

Safgard™

MODEL 1200

**Low Water Cut-Off
For Residential
Hot Water Boilers**

24 VAC Operating Voltage

Installation Instructions and Operating Manual

- Advanced solid state design
- Test button for easy diagnostics
- Power, low water and service-needed indicators
- Molex connector for easy wiring
- Compact size allows for mounting in tight spaces
- Designed for operation with Honeywell boiler control module



Operating and Test Procedure for Initial Installation

1. Before filling the boiler with water, turn on power to the boiler and set the thermostat to call for heat. Both the green "POWER" LED and amber "LOW WATER" LED should illuminate. The burner should not fire. **IMPORTANT:** If the burner fires with no water at the probe, immediately shut down power to the boiler and contact the factory for assistance.
2. Proceed to fill the boiler with water. When water reaches the sensor for the Model 1200, the LOW WATER light will turn off and the burner will fire.
3. Turn off the power to the boiler and finish filling the system.
4. Before leaving the job, power up the system and push the TEST button on the Model 1200 to simulate a low water condition. The amber "LOW WATER" LED will illuminate and the burner will shut down.

WARNING A low water condition is a serious and potentially dangerous condition. In the event the MODEL 1200 detects a low water condition, the system must be inspected by a qualified service technician before the boiler is returned to service. **Do not attempt to add water to a hot boiler. Allow the boiler to fully cool before adding water.**

WARNING **Frozen pipes/water damage.** Central heating systems are prone to shut down as a result of power or fuel outages, safety related fault conditions or equipment failure. Installation of freeze protection monitoring or other precautions is recommended for unattended dwellings in climates subject to sustain below-freezing temperatures.

**HYDROLEVEL
COMPANY**

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Control Removal/Replacement

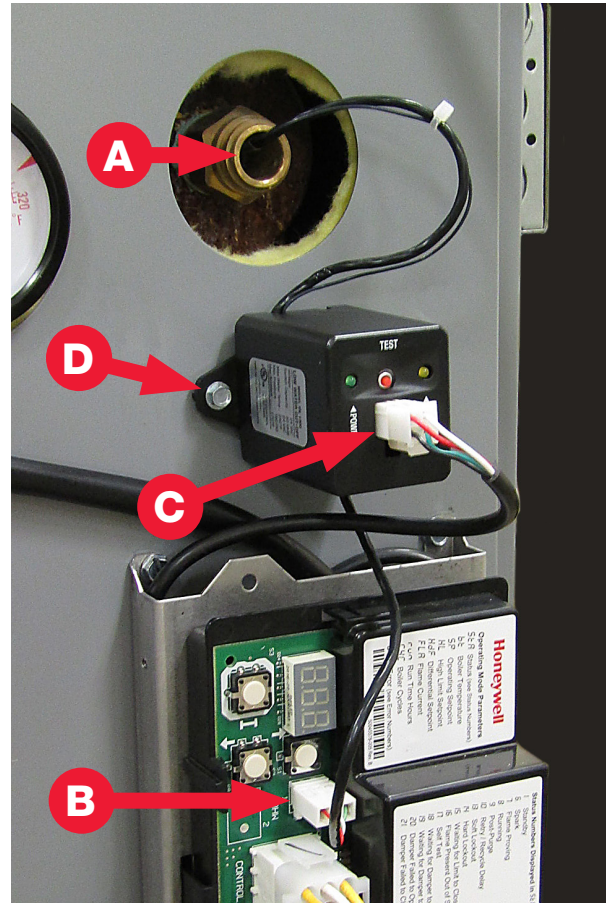
WARNING **Electrical shock hazard.** To prevent electrical shock, death or equipment damage, disconnect power supply before installing or servicing control. Only qualified personnel may install or service this control in accordance with local codes and ordinances. Read instructions completely before proceeding.

Removing the Control

1. Remove the sensor from the boiler well **A**
2. Unplug the sensor from the ignition control board **B**
3. Unplug the cable harness from the top of the Model 1200 low water cut-off **C**
4. Remove the screws that secure the control to the boiler jacket **D**
5. Remove the control

Replacing the Control

1. Install replacement control on the boiler jacket and secure with mounting screws **D**
 2. Plug the cable harness into the top of the control **C**
 3. Plug the sensor into the ignition control board **B**
 4. Insert the sensor into the boiler well **A**
- Note: Be sure the sensor is inserted all the way into the well so that it can accurately sense the boiler water temperature.*



Service and Maintenance

Check control operation annually by pressing the TEST button. The amber "LOW WATER" LED will illuminate and the burner will shut down.

If the AMBER light is on and the boiler is filled with water: The amber "LOW WATER" light indicates the control is not sensing water in the boiler. If you are certain that the boiler is filled with water, remove the sensor from the well. Make sure that the metal clip is protruding enough to come in contact with the inside of the well tube. Check that the well does not have any heat transfer grease or other contaminants that may interfere with the metal sensor head contacting the well. If this does not resolve the problem, remove the well and examine for excessive residue build-up. Clean as needed and re-install.

If the AMBER light is blinking: If the LOW WATER light is blinking, the Model 1200 is nearing the limit of its water detection range. This can occur as a result of a poor connection between the metal sensor head and the inside of the copper well or as a result of excessive residue build-up on the exterior of the well. To address this situation, follow the steps above under 'If the Amber Light is On.'

Specifications

Voltage.....	24 VAC
Power Consumption.....	1 VA
Switching Capacity	50 VA
Max Load	5 Amps
Max Pressure.....	160 PSI (11.25 kg/cm ²)
Max Water Temperature	250°F (121°C)
Max Ambient Temperature	170°F (77°C)

