

Heater Replacement 1998—2014

This process is used on Dimension One Spas with a "Trombone" style heater from 1998-2014. The photo shows a typical example of the equipment layout for a 2-pump system.

You'll need to shut off power at the GFI and drain the spa to get started.



Step 1:

Cut the zip tie holding the High Limit Sensor in place. (Fig 1a)



Fig. 1a

Slide the High Limit Sensor out from under the pad. (Fig 1b)



Fig. 1b

Step 2:

Remove the nylon clamp holding the hose in place. (Fig 2a)



Fig. 2a

Remove the metal bracket holding the heater tube in place. (Fig 2b) You won't need to replace this metal clamp later. The heater will stay in place without it.

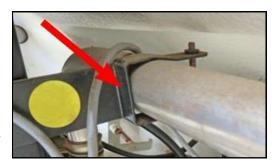
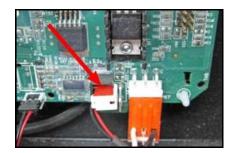


Fig. 2b

Step 3:

Unplug the flow switch connector from the PC Board. Please call us if you need help locating this connector.



Step 4:

Cut the flow switch wire at the top of the switch. Throw the cord away.



Step 5:

Cut the 4 heater wires where they enter the metal equipment box. (Fig 5a)

Disconnect and remove the wires you've just cut.

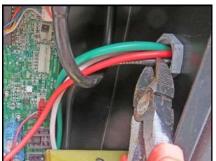


Fig. 5a

Unscrew and remove the thin nut holding the plastic heater box to the metal equipment box. (Fig 5b)



Fig. 5b



Remove the wire between the heater lug and grounding lug. (Fig 6a)

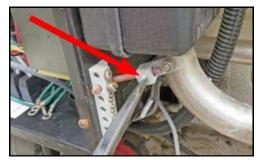


Fig. 6a

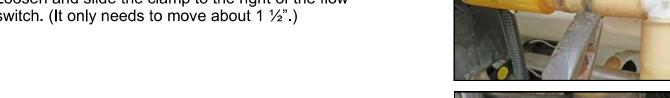
Remove heater grounding wire at grounding screw. (Fig 6b)



Fig. 6b

Step 7:

Loosen and slide the clamp to the right of the flow switch. (It only needs to move about 1 ½".)



Step 8:

Loosen hose clamp where lower heater hose attaches to the circulation pump. (The middle of this pump can be red, blue or black).



Step 9:

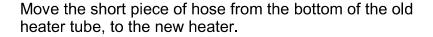
Separate the flow switch from the hose.

The heater assembly is now loose and can be removed. You'll have to be a little creative and use some muscle to get the assembly out. Just be patient and you'll figure something out.



Step 10:

Set the old heater next to the new heater as pictured.







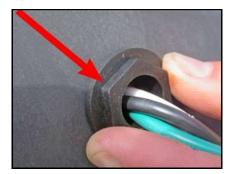
Step 11:

The new heater has an adapter that you won't need for this installation. Remove and dispose of the adapter.



Step 12:

Remove the plastic nut from the outside of the new heater box and throw it away.



Step 13:

Align the new heater in place. Feed the 4 wires through the metal box.



Step 14:

Attach the new flow switch tee to the old hose. (Fig 14a & 14b)

Slide the hose clamp back to the left and back in place. (Fig 14c)







Fig. 14a

Fig. 14b

Fig. 14c

Step 15:

Reattach the circulation pump and hose.



Step 16:

Thread the 4 heater wires through the mounting nut and tighten it in place.



Step 17:

Attach the new heater wires to the circuit board. (Fig 17a)

Attach the ground wire to the grounding nut inside the metal box. (Fig 17b)



The grounding lug on the new heater tube is in a different position so we'll have to make our own new ground wire to attach outside the box. Taking the original green wire from the old heater, cut a piece 6" long. Remove about 3/4" of insulation from each end, (Fig 18a), and twist the wire strands.

Attach one end onto the heater lug and the other on the grounding bar as pictured, (Fig 18b).

Step 19:

Plug the flow switch connector back on the PC Board.

Step 20:

Side the High Limit Sensor under the new foam pad on your heater.

Step 21:

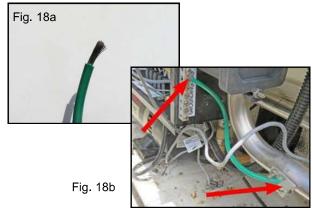
Reattach the nylon clamp from Step 2.



Fig. 17a



Fig. 17b







Congratulations, your installation is complete. Fill the spa with water and turn power back on at the GFI.