Safety Rules

- 1. Read instructions carefully.
- 2. Disconnect all electrical service that will be used for the unit before you begin the installation.
- 3. Electrical hook up should be done by a qualified electrician, so that all electrical wiring will conform to your local standards.
- 4. For a maximum safety precaution, make sure cooler cabinet is properly grounded to a suitable ground connection.
- 5. Cooler must be connected to proper line current, voltage and cycle, as stamped on cooler motor and pump motor specification plate.
- 6. Do no allow pump to tip over and become submerged.
- 7. Always **DISCONNECT POWER** before installing unit or performing any maintenance.

Operation

For the best cooling performance, if the pads are dry, pre-wet the pads by running the pump for a few minutes before starting the blower.

These coolers may also be used without water for ventilation purposes. When outside air is cool (for example, at night) or when humidity is high the water pump can be turned off.

IMPORTANT: To cool efficiently, you must exhaust the stale or used air from the building. Open windows or doors or use exhaust fans located away from the cooler and in the direction you wish to cool the air. The air will flow in the direction of the exhaust openings. A common guide for the amount of exhaust opening needed is to have at least 2 square feet of opening per 1000 CFM.

Installation

CAUTION: Make sure that the mounting surface is strong enough to support the operating weight of the cooler when in use. (For operating weight, see Specification Table.)

ACAUTION: Never plug in cooler until installation is complete and unit has been tested for rigidity.

CAUTION: Make sure all bolts are securely tightened before starting the cooler.

• **Ductwork.** See the General Specification table for the duct opening dimension for your specific cooler. For down discharge units models 10/12DD and 14/21DD, the duct must go inside the opening. Size these ducts slightly smaller than the duct opening in the cooler. On 75/85DD and 95DD models the duct may go to the inside or outside of the duct flange. The side discharge units have a 1 inch flange. Size these ducts larger than the duct opening to fit over the flange of these units.

Note: Curbs are not provided. The installer is responsible for providing curbs or other means to support the cooler.

Motor Installation

- Mount motor. Slide the heads of the provided carriage bolts into the slots of the adjustable channels. Slide these channels sideways in the slotted holes to align with the holes in the motor base and to align the motor shaft with the blower pulley. Mount the motor to the motor mount using these carriage bolts and the washers and nuts provided (see Fig. 1). Make sure all bolts are securely tightened.
- **Install pulley.** Install the adjustable motor pulley so that it aligns with the blower drive pulley (see Fig. 2) and tighten set screw. See page 3 for instructions on adjusting pulley.

Electrical Installation



NOTE: Local building code regulations must be observed. **AWARNING:** Disconnect all electrical service that will be used for this unit before you begin the installation.

- Electrical Supply. Cooler must be supplied with the proper line current, voltage and frequency, as stamped on cooler motor and pump motor specification plate. See the wiring diagrams on page 4 for typical electrical connections. NOTE: Connecting improper voltage to motor will void motor warranty.
- Wire sizing. The conductor sizes are to be determined by motor loads and length of run per national and local electrical codes.
- Switches or contactors. Motors require switches or contactors of proper current capacity and should be sized and installed by a competent electrician.

A*WARNING:* Make sure that cooler cabinet is properly grounded to a suitable ground connection for maximum safety.

Water Connection

• Overflow assembly. Remove nut and place nipple through the hole in the pan, with the rubber washer between the pan and the head

of the drain nipple (Fig. 3). Screw on nut and draw up tight against bottom of pan. Insert overflow pipe in nipple to retain water. Overflow pipe may be removed to drain pan when necessary. A garden hose may be screwed on the drain nipple to drain water away from your unit.



• **Pump.** The pump must be secured to prevent it from tipping over. Secure the pump to the pump mounting bracket. For the 10/12 and 14/21 models, remove the mounting screw on the top of the pump and using this same screw, secure the pump to the pump mount. To secure the pump for the 75/85 and 95 models, slide the pump into the slot of the pump mount and secure with the plastic retainer.