

Small Engine Service and Repair

Curriculum Guide: *Small Engine Service and Repair*

Module: 2. Carburetor Service and Repair

Unit Objective:

Students will apply principles of small engine carburetor service and repair by identifying and servicing a variety of carburetors, fuel filters, and air cleaners and by explaining the operation and service of all-temperature and standard automatic chokes.

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 2 evaluation, Carburetor Service and Repair.
- Students will complete the following competency profile: Small Engine Carburetor Service and Repair.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. 2.19 (2, 5) and p. 2.33 (3).

Performance-Based Assessment:

As part of the instructional strategies and activities for this module, students will identify and service a variety of carburetors, fuel filters, and air cleaners. They will also explain the operation and service of all-temperature and standard automatic chokes.

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 2—Carburetor Service and Repair 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 Small Engine Carburetor Service and Repair Competency Profile to assess student performance. This profile includes the procedures listed below. The page number indicates the location of a checklist for the procedure. The procedures and checklists are found in the student manual.
 - Servicing an Oil Foam Air Cleaner, p. 11
 - Servicing a Cartridge Air Cleaner (Round), p. 14
 - Servicing a Reverse Air Flow Cartridge Air Cleaner, p. 17
 - Servicing a Flat Cartridge (Vertical Crankshaft) Air Cleaner, p. 20
 - Servicing a Flat Cartridge (Horizontal Crankshaft) Air Cleaner, p. 23
 - Servicing an Oil Bath Air Cleaner, p. 25
 - Servicing Briggs and Stratton Walbro One-Piece Flo-Jet Carburetor, p. 33
 - Servicing Pulsa-Jet, Vacu-Jet All-Temperature Automatic Choke, pp. 43–44
 - Servicing Pulsa-Jet (Suction Feed) Carburetor and Fuel Tank Assembly With Automatic Choke, pp. 56–57
 - Servicing Minlon (Vacu-Jet) Carburetor, p. 61
 - Servicing Pulsa-Jet (Suction Feed) Carburetor and Fuel Tank Assembly, p. 70
 - Servicing a Large One-Piece Flo-Jet Carburetor, pp. 78–79
 - Servicing Briggs and Stratton Pulsa-Prime Carburetor Model Series 95900 to 95999, p. 85
2. Have students complete the Module 2 evaluation, Carburetor Service and Repair. Answers for the evaluation are found on p. 2.34 of the instructor manual.
3. 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.
4. 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.

Small Engine Service and Repair

Module 2—Carburetor Service and Repair Scoring Guide

Name _____

Activity	Criteria	Points Possible	Points Earned	Instructor Comments
Small Engine Carburetor Service and Repair Competency Profile	<input type="checkbox"/> Oil foam air cleaner			
	<input type="checkbox"/> Cartridge air cleaner (round)			
	<input type="checkbox"/> Reverse air flow cartridge air cleaner			
	<input type="checkbox"/> Flat cartridge (vertical crankshaft) air cleaner			
	<input type="checkbox"/> Flat cartridge (horizontal crankshaft) air cleaner			
	<input type="checkbox"/> Oil bath air cleaner			
	<input type="checkbox"/> Walbro one-piece Flo-Jet carburetor			
	<input type="checkbox"/> Pulsa-Jet, Vacu-Jet all-temperature automatic choke			

	<input type="checkbox"/> Pulsa-Jet (suction feed) carburetor and fuel tank assembly with automatic choke			
	<input type="checkbox"/> Minlon (Vacu-Jet) carburetor			
	<input type="checkbox"/> Pulsa-Jet (suction feed) carburetor and fuel tank assembly			
	<input type="checkbox"/> Large one-piece Flo-Jet carburetor			
	<input type="checkbox"/> Pulsa-Prime carburetor model series 95900 to 95999			
Module 2 Evaluation	Complete Module 2 evaluation			

Total Points Earned _____