Installation, Operating and Maintenance Instructions for KTM "A" & "AA" Type Dust Collector

Mount the corner gussets on each leg, place the legs on your footings and loosely attach all cross bracing. Mount the frame onto the legs and tighten all bolts. Lift the filter cabinet by the reinforced lugs at the top of the unit and loosely attach to the structural frame.

The blower can now be moved into position and attached to the inlet of the filter cabinet. After this sequence, tighten all bolts to the frame.

The safety railings can be attached to the safety platforms while on the ground. Lift the platforms into place and attach to the matching holes on the filter cabinet. After tightening all bolts, attach the ladders to the platforms using the large washers and bolts provided. The bottom arm of the ladder should be mounted to the frame or leg of the collector (you may need to drill matching holes).

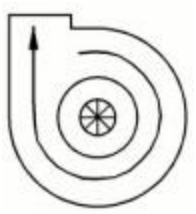
After your new dust collector has been erected (the footings secured, the ladder and safety railings attached), the breather plug on the filter shaker gear should be removed and the gear oil level checked to see if sufficient oil is in the gearbox. Return the breather plug to its former position.

Do not start up the dust collector unless all the ductwork is connected and in place. A licensed electrician must do the electrical connections.

A licensed electrician should install the control panel in the proper location. The panel sequence is as follows:
The start button starts up the main motor. The main motor runs until the stop button is pushed, followed by 1 minute of settling time, then a pre-programmed 3 minute shaker cycle. If the collector has a rotary air lock, it will be running an extra 3 minutes to clean out any collected dust. After this, the program resets itself for the next start up.

The collector has 1 or 2 sprinkler heads near the top of the filter bag section that will be activated by high temperatures. A plumber should connect a water line to the sprinkler head(s).

After the ductwork is in place and connected to the dust collector, the unit can be started up. The amperage draw should be checked to make sure the motor is not exceeding the maximum amperage shown on the motor name plate. Inspect the fan rotation and ensure the fan is rotating toward the outlet (see diagram).



If your collector has a fire damper, a high temperature build up in the air return line will melt the fusible link and trip a micro-switch, stopping the main blower. The fire damper has to be manually reset via an access door near the fire damper and a new fusible link must be installed.

The explosion relief door(s), if installed, will open to the outside if any explosion occurs. The door(s) must be closed manually after an incident.

Depending on the model, the slide gate will be opened by a chain operated hand wheel with rack and pinion. A clam gate is operated with 3 winches.

Hand wheel opened gates are usually 42" x 42" and clam gates are usually 4' x 9' or 7' x 9'.

Rotary air locks are used for continuously unloading the waste material. Units with rotary air locks do not have storage space. If the waste is allowed to accumulate under the air lock unchecked, a bridge above the air lock will build up and clog the system. To unclog the air lock, the access door right above the air lock has to be opened and the material manually removed.

We recommend using a drop out expansion box on all units. This may be fitted on the blower inlet or in the main duct in order to prevent heavy articles from hitting the fan blades. We can supply these boxes upon request.

Maintenance Suggestions

The following steps should be taken to maintain proper working conditions:

The blower should be inspected every six weeks under normal use and the blower bearings should be greased if needed. Do not overgrease (no grease should escape the housing seals).

The v-belts are adjusted to the correct tension when the collector is installed. An adjustment is needed after 3 to 4 days of use and again 3 to 4 weeks after start up. V-belts have to be tightened to allow ½" play, giving to the pressure of one finger in the centre between the pulleys with reasonable force. Frayed belts or cracked belts should be replaced as soon as possible.

The filters can be washed or dry-cleaned as they are resistant to shrinkage. If the colour of the filter bags changes from white to brown or even beige, the filter material is saturated and the bags need to be washed or dry-cleaned. To reinsert filter bags, press the bottom snap ring with both thumbs and fit it into the hole sheet and snap in. Most bags have 3 grommets for easy adjustment. Bags should be firm but not over-stretched.

The doors need to be resealed after the filter bags are checked. Clear silicone sealer is preferred.

If the motor or blower becomes noisy, the bearings should be checked or may need to be replaced.

The bearings on both sides of the motor/blower should be replaced at the same time (if you replace only one side, the other side will quickly deteriorate and need replacement).

If the return air is not clean, a filter bag may be torn or may have popped out of the hole sheet.

If the shaker gear makes noise, the gear oil may be too low (please check).

Some dust comes out on collection drum rims. A 1" wide strip of closed cell neoprene gasket may need to be put on the collection drum to give it a better seal.

Daily Maintenance Reminders

Upon starting up the dust collector, listen for signs of trouble (i.e. noisy bearings may need to be greased and/or replaced, squealing belts may need to be tightened and/or replaced).

Under normal operation, the dust collector should be shut down three times per shift (i.e. morning break, lunchtime and afternoon break). At this time, the filter shaker should be engaged for approximately three minutes. This sequence is automatic if the dust collector is operated with an electric control panel.

If a rotary air lock is in use, it should remain on for approximately two minutes after the shaking cycle to remove the accumulated dust. This sequence is automatic if the dust collector is operated with an electric control panel. Ensure the discharge of the rotary air lock is clear of debris to avoid any bridging action (this can be avoided by evenly spreading the pile of dust in the container).

Lubrication Requirements
Usage / Conditions

1 *	*One or two shifts per day*
2 *	*Normal 24 hour continuous use*
3 *	*24 Hour continuous use in dirty or moist locations*
4 *	*High vibration or shaft end hot*
5 *	*Seasonal (used only for part of the year)*

HP Range	Usage / Conditions	Relube Interval
Fractional to 7.5	*1 **	*5 years*
Fractional to 7.5	*2 **	*2 years*
Fractional to 7.5	*3 **	*6 months*
Fractional to 7.5	*4 **	*6 months*
Fractional to 7.5	*5 **	*start of season*
10 to 40	*1 **	*3 years*
10 to 40	*2 **	*1 year*
10 to 40	*3 **	*6 months*
10 to 40	*4 **	*6 months*
10 to 40	*5 **	*start of season*
50 to 200	*1 **	*1 year*
50 to 200	*2 **	*9 months*
50 to 200	*3 **	*3 months*
50 to 200	*4 **	*3 months*
50 to 200	*5 **	*start of season*

Type of Equipment	Type of Grease	Generic
Eberle Motors	*Beacon 325*	*Lithium Complex*
Hyundai Motors	*Beacon 325*	*Lithium Complex*
Leeson Motors	*Shell Dolium*	*Polyurea*
VP Motors	*Beacon 325*	*Lithium Complex*
Weg Motors	*Beacon 325*	*Lithium Complex*
Other Motors	*See Manufacturer*	*See Manufacturer*
Pillow Blocks	*Alvania Grease 2*	*Lithium*
Gearboxes	*Castrol Hypoy C*	*Gear Oil SAE 80W-90*

**** Use of any non-compatible (Aluminum, Barium, Sodium or Bentone) grease will void warranty ****

If you have any questions, please call us at 1-800-443-6443.