

Unit/Standard Number	<p style="text-align: right;"><u>High School Graduation Years 2020, 2021 and 2022</u></p> <p style="text-align: center;"><b>Medium/Heavy Vehicle and Truck Technology/Technician CIP 47.0613 Task Grid</b></p>	<p style="text-align: center;"><b>Proficiency Level Achieved: (X) Indicates Competency Achieved to Industry Proficiency Level</b></p>
<b>Secondary Competency Task List</b>		
<b>100</b>	<b>ORIENTATION AND SAFETY</b>	
101	RESERVED	
102	Explain diesel occupations and certification programs.	
103	Identify truck classifications and configurations.	
104	Use service manuals and online service information.	
105	Follow safety procedures and safe equipment operation.	
106	RESERVED	
107	Follow EPA standards for cleaning and disposal of waste and fluids.	
108	Exhibit professional/personal standards and work habits/ethics in a diesel shop.	
109	Comply with OSHA regulations.	
<b>200</b>	<b>TOOLS AND FASTENERS/HARDWARE</b>	
201	Identify and use basic hand tools and power tools.	
202	Identify and use fasteners, fittings and hardware.	
203	Drill and use threading tools and extractors.	
204	Identify and use fractional and precision measuring tools both standard and metric.	
205	RESERVED	
206	Set up/Shut down, cut and heat with Oxy-Acetylene Torch.	
<b>300</b>	<b>SUSPENSION AND STEERING SYSTEMS</b>	
301	Inspect, repair, or replace steering linkage.	
302	Inspect and adjust basic wheel alignment/inspect tires.	
303	RESERVED	
304	Inspect, test/service power steering system.	
305	Service wheel bearings and hubs, according to TMC Guidelines.	
306	Inspect or replace shock absorbers.	
307	Inspect or replace king pins.	
308	Inspect or replace leaf springs.	
309	Inspect, repair or replace air suspension components.	
310	Inspect and service wheel assemblies.	
<b>400</b>	<b>PREVENTIVE MAINTENANCE</b>	
401	Determine preventive maintenance intervals and procedures.	
402	Perform preventive maintenance inspection.	

Unit/Standard Number	<p style="text-align: right;"><u>High School Graduation Years 2020, 2021 and 2022</u></p> <p style="text-align: center;"><b>Medium/Heavy Vehicle and Truck Technology/Technician CIP 47.0613 Task Grid</b></p>	<p style="text-align: center;"><b>Proficiency Level Achieved: (X) Indicates Competency Achieved to Industry Proficiency Level</b></p>
403	RESERVED	
<b>500</b>	<b>BRAKE SYSTEM</b>	
501	Inspect, repair, or replace hydraulic disc brake components.	
502	Inspect, repair, or replace hydraulic drum brake components.	
503	Inspect, repair, or replace S-cam drum brake components.	
505	RESERVED	
506	Inspect, replace and/or adjust air governors.	
507	Replace hydraulic brake lines/bleed brakes.	
508	Inspect, repair, or replace air brake lines.	
509	Inspect, diagnose, or replace air brake chambers.	
510	Inspect, diagnose, or replace master cylinder and hydraulic system components.	
511	Diagnose, 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 air disc brake components.	
515	RESERVED	
516	RESERVED	
517	Inspect, replace and adjust slack adjusters.	
<b>600</b>	<b>DIESEL ENGINES</b>	
601	Explain diesel engine operation and identify parts.	
602	Remove, inspect, and install camshaft, and valve train components.	
603	Remove, inspect, and install piston, connecting rod, and liner.	
604	Remove, inspect, and install crankshaft and bearings (mains and rods).	
605	Replace engine oil seal.	
606	Perform diesel tune-up (set overhead).	
607	Remove, inspect, and install cylinder head and gasket.	
608	Remove, inspect, and install oil pump.	
609	Remove, inspect, and install vibration dampener and flywheel.	
<b>700</b>	<b>AIR INTAKE AND EXHAUST SYSTEMS</b>	
701	Inspect, repair, or replace air induction system components.	
702	Inspect, repair, or replace exhaust system and components.	
703	Inspect, or replace charge air-coolers and after coolers.	
704	Inspect, repair, or replace turbocharger.	

Unit/Standard Number	<u>High School Graduation Years 2020, 2021 and 2022</u>		Proficiency Level Achieved: (X) Indicates Competency Achieved to Industry Proficiency Level
	<b>Medium/Heavy Vehicle and Truck Technology/Technician CIP 47.0613 Task Grid</b>		
<b>800</b>	<b>COOLING SYSTEMS</b>		
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	RESERVE		
807	Inspect/replace water pump.		
808	Test/inspect/repair fan drives.		
809	Inspect, pressure test cooling system components.		
<b>900</b>	<b>FUEL SYSTEM</b>		
901	Replace fuel filters/strainers.		
902	Inspect/replace fuel lines, tank, cap, and fittings.		
903	Prime and bleed fuel system.		
904	RESERVE		
905	Perform fuel supply and return system tests.		
906	Remove and install injector/nozzle.		
<b>1000</b>	<b>ELECTRICAL/ELECTRONIC SYSTEM</b>		
1001	Test/service battery.		
1002	Test/replace/adjust bulbs and lamps.		
1003	Diagnose, repair/replace electrical circuits and components.		
1004	Test starting system and replace component assemblies.		
1005	Test charging system output and replace component assemblies.		
1006	Analyze and interpret wiring diagrams.		
1007	Perform computer systems tests and analyze codes.		
<b>1100</b>	<b>DRIVE LINE</b>		
1101	Diagnose, replace and adjust drive-line components.		
1102	Perform clutch/clutch brake maintenance and adjustment.		
1103	Remove and install clutch assembly.		
1104	Remove and install transmission.		