

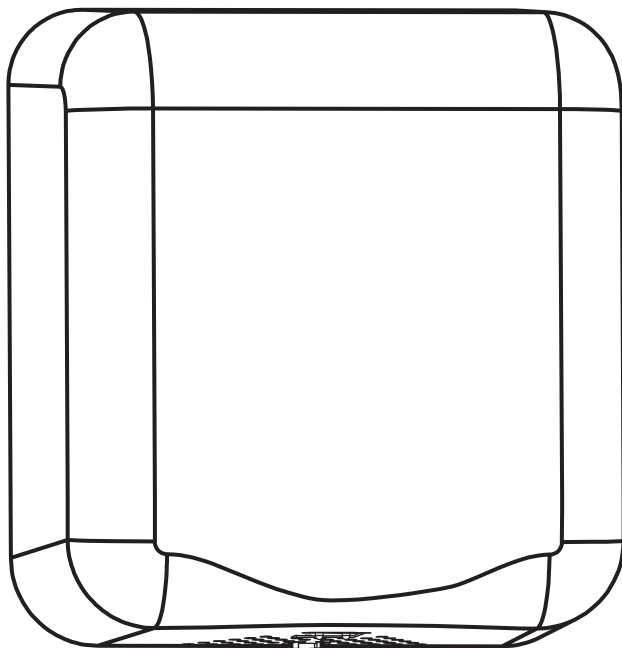


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HEMLOCK

HAND DRYER

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ALP400-SERIES

USER GUIDE



Thank you for your purchase.

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**Alpine maintains a strong practice
of ongoing development of products
and commercial research.**

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Combining commitment to the customer, design innovation and skilled, dedicated workforces, they have produced a range of products that are an essential part of every commercial facility. Every product is designed to the highest standards, enabling you to get your requirements done in a reliable and cost-effective way.

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Important Safety Instructions

WARNING

A comprehensive installation guide is enclosed with the unit packaging. This contains detailed information on the correct installation of the unit which **MUST** be adhered to completely. Damage caused by incorrect installation is not covered by your warrantee. If hardwired, installation **MUST** be by a qualified electrician. The instructions in this manual and the installation guide must be followed completely. Failure to do so may result in incorrect operation, damage to property and/or personal injury. Alpine Industries will not be held liable for any damage to property or personal injury, or any loss of business or revenue, if you, your staff, your installer or service engineers have not followed the instructions given in this manual and the installation guide.

WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY, NOTE THE FOLLOWING:

- This unit is not intended for use by persons (including children) with reduced physical, sensory or reasoning capabilities, or lack of knowledge, unless they have been given supervision or instructions concerning use of the unit by a person responsible for their safety.
- Do not use hand dryer for any purpose other than drying hands. Use this unit only in the manner intended by the manufacturer.
- Before servicing, switch the power to off at the service panel. Ensure the switch is locked to prevent the power from being accidentally switched on. If the means of switching off the power cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- Children should be supervised to ensure that they do not misuse the unit.
- Do not obstruct air inlet holes or outlets.
- If you have any further questions contact the manufacturer.

CAUTION

Your hand dryer should be located indoors. To reduce the risk of fire or electric shock, do not expose the internal mechanisms/components of this unit to moisture.

Cleaning/Maintenance

- Before servicing or cleaning the unit, switch power to off at the service panel.
- Lock to prevent power from being switched on accidentally.
- If you cannot lock the service panel, securely fasten a prominent warning device, such as a tag, or label, to the panel.

WARNING

1. Do not pressure-wash the unit.
2. Do not clean the filter or allow it to come in contact with water.

Outside

- Gently wash cover and air inlet holes using a soft cloth, lukewarm water, and a nonabrasive cleaner.

Inside

- Alpine recommends regularly checking and cleaning the insides of your machine to ensure proper performance.
- Use a soft dry cloth or brush to gently remove dust from parts and inlet holes.
- If your unit contains a filter, be sure it does not come in contact with water.
- Change filter every 6 months.
- For a new filter contact your local dealer or contact us at support@alpineindustries.com.

Installation Guide

WARNING

- For proper electrical connections, check your local building codes.
- If hardwired, unit must be installed by a qualified, licensed electrician.

Pre Installation Wiring

1. Ensure that the electrical supply corresponds to that shown on the rating sticker of unit.
 - a. Permanent damage to the unit may result if connected to any electrical supply other than that stated on the rating sticker of the unit.
2. Confirm that the electricity at the main panel is switched to off before installing or maintaining the unit.
3. The unit must be protected by an independent circuit.

Hardwiring	
Live/Hot Wire	Brown or Red
Neutral Wire	Black, Blue, White or Gray
Ground Wire	Green or Yellow

Installation Guide

Installing the Hand Dryer Unit

CAUTION

- Your hand dryer should be located indoors.
 - To reduce the risk of fire or electric shock, do not expose the internal mechanisms/components of this unit to moisture.
- 1.** If hardwired, disconnect power source of electricity previously brought to the hand dryer location.
 - 2.** Be sure there is no obstruction between floor and dryer.
 - If mounted over counter top place dryer no less than 16 inches above counter.
 - Do not install dryer over wash basin.
 - 3.** Mark wall at appropriate mounting height according to height guide below.

Recommended Height Guide From Floor to Bottom of Dryer

Men	45"- 114 cm
Women	43"- 109 cm
Teens	42"- 107 cm
Young Children	34"- 86 cm
Handicapped	38"- 97 cm

Installation Guide

Installing the Hand Dryer Unit (Continued)

- 4.** Hold the template (supplied) against bare wall.
 - Make sure that the line of template representing bottom of dryer is horizontal.
 - Mark location of screws.
- 5.** Remove shipping security screw located at center top of back-plate.
- 6.** Use wrench (supplied) to remove the two mounting screws located at the side of the cover and lift cover up from base plate.
- 7.** If electrical wiring entry is made from rear, remove the pre-formed knock-out from the base plate.
- 8.** Attach base plate to the wall at the 4 previously marked points.
 - Beware if you prefer unit not to meet wall use rubber gaskets supplied.
- 9.** Attach cover to the base plate.
 - Push bottom in first.
- 10.** Replace screws previously removed from cover using wrench.
- 11.** Restore power and test for proper operation.

Troubleshooting

Dryer Will Not Turn On:

1. Check power to the unit and connections. Verify dryer is receiving the correct voltage at the Terminal Block (check dryer label on the outside bottom of the cover).
2. Adjust the sensor range (refer to wiring diagram sheet).
3. Check for loose, disconnected or improper wiring. Especially make sure that the sensor wires are well connected (refer to wiring diagram sheet).

If you did the 3 steps above and the dryer is still not working, place your hands under the sensor and check for the following:

1. If the blue LED light turns on then the Main Circuit Board needs to be changed.
2. If the blue LED light does not turn on, the Sensor and Program Board needs to be changed.
 - a. If after changing them it's still not working, the Main Circuit Board needs to be changed.
3. If after the above steps are completed and it still doesn't work, the Motor needs to be changed.

Troubleshooting

Dryer Does Not Shut Off

1. It may be mounted too close to a counter or object and has gone into lockout.
 - a. If relocating appliance is not possible, adjust the range of the Sensor.
 - b. Turn off the power to the dryer then turn the range adjustment on the program board counterclockwise towards low to decrease the sensor's range (refer to wiring diagram sheet).
2. Check for loose, disconnected or improper wiring at Control Assembly (refer to wiring diagram sheet).
3. Replace Sensor and Program board.

Dryer Does Not Always Turn On or Turns On By Itself

1. It may be mounted too close to a counter or object and has gone into lockout.
 - a. If relocating the appliance is not possible, adjust the range of the sensor.
 - b. Turn off the power to dryer then turn the range adjustment on the program board counterclockwise towards low to decrease the sensor range (refer to wiring diagram sheet).
2. Check for foreign material on the optical sensor next to the air outlet.
3. Check for loose, disconnected or improper wiring at Control Assembly (refer to wiring diagram sheet).
4. Replace the Sensor and Program board.

Troubleshooting

Dryer Blows Only Cold Air

1. Check the heat setting on the control (if supplied).
2. Check for loose connections to the Heating Element (refer to wiring diagram sheet).
3. Replace the Heating Element.

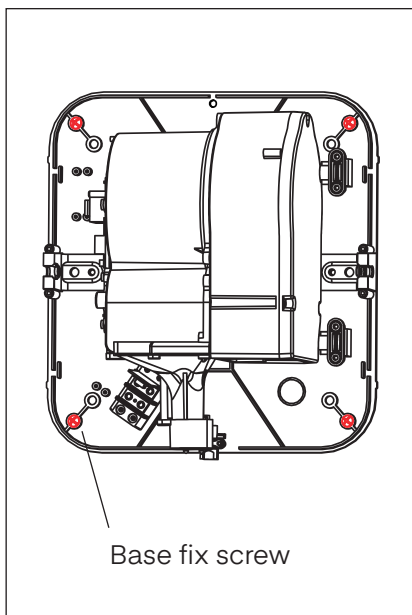
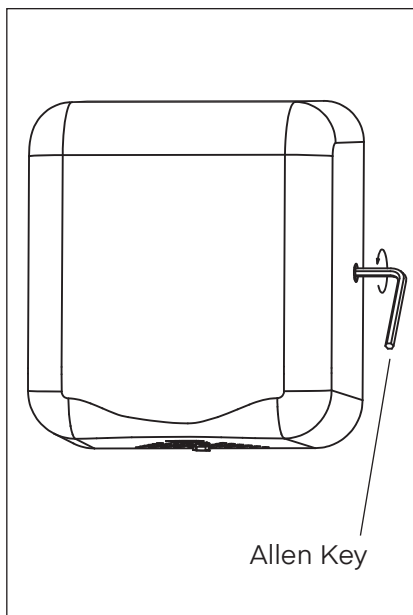
Dryer Has Loss of Air Volume

1. Check the motor speed setting on the control (if supplied).
2. Check for the slow running Motor or burning smell.
 - a. If so, replace the Motor.
3. Check for lint buildup at the filter or in the air inlet holes.
 - a. If so, replace filter and clean the air inlet holes.

Maintenance

Removing Hand Dryer From The Wall

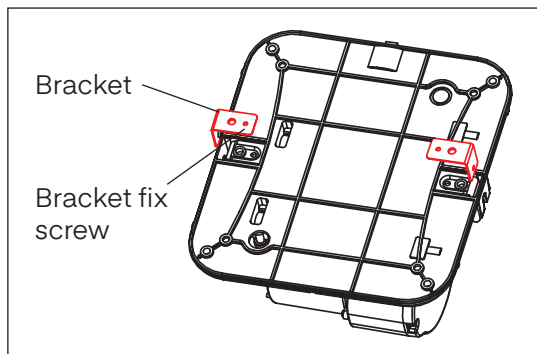
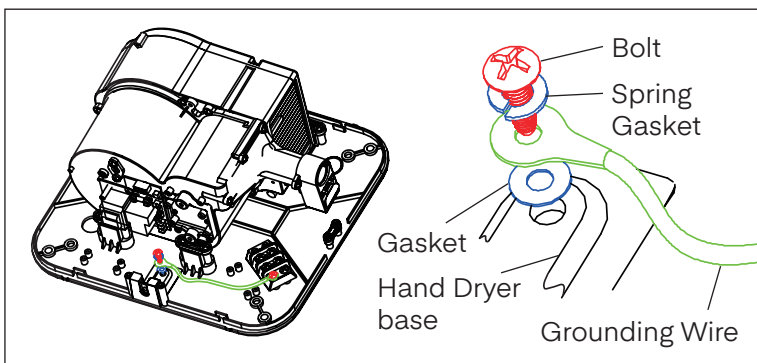
1. It is recommended to take the hand dryer from wall **ONLY** when you need to replace a new motor or two side cover fix brackets.
2. Remove and retain 2 side security hex cover screws with a Allen key, then remove the cover.
3. Loosen and remove the 4 base fixed screw.
 - a. Then, take the hand dryer from wall and place it on a flat, clean surface.



Maintenance

Replacing Brackets

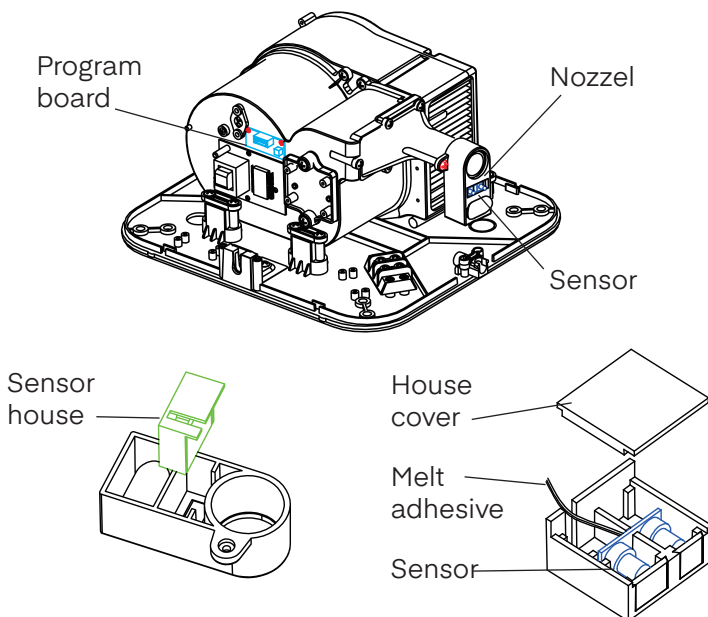
1. Remove the grounding wire fixed on bracket by loosening the screw.
 - a. Be sure not to lose the screw and two gaskets.
2. Loosen the two bracket fixed screws from the hand dryer's base back.
3. Replace the bracket(s) with the new one(s).
 - a. Be careful not to over-tighten.
4. Fasten the grounding wire to the bracket tightly and keep it as:
 - a. Base-->Gasket-->Wire-->Spring Gasket-->Bolt



Maintenance

Replace Sensor/Program Board

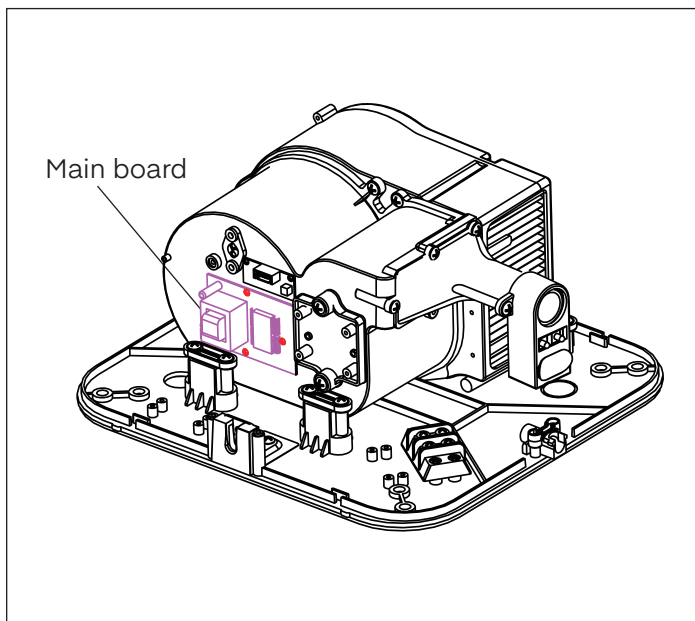
1. Remove the nozzle by loosening the nozzle screw.
 - a. Be sure not to lose it.
2. Remove the sensor from its housing and disconnect it from the program board and main board.
 - a. The melt adhesive is only for safe transportation and you do no need to use it when replacing the sensor.
3. Remove the program board by loosening the two screws.
4. Connect new program board.
5. Connect the sensor.
 - a. Please take care not to damage the sensor board when replacing it with a new one.



Maintenance

Replace Main Circuit Board

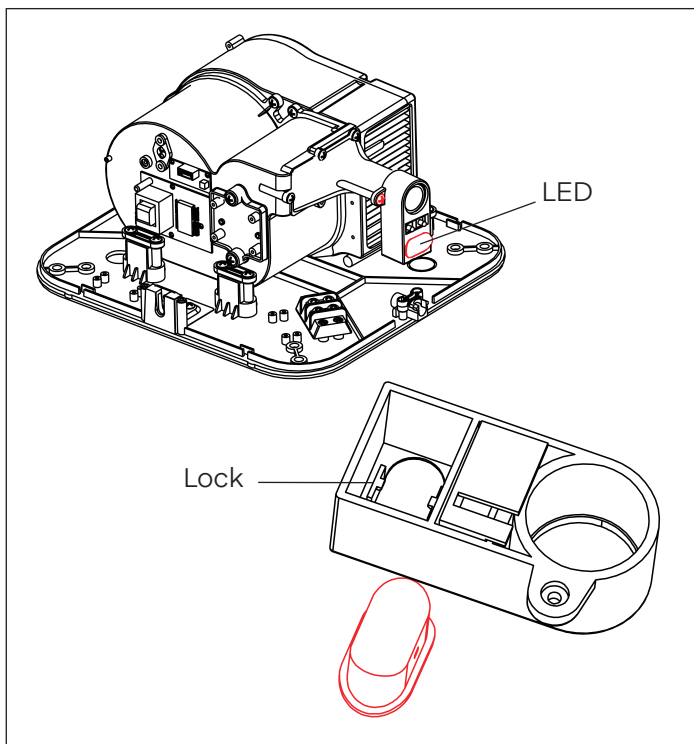
1. Disconnect all the wires from the circuit board.
2. Unscrew the 3 screws and remove the main board.
3. Connect the new main board.
4. Reconnect all the wires (see Diagram on page 1).



Maintenance

Replace LED

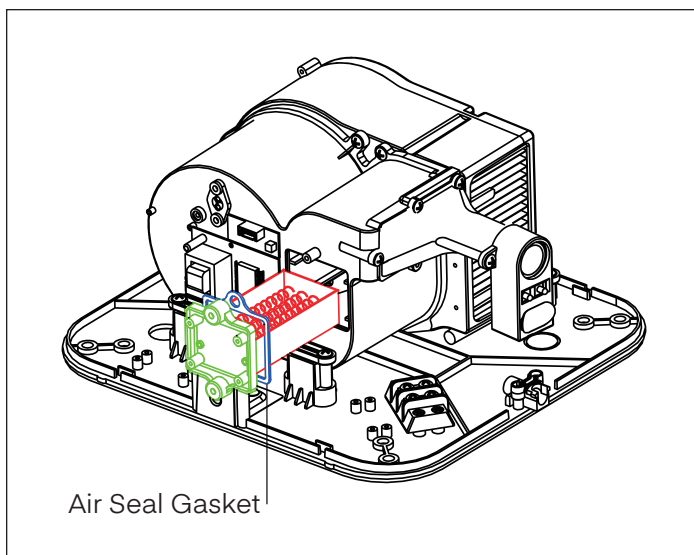
1. Remove the nozzle by loosening the nozzle screw.
 - a. Be sure not to lose it.
2. Remove the LED from LED housing and disconnect it from the main board.
 - a. It is recommended to use a slotted screw driver to push the lock out a little then push the LED down lightly.
3. Push a new LED bottom from the bottom up until it is well-locked.
 - a. Connect new LED wire to main board.



Maintenance

Replace Heat Element

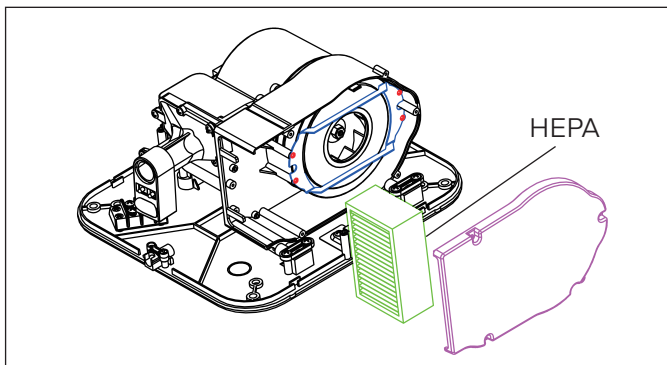
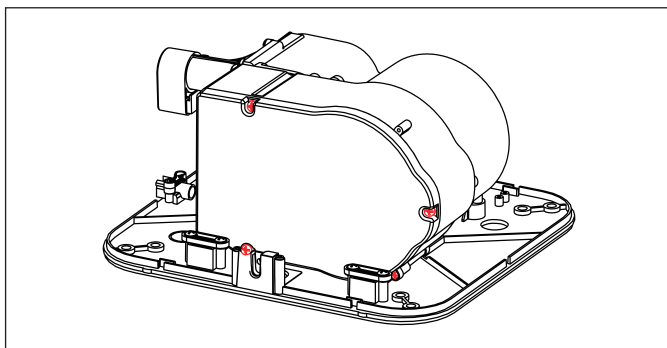
1. Disconnect two heating element wires from the Main Board.
2. Loosen the 4 screws on the heat element holder then pull it out.
 - a. Be sure not to lose screws and the air seal rubber gasket.
3. Put the air seal gasket on the new heating element.
 - a. Slide it into the housing.
4. Screw back in the heating element holder.
 - a. Do not over tighten.
5. Reconnect the wire to Main Board as shown in the diagram.



Maintenance

Replace Filter or HEPA Filter (If Supplied)

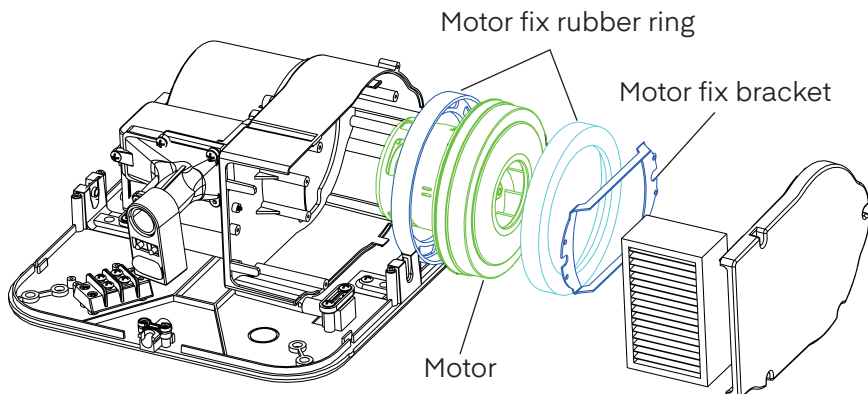
1. If it is a normal air filter:
 - a. Pull is straight out
 - b. Then, replace it with a new one.
2. If it is a HEPA air filter:
 - a. Remove air inlet right cover by loosening the 4 screws.
 - b. Be sure not to lose them.
3. Replace it with a new HEPA filter.
4. Replace over and do not over tighten it.



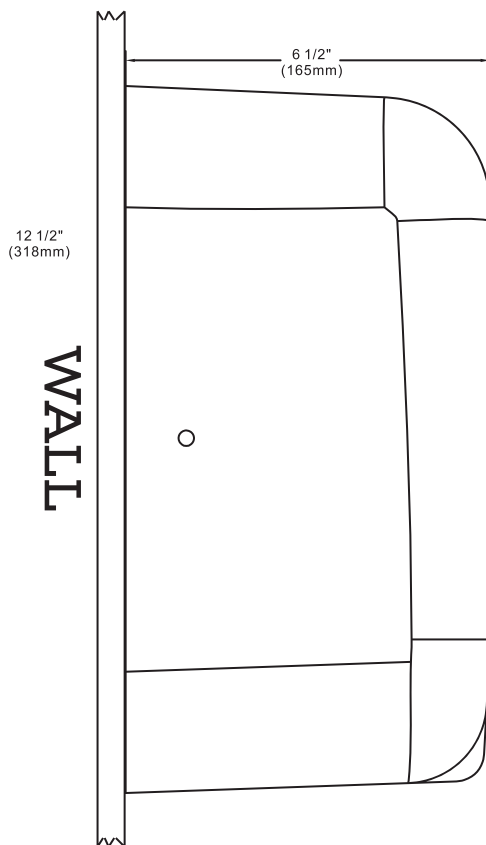
Maintenance

Replace Motor

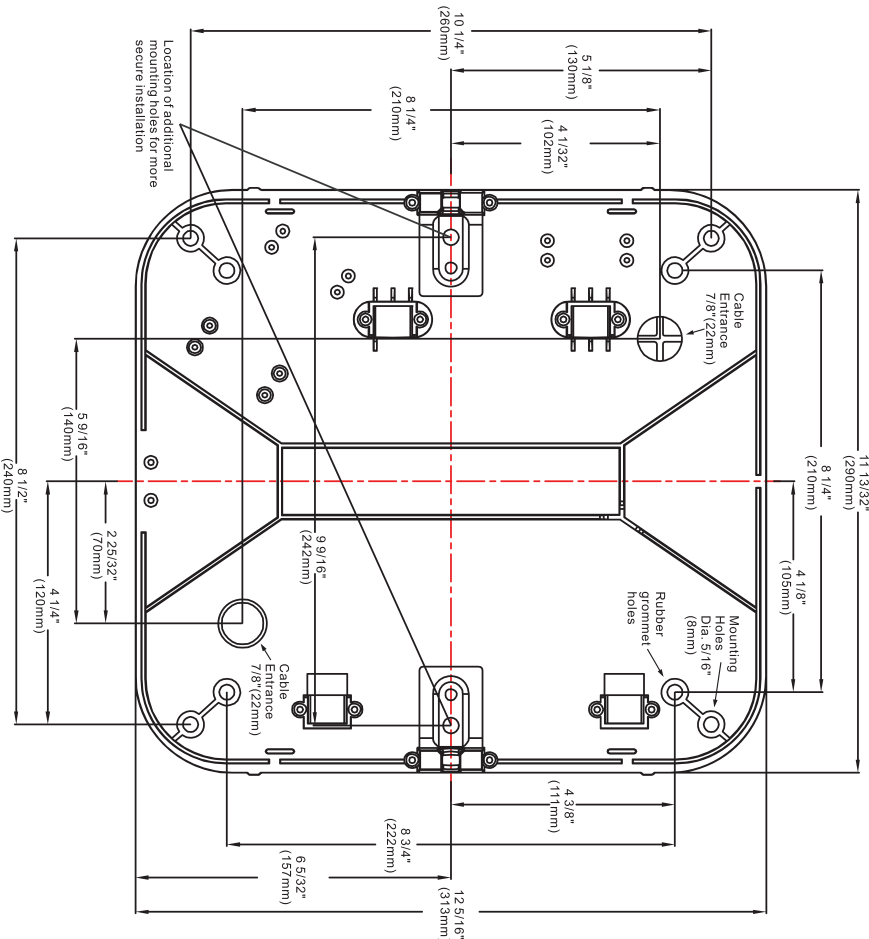
1. Disconnect the motor wire from the motor to the Main Board.
2. Move the air inlet right cover by loosening 4 screws.
 - a. Be sure not to lose them.
3. Move the motor fix bracket and motor fix rubber ring by loosening 4 screws.
 - a. Be sure not to lose them.
4. Pull out the motor lightly and disconnect two wires. Be sure the two wires go through motor house hole smoothly.
5. Replace a new motor and keep it well installed.
 - a. It is important to install the two rubber rings evenly.
6. It is recommended to weld the wire on motor's two connection pins.
 - a. Pull the two wires from the motor housing lightly.
 - b. Reconnect motor wire as diagram.



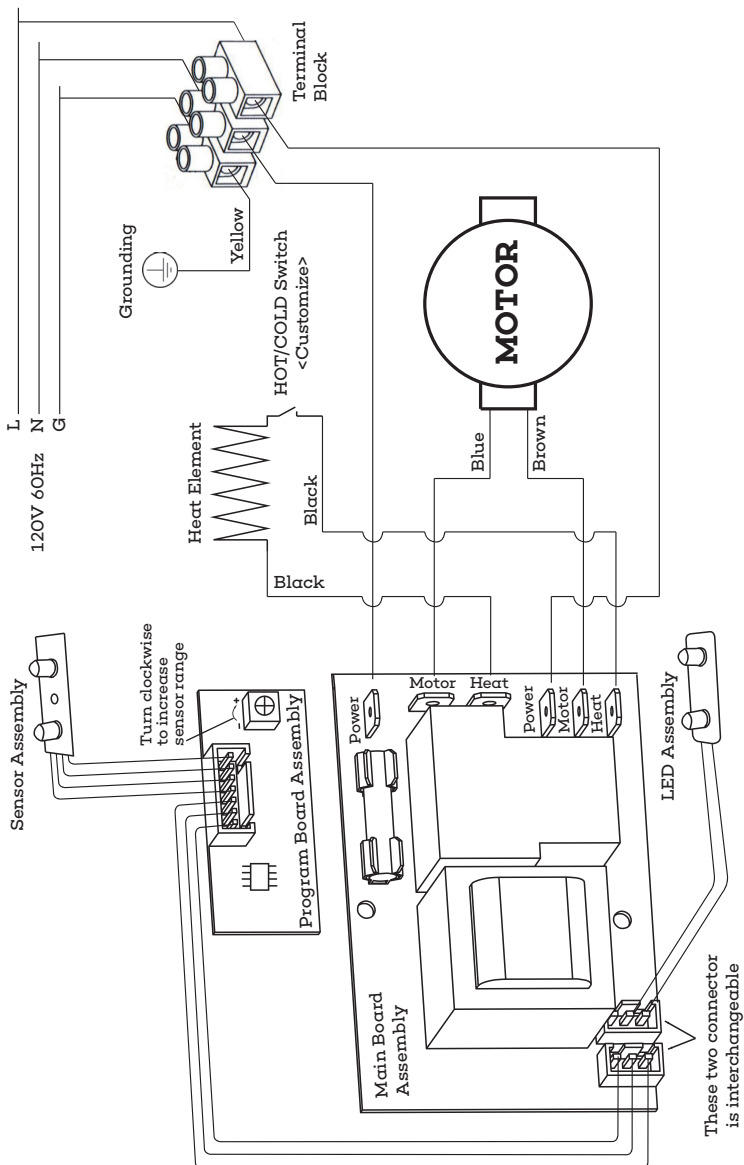
Diagrams



Diagrams



Diagrams



Notes

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Warranty

1. Adir Corp (the "Company" or "Tiger Companies") warrants to the purchaser that the product will be free from defects in workmanship and materials for a period of 5 years from the date of purchase. The warranty period is not extended if we repair, replace, exchange, or provide a refund for the product (as determined in our sole discretion). We may change the availability of this limited warranty at our discretion, but any changes will not be retroactive.
2. These warranties are not assignable or transferable to any other person, including, without limitation, any subsequent owner or other transferee of the product.
3. This Warranty does not apply to: (a) damage caused by misuse, tampering, abuse, neglect, or accident; (b) damage caused by improper installation, modification, or service; (c) alteration of the serial number; or (d) use that violates the instructions furnished by the Company will void this warranty.
4. The sole responsibility of the Company shall be limited to (a) the repair or replacement (in its sole discretion) of any component of the product which fails to conform to this; (b) a refund the purchase price of such product (in its sole discretion), at no cost to the purchaser for the period of the warranty, or (c) an exchange for a similar product, comparable in function and price.
5. Contact the Company directly at 1-(800)-805-1790 to obtain service under this warranty. If it becomes applicable to send a defective product to the Company, a Return Authorization Number must first be obtained from the Company. In order to obtain service under this warranty, purchaser may be required to provide the Company with the following items (a) proof of purchase, (b) photographs and or videos (of the damage, and (c) a written testimonial describing the defect.
6. Products shipped without prior Return Authorization and Return Authorization Number may not be accepted, and the Company will not be responsible for their disposition and/or cost of return to the owner.
7. The Company will not assume any responsibility for any loss or damage incurred in shipping and or delivery.
8. The product(s) must be returned within 14 calendar days of receiving the return authorization from the Company and must include the original proof of purchase for the warranty to be honored.
9. Any implied warranties that the purchaser may have are limited to the duration of the warranties described above. There are no further warranties that extend or apply beyond the face hereof, and the Company expressly disclaims and excludes any and all warranties of merchantability or fitness for a particular purpose. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.
10. THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES AND THE COMPANY'S ENTIRE LIABILITY FOR ANY BREACH OF THIS LIMITED WARRANTY. OUR LIABILITY SHALL UNDER NO CIRCUMSTANCES EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE PRODUCT, NOR SHALL WE UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE LIMITATION MAY NOT APPLY TO YOU.
11. This warranty gives you specific legal rights, and you may also have additional rights which vary from state to state.



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