

## **Owner's Manual** Model 2000, 2001 and 2002 Home Humidifiers

Includes Safety, Operating and Maintenance Instructions and Warranty

## Congratulations...

... on your purchase of a Skuttle High-Capacity Flow-Thru Humidifier—one of the finest home humidifiers made!

#### **Caring for Your Humidifier**

Please take a few minutes to read this booklet. It will familiarize you with the many features and benefits of your new humidifier, and aid you in understanding the routine maintenance that will ensure many years of efficient operation.

If, at some point, you need parts or service to maintain the superior performance of your humidifier, follow these simple procedures:

- Contact the heating and air conditioning contractor who installed your unit. Often, this information can be found on a label attached to your humidifier or heating system.
- If no label is found, look in the yellow pages of your phone book under Heating & Air Conditioning Contractors.
- Finally, if these attempts for parts or service fail, write or call Skuttle Indoor Air Quality Products at the address or phone number printed on the front inside cover or page 5 of this booklet.

#### **Experience That Works for You**

With more than 75 years of experience in the indoor air quality field, Skuttle has earned its place as a leader in home humidification. Our longevity and dedication to our customers has resulted in products that are unsurpassed in quality and ease of operation. Features such as automatic controls, snap-out and reversible components, and fewer overall parts make Skuttle one of the simplest, most trouble-free humidifiers you can buy.

## **Owner Responsibility**

Skuttle's obligation to honor the warranty on this humidifier is dependent upon your completing the Warranty Registration Card (found in your humidifier parts package) and mailing it to Skuttle<sup>®</sup> Indoor Air Quality Products. The warranty is not valid unless the card is returned within (15) days from the date of equipment installation.

## About Your Skuttle<sup>®</sup> Humidifier

#### **Principle of Operation**

Your Skuttle Humidifier uses the same method of evaporation you observe in nature after a summer shower. Mother Nature's technique is simple: warm air passes over a thin layer of water spread over a large area, causing the water to evaporate and raising the level of humidity. Your humidifier creates the same natural response with an evaporator pad that dispenses water evenly in front of a warm air stream.

You'll notice that the evaporator pad has many holes and connecting strands. These significantly increase the surface from which water can evaporate. This warm air evaporative process, intensified by the warm air from your furnace, is what makes your humidifier perform efficiently.

The system is controlled by a humidistat that monitors the relative humidity in your home, and activates or deactivates the humidifier accordingly. Water evaporated from the humidifier leaves behind all its impurities (e.g., calcium, iron, lime, bacteria, etc.), thus creating a purified vapor that doesn't pollute your indoor air. As a result, your home will be freer from these contaminants... and your family will almost certainly be healthier and more comfortable.

#### How Your Humidifier Works...

**Model 2000 & 2001.** When your home's air is dryer than the selected level of humidity, the humidistat activates the low-voltage solenoid in your humidifier, allowing water to flow across the unit's media. Warm, dry air is then forced through the humidifier cabinet by the furnace blower. As the warm air evaporates the water, the resulting moist (or humidified) air is circulated throughout your home by the heating system.

**Model 2002.** (Skuttle Model 2002 operates identically to Model 2000 & 2001, except that warm air is forced through the humidifier cabinet by a humidifier fan rather than by the furnace blower.)

#### **Operating Instructions**

Your new humidifier is controlled by a humidistat that is installed either on the cold air return of your furnace, or on an interior wall of your home. The recommended settings for this control may seem illogical until you understand the principle behind them....

As you can see from the Humidistat Settings chart below, the recommended setting goes down as the outside temperature decreases—just the opposite of how you operate your furnace's thermostat. To understand the reason for this, think of what happens to an ice-cold drink when it's outside on a hot summer day... water (or condensation) forms on the outside of the glass. Condensation occurs because the hot summer air contains humidity, and the cold surface of the glass cools the surrounding air. Once cooled, the air molecules become smaller and can no longer hold as much moisture. The result is that water droplets accumulate on the glass.

The same principle applies to your home during the winter, when the outside temperature drops and the inside air remains warm and humid. In order to retain moisture in your home and prevent condensation, it's necessary to turn your humidistat down as outside temperatures fall.

#### **Recommended Humidistat Settings**

At Outside Temperature	<b>Recommended Setting</b>	At Outside Temperature	<b>Recommended Setting</b>
-20° F	15 (Low)	+10° F	30 (Medium)
-10° F	20	+20° F	35 (Medium-High)
0° F	25 (Low-Medium)	Above 20° F	40

#### **Checking the Humidifier for Proper Operation**

To check your humidifier for proper operation after servicing or winter start-up, follow these procedures:

1. Turn the furnace blower to the OFF position, making sure the solenoid valve is closed.

2. Turn the furnace blower ON and set the humidistat to 100% humidity. The solenoid valve should open.

3. Make sure the water flow from the solenoid falls directly into the distribution tray. (The solenoid valve should limit the flow to approximately four gallons per hour at a line pressure of 60 P.S.I.)

4. To avoid overflow, run the humidifier long enough to be sure the drain tubing is carrying water to the waste line.

WARNING: DO NOT SET HUMIDITY CONTROL TOO HIGH. Use the recommended settings shown on humidistat nameplate.

# Maintenance Instructions for 2000, 2001 & 2002

#### Danger - To Avoid Hazard of Electrical Shock or Burn Turn Off Power Supplying This Equipment Before Servicing.

1. Shut off water supply.

2. Remove the humidifier cover by turning the screw located at the bottom of the cover and pulling the cover out toward you.

3. Tilt out the distribution tray and evaporator pad assembly.

4. All plastic and metal parts (except electrical parts and components) can be washed in humidifier cleaner or a 50% solution of vinegar and water.

5. Replace evaporator media, if cleaning is not satisfactory. This unit also contains a one piece wick. This wick must be changed along with the evaporator pad. The wick can be changed very easily by simply lifting out the old one and replacing it with the new one provided with the evaporator pad.

6. Evaporative media should be replaced at least once a year (once each heating season).

7. Wipe any loose sediment from the water tray (make certain no particles are allowed to plug the drain hole).

## Water Hardness and Maintenance Schedule

Your humidifier will accumulate minerals such as calcium and lime after operating for a short period (accumulation of minerals is a sure sign the humidifier is producing humidity). The amount of accumulation is dependent on the hardness of the water supply in your area. Therefore the time between cleaning is unpredictable.

NOTE: Excessive buildup of these minerals is detrimental to internal parts as well as evaporative efficiency. Refer to the maintenance instructions above to achieve years of satisfactory performance from your Skuttle Humidifier.

## **Homeowner Tips**

A. In a home that has had little or no humidification, allow approximately three weeks for your new humidifier to attain the desired humidity level. Your furniture, woodwork, carpeting, plaster, houseplants and family members all need time to absorb lost moisture.

B. To eliminate drafts that allow heat and humidified air to escape, keep fireplace dampers closed when not in use.

C. If excessive moisture appears on windows or walls, reduce the humidity setting on your humidistat. If the situation continues, turn off the water valve and consult your dealer or HVAC contractor.

### Skuttle<sup>®</sup> Limited One-Year Product Warranty

This Limited One-Year Warranty covers this Skuttle product as designated on the return portion of the Warranty Registration Card, excluding wiring, plumbing and installation.

Skuttle Manufacturing Company warrants that this product is free from defects in material and workmanship under normal, non-commercial use and service. Skuttle will remedy any such defects if they appear within 12 months from the date of the original installation as evidenced by receipt of the Warranty Registration Card, subject to the terms and conditions of the Limited One-Year Warranty stated below:

#### 1. THIS LIMITED ONE-YEAR PRODUCT WARRANTY IS GUARANTEED BY SKUTTLE MANUFACTURING COMPANY, 101 MARGARET STREET, MARIETTA, OHIO 45750.

2. This warranty shall extend only to any non-commercial owner who has purchased this residential product for purposes other than resale.

3. The completion and return of the Warranty Registration Card is a condition precedent to warranty coverage and performance. Warranty is not valid unless this card is completed and mailed to the factory within fifteen (15) days of equipment installation.

4. All components are covered by this limited warranty except expendable items.

5. If within the warranty period this product or any component requires service, it must be performed by a competent heating and/or plumbing contractor—preferably the installing contractor. Skuttle will not pay shipping or labor charges to remove or replace such defective parts or components. If the part or component is found by inspection to contain such defective material and/or workmanship, it will be repaired or exchanged free of charge at Skuttle's option, and returned freight collect.

6. In order to obtain the benefits of this Limited One-Year Warranty, the owner must notify the dealer or distributor in writing of any defects within thirty (30) days of the discovery. If, after reasonable time, you have not received an adequate response from the dealer or distributor, notify in writing: Skuttle Manufacturing Company, 101 Margaret Street, Marietta, Ohio 45750. (SKUTTLE WILL RECEIVE, FREIGHT PREPAID, ONLY REMOVABLE PARTS OR COMPONENTS OF SUCH DEFECTIVE PRODUCTS.)

7. This limited warranty does not apply to any part or component that is damaged in transit or handling; has been subject to abuse, neglect or accident; has not been installed, operated and serviced according to Skuttle's instructions; has been operated beyond the factory rated capacity; or has been altered in any way that affects its performance. There is no warranty due to neglect, alteration or ordinary wear and tear. Skuttle's liability is limited to replacement of defective parts or components and does not include the payment of the cost of labor charges to remove or replace such defective components or parts.

8. Skuttle will not be responsible for loss of use of any product; loss of time; inconvenience; or any other indirect, incidental or consequential damages with respect to person or property, whether as a result of breach of contract, neglect or otherwise. (SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE LIMITATION OF EXCLUSION IN THE PRECEDING SENTENCE MAY NOT APPLY TO YOU.)
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10. Any warranty work will be performed within a reasonable time— usually within one-hundredtwenty (120) days after notice of defect and delivery to the Skuttle factory—subject to delays beyond the manufacturer's control.

11. Any warranty by Skuttle of merchantability, fitness for use or any other warranty (express, implied or statutory), representation or guarantee other than what was set forth herein shall expire at the expiration date of this limited warranty. (SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE LIMITATION IN THE PRECEDING SENTENCE MAY NOT APPLY TO YOU.)

12. Skuttle reserves the right to make changes in the design and material of its products without incurring any obligation to incorporate such changes in the units completed on the effective date of such change.