



## INSTRUCTION MANUAL

### MODEL 74-1800

#### GENERAL INFORMATION

Carefully inspect the unit for concealed damage that may have occurred during shipping and handling. If any damage is found, then you as the receiver must note and immediately contact the Freight Company. Make sure there are no dents in the housing, as they will prevent the filters from sliding into the unit smoothly. **THIS IS YOUR RESPONSIBILITY.**

**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, which 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 circuits. 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 the 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 recommended methods for lifting.

##### CAUTION: (AIRFLOW BLOCKAGE)

Since exhaust air leaves the end of this unit, caution should be observed not to position the unit in such a way as to block the exhaust.

#### MISCELLANEOUS CAUTIONS:

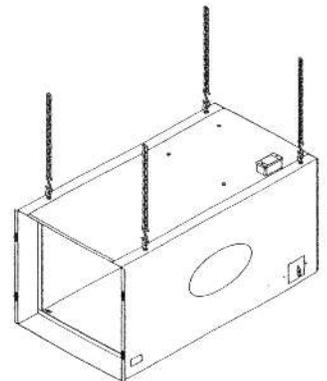
1. Use of any attachment not recommended or sold by the air cleaner manufacturer may result in risk of fire, electric shock, or injury to persons.
2. Do not disassemble the air cleaner. Take it to a qualified service technician when service or repair is required. Incorrect reassembly may result in risk of electric shock or fire.
3. To reduce the risk of electric shock or bodily injury, disconnect power from the air cleaner before attempting any maintenance or cleaning. Turning the switch to the OFF position will not eliminate this risk.

#### INSTALLATION

This unit is equipped with eight 3/8-16 internal weld nuts, four on the top, four on the bottom; the weight is approximately 180 lbs.

#### SUSPENDING THE UNIT FROM THE CEILING

The unit can be suspended from the ceiling by using the four 3/8-16 weld nuts on top of the cabinet. One method is to use eyebolts with "S"-hooks and chain or wire rope. Thread a 3/8-16 eyebolt into each of the four weld nuts plus an additional hex nut on each eyebolt to lock the position and prevent the eyebolt from turning.



The four mounting points should be directly above the weld nuts. This will provide better stability and simplifies leveling. After the four supports are in place, level the unit so each support is equally loaded. All parts used to hang the unit should have a minimum work load limit of 250 lbs.

NOTE: ACE Industrial Products does not supply hardware (eyebolts, 'S'-hooks, chain, etc...) for hanging the unit.

#### MOUNTING THE UNIT AGAINST A WALL

Four 3/8-16 weld nuts are located on the bottom of the unit so the unit can be attached to wall brackets.

#### LOCATION OF AIR HANDLING EQUIPMENT

It is impossible to cover all types of installation situations. However, by following these general rules of installation, it is possible to handle most problems. If unusual situations are encountered, contact your ACE representative for assistance.

1. Never place a unit too close to a corner. Allow as much room as possible or contaminated air will be pushed past the unit instead of pulled through it. (Figure 1.)

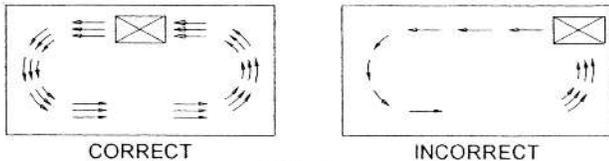


FIGURE 1

2. In a "L" shaped room position the unit so the air circulation will draw air from the "L". (Figure 2.)

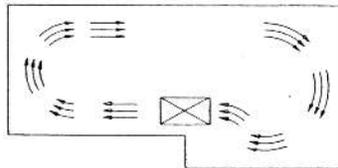


FIGURE 2

3. Mount the unit near the wall opposite the cold air or heating ducts. (Figure 3.)

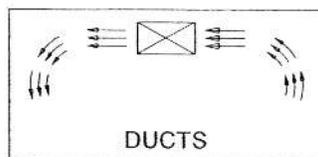


FIGURE 3

4. When installing multiple units it is important that air circulation covers the entire area. (Figure 4.)

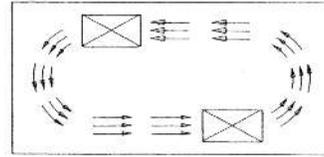


FIGURE 4

5. In rooms with sloped ceilings, install the unit in the higher end. (Figure 5.)

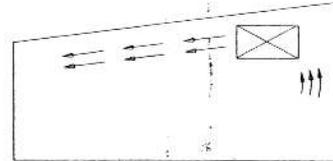
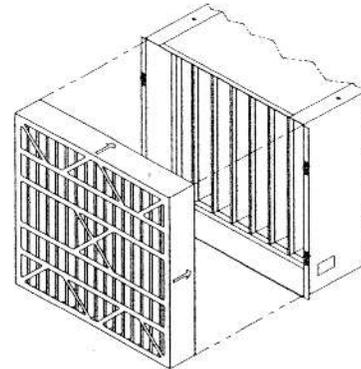


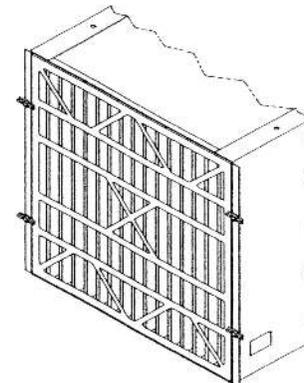
FIGURE 5

#### Filter Installation

1. Remove the wrapping from the bag filter. Insert the bag filter into the intake opening with the filter pockets vertical.
2. Install the pre-filter; make sure the arrow on the filter matches the direction of the airflow.



3. Turn the locking latches to secure the filters in place.



## ELECTRICAL WIRING

**WARNING: ALL ELECTRICAL INSTALLATION SHOULD BE PERFORMED BY QUALIFIED PERSONNEL.**

Always disconnect the power source before working on or near a motor or its connected load. If the power disconnect point is out of sight; it should be locked out in the OPEN position and tagged to prevent unexpected application of power.

**POWER:** The voltage, frequency and phase of the power supply must be the same as that shown on the motor nameplate. Low voltage can reduce performance and cause overheating. High voltage will cause the motor current to increase above the nameplate value.

**WIRING:** All electrical wiring and connections must comply with the National Electric Code (NEC) and local codes. Use of a motor starter either manual or magnetic incorporating thermal protection is recommended and may be required by code. The motor is properly wired to the junction box at the factory. The motor and blower are both rated for continuous duty. Once installed the unit can be run continuously, or shut off overnight as dictated by the nature of the application.

## MAINTENANCE AND SERVICE

Only qualified service technicians should make repairs to this unit. Do not replace the motor with a motor other than that recommended by the manufacturer.

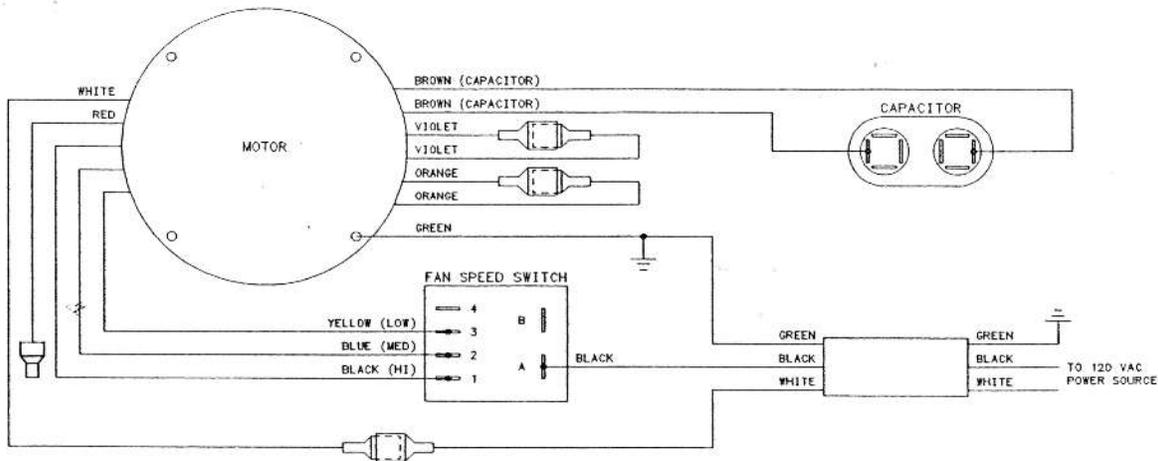
**CAUTION: DISCONNECT THE POWER SUPPLY TO THE UNIT BEFORE OPENING EITHER END.**

Always disconnect the power source before working on or near a motor or its connected load. If the power disconnect point is out of sight; it should be locked out in the OPEN position and tagged to prevent unexpected application of power.

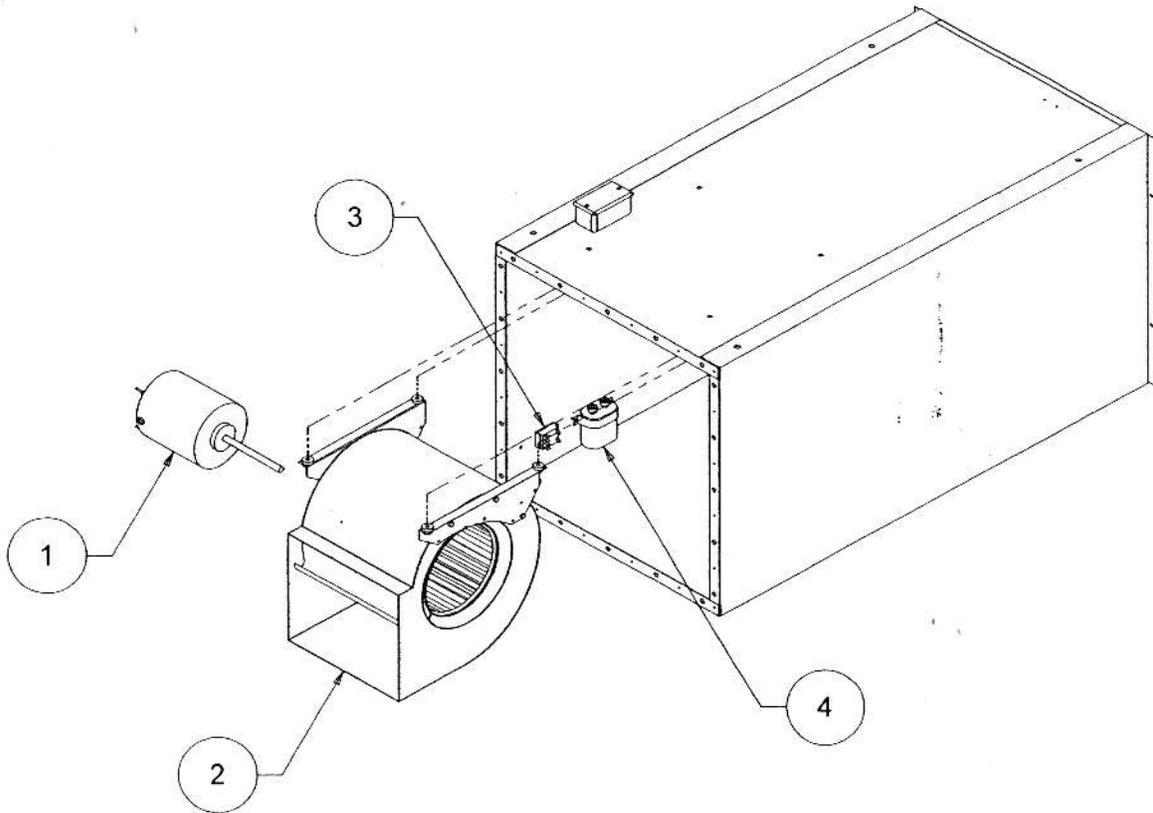
## OPERATION

The unit is equipped with a three-speed direct drive blower motor and a rotary switch with HI, MED, LO and OFF positions. Set the switch to the position that will deliver the volume of air filtration desired.

WIRING DIAGRAM



EXPLODED PARTS VIEW



Repair Parts

Item	Description	Part No.
1	Motor.....	65072
2	Blower assembly (wheel, base sides & motor mount) .....	65073
3	Switch w/knob.....	65074
4	Capacitor w/bracket.....	65075

Replacement Filters

All Factory furnished filters have a UL class II rating and using any filters other than those supplied for this unit is not recommended.

95% Main Filter, 24"x24"x22" .....	91-980
85% Main Filter, 24"x24"x22" .....	91-981
65% Main Filter, 24"x24"x22" .....	91-982
40% Pre-filter, 24"x24"x4" .....	91-984
Pre-filter wrap, 24"x250 yd. ....	91-962

**ACE INDUSTRIAL PRODUCTS**

A Division Of:  
 ASSOCIATED EQUIPMENT CORP.  
 5043 Farlin Avenue  
 St. Louis, MO 63115  
 Phone: (314) 385-5178  
 Fax: (314) 385-3254