

# **Inflatable AIRBUNKER shelters**

Owner's Manual

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# 1. Introduction

Inflatable AIRBUNKER shelters are designed for paintball and laser tag sports competitions arranged in stationary outdoors/indoors arenas, and also for visiting games. All the pieces are made of strong PVC fabric of different color with the density of 650 g/m<sup>2</sup>, which is designed for using in rough gameplay conditions.

After the production of each order, the company carries out the series of special tests for the strength and airtightness of the pieces.

Following the conditions of operation, inflatable pieces can serve more than 10 years.

You can download the operating instructions at <https://air-bunker.com/manual/> by scanning the QR code.



# 2. The structure of inflatable shelters

The inflatable AIRBUNKER shelters are produced in different shapes and sizes but their structures are almost the same.



**Main elements of inflatable shelters**

The base of the piece is a PVC frame filled with air or water (a water-filled compartment).

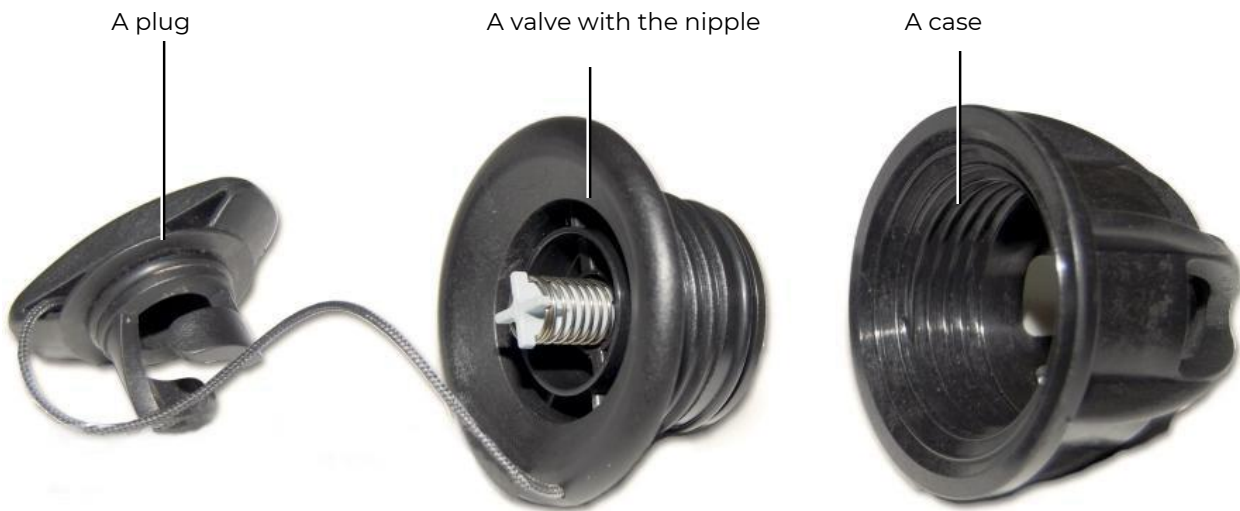
The PVC fabric is resistant to ultraviolet emission, water, fuel and oil impact. It is unexposed to rotting and preserves its features in the temperature range from -15 °C to +40 °C.

However, at temperatures below 15 °C, the PVC fabric loses its elasticity. Therefore, at such temperatures, it is not recommended to inflate, blow off, and also roll up or unfold inflatable pieces because this may lead to a premature breakdown of the product.

For inflating and deflating, the shelters are equipped with an air valve which is protected by a shield with a textile fastener of the Velcro fastener type.

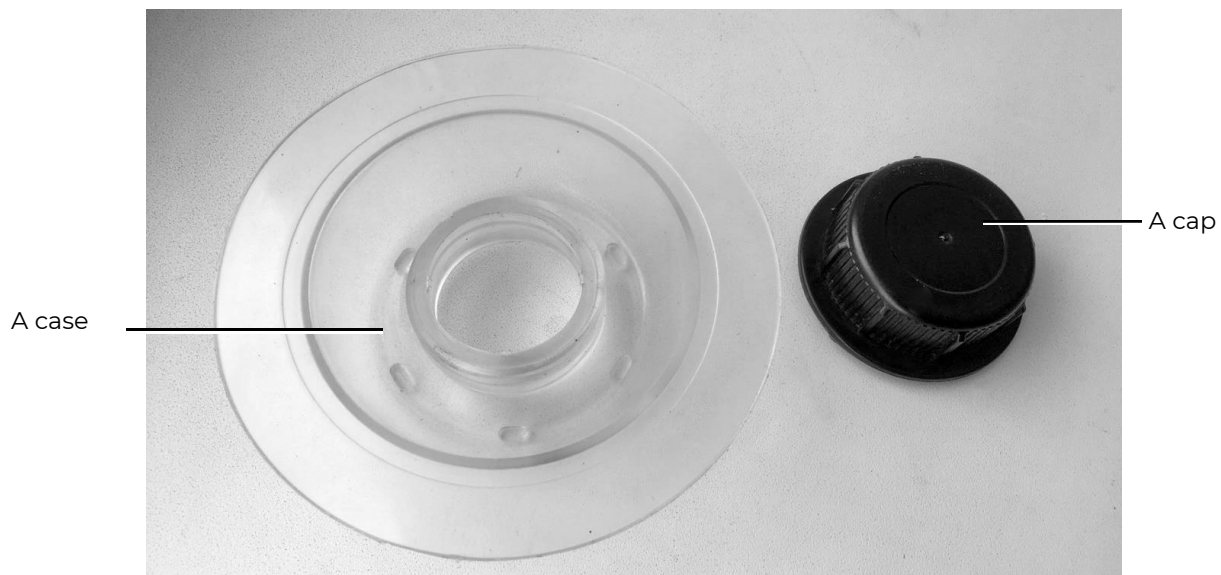
Depending on the bunkers' type and order specifications valves of two types may be applied: with nipple and without it.

The nipple air valve (Push and Go) consists of three main parts: the case, the valve, and the plug. To ensure a better seal, the valve is equipped with a spring-loaded mechanism (nipple).



**Nipple valve design**

The valve without nipple (Sport Classic) consists of two parts: case and a cap. The cap is equipped with rubber strip that provides valve tightness.



**The design of the valve without nipple**

Depending on the model, there are fastening elements both for fixation on a horizontal surface and conjoining separate pieces into a whole construction.

Water-filled pieces are heavier due to water in a special compartment, and they do not require any other attachment to the horizontal surface.

For the convenience of carrying inflated shelters, the pieces are equipped with handles.

- ! **Do not carry the piece with a filled water compartment or fastened ballast elements. It will lead to damage of the handles and the inflatable piece in general.**
- ! **Do not carry inflatable shelters for fastening loops. It will lead to physical damage of the inflatable piece.**

### 3. Installation and operation

Before installation of the inflatable shelters, it is necessary to check all the components. Check the cloth integrity, the condition of the valves and fastening elements.

If the piece is equipped with a waterfilling compartment, it is filled first. Due to the weight, it is necessary to fill it in the place of the intended installation in the arena.

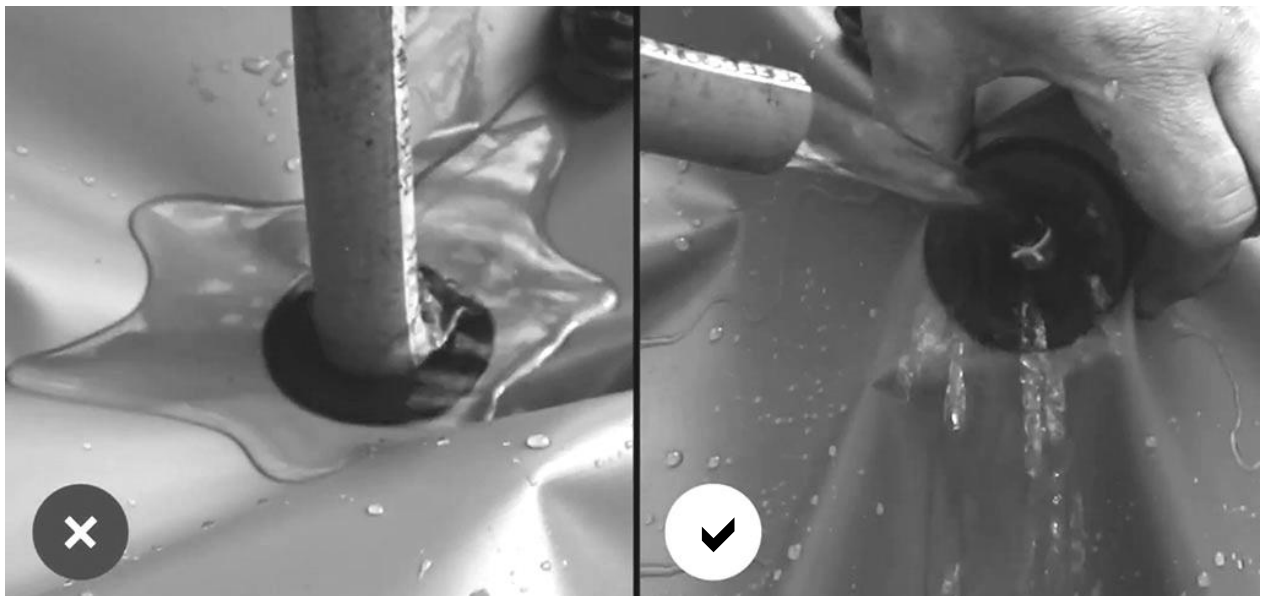
1. Make sure that the surface of the field is free from stones and sharp objects (including sharp branches and roots) that can damage the piece.
2. Tilt the piece to get to the water-filled valve at the bottom of it. This is the only valve without a protective shield.

Open the plug and then the valve. Rotate the spring-loaded nipple in the clockwise direction with a push.

3. Arrange the piece so that the valve is located at the top.
4. Remove all the air from the filling compartment and fill it in with water until the compartment begins to take its shape. Use a hose connected to a regular water pipe.



**To prevent excessive pressure, do not cover the mouth of the valve with a hose during the process of filling it with water so the air is blown out from the compartment.**



**Filling of the waterfilling compartment**

5. After filling the compartment, close the valve by rotating the spring-loaded nipple counter-clockwise. Close the plug.  
If the inflatable bunker is equipped with valve without nipple screw the cap on.

Filling the inflatable bunkers with air is carried out using a garden vacuum.



**Do not use the sources of compressed air (a balloon or an automatic air compressor for tires). Do not use a car's exhaust pipe for filling up!**

1. The air valve on the piece is covered with a protective shield. Lift it up by unsnapping the textile fastener. Remove the plug on the valve or unscrew the cap (if the valve is without nipple).



**An air valve with an open plug**

2. Close the nipple by turning it clockwise.
3. Prepare the garden vacuum.  
Check that there is no dirt or leaves around. They can get into the inlet of the pump and damage it.

**!** **Using the garden vacuum cleaner, follow the [Safety Instructions for the Operation of Electrical Installations](#) and the [Instruction Manual for Vacuum Cleaners](#). Ensure the integrity of the insulation of the electrical cord and the plug. If damage is detected, the product can't be used until the problem is completely resolved. To prevent electric shock, do not operate the vacuum cleaner during rain.**

4. Bring the tip of the vacuum cleaner to the open valve and turn on the device. During the injection process, ensure that the inlet of the vacuum cleaner is free to suck in the air, and it is not blocked by an incompletely inflated element or other objects. The degree of inflation is determined by the smoothing of the main large folds

Inflatable shelters for paintball should be a little under-inflated so they will absorb the balls that hit them (the balls will not bounce). Leave the piece soft enough to shake it with a touch, so you can bend the casing of the inflated piece for 12 to 20 cm. You should also control the tension of the elastic bands which fastening loops of connection with the weights - in order to avoid gusts, they should not be tightened.

Tactical pieces can be used for laser tag games. In this case, they are pumped harder. To inflate such pieces, you need to use a foot pump for inflatable boats.





#### Filling air pieces with a garden vacuum

5. After filling the bunkers with air, it is necessary to close the valve (turn the nipple clockwise), install the plug (screw the cap) and cover with it the protective shield and fixate it with a textile fastener.
6. If the bunkers consist of several parts, connect them with straps. To do this, thread them through the special loops in the figure and use the knobs to tighten them until they are connected.



7. Ensure that the surface of the field is free of stones and sharp objects, and secure the inflatable shelter with anchors or ballast weights for the specially designed attaching lug.

8.

Anchoring is performed as follows:

1. Hammer a plastic or metal anchor in the ground next to the set inflatable piece at a distance of 8-10 cm from the attaching lug.
2. Connect the anchors and the attaching lugs of the inflatable piece with the elastic fastening loop.



**Do not use hard ropes to connect anchors and attaching lugs. This can lead to pulling out the anchors and damaging the material of the pieces!**

Small bags with sand are supplied as ballast weight. They are also fastened by a fastening loop to the attaching lugs. Inflatable bunkers above 2.7 m must be fixed by the upper part with either a cable through the entire playing area or with a bungee cord to the ground.

Do not install the inflatable pieces while it is windy. Strong gusts can move or overturn the piece.

Watch that there are not any heating devices or open flames next to the inflatable shelters. Do not use pyrotechnics near the shelter! Do not let any pets approach the inflatable pieces!

When moving the shelters on the site, do not drag them. You risk damaging the surface of the casing and shortening the life of the product.

Avoid contact with solvents such as acetone, ethyl acetate, and paint based on these solvents.

If the temperature rises during the day or the pieces are used under the sunlight, the pressure inside the shelter increases.

In this case, it is necessary to drain air by pushing the valve nipple to the initial position.

With the decrease of the temperature, the pressure in the inflatable pieces decreases too; therefore, it is necessary to pump them.



**Watch the air pressure in the piece. Excessive pressure can cause a breakage of the casing or the valve!**



**Do not use the inflatable pieces without a protective cap on the valve. This will lead to dirtying of the sealing ring of the valve and its breakdown.**

## 4. Dismantling and packaging

Begin dismantling the inflatable pieces as follows:

1. Unfasten all fastenings both among the pieces, and to a flat surface.
2. If the surface of the bunker was contaminated during operation, it is necessary to clean it thoroughly. When folding, sand and other debris will damage the PVC fabric.

To clean the surface of the inflatable shelters, use water and a mild detergent (soap or shampoo).

Do not use chemical reagents, cleaners or abrasives. They will damage the synthetic material.

After cleaning, wipe the surface of the figure with a dry cloth and wait for it to dry.

3. If there is a water compartment in the construction of the piece, drain the water by opening the valve. It is necessary to squeeze out the water by pumping air into the main compartment.
4. Drain the air from the main compartment of the piece.  
Just lift the protective shield, open the air valve (remove the plug, press and hold the nipple in the pressed state, or press and turn the nipple a quarter of a turn counter-clockwise), and wait until the air comes out. Or use a garden vacuum in pumping mode. Ensure that the casing fabric from the inside does not clog the pump inlet.
5. When the figure is almost flat, fold the side elements of the piece inward towards the valve until all the air is squeezed out. Install the valve plug. Pull down the protective shield and fold the piece. To reduce taken space, inflatable pieces are recommended to be packed in a special bag. It also protects the product from mechanical damage during transporting.

A folded set of inflatable shelters fits in a car trunk.





**Bags for packing the inflatable shelters**

## 5. Repair and service

**!** The repair of inflatable shelters must be carried out only from materials included in the repair kit.

If you notice that the inflatable shelter is losing its shape (and it's not connected with temperature changes), check the condition of the air valve.

A possible leakage can be detected by splashing soapy water (you can use a dishwashing detergent) around the valve and at its base.

The leak can be detected by the emerging soap bubbles. If the valve, the rubber gasket in particular, is damaged, it must be replaced by another one from the repair kit supplied in the delivery.

Next, check the integrity of the casing. If you have not seen the area of possible leakage, use soapy water, pour it into a spray gun, and spray in suspected places.

If a small hole or a cut up to 15 mm is detected, it can be repaired with a glue and PVC patches which are included to the repair kit. Do as followed:

1. Cut the patch according to the size and shape of the cut, exceeding the hole size by at least 30 mm. The cut piece of material should have the form of a circle, an oval or a square with rounded corners.
2. First clean the damaged area thoroughly with water and then completely dry it.
3. Degrease the place of gluing. This procedure should be carried out with clean, dry hands. As a degreaser use a solvent such as acetone, ethyl acetate or methyl acetate. Other solvents should NOT be used. The place of gluing and patching can also be polished with fine emery paper.
4. Apply the patch to the damaged area and with a pencil draw a contour.
5. For gluing PVC fabrics use Desmocoll glue, which is supplied with repair kit. To make the glue line more durable and heat-resistant the second component is added to the glue - the heat-stabilizing additive Desmodur.
6. Mix the required volume of glue and additives in the container (2% -3% of the glue volume). Mix thoroughly. The mixture must be used within 2 hours!
7. With a brush apply the glue on the underside of the patch and on the damaged area (according to the outlined contour) with a layer of 0.5 mm. If the glue is too thick - dilute it with acetone in any small container to the consistency of the usual PVA. It should be easily applied with a brush and it should not stretch after it. After

5-10 minutes (depending on the temperature and humidity of the surrounding air, the adhesive applied should be slightly adherent), it is necessary to repeat this procedure.

8. All Desmocol based adhesives require thermal activation. It is necessary to carry it out only after the glue on the surfaces of the piece and the patch has completely dried (it will not stick), it usually takes 15-20 minutes.
9. For thermal activation warm the bonded surfaces during 2-4 min with a heat gun with the temperature up to 65-70 ° C. Prevent the glue from bubbling. If it bubbles, it is necessary to clean and wash off the layers of adhesive with solvent and repeat the application procedure.
10. Put the repaired figure on a firm and plain surface, quickly and accurately set the patch to the damaged spot by marking and press firmly, avoiding air bubbles. With effort, roll the place of gluing with a solid roller until the glue cools down completely.
11. In order to avoid wrinkles, press down the spot of repair with a load. Leave it for not less than 6 hours (better 24 hours).

Do not use open fire for heating! The wet glue and fabric are flammable!

If absolutely necessary, the product can be used ten minutes after gluing. After carry out the next repair in stable conditions in accordance with this instruction.

Large cuts (more than 15 mm) can be glued only in a specialized workshop (for example in a repair shop for inflatable boats).

 **If glue gets on the skin, it is necessary to wash it off with rinse water and soap. If an allergic reaction is observed, it is necessary to consult a doctor.**

 **It is forbidden to work with Desmokol near sources of open fire due to the high risk of fire.**

## 6. Storage Rules

Always clean, dry, blow off and fold the piece after use.

It is recommended to store inflatable shelters in a cool and dry place, packed in special bags. When stored at cold temperatures, it is not recommended to move products without the special branded packing bag for inflatable figures.

Keep away from sharp, hot and dangerous objects, avoid places of potential habitat of rodent animals.

## 7. Warranty

1. AIRBUNKER inflatable shelters provide a guarantee on seams, valves and fasteners. The guarantee is for 12 months, from the date of purchase.
2. The transportation service of equipment for warranty or service repair are paid by the client.
3. When the pieces are received, the customer is obligated to conduct inspection of the products and make an act of acceptance-transfer of the goods, in accordance with the form provided by the manufacturer. Within a week the client is obliged to send the certificate to the manufacturer.
4. All manufacturing defects caused by incorrect sizing or defective valves, revealed within a week from the date of receipt of the kit, are eliminated by the manufacturer free of charge, after necessary repairs or replacement of inflatable shelters and components, and also compensates transportation costs for the delivery of products.
5. This warranty is not valid if the defects in the product have appeared as a result of a natural disaster, fire, accident, etc.
6. The guarantee does not apply in the following cases:
  - violation of transportation rules;

- use of the product for other purposes;
  - violation of the installation, operation and storage instructions;
  - use of non-original components;
  - mechanical damage (as a result of impact, fall, excessive pressure, the activity of rodents, etc.)
  - effects on the casing of the pieces of aggressive chemical agents;
  - repair by non-specialized service;
  - expiration of the warranty period.
7. In these cases, the buyer has the right on repairs, but the work, the cost of consumables and the delivery of the product are paid at his own expense. The manufacturer is ready to help in eliminating any malfunction of the inflatable shelters delivered by them.
  8. In case of problems, first of all contact the specialists of the technical support department of our company who will help to quickly detect the problem by consulting via Skype, phone or e-mail, and will give recommendations for solving the problem.