



# ACE INDUSTRIAL PRODUCTS MODEL 73-900 INSTRUCTION MANUAL

**CAUTION:** This device is powered by rotating electrical machinery !!!  
Careless or improper use may result in personal injury. Read the Safety  
Precautions and Warnings contained within prior to operating this machine.

## **READ AND SAVE THESE INSTRUCTIONS**

### **SAFETY WARNINGS & CAUTIONS**

FAILURE TO OBSERVE THE FOLLOWING PRECAUTIONS COULD RESULT IN SERIOUS INJURY, INCLUDING DEATH  
IN EXTREME CASES. SAVE THESE INSTRUCTIONS.

#### **WARNING: EXPLOSION HAZARD**

This unit contains parts that can arc or spark during normal operation. Do not use in areas contaminated by volatile or flammable materials as these sparks may ignite the contaminants and cause a dangerous explosion.

#### **WARNING: HARMFUL FUMES**

The filters used in this unit will remove solid particulate only, and do not eliminate fumes and gases that may be a health hazard. Failure to observe the presence of such fumes could cause serious illness or death.

#### **CAUTION: SHOCK HAZARD**

To insure continued protection against shock hazard, connect AC cord only to properly grounded outlets. Replace defective cords immediately. Do not expose to moisture or liquid, as this could defeat the electrical insulation thus causing electrical shock.

#### **CAUTION: STRONG VACUUM**

Care must be taken to avoid personal injury by not allowing inlet to contact any body area such as eyes, ears, mouth, etc.

#### **CAUTION: LIFTING**

Improper lifting or handling of this unit could cause back injury. Follow the recommended method for lifting.

#### **CAUTION: AIR FLOW BLOCKAGE**

Since exhaust air leaves the bottom-side of this unit, caution should be observed not to position unit in a way that blocks the exhaust.

#### **MISCELLANEOUS CAUTIONS:**

1. To reduce the risk of damage to the electric plug or cord, disconnect by pulling plug rather than cord when removing power from the air cleaner.
2. Make sure cord is located so it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
3. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in risk of fire and electric shock.
4. Do not disassemble the air cleaner. Take it to a qualified service man when service or repair is required. Incorrect reassembly may result in risk of electric shock or fire.

#### **THEORY OF OPERATION**

The down draft table has been designed to pull the welding smoke down during the welding process. With the top made of 2" channel that is made to move, you can move the channel to increase or decrease the amount of air flow in the area that the welding procedure is being done. The 8" pieces are to set the small parts you are welding on so you can have an opening on each side to pull the smoke down through. During any gas welding procedures, move the channels to where no opening is directly below the weld to prevent it from removing the gases.

**FILTER CLEANING**

There are two types of filters in this unit, a pre-filter and two main filter. The pre-filter is to stop all the sparks and small fire cinders from going through to the main filter. The filter is located on top, under the air deflector. The pre-filter should be cleaned frequently (weekly), remove the deflector and then the pre-filter and blow out with air or wash out with water.

The two main filters are under the table on each end. The main filter is designed to remove 97% of all contaminates in the air. If welding toxic materials, HEPA filters can also be made available. The main filter can occasionally be cleaned by blowing air through the filter. But care should be taken when cleaning the main filters, do not hold the air gun to close to the filter or you might separate or tear the filter media, resulting in the need to replace the filter.

**MAGNEHELIC GAGE**

The MAGNEHELIC GAGE on the 73-900 down draft table will read approximately .40-.50 when the filters are new and clean. This gage is to monitor the filter resistance, which also is an indicator of what percentage of the filter is full. As the hand goes to the right, the air flow will decrease. Never allow the meter to read more than 1.25". The main filters should be cleaned or changed at around 1".

**UNPACKING**

Carefully inspect the unit for concealed damage that may have occurred during shipping and handling. If any damage is found, immediately contact the freight company.

**OPERATION**

Your 73-900 is designed as a source capture device, i.e., it is intended to eliminate smoke and particulate at the point of origin. Keeping this in mind, the machine should be operated in the following manner:  
Re-read the sections of Safety Warnings and Cautions before proceeding any further.

1. Place the machine on a flat, level surface. Pick a location that will allow unrestricted flow of the exhaust air to the atmosphere.
2. Lock the casters or block the casters.
3. Using the ON/Off switch, turn the machine On. Should the motor not start, or should the machine make unusual noises, immediately turn the machine off and seek trained maintenance personnel. Do not continue to use the device.
4. Upon completion of the specific manufacturing or welding operation, turn the machine off. Continuous running of the machine will continue to remove particulate from the general environment and will cause premature clogging to the filter.

**GENERAL MAINTENANCE**

ONLY QUALIFIED SERVICE TECHNICIANS SHOULD MAKE REPAIRS TO THIS UNIT.  
DO NOT REPLACE THE MOTOR OR FAN BLADE WITH ANY OTHERS THAN THOSE RECOMMENDED BY THE MANUFACTURER.

**REPLACEMENT FILTER LIST**

<u>DESCRIPTION</u>	<u>SERVICE NUMBER</u>
PRE-FILTER .....	91-851
MAIN FILTER (90-95% EFFICIENT) .....	91-852

**ACCESSORY LIST**

<u>DESCRIPTION</u>	<u>SERVICE NUMBER</u>
CENTER PARTITION .....	65900

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