



TRANE™

Installation

UHWA-IN-1A

Library	Service Literature
Product Section	Terminal Devices and Heating Products
Product	Unit Heaters
Model	UHWA
Literature Type	Installation
Sequence	1A
Date	April 1993
File No.	SV-TD-UH-UHWA-IN-1A-493
Supersedes	UHWA-IN-1-189

Electric Wall-Mounted Unit Heaters

UHWA Models

UHWA-02 (2000 Watts)

UHWA-03 (3000 Watts)

UHWA-04 (4000 Watts)

UHWA-05 (5000 Watts)

Service Instructions for Electric Wall Mounted
Unit Heater Models with Standard Controls

UHWA Units of "A"
Design Sequence

Since American Standard Inc. has a policy of continuous product improvement, it reserves the right to change specifications and design without notice. The installation and servicing of the equipment referred in this booklet should be done by qualified, experienced technicians.

Literature Change History

UHWA-IN-1 (January 1989)

Original issue of manual;
specifically intended for use by
experienced service technicians.
Provides installation procedures for
UHWA units of "A" design.

UHWA-IN-1A (April 1993)

Metric dimensions added.

Model Number Description

All standard Trane Products are identified by a multiple-character model number that precisely identifies a particular type of unit. An explanation of the alphanumeric identification code used with Air Terminal Devices and Heating Products is provided below. Its use will enable the owner/operator, installing contractors and service technicians to define the installation, components and options of a particular UHWA unit.

Important! Be sure to refer to the model number stamped on the unit nameplate when ordering replacement parts or requesting service.

Model Number Breakdown

Model Number:	UHW	A	02	1	A	2	A
Digit Number:	1,2,3	4	5,6	7	8	9	10

Digits 1, 2, 3
Electric Wall Mounted
Unit Heaters

Digit 4
Development Sequence

Digits 5,6
Unit Capacity
02 = 2000 Watts
03 = 3000 Watts
04 = 4000 Watts
05 = 5000 Watts

Digit 7
Element Phase
1 = Single-Phase
3 = Three-Phase

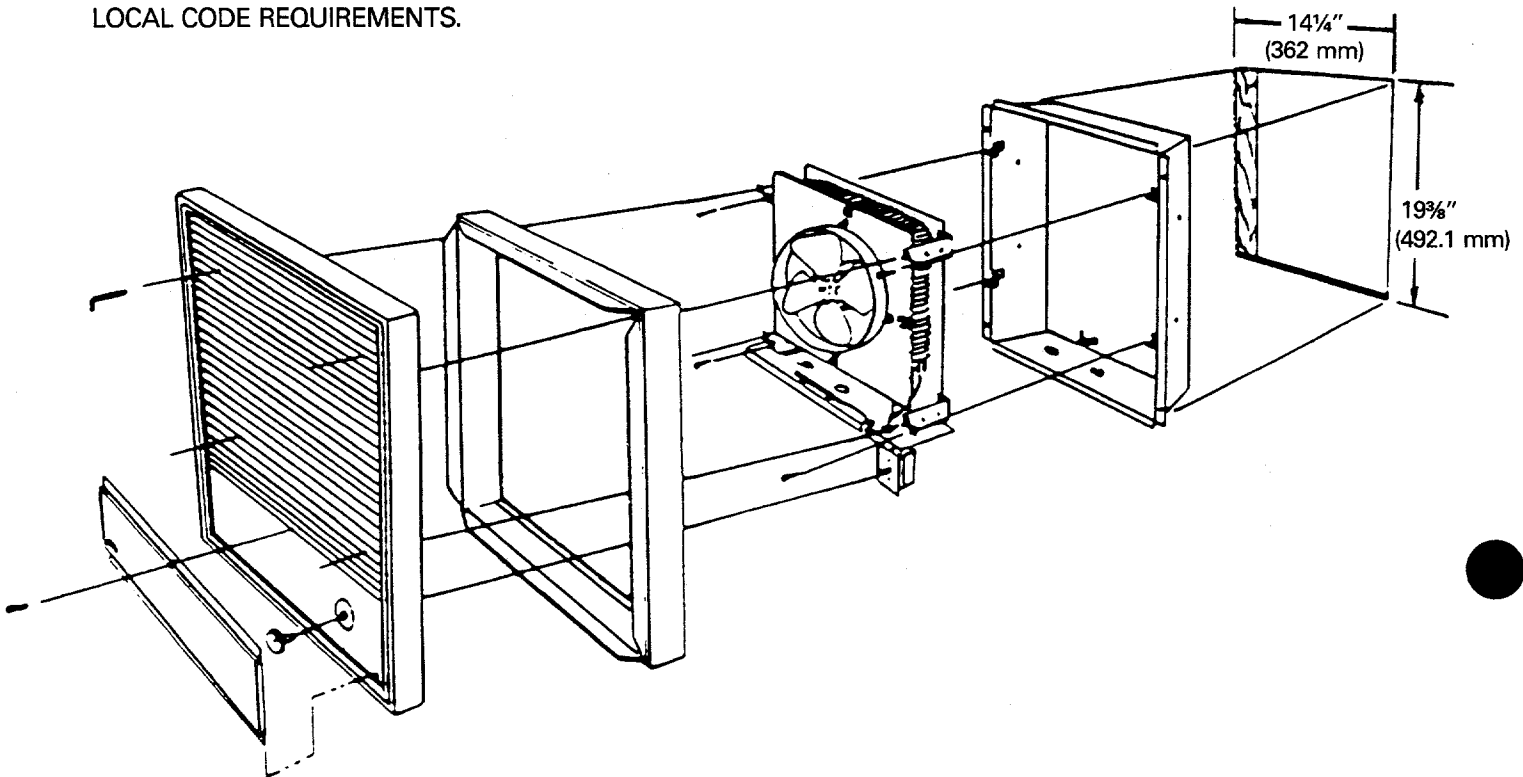
Digit 8
Element and Motor Voltage
A = 208 Volt
B = 240 Volt
C = 277 Volt

Digit 9
Unit Series
2 = Series 20
5 = Series 50

Digit 10
Design Sequence

Recessed Mounting 20 Series

MOUNT IN VERTICAL POSITION ONLY.
DO NOT INSTALL ANY CLOSER THAN 12" (304.8 mm) TO ANY VERTICAL SURFACE
OR 12" (304.8 mm) TO FLOOR.
DO NOT MOUNT BENEATH TOWEL RACKS OR BEHIND DOORS.
HEATER MUST HAVE NO OBSTRUCTIONS IN FRONT OF IT.
MAKE CERTAIN POWER SUPPLY IS SAME AS NAMEPLATE VOLTAGE ON HEATER.
ALL WIRING MUST CONFORM TO THE NATIONAL ELECTRIC CODE AND EXISTING
LOCAL CODE REQUIREMENTS.



1. Heater box 3420 is installed just like any ordinary outlet box. Box should be mounted in wall — top side up — so that the front edges are $\frac{3}{16}$ " (4.8 mm) away from the finished wall surface.
2. The knockout on the bottom of the box and back of box can be used for conduit, metallic or non-metallic armored cable. Terminate feed lines at knockout.
3. Mount heater mechanism to interior box by inserting heater mechanism straight in box engaging (4) lower tabs on interior mounting brackets with (4) tabs on wall box. Secure with (4) screws provided.
4. Mount heater front to heater mechanism mounting brackets (4) top tabs with (4) allen head screw trapped behind louvers in front. Insert wrench (provided) through louvers to engage (4) allen head screws.

Caution: De-energize the power supply and secure in that position to avoid accidental closing of the power supply. Failure to do so may result in personal injury or death from electrical shock.

NOTE: FOR OPERATION OF THERMAL CUTOUT, SEE BACK.

MAINTENANCE

Caution: Always disconnect heater from power supply before attempting to service, clean or disassemble any component of the unit. Failure to do so may result in personal injury or death from electrical shock.

Caution: Unit weights are provided in this manual. Use special care when lifting units to mounting position to avoid personal injury and/or equipment damage.

Approximate weight per unit —
41 lbs (18.6 kg)

Recessed Mounting Semi-Recessed Mounting 20 Series

MOUNT IN VERTICAL POSITION ONLY.

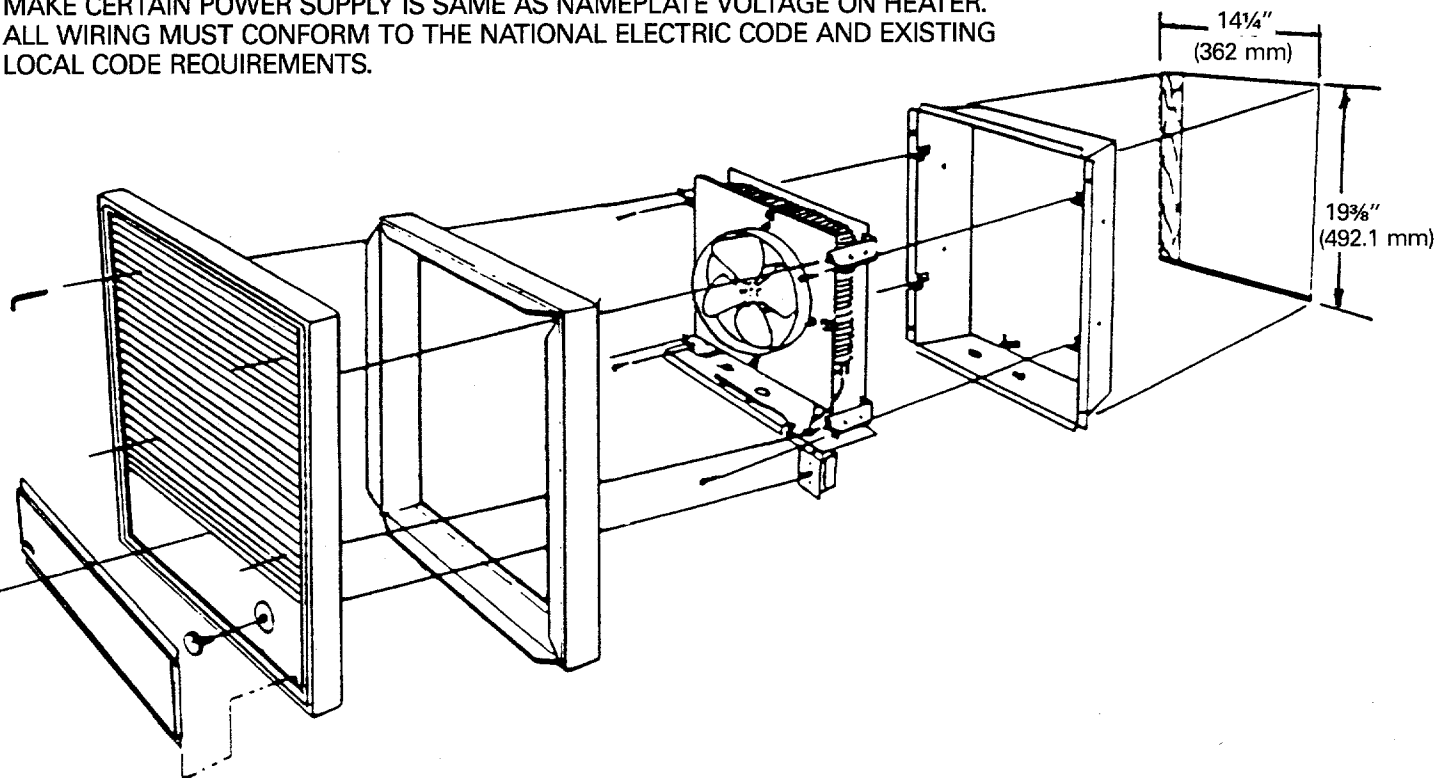
DO NOT INSTALL ANY CLOSER THAN 12" (304.8 mm) TO ANY VERTICAL SURFACE OR 12" (304.8 mm) TO FLOOR.

DO NOT MOUNT BENEATH TOWEL RACKS OR BEHIND DOORS.

HEATER MUST HAVE NO OBSTRUCTIONS IN FRONT OF IT.

MAKE CERTAIN POWER SUPPLY IS SAME AS NAMEPLATE VOLTAGE ON HEATER.

ALL WIRING MUST CONFORM TO THE NATIONAL ELECTRIC CODE AND EXISTING LOCAL CODE REQUIREMENTS.



FOR SURFACE MOUNTING USE EXTENDER 3420EX34

FOR SEMI-RECESSED MOUNTING USE EXTENDER 3420EX8 OR 16

BOX 3420 MUST BE USED IN CONJUNCTION WITH ACCESSORY EXTENDER

1. For surface mounting attach 3420 box to wall. For semi-recessed mounting 3420 box should be set in the wall so the flange is out from the finished wall a distance equal to the frame depth [1" (25.4 mm) for a 1" (25.4 mm) frame, 2" (50.8 mm) for a 2" (50.8 mm) frame].
2. Remove knockout(s) in 3420 as required.
3. Proceed as with recessed installation described on front — steps 2 and 3.
4. Extender frame is attached to heater front (slip fit) and this assembly is then attached to the heater following step 4 on front. Frame is captured between heater front and finished wall.

THERMAL CUTOFF OPERATION

To reset thermal cutoff, disconnect all power for 5 minutes (300 s), then energize the unit. If fault continues, disconnect power and check for cause.

Caution: De-energize the power supply and secure in that position to avoid accidental closing of the power supply. Failure to do so may result in personal injury or death from electrical shock.

MAINTENANCE

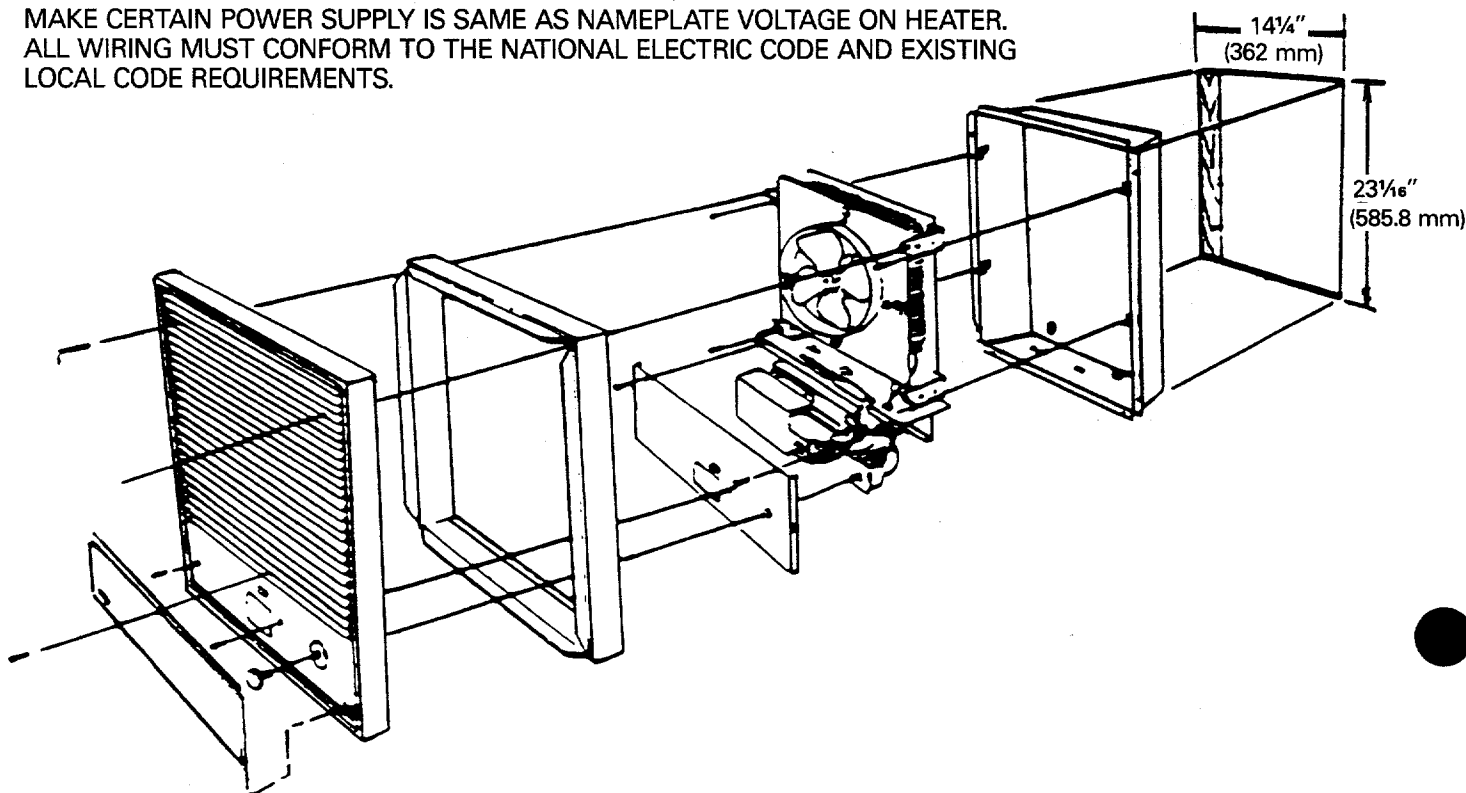
Caution: Always disconnect heater from power supply before attempting to service, clean or disassemble any component of the unit. Failure to do so may result in personal injury or death from electrical shock.

Caution: Unit weights are provided in this manual. Use special care when lifting units to mounting position to avoid personal injury and/or equipment damage.

Approximate weight per unit —
41 lbs (18.6 kg)

Recessed Mounting 50 Series

MOUNT IN VERTICAL POSITION ONLY.
DO NOT INSTALL ANY CLOSER THAN 12" (304.8 mm) TO ANY VERTICAL SURFACE
OR 12" (304.8 mm) TO FLOOR.
DO NOT MOUNT BENEATH TOWEL RACKS OR BEHIND DOORS.
HEATER MUST HAVE NO OBSTRUCTIONS IN FRONT OF IT.
MAKE CERTAIN POWER SUPPLY IS SAME AS NAMEPLATE VOLTAGE ON HEATER.
ALL WIRING MUST CONFORM TO THE NATIONAL ELECTRIC CODE AND EXISTING
LOCAL CODE REQUIREMENTS.



1. Heater box 3450 is installed just like any ordinary outlet box. Box should be mounted in wall — top side up — so that the front edges are $\frac{3}{16}$ " (4.8 mm) away from the finished wall surface.
2. The knockout on the bottom of the box and back of box can be used for conduit, metallic or non-metallic armored cable. Terminate feed lines at knockout.
3. Mount heater mechanism to interior box by inserting heater mechanism straight in box engaging (4) lower tabs on interior mounting brackets with (4) tabs on wall box. Secure with (5), (4) in mounting bracket tabs, (1) in low voltage supply area.
4. Mount protective control cover to chassis with (4) screws provided.
5. Mount front to chassis at top with (2) trapped allen screws and at bottom to protective control panel with (2) loose allen head screws provided.
6. Mount tamperproof panel to front with (1) pan head allen screw provided.

Caution: De-energize the power supply and secure in that position to avoid accidental closing of the power supply. Failure to do so may result in personal injury or death from electrical shock.

NOTE: FOR OPERATION OF
THERMAL CUTOUT, SEE BACK.

MAINTENANCE

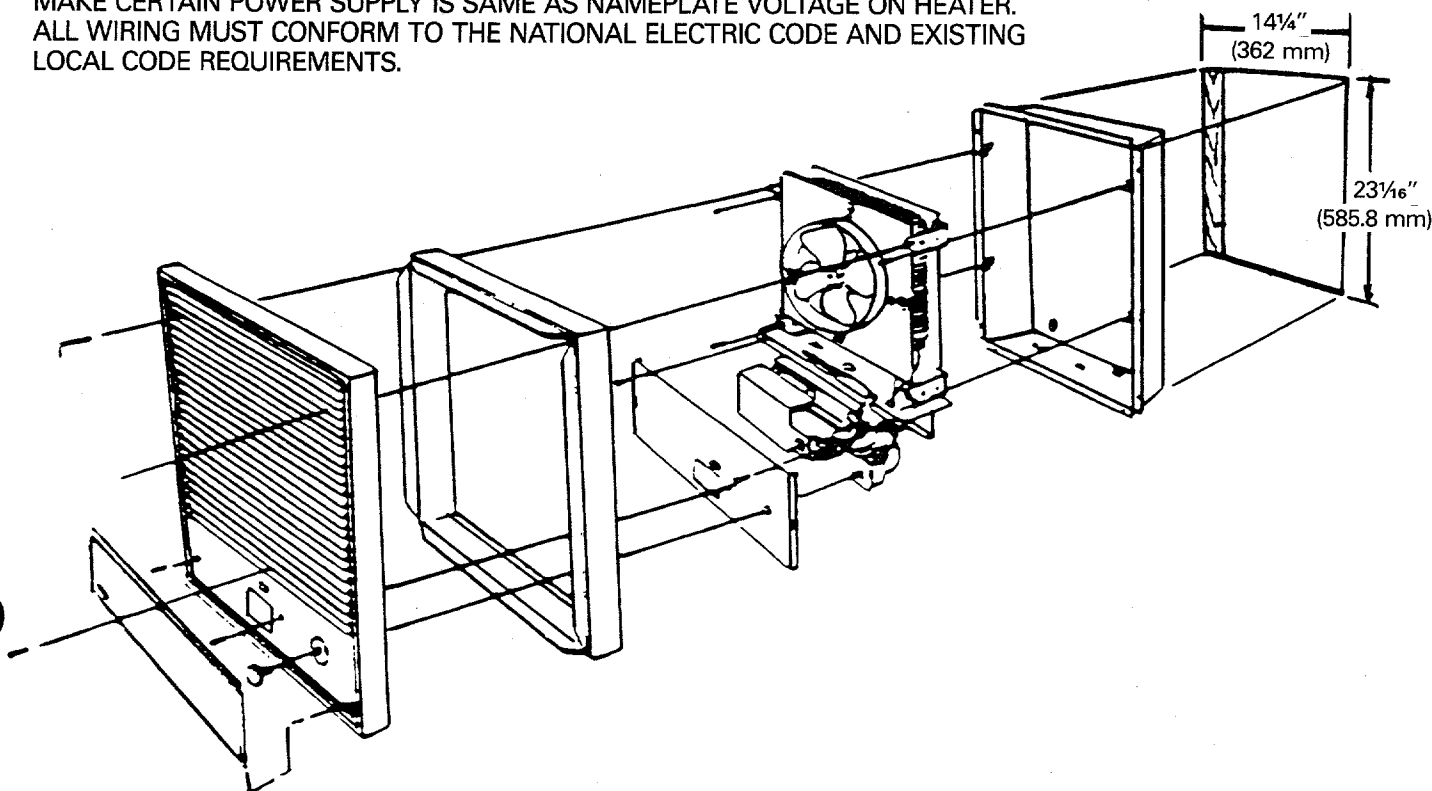
Caution: Always disconnect heater from power supply before attempting to service, clean or disassemble any component of the unit. Failure to do so may result in personal injury or death from electrical shock.

Caution: Unit weights are provided in this manual. Use special care when lifting units to mounting position to avoid personal injury and/or equipment damage.

Approximate weight per unit —
55 lbs (24.9 kg)

Recessed Mounting Semi-Recessed Mounting 50 Series

MOUNT IN VERTICAL POSITION ONLY.
DO NOT INSTALL ANY CLOSER THAN 12" (304.8 mm) TO ANY VERTICAL SURFACE
OR 12" (304.8 mm) TO FLOOR.
DO NOT MOUNT BENEATH TOWEL RACKS OR BEHIND DOORS.
HEATER MUST HAVE NO OBSTRUCTIONS IN FRONT OF IT.
MAKE CERTAIN POWER SUPPLY IS SAME AS NAMEPLATE VOLTAGE ON HEATER.
ALL WIRING MUST CONFORM TO THE NATIONAL ELECTRIC CODE AND EXISTING
LOCAL CODE REQUIREMENTS.



FOR SURFACE MOUNTING USE EXTENDER 3450EX34
FOR SEMI-RECESSED MOUNTING USE EXTENDER 3450EX8 OR 16
BOX 3450 MUST BE USED IN CONJUNCTION WITH ACCESSORY EXTENDER

1. For surface mounting attach 3450 box to wall. For semi-recessed mounting 3450 box should be set in the wall so the flange is out from the finished wall a distance equal to the frame depth [1" (25.4 mm) for a 1" (25.4 mm) frame, 2" (50.8 mm) for a 2" (50.8 mm) frame].
2. Remove knockout(s) in 3450 as required.
3. Proceed as with recessed installation described on front — steps 2 and 3.
4. Extender frame is attached to heater front (slip fit) and this assembly is then attached to the heater following steps 5 and 6 on front. Frame is captured between heater front and finished wall.

THERMAL CUTOUT OPERATION

To reset thermal cutout, disconnect all power for 5 minutes (300 s), then energize the unit. If fault continues, disconnect power and check for cause.

Caution: De-energize the power supply and secure in that position to avoid accidental closing of the power supply. Failure to do so may result in personal injury or death from electrical shock.

MAINTENANCE

Caution: Always disconnect heater from power supply before attempting to service, clean or disassemble any component of the unit. Failure to do so may result in personal injury or death from electrical shock.

Caution: Unit weights are provided in this manual. Use special care when lifting units to mounting position to avoid personal injury and/or equipment damage.

**Approximate weight per unit —
55 lbs (24.9 kg)**

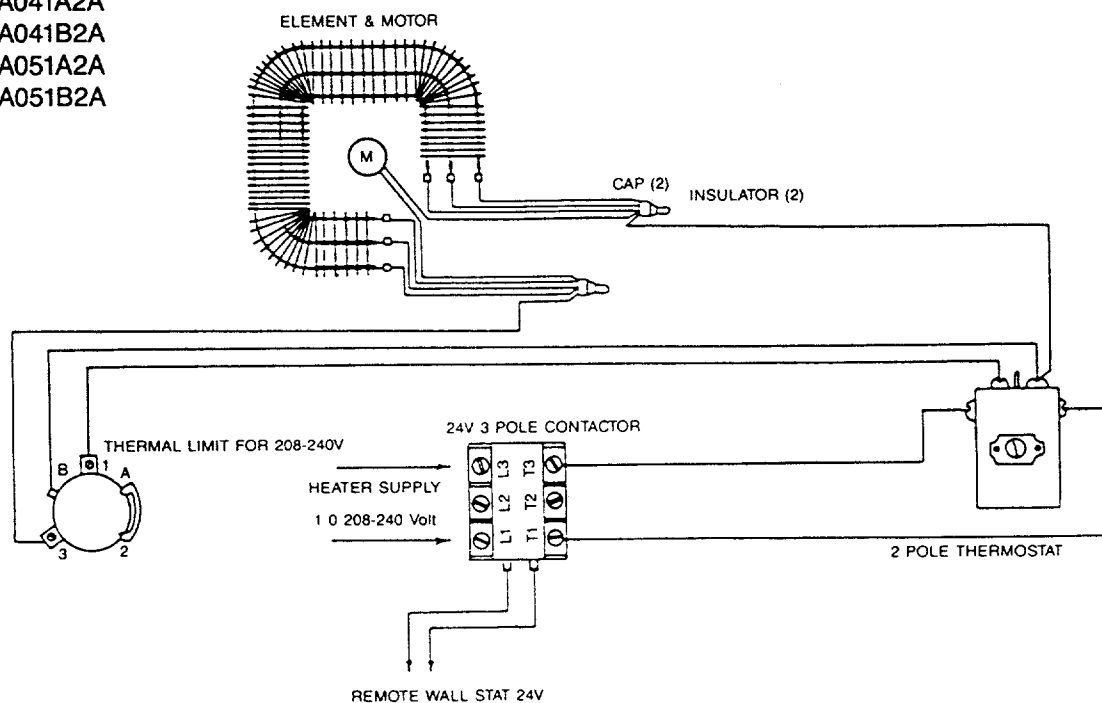
TRANE
ORDER NO.

236-400
236-402
236-406
236-408
236-412
236-414
236-422
236-424

TRANE
MODEL NO.

UHWA021A2A
UHWA021B2A
UHWA031A2A
UHWA031B2A
UHWA041A2A
UHWA041B2A
UHWA051A2A
UHWA051B2A

WD 18



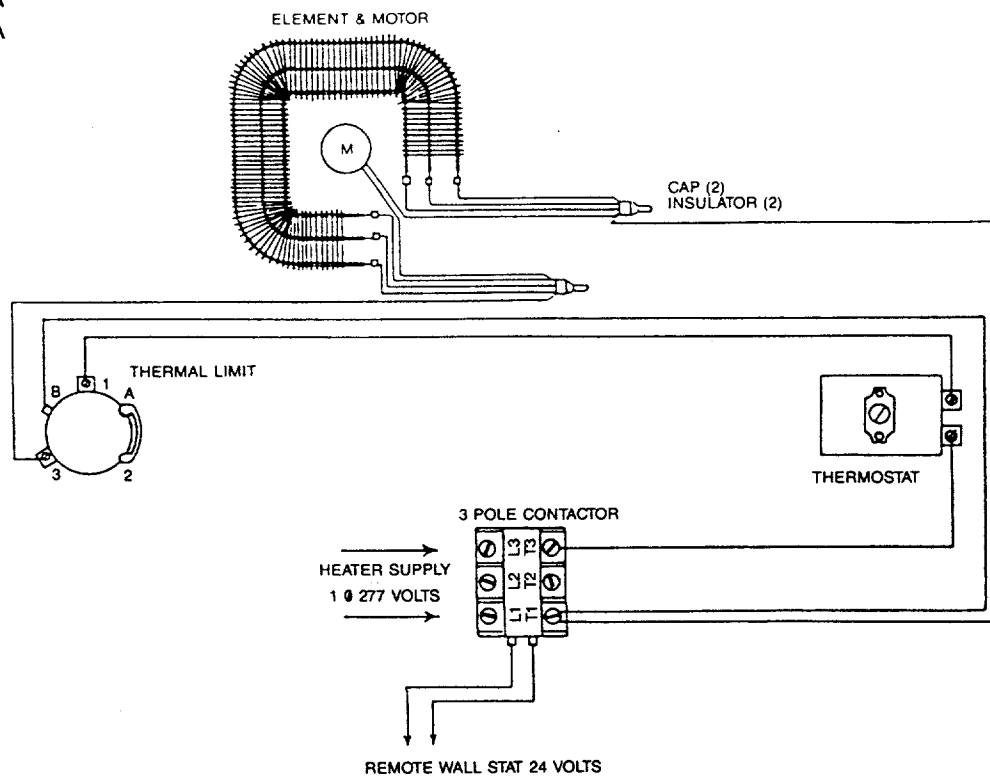
TRANE
ORDER NO.

236-404
236-410
236-416
236-426

TRANE
MODEL NO.

UHWA021C2A
UHWA031C2A
UHWA041C2A
UHWA051C2A

WD 15



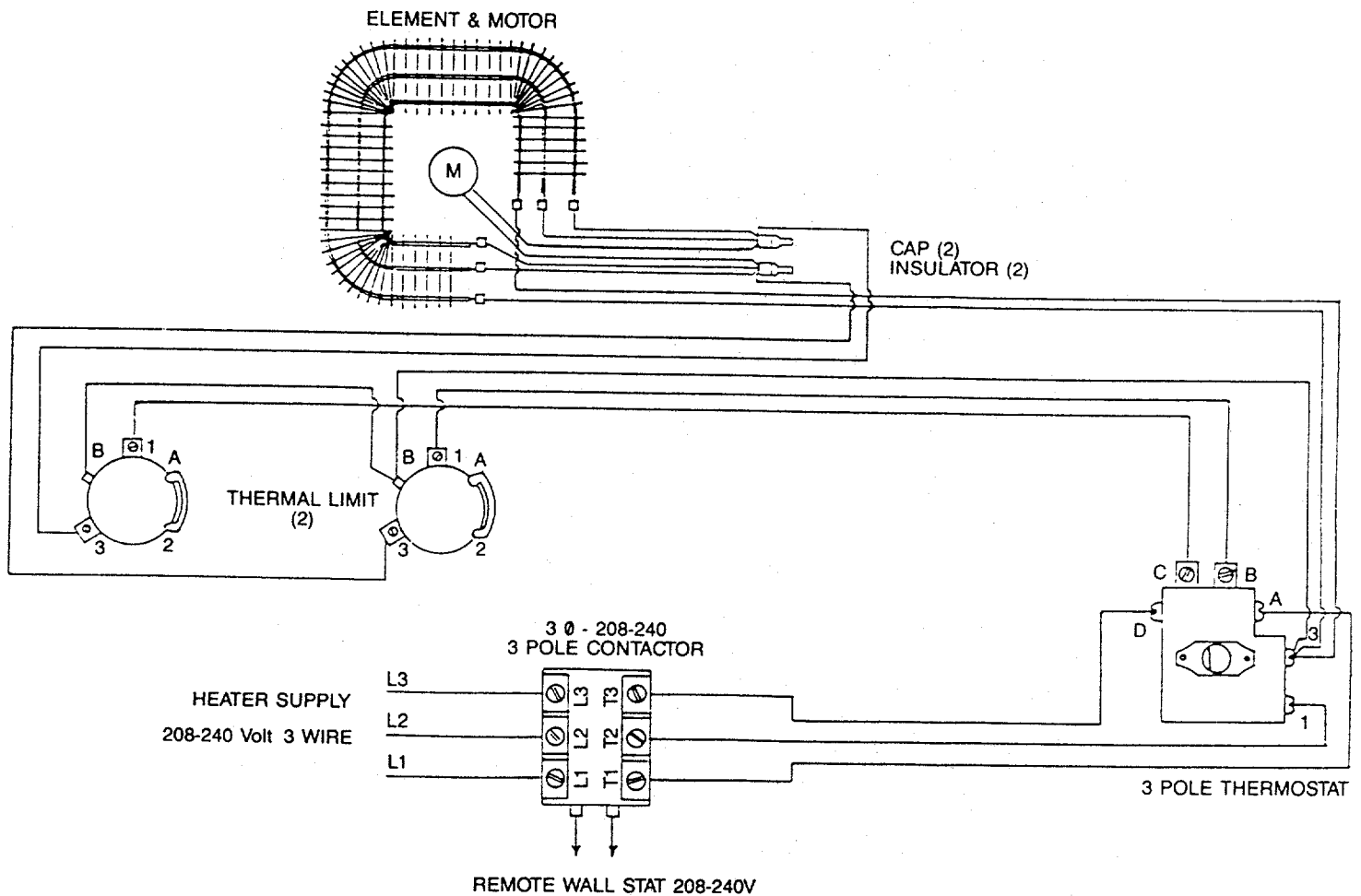
TRANE
ORDER NO.

236-418
236-420
236-428
236-430

TRANE
MODEL NO.

UHWA043A2A
UHWA043B2A
UHWA053A2A
UHWA053B2A

WD 13



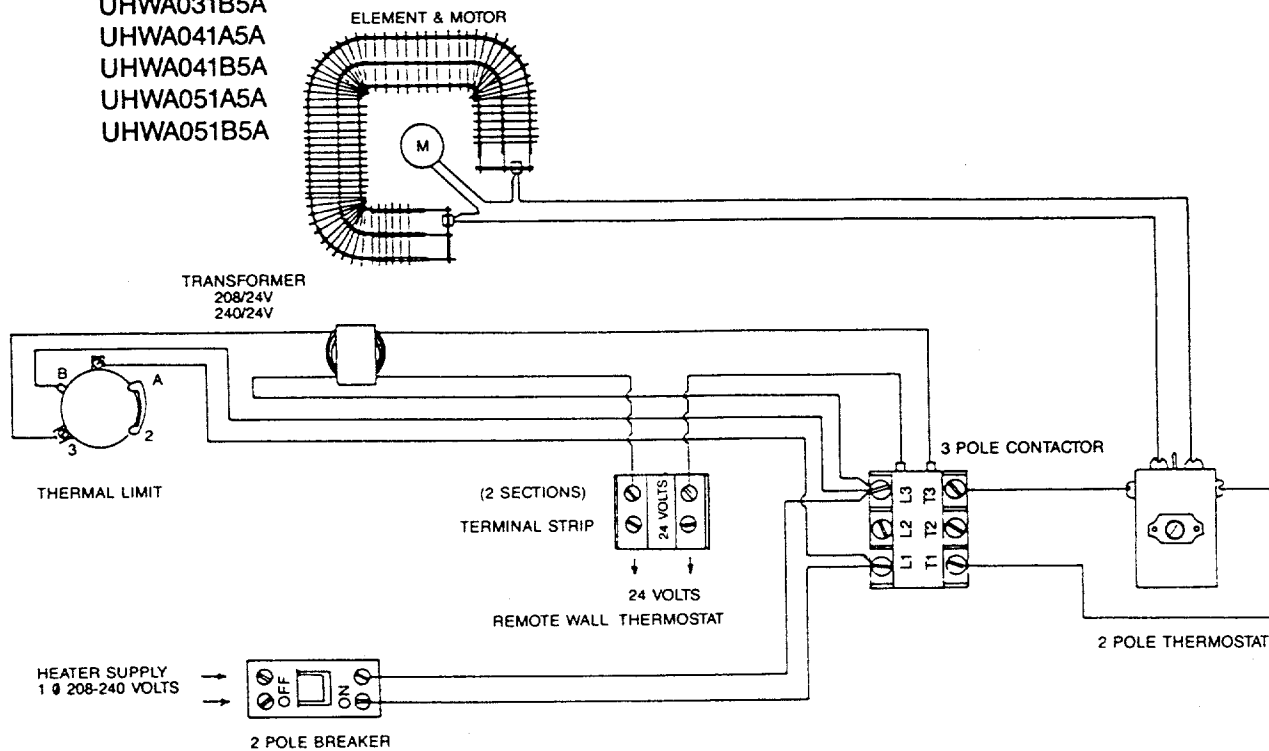
TRANE
ORDER NO.

236-431
236-433
236-437
236-439
236-443
236-445
236-453
236-455

TRANE
MODEL NO.

UHWA021A5A
UHWA021B5A
UHWA031A5A
UHWA031B5A
UHWA041A5A
UHWA041B5A
UHWA051A5A
UHWA051B5A

WD 68



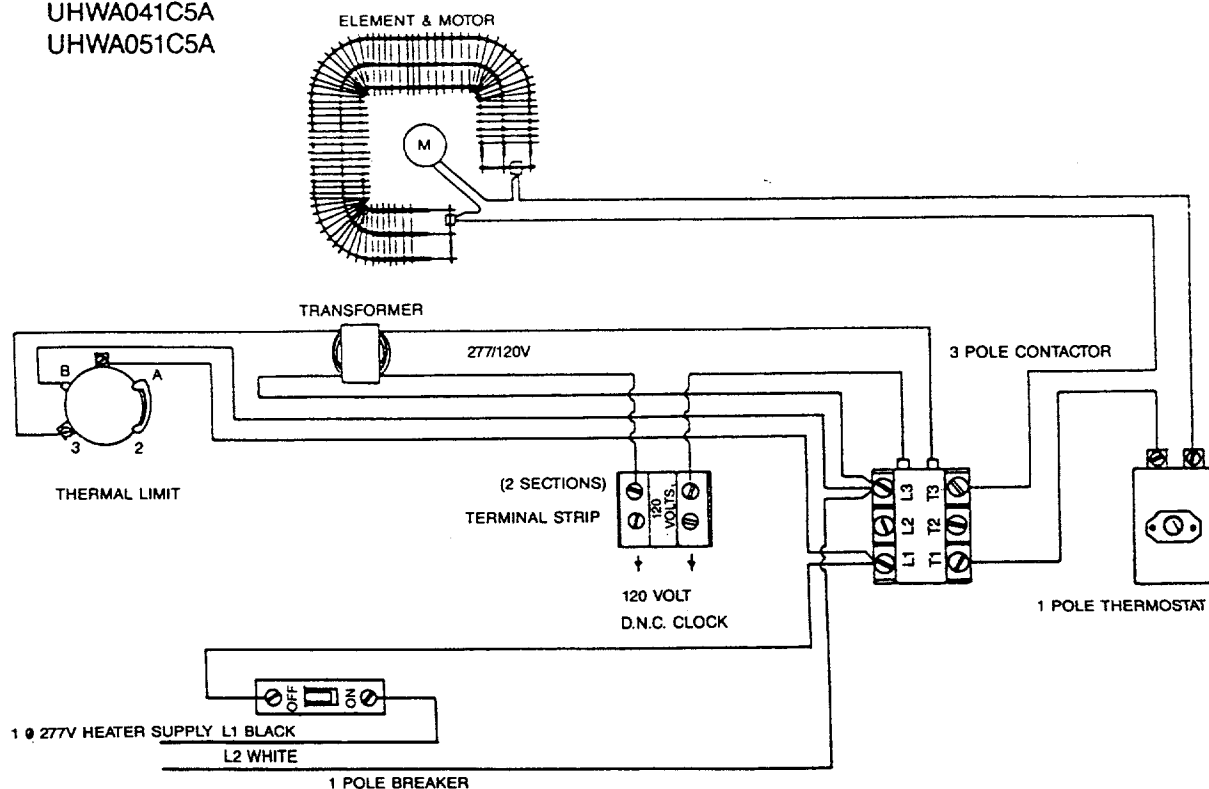
TRANE
ORDER NO.

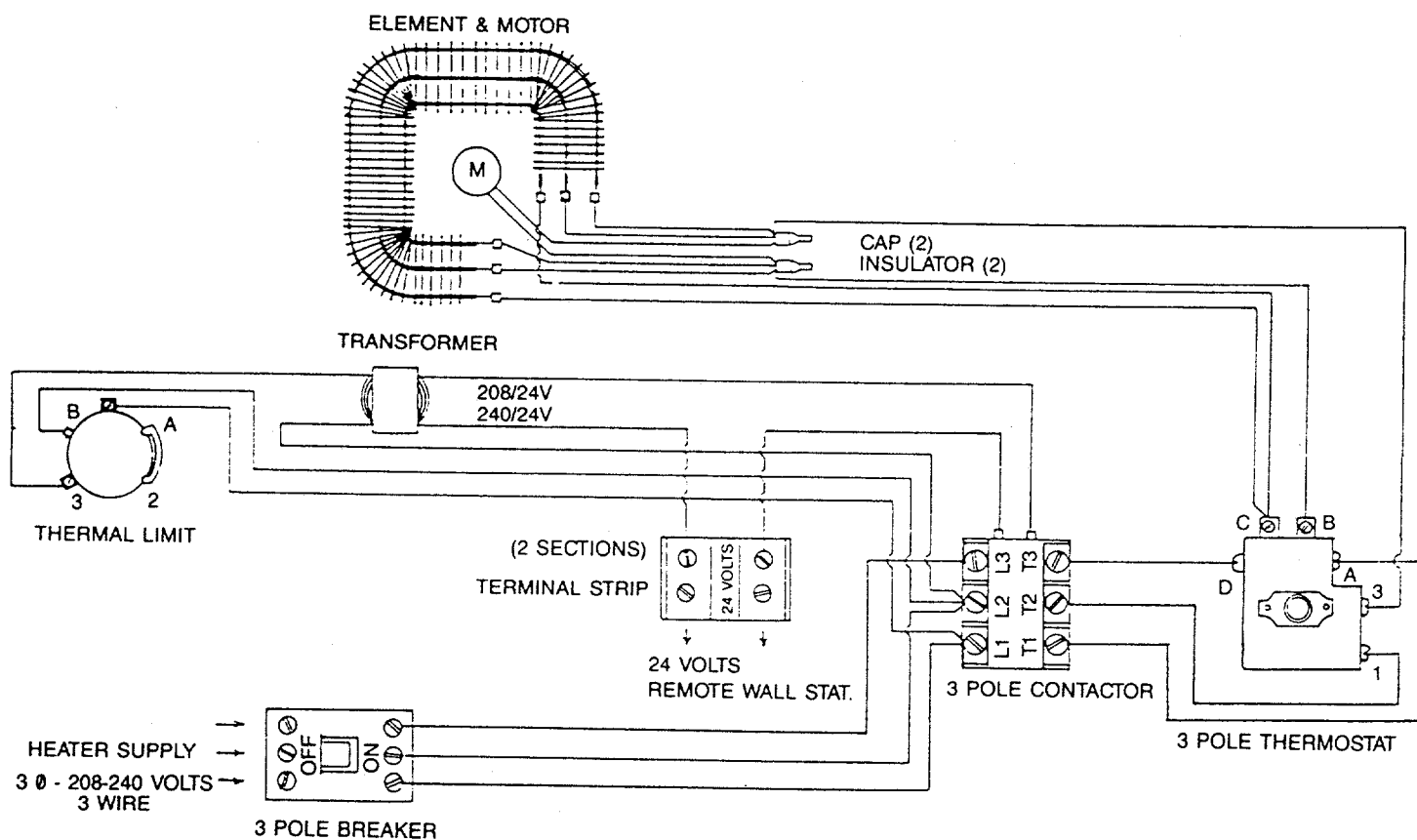
236-435
236-441
236-447
236-457

TRANE
MODEL NO.

UHWA021C5A
UHWA031C5A
UHWA041C5A
UHWA051C5A

WD 59





TRANE
ORDER NO.

236-449
236-451
236-459
236-461

TRANE
MODEL NO.

UHWA043A5A
UHWA043B5A
UHWA053A5A
UHWA053B5A