# Science & Technology

## ENGINES, TRACTORS, FIELD EQUIPMENT

### LEVEL 1

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| Crank It Up, Grades 3-5 Youth Materials: | In the member’s current Manual: | • 4-H Project Record Book #91950  
• 4-H Involvement Report (#91910)  
• Completed Member Guide Exhibit one of the following:  
• A poster (14”x22”) or display illustrating something you learned in this project this year.  
• A scrapbook of pictures of an activity you conducted  
• One of the following items (each year it should be a different item):  
  • History of Engines  
  • Classifying Small Engines  
  • Uses of Small Engines  
  • Matching machines to the job  
  • Engine operation  
  • Small Engine Parts  
  • Buying Small Engine Parts  
  • Electrical System Operation  
  • Needs for Lubrication  
  • Needs for Cooling System  

Note: Exhibits must utilize only skills, tools, and techniques taught in this project book. |
| • National 4-H Curriculum Crank It Up, Level 1 (#83751) | • Complete a minimum of 7 required/optional activities each year.  
• Finish at least 21 of the required and optional activities within 3 years to pass each book.  
• Have your project helper date (month and year) and initial each activity when it is finished.  
• Give an oral presentation (speech, demonstration or illustrated talk) related to this project. | |
| • 4-H Involvement Report (#91910) | | |
| • 4-H Project Record Book (#91950) | | |

**Volunteer Materials:**  
- National 4-H Curriculum Small Engines Helper’s Guide (#83754)

Complete the following:  
- 4-H Involvement Report (#91910)  
- 4-H Project Record Book (#91950)

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**County Requirements:**  
Check with your County Extension office for more information.

**Support Materials:**  
To order from National 4-H Mall visit: [http://www.4-hmall.org/Category/4-hcurriculum-small-engines.aspx](http://www.4-hmall.org/Category/4-hcurriculum-small-engines.aspx)  
Idaho 4-H Small Engines page: [https://www.uidaho.edu/extension/4h/projects/small-engines](https://www.uidaho.edu/extension/4h/projects/small-engines)

**Optional Supporting Materials:**  
- www.briggsandstratton.com (Briggs and Stratton)  
- www.ariens.com/en-us (Ariens)  
- www.deere.com (John Deere)  
- www.kohlerengines.com (Kohler)  
- http://www.tecumseh.com (Tecumseh)