Powdermaster Blower Attachment

USER MANUAL

For Digital and Non Digital Powdermasters

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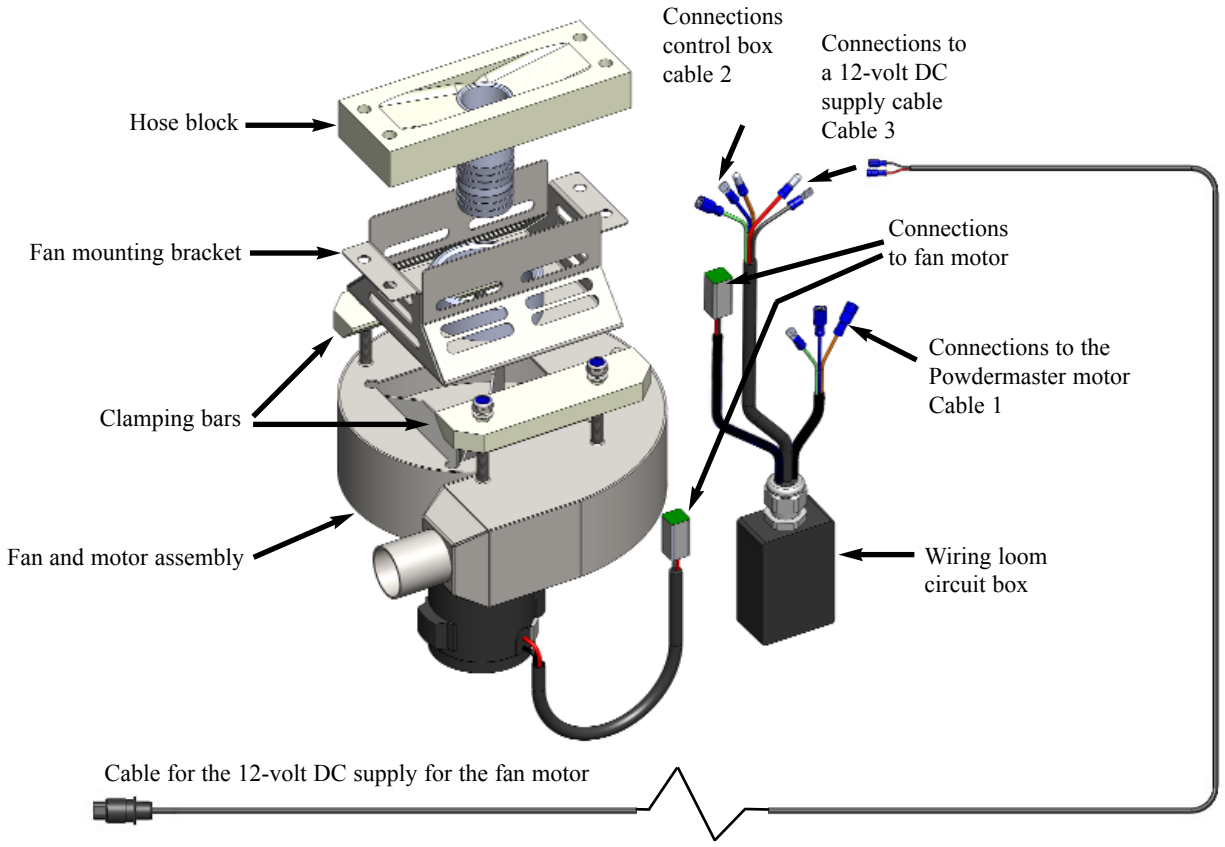
The blower kit consist of: -



Wiring connection

DIGITAL POWDERMASTER			NON DIGITAL POWDERMASTER	
Powdermaster motor	Wiring loom box cable 1		Powdermaster motor	Wiring loom box cable 1
Brown	Brown		Red	Brown
Blue	Blue		Black	Blue
Green Yellow	Green Yellow			Green Yellow Not Connected
Control box cable	Wiring loom box cable 2		Control box cable	Wiring loom box cable 2
Brown	Brown		Red	Brown
Blue	Blue		Black	Blue
Green Yellow	Green Yellow			Green Yellow Not Connected
12-volt DC supply for fan motor	Wiring loom box cable 3		12-volt DC supply for fan motor	Wiring loom box cable 3
Red	Red		Red	Red
Black	Black		Black	Black

The Powdermaster blower attachment is supplied as a kit that can be can be easily fitted to the Powdermaster applicator. A wiring loom is included that enables the electrical connections to be made via a switching control circuit to synchronise the operation of the blower with the Powdermaster. The fan power supply is completely independent of the applicator. The fan does not draw power from the applicator

Fan operation

The wiring loom circuit box monitors the Powdermaster operation and enables the fan only when dosing is taking place. When dosing stops or pauses the fan will continue to run for a few seconds to allow product to clear after which it will halt until dosing restarts. The wiring loom circuit box also monitors the fan power supply, if this is not correctly connected the Box will disable dosing to prevent a build up of product. The Box also monitors how hard the fan is working to clear product from the system, in the event that the system becomes overloaded the fan will continue to attempt clearance for a few seconds and then shut down operation. If this happens dosing will also be disabled.

The fan will only activate if :-

The separate fan supply is correctly connected, the fan is not blocked and dosing has been selected at the applicator control box.

The applicator will only dose if:-

The fan is ready to operate and dosing is selected at the applicator control box.

If dosing is disabled because the fan is not running the digital applicator controller will show a “Check Flow” message on the display.

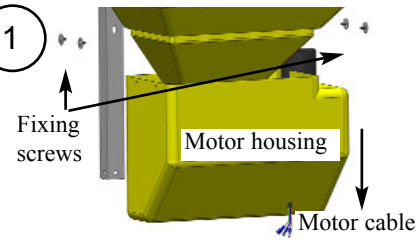
If the fan has been disabled because the system is blocked the fan MUST be disconnected either at the fan power connection or at the fan itself for at least 60 seconds before in can be reactivated.

Selmech Supplies

Blower kit fitting instructions - Disconnect the power lead from the control box before carrying out the following

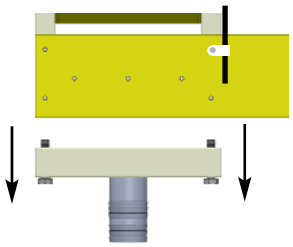
The following instructions apply to both digital and non digital Powdermasters. Refer to the wiring connection table on previous page for information on the wiring loom connections.

1



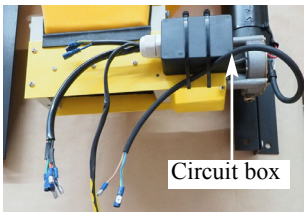
Disconnect the cable coming from the controller and remove the motor housing passing the motor cable through the hole in the cover.

2



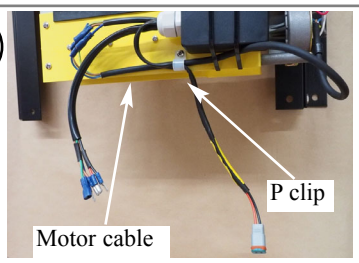
Remove the existing hose block from the feed rotor assembly.

3



Use the tie wraps provided to attach the wiring loom circuit box to the feed rotor bracket Feeding the cable from the powdermaster motor through the tie wraps.

4



Attach the motor cable to the short lead from the circuit box. Use the P clip provided to secure this cable and the cable with the 2 pin socket fitted to the bracket.

5

Take the existing cable from the control box and the supplied 12-volt DC cable for the fan motor and feed them through the cable hole in the cover.

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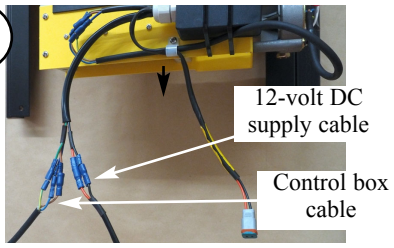

Connect the two wiring loom connections to the control box cable and 12-volt DC supply fan motor cable.

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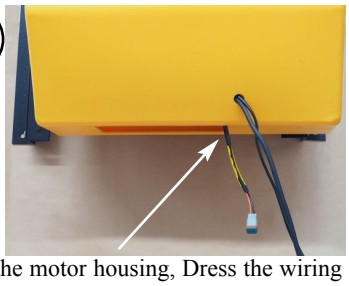

Refit the motor housing, Dress the wiring loom 2 pin socket for the fan motor out through cut out for the hose block.

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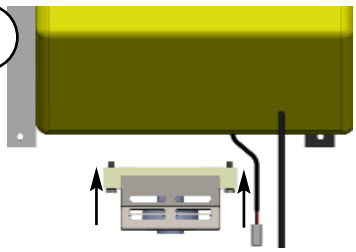
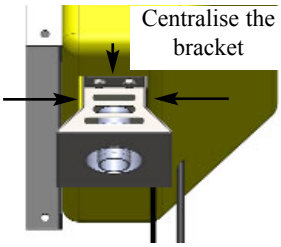


Position the fan mounting bracket and new hose block together and bolt in place of the hose block that was removed.

9



Align the motor housing so the outlet is centralised about the fan mounting bracket and push the housing up fully while tightening the fixing screws.

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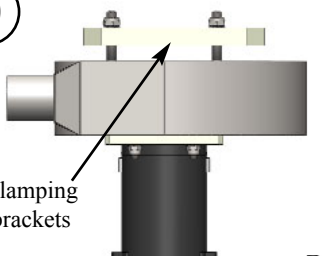
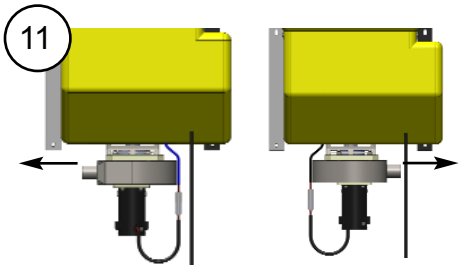


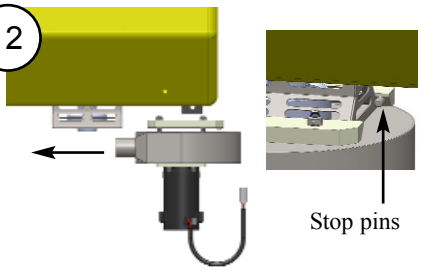
The clamping rails are loosely fitted to the fan assembly these allow the fan assembly to be slid onto the mounting bracket.

11



The fan assembly can be fitted so that the outlet is pointing either to the left or the right. Decide which way suits you best before sliding it onto the bracket.

12



Slide the fan assembly onto the bracket until the stop pins in the clamping bars hit the mounting bracket.

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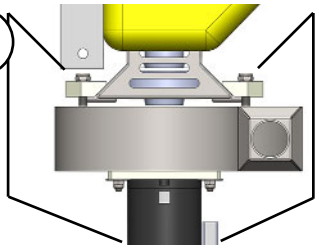

Evenly tighten the clamping bars down onto the bracket so that the fan assembly is firmly held in place.

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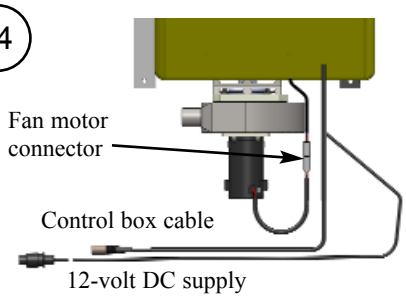

Connect the wiring loom 2 pin socket to the fan motor 2pin plug.
Connect the 12-volt DC supply for the fan motor to a fused 12-volt supply.
Plug control box cable into the control box

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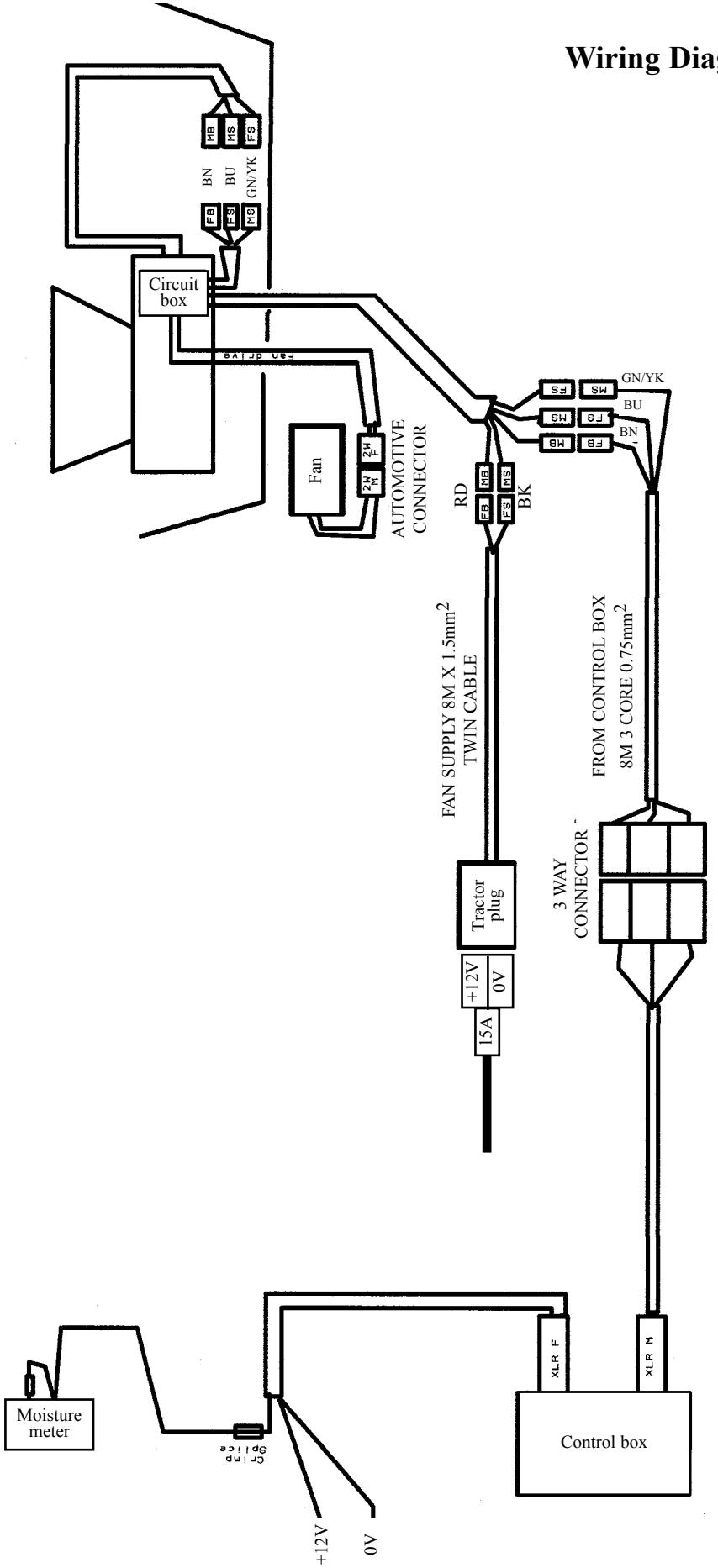
TECHNICAL DATA	POWDERMASTER	BLOWER
Supply Voltage	12V/DC (10.6V DC to 16.4V/DC	12V/DC (10.6V DC to 16.4V/DC
Current consumption	2.8A	11.5A
Fuse rating	5A	15A
Output signal to motor	PWM approx 1.4 KHz	
Capacity of the hopper	50 kg or 80kg	
Output range	50g to 2000g per minute	

WARRANTY

Provided installation is carried according to these instructions a warranty of 1 year from date of delivery applies. This covers faulty manufacture only and does not cover wear and tear through normal use or mechanical or chemical damage that has occurred to parts through misuse or unauthorised attempts to repair the unit. In the case of faulty manufacture, claims are limited to repair of the unit and its return to the customer.

Wiring Diagram