MS24ER Installation & Owners Manual

Read and Save These Instructions

- Installation by anyone other than a qualified contractor voids the warranty.
- Product designed for residential installation only. Commercial installation voids warranty.
- Modification or alteration of product, parts, installation instructions or local safety codes voids warranty.
 - Read our full warranty policy at the end of this document.

CAUTION: Do Not Look Directly at Lamp When Turned On

A CAUTION: Do Not Touch Lamp With Bare Hands When Handling

CAUTION: Ensure Unit Is Unplugged During Installation And Maintenance.

The Following Parts Are Included

- Power supply with remote lamp assembly
- One (1) 14" Germicidal lamp (GFI #4462)
- Two (2) caution labels
- Installation & maintenance instructions
- Magnetic Z Bracket
- Eight (8) sheet metal screws



Specifications

- Weight: 1.2 Lbs.
- Dimensions Unit: 16.25" x 2.5" x 2.5" / Dimensions Z Bracket: 3"
- Lamp Potency: 20 Watts
- Assembly: Mounting Z Bracket for Duct Mounting
- Length in Duct: 14" Germicidal Lamp Penetrates Duct 13.5". 15mm Diameter. •
- Voltage: 24V
- Electrical: 50 / 60 HZ; 2 LED lights; one illustrating power on, the other a lamp on indicator.
- Replacement Lamp: MS24ER 24V (GFI #4462) Replace Every 2 Years
- Y *Do not look directly at a lamp that is turned on. *Never touch lamp with bare hands.
- Ballast: 24V Rapid Start Ballast with end of life protection
- Static Pressure: No Change
- Air Flow: Max 2000CFM or 4,000 Sq. Ft.
- Lamp Intensity Rating: 55 microwatts/cm²@ 1 meter
- Amperage: .8A
- Warranty: 2 Years Bulbs; 3 Years Unit

Unpacking the Unit

Each lamp is shipped with the germicidal lamp placed in a box with protective packaging. When handling the lamp take care to not touch the glass portion of the lamp with bare hands. Oils from the hands can cause "hot spots" which reduce lamp life. Handle by the socket end or use a soft cloth. If you accidentally touch a lamp, clean it using a soft cloth dampened with rubbing alcohol. The lamp is fragile and proper care must be taken when removing from packaging.

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Installation



IMPORTANT: Do not locate the unit within 20" of plastic material that will be directly exposed to the UV light, such as wiring return-side humidifier or certain types of air filters. Check with the filter manufacturer to see if their material is UV resistant. Over time, UV light may degrade plastic.



IMPORTANT: Do not touch the glass portion of the lamps with bare hands because oils from the hands can cause "hot spots" which reduces lamp life. Handle either by the porcelain caps or use a soft cloth. If you accidentally touch a lamp, wipe it off, using a soft cloth dampened with rubbing alcohol.

Installing the UV Lamp Using the Magnetic Z Bracket

- 1. Find a suitable cool, dry location for the ballast; making sure supply cord to ballast will reach 24 volt power supply and that lamp connector can reach the desired lamp mount area.
- IMPORTANT: Do not mount in unvented panels or install in environments that will exceed 160 degrees Fahrenheit or will expose the ballast to moisture.
- 2. Drill a 1/2" hole on the air duct near your desired lamp mount location,
- 3. Taking care not to touch the glass, hold the lamp by the plastic end and insert fully into the magnetic Z bracket and secure with lamp holder. (See photos below.)



- 4. Unplug mid-cord connector and insert the moisture-resistant lamp socket onto lamp.
- 5. Route the lamp power supply cord through drilled hole from step #2.
- 6. Place the lamp with magnetic Z bracket into position inside duct and re-connect the mid cord connectors.

Installing the UV Lamp on Sheet Metal

- 1. Drill 7/8" hole on the air duct in a suitable location.
- To convert the magnetic Z bracket into a duct mounting plate, carefully cut or break off the lamp mount portion of the magnetic Z bracket.
- 3. Center the lamp mounting plate on the hole.
- 4. Use four self-tapping screws provided to secure mounting plate on the sheet metal.
- 5. Taking care not to touch the glass, hold the lamp by the plastic end and insert fully into the mounting plate and secure with lamp holder.
- 6. Find a suitable location to mount the ballast making sure supply cord to ballast will reach 24 volt power supply. Mount the ballast using two self-tapping sheet metals screws provided.

IMPORTANT: Adhere included UV Warning Label onto ductwork within six inches of the UV lamp.

UVC Lamp 🔍

Z Bracket





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Wiring

The ballast operates with 24 Volts. Do not cycle the germicidal lamp with the furnace blower. You must allow unit to run continuously. Wire the unit in accordance with local wiring codes.

IMPORTANT: Systems with high 24 VAC loads may require the installation of a separate 24 VAC transformer to power the UV light. Draws 16 VA. You may need to do load calculation: Volts under load X Amps under load.

Maintenance

This maintenance schedule is only a guideline, determined by average conditions. Actual conditions will dictate the frequency of cleaning and/or replacement of lamps.

IMPORTANT: Do not touch the glass portion of the lamp with bare hands because oils from the hands can cause "hot spots" which reduce lamp life. Handle either by the socket end or use a soft cloth.

If you accidentally touch a lamp, clean it using a soft cloth dampened with rubbing alcohol.

Cleaning the Lamp - Recommended Every 12 Months

- 1. Disconnect power to the ballast. Unplug mid-cord connector before removing lamp.
- 2. If duct mounted, remove lamp holder, then holding the lamp socket pull away from lamp mount. (If mounted using the magnetic Z bracket, there is no need to remove the lamp from the bracket.)
- 3. Using a soft cloth moistened with rubbing alcohol, wipe down the lamp. If there is a large build-up of dust particles, you may wish to use a can of air first. Always handle the lamp by the end socket.
- 4. If duct mounted, carefully slide lamp into duct through lamp mount re-installing lamp holder.
- 5. Reconnect mid-cord connector and restore power to the unit.

Replacing the Lamp - Recommended Every 24 Months

- Replacement lamps are available through your HVAC contractor.
- You must disconnect power to the ballast to reset its auto-protect circuit.
- Follow above procedure except #4 where you replace the lamp instead of clean it.
- Using off-the-shelf lamps voids the warranty.



GFI #4462

Trouble Shooting

- The Power LED will be lit when power is supplied to the unit.
- The Lamp LED indicates lamp function. If the Lamp LED does not light:
 - 1. Disconnect power to the ballast to reset its auto protect circuit.
 - 2. Be sure lamp connector is fastened securely.
 - 3. Check to be sure there is power to the unit.
 - 4. If the LED still does not light, replace the lamp.
 - 5. If still not operating, replace ballast.

Note: Standard off-the-shelf lamps are not compatible with this unit. Use of improper lamps will void warranty.

Warranty

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- Electric components carry a three-year warranty to the original home owner.
- The manufacturer reserves the right to send replacement parts or to replace the unit at its discretion.
- The warranty does not cover labor or damage resulting from improper installation or abuse.
- Use of any lamp other than the recommended will void the warranty.
- The original lamps are warranted for a period of two years. The warranty does not cover lamps broken during shipping, installation or as a result of improper handling.
- To request a return, you must complete our RMA form online at www.generalfilters.com / returns.

Cut Out to Mail	
GENERALAIRe Warranty Registration	Register Online www.GeneralAire.com / Support Center
Product Information Serial Number: Model:	<u>Or Mail</u>
Model: Installation Date Month:Day:Year:	USA CUSTOMERS, MAIL TO:
Owner Information Name: Address: Address 2: City:	General Filters, Inc Attn: Warranty Dept. 43800 Grand River Ave. Novi, MI 48375 www.generalfilters.com
Email:	CANADIAN CUSTOMERS, MAIL TO:
Contractor Information Contractor Name: Address: Address 2: City: State: Zip Code: Contractor Phone:	Canadian General Filters, Ltd. Attn: Warranty Dept. 400 Midwest Rd. Toronto, ON M1P3A9 Canada www.cgfproducts.com
Contractor Email:	Keep a copy for your records!