

Tractor Pull

Effective December 07, 2022

Text in RED is new for 2023

Code: TPM

Control: **Must be fitted with a single action kill switch prominent on the top of the robot, causing the robot to be immobilized by the removal of an article (be it pin or magnet, etc) which, being attached by a length of cord to the driver's wrist, when pulled, will cause a disconnect of power and the vehicle to stop.**

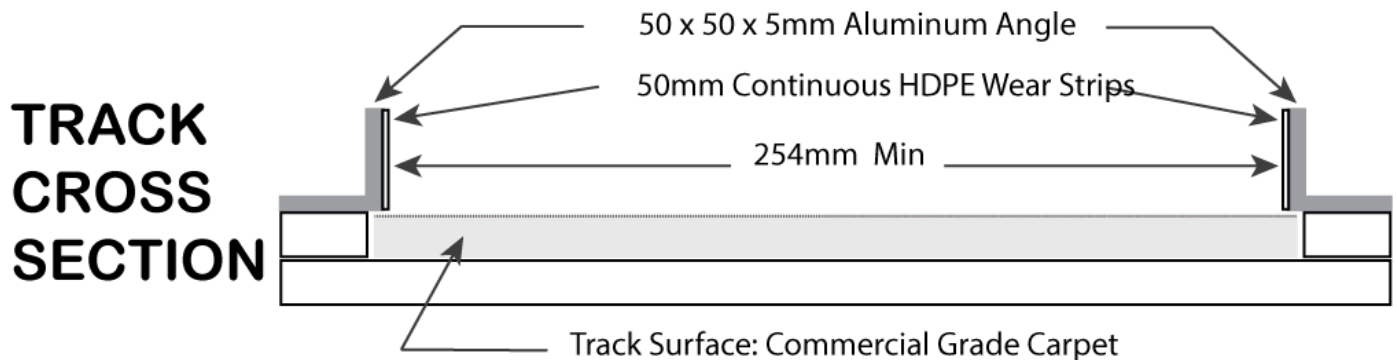
Open to: All up to Grade 12

Robot Weight: Maximum vehicle weight (including batteries) 4.53Kg.

Robot Length: Maximum vehicle length - 355mm". Length shall include all parts of vehicle including the hitch.

Robot Width: Maximum vehicle width - 252mm (10") Where the widest points of the vehicle shall be at or below a height of 38mm from the ground and designed to guide vehicle between the HDPE coated guide rails.

Size of Playing Field: 7.3m long x 254mm wide (see details below).



Explanation: The object of this competition is for your tractor to pull the sled for a distance of 7.01m (23 ft.) on carpeted track in less than 2 minutes. As the sled is pulled forward the weight is shifted progressively from above the wheels at the back of the sled to above the skid near the front of the sled. As this weight is shifted forward so the friction is increased. The track has sides so there is no need to be able to steer the tractor, but it must be equipped with some form of low-friction guides to help keep the tractor within the guides.

Rules: **For** tethered vehicles; the tether cable must not foul the track, nor be used to pull the vehicle forward.

Wheelie bars are permitted.

Added weights must be firmly attached.

The tread may be any style but may only be composed of either rubber, silicone, latex, flexible urethane or similar thermoplastic elastomer.

No metal, plastic or fibre spikes, tire chains, hook and loop or similar device may be added or attached to any driven tire.

Liquid or chemical tire traction compounds are not permitted.

Each vehicle will be weighed before competing and may also be weighed after a pull, and if found to be overweight, that pull is void.

Each competitor has the option to call for a restart if the tractor is stopped before the sled reaches the 1.52m. "Default Line". However, he/she must re-pull immediately. No repairs or battery recharging will be permitted. Each contestant is allowed one re-start only, use it wisely.

All robots must pull in the first weight/round (10 Lbs).

The Event Judge will, at his/her discretion, display the weights to be pulled starting with large weight increments and gradually decreasing them. Contestants will have the option of telling the Judge they will “pass” when new weights are announced.

Each robot must cover the full 7.01m track within a two-minute time limit to be awarded a successful pull. If a vehicle is unable to complete the distance, it will be deemed to have failed that pull and the previously successfully completed pull shall be their best pull.

Each contestant will be allowed one free pull. Use it wisely!

Distance pulled will be measured from the leading edge of the sled’s skid which is to be aligned with the starting line, and has to be level with the finishing line for a complete pull.

Ties will be broken by adding weight to the sled and re-pulling.

Intentional jerking of the sled will disqualify the contestants from that pull. Intentional jerking will be determined by the track officials.

If the sled malfunctions at any time during the pull, that pull will be null and void. The puller will be permitted to recharge his/her batteries and re-pull at a time determined by the track officials. Sled malfunctions shall be determined by track officials ONLY.

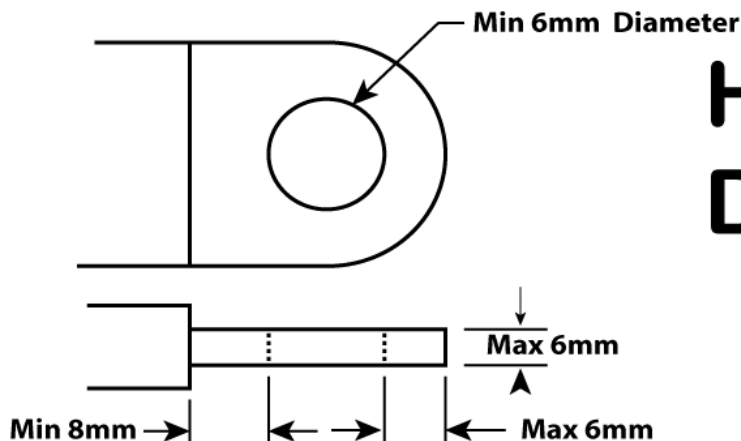
The decisions of the Event Judge or Head Judge are final and cannot be overruled.

On or Off-track repair time limits are to be decided upon by the Event Judge prior to the start of the event and shall be announced to the drivers.

No production type R/C Pulling vehicle will be allowed to compete in the MRG Tractor Pull. However, they may (at the discretion of the Event Judge) be allowed to pull exhibition only.

Hitch Height: **Maximum** hitch height - 100mm” (measured from ground).

Hitch: **Must be** mounted to the vehicle in such a way as not to permit any movement either longitudinally, vertically or horizontally during a pull.
Adjustable hitches are permitted, but must be locked in position during the pull.
The hitch must be constructed of strong, rigid material and incorporate a minimum of 6mm hole located no more than 6mm from the rearmost end of the hitch drawbar and no more than 6mm254mm thick (i.e., the sled pull cable must have a clear path from the clevis to the sled with no interference from any part of the pulling vehicle).



HITCH DETAIL

- Batteries: **No unsealed** or vented batteries containing liquid acid compounds will be allowed.
No Fuel Cells allowed.
Lithium Ion, Lithium Polymer may be used under strict conditions (see MRG General Rules p3).
If you have a back up battery(or batteries), they must all be declared at registration and the robot weighed with each, separately.
- Driving Wheels/Track: **There is** no restriction on the number of, diameter, or width, of driving wheels.
Track laying mechanisms may be utilized.
Tractors will be stopped if, by the judges opinion, they are perceived to be causing damage to the sidewalls or the surface of the track.
- Robot Identification: **The MRG** identification sticker(s) (as supplied while registering in the contest) must be easily readable on the robot's body while the robot is in competition.
- MRG General Rules: **Failure** to follow the MRG General Rules may result in the following:
Warning being issued, or
Disqualification and loss of the pull, or
Disqualification from competition and or event.