

RESTRAINTS SYSTEMS DAMAGE ANALYSIS

DAM11

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

Module 1— 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 of system 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, the student 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. The student 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, details on different parts of a seat belt and functions of different retractors will be also be given. Information on analysing 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:

- Fundamentals of Collision Repair (FCR01)
- Damage Analysis of Advanced Automotive Systems (DAM07)
- Exterior Panels Damage Analysis (DAM10)

Registration

To register for Restraints Systems Damage Analysis (DAM11) click [here](#) or visit www.i-car.com.au

Course Highlights

Points: 1

Estimated Duration: 4 Hours

Format: Classroom & Virtual Classroom

Meets the I-CAR training requirements for the following roles:



ESTIMATOR



ASSESSOR

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
- Recognise seat damage and determine repair versus replacement decisions.

