MICHELIN
INFLATABLE SOLUTIONS

REPAIR GUIDE

This file contains all our recommendations to guide you in repairing your Michelin Inflatable Solutions product.

We recommend that you read it very carefully the first time you use it and refer to it if you have any doubts.

Our sales team remains at your disposal for any further information (e-mail: **commerce@inflatable.michelin.com**).

REPAIR KIT

A basic **repair kit** is systematically supplied with the structure. The purpose of this kit is to enable minor repairs that do not affect the structure to be carried out. For any major damage requiring the replacement of a part, we recommend that our customers return the structure under warranty.

Discover the composition of the repair kit :

SUMMARY

I. Removing a bladder

1. Remove pipes/valves/eyelets

✓ Spread out the structure.

✓ Disconnect the "One Pump" tube. Hold the valve with one hand while pulling on the tube with the other. Do not pull all at once, the tube will withdraw gradually.

✓ Open the integration zips to gain access to the various valves.

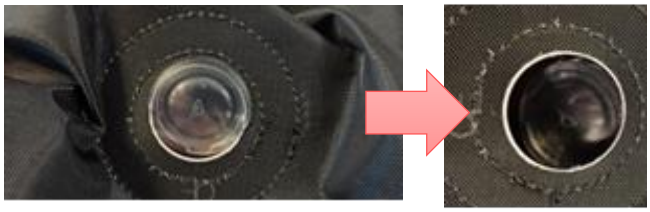
✓ To remove a **Naish valve**, slide one hand inside to pinch the sleeve. Then, with your second hand, press down with your thumb to unclip the first half of the valve. Continue until the valve is completely removed.

✓ To remove a Big Gaastra valve, start by removing the Velcro from half the valve. Gently grasp the Velcro so as not to pull on the weld.

✓ Then pull on the valve to loosen it completely.

I. Removing a bladder

✓ To remove an **eyelet**, slide one hand inside to pinch the sleeve. Then, with your second hand, press down with your thumb to unclip the eyelet. Continue until the eyelet is completely removed.



2. Remove the bladder

✓ Once all the components have been removed (valves, eyelets, hoses), you can gently pull on the bladder to release it through an integration zip. It is advisable to grip the bladder at the middle to limit friction against the zip.

✓ For long bladders, remove the bladder using a middle zip in two stages. For longer lengths, you can add weight so that the structure does not move when the bladder is pulled.

II. Integrating a new bladder

1. Spreading out the structure

✓ It is important for the structure to lie flat, with as few folds as possible and no rotation to facilitate the integration of the bladder.

2. Check the bladder

✓ Then place and spread the bladder along the structure to check the presence and correspondence of all the elements (valves, eyelets) on the bladder and the structure. This will ensure that the valves are facing the right way.

3. Preparing the bladder before integration

✓ Make a "sleeve" with the ends of the bladder. This is done by turning up the corners inside the bladder to make it easier to place the bladder in the corners when inflating.

✓ Fold the bladder over itself to form a stack.

II. Integrating a new bladder

4. Integrating the new bladder

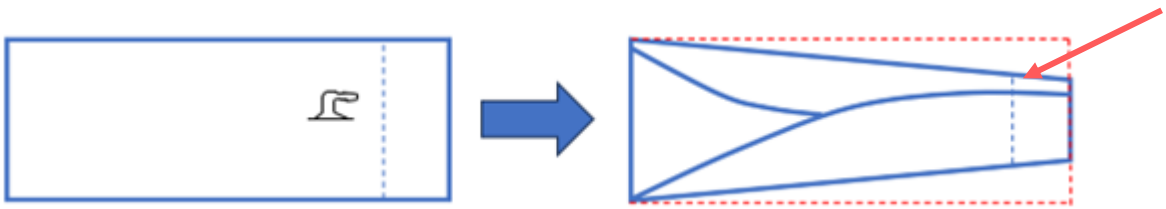
✓ Check that the dacron protector is in place before fitting. This will protect the bladder from the zip.

If necessary, place a weight on the structure to hold it in place as the bladder passes through.

✓ Using the clamp, pass the structure through the integration zips. Start at one end and pull out the clamp at the other.

(For large bladders (+-7m), the integration will be done twice, starting in the middle and then on each side).

✓ Roll up the rope using the sliding knot on the clamp. Then make 3 turns around the knot to make sure the rope doesn't come loose when you pull the rope up.



II. Integrating a new bladder

✓ Gently insert and guide the bladder into the structure using the zip.

✓ Gently pull on the clamp to slide the bladder along the structure.

Be careful not to damage the bladder on the zips when pulling, or the other components (valves, rings, etc.). If you feel any resistance, check that the bladder is not blocked inside.

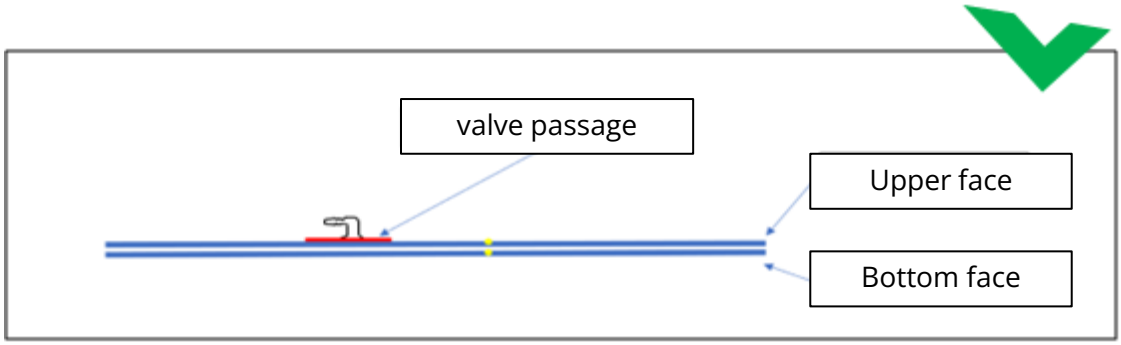
✓ Pull the bladder up to about 10 cm from the zip, and gently pull it out to remove the clamp. When it arrives, check that the coil has remained straight and has not turned.

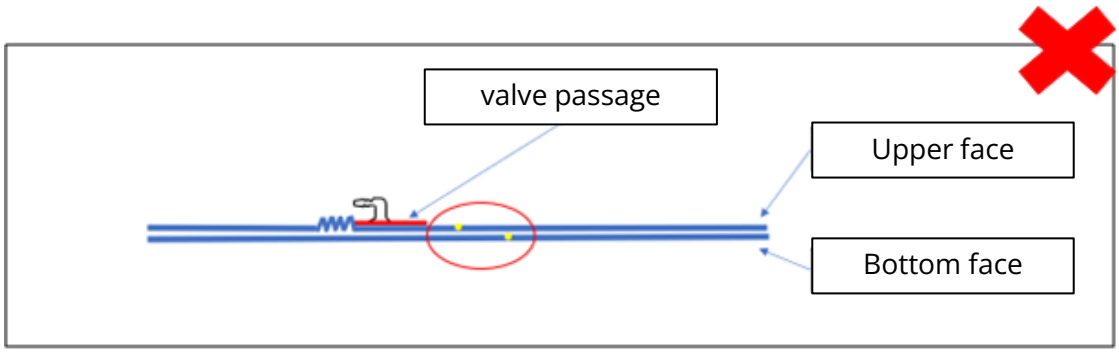
✓ To position the bladder, match the position of the valve on the bladder to that of the fabric.

II. Integrating a new bladder

5. Position the valves and eyelets

✓ Once the bladder has been fitted, position the valves in their slots. Distribute the bladder evenly, do not offset the top and bottom faces when fitting the valves.





✓ If you need to pull part of a bladder to give yourself room, or to match the valve, you need to pull it through the middle, taking it completely in your hand. Don't just pull on the bottom part, as this would cause the bladder to shift.

III. Changing or fitting a Big Gaastra valve

Changing a Big Gaastra valve

1. Remove the valve

✓ Remove the damaged flange, referring to **I**. in the guide.

✓ Cut around the valve using scissors.

✓ Use an alcohol patch to clean the area.

2. Fitting the new valve

✓ Place the adhesive valve, included in the repair kit, over the hole, paying attention to the direction of the valve. Take care to position the valve in the middle.

✓ Integrate the repaired flange, referring to **II**. of the guide.

Fitting a Big Gaastra valve

✓ Match the Big Gaastra valve to its position on the fabric sleeve. Position the valve correctly; do not rotate the valve when velcroing it in place.

✓ Press gently around the valve so that the white PVC part is positioned in the groove, until you hear a "click". Do not try to press all at once, but position one third at a time.

Check that all the PVC protection is in the groove of the Big Gaastra.

IV. Changing or fitting a Big Gaastra cap

Fitting a Big Gaastra cap

✓ Using scissors, cut the stem attached to the cap as close as possible to the base.

✓ Turn the seam over; the grooved part should be visible.

✓ The cap must be attached to the structure using the elastic band provided. Follow the steps below :

Expand the elastic band

Tighten the elastic in 2

Spread the loop

Pass the cap through the cap and tighten the loop.

✓ Then close the cap on the Big Gaastra valve.

V. Changing or fitting a Naish valve

Changing a Naish valve

1. Remove the valve

✓ Remove the damaged bladder, referring to **I**. in the guide.

✓ Cut around the valve using scissors.

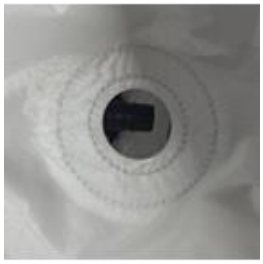
✓ Use an alcohol patch to clean the area.

2. Poser la nouvelle valve

✓ Place the adhesive valve, included in the repair kit, over the hole, paying attention to the direction of the valve. Take care to position the valve centrally.

✓ Fit the repaired bladder, referring to **II**. of the guide.

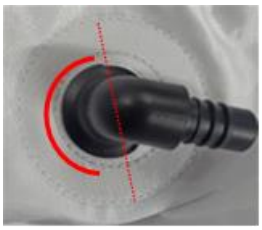
Fitting a Naish valve



✓ Match the Naish valve to its position in the fabric sleeve. The valve should be visible when viewed from above through the hole in its location.

✓ Push the teat out through its slot.

✓ Apply slight pressure with your hand to hold the fabric in place, then push half the valve ring through.



✓ Then finish fitting the other half of the ring by pulling on it slightly in a circular motion.

✓ Check that the valve is correctly positioned by turning it slightly on itself. This movement should be smooth and without resistance.

VI. Replacing a tube

1. Remove the tube

✓ Hold the valve and use your other hand to remove the tube from the teat.

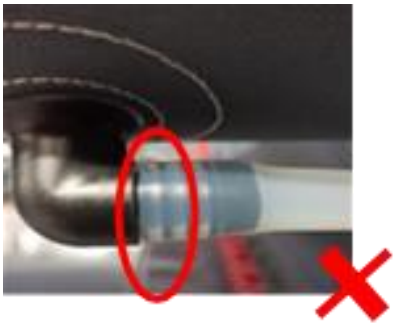
2. Cutting the new tube

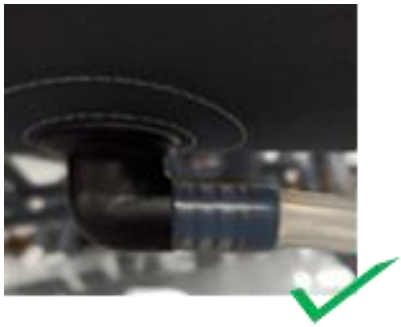
✓ Position the old tube next to the new one, then cut the tube to the same length with scissors, using a clean, precise movement. The cut must be clean.

3. Fitting the tube to a naish valve

✓ Insert the valve teat into the hose. Hold the valve with your other hand to keep it flat.

✓ Once the first centimeter has been pushed in, push the tube with a slight rotation from left to right. Continue to hold the valve flat with your other hand.



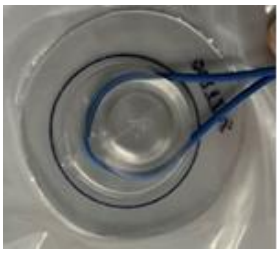


✓ Insert the hose as far as the end of the valve nipple.

VII. Changing or fitting an eyelet

✓ Match the eyelet to its location on the fabric sleeve. The eyelet must be visible when viewed from above through the hole in its location.

✓ Pass the clamp through the groove in the eyelet. Work from the outside inwards to be able to pull the end of the clamp from the outside.



✓ Reposition the eyelet opposite the hole then pull on the 2 clamp ends at the same time so that the eyelet is positioned and protrudes over the PVC protection.

✓ Pull the clamp to one side so that the eyelet snaps into position. The PVC protector should be fully seated in the groove all the way round the eyelet.

VIII. Repairing a bladder/cover

✓ Clean the damaged area (small tear, small hole) with an alcohol patch.

Examples :

Small hole on
a bladder

Small holes on
a cover

✓ Place the Monster patch transparently over the damaged area, then fold it in 4 to trace its middle.

✓ Place the Monster patch in the middle of the hole, peel off the self-adhesive part and stick the patch in place.

✓ Press the air out of the patch using a rigid tool.