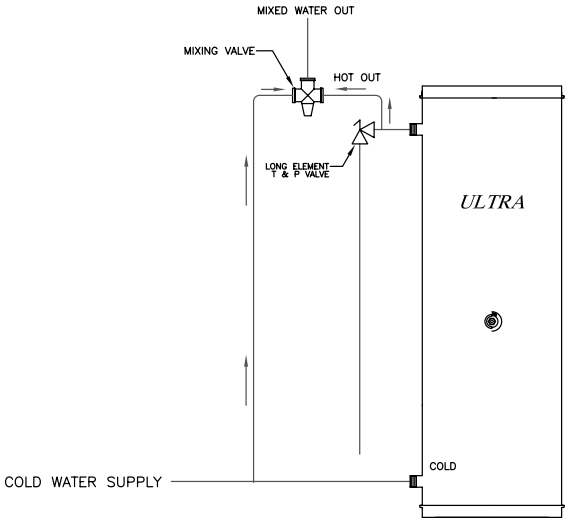
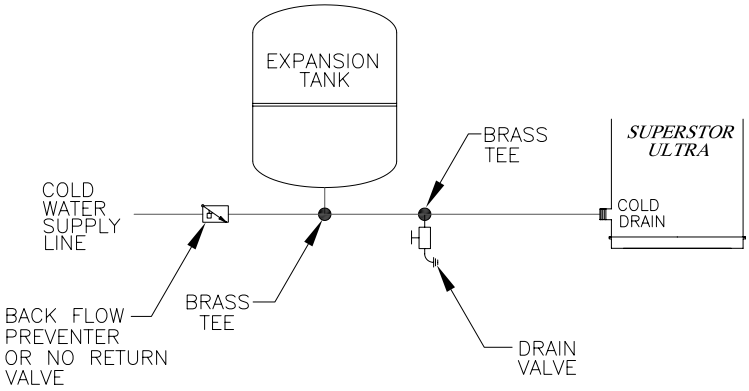
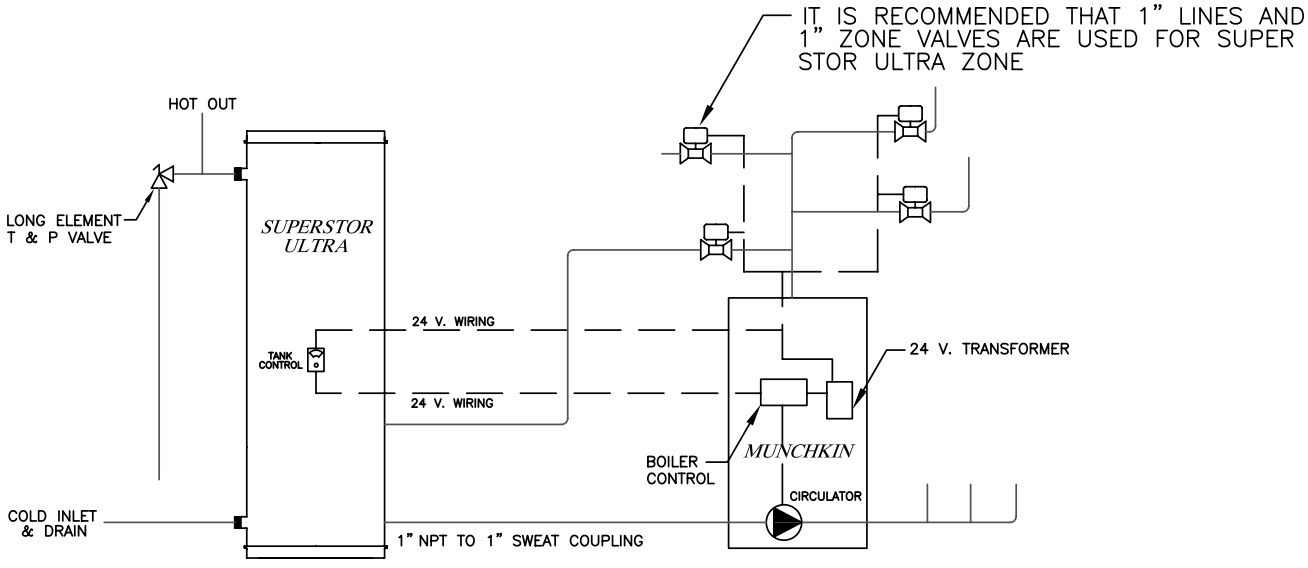
TYPICAL MIXING VALVE



TYPICAL EXPANSION TANK

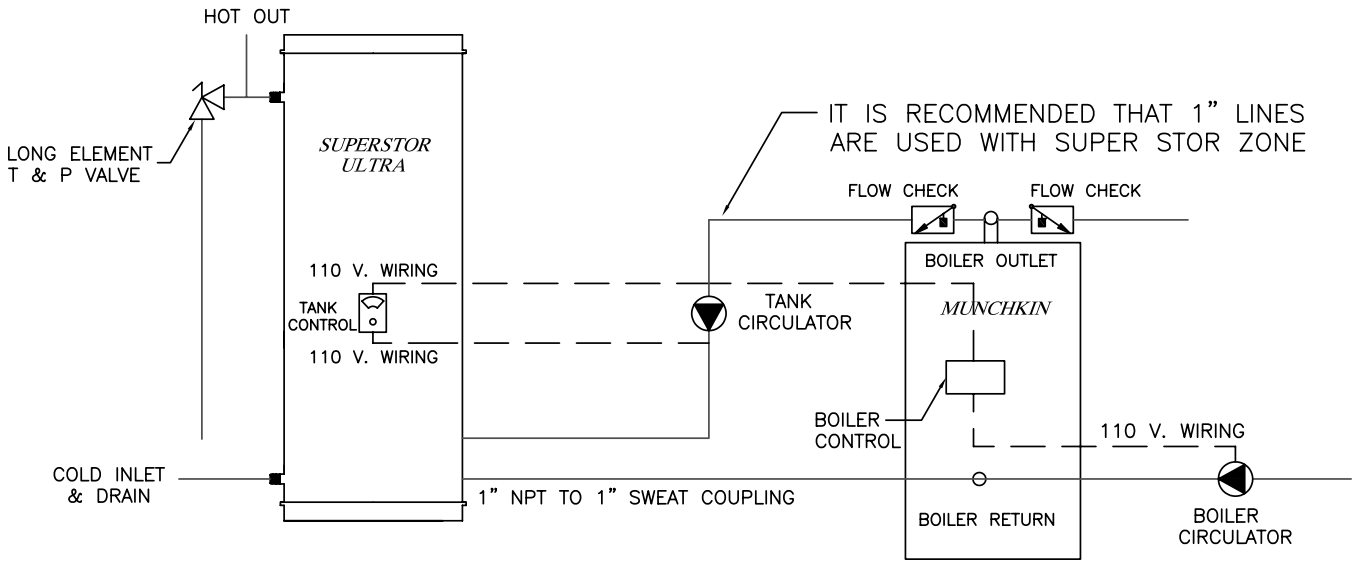


TYPICAL INSTALLATION USING ZONE VALVES



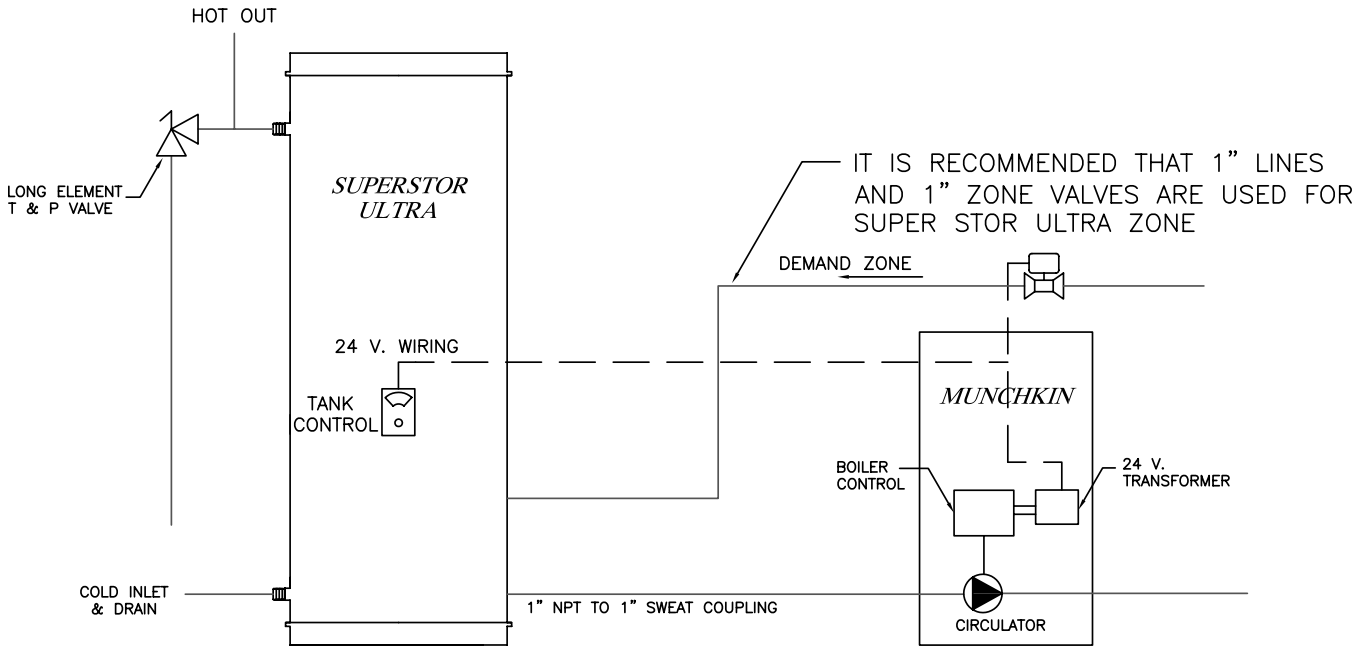
NOTE: IF A BACK FLOW PREVENTER OR A NO RETURN VALVE IS INSTALLED, A THERMAL EXPANSION TANK IS REQUIRED ON THE COLD WATER INLET BETWEEN THE SUPER STOR ULTRA AND THE BACKFLOW PREVENTER.

TYPICAL INSTALLATION USING CIRCULATORS



NOTE: IF A BACKFLOW PREVENTER OR A NO RETURN VALVE IS INSTALLED, A THERMAL EXPANSION TANK IS REQUIRED ON THE COLD WATER INLET BETWEEN THE SUPER STOR ULTRA AND THE BACKFLOW PREVENTER.

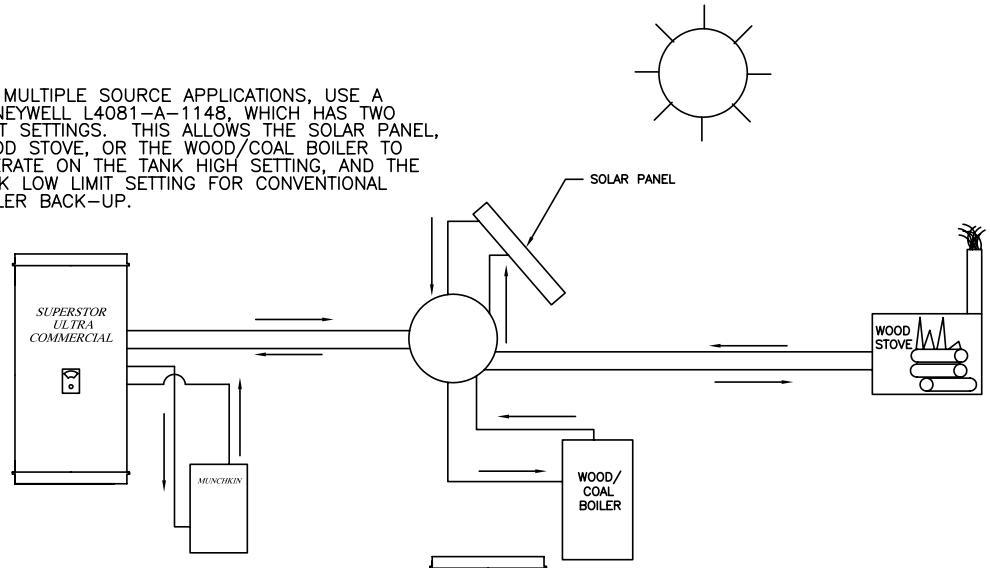
TYPICAL INSTALLATION USING A ZONE VALVE (3-WAY)



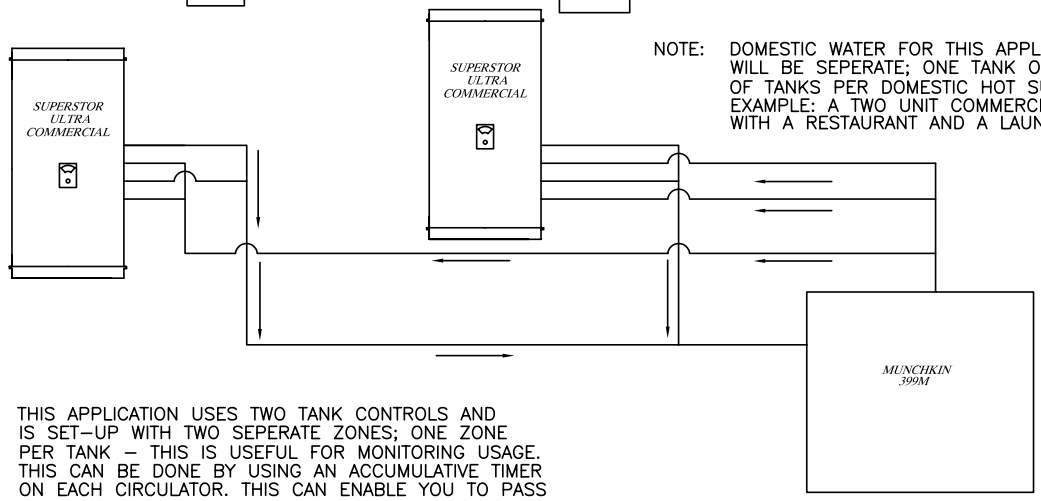
NOTE: IF A BACKFLOW PREVENTER OR A NO RETURN VALVE IS INSTALLED, A THERMAL EXPANSION TANK IS REQUIRED ON THE COLD WATER INLET BETWEEN THE SUPER STOR ULTRA AND THE BACKFLOW PREVENTER.

TYPICAL DP INSTALLATIONS

NOTE: ON MULTIPLE SOURCE APPLICATIONS, USE A HONEYWELL L4081–A–1148, WHICH HAS TWO LIMIT SETTINGS. THIS ALLOWS THE SOLAR PANEL, WOOD STOVE, OR THE WOOD/COAL BOILER TO OPERATE ON THE TANK HIGH SETTING, AND THE TANK LOW LIMIT SETTING FOR CONVENTIONAL BOILER BACK–UP.

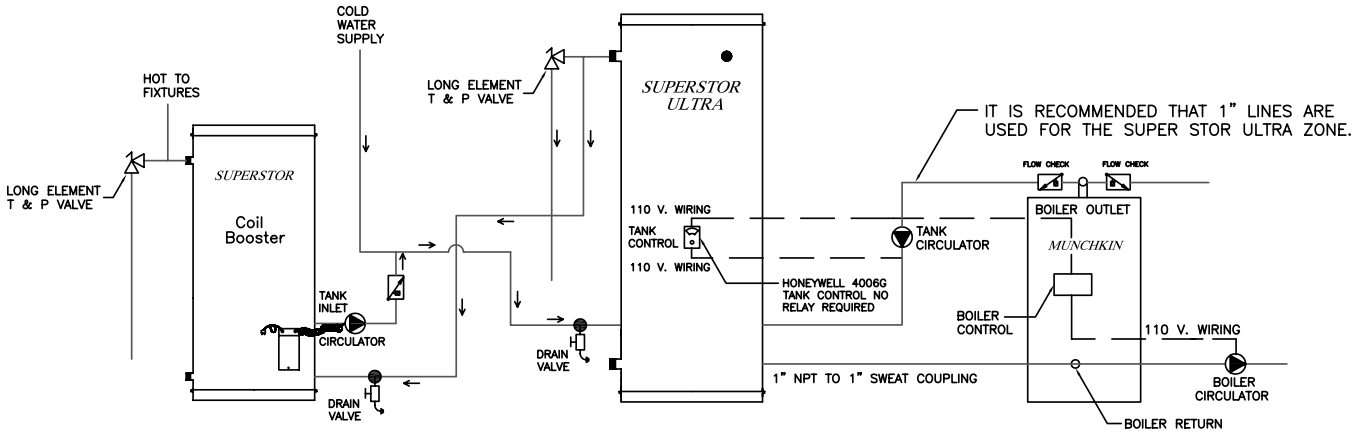


NOTE: DOMESTIC WATER FOR THIS APPLICATION WILL BE SEPERATE; ONE TANK OR BANK OF TANKS PER DOMESTIC HOT SUPPLY LINE. EXAMPLE: A TWO UNIT COMMERCIAL BUILDING WITH A RESTAURANT AND A LAUNDROMAT.



NOTE: THIS APPLICATION USES TWO TANK CONTROLS AND IS SET–UP WITH TWO SEPERATE ZONES; ONE ZONE PER TANK – THIS IS USEFUL FOR MONITORING USAGE. THIS CAN BE DONE BY USING AN ACCUMULATIVE TIMER ON EACH CIRCULATOR. THIS CAN ENABLE YOU TO PASS ALONG FUEL COST ADJUSTMENTS IN A MULTI–USAGE RENTAL PROPERTY.

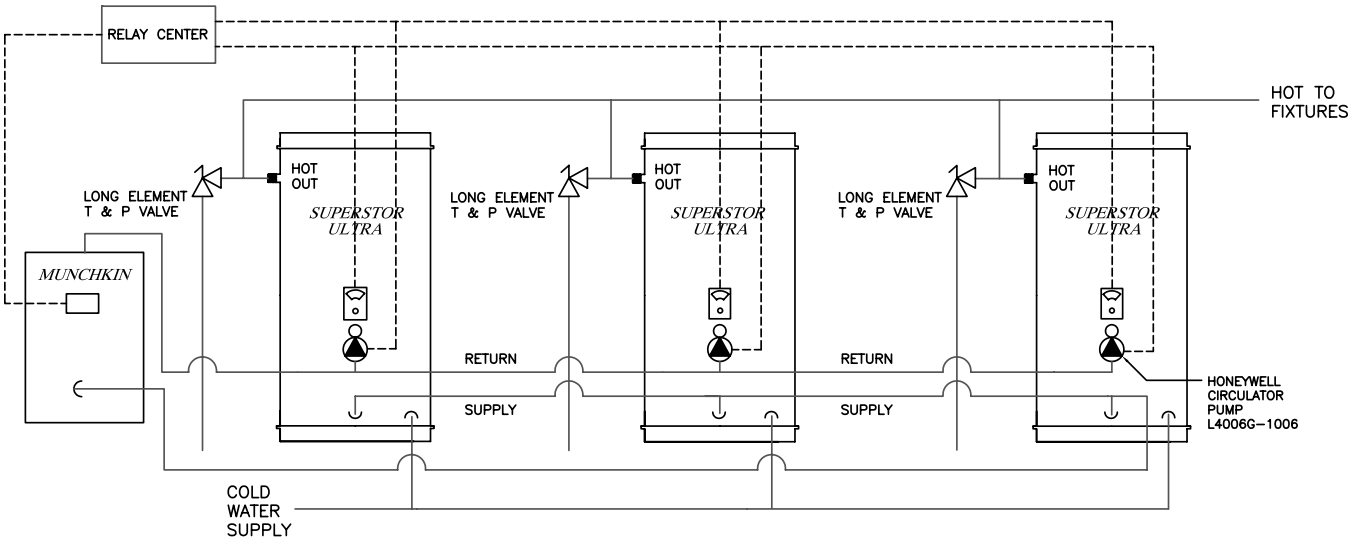
SUPERSTOR WITH STORAGE TANK TYPICAL INSTALLATION



NOTE: IF A BACKFLOW PREVENTER OR A NO RETURN VALVE IS INSTALLED, A THERMAL EXPANSION TANK IS REQUIRED ON THE COLD WATER INLET BETWEEN THE SUPER STOR ULTRA AND THE BACKFLOW PREVENTER.

MULTIPLE TANK INSTALLATIONS

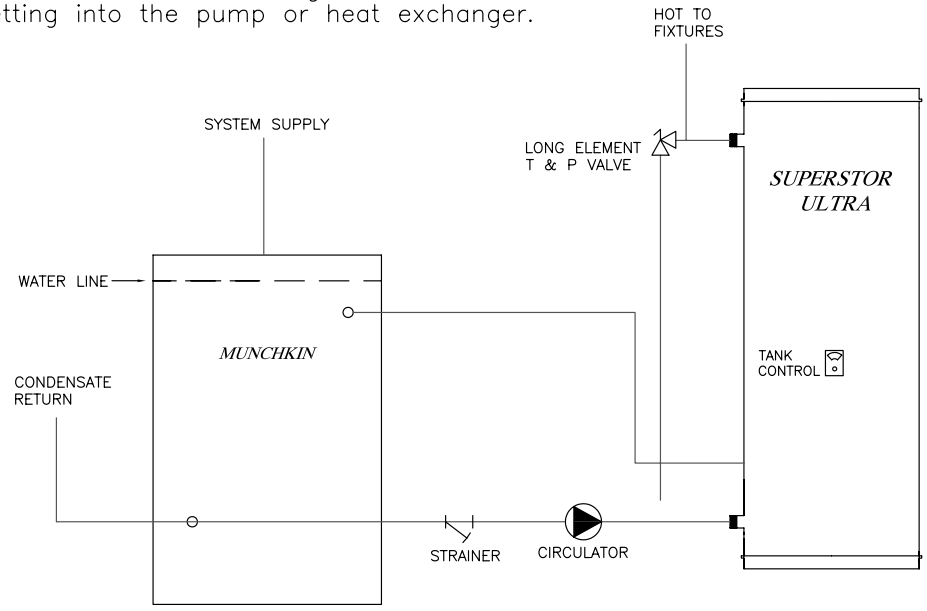
NOTE: The State of Massachusetts requires a limit of four tanks per mechanical room. Consult with local inspector.



NOTE: ALL PIPING IN PARALLEL USED FOR LARGE DUMPS OF HOT WATER; HIGH USAGE, SHORT DURATION.

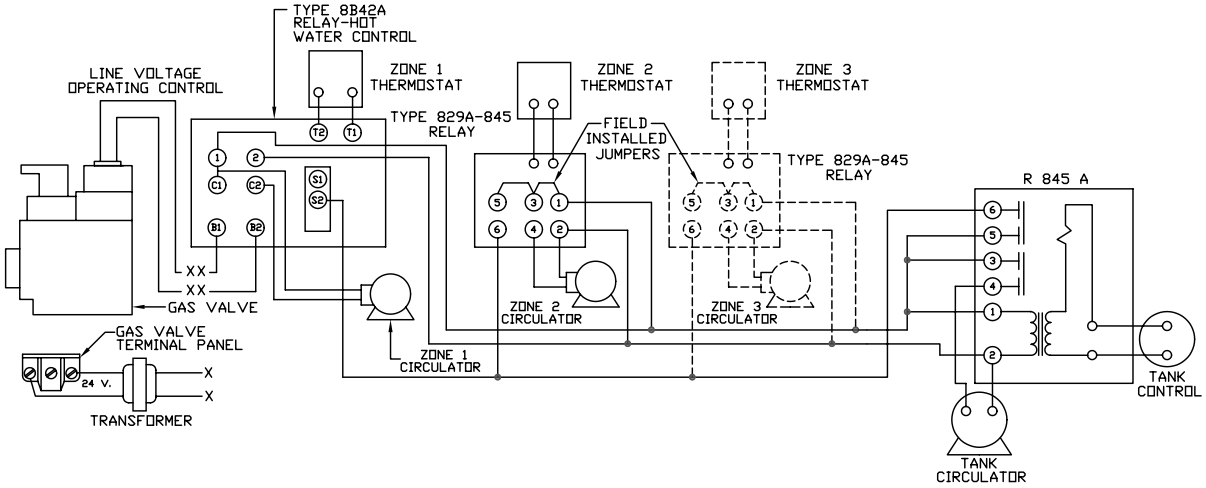
TYPICAL STEAM BOILER

Note: The SuperStor Indirect Heat Exchanger Supply and Return Connection must be above the water line from the boiler connection. The internal flow check or spring check must be used to avoid thermal siphoning from the connected boiler. A basket strainer should also be used to avoid sludge and sediment getting into the pump or heat exchanger.



ZONING WITH CIRCULATORS WITH R845 RELAY

THIS DIAGRAM SHOWS CONNECTIONS FOR EITHER A LINE VOLTAGE OR 24v MANIFOLD GAS VALVE.
(NOTE: THIS DIAGRAM IS NOT RECOMMENDED FOR NORMAL STACK-MOUNTED OIL BURNER CONTROLS BECAUSE RAPID CYCLING OF THE LOW LIMIT-CIRCULATOR CONTROL MAY CAUSE THE OIL BURNER CONTROL TO LOCK OUT ON SAFETY)

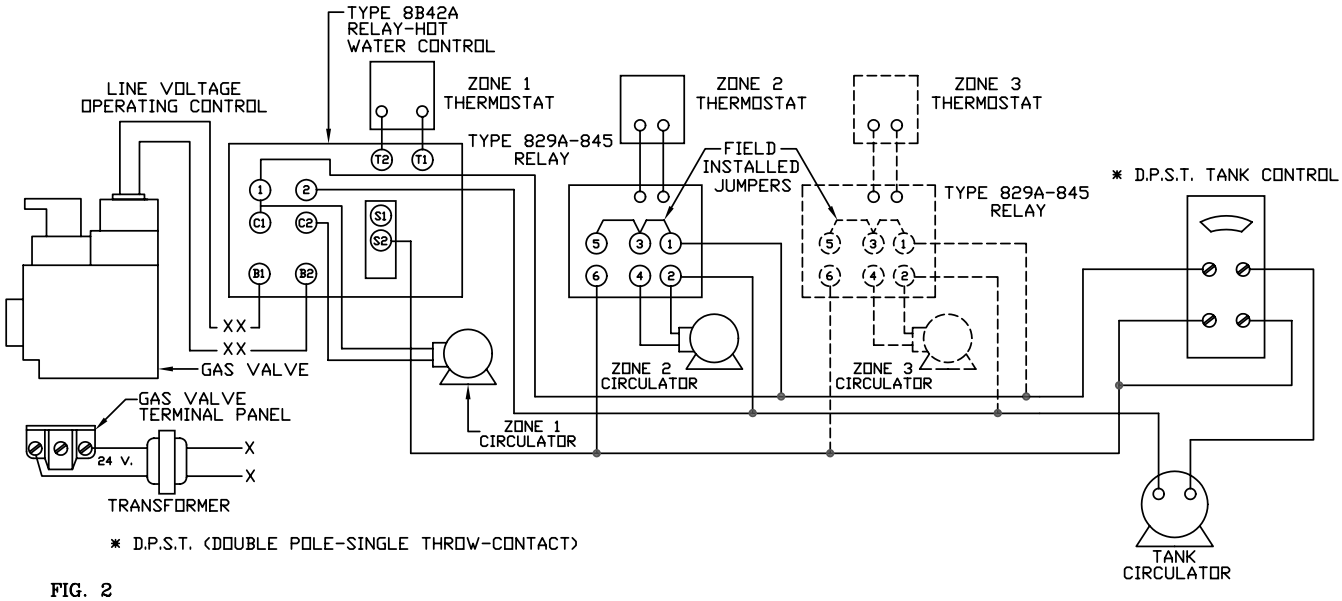


CAUTION: TERMINAL "6" FROM TYPE 829A-845 RELAYS MUST BE WIRED TO TERMINAL "S2" ON THE 8B42A TYPE RELAY HOT-WATER CONTROL AS SHOWN TO MAKE CERTAIN THAT THE HIGH LIMIT IS WIRED INTO THE CIRCUIT.

FIG. 1

ZONING WITH CIRCULATORS USING R8182D AND D.P.S.T. NO RELAY REQUIRED

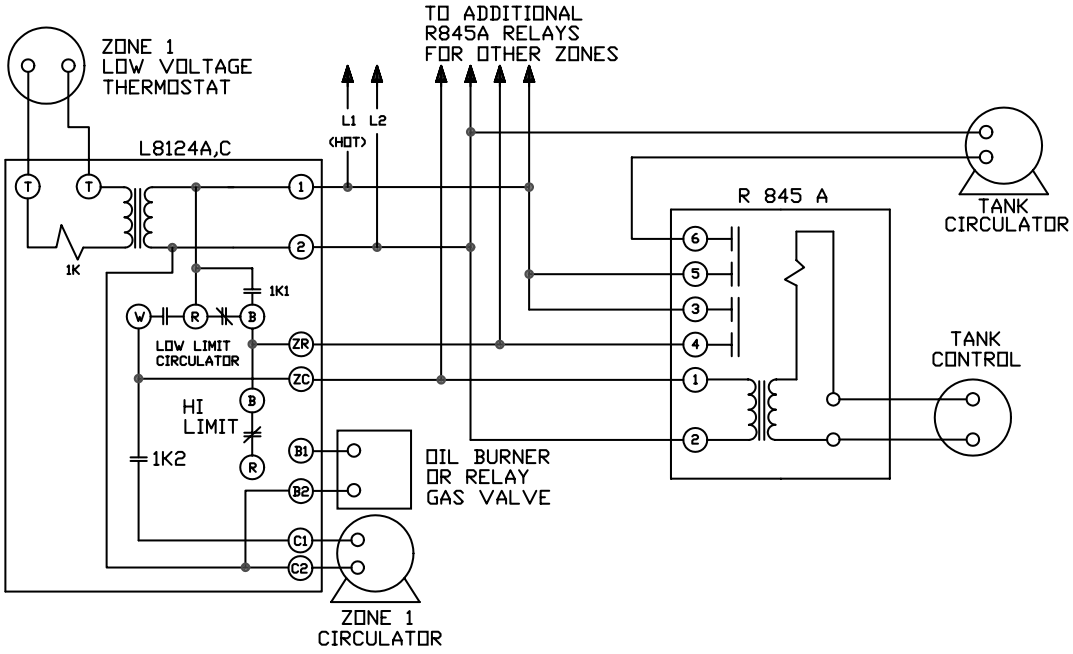
THIS DIAGRAM SHOWS CONNECTIONS FOR EITHER A LINE VOLTAGE OR 24v MANIFOLD GAS VALVE.
(NOTE: THIS DIAGRAM IS NOT RECOMMENDED FOR NORMAL STACK-MOUNTED OIL BURNER CONTROLS BECAUSE RAPID CYCLING OF THE LOW LIMIT-CIRCULATOR CONTROL MAY CAUSE THE OIL BURNER CONTROL TO LOCK OUT ON SAFETY)



* D.P.S.T. (DOUBLE POLE-SINGLE THROW-CONTACT)

FIG. 2

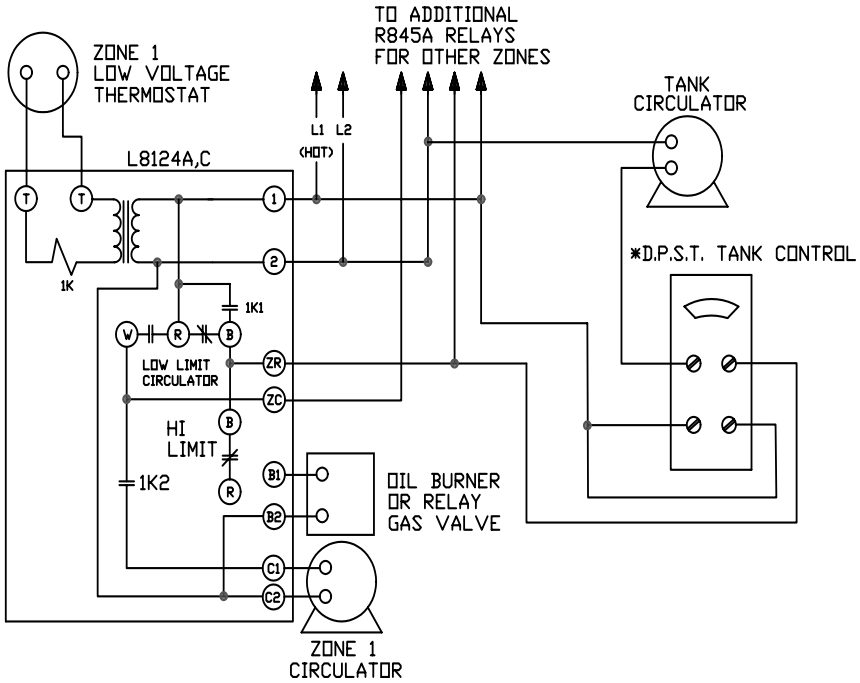
ZONING WITH CIRCULATORS USING L8124 A, C AND R845A RELAY



POWER SUPPLY, PROVIDE DISCONNECT MEANS AND OVER LOAD PROTECTION AS REQUIRED.

FIG. 3

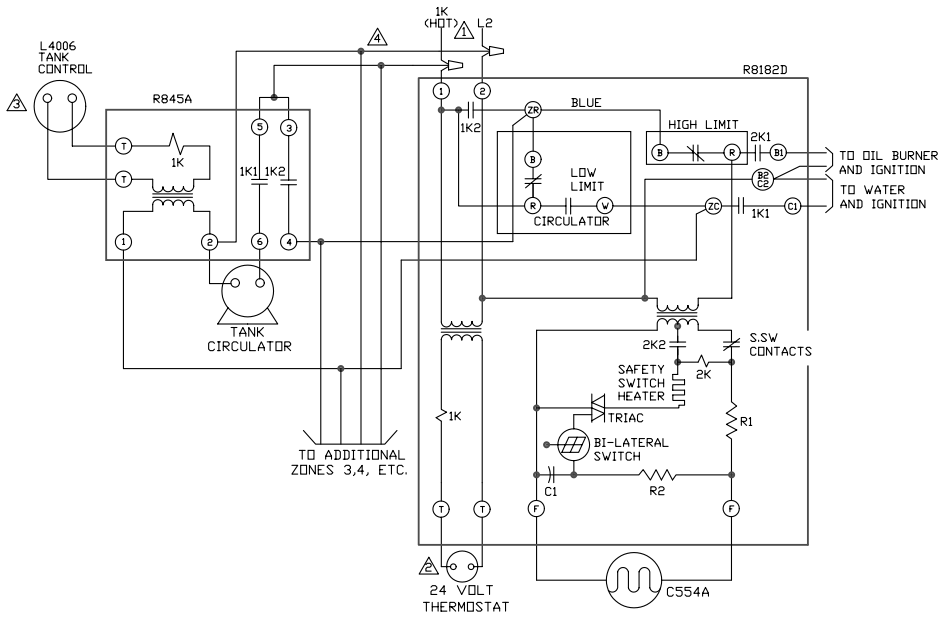
ZONING WITH CIRCULATORS USING L8124 E,F AND D.P.S.T. CONTROL. (NO RELAY REQUIRED)



POWER SUPPLY, PROVIDE DISCONNECT MEANS AND OVER LOAD PROTECTION AS REQUIRED.
*D.P.S.T. (DOUBLE POLE-SINGLE THROW- CONTACTS)

FIG. 4

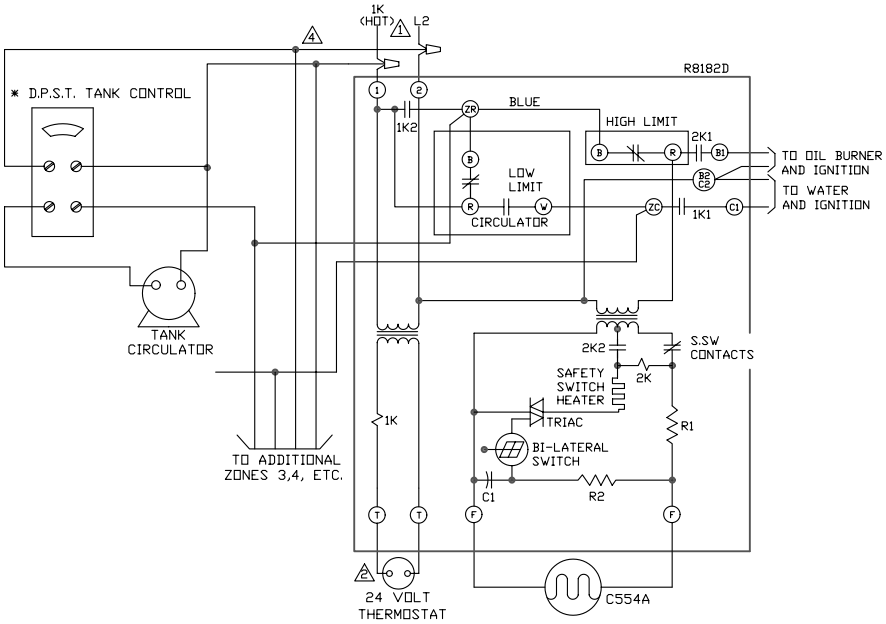
ZONING WITH CIRCULATORS WITH R182D AND R845A RELAY



1. 120 VAC POWER SUPPLY PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.
2. THERMOSTAT HEAT ANTICIPATOR SETTING, 0.2 AMP FOR R8182D
3. THERMOSTAT HEAT ANTICIPATOR SETTING, 0.4 AMP FOR R845A CONTROL CASE MUST BE CONNECTED TO EARTH GROUND USE
4. GROUNDING SCREW PROVIDED

FIG. 5

USING CONTROL WITH BUILT IN IDPST SWITCH WITH NO RELAY REQUIRED

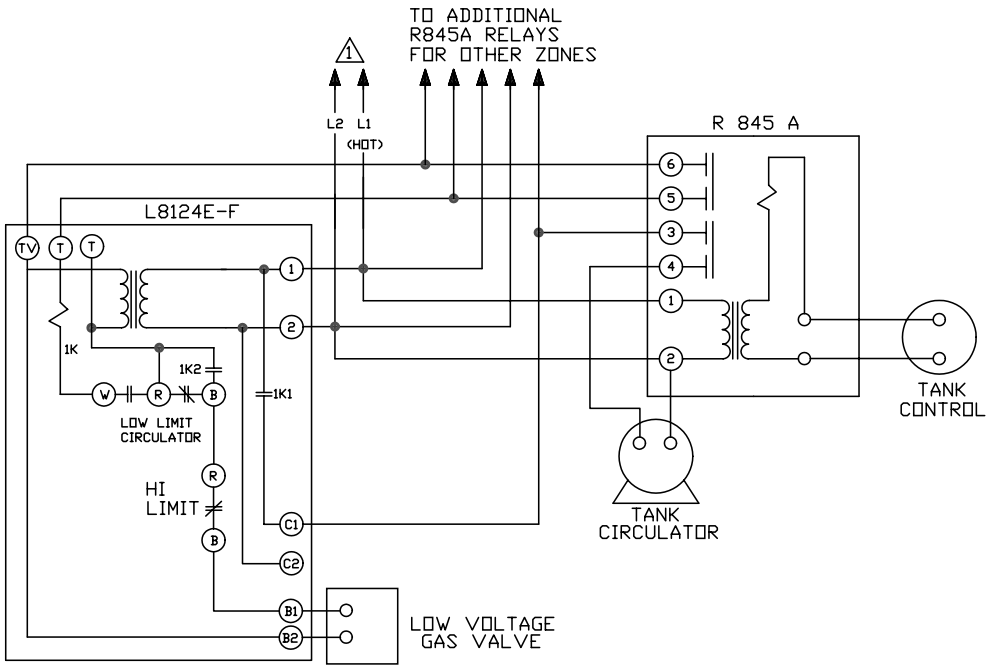


1. 120 VAC POWER SUPPLY PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.
2. THERMOSTAT HEAT ANTICIPATOR SETTING, 0.2 AMP FOR R8182D
3. THERMOSTAT HEAT ANTICIPATOR SETTING, 0.4 AMP FOR R845A CONTROL CASE MUST BE CONNECTED TO EARTH GROUND USE
4. GROUNDING SCREW PROVIDED

FIG. 6

* D.P.S.T. (DOUBLE POLE-SINGLE THROW-CONTACT)

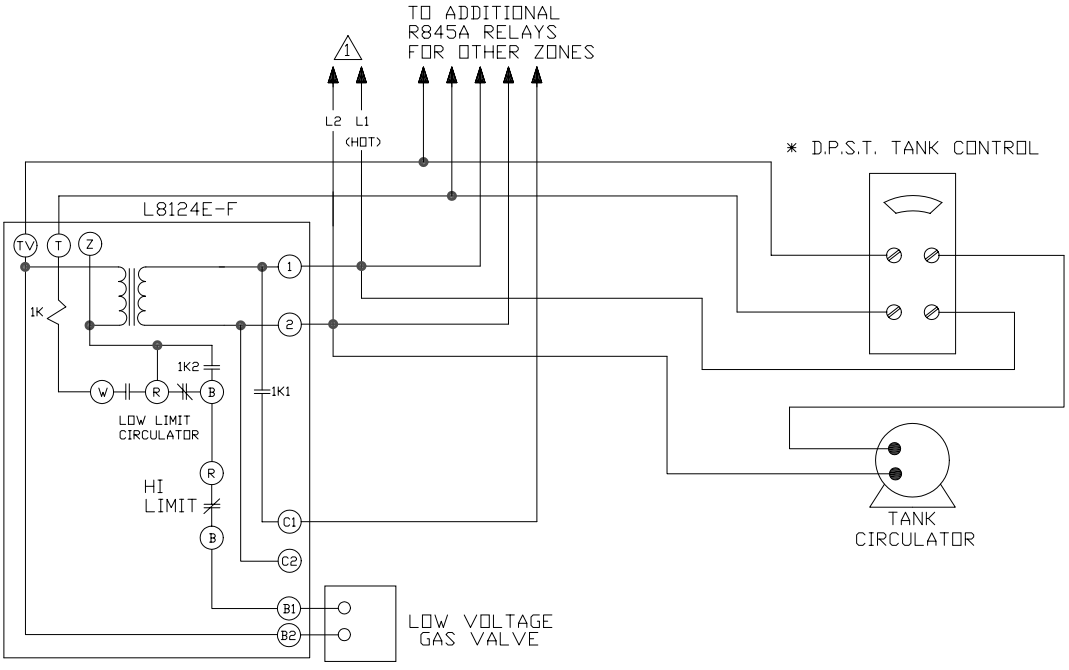
ZONING WITH CIRCULATORS USING L8124 A, C AND R845A RELAY



1 POWER SUPPLY, PROVIDE DISCONNECT MEANS AND OVER LOAD PROTECTION AS REQUIRED.

FIG. 7

ZONING WITH CIRCULATORS USING L8124 A,C AND D.P.S.T. (NO RELAY REQUIRED)

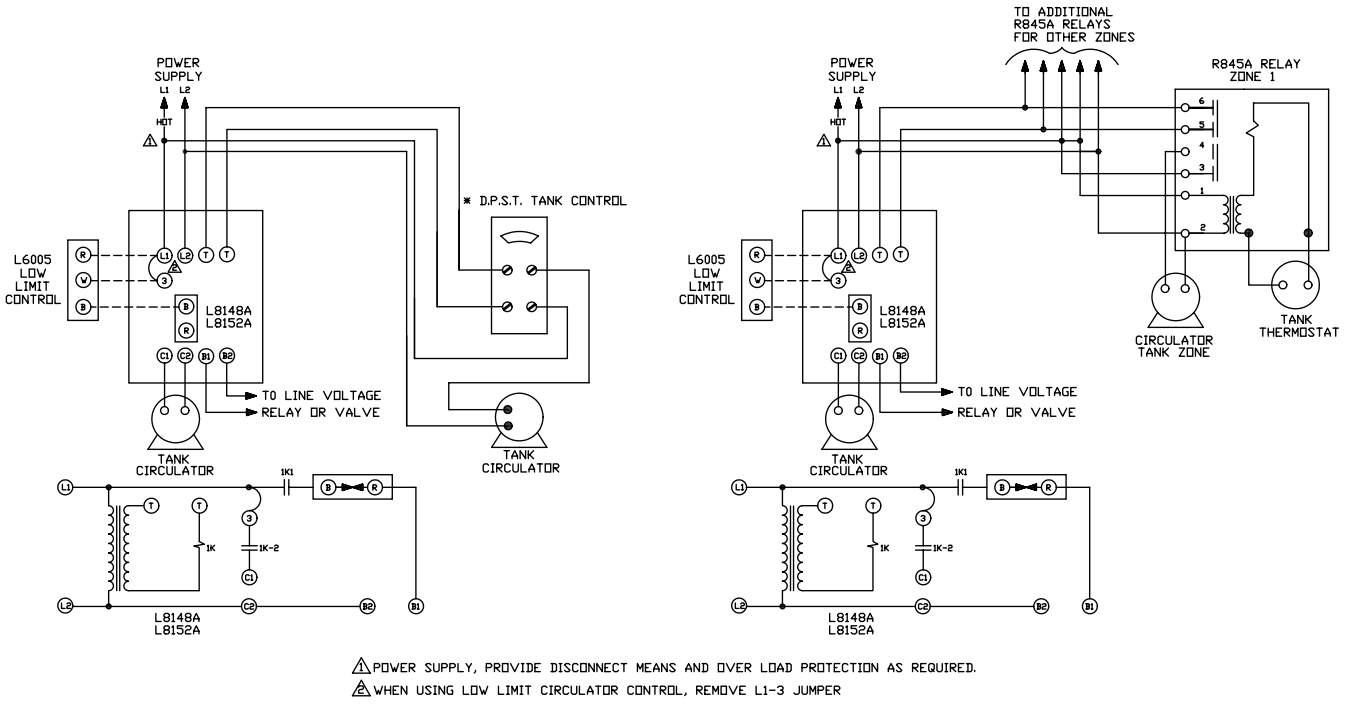


1 POWER SUPPLY, PROVIDE DISCONNECT MEANS AND OVER LOAD PROTECTION AS REQUIRED.

*D.P.S.T. (DOUBLE POLE-SINGLE THROW CONTACTS) HONEYWELL L4006G-1006)

FIG. 8

USING L8148A OR L8152A COLD START BOILER CONTROL WITH CIRCULATORS



⚠ POWER SUPPLY, PROVIDE DISCONNECT MEANS AND OVER LOAD PROTECTION AS REQUIRED.
⚠ WHEN USING LOW LIMIT CIRCULATOR CONTROL, REMOVE L1-3 JUMPER

FIG. 9

PRIORITY ZONE WITH CIRCULATORS

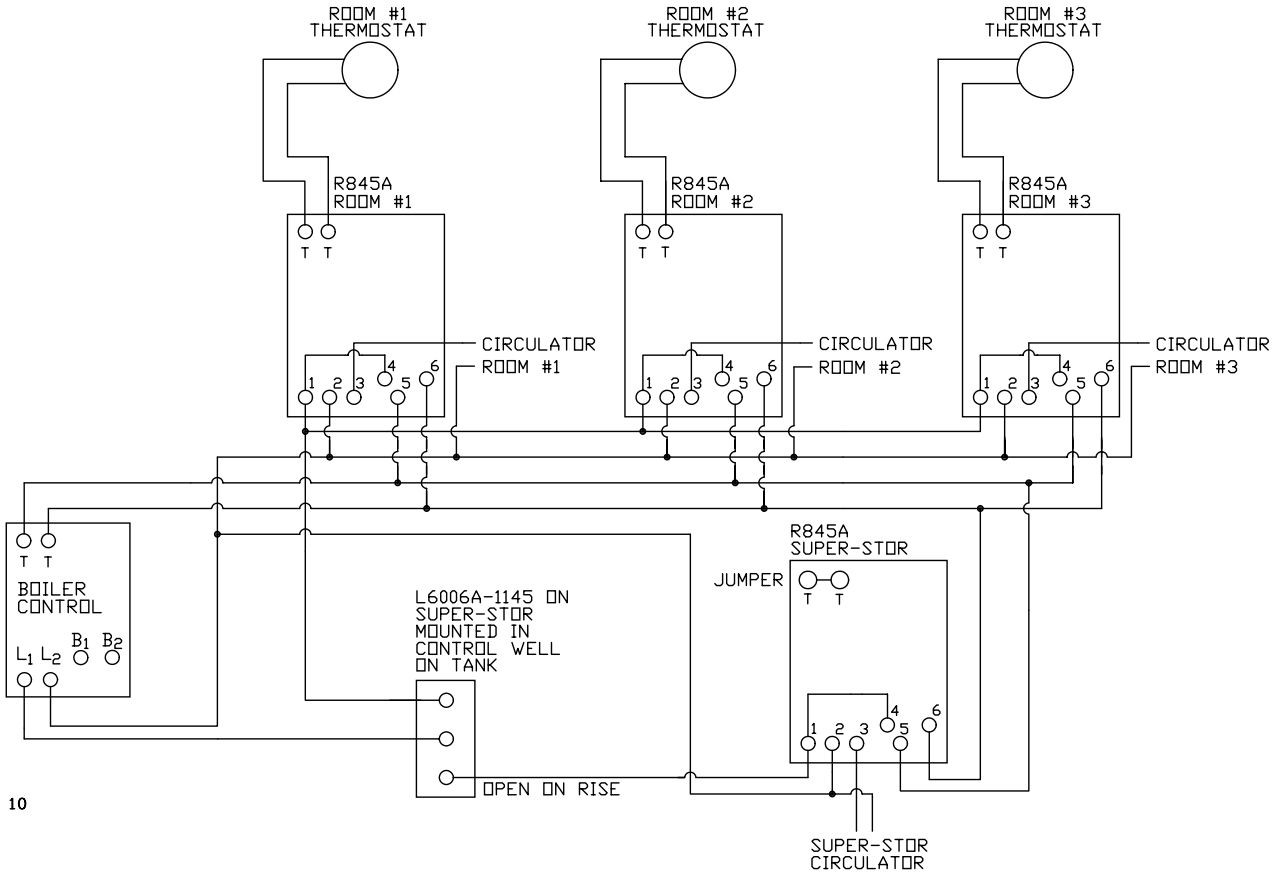


FIG. 10

USING L8148A OR L8152A COLD START BOILER CONTROL WITH ZONE VALVES

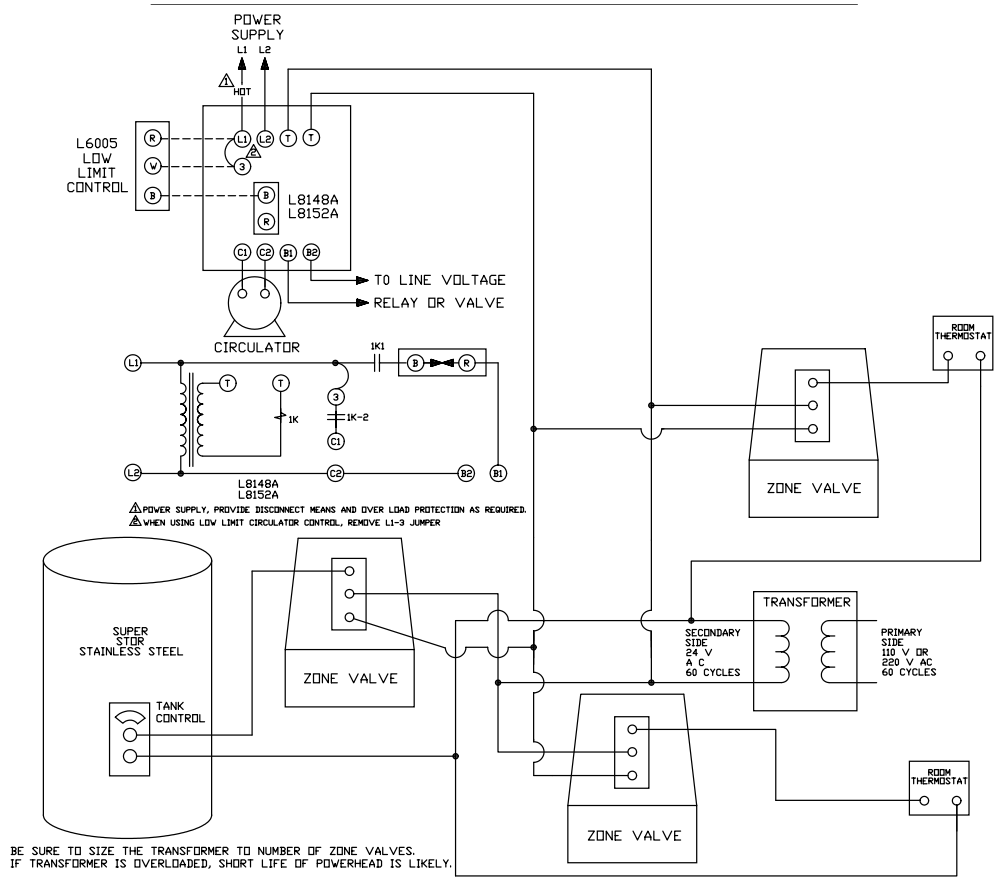


FIG. 11

PRIORITY ZONE WITH ZONE VALVES

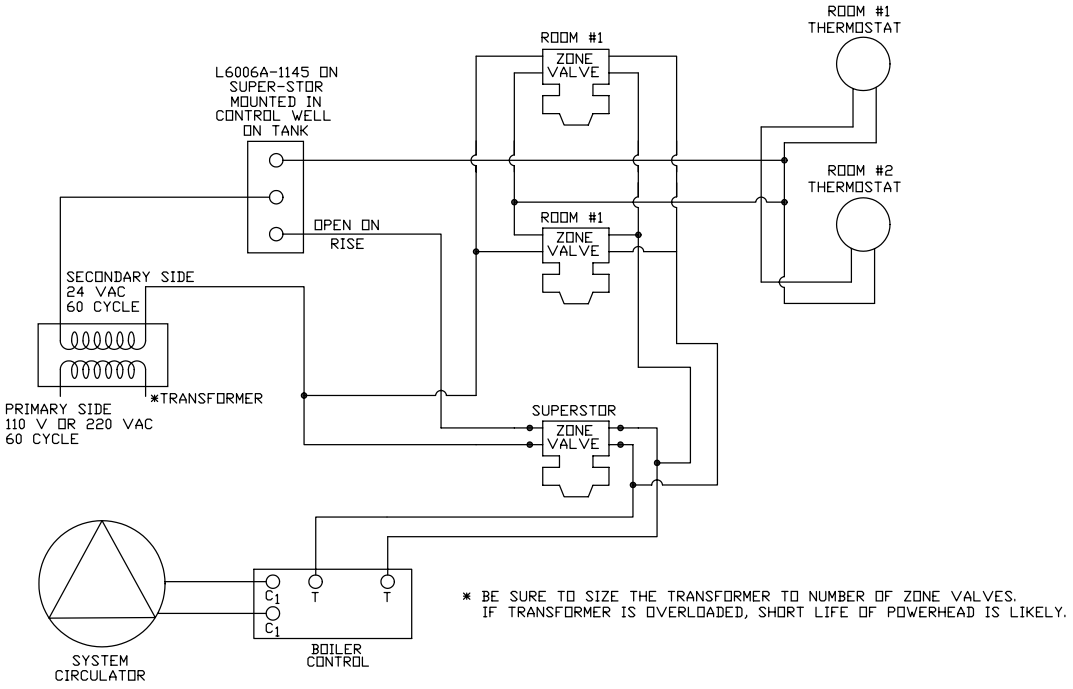


FIG. 12