



COLORADO STATE UNIVERSITY  
EXTENSION

# 4-H Small Engines



“Start Your Engines.” Welcome to the world of power engines! With over sixty fun activities, this Small Engine curriculum helps youth understand how small engines work, how they work for us and how to keep them working. Put some spark and fuel into your youth program with this hands-on curriculum.

## Crank It Up! - Unit 1

### Jr./Int./Sr.

This unit is for members ages 8-18 years old who have little or no experience with small engines. Members will accomplish the following learning experiences:

- Use operator’s manual to guide maintenance repair and adjustments
- Learn major parts of engines
- Importance of clean air to efficiently functioning engines
- How to replace a spark plug and much more

## Warm it Up! - Unit 2

### Jr./Int./Sr.

This unit is designed for members ages 11-18 years old. Members will accomplish the following learning experiences:

- Learn about different engine types
- Learn the internal parts of an engine
- Specialize tools used
- Engine sizes
- Compression
- Seasoning your engine
- Safety issues
- How to start you own business

## Tune it Up! - Unit 3

### Jr./Int./Sr.

This unit is for members 8-18 years old who have had experience with small engines. It is recommended that the member complete the first two units before doing Unit 3. Members will accomplish the following learning experiences:

- Learn about tearing engines down and rebuilding them
- How to use diagnostic tools
- How to “listen” to engines for specific problems
- How to properly maintain engines
- How to use the internet to find resources, rules and regulations regarding small engines
- Selecting replacement engines

## Advanced Small Engines

### Jr./Int./Sr.

This is for members who have completed Units 1-3 or who are interested in doing a self-determined study of small engines. This unit is also for members who want to study tractors, cars, and other engines. Members will accomplish the following learning experiences:

- Plan specific goals and a course of action for a specific topic
- Become a junior leader in the small engine project
- Design your own small engines project

## Resources and Links

[Small Engine Tip Sheet](#)

[Small Engines e-record](#)

[State Fair Exhibit Requirements](#)

[Small Engines Score Sheets](#)

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