Repair Instructions

Adjusting the Elco fan speed in a Climatron reach in Cabinet but changing the wiring.

To suit: Climatron Reach In Growth Cabinets

Approvals		
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Safety Reminder

Adjusting the wiring of the fan requires the technician to hold a suitable electrical licence.

These instructions do not purport to address all potential safety issues, if any, associated with the product's use. It is the responsibility of the user of these instructions to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.
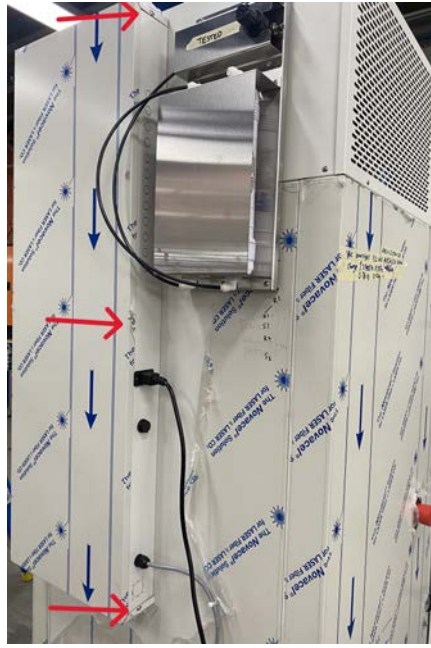Before attempting any of the following, perform the actions listed below:
• Turn OFF power to the machine.
• Unplug the machine.

Summary

These instructions how to modify the electrical connections of the fan in a Climatron to allow it top operate at low speed

Tools Required	
Phillips Head Screw Driver	
Flat Head Screw Driver	

Follow the shutdown procedure in the [Climatron manual](#), then unplug the power cord from the GPO.

To remove the electrical box cover, you need to take off the six screws that are shown above.

The Elco fan may be one of two different models that are used in the Climatron cabinets. One has a grey power cable and other one has a black power cable. Each has a different wiring configuration but in each instance the (low speed) red wire has to be added to the (high speed) brown or blue wire in the terminal block. This will slow the fan speed.

The Elco fan with the grey wiring has the following wiring configurations:

Blue Wire = Neutral
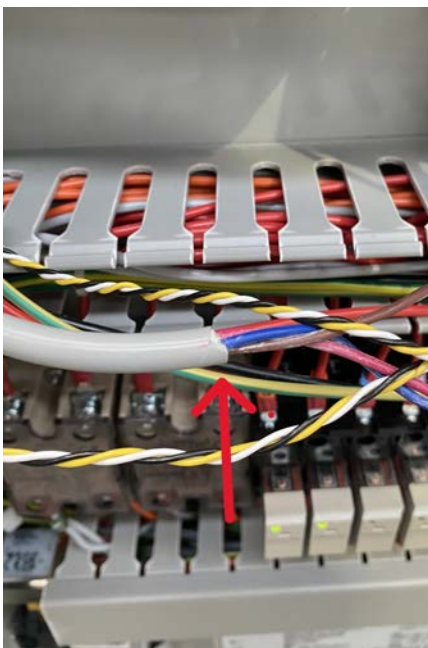Brown Wire = High Speed
Red Wire = Low Speed

As shown in the above picture this configuration is also noted on the fan itself.

The Elco fan with the black wiring has the following wiring configurations:

Brown Wire = Neutral
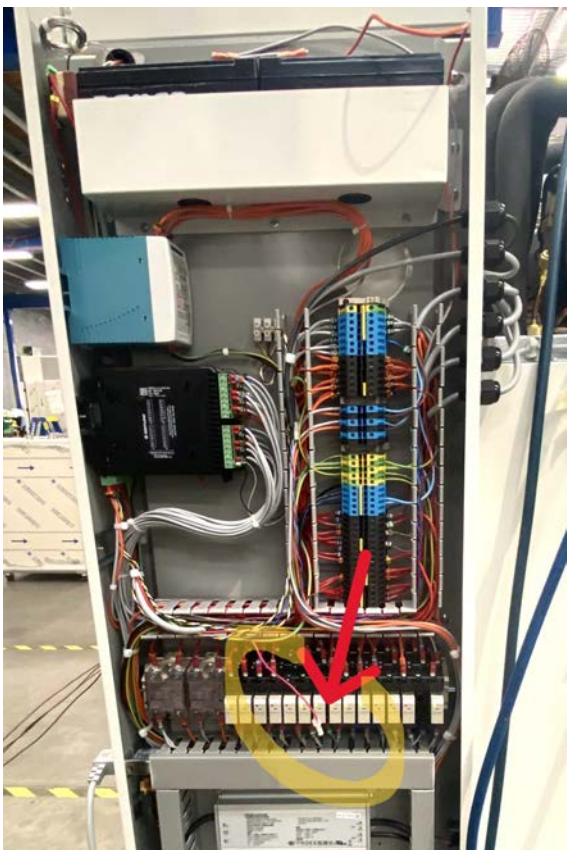Blue Wire = High Speed
Red Wire = Low Speed

As shown in the above picture this configuration is also noted on the fan itself.

The power cable coming for the fan enters the electrical box at the top left of the cabinet as shown in the below pictures (in this instance it is the fan with the grey power lead). It traces down the side of the electrical box along the cable tray with the (high speed) wire (in this case brown) attached to the terminal block.
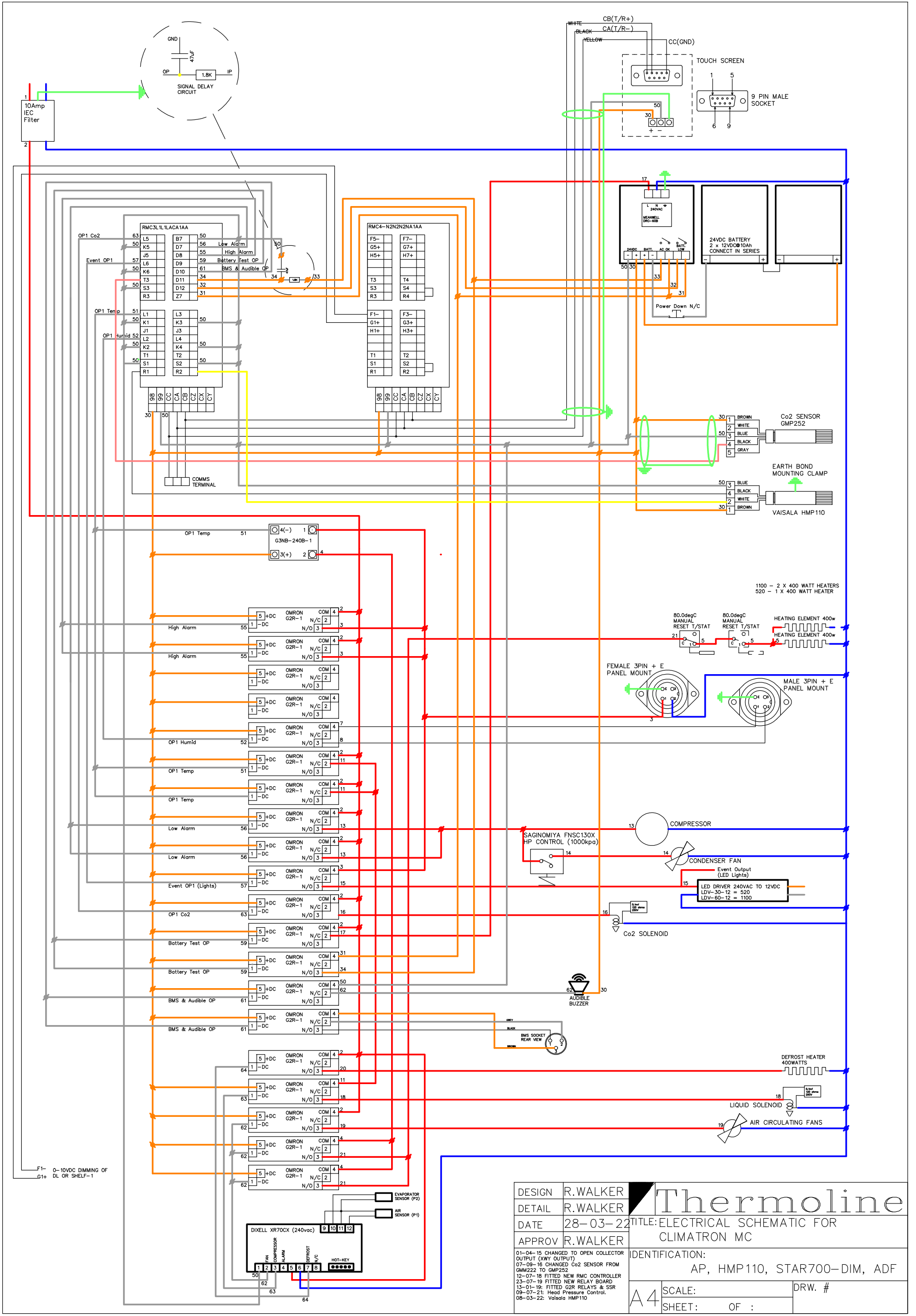

Unscrew the fixing screw and then place the red wire into the sample fitting on the terminal block where either the brown and blue wire is currently fitted and remove the wire.

The red wire, which is for low speed, is currently not connected to the terminal block, but is left loose with a BP connector as shown in the pictures below. To connect it to the terminal block, you need to remove the BP connection. Once that is done, you can combine it with either the brown or blue wire, which are for high speed, and connect them both at the same location on the terminal block.

Taking both the low speed and high speed wires fit them both into the terminal block together. Re tighten the fixing screw to secure the wires in place.

Thermoline

DESIGN	R.WALKER
DETAIL	R.WALKER
DATE	28-03-22
APPROV	R.WALKER

TITLE: ELECTRICAL SCHEMATIC FOR CLIMATRON MC

01-04-15 CHANGED TO OPEN COLLECTOR OUTPUT (XWY OUTPUT)
07-09-16 CHANGED Co2 SENSOR FROM GMM222 TO GMP252
12-07-18 FITTED NEW RMC CONTROLLER
23-07-19 FITTED NEW RELAY BOARD
13-01-19: FITTED G2R RELAYS & SSR
09-07-21: Head Pressure Control.
08-03-22: Vaisala HMP110

IDENTIFICATION:
AP, HMP110, STAR700-DIM, ADF

A4

SCALE:
SHEET: OF :

DRW. #

Plug the Climatron cabinet back into the GPO to turn the unit back on.

Support and Contact

Repair and Support is available over the telephone Monday through Thursday from 8:30am to 4pm and Friday 8:30am to 2pm. Please contact service@thermoline.com.au for email technical support.
You can also visit our website at www.thermoline.com.au for access to additional useful troubleshooting guides, operating manuals, and technical information.