



AP010-00004
Furnace Installation Instructions

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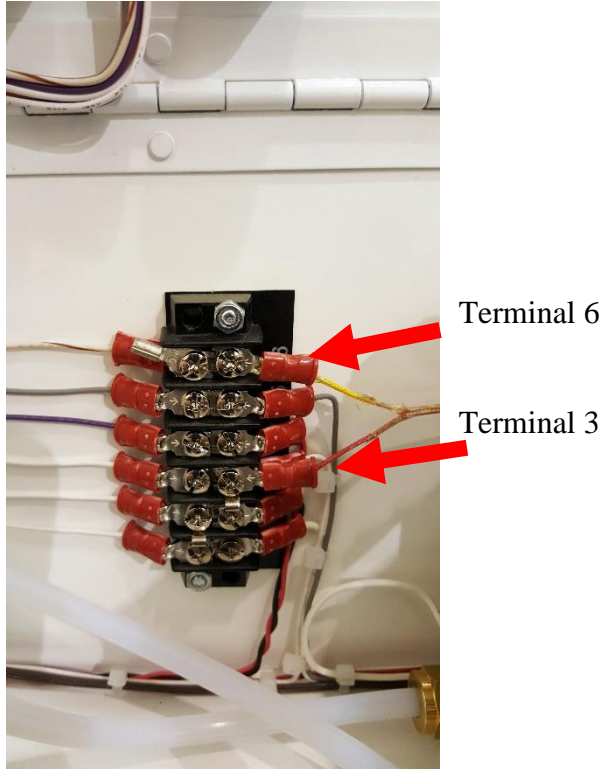
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GF1900 Furnace installation

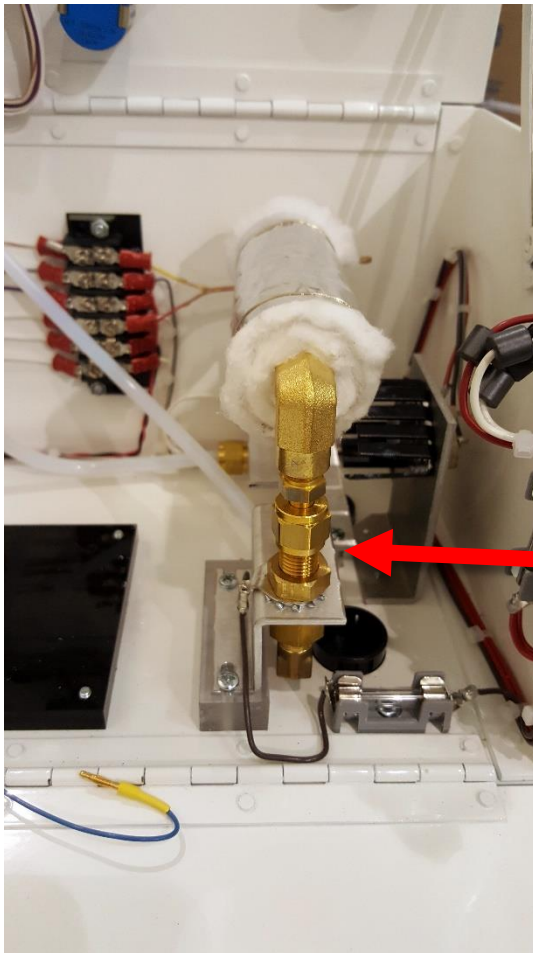
Caution! Interscan is not responsible for damaged during installation. Breakage is not covered under Warranty.

Turn GF1900 off and allow the furnace to cool. Never work with a hot furnace as severe burns will occur. Disconnect power from GF1900.



Open the GF1900 by turning the two screws at the top of the right-hand side $\frac{1}{4}$ turn counter-clockwise. Open the right-hand door and flip the top upward to expose the inside of the monitor. Locate terminal block on the back wall of enclosure. Note wires from furnace at terminals 3 and 6. The yellow wire for the new furnace must connect to Terminal 6 and the red to Terminal 3. Reversing the wire connections will result in thermal runaway which will damage the furnace.

Loosen the screws at terminals 3 and 6 one turn counter-clockwise. The furnace wires can then be removed by gently pulling them away from the terminal block.



Front Nut.

Use a 9/16 inch open end wrench to loosen the two furnace nuts (Front and Rear) until you can remove old furnace by gently lifting upward.



Loosen the two Phillips-head screws until the front furnace bracket freely slides. This must be done to prevent the furnace from breaking as the length of each is slightly different.

Front Furnace Bracket

Phillips-head Screws

Orient the new furnace so the wires point to the back wall of the GF1900. Carefully insert the new furnace into position while sliding the front bracket to allow fittings to align.

Note: There are alternate positions for the front bracket screws should alignment not be able to be achieved. Always remove the furnace before relocating the front bracket screws.

Finger tighten the furnace nuts (front and rear) if fittings align, and then snugly tighten the two Phillips-head screws.

Use the 9/16 inch open end wrench to tightened the front and rear furnace nuts. DO NOT overtighten as the furnace will break!

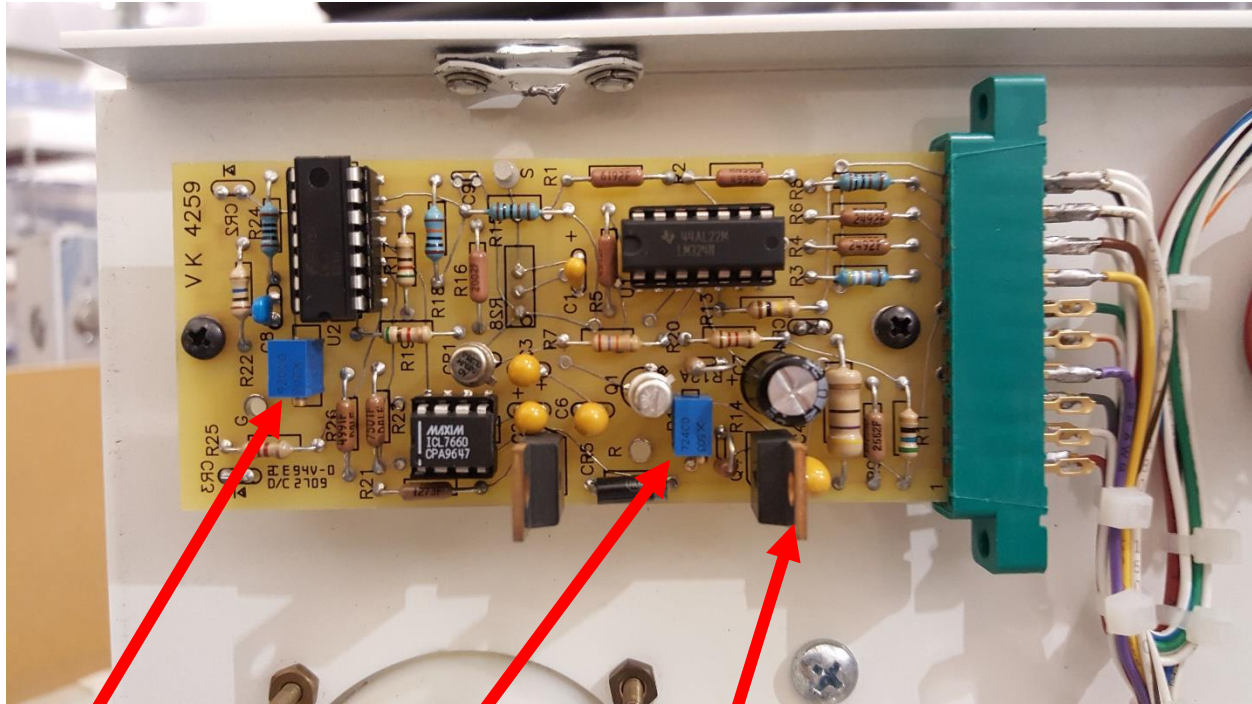
Insert the fork lug with red colored wire into terminal block at position 3 and tighten Phillips screw. Insert the fork lug with yellow colored wire into terminal block at position 6 and tighten Phillips screw.

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The furnace must now be setup to properly operate.

Note: You must use a Digital Voltmeter (DVM) with a minimum 10 megaohms input impedance to make voltage measurements.

Set the DVM to measure 35 mVDC. Connect the DVM ground lead to terminal block position 1, 2 or 3. Connect the positive lead to terminal block position 6.



R27

R12

Q4

Main Circuit Board

The potentiometer R27 is used to adjust the voltage at which the furnace Ready light turns on. Connect a power source to the GF1900. Turn the function switch to ON. Monitor the voltage between ground and terminal block position 6. Adjust R27 so the Ready light turns on when the voltage reaches 35.0 mVDC. The adjustment must be performed quickly or the heating element of the furnace will be damaged. Proper adjustment is indicated by the Ready light staying on or flickering while the voltage remains at 35.0 ± 0.1 mVDC. Set the DVM to measure 17.0 VDC. Move the positive lead to the metal tab of Q4.

The Potentiometer R12 is used to adjust the voltage at Q4 and therefore the activation time of the furnace Ready light. A higher voltage decreases the activation time. Activation time should be between seven to nine minutes. The voltage at Q4 must never exceed 18.0 VDC. Adjust the voltage at Q4 to 17.0 VDC. Turn the Function Switch to off and allow an hour for the furnace to cool. Turn the function switch to ON and monitor how long before the Ready light activates. Repeat changing the voltage and cooling/heating the furnace until the appropriate activation time is reached. Perform calibration as indicated in the user manual after completion of these adjustments.

The Instructions herein are not equivalent to Factory training. Interscan Corporation assumes no implied liability for damage or improper operation other than that expressed under Parts Warranty. Yearly factory training is recommended.

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