

AUTO BODY REPAIR/5: ESTIMATION (90 Hours)

Course No.: 79-80-59

COMPETENCY CHECKLIST

Student Name _____

Teacher Name _____ School Site _____

Start Date _____ Completion Date _____ Certificate Date _____

Teacher Signature _____ Student Signature _____

(Signature verifies completion of course competencies)

A. INTRODUCTION AND SAFETY (3 hrs)

- _____ 1. Scope and purpose of course
- _____ 2. Classroom policies and procedures
- _____ 3. Jobs in industry w/impact on auto technician
- _____ 4. Importance of 'safety first' attitude
- _____ 5. First aid and emergency procedures
- _____ 6. Cal/OSHA requirements of auto body techs
- _____ 7. Safety items required by federal/state/local
- _____ 8. Proper use of protective clothing & gloves
- _____ 9. Proper use of protective respiratory gear
- _____ 10. Proper user of protective eye gear
- _____ 11. Proper ventilation in auto body shop
- _____ 12. Handling/storing/disposing of chemicals
- _____ 13. Use of MSDS as it applies to auto industry
- _____ 14. Pass safety test with 100%

B. TOOLS AND EQUIPMENT (3 hrs)

- _____ 1. Common hand tools used in auto body shop
- _____ 2. Tools & equipment used in areas of repair

C. TRADE MATHEMATICS (5 hrs)

- _____ 1. Practical application of math to auto repair
- _____ 2. Solving whole number problems
- _____ 3. Solving fraction problems
- _____ 4. Solving decimal problems
- _____ 5. Changing fractions to decimals
- _____ 6. Changing decimals to fractions
- _____ 7. English system of measuring length
- _____ 8. English system of measuring weight
- _____ 9. English system to measure volume/capacity
- _____ 10. English system of linear units
- _____ 11. English system of units of volume/capacity
- _____ 12. Solve English system measuring problems
- _____ 13. Measure w/ English system tools of trade
- _____ 14. Metric system of measuring length
- _____ 15. Metric system of measuring weight

- _____ 16. Metric system of measuring volume/capacity
- _____ 17. Metric system of linear units
- _____ 18. Metric units of weight
- _____ 19. Solve metric system measuring problems
- _____ 20. Measure w/metric tools of the trade
- _____ 21. Solving geometric problems related to industry
- _____ 22. Solve algebraic problems related to industry
- _____ 23. Problem solving using percentages
- _____ 24. Reading and interpreting graphs
- _____ 25. Demo techniques for using a calculator

D. AUTO BODY CONSTRUCTION (10 hrs)

- _____ 1. Auto body design from past and present
- _____ 2. Govt. branches that regulate collision repair
- _____ 3. Factors auto design engineers consider
- _____ 4. Reasons to stay abreast of new trends
- _____ 5. Body and frame vs. unitized body construction
- _____ 6. Combination frame construction
- _____ 7. Materials used to make autos lighter
- _____ 8. Describe the need for body crowns
- _____ 9. Define work hardening
- _____ 10. Describe direct damage
- _____ 11. Describe indirect damage
- _____ 12. Difference between repairing/replacing panels

E. MINOR BODY REPAIRS (10 hrs)

- _____ 1. Examples of different types of damage
- _____ 2. Document a minor repair plan
- _____ 3. Verify minor body repair w/technician

F. MAJOR BODY REPAIRS (15 hrs)

- _____ 1. Inspect/clean spray guns and equipment
- _____ 2. Identify major damages in listed areas
- _____ 3. Document a major repair plan
- _____ 4. Verify major body repair w/technician

G. FINISHES (15 hrs)

- _____ 1. Determine type and color of paint on vehicle
- _____ 2. Define spot painting and overall painting
- _____ 3. Purposes of undercoats
- _____ 4. Identify different types of top finishes
- _____ 5. Describe purposes of solvents
- _____ 6. Describe purposes of clear-coated finish
- _____ 7. Describe purposes of catalysts
- _____ 8. Review examples of listed paint defects
- _____ 9. Restoring metal surfaces to factory specs
- _____ 10. Document a finishing repair plan
- _____ 11. Verify details in plan with painter/finisher

H. COLLISION COST ESTIMATION (25 hrs)

- _____ 1. Define listed terms related to topic
- _____ 2. Noting vehicle info for damage assessment
- _____ 3. Document damage
- _____ 4. Difference between replacing and repairing
- _____ 5. Difference between filling and straightening
- _____ 6. Identify price and cost references
- _____ 7. Determine costs & charges using references
- _____ 8. Prepare listed final written estimates
- _____ 9. Schedule repair work on auto shop calendar

I. EMPLOYABILITY SKILLS REVIEW (2 hrs)

- _____ 1. Review employer requirements
- _____ 2. Update data on potential employers
- _____ 3. Finalize a résumé
- _____ 4. Requirements for filling out job application
- _____ 5. Complete sample job application forms
- _____ 6. Importance of enthusiasm on job
- _____ 7. Appropriate appearance on job
- _____ 8. Continuous upgrading of job skills
- _____ 9. Customer service as way to build business

J. ENTREPRENEURIAL SKILLS REVIEW (2 hrs)

- _____ 1. Review definition of entrepreneurship
- _____ 2. Characteristics of successful entrepreneurs
- _____ 3. Contributions of entrepreneurs to industry
- _____ 4. Purpose/components of business plan
- _____ 5. Establish goals prior to starting business
- _____ 6. Sources of monetary investment
- _____ 7. Licensing needs for auto repair business
- _____ 8. Scenario w/student as business owner