LARRY KING LAW LANGLEY SPEEDWAY
2023 PRO-SIX DIVISION RULES | UPDATED FEBRUARY 20

Amendments: Rules are subject to amendments at any time when ample notice has been given to enhance competition

1. CHASSIS, FRAME RAILS AND ROLL CAGE

A. Main frame rails 2" x 3" x .093 minimum, for entire length of car
B. All cross members and cross bracing must have .093 minimum wall thicknesses
C. All cage, hoops, down tubes, etc., 1 ¾" round x .093 minimum
D. Minimum of three driver side bent door bars 1 ¾" x .093 minimum
E. Left side foot protection bar of some type is mandatory
F. Right side "X" bracing or door bars required, 1 ¾" x .093 minimum
G. Offset or perimeter type chassis allowed (No uni-body cars allowed)
H. Rear frame rails must have a four-inch minimum kick up
I. "X" brace or inner hoop behind driver required
J. All cars must have fabricated bumpers (front & rear) in good condition
K. 1/16" thick steel floor pan required for the entire length of driver's compartment
L. No alterations of any kind to original chassis
M. All chassis are to be inspected by the executive board prior to completion and racing

2. SETBACKS FOR ENGINE AND MISCELLANEOUS SPECS

A. Engine and transmission must be in center of chassis between front spindles
B. Engine may be set back ten (10) inches. (Measurement taken from center motor mount bolt to centerline of front spindles)
C. Ground clearance will be a minimum 4" measured under left front frame rail
D. Ground clearance of front spoiler will be 4" minimum the full width of the car
E. Tread width – 64" Maximum.6.Wheel base 95" to 97".7.Weight minimum of 2250 lbs. Left side weight maximum of 58% (with driver). Car and driver minimum weight of 2250 lbs. after finish of race

3. SUSPENSION, SPINDLES, AND REAR AXLE (Spindles, hubs, and brakes)

A. Mustang 2 or Pinto front spindles. No alteration to spindles of any kind. No drop-down spindles
B. Kingpin angle must be between 7-10 degrees
C. Iron or steel hubs and rotors only. No aluminum or lightened components allowed. Only exception is to quick change rear end components that are only available in aluminum
D. Front hubs and rotors are still required to be steel or iron
E. Iron or steel brake calipers only. O.E.M calipers with single piston only. Steel brake lines are allowed and recommended. No drilled rotors

4. FRONT & REAR SUSPENSION

A. Coil-overs allowed
B. Bottom of front shocks must be mounted to the lower control arm and top of the shocks must be mounted to the horizontal chassis snout bar. Adjustable shock jack screw mounting bolts are not allowed.
C. Bottom of rear shocks must be mounted to the back side of the rear end and top of rear shocks must be mounted to the kick up section on the rear clip on the main frame rail.
D. Upper and Lower control arm mounting (pivot) points to the chassis may be adjustable.
E. Spring sizes allowed: 150-375 – Any combination of ach size can be used. Springs must have 2 ½ - 2 ⅝ inches inside diameter. Coil over spacers are allowed
F. Only one spring rubber per wheel allowed
G. Shocks are limited to AFCO steel body, non-adjustable series shock numbers and quantities are as follows: 2 #1074 or #1474 1 #1075 or #1475 1 #1076 or #1476 Shocks may be used in any location on the car
H. No alteration of any kind is allowed to the shocks.
I. Shocks may be claimed for $200 each. Price includes shock and coil over hardware.
J. No independent rear suspension allowed
K. Single link track bar only. Adjustable mounts to rear end and to frame are allowed. Equipment to adjust track bar during competition is not allowed.
L. Top link on Rear End housing. No shock or spring type upper links or control arms allowed. Top link can be made of steel or aluminum
M. Front sway bar allowed. Sway bar must be 1 inch 48 spline hookup. Maximum working diameter is 11/4 inches. Solid sway bar only; no gun drilled sway bar types allowed. Steel or aluminum sway bar arms allowed. Sway bar may mount to suspension by a heim or slapper
N. No rear sway bars allowed
O. Trailing arms may be steel or aluminum
P. Rear trailing arms may be mounted to frame and rear end by heim ends, mono-balls, or rubber trailing arm bushings

5. REAR ENDS

A. Rear may be stock Toyota 8 ½ inch or quick change
B. Welded spider gears or spools may be used. No limited slip allowed.
C. Gear ratio MUST be +/- 0.02 points from stock ring and pinion ratios for Toyota 8 ½ rear end. Ratios include:
    - 4.11
    - 4.30
    - 4.56
    - 4.88
D. No camber for rear tires allowed
E. Attachments for 3-link set up only

F. The following may be added to rear end housing: adjustable mounting point trailing arm brackets, shock mounting points, top link bracket, track bar bracket, and brake caliper brackets
G. Toyota rear axles must be stock, solid shaft. Axle flange may be turned to accept brake hat
H. Quick change rear axles must be solid shaft. No gun drilled axels allowed
I. Stock ring and pinion for Toyota 8 ½ only. Ratios include:
    - 4.11
    - 4.30
    - 4.56
    - 4.88

6. CONTROL ARMS, STRUTS, AND STEERING LINKAGE

Lower Control Arms

A. Non-adjustable lower control arms only
B. Centerline ball joint to centerline chassis hookup must be 16 5/8" for both LF and RF
C. Screw in ball joint type only. Non-adjustable, non-rebuildable style ball joint only
D. Ball joint must be style K-719, K-772, or K-727 only
E. Lower control arm must be made of steel
F. Mono-ball and heim ends allowed

Upper Control Arms

A. Adjustable upper control arms are allowed
B. Screw in ball joint type only. Non-adjustable, non-rebuildable style ball joint only
C. Ball joint must be style K-719 or K-772 only
D. Upper control arm must be made of steel
E. Mono-ball and heim ends are allowed

Strut Tube

A. Must be one of the following types: Grand National Strut Tube (Hockey Stick), Clevis, or Solid Rod End
B. Chassis mount may be slotted for adjustment
C. Strut Rod tube may be steel or aluminum

Steering Linkage

A. Tie rods may be steel or aluminum
B. Hex tubes or swaged tubing allowed
C. Steel heims only

7. STEERING AND BRAKE CONTROLS

Steering Control

A. Rack & Pinion, O.E.M. or race rack
B. Steering quickener is allowed
C. Power steering is allowed

Steering shaft and coupler

A. If steering shaft runs straight, there must be a collapsible section; angled with "U" joint will serve the same purpose

B. A quick disconnect coupling must be used at steering wheel
C. NO Aluminum Steering Wheels allowed

Brakes

A. Two brake master cylinders allowed
B. Only one brake bias valve allowed. May be in the hydraulic brake line or mechanical style between brake pedal and master cylinder
C. Brakes must be fully operational on all four wheels at all times
D. Air ducting to brakes only

8. FUEL CELL AND FUEL COMPONENTS

Fuel Cell

A. 8 or 15-gallon type, approved for circle track racing. (Fuel cell foam must fill cell completely)
B. Fuel cell must be in an approved steel can – 22-gauge minimum
C. Fuel cell must be held in place with a minimum cage of 1"x1"x .120 square steel; two under braces in a "H" pattern with minimum cage of 1"x1" x .120 square steel
D. Top of fuel cell must have 2 straps or a welded four-way strap.
E. Fuel cell must have a roll over type check valve
F. Fuel cell must have a minimum ground clearance of 10"
G. No external filler necks allowed
H. Fuel cell must be centered in rear of car with an adequate firewall

Fuel pump and filter

A. All electric fuel pumps will be connected to a roll over switch
B. Fuel filters must be mounted – cannot be hanging from fuel lines or lying on the engine
C. Pump gasoline or Track Fuel ONLY (NO additives or hot fuels)

9. WHEELS and TIRES

A. Steel wheels, 13" diameter with a width of 10"
B. All wheels must have same offset
C. No pop off valves allowed

10. BODIES, GLASS, AND CAR NUMBER

A. 1985 To current model year
B. No compacts or subcompacts
C. Bodies may be fabricated or stock, must be neat in appearance. A solid spoiler must be attached to the rear of the car. All cars will be permitted to use a rear spoiler not exceeding five (5) inches in height and not more than 54 inches in width, measured around the back side of the spoiler, and must be attached to and centered on the rear of the car. Spoilers must be solid 1/8-inch metal or 1/4-inch clear polycarbonate and control the flow of air over one (1) surface only. The rear spoiler blade must maintain the same thickness over the entire spoiler blade. Rudders or forward mounting brackets will not be permitted. The rear spoiler angle must be set between 50 degrees and 60 degrees.

D. Fuel cell and battery must be outside of driver compartment with an adequate firewall
E. A rear hatch type car will have a fabricated trunk type compartment for the fuel cell

11. GLASS

A. Front and rear Lexan windows required
B. All Lexan must be braced and riveted in a safe manner
C. Quarter windows must be covered with Lexan or Plexiglas

12. CAR NUMBER

A. Minimum height of 18" and readable on both doors and roof (read from the passenger side)

13. ENGINE

Short block

A. Nissan 3 Liter iron block V6 with single OHC, model VG30E
B. Stock block. Cylinders may bored to 0.020" over
C. Heads – VG30E stock single cam type O.E.M. production – no porting or polishing. 3-angle valve job permitted
D. Ports and guides cannot be ground or modified in any way. No angle milling of heads
E. Gasket surface of head may be cut a maximum of .015 (to remove warping) and will be checked against a stock head for model VG30E engines only
F. Stock pistons and rods only. If cylinder has been bored to 0.020", stock 0.020" pistons must be used to maintain stock cylinder displacement
G. Stock intake and exhaust valves as per Nissan for model VG30E engines only
H. Aftermarket valve springs are allowed, single or double spring valves allowed Stock retainers must be used. (no aluminum or titanium retainers)
I. Stock rocker arms only
J. Stock or replacement lifters allowed
K. Stock VG30E Crankshaft - journals may be turned but no other machining allowed
L. Balancing allowed on rotating assembly to the lightest stock piston and rod
M. Stock oil pan. Pan may be cut for clearance or more capacity
N. No windage trays or scrapers allowed
O. Stock head gaskets only
P. Camshafts must be for a stock VG30E. Camshafts are limited to a maximum lift of 0.393" Cams hafts are limited to the following specified durations, 248/248, 252/252, or 264/262 (intake/exhaust). NO Regrinds
Q. Stock and adjustable style camshaft gears are allowed
R. Coil – Can use stock coil from 300ZX or Maxima OR Crane Cams 730-0020 coil with ballast resistor
S. MSD Box (Analog) XXX allowed (part TBD)
T. Oil System
    a. No dry sumps allowed
    b. No external il pump allowed

c. No remote oil filters allowed

14. CARBURETOR, INTAKE MANIFOLD, AND AIR FILTERA

Intake Manifold

A. Manifold must be either O.E.M. #14003-V6501 (no modifications or grinding allowed and no more than1" carburetor adaptor) OR O.E.M. #14003-88G00 that is stamped by Experimental Engineering

Carburetor

A. Holley 350 or 500 CFM (2300 series) 2-bbl carburetor only (NO modifications or grinding allowed)
B. Choke assembly may be removed
C. Float, jets, power valve, accelerator cam may be changed

Air Filter

A. No high-performance or air induction systems allowed
B. No ducts or sheet metal air boxes allowed
C. Air filter must be completely covered by hood
D. No cold air boxes

15. TRANSMISSION, FLYWHEEL, AND CLUTCHA

Transmission

A. Stock O.E.M. NON-Turbo Nissan transmission ONLY. (Non-Turbo 5 speed, model FS5W71C)
B. 1st thru 4th gears and reverse must be in working order
C. No aluminum or composite drive shafts allowed

Flywheel and Clutch

A. Stock O.E.M. production only (No aluminum flywheel allowed)
B. O.E.M. or replacement type stock clutch only (No multi-disc or aluminum components allowed)

16. RADIATOR, FAN, WATER PUMP AND ALTERNATOR

Radiator

A. Aluminum or O.E.M. types allowed
B. Over- flow bottle required (recommended that it flows to the rear of the car and exhaust up)
C. Water pump - Belt driven ONLY
D. Radiator-air box must be sealed from inlet (grill) to radiator and must not exceed the width and height of the radiator. No airflow from the box is allowed to go around the radiator

Alternator

A. Optional

17. SAFETY ITEMS

A. Aluminum, high back seat ONLY (Approved type). Seat must be mounted to left frame rail allowing movement due to side impact
B. All drivers must wear a helmet that is a Snell SA 2010, or better. All helmets must be inspected by the Tech director. Helmet must accompany car at time of inspection
C. All drivers must wear fire suits made of flame-retardant material. Suits will be kept in presentable condition. All drivers must wear flame-retardant gloves. Flame-retardant hood, socks and shoes are highly recommended. Gloves and other safety equipment covered by grease and/or oil and not cared for properly should be replaced
D. The driver's competition shoulder harness and lap belt must be at least three (3) inches wide with a submarine strap. Metal to metal buckles are required on shoulder and seat belts. The shoulder harness should be mounted even with or slightly higher than driver's shoulders. Belts that are weathered or frayed will not be permitted for racing use
E. Approved "Hans-type" head and neck restraint is mandatory
F. Fireproof driver's side window net is mandatory
G. All cars must be equipped with an on-board fire system/extinguisher that is fully charged and accessible to the driver
H. All roll bars within the driver's reach of his/her leg or arm must be padded
I. The steering wheel will have a safety pad in the center

Battery and disconnect switch

A. Switch must be accessible to driver and safety crew
B. Switch must be labeled and easy to spot for safety crew
C. Battery must be securely mounted and shielded

Miscellaneous Safety

A. All roll bars within driver's reach must be padded properly
B. Driver's side window net is mandatory
C. Eye protection of some type is required
D. Driveshaft safety loop should be welded or bolted
E. Driveshaft must be painted white
F. A steel plate above drive shaft to protect driver from danger in case of drive shaft coming loose or breaking is required

Transponders

A. The transponder will be mounted 72 inches, plus or minus 2 inches from the front edge of the front bumper, measured from the center of the car

18. POST RACE INSPECTION

A. Cars found noncompliant will be penalized and may result in forfeiting finishing positions, points, and payout for that event

B. Noncompliant parts must be surrendered to the track official and will be held for a period of 30 days and then returned to the respected team. Parts not surrendered may result in a penalty for finishing positions, points, and payout for that event