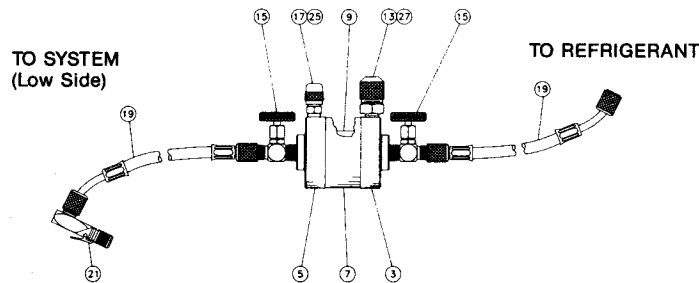


INTRODUCTION:

It is important that these instructions be carefully read and thoroughly understood before attempting to use the Mist Infuser.

The unique Spectroline Mist Infusers are hand-operated devices that, when used with a high-intensity Spectroline Ultraviolet (UV) Lamp and specially formulated AR-GLO® Fluorescent Additives, detect refrigerant leaks in all types of air conditioning and refrigeration systems. They are effective with every commonly used refrigerant, including R-11, R-12, R-22, R-113, R-114, R-123, R-500 and R-502 — even R-134a. Since the Mist Infuser's transparent housing lets the operator actually see the additive, the infusion rate can be controlled, preventing slugging of the compressor. Then, when viewed under the UV lamp, all leaks will glow brightly.

MIST INFUSER COMPONENTS



- 3. End Cap — "FILL"
- 5. End Cap — "VENT"
- 7. Safety Shield
- 9. High-Strength Glass Reservoir
- 11. "O" Ring — 2 Required (Not Illustrated)
- 13. Fill Port Fitting
- 15. Control Valves
- 17. Vent Port Fitting
- 19. Charging Hoses (Not Included)
- 21. Quick-Disconnect Attachment
- 23. Socket Head Cap Screws — 4 Required (Not Illustrated)
- 25. Quick-Seal Cap — Vent
- 27. Quick-Seal Cap — Fill

When ordering replacement parts for any Spectroline® Mist Infuser, please specify the *model number* of the unit and the *part description* as shown in the chart above.

WARNING

The Mist Infuser was designed to be safe if used properly. However, as with any refrigeration or air conditioning servicing, misuse or failure to follow proper operating procedures can cause the refrigerant gas under pressure to shatter components. This could provoke a violent explosion and/or premature discharge of refrigerant which can cause frostbite if it comes in contact with the skin.

The Mist Infuser is intended for use only by qualified service personnel knowledgeable with both the equipment and the system being serviced, with strict adherence to the proper precautions necessary to complete the intended service operations. UV-absorbing protective eyewear, such as the Spectroline UVG-50 Goggles, is recommended for maximum personal safety against ultraviolet radiation.

OPERATING INSTRUCTIONS:

- Choose the correct AR-GLO additive formulation. AR-GLO is available in formulations with four different base lubricants. AR-GLO is for use in systems lubricated with *mineral oils*. AR-GLO/E is for use in systems lubricated with *ester-based oils*. AR-GLO/PAG is for use in systems lubricated with *PAG-based oils*. AR-GLO/LT is for use in *low-temperature systems compatible with alkyl benzene oils*. Be sure to select the correct AR-GLO additive formulation for each application.

NOTE: For *oilless systems* or for *heat transfer fluids*, contact the AC&R Technical Department at Spectronics Corporation for information about our special AR-GLO/OL formulation.

AR-GLO is available in four different concentrations to suit every need. AR-GLO 1, 2 and 3 come in cases of twelve ½-ounce bottles. AR-GLO 4 is available in both cases of six 2-ounce bottles and in individual pint bottles. See the chart above for usage information.

- To fill the Mist Infuser:
 - Close the end valves tightly.
 - Remove the fill and vent caps.

Additive Type	Amount of Refrigerant Required by System	Additive Amount	Typical Application
AR-GLO 1	Up to 4.9 lbs.	½ oz.	Residential systems*
AR-GLO 2	5 to 9.9 lbs.	½ oz.	Light commercial and large residential systems*
AR-GLO 3	10 to 25 lbs.	½ oz.	Commercial and light industrial, including all split systems
AR-GLO 4	N/A**	Use ¼ oz. of AR-GLO 4 per gallon of refrigeration oil	Industrial systems

*Use AR-GLO 3 with *all* split systems, even if they are being used for residential applications and hold less than 10 lbs. of refrigerant.

**When the oil charge is known, calculate the AR-GLO 4 dosage based on the amount of refrigeration oil in the system.

NOTE: With chillers and any other AC&R systems where oil does not circulate with the refrigerant, please contact the AC&R Technical Department at Spectronics Corporation to discuss your particular application. Either a standard AR-GLO additive or a custom formulation will be recommended, depending on the system description.

NOTE: Always remove the vent cap *before* the fill cap. If the larger fill cap is removed first when the Mist Infuser is under pressure, the O ring may be dislodged and leakage will result.

C. Hold the Mist Infuser at a slight angle from horizontal, *vent* side up.

D. Insert the tip of the dispensing cap of the AR-GLO bottle into the fill port firmly and fill the Mist Infuser slowly until AR-GLO is seen rising up the vent port.

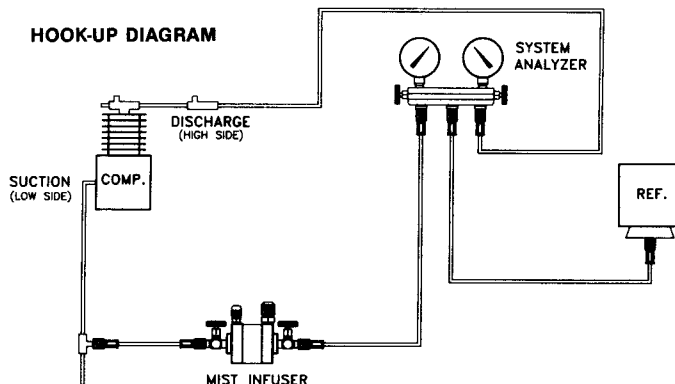
NOTE: For faster filling of larger Mist Infusers the tip of the dispensing cap can be trimmed up to the raised line.

E. Holding the Mist Infuser horizontally, top off both the fill and vent ports until the AR-GLO level is just below the hole.

F. Replace the *vent* cap first, and then the *fill* cap.

NOTE: For neat and clean infusion, **do not overfill** the Mist Infuser. Each AR-GLO bottle contains slightly more fluorescent additive than is needed to completely fill the Mist Infuser. To avoid spills, stop pouring when the AR-GLO reaches the vent port.

Avoid contamination: Use only full, unopened bottles and discard any remaining AR-GLO.



3. To infuse AR-GLO:

A. Connect the Mist Infuser to the low-side access port and refrigerant source and purge all lines of air.

NOTE: The Mist Infuser works best if *liquid* refrigerant is used to infuse AR-GLO into the system. However, a liquid infusion must be done *slowly* in order to avoid compressor damage.

B. While holding the Mist Infuser *vertically*, with the valve connecting it to the low side of the system on the *bottom*, fully open the top end valve.

C. Open the valve connecting to the system *slowly* until liquid refrigerant is seen displacing the AR-GLO.

D. When all the AR-GLO has been infused, close the lower valve and let the Mist Infuser fill partially with liquid refrigerant.

E. Close the top valve and shake the Mist Infuser to clean the inside.

F. Close the valve at the refrigerant source while all the other valves are open and allow the Mist Infuser and lines to reach the low side pressure.

G. Close all the other valves and disconnect the Mist Infuser from the system.

4. To allow the AR-GLO to circulate, wait 15-30 minutes before inspecting the system for leaks with the UV lamp. All leaks will fluoresce a bright yellow-green color. Large leaks will become evident quickly, while minute leaks may take up to 24-48 hours to be detected. To discover minute leaks in automobile systems, have the customer operate the vehicle and air conditioner as much as possible over a 24 hour period and then reinspect with the UV lamp.

NOTE: Fluorescent contrast may be heightened by shielding or dimming room light.

5. After the leak has been repaired, use any general-purpose cleaner to remove the remaining AR-GLO from around the leak area. Run the system for 24 hours, then reinspect with the UV lamp. If there is no glow, *every* leak has been fixed.

6. PERIODIC INSPECTION/MAINTENANCE: Since AR-GLO will safely remain in the system unless purged, periodic inspection with the UV lamp will *instantly* pinpoint any future leaks that may develop.

MIST INFUSER CLEANING:

For proper maintenance, wipe any spills or dirt from the Mist Infuser with a soft cloth and a **nonabrasive** cleaning solution designed for use on glass or plastics.

WARRANTY:

The warranty policy for the Mist Infuser is provided in the Certificate of Limited Warranty enclosed separately with each unit.

NOTE: For assistance of any kind, contact the Customer Service Department at Spectronics Corporation (in the U.S. and Canada, call toll-free 1-800-274-8888). Give full details of the difficulty and include the model and serial number of the unit and date of purchase. If return of the unit to the factory is deemed necessary, shipping instructions will be provided. If an estimate of charges for non-warranty work or other service work is required, a quote will be furnished upon evaluation of the unit. Out-of-warranty service work will not be performed without customer approval.

SPECTRONICS CORPORATION
956 Brush Hollow Road, P.O. Box 483
Westbury, New York 11590
Tel: 800-274-8888 • Fax: 800-491-6868
Outside U.S. and Canada
Tel: 516-333-4840 • Fax: 516-333-4859
E-mail: UVUV@aol.com
Website: www.spectroline.com