

**MODIFICATION »ZERO SWITCH« KIT FOR »SIL AIR« PUMP FOR
AIR LINE TONEARM Feb
05**

In some cases the pump makes switching noises which can be heard through the audio system, especially when switched on. Should this occur connect the pump to a different mains point to the audio system. Alternatively add a much longer cord, relocate pump well away from the audio system or try to use noise filters on the mains, blocking spikes from the pump.

Should the problem persist then a special switch relay system can be installed. Modification should be carried out by a qualified electrician and only after the pump has been disconnected from the mains voltage.

Kit:

The kit consists of a box containing a zero switch relay with marked input and output cables, blocking capacitor (pumps will have this cap built in from Jan 2005), 1 piece shortening wire and a heatshrinking tube for insulating the 'join'.

1.

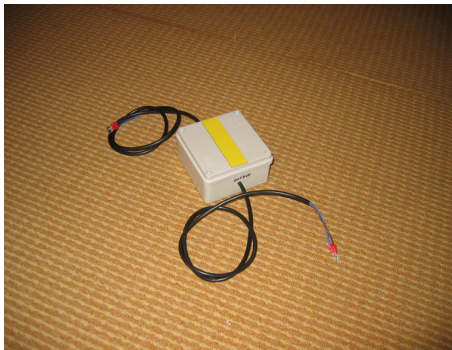
First remove the metal cover by unscrewing 6 pcs screws. Then, with cross screwdriver, unscrew two screws and remove the black cover which protects the main switch (see standard connection Fig 1). If your compressor (pump) was delivered before Jan 2005, you will need to add a blocking capacitor at the motor head switch (see : Installation of blocking capacitor).



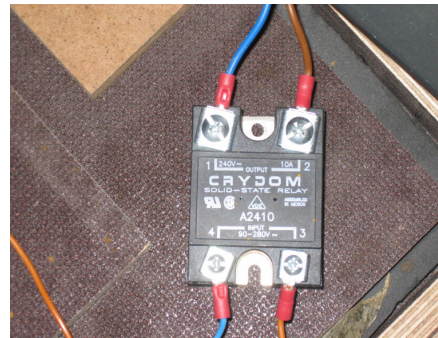
Standard pump connection- main switch Fig 1.



Connected wires on main switch with zero relay. Fig 2



Box containing zero relay switch. Fig 3.



Zero relay switch. Fig 4.

There are three mains cables coming through holes underneath the switch. Release the collars and loosen the mains cable. Locate which cable comes from the mains plug, from the timer and from the switch towards the motor head where the intake filter is located. Carefully observe which brown or blue wire goes on which connection (modification with zero switch relay- see Fig 2 and drawing for zero switch relay).

Push wires through holes underneath and be sure that you locate the correct the wires.

2.

Observe the output and input cable with brown and blue wires and rearrange the wire connections according to the drawing with zero switch relay as in Figs 2,3 and Fig.7.

First remove blue and brown wires from the main switch by releasing screws. Reconnect the brown wires with spades from the box input, mains, timer and motor head as well as shortening wire. It is a bit tricky to get all the spades inside. Then connect all the blue wires.

Finally, using a special clip or by soldering, connect the blue wires coming from the timer and motor head to the output box blue wire. Do not forget to add heat shrinking tube to cover the exposed wires or 'join'. (Fig 2.)

3.

Check whether your pump has a built in blocking capacitor at the motor head switch. Pumps delivered before Feb 2005 will not have it. Ask for details.

4.

Check all connections. Ensure that there is no metal contact on top of the main switch between various wires and that all spades are neatly fixed.

5.

Screw back the black cover of the main switch by two screws. Then rearrange the wires coming towards the relay box. Replace the metal cover on the pump and, by removing protection from double sided tape, position box in the appropriate position(Fig. 5.) In some cases mains filters, such as those used in the audio systems, should help to fully eliminate spike noises. Connect these as close as possible to the pump.

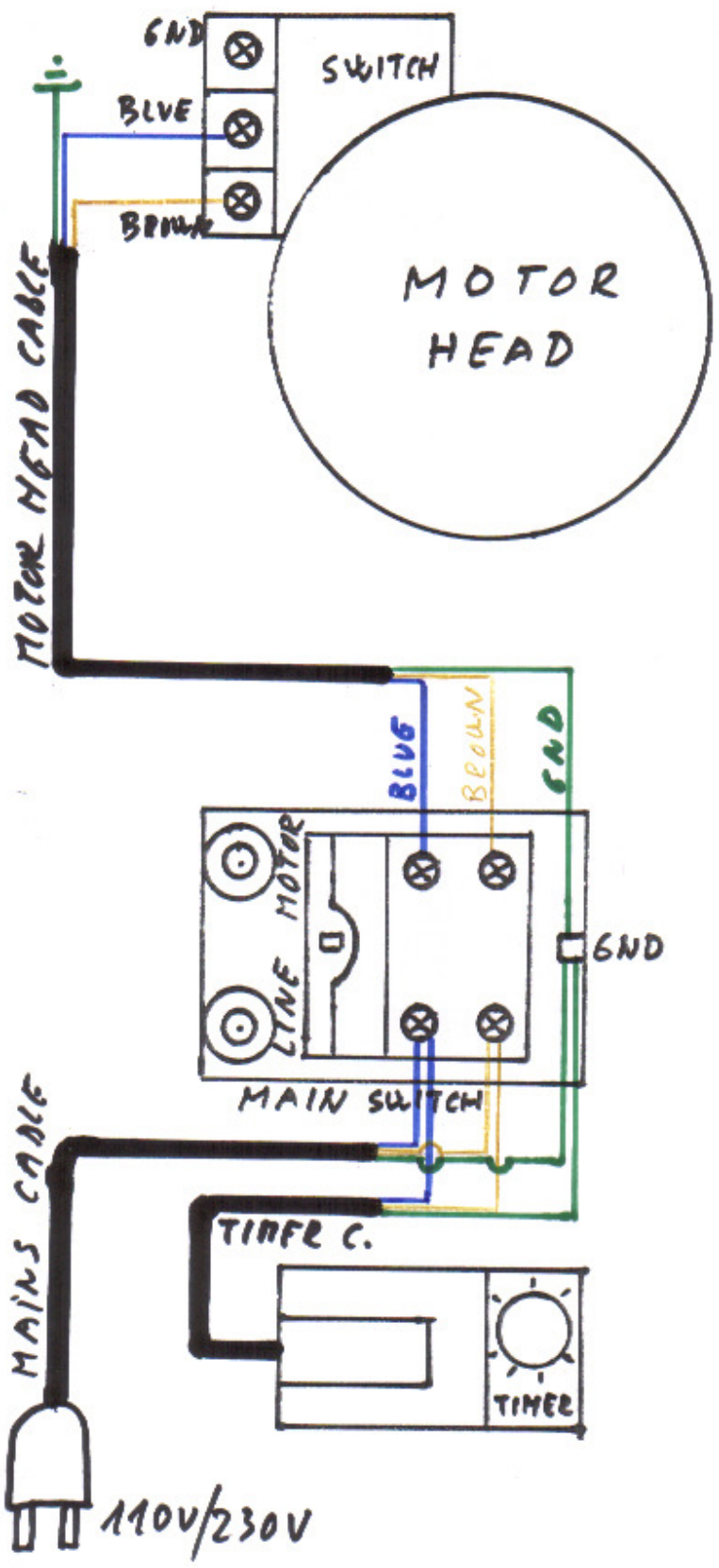
6.

Connect and switch on the pump and see if it works properly .

7.

See Standard (Fig. 6) and Zero relay switch circuit diagram (Fig. 7).

SIL AIR
PUMP
STANDARD
SWITCH



Zero relay switch circuit diagram. Fig. 7.