

Work Processes Schedule

DIESEL MECHANIC					
RAPIDS: 0124N	O*NET/SOC: 49-3031.00	REVISION DATE: 03/2015			
<p>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.</p>					
<p>Applicable Ratings/MOS USMC MOS 1341, 1342, 2141, 2146, 2147, 3521 USCG MK USN CM, EN</p>					
<p>Related Instruction Any trade related schools/courses totaling 576 hours</p>					
<p>Additional Requirement None</p>					
		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 	500			
	B	<p>EQUIPMENT</p> <p>Demonstrate safe operation and upkeep of shop equipment. The equipment list is representative of tools and machinery typically found in the Work-Center associated with this trade.</p> <ol style="list-style-type: none"> 1. Ram And Pump, Hydraulic 2. Blast Cleaning Cabinet, Dry, With 20 In Turntable, Floor 3. Cleaner, Steam, Pressure Jet, Oil Fired, Portable 4. Battery Charger 5. Calipers, Inside/Outside 6. Drill Machine, 20 In Swing, 1-1/4 Cap 7. Degreaser, Tank, Floor 8. Diesel Engine Test System 9. Dial Indicator, Magnetic Base W/Flexible Arm 10. Fork Lift, Diesel, 5 Ton, Pneumatic Tire 11. Grinding Machine, 10 In Wheel, Bench 12. Gage, Bore 13. Gage, Snap 14. Gage, Depth 15. Head Machine, Diesel Engine, 8 Speed, 24 In, Reversible 16. Micrometer Set 17. Oven, Bearing Heating, 400 F, Bench 18. Tank, Dip 19. Valve Seat Grinder, Universal W/Dial Gage, Portable 20. Wrench, Torque 21. Comparator Flow Diesel Bench 22. Dial Indicator 23. Grinders 24. Pressure Tester 25. Injector Pop Tester 26. Nozzle Cleaner 27. Nozzle Viewer 28. Fuel Pump Test Stand 29. Governor Test Stand 	500		
		C	<p>CLEAN DIESEL ENGINE, INTERNAL AND EXTERNAL COMPONENTS</p> <ol style="list-style-type: none"> 1. Steam Clean 2. Chemical Cleaning 3. Caustic Cleaning 	200	
			D	<p>DISASSEMBLE, OVERHAUL AND REPAIR LARGE DIESEL ENGINES</p> <ol style="list-style-type: none"> 1. Colt Pirlstick PC2.5v Engine 2. Engines Up To 200 Hp 3. Engines Up To 500 Hp 4. Engines Up To 2700 Hp 5. Engines Up To 1200 Hp 6. Issotta Fraschini Diesel 	2000

E	DYNAMOMETER LOAD TEST DIESEL ENGINES (IN SHOP) 1. Up To 200 Hp 2. Up To 500 Hp 3. Up To 700 Hp	400
F	INSPECT & REPAIR LUBE OIL SYSTEMS 1. Inspect Lube Oil Systems 2. Lube Oil System Hot Oil Flushes 3. Repair Lube Oil Systems	400
G	OVERHAUL, REPAIR, REPLACE, & TEST DIESEL ENGINE COMPONENTS 1. Air Start Motors 2. Cooling Systems	400
H	PROVIDE MISCELLANEOUS REPAIR AND ADJUSTMENT SERVICES 1. Diesel Engine (Tune Up) 2. Diesel Inspections Up To 400 Hp 3. Diesel Inspections Above 400 Hp 4. Exhaust Driven Turbine Blowers (Turbochargers) 5. Inspect Generator Bearings And Shaft Seals 6. Pump Mod 1 Repairs 7. Mod 2 Conversion And Repairs 8. Replace Resilient Mounts 9. Torque Foundation Bolts 10. Servo Actuators (Steam System)	1600
I	REPAIR, REPLACE & TEST DIESEL ENGINE COMPONENTS 1. Cylinder Heads 2. Cylinders (Including Honing) 3. Engine Driven Blowers 4. Engine Driven Component Alignment 5. Friction Clutches 6. Fit And Replace Pedestal Bearings 7. Fuel Oil Piping (Fabricate & Install Tubing) 8. Labyrinth Seals 9. Transmissions 10. Vibration Dampers 11. Speed Sensing Devices (Magnetic/Electric Pickup) 12. Troubleshoot, Test & Repair Fuel Pumps American Bosch Fuel Pumps, Caterpillar Fuel Pumps, CAV Fuel Pumps, Colt Pirlstick Fuel Pumps, Lucas & Bryce Fuel Pumps, Robert Bosch (APE) Fuel Pumps, Robert Bosch (APF) Fuel Pumps, Roosa Master Fuel Pumps 13. Troubleshoot, Test & Repair Governors Woodward (Model EG) Governors, (Model PG) Governors, (Model (SG) Governors, (Model UG) Governors 14. Troubleshoot, Test & Repair Injectors & Nozzles Unit Type Injectors, Pressure Time Injectors, American Bosch Nozzles, Colt Pirlstick Nozzles, Fairbanks Morse Nozzles, (IF) Isotta Franschini Nozzles, Lucas Bryce Nozzles, Robert Bosch Nozzles	2000