



Manuale d'istruzioni
User's Guide
Manuel d'utilisation
Manual de instrucciones
Manual de instruções
Οδηγίες χρήσης

SPARK MIMETIC

PNEUMATIC AIR SPEARGUNS SPARK MIMETIC

WARNING

CAREFULLY READ THIS INSTRUCTION MANUAL BEFORE USE, AND KEEP IT FOR FUTURE REFERENCE.

INTRODUCTION

Congratulations. You have purchased one of the finest pneumatic spearguns available on the market, designed to assist you in every type of spearfishing situation, whether you are hunting on the sea-bottom, in a reef or in the open sea. Your Mares speargun is the result of years of continuing evolution, and is constructed using the most up-to-date manufacturing technology in our ultra-modern Rapallo facility, where its quality and reliability have been verified.

WARNING

Read this manual carefully. The improper use of any diving equipment can result in a serious injury or death. SCUBA Diving Equipment should be used by certified divers only. Professional training should be obtained exclusively from a certified instructor. For your protection, your equipment should be serviced by Mares or a Mares Authorized Dealer.

IMPORTANT

Any critical information or warnings that might affect the performance or result in the injury or death of the technician, speargun owner, or other persons are highlighted with the following symbols:

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Mares reserves the right to modify any products, processes and manufacturing techniques at any time. It is the technicians' responsibility to acquire the latest information and parts from Mares for service and repairs to be performed.

GENERAL WORKING PRINCIPLE OF PNEUMATIC SPEARGUNS (FIG. 1)

The air contained in the tank (3) is pre-compressed through valve (7) by means of a pump. When the piston (5) is pushed into the barrel (4) with the shaft, the pressure in the tank (3) increases until the piston engages the catch hook (6). Pulling the trigger releases the piston, which is propelled along the barrel by the sudden expansion of compressed air until it stops on the shock absorber bushing (2), thereby releasing the shaft (1) which is retained only by friction. This type of speargun offers the advantage of very high power in a compact size.

TECHNICAL CHARACTERISTICS

- New rigid ergonomic handle.
- Power regulating system.
- Side line release (patented).
- Hydrodynamic cross-tied line hole.
- New safety catch (patented).
- Technopolymer shock-absorber bushing and piston.
- Muzzle with large drain ports.
- Harmonic steel shaft Ø 7 mm (also available in the Tahitian model).
- High capacity air tank.

FIRING CHARACTERISTICS

Years of research and testing in collaboration with the Mechanical Technology Institute of the University of Genoa have led to the exceptional performance of the SPARK MIMETIC speargun. The internal diameters and compression ratios have been optimized so that SPARK MIMETIC spearguns now outperform traditional spearguns by more than 15%.

INSTRUCTIONS FOR USE

ASSEMBLING THE LINE (FIG. 2)

- Tie one end of the line to the line hole on the shaft (Fig. 8).
- Push the shaft into the muzzle until it rests against the piston.
- Wind the line at least twice between the line hole and the wishbone (Fig. 2).
- Bring the line close to the wishbone, and then tie the elastic (Fig. 6).
- Fix the line to the wishbone with the elastic slightly taut (Fig. 7).

SAFETY CATCH (FIG. 3)

The SPARK MIMETIC speargun features a new patented safety catch system which, in addition to the mechanical locking of the trigger, also physically prevents the diver's finger from reaching the trigger. This means there is never any doubt about whether the safety catch has been engaged. The safety catch can be operated with equal ease using either the left or the right hand.

POWER REGULATOR

The power regulator allows the speargun to be used at either a reduced pressure or full pressure setting (Fig. 5), to meet a wide variety of spearfishing needs.

LOADING THE SPEARGUN

Engage the safety catch (Fig. 3) - Remove the anatomical loader from its compartment inside the handle (Fig. 4) - Rest the speargun against your thigh or foot (Fig. 9), depending on its length, grasping it from the top which has been specially designed for this purpose.

Insert the shaft and press down firmly with the loader, trying to keep the shaft aligned with the muzzle. Push until the shaft is securely engaged.

WARNING

Avoid exerting pressure on the sides of the speargun when pumping air into the tank (Fig. 11).

WARNING

For your safety, and to avoid damaging the speargun, never load or fire the speargun out of the water.

The loading operation is facilitated by putting the pressure regulator on the "low" setting (Fig. 5).

TANK PRESSURE

The speargun is loaded at a working pressure which can be manually adjusted. The working pressure can be regulated using the special manual injector, by connecting it to valve 7 (Fig. 1). To do this, unscrew the valve cap using the loader (Fig. 10) and then connect the injector, locking it down fully without using excessive force. The table below gives the number of pump strokes necessary for obtaining the desired pressure.

Model	Tank pressure (bar)				
	10	15	20	25	30
	Number of pump strokes (approx.)				
SPARK MIMETIC 55	181	268	363	479	595
SPARK MIMETIC 70	218	334	450	566	696
SPARK MIMETIC 85	305	479	653	841	1030
SPARK MIMETIC 98	377	573	834	1095	1341
SPARK MIMETIC 110	464	740	1015	1262	1530

WARNING

NEVER exceed the maximum pressure of 30 bar. Higher pressures may result in accident or damage to the speargun.

WARNING

Avoid exerting pressure on the sides of the speargun when pumping air into the tank (Fig. 11).

WARNING

The values given in the table are for completely depressurized spearguns. For example, in the case of a model 70 speargun already loaded at 20 bar, increasing its pressure to 30 bar does not require 480 pump strokes, but only 170.

WARNING

When reloading the speargun or changing its working pressure, carry out the pumping operation with the power regulator in the maximum pressure position (Fig. 5).

To reduce the pressure, simply press lightly on valve "7" with a pin (Fig. 1). Release the air slowly to avoid oil leaks. If the speargun needs to be completely depressurized, it should be left with the muzzle facing down for a certain period of time.

WARNING

When depressurizing the speargun, always set the power regulator to the maximum pressure position (Fig. 5).

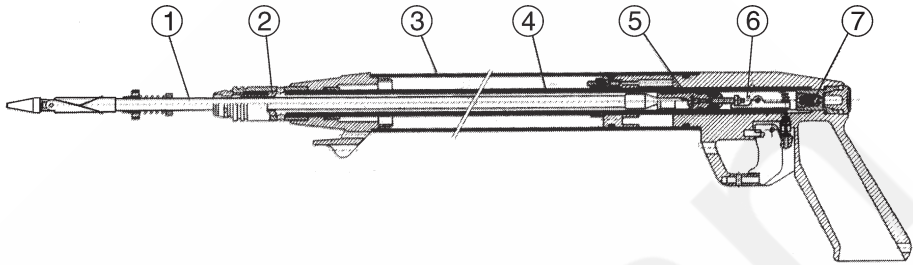
For a more accurate measurement of the speargun pressure, use the special pressure gauge which is available on request.

CARE AND MAINTENANCE

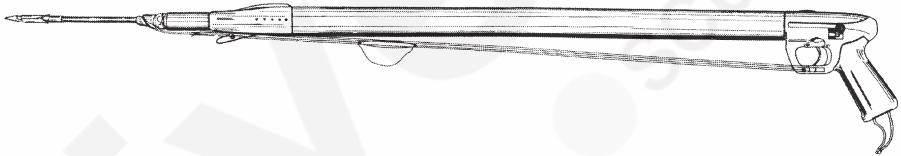
- Rinse the speargun in fresh water after each use.
- Do not store the speargun near sources of heat and avoid exposure to direct sunlight.
- It is recommended to have your speargun overhauled every 2 years.

WARNING

To ensure maximum safety, always entrust the maintenance of your equipment to an AUTHORIZED Mares SERVICE CENTER.

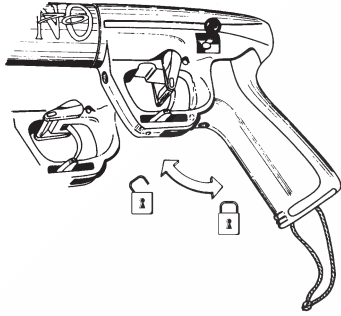


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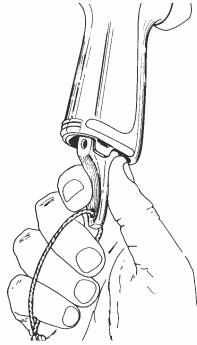


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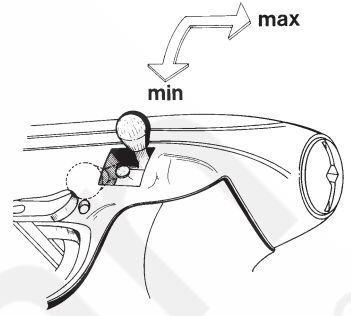
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|--|--|--|---|---|---|---|
| <p>1 Asta
Shaft
Fleche
Flecha
Flecha
Schacht
Skaft
Βεργα
Keihäs
Drzewiec
Szigony</p> | <p>2 Testa
Head
Tete
Cabezal
Ogiva
Bovenzijde
Huvud
Κεφαλη
Kärki
Głowica
Fej</p> | <p>3 Serbatoio
Tank
Reservoir
Tanque
Reservatório
Fles
Reservoar
Συληνωσ
Säilio
Zbiornik
Tartály</p> | <p>4 Canne
Barrel
Canon
Cañón
Cano
Vat
Pipa
Κωνη
Putki
Lufa
Cső</p> | <p>5 Pistone
Piston
Piston
Pistón
Émbolo
Zuiger
Kolv
Εμβολο
Mäntä
Tlok
Dugattyú</p> | <p>6 Meccanismo di
sgancio
Catch hook
Gâchette
Mecanismo de
zafado
Mecanismo de
engate
Vanghaak
Spärrhake
Αγκιστρο
συγκρατηση
Lukitusalpa
Haczyk zaczepowy
Visszatartóhorog</p> | <p>7 Válvula
Inlet valve
Soupape
Válvula
Válvula de entrada
Inlaantventiel
Ingångsvalv
Βαλβίδα εισοδου
Täyttöventtiili
Zawór wlotowy
Bemenőszelap</p> |
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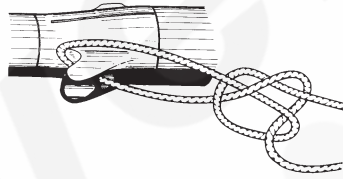
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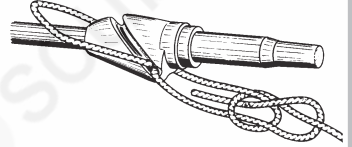
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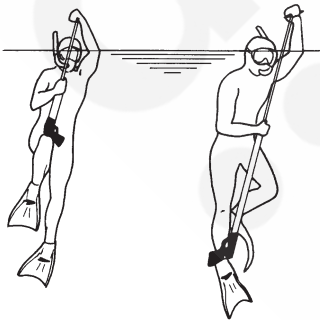
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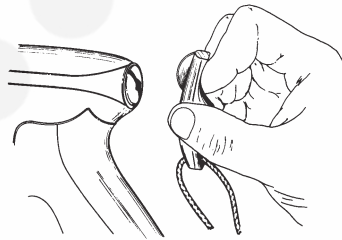
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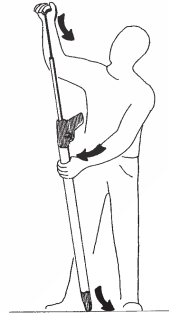
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