

Crawford County
Career  **Technical**
 Center

Unit/Standard Number	<p align="center">Autobody/Collision and Repair Technology/Technician CIP 47.0603 Task Grid</p>	<p align="center">Proficiency Level Achieved: (X) Indicates Competency Achieved to Industry Proficiency Level</p>
	Secondary Competency Task List	
100	SAFETY	
101	Establish general shop safety.	
102	Demonstrate proper use of personal safety devices and clothing.	
103	Locate and identify fire extinguishers.	
104	Locate and operate emergency switches.	
105	Explain fire and tornado drill procedures.	
106	Demonstrate proper handling of hazardous materials.	
107	Identify proper chemical disposal techniques.	
108	Operate shop and spray area ventilation systems properly.	
109	List rules for care and safe use of hand tools.	
110	Demonstrate safe and proper use of hydraulic tools; electric powered, pneumatic equipment.	
111	Identify the proper methods and options for safely moving vehicles in the shop area.	
112	Identify information on Safety Data Sheets (SDS).	

Crawford County
Career  **Technical**
 Center

200	VEHICLE DESIGN AND CONSTRUCTION	
201	List the differences between various vehicle frame construction.	
202	Identify and describe structural and nonstructural panels of a unibody vehicle.	
300	PANEL REPLACEMENT AND ALIGNMENT	
301	Install panels using various alignment methods (weld, bolt).	
302	Remove, reinstall, and align bolt on panels.	
303	Remove and reinstall wheel assembly.	
304	Aim headlights using mechanical aiming equipment.	
305	Replace wheels/tires.	
400	TRIM AND HARDWARE	
401	Identify the principles of full or partial panel replacement (bonded, bolted, or welded).	
402	Identify and select types of fasteners.	
403	Remove and replace adhesive-held molding and trim.	
404	Remove and install seats.	
405	Describe when and how to remove and reinstall carpeting.	
406	Identify, remove and install interior parts and hardware.	
407	Identify, remove and install exterior parts and hardware.	
408	Remove and install exterior trim, moldings, and emblems.	
500	METAL FINISHING	
501	Select proper metal straightening tools.	
502	Describe heat shrinking method for stretched metal.	
503	Demonstrate weld-on nail gun to repair sheet metal.	

Crawford County
Career  **Technical**
 Center

504	Repair metal to industry standards.	
600	BODY FILLERS	
601	Select correct body filler and tools.	
602	Prepare surface for body filler.	
603	Mix and apply body filler.	
604	Sand body fillers to correct contour.	
700	GLASS AND HARDWARE	
701	Remove and replace a door regulator.	
702	Remove and repair moveable door glass.	
703	Describe the removal and replacement of stationary glass.	
800	STRUCTURAL COMPONENT REPAIR AND DAMAGE ANALYSIS	
801	Classify the various types and extent of damage a vehicle sustains from an accident.	
802	Select and interpret body dimension specification sheets and/or manuals.	
803	Set up and use tram gauge to diagnose vehicle length and width damage.	
804	Explain how to diagnose vehicle height damage with datum line gauges.	
805	Identify aspects of various measuring systems.	
806	Identify repair methods for vehicle with diamond damage, twist, sag side swag or mash.	
900	STRUCTURAL COMPONENTS	
901	Demonstrate knowledge to mount and anchor vehicle to a pulling system.	
902	Prepare vehicle for gauging and analysis.	
903	Prepare vehicle for alignment.	

Crawford County
Career  **Technical**
 Center

1000	CORROSION PROTECTION	
1001	Identify corrosion principles and factory corrosion protection.	
1002	Identify repair methods and materials for corrosion protection.	
1003	Describe the application of seam sealers.	
1004	Apply caulking and seam sealers.	
1100	WELDING AND CUTTING	
1101	Identify different methods of attaching structural components [MIG welding, squeeze type resistance spot welding (STRSW) riveting, structural adhesive, silicon bronze, etc.].	
1102	Demonstrate personal safety practices and vehicle protection measures.	
1103	Set up and tune the MIG welder.	
1104	Complete a butt joint with backing in various welding positions.	
1105	Complete a fillet weld lap joint.	
1106	Complete a plug weld in various positions.	
1107	Define protection of adjacent panels, glass, vehicle interior, etc. from welding and cutting operations.	
1200	CUTTING PROCESSES	
1201	Identify cutting processes.	
1202	Demonstrate sheet metal cutting processes.	
1300	SURFACE PREPARATION, REFINISHING, AND EQUIPMENT	
1301	Explain various environmental regulations and other items regulated in an automotive refinishing department.	
1302	Locate hazardous warning information.	
1303	Select and inspect personal safety equipment and clothing needed for protection during refinishing operations.	

Crawford County
Career  **Technical**
 Center

1304	Demonstrate safe painting practices and use of protective clothing equipment.	
1305	Identify personal health and safety hazards according to OSHA guidelines.	
1400	AUTOMOTIVE FINISHES	
1401	Describe the difference between paint systems and why the materials are applied by the manufacturer.	
1402	Describe paint defects - causes and cures.	
1403	Identify various undercoats.	
1404	Identify various topcoats (single stage, basecoat/clearcoat, tricoat).	
1500	SURFACE PREPARATION	
1501	Demonstrate proper steps to pre-wash entire vehicle.	
1502	Employ the proper use of wax and grease remover.	
1503	Demonstrate proper use of sanding and featheredging techniques.	
1504	Wet sand and featheredge areas.	
1505	Apply suitable metal treatments.	
1506	Identify the color of paint on vehicle with use of paint catalogs.	
1507	Apply undercoats.	
1508	Prepare panels for blending.	
1509	Explain the purpose of chip-resistant coating.	
1510	Identify masking materials.	
1511	Demonstrate masking procedures.	
1512	Select the appropriate abrasive.	
1600	REFINISHING EQUIPMENT AND PAINT AREA	
1601	Prepare and operate the spray booth.	

Crawford County Career Technical Center

1602	Prepare and use the paint mixing area.	
1603	Set up, test and adjust spray guns.	
1604	Inspect, clean, and determine conditions of spray guns and equipment.	
1605	Select and use the National Institution of Safety and Health (NIOSH) approved (Fresh Air Supplied System) personal painting/refinishing respirator system.	
1700	REFINISHING OPERATIONS	
1701	Prepare surface for topcoat system.	
1702	Apply primer-sealer.	
1703	Apply single-stage finish.	
1704	Apply basecoat/clearcoat finish.	
1705	Describe the application of stone chip-resistant coating to lower body areas.	
1800	BLENDING OPERATIONS	
1801	Prepare an area for blending of the finish.	
1802	Blend basecoat/clearcoat finish.	
1803	Tint and blend color coat.	
1900	DETAILING	
1901	Remove overspray.	
1902	Clean exterior of vehicle.	
1903	Clean interior of vehicle.	
1904	Apply decals and stripes.	
1905	Demonstrate color sanding and polishing techniques.	
1906	Clean body openings.	

Crawford County
Career  **Technical**
 Center

1907	Clean exterior and interior glass surfaces.	
2000	ESTIMATING DAMAGE ANALYSIS	
2001	Identify vehicle by VIN (vehicle identification number).	
2002	Collect vehicle and customer data.	
2003	Demonstrate usage of collision estimating guides.	
2004	Identify different types of vehicle damage.	
2005	Indicate repair and replace decisions.	
2006	Prepare an estimate/repair sequence.	
2100	PLASTIC REPAIR	
2101	Identify plastic to make repair decisions.	
2102	Demonstrate plastic repair methods (adhesives and welding).	
2103	Repair plastics with two-part adhesives, with and without reinforcement.	
2200	RESTRAINT SYSTEMS	
2201	Research auto manufacturers' recommended safety procedures to prevent accidental deployment of supplemental restraint systems.	
2202	Identify supplemental restraint systems.	
2203	Remove and reinstall seat belt components.	