UNIVERSITY OF SOUTHERN CALIFORNIA
AC Technician Journeyman- Module A
Job Code: 180147

Grade: TA
OT Eligible: Yes
Comp Approval: 12/1/2004

JOB SUMMARY:
Performs standard air conditioning, refrigeration, heating and ventilation procedures as required. Determines need to repair and/or replace equipment. Estimates materials required for specific job components. Participates in the AC Technician Pay for Knowledge and Skills Program including on-the-job training. Performs all appropriate module tasks and demonstrates proficiency as outlined in the AC Technician Pay for Skills section, independently or as part of a team, as assigned by the supervisor. May perform tasks in higher-level modules. Trains journeymen and other employees specific skills and tasks as required.

JOB ACCOUNTABILITIES:

*E/M/NA % TIME

_____ _____ Responds to service calls for air conditioning, refrigeration, heating and ventilation systems, including controls and auxiliary components.

_____ _____ Performs repair and maintenance procedures for heating and ventilation systems. Works from blueprints, specifications and schematic diagrams.

_____ _____ Monitors, adjusts and calibrates automatic controls of air conditioning and refrigeration system.

_____ _____ Performs routine safety and maintenance checks on air conditioning and refrigeration system of repair seals, chilled water or condenser water pumps, compressors and pneumatic controls, repair and maintenance of mechanical equipment.

_____ _____ Installs equipment and fabricates components for system and equipment.

_____ _____ Estimates materials required for specific job components.

_____ _____ Trains other journeymen, Zone Maintenance Technicians, or other employees specific skills and tasks, as required.

_____ _____ Maintains clean job site throughout duration and cleans up job site following work completion. Maintains safe working conditions for self and others. Stores and maintains supplies, tools and equipment.

_____ _____ Prepares reports and/or maintenance records, as needed.

_____ _____ Responds to on-call emergencies.

Performs other related duties as assigned or requested. The University reserves the right to add or change duties at any time.

EMERGENCY RESPONSE/RECOVERY:
Essential: □ No

*Select E (ESSENTIAL), M (MARGINAL) or NA (NON-APPLICABLE) to denote importance of each job function to position.
In the event of an emergency, the employee holding this position is required to "report to duty" in accordance with the university’s Emergency Operations Plan and/or the employee’s department’s emergency response and/or recovery plans. Familiarity with those plans and regular training to implement those plans is required. During or immediately following an emergency, the employee will be notified to assist in the emergency response efforts, and mobilize other staff members if needed.

**JOB QUALIFICATIONS:**

**Minimum Education:**

High School Diploma or equivalent and completion of four year apprenticeship program

**Minimum Experience:**

2 Years

**Minimum Field of Expertise:**

Four years experience as a trade-related trainee may substitute for completion of a four year apprenticeship program. Additional two years minimum experience must be as a journeyman. Experience performing standard trade-related procedures. General knowledge of trade-related methods, materials, tools, and equipment. Experience in identifying systems and/or mechanical problems. General knowledge of engineering procedures, equipment and systems. Familiar with city and state building codes, OSHA rules and regulations, standard safety practices and equipment, and other requirements for workplace safety. Universal Environmental Protection Agency (EPA) Certificate.

**Preferred Education:**

Related Undergraduate Study

**Skills: Administrative:**

- Compute totals
- Gather data
- Input data
- Prioritize different projects
- Read handwritten text
- Understand and apply policies and procedures
- Use computerized spreadsheets
- Use database and/or word processing software
- Verify calculations

**Skills: Other:**

- Communication -- written and oral skills
- Knowledge of applicable laws/policies/principles/etc.
- Planning
- Scheduling

**Skills: Machine:**

- Calculator
- Personal Computer

**Skills: Trade/Auxiliary:**

- Calculate measurements
- Identify technical and equipment problems related to trade
- Prepare reports and/or maintenance records
Read, interpret, and comprehend design drawings, blueprints, plans, specifications, and/or sketches. Use and/or operate various stationary machinery, hand held power tools, and/or non power tools.

**Supervises:** Level:

Trains journeymen and other employees on specific skills and tasks as required.

**Comments:**

Valid California Driver's License required. Must own designated hand tools.

**Pay for Skills:**

- Check operating pressures on compressor
- Repair refrigerant leaks
- Remove/replace refrigerant in compressor
- Check prime mover
- Megger motor and record data
- Check motor resistance
- Record motor amperage/balance
- Check, calibrate, repair or replace pneumatic thermostat
- Test cooling tower water
- Remove and replace low voltage t-stat
- Replace mechanical seal of pump
- Repair or replace flowswitch
- Remove and replace bearings (motor)
- Remove and replace blower
- Repair or replace pneumatic 2-way valve
- Perform preventative maintenance on cooling tower
- Check, remove and replace crankcase heaters on compressor, as necessary
- Diagnose compressor problem
- Remove/repair condenser fan motor
- Check pressure difference across filter bank (replace filters if needed)
- Perform oil change in compressors
- Lubricate pumps and motors
- Chemically clean heating and cooling coils
- Clean condenser tubes
- Remove and replace hermetic compressors
- Remove/replace filter dryer
- Remove and replace run and start capacitor
- Remove/replace oil filter on compressor
- Take oil sample for analysis
- Remove/replace sheave on shaft
- Remove and replace valve diaphragm
- Repair/remove/replace actuator
- Replace space sensor
- Remove/replace bearings on shaft
- Order material from outside suppliers
Respond to customers verbally or in writing
Order material from stock

SIGNATURES:

Employee: ___________________________ Date: __________________________

Supervisor: __________________________ Date: __________________________

The above statements are intended to describe the general nature and level of work being performed. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.

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