

PHANTOM BAND SPEARGUN

WARNING

CAREFULLY READ THIS INSTRUCTION MANUAL BEFORE USE, PAYING PARTICULAR ATTENTION TO ALL THE POINTS CONCERNING SAFETY, AND STORE FOR FUTURE REFERENCE.

INTRODUCTION

CONGRATULATIONS. You have chosen one of the most technologically advanced and reliable products available on the market. Your PHANTOM speargun is the result of years of continuing evolution and development of new materials and technologies for improving performance, safety and reliability. It is the maximum expression of Mares's extensive experience in the spear fishing sector.

Our spearguns are constructed using high technology production processes and materials, entirely within our factories. This enables us to check and test all the materials and components for durability and reliability.

WARNING

Carefully read the instructions in this manual as they are essential for protecting your own safety and prolonging the life of your equipment. Diving equipment should only be used by persons who have received adequate training. To ensure maximum safety, your equipment should only be serviced by an AUTHORIZED MARES SERVICE CENTER.

WARNING

In Italy, under art. 18 of Italian Law no. 963/65, the use of spearguns is permitted only to persons older than 16. Please refer to current legislation concerning the use of spearguns by minors in other countries.

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 is highlighted with the following symbols:

Characteristics

Characteristics	PHANTOM FV				PHANTOM CARBON		
	55	75	95	110	75	95	110
Length							
One-piece construction	•	•	•	•	•	•	•
Hydrodynamic speargun body with enclosed shaft track	•	•	•	•	•	•	•
Ergonomic handle	•	•	•	•			
Ergonomic handle with soft touch overmold.					•	•	•
Hydrodynamic muzzle	•	•	•	•			
Interchangeable hydrodynamic muzzle					•	•	•
Stainless steel firing mechanism with high sensitivity trigger	•	•	•	•	•	•	•
Positively buoyant without the spearshaft	•	•	•	•	•	•	•
Chest loading pad	•	•	•	•			
Chest loading pad with soft touch overmolding					•	•	•
Automatic line releaser	•	•	•	•	•	•	•
Tahitian shaft in stainless steel, diameter 6 mm length mm	850	1150	1300	1500			
Tahitian shaft in stainless steel, diameter 6.5 mm, length mm					1150	1300	1500
Stainless steel articulated wishbone. Stainless steel	•	•	•	•	•	•	•
Muzzle with attachments for ballast	•	•	•	•	•	•	•
Reel fittings	•	•	•	•	•	•	•
Integrated reel line guide	•	•	•	•	•	•	•
Easy to use safety catch	•	•	•	•	•	•	•
Shaft retaining bridge on muzzle			optional		•	•	•
Double band fork adapter			optional		•	•	•
Two lanyard attachments	•	•	•	•	•	•	•

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 TECHNICAL CHARACTERISTICS

PHANTOM SPEARGUN

To satisfy all types of users, the Phantom speargun is produced in two versions, which can be further customized with optionals to suit your individual needs.

Phantom Carbon New one-piece body constructed from reinforced engineering polymers and carbon, to confer both strength and light weight.

Phantom FV New one-piece body constructed from reinforced engineering polymers.

For the characteristics of the spearguns, refer to the table

ONE-PIECE CONSTRUCTION WITHOUT NEED FOR SEALS

One of the most common causes of a speargun flooding is the OR seal, which can become damaged either during insertion or during use.

Your Phantom speargun eliminates this type of problem thanks to its one-piece construction of the speargun handle, barrel and muzzle.

HYDRODYNAMIC SPEARGUN BODY, WITH ENCLOSED SHAFT TRACK

The speargun has a hydrodynamic shape for better maneuverability and stability during use, which improves its performance and reduces friction and vibration during lateral movements.

On a traditional speargun, without an enclosed shaft track, when the wishbone hooks onto the notch at the top end of the spearshaft it pulls the shaft downward, causing it to flex. At the moment of firing, the spearshaft is released from the pressure of the wishbone and reverts to its original straight shape. This passage from a curved to rectilinear shape creates a "shaft whip" effect that causes the spearshaft to lose power and accuracy.

Our fully enclosed shaft track instead provides the spearshaft with the needed support, guiding it along the most important points. An especially important aspect is that the shaft runs inside the track with minimal friction, because it is hydrodynamically cushioned by a thin film of water.

SPEARGUN POSITIVELY BUOYANT WITHOUT SHAFT

An added benefit of the one-piece body construction is that the speargun without the shaft is positively buoyant, and thus able to float. This facilitates retrieval of the speared fish, by allowing the diver to use both hands.

ERGONOMIC HANDLE (FIG. 1A)

Ergonomic and adaptable to both left and right handed users and all sizes of hand, including with thick gloves, as well as all firing styles (using the first or second finger joint). In the Carbon version, the handle has a soft-touch overmold which improves comfort, thereby reducing hand fatigue.

QUICK AND EASY TO OPERATE SAFETY CATCH (FIG. 1E)

The Phantom speargun is provided with a safety catch positioned on the top of the handle which, when engaged, prevents the trigger from operating. The use of the safety catch is facilitated by its ergonomic shape, which guarantees a secure grip when it is being engaged or released (Fig. 3).

WARNING

THE FIRING MECHANISM HAS BEEN DESIGNED TO ENSURE HIGH SENSITIVITY AND MAXIMUM SAFETY.
TO AVOID DAMAGING THE FIRING MECHANISM, NEVER INSERT THE SHAFT WITH THE SAFETY CATCH ENGAGED.

WARNING

DO NOT ATTEMPT TO REMOVE OR TAMPER WITH THE SAFETY CATCH, AS THIS CAN COMPROMISE YOUR SAFETY AND THAT OF OTHERS. MARES DECLINES RESPONSIBILITY FOR ACCIDENTS TO PERSONS OR PROPERTY ARISING FROM PRODUCTS THAT HAVE BEEN TAMPERED WITH.

STAINLESS STEEL FIRING MECHANISM WITH HIGH SENSITIVITY TRIGGER

The ergonomics, geometry and mechanical design of the trigger (Fig. 1B) make it highly sensitive to finger traction, reducing the response delay between when the trigger is pulled and when the spearshaft is effectively released. This minimizes the movement imparted by the action on the trigger, making for a more precise shot.

CHEST LOADING PAD (FIG. 1C)

The loading effort can be considerable, especially when the speargun is loaded for maximum power, on the second notch of the shaft. During this phase, it is important for the speargun to be optimally positioned against the chest. Our loading pad offers the ideal solution for a safe and comfortable loading rest. In the Carbon version, the loading pad is overmolded with thermoplastic rubber for improved comfort and slip resistance.

AUTOMATIC SIDE LINE-RELEASES (FIG. 1D)

Inserting the spearshaft into its seat in the handle causes the line-releaser to be locked. When the trigger is pulled, causing the shaft to be ejected, the line-releaser is automatically unlocked. The line releaser can be assembled on either the right or left hand side.

To alter the position of the line-releaser, remove the protective cap, extract the line releaser (Fig. 7) and place it on the opposite side. Replace the protective cap.

MUZZLE WITH EXCLUSIVE SYSTEM FOR FITTING DIFFERENT TYPES OF BANDS (FIG. 2A)

Innovative muzzle: Your speargun is rigged as standard with a loop band, and in the Carbon version also comes with a fork adapter for screw-on bands. The geometry of the loop band attachment (which can accommodate 16 to 20 mm diameters) is designed to hold the bands in place without damaging them, ensuring they are always clamped at the center point. After assembly, simply stretch the bands once to position them correctly. You can decide to install the double band by inserting the fork adapter into the seat provided (Fig. 4). Unlike other spearguns on the market, the muzzle of the Phantom Carbon version can be converted to only accommodate loop bands (Fig. 2A1). With a simple operation that takes just a few minutes, you can adapt your speargun to the preferred system yourself (Carbon version), the band fork adapter is available as an optional for the FV version. All the muzzles can be fitted with ballasting weights for fine-adjustment of buoyancy (Fig. 2B - 2B1 - 5).

REPLACING THE MUZZLE (CARBON VERSION ONLY)

Fully back off the fixing screw (Fig.12A), and pull out the muzzle (Fig.12B). Insert the new muzzle and lock down the screw (Fig.12A). Check that the muzzle is securely clamped.

BRIDGE ON MUZZLE FOR RETAINING THE SHAFT

(FIG. 2C - 2C1)

The assembly of the bridge is extremely simple. Back off and remove the screw, the nut and the two mounts (figure 2C). Install the bridge as shown in Fig. 6. To facilitate the clamping operation, the retainer (Fig. 2D) should be in the open position. Lock down the screw into its nut, making sure that it also goes into the hole in the retainer.

INTEGRATED REEL LINE GUIDE

One problem encountered when using a reel is vibration of the line, along with the risk that the line running between the reel and muzzle may become entangled. This problem is eliminated thanks to a special guide running along along the speargun body, which protects and practically conceals the line. To guarantee that the line is always aligned with the speargun and reel, it is threaded through two eyes mounted at opposite ends of the guide.

BANDS

Our spearguns are supplied, depending on the model, with various pure natural latex bands. Thanks to the material and the special production process, these bands retain their elasticity up to the breaking point (machine elongation test) and deteriorate (splitting or drying) 3 to 4 times less quickly under equal conditions of use; what is more, they provide unparalleled progressive thrust, and better retain their power over time.

TAHITIAN SHAFT IN STAINLESS STEEL

The stainless steel Tahitian shaft is supplied with a 6.5 mm diameter for the Carbon version and with a 6 mm diameter for the FV version .

STAINLESS STEEL ARTICULATED WISHBONE

The articulated wishbones are highly durable, and tested under the most punishing conditions of use. They can be fitted on all the Mares bands, and have a hooking angle which facilitates loading.

FITTINGS FOR LINE REEL (FIG. 1F)

All the Phantom series spearguns come with fittings for assembling a line reel in one of two positions, chosen by the user. Assembly of the reel is quick and easy, and simply requires sliding in the reel support until the screw fixing holes are aligned. For specific assembly instructions, consult the separate reel manual.

TWO LANYARD ATTACHMENTS

For maximum freedom of movement, the speargun can be attached to a lanyard using one of the two eyes provided for this purpose (Fig. 1G).

PRECAUTIONS

Before using the speargun, always check the following:

- Check the correct operation of the firing system, including the safety catch.
- Check that the muzzle is correctly assembled (only Carbon version).
- Check that the band is correctly screwed onto the wishbone, and onto the fork adapter if using double bands.
- Check the correct insertion of the loop band, or of the fork adapter on the muzzle.
- Check that bands are in good condition, in particular check for signs of cracking, damage or splitting, and make sure they are not coming away from the ends. If any such defects are found, replace the bands immediately.
- Check that the wishbone pins are firmly secured, and that the wishbone itself does not show signs of wear.
- Check that the shooting line is correctly fixed to the end of the speargun and to the shaft (Fig. 8).
- After use, and before putting the speargun away, always fit the tip protector on the spearshaft.
- In the event of a malfunction, do not attempt to repair the speargun yourself, but immediately consult an AUTHORIZED MARES SERVICE CENTER or send it directly to MARES.



WARNING

MARES DECLINES ALL RESPONSIBILITY FOR ACCIDENTS TO PERSONS OR PROPERTY ARISING FROM TAMPERING, IMPROPER USE OR INADEQUATE MAINTENANCE.

LOADING THE SPEARGUN



DANGER

NEVER ATTEMPT TO LOAD OR FIRE THE SPEARGUN OUT OF THE WATER. NEVER FIRE IN AREAS OF POOR VISIBILITY, OR IN THE DIRECTION OF OTHER PEOPLE OR STATIONARY OBJECTS. THIS COULD RESULT IN INJURY TO YOURSELF OR OTHERS, WITH POTENTIALLY SERIOUS DAMAGE.
NEVER TRANSPORT THE SPEARGUN WHILE LOADED.

INSERTING THE LOOP BAND AND THE OPTIONAL SECOND BAND

Exerting a slight pressure on the muzzle, open the retainer as shown figure 11A. Insert the loop band in its seat, after wetting it. To facilitate insertion of the band, grasp its central section with both hands, pull it outward, and insert it into the seat (Fig. 11B) Exerting a slight pressure on the muzzle, close the retainer as shown figure 11C.

If desired, you can purchase a second band from an AUTHORIZED MARES DEALER.

PRE-DIVE PROCEDURE

- Release the safety catch (Fig. 3A).
- Slide the spearshaft (with the attached line) along the track, inserting it into the handle with the notches facing upward. Push the spear shaft toward the handle until it clicks into place.
- Check that the spear shaft is correctly engaged: if it is not, pull the shaft out of its seat in the handle and reinsert it.
- Engage the safety catch (Fig. 3B).
- Wind up the line from the muzzle in one of the two ways shown in figures 9 and 10.



WARNING

To avoid possible physical harm, it is advisable to always use a chest pad/protection on the wetsuit.

LOADING IN THE WATER

- With the shaft already inserted in the firing mechanism, check that the safety catch is engaged (Fig. 3B).
- Rest the butt of the speargun against your chest.
- Pull the band toward you until the wishbone "V" hooks onto either the first or second notch on the spearshaft.

UNLOADING THE SPEARGUN (WITHOUT FIRING)

- Always unload the speargun while you are still in the water.
- Make sure there are no other people around within range of the speargun.
- Check that the safety catch is engaged (Fig. 3B).
- Rest the butt of the speargun against your chest.
- Pull the band toward you and disengage the wishbone "V" from the notch on the spearshaft.
- If the speargun is equipped with a second band, repeat the above procedure.

MAINTENANCE

Rinse the speargun with fresh water after each use.

Do not keep the speargun in a sealed case or container; it should be stored in a well-aired place.

FOR ALL REPAIRS AND SERVICING ALWAYS CONTACT AN AUTHORIZED MARES SERVICE CENTER.