

METROPOLITAN NY CHAPTER Refrigeration Service Engineers Society

Continued Education for the HVAC/R Industry
"Better Service Through Knowledge"

January 2014

WWW.METRONYRSES.ORG



A Hot Compressor

Replacing a compressor is neither simple nor for a technician or inexpensive for their customer. Before replacing a compressor a technician needs to ensure that it is truly defective and that there is not another problem leading to the compressor not running or operating correctly. Unfortunately sometimes good compressors get replaced as a result of a misdiagnosed problem.

Here is one common scenario where a compressor may appear to be defective when in fact it is not:

If a compressor has overheated and opened its internal overload, it will shut down and not run. If a technician arrives on the job when the compressor is still hot and performs a resistance check on it, he will find the resistance of one or more windings to be infinite. He may interpret this to be a permanent open winding and decide that the compressor needs replaced. However, if the compressor was allowed to cool down and its internal overload reset, the technician will find its winding(s) not permanently open. He will proceed to diagnose why the compressor's internal overload opened and find the true cause of the problem. It may still be the result of a defective compressor but at least all of the other possible causes were ruled out first.



I can personally attest to this mistake. Early in my career I was called out to troubleshoot an ice machine. When I arrived on the job the machine was not making any ice and everything seemed to be running normally except the compressor. I checked if voltage was applied to the compressor and it was. I then checked to see if it was drawing current and it was not. I then proceeded to de-energize the compressor, remove its electrical leads, and perform a resistance check on its windings. Sure enough I found both of the windings open (or so I thought). So, being a good technician, I notified the customer of the problem and quoted a price to replace the compressor. They needed ice so they okayed the repair. I went to the supply house, picked up a new compressor, returned to the job and proceeded to replace the compressor. Once the new compressor was installed I started it up; it seemed to be running fine. I had

the customer sign my work order and I quickly left the job. I did not wait for the ice machine to make a batch of ice as I should have.

A few hours later I received a call from my office telling me the ice machine was still not working. When I arrived back at the job the compressor again was not running. I went through the same procedure and found the compressor windings open again. Now I had a problem: could it be the replacement compressor failed that quickly or was there something else wrong? I called my office for help.

At the time I was working for my father's refrigeration service in New York City, so I had a good technical advisor to call on. He first asked me if I checked the compressor's run and start capacitors and its start relay. Of course I had not. When I checked these components I found an open run capacitor. I changed the run capacitor and let the compressor cool down. It started up and I waited until two batches of ice were made and left the job. When I returned to the shop that day I rechecked the old compressor and guess what? Its windings were not open.

The moral to this story: if a compressor has an internal overload and is hot (too hot to touch) allow the compressor to cool down and retest it before deciding it needs to be replaced.

Safety Shoes

Proper foot protection should be worn while servicing, maintaining or installing any RHVAC systems. Technicians should wear steel-toed, ankle-high leather shoes with thick non-conducting soles to properly protect their feet while on the job.

The proper foot gear will support your ankles better; protect your feet from sparks; protect you from nails and other sharp objects; protect you from electrical hazards and/or shock; prevent slipping; protect your feet from falling objects.



Quality safety shoes normally cost more money than other types of work shoes; however the investment in your safety and comfort is well worth the cost.



HVAC/R
Parts
Supplies
Equipment

27-01 BROOKLYN QUEENS
EXPRESSWAY WEST
WOODSIDE, NY 11377

FAX (718) 274-4972

Large
Local
Stock
Free Catalogue

718-545-4896

WHOLESALE ONLY

Supco

**SEALED UNIT
PARTS CO., INC.**

P.O. BOX 21
2230 LANDMARK PLACE
ALLENWOOD, NJ 08720 USA
(732) 223-6644
FAX: (732) 223-1617



*Support Services for the
HVAC Contractor*

HVAC Water Treatment

Specialty Cleaning
Pipe • Duct • Coil

HVAC Antifreeze

Lab Services

Indoor Air Quality

718-361-6666

www.csiontheweb.com



**UNITED
REFRIGERATION INC.**

Refrigeration, Air
Conditioning, Heating,
Supplies, Equipment & Parts

Jim Herlinger
Branch Manager
51-05 59th Place
Woodside, NY 11377-7408

Tel: 718 476-2600

Fax: 718 476-2648

Branchv2@uri.com

HALSEY SUPPLY
CO. INC.

FOR ALL YOUR

AIR CONDITIONING
REFRIGERATION

EQUIPMENT
PARTS SUPPLIES

EPA-CERTIFICATION TESTING

241 HALSEY STREET
BROOKLYN, NY 11216

(718) 574-4774

FAX (718) 574-4778

**T
H
I
S
S
P
A
C
E**

COMING EVENTS

New Technology Boilers

Daikin Mini-Split Systems

Ice Machine Servicing and Troubleshooting

Identifying and Fans & Blowers

Soldering & Brazing Safety & Techniques

Servicing Scroll & Screw Compressors

If you have any suggestions or requests for
Future programs, please let us know!

**T
H
I
S
S
P
A
C
E**

**SEE
US 1st**



WHOLESALE DISTRIBUTORS
Refrigeration/AC/Heating

BROOKLYN (718) 257-3347
10720 Avenue D

JAMAICA (718) 526-0330
139-29 Queens Blvd.

MT. VERNON (914) 668-3631
551 S. Columbus Ave.



**Fire Ice
Mechanical Inc.**

HVAC/R Service Contractors

KURT J. EGGERT

Vogt Tube-Ice Authorized Dealer/
Sales & Factory Certified Technicians
Goldenrod Distributor;

The Newest in Water Treatment Technology
Air Conditioning & Refrigeration

Tel (718) 631-1503

Fax (718) 279-4686

ThermatiX Supply

Plumbing, Heating, and Air
Conditioning Supplies

"We keep you supplied"



73 Broadway, Hicksville, NY 11801

toll free: (877) 390-9421

tel: (516) 513-0985 / 0986

fax: (516) 620-5942

email: sales@thermatixsupply.com



49-70 31st STREET

L.I.C., NY 11101

Phone: 718-937-9000

Fax: 718-392-1296

1-800-937-9000



Suva



WEDDINGS

OUR SPECIALTY

Special Attention Given To
Dinner Dances • Company Parties
Cocktail Parties • Business Meetings
Fund Raisers • Fashion Shows
Engagement Parties • Christenings
Special Discounts Given to Senior Citizens

*Riccardo's
by the bridge*

21-01 24th Avenue, Astoria, NY 11102
718 721-7777

ANTHONY M. CORBISIERO
RICHARD F. CORBISIERO

Metro NY Chapter RSES HVAC Training Courses

The Metropolitan New York Chapter RSES will offer the RSES Technical Institute Course 3 on Tuesday & Thursday evenings, **STARTING FEBRUARY 11th, 2014** in Long Island City, NY

Dates*: For 11 weeks on Tuesdays & Thursdays*

2/11 & 2/13	2/18 & 2/20	2/25 & 2/27
3/4 & 3/6	3/11 & 3/13	3/18 & 3/20
3/25 & 3/27	4/1 & 4/3	4/8 & 4/10
4/15 & 4/17	4/22 & 4/24	

**Dates Tentative – Subject to Change*

Time: 6:00 PM – 10:00 PM

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 calling, mailing or
Emailing the form below

FOR ADDITIONAL INFORMATION VISIT:

<http://www.metronyrses.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"



TECHNICAL INSTITUTE COURSE 3 TRAINING COURSE OVERVIEW

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://metronyrses.org/ti3.pdf>

— DETACH & RETURN THIS SECTION WITH PAYMENT – BE SURE TO KEEP COPY FOR YOUR RECORDS —

REGISTRATION FORM For February 2014 Class

Name: _____ Company: _____
Address: _____ City: _____ State: _____ Zip: _____
Email: _____ Phone: _____
Check / Credit Card Number: _____ Exp: _____
Name on Credit Card: _____

Are you a current RSES Member. If Yes, RSES Membership Number: _____

Please register early - 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

Election of Officers—Third Notice

At the January meeting we will have Election of Officers and Board Members. If any member in good standing wishes to hold an office or be on the Board of Directors and/or would like to nominate another member for any of these important positions, please advise any current officer.

The Nominating committee is recommending the following slate:

Officers

President: Drew Garda
Vice President: Vacant
Treasurer: Steven Aiello
Secretary: Nito Mehra
Sergeant-at-Arms: Kurt Eggert

Members-Board of Directors

Howard DaCosta
Herb Meyer
Stan Hollander, CMS
Rich Bruno

Appointed Positions

Educational Director: Stan Hollander, CMS
Newsletter Editors:
Stan Hollander, CMS & Herb Meyer
Publicity: Position Available

**In the unlikely event of meeting cancellations,
announcement will be posted on our web site**

Wednesday January 8th, 2014 at 7:30pm

at

RICCARDO'S

21-01 24th Avenue, Astoria NY 11102

***New Wall Hung Boiler Technology
Features and benefits of Dunkirk Boilers
Federal Compliance Regulations.***

By

Mike Little—ECR/Dunkirk Boilers

— PLACE LABEL HERE —

**EDUCATIONAL PROGRAM
Wednesday January 8th, 2014
at 7:30pm
SEE DETAILS THIS PAGE**

The HVACR Training Authority
Metropolitan New York Chapter
Refrigeration Service Engineers Society
241 Halsey Street
Brooklyn, NY 11216

