

NOTE ON PERFORMANCE TESTING

Performance Profile Sheet(s) are included in a format that can be easily photocopied for each trainee. This examination is designed to measure competency in the tasks taught in each module.

Please note the number of tasks to be tested while teaching each module. Each trainee should be tested on all the tasks listed on the Performance Profile Sheet(s). Before performance testing, the instructor should brief the trainees on:

- Test objectives and criteria
- Safety precautions
- Procedures for each task to be tested

The instructor administering the performance testing should also do the following:

- Ensure that all of the needed equipment is available and operating properly.
- Set up the testing stations.
- Organize and administer the test in a way that allows for optimal performance.
- Complete the Performance Profile Sheet(s) for each trainee by assigning a pass/fail score for each listed task. Also, include the testing date, and start and end times for each task in the rating boxes.
- Monitor adherence to all safety regulations and precautions.
- Provide adequate supervision to prevent injuries.
- Take immediate and effective action to remedy any emergency.

Performance Testing

If Performance Testing is done as part of NCCER's Training Program, the following conditions must be met:

1. The Craft Instructor must hold valid NCCER instructor certification.
2. The training must be delivered through an Accredited Training Sponsor recognized by NCCER.
3. The specific performance testing must be completed successfully.
4. The results of the testing must be recorded on Training Report Form 200. This form must be provided to the local Accredited Training Sponsor to be forwarded to NCCER's Registry Department.

Certified Plus Credential

Provided the sponsor is working through an NCCER-Accredited Assessment Center, candidates who successfully pass performance testing may be eligible for a Certified Plus Credential. A number of NCCER's Performance Profiles cross over to NCCER's Assessment Performance Verifications and may be completed simultaneously. Go to www.nccer.org and select the Assessments tab to locate the Performance Verifications associated with this craft.

Note that two other important conditions are required for the Certified Plus Credential:

1. Candidates must first pass the associated written assessment.
2. An NCCER-Accredited Assessment Administrator must sign off on the Performance Verification before it is submitted to NCCER.

Craft: HVAC Level 2
Module: 03206-13
Module Title: Alternating Current



TRAINEE NAME: _____

TRAINEE PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
 Also, list the date for testing for each task was completed.

Recognition: When testing for the NCCER Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.

Certified Plus Credential: Trainee who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
1	1. Point out the components used in a functional AC power supply circuit and explain their functions.				
4	2. Following applicable safety practices, test AC components, including transformers, capacitors, and motor windings.				

Craft: HVAC Level 2
Module: 03302-13
Module Title: Compressors



TRAINEE NAME: _____

TRAINEE PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
 Also, list the date for testing for each task was completed.

Recognition: When testing for the NCCER Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.

Certified Plus Credential: Trainee who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
4	1. Measure and record the electrical and mechanical operating parameters of an operational compressor.				
3	2. Use a sealed tube acid/moisture test kit to test a refrigerant circuit.				

Craft: HVAC Level 2
Module: 03301-13
Module Title: Refrigerants and Oils



TRAINEE NAME: _____

TRAINEE PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
 Also, list the date for testing for each task was completed.

Recognition: When testing for the NCCER Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.

Certified Plus Credential: Trainee who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
3	1. Install refrigerant gauges on a functional system and calculate superheat and subcooling using the appropriate P-T chart.				

Craft: HVAC Level 2
Module: 03205-13
Module Title: Leak Detection, Evacuation, Recovery, and Charging



TRAINEE NAME: _____

TRAINEE PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
 Also, list the date for testing for each task was completed.

Recognition: When testing for the NCCER Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.

Certified Plus Credential: Trainee who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
1	1. Use a mixture of nitrogen with traces of HCFC-22 refrigerant to pressurize a refrigerant system in preparation for leak testing.				
1	2. Using at least two of the following methods, leak test a pressurized refrigerant circuit:				
	• Electronic leak detector				
	• Liquids				
	• Ultraviolet/fluorescent systems				
2	3. Use a recovery unit to recover the refrigerant from a system.				
3	4. Evacuate a system using the deep vacuum method and perform a vacuum leak test.				
3	5. Evacuate a system using the triple evacuation method.				

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Craft: HVAC Level 2

Module: 03205-13

Module Title: Leak Detection, Evacuation, Recovery, and Charging



OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
4	6. Demonstrate how to properly charge a refrigerant circuit by the following methods:				
	• By weight				
	• By superheat (fixed orifice metering device)				
	• By subcooling (thermostatic expansion valve metering device)				

Craft: HVAC Level 2
Module: 03303-13
Module Title: Metering Devices



TRAINEE NAME: _____

TRAINEE PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
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Recognition: When testing for the NCCER Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.

Certified Plus Credential: Trainee who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
2	1. Replace the orifice piston in a piston-type metering device.				
4	2. Install an externally equalized expansion valve, correctly placing the sensing bulb and equalizer tube.				
4	3. Calculate superheat and adjust an expansion valve to obtain the correct superheat.				

Craft: HVAC Level 2

Module: 03211-13

Module Title: Heat Pumps



TRAINEE NAME: _____

TRAINEE PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
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Recognition: When testing for the NCCER Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.

Certified Plus Credential: Trainee who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
3	1. Install a heat pump and complete a proper startup.				

Craft: HVAC Level 2
Module: 03215-13
Module Title: Basic Maintenance



TRAINEE NAME: _____

TRAINEE PROGRAM SPONSOR: _____

INSTRUCTOR: _____

Rating Levels: (1) Passed: performed task (2) Failed: did not perform task
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Recognition: When testing for the NCCER Training Program, be sure to record Performance testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.

Certified Plus Credential: Trainee who successfully complete these performance tasks may be eligible for a Certified Plus Credential. Refer to the Note on Performance Testing of this Performance Profile for eligibility requirements, or contact NCCER for more information.

OBJECTIVE	TASK	RATING	DATE	START TIME	END TIME
3	1. Properly install, align, and adjust a drive belt.				
2	2. Lubricate a bearing using a grease gun.				
4	3. Perform an inspection and periodic maintenance on a gas furnace and document the inspection results on a checklist.				
4	4. Perform an inspection and periodic maintenance on a cooling or heat pump system and document the inspection results on a checklist.				

**Module 03202-13 has no Performance Profile Sheet;
no performance testing is required for this module.**

**Module 03213-13 has no Performance Profile Sheet;
no performance testing is required for this module.**

**Module 03214-13 has no Performance Profile Sheet;
no performance testing is required for this module.**

**Module 03201-13 has no Performance Profile Sheet;
no performance testing is required for this module.**

**Module 03204-13 has no Performance Profile Sheet;
no performance testing is required for this module.**

**Module 03203-13 has no Performance Profile Sheet;
no performance testing is required for this module.**