

Commercial heating boiler quarterly maintenance checklist

A quarterly heating boiler round is short on purpose: it catches the wear items that fail between annual services. This checklist is sized for a tech with a phone. Every item says what to look at and the photo that proves the round happened. Work is commonly verified against ASME guidance, manufacturer maintenance schedule. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The boiler service tech on the contracted quarterly visit. When: Every quarter, weighted toward the heating season since that's when the boiler is under sustained load.

Operating conditions

- ☐ **Operating pressure and temperature readings recorded**
Gauge readings match setpoint and are logged against the prior visit for trending. 1 photo required
- ☐ **Boiler and piping inspected for leaks**
No weeping at gaskets, valves or tube connections; no mineral staining indicating a slow leak. 2 photos required
- ☐ **Combustion analyzed with a calibrated analyzer**
O₂, CO and stack temperature readings within the manufacturer's target range, not just flame color by eye. 1 photo required

Safeties

- ☐ **Low-water cutoff tested by manual trip**
Burner shuts down when water level drops below the cutoff point, and alarm (if fitted) activates. 1 photo required
- ☐ **Relief valve and gauge glass checked**
Relief valve seat free of buildup, no weeping; combination pressure and temperature gauge reading plausible against the system fill and operating pressure. 1 photo required
- ☐ **Flame signal and lockout history read at the controller**
Flame signal within the manufacturer's range and recent lockouts noted, with any repeating fault code flagged for the annual service. 1 photo required
- ☐ **Relief valve discharge piping checked**
Discharge line full size, supported, unobstructed and piped to a safe point near the floor, never capped, plugged or reduced. 1 photo required

Condensate system

- ☐ **Condensate trap and drain lines checked**
Trap primed, no blockage, condensate flowing freely to the neutralizer or drain. No photo required
- ☐ **Neutralizer media level and condition checked**
Media not fully dissolved or channeled; condensate pH after the neutralizer within acceptable range. No photo required

Fuel and venting

- ☐ **Fuel train inspected and joints leak checked**
Gas joints checked with leak solution or a detector, or oil lines and filter checked dry, and the manual fuel shutoff operates freely. 1 photo required

- ☐ **Combustion air openings and intake checked clear**
Louvers, intake terminal and room openings free of blockage and stored material, so the burner gets the air it was set up with. 1 photo required
- ☐ **Vent connector joints, supports and terminal inspected**
Joints sealed and supported, no corrosion, condensate staining or separation, and the terminal clear of nests, ice and debris. 1 photo required
- ☐ **Lock and tag hung first wherever a fuel or vent joint was opened**
Where a fuel fitting or vent section had to be opened on this round, power and fuel were locked and tagged under the site's procedure before it was touched. No photo required

Return to service

- ☐ **Boiler back in automatic and firing on a call for heat**
Covers and jackets back on, any locks removed by whoever hung them, controls in automatic and the burner lighting on a heat call. 1 photo required
- ☐ **Quarterly readings logged and deficiencies reported to the owner**
Pressures, temperatures and combustion readings entered in the boiler log, and anything out of range written up for the owner. No photo required