Vacuum

ELECTRAK 1

1.5HP, 110V, 1 Phase Motor
with Variable Frequency Drive

- INSTALLATION
- OPERATION
- MAINTENANCE

Meyer Machine & Equipment, Inc.
241 W Depot Street
Antioch, Illinois 60002

(800) 728-3828
(847) 395-2970
(847) 385-9420 Fax

ELECTRAK 1

I.O.M. MANUAL

Safety :

- Do not operate this equipment until you have read this manual and fully understand the machines' operation.

- Never operate the vacuum without a hose on the inlet.

- Never operate the vacuum without the side panel of the fan housing mounted and the filters in place.

- Never place your hands, arms or any body parts near the fan inlet or discharge while the fan is in motion. The fan can cause severe and permanent injuries to bodily parts.

- Never attempt any maintenance while the fan is rotating.

- Prior to any maintenance, push the red stop push button and remove the plug from the wall. This will eliminate the possibility of accidental start up.

- Exercise caution when moving your vacuum up & down ramps. This machine weighs in excess of 150 lbs. and can cause injury if moved improperly.

- Do Not transport the vacuum without properly securing the vacuum in your vehicle.

- Do Not continue to operate a vacuum that has an out of balance condition. This will be apparent by the machine shaking violently. Operating a machine that is out of balance could result in damage to the machine or injury to the operator.

- Never operate the machine unless you are 100% familiar with how to stop the vacuum.

ELECTRAK 1

I.O.M. MANUAL

Installation :

Upon receipt of your power vacuum and equipment, double check your packing list against the actual materials received. Note any discrepancies and/or damage to the freight on the trucker's freight bill. Any claims will have to be processed through the freight company and they will require documentation.

Unpack your **ELECTRAK 1** power vacuum using caution not to damage the machine. Your machine should be fully assembled with the exception of the hose and the hepa module. Locate the packing slip attached to your shipment; check to see that you received everything that is listed.

Locate the hepa module and roll it to the front of the machine under the control panel. Lift the hepa module by the side handles and rest it on the lower angle. Rotate the module forward and latch the 2 spring loaded latches rotate them tight. Install the hose from the inlet of the vacuum to the duct system. Please note that the machine should be in the upright position.

Plug the machine into a 110-120 volt outlet with at least 15 amps of available service. The machine is now ready to operate.

ELECTRAK 1

I.O.M. MANUAL

Operation :

Prior to operating your **ELECTRAK 1** power vacuum, there are a few necessary points that must be checked.

- Machine is properly plugged in
- Inlet hose is firmly in place
- Hepa module is clamped on
- Make sure you know how to stop machine

NOTE: Never operate your vacuum without proper inlet and discharge connections.

Once you have checked the items above, you are ready to proceed with starting the vacuum.

Place the speed control dial midway between low & high speed, press the start push button, the motor that drives the fan will slowly begin to accelerate. You will notice that the ammeter will begin to rise. When the speed stabilizes turn the speed control up to a level that corresponds to the power service available. For example 14.5 amps for a 15 amp service or 19 amps for a 20 amp service.

Set the speed of your machine such that the ammeter maximizes your available power. As the filters begin to blind up and/or you have to run longer lengths of hose you will notice that the amps will go down. You can adjust the speed control to bring the amps back up to the appropriate level. This will maximize your air flow (CFM) in the duct system.

To shut down the vacuum, press the stop push button, then remove the plug from the wall outlet. This will minimize the possibility of the machine re-starting. The machine can also be turned off by pushing the stop button on the motor control box.

ELECTRAK 1

I.O.M. MANUAL

Maintenance :

Your **ELECTRAK 1** power vacuum, as well as the rest of your equipment, will last for many years if you properly maintain the equipment.

NOTE: ALWAYS FOLLOW THE SAFETY GUIDELINES AS OUTLINED ON PAGE 1 OF THIS MANUAL PRIOR TO DOING ANY MAINTENANCE.

The pressure gauge on your **Electrak 1** is measuring the total vacuum. By reading this and analyzing the readings we can determine when to change the filters. By changing the filters on a regular basis you will be changing the less expensive pre-filters and you will be prolonging the life of the more expensive filters.

By taking 15 minutes or so and filling out the chart below you can determine which filters need to be changed. You should remember that the machine with <u>all</u> new filters will produce about 3" H_2O static pressure. As each of the filters start to load up with material the pressure will begin to climb.

It is important to measure the pressure with the fan running at the same speed for all measurements. So adjust the speed of the fan so that your ammeter reads 14 amps with all of the filters in place.

		Pressure
"H_2O		
First:	Write down the pressure with the first 2 filters in place.	A = __________
Second:	Mount the hepa filter and write down the pressure with all 3 filters.	B = __________
Third:	Remove the hepa filter and remove the primary filter then write down the pressure with only the 2nd filter in place.	C = __________
Fourth:	Remove all the filters from the machine and close the inlet cover write down the pressure in a free state.	D = __________

ELECTRAK 1

I.O.M. MANUAL

A. C - D = ______ If greater than 1½" then your secondary filter needs to be changed.

B. A - C = ______ If greater than ¾" then your pre-filter needs to be changed.

C. B - A = ______ If greater than 2" then your hepa filter needs to be changed.

The spare filters for your machine are:	Part No.
Pre-Filter 23½" x 25½" x 9" cube	FTB003
Secondary Filter 23½" x 23½" x 18" bag, 95% efficient	FTB020
Hepa Filter 23½" x 23½" x 11½" Hepa	FTH024

On the following page there is a wiring diagram that indicates how the motor, controller and control panel are interfaced together. Do not attempt to open the control panel or the controller unless you are qualified to do such work.

The following chart will outline the desired values for selected parameters on the adjustable speed controller. The controller is programmed at the factory so that these values remain constant. Parameters are not intended to be changed other than through the control panel. Should you have any questions about these or any other parameters, please consult the factory.

Parameter Name	Setting
Acceleration	15 sec.
Deceleration	10 sec
Minimum frequency	20 Hz
Maximum frequency	75 Hz
Base frequency	60 Hz

If your vacuum shuts itself down, it is probably because you overloaded the motors controller. Go to the back of the machine and push the stop button on the controller. This will reset the controller. Before you start the machine again, turn down the speed control to a low level and slowly turn it up as you start the machine. Never run the vacuum in excess of 19 amps.

NOTE: All warranty repairs must go through Meyer Machine & Equipment, Inc. prior to any service work being done. Work not authorized by Meyer Machine will not be covered under warranty.