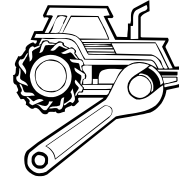


STEM: SCALE MODEL 1/16TH TRACTOR

STATE FAIR ENTRY: No

EXHIBIT BY: All * items must come to the contest.



TRACTOR 1/16 th Tractor (Electric & Gas)	Project Book TRAC-EG-1-17	Record Sheet TRAC-16-R-11/16*
This is a resource project book. There are no activities to complete.		

JUDGING TIME: Wednesday, July 21 at 2:00 p.m. Check-in on Wednesday between 1:30 – 2:00 p.m.
Construction will be judged at Fri, July 16 at 2:00 p.m.

PROJECT DESCRIPTION:

In this project, 4-H'ers will exhibit a 1/16th model tractor (electric or gas) to be used in a pull. The 4-H'er will learn some engineering and physics principles.

EXHIBIT:

All divisions:

1. Complete a separate record sheet for each tractor.
2. Participate in the county pull contest.
3. Show arena is limited to: show officials, truck officials, tractor officials and pullers only. *No parents that are not officials will be allowed.

1/16th Scale Model Tractor:

1st year members:

- Exhibit one 1/16th scale model tractor with restricted gear ratio and an electric motor which will be supplied by the project leader at your cost. See project manual for additional requirements.

2nd year members: Can compete in electric and / or gas.

- Exhibit one 1/16th scale model tractor with restricted gear ratio and an electric motor which will be supplied by the project leader at your cost. See project manual for additional requirements
- Exhibit one 1/16th scale model tractor with restricted gear ratio using a 35% fuel mixture-powered engine or diesel engine. See project manual for additional requirements.

3rd year & above: You can choose to exhibit your electric or gas pro-stock.

IMPORTANT

Static Model Class (Construction) on Fri. – All fuel powered tractors and trucks **must** arrive at judging without fuel in the tank. Note: Only 1 tractor can be shown for the Static Model (Construction) class.

	1/16TH Electric Tractor	1/16TH Gas Tractor
Max. Weight (lbs)	4 and 6	4 and 6
Max. Wheelbase (inches)	8"	8"
Length Limit (inches) (center of rear axle to front of vehicle)	10½"	10½"
Max. Number of engines Max. batteries for electric	1 electric on sled	1 gas

Max. engine displacement (cubic inches)	By leader (Electric)	.051 (Gas)
Hand-held throttle cables allowed?	No (Electric)	Allowed (Gas)
Tire Design	Black Rubber	Black Rubber
Max. Tire Size (width x diameter)	1 ⁵ / ₈ " X 4 ¹ / ₄ "	1 ⁵ / ₈ " X 4 ¹ / ₄ "
Max. Hitch Height (inches)	1 ¹ / ₄ "	1 ¹ / ₄ "
Min. Hitch Length (center of rear axle to back of hitch hole)	1 ¹ / ₈ "	1 ¹ / ₈ "
Gear Ratio	250-300:1 Electric	200-300:1 Gas