

Refrigerator, Freezer, Incubator and Oven Service Checklist- 35 point check



Below is a list of minimum checks that a Henderson Biomedical engineer will perform during a service visit. This list is intended as a guide and is not exhaustive. Indeed, there may be other checks that the engineer carries out. Please note that some of the checks listed below cannot be performed on every model of refrigerator, freezer, incubator and oven.

Visual inspection of the instrument

General inspection of the instrument

Check for signs of damage and abnormal noises

Initial checks

Ensure that the instrument has been properly decontaminated before work begins.

This can be carried out by the engineer if the user has not done so already.

Check the display screen (LED, LCD, touch screen) is clear and free from any faults

Check functionality of all working parts

Take a note of the user program settings for later reference

Check the instrument is located correctly.

Check the instrument has been appropriately sited, e.g. not pushed up against a wall

Functional checks

Check rubber door seals are not cracked or perished

Check for any software updates and advise customer if necessary

Ensure door lock works if present

If applicable, check inner glass door for damage and ensure lock is not damaged/missing

Visual check of the fan functionality

Check hoses for discolouration if applicable

Analyse the levels of CO₂/O₂ (where applicable)

Check pipework for kinks and ensure connectors are tight

Temperature control

Visual check for signs that the instrument is performing within specification
Check refrigeration pipework for any signs of corrosion or impact

Electrical

Replace back-up battery if requested
Visual inspection of electronics including the PCB
Check for loose wires and/or connectors. Check the instrument is properly earthed
Do any of the components or cables show signs of burning?
Check panel indicators and switches are functional
Verify integrity of the mains cable and plug
Electrical safety checks carried out using a Portable Appliance Test (PAT)
Check all the keys on the keypad are working
Check cooling fan is functional and clean if necessary

General housekeeping

Ensure all nuts and bolts are properly secured
Clean or replace filters (e.g. HEPA filter) if applicable
Clear ice build-up from around door if applicable
Clean condenser, compressor unit grille and any filters if needed. Ensure grilles are free of obstruction.
Clean external parts of the instrument including door seals
Remove all expired and unnecessary labels. Remove adhesive deposits using label remover
Ensure that Henderson Biomedical Service and Support sticker is placed somewhere visible on the instrument
Complete service/calibration label sticker with date, serial number and engineer's initials
Leave instrument with original programmed settings set by the user
Inform the user of any remedial work and/or potential future problems (if any)
Offer advice and/or tips on prolonging the life of the instrument