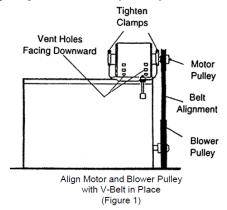


# HESSAIRE EVAPORATIVE COOLER MOTOR INSTRUCTION

WARNING: FAILURE TO FOLLOW INSTRUCTIONS AND USE SAFE ELEC-TRICAL PROCEDURES COULD RESULT IN SERIOUS INJURY SUCH AS SHOCK OR ELECTROCUTION.

#### **SAFETY PRECAUTIONS:**

- Disconnect electrical power at source before working on or near a motor or its connected load.
- This motor must be grounded by attaching the power supply green ground wire to motor terminal green screw.Install all wiring, fusing and grounding in accordance with National Electrical Code, local requirements, and according to cooler manufacture's insturctions.
- 3. Caution: Motor may stop and restart without warning. If motor is "overloaded", it will become unusually hot and the automatic internal overload switch will cause the motor to stop. The motor will then automatically restart after cooling down. An "overloaded" motor will cycle on and off. If this occurs, see Motor Pulley Adjustment Section.
- 4. Keep all parts of body and loose clothing clear from belts, pulleys and other exposed parts at all times.

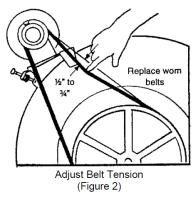


# Installation Instructions

1. Motor Mounting:

Place motor in motor mounting bracket with vent holes down and motor label up. Be sure groove in rubber mounting rings seats securely on mounting bracket. Tighten clamps.

- Motor Pulley and Blower Pulley Alignment:
   Pully must be aligned per Figure 1. If necessary, loosen pulley set screws with 5/32 Allen wrench.
   Each set screw must seat securely on flat of shaft.
- Belt Tension:
   Adjust belt to deflect ½ to ¾ inch at center of span as per Figure 2. Readjust belt tension after any pulley adjustment. Replace worn of damaged belts.

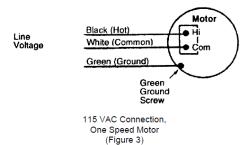


4. Electrical Connection (Disconnect electrical power source prior to making any connections)

#### 115 VAC Motors:

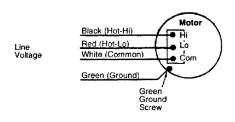
- A. Connect green wire (ground) to green screw of motor housing.
- B. One Speed Motors:

Connect white wire (Common) to white terminal and black wire (source) to black terminal per Figure 3.



### Two Speed Motors:

Connect white wire (common) to white terminal, black wire (source-high speed) to black terminal (HI) and red wire (source-low speed) to red terminal (LO) per Figure 4. Caution: <u>Do not apply voltage across HI to LO</u>.



115 VAC Connection, Two Speed Motor (Figure 4)

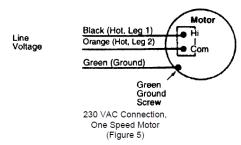


#### 230 VAC Motors:

A. Connect green wire (ground) to green screw of motor housing.

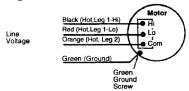
# B. One Speed Motor:

Connect orange wire (first leg of source) to white terminal and black wire ( second leg of source) to black terminal Figure 5.



# **Two Speed Motors:**

Connect orange wire (first leg of source) to white terminal, black wire (second leg of source-high speed) to black terminal (HI) and red wire (second leg of source-low speed) to red terminal (LO) per Figure 6. Caution: Do not apply voltage across HI to LO.



230 VAC Connection, Two Speed Motors (Figure 6)

# 5A. Motor Pulley Selection:

The motor pulley <u>must be</u> the same size and type recommended by cooler manufacturer. <u>Do not</u> use a larger pulley size. Recommended motor pulley sizes are:

**1/3 HP Motor:** 31/4" adjustable, or 21/4" to 21/2"

fixed with 1/2" bore.

**1/2 HP Motor:** 3½" to 3¾" adjustable, or 2½" to

2¾" fixed with ½" bore.

3/4 HP Motor: 3<sup>3</sup>/<sub>4</sub>" adjustable, or 3" to 3<sup>1</sup>/<sub>4</sub>" fixed

with 1/2" bore.

**1 HP Motor:** 4" adjustable, or 31/4" to 31/2" fixed

(Single inlet with 5/8" bore.

cooler only)

**IMPORTANT:** Too large of a motor pulley will "overload" motor and cause it to cycle on and off. If this occurs, see Motor Pulley Adjustment section.

#### 5B. Motor Pulley Adjustment:

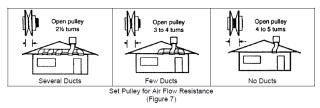
Important: This motor will work only if:

- 1. correct size pulley is used (see front);
- 2. moveable half of the adjustable pulley is opened 2-1/2 to turns (see below);
- 3. belt tension is correct (see front).

Warning: Disconnect electrical power source <u>prior</u> to working on cooler.

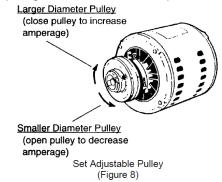
- 1. Loosen set screw on movable half of pulley with 5/32 Allen wrench.
- 2. Unscrew moveable half of pulley 2-1/2 to 5 full turns from the closed position.

Pulley setting depends on the resistance to air flowing out the cooler.



- 3. Re-tighten set screw on moveable half of pulley.
- 4. Re-adjust belt tension (see Belt Tension).
- 5. Operate cooler with pad frames in place.
  - a. If motor runs continuiusly, installation is complete.
  - b. If motor stops after a period of time (and restarts later) the motor is "overloaded" and the movable half of the adjustable pulley must be opened ½ or more turns. Repeat steps (1) to (5).

**Note:** To increase cooler efficiency, during step 2, use an ammeter to adjust the pulley diameter until the motor amperage draw is equal to, or less than, the amperage on the motor name plate.



### **Limited Warranty**

- (1) Replacement made through your authorized dealer or retailer within one year from date of sale with proof of purchase.
- (2) Reason for replacement, purchase date, failure date, and sales receipt <u>must</u> accompany all motors returned for replacement.
- (3) Warranty is void if motor has been abused, altered, water damaged or improperly installed.
- (4) We do not pay the cost of a service call at the site of installation to diagnose cause of trouble or the cost of labor or trans-portation to replace a defective motor.
- (5) We are not responsible for any incidental or consequential damage resulting from any malfunction unless required to do so by State Law.