

# PLASTIC AND COMPOSITE REPAIR

PLA03

**With the continued use of plastics and composites on many of today's vehicles, collision repair professionals are seeking efficient ways to repair collision damaged vehicles made from these materials. Given the vast amount of materials available and their differing characteristics, plus the many viable repair options, the most up-to-date knowledge and information is critical to ensuring a complete repair.**

## Course Content

### Module 1— Plastics Identification and Repair Considerations

In the first module, the student will be introduced to different plastics, including PP, TPO, ABS and FRP. The student will gain an understanding of plastics families, the relevance of ISO codes, how to identify varying characteristics of plastics and the correct preparation procedures for the repair. The student will also learn the considerations around repairs done with plastics and FRP.

### Module 2— Adhesive Bumper Repair

As the student moves through the course, he or she will gain an understanding of adhesives used in plastic repairs, including when to use adhesion promoters. The student will also learn about the considerations around one and two sided plastic repairs, as well as the importance of understanding how the level of plastic identification can affect a repair. In addition this module explains important considerations about performing mounting tab repairs and refinishing plastics after repairs.

### Module 3—Fibre Reinforced Plastic (FRP) Repair

The third module, of the course discusses common FRP used on today's vehicles and explains correct repair methods when working on FRP. The student will gain knowledge on proper preparation of FRP and important information on performing one and two sided

repairs as well as FRP refinishing considerations. procedures for the repair. The student will also learn the considerations around repairs done with plastics and FRP.

### Module 4— Plastic Welding Repairs

In the final module, the student will become familiar with plastic welding equipment and its uses. They will gain an understanding of the different types of plastic welds in automotive applications. Including fusion and adhesion welds.

## Recommendations

This class covers a range of advanced materials and repair procedures common on many of today's vehicles. It is recommended that students have an understanding of the collision repair process. Courses that are helpful include:

- Fundamentals of Collision Repair (FCR01)
- Adhesive Bonding (ADH01)

## Registration

To register for Plastic and Composite Repair (PLA03) click [here](#).

## Course Highlights

Points: 1

Estimated Duration: 4 Hours

Format: Classroom

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



ESTIMATOR



NON-STRUCTURAL TECHNICIAN



DAMAGE APPRAISER

**After completing this course, you will be able to:**

- Identify different types of plastics by their characteristics and determine the level of plastic identification required to perform a repair
- Understand correct preparation procedures for plastics
- Identify different types of plastics and the correct methods to repair each
- Recognise proper adhesives for different repairs and when to use adhesion promoter
- Perform one and two sided plastic adhesive repairs and mounting tab repairs
- Understand refinish considerations for plastic parts
- Identify the types of plastics welds in automotive applications
- Identify welding equipment and its uses
- Explain how hot air weld and airless welds are made

