

Trouble Shooting Fraser AC Bars, Ionising Air Guns and their Power Units

Occasionally a component may fail which causes an AC bar or Ionising Air Gun to become inoperative. This document provides a fault finding process to determine which part of the system has failed. Before conducting electrical checks, visually inspect the equipment to ensure there is no obvious damage or disconnection.

Products covered:

AC Bars 1100, 1250 (all variants including EX), Single Point Ionisers 1260 / 1265

Ionising Airguns 4100, 4110, 4125

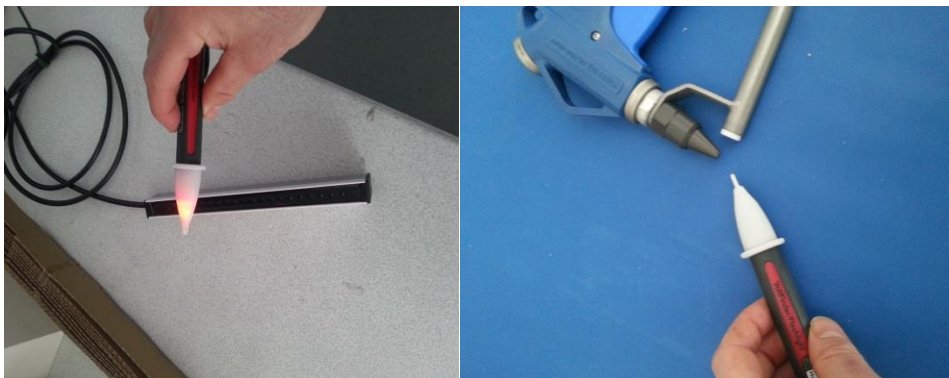
Power Units HP50-1, HP50-2, HP50-4, HP50-F, HP80, EXHP-F, 9055-2

Equipment Required:

Electrician's AC Volt Stick eg Fluke Tester 1AC, Megger VF2 AC

Situation 1 Power supply with single ioniser or bar attached.

In order to test the whole system, hold the Volt stick in front of the ioniser. If the volt stick illuminates then the system is working.



Working 1250 Bar

Inoperative 4125 Gun

If the volt stick does not illuminate then there is a failure.

If the bar is extremely dirty then this could be the cause of failure, so clean the bar as described in the operating instructions and repeat the test.

If the ioniser is still inoperative, test that the mains supply into the Power Unit is present by holding the Volt Stick to the power cable.



Figure 2. Volt stick verifying that mains supply is good.

If the mains supply is good, switch off the power and then disconnect the ioniser to test the Power Unit in isolation. Place the Volt Stick right into the output port on the Power Unit. It will light if the Power Unit is working.

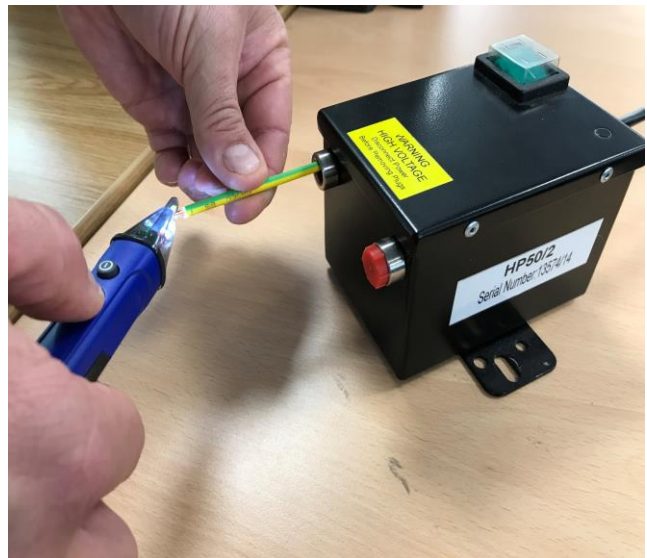


Figure 3. Volt Stick verifying that High Voltage Output is present, use a piece of earth cable if Volt stick is not of suitable length to access the power supply port (only touch the insulated part of the cable)

If the High Voltage Output on the Power Unit is working then the Ioniser or its cable has failed. Contact Fraser or your distributor for a replacement or Gun re-cable.

If the High Voltage Output on the Power Unit is not working then contact Fraser or your distributor to see if a Power Unit repair is possible. It is unlikely that the Power Unit and Ioniser will both have failed, however if you need to return the Power Unit for repair and it is convenient to send the ioniser at the same time then do so for a factory full-system check.

Situation 2. Power Supply with more than one ioniser attached.

In order to test the whole system, hold the Volt stick in front of each ioniser. If the volt stick illuminates then the system is working.

If none of the Ionisers are working, it does NOT automatically mean that the Power Unit has failed. An inoperative ioniser can cause a Power Unit to shut down, so that none of the ionisers that are attached will work. In these circumstances, test each individual ioniser with the power supply as described in Situation 1, until you have identified the failed part(s) by the process of elimination.