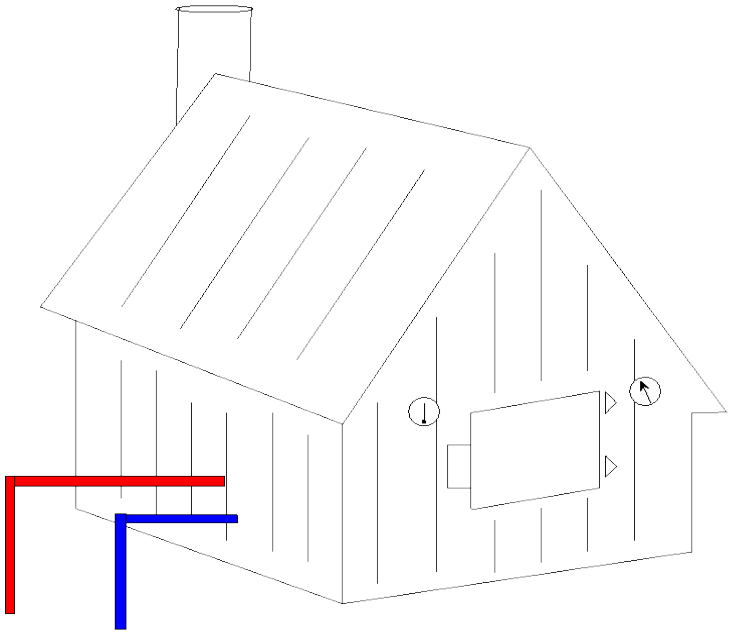
MY Buddy Has A ...

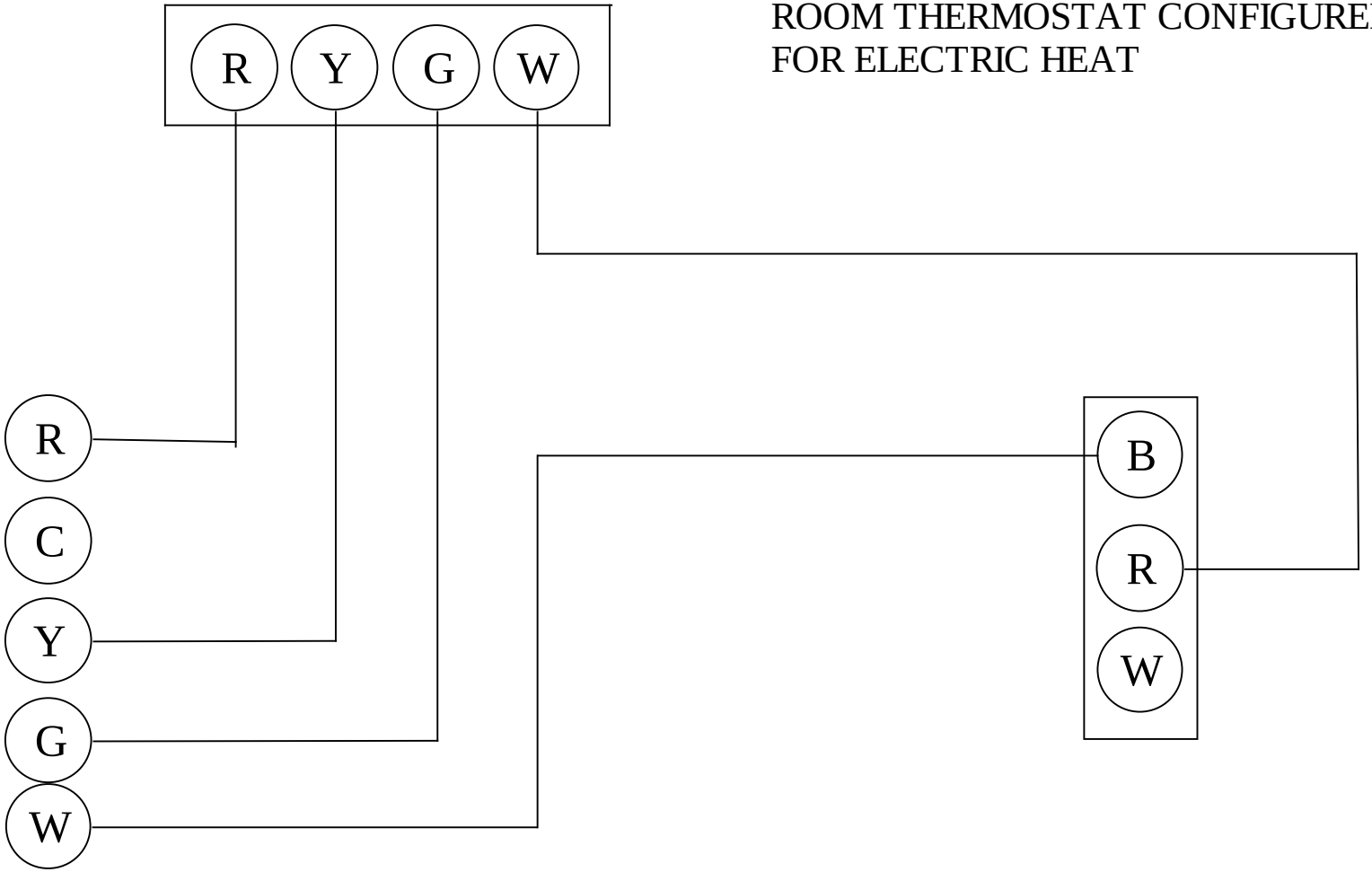


WOOD BOILER

2.0

Basic Furnace/Wood Boiler Interface

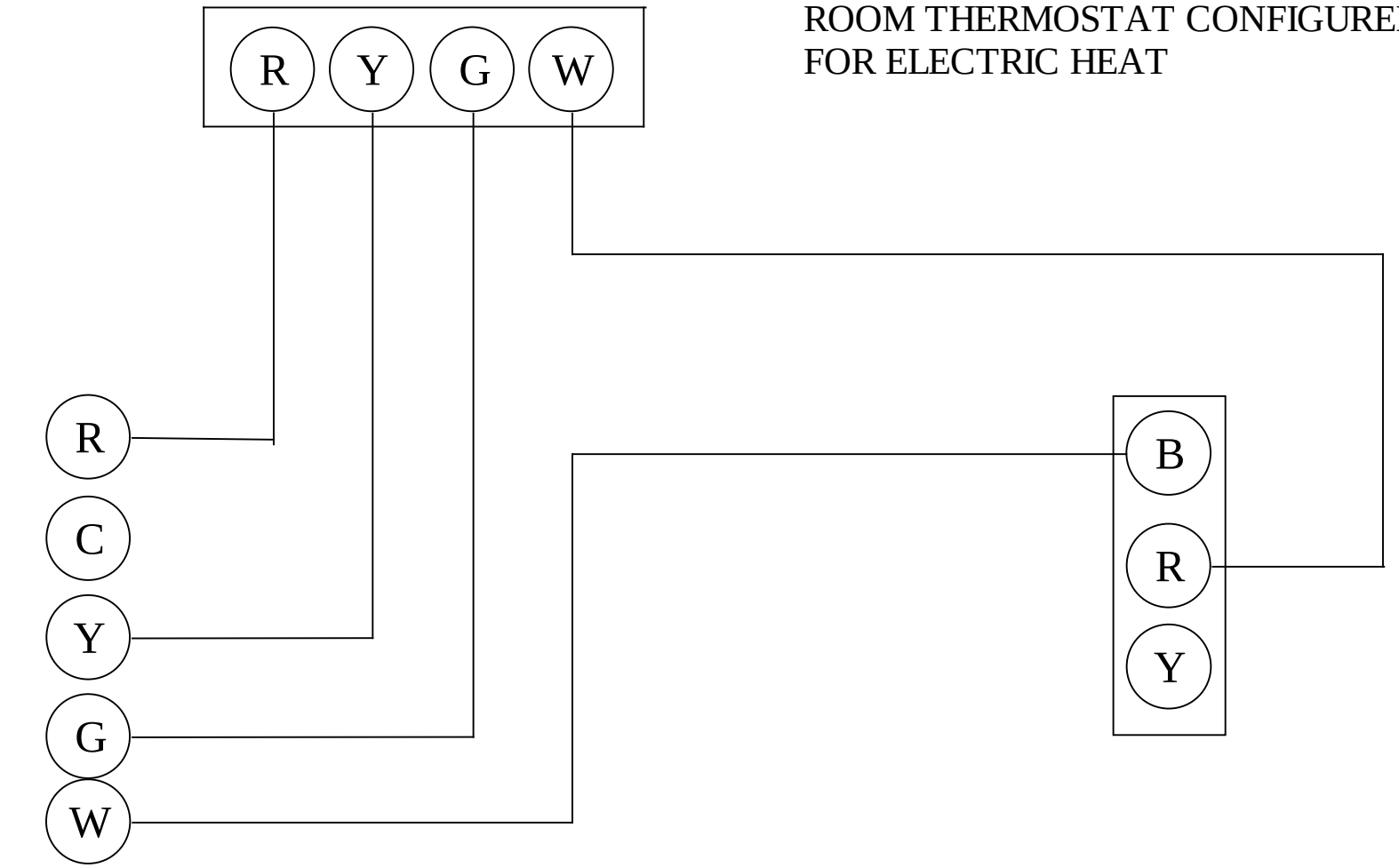
- This is the basic system with the outdoor boiler continuously circulating. The Thermostat is configured for electric heat so that the “G” signal is isolated and will not feed back to “Y” but will energize the fan on a call for heat. Meanwhile the “W” from the thermostat goes to the common or “R” terminal of the aquastat that senses the temperature in the boiler water. If the boiler water is warm it stops there. If the boiler water is below the changeover point the the “B” terminal of the aquastat is energized to allow the signal through to the furnace “W”.



FORCED AIR FURNACE / WOOD BOILER INTERFACE

Basic Furnace/Wood Boiler Interface (Johnson)

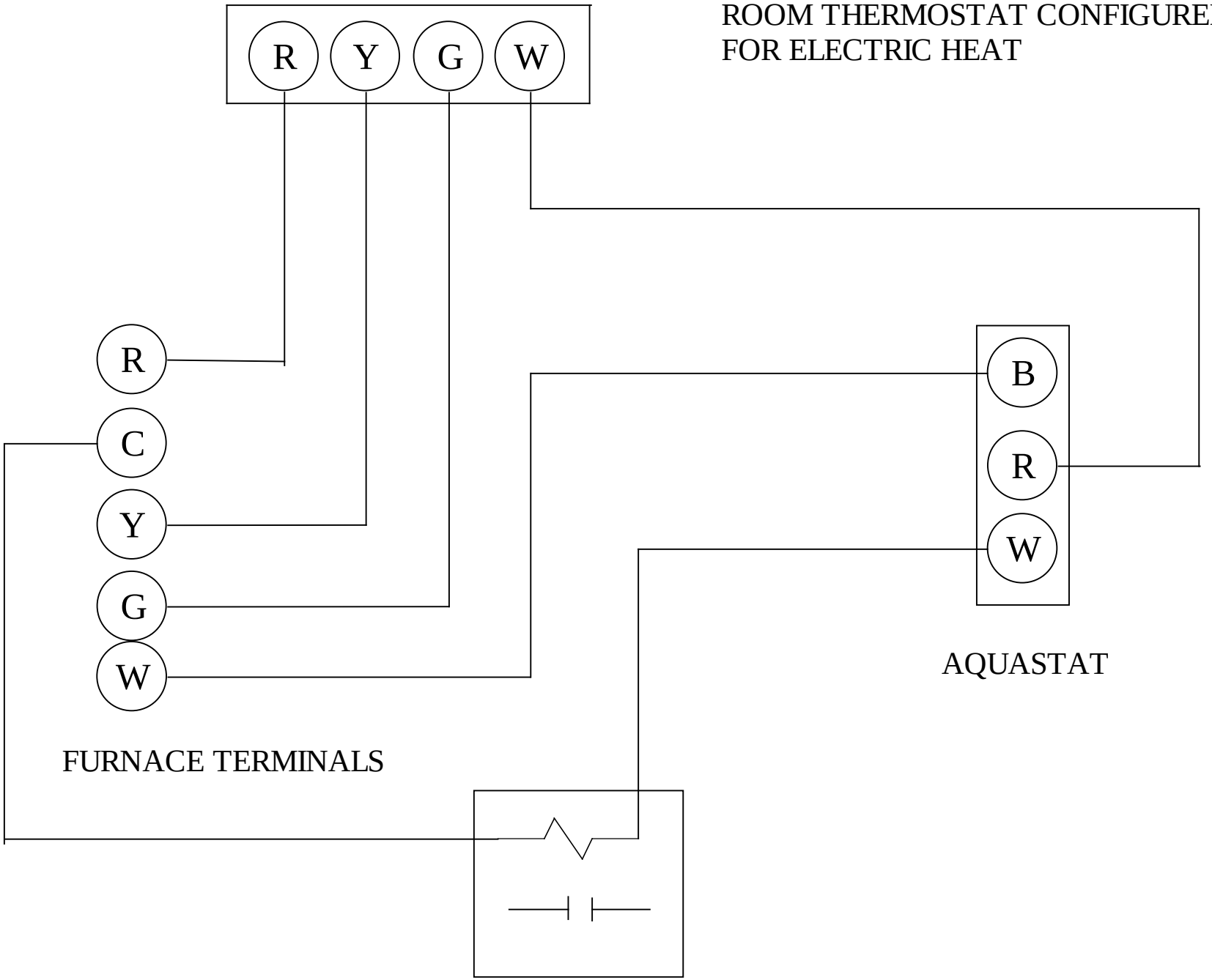
- This is the basic system with the outdoor boiler continuously circulating. The Thermostat is configured for electric heat so that the “G” signal is isolated and will not feed back to “Y” but will energize the fan on a call for heat. Meanwhile the “W” from the thermostat goes to the common or “R” terminal of the aquastat that senses the temperature in the boiler water. If the boiler water is warm it stops there. If the boiler water is below the changeover point the the “B” terminal of the aquastat is energized to allow the signal through to the furnace “W”.



FORCED AIR FURNACE / WOOD BOILER INTERFACE

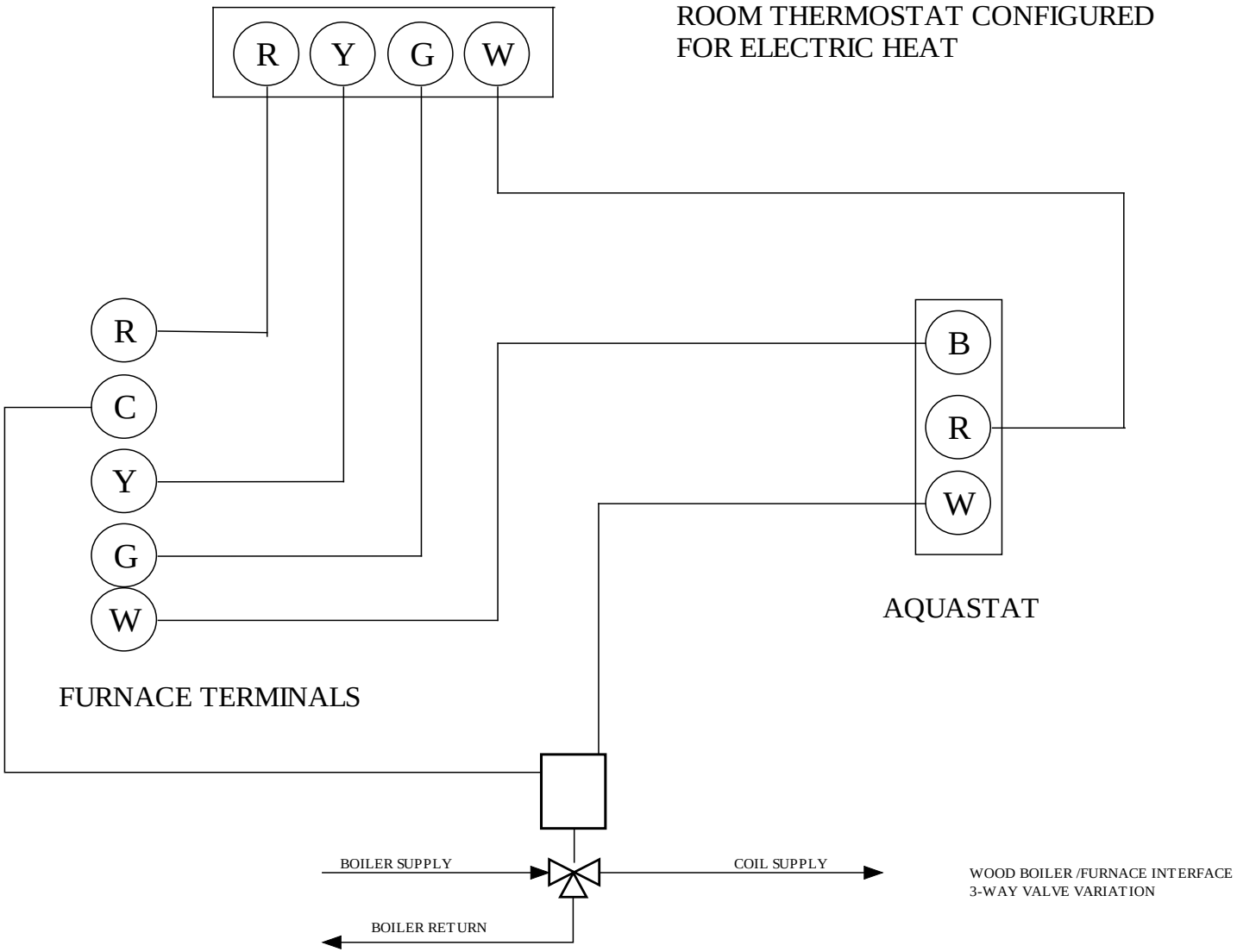
Pump Relay Variation

This is like the Basic with the addition of a relay to turn on the pump in the outdoor unit using the “W” signal from the aquastat when there is enough heat in the boiler water


ROOM THERMOSTAT CONFIGURED
FOR ELECTRIC HEAT
R
Y
G
W
R
C
Y
G
W
FURNACE TERMINALS
B
R
W
AQUASTAT

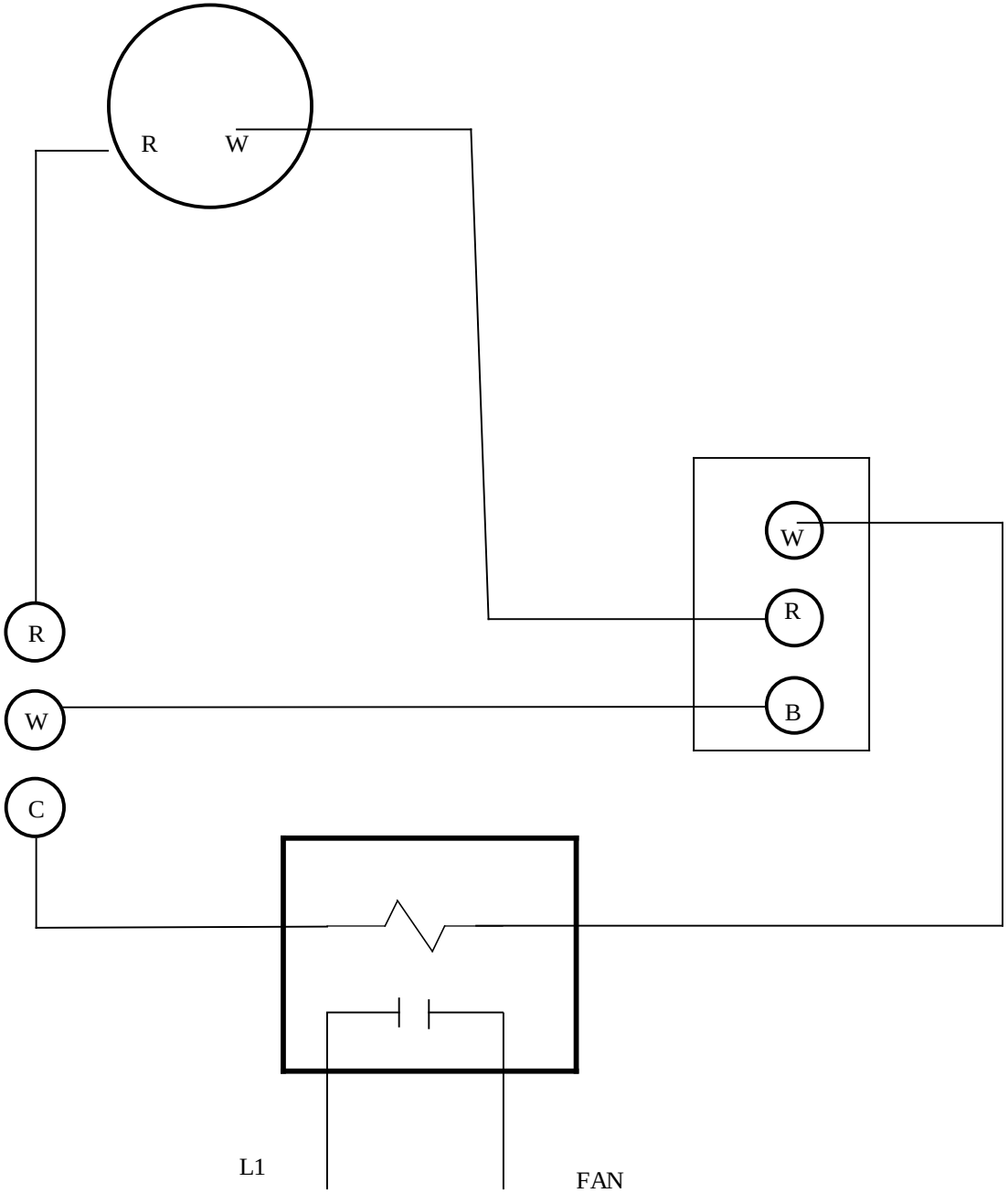
Diverting Valve Variation

This one uses the “W” from the aquastat to energize a diverting valve that allows flow to the coil or diverts it to the boiler return


ROOM THERMOSTAT CONFIGURED
FOR ELECTRIC HEAT
R
Y
G
W
R
C
Y
G
W
FURNACE TERMINALS
B
R
W
AQUASTAT
BOILER SUPPLY
COIL SUPPLY
BOILER RETURN
WOOD BOILER /FURNACE INTERFACE
3-WAY VALVE VARIATION

Heat Only Thermostat/ Fan Relay

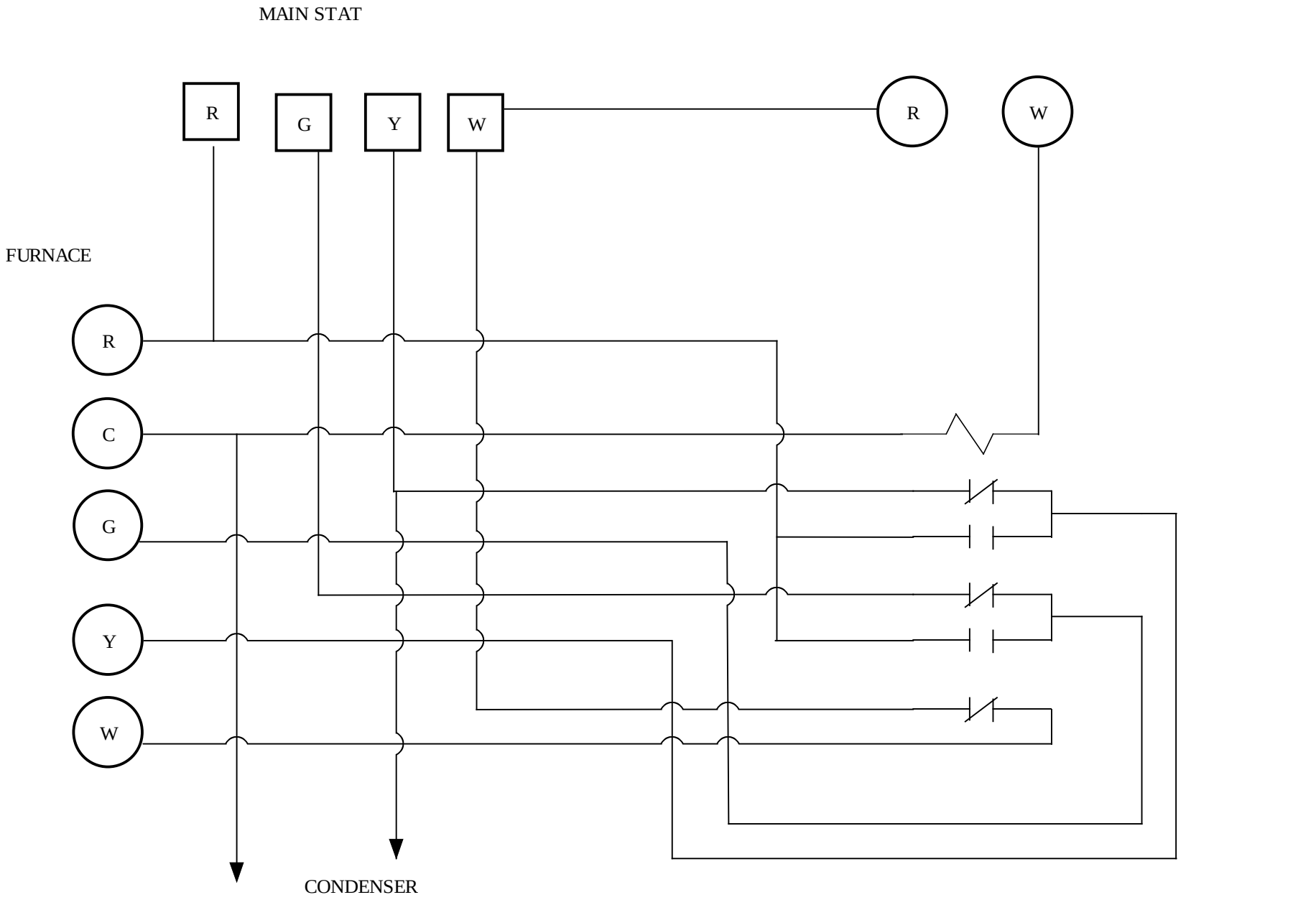
- This one routes the thermostat “W” through the aquastat to energize a fan relay without any fan switching in the furnace



HEAT ONLY STAT/BOILER

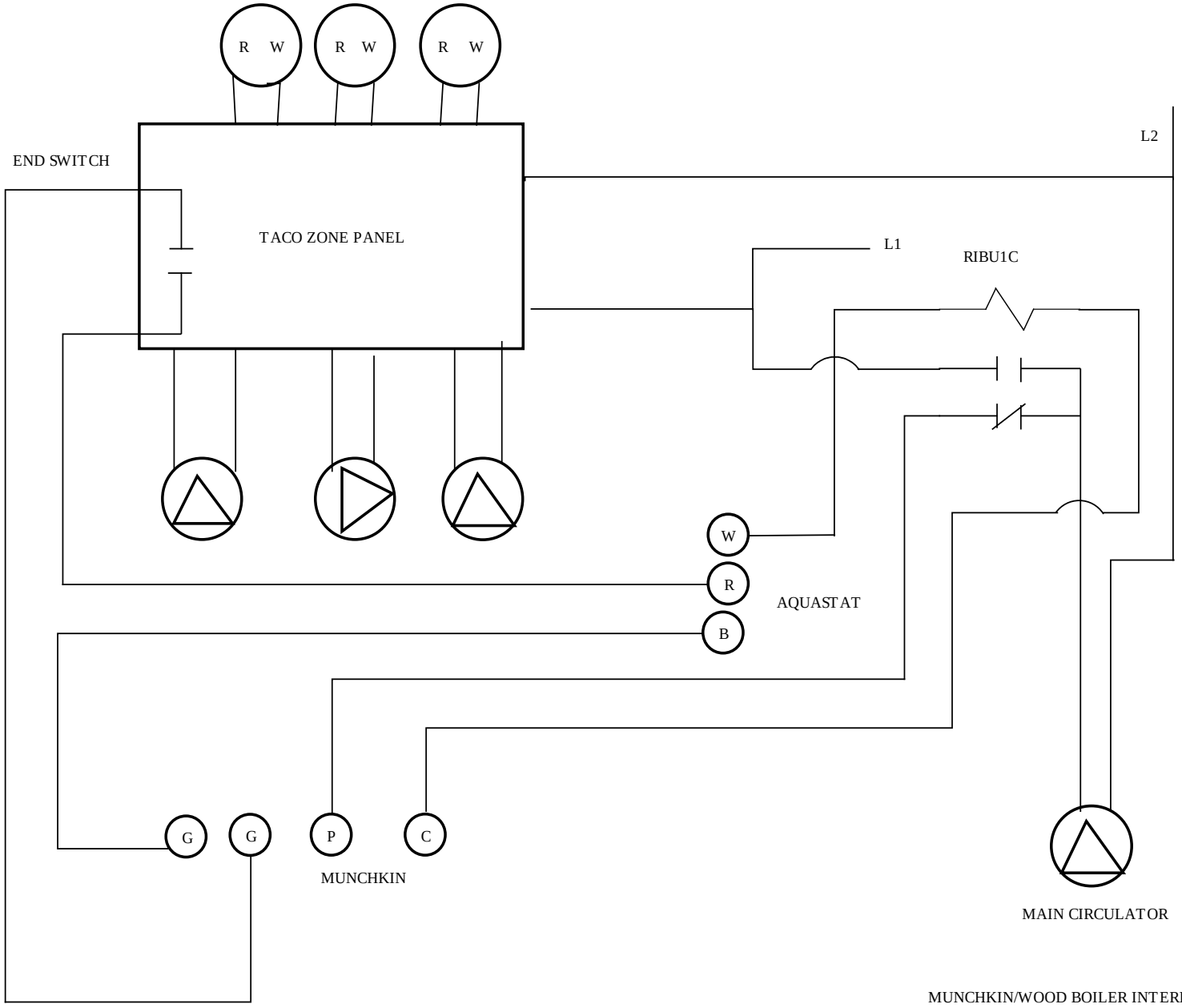
After Someone Installs a Second Thermostat

- This diagram is to get rid of the feedback problem created when someone installs a second thermostat without isolating the “G” signal from “Y”.


MAIN STAT
R
G
Y
W
R
W
FURNACE
R
C
G
Y
W
CONDENSER
WILSON BOILER & GOODMAN

Munchkin/Taco/Wood

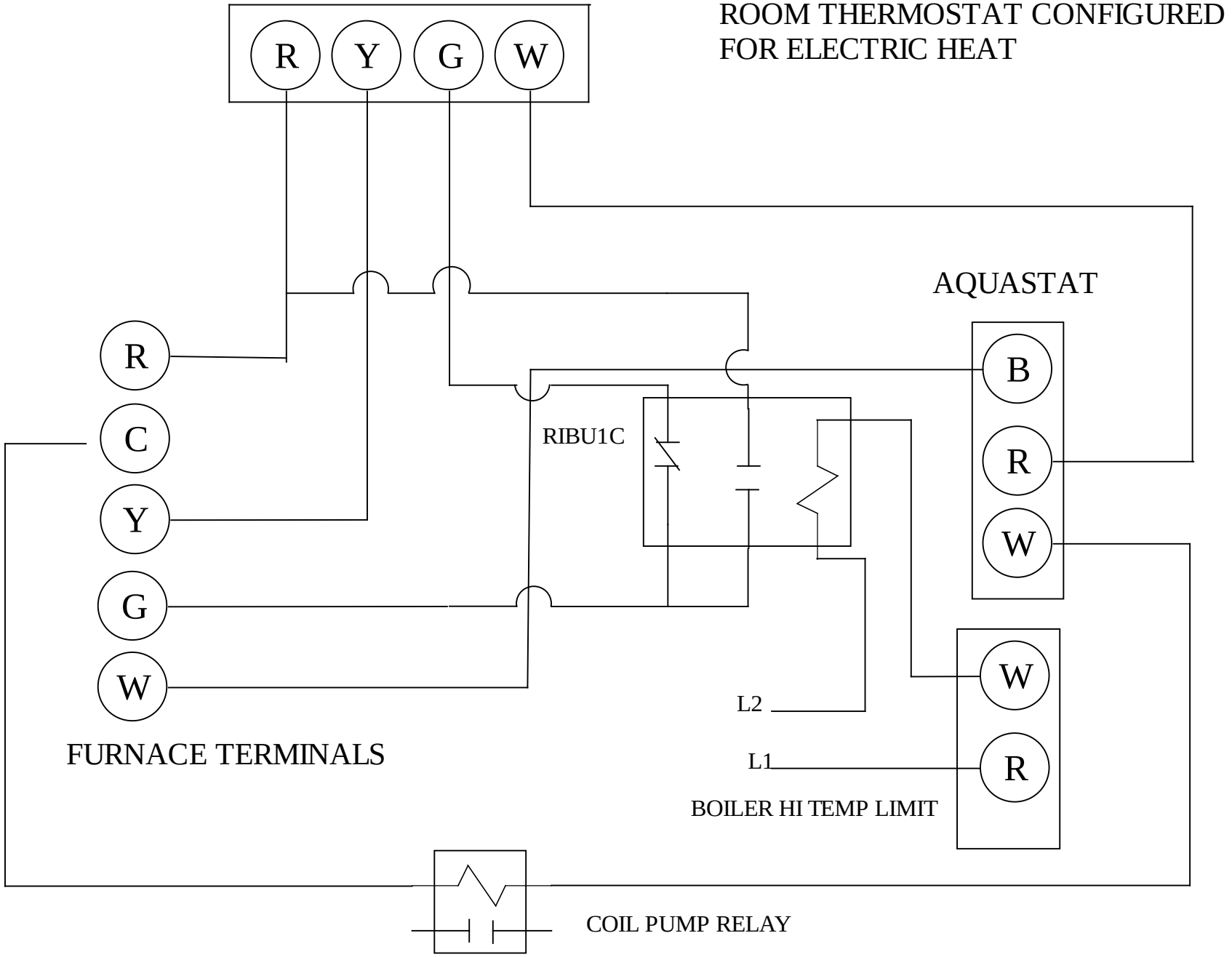
- This was a special job where the contractor needed to decide whether the Munchkin or the wood boiler would supply the heating zones. The Taco panel zones by pumps with the main circulator output on whenever any zone is calling for heat.



MUNCHKIN/WOOD BOILER INTERFACE

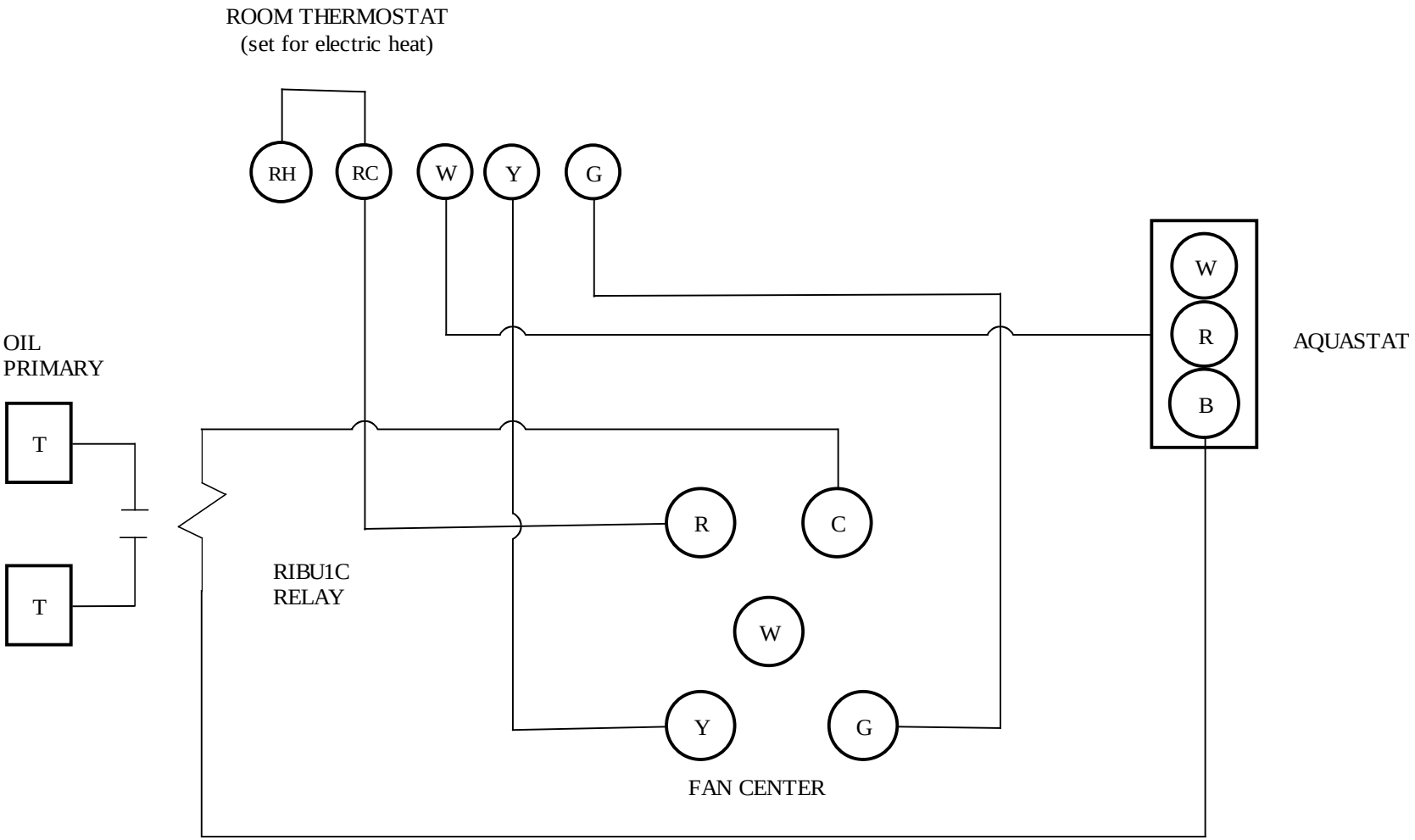
Overheat Dump Zone Control

- A basic system with an overheat dump zone through the furnace coil. Normal operation is continuous circulation through the coil with the fan cycling from the thermostat. If the boiler gets too warm the fan is energized by the boiler high limit to dump heat into the space.


ROOM THERMOSTAT CONFIGURED
FOR ELECTRIC HEAT
R
Y
G
W
AQUASTAT
B
R
W
RIBU1C
R
C
Y
G
W
FURNACE TERMINALS
L2
L1
W
R
BOILER HI TEMP LIMIT
COIL PUMP RELAY

Oil Furnace/Fan Center Interface

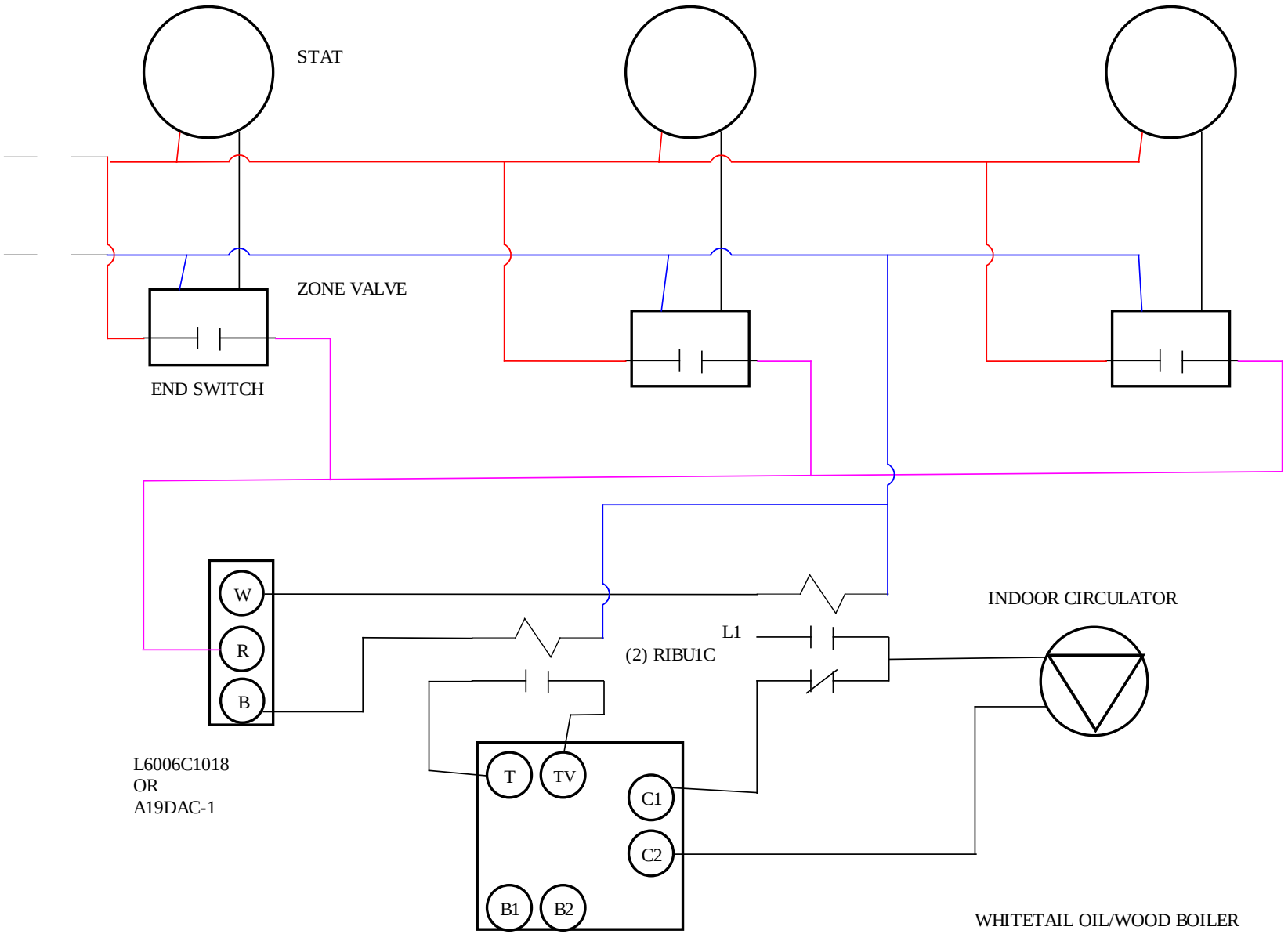
- The basic scenario for adding the coil and wood boiler to an oil furnace with the traditional primary control and a fan center for cooling control. The aquastat energizes a relay to close the “TT” circuit on the primary when the boiler temperature falls below the setpoint. The thermostat “G” energizes the fan relay on a call for heat.



WOOD BOILER & OIL FURNACE, A/C

Hydronic Zone Valves
Gas Boiler/Wood Boiler

- Individual thermostats drive their respective zone valves. Zone valve end switch signals go to aquastat “R” then to external circulator relay from aquastat”W”.
- If the boiler temperature falls the aquastat ”B” energizes a relay to close the boiler control “TT” terminals, energize circulator and fire the burner.

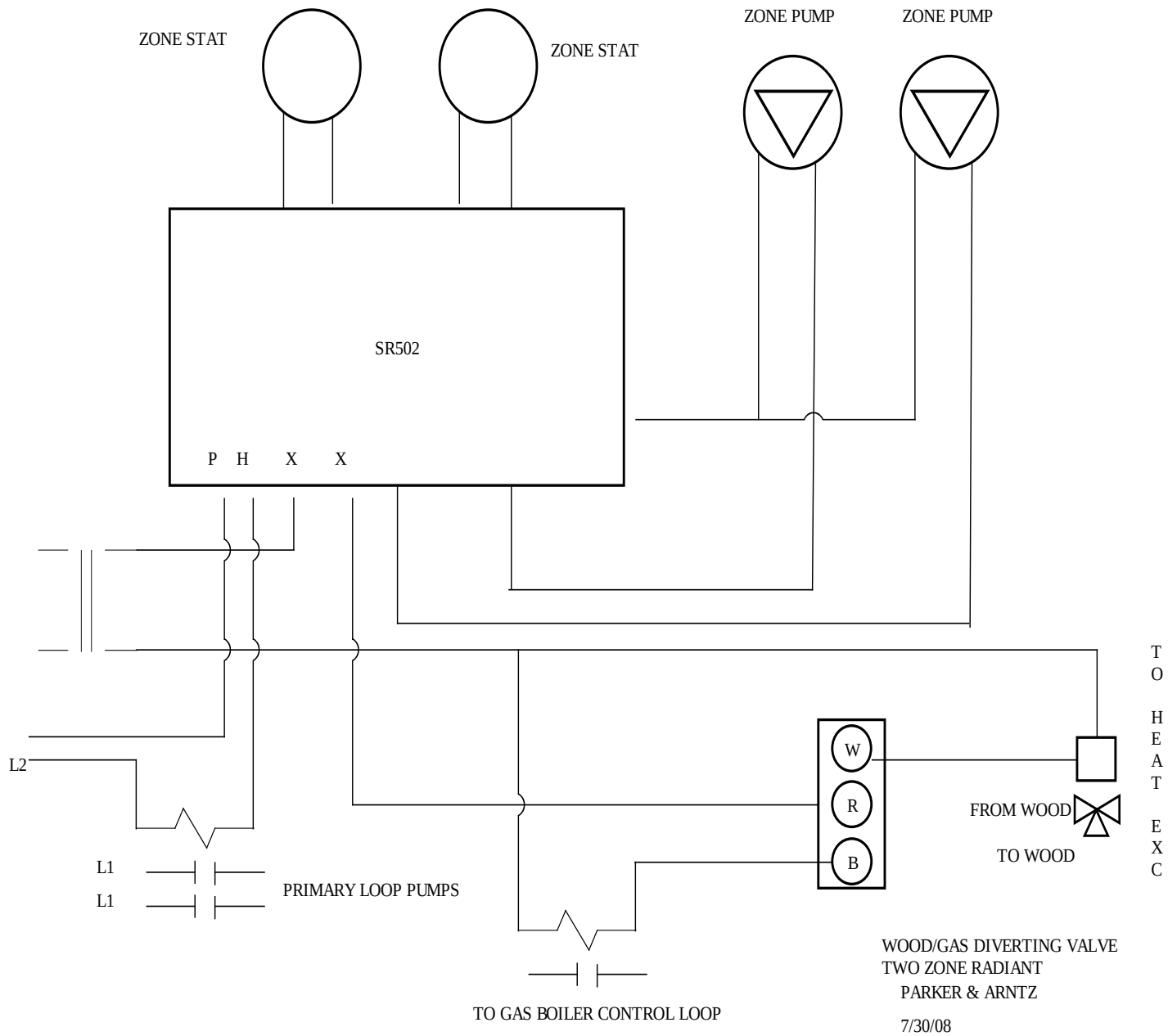


WHITETAIL OIL/WOOD BOILER

7/8/08

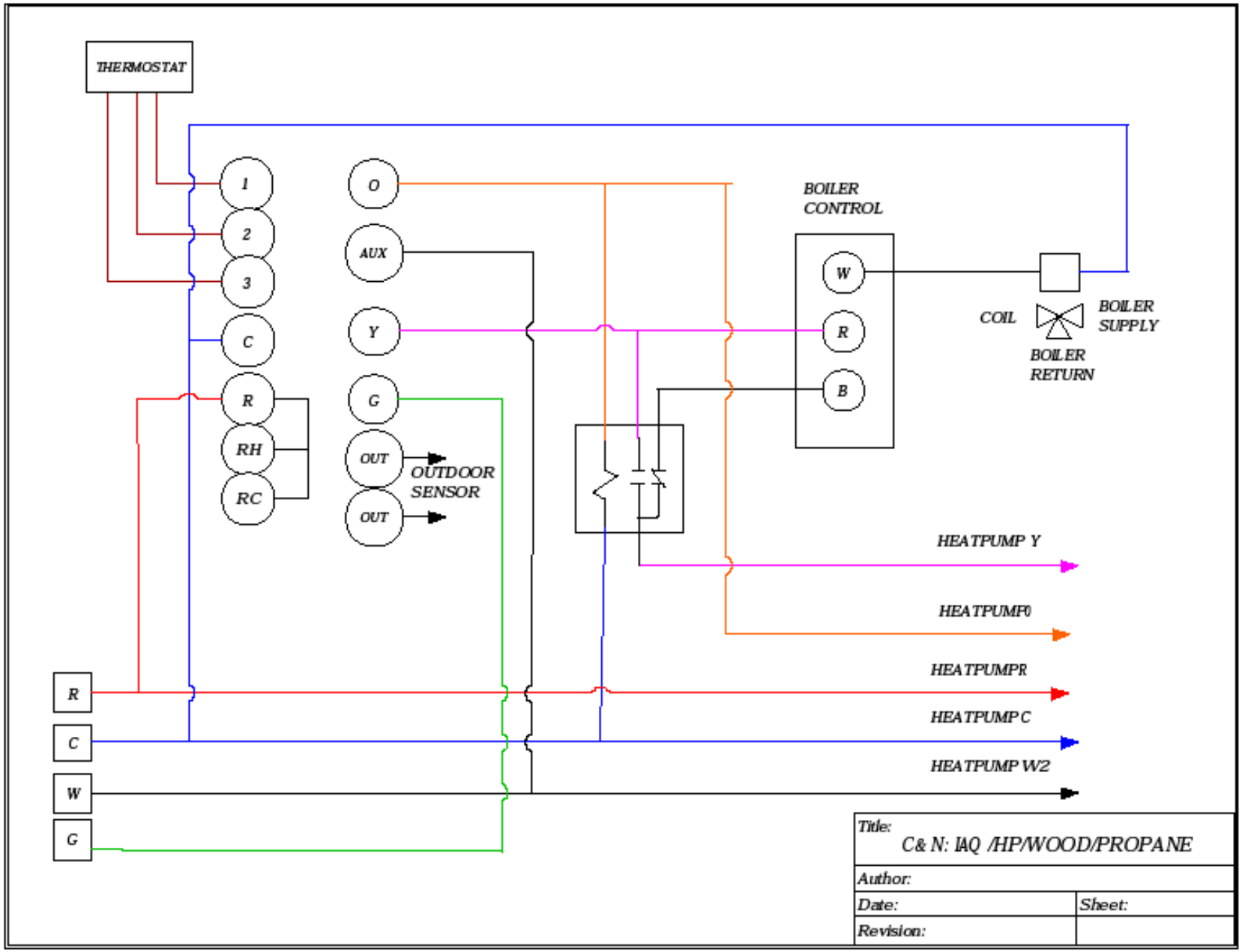
Two Zone Pump Relay Panel

- When either zone thermostat calls for heat, the pump relay panel energizes the corresponding zone pump and the auxiliary contacts in the relay panel. The low voltage signal from the auxiliary contacts goes to the aquastat “R” and out “W” to the wood boiler diverting valve if the water is hot or out “B” to the gas boiler relay if the water is below the changeover set point.

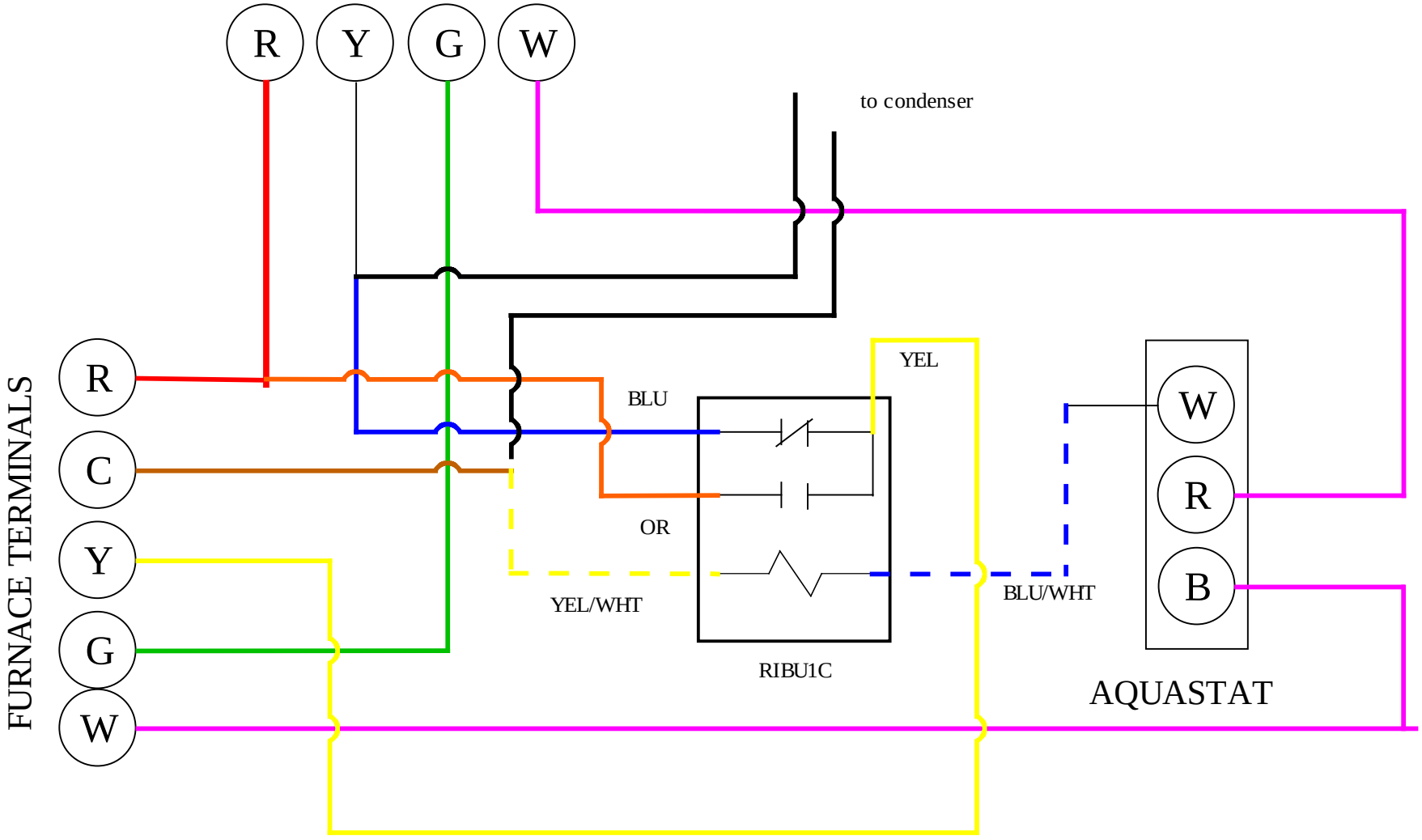


WOOD/GAS DIVERTING VALVE
TWO ZONE RADIANT
PARKER & ARNTZ
7/30/08

Wood Boiler, Air Source Heat Pump,and Propane Furnace under the control of a Honeywell IAQ thermostat: First call for heat can be either heat pump or boiler. The three way valve prevents heating of the boiler loop with the propane furnace if the second stage of heat calls or if the heatpump is in low temp lock out and the boiler has no heat available

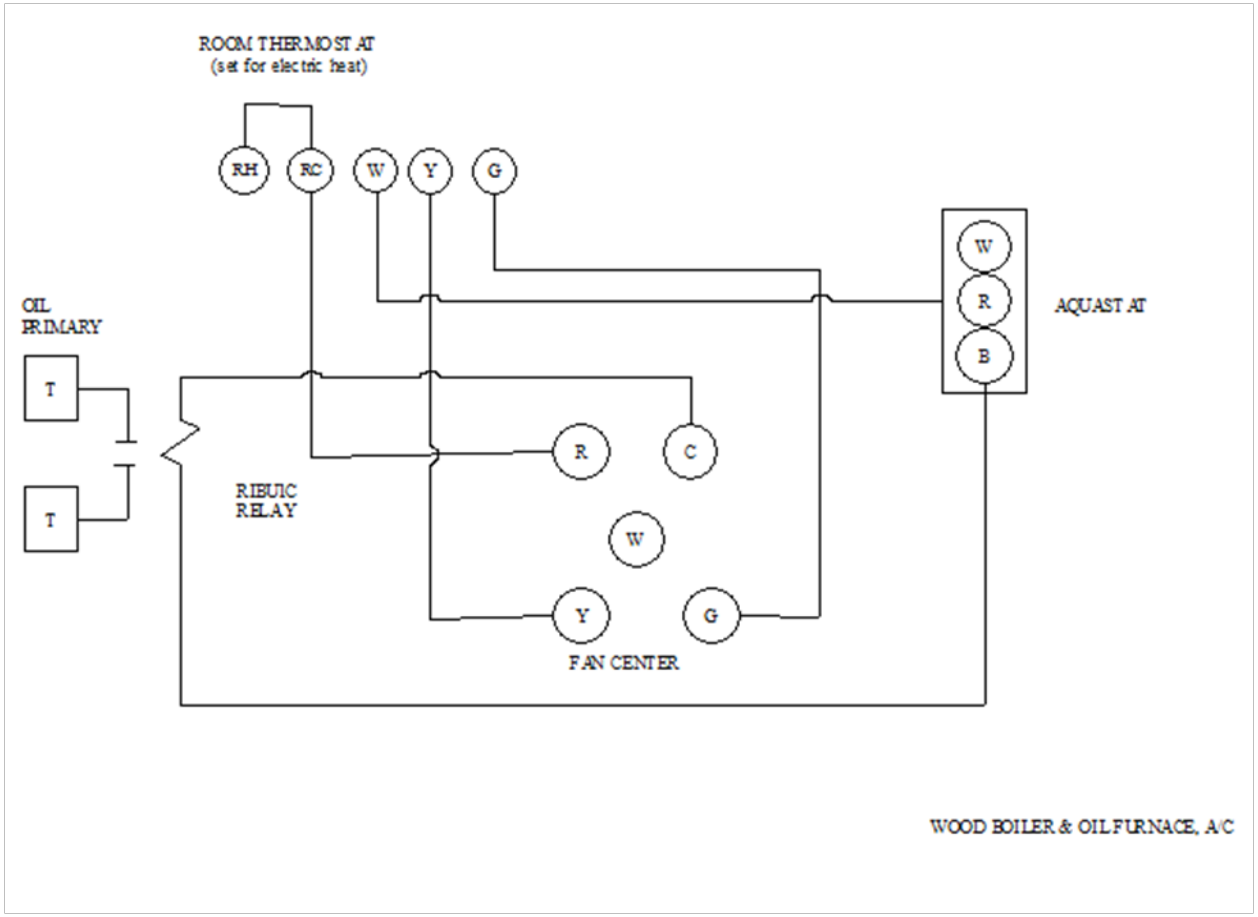

THERMOSTAT
1
2
3
C
R
RH
RC
O
AUX
Y
G
OUT
OUT
OUTDOOR SENSOR
BOILER CONTROL
W
R
B
COIL
BOILER SUPPLY
BOILER RETURN
HEATPUMP Y
HEATPUMP O
HEATPUMP R
HEATPUMP C
HEATPUMP W2
R
C
W
G
Title:
C& N: IAQ /HP/WOOD/PROPANE
Author:
Date:
Sheet:
Revision:

Some furnaces that have integrated fan controls need to run the high speed for the hot water coil but low speed for the furnace. This one takes care of the isolation of the fan signal for each condition.


R
Y
G
W
to condenser
FURNACE TERMINALS
R
C
Y
G
W
BLU
YEL
OR
YEL/WHT
BLU/WHT
RIBU1C
W
R
B
AQUASTAT

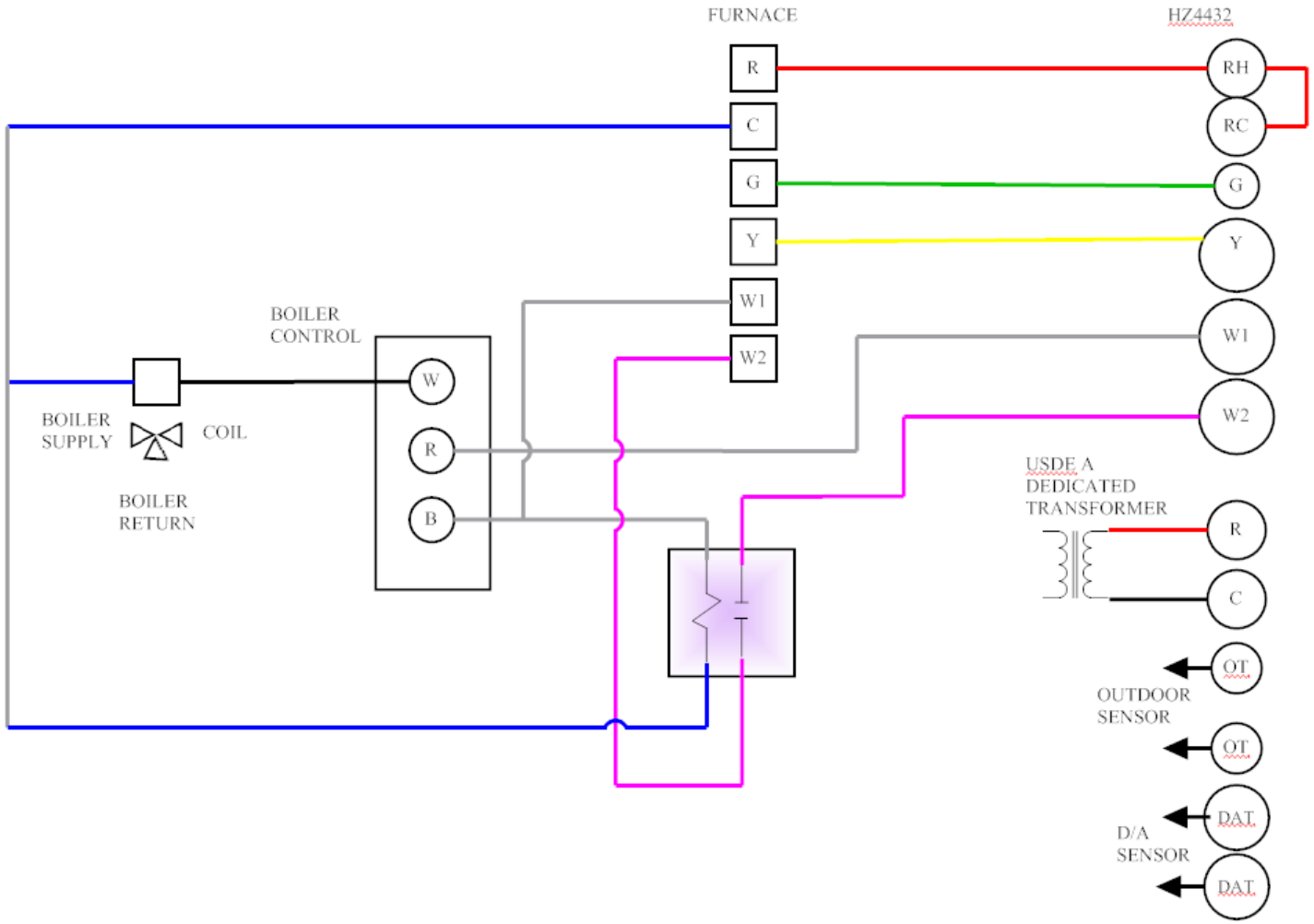
Oil Furnace/Fan Center Interface

- The basic scenario for adding the coil and wood boiler to an oil furnace with the traditional primary control and a fan center for cooling control. The aquastat energizes a relay to close the “TT” circuit on the primary when the boiler temperature falls below the setpoint. The thermostat “G” energizes the fan relay on a call for heat.

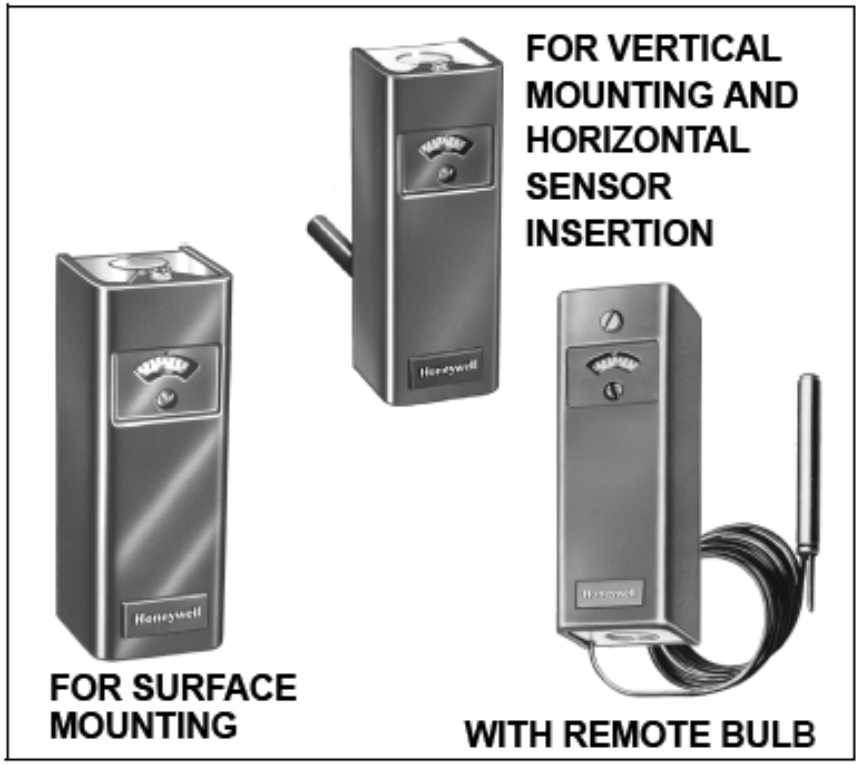

ROOM THERMOSTAT
(set for electric heat)
RH
RC
W
Y
G
W
R
B
AQUASTAT
OIL
PRIMARY
T
T
RIBUIC
RELAY
R
C
W
Y
G
FAN CENTER
WOOD BOILER & OIL FURNACE, A/C

THIS SYSTEM INCLUDES A FORCED AIR ZONE PANEL WITH A FURNACE DIVERTING VALVE AND WOOD BOILER. WHEN A ZONE CALLS FOR HEAT THE PANEL SENDS A “W” SIGNAL TO THE AQUASTAT THAT DIRECTS IT TO THE DIVERTING VALVE IF THE BOILER IS WARM OR TO THE FURNACE IF THE BOILER IS COLD

FORCED AIR ZONE PANEL WITH FURNACE WOOD BOILER AND DIVERTING VALVE



These are a few of the possible combinations if you didn’t find one that will solve your problem we can create a custom solution just for you


FOR VERTICAL MOUNTING AND HORIZONTAL SENSOR INSERTION
FOR SURFACE MOUNTING
WITH REMOTE BULB