



Operating and Maintenance Manual for GreenAir
WheelMate and double WheelMate Spray Booths



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Operating Instructions

The WheelMate is a spray booth designed to provide the ideal conditions for the application of spray paint to alloy wheels. It includes a fan, extraction filters, light fitting and a wheel turntable. It has been designed to be lightweight and take up as little floor space as possible. It can be used in a van or in a building.

It requires a 230V electrical supply and comes with a 4.0m flex and a 3-pin domestic style plug with a 13A fuse.

It is delivered ready assembled. Once the ducting has been sorted the unit can be plugged in and is ready to use.

The fan is sized to provide a velocity of 0.7 metres per second across the front opening of the spray booth with partially soiled filters. This is a guideline recommended by the Health and Safety Executive, and is also standard industry practice, to ensure that over spray directed towards the filters is contained.

It is important that the sprayers use air-fed masks, particularly when spraying two pack materials.

Two stages of filter are to be used with this spray booth. The first stage is a 100mm thick, graduated density, Paintstop media which is usually green facing the sprayer and white on the other side. The second stage is a 20mm thick layer of 290 gsm (grams per square metre) fines filter. This is usually blue facing the sprayer and white on the other side. This is to be positioned in the same frame behind the Paintstop media.

It is important that the air is expelled to outside the van or building. A 3.0m length of flexible duct with a spigot and two hose clips are provided for this. Additional ducting may be required, particularly if the spray booth is to be installed in a building.

The turntable comprises four rollers mounted on a cross shaped frame, and two 'spinner' wheels. The 'spinner' wheels can be moved up and down the cross for different sized wheels. Each spinner assembly is held onto the cross by two bolts and wing nuts. To move the spinner, remove the wing nuts, pull the assembly off the cross, re-position where required and replace the bolts and wing nuts.

Maintenance

Always ensure that the fan is isolated by unplugging the power supply before removing the access cover.

Weekly

Visually check the condition of the filters. It is likely that the primary Paintstop media will need to be replaced more frequently than the secondary media.

Check the condition of the light glass.

Bi-monthly

The fan blades should be cleaned of any over spray build up. Whilst doing this you should take the opportunity to clean the motor cooling fins and remove any build-up of paint overspray from the fan chamber.

As well as providing extraction, the fan also draws cooling air over the motor. Failure to do this will result in poor extraction and eventually the motor overheating and failing. A build-up of paint overspray can be a fire hazard.

To get to the fan, first remove the access hatch below the bench using an 8mm socket or equivalent to reveal the fan chamber. Then remove the fan by unscrewing the four 8mm bolts in the corners using a 13mm spanner or socket and pulling it forwards out of the chamber.

Carefully clean each blade using a paint scraper or similar. **Once this task is started it must be finished** to ensure the balance of the impeller.

Note that the fan has an air inlet on both sides. When you remove the access cover you can only see one of these sides, so it is important to pull the fan right out and clean both sides.

When replacing the access cover be careful not to over-tighten the screws.

Annually

The fan belt tension should be checked. If adjustment is required, first un-tighten the clamp screw using a 10mm spanner, then adjust the tensioning screw using a 19mm spanner before re-tightening the clamp screw. **Do not over tighten the belts** as this will reduce the life of the bearings. As a general rule, if the belts are not squealing there is not a problem. Take great care not to get your fingers between the belts and pulleys when tensioning or replacing belts.

Procedure for Changing the Filters

It is advisable to wear gloves when handling the filter media.

First, remove the wheel turntable.

Then, pull the soiled filter media out of the retaining frame. This should be disposed of in a responsible manner.

The new filter media is best purchased on 20m x 1m rolls. It is widely available, including from GreenAir.

Cut the filter using a sharp Stanley knife or equivalent. To protect the blade, use a strip of hardboard or chipboard rather than cutting on to a concrete floor. Allow an extra 50mm on each cut to tuck into the filter frame.

Roughly position the new secondary (blue/white) filter media then tuck it into the slot around the perimeter of the filter frame. Then repeat for the primary Paintstop (green/white) media.

Finally, replace the wheel turntable.

Technical Data

Single WheelMate

Motor – 0.55kW 4 pole single phase permanent capacitor (230V)

Air flow rate – 2,050 cubic metres per hour.

Duct size – 250mm

Double WheelMate

Motor – 1.1kW 4 pole single phase permanent capacitor (230V)

Air flow rate – 3,600 cubic metres per hour.

Duct size – 315mm

Recommended Spares

1m x 20m roll of 100mm Paintstop (green/white) media.

1m x 20m roll of 290gsm secondary (blue/white) media.

SPZ 1000 drive belt.

40mm x 400mm gravity roller with 8mm spindle.