



2005 UMARA NATIONAL MIDGET RULE BOOK DISCLAIMER

Notice: The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events and, by participating in those events, all participants are deemed to have complied with these rules. NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF, OR COMPLIANCE WITH, THESE RULES AND/OR REGULATIONS. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official. The UMARA Officials shall be empowered to permit minor deviation from any of the specifications herein or impose any further restrictions that, in their opinion, do not alter the minimum acceptable requirements. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS. Any interpretation or deviation of those rules is left to the discretion of the officials. Their decisions are FINAL. These rules of competition become effective March 1, 2005, and supersede all previous rules and are subject to change without notice

UNITED MIDGET AUTO RACING ASSOCIATION RULES
(last updated March 1,2005)

Part I - Licensing

1.1 All participants, pit crewmembers and other persons admitted to UMARA events, must conform to all UMARA rules.

1.2 Conduct Detrimental to Racing - Any member, participant or other person who, in the judgment of the Race Director or the Board of Directors, is guilty of conduct detrimental to racing and/or to the United Midget Auto Racing Association, on or off the track or any other venue, may be suspended, excluded from UMARA events, and/or fined by the Race Operations Manager or the Board of Directors.

1.3 Before a person shall be eligible for a license in the United Midget Auto Racing Association (UMARA), and participation in a UMARA sanctioned race meeting, such person must be eighteen (18) years of age or older. A driver under the age of eighteen (18) years of age but not less than sixteen (16) years of age who has complied with the recognized acts of other states enabling partial emancipation of a minor for racing purposes, will be eligible for consideration by UMARA to compete in the sportsman midget division only. Birth certificates and written documentation of emancipation must be presented as proof of eligibility to UMARA officials upon request.

1.4 All officials, owners, drivers and mechanics will be issued proper identification tags or cards for all events. Any person found loaning or giving their identification to anyone so they may gain access to any area of the track illegally will be removed from the track and/or barred from further competition in that meet.

1.5 All members must present their membership card to the secretary and/or assistant secretary at the pit gate on request.

1.6 UMARA shall have the authority to withhold the award of points and/or prize money until the payment of fines and money owed has been received.

1.7 UMARA may prohibit any competitor or car from entering any race event upon evidence of unpaid fines and/or monies due.

1.8 Drivers licensed with UMARA must meet the following requirements:

- A. A physical form completed by a qualified M.D. yearly, stating that the applicant is in good physical condition, must be submitted with the driver's application for UMARA membership or at the time his/her membership dues are paid.
- B. Rookies must start at the rear of any event qualified for (regardless of time) for a minimum of three meets or longer if need be. Rookie is defined as anyone competing in a midget for less than six (6) events. Anyone who has competed in more than five (5) midget meets in any one season with any sanctioned midget organization loses his/her rookie status.
- C. UMARA may require any driver at any time to furnish a new physical examination certificate, from a designated physician attesting to his physical fitness for racing before granting driving privileges.
- D. UMARA shall have the power to disqualify and/or exclude from competition any driver, mechanic, other competitor or official who, as a result of a medical examination, gives evidence of or who shows visible signs of exhaustion, substance abuse, or other physical or mental irregularity.
- E. UMARA may prohibit any competitor or car from entering or continuing a race if they consider either might be a source of danger.

Part II - Race Officials

2.1 All disputes that involve racing procedures will be settled by the Race Director.

2.2 The Race Operations Manager shall have the only authority to impose fines, and/or suspensions, without consent of the Board of Directors. The members shall have the right to enter a written appeal to the Board.

Part III - Point System

3.1 To participate in point fund money, end of the year award money and points, participant must be a paid member.

- A. To receive point fund and appearance money, participant must compete in 60% of current UMARA season race meets.
- B. Cut off date for points will be October 31st, unless event(s) after that date are scheduled officially by August 15th
- C. The schedule for UMARA National Midget points follows:

Qualifying (IF RUN)

1 -----→40	14 -----→18
2 -----→30	15 -----→17
3 -----→29	16 -----→16
4 -----→28	17 -----→15
5 -----→27	18 -----→14
6 -----→26	19 -----→13
7 -----→25	20 -----→12
8 -----→24	21 -----→11
9 -----→23	22 -----→10
10 -----→22	23 -----→ 9
11 -----→21	24 -----→ 8
12 -----→20	25 -----→ 7
13 -----→19	26 -----→ 6

Qualifying points from position 27 downward are 5 points each

***Dash (IF RUN)**

1 -----→ 6
2 -----→ 5
3 -----→ 4
4 -----→ 3
5 -----→ 2
6 -----→ 1

***Dash is not considered as a qualifying event.**

***Heat Races**

1-----→30
2-----→25
3-----→22
4-----→20
5-----→18
6-----→16
7-----→15
8-----→14
9-----→13
10-----→12

* Heat races are considered qualifying events

****Semi Feature**

1--→Transfer to Feature
2--→Transfer to Feature
3--→15 or transfer
4--→14 or transfer
5--→13 or transfer
6--→12 or transfer
7--→11 or transfer
8--→10 or transfer
9--→ 9 or transfer
10--→ 8 or transfer
11--→ 6 or transfer
12--→ 4 or transfer

Feature**

1----->	110
2----->	90
3----->	75
4----->	65
5----->	60
6----->	55
7----->	50
8----->	45
9----->	40
10----->	38
11----->	36
12----->	34
13----->	32
14----->	30
15----->	28
16----->	26
17----->	24
18----->	22
19----->	20

****Note:** Positions 20 and below will decline in increments of 2 points per position from position 19. The Minimum number of points earned for a feature start shall be 10. There will be an additional five(5)bonus points awarded to the car which improves the most positions during the feature event.

Part IV - Qualification

4.1 At the Race Operations Manager's discretion, qualifications may or may not be conducted or be conducted by order of the draw. Draw for qualification order will be held prior to the scheduled start of warm-ups. If a participant fails to draw or is unable to qualify at his/her appointed turn, participant loses one attempted lap of qualification and will make the attempt after all cars that have drawn are qualified. If open qualifying is done, cars will be limited to one lap if they are not ready in time.

4.2 Where qualifications are part of the show, qualifying will consist of two (2) laps, with the faster of the two counted as the official time.

4.3 All races will be lined up by time trials or draw system to be determined by the Race Operations Manager.

4.4 Driver change:

A. If a driver qualifies car "1," then qualifies car "2," with the permission of the Pit Steward, car "1" will be put to the tail of any events qualified for if a driver is available (considered driver change) and car "2" is put into position according to qualifying time.

4.5 There will be NO qualifying attempt allowed after the start of the first event.

4.6 The fastest 6 qualifiers that transfer through the heat races will be inverted for the feature lineup in programs where qualifying is included. Heat races will be progressive racing. Cars that do not meet a minimum qualifying time criteria of 1.08 times the fastest time posted for the night will be placed at the rear of the heat race starting field.

4.7 On dirt tracks where qualifying is not in the program, the winner of the first heat race is considered the fastest qualifier.

4.8 In the event a car does not qualify and a shortage of cars develops, the unqualified car may be invited to compete in a heat race, or the semi-feature (starting in the back of the event). If the "invited" car qualifies for the feature by virtue of the finish in the preceding events, that car may compete in the feature (starting in the back of the event) and will be eligible for money and points earned during the feature event.

Part V - Race Procedures

5.1 Any driver change before any event must be cleared with the Pit Steward.

5.2 Alternate cars for any event must start in the rear of the field.

5.3 Feature alternates will be added from the semi-feature in the order of finish, provided the "semi" is run before the feature.

5.4 All drivers are required to attend official driver's meetings. Failure to attend will cause the car to be placed at the rear of all events.

5.5 UMARA reserves the right to reposition a car from the front of a start or restart to the rear if that car or driver poses a hazard to a safe start.

5.6 Once a car has been started, and before the green flag has fallen, a participant who stops to work on the car for any reason other than to turn on the fuel valve, will lose his original starting position and must start at the rear of the event. Cars going back to the pit area will be disqualified. (See 5.5 exception).

5.7 No work may be performed on cars during a yellow flag after the race has started. (EXCEPTION: For special events that exceed 70 laps, work may be permitted during yellow flag periods in approved designated work areas).

5.8 Yellow flag procedure for races 50 laps or less:

The leader on the lap immediately preceding the yellow will assume the lead and slow the field to an idling speed safely. The field will close-up behind the leader. No passing, as the race will be scored back to the last completed scored lap. Yellow flag laps will not be scored. The field will line up in single file the way they were running the lap before the yellow was used. Failure to follow the Flagman's instructions will result in a black flag to the car out of line. The green flag will not be displayed until the field has been completely closed up and the course is clear. Any driver guilty of passing on the yellow will lose the number of positions gained under the yellow plus a penalty of two (2) positions for each position gained. Any car which causes or is directly part of the yellow, may be restarted at the rear of the lap on which it was scored immediately preceding the yellow.

5.8a Additional Yellow flag procedures for races exceeding Fifty Laps

Yellow flag laps will be scored until 8 consecutive laps have been completed, then the scoring will be suspended. Scoring will resume only when the green flag has been displayed.

51 to 75 laps: the last 10 laps scored must be green.

76 to 100 laps: the last 15 laps scored must be green.

5.9 When any car is suspected of leaking fluid, the yellow flag will be displayed. Suspect car will be black flagged, directed to proceed directly to the pit area or stop at a designated area for consultation. If after consultation there is no problem, the car will be able to restart in its established position. The "designated area" may be identified at the pre-race drivers meeting, and may also be communicated to driver(s) via one-way radio communication from UMARA Officials to the driver.

5.10 If the race is red flagged because of an accident, those cars involved will restart at the rear of all cars running on the same lap. If the race is called or declared complete at the time of the red flag, those cars involved will be scored at the rear of all running cars on the same lap, with the exception of any running car lapped more than one time.

Example: Race is red flagged and considered completed - the car involved in accident will be scored ahead of any car lapped more than once, only if the involved car is on the lead lap. The only exception would be if the involved car were also a lapped car.

5.10a Authorized Personnel on Track or Infield

1. Once race cars have been presented to compete, the only personnel permitted on the racing surface or infield are UMARA authorized Track Officials and the driver of the racecar. If involved in an incident/accident, drivers must remain in the racecar unless in immediate danger (IE: fire). No driver shall get out of their racecar for any reason other than to avoid imminent danger or upon approval by a UMARA official. The driver may get out if the racecar is in the infield area and out of danger.
2. All other personnel are not permitted to enter the racing area (racing surface or infield) unless requested by a UMARA Official to assist during special circumstances. Crewmembers, Owners, and/or other personnel are not permitted on the track following an accident or injury unless permission is granted by a UMARA Official. Violation of this rule shall result in immediate disqualification from the event, fine and/or suspension.
3. If uninjured, the driver should remove the steering wheel as an indication to the safety personnel that no immediate emergency services are required.

5.11 When a race is stopped with the red flag, servicing will be allowed only on cars that have a flat tire. Only after permission from the pit steward a maximum of two (2) crewmembers per car will be allowed on the track only to change the tire(s) and check for proper inflation and/or stagger requirements. No other work or servicing may be performed. Once servicing is complete, the car serviced will restart at the tail of the lap it completed. Any service other than flat tire replacement will disqualify the car for the event. Cars returning to the pits will be disqualified.

A maximum of five minutes will be allowed for work on the car and cars must be ready for restart when called upon. Cars that are not ready upon the push-off of the first car will be penalized one lap. Drivers may get out of their cars, if needed, under a red flag only. No servicing will be permitted in heat race events.

5.12 For feature race only:

For races 50 laps or less, the last two (2) laps will be run under the green flag conditions if possible - one (1) green and one (1) white flag. In case of an accident late in the race, the Safety Director, Race Director, or Race Operations Manager may declare any race complete upon the waving of the red flag.

5.13 If a driver has a safety problem, i.e. seat belt loose, helmet unbuckled, etc., he/she must stop at the start/finish line. Driver will be able to restart in his/her established position upon official approval.

5.14 If a driver gets out of his/her car under a yellow flag while on the racing surface or the infield, he/she will be considered out of the race.

5.15 A 360-degree spin will not count as a spinout unless it causes the yellow caution flag.

5.16 A driver will be allowed one (1) spin. The first one will allow him/her to restart at the tail of the field; the second spin will put him/her in the pits.

5.17 No driver change will be allowed after the green flag has fallen to start the race.

5.18 Any car involved in a flip must be inspected by the Technical Crew. Restart is upon the decision of the Race Director, Race Operations Manager, or Safety Director with guidance and consultation from the "tech crew."

5.19 A lap is considered completed when all cars but the last four (4) cross the start/finish line (minimum 14-car start field).

5.20 Once a car leaves the racetrack and sits for one or more laps in the infield, it may not re-enter the race.

5.21 BRAKE CHECKING WILL BE GROUNDS FOR DISQUALIFICATION

5.22 Absolutely no three (3) or four (4) wheelers will be allowed on the track before or during any race at anytime. Three or four wheelers may push racecars to the line for the main event only. No person under the age of sixteen (16) will be permitted to operate any motorized vehicle. Three or Four wheeled vehicles are approved for use by the Track Crew, Safety Crew, or Fire Crews as needed.

Part VI - Protests

6.1 The protest period for any race will be (15) minutes after a race is finished.

6.2 All protests must be presented in writing and presented to the President or Racing Director, along with a protest fee of \$25.00. Protest may be made by the car owner only. The car owner must represent his/her driver and mechanics. This is to prevent trackside disorder. If the car owner is not in attendance, the driver may then file the protest.

6.3 If a dispute involves a car that a board member owns or has a financial or sponsorship interest in, then that official or Board member will have no vote regarding the matter in dispute.

6.4 To prevent holding up payment of prize monies, all protests will be decided upon by the Race Operations Manager and/or President before payoff begins. If a protest is ruled invalid, the protest fee goes to the point fund. If the protest is ruled valid, the fee will be returned.

6.5 An additional protest fee for each engine head removal will be \$200.00. Engine protests with P & G tester will be \$50.00. If the protested engine is found to be legal, 100% of the protest fee shall be awarded to the owner of the protested engine. If the engine is found to be illegal, 100% of the protest fee will be returned to the protesting car owner. There will be an additional protest fee of \$25.00 relative to tire, chassis offsets or car weight checking.

6.6 Right To Protest

A. Technical protests against another competitor regarding specifications that are routinely inspected by the technical inspectors are not permitted.

B. Results or procedures of a weight test of any car cannot be protested

C. The following decisions, which involve the exercise of judgment by the Race officials, cannot be protested.

1. To call or not to call a yellow caution period.
2. To call or not to call a red flag period
3. Whether a driver should be black-flagged and stopped for consultation, inspection or removed from competition.
4. Whether a driver ignored a black flag.
5. Whether a penalty could or should be applied or imposed during or after any event.
6. The decision as to whether safety equipment rules were violated.
7. Whether a driver flagrantly improved his position prior to the green flag being displayed.
8. To reposition a car for a starting, restarting or other violation.
9. Whether a car is in a safe condition to compete.
10. Whether a car is in a hazardous condition such that it will not be permitted to continue in competition.
11. Whether to exclude a driver from competition due to injury, fatigue, rookie status or safety reasons.

Part VII - Sportsmanship, Personal Conduct, Fines and Penalties

This section applies to any race event, forum, publication or meeting involving UMARA or its affiliated entities.

7.1 Conduct Detrimental to Racing - Any member, participant or other person who, in the judgment of any UMARA Official or the Board of Directors, is guilty of conduct detrimental to racing and/or to the United Midget Auto Racing Association, on or off the track or any other venue, may be suspended, excluded from UMARA events, and/or fined by the Race Operations Manager or the Board of Directors.

7.2 Any driver, pit crew member or owner that physically or verbally abuses any UMARA track official will subject his or her car and crew to suspension.

7.2.a CONDUCT:

1. The Car Owner (Entrant) is responsible for all crewmembers and people associated with the owner's team, and/or anyone signed in at registration associated with that team. This includes the operation of any push vehicles (3 and 4 wheelers). Each push vehicle must be operated safely and responsibly at all times and be numbered with the number of the car it normally pushes. If anyone operates the push vehicle irresponsibly, the racecar it is with may be disqualified at the discretion of the Pit Steward. No person under the age of sixteen (16) may operate a push vehicle.
2. Any participant who physically or verbally abuses any other Participant, Spectator, Track Worker, or Official will subject the Car, Entrant, and/or Driver to disqualification, fine and/or suspension.
3. Fighting will not be tolerated and will be grounds for immediate disqualification, fine, suspension, and/or arrest by law enforcement authorities.

7.3 Rough driving, cutting the pole marker without good reason, foul driving of any kind or unsportsmanlike-like conduct will result in one or all of the following.

- A. Fine and/or suspension being levied against the guilty party.
- B. Loss of points for any or all events for the entire race show.

7.4 Suspensions will take effect immediately after notification unless appealed in writing to the Board of Directors. If appealed, any suspension will take effect upon Board's decision.

7.5 All fines must be paid and suspensions terminated before the member will be allowed further participation.

7.6 If an owner refuses to allow measurement of his/her engine or other car weight or specification, it will be assumed that the car is illegal.

Part VIII - Appeals

8.1 An appeal must be hand delivered or faxed to any Board Member or the Race Operations Manager within three (3) days of the rendering of a penalty or other decision. The appeal must fully set forth the facts of the case and be accompanied by sworn statements or affidavits necessary to substantiate the appeal.

8.2 All appeals will be heard and acted upon at the next regularly scheduled Board meeting.

Part IX - Safety

9.1 Any car may be checked at any time for any reason.

9.2 No metal-framed goggles allowed. Goggle lenses shall be shatter proof.

9.3 Any car running too slow or causing a hazard in any event will be black flagged from the race.

9.4 No car and/or driver, which in the opinion of the UMARA Officials is a hazard to the other cars in the event, will be permitted to run, i.e. rookie, safety, etc.

9.5 In the event of an accident that in the opinion of the officials might have inflicted an injury to a driver, affecting his driving ability, the injured driver shall have a medical check-up as to his fitness to drive, and a written release from a doctor stating so.

9.6 Dentures: All drivers are required to remove all dentures before starting an event.

Safety Equipment

9.7 Safety equipment on a racecar and / or a driver's personal safety equipment may be inspected by UMARA Tech Inspectors and/or by UMARA Officials at any time. Any participant not complying in full with all safety requirements in this Rule Book will not be permitted to compete.

9.8 Helmets: All participating drivers must wear safety helmets designed specifically for auto racing that meet or exceeds the 1995 Snell Foundation or SFI Foundation 31.2 specifications and are labeled as such. Helmets will be subject to inspection at each event.

9.9 Uniforms: All drivers must wear fire resistant head-sock/helmet skirt, underwear, socks, gloves, and a one-piece uniform fitted snugly around the neck, wrists and ankles. It is recommended that these items meet SFI Foundation specifications.

9.10 Arm Restraints: Arm restraints are mandatory and must be worn at all times whenever the racecar is running and on the track.

9.11 Roll Cage Nets: It is recommended that all cars be fitted with roll cage nets on both the left and right sides of the roll cage for all events. Caution should be used when positioning head restraining nets to be certain the driver's head cannot get under the net in case of an accident. All roll cage nets new must be stamped by the manufacturer and be labeled showing they meet SFI Foundation specification 37.1. The life of roll cage nets in use shall not exceed two (2) years.

9.12 Roll Cage Padding: All chassis protrusions, roll cage tubes and roll bars in close proximity to the driver's helmet must be padded with a high-impact material such as Ensolite or Beadall. This padding must have a thickness of one-half ($\frac{1}{2}$) inch.

Part X - Specifications

10.1 All phases of design and construction of any car are subject to the approval of the Technical Committee. The stewards and the Technical Committee may exclude any car, design or construction of which they deem dangerous or not meeting the specifications herein.

10.2 Car Size Limits: The wheelbase must be a minimum of sixty-six (66) inches and may be a maximum of seventy-six (76) inches. The maximum overall width is limited to sixty-five (65) inches as measured from outside of the tires. All cars must weigh a minimum nine-hundred (900) pounds, without the driver. (EXCEPT VW powered cars with 166 CID or less) must weigh a minimum of eight-hundred-fifty (850) pounds without the driver. Cars may be weighed following any event and fuel may not be added to make up weight.

10.3 Car Construction:

A. All cars must be of the open wheel, open cockpit type. The body must give the appearance of completely covering the frame. The engine must be covered with a cowling secured in place, but need not enclose the side of the engine compartment. The car's body, driver seat and fuel tank assembly must be mounted on the chassis centerline. A maximum variance of one (1) inch overall, $\frac{1}{2}$ inch offset will be permitted. All cars must have an engine area under-pan mechanically fastened to the chassis and a cockpit floor that is bolted to the chassis. At all pavement events an approved absorbent pad under the engine is mandatory. Radiator overflow catch tanks are required at all pavement events on liquid cooling equipped cars. Certain events specified by UMARA, may require full under-car diapers.

B. With the exception of suspension components, induction and/or exhaust systems and nerf bars, no accessory or component of the car may extend more than six (6) inches from the mainframe tubes. Cylindrical oil tanks mounted outside the frame, behind the engine must be mounted as close to the frame as practical.

C. All fuel must be contained in a single, conventional Midget tail and tank assembly, located behind the driver and within the body contours. The fuel tank must have a minimum capacity of eighteen (18) gallons. Fuel tanks may not be made from carbon fiber or carbon/kevlar material.

D. Engine layover is limited to (45°) forty-five degrees, (angle from vertical) as measured through the crankshaft and/or cylinder bore centerlines. Engine offset is limited a maximum of one (1) inch, two (2) inches overall, from the chassis centerline. The crankshaft centerline, front to rear, will be used to determine maximum offset. The centerline of the rear end section must be directly behind the centerline of the crankshaft. The crankshaft and driveline must be parallel to the chassis centerline and at a (90°) ninety-degree angle to the engine motor-plate.

E. The maximum rear wheel offset from center, is three inches (six inches overall) measured from the inside bead seat to the centerline of the rear center section. Front wheel offset is limited to a maximum of 5 ½ inches (11 inches overall) as measured from the inside bead seats to the centerline of the chassis. The right front tire cannot be farther out than the right rear tire when the right rear wheel is set at maximum offset.

F. No airfoil, wing, spoiler or other air deflection device will be permitted. Vertical spill plates may be used on the outer edge of the hood assembly and will be limited to one (1) inch in height. The outside dimensions of these spill plates may be no wider than the main frame of the car. The under-pan or car bottom must be flat from side-to-side and no tunnel structures spill plates, skirts or horizontal panels may be extended from the bottom of the under-pan of the car or fuel tank contours.

Sun visors are limited to five(5)inches in length from top to bottom including any tabs, extensions etc. and may not be not wider than the width of the cage and cannot extend above the cage.

G. The maximum overall width of the car is 65 inches including tires and wheels.

10.4 Roll Cage:

A. All UMARA midget racecars must be equipped with a roll cage that cannot encroach upon an imaginary cylinder extending upward from the cockpit opening. The roll cage must be secured and attached to a strong component of the car and adequately braced fore and aft to secure it in an upright position. The roll cage must extend two (2) inches above the top of the helmet when the driver is sitting in an upright position. It is recommended that on all new cars, the roll cage should extend four (4) inches above the top of the driver's helmet. The normal height is thirty-six (36) inches measured on a line equivalent to the driver's spine when seated in the car.

B. All cars constructed after December 31, 2004 are required to have roll cages constructed of SAE 4130 seamless steel tubing with a minimum O.D. of 1-3/8 inches and a minimum wall thickness of 0.095 inches. The roll cage must be gusseted in all four (4) corners. It is recommended that the gussets be made from seamless tubing, eliminating any sharp edges that might endanger the driver's arms in case of a roll over.

C. All roll bars and/or roll cages must be so designed to permit the lifting of the car in case of an accident.

D. All roll cages must pass technical inspection by UMARA. No bolt-on roll cages will be permitted. (Deleted grandfathered language)

F. No water or oil coolers are to be placed above or besides the cockpit opening.

10.5 Fuel System:

A. Fuel is restricted to methanol only. The addition of any unauthorized material(s) to the fuel is strictly prohibited.

B. The addition of any material(s) to the intake air or the addition of any mechanical device(s) essential to the application of this material(s) is strictly prohibited.

C. Any device, which artificially reduces the temperature of the fuel, is strictly prohibited.

D. All fuel is subject to testing at any time. Any fuel that does not conform to the UMARA standards will be considered illegal. The use of illegal fuel will result in disqualification from the event and/or the entire program.

E. The use of ethanol will be considered by the technical committee upon written petition.

G. Fuel tanks must be constructed and supported in a manner that will insure every possible precaution has been taken to avoid rupture or breakage.

H. Fuel tanks should not be altered, meaning that it should be installed and utilized in its original manufacture construction.

I. UMARA highly recommends that fuel tanks not be mounted to the chassis utilizing any portion of the access plate or the nut plates bonded into the fuel bladder for mounting.

J. It is highly recommended that the fuel tank have an adequate supporting structure under the forward section of the lowest portion of the tank. These structures should follow the contour of the tank and be welded or securely attached to the frame of the car on each side.

K. In areas of mounting the fuel tank to the chassis, all mounting points must have inner and outer plates attached to the shell. These plates must be of adequate size to insure the tank being secure to the chassis. All tanks must have a minimum of four mounts to the chassis.

L. A flush-type cap or device approved by the Technical Committee is mandatory on all exposed fuel caps.

M. The tank vent must have a check valve.

N. Fuel systems must be equipped with a shut-off device located within easy reach of any driver.

O. The lower portion of the tail directly under the fuel tank must be louvered or left open to allow fuel to escape if the tank is ruptured.

P. Electronically controlled fuel injection systems shall not be Permitted.

Q. Fuel Cell Inserts - All fuel tanks must have inserts and all fuel cells must have a label in the area of the filler neck indicating acceptable type fuels and complies with the following specifications.

1. All fuel cell materials should be constructed of a woven fabric impregnated and coated with a fuel resistant elastomer.
2. All fittings shall be built into the fuel cell, bonded, and cured as an integral part of the cell or tank during vulcanization. Inspection plates may be utilized for the installation of fitting for fuel pick-up, vent and return lines.
3. The fuel cell shall be completely surrounded by a container(which also may be a part of the structure or body work of the car) to rigidly support the fuel cell and provide additional protection.

10.6 Firewall: An effective firewall of metal at least .0625 inch thick or other approved fire retardant material must be installed between the engine compartment and the cockpit. It must be as leak-proof as practical. The motor plate may not be made from carbon fiber, honeycomb, or other composite materials.

10.7 Revolving Parts: All revolving driveshaft components must be fully enclosed by an approved type of safety shield. UMARA approval will be required prior to entering and competing in any event. Carbon fiber torque tubes are prohibited.

10.8 Chassis Protrusions: Sharp protrusions (grease fittings, cotter keys, etc.) must not be located in close proximity to the tires.

10.9 Bumpers:

A. The car must be equipped with a rear bumper securely fastened to the structural components of the car and designed without any stubs pointing downward.

B. The bumper shall follow the contour of the tail and have adequate clearance to permit moving the car by the bumper.

10.10 Nerf Bars: The car must be equipped with adequate nerf bars made of steel and securely fastened to the main frame.

10.11 Steering and Suspension:

A. The steering mechanism must be engineered and assembled in accordance with sound engineering principles.

B. All highly stressed steering parts must be made from SAE 4130 steel or an alloy, specified by the alloy manufacturer as equivalent in physical properties. Aluminum alloy spindles, steering arms, pitman arms, tie rods and drag links may be utilized if recommended by the manufacturer for their intended use and are subject to approval by the UMARA Technical Director.

C. All such parts must be heat treated (including stress relieving, normalizing, annealing and hardening when applicable) after forming and/or welding as recommended by the manufacturer of the alloy being used.

D. Parts may not be joined by brazing, soldering or by dissimilar metals.

E. All steering parts that are electroplated must be oven-baked at a temperature of 375°(degrees)Fahrenheit, (plus or minus)25° (degrees) for not less than three (3) hours, after plating.

F. Parts that have been stripped of plating must also be baked according to the specifications in 10.11, item "E," unless the parts are to be reprocessed within a three (3) hour period.

G. Shot peening is recommended for all highly stressed parts. Authorized facilities should be used.

H. The steering wheel hub must be padded with a resilient material of not less than $\frac{3}{4}$ inch thickness.

I. Removable steering wheels, as approved by the Technical Committee, are MANDATORY. Removable pins in the steering hub are not allowed in UMARA.

J. Independent suspension is not permitted. The car's axle connecting the wheels must be one-piece tubular construction without the capability of camber adjustments to the wheel assembly. Any other construction will be considered as independent suspension. Titanium front and rear axles are prohibited.

K. **Shock Absorbers:**

1. Shock absorbers must have all valve mechanisms housed in a single cylindrical unit and may be mono tube or twin tube type.

2. Shock absorbers must be of steel or aluminum construction.

3. Shock absorbers with a connected expansion chamber for valving purposes or gas pressure reduction are prohibited.

4. Connections from the shock absorber to the frame for the purpose of carrying gases or oil are prohibited.

5. Shock absorbers may have only one external adjustment and may be adjusted remotely only by manual methods and cannot operate or be adjusted electrically.

10.12 Wheels:

A. The number of allowable wheels is restricted to two (2) front wheels and two (2) rear wheels. Cars shall be rear drive only.

B. The rim diameter must be 12 or 13 inches.

C. The wheel width shall not exceed eight (8) inches, except for the right rear, which may be a maximum of ten (10) inches.

D. Cars that have four (4) cylinders horizontally opposed, two (2) valve per cylinder, (VW). engines in them with 166 CID or less will be allowed a twelve (12) inch right rear wheel. The right rear wheel on VW powered cars with more than 166 CID shall not exceed ten (10) inches.

10.13 Tires:

A. All tires must be American Racer Tire brand.

B. Rear tires must be of a size, compound and brand specifically approved for that event by UMARA.

1. The presently approved Right Rear tire is American Racer tire brand, 23.5/12.0-13 S size in M32 compound.

2. The presently approved Left Rear tires are American Racer tire brand, 9.8/22.0-13, 22.5/10.0-13 or 22.5/9.0-13 sizes in M28 compound.

C. The maximum width of the right rear tire shall be fourteen and one-half (14 ½) inches. The maximum width of the left rear tire shall be twelve (12) inches. The front tires are limited to nine and one-half (9 ½) inches in width. All measurements shall be made sidewall-to-sidewall, race ready.

D. Any device(s) used for warming the tires prior to competition is prohibited.

E. Any solvents or chemicals applied to the tire that have the effect of altering the tire durometer or increasing adhesion, will be cause for disqualification.

F. No siping, grooving, or other tire modifications are allowed.

F. The use of a Wire wheel or wire brush to remove debris and/or excess build-up on any tire may be permitted under special circumstances??

H. Change to: The right side tires used during qualification or the first scheduled qualifying event, must be used for all subsequent points competition during the race. The change any right side tire after the car has been run in a qualifying event, will cause the car to be placed at the end of the lineup.

I. UMARA reserves the option to modify or change any of these tire rules prior to any race event. In the event that UMARA elects to alter these tire rules it will attempt to provide notice one race date prior to changing the rule.

10.14 Throttle:

- A. Throttle toe straps are mandatory. In addition, a minimum of three (3) return springs must be connected to the throttle and at least one (1) of these must be connected to the butterfly shaft.
- B. The throttle pedal must have a wide-open pedal stop.

10.15 Ignition Systems and Electronic Equipment:

- A. UMARA reserves the right to approve or disapprove any ignition, other than magnetos, prior to their use in competition. It is the responsibility of the participant, not the manufacturer, to obtain proper approval.
- B. An ignition switch must be mounted within easy access to driver and be in operating condition.
- C. Only UMARA mandated and approved one-way radio communication devices used by UMARA Officials to communicate to the drivers is allowed. During competition, a working, approved one-way radio receiver communication device used by UMARA Officials to communicate to the drivers is MANDATORY. The use of in-car radios that both transmit and receive are prohibited.
- D. The use of electronic logic processes to control any function of the racecar, and/or any system for gathering data from any function of the racecar including recorded lap times with the exception of a tachometer which records only the engine RPM is strictly prohibited. Electromotive "DIS" ignition systems are OK because they are not programmable software.
- E. Ignition electronics that provide traction control are prohibited. All electronic components may be inspected, sealed, impounded, or confiscated by UMARA officials at any time. Penalty for violation of this rule is a one (1) year suspension from the date of infraction with the loss of all points earned for the season.
- F. Any device which allows the driver to control or adjust the tire air pressure during the running of an event is strictly prohibited.

10.16 Dog Clutch: Dog clutch must be positive and in good working order.

10.17 Car Numbers: All cars must carry their correct numbers, as issued by the office of UMARA. These numbers must be legible in contrasting color to the primary color of the tank and be displayed on both sides of the tail. The tail number shall be of sufficient size to be legible to the scorers. The final decision as to the visibility of the number will be determined by timing and scoring. Number on the nose is recommended. Duplicate numbers will be changed by the UMARA Pit Steward. It is also recommended the driver name be displayed on the sunvisor (if used).

10.18 Engine Size Limits: Specification for all engines listed below.

A. Pushrod Type Engines:

1. Four (4) cylinder inline, two (2) valves per cylinder, water cooled, iron block and head with intake and exhaust ports on the same side of the head. MAXIMUM 184 C.I.D. (3016 cc).
2. Same as (1) above, except utilizing a "cross-flow" cylinder head. MAXIMUM 174 C.I.D. (2852 cc).
- 2a. Same as (1) above, except using an aluminum block on an approved non-cross flow aluminum "Fontana" cylinder head. MAXIMUM 174 C.I.D. (2852cc).
3. Four (4) cylinder inline, two (2) valves per cylinder operated by pushrods, water-cooled utilizing an aluminum block and/or head. MAXIMUM 166 C.I.D. (2721 cc).
4. Four (4) cylinder horizontally opposed, two (2) valves per cylinder intake and exhaust must be inline and on the same axis. MAXIMUM 174 C.I.D. 2852 cc.
5. Maximum of six (6) cylinders, V-type (maximum 90°degrees), Two valves per cylinder, water cooled, iron block and head. MAXIMUM 174 C.I.D. (2852 cc).
6. Same as (4) above, except utilizing an aluminum block and/or head. MAXIMUM 166 C.I.D. (2721 cc).

B. Single Overhead Camshaft Type Engines:

1. Maximum of six (6) cylinders in-line or V-type (maximum 90° degrees), water-cooled, two (2) valves per cylinder. MAXIMUM 146 C.I.D. (2393 cc).
2. Four (4) cylinder horizontally opposed, rocker arm actuated four (4) valves per cylinder, water-cooled engine. MAXIMUM 122 C.I.D. (2000 cc).
3. Four (4) cylinder in-line, aluminum block and head "Esslinger" Alteration of the basic design of the head or block is prohibited. MAXIMUM 161 C.I.D. (2638cc).

C. Double Overhead Camshaft Type Engines:

1. Four (4) cylinder inline, water-cooled, maximum of four (4) valves per cylinder. MAXIMUM 122 C.I.D. (2000 cc).

a. The stock production "Cosworth Vega," four (4) cylinder inline, four(4) valves per cylinder, utilizing the stock production block and head. Alteration of the basic design of the head or block is prohibited. MAXIMUM 130 C.I.D. (2082 cc).

b. Cast iron block, aluminum head four (4) valve per cylinder. MAXIMUM 145 C.I.D.

D. Complete engines and/or major components must be available in a reasonably sufficient supply to all competitors at competitive prices.

E. All engines must be normally aspirated, internal combustion, four (4) cycle reciprocating piston-type. Ram-type air scoops facing forward are not permitted.

F. The preceding engine sizes are the maximum permitted with no clean up allowances.

Any engine legal for UMARA Sportsman Midget competition will be allowed to compete in UMARA National Competition without the Sportsman inlet restrictors. If it becomes apparent that this provides a distinct advantage for the Sportsman engine, it will be restricted appropriately at the discretion the UMARA Board.

NOTE: UMARA reserves the right to disallow any component, engine and/or ignition system for competition, which in its judgment does not meet the spirit and intent of competitive racing, in regards to cost and/or performance. Any engine not covered by the preceding specifications must be submitted for approval prior to entering competition.

10.19 Oil Supply:

A. For events held on paved tracks the entire lubricating system must be of the dry sump type.

10.20 Engine Coolant

All liquid cooled engines must use only water in the cooling system. No anti-freeze of any type, fuel, oil, or similar coolants may be used. Approved rust inhibitors or water pump lubricants are permitted.

10.21 Exhaust and Muffler:

- A. Exhaust systems must be designed to create a minimum fire hazard and a minimum hazard to other competitors.
- B. Cars having exhaust pipes in or passing the cockpit, in close proximity to the driver, must have raised metal guards adjacent to the exhaust pipe to afford protection to the driver and mechanic.
- C. The car may be required to have a muffler if local conditions warrant. Muffler tubes should be bolted to the exhaust collector in addition to clamps. Mufflers should be attached so as they follow the angle of the nerf bar as close as possible.

10.22 Seating System:

- A. Aluminum seats are mandatory. The seat must be mounted to the chassis in a minimum of four places with a minimum of 5/16" steel bolts with large OD washers and nuts.
- B. It is absolutely necessary, in the reclining position, to provide a kick-up (roll-up) forward to the buttocks of sufficient height and strength to prevent forward movement and/or rotation of the torso under the seat belt.
- C. It is mandatory that all cars have a headrest of high impact, shock-absorbing material behind the driver's head with a minimum thickness of one (1) inch. Seats with built-in headrest must also comply with this requirement.
- D. In the reclining position, adequate padding must be used under the buttocks to absorb impact.

10.23 Seat Belts: The use of an approved seat belt with a latch/lever release mechanism is mandatory. Life of the belts in use shall not exceed two (2) years and must be date stamped by the manufacturer. All belts must have a label showing that they meet SFI specifications.

- A. Seat belts must be worn as tight as possible.
- B. Seat belts must be worn in such manner that it passes around the pelvic area at a point below the anterior-superior iliac spines. Under no condition may it be worn over the area of the intestines and abdomen.
- C. Seat belts should not pass over the sides of the seat. They should come through the seat at the bottom on each side, thereby wrapping and holding the pelvic area over the greatest possible area. At any point where the belt passes through the side of the seat, the seat edges must be rolled or have grommets to prevent chafing or cutting of the material.

- D. Five (5) or six (6) point (crotch) belts connected to the main belt quick release mechanism and securely attached to the chassis, is mandatory

10.24 Shoulder Harness: The use of double over-the-shoulder straps is mandatory. The minimum width of the shoulder straps is three (3) inches. Both the fastening design and condition of the straps are subject to the inspection of the Technical Committee. Life of the shoulder straps in use shall not exceed two (2) years and must be date stamped by the manufacturer. All straps must have a label showing that they meet SFI specifications.

A. Shoulder straps should be attached directly to the strong structural member of the chassis, close behind the driver's head and neck. At points of attachment, they should be four (4) to six (6) inches apart. They should be attached in a line approximately 90° (degrees) to the seat back and be approximately level with the top of the driver's shoulders.

B. Where the straps pass through the seat or body structure of the car, the edges must be rolled or have grommets, to prevent chafing or cutting of the strap material.

C. Shoulder straps must be secured behind the driver's shoulders so that they are prevented from sliding sideways more than one (1) inch in either direction.

D. Two (2) belts joining in a "Y" behind the neck to form one strap may not be used.

E. The shoulder harness should be worn as tight as possible.

10.25 Brakes:

A. Cars must be equipped with a minimum of 3 wheel brakes.

B. If at any time during competition it becomes evident that a car is without brakes, the necessary repairs must be completed before the car can continue competition.

C. Brake discs are limited to being manufactured of steel, ferrous or aluminum alloy. Titanium, carbon or carbon composite brake discs are not allowed. The use of carbon fiber or other composite materials in the braking system is not allowed. Brake pad material is open.

10.26 Appearance: All cars will appear at the track in a clean, respectable, and presentable condition.

UMARA RULE BOOK ADDENDUM

Effective August 1, 2002

1. The use of any fuel or oil additive or any other method of artificially introducing anything other than regular air and pure methanol (or ethanol if pre-approved by UMARA) to the race engine's combustion chamber is strictly forbidden.
2. The penalty for breaking this rule is loss of points and prize money for the race meeting during which the infraction was detected PLUS a one event suspension from competition. This penalty applies to the racecar, owner and driver involved.
3. A second offense will result in a loss of points and prize money for the race meeting during which the second infraction was detected PLUS an additional 3 event suspension. This penalty applies to the racecar, owner and driver involved.
4. A third offense will result in a one-season suspension for the driver and car owner involved.
5. This rule applies to all UMARA Race Car Classes.
6. As noted elsewhere in this Rule Book, UMARA has the right to check any part or function of every Race Car that competes with UMARA at any time. This rule is extended to give UMARA the right to impound or "seal" any car or part of any car (i.e. engine or electronic ignition system) at any time to allow proper tear down and/or inspection of the engine or any other function or component of the car. If the Racer and/or car owner refuses to allow UMARA to impound or "seal" the car, part or component of the car, and/or perform a prompt detailed inspection the car will be considered non-compliant and the car, driver and car owner will suffer the same penalties as if the car had been "non-compliant" for the event in question, plus the previous 4 race meets.

Appendix A

Heat Race* line-ups with Qualifying

Qualifier # Heat 1.	Qualifier # Heat 2.	Qualifier # Heat 3.
1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
25	26	27
28	29	30

*All heat races are a full inverted Start

Heat race numbers may change but the grouping will remain the same.

Example: Heat # 1 may become the third or second heat with the assigned cars remaining the same

Heat races will be 12 laps unless circumstances dictate otherwise

**Feature Line-ups

The top four finishers from each heat transfer to the feature with the fastest six that transferred inverted in the first three rows. DNF does not count as a transfer.

The remainder of cars that did not transfer will start behind the transferred cars straight up according to qualification times.

This procedure is subject to change based on the running car count and may include a semi-feature. If a semi-feature is required, the top five or six finishers from the heats will transfer to the feature and the required finish order to transfer to the feature will be determined by the car count.

Regular feature events will be 30 laps unless circumstances dictate otherwise
Special feature events may be greater than 30 laps

Appendix B

Heat Race* line-ups by Draw

<u>Draw # for Heat 1.</u>	<u>Draw # for Heat 2.</u>	<u>Draw # for Heat 3.</u>
1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
25	26	27
28	29	30

*All heat races lined up according to above draw order

Heat races will be 12 laps unless circumstances dictate otherwise.

**Feature Line-ups

The top four (4) finishers from each of the three heats transfer to the feature. The cars (whatever number) that transfer will re-draw with the lowest number drawn starting in the 1st row inside and the highest number drawn starting in the last position of the transferred cars. DNF DOES NOT COUNT AS A TRANSFER.

The remainder of the cars that did not transfer will be lined up according to finish in the heat races as listed below. Example of twelve car transfer from three 8-car heats

#13. 5 th – heat #1.	#14. 5 th – heat #2.
#15. 5 th – heat #3.	#16. 6 th – heat #1.
#17. 6 th – heat #2.	#18. 6 th – heat #3.
#19. 7 th – heat #1.	#20. 7 th – heat #2.
#21. 7 th – heat #3	#22. 8 th – heat #1.
#23. 8 th – heat #2.	#24. 8 th – heat #3.

Regular Feature events will be 30 laps unless circumstances dictate otherwise.

Special Feature events may be greater than 30 laps

This procedure is subject to change based on the running car count and may include a semi-feature. If a semi-feature is required, the transfer number to the feature may change. Transfer to the feature and the required finish order to transfer to the feature will be determined by the car count.