

## **Engel Compressor Fridge Faults (V2.0)**

The Engel uses a Sawafuji swing motor. The Sawafuji swing motor has a piston that oscillates back and forwards with a natural frequency of 50Hz. When running from 240V AC the voltage is reduced to 12V AC by a transformer. A relay disconnects the 12V DC. Both power sources are connected and it automatically changes to 240V when it is present.

The 12V operation electronics change the 12DC to 50Hz 12V AC by 2 transistors switching.

### **Repairs:**

The contacts in the change over relay can fail, gently remove the clear plastic cover and clean the relay contacts with sandpaper. Later one replace the relay.

If you have electronic skills the PCB can be repaired. Warning! Removal of the PCB metal box from the fridge **and** removal of the PCB from the metal box can be difficult! Will need to undo the piping and gently bend it to gain access. It has 2 switching transistors (2SK2232/K2232), test these and replace if necessary.

Later model ones this is much easier. Remove top cover, undo 2 screw at top, 2 on the outside of the cabinet at the power sockets, side metal box across and up. Inside the box contains a 15A fuse, only accessible when the box is opened. The metal transformer and relay are now replaced by electronics.

Special K2232 \$2.00 each and \$1.10 P&P for complete order, Example 2x transistor posted for **\$5.10. Click on Post and Pack**