

USRA

United Slot Racers Association

1971-2003
Racing into our
4th Decade of
National
Championships

2003

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By accepting membership into the USRA as a racer or commercial member, you are agreeing to comply with all rules and bylaws in this rule book and not bring any legal action against the USRA or any of its officers

USRA

**The
United
Slot Racers
Association**

**2003
Wing-Car Division
National Rules**

UNITED SLOT RACERS ASSOCIATION BYLAWS

ARTICLE I

A. DEFINITION OF BYLAWS

These bylaws constitute the code of rules adopted by the United Slot Racer's Association, (hereinafter USRA), for the regulation and management of its affairs.

B. PURPOSES & POWERS

The primary purpose of the Organization is to establish rules and procedures to standardize the sport of slot car racing, and to further the general interests of all persons engaged in the hobby/ sport of scale model slot car racing.

ARTICLE II - MEMBERSHIP

A. DEFINITION OF MEMBERSHIP

The members of this Association are those persons having membership rights in accordance with the provisions of these bylaws.

B. CLASSES OF MEMBERSHIP

The Association will have the following classes of members: General Membership and Commercial Membership. Only General Members in good standing may enter sanctioned events.

C. MEMBERSHIP DUES

The membership dues payable to the Association by members will be in such amounts as may be determined from time to time by vote of the members. Dues are payable annually. Dues are \$10.00 US for General Membership at the national level, \$25 for Raceway membership, and \$50.00 US for Commercial Membership, which are payable to the National Treasurer during the year, or at the National race event. Only products of USRA commercial members will be approved for use at USRA regional and national competitions.

D. VOTING MEMBERS

Each member will be entitled to one vote on each matter submitted to a vote of the members.

E. TRANSFERABILITY OF MEMBERSHIP

Membership in this Association is nontransferable and non-assignable.

F. TERMINATION OR SUSPENSION OF MEMBERSHIP

Membership will terminate or be suspended with this Association on any of the following events:

1. The death of a member.

2. Conduct detrimental to the sport, subject to the discretion of the Ethics Committee, will result in suspension.
3. Dishonesty with respect to the handling of USRA funds.
4. Commercial members found by the Ethics Committee to be operating outside the bounds of proper conduct in either the marketing or production of products or in violation of specific USRA rules with respect thereto will be subject to suspension, or in extreme cases expulsion from the USRA. This action would, pursuant to Article XI, Section A, preclude their products from competition in sanctioned events for the duration of the suspension, or in the case of expulsion until readmittance. Length of suspensions will be decided by the Ethics Committee after a full investigation. Such investigation will include a full and fair opportunity to be heard by the member and any other individuals involved. The opportunity to be heard personally will take place with the Regional Director and one member of the Ethics Committee.

ARTICLE III - EMERGENCY CLAUSE

A. EMERGENCY RULE CHANGES

USRA Ethics Committee may add, delete or change any rule(s) in fairness to the sport of slot car racing, All decisions will be final, In emergency situations, representatives must abstain from voting on issues which will benefit their firm directly.

ARTICLE IV- OFFICERS

A. ROSTER OF OFFICERS

The officers of this Association are charged with the responsibility of conducting general business in the name of the Association at the national level, to include the publication and administration of rules, finances, publicity, and other necessary business are hereby granted the authority to do so.

1. National Director
2. Assistant Directors
 - a.) One for each Division of racing
3. Communications Director
4. Treasurer
5. Technical Directors
 - a.) One for each Division of racing
6. Assistant Technical Directors
 - a.) One for each Division of racing
7. Tech Advisors
 - a.) One for each Class of racing

B. SELECTION OF OFFICERS

The officers will be elected annually by vote of the general membership of

the Association at the national meeting. Each officer will remain in office until a successor to such office has been elected and qualified. The change over date will be on October 1 for the Wing-car Division. The Scale Division change over date will be June 1.

C. NATIONAL DIRECTOR

The National Director will chair the general membership meeting, and will have the authority to make the final decision on technical matters which have not been approved by the members of the Association. He/she has the authority to cancel or relocate the site of the USRA Nationals, in accordance with the national rule book procedures. He/She has the responsibility of ensuring that the rule book is updated in accordance with the annual vote of the membership. The National Director may not be a manufacturer, owner, or employee of slot car producing companies.

D. ASSISTANT DIRECTORS (Wing-car Div. & Scale Div.)

The Assistant Directors will perform all duties when the National Director is absent or is otherwise unable to act. The Assistant Director of each Division will exercise control over their respective Division. The Assistant Directors may not be a manufacturer, owner, or employee of slot car producing companies.

E. COMMUNICATIONS DIRECTOR

The Communications Director will be the custodian of the Association records, will give all notices as required by law, or by these bylaws, or which maybe assigned from time to time by the National Director.

F. TREASURER

The Treasurer will be responsible for the collection of dues from the members, and for the preparation of in annual report on the finances of the Association. He/She will be responsible for the distribution of the National Racing Rules to the membership.

G. TECHNICAL DIRECTORS (Wing-car Div. & Scale Div.)

The Technical Directors will be responsible for the review of technical specifications proposed in rules changes and for the technical inspection for rules compliance of entries in National Championship events. He/She will be a member of the committee reviewing equipment modifications which have not been approved by membership vote for acceptability in USRA competition, and head the Technical Committee The Tech Directors may not be a manufacturer, owner, or employee of slot car producing companies.

ARTICLE V - COMMITTEES

A. OFFICIAL COMMITTEES

The association may have certain committees which will have and exercise some prescribed authority in the management of the Association. These committees shall include, but not be limited to the following: Bylaws Committee - no less than 3 members may serve on this committee; Rules Committee - no less than 3 members may serve on this committee; Nationals Committee; Product Approval Committee - no less than 3

members may serve on this committee; Ethics Committee- no less than 10 members may serve on this committee; Publicity Committee.

B. COMMITTEE MEMBERSHIP

Members of these committees will be appointed by the National Director and confirmed by the Directors. The Product Approval Committee will be made up of three members who are not manufacturers or come under that definition.

C. BOOKS AND RECORDS

The Association will keep correct and complete books of records of account.

D. NONPROFIT OPERATIONS

The Association will not have nor issue shares of stock. No dividend will be paid and no part of the income will be distributed to its members or officers. However, the Association may pay such compensation in a reasonable amount to members or officers for expenses incurred on behalf of the USRA.

ARTICLE VI - AMENDMENT OR MODIFICATION OF BYLAWS

A. Any amendment to the bylaws requires 2/3 majority vote of the General Meeting.

B. Amendments to technical specifications require a simple majority of the General Meeting.

ARTICLE VII - ORGANIZATION

A. For various administrative purposes, the 48 contiguous states, Hawaii, Alaska, and Canada shall be geographically divided into 5 areas;

WEST
INTERMOUNTAIN
MIDWEST
SOUTH
EAST

B. Each area will be headed by a Director appointed by the National Director, It will be his/her responsibility, by working with the respective regional and neighboring area directors where appropriate, to coordinate series events within the various regions to avoid, to the greatest degree possible, conflicts of race dates. It is further suggested that his/her responsibilities include publication of this race schedule, and respond to requests by members for same. He/she will also serve as arbitrator of disputes at the regional level, consulting the other area Directors, and National Director when required.

C. Any number of regional associations may be organized within the areas. In addition to the executive duties at the regional level, the Directors of these regions shall make up the competition committee at the national level, with responsibilities to include National Event site selection, and the voting

- members of the meeting to set the agenda for the national general meeting
- D. Regional Associations are encouraged to organize and promote annual series championships for each division in accordance with the National Rules.
1. Wing-car Division - Traditional Group & Open Racing classes, Wing Cars
 2. Scale Division - Non Glue Classes, Scale Cars
- E. To apply for consideration as an official regional entity, the following procedure should be followed:
1. The series must have a minimum of 50 (fifty) regional dues paying members.
 2. The series must file a list of officers and projected race schedule with division director by September 1 of each year and coordinate schedules with the division director by October 1.
 3. The series must have organized and run a race series complying with minimum revisions, to the National USRA rules for at least one season. The racing series should include at least three raceways.

ARTICLE III - PURPOSE OF COMMITTEES

A. Bylaws Committee

It shall be the duty of the Bylaws committee to plan organize and make recommendations for changes in the bylaws.

B. Rules Committee

There will be a Rules Committee for each Division which will review, recommend, and update proposed rule changes Prior to any rule change becoming final, it must be voted on by the Ethics Committee with final publication in the National Rule Book for the membership.

C. Nationals Committee

It shall be the duty of the Nationals Committee to plan, organize and oversee the National Championships, to include publishing a Nationals Booklet, establishing race entry fees, soliciting and distributing race prizes, and the registration, technical inspection, and conduct of the races.

D. Product Approval Committee

It shall be the duty of the Product Approval Committee to propose and recommend changes to the Ethics Committee. The National Technical Director and Assistant Technical Director will be members of this committee.

E. Ethics Committee

The Ethics Committee will have the responsibility of monitoring the compliance of Commercial Members with the USRA Rules and bylaws.

F. Site Selection Committee

This Committee will be comprised of the Regional Directors and the National Director and will have the responsibility of determining site for the USRA Nationals.

G. Publicity Committee

It shall be the responsibility of this Committee to promote the USRA through all forms of media available. This Committee will further have

the responsibility of contacting commercial sponsors for sponsorship of slot racing events in all divisions.

H. Technical Committee

Technical issues shall be determined by a committee.

1. The National Tech Director shall be the chairman of the committee.
2. Each class shall elect a technical advisor to sit on the committee.
3. The Tech Director and the individual class tech representatives shall decide national issues for that class. If an impasse exists, then the USRA National Director shall be the tie breaking vote.
4. The tech advisor will be involved in teching the class.

ARTICLE IX - GENERAL MEETING

A. ANNUAL MEETING

A general meeting will be held annually in conjunction with the National Championship event. Business will include:

1. Financial report.
2. General business agenda based on rule changes recommended by members for consideration. Changes must be submitted in good form to the National Director at least sixty (60) days prior to the National Championship.
3. Election of officers

B. DIRECTORS MEETING

An executive work session will be conducted annually prior to the General Meeting to formulate the agenda for the General Meeting. The meeting will be open to all officers at the regional and national level and their guests. Commercial Members are invited to this meeting for advice on technical matters. Voting is restricted to Regional Directors or their authorized surrogate.

- C. There shall be a meeting for each class following qualifying or at another appropriate time and rules relating specifically to that class shall be decided at that time.

ARTICLE X - EQUIPMENT APPROVALS

- A. Manufacturers of goods who wish to have their components accepted for use in restricted classes in USRA sanctioned events at the national or regional level must be commercial members of the Association and must conduct themselves in a matter suitable to the best interests of the sport.
- B. Manufacturers must submit one piece each of the component they are seeking to have approved to the respective Divisional Director by August 1 for evaluation and inspection.
- C. Each Divisional Director will report their findings and decisions directly to the USRA National director.
- D. Each Manufacturer must notify Distributors and Raceways (in writing) of any and all new products by Sept. 1.
- E. Before being approved for USRA competition the product must be Commercially Available at Distributors and/or retailers by October 1.
- F. The director will notify the manufacturers of approval or non-approval for the

following year's Div. I or Div. II National Championships.

ARTICLE XI - RACER SPONSORSHIP

- A. Any racer who receives merchandise directly from any manufacturer at less than retail price is considered a sponsored racer.
- B. Level I (Major) Manufacturers (defined as complete line manufacturers) may sponsor two drivers maximum per region plus four wild cards total.
- C Level 2 (Minor) Manufacturers (defined as specialized manufacturers) may sponsor one driver only per region plus two wild cards total.
- D. Employees of manufacturers are exempt from this rule and evidence of employment must be proven to the USRA by two of the following means:
Canceled check, W-2 Form and/or 1099 Form.
- E. The Ethics Committee will decide the level of the manufacturers.
- F. Each manufacturer with sponsored racers will submit a list of them to the National Director with the manufacturer's annual membership dues.

ARTICLE XII - SANCTIONED RACING EVENTS

A. NATIONAL CHAMPIONSHIP

A National Championship shall be conducted annually for each division of USRA (i.e., major racing category).

B. FORMAT FOR NATIONAL RACES

The National Championship for Division I will be a one (1) race event scheduled at a site determined by the Site Selection Committee. The Committee will receive bids from the prospective race sites no later than 90 days prior to the National even. The site and an alternative site will be announced prior to tile end of the calendar year. The Committee will be responsible for any change of site decisions and will assist the site representatives in the organization and promotion of the event, If the raceway which is selected to host the USRA Nat's is sold, the race automatically goes to the alternate location. (This does not mean that if a slot car track is sold and replaced in the same location, under the same owner, the race will be moved only if the slot racing business itself changes hands). If the alternate site also has been sold, the USRA president must:

1. Select a new site to host the Nat's.
2. Cancel the race for that year .

C. SPONSORSHIP

USRA sanctioned events shall not take on the name of any company nor individual engaged in commercial sale of, or production of, or deriving commercial benefit from the sport of Slot Car Racing. This would not preclude a retail establishment from normal promotional billing, but would specifically exclude manufacturers or distributors from usurping the USRA image for their benefit. There are no such restrictions placed on major corporations not operating in or affiliated with persons or firms operating commercially in the sport of Slot Car Racing, and such

outside sponsorship is encouraged.

D. NAT'S VOTING PROCEDURE

Before the voting procedure begins, the officers presiding over the meeting shall identify all of the eligible voters by stating their name and title. When their name is called, the voter will stand to make him/herself visible to the meeting attendees. (The purpose of the procedure is to enlighten all of the meeting attendees as to who can vote and what position this person holds in the USRA)

1. All secret ballots should be made on papers with voting subjects and selections clearly stated on each ballot. Selections may be handwritten, typed or photocopied.
2. Prepared ballots will then be distributed only to the people eligible to vote. If there are any additional ballots, they will be destroyed before my votes are cast.
3. The voter will then make a check mark alongside his/her selection and deposit his/her ballot into a certified empty ballot box which is in clear sight of all meeting attendees.
4. After all votes have been cast, the officer(s) presiding over the meeting will then remove the ballots from the box one at a time. Each ballot removed will have its selection read aloud so that all meeting attendees can hear the vote selection. Ballots will be retained for future reference.
5. At this point, the two locations receiving the highest number of votes will be retained (in lite event of a tic, locations that tie for second will be retained as well). The voting procedure will then commence again for the retained locations (top two) by following the procedure from letter a. above and proceeding through letter d. above. After completing the second and final vote, proceed to f. below.
6. After all ballots have been read, the officer(s) presiding over the meeting will total all votes and announce the voting results aloud so that all meeting attendees can hear the voting results.
7. If someone challenges the vote, the ballots can be recounted so that all meeting attendees can see the voting results again,

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All Entry forms and or Tech Sheets are and will remain the property of the United Slot Racers Association (USRA). These documents will not be available to the racers after being accepted by the USRA as the official document provided by the racer for the sanctioned event.

General Competition Regulations



1) DRIVER CLASSIFICATION WING-CAR DIVISION

A. AMATEUR

1. Race prize payout will be in merchandise certificates and or trophies, with at least 50% payback to top 8 finishers.
2. All car classes will have an amateur and an expert division (except Spec-15)
 - a. Spec-15 Amateur only
 - b. GP-12 Amateur and Expert
 - c. INTERNATIONAL 15 (15A) Amateur and Expert
 - d. COBALT 12/15 Amateur and Expert
 - e. GROUP 27 Amateur
 - f. SEMI-PRO GROUP 7
3. Any racer who has won in any Amateur class at the National Championship must compete in the expert division in that (and any lower) class. The winner in Gp-27 will move to Pro 27, and the winner in Semi-Pro Gp-7 will move to Pro Gp-7
4. Amateur racers may enter any amateur class with these exceptions:
 - a. Spec-15 racers may only race Spec-15 & Amateur GP-12.
 - b. You may not run restricted GP-12 and Semi Pro Group 7 at the same event.
 - c. No Amateur or Semi Pro entrant may also race Pro Group 7.
 - d. No Pro Racer may enter any Amateur class
 - e. No racer who has raced Pro Gp-7 at the National championship in the past five years may enter any amateur Division.
 - f. No racer may race both the Amateur and Expert divisions of any class at the same Nats.

B. PROFESSIONAL

1. Race prize payout will be in cash to Pro Gp-7, Senior Open, and Sponsored Pro-27 racers. Amateurs competing in Pro-27 will receive merchandise prizes
2. PROGROUP 7
 - a. All drivers with exceptional driving ability
 - b. Any driver sponsored by a major manufacturer.
3. PRO GROUP 27
 - a. All drivers with exceptional driving ability
 - b. Any driver entering Group-27 who is sponsored by a major manufacturer must race in this class not Amateur.
 - c. Any driver entering Group 27 who has won the National Championship in Group 27, Semi Pro Group 7 or Pro Group 7

must race in this class, not Amateur Group 27.

- d. Any driver entering Group 27 who has entered the Pro Group 7 class at the National Championship in the past five years must race this class not Amateur Group 27.

B. SENIOR OPEN

All Drivers age 45 or over are permitted in this class. Pro Group 7 rules will be followed.

III) COMMERCIALLY AVAILABLE

- A. Major components for Group and restricted racing (motor, motor parts, chassis, chassis parts, bodies) must be readily available to all participants, sufficiently far in advance of the race event for all participants to be able to compete on an equitable level.
- B. Commercially available means that the product must be readily available through retailers and/or 3 national USRA member Commercial Distributors by October 1 of the year prior to the USRA National Event (or other USRA competition event in which they will be used).
- C. The number of pieces required to be available for a product to be considered commercially available is 250 pieces for Gp-12/ 15 motors, tagged armatures, restricted chassis, any restricted component, and bodies.
- D. A product will be considered to be no longer commercially available after production has ceased; products in this status which have been approved for competition will continue to be legal for USRA competition for a period of no longer than 2 years after production ceases.
- E. All products which are considered to be commercially available and restricted products must meet retail specifications and must be sold at standard industry discounts through approved dealers. Any product that is restricted in retail price by the USRA may be adjusted in retail price according to the annual cost of living, maximum 5% annually. These items include: Group 12, 15, and 27 armatures, and GP-12 chassis.

IV) RACE PROCEDURE

A. REGISTRATION

All cars shall be inspected and impounded prior to qualifying,

1. No cars will be accepted after announced registration closing time.
2. The chassis should be engraved with the drivers entry number, class, and the initials of the tech inspector. The body should be marked with a spot of non-removable paint or ink.

B. ACKNOWLEDGEMENT

All racers entering an event should be aware of the rules governing it, and withdrawal is not an option in the case of a protest

IV) NO SMOKING

Smoking is prohibited within the raceway at all USRA events.

V) NO ALCOHOLIC BEVERAGES

No alcoholic beverages may be consumed within the raceway or within close

proximity. Consumption of these beverages must be confined to those establishments properly licensed for this use.

VI) DRIVERS MEETING

It is suggested that a drivers meeting be held prior to qualifying to discuss race and qualifying procedures, marshaling responsibilities, racer conduct, glue rules, track calls, disqualifications, track tech, etc. Drivers with specific questions should ask them at this time.

V11) TRACK PREREQUISITES

In all USRA events, qualifying voltage for all classes will be limited to a maximum of 16.0 volts, and race voltage will be limited to a maximum of 14.0 volts. This voltage is to be measured, unloaded, without the cars on the track using accurate digital voltmeters to record the values.

VIII) TRACK CONDITIONS

A. LIMITED GLUE

1. Glue zones must be clearly marked, and be no more than 10 inches in length as measured from the start of the curve back. Glue may be applied to glue zones only & then may be spudged or smoothed past zone & through turn with glue spudger and or hand (fingers).
2. Glue may be removed from the turns with a clean, dry, rag only. Care must be taken to avoid changing conditions on adjacent lanes.
3. All gluing and cleaning of the track braid and straights must be completed before the power comes on. Nothing may be put down or removed during the racing.

B. SPRAY GLUE

1. The track will be cleaned and sprayed prior to the racing and may be re-sprayed as deemed necessary by the race director(s).
2. The track surface in the turns may not be touched or altered in any way. No addition, deletion, or redistribution of the glue is allowed without specific and prior race director approval.

C. TRACK CLEANING

All braid and the track surface of all straight sections may be cleaned in both spray glue and limited glue conditions.

D. ACCIDENTAL SPILLAGE

If an accidental spill occurs, the race director may re-spray the affected area to restore fair racing conditions.

PLEASE NOTE:

Most cleaning solutions are FLAMMABLE! Care must be taken during their use. Fire extinguishers should be located in the immediate area and other necessary precautions taken to insure safety.

IX) QUALIFYING

A. ORDER

1. PROFESSIONAL GROUP 7

Determined randomly, such as drawing from a hat.

2. Other classes

- a. Limited glue - Qualifying will be in reverse order of registration
- b. Spray Glue - Qualifying will be in order of registration.

B. FORMAT

1. Time - A two minute run is allowed to establish the fastest single timed lap. Back up times will be recorded to alleviate tie breakers. Spec-15 class will not qualify. Lanes will be chosen at random. Amateur GP-12 will run a one minute no bye round of qualifying.
2. The first qualifier will receive one extra minute qualifying time.
3. Byes - A racer may take one bye for any reason (may abort initial qualifying attempt and re-attempt during the bye round).
 - a. Thirty seconds will be deducted from the racers remaining time as a penalty for using a bye,
 - b. Cars will be technically inspected prior to their bye round,
 - c. Times made during the initial attempt and the bye round will count
 - d. Byes will be run (racers remaining time less thirty second deduction) at the end of qualifying for each respective class, Order will be the same as the original round.
4. If a lap timer is not available, qualifying may be conducted in tile form of a one minute run for total laps and sections. Good marshaling must be assured.
5. Each racer will be given a specified amount of time (not to exceed fifteen seconds) to get hooked up to begin his/her qualifying round. This should be set into the computer to automatically start the time and make it uniform for all racers. Any registered racer not present to qualify when called will be given an automatic bye. Any racer unavailable for the bye will stand by his/her previous best, or if no times are recorded, will be placed in the first (lowest) level of consolation races.
6. Local Option Format (excluding National Competition)
 - a. One minute with no byes
 - b. One minute with bye with no loss of time

X) EUROPEAN (STAGGERED) LANE ROTATION

- A. USRA events will follow the European or staggered system, This rotation for tracks marked with American raceways colors is described as follows:
 1. Consi - Racers will race on either the red or the black set. Racers on the red set (red, green, blue, purple) rotate down the track to purple and then jump to red continuing rotation down the track. Racers on the black set (black, yellow, orange, white) rotate tip the track to white and then jump back to black continuing rotation up the track.
 2. Quarterfinal, Semi, and Main Event Races - Racers running on the

red set will rotate down the track to purple, keeping on the red set. After running purple, rotate to the black lane of the black set. After running white, jump to red and rotate as indicated for the red set. Continue until all eight lanes have been run.

XI) AUSTRALIAN RACE FORMAT

- A. All entrants will contest a series of consis, heats, quarterfinals, semifinals and finals depending on the number of entries.
- B. All races designated as “consis” will be contested over 4 lanes only, running on either the red set i.e. red, green, blue, purple or the black set i.e. black, yellow, orange, white.
- C. All other races will be contested over 8 lanes.
- D. All races will be on a “move up” basis. The following schedule has been adopted to ensure that a minimum of four drivers will move up from each race.
 - 1 - 8 entries: Final only
 - 9 - 11 entries: Round Robin
 - 12 - 22 entries: two round-robin semis and final. Top 4 in each semi move up.
 - 23 entries: one round-robin heat, two semis and final. Fastest 12 qualifiers into semis - top 4 in heat move up.
 - 24 -44 entries: Four quarterfinals, two semis and final. All entrants start in quarterfinals, top 4 in each move up to semis, top four in each move up to final
 - 45-46 entries: Two round-robin consis, four quarterfinals, two semis, and final. Fastest 24 qualifiers into quarterfinals, top 4 in each consi move up.
 - 47-60 entries: Four round-robin consis, four quarterfinals, two semis, and final. Fastest 16 qualifiers into quarterfinals, top 4 in each consi move up.
 - 61-76 entries: Four sub-consis, four consis, four quarterfinals, two semis, and final. Fastest 16 qualifiers into quarterfinals, qualifiers 17-32 into consis, top four in each race move up.
 - > 76 entries: For races with over 76 entries create sub-sub-consis (and sub-sub-sub-consis if needed) using the same procedures as for sub-consis. Top four in each race always move up.
- E. Lane choice will be determined first by qualifying position then by lap total and position from previous heat.
- F. In moving racers up from Consis, Quarterfinals, or Semis, the same logic applies. Lane choice selection order is determined by the total laps turned by the winners of the qualifying race.
 - 1. For main event move-ups first pick goes to the racer with the most laps out of the two semis, second pick goes to the racer with the most laps out of the other semi.
 - 2. Choices are then alternated between semis. Third pick goes to the second place finisher in the semi that had first pick, and fourth goes to the

second place finisher in the semi with second pick etc.

G. Racers are seeded into the appropriate semis, quarterfinals, or consis according to the following pattern (example given for semis and quarterfinals, consis same pattern as quarterfinals).

24 or fewer entries	Semi-A	Semi-B
Qualifier #	1	2
	3	4
	5	6
	7	8
	9 or winner Heat-A	10 or winner Heat-B
	11 or second Heat-A	12 or second Heat-B
	13 or third Heat-A	14 or third Heat-B
	15 or fourth Heat-A	16 or fourth Heat-B
25 or more entries	Semi-A	Semi-B
	Quarter A or B winner with most laps	Quarter C or D winner with most laps
	Other winner of Quarter A or B	Other winner of Quarter C or D
	Second place from Quarter with first pick	
	Second place from Quarter with second pick	
	Continue alternating for remaining picks	

	Quarterfinal-A	Quarterfinal-B	Quarterfinal-C	Quarterfinal-D
Qualifier #	1	2	3	4
	8	7	6	5
	9	10	11	12
	16	15	14	13
	17	18	19	20
	24	23	22	21
	25	26	27	28
	32	31	30	29

H. Heats, Consis and Quarterfinals are run D, C, B, A,

1. Semis are run B, A

XII) DURATION OF RACES

Race	Segment Length	Lane Change
A. Mains		
1. Pro/Semi-Pro Group 7	8	5 minute 4 minute
2. Group 27/Pro 27	8	4 minute 4 minute
3. All other Div. 1	8	3 minute 4 minute
B. Semis		
1 Pro/Semi-Pro Group 7	8	3 minute 3 minute
2. Group 27/Pro 27	8	2 minute 3 minute
3. All other Div. 1	8	2 minute 3 minute
C. Quarterfinals		
1 Pro/Semi-Pro Group 7	8	2 minute 3 minute
2. Group 27/Pro 27	8	2 minute 3 minute
3 All other Div. 1	8	2 minute 3 minute
D. Consis & Sub Consis		
1. Pro/Semi-Pro Group 7	4	3 minute 3 minute
2. Group 27/Pro 27	4	2 minute 3 minute
3. All other Div. 1	4	2 minute 3 minute

XIII) MISCELLANEOUS PROCEDURES

A. BLACK FLAG

The race director is obliged to black flag any car which is dragging, interfering with other cars or continuously de-slotting due to mechanical problems. Upon being black flagged, the driver must bring the car in for repairs immediately. If the problem is not corrected, the black flag may be enforced again as required.

B. TRACK CALLS

In Scale Division, riders will be track calls.

1. The power will only be turned off for extremely unfair or dangerous situations. The following are the only acceptable reasons:
 - a. Braid up.
 - b. Power failure (one lane or all).
 - c. Debris in slot.
 - d. An un-marshalable car.
 - e. Lap counter or track equipment failure.
2. During a track call, there will be absolutely no work performed on the cars or lane preparation. Doing so will result in a 20 lap penalty. A second infraction will result in disqualification. This includes the pit helpers or the driver.

C. LAP COUNTER

1. The lap counter will be considered correct unless it can be proven otherwise. The counter should be corrected if necessary (as when a car crosses in the wrong lane). If a major error occurs in the counting process that cannot be corrected, the race director may:
 - a. Assign responsible stewards to count laps or verify the counter.
 - b. Add or subtract mutually agreeable laps as established by race officials and drivers.
 - c. Restart the segment.
 - d. Restart the race from the latest possible point.
2. Laps should not be added or subtracted unless the race director is certain the counter is incorrect.
3. For a major error in counting, the steps taken should preserve as much of the race as possible, while remaining as fair as possible to all.

D. MARSHALING

All drivers are expected to marshal the race(s) preceding their own. Substitute marshals must be acceptable to the race director and drivers. Good racing is not possible without good marshals. Every racer is expected to do his/her part both before and after racing if necessary. Failure to fulfill marshaling responsibilities will result in lap penalties and/or disqualification. *All* cars will be impounded after all races to

insure fair and proper marshaling responsibilities. Cars will be returned and move-up drivers will be given equal time to prepare for upcoming races.

E. LANE CHANGE

1. Following each lane change, all cars must be returned to the track where they stopped. Putting a car back on the track in an advantageous position, will result in a five lap penalty. A second infraction will result in disqualification. It is the drivers responsibility to know where the car stopped. When a car is removed from the track during racing, the same rule applies. Corner marshals should notice the cars stopping in their section and pay close attention to cars near the lap counter section. At the conclusion of each race, cars will be left on the track until the order of finish is positively determined.
2. Lane change cards are required to be used for the National Championships.

F. UNSPORTSMANLIKE CONDUCT

1. Unsportsmanlike conduct on the part of a driver or turn marshal will be subject to immediate disqualification at the discretion of the race director. Verbal abuse or profanity will not be tolerated. The race director may first warn drivers, marshals or pit helpers if their behavior is unacceptable. Serious or repeat violations will result in a five lap penalty for the first infraction and disqualification for the second.
2. Repeat offenders of any of the unsportsmanlike conduct guidelines may be prohibited from future USRA events.

G. PROTEST

A competitor may protest another racers equipment by officially informing the race director. Special provisions for armature protest are in the following section.

1. A racer must be aware of the rules when entering and withdrawal is not an option in the case of a protest.
2. Any racer in a USRA sanctioned race whose motor is protested and then refuses to have his/her motor torn down shall be banned from competition in any USRA race for a time of one year from the date of said infraction.

ARMATURE PROTEST (RESTRICTED CLASSES ONLY)

1. Any competitor may protest another person's armature. He/she must officially inform the race director, at which time the race will be stopped.
 - a. The protester may buy a look by posting a \$2.00 fee. He/ she is then entitled to look at the suspected armature in the car.
 - b. If not satisfied, he/she may formally protest which requires posting a fee equal to double the current manufacturer suggested retail price of their respective armature. The buy a look fee is transferable.
 - d. At this time, the armature must then be non-destructively and indelibly marked (suggest unique Dremel marks on the shaft).

Extreme care must be exercised to avoid damage to armature balance and delicate components such as ball bearings, motor brushes, etc.

- c. An impartial race steward must then be charged with the responsibility of observing and verifying the authenticity of the armature for post race inspection. The race will then be restarted.
2. Thorough disassembly and inspection must be conducted immediately upon completion of racing, and must be conducted in a manner assuring accurate technical verification. Armature stack length will be measured, and if within specs the inspection will proceed to the wire. This can be accomplished by destroying any epoxy or similar binder with extreme heat (a common torch does this nicely), Then dissecting the armature with a Dremel and carefully measuring the wire and counting the turns.
3. The fees will be held by the race director until resolution of the matter, then promptly surrendered to the appropriate party. Likewise, any winnings and/or points will be held pending the outcome of the inspection.
4. Buy a look proceeds go to the protested party if not applied to a FORMAL PROTEST.
5. There is a maximum limit of \$100.00 for protesting Group 27 armatures.

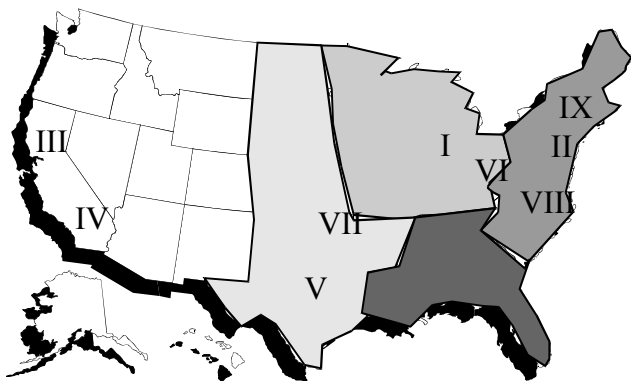
XII) HOSTING A NATIONAL EVENT

Any raceway or persons involved in slot car racing may make a bid to host a National Event. Following is a list of guidelines which may be helpful in preparing presentations.

- A. The raceway or promoter should be well established with a reputation for organizing and directing a well run race. The more racers that have attended one of your races, the better. That would allow the USRA directors more input on how well organized your business is.
- B. If you plan to bid for the USRA Nationals, you must notify the USRA Director of your intentions to do so. This must be accomplished in writing no later than ninety (90) days prior the current year's Nationals
- C. The bids for the next Nationals are presented at the General Meeting at the current year's Nationals. Your presentation should include:
 1. Pictures of your raceway or host site, and of previous races (if possible).
 2. A summary of some of your previous races, including your race schedule, number of entries, etc.
 3. Details about your track and your lap counter system, include information about track power, batteries, color, braid recess, power polarity, etc.
 4. Information concerning lodging, airlines, restaurants, and places of interest.
 5. Pictures of pit space.

6. Letters of approval from your City Directors, radio or television stations.
 7. A mock race schedule of dates, times, and activities for each day of the National Event. This is a requirement that must be included in any bid.
 8. Your presentation should be placed in book form (such as a photo album), so that it can be passed around for all interested parties to view. Two or more copies of your presentation would be advantageous.
 9. Talk to previous National Hosts.
 10. Each bid for the National Event will include financial details of the race to include: Guaranteed purse, entry fees, warm up race entry fees, pay-outs, cost of track time.
- D. Each bid for the USRA Nationals will be accompanied by a refundable deposit of \$500.00 (cashiers check or money order). The deposits will be returned promptly after the site selection voting to the unsuccessful bidders. The deposit for the successful bid will be returned after the National Event (two weeks) provided there are no financial problems such as bad checks, failure to deliver advertised pay-outs, etc. If financial problems occur, the deposit will be forfeited and the USRA treasurer shall use it fully to correct bad checks or other losses in an equitable way. The dispersal of funds is to be included in the treasurers' report.
- E. All entry forms and/or tech sheets are and will remain the property of the USRA. All of these forms must and will be turned over to USRA officials only.
- F. Once the hosting track has been established, the actual Nats race schedule will be written in collaboration with the the hosting track and the USRA Divisional Director. Once a mutual agreement is decided upon by both parties, the final schedule will be sent to the National Director for final approval.

For various administrative purposes, the forty-eight contiguous states, Hawaii, Alaska, and Canada shall be geographically divided into the following regions with representatives of each to make up the Site Selection Committee.



Region I

Midwest USRA

(No series at this time)

Region II

USRA Northeast

Doug Bauer
1844 A Rt 112
Coram NY 11727
516-696-7721

Amateur Boxstock, Pro Boxstock,
International 15, Group 27, Group 7

Region III

NorCal USRA

Frank Sarkela
305 Southwest Blve
Rohnert Park Ca
707-795-4156

Boxstock 15,
Amateur & Pro Cobalt 12,
Amateur Gp 27, Pro 27, Gp 7

Region IV

So-Cal USRA

Jason Holmes
25847 Viana Ave
Lomita CA 90717
310-530-4482

Spray Glue Gp-12, C-12,
GP-27, One motor Open, GP-7

Region V

Texas USRA

PA Watson
10100 Kleckley #11
Houston TX 77075

NASCAR, GTP, Boxstock, Cobalt 12,
Group 27, Open

Region VI

Tri-State USRA

Ryan Hodges
wingslotracer@aol.com
Amateur & Pro Boxstock,, Am & Pro C-12,
Am & Pro Gp-27, One mtr Open, Gp-7

Region VII

Great Plains USRA

TimThompson

Spray Glue Boxstock, Boxstock,
Int 15, Cobalt 12,
Group 27, Group 7

Region VIII

Mid-Atlantic USRA

Brian Eardley
715 Dublin Dr
Silvre Spring MD
Boxstock, Int 15, Cobalt
12,Group 27, GP-7

Region IX

Yankee USRA

Keith McVicar &
Frank Rempe
2141 Crompond Rd
Cortland Manor NY 10567
718-788-4032
kmcvicar@mail1.nai.net
NASCAR Gp-10, Boxstock,
Open 12, Group 27, Group 7

Region X

International

GENERAL TECHNICAL RULES



All cars/racers are expected to comply with these guidelines. All drivers are responsible for the legality of their equipment. There is one car per driver per class, and one driver per car per class. **ANY RULE THAT IS IN QUESTION OR BEING INTERPRETED IMPROPERLY WILL BE CLARIFIED BY THE NATIONAL DIRECTOR AND/OR RULES COMMITTEE.**

I) SCALE

The size of scale to which the cars must be built is 1/24th that of the actual race car

II) WIDTH

All cars may not be more than 3.25 inches (82.55mm) wide at any point. Round head body mounting pins may extend beyond this width. Other type body pins such as glass head or type are not allowed.

III) WHEELS

All cars must have front and rear wheels (2 each) with rubber tires.

- A. Rear tire minimum diameter is .0750 inches (19.05mm), unless otherwise specified. Rear wheels maximum width is .810 inches (20.57mm), unless otherwise specified.
- B. Front tire minimum diameter is .0500 inches (12.7mm), unless otherwise specified.
- C. Front wheels or one piece wheel/tire units, must rotate on their axles.
- D. Front wheels must be mounted so as to contact the racing surface, as the car is rocked to the side, before grounding on the chassis or body.

IV) CLEARANCE

The minimum clearance for all classes (except Eurosport) chassis, gear, and motor is .062 inches (1.5875mm). No parts may drag. Guide flag/braid, front and rear tires are exempt from this rule.

V) GUIDE FLAG

One guide or pickup device per car.

VI) BODY

Designs should resemble full size race cars. Manufacturers are urged to maintain scale proportions. Variations are allowed to conform to state-of-the-art practices.

- A. Paint - All bodies must be fully painted and opaque when sitting on the tech block. The sides of the body may remain clear. They should be detailed to resemble full size race cars. Exhaust pipes, body lines, injector stacks,

mirrors and decals are optional.

- B. Numbers - All cars must display three numbers of reasonable size and position, 1/4" minimum.
- C. Interior - All cars must contain a suitably painted, 1/24th scale, driver with helmet, shoulders, arms, and steering wheel mounted in the original cockpit position at all times during race. May be made of any material. Paper included.
- D. Windshield - Windshield must be clear and allow for viewing of driver. May not exceed 1-1/4" x 1-1/4" unless following original manufacturers mold lines.
- E. Wheel wells - Wheel wells must be transparent, or cut to the horizontal center line of the front wheel so when viewed from either side of the car 75% of both of the front wheel must be visible through the wheelwell.
- F. Body openings - The chassis must be completely covered by the body and air control when viewed from above, except for the cockpit opening or USRA legal body openings (such as accurate representations of vents, scoops, etc.)

VII) AIR CONTROL DEVICES (wing car division only)

- A. No part may exceed 2.5 inches (63.5mm) inches, measured from the tech block surface. No air control devices can be opaque.
- B. Side Dams may be a maximum of 2.5 inches (63.5mm) high behind the rear wheel center line and continue on a taper making them a maximum of 2.0 inches (50.8mm) high at a point 3.75 inches (95.25mm) forward of the rear wheel center line. The same taper may continue ahead of the front wheels.
- C. Must have the front edges taped and must have outside corners rounded in a manner suitable to avoid injury to race participants and spectators.
- D. May affix any decals or markings on any air control surface but cannot be opaque.
- E. Diaplane Maximum length is .500 inches (12.7mm) Corners must be rounded.
- F. Rear spoiler cannot be opaque, although suitable decals may be affixed.

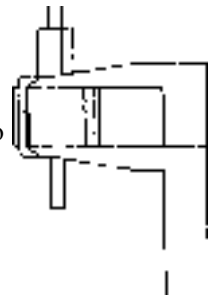
VIII) PARTS REPLACEMENT

Any component may be replaced during competition except the original chassis or body. Any racer found to have switched chassis or body will be disqualified immediately. All replacement parts must conform to the rules of the class.

IX) GENERAL TECHNICAL SPECIFICATIONS

A. ARMATURE STACK LENGTH

1. Any armature that has been purposely altered or tampered with, to make the stack appear longer, so as to attempt to comply with the length rules as listed, shall be declared illegal at the tech inspector's discretion. Stack length minimums shall be required on all 3 poles of the armature (using calipers with the faces across each end of the pole) and only the actual lamination material shall be used to determine this figure. This is meant to specifically exclude, as an example, such practices as the insertion of spacer type materials between the laminations, abnormally thick applications of coatings or any methods of artificial



compliance with the rule.

2. Any armature presented for tech inspection that is found to be illegal for competition (such as short stack) will be impounded until the completion of the racing class.

B. CONTROLLER SPECIFICATIONS

Any controller / choke may be used as long as the controller / choke uses no batteries or additional power sources to increase or regulate voltage or amperage at track braid. Specifically prohibited are voltage multipliers or doublers, transformers, batteries, encapsulated components, and capacitors. Specifically allowed are simple wire chokes, and diodes. These lower power but, do not regulate. A variable choke operated by the driver shall not be considered regulated. Relays if used must be powered by (lie track current only). Controllers / chokes are subject to inspection by USRA officials to verify compliance with the above rules. The Ruddock DR-40 is approved for USRA use.

Car Specifications Wing-car Division



SPEC-15

All General Rules apply

This class is intended for entry level racers to compete in for glue type racing. To that end the specifications for this class will **never** be changed. No rules proposals to change anything about this class will be accepted.

Drivers- This class is **only** open to Amateur drivers who have **never** made the main event in any class at the Nats before. Drivers may **only** compete in Spec-15 class and Amateur GP-12. Winners of this class may defend their championship title one time (the following year) **only**.

Awards- Awards will be donated merchandise and trophies **only**.

Qualifying- Qualifying will be by random lane pick. Number of entries will determine format.

Glue- The National race will run using limited glue. (*Regional races may opt to race under spray glue conditions*)

A) Motors

1. Motors must be commercially available, as defined in General Rules. Section IX, and must be specifically approved for the Spec-15 class on an as submitted basis.
2. Can and endbell will be the same as Amateur GP-12 motor rules. *See page 27,28,29, & 30.*
3. Any motor retailing fo \$40.90 US or less may be used as long as it meets all Spec-15 spec and rules.

4. All motor manufacturers are encouraged to make Spec-15 motors. Motors for the Nats will be hand-out motors determined by a random draw by USRA officials. Regional racing is encouraged to run all makes of motors to help promote the class at the local level. Springs and brushes may be changed from hand out motors. Springs must be of approved manufacturer 3 coil type.

B) Magnets

1. See *GP-12 specifications on page 27,28 & 29.*

C) Armature

1. Armatures must be commercially available as defined in *General Rules Section IX*, and must be specifically approved for the class.
2. Must be machine wound with a minimum of 50 series wound turns of AWG #29 wire per pole. AWG #29 wire is 0.0112-0.0114" in diameter excluding insulation.
3. **Only** Spec-15 armatures are permitted, must have a minimum stack length of .440" (11.1761mm). See *Armature Stack Length* section for clarification.
4. **All** armatures will be .513" (13.03mm) **only**.
5. Must be tagged with **Spec-15** indicating they were produced by a USRA approved manufacturer in compliance with these rules.
6. Armatures may be reconditioned but not re-sized. Reconditioning includes: cleaning, dying, commutator re-truing, and re-balancing.
7. Armatures retailing for \$26.91 US or less may be used as long as they meet all Spec-15 armature specs and rules.

D) Can Modifications

See GP-12 specifications on page 28,29..

E) Chassis

1. All chassis manufacturers are encouraged to make Spec-15 chassis. The USRA will provide each manufacturer with a disk that will have the USRA designed chassis drawing and specs (measurements) on it. Any manufacturer wishing to make a Spec-15 chassis will be required to make the chassis to these specifications and design **only**. An assembled chassis will also be sent to any manufacturer that wishes to make a Spec-15 chassis showing where all of the components are to be placed. **All** Spec-15 chassis will be engraved by the manufacturer with a serial number. The racer will then fill out the attached registration card and send it in to the USRA to register your chassis with the USRA. All chassis' competing at the Nats will be checked for this serial number to insure its legality for USRA approval of manufacturer. Chassis may NOT be modified from original assembled form. All weight must be attached to top of chassis pans only. No under chassis weight allowed. All body mounts to be left in original position. (No floating of rear body mounts)

F) Body

1. Any USRA approved bodies may be used.

G) Tires

1. Tires to be handed out by USRA with motor. Local option could be hand out also, or determined by regional director. Suggested same tire for all.

H) Gears, Axles

1. Any gear ratio or pitch may be used. Drilled gears are permitted.
2. Only solid axles retailing for \$5.00 or less may be used. May have flats.

I) Bearings

No ball, roller, or other frictionless bearings are allowed.

J) Weight

All cars will be of a race legal weight of not less than 72 grams.

GP-12

All General Rules apply. Starting in 2002, a 2 year freeze will go into effect regarding the changing of any or all motors parts. This to include: armatures, cans, magnets, endbells, & hardware. At the end of two years, (2004) each of the motor manufacturers will be able to submit new designs on any or all of these components.

A) Motors

1. Motors must be commercially available, as defined in General Rules, Section IX, and must be specifically approved for the GP-12 class on an as submitted basis. Approved motors are listed in the GP-12 approved components listing.
2. Can & endbell must be mass produced, of full dimensioned can type (full top, bottom, & 2 sides, without cheater tabs or other artificial attempts to meet the dimensional specifications) without modification. No Aluminum endbells allowed. Inside can dimensions are defined as not less than:
 - Length - .925 inches (23.495mm)
 - Width - .835 inches (21.209mm)
 - Height - .560 inches (14.224mm)
3. Aftermarket components which are not identical replacements of original parts as approved are not allowed. This means endbells, hardware, cans, etc. must be original for that brand & type of motor with the following exceptions.
 - a. Approved single piece magnets may be interchanged. Any magnet approved for use in any manufacturers motor may be used in any other manufacturers setups.
 - b. Manufacturers selling super magnets, or other components above the cost of original equipment replacement parts are not allowed. A super magnet at higher cost and identical in appearance may not be

detectable in a car, hence manufacturers selling identical looking components at higher cost will lose approval for their motor (this would not rule out “matched” pairs of approved magnets).

4. Any motor retailing for \$40.90 US or less may be used as long as it meets all GP-12 specs and rules. Price only applies to Amateur.

B) Magnets

1. Magnet dimensions plus or minus 10% are as follows:
 - a. Length: 0.500 Inches (12.70mm)
 - b. Width: 0.150 Inches (3.81 mm)
 - c. Height: 0.550 Inches (13.97mm)
2. Magnets must be commercially available through major Distributors.
3. No quad magnets allowed. Single piece ceramic only.
4. Magnets may not contain “Rare Earth” Materials (Defined As Elements with atomic weights 58 through 71).

C) Armature

1. Armatures must be commercially available as defined in *General Rules, Section IX*, and must be specifically approved for the class. Approved armatures are listed in *GP-12 Approved Components*
2. Must be machine wound with a minimum of 50 series wound turns of AWG #29 wire per pole. AWG #29 wire, excluding insulation, is 0.0112 -.0114 inches diameter.
3. Group 12 or 15 armatures are permitted, must have a minimum stack length of .350 inches (8.89mm). *See Armature Stack Length* section for clarification. Spec-15 armatures must be .440” minimum.
4. Armatures must be no less than .513 inches (13.03in), and no more than .518” in diameter. Spec-15 armatures must be .513” only
5. Must be tagged with at least the number 12 or 15 indicating they were produced by a USRA. approved manufacturer in compliance with these rules Spec-15 arms must be tagged Spec-15
6. Armatures may be reconditioned but not re-sized. Reconditioning includes: cleaning, dying, commutator re-truing, and re-balancing.
7. Armatures retailing for \$26.91 US or less may be used as long as they meet all GP-12 Armature specs & rules.

D) Can Modifications Anything not listed here is illegal.

1. Can bushing may be soldered in place but may not be reversed or moved from original position except as stated in #2
2. Diameter of bushing locator hole may be altered to allow the stock size bushing to be centered.
3. Outside diameter of bushing (excluding flange) may not be altered.
4. Magnets may be super glued in place (clear super glue only) and do not have to retain OEM magnet clips. (amateur only) Glue may be placed on the back of the magnet. Expert Gp-12 may epoxy magnets in place & hone.
5. Magnet zapping is permitted.
6. Single, one piece magnets. No quad or multiple piece magnets allowed.

7. In 2002 a minimum air gap of .528" will be enforced.
8. Motor brushes and springs may be replaced and spring tension may be adjusted. Any 3-coil spring, brush, or bronze bushing may be used. (Amateur only) Expert Gp-12 may use any spring.
9. A 1/8" x 1/4" notch may be cut in the can to allow for axle clearance
10. Prohibited Modifications
 - a. Cut outs or machine work on can or endbell.
 - b. Shunt wire or spring insulation. (Amateur only) Expert Gp-12 may use shunt wires and spring insulation.
 - c. Adding endbell heat sinks.
 - d. Drilling holes in can or endbell.
 - e. Interchanging parts from one approved type of motor to another is not permitted. In other words, GP-12 & Spec-15 motors must use the original can, endbell, and hardware. Armatures and Magnets may be intermixed between approved manufacturers. (Amateur only) Expert Gp-12 may interchange endbell and hardware.
 - f. No post factory honing, shimming or polishing of magnets allowed unless delivered by the manufacturer in this manner

E) Chassis

1. Chassis for the GP-12 class must be commercially available and be specifically approved on an as submitted basis, in accordance with the following parameters:
2. Any chassis that has been submitted and approved, retails for \$36.23 or less in completed form and meets all current USRA GP-12 specs may be used.
 - a. Chassis must be commercially available separately, and may also be available in a completed car.
 - b. See the *GP-12 Approved Components* for approved chassis
3. Chassis may be made of any material.
4. Chassis containing steel components, except steel wire, pillow blocks, motor brace, and lead wire retainer
 - a. must have a guide mount which is integral,
 - b. must be made of a continuous piece of steel extending from the guide mount to the rear axle line and to which the pillow blocks are attached.
 - c. The bottom of the guide mount must be level with the bottom of the chassis with no offset.
 - d. Steel chassis may be sold as kits, but must be commercially available in an assembled form. Kits must be assembled in a manner identical to the assembled production chassis except as noted.
5. Front body mounting tubes must be rigidly attached to the chassis (no shakers)
6. Rear body mount may be floated on any steel chassis, but must remain in original location as the R-T-R car. Steel pin tubes may be used.
7. May only reposition front wheel mount location on any chassis but wheels must be able to be seen through body wheel well opening. No other component may be altered or repositioned from its original location in ready-to-run car.
8. Minimum weight of a completed, R-T-R car will be no less than 72 grams²⁹

at all times during the racing

F) Modifications

Pre-assembled chassis may be re-soldered, but components may not be altered or repositioned, chassis kits must be assembled the same as production chassis. Anything not listed here is illegal.

1. Static bracing, consisting of straight piano wire may be added to solder joints only. Wire may not be bent at any angle so as to constitute a brace. Wire may not be soldered to anything else other than the component it is parallel to.
2. On steel chassis brass & lead may be used for weight.
 - a. Weights must be solid, rigidly attached, and not used as a brace. All weight may only be attached to the front “V” and/or to any existing weights. Weight may not be soldered to the center rail or to the side rails.
 - b. May extend no more than 1” back from the center of the guide hole,
 - (1) No floating pans
 - (2) No modifying or bracing of chassis and calling it weight.
 - (3) Weights may be soldered to the bottom of the chassis as long as the chassis and attached weight clears the track by 1/16” at all times.
3. A lead wire retainer may be added.
4. A motor support tube or wire may be added, not to exceed 1.5 inches in total length behind the motor. Motor must be soldered to this brace or it will be considered a chassis brace. Chassis may have steel pillow blocks and motor brace.
5. May solder or glue oilites in place.

G) Prohibited Modifications:

1. Tie Wire
2. Changes in size, dimension, shape. or location of any component

H) Lightweight Components

Since the GP-12 class is intended to be an entry-level class, many of the rules are designed to discourage the use of complicated, state of the art, or expensive components. Therefore, special lightweight components are specifically prohibited, including:

1. Magnet wire or magnet type wire as a substitute lead wire
2. Hollow or special lightweight axles

I) Gears

Any gear ratio or pitch is allowed. Drilled gears are permitted.

J) Axles

1. Axles retailing for \$5.00 or less may be used
2. Axles with flats are allowed.

K) Wheels

Front and rear wheels may be drilled.

L) Bearings

No ball, roller, or other frictionless bearings are allowed.

M) Weight

All cars will be of a race legal weight of not less than 72 grams.

International 15

All General Rules apply

A) Motor

1. Can must be mass produced, and commercially available, as defined *in section IX General Rules* Cut outs and machine work are allowed.
2. Can inside dimension minimums are defined as not less than:
 - a) Length: No restrictions
 - b) Width: 0.835 inches (21.209mm)
 - c) Height: No restrictions
3. Magnets must be ceramic. Magnets containing rare earth materials (defined as elements with atomic weights 58 through 71) are not allowed. No neodymium magnets or materials allowed.
4. Ball Bearings are allowed.

B) Armature

1. Must be tagged with at least the number 15, and mass produced by a USRA approved manufacturer.
2. Must be machine wound with a minimum of 50 series wound turns of AWG #29 wire per pole. AWG #29 wire, excluding insulation, is .0112-.0114 inches diameter.
3. Must be commercially available, as defined in *General Rules, Section IX*
4. Armature stack lamination length shall be a minimum of .440 inches (11.1761mm). *See Armature Stack Length* section for clarification.
5. Armatures retailing for \$28.37 or less may be used as long as they meet all specs and rules for Int. 15 arms.

C) Chassis

1. No chassis restrictions Any material may be used.
2. Racer constructed chassis are specifically allowed.
3. Ball bearings allowed.

Cobalt 12/15

All General Rules apply

A) Setup

1. No restrictions.
2. Ball Bearings allowed
3. Amateur C-12 racers may use single or quad magnets only.

B) Armature

1. Must be tagged with at least the number 12 or 15, and be mass produced by a USRA approved manufacturer.
2. Must be machine wound with a minimum of 50 series wound turns of AWG #29 wire per pole. AWG #29 wire, excluding insulation, is 0.0112"-.0114 inches diameter.
3. Must be commercially available, as defined in *General Rules, Section IX*
4. Armature stack length shall be a minimum of .350" (11.1761mm) *See Armature Stack Length* section for further clarification.

5. Timing may be adjusted to allow for factory variations.

No minimum diameter.

6. Armatures retailing for \$29.80 or less may be used as long as they meet all specs and rules for C-12 arms.

C) Chassis

1. No chassis restrictions Any material may be used.
2. Racer constructed chassis are specifically allowed.
3. Ball bearings allowed.

Group 27

All General Rules apply

A) Set-up

No restrictions

B) Armature

- 1) Must be a tagged Group 27 armature, and mass produced by a USRA approved manufacturer.
- 2) Must be commercially available, as defined in *General Rules*.
- 3) Must be wound with a minimum of 38 series wound turns of AWG #27 wire per pole. AWG #27 wire, excluding insulation, is .0141-.0143 inches diameter.
- 4) Armature stack lamination length shall be a minimum of .440 inches (11.176mm). See *Armature Stack Length* section for further clarification.

C) Chassis

No restrictions

D) Wheels, Tires, Gears

Must comply with general rules otherwise no restrictions

D) Body

Must be commercially available and approved for use in restricted classes

Group 7/Open (Unlimited)

All General Rules apply

A) Motor

No restrictions to setup or armature

B) Chassis

No restrictions

C) Body

Must comply with general rules otherwise no restrictions

D) Wheels, Tires, Gears

Must comply with general rules otherwise no restrictions

APPROVED COMPONENTS GP-12



Motors

Mura	#1212,#1213P,#1215P
Parma	#455
Champion	#510HTX,#511HTX,#510X,#511X
Proslot	#728,#723,#728mega,#723 mega
RJR	#500,505
Koford	#408,M-408J
Kelly	#KE-1150,#KE-1152

Armatures

Mura	#2012,#2013,#2015
Champion	#510A,#510AHT,#511A,#511AHT
ProSlot	#701,#702,#701M,#701D,#701MD(&L)
RJR	#901,#901X,#931,#931 X,#903,#903X
Koford	#M387,#M-468

Chassis

ProSlot	# PS-317, PS-318, PS-320
Koford	#M-451, #M-451B, #M-490A, #M-490B
FX Motorsports	#FX 136, #FX98, #FX897
Proformance Racing	PRI-201,202
RJR	#795 Steel/Wire
Mosetti Racing	#204,206
GTO Hi-Tech	#GP-12
Slick7	#243,#243B,#243C-055,#243C-062,#231,#472,#473,
ZAP	#101
Kelly	#1512 Predator,#1502 Perimeter
Parma	#70013

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USRA

**United
Slot Racers
Association**

**2003
Scale Division
National Rules**

General Competition Regulations



I) DRIVER CLASSIFICATION SCALE DIVISION

A. EUROSPORT and GT-12

1. All Driver's are encouraged to enter these classes regardless of ranking with the following exception.

2. No one racing Junior Group 10 may enter Eurosport at the same Nats

B. All other classes will be divided into Amateur and Expert.

1. Amateur

a. Racers with average driving or technical ability and newer racers.

b. C-12 Euro class will be for Amateur racers only. Those racers who never made the main in 1/24 or 1/32 Eurosport. Any racer who has ever made a main in either 1/24 or 1/32 Eurosport may **not** compete in C-12 Eurosport.

c. Amateur racers will use hand out motors for all classes.

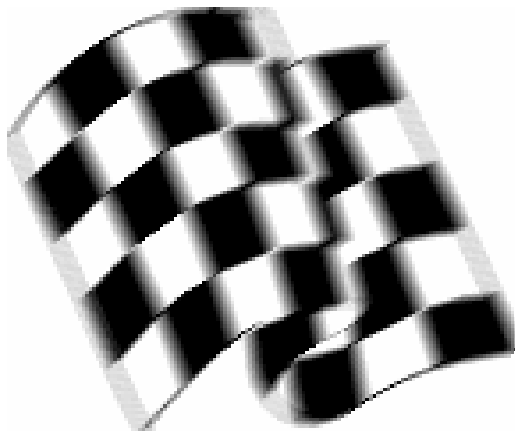
d. Junior class is for those 14 years of age and younger.

2. Expert

a. All drivers with exceptional driving or technical ability.

b. Any driver sponsored by a major manufacturer must race in this class.

c. Any racer who has won in any Amateur class at the Nationals must race Expert in all classes at any future Nats. May defend title the following year only.



Car Specifications Scale Division



Group 10 Stock Car

General rules also apply.

A) Chassis

1. Must be a commercially available approved chassis,
2. Must be stamped and formed metal. The portions to which the motor is attached must be steel, floating pans must be steel aluminum or brass.
3. May update chassis to RTR specs. May use Lightweight-Replacement Pans, and center sections.
4. May interchange parts from a single manufacturers; such as Flexi and Flexi-2 parts, JK long or short center sections and-heavy or light pans on JK Chassis.
5. No modifications except for the following:
 - a. May solder or glue motor, axle oilites, and front wheel retainers.
 - b. May add lead weight and tape to chassis.
 - c. May file holes in motor bracket to allow better gear mesh, but must retain a portion of motor bracket.
 - d. No oilite modifications allowed. May use offset oilites.
 - e. May add spacers between pan and center section.
 - f. May add a one inch (1") long motor brace and an upright brace.
 - g. The original manufacturers plating may be removed in the area to be soldered only.
 - h. May add pin tubes. Pin tubes may be either solid or floating. May add lead wire retainer.
 - i. May solder on steel guide tongue reinforcement such as Slick 7 but the original tongue may not be removed, modified, or moved.
 - j. No other-modifications, soldering, cutting grinding or bracing allowed.
 - k. May use any guide, nut, spacers, lead wire and clips.

B) Motors Stock 16-D

Must be commercially available, meet all USRA manufacturing specs, and be approved for use in this class by the USRA. A minimum number of 500 pieces is required for approval, and must be available through Distributors and or raceways by Oct. 1 prior to the National Event

1. Stock 16-D style set-ups only. Must be commercially available. Setup retailing for \$10.25 or less may compete. Setups sold with aluminum spring cups retailing for \$11.25 or less may compete.
2. No modifications allowed except as follows:

- a. Racer may add can screws
- b. May add spacers-to limit end play.
- c. May dye armature
- d. May re-true commutator
- e. May zap magnets
- f. May super glue magnets in place
- g. May change brushes and may use any 3 coil springs.
- h. No polishing of magnets allowed.
- i. No shimming or honing of magnets.
- j. Balancing allowed.
- k. Armature may reconditioned but not resized, green coating may be removed. . Must be minimum diameter of .513".
- l. Minimum air gap .575"
- m. May not interchange parts between manufacturer's set-ups
- n. Oilite may be soldered in place
- o. May use Mura endbell hardware as replacement hardware.
Aluminum spring cups may be used as replacements.
- p. May solder hoods to brush plates

3. Cans (D-Cans)

- a. Must be made from metal, and have no cut outs or metal removed from sides of can. The only allowable cut outs are the axle notches. Only one hole is allowed on the top and bottom of can, no strap type cans allowed. Cans must have a full top and bottom. No cheater tabs on can allowed.

- b. Must meet the following minimum inside dimensions

Height	.600"
Width	.875"
Length	.950"

4. Magnets (16-D)

- Must be stock one piece single (no quads) ceramic magnets as found in the production motor, and meet the following minimum dimensions.

Height	.580"
Length	.650"
Thickness	.150"

5 Armatures (16-D)

- Must be commercially available, meet all USRA manufacturing specs, and be approved for use in this class by the USRA

- a. Minimum dimensions

Diameter	.513" excluding coating
Stack Length	.600"

No Split Stack/Lamination arms allowed

- b. Must be wound with 70 series wound turns of US 30 gauge wire (.0099-.0101 inches excluding insulation) per pole
- c. May be balanced

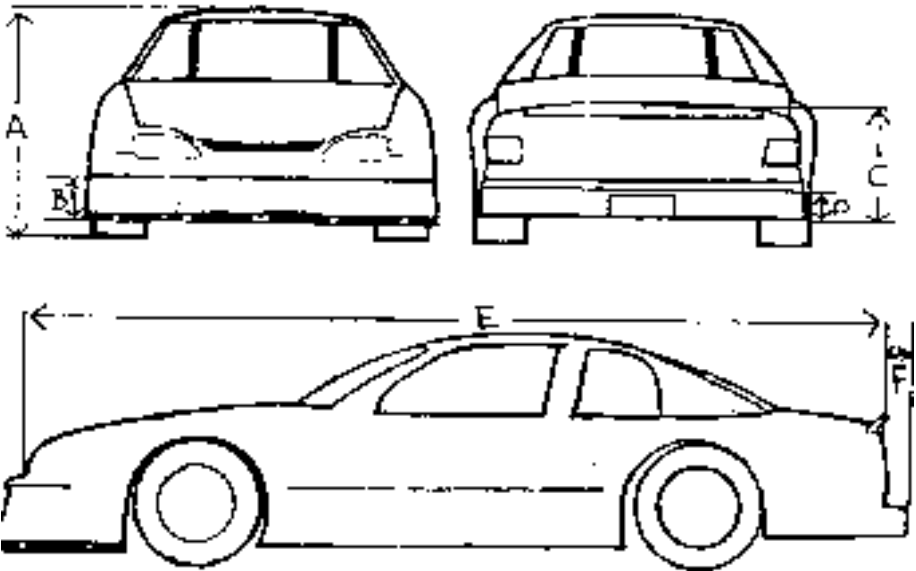
- d. May have factory applied commutator tie wrap
- e. May be dyed, commutator may be trued
- f. Must be tagged 16-D

C) Bodies:

- 1. Must be commercially available and approved for use by the USRA.
- 2. No air control devices allowed. No alterations or additions to the manufacturers dimensions are permitted. Body must cover entire chassis when viewed from above.
- 3. May reinforce body with tape or Lexan.
- 3. 4" Stock Car bodies will be used. Should represent the full size car. Only Stockcar body styles will be permitted.

Bodies must have front and rear bumpers

- (a) Minimum roof height is 1½" measured from tech block to the center of the roof. Measurement does not include roof ribs. Car is to have legal clearance while measuring body height.
- (b) Min. 1/8" Bumpers front and rear. Must retain a minimum of 5/8" rear valance measured from the trunk lid down. Rear bumper may be included in the measurement, but must also be min. 1/8". May not cut out or put holes in rear portion of bodies.
- (c) All windows must be clear.
- (d) Bodies must have full painted 1/24 stock car interior. Chassis or track must not be visible.
- (e) Rear spoiler to be blade type only with a maximum height of 1-3/8" measured from tech block to the top of the spoiler. Spoilers are to have no side dams/plates, no radius or fillets between the trunk lid and blade/spoiler.
- (f) No other air control devices allowed.
- (g) Front wheel wells may be cut out or left clear. No cutting into the top of the fenders.
- (h) Must have three decal or painted numbers placed on body, one on each door and one on the roof. Bodies should be painted to resemble real stock cars.
- (i). No Wedging of bodies.
- (j) Tech Director reserves the right to allow or disallow any cars or bodies and his decision is final.



A= Roof Height

1 1/2" measured from the track to the center of roof, roof ribs not included

B= Front Bumper

Min. 1/8" measured from the top of bumper down

C=Rear Valance

Min. 5/8" measured from trunk lid down and including rear spoiler

D= Rear Bumper

Min. 1/8" measured from top of bumper down.

E= Body Length

Min. 6" measured from front intersection of grill and bumper to the rear intersection of trunk lid and valence.

F= Bumper length

Min. 1/16" measured from grill out and from valence out. Front bumper may be flush with grill work.

G= Rear Spoiler

Max. Height 3/8" measuring blade/cord length only. No radius or fillets between trunk lid and rear spoiler

H= Rear spoiler maximum height as measured
from the tech block to top of spoiler is to be 1-3/8".

D) Gears:

Any gear ratio allowed. May use 64 pitch gears.

E) Axles/Tires/Wheels:

1. The car must have a single one piece front axle that passes through both uprights
2. Front axles minimum diameter .047", front wheel minimum-diameter 1/2".
3. May solder front retainers to front axle. May solder front axle where it passes-through chassis. Front axles may be bent.
4. Front tires must be made of rubber mounted on separate metal rims, and mounted on front axles.
5. Rear Tires must be Black rubber
6. May use 3/32" axles
7. May use drill blank axles front and rear. Axles must be steel. No hollow or other lightweight axles.

F) Clearance

Must have .063" clearance, measured at rear axle including gear

PRODUCTION 1/24 STOCK CAR

A) Chassis:

1. Must be a commercially available, stamped and formed chassis. The portions to which the motor is attached must be steel, floating pans must be steel aluminum or brass., have a wheelbase of 4.5" and must be approved for competition.
2. If using extenders must use original manufacturers extenders on the chassis they were designed for. May solder extender to chassis. May remove front wings for extender/front wheel clearance only.
3. May update chassis to RTR specs. May use Lightweight-Replacement Pans, and center sections.
4. May interchange parts from a single manufacturers; such as Flexi and Flexi-2 parts, JK long or short center sections and-heavy or light pans on JK chassis.
5. No modifications except for the following:
 - a. May solder or glue motor, axle oilites, and front wheel retainers.
 - b. May add lead weight and tape to chassis.
 - c. May file holes in motor bracket to allow better gear mesh, but must retain a portion of motor bracket.
 - d. No oilite modifications allowed. May use offset oilites.
 - e. May add spacers between pan and center section.
 - f. May add a one inch (1") long motor brace and an upright brace.
 - g. The original manufacturers plating may be removed in the area to be soldered only.
 - h. May add pin tubes. Pin tubes may be either solid or floating. May add lead wire retainer.
 - i. May solder on steel guide tongue reinforcement such as Slick 7 but the original tongue may not be removed, modified, or moved.
 - j. No other-modifications, soldering, cutting grinding or bracing allowed.
 - k. May use any guide, nut, spacers, lead wire and clips.
6. No ball bearings. No oilite modifications allowed. May use offset oilites

B) Motor

Same as Gp-10 motor rules.

C) Body

1. Bodies must be 1/24th scale 4 1/2" wheelbase stock car bodies that are commercially available and approved for USRA competition. Minimum length 7.5" Only body styles resembling Stockcars will be permitted.
2. Bodies must be fully painted and all window areas left clear.
3. Body must have full Stock Car interior (Parma #809 or similar) properly

- painted, and installed in the correct position, and completely covering interior. Chassis or track must not be visible.
4. Cars must have a minimum roof height of 17/8 “ measured from tech block. Roof height is to be measured at the center of roof, and does not include roof ribs. Measure height with car on tech block or track with legal clearance.
 5. Cars must have front and rear bumpers. Front bumper must be at least 1/4” measuring from top of bumper down. Rear bumper must be at least 1/8” measuring from top of bumper down.
 6. Car must retain a min. of 13/16” rear body valance. This will be measured from trunk lid down. Rear bumper may be included in the measurement, but must also be min. 1/8” May not cut out or punch holes in rear of body.
 7. Rear Spoilers are to be blade type only with a max height of 1- 3/8” measuring from tech block to top of spoiler. Rear spoilers are to have no side dams/plates, no radius, or fillets between the trunk lid and blade spoiler.
 8. No air control devices allowed. No additions or alterations to the manufacturers dimensions are allowed except for the following:
 - a. Rear spoiler max height is 3/8” measuring the actual blade/cord length. May add Lexan to meet this measurement.
 - b. Rear spoiler max width is 3- 1/4”. Lexan may be added to meet this measurement.
 - c. No “Gurney Lip” or additional bends in the spoiler allowed.
 9. Bodies must have 3 scale sized decal or painted numbers placed on roof and both doors. Bodies should be painted to resemble real stock cars
 10. No cutting into top of body or fenders allowed. No part of the chassis or tires may be visible when viewed from above.
 11. Front wheel wells must be cut out.
 12. May reinforce body with tape and Lexan.
 13. No Wedging of bodies.
 14. Tech Director reserves the right to allow or disallow any cars or bodies and his decision is final.

A= Roof Height

1 7/8" measured from the track to the center of roof, roof ribs not included

B= Front Bumper

Min. 1/4" measured from the top of bumper down

C= Rear Valance

Min. 13/16" measured from trunk lid down and including rear bumper

D= Rear Bumper

Min. 1/8" measured from top of bumper down.

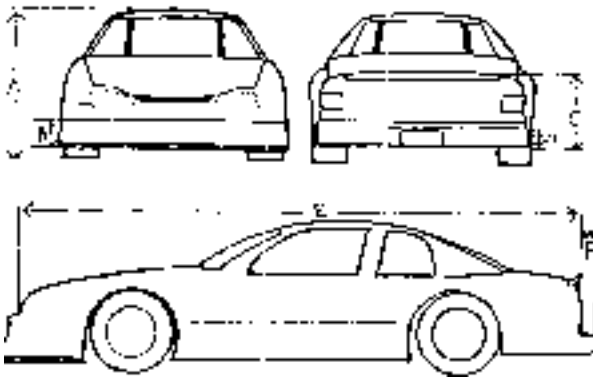
E= Body Length

Min. 7 1/2" measured from front intersection of grill and bumper to the rear intersection of trunk lid and valance.

F= Bumper length

Min. 1/16" measured from grill out and from valance out. Front bumper may be flush with grill work spoiler.

G= Rear spoiler maximum height as measured from tech block to top of spoiler to be 1-5/8".



D) Gears:

Any gear ratio allowed. May use 64 pitch gears. May solder on pinion

E) Axles/Tires:

1. Minimum Axle Diameter Front 3/32" Rear axle may be 3/32". Steel Axles only. No hollow or other lightweight axles. Drill blank axles allowed
2. Tires front and rear must be composed of black foam rubber only. No dyed tires allowed. May add nail polish to fronts
3. Front tire minimum diameter .675". Minimum front tire width .400". Minimum rear tire diameter .790. Maximum rear tire width .810".
4. Independent Rotating Fronts allowed.
5. Solid, one piece front axles only, no stubbies. Axle must pass through both front uprughts Front axles may be soldered solid, but front wheels must rotate.

F) Clearance

Car must have .063" Clearance in rear, as measured at the rear axle including gear.

GTP

A) Chassis:

Same as Group 10 Stock Car

B) Motor:

Must be commercially available, meet all USRA manufacturing specs, and be approved for use in this class by the USRA. One of the following Motors may be chosen. Super 16-D, Super Wasp/Hornet, Group 11, Super 16-C.

1) Super 16-D

Same rules as Gp -10 Stock Car with the exception of Super 16-D Armatures.

2) C Can

Same motor rules as GP-12 with the exception of Armature which must be Super 16-C, Super Wasp, or Group 11.

May interchange can, endbells, and hardware between different approved manufacturers.

C) Armature

1. Armatures must be commercially available as defined in *General Rules, Section IX*, and must be specifically approved for the class.

Approved armatures types are Super Wasps, Hornets, Gp-11 (Challengers, Contenders, Competitors and Sportsman), Super 16-D, and Super 16-Cs.

2. Armatures must meet one of the following technical requirements

(a) Wasp/Hornet

(1) Armatures must be no less than .513 inches (13.03mm) diameter.

(2) Minimum stack length must be .350" No split stack/ Lamination arms allowed.

(3) Armatures must be wound with a minimum of 60 turns of 30 gauge wire (.0099"-.0101" minus insulation) per pole

(4) Must be tagged Super Wasp or Hornet

(b) Challenger/Contender/Competitor/Sportsman Gp-11

(1) Armatures must be no less than .513 inches (13.03mm) diameter.

(2) Minimum stack length must be .440" No split stack/ Lamination arms allowed.

(3) Armatures must be machine wound with a minimum of 55

turns of 30 gauge wire (.0099"-.0101" minus insulation) per pole.

(4) Armatures must be tagged Must be tagged Group 11, Challenger (CH), Competitor (Com) (Comp), Contender (Cont), or Sportsman (SP).

(c) Super 16-C

(1) Armatures must be no less than .513 inches (13.03mm) diameter.

(2) Minimum stack length must be .490" No split stack/ Lamination arms allowed.

(3) Armatures must be machine wound with a minimum of 55 turns of 28 gauge wire (.0125"-.0127" minus insulation) per pole.

(4) Armature must be tagged Super 16-C

(d) Super 16-D

(1) armatures must be no less than .520". Coating may not be removed.

(2) Minimum Stack length of .490" No split stack/ Lamination arms allowed.

(3) Must be machine wound with a minimum of 60 turns of 28 gauge wire (.0125"-.0127" minus insulation) per pole.

(4) Armature must be tagged Super 16-D.

3. Armatures may be balanced.

4. Armature may have factory commutator tie wrap.

5. Armatures may be reconditioned but not re-sized.

6. Arms meeting these specs and retailing for \$21.68 US or less are allowed.

D) Bodies

1. Only bodies on USRA approved GTP body list may be used.

2. Body must cover entire chassis when viewed from above. Cutting into the top of the body for motor, gear, tire, or guide clearance is not allowed. Any cut outs or openings must be the same as on actual car. May cut out rear portion of bodies as long as body is cut to manufacturers cut lines.

3. Bodies must be fully painted. All windows must be clear. Must have 3 numbers.

4. No air control devices may be added. Alterations or additions to the manufacturers dimensions are not permitted.

5. Must use a 1/24 scale size driver / interior painted and mounted in normal position, and covering entire interior. no flat or thingie interiors allowed. Driver / interior must include helmet, arms, and steering wheel.
6. May reinforce body with Lexan and tape.
7. Maximum height of body is 1.625".
8. Front wheel wells may be cut out or left clear.

E) Gears

Any gear ratio is allowed and any gears may be used, May solder pinion to motor.

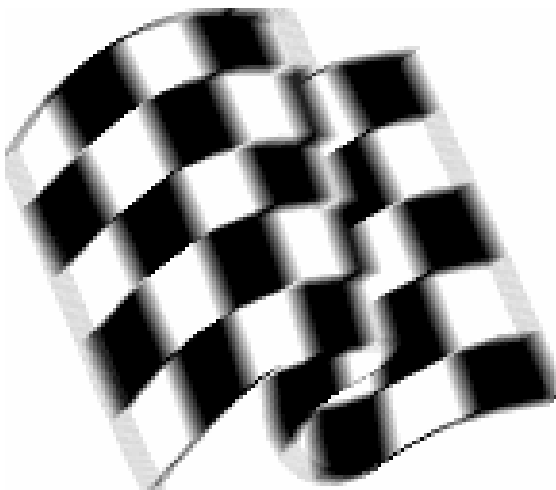
F) Axles/Tires/Wheels

Minimum diameter .047" front axle, 3/32 Rear axles are allowed. May use piano wire or drill blank and may be soldered to the chassis. No hollow or other light weight axles. Front tires must be made of rubber mounted on separate metal rims, and mounted on front axles. Front wheels and tires must rotate and must be minimum diameter of .600".

(16mm or 5/8"). Front wheels should touch and roll in the corners in order to prevent any portion of the chassis making contact with the running surface of the track. Black rear tires only; minimum diameter .750", maximum width .910". Front axles maybe bent.

G) Clearance

Chassis must have .063" rear clearance as measured at the rear axle, including gear.



GT-1

General rules also apply.

A) Chassis:

Same as GTP

B) Motor:

Must be commercially available, meet all USRA manufacturing specs, and be approved for use in this class by the USRA.

1. Motors

a. Motors must be commercially available, as defined in General Rules, Section IX, and must be specifically approved for the GP-12 class. Any setup approved for GP-12 competition is also approved for GT-1, with the appropriate armature.

2. Can & endbell must be mass produced, of full dimensioned can type (full top, bottom, & 2 sides, without cheater tabs or other artificial attempts to meet the dimensional specifications) without modification. Inside can dimensions are defined as not less than:

Length - .925 inches (23.495mm)

Width - .835 inches (21.209mm)

Height - .560 inches (14.224mm)

3. Aftermarket components which are not identical replacements of original parts as approved are not allowed. May interchange can, endbells, and hardware between approved manufacturers.

a. Approved single piece magnets may be interchanged. Any magnet approved for use in any manufacturers motor may be used in any other manufacturers setups.

b. Manufacturers selling super magnets, or other components above the cost of original equipment replacement parts are not allowed. A super magnet at higher cost and identical in appearance may not be detectable in a car, hence manufacturers selling identical looking components at higher cost will lose approval for their motor (this would not rule out "matched" pairs of approved magnets).

4. Motors with a retail price of \$40.90 US or less are allowed as long as they meet all specifications for this class.

C) Magnets

1. Magnet Dimensions Plus Or Minus 10% Are As Follows:
 - a. Length: 0.500 Inches (12.70mm)
 - b. Width: 0.150 Inches (3.81 mm)
 - c. Height: 0.550 Inches (13.97mm)
2. Magnets must be commercially available through major Distributors.
3. No Quad magnets allowed. Single piece ceramic only.
4. Magnets may not contain "Rare Earth" materials (defined as elements with atomic weights 58 through 71).

D) Can Modifications Anything not listed here is illegal.

1. Can bushing may be soldered in place but may not be reversed or moved from original position except as stated in #2.
 2. Diameter of bushing locator hole may be altered to allow the stock size bushing to be centered.
 3. Outside diameter of bushing (excluding flange) may not be altered.
 4. Magnets may be super glued in place and do not have to retain OEM magnet clips. Glue may be placed on the back of the magnet.
 5. Magnet zapping is permitted.
 6. Single, one piece magnets. No quad or multiple piece magnets allowed.
 7. Minimum air gap of .528".
 8. Motor brushes and springs may be replaced and spring tension may be adjusted but, any 3-coil spring, brush, or bronze bushing may be used.
9. Prohibited Modifications
- a. Cut outs or machine work on can or endbell.
 - b. Shunt wire or spring insulation.
 - c. Adding endbell heat sinks.
 - d. Drilling holes in can or endbell.
 - e. Interchanging parts from one approved type of motor to another is permitted. Armatures, Magnets, endbells, can and hardware may be intermixed between approved GP-12 manufacturers.
 - f. No post factory honing, shimming or polishing of magnets allowed unless delivered by the manufacturer in this manner.

E) Armature

1. Armatures must be commercially available as defined in *General Rules, LV*, and must be specifically approved for the class.
2. All armatures must meet the following technical requirements
 - a) armatures must be no less than .513 inches (13.03mm) diameter.
 - b) Minimum stack length must be .440"
 - c) Armatures must be wound with 55 turns of 30 gauge wire (.0099"-.0101" minus insulation) per pole
 - d) Armatures may be balanced
3. Armatures may be reconditioned but not re-sized. Reconditioning to includes: Cleaning, balancing, dying, re-truing of commutator.
4. Must be tagged Group 11, Challenger (CH), Competitor (Com) (Comp), Contender (Cont), or Sportsman (SP)
5. Armatures retailing for \$21.22 US or less are allowed.

F) Bodies

1. Bodies for GT-1 class must be commercially available and approved for competition.
2. Body must cover entire chassis when viewed from above. Cutting into the top of bodies for motor, gear, tire or guide clearance is not allowed. May cut out rear portion of bodies. Bodies must be mounted to manufacturers existing cut lines.
3. Bodies must be fully painted. All windows must be clear. Must have 3 numbers
4. No air control devices may be added. Alterations or additions to the manufacturers dimensions are not permitted.
5. Bodies must have full painted 1/24 scale interior. Chassis or track may not be visible
6. Front wheel wells may be cut out or left clear
7. Must have three scale sized decal or painted numbers.
8. May reinforce with tape and Lexan
9. Maximum rear height is 1- 5/8". Body must be cut on manufacturers cut line.

G) Gears

Any gear ratio is allowed and any gears may be used, May solder pinion to motor.

H) Axles/Tires/Wheels

Minimum diameter .047" front axle, 3/32 Rear axles are allowed. May use piano wire or drill blank and may be soldered to the chassis. No hollow or other light weight axles. Front tires must be made of rubber mounted on separate metal rims, and mounted on front axles. Front wheels and tires must rotate and must be minimum diameter of .600" (16mm or 5/8"). Front wheels should touch and roll in the corners in order to prevent any portion of the chassis making contact with the running surface of the track. Black rear tires only; minimum diameter .750", maximum width .810". Front axles maybe bent.

I) Clearance

Chassis must have .063" rear clearance as measured at the rear axle including gear.

GT-12 (Scale GP-12)

A) Chassis

1. Any commercially available, and approved for competition.
2. Chassis may be constructed using any materials.
3. Chassis must be available in assembled RTR form.
4. Chassis Kits are allowed as long as they are assembled identical to approved RTR chassis. All parts must be in stock location.
 - a. May add lead weight.
 - b. May add a rear motor brace and upright brace.
 - c. No other modifications allowed.
5. Chassis meeting these specifications and retailing for \$47.00 or less are allowed. (No additional annual increase until 2004)

B) Motors/Armatures

Same rules as GP-12 (Wing-car Division) (pg 27 & 28) Except for interchangeability of endbell and hardware.

C) Bodies

Same rules as GTP.

D) Gears

No Restrictions

E) Wheels/Tires/ Axles

1. Black rear tires only; minimum diameter .750", maximum width .810".
2. Front tires must rotate on their axles, and must be minimum diameter of .600" Axles must be mounted to chassis
3. Front wheels must be mounted so as to contact the racing surface, as the car is rocked to the side, before grounding on the chassis or body.
4. Front tires must be mounted approximately perpendicular to (lie track, axles may be adjusted to allow this.
5. No hollow or other light weight axles. May use 3/32 rear axles

F) Clearance

Same as 1/32 and 1/24 Eurosport

EUROSPORT_C-12

A) Chassis

See approved chassis list for Euro C-12. Chassis retailing for \$75.00 or less & meeting all other C-12 chassis specifications may be used.

B) Motor

Same as C-12 (Division I) see page 31 & 32.

C) Bodies

Same as GTP

D) For all other rules see 1/24 Eurosport.

1/24 & 1/32_SCALE EUROSPORT

A) Chassis

No restrictions, except for the following: 1/32 guide length maximum 4.275
1/24 guide length maximum 5.140. Measurement is to be made from front of guide post to rear of rear axle, Maximum width for 1/32 is 2.519”.

B) Motor

No restrictions on motor, magnets, armatures, and/or motor cans,

C) Bodies

1. Bodies must be commercially available and approved for competition.
2. Same as GTP bodies.
3. See drawing for all body measurements
4. All other GTP body rules apply
5. All interiors must be of correct scale.

D) Gears/Axles

No restrictions

E) Tires/Wheels

1. Front Tires minimum diameter: 1/32, .500", 1/24, .600"
2. Front tires must rotate on their axles.
3. Front wheels must be mounted so as to contact the racing surface, as the car is rocked to the side, before grounding on the chassis or body.
4. Front tires must be mounted approximately perpendicular to the track
5. Rear Tires: 1/32 maximum width .650", 1/24 maximum width .900"

F) Clearance

1. Clearance will be checked at the beginning of the race with no check at the end of the race. However if the car is dragging the track during racing, the race director, at his discretion may check clearance. Any car found to be dragging the track will be repaired during green flag racing conditions.
2. Clearance for both 1/32 and 1/24 shall be .032” in rear. This is not recommended for tracks with banking. When racing on banked tracks, a higher clearance (.063") should be specified.
3. Gear may not extend below chassis.

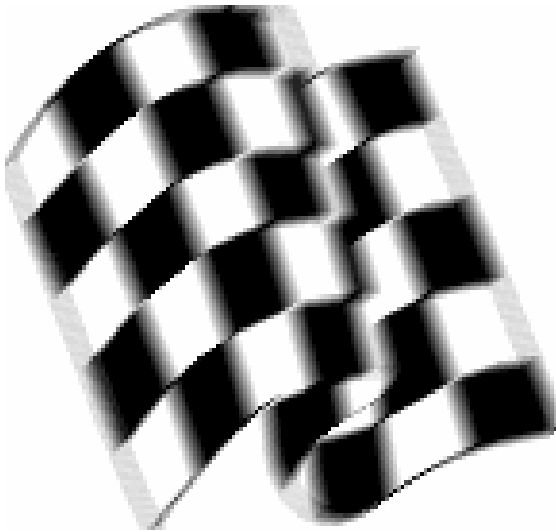
Eurosport Race Procedure

A) Qualifying

Qualifying order will be determined by a random draw. Each driver will receive one minute of qualifying time to establish his/her single fastest recorded lap time. Lane choice will be in accordance with normal USRA procedure.

B) Racing

Racing segments will be comprised of: Mains - 8x5 minute heats Semis - 8x3 minute heats Quarterfinals W minute heats. Consis - 4x3 minute heats. The European lane rotation system will be used. Lane changes will be two minutes between heats, with any work allowed on the cars during this period. However, drivers or pit personnel are not permitted.



Scale Division Approved Components

Group-10 Stock Car

Group-10 Chassis

Champion	Turbo Flex Astro XE
JK	Scorpion II Cheetah Scorpion III pan 2909 2901S, 2501S
Parma	Flexi-Kar Flexi-2, Flexi 3 Flexi 4-#579
Ferrett	
Rad Trax	RT-55
Mossetti Racing	300 Titan 303 Alum. Pan

Group-10 Motors

FastOnes	Twistrrr FO-260DC, FO-273B
Parma	Rotor 498IX 499IX DeathStar
RJR	541
Kelly	KE-575

Group-10 Armatures

FastOnes	D-Spec, FO-351
Mura	M2216
PSE	72013 72015
RJR	16-D, 922B
ProSlot	PS-706

Group-10 Bodies

Parma	1081M/C
Kelly	1723, 1724
JK Products	7321 M/C 7322 Dodge 7323 Taurus 7324 Pontiac

Kelly	1722
Toytech	TR-117-7 TR-118-7 TR-063-7

4-1/2" StockCar

4 1/2" Stock Car Chassis

Champion	Turbo Flex Astro XE
JK	One piece Scorpion II JK-25231S
Parma	Flexi 2 & 3

4 1/2" Stock Car Motors

Same as Gp-10

4 1/2" Stock Car Armatures

Same as GP-10

4 1/2" Stock Car Bodies

Kelly	1731, 1733
JK Products	73121 Dodge 73131 Taurus
Parma	1082 M/C

Approved Components Continued



GTP

GTP Chassis

Same as Gp-10

GTP Motors

Approved D-Can set-ups same as Gp-10. Approved C-Can set-ups same as GT-1

GTP Armatures

ProSlot	Super 16-D
PSE	Super 16-D
RJR	Super 16-D, 919B
Mura	Super Wasp
ProSlot	Super Wasp
RJR	Hornet
ProSlot	Super 16-C
Mura	Super 16-C
RJR	Super 16-C
Champion	Sportsman
FastOnes	Contender, FO-356 Super 16D
Koford	Competitor
Mura	Challenger
RJR	Contender

GTP Bodies

JK	7070U	Kelly	1754
	7073		1756
	7014U		1750
	7014B		
	70701		
Outisight	062	067	
	062U	066	
	064U	068	
	066E	069	
	067E		
	084		
	085		
PSE	70513	70524	
	70519	70525	
	70514	70526	
	70506		
	1103		
	70512		
ToyTech	TR124	166-7	097 103
	124-7	165-7	097-7 103-7
	095	096	102
	095-7	096-7	102-7

Approved Components Continued



GT-1

GT-1 Chassis

Same as Gp-10

GT-1 Motors

Any USRA approved C-can set-up.
Champion, Proslot, Koford, RJR, Kelly, Mura

GT-1 Bodies

Outisight 088, 062GT333

PSE 1044, 1045
1083

Kelly 1741
1740
1742

JK 7112
7176
7177
7178
7182
7183
7184
7185
7186
7187
7191
7192
7193
7194
7195
7196
7197

GT-12

GT-12 Chassis

FX	89,92	Kelly	1922
	93		1920
			1527

RPM 111
Slick7 447,447A, 447B
446A, 446B
498, 499

Mossetti Racing 200

GT-12 Motors

Any USRA approved C-Can set-up
Same as GP-12 Division I

GT-12 Armatures

Any USRA Approved GP-12 armature

GT-12 Bodies

Same as GTP

Euro C-12

Euro C-12 Chassis

Kelly 1532, 1530

Slik-7 S7-497
S7-496
S7-477 motor brace to convert
499&498 chassis to C-12 Euro
chassis

FX FX-90, 91

Motor & Armatures

Same as Division I C-12

Bodies

Same as GTP

Eurosport

1/32 Eurosport Bodies

Outisight 220,221,222,223,224,225
JK 7012B
7152B
Kelly 1782
1780

1/24 Eurosport Bodies

Same as GTP

Past USRA Gp-7 National Champions

1971	Dan Bloodworth	Cleveland, OH
1972	Jan Limpach	Cleveland, OH
1973	Joel Montague	Elyria, OH
1974	Jan Limpach	San Antonio, TX
1975	Don Barber	San Antonio, TX
1976	Bob Crane	Greenbelt, MD
1977	Joel Montague	Buena Park, CA
1978	Jan Limpach	Houston, TX
1979	Steve Bogut	New York, NY
1980	Ernie Provetti	Cincinnati, OH
1981	Paul Pfeiffer	Milwaukee, WI
1982	Paul Pfeiffer	Inman SC
1983	Paul Pfeiffer	Centerville, OH
1984	Csaba Szekelyhidi	Clovis, CA
1985	Henry Pena	Pasadena, TX
1986	P.A. Watson	Detroit, MI
1987	Bob Morton	Chicago, IL
1988	Mike Swiss	Atlanta, GA
1989	P.A. Watson	Withita, KS
1990	Mike Swiss	Kent, WA
1991	P.A. Watson	Orlando, FL
1992	Jon Laster	Riverdale, NJ
1993	P.A. Watson	Reseda, CA
1994	Ralph Morella	Marrietta, GA
1995	Martin Gramman	Montgomeryville, PA
1996	Paul Ciccarello	Chicago, IL
1997	Paul Ciccarello	Manchester, NH
1998	Rande Marshall	Butler, PA
1999	Paul Ciccarello	Boise, ID
2000	Paul "Beuf" Pedersen	Buena Park, CA
2001	Mario "MSP" Shone	Coram, NY
2002	Paul "Beuf" Pedersen	Buena Park, CA
2003	?	Gaithersburg, MD