

## Refrigerator, Freezer, Incubator and Oven Service Checklist- 30 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

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 hoses for discolouration if applicable

Analyse the levels of CO<sub>2</sub>/O<sub>2</sub> (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 fitted

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 condensor if applicable

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 log book and attached to instrument as a reference

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