SYLLABUS

DATE OF LAST REVIEW: 07/23/14

CIP CODE: 47.0106

SEMESTER: Departmental Syllabus

COURSE TITLE: Top and Front Load Clothes Washers - Domestic/Commercial

COURSE NUMBER: MAPR0245

CREDIT HOURS: 3

INSTRUCTOR: Departmental Syllabus

OFFICE LOCATION: Departmental Syllabus

OFFICE HOURS: Departmental Syllabus

TELEPHONE: Departmental Syllabus

EMAIL: Departmental Syllabus

KCKCC-issued email accounts are the official means for electronically communicating with our students.

PREREQUISITES: None

REQUIRED TEXT AND MATERIALS: Please check with the KCKCC bookstore, http://www.kckccbookstore.com for the required text for your particular class.

COURSE DESCRIPTION:
This course provides instruction in techniques used to ensure safe and correct procedures, to disassemble, identify components, explain operation, diagnose, repair and reassemble several types of clothes washers. By learning to identify controls, explain their operation, and identify common repair problems, students learn proficiency in this line of work. Customer service, repair order write-up, service and parts manual usage, parts ordering and follow through will be discussed and practiced. Upon successful completion of this course, the student should be able to utilize, on-line, and parts ordering software. This course will teach invoice accounting, parts labeling, retail price calculation, packaging and parts distribution systems.

METHOD OF INSTRUCTION:
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing,
performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE:

I. Top Load Clothes Washer Systems
   A. Installation
   B. Wash/Drain Motors
   C. Control Circuit boards/Timers
   D. Water inlet/draining
   E. Agitate/Spin Cycles-Transmissions/Basket Drives
   F. Soap/Fabric Softener Dispensing
   G. Door Switch Systems
   H. General Maintenance
   I. Front Load Clothes Washer Systems

II. Front Load Clothes Washer Systems
    A. Installation
    B. Wash/Drain Motors A/C-D/C
    C. Control Circuit Boards
    D. Water Inlet/Draining
    E. Wash/Spin Cycles
    F. Soap/Fabric Softener Dispensing
    G. Door Seal Systems
    H. General Maintenance

III. Schematics
    A. Top Load Clothes Washers
    B. Front Load Clothes Washers

IV. Introducing Parts Research and Ordering Systems
    A. Parts are critical
    B. Accuracy
    C. Pictorial Diagrams
    D. Names/Numbers can change
    E. On-line Research
    F. Parts Manuals/Microfiche
    G. Inventory Management
    H. Worksheet Parts list
    I. Manuals

V. Competency Evaluations

EXPECTED LEARNER OUTCOMES:
A. The student should be able to diagnose electrical failures of load and power passing devices.
B. The student should be able to disassemble and reassemble various makes and models of washing machines.
C. The student should be able to remove and replace motors, switches, touch pads, and control circuit boards, water pumps.
D. The student should be able to understand soil removal/wash ability.
E. The student should be able to install and uninstall built-in washing machines.
F. The student should be able to interpret appliance parts manuals
G. The student should be able to maintain Access database of shop stock parts.
H. The student should be able to navigate on-line web based parts research(ordering software
I. The student should be able to label parts received and distribute replacement parts to live work.
J. The student should be able to interpret parts distributor invoice, and backorder status.

COURSE COMPETENCIES:

The student should be able to diagnose electrical failures of load and power passing devices.
1. The student should be able to diagnose electrical failures of drive motors.
2. The student should be able to diagnose electrical failures of control circuit boards.
3. The student should be able to diagnose electrical failures of water pumps.
4. The student should be able to diagnose electrical failures of water valves.
5. The student should be able to diagnose electrical failures of timers.
6. The student should be able to diagnose electrical failures of program switches.
7. The student should be able to diagnose electrical failures of lid switches.
8. The student should be able to diagnose electrical failures soap dispensers.

The student should be able to disassemble and reassemble various makes and models of dishwashers
9. The student should be able to disassemble and reassemble top-load washers.
10. The student should be able to disassemble and reassemble front-load washers.
11. The student should be able to disassemble and reassemble professional washers.

The student should be able to remove and replace motors, switches, touch pads, control circuit boards, and water pumps.
12. The student should be able to remove and replace drive motors.
13. The student should be able to remove and replace control circuit boards.
14. The student should be able to remove and replace water pumps.
15. The student should be able to remove and replace water valves.
16. The student should be able to remove and replace timers.
17. The student should be able to remove and replace program switches.
18. The student should be able to remove and replace lid switches.
19. The student should be able to remove and replace soap dispensers.

The student should be able to understand soil removal/wash ability.
20. The student should be able to understand soil removal/wash ability.
The student should be able to install and uninstall washing machines.

21. The student should be able to observe safe practices.
22. The student should be able to protect floor surfaces.
23. The student should be able to disconnect and reconnect water supply.
24. The student should be able to disconnect and reconnect power supply.
25. The student should be able to disconnect and reconnect drain hose.

The student should be able to interpret appliance parts manuals

26. The student should be able to identify specific parts and components as provided by a mechanical drawing.
27. The student should be able to accurately determine part numbers by drawing reference number.

The student should be able to maintain Access database of shop stock parts.

28. The student should be able to utilize Microsoft Access program to add to and expend Shop parts inventory.

The student should be able to navigate on-line web based parts research/ordering software

29. The student should be able to acquire part numbers utilizing On-line assets provided via the internet.

The student should be able to label parts received and distribute replacement parts to live work.

30. The student should be able to label parts received and distribute replacement parts to live work

The student should be able to interpret parts distributor invoice, and backorder status.

31. The student should be able to report part status accurately bases on invoice information.
32. The student should be able to identify dealer vs. retail pricing
33. The student should be able to calculate prices based on markup percentages.

ASSESSMENT OF LEARNER OUTCOMES: Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

SPECIAL NOTES: This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed
to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

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