# Celebrating 26 years of World Championship R/C Pulling and Monster Truck Racing!



Official Rulebook of the

National Radio Control Truck Pulling Association

Version 8.3

Effective March 1st 2014

\$5.00

#### **Forward**

This rulebook is a culmination of many years. Over the years the hobby world has changed and consequently the rulebook continues to evolve. The rulebook is published yearly to remain abreast with current trends. The association uses all of its resources to ensure the rulebook remain consistent of current hobby trends..

The NR/CTPA Executive board welcomes comments and questions concerning the rulebook . Feel free to contact the board at:

rctruckpull@roadrunner.com

www.nrctpa.org or

716 627 4321

**Purpose:** The purpose of the NR/CTPA is to promote radio con

controlled truck pulling, monster truck and tuff truck con tests and to provide the rules and assistance to members

and affiliated clubs.

#### Membership;

Dues:

Individual membership: \$25.00 per year (U.S.)

Family membership: \$30.00 per year. Family memberships can in-

clude hold. any family member residing in the same house-

Discount: A discount of \$5.00 may be deducted from either

memberships if the member is a member of a

recognized NR/CTPA affiliate club.

Associate Membership: \$20.00 per year. This membership is for Hobby

Stores only.

The rules in this rulebook shall govern all competitions after March 1, 2014 and supersedes all previous editions. The NR/CTPA reserves the right to amend, change, or add to the rules according to changes affecting the hobby. All attempts will be made to keep the rules fair and equal for all participants.

Contents of this rulebook may not be reproduced in any form without written permission of the NR/CTPA. Copyright 2013, NR/CTPA all rights reserved.

General Rules	2-9
Motor Levels	2-4
Battery Rules	5-6
Frequency Page	8
Concours	9
Pulling Rules	10-36
Index	10
Pulling Track Layout Guide	11
Pulling general rules	11-13
Electric two wheel drive pullers	14-23
Electric four wheel drive pullers	24-30
Fuel powered pullers	31-34
Optionally powered puller	32-33
Racing rules	39-55
Index	38
General Racing Rules	39
Special Race Rules	40-43
Entry Level Class Rules	44
Tough Truck	45-46
Independent Suspension	47
Four Wheel Drive Monster Trucks	48-54
Definitions and Clarifications	55-59
Class Dots and	60

## These rules shall cover all classes of pullers and racers less specifically noted.

un-

- 1. All vehicles covered in this rulebook shall be radio controlled 1/12 or 1/10 scale cars, trucks or tractors and will have a body to resemble a car, truck, tractor, or full size vehicles. Vehicles must run in classes according to their factory production vehicle classification; i.e. 2wd factory production vehicle runs in 2wd classes, 4wd factory production vehicle runs in 4wd classes. The following classes are limited to run factory production vehicles only: Stock, Super Stock, and Modified. 2wd and 4wd classes compete separately. Specifications for both 2wd and 4wd in each class appear on their respective pages of this rulebook. Differentials may be locked and ball bearings are acceptable in all classes.
- All classes are subject to any combination of pre and post competition
   Inspection with weigh in. Each vehicle must pass through tech and if found to be illegal, that vehicle is disqualified for that round.
- 3. (Track Official Inspection) Vehicle may be inspected at any time by the head track official if suspected of a violation. Anyone refusing to submit the vehicle in question for inspection will be disqualified from event and forfeit entry fees. If inspection is regarding specific motor or component and disassembly is required, the head track official must first notify the Event Competition Committee for further review. After review the owner of the motor or component in question must first provide proof of the legality to the Competition Committee. If the owner is unable to provide proof, the NR/CTPA will ask the owner at that time to disassemble the component in question. If the owner refuses request of disassembly, the vehicle in question will be disqualified. After inspection if the component is found to be legal per current rules, the NR/CTPA will refund the cost of component in question if warranted. Refund not to exceed current market value, not manufacturers suggested retail price. The ruling of the head track official is FINAL.
- 4. Ties will be broken by adding weight to the sled and re-pulling or an other race. Batteries may be recharged. This will be left up to the host club or Event Director. This will be announced at the drivers meeting.
- 5. There can not be a protest against the Head Track official or their staff. Any complaints must be filed with the Competition Committee. The decisions of the Head Track Official and or Competition Committee Director are final and can not be overruled.

- 6. Any participant may request an inspection of a vehicle in his/her class but ONLY if suspected of a rule violation. Participant must register a written complaint with the Competition Committee along with a \$30.00 protest fee in cash. The owner of the vehicle in question will be notified of the complaint by a Competition Committee member. At that time the vehicle will be placed in impound. If disassembly is required the owner will do any disassembly of their vehicle under the supervision of the Competition committee. If the vehicle in question is found to be I legal, the owner of the vehicle will receive the protest fee. If the vehicle in question is found to be illegal the protest fee will be returned to the person filing the protest and the vehicle would be disqualified from the event and the owner would forfeit the entry fees. The decision of the Competition Director is final.
- No metal or fiber spikes, tire chains, or foreign material to be attached in any matter to or injected into tires. Liquid or chemical tire com pounds are not permitted in any class.
- 8. All weights must be firmly attached. External weights must be of scale appearance and proportionate to that vehicle size. Weights may not extend more than ½ inch past either edge of the body. Vehicles using a scale tractor body may exceed the width limit but no weights are to exceed the vehicles width. Weights may not exceed 3 inches in height. Weight bar and/or weights must have a minimum of ¼ inch clearance when set on a table. All four wheels must contact the table surface. All batteries, motors and non-scale appearing weights must be located under the body of the vehicle. The body may be cut to allow for the wheel openings, exhaust, starter drive access and for clearance of oversized motor housings. Custom work is allowed. Unless it is listed differently in the class rules all dimensions include all of the vehicle components as it is to be competed with.
- 9. Any production R/C vehicle shall be reviewed by the NR/CTPA and approved for a particular class based on their review.
- 10. Experimental vehicles not specifically addressed by this rulebook are permitted to compete as exhibition only. The decision to allow these vehicles to compete in their own class is left up to the host club.
- No automatic transmissions or transmissions that shift while in motion are allowed. The exception to this is Open Monster truck and the 4WD Independent Suspension monster truck classes.
- 12. There will be no verbal or physical abuse directed towards any track officials, tech staff, or Competition Committee members by competitors or other officials. There will be no verbal or physical abuse directed towards any competitor by any officials or other competitors.

No alcohol or drugs are allowed in the event area during competition hours. Anyone found to be soliciting drugs or alcohol to minors will be asked to leave. You will be disqualified from the event without refund. No exceptions. This will be decided by the event officials, Competition Committee, and/ or the Executive Board.

- External propellers and or fan blades may not be used to cool motors in any class. Small blower assemblies will be permitted if mounted securely to the vehicle and properly encased.
- 14. No walking with the vehicle. The driver must stand in one spot anywhere along the track. Pivoting to the right and left is permitted. The exception is; you may not stand on the track surface at the finish end of the pulling surface. This is for safety and vision reasons. Violation of this rule will result in disqualification for that round. The enforcement of this will be up to the event director. Exceptions may be granted for physical disability, (i.e. vision), or for building interference.
- 15. No truck maximum per person per class. This will be left up to the host club or the Event Director and announced prior to the event.
- 16. Pulling and racing vehicles can enter multiple classes. A single chassis cannot register in one class more than once. Entry fees must be paid per entered class and vehicle must meet all specific class rules.
- 17. All members will be expected to help in any way if asked at events if physically capable.
- 18. No teching of brush hoods on any motor (lay down or standup) during tech inspections. The exception to this is during special inspections such as those in general rules number 3 and 6. During these inspections the brush hoods may be disassembled and inspected to prove legality.
- 19. A minimum of three (3) entries per class must be pre-registered and prepaid, at least four (4) weeks prior to the World Championships in order to purchase awards for said class All exhibition classes will be awarded plaques instead of trophies at the World Championships and the Spring Nationals events unless the class is sponsored.
- 20. You may not tech your own vehicle or measure its distance in pulling.
- All competition courses and/or tracks must be set up in a safe manner.
   This is for the safety of the participants, spectators, building and vehicles.

#### Motor levels and rules

As you look through the rulebook you will see the following names used for motors. Please refer to these pages for definitions and clarifications of motor levels. Any variance of these rules will be listed in the

Stock:

Are to be motors that are R/C motors with nonadjustable end bells. These motors will be labeled as ROAR motors. Rebuildable stock motors will have an identification mark on the can and armature. These marks will either be the ROAR name or the manufacturers name along with the number 27. You can not tamper with, in any way, the timing adjustments, which include the use of cut brushes that will affect the timing. Ball bearings, external magnets, internal Cobalt or neodymium magnets are not permitted. You are allowed to machine the commutator with a comm. stick or a stock comm. lathe only. No opening of a motor with a staked end bell. You may disassemble rebuildable stock motor for maintenance. Other than machining the commutator you may not alter rebuildable motors. This includes swapping end bells, cans or armatures. You are allowed to change springs and brushes in the motor. The end bell must have a bushing.

Sport Modified:

must be a Maximum of two HPI 15 turn Firebolt required at the 2014 WORLDS until then all motors will be legal. External magnets, internal cobalt magnets or neodymium are not permitted. You are allowed to machine the commutator with a comm. stick or with a comm. lathe. The 4.5mm X 5mm brush and hood, "readily available R/C motor ac cessory" also known as the "P-94" brush hoods may be used. Motors from Stock may also be used

Modified:

Are to be motors that are brushed or brushless R/C motors. And can be of any size or price limit This level motor may have an adjustable end bell. This level of motors are allowed to have adjustable timing, modified or cut brushes, and ball bearings. The commutator is allowed to be machined. The output shaft is allowed to be shortened and/or have a flat spot machined in it. Drilling holes in the end-bells is allowed in order to cool motor. The Astroflight Pullmaster I and Pullmaster IV are allowed in this level until further notice. Motors from Stock, and Sport Mod are allowed.

Open II: any electric motor of any size or dollar limit

#### **Battery Rules**

All classes may use NiCd or NiMh cells. LiPo batteries are allowed in accordance to the LiPo Battery Rules listed below. Factory built batteries will be encased in the original factory wrapper with the label attached. All other batteries must be in clear shrink-wrap or clear tape. No added opaque tape or shrink wrap allowed. Batteries will be readily available R/C type. Individual class limits will be listed in that class section of this rulebook.. Any battery chemistry is allowed in the Insane Pulling class.

#### **LiPo Battery Rules**

Lithium Polymer (LiPo) batteries are allowed in all pulling and racing classes that allow Sport-Modified, Modified, and Open II motors. Specific LiPo battery limitations will be outlined in pulling and racing class rules. LiPo batteries must be protected from puncture from all directions. Examples of accepted materials at lexan, aluminum, carbon fiber or the chassis itself. Hard cased LiPo batteries require no additional protection. No other form of protections will be allowed. When charging LiPo batteries, the battery must be in a reasonably safe charging receptacle

#### **Trophy Rules SPRINGS & WORLDS**

- If a class has 1 or 2 entries pre-registered & pre-paid (4) weeks prior to event, a 1st place plaque shall be purchased.
- •If a class has 3-5 entries pre-registered & pre-paid (4) weeks prior to event, 1st & 2nd place plaques shall be purchased.
- •If a class has 6+ entries pre-registered & pre-paid (4) weeks prior to event, 1st, 2nd & 3rd place plaques plaques shall be purchased.
- •Exhibition classes shall be awarded if the class is sponsored.
- •If a class is sponsored, 1st, 2nd & 3rd place awards shall be purchased regardless of pre-registered & pre-paid status. 1st place shall be a trophy. All awards shall name the class sponsor.

#### Frequency charts and rules

27 MHZ						
A1 26.995						
A2	27.045					
АЗ	27.095					
A4	27.145					
A5	27.195					
A6	27.255					

Each class is limited to what frequency's it may use. Below is listed the frequency channels and what classes that may use them.

#### Digital Spectrum Modulation (DSM)

Radio equipment using DSM technology is permitted in all divisions and in all classes.

#### **Pulling Division**

All Pullers are limited to the following channels:

A1, A3, A4, A6, 62, 63, 64, 68, 69, 70, 72, 73, 74, 76, 77,

#### **Racing Division**

4WD Modified, Sport Modified, and Retro are limited to the following channels:

A2, A5, 61, 66, 71, 81, 83, and 86

The remainder of the racing classes may use the follow-

#### Proper use

It is the responsibility of each participant to use the proper frequency. Failure to use the correct frequency may result in penalties or even disqualification from event. The penalty is up to the host club and shall be announced prior to the start of the event.

75 MHZ					
61	75.41				
62	75.43				
63	75.45				
64	75.47				
65	75.49				
66	75.51				
67	75.53				
68	75.55				
69	75.57				
70	75.59				
71	75.61				
72	75.63				
73	75.65				
74	75.67				
75	75.69				
76	75.71				
77	75.73				
78	75.75				
79	75.77				
80	75.79				
81	75.81				
82	75.83				
83	75.85				
84	75.87				
85	75.89				
86	75.91				
87	75.93				
88	75.95				
89	75.97				
90	75.99				

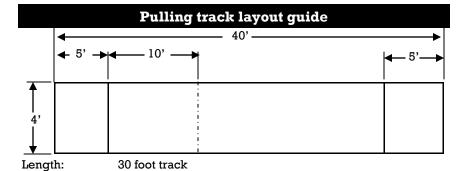
## "Peoples Choice" Concours

Concours judging aims to award the best looking and most realistic appearing pulling vehicle and monster truck entered in competition. The following are guidelines to ensure the Concours is fair and equitable for all participants.

1. No props such as mirrors stands etc.
2. No stacking of vehicles is allowed
3. Must run the same body in competition
4. Must run the same tires in competition
5. Must be a registered vehicle that competes in at least half of the event.
6. Vehicle must be displayed with others during concours to be eligible for awards
7. No obscene images or wording allowed.
8. May be scored by judges of done by participants choice.

## Pulling Index

Pulling Genera	al Rules	
Pulling	Track Layout Guide	11
Pulling	General R ules	11-13
Electric 2 WD	Pullers	
Digger	r	14
Dirt Ga	arden Tractor	15
2WD B	ox Stock	16
2WD T	ruck	17
Pro Sto	ock Tractor	
Heavy	Super Stock Tractor	19
Bar Tir	e Sportsman	20
2WD P	ro Modified Electric	21
2WD C	pen I	22
2WD C	pen II	23
Electric 4WD I	Pullers	
Big Rig	ı	24
Carpet	t Big Rig	25
4WD P	ro Modified	26
4WD M	Iodified Driveshaft	27
4wd Sc	cratch Built	28
4WD M	Nodified 12#	29
4WD B	ox Stock	30
Fuel Propelled	l Pullers	
Light S	uper Stock Tractor	31
2WD P	ro Modified Nitro	32
2WD N	Titro	33
2WD G	Sas	34
Optionally Pov	wered Pullers	
Insane		35
2wd Hr	nlimited	36



5 foot pull back area

5 foot runoff area

40 foot total length

10 foot default line. Measured from the starting line

#### **Pulling General Rules**

- The first puller, on dirt, in every class can decline the pull except in the pulloffs. Every puller has the option to restart his/her pull if he/she stops before the front of the sled reaches the 10 foot default line on both carpet and dirt tracks in every round except the pulloffs. If this option is taken you must re-hook immediately with no vehicle adjustments, only driving adjustments. You will be allowed two minutes to start your pull once the Track Official calls you to the track. The exception to the two minute limit is if the participant is required at another track. If your vehicle does not make it off the line, you will have the opportunity to make vehicle adjustments on or off the track. When pretech is used, if you make any changes to the vehicle,, the vehicle must have re-inspection by tech officials before second attempt is made. If vehicle leaves the track surface for repairs, you will be rotated down in the field and if you are the last puller you will have five minutes to return or you will be disqualified for that round. The repair procedure will be announced at the drivers meeting.
- 2. The order of pullers in each class may be determined by the order of registration. Random drawing at the event is preferred. This is up to the host club or Event Director.
- Start and finish of each pull shall be determined by an official starter using an audible or visual signal such as a whistle, flags, and lights.
   The type of signal will be announced at the drivers meeting.

- 4. All sleds are to be chain drive except for the Digger class may use a string drive sled. Sleds are not allowed to lock up before the finish like. The pull chain will be 8" long and attached to the center of the skid plate no higher than 3/4" above the track surface. The length of the pull chain is measured from the skid plate to the inside of the hook. No twisting of the chain is permitted. All sleds used for fuel propelled vehicles shall have a second chain or strap firmly attached to hook to vehicles using a tether or kill switch. Distance pulled will be considered the distance the sled is pulled down the track. All sleds will have and indelible mark in which to measure to. The mark will be on the center of the front of the skid plate. This point will be known as the "zero" point. The front of the sleds skid plate is "front" of the measurement point. The distance can be measured using the front of the skid plate or may be measured using two points in which to measure. For example the distance can be measured using the back of the sled as long as the zero point is known when the front of the skid plate is on the starting line.
- 5. If the pulling sled malfunctions at any time during a pull, that pull will be null and void. The participant will be allowed to recharge the batteries and re-pull at a time determined by the track officials. Sled malfunctions will only be determined by the track officials.
- 6. If any item falls off of the vehicle, the vehicle flips over backwards or sideways, the vehicle will be stopped at that point. If the sled passes the vehicle's part on the track the measurement with a 12 inch penalty will apply from the spot where the part lies. This shall also apply to the exhaust elimination system when an overhead elimination system is used.
- 7. During a pull if any part of a vehicle touches, hangs over the sideboards, or crosses over the edge of the pulling surface the vehicle will be disqualified for that round.
- Intentional jerking of the pulling sled will disqualify the vehicle for that round. Intentional jerking will be determined by the Head Track Official.
- 9. A 30 second time limit is to be imposed for the length of time to compete a pull from the start of the signal. If a vehicle has not completed the distance or has been stopped by the sled prior to the 30 seconds, it will be signaled to stop. A measurement will be taken from that point. If a vehicle restarts according to Pulling General rule number one, the clock will be reset and started again at the signal.
- 10. The only person allowed in the track area once the vehicle has started its pull shall be the driver and Track Official. No assistance is permit-

ted, either verbally or through hand signals in the direction of the vehicle. Pit crew will be allowed to assist with the vehicle in the hooking, unhooking, turning on, turning off, and adjustments only. This shall include helping the driver prepare the vehicle to make its run especially in the larger classes, which are more dangerous. The Pit Crew must leave the prior to the pull starting. Any violation will result in a disqualification of the vehicle for that round. Violations will be determined by the Track Official. Participants with disabilities and children under ten will be an exception to this rule.

11. For indoor events when an exhaust elimination system is used, all vehicles must be able to adapt to the exhaust system. The vehicle's exhaust must exit upward more than 45 degrees from the track surface toward the smoke elimination system. While the vehicle will not be attached to the smoke system, the exhaust must exit upward in order for the smoke system to catch the fumes (this rule is for the big exhaust system)

for the NR/CTPA system:

For indoor events when the NR/CTPA exhaust elimination system is used, all vehicles must be able to adapt to the exhaust system. The current exhaust system has a 4 inch hose that hangs over the vehicle. The vehicle is required to attach to that hose. The attachment need not be air tight but is required to direct exhaust into the hose.

12. Fuel for gasoline vehicles may be any octane. The gasoline may not contain any additives other than the two cycle engine oil. All of the fuel shall be contained within the fuel system.

#### Digger

Weight	Motor Level	Drive	Length	Battery	Surface
3 lbs	540 can	2WD	Stock	6 Cell	Dirt

Motor: Maximum of one 540 can brushed motor.

Battery: 6 cell "C" size maximum, ½ sub "C" minimum

Chassis: Must be in stock configuration. Parts may be missing.

Holes may be drilled for mounts only. All unused non-factory holes must be filled with epoxy so as to maintain

factory weight. Aluminum hubs are allowed.

Tires: Rear tires are to be a maximum 3 ½" diameter, and a

maximum of 2" wide. Front tires are to be a maximum of 2  $\frac{1}{2}$ ", the stock tire size. The minimum front tire size is 1

3/8"

Weight: Maximum weight is 3 lbs.

**Dimensions:** Maximum vehicle width is 9 inches.

Wheelbase: Wheel base is 8 inches and stock for this vehicle.

Hitch: Hitch is the wheelie bar. Rollers may be added for hori-

zontal adjustment. The aluminum bar may be replaced

with a plastic bar.

**Body:** Factory replacement body or any 1/12 scale body. The

body is to be the furthest item forward.

Other: The spur gear shall be no larger than a 64 tooth 32 pitch.

The pinion gear shall be no smaller than a 6 tooth 32 pitch.

#### **Dirt Garden Tractor**

Weight	Motor Level	Drive	Length	Battery	Surface
4 lbs	Modified	2WD	12 inches	See	Dirt
				below	

Motor: Maximum of one Modified motor

Battery: 2S LiPo or any battery 8.4 nominal volts maximum

**Chassis:** May be factory production or scratch built.

Tires: Maximum rear tire diameter is 4 inches. Maximum rear

tire width is 2  $^3\!\!4$  inches. Minimum front tire diameter of 1 inch. Rear tires must have "V" bar tread pattern. TLT tires

are acceptable.

Weight: 4 lbs maximum.

Dimensions: Maximum vehicle length of 12 inches. Length is measured

from the rearmost part of the hitch to the furthest point

forward.

Wheelbase: Maximum of 9 inches.

**Hitch:** Maximum hitch height of 4 inches.

**Body:** Will have the appearance of a scale stock or modified

garden tractor.

Wheelie Bar: Vehicle may have wheelie bars. The wheelie bars may not

extend more than 2 inches past the rearmost portion of the hitch. Wheels may be replaced with skid pads.

Other: A maximum of one gear drop. This is the drop from the

motor pinion to the rear axle spur gear.

#### **2WD Box Stock**

Weight	Motor Level	Drive	Length	Battery	Surface
6 lbs	Stock	2WD	19 inches	6 cell	Dirt

Motor: Maximum of one Stock motor

Battery: 6 cell "C" size maximum, ½ sub "C" minimum. Battery

must be in stock location

Chassis: Any factory production 2WD R/C vehicle is allowed

(factory production R/C pulling vehicles are not permit ted) No pinion gear or other gear changes allowed. No additional gears or gearboxes are permitted. No modification of gear cases are permitted. Bearings are allowed (vehicle only) Suspension must remain original for that vehicle and cannot be locked. Differentials must be original for that vehicle and can not be locked. No

"aftermarket differentials" will be permitted.

Tires: Tires must be original size for that vehicle. Any tread type

will be permitted. Tires may not be cut. Dual wheels are not permitted. Tire chains, added spikes, pins, etc. are

not permitted.

**Body:** Any scale appearing body is allowed.

Weight: Maximum vehicle weight is 6 lbs. All counterweights must

be under body.

Hitch: 2 inch Maximum hitch height. The hitch must be mounted

i n such a way as not to permit any movement. Adjustable hitches are allowed but must be locked when pulling

**Dimensions:** Maximum vehicle length of 19 inches. Maximum vehicle

width is 13 inches. Dimensions include all parts, body hitch, etc. of the pulling vehicle. Length and width must

be stock for that vehicle.

#### **2WD Truck**

Weight	Motor Level	Drive	Length	Battery	Surface
7 lbs.	Modified	2WD	19 inches	See below	Carpet

Motor: Maximum of one Modified motor.

Battery: 2S LiPo or any battery 8.4 nominal volts maximum

**Chassis:** May be scratch built or a combination of kit components.

May be built with any of the following: Steel, aluminum,

fiberglass, or plastic.

Tires: Rear tires are to be Tamiya "Wild Willies, Lunchbox, or

Midnight Pumpkin" type tires only. Front tires are to be a

minimum of 2  $\frac{1}{4}$ " in diameter.

Weight: Maximum vehicle weight is 7 lbs.

**Dimensions:** Maximum length is 19 inches. Maximum width is 9 inches.

The furthest point forward from the centerline of rear axle

shall be no further than 15 inches.

Wheelbase: Maximum wheelbase of 11 ½ inches.

Hitch: 2 inch maximum hitch height.

**Body:** Must use a truck, van or car body only. All components

must be under the body. Front tires must be in wheel

opening.

#### **Pro Stock Tractor**

Weight	Motor Level	Drive	Length	Battery	Surface
10 lbs	Modified	2WD	19 inches	See be-	Dirt or Carpet

Motor: Maximum of one Modified motor.

Battery: 2S LiPo or any battery 8.4 nominal volts maximum

Battery shall be placed in a fashion so that it can not be seen from either side, front, rear or top of the tractor.

Chassis: Chassis may be scratch built or combination of kit compo-

nents.

**Tires:** Rear tires are to be a maximum of 6  $\frac{1}{2}$  inches. The Maxi-

mum tread width is  $4\frac{1}{2}$  inches. Must be agricultural single "V" type bar tire. Stock E-maxx tires are allowed. Tires are allowed to be cut for dirt pulling only.

Weight: Maximum tractor weight is 10 lbs. Any visible weight must

be scale suitcase weights. These weights are allowed to stick out past the body within the maximum tractor width.

**Dimensions:** Maximum over all length is 19 inches. Maximum tractor

width is 14 inches. Maximum tractor length is 18  $\frac{3}{4}$  inches. The wheelie bars may be  $\frac{1}{4}$  inch past the rearmost part of the tractor. The furthest point forward shall be no further than 15  $\frac{1}{2}$  inches from the center of rear axle.

**Wheelbase:** Maximum wheelbase is 11 ½ inches.

**Hitch:** Maximum hitch height of 2 inches.

**Body:** Must be a 1/10 scale Pro-stock or Super-stock Farm trac-

tor body. Any make, model and year are allowed. Tractor may be built to resemble a four wheel drive tractor but must remain two wheel drive. Tractor must have fenders of some type. It is suggested, not required that the tractor should smoke, have a driver and a transmission blanket

for realism.

**Front axle:** Front axle may be tricycle type with single or double

tires. Front axle may also be a solid or pivoting type axle.

Other: Wheelie bars are suggested but not required. If wheelie

bars are used, the wheels maybe removed and/or re-

placed with skid pads.

#### **Heavy Super Stock Tractor**

Weight	Motor Lev- el	Drive	Length	surface	battery
12 lbs	modified	2WD	19.5 inches	Dirt	11.1V

Motor: Maximum of one electric motor. 37mm max. dia and

57mm max overall length

**Battery:** 3 S LiPo or any battery 11.1 nominal volts maximum

Batteries must be concealed.

**Chassis:** Chassis may be scratch built or a combination of kit

components. 2WD only.

**Tires:** Rear tires are to be a maximum of 7 inches in diameter.

The maximum tread width is 4 ½ inches. Must be agri-

cultural single "V" type bar tire.

**Weight:** Maximum tractor weight is 12 lbs. Any visible weight

must be scale suitcase weights. These weights are allowed to stick out past the body within the maximum

tractor width.

**Dimensions:** Maximum over all length is 19 1/2 inches. Maximum

tractor width is 14 inches. The furthest point forward shall be no further than 15 ½ inches from the center of

the rear axle.

Wheelbase: Maximum wheelbase is 11 ½ inches.

Hitch: Maximum hitch height will be 3".

**Body:** Must be a Pro-Stock or Super-Stock farm tractor body.

Any make, model and year are allowed. Tractor may be built to resemble a 4 wheel drive tractor but must re main 2 wheel drive. The tractor must have fenders of some type. Body can be slightly smaller or larger than true 1/10 scale, this will allow for a wider variety of tractors to be used. Size must look appropriate for

wheelbase.

### **Bar Tire Sportsman**

Weight	Motor Level	Drive	Length	Battery	Surface
10 lbs	Modified	2WD	24 inches	See be- low	Dirt or carpet

Motor: Maximum of one Modified motor.

Battery: 2S LiPo or any battery 8.4 nominal volts maximum

**Chassis:** May be scratch built or a combination of kit components.

May be built with any of the following; Steel, aluminum,

fiberglass, or plastic.

**Tires:** Rear tires are to be a maximum diameter of 6 ½ inches

with a minimum diameter of 3 inches. The maximum width for the rear tires is 4  $\frac{1}{2}$  inches. Rubber bar agricultural

tires only. Tires may be cut.

Weight: Maximum vehicle weight is 10 lbs.

Dimensions: Maximum vehicle length is 24 inches. Maximum vehicle

width for vehicles competing on dirt is 16 inches. The maximum vehicle width for vehicles competing on carpet

is 14 inches.

Hitch: Maximum hitch height is 4 inches for dirt vehicles and 2

inches for carpet vehicles.

#### **2WD Pro Modified Electric**

Weight	Motor Level	Drive	Length	Battery	Surface
10 lbs	Modified*	2WD	19 inches*	11.1V	Dirt

Motor: Maximum of one Modified Motor.

Battery: 3S LiPo or any battery 11.1 nominal voltage maximum

Chassis: Chassis may be scratch built or combination of kit

components.

**Tires:** Maximum rear tire diameter is 5 ½ inches. Maximum rear

tire width is 3 1/4 inches. Minimum front tire diameter is 2

inches.

Weight: Maximum vehicle weight is 10 lbs.

Dimensions: Maximum vehicle length is 19 inches. This is to be meas-

ured from the rearmost portion of the hitch to the most

forward part of the vehicle.

**Wheelbase:** Maximum wheelbase is 11 ½ inches.

**Hitch:** Maximum hitch height is 4 inches.

**Body:** Must use a truck, van or car body only.

#### 2WD Open I

Weight	Motor Level	Drive	Length	Battery	Surface
12/15 lbs	Modified	2WD	24 inches	16.8 V	Dirt or carpet

Motor: Maximum of one Modified motor

**Battery:** 4S LiPo or any battery 16.8 nominal voltage maximum.

**Chassis:** May be scratch built or a combination of kit components.

Tires: Maximum rear tire diameter is 6 ½ inches. Minimum rear

tire diameter is 2 3/4 inches. Maximum rear tire width is 4

 $\frac{1}{2}$  inches.

Weight: Maximum vehicle weight is 12 lbs for carpet vehicles and

15 lbs for dirt vehicles.

Dimensions: Maximum vehicle length is 24 inches. Maximum vehicle

width is 14 inches for carpet vehicles and 16 inches for

dirt vehicles.

**Hitch:** Maximum hitch height of 4 inches.

### 2WD Open II

Weight	Motor Level	Drive	Length	Battery	Surface
20 lbs	Open II	2WD	28 inches	28 cells	Carpet

Motor: Maximum of 6 electric motors Brushless allowed

Battery: Maximum of 28 "D" size cells or 8S

Chassis: May be scratch built or any combination of kit

components.

**Tires:** Maximum rear tire diameter of 6 1/2 inches. Minimum

rear tire diameter is 3 inches. Maximum rear tire width is

 $4 \frac{1}{2}$  inches.

Weight: Maximum vehicle weight is 20 lbs.

Dimensions: Maximum vehicle length is 28 inches. Maximum vehicle

width is 16 inches.

Hitch: Maximum hitch height of 4 inches.

#### **Dirt Big Rig**

Weight	Motor Level	Drive	Length	Battery	Surface
7 lbs.	Modified	Tandem	20 inches	See be- low	Dirt

Motor: Limit of one Modified motor

Battery: 2S LiPo or any battery 8.4 nominal volts maximum

**Chassis:** May be scratch built or a combination of kit components.

May be built with any of the following: Steel, aluminum,

fiberglass, or plastic.

**Tires:** All tires must be  $1/10^{th}$  scale. All four drive tires must be

of the same size. Maximum tire diameter is 4 inches. Maximum tire width is 3 inches. Dual tires are al-

lowed.

Weight: Maximum vehicle weight is 7 lbs.

**Dimensions:** Maximum vehicle length is 20 inches. Maximum vehicle

width is 11 inches.

Wheelbase: No limit on the overall wheelbase except within the vehi-

cle dimensions and body limitations. The rear axles are to be maximum of 4  $\frac{1}{2}$  inches apart, center of axle to center

of axle.

**Hitch:** Maximum hitch height of 4 inches.

**Body:** Must be an 18 wheeler body. Tires must be located in the

factory wheel openings. All components must be under

the body.

Other: This class is to be tandem axle four wheel drive. The front

axle must be fixed. No hinged or pivoting axles. The front

axle is not to be driven.

#### **Carpet Big Rig**

Weight	Motor Level	Drive	Length	Battery	Surface
7 lbs.	Modified	Tandem	20 inches	See be- low	Carpet

Motor: Limit of one Modified motor

Battery: 2S LiPo or any battery 8.4 nominal volts maximum

**Chassis:** May be scratch built or a combination of kit components.

May be built with any of the following: Steel, aluminum,

fiberglass, or plastic.

**Tires:** All tires must be  $1/10^{th}$  scale. All four drive tires must be

of the same size. Maximum tire width is 2 inches.

Weight: Maximum vehicle weight is 7 lbs.

Dimensions: Maximum vehicle length is 20 inches. Maximum vehicle

width is 11 inches.

Wheelbase: No limit on the overall wheelbase except within the vehi-

cle dimensions and body limitations. The rear axles are to be  $3\frac{1}{2}$  inches apart, center of axle to center of axle. There is a 1/16 inch variable plus or minus the  $3\frac{1}{2}$  inches.

**Hitch:** Maximum hitch height of 2 inches.

**Body:** Must be an 18 wheeler body. Tires must be located in the

factory wheel openings. All components must be under

the body.

Other: This class is to be tandem axle four wheel drive. The front

axle must be fixed. No hinged or pivoting axles. The front

axle is not to be driven.

#### **4WD Pro Modified**

Weight	Motor Level	Drive	Length	Battery	Surface
7 lbs	Modified	4WD	21 inches	See below	carpet

Motor: Limit of one Modified motor

Battery: 2S LiPo or any battery 8.4 nominal volts maximum

**Chassis:** May be a kit, scratch built, or a combination of both.

**Tires:** Maximum tire diameter is 4 inch. Minimum tire diameter

is 2 1/2 inches. Maximum tire width is 2 3/4 inches. Minimum tire width is 1  $^{3}$ 4 inches. Tires must be rubber bar tread type. Cutting of tires is allowed. RC4WD, tlt and 1/16 Traxxas Monster truck tires are now allowed.

Weight: Maximum vehicle weight is 7 lbs. Weight covers are

permitted.

Dimensions: Maximum vehicle length is 21 inches. Maximum vehicle

width is 9 inches. The furthest point forward from the centerline of the rear axle shall be no more than 17 inches, or

6 inches from the centerline of the front axle.

Wheelbase: Wheelbase is not to be less than 10 inches or more than

11 inches.

Hitch: Maximum hitch height is 2 inches. Center of the hitch hole

shall be no more than 2 1/2 inches from the center of the

rear axle.

**Body:** Must be 1/10 scale pickup truck body. Body must resem-

ble a 4 wheel drive truck that is as realistic as possible to a 4X4 truck that you see at a full scale pulling event. If an alternate body, such as a balsa body is to be used, a Parma model number 10102 or 10103 shall be used as the template for the wheel openings. The rear wheel openings may not be cut beyond the factory lines. The front wheel openings must use the factory lines but may have the bottom corners trimmed for tire clearance. The wheels must fit the body wheel openings. The body may not be cut in order to make it longer or shorter. The body

must have tailgate and grille.

#### **4WD Modified Driveshaft**

Weight	Motor Level	Drive	Length	Battery	Surface
10 lbs	Modified	4WD	24 inches	See below	Dirt

Motor: Limit one Modified motor

**Battery:** 2S LiPo or any battery 8.4 nominal volts maximum

Batteries must be concealed.

Chassis: Chassis may be scratch built or combination of kit

components.

Tires: Maximum tire diameter is 4 ½ inches. Maximum tire width

is 2 ¾ inches. Tires may be cut. Maximum of four tires.

Weight: Maximum vehicle weight is 10 lbs.

Dimensions: Maximum vehicle length is 24 inches. Maximum vehicle

width is  $11 \frac{1}{2}$  inches. The furthest point forward from the centerline of rear axle shall be no further than 20 inches.

**Wheelbase:** Maximum wheelbase is 11 ¾ inches.

Hitch: Maximum hitch height is 2 inches.

**Body:** Any scale appearing body is allowed. Wheels must be fit

in the body wheel openings.

Other: This class will be for shaft drive trucks. No straight direct

shafts allowed. A driveline that includes universal joints is required. Gear box must be located between the front

and rear axles.

#### **4WD Scratchbuilt Truck**

Weight	Motor Level	Drive	Length	Battery	Surface
10 lbs	Modified	4WD	24 inches	See be- low	Dirt

Motor: Limit one Modified motor

Battery: 2S LiPo or any battery 8.4 nominal volts maximum

Batteries must be concealed.

Chassis: Chassis may be scratch built or combination of

kit components.

Tires: Maximum tire diameter is 4 ½ inches. Maximum

tire width is 2  $^{3}$ 4 inches. Tires may be cut. Maxi-

mum of four tires.

Weight: Maximum vehicle weight is 10 lbs.

**Dimensions:** Maximum vehicle length is 24 inches. Maximum

vehicle width is  $11 \frac{1}{2}$  inches. The furthest point forward from the centerline of rear axle shall be

no further than 20 inches.

Wheelbase: Maximum wheelbase is 11 ¾ inches.

**Hitch:** Maximum hitch height is 2 inches.

**Body:** Any scale appearing body is allowed. Wheels

must be fit in the body wheel openings.

Other: This class will be any drive type trucks. Straight

direct shafts allowed. Examples of the drive types

are; chain drive, direct shaft, and belt drive.

#### **4WD Modified 12# Truck**

Weight	Motor Level	Drive	Length	Battery	Surface
12lbs	See below	4WD	24 inches	See	Dirt
				below	

Motor: Any motor listed as small can, no dollar limit in

cludes brushless 1/10 scale brushless 1/8 scale not allowed limit 1 motor (37mm max. dia and

57mm max overall length)

Battery: 3s LiPo or any battery 11.1 nominal voltage max.

Must be under the body or chassis.

**Chassis:** Can be factory production or a scratch built unit.

Any gearbox or combination of gear reduction

units can be used.

Tires: \*Sharpening of tire permitted

only TLT and RC4WD tires will be allowed or 4"

max Dia.

Weight: Maximum vehicle weight is 12 lbs.

Dimensions: Maximum length will be 24 inches, measured

from the rear of the hitch to the most forward part

of the truck.

Maximum wheel base will be  $13 \frac{1}{2}$  inches.

Maximum width 12 1/2".

Maximum distance for hanging weight will be 6 inches from center line of front axle forward. No part of the truck will be any further ahead.

Hitch: Maximum hitch height will be 2.5 inches.

Truck must balance on its own. Hitches will be measured with no assistance to hold rear down.

**Body:** Must be a 1/10 or 1/8 scale truck or van body. No

tractors allowed.

Wheels must fit in opening.

Scale appearing as close as possible is preferred

#### **4WD Box Stock**

Weight	Motor Level	Drive	Length	Battery	Surface
14	Modified	4WD	19 ½ inches	See	Dirt or Carpet
				below	_

Motor: Limit two Modified motors

**Battery:** 2s liPo allowed or any battery 8.4 nominal maximum.

Battery must be in stock location with battery box. Battery covers and holders maybe removed to allow for a 7 cell

battery pack.

Chassis: The chassis, gearbox and suspension must be original for

that vehicle. Minimum pinion size is an 8 tooth 32 pitch and must be visible. Motor swing adapters are allowed. No additional gearboxes are permitted. Suspension may be locked at each wheel only. Aluminum steering mechanisms and gearbox braces are allowed. Rear wheel steering may be locked. Steering servo may be used and may be relocated. A ¼ scale steering servo is allowed. USA is allowed to use replacement dog bones from an R/C manufacturer. Items not related to the suspension may be removed. All stock suspension must be present and that

includes the shocks.

**Tires:** All four tires must be of the same size and stock for that

vehicle. Bar tires only. No street or foam tires. Cutting of

tires is not allowed. Stuffing of tires is allowed.

Weight: Maximum vehicle weight is 14lbs. No weight past the front

bumper.

Dimensions: Maximum vehicle length is 19 ½ inches. Maximum vehi-

cle width is 16 inches.

**Wheelbase:** Must be original for that vehicle.

**Hitch:** Maximum hitch height of 4 inches.

**Body:** May be changed to lexan but must resemble a real type

truck. For example a Ford, Chevy, or Dodge  $\frac{1}{2}$  or  $\frac{3}{4}$  ton

pickup truck.

Electronics: An ESC is allowed.

Other: This class is limited to factory production dual-motored

4WD vehicles.

## **Light Super Stock Tractor**

Weight	Motor Lev-	Drive	Length	surface	hitch
8 lbs	Nitro	2WD	19.5 inches	Dirt	3"

**Motor:** One Traxxas brand 2.5 or 3.3 nitro engine only.

**Chassis:** Can be factory production or a scratch built unit Any

gearbox or combination of gear reduction units can

be used. 2WD only

**Tires:** Front tired minimum size will be 2" in diameter Rear

drive tires can be maximum of 7" diameter and maxi-

mum of 3.4" in width.

Weight: Maximum tractor weight is 8lbs. Any visible weight must

be scale suitcase weights. These weights are allowed to stick out past the body within the maximum tractor width.

**Dimensions:** Maximum overall length will be 19 1/2".Maximum

wheelbase will be  $11\frac{1}{2}$ ". To be no more than  $15\frac{1}{2}$ " from the centerline of the rear axle to the furthest

point forward. Maximum width will be 12"

Wheelbase: Maximum wheelbase is 11 ½ inches.

Hitch: Maximum hitch height will be 3".

**Body:** Body must resemble a full size pro-stock or super

stock tractor. .Body can be slightly smaller or larger than true 1/10 scale, this will allow a wider variety of

tractors to be used.

#### **2WD Pro Modified Nitro**

Weigh	Engine Level	Drive	Length	Fuel type	Surface
10 lbs	.15 Nitro	2WD	19 inches*	Nitro	Dirt

Power Plant: Maximum of .15 cubic inch nitro engine.

Chassis: Chassis may be scratch built or combination of kit

components.

Tires: Maximum rear tire diameter is 5 ½ inches. Maximum rear

tire width is  $3\frac{1}{4}$  inches. Minimum front tire diameter is 2

inches. Rear tires must be bar type.

Weight: Maximum vehicle weight is 10 lbs.

Dimensions: Maximum vehicle length is 19 inches. This is to be meas-

ured from the rearmost portion of the hitch to the most

forward part of the vehicle.

Wheelbase: Maximum wheelbase is 11 ½ inches.

**Hitch:** Maximum hitch height is 4 inches.

**Body:** Must use a truck, van or car body only.

#### **2WD Nitro**

Weight	Engine Level	Drive	Length	Fuel
15 lbs	.30 Nitro	2WD	18 inches	Nitro

Power Plant: One two stroke nitro engine with a maximum displace-

ment of .30 cubic inches. Engine is to be mounted in the front 50% of vehicle. Must have a store bought tuned ex-

haust pipe. No straight pipes are allowed.

Chassis: Chassis may be scratch built or a combination of kit

components.

Tires: Rear tires are to be Tamiya "Wild Willies, Lunchbox, or

Midnight Pumpkin" type tires only. Tires may be cut. Steer tires are to be a minimum of 13/8 inch in diameter.

Weight: Maximum vehicle weight is 15 lbs.

**Dimensions:** Maximum vehicle length is 18 inches from the center of

the rear axle to the furthest point forward. Maximum width

is 9 5/8 inches.

Wheelbase: Wheelbase must fit under body.

Hitch: Maximum hitch height is 4 inches. The hitch hole is to be

located no closer than 1.8 inch behind the rear axle as measured from the center of the axle to the rear of the hitch hole. Vertical holes that require the sled hood to be

hooked horizontally are not permitted.

**Body:** Any scale appearing body is allowed.

Other: For scale appearance a 90 degree rear end is preferred.

Vehicles without a 90 degree rear axle will need approval from the host club or Event Director. Weight penalties

may apply.

**Special:** At the time of printing the NR/CTPA felt it was in the best

interest for class growth to not enforce any penalties for the vehicles with out a 90 degree rear axle. The penalties will not be enforced until a time when either drive type can sup-

port themselves.

	4WD Nitro								
Weight	Engine Level	Drive	Length	Fuel					
10 lbs	.2.5-3.3 Traxxas	4WD	From center of rear axle 19.5	Nitro					

**POWER PLANT:** Maximum of one Traxxas brand 2.5 or 3.3 nitro engine.

CHASSIS: Chassis may be scratch built or combination of kit

components. No gearbox limitations. Shifting gear

boxes are allowed.

TIRES: Maximum tire diameter is 4 inches. Maximum tire

width is 2 3/4 inches. Maximum of four tires.

**WEIGHT:** Maximum vehicle weight is 10 lbs.

**DIMENSIONS:** The furthest point forward from the centerline of the

front axle shall be no further than 6 inches. Maximum vehicle width is 12  $^{1}\!/_{\!2}$  inches. The furthest point

center of the rear axle.

WHEELBASE: Maximum wheelbase is 13 1/2 inches.

**HITCH:** Maximum hitch height is 2 1/2 inches.

**BODY:** Any scale appearing body is allowed. Wheels must

fit in the body wheel openings.

OTHER: This is the same truck as the STPA ... no changes

#### 2WD Gas

Weight	Engine	Drive	Length	Fuel	Surface
25 lbs	39cc	2WD	24 inches	Gasoline	Dirt

Engine: Maximum of one two stroke engine. Maximum

displacement of 39cc.

Fuel: A maximum of 4 fluid ounces of gasoline. Fuel on board

shall be no more than necessary. All fuel must be con-

tained within the fuel system.

Chassis: Any scratch built chassis is allowed.

Tires: Maximum tire diameter is 6 ½ inches. Maximum tire width

is 4  $\frac{1}{2}$  inches. Maximum of four tires. Tires may be cut.

Weight: Maximum vehicle weight of 25 lbs.

Dimensions: Maximum vehicle length is 24 inches. Maximum vehicle

width is 16 inches.

**Hitch:** Maximum hitch height of 4 inches.

**Body:** Any scale appearing body is allowed. If an econo mod

tractor or mod tractor it needs fenders, roll cage, seat,

steering wheel and an instrument panel.

Safety: Vehicle must have a kill switch that will kill the engine if

the vehicle becomes disconnected from the pulling sled. Vehicle must be hooked to the sled, an anchor point or set in on cradle before starting. All primary belts, chains, sprockets and clutches must be enclosed with a minimum

of 1/16" thick metal (or lexan) except for the final reduc-

tion to the axle.

### Insane

Weight	Motor Level	Drive	Length	Battery	Surface
15 lbs	See rules	2WD	20 inches	unlimited	Dirt

Motor: No motor or engine restrictions. May use Gas, Nitro, or

Electric power plant. Must be safe.

Chassis: Chassis may be scratch built or combination of kit

components.

Weight: Maximum vehicle weight is 15 lbs.

Dimensions: Maximum vehicle length is 20 inches. Maximum vehicle

width is 12 inches.

**Hitch:** Maximum hitch height of 4 inches.

**Body:** Must resemble some kind of full scale pulling vehicle. For

any unusual vehicles it is recommended that participant

have a photo of the full scale puller.

Safety: Must have shielding to contain flying parts. The body may

be considered to be the shielding. Must have a hitching point for a safety tether or kill switch. The hitch point must be just above the pulling hitch if using a safety tether. Vehicle may be started off track and carried to the track (not to be started in your personal pit area but rather using the

available smoke system

Recommended: Vehicle should be hooked to the sled, an anchor point or set in on cradle before starting. If the vehi-

cle is Nitro or Gasoline operated

**Exhaust:** Gas or Nitro vehicles are required to adapt to an exhaust

elimination system. The current system adapts best to

exhaust exiting from the top of the vehicle.

### **Unlimited**

Weight	Motor Level	Drive	Length	Battery	Surface
20 lbs	No Limit	Up to	28 inches	unlimited	Dirt
		6WD			

**Motor:** No Limit to power source (gas nitro electric)

Chassis: Chassis may be scratch built or combination of kit

components. Up to 3 axles May be 6, 4 or 2 wheel drive

Tires: Maximum tire diameter 7 inches.

diameter is 3 inches. Maximum rear tire width is 4 inches.

Weight: Maximum vehicle weight is 20lbs.

Dimensions: Maximum vehicle length is 28 inches. Maximum vehicle

width is 16 inches.

Hitch: Maximum hitch height of 4 inches.

Safety: Must have shielding to contain flying parts. The body may

be considered to be the shielding. Must have a hitching point for a safety tether or kill switch. The hitch point must be just above the pulling hitch if using a safety tether. Vehicle may be started off track and carried to the track (not to be started in your personal pit area but rather using the

available smoke system

Recommended: Vehicle should be hooked to the sled, an anchor point or set in on cradle before starting. If the vehi-

cle is Nitro or Gasoline operated

**Exhaust:** Gas or Nitro vehicles are required to adapt to an exhaust

elimination system. The current system adapts best to ex-

haust exiting from the top of the vehicle.

# Racing Index Racing General Rules \_\_\_ **Special Race Rules** Long Jump \_\_\_\_\_\_ 39 Elimination Race \_\_\_\_\_\_\_41 Freestyle Competition \_\_\_\_\_\_ 42 **Entry Level Class Rules** Novice Tough Truck Class Rules Two Wheel Drive Stock Tough Truck \_\_\_\_\_\_ 44 Four Wheel Drive Modified Tough Truck \_\_\_\_\_ 45 **Independent Suspension Class Rules** Four Wheel Drive Independent Suspension \_\_\_\_\_\_46 **Monster Truck Class Rules** Retro \_\_\_\_\_\_ 47 Sport Modified \_\_\_\_\_\_ 48 Four Wheel Drive Modified \_\_\_\_\_\_ 49 Four Wheel Drive Driveshaft \_\_\_\_\_\_50 4WDPro Modified Monster Truck \_\_\_\_\_ **Exhibition Racing Class Rules** 4WD Box Stock Rules 52 4WD Super Stock Rules \_\_\_\_\_\_53

### Racing General Rules

- The Monster Truck and Tuff Truck competition will consist of a timed event or side by side elimination. The vehicles will race over obstacles such as; Jumps, crushed cars and/or a slalom course. Whether timed or elimination, two trucks will run side by side on identical or mirror image courses. During timed events one or two trucks may run but the time will be recorded for each truck individually.
- 2. At least two wheels from the same side of the vehicle must pass over obstacle. A one second penalty will be assessed to the final time for every missed obstacle and every pylon knocked over. Cones will be placed at corners and must be placed no more or less than 3 inches from the edge of any ramp. In elimination racing a missed obstacle or knocked over pylon will result in a disqualification.
- 3. The course layout will be determined by the Host Club or the Event Director. The layout will be announced at the drivers meeting.
- 4. Immediately after completing a round the participant will return to marshal for the next participant. If the participant can not return to marshal, it is their responsibility to find a replacement. A driver that does not return or find a replacement will have their last truck disqualified for the day. A vehicle that requires assistance in order to finish the run will not receive a score for that run. Exact rules for marshaling will be left up to the Host club or Event Director and announced at the drivers meeting.
- 5. Tracks and foam tires are not permitted in any racing class.
- 6. All four tires must be the same size and width.
- 7. All vehicles will be inspected either before or after their runs.
- 8. Ramps are to be 18 to 24 inches wide. Maximum height is 8 inches. Maximum pitch of 45 degrees. The first ramp is to be placed at the starting line.
- 9. The front tires of the vehicle will be on the starting line before the race can begin.
- 10. If a part or parts fall off of a vehicle while competing, the vehicle may continue if able. The vehicle must then pass tech inspection with the part(s) missing.

### Long Jump

Purpose of the Long Jump competition is to determine which vehicle can jump the furthest from an established line

- 1. 4WD Monster Truck and 2WD Truck Class
- 2. Must be a legally registered vehicle in the racing portion of the event.
- 3. Trophy or Plaque for first place only
- 4. Vehicle hitting the wall results in a disqualification from the Long Jump Competition
- 5. Must run a body
- 6. 2 attempts allowed
- After jumping, vehicle must drive back to the driver with no assistance from human or other vehicles on it's wheels
- 8. Results to be turned in to the head track official at the end of the event
- 9. Sponsor must run the event

### **Drag Race**

Drag Race competition is normally held on Friday at the NR/CTPA Spring Nationals and the NR/CTPA World Championships

- 1. Track is 55 Feet Start line to finish line
- 2. Hitting the timing system or wall DQ 's that run
- 3. Only one truck per person
- 4. Red lights do not count only in qualifying rounds
- 5. Every truck must do a brake check before each run
- 6. No more than 16 inch wheelbase
- 7. Must be a 4WD vehicle
- 8. Any 2 motors brushed or brushless
- 9. No more than 14 cells
- 10. The following are guidelines for lipo batteries
  - 1. Minimum 4000 mah
  - 2. minimum 40C rating
  - 3. Must use 2 batteries
- 11. Must have an ESC no microswitches
- 12. Modified Clodbuster tire rule applies
- 13. Must be Clodbuster axles only
- 14. Wheelie bars allowed
- 15. Any car or truck body allowed (1/12th, 1/10th, 1/8th scale
- 16. Worst or first rule applies
- 17. Must marshal in shutdown area after each run (for safety purposes)
- 18. Sponsor to turn results in to the head track official at the end of the race.

### **Elimination Race**

- 1. to be held Sunday.
- The Elimination Race is a head to head race where the winner advances to the next round.
- 3. field is set by qualifying order
- 4. standard racing rules apply
- 5. must be a register vehicle at the event
- 6. one truck per driver
- 7. Rules for 4x4 Pro Modified apply.
- 8. for Solid axle based trucks
- awards...1st place 2nd place, and top qualifier recommended.

# **Freestyle Competition**

The purpose of the Freestyle Competition is to receive the highest score by doing tricks and jumps within the allotted time.

- 1. Class will be run if sponsored and if time allows.
- 2. Must be a legally enter vehicle at the event.
- 3. Building damage will not be tolerated.
- Sponsor may use own obstacles, but needs to clean up after the event is over.
- 5. Sponsor needs to find volunteers for judges to run the event.
- Maximum of 2 vehicles per driver. This can change on the amount of Entries
- 7. Rollover limits set by sponsor.
- 8. May be split into child's and adults divisions.
- 9. Scores and results must be handed to the head track official at the conclusion of the event,

### **Novice**

This class is for beginners to learn racing and to introduce them to R/C monster truck racing.

This class is not designed to be highly competitive.

When participants are achieving times with a truck that is comparable to the time achieved with trucks in a regular class, that participant will be moved to the regular class. This point will be reached by averaging out all of the times from the regular class for the same event. This decision will be made by the Monster Truck Director and their staff.

The participants should arrange for their own vehicle. The vehicle maybe of any make size or configuration. The truck maybe be either 2WD or 4WD.

In the event a truck is not available or every member of the family, a truck may be used more than once in this class.

# **2WD Tough Truck**

weight	Motor Level	Drive	Wheelbase	Battery	Surface
No limits	Brushed or	2WD	Stock	see be-	Racing
No limits	Brushed or	2WD	Stock	see be-	

\*\*\*\*Must be a 2WD truck

Tires: Maximum tire diameter is 6 ½ inches. The maximum

tire width is 4  $\frac{1}{2}$  inches. The minimum tire diameter

is 4 inches.

Battery: 2S Lipo / 6-cell NICD/NIMH. Battery must be in stock

location.

Motor: BL systems or brushed motor setups allowed.

Chassis: Must use stock chassis in stock location. Suspension

parts may be upgraded with direct replacement parts. Direct replacement means screwed right on with no modifications. Ground clearance minimum of 1.25" measured from chassis to ground or from any skid plates to the ground (whichever is lowest point

on truck).

Examples: This class is for but not limited to the Traxxas

Stampede, Losi High Roller, HPI 2WD Wheely -King

and Tamiya Blackfoot.

\*\*\*\* No stadium trucks or buggy conversions with truck tires.

### **4WD Tough Truck**

weight	Motor Level	Drive	Wheel- base	Battery	Surface
No limits	Brushed or brushless	4WD	14 inches	See below	Racing

\*\*\*\*Must be a 4WD truck.

Tires: Maximum tire diameter is 6 ½ inches. The maximum

tire width is  $4\frac{1}{2}$  inches. The minimum tire diameter

is 4 inches.

Batteries: 2S Lipo / 6-cell NICD/NIMH. Battery must be in stock

location.. Also.. Battery must be in stock location for

any conversion chassis as determined by the

manufacturer

Motor: BL systems or brushed motor setups allowed. Dual

motors allowed (One rear motor, one front motor).

Chassis: Must use stock chassis in stock location. Conversion

truck chassis type and location is determined by builder / manufacturer. 4WD Stampede conversions allowed. Suspension and driveline components may be upgraded. Ground clearance:minimum of 1.25" measured from chassis to ground or from any skid plates to the ground (whichever is lowest point on

truck).

Examples: Class is for but not limited to the 4WD Traxxas

Stampede, 4WD HPI Wheely King, Tamiya

Wild Dagger / Twin Detonator.

\*\*\*\*No stadium trucks or 4WD buggy conversions

with truck tires.

# **4WD Independent Suspension**

Weight	Motor Level	Drive	Battery	Surface
No limits	Modified	4WD	See below	Racing

Motor: Limit of two Modified motors. There is no maximum MSRP

in this class.

Battery: Maximum of two 2S LiPo packs or a maximum of 14 "C"

cell NiMh or NiCd. Must be in stock location.

Chassis: The chassis, suspension, shocks, gears, and driveline may

be replaced with aftermarket parts.

Tires: Minimum tire diameter is 5 1/4 inches. Minimum tire width

is 2  $\frac{1}{2}$  inches. Aftermarket tires are permitted.

**Examples:** Emaxx, Esavage, Ezilla, and USA-1.

#### Retro

Weight	Motor Level	Drive	Length	Battery	Surface
No limits	Stock	4WD	Special	4 cells	Racing

**Motor:** Maximum of two motors from the following group; **Stock**,

original motor, or Kyosho Magnetic Mayhem. OR to allow motors with a minimum of 20 turns can beused. Example: Traxxas

Stinger Motor

**Battery:** Must run 4 "sub C" cells. or1 cell (3.7 volt) 40c lipo battery to

can be used.

**Chassis:** Four link suspensions are prohibited.

Tires: Must run Tamiya Clodbuster stock tires. Dual tires may be

used if the intention is to replicate a vintage monster truck that used them. A photo may be required. Tires may not

be cut or shaved.

Wheelbase: Must be scaled from a full size pre 1990 Monster truck.

Hitch: Must pull a weighted sled.

**Body:** Must be a pre 1990's body style and must replicate an

actual full size monster truck.

## **Sport Modified**

Weight	Motor Level	Drive	Wheel-	Battery	Surface
No limits	15T HPI Firebolt.	4WD	unlimited	See below	Racing

Motor: Two HPI 15 turn Firebolt required at the 2014 WORLDS

until then all motors will be legal.

Battery: Maximum of 2S LiPo or 6 "C" cell NiMh or NiCd.

Chassis: May be scratch built, aftermarket, or any combination of

kit components.

Tires: Must use uncut and unmodified Clodbuster "v" tread

tires. (part #TAM9805226)

**Body:** Any car or truck lexan body is allowed.

Other: Gear cases are to be stock gear case halves. Adjustable

motor mounts are not permitted. Motor must mount to gear case in stock fashion. Gears must be stock for that vehicle. Must run a 13 tooth pinion gear. Sport Modified

trucks are not allowed to register in other classes

### **4WD Modified**

Motor Level	Drive	Wheelbase	Battery	Surface
Modified	4WD	unlimited	See below	Racing

Motor: Limit of two Modified motors.

Battery: Maximum of two 2 S LiPo packs or a maximum of 14 "C"

cell NiMh or NiCd.

Chassis: May be aftermarket, scratch built, kit or any combination

of these.

**Tires:** The minimum tire diameter is  $5\frac{1}{2}$  inches. The minimum

tire width is 4 inches.

Gearboxes: Must have started life as a Clodbuster, or Bullhead

gearbox.

Other: Class is limited to trucks without driveshafts.

### **4WD Driveshaft**

Motor Level	Drive	Wheelbase	Battery	Surface
Modified	4WD	unlimited	See below	Racing

Motor: Limit two Modified motors.

Battery: Maximum of two 2S LiPo packs or a maximum of 14 "C"

cell NiMh or NiCd.

Chassis: May be scratch built, aftermarket, or any combination of

kit components.

Tires: Minimum tire diameter of 5 ½ inches. Minimum tire width

of 3 inches.

**Body:** Any car or truck lexan body is allowed.

**Driveline:** Transmission is to be centrally located in the chassis.

Functional front and rear drive shafts are required to deliver the power to the axles. Straight solid differential housings are required. The following examples of kit vehicles have differential housings that are allowed in this class; Jugg1, Jugg2, Mad Force, Twin Force, TXT, XTM, or Xfactor. Vehicles with independent suspension are not

permitted in this class.

### **4WD Pro Modified Monster Truck**

	Weight	Motor Level	Drive	Length	Battery	Surface
ĺ	No limit	No limit	4WD	No limit	See rules	Racing

Motor: No limitations.

Battery: Must be NiCD, NiMH or LiPo. If using LiPo a maximum of

two 2S LiPobatteries.

Chassis: May be aftermarket, scratch built, kit or any combination

of these.

Tires: Minimum tire diameter is 5 ½ inches minimum tire width

is 4 inches

Weight: No limitations.

**Dimensions:** No limitations.

Wheelbase: No limitations.

Gearing: Vehicle may have a two speed gear box

Other: This class is for solid axle trucks. Trucks may be motor on

axle trucks and drive shaft trucks. Ex. Clodbuster, TXT-1,

Twin Force, etc.

### **4WD Super Stock Monster Truck**

Weight	Motor Level	Drive	Length	Battery	Surface
No limit	No limit	4WD	No limit	See rules	Racing

Motor: Limit of 2 readily available\* R/C motor\* with a non

adjustable end bell (stock motor\*) Or Econo Modified\*

motor.

Battery: 7-cell C size Must be on top of chassis only.

Chassis: May be \*stock kit or factory replacement chassis such as

Sassy Chassis, Bennett Equip.and E.S.P. ect. Stock wheelbase only. Oil shocks are allowed in stock location.

no cantilever bars, \*stock swing arms only. NO SWAY

BAR ALLOWED. Ball bearings allowed. Can be 2 or 4

wheel steering, may change servo mounts, and upgrade

with after market steering and ball ends. May modify

chassis with holes for increased suspension travel to

compete with Sassy Chassis. Must use \*stock gear

boxes. May change axles to aftermarket parts. USA 1's

may use slider ball links

Wheelbase: Must be stock original.

**Tires:** Maximum diameter 6 1/2" Min dia 5 1/2"

Minimum width 4" Maximum.width 4 1/2"-Must use a

production V-tread kit tire only

#### **4WD Box Stock Monster Truck**

Weight	Motor Level	Drive	Length	Battery	Surface
No limit	stock	4WD	No limit	6 cells	Racing

Motor: Limit if 2 motors 3 Motors allowed,

1. original, out of the box

2. A ROAR\* Motor

3.Mega 360/Mayhem.

Battery\*: Up to 6-cell, C-size maximum, Battery must be in stock

location. Must be NiCad or NiMH

Chassis: The chassis\* and gearboxes\* must be \*original

equipment for that vehicle. Original gears and pinion only. Monster truck conversions are not allowed. \*Original Shocks and Suspension,- no

modifications allowed-. After market ball

bearings allowed on all axles and gear assemblies . No straight axles allowed. Entire chassis must be present

in stock location direction. Must use 4 wheel steering, may

upgrade speed control.

Tires: \*Original Equipment for that vehicle. No cut tires

Wheelbase: Must be original for that vehicle.

Changes: Only changes allowed are to lexan body and ESC.

Examples: open to all types of 1/10 scale 4wd steer trucks that fit

current rules including txt and juggernauts

# **Definitions and Clarifications**

Deminions of	and Clarifications		
2WD:	Shall constitute one rear drive axle with 2 wheels only.		
4WD:	Shall constitute two drive axles; one rear drive axle with two wheels and one front steer drive axle with two wheels. On pulling vehicles the front and rear tires will be no more than 1 inch difference in diameter. On racing vehicles the front and rear tires will be the same size in diameter and width. 4WD vehicles will be true 4WD vehicles. The Big Rig class is the only class allowed to use tandem drive axles.		
Battery:	In general shall refer to the device used to store electricity in order to supply the vehicles motor.		
Body:	Shall be the shell that gives the vehicle its shape and allows it to resemble a full size car, truck, or tractor.		
Chassis:	Frame of the vehicle not including suspension, steering, body or gearbox.		
Dual wheel:	More than one tire on one rim or a combination of more than 1 tire with one rim on each side of an axle. No dual wheels are permitted. Foam tires may be glued together to make 1 tire on 1 rim and shall not be considered dual wheels.		
ESC	Electronic Speed Control		
Factory production:	Any R/C product manufactured by a recognized R/C supplier in quantities of no less than 100 units per year. Bodies are not required to be "factory production" as long as they are realistic. Please refer to motor rules for specifics on them.		
Factory production vehicle:	Any factory production vehicle kit originally manufactured for use other than a pulling vehicle. For example a Tamyia Clodbuster or a HPI Wheely King are "Factory Production Vehicle".		
Front axle:	The device mounted at the front of the vehicle in order to provide a means for steering. The axle will be mounted so that the wheels line up with the wheel openings in the body. Exceptions will be made for "Factory Production Vehicles".		

Page 55

The tires on hinged or floating front axles are not allowed to contact the track surface if the vehicles front end lifts 3/4 of an inch or more.

Front wheel openings:

The open place that allows the front wheels to have clearance to move when turned to the right or left. The wheel openings will be located behind the front most part of the body. Front wheels are not allowed to extend more than one inch on either side of the body. Exceptions are made for 4WD vehicles, Factory Production Vehicles that must run the original suspension, and replicas of full size vehicles.

Gearbox:

The unit consisting of the gears, belts, chains, case and/or mounting brackets. The gearbox is the means for transmitting the power from the motor to the wheels. An additional gearbox refers to a second gearbox that is attached to the main gearbox.

Hitch:

The apparatus used to hook the pulling sled to the vehicle. The hitch shall incorporate a 5/16 inch hole for the sled hook and will be no more than ½ inch from the rearmost end of the hitch drawbar. The hole must be located behind the axle. The sled chain will have a clear path to the hole with no interference from the vehicle. The hitch is to be fashioned from a strong and rigid material. All hitches will be rigidly mounted. The hitch must be mounted in such a way to not allow any movement longitudinally, vertically, or horizontally. Adjustable hitches are permitted but must be locked in position when pulling.

Hitch continued;

Unless otherwise noted in the class rule the maximum hitch height is 4". The following will also apply to the 2" maximum hitch height classes. The hitch is measured by placing the vehicle on the tech table, without any downward pressure during inspection. Horizontal hitches will be measured to the top of the hitch. Vertical hitches will be measured to the top of the hole. Any hitch with multiple holes will have the holes above the maximum covered with tape.

Intentional jerking: The act of deliberately manipulating the

controls of the vehicle in a way to advance the sleds position in an erratic

manner.

MSRP: Manufacturers Suggested Retail Price.

Maximum motor size: The total outside length and diameter of

the motor not including the output shaft.

Measuring device: All measurements are to be made with a

normal ruler. Micrometers and the like

are not to be used for tech.

Monster truck: A vehicle with oversized tires designed

to go over large obstacles at a fast pace.

Original: As manufactured and unmodified.

**Production Pulling Vehicle:** Any vehicle manufactured specifically

for pulling. This may be "factory produc-

tion" or scratch built.

R/C: Radio controlled.

**R/C Motor:** A motor that is designed and built for the

R/C industry.

Readily available: Available off the shelf from hobby shops,

distributers, or from retail mail order outlets. Special order or custom made items are not considered to be "readily

available".

Scale appearance: Having the scaled down look of a full size

vehicle or part.

**Sled:** The device used to create a drag on the

pulling vehicle in which to stop the vehi-

cle.

Stadium Truck: A cross between a buggy and a monster

truck, the stadium truck has buggy speeds and monster truck durability. Designed from jumps and off-road racing, the stadium truck can handle rougher terrain than most buggies. Stadium trucks are almost always 2WD, and like 2WD buggies, have spiked rear tires for traction on dirt and ribbed front tires for steering. On most models, the suspension arms are extended so that the tires

Page 57

are totally outside the body, not underneath it. This helps to keep the inside of the chassis clean and the wide stance helps with control and stability. The shocks on these trucks are long, for maximum dampening. The chassis of a stadium truck is usually aluminum for nitropowered trucks or composite/plastic for electric powered trucks. Most (but not all) stadium trucks are 1:10 scale. Whether nitro or electric, their speed can be anywhere from around 15 to 50 mph depending on the performance-level of the truck. Stadium trucks are a good mix of speed and toughness, making them good for all types of drivers.

Stock:

Factory original for that vehicle or piece of equipment.

**Traction compound:** 

Anything that is foreign to that tire. Any substance that was not made for, put on, or into the tire at time of manufacture. Tire glues are allowed to mount tires to rims or to glue two tires together in order to make a wider tire.

Tread width:

The width of the tread only. This does not include the sidewalls.

Wheel:

An assembly consisting of one tire and one rim.

Wheelie bar:

A device mounted to the rear of the vehicle to prevent the vehicle from flipping over backwards once the vehicles front tires loose contact with the pulling surface. This device is made up of a single or pair of bars with one or two wheels mounted on the bars. Wheelie bars are permitted in all classes. They may not extend past the legal length of the vehicle and may not interfere with the operation of the pulling sled in any way. Skid plates are not permitted. In the dirt classes skid pads may replace the wheels on wheelie bars for scale appearance. Flex-

Page 58

ible straps for static grounding are only permitted to touch the pulling surface. Wheelie bars are not to be use to rock the vehicle back and forth. This would be considered intentional jerking.

### **Class Dots**

These are the numbered dots that you will receive at an NR/CTPA event. One dot goes on the chassis and the other goes on the body.

Dirt Pulling	
Digger	DA
Garden Tractor	DB
4WD Modified Driveshaft	DF
Pro Stock Tractor	DG
4WD Scratch Built	DH
2WD Pro Modified Electric	DJ
2WD Pro Modified Nitro	DK
4WD Box Stock	DL
Bar Tire Sportsman	DM
Dual Motor Superstock	DN
2WD Open I	DQ
Dual Motor Modified	DS
Gas	DT
Insane	DU
2WD Open II	DW
2WD Modified Nitro	DХ

Carpet Pulling	
2wd Truck	CC
Big Rig	CE
Pro Stock Tractor	CG
Bar Tire Sportsman	CM
2WD Open I	CQ
4WD Open I	CR
2WD Open II	cw
4Wd Pro Modified	СХ
2WD Super Sport Truck	cz

Racing	
2WD Stock Tuff	ма
2WD Mod Tuff	мв
4WD Modified tuff	MC
Retro	MF
4WD Modified	MG
4WD Tube	мн
Open	мј
Novice	MK
Stock 4WD Independent Suspension	ML
Modified 4WD Independent Suspension	MM
Sport Modified	MP
4WD Driveshaft	MQ

Page 60