

# 15. Cleaning, Storage and Transportation

## 15.1 System Cleaning

## SYSTEM (FULLY ASSEMBLED)

After each use, it is recommended that any dirt and flies that may have accumulated on the outer garment are removed by wiping down the garment with a damp cloth and drying the garment afterwards using a towel. Do not use hot water or any other types of cleaners or solvents on 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 with a temperature of over 40°C.

#### **BASE LAYER**

The Base Layer (1) is defined as the Tech-Air® System WITHOUT the Electronic Components (such as Wiring, Sensors, LED Display, Electronic Control Unit etc...), Gas Inflators, Airbag (11) and Protectors.

For proper care of the Base Layer (1), follow the instructions reported on the care warning label below:



Hand wash 30°C/Do not bleach/Do not tumble dry/Do not iron/Do not dry clean

Base Layer (1) care warning label:



WARNING! Under NO circumstances should the System (BOTH fully assembled and disassembled) be washed in a washing machine, tumble dried, or ironed. This may cause permanent damage to the System and cause malfunctioning of the System.



Before washing the Base Layer (1), it is necessary to remove the components of the System, including the System's removable protectors, Airbag, Electronic Components and/or other non-washable components of the System.

In order to clean the System, the User MUST follow the steps as described in the Section below.

## REMOVAL OF NON-WASHABLE COMPONENTS

Before washing, the User MUST first remove all of the non-washable components, which include: the Back Protector (4), the Airbag (11) and ALL Electronic Components, including the LED Display (3), and the Activation Zip (2). This operation can be performed following the steps below:

1. Disconnect the LED Display (3) – First, place the System on a flat surface preferably on top of a workbench or table, with the front of the System facing downwards. Access the Back Protector (4) by opening the zip located on the back side of the System. Open the cover with the Velcro closure on the Back Protector (4) and disconnect the LED Display (3) connector as indicated in Figure 23.

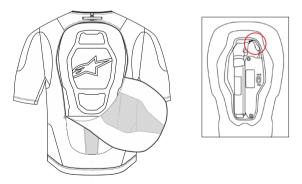


Figure 23: Disconnect the LED Display (3)



- 2. **Detach the Back Protector (4)** Detach the Velcro on the upper part of the Back Protector (4) and separate the Back Protector (4) from the Base Layer (1).
- 3. **Detach the Airbag (11)** Through the rear opening, proceed to detach all 12 of the connection loops that connect the Airbag (11) to the Base Layer (1) in the rear part of the System and in the sleeves area. To access the connection loops on the front part of the System use the two openings present on the sides of the inside of the garment, the openings are located on the sides of the System directly underneath the armpit area, as shown in Figure 24. Proceed by removing the Airbag (11) entirely from the Base Layer (1).

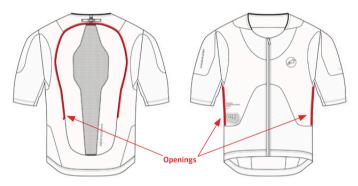


Figure 24: Base Layer (1) Openings

4. **Remove the LED Display (3) and the Activation Zip (2)** – Remove the LED Display (3) by accessing the opening inside the garment, next remove the Activation Zip (2) located inside the Velcro pocket as shown in Figure 25.



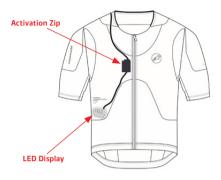


Figure 25: Removal of the LED Display (3) and Activation Zip (2)

Now the Base Layer (1) is free from all the non-washable components and can be handwashed at 30°C with gentle soap. The Base Layer (1) should NOT be washed with bleach, cleaners, or chemical solvents, and it should NOT be dried in the dryer, nor ironed, nor dry cleaned as reported in the instructions of the User Manual. To dry the Base Layer (1), ONLY use a towel to pat down the garment or allow it to air dry naturally by hanging it up on a hangar or placing it horizontally on a drying rack.

### CLEAN THE NON-WASHABLE COMPONENTS

The User can now clean the remaining non-washable components ONLY by HAND-WIPING them with a damp cloth and using water at a temperature of no higher than 30°C – DO NOT submerge the non-washable parts in water. Under NO circumstances should the User put the remaining non-washable components into a washing machine or a dryer. Under NO circumstances should the User completely submerge all the remaining parts in water. The User can ONLY submerge the textile parts (i.e. the Base Layer (1)) in water and soap and cannot use any chemical solvents or cleaners to clean the System. ONLY use a damp cloth with a small amount of gentle soap applied to the cloth to clean the non-washable components and then dry the non-washable components afterwards using a towel or allow them to air dry naturally.



WARNING! Detach the Airbag (11) ONLY to wash the Base Layer (1). The Airbag (11) is a very critical safety part of the System. Always use extreme caution when handling the Airbag (11). Any scratches, holes, or damage to the Airbag (11) will lead to the System's malfunction, accordingly, if you see any such damage to the Airbag (11) do NOT use the System and send the System to Alpinestars or to an authorized Alpinestars' Tech-Air® Service Center for service.

#### REASSEMBLY OF THE SYSTEM

After cleaning the non-washable components, the User MUST proceed with the correct reassembly of the System following the instructions below:

1. Insert the LED Display (3) and Activation Zip (2) - Reinsert the LED Display (3) inside its casing slot and put the Activation Zip (2) back inside the pocket, taking care to position the Activation Zip (2) correctly inside its casing and making sure the Velcro is tightly closed as shown in Figure 26.

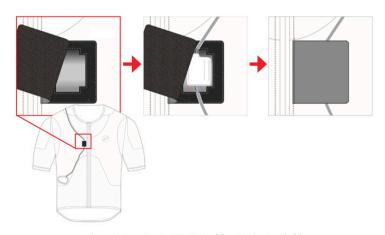


Figure 26: Inserting the LED Display (3) and Activation Zip (2)



2. **Reinsert the Airbag and Attach the Back-Protector (4)** - Reinsert the Airbag (11) and then proceed to attach the Back Protector (4) to the Base Layer (1), taking care to correctly attach the Velcro parts on the upper side of the protector to the Base Layer (1) as shown in Figure 27.

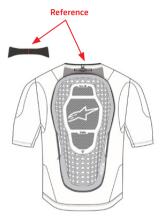


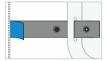
Figure 27: Attach the Back Protector (4)

3. Attach the Airbag (11) - Proceed to close all 12 Connection Loops that attach the Airbag (11) to the Base Layer (1), making sure to match the colored labels on the Airbag (11) to the colored labels on the Base Layer (1), use the two openings inside the garment to access the Connection Loops on the front area. Make sure to follow the numbering on the labels to facilitate the reassembly of the System, as shown in Figure 27. In addition, check to make sure that the Airbag (11) is well positioned within the System and ensure that there are no folds in the Airbag (11) or twisting of the Airbag (11), especially in the shoulder areas. Double check that all 12 connection loops are positioned correctly and securely attached to the Base Layer (1).

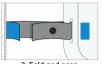




1: Connection Loops sewn into seam.



2: Run Connection Loops through Airbag.



3: Fold and snap Connection Loops.

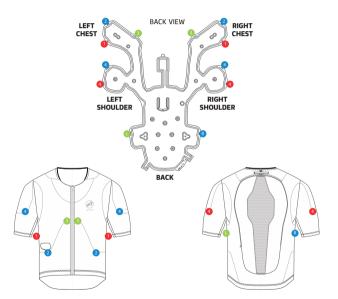


Figure 28: Airbag (11) attachment to the Base Layer (1)

4. **Connect the LED Display (3)** - Access the Airbag Control Unit (5) by opening the cover with the Velcro closure on the Back Protector (4) and proceed to reconnect the LED Display (3) to the Electronic Control Unit. Make sure that all the components are positioned correctly



within the Airbag Control Unit (5) and close the cover making sure that it is positioned correctly and that the Velcro straps are perfectly aligned.

5. **Perform the System Check** - Make sure you close the two side openings on the inside of the garment and zip closed the pocket containing the Back Protector (4). Close the Activation Zip (2) and make sure that the System turns on correctly, as detailed in Section 6. "System Operation."

# 15.2 Storage

When not in use, it is highly recommended that the System be stored in its original packaging. They System may be stored flat provided that no heavy or sharp objects are placed on top of it. The System can be easily stored by hanging it up on a hanger. The System should always be stored in a cool, dry place, out of direct sunlight.

The battery of the System slowly self-discharges, even if the System is not turned on, especially if the System is stored in a cold environment. It is thus recommended that even while in storage, the System be periodically recharged. If the System is stored with 50% battery charge, it should be recharged every 3 months. If the System is stored with a full battery charge it can be charged once every 6 months to a charge of 50% or more. It is very important that the System be recharged when in storage to prevent battery drainage and shortening of the battery life.

- **IMPORTANT!** If the battery becomes fully drained, the System may require a longer time to recharge. It is thus recommended that the System be 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 as well as possibly damage the electronic components of the Electronic Control Unit.
- WARNING! When storing the System, remember that zipping up the Base Layer (1) and closing the Activation Zip (2) will cause the System to turn on. To prevent this from happening while storing the System, it is essential that the Activation Zip (2) remains open, in order to prevent accidental activations of the System. Alternatively, the System can be turned off with a long press (~ 5 seconds) of the Display Button (3a). Failure to do so will cause the System to turn on, which will cause the battery to drain. When storing the System remember to check that there are no indicator lights illuminated on the LED Display (3).
- 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.