

RESTRAINTS SYSTEMS DAMAGE ANALYSIS

DAM11/e

The integrity of a repair can be impacted greatly by the knowledge and skills of the collision repair professional. An incorrect repair can cause the failure of a restraint system at the very moment it is needed most. When it comes to something as important as customer safety, understanding how to identify damage in restraints systems can help complete proper repairs, and ensure that the customer can depend on the vehicle to perform correctly.

Course Content

Restraints Systems Damage Analysis

The course begins with an overview of restraints systems, including a description of the various mechanical and electronic parts that are used to protect vehicle occupants during a collision. The student will gain an understanding of the steps needed for identifying which restraints systems the damaged vehicle is equipped with and how to determine what parts or systems have deployed. Other information related to the inspection that will be useful to the student during the inspection process include important safety precautions, scan tools, how to determine replacement items, and various information sources.

As the student moves through the course, he or she will be introduced to different sensors, information about their specific locations, repair versus replace considerations, and key areas to check when inspecting for damage. Next, the student will learn about the restraint systems control modules. He or she will learn how to check for faults, understand replacement considerations, and various methods that are used to calibrate Occupant Classification System.

Next, the student will learn about various types of vehicle airbags and what each type is designed to do. SRS wiring will be discussed and the student will learn about wires and wiring harnesses, terminals, and connectors.

Collapsible steering columns, which are energy-absorbing and designed to collapse during a collision, will be introduced to the student, as well as proper inspection procedures. Repair consideration for seats, pop-up roll bars, and interior roll bars will also be provided.

Finally, the student will be presented with information on seat belt pre-tensioners, detail on different parts of a seat belt, and functions of different retractors will be given. Information on analyzing damaged seats and advanced restraint systems built into the seats will also be discussed.

Recommendations

This course covers several collision repair topics and advanced vehicle features. Other courses that may be helpful and are relevant to training for your role include:

- Vehicle Identification, Estimating Systems, and Terminology (DAM01/e)
- Basic Electronics Damage Analysis (DAM13e)

Registration

To register for Restraints Systems Damage Analysis (DAM11/e), visit the I-CAR website at www.I-CAR.com.

Course Highlights

Credit Hours: 3

Estimated Duration: 3 or 4 hours

Format Option: Live instruction or online training with posttest

Meets I-CAR® ProLevel™ or annual training requirements for the following roles:



ESTIMATOR



AUTO PHYSICAL DAMAGE APPRAISER

After completing this course, you will be able to:

- Identify the various types of passive restraint systems and their parts
- Identify deployment of passive restraint systems
- Understand required replacement or inspections for passive restraint system parts
- Identify seat belt system parts and proper operation
- Determine replacement consideration for damaged seat belt system parts
- Recognize seat damage and determine repair versus replacement decisions



I-CAR Training Support Center
5125 Trillium Blvd.
Hoffman Estates, IL 60192
Phone: 800-422-7872
Fax: 800-590-1215
www.I-CAR.com

