INTRODUCTION TO CARBON FIBRE

CFR01

Carbon fibre has been used prominently in aircraft designs for years. It's five times as strong as steel and twice as stiff, yet weighs two-thirds less. And now its gaining popularity in vehicle designs as automakers strive to hit CAFE standards. This course will help you identify and understand this high-tech material and dispel some common myths related to its collision repair— so you can get ready for the lightweight vehicles you'll be seeing more of soon.

Course Content

Module 1— Carbon Fibre Now and in the Future

The course opens by defining carbon fibre and commonly used terms associated with lightweight material. Also in this module, and throughout the class, many myths about working with carbon fibre are addressed. Types of carbon fibre are presented, and a detailed look at the manufacturing process of the material is presented through detailed photographs and illustrations. The module concludes by presenting current vehicles containing carbon fibre parts and examining future uses.

Module 2— Repair

Videos and interactive activities are key throughout this module, which details step-by-step processes for basic damage inspections and basic vacuum bagging repairs for carbon fibre. I-CAR worked closely with Abaris, a leader in aerospace carbon fibre training and repair, to understand how these same applications relate to collision repair. Repair options include vacuum bagging, which is the main repair process covered in this course, adhesive bonding, rivet bonding and conventional composite repair.

Registration

To register for Introduction to Carbon Fibre (CFR01e) click here or visit www.i-car.com.au

Course Highlights

Points: 1

Estimated Duration: 4 Hours

Format: Classroom

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

- ESTIMATOR
- STRUCTURAL TECHNICIAN
- NON-STRUCTURAL TECHNICIAN
- ASSESSOR
- ALUMINIUM TECHNICIAN

After completing this course, you will be able to:

- Identify characteristics of carbon fibre and different composite types
- Understand the carbon fibre manufacturing process
- Identify current vehicles with carbon fibre parts
- Explain the visual inspection process and how to use different inspection equipment
- Understand the vacuum bagging repair process, including tools and materials required

I-CAR® AUSTRALIA