

Work Processes Schedule

ELECTRIC-MOTOR REPAIRER (ANY INDUSTRY)

RAPIDS: 0149N

O*NET/SOC: 49-2092.00

REVISION DATE: 12/2014

Test, repair, rebuild, and assemble electric motors, generators, and equipment. Demonstrate knowledge and skills for qualifying as Journeyman. Applicable Job Qualification Requirements will be used as a guide in performing tasks and demonstrating knowledge in the following areas. Actual work time must be recorded in the Work Experience Log.

Applicable Ratings/MOS

USMC MOS 1120, 1142, 1169

USCG EM

USN CE, CT, EM, EMN, ET, ETN, ETR, ETV

Related Instruction

Any School trade related schools/courses totaling 576 hours.

Additional Requirement

None

Total Hours: **8000**

Skill	Description	Hours
A	<p>FUNDAMENTALS</p> <p>Demonstration of knowledge required in all areas.</p> <ol style="list-style-type: none"> 1. Safety Precautions Fundamentals 2. First Aid And Rescue 3. Quality Assurance Administration Fundamentals 4. Quality Assurance Program Fundamentals 5. Levels Of Control Fundamentals 6. Hearing Conservation Program Fundamentals 7. Hazardous Material Control And Management-(HMC&M) Program Fundamentals 8. Respiratory Protection Program Fundamentals 9. Sight Conservation Program Fundamentals 10. General Administration (log, record and file maintenance) 11. Technical Administration (publications and technical manuals) 12. Logistics 13. Shop Fundamentals <ul style="list-style-type: none"> · Fasteners Fundamentals · Electrical Fundamentals · Electrical Administration Fundamentals · Coil Winding Fundamentals · Core Loss Tester Fundamentals 	500
B	<p>EQUIPMENT</p> <p>Demonstrate safe operation and upkeep of shop equipment. The equipment listed is representative of tools and machinery typically found in the Work-Center associated with this trade.</p> <ol style="list-style-type: none"> 1. Armature Undercutter 2. Addressograph 3. Sandblaster 4. Coil Cutter/Puller 5. Precision Measuring Tools 6. Grinder 7. Growler 8. Overhead Hoists And Rigging Equipment 9. Slipring / Commutator Machining Jig 10. Multimeters 11. Ovens 12. Spray Paint Booth 13. Hydraulic Press 14. Bearing Puller 15. Abrasive Cut Off Saw 16. Test Panel 17. Core Loss Tester 18. Bar To Bar Armature Tester 19. Baker Surge Comparison Tester 20. Hipotronics Hd100 Series Testers 21. Agitating Machine 	500

	<ul style="list-style-type: none"> 22. Dip Tank 23. Trickle Motor Impregnator 24. Strobotac Type 1531-Ab 25. Coil Winding 26. Megohmmeters 	
C	<p>INSPECT, TEST FOR RECONDITION/REWIND</p> <ul style="list-style-type: none"> 1. Receipt Inspection 2. Electrical Test 3. Disassemble Motor 	400
D	<p>PREPARE, REWIND AND REASSEMBLE ELECTRICAL EQUIPMENT</p> <ul style="list-style-type: none"> 1. Motor / Generator Cleaning 2. Drying 3. Abrasive Blasting and Preservation 4. Remove, Fit Up & Install Bearings 5. Prepare Rotor for Balance 6. Rewind 400 HZ Motor Generators (Up To 75 KW) 7. Rewind AC/DC Motor Generators 8. Rewind AC Generators (Up to 200 KW) 9. Rewind AC Motors (Up to 150 HP) 10. Rewinding DC Generators & Motors (Up to 150 HP) 11. Rewind Motor/Generator Sets (Up to 200 KW) 12. Rewind Motor/Generator Sets (Up to 500 KW) 13. Rewind Motors up to 500 HP 14. Rewind Electrical Equipment: Relays 15. Rewind Electrical Equipment: Transformers 16. Re-assemble Motors and AC/DC Generators 	6100
E	<p>TROUBLESHOOT, INSPECT, REPAIR & TEST ELECTRICAL EQUIPMENT</p> <ul style="list-style-type: none"> 1. Ventilation Fans/Blowers 2. Remove, Refurbish, Install Slip Rings / Commutator 3. Repair and Certify Submersible Pumps 	500