# **OPERATION & MAINTENANCE GUIDE**

# **MobileAir**

# Advanced Vehicle Air Purifier

Model: CUASV10825



Manufactured in Canada by



Congratulations. Your MobileAir Advanced Vehicle Air Purifier will remove gases, odours, fumes and particulate pollution and give you and your family cleaner and healthier air while driving.

Please read and understand the advice given in this guide before installing or using the equipment.

www.plainair.co.uk

## **HOW IT WORKS**

MobileAir draws your cabin air through a highly efficient physical barrier, a HEPA filter, trapping the finer particulate pollution, through a market-leading multi-year activated carbon filter, to remove dangerous gases from the air, then through another HEPA filter, just in case. Put it in your vehicle, plug it in, and forget about it.

#### **GETTING STARTED**

#### **Preparation**

To get the best from your *MobileAir*, thoroughly clean and vacuum all the interior surfaces of the vehicle before installation. Do not use chemical sprays or cleaners except where necessary. Regular cleaning will prolong the life of the filters in the equipment.

#### Installation

Remove the *MobileAir* from its packaging and the airtight bag which protects the life of the activated carbon filter before first use. Wipe with a damp cloth if necessary.

Decide on where to locate the *MobileAir*. You can move it later depending on preference, experience and passenger comfort. The hook and loop straps provided can be used to fix the unit in its desired position. It is normally recommended that the unit is placed on the floor underneath the rear of the driver's seat. If there is insufficient space the unit can be located anywhere in the vehicle's cabin (or boot, for a hatchback or estate with no parcel shelf installed) where it is safe to do so and where the air vents on the unit do not become blocked by either the straps provided or by any part of the vehicle or contents.

It is not safe to locate the unit under the front of the driver's seat unless securely fastened as any movement of the unit may interfere with the operation of the vehicle. For maximum efficiency you should ensure there is at least 7cm (3") gap between each vent on the unit and any part of the vehicle. Accidental occasional blocking of one inlet vent will not damage the unit but will reduce its ability to purify the air. Blocking both the inlet vents or the outlet vent could result in damage. Install the *MobileAir* on the floor or below seat height in order to reduce the risk of injury in the event of a collision. The unit can rest on its base or on the unvented side without affecting efficiency.

Do not install over or near any vehicle air bag.

Connect the power cable provided and plug into a convenient 12V socket. Ensure the cable does not:

- Interfere in any way with the driver or the operation of the vehicle
- Risk being damaged by the sliding mechanism of any seat
- · Become damaged by passengers or contents

#### **Before Use**

Use a power socket that can be easily reached by the driver **OR** that does allow current to flow when the ignition is off in order to prevent inadvertent discharge of the vehicle's battery when unattended. If the socket is not live when the ignition is off you can leave the *MobileAir* connected at all times. Ensure any spare cable is tucked away and the unit cannot cause an obstruction.



Under either front seat...



...or any safe location sharing cabin airflow

#### **OPERATION**

The *MobileAir* is designed to be running whenever the vehicle is in use. Its impact on the quality of the air that you are breathing will depend on the level of pollution at any time and, importantly, on how you **manage the airflow** in your vehicle.

Until now you've probably driven with the air controls set so that outside air flows into the car though the air vents most of the time. This stops humidity and carbon dioxide from your breath from building up inside. However, this does let in outside pollution and will prevent your *MobileAir* from maximising your air quality.

Set the airflow to 're-circulate' with the windows closed. This reduces the inflow of outside air to a level the *MobileAir* can easily manage. Within a few minutes the quality of air will improve significantly. After some time you may notice the windows start to fog up from the humidity in the occupants' breath, although you can delay this by using the car's air-conditioning, which removes the moisture from the air. Eventually you'll need to change the

air, especially as carbon dioxide  $(CO_2)$  can build up, potentially causing drowsiness and headaches. How quickly  $CO_2$  builds up will depend on the size of your car and how many passengers you have, and experience will tell you if it starts to have an impact. Window fogging will normally occur long before  $CO_2$  build-up becomes an issue.

If driving alone it is recommended that you let in outside air for a few minutes at least every half an hour, and more often if you have other passengers. Once you've exchanged the air, set it back to 're-circulate' (over the windscreen will assist in anti-fogging) and let the *MobileAir* remove the pollution again.

You will further improve the quality of the cabin air if you only let in outside air when it seems pollution levels are lower. Slow, congested major roads will be highly polluted, whereas faster driving conditions or quieter roads are good opportunities for air changes. Of course you may not feel the conditions are good at all in which case just go ahead and let in air when you need to, knowing that *MobileAir* is providing some protection.

Do not turn off the car air flow even when re-circulating the air as the existing car cabin air filter will help to remove many of the larger airborne particulates.

#### **MAINTENANCE**

#### Care of the MobileAir

The *MobileAir* is designed to give you many years of effective purification if you follow a few simple guidelines.

- Keep the interior of your car clean, especially from dust and pet hair.
- Clean the outside of the unit only with a damp cloth. An occasional gentle vacuuming of the air inlets can extend the life of the filters (but take care, strong suction might damage the filter).
- Locate MobileAir where it will not be kicked or knocked, taking care over the power connection to the unit. Protect the cable. Replacement cables and other accessories are available though our website.

#### The Filters

MobileAir contains two types of filters which work together to improve the air you're breathing while on the road.

Approx. 900 grams of 'activated carbon' – a specially treated form of charcoal that traps polluting and dangerous gases (it's used in military gas masks). It will also significantly reduce unpleasant smells in the car – think takeaways, wet dogs and smoking. It doesn't mask these smells, like an air freshener, but removes them. *MobileAir* is special in that the amount of carbon is many times the tiny quantities found in cheaper, less effective products and because the carbon is specially treated to ensure maximum adsorption of the most polluting gases.

Surrounding the carbon is a 'Super-HEPA' particulate filter that captures almost all fine particles that are the cause of most pollution-related respiratory issues. HEPA filters are widely used to provide clean air in hospitals, laboratories and electronic clean rooms, removing 99.97% of airborne particles down to 0.3 microns in size.

# **Changing the Filters**

**When?** Both filters are changed together, whenever one is saturated. If you notice reduced airflow from the *MobileAir* it is likely that the HEPA filter is becoming full. If smells don't go away as quickly as they once did, or if the unit regularly gives off smells, the carbon is saturated and should be changed. If you don't notice any problems, change the filters after 3 years, or approx 25,000 miles (less in highly polluted areas or slower than average driving).

If you have a new or nearly-new car we recommend the first filter change is carried out after 9 months as the much higher levels of chemicals given off by the car interior will saturate the filters more quickly. That new car smell is actually quite toxic.

**How?** Click on the QR code found on the unit, or go to www.plainair.co.uk for details on how to return the unit to us free of charge. We supply you with suitable packaging and a courier will collect from you at a convenient time and place. We will change the filters for you, give your *MobileAir* a maintenance service and swiftly return it to you.

Plain Air is proud that we are able to recycle all of the used carbon filters returned to us in this way, avoiding a considerable volume of landfill waste. Unfortunately the material HEPA filters are not recyclable.

## **AllerAir**

AllerAir Industries Inc, based in Montreal Canada since 1996, is a market leader in the design and manufacture of air purifiers that effectively remove both particles and polluting gases from the air. Its range of products feature deep beds of activated carbon, providing many times the gas removal properties of the majority of its competitors. Plain Air Ltd is delighted to be the sole UK distributor of the *MobileAir*, providing the perfect balance of quality, Canadian engineering with maximum, long-lasting purification for cars and other vehicles.

#### **FAQs**

# Can I swap the MobileAir between cars?

Of course, as long as there is a 12V DC power supply. You could have the unit in your work vehicle during the week and move it to the family car at weekends, or make sure the children benefit on the school run.

#### My MobileAir isn't working.

Check the power connection at both ends. The supplied cable shows a red light when properly connected to the car. Check the ignition is on as most vehicle power sockets aren't live when the ignition is off.

If you've followed the set-up and operating procedures and there is power from the socket but not at the unit check the power cable for damage. Remember to ensure the cable doesn't become trapped in the sliding mechanism of the seat.

The *MobileAir* contains a standard 0.75A fuse which can be replaced if necessary. Follow the instructions for removing the base plate and activated carbon filter described in the section 'Changing the Filters'.

If you're still stuck call us for assistance.

# My MobileAir seems to be running slower than usual

Check the air vents aren't blocked or that there isn't a lot of dust, or other debris blocking the vents. The Super-HEPA filter may be full and needs changing.

## My MobileAir is giving off a smell

You might notice a smell the first few times you use a new filter but it should soon go away. It can also happen in very hot conditions as some gases previously trapped by the filter can be released. Unless the filter is old, continuing to use the purifier should rectify the issue. If the filter is old this is usually a sign that the activated carbon is full and needs replacing.

## Does the *MobileAir* produce ozone?

No, we do not believe it is sensible for a purifier in an enclosed space to use ozone-producing technology. Ozone is a highly damaging pollutant and the unit will effectively remove ozone from the vehicle cabin air.

# Can I leave the MobileAir plugged in the whole time?

Yes, when the engine is running. Check if the power to the socket goes off when you turn off the ignition. If it does not, unplug the unit whenever you turn off the engine to save the car battery. Otherwise you can leave the unit connected. (Note: Filter life will be slightly extended if you disconnect the unit when driving for an extended period with the windows open as the unit will mostly be cleaning air that goes straight out of the vehicle.)

## Won't the *MobileAir* overload my car battery?

No, it's designed to operate whenever the engine is running. If you have an old battery that struggles to start your vehicle then you may wish to wait to plug in the unit until the engine is running.

## Can I clean the filters to get more life out of them?

No. The HEPA barrier filter would be damaged by cleaning or washing and the carbon filter won't release captured pollutants through washing or capture new pollutants if wet. However, you can remove any obvious fluff, hair etc from the air vents, and gently vacuuming the vents every month or so may extend the filter life. Do not push anything into the vents as this may damage the filter or motor.

## I spilt liquid into the unit, what should I do?

Unplug it straight away as operating it when wet may damage the motor. If only a little liquid (splash of drink or rain) entered, shake the unit to remove any liuid and put it in a warm place for a day or two to dry out. The filters will be less effective when damp. If a lot of liquid entered, get in touch with us at Plain Air for advice before operating.

# My car is often full of condensation. Can I use the MobileAir?

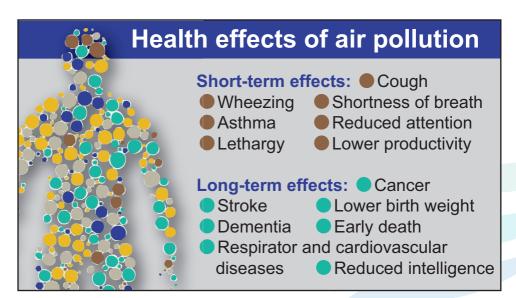
The filters are sensitive to excessive moisture and humidity and drawing wet air into the unit may saturate the filters and prevent effective operation until the unit has dried out internally. We suggest unplugging the unit until ventilation has removed the condensation.

## Doesn't my car already have a cabin air filter?

Almost certainly yes, but it's unlikely to be anywhere near as effective as the HEPA filter in the *MobileAir*, and will do nothing to remove nitrogen dioxide and other polluting gases from the air. At best it will remove larger particles from the incoming air and help extend the life of the HEPA filter. These filters are fitted more for the benefit of the car's electrical systems than the occupants.

#### **SAFETY**

- Use only the supplied power cable
- Use only with a 12V DC supply
- Do not operate if the unit is wet
- Fix the unit to the vehicle floor or ensure it is firmly attached low down with the supplied hook & loop fixings
- Place the unit away from the driver's feet
- Do not block the air vents with the straps, parts of the vehicle or belongings
- Do not install the unit over or near any vehicle air bag
- Do not drop the unit
- Unplug the unit before moving it to prevent damage to the connector
- Not to be used by children or anyone with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction
- Do not allow children to play with the unit
- Periodically check that the air vents are not blocked by dust or debris
- Ensure sufficient cabin ventilation when driving at all times
- Do not be distracted by the operation of the unit when driving
- Clean only with a damp (not wet) cloth
- Do not expose the unit to wet or excessively humid conditions
- Disconnect the unit immediately if liquid is spilled in or onto it
- Disconnect the unit immediately if it becomes excessively warm through operation
- Do not operate if the power cable is damaged
- Do not repair or modify the unit except as recommended here



#### **GUARANTEE**

Plain Air Ltd gives a 3 year guarantee from the date of purchase that the *MobileAir* is free from manufacturing faults. If there is a fault covered by the guarantee we will repair or replace the unit and refund reasonable postage costs from the UK. If the fault has other causes we will discuss the options with you and give you a reasonable quote for repair we do not look to make a profit on any repairs which should rarely be needed if you take reasonable care of the unit. AllerAir Industries Inc, the manufacturer of the MobileAir also provides a 1 year warranty (details available), although any claim should normally be made through Plain Air Ltd as the retailer.

#### **EU REGULATIONS**

#### **Declaration of Conformity**

AllerAir Industries Inc, of 6634 rue. Abrams, St-Laurent, QC, Canada, H4S1Y1, declares that the MobileAir vehicle air purifier Model No. CUASV10825 is in compliance with the necessary requirements of EN 60335-1:2010 (Fifth Edition) incl. Corr. 1:2010 and Corr. 2:2011 + A1:2013, EN 55014-1: 2006 + A2: 2011 and EN 55014-2:1997 + A2: 2008, and is approved for sale and operation in the United Kingdom and the European Union.









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