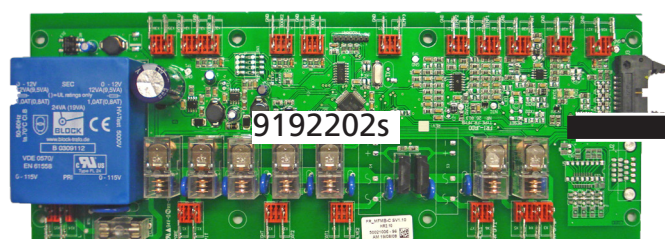## Conversion to new generation Power&I/O board in the Multisserie
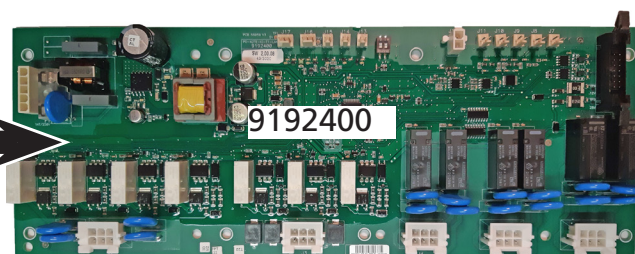

The below 9192202s board is no longer deliverable. This because some components became obsolete
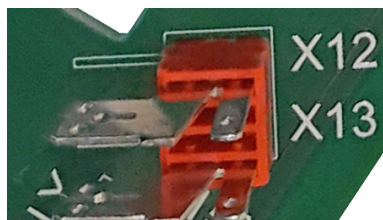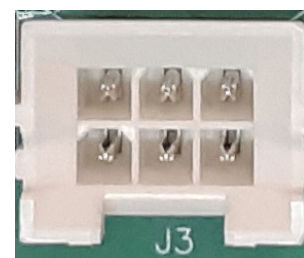
The below 9192400 board will replace it

9192202s

9192400

Old boards have spade terminals

New boards have multi pole sockets


X12
X13

"X" numbers to "J " numbers

J3

Take notice of the following remarks!

- **USA (208V units) Only**:   On the terminal block near the big transformer, 2 NTC resistors should be present.
- Units older than serial number 100067648 (May 2014) may not have these.
- In these cases, the unit has to be upgraded with the "service set MTS transformer" update kit 9190193s. **Otherwise, the board will be blown !!!**

- CPU boards that do not have a USB socket, must have sw version 4.3 or higher. Otherwise, the vent valve error will pop up. It is however still possible to work with the unit, but the error message remains on screen. These boards are applied untill serial number 100060393, October 2012. Sw version 4.30 is released in January 2013
- The vent valve will be disconnected. Check if it is in open position. Remove the flap if necessary.
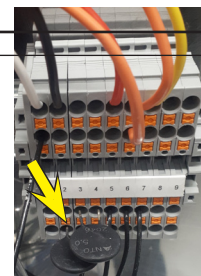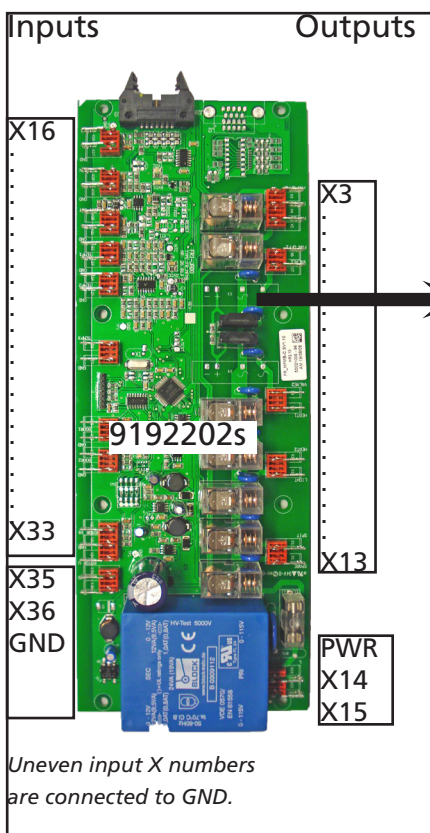
The kit comes with:
➔ An interface board 9192402 to convert the output wiring.
　➔ A bracket with wiring to convert the input wiring.
　　➔ Mounting material.

9192402

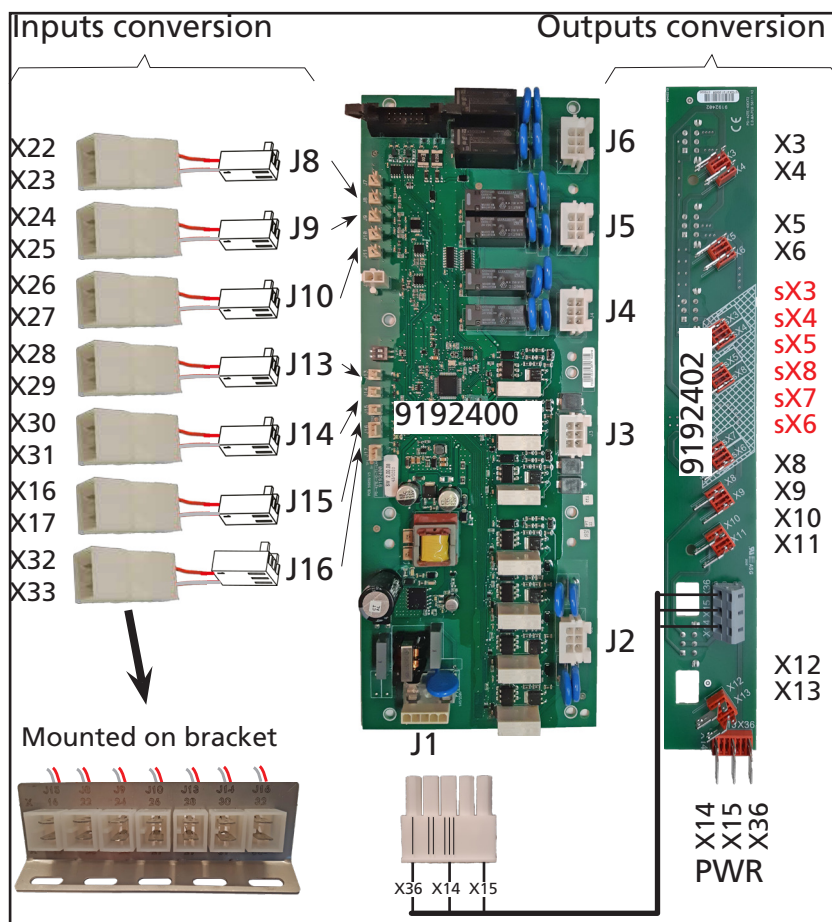9192400

15 8 9 10 13 14 16
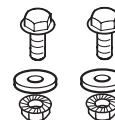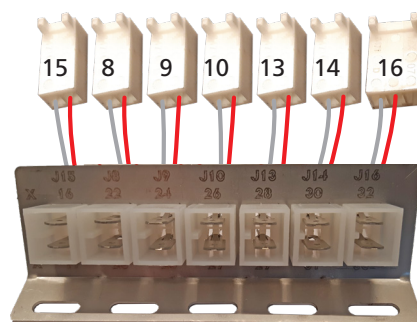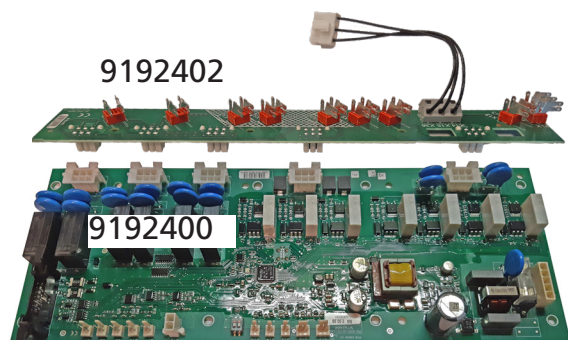
The principle

Inputs are signals like switches and sensors.
Outputs are power consumers like contactors, motors, lamps.

Old board connections.　　　　　　　　New board with conversion

Inputs	Outputs

X16

X3

9192202s

X33

X35
X36
GND

X13

PWR
X14
X15

*Uneven input X numbers
are connected to GND.*

Inputs conversion　　　　　　**Outputs conversion**

X22
X23　J8

X24
X25　J9

X26
X27　J10

X28
X29　J13

X30
X31　J14

X16
X17　J15

X32
X33　J16

9192400

J6

J5

J4

J3

J2

J1

9192402

X3
X4

X5
X6

sX3
sX4
sX5
sX8
sX7
sX6

X8
X9
X10
X11

X12
X13

X14
X15
X36
PWR

Mounted on bracket

X36 X14 X15

Preparation

Note that the assembly of boards has one spacer mounted, with the top, cut off.
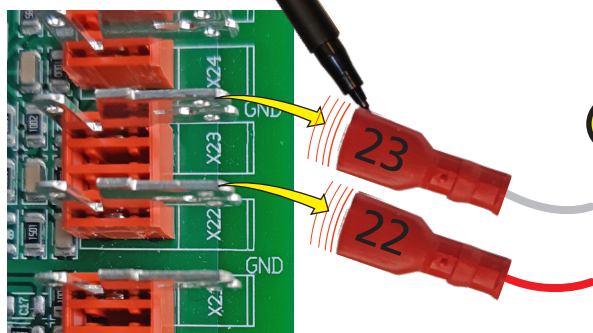Check if the connectors are completely pushed into each other.

| 15 | 8 | 9 | 10 | 13 | 14 | 16 |

=
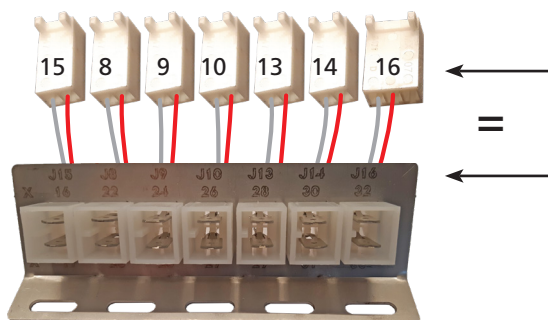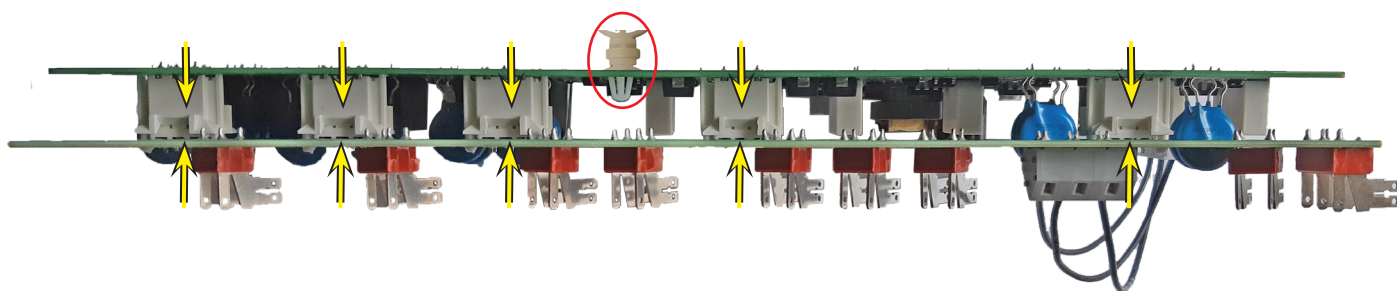
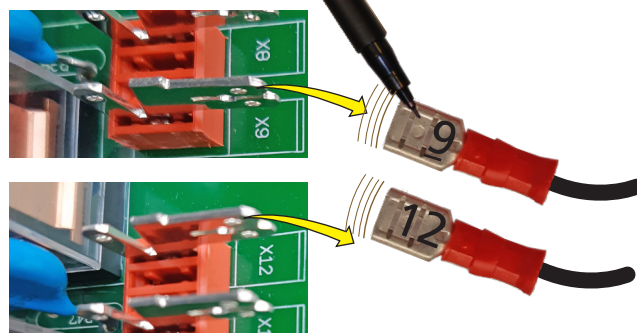Check if the "J" numbers on the plugs, correspond with the laser burned ones.

Do not forget !!!

Write the corresponding X numbers on the faston connectors, when disconnecting !!!!!

Example X22 and X23 from the PT1000 sensor

Example   X9 (Heater contactor)
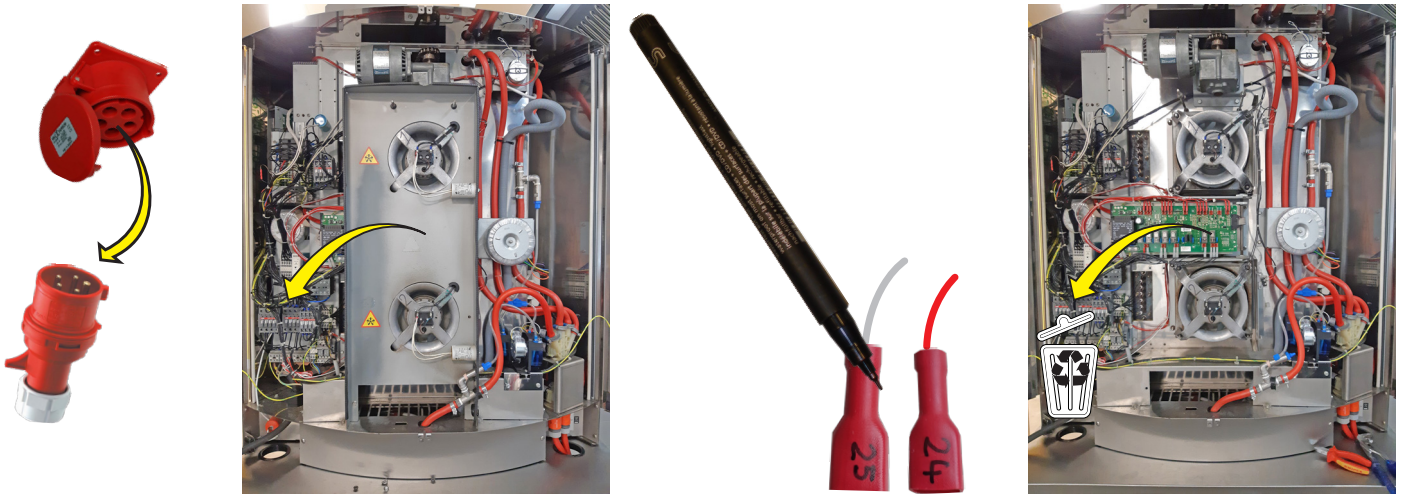   X12 (Rotor motor)

Disconnect the mains power.

Open the service doors and remove the air funnel.

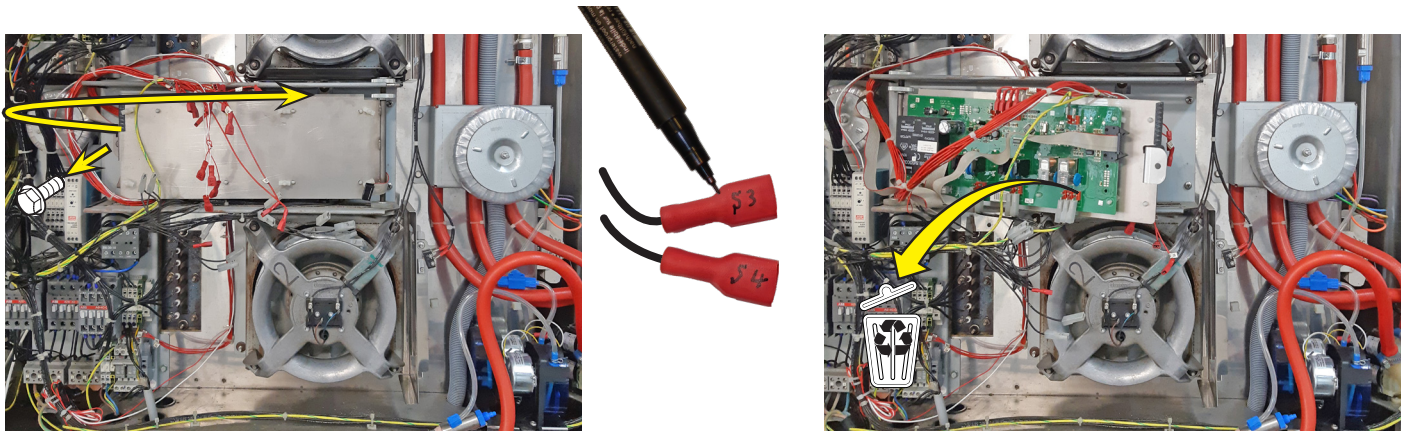Disconnect all wires and number them with the "X" numbers.

Remove the power&I/O board

Unscrew the screw and slide / turn out the mounting bracket.

Disconnect all wires, put corresponding **"sX"** numbers on the faston terminals.
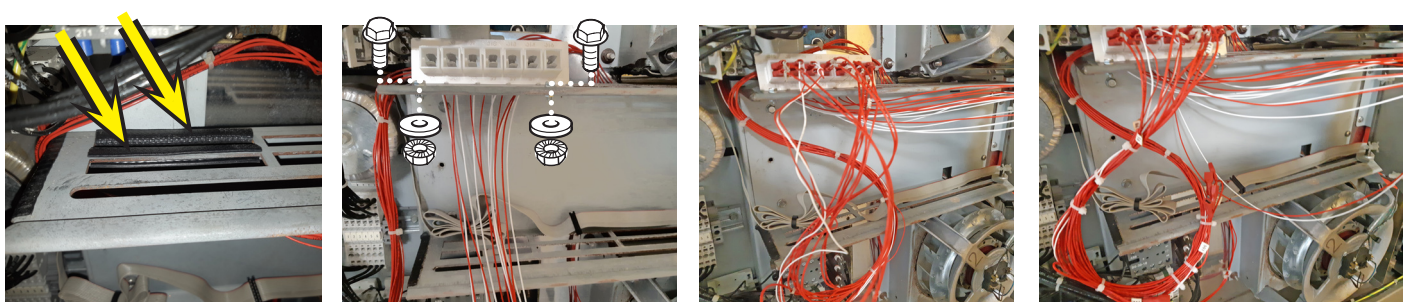
Remove the slave board.

Put protective U profile on the bracket, 2x 8 cm.

Mount the assembled bracket.

Connect all input "X" wiring to the corresponding numbers.

Tie up the unused wires and make a neat wiring loom.

Not used numbers (if present) are sX16, sX17, sX18 and sX19.
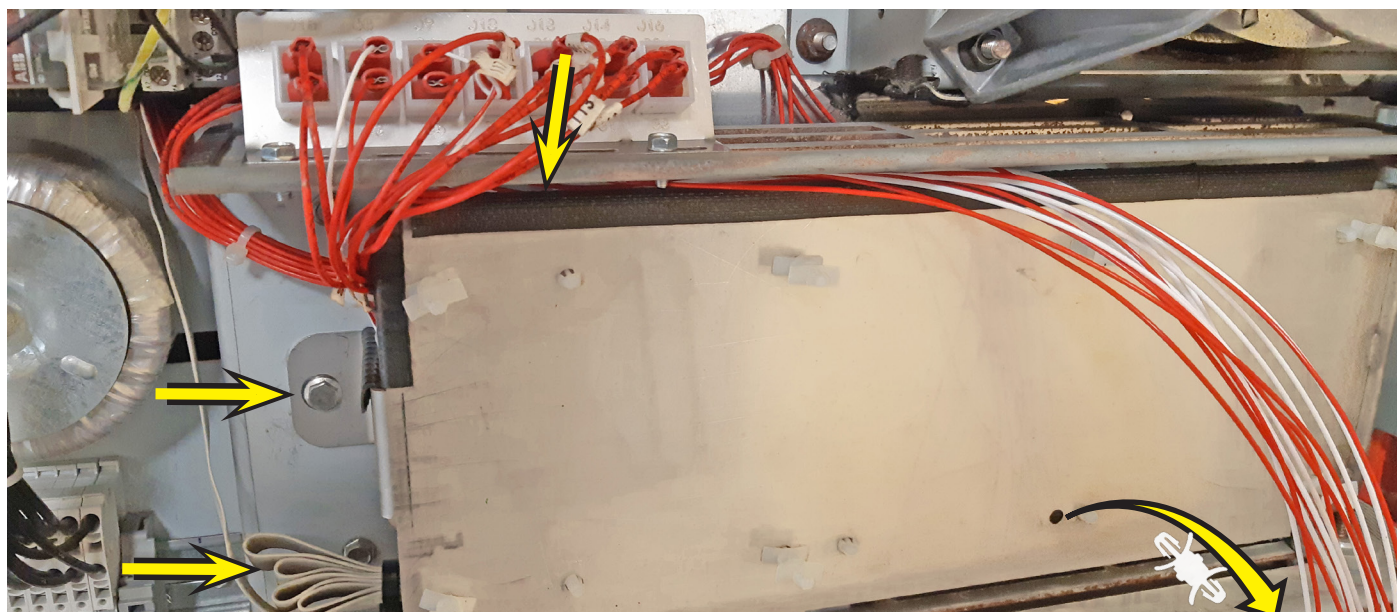
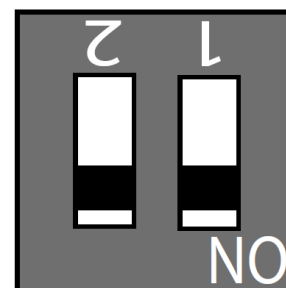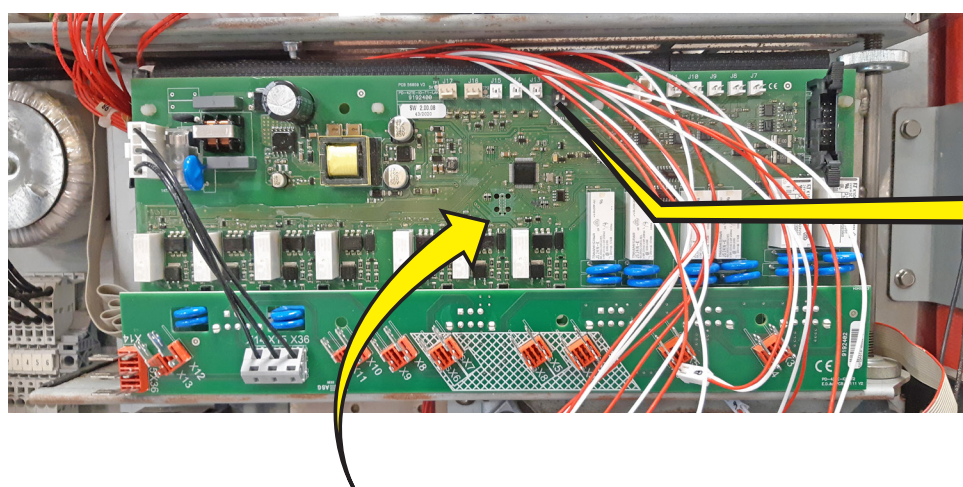Put 30 cm protective U profile on the bracket
        Put the ribbon cable in place, behind the mounting bracket and close it.
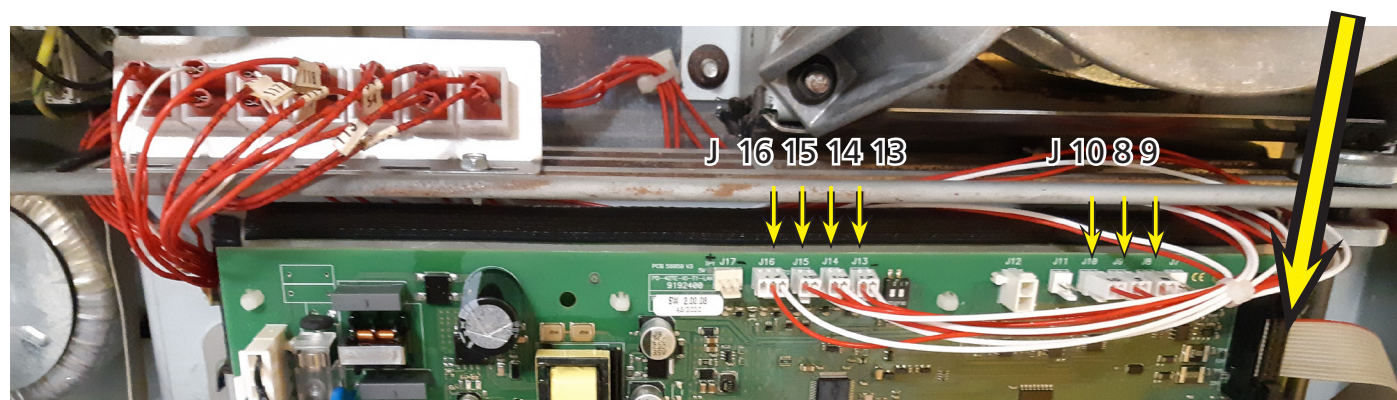   Remove one plastic spacer as indicated.

Push the assembly of boards, on the 7 plastic spacers.
                Set the dip switches in the ON position

Connect the "J" connectors.
        Connect the ribbon cable

J 16 15 14 13   J 10 8 9

Connect the (black) wiring to the corresponding X numbers on the interface board.
   Cut off a number of cable ties to make this possible.
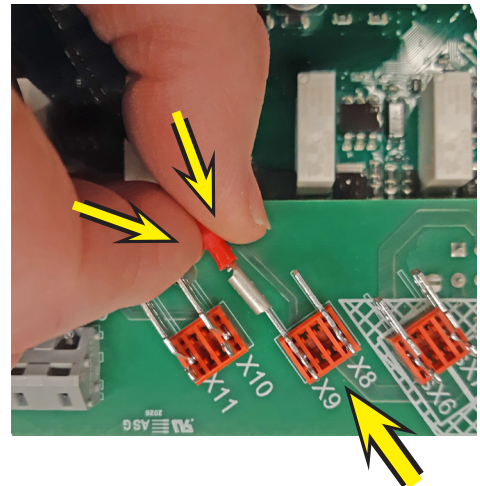   Put "sX" wires from the previous Slave board on the shaded area with sX numbers.
Bundl these wires close to the interface board.
They must not fan out above the power board.

X 13-12   X 11-10-9-8   sX 6-7   sx8-5-4-3   X 6-5   X 4-3

X 14 15 36

sX !

FRAGILE
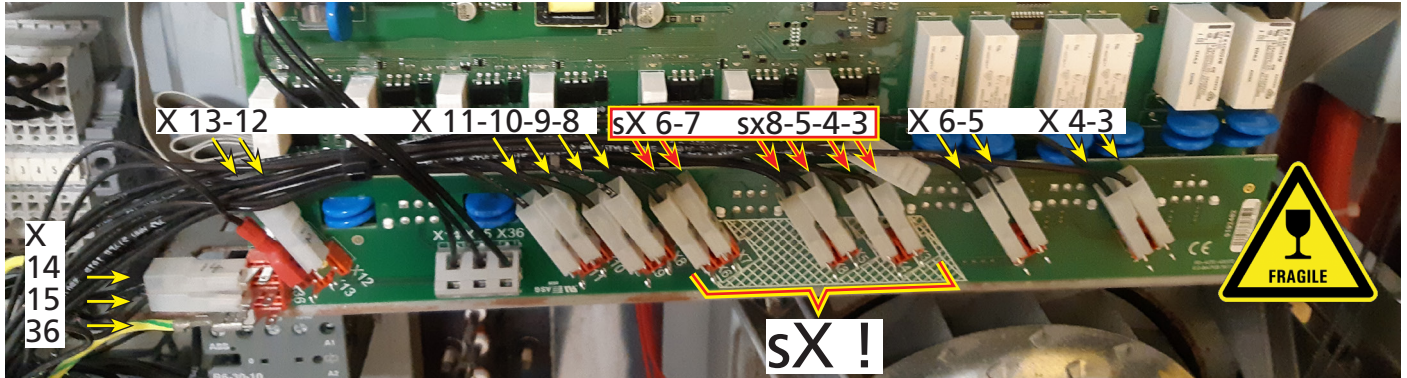
Put contra force on the terminals while connecting !!

Not used x numbers are
   X7 fan slow start (USA only) **If no NTC's are mounted, kit 9190193s is needed !!!!**
 sX9 Vent valve
 sX10 power. **Insulate !**
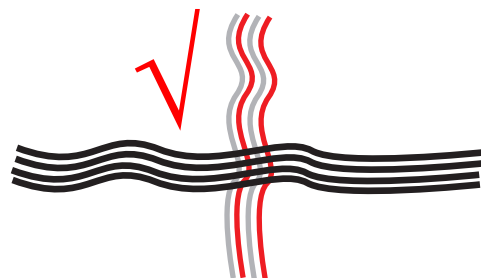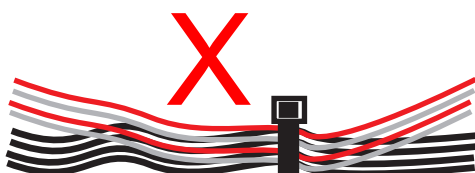 sX11 power. **Insulate !**
 sX20 Ground wire. **Insultate !**

USA only

Tie up loose wiring again, make a neat wire harness.
      Do not tie wires from inputs and outputs in parallel together.
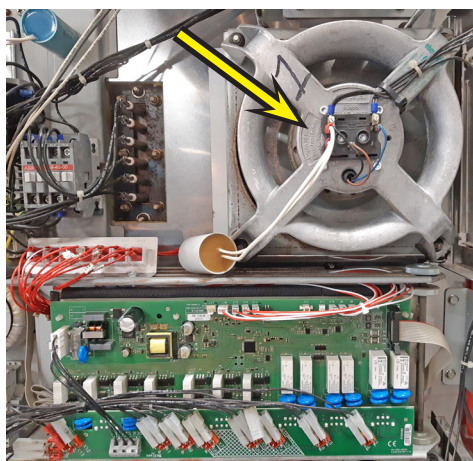   Crossing wires from inputs with wires from outputs are allowed.

Connect the capacitors of the blowers.
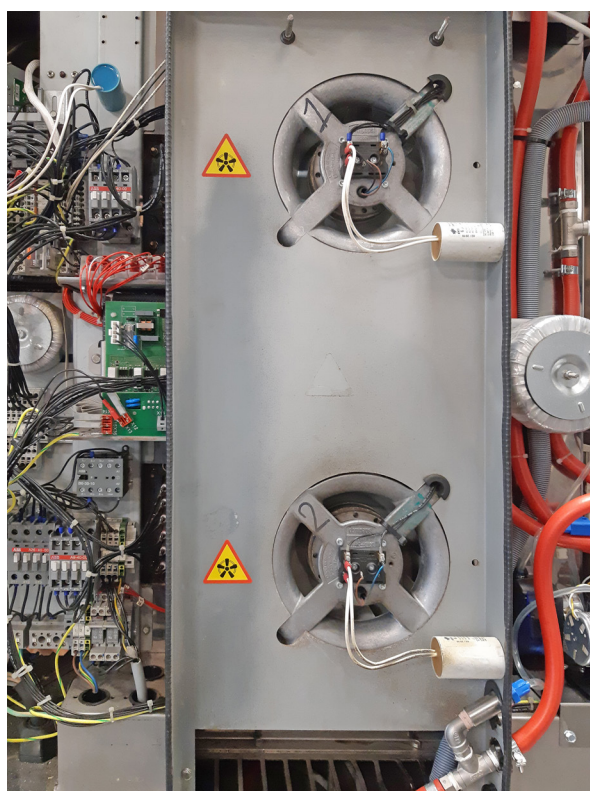Plug in the USB drive in case of software update.
Connect the mains power

Check all inputs and outputs by means of the I/O test facility in the service parameters.
Note that it still shows the mfMB and mfS1 inputs and outputs, like there are still two boards.
If everything ok, then remount the fan funnel and close the service doors.

Overview of board terminals

Leave this sheet in the oven, next to the electric diagrams for future trouble shooting.

Previous board, ref 9192202s

Current board, ref 9192400s
with 9192402 interface board
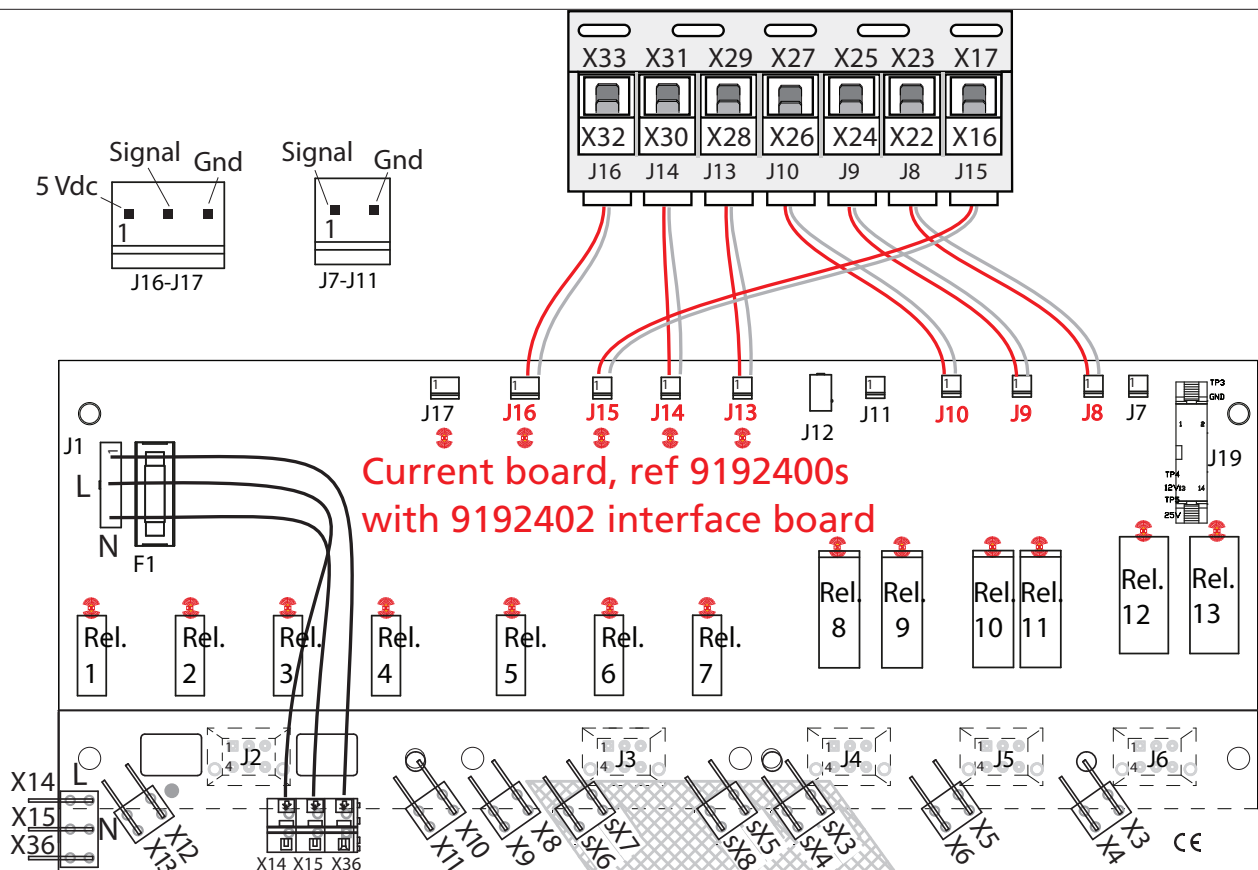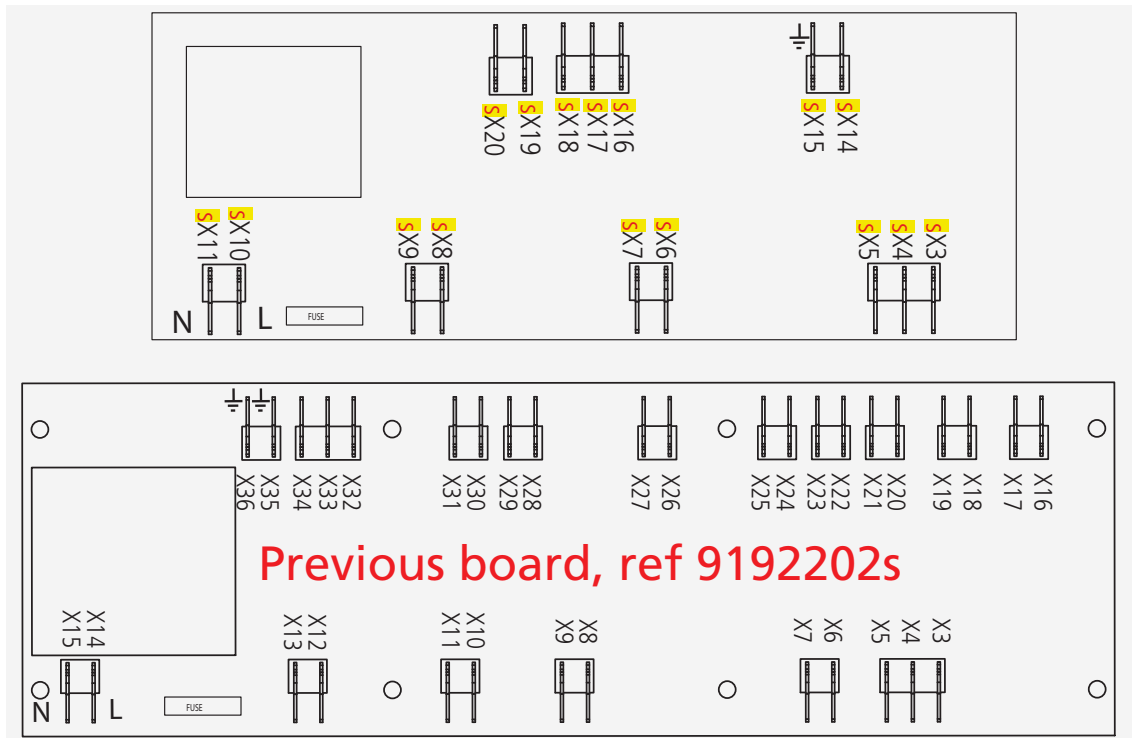
Electrical diagram of the new board assembly.