PART NUMBER 158632 REV C (11/23)

SERVICE MANUAL

IMPORTANT INFORMATION, KEEP FOR OPERATOR

888-994-7636, fax 888-864-7636
unifiedbrands.net

THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE. READ, UNDERSTAND AND FOLLOW THE INSTRUCTIONS AND WARNINGS CONTAINED IN THIS MANUAL.

WARNING Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

NOTIFY CARRIER OF DAMAGE AT ONCE It is the responsibility of the consignee to inspect the container upon receipt of same and to determine the possibility of any damage, including concealed damage. Groen suggests that if you are suspicious of damage to make a notation on the delivery receipt. It will be the responsibility of the consignee to file a claim with the carrier. We recommend that you do so at once.

Manufacture Service/Questions 888-994-7636.

This manual provides information for:

INTEK XS

ALL ELECTRIC MODELS AND VOLTAGES

EXTREME STEAM ELEMENT FIELD REPLACEMENT INSTRUCTIONS

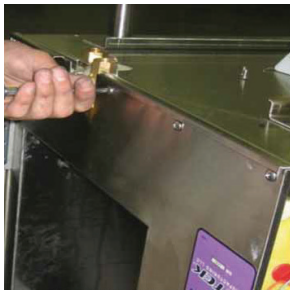
Please read and follow the instructions below.

- Safely remove all power connections, drain lines, and fill lines (if applicable). A stacked unit must be removed from its location (top or bottom) in order to change the element.
- Disconnect the element wires connected to the terminal block.
- Due to the location of the element and the limited space available, you must turn the unit upside down.
- Remove the two side panels.

REMOVING THE EXTREME STEAM HEATING ELEMENT

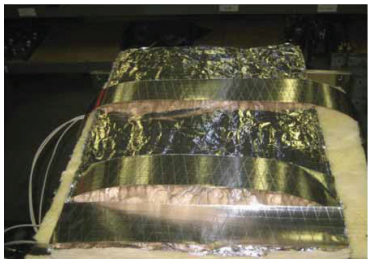
1. Turn the unit upside down and remove the legs using a Crescent Wrench as shown above.

2. Remove the drain cover *(Part # NT1046)* and two screws *(Part # NT1105)*.



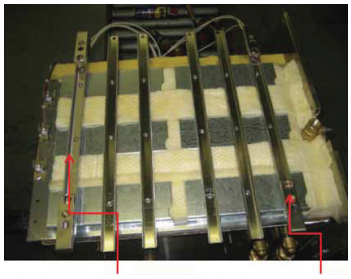
3. Remove the (5) drip rails Screws *(Part # NT1104)*.

4. Remove the bottom and back panel as seen above.

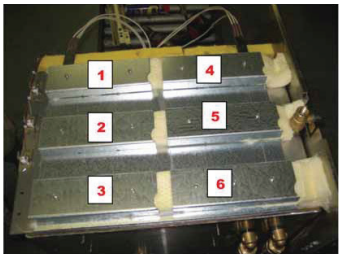


5. Remove insulation *(Part # 1162)* shown above.

6. Remove sheet insulation *(Part # 1120)*.

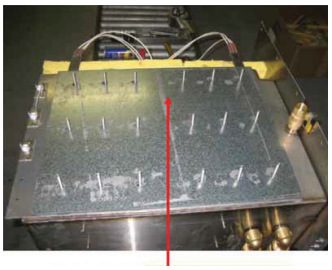


7. Remove the U-Brackets and note Tall Bracket is in the rear and the Short Bracket in the front.

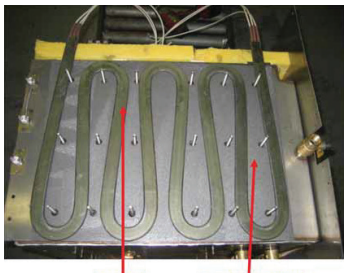


8. Remove the (6) U-Channels *(Part # NT1014)* as seen above.

9. Remove insulation *(Part # NT1120)* from bottom of unit.

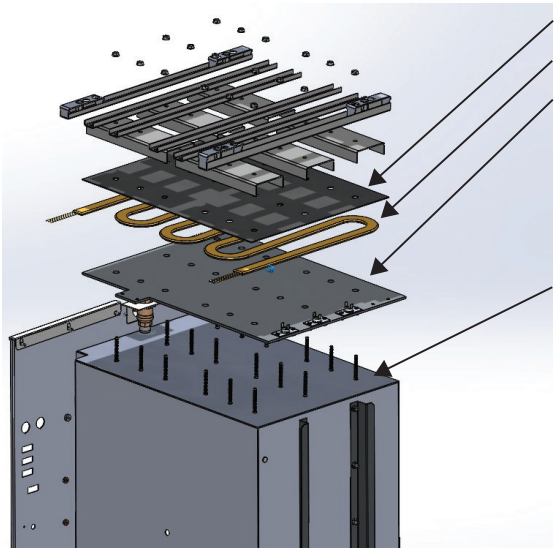


10. Remove bottom Galvanized Heater Plate *(Part # 1001)*.

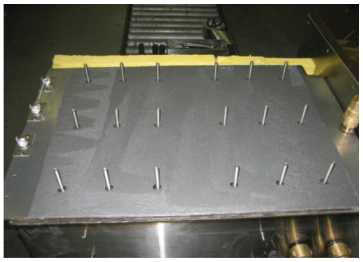


11. Remove the Element and the First Heater Plate.

INSTALLING THE EXTREME STEAM HEATING ELEMENT

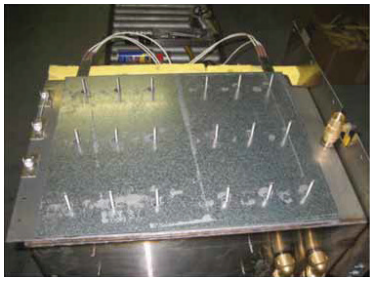


1. The heater plate *(Part # NT1003)* needs to be coated on one side with Thermal Transfer compound using a roller brush.

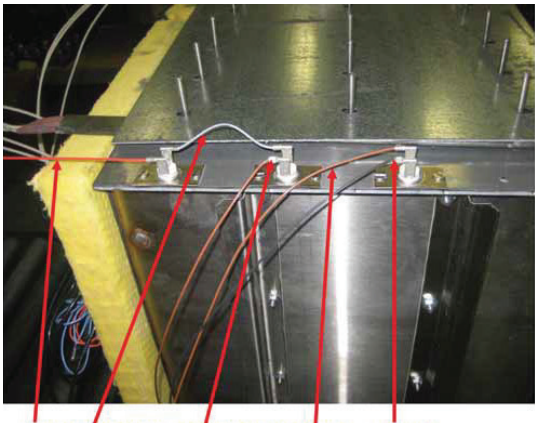


2. Turn the unit upside down and install the first Heater Plate *(Part # NT1003)*.

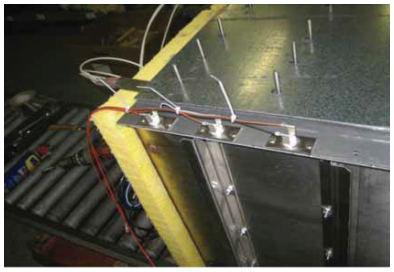
3. Slightly bend the element to improve the fit, making sure the **edge of the turns** are not hanging over the heater plate and the element isn't touching the studs at any stud locations.



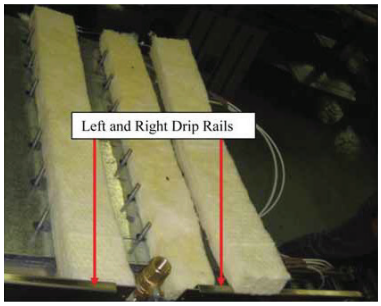
4. Install the galvanized bottom heater plate *(Part # NT1001)*.



5. Install the **red, jumper, long brown, short brown and black** wires as seen above.

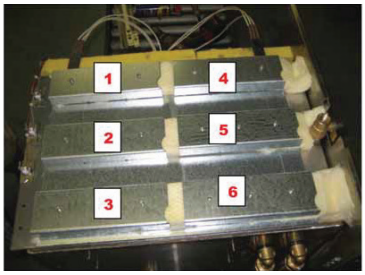


6. Zip tie as seen above.

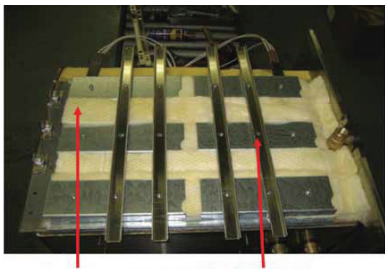


7. Install the left drip rail *(Part # NT1051)* and the right drip rail *(Part # NT1052)*. Set in place but do not attach.

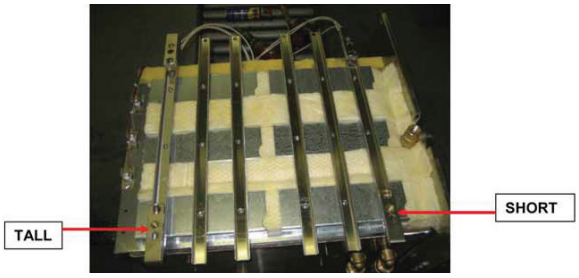
8. Place the insulation *(Part # NT1120)* as seen on the bottom of the unit.



9. Insert (6) U-Channels *(Part # NT1014)* as seen above.



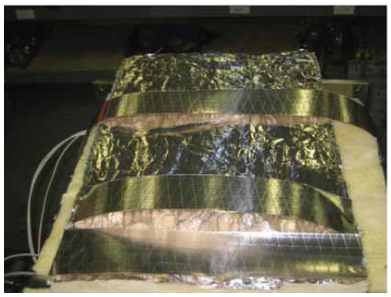
10. Add insulation and install (4) *(Part # NT1016)* as seen.



11. Install the short and tall U-Brackets towards the front of the unit.

12. Use LocTite on all the studs prior to tightening the nuts *(Part # NT1101)*. Nuts should be tightened with a torque wrench to 80 in/lbs.

13. Add *(Part # NT1120)* insulation sheet over the previously tightened brackets.



14. Place the back insulation *(Part # NT1162)*.

15. Place the bottom back on the unit as shown above.

16. Install the two pan holders *(Part # NT1027)* and install the legs through the pan holders after applying LocTite. Leave the feet slightly tightened for future adjustment.

17. Secure the drip rails using (5) screws *(Part # NT1104)*.

18. Install the drain valve cover *(Part # NT1048)* using two screws *(Part # NT1105)*.

19. Complete assembly by tightening the feet using a Crescent Wrench.
20. Return unit to its normal upright position and wire elements per wiring diagram.

REPLACING NT1098 THERMOMETER ON INTEK XTREME STEAM

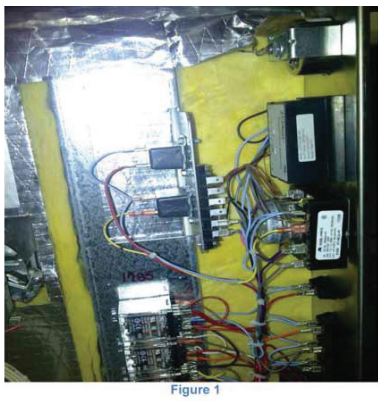


Figure 1

1. Safely remove all power connections.
2. Remove left side panel and remove existing thermometer from front panel.

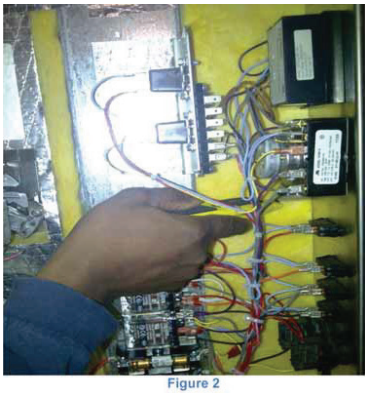


Figure 2

3. Cut the insulation in halves and slide the bottom half out to expose the bulb and bracket.

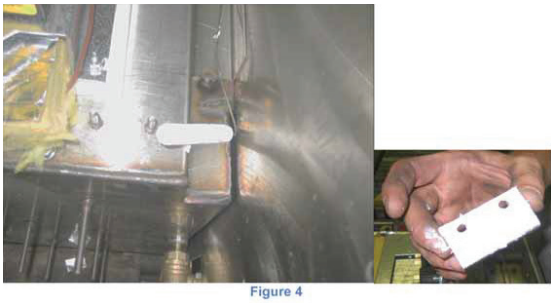
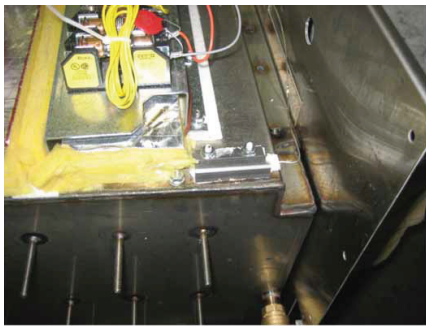


Figure 4

4. Remove damaged bulb, replace the thermometer bulb 1098 and apply heat sync compound to the bulb. If bracket is replaced apply heat sync compound to the backside of bracket. (Compound does not come with the temperature gauge.)



5. Secure the bracket and bulb using two the 1102 nuts as shown above.

6. Replace the insulation; install the gauge, and the left side panel. Reconnect power supply.

Watlo Heater Amp Reading During Operation		
	AMPS +/- 10%	OHMS Per Element
208-14-3000	38.9	9.3
208-12-3000	33	10.5
208-8-3000	22	15
208-8-1000	38.5	10.5
208-6-1000	28.9	20
240-14-3000	33.7	12
240-12-3000	28.9	14
240-8-3000	19.2	20
240-8-1000	33.3	14
240-6-1000	25	27
480-12-3000	14.4	56.6

IMPORTANT: TO RECEIVE THE PROPER OHMS PER ELEMENT, DISCONNECT ALL HEATER LEADS FROM THE THREE POSITION TERMINAL BLOCK AND TEST 1L1 TO 1L1 - 2L2 TO 2L2 - 3L3 TO 3L3.

IMPORTANT: TO READ THE AMPS PER UNIT DURING NORMAL OPERATION, CONNECT THE AMP METER TO THE INCOMING POWER CORD LEADS CONNECTING TO THE MAIN CONTRACTOR. AMP OUT EACH LEAD.

TROUBLESHOOTING

WARNING: TO PREVENT ELECTRICAL SHOCK DISCONNECT AC INCOMING POWER BEFORE SERVICING.

NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

SYMPTOM	POSSIBLE CAUSE
No Lights when ON is pressed	Facility Main Breaker, Unit Ran Dry - No Water In Chamber, F1/F2 Fuse, Hi-Limit (OT-1), MC, CR-1 or N.O. Contact - ON Push-button
Unit Turns ON when "ON" pushed - Turns OFF when released	Auxiliary Contact on MC, N.C. Contact - OFF Push-button
"Add Water" Light On	Not Enough Water In Chamber, Build-Up (Lime) On Chamber Bottom, OT-2/OT-3 or AWR.
Unit won't Heat Up: 1) w/ Steam Out Exhaust 2) w/o Steam Out Exhaust	PS-1, SSR-1/SSR-2, CR-2 Not Working In Cook Mode Steam Orifice Is Blocked
Heat Stays On *(Light Stays On)*	Normal When Door Open, PS-1, SSR-1/SSR-2 *(If Door Is Leaking Steam - Adjust First)*
Heat Stays On *(Light Cycles)*	SSR-1/SSR-2

OPERATING SUMMARY

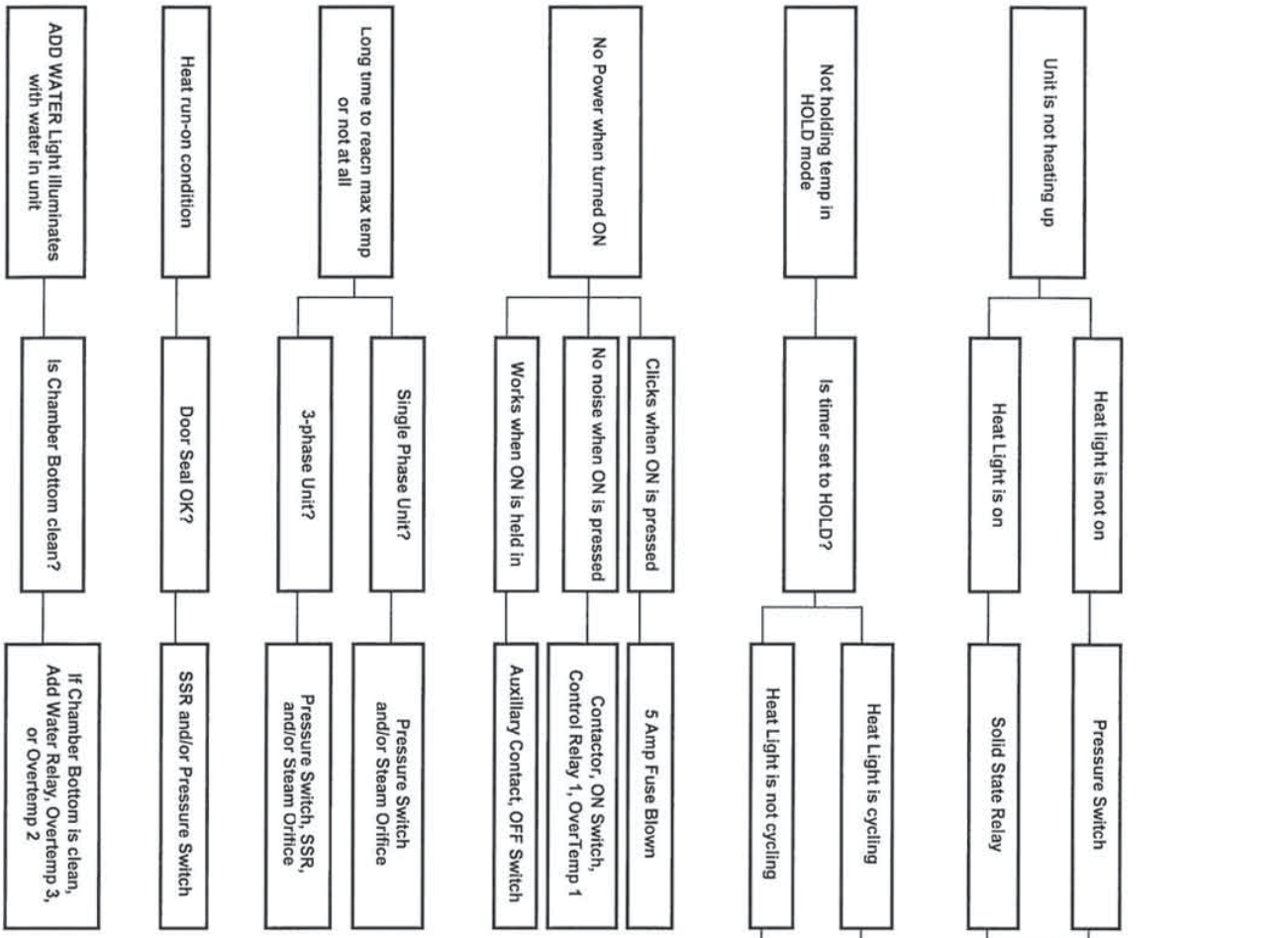
When the timer is at the HOLD position, heat is controlled by the HOLD Thermostat. When the timer is at any other position, heat is directly controlled by PS-1 (pressure switch). Note: Both COOK and HOLD Mode heat outputs are directed through PS-1.

It is normal for the Heat Indicator Light to cycle ON and OFF.

The Convection Fan (CFM) is only on during the cooking cycle.

REFER TO WIRING DIAGRAM FOR ADDITIONAL INFORMATION.

Troubleshooting Guide



NOTE: Steam Orifice is located at the bottom of the Pressure Switch Tee and above the Union

Control Side Components

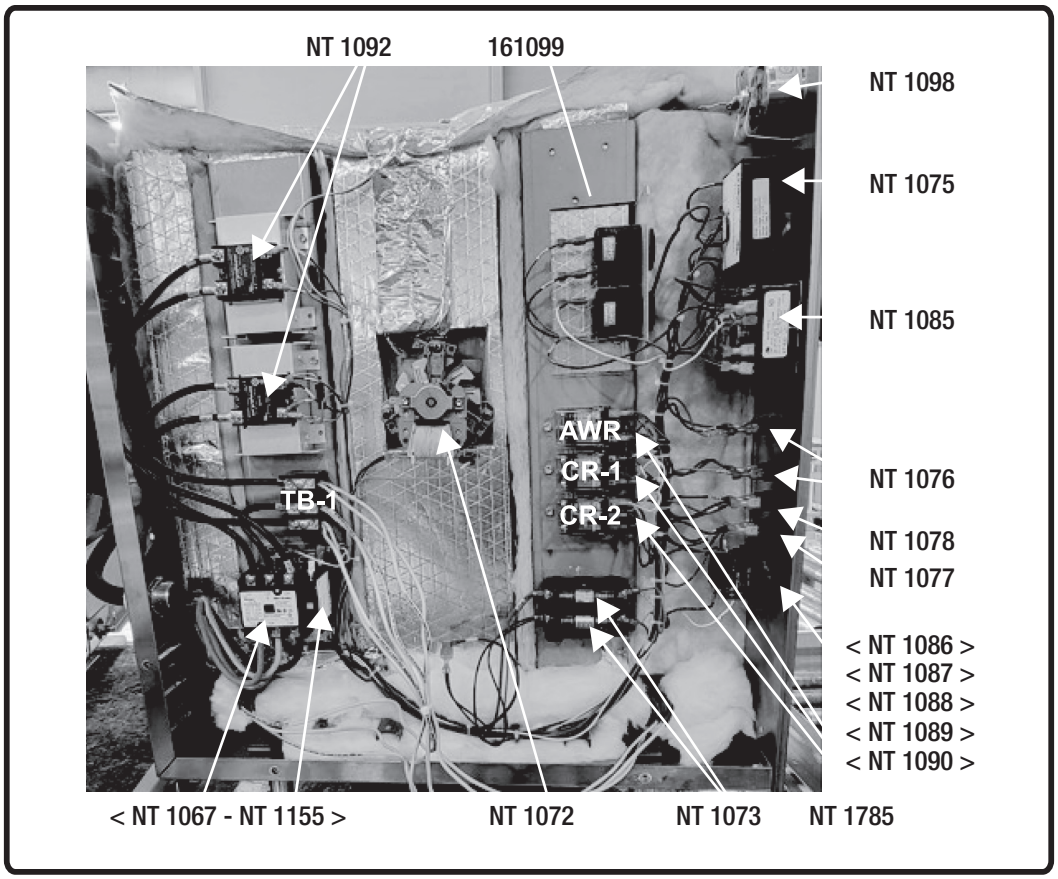


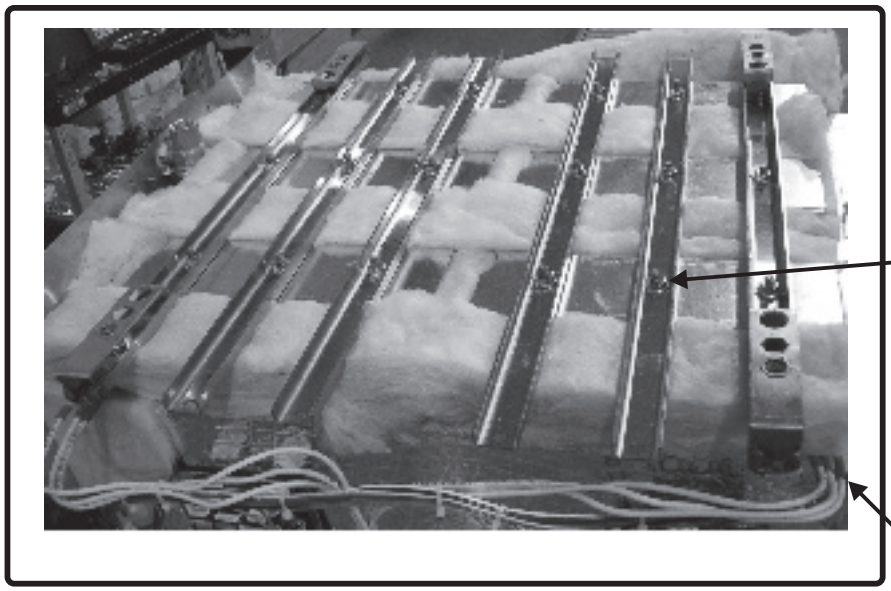
FIGURE 1
XS-208-12-3 (3 Phase Unit Shown)

Intek Part #	Description
161099	BEEPER,120V-240V
NT 1067	DP Contactor, Main Power
NT 1785	Relay, 220V, Control
NT 1072	Fan, Convection (Includes Blade Assy.)
NT 1073	Fuse, 5 Amp
NT 1075	Thermostat, Hold 100-212 Degrees
NT 1076	Lamp, Red
NT 1077	Lamp, Blue
NT 1078	Lamp, Amber

Intek Part #	Description
NT 1085	Timer, 60 Minute
NT 1086	Operator, Switch, PB, On
NT 1087	Operator, Switch, PB, Off
NT 1088	Mounting Latch, On / Off Switches
NT 1089	Contact, NC, Off Switch
NT 1090	Contact, NO, On Switch
NT 1092	Solid State Relay, 75A, AC Input
NT 1098	Thermometer, Analog, 100-220 Degrees
NT 1155	Aux. Contact, DP Contractor

REFER TO WIRING DIAGRAM FOR ADDITIONAL INFORMATION

Elements & Plumbing Components



IMPORTANT
Apply Loc-Tite™ Removable-ThreadLocker™
AND
Torque Clamping Nuts to 65in.lbs. / 5.5ft.lbs.

Heater Is Located Under Bracket / Clamp Assembly

FIGURE 2

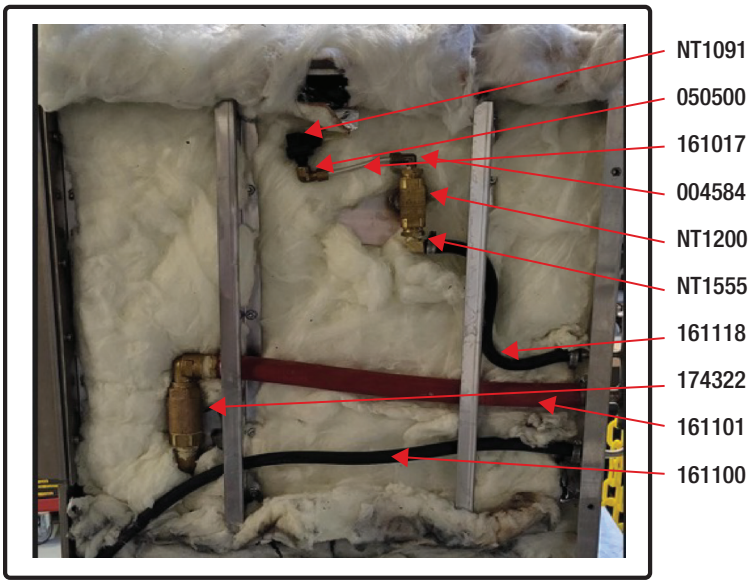


FIGURE 3

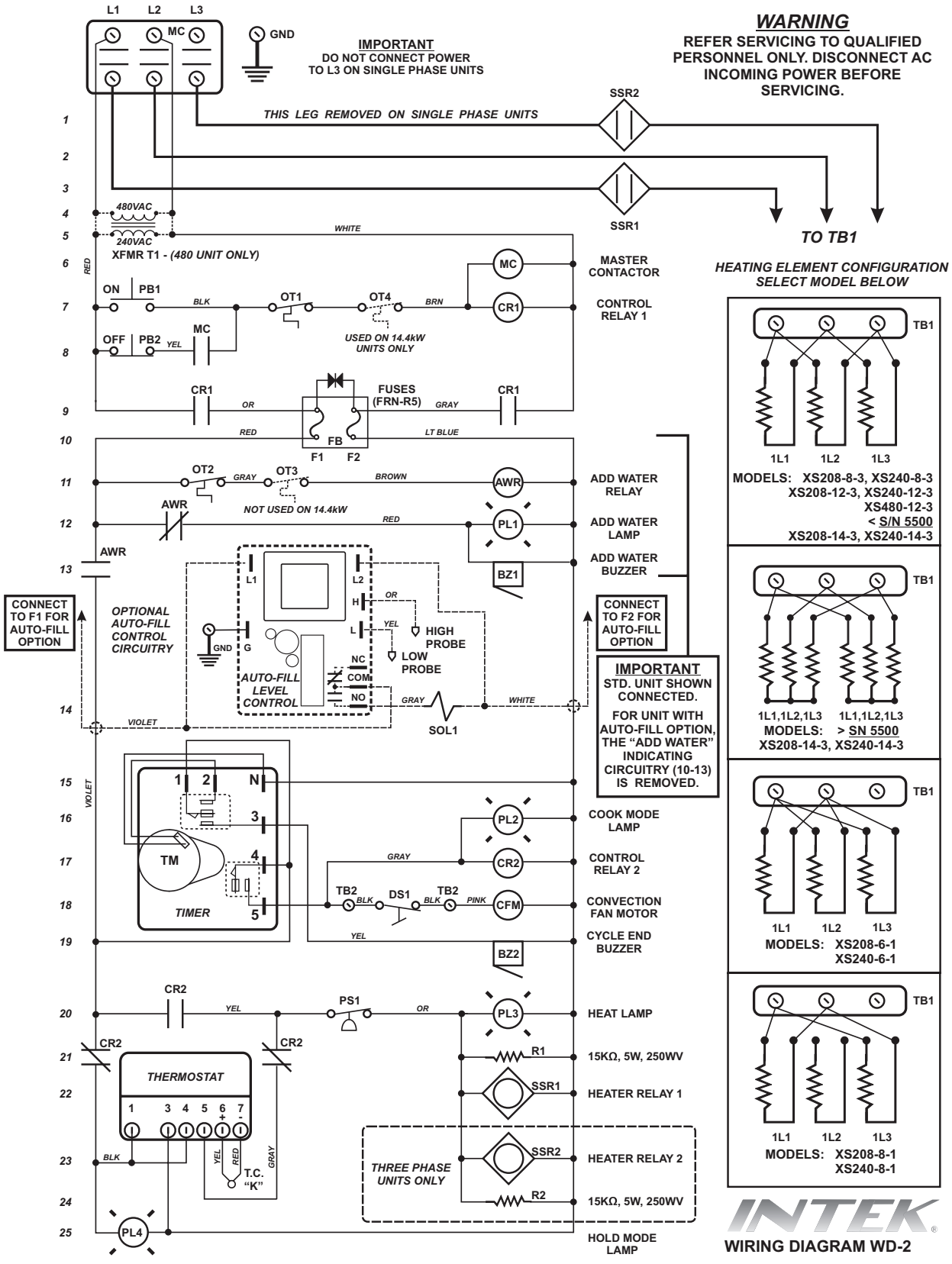
Parts Not Shown

Intek Part #	Description
NT 1079	Thermostat, Bi-Metal, 325F
NT 1080	Thermostat, Bi-Metal, 410F
125907	Gasket, Door HY-5 Silicone

Intek Part #	Description
NT 1009	Heater, 208V, 12kW
NT 1011	Heater, 240V, 12kW
NT 1012	Heater, 208V, 6.24kW
NT 1013	Heater, 240V, 6.24kW
NT 1045	Heater, 208V, 8.5kW
NT 1046	Heater, 240V, 8.5kW
NT 1269	Heater, 208V, 14.4kW
NT 1270	Heater, 240V, 14.4kW
NT 1091	Switch, Pressure, 1/8" NPT
NT 1797	Heater, 208V, 14.4kW (New Ver.)
NT 1798	Heater, 240V, 14.4kW (New Ver.)
174322	Check Valve Assembly
161017	1/4" X 4" Long Aluminum Tube
161100	Hose 5/16" 28" Long EPDM
161101	Hose 3/4" 16.75" Long EPDM
161118	Hose 5/16" 12" Long EPDM
NT 1200	Brass Tee - 1/2 FP
NT 1555	Brass Elbow Fitting - Hose Barb X 90 Degree Male - Blockstyle
Z004584	Fitting Compression 90, 1/8 NPT X 1/4 CC
Z050500	Elbow Female 90 Deg

REFER TO WIRING DIAGRAM FOR ADDITIONAL INFORMATION

Wiring Diagram



INTEK

WIRING DIAGRAM WD-2

Replacement Parts List

Part #	Description
NT 1009	Heater, 208V, 12kW
NT 1011	Heater, 240V, 12kW
NT 1012	Heater, 208V, 6.24kW
NT 1013	Heater, 240V, 6.24kW
NT 1045	Heater, 208V, 8.5kW
NT 1046	Heater, 240V, 8.5kW
NT 1269	Heater, 208V, 14.4kW
NT 1270	Heater, 240V, 14.4kW
NT 1797	Heater, 208V, 14.4kW (new ver.)
NT 1798	Heater, 240V, 14.4kW (new ver.)
161099	Beeper, 120V-240V
NT 1067	DP Contactor, Main Power
NT 1070	Relay, 220V, Control
NT 1072	Fan, Convection (Includes Blade Assy.)
NT 1073	Fuse, 5 Amp
NT 1075	Thermostat, Hold 100-212 Degrees
NT 1076	Lamp, Red
NT 1077	Lamp, Blue
NT 1078	Lamp, Amber
NT 1079	Thermostat, Bi-Metal, 325°F
NT 1080	Thermostat, Bi-Metal 410°F
NT 1083	Plug, Angle 250V 3PH
NT 1085	Timer, 60 Minute
NT 1086	Operator, Switch, PB, On
NT 1087	Operator, Switch, PB, Off
NT 1088	Mounting Latch, On/Off Switches
NT 1089	Contact, NC, Off Switch
NT 1090	Contact, NO, On Switch
NT 1091	Switch, Pressure, 1/8" NPT
NT 1092	Solid State Relay, 75A, AC Input
NT 1093	Terminal Block, 3-Pos.
NT 1098	Thermometer, Analog 100-220 Degrees
NT 1155	Aux. Contact, DP Contactor
125907	Gasket, Door HY-5 Silicone
NT 1115	Hinge, One Pair
NT 1144	Magnetic Door Latch
NT 1175	Stand Caster, 5” Locking
NT 1176	Stand Caster, 5” Non-locking
NT 1178	Knob
NT 1335	Nut plate
NT 1127	Drain Valve
NT 1022	Shell/Top

Part #	Description
NT 1023	Right Side, Shell
NT 1151	Left Side Shell, Louvered
161061	Door Assembly, Intek
NT 1137	Auto Fill Control Board with Probes
NT 1028	Control Panel Overlay
174322	Check Valve Assembly
NT 1116	Heat Sink
NT 1132	3/4 Inch Hose
NT 1001	Galvanized Bottom Plate
NT 1003	Heater Plate, Aluminum
NT 1120	Insulation, Chamber Bottom
NT 1135	Lens, Thermometer
NT 1537	Inner Door Panel Assembly
NT 1096	Thermocouple
NT 1037	Shelf Bracket, Stand
NT 1027	Pan Bracket - Steamer Bottom
170908	Harness, Intek Electric, Manual Fill
NT 1117	Steamer Foot, Flanged
NT 1104	Screw, 10-24 x 1/2 SS
NT 1217	Nutsert
NT 1202	Brass Reducer, 1/2 x 1/8
161017	1/4” X 4” Long Aluminum Tube
161100	Hose 5/16” 28” Long EPDM
161101	Hose 3/4” 16.75” Long EPDM
161118	Hose 5/16” 12” Long EPDM
NT 1200	Brass Tee - 1/2 FP
NT 1555	Brass Elbow Fitting - Hose Barb X 90 Degree Male - Blockstyle
Z004584	Fitting Compression 90 1/8 NPT X 1/4 CC
Z050500	Elbow Female 90 Deg

Service Log

Model No:	Purchased From:
Serial No:	Location:
Date Purchased:	Date Installed:
Purchase Order No:	For Service Call:

Date	Maintenance Performed	Performed By