NU-VU® Model:

OP-2FM

Manufactured for:

A Quality Product Made in the U.S.A.

Revised:
12 May 2003

by:

NU–VU® Food Service Systems

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MENOMINEE, MICHIGAN 49858-0035
(800) 338-9886 FAX (906) 863-6322

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Dear Customer:

Thank you for buying NU-VU® equipment. We think you have purchased one of the best units on the market today.

Every piece of NU-VU® equipment is put through a full electrical test. In addition, NU-VU® ovens are randomly selected for test baking to ensure you are receiving the best product possible. The interior of the oven may darken slightly during this testing process. This coloration is normal and occurs in any oven that has been operated for a few hours. It will not affect the operation, durability or warranty of your NU-VU® equipment.

This OWNER'S MANUAL has been put together to give you a good general knowledge of your equipment. It is not a detailed technical manual; such a book is unnecessary for the daily care and operation of your unit. However, this Manual *does* contain some basic trouble-shooting and service information. If this OWNER'S MANUAL does not answer your questions or solve your problems, please call us on our toll-free service line at (800) 338-9886. You can also FAX your question or comment to our Service Department at (906) 863-6322. You can even e-mail us at service@NU-VU.com. One of our service technicians will be glad to assist you. Please supply the model number, serial number and the manufacturing date code of your NU-VU® equipment when you contact us.

Each page carries information to help you use this OWNER'S MANUAL. The header at the top of each page contains the title of the section you are currently in. The footer at the bottom of each page carries the page number, our toll-free telephone number, and our Sales and Service FAX numbers.

All sections begin at the top of a page and start like this:

SECTION HEADING

All sub-section headings are on the left side of each page and look like this:

SUB-SECTION HEADING:

SUB-SECTION HEADING - -

Pointing hands are located in the left margin throughout this OWNER'S MANUAL, and point toward shaded boxes containing important warning and/or safety information:

The illustrations used throughout this OWNER'S MANUAL are titled in their lower left-hand corners. A complete listing of these illustrations along with their respective page numbers can be found on page iv of this manual. A REPLACEMENT PARTS LIST can also be found at the end of this manual. Replacement parts are listed by Reference Number. The part Reference Numbers are circled ○ in the illustrations and bracketed [ ] in the text. Please note that some of the parts listed are not replaceable except as part of another assembly, but are listed for reference and identification only.

IMPORTANT: THESE SHADED BOXES WILL CONTAIN IMPORTANT WARNING, OPERATING AND/OR SAFETY INFORMATION!

Wiring schematics are included at the end of this OWNER'S MANUAL for use as a reference aid only.

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SUBWAY OP-2FM

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LIST OF ILLUSTRATIONS AND SCHEMATICS

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ABOUT YOUR OP-2FM

The NU-VU® OP-2FM is an electrically powered and operated commercial baking/cooking appliance. It does not require exterior venting under normal circumstances; however, hood and venting codes vary from country to country, state to state, and even from locality to locality. For this reason, NU-VU® cannot give specific detailed information regarding your individual application. Your local building inspector, licensed contractor, or installer is best qualified to determine your specific needs.

The oven section features our patented V-AIR® air movement system. A top-mounted blower moves the heated air down through the oven side walls to be heated, then out through specially designed hole patterns to provide even heat distribution throughout the oven. Your product is baked evenly top to bottom, side to side, and front to back without turning pans. You can load the oven completely with pans having the same product, bake, and remove the entire load at the same time. The bake is uniform because each shelf now receives essentially the same air pattern.

The oven section is equipped with a single 550◦F solid state heat control and a 60-minute timer. The half-size pans are supported by the side walls. No separate oven shelves are required.

The proofer section uses a 250◦F solid state heat control, a numbered 1-10 humidity control, and a 60-minute timer. Manual-fill proofers are supplied with a stainless steel water pan. The side walls support the nine (9) chromed wire shelves supplied with the unit.

The NU-VU® OP-2FM is designed for the following:

- Automatic pan positioning
- Rapid and even baking
- Easy cleaning
- Simple operation
- Dependability
- Low energy consumption
- Low maintenance
- Rapid servicing

The OP-2FM is constructed of stainless steel inside and outside. All of the frame members are welded to provide lifetime durability, rigidity and long life construction. Components such as temperature and humidity controls, timers, switches, motors, heating elements, and others are thoroughly tested before shipment. Ongoing research and development projects are used to introduce the latest and most dependable parts.

The NU-VU® OP-2FM is available with the AUTOMIST proofer option. This option eliminates the manually-filled water pan. An adjustable controlled water mist is injected into the blower wheel. The blower wheel then distributes this water mist evenly throughout the proofer. The injected mist provides the controlled humidity necessary for proper proofing action.

OP-2FM SPECIFICATIONS:

Exterior Dimensions

Height = 84" Width = 34 " Depth = 22 "

Interior Dimensions (usable space)

Oven Height = 26¼" Width = 19¼" Depth = 16 "

Proofer Height = 33¾" Width = 26" Depth = 21"

Door Swing (straight out from face of unit)

Oven = 26¾" Proofer = 29¼"

Capacities

Oven = Six 13"x18" half size sheet pans with 4" pan spacing

Proofer = Eighteen 13"x18" half size sheet pans with 3½" pan spacing

Listings/Approvals

(UL 197, ed. 8)
(Canada C22.2)
UL File #E61840

(NSF/ANSI 4-2002)

Service Connections

Electrical:
208 or 240 volt, single or three phase, to be hard wired on site.
Single phase uses a 4-wire system (L1, L2, Neutral, Ground).
Three phase uses a 5-wire system (L1, L2, L3, Neutral, Ground).

The Oven section uses two 2,000 watt heating elements. The Proofer section uses one 625 watt humidity system element (standard manual-fill units only) and two 255 watt heating elements. AUTOMIST units use two 600 watt heating elements only, without a separate humidity element.

Water:
Standard units do not require connection to a water supply. Units equipped with the AUTOMIST option require direct connection to a potable water supply. Such units come equipped with a ¼" OD compression-type copper fitting on the back of the equipment.

RECEIPT, INSTALLATION AND START-UP

RECEIPT:

It is essential to inspect the unit immediately when it arrives. NU-VU® has placed instructions on the packaging to help avoid damage in transit. However, negligent handling can produce hidden damage. These steps should be followed:

A. Inspect the entire perimeter of the package for damage or punctures to the packing material. This may indicate damage to the unit inside. Call any and all packing damage to the attention of the delivery person.

B If any package damage is found uncrate the unit immediately in the presence of the delivery person to determine if the unit is damaged. Pay special attention to the Motor at the top of the unit. Make sure the Motor or Motor Cover is not damaged or bent, which may occur if the top of the unit has struck a door frame or the top of a trailer. Indicate the type and amount of any damage on the shipping documents and notify NU-VU® at (800) 338-9886 immediately after filing a freight claim.

C. Uncrate the unit carefully and check the entire unit (top, front, back, and both sides) for any visible or hidden damage.

D. Remove the unit from the shipping pallet and inspect the bottom (including the Casters) for any damage. Check the Casters as well as the Proofer Motor/Cover directly under the unit.

E. Immediately contact the freight company and NU-VU® Food Service Systems if any damage is noted after the driver leaves.

F. Check the Oven and Proofer Doors. Make sure both Doors close completely, and that the Door Gaskets seal firmly (refer to the *DOOR TEST PROCEDURE* in the *SERVICE AND REPLACEMENT GUIDE*). If they do not close or seal properly, please contact the NU-VU® Service Department for instructions and assistance in any required adjustments.

G. Count the Proofer Shelves shipped. There should be nine (9) Shelves. Contact NU-VU® immediately about any shortage.

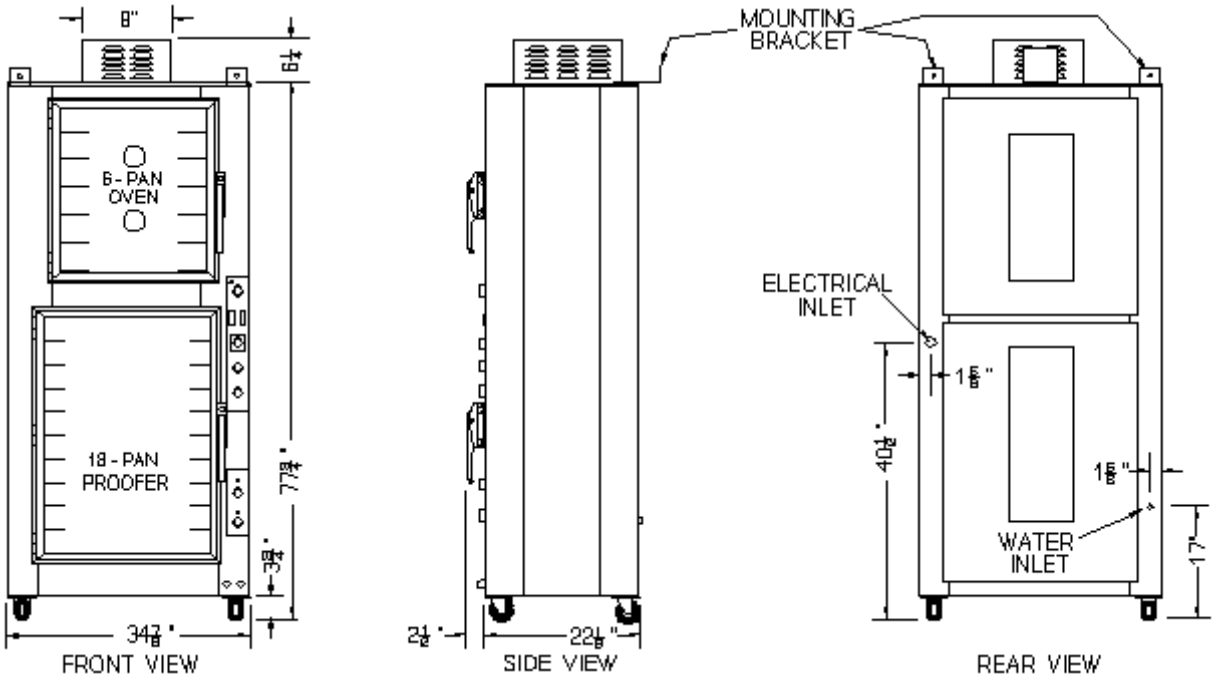

Fig. #1 - ***INSTALLATION***

INSTALLATION:

Roll the unit into the exact position where it will be operated. Make sure there will be enough clearance on each side of the unit so that it can be easily accessed or moved out for maintenance and service. Mark the locations of the electrical and optional water connections on the wall.

Check the swing of both the Oven and Proofer Doors, making sure they have enough room to open completely without hitting anything or obstructing the work area. Also check the Door hinging of the unit. If you desire to change the hinging for any reason, you should follow the procedure outlined in the *SERVICE AND REPLACEMENT GUIDE* under *DOOR HINGING, How to Change*.

Move the unit out of its operating position and proceed with the service connections.

Electrical Connections - -

Check to determine that the power source is the same voltage and phase as that indicated on the label on the side of the unit. If the voltage and/or phase is *not* the same, please call NU-VU® for instructions on changing the voltage and/or phase of your equipment.

Your licensed installer or electrician should remove the exterior Side Access Panel on the control side of the unit to expose the power terminal connections. A wiring schematic is attached to the inside of the unit near the power terminal connections.

This unit must be connected in accordance with all national and local electrical codes. All electrical connections must be made with COPPER WIRE ONLY in the correct gauge for the application. The unit may be connected either through a plug and receptacle-type connection or by direct wiring. Allow enough slack in the wiring to allow for equipment to be moved during installation or any required maintenance and servicing.

IMPORTANT: ALL POWER MUST BE TURNED OFF AT THE WALL BREAKER WHILE THE UNIT IS BEING CONNECTED!

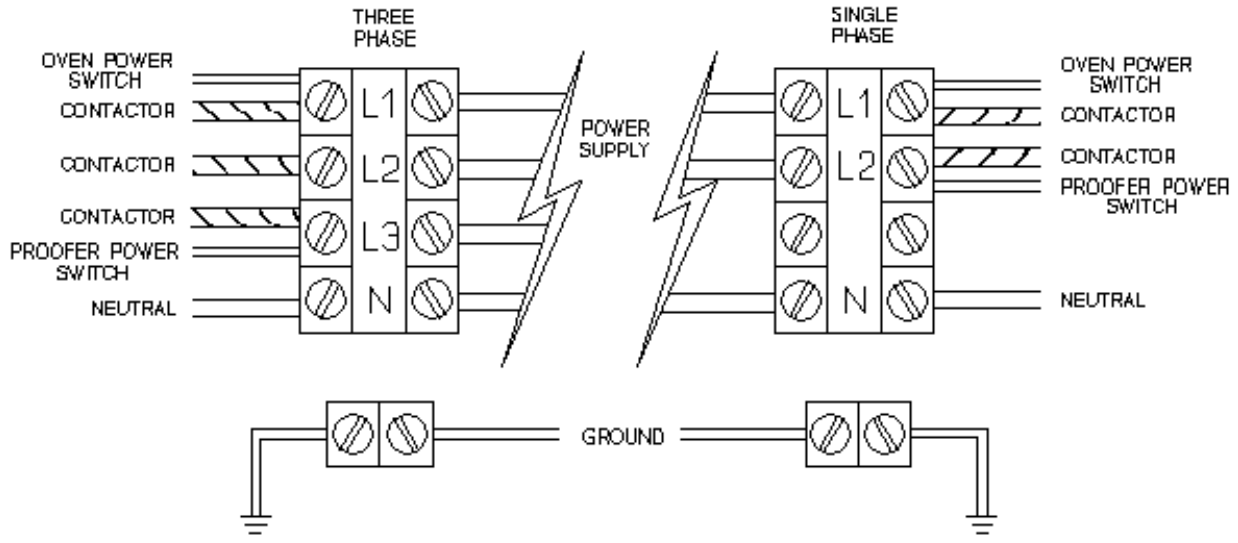

Fig. #2 – POWER SUPPLY CONNECTIONS

The following steps should be carefully followed to complete the electrical connections:

A. Take note of the labeling on the terminal connections (**L**ine **1**, **L**ine **2**, **L**ine **3**, and **N**eutral) at the Power Terminal Block [1].

B. Carefully identify the power source connections and attach them to the appropriate terminals. Make sure all connections are clean and tight.

IMPORTANT: IN ANY 240 VOLT THREE-PHASE SYSTEM THE WILD LEG (240 VOLTS-TO-NEUTRAL) MUST ALWAYS BE CONNECTED TO LINE 2!

C. The unit must be properly grounded BEFORE use by attaching a grounding wire to the Ground Lug [2] next to the Power Terminal Block.

D. Carefully set all switches and controls on the unit to the **OFF** position, and engage the main power supply.

E. Check the voltage at the terminals on the Power Terminal Block with a voltmeter and compare the readings with the label listings on the side of the unit. If the readings match the unit is ready for its INITIAL START–UP. If the readings **DO NOT** coincide you must call the NU-VU® Service Department for instructions on changing the voltage and/or the phase.

*NOTE: Diagrams and abbreviated instructions for phase-changing can be found on page 6. These diagrams are included to help you understand the procedure that we will explain to you!!! **DO NOT** change the phase of your equipment without first calling the NU-VU® Service Department!!!*

F. If your OP-2FM *is not* equipped with the AUTOMIST option, you can now replace the Side Access Panel. Be careful not to pull or pinch any wires while installing the panel. If your OP-2FM *is* equipped with the AUTOMIST option, leave the Side Access Panel off until the water connection is completed.

Water Supply Connection - -

IMPORTANT: NU-VU® strongly recommends that *only soft water* be used in any unit requiring a water supply. Also, a good quality water filter MUST be installed in-line between the unit connection and the water supply to guard against clogging and mineral build-up in the components (refer to Figure #1 on page 3). This is extremely important in areas having hard water. This filter may be installed at the water source or adjacent to the water inlet on the back of the proofer, whichever is more convenient for you.

A. Run ¼" tubing from the water supply line to the unit location. Allow some slack for final unit positioning and service. Avoid any kinks or strains on the tubing and place the tubing where it will not be damaged in any way.

B. The tubing end that attaches to the unit must not be damaged or deformed in any way. The cut end should be cut straight and clean with no deforming of the tubing. All burrs and sharp edges should be removed to ensure a proper and leak-free connection.

C. Position the tubing so that the tubing runs straight into the intake Water Fitting [78]. This fitting is found on the back of the proofer section, on the side opposite from the electrical connections. Be careful not to kink the tubing if you bend it, and do not bend the tubing within two (2) inches of the end.

D. The two-part compression fitting (tapered collar and nut) is placed approximately 1" onto the tubing so that the collar is inside of the nut and the threaded opening of the nut is toward the intake Water Fitting.

E. Push the tubing all the way into the intake Fitting (approximately ¼") and hold it there while you thread the compression nut onto the intake Fitting. Tighten the compression nut with an open-end wrench, *but do not over-tighten!*

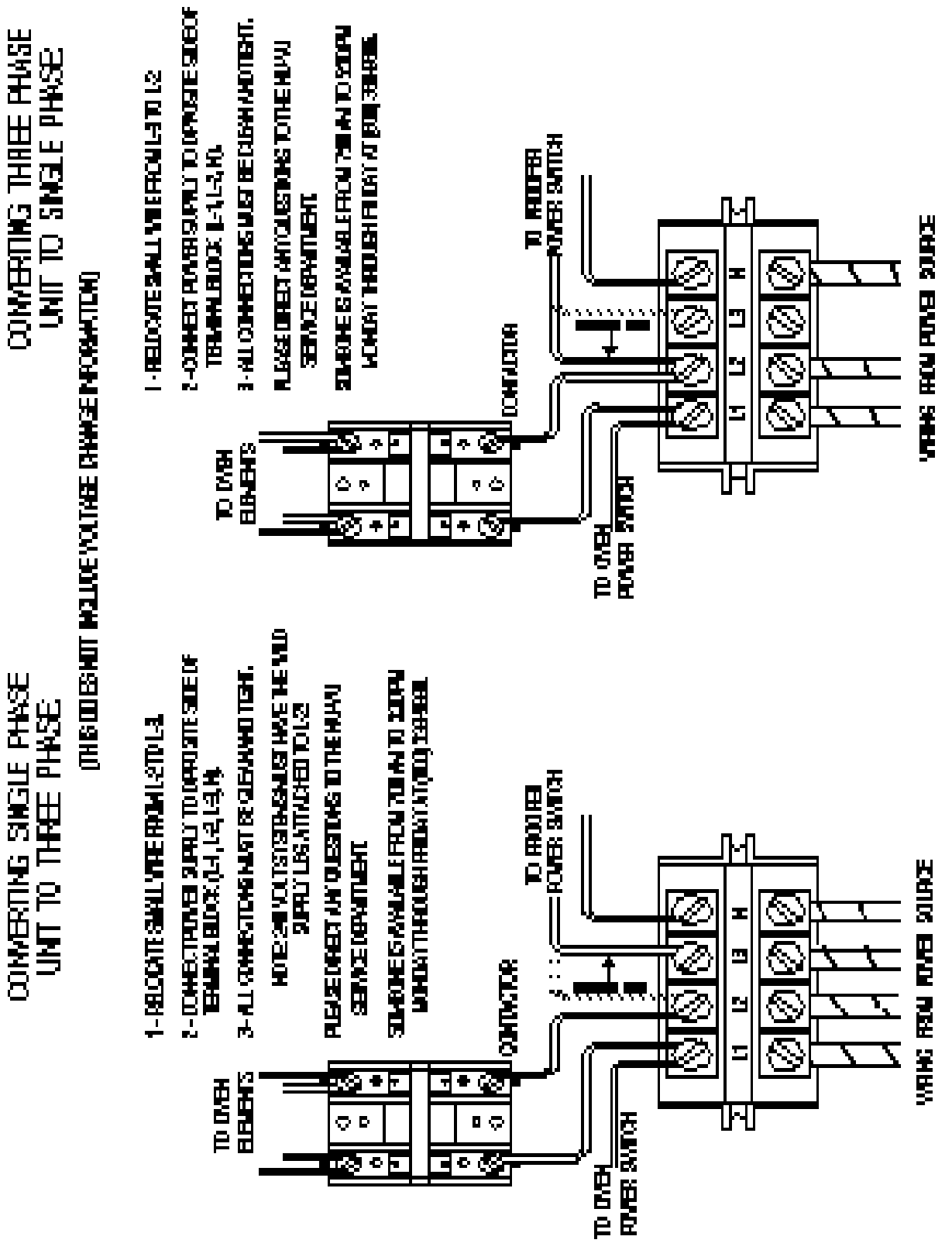

Fig. #3 – <u>PHASE CONVERSION</u>

F. Turn on the water supply to the unit. If the connection leaks when tested, and further gentle tightening does not stop the leak, the compression fitting must be replaced. Also inspect the copper plumbing on the inside of the equipment to make sure there are no leaks.

Careful attention to these simple procedures will help to ensure an installation without leaks. If you have any questions or problems please call the NU-VU® Service Department at (800) 338-9886.

IMPORTANT: Please be sure to install any desired or required drain plumbing at this time. Any required plumbing must be installed before starting up the unit for the first time.

NOTE: The OP-2FM is constructed with a drain tube in the floor of the Proofer section. This drain tube prevents the build-up of any excess water, and helps to prevent damage to the Proofer Motor, Heating or Humidity Elements, or Control Sensors. Please attach a length of tubing or light hose to the drain tube where it comes through the base of the unit and run it to a floor drain, OR position the Proofer drain tube directly over a floor drain. If no floor drain is available in the immediate area, please install the included Drain Pan [80] in the brackets under the Proofer to catch any draining water.

Final Positioning - -

A. Push the unit back into place and secure the unit to the wall with the Mounting Brackets [75] on top of the Oven (refer to Figure #4):
   1. Turn the Mounting Brackets over so that the end flange points up. Attach the Brackets to the top of the Oven so as to provide a minimum of four (4) inches clearance between the back of the unit and the wall.
   2. Attach the end flanges of the Mounting Brackets to the wall by any suitable means such as lag bolts or anchors.

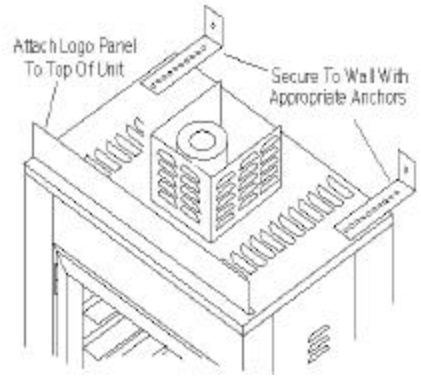

Fig. #4 – TOP DETAIL

B. Attach the Logo Panel (if included) to the top of the unit. Remove the two front screws on the Outside Top of the unit, and fasten the Logo Panel in place with the hex-head thumbscrews provided with the Panel.
C. Set the braking locks on the front Casters [77].
D. Unscrew the glass Light Globes [18] in the Oven and Proofer sections. Install the included 40-watt Appliance Bulbs and replace the Light Globes.
E. Install the supplied Proofer Shelves.
F. The Proofer compartment of the NU-VU® OP-2FM is equipped with a bottom drain centered directly under the Proofer Door. Please install the included Drain Pan [80] in the brackets under the Proofer *if you have not already installed drain plumbing*. This drain prevents the build-up of excessive water that may damage the Proofer Motor, Heating or Humidity Element, or a Sensor.

IMPORTANT: IMPROPER INSTALLATION, MISUSE OR OTHER FAILURE TO FOLLOW THESE INSTRUCTIONS MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY, AND MAY ALSO VOID YOUR NU-VU® WARRANTY!

YOUR NU-VU® OP-2FM SHOULD NOW BE READY FOR ITS INITIAL START–UP!!!

START–UP:

PRIOR TO ENERGIZING THE OP-2FM FOR THE FIRST TIME IT IS ADVISABLE TO SET ALL THE CONTROLS AND SWITCHES TO THEIR OFF POSITIONS.

Oven - -

A. Engage the main electrical and optional water supplies.
B. Set the Oven Power Switch [21] to **ON** (refer to Figure #6 on page 14). The interior of the Oven will illuminate and the Oven Blower Wheel [51] will rotate in a counter-clockwise direction.
C. Open the Oven Door [41]. The Motor/Blower Wheel should come to a stop as the Door opens and the Micro Switch [15] in the Door Jamb is released.
D. Place a reliable oven thermometer on a baking pan in the center of the Oven.
E. Close the Oven Door securely. The Motor/Blower Wheel should restart.
F. Set the Oven Temperature Control [22] to 350°F. The Temperature Control Indicator Light [23] should illuminate and the Oven should begin heating. You may continue with the Oven Start-Up and even begin the Proofer Start-Up while the Oven heats.
G. Set the Oven Timer [24] to 5 or 10 minutes.
H. Allow the Timer to count down and its Buzzer Alarm to sound. If the Timer does not run or the Buzzer fails to sound please refer to the Oven section of the *TROUBLE–SHOOTING GUIDE* under *VII - The Oven Timer does not run* or *VIII-The Buzzer Alarm does not sound*.
I. Check the thermometer reading against the Temperature Control setting when the Temperature Control Indicator Light goes out. If the readings differ by more than 10° the Temperature Control may need a simple adjustment. Please call the NU-VU® Service Department **BEFORE** attempting calibration of the control.

   NOTE: Please allow the Temperature Control to cycle two or three times to allow the Oven temperature to stabilize BEFORE comparing the readings.

J. Return all Oven controls and switches to their **OFF** positions.

Standard Manual-Fill Proofer - -

These instructions are for the standard manual-fill Proofer only. If your unit is equipped with the AUTOMIST automatic humidity option, please refer to the instructions on the next page.

A. Set the Proofer Power Switch [31] to the **ON** position (refer to Figure #5 on page 13). The interior of the Proofer will illuminate and the Fan Blade [61] will rotate in a counter-clockwise direction.
B. Set the Proofer Temperature Control [32] to 100°F. The Temperature Control Indicator Light [33] should illuminate as the Proofer begins to warm up.
C. Place a reliable oven thermometer on a Proofer Shelf [65] in the center of the Proofer.
D. Check the thermometer reading against the Temperature Control setting when the Temperature Control Indicator Light goes out. If the readings differ by more than 10° the Temperature Control may need a simple adjustment. Please call the NU-VU® Service Department **BEFORE** attempting calibration of the control.

   NOTE: Please allow the Temperature Control to cycle two or three times to allow the Proofer temperature to stabilize BEFORE comparing the readings.

E. Remove the Water Pan [64]. Set the Proofer Humidity Control [34] to #5 or #6. The Humidity Control Indicator Light [35] should illuminate and the round Humidity Element [13] will begin to heat up.
F. Fill the Water Pan with approximately 1½" to 2" of water and place it on the Humidity Element. The water should begin to heat up and in a few minutes a light fogging will begin to form on the Proofer Door [42] glass.
G. Set the Proofer Timer [36] to 5 or 10 minutes.
H. Allow the Timer to count down and its Buzzer Alarm to sound. If the Timer does not run or the Buzzer fails to sound please refer to the Proofer section of the *TROUBLE–SHOOTING GUIDE* under *V - The Proofer Timer does not run* or *VI -The Buzzer Alarm does not sound*.
I. Return all Proofer controls and switches to their **OFF** positions.

AUTOMIST Proofer - -

A. Set the Proofer Power Switch [31] to the **ON** position (refer to Figure #5 on page 13 and/or Figure #15 on page 37). The interior of the Proofer will illuminate and the Blower Wheel [86] will rotate in a counter-clockwise direction.
B. Set the Proofer Temperature Control [32] to 100◦F. The Temperature Control Indicator Light [33] should illuminate as the Proofer begins to warm up.
C. Place a reliable oven thermometer on a Proofer Shelf [65] in the center of the Proofer.
D. Check the thermometer reading against the Temperature Control setting when the Temperature Control Indicator Light goes out. If the readings differ by more than 10◦ the Temperature Control may need a simple adjustment. Please call the NU-VU® Service Department **BEFORE** attempting calibration of the control.

   NOTE: Please allow the Temperature Control to cycle two or three times to allow the Proofer temperature to stabilize BEFORE comparing the readings.

E. Set the AUTOMIST Humidity Control [81] to #2 or #3. The Humidity Control Indicator Light [82] should illuminate as a light water mist is sprayed from the Injection Nozzle [85] into the Blower Wheel. In a few seconds the spray should stop and the Indicator Light should go out. After a short pause (approximately 40-45 seconds) the Humidity Control should cycle again.

   *NOTE: The AUTOMIST feature controls the humidity in the Proofer by using a solid-state Repeat Cycle Timer [83]. This Timer has a fixed "**OFF**" time and an adjustable "**ON**" time. Changing the setting of the Humidity Control varies the "**ON**" time and thus regulates the duration of the water spray in the Proofer.*

F. Set the Proofer Timer [36] to 5 or 10 minutes.
G. Allow the Timer to count down and its Buzzer Alarm to sound. If the Timer does not run or the Buzzer fails to sound please refer to the Proofer section of the *TROUBLE–SHOOTING GUIDE* under *V - The Proofer Timer does not run* or *VI - The Buzzer Alarm does not sound*.
H. Return all Proofer controls and switches to their **OFF** positions.

YOUR OP-2FM IS NOW READY TO OPERATE!!!

PRODUCT PREPARATION AND USE OF UNIT

Proper handling of food product and proper use of the equipment is essential to end product quality. For purposes of preparation it is important to do the following:

Know Your Operation - -

A. Determine your raw material requirements and storage space.
B. Get a production planner for daily use.
C. Make out a production schedule based on manpower requirements and product delivery times.
D. Prepare a brief job description for your help and determine what employees will be trained to handle the various production steps.

Know Your Product - -

A. If using a frozen dough supplier consult the manual which describes the initial steps for the product, as well as proper procedures during proofing and baking or cooking. If you do not have a manual from your supplier you may obtain a manual of general information from NU-VU®.
B. Study the manual and make up a list of questions.
C. Contact a representative from the food product supplier to obtain answers to your questions.
D. Sign up to attend a seminar or training session to learn specifics.
E. If possible, try to get some "hands-on" training time prior to starting up your own operation.
F. In general the same steps used for a thawed frozen product will be applicable to a scratch or mix program. However, temperature and moisture settings may vary due to a difference in dough composition and consistency.

Know Your Equipment - -

A. Read this manual and study the Operations and Servicing sections. Make sure that the equipment you are using is installed correctly and is applicable to the product or products you wish to prepare.
B. Contact NU-VU® if any of the information provided here is not clear or if you have any problems or questions.

USING YOUR NU-VU® OVEN/PROOFER:

Many factors affect the quality of the end product. For yeast products the major factors are dough preparation, proofing and baking. The manner in which the dough is prepared affects the proofing process. Whether the dough is prepared from basic raw ingredients or from prepared mixes, the user should receive the necessary training in product preparation. When using yeast products it is important that they are prepared properly. Your equipment cannot correct *improper procedures* or *poor dough product.*

Taking shortcuts in the preparation and proofing processes will not permit a successful outcome. As a general rule of thumb, you need to:

- Properly thaw frozen products.
- Properly prepare all fresh products.
- Properly proof all yeast products.
- Properly bake the products.

As indicated in your bakery manual, some products require "proofing", or a period for the yeast to act and the dough to rise. The basic yeast dough should be at room temperature when placed in the Proofer.
Your baking manual gives instructions in dough treatment, proofing and baking. Changes in the actual proofing conditions depend on the conditions in the area of the Proofer as well as the proofer settings themselves.

All yeast products should be baked immediately after proofing to obtain optimum results. Follow these general guidelines for proper results:

A. Set out the desired product for thawing (if necessary). Be sure to allow sufficient time in your production schedule for your Proofer to reach the correct operating conditions.

   NOTE: The OP-2FM is available with the AUTOMIST option in the Proofer. This option eliminates the manually-filled Water Pan in the Proofer by injecting and distributing a controlled water mist throughout the Proofer to provide proofing humidity.

B. Begin preheating the Proofer about 20 to 30 minutes before its intended use. Set the Proofer Temperature Control to the desired proofing temperature, but leave the Humidity Control OFF or at a minimal setting to prevent excessive moisture accumulation in the Proofer. Excess water can lead to premature failure of the Motor, Heat or Humidity Elements, or Control Sensors.

IMPORTANT: ALWAYS REDUCE THE HUMIDITY SETTING TO A MINIMAL LEVEL WHEN OPERATING THE PROOFER WITHOUT PRODUCT!

C. Thaw the product:
   1. Air thaw the product from 45 to 90 minutes, depending on size and type of product, size of the load, product spacing, pan spacing, room temperature and room humidity. Check often and regularly.
   2. Dough must not become dry enough to form a skin. Spray with a mist of fresh clean water if necessary to moisten product, *but do not saturate the dough!*
   3. Thaw until dough is soft and moist all the way through. Product centers should not be hard or stiff, and should be easily penetrated by finger pressure.
   4. Compare thawed product from both the outside and center of pans. The thaw must be even and equal to ensure a good proof and bake.

D. Begin preheating the Oven about midway through the proofing cycle. Set the Oven Temperature Control to the desired baking temperature. The Oven is ready to bake when the Temperature Control Indicator Light goes out.

E. Proof the product:
   1. Load the product into the Proofer. Center the pans front to back and side to side as much as possible on each Shelf to allow for proper air circulation. Note the proofing start time.
   2. Check the progress of the proof after about 20 minutes; product should be starting to rise. Dough should not be so moist as to be sticky or so dry as to form a skin.
      a. If too wet decrease the Humidity Control setting by ½ or 1. If very wet (saturated) decrease the Humidity Control setting by 1 or 1½ and increase the Temperature Control setting by 5° (see "d").
      b. If too dry increase the Humidity Control setting by ½ or 1. If very dry (starting to form a skin) spray the product with clean fresh water until slightly glazed (see "d").
      c. If excessive wetness or dryness continues and changes in the Temperature and Humidity Control settings have little or no effect:
         i. Does the Humidity Control cycle **ON** and **OFF**?
         ii. Does the Water Pan in the Standard Proofer contain water?
         iii. Does the Humidity Element operate correctly?

iv. In the AUTOMIST option is water being supplied to the Proofer?
v. In the AUTOMIST option is the Injection Nozzle clogged or damaged?

d. Recheck the proof in 5 to 10 minutes after making adjustments. Readjust as necessary.

3. Monitor progress of the proof more closely as you approach the end of the proofing cycle.

NOTE: Do not open the Proofer Door more often than is required, or keep it open any longer than necessary.

4. Product is generally ready to bake when it is 75% to 80% of the desired finished size. Bread dough should just stick to your finger when you touch the loaf, but still pull off cleanly when you withdraw your finger. Dough that is not slightly tacky or has a flat dull appearance is too dry. Dough that is too sticky or has a shiny or glazed appearance is too wet. These conditions may be remedied as follows:
   a. Too dry:
      i. Spray with fresh clean water, OR:
      ii. Turn the Temperature Control **OFF**, turn the Humidity Control to maximum. Check every few minutes until dough is correct.
   b. Too wet:
      i. Open the Proofer Door to vent the excess humidity. Close the Door and monitor the product, OR:
      ii. Turn the Humidity Control to **OFF**, turn the Temperature Control to 110°. Check every few minutes until dough is correct.

F. Bake the product:
   1. Make sure the Oven has reached the correct preheat or baking temperature.
   2. Open the Oven Door and load the product quickly. Push the pans all the way to the back (until they rest against the Pan Stops). Close the Oven Door securely.
   3. Set the proper baking temperature (if different from your preheat temperature) and the desired bake time *minus two minutes*. The bake will proceed as selected.
   4. Check your product when the Timer expires and the Buzzer sounds.
   5. Remove the product when it is finished and reload with fresh product. Repeat steps "2" through "5".
   6. When baking is finished for the day complete the daily *DRY–OUT PROCEDURE* for the Oven and Proofer (refer to the *MAINTENANCE AND CLEANING GUIDE*).

G. If you have problems with the end results it is usually attributable to one of the following:
   1. Problems with the dough itself.

IMPORTANT: If you have humidity in the Proofer and the correct temperature set but the dough does not rise, you have a dough problem and not an equipment problem!

   2. Proofer temperature set too low. Proper proofing action occurs between 95° and 105°.
   3. Proofer temperature set too high. Yeast will begin to deteriorate and die at temperatures over 115°F.
   4. Lack of sufficient moisture or too much moisture will both affect your finished product in terms of color and appearance.
   5. Products not proofed long enough will appear small and heavy.
   6. Products that are over-proofed will tend to collapse after baking and may have dark streaks across them. The size of your product when removed from the Proofer prior to baking should only be 75% to 80% the size of the desired finished product.
   7. Baking temperatures too high or time too long. Product will have dark spots and/or ends and edges.
   8. Baking temperature too low or time too short. Product will be uneven or too light in color and will be unbaked on the inside.

OPERATING INSTRUCTIONS

PROOFER:

The Proofer section should be pre-heated about 20 to 30 minutes before its intended use. Set the Proofer Temperature and Humidity Controls to the desired settings. If your Proofer is equipped with the AUTOMIST option, you can leave the Humidity Control OFF until you are actually ready to load thawed dough into the proofer. A manual-fill unit requires more time to heat the water and raise the humidity level, but an AUTOMIST unit injects water directly into the atmosphere, raising the humidity level almost immediately. Excessive water in the Proofer can lead to the premature failure of the Motor, Heat or Humidity Elements, or Control Sensors.

A. Set out the desired product for thawing. Be sure to allow sufficient time in your schedule for both the product and your equipment to reach the correct conditions.

B. Prepare the Proofer:
   1. Turn the Proofer Power Switch [31] **ON** at least 20 minutes prior to use.
   2. Set the Proofer Temperature Control [32] to the required setting (refer to *General Settings* on page 15 and the *Baking Chart* on page 16).
   3. FOR THE STANDARD PROOFER:
      a. Make sure the Water Pan [64] contains between 1½" and 2" of water. This should be checked every time you load the Proofer, and at least every other hour during normal operations.
      b. Set the manual-fill Humidity Control [34] to the desired setting (refer to *General Settings* on page 15).
      c. The Proofer is ready for use when the Temperature and Humidity Control Indicator Lights go out and a light fogging appears on the Proofer Door [42].

      FOR THE AUTOMIST PROOFER:
      a. Make sure the water supply to the Proofer is not interrupted or shut off. The Injection Nozzle [85] should spray a fine intermittent water mist into the Blower Wheel [86] when the Humidity Control Indicator Light [82] illuminates. Leave the AUTOMIST Humidity Control [81] **OFF** until you are ready to load thawed product into the Proofer.
      b. When your product is ready and JUST PRIOR TO LOADING PRODUCT INTO THE PROOFER, set the AUTOMIST Humidity Control [81] to the required setting (refer to *General Settings* on page 15).
      c. The Proofer is ready for use when the Temperature Control Indicator Light goes out.

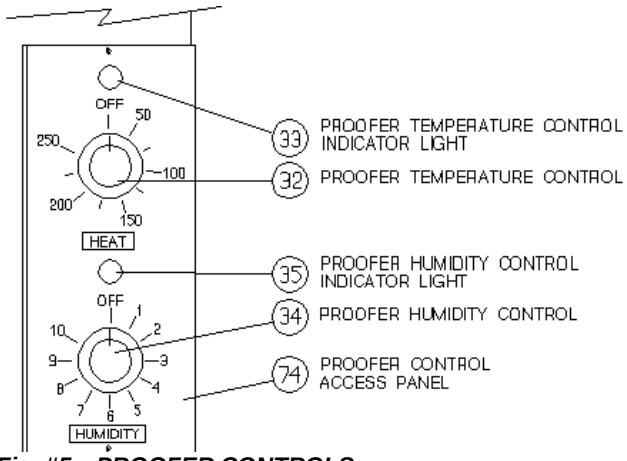

Fig. #5 – PROOFER CONTROLS

IMPORTANT: ALWAYS REDUCE THE HUMIDITY SETTING TO A MINIMAL LEVEL WHEN OPERATING THE PROOFER WITHOUT PRODUCT!

C. Load the product. Center the pans front to back as much as possible on each Proofer Shelf to allow for proper air circulation over and around your product.

NOTE: The Indicator Lights will turn on and off as the Temperature and Humidity Controls regulate the conditions in the Proofer. This is normal, and may happen several times during a proofing cycle.

D. Set the Proofer Timer [36] on the bottom end of the Oven Control Panel as a reminder to check your proof.

E. Monitor the proofing process. Your Proofer is functioning properly if there is a slight fogging on the Proofer Door. No fogging means your Proofer may be running too hot, too dry, or both. Excessive fogging (with water running down the glass) means your Proofer may be running too cold, too wet, or both. Check the product and adjust the Proofer Temperature and Humidity Controls as necessary.

TIP: If water accumulates on the floor in front of your Proofer from drippings out of the Proofer Door you are probably proofing with too much humidity. Decrease the Humidity Control setting. If water on the floor is a constant problem for you please call the NU-VU® Service Department at (800) 338-9886.

F. Load the Oven when your product is fully proofed. Yeast products should be 75% to 90% of the desired finished size at the end of the proof cycle. Generally speaking yeast products should also be slightly tacky to the touch as they are loaded into the Oven.

OVEN:

At the beginning of each day you may want to preheat your Oven about 25° higher than the required baking temperature. Since your Oven requires time to reach the proper temperature you must plan ahead so your Oven and product are ready at the same time. When the desired temperature is reached (about 15-20 minutes after start-up) the Oven Temperature Control Indicator Light [23] will go out. It is not necessary to reset to preheat temperature with each load unless you are baking new items at a much higher temperature.

A. Turn the Oven Power Switch [21] **ON** and set the Temperature Control [22] to the desired preheat or baking temperature (refer to *General Settings* on page 15 and the *Baking Chart* on page 16). The Oven is ready for baking when the Temperature Control Indicator Light goes out.

B. Load the Oven from the top shelf down. If the top shelf is too high to be reached safely and easily an empty pan should be placed on the shelf. If you are baking less than a full load please insert an empty pan on any empty shelf immediately above or below your product. This is necessary to guide the ducted air flow over and around your product for the best possible results.

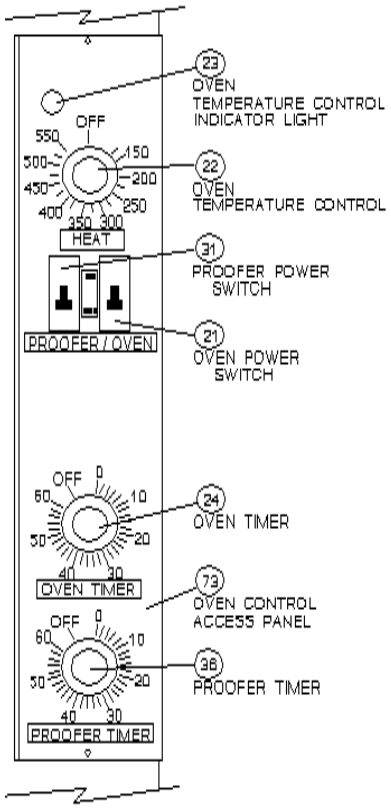

Fig. #6 – OVEN CONTROLS

C. Close the Oven Door [41] securely. It is important that you keep the Oven Door closed unless actually loading or removing product. This helps to maintain Oven temperature, reduce baking time, and minimize energy usage.

NOTE: It is helpful to slowly push the Oven Door closed until the Oven Motor restarts. Hold it about 1" from the closed position for only 1 or 2 seconds before latching it securely. This short delay prevents the sudden build-up of internal air pressure (as the Motor starts up and the cool air instantly heats) that may suddenly "pop" the Oven Door open.

D. Set the Oven Timer [24] for the estimated baking time *minus one or two minutes*. This will assure an early indication from the Buzzer Alarm [16] and help prevent over-baking.

E. As soon as the product is finished baking open the Oven Door and remove the product quickly. Immediately load more ready product into the Oven and close the Door.

IMPORTANT: STAND AWAY FROM THE FRONT OF THE OVEN WHEN OPENING THE OVEN DOOR AFTER A BAKING CYCLE TO AVOID EXPOSURE TO ESCAPING HEAT AND STEAM!

F. When all baking is done for the day set both the Temperature Control and the Oven Power Switch to **OFF**, and complete the daily *DRY–OUT PROCEDURE* outlined in the *MAINTENANCE AND CLEANING GUIDE*.

GENERAL SETTINGS:

These settings are for general information only, and are intended solely to get you started. You will need to adjust these settings to compensate for the product you are using as well as your local weather conditions.

Proofer Settings:

PRODUCT	TEMPERATURE	HUMIDITY	TIME
Bread	100° - 105°	3 - 4	50 - 60 min.
Rounds	100° - 105°	3 - 4	35 - 40 min.

Oven Settings:

PRODUCT	TEMPERATURE	TIME
Bread	350°	16 - 18 min.
Rounds	350°	13 - 15 min.
Heinz Cookies:		
(1.3 ounce)	300°	13 - 15 min.
(2.0 ounce)	300°	14 - 16 min.
Flour Pot Cookies:		
(1.3 ounce)	320°	11 min.
(2.0 ounce)	320°	11 min.
Leon's Cookies:		
(1.3 ounce)	325°	12 - 15 min.
(2.0 ounce)	325°	12 - 15 min.

Baking Chart

	Foot-long Breads (White & Wheat)	Deli Style Rolls	Heinz Cookies (1.3 oz.)	Heinz Cookies (2.0 oz.)	Flour Pot Cookies (1.3 & 2.0 oz.)	Leon's Cookies (1.3 & 2.0 oz.)
PAN CONFIGURATION	Half-size tray (5 loaves)	3 x 2 x 3 (8 Deli Style Rolls)	3 X 2 X 3 * (8 cookies)	3 X 2 X 3 (8 cookies)	3 X 2 X 3 * (8 cookies)	3 X 2 X 3 * (8 cookies)
RETARDER TIME	8 – 12 hours	8 – 12 hours	- - - - -	- - - - -	- - - - -	- - - - -
FLOOR TIME (How long to leave product at room temp before proofing)	20 minutes	20 minutes	- - - - -	- - - - -	- - - - -	- - - - -
PROOFING						
Proofing Temperature	100º - 105ºF	100º - 105ºF	- - - - -	- - - - -	- - - - -	- - - - -
Proofing Humidity Setting	3 – 4	3 – 4	- - - - -	- - - - -	- - - - -	- - - - -
Proofing Time	50 – 60 minutes	35 – 40 minutes	- - - - -	- - - - -	- - - - -	- - - - -
BAKING						
Baking Temperature	350ºF	350ºF	300ºF	300ºF	320ºF	325ºf
Baking Time	18 – 22 minutes	13 – 15 minutes	13 – 15 minutes	14 – 16 minutes	approx. 11 minutes	12 – 15 minutes
MISCELLANEOUS	Proofer Heat-Up Time: 20 – 30 minutes		Oven Heat-Up Time: 20 – 25 minutes			

BREAD BAKING REMINDER:

- Store frozen dough in the freezer immediately upon receipt.
- ALWAYS retard dough thoroughly before proofing. Retarding dough allows the dough to relax and properly age.
- Proof foot-long breads to approximately 80% of their baked size; proof Deli Style Rolls to 4" wide and 1½" high.
- When proofing, dough should feel slightly tacky to the touch. Spray the dough with a fine mist of water and/or increase the humidity setting slightly if the dough feels dry.
- Bake bread until it is golden brown.
- Always place Deli Style Rolls swirl side up on the baking trays.

COOKIE BAKING REMINDERS:

- All cookies must be baked from the frozen state.
- Place silpat liner or baking paper on half size baking tray.
- Pan product to approximate pan configuration as described on this chart.
- Bake product at approximate temperature as described on this chart.
- Remove cookies from oven when they are light brown in the middle and golden brown around edges. The cookies will appear to be slightly underdone; however, they will continue to bake on the tray for approximately 3 – 5 minutes after being removed from the oven.
- Allow cookies to cool for approximately 20 minutes on the baking tray.

* The 1.3 ounce cookies may be panned up in a 4 x 3 configuration (12 per half tray) if additional production is needed.

MAINTENANCE AND CLEANING GUIDE

MAINTENANCE:

NU–VU® equipment is designed to last for years of useful service. Careful consideration is given in selecting components for durability, performance and ease of maintenance. For example, both the Oven Motor and Proofer Motor have sealed bearings and never need to be lubricated. While NU-VU® equipment is designed for minimum care and maintenance certain steps are required by the user for maximum life and effectiveness:

- Proper installation of the equipment (including proper use of the Mounting Bracket [75]).
- Correct application and usage of the equipment.
- Dry-out Procedures performed daily.
- Thorough cleaning on a regular basis.

Standard Proofer Dry–Out Procedure - -

A. Remove the Water Pan [64]. Empty and clean the Water Pan and set it aside.
B. Wipe up any standing water in the bottom of the Proofer.
C. Empty, clean and replace the Drain Pan [80] beneath the Proofer.
D. Set the Proofer Power Switch [31] to **ON**. Leave the Temperature Control [32] and Humidity Control [34] at their normal settings.
E. Leave the Proofer Door [42] open by about 1 to 2 inches and allow the Proofer to run for about 30 minutes.
F. Set the Proofer Power Switch to **OFF**. Leave the Proofer Door slightly open (about 1 to 2 inches) while the Proofer is not in use.

AUTOMIST Proofer Dry–Out Procedure - -

A. Wipe up any standing water in the bottom of the Proofer. You may need to remove the Element Cover [62] to do this.
B. Empty, clean and replace the Drain Pan [80] beneath the Proofer.
C. Set the Proofer Power Switch [31] to **ON**. Leave the Temperature Control [32] at its normal setting but turn the Humidity Control [81] to **OFF**.

NOTE: You may also need to turn off the water supply.

D. Leave the Proofer Door [42] open by about 1 to 2 inches and allow the Proofer to run for about 30 minutes.
E. Set the Proofer Power Switch to **OFF**. Leave the Proofer Door slightly open (about 1 to 2 inches) while the Proofer is not in use.

Oven Dry–Out Procedure - -

A. Set the Oven Temperature Control [22] and Oven Power Switch [21] to **OFF**.
B. Leave the Oven Door [41] open about 1 to 2 inches. The residual baking heat will dry out any moisture that may be trapped in the insulation or other components of the Oven.
C. Leave the Oven Door slightly open (about 1 to 2 inches) while the Oven is not in use.

IMPORTANT: THESE DRY-OUT PROCEDURES MUST BE CARRIED OUT DAILY TO HELP MAINTAIN YOUR EQUIPMENT IN THE BEST POSSIBLE CONDITION. THE REMOVALOF RESIDUAL MOISTURE HELPS PREVENT DETERIORATION OF THE INSULATION, DAMAGE TO THE HEATING ELEMENTS, SENSORS, MOTOR AND OTHER ELECTRICAL COMPONENTS, AND EXTENDS THE USEFUL LIFETIME OF YOUR NU-VU® EQUIPMENT!

CLEANING:

Your OP-2FM should be cleaned daily and as soon as possible after a spill has occurred. It is essential to maintain a clean unit, especially if the public views the unit in your place of business. The following should be used for cleaning:

A. The stainless steel exterior may be cleaned with any good stainless steel cleaner or polish, or with hot soapy water followed by a clear rinse if it is very soiled.
B. The Doors can be removed for ease of cleaning by opening each Door until it is perpendicular to the face of the unit and then lifting the Door straight up. All glass should be cleaned with a glass-cleaning formula. Baked-on or excessive soiling can be removed with soap and hot water followed by a thorough rinse with fresh clean water. Severe deposits may be loosened and removed by soaking in a stronger soap and water solution.
C. The Oven and Proofer interiors (including the Door Jamb) should be cleaned on a regular basis with mild soap and hot water followed by a thorough rinse with fresh clean water.

* * * CAUTION * * *

NU-VU® DOES NOT RECOMMEND the use of any strong commercial or caustic product on this equipment. DO NOT allow any type of caustic cleaner to come into contact with any aluminum parts (such as Door Frames), the silicon rubber Door Gaskets, or any of the sealing compound in the Oven and Proofer seams and joints. These compounds may cause discoloration and degradation of these parts resulting in permanent damage. DO NOT use bleach or bleach compounds on any chromed parts; bleach will damage chrome plating.

* * * NOTE * * *

NU-VU® has had very good results with a product called JIFFY CLEANER. For standard cleaning simply spray JIFFY on and wipe off. Heavily soiled areas may require a short period of soaking. This cleaner is available through NU-VU® (Part #51-0002) or through your local Rochester/Midland distributor or representative.

* * * NOTICE * * *

NATIONAL SANITATION FOUNDATION GUIDELINES REQUIRE THAT ALL INTERIOR PARTS BE REMOVABLE WITHOUT THE USE OF TOOLS. THIS EQUIPMENT HAS BEEN FACTORY ASSEMBLED TO SAFELY ACCOMMODATE ROUGH HANDLING THROUGH SHIPMENT AND ORIGINAL INSTALLATION. AFTER ANY MAINTENANCE, CLEANING OR REQUIRED SERVICE WORK THE INTERIOR SHEET–METAL PARTS SHOULD BE REASSEMBLED AND FASTENED HAND–TIGHT ONLY, BUT STILL REMAIN TIGHT ENOUGH TO PREVENT ANY RATTLE OR MOVEMENT OF PARTS.

TROUBLE–SHOOTING GUIDE

OVEN:

I. The Oven Power Switch [21] is in the ON position and there are no lights, heat, humidity or motor rotation:

A. The Power Switch may be tripped. Set it all the way to **OFF**, then reset it to the **ON** position.
B. Check the Fuses [19] below the Proofer Control Panel for a blown Fuse.
C. Check the main wall breaker or fuse box for a tripped power supply breaker or blown fuse.
D. Check the electrical connections to the Oven Power Switch.
E. Check the electrical connections from the main breaker or fuse box to the Power Terminal Block (refer to Figure #2 on page 4). All connections must be clean and tight.
F. Check the voltage from the main breaker or fuse box to the Power Terminal Block and compare it to the requirements listed on the equipment label.
G. If all electrical connections and readings are correct as to voltage and phase the Oven Power Switch must be replaced (refer to *POWER SWITCH, How To Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

II. The Oven operates but you have slow warm-up and recovery times:

A. Check for proper voltage, phase and amperage against the requirements listed on the equipment label. Use a volt/amp meter on the wires to the Power Terminal Block [1] (refer to Figure #2 on page 4).
B. Check the Oven Heating Element [6] on each side of the Oven next to the Blower Wheel [51] by removing the Oven Element Cover [52]. Turn the Oven **ON**, close the Oven Door [41] or depress the Micro Switch [15], and set the Temperature Control [22] to 250° to see if the Heating Elements become red-hot. Replace any Heating Elements that fail to become red-hot (refer to *OVEN HEATING ELEMENT, How To Replace* in the *SERVICE AND REPLACEMENT GUIDE*).
C. Check the Temperature Control [22] against a reliable oven thermometer. Place the thermometer on a pan in the center of the Oven and set the Temperature Control to 350°F. Compare the thermometer reading against the Temperature Control setting when the Temperature Control Indicator Light [23] goes out. If there is more than 10° difference the Temperature Control may need a simple adjustment (refer to *TEMPERATURE CONTROL, How to Adjust* in the *SERVICE AND REPLACEMENT GUIDE*).

III. The Oven Motor [7] cuts out or will not start when the Oven Door is closed:

A. Open the Oven Door and depress the Micro Switch [15] by hand. If the Oven Motor starts the Micro Switch may only need adjustment (refer to *MICRO SWITCH, How To Replace* in the *SERVICE AND REPLACEMENT GUIDE*).
B. If depressing the Micro Switch by hand fails to start the Oven Motor check the wiring connections between the Power Switch [21], the Micro Switch and the Oven Motor.
C. If both the Oven Motor and the Temperature Control do not function when the Micro Switch is depressed the Switch itself is bad and must be replaced (refer to *MICRO SWITCH, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).
D. If the Temperature Control functions properly but the Oven Motor still does not run the Oven Motor is bad and must be replaced (refer to *OVEN MOTOR, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

WARNING: THE OVEN MOTOR IS THERMALLY PROTECTED, AND WILL SHUT ITSELF DOWN IF OVER-HEATED. IT MAY RESTART WITHOUT WARNING! ALWAYS TURN THE OVEN OFF BEFORE WORKING ON THE MOTOR!

IV. The Oven Door is open but the Oven Motor [7] continues to run:

A. Check the Micro Switch [15] plunger in the top Oven Door Hinge [43]. The plunger must be free to move in and out. Eliminate any binding by adjusting the Switch (refer to *MICRO SWITCH, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

B. If the Micro Switch plunger is free to travel in and out but the Oven Motor continues to run, the Micro Switch itself is bad and must be replaced.

V. The Oven Blower Wheel [51] makes unusual noise:

A. Remove the Oven Element Cover [52]. Make sure the Oven Blower Wheel is not rubbing on the Element Cover or the ceiling of the Oven. The position of the Blower Wheel can be adjusted by loosening the allen screws on the Blower Wheel hub and moving the Wheel up or down on the Oven Motor shaft (refer to *BLOWER WHEEL INSTALLATION AND BALANCING* in the *SERVICE AND REPLACEMENT GUIDE*).

B. If there is no evidence of rubbing on either the ceiling of the Oven or the Element Cover the Blower Wheel allen set screws may only be loose. Tighten them securely. A Blower Wheel that is only a little bit loose can make unusual noise and may damage the Oven Motor.

C. Remove the Motor Cover [72] and run the Oven Motor. If the Motor shows any vibration while running the Blower Wheel may be out of balance (refer to *BLOWER WHEEL INSTALLATION AND BALANCING* in the *SERVICE AND REPLACEMENT GUIDE*). An unbalanced Blower Wheel may damage the Oven Motor.

VI. You have an uneven bake:

A. Remove the Oven Element Cover [52]. Turn the Oven **ON** and set the Temperature Control [22] to 250° to see if the Oven Heating Elements [6] become red-hot. Replace any Heating Elements that fail to become red-hot (refer to *OVEN HEATING ELEMENTS, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*). NOTE: The Oven Heating Elements will not function until the Oven Door is closed or the Door Micro Switch [15] is depressed by hand.

B. Make sure the Oven Door Gasket [46] is intact and seals completely around the Oven Door (refer to *DOOR LATCH, How to Adjust* in the *SERVICE AND REPLACEMENT GUIDE*).

C. Make sure the Oven Side Walls [53] and Oven Element Cover [52] are correctly installed in the Oven. The ½" flange on the back of the Element Cover and each Sidewall must be inserted into the guide braces welded to the sides and ceiling of the Oven. Make sure all mounting thumbscrews are present and tight.

D. If all of the above steps have been checked and okayed, and you still have an uneven bake, we ask that you please call our Service Department at (800) 338-9886. Be prepared to describe exactly what is wrong with your bake so that we may be of assistance.

VII. The Oven Timer [24] does not run:

A. Check the electrical connections between the Oven Power Switch [21] and the Oven Timer. All connections must be clean and tight.

B. Make sure that the Timer wiring is correct. The black wire from the Power Switch is connected to terminal "4" on back of the Timer. Terminal "6" on back of the Timer is connected to one side of the Buzzer Alarm [16].

C. Turn the Timer Knob back and forth several times to free it from any possible sticking.

D. If the Timer still does not run, or runs only after the Knob has been turned back and forth several times, the Timer must be replaced (refer to *TIMER, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

VIII. The Buzzer Alarm [16] does not sound:

A. Check the Oven Timer [24] for proper operation.
B. Make sure the Buzzer Alarm wiring is correct. One side of the Buzzer Alarm is connected to terminal "6" on back of the Timer. The other side of the Buzzer is connected to any common or group of common (WHITE) wires.
C. If all connections are correct, clean and tight and the Buzzer Alarm still does not operate, it must be replaced (refer to *BUZZER ALARM, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

IX. One or more Indicator Lights do not function:

An Indicator Light tells when a system or control is activated. Failure of the Indicator Light itself will not affect the over-all operation of your unit.

A. Make sure all electrical connections to the Indicator Light are clean and tight.
B. Check the associated Control to see if it functions correctly. If the Control functions but the Indicator Light does not light up the Light itself is bad and should be replaced (refer to *INDICATOR LIGHT, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

PROOFER:

I. The Proofer Power Switch [31] is in the ON position but there are no lights, heat, humidity or motor rotation:

A. The Power Switch may be tripped. Set it all the way to **OFF**, then reset it to **ON**.
B. Check the Fuses [19] below the Proofer Control Panel for a blown Fuse.
C. Check the main wall breaker or fuse box for a tripped power supply breaker or blown fuse.
D. Check the electrical connections to the Proofer Power Switch.
E. Check the voltage from the main breaker or fuse box to the Power Terminal Block and compare it to the requirements listed on the equipment label.
F. Check the electrical connections from the main breaker or fuse box to the Power Terminal Block (refer to Figure #2 on page 4). All connections must be clean and tight.
G. If all electrical connections and readings are correct as to voltage and phase the Proofer Power Switch must be replaced (refer to *POWER SWITCH, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

II. The Proofer Power Switch [31] is in the ON position, you have lights, humidity and Proofer Motor rotation but no heat:

A. Make sure the Proofer Temperature Control [32] is set past room temperature.
B. Check the Proofer Heating Elements [12] under the Proofer Element Cover [62]. They should get hot to the touch when the Proofer Temperature Control is activated.
C. Check the electrical connections between the Power Terminal Block [1], the Power Switch, the Proofer Temperature Control Circuit Board [8] and the Heating Elements. All connections must be clean and tight.
D. Check the voltage from the Power Terminal Block to the Power Switch, the Temperature Control Circuit Board and the Heating Elements. The voltage should match the requirements listed on the equipment label. If voltage is present at the Heating Elements one or more of the Elements may be burned out. If voltage is present at the input side of the Temperature Control Circuit Board [8] but not at the output side the Control Circuit Board or its Control Sensor [9] may be bad.
E. Check the Temperature Control against a reliable thermometer. Place the thermometer on a Shelf in the center of the Proofer, turn the Humidity Control [34] to **OFF**, and set the Temperature Control to 100°. Compare the thermometer reading against the Temperature Control setting when the Temperature Control Indicator Light [33] goes out. If there is more than 10° difference the Temperature Control may need a simple adjustment (refer to *TEMPERATURE CONTROL, How to Adjust* in the *SERVICE AND REPLACEMENT GUIDE*).

III. The Proofer Power Switch [31] is in the ON position, you have lights, heat and Proofer Motor rotation but no humidity:

For the standard manual-fill Proofer:

A. Make sure the Water Pan [64] contains at least 2" of water.
B. Make sure the Water Pan is fully seated on the Humidity Element [13].
C. Turn the Humidity Control [34] to #7 or #8 to see if the Humidity Control activates. If the Humidity Control activates the Humidity Element coil should become very hot in only a few moments.
D. Check all electrical connections between the Proofer Power Switch, the Humidity Control Circuit Board [10] and the Humidity Element. All connections must be clean and tight.
E. Check the voltage from the Power Terminal Block [1] to the Power Switch, to the Humidity Control Circuit Board, and to the Humidity Element. If the correct voltage is present at the Humidity Element but it does not get hot the Element must be replaced (refer to *HUMIDITY ELEMENT, How To Replace* in the *SERVICE AND REPLACEMENT GUIDE*). If voltage is present at the input side of the Control Circuit Board but not at the output side the Control Circuit Board or the Humidity Control Sensor [11] may be bad.

For the AUTOMIST Proofer:

A. Check for adequate and sustained pressure in the water supply line to the Proofer up to the Proofer Solenoid Valve [84]. If there is sufficient pressure at the water source but not at the Proofer Solenoid Valve your in-line water filter may be clogged or the water supply line may be kinked or pinched.
B. Gently tap the Proofer Solenoid Valve body to loosen any sediment that may be causing the valve to stick.
C. Remove the Proofer Element Cover [62] to expose the Injection Nozzle [85]. Unscrew the Nozzle spray head and check for clogging in the spray orifice. Clean the internal screen with a small stiff brush before replacing.
D. Check all electrical connections between the Proofer Power Switch, the Humidity Control [81], the Repeat Cycle Timer [83] and the Proofer Solenoid Valve. All connections must be clean and tight.
E. Check the Humidity Control, the Repeat Cycle Timer and the Proofer Solenoid Valve with a voltmeter for proper operation. Any suspect component should be thoroughly checked. All non-functional components must be replaced.

IV. The Proofer Power Switch [31] is in the ON position but the Proofer Motor [14] makes noise or does not run:

A. Loosen and lift the Element Cover [62] away from the Proofer Fan Blade [61] or Blower Wheel [86]. If the Proofer Motor starts running, or the noise stops, the Fan Blade/Blower Wheel was dragging on the bottom of the Element Cover. Straighten the Element Cover (if it is bent down) or reposition the Fan Blade/Blower Wheel on the Proofer Motor shaft.
B. Remove the Proofer Element Cover and check the Fan Blade/Blower Wheel for dragging on the floor of the Proofer. Reposition the Fan Blade/Blower Wheel on the Proofer Motor shaft if necessary.
C. Check the set screw on the Fan Blade/Blower Wheel for tightness. A loose set screw will allow the Fan Blade/Blower Wheel to wobble and vibrate, causing noise and possible damage to the Proofer Motor.
D. Remove the Proofer Element Cover and spin the Proofer Motor by hand. If the Motor turns hard or makes a grinding noise when turned the Motor bearings are bad and the Motor must be replaced (refer to *PROOFER MOTOR/FAN ASSEMBLY, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

E. If the Fan Blade/Blower Wheel is not dragging on the Element Cover or the Proofer floor and the Proofer Motor spins easily by hand but still does not run:
   1. Check all electrical connections between the Power Switch and the Proofer Motor. All connections must be clean and tight.

   NOTE: It may be necessary to remove the Proofer Motor Assembly for electrical inspection.

   2. Check for voltage from the Power Switch to the Proofer Motor. If voltage is present but the Motor does not run it must be replaced (refer to *PROOFER MOTOR ASSEMBLY, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

V. The Proofer Timer [36] does not run:

A. Check the electrical connections between the Proofer Power Switch [31] and the Proofer Timer. All connections must be clean and tight.
B. Make sure that the Timer wiring is correct. The black wire from the Power Switch is connected to terminal "4" on back of the Timer. Terminal "6" on back of the Timer is connected to one side of the Proofer Buzzer Alarm [16].
C. Turn the Timer Knob back and forth several times to free it from any possible sticking.
D. If the Timer still does not run, or runs only after the Knob has been turned back and forth several times, the Timer must be replaced (refer to *TIMER, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

VI. The Buzzer Alarm [16] does not sound:

A. Check the Proofer Timer [36] for proper operation.
B. Make sure the Buzzer Alarm wiring is correct. One side of the Buzzer Alarm is connected to terminal "6" on back of the Timer. The other side of the Buzzer Alarm is connected to any common or group of common (WHITE) wires.
C. If all connections are correct, clean and tight and the Buzzer still does not operate it must be replaced (refer to *BUZZER ALARM, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

VII. One or more Indicator Lights do not function:

An Indicator Light tells when a System or Control is activated. Failure of the Indicator Light itself will not affect the over-all operation of your unit.

A. Make sure all electrical connections are clean and tight.
B. Check the associated Control to see if it functions correctly. If the Control functions but the Light does not go on the Light itself is bad and should be replaced (refer to *INDICATOR LIGHT, How to Replace* in the *SERVICE AND REPLACEMENT GUIDE*).

SERVICE AND REPLACEMENT GUIDE

Your OP-2FM has been designed to be serviced quickly and easily. In fact, any individual who has average mechanical ability can do most of the work. Our Service Department is also available to you Monday through Friday from 7:00 a.m. to 5:30 p.m. (Central Standard Time) should you find yourself with a situation or problem other than what is outlined here. Call NU-VU® at (800) 338-9886 and ask for our Service Department to order replacement parts, ask questions, or offer comments.

This *SERVICE AND REPLACEMENT GUIDE* has been prepared to cover normal service problems. If this "trouble-shooting" information does not provide a solution for your particular problem we ask that you call us for direct assistance. Calling our Service Department before calling in a repair technician can usually save you both time and unnecessary expense. We want to do everything we can to minimize your "down-time".

You may need to remove an Access Panel for servicing. **DO NOT** allow any Access Panels to drop. When work on the component is finished replace the panel with care, making sure that all wires are properly placed and not pulled or pinched. If more than one component is being worked on try to remove only one component at a time.

*** * * NOTICE * * ***

Please supply the Serial Number, Model Number and Manufacture Date Code from the side-mounted nameplate of your NU-VU® Oven/Proofer when ordering replacement parts or requesting service for your NU-VU® equipment.

*** * * NOTICE * * ***

NATIONAL SANITATION FOUNDATION GUIDELINES REQUIRE THAT ALL INTERIOR PARTS BE REMOVABLE WITHOUT THE USE OF TOOLS. THIS EQUIPMENT HAS BEEN FACTORY ASSEMBLED TO SAFELY ACCOMMODATE ROUGH HANDLING THROUGH SHIPMENT AND ORIGINAL INSTALLATION. AFTER ANY MAINTENANCE, CLEANING OR REQUIRED SERVICE WORK THE INTERIOR SHEET–METAL PARTS SHOULD BE REASSEMBLED AND FASTENED HAND–TIGHT ONLY, BUT STILL REMAIN TIGHT ENOUGH TO PREVENT ANY RATTLE OR MOVEMENT OF PARTS.

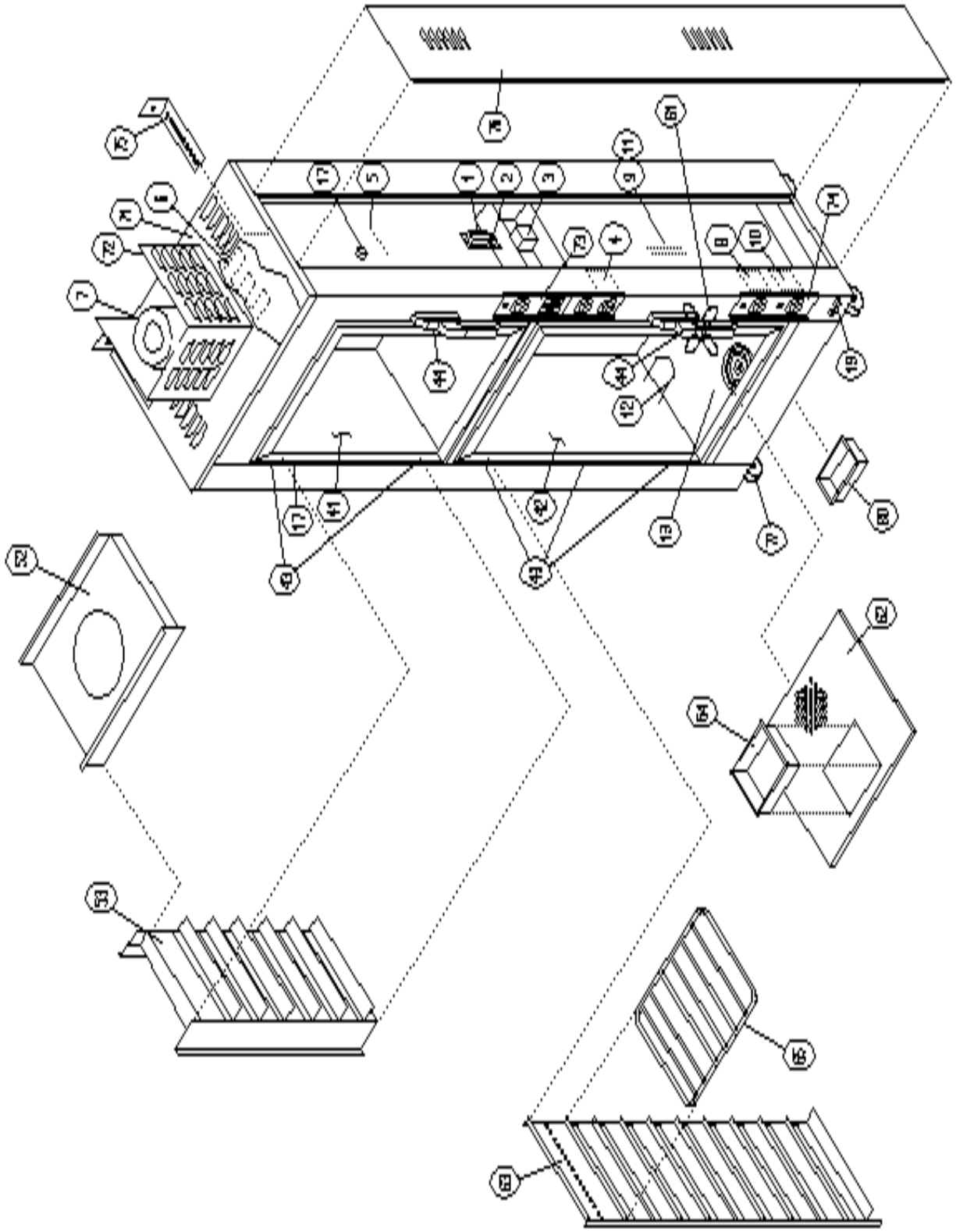

Fig. #7 – <u>GENERAL EXPLODED VIEW</u>

POWER TERMINAL BLOCK OR CONTACTOR, How To Replace:

The Power Terminal Block [1] or Contactor [3] very seldom requires replacement. However, should either one ever become damaged or defective in any way a qualified electrician or service technician should be called in and the NU-VU® Service Department notified immediately!

IMPORTANT: IMPROPER INSTALLATION, MISUSE OR OTHER FAILURE TO FOLLOW THESE INSTRUCTIONS MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY, AND MAY ALSO VOID YOUR NU-VU® WARRANTY!!!

OVEN MOTOR ASSEMBLY, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the Oven Element Cover [52] by removing the two thumbscrews from each side. Pull the Element Cover down and to the front of the Oven to remove it.

B. Measure and record the distance from the ceiling of the Oven to the bottom of the Blower Wheel [51]. Loosen the two set screws on the hub of the Wheel with a 5/32" allen wrench and pull the Wheel from the Motor shaft.

C. Remove the Outside Top [71] of the unit. Label and disconnect all wires attached to the Oven Motor [7]. Loosen and remove the four nuts from the Motor Mount and lift the Motor out.

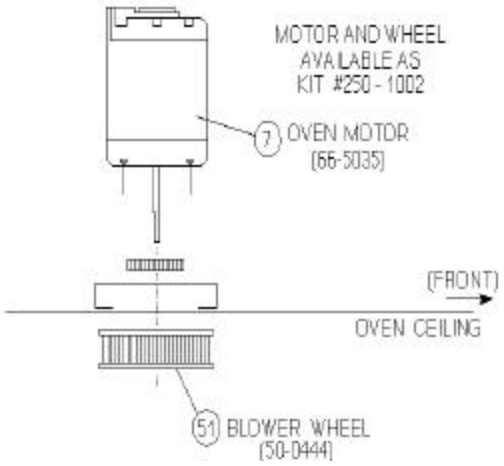

Fig. #8 – OVEN MOTOR

D. Position the replacement Motor over the mounting bolts. Start the nuts on the mounting bolts but do not tighten them. Make sure the Motor shaft is centered in the passage hole in the Oven ceiling and that the Motor shaft turns freely. Now tighten the mounting nuts securely.

E. Reconnect the Motor wires. Make sure all connections are clean and tight. Leave the Motor Cover off.

F. Install the Blower Wheel on the Motor shaft. Set it at the same distance as was measured before the Blower Wheel was removed. Position the two set screws over the flats on the Motor shaft and tighten them down until snug. Recheck the position of the set screws over the shaft flats and the measurement from the ceiling of the Oven. Torque both set screws to 175 inch/pounds.

IMPORTANT: A loose Blower Wheel will cause an immediate service problem and may damage the Oven Motor!

G. Restore electrical power to the unit and test the Oven Motor for proper operation. Watch the Oven Motor for any vibration. Any vibration or wobble in the Blower Wheel or Oven Motor must be corrected immediately (refer to *BLOWER WHEEL INSTALLATION AND BALANCING*).

H. Replace the Motor Cover and the Oven Element Cover. Make sure the ½" flange on the back of the Element Cover fits into the guide strip welded to the ceiling of the Oven and that the Element Cover is all the way back and tight to the ceiling. Tighten the thumbscrews securely.

BLOWER WHEEL INSTALLATION AND BALANCING:

When installing a new Blower Wheel it is imperative that the Wheel be balanced correctly. An improperly balanced Blower Wheel will cause premature failure of the Oven Motor.

The Blower Wheel should rotate under power in a counter-clockwise direction when viewed from the open side of the Wheel (refer to Figure #8 on page 26). An up and down wobble may be noticeable when the wheel slows to a stop. A wobble of less than 1/16" is acceptable; anything more must be corrected.

The easiest method of eliminating the wobble is to locate the narrowest distance between the Blower Wheel and the ceiling of the Oven. Place this point toward you and gently pry the Blower Wheel down from the top. Repeat this procedure until the wobble is eliminated. Check the tightness of the set screws on the Blower Wheel hub; they should be torqued to 175 inch/pounds.

A new Blower Wheel may already have one or more weights attached; these have been installed by the original manufacturer. If the Blower Wheel is not in balance when you test it please remove and save these weights.

The Blower Wheel should now be ready for balancing.

CAUTION: DO NOT PLACE FINGERS NEAR THE BLOWER WHEEL WHILE IT IS STILL TURNING, EVEN IF THE MOTOR IS TURNED OFF. THE MOVING VANES STILL HAVE SUFFICIENT FORCE TO CAUSE SERIOUS INJURY!

A. Clip a weight to the inside of an air vane. Turn the Oven **ON** and depress the Door Micro Switch [15] in the door jamb just below the top Hinge. Watch the Oven Motor [7] for any sign of vibration. Release the Micro Switch and allow the Blower Wheel to come to a stop.
B. Move the weight 4 to 6 vanes in either direction. Run the Motor again. Note any change in vibration. If the vibration increased move the weight in the opposite direction. If the vibration decreased move the weight in the same direction another 4 to 6 vanes. Repeat this procedure until the vibration begins to increase.
C. Now move the weight back 1 or 2 vanes at a time until the vibration is at its lowest level. Secure it there.
D. Repeat the entire procedure with more weights until the vibration is eliminated. Make sure that all weights are securely fastened to the inside of the air vanes before closing up the Oven. Failure to do this may cause the loss of a weight, resulting in an unbalanced condition.

PROOFER MOTOR ASSEMBLY, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the Proofer Element Cover [62] to expose the Proofer Fan Blade [61] or Blower Wheel [86]. Loosen the set screw on the Fan Blade/Blower Wheel hub and remove the Fan Blade/Blower Wheel from the Motor shaft.
B. Remove the four screws holding the Motor Mount in place. Use a pocket knife or other sharp instrument to cut loose the sealant around the Motor Mount. Gently pry up on the Motor Mount to break it loose from the floor of the Proofer.
C. Remove the Proofer Motor [14] assembly far enough to expose and disconnect the wire nut connections. These wires are interchangeable and do not need to be labeled. Remove the Proofer Motor assembly from the Proofer.
D. Remove all old sealant from the floor of the Proofer with a putty knife or scraper.

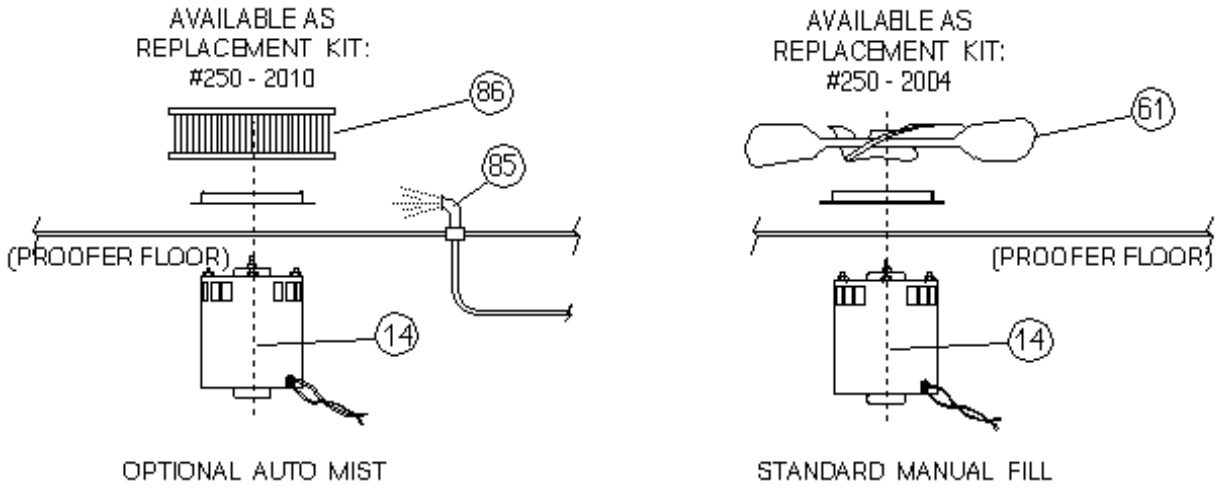

Fig. #9 – <u>PROOFER MOTORS</u>

E. Connect the electrical leads to the new Motor assembly. Make sure all connections are clean and tight.
F. Lower the Motor assembly into place and fasten it securely with the four mounting screws.
G. Apply a bead of silicone sealant (available at any plumbing or hardware store) around the edges of the Motor Mount. Smooth it down with your finger. Remove any excess sealant but make sure that the entire edge of the Motor Mount is completely sealed to prevent any water from leaking from the Proofer onto the new Proofer Motor.
H. Replace the Fan Blade/Blower Wheel on the Motor shaft. Tighten the set screw securely; a loose Fan Blade/Blower Wheel will cause a later service problem.
I. Restore electrical power to the unit and test the new Proofer Motor assembly for proper operation. Make sure the Fan Blade/Blower Wheel does not drag on the floor of the Proofer.
J. Replace the Proofer Element Cover and retest the Proofer Motor assembly. Make sure the Fan Blade/Blower Wheel does not drag on the underside of the Element Cover.

OVEN HEATING ELEMENT, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS <u>OFF</u>. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the Oven Element Cover [52] by removing the two thumbscrews from each side. Pull the Element Cover down and to the front of the Oven to remove it.
B. Remove the Outside Top [71] of the Oven to expose the Heating Element wiring (refer to Figure #7 on page 25).
C. Remove the Side Access Panel [76] from the Control side of your unit.
D. Trace the wires from the defective Heating Element to the Contactor [3] and disconnect them. Pull the wires up to the top of the unit.
E. Remove the Heating Element mounting screws from the inside of the Oven and remove the Heating Element from the support bracket. Pull the Heating Element and its wires from the Oven.
F. Remove all old sealant from the Heating Element mounting holes with a putty knife or scraper.
G. Run a " bead of high-temperature silicone or gasket sealer around each Heating Element passage hole in the ceiling of the Oven.
H. Feed the wires of the replacement Heating Element up through the passage holes and push the replacement Heating Element into place. Secure it there with the support bracket and the mounting screws.

I. Route the Heating Element wires down the outside of the Oven and down to the contactor.
J. Position the Heating Element wires where they will be out of the way and cut off any excess. Strip approximately ½" of insulation from the end of each wire and fasten them in the Contactor terminals. Make sure each Contactor terminal contains one wire from each Heating Element.
K. Replace the Outside Top and the Side Access Panel. Be sure not to pull or pinch any wires while replacing these panels.
L. Restore power to the unit and test the Heating Elements for proper operation.
M. Replace the Oven Element Cover. Make sure the ½" flange on the back of the Element Cover fits into the guide strip welded to the ceiling of the Oven and that the Element Cover is all the way back and tight to the Oven ceiling. Tighten the thumbscrews securely.

PROOFER HEATING ELEMENT, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the Proofer Element Cover [62] to expose the Proofer Heating Elements. The standard manual-fill Proofer uses two 225 watt Heating Elements [12], each bent in a simple "U" shape. The AUTOMIST Proofer uses two larger 600 watt Heating Elements [87] bent in an extended block "W" pattern. Both types of Elements are mounted near the bottom on each side of the Proofer (refer to Figure #7 on page 25 and/or Figure #15 on page 37).
B. Remove the Side Access Panel [76] on the control side of the unit as well as the side with the defective Heating Element.
C. Trace the electrical wires from the defective Heating Element to where they are connected to the unit wiring. Label these wiring junctions, then disconnect and remove the Element wires from these junctions.
D. Remove the defective Proofer Heating Element from its mountings and pull it from the Proofer. Clean away any old sealant around the mounting holes in the Proofer sidewall.
E. To install a new standard Heating Element [12]:
    1. Carefully push the Element lead wires through the mounting holes, position the replacement element, and secure it in place.
    2. Apply high-temperature silicone or gasket sealant around the new Element on both the inside and outside of the Proofer wall.

    To install a new AUTOMIST Heating Element [87]:
    1. Apply a small " bead of fresh high-temperature silicone or gasket sealant around the Heating Element mounting holes.
    2. Carefully push the Element lead wires through the mounting holes, position the replacement Heating Element, embed it in the sealant, and secure it into place.
F. Reconnect the electrical wires as labeled. All connections must be clean and tight.
G. Replace the Side Access Panels and the Proofer Element Cover.
H. Restore electrical power to the unit and test the replacement Element for proper operation.

PROOFER HUMIDITY ELEMENT, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the Water Pan [64] to expose the Humidity Element [13]. Clean the pan and set it aside.
B. Remove the Side Access Panel [76] from the control side of your unit to expose the Humidity Element wiring connections.

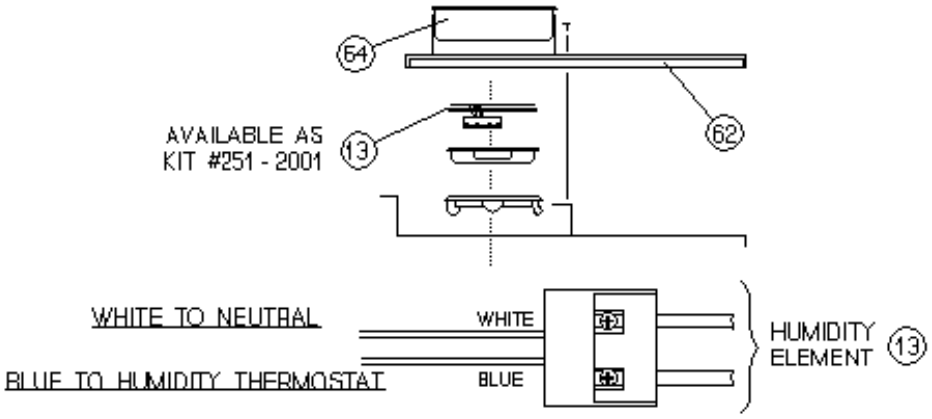

Fig. #10 – HUMIDITY ELEMENT ASSEMBLY

C. Lift the Humidity Element up and out of its mounting ring, and gently pull it away from the control side of the proofer. Identify, isolate and disconnect the Element wiring leads where they connect with the unit's control wiring; these should be wire nut junctions. Tag, label or otherwise identify each wiring connection as you disconnect the Humidity Element.
D. Pull the disconnected Humidity Element and its wires from the proofer.
E. Thoroughly clean under and around the Element mounting area and wipe the area dry.
F. Insert the two wiring leads of the replacement Element down through the Element mounting ring into the lower box and out through the hole in the side of the box toward the control wiring. Make sure both wires (WHITE and BLUE) pass through the hole together.
G. Ease the Element into place while continuing to feed the two lead wires through the conduit hole in the box. Make sure the wiring is not kinked or twisted and that the Element is evenly supported by the mounting ring.
H. Connect the new leads to the control wiring: WHITE to the tagged group of white wires, BLUE to the tagged blue (or black) wire leading from the Proofer Humidity Control Circuit Board [10]. All connections must be clean and tight.
I. Replace the Side Access Panel. Be sure not to pull or pinch any wires while replacing the panel.
J. Restore electrical power to the unit and test the new Humidity Element for proper operation.
K. Replace the Water Pan.

TEMPERATURE CONTROL, How To Adjust:

PLEASE CALL THE NU-VU® SERVICE DEPARTMENT AT (800) 338-9886 BEFORE ATTEMPTING TO ADJUST THE TEMPERATURE CONTROL!

A. Place a reliable thermometer (or the thermocouple of a test instrument) on a pan in the center of the Oven or Proofer. Turn the Oven or Proofer **ON** and set the Temperature Control [22 or 32] to its normal setting. Allow the equipment to reach a stable operating temperature.
B. Compare the Temperature Control setting to the reading on the test instrument. If there is a difference of more than 25° in the Oven or 15° in the Proofer you should call the NU-VU® Service Department for advice on adjusting or replacing components.
C. If the difference is less than 25° in the Oven or 15° in the Proofer a simple dial adjustment may solve the problem:
    1. Remove the Knob of the Temperature Control by pulling it straight out from the face of the Control Panel.
    2. Hold the black plastic Knob securely with the back of the clear plastic dial toward you. Use a phillips screwdriver to loosen these screws from ¾ to 1 full turn, *but do not remove them!*

3. To increase the temperature inside the Oven or Proofer carefully rotate the index line on the clear dial *clockwise*. Each "click" of adjustment is equal to approximately 5° of temperature change in the Oven and 2° of temperature change in the Proofer. To decrease the inside temperature rotate the clear dial *counter-clockwise*.
4. Gently tighten the dial screws and install the Control Knob. Check the Control setting against the test instrument and repeat this procedure if necessary.

D. Replace the Temperature Control Sensor if this procedure fails to bring the temperature reading within the desired range. Replace the Temperature Control Circuit Board if the temperature is still too far off.

TEMPERATURE OR HUMIDITY CONTROL, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

The Oven and Proofer Temperature and Humidity Controls are both replaced with the same procedure. Only the Humidity Control in units having the AUTOMIST option is different.

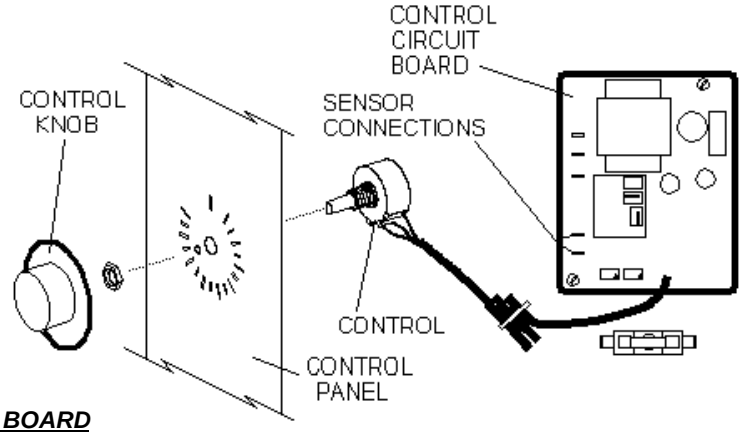

Fig. #11 – CONTROL BOARD

Standard Controls - -

A. Remove the Control Knob by pulling it straight out from the face of the Oven Control Access Panel [73] or Proofer Control Access Panel [74].
B. Remove the two mounting screws on the Control Access Panel, then gently pull the Control Panel toward you.
C. Remove the retaining nut from the front of the Control and pull the Control out from behind the Control Access Panel.
D. Label and disconnect all wiring to the Temperature or Humidity Control Circuit Board [4, 8, or 10] including the Control Sensor leads.
E. Remove the mounting screws from the corners of the Control Circuit Board and lift the Circuit Board and Control from the unit.
F. Position the replacement Circuit Board on the mounting plate and secure it in place; seat the mounting screws firmly *but do not overtighten!*
G. Position the Temperature or Humidity Control in the Control Access Panel. Secure the Control in place with the retaining nut. Seat the nut firmly *but do not overtighten!*

IMPORTANT: THE CONTROL INDEXING TAB MUST BE FULLY INSERTED IN THE TAB LOCATION HOLE IN THE ACCESS PANEL!

H. Attach all electrical wiring as labeled. Make sure all connections are clean and tight.

IMPORTANT: THE RED LEAD FROM THE SENSOR CABLE MUST BE INSTALLED ON THE TC "-" TERMINAL!

I. Replace the Control Access Panel and secure it with the two mounting screws. Be careful not to pull or pinch any wires when replacing the panel. Install the Control Knob by pressing it onto the end of the Control shaft.
J. Restore electrical power to the unit and test the replacement Control for proper operation. We recommend that any replaced Temperature Control be checked for proper adjustment (refer to *START–UP* and *TEMPERATURE CONTROL, How to Adjust*).

AUTOMIST Humidity Control - -

A. Remove the Knob from the Humidity Control [81] by pulling it straight out from the face of the Proofer Control Access Panel [74] (refer to Figure #15 on page 37).
B. Remove the mounting screws on the Control Access Panel and gently pull the panel toward you.
C. Remove the mounting screws from the Humidity Control and pull it out from the back of the Control Access Panel.
D. Label and disconnect all electrical wiring to the Humidity Control.
E. Attach the electrical wiring to the replacement Humidity Control as labeled. All connections must be clean and tight.
F. Position the replacement Humidity Control on the back of the Control Access Panel and secure it in place with the two mounting screws.
G. Replace the Control Access Panel and secure it with the two mounting screws. Be careful not to pull or pinch any wires when replacing the panel. Install the Control Knob by pressing it onto the end of the Control shaft.
H. Restore electrical power to the unit and test the Humidity Control for proper operation.

OVEN TEMPERATURE SENSOR, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Locate the Temperature Control Sensor [5] on the Oven Sidewall [53] and slide the Control Sensor out of its mounting bracket (refer to Figure #7 on page 25).
B. Remove the Side Access Panel [76] from the Control side of your unit. Carefully pull the old Control Sensor and its cable through the side of the Oven.
C. Remove the two mounting screws in the Oven Control Access Panel [73] and gently pull the Control Access Panel toward you. Disconnect the Sensor wires from the Control Circuit Board and mark each one as it is removed. Remove the old Control Sensor and cable.
D. Uncoil the new Control Sensor and its cable, *using extreme care not to kink, twist or damage it in any way!*
E. Feed the Sensor end of the new cable through the side of the Oven and secure the Sensor in the mounting bracket on the Oven Sidewall.
F. Connect the wires at the end of the Sensor cable to the Temperature Control Circuit Board. Replace the Control Access Panel and secure it with the two mounting screws. Be careful not to pull or pinch any wires when replacing the Control Access Panel.

IMPORTANT: THE RED LEAD FROM THE SENSOR CABLE MUST BE INSTALLED ON THE TC "-" TERMINAL!

G. Seal the Sensor cable where it passes through the side of the Oven from both sides with a high-temperature silicone or gasket sealant.
H. Replace the Side Access Panel. Be careful not to pull or pinch any wires when replacing the panel.
I. NU-VU® recommends that any replacement Control Sensor be tested for proper operation. It may be necessary to adjust the Temperature Control (refer to *TEMPERATURE CONTROL, How To Adjust*).

PROOFER TEMPERATURE OR HUMIDITY SENSOR, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the Side Access Panel [76] from the Control side of your unit and locate the appropriate Proofer Control Circuit Board behind the Proofer Control Access Panel (refer to Figure #7 on page 25). The Temperature Board is on top, the Humidity Board is on the bottom.
B. Follow the braided metal cable from the Circuit Board to locate the Temperature Control Sensor [9] or the Humidity Control Sensor [11] on the Proofer side wall behind the Side Rack/Ladder [63]. Remove the appropriate Sensor from the mounting bracket.
C. Carefully pull the old Sensor and its cable through the Proofer wall.
D. Unplug the Sensor wires from its Circuit Board and remove the old Sensor and cable from the unit.
E. Gently uncoil the new Sensor and its braided cable, *using extreme care not to kink, twist or damage it in any way!*
F. Feed the Sensor end of the new cable through the Proofer side wall and secure the Sensor in the mounting bracket.
G. Plug the wire terminals at the other end of the Sensor cable into the connections on the appropriate Control Circuit Board.

IMPORTANT: THE RED LEAD FROM THE SENSOR CABLE MUST BE INSTALLED ON THE TC "-" TERMINAL!

H. Use a high-temperature silicone or gasket sealant to seal the Sensor cables both inside and out where they pass through the Proofer side wall.
I. Replace the Side Access Panel. Be careful not to pull or pinch any wires when replacing the panel.
J. NU–VU® recommends that any replacement Temperature Control Sensor be tested for proper operation. It may be necessary to adjust the Temperature Control (refer to *TEMPERATURE CONTROL, How To Adjust*).

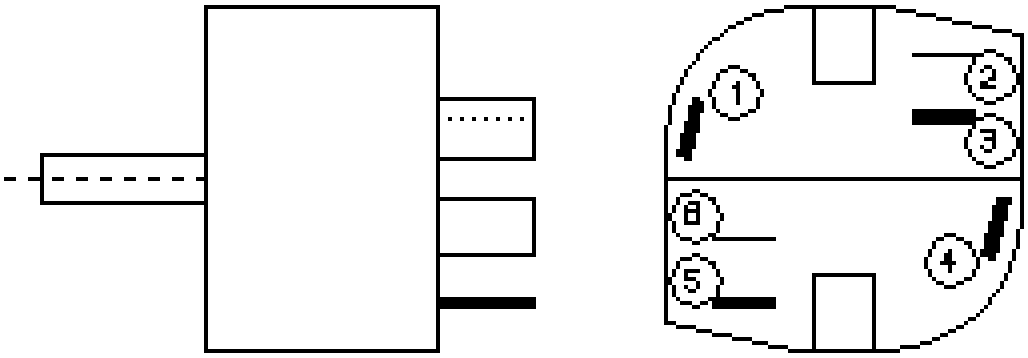

Fig. #12 – 60-MINUTE TIMER

TIMER, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the Knob of the defective Timer by pulling it straight out from the face of the Control Access Panel.
B. Remove the two mounting screws from the Oven Control Access Panel [73] and gently pull the Control Access Panel toward you.
C. Remove the two screws securing the Timer [24 or 36] to the Control Access Panel and pull the Timer out from the back of the panel.
D. Label and disconnect the Timer wiring, OR disconnect the wires one at a time and transfer them to the same location on the replacement Timer. Terminal "6" on back of the Timer should be connected to the Oven Power Switch [21] with a black wire. Terminal "4" on back of the Timer should be connected to a terminal on the appropriate Buzzer Alarm [16]. Make sure all connections are clean and tight.
E. Position the replacement Timer on the back side of the Control Access Panel and secure it in place with the two mounting screws.
F. Replace the Oven Control Access Panel and secure it in place with the two mounting screws. Be careful not to pull or pinch any wires when installing the panel. Install the Timer Knob by pushing it onto the end of the Timer Shaft.
G. Restore electrical power to the unit. Check the Timer by setting it for any time over five minutes and letting it run down. The Buzzer should sound when the Timer reaches "0".

NOTE: If the Buzzer sounds BEFORE the Timer reaches "0" or AFTER the Timer runs past "0" the Timer Knob can be adjusted by loosening the two Phillips-head screws on the back of the Knob, repositioning the clear index dial on the Knob, and tightening the screws.

BUZZER ALARM, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the two mounting screws from the Oven Control Access Panel [73] and gently pull the Control Access Panel toward you. The Buzzer Alarms [16] are located behind the Control Panel and just in front of the Oven Temperature Control Circuit Board [4]. The Oven Buzzer is on top.
B. Remove the two screws securing the defective Buzzer Alarm to the Control Access Panel and pull the Buzzer Alarm out from the back of the panel.

C. Label and disconnect the Buzzer wiring, OR disconnect the wires one at a time and transfer them to the same location on the replacement Buzzer. One terminal should lead back to "4" on back of a Timer [24 or 36]. The other should be connected to any common or group of common (white) wires. Make sure all connections are clean and tight.
D. Position the replacement Buzzer on the back side of the Control Access Panel and secure it in place with the two mounting screws.

NOTE: The Buzzer shaft is usually cut off due to space limitations. Please make sure the Buzzer shaft is turned completely clockwise (the highest volume setting) before installation.

E. Replace the Oven Control Access Panel and secure it in place with the two mounting screws. Be careful not to pull or pinch any wires when installing the panel.
F. Restore electrical power to the unit. Check the Buzzer by setting the appropriate Timer for any time over five minutes and letting it run down. The Buzzer Alarm should sound when that Timer reaches "**0**".

POWER SWITCH, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the two mounting screws on the Oven Control Access Panel [73] and gently pull the Control Access Panel toward you.
B. Label and disconnect all wires to the defective Oven Power Switch [21] or Proofer Power Switch [31].
C. Remove the defective Switch by depressing the spring locking tabs on the top and bottom of the Switch. The Switch should now exit through the front of the Control Panel.

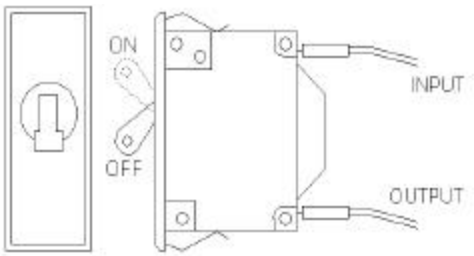

Fig. #13 – POWER SWITCH

D. Insert the replacement Switch from the front of the Control Panel and press it into place until the spring locking tabs are fully engaged with the panel.

NOTE: The replacement Power Switch must be installed so that the toggle is UP when the Breaker is set to the ON position.

E. Reconnect the wires as tagged. The wire at the bottom Breaker terminal should lead to a wire nut junction. The wire at the top terminal should come from the Power Terminal Block [1]. Make sure all connections are clean and tight.
F. Replace the Oven Control Access Panel and secure it with the two mounting screws. Be careful not to pull or pinch any wires when replacing the panel.
G. Restore electrical power to the unit and test the replacement Power Switch for proper operation.

DOOR MICRO SWITCH, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the Side Access Panel [76] and/or the Micro Switch Cover Plate [79] from the Hinge side of your unit. Carefully remove enough insulation from the side of the Oven to expose the Micro Switch [15] mounted in the Door jamb.
B. Loosen and remove the nut securing the Micro Switch in the jamb and remove the Micro Switch with its wiring.

C. Disconnect the wires one at a time and install them on the new Micro Switch. Make sure all connections are clean and tight.
D. Turn one mounting nut onto the Micro Switch until it is approximately half-way down the threaded shaft.
E. Position the Micro Switch in the Door jamb and install the second mounting nut until it is flush with the end of the threaded shaft. Now turn the first nut finger tight until the Micro Switch is snug in the Door jamb.
F. Check the Micro Switch position adjustment by opening and closing the Oven Door [41]. The Micro Switch should "click" on and off as the Oven Door [41] is opened and closed. Gently tighten the outside mounting nut when the Micro Switch is properly positioned.

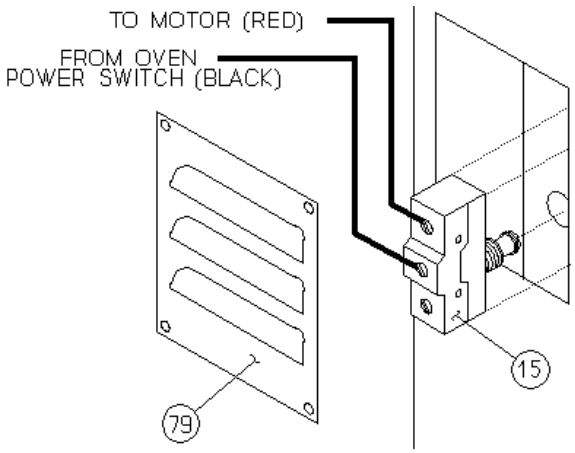

Fig. #14 – MICRO SWITCH

G. Carefully replace any disturbed Oven insulation, the Side Access Panel and/or the Micro Switch Cover Plate.
H. Restore electrical power to the unit and test the Door Micro Switch for proper operation.

INDICATOR LIGHT, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

The Indicator Lights tell when a system or control is activated. Failure of the Indicator Light itself will not affect the operation and performance of your equipment.

A. Remove the two mounting screws on the Control Access Panel [73 or 74] and gently pull the Control Access Panel toward you.
B. Tag and disconnect the wires on the defective Indicator Light.
C. Remove the defective Indicator Light by pushing it out the front of the Control Access Panel.
D. Install the replacement Indicator Light, wires first, from the front of the Control Access Panel until the metal collar on the Indicator Light is tight against the front of the panel.

WARNING: Do not pull on the Indicator Light wires while installing the Indicator Light.

E. Refasten the wire connections. Make sure all connections are clean and tight.
F. Replace the Control Access Panel and secure it with the two mounting screws. Be careful not to pull or pinch any wires when replacing the Control Access Panel.
G. Restore electrical power to the unit and test the Indicator Light and its associated Controls.

REPEAT CYCLE TIMER, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Remove the two mounting screws on the Proofer Control Access Panel [74] and gently pull the Control Access Panel toward you.
B. Locate the Repeat Cycle Timer [83] mounted directly below the Proofer Temperature Control Circuit Board [8] (refer to Figure #15 on page 37). Label and disconnect all wiring to the Repeat Cycle Timer.
C. Remove the slotted mounting screw in the center of the Repeat Cycle Timer and remove the Timer from the Proofer.

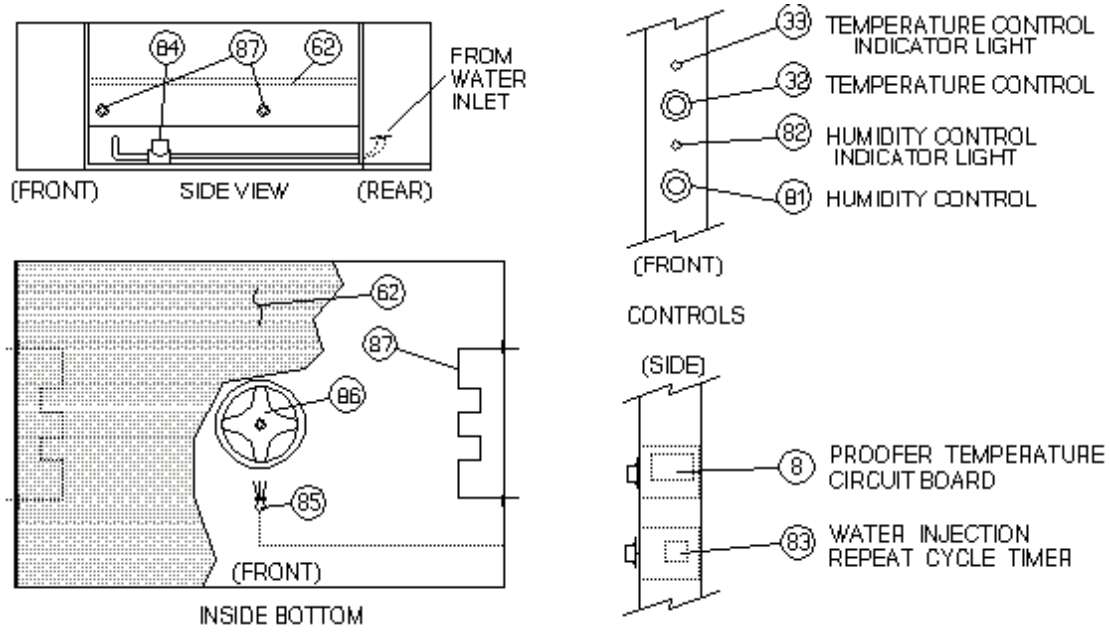

Fig. #15 – <u>AUTOMIST COMPONENTS</u>

D. Insert the mounting screw through the center of the replacement Repeat Cycle Timer and fasten the Timer to the mounting bracket. Do not overtighten the mounting screw or you may crack the Timer's plastic case.
E. Reconnect all electrical wiring as it is tagged. All connections must be clean and tight.
F. Replace the Control Access Panel. Be careful not to pull or pinch any wires when replacing the panel.
G. Restore electrical power to the unit and test the Repeat Cycle Timer and Humidity Control [81] for proper operation.

SOLENOID VALVE, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS <u>OFF</u>. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

A. Locate and turn **OFF** the main water supply to the Proofer.
B. Remove the Side Access Panel [76] from the Hinge side of your unit.
C. The Solenoid Valve [84] is an odd-shaped red, green and brass plumbing fixture mounted on the base of the unit. Label and disconnect the electrical wiring to the Solenoid Valve.
D. Loosen the copper tubing connections to the Solenoid Valve body and remove the plumbing from the Solenoid Valve.

   <u>NOTE:</u> Place a towel or other absorbent material under the Solenoid Valve to catch any water that may drain from the disconnected tubing. Protect all electrical components in the work area from water.

E. Remove the Solenoid Valve mounting screws and remove the Solenoid Valve from the Proofer.

   <u>IMPORTANT:</u> Make note of the <u>flow direction</u> before removing the Solenoid Valve.

F. Position the replacement Solenoid Valve in the Proofer and secure it into place. Make sure the flow direction as marked on the Solenoid Valve body is the same as that observed in step "E".

G. Position the plumbing connections on the Solenoid Valve body and snug them in place, *but do not over-tighten the fitting!* If any joint leaks when tested and further gentle tightening does not stop the leak the entire fitting must be replaced. If pipe dope or thread compound is used to create a leak-free joint use care not to get any sealant in the tubing itself. Any excess may be flushed through the tubing and cause the Solenoid Valve to stick or clog the Injection Nozzle [85].
H. Reconnect the wiring as labeled. Make sure all connections are clean and tight.
I. Restore the water supply to the unit. Check the plumbing for leaks on the intake side of the Solenoid Valve.
J. Restore electrical power to the unit and activate the Humidity Control [81]. Check the Solenoid Valve for proper operation and the plumbing for leaks on the outlet side of the Valve.
K. Wipe up any spilled water and replace the Side Access Panel. Be careful not to pull or pinch any wires when replacing the panel.

DOOR LATCH, How To Adjust:

Determine if the Oven Door [41] or Proofer Door [42] is fitting too loose (it will leak moisture and hot air past the Gasket) or too tight (it will not close properly, or will "pop" open unexpectedly). If it is too loose the Door Latch [44] must be adjusted OUT (away from the unit); if it is too tight the Door Latch must be adjusted IN (towards the unit). Please proceed as follows:

A. Loosen the two acorn nuts inside the Latch Cover [45] with a small box wrench. Pull the Latch Cover straight out from the Door to remove it and then remove the acorn nuts (refer to Figure #16 on page 39).
B. Open the Door and take careful notice of the adjustment plate position against the body of the Door Latch.
C. Hold the adjustment plate against the body of the Door Latch with one hand while you loosen the three mounting screws with the other hand. Back the screws out approximately three full turns.
D. CAREFULLY move the Door Latch body IN or OUT under the adjustment plate *one notch at a time*. Make sure the Door Latch stays straight up and down and tighten the mounting screws. Test the Door for proper closing and sealing (refer to the *DOOR TEST PROCEDURE*).
E. Repeat steps "C" and "D" if you are not satisfied with the Door adjustment. If the Door tests as satisfactory make sure the three mounting screws are tightened securely.
F. Install the acorn nuts on the ends of the top and bottom Door Latch screws. Turn the nuts on all the way until they just contact the back side of the latch bracket, then loosen them by 1½ to 2 full turns. Install the Latch Cover and tighten the acorn nuts lightly to hold the Latch Cover in place.

DOOR TEST PROCEDURE:

A. Cut one or two strips of paper approximately 1" wide and 8" to 10" long.
B. Open the Door slightly, insert a strip of paper between the Gasket [46] and Door Jamb and close the Door.
C. Slowly pull the paper strip out. You should feel some resistance as you pull the strip from between the Gasket and Door Jamb of a properly adjusted Door. Test the fit at regular 2" to 3" intervals around the entire Door.
    1. If you feel NO resistance at a particular spot the Door is too loose, you have found a weak or damaged spot in the Door Gasket or the Door Jamb has been bent in.
    2. If you feel HEAVY resistance at a particular spot the Door is too tight or the Door Jamb has been bent out.

DOOR LATCH, How To Replace:

A. Loosen the two acorn nuts inside the Latch Cover [45] with a small box wrench. Pull the Latch Cover straight out from the door to remove it and remove the two acorn nuts.
B. Loosen and remove the three screws securing the Door Latch [44] to the latch bracket. Remove the Door Latch and its adjustment plate.
C. Position the replacement Door Latch on the latch bracket. Align the holes in the adjustment plate with the holes in the Door Latch body and secure the adjustment plate and Door Latch to the latch bracket.
D. Adjust the replacement latch to obtain proper door sealing and closure (refer to *Door Latch, How To Adjust*). Tighten the mounting screws securely.
E. Install the acorn nuts on the ends of the top and bottom Door Latch screws. Turn the nuts on all the way until they just contact the back side of the latch bracket, then loosen them by 1½ to 2 full turns. Install the Latch Cover and tighten the acorn nuts lightly to hold the Latch Cover in place.

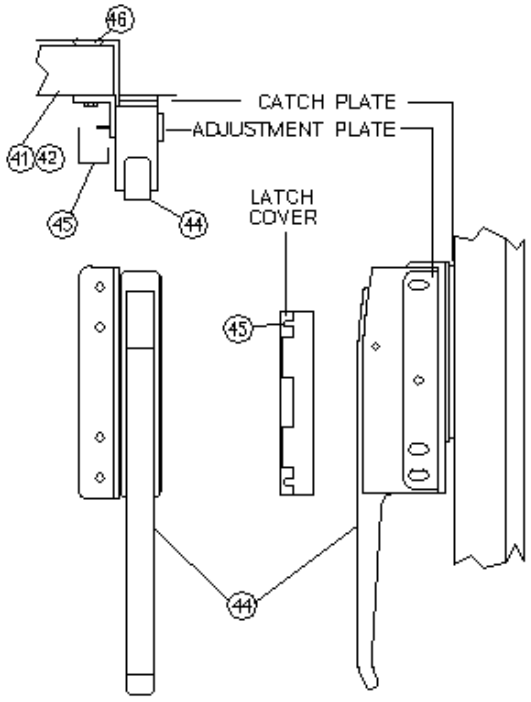

Fig. #16 – DOOR LATCH

DOOR LATCH CATCH PLATE, How To Replace:

A. Mark the location of the Catch Plate on the face of the unit. Remove the two Catch Plate mounting screws and remove the Catch Plate (refer to Figure #17).
B. Place the replacement Catch Plate on the face of the unit in the same position as the original.
C. Fasten the Catch Plate in place with the two mounting screws. Tighten them securely.

HINGES, How To Adjust:

Hinges on Flush-Mount Doors are preset at the NU-VU® factory and should not need adjustment. However, if you experience any problems with Door operation please call the NU-VU® Service Department for assistance at (800) 338-9886.

HINGES, How To Replace:

A. Open the Oven Door [41] or Proofer Door [42] until it is straight out from the face of the unit. Lift the Door straight up and off of the Door Hinge [43] pins.
B. Remove the bottom half of each Hinge (with the pivot pin) from the unit. Replace with the identical part from the new Hinge. Make sure the pivot pin points up and that the screws are fully seated and tight.
C. Remove the top half of each Hinge from the Door. Replace with the identical part from the new Hinge. Make sure that the screws are fully seated and tight.

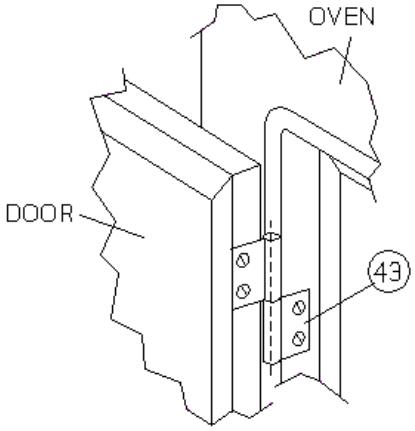

Fig. #17 – DOOR HINGE

D. Make sure that any washers provided with each replacement Hinge are installed on the pivot pin between the Hinge halves. Position the Door so that the sleeve of the top half of each Hinge is centered over the end of the pivot pin on the bottom half of each Hinge. Lower the Door onto the pivot pins. Work the Door back and forth to fully seat the Hinges.

E. Test the Door for proper closing and sealing (refer to the *DOOR TEST PROCEDURE*).

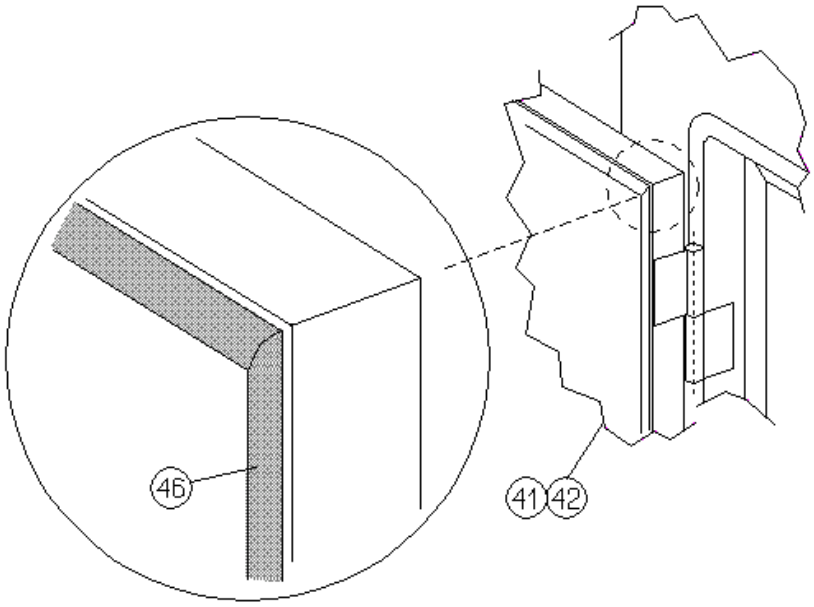

Fig. #18 – DOOR GASKET

DOOR GASKET, How To Replace:

Follow these instructions to correctly install your Door Gasket with minimal problems. Use the installation kit provided. If you have any problems or questions call NU-VU® at (800) 338–9886 and ask for the Service Department.

A. Remove all pieces of the old Gasket. Thoroughly clean the Door frame in the area of the new installation. Remove the old sealant and any baked-on deposits.

IMPORTANT: DO NOT DISASSEMBLE THE ACTUAL DOOR WHEN REPAIRING OR REPLACING THE DOOR GASKET!

B. Pre-cut the replacement Gasket to a size slightly longer than you require.

C. Put a small amount of soap water into and around the slot that the new Gasket will fit into (a small trigger spray bottle works well). This step is optional but will help in the installation.

D. Position the new Gasket over the slot, allowing the ends to extend past the end of the slot. Press the mounting flange down into the slot on the Door frame. Use a roller tool to force the mounting flange into the slot by working the tool back and forth along the Gasket. Make sure the Gasket mounting flange is completely fitted into the slot and that the Gasket is free to slide back and forth in the slot.

IMPORTANT: DO NOT STRETCH OR PULL ON THE GASKET DURING INSTALLATION. THIS WILL LATER CAUSE THE TRIMMED CORNERS TO SEPARATE AND PULL APART!

E. Use a sharp knife or a single-edged razor blade to cut the ends of the Gasket at a 45° angle (you can use the mitered corner joint on the Door as an angle guide). Cut the Gasket about ¼" longer than the required length and work the excess back into the slot. This extra Gasket will help to create a nice tight corner joint, and allows for any follow-up trimming that may be necessary.

F. Work your way around the entire Door (or the section of the Door having the Gasket replaced). Make sure the Gasket is just tight into the corners. A bulging joint or pucker along the Gasket indicates a Gasket section that is cut too long. Joints that pull apart indicate a Gasket section (or sections) that is cut too short.

IMPORTANT: MAKE SURE THAT THE GASKET AND THE DOOR FRAME ARE BOTH CLEAN AND COMPLETELY DRY BEFORE APPLYING ANY SEALANT!

G. Seal the corner joints after the entire Gasket is properly fitted. Pull the joints apart only enough to put sealant on all the *cut edges only*. Allow the Gasket joint to come together. Smooth out any excess sealant to form a smooth surface on the face of the Gasket. Add more sealant to any spots as necessary and smooth them down.

H. A quality sealant will be dry to the touch and tack-free in one to two hours after application. However, it will not be completely cured until six to eight hours later. We recommend that you wait until after your sealant is completely cured before using your Oven or Proofer.

WARNING: SOME SEALANTS GIVE OFF ACIDIC FUMES AS THEY CURE. THESE FUMES MAY CAUSE IRRITATION TO THE EYES AND/OR NASAL PASSAGES. USE CAUTION WHEN OPENING YOUR UNIT AFTER WAITING FOR ANY FRESH SEALANT TO SET UP AND/OR CURE!

CASTER, How To Replace:

MAKE SURE ALL POWER TO THE UNIT IS OFF. FAILURE TO DO SO MAY CAUSE SEVERE EQUIPMENT DAMAGE OR PERSONAL INJURY!

The Casters [77] on this unit are maintenance free. However, it is occasionally necessary to replace one or more due to shipping damage or improper handling. This can be done either by raising the unit off of the floor by one or two inches or laying the entire unit on its back.

To Raise Unit Off the Floor - -

A. Disconnect any service lines (electrical or water) to the unit. Move the unit to an area enabling you to reach the Caster to be replaced.

B. Engage all Caster locks.

C. With a small jack, or using the lever and fulcrum method (such as a length of board and a small wooden block), gently lift the affected side of the unit until the Caster is clear of the floor (1" is sufficient). Shim or block the bottom of the unit to hold it up and remove the lifting device. Lift and repair one side at a time.

IMPORTANT: LIFT AND REPAIR FROM THE SIDE ONLY WITH THE DOORS SECURELY TAPED CLOSED OR REMOVED. DO NOT LIFT UNIT FROM THE FRONT OR BACK. THE UNIT MAY OVER-BALANCE AND TIP OVER!

D. Complete the repair (see *To Replace Caster*) and reverse this procedure to lower the unit to the floor.

To Lay Unit Down - -

A. Disconnect any service lines (electrical or water) to the unit.
B. Move the unit to a level surface that provides a good work area.
C. Engage all Caster locks.
D. Remove the Side Access Panel [76] from the side of the unit with the defective Caster. Also remove any unnecessary weight from the unit such as pans, trays and shelves. Even the Doors can be lifted off.
E. Place a 2x4, stacked lumber or any similar item BEHIND the rear Casters and immediately under the back bottom edge of the unit. Have another piece handy to place under the top of the unit.
F. With plenty of help and extreme care gently tilt the unit back onto the spacer behind the Casters and lower it to the floor. Allow it to rest on the second spacer (keep this spacer as close to the top of the unit as possible to avoid damage to the outside back).
G. Complete the repair (refer to *TO REPLACE CASTER*) and reverse this procedure to stand the unit upright. It is a wise precaution to station someone in front of the unit while it is being raised to prevent the unit from skipping out at the bottom.

To Replace Caster - -

A. Remove the Side Access Panel [76] from the side of the unit with the defective Caster.
B. Remove all weight from the affected Caster (see *To Raise Unit...* or *To Lay Unit Down*).
C. Use a 7/16" wrench or socket to remove the four nuts on the Caster mounting bolts. Remove the mounting bolts from the base of the unit and remove the defective Caster.
D. Position the replacement Caster under the unit base and insert the mounting bolts. Install and tighten the nuts.
E. Replace the Side Access Panel. Be careful not to pull or pinch any wires when replacing this Panel.

NU-VU® EQUIPMENT WARRANTY

NU-VU® products are warranted against defects in workmanship and materials. No other express warranty, written or oral, applies. No person is authorized to give any other warranty or assume any other liability on behalf of NU-VU®, except by written statement from an officer of NU-VU®.

Your NU-VU® equipment warranty is limited to the following time periods for the original owner only:

	PARTS	LABOR
Inside the United States	24 Months	12 Months
All areas outside the United States	12 Months	12 Months

These time limits will apply in all cases unless prior arrangements have been made and agreed to in writing.

The NU-VU® equipment warranty is composed of the following:

PARTS:

This limited warranty covers certain electrical, electronic and mechanical parts for the time period listed above, *excluding light bulbs, fuses, and gaskets*. Customers who maintain an open account may purchase against their account. MasterCard, Visa and American Express credit cards are also accepted

The return of defective parts is required. The return of a defective part or component must be made prior to the issuance of a credit on an open account. If a part that is returned tests satisfactory in the NU-VU® factory or at an authorized NU–VU® dealer or service agency, NU-VU® may withhold issuing credit. Replacement parts will be warranted for a period of *six (6) months* provided they are installed and used in a manner authorized by NU–VU®.

LABOR:

We require that you call our NU-VU® Service Department at (800) 338-9886 for service authorization BEFORE you call any service agency if you wish to claim a labor expense under this warranty. We may be able to solve your problem over the telephone, or we will schedule a service call by a reliable service agency in your area.

This warranty covers the replacement and installation of those parts and components included under **PARTS** for the appropriate time period as listed above. This coverage is limited to the normal mileage allowance for a maximum travel radius of up to fifty (50) miles, and the normal labor rate times the allowable hours for performing the work as set forth in the following listing:

STANDARD TIME ALLOWANCES FOR WARRANTY REPLACEMENTS

Change performed	Change time	Test time	Total time
Oven Heating Element	1 hr.	½ hr.	1½ hr.
Oven Motor/Rebalance Fan	1 hr.	½ hr.	1½ hr.
Solid State Control	½ hr.	½ hr.	1 hr.
Control Sensor	½ hr.	½ hr.	1 hr.
Proofer Heating Element	½ hr.	½ hr.	1 hr.
Contactor/Relay	½ hr.	5 min.	½ hr.
Proofer Motor	½ hr.	5 min.	½ hr.
Power Switch	¼ hr.	5 min.	¼ hr.
Indicator Light	¼ hr.	5 min.	¼ hr.

These times are based on servicing a unit that has been installed with allowance made for Access Panels on the unit. If the unit is built into a wall that makes servicing very difficult or impossible without removing part of the counter, wall, trim, etc., the extra time for gaining access shall be charged to the owner of the unit. NU-VU® has determined that the listed times, which are based on the period necessary for a trained service person to perform the work noted, are fair and reasonable. If a problem is not diagnosed within one half hour, the service person must contact the NU-VU® Service Department via telephone. Additional time for problem solving will not be allowed unless this procedure is followed. An appointment for servicing a unit should be set up since time will not be allowed for waiting to service a unit. Unless the service person justifies extra time for performing the work noted, charges for work performed by the service person in excess of the allowed time shall either be billed to the owner of the equipment or denied.

IMPORTANT: NU-VU® WILL NOT PAY FOR ANY SERVICE CALLS AS WARRANTY WORK IF AN AUTHORIZED SERVICE AGENCY DETERMINES THAT YOUR EQUIPMENT IS SET UP AND OPERATING PROPERLY!

WARRANTY LIMITATIONS:

NU-VU® will pay for parts and labor under warranty if there is a defective part or component, but not for:

- Normal operational wear and tear on the following parts:
  - Light bulbs and fuses
  - Door handles, catches and gaskets
- Damage attributable to customer abuse, including -
  - Proofer water pan allowed to run dry and burn.
  - Proofer fan motor damaged from not following outlined Dry-Out Procedure.
  - Lack of regular cleaning and/or maintenance.
- Power supply problems, including –
  - Insufficient or incorrect voltage.
  - Damage to electrical components caused by a power surge or spike.
  - Incorrect installation (i.e., equipment not supplied with separate neutral or ground as required, or incorrect location of high-voltage power leg for 240-volt 3-phase units).
  - Damage to electrical components resulting from use of an incorrect power supply cord or circuit breaker.
- Operational problems resulting from customer's failure to follow established procedures outlined in the Owner's Manual.
- A service call if nothing is found to be wrong (any returned parts work as per spec when tested).
- Recalibration of temperature and humidity controls (all controls are carefully calibrated and tested at our facility before shipment).
- Any equipment moved from the place of original installation unless NU-VU® agrees in writing to continue the warranty after the relocation.
- Ongoing operational adjustments due to changing environmental conditions or normal wear and tear.
- Any overtime charges. NU-VU® will pay straight time only for any work performed on NU-VU® equipment.

Products must be installed and maintained in accordance with NU-VU® instructions. Users are responsible for the suitability of the products to their application. There is no warranty against damage resulting from accident, abuse, alteration, misapplication, inadequate storage prior to installation, or improper specification or other operating conditions beyond our immediate control. Claims against carriers damage in transit must be filed by the buyer; therefore, the buyer **must inspect** the product immediately upon receipt.

THIS WARRANTY DOES NOT COVER ADJUSTMENTS DUE TO NORMAL ON-GOING USE OF THE UNIT!!!

PARTS RETURN PROCEDURE AND CONDITIONS:

The following procedure shall be followed for the return of parts to the factory for credit consideration:

- All parts received by NU-VU® must have a completed RETURN AUTHORIZATION FORM as supplied by NU-VU® with the replacement part.
- Package all return parts securely so that in-transit damage cannot occur.
- Prepay shipment. Any parts returned collect will be refused by our receiving department. Credit will be considered on proper returns only.
- As soon as parts are tested and confirmed to be defective credit will be issued against them.
- If the engineering test shows the component is not defective and is in good working condition it may be returned to you along with your request for payment.

REPLACEMENT PARTS LIST

(SUBWAY OP–2FM)

Reference #	Description	Replacement Part #

Electrical Components - -

1	Power Terminal Block	50-0237
2	Ground Lug	50-0062
3	Contactor	66-2013
4	Oven Temperature Control Circuit Board	252-5001
	Circuit Board Fuse, .5 amp	66-2015
5	Oven Temperature Control Sensor	252-3001
6	Oven Heating Element:	
	208v, 2000w	251-1005
	240v, 2000w	251-1002
7	Oven Motor *	66-5035
8	Proofer Temperature Control Circuit Board	252-4001
	Circuit Board Fuse, .5 amp	66-2015
9	Proofer Temperature Control Sensor	252-3001
10	Proofer Humidity Control Circuit Board	252-4001
	Circuit Board Fuse, .5 amp	66-2015
11	Proofer Humidity Control Sensor	252-3001
12	Proofer Heat Element (120v 255w)	60-0002-1
13	Proofer Humidity Element Assembly (120v 625w) †	251-2001
14	Proofer Motor Assembly (Manual Fill only) ‡	250-2004
15	Door Micro Switch	252-2004
16	Buzzer Alarm	252-1003
17	Thermal Overload Safety	66-1014
18	Light Fixture:	
	Bulb Socket w/Globe	252-7003
	Globe Only	50-1021
	Globe Gasket	70-0317
	Light Bulb (120v, 40w)	50-0695
19	Fuse Holder	50-0368
	20-amp Fuse	50-0369
20	Surge Suppressor (optional)	50-0939

* Supplied with MOTOR MOUNT and BLOWER WHEEL in Kit #250-1002.

† Supplied with SUPPORT PAN and ADAPTER RING.

‡ Supplied with MOTOR MOUNT and FAN BLADE.

(refer to page 48 for AUTOMIST components)

*** * * NOTICE * * ***

Please supply the Serial Number, Model Number and Manufacture Date Code from the side-mounted nameplate of your NU-VU® Oven/Proofer when ordering replacement parts or requesting service for your NU-VU® equipment.

Oven Control Components - -

21	Oven Power Switch	252-6001
22	Temperature Control	252-5001
	Control Knob	253-2003
23	Temperature Control Indicator Light	50-0029-A
24	Oven Timer (60-Minute)	252-1004
	Timer Knob	253-2002

Proofer Control Components - -

31	Proofer Power Switch	252-6001
32	Temperature Control	252-4001
	Control Knob	253-2003
33	Temperature Control Indicator Light	50-0029-A
34	Humidity Control	252-4001
	Control Knob	253-2003
35	Humidity Control Indicator Light	50-0029-A
36	Proofer Timer (60-Minute)	252-1004
	Timer Knob	253-2002

Door Components - -

41	Oven Door:	
	Hinged Left	21-1900
	Hinged Right	21-1920
42	Proofer Door:	
	Hinged Left	21-1950
	Hinged Right	21-1960
43	Hinge:	
	Left side	50-0210-B
	Right side	50-0211-B
	Hinge Reversing Kit:	
	Right to Left	21-7045
	Left to Right	21-7046
44	Latch/Catch Assembly	254-2007
45	Latch Cover	21-1024
46	Door Gasket	254-1001

*** * * NOTICE * * ***

Please supply the Serial Number, Model Number and Manufacture Date Code from the side-mounted nameplate of your NU-VU® Oven/Proofer when ordering replacement parts or requesting service for your NU-VU® equipment.

Oven Interior Components - -

51	Oven Blower Wheel *	50-0444
52	Element Cover	21-0452
53	Oven Side Wall Assy:	
	Right	21-0414
	Left	21-0415

* Supplied with MOTOR and MOTOR MOUNT in Kit #250-1002.

Proofer Interior Components - -

61	Proofer Fan Blade †	50-0367
62	Element Cover:	
	Manual Fill	21-3014
	AUTOMIST	21-8036
63	Side Rack/Ladder:	
	Light side	21-3016
	Non-Light side	21-1013
64	Water Pan, Manual Fill only (size x 2½")	50-0074
65	Shelf	21-0429-A

† Supplied with MOTOR and MOTOR MOUNT in Kit #250-2004.

General Exterior Components - -

71	Outside Top	21-1085
72	Motor Cover	21-8024
73	Oven Control Access Panel:	
	Right Side	21-1034
	Left Side	21-1134
74	Proofer Control Access Panel:	
	Right Side	21-1035
	Left Side	21-1135
75	Mounting Bracket	21-0310
76	Side Access Panel	21-0600
77	Caster	50-0058
78	Water Fitting	31-0058
79	Micro Switch Cover Plate	98-0103
80	Drain Pan	50-0547

AUTOMIST Option Components - -

81	Humidity Control	252-3003
82	Humidity Control Indicator Light	50-0029-A
83	Repeat Cycle Timer	66-8012
84	Solenoid Valve	50-0308
85	Humidity Injection Nozzle	31-0033
86	Blower Wheel (6" Aluminum Squirrel Cage) ‡	50-0362-A
87	Proofer Heating Element (120 volt 600 watt)	60-0001-1

‡ Supplied with MOTOR and MOTOR MOUNT in Kit #250-2010.

*** * * NOTICE * * ***

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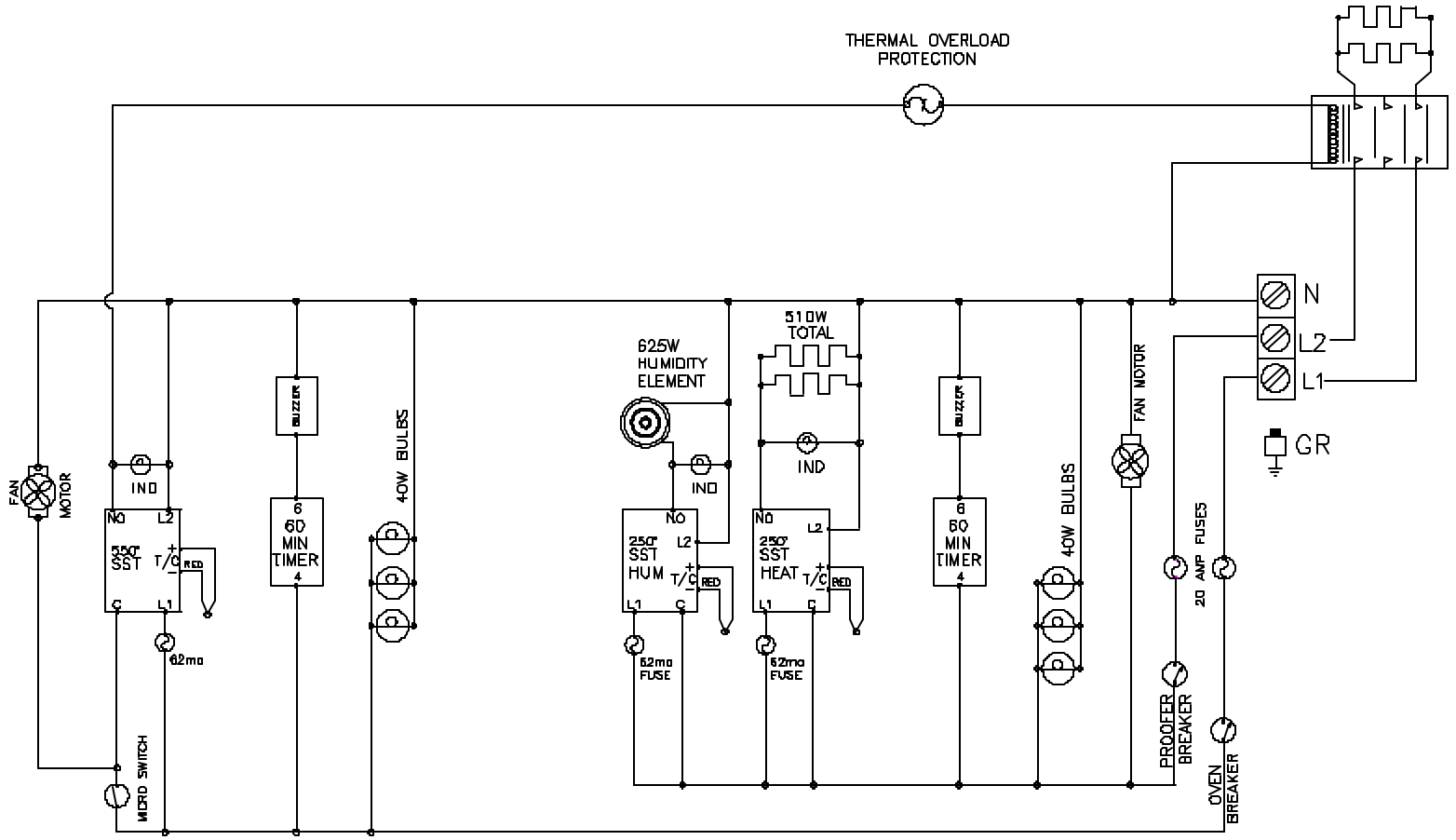
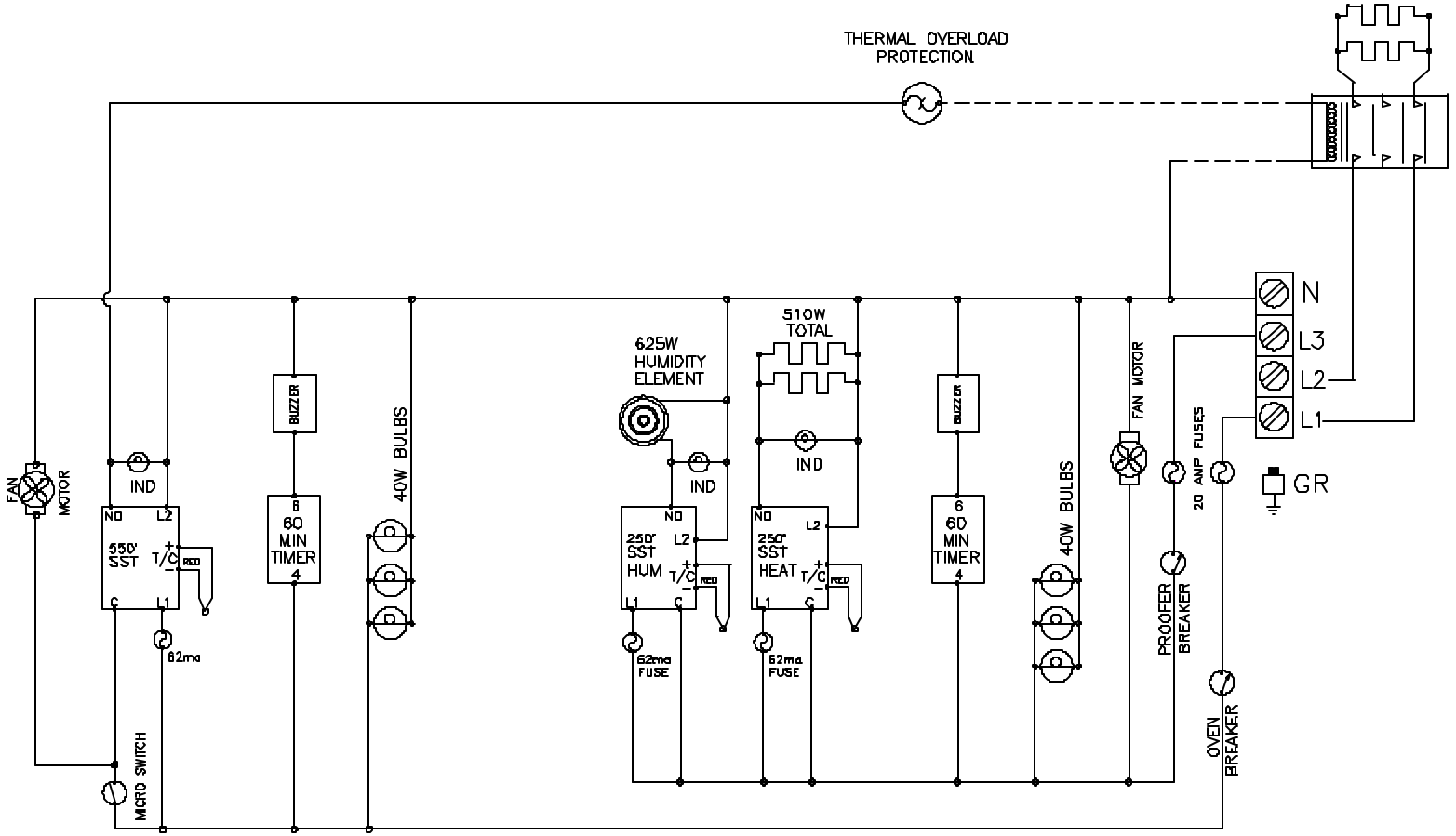


NU-VU Food Service Systems 5800 13th STREET MENOMINEE, MICHIGAN 49858	REV.	DESCRIPTION	CHANGED BY	DRAWN BY: TEZ	VOLTAGE: 120/208-240
	E			CHECKED:	PHASE: SINGLE
			DATE	DATE: 7-31-00	WATTAGE:
				BOM FILE #	CONTROLS: SOLID STATE

MODEL #: OP-2FM
CUSTOMER SUBWAY
MANUAL FILL
DWG. NO. 121-D0091



NU-VU Food Service Systems 5800 13th STREET MENOMINEE, MICHIGAN 49858	REV.	DESCRIPTION	CHANGED BY	DRAWN BY: TEZ	VOLTAGE: 120/208-240	MODEL #: OP-2FM
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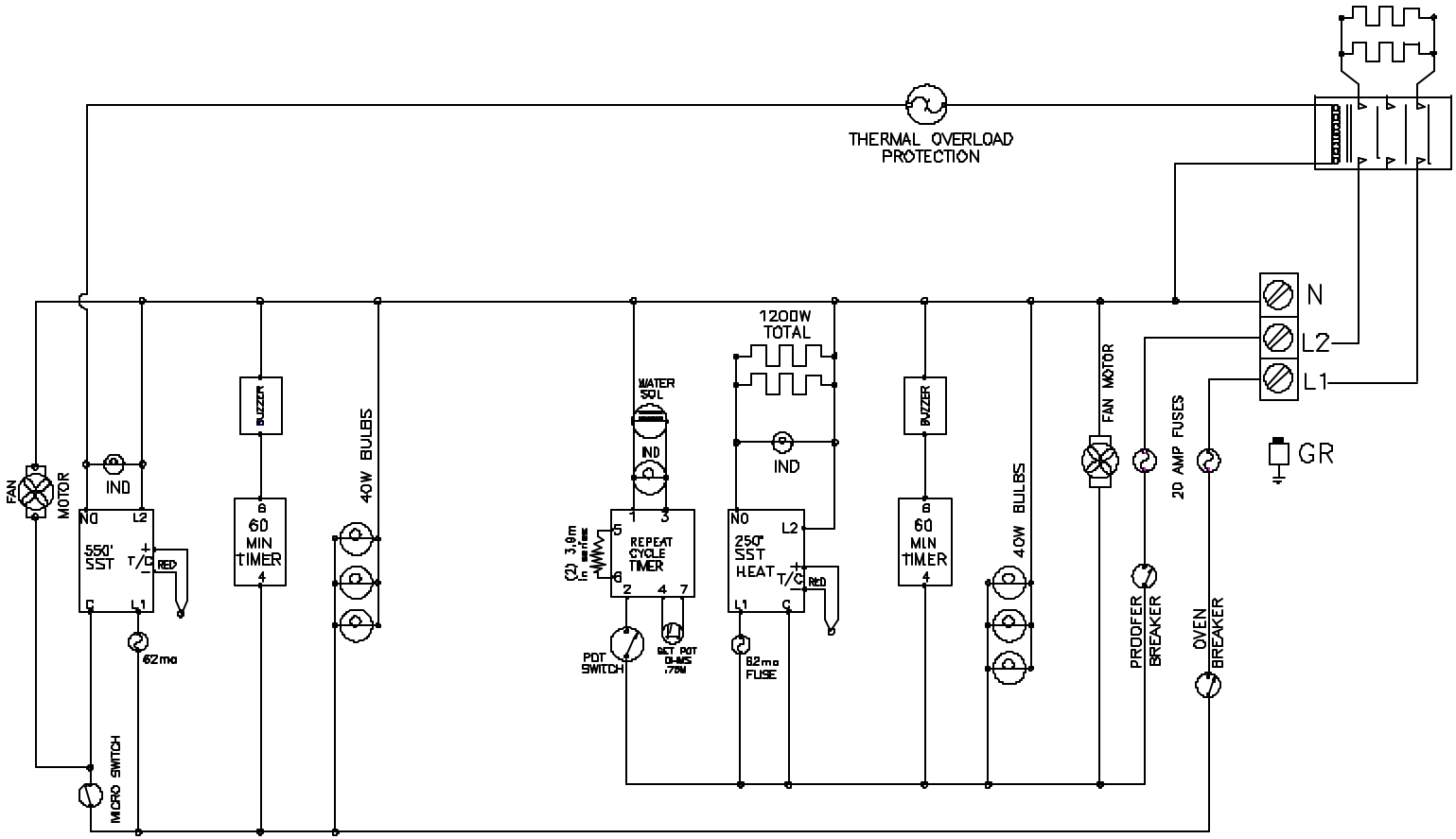
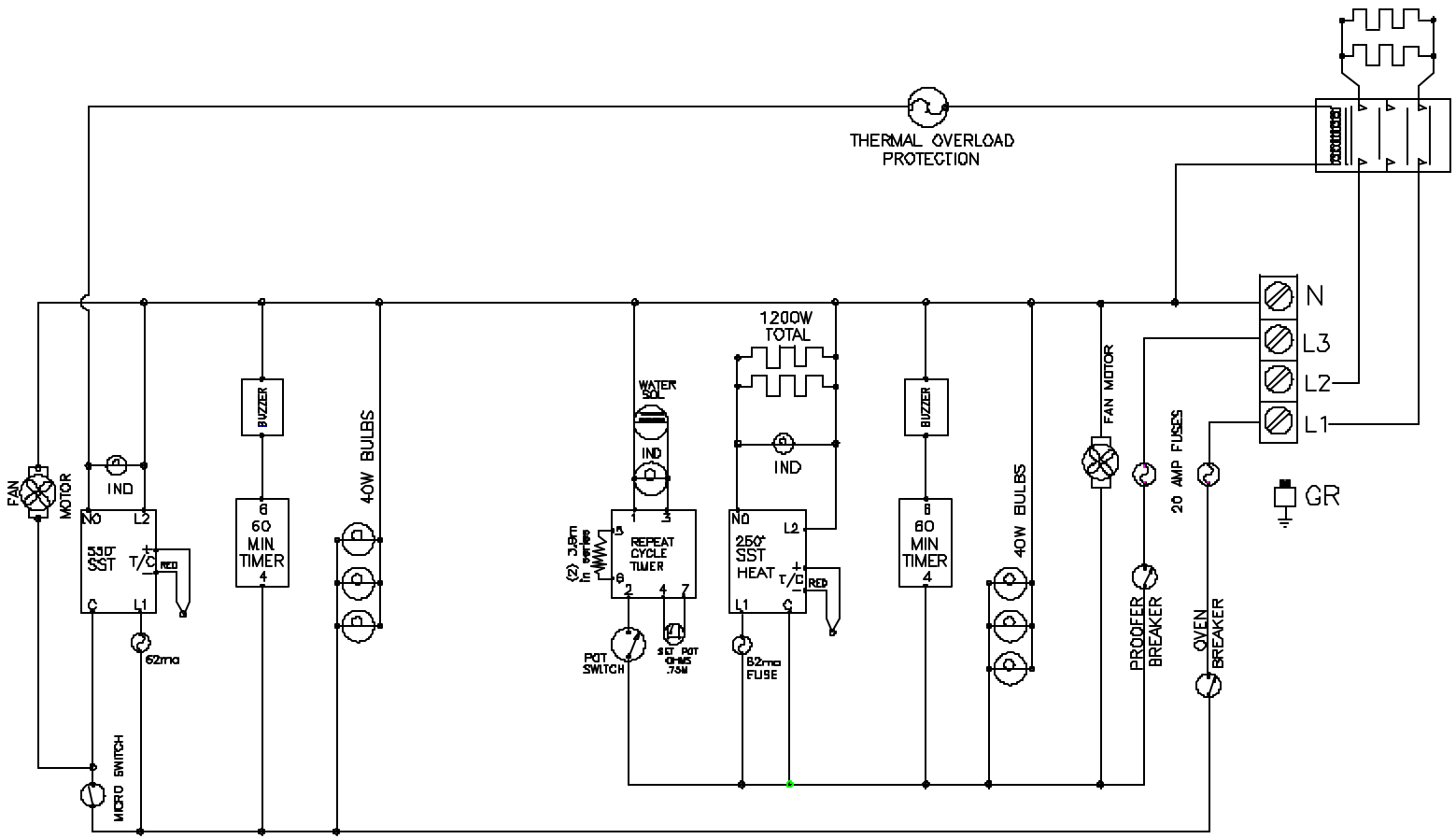


NU-VU Food Service Systems 5600 13th STREET MENOMINEE, MICHIGAN 49858	REV.	DESCRIPTION	CHANGED BY	DRAWN BY: TEZ	VOLTAGE: 120/208-240	MODEL #: OP-2FM
				CHECKED:	PHASE: SINGLE	CUSTOMER SUBWAY
	E		DATE	DATE: 8-23-00	WATTAGE:	AUTOMIST
				BOM FILE #	CONTROLS: SOLID STATE	DWG. NO. 121-DD111



NU-VU Food Service Systems 5600 13th STREET MENOMINEE, MICHIGAN 49858	REV.	DESCRIPTION	CHANGED BY	DRAWN BY: TEZ	VOLTAGE: 120/208-240	MODEL #: OP-2FM
				CHECKED:	PHASE: THREE	CUSTOMER SUBWAY
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				BOM FILE #	CONTROLS: SOLID STATE	DWG. NO. 121-D0093