

## MUFFLERS REQUIRED

### RaceSaver® Sprint Series 2023 rules

**Rules are meaningless, if not consistently enforced. RaceSaver® participants should insist on proper rules enforcement. Passionate racers, supporting RaceSaver® principles, are the bedrock of rules enforcement.**

**Preventing racers from spending their last dollar is nearly impossible, but, RaceSaver® rules, nationally proven over 26 years, make it possible for budget racers to be competitive. You can build an engine for less than \$6000 that can compete with engines costing 3 times as much. We have documented proof of RaceSaver® engines producing over 435 hp. using stock rods, crank, and cast pistons. One engine (serial #004) has raced over 10,000 laps in 16 years with the never freshened, original parts. This untouched engine produced 450 horsepower last year before going to the RaceSaver® museum.**

**Only registered and certified RaceSaver® engines will be allowed to compete. The heads are marked with 2 sets of serial numbers (BroDix & RaceSaver®) and both logos (RaceSaver® & FGRS). These heads are registered with RaceSaver® by their serial number at the time of sale. Registered head serial numbers are in our master head files. Head serial numbers must match our serial number registry to be allowed to compete in RaceSaver® events. RaceSaver® events will require a registration hard card from RaceSaver® in order to compete. The hard card will carry the name, address, head serial numbers, seal serial numbers, and home region. All new engines will be required to obtain a hard card at the time of engine sealing. Existing engines may obtain a hard card by contacting RaceSaver®.**

**All engines must be sealed with RaceSaver® serial numbered seals before they are permitted to compete. RaceSaver® personnel certified to seal engines are available throughout the country. The bolts must be drilled for sealing wire on: 2 adjacent cylinder head bolts on each head, 2 intake bolts, and 2 timing cover bolts. All logo and trademark stamps must be intact at time of inspection. Detailed information on sealing procedures are available by contacting RaceSaver®.**

**RaceSaver® maintains comprehensive documentation on RaceSaver® heads and sealed engines. This includes the history of registration, tech inspections, and repairs. The documentation and hard card program enables consistent application of the rules nationwide. A valid hard card will facilitate identification of RaceSaver® sealed engines and speed up track tech inspection. Pertinent tech information is available to our tech inspectors to assist them in maintaining RaceSaver® rules.**

**RaceSaver® heads are available directly from RaceSaver® or our authorized dealers. RaceSaver® keeps 12 pair of heads ready to ship in stock at all times.**

**For Detailed Information on rules, or to order heads: RaceSaver®**

**Call: RaceSaver® Sprint Series @ 540-923-4541 540-923-4543 cell 540-229-1828**

**Web sites: [www.racesaver.com](http://www.racesaver.com) or [www.frenchgrimes.com](http://www.frenchgrimes.com)**

**Disclaimers: These rules are offered on an advisory basis only. Suitability of use must be determined by the user. The rules and/or policies set forth herein are designed to provide for the orderly conduct of racing events. These rules shall govern the conduct of all events and by participating in these events, all participants are deemed to have complied with these rules or policies.**

**NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF, OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS.**

**They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM USE OF THESE RULES.**

**The RACESAVER® Sprint Series is comprised of all volunteer, uncompensated officials who may not be held accountable for any actions taken by participants, host race tracks or their safety crews. By participating in said race events, all participants acknowledge that: Racing is a dangerous sport that could result in injury or death to a participant, spectator or official, and the suitability of the track, race conditions, and safety considerations is solely their responsibility.**

### **Objectives:**

**This is recreational racing. Safety and cost containment are our objectives. Respect, for competitors, fans, and promoters, is fundamental to our success. Racers and crews are reminded that we are guests of the race tracks. We should be respectful of our hosts decisions and procedures. We should all leave our pit area trash free. All teams should carry containers to remove their trash and any waste fluids.**

**Safety Recommendations: In order to facilitate rapid response, Fire extinguishers should be readily available. A teams support personnel on a four wheeler should wear a fire suit, gloves, and a helmet. Four wheelers should have fire extinguishers mounted on them. Water based foam systems will help pull heat away from driver in a fire. Firefighting efforts should concentrate on suppressing the fire on the driver and removing him first. Tracks should be made aware that methanol burns without much visible flame. As a precaution, anytime there is a significant crash, fire apparatus should respond, even if there is no apparent fire. Safety awareness is everyone's responsibility and this should be stressed at each drivers meeting.**

**In support of our emphasis on safe recreational racing; specific safety protocols must be followed by all regions. These procedures need to be integrated with host race tracks. Events have demonstrated that our safety protocols should be observed, and must take precedence over track procedures that could possibly be less effective.**

- 1: All new prospective RaceSaver® drivers will be interviewed by their regional director and/or their advisory board before being allowed to compete.**
- 2: Drivers new to sprint cars must demonstrate their understanding and ability to properly start and stop the car safely before they are permitted to compete.**
- 3: Cars are not permitted to be started or moved under their own power in an active pit area.**
- 4: A driver must wear all safety gear, including helmet, and must be fully strapped in, before being permitted to start the car.**
- 5: Cars may only be started in one of 2 places: A: On the race track. B: In a specifically designated starting area. Such an area must be reserved for the car being started and the push vehicle; and not accessible to the active pits.**
- 6: Upon exiting either the racetrack or designated starting area the car must be placed in neutral. Cars will be moved back to their pit area by push vehicles.**
- 7: On board fire suppression systems are strongly recommended, as are fire extinguishers racing in each tow and push vehicle.**
- 8: Injuries can happen even when cars are not running. In the event the facilities ambulance and EMT's do not arrive at the same time as the pits open, participants must be aware there is no safety net for any injuries until they arrive.**

#### **Engine Rules:**

**1: Only the following engine blocks will be permitted. GM 305 V-8s with the following approved casting numbers: 361979 460776 460777 460778 14010201 14010202 14010203 14088551 14016381 14016382 14016383 14094766 355909 14093627 14101147 10243878 4715111 10046164 14102058. A specific Dart Machinery block, purpose built and approved for RACESAVER®, competition is the "Little M" "B" block: pn. 31151411.**

**This block Is no longer manufactured. There is a new DART block marked DRT 305 that has been approved by RaceSaver (R). In order to be legal for RaceSaver(R) competition this block cannot be lightened, and must maintain a block deck height of no less than 9.000 inches. All identifying marks cast or stamped in the block must remain intact and visible.**

**2: If a lightened block is utilized any, and all, ballast needed to make weight must be mounted between the front and rear motor plates. Such weight must be secured by a minimum of 2- ½” bolts, painted white with the car number affixed to the weight. Also read car rule #3 to clarify what may constitute ballast.**

**3: A maximum of 315.9 cubic inches will be permitted (+/-0.0). Stroke 3.480" (+/-0.020) Max bore 3.801. If 3.5” stroke, max bore is 3.790 Bore: Plain cast iron. Sleeves will be permitted for repair only.**

**4: Only flat top pistons with valve reliefs will be permitted. Pistons may not protrude**

from cylinder bore.

**5: Only an iron or steel crankshaft, with a minimum weight of 48 lbs. will be permitted, (-1%). The main bearing diameter will be 2.450 ( -.030). Weight added to crank except balance metal, which must be welded in place, will not be permitted.**

**6: Only 5.700" steel connecting rods, with a rod journal dia. 2.100 (-.030) will be permitted. Oil pan may be removed for inspection at any time.**

**7: Only chain cam drives will be permitted. Variable cam timing will not be permitted.**

**8: Only plain hub or SFI approved damper will be permitted. The water pump must remain in the stock location.**

**9: Only solid .842 diameter ferrous metal flat tappets will be permitted.**

**10: Only a cast iron cam, with a firing order of (18436572) will be permitted.**

**11: Only a straight wound spring with a flat damper, that conforms to the specifications will be permitted. PSI @ seat 90-120#, @.500 lift 330-355#, Inst. Ht. 1.700 -1.820, Dia. 1.262 +- .005, Wire dia. .193 +- .002, Free ht. 2.130 max. 1.950 min., 5 full coils +/- 1/8th turn as measured from tail to tail.**

**12: Only vented, wet sump, in pan, oil systems will be permitted.**

**13: Only rockers centered on, & retained by the 3/8" rocker studs will be permitted.**

**14: The maximum valve lift permitted is: (.510" int. .535" exh.) @ zero lash @ valve retainer. Only standard size & configuration, 7 degree retainers and keepers will be permitted.**

**15: Stud girdles, rev kits, or valve train stabilizers, will not be permitted:**

**16: Repositioning, boring or bushing of cam or lifter bores will not be permitted. The maximum cam diameter will be 1.869 + .002**

**17: Only valves that conform to the RaceSaver(R) original size, configuration, length & weight will be permitted. The sizes are as follows: stem size 11/32", Intake 1.94" .008 stem undercut. Exhaust 1.60", Orig. stem undercut to .315**

**18: Ferrous material only: Valves, Seats, Retainers, Keepers, Push rods, Springs, Tappets, Cam, Crank, Rods, Wrist pins, Fasteners, Main Caps. Materials and processes including, but are not limited to; Titanium, Inconel, Ceramics, DLC, Nikasil, will not be permitted.**

**19: Only point type Magnetos, or Kettering style ignition, will be permitted. Only naturally aspirated, constant flow fuel injection will be permitted.**

**20: An additional 100 lbs. penalty will be added to the minimum car weight for use of any electronics, including but not limited to: ignition, ECU's and/or active driver aids.**

**21: RaceSaver® SPEC cylinder head: Alterations of any type will not be permitted. Machining, milling, resurfacing, grinding, polishing, welding, acid or caustic work, shot peening, glass beading, coating, or any other process that will alter the machined**

surfaces or the natural sand cast finish, will not be permitted. The cylinder head must retain all original dimensions & configurations including; Valves, springs, retainers, stems, & guides. Only re-seating the valves is permitted. Top cuts that extend into the aluminum of the chamber will not be permitted. Under the seat relief cuts, will not be permitted. Alterations to as delivered throat size, 1.810 Int. & 1.345 Ex. (+ .000 - .005) will not be permitted. Bowl changes will not be permitted. Every dimension of these heads has a gauge dimension that must be met for them to be certified. Any changes will result in disqualification. The stamped identification marks may not be altered.

**22: Compression Ratio:** 10.25 to 1 will be the maximum allowable compression ratio. The compression ratio may be checked with a whistle, or by measuring the volume of the assembled cylinder using liquid. The absolute minimum assembled cylinder volume measured at Top Dead Center (T.D.C.) is 70 cc. Any type of surfacing the heads will not be permitted without a repair authorization. Original serial numbers and certification marks must remain intact. They may not be altered or obscured. Any & all repairs **MUST** be pre-approved and the cylinder heads must be re-certified. If any spec head is found to be modified; it must be replaced with a certified spec head.

**23. Repairs:** In the event a cylinder head needs to be repaired, a repair authorization must be obtained by contacting RACESAVER® at 540-923-4541 before attempting repairs. After repair, the cylinder heads, completely assembled with all valves, spring, retainers, studs and guides, must sent to RACESAVER® for re-certification and registration. Recertified heads will be stamped with RACESAVER® & FGSR logos. The spirit and intent of RACESAVER® Engine Rules shall prevail.

Any attempt to circumvent the rules may result in confiscation of suspect parts, and other significant penalties. RACESAVER® determines compliance with specifications and rules. We reserve the right to exchange any spec cylinder head at any time. If the cylinder heads are altered, there will not be an exchange made. Altered cylinder heads will be removed from approved head registry. If a RaceSaver® engine competes in a non- sanctioned race, the engine is subject to be re-teched before returning to RaceSaver® events.

Complete rules Web site: [www.racesaver.com](http://www.racesaver.com)

For Information on Sanctioning requirements, rules clarification, or to order call:

RaceSaver® Sprint Series @ 540-923-4541 540-923-4543 Cell 540-229-1828 Web site: [www.racesaver.com](http://www.racesaver.com)

### **Car Rules:**

**1: Sprint car appearance.** The minimum wheelbase is 80"- inches with a maximum of 95"- inches.

**2: The minimum weight with a driver after race:** 1550 lbs. with a fire suppression system. Cars without a fire suppression system must weigh 1575 lbs. Starting weight must allow for fuel burn off.

**3: Ballast weight of any form or material will not be permitted in the bumpers, rub**

rails, seats, floor pans, or any miscellaneous and or extraneous components. The rub rails and bumpers must be steel, with a maximum wall thickness of .095. Any ballast must be securely bolted, and located between the front motor plate and located between the front motor plate to 12" behind rear motor plate.

**4: A right rear bead lock is required. Wheel covers or mud plugs must be securely fastened. Bleeders will not be permitted. The right rear tire will be a Hoosier RaceSaver® plated tire, minimum durometer 45. Any left rear tire with a minimum 35 durometer will be permitted.**

**5: Wing(s): The main wing may have a maximum of 25 sq. feet, 61"- wide, with 30"-inch x 72"-inch side boards. The front wing must be a maximum of 2'-feet x 3'-feet with the leading edge no more than 6"-inches ahead of front tires.**

**6: Cockpit adjustable weight jacks, shocks, or wings will not be permitted. Additional reservoir shocks (internal or external) will not be permitted.**

**7: Titanium, carbon, and/ or ceramic brake materials will not be permitted. Titanium and/or carbon parts which are, or rotate in, a diameter larger than 1.5" will not be permitted. Carbon drive train parts will not be permitted.**

**8: Open drive lines will not be permitted. Safety hoop or strap is required. Center section of the rear end must centered within the rails.**

**9: A fuel tank & bladder assy. or Fuel Safe enduro cell meeting FIA-FT3 & SFI Spec. 28.1 is required. A main fuel line shut off is required. An on board fire suppression system is recommended.**

**10: Only pure methanol is allowed. Additives of any type will not be permitted. Fuel is subject to chemical analysis.**

**11: Safety requirements: SFI approved helmet, 5 point harness, fire suit, gloves, roll bar padding, shoes, arm restraints. Hans® type device strongly recommended.**

**Procedures: Participation is by invitation. We reserve the right to limit the number of entries at any event may require pre-entry. All cars must have valid RaceSaver® seals, and meet all rules. The spirit and intent of RaceSaver® shall prevail.**

**Penalty Procedures Stages pertaining to all incidents, excluding technical incidents:**

**Stage 1: If the first incident is minor, a meeting will be held between the driver(s) involved. This meeting will include only the driver(s) and the official responsible for rule enforcement.**

**Stage 2: Should a second incident occur; or if the first incident is significant, the driver (s) involved will be advised of the penalties. The driver (s) deemed responsible may be required to start at the rear of the field for 2 weeks. The driver (s) will also be on probation for these 2 weeks.**

**Stage 3: Should a third incident occur; a letter will be sent to the driver (s) involved advising them of the length of suspension.**

**Any member of a team who goes to another competitor's pit or car, or race directors, or track officials; and engages in any verbal or physical confrontation on ,or off, the track; may subject that team to immediate suspension.**

**Technical infractions: Tampering with any components under RaceSaver® seals, or modifying or replicating said seals, will result in immediate suspension. The duration of suspension will be determined by the infraction. Components or measurements, that are not under seal, and do not conform to the rules, may incur penalties that include immediate suspension. The "RaceSaver®" mark is our federally registered trademark, and as such, carries severe penalties for unauthorized use.**

**Disclaimers: These rules are offered on an advisory basis only. Suitability of use must be determined by the user. The rules and/or policies set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events.**

**These rules shall govern the condition of all events and by participating in these events, all participants are deemed to have complied with these rules or policies.**

**NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF, OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS.**

**They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official. The race advisor shall be empowered to permit minor deviation from any of the specifications herein imposed and further restrictions that in his opinion do not alter minimum acceptable requirements.**

**NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATIONS OF SPECIFICATIONS.**

**The RACESAVER® Sprint Series is comprised of all volunteer, uncompensated officials who cannot be held responsible for any actions taken by participants, host race tracks or their safety crews. By participating in said race events, all participants acknowledge that: Racing is a dangerous sport that could result in injury or death to a participant, spectator or official, and the suitability of the track, race conditions, and safety considerations is solely their responsibility. Signor accepts full responsibility for themselves, and their crew. Signor agrees to hold harmless, RaceSaver® , French Grimes and RaceSaver® officials from any actions, decisions, and duties.**

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