



Skuttle[®]

Indoor Air Quality Products

MODEL 45, 90 & 190

SKUTTLE MFG. CO.

WHOLEHOUSE CENTRAL HUMIDIFIER

OWNER'S MANUAL

Includes Safety, Operating and Maintenance
Instructions and Warranty

**CAUTION: READ THESE INSTRUCTIONS THOROUGHLY
BEFORE SERVICING**

INTRODUCTION

Thank you for your purchase of a Skuttle Drumatic Humidifier. We appreciate your business and are pleased to add your name to our list of valued customers. We at Skuttle sincerely hope you are satisfied with our product and its performance. Skuttle is the oldest manufacturer of residential humidifiers, having manufactured them for over 55 years. Skuttle also manufactures make-up air controls, filters, flexible air duct and accessories.

At Skuttle quality is always of great concern along with product performance and customer satisfaction. The following information will aid you with the future periodic maintenance necessary to maintain the high performance of this product.

- * First when you need parts or service call your local heating and air conditioning dealer, sometimes this information will be located on the heating system where the installer has placed a label for your reference.
- * Second check the Yellow Pages under Heating & Air Conditioning Contractors.
- * If these attempts at finding parts or service fail you may write us and we'll be glad to be of help to you.

Now if you would please take a few minutes to read the appropriate sections of this booklet. They will familiarize you with the benefits of your new humidifier and aid you in understanding the routine maintenance that will be required.

OWNER RESPONSIBILITIES

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

* PRINCIPLE OF OPERATION

Your Skuttle Humidifier uses the same natural methods of evaporation that you see in mother natures, everyday, normal, environment. Natures way is simple, a little water spread over a large area with a warm breeze will evaporate the water and raise the relative humidity, just the same as it would after a summer shower.

The humidifier accomplishes this with a polyurethane foam evaporator pad that lifts water from the water pan and into the warm air stream. You will notice that the evaporator pad has many holes and connecting strands, these drastically increase the area that the water can evaporate from. This combined with the warm air in your heating system is what makes the humidifier work.

The system is controlled by a humidistat that monitors the relative humidity within your home and activates or deactivates the humidifer accordingly.

Water evaporated from this humidifier leaves behind all the impurities (Calcium, Iron, Lime, Bacteria, etc.) that were contained in the water, thus the vapor is in a pure form and these impurities are not distributed into your home. This will keep your home clean and your family safe from these contaminates.

** OPERATING INSTRUCTIONS

Your new humidifier is controlled by a humidistat that is installed either on the cold air return or in the living area on an interior wall. The recommended settings on this control may seem a bit strange when you first read them. But there is a reason for them and it can be explained fairly easily. You will notice the recommended setting goes down with the outdoor temperature, this seems illogical. If you remember last summer when you were outdoors with a cold drink the outside of the container became wet and water began to run down the sides. This is called condensation, caused by the surface of the container reaching the dew point. This means the air surrounding the container contained humidity and the cold surface of the container cooled the air around it, when cooled the air becomes smaller and is no longer capable of holding as much moisture as it could hold when it was warm. This is what caused the moisture to accumulate and run down the container. The same thing can happen in your home in the winter when the outside temperature drops and the inside is warm and humid. This is why the settings go downward when the temperature goes down to prevent accumulation on your windows etc.

At Outside Temperature	Recommended Setting	At Outside Temperature	Recommended Setting
-20°F.	15	+10°F.	30
-10°F.	20	+20°F.	35
0°F.	25	Above 20°	40

Your unit may be equipped with a humidistat that has different relative humidity settings; if so use the following recommended settings:

At Outside Temperatures

-20°F
0°F
+10°F
+20° Or Above

Recommended Setting

Low
Low-Medium
Medium
Medium-High

Occasionally some indoor activity may cause the humidity to rise to excess and begin to accumulate on windows. Such activities as cooking, showers, and clothes drying, etc. If this condition persist for more than a few hours the humidifier should be turned off and if this condition still continues, the home should be ventilated to remove the moisture.

***** CHECKING THE HUMIDIFIER FOR PROPER OPERATION**

To check the humidifier for proper operation, winter start up, and after servicing follow this recommended procedure.

1. Turn the water on at the saddle valve to the humidifier.
2. Check the water level in the humidifier, water level setting should be 1-3/8". Turn valve adjustment screw clockwise to lower water level and counter clockwise to raise.
3. Turn the humidistat to its highest setting and observe the humidifier evaporator pad for rotation. If the unit is not rotating turn the furnace on by setting the thermostat higher until the furnace starts and the blower is running.

NOTE: Wiring the unit to operate independent of or in conjunction with the furnace blower is left to the discretion of the installer. On installations where the unit might be closely sized, independent operation allows the unit to operate thru-out the full blower cycle, thereby eliminating lag time involved in starting the humidifier.

4. Reset thermostat and humidistat to their correct positions for automatic operation.

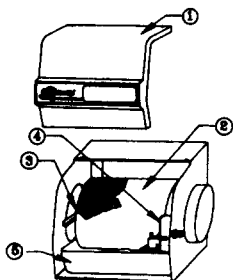
****** WATER HARDNESS AND MAINTENANCE SCHEDULE**

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. In areas with hard water where cleaning becomes frequent we suggest installation of a Skuttle Automatic Flushing Timer to increase time between cleaning intervals.

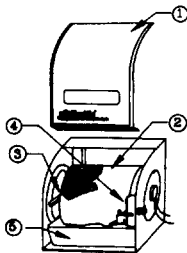
NOTE: Excessive buildup of these minerals is detrimental to internal parts as well as evaporative efficiency.

**MAINTENANCE INSTRUCTIONS
FOR
SKUTTLE HUMIDIFIER MODELS 190, 45, 90
REFER TO COVER FOR THE UNITS MODEL NUMBER**

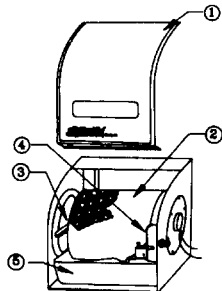
MODEL 190



MODEL 45



MODEL 90

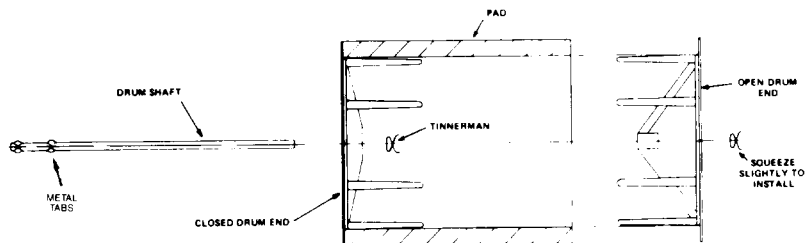


**REPLACEMENT PAD #
A04-1725-034**

**REPLACEMENT PAD #
A04-1725-033**

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A04-1725-034**

1. Turn the water off at the saddle valve by turning the T handle clockwise.
2. Remove the humidifier cover (1) by lifting the bottom upward on the bottom for the mod. 190, and by lightly prying on the bottom lip of the cover down and out mods. 45, & 90.
3. Remove the drum assembly (2) by lifting the drum shaft from the bearing end (3) and slide it out of the motor coupling, then remove drum from unit.
4. Remove the rubber valve seat by grasping it between your thumb and fore finger and lifting it upward and removing it from the valve. (see arrow 4 inside water valve opening.)
5. Now raise the float up to remove the water pan (5) for cleaning.
6. For drum disassembly and assembly see the drawing below.



7. Clean all parts in a 50% solution of vinegar or Rydlyme (humidifier cleaner) and water. Soaking over night to remove stubborn deposits, is sometimes required.

NOTE: It is suggested that the evaporator pad be replaced yearly. Depending on water hardness this interval could vary.

8. For reassembly reverse procedures 1 thru 5 and return to the section labeled "CHECKING THE HUMIDIFIER FOR PROPER OPERATION" follow these steps to assure proper humidity output.

SKUTTLE 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 this limited one-year warranty stated below:

1. THIS LIMITED ONE-YEAR 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 other than for purposes of 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 charges, 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 either 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, 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 altered in any such way that its performance is affected. 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.**

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 on the effective date of such change.