

Course Objectives/Course Outline
Spokane Community College

Course Title: Unibody and Frame Alignment and Repair

Prefix and Course Number: ABF 112

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Perform MIG welds on live vehicles
- Perform Resistance spot welds on live vehicles
- Trim salvage parts for usable replacement
- Remove and install welded on body parts on live vehicles
- Correct minor misalignment of upper body structures, using hydraulic jacks

Course Outline:

- I. Safety
 - A. Safety practices related to unibody pulling and jacking equipment.
- II. Automobile construction
 - A. Body styles and types
 - B. Automobile construction types
 - C. Collision energy management
- III. Advanced welding applications
 - A. I-Car approved structural joining techniques
 - B. Squeeze type resistance welding
 - C. Corrosion protection of weld areas.
- IV. Upper body alignment
 - A. Measuring techniques
 - B. Hydraulic jack use
 - C. Floor mounted pulling devices