Fans

1.5HP
2HP

Airquee Inflatables
www.airquee.com

Additional Operating Instructions

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Contents:

Fans come in all shapes and sizes and problems might not always be obvious. Before reporting a problem with a fan please read through this guide and make sure you have checked everything. These additional operating instructions cover Gibbons fans supplied by Airquee. Over many years Airquee has established Gibbons fans to be the most reliable and robust for the most demanding users.

If you are in any doubt about anything mentioned in this manual or its suitability for your product or circumstances, please contact us using any of the methods given on our website, www.airquee.com/contact.

Nothing in this guide takes the place of or deviates from the manufacturer's documentation. The manufacturers documentation can be obtained by visiting www.airquee.com/manuals.

Never investigate a problem with a fan while it is plugged into the electricity supply.
The fans we supply are riveted closed. They are not designed to be taken apart by customers.
Never conduct any electrical tests unless you are a qualified electrician.

They may be small, but they are pretty heavy. A typical fan can weigh anything from 18-27kg. Care must be taken when moving them. You should conduct your own manual handling risk assessment to determine a safe set up and moving procedure and number of people required based on your circumstances.

Is it a **fan** or is it a **blower**? – you choose. The terms are mixed muddled up all over the place and they refer to exactly the same thing.

INTENDED USE OF THE PRODUCT

Constant flow fans are designed to be attached to an inflatable's filler pipe and continually run while the inflatable is in use. They are not designed to run with no inflatable attached to them, this can damage the product.

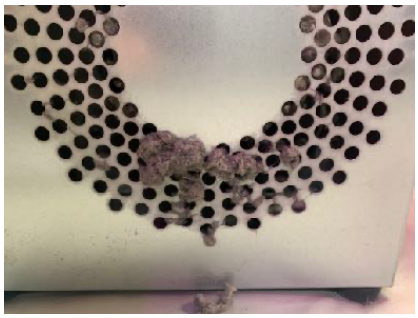
OPERATING GUIDELINES FOR 1.5HP & 2HP

- **Always check the fan for any physical damage before use or deviation from the original specification**
- **Always check the cable for physical damage before use**
- **Never use a fan that is damaged in any way**
- **Always ensure the air intake is free from obstructions**
- **Always ensure the air outlet is free from obstructions**
- **If using an extension lead, ensure the lead is fully uncoiled and correctly specified**

2. CLEANING

All fans need daily inspections and regular cleaning. They suck in thousands of litres of air and along with that they take in all the dust, dirt, and grime.

1. On a daily basis the fans should be inspected for:
    a. Any physical damage to the fan, cable, or plug
    b. Buildup of dirt on the fan intake
    c. Any obstructions on the fan intake, this may be just pushed to close against a wall
    d. Ensure the filler pipe is straight and the end is firmly attached with the cam buckle and strap
2. On a weekly basis the fan should be unplugged from the power source:
    a. Cleaned all over with a soft brush
    b. Vacuum the air intake
    c. Vacuum the area around the fan



This is an example of just a few weeks of dust buildup. Already the fan will be working much harder to deliver the air. This can cause the fan to overheat and stop. If the fan cannot deliver the required air then the inflatable will be soft and potentially dangerous.

3. CONNECTING FANS

Both 1.5HP and 2HP fans come with a 16amp and a 13amp connection. Below we will explain how they work.

In the UK a 'normal' household or business electrical supply is 13amp 220-240 volts. It can be called a 3 pin plug socket and looks like this:

In Europe it is the same supply and can be called a schuko socket and looks like this:

For more commercial uses where durability and water/dirt resistance are important you can get an electrician to install 16amp sockets that look like this: **(These are recommended)**

All the above runs on 220-240v single phase.

Connecting it all together

Set up will depend on your circumstances, use, and number of fans. It is highly recommended that an electrician is consulted for multi fan setups. It is even more important when there are lots of other electrical items being used in the same building.

Connecting just one fan to a busy setup might be enough to tip the system over the edge and blow.

Setup options:

Fan

Fly Lead (supplied with fan)

13amp socket

Fan

Extension lead if required – Ensure it is fully uncoiled and correctly specified

16amp socket

REMEMBER

The maximum you can plug into a 13amp socket is ONE 1.5hp or 2hp fan. But just because there are multiple 13amp sockets available at your premises does not mean you can keep plugging fans in, as the line they are on will have a limit. Once you hit the line limit, it will also blow. The limit will depend on how the electricity supply was set up in your premises. The line will probably have other items running from it, again increasing the load.

Everything could work fine until the kitchen fires up or the cleaner turns on the vacuum!

4. FAN TROUBLESHOOTING

IS THE FAN PHYSICALLY DAMAGED?

1. If yes, then arrange for a replacement. Never continue to use a fan that is damaged.
2. Is the plug or cable damaged? If it is do not attempt to unplug it as you may get an electric shock. Isolate the ring main at the fuse board before unplugging. Ensure the fan cannot be accidently used by anyone else and order a replacement.

THE FAN DOESN'T OPERATE AT ALL

1. **Change the fuse in the 13amp plug**. If you are using the blue 16amp plug, there is no fuse. See below on how to change a fuse.
2. **Is there power to the socket?** – Try plugging something else into the same socket and see if that works. Struggling to find something portable? Even a phone charger connected to your phone will show if there is power in the socket.
3. **Extension Leads –** If the fan is being used on an extension lead try a different lead or plug the fan directly into the wall socket. Never use an extension lead that is coiled up.
4. **Is it being used with an RCD device?** If so, remove this device (to eliminate this as the potential problem) and try again.
5. **Has a trip switch been tripped?** – Identify the fuse on the main fuse board, has it been tripped? Are there other electrical items in the same area not working?

THE FAN IS CUTTING OUT AFTER SEVERAL SECONDS OR MINUTES.

1. If being used on an extension lead is the extension lead fully unwound? Coiled up extension leads produce heat and will stop working. The extension lead should be no more than 25 metres long and have cable thickness of at least 2.5mm2, to reduces voltage drop.
2. Is there anything else operating on the same circuit that could be drawing power? Even a vacuum cleaner plugged into the same circuit could overload the circuit. This is very common with back garden hire. A ring main is all powered from one RCD in the house distribution board. If an oven, kettle, washing machine etc. are all on this will cause issues.
3. It is possible that the buildings electrics are not strong enough for the fan? Try plugging the fan in somewhere else.
4. If the fan is cutting out after 15 minutes or more then the likely reason is due to the amps drawn being too high. This heats up the motor and causes the thermal overload to open cutting out the fan.

THE FAN IS MAKING A STRANGE NOISE

1. If the noise is mechanical, it could have been dropped or something put into the impeller.
2. If the fan makes a noise when slowing down then it could be a bearing failure, this may be a slight grinding sort of noise (quite rare).
3. If the fan vibrates a lot, it is probably that the impeller has been impacted, again caused by damage or neglect.
4. Regardless of the type of noise it cannot be repaired and should be replaced.

THE FAN PRESSURE IS LOW

1. Is there anything blocking the fan intake? (we have had an example of a crisp packet stuck to the intake!).
2. Is there anything blocking the fan output? Check the non-return flaps are moving freely.
3. If there are multiple fans running on the same circuit an overall decrease in power will result in the fan not fully performing. Each fan needs its own power feed.
4. If the inflatable is soft, ensure all zips and fully closed, and the filler pipe(s) are completely straight. The inflatable should be checked for damage too. Even a small hole can have a huge effect on pressure.
5. For pool inflatables the hose must be straight and no longer than 10m in length. Ensure also that the hose is not crushed as this can have a huge effect on the pressure. Even small 'crushed' areas can cause turbulence which will reduce pressure.

5. FAN TECHNICAL DATA – 1.5HP

Material	Galvanised Steel Sheet
Maximum Running Current	7.3A (230V)
Rated Output	1.1kW 1.5hp
Speed	2800 - 3260 rpm
Electrical Supply*	100V-230V 50Hz-60Hz
Shipping Dimensions	46 x 28 x 53cm / 18.1” x 11” x 20.9”
Product Dimensions	41 x 22 x 51cm / 16.1” x 8.8” x 20.1”
Weight	16.6kg / 37lbs
Decibel Level	83 dBA
IP Rating	24

Certifications

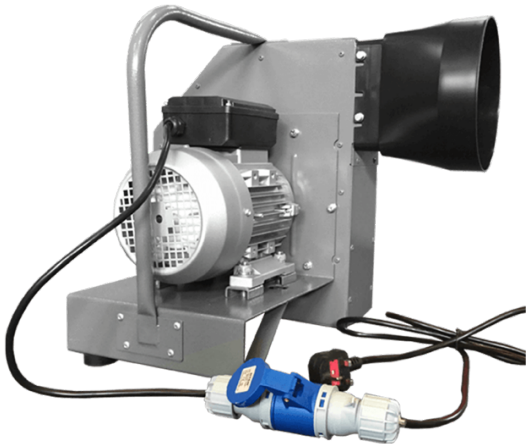
6. FAN TECHNICAL DATA – 2HP – NEW 2022 MODEL

Material	Galvanised Steel Sheet
Maximum Running Current	10.4 Amps (230V)
Rated Output	1.5kW 2.0hp
Speed	2800 rpm
Electrical Supply*	230V 50Hz
Shipping Dimensions	48 x 29 x 54cm / 18.9” x 11.4” x 21.26”
Product Dimensions	43 x 28 x 53cm / ”16.93 x 11.0” x 20.9”
Weight	24.0 kg / 52.9 lbs
Decibel Level	85 dBA
IP Rating	24

Certifications

7. FAN TECHNICAL DATA – 2HP – OLD MODEL

Material	Galvanised Steel Sheet
Maximum Running Current	9.6 Amps (230V)
Rated Output	1.5kW 2.0hp
Speed	2820 rpm
Electrical Supply*	230V 50Hz
Shipping Dimensions	54 x 45 x 45cm
Product Dimensions	52 x 43 x 42cm
Weight	27.0 kg
Decibel Level	85 dBA
IP Rating	55



8. FREQUENTLY ASKED QUESTIONS

Do I need to service my fan?
No! As long as you take care of your bouncy castle blowers, keep them protected from dust and debris and store them out of cold, damp places, they should be fine! However, please remember to have your units PAT tested at least annually when your inflatables are being inspected.

Please remember it is best practise to inspect your blowers before and after every hire for damage to the inlet and outlet guards and the electrical connections and power cables.

If in doubt, please have your inflatable blower checked by an electrically competent person.

Can I use an extension lead with my fan?
Yes. However, ensure the cable has a minimum copper cross-sectional area of 1.5mm2, but for best practise, we suggest using 2.5mm2 cable, with a maximum length of 25m. NB: The cross-sectional area is usually embossed into the outer insulation of the cable along with other technical information. Please note that each fan should be supplied by its own dedicated extension cable, this will ensure that the fan is operating most efficiently without any loss in performance.

Can I use my fan in the rain?
As with all electrical products care must be taken when operating a Fan in damp or wet conditions including rain and snow. Gibbons Fans are the only inflatable blower manufacturer who has had their products certified for outdoor use in UK, Europe, USA and Canada.

They are designed to IP24, meaning that they can safely withstand splashes of water from all directions, in line with the IEC standard 60529 (UK and Europe) and to CSA C22.2 No. 68-09 / UL 1450-Fourth Edition for Canada and the USA.

We strongly recommend that the correct electrical connections are used to ensure that the complete installation is also to IP24. Please note that using any electrical device in wet or damp conditions should be avoided as much as possible and that inflatables should only be used in these conditions if manufacturers and or government safety guidelines are strictly followed.

Can I use my fan on the beach?
Gibbons Fans can be used on the beach without affecting either the warranty or performance of the unit. We do however recommend that an inlet filter is added to the inlet side of the fan, this will prevent sand being sucked into the inflatable.

Over time if a blower is used on a beach, then sand will be ingested by the blower which will gradually create a build-up of sand within the inflatable itself, increasing the weight and possibly causing above normal wear and tear (damage) to the internal structures of the inflatable. Our inlet filter can be fitted to our FP 5006 (1.50hp) and FP 5007 (2.00hp) products and involves the inlet guard of the fan being changed and the filter kit added. Our advanced, washable filter prevents sand and other debris entering the fan without affecting blower performance and is a must for any operator looking to operate an inflatable either on or near a beach.

How loud are the fans?
In free air (i.e. not connected to an inflatable), the FP5005 and FP5006 0.75hp/1.5HP units produce approximately 80dB at 5meters and the FP5007 2.0HP fans produce approximately 87dB at 5 meters. You can reduce the noise generated by the blower by using one of our fantastic noise reducing covers, these reduce the noise of a blower by 12%.

FAQ source: https://www.gibbonsfans.com

9. CHANGING THE FUSE IN A PLUG

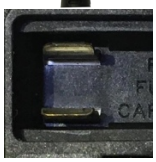
The fuse is designed to blow if anything goes wrong. It could also blow if there is a power surge, power cut, or many other circumstances. Replacing the fuse is easy and should always be one of the first checks that is carried out. If the fuse continues to blow then there is another larger problem that needs to be investigated.

We recommend that you keep a supply of 13amp fuses on site ready to be used. They are very inexpensive and can be bought from any hardware store or supermarket. – Never try to put anything else into the plug fuse compartment. The maximum fuse you can use is 13amp. We recommend that a slow blow type fuse is used.

Switch off the fan and remove the plug from the socket.

Find the fuse holder, which will be small plastic rectangle labelled 'FUSE' or 'FUSED' in between the live and neutral pins.

Use a small flat blade screwdriver to carefully lift the fuse holder. If the fuse contacts are tightly holding the fuse, then it can take a little force to lift the cover. If it falls out very easily, then the contacts have likely become loose.



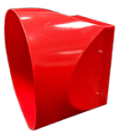
Check the contacts (little springy U-shaped clips) and the metal on the fuse for any signs of heat damage. Heat will cause the metal to turn darker, sometimes with a multicoloured pattern. The plastic may also be melted, particularly around the contact. If the contacts are damaged do not use.

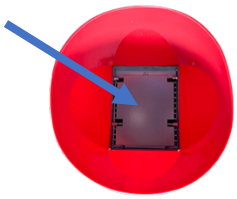
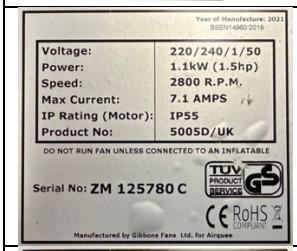
Check that the replacement fuse is the correct rating for the fan – a 1.5HP or 2HP fan uses 13A. NEVER try and put anything else in this slot. 13amp is the maximum you can get.

Use a small flat blade screwdriver to push in each side of both contacts - more than 1mm is unlikely to be needed. Do not push them too close together, as the fuse still needs to fit.

With the fuse back in the holder, place the cover so that it is resting back on the plug. Firmly press until the holder is fully inserted, flush with the surface of the plug.

10. GLOSSARY OF TERMS

	Fan / Blower	The electrical device used to inflate your pillow pit / inflatable park /inflatable.
	1.5HP / 2.0HP	This is the power of the fan. The more power, the more air.
	Amps	An "amp", short for ampere, is a unit of electrical current, having the right amount available is vital – consult your electrician
	IP Rating	An IP Rating (also known as an Ingress Protection Rating or International Protection Rating) is a way of showing the effectiveness of electrical enclosures in blocking foreign bodies such as dust, moisture, liquids, and accidental contact Both fans have IP rating of 24 with means: 2 = Protected against solid objects over 12mm, e.g. fingers. 4 = Protected against water splashed from all directions, limited ingress permitted.
	Fly Lead	The cable supplied with all 1.5 and 2HP fans. This converts the fan cable from 16amp to 13amp. Connect the blue end to the blue socket attached to the fan and then plug the 3-pin plug into a normal UK socket
	UK 3 Pin Socket	Type of socket available in domestic and business premises in the EU. 220-224v 13amp maximum
	EU schuko socket	Type of socket available in domestic and business premises in Europe. 220-224v 13amp maximum
	Fuse	Needed in the 3-pin plug of the fly lead. Always keep spares
	3 Pin UK Plug	Located on the fly lead and needed when plugging the fan into a standard UK socket.
	16amp 'blue' socket 'commando' socket	This is type of socket is typically found in more industrial environments where robust and water/dust resistance is needed
	16amp Extension Lead	Connect the male end to the fan 'blue' socket and the other end to the 16amp power socket. Always ensure the extension lead is fully uncoiled before use.
	Cone	The plastic part of the fan that delivers the air to the inflatable.

	Non-Return Flaps	Located where the air exits the fan, at the back of the cone. These should be free moving and clean. They should be replaced if missing or damaged.
	Intake Grill	This is part of the fan casing and should be free from dust. It should also have enough airflow around it to allow to air intake.
	Information Label	Located on the top of the fan it will give all the technical data
	Serial Number	This can be located on the Information Label above and will be required in case of any problems
	Fan Cover	Used to protect the fan and reduce noise. Ensure the sides do not touch the air intake.

Your product model, and its additional equipment (number and type) may differ from the one presented in this manual. All the pictures and drawings contained in this manual are for illustration purposes only. Any misuse or failure to adhere to the instructions and recommendations contained in this manual will render void the warranty.

Due to constant innovation, product enhancement and changes to international standards any printed or downloaded manual may become out of date. The most recent manuals can be freely downloaded at www.airquee.com/manuals.

For any further information or guidance please refer to www.airquee.com/contact for the best way to contact us in your country or region.