in the forward position.

Change the magazine, retract the bolt carrier fully to the rear and release it.

The carbine is loaded and ready for the next shot.

3.4.3 Unloading procedure:

- engage the safety;
- detach the magazine;
- disengage the safety;
- pull the bolt carrier fully rearward and extract the cartridge from the chamber;
- force the bolt carrier forward;
- make a control release by pulling the trigger as shown in Fig. B.8;
- engage the safety;
- unload the magazine;
- attach the empty magazine to the carbine.

IMPORTANT! THE CARBINE IS EQUIPPED WITH THE TRIGGER LOCK THAT BLOCKS FIRING WITH THE FOLDED BUTTSTOCK. THE FIRING IS POSSIBLE ONLY WHEN THE BUTTSTOCK IS IN THE OPERATING POSITION.

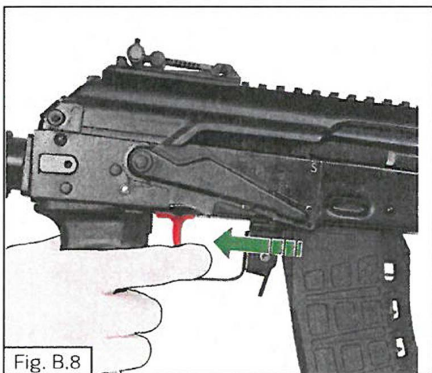


Fig. B.8

4 MAINTENANCE

4.1. Field stripping

4.1.1 Perform the field stripping to visually inspect the carbine and to clean and lubricate it after shooting.

For your convenience while performing the field stripping and reassembly, use the drift from the accessories.

IMPORTANT: AVOID USING UNRECOMMENDED OR UNKNOWN CHEMICAL PRODUCTS FOR CLEANING AND LUBRICATING THE CARBINE. THEY MAY DAMAGE PARTS AND COMPONENTS OF THE CARBINE!

RECOMMENDATION: WE RECOMMEND TO USE THE AK CLEANING PRODUCTS AND LUBRICANTS.

Field stripping procedure



IMPORTANT: MAKE SURE THE CARBINE IS UNLOADED.

- detach the magazine, disengage the safety, retract the charging handle to the rear and inspect the cartridge chamber. Ensure that no cartridge is in the chamber, force the bolt carrier group to the front position;

- extract the accessories. Shift the butt plate down, as shown in Fig. B.9, for which purpose pull the spring loaded retainer of the butt plate to the front and move the butt plate down. Extract the container with the accessories. Unscrew the sections of the rod from the container. Assemble the cleaning rod to clean and lubricate the carbine. Take out the screwdriver and the drift for the further disassembly procedure.

- detach the muzzle brake, for this purpose sink the brake retainer, turn the muzzle brake by 180° and detach from the bush as shown in Fig. B.10;

- detach the receiver cover, for this purpose turn the retainer lever in the cover front portion counterclockwise by 90° upwards; pulling the lever fully to the right, disengage the retainer from the rail hole. Then, pull

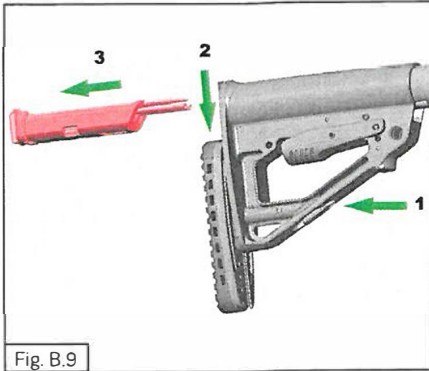


Fig. B.9

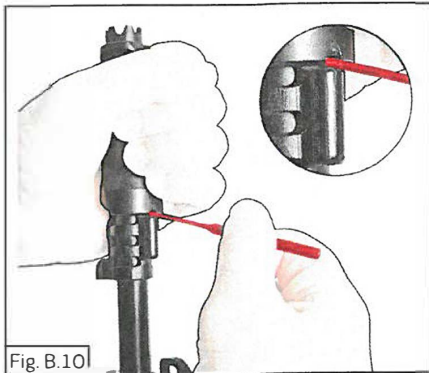


Fig. B.10

the cover to the rear and detach it from the receiver as shown in Fig. B.11;

- detach the retracting mechanism upwards as shown in Fig. B.12;

- detach the bolt carrier group. For this purpose retract the bolt carrier backwards to the stop and take it upward from the receiver guides as shown in Fig. B.13;

- detach the bolt from the bolt carrier. Hold the bolt carrier group with the left hand, turn the bolt head with the right hand counterclockwise so that the bolt lug disengages from the carrier shaped slot. Detach the bolt from the carrier channel as shown in Fig. B.14;

- detach the plug of the gas cylinder, for this purpose press the retainer, turn the plug by 90 ° and shift it to the front as shown in Fig. B.15.

When reassembling the carbine, make sure to adhere to the following:

- before placing the bolt carrier group into the receiver, make sure that the hammer is set at the trigger lug, if not, turn the hammer to engage with the lug;

- when mounting the receiver cover, ensure to put the cover rear wall on the rear trunnion so that the cover pin engages with the prism slot of the rear trunnion, and the front portion

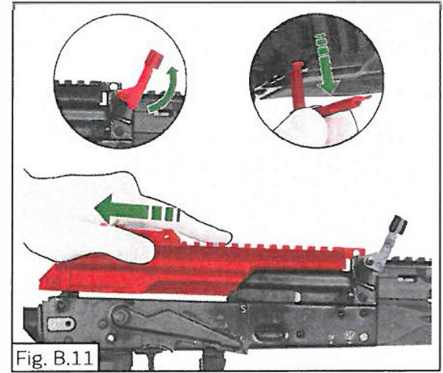


Fig. B.11

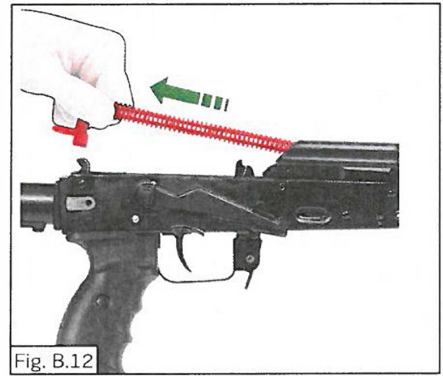


Fig. B.12

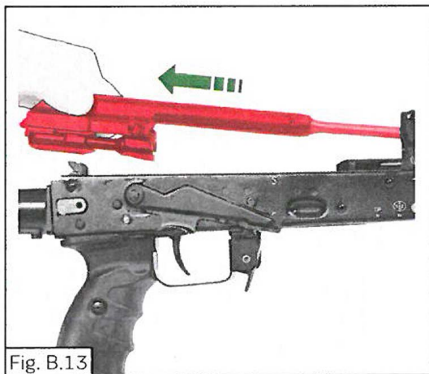


Fig. B.13

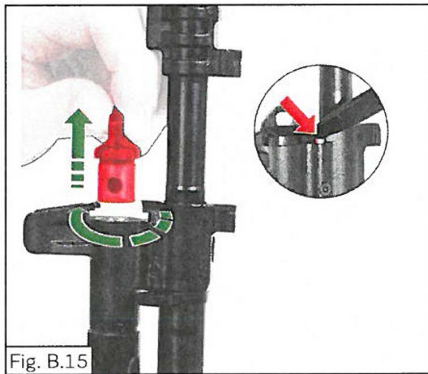


Fig. B.15

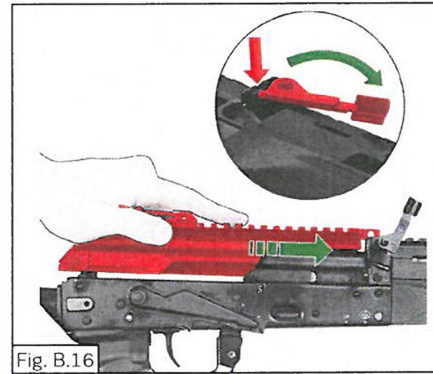


Fig. B.16

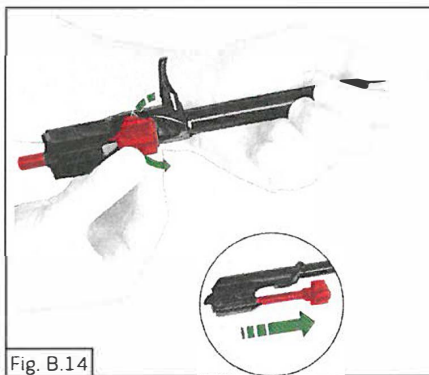


Fig. B.14

of the rail engages with the sight bed notch. Compress the spring and align the rail hole with the bed hole, then shift the retainer through the rail hole to the stop. Turn the lever and bring it behind the hand guard notch as shown in Fig. B.16.

⚠ IMPORTANT! MAKE SURE THE LEVER REAR PORTION ENGAGES WITH THE SIGHT BED NOTCH.

Before attaching the magazine, press the trigger and set the carbine at safe.

4.2 Detail stripping

4.2.1 Perform the detail stripping if the carbine has been exposed to mud, dirt, humidity or the carbine is to be stored for a long period.

Detail stripping procedure:

- perform the field stripping;
- disassemble the bolt. For this purpose drive out the firing pin stud with the drift and remove the firing pin from the bolt channel as shown in Fig. B.17, force out the extractor pin with the drift and remove the extractor with the spring as shown in Fig. B.18;
- disassemble the magazine. For this purpose sink the locking plate lug into the floor plate hole with the drift and slightly move the floor plate to the front. Holding the locking plate and thus preventing the spring from expanding, remove the floor plate from the magazine body as shown in Fig. B.19. Slowly release the spring and take it out together with the locking plate and the follower from the magazine body as shown in Fig. B.20;
- detach the fore end.

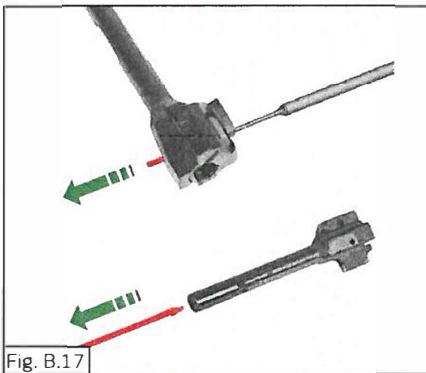


Fig. B.17

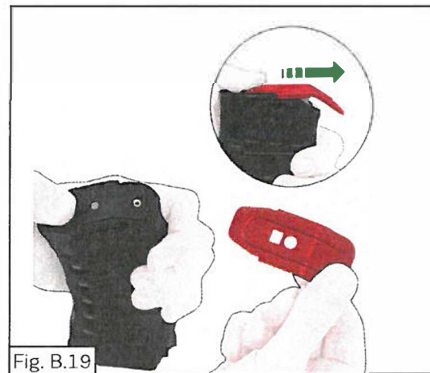


Fig. B.19

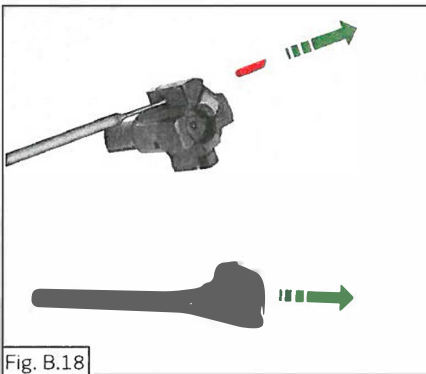


Fig. B.18

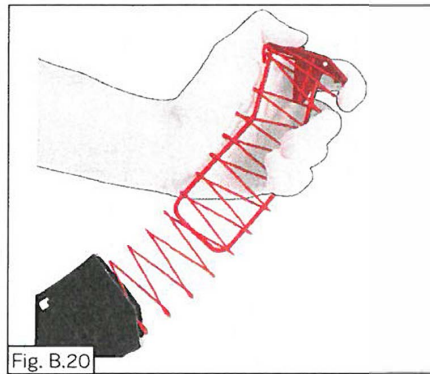


Fig. B.20

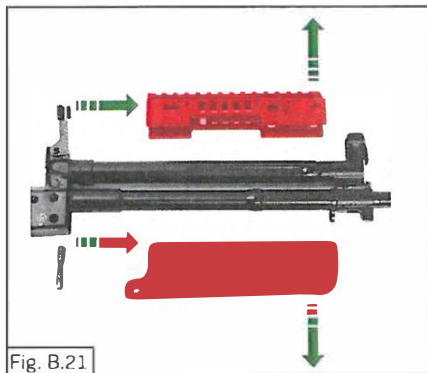


IMPORTANT! THE FORE END IS DETACHED ONLY IN RARE CASES WHEN REMOVING STORAGE GREASE, AFTER EXPOSURE TO DIRT, MUD, WATER ETC.

Use the drift to press the flat spring through the hole in the fore end bottom, then shift the axle pin in any direction and extract it. Then shift the hand guard assembly towards the muzzle to disengage the hand guard lugs from the fore end slots. Shift the fore end towards the muzzle and detach the fore end from the carbine as shown in Fig. B.21. Detach the metal shield from the fore end with the screwdriver. Do it with a slight effort in order not to deform the side walls of the shield. If necessary to detach the hand guard, place the hand guard on the tube, make sure you align the lugs of the hand guard middle portion with the shaped recesses of the tube. Then detach the hand guard up.

4.3 Cleaning and lubrication

4.3.1 Clean the carbine using the accessories from the carbine complete set within one day after shooting. In winter clean the carbine indoors at temperature



(20± 5) °C after the carbine has warmed up to the indoor temperature. For cleaning, use a clean cloth (rag, tow) without sand or any hard particles.

4.3.2 Cleaning procedure:

- lubricate the barrel bore and the chamber with the brush soaked in the rifle oil;
- wipe the barrel bore dry using the pull-through with the cloth tightly wrapped onto it;
- repeat lubricating and wiping 8-10 times until the fouling is removed completely (check by visual inspection);

- after cleaning, lubricate the bore and the chamber with the clean rifle oil.

4.3.3 To ensure proper functioning of the carbine, remove the fouling from the gas cylinder, gas tube and gas piston of the bolt carrier in due time.

4.3.4 When lubricating, follow Table 2.



IMPORTANT! AVOID THICKENING OF THE LUBRICANT IN THE BOLT CHANNEL FOR THE FIRING PIN, IN THE SEAT FOR THE EXTRACTOR, ON THE MAINSPRING AND THE FIRING PIN SPRING.

Table 2

Lubricant	Lubrication point	How to apply lubricant
Rifle oil relevant to temperature conditions	Barrel bore	Lubricate the barrel bore with a brush soaked in the rifle oil (lengthwise with two or three double travels of the cleaning rod)
Rifle oil relevant to temperature conditions	Bolt carrier, receiver guides	Wipe the parts with the cloth soaked in the rifle oil and wrung out from its excess

4.4 To fire over aperture sight

To aim, look through the rear sight hole and align the front sight edge with the aiming point as shown in Fig. B.22.

To make a shot, firmly hold the carbine and smoothly press the trigger with the index finger until the discharge.

4.5 To check accuracy of fire and adjust sighting device

The carbine iron sight is zeroed at the 100 m range at the Manufacturing plant. Since the accuracy of fire depends on the

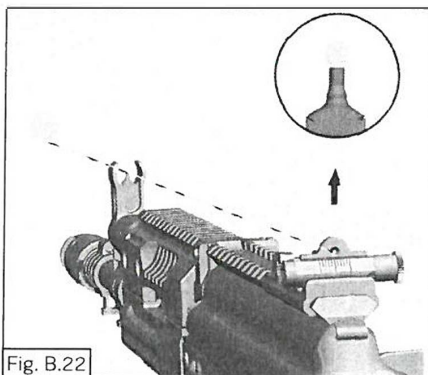


Fig. B.22

shooter's individual features, ammunition type and lot, weather conditions and other factors, you may check the accuracy if necessary.

Check for the fire accuracy on the firing ground at the calm weather, in the shooting gallery, or in the shooting area protected from wind, under conditions of normal lighting.

Fire is delivered at the range of 100 m with the sight set at 1. Fire from prone position with a support.

To check the accuracy of fire, the shooter makes four shots, carefully and uniformly aiming under the middle of the lower edge of the test target. On completing the shots, determine the mean point of impact.

If necessary, you may adjust the accuracy of fire by shifting the rear sight on the sight leaf to the right or left and rotating the front sight up or down.

For the 100 m firing range:

- one full revolution of the front sight – 16.5 cm,
- one scale division of the rear sight shift to the side – 22 cm.

5 TRANSPORTATION

5.1 The carbine may be transported by any transport in covered transport facilities.

Shipping is performed according to the marking and handling signs on the transportation tare.

5.2 Fasten the tare and transport it according to the established rules and specifications of the relevant transport.

5.3 When moving, carry the carbine in the slung position. Adjust the sling to avoid impacts of the carbine against hard items of your garment and personal equipment. Carry the carbine with or without the magazine attached.

5.4 When moving in a vehicle, keep the carbine cased and protect it from impacts and falls.

6 STORAGE

6.1 To maintain in good operating order, keep the carbine always cleaned and lubricated with a thin coat of the rifle oil.

6.2 Store the carbine in dry premises without sharp temperature changes, far from heating devices and without aggressive substances in the ambient air.

6.3 To avoid the mainspring permanent deformation, keep the hammer released.



7 COMPLETE SET

7.1 The complete set of the carbine is given in Table 3.

Table 3

Designation	Description	Qty*
ИЖ-1614.C60	TR3 semi-automatic hunting carbine under 5.45x39 without sets and magazine	
ИЖ-1615.C60	TR3 semi-automatic hunting carbine under 7.62x39 without sets and magazine	
ИЖ-1614.C611	Set of additional equipment	1
_____ *2	Magazine	
МКС-К.C68	Rifle sling *1	
Set of tools and accessories		
ИЖ-1614.C610	Accessories assembly	1
СОК-Ю-5.C63	Oiler *1	
Operation documents		
ИЖ-1614 P9	TR3 semi-automatic hunting carbine Service Manual	1
Package		
ИЖ-1614.C613	Package for TR3 semi-automatic hunting carbine	1
* Quantity according to actual delivery *1 Delivered by special order *2 Designation according to actual delivery		



Г001

9 ACCEPTANCE CERTIFICATE

9.1 The TR3 semi-automatic hunting carbine chambered in _____ Serial № _____ is manufactured, accepted, preserved and packed in accordance with the mandatory requirements of the State standards, technical documentation in force and found fit for service.

Certificate of Conformity is № POCC RU C-RU.Г001.B.00292/19 of 13.06.2019.

Chief of Insp. Dept

Seal _____
personal stamp print full name

year, month, day

APPENDIX B

MAIN PARTS AND COMPONENTS OF TR3 SEMI-AUTOMATIC HUNTING CARBINE

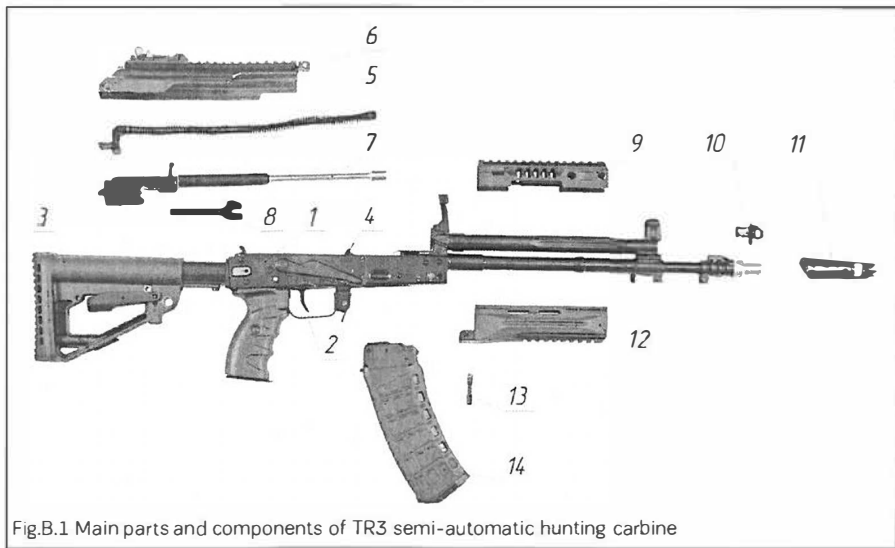


Fig.B.1 Main parts and components of TR3 semi-automatic hunting carbine

B.1 The list of the TR3 main parts and components is given in Table B.1.

Table B.1

Pos. No. as per Fig.B.1	Denomination
1	Receiver and barrel assembly
2	Trigger
3	Buttstock
4	Hammer
5	Retracting mechanism
6	Receiver cover with rail and sight
7	Bolt carrier assembly
8	Bolt assembly
9	Hand guard
10	Gas cylinder plug
11	Muzzle brake
12	Fore end assembly
13	Fore end pin
14	Magazine

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