

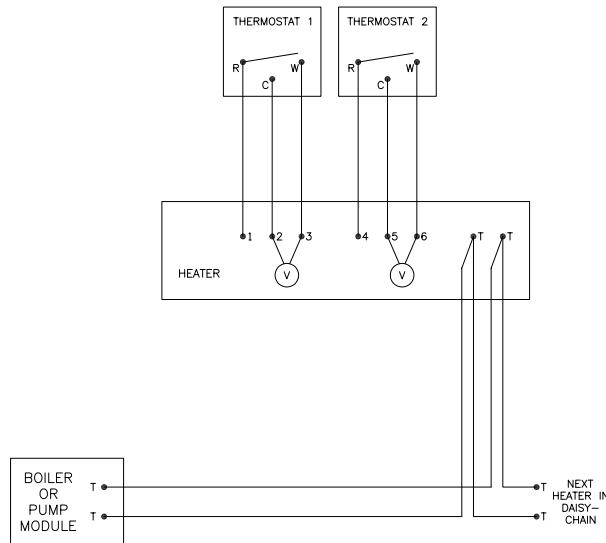
INTERLOCK IS NOT REQUIRED FOR MOST HOT WATER SYSTEMS THAT INCLUDE DOMESTIC WATER SUPPLY AND USE THE LEGALETT-SPECIFIED PUMP. Refer to the [Hot Water Supply Schematic](#) and Heater & Control Specifications on the design drawing.

However, in some scenarios, such as a dedicated heat-only boiler hot water system, it may not be desirable or possible to have a boiler armed for the duration of the heating season, i.e. during times when all zones are off. Thus a signal is required from the LEGALETT units that will arm the boiler and/or turn on a circulation pump. The following are generic wiring diagrams to assist the mechanical contractor in interfacing the LEGALETT System with a boiler and/or pump, if required.

3200/5200/5500 SERIES LEGALETT WATER COIL HEATERS - SINGLE LOW VOLTAGE (DRY CONTACT) INTERLOCK SIGNAL

Scenario 1 - Boiler only is interlocked
 (pump runs continuously)

Scenario 2 - Pump only is interlocked
 (constant hot water supply)

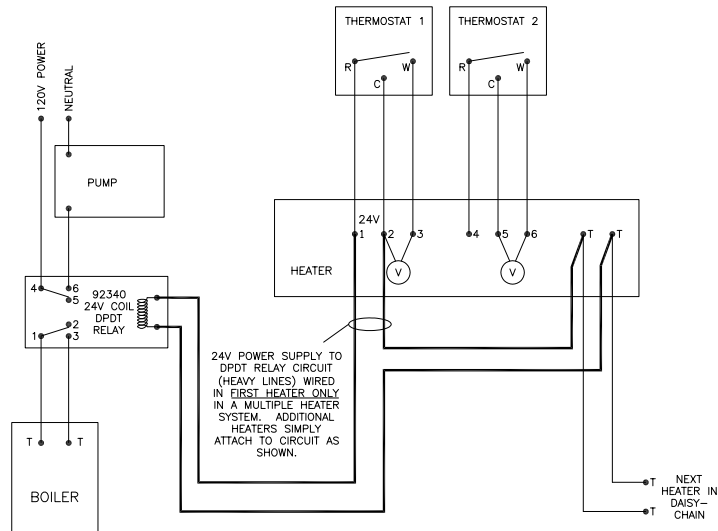


INTERLOCK REQUIRES 2 CONDUCTORS FOR THE FIRST HEATER, FROM HEATER TO BOILER/PUMP INTERLOCK, IN ADDITION TO 2 CONDUCTORS CONNECTING EACH REMAINING HEATER TO THE NEXT HEATER IN A DAISY-CHAIN ARRANGEMENT. EXISTING INTERNAL HEATER WIRING NOT SHOWN FOR CLARITY. IN LIEU OF A PUMP MODULE, REFER TO THE OTHER DIAGRAM TO SWITCH POWER TO A PUMP. MULTIPLE HEATERS CAN BE GANGED TOGETHER ON THE SAME BOILER/PUMP MODULE CIRCUIT AS SHOWN. V = LEGALETT VALVE ACTUATOR

3200/5200/5500 SERIES LEGALETT WATER COIL HEATERS - TWO LOW VOLTAGE (DRY CONTACT) INTERLOCK SIGNALS OR SINGLE LINE VOLTAGE POWER SUPPLY FOR PUMP (BOTH VIA A 24V SIGNAL)

Scenario 3 - Boiler and pump are independently interlocked

Scenario 4 - Pump only is powered (constant hot water supply)



INTERLOCK REQUIRES 2 CONDUCTORS FOR THE FIRST HEATER, FROM HEATER TO INTERLOCK RELAY, IN ADDITION TO 2 CONDUCTORS CONNECTING EACH REMAINING HEATER TO THE NEXT HEATER IN A DAISY-CHAIN ARRANGEMENT. EXISTING INTERNAL HEATER WIRING NOT SHOWN FOR CLARITY. RELAY BY OTHERS - MARS 92340 OR GENERIC EQUIVALENT 24V COIL DPDT RELAY. OPTIONAL PUMP MODULE BY OTHERS - USE TERMINALS 4 AND 6 ON 92340 RELAY TO CONTROL PUMP MODULE IN LIEU OF DIRECT PUMP CONTROL. IN LIEU OF DIRECT PUMP CONTROL - ADDITIONAL HEATERS SIMPLY ATTACH TO CIRCUIT AS SHOWN. CIRCUIT CAN BE USED TO POWER PUMP ONLY (NO BOILER INTERLOCK) BY SUBSTITUTING A MARS 92290 SPST RELAY FOR THE MARS 92340 DPDT RELAY. USE MARS 92290 RELAY TERMINALS 2 AND 4 FOR PUMP. V = LEGALETT VALVE ACTUATOR