

Study: Save up to **40%** off fuel bills
with heat and hot water boiler upgrades! *

*See footnote at the
bottom of page 2.



**ENERGY KINETICS
JUMPS FAR AHEAD
of old fashioned
tankless coil
technology!**

For high flow showers, fast fill tubs, higher efficiency and more fuel savings, or if you currently have a hot water tank. Ask about our other great Energy Kinetics products!

(See back cover.)

**100% Bioheat[®]
fuel ready!**

Ascent[™]

Simple technology that cuts
the high fuel bill of tankless coil boilers!



SHOWN
WITH OPTIONAL
SILENT BURNER
COVER

- **Runs on oil, gas OR biofuel (using blends of up to 100% biodiesel!)**
- **Proven** 30 year boiler!
- **Whisper quiet with silent burner cover – no need to turn up the TV!**
- **Combined heat and hot water in one boiler!**
- **Replaces 2, 3 and 4 section oil boilers!**
- **Lifetime Limited Warranty**

**Cuts
fuel bills
season
after
season!**

THE ASCENT COMBI is ready 24/7, . . . just like conventional tankless coil boilers. But because of its unique design and plate heat exchanger, it cuts energy bills year after year!

No tankless coil boiler compares for energy savings, quietness and hot water delivery! For *greater* savings, at the touch of a button, select either a smart learning mode or on-demand operation.

Don't need hot water at night during the summer? The boiler doesn't have to run! It's so smart it learns your routines and is ready when you need hot water, . . . then saves energy when you don't.

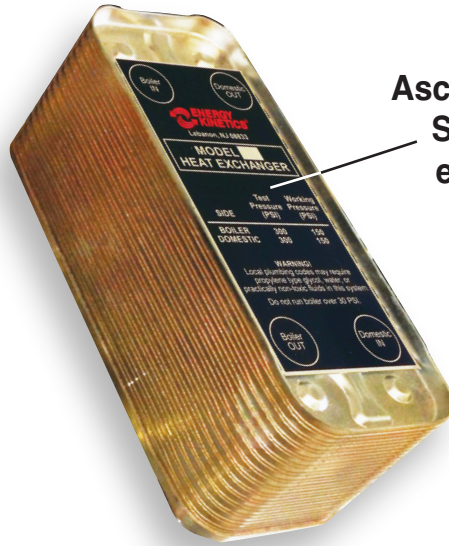
What does Bioheat fuel mean to me?

Bioheat fuel, or biodiesel, is a renewable, biodegradable high grade fuel manufactured domestically from waste stream sources including vegetable oils, animal fats or used cooking oil. It's a clean, easy choice to reduce emissions *without sacrificing comfort or efficiency.* **The Ascent boiler can use fuel oil blends up to 100% biodiesel (B100), which CAN CUT CARBON EMISSIONS UP TO**

85%

Ascent™

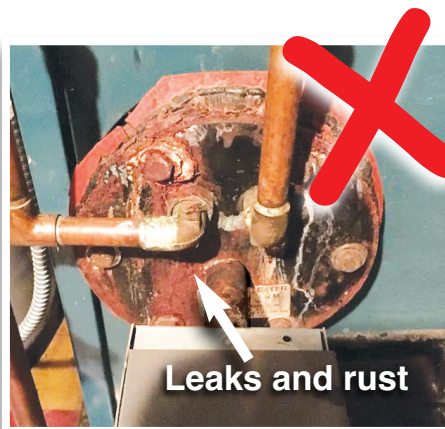
Combi boiler by Energy Kinetics



Ascent's revolutionary Sealix® plate heat exchanger (PHE)

This innovative state of the art PHE delivers reliable, **continuous** hot water – *unmatched* by any other tankless coil boiler.

Plus there are no studs to break or gaskets to leak, with easy-to-service union connections. Our Sealix® non-stick coated surfaces prevent lime and mineral build up for exceptional long-term performance in hard water applications.



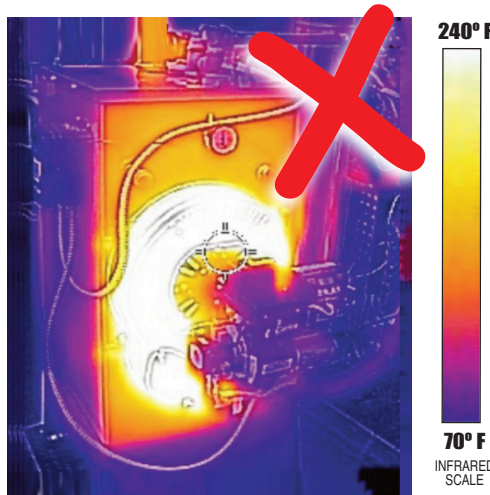
Leaks and rust

Tankless coil boilers typically fail at the coil flange or cast iron sections. **Ascent has no coil flange or cast iron sections.**

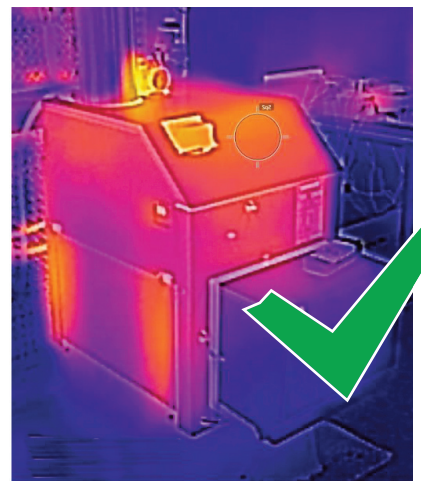


Air flow

Tankless coil boilers waste fuel through draft regulators. **Ascent has no draft regulator.**



240° F
70° F
INFRARED SCALE



Infrared doesn't lie! Shown at left: a tankless coil boiler wastes heat and energy through jacket loss. Shown at right: Ascent sends more heat into your home.

* Data and conclusions are drawn from the report "Performance of Integrated Hydronic Heating Systems" (2007), Energy Resources Division, Department of Energy Sciences and Technology, BNL, Under Contract No. DE-AC02-98CH10886 with the United States Department of Energy by Dr. T. Butcher; and "Chimney Related Energy Losses in Residential Oil-Fired Heating Systems" (1990).

These additional design and engineering features help Ascent easily outperform old fashioned tankless coils.

On the Hydrostat™ control panel, select one of **four operating modes** that best suits your needs!

The energy converter is a **proven 30 year spiral design** for the highest efficiency. There are no sections or pins to foul, clean, or leak.

Removable stainless steel alloy combustion chamber for **clean burning operation**.

Hefty **2 inch thick insulation wrap** for high efficiency and quiet operation.

Swing down door for easy accessibility.

Plate heat exchanger.

Our smart Hydrostat controls hot water comfort and efficiency and **outperforms tankless coils**.

Optional silent burner cover combined with our spiral boiler design delivers **whisper quiet operation**.

Built in stand keeps Ascent off the cold floor.



UP TO **87.0** AFUE

Multi-Fuel



Hard water? Add a scale stopper for reliable operation (up to 25 grains of hardness) without cleaning!



With the silent burner cover, Ascent is more quiet than a microwave oven!

Our smart Hydrostat™ can learn your weekly routines.

2 inch thick insulation wrap.

Optional Clean In Place (CIP) valves location.

Optional boilerside Y-Strainer (CIP).

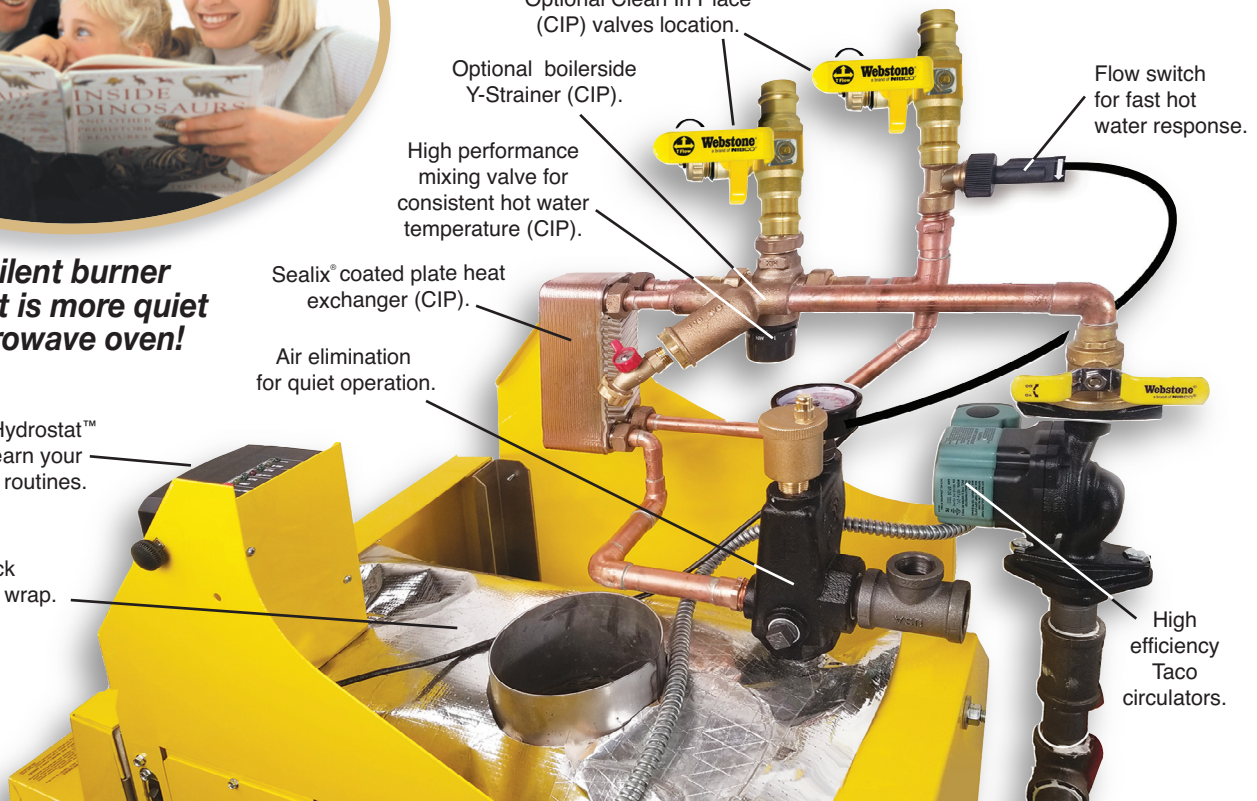
High performance mixing valve for consistent hot water temperature (CIP).

Sealix® coated plate heat exchanger (CIP).

Air elimination for quiet operation.

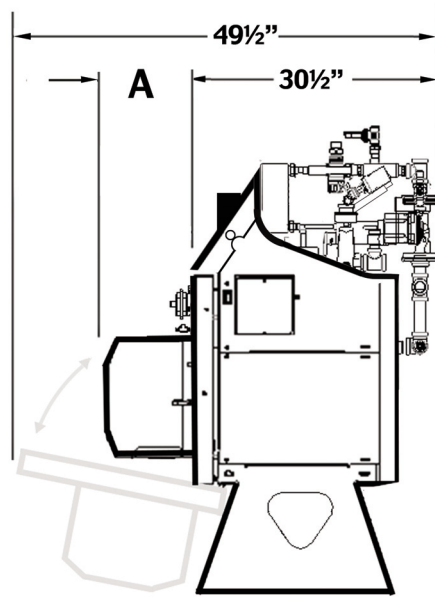
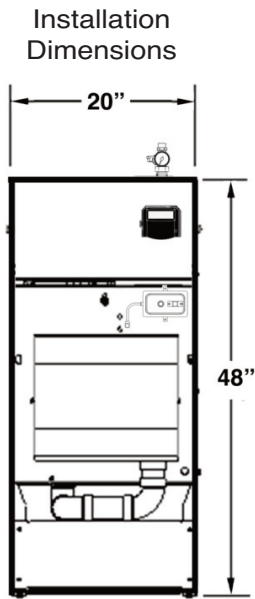
Flow switch for fast hot water response.

High efficiency Taco circulators.



Ascent Combi Model EK1T

Ascent Combi Model EK1T



Recommended service clearances:
 20" from front door face
 5" from left side
 12" from right side

Clearance to combustibles:
 4" from rear cover
 10" above top cover
 0" from polypropylene pipe
 0" for all the other dimensions



Weight	315 lbs.
Water Content	3 gallons
Air Inlet Pipe Size*	3" PVC
Boiler Flue Outlet†	5"
Hydronic Supply	1"
Hydronic Return	1"
Hot Water Supply	3/4"
Hot Water Make-up	3/4"
Bypass Circulator	Taco 007e
Hydronic Circulator	Taco 007e

*Reduce to 2" PVC for up to 20' plus five elbows
 †6" liner recommended for 1.25 GPH firing rate

Dimension "A" See drawing at left

Burner	W/O Cover	With Cover
Carlin EZ-1	9"	9 1/2"
Carlin EZ-Gas	11 5/8"	12 3/4"

Included (factory piped and assembled): ASSE mixing valve, boiler base, blocked vent safety switch, dynamic air elimination manifold, ON/OFF switch and junction box, 3/4" drain valve, plate heat exchanger and combi hot water assembly, hydronic Y-strainer, circulator flanges, door safety switch. **Included (field install):** Clean in place valves, relief valve, hydronic circulator (wiring included). **Draft regulator not required or recommended due to advanced combustion chamber.**

*6" liner recommended for 1.25 GPH firing rate † Domestic hot water rating based on 77° rise. Not for comparison with tankless boiler ratings. Input based on No. 2 fuel oil heating value of oil -140,000 BTU / Gal. MBH refers to thousands of BTU per hour.

Oilheat and Bioheat® fuel home heating system†

Model	Input Rating (GPH)	Heating Capacity (MBH)	AFUE	Domestic Hot Water*
EK1T	0.85	104	87.0	195
EK1T-140	1.00	119	87.0	205
EK1T-175	1.25	145	86.2	270

†UL listed for use with oilheat blends up to 100% biodiesel with a B100 listed burner.

Natural gas and propane home heating system

Model	Input Rating (MBH)	Heating Capacity (MBH)	AFUE	Domestic Hot Water*
EK1T-120	120	101	87.0	195
EK1T	150	126	85.9	205
EK1T-175	175	147	85.1	270

*Domestic hot water rating based on first hour draw with 67°F rise and a 3 gpm draw on a 40 gallon tank; first hour draws over 195 gallons are calculated based on continuous draw with 67°F rise at maximum flow rate.



System 2000®



Resolute™ RT

For high flow showers, fast fill tubs, higher efficiency and more fuel savings, or if you currently have a hot water tank, ask about these great Energy Kinetics products

"Tankless coil ratings *overstate* hot water delivery. They use a misleading short five minute flow test. They just can't keep up with Ascent's continuous flow."



Exceptional residential lifetime limited warranty!
 See actual warranty for details.

As an ENERGY STAR® Partner, Energy Kinetics has determined model EK1T meets ENERGY STAR® guidelines for energy efficiency for oil heat input 0.85 GPH. ®The color yellow for heating boilers is a registered trademark of Energy Kinetics.

Scan code to visit our website at EnergyKinetics.com



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