

MC-MP SPA SYSTEMS

• by Gecko Alliance •

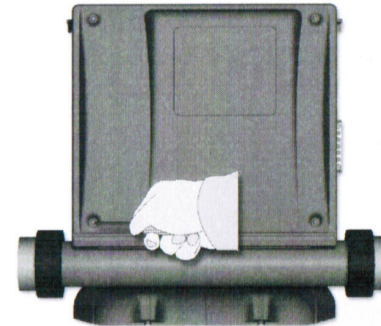
How to replace the board

Visual step-by-step guide

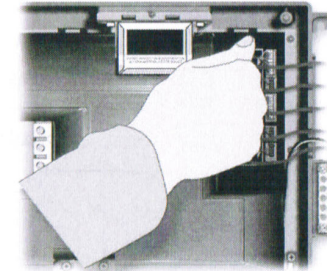


How to Replace the Board

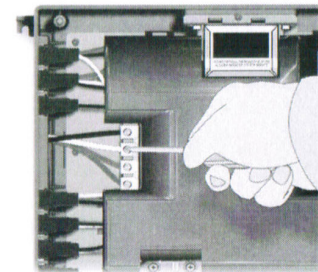
When replacing the MC-MP board, it is important to make sure to turn power off before proceeding and to disconnect the breaker!



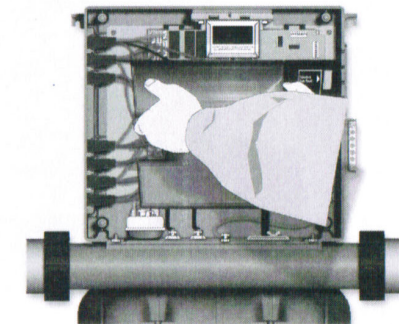
- 1 • Loosen 4 screws holding Spa Pack cover and remove.



- 3 • Unplug all connectors located in the upper right corner of the power box.



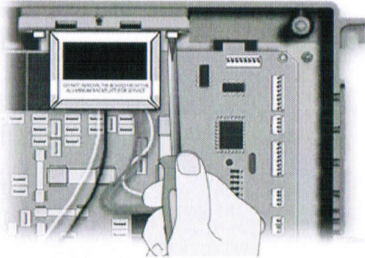
- 2 • Disconnect power input cables.



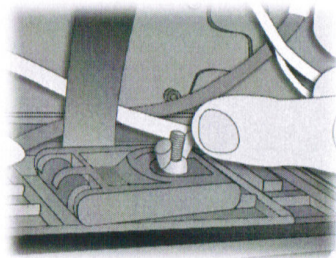
- 4 • Insert the end of a flat screwdriver into the slots at the top of the plastic cover to remove black plastic cover protecting the circuit board.

Lift up the cover on both sides and remove it from the power box.

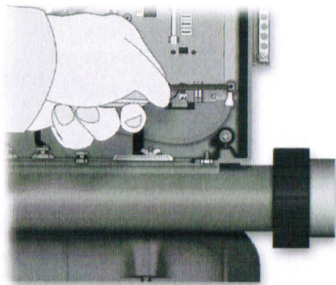
HOW TO REPLACE THE BOARD



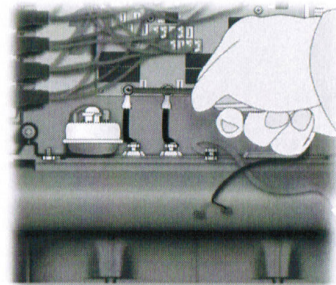
- 5• Remove the transformer.



- 7• Remove wing nut, open plastic latch and carefully pull hi-limit rubber sensor out of place.

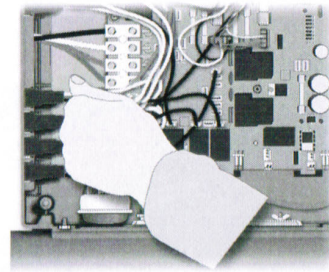


- 6• Disconnect ground cable.

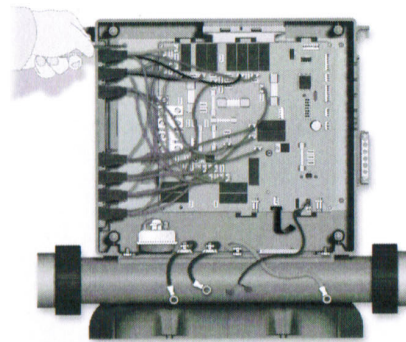


- 8• Disconnect heater and pressure switch cables.

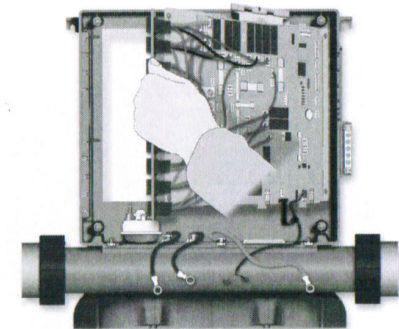
HOW TO REPLACE THE BOARD



- 9• Remove Unslot AMP or J&J mini connectors from side of the pack. Remove the 3 screws that hold the small metal plate in place. Remove all Amp or J&J connectors.



- 10• The circuit board is supported by a metal plate, with the entire assembly being held in place by 5 screws (one attached to ground wire). Please note that in certain models the assembly is held by 3 additional screws located under the board. In this case the board must be removed before getting access to the additional screws. Remove screws and disengage the defective board/ plate assembly.



- 11• Correctly align replacement board/metal plate assembly with original screw holes and reattach to enclosure with screws. Please note that on all models the re-installation of the screws located under the board is no longer needed.

- 12• Re-connect the Amp or J&J connectors.

- 13• Re-install the transformer.

- 14• Re-connect heater and pressure switch cables.

- 15• Put hi-limit sensor back in place.

- 16• Re-connect ground cable.

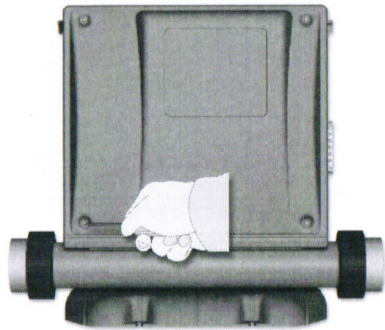
- 17• Verify all connections. Assemble metal cover.

- 18• Re-connect all connectors located in the upper right corner of the power box.

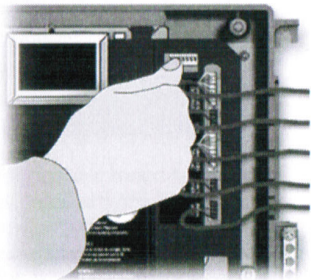
- 19• Re-connect power input cables. Re-install Spa Pack cover and turn power back on.

How to Replace the Board (since year 2005)

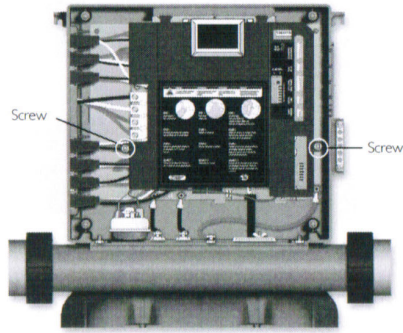
When replacing an MC board, it is important to make sure to turn power off before proceeding.



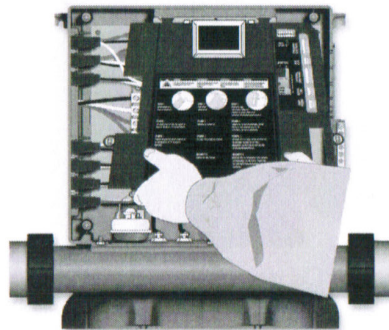
- 1• Loosen 4 screws holding spa pack cover and remove. Disconnect power input cables.



- 2• Unplug all connectors i.e.: keypad(s), temperature sensor etc. located in the upper right corner of the power box.

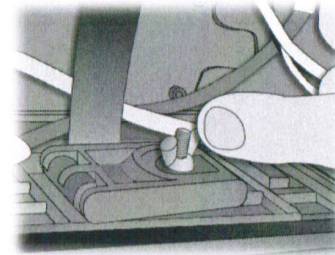


- 3• Loosen the 2 screws located in the middle of each side of the metal cover.

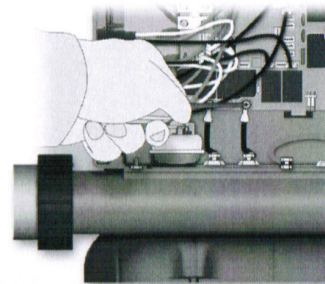


- 4• Lift up the metal cover and remove it from the power box.

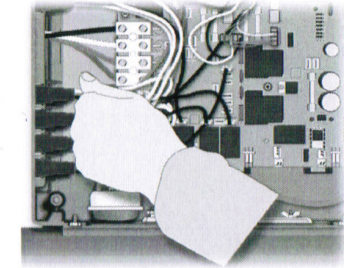
How to Replace the Board (since year 2005)



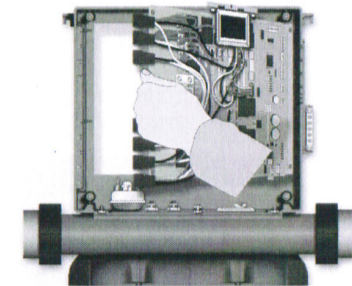
- 5• Remove wing nut, open plastic latch and carefully pull hi-limit rubber sensor out of place.



- 6• Disconnect heater output by removing two screws at the bottom of circuit board. Disconnect pressure switch.



- 7• Unslot AMP or J&J mini connectors from side of the pack. Remove the 3 screws that hold the small metal plate in place. Remove all Amp or J&J connectors.



- 8• The circuit board is supported by a metal plate, with the entire assembly being held in place by 5 screws (one attached to ground wire). Remove screws and disengage the defective board/ plate assembly. **Note:** transformer remains attached to board.

- 9• Install the metal plate by sliding the 2 metal tabs into the plastic slots. Correctly align replacement board/ metal plate assembly with original screw holes and re-attach to enclosure with 7 screws (2 more screws have been added).

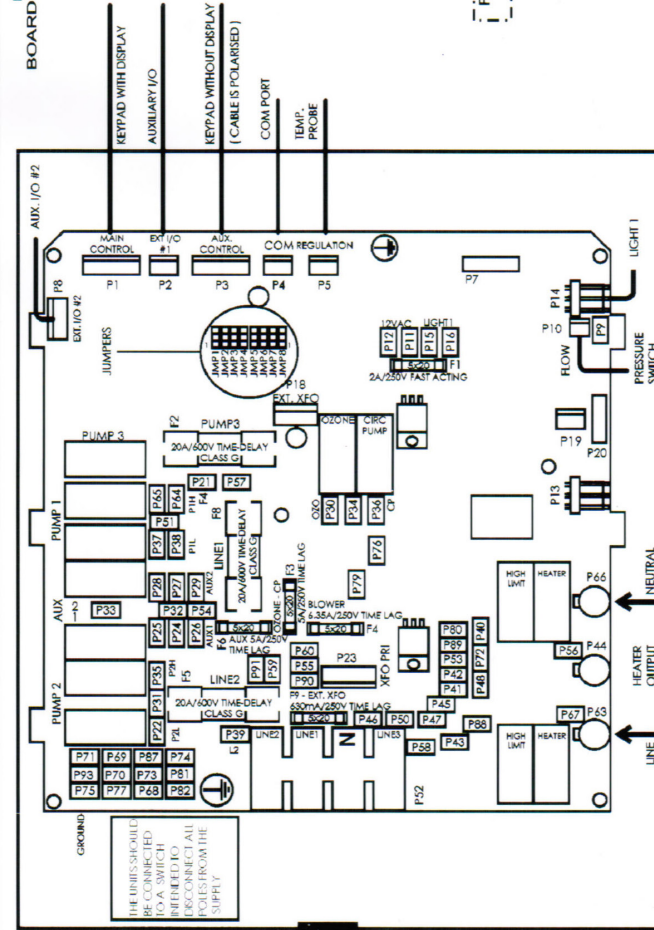
How to replace the board (since year 2005)

When replacing an MC-MP board, it is important to make sure to turn power off before proceeding.

10. Now, reinsert J&J mini connector to pack side.
11. Switch transformer from one plate to the other.
12. Re-connect heater cables.
13. Re-connect pressure switch and high temperature sensor cables.
14. Verify all connections. Reposition plastic cover.
15. Re-connect keypad(s) and temperature sensor connections.
16. Re-connect power cable and turn power back on.



MODEL NUMBER:
BOARD ASSY KIT MC-MP-CE-GE
14470-01A



JUMPER SETTINGS

JMP1	102A	116A PHASES
JMP2	103A	8 KEYS KEYPAD
JMP3	104A	10 KEYS KEYPAD
JMP4	105A	12C-8
JMP5	106A	12C-4
JMP6	107A	12C-8
JMP7	108A	NOT USED
JMP8	109A	NOT USED
JMP9	110A	NOT USED
JMP10	111A	NOT USED

PUMP #1 CONNECTOR

P71	GREEN / GROUND
P48	BLUE / NEUTRAL
P37	BLACK / LOW SPEED
P45	BROWN / HIGH SPEED

PUMP #2 CONNECTOR

P93	GREEN / GROUND
P45	BLUE / NEUTRAL
P35	BROWN / HIGH SPEED

PUMP #3 CONNECTOR

P75	GREEN / GROUND
P40	BLUE / NEUTRAL
P21	BROWN / LINE

CIRC. PUMP CONNECTOR

P68	GREEN / GROUND
P41	BLUE / NEUTRAL
P35	BROWN / LINE

LIGHT CONNECTOR 24 W MAX.

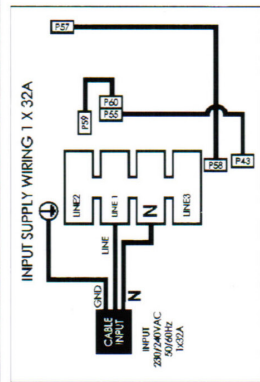
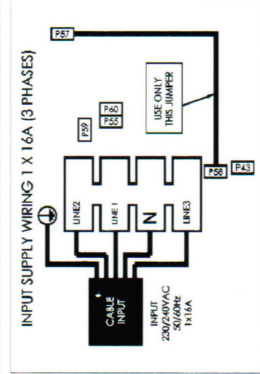
P14	LIGHT 1
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OZONE CONNECTOR

P87	GREEN / GROUND
P46	BLUE / NEUTRAL
P30	BROWN / LINE

HEATER

P60	GREEN / GROUND
P60	BLUE / NEUTRAL
P43	BROWN / LINE



- USE COPPER CONDUCTORS ONLY.
- THIS APPLIANCE MUST BE SUPPLIED THROUGH A RESIDUAL CURRENT DEVICE (RCD) HAVING A RATED RESIDUAL OPERATING CURRENT NOT EXCEEDING 30mA.
- FOR SUPPLY CONNECTION USE CONDUCTORS SIZED ON THE BASIS OF 60°C AMBIENT BUT RATED MINIMUM 90°C.
- SUITABLE ONLY FOR INDOOR USE OR WHEN INSTALLED UNDER THE WEATHERPROOF SORT OF A SPA.
- PLEASE MAKE SURE THAT JUMPERS SETTING IS PROPER BEFORE POWER-UP.



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