

# USER MANUAL PNEUMATIC SPEARGUN

Chelyabinsk 2016

#### USER MANUAL

TAIMEN company develops and manufactures underwater hunting gear for sports and amateur spearfishing.

The prototype of the speargun series is an underwater competition target shooting gun.

Solutions employed to create TAIMEN fishing gear are unique nowadays.

TAIMEN company holds patents and certificates on the useful model for gear manufacturing.

TAIMEN fishing gear provides comfortable and effective underwater hunting.

New engineering solutions are proved effective by continuous tests in swimming pools and natural conditions.

It is at the development and testing stage when the gear was highly appreciated and received approval of experienced spearos.



# PNEUMATIC SPEARGUN



#### DANGER!

Please, read the instructions of this user manual carefully. Improper

operation with the speargun may cause serious personal injury or death.

#### ATTENTION!

PNEUMATIC SPEARGUNS ARE DESIGNED FOR

UNDERWATER HUNTING AND MUST ONLY BE USED WHEN

FULLY SUBMERGED UNDER WATER. FIRING IN THE AIR

CAUSES DAMAGE TO THE SPEARGUN.

# SPEARGUN DESIGN

PVMR

TAIMEN PVMR speargun overall view is presented at Picture 1.

The speargun consists of the following main parts and units:

Receiver assembly	1	
Handgrip with trigger mechanism	2	
Power reducer	3	
Safety catch	4	
Line releaser	5	Picture 1.
Snap hook	6	
Revolving ring	7	
Charging valve cap	8	
Line	9	
Spear	10	
Line slide	11	
Line slide holder	12	

On the one end the line is attached to the speargun with a snap hook (6), on the other end the line is attached to the line slide (11).



# COMPLETE SET

Speargun	<u>1 pc.</u>
Regular spear	1 pc.
Line	1 pc.
Hand loader	1 pc.
Hand pump	1 pc.
Protective spear cap	2 pc.
Rings kit	1 pc.
Carrying case	1 pc.
User manual	1 pc.



# MODIFICATIONS

TAIMEN spearguns are

available in the following modifications:



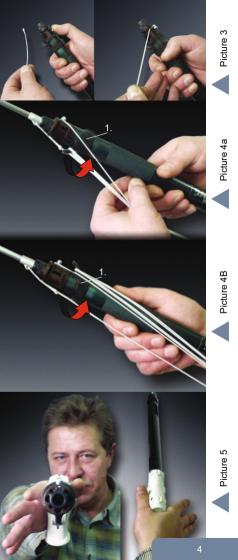




#### **SPECIFICATIONS**

TAIMEN spearguns come with new technical solutions offering extra advantages:

- rubber ring creates vacuum in the barrel. As there is no water in the barrel when the spear and the piston are moving, firing has significantly greater power and you do not have to make much effort to load the gun with the efficiency of hunting still guaranteed;
- piston design and front sleeve provide buffering and silencing effect on firing;
- stainless steel barrel;
- sharp spear tip allows piercing the scales of big fish at large distances;
- spearguns come with dia 7 and 8 mm spears;
- polyurethane seal at the spear tang being fixed at the back excludes jamming of the line slide and allows reduction of the sound volume as compared to the alternative design solutions;
- the snap hook fastening the line to the speargun allows quick removal of fish or replacement of a spear (Picture 3);
- self-restoring line releaser triggers immediately and releases the required number of line coils when the spear hits a target thereby improving the shot accuracy;
- revolving winding ring allows restoring of tension to the slack line quickly (pos. 1, pic.4);
- shock-absorber line buffers the jerking of the shot fish;
- speargun without spear is positively buoyant;
- owing to the absence of thread and hinged connections (which need special adjustments) the trigger mechanism is highly reliable;
- anatomic grip with 45° angle to the barrel provides that the required recoil vector is achieved which prevents the gun from throwing up on firing and, consequently, improves the shot accuracy. The position of the speargun remains the same even with the hand open (Picture 5);
- the PVMR series power reducer allows gradual adjustment of firing power;
  TAIMEN speargun characteristics as listed above summarize into high quality offered to the Customers.



# SPECIFICATIONS

Model	PVM400	PVM500	PVM500 PVM600	PVM700	PVM850	PVM1000
Striking range, m	ę	4	5	9	7	œ
Length without spear, mm	400	500	600	700		1050
Piston stroke, mm	175	275	375	475		825
Weight without spear, gr (max)	350	395	440	485		635
Weight with spear, gr (max)	450	525	600	675	790	925
Loading force, kg	20-25	20-25	20-25	20-25		20-25
Piston diameter*, mm	10/11	10/11	10/11	10/11		10/11
Spear diameter, mm	7/8	7/8	7/8	7/8		7/8

\* Spear diameter 8mm suggests piston diameter 11mm

#### **BEFORE FIRING**

At the factory the speargun is pumped up with air pressure to 20-25 kg/cm<sup>2</sup> depending on the

length and the diameter of the spear. At standard conditions and in normal usage mode the speargun

will remain always charged to the proper pressure value regardless the number of shots performed.

The hand pump should only be used in the following way: release the screw (1), remove the cap (2), fill the hand pump with 2-3 cm<sup>3</sup> of oil and screw the pump in until it contacts the O-ring (3). Consult the



table to find your gun model and the number of strokes needed to charge the gun to the pressure of 25-27 kgs with the standard pump. Number of strokes in table assumes pumping starts with zero pressure in gun.

When completed perform the operations listed above in reverse order.

If it is obvious that the pressure in the gun is constantly low and requires recurrent pumping, we recommend you to contact the service

#### center or the manufacturer as it may be caused by a defect in the speargun.

Если Ваше ружье требует постоянного подкачивания давления, то это может быть результатом неисправности и рекомендуется обратиться в центр технического обслуживания или к производителю.

#### HAND PUMP TABLE

	Number of standard pump strokes		
Model of speargun	Ø 7mm	Ø 8mm	
PVM400	110	90	
PVM500	120	100	
PVM600	150	130	
PVM700	180	160	
PVM850	210	190	
PVM1000	230	210	

#### DANGER!

DANGER OF EXPLOSION! Do not exceed the maximum of 30 kg/cm<sup>2</sup>. The excess pressure may cause explosion and heavy personal injury or death. The adjusting rod of the power reducer must be at maximum position when the pressure is pumped up.

#### LOADING

#### WARNING!

When loading be sure that the gun is directed safely, never point the gun at yourself. Absolutely avoid drawing the spear out if the speargun is loaded. Do not fire the gun without spear; it may cause damage to the gun. Never load, unload or fire your speargun if it is not submersed in water. Always be aware of the distance the spear may cover underwater. Never point and fire the gun at another person or object. Never load the gun on a boat with other boats or divers nearby. Breaking of these rules may cause serious injury or death of people.

- 1. Before loading check that the spear and the line releaser perform correctly.
- 2. Be sure that the removable tip of your spear is securely fixed.

Picture 6



3. Hold the grip of your speargun against your thigh or foot depending on the speargun length. Hold the gun on the front part of the receiver (Picture 6) and insert the spear, verifying the spear is in the center of the barrel. Never insert the spear with inclination as it may cause damage to the gun.

4. Insert the spear, and fix the line slide with the holder. Spool the line onto the line releaser and the revolving ring. If necessary turn the ring until the slack is eliminated. Place the hand loader onto the spear tip and push the spear down the barrel until it is hooked.

#### WARNING!

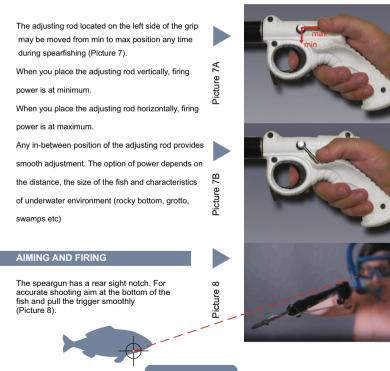
#### ALWAYS CHECK YOUR HAND LOADER BEFORE COMMENCING SPEARFISHING.

If any crack is detected the hand loader must be replaced. The use of a defective hand loader may cause puncturing with the spear and serious personal injury. Frequent use increases the natural wear of your hand loader. 5. Once the gun is loaded lock it with the safety catch. Release the safety catch only when you are ready to fire. Check the safety's operation at regular intervals to be sure that it works correctly. Do not load and do not use the speargun in case any sign of a malfunction is detected.

6. If your spear is bent replace it with a new one. Do not try to insert a bent spear by force as it may cause internal damage to the gun.

#### POWER REDUCER

PVMR speargun has a power reducer; hence it is possible to choose firing at maximum and minimum power modes.



#### CARE AND MAINTENANCE

If the speargun is used correctly minimum care is needed.

1. After each use rinse speargun and spear with large amount of fresh water, focusing on the

barrel and power adjusting rod. Wipe spear dry, preferably with oiled rags. Make absolutely sure that there is no sand left on the spear and barrel, as with the presence of sand it is possible to damage barrel and vacuum rubber ring.

2. Always check your hand loader for damage; replace it with a new one if necessary.

3.If your spear is bent then straighten it or replace it with a new one.

4.We recommend to store and carry the spear with caps on (Pos. 1 Picture 9)

5. Store your gun in dark, cool place.



6. Take care that adjusting rod is set at maximum power while storing.

7. For long storage half of the air should be released.

8. Annual maintenance, including replacement of lubricating oil is a must.

9. Before using after long-term storage we recommend:

- Fill the barrel with 1 cm<sup>3</sup> of oil;
- Insert the spear into the barrel; fix the line slide with the holder.
- Lean the tip against firm surface and imitate the process of loading without hooking the piston.

 When your speargun needs repair or maintenance contact the manufacture or service centers.



Spears supplied in Ø8mm, Ø7mm and Ø6,5mm in two mods: threaded and with spear tips.

Sharp spear tip allows piercing the scales of big fish at large distances

Polyurethane seal at the spear tang being fixed at the back excludes jamming of

the line slide and allows reduction of the sound volume as compared

to the alternative design solutions.

#### SPEAR SIZE TABLE

		Spear with tip,	Threaded spear,
	Gun model	mm	mm
	PVM400	340	300
·	PVM500	440	400
	PVM600	540	500
	PVM700	640	600
	PVM850	800	760
	PVM1000	940	900

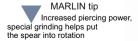


Spear caps make transportation and storage of spear and

line more convenient



TAIMEN tip pierces the scales and bones of big fish easily











The main advantage of this fish string is that a spearo can fix both ends at his waist

thereby preventing from getting entangled in rushes and snags.



#### Shock-absorber line

buffers the jerking of the shot fish, designed for any type of speargun.

Original know how product. Increased linear expansion coefficient.

Fixed length 3.1 m.

Diameter, mm	Breaking load, kg	Linear expansion coefficient, %	Material
1,4	30	30	capron
1,6	40	35	capron
2,0	50	40	capron
2,5	70	45	capron
1,5	35	10	capron
1,6	40	10	capron
	mm 1,4 1,6 2,0 2,5 1,5	mm      kg        1,4      30        1,6      40        2,0      50        2,5      70        1,5      35	mm      kg      coefficient, %        1,4      30      30        1,6      40      35        2,0      50      40        2,5      70      45        1,5      35      10

Speargun assembly/disassembly wrench

Hook to attach to fish string



Iroquois supplementary coil releaser



Hand Loader to facilitate loading the gun



### SPARE PARTS KIT

- 1. Barrel O-ring (21x11)
- 2. Running roller holder O-ring (Ø7 15,5x9,5; Ø8 16,5x10,5)
- 3. Sear O-ring (9.5x3)
- 4. Charging valve shaft O-ring (5x2)
- 5. Back sleeve receiver O-ring (25,5x20)
- 6. Charging valve housing O-ring (15,5x9,5)
- 7. Adjuster O-ring (9,5x4)
- 8. Shooting power adjuster outer dirt sealing O-ring
- 9. Front sleeve receiver O-ring (23,5x18,5)
- 10.Pump sealing O-ring (17x9,5)
- 11. Shock absorber (14x9,8)
- 12. Piston sealing O-ring (9,5x4,5)
- 13. Vacuum O-ring

#### WARRANTY

1. This warranty covers defects that arise as a result of normal use of the Product during the applicable warranty period specified in Warranty statements.

O 20 30 40 0 6,5 mm

**11** 12 **0** 8 mm

2. Troubleshooting and warranty repairs are carried out at the technical department of Seller. Troubleshooting is to be held within 10 working days. The decision on malfunction and its causes is rendered by the technical department of Seller or by Service center of Manufacturer. If necessary the Product will be repaired within 45 working days from the date of being available for the services. Owner must deliver Product to Service center as a COMPLETE set. In case of disagreement with the decision on malfunction of Product and (or) the causes for such malfunction, Owner of Product may set an independent inspection of the Product, at Owner's own expense.

3. This warranty is subject to the following limitations and exclusions:

a) the Product is not covered by this warranty if it was used for commercial purposes.

b) the Product is not covered by this warranty if it has any mechanical and (or) chemical damages,

or damages resulted from failure to operate as set forth in the operating instructions, improper

transportation, repair by anyone other than a facility authorized by the Manufacturer to service this

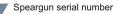
Product, upgrading, change of design, actions of third parties, acts of terrorism, or damages due to

acts of God, i.e. lightning strokes, acts of terrorism, natural disasters, man-made disasters etc.

4. At the end of the two-week period after Owner of Product was informed of the service works being completed, the penalty of 0.5% of Product price per every day of the storage is applicable. At the end of the six-month period of storage Product is liable for disposal.

# MAINTENANCE RECORD

Date of service	Operations completed	Date Executor's signature Service center stamp





#### ACCEPTANCE CERTIFICATE

Taimen spearguns conform to GOST R 51281 standards, technical specifications TU 7184-

003-16133192 or TU 7180-004-16133192-01 and are qualified as ready for operation.

#### MANUFACTURER

TAIMEN firm, individual entrepreneur Kuznetsova Elena Nikolayevna.

Certificate of registration #16133 of 19th February, 2001, issued by Leninsky municipal district

administration, Chelyabinsk. Unified State Register of Enterprises and Organizations

#304744914000075. Taxpayer Identification Number 744910915770.

Call: tel./fax +7(351)256-38-49, tel. +7(351)259-38-24

Mail: 454135, Chelyabinsk, P.O. Box 0244

Online: www.apox.ru/taimen; e-mail: taimen@apox.ru; Skype: vitchel174

Serial number		
Date of manufacture	QC stamp	
Distributor's stamp	Date of purchase	

#### WARRANTY STATEMENT

This Product is warranted to the original Purchaser to be free from defects in materials and workmanship under normal use and storage as set forth in the operating instructions.

Guarantee period is 12 months following the date of purchase, but not greater than 24 months from the date of manufacturing. Service life of a speargun is 7 years.

If Manufacturer receives, during the applicable warranty period, notice of a defect in Product which is covered by warranty, Manufacturer shall repair Product. This warranty does not apply to products that experience problems resulting from misuse, improper storage, or operation outside of the published specifications.

Manufacturer declines a claim in case of absence of the Distributor's stamp.

Please, find our service centers in the Internet: http://apox.ru/taimen

MAEHO

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