

AirTrack Factory

SERVICE MANUAL



1 INSPECTION

POTENTIAL PROBLEMS

Air leaks

Every AirTrack leaks air. Our mats are mostly airtight, but there will always be some air loss because it's simply impossible to make inflatable products 100% airtight.

We use the following rule of thumb:

An AirTrack should not require re-inflation during training. This makes sense because the pressure should always be adapted to the users before every new training session.

Should an AirTrack lose pressure too quickly, we are facing a real air leak. Leaks can easily be spotted by listening or applying water with soap and checking for bubbles. They can occur on the following points:

- Grey valve
- Black valve
- Top & bottom material
- Material on the sides
- Seams

Damage

The following components can be damaged:

- Handles
- Velcro
- D-rings
- Banners
- Damage from transport, bag is damaged

Malfunction

- Malfunctioning blower
- Malfunctioning manometer

The chart on the right helps to identify a problem and find the right solution.

PROBLEM	PART	ANALYSIS	SOLUTION	TO BE PERFORMED BY	INSTRUCTIONS
Air leak	Black valve	Rubber gasket or o-ring missing or damaged	Replace the gasket or o-ring.	User	Chapter 2.3.4
		Damage to the valve itself	Attempt to repair. If unsuccessful, replace damaged part or entire black valve.	User or dealer	Chapter 2.3.4
	Grey valve	Damage to the pin, screw thread or cap	Replace the outer part of the grey valve.	User	Chapter 2.3.4
		Inner part	Return the mat to ATF; the entire valve needs to be replaced.	ATF	Chapter 2.3.4
	DWF Surface	Tear > 1cm	Case-dependent; contact ATF.	ATF or dealer	
		Tear > 1 mm, < 1 cm	Tear Aid	User	Chapter 2.3.3
		Puncture < 1 mm	Tear Aid	User	Chapter 2.3.3
	Seam	Seam opening	Seam grip	User or dealer	Chapter 2.3.2
	Boat fabric	Tear > 1mm	Case-dependent; contact ATF.	ATF or dealer	
		Tear > 1 mm, < 1 cm	Tear Aid	User	Chapter 2.3.3
		Puncture < 1mm	Tear Aid	User	Chapter 2.3.3
	Unknown	Can't find it	Contact ATF		
	Handles		Replace the handle.	User or dealer	Chapter 3.2
	Velcro		Contact ATF	ATF or dealer	
Damage	D-Ring		Replace the D-ring.	User or dealer	Chapter 3.2
	Banner		Replace the banner.	User or dealer	Chapter 3.1
	Transport bag		Replace the bag.	ATF or dealer	
	Other		Contact ATF		
Malfunction	OV10 blower		Contact ATF		
	Hitachi blower		Contact ATF		
	Manometer		Contact ATF		

2 FIXING THE PROBLEM

In this chapter you'll find general information on the different techniques you should know before repairing a piece of inflatable equipment.

Before any repair is made it should have been assessed by the dealer or ATF. If the end user attempts to repair a product without consulting his dealer first, the warranty lapses due to possible damage caused in the process.

Please read the following instructions carefully. If any questions arise, do not hesitate to contact us.

4.1 GENERAL INFO ON GLUING

IMPORTANT!

GLUE

AirProducts are made and repaired using a soft PVC glue. Check with your distributor which glue you should use.

Most glue has a limited usage period (usually approx. 1 year when unopened). Check the expiration date on the can before proceeding.

GLUING METHOD

- Clean the surface with a little bit of isopropyl alcohol applied to a wipe. This is essential for a good adhesion.
- Outline the gluing area with masking tape. The tape will protect the object from spilled glue. Firmly press the tape onto the object to prevent glue from getting under the tape.
- Apply the glue on both the equipment and the part you want to add by using a standard round paintbrush. The glue should cover the entire surface but not be too thick. A thin layer results in best adhesion.
- Check if the glue covers the entire surface. Make 100% sure the edges are properly glued!
- Remove the tape as soon as you're done applying the glue to prevent lines of dried glue appearing under the edge of the tape.
- Wait until the glue has dried in. Check the stickiness with your finger; the glue should not stick to your finger at all. Depending on the room temperature and glue brand this may take 5 - 20 mins. Continue with the next step as soon as the glue is ready. Do not wait too long!
- Firmly hold the item you're adding and stretch it out while pressing it onto the mat. Start from the most critical point (usually the top). Rub from the center to remove any remaining air. Rub all edges to seal. Use a roller or rounded-off spatula to improve the connection.
- Apply pressure to the connection using a weight or holdfast and allow it to dry for at least 12 hours.

PRECAUTIONS WHEN GLUING

Prevent glue from spilling anywhere. Glue can not be fully removed once it is dry.

When working on large tears, prevent glue from dripping inside the object, which could cause the yarns inside to stick together. When this happens, a dent could appear in the object which cannot be fixed! When repairing bigger air leaks, insert a piece of paper under the gluing area (inside the object) in order to avoid glue dripping on the yarns. If you can't get the paper out afterwards it's not a problem, it doesn't have any effect on the mat.

Always follow the safety guidelines described on the glue and wear protective clothing to prevent ruining your normal clothes.

4.2 SEAM GRIP

Comes in a small tube and is available at most hardware / outdoor shops. Ideal for small repairs to leaking seams. To perform a repair with Seam Grip you will need the items listed below. **Make sure you've read the general information on gluing in the previous chapter before proceeding.**

REQUIRED MATERIALS

1. Seam Grip.
2. Small flathead screwdriver. To widen the gap in the seam and fill it with glue.
3. Masking tape. Used to prevent spilling glue on the mat. In this demonstration we're using duct tape instead.
4. Soap, water, a brush and a cloth. To find the leak and dry the surface.

INSTRUCTIONS

Step by step instructions can be found on the next page.

Video instructions for this repair can be found here:

www.youtube.com/watch?v=_eZDLP4E97Y



Gather all the required materials listed on the previous page.



Inflate the AirTrack and apply water with soap on the area where you expect the air leak to be. Bubbles will indicate where the leak is. Dry the surface with a cloth and mark the location with a pencil.



Apply masking tape in front of the leak (on the top part of the mat). In this image, duct tape has been used instead of masking tape. Mark the exact location of the leak on the masking tape with a marker or pen.



Deflate the mat.



Use the screwdriver to slightly open the leak. Apply Seam Grip to the tip of the screwdriver and carefully fill the entire area of the leak. **Leave to dry for 10 mins.**



Press the seam to evenly spread the Seam Grip inside the gap. Remove the masking tape. **Leave to dry for 24 hours.**



Inflate the AirTrack.



Check if the leak has been fixed. If not, redo the process or contact ATF.

4.3 TEAR-AID TYPE B

Rightfully marketed as “The exceptionally strong repair patch”, Tear-Aid is an affordable, extraordinary useful repair set. This patch is much like what you would use to repair a flat bike tyre, only much stronger. It is used to repair inflatable sports equipment, as well as other inflatable structures such as bouncy castles and inflatable boats.

When applied correctly, Tear-Aid can withstand temperatures of -28 to +80 degrees Celsius (-20 to +190 degrees Fahrenheit).

ALWAYS MAKE SURE THAT YOU'RE USING TYPE B, TYPE A DOES NOT HOLD ON PVC.

APPLYING TEAR-AID TYPE B

1. Deflate the object.
2. Clean the surface with the provided alcohol wipe. Make sure the surface is completely dry before continuing.
3. Remove or stow back any yarns coming out of the cut. Close the cut as good as possible.
4. Cut the Tear-Aid patch to size. You will need at least 2.5 cm extra around the edges of the cut.
5. Round off the corners of the patch.
6. Start peeling off the paper liner (approx. 1 cm) using scissors. Do not use your fingers!
7. Position and anchor exposed 1 cm edge – allowing the patch to extend 2.5 cm beyond all edges of the tear. Slowly peel back the liner while carefully applying the patch over the tear – take care to avoid air bubbles. Rub from the center to remove any remaining air. Rub all edges to seal.
9. Allow 24 hours of curing time.
10. Test if the repair was successful by inflating the object and applying soapy water over the patched area.



4.4 REPAIRING GREY VALVES

Valves are a critical point on any inflatable object. Although they are strong, they are still vulnerable to damage. Before going into details about any leak, always (have the customer) check whether all valves are closed properly. Grey valves should have the pin in the 'up' position **at all times**, except when deflating the mat.

GREY VALVE REPLACEMENT

The grey valve consists of 3 parts, an inside part, an outside part and the cap. The outside part of a grey valve is vulnerable to damage from heavy objects landing on the valve, causing it to crack. With the help of the grey valve key, the outside part and cap can easily be replaced.

The inside part cannot easily be replaced. Damage to the inner part of the grey valve is extremely rare. When it does occur, contact ATF.

REQUIRED MATERIALS

1. Grey valve key.
2. A new grey valve.

INSTRUCTIONS

1. Take the cap off the valve and insert the key into the valve. Twist the top part off while holding the back part (which is inside the mat).
2. Hold the back part in place and screw the new top part on. Use the key to close it tight.
3. Inflate the mat and check if the new valve is airtight.



4.5 REPAIRING BLACK VALVES

First check with water, soap and a brush where exactly the leak is coming from. When you have seen the results, you can follow the steps below:

1. When the air leak is between the cap and the valve itself, check if the L shaped gasket is damaged. If it is damaged, replace it and check again.
2. The L shaped gasket is locked in place by a small rubber o-ring. This prevents users from losing it.
3. When the L shaped gasket is not damaged, check the internal screw thread for damage or imperfections. If you find any, there are two 2 options:

Option 1 is to smoothen the imperfection with a small target external heater. This requires experience and involves some risks, so it should not be performed by an end-user. Targeted heat can be applied to the imperfection, after which it can be reshaped. Make very sure not to heat up anything besides the screw thread! If you do not feel confident about this or don't have the right tools; do not attempt it and move on to option 2 or contact ATF.

Option 2 is to replace the valve completely. We have a special replacement valve which the end user can install by himself. Contact ATF for a replacement valve and a repair manual for your customer.

Please check the following pages for a step by step guide on how to replace the black valve completely.

Note: Please be careful while performing this repair. You'll be working with an incredibly sharp knife and there's a chance of damaging yourself or your equipment. **Safety first!**

REQUIRED MATERIALS

1. Soapy water
2. O-ring & L shape gasket
3. Sharp knife
4. Replacement valve, supplied by ATF
5. Black valve key.

INSTRUCTIONS

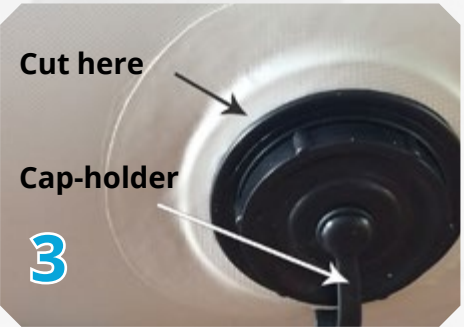
See next page.



Gather all the required materials listed on the previous page.



Make an incision at the position shown above. Cut all the way through the plastic (approx. 5mm thick).



The outer layer of the black valve may be covered by a grey fabric.



Carefully cut along the edge, around the valve. Stay as close to the edge as possible. Take your time and be careful; this is the most important step!



Remove the old valve. Remove the cap-holder (see top right image) from the cap. Don't throw the cap away.



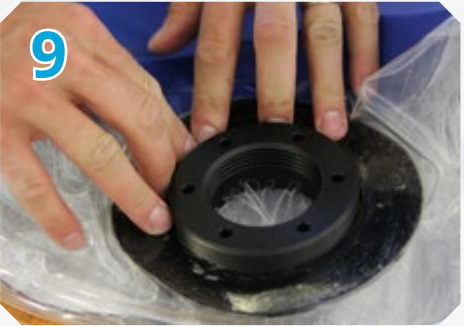
If a protective net is placed right at the **inner edge** of the hole, blocking the replacement valve, remove it with a knife.



Carefully cut off any uneven bits of plastic along the in- and outside of the edge to smoothen the surface.



Insert the back part of the new valve into the mat. When inside, place the soft gasket over the valve.



Press the valve into the right position. Avoid yarns coming between the valve and the boat fabric.



Screw the top part of the valve onto the back part.



Tighten the parts using the spanner.



(Optional) Close the valve using the cap from the old valve.



Inflate the mat using either the black or grey valves.



Apply water with soap to the valve to check for leaks.



There should be no bubbles popping up.

Is the new valve leaking air?

Follow these steps to minimize or stop the leak:

- Take the top and bottom parts of the valve apart again (using the spanner) and remove the entire valve. Make sure the surface of the ridge along the hole is flat and even. If not, cut uneven bits off.
- When placing the valve back in, blow away any threads that could come between the valve and the fabric.
- After the valve is back in position, use the spanner to close the valve very tight.

Please note that a very small leakage is acceptable.

5 ADDING EXTRAS TO AN OBJECT

Adding perks is a relatively easy process but since you're working with glue, it comes with a few important rules to keep in mind. **Make sure you've read and understand the gluing tips explained earlier. If you don't feel confident about your gluing skills, practice on a spare piece of material before continuing!**

POSSIBLE ADDITIONS

1. Velcro
2. Grips
3. D-rings
4. Banners

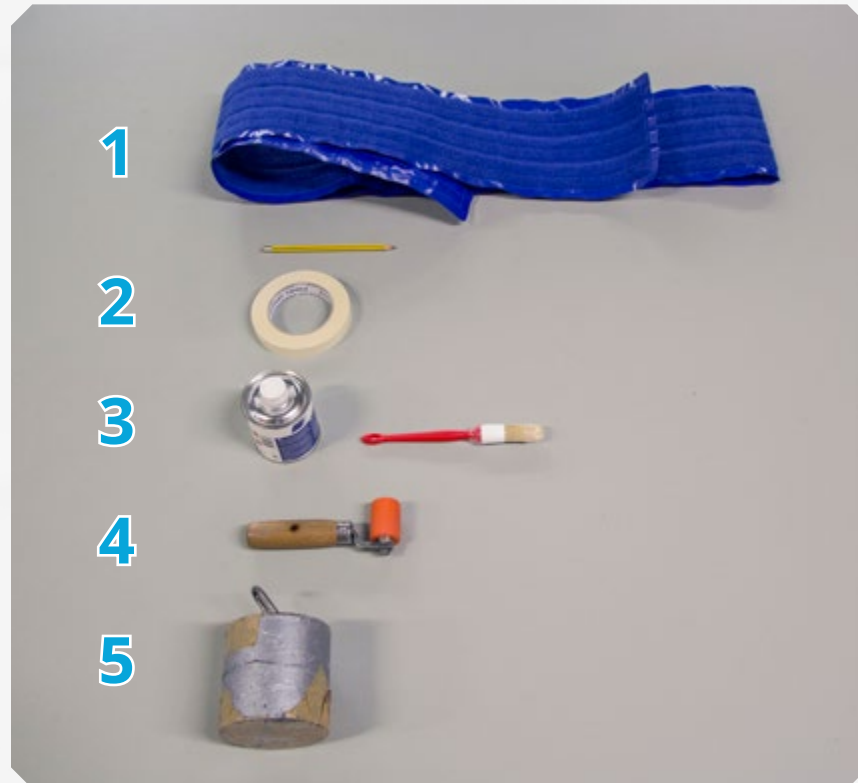
PREPARATION

1. Check your inventory for the required items.
2. Check the expiry date of the glue.
3. Contact ATF about the procedure you're planning to perform. Request the materials you're missing.
4. Clean the surface using isopropyl alcohol.
5. Follow the instructions on the subsequent pages.

5.1 ADDITIONAL VELCRO

Strips of soft Velcro stitched to a PVC coated fabric can easily be added to an AirTrack or AirFloor. Both the Velcro and the required glue are supplied by ATF. Since this procedure is time-bound, please read the entire instructions before beginning. These instructions can also be used for applying a banner to a mat.

REQUIRED MATERIALS



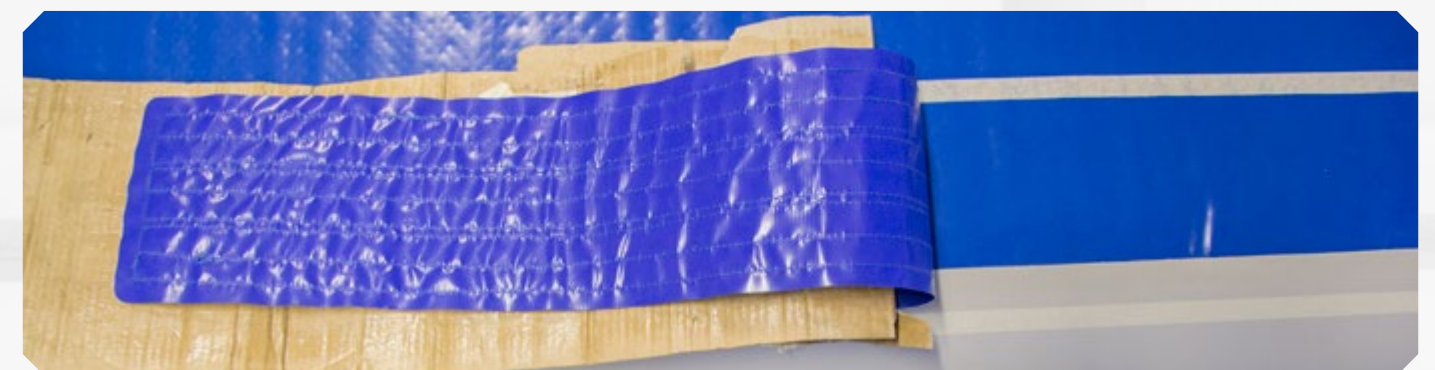
1. Soft Velcro, supplied by ATF. When requesting Velcro, please specify the width of the product, the amount of Velcro rows (rows are 5 cm wide) and the color.
2. Marking material. A pencil will make positioning easier and masking tape prevents glue from spilling.
3. Glue, supplied by ATF. Do not use your own glue without consulting ATF first!
4. Roller or rounded-off spatula (optional). When applying large strips of Velcro, the roller is essential.
5. Weight (strongly advised). After gluing Velcro to the mat, applying weight to critical points guarantees a better adhesion.

INSTRUCTIONS

1. Inflate the mat to high pressure and clean it as described earlier. Position the Velcro on the AirTrack. By our production standards, the Velcro should overlap the seam about an 3 cm.
2. Firmly pull the Velcro and mark all its corners on the AirTrack with a pencil. Check if the positioning is correct. Remove the Velcro.



3. Apply masking tape along the pencil outlines. You're trying to outline the shape of the Velcro strip, so round off the corners with an extra piece of tape. Rub the tape so no glue can come underneath.
4. Apply a layer of glue to the first 60 cm of the mat. Be carefull not to spill any glue on the mat! The outer edges (touching the tape) are most important, however, the entire first 60 cm of the marked area should be covered with a layer of glue. Remove the marking tape till just beyond the 60 cm point.
5. Do the same for the first 60 cm of the Velcro.
6. Wait for the glue to dry. Tap your finger on the glue; if it doesn't stick to your finger you're ready for the next step. Glue takes approx. 5 - 20 mins to dry, depending on the room temperature and glue type.
7. Carefully attach the first bit of Velcro to the mat, starting at the top. Rub the Velcro onto the mat from the center to the outer edges, removing any air left underneath. Optional: use a roller after rubbing for better results. Leave untouched for a few minutes before continuing.



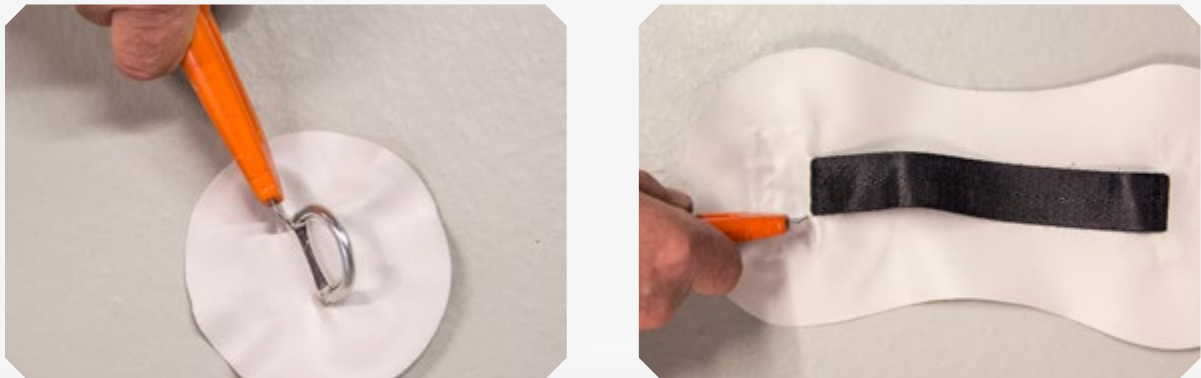
8. Pull back the Velcro a little bit until you notice a strong adhesion (usually less than 3 cm). This is the next starting point.
9. Re-apply the bit of masking tape at the end of the 2' so you can safely glue the next bit. Place a carton or plastic sheet under the Velcro strip when gluing the next bit of Velcro to prevent glue from spilling on the mat. Repeat this process until finished.
10. Apply weights to the top corners of the Velcro.
11. Do not deflate or use the mat for 12 hours.

5.2 ADDITIONAL HANDLES OR D-RINGS

Extra handles or D-rings can help make an AirProduct more versatile. These connections need to be very strong so take your time to glue them properly.

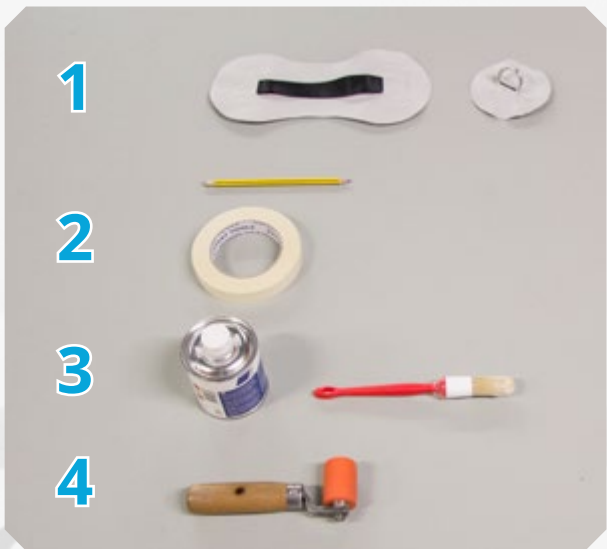
REMOVING AN OLD HANDLES OR D-RING

When adding a handle over an old (damaged) handle, make sure the new handles overlaps the old by at least 1 cm. Carefully remove the old handle by cutting out the black belt with a sharp knife before applying the new handle. Same goes for the D-rings; remove the metal part before placing a new ring over it. Be very careful not to cut through the side of the mat. Examples are shown below.



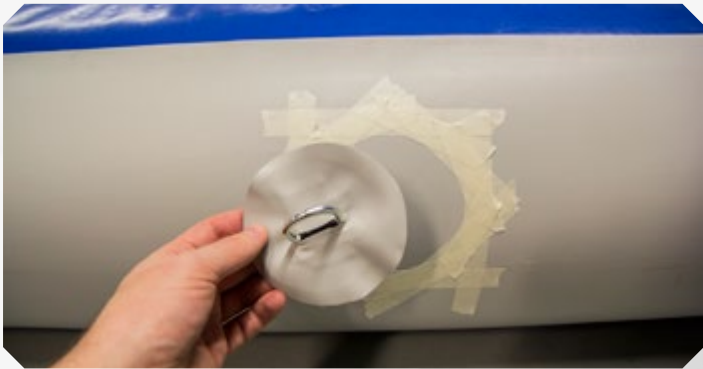
REQUIRED MATERIALS

1. Pre-made handle or D-ring, supplied by ATF.
2. Marking material. A pencil will make positioning easier and masking tape prevents glue from spilling.
3. Glue, supplied by ATF. Do not use your own glue without consulting ATF first!
4. Roller or rounded-off spatula (optional).



INSTRUCTIONS

1. Inflate the mat to high pressure and clean it as described earlier.
2. Position the handle or D-ring on the object and make a pencil outline.



3. Apply masking tape along the pencil outlines. Use overlapping pieces of tape to recreate the shape's outline. Rub the tape so no glue can come underneath.
4. Glue the area that you just marked with tape. Be carefull not to spill any glue on the mat! The outer edges (touching the tape) are most important, however, the entire marked area should be covered with glue. Remove the marking tape when finished.
5. Apply glue to the handle or D-ring.
6. Wait for the glue to dry. Tap your finger on the glue; if it doesn't stick to your finger you're ready for the next step. Glue takes approx. 5 - 20 mins to dry, depending on the room temperature and glue type.
7. Carefully attach the grip or D-ring onto the mat and rub from the center to the outer edges, removing any air left underneath. Optional: use a roller after rubbing for better results.
8. Do not deflate or use the mat for 12 hours.

6

MAINTENANCE AND STORAGE

Above all, users should follow the user manual provided with the product. Doing so will make sure the AirProduct has a maximum lifespan.

CLEANING

All our products are made of fabrics with a soft PVC coating. These products should only be cleaned using soft soap. NEVER USE CHEMICAL CLEANERS. If a product requires thorough cleaning, please contact ATF for instructions.

STORAGE

All products should be stored dry and clean. When products are stored wet, mold and damage will occur.

AirTrack Factory

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