

Hot water recirculation pump annual maintenance checklist

The annual recirculation pump service is the deep pass: the measurements, cleanings and tests a quarterly round doesn't reach. This checklist keeps the full service on record with the photos that make it defensible later. Work is commonly verified against IPC / UPC plumbing codes, manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The plumbing service tech on the annual, able to isolate the pump at the flanges to service the check valve and read the loop cold and hot. When: Once a year, the pass that isolates the pump to actually inspect the check valve and cartridge and to walk the return legs, rather than assuming the loop is balanced because one gauge near the heater looks right.

Pump and check valve

- ☐ **Pump isolated and check valve inspected**
Isolation flange valves closed, check valve opened and its disc, spring and seat inspected or replaced, cartridge or impeller checked on cartridge circulators, pump reassembled and bled of air. 2 photos required
- ☐ **Motor current and bearings checked**
Amp draw read against the nameplate, bearings running quiet and cool, no overheating at the motor that points at a dead-headed or airbound pump. 1 photo required

Controls

- ☐ **Aquastat calibration and timer schedule verified**
Aquastat setpoint and differential checked against a measured line temperature and adjusted, timer schedule confirmed for occupied hours, pump proven to cycle on and off at the intended temperatures. 1 photo required

Loop balance and delivered temperature

- ☐ **Isolation valves operable and return legs proven hot**
Isolation and any balancing valves operable and set, return temperature checked at the ends of the risers or legs, each leg confirmed carrying hot water so no branch is running cold or airbound. 2 photos required