

Small Engines

4-H Project Newsletter

This SMALL ENGINES Project Newsletter contains information specific to the SMALL ENGINES Project. Please use it in conjunction with the General 4-H Information Bulletin, so that you are aware of Achievement Day completion requirements as well as general opportunities and information pertaining to all 4-H members. This Project Newsletter, as well as the General 4-H Information Bulletin, will be updated in December of each year, if necessary, based on changes made at the 4-H Nova Scotia Annual General Meeting.

Welcome to the 4-H Small Engines Project! This newsletter will give you an overview of the Small Engines project, answer some of your questions concerning expectations of the project, and provide you with project ideas and some resources. Project newsletters are an excellent reference to keep on hand to refer to throughout the year. Enjoy your year in the Small Engines project and when working on your project, remember to "Learn to do by Doing." If you have any questions, please contact your Regional Agriculture Leadership Coordinator (ALC).

Small Engines Project Work Requirements

On Achievement Day, Small Engines members will be required to display two (2) projects. 4-H members do not need to focus on the 2 or 4 cycle engines, as long as their two projects fit within the four categories above. 4-H members can create or build anything they want. (e.g., a member may rebuild an engine in their first year.)

4-H NOVA SCOTIA PROVINCIAL SHOW CLASS & SECTIONS:

Each county is eligible to send the top two junior and top two senior articles to the 4-H Nova Scotia Provincial Show. The sections are as follows:

CLASS 10: SMALL ENGINES

SECTION 1:	Posters & Reports – Write-ups on activities done relating to your project, photo stories, information booklets, etc.
SECTION 2:	Displays – Posters which include additional items, models, etc. and Small Engine Display boards to display the parts of an engine
SECTION 3:	Rebuild/Refurbish – Must include photos that show your progression with the projects from beginning to end
SECTION 4:	Specialty Project – Anything that does not fit in the above sections– Must include a short write-up detailing what you did for this project from beginning to end.

Suggestion: Reports should be a minimum of 1 page in length (approx. 250 words) and should include diagrams and/or photos where possible.

IT IS RECOMMENDED that the small engines display board be no larger than 1.2 m X 1.2 m (4 feet X 4 feet) due to space restrictions in the small engines class area at exhibitions and the Nova Scotia 4-H Show.

SUGGESTION:

Typically, the display board is made from pegboard, which allows for engine parts to be mounted easily. Make sure the engine parts are displayed in a logical and coherent order. It is a nice touch to add a frame to the outside edge of the peg board display. Be sure to include large clear handwritten or typed parts labels and title. It is a good idea to use colour to make your display board stand-out.

PROJECT RESOURCES

The following project resources are available from the 4-H Office by request:

- Small Engines Resource Leader Guide
- Project Newsletter and Record Sheets
- 2-Stroke engine cut away sparking with resource material
- 4-Stroke engine cut away sparking with resource material

TWO AND FOUR STROKE ENGINE CUT-AWAYS

These are an exciting resource available to leaders and members so you can explore the mechanical movement that makes these engines work. The cut-away models are available separately as one of the Audio/Visual resources from the 4-H Nova Scotia Office. These engines can be further dismantled showing working parts of the sparkplug system including points, condenser and more!

HELPFUL PROJECT HINTS

- Consult local small engine repair shops and mechanics, they are a good resource for your project. You may find they have used parts for your display boards.
- Keep an eye out on local clean-up days or on Kijiji for lawn/yard equipment which could be used for your project.
- Make displays neat and attractive. Paint the background, mount parts securely and neatly label parts. The parts should be clean and painting the parts can be effective.
- Have fun with the project and be safe, please ask permission before you dismantle the family lawnmower.