

DIESEL MECHANIC

RAPIDS: 0124D

O*NET/SOC: 49-3031.00

REVISION DATE: 09/2019

TRADE DESCRIPTION: Diagnose, adjust, or overhaul buses and trucks, or maintain and repair any type of diesel engines, including mechanics working primarily with automobile or marine diesel engines.

TASK PERFORMANCE: 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 skill areas. Actual work time must be recorded in the Work Experience Log; each skill area must be completed.

Applicable Ratings/MOS/NEC

USMC MOS: 1341, 1342, 2141, 2146, 2147, 3521

USCG: MK

USN: CM, EN

USA MOS: 12P, 881A, 88L, 915A, 915E, 919A, 91A, 91B, 91C, 91D, 91H, 91J, 91L, 91M, 91P, 91S, 91X, 91Z

Related Instruction:

Trade related On-The-Job-Training (OJT) or Any Trade related schools/courses totaling 288 or more hours.

Additional Requirement:

None.

Total Hours: **4000**

Skill	Description	Hours
A	ADMINISTRATION	250

	<ul style="list-style-type: none"> -- General administration; logs, maintenance records, customer files, etc. -- Technical Administration; Publications and technical manuals, electronic files. -- Manage Quality assurance, Hearing conservation, Hazardous materials, Respiratory, and Sight conservation programs. -- Follow green operational practices involving conservation of water or energy or reduction of solid waste. 	
B	<p>EQUIPMENT</p> <ul style="list-style-type: none"> -- Use hand tools such as screwdrivers, pliers, wrenches, pressure gauges, precision instruments, grinders, parts cleaning equipment, as well as power tools such as pneumatic wrenches, lathes, welding equipment, and jacks and hoists. -- Use test equipment to measure vehicle emissions to determine whether they are within acceptable limits. -- Raise trucks, buses, and heavy parts or equipment using hydraulic jacks or hoists. -- Operate valve-grinding machines to grind and reset valves. 	250
C	<p>INSTALL OR REPAIR COMPONENTS</p> <ul style="list-style-type: none"> -- Repair or adjust seats, doors, or windows. -- Rewire ignition systems, lights, and instrument panels. -- Install or repair accessories. 	100
D	<p>DISASSEMBLE, OVERHAUL AND REPAIR LARGE DIESEL ENGINES</p> <ul style="list-style-type: none"> -- Rebuild gas or diesel engines. -- Disassemble and overhaul internal combustion engines, pumps, generators, transmissions, clutches, differential units, and transaxles. 	1000
E	<p>DYNAMOMETER LOAD TEST DIESEL ENGINES</p> <ul style="list-style-type: none"> -- Attach test instruments to equipment, and read dials and gauges to diagnose malfunctions. -- Inspect, test, and listen to defective equipment to diagnose malfunctions, using test instruments such as handheld computers, motor analyzers, chassis charts, and pressure gauges. 	200
F	<p>INSPECT & REPAIR LUBE OIL FUEL OIL SYSTEMS</p> <ul style="list-style-type: none"> -- Perform routine maintenance such as changing oil, checking batteries, and lubricating equipment and machinery. -- Specialize in repairing and maintaining parts of the engine, such as fuel injection systems. 	400

	-- Maintain or repair vehicles with alternative fuel systems, including biodiesel, hybrid, or compressed natural gas vehicles.	
G	OVERHAUL, REPAIR, REPLACE, & TEST DIESEL ENGINE COMPONENTS -- Diagnose and repair vehicle heating and cooling systems. -- Adjust or repair computer controlled exhaust emissions devices. -- Inspect, repair, and maintain automotive and mechanical equipment and machinery such as pumps and compressors. -- Recondition and replace parts, pistons, bearings, gears, and valves. -- Test drive trucks and buses to diagnose malfunctions or to ensure that they are working properly.	1000
H	PROVIDE MISCELLANEOUS BRAKE REPAIR AND ADJUSTMENT SERVICES -- Inspect brake systems, steering mechanisms, wheel bearings, and other important parts to ensure that they are in proper operating condition. -- Adjust and reline brakes, align wheels, tighten bolts and screws, and reassemble equipment. -- Align front ends and suspension systems. -- Examine and adjust protective guards, loose bolts, and specified safety devices. -- Inspect and verify dimensions and clearances of parts to ensure conformance to factory specifications.	800