

Massachusetts Technical Teacher Testing Program Automotive Collision Repair & Refinishing Content Outline

Written and Performance Exam General Overview

- The intent of this exam is to assess your ability to teach the skills found in the Massachusetts Technical Education Framework.
- This exam is aligned to the frameworks which can be accessed [here](#).
- Many questions and tasks require a synthesis of knowledge based on experience in the field and may not be found in any book.
- Candidates are encouraged to prepare for their exam by reviewing textbooks and reference material which has been listed as part of this exam outline. These resources can be found using online search tools, online vendors, and websites.
- Contact the Technical Teacher Testing Office if you need further assistance in locating resources listed in the exam outline.
- Use this exam outline and the Massachusetts Technical Education Framework to focus your preparation for the exam.

Written Exam

- Number of Questions: 100
- Administration Time: 3 hours
- Administration Method: Remote Proctoring Online Session

Written Exam Content Coverage

20%	Health and Safety	<ul style="list-style-type: none"> • Health and Safety Regulations and Practices • High Pressure Systems • Electrical Circuits • Tools • Refinishing Operations
5%	Measuring Procedures & Power Tools	<ul style="list-style-type: none"> • Measuring Tools and Gauges • Pneumatic and Electric Powered Tools
8%	Structural Damage	<ul style="list-style-type: none"> • Set-up and Measure Structural Damage
20%	Cutting and Welding	<ul style="list-style-type: none"> • Weldable and Non-Weldable Materials • Cutting and Welding Processes and Equipment • Set-up Welding Equipment • Prep Metal and Work Area • Test Welds • Welding Problems

- 25% Repair Plan**
 - Wash Vehicle
 - Develop Repair Plan
 - Exterior Panel Cosmetic Repair
- 4% Mechanical and Electrical Components**
 - Suspension and Braking Components
 - Electrical Systems Components
- 6% Plastics and Adhesives**
 - Types of Plastics used in Vehicles
- 10% Automotive Refinishing**
 - Mix and Apply Undercoats
 - Dry or Wet Sand and Clean Area
 - Blend a Panel
 - Panel Refinishing
 - Repair Paint Problems
- 2% Final Detail**

Written Exam Reference Materials (Reference Current Edition)

- **Auto Body Repair for MOTORS** by Robert Scharff (Delmar)
- **Motors Estimating Crash Guides**
- **Chief E-Z Liner Curriculum Guide**
- **Estimating For Collision Repair** by Michael Crandell (Delmar)

Note: You may want to check with your local library for obtaining these resources through the interlibrary loan program.

Materials Needed for the Written Exam

- A four-function calculator is included in the online testing system. No other calculators are permitted.
- Scrap paper and pencil/pen are permitted.

Written Exam Sample Items

Each question on the exam consists of one incomplete sentence or question followed by four choices. Some items reference an image or diagram. A few sample items are included below; the correct answer is designated with an asterisk (*).

When installing a deck/trunk lid technician A aligns the sides first and technician B aligns the front edge first. Which technician is correct?

- *a. Technician A
- b. Technician B
- c. Both Technician A and B
- d. Neither Technician A or B

Technician A uses a supplied air respirator when spraying activated products. Technician B used an organic vapor respirator to spray non activated products. Which technician is correct?

- *a. Technician A
- b. Technician B
- c. Both Technician A and B
- d. Neither Technician A nor B

Performance Exam

- Administration Time: 4 hours
- Administration Method: Onsite at an approved Teacher Testing Location

Performance Exam Content Coverage

17% Damage Appraisal Report

- Analyze damage
- Use crash book or CCC Computerized Program
- Prepare a formal damage report
- Complete list of parts and materials needed
- Compile detailed list of labor operations

28% Repairing Damaged Panel

- Preparation of damaged panel
- Perform metal straightening and finishing on damaged panels
- Use body tools and equipment
- Use body filler/polyester putty
- Finish the damaged area to its original contour(s) and primer ready

23% Refinishing

- Prepare surface
- Prepare panel for undercoat application
- Apply undercoat
- Prepare undercoats for topcoat application
- Apply topcoats

17% Structural Damage

- Mark Out Cut Lines
- Tram Gauge – Cross Measure

10% Welding

- Set up and MIG Weld Steel

5% Safety

Materials Required for the Performance Exam (Candidate Must Supply)

- Face mask (cotton face covering or respirator which fully cover the nose and mouth)
- Nitrile Disposable Gloves
- Safety Glasses
- Industry-Approved Work Attire
- Industry-Approved Work Shoes (No Sneakers)
- Spray Respirator
- Spray Gun
- Pen and/or Pencil
- Calculator

Note: Candidate may leave if test is completed prior to four hours. A break will be allowed. Safety rules are expected to be industry and OSHA safety standards. If safety rules are not observed, examiner will stop the test at that area of testing. No books or notes will be allowed. Cell phones are prohibited during the exam administration.

Onsite Performance Exam Requirements

- Candidate must practice social distancing and wear the appropriate face covering that covers the nose and mouth while at the exam site.
- Testing sites may have individual requirements based on location and the current guidance from the Center for Disease Control and Prevention (CDC).

Performance Exam Reference Materials (Reference Current Edition)

- **Safety Orientation** by NCCER (Pearson Prentice Hall) www.crafttraining.com
- **OSHA Regulations** www.osha.gov
 - [1910.1200 - Hazard Communication](#)
 - [1910 Subpart I - Personal Protective Equipment](#)