



S E R V I C E

AM14 SERIES DISHMACHINE CUSTOMER MAINTENANCE MANUAL



This manual is only intended for use by properly trained and qualified customer in-house maintenance for the limited procedures herein.

This manual is not intended to be all encompassing. You should read the maintenance or repair procedure you wish to perform, in its entirety, to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained Hobart Service technician.

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Specification Sheets

Click on image below for most recent edition.

AM14/ AM14C DISHWASHERS

Item # _____
Quantity _____

C.S.I. Section 11420

HOBART
701 S. Ridge Avenue, Troy, OH 45374
1-800-835-5527 • www.hobartcorp.com

AM-14/AM-14C DISHWASHERS

STANDARD FEATURES

- 50 cycles per hour - hot water wash cycle
- 16 gauge stainless steel tank, chamber, doors, frame and feet
- Stainless steel front panel (AM14)
- Microcomputer controls with LED cycle/temperature display
- Manual by-pass controls
- Field adjustable control box height
- Left hand or right hand controls (AM14C)
- Revolving upper and lower anti-clogging wash arms
- Revolving upper and lower anti-clogging rinse arms
- Scrap screen and bucket system
- Self-draining, high efficiency pump with Neostatic impeller
- Automatic fill
- Door actuated door closure
- Spring counterbalanced doors with nylon door guides
- Vent fan control (gas units only)
- Pass-through or corner installation
- Hot water or chemical sanitation

MODELS

- AM-14
- AM-14C

OPTIONS AT EXTRA COST

- 70" rise electric booster heater
- Flanged feet

ACCESSORIES

- Vent fan control (field installed) (electric heat)
- 1/2" pressure regulator valve
- Peg rack
- Combination rack
- Stainless steel tray rack

Accessories, options, electrical specifications, etc. see catalog.



Model AM-14 Model AM-14C

VOLTAGE

- 208-240/60/1
- 208-240/60/3
- 480/60/3

UL NSF

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AM14F DISHWASHERS

Item # _____
Quantity _____

C.S.I. Section 11420

HOBART
701 S. Ridge Avenue, Troy, OH 45374
1-800-835-5527 • www.hobartcorp.com

AM14F DISHWASHERS

DUAL PURPOSE DESIGN...OPTIMUM WASHING OF DISHES AND UTENSILS

DESIGN FEATURES

- Split front door design for easy front loading - no tables required
- Large 27-3/16" x 20-3/4" wide opening and spacious interior control 10" x 10" wash zone up to a 90° tilt mixing bowl
- High volume 52 rpm per hour
- Low water usage - 1.42 gal rack
- NSF, U.L. and CSA approved
- Exclusive Hobart Enhanced Washing System - Stainless steel revolving upper and lower wash and rinse arms with Hobart's special computer designed debraser, anti-clog nozzles - the latest X-Streamwash technology - provides the most effective spray pattern
- Hobart built, heavy-duty 2 HP wash pump - triple protected - thousands of cycle thermal protection
- Self-draining pump with 16 mesh impeller for long life
- Rinse system with exclusive Squeal Dry cycle (refill hot water working over)
- Operator Phasers - Easy access front mounted controls with field cycle selection (standard 2, 4, or 6 minute wash, automatically timed tank fill)
- Self-flushing stainless steel squeegee pan system with large stainless steel squeegee blades

OTHER NOTABLE FEATURES

- Choice of electric, gas immersion tube, steam injector or steam coil heat
- Wide variety of electrical specifications available
- Single stainless steel front panel is standard

Specifications, details and accessories at Hobart Corp.



AM14F

AM-14T/ AM-14TC DISHWASHERS

Item # _____
Quantity _____

C.S.I. Section 11420

HOBART
701 S. Ridge Avenue, Troy, OH 45374
1-800-835-5527 • www.hobartcorp.com

AM-14T/AM-14TC DISHWASHERS

STANDARD FEATURES

- 48 cycles per hour - hot water wash cycle
- 27" door opening for 18" x 18" cheer pans or 80-quart mixing bowl
- Timed wash cycle for 1, 2, 4 or 6 minutes
- 16 gauge stainless steel tank, chamber, doors, frame and feet
- Stainless steel front panel (AM-14T)
- Microcomputer controls with LED cycle/temperature display
- Manual by-pass controls
- Field adjustable control box height
- Left hand or right hand controls (AM-14T)
- 90° doors (AM-14TC)
- Revolving upper and lower anti-clogging wash arms
- Revolving upper and lower anti-clogging rinse arms
- Scrap screen and bucket system
- Self-draining, high efficiency pump with Neostatic impeller
- Automatic fill
- Door actuated door closure
- Counterbalanced doors with nylon door guides
- Vent fan control (gas units only)
- Pass-through or corner installation
- Hot water or chemical sanitation
- Self-drain rack

MODELS

- AM-14T
- AM-14TC

OPTIONS AT EXTRA COST

- 70" rise electric booster heater
- Flanged feet

ACCESSORIES

- Vent fan control (electric heat)
- 1/2" pressure regulator valve
- Peg rack
- Combination rack
- Stainless steel tray rack
- Shot pan rack

Accessories, options, electrical specifications, etc. see catalog.



Model AM-14T Model AM-14TC

VOLTAGE

- 208-240/60/1
- 208-240/60/3
- 480/60/3

UL NSF

701 S. Ridge Avenue, Troy, OH 45374 • 507-332-3000 • 1-800-333-7447

Tools

Standard

- Standard set of hand tools.
- Anti-static kit.

Installation & Operation Manual

Click on image below for most recent edition.

[AM Select Dishwashers Instruction Manual](#)



Marketing Materials – Wall Charts

Click on image below for most recent edition.

AM Ventless Warewashing

advansys AM VENTLESS WAREWASHING

TO OPERATE:

- Place water sensor and soap basket into position in the distributor rack.
- Close the door fully automatically. Close CYCLE and push the "OFF" button. The word "FILL" will be displayed.
- When fill is complete, the machine will drain the wash water temperature. Select the wash cycle. 1. For normal soiling, select 2. 4 or 6 for heavier soiling. Select through cycle options by pressing the CYCLE button. After filling is complete, turn the door and slide the rack in the machine.
- Close the door. The machine will start automatically and the cycle light will turn on. NOTE: Each wash cycle is followed by an automatic rinse. Throughout the wash portion of the cycle, the wash water temperature is maintained, along with the wash and rinse water. During the final rinse, the rinse water warms to 180°F and an on-line, followed by 30-45 second CONSERVING CYCLE with temperature lower than 120°F.
- Do not open door until cycle light turns off and washwater timer is no longer displayed.

OPERATIONAL TIPS:

- Pre-rinse water to remove large food particles and debris.
- Do not stack dishes or dishes one on top of another.
- Use only commercial detergents and chemicals with the AM Dishwashing.
- Consult technical personnel for machine operation manuals. Before instructions located on the front panel in the door light panel area.

TO CLEAN:

- Push the OFF button.
- Open the machine door.
- Clear all dishware into the distributor.
- Drain the machine by lifting up the drain lever.
- Remove rackbars, water sensor and soap basket, wash and rinse thoroughly.
- Remove the overflow tube, wash and rinse inside and out.
- Thoroughly clean and flush the distributor cabinet. Remove any remaining food soil.
- Make sure wash and rinse arms rotate freely and are free of any obstructions. If not, remove arms and clear and lubricate.
- Disassemble the machine.
 - Remove overflow tube, soap sensor and water basket.
 - Wash and rinse arms if removed.
 - Remove rackbars.
- Wipe down machine exterior with a clean, wet cloth. DO NOT USE STEEL WOOL, A SCOURING PAD OR ABRASIVE MATERIAL TO CLEAN THE MACHINE.
- Approximately every 6-12 months, remove and clean ruffles behind the upper wash and rinse arms. NOTE: For ease of the slip cleaning, complete steps 1 through 10 and leave the door open to allow the interior to air out and dry.

HOBART 761 S. Main Street, Troy, OH 45374-0001 Phone: 800-333-2500 www.hobart.com

AM Door Types | Delime Instructions

HOBART AM DOOR TYPES | Delime Instructions

Delime™ Your AM Door Type for Optimal Results

Delime™ is a chemical solution that is used to clean the interior of the machine. The solution must be left undisturbed during application and drying to properly set up delime residues.

If the optional delime verification is activated on the HOBART light icon, follow the audio clues below. Delime™ is also necessary if moisture deposits are visible inside or outside the machine. The process can be completed anytime, at the operator's discretion.

PREPARING Your AM Door Type Washer for the Delime Cycle

- OPEN DOOR AND REMOVE RACK GUIDE**
Remove the rack guide from the door.
- REMOVE THE SOAP BASKET AND STRAINER PIN**
Remove the soap basket and strainer pin from the door.
- REMOVE THE RACK BASKET AND STRAINER PIN**
Remove the rack basket and strainer pin from the door.
- INSTALL CLEANED STRAINER PIN, SOAP BASKET AND RACK GUIDE**
Reinstall the cleaned strainer pin, soap basket and rack guide.

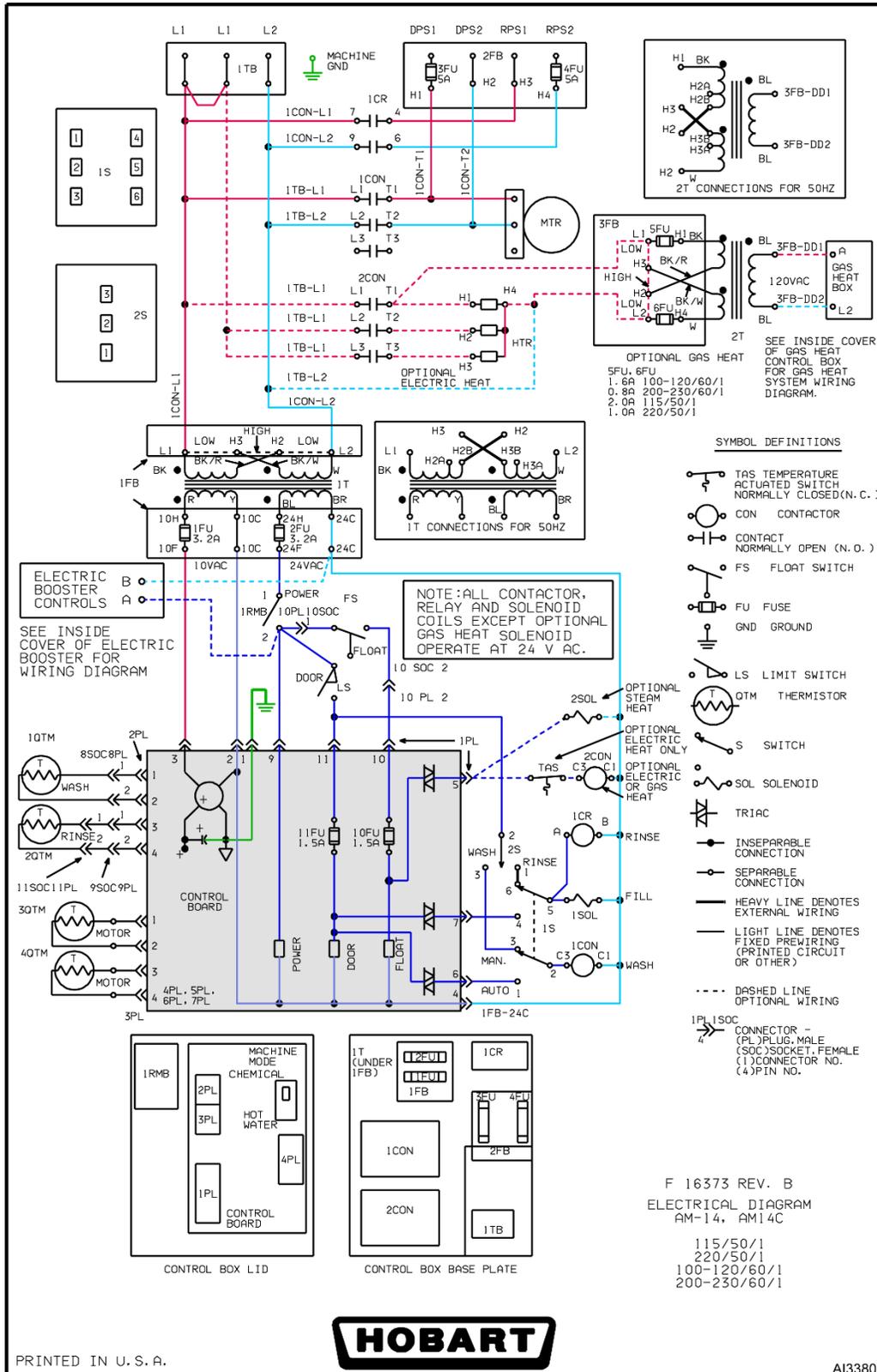
How to INITIATE the Delime Cycle

- LOCATE YOUR DELIMING CHEMICAL**
Locate the delime chemical in the cabinet. The cabinet must be locked along with the door when pumped.
- DRINK THE TANK**
The delime chemical is pumped into the tank. Press the DELIME button on the control panel.
- PRESS AND HOLD CYCLE AND DELIME**
Press and hold the CYCLE AND DELIME button for 3 seconds. The word "DELIME" will appear on the display.
- OPEN THE DOOR**
The delime chemical is pumped into the tank. Press the DELIME button on the control panel.
- CLOSE DOOR, PUMP STARTS AND DISPLAY FLASHES "DELIME"**
The delime chemical is pumped into the tank. The power of the pump will stop when the delime cycle is complete.
- OPEN THE DOOR AND CHECK THE RACKBARS**
The delime chemical is pumped into the tank. Press the DELIME button on the control panel.

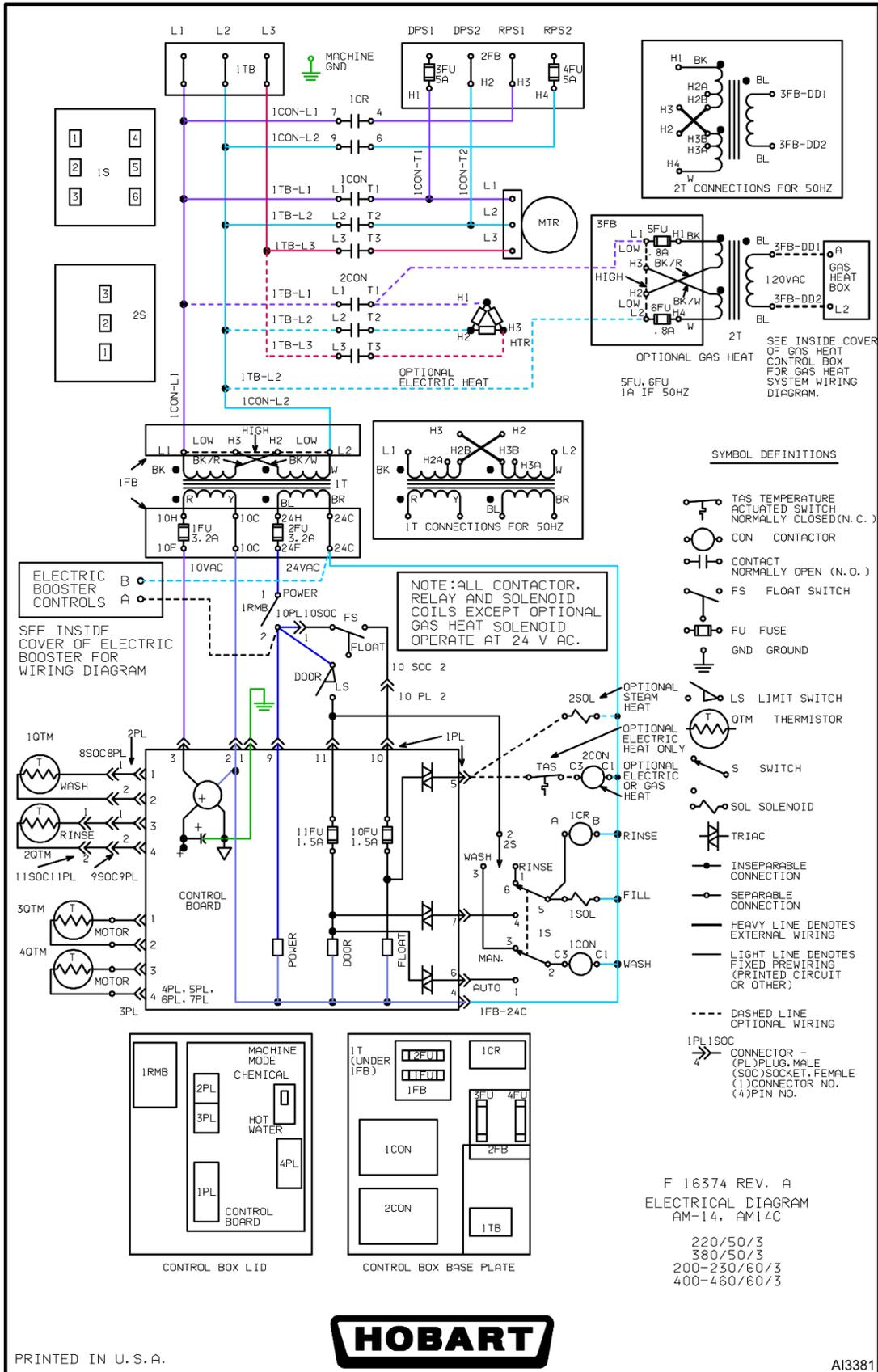
For further assistance, visit www.hobart.com or call 800-333-2500.

Schematics

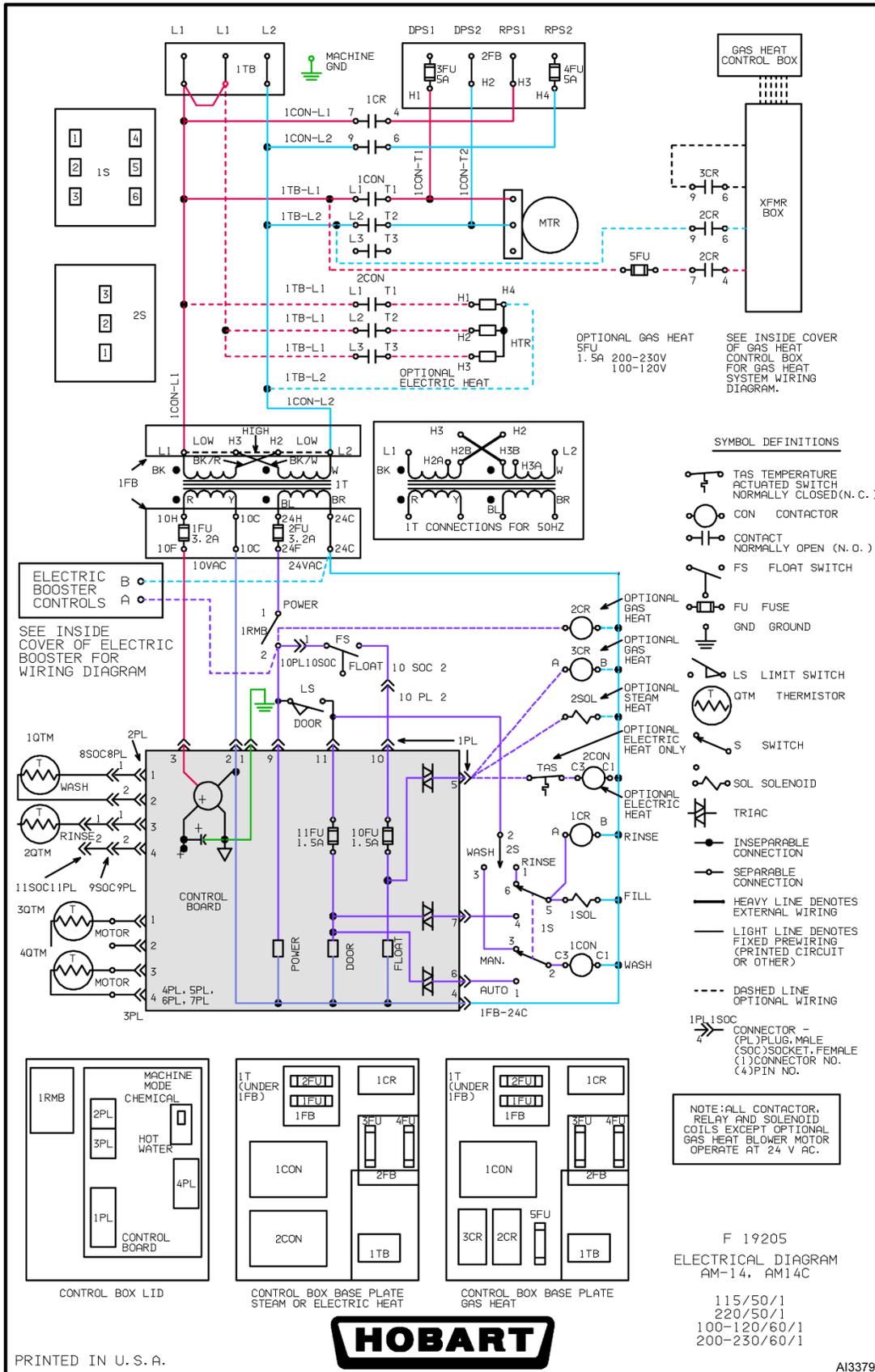
AM14 / AM14C Electric Heat (1PH)



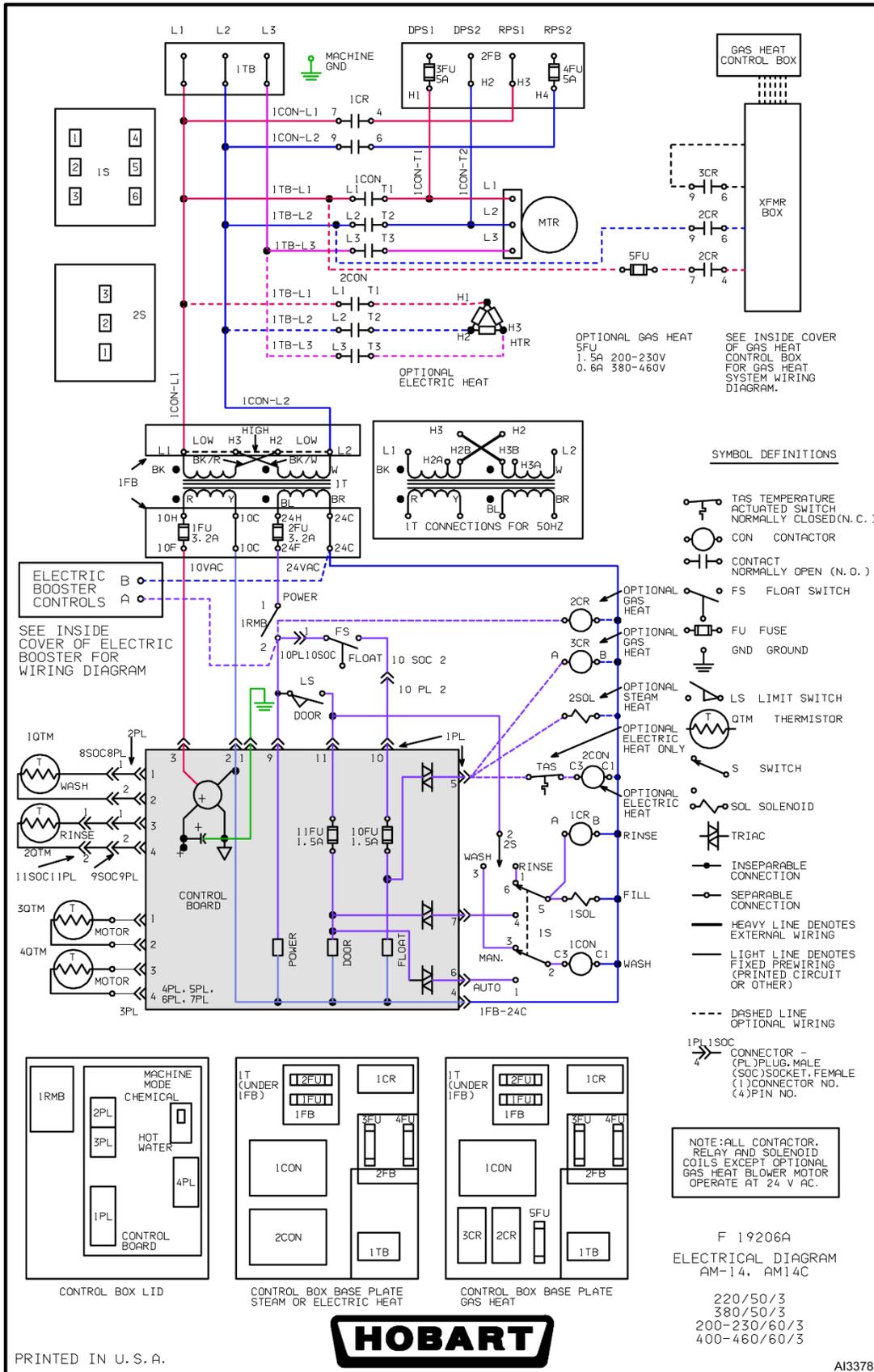
AM14 / AM14C Electric Heat (3PH)



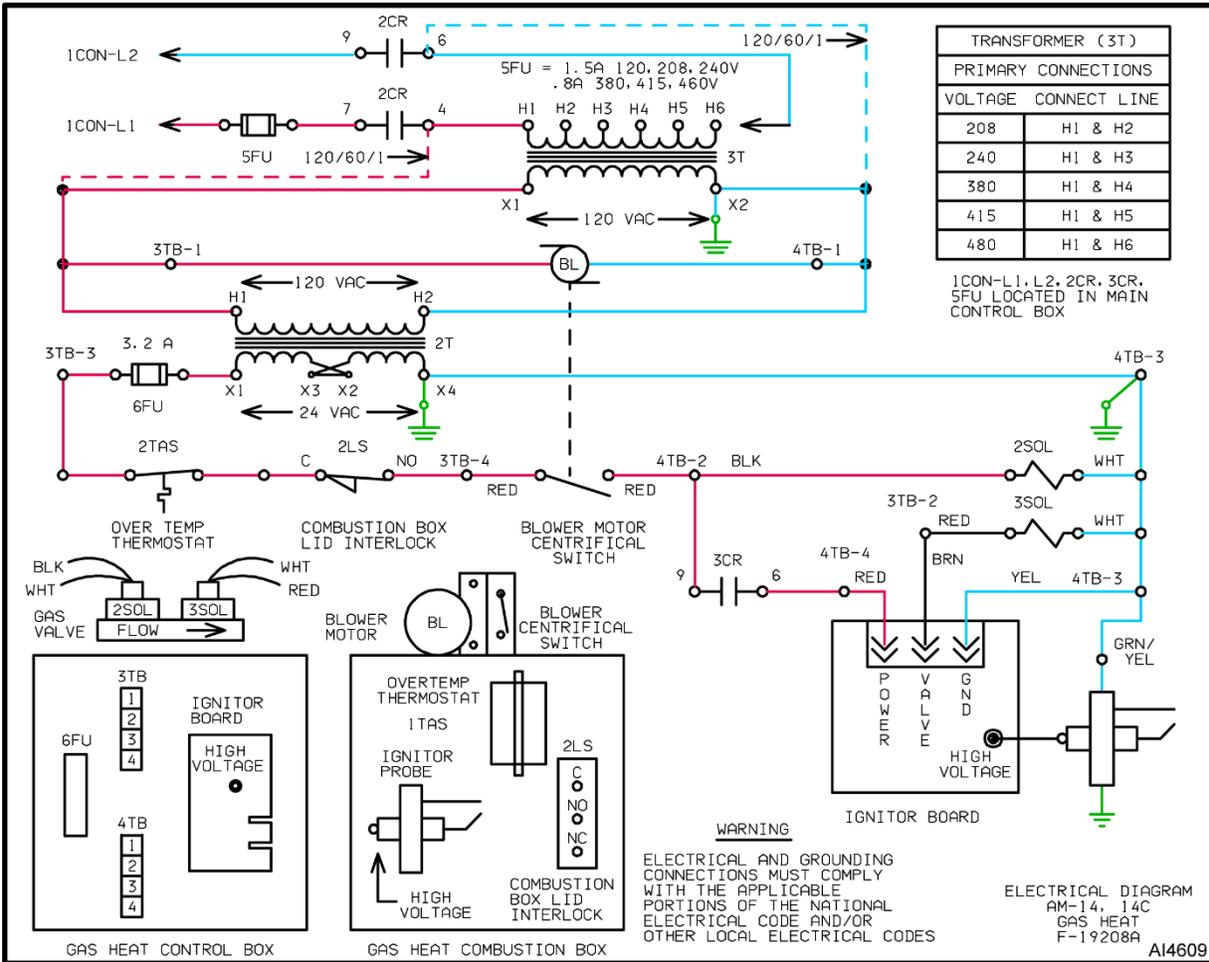
AM14 / AM14C Gas Heat (1PH)



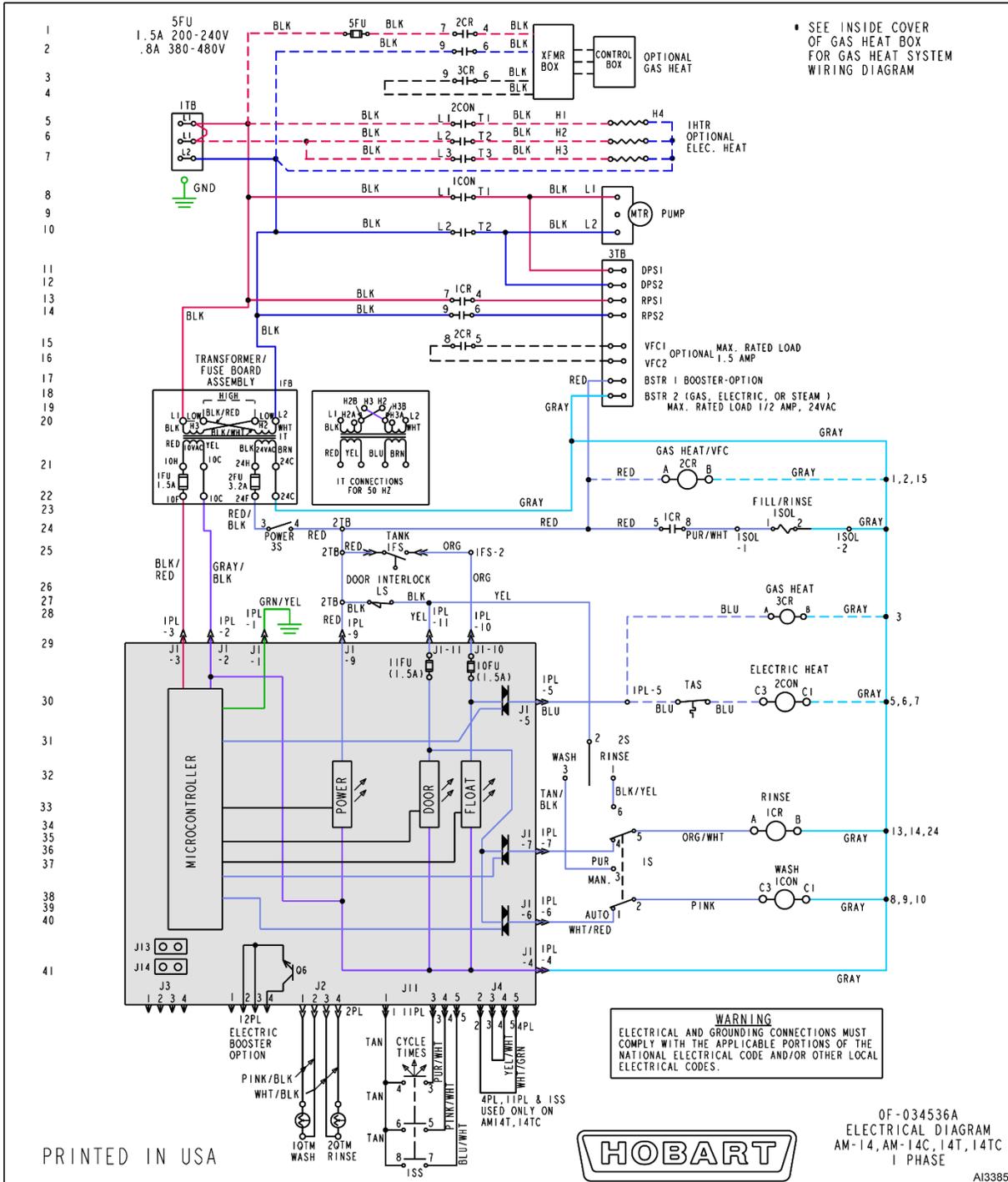
AM14 / AM14C Gas Heat (3PH)



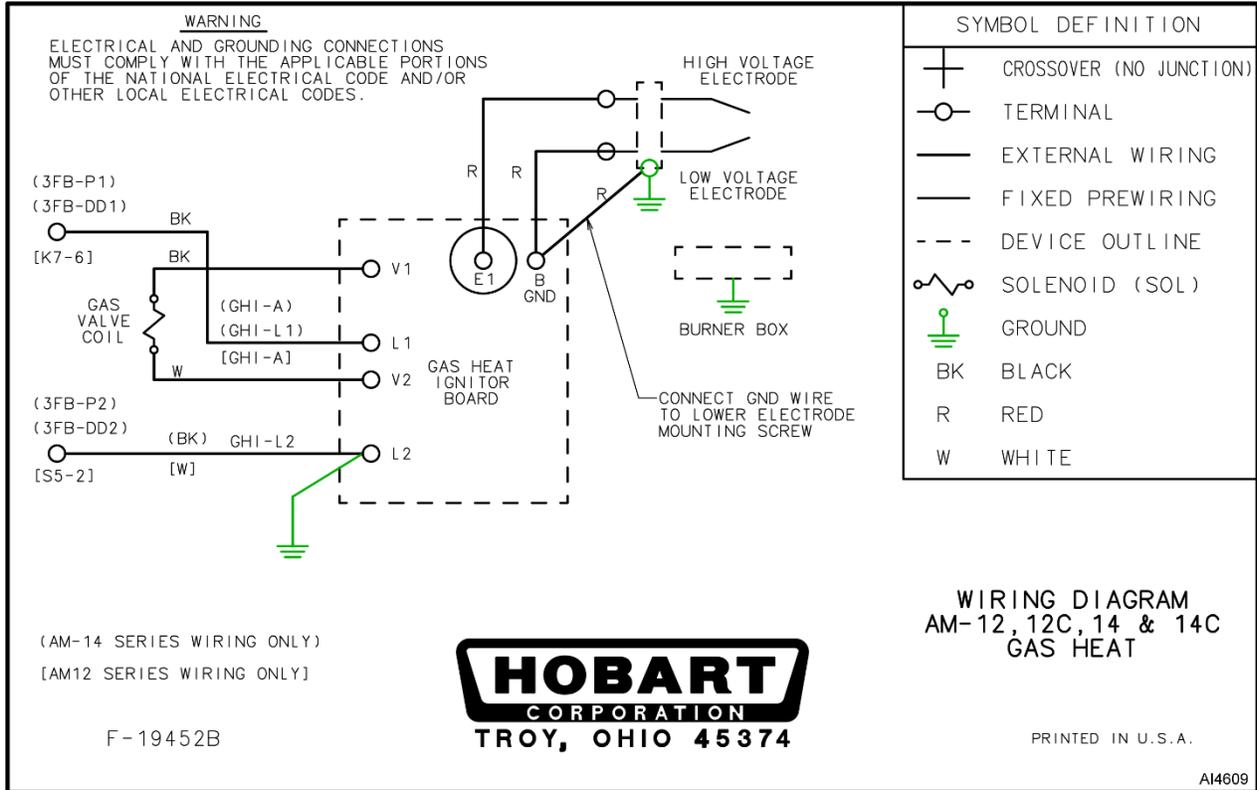
AM14 / AM14C Gas Heat (1PH)



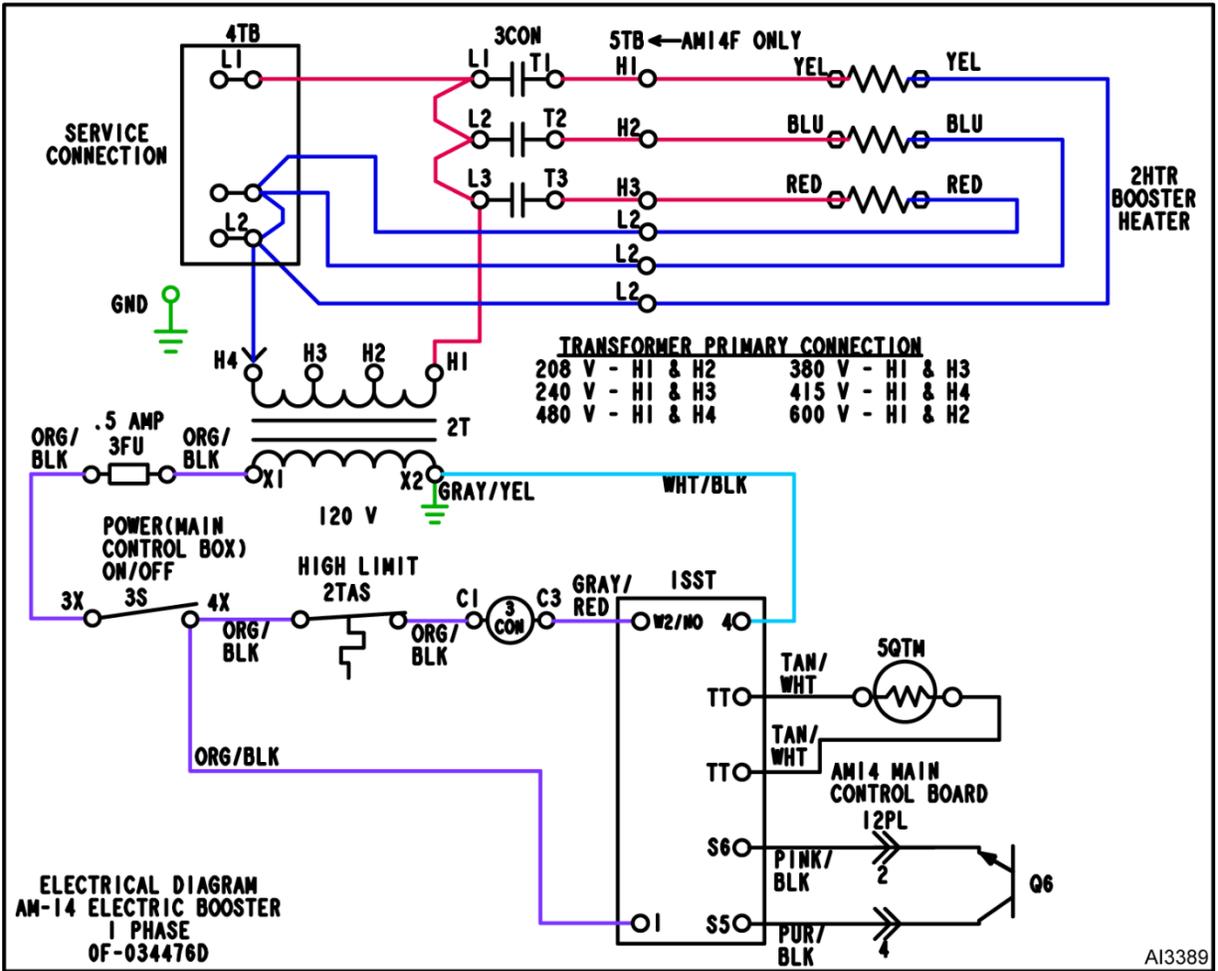
AM14 / AM14C / 14T/ 14TC Electric Heat (1PH)



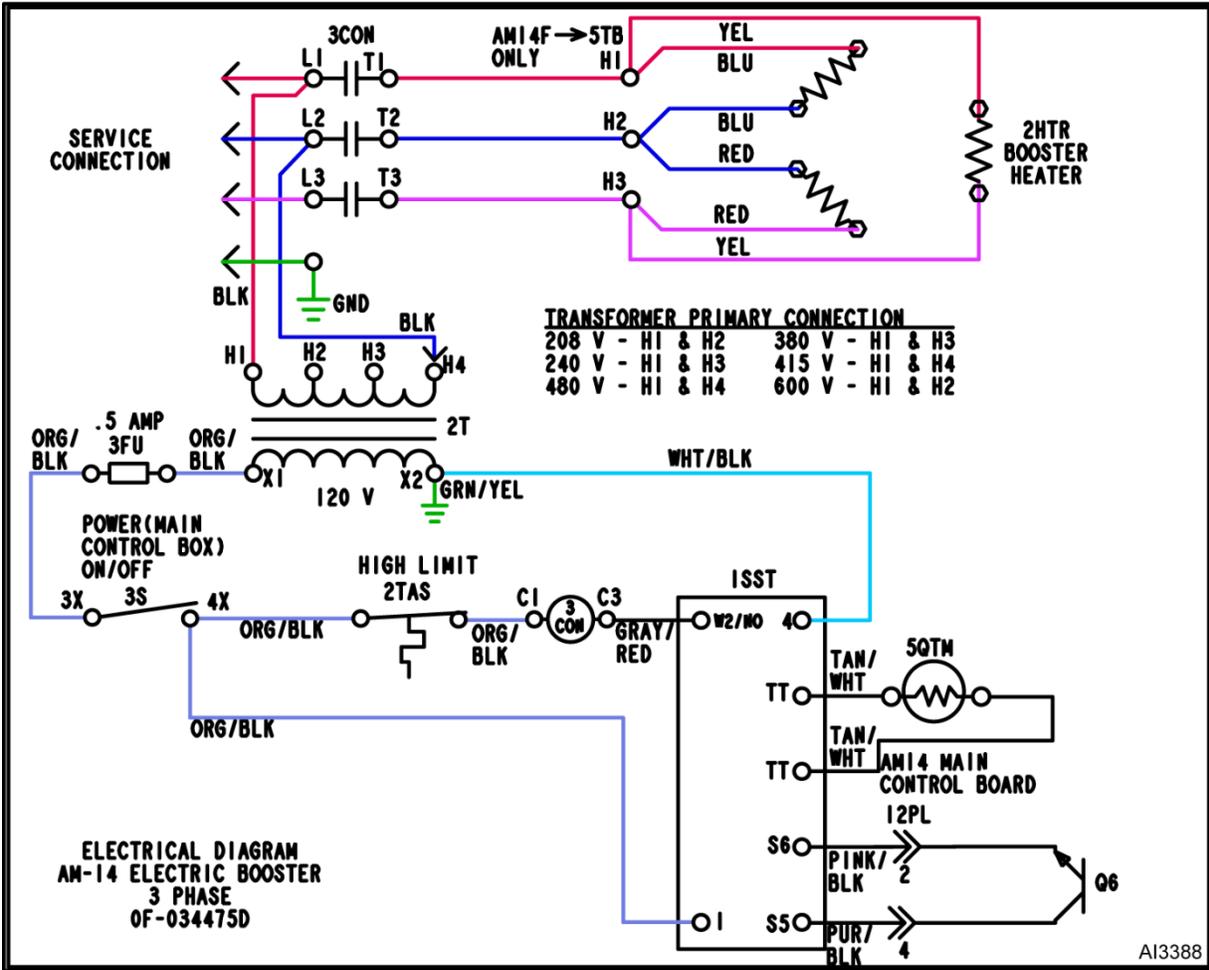
AM12 / 12C / 14 / 14C Gas Heat



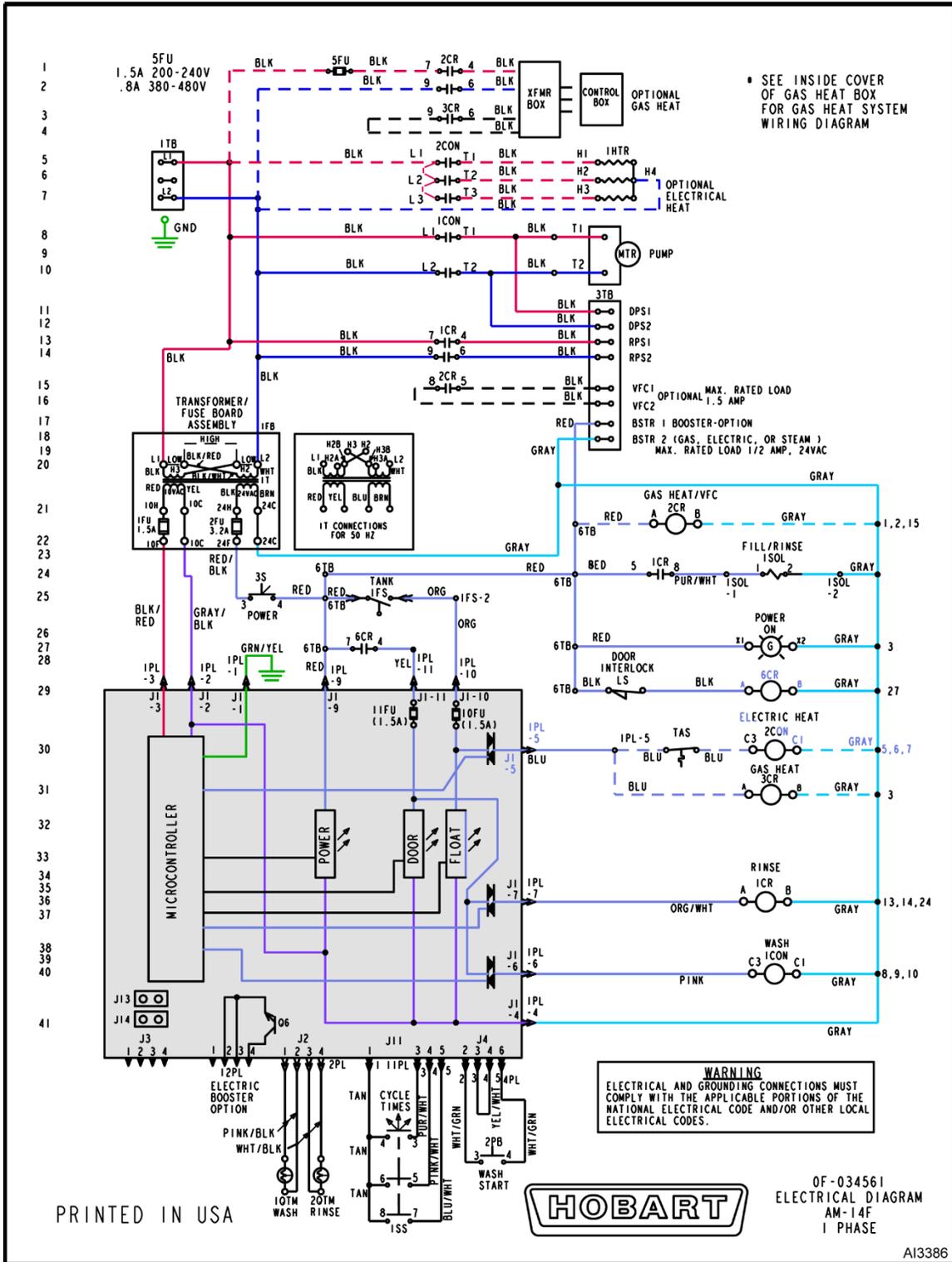
AM14 Electric Booster (1PH)



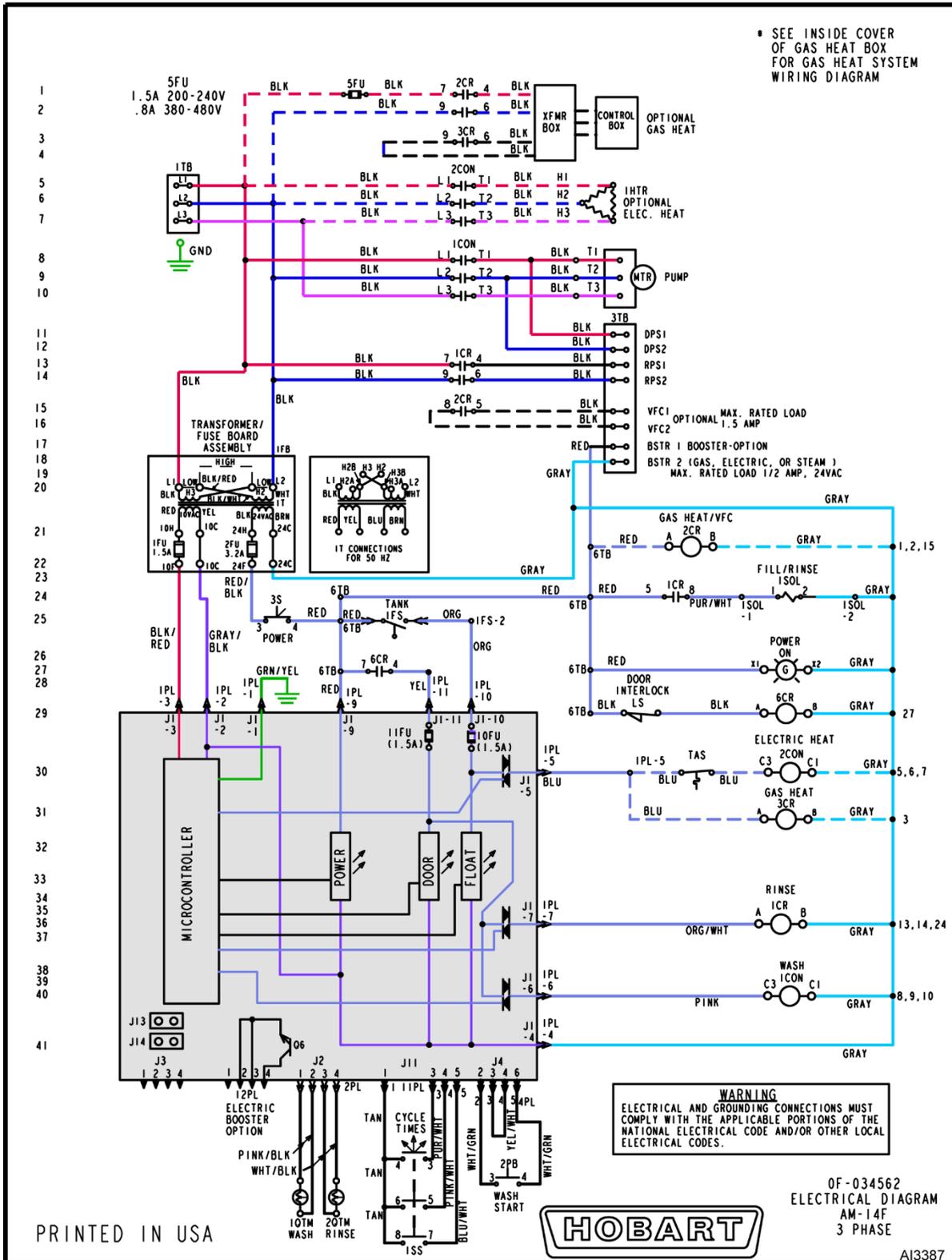
AM14 Electric Booster (3PH)



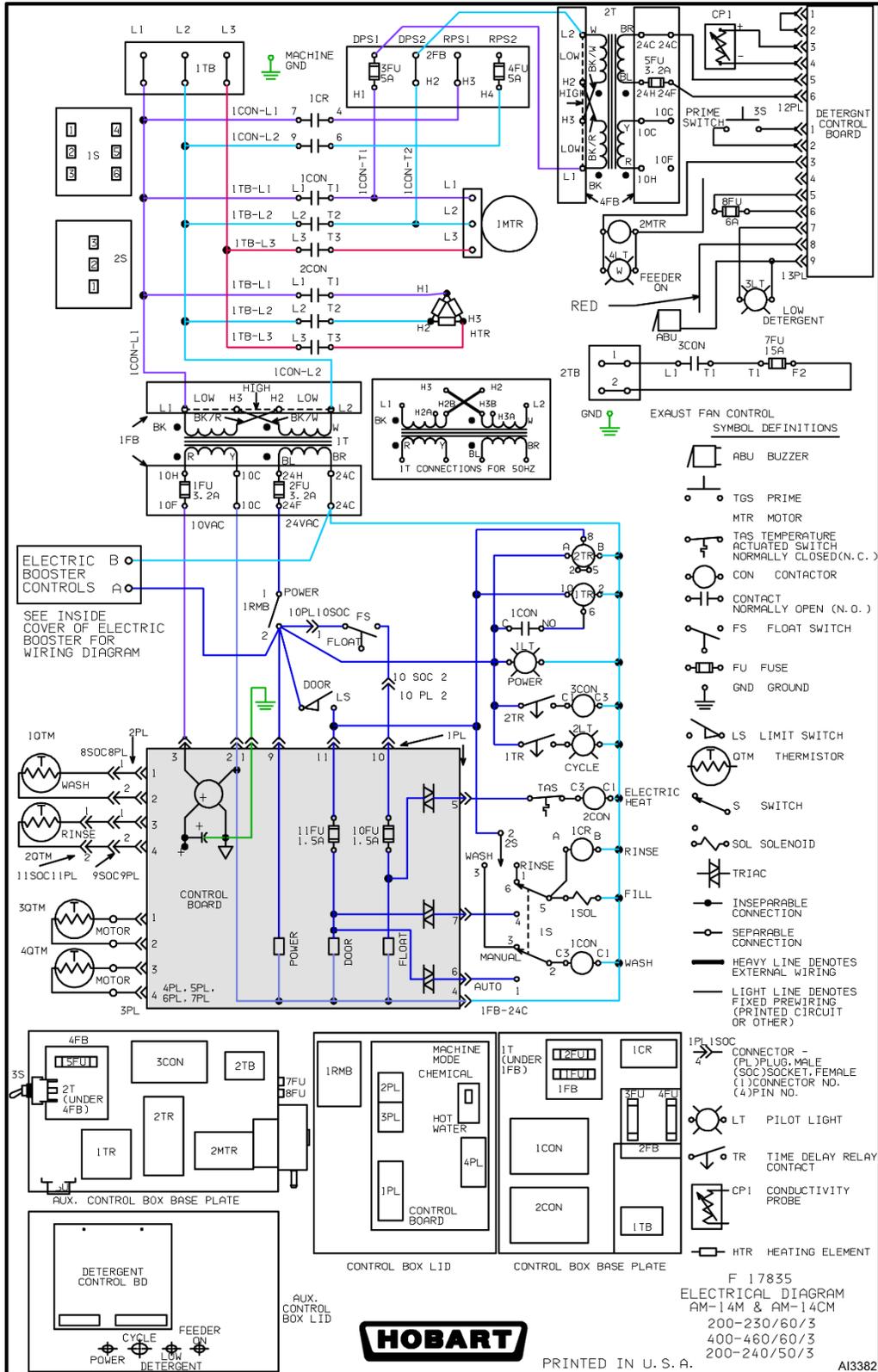
AM14F Electric Heat (1PH)



AM14F Electric Heat (3PH)



AM14M / AM14CM Electric Heat (3PH)



Troubleshooting (Gas)

Symptom	Possible Causes
No heat	<ol style="list-style-type: none">1. Control board malfunction.2. Float Switch inoperative.3. Temperature Probe inoperative.4. Fuses (5FU) or (6FU) blown.5. High Limit Thermostat (2TAS) tripped or open.6. Heat Box Interlock Switch (2LS) open.7. Igniter Board inoperative.8. Igniter Probe inoperative.9. High voltage lead inoperative or arcing to ground.10. Gas Solenoid inoperative (2SOL and/or 3SOL).11. Combustion Blower inoperative.12. Centrifugal Switch inoperative (open).13. Transformer (2T) or (3T) inoperative.14. Heat Relay (3CR) inoperative.15. Incorrect spark gap.16. Electrode ceramic housing cracked.17. Low gas pressure.

Troubleshooting (Booster)

Symptom	Possible Causes
Water reaches 180°F but does not hold temperature through entire dishwashing cycle.	<ol style="list-style-type: none"> 1. Incoming cold water too warm. 2. Cold water solenoid malfunctioning. 3. Cold water line strainer clogged. 4. Check blower motor circuit. 5. Check 5 CON. 6. Check blower motor.
Booster heater does not heat at all.	<ol style="list-style-type: none"> 1. No water in dishwasher tank or float circuit malfunction. 2. No power to booster. 3. Fuse blown in booster circuit or circuit breaker tripped. 4. Power switch (3S) malfunction. 5. Contactor malfunction (3CON). 6. Transformer malfunction 120VAC (2T). 7. High limit thermostat malfunction. 8. Thermistor or SST malfunction. 9. Heater element malfunction.
Temperature does not reach 180°F	<ol style="list-style-type: none"> 1. SST set incorrectly. 2. Heating element malfunction. 3. Incoming water temperature too low (minimum is 110°F). 4. Voltage to booster heating circuit not correct. 5. Incorrect heater being used. 6. Heating elements coated with lime.
Booster heater repeatedly blows fuse or trips circuit breakers.	<ol style="list-style-type: none"> 1. Undersized fuse. 2. Check wire and fuse size. 3. Short circuit in internal wiring. 4. Incorrect voltage or heater.
Heating element burns out repeatedly.	<ol style="list-style-type: none"> 1. Element powered with low or no water in booster. 2. Check for correct heater and voltage. 3. Contactor malfunction (3CON).
High Limit Thermostat trips.	<ol style="list-style-type: none"> 1. High limit thermostat switch malfunction. 2. SST set too high or malfunctioning. 3. Contactor malfunctioning (3CON). 4. No water in booster tank.

Troubleshooting

Symptom	Possible Causes
Warewasher will not operate with power switch ON. No tank heat, no wash no display.	<ol style="list-style-type: none"> 1. No power to warewasher. 2. Power switch malfunctioned. 3. Tripped breaker.
No wash. Rinse and tank heat normal.	<ol style="list-style-type: none"> 1. Pump motor malfunctioned. 2. Contactor (1CON) malfunctioned
Incorrect flow pressure (flow pressure should be between 20 and 25 psi).	<ol style="list-style-type: none"> 1. Line strainer clogged. 2. Regulator not adjusted properly. 3. Regulator malfunctioned
No rinse. Wash and tank heat normal.	<ol style="list-style-type: none"> 1. Door switch malfunctioned.
Warewasher will not operate - Main control box display lit.	<ol style="list-style-type: none"> 1. Cycle switch set to "Manual" and Wash/Rinse Switch "Off". 2. Very low or no water in tank. 3. Door open.
Utensils not clean.	<ol style="list-style-type: none"> 1. Improper racking and shielding of ware. 2. Poor prerinse. 3. Excessively dirty wash water. 4. Wash arm blocked and cannot rotate. 5. Wash arms clogged. 6. Wash arm pivots fouled or worn. 7. Insufficient wash pressure due to: <ol style="list-style-type: none"> A. Line strainer clogged. B. Low wash volume due to leaking drain. C. Obstruction in pump or impeller eroded or broken. 8. Incorrect wash temperature. 9. Low detergent concentration. (AM-14M/CM Only) This could be due to: <ol style="list-style-type: none"> A. Detergent supply empty. B. Detergent concentration misadjusted. C. Detergent not flowing in feed line.

Symptom	Possible Causes
White residue, spots or streaks on utensils.	<ol style="list-style-type: none"> 1. Detergent "CONC" set too high. (AM-14M/CM ONLY) 2. Improper racking and shielding of ware. 3. Rinse arm nozzles clogged. 4. Rinse arms not turning due to obstruction. 5. Incorrect rinse temperature. 6. Solenoid valve malfunctioned. 7. Line strainer clogged. 8. Low water pressure. 9. Pressure regulator malfunctioned. 10. Poor quality water. 11. Excessive hardness. 12. Malfunction in water softener.
Lime buildup in warewasher.	<ol style="list-style-type: none"> 1. Detergent supply empty. 2. Detergent not flowing in feed lines. 3. Detergent pump or circuit board malfunctioned. 4. Detergent probe malfunctioned.
Detergent pump leaking. (AM-14M/CM ONLY)	<ol style="list-style-type: none"> 1. Tube connections loose. 2. Detergent pump tubing cracked.
More than usual detergent consumption. (AM-14M/CM ONLY)	<ol style="list-style-type: none"> 1. Prime switch malfunctioned. 2. Prime switch "ON". 3. Poor racking and washing only partial loads. 4. Detergent probe covered with scale. 5. Incorrect wash temperature. 6. Solenoid valve stuck open. 7. Water pressure set too high. 8. Drain leaking. 9. Detergent "CONC" incorrect. 10. Detergent feed lines leaking.
Excessive foaming.	<ol style="list-style-type: none"> 1. Excessive amounts of food soil - especially eggs, milk and shakes. 2. Detergent Concentrate solution getting into wash tank. 3. Wrong detergent used.

Symptom	Possible Causes
<p>Incorrect wash temperature. (Correct wash temperature should be between 150 degrees F and 160 degrees F.)</p>	<ol style="list-style-type: none"> 1. Low incoming water temperature (minimum is 120 degrees F). 2. Primary water pressure too high (must be 20-25 psi with dishwasher rinse valve open). 3. Voltage does not conform to electrical specifications of booster. 4. Heating elements coated with lime.
<p>Booster heater repeatedly blows fuses or trips circuit breakers. NOTE: Fuses or circuit breakers should not be loaded to more than 80% of their rating.</p>	<ol style="list-style-type: none"> 1. Fuse undersized. 2. Short circuit in internal wiring.
<p>Elements burn out repeatedly.</p>	<ol style="list-style-type: none"> 1. Heaters operating "dry" from time to time. 2. Heater turned on after tank is drained for repairs. 3. Overheating due to malfunctioned or improperly adjusted thermostat.
<p>When dishwasher and booster have been idle for several hours, and then operated, relief valve opens or high temperature limit switch trips.</p>	<ol style="list-style-type: none"> 1. Excessive primary water temperature.
<p>Heater functions properly but relief valve leaks.</p>	<ol style="list-style-type: none"> 1. Incorrect pressure reducing valve. 2. There is a check valve installed in the incoming line. 3. High momentary pressure at times.
<p>Heater operates properly but pressure relief valve opens.</p>	<ol style="list-style-type: none"> 1. Pressure set too close to booster operating conditions. 2. Primary water pressure too high, must be 20-25 psi with dishwasher rinse valve open. 3. Primary water temperature above 160 degree, F. 4. Incorrect pressure reducing valve installed, must be 20-25 psi. 5. There is a check valve installed in the incoming line.
<p>High temperature limit switch trips.</p>	<ol style="list-style-type: none"> 1. Bad switch. 2. Primary water temperature too high. 3. Control thermostat set too high or malfunctioned.

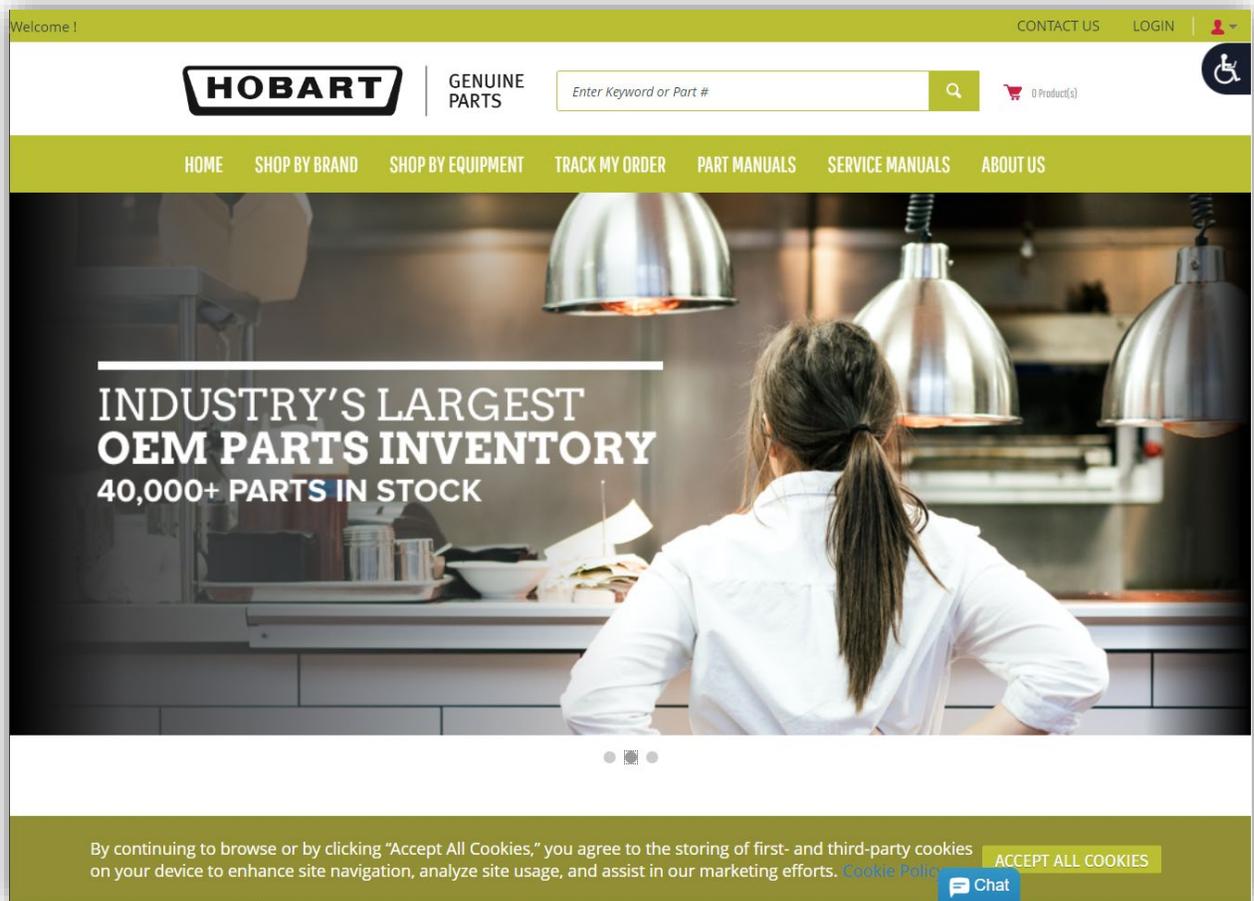
Symptom	Possible Causes
Chattering contactor.	<ol style="list-style-type: none"> 1. Low voltage. 2. Warpage of the frame or distorted coil. 3. Accumulation of dirt under armature.
Warewasher will not fill or fills slowly.	<ol style="list-style-type: none"> 1. Water supply Line turned off. 2. Line strainer clogged. 3. Pressure regulator clogged. 4. Water pressure regulator set too low. 5. Rinse arm nozzles clogged. 6. Solenoid valve malfunctioned. 7. Drain open. 8. Pressure regulator malfunctioned. 9. Clean probe.
Rinse will not shut off.	<ol style="list-style-type: none"> 1. Solenoid valve malfunctioned. 2. Float and probe assembly malfunctioned.
Warewasher drains slowly or overflows.	<ol style="list-style-type: none"> 1. Drain plugged
Yellow or brown coating on inside of warewasher or utensils.	<ol style="list-style-type: none"> 1. Excessive iron in water.
Odor in warewasher.	<ol style="list-style-type: none"> 1. Improper cleaning procedure.
Detergent alert not operating. (AM-14M/CM ONLY)	<ol style="list-style-type: none"> 1. Detergent probe malfunctioned. 2. "CONC" adjustment incorrect.
No tank heat.	<ol style="list-style-type: none"> 1. Gas Units <ol style="list-style-type: none"> A. Contactor (2con) malfunctioned. B. Cleanprobe. C. Incorrect spark gap. Spark gap should be .125". D. High voltage lead shorted to ground. (.250" minimum distance between electrode and ground.) E. Electrode ceramic housing cracked. F. Gas valve malfunctioned. G. Low gas pressure. H. Gas heat transformer (2T). 2. Electric units <ol style="list-style-type: none"> A. Contactor (2con) malfunctioned. B. Clean float and switch assembly. C. Temperature actuated switch (TAS). 3. Steam Units <ol style="list-style-type: none"> A. Steam valve (2 SOL) malfunctioned. B. Control board malfunctioned. C. Float and switch assembly malfunctioned.

Symptom	Possible Causes
Wash Displays 00 degrees F Wash Displays 225 degrees F	Open Thermistor 1QTM Shorted Thermistor 1QTM
Rinse Displays 00 degrees F Rinse Displays 225 degrees F	Open Thermistor 2QTM Shorted Thermistor 2QTM

Hobart Online Parts Store

Order parts by clicking on image below to reach our Hobart Service Parts Store.

<http://www.hobartparts.com>



Parts Catalogs

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[AM 14 Series Dishwashers Catalog of Replacement Parts](#)

