

**AGRICULTURAL MECHANICS
PROJECT SHOW AND
TRACTOR RESTORATION CONTEST
4-H/FFA
TUESDAY, OCTOBER 5, 2010 – 8:00 AM**

SUPERINTENDENT

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Entry deadline Wednesday, Aug. 25
Earliest Arrival Mon., Oct. 4 2:00 PM
In Place Deadline Mon., Oct. 4 6:00 PM
Judge – Tractor Restoration (Mechanical)
Upon Offloading 2:00 PM
Judge Projects..... Tues., Oct. 5 8:00 AM
Awards Presentation . Tues., Oct. 5 7:00 PM
Begin Release..... Tues., Oct. 5 after Awards

This show will be governed by the General and Youth Rules and Regulations of the State Fair of Texas and the following special rules.

The purpose of this show is to provide an opportunity for 4-H and FFA members to display projects constructed in agricultural mechanics labs; to promote the development of skills in agricultural mechanics through competition; to recognize individual and group accomplishments in the area of agricultural mechanics; and to provide an opportunity for public appreciation of this important phase of 4-H and FFA Youth Programs.

SPECIAL RULES

- 1. ELIGIBILITY:** Entries in this division are limited to Texas FFA and 4-H members. Entries must be included on the official group summary sheet submitted by the CEA or AST. Projects exhibited must have been constructed by FFA and 4-H members under direct supervision of the CEA or AST, either as a part of their agricultural mechanics instruction in agricultural science or as a part of their supervised work experience program.
- 2. OWNERSHIP:** Projects may have been individually or group constructed and may be individually or chapter owned.
- 3. CLUB ENTRIES:** Entries made in the name of FFA Chapters or 4-H Clubs are not eligible. All projects must be entered in the names of the exhibitors who participated in planning and construction of the project.
- 4. ENTRY LIMITATION:** Each exhibitor may enter two individual projects and no more than one per class. Each group of students may enter no more than two group constructed projects and may have no more than one entry in any project class. No individual exhibitor may enter more than four projects total.
- 5. INELIGIBLE PROJECTS:** Any project that does not fit into one of the stated classes will be disqualified by the Show committee.
- 6. SUBSTITUTIONS:** All project substitutions must be made at check in with the superintendent. Substitutions will not be allowed after check-in. See Youth Show Rules for exhibitor substitution rules.
- 7. CONSTRUCTION DATE (AG MECH):** A project can be exhibited only one time at the State Fair of Texas. All projects must be started on or after April 1, 2009.
- 8. RESTORATION DATE (TRACTORS):** A tractor can be exhibited only one time at the State Fair of Texas. All restoration projects must be started on or after October 1, 2008.
- 9. EXHIBIT SPACE:** Due to limited exhibit space, please note your space requirements on your entry form. Final space allotment is at the superintendent's discretion.
- 10. PROJECT PRESENTATION:** All projects must be painted or properly treated and must be clean and in a presentable condition, even though they may have been used. Due to limited exhibit space, trailers and other equipment are to be displayed in transport position. Operation of ramps, extensions, and other special features may be demonstrated only as directed by the official judges and as space permits. No additional

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floor space will be provided for podiums, chairs, tables, show boxes, etc. No electricity will be available for computers, other electronics, etc. Electricity will be available for projects requiring it for operation during judging only. No touch up painting of any type will be allowed.

11. **EXHIBITOR PRESENTATION/SHOWMANSHIP:** Exhibitors should be dressed appropriately and be with their project when it is judged. Exhibitors should be courteous and helpful to those viewing their project, including those exhibiting next to them. Exhibitors should not interfere with or shield those who are exhibiting next to them. Exhibitors should be available to answer questions when their project is being judged. Knowledge of the project will be evaluated at this time. Exhibitors should be well informed of the project they are representing, but should not be boisterous or argumentative. Exhibitors should provide any equipment that may be necessary to judge their project (flashlights, mat or creeper for judging projects that the judge would need to get underneath such as trailers). Exhibitors may be requested to hold measuring tap and assist the judge in making measurements on projects. An anonymous judge will award showmanship.
12. **TRAILER REGISTRATION:** Current registration plates or one trip permits and paper plates are required on all trailers that are towed to the project show. Hauled trailers will be exempt from this rule.
13. **DOCUMENTATION:** An original (exhibitor drawn) plan or drawing, a bill of materials and photographs showing all phases of construction are to be provided with projects. TxDOT and/or ASAE regulations and specifications are to be provided as they apply to individual projects. Display of plans, photos, etc. must be done in such a manner that no additional floor space is required. Stands, podiums, etc. will be permitted only when they can be positioned on or under the project.
14. **PROJECT SAFETY:** Appropriate and safe display stands must be provided for gates, panels, and other projects that need support. Sharp edges and points, such as found on self feeder roofs, bale movers, etc. are to be padded or covered as necessary to prevent injury. All trailers and other equipment that is to be operated and/or transported on public roads are to be equipped with safety equipment specified in Title 7, Vehicles and Traffic Transportation Code of Texas Statutes, Specific chapters regarding width (621.201), lights and reflectors (545.106, 547.324 and 547.331), brakes (547.401), length (621.201) and inspection (621.204) are to be adhered to. Any trailer that exceeds 102 inches in width must have a signed permit. All towed equipment, regardless of standards, is to be equipped with safety chains. All three-point hitch and P.T.O. operated equipment are to meet current ASAE standards. The IMS WEB page will provide information on how to access or acquire TxDOT Equipment and Vehicle Registrations, and ASABE Standards. (www-ims.tamu.edu)
15. **ELECTRICAL SAFETY:** All 120 VAC and higher electrical plugs and receptacles are to be the equipment grounding type. All metal components are to be grounded. Ground fault circuit interrupters (GFCI) shall be provided for all 120 VAC receptacles. All 50 VAC and higher connections are to be protected in appropriate indoor or outdoor rated enclosures.
16. **GENERAL SAFETY:** Flammable and/or combustible liquids shall not be used, stored or sprayed inside any State Fair of Texas building at any time. This shall include, but is not limited to, enamel paints, thinners, reducers, gasoline or any other petroleum based liquids. All liquids must be in properly labeled original containers. All compressed gas cylinders shall be properly secured in place. Hand wheels are to be removed. Protective caps installed and taped. No regulators or hoses are to be installed at any time. No extension cords allowed.
17. **NO OFFLOADING ASSISTANCE WILL BE PROVIDED.**
18. **PROJECTS WITH ENGINES:** There is to be no more than two gallons of fuel in any fuel tank. The fuel tank cap is to be in place and sealed with tape. The battery is to be disconnected. This applies to all engines in the exhibit area.
19. **VEHICLES:** Tractors, truck or other vehicles (including non-entered trailers) are not allowed in the exhibit area as part of the display.
20. **PROJECT COMPLETENESS:** All projects should be complete including finish. Any item, necessary for use of the project, must be a part of it (example: hinges and latches on gates and panels) including documentation.
21. **SIGNS:** All projects are to be identified with standard club exhibitor cards. Additional signs, banners, etc. are encouraged, but are subject to approval by the Committee. No "For Sale" signs will be permitted.
22. **LOSS OR DAMAGE:** Every precaution will be taken to protect the projects entered; however, neither the State Fair of Texas, its management, superintendents nor judges of this Division will be responsible for any loss or damage to projects.

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23. JUDGING CRITERIA for projects, excluding Tractor Restoration:

<u>Criteria</u>	<u>Points</u>
Workmanship (including finish)	30
Design and Materials Used (including practical)	20
Documentation	20
Knowledge of Project (response to questions).....	20
Degree of Difficulty	<u>10</u>
Total	100

Blue Ribbon 90-100 Points / Red Ribbon 80-90 Points / White Ribbon 70-80 Points

Failure to provide all required documentation and information will result in projects being lowered one classification.

24. TRACTOR RESTORATION:

- A) No yard tractors or riding lawnmowers.
- B) Tractors with steel lugs – Exhibitors must provide mats or lumber/plywood to serve as runners to protect asphalt and concrete from damage.
- C) Tractor Serial Number must be included with Description on Entry Form.

25. Judging Criteria for Tractor Restoration projects:

- A) **Aesthetics: 15 points.** Overall appearance of tractor, including workmanship and finish. Items that will be considered include, but are not limited to the following:
 - Metal preparation prior to painting
 - Completeness of all sheet metal
 - Painting and finish
 - Detail and completeness of components – steering wheels, seats, decals, instrument panels, wiring harness, etc.
- B) **Authentic: 10 points.** Must be as original as possible. To include:
 - Paint color, fasteners, and other components such as magnetos, carburetors, exhaust systems
 - Mechanical systems, fuel, electrical, engine, transmission, final drive, cooling, etc.
 - Serial plates in place with unaltered serial numbers
- C) **Mechanical: 40 points.** To include the mechanical restoration of all systems including: (some tractors may not have all systems)
 - Engine, transmission, final drive
 - Fuel, cooling, ignition, lighting, exhaust, charging, starting, hydraulic and steering systemsExhibitors will be asked to start the tractor and drive it, demonstrating all gears along with systems (hydraulics, lights, brakes, etc.). Driving and mechanical evaluation will be done outside when offloading on Monday. Exhibitors may be asked to move tractors back outside for additional driving and mechanical evaluation on Tuesday.

A Mechanical Check Sheet, which tractor judges use in their evaluation will be posted on the website as soon as it becomes available. These score sheets will include (a) Checks on Systems – engine – transmission – final drive – brakes/steering – lights/safety equipment – cranking/charging and PTO/lift/hydraulics; (b) example question that could be used in interviewing exhibitors to ascertain their knowledge; and (c) observations made when tractors are driven.

- D) **Safety Equipment: 5 points.** All equipment that was original to the tractor should be in place (includes all shields and decals). Tractor must be in safe operating condition. To exhibit a tractor, the following safety considerations must be followed:
 - No more than 5 gallons of fuel in the fuel tank
 - Neat and functional drip pans containing floor absorbent material (cat litter) to collect any coolant, oil, or hydraulics that may drip from the tractor
 - Fuel shut off valves, under all fuel tanks, must be functional and all tractors must be exhibited with these valves off
 - An approved ABC fire extinguisher with a minimum of 5 lb. capacity must be provided and placed near the tractor
 - Tractors may be started only at the request of show officials

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- E) **Documentation: 15 points.** Documentation must be typed (recommend word processor or spreadsheet) and include the following: (The National FFA Tractor Restoration Competition documentation format may be used.)
- One page description of the overall restoration project
 - Expense report identifying all costs involved in the restoration
 - Photos (before, during, after) – Safe working environments should be depicted in all photos
 - Mechanic's report detailing all mechanical work performed
- All documentation is to be arranged in a three-ring notebook, divided and sequenced with a table of contents and page numbers.
- F) **Knowledge: 10 points.** Judges will ask questions to determine the exhibitor/exhibitors knowledge of and involvement in the restoration.
- G) **Presentation: 5 points.** Showmanship includes meeting public, eye contact, introduction, enthusiasm for describing tractor, articulate and assuring.

DIVISIONS

AGRICULTURAL MACHINERY AND EQUIPMENT CLASSES

1. Hay handling equipment
2. Spraying equipment
3. Mounted and pull type tractor equipment
4. Hydraulic equipment
5. Shop equipment
6. Truck, tractor, and agriculture equipment accessories
7. Division Champion
8. Reserve Division Champion

ELECTRICAL EQUIPMENT

9. Show and livestock equipment
10. Shop tools and equipment
11. Division Champion
12. Reserve Division Champion

LIVESTOCK EQUIPMENT

13. Gates and livestock panels
14. Squeeze chutes and restraining equipment
15. Trim chutes, blocking stands, livestock crates and headgates
16. Feeders – includes self and creep feeders
17. Other livestock equipment
18. Division Champion
19. Reserve Division Champion

TRAILER

20. Bumper Pull Utility – 10 ft. and under
21. Bumper Pull Utility – Over 10 to 16 ft.
22. Bumper Pull Utility – Over 16 ft.
23. Bumper Pull Stock – all lengths
24. Gooseneck Lowboy – bed between wheels
25. Gooseneck Flatbed/Float – bed over wheels
26. Gooseneck Stock Trailer – all lengths
27. Mulitbale
28. Other trailers – includes: welder trailers, dump bed (including hydraulic dump), cargo, and over wide trailers (more than 102 inches). All flatbed (bed over wheels) bumper pull trailers regardless of size.
29. Division Champion
30. Reserve Division Champion

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RECREATIONAL PROJECT CLASSES

31. Barbecue Pits and Smokers – Stationary
32. Barbecue Pits and Smokers – Pull Type
33. Hunting equipment
34. Home Décor
35. Other
36. Division Champion
37. Reserve Division Champion

WILDLIFE EQUIPMENT

38. Wildlife Feeders
39. Traps
40. Hunting Stands
41. Other
42. Division Champion
43. Reserve Division Champion
44. Grand Champion Project
45. Reserve Grand Champion Project

TRACTOR RESTORATION (This division is separate from the divisions listed above.)

46. Tractors 1950 and older
47. Tractors 1951 – 1960
48. Tractors 1961 – 1990
49. Champion Tractor
50. Reserve Champion Tractor

Awards will be also be given to: Showmanship Group and Showmanship Individual