2012

MODIFIED RULES

Lebanon I-44 Speedway

2012 Modified Rules

GENERAL DESCRIPTION

Anyone having questions may call Larry Magnussen (Chief Tech.) at 417-531-0775.

2500 pounds, maximum 56% left side weight with driver **sitting in normal driving position in seat** after race. Aluminum / fiberglass body, open wheel, stock frame.

CARBURETOR / ENGINE COMBINATIONS

1. Holley 4412 - 500 2-Barrell carburetor / V-8 small bock engine, 11.0:1 compression ratio

2. **604 Crate - Factory stock new and sealed motor can run Holley 650 4-Barrel carburetor with 6000 R.P.M. chip. Must have stock 1.5 rockers, no carburetor spacer, stock balancer and oil pan. Any 604 that does not have factory seals will run Holley 2-Barrel 500 C.F.M. carburetor. Any straight bore - Aluminum or Phenolic adapter 1"tall and 1.700 hole must be used. Any 604 Crate must have a fifty (50) pound weight mounted in front of engine plate.**

I. SAFETY EQUIPMENT

Rules apply at all times car is on track. Snell-rated SA2000, SA2005 or SFI 31.1/2005 helmet required.

Roll bar padding required in driver compartment (*Fire retardant recommended).*

SFI_approved full fire suit required. Fire retardant gloves, shoes and neck brace (or head and neck restraint) required. Right and left seat head supports required if using head restraint system with no neck collar.

Recommended: Fire retardant head sock and underwear; collapsible steering shaft.

Driver-side window net required, minimum 16 inch by 20 inch ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window.

Minimum three inch (two-inch with head restraint system) wide SFI-approved five point safety belt assembly required. (Y-type shoulder harness not allowed), must be mounted securely to roll cage, *recommended to be no more than three years old.*

Kill switch required within easy reach of driver and must be clearly marked 'OFF' and 'ON'.

II. FRAMES

1. Factory production full American passenger frames with parallel rails only.
2. Frame rails must extend to a point beyond the base of the driver's seat.
3. Rear clip may be fabricated out of tubing.
4. Front and rear pick up loop is required.
5. Frame height minimum of 4-inches without driver, on both sides of car.
6. Minimum of 10 ½-inches from the centerline of the crankshaft to ground.
7. Front cross member may be altered for oil pan clearance. Distance between frame rails must be OEM dimensions.
8. May be cut off 36-inches maximum from rear axle centerline.
9. Must not be widened or narrowed at front (except for notching for radiator clearance) and must be able to support main vertical bars of main roll cage.

III. ROLLCAGE

1. Only steel round, rectangular or square tubing is approved for roll cage or chassis construction of any main or supporting sub-structures. Absolutely NO aluminum allowed on the structure of the chassis.

2. Must consist of continuous hoops not less than 1 ¾-inch outside diameter and must have a wall thickness of at least .095-inch carbon steel round mechanical tubing. Low carbon or mild steel recommended.
3. Must be welded to frame in at least 6 places. Body mounted roll cages are not acceptable.
4. Must consist of configuration of front and rear hoops connected by tubing on sides or side hoops in a manner deemed acceptable by the inspector.
5. Driver's head must not protrude above cage with helmet on, while strapped in driver's seat. A minimum of 3-inches of clearance to nearest tubing.
6. Roll cage must have 3/16-inch inspection hole in non-critical area.
7. Must have at least 3 curved horizontal bars at driver's door welded to front and rear cage members.
8. Left side Drivers Door Plates made of 0.125-inch 1/8-inch steel plate. No material substitutions permitted.
    A) Solid steel plates may be bolted to the roll cage using a minimum of 6 each 3/8-inch aircraft quality bolts and washers.
    B) Individual steel plates may be welded to the spaces between each left-side door bars.
9. No Material substitutions permitted. No drilling to lighten any part of the body, chassis, suspension or bolts is permitted.
10. Bends must not have any kinks.
11. Complete engine compartment and truck compartment braces are required.
12. See diagrams # 2, # 3, # 4, #5 and # 6.

IV. BODY

1. IMCA type modified body.
2. Bodies must be symmetrical in size from side to side and from front to rear.
3. Original roofline of body must be maintained with a maximum 2-inch drop rear to front.
4. No half roofs are permitted.
5. Top to be rounded in all directions (No Flat Tops).
6. Roof width: 44-inches minimum; 50-inches maximum.
7. Roof length: 41-inches minimum; 56-inches maximum.
8. Bodies should extend no further forward than the back of the block. Front wheels must not be covered. Engine compartment must have completely open sides.
9. Must have full floorboards and completely enclosed interior and sealed metal firewalls, both front and rear.
10. Rear bumper to deck lid enclosure is optional. If enclosed, it should be a solid panel at least 8-inches high and include car number (on passenger side).
11. If no rear panel, use 6-inch by 6-inch number plate on rear (on passenger side).
12. Driver and passenger side window must have at least a 12-inch vertical opening. Driver must have easy access into and out of both sides of the car.
13. Driver's window must have an approved window net with quick release.
14. A 5-inch spoiler is allowed.
15. No wings or any other type of air / ground effects are allowed anywhere inside or outside the car.
16. No protruding objects allowed.
17. Full Lexan windshield or 3 safety bars must be installed in front of driver, and may have screen attached. Lexan / glass is not permitted in door windows.
18. Rear deck width, measured from outside to outside of quarter panels at widest point, is 53- inches minimum and 66 inches maximum.
19. Quarter panel length, measured from centerline of rear axel to rear bumper, is 34-inches minimum and 45-inches maximum.
20. Rear deck height is 28-inches minimum and 38-inches maximum.
21. Must be kept in good condition all season long.

V. BUMPERS

1. Bumpers must be used both front and rear.
2. 2 bar front bumpers must be mounted frame end to frame end with bottom loop parallel to ground.
3. Front bumper must be 10-inches high from bottom bar to top of top bar.
4. Front bumper material must be 1 ¼-inch minimum and 2-inch maximum outside diameter steel pipe.
5. Rear bumpers may be constructed of pipe or square tubing, but must not have sharp edges.
6. Rear bumpers and nerf bars must not extend beyond width of rear tires.
7. Must have tow hook or cable, front and rear, capable of supporting car.

VI. WHEELBASE

1. 108 inches minimum and 112-inches maximum on both sides.
2. Tread width, measured from outside of tire sidewall to outside of tire sidewall, is 80 ½-inches maximum.

VII. WEIGHT

1. Minimum total weight is 2500 pounds after race with driver. No tolerance.
2. Maximum left side weight is 56% of total weight with driver **sitting in normal driving position in seat.**
3. All ballast must be in block form of 5 pound minimum, painted white, must have car number painted on it, and be securely fastened. Cannot be located in drivers compartment.
4. No ballast weight is permitted to be welded or attached to leg or doorplates.
5. Lead shot, liquid or ballast adjustment devices are not permitted.
6. Tungsten, bb, or liquid weight is not permitted at anytime for ballast weight.
7. Weight penalties may be added to any car not meeting rule requirements.

VIII. NUMBERS

1. All cars must have large legible numbers on both doors and on top (reading from passenger side) in contrasting color from body.
2. Numbers must be at least 4-inches thick and 18-inches high on doors and 24-inches high on roof.
3. Number is to be placed on front (drivers side) and rear (passenger side) of car that are at least 1-inch thick and 5-inches in height.
4. Numbers must be registered with track before racing. See general rules.

IX. WHEELS

1. Only steel wheels with a maximum width of 8 inches permitted. Minimum weight is 19-pounds. No aluminum wheels.
2. Bleeder valves are permitted.
3. Wide 5 wheels are not permitted.

X. TIRES

1. **Track tire rule in effect** . Tires will be bar coded and put into teams inventory and each team may purchase one new tire per week, **but new tire must be ran in that week's feature event.** You may start the season with six (6) tires in your tire bank.
2. It is the Car owner or Driver's responsibility to make sure that tires that are sold or swapped between teams or cars:
   - **a) Tire #'s are recorded in tire book and scanner.**
   - **b) If tire is swapped to another car it must be removed from original purchaser and placed on new car's tire list.**
   - **c) Any tire found on car that it is not registered to that car will be disqualified. NO EXCEPTIONS!**

3. All tires must be purchased from the I-44 Speedway tire dealer.
4. No softeners permitted. No alternations of any kind permitted, this is defined as any attempt to change or alter the physical and / or chemical composition of the tire by cutting, grinding, buffing, warming, cooling, etc. or the use of chemicals whereby the tread area or the interior surfaces of the tire is changed from the manufacturer's specifications.. No alteration or defacing of tire identification numbers, labels, code numbers or serial numbers permitted.

XI. BRAKES

1. Must have operating brakes on all 4 wheels at all times.
2. Only 1 brake line per caliper. No brake re-circulators permitted.
3. Only steel or cast iron brake rotors permitted.
4. Carbon fiber brakes are not permitted.
5. Rotors may be re-drilled for different bolt pattern or larger studs but must not be drilled to lighten.
6. Disc or drum brakes may be used front and rear.
7. Brake floaters are allowed on rear brakes.
8. Aluminum calipers are allowed, but car must add weight penalty of 15 pounds.

XII. SEAT, SEATBLETS & SAFETY ITEMS

1. Full containment, high backed steel or aluminum racing seat is mandatory.
2. Seats must be attached with a minimum of 6, 5/16-inch or larger bolts (minimum of grade 5) with fender washers; 4 on bottom and 2 in back.
3. All cars must be equipped with an approved quick release type 5 point safety harness, securely fastened to frame and roll cage.
4. Seat belt and shoulder harness material should be at least 3-inches wide and CANNOT be older than 2 years. Minimum requirements consist of lap belt, shoulder harness and crotch strap. And should be routinely checked and maintained through out the season. No sewing or altering allowed on seatbelt material. Seat belts must be attached to main structure with a minimum of 7/16-inch grad 8 bolds with double or self-locking nuts. See diagrams # 7, # 8 and # 9.
5. Seat and steering wheel may be located to suit driver, but must be kept on the left side.
6. Master "ON/OFF" switch on battery cable must be located just inside driver side window, between ledge and roof, just behind driver for easy access. Switch is to clearly marked OFF and ON. See specifications (page # 10).
7. Must be equipped with a fully charged fire extinguisher with working gauge and must be mounted in a quick release holder to be accessible by the driver. Onboard fire-out system is recommended. A minimum of a 5-pound fire extinguisher.
8. 2 way radios are allowed.
9. Scanner tuned to track frequency is required. Driver or spotter must be able to monitor track frequency.

XIII. FUEL SYSTEM / FUEL CELL

1. Gasoline only. Must meet track specifications, if other fuel is used, it can match but must not exceed testing results of track fuel.
2. No fuel additives of any type permitted.
3. No pressurized fuel systems.
4. Fuel cells are mandatory. Fuel cells with a bladder highly recommended. And must be encased in an approved metal container of no less than 20 gauge steel or 1/8-inch aluminum. Must have 3, 1/16-inch steel protection plates on rear and both sides of fuel cell that attach to square tubing, straps or frame of car. See diagram # 1.

5. Fuel cells must be mounted between frame rails as far forward as possible and using minimum of 2, 2-inch by 1/8-inch metal straps.
6. Fuel cell must not extend below the rear end housing. Bumper must be equipped with a drag loop extending below bottom of the cell.
7. Maximum of 22 gallon capacity.
8. Only OEM type mechanical fuel pumps mounted in stock location permitted. No electric fuel pumps.
9. Fuel lines must be armored hose, or installed in metal conduit, or steel fuel lines and must not be routed through driver compartment.
10. Fuel cell height is measured from ground to lowest point of bottom of fuel cell. 10 ½-inches minimum permitted.
11. Must have check valve on vent tube or cap.

ENGINE OPTION 1 – I-44 SPEEDWAY MOTOR

XIV. ENGINE

1. Must use OEM cast iron, American make V-8 engines only.
2. External engine casting and threaded holes cannot be altered.
3. No aluminum, titanium or carbon fiber components allowed.
4. Water only **as coolant**. NO ANTI-FREEZE. **Violators subject to penalties.**
5. Rear of engine (bell housing flange) must be 72-inches minimum from centerline of rear axle.
6. Center of the crankshaft must be within 1½-inches of center of upper ball joints.
7. Centerline of crankshaft must be located at least 10 ½-inches above ground plane.
8. Maximum compression ratio is 11.0 to 1. No tolerance.
9. Engine must appear strictly stock.
10. Only standard OEM stock cast iron engine blocks permitted.
11. Engine block must retain all standard dimensions with exception of maximum allowable overbore and surfacing of block deck.
12. No angle cutting of engine deck permitted,
13. No internal polishing of engine block permitted. Deburring is permitted.
14. ENGINE SIZES V-8 small bock engine, 11.0:1 compression ratio
    A) Chevrolet / General Motors - 350 cubic inch displacement engine block plus a maximum of .045 inch overbore per cylinder.
    B) Ford – 351 cubic inch displacement engine block plus a maximum of .040 inch overbore per cylinder.
    C) Chrysler – 340 or 360 cubic inch displacement engine plus a maximum of .030 inch overbore per cylinder.
    D) 355 cubic inch displacement Chrysler engine is not permitted.
    E) **All built motors will be checked for Cubic Inches and Compression Ratio.**

XV. VALVE TRAIN

1. Maximum 2.02-inch intake valves and 1.60-inch exhaust valves.
2. Only steel valve springs permitted. No titanium (or other expensive or exotic material) valve spring or retainers.
3. Guide plates and screw in studs allowed.

4. No angle milling permitted. Flat milling is allowed.
5. Flattop or dished pistons only.
6. Must use flat tappet cam and lifters.
7. No mushroom lifters.
8. Rev-kits are not permitted.
9. Cannot alter lifter bores. May have bronze inserts but diameter must remain O.E.M at .842-inch.
10. Must use OEM size lifters for block being used.
11. Any length push rods allowed.
12. Aluminum roller rocker arms and stud girdles are permitted.
13. No canted valves. Inline valves only.
14. Maximum valve spring diameter 1.44-inches.
15. No portion of piston above engine block surface permitted.
16. Only solid steel connecting rods permitted.
17. No air directional devices on any valve surface permitted.
18. Valve stem diameter is .34375-inch (11/32-inch) minimum.

XVI. BLOCKS

1. Aftermarket blocks permitted.
    A) General Motors – Stock cast iron blocks: 305, 327, or 350.
    B) Ford – Stock cast iron blocks: 260, 289, 302, or 351.
    C) Chrysler – Stock cast iron blocks: 273, 318, 340, or 360.

XVII. HEADS

1. No aftermarket head allowed except those listed.
    A) General Motors: Any stock GM head except the Bowtie Vortec head.
        1) Dart – 10320010 or 10310010
        2) World Products – 011250 or 011150
        3) RHS – 12319 or 12320
        4) EQ – CC200BA
        5) Bowtie – 034
    B) Ford: Any stock Ford head.
        1) World Products – 053040 or E351 or Roush 200
        2) RHS – 35302
        3) SVO – N351 or N352
    C) Chrysler: Any Stock OEM factory production Chrysler head allowed with inline valves (no canted valves). Must meet maximum intake and exhaust. No W-2 or aftermarket heads allowed. Chrysler may use OEM rocker arm bars.
2. Only unaltered stock cast iron production heads limited to 2 valves per cylinder permitted.
3. No port matching or flow work of any kind permitted. Gasket matching will be permitted.
4. No angle cutting of heads to block mating surface is permitted.
5. No offset drilling head stud or bolts holes permitted.
6. 3-angle valve job permitted.
7. Combustion chamber may be polished.
8. Intake manifold cannot be altered. Must remain as manufactured. No port matching or flow work of any kind permitted. Outside may be powder coated, but interior cannot be painted.
9. Part numbers must remain visible.

XVIII. CARBURETOR

1. A Carburetor track claim rule will be in effect:
    A) Claim will be $500 with NO EXCHANGE.
    B) Claim to be made by track.
2. No use of any type of Epoxy or other coating of any type is permitted.
3. Fuel injection, superchargers or nitrous oxide are not permitted.
4. Alterations to allow additional air to be picked up below opening of venture will not be permitted.
5. Double return spring required.
6. Base plate must not be altered in any way.
7. No modifications. Air horn must not be removed.
8. No polishing, grinding or drilling of holes permitted.
9. No tapered boosters. Boosters may not be changed or altered in any way.
10. Venturi area must not be altered in any way. Casting ring may not be removed.
11. Must use Edelbrock Performer 4 bbl. Intake manifold. No exceptions.
    A) Chevrolet part # 2101 or 2701
    B) Ford part # 2121 or # 2181
    C) Chrysler part # 2176
12. No Performer RPM or air gap manifolds.
13. **Any straight bore adapter - Aluminum or Phenolic - 1.700 diameter hole and 1" tall.**
14. No spacers are allowed.
15. Carburetor must be securely fastened to intake manifold. Carburetor and adaptor gaskets maximum .05-inch thickness.

XIX. CARBURETOR AIR CLEANER / AIR INTAKE

1. A dry type round air cleaner element will be required. **It must have metal top and bottom** with a minimum diameter of 12-inches, maximum of 1- inches, and maximum height of 4- inches. No additives allowed in air filter.
2. Air cleaner base must be no higher than top of choke horn.
3. All air must be filtered through air cleaner.
4. No hoses, funneling devises, or devices designed to get more air into engine will be permitted. No carburetor hat. No devices for directing the flow of air into the air cleaner.
5. No air intakes facing forward permitted.
6. No air boxes permitted.

XX. CRANKSHAFT / HARMONIC BALANCER

1. Only steel or cast iron production design crankshaft permitted with a minimum weight of 45- pounds.
2. After market crankshaft is permitted, but must be identical in appearance and construction as OEM crankshaft.
3. Stroke must be OEM dimension for engine block being used.
4. No Honda journal crankshaft permitted.
5. Leading edge of counterweights must not be knifed edge, have pendulum cut or holes across counterweights.
6. Only standard OEM steel elastomer-type harmonic balancer permitted. After market balancer may be used, but must be of conventional design. Balancer cannot contain fluid or unbonded inertia ring.

XXI. OIL PAN

1. Extra capacity oil pans are permitted.
2. No dry sumps allowed.
3. Oil pump must mount in stock location.
4. Must have minimum ¾-inch plug installed in side of oil pan, in line with a rod journal, for inspection purposes. If a windage tray is used, access hole must also pass through tray.
5. External oil pump not permitted.

ENGINE OPTION # 2 – CRATE MOTOR 604

Factory stock new and sealed motor can run Holey 650 C.F.M. 4-Barrel carburetor with 6000 R.P.M. chip. Must have stock 1.5 rockers, no carburetor spacer, stock balancer and oil pan. Any 604 that does not have factory seals will run Holley 2-Barrel 500 C.F.M. carburetor. Any straight bore aluminum or phenolic adapter 1" tall and 1.700 straight holes may be used.

1. Engine must be used as STOCK as delivered from dealer. Lebanon I-44 Speedway's Exclusive Dealer is McGunegill Performance (765-282-1913).

2. **CARBURETOR**

A) Stock Holley 650 CFM 4-barell carburetor, part # 4150 or # 80541-1, "box-stock" is required.

a-1) Any Crate motor without the proper documentation will be declared "altered" and must run the Holley 500 CFM. 2-Barrel carburetor.

B) Carburetor must be securely fastened to the intake manifold with 1 (.0625-inch (1/16 inch or smaller flange) gasket.

C) Drop-in spacers, alteration, physical changes, machining, re-shaping or tampering with any part of the original parts, internal or external, is prohibited.

D) No use of any type of Epoxy or other coating of any type is permitted.

E) Fuel injection, superchargers or nitrous oxide are not permitted.

F) Alterations to allow additional air to be picked up below opening of venture will not be permitted.

G) Following is a list of tuning and replacement parts permitted for use on the Holley 4150 HP Carburetor. Only genuine Holley replacement parts are permitted and must match exactly parts replaced.

a. Jets
b. Bleeds
c. Needle & seat
d. Emulsion bleeds
e. Power Valves
f. Accelerator pump nozzles
g. Accelerator pump can
h. Floats include all offered by Holley for the HP 4150 650 CFM Carburetor
i. Floats maybe modified/angle cut.

XXII. IGNITION / ELECTRICAL SYSTEM

1. Must have working starter and be capable of starting engine on demand.
2. 12-volt ignition system only.
3. Crank triggered or multiple coil ignition systems are not permitted.

4. Master "ON/OFF" switch on battery cable must be located just inside driver side window, between ledge and roof, just behind driver for easy access. See diagram.
5. Only one, 6 terminal ignition box permitted. Only one ignition box allowed, and it must be out of driver's reach.
6. MSD boxes approved: MSD 6A, MSD 6T, MSD 6AL, MSD ALN, MSD 6TN.
7. MSD Connector: The 6 wire harness must be a maximum of 24-inches long, and have a female 6 pin, weather pack connector.

   C) SIX PIN WIRING DIAGRAM
      a) Ignition Switch 12v (Small red)
      b) Points Pick-up (Small white) brown gm boxes
      c) Coil Negative (Small black)
      d) Coil Positive (Small orange)
      e) Battery Positive (Large red)
      f) Battery Negative (Large black)

   D) TWO PIN OPTION FOR THESE TWO
      a) Battery Positive (Large red)
      b) Battery Negative (Large black)

8. Onboard electronics such as but not limited to lap timing devices, suspension monitors, computers, torque limiter ignitions, and other electronic devices are not permitted.
9. Battery must be securely fastened with cover and must not be mounted in driver compartment. A marine type battery box, or equivalent, is recommended.

XXIII. ENGINE COOLING SYSTEM

1. All engine-cooling radiators must be mounted in engine compartment.
2. Must have operational radiator overflow tank with a minimum capacity of 1-gallon, securely mounted.
3. Water only **as coolant**. NO ANTI-FREEZE. **Violators subject to penalties.**
4. Fan shroud must cover a minimum of top 180-degrees of fan. Must extend at least to centerline of fan blades.

XXIV. CLUTCH / FLYWHEEL / BELLHOUSING

1. High speed multiple discs clutch is permitted. Minimum clutch size of 5 ½-inch.
2. Absolutely no carbon fiber or poly clutches allowed.
3. Clutch assemblies must be mounted inside bellhousing.
4. Only steel, heavy cast iron, or after market aluminum bellhousing permitted.
5. Must be capable of being put into and taken out of gear with engine running.
6. Must have flywheel with a starter ring on it.
7. Reverse mounted starter will be permitted.

XXV. TRANSMISSION

1. 3 or 4 speed transmission must be OEM production manufactured that is cataloged through regular dealer channels.
2. Bert or Brinn style transmissions ARE permitted.
3. Must have minimum of 2 forward and a reverse gear, plus a neutral position, all in working order.

4. Transmission must bolt directly to bell housing, which bolts directly to rear of engine block.
    A) Automatic transmission is permitted. Must be unaltered, 2 or 3 speed, OEM production case with a functioning stock appearing pump. Must have an approved scatter shield constructed of .125-inch by 3-inches steel, 270-degrees around top of flex plate. Splined drive flange coupler with internal pressure relief device, gate valve, or torque converter (10-inch minimum) only. Hydraulic lines may not extend into driver compartment.
    B) Manual transmission 3 or 4 speed only, No 5 speeds (or more) allowed. Must have explosion-proof steel bell housing and 1 hole for throw out bearing lever or hose, must be 270-degrees around top of clutch and flywheel area.

XXVI. DRIVE SHAFT

1. Minimum 2-inch diameter, painted white, steel drive shaft.
2. Steel slip-yokes only.
3. 360-degree drive shaft loop required and must be constructed of at least ¼-inch by 2-inch steel, or 1-inch tubing, mounted 6-inches back from front U-joint.

XXVII. REAR END

1. Only Steel approved OEM passenger car or truck non-cambered rear end permitted.
2. All components must be steel, except lowering blocks, axle caps and drive flange.
3. Open tube rear end not permitted. Aluminum rear end is not permitted.
4. Independent rear axles not permitted.
5. Rear ends may be Quick-Change (no 8") with full-floating hubs or 9-inch Ford type. Quick change rear-ends will have a 25- pounds weight penalty.
6. No aluminum center section is allowed in 9-inch Ford rear end.
7. Full floating (safety hubs) rear axles are recommended.
8. Ring gear, center section and yoke cannot be lightened.
9. Steel full or mini-spools only.
10. Solid steel axles and one piece drive flanges only. No aluminum axle tubes, No titanium axle shafts.
11. No lockers, tru-trac, gold track etc.
12. Inspection hole in housing is required.

XXVIII. EXHAUST

1. Headers may be used but must be collector type.
2. Exhaust must exit behind driver.
3. Crossover pipe permitted.
4. Expansion chamber not permitted.
5. Must be sealed tight and securely mounted.
6. Noise level is set at a maximum of 100 db measured at 100 feet from car.
7. If muffler is used, muffler choice will be left up to competitor.

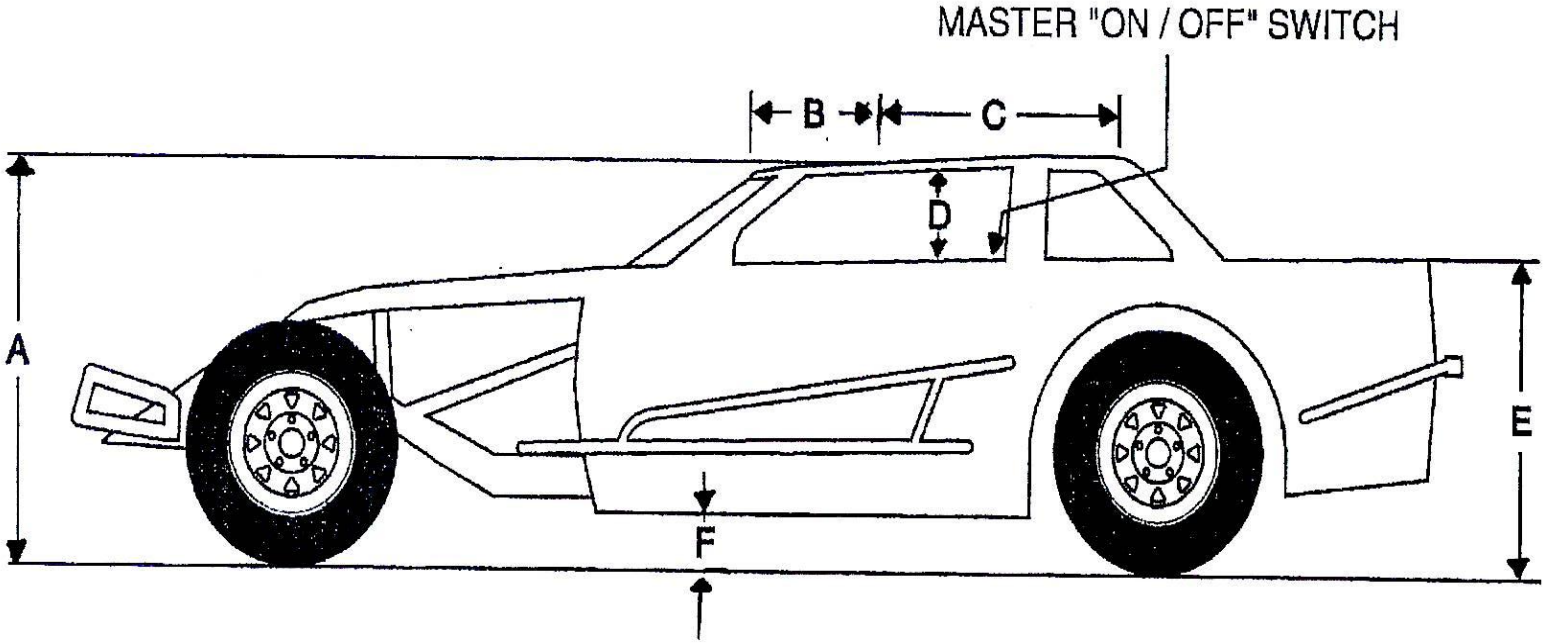
XXIX. SUSPENSION / STEERING COMPONENETS

1. NO "HIGH DOLLAR" SHOCKS PERMITTED. There will be a claim rule on shocks.
    A) Claim will be **$125.00** with NO EXCHANGE.
    B) Claim to be made by **any car on the lead lap**.

2. One steel unaltered shock per wheel. No adjustable shocks permitted. Shocks must be factory sealed units that cannot be disassembled. NO aluminum shocks permitted. No rebound adjustable or double adjustable shocks permitted.
3. **Conventional setups only - No bump stop, coil bind setups, or snubbers on shocks**
4. No Schrader or bladder type valves. No threaded body, front coil-over, air or remote reservoir shocks.
5. All suspension parts must be made of steel.
6. Lower A-frames must be stock production for type of frame and must mount in stock location. Lower A-frame cannot be altered.
7. Upper A-frames may be stock or tubular type and frame-mounting brackets may be relocated.
8. Any 5 on 5 spindle and hub will be allowed.
9. Any cast iron spindle allowed. If an aftermarket spindle or fabricated spindle is used, a weight penalty of 25-pounds will be required.
10. Spindle steering arms and OEM drag link may be drilled to accept spherical type tie rod ends.
11. Pitman arm and idler arm must be OEM.
12. Weight jacks permitted. No hydraulic weight shifting devices are permitted.
13. Coil over shock / springs are not permitted.
14. Coil over eliminators are not permitted on front.
15. Adjustable strut bars may be used on front only.
16. Adjustable sway bars are permitted, but cannot be changed from inside driver compartment.
17. No adjustable suspension components or weight shifting devices that can be adjusted inside driver compartment permitted.
18. Must have a collapsible steering shaft or use at least 2 universal joints, which are not mounted in same plane.
19. Must have an approved steering wheel disconnect.
20. Steering box must be stock OEM type and be in stock location.
21. Rack and pinion steering not permitted.
22. Either rear coil or leaf springs are permitted.
23. No transverse coil spring mounts permitted.
24. Coil springs must be a minimum of 4 ½ inches in diameter.
25. Rear suspension has two options: After market 3 link design or multi-leaf design. All components must be steel. All mounts and brackets must be welded or bolted solid. No floating of trailing arms or brakes. One trailing arm per side only.
    A) A) THREE LINK DESIGN REQUIREMENTS: Must be only 1 lower **solid** bar per side. Must use 1 upper control arm, may use pull bar spring or biscuit assembly, located at top center of rear end housing. May use pan hard bar located in front of or behind rear end housing. May mount rear spring directly over axel housing or use coil over eliminators (sliders). Lower spring perch or coil over mount must be welded to rear-end housing. No coilovers. Must use steel upper weight jack is spring are mounted over axel housing.
    B) MULTI-LEAF SPRING DESIGN REQUIREMENTS: Must use steel multi-leaf springs. Dampener shock on top of rear end allowed. One shock per wheel. Adjustable aluminum lower blocks are allowed.

XXX. MISCELLANEOUS

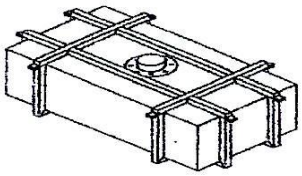
1. Carbon fiber clutch or drive shaft, ceramic valves, or other new high technology, high expense items will not be permitted. Ask first, before buying any questionable equipment.
2. Pre-race inspection is mandatory for all cars each night before being permitted on track. Permission to compete does not mean that the car meets and passes all safety and division rules.
3. Post-race inspection is mandatory for any car directed by track officials, or for any car competing with a weight penalty.
4. All cars involved in a major accident must be re-inspected before returning to competition.
5. Equipment or parts failing inspection is subject to confiscation.
6. Any new parts or equipment not specifically covered in these rules must be approved before being used in competition.
7. Mirrors are allowed, but must not extend outside of body.
8. All wiring must be visible for inspection.
9. No electronic traction control allowed.
10. Traction Control and On-Board Computer or Analysis Equipment. No equipment of this nature is permitted on any car or located in the pit area during any event. Confiscation of equipment, disqualification and / or suspension, and / or other penalties will be issued.
11. Non-compliance with the specifications outlined herein may subject the participants (car owner/driver) to disqualification, loss of monies and points earned at the event. Furthermore, the owner may be fined up to $5000 and the Technical Inspector will seize all non-complying components. Owner/driver must provide tools to remove parts.
12. **Anyone under the age of 18 (Driver or crew member) must have a *signed and notarized* minor's parental waiver / release form(s). Both parents must sign. Questions, please call before showing up at track. *Proof of age is required* and no one under 10 will be permitted in pits at any time, (special rules and pit areas, apply for 10-13 years old).**
13. **At no time is anyone allowed to ride in or on the car with any part of their body outside the car. This includes in the pit or on the track. Disqualification from event can result.**



CAR BODY INSTALATION

DIMENSIONS	INCHES
A. ROOF HEIGHT (MIN.) MEASURED AT B	42
B. MEASURING POINT OF ROOF (from windhsield)	10
C. ROOF SLOPE (MAXIMUM)	2
D. SIDE WINDOW OPENING (MINIMUM)	12
E. REAR DECK HEIGHT (MAXIMUM)	35
F. GROUND CLEARANCE WITHOUT DRIVER IN CAR (MIN.)	4

DIAGRAM #1



1 INCH STEEL SQUARE TUBING
OR
2 INCH BY 1/8 INCH STEEL STRAP

DIAGRAM #2

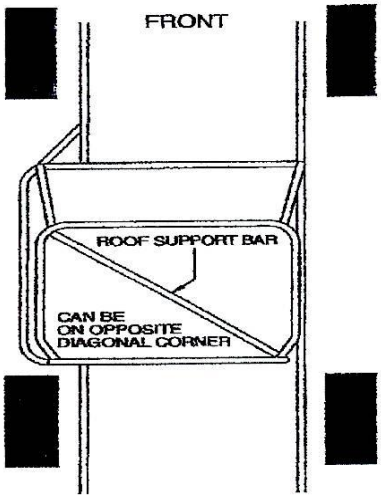
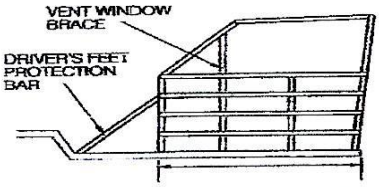
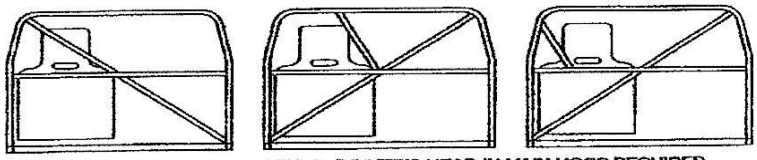


DIAGRAM #3



THIS AREA TO BE .095 INCH WALL THICKNESS BY
1.66 INCH O.D. TUBING MINIMUM.

DIAGRAM #4
BACK VIEW



ADDITIONAL BRACING BEHIND DRIVER'S HEAD IN MAIN HOOP REQUIRED.
THESE DIAGRAMS ARE MEANT TO BE SUGGESTIONS ONLY.

PROPER DRIVER SIDE DOOR PLATE INSTALLATION

Diagram # 5
Preferred Method

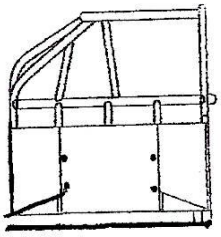
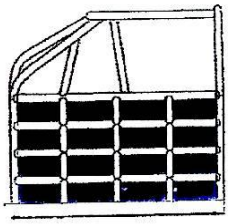


Diagram # 6



SEAT / SAFETY HARNESS

3-bar adjuster should be positioned as close possible to harness bar or snap-on/bolt-on bracket. This applies to both lap and shoulder belt points. The final wrap as pictured in # 9 is mandatory. At Least 4-inches of webbing material must extend out from the adjuster after this final wrap is completed.

Diagram # 7
Lap Belt Angle

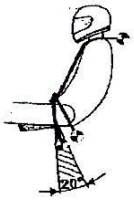


Diagram # 8
Sub Strap Angle

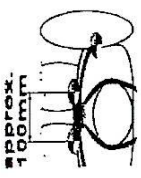


Diagram # 9
Proper Wrapping of
Shoulder Harness Belts