

MECHANIC STUDY GUIDE

Unitized Body Structural Repair

Michigan Motor Vehicle Mechanic

Listed below are a number of items and subjects which make up the mechanic certification tests identified above. An individual's ability to pass the certification test will depend upon the amount of knowledge the person has concerning these items.

Steels (Characteristics & Identification) - 12%

UHSS (Ultra High Strength Steel)
HSS (High Strength Steel)
Tensile strength
Identification of various steels

Pulling (Straightening) - 8%

Overpulling
How to minimize tearing
Anchoring

Welding - 20%

MIG Oxyacetylene
Brazing Shielding
gas Weld quality
Electrode wire use
Precautions Types
of welds Types of
welders

Repairing Structural Components - 25%

A-pillars & B-pillars
Location of welds
Sectioning
Joints to use
Corrosion protection
Weld-through primers
Glass installation

Measuring/Damage Analysis - 21%

Point to point Indirect
damage Direct
damage Secondary
damage Primary
damage Datum plane
Asymmetrical dimensions
Vehicle centerline
Centering gauges
Loaded measurement

Unitized Body General Understanding- 14%

Crush zones
Design features which initiate the crush
process
Space frame construction
Manufactures' tolerances
One-time fasteners

SAMPLE QUESTION:

Two-part epoxy primers:

- A. Provide corrosion protection close to OEM E-coat.
- B. Have an indefinite pot life.
- C. Should be used on structural parts only if a lacquer primer surfacer is not available.
- D. All of the above.

ANSWER: A