



# Aerix



2902-28

## Adjustable Motor and Sensor Series Service Manual

# Aerix

**Maintenance and Safety**

**How to Remove the Cover**

**Motor Maintenance**

**Motor Brushes Replacement**

**Motor Replacement**

**How to Replace the Heating  
Element**

**How to Replace the Circuit Board**



## Maintenance

The following slides contain instructions and images to service the components of 2902-28 hand dryers.

Consult installation instructions before using the equipment.



# Service Manual for 2902-28

How to Remove the Cover





# Cover Specification

Cast Iron – White Porcelain

2902-280000 (replacement P/N: P15-411)

Steel – White Enamel

2902-287300 (replacement P/N: P15-412)

Stainless Steel - Satin

2902-287400 (replacement P/N: P15-413)



## Reminder!

Disconnect the power to the unit before removing the cover

# Removing the Cover

Loosen screws with security wrench provided.

Replacement Part Number: P15-419



**Note: To loosen screws:**

Turn wrench in Clockwise direction. Screws will tighten to base plate and loosen from inside of cover.



## Removing the Cover (Cont).

Remove the cover taking care to avoid damaging the cover or internal parts.







# Service Manual for 2902-28

How to Replace the Motor Brushes

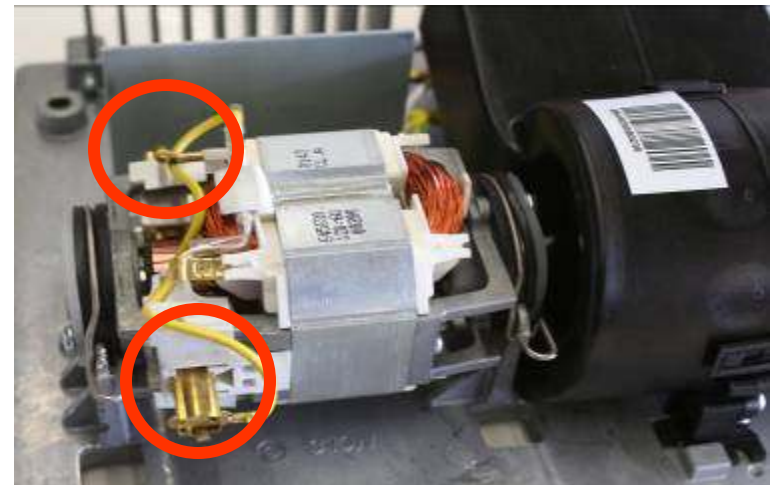


# Motor Brushes Specification

- The motor brushes have a theoretical life of 3000 hours and must be changed if they are shorter than 0.2 inches

Motor Brushes are installed on the side of the motor.

Replacement Part Number: P15-417





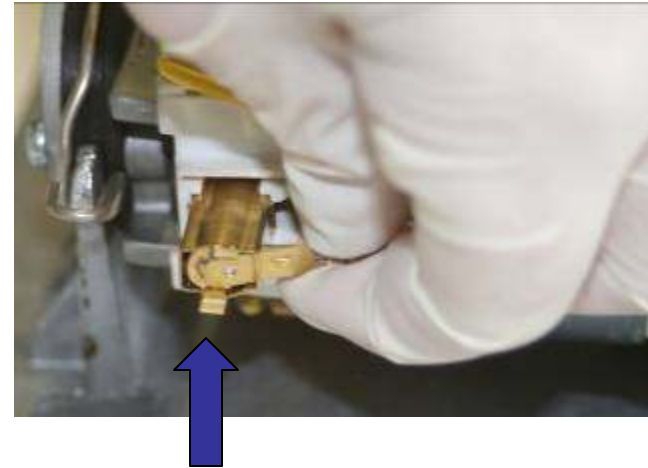
## Reminder!

Disconnect the power to the unit before removing the cover

# Replacing The Motor Brushes:



Step 1: Press the clip which is covering the brushes.



Step 2: Remove the clip to the side until you can see the brushes inside.



Step 3: Remove the brushes.

To replace the brushes, take the replacement and follow the above steps in reverse.



# Service Manual for 2902-28

How to Remove the Motor





## Motor Specification

- Universal Brush Motor
- Class A
- 1/3 HP. (250 W)
- RPM may be manually adjusted by means of a potentiometer
- 3800 – 8200 r.p.m.
- Safety thermal cut-off which temporarily disables the dryer.

Replacement Part Number: P15-414



## Reminder!

Disconnect power to the unit before  
removing the cover

## Removing the Motor:

Remove the bar code label located on the volute.

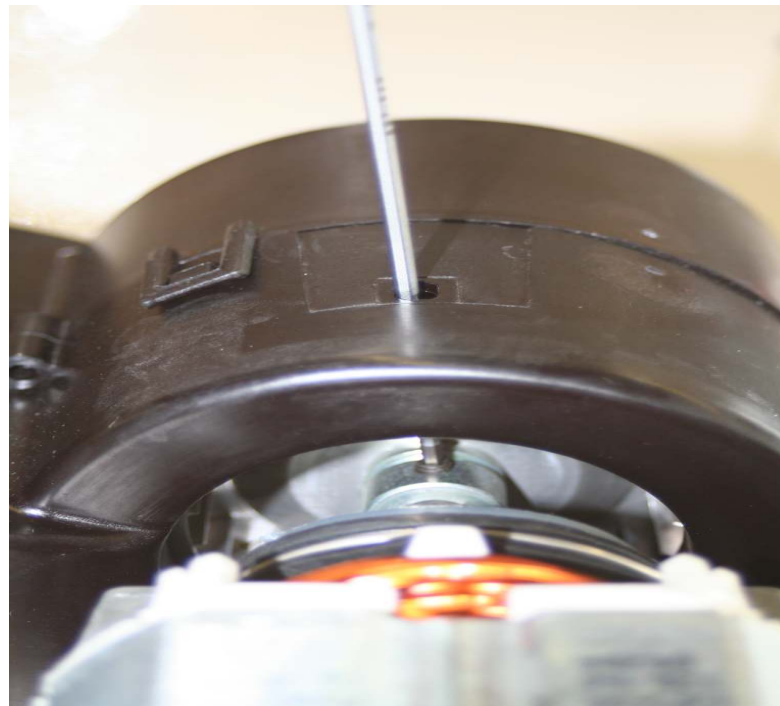






## Removing the Motor (cont).

Loosen the fan wheel by using the #2 Allen key provided.

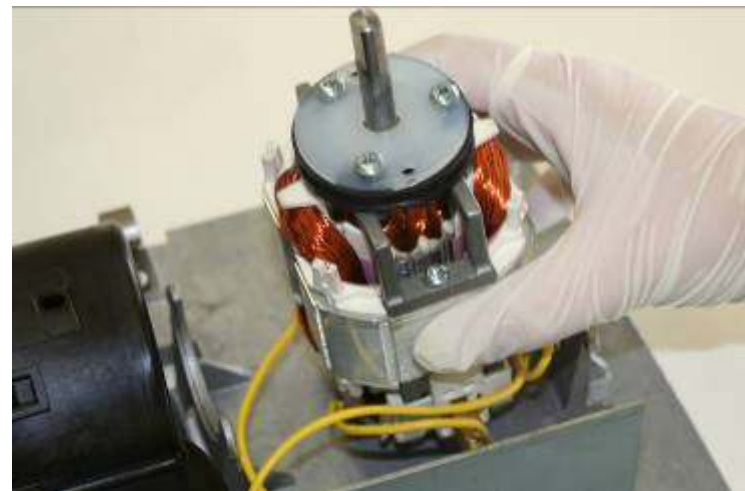


## Removing the Motor (cont).

Release the lateral springs that hold the motor in place.



Carefully remove the motor from its location, be careful not to damage the fan wheel.



## Removing the Motor (cont).



Remove the fuse cable from the motor.

To replace the motor, take the replacement and follow the above steps in reverse.



# Service Manual for 2902-28

How to Remove The Heating Element





# Heating Element Specification

- Material: Waved wire NiCr heating element
- Automatic resetting circuit breaker protects against overheating. (302° F disconnect)

Replacement Part Number: P15-415

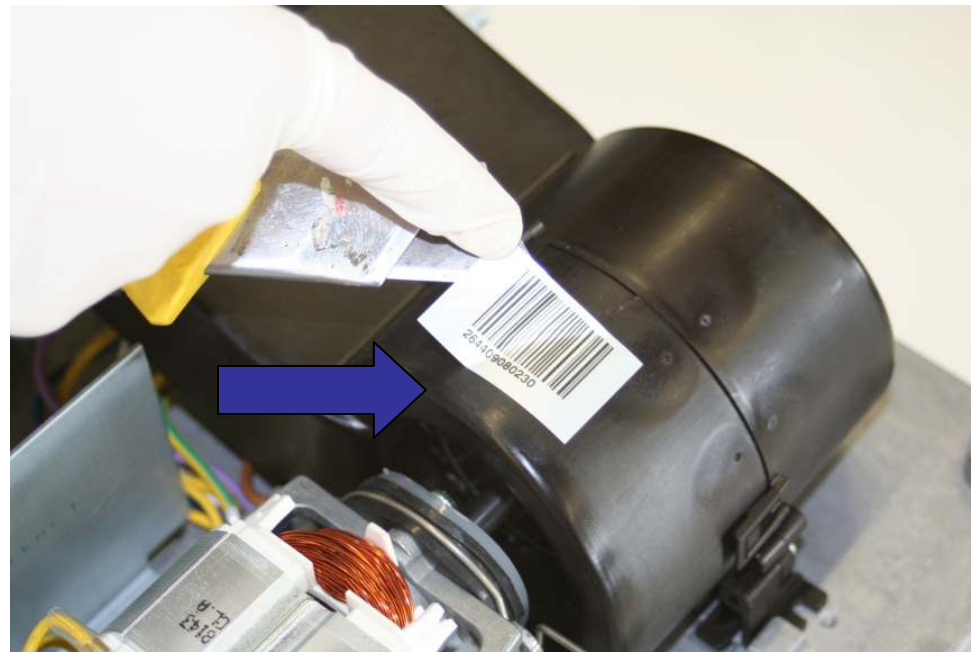


## Reminder!

Disconnect power to the unit before  
removing the cover

# How to Remove The Heating Element

Remove the bar code label located on the volute.

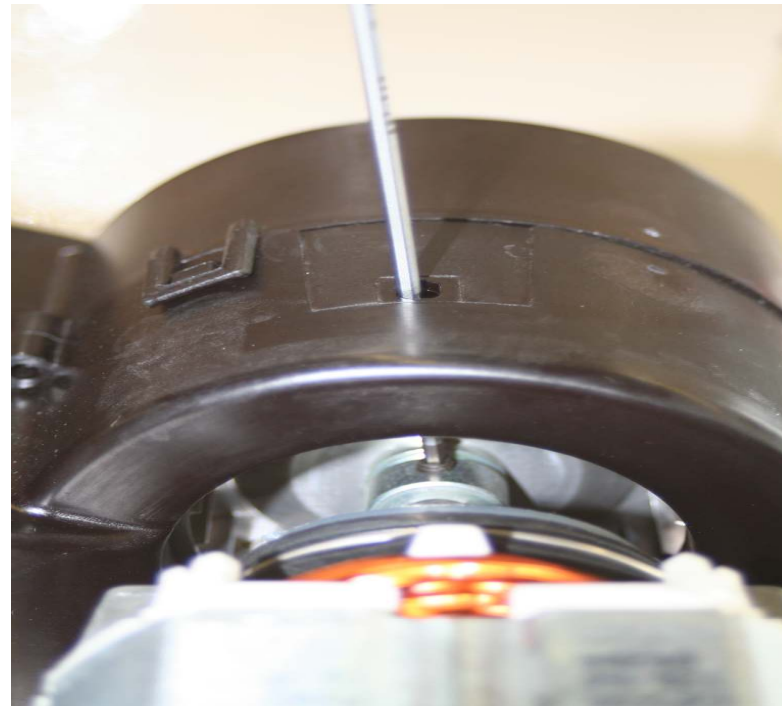




## How to Remove the Heating Element (Cont).

Loosen the fan wheel/Turbine by using the #2 Allen key provided.

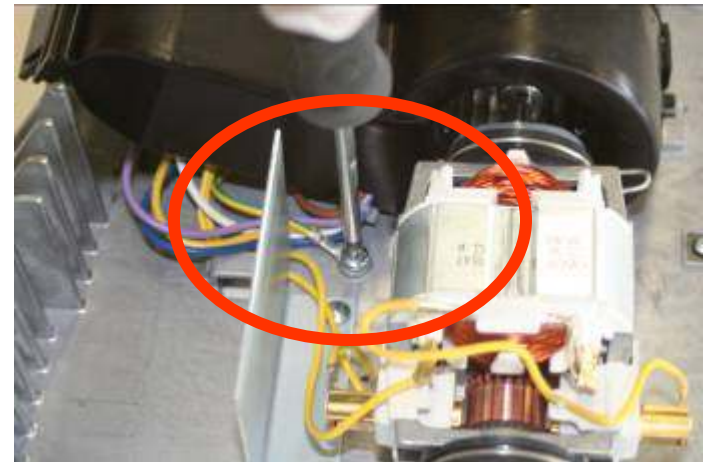
Turbine Replacement  
Part Number: P15-418





# How to Remove the Heating Element (Cont).

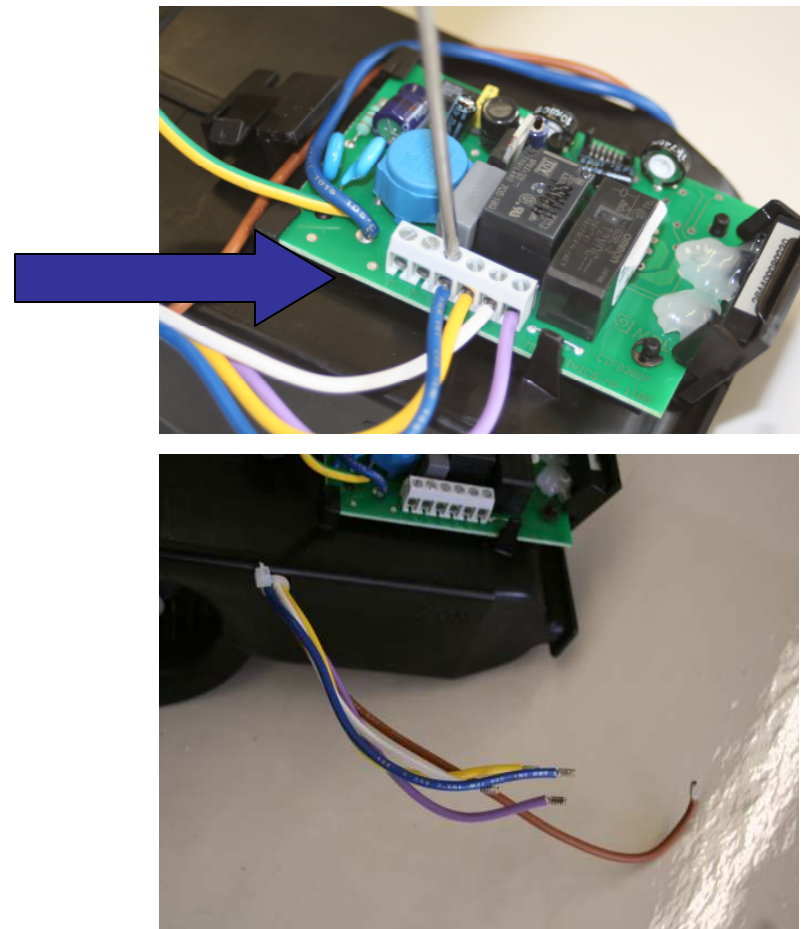
Disconnect the ground cable.



Remove the motor from the volute.

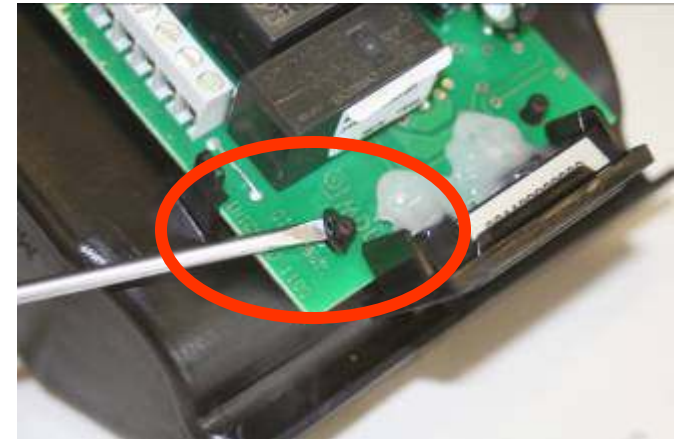
## How to Remove the Heating Element (Cont).

Disconnect all the cables from the motor that connect to the terminal block, (including the brown wire).

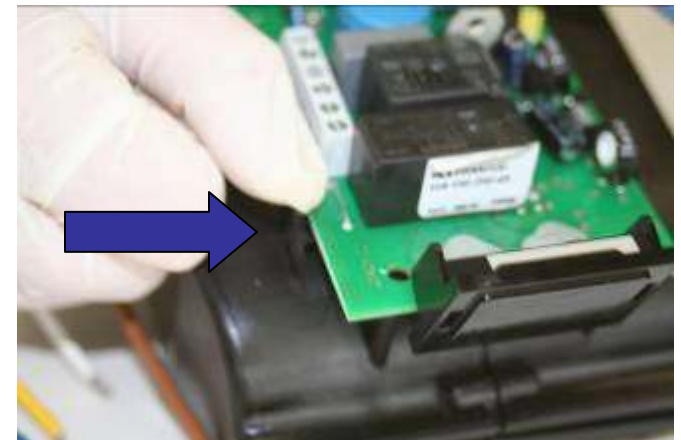


# How to Remove the Heating Element (Cont).

Remove the clip from the circuit board.

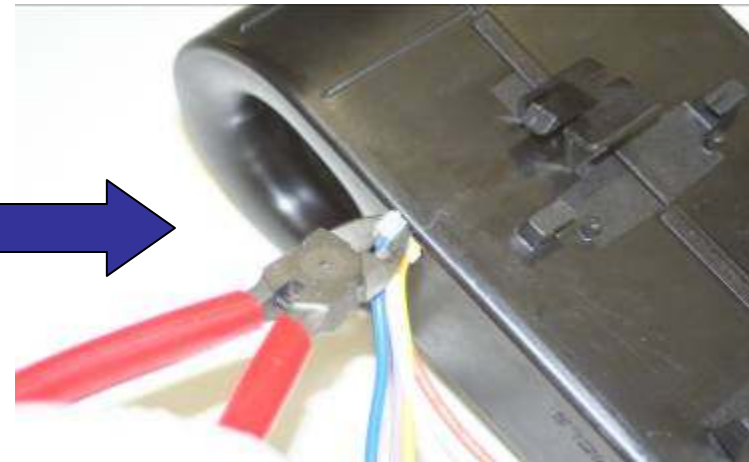


Remove the circuit board by pressing on the flaps.



## How to Remove the Heating Element (Cont).

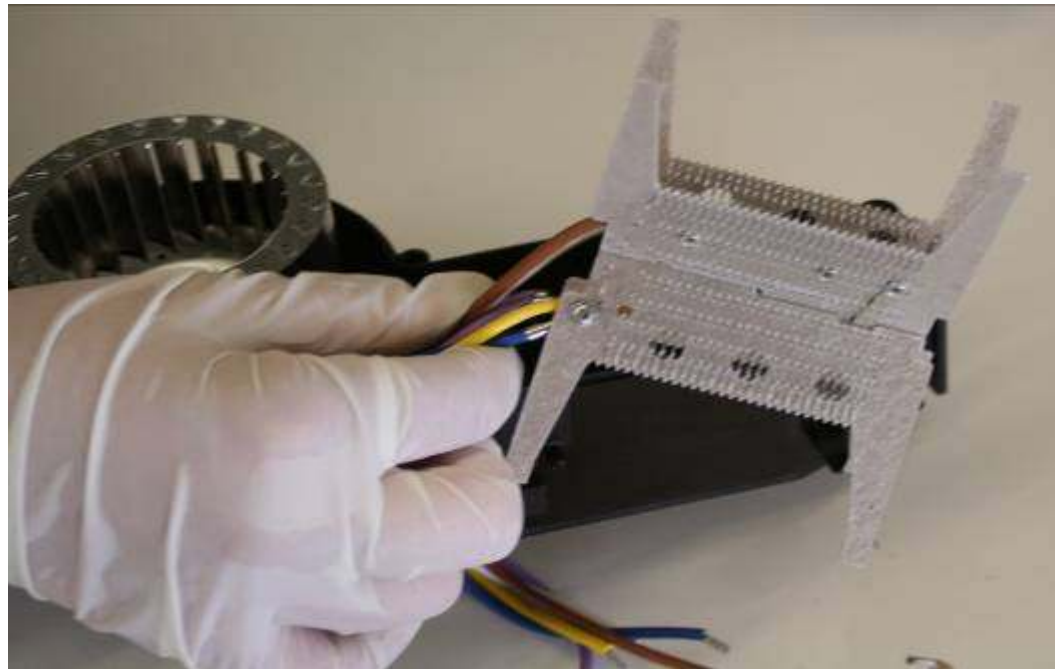
Cut the Bridle.



Open the volute by separating each side.

## How to Remove the Heating Element (Cont).

Carefully remove the heating element from inside the volute.



To replace the heating element, take the replacement and follow the above steps in reverse.



# Service Manual for 2902-28

How to Replace the Circuit Board



# Circuit Board Specification

- Infrared sensor
- Vandal resistant operating system will cause this unit to automatically shut off if sensor is completely blocked. (60 seconds)
- Fully adjustable detection range: 2 – 8 inches

Replacement Part Number: P15-416

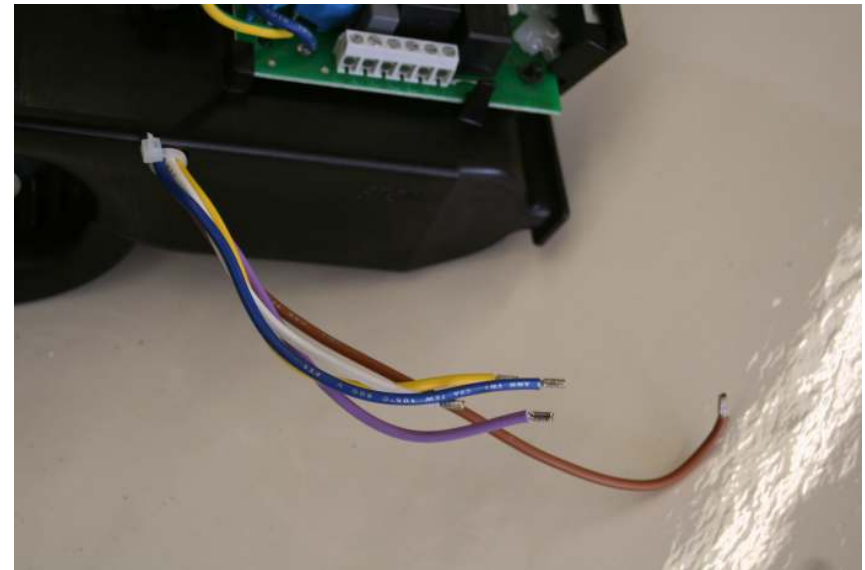
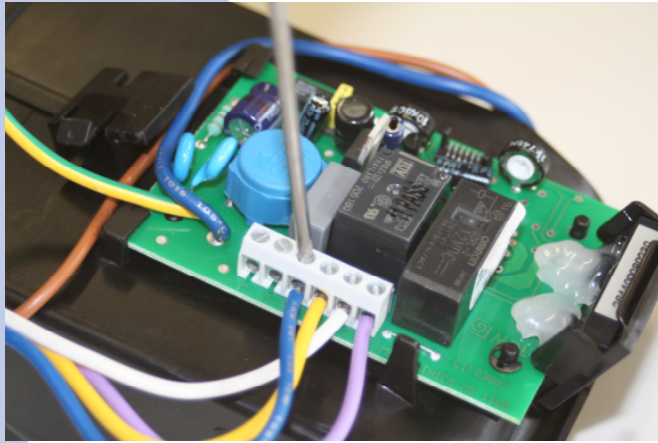


## Reminder!

Disconnect power to the unit before  
removing the cover



## How To Remove the Circuit



Remove all the cables from the circuit board and the motor.

To replace the circuit board, take the replacement and follow the above steps in reverse.