

SMALL ENGINES

PROJECT SUPERINTENDENT:	Jason Reynolds, 317-645-6655, reynoldsjwr@yahoo.com
EXHIBIT CHECK-IN:	Sunday, July 11, 4-6 PM
JUDGING:	Monday, July 12, 8:30 AM, Open Judging
RELEASE:	Tuesday, July 20, 9-11 AM, and 5-7 PM
STATE FAIR ENTRIES:	Three (3) exhibits

Levels:

Level 1	<u>Grades 3-5</u>
Level 2	<u>Grades 6-8</u>
Level 3	<u>Grades 9-12</u>

Suggested Fair Exhibit Guidelines:

- Note:
- * Read and complete three (3) county activities in the manual.
 - * Attend county workshop(s).
 - * Turn in your completed record sheets to finish the project.

Exhibit Requirements:

Poster Requirements: Poster size 22" x 28" (See poster rules, Page 30, #15). Mounted on stiff backing- plywood, peg board, or very stiff cardboard. Must be displayed horizontally and covered in plastic. 4-H Member identification card IE: name, club, county, and level. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to original author.

Actual Engine Display: The actual small engine may be displayed. It must be mounted on a stable base no larger than 30" x 30". For safety reasons, all fluids (fuel and oil) must be removed. Note: It is strongly suggested that a notebook with details and pictures of what was done to the engine accompany the display.

Educational Display: No larger than 36" x 36" and freestanding. Science fair display boards (3 sided) are acceptable. Display board may be three (3) dimensional. All items are to be securely fastened.

Exhibits for Level 1 (BU-7324), Crank It Up! Grades 3-5

Educational display: Any educational display related to what you have learned in this project. Some possibilities of exhibits might include:

- Picture poster showing what you have learned about small engines.
- Display of basic tools needed to maintain a small engine.
- An educational display related to what you have learned about two-cycle engines.
- An educational display related to what you have learned about four-stroke engines.
- An educational display showing proper maintenance and care of a lawn mower.
- An educational display of proper safety labels and procedures for small engines.
- Small engines parts display board with a brief explanation of the purpose of the parts and how they work.
- Display related to some system that you learned about in small engines (filters, cooling, ignition, etc.).

Exhibits for Level 2 (BU-7325), Warm It Up! Grades 6-8

Educational display: Any educational display related to what you have learned in this project. Some possibilities of exhibits might include:

- An educational display comparing the different types of engines.
- An educational poster illustrating and explaining the internal parts of an engine.
- An educational display showing how transmissions work.
- An educational display showing how to conduct a compression check.

- An educational display showing how to adjust a carburetor **according to owner's manual instructions and in accordance with EPA regulations.**
- A display using a real small engine with a brief explanation showing steps in preparing a small engine for storage.
- Carburetor parts display board with a brief explanation of the purpose of the parts and how they work together.
- An income and expense record of your lawn mowing business, including costs, hours worked, pay for individual jobs, etc.

Exhibits for Level 3 (BU-7326), Tune It Up! Grades 9-12

Educational display: Any educational display related to what you have learned in this project. Some possibilities of exhibits might include:

- An educational display showing how to use diagnostic tools on small engines.
- An educational display showing how to tear down and reassemble a small engine.
- An educational display related to the electrical system of a small engine.
- An educational display about emissions systems on small engines and future trends.
- An educational display showing **mower blade inspection and maintenance skills.**
- An educational display about careers in small engines.
- An educational display about your work in finding resources about small engines on the Internet.
- An educational about trouble-shooting common problems with small engines.
- An educational display about small engines designs.
- Any educational display related to what you have learned in this project.