

MANUAL

USER



POINT

TWO™

AIR VESTS

pointtwoairvests.com

THE BEST RIDES

ARE THE SAFE ONES.

But, you already know that. It's why you have this guide. Please, read it carefully to get the most from your new air vest.

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CONTENTS

Products covered by this information:

ProAir2/MC Superlite /S

Point Two's ProAir2/MC Superlite /S inflatable body protector features the proven Point Two advanced inflatable airbag system to produce truly innovative and superior levels of protection for motorcyclists.

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1. Testing and Approval

ProAir2/MC Superlite /S body protector

This body protector has been tested against the manufacturer's specifications and Ec Type-Examination certification issued by SATRA Technology Centre, Kettering, UK (European Notified Body number 0321). It conforms to the requirements of EN1621-4:2013 "Motorcyclists' protective clothing against mechanical impact – Part 4: Motorcyclists' inflatable protectors – Requirements and test methods" (for the airbag system) - **with the specific exception of clause 4.10.2 "Activation energy"** - plus EN 1621-2:2003 "Motorcyclists' protective clothing against mechanical impact - Part 2: Motorcyclists' back protectors - Requirements and test methods" (for the integrated foam back protector).

This body protector is CE marked to denote compliance with the EU Personal Protective Equipment Directive 89/686/EEC.

2. Protection

The integrated back protector meets the requirements of European Standard EN 1621-2:2003, which specifies two performance levels as follows:

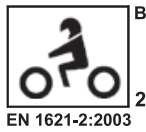
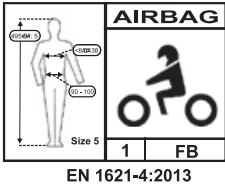
Level 1 protectors are impacted at 50 Joules and the mean transmitted force recorded by the apparatus is required to be below 18 kN with no single value above 24 kN. This is the lowest performance class recognised by EN 1621-2:2003.

Level 2 protectors are impacted at 50 Joules and the mean transmitted force recorded by the apparatus is required to be below 9 kN with no single value above 12 kN. This is the highest performance class recognised by EN 1621-2:2003. In order to provide higher impact protection, Level 2 products may be heavier and or thicker than Level 1 products.

It is important that you choose the level of protection most suitable for your riding activities.

The back protector integrated into the ProAir2/MC Superlite /S has been tested and approved to the performance class stated (see below) when the airbag is not inflated.

Label fitted to garments featuring a Level 2 performance class back protector



Left: EN 1621-4:2013 pictogram for a Level 1 airbag offering full back protection.

Right: The vest also features an EN 1621-2:2003, Level 2 full back protector.

When the airbags are fully inflated, the ProAir2/MC Superlite /S provides additional protection to the back and torso from impacts resulting from a fall from a motorcycle. Impacts may be against soft or hard ground, or objects such as trees, vehicles, posts or rails.

- Products meeting the requirements of the technical specifications are intended to reduce the severity or incidence of soft tissue injuries such as bruising, contusions, cuts and abrasions.
- Products meeting the requirements of the technical specifications may reduce the severity and/or incidence of some more serious injuries such as minor fractures.
- Products meeting the requirements of the technical specifications cannot significantly mitigate against major injuries, such as serious fractures resulting from extreme impact forces or torsion/flexion/bending/crushing injuries and neurological spinal injuries. Currently available materials and technology do not allow this level of protection to be attained in products which would be acceptable to wear and which would allow physical activities to be conducted and completed satisfactorily.



WARNING: Injuries cannot be entirely prevented by this body protector, but should be reduced in severity. Injuries cannot be prevented in accidents involving severe torsion, flexion, extension or crushing of the body. Protection from neurological spinal injury is not guaranteed, although testing at the Transport Research Laboratory has shown that skeletal spinal injuries may be reduced in severity or prevented. When inflated, the ProAir2/MC Superlite /S's airbag system offers the collar of the neck and trunk more support, thus reducing the risk of over bending the spinal column. The ProAir2/MC Superlite /S body protector cannot guarantee the rider absolute safety and does not protect the rider from all injuries.

Special note: Activation energy testing (clause 4.10.2 of European Standard EN 1621-4:2013)

The triggering system of the Point Two ProAir2/MC Superlite /S body protector has been designed to minimise the risk of ‘false triggerings’ when riding a motorcycle and when stepping off a motorcycle. Point Two’s engineers discovered that a triggering system which satisfies the requirements of the activation energy test in EN 1621-4:2013 could inflate the airbag under normal riding conditions, which could cause the wearer to lose control of their motorcycle. The Point Two system therefore operates at much higher activation energy than permitted by the European Standard and cannot therefore be claimed to fully conform to EN 1621-4:2013. Certifying body, SATRA Technology Centre, accepted Point Two’s evidence and has approved the ProAir2/MC Superlite /S as conforming to the requirements of EN 1621-4:2013 with the specific exception of clause 4.10.2 “Activation energy”. Testing was conducted at maximum duration inflated time, 5 seconds after inflation.

Fitting

To benefit from the protection offered by your ProAir2/MC Superlite /S body protector, you should ensure that it covers the areas that it is designed to protect, that no discomfort is caused by the garment when you are in a riding position and that you are able to maintain a full range of movements. When correctly worn and inflated, the ProAir should cover the following areas of the body:

- The bottom edge should be not less than 25mm below the ribcage anteriorly, and should reach the pelvis laterally
- Posteriorly, the edge should be not less than 15cm below the level of the top of the pelvis on an average adult
- The top of the back of the protector should just reach the level of the seventh cervical vertebra (the prominent bone at the base of the neck)
- The front of the protector should reach the top of the sternum
- The body protector should cover the lateral 75% of the collar-bone.

Location and adjustment

The ProAir2/MC Superlite /S is intended to be worn as the

outermost layer of motorcyclists' clothing. Remove any pointed objects such as pens, pins, glasses and mobile phones from your clothing before putting on the ProAir2/MC Superlite /S body protector.

Unfasten the buckles or main zip and put on the ProAir2/MC Superlite /S body protector. Refasten the buckles or zip. Put your hands inside the side opening and, turning them sideways so your hand is at 90 degrees to your body, you can easily run your hand from your chest to the bottom of the jacket without experiencing any tight spots, ensuring that there is at least a 7.5 cm/3" gap between your body and the lining of the body protector. If necessary, use the buckle and Velcro fastener straps to adjust the fit.



WARNING: The safety features of the ProAir2/MC Superlite /S only work when all fastenings are securely closed.



WARNING: It is important that the ProAir2/MC Superlite /S body protector is not fastened snugly to the body, as the airbags require space in which to inflate. If, when inflated, the /S model body protector is too snug, it may be necessary to adjust the straps.

If, despite following the above instructions, you are unable to obtain a comfortable, secure fit, an alternative size may be required. Consult the retailer if in any doubt.

Size Range

Take measurements according to the pictogram (see right - 2/MC Superlite /S size 5 depicted) and select the appropriate size from the size chart. The products described in this technical file are available in the following sizes (all dimensions in centimetres):

ProAir2/MC Superlite /S

Size	Height	Chest	Waist	Back protector torso length
5 (AM)	162 - 172	95 - 105	90 - 100	44
6 (AL)	170 - 180	100 - 110	95 - 105	44
7 (AXL)	178 - 188	105 - 115	100 - 110	44

Material Content and Cleaning

Outer cover: 100% Polyester. Lining: 100% Polyester. Wipe clean with lukewarm water only and place on a hanger in a well-ventilated space to dry. Do not machine wash, use bleach, tumble dry or iron.



The materials from which this body protector is manufactured are not known to cause allergic reactions generally.

Storage and Transportation

Place on a clothes-hanger, and store in a dry, well-ventilated environment away from direct sunlight and extremes of temperature. Do not place heavy objects on top of the garment, as these may cause damage to the airbag system. Do not sew or stick any thing onto the body protector as it could pierce the airbags and prevent them from working properly.

Maintenance and Obsolescence

Frequent visual inspection should be made for signs of obvious wear, especially after any accident. In particular, check that all areas are in good condition where the airbag system is present (i.e., no rips or tears) before each use. If you suspect the airbag may be damaged, reset the trigger, fit a new cylinder, and pull the lanyard to inflate the airbag. If it does not inflate correctly, exhibits reduced pressure, or deflates without removing the air canister, return your ProAir2/MC Superlite /S to Point Two for professional inspection and repair. The garment should be replaced if in any doubt.

The ProAir2/MC Superlite /S air vest should be sent in for servicing annually to have the airbag replaced. Failing to do so could cause the vest to not activate or inflate properly. The service life of the foam back protector insert in normal conditions should be up to three years.

Use with additional personal protective equipment

The ProAir2/MC Superlite /S and fitted back protector are components of motorcyclists' clothing and are designed to be used with the following, additional PPE:

- A safety helmet, with fitted or separate eye protection where applicable
- Other, compatible items of PPE giving protection to body areas of the wearer not protected by the products in this application alone (where applicable); including any one or more items of the following:
 - o Limb protectors meeting the requirements of EN 1621-1.
 - o Outer clothing providing protection from other risks which may occur during the activity, such as cuts, grazes and abrasions. (Note: The ProAir2/MC Superlite /S must always be worn as the outermost layer of clothing).
 - o Sturdy boots and gloves.

Product Labelling


The following labels appear on your ProAir2/MC Superlite /S body protector:

Below left: Main garment label.

Below right: EN 1621-4:2013 airbag label. The "1" and "B" within the box denote that the product meets the Level 1 requirements of motorcyclists' airbag standard EN 1621-4:2013 and provides protective coverage to the wearer's back ("B").

Below bottom centre: EN 1621-2:2003 back protector label. The “B” and “2” to the right of the box denote that the product incorporates a full back protector meeting the highest, Level 2 requirements of EN 1621-2:2003

Bottom right: Material content, cleaning instructions and year of manufacture.



Point
two

Email: info@pointtwo.co.uk
Web: <http://www.pointtwo.co.uk>

ProAir2/MC Super Lite
Motorcyclist's body protector
with integrated airbag system

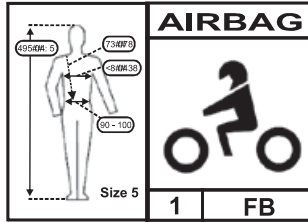
CE 

Directive 89/686/EEC

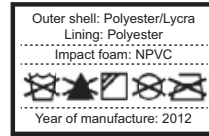
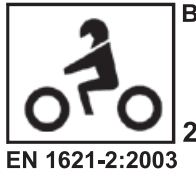
This product has been type-examined and certification issued
by SATRA Technology Centre, Notified Body No. 0321

THIS BODY PROTECTOR SATISFIES THE
REQUIREMENTS OF EN 1621-4:2013
(EXCLUDING CLAUSE 4.10.2 "ACTIVATION
ENERGY" - SEE INSTRUCTIONS BOOKLET
FOR DETAILS) AND EN 1621-2:2014

Do not use without the EN 1621-2 compliant
back protector insert in place



EN 1621-4:2013



Special Instructions for the Point Two Airbag System



IMPORTANT: Please read these special instructions carefully in order to ensure optimum protection is provided by the ProAir2/MC Superlite /S's airbag system, which is designed to keep the spinal column supported and absorb shock. Failure to follow the instruction could lead to your body protector malfunctioning or reduce its effectiveness.

The ProAir2/MC Superlite /S is worn like any other conventional outer garment when riding a motorcycle (Note: it must always be worn as the outermost layer of clothing, as wearing other garments on top of the vest could affect its ability to protect and may cause an injury due to the pressure of inflation expanding inwards instead of outwards). The wearer attaches a lanyard to the frame of the motorcycle, at the rear of the fuel tank, and, when they fall or are thrown from their motorcycle, the lanyard linking them to the motorcycle tightens and forces out the release pin from the trigger body, which in turn allows a spring to push the piston into the neck of the CO₂ cartridge. The CO₂ is then discharged into the airbags until they reach full inflation.

Inflation of the vest will be maintained until the gas cartridge is removed.

Point Two requires its retailers to provide every purchaser of a ProAir2/MC Superlite /S body protector with the opportunity to experience a test inflation of their new garment. It is highly recommended that you take advantage of this, as you will then know what to expect when the system is activated in response to a real incident and how the body protector feels when inflated. You may experience a feeling of slight restriction while the vest is inflated. Most wearers do not find this troublesome, particularly if they have experienced the test inflation. Those who still feel particularly restricted can release the main fasteners of the vest in order to ease the pressure, which we recommend is also done as part of the test inflation process. The canister can also be removed, which will cause the vest to quickly deflate. The test inflation experience is also an opportunity for the retailer to demonstrate and talk you through how to reset the airbag system. This is also covered in detail later in this information.

The Point Two Airbag System

The Airbags

The airbags are made of high-quality resistant polyurethane sheaths, which provide the best possible shock absorption. It is possible for the airbags 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 50C.

The Release Pin

A force, applied to the connecting lanyard, is required to pull the release pin from the trigger body. This releases a spring which forces a needle to perforate the CO2 canister, releasing the gas into the airbags. A pull from any direction will detach the release pin from the trigger body.



Warning! For your own safety, do not dismantle the release pin or remove any parts

The Gas Cartridge (CO2)

When replacing the gas cartridge, use only a genuine Point Two part of the correct size. The capacity of CO2 is stamped on the canister on the CO2 line. Replacement gas (CO2) cartridges can be obtained from Point Two Ltd. Please call the UK office at 01403 732128.

Adult sizes

Type: CO₂

Canister volume: 60cc

Weight: 45g 3 3g

Container: cast steel; welded tap

Reference: LS-6013-ew-Cn3L-45



Important!

- **The cartridge should be stored and used in temperatures below 45C.**
- **The cartridge must be used at a temperature over 0C. If stored under 0C, warm up before use or replace with a cartridge which has been warmed in an indoor environment.**
- **Do not expose full cartridges to naked flames.**
- **Do not leave full cartridges in the car in high temperatures.**
- **If rust or other corrosive marks appear on the outer surface of the cartridge, change it immediately and dispose of the corroded cartridge in a safe and environmentally-friendly manner.**
- **Ensure that a spent cartridge is completely empty before removing it from the trigger system.**
- **Only install genuine Point Two gas cartridges of the same size sold with the ProAir2/MC Superlite /S body protector.**
- **Once the gas cartridge is installed, do not unscrew or remove it unless replacing the used cartridge or to adjust the middle Velcro fastener, after which time the new canister should be replaced and locked into place. A new, unused cartridge must be properly inserted for the vest to function properly.**
- **Please ensure spare CO2 cartridges are kept out of children's reach at all times.**
- **Do not remove any part of the ProAir2/MC Superlite /S's trigger system.**
- **The CO2 cartridge is not re-usable. Once used, it must be replaced with a fresh cartridge of the same capacity.**
- **Check the weight of the cartridge yearly. It should not differ by more than 3g from the weight engraved on the cartridge.**

The Lanyard Attachment

Point Two recommends that the lanyard is connected behind the trigger body in the vertical plane to a suitable, safe part of the motorcycle frame, away from hot and sharp surfaces. The adjustment should be 370mm from the connection with the trigger body to the motorcycle frame.

Attaching the motorcycle section of the lanyard:



(1) Remove the motorcycle's seat.

(2) Look for a suitable position where at the rear of the tank, to which the lanyard can be solidly attached. Ensure it is clear of electrical wiring, fuel line, or any other items.



(3) The length of the lanyard and its position relative to the rider are important to the efficient and effective inflation of the airbag.

Attaching the lanyard to the motorcycle behind the trigger body in the vertical plane and adjusting the lanyard length so that it is not longer than 37 cm or less has provided the most efficient and reliable inflations in testing and real world incidents.



(4) Replace the seat so the lanyard is accessible at the nose of the saddle.

(5) Sit and attach lanyard to vest.



(6) Stand on the pegs. The lanyard should stretch and become taught just before full extension.

(7) Lean back. The lanyard should become taught before you fall back.

(8) If you can't stand or lean back - or if your lanyard has slack while doing so - remove the seat and adjust until it meets the guidelines.



CAUTION: Make sure the lanyard cannot wrap around any part of the motorcycle when riding. Adjust the length accordingly, check that it doesn't restrict the rider's normal range of movements and that the chosen fixing point is sturdy. You should be able to step off the motorcycle and stand immediately alongside it without fully extending the lanyard.

Users are responsible for ensuring that they have the correct length of lanyard and have attached it to the motorcycle.

The lanyard clip and trigger loop must be secured, otherwise your jacket will not inflate in the event of a fall.

Considerable force is required to activate the airbag system: it should not activate during normal use. Should the lanyard catch on any obstruction, accidental activation could occur. In the event of a fall where the rider stays in the saddle, the

airbag system cannot be activated until the activation distance (full stretch of the lanyard) and activation force are both reached. The integrated foam back protector is present to offer some protection in these circumstances.

Always unclip and detach the the lanyard from the trigger loop before dismounting to avoid accidentally inflating the airbag system. Before this happens, however, you will experience increasing resistance from the lanyard as you try to walk away from your motorcycle. This is your reminder that you are still attached!

Precautions After Activation

Pay attention to the following points when the airbag is inflated:

- Make sure you are out of danger before removing the ProAir2/MC Superlite /S body protector.
- The airbag will remain inflated until the gas cartridge is removed.
- If the cushions are punctured when the airbag is inflated, all the chambers will empty and the jacket will deflate.
- If any external damage to the body protector is caused during deployment, take it to an authorised dealer, or phone Point Two Ltd, for servicing and replacement of the cartridge.
- In the event of serious damage to either the interior or exterior of the body protector, it may not be possible to repair it.

Resetting the Trigger System and Replacing the CO₂ Cartridge

If after reading the following instructions you remain unsure of the correct procedure to reset your ProAir2/MC Superlite /S's airbag system, we recommend you take it to an authorised dealer for resetting and a further demonstration of how you can reset the system yourself. The ProAir2/MC Superlite /S body protector can be reused if it is reset according to the following procedure, but if it is not reset correctly there could be a malfunction. Using the ProAir2/MC Superlite /S body protector without a correctly set airbag trigger system could deprive the wearer of the protection provided by the airbags.

Resetting the Trigger System



IMPORTANT: These steps must be followed in sequence before removing a spent cartridge to avoid damaging the release pin. We recommend that an adult resets the jacket after activation or contact us for advice.



A This is how the trigger looks after activation. The release pin and lanyard have detached, the piston has slid towards the cartridge and the spring (marked with an arrow) is visible.



B Unlock the empty cartridge by applying slight downward pressure and turning it anticlockwise to the right in the trigger body.



C When the retention lug on the bayonet fitting reaches the right hand side of the location slot (shown by the arrow in the picture), you will feel the cartridge loosen in the trigger body.



D Remove the empty CO2 cartridge upwards away from the trigger body.

Replacing the CO2 Cartridge and Resetting the Trigger Mechanism



IMPORTANT Please pay particular attention to the following points when reassembling the trigger system of your Point Two ProAir2/MC Superlite /S body protector:

- Check for visible external damage (holes, rips, etc.) in the fabric of the outer garment and the airbags (if visible);
- Ensure that the airbags have completely deflated;
- Always ensure the replacement cartridge is a approved, genuine Point Two in the correct size (60cc for adult sizes).



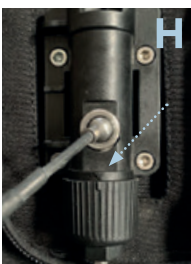
E Loosen the spring tension cap with the Allen key provided, turning it in the direction shown by the arrow, until the spring drops out of sight below the bottom of the release pin aperture of the trigger body.



F With your finger or with the allen key, push through the trigger aperture to move the piston back to its location. Ensure the recess of the silver piston is aligned with the hole in the centre of the trigger casing - as pictured.



G Insert the release pin into the aperture, making sure it is fully pushed into the recess in the piston. Hold it in place with one hand and begin tightening the spring tension cap with the other hand.



H Finish tightening the cap with the Allen key, until it is fully screwed into the trigger body and the markers on the trigger body and spring tension cap line up as shown by the arrow.



I To insert a new CO2 cartridge; first ensure it has the correct bayonet fitting. It is not possible to use screw-fitting cartridges in the Point Two trigger system. Line up the location lug on the bayonet fitting (highlighted by the top arrow in the picture) with the slot on the trigger body (highlighted by the bottom arrow in the picture).



J Insert the CO2 cartridge into the trigger body. If you encounter resistance, ensure you have correctly aligned the location lug on the bayonet fitting with the insertion slot on the trigger body.



K Using light downward pressure, twist the CO2 cartridge clockwise to the left, as shown by the direction of the top yellow arrow in the picture, until the location lug on the bayonet fitting is in the left side of the location slot.



L Feed the Pin Loop through the slot in the pocket and zip on the CO2 cartridge cover.

Conclusion: Check again to ensure accurate reassembly of the airbag trigger system bearing in mind your own safety. Any exterior or interior damage could cause a malfunction.

Thoroughly following these instructions will ensure your Point Two ProAir2/MC Superlite /S body protectors' airbag system is properly reset. If, however, you remain unsure about the resetting procedure, or are not confident of your

understanding of these instructions, please visit the Point Two website to view the instructional video, or for one-to-one assistance, speak with the supplying retailer, or contact Point Two direct.



Important Notices

- No body protector can prevent death or serious injury in certain accidents.
- Point Two Ltd will be held in no way responsible for any bodily injury or death, and/or property damage that may occur whilst using any Point Two product.
- Unauthorised modification or misuse could lead to malfunction. Point Two Ltd accepts no responsibility or liability for any improper installation and usage of any of its products.
- Point Two Ltd recommends that the ProAir2/MC Superlite /S should NOT be used by anyone who is pregnant by 18 weeks or more.
- All ProAir2/MC Superlite /S body protectors are subjected to rigorous quality assurance testing by the manufacturer. Prior to despatch, each one is test inflated at the factory to double the pressure attained when inflated through the trigger system; however, due to the fact that the nature of incidents can vary significantly and there may be occurrences, for example, where the rider never sufficiently parts from the motorcycle to initiate the inflation, Point Two is unable to guarantee the airbag will inflate every time.
- Point Two Ltd recommends that ProAir2/MC Superlite /S body protectors are serviced annually or after every six inflations, whichever occurs first, by one of the manufacturer's appointed technicians.
- No other garments or backpacks should be worn over the ProAir2/MC Superlite /S body protector.
- **Always ensure the lanyard and motorcycle attachment are fitted securely as detailed in the user manual.**
- **Point Two is unable to guarantee an air jacket will inflate in all circumstances, during the first impact between the motorcycle and an obstacle, or when the rider does not separate sufficiently from the motorcycle to extend the lanyard to its fullest extent.**
- **This garment can be deflated by the removal of the gas canister.**
- **Always replace the canister after each inflation.**
- **Do not use without the EN 1621-2:2003 certified back protector insert in place.**

**The Point Two ProAir2/MC Superlite/S body protector is
manufactured and serviced in United Kingdom by:
Point Two Limited / Servicing Address:**

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