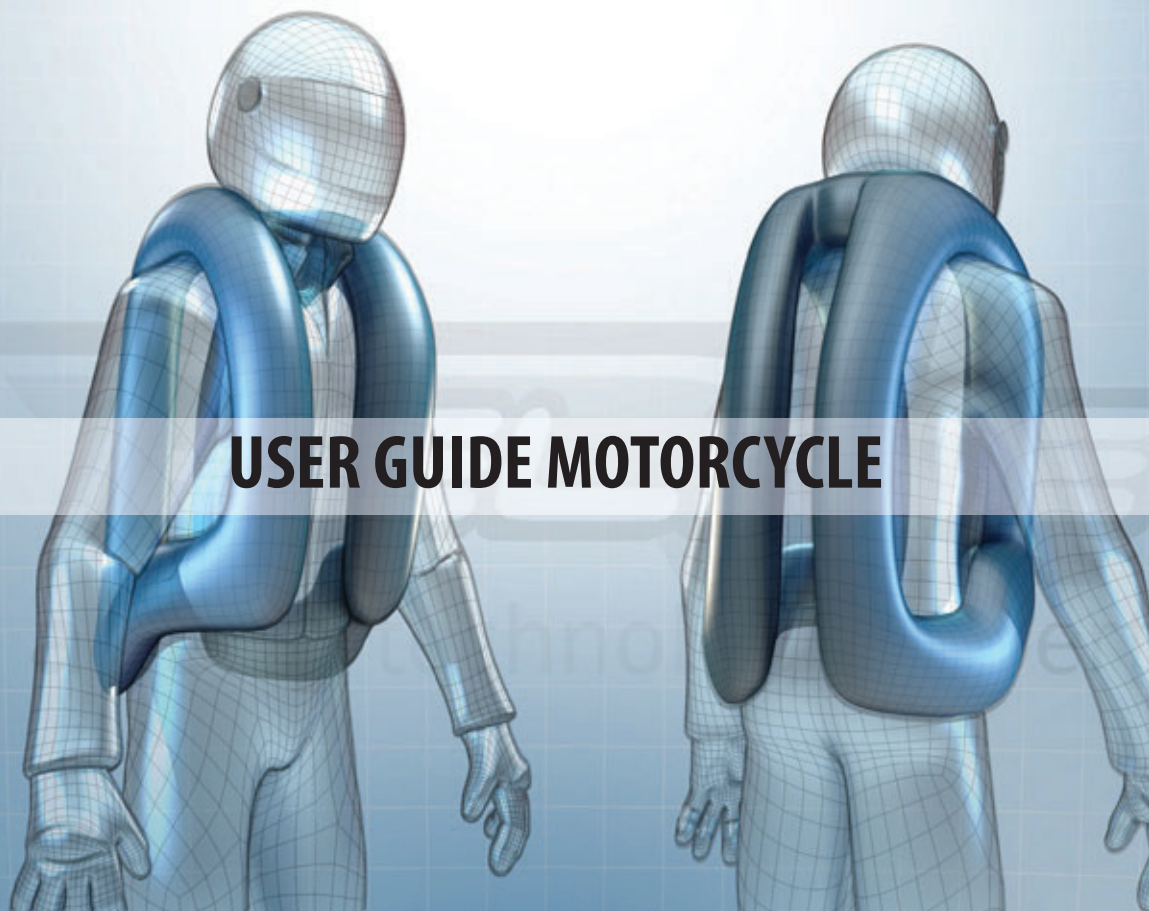




airbag technology expert



## USER GUIDE MOTORCYCLE

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# THANK YOU FOR YOUR PURCHASE

*To get the most out of your HELITE jacket,  
read this manual carefully.*

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# USER GUIDE



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## 1. Safety Precautions

Read this manual carefully in order to use the HELITE jacket, which is fitted with Airbags designed to keep the spinal column supported and absorb shock.

### CAUTION

Failure to follow the instruction could lead to your jacket malfunctioning or reduce its effectiveness.

- The Helite jacket must fit your size. For the length, the vest has to stop minimum 10 cm under the top of your pelvis. For the width adjust the straps in order to have a fist between your vest and your body.

Use the following size chart for an indicative information about which size you should use:

SIZE	S	M	L	XL	LL	XLL
Height (cm)	155/170	165/180	170/185	180/195	170/185	180/195
Height between waist/shoulder (cm)	35/42	40/47	45/52	51/58	45/52	51/58
Chest line (cm)	95/105	100/115	100/115	105/130	120/140	130/ 150



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- Do not remove any part of the trigger system.
- Modifications or wrongly used airbag could decrease dangerously the effectiveness of your system.
- Do not sew/iron or stick anything on the Helite airbag as it could pierce the airbags and prevent them from working properly.
- Remove any pointed objects such as pens, pins, glasses and mobile phones from your clothing before putting on the Helite Jacket.
- Check that your airbag is in good condition, i.e. no rips or tears, before each use.
- Store your Helite airbag on a clothes hanger. Do not fold it or hang anything else on top of it. Keep away from high temperatures and humidity.
- Unclip from the motorcycle before dismounting to avoid accidental inflation. If you have a passenger, check if he is attached when riding and unclips before dismounting.
- Take the time to install the motorcycle strap correctly to your motorcycle. Ideally under the seat, close to your gravity centre.
- Once used, the CO2 cartridge must be replaced with a new cartridge of the same capacity.
- If you are unsure whether your airbag is working correctly, we recommend that you take it to an authorized dealer.

## 2. General Information

- The airbag is worn like a normal jacket when riding. The user clips the strap to the jacket. When the rider falls or is thrown from the motorcycle, the strap linking the rider to the motorcycle tightens and forces out the key ball which activates the release pin. The CO2 cartridge is pierced by the release pin and discharges the gas in the airbags, to reach full inflation in less than 0.1 seconds.
- Helite airbag absorbs shocks and offers the collar of the neck and trunk more support, thus reducing the risk of over bending the spinal column.
- Helite airbag cannot guarantee the rider absolute safety. The Helite jacket protects only when inflated and does not protect areas which are not covered by the airbags. The jacket does not protect the rider from all injuries. Please respect both the speed limit and the driving rules.
- Considerable force, around 35kg, is required to activate the trigger mechanism, so the Helite system should not be activated during normal use.
- If the biker falls with his bike, the Helite system cannot be activated until the activation distance is reached. If this happens, we recommend that you push yourself forcefully away from the bike to trigger the airbag mechanism and distance yourself from the protruding parts of the bike.
- The CO2 cartridge is not re-usable.
- This personal protection device contains no known allergenic substances. The design will not cause irritation or any discomfort to the wearer.

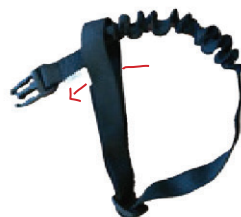
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## 3. Installation of the strap on the motorcycle

The correct instalment of the strap on the motorcycle is of crucial importance. It will influence the time of activation of the airbag. If fitted incorrectly, the device could be triggered too late. The shorter the strap the better, but make sure it doesn't restrict you from normal movements.



STEP 1: Length adjustment



STEP 2: Attach on the motorcycle by making a noose knot

Ideally you can remove the saddle and find a sturdy point close to the tank.

The attachment point should not be lower than the bottom of the saddle.



Adjust the length of the strap by making sure it is as short as possible but doesn't restrict any of your movements



Do not attach the strap to the handle bar



The fixing point resists over 150kg. For example, do not use a plastic part.



Replace the strap when worn out, burnt or if it appears cracked or has any other fault.



The fixing point is not in contact with any hot or sharp part of the motorcycle.



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## 4. Technical Description

### 1. RELEASE PIN

A force ranging from 25 to 35kgs (depending on the jacket's size), applied to the clipping strap is required to detach the key-ball from its compartment. The pressure forces the needle to perforate the cartridge, instantly releasing the gas towards the airbags. The key ball can be released from its compartment in any direction. For your own safety, do not dismantle the release pin or remove any parts.

### 2. AIRBAGS

- The airbags are made of high quality resistant polyurethane sheaths, which provides the best possible shock absorption.
- Maximum pressure when the airbags are fully inflated is 135Kpa (1.35kg/cm<sup>2</sup>). The pressure gradually decreases through a decompression hole.
- It is possible for the bags to be ripped or damaged in an accident if they hit any pointed or sharp objects.

### CAUTION

The sheaths must not be exposed to temperatures above 50°C.

### 3. GAS CARTRIDGE (CO<sub>2</sub>)

The CO<sub>2</sub> cartridges have a long life span but we do recommend a yearly check. The check consists in weighing your cartridge on a scale and making sure it is approximately (+/- 3g) equivalent to the weight written on your cartridge. Use the below table to find the weight of your cartridge:

Vest Size	Total Weight (TW)	Cartridge needed
Child S, Child M	btw. 150 and 155 g	50 cc
Child L, S, M, L, XL	btw. 180 and 185 g	60 cc
Adult Big Size (LL, XLL)	btw. 295 and 305 g	100 cc

Capacity of the CO<sub>2</sub> cartridge is printed on the canister.

### CAUTION

- The CO<sub>2</sub> cartridges are for single usage only.
- The cartridge should be stored and used in temperatures below 45°C. Do not leave full cartridges in the car in high temperatures for example.
- The cartridge must be used at a temperature over 0°C. If stored under 0°C, warm up before use
- If rust or other corrosive marks appear on the outer surface of the cartridges, change them immediately and discard the cartridge.
- Only install gas cartridges of the same size and content as sold with the airbag.
- Keep out of reach of children



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## 4. STRAP CONNECTING THE AIRBAG TO THE MOTORCYCLE

Don't forget to connect your airbag to the motorcycle by clipping in every time you mount your motorcycle. The same way you do with a seatbelt in a car. Disconnect yourself before dismounting. Check the wear and tear of your strap regularly.



## 5. PRECAUTIONS AFTER ACTIVATION

- The gas will escape gradually through the decompression hole. The pressure sensation will remain for 5-10 seconds. The airbag will take back its normal shape.
- While inflated the airbag will come up high around the neck, it could be difficult to retrieve your helmet the first few seconds.
- If any external damage to the airbag garment is caused during deployment, take it to an authorised dealer for servicing. In the event of serious damage to the airbag garment, it may not be possible to repair it.

## 5. Cleaning Instructions

### VEST



Use a sponge or brush with soap. No solvent. Do not iron. Do not submerge the trigger system in water.



**TIP:** Hang your vest in the shower and use gentle rain like warm water. You can scrub the textile with a sponge and soap. Avoid the trigger system as much as possible.

Baby wipes work very well for the stains on the yellow textile.

### JACKET with removable airbag



Removing the airbag is not complicated as you only need to gently unzip, unclip and detach hook and loop fastener without pulling too hard on the airbag; the steps to remove the airbag need to be clearly memorized in order to refit the airbag correctly. Watch out for twists in the airbag when refitting.

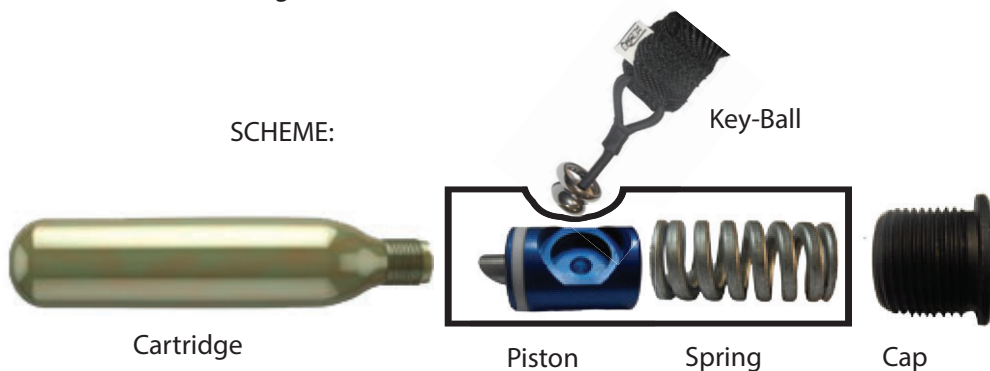
Remove the airbag from the jacket before washing.

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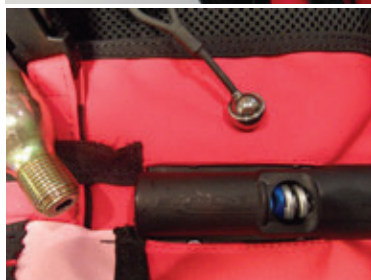
## 6. Re-assembling after activation

Before re-assembling check for any external damage and have a new cartridge ready to be screwed in. If you are unsure of the correct procedure to reset your airbag we recommend you take it to an authorised dealer for resetting. The vest can be reused if it is reset according to the following procedure, but if it is not reset correctly there could be malfunctions. You can also check out our resetting videos online.

SCHEME:



A. Position of the trigger after the activation: the ball is out of its set, the piston has slid towards the cartridge and the spring is visible.



B. Unscrew the CO2 cartridge and remove it. This canister may not be reused and must be replaced with a new one.



C. Unlock the cap with the 5mm allen wrench supplied with the airbag. You can use your fingers at some point. Do not unscrew the bearing cap completely. 12mm out of the cylinder is enough.



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D. Place the piston back to its location with your finger or with the allen wrench through the cartridge hole. Be careful not to damage the piston's needle.



E. Place the ball bearing back in the recess. Make sure the ring around the ball bearing is inserted into the recess of the silver piston and is flush.



F. While ensuring that the ball bearing remains flat in its set, begin to tighten the cap manually.



G. Finish tightening the cap with the 5mm allen wrench. The end cap must be tightened until no thread is showing and the cap will turn no more.



H. Now insert your new CO2 cartridge ensuring that it is screwed fully by hand so that thread doesn't shows. Don't not over tighten. The cartridge must be practically in contact with the plastic of the trigger. If not tight enough and the cartridge will not be fully pierced, inducing slow or no inflation.

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## 7. Storage

Follow the guidelines below to enjoy long and reliable use of your airbag garment:

- Avoid high temperatures (direct sunlight, if left in a vehicle, near a heat source or flame).
- Do not leave exposed to the rain when not riding
- When stored, do not expose to steam or excessive humidity.
- When stored do not cover with anything heavy.
- Do not leave within reach of rodents or other animals.
- Do not fold or roll up for prolonged periods. It is best to leave the airbag on a hanger.

## 8. Replacement

- If the airbag garment or the interior materials (fabrics, sheaths) are torn, worn out and the internal bag is visible.
- If any breaks, cracks or corrosion appear on the trigger mechanism or gas cartridge.
- If the lanyard is threadbare or frayed.
- In the event of deterioration or significant fading in the materials.

## 9. Disclaimer

Please note, no body protector can prevent death or serious injury in certain accidents

- Helite will be held in no way responsible for any bodily injury or death, and/or property damage that may occur whilst using any Helite airbag garment.
- Helite accepts no responsibility or liability for any improper installation and usage of any of its products.
- All Helite airbag garments are rigorously tested before being sold. Every airbag garment is inflated to double the pressure as it would be when inflated normally, however we cannot guarantee the airbag garment will inflate every time or be held responsible should it not.
- Helite cannot be held responsible should the airbag garment not inflate.
- The Helite airbag garment protects only when inflated.
- Any modification or misuse could lead to malfunction.
- It is recommended not to wear any garment or backpack over the Helite airbag garment.
- Currently little data exists on the use of airbag garments by pregnant women. However, we suggest that the Helite airbag garment is not worn beyond 18 weeks pregnancy to avoid the theoretical risk of spontaneous miscarriage / preterm labour, amniotic fluid embolisation, abruptio placenta and isoimmunization.