# METROPOLITAN NY CHAPTER Refrigeration Service Engineers Society

Continued Education for the HVAC/R Industry





## January 2012 WWW.METRONYRSES.ORG



## Service Logs

Maintaining a service log on equipment serviced can be of great benefit to both the technician and their customers. The benefits of having these logs far outweighs the additional work needed to start and maintain them. Some these benefits include:

- Allowing a technician to troubleshoot systems more timely and efficiently;
- Aiding a technician in keeping track of ongoing system problems;
- Enabling technicians to communicate with one another;
- Having a recorded history of maintenance performed on a system;
- · Having a record of refrigerant used;
- Enhancing the professional image of your company.

By keeping a service log of the equipment, a technician will know what prior service was done to the system. If the service log includes the system's last recorded running pressures and its applied voltage and current draw, the technician would be able to troubleshoot the system faster and more accurately by being able to compare these system parameters from their past value to their current values.

Service logs will also allow a technician to see if there any are patterns to prior service calls. If, for example, many of the prior service calls were to repair refrigerant leaks, the cause of these repetitive leaks could be determined and repaired in order to prevent future similar problems. If the underlying problem can be diagnosed it will prevent repeat service calls, thus saving time and money for both the customer and the service company.

Many times different technicians are called upon to service the same piece of equipment. Having a service long on hand allows technicians to communicate with each other easily. The technician currently on the job can readily see what was done on prior visits and avoid repeating the same steps unnecessarily.

Performing regular preventive maintenance to any refrigeration equipment will be a great benefit to you and to your customers. Keeping a written record of this maintenance is equally important. The maintenance performed can easily be tracked and the service log will serve as a reminder to the technician to perform regular maintenance within the recommended time frames and not overlook any needed tasks or items.

With the ongoing changes regarding refrigerants in our industry these days, having a written record of the refrigerant used will help you to stay within current guidelines and abide by new regulations affect-



ing the equipment. On larger systems it will also help to track if excess amounts of refrigerant have been used without finding and repairing a system leak. The use of service logs can also help to identify the type of refrigerant used if the system has been converted over to any of the newer refrigerants.

A service log does not need to be in any specific or formal format. It can simply be an index card, paper tag or a spiral notebook. Logs should be neatly kept in an accessible area where they will not become damaged from any oil, refrigerant or other system debris.

The benefits of keeping and maintaining a service log with the equipment you service cannot be overstated. It will improve your performance on the job, make your work time more efficient and enhance the professional image you want for yourself and your company.

## **Frosted Suction Lines**

What does frost on the suction line indicate about a system? Does it indicate a properly working system? Does it indicate a shortage or overcharge of refrigerant?

Actually, frost on the suction line only indicates that at the location where the frost is present, the suction line piping is at or below 32°F. That is it. It is neither an indication of a properly operating system nor a system defect.



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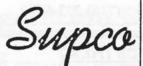
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## **Metro NY Chapter RSES HVAC Training Courses**

The Metropolitan New York Chapter RSES will offer the RSES Technical Institute Courses - 1, 2 & 3 on Tuesday & Thursday evenings, starting January 17th, 2012 in Long Island City, New York

Dates: For 11 weeks on Tuesdays & Thursdays

1/17 & 1/19 1/24 & 1/26 1/31 & 2/2 2/7 & 2/9 2/14 & 2/16 2/21 & 2/23 3/6 & 3/8 3/13 & 3/15 2/28 & 3/1

3/20 & 3/22 3/27 & 3/29

6:00 PM - 10:00 PM Time:

Location: Long Island City High School

14-30 Broadway

Long Island City, NY 11106

## Cost for Course 1, 2 or 3:

\$849.00 for RSES members \$949.00 non-RSES members (also includes 1 year membership in RSES)

Includes: Technical Institute course manual, course tuition, Certificate of Completion after passing final exam, 72 hours toward NATE Recertification, for those eligible.

Register by January 10<sup>th</sup> by calling, mailing or Emailing the form below

#### FOR ADDITIONAL INFORMATION VISIT:

http://www.metronvrses.org or Email: school@metronyrses.org

or Phone Stan Hollander: 718 232-6679

by Mail: Metro NY Chapter RSES

Attn: Stan Hollander, 1837 61st Street, Brooklyn, NY 11204

-Checks and Charges Welcome -

Please make checks payable to "Metro NY RSES"



#### TRAINING COURSE OVERVIEWS

#### TECHNICAL INSTITUTE COURSE 1:

This course begins with a comprehensive introduction to refrigeration and air conditioning. Topics covered include: basic physics, major system components including hermetic, semi-hermetic and open compressors, condensers, evaporators and refrigerant metering devices. It also covers the fundamental concepts of electricity and magnetism as they pertain to resistors, resistance conductors, power supplies, circuit protection devices and transformers. Detailed information on lessons and content for Course 1 can be found at:

## http://metronvrses.org/ti1.html

## TECHNICAL INSTITUTE COURSE 2:

Beginning with tools-of-the-trade this course covers refrigeration system accessories, desiccants and driers, defrosting methods, refrigeration system controls and piping. It also includes instruction on compressor replacement and system evacuation, electric motors in refrigeration systems, motor capacitors and protectors, thermostats, relays, contactors and starters, test equipment and troubleshooting, pressure and enthalpy diagrams, psychrometrics, heat transfer and estimating heat loads residential air conditioning, humidification and a review of safety codes. Detailed information on lessons and content for Course 2 can be found at:

#### http://metronyrses.org/ti2.html

#### TECHNICAL INSTITUTE COURSE 3:

Begins with comprehensive introduction to heat pump theory, including watersource heat pumps. Topics covered include computer-room environmental control, economizers, fans and blowers, air filtration and distribution evaporative condensers and cooling towers, water treatment, multiple-rack systems, hydronics, troubleshooting, controls and controls components. pneumatic relays, typical control applications, and control maintenance. Detailed information on lessons and content for Course 3 can be found at:

http://metronvrses.org/ti3.pdf

## DETACH & RETURN THIS SECTION WITH PAYMENT - BE SURE TO KEEP COPY FOR YOUR RECORDS -

	REGISTRATION FORM	
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Please register by January 10<sup>th</sup> - space is limited. Check or Credit Card Accepted for Payment

Make check to "Metro NY RSES" and mail w/ registration to: Metro NY RSES, Attn: Stan Hollander, 1837 61st Street, Brooklyn, NY 11204 To register by Email submit this form with Credit Card information to school@metronyrses.org

## METROPOLITAN NEW YORK CHAPTER, RSES

For Information Call: Stan Hollander, CMS (718) 232-6679

We are planning to begin our 2012 school program on January 17th. We are offering the Technical Training Institute Program #1 and #2 again, plus we are introducing #3 for the more advanced technicians, and those who successfully completed #2 last year. Application and information is on page 3, and on our website <a href="https://www.metronyrses.org">www.metronyrses.org</a>

## Wednesday January 11th, 2012 at 7:30pm

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