



A-MAIZE-ING HEAT®

LDJ Manufacturing, Inc. • Pella, IA

BIOMASS FUELED FURNACE & BOILER



Working for
a safer world



Lowest Maintenance Biomass Unit on the Market

Obadiah's • 406-300-1776

HEATING COST COMPARISON

- | | | |
|--|---|---|
| 1. Current monthly HEATING bill:
(Yearly totals can also be used) | \$ _____ | 5. Equals total BTU's used to HEAT home: \$ _____ |
| 2. Divided by the price paid per unit:
Unit = Gallon of propane (LP)
Gallon of fuel oil
KWH of electric (average unit cost)
Therm of natural gas (average unit cost) | \$ _____

got corn?
Burn It! | 6. Divided by average BTU content / bu. of corn: 504,000 btu
(UL standard BTU value per bu. of corn) |
| 3. Equals current monthly fuel consumption: \$ _____
gal / kwh / therm | | 7. Equals bu of corn required to HEAT home: \$ _____ |
| 4. Multiply by BTU per unit of this fuel:
Propane 91,000 BTU/gal
Fuel Oil 140,000 BTU/gal
Electric 3,412 BTU/kwh
Natural Gas 100,000 BTU/therm | _____ BTU | 8. Multiply by the price per bu of corn: \$ _____ |
| | | 9. Equals cost/month to HEAT with corn: \$ _____ |
| | | 10. Top line (1.) \$ _____ |
| | | 11. Minus bottom line (9.) \$ _____ |
| | | 12. Equals SAVINGS per MONTH/YEAR: \$ _____ |

EXPERIENCE AN EFFICIENT HEATING ALTERNATIVE ~

...a highly efficient concept, biomass heat. In times of highly uncertain energy costs it makes sense to use a heat source that utilizes a resource that is renewable, readily available, and cost effective. The LDJ **A-Maize-Ing Heat®** furnaces and boilers burn shelled corn, wheat, barley, milo, cherry pits, grain sorghum, wood pellets, and many other bio products.

• Efficient, Self-cleaning Unit

The LDJ **A-Maize-Ing Heat®** systems feed the fuel into the bottom of a 5/8-inch thick cast iron burn pot, therefore providing the most efficient fuel consumption. The residual ash then spills over the top of the burn pot into an ash pan for easy removal. This process, in effect, self cleans the combustion chamber.

• Thermostatically Controlled:

Your home's thermostat electronically controls the fuel feed system and blower to provide a constantly comfortable living environment. The unit will remain lit as long as the bin contains fuel and will shut down automatically if the fuel supply is depleted. The storage bin holds 14 bushels of corn which is automatically fed into the combustion chamber as needed.

• Advantages over Wood:

The **A-Maize-Ing Heat®** biomass system has many advantages over wood heat. Along with the thermostatic control, the low stack temperatures and absence of creosote buildup eliminates the possibility of chimney fires. There is no daily maintenance. Also, with the available 100,000 or 165,000 variable rate BTU models you can easily heat an entire home or shop. The use of

these biomass fuels also eliminates the mess of bark, insects, splinters, and storage and handling problems associated with wood heat. No chainsaws, wood splitters, or trailers to buy and maintain either.

• Quality Construction:

The LDJ **A-Maize-Ing Heat®** unit features quality construction for long lasting performance. 14 gauge steel is used on the heat exchanger and a 5/8-inch thick cast iron burn pot ensures long life. A one-year warranty is included on parts and a five year limited warranty on the burner and heat exchanger.

• Environmentally friendly:

The LDJ **A-Maize-Ing Heat®** systems utilize a fuel source that is renewable and locally produced. It also emits, when burned, an exchange of carbon dioxide equal to what was taken from the environment in the production of the biomass fuel. There is no harmful carbon monoxide emitted in the process.

• UL Listed:

Every LDJ **A-Maize-Ing Heat®** unit has a current UL listing. The original A-maize-ing Heat biomass systems were the first corn-fired units to be listed by Underwriters Laboratories. Using the dual auger drive system to meter the fuel allows for precise and safe control of combustion. Every change or update LDJ has made has gone through the UL testing and been approved. LDJ's UL listing assures a safe and quality product to every consumer.



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Toll Free: 866-535-7667

www.cornheat.com

Authorized Dealer:

Made in America

To Heat

American

Homes With

American Grown Fuel



BIOMASS BOILER

BOILER SPECIFICATIONS

Model LDJ991-9 & LDJ991-10

Dimensions - Boiler61"H x 22"Diameter
Dimensions - Bin48" H x 36" W x 52" D
Weight - Boiler.....510 lbs
Weight - Bin.....50 lbs
Flue Pipe6" Class A
Fire Pot5/8" Cast Iron
Bin Capacity14 bushels
Tank Capacity18 Gallons
Combustion Blower60 or 100 CFM
BTUs100,000 OR 165,000
Voltage110 volts
Efficiency Rating85%
Clearance to Combustibles.....18" from flue connection
Thermostat Controlled, UL Listed

ASME Approved Boiler

Tube type steel boiler with a wet leg water jacket surrounding the burner chamber in water.

- Combustion Blower
- Pressure Relief Valve
- High Limit Switch
- Aquastat Relay Burner
- Switch



Advantages of Hydronic Heat:

- Hydronic systems are reliable, clean, efficient without the noise, dust and drafts of hot air systems.
- Operation is automatic – indoor temperature is maintained at the desired level, regardless of changes in weather by setting the thermostat.
- Water is the best natural material for conducting heat. Temperature changes of water can be accurately controlled and measured so there is less “over shooting” of thermostat settings and less wasted heat.
- There is no hot or cold spaces or drafts in your home.
- With hydronic heat, there is no recirculation of air in the home blowing dust, odors, germs, or spores throughout the house.
- Hydronics is a sealed system so there is no moisture put in or taken out of the home.

LDJ Exclusive Boiler Improvements

- Copper auger tube
- New higher torque auger motors
- Updated UL listing 
- ASME boiler tank
- New and improved owner's manual
- Available in 100,000 BTU & 80,000-165,000 BTU Variable Rate
- Corn hopper shutoff
- Powder Coated Finished

Additional Options

- New 7 bu. Hopper Topper
- New Hopper Screen
- Domestic Water Coil

BIOMASS FURNACE

FURNACE SPECIFICATIONS

Model LDJ620-9 & LDJ620-10

Dimensions - Furnace.....53"Hx27"Wx46"D
Dimensions - Bin.....48"Hx36"Wx51"D
Weight - Furnace440 lbs.
Weight - Bin50 lbs.
Flue Pipe.....6" Class A
Plenum Openings.....14" x 18"
HEAT Exchanger14 gauge steel
Fire Pot.....5/8" Cast Iron
Air Filter20 x 20 x 1
Bin Capacity14 bushels
Combustion Blower60 or 100 CFM
Hot Air Blower1/2 HP - 3 speed
BTUs100,000 OR 165,000
Voltage110 volts
Efficiency Rating.....85%
Clearance to Combustibles:
Top32" Front30"
Side.....6" Rear18"
Thermostat Controlled, UL Listed



LDJ Exclusive Furnace Improvements

- Copper auger tube
- Sloped door lip
- New higher torque auger motors
- Powder coated finish
- Updated furnace wiring
- Larger 1/2 hp. room air blower
- Increased plenum size
- Updated UL listing (UL)
- New and improved owner's manual
- Available in 100,000 BTU & 80,000-165,000 BTU Variable Rate
- Corn hopper shutoff
- Improved heat exchanger
- Coupler system for Left hand/Right hand unit
- Air Conditioning Compatible

Additional Options

- New 7 bu. Hopper Topper
- New Hopper Screen