**BARTON COMMUNITY COLLEGE**

##### COURSE SYLLABUS

## GENERAL COURSE INFORMATION

Course Number: CNHI 1215

Course Title: Skid Steer Loader Operation and Diagnostics

Credit Hours: Variable 1-3

Prerequisites: None

Division/Discipline: Workforce Training and Com. Education/CNH Service Training

Course Description: This course emphasizes skid steer loader operation and diagnostics. Particular attention will be given to electrical/electronic control systems and hydraulic systems commonly found on this type of equipment. The class includes classroom and hands-on instruction supported by detailed manuals, mock-ups, cutaways, and live training equipment.

Variable Credit: If the student enrolls in a 4-day face to face diagnostics class, then it is a 2 credit hour course. If the student enrolls in a 2-day product update class it is a 1 credit hour course, and if the student enrolls in the 6-week online and 2-day face to face class, it is a 3 credit hour course. All sections of the course cover the same material.

## INSTRUCTOR INFORMATION

## COLLEGE POLICIES

Students and faculty of Barton Community College constitute a special community engaged in the process of education. The College assumes that its students and faculty will demonstrate a code of personal honor that is based upon courtesy, integrity, common sense, and respect for others both within and outside the classroom.

Plagiarism on any academic endeavors at Barton Community College will not be tolerated. The student is responsible for learning the rules of, and avoiding instances of, intentional or unintentional plagiarism. Information about academic integrity is located in the Student Handbook.

The College reserves the right to suspend a student for conduct that is determined to be detrimental to the College educational endeavors as outlined in the College Catalog, Student Handbook, and College Policy & Procedure Manual. (Most up-to-date documents are available on the College webpage).

Any student seeking an accommodation under the provisions of the Americans with Disability Act (ADA) is to notify Student Support Services via email at disabilityservices@bartonccc.edu.

## COURSE AS VIEWED IN THE TOTAL CURRICULUM

This course is one in a series of Case-New Holland Industrial Service Training courses. This course is not open to the general public, and is not designed as a transfer course.

The course will cover the operation, diagnosis, and repair of the skid steer loader. The technician will have sufficient shop time to become familiar with the new product.

1. **ASSESSMENT OF STUDENT LEARNING**

Barton Community College assesses student learning at several levels:  institutional, program, degree and classroom.  The goal of these assessment activities is to improve student learning.  As a student in this course, you will participate in various assessment activities.  Results of these activities will be used to improve the content and delivery of Barton’s instructional program.

Course Outcomes, Competencies, and Supplemental Competencies:

1. Identify and analyze the major hydraulic circuits of a SSL (skid steer loader).
2. Locate major components, state their function and how they are used on the SSL.
3. Demonstrate the approved pressure testing and calibration methods for the system and its components.
4. Understand how to disassemble, inspect for wear, and reassemble the hydrostatic pump.
5. Demonstrate understanding of the electrical system and its related components and functions on the skid steer loader.
6. Understand the electrical interlock system and operator presence system, components and location.
7. Use the instrumentation system to retrieve and accurately diagnose the electrical system faults.
8. Use the Electronic Service Tool to retrieve faults, preform component tests, and download software.
9. Demonstrate proper adjustment procedures to the electrical and hydraulic systems
	* 1. Understand how to adjust linkage and servo systems to remove machine creep.
		2. Demonstrate ability to troubleshoot and calibrate EH (electro-hydraulic) controls on the SSL.
		3. Raise the ROPS (roll-over protective structure) cab and boom using the correct procedures.
10. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

## TEXTBOOKS AND OTHER REQUIRED MATERIALS

### REFERENCES

### METHODS OF INSTRUCTION AND EVALUATION

## ATTENDANCE REQUIREMENTS

## COURSE OUTLINE