

CRAMPONS

EN Crampons for mountaineering.



MADE IN ITALY
EN 893:2010

Regulation (EU) 2016/425
Personal Protective Equipment against falls from a height.

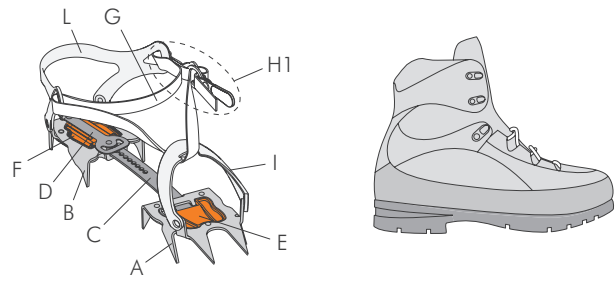


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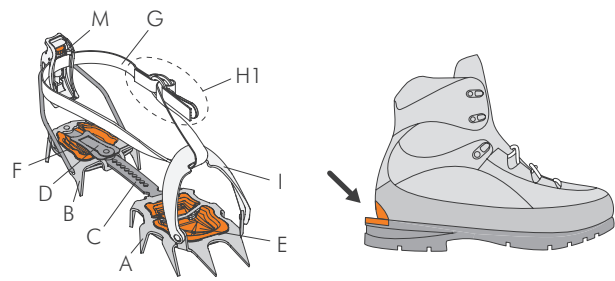


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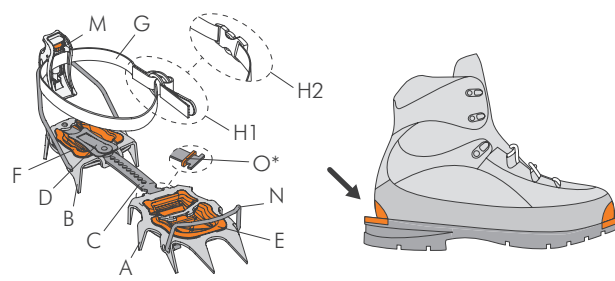
2 NOMENCLATURE / BINDING SYSTEMS



2.1 - CLASSIC

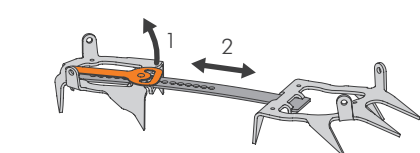


2.2 - SEMI-AUTOMATIC

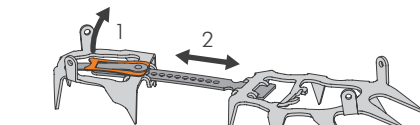


2.3 - AUTOMATIC (*only SNOW FLEX model)

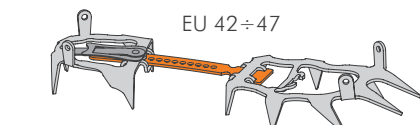
4 LENGTH ADJUSTMENT - Attention! Simplified views for a better understanding.



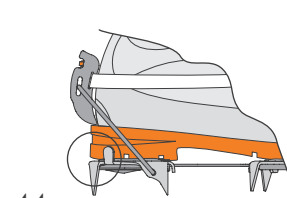
4.1 - NEVIS / ICE MODELS.



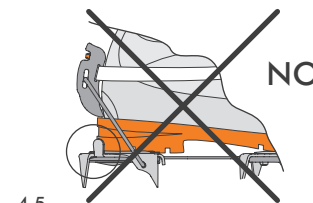
4.2 - HYPER-SPIKE / LYCAN / NUPTSE EVO MODELS.



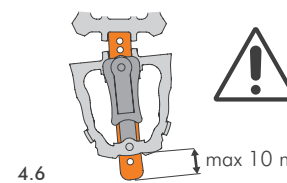
4.3 - HYPER-SPIKE / LYCAN / NUPTSE EVO MODELS.



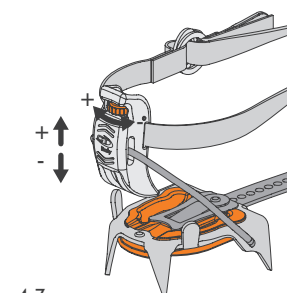
4.4



4.5

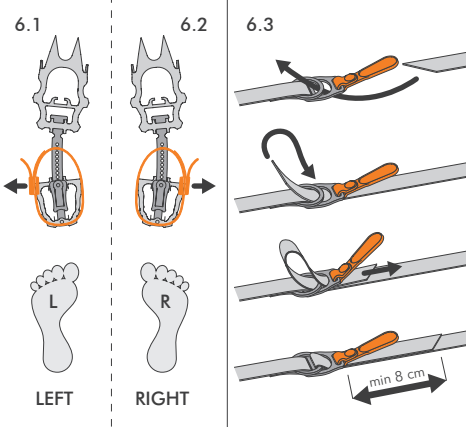


4.6

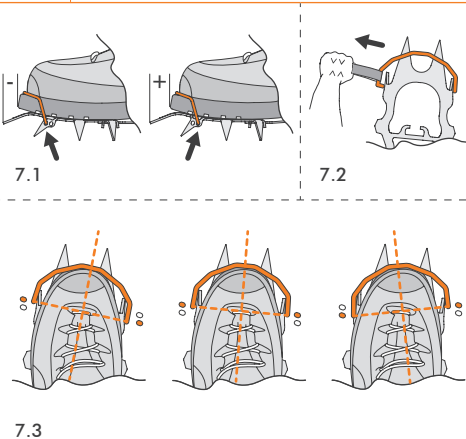


4.7

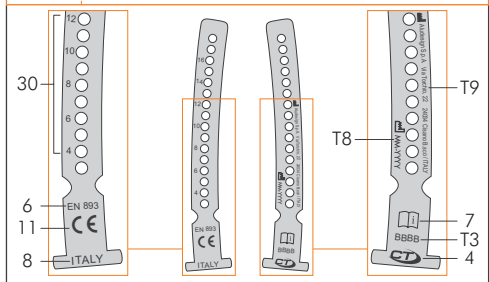
6 BUCKLES SETTING



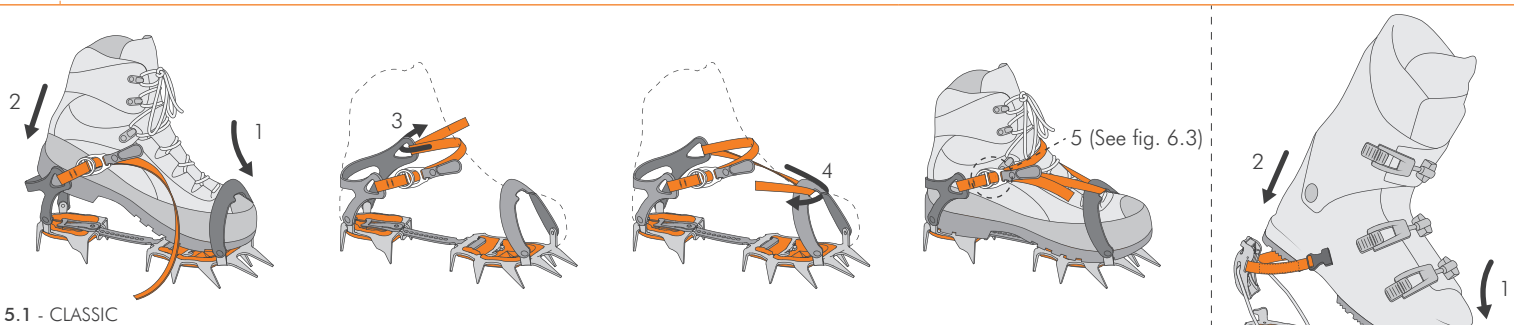
7 COMFORT SETTING



3 MARKING



5 ATTACHMENT TO BOOT



1 PRODUCT SHEET

PRODUCT	ATTACHMENT	REF. No	WEIGHT	TECHNICAL DATA			SUGGESTED USE					
				STANDARDS	MATERIALS		POINTS	SKI TOURING (Fig. 12.1)	GLACIER TRAVEL (Fig. 12.2)	CLASSIC ALPINISM (Fig. 12.3-12.6)	TECHNICAL ALPINISM (Fig. 12.7-12.8)	ICE FALLS (Fig. 12.9)
					BODIES (A-B)	BARS (C)						
HYPER-SPIKE	AUTOMATIC	31894	970 g	EN 893:2010	STEEL ALLOY (1)	STEEL ALLOY (1)	13	/	/	/	•••	•••
	SEMI-AUTOMATIC	31847	1060 g				12	/	•	••	•••	••
LYCAN	AUTOMATIC A	31848	1030 g				12	/	•	••	•••	••
	AUTOMATIC B	31853	1040 g			12	/	•	••	•••	••	
NUPTSE EVO	CLASSIC	31850D	945 g			12	•	•••	••	•••	/	
	CLASSIC FLEX	31850C	940 g			12	•	•••	••	•••	/	
	SEMI-AUTOMATIC	31851D	1000 g		12	••	•••	•••	•••	/		
NEVIS FLEX	AUTOMATIC A	31852D	995 g		12	••	•••	•••	•••	/		
	AUTOMATIC B	31854D	1005 g		12	••	•••	•••	•••	/		
SNOW FLEX	CLASSIC	31818C	800 g		10	••	•••	•••	•••	/		
	CLASSIC	21864	490 g		10	•••	•••	/	/	/		
ICE	SEMI-AUTOMATIC	31883	1030 g		12	•••	•••	/	/	/		
	AUTOMATIC	31884	1038 g	12	•••	•••	••	/	/			

5.1 - CLASSIC

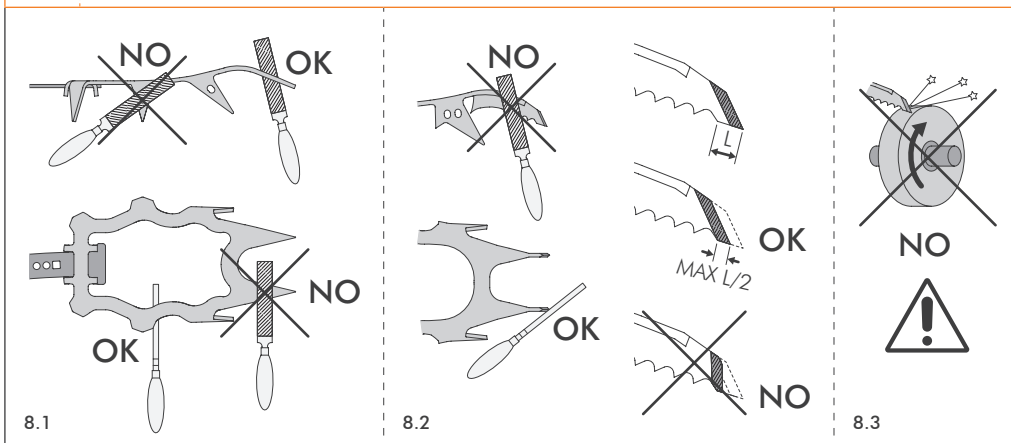
5.2 - SEMI-AUTOMATIC

5.3 - AUTOMATIC A

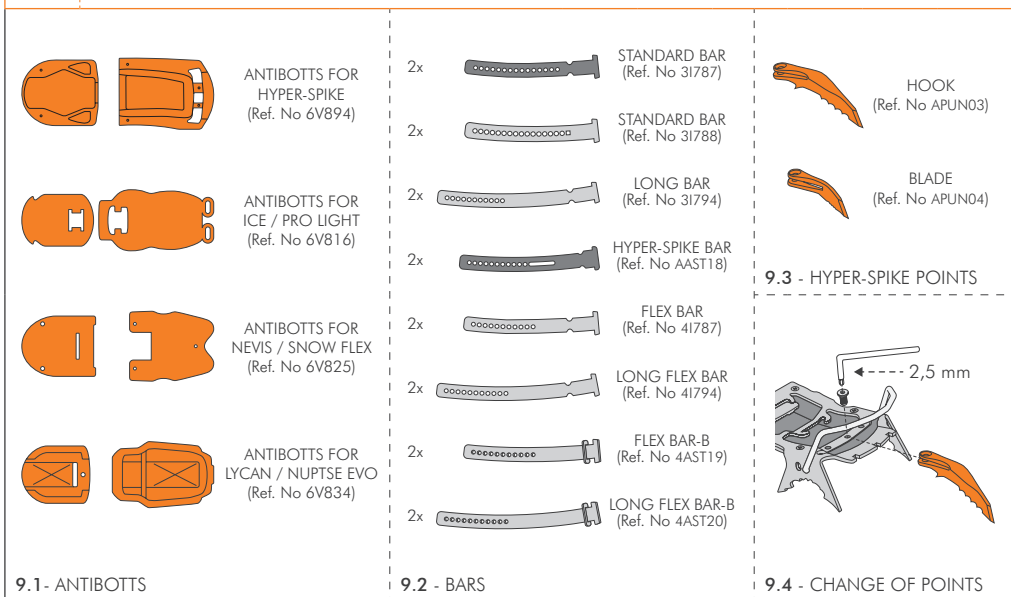
5.4 - AUTOMATIC B

5.5 - AUTOMATIC C

8 SHARPENING

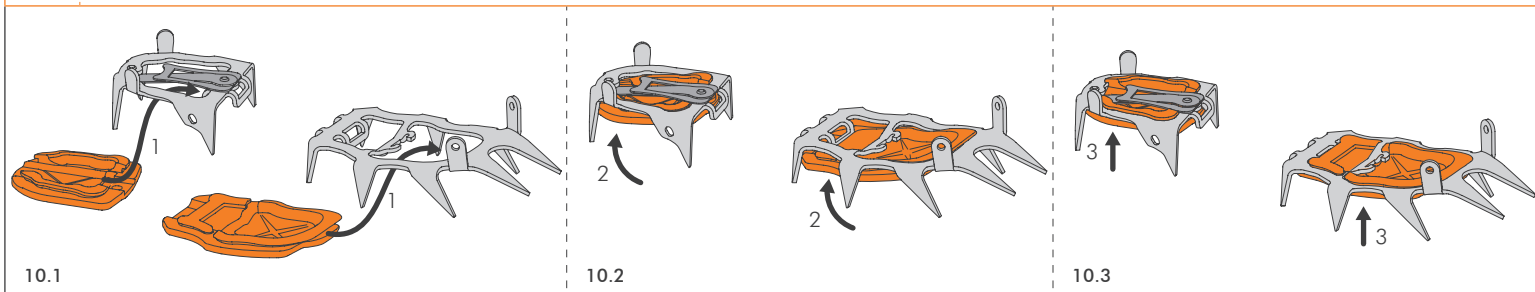


9 ACCESSORIES / SPARE PARTS

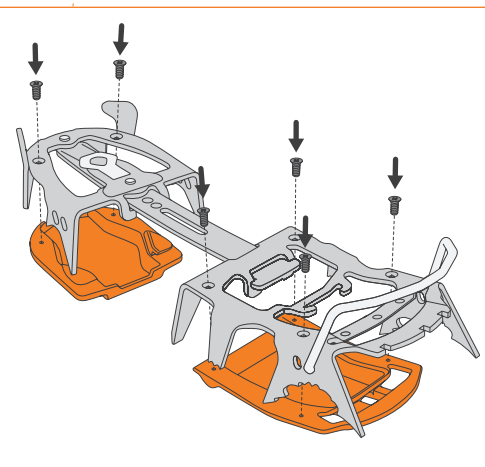


PRODUCT	REF. No.	HYPER-SPIKE						
		HYPER-SPIKE	LYCAN	NUPTSE EVO	ICE	NEVIS FLEX	SNOW FLEX	
ANTIBOTTS	6V894	✓						
	6V816				✓			
	6V825					✓	✓	
	6V834		✓	✓				
STANDARD BAR	31787		✓(36÷47)	✓(36÷47)				
	31788				✓(36÷46)	✓(33÷44)		
LONG BAR	31794		✓(→50)	✓(→50)	✓(→50)	✓(→47)		
HYPER-SPIKE BAR	AAST18	✓(36÷47)						
FLEX BAR	41787			✓(36÷47)				
LONG FLEX BAR	41794			✓(→50)				
FLEX BAR-B	4AST19					✓(33÷44)	✓(33÷44)	
LONG FLEX BAR-B	4AST20					✓(→47)	✓(→47)	
HOOK	APUN03	✓						
BLADE	APUN04	✓						

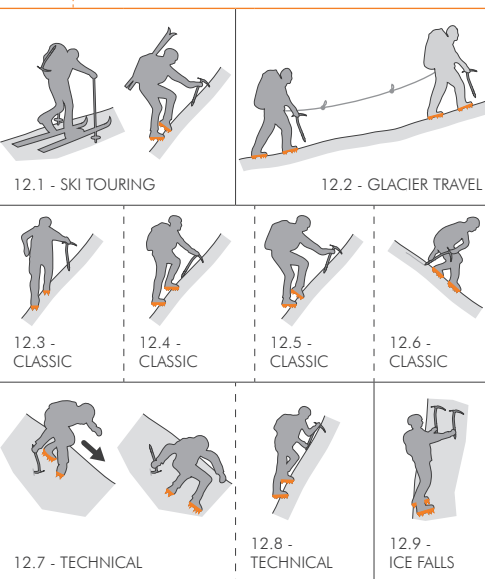
10 ANTIBOTTS 6V834 - INSTALLATION



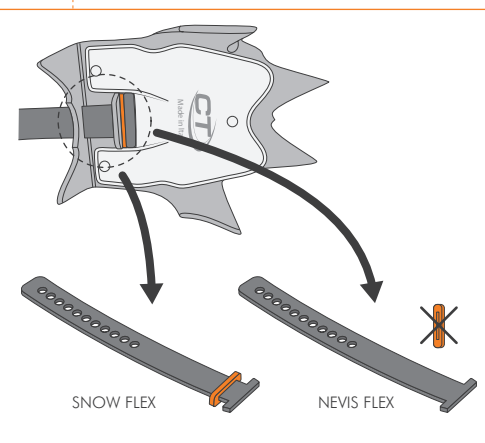
11 ANTIBOTTS 6V894 - INSTALLATION



12 TECHNIQUES



13 ANTI-WEAR BUCKLE



ENGLISH

The instruction manual for this device consists of general and specific instructions, both must be carefully read and understood before use. **Attention!** This leaflet shows the specific instruction only.

SPECIFIC INSTRUCTIONS EN 893:2010.

This note contains the necessary information for a correct use of the following product/s: crampons for mountaineering.

1) FIELD OF APPLICATION.

EN 893:2010. Mountaineering equipment – Crampons. This product, that complies with Regulation (EU) 2016/425, is a Personal Protective Equipment (PPE) against the risk of slips on ice, snow or mixed terrain, depending on the intended use of the device. See the summary table to check, depending on the model, the range of use recommended: ski touring (Fig. 12.1), glacier travel (Fig. 12.2), classic mountaineering (Fig. 12.3÷12.6), technical mountaineering (Fig. 12.7÷12.8), ice falls (Fig. 12.9). **Attention!** Light-alloy crampons are intended for snow travel only; do not use them for progression on ice or mixed terrain.

2) NOTIFIED BODIES. Refer to the legend in the general instructions (paragraph 9 / table D): M1, M6.

3) NOMENCLATURE (Fig. 2). Parts of the crampon: Front half (A); Rear half (B); Adjustment bar with holes (C); Size adjustment system (D); Front anti-balling plate (E); Rear anti-balling plate (F); Binding strap (G); Strap fastening system with double rings (H1); Fastening system with quick-release buckle (H2); Toe binding (I); Heel binding (L); Heel lever (M); Wire toe bail (N); Anti-wear buckle (O). Binding systems: CLASSIC (Fig. 2.1) for all types of boot; SEMIAUTOMATIC (Fig. 2.2) for boots with heel welt to hold lever; AUTOMATIC (Fig. 2.3) with front and rear grooves/welts.

3.1 - Main materials. Refer to the legend in the general instructions (paragraph 2.4): 2 (levers and rivets); 7 (strap & bindings). **Attention!** The materials of bodies (A-B) e bars (C) are indicated in the table (Fig. 1): 1) Steel alloy; 2) Stainless steel; 3) Light alloy.

4) MARKING.

Numbers/letters without caption: refer to the legend in the general instructions (paragraph 5).

4.1 - General (Fig. 3). Indications: 4; 6; 7; 30) Bar numbering for size adjustment.

4.2 - Traceability (Fig. 3). Indications: T3; T8; T9.

5) CHECKS.

Further to the checks listed below, comply with what indicated in the general instructions (paragraph 3).

Before each use, verify that: the size adjustment system can be securely fastened and the adjustment bar slides freely through the crampon body; the buckle is working properly; the heel lever adjustment screws turn without sticking; the wire toe bails can rotate freely in their mounting holes; the points are well-sharpened (for sharpening see the relative paragraph). **Attention!** During use check regularly that the crampons are properly adjusted and well fastened to the boots. **Attention!** Even if the crampons are equipped with an anti-balling system, it is necessary to be cautious and to pay attention to snow built-up under the crampons; danger of slipping and falling.

6) ADJUSTMENT AND MOUNTING. The crampons must fit perfectly onto the boots that will be used. **Attention!** It is advisable to check the compatibility and proper fitting of the crampons indoors before using them outdoors. **Attention!** The Flex models are equipped with an adjustment bar, ideal for use with boots with a semi-rigid sole. **Attention!** Please make sure that the adjustment bars that come standard on the Snow Flex model are always correctly equipped with anti-wear buckles. (Fig. 13). Adjusting the crampons is a two-stage process: the first is to the broad size range 36÷43 or 42÷47 (macro-adjustment), the second is the adjustment inside on of these broad size ranges (size adjustment). **Attention!** Some views are simplified for a better understanding.

6.1 - Macro-adjustment. There are two macro-adjustment systems:

- screw system (Ice): push the adjustment bar forwards, insert the shortening screw into the square hole in the bar and screw on the auto-locking nut. Pull the bar rearwards until the shortening screw fits into the front half of the crampon. To return to size range 42÷47 remove the shortening screw.
- rapid system (Hyper Spike, Lycan, Nuptse Evo): push the adjustment bar forwards, lifting it over the intermediate crossbar, and then pull it backwards so that the end of the adjustment bar is stopped from moving further backwards by the attachment to the crossbar (Fig. 4.3). To return to size range 42÷47 repeat the operation in reverse.

6.2 - Size adjustment. There are two size adjustment systems:

- single lever system (Ice, Nevis Flex, Snow Flex): lift the lever with your fingers and move the bar to the desired position. Release the lever making sure that the locking pin is correctly inserted into the hole of the bar (Fig. 4.1).
- double lever system (Hyper Spike, Lycan, Nuptse Evo): lift the command lever so as to be able to lift the main lever and adjust the bar to the desired position. Then release the command lever making sure that the locking pin is correctly inserted into the hole of the bar (Fig. 4.2). **Important!** The bar should not protrude more than 10 mm (Fig. 4.6). **Important!** Check the fit of the rear crampon half to the heel of the boot (Fig. 4.4-4.5).

6.3 - Additional adjustment. For larger boots (size 44÷50) you can buy a longer adjustment bar (LONG BAR / LONG FLEX BAR, LONG FLEX BAR-B), except for the Nevis Flex and Snow Flex models that are sold with two adjustment bars of different lengths

(a short one for EU sizes 34÷41 and a long one for EU sizes 40÷47). For all crampons with SEMIAUTOMATIC or AUTOMATIC bindings adjust the height of the heel lever by loosening and then retightening the adjustment screws, so that when it is snapped on the heel lever stays firmly in position (Fig. 4.7). For only the models Hyper Spike, Lycan, Nuptse Evo and Snow Flex with AUTOMATIC bindings it is possible to adjust how much the front points stick out by modifying which of the holes in the front half of the crampon the toe bail wire is inserted into (Fig. 7).

6.4 - Fitting to the boot. For all models there is a right foot and a left foot crampon and they cannot be fitted to the other boot. Check the curve of the adjustment bar and the binding strap with buckle is always on the outside of the foot (Fig. 6.1-6.2).

- CLASSIC binding (Fig. 5.1): put the toe of the boot into the toe binding; position the heel of the boot onto the rear half of the crampon; thread the strap through the rear binding, then through the front binding, then through the buckle and tighten it. Remember to always pass the strap back through the second ring (Fig. 6.3).
- SEMIAUTOMATIC binding (Fig. 5.2): put the toe of the boot into the toe binding; Position the heel of the boot onto the rear half of the boot and rotate it forwards until it snaps onto the closed position; thread the strap through the front binding, then through the buckle and tighten it. Remember to always pass the strap back through the second ring (Fig. 6.3).

- Binding AUTOMATIC / A (mod. Hyper Spike / Lycan / Nuptse Evo - Fig. 5.3): position the welt on the toe of the boot under the toe bail wire; position the heel of the boot onto the rear half of the boot and rotate it forwards until it snaps into the closed position; pass the binding band around the upper part of the boot, then through the buckle and tighten it. Remember to always pass the strap back through the second ring (Fig. 6.3).
- Binding AUTOMATIC / B (Mod. Ice - Fig. 5.4): follow the instructions already indicated for AUTOMATIC / A version, passing in this case the webbing binding band through the eyelet of the tongue, connected to the front wire toe bail, as illustrated.
- Binding AUTOMATIC / C (mod. Snow Flex - Fig. 5.5): position the welt on the toe of the boot under the toe bail wire; position the heel of the boot onto the rear half of the boot; position the heel lever on the rear welt of the boot and rotate it forwards until it snaps into the closed position; close the quick-release buckle and pull the strap until tight.

6.5 - Test of function. After having tightened the strap, check the crampon is fitted correctly by kicking into the ice or snow: if the boot can be moved, remove it from the crampon and re-adjust the fitting of the crampon. **Attention!** During use check periodically that the crampon is firmly fitted to the boot, since during use the binding can work loose.

6.6 - Hyper Spike. The Hyper Spike model is equipped with a modular front section, compatible with the main Hook point and with the Blade accessory point. The Blade point, mounted to one side of laterally onto the Hook point, provides greater stability on ice and mixed climbing. The possible combinations configurations are shown in Fig. 9.5. **Attention!** The Blade accessory point must always be used together with the main Hook point.

7) MANUTENTENANCE. 1) Always check before and during use that the crampons are in good condition. 2) If the crampons are very heavily loaded or you are unsure of their condition, replace them. 3) We recommend having the crampons checked annually by a competent person (e.g. manufacturer). 4) If the points are worn, sharpen them with a hand file: don't use a powered grinder since the heat generated could affect the characteristics of the metal (steel or light alloy) and reduce holding power (Fig. 8). For Hyper Spike and Lycan models do not file back to beyond the first half of the first tooth. **Attention!** Maintain the thickness of the metal or you may reduce the point's holding power.

8) REPLACEMENT PARTS / ACCESSORIES. The accessories / spare parts are listed in the table (Fig. 9): antibotts*; standard, long (Long Bar model) and/or flexible (Flex Bar/Long Flex Bar models) regulation bars*; additional tips* for the Hyper Spike model. **Attention!** The use of the flexible adjustment regulation bars is recommended with semi-rigid and/or oversized boots (over 42 size), since they improve the comfort of use and the life span of the crampons. **Attention!** Spare bars 4AST19 e 4AST20 include two anti-wear buckles that can only be used with the Snow Flex model, never with Nevis Flex crampons. (Fig. 13). **Attention!** Accessories/spare parts marked with an asterisk (*) by themselves do not constitute PPE. **Attention!** Before installing an accessory/replacement part, carefully read and understand the instructions for use of the device on which it will be installed. **Attention!** Before use make sure that the accessory/spare part is correctly installed.

