

## Door Com 3-Station Door-Answering Intercom

### MODEL: IK-25 SERIES

Includes: Master Speaker, Remote Speaker, Door Speaker and Transformer

#### LOCATION

1. Locate the Inside Speakers wherever it is convenient. Install speakers at an easy operating height – approximately 60" from the floor.
2. Locate the Door Speaker on an even mounting surface close to the door. The mounting surface should be wide enough for the speaker. Mount the Door Speaker at a height for easy pushbutton operation.
3. Try to locate the speaker where running the wires will not be a problem.
4. **IMPORTANT: Maximum cable length between Master and Remote inside speakers is 100 ft (50 ft if a door release is used). Maximum cable length between Door speaker and Master speaker is 300 ft. Do not locate speakers back-to-back on the same wall.**

#### WIRING INSTALLATION AND CONNECTIONS

1. Turn off the house power at its source and leave it off until installation is complete.
2. All wiring must comply with local codes.
3. Carefully fasten wiring to wall studs and ceiling joists. Avoid short circuits caused by staples, nails, or clips cutting through the wiring's insulation.

#### WIRING CAUTIONS

**NOTE:** This section contains wiring instructions for a basic system: transformer, master speaker, inside remote speaker, and door speaker. If the system requires the optional door release or the optional lighted door speaker pushbutton, see "Optional Door Release," or "Optional Lighted Pushbutton."

#### TRANSFORMER WIRING

1. Install the supplied 16 volt transformer. Mount transformer to a junction box or circuit breaker box. **Do not mount the transformer in a high temperature area (i.e., attic, crawl space).**

2. Connect 120VAC house power wiring to the transformer's primary leads.
3. **Refer to Figure 1.** Connect NuTone IW-2 (22 gauge, two-conductor, twisted-pair, 100 ft max.) between the transformer's secondary terminals and a BLACK and WHITE wire at the Master Speaker.

#### DOOR SPEAKER WIRING

1. **Refer to Figure 1.** Run IW-2 cable (300 ft max.) between the Door Speaker location and the Master Speaker location.
2. Connect the BROWN Door Speaker wires to the GREEN and ORANGE Master Speaker wires.

#### MASTER AND REMOTE SPEAKER WIRING

**IMPORTANT:** NuTone cannot be responsible for improper intercom operation that results from interference generated by light dimmers, fluorescent lighting fixtures, and similar electrical products, such interference must be corrected at the source. As an aid to help reduce this interference, all remote cables must be placed at least 12 inches from any A.C. power wiring.

The Intercom System is designed to be used only with NuTone specified wire. No other wire should be used. The use of wire other than NuTone wire may result in faulty installation and improper operation.

1. Run NuTone IW-6 (3-Twisted Pair, 6-wire, 22 gauge cable) from the Master Speaker location to the Remote Inside Speaker location. (Maximum cable length is 100 ft (50 ft if a door release is used).
2. **Refer to Figure 1.** Connect the IW-6 color-coded wires to matching color-coded wires at both the Master Speaker and the Inside Remote Speaker. (i.e., orange to orange; orange/white to orange/white, etc.). **NOTE: If the Door Release option is not used, do not connect the RED wires.** See "Optional Door Release," page 3.

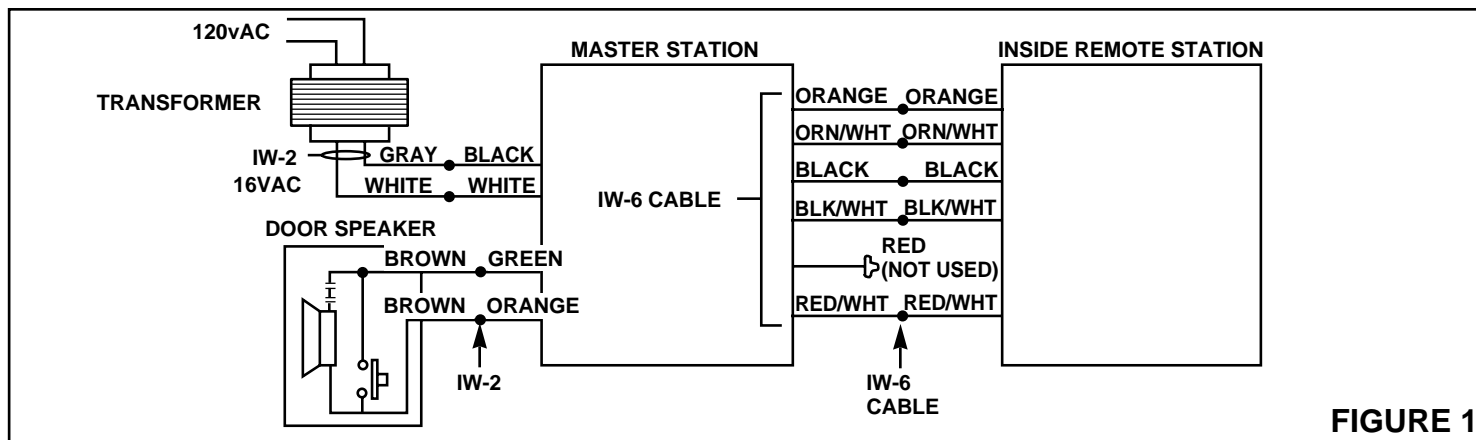


FIGURE 1

## MOUNTING THE SPEAKERS

### DOOR SPEAKER

Refer to Figure 2.

1. Once the Door Speaker wiring is connected, the speaker can be mounted.
2. Make sure speaker is mounted to a flat surface.
3. Use two supplied screws through bosses to mount speaker to surface. Use anchors (not supplied) if necessary.
4. Remove nameplate and namecard from Door Speaker. Write name on card and insert into nameplate. Snap nameplate into place.

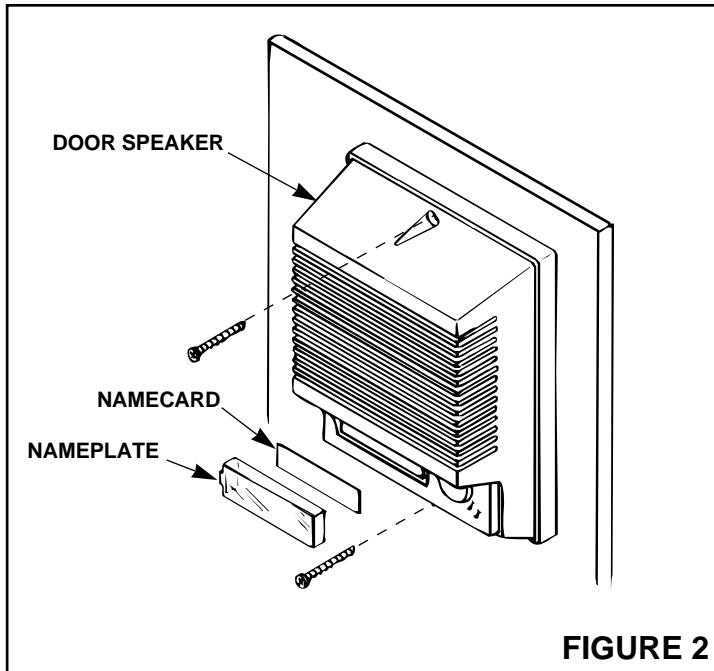


FIGURE 2

### MASTER AND INSIDE REMOTE SPEAKERS

Refer to Figure 3.

1. Once the Master and Inside Remote Speaker wiring is connected, the speakers can be mounted.
2. Use two supplied screws through bosses to mount each speaker to wall. Use anchors (not supplied) if necessary.

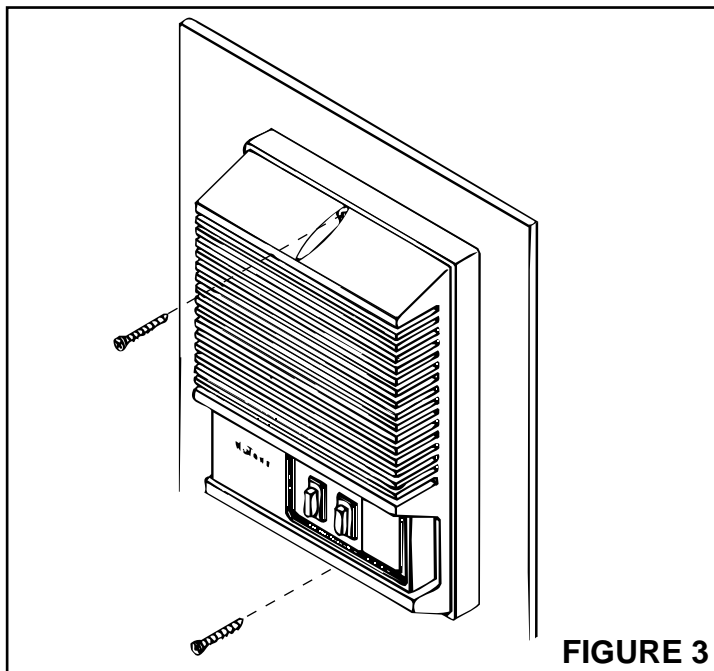


FIGURE 3

## OPTIONAL LIGHTED PUSHBUTTON

The Door Speaker's pushbutton will accommodate a bulb (Model PBL-2) if the user desires a lighted pushbutton. A lighted Door Speaker pushbutton requires: bulb installation and two (2) additional wires from the Door Speaker's pushbutton terminals to the Master Speaker.

### BULB INSTALLATION

Refer to Figure 4.

1. Twist the terminal base to unlock it from the pushbutton.
2. Insert the bulb (NuTone PBL-2) into the terminal base. Make sure each bulb wire contacts a socket plate.
3. Replace terminal base and twist to lock in place.

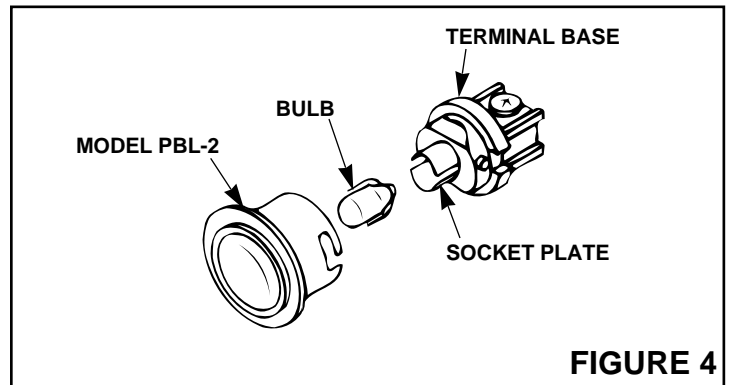


FIGURE 4

### WIRING

Refer to Figure 5.

1. Run two IW-2 cables (max. 300 ft) from the Door Speaker to the Master Speaker.
2. Remove two screws from the pushbutton terminals and disconnect the two **BROWN** wires. Insulate terminals on **BROWN** wires with tape. Reinstall pushbutton screws.
3. Connect the **two** Door Speaker **BROWN** wires to the Master Speaker's **GREEN** and **ORANGE** wires.
4. Connect the two pushbutton wires to the Master Speaker's **BROWN** (unstripped) wire and to Master Speaker's **BLACK** and transformer secondary (3-wire connection).
5. Mount the Door Speaker as described in section "Mounting the Speakers".

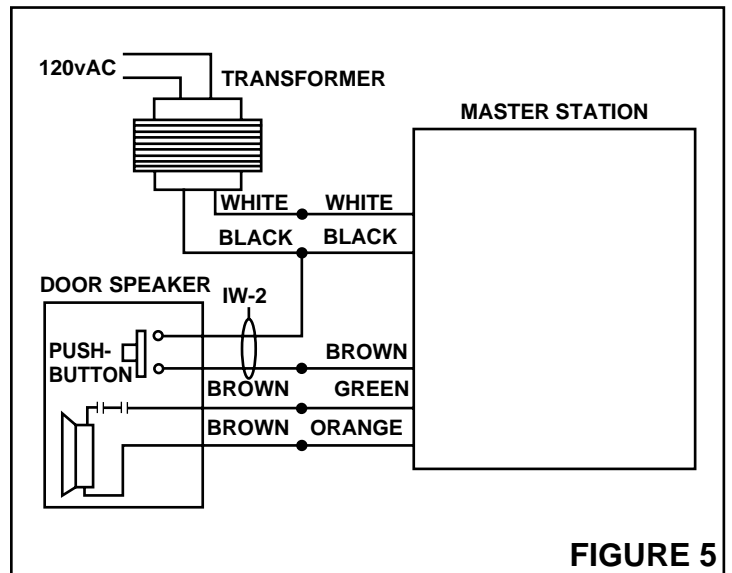


FIGURE 5

## OPTIONAL DOOR RELEASE

An optional door release feature may be added to the IK-25 system. This feature requires the addition of a Model IM-25SW door-release pushbutton at the inside speakers and a NuTone Model DR-1 Door Release at the door. All are purchased separately.

### IM-25SW PUSHBUTTON INSTALLATION

#### At the Master

##### Refer to Figure 6.

1. Remove the insert panel from the Master Speaker.
2. Insert pushbutton into hole in Master Speaker.

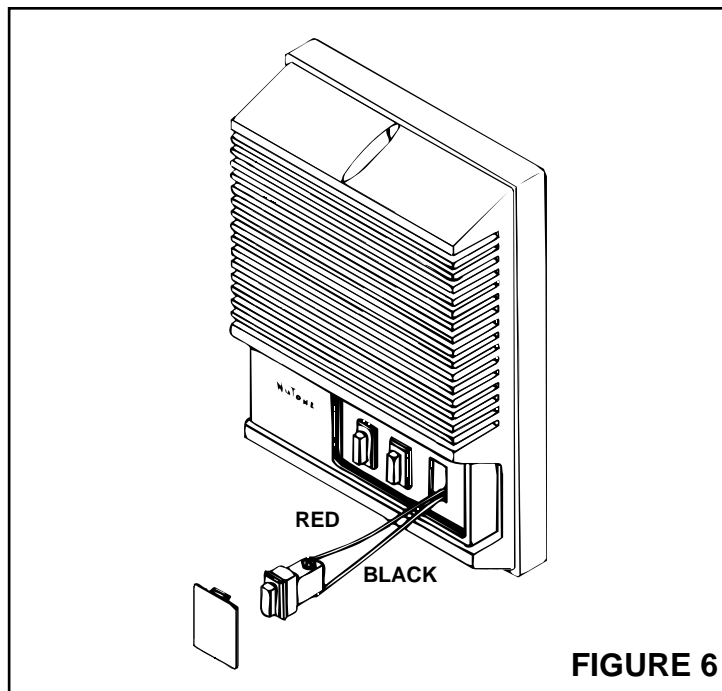


FIGURE 6

#### At the Remote

##### Refer to Figure 7.

1. Remove insert panel from the Remote Speaker.
2. Insert pushbutton into hole in Remote Speaker.

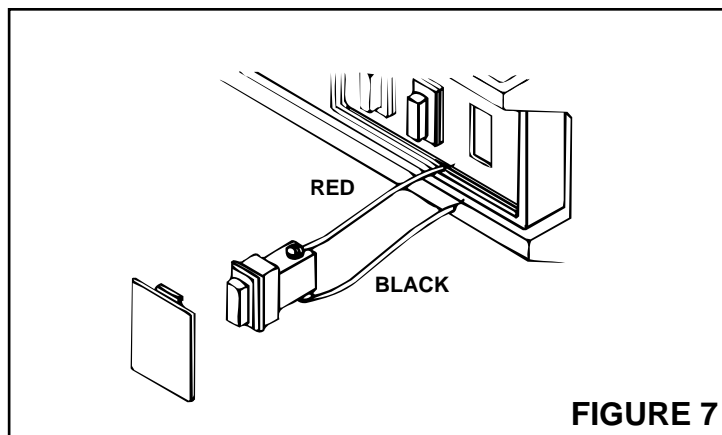


FIGURE 7

#### At the Door

1. Install Model DR-1 Door Release according to instructions packaged with that Model.

## WIRING

1. Connect wiring from Remote Speaker to Master Speaker as shown in Figure 8, (50 ft maximum).
2. Make wiring connections at the Remote Speaker as shown in Figure 9.
3. Refer to Figure 8. Connect the Master Speaker's RED and VIOLET wires to the Door Release leads (maximum IW-2 door release cable length is 50 ft. Use S-143 (18 ga.) cable for lengths up to 100 ft).

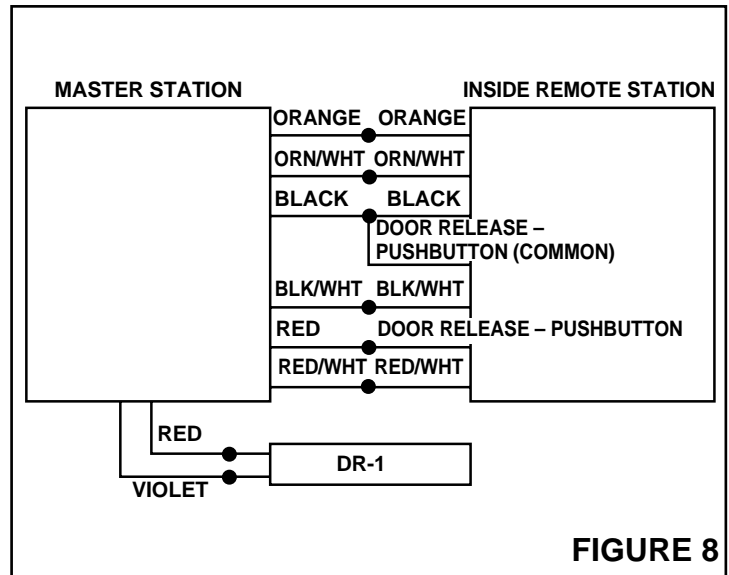


FIGURE 8

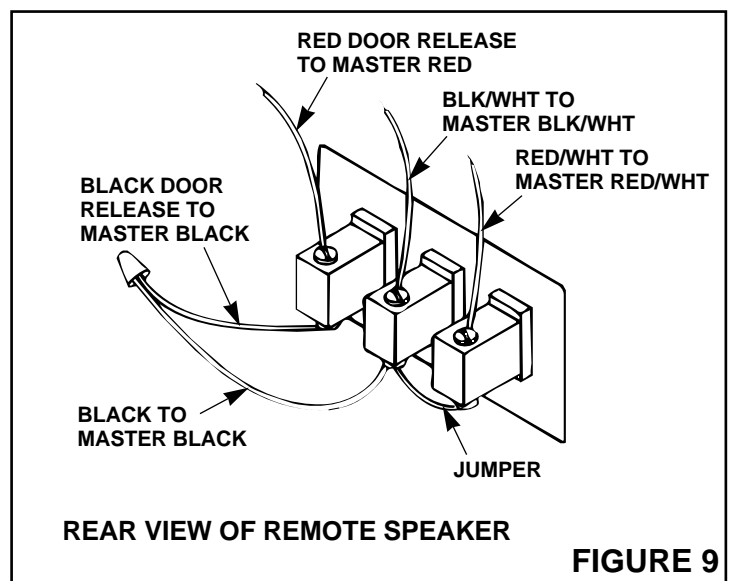


FIGURE 9

## ADDITIONAL DOOR SPEAKER

An additional door speaker (NuTone Model IS-68, sold separately) may be added to this system for a total of two door speakers.

## TIMEOUT AND VOLUME ADJUSTMENTS

### TIMEOUT

Refer to Figure 10.

The Door Speaker operates "hands-free." The intercom conversation is controlled by the Master Speaker. Operation is as follows: To speak to the Door Speaker, depress the **DOOR TALK** button. To listen to the Door Speaker, release the **DOOR TALK** button.

When the **DOOR TALK** button is released, the Door Speaker will be active until it times out. This timeout period is factory-set for approximately 15 seconds.

If the owner desires a longer timeout period, it can be adjusted up to 35 seconds. Adjust timeout by turning **TIMEOUT** thumbwheel pot clockwise to increase time.

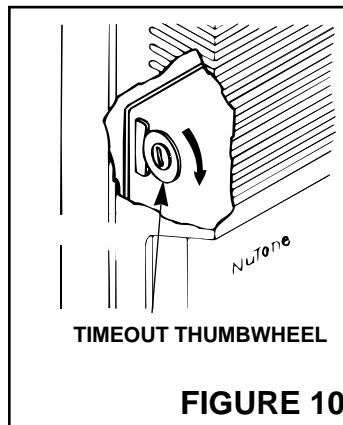


FIGURE 10

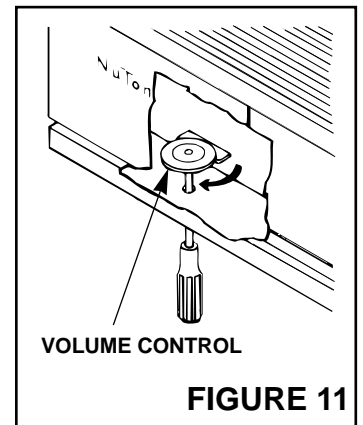


FIGURE 11

### VOLUME

Refer to Figure 11.

The volume is factory set. However, if the intercom volume needs to be adjusted, use a screwdriver through the hole in the bottom of the speaker to make the adjustment. Turn clockwise to **INCREASE** volume.

### OPERATION

Refer to Figure 12. **Inside Speaker to Inside Speaker** –

To talk from one inside speaker to the other, depress the **INSIDE TALK** button. Keep the button depressed while speaking; release the button to hear reply. The person making a reply must also depress **INSIDE TALK** to speak.

While the **INSIDE TALK** buttons are depressed, the door speaker will be disconnected. When the **INSIDE TALK** buttons are released, both inside speakers will be in the "listen to the door mode" until the system times out.

**Inside Speaker to Door Speaker** – To speak from an inside speaker to the door speaker depress the **DOOR TALK** button. To listen to the door speaker, release the **DOOR TALK** button.

**Optional Door Release** – Depress the **DOOR RELEASE** as long as entrance requires.

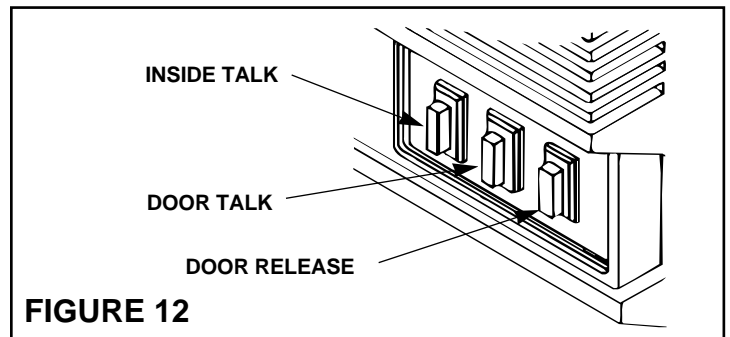


FIGURE 12

# NuTone®

## Two Year Limited Warranty

**WARRANTY OWNER:** NuTone warrants to the original consumer purchaser of its products that such products will be free from defects in materials or workmanship for a period of two (2) years from the date of original purchase. **THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

**During this two year period,** NuTone will, at its option, repair or replace, without charge, any product or part which is found to be defective under normal use and service. **THIS WARRANTY DOES NOT EXTEND TO FLUORESCENT LAMP STARTERS OR TUBES, FILTERS, DUCT, ROOF CAPS, WALL CAPS AND OTHER ACCESSORIES FOR DUCTING.** This warranty does not cover (a) normal maintenance and service or (b) any products or parts which have been subject to misuse, negligence, accident, improper maintenance or repair (other than by NuTone), faulty installation or installation contrary to recommended installation instructions.

The duration of any implied warranty is limited to the one year period as specified for the express warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

**NUTONE'S OBLIGATION TO REPAIR OR REPLACE, AT NUTONE'S OPTION, SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. NUTONE SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH PRODUCT USE OR PERFORMANCE.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty supersedes all prior warranties.

**WARRANTY SERVICE:** To qualify for warranty service, you must (a) notify NuTone at the address stated below or telephone 1/800-543-8687, (b) give the model number and part identification and (c) describe the nature of any defect in the product or part. At the time of requesting warranty service, you must present evidence of the original purchase date.

Date of Installation

Builder or Installer

Model No. and Product Description

#### IF YOU NEED ASSISTANCE OR SERVICE:

For the location of your nearest NuTone Independent Authorized Service Center:  
**Residents of the contiguous United States** Dial Free 1-800-543-8687

Please be prepared to provide:

Product model number • Date and Proof of purchase • The nature of the difficulty

**Residents of Alaska or Hawaii should write to:** NuTone Inc. Attn: Department of National Field Service, Madison and Red Bank Roads, Cincinnati Ohio 45227-1599.

**Residents of Canada should write to:** Broan-NuTone Canada, 1140 Tristar Drive, Mississauga, Ontario, Canada L5T 1H9.

Rev. 01/2000

Product specifications subject to change without notice.

Madison and Red Bank Roads, Cincinnati, Ohio 45227  
Printed in Malaysia, Rev. 5/00, Part No. 44431