



## SAFETY UPGRADES

The Dixons range of portable autoclaves has been manufactured for over forty years under various brand names. They have been known over the years as 'Express' autoclaves, 'The Arnolds Autoclave', 'The Portable Autoclave', 'The HM&S Autoclave' and 'The Macarthy Autoclave'. These autoclaves were previously manufactured by Arnold & Sons, Basildon (owned by the McCarthy Group). Dixons have been exclusively manufacturing the range since 1990.

Since that time certain potential faults have come to light if users have not followed the instruction manual carefully. At such times modifications were made to the production models in order to make all the autoclaves as safe as possible to use. Although the problems did not require 'total recall' it is our policy to modify all units that come into the factory for servicing / repair and thus render them compliant with current standards when they leave our factory. Similarly, we would recommend that any autoclaves serviced / repaired are treated in the same manner.

Every autoclave has a unique serial number stamped into the locking rings of stainless steel models or the lifting handle boss of aluminium models. This allows the age of the unit to be established. Simply contact this office with the serial number and we will give you the date of manufacture.

The modifications carried out since 1990 that should be carried out on all models are as follows:

### Insulation Resistance

The insulation resistance of the old wiring (white sheathing) did not meet new electrical regulations. The modified wiring has coloured sheathing, a tufnol plate behind the mains in terminal block and a long brass nut holding it in place.

### Safety Valve

The old two setting safety valve (knurled adjuster sticking out of the top) used a metal ball to make the seal which, if not maintained correctly, could stick. The safety valve was completely redesigned. The current design is a single setting only and used a silicon seal. A separate datasheet is available with more information on safety valve adjustment.

### Pressure Gauge And Thermometer

The old style pressure gauge had a temperature scale marked on it as well as pressure. Some users were assuming they were achieving sterilising temperature, by taking the temperature reading from the pressure gauge, when in fact they had trapped air in the autoclave. This meant that the pressure reading was correct but the temperature in the autoclave would have been somewhat lower. The current pressure gauges only read pressure. A dial thermometer is now also fitted to ensure correlation of temperature and pressure thereby showing the correct removal of air from the autoclave. The dial thermometer is a 3/8" BSP fitting. Some autoclaves may need a hole drilled and tapped in the lid to take the dial thermometer.

### Residual Pressure Relief Valve

The ratchet locking mechanism of the stainless steel autoclaves was replaced with the current wing nut versions. Following an incident with one of the old style models a residual pressure relief valve was fitted to ensure that the lid could not be removed before all the pressure had been released from the pot. A separate datasheet is available with more information on the ratchet locking mechanism.

