

BOILER PRE-STARTUP CHECKLIST



The installer should complete this checklist before calling Midwest Machinery to schedule start-up of the boiler or water heater. Please check each item carefully for completion. Contact Midwest Machinery if you have questions on any item. The project manager or supervisor on site should sign and date this agreement and email to info@midwestmachinery.net or fax it to (636) 537-1920.

The unit is applied on one of the heating applications listed below (Check applicable):

- Hydronic Heat Application
- Domestic Water Application
- Radiant Heat Application
- Heat Pump Application
- Other

Please check each box as they are complete:

- Water connections to the boiler are not be reduced and full pipe size maintained to system.
- Union and isolation valves are install in the piping connections to the unit.
- Isolate boiler when system flush is conducted so boilers are not fouled.
- All waterways filled, pressurized, completely purged of air, and water treatment chemicals added to system. Some models require 30 PSI minimum water pressure.
- System expansion tank is charged with air and pressurized to system static water pressure, connected to point of lowest pressure in the system before the system supply pumps.
- Pressure relief valve installed before any service valve with full pipe size. Relief discharge piped to drain. Check pressure relief setting against static system pressure.
- All pumps and associated controls properly installed and wired.
- System will not violate "cold start" requirement. Inlet temperatures kept above minimum required in manufacturer's literature.
- Sufficient load available to achieve high fire testing of boiler. Need minimum 15 minutes high fire run time.
- Installed clearances as specified in the manufacturer's installation manual and all code requirements. This includes clearance for the top of the boiler.
- Clear floor drain near unit. Floor pitched down from unit to floor drain.
- Unit is installed on a housekeeping pad equal to or larger than the footprint of the unit, made from non-combustible material.
- Power connected to the boiler with adequate wire gauge and circuit breaker capacity for the equipment's total load.

Please check each box as they are complete:

- Verify all voltages are correct and properly grounded. Some units require 115 & 230 volt power. All voltages must be checked before powering up the unit. (Observe all line to neutral and line to line references when checking voltages.)
- Lights installed and operating in equipment area.
- Circuit breakers energized or easily accessible for power up at start-up. Note: Pumps that require 230 volts cannot operate on 208 volts. Verify with electrician or installer that 208 volts has not been applied to any product with a 230 volt nameplate.
- Properly sized lock-up type gas pressure reducing valve (one for each boiler/water heater) installed per gas regulator manufacturer's requirement. Must have stable gas pressure regulation for boiler to operate correctly.
- Gas valve bleed and vent lines run from equipment jacket to outside of equipment room as required by codes or manufacturers' requirements.
- Air purged from the gas line to the boiler's closest shut off valve. Must have pressure test ports on both entering and leaving sides of the regulator. **Please provide inlet gas pressure to regulator here:** _____
- Operating control located and wired as specified in operating manual.
 - Contact Midwest Machinery for help with systems that utilize external operating controls (on site building automation system or energy management system) other than those supplied by boiler manufacturer.
 - If a BAS or EMS system will control the start-stop function and firing rate signal, these must be wired to the boiler before the time of start-up. Those functions should be operable and tested by the control contractor.
- Exhaust venting and air intake installed including any required condensate drains and drain loops.
NOTE: The size and type of the venting material must meet manufacturers & code requirements for the specific venting category of the unit installed. Check the manual or consult with the factory for suggested vent terminations.
- External condensate neutralizer kits to be mounted to floor NOT housekeeping pad. Must have proper fall to provide adequate draining of condensate.
- Permanent test ports installed in venting for flue gas analysis.
- Combustion air and ventilation openings meet specified and applicable code requirements for an indoor installation.
NOTE: Most manufacturer manuals contains sizing charts and tables. The National Fuel Gas Code also contains information about combustion and venting.

Manual & wiring diagrams supplied with heater are available at job site. Note: If you cannot locate the original manual, please call Midwest Machinery Company.

Job site location information:

Project name	
Job site name	
Job site address	
Job site contact name	
Job site contact phone number	
Job site contact title	

On-site equipment information:

Boiler/Water Heater Model Number(s)

Quantity of units to start

Serial Number 1

Serial Number 2

Serial Number 3

Serial Number 4

Serial Number 5

Serial Number 6

Comments or notes regarding access
or start times

Installing contractor is responsible for all safety related access including a safe, clear, well-lit Service area and any required tie off or restraint equipment. Midwest Machinery reserves the right to refuse service in any area not deemed safe by our personnel.

Please verify that the equipment and the site are ready prior to the time that Midwest Machinery's technician arrives to do the start-up. It may be necessary to schedule one or more return visits. Midwest Machinery charges \$90.00 per hour, plus all expenses and travel time for any return visits that may result from lack of preparation of the boiler or job site. Such charges are invoiced if a return trip is necessary.

Please sign, date and complete this form then fax it to Midwest Machinery at (636) 537-1920 or email it to your representative.

By signing this agreement below, the signing party agrees to pay for services by Midwest Machinery as incurred; should second or further visits be required.

Project Manager, contractor or
Supervisor's name

**Signature of person authorized to
agree to the terms and conditions of
this agreement**

Date of signing