

Installing “Energy Smarts” as Part of Your Project:

*Differentiate Yourself with
Training and Behavioral
Energy Management*



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We all live and work in buildings

and

Make Choices about

How we use energy

and

We don't think too

much about it

Research shows that these choices
can impact energy use by 3%-20%

*Our Habits
Matter*

Equipment Choices + Human Choices = Energy Consumption







TRAINING + BEM

Why You Want to Install Training:

- **Low-cost insurance policy on your performance incentive**
- **Requirement when installing submeters**
- **Incorporates an important customer service component**

Why Your Client Wants to Install Training:

- **Organizational sustainability goals**
- **Interest in resident involvement/employment**
- **Understands that periodic training leads to a persistence of savings**

How will this guy screw up
your savings?







12.0 gpm

You installed 0.5 gpm aerators in the bathroom. Maintenance is replacing with 2.2 gpm aerators. What's the difference?

\$2,170/year.





MODINE

HOT WATER SUPP

Aqua

1/2" Aqua 1/2" Aqua

LEMIEUX HEATING, INC.
2283 Acushnet Avenue
NEW BEDFORD, MA 02745
(508) 995-1631

MAKE _____ DATE OF PURCHASE _____

MODEL _____

SERIAL NO. _____

DATE	INITIALS	NATURE OF SERVICE
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06-07	JW	YEARLY MAINT.
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5/08	JW	YEARLY MAINT.
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Operating Instructions for
R-K Gas-Fired Heating Boiler

Starting Boiler

1. Verify that no flames are visible in the burner area before attempting to start the boiler.
2. Turn on the gas supply valve to the boiler.
3. Turn on the boiler power switch.
4. Turn on the boiler power switch.

Stop Operation

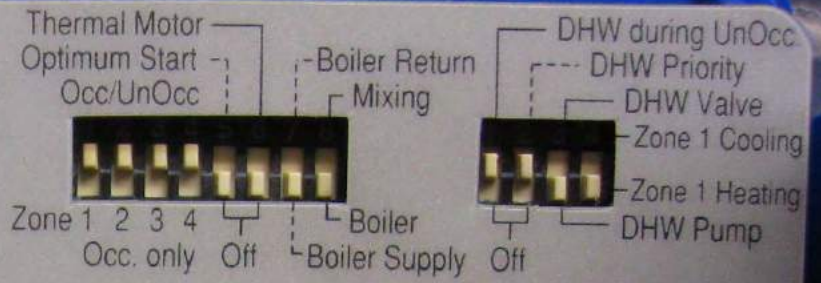
1. Turn off the boiler power switch.
2. Turn off the boiler power switch.

IPK
Fletcher-Kelley Co.
Burlington, MA

HEAT, WATER, FLUE, GAS, FRESH AIR, FAN, FLAME FAILURE

CALL 1-855-873-5677

IPK
THERMIFLEX



- Power
- WWSD
- DHW Demand
- Maximum Supply
- Minimum Boiler

24 hr. Timer

12 hrs.

6 18 24

0

UnOccupied Duration

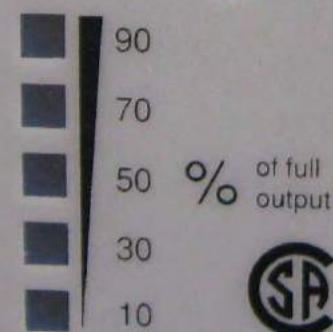
0 = always Occupied
24 = always UnOccupied

70°F (21°C)

40 (4) 100 (38)

UnOccupied

- DHW Pmp / Vlv
- System Pump
- Boiler
- Zone 1 / Cooling
- Zone 2
- Zone 3
- Zone 4



1 2 3 4

0.2 3.6

Heating Curve

170°F

120 220

Max. System Supply

130°F

100 165

Min. Boiler Supply/Return

Test

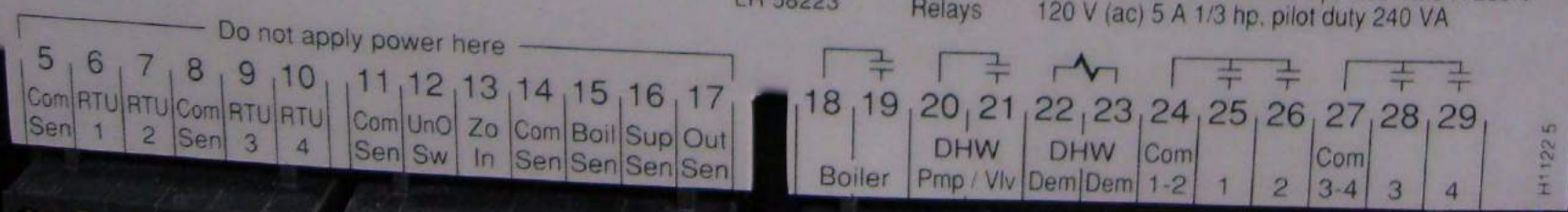
1370
Boiler / Mixing

Made in Canada by tekmar Control Systems Ltd.

Apr 00
31176959

Caution: Signal wiring must be rated at least 300V

Power 120 V 50/60 Hz 1000 VA
Var. Pump 240 V 50/60 Hz 2.4 A 1/6 hp. fuse T2.5 A 250 V
Relays 120 V (ac) 5 A 1/3 hp. pilot duty 240 VA







Heating/Cooling

Todd's List

- Periodic clean and tune
- Periodic recalibration of system controls
- Recommissioning of building EMS
- Steam trap maintenance/repair
- Clean furnace filters regularly
- Combustion safety testing
- Educate residents on temperature management

Recommended Illuminance Levels

Building Area and Task	Footcandles
Hallways	5-10
Stairwells	3-5
Lobby – Daytime	20-30
Lobby – Night	5-10
Community Room	30
Mechanical Room	10-30
Bathroom	30-50
Kitchen	30-50



Electricity – Appliances

Todd's List

- Unplug refrigerators in vacant units
- Check/replace refrigerator gaskets
- Set fridges in the 'Smart Zone' 38°-40°
- Install vending misers on vending machines
- Encourage residents to wash and dry full loads only
- Encourage residents to wash clothes in cold water

How will these folks screw up
your savings?



