



Please read the following important WARNING and LIMITATION of use notice carefully:

Motorcycling is an inherently dangerous activity and an ultra-hazardous sport, which may result in serious personal injury, including death. Each individual motorcycle rider must be familiar with motorcycling, recognize the wide range of foreseeable hazards and decide whether to assume the risks inherent in such an activity with the knowledge of the dangers involved and accept any and all risks of injury, including death. While all motorcycle riders should utilize appropriate protective equipment, each rider should exercise extreme care for safety while riding and understand that no product can offer complete protection from injury including death or damage to individuals and property in case of fall, collision, impact, loss of control or otherwise. Riders should ensure that safety products are correctly fitted and used. DO NOT use any product that is worn out, modified or damaged.

Alpinestars makes no guarantees or representations, express or implied, regarding the fitness of its products for any particular purpose.

Alpinestars makes no guarantees or representations, express or implied, regarding the extent to which its products protect individuals or property from injury, death, or damage.

Table of Contents

Legend for the Tech-Air® 7x Airbag System Manual	5
1. Introduction	6
2. Principles of Operation	7
3. Tech-Air® Envelope of Protection	8
4. Limitations of Use	15
5. System Overview	16
6. Sizing	19
7. Health and Age Restrictions	20
8. Compatible Outer Garment	21
9. System Installation and Fitting	23
10. Transportation of Objects inside the Outer Garment	26
11. Battery Charging	26
12. System Operation	27
13. LED Display Indications	29
14. Cleaning, Storage and Transportation	30
15. Maintenance, Servicing, Lifespan and Disposal	39
16. Actions in the Event of an Accident	42
17. Tech-Air® App	43
18. Troubleshooting	48
19. Tech-Air® Support	49
20. Certification Information	49
21. Important Information for Users WARNING!	62

Legend for the Tech-Air® 7x Airbag System Manual

The following four words and icons are used in this document to provide various warnings, important information and tips about the Airbag System:

WARNING! Provides critical information which, if not followed, may cause injury, death, System malfunction or non-function, and/or an exaggerated expectation of the System's abilities.

IMPORTANT! Provides important information regarding the limitations of the System.



Tip: Provides useful advice regarding the System.

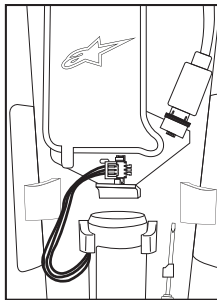
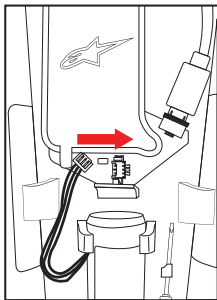


Provides information related to Tech-Air® App optional functionalities.

IMPORTANT! PLEASE READ BEFORE FIRST USE

The Tech-Air® 7x (hereinafter referred to as the "System") is shipped in its transportation mode. Before using the System for the first time, please ensure the Battery (14) is connected to the Electronic Control Unit (16) by following these instructions:

- Open the Cover (12) of the Airbag Control Unit (6)
- Locate the Battery (14) and insert the white connector at the end of the battery cable and connect it to the corresponding connector located in the Electronic Control Unit (16)



- Close the Cover (12) of the Airbag Control Unit (6)

1. Introduction

Dear User, thank you for choosing this Product!

The System is an active safety system for mainstream/recreational motorcycling, which offers protection to a motorcycle user. In the event of an accident or other triggering event, the System provides full back protection and covers also the User's shoulders, chest, and full back, regardless of the type of motorcycle. The System is designed to function in both road riding and light off-road riding situations (subject to the Off-Road limitations indicated in Section 3 "Tech-Air® Envelope of Protection").

The System comes equipped with two riding modes: "Street" and "Race". For the specific riding conditions supported by either one of these riding modes please refer to Section 3 "Tech-Air® Envelope of Protection".

The System consists of a standalone vest which is designed to protect the motorcycle user from impacts occurring during an accident. It does not provide any protection against possible abrasion during an accident; therefore, the System must be always used in combination with an outer protective garment, compatible with the System (for further information see Section 8 "Compatible Outer Garment").

WARNING! The System does offer the Dual Charge Concept. The System contains two Gas Inflators (15), which allows for two separate Airbag deployments. After one Airbag deployment, an additional Gas Inflator (15) is available for a second inflation after some minutes and System reboot. After the second deployment, the User of the System will be without further Airbag protection until the System is serviced and the Gas Inflators (15) are replaced. For further detailed instructions, see Section 16 "Actions in the Event of an Accident".

WARNING! The System, including its components, are technologically advanced pieces of motorcycling safety equipment and should not be treated like a normal motorcycle garment. Similar to one's motorcycle, the System and its components must be cared for, serviced and maintained, so that they may function correctly.

WARNING! The System MUST be used in combination with an outer protective garment, compatible with the System (Section 8 "Compatible Outer Garment"), which will provide abrasion resistance in the event of a crash.

WARNING! It is essential to read this User Guide carefully, to understand it completely and to follow the advice and warnings. If you have any questions regarding the equipment, contact Tech-Air® Support (Section 19 "Tech-Air® Support").

IMPORTANT! Without any additional notice, Alpinestars reserves all rights to, from time to time, update the software and/or the electronic components of the System. Accordingly, it is important that users register on the Tech-Air® App to receive instant notifications and updates.

2. Principles of Operation

The System consists of an Airbag Control Unit (6) with built-in sensors integrated into the Back Protector (5) and with two external sensors positioned on the shoulders, as shown in Figure 1.

The cluster of sensors consists of 3 tri-axial accelerometers (1 positioned on the back protector and 2 positioned on the shoulders) and 1 tri-axial gyroscope. These sensors monitor the User's body for shocks or unexpected movements. In the event the User's body is subject to a high and/or sudden amount of energy, the System will deploy. This may occur when the motorcycle is involved in an accident, such as when the motorcycle collides with another vehicle or object, when the rider loses control or when the rider falls off the motorcycle.

The System is equipped with a Bluetooth Low Energy (BLE) device located in the Electronic Control Unit (16). The BLE allows the System to connect directly to a mobile phone in order to receive important information from the System, while also permitting the users to access a number of other functions (for further information see Section 17 "Tech-Air® App"), the most important being the ability to update the System to the most recent version of the software.



To connect the System to the mobile phone via Bluetooth, remember to activate the Bluetooth module (by turning on Bluetooth on your mobile device) within your mobile phone's settings and make sure that you immediately download the Tech-Air® App available in the Android Play Store or from the Apple App store.

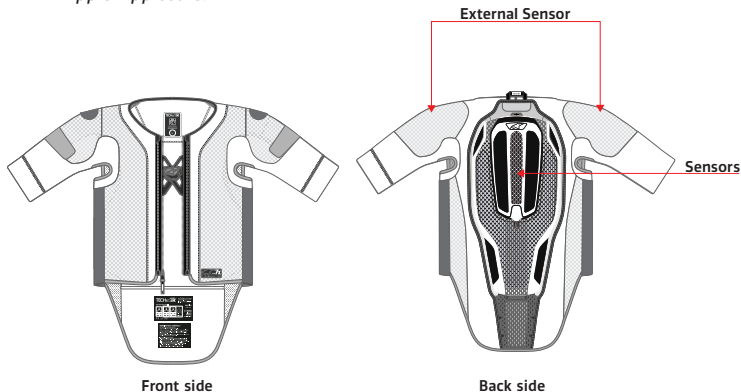


Figure 1 – Sensor Location



IMPORTANT! The System comes with two different algorithms that allow riders to ride their motorcycles in the following conditions: 1) street and light off-road paths (in "Street Mode") and 2) on closed circuit race tracks (in "Race Mode"). Users can easily switch between these two modes from Street Mode to Race Mode and vice versa by simply using the Tech-Air® App.

WARNING! The System must always be used in Street Mode when riding on public roads and NOT on a closed circuit race track. Always remember to switch from Race Mode to Street Mode at the end of your track day, as you leave the track.

WARNING! Users must always ensure, via the Tech-Air® App, that the System is running the most up to date software release. It is imperative that on the day you purchase your Tech-Air® System that you immediately check to make sure that your System has the latest version of the software installed (Section 17 "Tech-Air® App"). You can only do this by downloading the Tech-Air® App, turning on Bluetooth on your phone, and pairing the System with the Tech-Air® App.

3. Tech-Air® Envelope of Protection

In general, there are three basic factors that determine whether an Airbag System will provide protection to a User:

- Whether the forces experienced by the User's body, during an event (such as an accident), occur within the area covered by the Airbag;
- Whether the Airbag deploys before the User collides with a vehicle, an obstacle, or the ground;
- Whether the Airbag deploys before the User collides with parts or accessories of his/her own motorcycle. For example, mirrors, windscreens or tank bags.

To provide protection to a User, an Airbag System must be fully deployed. The Deployment Time (or Intervention Time) consists of the time for the sensors to detect the dangerous event (Detection Time), plus the time it takes to fill the Airbag fully with gas (Inflation Time), which, for the System is 44 milliseconds (ms) maximum based on the volume of the Airbag size.

The "Envelope of Protection" is a term used to generally describe situations and/or circumstances where the System may provide protection denoted as "inside the Envelope," and those situations and/or circumstances where it will not, denoted as "outside the Envelope".

The System protects the motorcycle user wearing the System in the event of an accident

or other triggering events; however, like any other product, there are limitations to the protection it can provide.

WARNING! No product can provide complete protection from injury (or death), or damage to persons or property in the event of a fall, accident, collision, impact, loss of control or other event.

IMPORTANT! The Intervention Time the Airbag depends on the type of accident, the type of motorcycle (e.g. scooter, custom, sports) and the speed involved.

The System is equipped with a bag that covers the areas shown in Figure 2, protecting the motorcycle user wearing the System in the event of an accident or other triggering events. Note that there are limitations to the protection it can provide as explained later in this User Manual (see Section 3.5 and Section 4 "Limitations of Use").

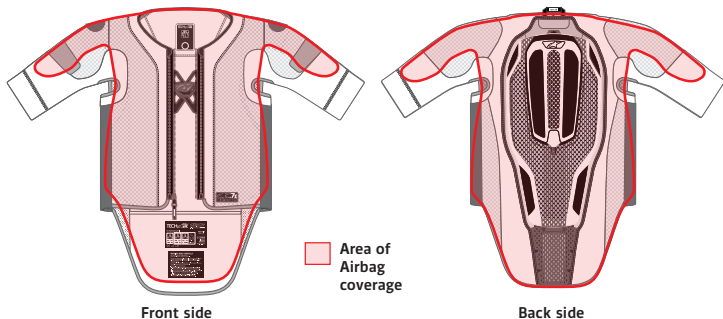


Figure 2: Area of Airbag coverage

WARNING! The System provides only limited impact protection against forces in the areas of Airbag coverage as depicted in Figure 2 and reported in Section 20 "Certification Information". No guarantee is given that the System will prevent injuries (including severe or fatal injuries) inside and/or outside the areas of Airbag coverage or the Envelope of Protection.

WARNING! The System cannot prevent accidents or injuries to the User.

WARNING! No protective device, including the System, can provide protection against all possible sources of injury and therefore cannot provide complete protection against injuries.

WARNING! Wearing the System is not a substitute for wearing other protective motorcycling clothing and gear. To provide full potential protection, the System must always be worn in conjunction with suitable motorcycling gear. Complementary personal protective equipment (PPE) garments could be: jackets or trousers (in accordance with EN 17092 parts 2, 3, 4 and 5), other impact protectors, boots (in accordance with EN 13634) and gloves (in accordance with EN 13594) and visibility clothing (in accordance with EN 1150) or high visibility accessories (in accordance with EN 13356).

WARNING! Always check that the appropriate Riding Mode is selected either by means of the Tech-Air® App and/or checking the LED Display (2) indications.

WARNING! Always make sure to select Street Mode when riding on public and/or gravel roads. Only use Race Mode for closed circuit racetrack use.

As summarized in Table 1, for the System the Envelope of Protection includes crashes against obstacles or vehicle and loss of control crashes (commonly referred as 'low-side' and 'high-side' falls).

IMPORTANT! There are some limitations on the deployment of the System even inside the Envelope of Protection (like a high impact angle on a crash against an obstacle or vehicle, or low impact forces). In general, the System is not expected to deploy if the impact energy is too low.





Incident Type		Street Mode	Race Mode
Crashes	Crashes against Obstacles or Vehicle 	✓	✓
	Stationary Crashes 	✓	✗
Loss Of Control	Low-Side Crashes 	✓	✓
	High-Side Crashes 	✓	✓

Table 1: Summary of the Envelope of Protection for Street and Race Modes.

Envelope of Protection for Crashes against Obstacles

In the case in which the user of a motorcycle strikes a vehicle or an obstacle, the System is expected to have an intervention time within 200ms from the moment of first contact between the motorcycle and the vehicle (or obstacle), within the arrival speed and impact angle conditions reported in Table 2 and Figure 3 below. Refer to Section 20 "Certification Information" for the complete list of tests.

Arrival Speed	From 25km/h (15mph) to 50km/h (31mph)
Impact Angle	From 45° to 135°

Table 2: Crash Conditions – Crashes Against Obstacles or Vehicle

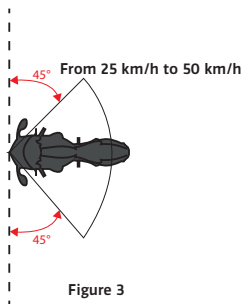


Figure 3

IMPORTANT! Figure 3 outlines the Envelope of Protection where the System is expected to inflate before the User's body contacts an obstacle. At speeds above 50km/h the System is expected to deploy regardless of the impact angle, but outside the Envelope of Protection the System may not be fully inflated before there is contact between the obstacle and the User.

IMPORTANT! If the speed of the motorcycle is less than 25km/h (15 mph), the System may not deploy at the time of the collision/crash but may deploy if the user suddenly falls from the motorcycle after the impact.

Envelope of Protection for Stationary Crashes

In the case in which a vehicle strikes a stationary motorcycle's User, the System is expected to have an intervention time within 200ms from the moment of first contact between the motorcycle and the vehicle (or obstacle), within the conditions reported in Table 3 and Figure 4 below. Refer to Section 20 "Certification Information" for the complete list of tests.

Arrival Speed	From 25km/h (15mph)
Impact Angle	From 45° to 135°

Table 3: Crash Conditions - Stationary Crashes

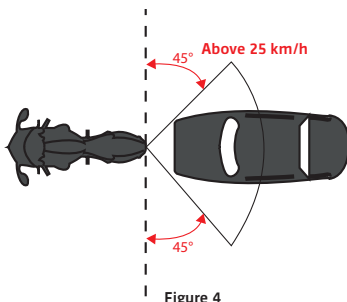


Figure 4

Envelope of Protection for Low-Side Falls

A low-side fall is a type of motorcycle crash usually occurring in a turn in which the rider falls towards the motorcycle's leaning side; the rider typically contacts the ground behind the sliding motorcycle and can also start tumbling or rolling while sliding. A low-side fall is caused when either the front or rear wheel slides out, as a result of either too much braking into the corner, too much acceleration through or out of the corner, or too much speed carried into or through the corner for the available grip. A low-side fall may also be caused by unexpected slippery or loose material (such as oil, water, dirt, gravel, or leaves) on the road surface. In these conditions, the System is expected to have an intervention time within 200ms from the moment of first contact with the ground. Refer to Section 20 "Certification Information" for the complete list of tests.

WARNING! During Low-Side Falls, the System may not deploy before the first impact with the ground, but may deploy during the following sliding phase, if present.

Envelope of Protection for High-Side Falls

A high-side is a type of motorcycle crash characterized by sudden and violent rotation of the bike around its longitudinal axis. This generally happens when the rear wheel loses traction, skids, and then suddenly regains traction, causing the rider to be thrown opposite and head-first from the side of the motorcycle or over the handlebars. In these conditions, the System is expected to have an intervention time within 400ms from the moment in which the loss of control of the bike is irreversible. Refer to Section 20 "Certification Information" for the complete list of tests.

Envelope of Protection: Limitation of Use

There are some limitations to the deployment of the System even inside the Envelopes of Protection, when, in general, the environmental conditions prevent the System from measuring acceleration and/or angular speed sufficient to activate the System.

WARNING! If the crash conditions are outside the Envelopes of Protection described above, the System may not deploy if the acceleration and angular speed measured by the System are not sufficient to activate the System.

WARNING! The User does not need to be involved in a crash for the System to deploy. For example, the System will deploy if the User falls while wearing the System, such as when dismounting from the motorcycle. These types of "non-riding" deployments are not failures of the System.

Light Off-Road Riding

The System may be used off-road, IN A LIMITED CAPACITY, and for riding on gravel roads only, and only when Street Mode is selected. For the purpose of using the System off-road, the definition of a gravel road is:

- An unpaved road surfaced with gravel.
- A road which has a minimum width of 4m (13ft).
- A road that has no gradients +/-30%.
- A road that has no ruts, steps, or holes greater than 50cm (19.5") in depth.

4. Limitations of Use

WARNING! USERS SHOULD BE AWARE THAT NO PRODUCT (INCLUDING PROTECTOR/S) WILL PROVIDE COMPLETE PROTECTION AGAINST INJURY AND NO GUARANTEES, WARRANTIES (EXPRESS OR IMPLIED) ARE MADE REGARDING THE PROTECTOR'S ABILITY TO AVOID RISK OF INJURY.

WARNING! Since the System is sensitive to sudden body movements and shocks, the System is to be used **ONLY** for motorcycling within the conditions and limitations delineated above. The System is **NOT** for use in:

- a. Any racing or competitive events (unless the Race Mode is selected);
- b. Enduro, Motocross, or Supermoto events;
- c. Motorcycle stunts; or
- d. Side skidding, wheelies, etc.;
- e. **ANY** non-motorcycling activities.

WARNING! Due to shocks, movement and/or other input detected and/or received by the System while in use, although unlikely, the System may deploy even though there is no crash event.

WARNING! Depending on the type of motorcycle, for example if the User has a scooter or a trials bike, it cannot be guaranteed that the System will inflate before the User collides with parts of the motorcycle, or other objects.

WARNING! The System's working temperature is between -20° and $+50^{\circ}$ (-4°F to 122°F).

WARNING! Do not use the System at 4,000 meters above sea level or higher, as low pressure may damage the internal Battery (14).

WARNING! This System's Back Protector (5) will provide limited protection against impacts in the event of an accident or fall.

5. System Overview

The diagrams below illustrate the different parts of the System. The numbered parts are used as a reference to guide you through this Airbag System Manual.

TECH-AIR® 7x SYSTEM

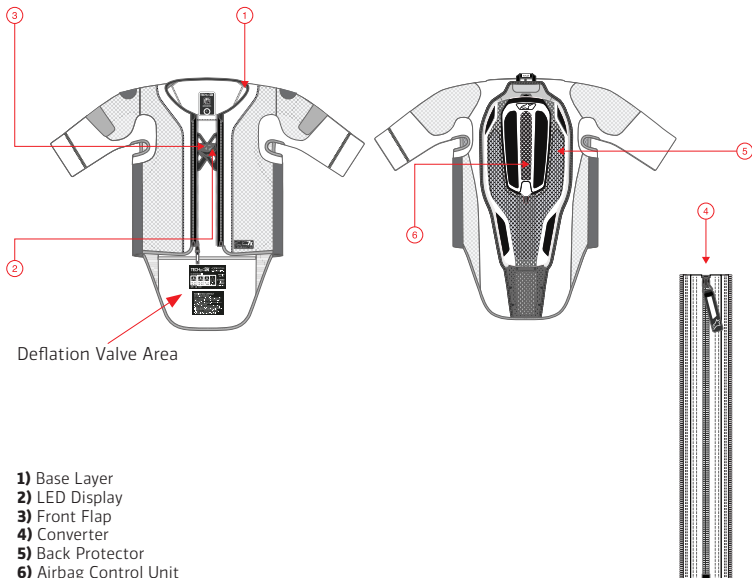
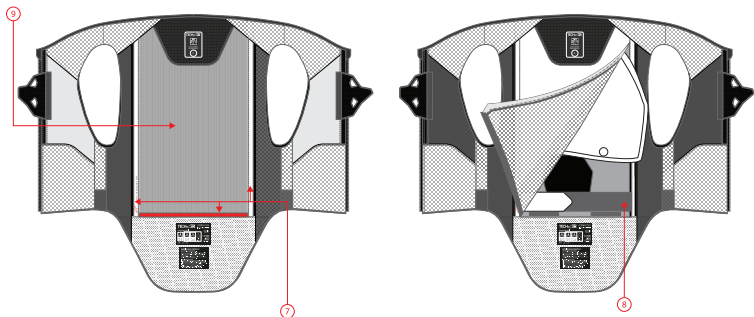


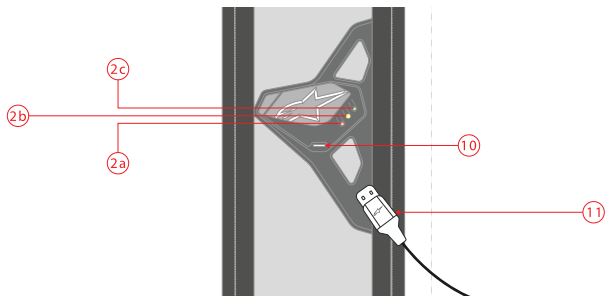
Figure 5



- 7)** Internal Opening
- 8)** Fitting Belt
- 9)** Comfort Padding

Figure 6

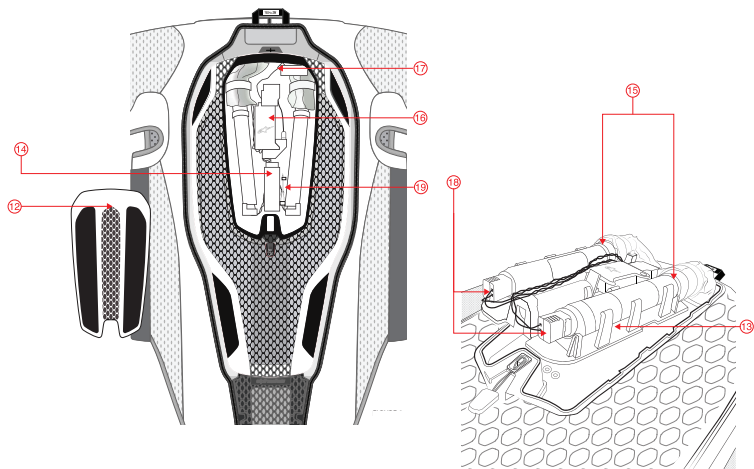
TECH-AIR® 7x LED DISPLAY (2)



- 2a)** Red LED
- 2b)** Yellow LED
- 2c)** Green LED
- 10)** Type C USB Portal
- 11)** Type C USB Cable

Figure 7

AIRBAG CONTROL UNIT (6)



- 12) Cover
- 13) Gas Inflater Housing
- 14) Battery
- 15) Gas Inflators

- 16) Electronic Control Unit
- 17) External LED Display Connector
- 18) Squib Connectors
- 19) Screwdriver

Figure 8

6. Sizing

The System is available in sizes from XS to 2XL.

Table 4 below lists the sizes of the System, the corresponding chest, waist and outer arm lengths, and the suggested height of a rider, designed to assist with the selection.

SIZE	XS		S		M		L		XL		XXL	
A. CHEST (CM)	83.5	89	89	94.5	94.5	100	100	105.5	105.5	111	111	116.5
B. WAIST (CM)	69	75	75	81	81	87	87	92	92	97	97	102
D. OUTER ARM (CM)	57.5	59	59	60.5	60.5	62	62	63.5	64	65.5	65.5	67
E. HEIGHT (CM)	163	168	168	174	175	179	180	184	185	189	190	194
A. CHEST (IN)	32 7/8	35	35	37	37	39 1/7	39 3/8	41 1/2	41 1/2	43 2/3	43 2/3	45 7/8
B. WAIST (IN)	27 1/8	29 2/4	29 1/5	31 1/3	31 1/5	34	34 1/4	36 2/9	36 2/9	38 1/5	38 1/5	40 1/6
D. OUTER ARM (IN)	20 1/4	21	23	23 1/3	23 1/3	24 1/6	24 2/5	25	25 1/5	25 4/5	25 4/5	26 3/8
E. HEIGHT (IN)	64 1/8	66 1/8	66 1/5	68 1/5	68 1/3	70 1/5	70 7/8	72 9/16	72 5/6	74 2/5	74 4/5	76 3/8

Table 4: Men's Size Guides Tech-Air® 7x System

BODY MEASUREMENT LOCATIONS

A. Chest

Measure around the fullest part, under the armpits, keeping the tape horizontal.

B. Waist

Measure around the natural waistline, in line with the navel, keeping the tape horizontal.

C. Hip

Measure around the fullest part of your hips, about 20cm below waistline, keeping the tape horizontal.

D. Thigh

Measure around the thigh just below the crotch, keeping the tape horizontal.

E. Inner Leg

Stand against a wall, ask someone else to measure from the crotch to the bottom of your leg.

F. Outer Arm

Measure from shoulder (Humerus) to wrist.

G. Height

Stand against a wall, ask someone else to measure from the floor to the top of your head, keeping the tape vertical.

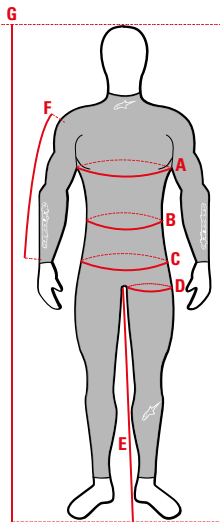


Figure 9: Body Measurement Locations;

7. Health and Age Restrictions

IMPORTANT! In Europe, the Pyrotechnic Directive (2013/29) prohibits the sale of pyrotechnic articles to anyone under the age of 18.

WARNING! The System must not be handled by children at any time.

WARNING! In the event of a crash, inflation of the System will cause sudden pressure to be applied across the back and torso of the motorcycle user. This can cause discomfort and for users in poor health, this may cause complications.

WARNING! The System must not be used by persons with a history of heart problems, or other diseases, conditions, afflictions, or illnesses which may weaken the heart.

WARNING! The System must not be used by people fitted with a pacemaker or other implanted electronic medical devices.

WARNING! The System must not be used by people with neck or back problems.

WARNING! The System must not be used by women during pregnancy.

WARNING! The System must not be used by women with artificial breast implants.

WARNING! Any body piercings which coincide with the Airbag coverage area should be removed before electing to use the System, as inflation of the Airbag into and against the body piercings may cause discomfort and/or injury.

Allergy Advice

People with certain skin allergies to synthetic, rubber or plastic materials, should carefully monitor their skin each time the System is worn. If any irritation of the skin occurs, immediately stop wearing the System and seek medical advice and/or attention.

8. Compatible Outer Garment

The System must be used with an outer protective garment as the vest is not abrasion resistant. Provided that the correct sizing is selected, the System can be used with all Alpinestars' Tech-Air® Compatible Garments and Alpinestars' new generation of Tech-Air® Ready garments. The Tech-Air® Compatible Garments and Tech-Air® Ready garments are designed with stretch panels to accommodate the inflated Airbag after deployment. The System can be worn under any properly fitting textile or leather jacket with 4 cm of space around the circumference of the rider's chest.

In general, it is recommended that the User choose an outer protective garment that, when worn over the System, does not cause discomfort and does not prevent the functionality of the System.

The System can be used with any abrasion resistant garment designed for two wheeled motor vehicles provided that the garment has sufficient space to accommodate the expansion of the Airbag after the deployment. Follow the procedure described below to check if your garment is compatible with the System. Remember to ensure that you select an Outer Garment that has the proper fit, and should any protectors be present on such

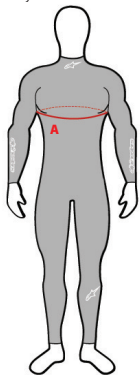
garment, that the protectors are correctly positioned. If the garment you have chosen is a leather garment, it is highly recommended that it has stretch panels to accommodate the inflated Airbag after deployment.

The System's Airbag covers the shoulder, chest, and full back area, accordingly, the System must not be used inside of a leather suit or a 2-piece leather suit, unless such leather suit or 2-piece leather suit has sufficient space to accommodate the inflation of the Airbag, as shown below, and it's not too tight in the crotch area, in order to prevent discomfort in the event of deployment.

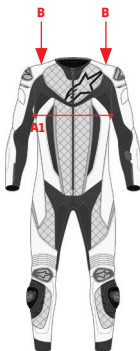
Moreover, it is highly recommended to use the System in combination with a protective garment, therefore certified in accordance with EN 17092 Parts 2, 3, 4 or 5, that can guarantee protection for the uncovered areas of the System.

IMPORTANT! When the System is used with an Outer Garment, other than those specifically designed by Alpinestars for Tech-Air® Systems, the User must verify if the Outer Garment provides enough inner volume able to accommodate the deployed Airbag as follows:

1. For the chest area, measure the circumference of the chest (A) and the garment width on the chest region (A1). The garment is compatible with Tech-Air® 7x System if $A1 > 0.5 \times A + 14$ cm ($A1 > 0.5 \times A + 5.51$ in)
2. For the Shoulders area (B), be sure that the suit can be raised up 4 cm without creating any discomfort.



Body measure



Garment measure

WARNING!

The System must **ALWAYS** be used with a correctly fitting Outer Garment of the User's appropriate body size. Use of the System with the incorrect size of an Outer Garment, or not compliant with the size check recommendations above, may result in the System malfunction or failure and injury, including severe injury and/or death.

9. System Installation and Fitting

The System can be used as a Standalone System or as an Integrated System within a compatible suit or jacket. The two installation modes are described below.

Standalone System Installation

To use the System as a Standalone System with an Outer Garment, the User must go through the following steps:

1. Put on the System with the Converter (4) attached to the front.
2. Close the Front Flap (3) taking care to correctly attach the hook-and-loop by lining up the patches, as shown in Figure 11; the System automatically turns on as soon as the Front Flap (3) is attached to the hook-and-loop patch.
3. Once the Front Flap (3) has been correctly closed, check the LED Display (2) to verify that the System has turned on and that it has started correctly (see Section 13 "Display Indications"). In particular, the User must verify that after the System starts-up, there is no System Fault present.

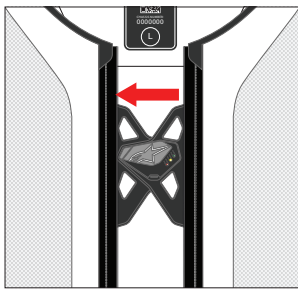


Figure 11: How to switch on the System;

4. Upon successful System start up, as indicated by the solid green LED (2c), the User can now close the central zip present on the Converter (3) and proceed to put on the Outer Garment taking care that the System remains well fitted underneath the Outer Garment, and that all fits perfectly in place. Be sure to pay particular attention to ensure that the shoulder areas of the System are correctly positioned within the sleeves of the Outer Garment.

5. Once the System has been correctly positioned on the body, close the Outer Garment.

Integrated System Installation

To use the System as an Integrated System with an Outer Garment, the User must go through the following steps:

1. System Preparation. Remove the Converter (3) and make sure that all the Velcro attachments present on the Base Layer (1) do not have their protective covers attached. There are 5 Velcro attachments (Figure 12): 4 placed on the shoulder areas and 1 positioned on the neck area. If the protective Outer Garment is equipped with a compatible Tech-Air® LED Display integrated inside the sleeve, it is possible to connect the System to the external LED Display using the External LED Display Connector (17) located underneath the Back-Protector (5) cover through the opening shown in Figure 12.

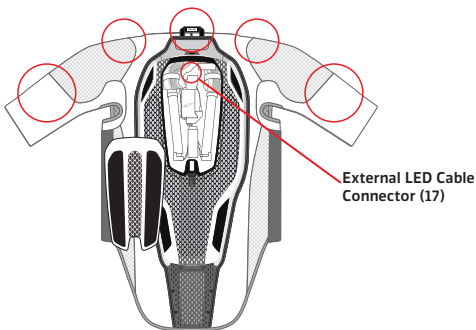


Figure 12: Velcro Attachments and External LED Display Connector (17) Locations

2. System Installation. Remove the inner liner from the protective Outer Garment. If present, first connect the integrated LED Display using the External LED Display Connector (17). Then proceed placing the System inside the Outer Garment, making sure to position all the Velcro attachments correctly. Finally, connect the zippers of the System to the zippers present on the Outer Garment. Proceed by inserting the inner liner, passing it internally to the sleeves, and make sure the Front Flap (3) is exposed to allow the System to turn on once the Outer Garment is on.

- 3. Put on the Garment.** Put the Outer Garment (with the Integrated System) on and close the Front Flap (3) taking care to correctly attach the hook-and-loop patches, as shown in Figure 11; the System automatically turns on as soon as the Front Flap (3) is attached to the hook-and-loop patch.
- 4. System Verification.** Once the Front Flap (3) has been correctly closed, check the LED Display (2) to verify that the System has turned on and that has started correctly (see Section 13 "Display Indications"). In particular, the User must verify that after the System starts-up, no System Fault is present.
- 6. Close the Garment.** Once the User has verified the regular functioning of the System, as indicated by the solid green LED (2c), the User can close the Outer Garment.

Once the System is switched on and successful startup of the System has been verified (see Section 13 "Display Indications"), the System is ready to provide the User with Airbag protection as explained under Section 3 "Tech-Air® Envelope of Protection" above. The System also activates if the User experiences a loss of control of the motorcycle which may lead to a fall. A fall from the motorcycle when stopped, may also activate the System.

WARNING! It is imperative that the System is fitted correctly, in order to provide the User with the maximum potential protection in an accident. Outer Garments which are too small will cause severe discomfort when the System is inflated, Outer Garments which are too large may not hold the System in place during a fall or accident. In case of doubts or questions regarding fit, seek advice from an authorized Alpinestars dealer.



Tip: To improve the fit and comfort of the System, a Fitting Belt (8) is present in the vest. To make the adjustment, access the belt through the Internal Openings (7) of the vest located in the back area.



Tip: The back area consists of a Comfort Padding (9) that can be left in place or alternatively removed per the rider's preference, in order to improve the comfort and breathability of the System. To remove the Comfort Padding (9), access the pocket in the back area through the Internal Openings (7) of the vest and remove the foam.

WARNING! Do NOT replace the Comfort Padding (9) with any other object and/or protection. The pocket in which the Comfort Padding (9) is contained is not designed to hold protections and/or any other type of garment or object.

10. Transportation of Objects Inside the Outer Garment

When using an Outer Garment, consideration needs to be given to the objects which may be placed inside the pockets. For example:

- Sharp or pointed objects placed in pockets may pierce the Airbag and compromise inflation
- Bulky objects may limit the Airbag expansion after deployment, potentially reducing the effectiveness of the Airbag and/or making the System feel much tighter when inflated, possibly increasing discomfort, or causing distraction or injury.

IMPORTANT! Particular attention should be paid to the contents of the internal Outer Garment's breast pocket, if any. ONLY flat objects such as wallet or mobile phone should be stored in the breast pocket.

WARNING! Under NO circumstances should a user attempt to transport objects of ANY size or shape, including sharp or pointed objects, stuffed inside the Outer Garment, as they may cause injury to the User and/or damage to the Airbag. Only blunt objects should be transported in the Outer Garment's pockets, provided that they fit completely inside the pockets.

11. Battery Charging

The System is supplied with a Type C USB Cable (11) for an easy and fast plug-in to the Type C USB Port (10).

IMPORTANT! While charging, always be sure that the USB Charger is connected to a power source sufficiently close to the System. Also be sure that the power source is always easily accessible.

Fully charge the System before the first use. To do this, connect the supplied Type C USB Cable (11) to the Type C USB Port (10), present on the Front Flap (3) of the System. Once on charge, the LED Display (2) will show a different combination of solid and blinking LEDs, according to the description provided in Section 13 "LED Indications".

IMPORTANT! The battery will only recharge when the ambient temperature is between 0°C and 40°C (32°F – 104°F).

IMPORTANT! If the battery is not periodically charged, it may take longer to fully charge.

WARNING! Do not leave the System unattended while charging the battery. Charge only in a dry location with a temperature range of 0°C to 40°C (32°F – 104°F).

Charging and Use Times

Approximately 4 hours are required to recharge a discharged battery, with the exception of the first battery charge which may require a longer time (approx. 12 hours). A fully charged battery will provide approximately 20 hours of use. If limited time is available, charging the battery for approximately 1 hour will provide approximately 7 to 8 hours of use.

Even when turned off, the System drains a small amount of current. Therefore, in case of prolonged time in between use (e.g. during the winter season) it is recommended to periodically recharge the System Battery (14) every 6 months. Not charging the System may result in permanent damage to the Battery (14) and a reduction in the duration of the System.



Tip: The System may be charged by connecting it to a computer. However, if the current output is under 1 Ampere, the charging times will be longer than those stated above.

WARNING! The System should be recharged as soon as possible when the red LED (2a) starts blinking, as a red blinking light indicates a low battery level.

12. System Operation

a) Turning On

To turn on the System, close the Front Flap (3) with the Alpinestars logo, taking care that hook-and-loop patches are correctly attached. An internal magnetic switch will detect that the Front Flap (3) is closed, and the System will turn on.

When the System turns on, the User MUST check the LED Display (2) to verify that the System starts correctly. See Section 13 "LED Display Indications" below for the meanings of the LED indicator lights.



Tip: If the System does not power on (i.e., no LED Indications illuminate) check that the Front Flap (3) has been closed correctly and be sure that the battery has charge remaining. If the problem persists, contact Tech-Air® Support (see Section 19 "Tech-Air® Support" for assistance).

IMPORTANT! The Front Flap (3) functions using magnets. Magnetically sensitive items (such as credit cards) should be kept at least 1cm away from the Front Flap area.

WARNING! In order to activate the System, the Front Flap (3) must be correctly closed taking care that the hook-and-loop patches are correctly attached and perfectly aligned.

WARNING! Always check that the appropriate Riding Mode is selected either by means of the Tech-Air® App and/or by checking the LED Display (2) Indications.

b) Turning Off

Turn the System off by opening the Front Flap (3). The System will shut down after approximately 1 second. Confirm that the System is off by checking that there are no indicator lights illuminated in the LED Display (2).

To keep the System turned off, keep the Front Flap (3) open and unzipped as shown in Figure 13. Always keep the System in this condition while stored, transported, or shipped.

WARNING! ALWAYS turn the System off by opening the Front Flap (3) as shown in Figure 13 when you are not riding a motorcycle, even if you continue to wear the System. Although the System has been evaluated for a number of non-riding activities, keeping the System turned on and/or active increases the possibility of an unwanted deployment as well as drains the battery.

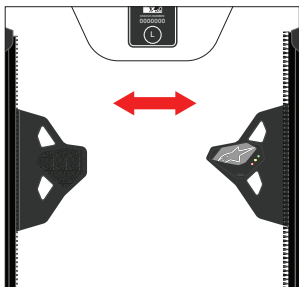


Figure 13: How to switch off the System;

c) Turning Off (Automatic)

Even if turned on, the System will automatically turn off if the System detects:

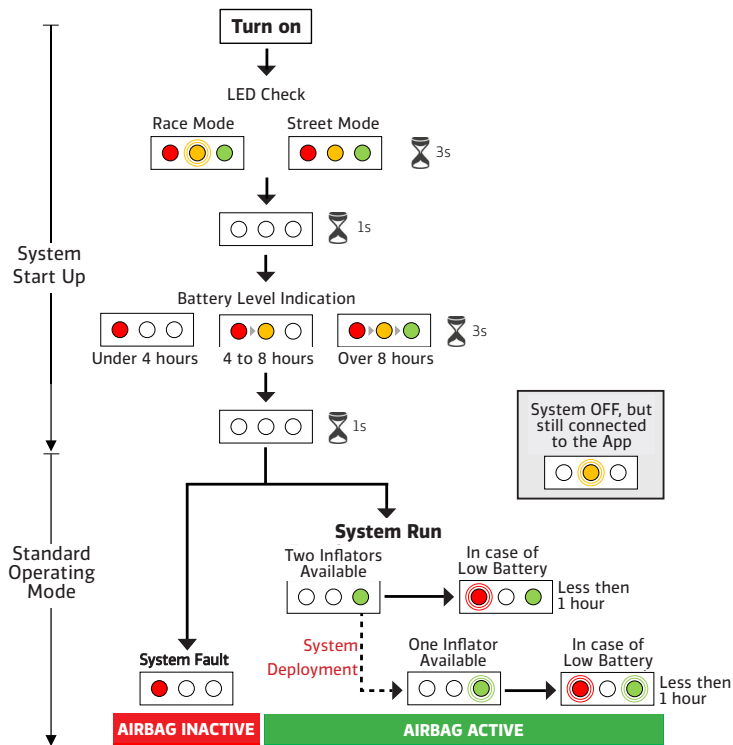
- a position incompatible with the normal usage of the System, or
- lack of activity of the System

for more than 10 minutes. When either of the above situations occur, open, and close the Front Flap (3) to restart the System.

13. LED Display Indications

The LED Display (2) has three colored LEDs which are used to indicate the status of the System.

LED Indications During Normal Use

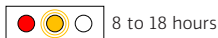


Glossary



LED Indications During Recharge

Battery Recharge



Glossary



IMPORTANT! The solid green LED (2c) indicates that the System is on.

WARNING! Any LED indication different from the solid green LED (2c) indicates that the System is not active and accordingly will NOT deploy in a crash.

Indications during battery charging

During battery charging the LED Display (2) will show a continuous blinking. When the battery is fully charged all 3 LEDs will remain illuminated.

14. Cleaning, Storage and Transportation

14.1 System Cleaning

After each use it is highly recommended that dirt and flies are removed from the System by wiping the garment with a damp cloth then drying the garment afterwards using a towel. Do NOT use hot water or any other type of cleaner or solvent, as they may compromise the integrity of the System.

In the event the garment does get wet, allow it to dry naturally, do NOT attempt to wring it out or place it in direct sunlight or next to any direct heat source over 40°C.

See the care label below for the specific washing instructions:



Do not wash with water / Do not bleach / Do not tumble dry / Do not iron / Do not dry clean

WARNING! Under NO circumstances should the System vest be washed in a washing machine, submerged in water, tumble dried or ironed. This may cause permanent damage to the System and cause malfunction.



Tip: As part of the recommended two-yearly service, the System will be disassembled and washed.

14.2 Base Layer Cleaning

The Base Layer (1) is considered to be the System WITHOUT including any of the electronic components (Electronic Control Unit (16), wiring, and LED Display (2), Gas Inflators (15) and/ or Airbag.

After each use it is recommended that dirt and flies are removed by wiping them away with a damp cloth or wet sponge.

WARNING! Under NO circumstances should the System (neither BOTH fully assembled nor fully disassembled) be washed in a washing machine, tumble dried or ironed, as this may cause permanent damage to the System and cause malfunctioning of the System. DO NOT WASH THE SYSTEM OR ANY OF ITS PARTS IN A WASHING MACHINE, DO NOT PUT IT IN THE DRYER, AND DO NOT IRON IT.

Before washing, it is necessary to remove some parts of the System, including the System's electronic components, wiring and/or other components of the System, as described in the next paragraphs.

In order to properly clean the Base Layer (1), as stated in the reported care label, the User MUST follow the steps detailed below.

WARNING

To maintain the base layer, refer to the instructions located in the User Manual

14.2.1 Removal of Non-Washable Parts

The first step that the User MUST follow is the removal of non-washable parts, which include: Airbag, Gas Inflatators (15) and ALL the electronic components, including the LED Display (2) and the wiring. This operation can be done following these indications:

1. Detach the Airbag. Access the Airbag through the Internal Openings (7) shown in Figure 6 and proceed to open all the connection clips arranged as shown in Figure 14. Each clip has a color and number to assist the User in proper assembly. The System has a total of 11 Connection Clips: 2 clips on the left shoulder area (#2 blue - #2 red), 2 clips on the right shoulder area (#2 blue - #2 red) area, 3 clips on the left side of the chest area (#3 red - #4 green - #5 blue), 3 clips on the right side of the chest area (#3 red - #4 green - #5 blue) and 3 clips for the back area (#1 green - # blue - # red). It is suggested that the User detach the clips beginning with the clips located on the back area, then detach the clips on the chest area and, finally, detach the clips on the shoulder area (see Figure 14).

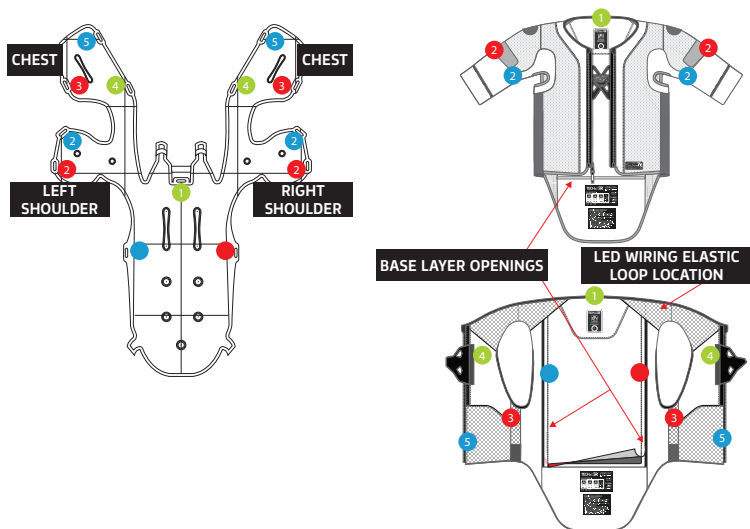


Figure 14: Connection clip locations on the Airbag (left) and on the System's Base Layer (1) (right)

2. Detach the Electronic Components. Remove the various electronic components (including the LED Display (2) and peripheral sensors) by separating them from the Base Layer (1) (Figure 15). To remove the LED Display (2), open the Velcro located under the Front Flap (3) and gently pass the LED Display (2) through the opening of the vest. When you remove the LED Display (2), be careful as you pass the electronic LED board through the elastic loop (located in the shoulder area) that is used for the correct positioning of the cable. To remove the peripheral sensors, access the shoulder area internally, open the Velcro, and remove the sensors from their pockets. Finally, access the pocket inside the upper back area and open the Velcro very widely, so as not to obstruct the removal of the various components.

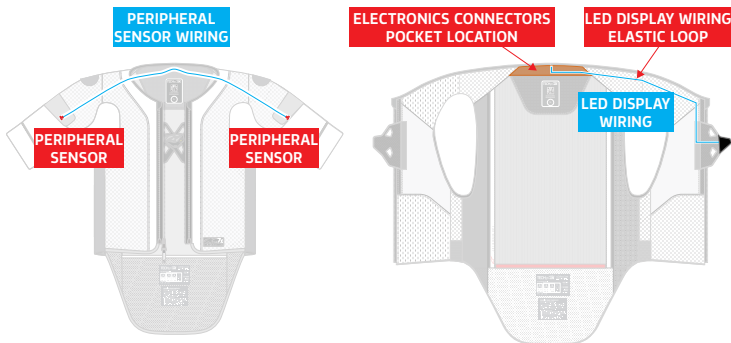


Figure 15: Electronic components location on the System's Base Layer (1);

3. Remove the Gas Inflators Housing (which also houses the Electronic Control Unit).

At this point you need to turn the System with the Back Protector (5) facing upwards and access the Airbag Control Unit (6) by opening the Cover (12). Now you must remove the Gas Inflators Housing (13) by lowering the lever found at the top edge of the Gas Inflators Housing (13) and located at the top edge in the center and between the two Gas Inflators (15) while pushing down, as shown in Figure 16. Next you must slide the carrier from bottom to top by placing your thumbs below the Gas Inflators (15) and pushing forward in an upwards direction toward the top back of the System. You need to push hard to release the black clips near the small steel screws that are present at the bottom of the Gas Inflators Housing (13). The Gas Inflators Housing (13) including all its parts (Electronic Control Unit (16), Battery (14), Gas Inflators (15)) can now be separated from the Base Layer (1), by also

removing the Airbag and all the other electronic components integrated inside the Base Layer (1) (see Figure 17). So, as you lift up the Gas Inflaters Housing (13), you will see that you have full access to be able to remove the entire Airbag. You may now start removing the Airbag from the Base Layer (1) by gently pulling on the Airbag until it is completely removed from the Base Layer (1).

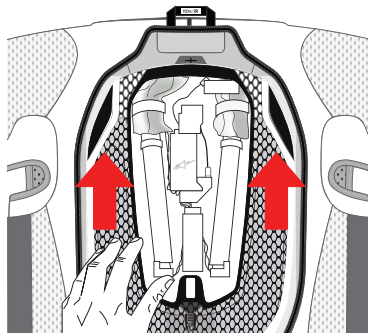


Figure 16: How to Detach the Gas Inflaters Housing (13) from the System

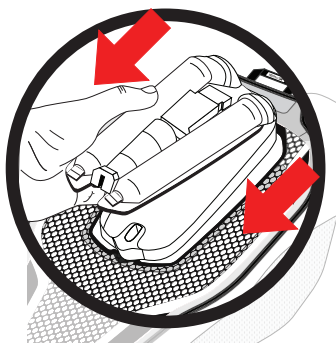


Figure 17: How to remove the airbag and all the electronic components from the rear of the System

14.2.2 Cleaning of the Washable Parts

After following ALL the steps indicated in Section 14.2.1, the User MUST have properly separated the non-washable parts from the washable parts of the System which should consist of the fabric Base Layer (1) and the Back Protector (5).

The User can now clean the washable components by HAND-WASHING them ONLY with water (30°C). Under NO circumstances should the User put the remaining washable components into a washing machine. Under NO circumstances should the User completely submerge the non-washable parts in water. The User can ONLY submerge in water and soap the washable parts and cannot use any chemical solvents or cleaners. Use ONLY a damp cloth with soap and dry the garment afterwards using a towel or allow it to air dry naturally.

WARNING! Detach the Airbag to wash the Base Layer (1). The Airbag is a very critical safety component of the System. Always use extreme caution when handling the Airbag. Any scratches, holes, or damage to the Airbag will lead to the System's malfunction. Accordingly, if you see any such damage to the Airbag, do not use the System and send it to Alpinestars or to an authorized Alpinestars' Tech-Air® Service Center for service.

14.2.3 Reassembly of the System

After cleaning the washable parts of the System (by being sure to strictly follow the instructions provided in Section 14.2.2), the User MUST proceed with the correct reassembly of the System following the instructions below:

1. Attach the Airbag. Insert the Airbag back into the Base Layer (1) by passing it through the opening present inside the Back Protector (5) and guiding it gently through the opening. Now place the Gas Inflators Housing (13) inside the Airbag Control Unit (6). Turn the System so the Back Protector (5) is facing downwards. Insert each protective area of the Airbag into the corresponding pockets located on the back, the shoulders, and the chest, being sure to use all the openings present on the Base Layer (1) as shown in Figure 6. Be sure to avoid twisting or folding of all sections of the Airbag. Attach the Airbag to the Base Layer (1) by reconnecting 10 of the 11 Connection Clips shown in Figure 14, except for the one Connection Clip (#1 green) that is located in the upper back area.

IMPORTANT! Particular attention must be paid to the repositioning of the Airbag, especially in the areas that protect the chest and shoulders, and you must avoid twisting and folding the Airbag. Any obstruction of the Airbag could compromise the correct inflation and therefore, the Airbag protection in these areas.

1. Insert the Electronic Components. Once the Airbag has been repositioned, position the Airbag with the Back Protector (5) facing upwards so you can now insert the electronic components and their wiring through the opening present inside the Back Protector (5). With the System positioned with the Front Flap (3) facing upwards, access the inner area of the vest and the wiring in the upper back area. Place the peripheral sensors back in their holders in their Velcro pockets, making sure to match the color of the sensor with the color indicated on the label, and close the Velcro securely. Finally, reposition the LED Display (2) by first passing it carefully through the elastic loop located in the left shoulder area, as indicated in Figure 14, and then pass the wiring down through the left chest area to the opening near the Front Flap (3). Finally, insert the LED Display (2) inside the Front Flap (3) and close the Velcro securely. Close the last Airbag Connection Clip (#1 green) in the upper back area and check that the Airbag is well positioned and without ANY folds or twisted parts. You can do this check by gently moving your hand across all sections of the Airbag. Also be sure to check that ALL wiring is not tightly pulled in any location. Now, make sure to close all the internal openings as indicated in Figure 6.

2. Close the Airbag Control Unit and Check the System. Turn the System with the Back Protector (5) facing upwards. Check that the Gas Inflators Housing (13) is securely attached and that all components are properly in place. Now you may reinsert the Cover (12) and make sure it is securely closed. Finally, verify that the System is fully functional by closing the System's Front Flap (3) and checking the LED sequence reported in Section 13.

WARNING! Always check that all the 11 Connection Clips are properly closed after the reassembly of the Airbag on the Base Layer (1).

WARNING! Under NO circumstances can the User position the Gas Inflators Housing (13) with only ONE Gas Inflator, but always with BOTH the Gas Inflators (15), as indicated in Section 16 "Actions in the Event of an Accident". The System can ONLY be used with two Gas Inflators (15) inside, NEVER use it with ONLY one Gas Inflator.

14.2.5 Storage

When not in use, it is recommended to store the System in its original packaging. It may be stored flat provided that no heavy or sharp objects are placed on top of it. The System can also be stored hung up from a rail. It should always be stored in a cool, dry place, out of direct sunlight.

Even if the System is turned off, the battery of the System slowly self-discharges, in particular if the System is stored in a warm environment. It is thus recommended that, even whilst in storage, the System be periodically recharged (at least once every 6 months) to prevent battery drainage and shortening of the battery life.

If storage is longer than 6 months, please fully charge the Battery (14) then disconnect it from the Electronic Control Unit (16) following the instructions in Section 14.2.6 "Transportation".

IMPORTANT! If the Battery (14) becomes fully drained, the System may require a longer time to recharge. It is thus recommended that the System is periodically recharged as indicated.

WARNING! Do NOT leave the System in direct sunlight inside a closed car or otherwise exposed to high temperatures. High temperatures will damage the Battery (14) and possibly the other electronic components.

WARNING! The System's storage temperature must be between -20°C and +60°C (-4°F to 140°F). Exposure to a temperature lower than -20°C (-4°F) may cause permanent damage to the Battery (14).

WARNING! Closing the Front Flap (3) will cause the System to turn on. To prevent this, it is essential that the Front Flap (3) ALWAYS remains open, in order to prevent accidental activations of the System. Failure to do so will cause the System to turn on, which will cause the Battery (14) to drain. When storing the System, remember to keep the Front Flap (3) open and check that there are no indicator lights illuminated on the LED Display (2).

14.2.6 Transportation

UNDEPLOYED SYSTEMS

An undeployed System may be transported by the User as indicated in this User Manual.

Users should be aware that Gas Inflators (15) are pyrotechnic devices. Under the European Pyrotechnic Directive (2013/29/EU) they are certified safe for transportation, provided that the Battery (14) is physically disconnected from the Electronic Control Unit (6). To disconnect the Battery (14), the User must open the Airbag Control Unit (6) and disconnect the Battery (14) from the connector located on the Electronic Control Unit (16), indicated in Figure 18.

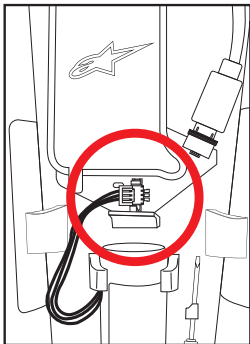


Figure 18: Location of the System Battery (14) Connector

Note that Systems with a damaged battery cannot be transported, unless the damaged battery is removed.

Signs of a damaged battery are usually:

- any physical damage to the connector, wire, and/or battery casing
- swollen battery
- discoloration of the battery casing
- smell or signs of corrosion

In the case of a damaged battery, users must take the System to the nearest Tech-Air® Service Center.

WARNING! If the Battery (14) is damaged, do not turn the System on, as powering it up or connecting it to a power supply can be dangerous.

The System may be transported by air subject to prior notification of the airline the User is flying with, and provided that the System is checked into the aircraft's hold as checked luggage.

When transporting the System by air, users are strongly recommended to download and print a copy of the Safety Data Sheet (SDS) in case they are questioned by airport staff. The SDS can be downloaded from the Tech-Air® App (Section 17).

IMPORTANT! Not all countries worldwide permit the import of pyrotechnic devices. Prior to traveling, users should check with the appropriate authorities of countries through which, and to which, they are traveling to determine if the System will be permitted entry or not.

DEPLOYED SYSTEMS

When BOTH Gas Inflators (15) of the System have deployed, the System will show solid red LED (2a).

For the transport of deployed Systems with an undamaged battery, ALWAYS keep the Front Flap (3) open.

The deployed System can then be delivered or shipped by the users (e.g. for servicing) to the nearest Tech-Air® Service Center according to regulation UN3481, provided that the battery is not damaged (as set out above) and keeping the Front Flap (3) open.

In case of a damaged battery, users need to physically take the System to the nearest Tech-Air® Service Center as damaged batteries may not be transported.

15. Maintenance, Servicing and Disposal

Garments with electronically activated Airbags are critical safety Systems which must be maintained in good working order to ensure their correct function. If not, they may not function properly or at all.

Maintenance

Prior to each use, the User should conduct a check of the System, looking for any signs of wear (loose threads, holes, marks) or damage. If any signs of wear are found, the System should be inspected further by an authorized Service Center.

Periodically check the System's Back Protector (5) for wear and tear. If you notice that the System's Back Protector (5) has any signs of degradation, cracking, or becomes chipped or delaminated, you should replace the System. If the System's Back Protector (5) has been subjected to a severe impact, the System should be replaced, in particular if the back protector's plastic has lightened in color at the impact point. In case of minor impacts, the System should first be checked by the authorized Alpinestars dealer where the System was purchased before further use. The System, inclusive of its Back Protector (5), should only be reused if it is in perfect conditions, with no visible damage. Under no circumstances should the User attempt to repair, alter, or modify the System or the Back Protector (5). This includes the application of paints or dyes which will compromise the material integrity of the System's Back Protector (5).

Servicing

The System must be routinely serviced at least every 2 years or after 500 hours of functioning by the authorized dealer where the System was purchased. During the routine service the Airbag and the System's components will be inspected. Routine service can be requested directly at the authorized dealer where the System was purchased. The following work is undertaken as part of the routine service:

- All components are removed from the System and the vest is cleaned.

- The diagnostics of the Electronic Control Unit (16) are checked (and firmware is upgraded, if applicable).
- The Airbag is inspected for any signs of wear and/or damage.
- The System is reassembled into the vest and checked functionally.



Tip: Two years or 500 hours of functioning is the maximum recommended period between inspections.

WARNING! If no service or recharge operation has been conducted after two years or 500 hours of functioning from the purchase date, there is the possibility that the System will not function inside the Envelope of Protection.

IMPORTANT! Even if the System have been regularly maintained, there is the possibility that it doesn't work after 10 years.

WARNING! There are **NO** user serviceable parts inside the System, except for Gas Inflators (15) that can be replaced **ONLY** by Users that are located in the countries authorized for Gas Inflators (15) handling and replacement. For the complete list of the authorized countries, see the Documents Section in the Tech-Air® App. Under no circumstances should Users attempt to open, service, disassemble or modify the System. Do not remove or change the internal battery. Any and all work performed on the System must be done by an authorized dealer where the System was purchased. Severe injury or damage may result otherwise.

Lifespan

The materials and components used in the System are selected to maximize durability. Properly caring for, including regularly servicing and updating your System, will help to ensure the longest possible lifespan.

Notwithstanding in the long run the System, similar to any product, has a limited lifespan as it is subject to natural degradation and breakdown of materials and/or components through factors such as use, wear and tear, improper care of your System, incorrect storage and/or common environmental conditions – all of which affects the practical lifespan of products. For safety issues and to ensure that the above factors have not reduced the integrity or product performance levels, we strongly recommend replacing your System 10 years from date of first worn. As written in the System's User Manual, always before any use, check the System, as well as any component for any damage to any part of the product. Regardless of the age of the product, do not use the System if you notice any damage.

WARNING! Users should be aware that different environmental conditions including high or low temperatures can influence the characteristics of the System's Back Protector (5) and may reduce the performance of the Back Protector (5).

WARNING! Always before any use, check the Back Protector (5) for any damage to any part of it. Regardless of the age, do not use the System if you notice any damage and/or degradation of the Back Protector (5).



Disposal of the System at the End of Life Span

Deployed System

IMPORTANT! The System contains electronic components, accordingly, at the end of its working life, the System must be disposed following the European Directive 2012/19/EU requirements. The symbol of the crossed bin displayed on the System indicates the electronic parts of the System which, at the end of its life span, must be separately disposed from other waste, for appropriate waste processing and recycling. The User must therefore take the Electronic Control Unit (16), Battery (14), Type C USB Cable (11) and all other electronic parts marked with the crossed bin, to those sites assigned for the disposal of electrical and electronic waste or return the System to the dealer where the System was purchased for disposal in accordance with the local waste requirements.

An adequate waste disposal System allows for a correct and environmentally-friendly recycling, processing and disposal of the System itself, thus avoiding the dispersion of dangerous substances and any negative effects on the environment and health and favoring the reuse and/or recycle of the materials which the System is made of. The unauthorized disposal of the System on behalf of the User, entails application of fines pursuant to the current law. We urge you to check the current legislation and the measures adopted by the public services operating in your territory.



Tip: Tip: A deployed System can be confirmed by turning on the System and looking for the solid red LED (2a) on the LED Display (2) (Section 13) or checking the System status using the Tech-Air® App (Section 17).

Undeployed System

WARNING! An undeployed System still contains live pyrotechnic charges and thus must NOT be disposed of in household waste or incinerated.

Undeployed Systems must be returned to an Alpinestars Tech-Air® dealer for subsequent return to Alpinestars who will handle the disposal. This service is free of charge.

16. Actions in the Event of an Accident

Whenever the System deploys, a service must be undertaken by an authorized Alpinestars' Tech-Air® Service Center that will check the status of the System and consequently advise on the type of service needed.

The System features an Airbag that, if intact and undamaged, is certified for up to four inflations. Moreover, since each crash is an unpredictable event, Alpinestars verifies the integrity of the Airbag for the first crash, NOT for the first deployment.

After each deployment, when the System is received for service, the authorized Alpinestars' Tech-Air® Service Center will perform an inflation test to check if the Airbag has been damaged during the deployment.

- If such inflation test is passed, confirming that the Airbag was not damaged during the deployment, the service will involve only the replacement of the Gas Inflators (15).
- If such inflation test is not passed, it means that the Airbag was damaged during the deployment and, accordingly, the System will undergo the full service that will involve the replacement of the Gas Inflators (15) and of the Airbag.

At the fourth deployment, the System will mandatorily undergo a full service as indicated in point b. above, with the Gas Inflators (15) and Airbag being replaced.

IMPORTANT! The Electronic Control Unit (16) records the number of deployments. After the fourth deployment, the System will permanently indicate a System Fault, displaying a solid red LED (2a) on the LED Display (2). The System will remain locked until a full service is performed by an authorized Alpinestars' Tech-Air® Service Center.



The Tech-Air® App displays a warning indicating that the Airbag needs to be replaced at the next deployment. In addition, the App displays the warning when, after the System deployment, it is necessary to replace the Airbag.

WARNING! Alpinestars STRONGLY RECOMMENDS to perform a System check by an authorized Alpinestars' Service Center after EACH inflation and/or after any events that could have potentially damaged the Airbag.

In case of deployment, in a situation where the User believes the System should not have deployed, the System should also be returned to an Alpinestars' Tech-Air® Dealer along with a detailed report of the event (including photos, if possible).

WARNING! The System does offer the autonomous Gas Inflator (15) replacement **ONLY** for those Users that are located in the countries authorized for Gas Inflators (15) handling and replacement. For the complete list of the authorized countries, see the Documents Section in the Tech-Air® App. For the complete description of the Gas Inflators (15) replacement, check the booklet provided with the Gas Inflators Replacement Kit.

Accident WITHOUT Deployment

In the case of minor, low energy and/or low speed accidents, it is likely that the System will not deploy. Nonetheless, a thorough inspection of the System should be made to ensure that there is no significant damage (tears, holes, etc.) which could compromise the functioning of the System, as per the maintenance check outlined in Section 15 "Maintenance, Servicing and Disposal".

In case of situations where the User believes that the System should have deployed, feedback can be sent to Alpinestars through the Tech-Air® App and/or given to Alpinestars directly by contacting Tech-Air® Support. If the System is returned to an authorized Alpinestars' Tech-Air® Service Center for an inspection, a detailed description of the event (including photos where possible) must be included.



The User can provide any feedback related to deployment events to Alpinestars through the Tech-Air® App and/or by contacting Tech-Air® Support (see Section 19).

17. Tech-Air® App

The System is equipped with a Bluetooth Low Energy (BLE) device which allows it to directly connect the User's mobile phone to the System, in order to get certain information from the System and have access to several functions, such as:

- monitor the status of the System;
- verify the installed software and, eventually, perform the latest software updates;
- send feedback related to the System and its performances;
- and many others.

WARNING! Alpinestars is not responsible for reporting possible accidents or for providing any assistance to those involved. User agrees that Alpinestars has no duty or responsibility to report any accidents, or the possibility of any accidents based on the data transmitted to Alpinestars. Users assumes the risk of any accidents or injuries whether or not data is being transmitted to Alpinestars.

The Tech-Air® App is available for download in the Android Play Store and in the Apple App Store.

IMPORTANT! Tech-Air® App is not necessary for the System to work as an impact protector. The System will protect the User as described in Sections 1 to 16 even if Tech-Air® App is not installed or not running on the User's mobile phone.

User Registration

To have access to the Tech-Air® App, the User must log in or, if not, sign up. In order to configure the Tech-Air® App, Bluetooth must be turned on within the User's mobile phone settings.

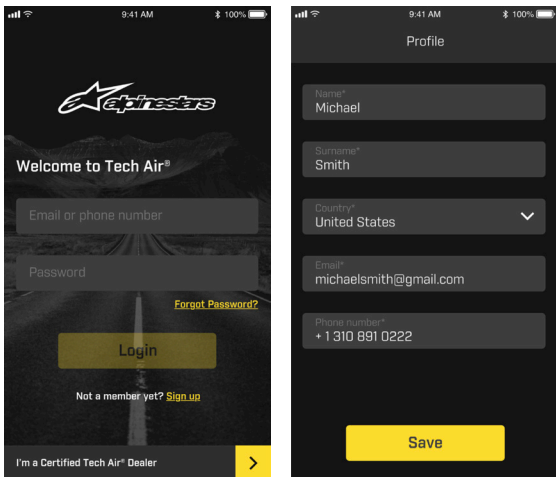


Figure 19: User Login and Registration Section

Pair the System

Once the Bluetooth is turned on, the App will automatically attempt to establish a connection with an available System, if already paired with the System. Should no Tech-Air® System have been already paired to the App, the System can be easily paired to the App by scanning the QR code present inside the System's internal neck liner. Once the System has been correctly paired

with the App, it will be possible to visualize the overall status of the System, such as battery level and installed software. When the System turns off, the Bluetooth® connection will stay active to allow the dialogue between the System and the mobile phone, provided that the System is in the vicinity. In this case, the active connection with the App is indicated by the blinking yellow LED (2b) on the LED Display (2) and the User can interact with the App. The LED Display (2) will definitively turn off when the System doesn't detect any connection with the App.

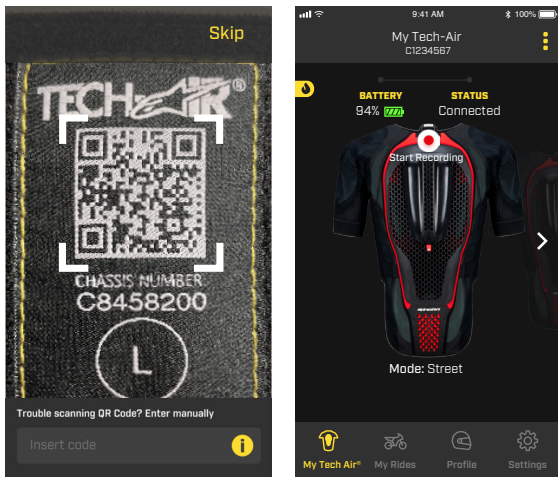


Figure 20: How to pair the System with QR code scanning

Monitoring the System Status

The App provides information about the actual operating mode of the System, verifying if the System is functioning correctly or not.

The indication "Status Connected" displayed on the screen (Figure 20) indicates that the System is correctly connected to the User's phone.

The screen also shows indications on the Riding Mode in use by the System and the number of Gas Inflators still available (two yellow flames indicate two available Gas Inflators; one yellow flame indicates one available Gas Inflator).

The indication "System Deployed" displayed on the screen (Figure 21) indicates that both Gas

Inflators are deployed.

The App will also inform the User when there's only one inflation available for the Airbag before undergoing a mandatory full service. A further warning will appear (Figure 21) in the event that the Airbag must be replaced because the number of inflations has exceeded the maximum number defined for the System.

While riding, for safety reasons, the User cannot access most of the App functions.

WARNING! User must always ensure, via the App, that the System is running the most up to date software release. On first purchase of the System, check that your System has the latest software installed.

WARNING! Without any additional notice, Alpinestars reserves all rights to, from time to time, update the software and/or the electronic components of the System. Accordingly, it is important that Users register their System and pair it within the Tech-Air® App to be able to receive important software updates and to receive instant notifications/push messages about availability and release of new software updates.

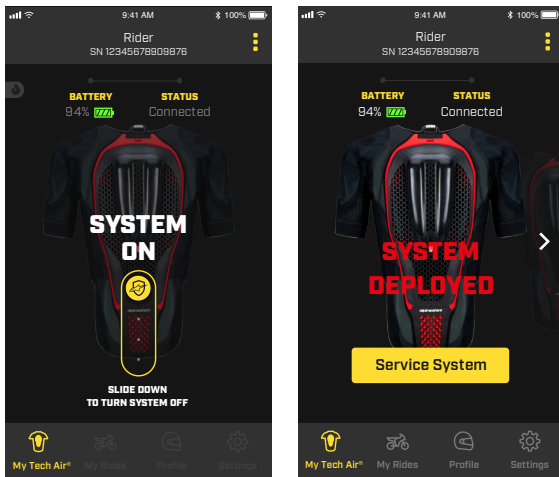


Figure 21: Indication that both Gas Inflators are deployed (left). Indication that the Airbag must be replaced (right).

Enjoy the Ride with MyRide

The Tech-Air® App contains the MyRide function which displays information about the ride, such as duration, distance and speed related to the ride. MyRide can also be used to send feedback regarding any events that occurred during the use of the System.

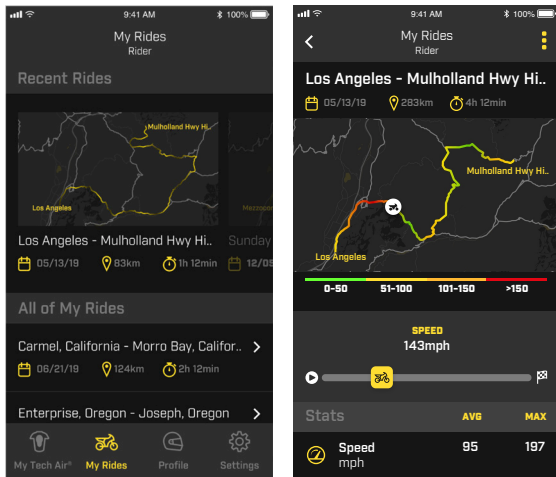


Figure 22

18. Troubleshooting

Problem	Possible Cause	Possible Solutions
LED Display (2) does not switch on when Front Flap (3) is closed	Battery (14) fully discharged	Recharge Battery (14) (Section 11) and check the correct LED behavior during the recharge.
	Front Flap (3) is not correctly positioned on the hook-and-loop patch	Check the correct alignment between Front Flap (3) and hook-and-loop patch.
Solid red LED (2a) on the LED Display (2)	Gas Inflators (15) empty and/or Airbag must be replaced	After a second deployment, the Gas Inflators (15) must be replaced. The System will not work even though the Battery (14) is charged and the LED Display (2) will show the solid red LED (2a) until the Gas Inflators (15) are replaced. If the number of available Airbag inflations is 0, the solid red LED (2a) will report the System Fault even after the Gas Inflators (15) replacement. In this case, the Airbag itself must be replaced and the System reactivated by the authorized dealer where the System was purchased.
	System Error	The System has an error. Contact the authorized dealer where the System was purchased.
Blinking red LED (2a), while green LED (2c) is on	Battery Low	Remaining battery level is lower than 4 hours. Recharge the Battery (14) as soon as possible.

19. Tech-Air® Support

In case of questions or should the users need further information, they may first contact the Tech-Air® Dealer where the System was purchased, or Alpinestars directly:

E-mail: techairsupport@alpinestars.com

Tel: +39 0423 5286 (please ask for Tech-Air® Support)

20. Certification Information

The Tech-Air® 7x System – ABS7XI24 is manufactured by:

Alpinestars SpA

5, Viale Fermi – Asolo (TV) 31011 Italy

And it is covered by a number of certifications.

Personal Protective Equipment

The Tech-Air® 7x System – ABS7XI24 and all the included protective parts are a Category II certified PPE (Personal Protective Equipment) under European Regulation (UE) 2016/425. This product is in compliance with the corresponding UK legislation (Regulation 2016/425).

For each PPE included in the Tech-Air® 7x System – ABS7XI24 and itself, the notified bodies and certifications information contained in the product markings are reported in Annex I of this manual.

EU Declaration of Conformity & UKCA Declaration of Conformity

The EU Declaration of Conformity of this PPE can be downloaded at: eudeclaration.alpinestars.com

The UK Declaration of Conformity of this PPE can be downloaded at: ukdeclaration.alpinestars.com

Protective Garments for Motorcycle Riders

The degree of risk or hazard that a motorcyclist will face is closely linked to the type of riding and the nature of the accident. Riders are cautioned to carefully choose motorcyclists' protective garments that match their riding activity and risks. Other garments or garment combinations certified according to the EN 17092 series of standards may provide more appropriate protection than this garment but there may be weight or ergonomic or heat



stress penalties associated with their use, that may be less appropriate for some riders.

The Technical Standard EN 17092:2020 requires that motorcycle protective garments must fulfill the mechanical requirements according to the relevant class of protection set forth by the Technical Standard EN 17092:2020. EN 17092 series is comprised of 6 parts.

(Part 1 describes some of methods for testing, Parts 2 to 6 specify the general requirements for each single class of garments included in the EN 17092 standard).

The Tech-Air® 7x System – ABS7XI24 is a Class C undergarment certified in accordance with EN 17092-6:2020. Class C garments are specialized, non-shell, impact protector ensemble garments, designed only to hold one or more impact protectors in place, as an undergarment. EN 17092-6:2020 garments are designed to provide impact protection for areas covered by the impact protector(s) only. This garment is designed to provide impact protection for the areas covered by the impact protector(s). It does not offer minimum abrasion protection.

WARNING! EN 17092-6:2020 garment DOES NOT offer minimum abrasion protection and DOES NOT offer minimum impact protection. As such Class C garments are intended to be worn with and supplement the protection offered by either Class AAA or AA or A or B garments.

The following requirements are established for the most exposed areas (i.e. shoulders, elbows, hips, and knees) as follows:

CLASS OF PROTECTION						
TEST PERFORMED	Class AAA garments EN 17092-2:2020	Class AA garments EN 17092-3:2020	Class A garments EN 17092-4:2020	Class B garments EN 17092-5:2020	Class C overgarment garments EN 17092-6:2020	Class C undergarment garments EN 17092-6:2020
Impact abrasion resistance	120 km/h – 75 mph	70 km/h – 43 mph	45 km/h – 28 mph	45 km/h – 28 mph	45 km/h – 28 mph	Not applicable
Tear strength	50 N	40 N	35 N	35 N	35 N	10 N
Seam strength	12 N/mm	8 N/mm	6 N/mm	6 N/mm	6 N/mm	4 N/mm

Wearing the System is not a substitute for wearing other protective motorcycling clothing and gear. To provide full potential protection, the System must always be worn in conjunction with suitable motorcycling gear. Complementary PPE garments could be: jackets or

trousers (in accordance with EN 17092 parts 2, 3, 4 and 5), other impact protectors, boots (in accordance with EN 13634) and gloves (in accordance with EN 13594) and visibility clothing (in accordance with EN 1150) or high visibility accessories (in accordance with EN 13356).

WARNING! No PPE or combination of PPE can offer full protection against injury.

WARNING! In order to provide the certified level of protection it is important that the garment is appropriate to your size and fits correctly. Selecting the correct size is important.

WARNING! Using the garment without protector(s) is at your own risk and peril.

Inflatable Impact Protector with Electronic Activation

The certification of the Tech-Air 7x System - ABS7XI24 as a motorcyclist inflatable protector has been achieved considering the following standard:

“EN 1621-4:2013 Motorcyclists’ protective clothing against mechanical impact – Part 4: Motorcyclists’ inflatable protectors – Requirements and test methods.”

and the guidelines reported in the following technical disciplinary:

“Dolomiticert’s technical disciplinary for inflatable protectors with electronic activation” (according to the Revision number reported on the declaration of conformity)

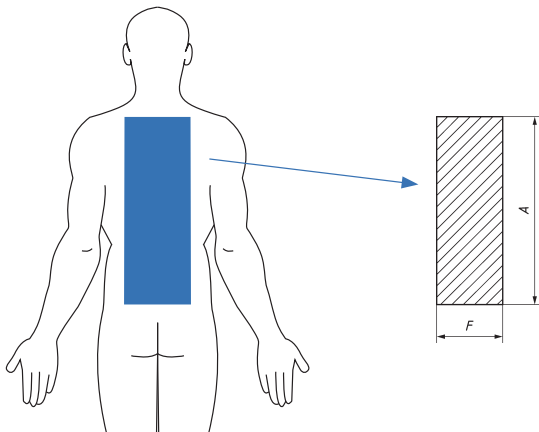
Any characteristics of the Device that could not be evaluated through the standard mentioned above were analyzed in consultation with the Notified Body.

The following table summarizes and explains the performance level reported on the product marking as an inflatable impact protector:

Tested Area	Standard Used for tests method applied in tests	Temperature	Force Transmitted with Impact Energy of 50 Joule Value Average/ Maximum	Level Level 1 requirements: average value \leq 4.5kN; No impact above 6kN Level 2 requirements: average value \leq 2.5kN; No impacts above 3kN
Central Back	EN 1621-4:2018	23°C	Average \leq 2.5kN Peak \leq 3kN	Level 2

Please note that the Level 1 requirement for each tested area is only guaranteed in combination with the passive Back Protector integrated in the Tech-Air® 7x System – ABS7XI24.

Description of Central Back Protected Area



Dimensions In Figure					
A	B	C	D	E	F
72 %	29 %	44 %	29 %	32 %	25 %

NOTE: All dimensions refer to the waist to shoulder length (100%) of the biggest user

Sizing & Fitting Information Related to the Inflatable Protector Integrated in the System

Table below lists the sizes of the System, the chest, waist and outer arm lengths, and a suggested person height to assist with the selection.

SIZE	XS		S		M		L		XL		XXL	
A. CHEST (CM)	83.5	89	89	94.5	94.5	100	100	105.5	105.5	111	111	116.5
B. WAIST (CM)	69	75	75	81	81	87	87	92	92	97	97	102
D. OUTER ARM (CM)	57.5	59	59	60.5	60.5	62	62	63.5	64	65.5	65.5	67
E. HEIGHT (CM)	163	168	168	174	175	179	180	184	185	189	190	194
A. CHEST (IN)	32 7/8	35	35	37	37	39 1/7	39 3/8	41 1/2	41 1/2	43 2/3	43 2/3	45 7/8
B. WAIST (IN)	27 1/8	29 2/4	29 1/5	31 1/3	31 1/5	34	34 1/4	36 2/9	36 2/9	38 1/5	38 1/5	40 1/6
D. OUTER ARM (IN)	20 1/4	21	23	23 1/3	23 1/3	24 1/6	24 2/5	25	25 1/5	25 4/5	25 4/5	26 3/8
E. HEIGHT (IN)	64 1/8	66 1/8	66 1/5	68 1/5	68 1/3	70 1/5	70 7/8	72 9/16	72 5/6	74 2/5	74 4/5	76 3/8

BODY MEASUREMENT LOCATIONS

A. Chest

Measure around the fullest part, under the armpits, keeping the tape horizontal.

B. Waist

Measure around the natural waistline, in line with the navel, keeping the tape horizontal.

C. Hip

Measure around the fullest part of your hips, about 20cm below waistline, keeping the tape horizontal.

D. Thigh

Measure around the thigh just below the crotch, keeping the tape horizontal.

E. Inner Leg

Stand against a wall, ask someone else to measure from the crotch to the bottom of your leg.

F. Outer Arm

Measure from shoulder (Humerus) to wrist.

G. Height

Stand against a wall, ask someone else to measure from the floor to the top of your head, keeping the tape vertical.

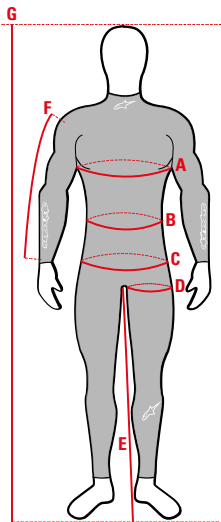


Figure: Body Measurement Locations;

Motorcyclists' Protective Clothing Against Mechanical Impact

Part 2: Motorcyclists' Back Protectors

The Tech-Air® 7x System – ABS7XI24 System, is equipped with a non-removable passive Back Protector that provides protection to the back area even if the System should not deploy. This Back Protector is certified as a Personal Protective Equipment (PPE) Category II, under the Regulation EU 2016/425, according to the EN 1621-2:2014 Standard. This product is in compliance with the corresponding UK legislation (Regulation 2016/425 on personal protective equipment as it applies in Great Britain).

The following information will help you to understand which type of passive Back Protector (among different types of Back Protectors) is installed inside your Tech-Air® 7x System – ABS7XI24.

Figure below illustrates the three different types of Back Protectors contained in this new standard. These are:

a) Full Back Protector, which provides protection to the central back and scapulae

b) Central Back Protector, which provides protection to the central back

c) Lower Back Protector, which provides protection to the Lumbar area only

EN 1621-2:2014 provides two performance levels of protection: Level 1 and Level 2.

Level 1 protectors have a lower performance protection level, however, they are more light-weight. Level 2 protectors have superior performance protection level; however, they may be thicker and heavier.

You should choose protectors which provide the best performance level of protection suitable for the type of riding you will do.

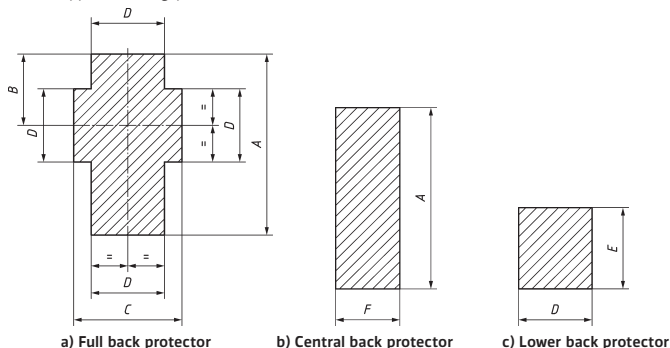


Figure 2 — Minimum dimensions of zones of protection

Table 1 – Dimensions of minimum zone of protection for back protector

Dimensions in Figure 2					
A	B	C	D	E	F
72 %	29 %	44 %	29 %	32 %	25 %
NOTE: All dimensions refer to the waist to shoulder length (100 %) of the biggest user.					

Figure: Protector Types and their Respective Certified Protective Areas (Zones of Protection).

The certification of the Tech-Air® 7x System – ABS7XI24 System has been conducted in combination with the suit MISSILE V2 1PC LEATHER SUIT - 3150122 and RACING ABSOLUTE LEATHER SUIT – 3156319

WARNING! Central Back Protector does not provide scapulae protection.

WARNING! Lumbar Protector does not provide protection to the upper back.

WARNING! Users should be aware that no Back Protector will provide complete protection against spinal injury and no guarantees, warranties (express or implied) are made regarding the protector's ability to avoid risk of spinal injury.

The protector integrated into the System is a Level 1 passive central Back Protector. The following Table summarizes and explains the performance level reported on the product marking as a passive impact protector:

Tested Area	Standard Used for tests method applied in tests	Temperature	Force Transmitted with Impact Energy of 50 Joule Value Average/ Maximum	Level Level 1 requirements: average value \leq 18kN; No impact above 24kN Level 2 requirements: average value \leq 9kN; No impacts above 12kN
Central Back	EN 1621-2:2014	23°C	Average \leq 18kN Peak \leq 24kN	Level 1

WARNING! Always before any use, check the Back Protector for any damage to any part of it. Regardless of the age, do not use the System if you notice any damage and/or degradation of the Back Protector.

WARNING! Any contamination, alteration of the Back Protector or improper use can dangerously reduce the performance of the Back Protector.

Sizing & Fitting Information Related to the Back Protector Integrated onto the System

Back Protectors are certified to EN 1621-2:2014 and are sized by 'Waist to Shoulder length,' as this gives the best representation of back length. Waist-to-shoulder length is the length measured on the back from the waistline to the junction of the shoulder to the neck at the highest point, as shown in the protective equipment pictogram.

The System is equipped with an integrated Back Protector that is not removable from the Airbag vest, nor may the Back Protector be modified.

The size of the Back Protector has been selected by Alpinestars based on the sizing and function of the System. Notwithstanding, one single size Back Protector cannot fit all body dimensions (height and shape). Accordingly, when selecting the System, check that the System's integrated Back Protector is correctly fitting. A correctly fitting Back Protector must not be touching your neck when you tilt your head backwards. If the Back Protector of the System touches your neck when you tilt your head backwards, this is a sign that the Back Protector of the System is too big and may interfere with the helmet, resulting in a dangerous riding condition. If this is the case, the System is unsuitable for you and must not be used by you.

The following Table explains and summarize the passive back protectors' sizes already installed in your vest:

Base Layer Size	International Size MAN	User's Waist to Shoulder length
XS	44-46	41cm (16.1") to 46cm (18.1")
S	46-48	41cm (16.1") to 46cm (18.1")
M	48-50	46cm (18.1") to 51cm (20.1")
L	50-52	46cm (18.1") to 51cm (20.1")
XL	52-56	46cm (18.1") to 51cm (20.1")
2XL	56-58	46cm (18.1") to 51cm (20.1")

Motorcyclists' Protective Clothing against Mechanical Impact - General Information

CARE & STORAGE

The protectors can be cleaned with a damp cloth and soapy water. Do not submerge the protectors in water. Never clean the protectors with strong cleaning agents or solvents, as these could weaken the materials or damage the integrity of the protectors. Care must be taken to avoid bending the protectors, particularly during storage. Store the protectors in a dry, ventilated area away from direct heat sources, including direct sunlight. Do not place heavy objects on top of the protectors. Extract the protectors from the garment to facilitate cleaning. Make sure that all of the removable protectors have been reinserted into the garment before riding with the garment again. DO NOT USE the garment if the removable protectors have not been reinserted into the garment or are missing. Using the garment without the removable protectors will render the CE and UKCA certification invalid and moreover provide no protection against impacts.

WARNING! Remember that for sensible motorcycling the full body must be protected and as such the protector should be worn with correctly CE and UKCA certified and fitting motorcycle clothing, boots, gloves, and a homologated helmet.

MAINTENANCE

The protectors should be periodically inspected for wear and tear. Depending on the location of the protectors in the garment, this may require that the protectors be removed from the garment first. If the protectors are degraded, cracked, chipped, or delaminated then the protector must be replaced. The protectors should also be replaced if they have been subject to a severe impact, particularly if the plastic has lightened in color at the impact point. In lesser impacts the protectors should be checked by an authorized Alpinestars' Dealer before further use. A protector should only be used if it is in perfect condition with no visible damage. Under no circumstances attempt to repair, alter, or modify the protector, this includes the application of paints, stickers or dyes which will compromise the material integrity of the protector.

LIFESPAN

The materials used by Alpinestars in its products are selected to maximize durability. Properly caring for your Alpinestars products will also help ensure the longest possible lifespan. Notwithstanding, all products have a limited lifespan and are subject to degradation and natural breakdown of materials in the long term, through factors such as use, wear and tear caused by your riding style, accidents, abrasions, how well you care for your product, and storage and/or common environmental conditions - all of which effects the practical lifespan of products.

Protectors having plastic parts have a limited lifespan due to stresses of riding and/or the elements such as heat or sun light exposures.

For safety issues and to ensure that the above factors have not reduced the integrity or product performance levels, Alpinestars strongly recommends to refer to the system regular maintenance recommendation for the non-removable protectors (see Section 15).

As written in this User Manual, always before any use, check the product for any damage to any parts of the product. Regardless of the age of the product, do not use any product if you notice any damage, cracking, deformity and/or the inside padding is deteriorating or if the product no longer fits correctly or is lacking its structural integrity.

DISPOSAL

At the end of its life the product must be disposed of in accordance with local refuse regulations. There are no hazardous materials used in the manufacture of the product.

ALLERGY ADVICE

Persons who have skin allergies to synthetic, rubber or plastic materials, should carefully monitor their skin each time the product is used. In the event any irritation of the skin occurs, immediately stop using the product, and seek medical advice.

LIMITATIONS ON USE

This product is for use ONLY while motorcycling and will ONLY provide limited protection against impacts in the event of an accident or fall.

WARNING! Users should be aware that no product (including protector/s) will provide complete protection against injury and no guarantees, warranties (express or implied) are made regarding the product's (including protector/s) ability to avoid risk injury.

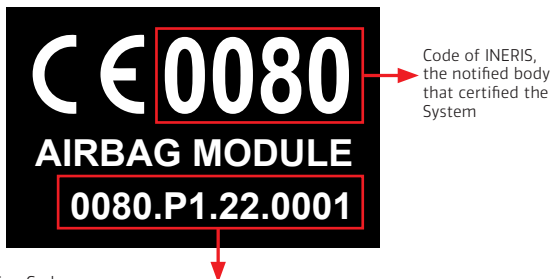
WARNING! Users should be aware that different environmental conditions including high or low temperatures can influence the characteristics of the protector and may reduce the performance of the protector, even if the T+ and/or T- are present in the pictogram.

Pyrotechnic Articles

The Tech-Air® 7x System contains two pyrotechnically activated cold Gas Inflators (15), and as such, the whole item is considered as an "AIRBAG MODULE" Category P1 under EU Directive 2013/29. As such, an EU Type Examination (Module B) has been conducted on the design of the System, and an EU Type Examination and Audit (Module E) has been conducted on the assembly of the System.

The EU Type Examination and Audit have been conducted by Notified Body #0080, Ineris, Parc Technologique ALATA BP2, Verneuil-en-Halatte, 60550, France.

The CE label on Tech-Air® 7x System reports the relevant information regarding the pyrotechnic certification:



Certification Code:

- 0080: code of the notified body (INERIS)
- P1: category of the Pyrotechnic article contained in the System
- 22.0001: unique code of the certification

Electromagnetic Stability

The Electronic Unit of the System has been tested according to different regulations for electronic and radio devices.

FCC Compliance Statement

The System has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the User is encouraged to try to correct the interference by one or more of the following measures:



- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

WARNING! Changes or modifications not expressly approved by Alpinestars could void the User's authority to operate the equipment (Part 15.21).

FCC ID: **RFR-S50**

Canadian Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to RSS-210 of the IC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the User is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING! Changes or modifications not expressly approved by the party responsible for compliance could void the User's authority to operate the equipment (RSS-210).

IC: **4957A-S50**

EU compliance Statement

The System contains a Bluetooth Low Energy Radio Module, with the following characteristics:

Frequency Band	2402+2480 Mhz
Rated Output Power	0.002344 Watts

Alpinestars SpA hereby declares that this wireless device is in compliance with the Directive 2014/53/EU. A copy of the EU Declaration of Conformity is available at eudeclaration.alpinestars.com

21. Important Information for Users **WARNING!**

The System is an active safety protection system that is different from normal motorcycle clothing and as a result requires additional care and precautions. You must read and understand the instruction manual fully before use, as well as pay close attention to the following warnings:

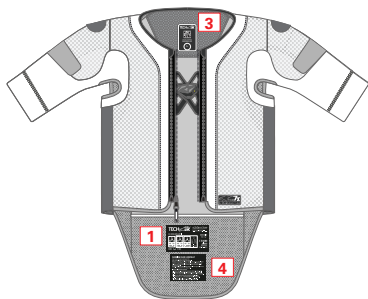
- The System can only provide a limited amount of protection in an accident or event. As such, there always remains a possibility that a serious or fatal injury could occur even when using the System.
- The System is designed and developed for street use and limited off-road use only when in Street Mode, race use when in Race Mode. This System has not been designed for hard off-road use, stunt use or any non-motorcycling applications. Alpinestars does not accept any claims for malfunctions of the System used outside the environments for which its use is intended.
- Certain types of movement could be interpreted as a crash by the System and cause a deployment though no crash has occurred.
- The System has been designed to deploy in crashes above a minimum energy threshold. This is to prevent wasteful use of the charges in situations where protection typically would not be needed. Thus, in low speed/low energy crashes it is likely and reasonable that the System will not deploy.
- There are NO user serviceable parts inside the System, except for Gas Inflators (15) that can be replaced ONLY by Users that are located in the countries authorized for Gas Inflators (15) handling and replacement. For the complete list of the authorized countries, see the Documents Section in the Tech-Air® App. Under no circumstances should Users attempt to open, service, disassemble or modify the System. Do not remove or change the internal battery. Any and all work performed on the System must be done by an authorized dealer where the System was purchased. Severe injury or damage may result otherwise.
- Do not attempt to make any modifications or adjustments to the electronics or to the vest of the System.
- The System must only be used for motorcycle street riding and limited off-road riding in Street Mode or race use when in Race Mode. The System must only be used for motorcycle street riding and only limited off-road riding in Street Mode or race use when in Race Mode.
 - it is not to be used for any other purpose, motorcycle related or otherwise. This includes:

Enduro, Motocross, Supermoto, performing stunts and any type of non-motorcycling activity. Wearing the System during any non-intended activity (with the unit switched on) may cause the System to deploy and cause injury or death to you or others and may cause damage to property.

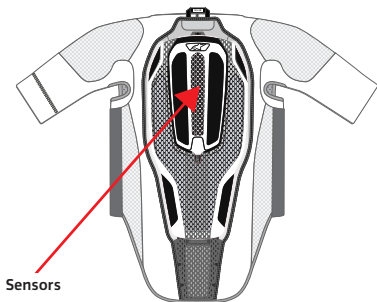
- When not in use and being stored, transported, or shipped, the System must be turned off by keeping the Front Flap (3) open.
- Prior to each use, the System should be inspected for any signs of wear or damage. Additionally, when turned on the LED Display (2) must be checked. In the event that the System reports a fault (i.e. if the solid red LED is illuminated), Users should not use the System and must follow the instructions in this User Manual.
- Prior to each use, the User must check that the Cover (12) is always properly closed.
- Whenever the LED Display (2) gives a low battery indication, the System **MUST** be recharged as soon as possible.
- The System must never be machine washed, submerged in water, tumble dried, or ironed.
- After the deployment, the System must be returned to the authorized dealer where the System was purchased which can arrange for the System to be recharged. Gas Inflators (15) can be replaced **ONLY** by Users that are located in the countries authorized for Gas Inflators (15) handling and replacement. For the complete list of the authorized countries, see the Documents Section in the Tech-Air® App.
- Even if the System has not been used, or the Airbag has never fired, it is important that the System be serviced at least once every two years or 500 hours of functioning. This can be arranged by the authorized dealer where the System was purchased.
- Without any additional notice, Alpinestars reserves all rights to, from time to time, update the software and/or the electronic components of the System. Accordingly, it is important that Users register their System and pair it within the Tech-Air® App to be able to receive important software updates, and to receive instant notifications/push messages about the availability and release of new software updates. User must always ensure via the App that the System is running the most up to date software release. On first purchase of the System, check that your System has the latest software installed. Simply access the Tech-Air® App, go to Settings/Software, and ensure the System is running the latest version of the software. For more information and User Instructions, see Settings/Documents in the App.

ANNEX 1

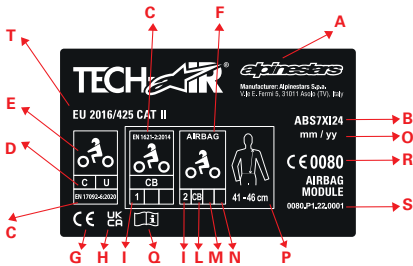

Example of markings in accordance with the various standards and the EU regulation



Front side



Back side

1	 <p>Diagram of the TECH AIR 7X AIRBAG MODULE with callout letters A through S pointing to various parts and markings:</p> <ul style="list-style-type: none"> A: Manufacturer: Alpinestars SpA, s.p.a. - Via S. D'Antonio, 170, Ivrea B: ABS7X124 C: EU 2016/425 CAT II D: EN 17092-4:2020 E: C U F: EN 14275-2:2014 G: CE H: UK I: CR J: CB K: 1 L: 2 M: 41-46 cm N: ILMN O: mm / yy P: 0080, P1, 22, 0001 Q: AIRBAG MODULE R: CE 0080 S: 0080, P1, 22, 0001
2	<div style="border: 2px solid black; padding: 5px; text-align: center;"> <p>WARNING</p> <p>Nothing else should be placed in this pocket other than the present foam</p> </div>
3	 <p>Close-up of the TECH AIR 7X QR code label with size L.</p>
4	<div style="border: 1px solid black; padding: 5px;"> <p>WARNING READ CAREFULLY</p> <p>Users must read and understand the users manual before using this garment.</p> <p>Warning on inflating gas inflator! Handle with care as gas inflators contain compressed gas. Before handling or replacing the gas inflators read user manual and gas inflator instruction leaflet for safety advice.</p> <p>DO NOT SWITCH ON AIRBAG VEST unless the gas inflators are correctly connected to the inflating vest.</p> <p>IMPORTANT: USER SHALL NOT BE HELD:</p> <ul style="list-style-type: none"> 1. GARMENT AND AIRBAG CAN NOT GUARANTEE PROTECTION FROM INJURY 2. AIRBAG VEST MAY PROTECT INJURIES TO SHOULDER, BACK AND CHEST 3. AIRBAG VEST MUST ONLY BE INSPECTED/SERVICED BY TRAINED PERSONNEL 4. AIRBAG VEST MUST ALWAYS BE CHECKED AFTER ANY ACCIDENT 5. OTHER RISK, ETC., PREVENTED OR NOT THE AIRBAG DEPLOYED. 6. ALPINESTARS DISCLAIMS ANY RESPONSIBILITY FOR INJURIES INCURRED WHILE WEARING OR USING ANY OF IT'S PRODUCTS. </div>

1	<p>Protective garments for motorcycle riders and Inflatable Impact Protector with electronic activation: Notified Body #2008: DOLOMICERT S.C.A.R.L. Z.I. Villanova, 32013 Longarone (BL) – Italy</p> <p>Pyrotechnic Articles: Notified Body #0080, Ineris, Parc Technologique ALATA BP2, Verneuil-en-Halatte, 60550, France</p>
2	Generic warning label
3	System size ad Chassis number
4	Generic warning label
A	Name of the manufacturer
B	Product identification code
C	Applied Standard
D	Impact Protector Garment (C), Use as Under garment (U)
E	Indicates this product is intended for motorcycle use
F	Indicates that an inflatable protector is installed
G	CE marking
H	UKCA marking
I	Indicates the overall level of protection achieved
L	Area of the body the protector is designed to cover
M	Optional hot conditions test passed (Otherwise vacant)
N	Optional cold conditions test passed (Otherwise vacant)
O	Month (mm) and Year (yy)
P	Waist to Shoulder Measurement
Q	Read the instructions before use
R	Pyrotechnic article Notified Body number
S	Pyrotechnic article registration number
T	Regulation (EU) 2016/425 on personal protective equipment