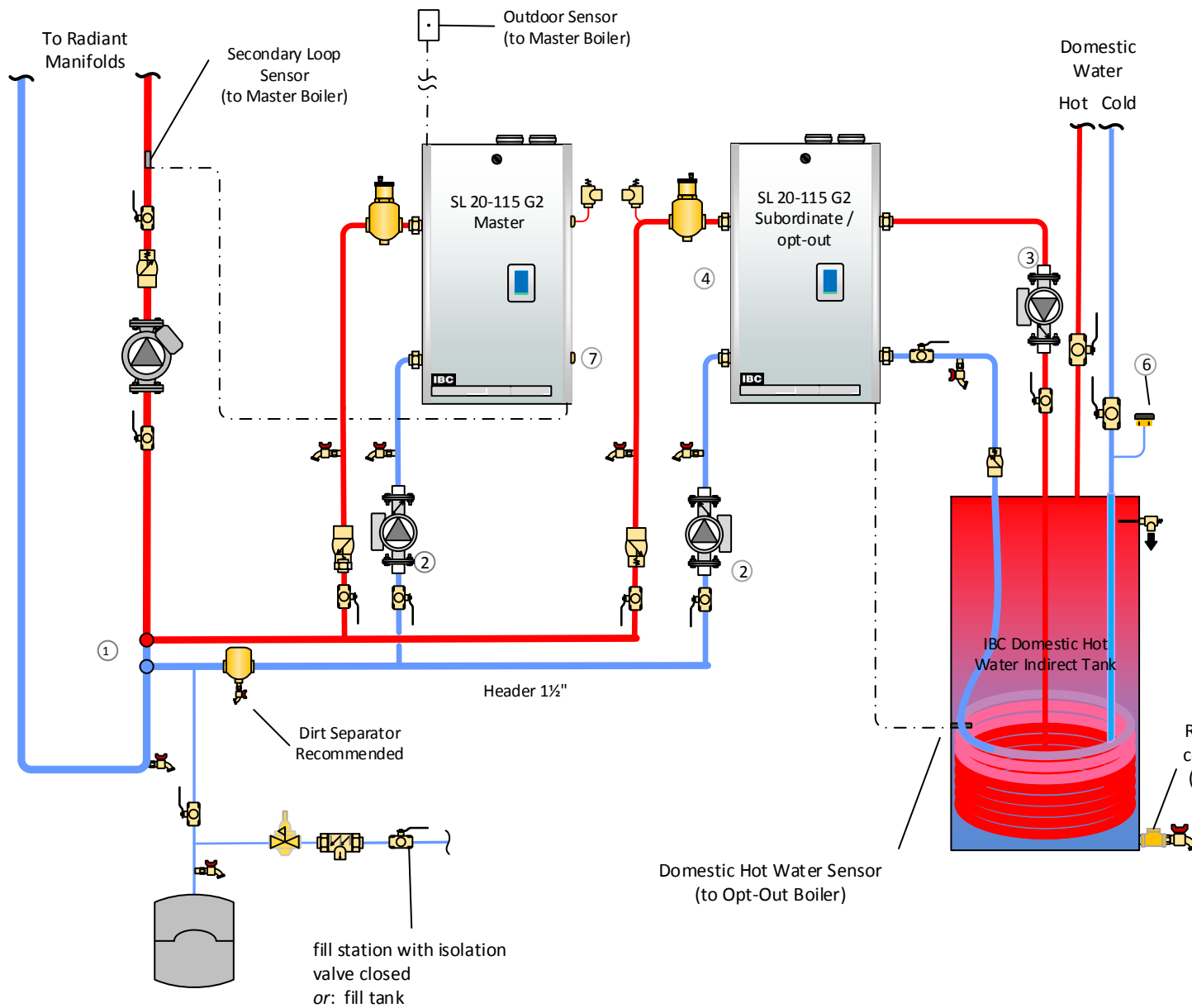




Better Boilers



Notes

- ① – Closely spaced tees are maximum of four primary circuit piping diameters apart, with a minimum of eight pipe diameters of straight tubing upstream of first tee and a minimum four pipe diameters straight tubing downstream of second tee.
- ② – Recommended pump size of boiler pumps is UPS 15-58F or equivalent.
- ③ – Opt-out pump sized for combined head loss of boiler, boiler piping and indirect tank coil. Opt-out load is configured for *Boiler Pump Off* (turns off primary pump during DHW operation).
- ④ – Subordinate boiler can contribute to space heating demand when hot water load is satisfied.
- ⑤ – Baseboards operated off thermostat; DHW aquastat goes to same opt-out load, external relay controls pumps.
- ⑥ – Vacuum relief valve; thermal expansion tank for domestic water also recommended.
- ⑦ – 1" NPT cap is contractor-supplied

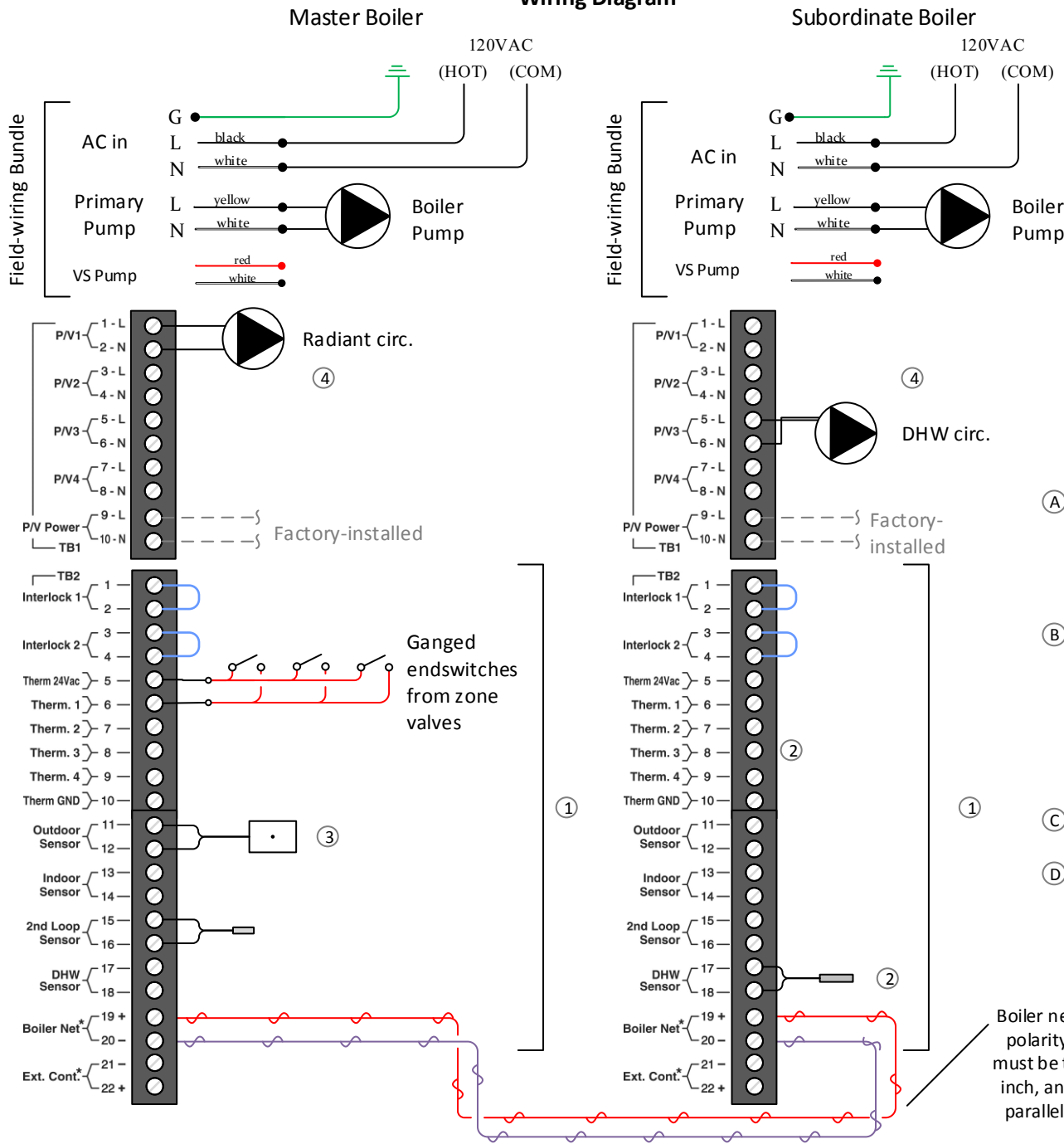
CAUTION: This drawing is a simple schematic guide to a successful installation. There may be many necessary components not shown here. We require that our boilers be installed by licensed and experienced trades people who are familiar with the applicable local and national codes. System design is to be completed by an experienced hydronic designer or Engineer. It is necessary to carefully read and follow the installation instructions that come with the boiler along with the application drawing that fits your system.

IBC 115 2.2.ind IBC G2 115 2 boiler, DHW	
DRAWN BY BRAD POULSEN	DATE 03/02/2015
DESCRIPTION Two-boiler installation with one boiler opting out of network to heat domestic hot water through an indirect tank.	
PAGE	1 OF 2



Better Boilers

Wiring Diagram



Wiring Notes

- ① – No external voltages to be applied to TB2 control terminal strip connections 1-20.
- ② – DHW Sensor from indirect tank to terminals 17 and 18; if an aquastat is used connection will be to terminals 5 and 8 (Therm 3).
- ③ – Outdoor sensor installed on North exterior wall, exposed to actual outdoor air temperature.
- ④ – Pump circuits are fused for a total draw of 5A; maximum amperage draw of 4A is recommended.

Programming Notes

- (A) – Note that Therm. and P/V connections other than shown are possible: the installer may program any of the four Loads as any type (e.g. Setpoint, DHW, etc.). **Every Load number (1-4) is associated with a corresponding Therm. connection and P/V (pump) connection.**
- (B) – On the Master boiler, in *Express Setup* Menu update the *Design Outdoor* to suit your locality, define Load 1 as *Reset Heating*, define the emitter, enter the temperature value you wish for the coldest weather at *Design Supply*, and *Save* your settings. If no outdoor sensor is installed, use *Setpoint* rather than *Reset Heating*. Space-heating parameters are not needed on the Subordinate boiler.
- (C) – For Opt-Out boiler, in *Express Setup* menu set Load 3 as *DHW*. For DHW only set *Boiler Pump* to *Off*.
- (D) – See memo *Multiple Boiler Systems* for full details about network configuring. For the Master Boiler only, in *Installer Setup Menu / MultiBoiler*, turn Master Boiler to *On*, and define boiler ID as “1”. Set boiler ID at subordinate boiler to “2”, leaving Master Boiler *Off*.

Boiler network wires are polarity-sensitive, and must be twisted once per inch, and not be routed parallel to line-voltage wires

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