USER MANUAL

El Mudo 3.0



Lead Rope Solo climbing device

Warning

Climbing Solo is an activity for experts. It is an experience of very high psychological, technical, and physical demand, so its practice is **NOT** recommended unless you fully know what it means to **assume** the risk you run.

Solo climbing should only be practiced by climbers with **extensive experience**. Before practicing it, the climber must know in depth the necessary maneuvers of rope climbing, that is, with a partner.

The Solo Climber must:

1. Know and practice the “Lead” with ease, efficiency, and effectiveness.

2. Having practiced rope climbing for a long time (... even years).

3. Have practiced climbing in only Top Rope style for many months.

4. Knowing how to recover a partner.

5. *Rappel* with different devices, knots, and fortuitous means.

6. Know how to make knots “well made”.

7. Know the characteristics of the equipment in general and its particular limitations.

Although there are many videos and tutorials on “How to climb in LRS”, it is strongly recommended to take an **experiential course** directly focused on that and practice a lot in “yo-yo” and/or “top rope” for several weeks before doing a full LRS climb.

The Mudo allows you to **Climb Solo with Rope**, with the possibility of leading without needing someone to belay you.

And one last comment that I hope will serve to raise awareness:
If you don’t do things right **all the time** when climbing, you can kill yourself or be severely injured for life.

SAFETY DEVICE FOR LEAD IN SOLO WITH ROPE.

El Mudo 3.0

This device is specifically designed and tested to provide the climber with a means of securing to go first —leading— without the need to have a partner handling the safety rope.
It can also be used for:

- Descent in Rappelling on a single rope.
- Belay a partner.
- Climb simultaneously.

That's why we call him "*The Mudo*": an effective assistant... and silent.

***The Mudo* is not a learning aid for solo climbing or intended to "invite" rope climbers to migrate to solo rope climbing.**

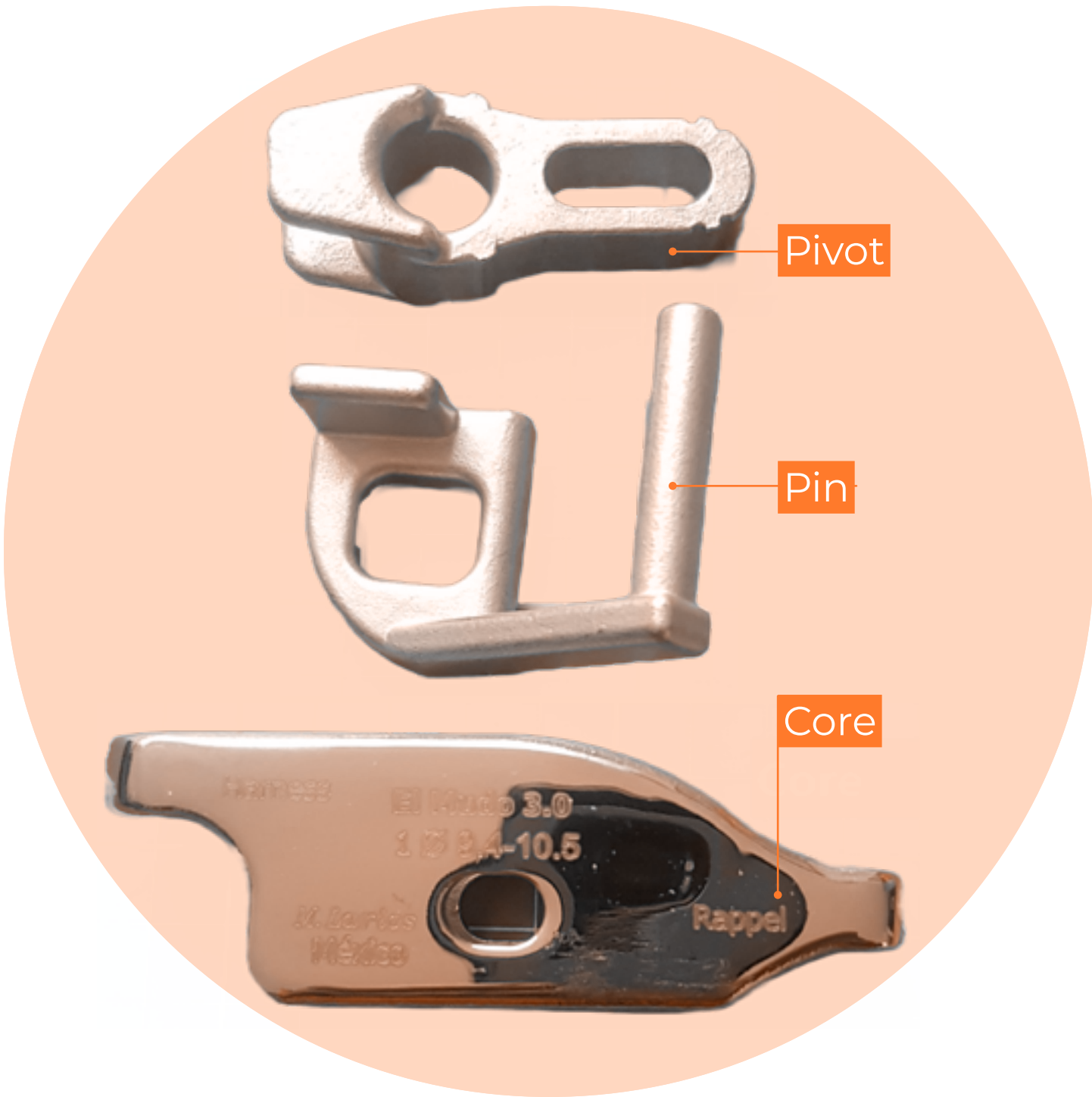
The use of *the Mudo* is an individual decision and the user is fully responsible for its handling.

It is equipment specifically designed to offer an effective means of securing to lead, solo with rope.

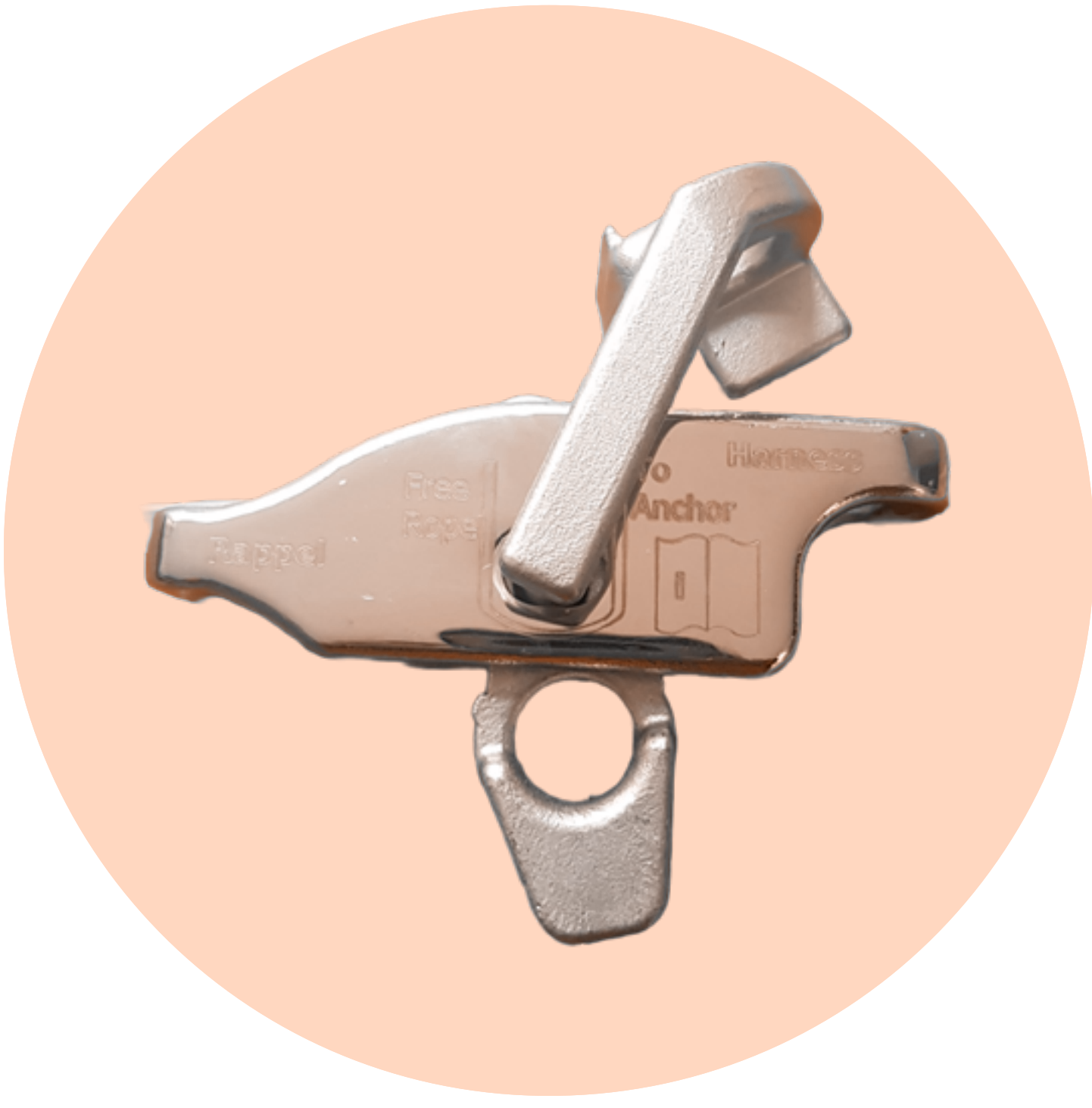
NOTE: There is currently no Normative on the part of the UIAA, for any apparatus that serves to climb in Solo with rope or for any really automatic belay device.

Description

The Mudo is a device that consists of three elements:

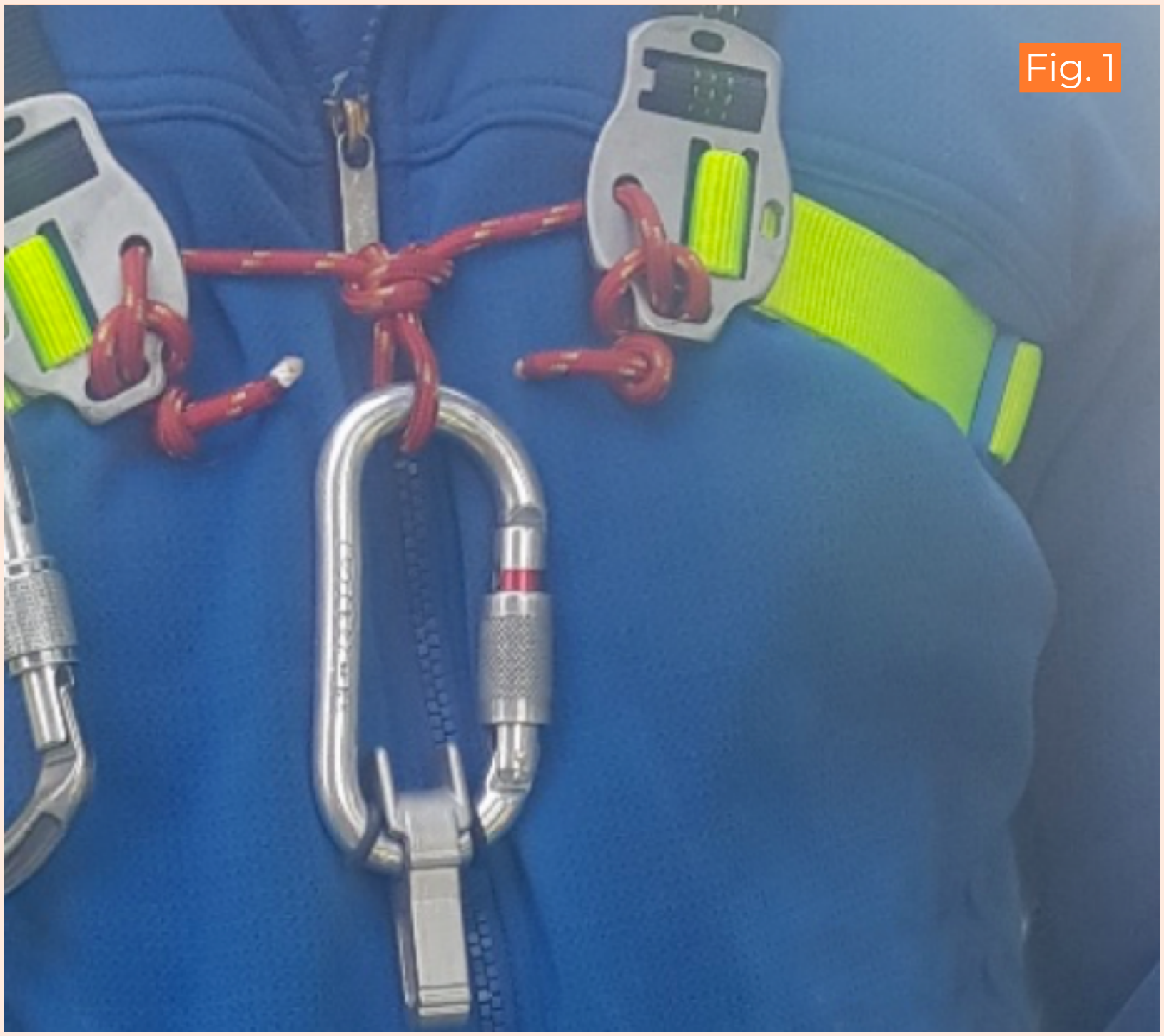


Set up



It is mandatory to have a chest harness, in addition to everything that is occupied when climbing with a partner.

▫ Place the Pivot in a carabiner or Maillon, preferably in the shape of a regular or oval pear, as shown in Figure 1.


Fig. 1

- Set limits to the Pivot with a webbing, O-Rings, or tape, to prevent it from rotating around the body of the carabiner, as in Figure 1.

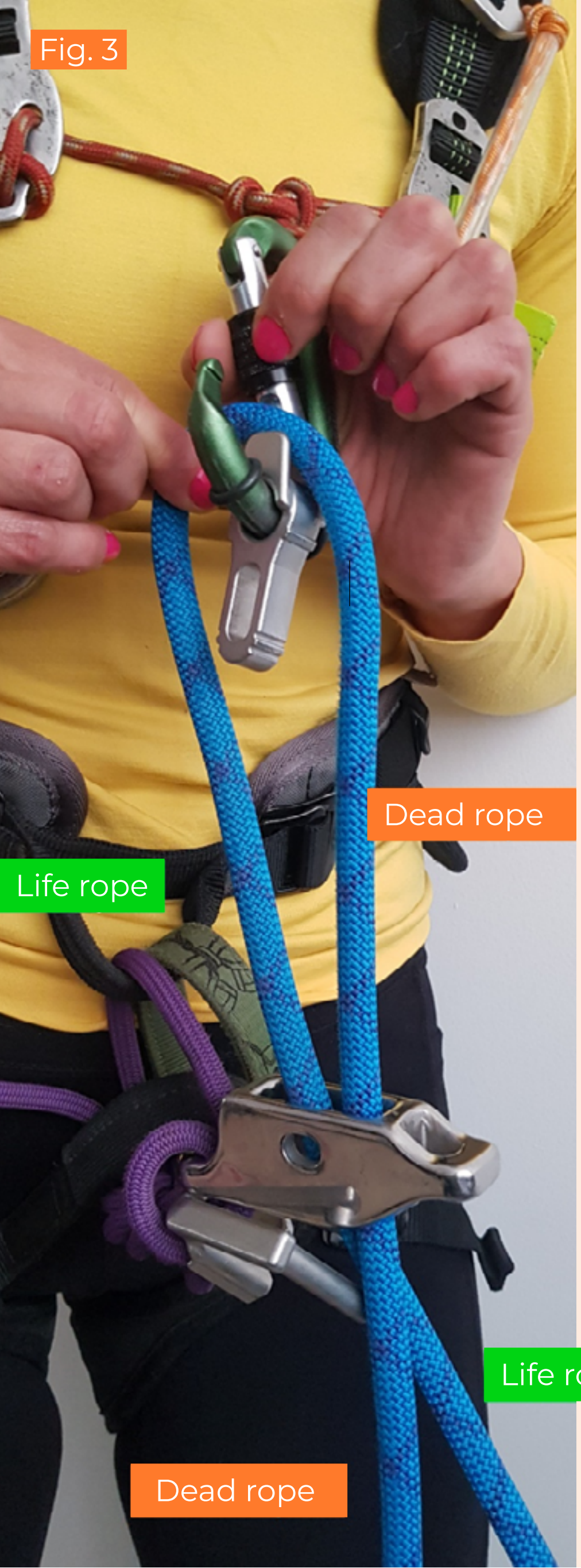
- Place this carabiner in the Chest Harness, as shown in Figure 1.

- Using a rope or cord of 8 mm or more, join the Core with the Waist Harness, passing the cord through the belt, legs, Core hole, and Safety Bolt hole, joined with an Eight or a Double Fisherman knot (Figure 2 and 2a).

- For additional security it is recommended to double turn the cord when passing it through the Core and the Pin. Fig. 2a


Fig. 2


Fig.2a



- Pass the safety rope (from 9.4 to 10.5 mm) through the largest slot of the Core (Figure 3). The rope that goes to the Master Point must be at the bottom (near the climber) of the Core, this will be the "Life rope". The rope that comes out above will be the "Free Rope" or Dead rope.

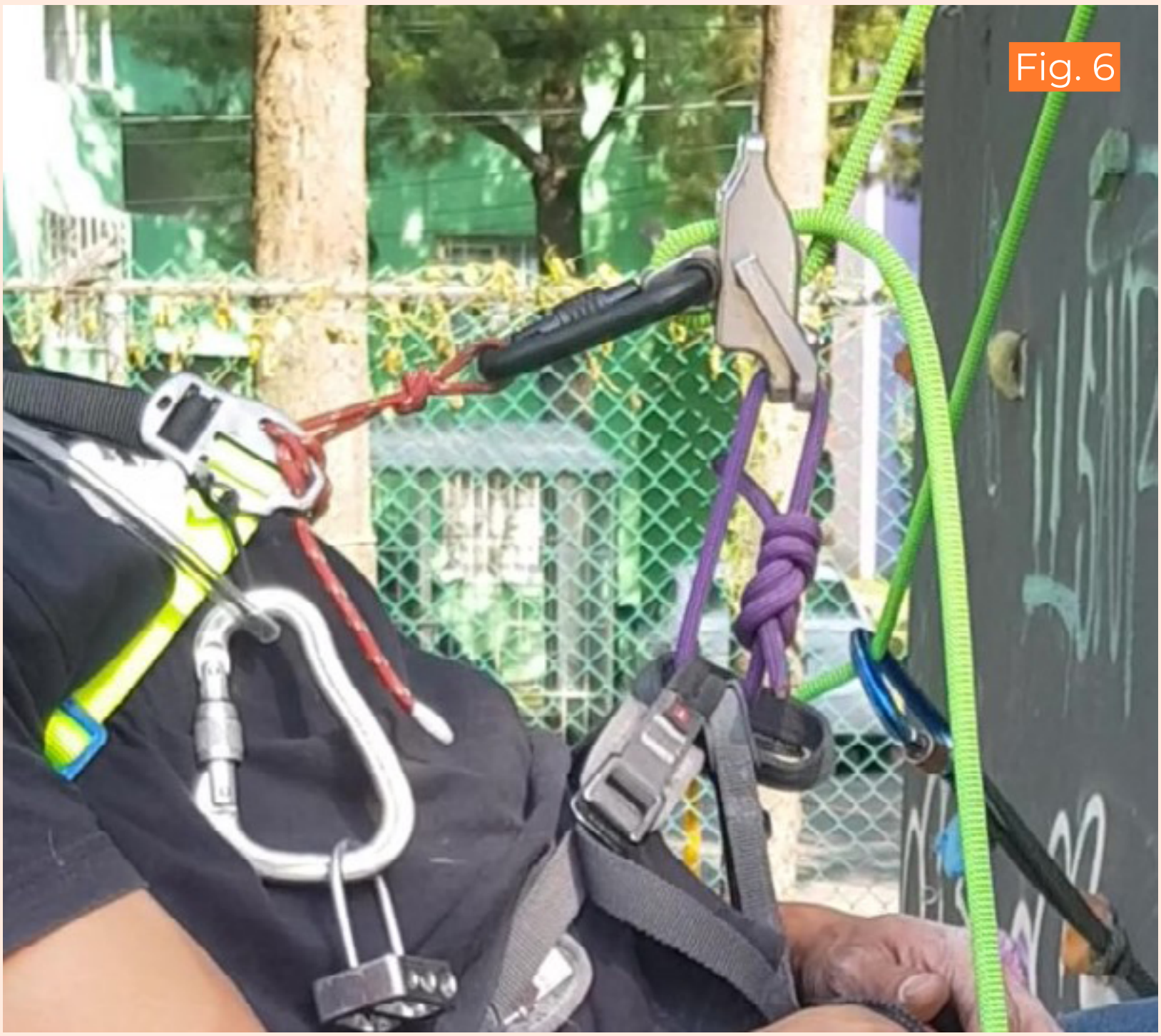
- Once the rope is passed through the Core, it is placed inside the carabiner of the pivot, separating the ropes inside the groove, as shown in Figure 4.





- Insert the Pivot into the body of *El Mudo* and place the Pin through the side hole, crossing the Core and the Pivot, as shown in Figure 5.

- Check before starting the ascent, that the system works as it should. (Fig. 6)


Fig. 6

- We recommend paying attention to the height at which the carabiner of the Pivot is placed, that is: if it is very high there will be a lot of friction and the advance will be more difficult; the same happens if it is very low. (Fig. 7)

- We recommend trying different distances until you find the one that best suits each person and allow the rope to run with as little friction as possible through *El Mudo*.





- It is important to fix the back of the chest harness in the haul loop of the sit harness, to always maintain the same distance between the Pivot and the Core

Something important about the safety rope...

The Mudo 3.0 should be used with 9.4 to 10.5 mm in diameter ropes. It is known that the ropes, as they are used, are "expanding" and their diameter can increase significantly; this increase in diameter increases the friction in *El Mudo* causing the rope not to run as smoothly as it should.

In addition, the ropes lose elasticity with time and use, becoming stiff and, again, making it difficult to pass through *El Mudo*; it is definitely recommended to discard the use of "old" strings and replace them with new ones.

Final Set up with Yomi



Fig. 8



- If you don’t have the Yomi, place a self-locking back knot type Prusik or Machard (Klemheist Knot), especially useful in case of falling headfirst.

- By means of a sling or cord tied to the harness belt, never to the material carrier. (Fig. 9 and 9a)



TO DESCEND IN RAPPEL THERE ARE TWO POSSIBLE CASES:

When you have NOT gone over the middle of the rope:

1. Place a carabiner in the upper hole of *El Mudo*, the one that has been free since the initial placement.

2. As in any rappel, the rope that comes out of the upper part of *El Mudo* is firmly held, and the carabiner that has just been placed is leveraged (... it's like rappelling with a Gri Gri); and when you release that carabiner, your descent immediately stops (Figure 10).



TO DESCEND IN RAPPEL THERE ARE TWO POSSIBLE CASES:

When you have already passed the middle of the rope:

- Secure yourself to the last available protection (or new Master Point).

- Anchor the rope originally considered Free or Dead, to that new Master Point.

- Place a self-locking knot on the rope that comes down from *El Mudo* and attach it to the leg of the harness

El Mudo is now his device for descent in Rappel.

- Descending by "feeding" rope in a similar way to when using a single-line ATC, which is braked by hand as in any rappel and, in case of emergency, the Machard or Prusik knot, stops the descent.



Functional characteristics of *El Mudo*

1. It is not necessary to feed rope.
2. It stops you even if you are head (you must use a chest harness and Machard or Prusik knot or Yomi).
3. It "feeds" as you advance.
4. It allows you to rappel without modifying the initial " ascent" arrangement.
5. It locks even at a very low load.
6. We recommend always having a Yomi, Prusik knot, or a Machard. It is not necessary to use additional backup knots.
7. It is unlocked when the load is removed.
8. It allows you to ascend the rope, without modifying the original arrangement, recovering manually (similar to how it is done with Gri-Gri or ATC).
9. *The Mudo* is a device free of springs and "hidden" mechanisms.

El Mudo
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