



The 2021 - 2022 season of the NorCal SCRA will begin on October 2nd 2021. The NorCal SCRA would like to welcome back returning racers, as well as extend our welcome to all new racers who will be joining us this season. In an effort to continue to grow and be responsive to the racers, a number of suggestions were put forward by the racers and organization volunteers, and several changes have been made to last year's rules. Please review this set of rules in its entirety.

It is the racers responsibility to be aware of all race day rules and procedures in addition to individual car class rules. Please review all of the rules for classes you will be racing to ensure you are legal!

SUMMARY OF RULE CHANGES FOR THE 2021 – 2022 SEASON

- The 2022 USRA Scale National championships will be held at Fast Track Hobbies. We hope you'll attend and represent NORCAL SCRA! Many of the classes are virtually the same as our classes.
- Overall clean-up to all rules

Local and State Health Orders

As the season begins, we will likely still be under “modified” conditions set forth per local and state health orders. These health orders may result in modification to race day procedures including: pit space, lane rotation, lane change duration, turn marshalling, etc.

Any changes to race day procedures will be discussed at the mandatory drivers meeting. It is expected that all racers, host raceways, race directors, and spectators compile with these orders. Those failing to cooperate with the health orders will not be allowed to race.

SCHEDULE – 2021 - 2022 SEASON

Date	Venue	NASCAR / NASTRUCK	Hawk GT/LMP
October 2nd 2021	Fast Track Hobbies 4420 Granite Drive #400 Rocklin, CA 95677 (916) 784-1722 (Dwight) www.fthobbies.com	Purple Angel	Yellow Dragon
November 6th 2021	Fast Track Hobbies 4420 Granite Drive #400 Rocklin, CA 95677 (916) 784-1722 (Dwight) www.fthobbies.com	Red Kingleman	Yellow Dragon
January 21st -23rd 2022 (Nats Warm-up Race)	Fast Track Hobbies 4420 Granite Drive #400 Rocklin, CA 95765 (916) 784-1722 (Dwight) www.fthobbies.com	Purple Angel	Yellow Dragon
February 5th 2022	Fast Track Hobbies 4420 Granite Drive #400 Rocklin, CA 95765 (916) 784-1722 (Dwight) www.fthobbies.com	Purple Angel	Yellow Dragon
March 5th 2022	Fast Track Hobbies 4420 Granite Drive #400 Rocklin, CA 95765 (916) 784-1722 (Dwight) www.fthobbies.com	Red Kingleman	Yellow Dragon
April 2nd 2022	Fast Track Hobbies 4420 Granite Drive #400 Rocklin, CA 95765 (916) 784-1722 (Dwight) www.fthobbies.com	Purple Angel	Yellow Dragon
April 26th – May 1st 2022 USRA Scale Nats!	Fast Track Hobbies 4420 Granite Drive #400 Rocklin, CA 95765 (916) 784-1722 (Dwight) www.fthobbies.com	Purple Angel	Yellow Dragon
June 4th 2022	Fast Track Hobbies 4420 Granite Drive #400 Rocklin, CA 95765 (916) 784-1722 (Dwight) www.fthobbies.com	Red Kingleman	Yellow Dragon

GENERAL RULES AND INFORMATION

RACE FEES, DRIVER DIVISIONS, CAR CLASSIFICATIONS:

The entry fee for all classes will be **\$15.00** per slot car entered. **Payment for race fees must be paid in cash ONLY!** Sign-ups open at approximately 9:15am, and close at approximately 9:40 am. It is the drivers' responsibility to make sure they are signed up on time.

There will be four driver divisions:

- Amateur
- Advanced
- Expert
- Pro

Classification of all drivers, not already established, will be by a consensus of the following processes:

- Consultation with the local track owner
- Observation of practice by a director

Changes in driver classification will not be permitted after they have run their first race. This list will be reviewed at the end of the season and adjustments made according to the following formula:

- **Amateur** – All Champions may be promoted to the “Advanced” division. Other promotions might occur based on driver abilities. Drivers may request a promotion to the next division.
- **Advanced** All Champions may be promoted to the “Expert” division. Other promotions might occur based on driver abilities. Drivers may request a promotion to the next division.
- **Expert** – Drivers in this division will be reviewed for possibility of return to the “Advanced” division based on performance. Drivers in this division can move to the “Pro” division only by invitation of a consensus of Pro drivers.
- **Pro** – Any driver who is sponsored by a chassis or motor manufacture must run in this class. Other promotions might occur based on driver abilities. Drivers in this division will be reviewed for possibility of return to the “Expert” division based on performance.

There will be four slot car classes; NASCAR, NASTRUCK, Hawk GT and LMP. NASCAR and NASTRUCK will run first and second, LMP and Hawk GT will run third and fourth.

CHAMPIONSHIP POINTS RACE FOR THE SEASON

Points will be awarded, on a per division basis, using the following guidelines:

- First place will receive 225 points
- Second place will receive 210 points
- Third place through fifth place will decrease by increments of 5 points per position (Third 205, fourth 200, etc)
- Sixth place through tenth place will decrease by increments of 4 points per position (Sixth 191, seventh 187, etc)
- Remaining placements will decrease by increments of 3 points per position (Eleventh 172, Twelfth 169, etc)

Box plaques will be provided, to those that would like them, as follows per class:

- Top three places in the Amateur, Advanced and Expert divisions. There will be no plaques for the Pro division.
- The concourse winner

Season plaques will be awarded to the top three places in each of the four divisions, Amateur, Advanced, Expert and Pro, for each class, NASCAR, NASTRUCK, Hawk GT and LMP.

Only 5 races of the 6 will be counted toward the championship. The lowest point total from one race will be tossed out. If a driver enters less than 6 races, then the throw out will be zero. If a race is canceled, for any reason, that race will not count as a throw out nor as a points race.

There will be season champion awards for concourse for each of the four classes. Points will be awarded on a 3, 2, 1 basis for 1st, 2nd, and 3rd place, respectively. Only the champion in each class will be presented with an award.

In the event of a tie in the points, the winner will be decided using the following criteria, in descending order, until a winner is determined:

- Most 1st place finishes
- Most 2nd place finishes
- Most 3rd place finishes
- Most recent win
- Highest finisher at the final race

If a racer wins the season championship for their division, they will automatically be recommended for promotion to the next higher division. Exceptions to this rule include racers under 18 years old, and certain special circumstances.

CODE OF CONDUCT

It is important that everyone remembers that this is a family environment!

- All drivers **MUST** pay attention and attend the driver's meeting. Important information will be discussed concerning the days' event.
- Yelling at corner marshals is strictly prohibited
- Corner marshals yelling at drivers is strictly prohibited, even if it is in response to being yelled at by a driver
Everyone keep your cool!
- The use of profanity is strictly prohibited
- Excessive use of alcohol and/or other mood altering products is strictly prohibited
- Displays of anger, throwing cars, controllers, etc is strictly prohibited
- Intentional interference in the racing environment in any manner is prohibited
- Un-sportsman like conduct is prohibited
- Race directors will be watching for infractions and any offense can and will be dealt with severely, up to and including ejection from the raceway.

The penalties for failing to follow the Code of Conduct are:

1st offense:	10-lap penalty
2nd offense:	Disqualification

These penalties are on a per race day basis. Disqualification for violating any of the above rules will be for all classes raced that day and zero points will be awarded for all classes. Depending on the severity of the infraction, **disqualification may occur on the 1st offense. NORCAL SCRA reserves the right to temporarily or permanently ban racers from the series!**

RULES FOR CORNER MARSHALS:

- All drivers ***MUST*** corner marshal. Failure to corner marshal will be considered un-sportsman like conduct, resulting in disqualification.
- Corner marshaling will be conducted in a sit out rotation format whether or not there are enough corner marshals to cover the race. This means that as you come off the track, you will immediately rotate to the first corner position matching the color you came out on. Corner marshal posts are marked with a "W" for the white sit out sequence and a "P" for the Purple sit out sequence. The number may vary by track configuration. The actual locations will be announced prior to the start of race set #1 after the opening grid has been set.
- If at any time you find yourself not on the track or not on a corner marshal position you may be requested to assist at one of the tracks should a shortage arise.
- If you drop out of the race you are still responsible for fulfilling your corner marshal duties.
- If you are physically unable to perform on a specific corner, **it is your responsibility to find a substitute.** Please let the group know; someone will likely help you.
- If a car becomes disabled a corner marshal will remove it from the track. Do not attempt to repair the car.
- Under no circumstances will a corner marshal leave their corner to give a disabled car to a driver or throw a disabled car across the track to a driver. The driver must leave their station and walk around the track to retrieve a disabled car.
- All drivers coming off the track and going to their corner marshaling posts must do so without delay. They are to deliver their car to impound, and put their controller away, then proceed to their assigned post. Failure to be at their post when the race is ready to resume will result in the following penalties:

1st offense:	10 lap penalty
2nd offense:	25 lap penalty
3rd offense:	disqualification

NORCAL Officials AND "RACE JURY"

Several racers have volunteered to provide help throughout the race day. These "Officials" will be indicated during the driver's meeting. These racers are intended to be points of contact for other racers, new and old, for the organization and should be utilized to answer any questions racers might have about rules, procedures, or anything else regarding NorCal SCRA.

During the driver's meeting, three of the Officials will be selected to be that race's "Race Jury" and one will be selected to judge "Concourse". The "Race Jury" will be consulted regarding any potential rule violation and the application of

penalties as provided in the rules. Should a situation arise where a rule is not clear, or penalties not defined, the "Race Jury" will determine a resolution. Their decision is final. Should there be a conflict of interest with a member of the "Race Jury", an alternate Official will be substituted.

RACE DAY PROCEDURES

PRACTICE:

The tracks will open for practice at 8:00am the day of the race. Race signups will begin at approximately 9:15 am.

Tracks will be on from 8:00 am to 10:00am for practice using track time purchased by NorCal SCRA. When available, any additional desired track time shall be purchased by the racer.

Only cars that are of the same type as the cars that will be racing will be allowed on the tracks the day of the race. Only racers that have signed up to race may practice.

SIGNUPS:

Signups for all car classes will close at 9:40 am. Signups after 10:00 am ***MAY*** be accepted, but will not be eligible for slotto tickets. Once the first race has started, no refunds are available.

SLOTTO:

- Slotto drawings (merchandise gift certificates) will be done following the conclusion of race set #2 (i.e. the NASTRUCK race)
- Drivers will receive one ticket for every slot car class entered, maximum of four tickets
- You must be present to win

DRIVERS MEETING:

There will be a MANDATORY driver's meeting. **ALL RACERS MUST ATTEND!** The drivers meeting will start promptly at 10:00 am.

TECH:

The tech process for each month's race event will be as follows:

- Tech for race set #1 will begin at the conclusion of the drivers meeting
- Race #1 will begin immediately following the conclusion of tech, but in no instance will it be later than 11:00 am.
- Tech for race #2 will open half-way through race #1. Those racers not in race #1 are required to have their cars in tech before the completion of race #1. Those racers in race #1 will present their cars to tech immediately following the conclusion of race #1
- Tech for race #3 will open half-way through race #2. Those racers not in race #2 are required to have their cars in tech before the completion of race #2. Those racers in race #2 will present their cars to tech immediately following the conclusion of race #2
- Tech for race #4 will open half-way through race #3. Those racers not in race #3 are required to have their cars in tech before the completion of race #3. Those racers in race #3 will present their cars to tech immediately following the conclusion of race #3
- All drivers are responsible for bring your cars to tech in a legal condition.
- All cars passing through tech will be placed in impound and cannot be handled again except under green flag conditions.
- All cars may be marked during the technical inspection process. These marks are intended to ensure the same chassis and body are used throughout the race. Changing of the car's body and/or chassis will result in a disqualification and zero points for the class.
- All cars must be presented to tech before tech closes. Cars submitted late to tech will be subject to a 3 lap penalty.
- Post-race technical inspection may be performed by the "Race Jury", or any member of the "Race Jury" on any car.

CONCOURSE:

The process for each month's concourse will be:

- Concourse will be done at the close of tech for each class, from the impound table.
- All cars entered in the race will automatically be included in concourse.
- Once tech closes, you may not change the body on your car and your car must be raced as it was presented for tech.

Concourse will be judged by a NorCal “Official”, based on the following criteria:

- **OVERALL PAINT** - This includes, first impression, paint quality, masking, color choice, realism, theme
- **INTERIOR** - This includes realism (3D appearance), 3 color minimum, color choice, detail (roll bar, seat belts, dash, steering wheel, shifter, driver suit, helmet, gloves, face, passenger seat, etc.)
- **DETAILS** - This includes 3 numbers, lettering, and sponsor decals (painted verses decal), vents, grill, exhaust, head and tail lights, motor detail, front wheels and wheel inserts, body mounting, wheel well cutouts, rear of car cutout
- **CHASSIS** –This includes cleanliness, soldering, wire routing, etc.

RACE FORMAT AND RULES

Classes will be raced in the following order: NASCAR, NASTRUCK, Hawk GT and LMP

All races will be run in the Round Robin Double Sit Out rotation format.

The race director will make reasonable efforts to announce racers that are “On Deck” and will attempt to get positive acknowledgement from the racers of their “On Deck” status. However, it is ultimately the racer’s responsibility to be prepared for their heats and to keep track of when they are supposed to be racing. If you miss your heat, there will be no adjustment to your lap total.

All race heats will be 3 minutes in length with the intermission between heats being 1 1/2 minutes.

Impound will be off limits at all times except to pick up a car or return a car between sit-outs.

All repairs and maintenance must be performed during green flag conditions. Green flag conditions are defined as the 1 1/2 minutes prior to the start of the heat you are in until the start of the heat in which you are either going to sit out or have finished all of your heats. Failure to return your car to impound by the start of the heat in which you are either sitting out or have finished all of your heats, will result in a penalty, up to disqualification and a zero for points.

Drivers may fix their cars during green flag conditions, and re-enter a race at any point. However, the car is subject to being submitted for technical inspection at any time once it returns to the track, subject to the technical or race director’s discretion. If a car is re-inspected, it will be checked for the same body and chassis that was used at the beginning of the race as well as sufficient ground clearance. The motor will be inspected to make sure it complies with the motor rules for the class.

Racers may **NOT** change their tires, post tech, to tires that are smaller in diameter than those used to pass technical inspection. If a tire becomes damaged or if the tires have worn to the point that the chassis is dragging, or endanger of dragging the track, tires may be changed. Any driver changing tires is subject to having their car re-teched at the tech or race director’s discretion.

The final position as recorded by the computer will be used as the determining judge in the event of any ties on the track.

A racer may protest a race’s results for a deposit of \$20. The race must contact any member of the Race Jury. Protests must be made within 5 minutes after the end of the race. The contacted Race Jury member will consult with the other members of the Race Jury, and the Race Jury will decide if any further action is warranted.

Black Flag Conditions: The race director may, at any time, direct a racer to remove their car from the track if it is determined that the car is dragging the track excessively, in any way poses a risk of damage to the track or other racers, or is incapable of reasonably making laps. The racer may return the car to the track only upon resolving the issue.

Failure to follow the rules (otherwise known as cheating) laid out by the club, either knowingly or unknowingly, will not be tolerated. Penalties associated with cheating will range from lap total penalties up to and including disqualification and permanent ban from the series.

4" NASCAR RULES (Amateur Class)

CHASSIS

APPROVED CHASSIS

Amateur racers may use any non-drop through motor box, steel flexi chassis. Aluminum pans or center sections are not allowed. The following chassis are common examples of allowed chassis:

- Champion Turbo Flex
- JK Products Cheetah 7
- JK Products Cheetah 21 (One piece pan ONLY)

The chassis with "Drop-through" motor boxes are **NOT** legal.

ALLOWED CHASSIS MODIFICATIONS:

- May solder or glue motor to chassis
- May add self-adhesive lead weight only
- May solder or glue rear oilites
- May reinforce rear uprights with piano wire
- May file holes in motor bracket, but must retain the entire bracket
- May file highest rear axle bushing hole to level rear axle
- May use a piano wire motor brace no longer than 1" and may connect to chassis motor bracket
- Fixed or floating pin tubes are allowed
- Guide tongue supports are allowed
- Must use oilites/bronze bushings.
- May interchange pans from the same manufacturer, but must use steel pans only!
- Soldering of earring back is only modification allowed rear of front axle.

DISALLOWED CHASSIS MODIFICATIONS:

- No ball bearings allowed at rear axle
- No cutting or modifying of chassis in any way. Chassis may be ever so slightly filed to increase or decrease movement of the chassis pan.
- No additional bite bars
- Lightening the chassis is prohibited. This rule will be strictly enforced.

MOTORS

APPROVED MOTORS:

All Amateur racers must use the ProSlot PS-2002, sealed 16D motor. The factory seal must remain intact at all times.

ALLOWED MOTOR MODIFICATIONS:

- Motor brushes and springs may be changed/replaced
- The can may be notched to allow clearance for the axle. No other modifications to the can are allowed.

DISALLOWED MOTOR MODIFICATIONS:

- All other modifications are disallowed
- Motor seal must be complete and intact

AXLES, TIRES AND GEARS:

APPROVED AXLES, WHEELS AND GEARS:

- Rear axle may be 3/32" or 1/8" diameter.

- Any gear ratio and pitch may be used
- Front axle must be a minimum of .047" to a maximum diameter of .063".
- Front wheel minimum diameter of 1/2". May use sticker front tires.
- Front wheels must rotate freely on axle.
- Front wheels must be two piece with the outside being rubber
- Rear wheels may be any diameter.
- Rear axle width not to exceed 3.25" inclusive of all tire and wheel material

ALLOWED AXLE, WHEEL AND GEAR MODIFICATIONS:

- May solder front axle where it passes through chassis uprights only. All other points of attachment are prohibited.
- May solder front wheel retainers to axle or chassis
- Cars must tech to .063" clearance under rear of car including gear.
- Any current, commercially available black rear tire, maximum tire and wheel width .810".

DISALLOWED AXLE, WHEEL AND GEAR MODIFICATIONS:

- No all rubber fronts tires/wheels allowed.
- No axle tubes allowed front or rear.
- No hollow rear axles allowed.

BODIES

APPROVED BODIES

JK PRODUCTS		PARMA
70525 Toyota Camry	70527 Ford	1033 Ford Fusion 2006
70524 Dodge	70528 COT	1034 Ford Fusion 2006
70526 Chevrolet		

ALLOWED BODY MODIFICATIONS:

- Bodies must be cut to the cut line and mounted with the cut line parallel to the chassis
- Body may be **minimally** trimmed to allow for chassis from tabs to clear the body
- The cut line must be visible on the front and both sides.
- Must retain a minimum 1/8" rear bumper.
- Bodies must have three matching numbers. Numbers should be placed on the car in approximately the correct locations for a NASCAR (i.e. numbers on the roof and on each door).
- Front wheel well area must be left clear.
- Front wheels/axles not required. May use stickers on the body.
- If using a front axle, it must be a minimum of .047" to a maximum diameter of .063"
- If using front wheels, they must have a minimum diameter of 1/2" and must rotate freely on axle
- Rear wheel well area must be cut out completely around the tire.
- Bodies must have a whole scale interior (no holes) and a three-dimensional multi-colored painted driver that covers all the car's components.
- Interiors must be commercially available paper folded to make it 3d or plastic molded only. No hefty bags, "thingy" or flat paper interiors with driver glued to it will be allowed.
- Interior must stay in the car at all times. If it drops out, fix it. Do not remove it or you will be black-flagged.

DISALLOWED BODY MODIFICATIONS:

- No add on spoilers.
- Bending or creasing the body to modify its shape or function is prohibited.
- No see-through paint jobs.
- No sunroofs. Only front wheel area and windows maybe clear.
- No tinted or painted windows. They must remain clear at all times. This includes rear side windows on bodies equipped with them.
- May not tear off back of body if damaged or after a body tucks. Tape, staples or glue may be used for repair.

4" NASCAR RULES (Advanced, Expert and Pro Classes)

CHASSIS

APPROVED CHASSIS

Drivers must use current, commercially available 4" flexi-car production chassis. No prototypes allowed. The current list of approved chassis are:

JK PRODUCTS	MOSSETTI	RM RACING	KELLY/PROSLOT	CHAMPION
Cheetah 7 Cheetah 11 Cheetah 21 Cheetah X24 & X25 Cheetah 43 "Aeolos"	Patriot Striker Patriot Defender Patriot Avenger	Arrow Chassis	SpeedFX	Turbo Flex Astro

ALLOWED CHASSIS MODIFICATIONS:

- May use any "Bite Bar" produced by the original chassis manufacture
- May replace straight "Bite Bar" with piano wire, but must remain straight as originally designed.
- May replace pins with "spring clip" on Mossetti chassis. Must still use brass or steel connecting pin tube.
- May solder or glue motor to chassis.
- May add self-adhesive lead weight only
- May solder or glue rear oilites.
- May reinforce rear uprights with piano wire
- May file holes in motor bracket, but must retain the entire bracket
- May jig rear axle for any diameter tire
- May use a piano wire motor brace no longer than 1" and may connect to chassis motor bracket
- Fixed or floating pin tubes are allowed
- Guide tongue supports are allowed
- Must use oilites/bronze bushings
- Commercially available aluminum pans designed for the chassis being used are allowed
- Soldering of earring back is only modification allowed rear of front axle. No additional bite bars, etc

DISALLOWED CHASSIS MODIFICATIONS:

- No ball bearings allowed at rear axle
- No axle tube bracing front or rear
- No cutting or modifying of chassis in any way. Chassis may be ever so slightly filed to increase or decrease movement of the chassis pan
- Lightening the chassis is prohibited. This rule will be strictly enforced

MOTORS

APPROVED MOTORS:

- May use current, commercially available balanced "American made" 16-D motor from any manufacturer
- May use any 16D single ceramic mag, current, commercially available setup.
- May use ProSlot PS-2002 sealed 16D motors. (See Amateur NASCAR Motor Rules for requirements)
- May use Bruiser or Big Bruiser armatures
- All armatures must have a tag, except for ProSlot PS-2002 motors. Seals MUST be intact.
- Allowable diameter is a minimum of .513 and a maximum of .560
- May run any air gap
- Minimum stack length .600"
- Motor must not extend below the bottom of the chassis

ALLOWED MOTOR MODIFICATIONS:

- May shim, hone, and epoxy magnets
- May mix or match components from any of the legal manufacturers in any combination
- May change spring cup to accommodate any spring
- May change motor brushes
- May use ball bearings in the can and endbell
- May hone magnets
- The can may be minimally notched to allow clearance for the axle. No other modifications to the can are allowed.

DISALLOWED MOTOR MODIFICATIONS:

- No shunts are allowed
- No spring insulation is allowed
- All other modifications are disallowed
- No Neo, Cobalt, other "rare-Earth" material magnets; Ceramic magnets ONLY!

AXLES, TIRES AND GEARS:

APPROVED AXLES, WHEELS AND GEARS:

- Rear axle may be 3/32" or 1/8" diameter.
- Must use 48, 64, 72, or 80 pitch gears (plastic or metal OK)
- Front wheel well area must be left clear so front tire/wheel is completely visible.
- Front wheels/axles not required. May use stickers on the body.
- If using a front axle, it must be a minimum of .047" to a maximum diameter of .063"
- If using front wheels, they must have a minimum diameter of 1/2" and must rotate freely on axle
- Rear Wheels may be any diameter
- Rear axle width not to exceed 3.25" inclusive of all tire and wheel material

ALLOWED AXLE, WHEEL AND GEAR MODIFICATIONS:

- May solder front axle where it passes through chassis uprights only. All other points of attachment are prohibited.
- May solder front wheel retainers to axle or chassis
- Cars must tech to .063" clearance under rear of car **including** gear
- Any current, commercially available black rear tire, maximum tire and wheel width .810".

DISALLOWED AXLE, WHEEL AND GEAR MODIFICATIONS:

- No all rubber fronts tires/wheels allowed
- No axle tubes allowed front or rear
- No hollow rear axles allowed

BODIES:

APPROVED BODIES

JK PRODUCTS		PARMA
70525 Toyota	70527 Ford	1033 Ford Fusion 2006
70524 Dodge	70528 COT	1034 Ford Fusion 2006
70526 Chevrolet		

ALLOWED BODY MODIFICATIONS:

- Bodies must be cut to the cut line and mounted with the cut line parallel to the chassis.
- Body may be **minimally** trimmed to allow front chassis tabs to clear the body.
- The cut line must be visible on the front and both sides.
- Must retain a minimum 1/8" rear bumper.
- Bodies must have three matching numbers. Numbers should be placed on the car in approximately the correct locations for a NASCAR (i.e. numbers on the roof and on each door).
- Front wheel well area must be left clear.
- Front wheel stickers are allowed.

- Rear wheel well area must be cut out completely around the tire.
- Bodies must have a whole scale interior (no holes) and a three-dimensional multi-colored painted driver that covers all the car's components.
- Interiors must be commercially available paper folded to make it 3d or plastic molded only. No hefty bags, "thingy" or flat paper interiors with driver glued to it will be allowed.
- Interior must stay in the car at all times. If it drops out, fix it. Do not remove it or you will be black-flagged.

DISALLOWED BODY MODIFICATIONS:

- No add on spoilers.
- Bending or creasing the body to modify its shape or function is prohibited.
- No see-through-paint jobs.
- No sunroofs. Only front wheel area and windows maybe clear.
- No tinted or painted windows-they must remain clear at all times. This includes rear side windows on bodies equipped with them.
- May not tear off back of body if damaged or after a body tucks. Tape, staples or glue may be used for repair.

4 ½" NASTRUCK RULES

CHASSIS

APPROVED CHASSIS:

Must use current, commercially available 4 ½" flexi-car production chassis. No prototypes allowed. The current list of approved chassis are:

CHAMPION	JK PRODUCTS	MOSSETTI	RM RACING
Turbo Flex	Cheetah 21 Cheetah 7 Scorpion I, II & III	Patriot Defender	Arrow Chassis Arrow Chassis Oval pan

ALLOWED CHASSIS MODIFICATIONS:

- May cut motor bracket for 4.5" JK Cheetah 21; must retain some vertical section of the original brace
- May solder or glue motor to chassis
- May add self-adhesive lead weight only
- May solder or glue rear oilites
- May reinforce rear uprights with piano wire or Slick 7 "U" brace
- May file highest rear axle bushing hole to level rear axle
- May use a piano wire motor brace no longer than 1" and may connect to chassis motor bracket
- Fixed or floating pin tubes are allowed
- Guide tongue supports are allowed.
- Must use oilites/bronze bushings.
- Commercially available aluminum pans designed for the chassis being used are allowed.
- May interchange pans from the same manufacturer
- Soldering of earring back is only modification allowed rear of front axle. No additional bite bars, etc

DISALLOWED CHASSIS MODIFICATIONS:

- No ball bearings allowed at rear axle
- No axle tube bracing front or rear
- No cutting or modifying of chassis in any way. Chassis may be ever so slightly filed to increase or decrease movement of the chassis pan.
- Lightening the chassis is prohibited. This rule will be strictly enforced.

MOTORS

All Amateur racers must use the ProSlot PS-2002, sealed 16D motor. The factory seal must remain intact at all times.

APPROVED MOTORS:

- May use current, commercially available balanced "American made" 16-D motor from any manufacturer
- May use any 16D single ceramic mag, current, commercially available setup.
- May use ProSlot PS-2002 sealed 16D motors. (See Amateur NASCAR Motor Rules for requirements)
- May use Bruiser or Big Bruiser armatures
- All armatures must have a tag
- Allowable diameter is a minimum of .513 and a maximum of .560
- May run any air gap
- Minimum stack length .600"
- Motor must not extend below the bottom of the chassis

ALLOWED MOTOR MODIFICATIONS:

- May shim, hone and epoxy magnets.
- May mix or match components from any of the legal manufacturers in any combination
- May change spring cup to accommodate any spring.
- May change motor brushes
- May use ball bearings in the can and endbell

- May hone magnets
- The can may be notched minimally to allow clearance for the axle. No other modifications to the can are allowed

DISALLOWED MOTOR MODIFICATIONS:

- No shunts are allowed
- No spring insulation is allowed
- All other modifications are disallowed
- No Neo, Cobalt, other "rare-Earth" material magnets; Ceramic magnets ONLY!

AXLES, TIRES AND GEARS

APPROVED AXLES, WHEELS, GEARS AND TIRES:

- Rear axle may be 3/32" or 1/8" diameter
- May use 48, 64, 72, or 80 pitch gears (plastic or metal OK)
- Front axle must be a minimum of 3/32" to a maximum diameter of 1/8".
- Front wheel minimum diameter of .675" and minimum width of .400"
- Front wheels must rotate freely on axle
- Rear wheels must have a minimum diameter of .790" and a maximum width of .810"
- Rear axle width not to exceed 3.25" inclusive of all tire and wheel material

ALLOWED AXLE, WHEEL AND GEAR MODIFICATIONS:

- May solder front axle where it passes through chassis uprights only. All other points of attachment are prohibited.
- May solder front wheel retainers to axle or chassis
- Cars must tech to .063" clearance under rear of car including gear.
- Any current, commercially available black rear tire, maximum tire and wheel width .810".

DISALLOWED AXLE, WHEEL AND GEAR MODIFICATIONS:

- No all rubber fronts tires/wheels allowed
- No axle tubes allowed front or rear
- No hollow axles front or rear allowed

BODIES

APPROVED BODIES:

- Must be 4 1/2" stock, scale appearing and factory production bodies only
- No additional bodies will be approved during the season

Approved bodies are:

JK PRODUCTS	
JK71191 4 1/2" Ford	JK71171 4 1/2" Chevy
JK71181 4 1/2" Dodge	JK7149 4 1/2" Toyota

ALLOWED BODY MODIFICATIONS:

- Bodies must be cut to the cut line and mounted with the cut line parallel to the chassis.
- The cut line must be visible on all four sides.
- Bodies must have three matching numbers. Numbers should be placed on the car in approximately the correct locations for a NASTRUCK (i.e. numbers on the roof and on each door).
- Front wheel well area must be left clear or be cut out so front tire/wheel is completely visible.
- No cutting into the top of the fender/hood area.
- Front wheel stickers are ***NOT*** allowed.
- Rear wheel well area must be cut out completely around the tire.
- Bodies must have a whole scale interior (no holes) and a three-dimensional multi-colored painted driver that covers all the car's components.
- Interiors must be commercially available paper folded to make it 3d or plastic molded only. No hefty bags or flat paper interiors with driver glued to it will be allowed

- Interior must stay in the car at all times. If it drops out, fix it. Do not remove it or you will be black-flagged.

DISALLOWED BODY MODIFICATIONS:

- No add on spoilers.
- Bending or creasing the body to modify its shape or function is prohibited.
- No see-through paint jobs
- No sunroofs. Only front wheel area and windows maybe clear.
- No tinted or painted windows-they must remain clear at all times. This includes rear side windows on bodies equipped with them.
- May not tear off back of body if damaged or after a body tucks. Tape, staples or glue may be used for repair

LE MANS PROTOTYPE (LMP) RULES

CHASSIS

APPROVED CHASSIS

Drivers must use current, commercially available 4" flexi-car production chassis. No prototypes allowed. The current list of approved chassis are:

JK PRODUCTS	MOSSETTI	RM Racing	KELLY/PROSLOT	CHAMPION
Cheetah 7 Cheetah 11 Cheetah 21 Cheetah X24 & X25 Cheetah 43 "Aeolos"	Patriot Striker Patriot Defender Patriot Avenger	Arrow Chassis	SpeedFX	Turbo Flex Astro

ALLOWED CHASSIS MODIFICATIONS:

- May use any "Bite Bar" produced by the original chassis manufacture.
- May replace straight "Bite Bar" with piano wire, but must remain straight as originally designed.
- May replace pins with "spring clip" on Mossetti chassis. Must still use brass or steel connecting pin tube.
- May solder or glue motor to chassis
- May add self-adhesive lead weight only
- May solder or glue rear oilites
- May reinforce rear uprights with piano wire
- May file holes in motor bracket, but must retain all of the bracket
- May jig rear axle for any diameter tire
- May use a piano wire motor brace no longer than 1" and may connect to chassis motor bracket
- Fixed or floating pin tubes are allowed
- Guide tongue supports are allowed.
- Must use oilites/bronze bushings.
- Commercially available aluminum pans designed for the chassis being used are allowed.
- May interchange pans from the same manufacturer
- May solder brass tube or rod to the inside of the center section front hooks, to control pan movement and droop on JK Cheetah 11, 21, X24 and X25 three piece versions.
- Soldering of earring back is only modification allowed rear of front axle. No additional bite bars, etc.

DISALLOWED CHASSIS MODIFICATIONS:

- No ball bearings allowed at rear axle
- No axle tube bracing front or rear
- No cutting or modifying of chassis in any way. Chassis may be ever so slightly filed to increase or decrease movement of the chassis pan.
- Lightening a chassis is prohibited. This rule will be strictly interpreted.

MOTORS

APPROVED MOTORS:

- Must use current commercially available c-can motors and arms from: Cahoza, Camen, Kelly, Koford, Red Fox, ProSlot and Mid-America
- Must use Contender, Super Wasp, Wasp, Hornet, Competitor arms
- Allowable armature diameter is a minimum of .510 and a maximum of .540
- All armatures must have a tag
- Minimum stack length .350
- Motor must not extend below the bottom of the chassis

ALLOWED MOTOR MODIFICATIONS:

- May shim, hone and epoxy magnets.
- Any single, non-beveled or beveled, ceramic magnets are allowed
- May mix or match components from any of the approved manufacturers listed under "Approved Motors"
- May change spring cup to accommodate any spring
- May change motor brushes
- May use ball bearings in the can and endbell
- May add shunt wires
- The can may be minimally notched to allow clearance for the axle. No other modifications to the can are allowed.

DISALLOWED MOTOR MODIFICATIONS:

- No Feather or strap cans allowed
- All other modifications are disallowed
- No Neo, Cobalt, other "rare-Earth" material magnets; Ceramic magnets ONLY!
- No Aluminum endbells

AXLES, TIRES AND GEARS:

APPROVED AXLES, WHEELS AND GEARS:

- Rear axle may be 3/32" or 1/8" diameter
- May use 48, 64, 72, or 80 pitch gears (plastic or metal OK)
- Front wheel well area must be left clear so front tire/wheel is completely visible.
- Front wheels/axles not required. May use stickers on the body.
- If using a front axle, it must be a minimum of .047" to a maximum diameter of .063"
- If using front wheels, they must have a minimum diameter of 1/2" and must rotate freely on axle
- Rear wheels must have a maximum width of **.810"**
- Rear axle width not to exceed 3.25" inclusive of all tire and wheel material

ALLOWED AXLE, WHEEL AND GEAR MODIFICATIONS:

- May solder front axle where it passes through chassis uprights only. All other points of attachment are prohibited.
- May solder front wheel retainers to axle or chassis
- For flat tracks cars must tech to .032" clearance under rear of car **including** gear
- Any current, commercially available black rear tire, maximum tire and wheel width .810".

DISALLOWED AXLE, WHEEL AND GEAR MODIFICATIONS:

- No all rubber fronts tires/wheels allowed
- No axle tubes allowed front or rear
- No hollow rear axles allowed.

BODIES:

APPROVED BODIES:

- Must be 4", scale appearing and factory production bodies.
- No additional bodies will be approved during the season.

Approved bodies are:

JK PRODUCTS		RED FOX	OUTISIGHT
7176 Toyota 7177 BMW Le Mans 7182 Audi RSC 7183 Mercedes CLR 7184 BMW V12 LMR 7187 Lola Judd	7192 Audi R8 7200 Ascari 7205 Mazda 7207 2003 Bentley LMP	RFSC26 Bentley RFSC34 Audi Coupe RFSC42 Peugeot Coupe RFSC100C Audi R18 RFSC Ferrari Concept RFSC102C Nissan	295 Audi R-18

ALLOWED BODY MODIFICATIONS:

- Must be 4" scale appearing, factory production body only.
- Bodies must have a maximum rear spoiler height of 1 5/8" as measured from a non-recessed tech block when mounted on its chassis.
- Bodies must have a vertical front surface. No knife edge.
- Outline does not need to be visible on the sides of the body.
- Body may be **minimally** trimmed to allow front chassis tabs to clear the body.
- Bodies must have three matching numbers.
- Front wheel well area must be left clear.
- Front wheel stickers are allowed.
- Rear panel may be cut out, but do not cut into the sides behind the wheel well above the cut line.
- Open cockpit bodies must have a multi-colored painted driver.
- May leave vents or other components that would be see-through on the actual car unpainted.
- Closed cockpit bodies:
 - Must have a whole scale interior (no holes) and a three-dimensional multi-colored painted driver that covers all the car's components.
 - When viewed from above, the chassis must be covered by the interior.
 - Interiors must be commercially available paper folded to make it 3d or plastic molded only. No hefty bags or flat paper interiors with driver glued to it will be allowed
 - Interior must stay in the car at all times. If it drops out, fix it. Do not remove it or you will be black-flagged.

DISALLOWED BODY MODIFICATIONS:

- No add on spoilers.
- Bending or creasing the body to modify its shape or function is prohibited.
- No see-through paint jobs.
- No sunroofs. Only front wheel area and windows maybe clear
- No tinted or painted windows. They must remain clear at all times. This includes rear side windows on bodies equipped with them.
- May not tear off back of body if damaged or after a body tucks. Tape, staples or glue may be used for repair.

HAWK GT RULES

CHASSIS

APPROVED CHASSIS:

Drivers must use current, commercially available 4" flexi-car production chassis. No prototypes allowed. The current list of approved chassis are:

JK PRODUCTS	MOSSETTI	RM RACING	KELLY / PROSLOT	CHAMPION
Cheetah 7 Cheetah 11 Cheetah 21 Cheetah X24 & X25 Cheetah 43 "Aeolos"	Patriot Striker Patriot Defender Patriot Avenger	Arrow Chassis	SpeedFX	Turbo Flex Astro

ALLOWED CHASSIS MODIFICATIONS:

- May use any "Bite Bar" produced by the original chassis manufacture.
- May replace straight "Bite Bar" with piano wire, but must remain straight as originally designed.
- May replace pins with "spring clip" on Mossetti chassis. Must still use brass or steel connecting pin tube.
- May solder or glue motor to chassis
- May add self-adhesive lead weight only
- May solder or glue rear oilites
- May reinforce rear uprights with piano wire
- May file holes in motor bracket, but must retain all of the bracket
- May jig rear axle for any diameter tire
- May use a piano wire motor brace no longer than 1" and may connect to chassis motor bracket
- Fixed or floating pin tubes are allowed
- Guide tongue supports are allowed
- Must use oilites/bronze bushings
- Commercially available aluminum pans designed for the chassis being used are allowed.
- May interchange pans from the same manufacturer
- May solder brass tube or rod to the inside of the center section front hooks, to control pan movement and droop on JK Cheetah 11, 21, X24 and X25 three piece versions.
- Soldering of earring back is only modification allowed rear of front axle. No additional bite bars, etc.

DISALLOWED CHASSIS MODIFICATIONS:

- No ball bearings allowed at rear axle
- No axle tube bracing front or rear
- No cutting or modifying of chassis in any way. Chassis may be ever so slightly filed to increase or decrease movement of the chassis pan
- Lightening a chassis is prohibited. This rule will be strictly interpreted

MOTORS

APPROVED MOTORS:

- JK Hawk 7 Motor (p/n: JK30307)
- JK Hawk Retro (p/n: JKHR)

ALLOWED MOTOR MODIFICATIONS:

- May break-in the motor
- May zap magnets
- The can may be minimally notched to allow clearance for the axle

DISALLOWED MOTOR MODIFICATIONS:

- No other motor modifications are allowed.
- **ANY** signs of tampering with the motor will result in failing tech inspection.
- Motor must not extend below the bottom of the chassis.

AXLES, TIRES AND GEARS

APPROVED AXLES, WHEELS AND GEARS:

- Rear axle may be 3/32" or 1/8" diameter
- Must use 48, 64, 72, or 80 pitch gears (plastic or metal OK)
- May use front axle of a minimum of .047" to a maximum diameter of .063".
- Must use front wheel with minimum diameter of 1/2"
- May use sticker front tires.
- All styles of front tires must be visible through front wheel openings
- Rear tires and wheels must have a maximum width of .810"
- Rear axle width not to exceed 3.25" inclusive of all tire and wheel material

ALLOWED AXLE, WHEEL AND GEAR MODIFICATIONS:

- May solder front axle where it passes through chassis uprights only
- May solder front wheel retainers to axle or chassis
- Cars must tech to .032" clearance under rear of car including gear

DISALLOWED AXLE, WHEEL AND GEAR MODIFICATIONS:

- No hollow rear axles allowed.

BODIES

APPROVED BODIES:

- Must be 4", scale appearing and factory production bodies only.
- No additional bodies will be approved until further notice.

Approved bodies are:

JK PRODUCTS	
71111 Jaguar GTS 71113 Ferrari Maranello 71223 Cadillac CTS	71224 Aston Martin 71225 Maserati MC12 71226 Corvette C6

ALLOWED BODY MODIFICATIONS:

- Must be 4" scale appearing, factory production body only.
- Body must be cut out and mounted on the cut line.
- Body may be **minimally** trimmed to allow front chassis tabs to clear the body.
- Rear end of the body may be cut out.
- Bodies must have three matching numbers.
- Front wheel well area must be left clear.
- Front wheel stickers are allowed.
- Side panels behind rear wheels may be cut out
- May paint rear window for bodies that have one
- Must have a scale interior (no holes) and a three-dimensional multi-colored painted driver that covers all the car's components.
- Interiors must be commercially available paper folded to make it 3d or plastic molded only. No hefty bags, "thingy" or flat paper interiors with driver glued to it will be allowed
- Interior must stay in the car at all times. If it drops out, fix it. Do not remove it or you will be black-flagged.

DISALLOWED BODY MODIFICATIONS:

- No add on spoilers.
- Bending or creasing the body to modify its shape or function is prohibited.
- No see-through-paint jobs
- No sunroofs. Only front wheel area and windows maybe clear
- May not tear off back of body if damaged or after a body tucks. Tape, staples or glue may be used for repair

Notes: