



Operating and Maintenance Manual for GreenAir Preparation Benches



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Operating Instructions

The GreenAir Preparation Bench is designed to provide the ideal conditions for the preparation of alloy wheels ahead of re-spraying. The wheels can be positioned on turntables on an ergonomically angled perforated bench top below which are the filters. The fan draws air across the wheels and turntable, through the perforations and filters into the chamber below. From here it is discharged to outside the building or van. The unit has been designed to be lightweight and take up as little floor space as possible.

It requires a 230V electrical supply and comes with a 4.0m cable 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 0.5 metres per second across the perforated bench top with partially soiled filters. This is a guideline recommended by the Health and Safety Executive, and is also standard industry practice, to ensure that dust is contained.

The filter media is a mixture of cotton and synthetic fibre of efficiency to EN779:2012: G4 standard.

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 unit 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.

The unit has been designed to comply with the Health and Safety Executive guidance note HSG258 'Controlling airborne contaminants at work: A guide to local exhaust ventilation (LEV)'.

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.

Check and clean the motor cooling fins.

Bi-monthly

The fan blades should be cleaned of any dust build up. As well as providing extraction, the fan also draws cooling air over the motor. Failure to keep the fan blades clean will result in poor extraction and eventually the motor overheating and failing.

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 may only see one of these sides, so it is important to pull the fan right out and clean both sides.

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(s) and the perforated bench top.

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

Replace with the new filters, ensuring the wire is on the underside. There is an arrow on the side of each filter, which should point downwards.

Finally, replace the perforated bench top and the wheel turntable(s).

Technical Data

Single Width Unit

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

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

Duct size – 250mm

Double Width Unit

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

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

Duct size – 315mm

Recommended Spares

Cardboard pleated filters – finished size 665mm x 795mm x 45mm.

SPZ 1000 drive belt.

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