



Tug of War

Overview

Tug of War is much like the human version of the game. Two vehicles compete to see which of them can pull the other one across the center of the table.

These rules are very similar to the long-running Tug of War contest at BrickWorld, so if your vehicle has competed at BrickWorld, it may be able to compete at BrickFair with minimal modification.

Playing Field

The competition will take place on a 6 feet by 15 inches smooth white surface. There will be three lines marked perpendicularly on the board in black electrical tape: a starting line, in the center; and two finish lines, 12 inches in each direction from the center.

Vehicles will begin the competition connected together by a short cord (which will be supplied by the judge). The cord will be positioned such that the center is directly over the center line and the two ends are over the two finish lines. The center of the cord will be conspicuously marked. At the start of the round, the two vehicles should begin pulling the cord with the objective of dragging their opponent across the center line. To avoid ambiguity due to different shapes and constructions of vehicles, the official determination will be made when the center mark on the cord moves across one of the finish lines. (The two methods of determination are equivalent; the total distance moved in either case is 12 inches.)

Competition

The competition will be played in either a round-robin style tournament, where each vehicle competes against every other vehicle with the winner determined by the highest cumulative score; or a double-elimination style tournament, where a vehicle climbs the tournament bracket until it loses twice. The round-robin is the preferred style, but if there are a large number of entries, the judge may elect to run a double-elimination event due to time constraints.

Each match consists of a maximum of three rounds in a best-of-three format. Each round is limited to 30 seconds. If 30 seconds have elapsed and neither vehicle has been pulled across the center line, the vehicle which has made at least some progress and has pulled its opponent the farthest will be awarded the win. In the event that the cord has not

moved, or has moved only a small distance, the round will be declared a draw. In round-robin style tournaments, vehicles will receive two points for a win, one point for a draw, and zero points for a loss.

At the start of a round, the vehicles will be connected by the cord and placed behind their respective finish lines with the cord taut and the cord's mark over the center line. At the starting signal, each person may touch his vehicle once (such as by pressing on "on" button, a touch sensor, or a button on the intelligent brick) and then must immediately move a safe distance away from the competition surface. No further interaction is permitted with the vehicles until the round ends. The vehicles may start immediately; it is not necessary to implement a delay. Vehicles are not required to stop automatically at the conclusion of a round.

There is a limit of one vehicle per person per tournament.

Vehicle Design

Vehicles can be of any design, subject to certain restrictions. Vehicles may be controlled by an intelligent brick (RCX, NXT, EV3, Cybermaster, Scout, MicroScout, etc.) or may be simple battery box vehicles. All vehicles must fit within a cube measuring 12 inches on each side. Vehicles must weigh no more than 3 pounds, or 1.36 kilograms. Vehicles must be constructed of 100% LEGO-brand parts, with special exceptions allowed for third-party sensors (if using an intelligent brick) and batteries. No modification (melting, glue, deformation, etc.) of the bricks is permitted.

There is one specific design requirement. The vehicle should have a tow hitch in the form of the cross blocks and axle shown in red and black below (the white and gray pieces are shown for clarity but are not required). The hitch should be mounted between 1 and 2 inches from the ground. The cord used to connect the two vehicles will be looped around the axle between the two cross blocks.

