



# **OPERATING & MAINTENANCE INSTRUCTIONS FOR REVERSE JET FILTER UNITS**

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## UNIT DATA

**Unit designation:**                      **Dustair size**              **Reverse Jet Filter Unit**

**Reference / Serial No.**                      **E**

**Fan / motor designation:**              **Kw, 2 pole, 415v, 3ph, direct drive.**

**Anti-spark features on fan:**

**Explosion Relief fitted:**

**Attenuation fitted:**

**Rated duty:**                      **cfm @    ” WG (    m<sup>3</sup>/s @    Pa) external.**

**Customer / site:**

**Date of manufacture:**



### **BEFORE USING THE EQUIPMENT**

#### **General**

The manufacturer does not accept any liability for damage to the product or personal injury caused by non-observance of the safety instructions in this manual, or by negligence during installation (where installation is not performed by Dustair ltd.), use, maintenance and repair of this product. Specific working conditions and / or connected equipment may require additional safety instructions. Please contact your supplier or Dustair Ltd if you detect a potential danger when using this product. **The user of this product is always fully responsible for observing the local safety instructions and regulations.**

**Observe all safety instructions and regulations which apply to machinery or similar connected items.**

#### **User Manual**

- All persons using this product must be familiar with the contents of this manual and observe the instructions herein.
- The management should instruct the personnel in accordance with the manual and observe all instructions and directions given.
- Never change the order of the steps to perform.
- Always keep a copy of this manual with the product.
- This product should be used only by authorized, trained personnel.
- This manual is intended to cover a range of units. Therefore some aspects may not apply to your particular unit.

## **GETTING STARTED – A QUICK GUIDE FOR USE AFTER INSTALLATION**

### **Switching on**

1. Check for any obvious obstructions in ductwork.
2. Check dust level in collection bin(s) at unit base. Empty if necessary following any appropriate precautions relating to personal protection against inhalation of contaminants and their disposal.
3. Check the integrity of the sleeve or seal connecting the collection bin(s) to the unit hopper. Any rips or other defects must be reported and logged.
4. Ensure unit access door(s) are closed and their latches engaged.
5. Ensure compressed air supply to unit reservoir is operational.
6. Switch unit on by a single press of the green button on the associated electrical control box. The fan will start and the unit and connected inlet ductwork will now be under negative pressure. Units having a fan motor power above 7.5kw (10hp) are usually wired 'star-delta' and a second run up in the fan will be heard shortly after the first.
7. When the filter unit is running, do not:-
  - Open any access door on the filter unit
  - Remove any dust collection bin
  - Perform any maintenance work
  - Allow items such as gloves or other rubbish to be sucked into ductwork

### **Cleaning of internal filters / Switching off**

This should be done at regular intervals during a normal shift, such as break times, as well as at the end of shift.

1. Press the red button (or button marked 'stop/clean') on the associated electrical control box. The fan will begin to slow, although may take several minutes to come to a complete stop. The fan rotation cannot usually be seen from outside the unit.
2. If 'off line' cleaning has been selected, the compressed air pulsing of the filters may continue for a preset or adjustable amount of time in order to clean more efficiently. Not all dust will be removed – this is normal.

### **General DOs and DO NOTs**



#### **DO:-**

Observe all safety precautions  
Regularly check unit and ductwork for damage and obstructions, clearing where necessary  
Empty collection bin(s) regularly  
Observe and follow recommended maintenance procedures and intervals  
Log any defects or concerns relating to the operation of the unit and duct system  
Have the unit and duct system tested annually in accordance with HSE / COSHH requirements



#### **DO NOT:-**

Open access door(s) or remove bin(s) while unit is running  
Enter the unit or perform any maintenance on the unit unless electrically & pneumatically isolated  
Attempt to modify any part of the equipment or attached duct system  
Allow foreign matter to enter duct system (e.g. gloves, general waste, etc.)  
Run the unit with the main access door(s) open or ajar  
Run the unit without the dust collection bin(s) or rotary discharge valve in place  
Run the unit without any filters  
Switch unit on and off in quick succession  
Switch unit off using isolation switch unless for maintenance  
Allow the internal filters to get wet or damp  
Remove bin(s) or open access door(s) without wearing a dust mask or similar

# **REVERSE JET CARTRIDGE FILTER UNIT** **OPERATING AND MAINTENANCE MANUAL**

## **1.0 GENERAL DESCRIPTION**

### **1.1 Description**

A reverse jet cartridge filter consists of two connected chambers. The dirty air chamber contains a series of pleated tubular filter cartridges (or sometimes fabric tubes), which arrest dust particles allowing filtered air to pass into the cleaned air chamber. It also includes a dirty air inlet with a pre-separation section. The cleaned air section houses the cleaning mechanism and pulse tubes, the outlets of which allow a timed pulse of air into each row of cartridges to remove surface dust.



On the outlet of the cleaned air chamber there would normally be attached an exhaust fan, either direct mounted or connected via ductwork. In purely venting applications there may be no fan fitted, the cleaned air chamber being open to atmosphere. The compressed air manifold, to supply the reverse jet tubes, and the reverse-jet timer plus valves for control, are normally fitted to the outside of this section.

Compressed air and electrical supplies must be connected to the manifold and timer respectively. An electrical supply must also be made to the fan motor, if fitted. In almost all circumstances the electrical requirement is 415v/3 ph/ 50 Hz.

### **1.2 Optional features**

The following may be included:

#### **Hopper:**

Complete with filter mounting flange, and means of discharge for heavier dust loading applications.

#### **Collecting Bin:**

For lighter duties a removable bin and discharge flap valve may be fitted.

#### **Rotary Valve:**

For heavier duties a rotary valve can be fitted to the hopper discharge point

#### Explosion Relief Panel:

In compliance with current ATEX legislation, a suitably sized relief panel will be fitted to one side of the filter, usually on the hopper or 'dirty' side of the unit. Fixing flanges are provided where ducting is required.

#### Explosion Relief Microswitch;

A weatherproof microswitch with a probe to sense movement of the membrane may be fitted to give NO/NC contacts.

#### Compressed air saver:

A pressure switch linked to the reverse jet timer, which prevents unnecessary cartridge cleaning, may be fitted. This saves air and prolongs cartridge life.

#### Manometer:

A differential pressure manometer may be fitted as an indicator of cartridge condition.

#### Silencer:

An attenuator may be fitted to the fan outlet flange, or an enclosure housing the fan motor, may be fitted.

## **2.0 REVERSE JET TIMER**

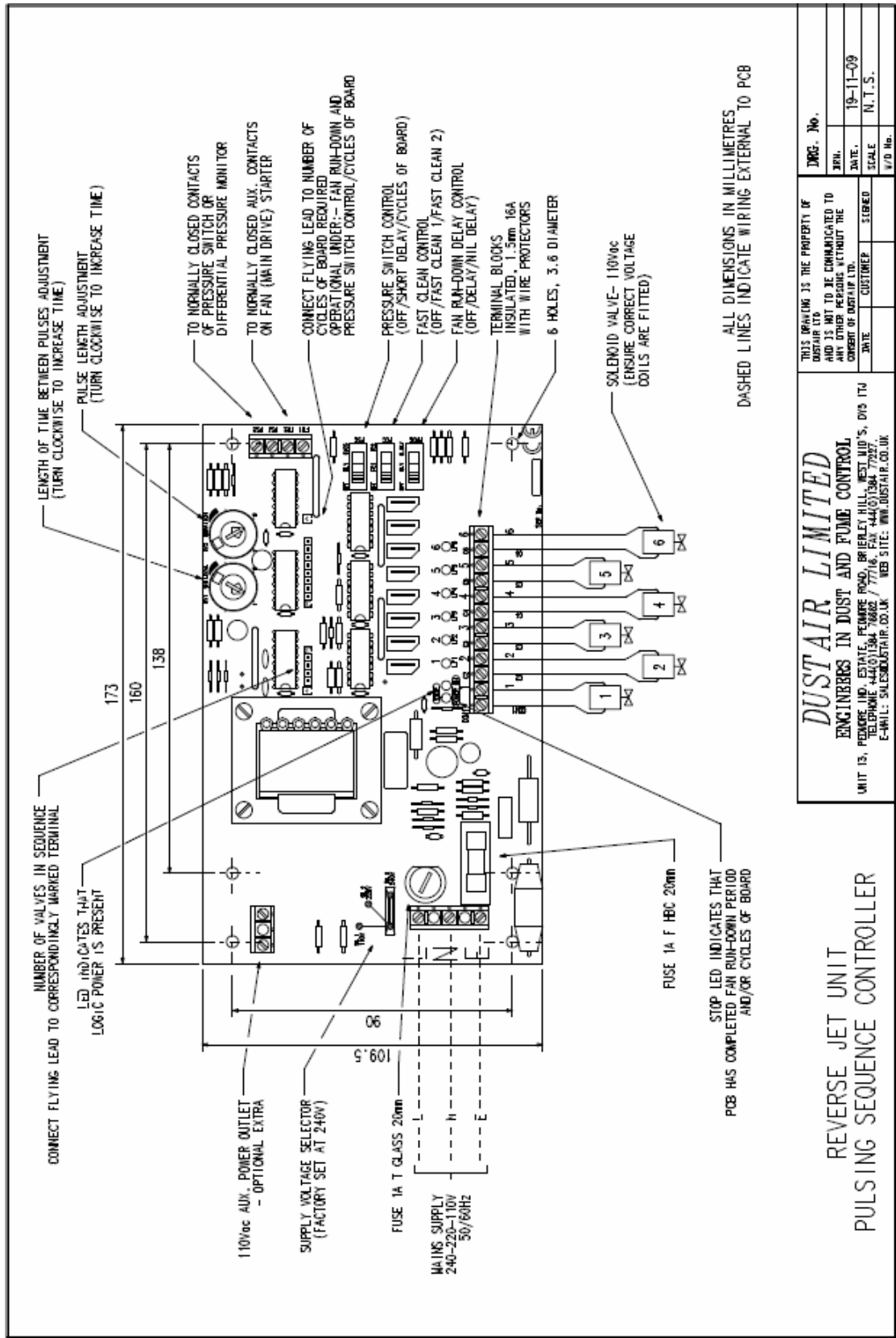
### 2.1 Operation

The electronic timer controls the operation of the pilot solenoid valves and hence the reverse jet cleaning action. It is a solid state sequence pulse timer with 2, 6 or 12 outputs for solenoid valve connection. The output is adjustable both for interval between pulses and duration of pulse, by means of two clearly marked setting potentiometers.



The circuit board is fitted with light emitted diodes, which flash as each output is energised. An optional run on timer can be fitted to allow offline cleaning on intermittent usage.

Full specification and/or control panel data sheets are normally available upon request.



**DUSTAIR LIMITED**  
 ENGINEERS IN DUST AND FUME CONTROL

UNIT IS, PLEASE NOTE, FEMALE PINS ONLY. BEST COPY S, DIS ITV  
 100, STATION ROAD, BRISTOL, AVON, GL2 0JN, ENGLAND  
 E-MAIL: SALES@DUSTAIR.CO.UK WEB SITE: WWW.DUSTAIR.CO.UK

DRG. No.  
 APR.  
 DATE. 19-11-09  
 SCALE N.T.S.  
 DATE CUSTOMER STORED  
 4/0 No.

REVERSE JET UNIT  
 PULSING SEQUENCE CONTROLLER

### **3.0 INSTALLATION**

#### **3.1 Requirements**

Your filter unit will require some or all of the following connections for successful installation. Check with your specification/quotation for the items to be provided.

MECHANICAL	Inlet air duct Outlet air duct Outlet attenuator Hopper discharge receptacle
PNEUMATIC	Compressed air to cleaning air manifold Filters, regulators or traps Pressure gauge(s)
ELECTRICAL	Supply to reverse jet timer Supply to fan motor and /or fan starter Supply to rotary valve (if applicable) Connection to pressure switch for alarm / monitor (if applicable) Connection to explosion relief microswitches for alarm/ shutdown (if applicable)

#### **3.2 VENTING APPLICATIONS (e.g. silo venting without a fan) - LOCATION OF FILTER**

The filter, which may have a case enclosing the filter cartridges, or be of the insertable type, is fitted with a drilled mounting flange. It should be mounted onto a similarly flanged aperture above the enclosure to be vented. Care should be taken in selection of the location, giving consideration to the following:

1. Allowing sufficient space for material pre-separation.
2. Preventing the filter cartridges from becoming immersed in material, e.g. insertable filter fitted to storage containers.
3. Allowing space and safe access for servicing, particularly for cartridge removal, which may be via the filter top or side removal according to model.
4. Pneumatically filled storage silos should be fitted with a level indicator or alarm to prevent overfilling and over-pressurization of the filter.

#### **3.3 Installing the filter unit**

Mount the filter onto the prepared flange sealing with a suitable sealant or gasket and bolt in place. Ensure mounting flange faces are flat to prevent possible damage when bolting together.

If top-removal cartridges are to be fitted:-

1. Open top access doors
2. Unscrew the jet tube unions and lift out the jet tubes, (see fig 6).
3. Unscrew the cartridge retaining nuts and remove.
4. Insert a cartridge ensuring that the seal ring is a good fit in the depression around the aperture in the filter floor.
5. Refit the nuts ensuring that if fitted the venturis are centrally located over the cartridges. Do not over tighten.
6. Similarly fit all other cartridges.
7. Refit jet tubes.

If the filter incorporates a ducted header, connect the outlet to a suitable fan or exhauster using appropriate ducting.



## **FOR DUCTED DUST COLLECTION APPLICATIONS:**

### **3.4 Location**

The filter will normally be mounted onto a dust collection hopper with either a removable bin or mechanical material removal system incorporating typically a rotary valve and screw conveyor. The dirty air inlet can be via either side of the filter body, or towards the rear.

### **3.5 Installation**

1. Locate and fit the filter to the hopper-mounting flange, sealing and bolting in place
2. Locate and fix the inlet ducting to the inlet connection provided on the filter.
3. Fit the filter cartridges as described above.
4. If the filter outlet is by means of a ducted header, i.e., no integrally mounted fan, connect the filter to the fan with suitable ducting.

### **3.6 Compressed air connections**

Compressed air for the reverse jet cleaning action is supplied to a manifold / reservoir tank situated at high level, which is fitted with a 1 inch BSP socket air feed connection. Connect the site compressed air supply pipe to one end of the manifold. A pressure gauge is supplied either loose or fitted to the manifold of the filter unit. If supplied loose, fit the gauge to the appropriate socket in the manifold. The filter unit will require dry, oil free compressed air at a nominal pressure up to 6.2 barg (90 psig). Rates of air consumption are typically 0.75 scfm per cartridge per pulse, assuming 1 pulse per minute under standard conditions, e.g. four cartridges on one pulse bar equals minimum of 3 scfm. Actual consumption depends upon reverse jet interval and duration to suit process conditions and dust loading.



#### **4.0 INSTALLATION OF ELECTRICAL EQUIPMENT.**

On all filters the solenoid valves and reverse jet timer are mounted in a common enclosure and the boards and solenoids prewired (see diagram) requiring only the incoming electrical supply.

A feed separate to the fan in single-phase supply should run to the timer through a fused isolator. On the 6 way timer it should be run to connectors marked neutral and either 110V, 240V as applicable; on the 12 way timer it should be run to terminals marked L and N and the flying lead adjacent to the transformer set to the correct input voltage (either 110, 220 or 240 volts). If a fan-assisted header is incorporated an appropriate supply should be run direct to the motor terminal box, through a starter. On certain applications the supply to the timer and fan may be through a more sophisticated control system to provide a sequenced start up and shut down to ensure that no dust or product remains in the filter when it is not in operation.

Pre-wiring of solenoid valves to the timer is as follows:-

On the 6 way timer the first solenoid coil is connected across timer output connectors marked 'common' and '1', the second across 'common' and '2' etc., until all solenoids are catered for. Also a flying lead on the timer board selects the number of outputs to be energised.

On the 12 way timers all the solenoid coils are connected to a single 'common' terminal. The other side of each solenoid coil is connected to terminals marked 1, 2, 3 etc., until all solenoids are catered for. As above a flying lead selects the number of outputs to be energised.

If an compressed air saver device is fitted this will consist of a pressure switch with its normally closed contacts prewired to terminals marked on the board. A test/run override switch is provided to enable the reverse jets to be tested if cartridges are clean or the fan is not running. If an explosion relief microswitch is fitted this should be wired in accordance with specific requirements to stop the filter and/or plant and/or raise an alarm. As the microswitch is an auto reset type it should be wired through a relay in the control circuit to maintain the fault condition.

## **5.0 COMMISSIONING & OPERATION**

### **5.1 Requirements**

All cartridge units are tested and set to a standard cleaning cycle prior to delivery. However, it is important that the filter unit is inspected, tested and set up to match prevailing site conditions once installed. For a venting type filter (with or without integral fan) these checks are simple. If the unit has a separate fan, or if the filter is part of a ducted dust control system, airflow and pressure readings must be taken, together with fan motor current to ensure correct filter and fan conditions and duct air velocity as appropriate. Adherence to the correct commissioning procedure will not only ensure satisfactory running conditions, but may result in significant savings in energy and compressed air consumption.

Certain installations may require a pre-coat to be introduced onto the filter media in order to form a 'cake' of dust and thus improve filtration efficiency. In such cases this pre-coating is normally performed by Dustair engineers as part of the commissioning procedure.

Comprehensive commissioning results will be required where COSHH or EPA regulations apply. Dustair Limited is able to offer a full commissioning and COSHH Initial Assessment service appropriate to your installation. Please ask for details.

### **5.2 Commissioning Procedure / General Operation**

- For standard top removal filter ensure nuts are screwed down securely so that the gasket is compressed all around; this should be sufficient to hold the cartridge rigid.
- Ensure door seals correctly, and if fitted, that dust collection bin seals to hopper mouth.
- Ensure timer and fan (if fitted) are correctly wired.
- See section on electrical connections. Check that timer is correctly set for supply voltage and number of valves utilized. A flying lead on the timer board should be connected to the appropriately numbered connector to select number of valves to be pulsed.
- Turn compressed air supply on and confirm an adequate 6.2 barg supply is available. Open drain tap on compressed air manifold to blow out any condensation present.
- Energise controller and check sequencing of valves, ensuring particularly that all valves are pulsing. This may be easily checked by feeling for a blast of air from the vent on the underside of each solenoid valve as they pulse in sequence. If a differential switch is fitted it will be necessary to put the override switch to 'test' to maintain the cleaning sequence in the conventional manner.
- Start fan (if fitted) and check rotation is correct. It should be noted that an incorrectly rotating fan would still produce a small amount of suction. If an air regulation damper is incorporated in the ducting system the fan should be run initially on a restricted air volume in order to keep within the motor amps; after the cartridges have become caked with dust the air volume may be increased to design.
- Unless pre-coating is required (see Dustair data sheet) introduce the dust into the system and a cake will begin to form on the filter. Eventually, in reasonably constant dust load conditions, the dust cake itself contributes to the efficiency of filtration. The efficiency with which this condition is reached is regulated by the reverse jet timer, specifically by adjustment of the 'interval' and 'duration' controls, both of which will have been preset to cater for the majority of applications.
- Check that the hopper discharge rotary valve (if fitted) performs satisfactorily.
- If a differential pressure switch is fitted put the override switch to 'run' and confirm that the cleaning sequence only becomes functional when the filter differential reaches the set point of 75 to 100mm water.

## **6.0 MAINTENANCE**

### **6.1 Routine inspection**

The cartridge type reverse jet dust collectors and venting filters are designed for continuous and trouble free operation; however, the following should receive regular attention.

Ensure adequately frequent emptying of dust collection bin, if fitted, or ensure no dust build up in hopper if a rotary valve is fitted.

Check reverse jet valves are operational on all cartridges.

Open drain valve on compressed air manifold / reservoir weekly or as necessary to prevent accumulation of condensation therein.

### **6.2 Full inspection**

It is recommended that a full inspection as listed is carried out every 2000 hours or every six months, whichever is sooner.

Check in cleaned air chamber for dust deposits, which would indicate a defective filter cartridge or O ring seal.

Check jet tube unions are tight.

Check nuts (top removal only) are still tight.

Check seals on all doors and lids.

Check satisfactory operation of all diaphragm valves. This check also proves operation of solenoid valves and reverse jet timer.

Check operation of drain tap on compressed air manifold.

Check compressed air supply equipment, particularly water separator and filter.

Check bin removal and seal (if fitted).

Check dump valve or butterfly valve operation and seals (if fitted).

If fan fitted check direction of rotation, wear, secureness and balance of impeller and inlet cone condition.

Check rotary valve operation and condition (if fitted).

Check interval and duration of reverse jet mechanism.

Check operation of explosion door, catches and switch (if fitted).

Check operation of pressure differential switch (if fitted) and that connection tubes are not blocked.

Check pressure tappings for manometer are clear of dust.

### **NOTES**

2) Spares listed cover only those items likely to wear and whose premature failure may prevent filter operation. However, other factors such as collector location or special features may necessitate further spares being held.

3) It should be noted that these recommendations do not cover accessories such as fans, rotary valves, or control gear and consideration must be given to these items when compiling spares requirements.

4) When enquiring for or ordering spares it is essential to quote filter type and serial number due to variations in type and quantity of components. In particular, diaphragm valves and solenoid valve manufacturer should be noted.

### 6.3 Unit identification

A typical unit may be designated:

E10599/R( J or C )500. Where E10599 = Contract or job reference.  
R (J or C) = Unit type reference bag or cartridges  
500 = Unit size (square feet of filter media) or sometimes is the unit design duty.

Dustair Limited would be pleased to provide routine maintenance and inspection on a regular contract basis. Our Engineers are well trained and equipped to work under the conditions associated with dust control plant, with the experience to identify and eliminate potential problems.

The Service comprises a regular full inspection with minor adjustments done on the spot - this followed by a comprehensive inspection report, which can be incorporated into your statutory records.

For further information, maintenance appraisal and prices without obligation, please contact our Service Department by any of the following means:-

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Email: sales@dustair.co.uk  
Web site: www.dustair.co.uk

## 7.0 SERVICING

### 7.1 Seals

The performance of any filter relies on efficient sealing and the following may require attention.

- Dirty air chamber access door or inspection panel.
- Cleaned air chamber lid.
- Cartridge 'O' ring seal.
- Motor mounting plate seal (if fan fitted).
- Fan case seal (if fan fitted).

### 7.2 Dismantling of integral (unit-mounted) fan units

#### **IMPORTANT: ISOLATE AND DISCONNECT POWER SUPPLY.**

1. Open cleaned air chamber lid and remove fixing bolts arranged around the fan inlet. This releases fan inlet cone and complete fan and motor assembly, therefore, ensure adequate support before lifting fan assembly from filter.
2. Remove nuts holding motor mounting plate to fan case. Withdraw motor assembly from fan case. Remove impeller from motor shaft by releasing screw in shaft end and sliding off.
3. Upon reassembly check condition of seal between motor mounting plate and fan case and between fan case and filter header; also ensure fan inlet cone does not foul impeller (check by rotating impeller when viewing from inside collector).
4. Reconnect power supply and check for correct fan rotation.

### 7.3 Stripping solenoid valves

1. Disconnect wiring, shut off compressed air and ensure no residual pressure in manifold by opening drain valve.
2. Remove circlip from top of solenoid coil.
3. Slide coil and bracket upwards off ferrule.
4. Remove body screws to separate body and retaining flange.
5. Plunger, plunger spring and stainless steel ferrule may now be removed.
6. Upon reassembly ensure body and ferrule 'O' rings are in position; also ensure close coiled end of plunger spring is uppermost in ferrule.

### 7.4 Stripping diaphragm valves

Ensure compressed air supply is shut off and no residual pressure in manifold by opening drain valve. Stripping may be effected without removing valve body from its piping connections.

1. Remove bolts to release cover.
2. Diaphragm (and diaphragm spring if fitted) may now be removed.
3. Upon reassembly ensure seat on diaphragm is towards body and that bleed passage in body, diaphragm and cover are aligned.

### 7.5 Removing and replacing filter cartridges

#### **NOTE**

**PROTECTIVE CLOTHING, FACE MASKS AND EYE PROTECTION SHOULD BE USED WHEN WORKING WITH USED CARTRIDGES OR ENTERING THE DIRTY AIR CHAMBER.**

Depending on the specific application, the filter cartridges may, or may not, have internal cages and venturis. Please read through the following section fully before commencing any work to change the filter cartridges. If in doubt, please contact Dustair engineers.

#### 7.5.1 Top removal cartridges



Open lid of cleaned air chamber. Remove pulsing tubes by unscrewing union and lifting out. Unscrew nuts on cartridge retaining pins. The cartridges are normally clamped by three nuts each. The cartridge

may incorporate a venturi as part of the same assembly. This and the cage must be removed to be reused if present. Lift the cartridges out carefully, minimizing spillage into the cleaned air chamber. Replacement is the reverse sequence to removal. When replacing cartridges check that the sealing ring and the lip around the aperture are clean to ensure a good dust tight seal.

### 7.5.2 Side removal cartridges



Remove access doors on side(s) of filter unit body. The panels on top of the unit may also be removed, if desired, in order to afford additional access. Ensuring the dust collection bin below is empty, undo the cartridge fixing wing-nut on the underside (end cap) of one cartridge, retaining the nut and any washers. There is no need to fully remove this nut from the threaded rod. Carefully lift the threaded rod upwards to disengage it from its upper seat, which is a groove in the flat steel above the cartridge mounting plate. Once disengaged, the rod and cartridge can be lowered down as much as necessary to allow withdrawal through the access door aperture. Repeat this procedure for the remaining filter cartridges.

To refit the cartridges, begin with those furthest from the access door (for single door unit) or the most central ones for a two-door unit. Ensure that any sealing washers are correctly fitted where the threaded rod passes through the end cap of the cartridge. Feed the cartridge (complete with the threaded rod and top & bottom nut assemblies) into the unit through the access aperture. Raise the assembly up so that the upper nut component hooks into the groove above the cartridge mounting plate (viewing through the top access panels of the unit will assist in this). The cartridge should now be hanging and can be done up securely by tightening the lower nut component (commonly a fabricated wing-nut). Repeat this procedure for the remaining cartridges. Ensure all access panels and doors are securely fitted afterwards.

## 7.6 Recommended spares

To save time and inconvenience it is recommended that a minimum quantity of spares be held in stock to permit planned maintenance or in the event of a breakdown.

### SPARES HOLDING FOR 2000 HOURS RUNNING

Filter cartridge	1 per 20 cartridges
Solenoid coil	1 per 10 valves (maximum)
Solenoid valve repair kit	1 per 10 valves (maximum)
Diaphragm valve repair kit	1 per 10 valves (maximum)
door, lid and inspection cover seals	1 set per unit
Reverse jet timer (board only)	1 of per control panel

### SPARES HOLDING FOR 6000 HOURS RUNNING

Filter cartridge:	1 complete set
Solenoid coil:	Minimum of 1 per 4 valves
Solenoid valve repair kit	Minimum of 1 per 4 valves
Diaphragm valve repair kit	Minimum of 1 per 4 valves
Door, lid and inspection cover seals	1 set per unit
Reverse jet timer (board only)	1 of per control panel



## **8.0 Reference Details specific to Dustair Job Ref. Exxxxx / WO.xxxx**

Customer:	xxxx
Application:	xxxx
Unit duty:	xxxx cfm (xxxx m3/s).
Build date:	xx-xx
Cartridges:	Single open ended cylinder, 21m2 (226 sq. ft) each. 660mm high x 324mm o/s diameter x 212mm i/s diameter. Gasket i/s diameter 255mm, bonded to filter top face. 320 pleats @ 50mm deep. Filter media: Water repellent blend of cellulose and synthetic fibres. Galvanized steel end cap (with central 13mm hole) and outer & inner sleeves. Filter class: F9. Operating temperature: -29 deg C to +80 deg C.
Cartridge quantity:	xx off.
Fan :	Centrifugal backward bladed multi-vane, horizontal discharge, directly driven. Duty: xxxx cfm (xxxx m3/s) at x" water gauge (xx KPa). Type: xxxx Paint code: BS 18E53 (blue).
Motor:	xx kW, xxxx rpm, 400v, 3 phase, 50 Hz, TEFC, foot mounted, xxxx frame. Current: FLC = xx A, SC = xxxA.
Compressed Air:	Air reservoir tank capacity xx litres. Operating pressure 5 bar (test pressure 11 bar). Air feed connection: 3/4" BSP female, L/H side default. Condensate drain: 1/2" BSP. xx off remote pilot diaphragm valves, 3/4" / 20mm 'dresser' type. Air supply to be dry and oil free.

Document date: 11-04-11.

Dustair operates a program of continual product development and, as such, specifications and designs are subject to change without prior notice.



# COMMISSIONING REPORT

Commissioning is the responsibility of the supplier of the equipment to the end user

## DESIGN PARAMETERS

Machine type: Dustair Reverse Jet dry bag dust filter unit

Reference / contract No.: E / WO

Approximate filter area: m<sup>2</sup> ( sq. feet)

Design duty: m<sup>3</sup>/s ( cfm)

Design pressure loss across unit: Pa ( " H2O)

Fan design duty (incl. filter loss): m<sup>3</sup>/s @ Pa ( cfm @ " H2O)

## TEST RESULTS

Static pressure, inlet side of filters: Pa ( " H2O)

Static pressure, outlet side of filters: Pa ( " H2O)

Static pressure at furthest end of 'index' run: Pa ( " H2O)

Total air flow rate: m<sup>3</sup>/s ( cfm)

## COMMENTS

Commissioning test performed by:

Date of test:

# Filter unit & LEV system log

Machine type: Dustair Reverse Jet dry dust filter unit

Reference / contract No.: E / WO

Date of commissioning:

This log is intended for the end user to record any defects found and/or maintenance work performed on either the dust extraction filter unit or the associated ductwork system.

Details	Performed by	Date