1971-2001 Racing into our 4th Decade of National Championships

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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

2001
Division I
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.

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 producting companies.

D. ASSISTANT DIRECTORS (Div I and Div II)

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 producting 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 (Div I and Div II)

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 producting 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 it's 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 INTERMOIJNTAIN 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. Division I Traditional Group & Open Racing classes, Wing Cars
 - 2. Division II 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 I 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 lite 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
- 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 each member of the product approval committee by August 1 for evaluation and inspection.
- C. Each member of the product approval committee will report their findings and decisions directly to the USRA National director.
- D. Before being approved for USRA competition the product must be Commercially Available at Dirstibutors and/or retailers by October 1.
- E. 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)

- 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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- The user assumes the entire risk as to the accuracy and the use of this document. This document may not be copied or distributed by anyone other than The National Chapter of The United Slot Racers Association.
- 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 DIVISION I

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 wil have an amateur and an expert division
 - a. BOX STOCK Amateur and Expert
 - b. INTERNATIONAL 15 (15A) Amateur and Expert
 - c. COBALT 12/15 Amateur and Expert
 - d. GROUP 27 Amateur and Expert
 - e. SEMI-PRO GROUP 7
- 3. Any racer who has finished in the top three positions in any Amateur class at the National Chamiionship must comptete in the expert division in that (and any lower) class. The top three in Gp-27 will move to Pro 27, and the top three in Semi-Pro Gp-7 will move to Pro Gp-7
- 4. Amateur racers may enter any amateur class with these exceptions:
 - a. You may not run restricted Box Stock and Semi Pro Group 7 at the same event.
 - b. No Amateur or Semi Pro entrant may also race Pro Group 7.
 - c. No Pro Racer may enter any Amateur class
 - d. No racer who has raced Pro Gp-7 at the National championship in the past five years may enter any amateur Division.
 - e. No racer may race both the Amateur and Expert divisions of any class at the same Nats

B. PROFESSIONAL

 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. PRO GROUP 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 Box Stock 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 Box Stock 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

- Glue zones must be clearly marked, and be no more than 10 inches in length.
 Glue may be applied in these areas only. Glue may not be removed or spread from those zones by any other means other than the normal running of the car.
- 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.
- 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 quality 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, while) 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 to 8 entries: Final only 9 to 11 entries: Round Robin

- 12 to 22 entries: two round-robin semis and final. Top 4 in each semi move up.
 - entries: one round-robin heat, two semis and final. Fastest 12 qualifiers into semis top 4 in heat move up.
- 24 to 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 to 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 to 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 o	or B winner with most laps	Quarter C or D winner with most laps
0.1		

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

O1:6:#	Quarterfinal-A	Quarterfinal-B	Quatlerlinal-C	Quarterfinal-D
Qualifier #	1	2	3	4
	9	7	6	5
	9	10	11	12
	16	15	14	13
	17	18	19	20
	24	23	22	21
	25	26	27	29
	32	31	30	29

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

XII) DURATION OF RACES

Race		Segment Length	Lane Change
A. Mains		Ü	, ,
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			
I 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			
I 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

^{1.} Semis are run B, A

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

- 1. The power will only be turned off for extremely unfair or dangerous situations. The following are the only acceptable reasons:
 - a. Braid tip.
 - b. Power failure (one lane or all).
 - c. Debris in slot.
 - d. An un-marshalable car.
 - c. 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 or 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 rive 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)

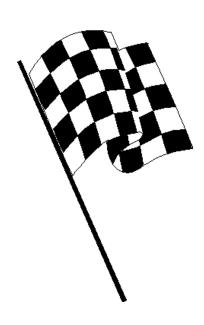
- 1. Any competitor may protest another person's armature. He/she must officially inform the race director, at which time the race will be stopped.
 - a. The protester may buy a look by posting a \$2.00 fee. He/ she is then entitled to look at the suspected armature in the car.
 - b. If not satisfied, 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.

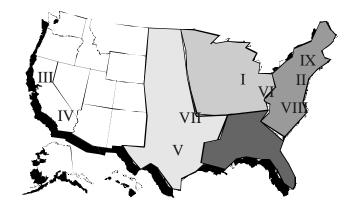
XII) HOSTING A NATIONAL EVENT

- 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.
 - 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, payouts, 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.



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

Scott Wright 10137 D Harlem Ave Chicago Ridge IL 60415 708-499-9841

Boxstock, Cobalt 12/15, Group 27, Pro Group 27, One Motor Open, Pro Group 7

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 Group 27, Group 7

Region IV So-Cal USRA

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

Spray Glue Boxstock, Cobalt 12, Group27, One Motor Open, Group 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, Amateur & Pro Cobalt 12, Grp 27, Pro 27, One Motor Open Group 7/Pro

Region VII Great Plains USRA

Alan Dodson Wicbigal@aol.com 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, Group 7

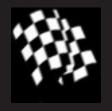
Region IX Yankee USRA

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 (19.05inin), unless otherwise specified. Rear wheels maximum width is . 8 10 inches (20.57mm), unless otherwise specified
- B. Front tire minimum diameter is .0500 inches (1 2.7mm), 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 (1.58751nin). 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, three dimensional driver with helmet, shoulders, arms and steering wheel mounted in the original cockpit position at all times during the racing. No paper drivers are permitted.
- D. Windshield Windshield must be clear and of original body.
- 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 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.)

V11) AIR CONTROL DEVICES

- A. No part may exceed 2.5 inches (63.5mm) inches, measured from the tech block surface. Any air control devices cannot 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 (95.25inin) forward of the real 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 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.

<u>Car</u> Specifications Division I



Boxstock

All General Rules apply

A) Motors

- Motors must be commercially available, as defined in General Rules, Section IX, and must be specifically approved for the Box Stock 15 class on an as submitted basis. Approved motors are listed in the Boxstock 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 \$38.00 US or less may be used as long as it meets all Boxstock specs and rules

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)
- 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 the Box Stock 15 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.
- 4. Armatures must be no less than .513 inches (13.03inin), and no more than .518" in diameter.
- 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
- 6. Armatures may be reconditioned but not re-sized. Reconditioning includes: cleaning, dying, commutator re-truing, and re-balancing.
- 7. Armatures retailing for \$25.00 US or less may be used as long as they meet all Boxstock 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 but must retain OEM magnet clips. Glue may not 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. In 2002 a ninimum 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.
- 9. A 1/8" x 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
- 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, Box Stock motors must use the original can, endbell, and hardware. Armatures and Magnets may be intermixed between approved Box Stock 15 manufacturers.
- f No post factory honing, shimming or polishing of magnets allowed unless delivered by the manufacturer in this manner

E) Chassis

- Chassis for the Box Stock 15 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 \$32.00 or less in completed form and meets all current USRA Boxstock specs may be used
 - a. Chassis must be commercially available separately, and may also be available in a completed car.
 - b. See the Box Stock 15 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 grams 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 piano wire may be added to solder joints only.
- 2. Lead weight may be added.
- 3. On steel chassis brass may be used for weight.
 - a. Brass 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) Brass 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 Box Stock 15 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 it race legal weight of not less than 72 grams.

International 15

All General Rules apply

A) Motor

- Can must be mass produced, and commercially available, as defined insection 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 0.0112 -.0114 inches diameter.
- 3. Must be commercially available, as defined in General Rules, Section IX
- 4. Armature stack lamination length sliall be a minimum of .440 inches (11. 1761mm). *See Armature Stack Length* section for clarification.
- 5. Armatures retailing for \$26.36 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

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 0.0 112"-.0 114 inches diameter.
- 3. Must be commercially available, as defined in General Rules, Section IX
- 4. Armature stack lamination length sliall be a minimum of .350 inches (11.1761nm). See *Armature Stack Length* section for further clarification.

- Timing may be adjusted to allow for factory variations. No minimum diameter.
- 6. Armatures retailing for \$27.63 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 woundturnsof 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

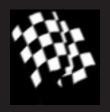
C) Body

Must comply with general rules otherwise no restrictions

D) Wheels, Tires, Gears

Must comply with general rules otherwise no restrictions

Apprroved Components Boxstock



Motors

Mura #1212,#1213P,#1215P

Parma #455

Champion #510HTX, #511HTX, #510X, #51IX

Proslot #728, #723

RJR #500

Koford #408, M-408J Camen #130.10, #130.15 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 Camen #1243.10, #1243.15

Chassis

ProSlot #PS-315, #PS-316(Kit)

Koford #M-451, #M-451B, #M-490A, #M-490B

FX Motorsports #FX 136, #FX98, #FX897

(Fast Racing)

RJR #795 Steel/Wire

RPM #115, #115 Kit, #102, #116,

DJ's Thunderbolt,

Slick7 #243, #243B, #472, #473

ACE #140, #141, ACEII-141, ACEII-143

ZAP #101

Kelly #1512 Predator, #1502 Perimiter

National Championships 1971-2001

	<u>- 1000-01-01-01-01-01-01-01-01-01-01-01-01</u>	- <u> </u>
1971	Parma Raceway	Parma OH
1972	Parma Raceway	Parma OH
1973	The Slot Shop	Elyria OH
1974	GM Model Raceway	San Antonio TX
1975	GM Model Raceway	San Antonio TX
1976	Joel's Race Place	Greenbelt MD
1977	Monaco Raceway	Buena Park CA
1978	Broadway Raceway	Houston TX
1979	Buzz-a-Rama	Brooklyn NY
1980	Gran Prix Raceway	Cincinnati OH
1981	Beloit Raceway	Beloit WI
1982	Inman Raceway	Inman SC
1983	Centerville Raceway	Centerville OH
1984	Super Slots	Clovis CA
1985	Pasadana Raceway	Pasadena TX
1986	Family Hobbies & Cones	Detroit MI
1987	Grand Raceway	Chicago IL
1988	Speedway & Hobby Too	Seattle WA
1989	DJ's Raceway	Wichita KS
1990	Georgia Hobby Center	Atlanta GA
1991	American Hobbies	Ocoee FL
1992	Zeppelin Hobbies	Riverdale NJ
1993	Chequered Flag	Reseda CA
1994	Fastrak	Atlanta GA
1995	LugNut Raceway	Montgomeryville PA
1996	JK Raceway	Chicago IL
1997	Victory Lane	Manchester NH
1998	R-Geo Raceway	Butler PA
1999	Flashtrax	Boise ID
2000	Buena Park Raceway	Buena Park CA
2001	Port Jefferson Raceway	Coram NY