

JUNIOR Fair Exhibit Guide NWSF 2025
Department Junior Mechanical Projects #24

By participating in the Northern Wisconsin State Fair, you agree to:

1. Use only this year's Guide
2. Register online at <http://nwsfa.fairwire.com>
3. Pay fees at the time of online registration. A registration worksheet with fee details is available online.
4. Register All exhibits prior to the deadline.
 - Work must have been created by the exhibitor since August 1 of the previous year (during the past 11 months).
5. Respect all fair leadership including but not limited to: Department Leaders, volunteers, judges, employees, board members, etc.
6. Department Leaders have the right to remove deteriorating exhibits during the fair.
7. Read all the general information found at the beginning of the guide.
8. Follow the IAFE Code of Ethics and all ethics guidelines as set forth by the NWSFA Board.
9. Acknowledge the ATCP 160.07(1) rule regarding classes with only a few exhibits being moved into an Any Other or Miscellaneous class at the time of judging.
10. Understand that large classes may be broken into heats.
11. Respect the decisions of the certified specialty judge. Junior Divisions will use the Danish system, with some modifications noted in specific department pages.
 - Judges MAY choose to award Best of Show or Judge's Choice ribbons to exceptional exhibits. State Fair rules will be followed.
12. Follow the schedule on page 1 of this Exhibit Guide or on our registration webpage.
13. Each worthy exhibit will receive a uniform premium of \$1.50 and a ribbon of the judge's choice.
14. Authorize the use of your image in pictures, audio, and video productions for advertising and marketing needs of the NWSF.

Items specific to this department exhibitors agree to:

- Projects may only be entered once. May not be entered a second year.
- Posters may not be larger than 18x24.

Department Junior Mechanical #24

Division A – Tractor - Class # - Description

1. Poster explaining tractor or machinery safety.
2. Display board showing various kinds of nuts, bolts, screws, rivets, and other fasteners used on farm machinery, properly labeled.
3. Poster showing the importance of proper tractor care and adjustments as they relate to good tractor operation. Examples: Spark plugs, batteries, tires, air cleaners, carburetors, etc.
4. Display of one piece of toy farm machinery, (includes toy tractor or implement) mounted on plywood board, with written explanation of significance of this toy farm machinery.
5. Presentation about a tractor restored by exhibitor with explanation of restoration process.

Division B – Automotive - Class # - Description

1. Poster indicating types of traffic signs, signals and highway markings used in Wisconsin.
2. Poster reporting a study of the uses of the family automobile.
3. Maintenance schedule (Form 1) for family car, cost account for one month (Form 2) and insurance charges (Form 3). These to be put on a poster.
4. Poster with information on car keeping: (a) interior care; (b) exterior care: washing, vacuuming, removing stains, polishing, etc.
5. Poster or display showing operation of any one working unit of an automobile engine.
6. Chart showing stopping distances required for different road conditions at different M.P.H. ranges.
7. Chart or display showing the operation of any one working unit of any automobile engine.
8. Display of carburetor identifying the various component parts.
9. Display of distributor identifying the various component parts.
10. Display of the engine cooling system identifying the various component parts.
11. Display of sections of different worn tires with explanation of causes of wear.
12. Exhibit of worn brake lining and damaged brake drums versus new lining and smooth drums.

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13. Automotive safety poster.
14. Item related to Off-Highway Vehicles (ATV, UTV, snowmobile, etc.) Include a poster or display, safety, parts and operation.

Division C - Small Engines - Class # - Description

1. Panel exhibit of small engine parts with identification to the parts.
2. Poster showing correct steps in preparing a small engine for winter storage (14"x22"). Maximum panel size is 4'x4'.
3. Panel showing worn or faulty engine parts with a statement as to cause and prevention. Panel 4'x4' is maximum size.
4. Poster showing the events in a four-cycle engine with a brief explanation
5. Panel exhibit of carburetor parts with explanation of function of parts, float, or diaphragm type.
6. Poster showing events in a two-cycle engine with a brief explanation.
7. Small engine safety poster
8. Safety poster on chainsaw use, outboard motors, or motor bikes
9. A cut away small engine with a brief explanation of the work done.
10. A rebuilt small engine with a brief explanation of work done.

Division D – Bicycle - Class # - Description

1. A study project on the types of bicycles, past or present (examples: booklet or miniature models).
2. Identification of bicycle parts, poster
3. Steps in care and maintenance of a bicycle, poster
4. Poster on safe bicycle operation,
5. Poster on vehicle and bicycle laws,
6. Bicycle safety poster,
7. Log of at least 3 bicycle trips.

Mechanical

Division E – Aerospace - Class # - Description

1. Poster, illustrating an airplane instrument panel.
2. A balsawood flying model airplane.
3. A plastic model airplane-from a kit, assembled by exhibitor.
4. A model of an airplane mock-up to demonstrate aircraft controls.
5. Model rocket built from a kit. Be prepared to discuss assembly procedures. Grades 3-8.
6. Model rocket built from a kit Be prepared to discuss assembly procedures. Grades 9-13.
7. Model rocket previously launched by exhibitor grades 3-8.
8. Model rocket previously launched by exhibitor grades 9-13.
9. Aerospace safety poster.
10. Radio-controlled plane, poster or illustration
11. Drone poster or illustration

Division F – Models – Class # - Description

- All Mechanical Science Models, including LEGO's, Knex or similar construction kits.
 - Reference to Legos is meant to include comparable products in every case.
 - No engine driven rockets
1. Models made from building blocks (Lego style) from a kit - Grade 5 and under
 2. Models made from building blocks (Lego style) from a kit - Grades 6-8
 3. Models made from building blocks (Lego style) from a kit - Grades 9-12
 4. Models made from building blocks (Lego style) not from a kit - Grade 5 and under
 5. Models made from building blocks (Lego style) not from a kit - Grades 6-8
 6. Models made from building blocks (Lego style) not from a kit - Grades 9-12
 7. Models made from Knex blocks
 8. Model made from a kit - (pre-painted plastic)
 9. Model made from a kit - (pre-painted steel)
 10. Model made from a kit - (self-painted)
 11. Customized models**Made from parts from kits of other models. Example: Model A Ford Kit, with parts from a Pinto or other car to customize the kit or stock car from a model kit.

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12. Any other model from your own original design, constructed.

Division G – Handyman - Class # - Description

1. Repaired or constructed article for use in the workshop. (Attach a statement of work done and method used.)
2. Repaired, refinished, or constructed articles for sport or recreational purposes. (Attach a statement of work done and method used.)
3. Repaired, refinished, or constructed articles for use in the home. (Attach a statement of work done and method used.)
4. Repaired, refinished, or constructed articles for use outdoors. (Attach a statement of work done and method used.)
5. Constructed article using recycled materials.

Division H – Welding - Class # - Description

1. Poster showing the different equipment used for welding.
2. A display of 3 welds (t-joint, butt weld and lap weld) using oxyacetylene, arc or wire welder. Joints may be no more than 3" long.
3. Repaired item.
4. Manufactured item.
5. Any other welding projects.