
ECTA.LLC 2018 LSR CAR RULES

For 2004 and newer street legal production vehicles, refer to Street Category/Super Street.

CORRESPONDENCE RELATING TO RULES OR SPECIFIC TECHNICAL OR SAFETY QUESTIONS SHOULD BE EMAILED TO STEVE STRUPP AT SPEEDING4U@GMAIL.COM

1.R RULE DEVIATION PROCEDURE:

Any request for deviation from any rule contained in this Rule Book shall be submitted in writing to Steve Strupp . You can email requests to Speeding4u@gmail.com or mail them to ECTA LLC 9429 Boberg Rd Wadesville ,In 47638 ECTA.LLC has up to 45 days to review any requests

Section 2 COMPETITION REQUIREMENTS AND SPECIFICATIONS

2.A 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 hereinafter described. 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. All other engines that transmit the power through the wheels only may run in Ω class. Only Streamliners and Unlimited Diesel Trucks may use more than one engine at the same time. For any engine to be considered for cubic inch (cc) requirements, the engine shall have contributed to the propulsion of the vehicle. Reaction propulsion engines are prohibited, except during exclusive meets.

2.A.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. Vintage engine class competitors are required to use production blocks as specified. Replacement cast iron blocks are allowed. Blocks shall be limited to original factory production and shall retain all original dimensions, excepting modification involving intake/exhaust ports, cooling ports, and in V4 engine class only specialty head adaption pursuant to the following criterion: Cylinder bore centers shall be maintained to within .150” of original design; crankshaft centerline to original deck height measurement shall be within .150” of original design; original deck material and thickness shall be maintained to within .150” of original design. The addition of a port divider to an OEM block or OEM cylinder head is not considered as adding a port. For V4 and V4F engines a Guide to Permitted/Prohibited engine block modifications is available from an ECTA Board Member.

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 passenger car and pickup truck (or the same engine design family, Section 4.N) engines, 1959 model year design or earlier, up to 325 original cid. In the spirit of the class, XO engines shall be typical of those at the Southern California Dry Lakes in the late 1940s and early 1950s. Examples include: Chevrolet, GMC, Hudson, Packard, Buick, Lincoln and Cadillac. Foreign engines are NOT included.

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, created from 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, 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 Track 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.

The Vintage Four engine classes (V4/V4F) are allowed in Special Construction and Vintage Categories only. For reasons of historical authenticity, vintage engine modifications and equipment used shall be restricted to older technology levels, so far as is practical. Accordingly, in classes XO, XF, XXF, XXO, V4 and V4F, using Vintage bodies:

1. Turbochargers are not permitted.
2. Computers, Section 2.Q, are allowed for data collection purposes only.
3. Electronic fuel injection prohibited;
4. Any ignition system may be used.

NOTE: See exception under Rules for Vintage Oval Track Category.

ENGINE CLASS BREAK

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	16.00 to 30.99 cid	0.260 to 0.507 L

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

The displacement of reciprocating engines shall be computed by the following formula: bore x bore x .7854 x stroke x number of cylinders. For non-reciprocating engines, equivalent displacement (ED) will be calculated by the following formula: ED=SV x 3 where SV is the Swept Volume. The cubic inch to liter conversion shall be computed by the formula: cid/61.024 = liter.

2.B FUELS:

In fuel classes, any approved liquid fuel may be used. Examples of approved fuels are: nitrous oxide, nitromethane, alcohol, and hydrogen, unapproved gasoline (to include E-85) and hydrogen.

In gasoline classes, you must run fuel supplied by our fuel vendor and have your tank sealed. You may bring gasoline in a factory sealed container to be dispensed by our fuel vendor at a cost of \$20 per event. Water injection is allowed, but water tanks must be inspected and

sealed by an ECTA official. Engines using LPG or diesel fuel may compete in gasoline classes.

For all record attempts, if directed, the competitor must submit to a fuel tank check in impound after the record run.

2.C 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 Contest Board 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.D SHOCKS:

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

2.E 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 must 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.F TIRES:

Due to the extended duration of this type event, Drag slicks are NOT ALLOWED. No recaps allowed. Any tire deviation must be submitted to the ECTA Race Committee, in writing, 45 days prior to any meet. 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.

Tires may be inspected at any time by the Race Committee. Adequate tire clearance between the tire and body or chassis is required. Tubeless tires must use metal valve stems, unless in Production or Street Car categories below 150 MPH. Metal valve stem caps must be fitted to all valve stems. 150 MPH and above, metal valve stems are required.

Land speed tires, approved and meeting the minimum requirements, are acceptable in all classes. Land speed tires are not recommended as drive tires in high speed applications.

The minimum tire requirements will be governed by ECTA inspection officials as follows:

Up to 135 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.
Above 225 MPH,	all competitors must sign a tire waiver form before competing.

Open Record Classes: Tire requirements shall be determined by the speed in the next larger displacement class in which a record exists.

The use of any non-rated tire(s) such as implement, farm, aircraft or reproduction of a vintage automobile or motorcycle tire, 17" drag race tires 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 request for deviation from any rule contained in this rule book shall be submitted in writing in accordance with the RULE DEVIATION PROCEDURE, Section 1.R.

2.G WHEELS:

All nonferrous wheels on which non-tapered lug nuts would come in direct contact with the wheel shall have a ¼ in. thick steel retaining plate or large OD heavy gauge individual washers under all lug nuts. This does not apply to spindle mounted nonferrous wheels.

Magnesium wheels are not recommended and, if used, shall have an initial Zyglo certificate and stamp available. Inspections made with tires mounted are accepted. 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 60 PSI or 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.

ALL CLASSES OVER 200 MPH and ALL VEHICLES with tires having a diameter of 29 in. or greater, or with wheels over 17 " in diameter require:

- One inch, (1 in.) lug nuts.
- Wheels used shall be manufactured for racing or reinforced to include: - 5 Min. 1/2" studs, center reinforced by welding the entire area of attachment between the rim and the center section on either the inside or outside of the wheel.

WHEEL COVERS: 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 securely mounted to the wheel or axle. **Over 135 MPH**, all hubcaps shall be removed. Fender skirts are not allowed except in Streamliner class.

2.H TREAD:

Tread is defined as the measurement from the centerline of one tire to the centerline of the opposite tire of paired wheels.

The minimum tread 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.I 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.J 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.K APPEARANCE:

All vehicles entered in an event shall be maintained so as to present a neat **and respectable** appearance. All owners, drivers, and crews are responsible for the maintenance of their pit area and will be expected to present a neat and respectable appearance.

2.L 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 Competition/Entry Numbers Coordinator, Tonya Turk.

New numbers - Concerning the availability or assignment of numbers – contact the Competition/Entry Numbers Coordinator, Tonya Turk.

2.M CANOPIES:

Canopies enclosing the driver are permitted in Streamliner and Lakester classes only and must be securely closed in competition by the employment of a mechanical fastening. 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.N 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.O TARPULINS 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 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.Q COMPUTER:

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

2.R DATA RECORDERS: Entrants in all classes may use a data recorder.

Section 3 TECHNICAL SPECIFICATIONS AND REQUIREMENTS

3.A DRIVER'S CLOTHING:

All driver must wear a driver's suit, gloves, and boots. Drivers 150 MPH and over must also wear a head sock or helmet skirt. 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 be SFI certified and have the SFI rating tag attached.

3.A.1 Minimum Driver's Suit Requirements:

Type of Vehicle

Blown cars with belt-driven superchargers, 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

All other cars over 200 MPH

Suit	SFI 3.2A/20 15
Boots	SFI 3.3/15 5
Gloves	SFI 3.3/15 5
Head Sock	SFI 3.3

All cars over 175 MPH, up to 200 MPH

Suit	SFI 3.2A/15 5
Shoes	SFI 3.3/5
Gloves	SFI 3.3/15 5
Head Sock	SFI 3.3

All cars over 150 MPH, up to 175 MPH

Suit	SFI 3.2A/1
Shoes	SFI 3.3/5
Gloves	SFI 3.3/5
Head Sock	SFI 3.3

For cars running 150 MPH, or less

Suit	Single layer fire retardant
Shoes	SFI 3.3/5
Gloves	SFI 3.3/5

3.A.2 Driver's Helmet:

ALL DRIVERS SHALL WEAR a full-face helmet with face shield bearing a Snell Foundation tag reading Snell SA2010, Snell SAH2010 or FIA 8860-2010 or newer standard helmets. Helmets with a Snell rating label of 2010 will expire on January 1, 2022. No open face helmets will be allowed. Helmets shall be undamaged and in serviceable condition. Eyeglasses worn under the helmet must be shatterproof. All cars and motorcycles streamliners, require SA rated helmets.

be shatterproof. All cars and motorcycle streamliners, require SA rated helmets.

3.A.3 Driver's Helmet Support:

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

Forward movement: All cars over 200 mph shall have an engineered and tested SFI spec 38.1 type head and neck restraint system, i.e. Hahn's device.

Lateral movement: The seat or roll cage structure shall provide restriction to lateral head, shoulder and hip movement of less than 2 in. per side inclusive of structure deflection, for vehicles over 190 MPH. See Section 3.B.1.

Rear movement: See Section 3.C.

3.B ROLL CAGES AND ROLL BARS:

For 2004 and newer street legal production vehicles, refer to Street Category/Super Street. All cars in competition over 135 MPH, must be equipped with a roll bar or roll cage structure. All closed cars between 135 MPH and 150 MPH must have a 4-point roll bar. All closed cars between 150 and 175 MPH must have a 6-point roll bar. All closed cars over 175 MPH must have a full roll cage. All open cars are advanced one bar / cage category over closed cars. Any individual wishing to enter a vehicle which deviates from these rules MUST contact the ECTA 45 days before the event for approval.

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 in. minimum diameter and a grade 5 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 structure and braces must have 1/8 in. thick support pads on the top and bottom of the floor (or sill, in a sandwich construction) and shall be of sufficient area to support an impact load equal to the weight of the car. For cars weighing less than 2500 pounds, these pads shall have a perimeter of at least 18 in. (i.e., 4 in. x 5 in.) and cars over 2500 pounds shall have at least 22 in. perimeter (i.e., 5 in. x 6 in.).

ANY REQUEST FOR ANY DEVIATION TO ROLL STRUCTURE RULES SHALL BE SUBMITTED IN WRITING IN ACCORDANCE WITH THE RULE DEVIATION PROCEDURE, SECTION 1.R.

3.B.1 ROLL CAGE:

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, or E4130 chromoly tubing with a minimum .095 in. nominal wall thickness, 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. Vehicles in classes where the existing record exceeds 175 MPH must use the larger tube minimum requirements. NHRA/IHRA spec. cages meet these requirements.

A 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. Gussets are required at tube junctions of hoop and shoulder rail. Gussets shall either be made of plate, tubing or fabricated from sheet. Plate gussets shall be made from mild steel .125 minimum thickness and 4 inches per side, preferably stitch welded on the outside of the tube junction. Tube gussets shall be 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, see Figures 2, 3, 4, and 5. Gussets are required at all shoulder bar attachment points. Grinding welds is NOT permitted. Gussets may not be used as aerodynamic aids and shall not exceed 6 in. in length without prior technical review and board approval.

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 can not 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 drivers helmet from exiting the roll cage from between the bars. See Figure 5.

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

ANY REQUEST FOR ANY DEVIATION TO ROLL STRUCTURE RULES SHALL BE SUBMITTED IN WRITING IN ACCORDANCE WITH THE RULE DEVIATION PROCEDURE, SECTION 1.R.

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

3.B.1a ROLL BARS: (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 is 1 3/4" outside diameter steel tubing with a minimum .120" minimal wall thickness. See Figure 1. 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. Roll bars must be adequately supported, cross braced and gusseted to prevent forward, aft or ateral 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.

Tubing Requirements - Chrome-moly (4130) or R8 tubing may be used in place of mild Steel.

ANY REQUEST FOR ANY DEVIATION TO ROLL STRUCTURE RULES SHALL BE SUBMITTED IN WRITING IN ACCORDANCE WITH THE RULE DEVIATION PROCEDURE, SECTION 1.R.

3.B.2 ROLL CAGE PADDING:

Padding meeting specification SFI 45.1 for round tubing and SFI specification 45.2 for flat plate construction is required in the proximity of the driver's helmet.



Figures 1
Examples of Roll Bar and Roll Cage construction.

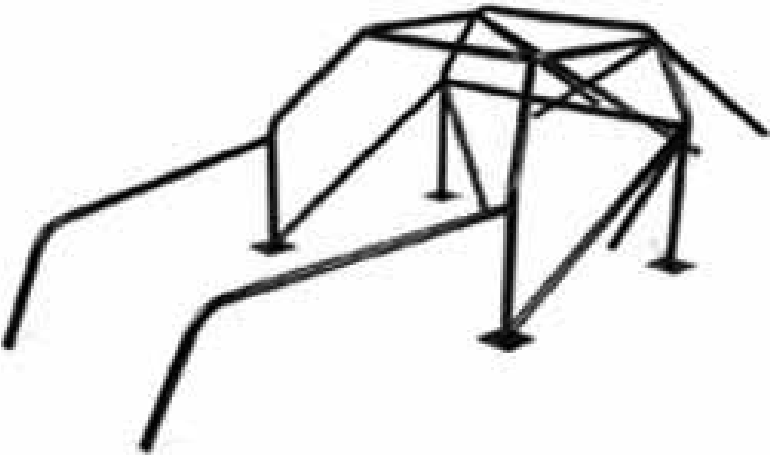


Figure 2

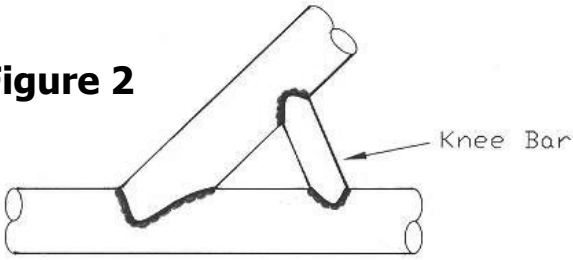


Figure 3

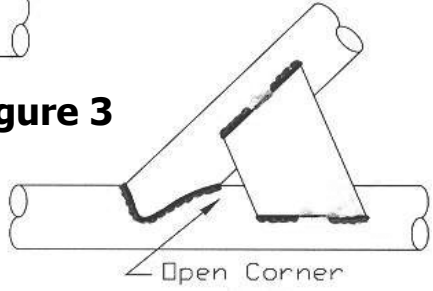


Figure 4

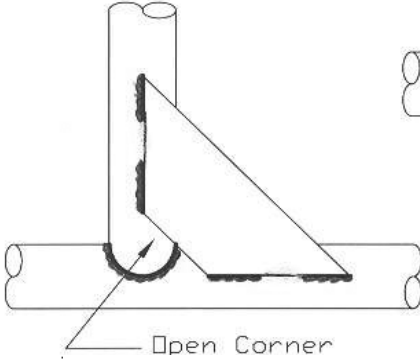


Figure 5

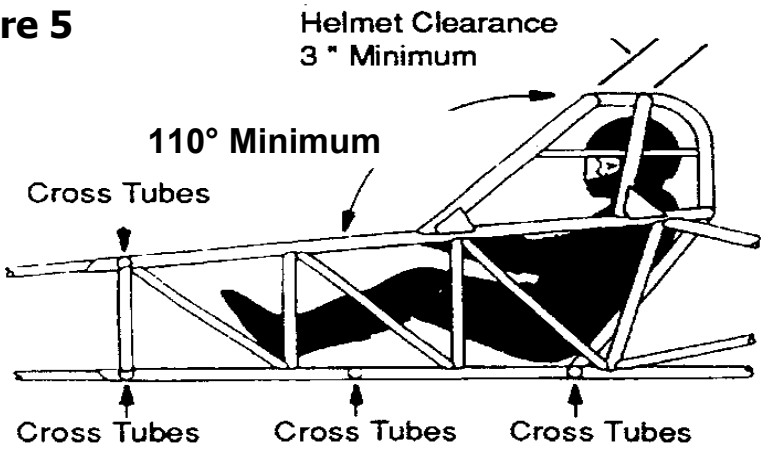


Figure 6

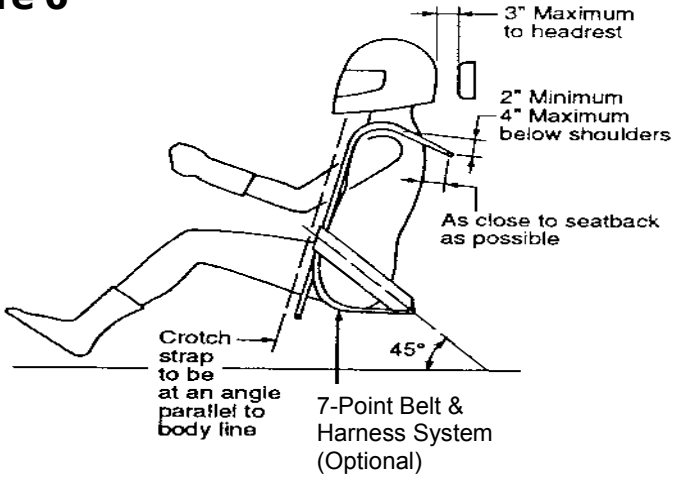


Figure 7

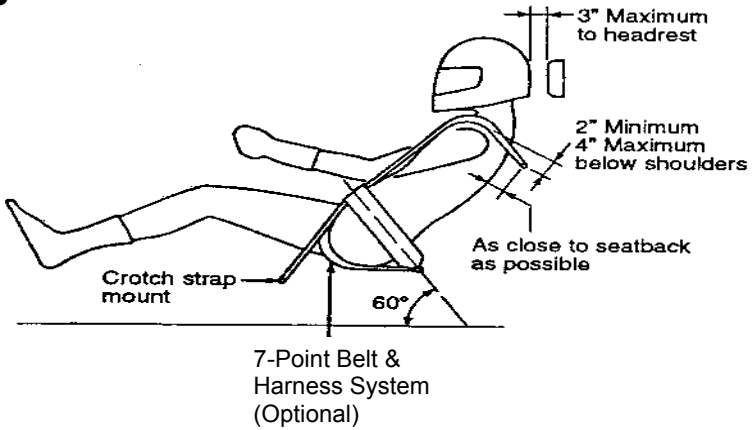
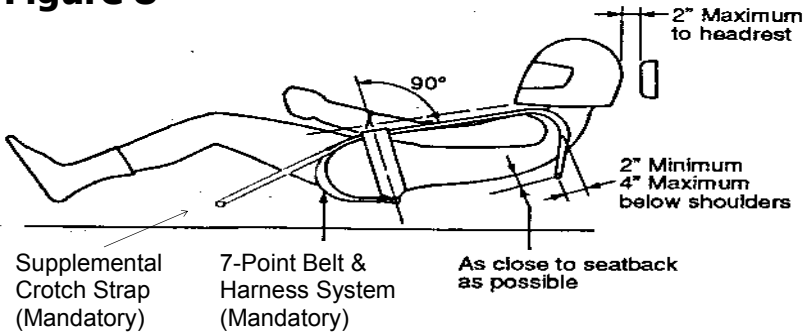


Figure 8



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.

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 pre-approved 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.

Refer to 3.A.3 for additional information on lateral movement instructions.

3.D.2 Seat Belts:

All vehicles 135 MPH and under require a lap belt and shoulder belt (3-point).

All vehicles over 135 MPH require at minimum a 5-point seat belts meeting SFI specifications 16.1 or SFI specification 16.5, quick release competition type seat belts 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. It is recommended that seat belts be upgraded every two to three years. 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" 24 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.

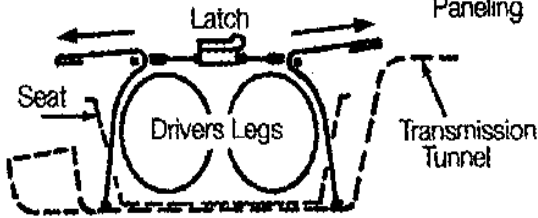
A supplemental strap to prevent the driver from sliding up into the roll cage must be added to vehicles where the driver is in a reclining position, see fig. 8. In a vehicle with minimal cockpit room, consideration should be given to ensure the seat belt tighten pull is to the center of the vehicle, 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.

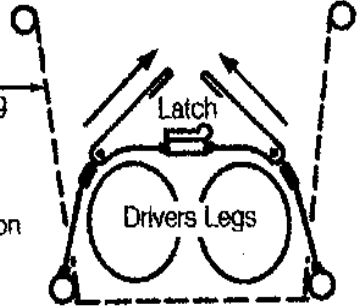
Figure 9

Order belts with adjusters close to latch so belts can be tightened by pulling belt straps sideways



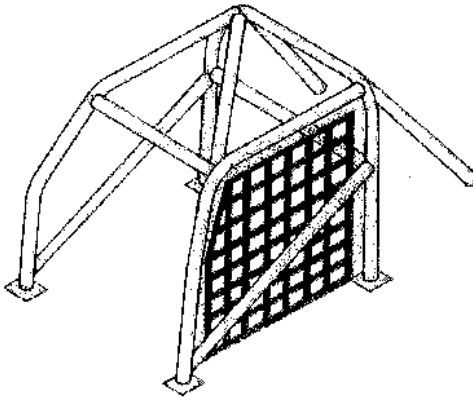
For vehicles with high door sills and high transmission tunnels

Order belts with adjusters that can be tightened by pulling belt straps inward



For lakesters and vehicles with tight driver's compartments

Figure 10



3.D.3 Arm/Leg Restraints / Door Nets:

Vehicles 150 MPH - 175 MPH: Arm restraints or a full door window net is Required. Vehicles 175 MPH and over: Arm restraints AND a full door window net is required. An SFI 27.1 ribbon-type or mesh-type window net is mandatory on any closed car required by the rules to have a roll cage. Window net must be securely mounted on the inside of the roll cage, with the permanent attachments at the bottom. All attachments points must be designed in an attempt to protect the driver and avoid contact with track surface. Eyelet clips, dogleash hardware, hose clamps, etc. are prohibited. Penetration of webbing, except as performed by manufacturer, is prohibited. Any modification to net must be performed by manufacturer. Legs shall be restrained by tethers, panels, bars or net. The restraint system shall be capable of preventing the driver's arms/legs from extending outside the roll structure and/or frame rails in case of an incident that includes a body panel separation. 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. Arm restraints shall be combined with the driver belt

system such that the arm restraints are released in conjunction with driver's belts. The restraint system shall be one of the various types available on the market. Restraint nets are acceptable as the primary leg restraint system. All mounting tabs/brackets shall be mounted inside the outside plane of the roll structure and shall not be exposed to the track surface in case of an incident or come into contact with the driver's body. All nets shall be mounted in such a manner that they fall from the top and out of the driver's way. All nets shall be mounted so that the driver can exit the car without assistance. The manufacturer shall perform any 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. All door net mounting bars.

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.

3.E DRIVER'S COMPARTMENT:

All driver's compartments shall not be open to the exterior of the vehicle or track surface such that the driver is potentially exposed to dangers such as fire or debris as well as dust. A rear floor or aft firewall is required in all vehicles where applicable.

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. Where possible, all switches should be clearly labeled.

On closed cars over 175 MPH, door locks and steering wheel locks shall be rendered inoperative. The driver must 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 must 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 150 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 175 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. All plastic fuel tanks shall have a ground strap attached to the fill cap ring. 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. 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.

3.1.1 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.

3.1.2 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.

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 cable or hydraulic throttles.

IT IS RECOMMENDED THAT PLASTIC-LINED THROTTLE CABLES BE AVOIDED.

3.K BATTERIES:

Up to 150 MPH, battery must be securely mounted. 150 MPH and over, all batteries shall be properly secured with metal framework and fasteners. Plastic tie-downs are not allowed. Both wet and dry cell batteries may be mounted in the driver's compartment, however wet cell batteries must be sealed in an acid spill-proof box.

All vehicles over 150 MPH shall be equipped with a main battery disconnect switch on the positive lead of the battery. 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. Competitors may wish to periodically qualify exceptionally critical welds (king pin bungs, radius rod brackets, spring perches, etc.) by means of x-ray or magnaflux. If a potential problem is observed in the inspection process, the Board may require the competitor to provide 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:

An approved parachute is required on all cars over 175 MPH. Vehicles that exceed 250 MPH shall be equipped with two (2) independent parachute systems. Parachutes shall be securely mounted to a suitable cross-member. All parachutes shall be opened during inspection. Special attention shall be given to the length and mounting point of the parachute tether line. The manufacturer's recommendations should be followed regarding parachute size, mounting, etc.

All new competitors must test parachute deployment at 150 mph. Parachute deployment is mandatory over 175 mph.

Parachute failures, such as the parachute pack not opening, canopy not opening, parachute separation from the vehicle, handling problems as a result of parachute opening, etc. will require a re-inspection.

ALL VEHICLES HAVING A PARACHUTE FAILURE MUST RETURN TO THE INSPECTION AREA WITH ALL COMPONENTS OF THE PARACHUTE SYSTEM. A NOTATION WILL BE MADE IN THE VEHICLE LOG BOOK DESCRIBING THE FAILURE AND SOLUTION.

3.N PARACHUTE RELEASE:

Any car equipped with a parachute shall have the parachute 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:

- Flywheels: No cast iron/cast aluminum flywheels shall be permitted.
- Flywheel Shields: Flywheel shields shall be SFI specification 6.1, 6.2 or 6.3 depending on the application. An ECTA approved flywheel shield, made from ¼ 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.

On cars where no aftermarket flywheel shield is available, and on smaller cars with limited space to install either SFI specification or ECTA approved flywheel shield, a SFI specification 4.1 blanket specifically manufactured to be used as a flywheel blanket (shield) may be used.

- Bell Housings: Cars utilizing bell housing engine mounts only (Corvaer, VW, etc.) must provide some additional method of retaining the engine 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: (ECTA ONLY)

Approved agents include Halon 1301, Halon 1211, DuPont FE36, and certain AFFF systems including Cold Fire 302, Firefox Gem Foam or other Halon replacement certified by the manufacturer for use in a confined space. The application and installation shall be in accord with the manufacturer's recommendations and consistent with the size and shape of the driver's compartment. The discharge rate should be designed to allow sufficient protection for the time it will take the car to stop from speed. All bottles must have a readable original manufacture's label.

NOTE: 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.

Vehicles over 150 MPH must have 5 lbs. of approved extinguishing agent, driver controlled, designed and applied to function as driver protection. The application and installation shall be in accordance with the manufacture's recommendations and consistent with the sizes and shape of the driver's compartment. The discharge rate should be designed to allow sufficient protection for the time it will take the car to stop from speed.

All vehicles over 175 MPH, in addition to the above requirements, must be equipped with an additional/separate 5 lb. (10 lbs. total) driver controlled fire system to serve the engine area. This system may utilize Halon or a foam-type agent and must have a minimum of two directional nozzles in the engine compartment which are aimed at the header/oil pan area or be installed according to manufacturer's recommendations.

Minimum Agent Requirements:

150 - 175 MPH	5 lbs. min. driver area
176+ MPH	10 lbs. min. driver area & engine

Note: The amount of required agent should not be confused with total bottle weight.

All push/crew vehicles are required to have a minimum of one 5 lb. portable fire extinguisher.

All competition vehicle extinguishing system control valves must be within the reach of the driver while strapped in position. The valves shall be designed to remain open on actuation. All agent lines and nozzles must be metal, and securely mounted. Extinguishing agent cylinders within the driver's compartment shall be mounted with a system more substantial than hose clamps alone. The use of hose clamps as a primary mounting system is prohibited.

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.

NOTE: Agent delivery lines are subject to dust and moisture clogging. Participants are responsible to assure that the fire system is full and operable before each event. Frequent clearing of the lines is recommended.

Questions concerning fire-extinguishing systems may be directed to the Fire Extinguishing System Specialist, Joe Timney at 302-378-3013.

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 4.11, 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 ¼ 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 ¼ 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).

Vehicles 135 MPH and over, all windshield wiper blades and arms should be removed. On front and rear windows, retaining tabs or straps are required over 175 MPH.

Vehicles with T-tops or moon roof panels must have the panels retained with tabs or straps. The original roll up window hole may be closed in replacing the frameless glass window with polycarbonate.

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. Visible hood release fasteners, (such as hood pins and Dzuz fasteners) do not require identification. All other releases (such as factory releases) shall be clearly marked. Hood pins are required on any vehicle over 150 MPH.

3.W BRAKES:

All cars must have 4 wheel brakes. Must use a dual master cylinder or 2 master cylinders. Brake controls shall be within the driver's reach while the driver is securely strapped in the seat.

175 MPH and over - four-wheel brakes are required.

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 the blower contained within an SFI type restraint bag.

3.Y OIL TANK VENTING:

Any oil tank within the driver's compartment shall be vented to the outside and lower portion of the vehicle.

SECTION 4 DEFINITIONS

The following is a list of terms used by the ECTA Board and their meanings:

4.A AIR DUCT:

Aerodynamic pressure relief systems in which air is ducted from one point to another. Air ducts may pierce, but shall not extend past exterior bodywork and shall not be utilized to eliminate a prominent feature (e.g. a fender crown shall not be removed to provide a duct opening). Air ducts shall originate and exit in the rear 50% of the vehicle body and shall not be directed to or away from wheel wells. Construction shall be of nonflammable materials.

4.B AIR INTAKES:

Ducted airflow devices, which are meant to provide combustion air directly to the engine. Air intakes shall not originate below the original stock location and, on rear engine cars, the air intake must originate in the rear 50% of the body. Air intakes protruding from the front of the car (other than OEM) must not exceed 48 sq. in. of frontal area **and** must not extend more than 12 in. and must not taper, except in classes where forward streamlining is allowed. Carburetors that protrude through the car's hood must be covered with a flash shield.

4.C AIR VENTS:

Aerodynamic pressure relief systems in which no air ducting is utilized. Louvers and tail light removal fall under this definition.

4.D AUTOMOBILE:

For classification purposes, an automobile is a land vehicle propelled by its own means, run on at least four (4) wheels not aligned, which shall always be in contact with the ground. Steering must be assured by at least two (2) front wheels. The automobile must be propelled by at least two (2) wheels. One pair of wheels shall be on the same transverse centerline.

4.E AUTOMOTIVE PRODUCTION:

Any component which is offered for sale by a recognized automotive manufacturer to the general public as original equipment or accessory to a production automobile is considered automotive production. A production rate of at least 500 vehicles of the same model and year for sale to the general public is considered to meet the requirement of a production automobile.

4.F BALLAST:

Material added to the vehicle for the purpose of additional weight only. Heavy components which serve another function will be identified by that function.

4.G BELLY PAN:

A skin of material used to cover the undercarriage of a vehicle. The skin must cover at least 51% of the undercarriage of the vehicle to be considered a belly pan for classification purposes. DRAIN HOLES ARE REQUIRED IN THE ENGINE AREA.

4.H BOBBING:

The removal of material from a body component in such a fashion as to destroy the original shape at either the top or bottom.

4.I CHOPPING:

The reduction of the overall height of a closed top vehicle, where the original general top contour is maintained. Materials can be added or removed to maintain the original shape. Size and base positioning of pillars must be in original OEM locations. Category specific requirements must be met.

4.1.1 CHANNELING:

The lowering of the body over the frame rails.

4.J CONTEST BOARD:

The Board of Directors of ECTA plus additional personnel appointed by the ECTA President.

4.K CONTOUR:

Contour is the configuration of the external sheet metal and windows. All body panels and windows shall be mounted in their original relationship as manufactured unless otherwise allowed. Moving body panels and windows from their original relationships to control air, tighten gaps, altering the original panel shape and filling seams with caulking or foam tape is considered streamlining. Removable trim, lights, windows, floorboards, and interior sheet metal are not part of the contour. In the special case of chopped tops, contour is considered to have been preserved as long as the angular relationship of the top to the body proper is not changed.

4.L COVERED WHEEL:

For classification purposes, a wheel will be considered covered if 120 degrees of the tread circumference is shielded from the air stream by the covering.

4.M DRIVER/RIDER COMMITTEE:

This Committee will consist of at least two Board members and a minimum of three non-Board members and will be responsible for licensing review and related matters.

4.N ENGINE SWAP:

An engine swap is defined as when an engine from an engine design family that was not available as a factory or dealer installed option for a given vehicle year is used.

An engine design family is defined as engines which are made with the same basic material, have the same bore centers, crank shaft supports, deck height, cam location, head mounting, bell housing and engine mount patterns, etc. All OEM parts must fit the block without modification.

The use of an OEM or aftermarket replacement engine block from the same design family is not considered a swap. "Crate engines" are not considered engine swaps. Direct replacement aftermarket engine blocks are not considered engine swaps (Dart, World Products, etc.), if they meet the above engine swap design definition criteria.

4.O FIREWALL: (NON-PRODUCTION)

A metal barrier between the engine and driver compartment, see Section 3.F.

4.P FLOORBOARDS:

Floorboards are defined as paneling in the lower portion of the car exclusive of the engine compartment. Floorboards shall be mounted above the frame or in the stock location for the body style and year of the vehicle. Floorboards shall be inside or over all suspension and drive line components, well fitted and securely attached with all holes sealed.

4.Q GASOLINE:

Gasoline, as produced, is a mixture of hydrocarbons which may include some E.C.T.A. acceptable oxygenates. The E.C.T.A. further defines gasoline as a liquid that does not contain nitrogen bearing compounds, nor propylene oxide, nor ethylene oxide, and no more than 10% methanol. (E-85 is not considered gasoline.)

4.R HOOD SCOOPS:

A hood scoop is a functional air intake device used on full body, un-blown vehicles, where allowed. No part of a forward facing hood scoop can extend forward of the leading edge of the hood, be more than 11" above the surface of the hood at the centerline or extend past the trailing edge of the hood more than 11" at the center line. Clearance between the scoop and the windshield must be a minimum of 1/2".

On rearward facing scoops they can not be more than 11" above the surface of the hood at the centerline. They can extend past the trail edge of the hood but the rear must be totally open and clearance between scoop and the windshield must be of 2". No foam sealing is allowed between the scoop and windshield. On rear engine cars the hood scoop may be built on the engine cover. The scoop shall not extend more than 11 in. above the surface of the roof and no further forward than the front edge of the back window.

Vehicles using a top-mounted blower may have a hood scoop which is no taller than 2 inches

above the fuel injector or carburetor(s). The scoop may extend to the rear no further than the back of the blower and terminate at that point. The scoop cannot extend to the windshield and will not exceed a total height of 11 inches, measured at the centerline of the hood. Hood scoops for blower types other than top-mounted may not exceed the specifications for unblown applications as noted in the paragraph above.

4.S INCIDENT REVIEW COMMITTEE:

This Committee will consist of 2 Board members and appointed non-Board members to review and report to the Board on a specific incident, as requested by the Board.

4.T INSPECTION COMMITTEE:

A group of ECTA members who conduct all the technical inspections at any ECTA competition event. The Board chooses the membership of this Committee.

4.U LIMB RESTRAINT:

A restraint system capable of containing the driver's arms and legs within the inner plane of the roll structure in case of an incident that includes vehicle body panel separation.

4.V OPEN CAR:

Any car, which may be entered and exited without unfastening, unlatching or moving any panel. All open cars as described, not in Special Construction Category, MUST have the driver's line-of-sight above the body. No periscopes allowed.

4.W OPEN WHEEL:

A wheel configuration in which no portion of the car's bodywork intrudes upon the inside plane of the tire.

4.X ROOF RAILS:

A piece of metal angle, perpendicular to the roof, and a minimum of ½ in. high to a maximum of ¾ in. high. The roof rail must be attached to the roof on each side, as close to the outside edge as possible. The roof rails must be parallel from the front to the rear. The roof rails may extend from the base of the windshield to the base of the rear window. Roof rails may be installed on any coupe, sedan or truck ~~when the existing class records exceed~~ **over** 200 MPH. Roof rails will not be considered for classification purposes.

4.Y SECTIONED:

The removal of a given horizontal width of a body panel and rejoining the body panel to achieve a lower height.

4.Z SECONDARY FLOORING:

Metal sheeting in the driver's compartment for the purpose of retaining the driver's feet in the event of step pan or belly pan tear away. Not required in cars with floorboards in the cockpit.

4.AA SET BACK:

The feature of a car which is represented by the formula D/WB where D is the distance measured from the front spindle transverse centerline to the front-most spark plug hole or centerline of the front most cylinder on compression ignition engines and WB is the wheelbase.

4.BB WINDSHIELD POST MOUNTING SUPPORT:

An upright bar, post or support structure to which the windshield posts are bolted, i.e., 1928-1931 and Ford roadsters have this piece, 1926 -1927 and 1932-1934 Ford roadsters do not.

4.CC STREAMLINING:

Any device which has the apparent purpose of directing, limiting, or controlling air flow around or within the car and was not a part of the original body will be considered as streamlining.

Removal of certain devices may also be considered streamlining; axle and header configuration will not. Any streamlining devices will be considered as part of the body for classification purposes, see Section 2.J. The types of streamlining devices listed below are

allowed in some classes:

4.CC.1 Air dams:

OEM or fabricated devices installed below the front bumper used to inhibit and direct airflow from under the vehicle. An air dam may be attached to the leaded the leading edge of the bumper and not be considered to be extending forward of the front bumper so long as no point of the air dam projects more than 1/4" forward of the original contour of the leading edge of the front bumper when viewed from above. Splitters are allowed as long as they follow the same contours requirements as an air dam. Bodies cannot be cut away to accommodate air dams or splitters. he front spoiler may not come in contact with the racing surface at anytime. It is the competitors responsibility to insure that their vehicle meets this rule when the front suspension bottoms out.

4.CC.2 Axle Fairing:

Streamlining devices attached to the axle to direct airflow around axle configuration only.

4.CC.3 Belly Pan:

A skin of material used to cover the undercarriage of a vehicle.

4.CC.4 Headrest Fairing:

Bodywork, on an open car, Section 4.V, which extends rearward for the purpose of preventing wind buffeting of the driver. The fairing shall not be wider than the roll cage at any point, nor extend past the rearmost part of the body.

4.CC.5 Skirts:

Streamlining devices added to the lower portion of the body for the purpose of controlling airflow under the body. The skirt may be a maximum ½ in. thick. The skirt shall be in a single plane, mounted to the bottom of the body but cannot modify the contour of the body. The skirts may extend from the centerline of the front axle to a vertical plane at the rearmost point of the original bodyline.

4.CC.6 Spoiler:

A device on the upper portion of the body for the purpose of spoiling lift. The spoiler shall be mounted in the rear portion of the body, behind the rear axle centerline. Two different implementation approaches can be used but not mixed together, see figures 11 and 12. Should a competitor wish to use a different approach to a spoiler implementation, that approach must be submitted to the Technical Committee for review and consideration prior to the race event.

IMPLEMENTATION APPROACH ONE:

The spoiler must have a continuous surface no wider than the outside edge of the rear tires. The maximum chord measured on the top surface at the center of the car can be 10 inches. A 1 inch tab or hinge can be added to the leading edge of the spoiler for the mounting purposes. A spill plate on each side of the spoiler is allowed and must be mounted parallel to each other vertically and horizontally. It can extend no further forward than the rear axle centerline. Spill plates are allowed to be no more than 8 in. above and below the forward mounted position of the spoiler when the spoiler is parallel with the ground and extend no more than 2 inch max past the end of the spoiler. Gurney flaps are allowed but cannot extend above or behind the spill plates. The design is allowed to fill the horizontal gap between the leading edge of the spoiler and the body with a plate no farther forward than the centerline of the rear axle.

IMPLEMENTATION APPROACH TWO:

The spoiler must have a single continuous surface with no side plates. The maximum spoiler chord measured on the top surface is 10 in. from the trailing edge of the body. A 1 in. tab can be added to the leading edge of the body for mounting purposes only. The ends of the spoiler must follow the contour of the body and shall not extend beyond the outside of the body at any point. When laid flat the width of the spoiler can be a maximum of no more than 16 inch wider than the outside plane of the rear tires. No other aero devices or Gurney Flap are allowed with this design.

Figure 11

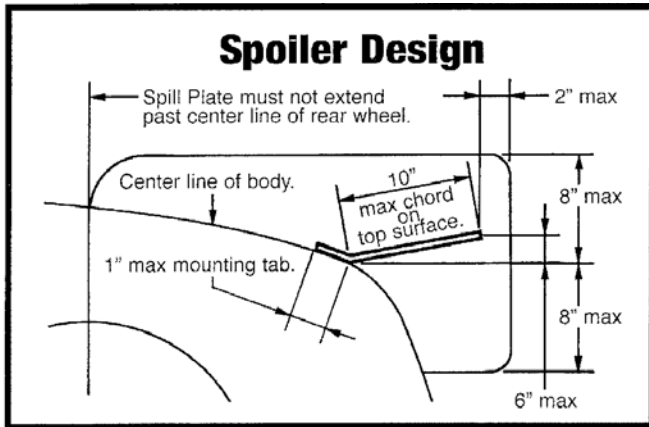
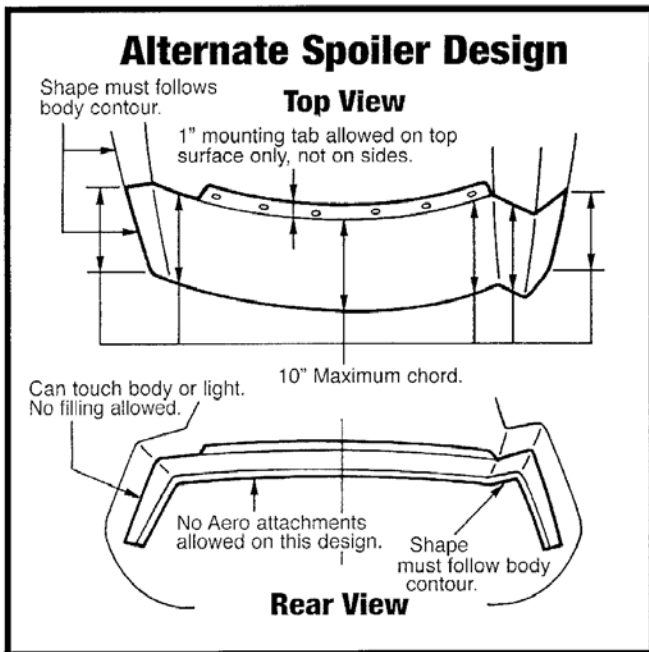


Figure 12



4.CC.7 Trip Fences:

A device in the upper forward part of the body for the purpose of tripping the laminar layer.

4.CC.8 Vortex Generators:

Sharp edged devices placed on the body for the purpose of creating flow vortices.

4.CC.9 Strake:

Strake is an aerodynamic device located under the vehicle in the rear portion of the vehicle that is intended to control and direct air flow under the vehicle. The strake may extend no further back than the trailing edge of the body, and be perpendicular to the ground. The strake may be located no further out than the inner plane of the rear tires and may extend no further forward than the firewall or body cowl line, whichever is further forward. Strakes that are OEM and do not meet this definition are allowed.

4.CC.10 Parachute Pack Mounts:

A parachute pack mounting plate must not extend more than 1" past the edge of the parachute bag on all sides. The maximum length on all sides supporting the mounting plate shall be 6". If two chute bags are mounted side by side on the same plate the max space allowed between them is 4". No more than two chutes can be mounted on one mounting plate. If the pack mount/mounts have to be more than 6" of the body a tube structure must support the mounting plate/plates.

4.CC.11 Parachute Mounting Tubes:

Parachute mounting tubes may extend no further than 6" behind the rearmost part of the original body and must not be faired into the body. The maximum length of any side of a tube extending from the body is 12". These dimensions are dependant on specific class rules.

4.CC.12 Wings:

Wings are a special class of aerodynamic devices intended to provide down-force, which are allowed ONLY on Streamliners, Lakesters, Modified Roadsters, Competition Coupes and Production bodies which had the wing as an option. For classification purposes, the wing is not considered as part of the body.

4.DD STREET EQUIPMENT:

That equipment required for legal street operation in most states. It includes, but is not limited to, high and low beam headlights, horn, taillights, stoplights, signal lights, windshield wipers, and an exhaust system capable of being muffled. Decals are not acceptable as meeting the head and tail light requirements.

4.EE STEP PAN:

A step pan may enclose the area from the aft-most portion of the firewall to a line 10 in. forward of the rear axle centerline and shall not be lower than the frame at any point plus the thickness of the material used.

The step pan shall be flat, parallel to the ground (side to side) and no wider than the frame rails. A box may be constructed to enclose the portion of the transmission which protrudes through the step pan. The box must be rectangular in design, flat on the bottom, covering only the exposed portion of the transmission. The box shall not be tapered in any way; maximum clearance from the transmission shall be 1 in. Chassis cross members are not considered as part of the frame for purposes of this rule. The transition at the rear of the step pan to the floorboard shall occur at a 45 degree or steeper angle to be exempted from the definition of a belly pan.

NOTE: A step pan shall not be considered as part of a belly pan for classification purposes.

4.FF SUPERCHARGED:

For purposes of classification, Blown (supercharged) will be an artificially aspirated engine with a mechanically driven supercharger or exhaust driven turbocharger powered by the primary engine. The supercharger or turbo charger must pressurize the intake system above atmospheric pressure. This will also include systems such as turbo compounding. All other engines (normally aspirated) will be classified as Unblown.

4.GG TECHNICAL ADVISORY COMMITTEE:

A group of competitors, manufacturers' representatives and others appointed by the Contest Board to review and update the competition rules of ECTA and to make recommendations of a technical nature to the Contest Board.

4.HH WHEELBASE:

All vehicles must have at least two parallel axles. The wheelbase is the distance measured from the centerline of the rear axle to the transverse center line of the front spindles. The wheelbase must be equal on the left and right sides of the vehicle to within 1 inch. Streamliners are exempt from this rule.

4.II DRIVESHAFT:

A driveshaft is defined as the connection from the engine or transmission to the rear drive unit in a conventional front engine/rear drive configuration.

4.JJ BUMPER:

A bumper is a metal device that bolts to a car's chassis to provide collision protection and may be removed in some classes. A bumper is typically 16-20 in. above the road surface. Bumper covers (thermoplastic body pieces on cars starting in 1978) are considered to be part of the body. The bumper cover cannot be removed or altered in shape and contour if not allowed by class rules. For the purposes of streamlining, any fascia covering the primary bumper bar ceases to be part of the bumper once above or below the primary impact absorbing region.

4.KK OEM BODY KIT:

Body kits produced by a recognized automobile manufacturer for a specific year vehicle must be used as a complete package. 500 kits for the same model were/are required to be for sale to the general public meets the production requirements. Mixing and matching pieces from different years or not using the complete kit will be considered streamlining.

4.LL COMPUTER:

A computer shall be defined as any electronic device (i.e. ECU, ECM, etc.) that activates any function of, or in any way affects, the operation of, the engine based on measurement, sensing, processing, etc. of any data related to the performance of the engine.

4.MM COWL:

The cowl area is defined as the portion of the body bounded by the front fenders, the base of the windshield and the rear edge of the hood as measured at the centerline of the vehicle.

SECTION 5 CAR CLASSES

The car classes are divided into six general categories: Special Construction, Vintage, Classic, Modified, Production and Diesel Truck. The general rules for each category apply to all classes in that category.

5.A 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.

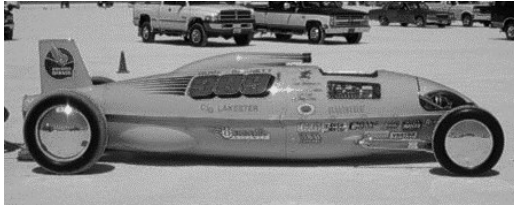
It is strongly recommended that all new vehicles be submitted for a pre-event inspection by appointment with the Board. If not practical because of distance, photographs and drawings may be submitted to the Board.



5.A.1 Streamliner - /BFS, /FS, /BGS, /GS, /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.A.2 Lakester - /BFL, /FL, /BGL, /GL

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, L, XF, XO, XXF, XXO, V4 and V4F

5.A.3 Electric Vehicle - /E

This class is for vehicles using electric power 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	over 1000 kg

5.A.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	over 1000 kg

5.B 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 three groups: ROADSTERS, from the highly modified to the street roadster; 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.B.1 Modified Roadster - /BFMR, /FMR, /BGMR, /GMR

In addition to the general category requirements, cars in this class shall have a American production automobile roadster body or an exact replica of a American production automobile 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.

Streamlining ahead of and including the cowl and channeling (4.1.1) is permitted. Air intakes (4.B), air vents (4.C) and the following as defined in Section 4.CC Streamlining are allowed: Splitters (4.CC.1) Axle Fairing (4.CC.2), Belly Pan (4.CC.12), Headrest Fairing (4.CC.4), Skirts (4.CC.7), Strakes (4.CC.9) and Wings (4.CC.12). No fairing or special covering of the wheels and tires is permitted. Splitters may not extend beyond the inner plane of the rear tires nor beyond the aft portion of the body.

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

The body may be cut out to move the driver as far back as possible, so long as the driver remains seated forward of the rear axle centerline and behind the engine. 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. 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.

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.

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.

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.

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.B.1.a Rear Engine Modified Roadster - /BFRMR, /FRMR, /BGRMR, /GRMR

In addition to the general category requirements, cars in this class shall have a American production automobile or an exact replica of an American production automobile roadster body as produced between 1923 and 1938. 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. Any type of frame may be used. The driver's seat must be entirely in front of the engine. 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.

Streamlining ahead of and including the cowl and channeling (4.1.1) is permitted. Air intakes (4.B), air vents (4.C) and the following, as defined, in Section 4.CC, are allowed: Splitters (4.CC.1), Axle Fairing (4.CC.2), Belly Pan (4.CC.3), Headrest Fairing (4.CC.4), Skirts ((4.CC.7), Strakes (4.CC.9) and Wings (4.CC.12). No fairing or special covering of the wheels and tires is permitted. Splitters may not extend beyond the inner plane of the rear tires nor beyond the aft most portion of the body.

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. No alterations to the turtle deck are allowed. 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.

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.

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.

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. Spoilers and four-wheel drive systems are NOT allowed.

Engine classes allowed are: AA, A, B, C, D, E, F, G, H, XF, XO, XXF, XXO, V4 and V4F



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

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. 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. The height of the grille shell may be no higher than the cowl of the body as constructed. The grille shell width may not be altered but may be sectioned or bobbed. Grille shells of a design manufactured after 1932 may not be used on 1932 or earlier bodies. Tanks of any kind in front of the grille shell are specifically prohibited.

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 inches. Flat panels may cover grille openings. Door hinges, windshield posts, filler caps, and brackets may be removed.

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.

Step pans are allowed, but belly pans or any other horizontal paneling not fitting the definition of floorboard is specifically forbidden. 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.

The following, defined as streamlining in Section 4, are allowed: Air Ducts (4.A), Air Intakes (4.B), Air Vents (4.C), Hood Scoops (4.R) and Headrest Fairing (4.CC.4). All other streamlining, as defined in Section 4.CC is NOT allowed.

A rigid tonneau cover and headrest fairing are allowed, as long as they do not violate the definition of an open car. The body may be cut to move the driver rearward, as long as the driver remains seated entirely forward of the rear axle centerline and behind the engine. 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.

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.B.3 Street Roadster - /BSTR, /STR (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 used, shall be mounted in their original relationship to each other. 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. Replica panels shall be exact copies of stock panels in size and contour. 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 engine 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 can not be cut on a radius greater than the bottom of the original fender.

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.

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 the rear tread to allow the tires to protrude beyond the fenders is permitted as long as 50% of the tire width is still covered by the fender.

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.

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. A maximum of 15% engine set back is permitted to permit adequate clearance for water pump, blower drives, etc.

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.

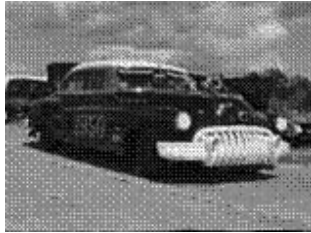
A rigid tonneau cover is allowed, as long as it does not violate the definition of an open car, Section 4.V.

The following as defined in Section 4 are not allowed; 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.

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 inches 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.

Engine classes allowed are: AA, A, B, C, D, E, F, G, H, XF, XO, XXF, XXO, V4 and V4F



5.B.4 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.

All vehicles will run only in the lowest primary class/category for which they are legal. See 1.B

BLOWN VINTAGE FUEL COMPETITION COUPE:

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

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

VINTAGE GAS COMPETITION COUPE:

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

BLOWN VINTAGE FUEL ALTERED COUPE:

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

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

VINTAGE GAS ALTERED COUPE:

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

BLOWN VINTAGE GAS COUPE and SEDAN:

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

VINTAGE GAS COUPE and SEDAN:

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

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. Minor trim items, door handles, exposed hinges and rain gutters may be removed.

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.B.5 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 seater cars, with a tapered tail and cowl. The appearance and design of 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.

At least 2 brakes the rear axle are required. No front wheel only braking systems are allowed. Brakes must be mounted outside the body.

The cars and engines in this category should also resemble historic, documented cars and be in a period correct relation to each other; i.e., a GMC engine laid flat in a Kuzma Roadster is not allowed.

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 degrees 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 the rear axle are required, Brakes must be mounted outside the body. 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.

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 must be moved or swung to safely enter or exit the cockpit.

Except for such tarps and panels, the appearance and design of cars in this category must be practical for, and as were used in, OVAL TRACK and SPEEDWAY competition.

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. 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.

All other safety rules are applicable. Particular attention will be paid to arm restraints, adequate caster, and proper steering ratios.

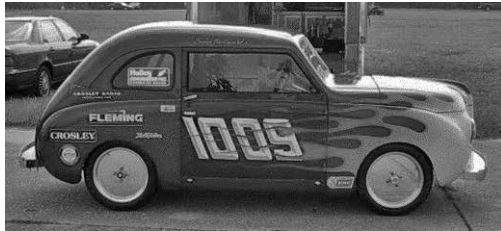
All cars must be equipped with a full roll cage, see Section 3.B. Fuel is restricted to gasoline or alcohol. Nitro methane or nitrous oxide is not allowed. In this class ONLY, non-production overhead cam engines of pre-'48 design (Miller, Offy, HAL, etc.) run in XXO Class.

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.C CLASSIC CATEGORY

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

This category encompasses American 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. Foreign Coupes and sedans are limited to 'F' (123.00 to 183.99 cid, 2.016 to 3.014 L) engines sizes. 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.

Classes within the Classic Category are the equivalent of the Modified and Production categories with body modifications as allowed in those categories. 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 Category, Altered classes. Within the Classic Category pre-1949 bodies may have a 3 in. beauty chop.

The following items ARE allowed: capacitive discharge type ignition systems with rev limiter, carburetors or mechanical fuel injection, one distributor or one magneto (one ignition system only) and OEM EFI. Sensor controlled ignitions are allowed but must be stock and not modified in any way for the year and model of the vehicle entered. Direct reading gauges, either electronic or mechanical and data recorders are allowed.

The following items are NOT allowed: non-OEM Electronic Fuel Injection, (EFI), sensor controlled engine management systems with feedback loop, and multiple magnetos or distributors.

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

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 within 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.

Once a vehicle in the Classic Category has competed in an ECTA sanctioned event, the vehicle must remain in that category for the current racing season.

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

5.D MODIFIED CATEGORY

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

This category encompasses American and foreign coupes and sedans 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 that the car shall have been originally produced with factory-installed seating for 4 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.

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.

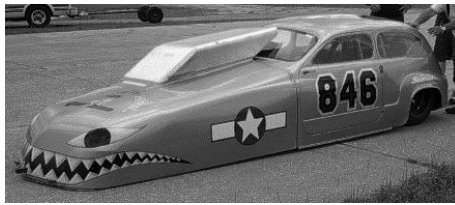
In classes where the removal of rear view mirrors is allowed the OEM fender or door shape must be retained. If a fender stamping has a mirror housing as part of the fender or door, that shape must be retained.

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 competing in the Competition Coupe and Modified Sports classes must have documentation showing the stock vehicle BEFORE modification.

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.

El Caminos and Rancheros meeting the requirements within this category will compete in the appropriate class.



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

This class encompasses production coupe or sedan bodies unaltered in width or contour. 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:

1. Top shall be chopped.
2. The vehicle must have a full belly pan.
3. The body from the cowl forward shall be lengthened a minimum of 12 inches
4. The engine shall be set back a minimum of 25% of the wheelbase. The engine setback cannot exceed 50% of the wheelbase.

Other than top chopping, no modification to the body is allowed. Minimum vertical windshield height is 5 in. 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. Cars in this class are considered in the Modified category and shall comply with the general rules of the category.

Wing width including side plates shall not be wider than the outside width of the body. The maximum allowable height of wing including side plates 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 lowest portion of the 48 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 rails 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 - /BFALT, /FALT, /BGALT, /GALT

This class encompasses American coupe or sedan bodies 1982 to the current year, and foreign coupe or sedan bodies 1928 to the current year, unaltered in height, width, length or contour. The body shall be mounted to the chassis with all body panels mounted in the original relationship to each other. One of the following modifications must be done to be considered in this class:

1. The addition of a step pan as defined in Section 4.EE.
2. The engine set back a max. of 25% of the wheelbase as defined in Sec. 4.AA.
3. A front wheel drive vehicle converted to rear wheel drive.
4. 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 a stock frame and the same year/make of body are being used. 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.

This class is allowed a 2% maximum body stretch in the cowl area, in front of the firewall. This does not apply to Vintage class. An engine swap as defined in Section 4.N is permitted.

No streamlining, as described in Section 4.CC is allowed, unless specified. Wheel wells may not be filled or covered. 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; the basic shape and contour of the vehicle cannot be changed. Engine intake air may be ducted from these openings. After market front ends are allowed as long as the item conforms to the class guidelines. Any horizontal paneling which may be construed as a belly pan is prohibited. No 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. Any type of exhaust may be used and can exit anywhere from the body but the top.

Roof mounted spoilers, other than original for the body used, are prohibited. 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. 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. Drip rails may be removed.

Cars in this class are considered in the Modified Category and should comply with the General Rules of the category. 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. 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 - /BGC, /GC

This class encompasses American coupe, sedan or convertible bodies 1982 to current year, and foreign coupe, sedan or convertible bodies 1928 to current year, which shall have at least one of the following:

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

Any one of which makes the car ineligible for competition in Production class. 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. Front wheel drive cars that have been converted to rear wheel drive are not permitted in this class.

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. The engine may be set back a maximum of 2% of the wheelbase.

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. Blocking air flow through the radiator in front or behind is not allowed. An on-board starter capable of starting the engine shall be used.

Convertibles are restricted to the Gas Coupe & Sedan and Production category classes only. Convertibles must run with the top and rear windows in the up position.

Within the Gas Coupe & Sedan classes the following body and chassis modifications may be made: wheel openings may be radiused for tire clearance, the generator/alternator, horn and stock gas tank may be removed, headers may be used, no individual stacks allowed, exhaust collectors may exit through the front fenders, minor chrome trim and emblems may be removed. Air intakes, see Section 4.B, may be used.

The following are not permitted: streamlining as described in Section 4.CC unless specified, air vents, headlight air intake, channeling, exhaust outlets through the doors or hood, blocked off grilles or radiators, taped or filled body, door, or window seams and one piece front ends.

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.

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

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. Vehicles in this category that exceed 200 MPH, or if the existing class record is in excess of 200 MPH, must 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 - /BFMS, /FMS, /BGMS, GMS

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. Limited production (a minimum of 50 examples produced) sports car bodies, which may be placed on any frame, will be permitted. No "one of a kind" bodies will be allowed. Production sports cars with an engine swap will be allowed.

Streamlining ahead of and including the cowl, channeling, belly pan and skirts is allowed.

Front tread width may be narrowed to a minimum of 27 in. Removal of minor trim and bumpers is allowed as long as the body is not altered in length, width or contour. Spoilers as defined in Section 4.CC.6 are allowed. Windshields may be lowered or removed. Coupe tops may be chopped. The top chop must maintain a minimum vertical windshield height of 5 inches. The lower location of the A, B and/or C pillars must be in original OEM location and the A pillar must be OEM width. A top chop by definition alters the contour of the vehicles. Drip rails may be removed or filled.

No wings are allowed unless the wing was offered as an OEM item for the year/model of vehicle 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 as purchased from the dealer. The entrant is required to provide suitable documentation.

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.

Any frame may be used, see Section 2.C. Maximum wheelbase allowed shall be 130 inches. Any type of rear end may be used.

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.

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.

The following items are not permitted: Air Vents (Section 4.C), Headrest Fairing (Section 4.CC.4) which extends past the rear of the body and taping of body and window seams.

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



5.D.5 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 considered in the Modified Category, Gas Coupe class and shall therefore comply with all rules of this category and 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 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 so as to offer no aerodynamic advantage.

All engine classes are allowed.



5.D.6 Modified Mid/Mini Pickup Truck - /BMMP, /MMP

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 and Toyotas.

Pickup trucks in this class are considered to be in the Modified Category, Gas Coupe class and therefore shall comply with all rules of this category and 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.D.7 CIRCLE TRACK - CARS - /BFCT, /FCT, /BGCT, /GCT, /VCT (ECTA ONLY) TRUCKS - /BFCTT, /FCTT, /BGCTT, /GCTT, /VCTT

This class is for all circle track and road race cars **or trucks**, dirt or pavement, that do not fit

into current ECTA classes like Competition Coupe or Altered. (such as NASCAR, SCCA or IMSA with modified panels)

~~Cars~~ **Vehicles** 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~~ **Vehicles** 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~~ **vehicles** that have non-functional doors. Gasoline and Alcohol are acceptable fuels for this class. Nitrous Oxide and Nitromethane are not acceptable. Vintage vehicles must run pre-1948 engine design.

Minimum wheel bases 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.

5.E PRODUCTION CATEGORY

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

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 factory-installed 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.

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.E.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.

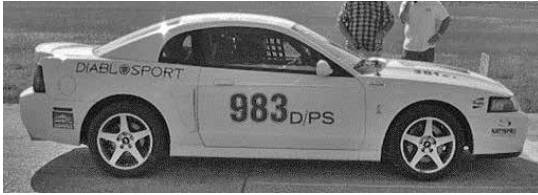
The following items shall be retained in the stock location and of the same year and manufacture as the body: frame, fenders, hood, grille, drip rails (must not be filled), windows, door handles, window trim, dashboard, headlights (high and low beam), tail lights, parking lights, stop lights, radiator, 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 body and chassis modifications may be made: headers, hood scoop (Section 4.R), wheel openings may be radiused for tire clearance. Passenger and rear seat may be removed. Air dams and air spoilers identical to factory optional equipment, (OEM) for the body in question may be added.

The following are NOT permitted: Streamlining, (Section 4.CC and subsections), Air Ducts (Section 4.A), Air Vents (Section 4.C), Chopping (Section 4.I), 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.

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.

Engine classes allowed are: AA, A, B, C, D, E, F, G, H, I, J, XF, XO, XXF & XXO



5.E.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



5.E.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 body and chassis modifications may be made: wheel openings may be radiused for tire clearance, the generator/alternator may be removed, an exhaust system capable of being closed off may be used (no individual stacks). Air dams and air spoilers identical to factory optional equipment for the body in question may be added. All vehicles must use a seat designed for racing, see Section 3.D.1. The original side panel upholstery or equivalent must remain. Minor chrome trim and emblems may be removed, and an OEM. Air Intake (Section 4.B) may be used. The stock windshield may not be removed or lowered.

Engine swaps are permitted as long as they are of the same manufacturer (e.g., Ford into Ford, Porsche into Porsche, etc.).

The following are NOT permitted: Streamlining (Section 4.CC and subsections), Air Ducts (Section 4.A), Air Vents (Section 4.C) headlight air intake, Chopping (Section 4.I) and 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 an automobile dealer.

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



5.E.4 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 considered in the Production Category (5.E), Production Class (5.E.1) and shall therefore comply with all rules of this category and class.

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.E.5 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 considered in the Production Category, Production Class and shall comply with all rules of this category and 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.F DIESEL TRUCK



5.F.1 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. ~~Vehicles that meet the 500 and 750 ci. requirement may compete at El Mirage.~~

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.

5.F.2 Modified Diesel Truck - /MDT (New Class for ECTA)

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 race course 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.

5.F.3 Diesel Truck - /DT

This class is for mid/mini and full-size diesel-powered pickup trucks of American or foreign manufacture. The body shall remain unaltered in height, width and contour, with all stock panels mounted in original relationship to each other. Air dams are allowed. Removal of antenna, wipers, wiper motors, mirrors, trim moldings and emblems are allowed. Any dash board may be used. A radiator and/or intercooler shall be mounted behind the grille and be at least as large as the original intercooler or radiator opening. Any pre-'48 truck may have a 3-inch beauty chop. The firewall and cab floorboards may be modified. If equipment is mounted in the truck bed, it must be lower than the bed rails and not extend thru the bed floor. Any ducting, hoses, etc. must be sealed to the bed to prevent air venting.

Engine swaps are allowed. Flywheel shields are mandatory. Roll bars must be mounted inside the cab. Down bars may be mounted on the exterior. Maximum engine setback is 2% of the wheelbase. Driveline (trans and rear end) swaps are allowed. A driveshaft hoop for each section of the drive shaft is required. Front and rear suspension may be modified or replaced for ride height and/or handling. The wheelbase shall be stock. The stock frame shall be used with necessary reinforcement and modifications for suspension, engine and transmission mounts.

The exhaust may exit behind the cab above the low pressure area, which for the rules is determined to be a line 45 deg. from the rear cab top extending to the top of the bed rail height. The pipe to floor and bed cap clearance shall be no greater than 1/8 inch to prevent venting of under truck air.

The 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 shall not allow any aerodynamic advantage. Pickups may run with the tailgate raised, lowered or removed.

~~This class shall use Event Diesel Fuel, Section 2.B. Fuel may be tested.~~

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.F.4 Highway Hauler - /HH2 (two-axles) & /HH3 (three axles)

American and foreign production diesel powered trucks of not less than 14,500 lbs.. The truck must be unaltered in height, width and contour with all stock panels mounted in the original relationship to each other.

There are NO engine class breaks, and all vehicles shall compete against the same record.

A stock cab shall be used and be mounted in the original location with respect to the chassis. The cab shall be fitted with both driver and passenger seats and with a suitable roll cage. Running boards and steps may be removed. Side mirrors may be removed.

Any diesel-fueled engine supplied by a diesel engine manufacturer through normal channels may be used so long as the basic original design is retained. The engine may be lowered a maximum of 4 in. and setback a maximum of 12 in. from the stock location. Only pure water is allowed for water injection systems. The water injection tank must be inspected and sealed prior to each record run.

The stock fuel tanks may be removed or retained. The stock fuel tanks must not contain flammable liquid or vapor. The only approved location for the in-use fuel tank is behind the cab, mounted securely between the frame rails.

The stock exhaust configuration and location shall be retained. The muffler may be removed, but it must be replaced by exhaust tubing. Shortening of the exhaust system is not allowed.

Trucks shall be equipped with a fifth wheel pad mounted in the original location and with functional air and electrical connections for a trailer. Trucks shall be capable of hauling a trailer.

Trucks shall also be equipped with brake, tail and turn signal lights. Stock headlight housings shall be retained, but the glass may be removed.

In the three-axle class, either a drive axle or a tag axle may be used as the second rear axle. In the case of a tag axle, tires shall bear against the surface of the racetrack. The axle shall be available as a stock item for the truck used.

Wheels and tires must be appropriate for the weight and speed of the vehicle. Generally, the stock wheels and tires, in excellent condition, will suffice. Wheels and tires designed for heavy, commercial aircraft use are also appropriate and encouraged.

Skid plates must 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 plate must not be designed so as to form a belly pan.

This class must use event diesel fuel only, if provided. 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.

NOTE: All entrants in the Diesel Truck Classes must have equipment available to remove a disabled vehicle from the race course.

5.G TIME ONLY - /TO

All vehicles must conform to the safety requirements for the speed intended.