



RESTAURANT SERVICES

PLANNED PREVENTATIVE MAINTENANCE SPECIFICATION

Frequency: Annually

General Hot Water System Checks

Training: Short courses available at Adveco premises by arrangement from 1 October (Farnborough Hants GU14 0NR)

- Check condition of unvented kit components for any evidence of leaks or damage. Confirm the operation of all safety valves
- Check the expansion vessel pressure and recharge as necessary
- Check the operation of all pumps
- Check the operation of system time controls, including the anti-legionella purge cycle
- Check and ensure all tundishes and drains are free from debris
- Check and record hot water flow and return temperatures

Hot Water Tank Checks

Training: Short courses available at Adveco premises by arrangement from 1 October (Farnborough Hants GU14 0NR)

- Isolate and drain down hot water tank(s)
- Inspect tank(s) and fittings for visual indication of leaks or damage
- De-scale and clean the hot water tank(s)
- Inspect and replace sealing gasket(s) as necessary
- Inspect and replace magnesium anodes (if present) as necessary
- Check tightness of all pipework connections, fittings, bolts, and wiring
- Test and confirm temperature and pressure safety relief valve(s) operate correctly
- Test and confirm incoming mains pressure relief valve (unvented kit) operates correctly
- Inspect and reset pressure in incoming mains expansion vessel (unvented kit)
- Service any installed immersion heaters per instructions below
- Re-fill system and ensure no leaks are present

Immersion Heater Checks

Training: Short courses available at Adveco premises by arrangement from 1 October (Farnborough Hants GU14 0NR)

- Isolate electrical supply at main isolator and secure in OFF position
- Inspect immersion elements for evidence of leaks or damage. Ensure terminal and its internal area is dry
- Ensure all electrical connections are tight and show no sign of wear
- Check phase-to-neutral or phase-to-phase readings. During correct operation these readings should be approximately equal
- Ensure electrical insulation between live and earth terminals is at least 1M Ω
- Ensure amperage through each phase is in line with the power draw for the immersion element rating:
 - 18 kW: 26A per phase
 - 12 kW: 18A per phase
 - 9 kW: 13A per phase
 - 6 kW: 9A per phase (three phase) or 26A (single phase)
- Drain the hot water tank and remove the immersion heater. Descale the heating element and connection flange as necessary
- Inspect the heating element and thermostats for visual wear or damage.
- Inspect and replace gasket(s) as necessary
- Reinstall immersion heater assembly. Check all connections and re-fill the system. Ensure no leaks are present
- Test and confirm correct operation of all control and overheat thermostats

Electric Boiler Checks

Training: Short courses available at Adveco premises by arrangement from 1 October (Farnborough Hants GU14 0NR)

- Isolate electrical supply at main isolator and secure in OFF position
- Inspect boiler and elements for evidence of leaks or damage. Ensure the internals of the boiler are clean and dry. Ensure all hydraulic connections are tight and secure
- Ensure all electrical connections are tight and show no sign of wear
- Check the boiler operating pressure and top-up as necessary
- Ensure there is no air present in the boiler installation
- Test and confirm the correct operation of all thermostats, valves, and pumps
- Check the boiler parameters, including temperature set point, time & date, and operating regime
- Ensure amperage through each phase is in line with the power draw for the immersion element rating:
 - P12: 18A per phase
 - P24: 36A per phase



RESTAURANT SERVICES

PLANNED PREVENTATIVE MAINTENANCE SPECIFICATION

Frequency: Monthly

Air Source Heat Pump Checks

Training: Short courses available from manufacturer at locations around the UK

- Check ASHP appliance display for any fault codes. If present, record and report to your service partner
- Inspect the surfaces of the appliance. If found to be excessively dirty or oily due to environment, organise regular professional cleaning
- Inspect air inlet and outlet of the appliance and ensure free from debris and obstruction. Remove as necessary to ensure good air flow
- Inspect and clean the pipework filter

Frequency: Annually

- Inspect condition of the plate heat exchanger. It is typically self-cleaning due to highly turbulent flow, but hard water at high temperatures can cause fouling over time. Organise professional cleaning-in-place (CIP) by pumping through a weak acid solution (5% phosphoric acid or, if frequently cleaned, 5% oxalic acid)
- Inspect condition of condenser coils. Ensure appliance is OFF. Remove foreign objects and debris with a brush between the fins. Clean only if necessary using cleanser designed for use on air conditioning units and flush with clean water
- Perform a thorough visual inspection of the control panel. Ensure all electrical connections are tight and show no sign of wear
- Inspect for any sign of refrigerant leak
- Confirm system is correctly filled and fully air purged. Top up if below 1 bar water pressure
- Confirm Heat Mode Test or DHW Mode Test (as appropriate) completes successfully (parameter 11)
- Confirm digital controller and thermostats are set and operate correctly
- Confirm operation of the pressure relief valve
- Check the condition and position of the pressure relief valve hose
- Check performance of the ASHP. Internal unit pipework and water pump should not require regular maintenance unless a problem arises and performance drops below acceptable levels
- Document the glycol concentration cold water protection

Control Panel Checks

Training: Short courses available at Advenco premises by arrangement from 1 October (Farnborough Hants GU14 0NR)

- Ensure all electrical connections are tight and show no sign of wear
- Inspect for any evidence of overheating or damage
- Ensure system control panel displays as healthy. If in fault status, record and report to your service partner
- Confirm that the control panel switches to 'fault' and the backup immersion heater is activated by temporarily forcing a fault condition on the ASHP or boiler. Reset fault and ensure system is healthy and operating on primary appliances only once confirmed
- Check that a fault alert email notification is received by the store management and/or designated service partners. Contact Advenco if not received by relevant parties

GRP Housing Checks

- Inspect the GRP housing for any evidence of damage or leaks. Ensure the interior is dry and secure
- Check the operation of the internal heater and kiosk lighting
- Ensure all ventilation paths are free from obstruction

HR0001 Heat Recovery Checks

- Inspect for any evidence of leaks or damage
- Check the glycol water side pressure
- Check the expansion vessel pressure and recharge as necessary
- Check operation of heat recovery system
- Check setting and operation of all controls
- Check refrigerant side during Condenser service
- Test temperature rise when 1 and 2 systems are operating
- Confirm glycol flow rate is 2L/min per system