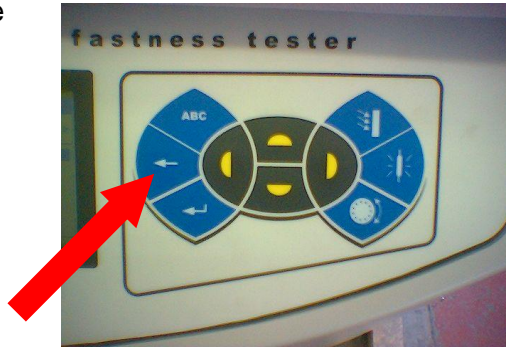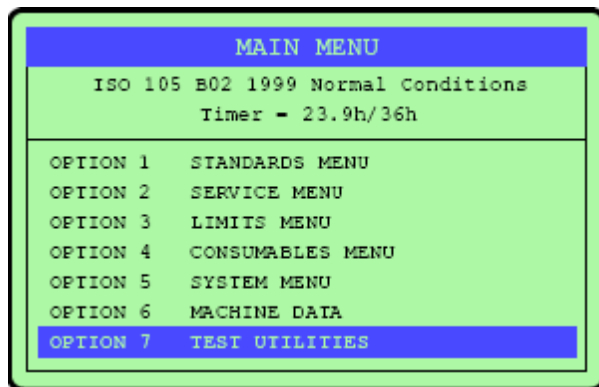# Error Message 111: Blower airflow error – Apollo 700

WARNING: Any maintenance work undertaken on a James Heal instrument must be done so by a trained and competent person. Where electrical work is detailed, this should only be completed by a qualified engineer. James Heal is not responsible for damage or injury arising from work carried out by any person not qualified to do so. If in doubt, please contact James Heal or your local James Heal Agent.

1. Ensure the Apollo is fitted with all glassware, filters and exhaust piping in exactly the way it will be during normal use.

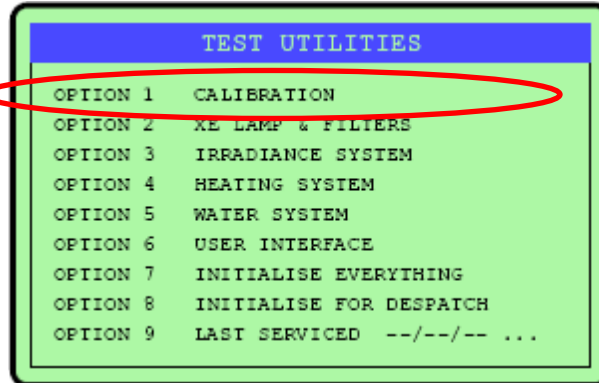2. Press and hold the backspace key while turning on the Apollo.

    The machine should beep and report that test utilities are unlocked and now show a screen with "**MAIN MENU**".

3. Use the Up/Down keys (A) to select Option 7 "**TEST UTILITIES**"
    Then press the right arrow key (B) to enter the test utilities menu.

    A   B


    ```
                    MAIN MENU
        ISO 105 B02 1999 Normal Conditions
                Timer = 23.9h/36h

        OPTION 1    STANDARDS MENU
        OPTION 2    SERVICE MENU
        OPTION 3    LIMITS MENU
        OPTION 4    CONSUMABLES MENU
        OPTION 5    SYSTEM MENU
        OPTION 6    MACHINE DATA
        OPTION 7    TEST UTILITIES
    ```
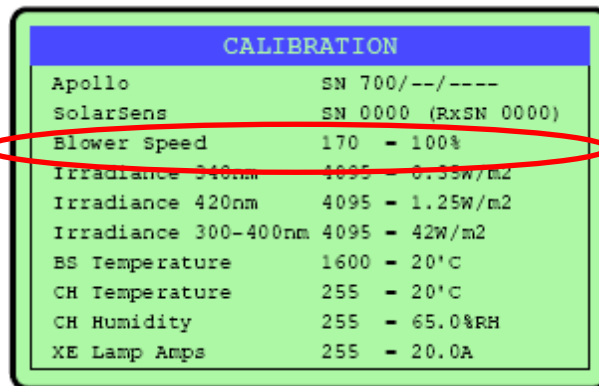
4. Use the Up/Down keys to select Option 1 "**Calibration**"

   Then press the right arrow key to enter the calibration menu.


```
TEST UTILITIES
OPTION 1    CALIBRATION
OPTION 2    XE LAMP & FILTERS
OPTION 3    IRRADIANCE SYSTEM
OPTION 4    HEATING SYSTEM
OPTION 5    WATER SYSTEM
OPTION 6    USER INTERFACE
OPTION 7    INITIALISE EVERYTHING
OPTION 8    INITIALISE FOR DESPATCH
OPTION 9    LAST SERVICED  --/--/-- ...
```

5. You should now be in the calibration menu.

```
CALIBRATION
Apollo              SN 700/--/----
SolarSens           SN 0000 (RxSN 0000)
Blower Speed        170  - 100%
Irradiance 340nm    4095 - 0.35W/m2
Irradiance 420nm    4095 - 1.25W/m2
Irradiance 300-400nm 4095 - 42W/m2
BS Temperature      1600 - 20'C
CH Temperature      255  - 20'C
CH Humidity         255  - 65.0%RH
XE Lamp Amps        255  - 20.0A
```

   Use the Up/Down keys (A) to select Blower speed.
   This figure should be 100%.
   If it is not press the right arrow key (B) to start editing, then use the left and right keys to adjust the figure to get 100%.

6. Use the return key to finish editing and exit the calibration then the utility menu then try the Apollo.