Crawford County Career & Technical Center

Competency Task List – Secondary Component
Medium/Heavy Vehicle and Truck Technology/Technician CIP 47.0613
High School Graduation Years 2026, 2027, 2028

100 Orientation and Safety

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
	RESERVED (101)		
102	Research diesel occupations and certification programs.		
103	Identify truck classifications and configurations.		
104	Research and interpret service manuals and online service information.		
105	Follow safety procedures and safe equipment operation.		
	RESERVED (106)		
107	Follow Environmental Protection Agency (EPA) standards for cleaning and disposal of waste and fluids.		
108	Exhibit professional and personal standards and work habits and ethics in a diesel shop.		
109	Comply with Occupational Safety and Health Administration (OSHA) regulations.		

200 Tools and Fasteners/Hardware

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
201	Identify and utilize basic hand tools and power tools.		
202	Identify and utilize fasteners, fittings, and hardware.		
203	Drill and use threading tools and extractors.		
204	Identify and utilize precision measuring tools.		
	RESERVED (205)		
206	Set up/Shut down, cut, and heat with an oxy-acetylene torch.		

300 Suspension and Steering Systems

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
301	Inspect and repair or replace steering linkage.		
302	Inspect and adjust basic wheel alignment and inspect tires.		
	RESERVED (303)		
304	Inspect and test/service a power steering system.		
305	Service wheel bearings and hubs according to Transportation Motor Control (TMC) guidelines.		
306	Inspect and replace shock absorbers.		
307	Inspect and service king pins.		
308	Inspect and service leaf springs.		
309	Inspect and repair or replace air suspension components.		
310	Inspect and service wheel assemblies.		

400 Preventive Maintenance

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
401	Determine preventive maintenance intervals and procedures.		
402	Perform preventive maintenance inspection.		
	RESERVED (403)		

500 Brake System

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
501	Inspect and service hydraulic disc brake components.		
	RESERVED (502)		
503	Inspect and service S-cam drum brake components.		
	RESERVED (505)		
506	Inspect and replace or adjust air governors.		
507	Replace hydraulic brake lines and bleed brakes.		
508	Inspect and service air brake lines.		
509	Inspect and diagnose and replace air brake chambers.		
510	Inspect and diagnose and replace hydraulic brake system components.		
511	Diagnose and repair or replace anti-lock brake system (ABS) components.		
512	Inspect and service air brake valves.		
513	Inspect and service air dryers.		
514	Inspect and service air disc brake components.		
	RESERVED (515-516)		
517	Inspect and service and adjust slack adjusters.		

600 Diesel Engines

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
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 mains and rod bearings.		
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.		

700 Air Intake and Exhaust Systems

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
701	Inspect and service air induction system components.		
702	Inspect and service exhaust system ~~and~~ components to include aftertreatment systems.		
703	Inspect and replace charge air coolers and after coolers.		
704	Inspect and service turbocharger.		

800 Cooling Systems

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
801	Inspect and replace belts and pulleys.		
802	Inspect and replace hoses and clamps.		
803	Test and replace thermostat.		
804	Drain, flush, refill, and bleed cooling system.		
805	Test anti-freeze and supplemental coolant additives.		
	RESERVE (806)		
807	Inspect and replace water pump.		
808	Inspect fan drives.		
809	Inspect and pressure test cooling system components.		

900 Fuel System

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
901	Replace fuel filters and strainers.		
902	Inspect and replace fuel lines, tank, cap, and fittings.		
903	Prime and bleed fuel system.		
	RESERVE (904)		
905	Perform fuel supply and return system tests.		
906	Remove and install injector/nozzle.		

1000 Electrical/Electronic System

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
1001	Test and service battery.		
1002	Test, replace and adjust bulbs and lamps.		
1003	Diagnose and repair or 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.		

1100 Drive Line

Item	Task	(X) Indicates Proficiency [1]	Secondary Course Crosswalk
1101	Inspect and service drive-line components.		
1102	Perform clutch/clutch brake maintenance and adjustment.		
1103	Remove and install clutch assembly.		
	RESERVED (1104)		

[1] Student Demonstrated Entry-Level Industry Proficiency as Indicated by (X)

Secondary CTE Instructor Signature _____ Date _____

Student Signature _____ Date _____

PA In-Demand Occupations List (PA IDOL)
Industry-Recognized Credential Resource Guide