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# 1.0 Safety Rules

ALL CARS ARE ELIGIBLE TO RUN IN 2022. General safety rules 1 through 17 must be followed. All cars not running safety rules 18-23 (See below) \$50 will be deducted from each advertised position in the feature, no driver will receive less than \$100 start money. Series members will still be able to receive their 2 provisionals and contingency awards (including Hoosier Hard Charger).

- 1. Raceceivers are mandatory, channel 454.000 (unless otherwise stated at drivers' meeting.)
- 2. Helmets must be SFI 31.1/2010 or Snell rated SA2010, SA2015, or SA2020 helmet required. (no open face helmets).
- 3. All drivers must wear approved fire-retardant racing gloves SFI 3.3/5 at all times when the car is on the track.
- 4. Head and neck restraint devices are recommended such as a HANS or similar. A minimum of a full wrap around neck brace is required.
- 5. All cars must have seat belts and shoulder harness securely fastened to the frame or roll bar. They must be of the approved racing type with quick release aircraft type hookups. NO stock type seat belts allowed. Shoulder harness must be securely mounted to the roll cage no higher than TWO inches above shoulder level. Sternum straps are highly recommended. All cars are required to have an SFI 16.1 or 16.2 lap belt, crotch belt and shoulder harness. Belts must be no older than 3 years on the production date.
- 6. All aluminum seats must be mounted properly & securely per the directions or recommendations from the seat manufacturer. The use of Grade 5 or better hardware is also required to attach the seat to the chassis with minimum four mounting bolts (3/8 inch or bigger). Seat mounting brackets must use properly sized bolts 3/8 inch or bigger with washers to match the holes in the mounting bracket. No oversized holes or slotted holes in the bracket. Aluminum racing seat. When not using a full containment seat you are required to use one of 2 options: Option 1: two head supports (left & right side) The left side may be shorter for egress only but cannot be trimmed any shorter than the distance of the face of the helmet. Option 2: The ISP seat parts number ISP 202LA L quick release helmet belt and the ISP 202M mounting bracket.
- 7. Fire suits of at least a fire-retardant material are mandatory. (SFI 5 is the recommended minimum.) Sleeves must be rolled down. Nomex underwear is highly recommended, including hood and socks. Race approved footwear (leather shoes) are highly recommended.
- 8. A fire extinguisher, in working order and up to date, will be required in your race car. Recommended when purchasing a new fire extinguisher to purchase the 10-pound fire bottle or safe craft suppression system with the thermal hoses running to the driver's cock pit and one to the fuel cell.
- 9. All roll bars within the driver's area are recommended to be padded with flame retardant foam roll bar padding.
- 10. Solid center steering wheels are highly recommended.
- 11. Door plate is required in 2020 but you will be allowed to run up to 5 MB SLMR series races without it.
- 12. All cars are recommended to use arm restraints or a window net, 16x20 rectangular shape mesh or ribbon style, must be mounted in accordance with the manufacturer's instructions and technical director's satisfaction, must latch at the top. Window net will not be required but recommended when using a full containment seat and a HANS (or similar) device. Arm restraints highly recommended.
- 13. ++Ballast (extra weight) added to the car for weight rule conformance must consider all provisions of safety and must be securely fastened. Ballast must be bolted to the frame or cage only. No ballast may be mounted above the interior deck to rub rails or body mounts. Any ballast weight of 20 lbs. or more must be drilled and mounted with two 1/2" studs through each weight. No ballast blocks less than 5 lbs. nor more than 60 lbs. will be allowed. No stacking of ballast. Ballast must be painted white and stamped with your car number (this is a maintenance item and must be maintained all year.)
- 14. No unapproved cameras, listening or transmitting devices, timing retard controls, or digital gauges, digital tach is ok. No electronic monitoring computer devices capable of storing or transmitting information except analog tach. No electronic traction control devices. No cameras of any type permitted below the interior (deck) of the car. No on-board electronic tire temperature gauges. No on-board data acquisition systems.
- 15. Eighteen-gauge steel or one-eighth inch aluminum "cockpit tub" to protect front, sides and rear of driver is highly recommended.

- 16. No car covers or opening covers of any kind allowed. Exception: If rain or inclement weather occurs you may cover your car until the weather passes and/or the rain stops. Including tires.
- 17. Head and neck restraint devices such as a HANS or similar are required.
- 18. Must use a full containment SFI 39.2 rated racing seat.

For drivers that need more room for entrance and exiting the racecar check with the ISPseat Company on seat parts number ISP 202LA L quick release helmet belt and the ISP 202M mounting bracket. No head support may be trimmed any shorter than the distance of the face of the helmet on the LEFT SIDE ONLY.

- 19. Window Bars: see Section 7.9 Rule 10
- 20. Window Screen: see Section 7.9 Rule 11
- 21. Door Plate: see Section 7.11
- 22. 10-pound Fire Bottle or Safecraft suppression system with the thermal hoses running to the driver's cock pit and one to the fuel cell will be required. The gauge must be able to be easily read from under the car during inspection, bottle must have 75% to full capacity to be considered legal. Must service every three years.
- 23. Signaling sticks are permitted) (2) Two inch (2)" maximum diameter with a length of thirty inches (30") are allowed to signal from a safe area where pit pass access is required. No signaling from the general admission area unless overwise instructed at a drivers meeting. Only tape is permitted on a signaling stick. No lighted or flashing signaling sticks are permitted.

## 2.0 Engines

- A) V8 engines sized 350ci. 460 ci. may be used (aluminum block, steel block, aluminum head, steel head), restrictors and weight rules will serve as equalizers. Restrictors cannot be bigger than what is listed per engine but can be smaller. See weight rules.
- B) IMCA Spec Engine Rules
  - 1. Steel blocks only. Maximum 361 (GM), 362 CI (Ford), and 364 CI (Chrysler)
  - 2. Minimum four-inch bore
  - 3. Minimum stroke: 3.48 inch (GM), 3.40 inch (Ford), and 3.313 inch (Chrysler)
  - 4. Maximum compression 10.5 to 1, can be checked at any time with whistler. No tolerance.
  - 5. Chevrolet Read intake manifold Section 2.3
  - 6. Brodix/IMCA spec cylinder heads only. No grinding, polishing, or altering of any kind. No use of any substance that may change or alter shape or size of ports, runners, or combustion chambers. Only alterations allowed to heads are for push rod clearance and to install shaft rocker system.
  - 7. Maximum valve sizes are 2.08 intake and 1.600 exhaust. Valve seats and guides to remain as manufactured and in as-cast positions. Minimum combustion chamber size to be 62cc volume. Valve angle to remain as manufactured.
  - Approved cylinder heads as follows: GM Brodix # 46 221, Ford Brodix # 46 223, Chrysler/Mopar Brodix # 46 222. No modifications to intake manifolds, must be used as produced by manufacturer. List of approved intakes as follows: GM Brodix #HV100946, Ford Edelbrock #2981 or 2980 (351) or #2921 (302), Chrysler Edelbrock #2915.
  - 9. Camshafts may be of roller, flat tappet or mushroom design.
  - 10. Crankshafts and connecting rods must be steel.
  - 11. One-inch inspection hole required in pan no obstructions to crank and rods. If obstructions are present, must remove pan for inspection. Flat top pistons only.
  - 12. Crank triggers, read section 2.5 rule 4.
- C) Spec Headed Engine Rules
  - 1. Any cast iron block only, List of part numbers for heads will be listed at a later time. The Brodix Spec 40/60 heads will not be allowed such as ASCS/SUPR. no unnecessary machine work inside or outside of block.
  - 2. Over 364 cu inches or 364 cu inches and under. Please see weight rules
  - 3. Aluminum intake. 7.25 inches from bottom of intake to base of carburetor, including spacer and gaskets.
  - 4. <u>Approved Brodix Spec Aluminum heads allowed</u>. Allowed part numbers include: Chevrolet SPCH, Ford SPFO, Mopar SPMO. May grind all IMCA spec heads with all of the same rules stated in rule 2.0. section C. 1-12

# including restrictors and weights.

- 5. Absolutely NO removing, relocating, grinding, polishing or defacing of any letters or numbers cast into the Brodix Spec aluminum cylinder heads.
- 6. Heads may be angle milled, although valve angle must remain within 1 (one) degree of original manufactured specification.
- 7. Valve guides must remain in original angle and spacing as manufactured. Valve guides may not be tapered, thinned or shortened in any way.
- 8. Absolutely no welding or adding material of any kind to the head.
- 9. Removal of material from the head is only allowed as listed below:
  - A. Chamber may be ground for dome clearance and polished.
  - B. Intake Port Intake bowl may be blended and polished from the valve seat to the edge of the letter C in the word "Spec" on the roof and floor of the intake port. The side of the intake port may also be blended and polished from the valve seat to the same point as the roof and floor. Absolutely no grinding or polishing along the sidewalls where the spec logo is cast. Factory CNC port match must not be altered in any way.
  - C. Exhaust Port Exhaust seat may be blended into the exhaust bowl and exhaust port may be polished as long as the word "Spec" in the roof of the exhaust port is not touched and the exhaust port exit at the header flange remains in the original as cast location, size and shape.
  - D. May machine for pushrod clearance.
- 10. Absolutely no enlarging, relocating or other altering of any head bolt hole, dowel hole, or threaded hole in the head except as noted below: May spot face head bolt holes after angle milling head. Heli coils may be used for repairs. Absolutely no grinding or polishing of or any kind anywhere on the casting, except in the combustion chamber, and in the areas of the intake port and exhaust ports as stated above, and for pushrod clearance.
- 11. Any internally repaired spec head must be recertified by Brodix.
- 12. Spec head checking fixtures will be used by SLMR officials to check all specifications and dimensions listed above.

# D) GM Crate Engine Rules

- 1. 602, 604, and 525 must have GM sealed bolts or IMCA sealed bolts
- 2. Any parts that have been replaced or repaired must be done to the weight, size, and material specs of GM as stock purchase.

## E) LS Chevy Style Engine Rules

- 1. Must follow same rule package as the open headed, aluminum block engine rules
- F) Steel Head Engine Rules (Small Cubic Inch)
  - 1. Only O.E.M. stock production steel heads as numbered below will be allowed.
  - 2. No Dart, fuel injected, Ford Cleveland, or GT40 heads allowed.
  - 3. The specified (spec.) head will be the G.M. BOWTIE non-vortec cylinder head, part/casting number 10134392, 14011058, 12480034, or 14011034. Chevrolet Performance Vortec Part number 12558060. Casting number 12039906 or 12558062 that have a 64CC combustion chamber, a 170CC intake port, no alterations to the head including porting or polishing and valve size must remain stock. 1.940" intake valve and 1.500" exhaust valves are legal.
  - 4. Ford M-6049-n351, Mopar head casting number 4532693. Mopar may run Chrysler R block #P4532907 or P4532908. Mopar heads may be 15 or 18 degrees. O.E.M. J Design Mopar heads are not legal. No modification outside of the combustion chambers, except surfacing, three angle valve jobs, and touching up the combustion chamber.
  - 5. Titanium valves and retainers allowed.
  - 6. All cylinder heads under rule F3 and F4 listed above must remain with their stock production valve centers.
  - 7. Roller camshaft, lifters, and rocker arms will be allowed. Shaft rockers will be allowed.
  - 8. Any aluminum intake may be used with a maximum total height of 6" from the carburetor base plate including the spacer plate to the floor of the plenum. Up to a 2"spacer may be included in the 6" height. No super high-rise intakes allowed. Plenum must have flat floor.

- 9. No titanium engine parts, except titanium valves and retainers.
- 10. Engine casting numbers stamped on the engine will be left on the block at the bell housing area.
- 11. No epoxying of block numbers will be allowed. Block numbers will be stamped by inspector if needed G) Engine Set-Backs
  - 1. All competing models using a engine larger than 364 cubic inches G.M., Ford, Chrysler, or a crate 525 engine are allowed a maximum engine set back of 25½ inches (to be measured on the left side of the engine, from the front side of the rear engine plate, to the center of the upper A frame/control arm mounting bolts which should be equal to the center of the ball joint)
  - 2. All competing models using a G.M., Ford, or Chrysler engine 364 cubic inches or smaller allowed a maximum engine set back of 27 ½ inches using the same measuring technique as listed in section G-1.
  - 3. For any fraction of a measurement listed in 1 or 2 above there will be a 25 lbs. lead weight penalty to be placed in front of the rear motor plate. Any fraction beyond the measurement of 1 ½ inches in 1 or 2 above up to 29 ½ inches will be a 50lb total weight penalty placed in front of the rear motor plate.

## 2.1 Weight Rules, all weight rules are to be met after all races. No fuel burn off allowance.

Motor, weight, and restrictor package may be changed at any time as determined by Series Officials to equal the package for all competitors. All additional bolted on weight must be in lead form of no less than 5 lb. increments.

There is still testing being done on motors that use restrictors. Changes that need to be made for restrictors to ensure all motor types are as close as possible will be made between now and the end of April of 2022. Any questions on restrictors call Joe Kosiski.

- 1. STEEL BLOCK ONLY: 602, 604 GM crate Motors, 2250 lb. weight minimum with up to a 10" spoiler with the standard 8-inch braces. -See body Rules- Fuel must be gasoline, ethanol-enriched gasoline, or alcohol. No oxygenated fuel other than methanol or ethanol is allowed. No nitrous oxide, or nitro. No nitrous devices allowed. No nitro-methane or propylene oxide.
- 2. Aluminum Crate 525: Must weigh minimum 2300 lbs. Fuel must be gasoline, ethanol-enriched gasoline, or alcohol. No oxygenated fuel other than methanol or ethanol is allowed. No nitrous oxide, or nitro. No nitrous devices allowed. No nitro-methane or propylene oxide. When running anything but 100% gasoline, you must add 50lbs to the front of the rear motor plate.
- 3. STEEL BLOCK ONLY: IMCA Spec Motor 2300 lbs. Maximum 10.5 to 1 compression ratio. See 2.0.B. With up to a 10" spoiler with the standard 8-inch braces. -See body Rules- Gasoline Only, if you run a different fuel (ethanol-enriched gasoline, or alcohol) your weight minimum will increase 2350lbs. with the 50lbs of the additional weight being added to the front of the engine plate. No oxygenated fuel other than methanol or ethanol is allowed. No nitrous oxide, or nitro. No nitrous devices allowed. No nitro-methane or propylene oxide.
- 4. STEEL BLOCK ONLY: 364 cu inches or smaller all steel motor including heads weight minimum **2350 lbs**. Gasoline only. Must meet rules in section 2.0 F above
- 5. STEEL BLOCK ONLY: Maximum 364 cu inches Brodix Spec Headed must weigh minimum 2350 lbs. **See 2.0.C.** Fuel must be gasoline, ethanol-enriched gasoline, or alcohol. No oxygenated fuel other than methanol or ethanol is allowed. No nitrous oxide, or nitro. No nitrous devices allowed. No nitro-methane or propylene oxide. When running anything but 100% gasoline, you must add 50lbs to the front of the rear motor plate.
- 6. STEEL BLOCK ONLY: Brodix Spec Headed engine larger than 364 cu inches See section 2.0.C. Gasoline Only, minimum weight 2350 lbs. with (4) 1.200 restrictors
- A.) STEEL BLOCK ALUMINUM HEAD: Chevrolet Motors with Brodix 23-degree track 1 style head without the spec or series bosses Under 374 cu in. With a 23-degree valve angle of plus or minus 2 degrees with the valve center of 2.350 to 2.354 must weigh minimum 2350 lbs. with (3) at 1.150 restrictors (1) 1.200. Gasoline Only.
   B.) STEEL BLOCK ALUMINUM HEAD: Chevrolet Motors Under 374 cu in. With a 23-degree valve angle of plus or minus 2 degrees with the valve center of 2.349 or less must weight minimum 2350 lbs. with (1) at 1.100 restrictors and (3) at 1.150 restrictors. Gasoline Only.
- 8. A.) STEEL BLOCK ALUMNIUM HEAD: Chevrolet Motors with 23-degree track 1 style head without the spec or series bosses Over 375 cu in. With a 23-degree valve angle of plus or minus 2 degrees with the valve center of 2.350 to 2.354 must weigh minimum 2350 lbs. with (3) 1.100 restrictors (1) 1.150. Gasoline Only.

- B.) STEEL BLOCK ALUMINUM HEAD: Chevrolet Motors Over 375 cu in. With a 23-degree valve angle of plus or minus 2 degrees with the valve center of 2.349 or less must weigh minimum 2350 lbs. with (1) at 1.050 restrictors and (3) at 1.100. Gasoline Only.
- 9. LS and Open Aluminum or steel motors with unrestricted valve angle 365 cubic inch or less-must weigh 2400 lbs. with restrictors (1) 1.100 (3) 1.050 restrictors. Gasoline Only.
- 10. LS and Open Aluminum or steel motors with unrestricted valve angle 366-400 cubic inch with a must weigh 2400 lbs. with (1) 1.000 restrictors and (3) 1.050 restrictors. Gasoline Only.
- 11. LS and Open Aluminum or steel motors with unrestricted valve angle 401 cubic inches and larger must weigh 2400 lbs. with (2) at 1.000 and (2) at 1.050 restrictors. Gasoline Only.
- 12. 25 lbs. total lead weight in block form, no less than 5-pound blocks is required in front of rear motor plate with Aluminum block motor except the 525 motor will add 0 total pounds in front of the rear motor plate.
- 13. All lead weights must be in block form of no less than 5lbs and must be painted white with the car number on them.
- 14. All lead weight must be bolted to the frame of the car in a secure manner. Using at least 2 half inch bolts for each weigh that is bolted to the car. No stacking of weights permitted.
- 15. Any lead weight mounted behind the fuel cell must be mounted below the frame of the car.
- 16. Mounting of weight inside of the driver compartment or above the interior of the car is NOT permitted.

## 2.2 Cylinder Heads

- 1. Any eligible cylinder head may be used. Approval of cylinder heads means approval for all competitors within the same guidelines.
- 2. There will be a competitor or track protest rule within 10 minutes after the A-Feature checkered flag for \$1,800 for one-cylinder head or \$2,200 for both cylinder heads for IMCA, Wissota, SB2, GM Crate or factory steel untouched heads. This rule only applies when there is a minimum of five business days between the next Series' race. IMCA and Wissota heads will be sent to Brodix to be ensured they are stock approved heads for each series. SB2, GM Crate, or factory steel untouched heads will be sent to Speedway Motors to be checked for illegal porting or air flow increase.
- 3. A competitor can only protest the same competitor one time during the season.
- 4. When running SB2 heads they may be tested with a chemical, such as ether, to check for increased outside air flow. We are looking at taking the SB2 engines out of series competition in the near future, no later than the end of 2022.

# 2.3 Intake Manifolds

- 1. Intake manifolds for the crate engines (602, 604, 525) must remain as manufactured and purchased for the crate motor. Up to a 2" spacer plate may be used.
- 2. IMCA intake must be stock configuration as purchased for IMCA racing, may use up to a 2" super sucker. (Inside of the bottom intake manifold must be flat. No devices permitted inside of intake manifold to disrupt/enhance the air flow to the engine)
- 3. IMCA Chevrolet in
- 4. Take manifold may have the clover milled out to be an open intake. The sides must not be milled any bigger than stock and the ports and runners must not be changed from stock IMCA manifold. Spacer of only 1" may be added to this intake, no super sucker. The measurement of the allowed cutting will be 3.625 across and 3.625 front to back at the top of the intake where the carburetor plate is mounted. It may go down into the intake up to the maximum of 1" from the top of the intake where the carburetor gasket mounts and no farther than 90 degrees from the carburetor gasket surface. It may be less than 90 degrees no other grinding will be allowed inside the intake runners or fuel guide fins.
- 5. Intake Manifolds on a Wide Bore Engine may configure to be taller than 6" with a 1" spacer & a 1" restrictor/governor. If this motor seems to have more horsepower due to the heightened intake there will be a shorter restriction put on the spacer plate.
- 6. Intake manifolds may be used with a maximum total height of 6" from floor of plenum to the opening of the carb

- spacer pad. Intake manifolds must have a minimum of a 3.500-inch opening in any direction front to back or side to side at the top of the carb spacer pad to the base of the plenum which must be flat and contain no obstructions except for the blades of the runners. Intake manifold height is 6" including any spacer to the carb pad including gaskets when not using the restrictor/governor plate.
- 7. When using the 1" restrictor/governor, the measurement from the top of carb pad, including gaskets, will be allowed a total height of 6 1/2-inches on the inside of the intake manifold to the base of the plenum.

# 2.4 Spacer Plates

- 1. Governor plates must be 1" thick Keyser Manufactured part #100 125000 and must use inserts/restrictor sizes 100 125095, 100 125100, 100 125105, 100 125110, 100 125120, 100 125125, 100 125130, and 100 125135.
- 2. You may use 1 or 2 Spacer plates not including your restrictor/governor plate to hit maximum intake height. Spacer plates may be open style or 4-hole spacer plate, must be unaltered and be a cataloged part number through Keyser Manufacturing/Port City, Speedway Motors, or Wehrs Machine and purchasable for all competitors, with zero tolerance taper to enhance or increase the airflow to the engine.
- 3. Carburetor blending plates from Wehrs Machine, part number WM10100R 1" (part number must be legible at all times, no grinding or enhancing of plate, must remain stock), may be used under the 1" governor/restrictor plate. The only tapered blending plate that will be allowed will the Wehrs Machine cataloged part number WM10100R 1". May be used on any motor with no alteration to the plate. No weight penalty will be accessed when using this plate.

# 2.5 Ignition Systems

- 1. No MSD Rev Limiting Chip Rule
- 2. No onboard computers, micro-controllers, processors, automated electronics, recording devices, Electronic memory devices, memory chips, or digital readout gages of any kind permitted. Digital Tachometers will be allowed.
- 3. Only one 2 electronic firing module amplifiers is permitted, if used.
- 4. You will only able to run off one of <a href="two">two</a> firing option, crank trigger or distributor one MUST BE unplugged and may be changeable within reach of driver or within driver cockpit. Both firing options must be within 2 degrees when read with the timing light of the tech official. Changes must be done under the hood.
- 5. Only one Two ignition coil permitted, with a coil wire hooked directly to the distributor. No coil splitters.
- 6. NO Traction Control of Any Kind.
- 7. (1) MSD box #TBD will be used in place of the computer on the CT525

## 2.6 Engine Claim Rules, Crate Motors Only

- 1. GM 602, GM 604, & GM CT525 are all susceptible to a claim.
  - A. GM 602 = \$4000, US cash in denominations no smaller than \$20 bills claim, as purchased from GM no extra components
  - B. GM 604 = \$6000, US cash in denominations no smaller than \$20 bills claim, as purchased from GM, no extra components
  - C. GM CT525 = \$8000, US cash in denominations no smaller than \$20 bills-claim, as purchased from GM, no extra components
    - \*At this time there is no motors to be claimed.
- 2.—Claimer must pay an additional \$100 US cash for removal fee
- 3. A paid SLMR Series driver of either east or west competing in the Λ-Feature event (must make one lap) the owner, driver or crew member is eligible to claim engine Λ-B-C (see above)

  Cars being claimed must have finished in the top 5. A Feature positions. You don't have to be a SLMR Series.
  - Cars being claimed must have finished in the top 5 A Feature positions. You don't have to be a SLMR Series member to have your engine claimed.
- 4. Malvern Bank SLMR series has the right to impound the crate engine of any competitor at any time. If the engine has non-approved modifications, the engine may be confiscated by the Malvern Bank SLMR series and driver/owner accessed a fined.

- 5. Engine Claim notification must be done within 10 minutes of the drop of the checkered flag to one of the Malvern Bank SLMR series officials that is connected by radio to race director or tech officials. Money must be presented within 10 minutes after the notification of the claim. Money does not have to be on the driver in the race car before the claim is in process.
- 6. DISCLAIMER: If a paid SLMR series member's car needs to compete the following night(s) in the SLMR series or a NASCAR event the motor will be taken out after the second or third night of continuous competition. Non-SLMR series members whose engines have been claimed will be pulled the night of the claim, regardless if they plan to race the next night. The engine will be marked, serial numbers, and pictures of seal bolt will be taken the night of the claim. After the conclusion of the event(s) the claimer can decide to cancel the claim if the claimer & Malvern Bank SLMR series official agree the motor shows to have problems or sabotage.
- 7. If the driver denies the claim or the claimed engine shows any sabotage at any time during a claim the claimed driver will lose all points and earnings for that event and the previous event(s) in the claimed time period, a \$500 fine, will lose all points for the season and 3 nights of SLMR competition (not to go over into the next year). You will not be able to receive any winnings or contingencies until the fine has been paid. In the event of the deny or sabotage the claimed driver will not be able to compete in the SLMR with a claimable engine option (A-B-C- above) for 1 calendar year.
- 8. The claimer is not required to run this engine at any upcoming SLMR events.

## **2.7 Fuel** (NO Oxygenated Additives)

- 1. Crate Motors (GM602, GM604) will be allowed to use commercial pump gas up to E-85 or 99.9% Pure Methanol (99.9% pure methanol by adding 25lbs of additional weight in front of the engine plate.)
- Wissota Motors will be allowed to run alcohol. With (2) 1.200 and (2) 1.250 restrictors and 25 lbs. of additional weight in block form of lead will be added in front of the engine plate including any other weight penalty.
   Restrictors can be changed by Series director at any time with a minimum 24-hour notice to ensure level competition.
- 3. Racing Gasoline. (Preferred VP 110 or VP Late Model+) No Propylene.
- 4. Testing may be done with the digitron dielectric meter. It is the responsibility of the driver or owner before the races if you are in question of your reading.

## 3.0 Carburetors, Air Cleaners, & Headers

- 1. Any eligible carburetor may be used. Approval of carburetor means approval for all competitors within the same guide lines.
- 2. Carburetors limited to one (1) four barrel. Can use up to a 5" air cleaner flange. No Fuel injection of any style. All carburetors must use a cast or Billet main body with float bowl design and power valves. All carburetor boosters must be of the original shape of the Holley booster, no cross-shaft booster tubes. Must have 4150-style Billet metering plate, and the Willy's style super bowls will be allowed in the 2022 season.
- 3. Carburetor hold down studs must be drilled above the hold down bolts for possible sealing.
- 4. Carburetors can't be removed once through pre-tech without asking a SLMR Tech Inspector to watch them raise the carburetor.
- 5. Any eligible dry element round air cleaner will be permitted. (Min.12" Max.17" in diameter and maximum 5" in height.
- 6. Only round—metal air filter housing will be permitted. The top and bottom of the air filter housing must be solid and must be of the same diameter. A max. of a 1" lip will be permitted from the air filter element to the top edge of the air filter-housing top and bottom. The air filter housing must be centered and set level on the carburetor. It is permissible to attach a shield to air filter housing. The shield can be no higher than the height of the air filter element. Tubes, Funnels or any device which may control the flow of air will not be permitted inside of the air cleaner or between the air filter housing and carburetor.
- 7. Cowl induction may be used as long as the air box is designed to draw air from under the hood. One side or end of the air box must be open. Hood scoops will be permitted to be open in the rear only.
- 8. No carburetor air dams or devices allowed increasing the airflow to the carburetor, either inside or outside air

cleaner.

9. (1) O2 oxygen sensor can be built into each header and can be ran to a gauge mounted on the dash.

# 4.0 Mechanical Components & Driveline

## 4.1 Clutch

- 1. High speed multiple disc clutches are permitted.
- 2. All cars must be able to be put in and out of gear with the engine running and the car sitting still.

#### 4.2 Flywheel

1. All competing models must be equipped with a flywheel and an operable starter.

## 4.3 Bell Housing

1. A production manufactured steel bell or aluminum bell housing must be used. Must be purchasable for all competitors.

#### 4.4 Transmissions

- 1. OEM. Production manufactured 2 to 4 speed transmissions that are cataloged through dealer channels will be permitted. Bert, Brinn, and Falcon circle track transmissions are permitted.
- 2. All transmissions must have at least 2 speeds forward and one reverse.
- 3. No 5 speed, over drive or automatic transmissions allowed.
- 4. All transmissions must bolt directly to the rear of the bell housing which bolts directly to the rear of the engine block.

#### 4.5 Driveshafts

- 1. All drive shafts must be painted white.
- 2. All cars must have a 360-degree hoop toward front of drive-shaft, made of at least ¼" by 2" steel strap.
- 3. It is recommended to have a drive-shaft safety hoop built out of 4 or 5-inch diameter by 6-inch-long round tubing.

#### 4.6 Rear Ends

- 1. Full floating rear ends are compulsory. Rear end must be quick-change type and track approved.
- 2. Rear end coolers may be used, but cannot be mounted inside of the driver's compartment.
- 3. No open tube rear ends allowed.
- 4. No cambered rear ends permitted.
- 5. Axles must be made of steel only.

# 4.7 Wheels

- 1. Only aluminum wheels will be permitted. Maximum wheel width 14". Bead locking devices permitted on all 4 corners
- 2. Only approved wheel discs will be permitted. Approved wheel discs are wheel discs that are fastened to the wheel using a minimum of three (3),1/4 or 5/16-inch diameter magnetic steel hex head bolts. Foam style mud plugs are permitted.
- 3. Only aluminum wheel spacers will be permitted. Maximum 2 ½".
- 4. The combined weight of the wheel, wheel hardware, wheel disc and fasteners, and tire must not exceed 40 pounds\*. \*The maximum combined weight in this rule is based upon current tire rules and may need to be adjusted in the event of an alternate tire.

## 4.8 Brakes

- 1. Brake calipers must be manufactured of aluminum.
- 2. The brake caliper including brake caliper pistons must be used as produced by the brake caliper manufacturer.
- 3. Brake rotors must be manufactured of magnetic steel, stainless steel or cast iron.

- 4. Brake rotors must be used as produced by the brake rotor manufacturer.
- 5. Wheel hubs must be manufactured of aluminum or magnesium.
- 6. Wheel hubs must be used as produced by the wheel hub manufacturer.
- 7. The combined weight of the wheel hub, wheel bearings and seal, spindle nut and washers, brake rotor and attaching hardware, the axle cap, and the wheel spacer must not exceed 27 pounds.
- 8. All brake lines must be metal. No plastic lines, brake hoses must be steel braided.

## 4.9 Battery

- 1. Batteries can NOT be mounted in the driver's compartment. All Battery cables and battery cable e1nds must have a non-conductive covering to prevent electrical contact with any part of the race car creating electrical shortage.
- 2. (1) Battery disconnect is required to be installed to the negative battery cable. Must be in reach of the driver near the shifter or on the deck behind the driver seat accessible to safety crews. Recommended: to have the disconnect mounted in both locations.

## 4.10 Mirrors

1. No mirrors permitted inside or outside of car.

#### 4.11 Radiators

- 1. Only 1 radiator permitted for the purpose of cooling water. Radiator must be mounted in front of the engine.
- 2. Radiator overflow tube must exit towards the ground.

#### 4.12 Fan Blades

1. No electric fans permitted. No flat bladed fans permitted (Electric fan permitted with ct525)

## 4.13 Water Pumps

1. Water pump must mount in stock location.

## 4.14 Oil Cooler

- 1. Oil reservoirs must be mounted in front of rear end housing.
- 2. Oil reservoirs or oil coolers cannot be mounted inside of driver's compartment.

# **5.0 Suspension Components**

- 1. No Inerters are allowed
  - A. No rotating parts inside the damper.
  - B. No Inerter style dampers, either mechanical or hydraulic, or other type of primarily acceleration sensitive damping devices not permitted.
- 2. No Electrical adjusted or active dampers are allowed. No electrical wires, transmitting or receiving components will be allowed to be attached internally or externally to the dampers or mounted inside any component or dampers. No portion of the racecar including and not limited to shocks and spring components or chassis components may have the ability to communicate transfer/transmit/receive any type of digital or analog data or any language and or adjust or monitor in any way whatsoever including but not limited to a variation of a wireless remote device/phone/computer/tablet/iPad or a mechanical remote device.
- 3. Any new chassis design or component designs pertaining to and/or but not limited to shock absorber mounts must be submitted to Malvern Bank SLMR series/I-80 Speedway for approval before they will be permitted for use in competition. Manufacturer and/or competitor may be required to disassemble for complete inspection before instatement of new part is permitted.
- 4. One (1) drop chain (limiting chain) is permitted. For each side of the rear of the car. Must mount vertically from the frame to a bracket on the birdcage to axle tube. Bracket on the axle tube can have a bearing or clamped solid.
- 5. Bump stops and/or bump springs are permitted. <u>All bump stops and/or springs must be mounted on a shock with</u> the exception of a left rear drop chain assembly, 6th coil assembly and/or lift arm assembly. No bump sticks are

# permitted.

- 6. Suspension covers are not allowed. Rear covers on racecar are not allowed outside of your pit area. Spring and/or shock covers are permitted, but must be fastened directly to the spring or shock.
- 7. A Swing Arm and/or Z Link suspension is permitted as long as the Top and Bottom solid links are mounted on heims and run in the opposite directions of the bird cage. The Shock on a Swing Arm or Z Link rear suspension may mount to the bird cage or the bottom radius rod.
- 8. Suspension and/or rear end parts can be made of steel or aluminum. Aluminum mounting brackets are permitted.
- 9. Frame and/or suspension mounts must be welded or bolted solid to the frame and not move. I.e. Floating, sliding, pivoting and/or rotating mounts and/or brackets of any sort are not allowed.
- 10. Bolted components must match the correct bolt size with the hole (for instance no 3/8 bolts in a 1/2-inch hole will be deemed illegal) and be torqued to a min of 40-foot pounds per inch
- 11. Rear Suspension Mounts.
  - A. All chassis mounts must be double sheer.
  - B. Double sheer mounts must be 1/8" minimum steel and/or 1/4" minimum aluminum.
  - C. Sheer mounts must use minimum 5/8" rod ends with minimum 1/2" grade 8 bolts only. The bolt must be bolted through both sheer mounts.
  - D. Double sheer mount must be no wider than 4 inches with a minimum 1/2" inch grade 8 bolt with steel or aluminum spacers only.
- 12. Only one (1) mechanical traction device is permitted. Only one (1) pull bar or one (1) lift arm is permitted. No other options are allowed. Covers of any sort in any relation to the lift arm or pull bar are not allowed.

#### 13. Lift Arm & Pull Bar

- A. Floating, pivoting and/or rotating mounts and/or brackets of any sort (connected to and/or associated with the pull bar or lift arm) are not allowed.
- B. Lift arm is defined as a steel or aluminum triangulated bar that is connected at the top and bottom of the rear end housing, extending forward where it is connected to a shock, shock spring coil over combination and a limiting chain. One stabilizer bar is permitted to locate the front of the lift arm from left to right in the car.
- C. 6th coil or braking spring assemblies are permitted, must be in front of 5th coil shock.
- D. Pull bar is defined as a continuous assembly that is connected to the top of the rear end and extends forward to a solid mounting point located on the chassis. The mounting location at both the front and rear of the pull bar may be adjustable but must remain constant during competition (cannot be adjustable from the cockpit).

## 14. Radius Rods

- A. All rear suspension radius rods must be of a fixed length. No hydraulic cylinders, torsion bars, bump rods, spring rods, slider rods or shock type radius rods are permitted.
- B. Radius Rods must be a minimum of 1" diameter OD. Rods can be round, square, or hex shaped. Rods must be a minimum of .095 steel or .120 aluminum in tubing thickness.
- C. Heim joints must be a minimum 5/8, and a maximum 3/4" steel heims. No rubber bushings.
- D. ONLY Two (2) radius rods per side.
  - 1. Radius rods must be spaced on the frame a minimum of 6"
  - 2. Radius rods must be spaced on the birdcage a minimum of 6" and a maximum of 12"
  - 3. Measurements will be made from center of each radius rod bolt.
  - 4. All radius rods must be straight with the exception of the left lower that can have a bend for axle housing mount clearance.

#### 15. Axle Housing Mounts (Birdcages)

- A. Birdcages must be made of aluminum or magnetic steel, no exotic materials. Birdcages don't have to be made of the same material from side to side.
- B. Birdcages may consist of multiple barrels but must bolt or weld together to work as single barrel birdcage.
- C. Limited one birdcage (1) per side.
- D. Shock(s) and radius rods must mount to the birdcage.
- E. Floating, pivoting and/or rotating mounts and/or brackets of any sort are not allowed. All brackets or mounts attached to the birdcage must be bolted or welded solid.

- 16. Jack Bolts are permitted.
- 17. Rear Suspension and Suspension Components:
  - A. Axle Housing, Rear Differential
    - 1. The axle housing must be of the "closed tube" design utilizing "full floating" magnetic steel axle shafts.
    - 2. The center section of the axle housing must be manufactured of either aluminum or magnesium.
    - 3. Axle tubes must be one (1) piece. Axle tubes must be manufactured of aluminum or magnetic mild steel. Axle tubes manufactured of exotic; heavy materials will not be permitted. The outside diameter of the axle tubes must not exceed three (3) inches. Axle tube internal inserts or external sleeves will not be permitted. The addition of any ballast weight to the axle housing will not be permitted.
  - B. Axle Housing Mounts
    - 1. The only materials used to fabricate axle housing mounts (birdcages) that will be permitted is aluminum or magnetic mild steel. Axle housing mounts fabricated of exotic; heavy materials will not be permitted.
    - 2. When fabricating axle housing mounts detail must be paid to functionality. The completed axle housing mounts, when comparing the right and the left side, must be as similar in design as possible.
  - C. Rear Suspension Attaching (Radius) Rods
    - 1. The only materials used to fabricate attaching (radius) rods that will be permitted are magnetic steel or aluminum
    - 2. Aluminum attaching (radius) rods may be solid or tubular material. Magnetic steel attaching (radius rods) must be tubular with a maximum wall thickness of 3/16 inch.
- 18. Shock, Spring, and Suspension Penalties and Infractions: If violations are found during prerace technical inspection: The driver and or team will receive a warning and must meet full compliance before being allowed to compete. If a violation is found after qualifying has started technical inspection: No Winnings, Points, will be paid and a fine of \$1,000 may be assessed to the violating team and or driver.
- 19. One mechanical power steering pump permitted. Electronic steering components are not permitted.

#### 5.1 Shocks

- 1. Shocks must be constructed of aluminum or steel. Canister shocks are permitted.
  - A. The only external connection allowed to the shock is a single hose to a single remote canister with the option of a compression adjuster in the canister.
  - B. Compression adjuster and/or canister cannot be mounted within the reach of the driver.
  - C. Maximum shock body outside diameter is two (2), half-inch inches (0.50").
  - D. Maximum front shocks length is twenty-one inches (21"). Measured center to center of the shock eyes.
  - E. Maximum rear shocks length is twenty-seven inches (27"). Measured center to center of the shock eyes
  - F. Only 2-way compression/rebound adjustable shocks are permitted no 3 or 4 way adjustable.
  - G. Air shocks will only be allowed to attach on the left rear of the racecar. Air or gas shock on the left rear will be the only shock on the car without a compression rule. All other gas or hydraulic shocks on left front, right front, right rear, or 5<sup>th</sup> arm will need to be compressible by hand once spring has been removed and set in race setting.
- 2. No cross connected shocks are allowed.
- 3. No "Rod Through" designs are allowed.
  - A. "Rod Through" shocks are defined as those shock absorbers in which the piston rod protrudes from both ends of the shock body.
- 4. Shock Locations
  - A. Only one shock per wheel is permitted at the left front, right front, right rear corners.
  - B. Left rear must have one shock behind the axle tube and may have one traction (dummy) shock on the front side or top of axle tube. Must mount vertically to the birdcage or clamp bracket.
  - C. One 5th Coil Shock permitted.
  - D. One 90/10 optional shock may be mounted above lift arm on upper lift arm plates. Must be mounted towards

the front of the car lying parallel with the car. Shock must mount within 3" of the centerline of the rear ends center section.

## 5.2 Springs

- 1. Stacked coil spring permitted. Leaf Springs will be permitted on rear end only.
- 2. Coil Springs must be made of magnetic steel. Leaf Spring must be made of magnetic steel of approved composite material.
- 3. Two or more stacked springs mounted to the torque arm on one shaft or shock for traction purpose is permitted. One spring only for brake side of torque arm.
- 4. Torsion bars are not allowed in rear of car.
- 5. Spring preload adjustments for coil springs must be made using mechanical adjusting nuts on the shock body.
- 6. Spring preload adjustments for leaf springs must be made using a mechanical adjusting device such as an adjustable shackle or threaded rod type mount.
- 7. Other than spring dampening by the shock absorber, hydraulic, pneumatic, or electrically controlled adjusting devices, (static or dynamic) that affect spring preload or race car heights will not be permitted.

# 5.3 Wheel Base

1. The minimum average wheelbase is 103 inches. With ¼" tolerance.

# 5.4 Droop Rule

(The droop rule will be in effect starting of the 2022 season, every driver will receive up to 2 fix it tickets, a maximum 2" tolerance or 53" will be given with the first fix it ticket and up to a maximum 1" tolerance or 52" will be given for the second fix it ticket up until June 8<sup>th</sup>, 2022. After the June 8<sup>th</sup> date the droop rule will be enforced as printed below and if not met will result in disqualification.)

A.) A vertical travel limiting chain must be installed on the left rear of the car from the left rear axle housing to the frame. The travel limiting chain must attach to a bearing type mount on the left rear axle tube between the birdcage and the edge of the left rear bell of the axle housing, and to the left rear frame directly above the chain mount on the rear axle. Travel limiting chains must be installed so that when taunt they are as close to vertical as possible. One compliance device may be used. The compliance device must not be more than one inch (1") thick, two and one-half inch (2 ½"), (without a load applied) and remain completely open and visible. Compliance devices can be rubber or any like material but must not be installed in any type of a canister. Springs, spring loaded, and/or pneumatic devices will not be permitted. No tapered, beveled or roller skate style of compliance rubber will be allowed. Must be solid material, same diameter top to bottom, not hollowed or drilled to soften material.

B.) The travel limiting chain including the compliance rubber must be installed so that when the car is jacked up from the rear the chain assembly is tight (no slack). The travel limiting chain is subject to inspection at any time during the event at the discretion of the Officials, including but not limited to, qualifying, heat races, B Features, and A Feature. Cars will be jacked up on the under-slung frame rail between the center of the rear axle and the Panhard bar mount. The left rear under-slung rail must be located between the left rear birdcage and the edge of the left rear axle housing bell. If a chassis is not of the under-slung design, then the car will be jacked up on the left rear frame rail closest to the Panhard bar mount. Cars will be jacked up until a .040"-inch shim will slide between the left rear tire and the ground. The right rear tire must also be off the ground. Once the car is jacked up as described a vertical measurement will be taken from the ground to top trailing edge of the rear deck bar, 6"-inches inboard of the left rear quarter panel outer edge. The measurement must not exceed 51"-inches. (Cars without a left rear underslung must not exceed 50"-inches.).

## 6.0 Tire Rule

Hoosier WRS or WRS-2 with the D55 compound will be the series tire rule, 11.0/88, 11.0/90, or 11.0/92. 11.0/90 on fronts and left rear only. 11.0/92 right rear only. Exceptions below.

2. Hoosier (28.5) M30 or W30 allowed on fronts only at designated race tracks. Grooving of the circumference factory pre-molded cross hatch marks only. The new groove is not to exceed the pre-molded marks. A #1 grooving head and blade to replicate the original groove.

<u>Tracks allowing the choice of Hoosier (28.5) M30, W30, or WRS 55 for the fronts only include</u> 300 Raceway

**Cresco Speedway** 

**Fayette County Speedway** 

**Hamilton County Speedway** 

**Independence Motor Speedway** 

**Kossuth County Speedway** 

**Mason City Motor Speedway** 

Rapid Speedway

**Sports Park Raceway** 

- 3. NO grooving, siping, or needling or altering beyond 24 grit sandpaper in removing the glaze will be allowed on a tire. The tech directors will be the final decision if the tire is allowed to run or not.
- 4. Tire stamping will begin in the 2022 season.
- 5. The rear tread width can be no wider than the front tread width. (Both Sides)
- 6. The composition and character of the tire may not be altered from original. This includes NO soaking, softening, conditioning, chemicals of any kind or recapping. D-55 tire should be no softer than 55 points on the durometer, warmers and any other means of artificially warming tires are prohibited.
- 7. Recommended washing tire with water only. Warning soaps and cleaning products may be detected as chemicals or altering the tires and is subject to disqualification, fines and suspension.
- 8. You may only use sandpaper up to and including #24 grit to remove the glaze on the top layer of tires. When you are completed with the sanding of the tires, the edges of the tread block must remain the same as the edge of the block next to it. You will only be able to create the look of a worn tire and not something of a different tire face appearance (example: no wavy tread pattern or deep grinding will be allowed). Metal grinding disks are not permitted.

# 9. **Durometer**

First offense for the 2022 season: Fail durometer inspection for time trials and you will start tail end of an assigned Heat Race. Fail pre-heat race durometer inspection and you will start tail end of an assigned B-Feature event. Fail pre-race B-Feature or A-Feature inspection and you will be finished for the night.

Second offense for the 2022 season: \$1,500.00 Fine and 500 points deducted plus any winnings that have accrued for the event, violator(s) will assume all costs included in any testing procedures, no points and no money will be awarded for that event.

- 10. Tire protest: Any driver, owner, or crew chief competing in the A feature event (must take a lap) are eligible to protest tires for chemical compounds or conditioning. Cars being protested must have finished in the top 5 A feature positions. Protest fee will be \$300 for 1 tire 1 test. All other tires on the same car can be tested for an additional \$250 per tire. Totaling \$1050 for all 4 tires on the same car being protested at the same event. Protest must be cash and bills must be in denomination of not less than \$20.
- 11. Tire protest and money must be presented within 15 minutes of the drop of the checkered flag to one of the SLMR tech officials. Winnings of the protested tire will be held until test comes back along with any other winnings made until the tests come back.
- 12. Tire Sample(s) will be cut with a blade/tool provided by the person being protested.
- 13. Denial Refusal of Tire protest will result in a Disqualification for that night (loss of both winnings & points) Loss of 100 additional points & a \$500 fine due before you can compete at a Malvern Bank SLMR series event again. Protester will receive his/her money back if protest is denied.
- 14. If testing proves tire sample to be illegal you will lose winnings for the night you were protested and all points accumulated in the season up to the protested date. \$500 fine due before you can compete with the Malvern Bank SLMR series again. You will not be able to compete in the next 3 SLMR series events (not to roll over into the

- following season.)
- 15. If Protested tire comes back to be illegal the person who protested the tire(s) will receive the Protested driver's winnings for that event up to the amount that was used to protest.

# 7.0 Bodies / Chassis

- 1. Nose piece and roof must match body style of car.
- 2. All cars must have a minimum of one-half inch (1/2") and a maximum of two (2") inches of roll at top of fenders, doors, and quarter panels. A sharp edge or angle will not be permitted. Body roll must go from sides over interior, not interior over sides.
- 3. Floorboards and firewall must cover the driver's area and be constructed to provide maximum safety.
- 4. Driver's seat must remain on the left side of the drive line.
- 5. Front window bars are mandatory.
- 6. Legible numbers, at least eighteen inches (18") high are required on each side of the car and roof.
- 7. No fins or raised lips of any kind are permitted anywhere along the entire length of the car.
- 8. Right side body line must be straight from front to rear with a one-inch (1") tolerance up and down, left and right.
- 9. No "slope noses" or "wedge cars" permitted. Noses must be stock appearing, subject to Series template.
- 10. No "belly pans" or any type of enclosure on bottom of cars will be permitted. Skid plate to protect oil pan is permitted.
- 11. No wings or tunnels of any kind are permitted underneath the body or chassis of the car. A maximum of one (1) stone deflector, for rear mounted oil pumps, oil filters, and for the main oil tank will be permitted. The deflector may be made of steel, aluminum, carbon fiber, or heavy gauge wire. Can run from rear of motor mount to in front of the four bar brackets not to cover bracket. Not to be above the top frame rail. Not to exceed below the bottom frame rail.
- 12. All body panels must be solid. No holes, slots, or air gaps are permitted. NACA ducts or NACA style ducts are not permitted. One hole for interior (deck) mounted oil cooler is permitted.
- 13. All non-approved bodies or any section/s of the body can or will be assessed a fifty pound (50#) minimum weight penalty at the discretion of the Technical Director.
- 14. No panels of any kind under the rear deck running from the front to the rear of the car. Bracing from fuel cell top from front to rear is legal.
- 15. Any air cleaner scoops used must be positioned in front of or around the air cleaner and cannot exceed one (1") inch in height above any part of the air cleaner. The scoop cannot be designed with fins or raised edges to direct airflow. The scoop cannot extend behind the rear of the air cleaner and must have a maximum width of seventeen inches (17") at the rear, with a maximum of ten inches (10") width at the front and cannot have more than one inch (1") opening in height at the front.
- 16. No cockpit or driver adjustable shocks, hydraulic or pneumatic weight jacks, trackers, MSD boxes or similar adjustable components of any kind are permitted inside the cockpit of the car. Taping over of any adjuster is not permitted. The offending component must be removed from the cockpit.
- 17. Body Skew: The measurement of the left rear quarter panel from the center of the hub to the rear of the quarter panel should not exceed 54"-inches. Measuring 6'-feet from the left rear quarter panel to the right rear quarter panel, then 8'-feet forward along the right-side door, the diagonal measurement from that point to the top of the left rear quarter panel should not exceed 118"-inches. Will go into effect June 8th, 2022.

#### 7.1 Stock Nose Pieces

- 1. Technical Inspector must approve all stock nose pieces.
- 2. Nose pieces must be made of molded type material.
- 3. Two (2) piece noses must be fastened together in the center. No spacers to gain width or cutting to narrow overall width of the nose are permitted.
- 4. The nose must be mounted flat where filler panel and nose piece meet. Nose piece may not be altered from its original shape. Nose piece will be checked with a template. Nose will be pushed against mounting supports to gauge its profile against template.

- 5. Adding to the bottom of the OEM valance to achieve lower ground clearance is not permitted.
- 6. A stock nosepiece can extend a maximum of fifty-two inches (52") from the center of the front hub to the farthest point extending forward. (1" Tolerance)
- 7. Front fender flairs must be made of plastic and cannot alter the original shape of the nose piece. The front fender flairs cannot extend beyond the front tire more than one inch (1") in width with wheels pointed straight.
- 8. Front fender flairs must have collapsible support.
- 9. Front fender flairs can extend a maximum of three inches (3") above the fender tops and hood.
- 10. Front fender flairs can extend a maximum of four inches (4") above where the filler panel meets the hood.
- 11. The front and sides of nose panels cannot be cut or altered, with the sides mounted no lower than 4 inches from the ground with the car at racing height. The sides of the nose panels must be parallel to the ground.
- 12. The racetrack officials must approve any bars ahead of the nose panel.
- 13. The nose piece must have a headlight decal package attached. One warning will be permitted and then the car must run contrasting color tape in the shape of a headlight.
- 14. Holes for cooling purposes must be in the center area (in front of the radiator) of the nose and/or valance.

# 7.2 Roof & Roof Supports

- 1. The roof length size must be a minimum of forty-four inches (44") to a maximum of fifty-four inches (54").
- 2. The roof width size must be a minimum of forty-eight inches (48") to a maximum of fifty-two inches (52").
- 3. Roof must be stock appearing and mounted directly to roll cage with no more than a ½" spacer.
- 4. Roof height must be between forty-five inches (45") and forty-eight inches (48") from the ground.
- 5. A maximum one and one-half inch (1.5") roll, turned downward, is permitted along the front edge of the roof. A maximum one-inch (1") ninety-degree (90°) bend is permitted along the rear edge of the roof. (Roll permitted to help strengthen roof).
- 6. A maximum one and one-half inch (1.5") roll, turned downward, is permitted along the front edge of the roof. A maximum one-inch (1") roll turned downward is permitted along the rear edge of the roof. (Roll permitted to help strengthen roof).
- 7. No odd shaped roofs permitted.
- 8. All roof side (sail) panels must extend to the edge of the body. Maximum (no tolerance) right side sail panel size seventeen inches (17") at the top and forty-three inches (43") at the bottom. Maximum (no tolerance) left side sail panel size seventeen inches (17") at the top and forty-three inches (43") at the bottom and minimum fifteen inches (15") at the top and forty inches (40") at the bottom. The window area may be covered with clear Lexan or transparent material. Both roof support openings must be covered or both must be left open, if left open the openings must maintain a border frame of 2-3" at the top and sides and 3" at the bottom. Decals will be permitted but must meet the dimensions in the drawing and must be approved by the Technical Inspector. Maximum two-inch (2") radius (No Breaks) in either direction in rear roof side panels is permitted.
- 9. Sail Panel Windows Openings must be a border frame of 2-3" at the top and sides and 3" at the bottom with no tolerance +/-0"
- 10. Front posts must be flat and in uniform width from top to bottom four inch (4") maximum width. Left and right sides must match in size.
- 11. Left side of car sun shields, three-inch (3") maximum, must be able to hinge for easy exiting of car.
- 12. Roofs may be made of fiberglass or aluminum.
- 13. The roof must be mounted parallel to body and near center of the car.
- 14. All cars must have a minimum of three inches (3") and a maximum of four inches (4") between sail panel and spoiler side where they meet the deck.

#### 7.3 Front Fenders & Hoods

1. Hood can drop one-inch (1") with a one-inch (1") tolerance measured at the back edge of the hood and in front of the carburetor from left to right side of car. Fenders must taper from outer edge to hood in a straight line. Fender material must be flat with no bubble. Fender top must have ten inch (10") minimum width.

- 2. Fenders are not permitted to gain height from rear to front of car. Will check with a string from the top of the quarter panel at the spoiler to the top of the highest point of the fender. Must be flat (1" tolerance)
- 3. No part of fender or hood can be outside of the body line.
- 4. The front fender can be a maximum of thirty-six inches (36") in height with one (1") tolerance. Height is measured vertically from the ground to the top of the fender behind the front tires.
- 5. If the hood is dropped, the deck must remain flat. If your hood remains flat, a drop of the deck will be allowed.

  The maximum drop will be 2"-inches. If the interior is dropped, the hood and fenders must remain flat behind the air cleaner.

#### 7.4 Doors

- 1. Door to door cannot exceed seventy-seven inches (76") in width at the top of the doors. (1" tolerance)
- 2. Door to door cannot exceed eighty-nine inches (89") in width at the bottom in the center of the car.
- 3. At no point can the door sides break in towards the center of the car between the top and bottom. One-inch (1") tolerance including plastic.
- 4. The minimum ground clearance permitted is three inches (3").

## 7.5 Quarter Panels

- 1. Quarter panel can be a maximum of forty-nine inches (49") from center of rear hub to rear edge measured horizontally. Quarter panel can be a maximum of fifty-four inches (54") from center of hub to rear T-bar at spoiler.
- 2. Tire clearance from body must be a minimum of two inches (2"). No wheel skirts permitted.
- 3. At no point can quarter panel sides break in towards center of the car between the top and bottom. One-inch (1") tolerance including plastic.
- 4. Right side quarter panel must be straight in line with the door. Will check with a string from the top of the quarter panel at the spoiler to the top of the highest point of the fender. Must be straight with a one-inch (1") tolerance.
- 5. Left rear quarter panels must extend downward from the deck a minimum of thirty-three inches (33") and a maximum of thirty-six inches (36") including the plastic. Measured at the front and rear of the quarter panel. Right rear quarter panels must extend downward from the deck a minimum of twenty-seven inches (27") without the plastic and thirty-one inches (31") with plastic. Measured at the front and rear of the quarter panel. One-inch (1") tolerance.
- 6. The maximum height from the ground to the top of the rear deck at the top of the rear quarter panels (spoiler hinge bottom) is thirty-eight inches (38"). One-inch (1") tolerance.
- 7. Deck height will be measured with the nosepiece splitter at a maximum height of fifteen inches (15") with no tolerance from the ground to the top (highest point) of the splitter.
- 8. Plastic quarter panels will be allowed on the right side of the car only. Plastic quarter panels will not be permitted on the left side of the car.

#### 7.6 Interiors

- 1. Interior is permitted to be dropped to the middle (just behind the seat) of the car a maximum of five inches (5") below the top of doors and a minimum of twelve inches (12") below the roll cage.
- 2. Interior must be fastened flush at the top of the door and quarter panels and must taper gradually towards the center of the car. Maximum of seventy-degree (70°) angle from the deck.
- 3. Interior must run in a straight line from behind the driver's seat to the rear spoiler.
- 4. Interior (deck) must run in a straight line (vertical and horizontal) across the back of car at the spoiler.
- 5. All interiors must be made of aluminum.
- 6. If interior is flat through the car, it must maintain a twelve-inch (12") clearance from roll cage for easy exiting from either side of the car.
- 7. Cowl (driver protection) panels in front of the driver may have a maximum of three inches (3") in height. The cowl panel must taper to the deck or end in line with the steering wheel.
- 8. If interior is dropped at firewall/back of hood, that portion of the firewall must be filled in vertically with aluminum. Interior may be dropped a maximum of two inches (2") from the top of the hood.

## 7.7 Spoilers

- 1. Rear spoiler must be manufactured of material of adequate strength, such as Lexan, Aluminum, or Carbon Fiber.
- 2. Rear spoiler material maximum eight-inch (8") height measured from deck to tip of material. Maximum seventy two-inch (72") width between outer edges of spoiler sides.
- 3. Rear spoiler is not permitted to be suspended above the deck to create a "wing effect."
- 4. Rear spoiler must begin where quarter panels end. No extended decks permitted.
- 5. Maximum of three (3) rear spoiler supports. Option of two (2) additional one-inch (1") aluminum braces.
- 6. Spoiler supports cannot be mounted wider than the top of the quarter panel.
- 7. Spoiler must be straight (vertical and horizontal) where it mounts to interior (deck) panels.
- 8. All spoiler braces will be required to fit the series template, be no higher than 4" at the front of the base and can be no higher of extend rearward past the rear spoiler.
- 9. Spoiler braces will be permitted to have up to a ½" break in them.

## 7.8 Covers

1. Car opening covers are not permitted. Exception: in the event of rain or inclement weather you may cover your car until the weather passes or the rain stops.

# 7.9 Frames & Windshield Screens

- 1. No aluminum frames or bumpers permitted in construction of car.
- 2. Minimum 103" Maximum 105" wheelbase.
- 3. Rectangle or Square Tubing: i.) The frame of all cars must be constructed of two two-inch) by two-inch (2") minimum rectangular or square tubing with a minimum of eight-inch (8") circumference and a minimum of eighty-three thousandths inch (.083") wall thickness.
- 4. Round Tube Frame: i.) The frame of all cars must be constructed of a minimum of one and three-quarter inch (1¾") round tubing and must have a wall thickness of eighty-three thousandths inch (.083") wall thickness minimum.
- 5. If rear bumper is stubbed, it may only extend a maximum of eight inches (8") beyond frame. Any stubbed rear bumpers that extend eight inches (8") or more beyond frame must be rounded and directed towards the front of the car.
- 6. It is recommended that all cars be equipped with a tow hook or strap.
- 7. All battery supports must be braced in two axis two horizontal and one vertical.
- 8. All frame and chassis components must be welded or bolted together. No sleeves, slip couplings. etc.
- 9. All main cage and door bars must be 1.5" od x .083 wall minimum.
- 10. Bars in the windshield area will be required from left 1 ½ inch down tubes to right 1 ½ inch down tubes connecting roof hoop to the cowl area there must be ½ inch tubes (vertically mounted) spread a maximum of 6 inches.
- 11. Screen across the full area from left 1  $\frac{1}{2}$  inch down tube to right 1  $\frac{1}{2}$  inch down tubes, no bigger than 1x1 squares and no smaller than  $\frac{1}{2}$  x  $\frac{1}{2}$  squares across the whole front area.
- 12. All cars are required to use a roll cage with at least 3 horizontal bars across the driver's door.
- 13. All competing models will be required to have a vent window bar and a bar in the center of the roll cage over the driver's head.
- 14. All cars will be required to have a bar to protect the driver's feet.

# 7.10 Roll Cages

- 1. Cars must have a suitable steel roll cage in driver's compartment.
- 2. Side roll bars are mandatory and must extend into the door panels.
- 3. A minimum of three (3) bars must be used on the left side of the car. Each bar must be a minimum of one and one-half inch  $(1\frac{1}{2})$  in diameter with a minimum thickness of ninety-five thousandths inch (.095).
- 4. Roll cage must be welded to the frame.
- 5. Roll cage must be above the driver's helmet. 38" minimum between floor pan and the bottom of the roll cage

- 6. No "fin-shaped" or "foil-shaped" add-ons permitted on any part of the roll cage. The entire roll cage must be constructed of round tubing only.
- 7. Roll cage padding certified to SFI Spec 45.1 is required anywhere the driver's helmet may contact the roll cage while in the driving position.

# 7.11 Door Plate (Intrusion Plate)

A collective effort of chassis manufacturers; crew chiefs; engineers and racers have provided the following images and developed two additional intrusion plate designs which have been approved for competition.

#### 1. DIRECT WELD – INDIVIDUAL PLATES

A minimum 1/8" (.125") thick magnetic steel intrusion plate on the driver's side door bars is mandatory. Individual plates between door bars are permitted but must be weld around the perimeter.



## 2. APPROVED FOR COMPETITION: WELDED TABS/BOLT ON PLATE

Minimum 1/8" (.125") thick magnetic steel intrusion plate measuring a minimum of 16" x 26". Intrusion plate must be bolted to fabricated 1/8" (.125") magnetic steel tabs, welded securely to the chassis, using a minimum of eight (8) x 3/8" Allen button head bolts.

A minimum of three (3) fabricated 1/8" (.125") magnetic steel tabs and 3/8" Allen button head bolts required across top of the intrusion plate, a minimum of three (3) fabricated 1/8" (.125") magnetic steel tabs and 3/8" Allen button head bolts required across the bottom of the plate, and one (1) fabricated 1/8" (.125") magnetic steel tabs and 3/8" Allen button head bolt in each in the middle front and middle rear of intrusion plate.



## 3. APPROVED FOR COMPETITION: INDIVIDUAL DOOR BAR CLAMPS/BOLT ON PLATE

Minimum 1/8" (.125") thick magnetic steel intrusion plate measuring a minimum of 16" x 26". Intrusion plate must be bolted to a minimum of six (6) approved-design door bar clamps using the included  $12 \times 1/2$ " Allen button head bolts per the manufacturer's specification.

A minimum of three (3) approved-design door bar clamps and the included six (6) x 1/2" Allen button head bolts required across top of the intrusion plate and three (3) approved-design door bar clamps and included six (6) x 1/2" Allen button head bolts required across bottom of intrusion plate.

Vendor and part number must be clearly labeled on part.

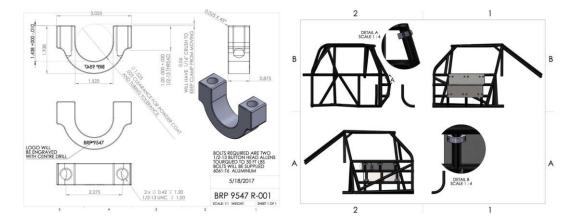
Current approved-design door bar clamps (as of June 6th, 2017) – in alphabetical order:

Manufacturer(s): Allstar Performance – Part Number: ALL4198

Bicknell Racing Products – Part Number: BRP 9547

Wehr's Machine & Racing Products – Part Number: WM397

(no other manufacturer has submitted a design for approval at this time)



#### 7.12 Fuel Cells

- 1. Commercially manufactured fuel cells mandatory, the only fuel cells that are approved are those that meet and/or exceed the FIA/FT3 or SFI 28.3 specifications, NO alterations (example: alterations to top plate, removal of foam, etc.). fuel cell capacity may be from 5 to 32 gal including fill spout. You may purchase a kit to make existing fuel cells FIA/FT3 or SFI 28.3 specifications are legal. Fuel cells that are not contained within a welded steel tubing "rack" must have two (2) equally spaced steel straps that measure two (2) inches wide by 1/8 inch in thickness that completely surround the fuel cell. The straps must be bolted to the frame. Longitudinal (front to rear) orientation is recommended for strap mounting. Fuel cell cannot extend below rear end tubes.
- 2. Fuel cells must have non-vented caps, rollover valves in return and vent lines, must pick up from the top of the fuel cell. Willy's Carburetor roll over plate part #WCD4000 is approved for competition.
- 3. Fuel cell guard must be made of at least 1" tubing and must extend to the bottom of the fuel cell.
- 4. No electrical fuel pumps allowed. (Belt driven fuel pumps or mechanical pumps will be permitted)
- 5. Fuel Cell Can must be sixty thousandths (.060) aluminum or twenty (20) gauge steel.
- 6. Threaded on caps are recommended.

EIRI (except in rare instances) Decisions of the officials are final and binding without exceptions! Any rule changes or clarifications during the course of the year will be published, and will be considered as an official part of the rules. Penalties and or fines may be awarded up to one week after the checkered flag.

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