

\_\_\_\_\_ SOUTH SEATTLE COMMUNITY COLLEGE \_\_\_\_\_

Technical Education Division

### COURSE OUTLINE

Revision: S. Ford February 2012

DEPARTMENT:	Automotive Technology
CURRICULUM:	Auto Body Collision Repair
COURSE TITLE:	Straightening Structural Parts
COURSE NUMBER:	ABR 171
TYPE OF COURSE:	Vocational Preparatory
COURSE LENGTH:	4 weeks
CREDIT HOURS:	7
LECTURE HOURS:	20
LAB HOURS:	100
CLASS SIZE:	20
PREREQUISITES:	ABR 111 (Introduction to Automotive Collision Technology), ABR 112 (Safety and Environmental Practices) and ABR 113 (Welding and Cutting), or instructors permission

#### COURSE DESCRIPTION:

This module instructs students in proper mounting and anchoring of the vehicle, various types of pulling equipment, knowledge of H.S.S.; cold and hot stress relief, pulling and straightening of front, rear end, side impact, and roof damage.

#### STUDENT LEARNING OUTCOMES ADDRESSED:

1. Personal Responsibility - To take pride in one's work.
2. Technology - To select and use appropriate technological tools to complete the task.

## ABR 171 Straightening Structural Parts

### STUDENT LEARNING OUTCOMES ADDRESSED: (cont.)

3. Critical Thinking and Problem Solving - Use critical thinking in solving problems and making decisions as to the proper course of repair.

### GENERAL COURSE OBJECTIVES:

At the end of the course the student will:

1. Demonstrate proper mounting and anchoring of vehicles to be pulled.
2. Be able to select and set-up different types of pulling equipment.
3. Have knowledge of working with high-strength steel.
4. Demonstrate cold and hot stress relief methods.
5. Demonstrate pulling and straightening of front end damage.
6. Demonstrate pulling and straightening of rear end damage.
7. Demonstrate pulling and straightening of side impact damage
8. Demonstrate pulling and straightening of roof damage

### TOPICAL OUTLINE:

### APPROX. HOURS

I. Course requirements	7
II. Safety in the workplace	7
III. Mounting and anchoring vehicles to be pulled	12
IV. Selecting and understanding how to use pulling equipment	12
V. Apply knowledge of working with high strength steel	12
VI. Apply cold and hot stress methods	12
VII. Pull and straighten front end damage	17
VIII. Pull and straighten rear end damage	17
IX. Pull and straighten side impact damage	12
X. Pull and straighten roof damage	<u>12</u>
Total	120

REVISED BY: Steve Ford  
DATE: February 2012