

INSTALLATION INSTRUCTIONS

480 volt to 240 volt Voltage Supply Kit

480 volt supply conversion for use in 240 volt Equipment

Model:

10-14195-02



WARNING

Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified installer or service agency.



WARNING

Installation and servicing of air conditioning equipment can be hazardous due to internal refrigerant pressure and live electrical components. Only trained and qualified service personnel should install or service this equipment. Installation and service performed by unqualified persons can result in property damage, personal injury, or death.

These instructions are intended as a general guide only, for use by qualified personnel and do not supersede any national or local codes in any way. Installation must conform with the local building codes and with the latest editions of the National Electrical Code.

Read these instructions thoroughly before starting installation. Only qualified installers or technicians should install the electric heat section and all other equipment used in HVAC systems. Federal, state, and local codes must be followed when installing this or any other HVAC equipment.



WARNING

If this unit is to be installed in a mobile or manufactured home application, the ductwork must be sized to achieve static pressures within the manufacturer's guidelines. All other installation guidelines must also be followed. Failure to do so may result in equipment damage, personal injury, and improper performance of the unit.



WARNING

If these instructions and/or codes are not followed or if the equipment is not properly installed, possible injury or death could occur during installation or operation.



WARNING

Sharp metal edges can cause injury. When installing the unit, use care to avoid sharp edges.



WARNING

Be sure to disconnect all power to the unit while installing and servicing this equipment. Turn off accessory heater power switch if applicable. Be mindful that there may be more than one disconnect servicing this equipment. Use proper tools and protective equipment during installation and service. TAG Disconnect switch(es) with a suitable WARNING LABEL.

Inspection of Shipment

Before proceeding with the kit installation, inspect thoroughly for shipping damage. Notify the shipper immediately if any damage is found. Clean all dirt, dust and moisture from equipment. Check for proper clearances of live parts, between phases, and to ground. Make sure that all required barriers are in place. Check conductors run in multiple to ensure that they are properly wired. Refer to base installation instructions for complete unit installation details.

WARNING

- When installing in a garage, the elements must be at least 18" above the floor.
- If this appliance is installed in an enclosed area such as a garage or utility room with any carbon monoxide (CO) producing appliance (i.e. Automobile, Furnace, Water-Heater etc.), ensure the area is properly ventilated.
- A means of strain relief and conductor protection must be provided at the supply wire entrance.

Attention Installing Personnel

As a professional installer, you have an obligation to know the product better than the customer. This includes all safety precautions and related items.

Prior to actual installation, thoroughly familiarize yourself with the Instruction Manual. Pay close attention to all safety warnings. Often during installation or repair, it is possible to place yourself in a position which is more hazardous than when the unit is in operation.

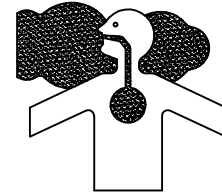
Remember, it is Your responsibility to install the product safely and to know it well enough to be able to instruct a customer on its safe use.

Safety is a matter of thinking before acting. Most dealers have a list of specific good safety practices ... follow them.

The precautions listed in this installation manual are intended as supplemental to existing practices. However, if there is a direct conflict between existing practices and the content of this manual, the precautions listed here are to take precedence.



**DANGER
PELIGRO**



Carbon Monoxide Poisoning Hazard

Special Warning for Installation of Furnaces or Air Handling Units in Enclosed Areas such as Garages, Utility Rooms or Parking Areas.

Carbon monoxide producing devices (such as automobile, space heater, gas water heater, etc.) should not be operated in enclosed areas such as unventilated garages, utility rooms or parking areas because of the danger of carbon monoxide (CO) poisoning resulting from the exhaust emissions. If a furnace or air handler is installed in an enclosed area such as a garage, utility room or parking area and a carbon monoxide producing device is operated therein, there must be adequate, direct outside ventilation.

This ventilation is necessary to avoid the danger of CO poisoning which can occur if a carbon monoxide producing device continues to operate in the enclosed area. Carbon monoxide emissions can be (re)circulated throughout the structure if the furnace or air handler is operating in any mode.

CO can cause serious illness including permanent brain damage or death.



WARNING

Reminder: If these instructions and/or codes are not followed or if the equipment is not properly installed, possible injury or death could occur during installation or operation.

Introduction

This Voltage supply kit is designed to provide 240 volt single phase power for the Air handler only from a 480 volt 3 phase source. Note this is for Air Handler only in split systems and does not include compressor loads. Refer to Unit and/or Unit instructions for proper wiring and MCA/MOP Requirements .

Wiring must conform to all applicable codes

WARNING

HIGH VOLTAGE

Risk of electrical shock.
Before installing or servicing unit, be sure ALL power to the units is OFF. More than one disconnect switch may be present. Failure to disconnect power supplies can result in property damage, personal injury, or death.



CAUTION

To avoid possible personal injury, use extreme caution if using power tools to remove the small breaker mounting brackets. The brackets may quickly rotate and cause injury.

Reminder: The power must be in the OFF position. There may also be more than one means of disconnect servicing this product.

Unit voltage conversion kit Installation

NOTE: If physical damage is observed during the inspection DO NOT install this kit.

Before installing the unit, check the information on the unit rating plate to ensure that the unit meets the job specification, proper electrical power is available, and the proper clearances are maintained.

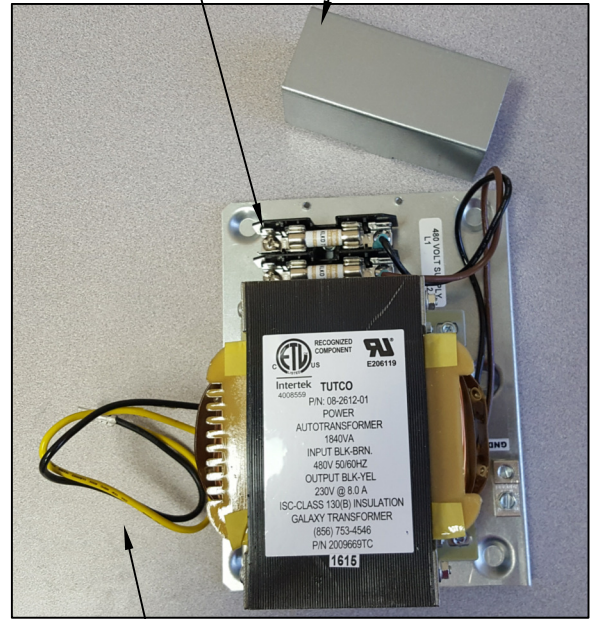
Refer to base unit installation instructions as required.

- 1.) Remove unit access panel.
- 2.) Locate & Place kit in unit in location with appropriate access being aware of electrical clearances and any applicable codes.
- 3.) Use Mounting holes provided to mount securely with applicable hardware.
- 4.) Remove fuse block cover and connect 480 volt supply to fuse block provided. (See Fig. 1)
- 5.) Place the cover back over the fuse block and attach using the removed screws. (See Fig. 1)
- 6.) Connect 240 volt single phase power from Autoformer Kit to unit supply with quick connects provided or by equivalent means (240 volt single ph). (See Fig. 2)
- 7.) Verify Unit Amps is not higher than 8 amps at 230 volts.
- 8.) Make all wiring connections per applicable field wiring diagrams. All installations must conform to national, state & local electrical codes. (Ref. Fig. 2 & 3)
- 9.) Connect all field wiring per air handler installation guide.
USE COPPER CONDUCTORS ONLY
- 10.) A wiring diagram label is supplied with the kit. Attach the wiring diagram next to the unit wiring diagram. Making sure that the wiring diagram is easily visible. (See Fig. 3)
- 11.) Place WARNING - HIGH VOLTAGE label in the upper right hand corner of the unit panel that was removed.

FIELD SUPPLY TO/FROM KIT
480 VOLT 3 PHASE

FUSE COVER

Fig. 1



240 VOLT 1 PHASE
SUPPLY TO UNIT

Fig. 2

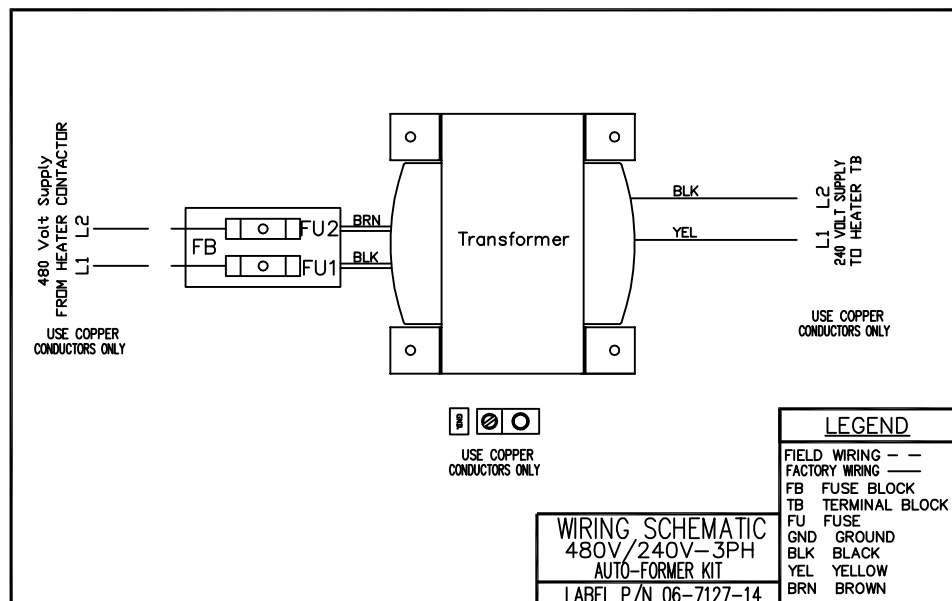
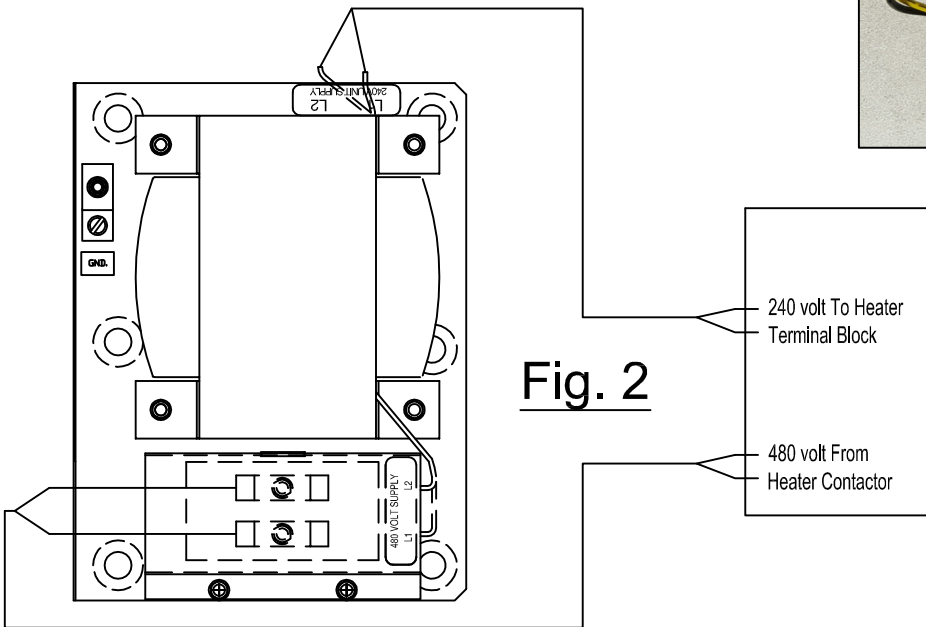


Fig. 3

1 Year

Limited Warranty

WARRANTY. This warranty extends only to the first purchaser (Buyer) of the Tutco Auto-former Kit product identified as model 10-14195-02 ("Product"), and does not extend to any subsequent purchaser of any of this Product. Seller warrants to Buyer that the Auto-former Kit Product, consisting of the included controls (other than over-current fuses), when installed correctly according to instructions provided by Seller, and when properly maintained, will be free from defects in workmanship and material for one (1) year after installation, but not to exceed one (1) year and six (6) months after manufacture. This warranty does not apply to defects caused by faulty installation, misuse, accident, alteration, improper care or use after installation, unrated voltage or chemical, electrical or physical abuse. If the product or component is found not to comply with the above warranty, the defective product or component shall be promptly returned, freight prepaid, to Seller's factory for examination. If the failure is due to causes other than faulty installation, Buyer abuse misuse, accident, alteration, improper care or use after installation, decreased airflow, dirty filters, unrated voltage or chemical, electrical or physical abuse, Seller will repair, or at its option, replace the product, component or parts found to be defective at no charge and return to Buyer with shipping charges prepaid, and issue credit for the incoming shipping charge.

THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, STATUTORY OR OTHERWISE, EXPRESS OR IMPLIED, ALL OTHER REPRESENTATIONS TO THE BUYER, AND ALL OTHER OBLIGATIONS OR LIABILITIES WITH RESPECT TO ANY PRODUCT PURCHASED HEREBY, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND SELLER'S OBLIGATION UNDER ALL SUCH WARRANTIES SHALL NOT EXCEED THOSE SET FORTH ABOVE. NO OTHER WARRANTY OR REPRESENTATION WHATSOEVER, EXPRESS OR IMPLIED, HAS BEEN MADE BY SELLER WHICH HAS BEEN RELIED ON BY BUYER. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY DIRECT OR INDIRECT DAMAGES OTHER THAN AS SET FORTH ABOVE OR FOR LOSS OF PROFITS OR OTHER INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Fill in this section and retain for warranty

Purchaser name: _____

Purchase date: _____

Serial number of heat kit: _____

Installation date: _____

- INTERNAL -