READY TO INSPECT — FIELD CHECKLIST

# Domestic water booster pump quarterly maintenance checklist

A quarterly booster pump set 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 IPC / UPC plumbing codes, manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The plumbing or building maintenance tech on the quarterly mechanical round. When: Every quarter, so a drifting setpoint or a lag pump that never comes on is caught before upper floors start losing pressure at peak draw.

## Pressure and setpoint

- [ ] Suction and discharge pressures read against setpoint
  Suction and discharge gauges compared to the target setpoint, transducer reading tracking the gauge, and a top-floor fixture opened to confirm real delivered pressure.
  2 photos required
- [ ] Set holds pressure through a draw without hunting
  Pressure stays inside the control band as a fixture is opened and closed, no rapid hunting or wide swing that points at a tank or transducer problem.
  1 photo required
- [ ] Controller setpoint compared with the design discharge pressure
  Setpoint on the controller display matches the design or commissioning discharge pressure, and any change since the last round traces to a work order.
  1 photo required
- [ ] Downstream PRV zones checked against the booster setpoint
  Where zones are fed through pressure-reducing valves, zone gauges hold their design pressure with the set at full boost and no PRV is set above the booster.
  No photo required

## Sequencing

- [ ] Lead-lag hand-off observed
  Demand raised enough to stage the lag pump in and back out, confirming the controller sequences rather than leaning on one pump.
  2 photos required
- [ ] VFD ramping smoothly where fitted
  Speed ramps up and down with demand instead of snapping between stops, no fault or alarm standing on the drive display.
  No photo required
- [ ] Drive output frequency at current demand logged where fitted
  On a drive-fed set, output frequency read off each drive at the round's demand and logged against past rounds; drive service itself is on the VFD checklist.
  No photo required

## Leaks and tank

- [ ] Seals, fittings and manifold checked for leaks
  No weeping at the mechanical seals, unions or the manifold, no puddle or rust trail under the skid.
  2 photos required
- [ ] Bladder tank pre-charge sound
  Tank not waterlogged, no water at the air valve, set not short-cycling on small draws the way it would with a dead tank.
  No photo required
- [ ] Tank isolation valve open and air valve capped
  Tank isolation valve found fully open so the tank sees system pressure, air valve cap on, supports and connection tight. Sets with no tank noted as such.
  No photo required

- [ ] Discharge holds as a pump stages off or the set rests
  When a pump stops on low demand or stages off, the discharge gauge holds steady instead of bleeding back, which would point at a passing check valve on that pump.
  1 photo required

## Suction protection and readiness

- [ ] Low-suction cutout setting read against the design
  Low-suction switch or transducer cutout read on the device or controller and matching the design, so the set stops before it drags the supply main or tank down.
  1 photo required
- [ ] Controller alarm history read since the last round
  Alarm log checked for low-suction trips, high-pressure alarms and pump faults since the last visit, each one explained and recorded before it's cleared.
  No photo required
- [ ] Pump isolation valves found open on every pump
  Suction and discharge isolation valves on each pump found fully open with handles aligned, so no pump sits valved off while it's counted as standby.
  1 photo required
- [ ] Set left in automatic with every pump available
  Each pump's selector in auto, no pump disabled on the controller, and no alarm standing on the display when the round ends.
  1 photo required