

Small Engine Service and Repair

Curriculum Guide: *Small Engine Service and Repair*

Module: 1. Installing a Magnetron Ignition and Breaker Points

Unit Objective:

Students will apply principles of small engine ignition service and repair by identifying ignition system tools and components and installing and testing a variety of ignitions.

Show-Me Standards: 1.10, CA3

References:

Briggs & Stratton Corporation. Accessed January 13, 2004, from <http://www.briggsandstratton.com>.

Kohler Engines. Accessed January 13, 2004, from <http://www.kohlerengines.com/>.

Small Engine Service and Repair. University of Missouri-Columbia, Instructional Materials Laboratory, 1994.

Instructional Strategies/Activities:

- Students will engage in study questions in lessons 1 through 3.
- Students will complete the Module 1 evaluation, Installing a Magnetron Ignition and Breaker Points.
- Students will complete the following competency profiles: Installing and Servicing Composite Magnetron Ignition, Magnetron Retrofit Installation, and Installing Breaker Points and Condenser.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: pp. 1.5–1.6 (1, 7), pp. 1.14–1.15 (3), and p. 1.27 (6, 8).

Performance-Based Assessment:

As part of the instructional strategies and activities for this module, students will identify ignition system tools and components. They will also install and test a Magnetron ignition, install and test a retrofit Magnetron ignition, and install and test a breaker point and condenser ignition.

Assessment will be based on performance on the module evaluation and the ability to safely and correctly perform the assigned repair and service procedures.

Module 1—Installing a Magnetron Ignition and Breaker Points Instructor Guide

The instructor should assign the performance-based assessment activity procedures in conjunction with the relevant lesson material outlined in the instructor guide. Students will complete the activity procedures as they progress through the module lessons.

1. Use the Installing and Servicing Composite Magnetron Ignition Competency Profile, p. 17 of the student manual, to assess student performance. The profile covers disassembly and reassembly procedures necessary to install and service a Magnetron ignition system.
2. Use the Magnetron Retrofit Installation Competency Profile, p. 27 of the student manual, to assess student performance. The profile covers disassembly and reassembly procedures for replacing a breaker point ignition with a Magnetron ignition.
3. Use the Installing Breaker Points and Condenser Competency Profile, p. 45 of the student manual, to assess student performance. The profile covers disassembly and reassembly procedures necessary to install and service a breaker point and condenser ignition.
4. Have students complete the Module 1 evaluation, Installing a Magnetron Ignition and Breaker Points. Answers for the evaluation are found on p. 1.28 of the instructor manual.
5. Because the student manual includes step-by-step instructions and an itemized checklist for each competency procedure, there is no student handout for this performance-based assessment activity. However, there is a scoring guide that can be used, if desired. The scoring guide lists the assessment activity procedures and includes spaces for points possible, points earned, and instructor comments.
6. The final assessment score will be based on the performance on the module evaluation and the ability to safely and correctly perform the assigned repair and service procedures.

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Module 1—Installing a Magnetron Ignition and Breaker Points Scoring Guide

Name _____

Activity	Points Possible	Points Earned	Instructor Comments
Installing and Servicing Composite Magnetron Ignition Competency Profile			
Magnetron Retrofit Installation Competency Profile			
Installing Breaker Points and Condenser Competency Profile			
Module 1 Evaluation			

Total Points Earned _____

