

Instruction guide to installing IEC Plug Harness to a S4E V3 Lancer Superchiller. This will reduce the potential of future agitator motor replacements requiring electrical termination or modifications.

Tools and equipment required

Pliers
Screwdriver – Phillips (PH2)
Hacksaw
Drill
6mm drill bit
Test & Tag Equipment
Gloves and Safety Glasses

Parts required

80000288 - MOTOR ASSY AGI ECR1 IEC
83000542 - HARNESS AGI IEC/SPADE ASSY
79135936 - SCREW M5 X16 SS PH
79150056 - NUT M05 [HEX] SS
83000034 – P-Clip

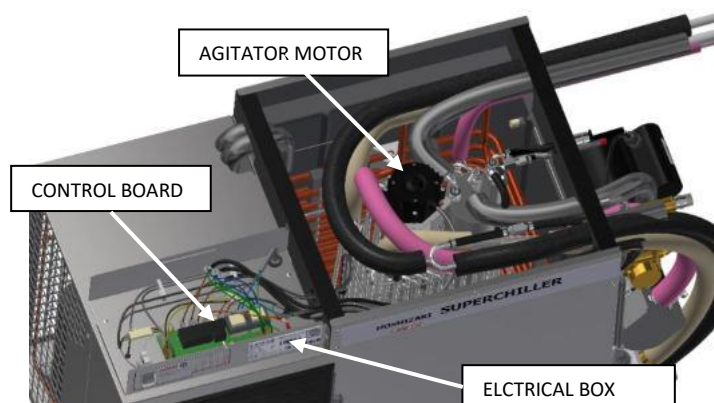


Warning

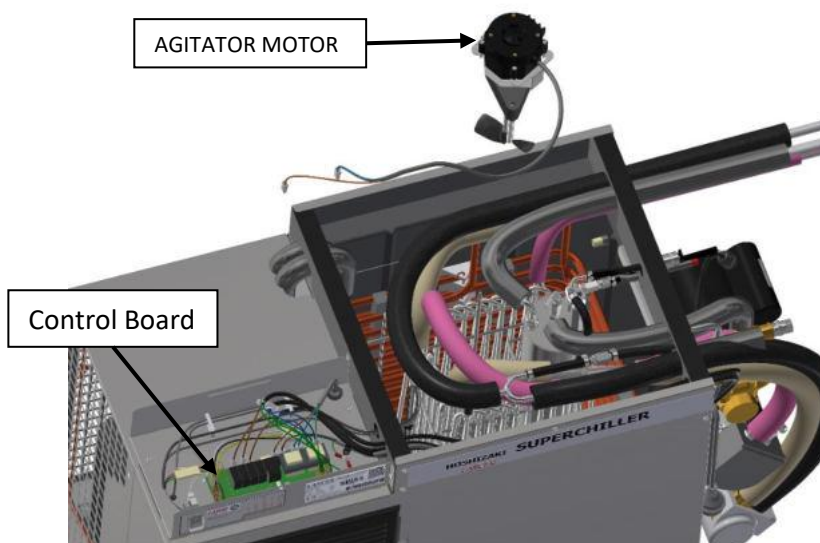
As this work requires changes to the electrical wiring it should only be performed by a fully trained & certified technician.
APPLIANCE MUST BE ISOLATED FROM ELECTRICAL SUPPLY BEFORE COMMENCING ANY SERVICE OR MAINTENANCE WORK.

STEP 1 – Electrical isolation and access.

- 1.1 Isolate the chiller and remove the electrical lead from the power outlet.
- 1.2 Remove the electrical box and chiller lids.



- 1.3 Disconnect the agitator motor leads from the control board and remove the agitator from the water bath cradle.



STEP 2 – Prepare to modify electrical box entry

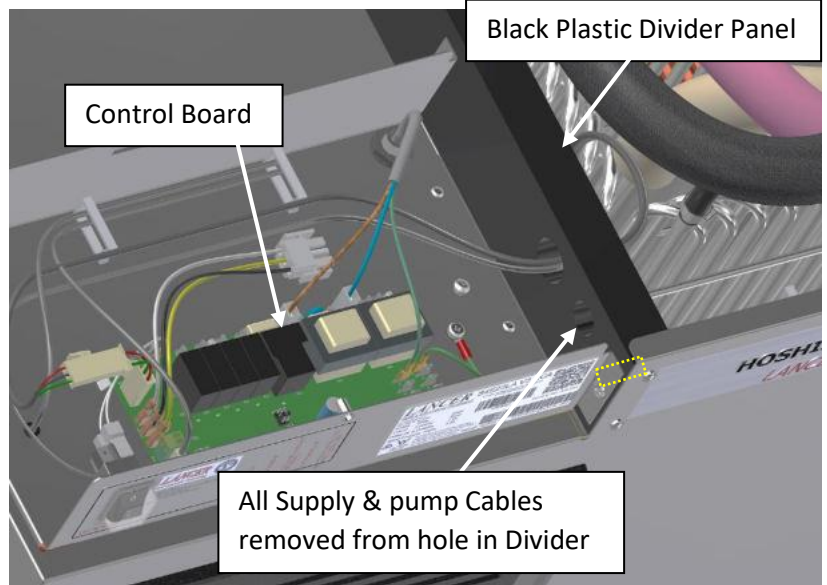
2.1 Disconnect and remove the following electrical leads from within the electrical control box –

- power Lead
- carbonator pump
- soda recirculation pump
- water pump (where fitted)
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TIP – Take a photo of the connections to assist with reconnection.

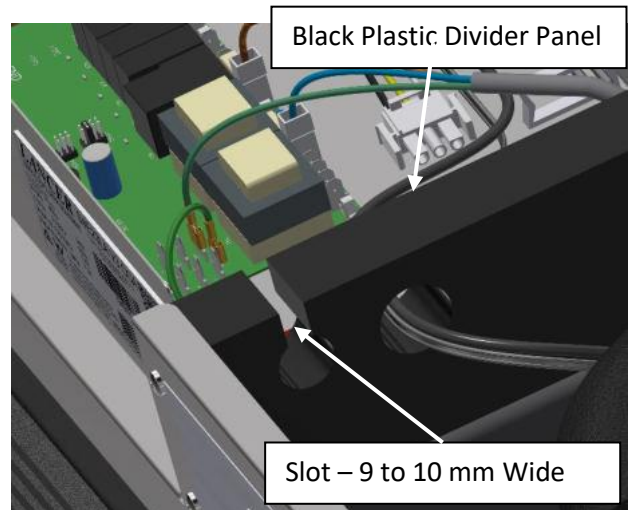
2.2 Mark cut lines on the divider panel as a guide for cutting. This should be approx. 10mm wide, to enable an agitator electrical lead to fit through.

IMPORTANT: Take care not to damage any leads or components when cutting and drilling.



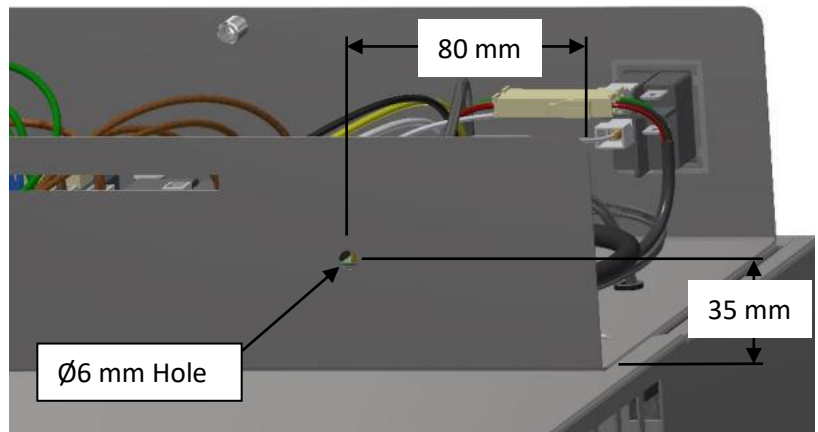
2.3 Using a hacksaw carefully cut a 10 mm wide slot into the black plastic divider panel.

Note: Clean up plastic swarf from the cutting process.



2.4 Drill a Ø6 mm hole in the side of the electrical box as shown.

Note: Clean up metal swarf from the drilling process.



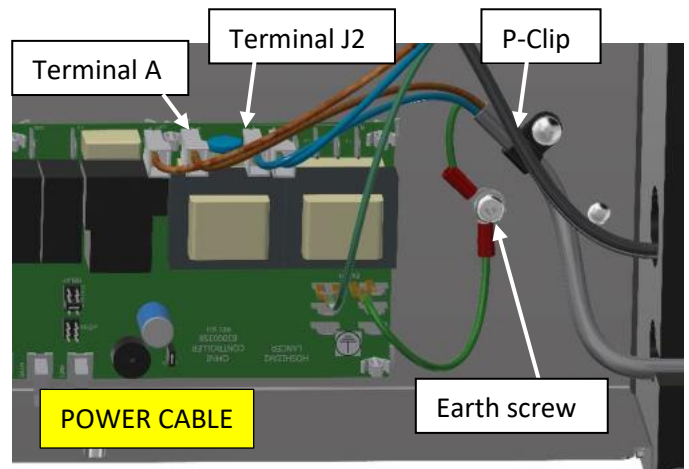
STEP 3 – Reconnection of equipment

Reconnect and neatly lay the electrical leads back into the electrical control box.

TIP -Reference the chiller manual electrical drawing and previously taken photos will assist.

3.1 Power Lead

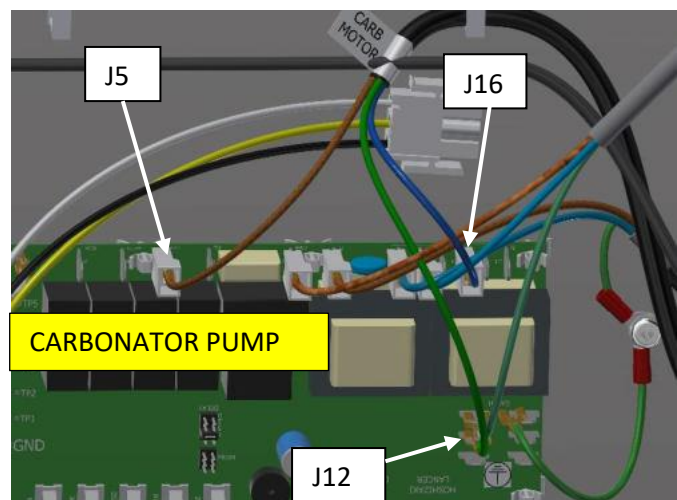
- Brown lead to terminal A.
- Blue lead to the neutral terminal J2.
- Earth lead to the earth screw with main earth from control board.



IMPORTANT: Ensure that the supply cable is fixed to the electrical box base with the P-Clip.

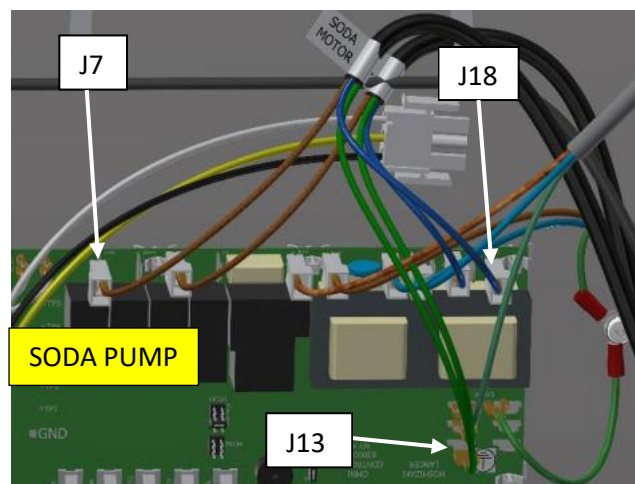
3.2 Carbonator pump

- Brown lead to terminal J5.
- Blue lead to the neutral terminal J16.
- Earth lead to the earth terminal J12.



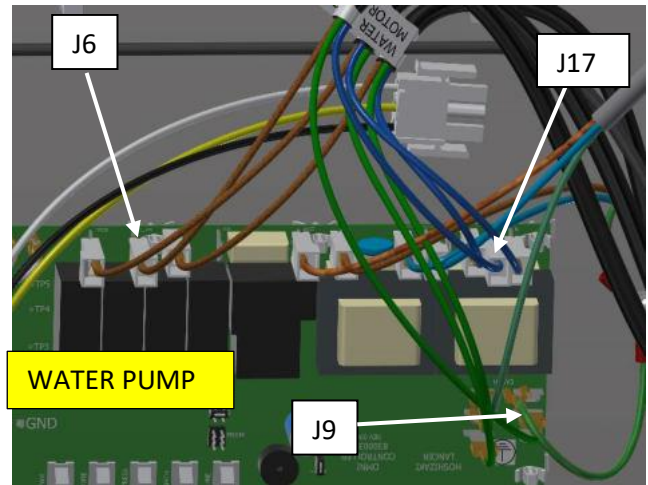
3.3 Soda recirculation pump

- Brown lead to terminal J7.
- Blue lead to the neutral terminal J18.
- Earth lead to the earth terminal J13



3.4 Water pump (when fitted)

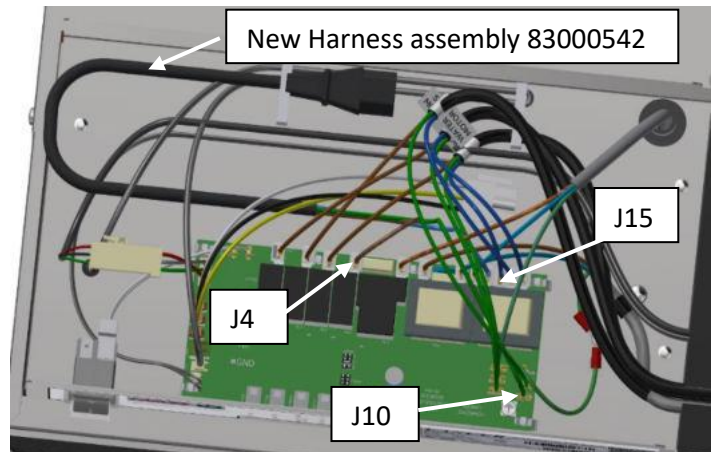
- Brown lead to terminal J6.
- Blue lead to the neutral terminal J17.
- Earth lead to the earth terminal J9.



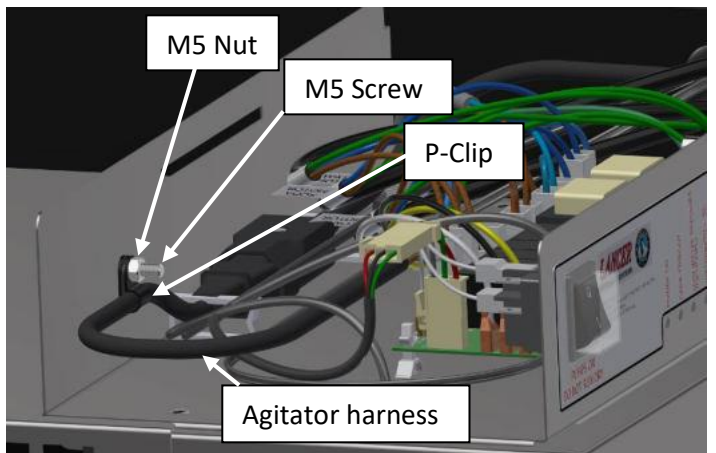
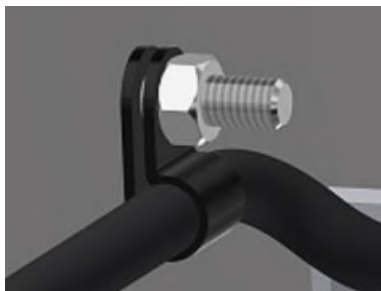
STEP 4 - adding the new harness with IEC plug

4.1 Fit and connect the Agitator harness (83000542) to the control board.

- Brown lead to terminal J4.
- Blue lead to the neutral terminal J15.
- Earth lead to the earth terminal J10.



4.2 Attached the Agitator harness to the drilled hole in the side of the electrical box with the P-Clip, M5 screw and nut supplied.



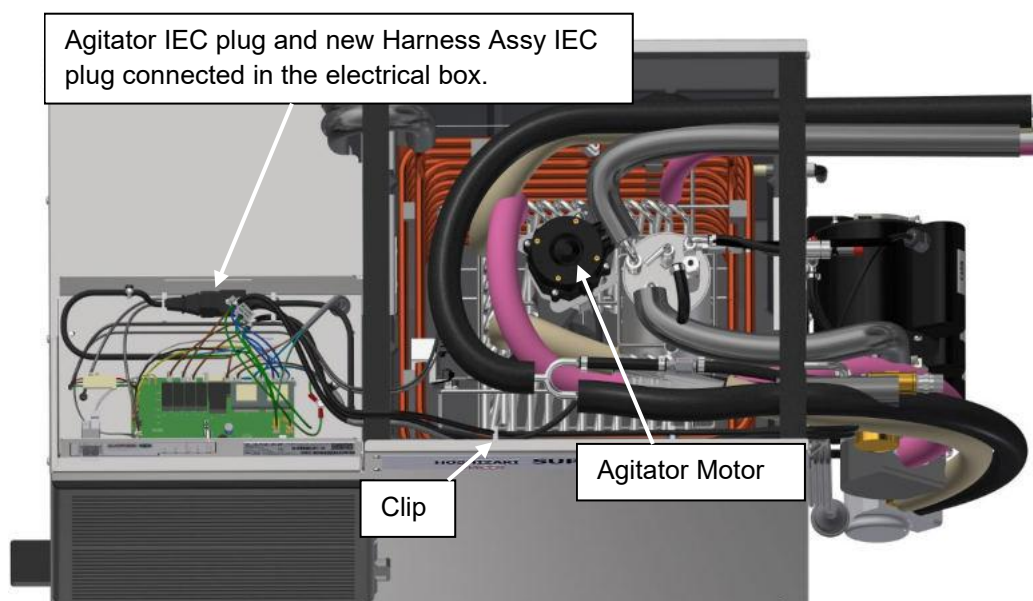
**IMPORTANT:
HARNESS MUST BE SECURED IN THE “P-CLIP” AS SHOWN ABOVE
BEFORE ENERGISING.**

STEP 5 - Installing the new agitator motor with an IEC plug fitted.

5.1 Fit the Agitator motor and blade into its place in the water bath cradle.

5.2 Run the Agitator cable through the clips pm the edge of the water bath into the electrical control box and connect to the newly installed IEC plug.

NOTE: The IEC plugs for the agitator motor must be inside the electrical control box, and all the leads must be contained in the divider bracket hole as not to get damaged by the lids. The Harness must be secured as shown in STEP 4.2.



STEP 6 – Cleanup & testing

6.1 Refit the Electrical control box lid.

6.2 Complete the Electrical Safety Inspection and Testing (Test & Tag) procedure in line with company and governing standards.

6.3 With a successful electrical test, reconnect the chiller to power and energize.

6.4 Confirm the agitator is functioning correctly.

6.5 Replace the chiller lid.