

Repair Instructions - Replace D-Series Motor

Replace a D-Series motor in Thermoline Ovens



To suit: Thermoline Oven Models TO, TD

Approvals		
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Safety Reminder

Before commencing any repair work on an electrical product, please check your local state/territory legislation in regards to suitable licencing/competences required to perform such work.

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 remove and replace a D-Series motor in a Thermoline oven.

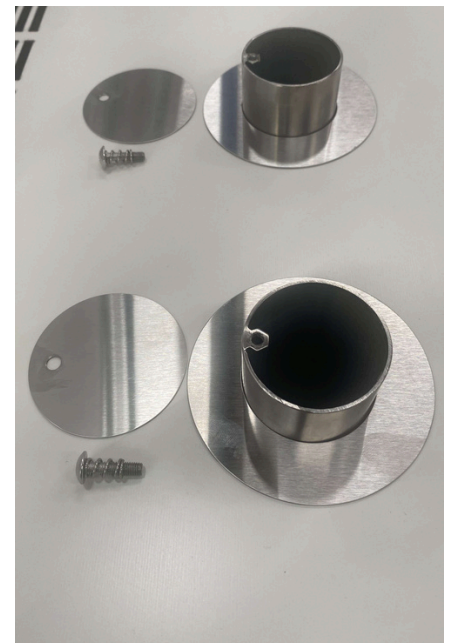
Tools Required	
Screw Driver	Medium Philips Head

Kit Contents		
Item	Description	Quantity
50429	D-Series Motor	1
51326	Blower wheel height guide	1

Section 1: Preparation



Turn off the oven and disconnect from the power supply.

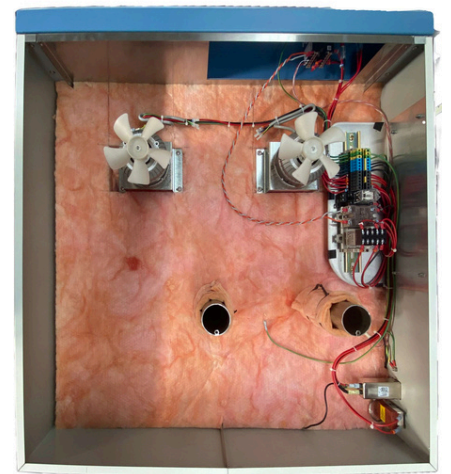


On top of the oven, you will see the exhaust and intake ports. Remove the port covers by removing the screws holding them.

Note: TO models may only have one port.



Remove the six screws holding the top cover of the oven in place; two on either side of the cabinet, and two at the back of the cabinet.



After you remove the screws, tilt the back cover up. Look for a green and yellow earth wire connected via a spade clip located at the back of the oven cover on the underside, next to the rectangular vents. Disconnect this earth wire from the cover to remove it and gain access to the D-Series Motors.



After removing the top cover, ensure the oven is cool before proceeding to remove the internal cover. Firstly remove the oven shelves and Shelvex clips to allow space to remove the internal top cover.

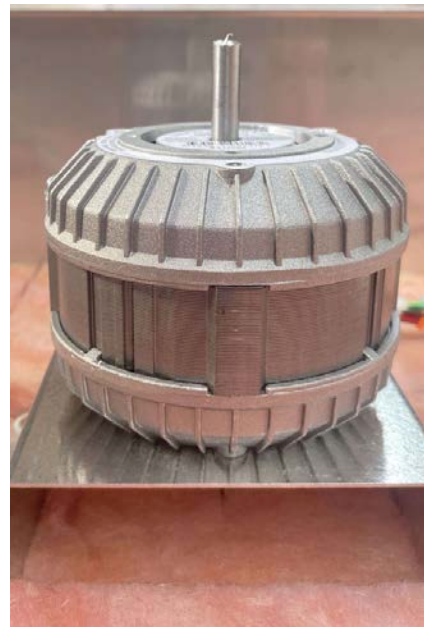


To remove the internal top cover of the oven, you need to unscrew the fixing screws. Depending on the size oven, there may be 4 or 6 screws holding the internal cover. As you unscrew the screws, make sure to support the top panel with your hand or with the assistance of another person to prevent any injury caused by the top cover dropping down once the screws are removed.



After removing the screws, carefully slide out the panel to avoid scratching the walls. Once removed, depending on the size oven, you will have either 1 or 2 the blower wheels in the roof of the oven will be visible.

Section 2: D-Series Motor Removal



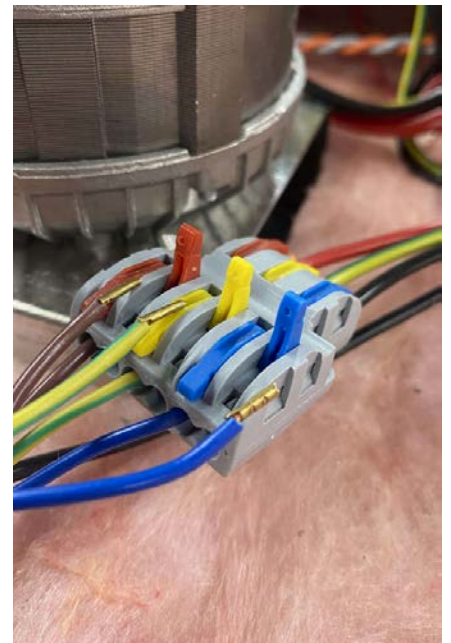
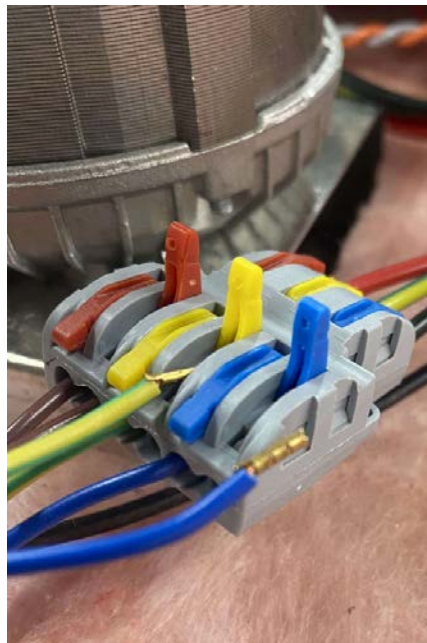
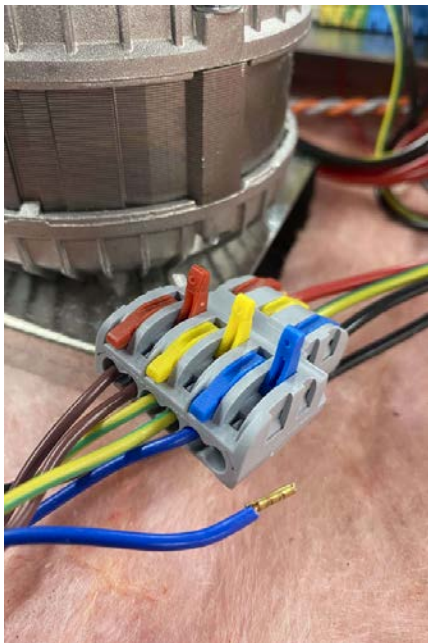
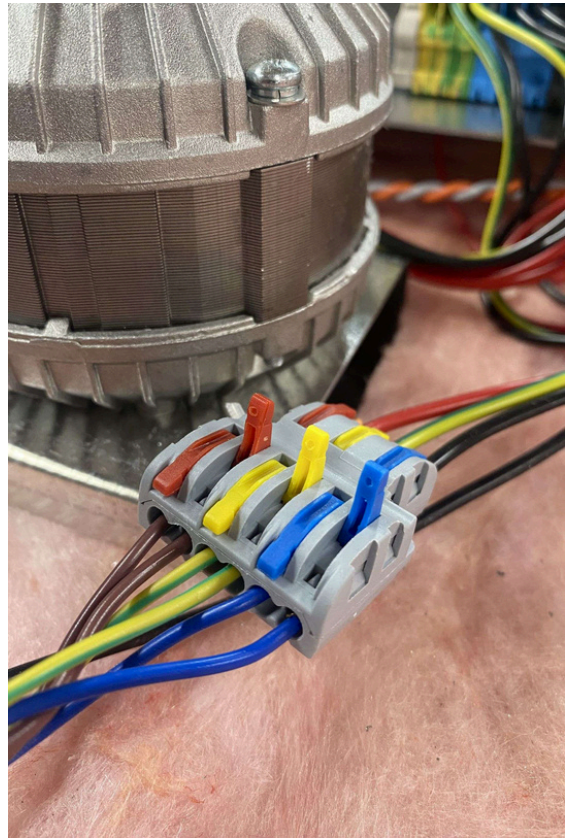
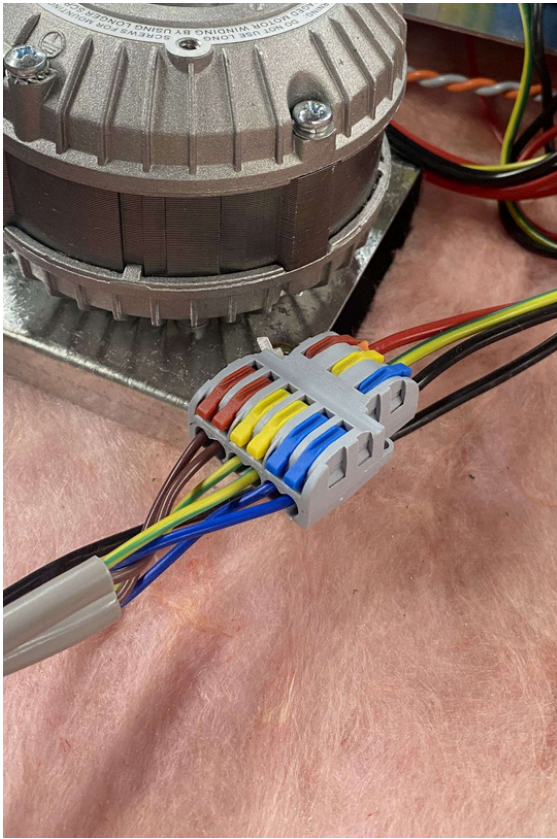
To remove the D-Series motor, first remove the cooling fan by sliding it upwards and off the top shaft.



To detach the blower wheel from the D-Series motor, use a 3mm Allen key to loosen the grub screw that holds it onto the shaft. Be careful not to remove the screw entirely. There are two screws on either side of the fan motor shaft that you need to loosen.

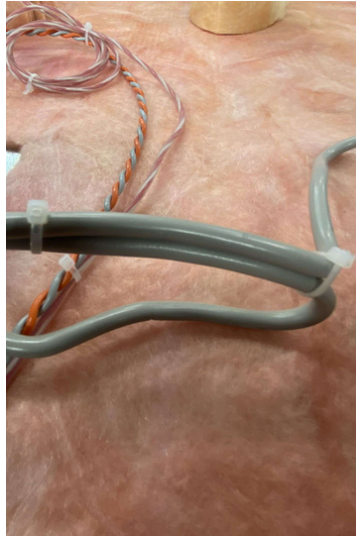


After loosening the grub screws, slide the blower wheel off the central fan motor shaft.

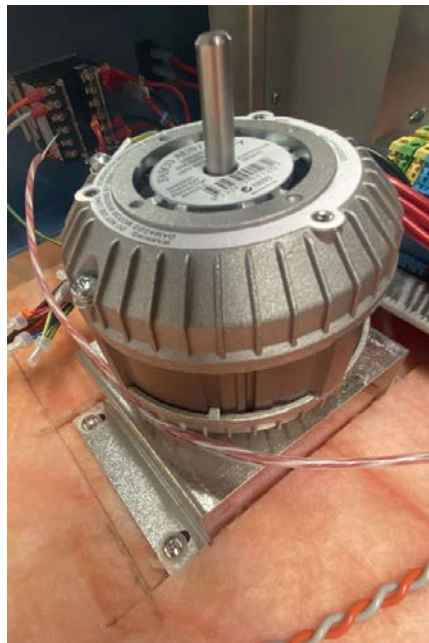
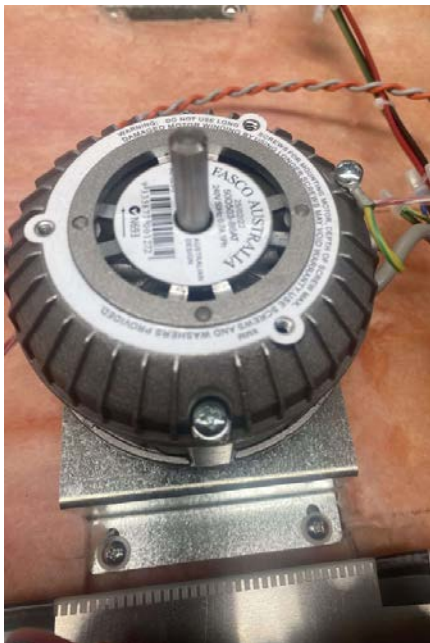


The D-Series motor can be connected to the main terminal block through a connector. To install the D-Series motor, follow the wires backwards from the motor to the connector and lift the tabs to free the wires. Once the tabs have been raised, gently pull out the wires.

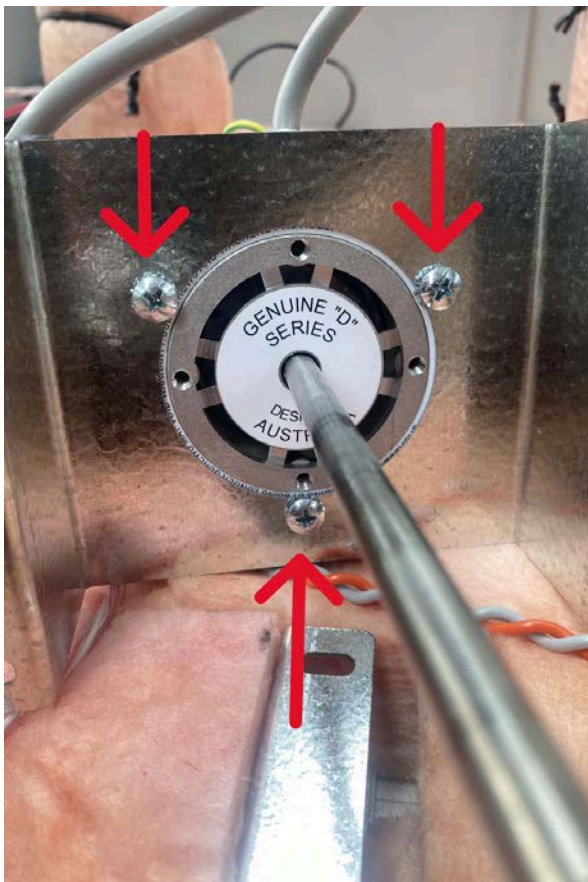
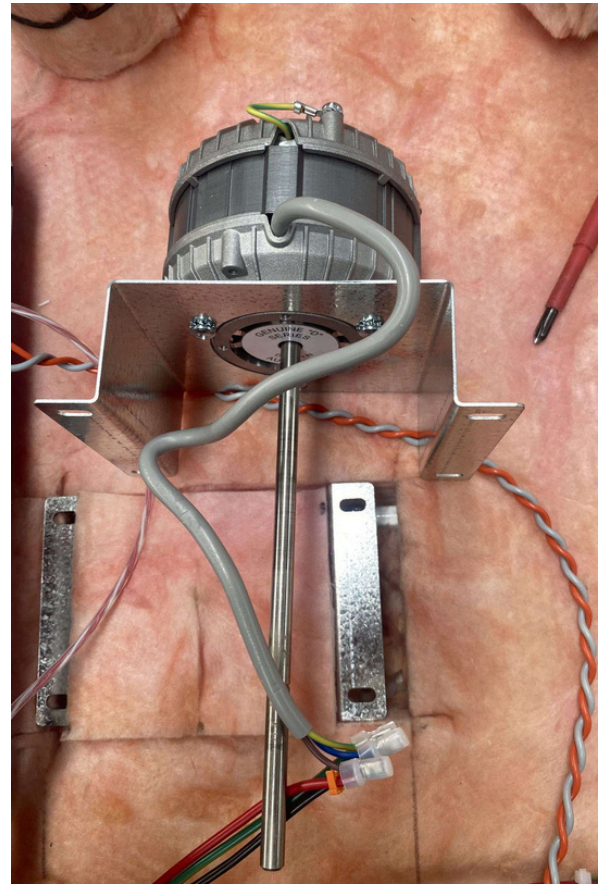
For older oven models without the connector, cutting the wires of the D-Series motor is necessary.



To separate the cables, remove any plastic cable ties that may be holding them together.



To remove the top hat connected to the D-Series motor, you need to unscrew the four screws that are holding it down. These screws are fixed using a nut on the underside. You might need to hold the nut steady with your fingers while unscrewing the screws from the top hat.

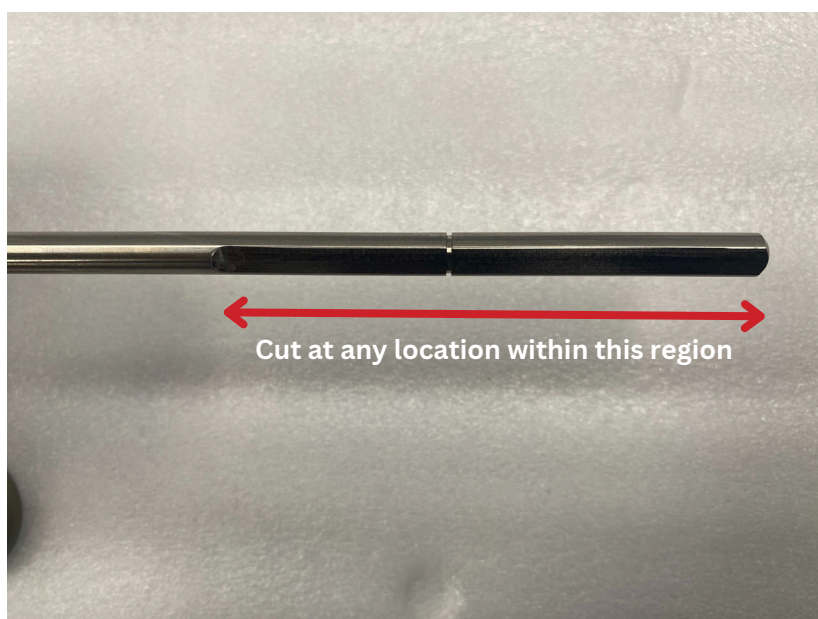


Once you remove the top hat, lift it up and lay it on its side. With the D-Series motor attached to the side, you can unscrew the three screws securing the motor to the top hat. Once these screws are removed, you can take out the motor.

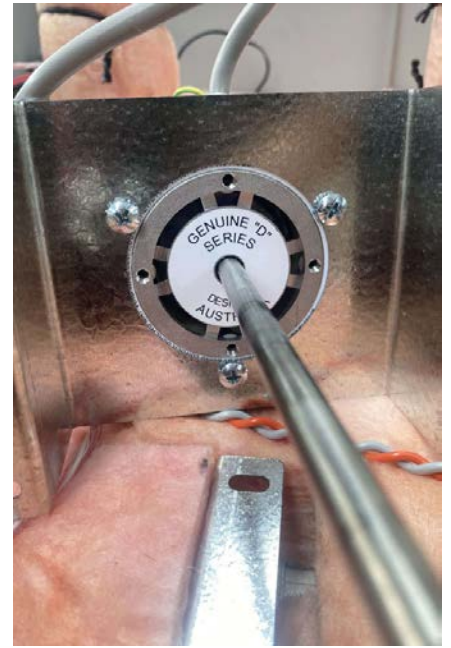
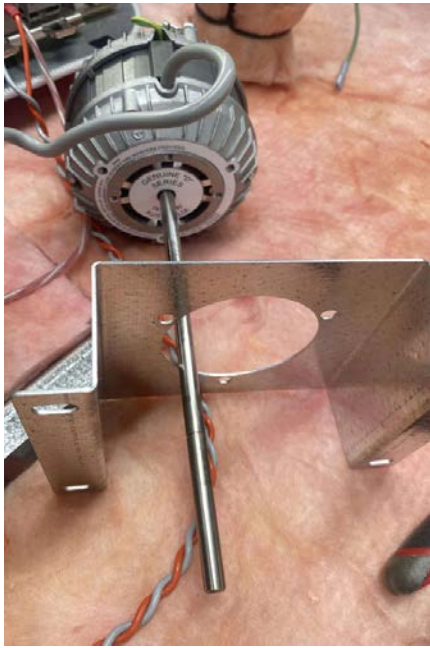
Section 3: Installation the new D-Series motor



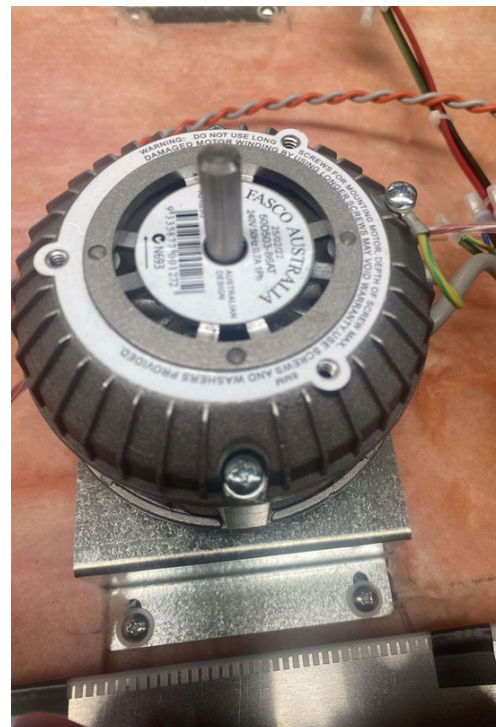
The D-Series motors are supplied in a standard length. As the D-Series motors are used in a variety of Thermoline cabinets, the shaft can be cut down to suit the product that it is going into.



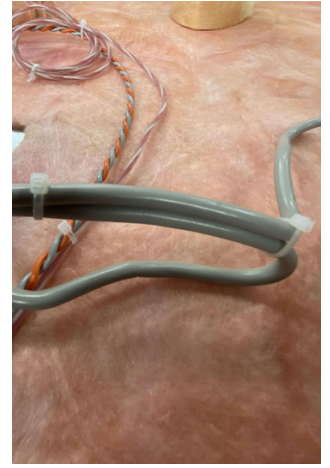
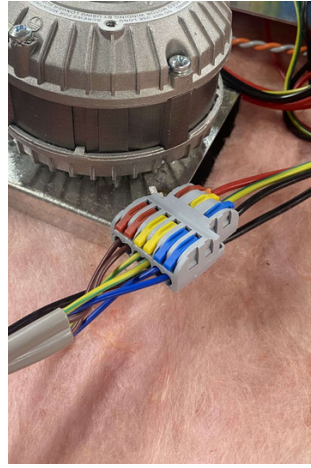
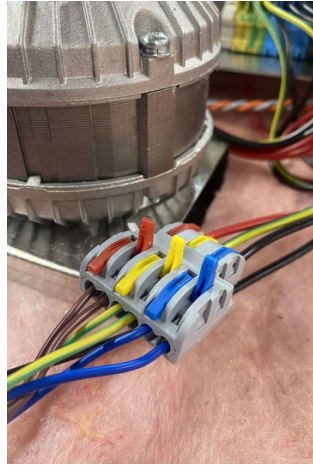
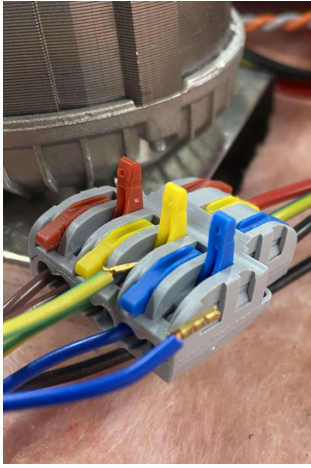
The Shaft can be cut with at any location indicated within the bounds of the arrow above to suit your cabinet. To cut the shaft you can use a hacksaw, angle grinder or any equivalent metal cutting tool.



To install the new D-Series motor, first, place it into the top hat and align the screw holes properly. Then, use only the screws provided to fasten the motor into the top hat. Using any other screws may cause damage to the motor's windings, rendering it inoperable. In case you have misplaced the screws or they were not included with the package, kindly contact Thermoline for assistance.



After fixing the motor to the top hat, reattach the top hat to its original position and secure it with the screws removed earlier.



Once the D-Series motor has been connected, re-insert the wires from the new D-Series Motor into the plastic connector and pull the tabs down. Using cable ties, refix the wires together.

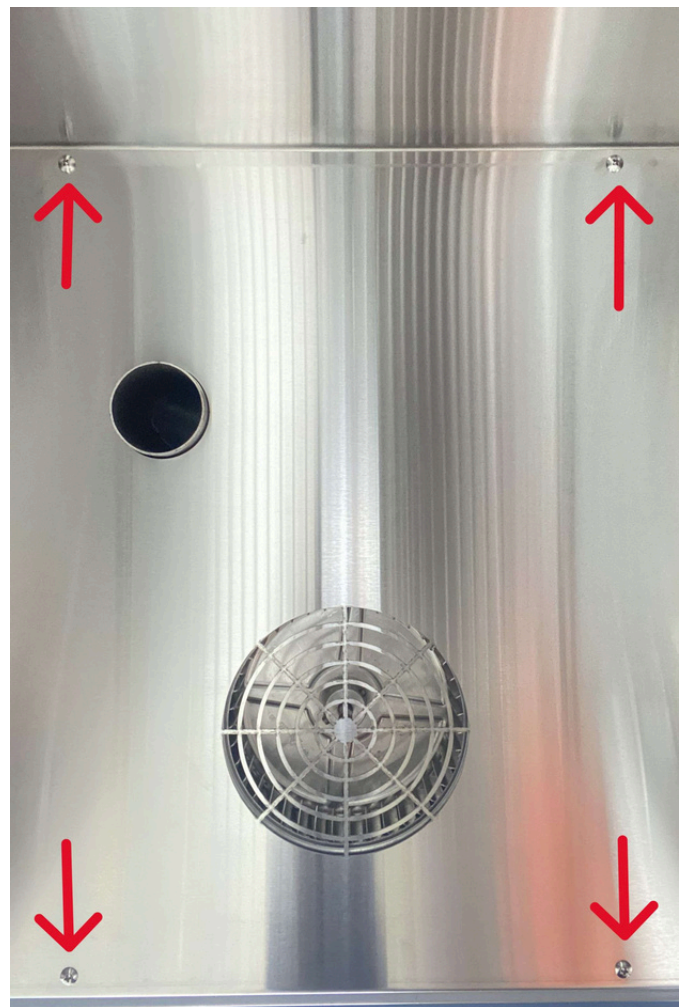
Note: For older ovens that do not have the connector, you will have to spice the wires of the new fan and the wires in the oven together.



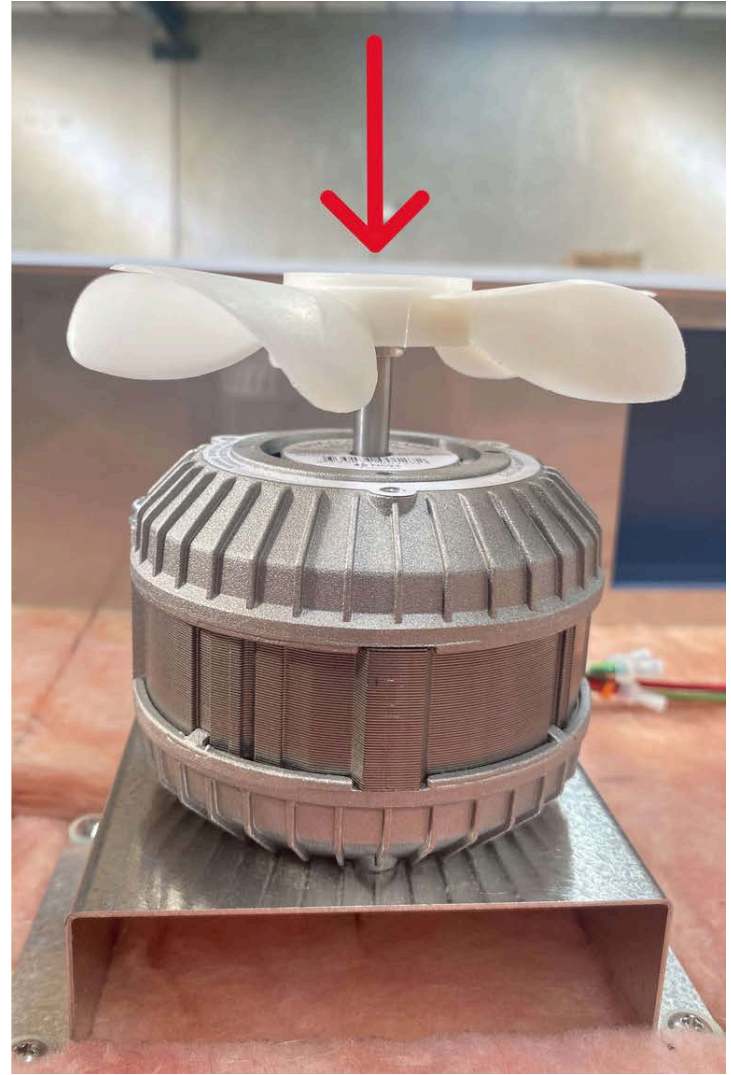
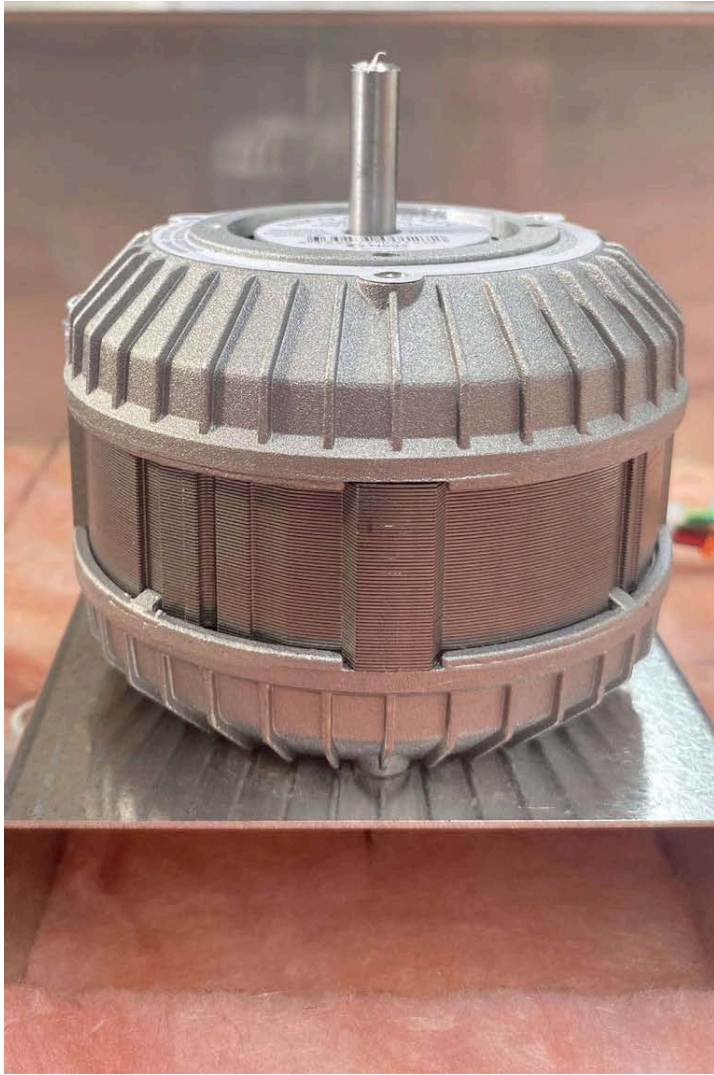
To reinstall the blower wheel, slide it back onto the shaft. Then, use the provided height guide to position its base correctly. Align the guide as shown above.



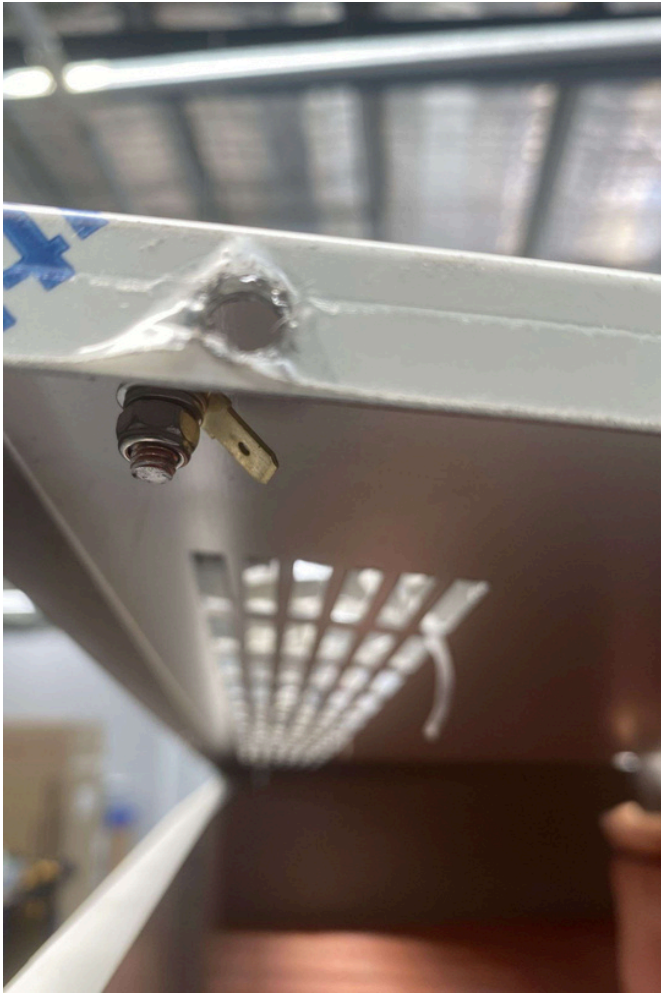
Use the 3mm Allen key to tighten both grub screws after positioning and aligning the blower wheel.



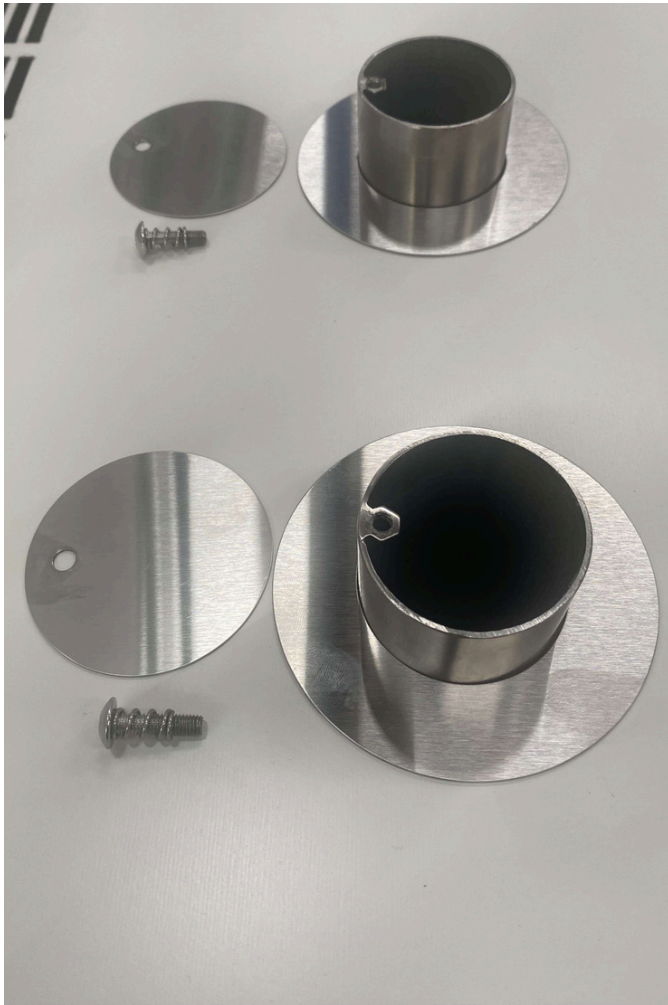
After installing the blower wheel, fix the top panel in place using the original screws.



Slide the D - Series motor cooling fan onto the shaft of the new D-Series motor.



Once the fan has been replaced, place the cover on top the oven and reattach the green and yellow earth wire to the spade clip to the spade terminal. With the earth wire connected, place the cover onto the oven and make sure that the screw holes of the cover are aligned with the cabinet. Replace the screws in the top cover to secure it into place.

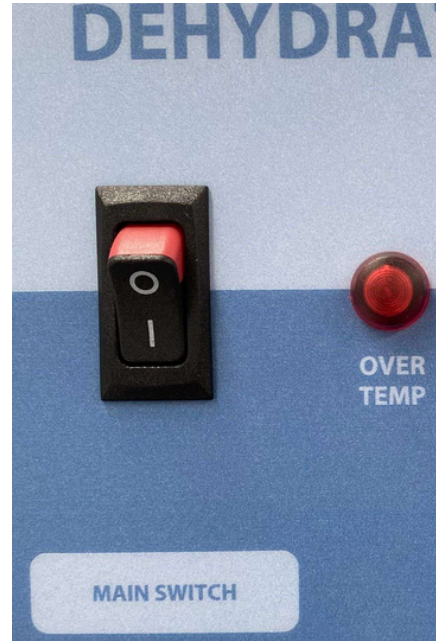


replace the covers of the inlet and the exhaust port back on.



Replace the Shelvex clips at your required level and reinstall the shelves.

Section 4: Power ON



Connect the oven back to power and turn it back 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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