# USER'S INFORMATION MANUAL FOR SELF-CONTAINED AIR CONDITIONING UNITS

## Thermostat Operation

We find most cooling only air conditioning units are installed with a single stage cooling thermostat. When optional auxiliary electric heat is added, the thermostat required is a combination heating/cooling type, which includes a manual heat/cool system switch and a manual/auto fan switch.

For cooling, position the system switch to "COOL" and the fan switch to "AUTO". If constant fan operation is desired, place the fan switch in the "ON" position.

When heating is required, position the system switch to call for heating and place the fan switch in the "AUTO" position.

We suggest that you experiment with constant air circulation during the heating and cooling cycles. To achieve this style of operation, place the fan switch on the thermostat subbase to the "ON" position. You may enjoy the comfort associated with the continuous air movement, constant air filtration, and the near even temperature from floor to ceiling.

Selection of Room Temperature: It is most important to select the comfort temperature you desire for either heating or cooling by the use of the thermostat temperature selector.

DO NOT PLAY WITH THE THERMOSTAT. SET IT AND FORGET IT.

If the temperature selection procedure is new to you, ask your installing contractor to familiarize you with the operation of the thermostat.

## System Operation Information

- 1. Keep the air filter clean. Your system will operate more efficiently and provide better conditioned air, more economically.
- 2. Arrange your furniture and drapes so that the supply and return air registers and grilles are unobstructed.
- Close doors and windows. This will reduce the cooling and heating load on your system for more economical operation.
- 4. Avoid excessive use of kitchen exhaust fans.
- 5. Windows shades and awnings will reduce the cooling load.
- 6. Unless you plan to clean the coils in the unit. do not disconnect the main power to your unit. This is a safety precaution for the protection of the compressor. Otherwise. use the thermostat switches to shut the system off.
- 7. For extended periods of inoperation, set the thermostat system switch in the "OFF" position and the fan switch in the "AUTO" position.
- If the power to the unit has been interrupted for an extended period, do not attempt to operate your unit on the cooling cycle until the power to the unit has been restored for at least 4 hours, preferably for 12 hours.

- 9. We suggest that you do not allow the unit to become a play stand for children. This could be dangerous to the child.
- 10. A regular period of waxing the finish on the unit will increase the life of the finish.
- 11. Remember to keep the air filters clean for efficiency and energy saving operation.

## Things You May Do

Warning: Before beginning any maintenance, be sure the main electrical disconnect switch is in the "Off" position.

- Keep air filters clean. There are several types of material used in air filters and there are many possible locations for air filters. Consult with your contractor as to the location of the filters and type of material in use.
- 2. How to Clean The Air Filters:

Glass Fiber (Throwaway) — This is a disposable type of filter. Inspect monthly and replace when necessary. A new home will normally require more frequent attention to the filters.

Aluminum Mesh – Wash with detergent and water. Air dry thoroughly and renew the coating in compliance with the manufacturer's instructions.

Plastic Impregnated Fiber - Wash with detergent and water or vacuum clean, then reinstall.

CAUTION: DO NOT OPERATE YOUR SYSEM FOR EX-TENDED PERIODS WITHOUT FILTERS, AS THE DUST ENTRAINED IN THE AIR MAY PACK INTO THE FIN AREA OF THE INDOOR COIL CREATING A CONDI-TION WHICH COULD REQUIRE EXTENSIVE REPAIRS.

3. Oiling of Electric Motors:

The blower motor sleeve bearings are prelubricated by the motor manufacturer and may not require attention for an indefinite period of time. However, our recommendations are as follows:

A. Motors without oiling ports --

Prelubricated and sealed. No further lubrication should be required, but in case of bearing problems, the blower and the motor end bells of some motors can be disassembled and the bearings relubricated by a qualified service person.

Motors with oiling ports -

Add from 10 to 20 drops of Electric Motor Oil or an SE grade of non-detergent SAE-10 or 20 motor oil to each bearing every two years for somewhat continuous duty or at least every five years for light duty. Take care not to over oil, because excessive lubrication can damage the motor.

The compressor motor is in a sealed system so does not require lubrication.

4. If your unit is equipped with an external manual high pressure switch reset button, have your servicing contractor familiarize you with its location. Many models have compressors equipped with internal pressure relief valves using an automatic reset feature elminating the need for an external control. This high pressure switch or the relief valve will open under excessive high pressures to protect the compressor. Some models with internal relief valves will require power interruption prior to resetting itself. The high refrigerant pressure may be due to a temporary condition, so if your unit is equipped with a reset button you may reset it as required. However, if the problem persists, refer to Item 7, and or refer the problem to your servicing contractor.

- 5. If the condensor coil is allowed to become restricted by dirt, lint, paper, grass clipping, leaves, etc., the system efficiency will suffer and abnormally high refrigerant operating pressures will result. To correct this condition, be sure to first cut off power to the unit, and then clean such material from the condenser coil and cabinet. Using a garden hose with a nozzle can be effective in cleaning the condenser coil, but the water should be sprayed from the inside to outside of the coil in the opposite direction from the normal airflow when the condensing unit is operating.
- 6. If you know or suspect that the compressor is not working, you should place the thermostat system switch on the thermostat subbase to the "OFF" position. This will stop the operation of the outdoor unit.
- 7. If you suspect that a problem has developed with your system and before you advise your servicing contractor, we suggest you check the following service hints.

### Service Hints

Problem

### No cooling

Remedy .

- 1. Set thermostat correctly. Return system switch to the "OFF" position, wait 5 minutes before returning system switch to "COOL" position.
- 2. Reset high pressure switch on the unit, if so equipped.
- 3. Check fusing or circuit breakers serving the unit.
- 4. Call your servicing contractor.

### Problem

Insufficient cooling --Unit operates continuously

#### Remedy

- 1. Check air filters.
- 2. Check for blocked return air system.
- 3. Check to see if supply registers have not been closed.
- 4. Check for open doors and windows.
- 5. Call your servicing contractor.

## Protecting Equipment From The Environment

The metal parts of this unit may be subject to rust or deterioration in adverse environmental conditions. This oxidation could shorten the equipment's useful life. Salt spray, fog or mist in seacoast areas, sulphur or chlorine from lawn watering systems, and various chemical contaminants from industries such as paper mills and petroleum refineries are especially corrosive.

WARNING: DISCONNECT ALL POWER TO UNIT BEFORE START-ING MAINTENANCE!

- 1. Avoid having lawn sprinkler heads spray directly on the unit cabinet.
- 2. Frequent washing of the cabinet, fan blade and coil with fresh water will remove most of the salt or other contaminants that build up on the unit.
- 3. Regular cleaning and waxing of the cabinet with a good automobile polish will provide some protection.
- 4. A good liquid cleaner may be used several times a year to remove matter that will not wash off with water.

Several different types of protective coatings are offered in 'some areas. These coatings may provide some benefit, but the effectiveness of such coating materials cannot be verified by the equipment manufacturer.

The best protection is frequent cleaning, maintenance and minimal exposure to contaminants.