READY TO INSPECT — FIELD CHECKLIST

Tankless water heater annual maintenance checklist

The annual tankless water heater 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 service visit. When: Once a year, and sooner where the water is hard, since scale in the exchanger is what steals temperature and eventually cracks the unit.

Isolation and lockout

- [ ] Occupants told hot water is off and test draws will run hot
  People served by the heater told before isolation that hot water is off for the service and that the checks afterward can run hot at the fixtures.
  No photo required

- [ ] Unit locked out and tagged before the pump kit goes on
  Every circuit and, on gas units, the gas valve locked and tagged by each worker. For run checks: refilled, air purged, locks off by whoever hung them, run, then re-locked before hands go back in.
  1 photo required

- [ ] Service valve kit and purge ports checked where fitted
  Where a service valve kit is fitted, cold and hot isolation valves close and hold, purge port caps come off cleanly, and a valve that passes water is reported before the hoses go on.
  No photo required

Descale and flush

- [ ] Descaling agent label checked against the manufacturer
  Product label matches the manual's allowed descaler type and dilution, and spent solution is disposed of as its label and the site's rules require.
  1 photo required

- [ ] Heat exchanger descaled and flushed
  Isolation valves used to circulate descaling solution through the exchanger, then flushed clean, scale volume in the return noted to set the next interval.
  2 photos required

- [ ] Inlet screen and flow verified after flush
  Inlet screen cleaned again after descaling, flow rate and delivered temperature re-checked to confirm the descale actually restored output.
  1 photo required

Burner service

- [ ] Burner, flame sensor and igniter cleaned and serviced
  Burner assembly and flame rod cleaned per manufacturer schedule, igniter checked, flame pattern and ignition re-verified after service.
  No photo required

- [ ] Combustion and venting proven after service
  Combustion confirmed within the manufacturer's range after cleaning, vent and condensate path re-checked end to end, no fault codes on restart.
  No photo required

- [ ] Neutralizer cartridge checked on condensing gas units
  Where fitted, remaining media judged against the neutralizer maker's guidance and a pH strip read at its outlet; spent media renewed and the date marked on the housing.
  No photo required

Heat input and relief

- [ ] Supply and element terminals torque-verified on electric units
  On electric units, locked out, supply and element terminals checked for heat marks and torque-verified to the manufacturer's value, re-torqued only where found loose.
  No photo required

- [ ] Heat input checked: gas pressures or element resistance
  Gas units: inlet and manifold pressure read at the test ports at full fire against the rating plate. Electric units: each element's resistance read locked out against the manual.
  1 photo required

- [ ] Relief valve set pressure matched to the unit's rating
  Set pressure stamped on the valve compared with the rating plate's maximum working pressure; discharge line unreduced, uncapped and ending where hot water cannot hit anyone.
  1 photo required

Return to service

- [ ] Unit back in service at its recorded setpoint
  Locks removed by whoever hung them, valves open and purge port caps back on, and the display showing the recorded setpoint with no active fault after a hot draw.
  1 photo required

- [ ] Service record updated and deficiencies sent to the owner
  Post-service flow and rise, heat input readings and any deficiency entered against the unit tag, and repairs needing approval written up for the owner.
  No photo required