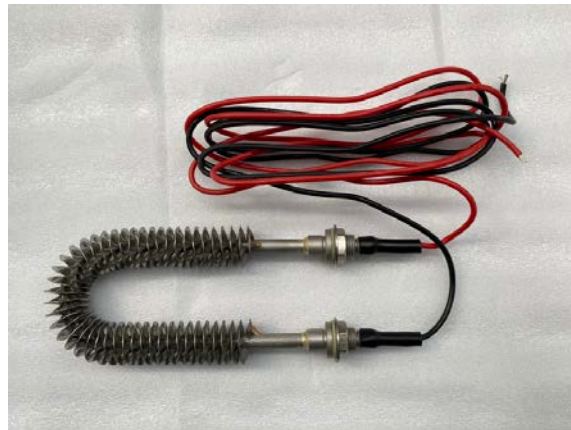

Repair Instructions

To replace the heating element in a Blanket Warmer or Incubator

To suit: TBW-520/1100F TI-520/1100F



Approvals

Approvals		
Written By:	Reviewed By:	Approved By:
Darren Assey	Duncan Smeaton	Duncan Smeaton

Safety Reminder

These instructions do not cover all possible safety concerns related to performing the work. Users must establish suitable safety and health procedures and assess regulatory constraints before use.

Prior to proceeding with any tasks, complete the following steps:

- Switch OFF the machine's power.
- Disconnect the machine.

For any electrical work, ensure it is carried out by a contractor holding a valid electrical license.

Summary

Instructions on how to replace a heater in a TBW-520/1100F or TI-520/1100F

Tools Required	
10mm Spanner	
Philips head screwdriver	

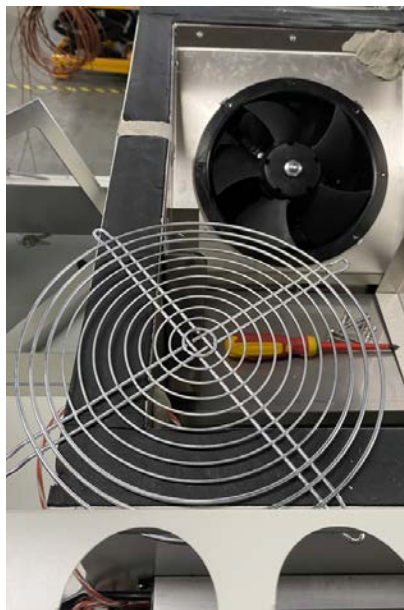
Kit Contents		
Item	Description	Quantity
21415	Heating Element	1

Section 1: Preparation



Undo the top cover of the conditioning duct of the cabinet using 10mm spanner or socket .

Remove the cover to reveal the fan (and the lint filter for a blanket warmer).



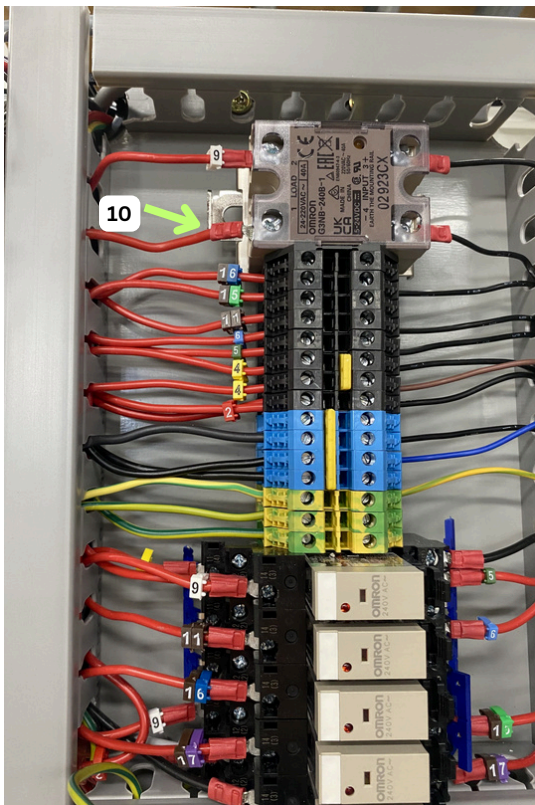
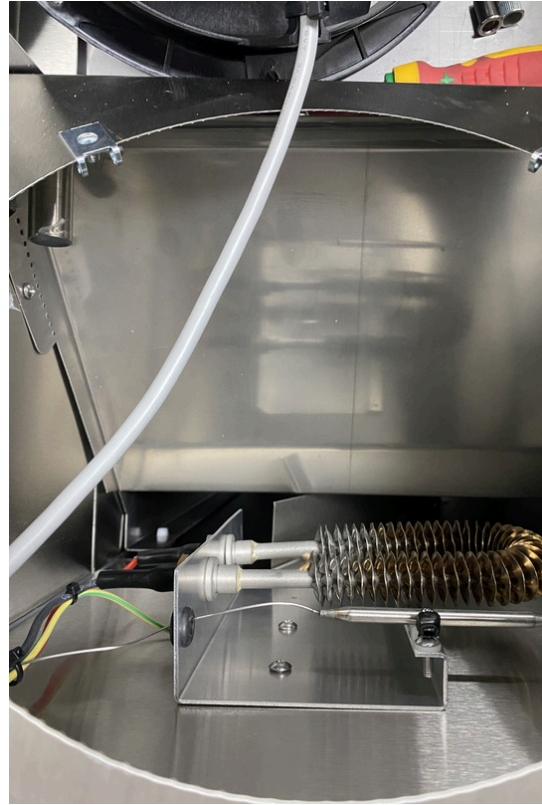
Remove the screws holding fan and protector in place First remove the fan protector and next, gently pull the fan assembly forward to reveal the heating element.



Peel back the putty to reveal the last screw and heating element wires

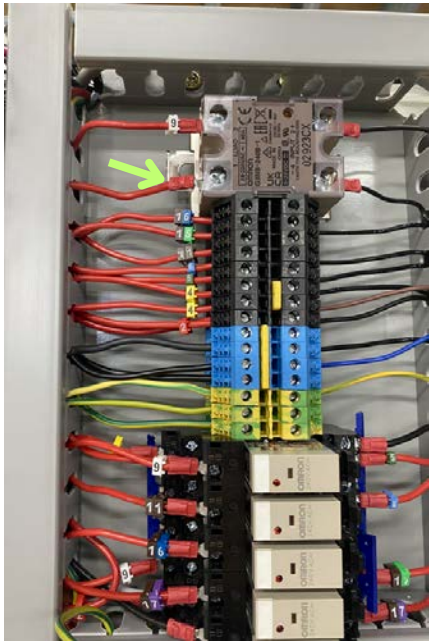
Please note: Another option to access the heating element is to remove putty and then remove the screws holding the fan motor plate in place allowing you to tilt it forward to access the heating element.

Section 2: Removing the Heating Element



Remove the putty from the cabinet, putting it aside as you will need once the new heater has been installed. Remove the wires connecting the heating element to the cabinet. The red wire (No.10 in the above picture with the green arrow) is fixed to the relay. The neutral (black) wire can be traced from the heating element to the appropriate connection in the terminal block (blue part of the block). Once the wires have been disconnected from the relay and terminal block, remove the locking nuts and unthread the heating element from the bracket.

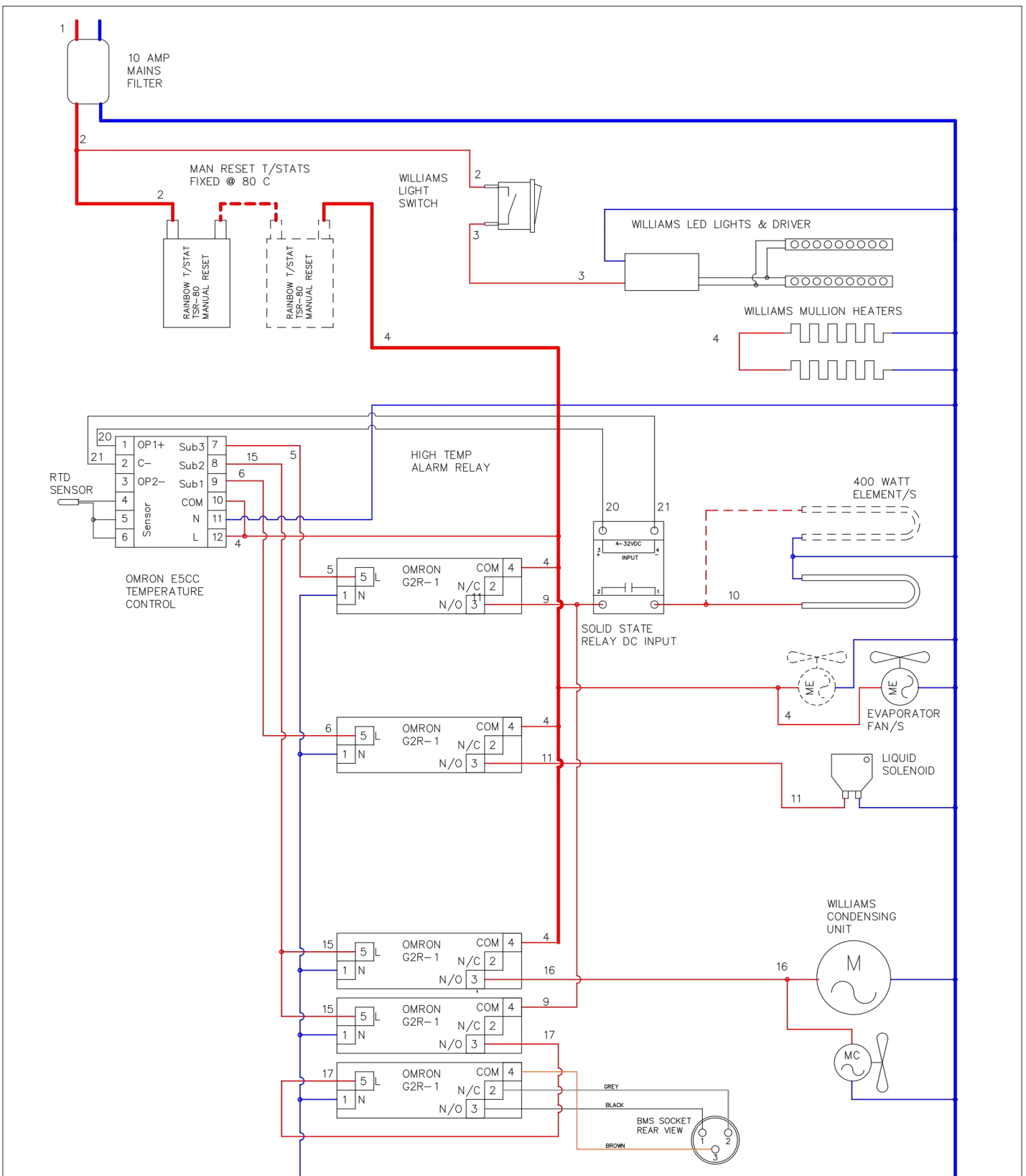
Section 3: Installation



Thread the heating element wires through the bracket on the cabinet wall remembering to ensure the lock nuts are put over the wires at the correct locations to hold the element in the bracket. Next, thread the wires through the back wall. Attach the red wire to the relay using an appropriate fork terminal. Attach the neutral wire back into the terminal block. A wiring diagram is supplied on the next page for reference.

Once the wires are fixed, reattach the putty in the back corner of the conditioning duct.

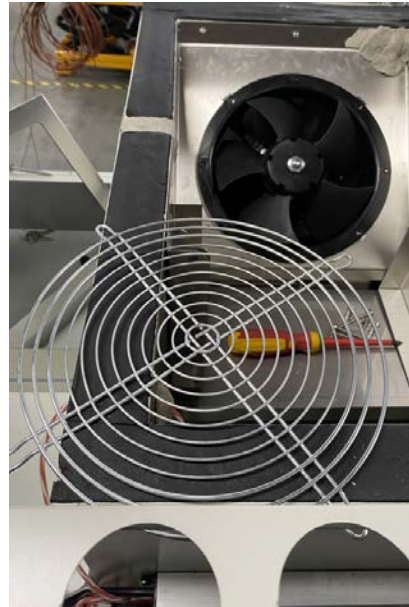
Please note: The electrical diagram on the below page includes information for the refrigerated incubator. The refrigeration circuit and additional heater is only applicable for the refrigerated incubator. The incubator and the blanket warmer are electrically the same with the blanket warmer having a lint filter in the conditioning duct.



NOTE: COMPONENTS IN DOTTED LINES ARE TRI-1100 MODEL ONLY.
 7-CORE FLEX FROM BOX TO FRONT CONTROL:
 1 = NEUTRAL
 2 = 2 LIGHT SWITCH COMMON
 3 = 15 LOW ALARM RELAY
 4 = 4 ACTIVE
 5 = 5 HIGH ALARM RELAY
 6 = 6 SOLENOID RELAY
 E = EARTH

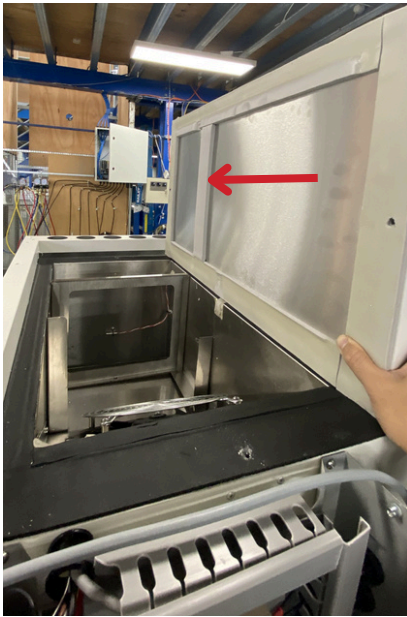
2-CORE FLEX FROM BOX TO FRONT CONTROL:
 20 = SSR +Ve
 21 = SSR -Ve

REFRIGERATED INCUBATORS	01-04-20: Changed to Omron G2R Relays.
MODELS: TRI-520 & TRI-1100	10-12-19: Changed BMS Socket
DRAWING NO: TRI 520 & 1100-ELEC	06-11-18: Disconnection of Mullion Heater.
DESCRIPTION: WIRING DIAGRAM FOR WILLIAMS REFRIGERATED INCUBATORS	6-10-17: Suppressors on relay coils, changes to wire numbers.
ISSUE DATE: 01-04-20	29-07-15: Removed Liquid Inject T/Stat, Sol and Hot Gas Sol.



Once the heater has been installed, replace the fan.

Reattach the fan cover. Please note to place the spacers between the fan cover the plastic rim of the fan.



Replace the lid to the conditioning duct and reattach it with the screws removed earlier.

Please note that the foam strip on the lid should be installed closest to the lint filter (if applicable) as shown above.

Section 4: Power ON

Plug the cabinet back into power and turn on.

Section 5: 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.

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