
2.

CARS

CARS OVERVIEW

(This overview is general and does not supersede any class rules)

This overview is designed to provide a general understanding of the categories and classes to help newcomers find the appropriate class for their vehicle. It is not designed to state all of the rules for that class. Cars are first broken down by CATEGORY and then CLASS. So, determine what CATEGORY your car will fit into, then find the CLASS within that CATEGORY. All applicable safety rules in Section 3 must be met as a minimum level of safety for the speed you intend to run; regardless of your Category or Class.

SPEED COSTS MONEY. . . HOW FAST DO YOU WANT TO GO?

	< 135	135-150	150-175	175-200	225+
CAGE	-	4-Point	6-Point	Full	Full
FIRE	-	-	1 - 5 lb.	2 - 5 lb.	2 - 5 lb.
CHUTE	-	-	-	1	1 or 2
BELTS	3-Point	SFI 16.1	SFI 16.1	SFI 16.1	SFI 16.1
HANS	-	-	-	-	Y
NET	-	Y or arms	Y or arms	Y	Y
ARMS	-	Y or net	Y or net	Y	Y
SUIT	Unblown	SFI / 1	SFI / 5	SFI / 5	SFI / 15
SUIT	Blown	SFI / 15	SFI / 15	SFI / 15	SFI / 20
SEAT	Street	Street	Race	Race	Race

THIS CHART DOES NOT REPLACE THE CLASS RULES

Convertibles are restricted to the Street, Production, or Gas Coupe & Sedan class only (with a roll cage) and must run with the top and rear windows up.

STREET CATEGORY

Time Only (T/O)

Time only is reserved for vehicles that meet the safety requirements for the speed they intend to run but 1) do not fit into a class, or 2) wish to run for testing only and not for records.

Street Car (135 Class)

This class designed to allow just about anyone enjoy the thrill of open asphalt. The class allows almost all street legal vehicles to participate in our events.

The tech. team can assist new racers in determining a class for your vehicle. How fast you can run is determined by the level of safety you choose to build into your car. With no modification, you can run as follows:

- A: Speed is STRICTLY limited to Under 135 MPH for street cars.
- B: Any vehicle that does not fit any class or chooses not to run for a record will run in T/O.
- C: Convertibles must have a roll bar.
- D: Snell 2005 or 2010 helmet, long sleeves, pants, shoes required.

Super Street (SS)

- A: Designed for more modern vehicles and some older.
- B: Fuel injected, supercharged, and turbos allowed.
- C: Nitrous Oxide allowed.
- D: Must have safety equipment for intended speed.
- E: Body kits put many vehicles into SS class.

F: Almost any street car will fit this class.

Real Street (RS)

- A: Designed for normally carbureted vehicles only.
- B: No more than 4 TOTAL BARRELS allowed.
- C: Pump gas only. (Gas and Fuel class)
- D: Must have safety equipment of intended speed.

PRODUCTION CATEGORY

This category is intended to represent typical transportation vehicle.

Production Coupe & Sedan - /PRO

- A: American cars 1982-present.
- B: Foreign cars from 1949-present.
- C: American cars from 1928-1981 that do not meet CLASSIC.
- D: Original seating for 4 required. (El Camino and Ranchero allowed.)
- E: Body, frame, wheelbase cannot be altered in any way.
- F: No streamlining or changes to the OEM bodywork allowed.
- G: No engine swaps.
- H: Hybrids welcome.

Production Supercharged - /PS

- A: Production (above) with factory Supercharger or Turbo.

Grand Touring - /GT, /BGT

- A: Production car as above.
- B: Two seating position. (Corvette, Viper, Honda S2000)
- C: Engine swaps ARE allowed.

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ROADSTER CATEGORY

Street Roadster - /STR, /BSTR

- A: Minor body modifications allowed.
- B: Hood stretch of 3" allowed.
- C: No streamlining or changes to the body contour allowed.
- D: Rear fenders required.

Gas- Fuel Roadster - /GR, /BGR, /FR, /BFR

Basically a Street Roadster with more modifications allowed.

- A: Some body modifications allowed.
- B: Hood stretch to 143" inch body length allowed.
- C: Hood shape optional.
- D: Some streamlining allowed.
- E: Driver location optional.

Modified Roadster - /GMR, /BGMR, /FMR, /BFMR

- A: Wheelbase stretched to 90 – 190"
- B: Minor body modifications allowed.
- C: Streamlining allowed.
- D: Engine and driver relocation allowed.

Rear Engine Modified Roadster - /GRMR, /BGRMR, /FRMR, /BFRMR

Rear engined roadsters.

- A: Wheelbase of 140 – 190"
- B: Considerable streamlining allowed.
- C: Considerable body modifications allowed.

D: Wings allowed.

MODIFIED CATEGORY

This category encompasses American and foreign coupes and sedans. The amount of modification to the vehicle determines the class.

Gas Coupe and Sedan - /GC, /BGC

- A: Production class (/PRO) with one of the following modifications.
 - 1: Engine Swap
 - 2: Quick-change rear end
 - 3: Non-stock supercharger or turbo
- B: No streamlining or changes to the OEM bodywork allowed.
- C: Convertibles must run in Gas Coupe or Production.

Competition Coupe - /GCC, /BCC, /FCC, /BFCC

- A: Production class (/PRO) with one of the following modifications.
 - 1: Chopped top.
 - 2: Full belly pan.
 - 3: Lengthened front body
 - 4: Engine setback 25 – 50% of wheelbase.

Modified Sports - /GMS, /BGMS, /FMS, /BFMS

- A: GT Class cars (Production Grand Touring) that have been modified.
- B: Considerable streamlining and body modification allowed.
- C: Custom and stretched frames allowed.
- D: Only OEM wings in original location allowed.
- E: Engine location change allowed.

Altered Coupe - /GALT, /BGALT, /FALT, /BFALT

- A: All coupes and sedans from 1928 – present.
- B: No streamlining or changes to the OEM bodywork allowed.
- C: Production class (/PRO) with one of the following modifications.
 - 1: Addition of a step pan.
 - 2: Engine setback of 25%.
 - 3: Front wheel drive converted to rear wheel drive.
 - 4: Covered head lights and grill per rules.

Modified Mid/Mini Pickup Truck - /MMP, /BMMP

- A: 1972 and newer mid/mini pickup with stock bed.
- B: Same rules as Modified Pickup /MP above.

Circle Track - /GCT, /FCT, /VCT

- A: Circle track race cars that do not fit current LTA classes.
- B: NASCAR, SCCA, IMSA, etc.
- C: Gas and Alcohol fuel only.

CLASSIC CATEGORY

CARS FROM 1928-1981 ONLY.

This category encompasses vehicles from the “Golden Age” of American cars. The spirit of the class is older cars running carburetors and a distributor (big block Chevy V8 with a Holley double pumper, etc.). Cars in this class can range from astock'69 mustangs to 1500hp blown'59 Studebakers.

- A: Limited modifications to the historical body lines allowed.
- B: Altered and Production class rules are used for the allowed modifications.

C: Original seating for 4 required. (El Camino and Rancho allowed.)

D: NO non-OEM EFI or engine management.

E: One distributor or magneto allowed.

F: Class includes:

Classis Production	CPRO
Classic Production Supercharged	CPS
Classic Altered	CALT
Classic Gas Coupe	CGC

G: Rules for CLASSIC cars are the same as their matching class below.

CLASSIC GAS COUPE (/CGC) are the same as GAS COUPE (/GC).

VINTAGE CATEGORY

This category is specifically intended for the lovers of antique iron. Although fiberglass and aluminum bodies are allowed, the body shall be an exact replica of an American production cars manufactured from 1923 – 1938. See Rules.

Vintage Coupe and Sedan

See Rules.

Vintage Oval Track – Midget Oval Track

See Rules.

TRUCK CATEGORY

Production Pickup Truck - /PP

A: 1946-present American FULL SIZE pickup trucks.

B: No streamlining or changes to the OEM bodywork allowed.

C: Rules are as in Production Coupe and Sedan Class (/PRO).

D: Superchargers go into Modified Pickup Class.

Production Mid/Mini Pickup Truck - /PMP

A: 1972 and newer mid/mini pickup with stock bed.

B: Same rules as Production Pickup /PP above.

Modified Pickup Truck - /MP

See Rules.

Modified Mid/Mini Pickup Truck - /MMP, /BMMP

A: 1948 – present American pickup trucks with stock bed.

B: Gas Coupe (GC) rules apply to this class.

C: One of the following modifications is required.

1: Engine Swap

2: Quick change rear end

3: Non-stock supercharger

D: No streamlining or changes to the OEM bodywork allowed.

Diesel Truck/Modified Diesel/Unlimited Diesel - /DT /MDT /UDT

See Rules.

SPECIAL CONSTRUCTION

See Rules.

ELECTRIC

See Rules.

VW

See Rules.

COMPETITION REQUIREMENTS AND SPECIFICATIONS APPLIES TO ALL VEHICLES

2.A NUMBER/CLASS DESIGNATION:

Numbers 1-10 and certain others are reserved and will not be available. Once assigned, numbers will be held for three years. Numbers may be reassigned if not used within the three year allotted time span. Numbers must be a minimum of 3 in. high. The current class designation shall appear on the race vehicle adjacent to the number. It has been the tradition that three (3) repetitive digits are assigned to Streamliners only, e.g. 111, 555, 999, etc. Sale of a race vehicle does not transfer the number to the new owner. Changes must be reported to the Numbers Coordinator, Donna Timney.

New numbers - Concerning the availability or assignment of numbers – contact the Numbers Coordinator, Donna Timney.

2.B ENGINES:

Any internal combustion engine using either a two stroke or four stroke Otto cycle or diesel cycle may run in any category, except for Vintage engine classes as described.

Engines that transmit the power through the wheels only may run. Only Streamliners and Unlimited Diesel Trucks may use more than one engine at the same time. For any engine to be considered for cubic centimeter (cc) requirements, the engine shall contribute to the propulsion of the vehicle.

Reaction propulsion engines are prohibited, except by prior approval.

2.B.1 VINTAGE ENGINES:

Vintage engine classes listed below refer to "blocks or crankcases" and are intended to be representative of examples of those listed and recognizable as such. In XF, XO, XXF, XXO, V4 and V4F classes, non-production engines or after-market blocks (even though they accept production crankshafts, cams and cylinder heads) may not be used. Vintage engine class competitors are required to use production or factory authorized replacements and shall retain all original dimensions replacements and shall retain all original dimensions, excepting modifications involving intake/exhaust ports, cooling ports and specialty head adaption pursuant to the following criterion: Cylinder bore centers shall be maintained to within .150" of original design; original deck material and height measurement shall be within .150" of original design; original deck material and thickness shall be maintained to within .150" of original design.

XF class consists of any production FORD/MERCURY, passenger car V-8 flathead engine, 1932 through 1953, up to 325 cid.

XO class consists of overhead valve (OHV) and flathead inline and flathead V8 (except Ford & Mercury) and V12 engines, 1959 or earlier design, up to 325 cid. Examples include Chevrolet, GMC, Hudson, Packard, Buick, Lincoln and Cadillac. Foreign engines are NOT included. No SBC allowed.

XXF class is an XF engine, as described above with a specialty cylinder head as described below.

XXO class is an XO engine, as described above with a specialty cylinder head as described below.

A specialty cylinder head is fabricated billet stock, cast or a modified OEM head that has added ports. At least one valve per cylinder must be in the head. All X class engines, as described above, which are over 325 cid, but less than 375 cid, shall be classified as either XXF or XXO. Specialty cylinder heads are NOT allowed in this instance.

Overhead cam specialty cylinder heads are not allowed in the XF, XO, XXF, & XXO engine classes. XX/PRO class is limited to cylinder head port configuration as originally designed. This applies to the XXF and XXO engine classes.

Vintage Four (V4) class consists of any pre-1935 American made four-cylinder automotive production engine, up to 220 cid. Specialty heads are allowed. The Vintage Four (V4) engine class is allowed in Special Construction, and Vintage categories only. NOTE: See exception under Rules for Vintage Oval Category.

Flathead Vintage Four (V4F) consists of any pre-1935 originally designed and American made flathead four cylinder automotive production engine, up to 220 cid. The engine shall have been produced as a valve in block engine, with the camshaft in the same location as produced, (in the block). Only flathead type cylinder heads (valve in block), are allowed. No specialty OHV or OHC conversion cylinder heads are allowed.

For reasons of economy and historical authenticity, vintage engine modifications are restricted to older technology levels, so far as is practical. Accordingly, in classes XO, XF, XXF, XXO, and V4 & V4F, using Vintage bodies:

1. Turbochargers are not permitted.
2. Computers are allowed for data collection purposes only.
3. Electronic Fuel Injection prohibited
4. Any ignition system may be used

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2.B.2 ENGINE CLASS SIZES

Ω (O)	Omega Engines using a thermodynamic cycle other than Otto	
	Cubic Inch Displ.	Liter Equiv.
AA	501.00 cid and over	8.210 liters and over
A	440.00 to 500.99 cid	7.210 to 8.209 L
B	373.00 to 439.99 cid	6.112 to 7.209 L
C	306.00 to 372.99 cid	5.015 to 6.111 L
D	261.00 to 305.99 cid	4.277 to 5.014 L
E	184.00 to 260.99 cid	3.015 to 4.276 L
F	123.00 to 183.99 cid	2.016 to 3.014 L
G	93.00 to 122.99 cid	1.524 to 2.015 L
H	62.00 to 92.99 cid	1.016 to 1.523 L
I	46.00 to 61.99 cid	0.754 to 1.015 L
J	31.00 to 45.99 cid	0.508 to 0.753 L
K	up to 30.99 cid	0.507 L and under

In classes where not all engine breaks are available, the smallest displacement class allowed is open to all engine displacements that fall within and below it.

The displacement of reciprocating engines shall be computed by the following formula: $\pi \times R^2 \times \text{stroke} \times \text{number of cylinders}$. For non-reciprocating engines, equivalent displacement (ED) will be calculated by the following formula: $ED = SV \times 2$ where SV is the Swept Volume. The cubic inch to liter conversion shall be computed by the formula: $\text{cid}/61.024 = \text{liter}$.

2.C FUELS:

(G) GAS is defined as gasoline purchased at the event from the fuel vendor or brought to the fuel vendor in a sealed container for the vendor to impound and dispense (\$20 charge). The tank is to be inspected and the fuel is sealed in the tank by fuel vendor. Water injection is allowed, but water tanks must be inspected and sealed by an LTA official. Engines using LPG or diesel fuel may compete in gasoline classes.

Competitor must submit to a fuel tank check in impound after each record run.

(F) FUEL is defined as any approved fuel source not purchased from the fuel vendor. Examples of approved fuels are: nitrous oxide, nitromethane, alcohol, and hydrogen. **Event Gas may also be run in fuel class by simply changing classes from Gas to Fuel.** Any oxidizer such as Nitrous Oxide is also considered Fuel.

(AF) Alternate fuel is defined as liquid or gaseous fuels not defined above. Alternate fuels will include propane, hydrogen, soybean/corn oil etc. The fuel designation is made a fuel class: i.e. /AFSS = Alternate Fuel Super Street.

(E) Electric is defined as propulsion via electric motors only. No hybrid or ICE generators used to power electric drive motors are allowed in this class. Electric power shall be designated in the LTA records as a fuel class: i.e. /ESS = Electric Super Street.

2.D FRAMES/CHASSIS:

Except where specifically forbidden by class rules, any design frame may be used. The frame design is subject to the approval of the **Chief Technical Inspector** and must be of sufficient strength to resist flex or twist. The burden of proof of the strength of the frame design lies with the entrant.

2.E SHOCKS:

A functional shock absorber is required for each sprung (moveable, non-fixed/rigid) wheel.

2.F DRIVE HUBS:

Any car equipped with a non-retained axle bearing (non-Hotchkiss type rear axle, front wheel drive hubs and four wheel drive hubs) assembly shall incorporate an approved hub to prevent loss of a wheel in the event of rear axle failure. Semi or full floating rear axle assemblies, as used in most late model production cars, are sufficient. Late model GM type rear ends using stock "C" clip axle retainers are NOT acceptable.

2.G FOUR WHEEL DRIVE:

Four wheel drive systems are allowed only in Special Construction Category and Production Category, where the competing vehicle was originally equipped with four wheel drive.

2.H TIRES:

A: Due to the extended duration of load on the tires at this type event, Drag slicks are not recommended.

B: No recaps allowed.

C: Tubes are required, except for tires designed for use without tubes.

E: Tubeless tires must use metal valve stems and caps,
(Street Cars under 135mph excluded.)

F: Entrants shall follow tire manufacturer's recommended inflation pressure. Higher pressures may be required, based on weight and speed. However caution should be exercised on excessive pressures (i.e. 100 psi.)

- G: Exceptions to the forgoing may be granted in the face of a letter from the manufacturer stating the speed and pressure at which a tire may be run.
- H: Tires may be inspected at any time by the Race Committee.
- I: Adequate tire clearance between the tire and body or chassis is required.
- K: Open Record: Tire speed rating shall be determined by the speed in the next larger displacement class in which a record exists.
- J: Any tire deviation must be submitted to the LTA Race director, in writing, 45 days prior to any meet. Land Speed Tires, approved and meeting the minimum requirements, are acceptable in all classes.

The use of any non-rated tire(s) such as implement, farm, aircraft or reproduction of a vintage automobile or motorcycle tire, or any non-pneumatic wheel/tire combination (no rubber) must be submitted for approval to the Board in writing 45 days prior to an event. Any wheel/tire combination that has a square edge at the tread/sidewall, is strictly forbidden.

These minimum tire requirements will be observed by LTA inspection officials:

- Up to 125 MPH: Original equipment tire QR & RR
- Up to 150 MPH: SR, TR or UR rated tires
- Up to 175 MPH: HR rated tires
- Up to 225 MPH: VR, WR, YR or ZR rated tires or steel-belted drag radials
- Up to 250 MPH: NASCAR spec Speedway tires.
- Over 250 MPH: Special tires designed by the manufacturer.
 - i.e. Bonneville tires or Land Speed tires.

2.I WHEELS:

NONFERROUS WHEELS on which lug nuts come in direct contact with the wheel shall have a 1/4" thick steel retaining plate or large OD individual washers under all lug nuts. (Does not apply to spindle mounted wheels.)

MAGNESIUM WHEELS, if used, shall have an initial Zyglo certificate and stamp available for inspection. Wheels are to be re-inspected if any adverse condition arises. It is recommended that tire pressure used on two-piece wheels does NOT exceed the manufacturer's specifications.

ALL CLASSES UNDER 200 MPH: The smallest part of the hex of a lug nut must be larger than the largest part of the taper of the mounting hole. Lug nuts must torque totally against a wheel's tapered surface. A minimum of 5/8 in. of the stud threads must be engaged within the lug nut.

CLASSES OVER 200 MPH: 1" lug nuts are required on all vehicles. Wheels used must be manufactured for racing or reinforced as below:

DIAMETER OVER 29" OR WHEELS OVER 17": Vehicles with tires having a diameter of 29 in. or greater or wheels over 17 in. in diameter must use a wheel manufactured for racing or reinforced as below. Wheels must be attached with at least 5 studs with a minimum diameter of 1/2 in. and 1 in. lug nuts. In either of the previous cases, wheels shall be manufactured for racing purposes or reinforced as follows; REINFORCEMENT SHALL BE DONE by welding the entire area of attachment between the rim and the center section on either the inside or outside of the wheel.

WIRE WHEELS: Wire wheels designed for automotive racing applications are allowed. Automotive OEM wire wheels are allowed only in classes less than 200 MPH, provided the center section is adequately reinforced.

NOT ALLOWED:

- A: No closed end (Acorn type) lug nuts are allowed.

- B: Motorcycle wheels not designed for automotive use are prohibited.
- C: All hubcaps shall be removed.
- D: Fender skirts are not allowed, except in Streamliner class. The prohibition against "wheel covering" in some class rules does not apply to "full wheel" discs, which are legal in all categories if securely fastened to the wheels with six (6) or more machine grade screws or three (3) Dzus type fasteners. Inner wheel discs shall be mounted to the wheel or axle.

2.J TRACK (FORMERLY TREAD):

Track is defined as the measurement from the centerline of one tire to the centerline of the opposite tire of paired wheels. The minimum **track** dimensions for all Vintage Category vehicles are 44 in. front and 50 in. rear. Special Construction Category vehicles are not subject to this rule.

2.K PUSH BARS:

All cars incapable of starting under their own power shall be equipped with bumpers or push bars. Push bars shall not offer any aerodynamic advantage. No horizontal paneling is allowed between the rear of the body and the bumper/push bar. No towed starts are permitted from the starting line without special approval. All Cars shall be equipped with a push bar or a readily available tow attachment.

2.L BALLAST:

Ballast may be used in all categories. Ballast shall be securely mounted, bolted to the frame or the frame structure. The use of hose clamps, wire, strapping, tape, and tie wraps, etc. for securing weight or ballast is prohibited. Ballast shall not be used to streamline the vehicle, see Section 4.CC. It is recommended that ballast be mounted as low as practical.

2.M REPLICA BODIES AND PANELS:

Replicas of original stock bodies and panels may be used in all (except Special Construction) categories provided they are exact dimensional replicas of factory production units that are otherwise acceptable in the category.

2.N CANOPIES:

Canopies enclosing the driver are permitted in Streamliner and Lakester classes only. The canopy shall be securely closed in competition by the employment of a mechanical fastening. The steering mechanism can move, but the canopy shall not be attached to the steering mechanism, required by Jan. 01, 2010. Canopies shall be capable of being opened from both the inside and outside without the use of tools. Latches must be clearly marked on the outside of the vehicle for emergencies.

2.O TARPAULINS AND TONNEAU COVERS:

Cockpits may be covered with any nonflammable material and may be flexible or rigid unless otherwise stated in the class rules. No sharp or protruding edges are allowed. Tarpaulins, rigid or non-rigid, on pickup beds shall be aligned with and no higher than the sides of the bed.

2.P COMPUTERS:

Vehicles may be equipped with a computer which affects engine operations ONLY, e.g., timed fuel injection, etc., except in Vintage Engine classes.

2.Q DATA RECORDERS:

Entrants in all classes may use a data recorder.

Section 3

DRIVERS SPECIFICATIONS AND REQUIREMENTS

3.A MINIMUM DRIVER'S APPAREL:

3.A.1 Street Car Class (Under 135mph)

While it is recommended above that a minimum of SFI 3.2A/1 be worn for closed cars running 135 MPH or less, a minimum of a long-sleeved shirt and long pants is required.

3.A.2 All Other Drivers:

All drivers, 135 MPH and over or all open cockpit vehicles, must wear a driver's suit, gloves, SFI 3.3 HEAD SOCK OR **SFI 3.3 HELMET SKIRT**, and boots. Protective underwear is highly recommended. All items shall be in clean and serviceable condition. It is advisable not to wear synthetic clothing material under the driver's suit. All Drivers' suits must have the SFI rating tag attached.

3.A.3 Minimum Driver's Suit Requirements:

Type of Vehicle

Unblown closed cars between 135 MPH and 150 MPH

Recommended on all closed cars under 135 MPH

Suit	SFI 3.2A/1
Boots	SFI 3.3/5
Gloves	SFI 3.3/5
Head sock	SFI 3.3

Unblown, open cars under 200 MPH and

Unblown, closed cars between 150 MPH and 200 MPH

Suit SFI	3.2A/5
Boots	SFI 3.3/5
Gloves	SFI 3.3/5
Head sock	SFI 3.3

Blown cars, open or closed under 200 MPH and

Unblown, open or closed over 200 MPH

Suit SFI	3.2A/15
Boots	SFI 3.3/5
Gloves	SFI 3.3/15
Head sock	SFI 3.3

Blown cars, open or closed over 200 MPH

Suit	SFI 3.2A/20
Boots	SFI 3.3/15
Gloves	SFI 3.3/15
Head sock	SFI 3.3

3.A.2 Driver's Helmet:

- A: All drivers/riders must wear a full-face helmet with face shield.
- B: Helmets will be certified to the end of their SNELL lifecycle.
- C: Helmets will be visually inspected each meet to determine that it is undamaged and in serviceable condition. Any issue will result in removal of the certifying decal and possible disposal.
- D: A Snell Foundation tag reading Snell SA2005 (FIA 8860-2004) or SA2010 (FIA 8860-2010) is required.
- E: Snell rating label change from 2005 to 2010 will occur in 2016.
- F: All enclosed cockpit car and motorcycle streamliners, require SA rated helmets.

G: Eyeglasses worn under the helmet must be shatterproof.

3.A.3 Driver's Helmet Support:

A side and rear helmet support system is recommended for use in all vehicles.

A: Forward Movement: All cars over 200 mph shall have an engineered and tested SFI spec 38.1 type head and neck restraint system.

B: Lateral movement: The seat or roll cage structure shall provide restriction to lateral head movement of less than 2 in. per side inclusive of structure deflection, for vehicles over 200 MPH. See Section 3.B.1.

All cars over 175 mph will be required to meet this rule.

D: Rear movement: See Section 3.C.

3.B ROLL CAGES AND ROLL BARS:

Cars competing over 135 MPH must be equipped with a roll bar or roll cage.

Closed cars between 135 MPH and 150 MPH must have a 4-point roll bar.

Closed cars between 150 and 175 MPH must have a 6-point roll bar.

Closed cars over 175 MPH must have a full roll cage.

Open cars are advanced one cage category over closed cars.

Low carbon (mild) steel tubing is recommended for the construction of roll cage structures. Threaded pipe, pipefitting, lap weld pipe, magnesium or aluminum is not permitted. All bolts must be 3/8" and grade 5 at a minimum.

All bolted structures must have at least two bolts (180 degrees apart) through support pads and roll cage structure brace connections.

On unitized construction and monocoque cars, the roll cage and braces must have 1/4 in. thick support pads on the top and bottom of the floor (or sill, in a sandwich construction) For cars weighing less than 2500 lbs. these pads shall have a perimeter of at least 18 in. and cars over 2500 lbs. shall have at least 22 in. perimeter.

Any individual wishing to enter a vehicle which deviates from these rules MUST contact the LTA 45 days before the event for approval.

3.B.1 ROLL CAGE SIZING:

Minimum requirements for cage type structure in J, K, & L classes is steel tubing not less than 1 1/4" o.d. x .095" nominal wall thickness.

Minimum requirements for cage type structure in G, H, & I, classes is steel tubing not less than 1 1/2" o.d. x .095" nominal wall thickness.

Minimum requirements for cage type roll structure in all other classes is 1 5/8" o.d. x .120" nominal wall thickness steel tubing, securely mounted, gusseted and braced within 5" of the top of the roll cage structure. All cage structures must be designed to protect the driver from any angle including the bottom. Any vehicle in classes where the existing record exceeds 175 MPH must use the larger tube minimum requirements.

minimum five (5) point roll cage is required if the hoops and bars are mounted to the shoulder bar as in a lakester or roadster cage. The roll cage bars must be adequately supported, cross braced and gusseted to prevent forward or lateral collapse.

3.B.1.1 Gussets:

Gussets are required at tube junctions of hoop and shoulder bar rail. Gussets shall either be made of plate, tubing or fabricated from sheet.

Plate and Sheet gussets should be made from mild steel .125 minimum thickness and four inches per side, preferably stitch welded on the outside of the tube junction.

Tube gussets shall be a minimum of 1 in. O.D., round steel tubing with a minimum .120 in. nominal wall thickness although it is recommended that tube gussets be of the same O.D. and wall thickness as the main roll cage material. Tube gussets shall be constructed such that the outside edge of the tube gusset be at least 4 in. from the tube junction point. On new construction a proper tubing gusset is preferred. See Figures 2, 3, 4, and 5.

Not Allowed:

- A: Gussets may not be used as aerodynamic aids and shall not exceed 6 in. in length without prior technical review and board approval.
- B: Grinding welds is NOT permitted.

3.B.1.2 Head Protection:

The front hoop of the roll cage must be at least three inches in front of the driver's helmet while the driver is in his normal driving position. A lateral movement structure, see Section 3A.3 shall be constructed such that the helmet cannot exit the outer plane of the roll cage. A helmet retaining strap within the roll cage is required. It must be a minimum width of one inch wide and a -minimum .125 inches thick, mild steel. Tubing of 1.0" diameter by .083 wall thickness is preferred. It must be securely welded inside the roll cage to prevent the driver's helmet from exiting the roll cage from between the bars. See Figure 5.

3.B.1.3 Deviation:

Deviation requests must include strength calculations, drawings and / or pictures showing all physical dimensions of the roll cage structure and adjacent frame. Tubing type and method of joining shall be included.

Should you decide to race at any SCTA sanctioned event, we strongly advise you to obtain a SCTA rulebook as their requirements are significantly different than what is stated above.

3.B.2 ROLL BARS: (LTA and ECTA ONLY)

Minimum requirements for roll bars and braces in G, H, I, J & K classes is steel tubing not less than 1 1/2" o.d. x .095" nominal wall thickness.

Minimum requirements for roll bars and braces in all other classes are 1 3/4" outside diameter steel tubing with a minimum .120" wall thickness. See Fig. 1.

Roll bars must be adequately supported, cross braced and gusseted to prevent forward, aft or lateral collapse. Braces shall intersect with the roll bar at a point not more than 5" from the top of the roll bar. On 4pt roll bars, 1/8" minimum steel or tubular gussets are required at both the top of the bar and frame anchor points of the brace.

See figure 1 for examples of a roll bar and cage.

3.B.2.1 Head Clearance:

All roll bars must come within 6" of the rear or side of the driver's head extending in height above the driver's helmet with the driver in the normal driving position.

3.C HEAD REST

A padded headrest shall be installed in all vehicles to prevent whiplash. All drivers shall have the padding within 2 in. of the back of helmet.



Figure 1a – Example of Roll Bar Construction.

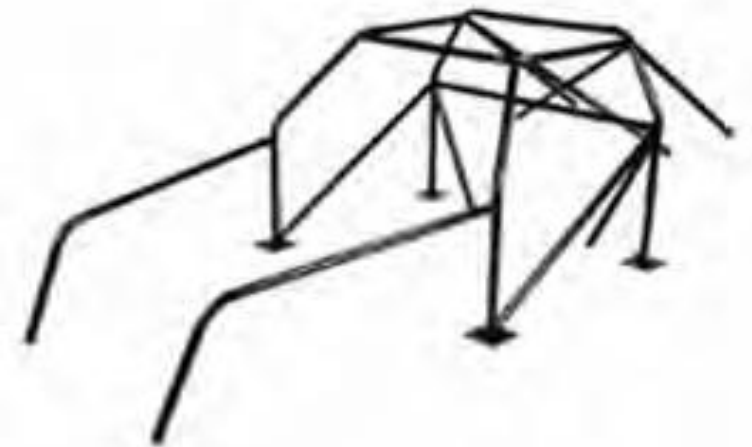
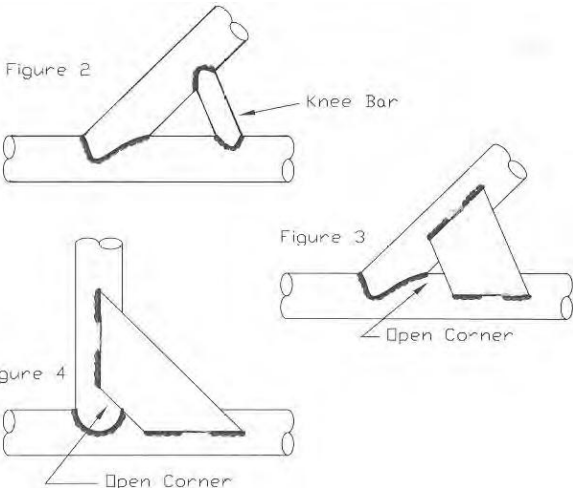


Figure 1b – Example of Roll Cage Construction.



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Figure 5

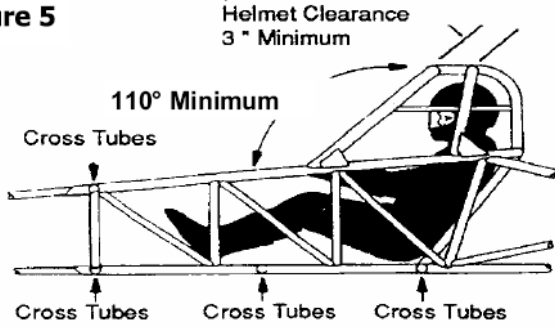


Figure 6

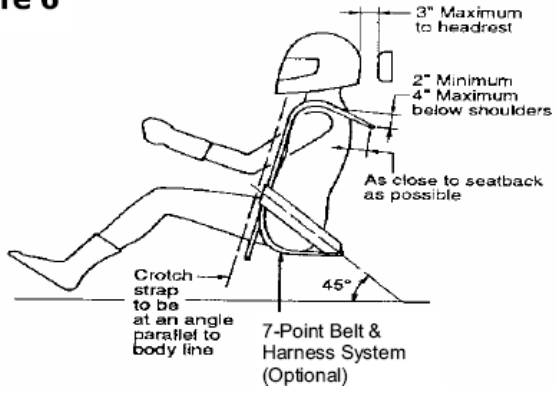


Figure 7

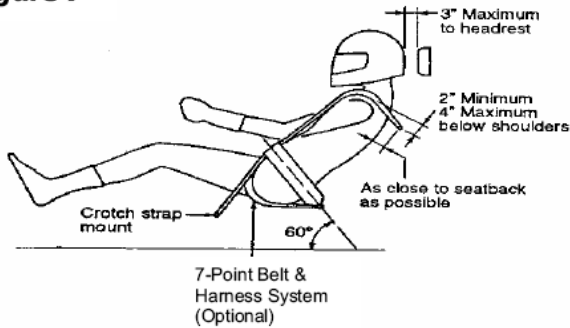
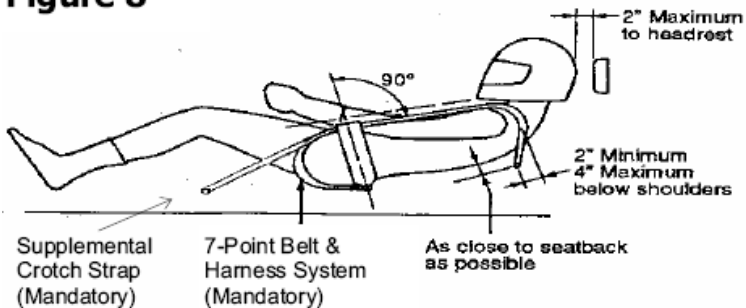


Figure 8



3.D DRIVER RESTRAINTS

3.D.1 Seats:

All vehicles over 150 MPH require a seat designed for racing. The seat shall be made of a metal, alloy sufficient to retain the driver under high "G" loading. Composite seats must be preapproved by the technical committee. No "plastic" seats will be allowed. The seat shall be securely fastened and have a maximum of 1 in. padding. Sprung or compressible seats are prohibited. Seats shall be securely installed and braced to prevent rearward collapse.

3.D.2 Seat Belts:

A: Under 135 MPH – 3 point lap and shoulder belt.

B: Over 135 MPH - SFI specification 16.1 or 16.5, quick release, competition type seat belts and shoulder harness with **2 in. minimum lap and shoulder belts** and 2 in. crotch strap are mandatory in all categories. All seat belt and shoulder harness installations shall be mutually compatible, originally designed to be used with each other. Crotch straps are required in all categories. All belts shall be in good condition, and have a manufacturer's tag with a legible date not more than 5 years old on the label. When arm restraints are worn with a belt system that utilizes a "latch lever" with a built in latch lock, a protective cover shall be installed to prevent the arm restraint from accidentally releasing the latch lever. Tape is not sufficient as protection.

Seat belts and shoulder harnesses shall be installed to the manufacturer's specifications and in compliance with the helmet support system requirements with special consideration given to shoulder belt interaction with HANS type device, SFI 38.1. Seat belts shall be securely fastened to the frame, cross member or reinforced mounting points so that fittings are in direct line with the direction of pull. Participants are cautioned that the usual "factory" mounting through the floorboard is inadequate and will not be permitted without additional reinforcement. Mounting shall be accomplished with a minimum of grade 5 bolts. Under no circumstances are bolts to be inserted through the belt webbing. The shoulder harness must be mounted in a manner as to prevent slipping off the driver's shoulders. See figures 6, 7, and 8.

A supplemental strap to prevent the driver from sliding up into the roll cage must be added to vehicles where the driver is in a reclining position, see fig. 8. In a vehicle with minimal cockpit room, consideration should be given to ensure the seat belt tighten pull is to the center of the vehicle, see figure 9, must not be flexible and must be attached with a positive locking system, e.g. seat belt hardware.

THE SEAT BELT CLINCHING MECHANISM MUST NOT BE ON TOP OF EITHER THE SFI TAG OR A MANUFACTURER'S LABEL. IF THE BELT CANNOT BE INSTALLED IN THIS MANNER, THE TAG MUST BE RELOCATED SO AS TO BE VISIBLE. See Figure 9.

All Special Construction vehicles shall include an inner liner or system of roll cage members for driver protection in the event of body panel destruction or separation. For a restraint system to be deemed acceptable, no part of the driver shall extend outside the inner plane of the roll cage structure.

3.D.3 Arm/Leg Restraints:

- A: Under 135MPH – No Requirement.
- B: 135 MPH - 175 MPH: Arm restraints OR a full door net required.
- C: 175 MPH and over: Arm restraints AND a full door net is required.
- D: Effective January 2010, SFI specification 3.3 arm restraints with a manufacturer's date of 2006 or later are required in all vehicles.
- E: Arm restraints shall be combined with the driver belt system such that the arm restraints are released in conjunction with driver's belts.
- F: Participants are cautioned that all controls be mounted as close to the steering wheel as possible to keep all arm restraints as short as possible.
- G: Legs shall be restrained by tethers, panels (non-body), bars or net.
- H: The restraint system shall be capable of preventing the driver's arms/legs from extending outside the roll structure and/or frame rails in an incident that includes a body panel separation.
- I: All mounting tabs/brackets shall be mounted inside the outside plane of the roll structure in a manner that in an incident they do not come into contact with the racing surface or the driver's body.
- J: All nets shall be mounted in such a manner that they fall from the top and out of the driver's way.
- K: Nets shall be mounted so that the driver can exit the car unassisted.
- L: Only the manufacturer shall perform modifications to window nets.

NOTE: In CC, ALT, GC, MS, PROD, PS and GT classes the restraint systems shall be effective without the door installed. To meet this requirement it shall be necessary to have arm restraints and a "full" door net or a combination of restraint systems that would be the equivalent to a "full" door net.

A cross member running below the driver's body, no smaller than the roll bar applicable to the class, shall protect any portion of the driver's body that extends below the main frame rail.

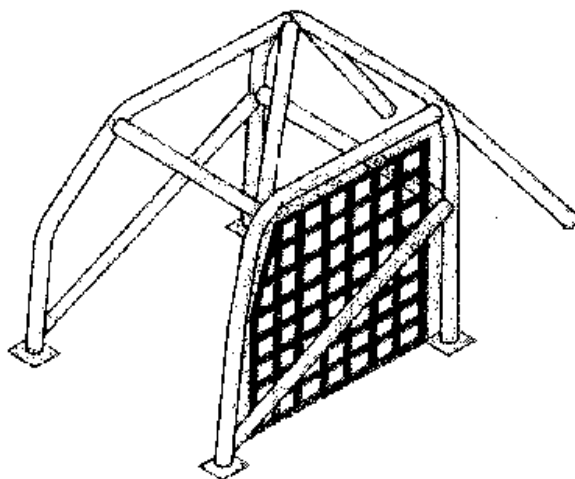
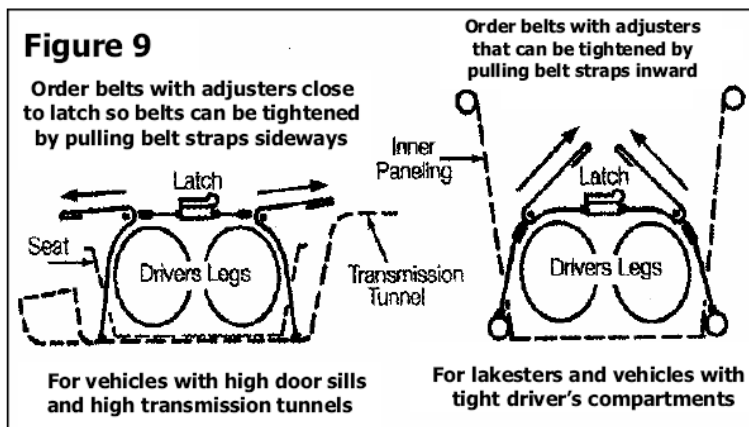


Figure 10

3.E DRIVER'S COMPARTMENT:

All driver compartments, driver's positioning, and surrounding structures shall be designed to support adequate forward vision. The driver must be able to exit the driver's compartment with ease. All doors, hatches, and canopies must be able to be opened from both inside and outside the vehicle without the use of tools. Non-OEM latches shall be clearly marked on the outside of the vehicles for emergencies.

On closed cars over 135 MPH, door locks and steering wheel locks shall be rendered inoperative. The driver shall be able to reach all switches, valves and

levers while strapped securely in the seat. Cars with front engines shall have the rear of the flywheel housing forward of the driver's knees. The driver's compartment shall be free from sharp edges, protrusions, brackets, etc. within close proximity of the driver. All enclosed driver compartments shall be equipped with a forward-pointing fresh air intake or breathing system directed to the driver and have adequate venting to carry away fumes. COMPRESSED OXYGEN BREATHING SYSTEMS ARE PROHIBITED. All breathing and cooling systems that supply air to the driver must have fire retardant protection on the hoses that supply air.

3.F FIREWALL:

A full firewall to provide a watertight and flame-resistant barrier between the engine and the driver is required in all categories. All non-production firewalls shall be made of metal with a minimum thickness of .060 in. A thickness of .095 in. is recommended. All holes must be sealed.

3.G SECONDARY FLOORING:

All cars with modified floor pans shall have secondary flooring of metal in the driver's compartment capable of retaining the driver and appendages in the event of the loss of the modified floor/belly pan(s). The secondary flooring must be securely attached to the frame or cross member. Expanded metal will be accepted if sufficiently rigid. Except in Vintage Oval Track Class, secondary flooring shall be no lower than the bottom of the frame plus the thickness of material used.

3.H TRANSMISSION SHIELDS:

All cars over 135 MPH, with automatic or planetary type transmissions shall be equipped with a ballistic transmission blanket or approved shield. It is recommended that the transmission blanket/shield meet SFI specification 4.1.

3.H.1 TRANSMISSIONS:

Any type of transmission may be used in any class. In cars over 135 MPH, automatic transmissions shall have a positive reverse lockout to prevent accidental reverse gear engagement.

3.I FUEL SYSTEMS:

The complete fuel system shall be securely mounted. Plastic fuel lines are not permitted. A metal screw type clamp shall be on each connection of rubber or steel-braided fuel line. All components of the fuel system shall be isolated from the driver's compartment or preapproved by the Technical Committee. All fuel lines in the area of the clutch and flywheel shall be run through heavy steel tubing or outside the frame rail, regardless of the presence of a scatter shield.

All fuel tanks shall be vented. Fuel tank vents shall be provisioned to eliminate spillage in the event of a rollover. All fuel tanks shall be isolated from the driver's compartment and protected in the plane of the blower drive, if used.

3.I.1 Fuel Shut-off:

All cars with other than stock fuel system shall have a fuel shut-off within the driver's reach. Electric fuel pumps shall have a switch in the circuit to disable pump operation. All electric fuel pumps shall have an inertial switch in the circuit to disable pump operation. All rotating fuel shut-off valves MUST have a positive stop to prevent reopening of the valve.

3.I.2 Nitrous Oxide Systems:

Nitrous Oxide bottles and lines are considered a portion of the fuel system and governed by all fuel system requirements. Nitrous Oxide bottles shall be securely mounted. Bottle mounting by hose clamps alone is not sufficient.

Vehicles with Nitrous Oxide systems shall be visibly identified as such and the location of the bottle(s) shall be indicated on the exterior of the vehicle. The Nitrous Oxide bottle(s) must be removed when competing in gasoline classes.

THE NITROUS OXIDE BOTTLE PRESSURE RELIEF VALVE SHALL BE VENTED TO THE OUTSIDE OF THE VEHICLE BY A RIGID LINE.

LTA & ECTA ONLY: Nitrous Oxide cylinders are allowed to be mounted inside the driver's compartment. NO NITROUS OXIDE CYLINDERS CAN BE HEATED BY OPEN FLAME.

3.J THROTTLES:

All cars shall be equipped with a redundant, self-closing throttle control with two (2) adequate return springs. There must also be a positive stop to prevent sticking in "over center" position. Accelerator pedal toe straps are required, except on OEM cable or hydraulic throttles.

IT IS RECOMMENDED THAT PLASTIC-LINED CABLES BE AVOIDED.

3.K BATTERIES:

All batteries shall be properly secured with metal framework and fasteners. Plastic tie-downs are not allowed. Batteries may be mounted in the driver's compartment if sealed in an acid spill-proof box.

All vehicles over 135 mph shall be equipped with a main battery disconnect switch. The disconnect switch or a positive mechanical control (cable or rod) for the switch shall be located on the front or rear of the vehicle, operable externally and clearly marked. For standardization, it is recommended that the switch be located on the rear of the car. Demonstration of shutoff may be required during technical inspection.

3.L STEERING:

All steering systems shall be gear or link type. The steering wheel shall have adequate clearance. The steering column shall be rigidly mounted. All moving parts shall operate freely without excessive play. The steering linkage shall have sufficient clearance between the body and the chassis. Steering must be assured by at least two (2) front wheels.

It is recommended that all steering system welds be visually inspected on a frequent basis. If a potential problem is observed in the inspection process, the Board may require an x-ray or magnaflux certification.

All spherical ends (i.e., Heim) used in steering systems shall not be constructed of aluminum and shall have washers with a larger OD than the Heim to retain the joint should separation occur (solid type Heim joints are required). All bolts used in steering linkage must be at least grade 5. For vehicles with long steering shafts, as used on rear engine streamliners and Lakesters, the shaft shall be collapsible or have a secondary steering shaft stop installed. Non-metallic steering wheel hub release mechanisms are not allowed.

The use of wagon wheel type steering on front wheel drive vehicles is prohibited. It is recommended that the wheel offset of front wheel drive vehicles be designed to minimize steering pull with loss of traction or drive line failure. Cable steering systems as used on the Ford Pinto are not allowed.

3.M PARACHUTE:

- A: 175-225 MPH – A single parachute is required.
- B: 225+ MPH and 2 wheel brakes – Two independent parachutes required.
- C: 250+ MPH with 4 wheel brakes - Two independent parachutes required.
- D: All parachutes shall be opened during inspection.

- E: Parachutes must be securely mounted to a suitable cross member.
- F: The manufacturer's recommendations should be followed regarding parachute size, mounting, etc. Special attention shall be given to the length and mounting point of the parachute tether line.
- G: Improper parachute performance or vehicle handling problems due to parachute performance will require re-inspection.
- H: ALL VEHICLES HAVING A PARACHUTE FAILURE MUST RETURN TO TECHNICAL INSPECTION TO DETERMINE THE CAUSE OF THE FAILURE. A NOTATION WILL BE MADE IN THE VEHICLE LOG BOOK DESCRIBING THE FAILURE AND SOLUTION.

3.N PARACHUTE RELEASE SYSTEM:

Any car equipped with a parachute shall have the release mounted in such a fashion that the driver may actuate it under emergency conditions while strapped securely in the seat wearing all safety equipment. All non-manual parachute release systems must also have a redundant, manual release as a backup that meets the above requirements.

3.O FLYWHEELS, FLYWHEEL SHIELDS and BELL HOUSINGS:

All cars over 135 MPH, including rear engine cars, with non-automatic transmissions, shall be equipped as follows:

- A: Flywheels: No cast iron/cast aluminum flywheels shall be permitted.
- B: Flywheel Shields: Flywheel shields shall be SFI specification 6.1, 6.2 or 6.3 depending on the application. An LTA or ECTA approved flywheel shield, made from 1/4 in. thick steel, providing 360 degree coverage and constructed in such a manner to provide retention of clutch and flywheel assembly parts may be used in the event that an aftermarket flywheel shield is not available.
- C: On cars where no aftermarket flywheel shield is available, and on smaller cars with limited space to install either SFI specification or LTA approved flywheel shield, a SFI specification 4.1 blanket specifically manufactured to be used as a flywheel blanket (shield) may be used.
- D: Bell Housings: Cars utilizing bell housing engine mounts only (Corvaire, VW, etc.) must provide some additional method of engine retention in the car.

3.P EXHAUST SYSTEM:

Exhaust systems may be modified in all categories. Systems shall be constructed in such a way that exhaust is directed past or away from the driver, fuel tanks, tires, and course. Individual stacks shall be connected by welding or other means near the free end so as to prevent destruction due to vibration.

3.Q FIRE EXTINGUISHING SYSTEMS: (LTA & ECTA ONLY)

- A: Under 150 MPH – Not required.
- B: 150 - 175 MPH - 5 lbs. Driver area only as a minimum. Driver control.
- C: 175+ MPH - 5 lbs. Driver area as a minimum. Driver control.
5 lbs. Engine compartment as a minimum. Driver control.
- D: Approved Agents – Driver area:
Halon 1301, Halon 1211, DuPont FE36, AFFF systems including Cold Fire 302, Firefox Gem Foam or Halon replacement certified for confined spaces.
- E: Approved Agents – Engine Compartment:
All listed above, dry chemical (not recommended) and CO2.
- F: The installation shall be in accord with the manufacturer recommendations.
- G: All agent lines and nozzles must be metal and securely mounted.

- H: Valves shall be designed to remain open on actuation.
- I: Control valves must be in reach of the driver while strapped in position.
- J: Driver area installation must be consistent with the size and shape of the driver's compartment.
- K: Engine area installation must have a minimum of two directional nozzles in the engine compartment which are aimed at the header/oil pan area.
- L: The discharge rate should be designed to allow sufficient protection for the time it will take the car to stop from speed.
- M: A current inspection/filling certification (no more than 24 months old) for each agent bottle shall be visible to the technical inspector without removing the bottle.
- N: The use of hose clamps as a primary mounting system is prohibited.

NOTE ON AQUEOUS COOLING SYSTEMS: Aqueous systems require that the nozzles be directed at the surfaces that require cooling, i.e. the firewall, cowl, floor pan, or transmission tunnel. Aiming of the nozzles is critical so that none of the agent impedes the vision of the driver at any time (not to spray on the windshield or driver's visor). Additionally, fresh air venting or breathing systems may be necessary in a confined space.

NOTE ON BOTTLES: The amount of required agent should not be confused with total bottle weight. Agent delivery lines are subject to dust and moisture clogging. Frequent clearing of the lines is recommended.

3.R COOLING SYSTEM:

All liquid cooling systems utilizing non-braided circulation lines shall have metal clamps at each connection. The use of plastic tubing in a cooling system is not allowed. No flammable or combustible coolants are allowed.

3.S DRIVE LINES:

Open drive lines in the driver's compartment shall be equipped with a protective covering. In all cars with drive shafts, see Section 4.II, there shall be a 360 deg. metal sling (at least ¼ in. x 1 in.), attached securely and mounted in the front 25% of the drive shaft to prevent dropping or excessive whipping in the event of breakage of drive shaft or universal joints.

Overrunning clutches (freewheeling) in drivelines are permissible in all categories. All traction bars and trailing links shall have a metal sling near the front attaching point with a minimum of 1/4 in. diameter. Torque tube (early Ford type) drivelines are exempt from the drive shaft sling requirement. If the rear wishbones are split and attached to the frame rails to act as traction bars, a 1/4 in. minimum metal sling is required.

3.T FRONT END AND SUSPENSION:

All front end and suspension fasteners shall be aircraft type "self-locking" nuts or have wire or keys appropriately placed to prevent them from coming apart. All spherical ends (e.g., Heim joints) used in suspension systems shall have washers with a larger OD than the joint to retain the joint should separation occur (solid type Heim joints are required). Un-sprung A-arm front ends are prohibited. No front suspension shall have more than 20 deg. of steering caster unless steering stops are used. Steering stops shall be installed to prevent wheel "flop over" and the tires from contacting any other component when the steering is in the full lock position.

3.U WINDOWS AND WINDSHIELDS:

All non-stock windows and windshields shall be made of shatter resistant plastic, such as polycarbonate (Lexan), and shall provide 120 degrees of

adequate vision forward. On all open body cars, a windshield is recommended, but shall not restrict driver entrance or exit. In all classes where a headrest fairing is permitted, the windshield may sweep around the driver's head and connect to the fairing on either side (refer to Driver's Compartment rule concerning sharp edges).

All windshield wiper blades and arms shall be removed. (Street cars excluded) On front and rear windows, metal retaining tabs or straps are required over 175 MPH.

T-tops or moon roofs must have the panels retained with metal tabs or straps.

3.V HOODS:

Hoods are required in all categories (except Special Construction Category) and shall be secured by metal fasteners, leather or webbing straps. Production hood latches are not sufficient unless the hood opens from the rear. Hood side panels (such as found on '29 Ford) may be removed. Early type hood hold-downs (spring type) are inadequate.

3.W BRAKES:

Adequate brakes are required in all classes. Brake controls shall be within the driver's reach while the driver is securely strapped in the seat.

3.X BLOWER RESTRAINT SYSTEM:

SFI type blower restraints shall be used on all vehicles using positive displacement blowers. Vehicles where the driver's body is within the rotational plane of the blower shall have containment via an SFI type restraint bag.

3.Y OIL SYSTEM:

Engine oil system must have filters, either mounted directly to the engine or remotely mounted, safety wired to ensure retention. The filter end may be fixed in place by the use of a filter with an integral stud or bung, or by wrapping the filter with a hose clamp. The attachment point may then be chosen as practicable to ensure that the filter is secure. Metal wire or strap is required.

SECTION 5 CAR CLASSES

The car classes are divided into eight general Categories: Street, Production, Roadster, Modified, Classic, Vintage, Truck, and Special Construction.

All applicable safety rules in Section 3 must be met as a minimum level of safety for the speed you intend to run; regardless of your Category or Class.

5.A STREET CATEGORY (LTA and ECTA ONLY)



This category is intended for street driven vehicles only. Cars, Street Rods, Pick-up Trucks and Sports Cars are included. In keeping with the intent of the class all vehicles must be licensed/tagged and insured. Fiberglass reproduction or phantom bodies are acceptable as long as the vehicle is street legal.

Convertibles may compete in Street Car **so long as they have a roll bar (See Section 3.B)** and must run with the top and rear windows up.

All street equipment must be retained and in working order. These items shall include but not be limited to: functional windows, wipers, horn, working lights & directionals, alternator, radiator, (power steering & power brakes if installed must be operable) full street legal interior minus rear seat. MUFFLERS are required and must be in use. Choice of engine, transmission and rear end is unlimited.

5.A.1 Time Only (T/O)

Time only is reserved for vehicles that meet the safety requirements of Section 3 for the speed they intend to run but

- A: do not fit into a class, or
- B: wish to run for testing only and not for records.

5.A.2 Street Car (135 Class)

This class designed to allow just about anyone enjoy the thrill of open asphalt. The class allows almost all street legal vehicles to participate in our events. The tech. team can assist new racers in determining a class for your vehicle. How fast you can run is determined by the level of safety you choose to build into your car. With no modification, you can run as follows:

- A: All applicable rules in Section 3 must be met for your intended speed.
- B: Speed is STRICTLY limited to Under 135 MPH for street cars.
- C: Any vehicle that does not fit any class or chooses not to run for a record will run in T/O.
- D: Convertibles must have a roll bar.
- E: Snell 2005 or 2010 helmet required.

- F: Drivers without the recommended SFI 3.2A/1 fire suit must wear long sleeve shirt and pants (cotton recommended).
- F: Once a car exceeds a 5 MPH cushion it will not be allowed to run again until it is in full compliance with competition rules.



5.A.3 Super Street - /GSS, /FSS, /BGSS, /BFSS

- A: All applicable rules in Section 3 must be met for your intended speed.
- B: Multiple Carburetion, Fuel Injection and Superchargers / Turbochargers allowed In Super Street.
- C: Nitrous Oxide is the only additional fuel additive allowed in the fuel class.
- D: Alcohol and Nitromethane are NOT permitted.
- E: No items are allowed that would make any vehicle illegal for street use.

All engine classes are allowed.

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5.A.4 Real Street - /GRS, /FRS

- A: All applicable rules in Section 3 must be met for your intended speed.
- B: Real Street vehicles are limited to single 4-bbl carburetor or any combination originally offered and installed by the factory, not to exceed four one-barrel carburetors.
- C: No fuel injection and no supercharging allowed.
- D: Alcohol and Nitromethane are NOT permitted.
- E: No items are allowed that would make any vehicle illegal for street use.

All engine classes are allowed.

5.B PRODUCTION CATEGORY

This category is intended to represent typical transportation vehicles, which may be purchased from ANY automobile dealer. A generic requirement for this category is the car shall have been originally produced with seating for four or more people, i.e. adults or children. If the car was produced and sold with 2 seats on some models and 4 seats (including jump seats) on other models, the car will be classified as a Coupe and Sedan. Examples include Honda CRX, Ford Mustang GT 350's, Porche, Nissan Z 2+2, etc. A production rate of at least 500

vehicles of the same model and available from any dealer's inventory for sale to the general public is considered to meet the requirement of a production automobile. In keeping with this intent, the cars are aerodynamically "stone stock" with no body parts allowed which were not parts of the manufacturer's production for the series of the vehicle involved.

THE MINIMUM REQUIREMENT FOR A VEHICLE WITHIN THE YEAR RANGE OF 1928- 1981 TO COMPETE IN PRODUCTION CATEGORIES MUST BE THE USE OF A NON-O.E.M. EFI SYSTEM.

Starting on Jan. 01, 2010 all entrants running in Production classes must have pictures of the car as produced with their Log Book for certification purposes.

Convertibles may complete in Production and must run with the top and rear windows up.

The engine used must have been available in the model of vehicle used as purchased from ANY automobile dealer. Modified body, body panels, spoilers, air dams, etc. intended for and as accepted or sanctioned by NASCAR, NHRA, SCCA, etc. are not permitted for use in this category unless specifically allowed. A manufacturer's part number does not necessarily imply that a part is an original, factory installed body part. Both exterior and interior body panels are considered to be part of a production vehicle and must be mounted in their original relationship to each other.

Racing seats shall be used per Section 3.D.1. The original side panel upholstery, both front and rear, must remain or be replaced with an aluminum equivalent. A stock or full width dashboard is mandatory. A fabricated, non-flammable equivalent is acceptable. Carpet, sound deadening material, headliner, minor chrome trim and emblems may be removed.

A different displacement size of the same design engine may be used provided it does not constitute an engine swap as defined in Section 4.N. Any transmission, non-quick change rear end, and an on-board starter capable of starting the engine shall be used so long as the original running gear design is retained.

Vehicles originally produced as a front wheel drive chassis and converted to rear wheel or four-wheel drive chassis are NOT eligible for competition in the Production Category. Choices of camshafts, induction and ignition are unlimited. Cylinder heads are limited to original number of valves and port configuration.

Vehicles in this category that exceed 200 MPH, or if the existing record is over 200 MPH, shall have roof rails, see Section 4.X.

PRODUCTION RECORDS ARE SUBJECT TO APPROVAL AND WILL BE CERTIFIED ONLY AFTER COMPARISON WITH THE MANUFACTURER'S SPECIFICATIONS FOR THE MODEL ENTERED. THE ENTRANT IS REQUIRED TO PROVIDE SUITABLE DOCUMENTATION. El Caminos and Rancheros meeting the requirements within this category will compete in the appropriate class.

XX/PRO class is limited to cylinder head port configuration as originally designed. This applies to the XXF and XXO engine classes.

All closed vehicles that would qualify as a V4 or V4F Production coupe or sedan will compete in the V4 or V4F Gas Coupe class.

Vehicles using a hybrid power source, such as a gasoline/ battery pack, will compete in the equivalent cubic inch class of the gasoline engine. The battery pack MUST be the stock unit as sold with the vehicle model used. The battery pack will be sealed to the race vehicle to ensure that it cannot be swapped. No off board charging of the battery packs will be allowed. If the vehicle is removed from the race meet, all previous runs will be forfeited. OEM throttle body control MUST be used. The entrant must provide the documentation to ensure that production units are used.



5.B.1 Production Coupe And Sedan - /PRO

American coupes and sedans 1928 to current year, foreign coupes and sedans 1949 to current year, or 1928-1981 American coupes and sedans that do not meet the requirements for Classic Category.

The vehicle will be unaltered in height, width or contour, with all stock panels mounted in the original relationship to each other. This category does not include cars properly classified as Sports or GT. A production rate of at least 500 vehicles of the same model for sale to the general public is considered to meet the requirement of a production automobile. The entrant must provide the documentation to ensure that production requirements are met.

The following items shall be retained in the stock location and of the same year and manufacture as the body: frame, floor pan, fenders, hood, grille, drip rails (must not be filled), windows, door handles, window trim, dashboard, headlights (high and low beam), tail lights, parking lights, stop lights, radiator, front and rear bumpers and horn. Decals are not acceptable as meeting the head and tail light requirements. The stock gas tank must be fitted, but need not be used. A replacement radiator of the same height and width and mounted in the original location as OEM shall be used. Blocking air flow through the radiator in front or behind is not allowed.

The following modifications are allowed:

- A: Headers.
- B: Hood scoop (Section 4.R).
- C: Wheel openings may be radiused for tire clearance.
- D: Passenger and rear seat may be removed.
- E: Air dams and air spoilers identical to factory optional equipment, (OEM) for the body in question may be added.

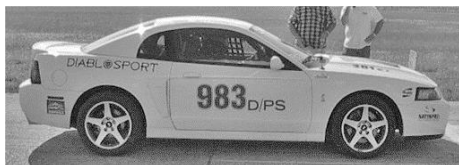
The following are NOT allowed:

- A: Streamlining, (Section 4.CC and subsections).
- B: Air Ducts (Section 4.A) or Air Vents (Section 4.C).
- C: Chopping (Section 4.I) or Channeling (Section 4.I.1).

Rules for these classes will be strictly enforced to ensure that cars entered are typical of street machines that may be purchased from ANY automobile dealer.

Engine classes allowed are:

AA, A, B, C, D, E, F, G, H, I, J, XF, XO, XXF & XXO



5.B.2 Production-Supercharged - /PS

This class is intended for American and foreign coupes and sedans that meet the requirement of the Production Coupe and Sedan Class that are equipped with factory supercharger systems. The vehicle shall be as originally equipped and configured. If the vehicle was originally equipped with one turbo charger, one turbo charger must be used. If the vehicle was originally equipped with a belt driven supercharger, a supercharger of that type must be used. Supercharged sports coupes equipped with rear jump seats, such as Mazda RX7 Turbo and Porsche 930 series, which would be considered a GT class vehicle, shall compete in the Blown GT class.

Engine classes allowed are : B, C, D, E, F, G, H, I and J



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5.B.3 Grand Touring Sport - /BGT, /GT

This class is limited to 2-seat production sports cars like the Corvette, Honda S-2000 or Fiero as well as limited production cars like the Factory Five Cobra manufactured by a recognized automobile manufacturer intended for comfortable high-speed driving. A production rate of at least 500 vehicles of the same model for sale to the general public is considered to meet the requirement of a production automobile.

Body styles produced with jump seating for more than two people like a Datsun 280Z 2+2, Porsche 911 or Honda CRX even though they may only have two seats will be considered a Coupe and Sedan and must run in that class.

The following items shall be retained in stock location and of the same year as the body: frame, fenders, hood, grille, drip rails (must not be filled), windows, door handles, window trim, headlights (high and low beam), tail lights, parking lights, stop lights, radiator, front and rear bumpers and horn. Decals are not acceptable as meeting the head and tail light requirements. The stock gas tank must be fitted but need not be used. Independent rear suspension may be replaced with any non-quick change rear.

The following modifications are REQUIRED:

- A: All vehicles must use a seat designed for racing, see Section 3.D.1.
- B: The original side panel upholstery or equivalent must remain.

The following modifications are ALLOWED:

- A: Wheel openings may be for tire clearance.
- B: The generator/alternator may be removed.
- C: Exhaust system shall be capable of being closed off may be used (no individual stacks).
- D: Air dams and air spoilers identical to factory optional equipment for the body in question may be added.
- E: Minor chrome trim and emblems may be removed
- F: An OEM. Air Intake (Section 4.B) may be used. The stock windshield may not be removed or lowered.
- G: Engine swaps as long as they were used in an automobile produced by the same manufacturer. (e.g., Ford into Ford, Porsche into Porsche, etc.).

The following modifications are NOT allowed:

- A: Streamlining (Section 4.CC and subsections).
- B: Air Ducts (Section 4.A), Air Vents (Section 4.C), or headlight air intakes.
- C: Chopping (Section 4.I) or Channeling (Section 4.I.1).

Rules for this class will be strictly enforced to ensure that cars entered therein are typical of street machines which may be purchased from a dealer.

Engine classes allowed are: AA, A, B, C, D, E, F, G, H, I and J

5.C ROADSTER CATEGORY

This category is specifically intended for the lovers of American Roadsters. Although fiberglass and aluminum bodies are allowed, the body shall be an exact replica of an American production car manufactured between 1923 and 1938 in annual numbers of 500 or more. No modification is allowed to the body proper from the stock firewall location back and the window down, and only limited modifications are allowed to the hood and top or as explicitly allowed in the class rules. Firewalls may be altered, moved or replaced entirely.

Bodies shall be mounted in a conventional manner and all stock panels must be mounted in their original relationship to each other. No fenders are allowed on MODIFIED, FUEL or GAS Roadsters.

TURBOCHARGERS ARE NOT ALLOWED ON VINTAGE CLASS ENGINES COMPETING IN ROADSTER BODY CLASSES, See Section 2.B.1.

The minimum tread dimensions for all Vintage Category vehicles are 44 in. front and 50 in. rear. Rear axles may be narrowed as long as no part of the tires extends within the body shell. Modified Roadsters are exempt from the front tread requirement. The minimum wheel diameter for all Roadsters is 14".



5.C.1 Street Roadster - /STR, /BSTR (Gas only)

In addition to the general category requirements, cars in this class shall have an American production roadster body, or an exact replica of a body produced between 1923 and 1938. The body shall not be altered in height, width or contour, and all stock panels, including cowl, cowl eyebrow and windshield post mounting supports (see Section 4.BB) that are an integral part of the body, i.e. welded on or formed into the body sheet metal, shall be retained. Stock panels, correct for the body year shall be mounted in their original relationship to each other. Replica panels shall be exact copies of stock panels in size and contour. On roadsters with non-removable windshield posts, the windshield structure may be cut off 1 in. above the lowest outer edge of the windshield frame.

Hood length, as determined by the year of the BODY, may be increased a maximum of 3 in. as measured along the top centerline of the hood. The entrant must provide this dimension. Front cross members may be moved to correspond to the increase in hood length. Hood side panels, if used, are not required to have the stock louvers or doors but must follow the original contour of the stock side panel. Hood side panels may be trimmed away for clearance of structural chassis or engine components. Bubbles or bulges may cover modifications made to the hood side panel to clear components so long as they do not violate the applicable portions of streamlining, Section 4.C.C.

Rear fenders are required. The fenders may be bobbed to the bottom of the body, but may not be relocated, narrowed, or widened. The outer edge of a bobbed fender cannot be cut on a radius greater than the bottom of the original fender.

A maximum of 15% engine set back is permitted to permit adequate clearance for water pump, blower drives, etc. A radiator/grille shell may be sectioned or bobbed, but the width may not be altered. If switched, the grille shell must be of the same manufacturer as the body (e.g. Ford to Ford, Chevrolet to Chevrolet, etc.) but not less than 530 sq. in. of frontal area. The radiator must fill the shell opening. The grille shell insert must remain open as in the original configuration and be stock style or removed completely.

Only cylindrical tanks are allowed in front of the grille. The tank shall be mounted horizontally between and above the frame rails. The maximum allowable dimensions for the tank are: 10 in. outside diameter, 32 in. circumference, 19 in. long, mounted a maximum of 2 in. from the leading edge of the grille.

Any frame may be used which is fabricated of round, square, or rectangular steel tubing, not less than 2 in. x .120 in. or channel not less than 4 in. x .120 in. No multi-tube frames may be used. Any type rear end may be used, and widening of rear tread to allow tires protrude beyond the fenders is permitted.

The driver shall sit in the stock location, and shall not be restricted from entrance to or exit from the car by the cockpit covering. The body may be channeled to the bottom of the frame. Flooring in the car shall be stock, or above the top lip of the top frame rail, and comply with the definition of Floorboards contained in Section 4.P.

A rigid tonneau cover is allowed, as long as it does not violate the definition of an open car, Section 4.V.

The following items are required: a horn, at least one tail/stop light, a transmission and two headlights facing forward in stock orientation. Headlight lenses shall be at least 5 in. in diameter. Both lights will be mounted outside the vertical edges of the grille shell and between 18 in. and 24 in. from the ground, measured to the centerline of the headlight.

The following items are optional: bumpers, current registration, floor mats, full upholstery, generator, hood side panels, parking brake, license plate, front fenders, running boards or windshield.

The following are not allowed as defined in Section 4; Sectioning of the body, Section 4.Y, Step Pan, Section 4.EE, and Streamlining, Section 4.CC and sub-sections. Louvers in the rear deck lid are allowed as long as they are sealed on the inside. Hood scoop, Section 4.R is allowed. Headers may be used, but shall terminate in a common collector, a minimum of 6" long beyond the end of the header tube.

Engine classes allowed are:

AA, A, B, C, D, E, F, G, H, XF, XO, XXF, XXO, V4 and V4F



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5.C.2 Gas/Fuel Roadster -/GR, /FR, /BGR, /BFR

In addition to the general category requirements, cars in this class shall have a production roadster body or an exact replica of a roadster body as produced between 1928 and 1938. Any type frame may be used and the body may be channeled to the bottom of the lower frame rail. Engines may be set back 25% of the wheelbase. Driver location is optional as long as the driver's entire body is between the firewall and the rear axle centerline.

The rear axle centerline may not be moved more than four inches aft from the stock position and rear tires may not extend more than 1 in. beyond the rear most part of the body proper.

The configuration of the bodywork between the original windshield line and the grille shell is optional, as long as the overall length of the car, from the front of the grille shell to the rear of the body, with any grille shell, is no greater than 143 in. for all roadsters except 1933/34 roadsters, which are allowed 152 in. All other roadsters whose stock production length is longer than 143 in. shall be allowed their stock production length. The entrant must provide this dimension.

Grille shells must have a minimum of 530 sq. in. of frontal area ('28 Ford) and must be mounted in the same vertical position as the original shell. The grille shell shall be measured at the widest point at the original shell and hood parting line and the width may not be altered but may be sectioned or bobbed. The height of the grille shell may be no higher than the cowl of the body as constructed. Grille shells of a design manufactured after 1932 may not be used on 1932 or earlier bodies.

The body at the original windshield line may be re-contoured to a flatter configuration, so long as the body contour is not lower than the top of the doors and the distance between the bottom of the frame and body contour, measured at the original windshield line, is not less than 28- 1/4 in.

The following alterations are allowed:

- A: Door hinges, windshield posts, filler caps, and brackets may be removed.
- B: Flat panels may cover grille openings.
- C: Tanks of any kind in front of the grille shell are specifically prohibited.
- D: Step pans.
- E: A flat panel may be located behind the grille shell and ahead of the vertical projection of the leading edge of the engine block. This panel must not be lower than the frame at any point plus the thickness of the material used.
- F: Streamlining in Section 4: Air Ducts (4.A), Air Intakes (4.B), Air Vents (4.C), Hood Scoops (4.R) and Headrest Fairing (4.CC.4).
- G: A rigid tonneau cover and headrest fairing are allowed, as long as they do not violate the definition of an open car.

The following alterations are not allowed:

- A: Belly pans or any other horizontal paneling not fitting the definition of floorboard is specifically forbidden.
- B: Streamlining, as defined in Section 4.CC is NOT allowed.

Minimum Wheelbase Requirements:

Classes	AA, A, B, C, D, E, XXF, XXO	100 inches
Classes	F, XF, XO, V4, V4F	95 inches
Classes	G, H	90 inches

Engine classes allowed are:

AA, A, B, C, D, E, F, G, H, XF, XO, XXF, XXO, V4 and V4F



5.C.3 Modified Roadster - /GMR, /FMR, /BGMR, /BFMR

In addition to the general category requirements, cars in this class shall have a production roadster body or an exact replica of a roadster body as produced between 1923 and 1938. Any type of frame may be used, and the engine may be set back 50% of the wheelbase.

The combined body area covered or altered by the headrest fairing, all parachute fairings, and any other allowed body protuberances or displacements, from the original cockpit opening to the rear of the car cannot exceed 65%, as measured in a horizontal plane from the top view.

The driver's seat may be at any location between the firewall and the rear axle centerline. The body may be cut out to move the driver as far back as possible.

The body at the original windshield line may be re-contoured to a flatter configuration, so long as the body top contour is not lower than the top of the doors as measured at the front edge of the doors.

Streamlining ahead of and including the cowl and channeling is permitted. Air intakes, air vents and the following as defined in Section 4.CC are allowed: Axle Fairing, Belly Pan, Headrest Fairing, Skirts and Wings.

Headrest and parachute pack fairing are allowed as long as the fairing is no larger than the headrest or parachute pack and does not extend past the rear of the body shell. Push bars shall not be solid or offer any aero advantage. Wings are allowed. The wing width, including side plates, shall not be wider than the inner vertical plane of the rear tires. The maximum allowable height of the wing shall not exceed 65 in. from the ground as measured to the highest part of the wing. The rear of the wing, including side plates, may not be set back more than 18 in. behind the rear of the body. The total wing size (measured by the fore to aft dimension times the side to side dimension, on the top surface) shall not exceed 1152 sq. in. The lowest portion of the wing shall be at least 12 in. above the roll cage structure. Multiple element wings are NOT allowed. Spoilers and four wheel drive systems are NOT allowed.

A rigid tonneau cover and headrest fairing are allowed as long as they do not violate the definition of an open car.

Wheel wells may be filled at stock location, but the rear axle shall not be narrowed to the point that the inner vertical plane of the rear tires is narrower than the original inner fender well. No alterations to the turtle deck are allowed.

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No fairing or special covering of the wheels and tires is permitted.

Maximum wheelbase is 190 in. Allowable minimum tread widths are 50 in. rear and 38 in. front. Allowable body width across the bottom of the doors must meet the dimension as originally produced by the manufacturer. The entrant must provide this dimension.

Minimum Wheelbase Requirements:

Classes	AA, A	110 inches
Classes	B, C, D	105 inches
Classes	E, XXF, XXO	100 inches
Classes	F, XF, XO, V4, V4F	95 inches
Classes	G, H	90 inches

Engine classes allowed are:

AA, A, B, C, D, E, F, G, H, XF, XO, XXF, XXO, V4 and V4F



5.C.4 Rear Engine Modified Roadster – /GRMR, /FRMR, /BGRMR, /BFRMR

In addition to the general category requirements, cars in this class shall have a production or an exact replica of a roadster body as produced between 1923

and 1938. Any type of frame may be used. The driver's seat must be entirely in front of the engine.

The combined body area covered or altered by the headrest fairing, all parachute fairings, and any other allowed body protuberances or displacements, from the original cockpit opening to the rear of the car cannot exceed 65%, as measured in a horizontal plane from the top view. The entire engine must be forward of the centerline of the rear axle. The driver's line of sight must be over the body work.

The body at the original windshield line may be re-contoured to a flatter configuration, so long as the body top contour is not lower than the top of the doors as measured at the front edge of the doors.

Streamlining ahead of and including the cowl and channeling is permitted. Air intakes, air vents and the following, as defined, in Section 4.CC, are allowed: Axle Fairing, Belly Pan, Headrest Fairing, Skirts and Wings. No fairing or special covering of the wheels and tires is permitted.

Headrest and parachute pack fairing are allowed as long as the fairing is no larger than the headrest or parachute pack and does not extend past the rear of the body shell. Push bars shall not be solid or offer any aerodynamic advantage.

Wings are allowed. The wing width, including side plates, shall not be wider than the inner vertical plane of the rear tires. The maximum allowable height of the wing shall not exceed 65 in. from the ground as measured to the highest part of the wing. The rear of the wing, including side plates, may not be set back more than 18 in. behind the rear of the body. The total wing size (measured by the fore to aft dimension times the side to side dimension, on the top surface) shall not exceed 1152 sq. in. The lowest portion of the wing shall be at least 6 in. above the highest point of the body. Multiple element wings are NOT allowed.

A rigid tonneau cover and headrest fairing are allowed as long as they do not violate the definition of an open car.

Wheel wells may be filled at the stock location, but the rear axle shall not be narrowed to the point that the inner vertical plane of the rear tires is narrower than the original inner fender well.

Alterations to the turtle deck, spoilers, or four-wheel drive systems are not allowed.

Minimum wheelbase is 140 in. and maximum wheel base is 190 in. Allowable minimum tread widths are 50 in. rear and 38 in. front. Allowable body width across the bottom of the doors must meet the dimension as originally produced by the manufacturer. The entrant must provide this dimension.

Engine classes allowed are:

AA, A, B, C, D, E, F, G, H, XF, XO, XXF, XXO, V4 and V4F

5.D MODIFIED CATEGORY

This category encompasses American and foreign coupes and sedans with a production rate of at least 500 vehicles of the same model for sale to the general public unaltered in height, width or contour, and with all stock panels

mounted in original relationship to each other. The vehicle has been modified to such an extent that it no longer fits into the Production Category. A generic requirement for this category is the car shall have been originally produced with seating for four or more people, i.e. adults or children. If the car was produced and sold with 2 seats on some models and 4 seats (including jump seats) on other models, the car will be classified as a Coupe and Sedan. Examples include Honda CRX, Ford Mustang GT 350's, Porsche, Nissan Z 2+2, etc. El Caminos and Rancheros meeting the requirements within this category will compete in the appropriate class.

THE MINIMUM REQUIREMENT FOR A VEHICLE WITHIN THE YEAR RANGE OF 1928- 1981 TO COMPETE IN THE MODIFIED CATEGORIES MUST BE THE USE OF A NON-O.E.M. EFI SYSTEM.

Coupes and sedans produced from 1949 to the current model year, and not meeting the criteria of the Classic Category, must compete in the Modified Category classes.

All entrants running in Modified classes must have pictures of the car as produced with their Log Book for certification purposes. Vehicles competing in the Competition Coupe and Modified Sports classes must have documentation showing the stock vehicle BEFORE modification.

Within the Modified category the amount of modification determines the class. For example, a Gas Coupe is basically a Production car with an engine swap, an Altered is a Gas Coupe with headlights and grille covered and the engine set back, a Competition Coupe is an Altered with the nose lengthened and streamlined.

In classes where the removal of rear view mirrors is allowed the OEM fender or door shape must be retained. If the stamping has a mirror housing as part of the fender or door, that shape must be retained.

Front air dams and splitters are permitted in the Modified Category. See Section 4.CC.1 for an air dam and splitter definition. In Gas Coupe and Sedan Classes the original grill opening shall remain uncovered.

Vehicles in classes where the current record exceeds 275 MPH must use security film on non-safety glass windows or replace the windows with polycarbonate material. Additional bracing must be installed to prevent window blowout or collapse.



5.D.1 Competition Coupe & Sedan - /GCC, /FCC, /BGCC, /BFCC

This class encompasses production coupe or sedan bodies unaltered in width or contour and shall comply with the general rules of the category. Streamlining ahead of and including the cowl, channeling, belly pan and skirts and spoilers, as defined in Section 4.CC. is permitted.

One of the following modifications MUST be done to be considered in this class:

- A: Top shall be chopped.
- B: The vehicle must have a full belly pan.
- C: The body from the cowl forward shall be lengthened a minimum of 12".
- D: The engine shall be set back a minimum of 25% and a maximum of 50% of the wheelbase.

Other than top chopping, no modification to the body is allowed. Minimum vertical windshield height is 5 in. The front and rear chop shall be equal. Window openings may be covered by flat plates on the outside of the opening or left open. Driver shall sit COMPLETELY ahead of the rear axle, inside the body and behind the engine, except in rear engine cars using the original engine location. Driver exit hatches in the roof are recommended but shall not change the contour of the body.

Wing width including side plates shall not be wider than the outside width of the body. The maximum allowable height of the wing including side plates shall not exceed 65" from the ground as measured to the highest part of the wing. The rear of the wing including side plates may not be set back more than 18 in. behind the rear of the body. The lowest portion of the wing shall be at least 6 in. above the highest point of the body. The total wing area (measured by the fore-to-aft dimension times the side-to-side dimension on the top surface) shall not exceed 1152 square in. Multiple element wings are NOT allowed.

NOTE: Entrants electing to use a pre-1949 body in the Competition Coupe classes need not comply with the seating requirement for four (4) average size adults. The rear inner fender panels may be modified to allow the rear tires to be located within the body. This rear fender panel allowance does NOT apply to Vintage Category vehicles using vintage engines. Drip rail may be removed.

Engine classes allowed are:

AA, A, B, C, D, E, F, G, H, I, J, XF, XO, XXF and XXO



5.D.2 Altered Coupe - /GALT, /FALT, /BGALT, /BFALT

This class encompasses American and foreign coupe or sedan bodies 1928 to the current year, unaltered in height, width, length or contour. Cars in this class must comply with the General Rules of the Modified Category. The body shall be mounted to the chassis with all body panels mounted in the original relationship to each other. The driver shall sit completely ahead of the rear axle, inside the body, and behind the engine, except in rear engine cars using the original engine LOCATION.

One of the following modifications must be done to be considered in this class:

- A: The addition of a step pan as defined in Section 4.EE.
- B: The engine setback max. of 25% of the wheelbase as defined in Sec. 4.AA.
- C: A front wheel drive vehicle converted to rear wheel drive.

D: Covered headlights and grille as described below.

Any frame may be used as long as the bottom line of the frame is not higher than the outer bottom line of the body between the firewall and the rear wheels. An exception will be made if the ORIGINAL frame/body relationship is such that the lower bottom line of the frame is above the outer bottom line of the body, that frame/body combination may be used. The burden of proof of the ORIGINAL frame/body relationship lies with the entrant. The frame may not be exposed from the bottom of the body. This rule does NOT apply to vintage body class vehicles.

The following are allowed:

- A: A 2% maximum body stretch in the cowl area, in front of the firewall. This does not apply to Vintage class.
- B: An engine swap as defined in Section 4.N is permitted.
- C: Bumpers, grilles and front lights may be removed and the opening created may be filled or covered. The filled or covered area may be flush with the adjacent body so long as the basic shape and contour of the vehicle is not changed. Engine intake air may be ducted from these openings.
- D: Drip rails may be removed.
- E: Taped or filled body, door or window seams are allowed from the firewall back. Windows shall be mounted in the stock fashion or fastened to the inside of the window openings. A non-stock spoiler is permitted as defined in section 4.CC.6.
- F: Pre-1949 bodies may be chopped. The chop shall be equal front to rear and must retain a vertical windshield height of at least 6 in. above the top of the cowl with a maximum horizontal length of 7 in. from the base of the windshield at the center of the car.
- G: After market front ends are allowed as long as the item conforms to the class guidelines.
- H: Any type of exhaust that exits anywhere from the body but the top.

The following are not allowed:

- A: Wheel wells may not be filled or covered.
- B: No streamlining, as described in Section 4.CC, unless specified.
- C: Any horizontal paneling which may be construed as a belly pan.
- D: Roof mounted spoilers, other than original for the body used.

Vehicles in this category that exceed 200 MPH, or if the existing record is over 200 MPH, shall have roof rails.

Engine classes allowed are:

AA, A, B, C, D, E, F, G, H, I, J, XF, XO, XXF, and XXO



5.D.3 Gas Coupe And Sedan - /GC, /BGC

This class encompasses American coupe, sedan or convertible bodies 1982 to current; and foreign coupe, sedan or convertible bodies 1928 to current year.

One of the following modifications must be done to be considered in this class:
(Any one of which makes the car ineligible for competition in Production class):

- A: Engine swap.
- B: Quick-change rear end.
- C: Non-stock supercharger.

Convertibles may compete in Gas Coupe & and must run with the top and rear windows up.

As in Production, Gas Coupes may not be altered in height, width, length or contour. All body panels shall be mounted in the original relationship to each other. An engine swap as defined in Section 4.N is permitted.

NOTE: Any "narrowing" or fairing of bumpers into the body will result in the car being placed in Altered Class. Bumpers must be stock and in the stock position. Air dams are allowed but must not cover the original grille opening. See specifications outlined in Modified Category description.

The following items shall be retained in the stock location and of the same year as the body: frame, fenders, hood, grille, drip rails (shall not be filled), windows, door handles, window trim, headlights (high and low beam), tail lights, parking lights, stop lights and bumpers. Decals are not acceptable as meeting the head and tail light requirements. A replacement radiator of the same height and width and mounted in the original location as OEM shall be used. An onboard starter capable of starting the engine shall be used.

The following modifications ARE allowed:

- 1) The engine may be set back a maximum of 2% of the wheelbase.
- 2) Wheel openings may be radiused for tire clearance.
- 3) The generator/alternator, horn and stock gas tank may be removed.
- 4) Air intakes per Section 4.B may be used.
- 5) Headers may be used.
- 6) Exhaust collectors may exit through the front fenders.
- 7) Minor chrome trim and emblems may be removed.
- 8) Upholstery and the passenger seat assembly may be removed.

The following modifications are NOT allowed:

- 1) No individual exhaust stacks or exhaust outlets through the doors or hood.
- 2) Front wheel drive cars that have been converted to rear wheel drive.
- 3) Streamlining as described in Section 4.CC unless specified.
- 4) Air vents, headlight air intake, one piece front ends.
- 5) Channeling.
- 6) Blocking air flow through the grill or radiator in front or behind
- 7) Taped or filled body, door, or window seams.

Vehicles in this category that exceed 200 MPH, or if the existing record is in excess of 200 MPH shall have roof rails. See Section 4.X.

Engines classes allowed are:

AA, A, B, C, D, E, F, G, H, I, J, XF, XO, XXF, and XXO



5.D.4 Modified Sports - GMS, /FMS, /BGMS, /BFMS

This class is intended for production sports cars as accepted for GT class, which have been modified to such an extent as to make the vehicle illegal for the Production Category.

This class is limited to production (a minimum of 500 vehicles) of the same model for sale to the general public. Examples include Chevrolet Corvette, Porsche 911, Mazda RX7, and Nissan Z series automobiles.

The following items are required: a starter capable of starting the engine, tail/stop lights, a transmission (either manual or automatic), and a radiator when originally equipped.

- 1) Production **GT class** cars with an engine swap will be allowed.
- 2) Any frame may be used, see Section 2.D. Maximum wheelbase allowed shall be 130 in. Any type of rear end may be used.
- 3) Engine placement is optional, so long as no change is made to the driver's location as originally designed. The driver must be seated behind the engine, except in the case of production and limited production bodies which are designed for mid/rear engine locations. The driver must not be restricted from entry or exit of the vehicle by the cockpit covering.
- 4) Coupe tops may be chopped and windshields may be lowered or removed.
- 5) Front tread width may be narrowed to a minimum of 27 in.
- 6) Front fenders may be removed at the stock fender location or at a point no further forward than 6 in. from the base of the windshield, measured at the centerline of the vehicle.
- 7) Streamlining ahead of and including the cowl, channeling, belly pan and skirts is allowed.
- 8) Wings offered as an OEM item for the year/model of vehicle may be used. The wing must have been available on the vehicle as purchased new and the wing must remain unmodified and mounted in the stock location. The entrant is required to provide suitable documentation.
- 9) Spoilers as defined in Section 4.CC.6 are allowed.
- 10) Removal of minor trim and bumpers is allowed as long as the body is not altered in length, width or contour.
- 11) Limited production (a minimum of 50 examples produced) sports car bodies, which may be placed on any frame, will be permitted.

The following modifications are NOT allowed:

- 1) No "one of a kind" bodies will be allowed.
- 2) Air Vents (Section 4.C).
- 3) Headrest Fairing (Section 4.CC.4) which extends past the rear of the body and taping of body and window seams.



5.D.5 CIRCLE TRACK - /GCT, /FCT, /VCT (LTA & ECTA ONLY)

This class is for all circle track and road race cars, dirt or pavement, that do not fit into current LTA classes like Competition Coupe or Altered. (such as NASCAR, SCCA or IMSA with modified panels)

Cars must be rear wheel drive. The driver shall sit entirely behind the engine and in front of the rear axle. The frame may be of any construction meeting safety rules, however all wheels must be sprung. Cars in this class must have a fully functioning radiator mounted in front of the engine. Spoilers, air dams and hood scoops are acceptable. Wings and nerf bars that give aerodynamic aid are not permitted. Door windows are not allowed on cars that have non-functional doors. Gasoline and Alcohol are accepted fuels for this class. Nitrous Oxide and Nitromethane are not acceptable. Vintage vehicles must run pre-1948 engine design.

Minimum wheel basses are as follows:

Classes	AA thru E, XXO, XXF	86 inches.
Classes	F, G, XO, XF, V4	68 inches.
Classes	H thru K	60 inches.

All engine classes are allowed.

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5.E CLASSIC CATEGORY

All entrants running in Classic classes must have pictures of the car as produced with their Log Book for certification purposes.

Coupes and sedans produced from 1949 to the current model year, not meeting the criteria of the Classic Category, must compete in the Modified Category classes.

The classes within this category are intended to provide a venue for coupes and sedans from the "Golden Era" of automobile production. This category encompasses American **and Foreign** coupes and sedans produced between 1928 and 1981 with a production rate of at least 500 vehicles of the same model for sale to the general public.

Entries must be unaltered in height, width, and contour with all stock panels, i.e., hoods, fenders, doors, etc., mounted in their original relationship to each

other. The vehicle must have been originally produced with suitable seating for four adults. For reasons of economy and historical authenticity, certain electronic engine technologies are not allowed.

Class Distinctions:

- 1) Classes of Classic Category are the equivalent of Modified and Production categories with body modifications as allowed in those categories.
- 2) American coupes and sedans in the year range of 1928-1948 using non-vintage engines may compete with the fenders and running boards removed in the Classic Altered classes.
- 3) Within the Classic Category pre-1949 bodies may have a 3 in. beauty chop.
- 4) **Foreign coupes and sedans are limited to 'F' (123.00 to 183.99 cid, 2.016 to 3.014 L) engines sizes.**

The following modifications ARE allowed:

- 1) One distributor or magneto (one ignition system only).
- 2) Capacitive discharge type ignition systems with rev limiter.
- 3) Sensor controlled ignitions are allowed but must be stock and not modified in any way for the year and model of the vehicle entered.
- 4) Carburetors or mechanical fuel injection, or OEM EFI.
- 5) Direct reading gauges, either electronic or mechanical and data recorders are allowed.

The following modifications are NOT allowed:

- 1) Non-OEM Electronic Fuel Injection, (EFI).
- 2) Sensor controlled engine management systems with feedback loop.

In order to prevent a vehicle from competing in both the Classic and Modified categories, the following policy is established:

American coupes and sedans within the year range of 1928-1948 using non-vintage engines such as a Chevy 350, Ford 351, and Chrysler Hemi OHV V8, etc. may compete in the Classic Category classes. Body modifications must comply with the class in which the vehicle is entered. El Caminos and Rancheros meeting the requirements within this category will compete in the appropriate class.

Body Classes: /CBFALT, /CFALT, /CBGALT, /CGALT, /CBGC, /CGC

Engine Classes: AA, A, B, C, D, E, F

Body Classes: /CPRO

Engine Classes: AA, A, B, C, D, E, F

Body Classes: /CPS

Engine Classes: C, D, E

Engine classes allowed are: AA, A, B, C, D, E, F, G, H, I

5.F VINTAGE CATEGORY

This category is specifically intended for the lovers of antique iron. Although fiberglass and aluminum bodies are allowed, the body shall be an exact replica of an American production car except for the Vintage Oval Track class. No modification is allowed to the body proper from the stock firewall location back and the window down, and only limited modifications are allowed to the hood and top.

This category is organized into two groups: VINTAGE COUPES AND SEDANS, which are special vintage classes for the Modified Category; and VINTAGE OVAL TRACK, a special class for oval track and speedway vehicles with pre-1948 designed engines.

Except for the Vintage Oval Track vehicles, only automobile bodies produced by an American manufacturer prior to 1948, at a rate of 500 or more yearly, or exact replicas of such bodies are allowed. Tops may be chopped, but no other alteration to the contour or size of the body shell is allowed except as specifically allowed in the class rules. Wheel wells may be filled but not deepened. Rear axles may be narrowed as long as no part of the tires extends within the body shell. **TURBOCHARGERS ARE NOT ALLOWED ON VINTAGE CLASS ENGINES COMPETING IN VINTAGE BODY CLASSES**, See Section 2.A. The minimum tread dimensions for all Vintage Category vehicles are 44 in. front and 50 in. rear. Modified Roadsters are exempt from the front tread requirement. The minimum wheel diameter for all Vintage Category vehicles with the exception of /VOT is 14 in. Bodies shall be mounted in a conventional manner and all stock panels must be mounted in their original relationship to each other. No fenders are allowed on MODIFIED, FUEL or GAS Roadsters. Firewalls may be altered, moved or replaced entirely.



5.F.1 VINTAGE COUPE & SEDAN Classes:

One of the following modifications shall be done to be considered in the Vintage Competition Coupe class:

- 1) The top shall be chopped more than 3 in. lower than the OEM height. The owner shall provide documentation of the OEM top height measured at the center of the cowl.
- 2) The vehicle shall have a full belly pan.
- 3) The body from the cowl forward shall be lengthened a minimum of 12 in.
- 4) The engine shall be set back a minimum of 25% of the wheelbase. The engine setback cannot exceed 50% of the wheelbase.

VINTAGE GAS COUPE and SEDAN:

XF/VGC, XO/VGC, XXF/VGC, XXO/VGC, V4/VGC and V4F/VGC

BLOWN VINTAGE GAS COUPE and SEDAN:

XF/BVGC, XO/BVGC, XXF/BVGC, XXO/BVGC, V4/BVGC and V4F/BVGC

VINTAGE GAS COMPETITION COUPE:

VF/VGCC, XO/VGCC, XXF/VGCC, XXO/VGCC, V4/VGCC and V4F/VGCC

VINTAGE FUEL COMPETITION COUPE:

XF/VFCC, XO/VFCC, XXF/VFCC, XXO/VFCC, V4/VFCC and V4F/VFCC

BLOWN VINTAGE GAS COMPETITION COUPE:

XF/BVGCC, XO/BVGCC, XXF/BVGCC, XXO/BVGCC, V4/BVGCC and V4F/BVGCC

BLOWN VINTAGE FUEL COMPETITION COUPE:

XF/BVFCC, XO/BVFCC, XXF/BVFCC, XXO/BVFCC, V4/BVFCC and V4F/BVFCC

VINTAGE GAS ALTERED COUPE:

XF/VGALT, XO/VGALT, XXF/VGALT, XXO/VGALT, V4/VGALT and V4F/VGALT

VINTAGE FUEL ALTERED COUPE:

XF/VFALT, XO/VFALT, XXF/VFALT, XXO/VFALT, V4/VFALT and V4F/VFALT

BLOWN VINTAGE GAS ALTERED COUPE:

XF/BVGALT, XO/BVGALT, XXF/BVGALT, XXO/BVGALT, V4/BVGALT and V4F/BVGALT

BLOWN VINTAGE FUEL ALTERED COUPE:

XF/BVFALT, XO/BVFALT, XXF/BVFALT, XXO/BVFALT, V4/BVFALT and V4F/BVFALT

The rules in these classes are identical to the respective Modified Category classes, except that only 1948 or earlier bodies with XF, XO, XXF, XXO, V4 or V4F engines are allowed. In all classes except VGC, fenders and running boards may be removed if it can be done by unbolting the fenders from the body. Pre-1949 bodies can have a 3 in. beauty chop. Pre-1949 cars shall have radiator/grille shells of the same manufacturer as the body, e.g., Ford on Ford, Chevy on Chevy, etc. Air dams are not permitted in the Vintage Gas Coupe and Sedan classes using vintage engines.

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All closed vehicles that would qualify as a V4 or V4F Production Coupe or Sedan will compete in the V4/V4F Gas Coupe class. All open vehicles that would qualify as V4 or V4F production roadster will compete in the V4/V4F Street Roadster class.

5.F.2 VINTAGE OVAL TRACK /VOT MIDGET VINTAGE OVAL TRACK /MVOT

The Vintage Oval Track class is for vintage engine, old-style open wheel, rear drive, dirt track and Indy, one or two seat cars, with a tapered tail and cowl. **The appearance and design of cars in this category shall be practical for, and as were used in OVAL TRACK and SPEEDWAY competition from the late 1920s to 1957.** A limb restraint system (3.D.3 and 4.U) extending from the firewall to behind the driver's seat requiring the driver's feet to be retained and protected, will be strictly enforced. A belly pan alone is not acceptable.

The vintage engines permitted in this class have to be built with pre 1948 design engine blocks; i.e., no modern overhead V8s or blowers are allowed. The cars and engines in this category should also resemble historic, documented cars and be in period correct relation to each other; i.e., a GMC engine laid flat in a Kuzma Roadster is not allowed. Excessive engine set back is prohibited. The most rear edge of the engine block may not extend inside the cowl section. Direct mounted dog clutches or Offy (NOT Ford A) drum-type flywheel-clutch assemblies need not be covered by a scatter shield, see Section 3.O.

No Production body panels are permitted, except for the grill shell. **No track roadster configurations are allowed.** A fully functioning radiator shall be mounted in front of the engine, and the fuel tank shall be mounted in the tail behind the driver. The driver shall sit entirely behind the engine, ahead of the

rear axle, and shall not recline more than 5 deg. from the vertical. The frame may be of any construction except monocoque, and all wheels shall be sprung (2.D). **Shocks must be mounted outside the frame.** "Knock-Off" type wheels specifically made for racing may be used in this class. **Knock-Offs must be safety wired.**

At least 2 brakes on either the front or rear axle are required. Brakes must be mounted outside the body.

Grille/Nose opening must resemble the documented race car and can NOT be filled. Air inlet opening in grille/nose must be a minimum of 30 sq. in. for VOT and 25 sq. in. for MVOT, not including the grille and/or grille bars.

Tarps and Panels may be fitted around the cockpit, but there may be no covering above the driver's head, except for the roll cage, nor any panel that shall be moved or swung to safely enter or exit the cockpit.

Ground effects, wings or wheel fairings are NOT permitted. Spun aluminum wheel discs are allowed. The usual track- style nerf bars are optional if they give no aerodynamic aid.

If required, parachute packs must be mounted behind the roll cage (on top of the tail) or in the push bar area. No fairing, molding or wings permitted.

All other safety rules are applicable. Particular attention will be paid to arm restraints, adequate caster, and proper steering ratios. All cars must be equipped with a full roll cage, see Section 3.B. Fuel is restricted to gasoline or alcohol. Nitro methane or nitrous oxide is not allowed. In this class ONLY, non-production overhead cam engines of pre-'48 design (Miller, Offy, HAL, etc.) run in XXO Class.

Engine classes allowed are: XO, XF, XXF, XXO, V4 and V4F

Maximum cid Midget Vintage Oval Track/MVOT

Flathead 150 cid

Overhead 125 cid

5.G TRUCK CATEGORY



5.G.1 Production Pickup Truck - /PP (Gas Only)

This class is for 1946 and later American made pickup trucks with full stock bed, unaltered in height, width and contour, with all panels mounted in the original relationship to each other. Samples of allowed trucks include but are not limited to; Chevrolet C series, Ford F series and others.

Pickup trucks in this class are required to comply with all class rules as well as all rules in the Production Category (5.B), Production Class (5.B.1).

Any supercharger and/or production full-time four-wheel drive trucks shall compete in the Modified Category, Modified Pickup class. Covering of pickup beds with tarps or panels is allowed. The cover must be no higher than the edge of the pickup bed. Aftermarket bed caps are allowed but must not allow any aerodynamic advantage. Pickups may run with the tailgate raised, lowered or removed. The exhaust shall not exit through the pickup bed floor.

Pickups with cab mounted gas tanks must have gas tank removed. The tank must be relocated to offer no aerodynamic advantage.

Engine classes allowed are: AA, A, B, C, D, E, XO & XF



5.G.2 Production Mid/Mini Pickup Truck - P/MP

This class is for 1972 and later American and foreign made Mid/Mini sized pickup trucks with a full stock bed. The body is unaltered in height, width or contour with all stock panels mounted in original relationship to each other. Samples of allowed trucks include but are not limited to; Chevrolet S-10, Ford Ranger, Nissan and Toyota.

Any supercharged and/or production full-time, four-wheel drive trucks shall compete in the Modified Category, Modified Mid/Mini Pickup class.

Pickup trucks in this class are required to comply with all class rules as well as all rules in the Production Category, Production Class.

Covering of pickup beds with tarps or panels is allowed. The cover must be no higher than the edge of the pickup bed. Aftermarket bed caps are allowed but must not allow any aerodynamic advantage. Pickups may run with the tailgate raised, lowered or removed. The exhaust shall not exit through the pickup bed floor.

Engine classes allowed are: C, D, E, F, G, H and I



5.G.3 Modified Pickup Truck - /BMP, /MP

This class is for 1946 and later American made pickup trucks, with full stock bed, unaltered in height, width or contour, with all panels mounted in the

original relationship to each other. Samples of allowed trucks include but are not limited to; Chevrolet C series, Ford F series and others.

Pickup trucks in this class are required to comply with all class rules as well as all rules in the Modified Category, Gas Coupe class.

Minimum requirements to compete in the Modified Pickup class are at least one of the following:

- * Engine swap
- * Quick change rear end
- * Non-stock supercharger

Production pickups with a supercharger and/or full-time four-wheel drive shall compete in this category and class. No streamlining as described in Section 4.CC is allowed unless specified.

Covering of pickup beds with tarps or panels is allowed. The cover shall be no higher than the edge of the pickup bed. Aftermarket bed caps are allowed but must not allow any aerodynamic advantage. Pickups may run with the tailgate raised, lowered or removed. The exhaust shall not exit through the pickup bed floor.

Pickups with cab mounted gas tanks must have gas tank removed. The tank must be relocated so as to offer no aerodynamic advantage.

All engine classes are allowed.



5.G.4 Modified Mid/Mini Pickup Truck - /MMP, /BMMP

This class is for 1972 and later American and Foreign made mid and mini sized pickup trucks with full stock bed, unaltered in height, width or contour with all panels mounted in the original relationship to each other. Samples of allowed trucks include but are not limited to; Chevrolet S-10, Ford Ranger, Nissan etc.

Pickup trucks in this class are required to comply with all class rules as well as all rules in the Modified Category, Gas Coupe class.

Minimum requirements to compete in the Modified Mid/Mini Pickup class are at least one of the following:

- * Engine swap
- * Quick change rear end
- * Non-stock supercharger

Production pickups with a supercharger and/or full-time four-wheel drive shall compete in this category and class. No streamlining as described in Section 4.CC is allowed unless specified.

Covering of pickup beds with tarps or panels is allowed. The cover must be no higher than the edge of the pickup bed. Aftermarket bed caps are allowed but must not allow any aerodynamic advantage. Pickups may run with the tailgate raised, lowered or removed. The exhaust shall not exit through the pickup bed floor.

All engine classes are allowed.

5.G.5 Diesel Truck - /DT

This class is intended to represent typical diesel pickup trucks that may be of either American or foreign manufacture. This class is limited up to and including one (1) ton vehicles. The body must remain unaltered in height, width and contour, with all stock panels in original relationships with each other.

Engine and driveline swaps are permitted. Flywheel shields are mandatory. Roll bars must be mounted inside the cab.

Pickup trucks in this class are required to comply with all class rules as well as all rules in the Modified Category, Gas Coupe class.

Rules for this class will be strictly enforced to ensure that trucks entered herein are typical of street machines that may be purchased at any automobile dealer.

Covering of pickup beds with tarps or panels is allowed. The cover must be no higher than the edge of the pickup bed. Aftermarket bed caps are allowed but must not allow any aerodynamic advantage. Pickups may run with the tailgate raised, lowered or removed.

5.G.6 Modified Diesel Truck - /MDT

This class is for diesel-powered trucks only, with modified bodies not otherwise legal for Diesel Truck class.

The body may not be altered in height, width or length. Truck frame and running gear must be used. Trucks weighing more than 14,500 lbs. are allowed unlimited engine displacement. Full size trucks are limited to a maximum of 750 cid. Trucks based on Mid/Mini chassis are limited to a maximum of 500 cid. There are NO engine displacement class breaks. All vehicles shall compete against the same record.

Streamlining behind the cab such as elongated bed or similar body work, not to exceed the height of the stock bed is allowed. Class 8 trucks may have any fairing between the wheels and frame covers not to extend above the top of the rear tires or frame rail, whichever is higher. The body from the back of the cab forward may not be altered in height, width or length.

Tires must be certified for vehicle weight and speed of class record or minimum. Skid plates shall be designed and mounted so as to prevent any portion of the running gear from damaging the racecourse in the event of tire failure. The skid plates must NOT be designed so as to form a belly pan. Streamlining devices are NOT allowed.

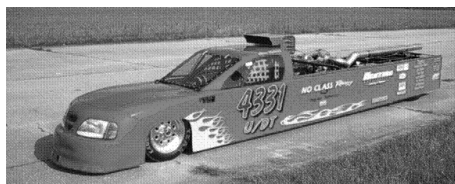
Roll cages are mandatory and must be mounted inside of the cab.

This class must use event diesel fuel, if provided. For other technical regulations refer to other sections of this book.

This class must use event diesel fuel, if provided.

Turbochargers and superchargers may be used; these engines will not be handicapped with class jump.

Engine classes allowed are AA, A, B, C, D, E, F, G and H



5.G.7 Unlimited Diesel Truck - /UDT

This class is for diesel-powered trucks only, modified as to be illegal for the Modified Diesel truck class. Any frame and running gear may be used and multiple engines are allowed. The body may be highly modified.

Trucks weighing more than 14,500 lbs. are allowed unlimited engine displacement. Full size trucks are limited to a maximum of 750 cid. Trucks based on Mid/Mini chassis are limited to a maximum of 500 cid. There are NO engine displacement class breaks; all vehicles must compete against the same record.

Tires must be certified for vehicle weight and speed of the class record or minimum. Skid plates shall be designed and mounted to prevent any portion of the running gear from damaging the racecourse in the event of tire failure. The skid plates must NOT be designed so as to form a belly pan. Roll bars are mandatory and must be mounted inside the cab. For other technical regulations, refer to other sections of this book. Any fuel is allowed.

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5.H SPECIAL CONSTRUCTION CATEGORY

This category is the pinnacle of the straightaway racer's art. It contains three main groups. In the automobile group are the unlimited Streamliners and open-wheeled Lakesters with a 4+ wheel configuration and in the motorcycle group are the Streamliner and Streamliner Sidecar class. These classes allow both blown and unblown, gas or fuel engines. These are all-out straightaway vehicles with non-stock engine blocks allowed, (with the exception of specific Vintage Engine classes). Innovation is encouraged, within the rules. Modified production bodies are forbidden. Four wheel drive is allowed in the automotive group. It is strongly recommended that all new vehicles be submitted for a pre-event inspection by appointment with the Board. If not practical because of distance, photographs and drawings may be submitted to the Board.



5.H.1 Lakester - /GL, /FL, /BGL, /BFL

Special cars constructed in such a way that there is no streamlining, fairing or covering of the wheels and tires. Tread width is optional so long as no part of the body or axle fairing is wider than the narrowest inner vertical plane of the tires. Wing struts must be within the inner vertical plane of the rear tires. The wing must be mounted at least 12 in. above the top of the rear tire as measured from the lowest part of the wing. Front wings must be no wider than the inner vertical plane of the narrowest set of tires.

Minimum wheelbase is as follows:

Classes	AA, A	110 inches
Classes	B, C, D	105 inches
Classes	E, XXF, XXO	100 inches
Classes	F, XF, XO, V4, V4F	95 inches
Classes	G, H	90 inches
Classes	I, J, K	80 inches

Engine classes allowed are:

Ω, AA, A, B, C, D, E, F, G, H, I, J, K, XF, XO, XXF, XXO, V4 and V4F

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5.H.2 Streamliner - /GS, /FS, /BGS, /BFS, /DS

This class is for the all-out land speed record car. Cars in this class shall have at least four wheels, but they need not be arranged in a rectangular configuration. The design of the body is restricted only to the extent that at least two (2) wheels shall be covered. Turbochargers, superchargers and any choice of fuel are allowed in Diesel Streamliner class.

Engine classes allowed are:

Ω, AA, A, B, C, D, E, F, G, H, I, J, K, XO, XF, XXF, XXO, V4 and V4F

5.H.3 Reserved

5.H.4 Turbine Vehicle - /T

This class is for vehicles using turbine power (external combustion) as the sole means of propulsion. The vehicle shall be wheel driven. THE BODY CONFIGURATION IS UNLIMITED. The vehicle and driver shall meet all technical and safety regulations based on the speed of the existing record. The

class will be based on vehicle weight less driver. The entrant must provide a weight certificate for classification purposes.

Class I under 1099 lb. Less than 500 kg

Class II 1100-2200 lb. 500-1000kg

Class III 2201 lb. and over 1000 kg

5.1 Electric Vehicles

The LTA, in cooperation the NEDRA (National Electric Vehicle Drag Racing Association) has developed EV motor classes to allow for a compilation of land speed records from around the globe specific to electric powered vehicles. While we do maintain an affiliation with the NEDRA, it does not extend beyond the sharing of records.

The NEDRA rules are specific to ELECTRIC DRAG RACE VEHICLES. NEDRA members must comply with all LTA competition rules and regulations to compete at LTA sanctioned events; just as they must comply with all NHRA rules at NHRA events.

The rules below are a combination of NEDRA and LTA rules. LTA rules have been substituted where the LTA rule must be followed. Any rule on which NEDRA is mute shall be governed by the LTA rules in section 2 and 3. If any discrepancy is found between rulebooks, the LTA supersede all NEDRA rules.

NEDRA Class Validation:

While all electric vehicles will compete in an appropriate LTA class for LTA records, the EV Technical Director will certify the NEDRA class for their records. For NEDRA record certification, participants must be NEDRA members.

Electric Power Class Designation:

Electric power shall be designated in the LTA records as a fuel type: i.e. /ESS = Electric Super Street.

5.1.1 Motor

- A: SPECIAL CONSIDERATION MUST BE MADE FOR INCREASE IN SUSTAINED LOADS PLACED ON LSR VEHICLES COMPARED TO DRAG VEHICLES. MOTORS, WIRING, AND COOLING MAY NEED TO BE UPGRADED TO REFLECT THESE CONDITIONS.
- B: Vehicle must be powered by electric motor(s) only during competition.
- C: Cars - Maximum allowed motor output shaft centerline height is 24".
- D: Trucks - Maximum allowed motor output shaft centerline height is 36".
- E: Exposed-motor vehicles with open frame, vented, or brush replacement window motors must install a motor shield, minimum 0.024-inch steel or 0.032-inch aluminum, or 0.120-inch Lexan.
- F: Conversion motors must be mounted in location of ICE.

5.1.2 ICE Fuel System

All conversion vehicles must remove fuel tanks and fuel system, including vapor storage equipment, from vehicle.

5.1.3 Transmission

See 3.H.1

5.1.4 Transmission Shields

See 3.H

5.1.4 Drive Lines

See 3.S

5.1.5 Rearend

Chain drive vehicles must be equipped with a chain guard constructed with minimum 0.125-inch steel or 0.250-inch aluminum, covering width and top run of chain to centerline of sprockets.

5.1.6 Deflector Plate - Open-bodied vehicle

Each vehicle must have protection for driver from traction motor overload. Must protect driver from motor plasma, flying commutator bars, molten copper, bursting batteries, and spraying electrolyte.
See 3.F – Firewall for guidance.

5.1.7 Batteries

- A: Must be securely mounted and sealed from the driver's compartment.
- B: Must be vented to the outside of the vehicle.
- C: Battery may not be located above the top of the rear or drive tires in open wheeled cars, nor outside the body lines in bodied car, except OEM production vehicles.
- D: Open bodied vehicles are NOT allowed to use wet cell of any kind.
- E: Must be installed so as to withstand a 4G vertical and 8G horizontal load.
- F: Each battery or battery pack must be secured with bolts and straps commensurate with the size and weight of the battery.

These tables are condensed to remove small size fasteners and grade 1 bolts.
Please refer to NEDRA guidelines for small fasteners
Grade 1 bolts are NOT allowed.

Table 1: Simple Two-Bolt Strap Hold-down on Flat Surface

			Grade 5			Grade 8		
Nominal Size-in.	Tensile Area	Stress Factor	Strength (ksi)	Load (lbf)	Battery (lb)	Strength (ksi)	Load (lbf)	Battery (lb)
1/4	0.0318	3.85	85.0	702.1	35.1	120.0	991.2	49.6
5/16	0.0524	3.85	85.0	1156.9	57.8	120.0	1633.2	81.7
3/8	0.0775	3.85	85.0	1711.0	85.6	120.0	2415.6	120.8
7/16	0.106	3.85	85.0	2340.3	117.0	120.0	3303.9	165.2
1/2	0.1419	3.85	85.0	3132.9	156.6	120.0	4422.9	221.1
9/16	0.182	3.85	85.0	4018.2	200.9	120.0	5672.7	283.6
5/8	0.226	3.85	85.0	4989.6	249.5	120.0	7044.2	352.2

Table 2: Maximum Battery Weights

Grade 5 Bolt			Steel			6061 – T4		
Nom Size	Max Load	Max Force/ Inch	Strap Thickness (inch)	Min Strap Width	Cross Section (inch ²)	Strap Tkness (inch)	Min Width (inch)	Strap Section (inch ²)
1/4	702.1	511	0.0596	1.427	0.085	0.098	1.427	0.140
5/16	1156.9	736	0.0860	1.631	0.140	0.142	1.631	0.231
3/8	1711.0	968	0.113	1.835	0.2074	0.186	1.835	0.342
7/16	2340.3	1192	0.139	2.03896	0.284	0.229	2.030	0.468
1/2	3132.9	1330	0.155	2.447	0.379	0.256	2.447	0.6266
9/16	4018.2	1574	0.1837	2.650	0.487	0.303	2.650	0.804
5/8	4989.6	1694	0.198	3.058	0.6048	0.326	3.058	0.998
Grade 8 Bolt			Steel			6061 – T4		
Nom Bolt Size	Max Load (lbf)	Max Force/ Inch	Strap Thickness (inch)	Min Strap Width	Cross Section (inch ²)	Strap Tkness (inch)	Min Width (inch)	Cross Section (inch ²)
1/4	991.2	721	0.084	1.427	0.120	0.1389	1.427	0.198
5/16	1633.2	1040	0.121	1.631	0.198	0.200	1.631	0.3266
3/8	2415.6	1367	0.1596	1.835	0.293	0.263	1.835	0.483
7/16	3303.9	1683	0.196	2.03896	0.400	0.324	2.030	0.661
1/2	4422.9	1878	0.219	2.447	0.536	0.362	2.447	0.885
9/16	5672.7	2223	0.259	2.650	0.688	0.428	2.650	1.135
5/8	7044.2	2392	0.2792	3.058	0.854	0.4606	3.058	1.409

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Table 3: Hold-down Bolt size for Rack or Box-Mounted Box

Nominal Size	Grade 5				Grade 8		
	Tensile Area	Strength (ksi)	Load (lbf)	Battery (lb)	Strength (ksi)	Load (lbf)	Battery (lb)
1/4	0.0318	85.0	702.1	87.8	120.0	991.2	123.9
5/16	0.0524	85.0	1156.9	144.6	120.0	1633.2	204.2
3/8	0.0775	85.0	1711.0	213.9	120.0	2415.6	301.9
7/16	0.106	85.0	2340.3	292.5	120.0	3303.9	413.0
1/2	0.1419	85.0	3132.9	391.6	120.0	4422.9	552.9
9/16	0.182	85.0	4018.2	502.3	120.0	5672.7	709.1
5/8	0.226	85.0	4989.6	623.7	120.0	7044.2	880.5

5.1.8 Electrical Wiring

- A: SPECIAL CONSIDERATION MUST BE MADE FOR INCREASE IN SUSTAINED LOADS PLACED ON LSR VEHICLES COMPARED TO DRAG VEHICLES. WIRING MAY NEED TO BE UPGRADED TO REFLECT THESE CONDITIONS.
- B: Traction motor and/or any high CURRENT wiring must be located outside of the driver's compartment.
- C: High VOLTAGE wiring for instruments is allowed in driver's compartment.
- D: All high-voltage wiring must be located and secured to prevent contact by driver and/or spectators. Any wiring over 24 volts must be completely covered.
- E: Traction motor wiring must be completely isolated from the chassis and must have full positive and negative leads to the battery.

5.1.9 Fusing of Batteries

- A: All battery packs must have over current protection.
- B: Battery sub-packs must be individually fused.
- C: Circuit breaker(s) or fuse(s) are permitted.
- D: Such protection devices must have a DC voltage rating equal or greater to the nominal pack voltage.

5.1.10 Recharging

- A: Batteries may be recharged in the pits or other designated areas only.
- B: Vehicle must be attended and monitored during entire charging process.
- C: Vehicle must be connected to AC power supply ground when charging.
- D: Charger must be internally fused with a fuse size appropriate for the chargers maximum DC output current.
- E: Generators used for charging purposes that are unmuffled or are deemed to be excessively loud may be required to move to a remote location at the discretion of the race officials.

5.1.11 Ignition

- A: All vehicles must have a visible indication of a 'live' car, except OEM.
- B: An externally activated switch or switch control must be installed on the outside of the vehicle and clearly marked to indicate OFF position. The rear of the vehicle is the preferred location.
- C: Traction battery pack must be physically disconnected when switch is in the off position
- D: A RED triangle must be clearly visible the power system is turned on. This may be a light or a mechanical indicator.

5.1.12 Master Cutoff

All vehicles except OEM must incorporate a master electrical disconnect switch that must disable all electrical functions. Switch must disconnect traction motor battery pack section of circuit, and if switch is push-pull design, push must be the "OFF" function.

5.I.13 Motor Class Sizes

Class	Nominal Voltage	Measured Voltage
AAA	349V and above	382.9V and above
AA	301V - 348V	330.1V - 382.8V
A	241V - 300V	264.1V - 330.0V
B	193V - 240V	211.3V - 264.0V
C	169V - 192V	184.9V - 211.2V
D	145V - 168V	158.5V - 184.8V
E	121V - 144V	132.1V - 158.4V
F	97V - 120V	105.7V - 132.0V
G	73V - 96V	79.3V - 105.6V
H	49V - 72V	52.9V - 79.2V
I	25V - 48V	26.5V - 52.8V
J	0 - 24V	0 - 26.4V and below

Please visit www.nedra.com for more information.



5.J 36HP ENGINE VW (LTA &ECTA ONLY)

The 36 HP challenge is a compilation of land speed records from around the globe specific to VW engined vehicles. While we do maintain an affiliation with the 36HP Challenge, it does not extend beyond the sharing of records. All entrants are required to comply with all LTA rules and regulations. LTA rules supersede all 36HP rules if a discrepancy is found.

NOTE: All VW's not fitting within the described engine, transmission, body and axle beam guidelines will run in The VW OUTLAW /VVO Class or appropriate LTA class and be eligible for "1" Club recognition by the 36HP Challenge.

Speed Validation:

All speeds must recorded using LTA timing trap at an LTA sanctioned event. Speeds recorded with a speedometer, GPS or radar will not be recognized.

"1" Club Recognition:

Recognition for the VW 1-Club is performed by the 36HP Challenge. All aerodynamically improved stock Volkswagens, Volkswagens with fiberglass fenders, hoods or deck lids, 36hp Lakesters, Formula Vees, Streamliners, Dragsters, Chopped or Sectioned VW's, Buggies, Baja Bugs, Kit Cars, Trikes or other "race" cars that pass their respective sanctioning bodies safety inspection procedures will be eligible for "1" Club recognition.

5.J.1 BODY/VEHICLE:

Any year Type 1 stock Volkswagen Beetle, Super Beetle or Cal Look sedan body with stock VW bumpers(NOTE: Convertible and sliding cloth sunroof bodies require added safety equipment (i.e. bolt-in 4 point roll bar available from EMPI suppliers- part #3116). Type 141 Karmann Ghia and pre-67 Type 2 bodied cars will compete in separate body style only categories and will not be eligible for recognition beyond 36hp Challenge record listings or be eligible for top speed 36hp "Beetle" records. All metal body and fenders with all lights, full width VW bumpers (note "T Bar" or Cal-Look style bumpers are not allowed), and running boards in place and functioning. Wiper blades & arms, antenna, outside mirrors and license plates may be removed during competition but must be in place prior to and through technical inspection. Interior must include two front seats and rear seat back (bottom portion of rear seat may be left out), headliner and door panels. Deck lid standoffs are not allowed! Rear wheel fender skirts (metal or fiberglass aftermarket) are allowed. if the mounting system passes the tech inspection. NA36 Turbo equipped cars can have both the intake and exhaust systems protrude through holes in the deck lid. No scoops allowed on the deck lid or body sides. Genuine Herrods Helper rear wings or the new replicas that mount to the air intakes under the rear window on bugs can be mounted on any 36hp Beetle that runs above 100 miles per hour for added stability and safety in all but Stone Stock categories and will NOT affect stock body classification!

5.J.2 Engine:

36hp engine case (block) with stock 36hp cylinder head studs in stock locations(8mm studs O.K.), original VW 36hp head, Okrasa, Denzel and new Wolfsburg West Okrasa replica aftermarket 36hp heads with or without modifications are allowed(no 1200-1600cc or Porsche based heads!). All engine sheet metal, to include a "functioning generator and cooling fan" are mandatory in all engine classes along with stock 36hp or period 36hp aluminum valve covers and gaskets (replica alloy valve covers for 36hp heads are O.K.).

NOTE: Nitrous systems are not allowed in 36hp Challenge cars or 130 Mile Per Hour Club categories! If NOX, E85 or any fuels other than gasoline or racing gasoline are used, any speeds recorded will be moved to the "1" Club category with the exception of the UNLTD36 class.

5.J.3 Transmission:

Transmission must be a Volkswagen 4 speed swing (non-synchro or full-synchro) or I.R.S. original or modified Bug transmission (five speed conversions, Porsche and Hewland style transmissions are not allowed).

5.J.4 Suspension:

The front end may be lowered using commonly available VW axle beams, spindles or devices "excluding NARROWED axle beams" in ALL classes (narrowed beams are O.K. in the "1" Club category). Rear sway bars or camber compensators are acceptable and "Moon Disc" style hub cabs when securely installed following LTA guidelines may be used in ALL classes. Above guidelines DO NOT APPLY to cars running for "1" CLUB recognition ONLY.

5.J.5 SAFETY EQUIPMENT:

Since almost all entrants will travel at speeds below 135mph, the rules of the "135 Class" will apply. **See Section 3.A.1 and 5.A.2.**

Any entrant traveling over 135 mph must comply with ALL applicable rules in Section 3 for your intended speed.

Additional requirements outlined by the 36HP challenge are as follows:

- A: 3-Point seat belt required.
- B: Dual (2) throttle return springs.
- C: Excellent condition "S" rated tires (to 112 mph) inflated to 50 pounds with hub caps and trim rings removed.
- D: H rated tire required over 100 mph.
- E: Metal valve stem caps.
- F: Race fuel is allowed.
- G: Nitrous is not allowed.

5.3.6 CLASSES:

Stone Stock – /VWS

Stock 36hp engine with single 28 PCI carburetor with no modifications except VW venturi and jet replacements. Must be equipped with a stock VW style dual tip exhaust system and tips, air cleaner, VW Bosch branded distributor and coil (Pertronix Ignitor, full flow oil system, engine balancing and three angle valve cuts are allowed). Extractor exhaust systems not allowed! Stock cylinder heads! No cylinder head porting or polishing, displacement or camshaft upgrades are permissible. 12 volt electrical systems are allowed.

Note: ALL Stone Stock categories, Bugs, Ghias and Buses must use "Steel" wheels, be they stock, Porsche or aftermarket. Alloy wheels are not allowed.

Super Stock Single - /VWSS

Modified 36hp engine with single 28PCI carburetor (modifications highly recommended) and 36hp single port cylinder heads. Requires any Bosch distributor and coil. No displacement, camshaft, carburetor modification or header limitations. Intake manifold can be modified or handcrafted.

Dual Super Stock - /VWDSS

Pre 1965 period style dual or single dual throat carburetors systems, using pre-1965 carburetors only (Weber 48 IDA carburetors are pre-1965), fitted to modified stock VW 36hp cylinder heads or period aftermarket 36hp dual port cylinder heads(or replicas like Wolfsburg West Okrasa heads). Requires any Bosch distributor and coil. Dual spark plug conversions are allowed . No displacement, camshaft or header limitations. Handcrafted intake manifolds are allowed . Carburetor(s) must be under the deck lid without bumps or scoops or external cutouts.

Supercharged/Kompressor/Fuel Injection - /VWK

Any pre-1970 mechanically driven supercharger (or reproduction Pepco/Judson/Shorrock supercharger) or pre 1965 fuel injection system. Requires any Bosch distributor and coil. Dual spark plug conversions are allowed.. No displacement, camshaft or header limitations. Dual period correct superchargers are acceptable as are pre 1965 Hilborn style fuel injection systems. Turbo chargers and electronic fuel injection systems are not allowed.

New Age 36 - /VWNA

Any turbocharged 36hp engine or post 1971 mechanically driven supercharger, post 1966 mechanical and any electronic fuel Injection systems, post 1966 production carburetor(s). Any ignition and coil is allowed. Dual spark plug

conversions O.K. . No displacement, camshaft or header limitations. Dual turbochargers or superchargers are acceptable. Intake and exhaust components can protrude through the deck lid but scoops are not allowed.

Unlimited Top Speed - /VWU

36hp engine case and modified period correct cylinder heads. Any transmission. Any four wheeled body configuration with or without modifications. No limitations on displacement, camshaft, fuel, ignition or exhaust systems.

LAKESTER36 - /VWL

Any classic lakester body, Formula Vee chassis, or single seat off road mid or rear engine race car fitted with one of the above described 36hp engines. Must utilize a full width Volkswagen Type 1 axle beam. Lakesters not fitted with the VW axle beam as described will compete under "1" Club guidelines and not be eligible for LAKESTER36 record recognition. Construction requires pre-approval from the LTA.

Outlaw 36hp - /VWO aka 1-Club

Outlaw class encompasses all VW 36HP powered vehicles that do not meet the requirements of VW classes above.

A: Vehicle may run in LTA class for records and also qualify for 1-Club recognition through the 36HP Challenge.

B: Identifiable 36hp engine case required.

C: Two, Three or Four wheels in any configuration per LTA rules required.

D: Unlimited cylinder heads or other engine modifications allowed.

E: Any transmission allowed.

F: Nitrous oxide allowed ONLY in full race vehicles.

G: Construction requires pre-approval from the LTA.

**5.K Alternative Fuel Experimental/AFX4
(New Class – LTA & ECTA ONLY)**

This class is for any car or truck, regardless of engine size; normally aspirated or blown, that is running on non-production pump fuels. Examples include: bio-diesel, peanut oil, soybean oil, hydrogen, etc.