

## TOESTERS "PURR-FECT" DESIGN

Model Numbers  
Toester 4/5  
Toester 6/8  
Toester 10/12  
Toester 11/13  
Toester 16/19

### UNDERCOUNTER HYDRONIC FAN COILS

PURR-FECT™  
AIR WHEEL

ELECTRICAL  
CONNECTION

PLUMBING  
CONNECTIONS



MODEL TOESTER 11/13 & 16/19

NOTE: Each Toester features a heat sensing aquastat for fan control or low water temperature limit to shut off the fan if the water temperature drops too low.

HIGH EFFICIENCY  
COPPER/ALUMINUM  
HEAT EXCHANGER

MODEL  
TOESTER  
4/5 & 6/7/8

These small, but ultra responsive, heating units can deliver from 4,000 to 19,000 BTU/hour to heat any space to an even and comfortable temperature. The undercounter units are reliable and easy to install. The Toester is another in a long line of Turbonics Fan Coils that specialize in bringing warmth to possibly difficult to heat areas using Micro-Zonal™ Technology. Toesters are Designed to fit below cabinets in the unused kick-space area and are accessed from above with a strategic access cover that is typically custom built on-site. The Toesters come with a bleed valve and standard 1/2" pipe connections. All Turbonics products use components that have been tried and tested for years of reliability in other combinations. Five-Year limited warranty on the core and electrical components is the standard others aspire to.

## Notable Features & Options:

- Dependable:** Shaded 4-Pole 2-speed encased motor for rugged operation and long motor life.
- Quiet:** Ultra-Low Profile fan coil draws air from a 360 degree radius and operates at either 650 or 850 RPM using the Purrr-Fect™ Air Wheel for optimum balance & performance.
- Compact:** Fits beneath cabinets with a virtually invisible grille in the recessed kick-space area.
- Controls:** An optional two-speed wall-mountable switch offers Hi/Off/Lo control. The unit can be used without the switch and be controlled by the heat-sensing aquastat.

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Units use L/ASTM B75 type copper and have been IAPMO tested and passed ANSI/NSF 61 section 4 and are suitable for use with residential potable water

# Turbonics INC.

## I. INSTALLATION: General

- Toester fan coil space heaters are suitable for connection to hot water supply at any pressure up to 125 P.S.I. Maximum water temperature should not exceed 200°F.
- Building codes and plumbing regulations may vary. Check local codes and regulations before determining proper application and installation. (See KWM & HDX Application Manuals)
- Cut an access panel under the bottom shelf. Starting at the right edge of the selected location, cut an opening in the toe-space riser at least 4" x 17-1/2" (SEE FIG. 1) for additional dimensions required for each particular model. Cabinet Details may vary for each installation.
- Lift the Toester out through the access door and sweat on fittings.

## II. PIPING: General

- The piping to the unit will usually be copper or any other locally approved piping. Accessible 1/2" sweat fittings are provided on the unit itself. An optional Flexible Stainless Steel Connector Kit with shut-off valves is available for connecting the unit to any type of piping system.
- All piping systems should be designed by a technician with experience in the various piping arrangements that work with this type of unit.
- As with any system employing circulated water, the pipes passing through unheated spaces should be insulated.
- When using mono-flo or "venturi" fittings, we suggest placement of a ball valve just after the supply take-off and before the return is connected.

## III. PIPING - HOT WATER BOILER

- The unit supply line should be taken from the boiler side beyond any flo-control valve. If the system being used is a gravity-flow or cast-iron hot water system, a separate circuit must be installed.

## IV. PIPING - WATER HEATER:

- To install correctly, a technician with knowledge of piping arrangements and back-flo valves must design the piping system.

## V. WIRING THE UNIT:

- A field wiring connection is provided on the unit. Connect wires at this point only.
- The unit is manufactured with a built-in factory wired aquastat with a set point of 140°F on and 110°F off. The aquastat may be disabled in the field if not required.
- Unit is pre-wired from the factory on Hi speed. Unit may be optionally installed with a remote mounted 2-speed switch (included) and/or a line voltage thermostat. (SEE FIG. 2)
- All wiring should be done to all local and national codes.

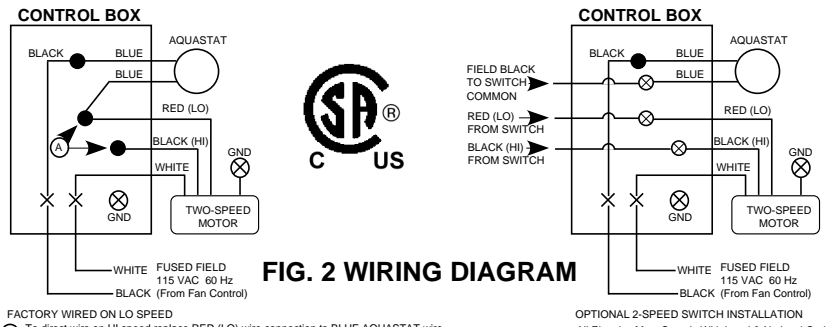
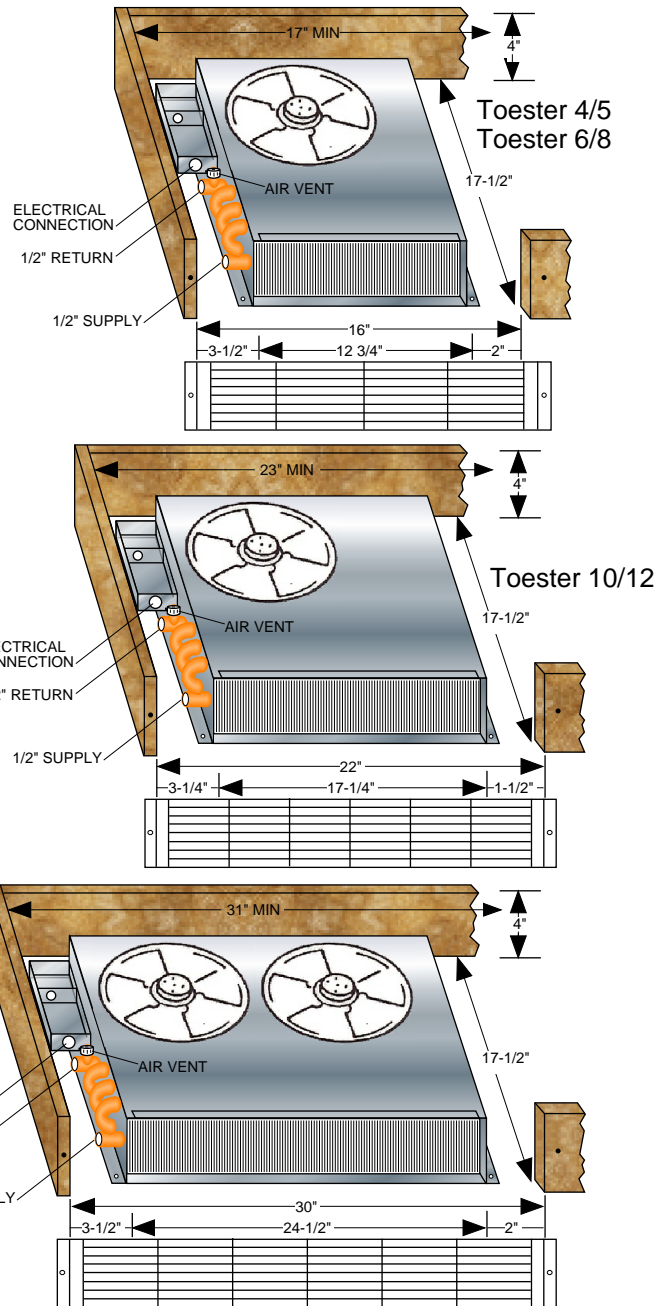
## VI. COMPLETION:

- Secure unit to floor through holes on perimeter of the bottom plate (screws provided).
- Bleed the unit, secure the access panel and install front grille cover.

TOESTER 4/5 RATINGS*					
Fluid Temperature	120°	140°	160°	180°	200°
High Speed	3000	3900	4800	5700	6500
Low Speed	2200	3100	4000	4800	5600
Pressure Drop (Feet of Head)					
	.33' @ 1 GPM		1.0' @ 2 GPM		3.0' @ 4 GPM
TOESTER 6/8 RATINGS*					
Fluid Temperature	120°	140°	160°	180°	200°
High Speed	3800	5150	6600	7700	9100
Low Speed	2900	4050	5200	6100	7200
Pressure Drop (Feet of Head)					
	.5' @ 1 GPM		1.5' @ 2 GPM		4.0' @ 4 GPM
TOESTER 10/12 RATINGS*					
Fluid Temperature	120°	140°	160°	180°	200°
High Speed	4100	6200	8100	10000	12000
Low Speed	3200	4800	6500	7800	9500
Pressure Drop (Feet of Head)					
	.6' @ 1 GPM		1.8' @ 2 GPM		4.5' @ 4 GPM
TOESTER 11/13 RATINGS*					
Fluid Temperature	120°	140°	160°	180°	200°
High Speed	5800	8200	10900	13200	16200
Low Speed	4000	6200	8800	10900	13800
Pressure Drop (Feet of Head)					
	.6' @ 1 GPM		1.8' @ 2 GPM		4.5' @ 4 GPM
TOESTER 16/19 RATINGS*					
Fluid Temperature	120°	140°	160°	180°	200°
High Speed	6900	9900	13250	16200	19100
Low Speed	4900	7500	10600	14000	16900
Pressure Drop (Feet of Head)					
	.33' @ 1 GPM		1.0' @ 2 GPM		3.0' @ 4 GPM

\* Heat Ratings based on 2 GPM and 65°F Entering Air. For 1 GPM multiply by .95 factor.

FIG. 1 DIMENSIONAL DATA



FACTORY WIRED ON LO SPEED  
 To direct wire on Hi speed replace RED (LO) wire connection to BLUE AQUASTAT wire with BLACK (HI) wire. Cap the disconnected RED (LO) wire before powering unit.

OPTIONAL 2-SPEED SWITCH INSTALLATION  
 All Electricians Must Comply With Local & National Codes

## 5 YEAR LIMITED WARRANTY

Turbonics, Inc. warrants to the original user each new product manufactured by it or sold under its trade names to be free from defects in workmanship and material under normal use and service for a period of five years from date of shipment from the factory warehouse excluding the pump on the Chill Chaser whose warranty is one year. The sole liability of Turbonics, Inc. under this warranty is limited to repairing, or at its option, replacing free of cost, any defective part or parts f.o.b. its factory, provided that (1) the defective part is returned prepaid to Turbonics, Inc. upon its written authorization, and (2) Turbonics, Inc. determines the defective part has not been subjected to misuse, abuse, negligence, accident, or improper installation, operation, service or repair. This warranty does not include any field labor charge involved in removal of the defective part or installation of the repaired or replacement part. During the first year, with prior factory approval, a labor charge of \$15.00 per hour may be applied for on warranty repairs. This warranty is made only to the original user of the product and cannot be transferred or assigned, and it is effective only while the product is in use at the place of original installation. Such warranty shall not apply to any product on which the serial number or date of manufacture has been altered, effaced or removed. This warranty applies only to products installed within the continental boundaries of North America. This warranty constitutes the only warranty, or representation of Turbonics, Inc. and no other warranty, or representation, statutory or otherwise, is expressed or may be implied. In no event will Turbonics, Inc. be responsible for special or consequential damages of any kind whatsoever.

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