

# SMALL ENGINES

## CRANK IT UP UNIT 1

County Project Only – Not eligible for State Fair competition.

- H890001**      **Poster** – of external parts of engines
- H890002**      **Poster** – of tools for maintaining and repairing small engines
- H890003**      **Poster** – describing a cooling system
- H890004**      **Poster** – of Safety Rules for small engines

## WARM IT UP UNIT 2

County Project Only – Not eligible for State Fair competition.

- H890005**      **Small Engine Display/Item** – Show an application of one of the concepts learned in the Warm It Up project. Examples include: comparison of engine oil types, transmissions, or safety related to engines. Exhibit could be a poster, display, or an actual item.
- H890006**      **Complete Small Engines** – are to have been reconditioned, repaired or overhauled during a 4-H Small Engine project. A report-listing source of engine, use of engine, repair parts list and cost is to be included in a notebook. Gas tanks are to be EMPTY when entered at fair. Engines will be fueled and started as part of the judging criteria. All engines with cast iron flywheels should be mounted on a solid wood base. These engines will run smoothly without attachments on the PTO shaft. Complete lawn mower exhibits are recommended where the engine is equipped with an aluminum flywheel because the blade is important to the smooth operation of the engine. Engines must be equipped with a throttle control.
- H890007**      **Small Engine Display** – show parts or systems of a small engine, cutaways of engine or systems, worn or broken parts, step by step procedure of how to perform repairs or maintenance, etc. Use needed labeling, short written description or explanations, drawings, etc. to explain what you are showing. Mount on ¼” thick board, 24” x 32” wide.

## TUNE IT UP UNIT

County Project Only – Not eligible for State Fair competition.

- H890008**      **Complete Small Engines** – that have been reconditioned, repaired or overhauled in 4-H Small Engine project. A report listing source of engine, use of engine, repair parts list and cost is to be included and protected in a notebook type of cover. Gas tanks are to be EMPTY when entered at the fair. Engines may be fueled and stated as part of the judging criteria. All engines should be mounted on a base at least ¾” plywood. Complete lawn mower exhibits are recommended where the engine is equipped with an aluminum flywheel because the blade is important to the smooth operation of the engine. Engines must be equipped with a throttle control.
- H890009**      **Engine Display/Item** – Display/Item should exemplify one of the lessons learned in the Tune It Up project. Examples include diagnostic tools, fuel systems, ignition systems. If a complete engine is exhibited it will not be started. Must include a report detailing: the process of building/rebuilding engine and how/where engine will be utilized (i.e. lawn mower, weed eater, snow blower, etc.)