
BENRICH SERVICE COMPANY TRAINING PROGRAM©

High Delta (302K – 902K BTU) Sequence of Operations

1. 120 volts coming into boiler
2. Goes to On/Off 30amp breaker switch
3. 120 volts distributed to: Transformer, Fenwall, Pump Delay, PC Board, Low Water Cutoff
4. 24 volts goes to auto high limit, manual high limit and blocked flue
 - a. Power to Panel switch
 - b. Goes to Enable/Disable (where management system (EDC) ties in)
 - c. Goes to stage 1 of PC board (Call for Heat)
5. Tank stat sends the “Call for heat”
6. Pump comes on and makes flow switch
7. Blower turns on and makes air switch
8. Igniter pulls amps and proves
9. Gas valves open
 - a. Power also sent to time delay(s)
 - b. Next gas valve opens
10. Burners ignite
11. Flame sensor senses flame

Laars Mighty Therm 2 (500K – 2M BTU) Sequence of Operations

1. 120 volts coming into boiler
2. Goes to On/Off switch
3. 120 volts distributed to: Transformer, Fenwall, Pump Delay
4. 24 volts goes to auto high limit, manual high limit and blocked flue
5. Goes to Local/Remote Switch to see how it is being controlled
6. Tank stat sends the “Call for heat”
7. Blower turns on and makes air switch
8. Pump comes on and makes flow switch
9. Igniter pulls amps and proves
10. Gas valves open
11. Burners ignite
12. Igniter senses flame