

Owner's Manual **Home Humidifier** Models 2000, 2001, 2002, 2100, 2101 and 2102 **Includes Safety**, **Operating and Main**tenance Instructions plus 5-Year Warranty

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Skuttle[®] Indoor Air Quality Products 101 Margaret St., Marietta, OH 45750 800-848-9786 (US only) or 740-373-9169 customerservice@skuttle.com • www.skuttle.com

Contents

Congratulations	. 2
Experience that Works for You	. 2
Owner Responsibility	. 3
About Your Skuttle Humidifier	. 3
Principle of Operation	. 3
How Your Humidifier Works	. 3
Humidistat Operating Instructions	. 4
Recommended Humidistat Settings	. 5
Maintenance Instructions	. 5
How Water Hardness Affects Maintenance	. 5
Pad Cleaning and Replacement	. 5
Homeowner Tips	. 6
Replacement Parts and Service	. 7
Models 2000 and 2100	. 8
Models 2001 and 2101	10
Models 2002 and 2102	12
Skuttle Limited Five-Year Product Warranty	14

See model number and contractor information on the back of this booklet.

Congratulations

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







Models 2000 and 2100* Bypass Flow-Thru Humidifiers

Models 2001 and 2101* Bypass Flow-Thru Humidifiers

Models 2002 and 2102* Fan-Powered Flow-Thru Humidifiers



*Skuttle's 2100-series Flow-Thrus include

Compustat, an electronic, temperature-sensing humidistat that automatically adjusts your home's relative humidity to the outdoor temperature and your level of comfort. Its set-it-and-forget-it technology

continually protects your home against the damaging effects of dry or overly humidified air, and offers strong defense against conditions that cause or aggravate allergies, colds, flu and respiratory ailments.

Models 2000, 2001 and 2002 come with manual humidistats.

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

Experience That Works for You

With more than 90 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 have 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 INDOOR AIR QUALITY PRODUCTS, 101 MARGARET STREET, MARIETTA, OH 45750. The warranty is not valid unless the card is returned within 15 days from the date of equipment installation.

About Your Skuttle 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 broad surface, causing the water to evaporate and the humidity level to rise. Your humidifier creates the same natural response with an evaporator pad, which 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 area 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.

How Your Humidifier Works

The system is controlled by a humidistat that monitors the relative humidity (RH) 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.

<u>Models 2000, 2001, 2100 and 2101</u>. 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.

Models 2002 and 2102. These models operate identically to the previous models, except that warm air is forced through the humidifier cabinet by a humidifier fan rather than by the furnace blower.

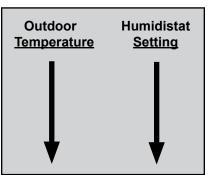
Humidistat Operating Instructions

Important Notes:

- Models 2000, 2001 and 2002 come with a standard humidistat. (See operating instructions, following.)
- Models 2100, 2101 and 2102 come with an electronic compensating humidistat, which operates automatically. See separate operating instructions entitled "Operating Instructions for Your Electronic Compensating Humidistat".

Your new Model 2000, 2001 or 2002 flow-thru 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 (page 5), 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.

Recommended Humidistat Settings

Outside	Recommended	Outside	Recommended
Temperature	Setting	Temperature	Setting
-20°F (-29°C)	15 (Low)	10ºF (-12ºC)	30 (Medium)
-10ºF (-23ºC)	20 (Medium-Low)	20°F (-7°C)	35 (Medium-High)
0°F (-18°C)	25	Above 20°F	40
	(Low-Medium)	(-07°C)	(High)

Maintenance Instructions

How Water Hardness Affects Maintenance

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 depends on the hardness of the water supply in your area. Therefore, the amount of time between cleanings is unpredictable.

To determine if your humidifier pad needs cleaned or replaced, look to see if the openings in the pad are caked with minerals.

CAUTION: Excessive buildup of minerals is detrimental to the humidifier's internal parts as well as to the evaporative process. Refer to the maintenance instructions below to achieve years of efficient performance from your Skuttle Flow-Thru Humidifier.

Pad Cleaning and Replacement

WARNING: To avoid hazard of electrical shock or burn, turn off power supplying this equipment before servicing.

- 1. Shut off the water supply.
- 2. Remove the humidifier cover by turning the screw (located at the bottom of the cover) counterclockwise ([]) and pulling the cover out toward you.



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



- Wash all plastic and metal parts (except electrical parts and components) in humidifier cleaner or a 50 percent solution of vinegar and water.
- 5. If cleaning is not sufficient, replace the evaporator pad. (See Replacement Parts and Service, page 7.)

IMPORTANT:

- The evaporator pad should be replaced at least once a year (i.e., once each humidification season). In cases of excessive mineral buildup, more frequent media replacement may be necessary if cleaning is not effective.
- The Humidifier also contains a onepiece wick, which must be changed along with the evaporator pad. The wick can be changed easily by lifting out the old one and replacing it with the new wick provided with the evaporator pad.



6. Wipe any loose sediment from the water tray. Make sure no particles are allowed to plug the drain hole.

IMPORTANT: At the end of each humidification season, turn the water supply off and clean the unit.

If, after cleaning or replacing the pad, your Flow-Thru Humidifier does not perform up to previous standards, contact your HVAC contractor for service.

Homeowner Tips

- In a home that has had little or no humidification, allow approximately three weeks for your new humidifier to reach the desired humidity level. Your furniture, woodwork, carpeting, plaster, houseplants and family members all need time to absorb lost moisture. To eliminate drafts that allow heat and humidified air to escape, keep fireplace dampers closed when not in use.
- 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 HVAC contractor.

Replacement Parts and Service

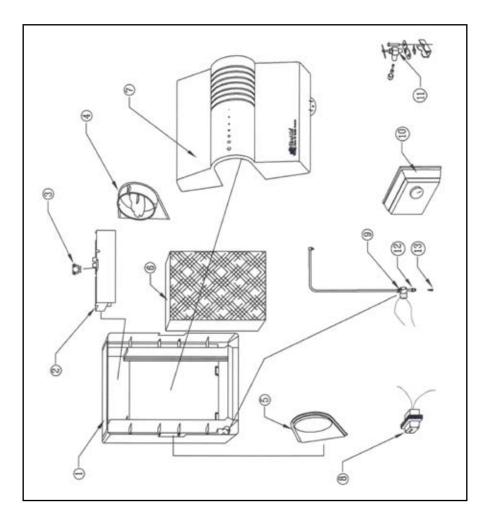
If you need parts or service to maintain the superior performance of your Flow-Thru Humidifier, follow these procedures:

- Contact the heating and air conditioning contractor who installed your unit. You may find this information stamped on the back cover of this booklet, or on a label attached to your humidifier or heating system.
- If this information is unavailable, look in the phone book or on the Internet under "Heating and Air Conditioning Contractors".
- Finally, if these attempts for parts or service fail, write, call or email Skuttle at:

Skuttle Indoor Air Quality Products 101 Margaret Street, Marietta, OH 45750 800-848-9786 or 740-373-9169 customerservice@skuttle.com

See Flow-Thru Humidifier part lists and diagrams, beginning on page 8.

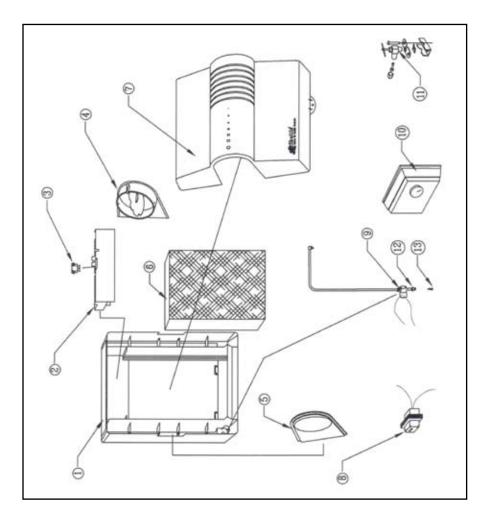
Models 2000 and 2100 Replacement Parts Diagram



Models 2000 and 2100 Replacement Parts List

Key No.	Part No.	Std. Pkg.	Description
1	000-1730-094	۱	Mounting Base
2	000-0602-055	١	Drip Tray
3	000-1317-091	٢	Wick
4	A00-1730-124	١	Side Piece w/Damper Assembly
5	000-1730-089	۱	Solid Side Piece
9	A04-1725-052	12	Replacement Media w/Wick
7	A00-0641-171	۱	Cover (w/Label, Screw & Retaining Washer)
8	000-0814-008	۱	Transformer (24V, 10VA, 120V Primary)
6	A01-0814-148	۱	24 Volt Solenoid (Universal Kit)
10	SK0-0055-001	1	Humidistat Assembly for 2000
10	SEH-7100-000	۱	Automatic Humidistat for 2100
11	A00-1128-005	۱	Saddle Valve
12	000-1106-037	l	Orifice Fitting w/Filter (#13), Compression Nut & Ferrule
13	000-1319-051	1	Inline Filter
Not shown	K00-2000-000	~	Small Parts Kit (w/Cover Screw & Retainer, Wa- ter Feed Tube, 90° Brass Elbow, Elbow Retainer & Screw)

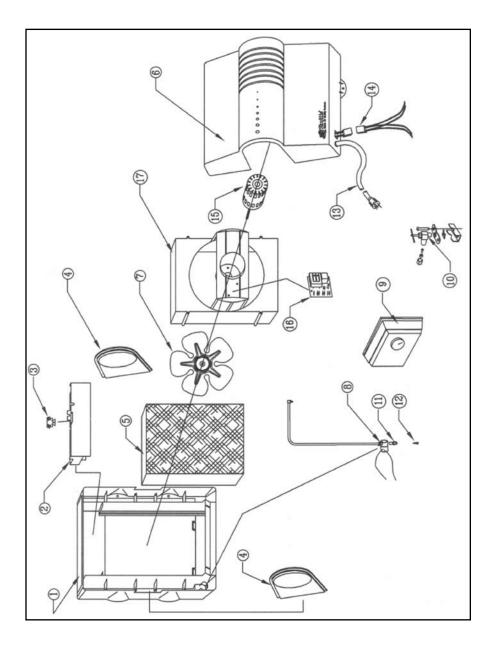
Models 2001 and 2101 Replacement Parts Diagram



Models 2001 and 2101 Replacement Parts List

Key No.	Part No.	Std. Pkg.	Description
1	000-1730-091	1	Mounting Base
2	000-0602-055	1	Drip Tray
З	000-1317-091	٢	Wick
4	A00-1730-124	1	Side Piece w/Damper Assembly
5	000-1730-089	1	Solid Side Piece
9	A04-1725-051	12	Replacement Media w/Wick
7	A00-0641-170	1	Cover (w/Label, Screw & Retaining Washer)
8	000-0814-008	1	Transformer (24V, 10VA, 120V Primary)
6	A01-0814-148	1	24 Volt Solenoid (Universal Kit)
10	SK0-0055-001	1	Humidistat Assembly for 2001
10	SEH-7100-000	1	Automatic Humidistat for 2101
11	A00-1128-005	1	Saddle Valve
12	000-1106-037	1	Orifice Fitting w/Filter (#13), Compression Nut & Ferrule
13	000-1319-051	1	Inline Filter
Not shown	K00-2000-000	-	Small Parts Kit (w/Cover Screw & Retainer, Water Feed Tube, 90° Brass Elbow, Elbow Retainer & Screw)

Models 2002 and 2102 Replacement Parts Diagram



Models 2002 and 2102 Replacement Parts List

Key No.	Part No.	Std. Pkg.	Description
1	000-1730-091	٢	Mounting Base
2	000-0602-055	٢	Drip Tray
3	000-1317-091	٢	Wick
4	A00-1730-089	-	Solid Side Piece
5	A04-1725-051	12	Replacement Media w/Wick
9	A00-0641-169	-	Cover (w/Label, Screw & Retaining Washer)
2	000-1318-080	-	10" Diameter Fan Blade
8	A01-0814-148	٢	24 Volt Solenoid (Universal Kit)
6	SK0-0055-001	٢	Manual Humidistat for 2002
6	SEH-7100-000	٢	Automatic Humidistat for 2102
10	A00-1128-005	٢	Saddle Valve
11	000-1106-037	٢	Orifice Fitting w/Filter (#12), Compression Nut & Ferrule
12	000-1319-051	٢	Inline Filter
13	000-0811-123	٢	Power Supply Cord
14	000-0811-122	٢	2-Piece Connector Assembly
15	000-1721-048	٢	Fan Motor
16	000-0431-034	٢	Insolation Relay
17	000-1730-092	1	Fan Shroud
Not shown	00-2000-000	-	Small Parts Kit (w/Cover Screw & Retainer, Water Feed Tube, 90° Brass Elbow, Elbow Retainer & Screw)

Skuttle Limited Product Warranty

NOTE: Models 2000, 2001, 2100 and 2101 are warranted for five years; Models 2002 and 2102 are warranted for one year.

This limited warranty covers your Skuttle Flow-Thru Humidifier as designated on the return portion of the warranty registration card, excluding wiring, plumbing and installation. Skuttle Mfg. Co. (DBA Skuttle Indoor Air Quality Products) warrants that this product is free from defects in material and workmanship under normal, noncommercial 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 warranty stated below:

- 1. THIS LIMITED PRODUCT WARRANTY IS GUARANTEED BY SKUTTLE MANUFACTURING COMPANY, 101 Margaret Street, Marietta, OH 45750.
- 2. This warranty shall extend only to any noncommercial 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. The 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.
- In order to obtain the benefits of this limited warranty, you 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 Indoor Air Quality Products 101 Margaret Street Marietta, OH 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 subjected 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 LIMITATION OF EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE LIMITATION OF EXCLUSION IN THE PRECEDING SENTENCE MAY NOT APPLY TO YOU.)
- 9. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.
- 10. Any warranty work will be performed within a reasonable time usually within one-hundred-twenty (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 before the effective date of such change.



Π	Model 2000	٥	Model 2001	۵	Model 2002
	Model 2100		Model 2101		Model 2102

Serial No.

Installation Date



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