Reports To
Assistant Director of Plant Operations

Job Summary
Maintains buildings, grounds and equipment, as well as utilities and their use; attends maintenance and engineering activities with other departments, attends staff meetings, as well as safety and other meetings, as directed by the Director of Plant Operations.

Duties
1. Repairs, installs, replaces and tests electrical circuits, equipment and appliances using hand tools and testing instruments to supply electrical power for lighting and equipment operation in the hospital
2. Inspects and tests electrical lighting, signal, communication, and power circuits and equipment
3. Isolates defects in wiring, switches, motors and other electrical equipment using testing instruments such as ammeter, ohmmeter, voltmeter, or testing lamp
4. Examines and tests such elements of systems as distribution panel, controls, circuit fixtures and motors to locate obvious faults such as blown fuses, short circuits, broken wires, loose connections, and worn motors
5. Replaces faulty switches, sockets, plugs, fuses, insulators, and other simple elements of electrical systems, fixtures and appliances
6. Renews circuits either by isolating and cutting out defective wiring and replacing it with new wiring, or by splicing ends of broken wires
7. Dismantles electrical machinery with hand tools and unsolder or unscrew wiring connections.
8. Replaces such defective mechanical parts as gears, bushings and bearings and such related electrical parts as armatures, commentators, and transformers, assembling components according to diagrams
9. Checks clearance of moving parts with precision gauges
10. Restores electrical connections to complete circuits
11. Installs new wiring and electrical machinery
12. Studies blueprints and diagrams to ascertain layout, location and specifications of items to be installed
13. Estimates quantities of materials needed
14. Cuts and shapes conduit with hand tools and fastens it in place with brackets
15. Fastens fixtures, switches and outlet boxes in positions
16. Runs wire through conduit and makes connections to complete circuits
17. Assembles, installs, and connects components of switchboards and distribution panels and connects them to units controlled
18. Mounts motors, transformer, lighting fixtures or other equipment into position and completes circuits, according to diagram specifications
19. May perform related work, such as recording time and materials expended on each work order; operating lathe, grinding, and polishing machines, on making finishing, and rebuilding parts of equipment, and performing minor carpentry, plastering, and painting in connection with repair work
20. Performs a variety of duties in and around buildings and grounds of the hospital complex in completing their tasks
21. Assists by transporting materials and tools by hand or dolly and by performing tasks as directed.
22. Makes repairs, cleans, lubricates and stores maintenance tools and equipment
23. Observes mechanical devices, pumps, engines, motors, air conditioning systems, laboratory equipment and plumbing systems in operation and listens to their sounds to locate causes of trouble
24. Dismantles devices to gain access to and remove defective parts
25. Repairs or replaces defective parts
26. Adjusts functional parts of devices and control instruments or may install special functional and structural parts
27. Lubricates and cleans parts
28. Starts devices to test their performance
29. Set-up and operate lathe, drill press, grinder and other metal-working tools to make and repair parts
30. Keep records for equipment showing type, model number, date of installation, and extent of service

31. Repair toolkit, ammeters, ohmmeters, test lamp, voltammeter, wattmeter and wiring diagrams
32. Fans, pumps, motors, compressors, refrigeration units, specifications, blueprints and hand power tools
33. Numerical ability is needed to make calculations for installation and repair of equipment and to estimate materials
34. Spatial perception is needed to read blueprints and specifications and to visualize installation. Form perception is needed when measuring installing parts and equipment
35. Motor coordination is needed to coordinate eyes and fingers when using hand tools. Finger dexterity is needed when wiring and testing systems. Manual dexterity is needed to work with hands in replacing various components

36. Color discrimination is needed to differentiate wire colors in order to connect correct wires

37. A preference for things and objects is necessary to master techniques of installing and repairing electrical or mechanical systems and fixtures

38. A preference for activities resulting in tangible satisfaction to detect and repair deficiencies in electrical or mechanical systems

39. Ability to handle a variety of changing duties resulting from the complexities of equipment

40. Ability to work within limits and standards set by building codes and blueprints. Capable of working under emergency conditions

**Qualifications**

1. High school graduation with related shop courses preferred

2. Up to one month’s on-the-job training to learn location of equipment, supplies and hospital layout. Working knowledge of related sections of public building and safety codes

3. Must possess a valid California’s driver’s license with a clean DMV record

**Lifting Requirements**

Work is medium. Lifts, carries, pushes or pulls a variety of materials (weighing up to 50 pounds) such as: cables, conduits, fixtures and testing equipment. When weights are heavier, are assisted by other crew members or uses mechanical equipment. Climbs, balances, stoops, kneels, and crouches to gain access to equipment, fingers small parts such as contacts and ends of wires when making connections. Reaches for and handles a variety of hand tools and meters. Near-visual acuity when reading blueprints and inspecting small parts. Depth perception, field of vision, and color vision are needed in making connections, soldering, welding and splicing wires. Works inside and outside, is exposed to hazards of electrical shocks and burns from heated equipment as well as falls from ladders or scaffolds, and noise from machinery.