

Unit/Standard Number	<p><u>High School Graduation Years 2014, 2015 and 2016</u></p> <p>Medium/Heavy Vehicle and Truck Technology/Technician CIP 47.0613 Task Grid</p>
	Secondary Competency Task List
100	ORIENTATION AND SAFETY
101	Demonstrate safe conduct in diesel shop
102	Identify and explain diesel occupations and certification programs
103	Identify truck classifications and configurations
104	Demonstrate use of service manuals and online service information
105	Demonstrate safety procedures and safe equipment operation
106	Understand OSHA regulation
107	Follow EPA standards for cleaning and disposal of waste and fluids.
200	TOOLS AND FASTENERS/HARDWARE
201	Identify and demonstrate the proper use of basic hand tools and power tools
202	Identify and demonstrate the proper use of fasteners and hardware
203	Drill and use threading tools and extractors
204	Demonstrate the proper use of fractional and precision measuring tools
205	Use and convert US standard and metric precision measuring tools
206	Set up/ Shut down, Cut and heat with Oxy-Acetylene Torch
300	SUSPENSION AND STEERING SYSTEMS
301	Inspect, repair, or replace steering linkage
302	Inspect and adjust basic wheel alignment/inspect tires
303	Inspect, repair, or replace steering gear box
304	Test/service power steering system
305	Service wheel bearings and hubs, according to TMC Guidelines
306	Inspect, repair, or replace shock absorbers
307	Inspect, repair, or replace king pins
308	Inspect, repair, or replace leaf springs
309	Inspect, repair or replace air suspension components
310	Inspect and service wheel assemblies

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400	PREVENTIVE MAINTENANCE
401	Preventive maintenance schedules and procedures such as lube, oil, and filter service
402	Perform preventive maintenance inspection
403	Inspect, repair, or replace fifth wheel and mount
500	BRAKE SYSTEM
501	Inspect, repair, or replace hydraulic disc brakes components
502	Inspect, repair, or replace hydraulic drum brakes components
503	Inspect, repair, or replace S-cam drum brakes components
505	Check operation of low air warning buzzer/indicator
506	Inspect, repair, or replace air governors
507	Replace hydraulic brake lines/bleed brakes
508	Inspect, repair, or replace air brake lines
509	Inspect, diagnosis, or replace air brake chamber
510	Inspect, diagnosis, or replace master cylinder and hydraulic system components
511	Diagnosis, repair, or replace ABS components
512	Inspect, repair, or replace air brake valves
513	Inspect, repair, or replace air dryers
514	Inspect, repair, or replace calipers
515	Inspect, repair, or replace rotors
516	Inspect, repair, or replace drums
517	Inspect, repair, or replace slack adjusters
600	DEMONSTRATE THE KNOWLEDGE OF THE ENGINE
601	Explain diesel engine operation and identify parts
602	Remove, inspect, or install camshaft, and valve train components
603	Remove, inspect, or install piston, connecting rod, and liner
604	Remove, inspect, or install crankshaft and bearings (mains and rods)
605	Replace engine oil seal

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606	Perform diesel tune-up (set overhead)
607	Remove, inspect, or install cylinder head and gasket
608	Remove, inspect, or install oil pump
609	Remove, inspect, or install vibration dampener and flywheel
700	AIR INTAKE AND EXHAUST SYSTEMS
701	Inspect, repair, or replace air induction system components
702	Inspect, repair, or replace exhaust system and components
703	Inspect, repair, or replace charge air-coolers and after coolers
704	Inspect, repair, or replace turbocharger
800	DEMONSTRATE THE KNOWLEDGE OF COOLING SYSTEM
801	Inspect/replace belts and pulleys
802	Inspect/replace hoses and clamps
803	Test/replace thermostat
804	Drain, flush, refill and bleed cooling system
805	Test anti-freeze and supplemental coolant additives
806	Test/replace radiator and pressure cap
807	Inspect/replace water pump
808	Test/inspect/repair fan drives
900	FUEL SYSTEM
901	Replace fuel filters/strainers
902	Inspect/replace fuel lines, tank, cap, and fittings
903	Prime and bleed fuel system
904	Test/service/remove/install injector/nozzle
1000	ELECTRICAL/ELECTRONIC SYSTEM
1001	Test/service battery
1002	Test/replace/adjust bulbs and lamps
1003	Diagnosis repair/replace electrical circuits and components
1004	Test starting system and replace component assemblies

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1005	Test charging system output and replace component assemblies
1006	Analyze and interpret schematics
1007	Perform computer systems tests and analyze codes
1100	DRIVE LINE
1101	Diagnosis, replace and adjust drive-line components
1102	Perform clutch/clutch brake maintenance and adjustment