

MODULE MEC3160: BODY REPAIR ESTIMATION**Level:** Advanced**Theme:** Suspension and Structural Systems**Prerequisite:** MEC1160 Structures & Materials**Module Description:** Students apply knowledge in estimating, including close attention to detail in determining the cost of a repair.**Module Parameters:** Access to supporting resources.**Curriculum and Assessment Standards**

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> state the role of insurance in the body repair industry and legal obligations involved in estimating 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> explanation of four of the following terms: <ul style="list-style-type: none"> insurance liability waiver write-off premium/deductible. <p><i>Assessment Tool</i> <i>Task Assessment Checklist: Body Repair Estimation, Part 1, MEC3160-1</i></p> <p><i>Standard</i> <i>Performance rating of 3 on each criteria</i></p>	10
<ul style="list-style-type: none"> identify and describe types of body damage 	<ul style="list-style-type: none"> presentation of a report that defines/determines: <ul style="list-style-type: none"> collision damage (direct) hidden damage accessory parts parts sources and prices (original equipment manufacturer versus aftermarket) damage owing to collision. <p><i>Assessment Tool</i> <i>Task Assessment Checklist: Body Repair Estimation, Part 2, MEC3160-1</i></p> <p><i>Standard</i> <i>Performance rating of 3 on each criteria</i></p>	20

MODULE MEC3160: BODY REPAIR ESTIMATION (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> • outline skills needed to successfully estimate collision damage • complete an estimate by determining what parts/components are to be replaced or repaired and their subsequent costs • demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • identification of skills required for estimating collision damage, including: <ul style="list-style-type: none"> – visual analysis of frame and body damage – part identification and location – accurate calculation of costs including time required and supplies. <p><i>Assessment Tool</i> <i>Task Assessment Checklist: Body Repair Estimation, Part 3, MEC3160–1</i></p> <p><i>Standard</i> <i>Performance rating of 3 on each criteria</i></p> <ul style="list-style-type: none"> • demonstration of estimating skills including: <ul style="list-style-type: none"> – problem-solving ability in determining cost of repair – knowledge of vehicle value versus repair cost – estimate of repair including parts, labour costs, shop costs, miscellaneous costs according to industrial standards. <p><i>Assessment Tool</i> <i>Task Assessment Checklist: Body Repair Estimation, Part 4, MEC3160–1</i> <i>Illustrative Example: Body Repair Estimation, MEC3160–2</i></p> <p><i>Standard</i> <i>Performance rating of 3 on each criteria</i></p> <ul style="list-style-type: none"> • observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tool</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>25</p> <p>45</p> <p>Integrated throughout</p>

MODULE MEC3160: BODY REPAIR ESTIMATION (continued)

Concept	Specific Learner Expectations	Notes
Health/Safety Hazards	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • demonstrate knowledge of and follow lab safety procedures. • identify mechanical and electrical components often damaged in collision, and state appropriate safety precautions in dealing with gasoline, oil, air conditioning gas and battery acid hazards. 	
Identify/Analyze	<ul style="list-style-type: none"> • list and describe the terms used in the appraisal industry • describe vehicle construction systems (unibody and framed) and safety requirements • examine the effects of collision on vehicle structure, parts and passenger safety equipment • demonstrate the effects of forces on metal and show how manufacturing techniques are used to absorb collision energy • define the terms primary damage, secondary damage and hidden damage • identify related damaged parts • investigate and describe collision damage to: <ul style="list-style-type: none"> – determine direction of damage – identify parts damaged (including hidden damage) – list signs of hidden damage • conduct tests to determine mechanical and/or electrical functions in order to properly estimate cost of collision damage • estimate cost including parts, labour and miscellaneous • calculate the cost of original equipment (OEM), aftermarket and used parts that could be used in a repair • complete a replacement parts list for a given collision, including “cost,” “extended cost” and “contracted” costs 	

MODULE MEC3160: BODY REPAIR ESTIMATION (continued)

Concept	Specific Learner Expectations	Notes
Identify/Analyze (continued)	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • list examples of hidden and “other” costs that must be included in an estimate of collision damage • describe the responsibility of the shop to the customer, the insurer and legal parties in doing an estimate; e.g., safety of vehicle • define write-off and explain when a vehicle is considered a write-off and non-repairable • explain the advantages of having a knowledge of vehicle structure and repair procedures when completing an estimate for repair. 	
Careers	<ul style="list-style-type: none"> • identify further education and work opportunities related to body repair estimation. 	