

Use, Care and Installation Guide

Read all Instructions before Installing and operating this appliance

Important Safety Notice

MODEL: ZPA-M90S

READ AND SAVE THESE INSTRUCTIONS

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THIS FAN WITH ANY SOLID-STATE CONTROL DEVICE.

WARNING

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

- a. Use this unit only in the manner intended by the manufacturer, if you have questions, contact the manufacturer.
- b. Before servicing or cleaning unit, switch power off at service panel and lock panel to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

CAUTION

For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors. Take care when using cleaning agents or detergents. Suitable for use in household cooking area.

WARNING

TO REDUCE THE RISK OF RANGE TOP GREASE FIRE:

- a. Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
- b. Always turn hood ON when cooking at high heat or when flambeing food (ie: Crepes Suzette, Cherries Jubilee, Peppercorn Beef Flambe)
- c. Clean ventilating fans frequently. Grease should not be allowed to accumulate on fan or filter.
- d. Use proper pan size. Always use cookware appropriate for the size of the surface element.

WARNING

TO REDUCE THE RISK OF INJURY TO PERSONS IN THE EVENT OF A RANGE TOP FIRE, OBSERVE THE FOLLOWING:

- a. SMOTHER FLAMES with a close-fitting lid, cookie sheet, or metal tray, then turn off the burner. BE CAREFUL TO PREVENT BURNS. If the flames do not go out immediately, EVACUATE AND CALL THE FIRE DEPARTMENT.
- b. NEVER PICK UP A FLAMING PAN – You may be burned.
- c. DO NOT USE WATER, including wet dishcloths or towels – a violent steam explosion will result.

Important Safety Notice

Read and save these instructions

MODEL: **ZPA-M90S**

- d. Use an extinguisher ONLY if:
1. You know you have a Class ABC extinguisher, and you already know how to operate it.
 2. The fire is small and contained in the area where it started.
 3. The fire department is being called.
 4. You can fight the fire with your back to an exit

WARNING

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

- a. Installation work and electrical wiring must be done by qualified person (s) in accordance with all applicable codes and standards. Including fire-rated construction.
- b. Sufficient air is needed for power combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA) and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and the local code authorities.
- c. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- d. Ducted fans must always vent to the outdoors.

WARNING

TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCTWORK.

CAUTION

To reduce risk of fire and to properly exhaust air outside - Do not vent exhaust air into spaces within walls, ceilings, attics, crawl spaces or garages.

WARNING

TO REDUCE THE RISK OF SHOCK, THIS FAN MUST BE INSTALLED WITH AN ISOLATING WALL CONTROL/SWITCH.

OPERATION

Always leave safety grills and filters in place. Without these components, operating blowers could catch onto hair, fingers and loose clothing.

***NOTE:** Please check www.zephyronline.com for revisions before doing any custom work.

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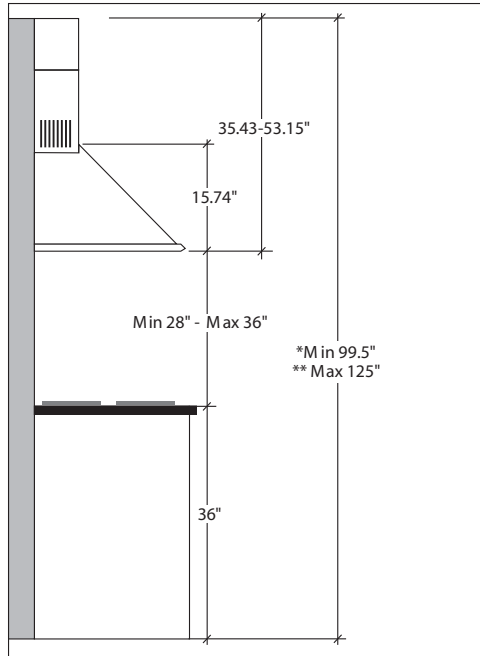
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MOUNT HEIGHTS & CLEARANCE



Minimum mount height between range top to hood bottom should be no less than 28".

Maximum mount height should be no higher than 36"

It is important to install the hood at the proper mounting height. Hoods mounted too low could result in heat damage and fire hazard; while hoods mounted too high will be hard to reach and will lose its performance and efficiency.

If available, also refer range manufacturer's height clearance requirements and recommended hood mounting height above range.

*Minimum ceiling clearance 99.5" at 28" hood mounting height.
 **Maximum ceiling clearance 125" at 36" hood mounting height.

DUCTING

A minimum of 6" round or 3-1/4 x 10" rectangular duct must be used to maintain maximum air flow efficiency.

Always use rigid type metal ducts only. Flexible ducts could restrict air flow by up to 50%.

Also use calculation (on right) to compute total available duct run when using elbows, transitions and caps.

ALWAYS, when possible, reduce the number or transitions and turns. If long duct run is required, increase duct size from 6" to 7 or 8". If a reducer is used, install a long reducer instead of a pancake reducer. Reduce duct size as far away from opening as possible.

If turns or transitions are required: Install as far away from opening and as far apart, between 2, as possible.

Minimum Duct Size:
 Round- 6" minimum
 Rectangular- 3-1/4 x 10" minimum (requires a 6" to 3-1/4x10" adaptor not supplied)

Duct Run Calculation:

Maximum run

6" or 3-1/4 x 10" duct	100 FT
Deduct:	
each 90 Elbow used	15 FT
each 45 elbow used	9 FT
each 6" to 3/14 x 10" transition used	1 FT
each 3/14 x 10" to 6" transition used	5 FT
Side Wall Cap w/ damper	30 FT
Roof Cap	30 FT

e. - 1 roof cap, 2x90 elbows, 1 45 elbow used: =30' + 30' + 9' =69' used, 31' available for straight duct runs.

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INSTALLATION

DUCTING

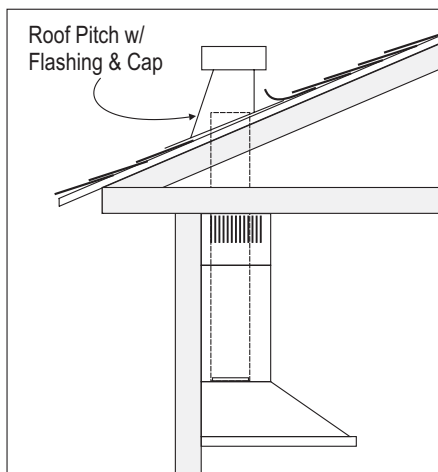
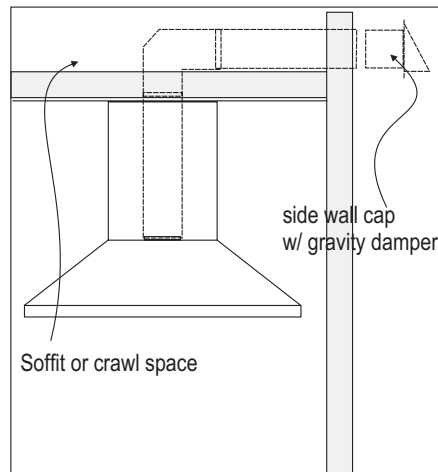
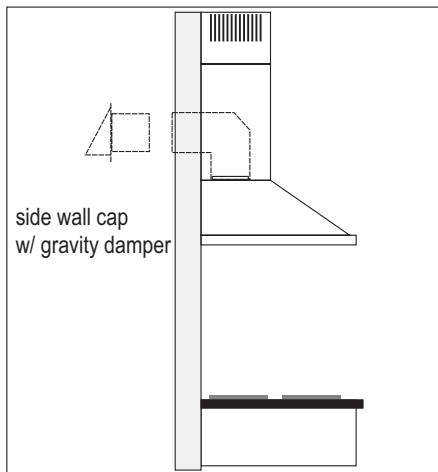
WARNING: FIRE HAZARD

NEVER exhaust air or terminate duct work into spaces between walls, crawl spaces, ceiling, attics or garages. All exhaust must be ducted to the outside.

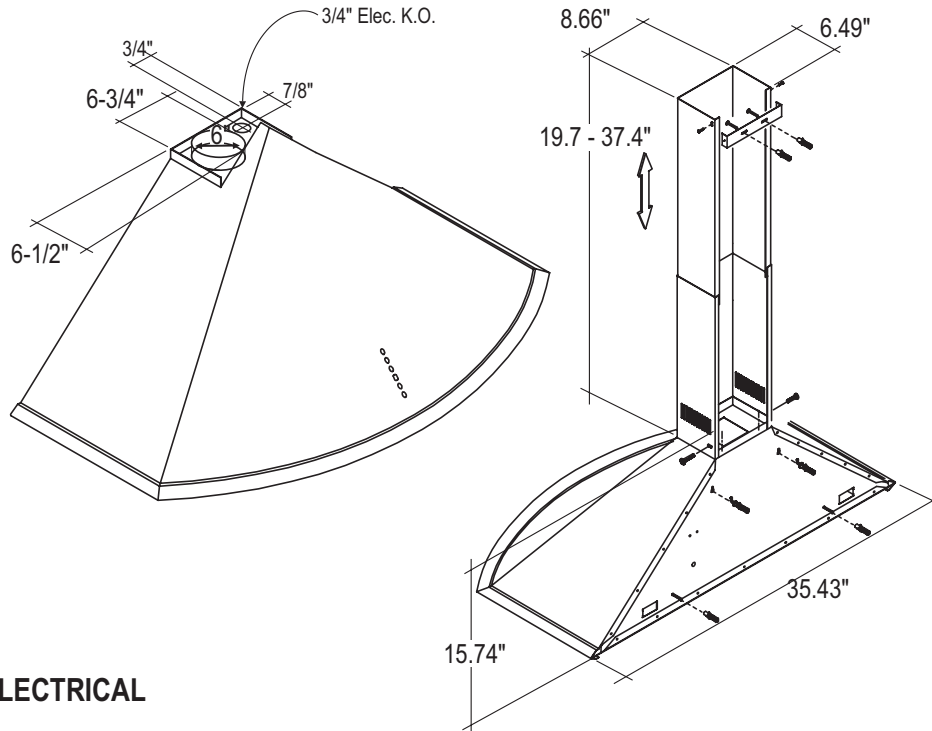
Use Metal ductwork only.

Fasten all connections with sheet metal screws and tape all joints w/ certified Silver Tape or Duct Tape.

Some Ducting Options:



SPECIFICATIONS



ELECTRICAL

WARNING:

All Electrical work must be performed by qualified electrician or person with similar technical know how and background.

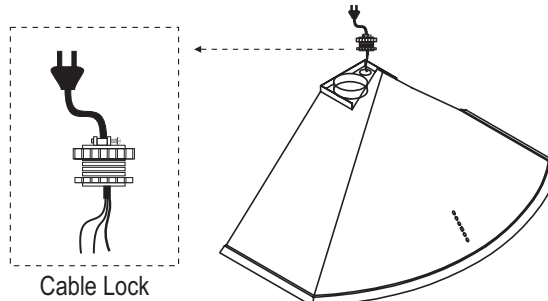
For personal safety, remove house fuse or open circuit breaker before beginning installation. Do not use extension cord or adapter plug with this appliance. **Follow National electrical codes or prevailing local codes and ordinances.**

Electrical Supply:

This appliance requires a 120V 60Hz electrical supply., and connected to an individual, properly grounded branch circuit, protected by a 15 or 20 ampere circuit breaker or time delay fuse. Wiring must be 2 wire w/ ground. Please also refer Electrical Diagram labeled on product.

Cable Lock:

A cable locking connector (not supplied) might also required by local codes. Check with local requirements and codes, purchase and install appropriate connector if necessary.



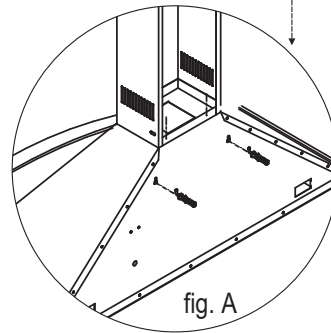
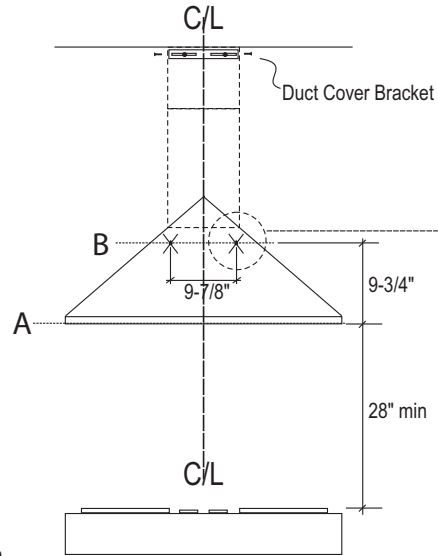
INSTALLATION

Mounting the Range Hood

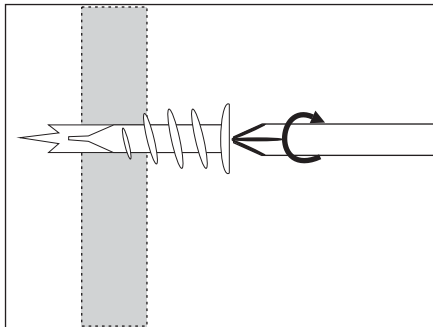
1. Measure from range top to hood bottom (28" min) Level and mark line A.
2. Plum and mark center line.
3. Mark mounting height line B. (9-3/4" from line A)
4. Mark mounting spread from C/L (9-7/8").
5. Fasten E-Z Anchors to wall (see below) as marked.
6. Fasten screws provided onto EZ Anchors, do not fasten screws all the way.
7. Hang hood onto screws and hand tighten (fig A).

Mounting the Duct Cover

1. Center and attach duct cover mount bracket on wall below ceiling or soffit.
2. Fasten telescopic duct covers onto hood and bracket.



EZ ANCHORS



Tap EZ anchor tip into marked drywall locations, turn with screwdriver until seated flush.

Note: Whenever possible, the hood should be secured to wall studs. Use EZ anchors provided only on hollow drywall applications (minimum drywall thickness $\frac{1}{2}$). If a stud or wood surface is present, fasten anchors with screws directly into stud or plywood. For all other wall types (concrete, brick, tiles etc.), use appropriate anchors for mounting.

DUCTLESS CONVERSION

Ductless conversion is intended for applications where an exhaust duct work is not possible to be installed. When converted, the hood functions as a "purifying" hood rather than an exhaust hood. Fumes and exhaust from cooking is drawn and filtered by a set of optional Carbon Filters. The air is then purified and re-circulated back within the home.

We recommend to ALWAYS exhaust air outside of the home by employing existing or installing new duct work, if possible. The hood is most effective and efficient as an Exhaust unit. Only when the exhaust option is not possible should you recourse to converting the hood into a "purifying" unit.

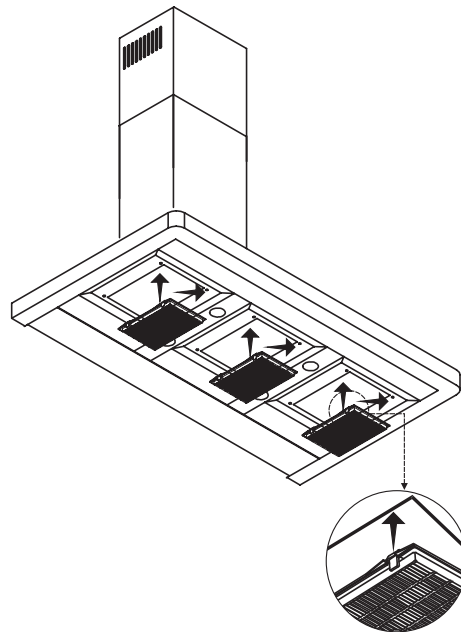
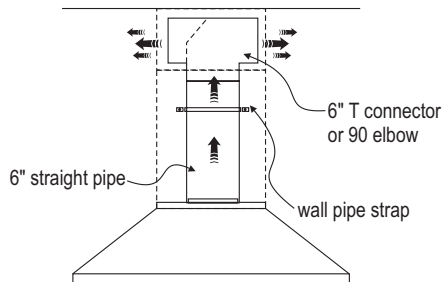
When converted to be a "purifying" unit, a set of Carbon Filters are required on top of its standard Metal Filter set. Order according to its Part number below. The standard Metal Filters are intended to capture residue from cooking and the optional Carbon Filters help to purify fumes exhausted from cooking for re-circulation.

Carbon Filters (Required)

1. Purchase ductless Charcoal Filters as follow:

Hood Model:	Part No.	Filters in pkg.
ZPA-M90S	Z0F-C022	2

2. Remove metal filters on hood. Clip carbon filters onto each slot opening.
3. Re-install metal filters.
4. Turn on Filter Change Indicator on control panel (refer details pg. 7)
5. Carbon Filters must be replace after every 120 hours of use (or approximately every 2 to 3 months based on the average of 1-2hrs. of daily cooking time). The microprocessor in the controls when set, will elapsed and count usage time and indicate when carbon filter replacement is required every 120 hrs.



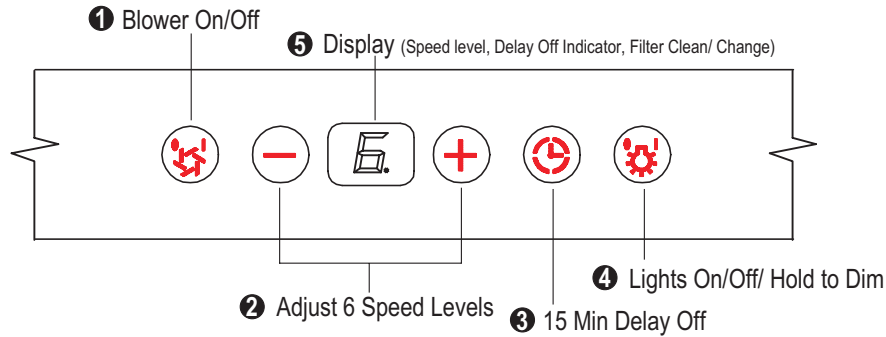
Ducting

1. Install a 6" straight pipe and a "T" connector/ or a 90 elbow to divert air through louvers on duct cover.
2. You may also order our air diverting duct kit; call 1-888-880-8368.

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FEATURES & CONTROLS



TOUCH CONTROLS & FEATURES





1 Blower On/Off

By pressing , the blower is switched On and Off. When switched on, the blower starts up on speed level 3.

2 Speed Selection

The 6 speed levels are selected by pressing  to decrease and  to increase speed level. The display indicates level selected.

3 Delay Off


This is used for programmed shut down of blower and lights 15 minutes after the function is activated. Press  once, a dot flashes in the lower right hand side of display  indicating the function is on. The hood will completely shut down in 15 minutes.

4 Lights On/Off/ Dim

Switch lights On and Off by pressing key  once. To dim lights, press and hold  for 2 seconds.

5 Advance Display Functions

Filters Clean Reminder (Metal):

After every 30 hours of use, the display will start flashing an  reminding you to clean the metal filters from residue and possible clogs.


The standard Metal Filters fitted are required to be cleaned frequently and as recommended in order to maintain blower efficiency. If improperly maintained, residue from cooking will sift through filters and cause damage to hood blowers and other sensitive components; and possibly clog duct work and creates fire hazard.

Filters Change Reminder (Carbon, if fitted):




When your hood is installed as a 'Purifying' (Ductless Recirculating) unit, it is fitted with a set of Carbon Filters to purify exhaust and fumes from cooking, and re-circulates the air within the home. These Carbon Filters are required to be replaced after every 120 hours of use. The **Filter Change Reminder** function in the microprocessor needs to be switched on. The microprocessor in the controls when set, will elapsed and count usage time and indicate when carbon filter replacement is needed every 120 hrs.

CONTROLS: FILTER CHANGE INDICATOR (Carbon Filters)

Filter Change Reminder (Carbon, if fitted):

When your hood is installed as a 'Purifying' (Ductless Recirculating) unit, it is fitted with a set of Carbon Filters to purify exhaust and fumes from cooking, and re-circulates the air within the home. These Carbon Filters are required to be replaced after every 120 hours of use. The **Filter Change Reminder** function in the microprocessor needs to be switched on. The microprocessor in the controls when set, will elapse and count usage time and indicate by a flashing  when carbon filter replacement is needed every 120 hrs.

Setting the Filter Change Reminder:

When Off, hold  for approx. 5 seconds. The display will change from  (exhaust mode) to , (purifying mode/ carbon filters used) this indicates that the elapse timer function is switched on and Carbon Filters are used.

Set Mode


hold 5 secs.



display from <--> to <C>



Filter Replace Indicator:




When the display  starts flashing, the Carbon Filters requires replacement after 120 hours of use.

Change Filters

display <C> flashes



Re-setting Function:

Once filters are replaced, with hood off, press and hold , the display will appear; hold for approximately 5 seconds until  on display disappears . The Filter Change Reminder is now re-set and a new 120 hours elapse cycle is initiated.

To Reset


hold 5 secs.




display from <C> to < >



CONTROLS: FILTER CLEAN INDICATOR (Metal Filters)**Filter Clean Reminder (Standard Metal Filters fitted)**

Whether your hood is installed as an Exhaust or Purifying unit, a set of metal filters are fitted by the factory. These Metal Filters are intended to filter out residue from cooking. It need not be replaced on a regular basis but are required to be kept clean. The **Filter Clean Reminder** function in the microprocessor will automatically indicate by a flashing  when the metal filters are needed to be cleaned after every 30 hrs. of use. Filters can be cleaned by hand or in a dishwasher with non-abrasive soap. Heavily soiled filters should also be soaked in grease cutting detergent such as '409' or its equivalent, prior to cleaning.




Filter Clean Reminder:

When  flashes on display, the metal filters installed are required to be cleaned. This will occur after every 30 hours of use.

Clean Filters

display <A> flashes

**Re-setting Function:**

Reset the Filter Clean Reminder timer when filters are cleaned and re-installed. Press and hold  for approx. 5 seconds, the display will appear; hold for approximately 5 seconds until  on display disappears . The Filter Clean Reminder function is now re-set and a new 30 hours elapse cycle is initiated.

To Reset

hold 5 secs.



display from <C> to < >



CLEANING

Surface Maintenance:

Clean periodically with hot soapy water and clean cotton cloth. Do not use corrosive or abrasive detergent (e.g. comet powder scrub, EZ-Off oven cleaner), or steel wool/ scoring pads which will scratch and damage surface.

For heavier soil use liquid degreaser such as 'Formula 409' or 'Fantastic' brand cleaner. After cleaning, you may use non abrasive stainless steel polish/ cleaners such as 3M or ZEP, to polish and buff out the stainless luster and grain. Always scrub lightly, with clean cotton cloth, and with the grain.

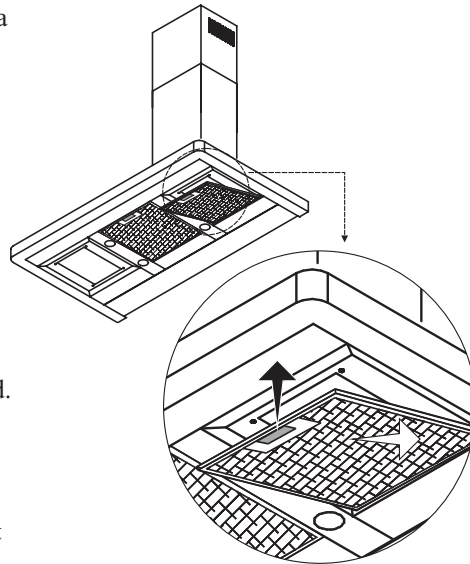
Metal Filters

The Metal Filters fitted by the factory are intended to filter out residue and grease from cooking. It need not be replaced on a regular basis but are required to be kept clean.

Filters should be cleaned after every 30 hours of use. Use the Filter Clean Reminder function on the controls to determine when filters require cleaning (ref. page 8).

Remove and clean by hand or in dishwasher. Spray 'Formula 409' or equivalent degreasing detergent and leave to soak if heavily soiled.

Dry filters and re-install before using hood.



Replacing Metal Filters

Should filters wear out due to age and prolonged use, replace with following part number:

Hood Model:	Part No.	Filters in pkg.
ZPA-M90S	Z0F-M032	2

Also replace damaged filter that has punctured or broken mesh, bent or broken frame.

LIGHTS

Replacing Light Bulbs

CAUTION: Light bulb becomes extremely hot when turned on. DO NOT touch bulb until switched off and cooled. Touching hot bulbs could cause serious burns.

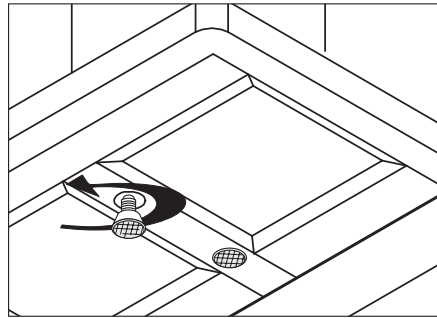
Make sure all power is turned off and bulbs are not hot.

Remove by turning bulb counter clockwise.

If bulbs are difficult to turn due to prolonged use, firmly attach a glass suction cup approx. the diameter of the bulb and turn.

Replacement bulbs are available at specialty lighting stores. Purchase type E27 50W halogen bulbs.

Or to order bulbs, please call our service center: 800-880-8368.



**TO OBTAIN SERVICE UNDER WARRANTY:
You must present proof of original purchase date.
Please keep a copy of your dated proof of purchase (sales slip) in order to
obtain service under warranty.**

One Year Service Repair Warranty:

For one year from date of original purchase, we will provide free of charge, service labor to repair any failed parts or components due to manufacturing defects.

Two Years Parts Warranty:

For two years from date of original purchase, we will provide free of charge, non-consumable replacement parts or components that failed due to manufacturing defects.

Consumable parts not covered by this warranty include: Light Bulbs, Metal and Carbon Filters.

Who is Covered:

This warranty is extended to the original purchaser for products purchased for ordinary home use in the 48 mainland states, Hawaii and Washington D.C.

In Canada and Alaska, this warranty is Limited. There might be costs associated with shipping the products to our designated service locations or you might need to pay service technician's travel costs, to have the appliance repaired in-home.

This Warranty will be Voided when:

Product damaged through negligence, misuse, abuse, accident.

Improper installation and failure to follow installation instructions. When product is used commercially or other than its intended purpose.

Damaged because of improper connection with equipment of other manufacturers.

Repaired or modified by anyone other than Zephyr's Authorized Agents.

What is Not Covered:

Consumable parts such as light bulbs, filters, and fuses.

Services outside of service area and the labor cost incurred in connection with the removal, shipping and reinstallation cost, nor does it cover any other contingent expenses.

The natural wear of finish, and wear due to improper maintenance, use of corrosive and abrasive cleaning products, pads, and oven cleaner products.

Chips, dents or cracks due to abuse, misuse, freight damage, or improper installation.

Service trips to your home to teach you how to use the product.

Damage of product caused by accident, fire, floods or act of God.

This warranty is valid in the United States and Canada. It is non-transferable and applies only to the original purchaser and does not extend to subsequent owners of this product. Any applicable implied warranties, including the warranty of merchantability, are limited in duration to a period of express warranty as provided herein beginning with the date of original purchase at retail and, no warranties, whether express or implied, shall apply to this product thereafter.

**TO OBTAIN SERVICE UNDER WARRANTY
or any Service Related Questions, please call:**

1-888-880-8368

Have your product proof of purchase with date ready for warranty issues.

Or write to:

**Zephyr Corporation
Service and Warranty department
1551 Minnesota Street
San Francisco, CA 94107**