


CHB BOILER
DHW RESISTOR HARNESS AND RELAY
KIT 550003082
For use with Argo ARM Zone Pump Control

Kit installation shall be completed by qualified agency.

 WARNING
Fire, explosion, asphyxiation and electrical shock hazard. Improper installation could result in death or serious injury. Read this instruction and understand all requirements, including requirements of authority having jurisdiction, before beginning installation. Installation not complete until appliance operation verified per Installation, Operation & Maintenance Manual provided with boiler.

1. Follow instructions TO TURN OFF GAS TO APPLIANCE found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual. Verify all electrical power to boiler is turned off.

 WARNING
Electrical shock hazard. Turn OFF electrical power supply at service panel.

2. Verify all power to boiler is turned OFF at service panel.
3. Follow Installation, Operation & Maintenance manual to remove front jacket panel

 WARNING
Burn hazard. Verify heat exchanger has cooled or use appropriate personal protection equipment.

4. Inspect combustion chamber through sight glass. Verify flame is not present.
5. See wiring shown in figures 2 and 3.

Kit Contents:	
Description	Qty.
DHW Resistor Harness	1
Isolation Relay (24 VAC)	1
Wire Nuts	7
Installation Instructions	1

Use this kit when the following applies:

- Use of Argo ARM Zone Control.
- Multiple 'CH' Zone and priority 'DHW' operation is required.
- Indirect tank operation (DHW) is controlled using mechanical thermostat.

If any of the conditions above apply:

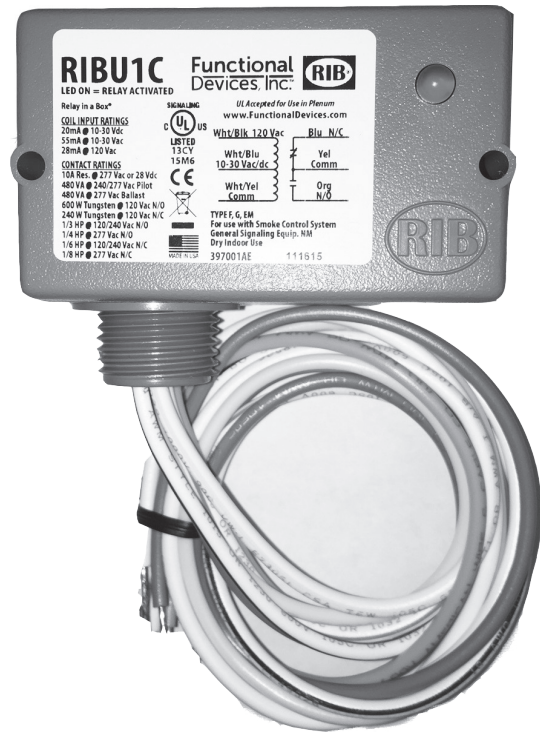
- a. Use piping diagram Figure 4 attached.
- b. Priority switch on Argo Zone Control must be set to "ON" position.
- c. Must use anti-scald valve on domestic hot water supply piping.

CHB BOILER - DHW RESISTOR HARNESS KIT

Multi-Zone Pump System with DHW Tank Thermostat and Isolation Relay

If DHW tank thermostat is applied to multi-zoned pump application secondary pump operation is controlled by Argo priority switch position.

FIGURE 1 - Isolation Relay



NOTICE

Important:

- Before connecting to Key72 terminals, remove jumper on terminal block.
- Before connecting Low Water Cut-off remove jumper on terminal block. (Key 370)

1. Boiler thermostat contacts (KEY 72) are wired to Argo ARM Zone Pump Control terminals (x-x). Zone thermostats and zone pumps are also wired to Argo Controller as shown on wiring diagram. See figure 2.
2. Important - Remove factory installed resistors, Terminal 7 and 8 on terminal strip (KEY 155).
3. Attach resistor kit wire harness to terminal strip (White wire to #7 / Red wire to #8). See figures 2 and 3.

NOTICE

Failure to observe wire coding will result in improper boiler operation. See wiring diagram figure 2.

4. Attach isolation relay provided to Argo Zone Control using an electrical knockout. Secure using conduit nut. See figure 1.
5. Extend brown and blue wires of wire harness to normally closed (N.C.) contacts on isolation relay (blue and yellow wires). Secure unused wire end of relay contact (ORG-N.O.) using provided wire nut.
6. Attach isolation relay coil wiring (24 VAC) to Argo Controller. Connect White/Blue wire to Argo zone 1 (Tw) and white/yellow wire to Argo "Common". see figure 2. Secure unused wire end of relay coil, 120V-white/black using wire nut provided.
7. Wire DHW mechanical tank thermostat to Priority Zone (Tw/Tr) contacts on Argo Zone Control.
8. Important: Set Argo Priority Switch to:
 - a. **ON** position - CH pumps **WILL** shutoff during DHW priority.
 - b. **Do not operate** this system with the Argo Priority Switch in **OFF** position.

NOTICE

If Indirect Tank pump is used connect to Priority Zone terminals (L1/N1) on Argo Controller.

9. Restore gas service and electrical power. Follow lighting and operating instructions. Restart boiler. Verify proper operation by following START UP Procedure found in boiler's Installation, Operation and Maintenance Manual.

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FIGURE 2 - CHB Boiler WITH SECONDARY ZONE PUMPS and DHW THERMOSTAT

NOTE: ZONE PUMPS WILL SHUTOFF DURING DHW PRIORITY W/ PRIORITY SWITCH ON

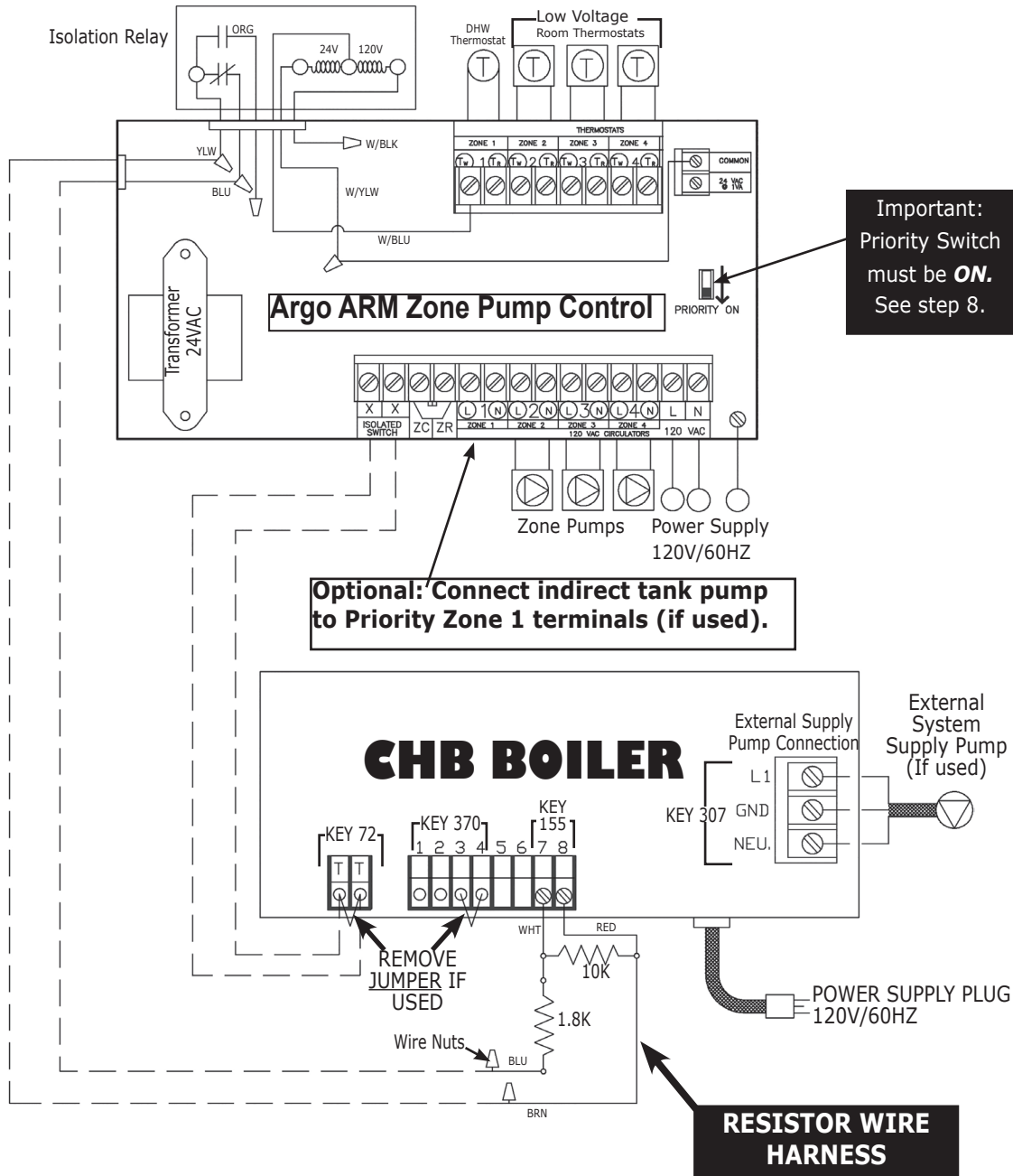
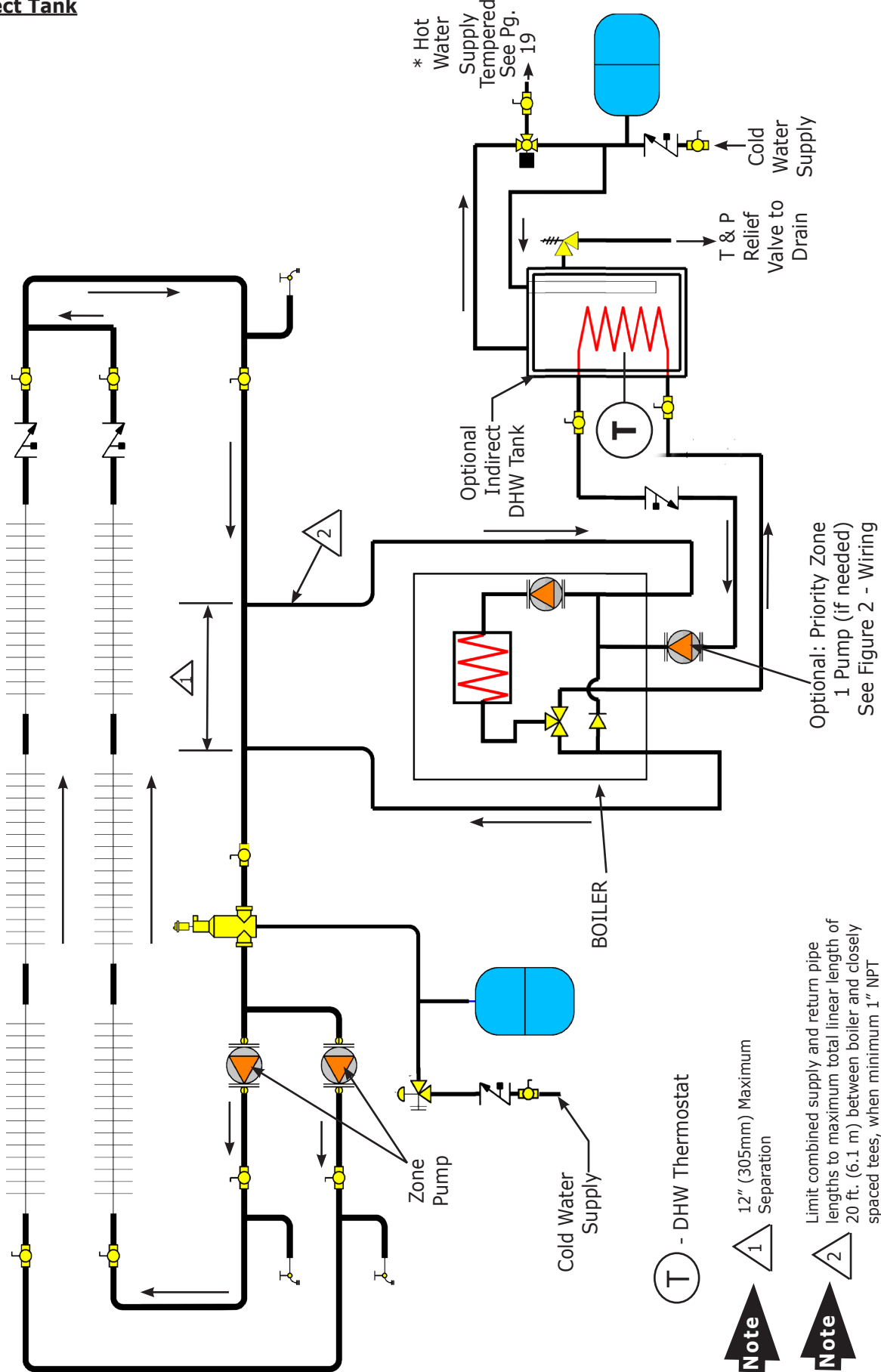


FIGURE 3 - Resistor Wire Kit Harness (DHW)



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FIGURE 4 - CHB -Single Boiler Primary/Secondary Series Loop Zoned WITH ZONE PUMPS and Optional Indirect Tank



See CHB/CCB Applications Guide located on the web at www.ecrinternational.com for indirect tank applications using boiler's on-board pump refer to flow rate and available pump head curves. Refer to Boiler's Installation, Operation and Maintenance Manual for operational requirements. Consult indirect tank manufacturer for indirect tank performance.

Note 1 12" (305mm) Maximum Separation

Note 2 Limit combined supply and return pipe lengths to maximum total linear length of 20 ft. (6.1 m) between boiler and closely spaced tees, when minimum 1" NPT pipe size is used. Linear length may be increased if supply and return pipe size is increased to limit pressure drop

Note * Manufacturer requires all domestic hot water (DHW) installations use an anti-scaled valve. Local codes may require additional equipment (expansion tank, relief valves, etc.) Select and size equipment to suit installation and meet code requirements.