

ELECTRO-BOILER

TS Series

INSTALLATION INSTRUCTIONS

Model EB-W-KIT

APPLICATION:

This Electro-Boiler kit is designed for conversion of the EB-R-** or EB-E-** boilers. This could also apply to earlier EB-** or EB-L-**, only exception is that the steps and photos in the next pages may be slightly different. This conversion kit is equipped with outlet temperature sensing and a smart controller which automatically stages the various elements to operate at the field preset outlet temperature.

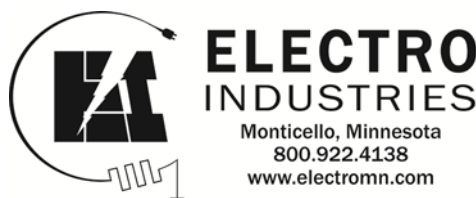
Note: For convenience this kit supplies all relays and wires for the maximum size, 27 kW (6 elements). For smaller size units simply ignore or drop off the higher relay numbers. The relays **not** used:

- 23 kW – K5 and E5
- 18 kW – K5 and E5, K6 and E6
- 13 kW – K5 and E5, K6 and E6, K4 and E4

For reference purposes, this package also includes the complete factory assembly wiring diagram for model EB-WX-27. The circuit breakers, hi-limits, elements and position of elements, the vessel shape and details are all identical. The EB-WX-27 boiler cabinet simply has the components within this kit in a slightly different physical arrangement but it should be quite easy for the installer to relate to the older style cabinet and the enclosed components.

Drawings **BW577**

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INSTALLATION INSTRUCTIONS

1. Disconnect power 240 and pump 120.
2. Remove boiler vessel covers – top, bottom, and surround.
3. Remove middle and bottom control box covers (middle cover can be discarded).

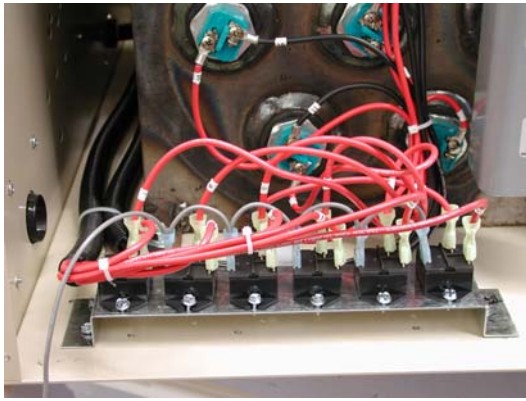


4. Remove and discard pump relay board and main control board.
5. Remove entire control wiring harness including red/white wires to 160° hi-limit and orange wires to aquastat (aquastat is no longer used but can be left in place).

6. Remove contactors.
7. Cut existing fork lugs off the red 12 gauge power wires that were connected to the contactors. Replace with yellow terminals supplied with kit.

Note: Do not cut off the wire number markers.





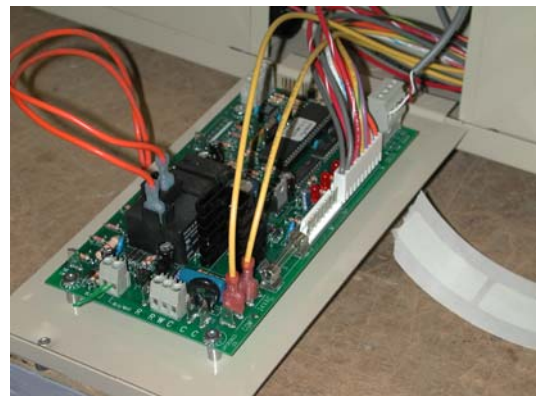
8. Mount relay bracket and align with existing holes (no drilling should be necessary).
9. Install wires on relays and install new wiring harness (see page 3 for details).

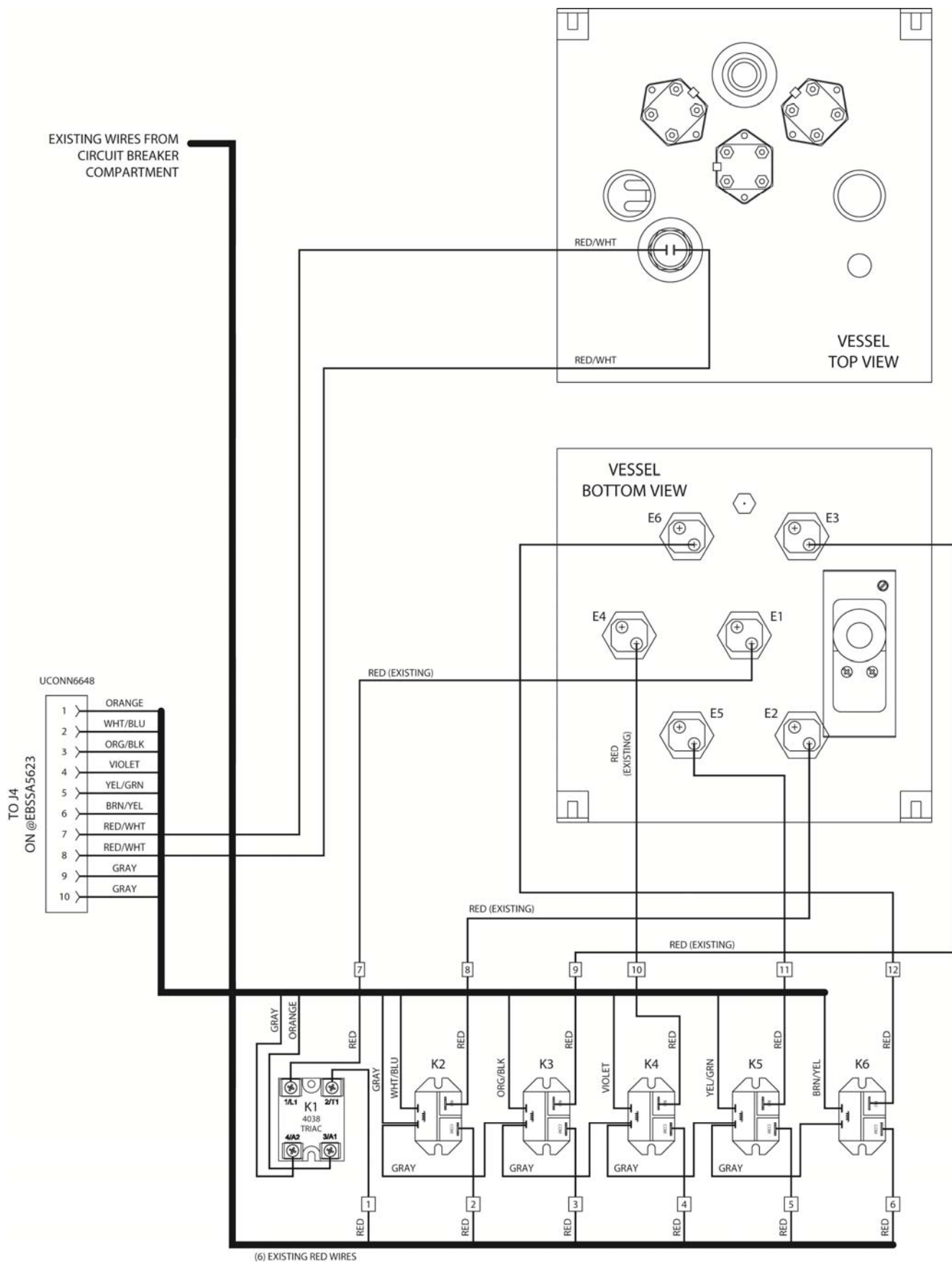
10. Route new harness in center compartment of control box. Splice extension wires on transformer.



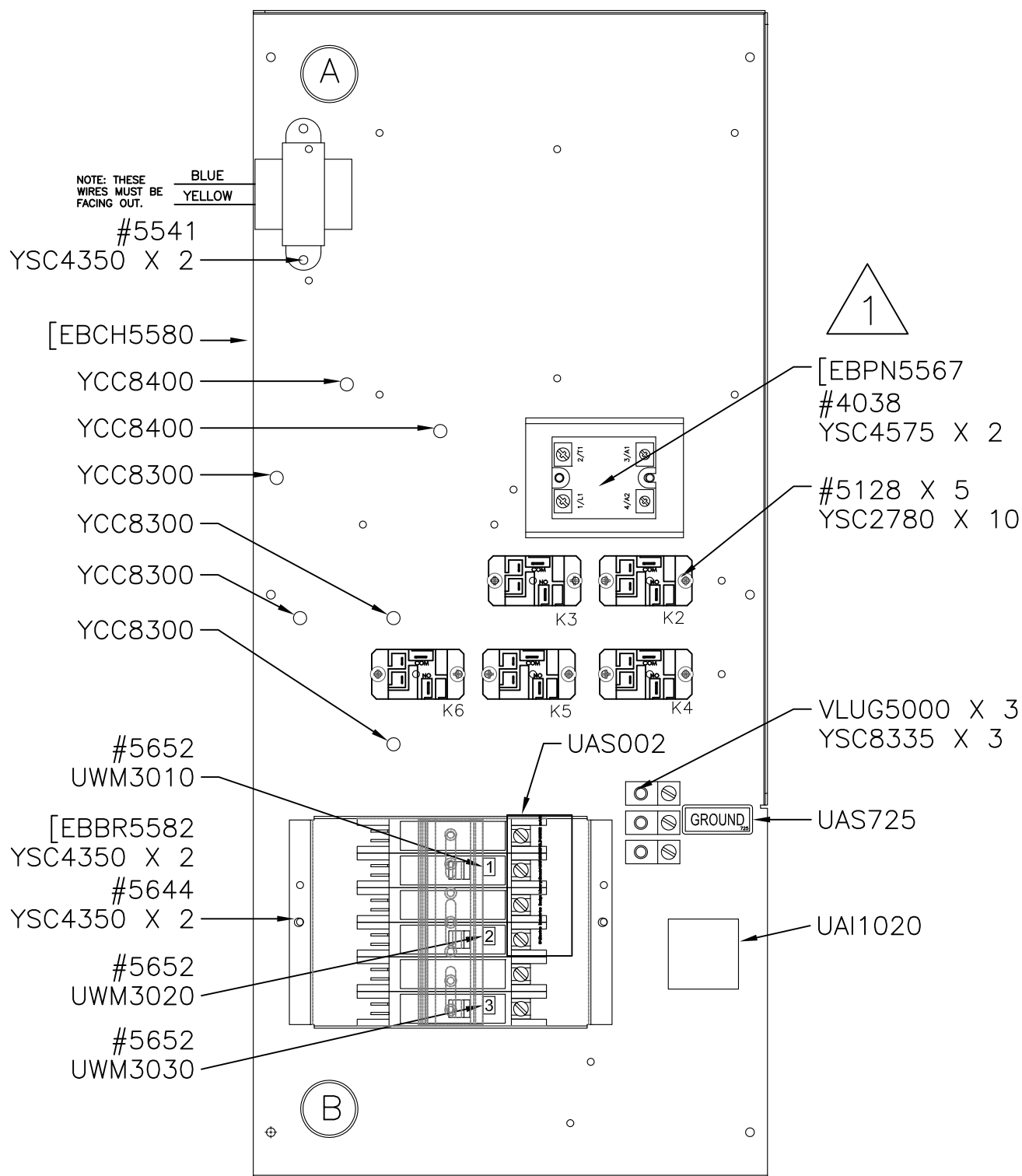
11. Install the supplied pipe tee with temperature sensor fitting at the outlet side of the boiler. Install the temperature sensor (see BD705). Route the cable to the center control box compartment.

12. Connect all control wiring to the new control board. The orange wires represent a relay contact closure for pump.



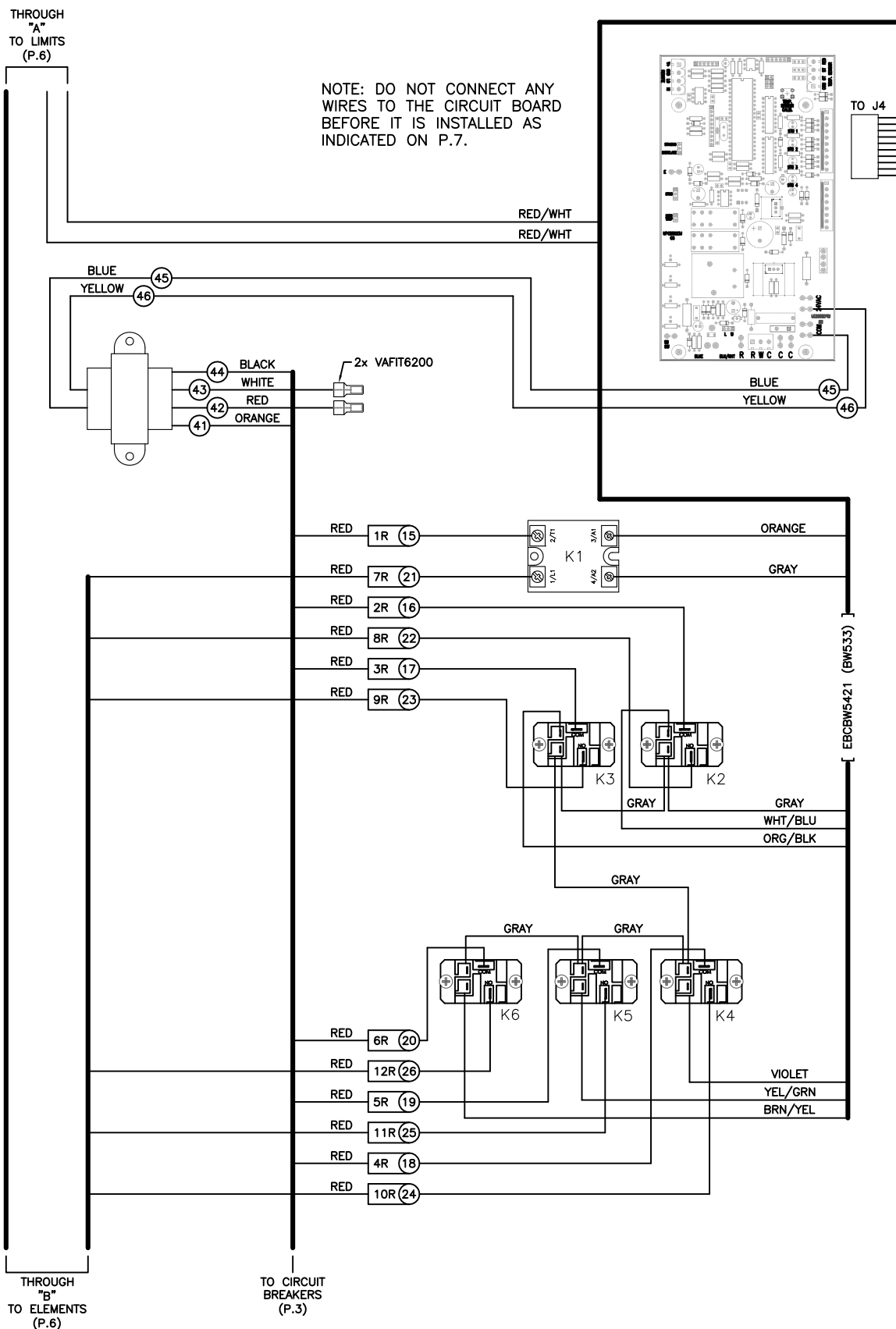


01-09-2013
ART-404



APPLY THERMOPASTE BETWEEN
[EBPN5567 & [EBCH5580.

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DESCRIPTION

EB-WX-27
ASSEMBLY



ELECTRO INDUSTRIES, INC.
MONTICELLO, MN 55362

DRAWN
CRN

CHECKED

APPROVED

SHEET

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3/8/16

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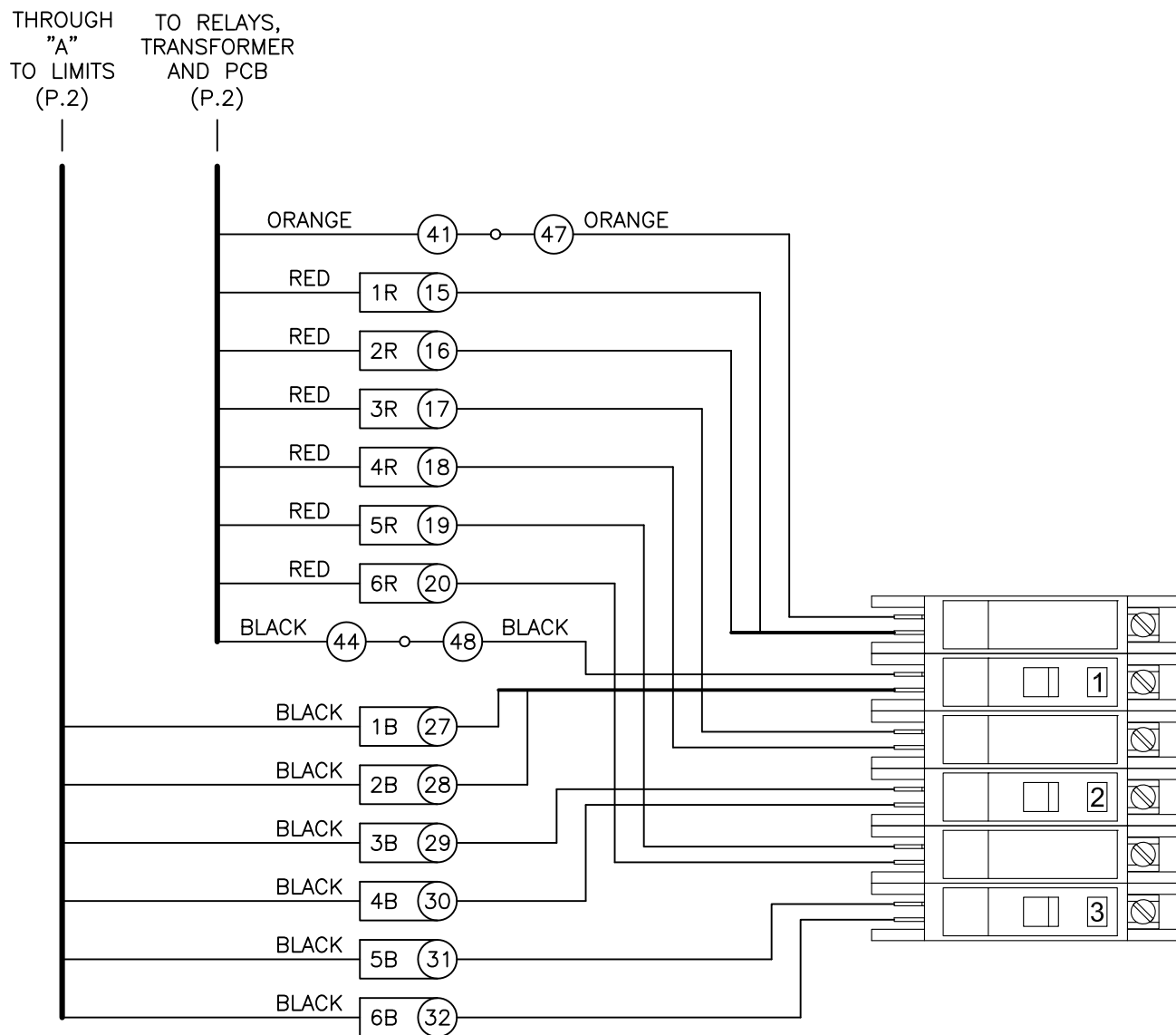
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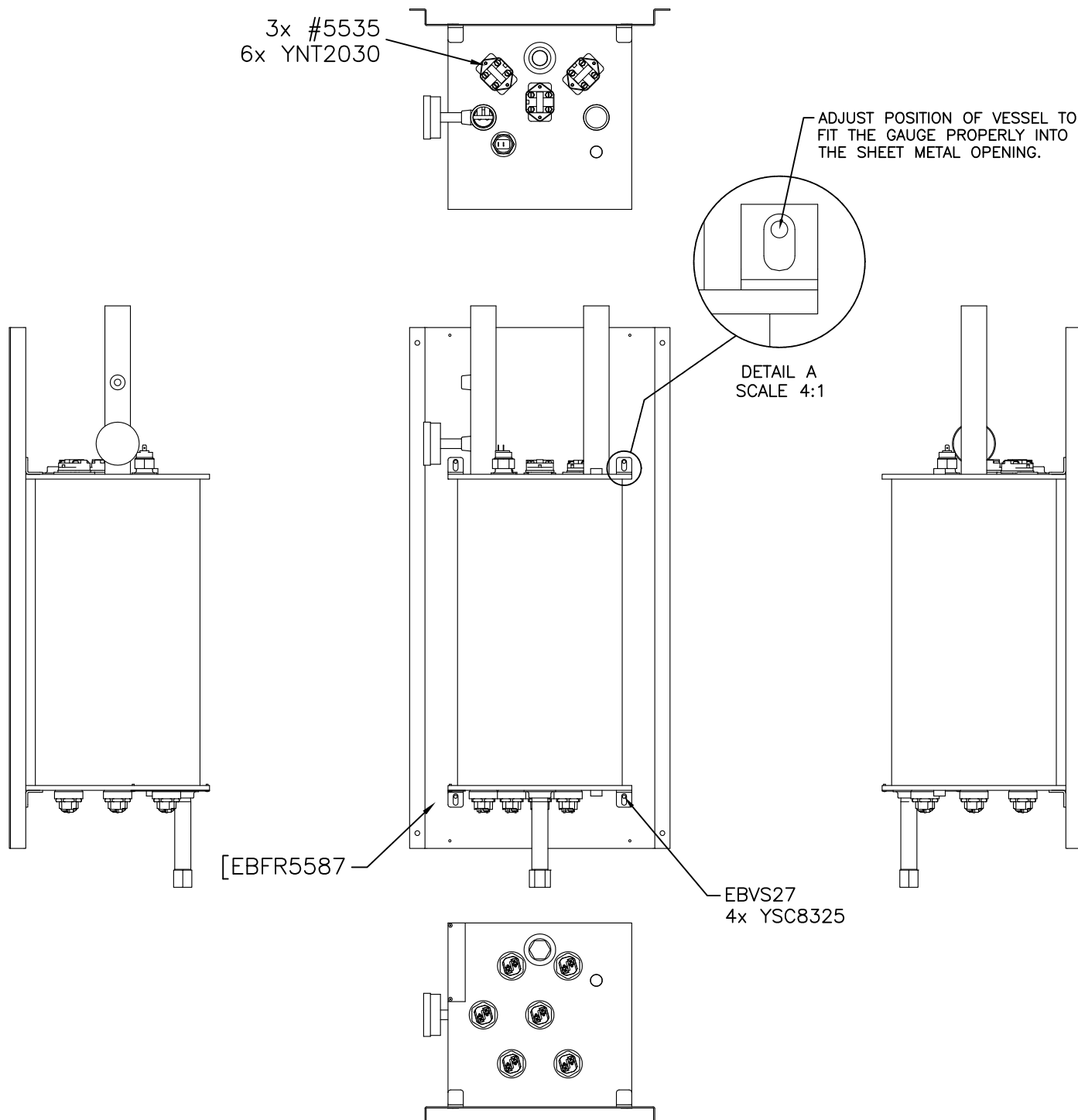
EB-WX-27


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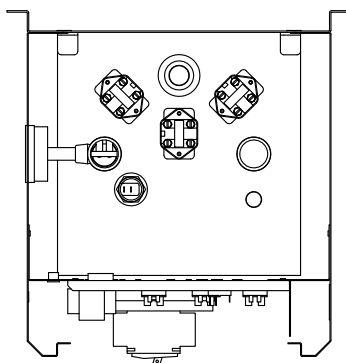
BW577



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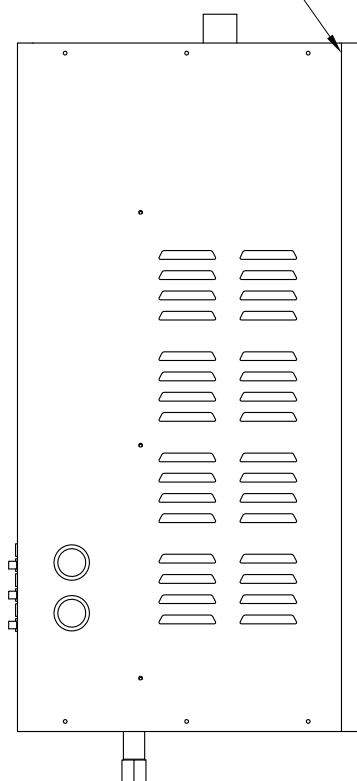
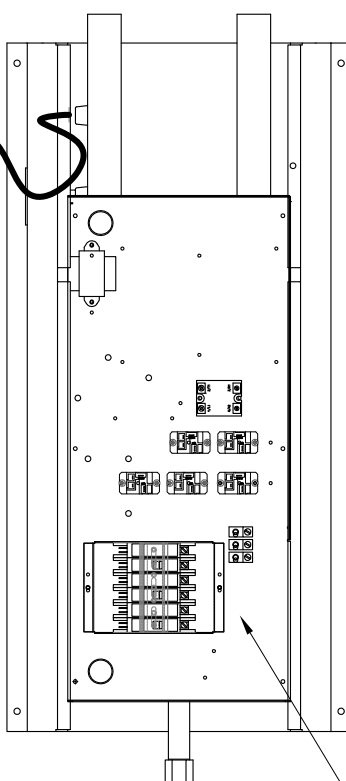
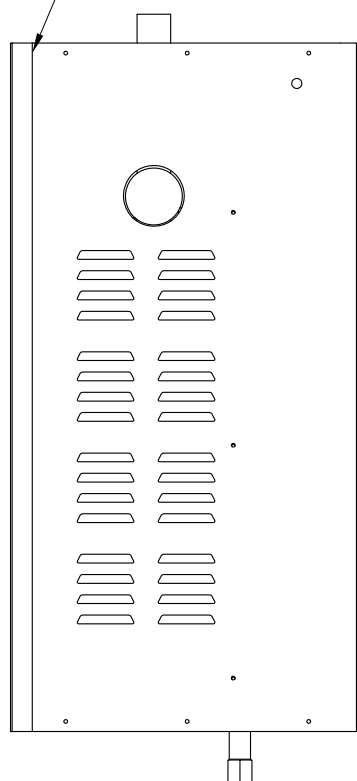


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2X YSC4355

[EBPN5586
2X YSC4355

@WFS3

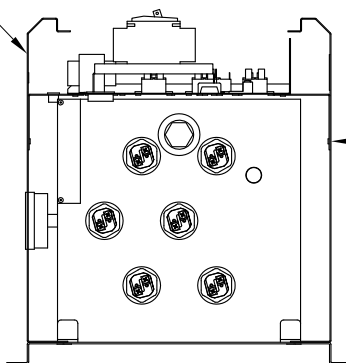
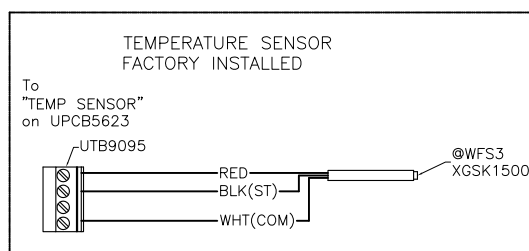
TO PCB
SEE DETAIL A
FOR HOOKUP



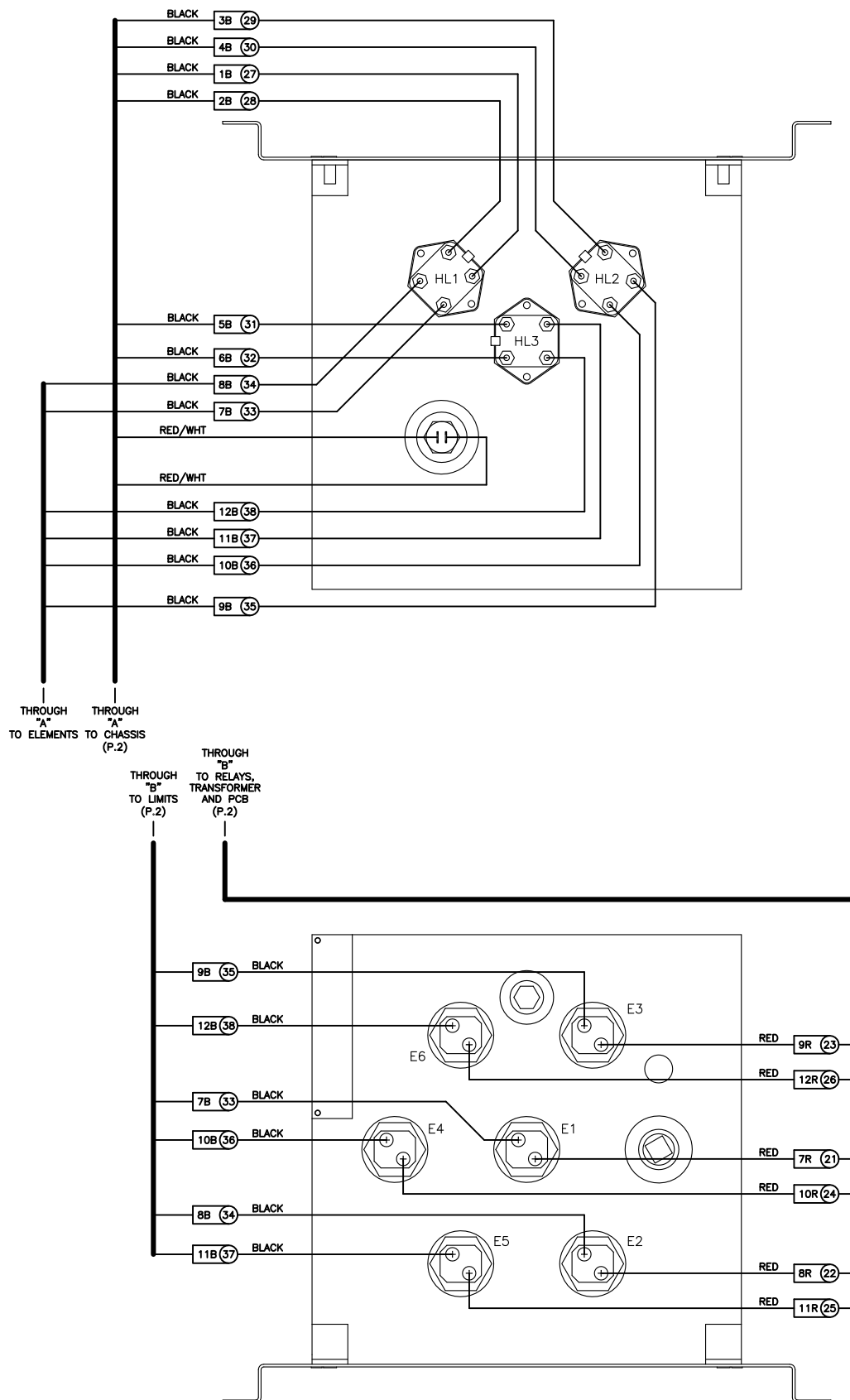
[EBBR5581
3X YSC4360

CHASSIS ASSEMBLY FROM P.1
INSTALL WITH YSC4350 X 6

[EBBR5581
3X YSC4360



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