



Crawford County Career & Technical Center

Student Start Date: _____

Student Name: _____

Competency Task List – Secondary Component

Autobody/Collision and Repair Technology/Technician CIP 47.0603 – Mr. Fuller

High School Graduation Years 2022, 2023, 2024

100 Safety

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|--|--|------|
| 101 | Follow general shop safety rules. | | |
| 102 | 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 | Follow proper chemical disposal techniques. | | |
| 108 | Operate shop and spray area ventilation systems. | | |
| 109 | Identify and follow rules for care and safe use of hand tools. | | |
| 110 | Identify and demonstrate safe and proper use of power tools and equipment. | | |
| 111 | Identify the proper methods and options for safely moving vehicles in the shop area. | | |
| 112 | Identify information on Safety Data Sheets (SDS). | | |

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| 113 | Demonstrate the ability to secure vehicles on jack stands and/or hydraulic lifts. | | |
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200 Vehicle Design and Construction

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 201 | Identify the differences between various vehicle construction types. | | |
| 202 | Identify and describe structural and nonstructural panels of a unibody vehicle. | | |
| 203 | Determine the various materials used in vehicle construction. | | |

300 Panel Replacement and Alignment

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|--|--|------|
| 301 | Identify the principles of full or partial panel replacement (bonded, bolted, welded, or riveted). | | |
| 302 | Remove, reinstall, and align bolt on panels. | | |
| 303 | Remove and reinstall wheel/tire assembly. | | |
| 304 | Aim headlights using mechanical aiming equipment. | | |
| 305 | RESERVED | | |

400 Trim and Hardware

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|--|--|------|
| 401 | RESERVED | | |
| 402 | Determine types of fasteners. | | |
| 403 | Remove and replace adhesive-held molding and trim. | | |
| 404 | Remove and install seats. | | |
| 405 | RESERVED | | |

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|-----|--|--|--|
| 406 | Remove and install interior parts and hardware. | | |
| 407 | Remove and install exterior parts and hardware. | | |
| 408 | Remove and install exterior trim, moldings, and emblems. | | |

500 Metal Finishing

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|--|--|------|
| 501 | Select proper metal straightening tools. | | |
| 502 | Evaluate stretched metal for repair. | | |
| 503 | Demonstrate weld-on nail gun to repair sheet metal. | | |
| 504 | Repair metal to meet industry standards. | | |
| 505 | Explain the characteristics of aluminum repair and tools required. | | |

600 Body Fillers

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---------------------------------------|--|------|
| 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

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 701 | Remove and reinstall a door window regulator. | | |
| 702 | Remove and reinstall moveable door glass. | | |
| 703 | Describe the removal and replacement of stationary glass. | | |

800 Structural Component Repair and Damage Analysis

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 801 | Classify the various types structural damage a vehicle can sustain. | | |
| 802 | Interpret body dimension specifications. | | |
| 803 | Use a tram gauge to diagnose vehicle length and width damage and X measurements of body or frame. | | |
| 804 | Diagnose vehicle height with datum line gauges. | | |
| 805 | Identify various measuring systems. | | |
| 806 | Identify repair methods for vehicle with diamond damage, twist, sag side swag, or mash. | | |

900 Structural Straightening

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 901 | Mount and anchor vehicle to a pulling system. | | |
| 902 | Measure vehicle structure and analyze data. | | |
| 903 | Interpret data to make a structural pull back to factory specs. | | |

1000 Corrosion Protection

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 1001 | Identify corrosion causes and OEM corrosion protection. | | |
| 1002 | Apply repair methods for corrosion protection. | | |
| 1003 | RESERVED | | |
| 1004 | Demonstrate the application of seam sealers. | | |

1100 Welding

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 1101 | Identify different methods of attaching components (MIG welding, squeeze type resistance spot welding (STRSW), structural adhesive, silicon bronze, etc.) | | |
| 1102 | Demonstrate personal safety practices. | | |
| 1103 | Set up and tune the MIG welder. | | |
| 1104 | Complete a butt joint with backing in various welding positions. | | |
| 1105 | Complete an overlap weld in various positions. | | |
| 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

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|--|--|------|
| 1201 | Identify cutting processes. | | |
| 1202 | Demonstrate sheet metal cutting processes. | | |

1300 Refinishing and Equipment Safety

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 1301 | Explain various environmental regulations. | | |
| 1302 | Locate hazardous warning information. | | |
| 1303 | Select and inspect personal protection equipment (PPE). | | |
| 1304 | Demonstrate safe painting practices. | | |
| 1305 | Identify personal health and safety hazards. | | |

1400 Automotive Finishes

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|--|--|------|
| 1401 | Describe the difference between paint systems (water borne, solvent, multi-stage). | | |
| 1402 | Describe causes and cures of paint defects. | | |
| 1403 | Identify various undercoats. | | |
| 1404 | Identify various topcoats (single stage, basecoat/clearcoat, tricoat, quadcoat). | | |

1500 Surface Preparation

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 1501 | Demonstrate proper steps to pre-wash entire vehicle. | | |
| 1502 | Use wax and grease remover. | | |
| 1503 | Demonstrate proper use of sanding and featheredging techniques. | | |
| 1504 | Wet, sand, and featheredge. | | |
| 1505 | RESERVED | | |
| 1506 | Locate and obtain the vehicle paint code. | | |
| 1507 | Apply undercoats. | | |
| 1508 | Prepare panels for blending. | | |
| 1509 | RESERVED | | |
| 1510 | Identify masking materials. | | |
| 1511 | Perform masking. | | |
| 1512 | Select the appropriate abrasive. | | |

1600 Refinishing Equipment and Paint Area

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|--|--|------|
| 1601 | Operate the spray booth. | | |
| 1602 | Maintain 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 personal painting/refinishing respirator system. | | |

1700 Refinishing Operations

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 1701 | Prepare surface for topcoat system (degrease and tack). | | |
| 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. | | |
| 1706 | Demonstrate paint manufacturer's mixing ratio when preparing paint products. | | |

1800 Blending Operations

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|----------------------------------|--|------|
| 1801 | RESERVED | | |
| 1802 | Blend basecoat/clearcoat finish. | | |
| 1803 | Tint and blend color coat. | | |

1900 Detailing

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 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. | | |
| 1907 | Clean exterior and interior glass surfaces. | | |

2000 Estimating Damage Analysis

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|--|--|------|
| 2001 | Identify vehicle by vehicle identification number (VIN). | | |
| 2002 | Collect vehicle and customer data. | | |
| 2003 | Use collision estimating guides/estimating software. | | |
| 2004 | Identify different types of vehicle damage (direct and indirect). | | |
| 2005 | Indicate repair and replace decisions. | | |
| 2006 | Prepare an estimate/repair and sequence/calculate repair costs/supplements. | | |
| 2007 | Explain the need for a pre-repair scan and post-repair scan of the vehicle computer. | | |

2100 Plastic Repair

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|--|--|------|
| 2101 | Identify plastic to make repair decisions. | | |

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|------|--|--|--|
| 2102 | Use plastic repair methods (adhesives and welding). | | |
| 2103 | Repair plastics with two-part adhesives, with and without reinforcement. | | |
| 2104 | Research recommended repair processes for bumper cover repair on Advance Driver Assistance System (ADAS) vehicles. | | |

2200 Restraint Systems

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|--|--|------|
| 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. | | |

2300 Advanced Technology

| Item | Task | (X) Indicates Proficiency ¹ | Date |
|------|---|--|------|
| 2301 | Explain function and components of the Advance Driver Assistance System (ADAS). | | |
| 2302 | Describe precautions required when working on high voltage vehicles. | | |

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

Secondary CTE Instructor Signature _____ Date _____

Student Signature _____ Date _____