# **DUSTKOP**

## **DUST COLLECTORS**

MAINTENANCE INSTRUCTIONS FOR ALL OF THE FOLLOWING MODELS

335, 520, 800, 1151, 2031, 2051, 3051, 5N20, 8N50, 11N51, 20N31, 20N51, 30N51, 5C20, 8C50, 11C51, 20C31, 20C51

#### LUBRICATION

Follow instructions on the motor manufacturer's tag attached to motor. Put the motor of this DUSTKOP on your regular motor maintenance schedule. Remember that even though this motor is only turning a fan, a working load exists just as surely as if it were driving a machine.

Every 3 months lubricate all moving parts of the shaker with light oil.

#### **CYCLONE UNIT OPERATION & MAINTENANCE**

- 1. Make absolutely certain that all electrical power to the cyclone unit is disconnected before servicing or replacing DUSTKOP components.
- 2. In order for your DUSTKOP unit to operate at its maximum efficiency and airflow, its duct system should be designed in accordance with good dust collection practices. The Industrial Ventilation Manual of the American Conference of Governmental Industrial Hygienists, or other recognized source, is recommended as a guide.
- The dust collector electrical system, including wiring, controllers, overload protection, and disconnect means must be installed in accordance with the National Electrical Code, Articles #310 and #430, or as specified by local code.
- 4. In order for the DUSTKOP to function properly, the fan must be checked visually to ensure rotation is in the proper direction as shown by the arrows on the fan housing. Rotation can be checked by viewing the fan wheel, the cooling fan on the back of the motor, or the motor shaft behind the fan housing. Reverse rotation will not reverse airflow direction, but will greatly reduce air volume, suction (S.P.), dust capture, and separation efficiency.
- 5. It is IMPORTANT that an airtight seal be maintained between the cyclone discharge and dust storage container. On "D1" and "D2" units, an airtight seal between the drum cover(s) and drum(s), and hose connections must be maintained. Likewise on "1RC", "RCS", and "B" units. On attached dust bin models, the bin doors must be tightly sealed. Failure to maintain the airtight seal in any of the above cases will provide a point for dust leakage, as the dust container is under positive pressure.
- 6. The dust collection drum(s) or bin should be checked regularly to establish a pattern that will provide for it being emptied when it becomes approximately 2/3 full of collected material. Allowing the dust collection drum(s) or bin to overfill can result in a plugged cyclone and a reduction in separating efficiency.

- 7. Under no circumstances should flammable materials be mixed with dust being collected from ferrous metal grinding operations, due to the potential fire hazard of sparks entering the dust collection system. Examples of such flammable materials are buffing dust, paper dust, wood dust, aluminum, and magnesium dust.
- 8. Employees should be warned not to throw lit cigarettes or any burning or glowing object into the dust collection hoods.
- Collected dust should be disposed of properly especially in cases where the dust is rated as being hazardous or toxic. In such cases, established governmental disposal regulations should be strictly obeyed.
- 10. If your DUSTKOP cyclone unit is connected to an after-filter, make sure that the after-filter is properly maintained in order to assure optimum performance of the cyclone unit, and hence the dust collection system.

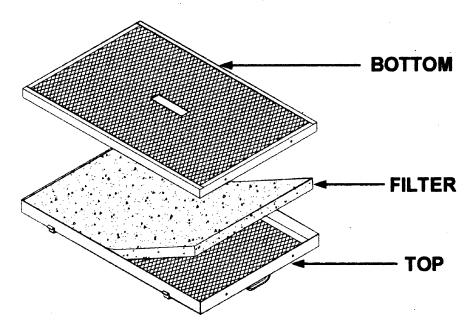
#### **SHAKING FILTERS**

- 1. The filters should be cleaned by shaking at the end of every eight hours of operation. On units having a shaker crank, this crank should be turned briskly about 25 revolutions at each shaking.
- 2. Under no circumstances should the filter be shaken while the fan is in motion. This drives the dust tighter into the filter, making it impossible to shake it out.
- Frequency of shaking depends upon the operation and the material being collected. A regular cycle will have to be established as outlined for the cleaning of the dust storage container. However, as a general rule, a filter should be shaken at least once a day (or once per shift).
- 4. When shaking the filter no longer restores adequate suction, the filter should be replaced with a new one. See changing filter instructions.
- 5. Dust accumulated in the filter compartments from shaking the filters should be removed whenever the filter is changed or whenever the dust storage container is emptied. Remove the filter frame from the collector and sweep the accumulated dust down into the opening leading to the center of the cyclone separator. This dust may then be removed with the dust accumulated in the storage container.
- Shaking of 'C' units is done either with the shaker lever, where provided, or by grasping sides of the bag and shaking violently.

#### **CHANGING FILTERS**

- 1. LOOSEN fastenings and remove filter frame from DUSTKOP.
- 2. PLACE frame upside down (handles down) on flat surface.
- 3. **REMOVE** screws in dimples at end of frame (if thus equipped).
- 4. LIFT out the inner (bottom) half of frame.
- 5. DISCARD old filter material and clean dust from frame angles.
- 6. SPREAD a new DUSTKOP filter into the upside down top frame making sure that it fills the entire frame completely to its edges with no gaps.
- 7. **INVERT** the bottom (inner) half of the filter frame. Place it on top of the filter material and push it straight down until the "dimples" snap in place or the screw holes line up.
- 8. **IMPORTANT** The flange on the bottom half of the frame should compress the filter material against the top half of the frame. **DO NOT** tuck the filter material into the channel of the bottom frame. It must be squeezed between the two frames in order to seal effectively, or it will leak dust at the edges.
- 9. **DO NOT** place anything on top of the filter. Suction will be reduced in proportion to the amount of surface area that you cover up.

# CHANGING FILTERS, cont.



## TROUBLESHOOTING

## **PROBLEM: Inadequate Airflow and Suction**

## **POSSIBLE CAUSE**

Fan running backwards

Drum cover(s) not clamped or sealed properly to drum(s)

Ductwork or cyclone plugged

System design

#### SOLUTION

Have electrician reverse motor direction.

Clamp drum cover(s) on drum properly. Obtain a good 55-gallon drum with a uniform rim (not bent or dented).

Visually check ductwork and cyclone interior, and clean as required.

Contact nearest Aget representative.

## PROBLEM: High Filter Resistance

## **POSSIBLE CAUSE**

Shaking while fan is running Not shaking filter often enough, or long enough Dust bin or drum(s) overfilled and backed up into cyclone Filter plugged

Air-to-filter ratio too high (CFM/SQ. FT.)

Incorrect filter media

## SOLUTION

Shake only when fan is stopped. Increase shaking frequency and, only if necessary, increase shaking time. Empty dust bin or drum(s).

Shake filter. If airflow is not restored, replacement may be necessary. Add more filter.

Contact your Aget representative

#### PROBLEM: Excessive Dust Bleed-Through from Filter

#### POSSIBLE CAUSE

Improperly installed filter Air-to-filter ratio too high (CFM/SQ. FT.)

Incorrect filter media for the dust being collected

#### SOLUTION

Refer to CHANGING FILTERS Add more filter area.

Contact your Aget representative.

# TROUBLESHOOTING, cont.

## **PROBLEM:** Excessive Dust Emissions from Cyclone

## **POSSIBLE CAUSE**

Drum cover hose not caulked Dust storage drum(s) or bin overfilled and backed up into cyclone

Too much fine dust for the cyclone to efficiently precipitate Aerodynamically shaped dust particles (e.g. paper)
Something caught in cyclone disturbing smooth airflow

## SOLUTION

Caulk hose top and bottom.
Empty dust storage container.
Check cyclone interior at the same time to see if the cyclone is plugged up with dust. Clean out as required.
Add an after-filter.

Contact your Aget representative.

Check visually through bottom cyclone discharge and top air outlet for anything foreign to the construction or materials of the cyclone. Check for dents in cyclone.

#### **PROBLEM: Electrical Overload**

#### **POSSIBLE CAUSE**

Branch circuit fuses incorrect size

Motor starter heater elements incorrect size

Motor starter, disconnect, or wiring undersized Loose connection

#### SOLUTION

Size fuses for branch circuit protection per National Electrical Code 430-52 and Table 430-152.

Size heater elements according to motor nameplate full load amps, per National Electrical Code 430-32.

Size according to National Electrical Code Article 430.

Check all connection points.

#### STATEMENT OF WARRANTY

We guarantee equipment produced by AGET MANUFACTURING COMPANY for a period of one year from the date of shipment against defects in workmanship and materials. All necessary replacements or repairs are F.O.B. Adrian, Michigan, and are subject to our inspection.

All electrical motors furnished with our equipment are warranted by the motor manufacturer and the motor industry's policy on repair or replacement must be followed in the event of a failure. The user must take the motor to the nearest authorized repair or service station with the request, preferably in writing, that the motor is for warranty inspection and giving the source of the motor (us) and the date of its acquisition.

From code numbers on the motor, the service shop can determine whether or not it is still within the warranty period. If found to be defective, it will either be repaired or replaced.

Contact us first before taking any action on a defective motor, as stated on the red tag attached to it. We can then advise the location of the nearest motor service authorized by the motor manufacturer to handle claims under warranty.

This warranty is in lieu of any other warranty, spoken or implied.

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