

Engine Rule Amendment Aug 17, 2021

Teams coming for the Lyndon Moss Memorial: To be CLEAR to all teams, the engine rule for any and all events is the 2021 National 305 Spec Engine rules as shown below. There are no exceptions! Consider this the official amendment to any loop holes on engines. We will not compromise the integrity of the rules or sport for anyone. Every series and team should be running 2021 engine rules. Engine tech will ensure these rules are met and we will not put our inspectors in a situation that is not fair to them or the teams. Come legal and there will be no issues. 2021 Engine rules were updated after the Moss Event Rule book was published. If you have a 2020 engine that you haven't updated i.e. minimum case height of 8.975 you may not be legal.

2021 Tires are the same Spec RR Tire and LR must have a durometer reading of 35. Tires will be checked prior hitting the track. No bleeders allowed. Wheel covers will be removed and checked for bleeders.

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.

Minimum case height 8.975.

A specific Dart Machinery block, purpose built and approved for national spec competition is the "Little M" "B" block:

P/N 31151411.

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 national spec 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: 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 ration 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.