



2010 LATE MODEL NON-ASAMWT 9-1 ENGINE RULES

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The rules and/or regulations 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. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF, OR COMPLIANCE WITH, THESE RULES AND/OR REGULATIONS. They are intended as a guide for conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official.

The Race Director and Track Officials shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in their opinion do not alter the minimum acceptable requirements. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS. Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.

The rules set forth shall be effective for Hawkeye Downs Speedway's 2010 racing season. Management reserves the right to amend, alter, suspend, delete, or supplement these rules as conditions warrant and without any prior notice. Any changes will be posted in the inspection area. It is your responsibility to be aware of changes posted. These rules shall govern the condition of all Hawkeye Downs Speedway events.

Auto racing is a competitive sport, and like any other sporting event that depends on fan support, there is a great deal of showmanship and public relations required. Starting on time, running events in a professional manner, proper uniforms or attire, racecars brightly painted, and the conduct of the competitors both on and off the track must be established.

Hawkeye Downs Speedway is private property. Any person on this property without the permission of the owners or management is guilty of trespassing and subject to the penalties prescribed by law. Through your registration you have been given the authority and the right to be on this property in conjunction with your racing activity only. However, the management of the race track reserves the right to revoke and cancel this authority at any time it is felt that your presence or conduct is not in the best interest of auto racing, your fellow competitors, the fans, management, or employees of Hawkeye Downs Speedway.

ALTHOUGH EVERY EFFORT HAS BEEN DIRECTED TOWARD COMPLETE, UNDERSTANDABLE, AND CORRECT RULES, AS WELL AS THE SAME FACTORS IN PUTTING THEM INTO PRINT, HAWKEYE DOWNS SPEEDWAY OFFICIALS CANNOT POSSIBLY ANTICIPATE EVERY SITUATION, CIRCUMSTANCE, OR INTERPRETATION.

THE DEFINITION OF STOCK MEANS "NO MODIFICATIONS TO FACTORY PARTS OR FACTORY SPECIFICATIONS."

HAWKEYE DOWNS SPEEDWAY RESERVES THE RIGHT TO INSPECT, TECH, OR "TEAR DOWN" ANY COMPETING CAR AT ANY TIME REGARDLESS OF FINISHING POSITION

2010 LATE MODEL RULES ARE ADOPTED FROM 2009 ASA LATE MODEL NORTHERN DIVISION RULES AND MAY BE DIFFERENT FROM PREVIOUS YEARS

www.asalatemodelsnorth.com

9-1 RACING ENGINE

1. Any cast iron domestic engine, of standard production corporate model, may be run in any body style of standard production. No plastic or aluminum
2. Engines may be offset 4 inches, measured from the centerline of front tires.
3. No external oil pumps or dry sump systems. Altered oil pans, oil coolers optional.
4. No roller cams, no hard face overlay cams or mushroom tappets. Maximum valve lift .600 inch at valve.
5. No automatic cam timing devices; no belt drive. TIMING CHAIN ONLY
6. After market harmonic balancers allowed.

7. ENGINE DISPLACEMENT

GM & Ford Maximum: 360 GM & Ford Minimum: 347

Chrysler Maximum: 372 Chrysler Minimum: 340

8. No 180 Degree crankshafts

ENGINE BLOCK BORE SIZE

GM & Ford: Maximum: 4.060inch Minimum: 4.000inch

Chrysler 340: Maximum: 4.100inch Minimum: 4.040inch

Chrysler 360: Maximum: 4.060inch Minimum: 4.000inch

9. CYLINDER HEADS

- A. Must be cast iron 2 valve per cylinder.
Fords may use Part No: 5302 or 53040 Cylinder Heads as produced from World Products.
 - B. Unaltered*, O.E.M. original "as cast" form. Any evidence of sanding, polishing, relieving, grinding, porting, chemical treating, abrasive blasting, alterations to the original form, or the addition of material to the ports or combustion chambers, is not allowed. Multiple angle valve grinds permitted. Maximum angle of any cut cannot exceed 75 degrees.
Any cut greater than 60 degrees must be done with a steel cutter (no stones).
 - C. The maximum allowable valve diameters are.....
All heads except Ford Cleveland: Intake-2.020 Exhaust -1.625.
Ford Cleveland: Intake-2.046 Exhaust -1.656. 5/16 valve stems will be allowed.
 - D. Combustion chambers may be "cc" matched by reseating valves only.
 - E. Intake gasket and head gasket surfaces may be re-machined (not angle milled) to improve sealing.
 - F. Any valve springs and retainers are permitted.
 - G. Valve guide material optional. Guides must remain in original position
 - H. Screw in studs optional. Head may be cut for valve seals.
10. Compression ratio of 9.0:1 is set, 9.5:1 will be declared illegal. Determined by the volume gauge and electronic sonic tester (Whistler).
 11. Stock appearing valve lifter only (no roller or mushroom type). Diameter of lifter and lifter bores must be stock as produced for that engine. Lifter bores may be sleeved.
 12. Camshaft bearings must remain stock babbitt type (no roller).
 13. No Titanium crankshafts, connecting rods, wrist pins, or pistons.
 14. No Aluminum Rods
 15. Any type of rocker arm permitted.
 16. No pumps to create a crankcase vacuum will be allowed
 17. Oil pan access hole with a minimum of 1 inch diameter, for connecting rod inspection required.
 18. No nitrous oxide equipment

IGNITION

1. Crane ignition system and wiring harness is NOT required as per ASALMS for 9-1 engines at Hawkeye Downs.
2. **Traction Control and On-Board Computer or Analysis Equipment.** No equipment of this nature is permitted on any car or located in the pit area of any Hawkeye Downs racing event and will subject the team(s) to confiscation of equipment and penalties by the Hawkeye Downs Racing Director.
3. All ignition systems must be 12 volts.
4. MSD boxes may be switched by Hawkeye Downs Officials from car to car or swapped with house MSD box.
5. MSD Boxes approved: MSD 6A, MSD 6T, MSD 6AL, MSD 6ALN, MSD 6TN
6. MSD Connector: The 6 wire harness must be 24" long Maximum and have a female 6 pin, weather pack connector.

1. May use cast iron exhaust manifolds or steel tubing exhaust headers. Maximum O.D. of plumbing, except for muffler body, 3 1/2 inches.
2. No form of spacer plates allowed between head and exhaust manifold, except for gaskets
3. Maximum outside diameter 1 5/8 inches. All headers must be manufactured by an exhaust header manufacturer. No "home made," custom, or "one of a kind" headers. No step type, reversion, anti reversion, venturi, multi size headers. Maximum size of collector 3 inches. No velocity, cone style collectors. Headers may be of under chassis or cross-over style. NO 180 DEGREE HEADERS, NO MERGED TUBES FROM SIDE TO SIDE OF ENGINE
4. Headers may utilize any coatings. **Headers must be readily available for \$300**
5. ALL CARS MUST HAVE MUFFLERS, EVEN IF CAR CAN MEET 95 db LIMIT WITHOUT MUFFLERS (SEE GENERAL RULES)
6. Exhaust must exit behind driver, either to rear of car or to infield (driver's) side. Do not exit exhaust toward grandstand.
7. **No tri-y or merge collectors.**

TRANSMISSION/CLUTCH for 9-1 Racing Engines

1. Transmissions allowed from any manufacturer. Must be OEM automotive type unit. Working reverse gear is mandatory.
2. Transmission must be available for purchase by any competitor for maximum of \$1500. (Racer listed price.)
3. **Clutch discs may *not* be smaller than 7.25 inches.**
4. No carbon fiber clutches
5. Bell housing must have minimum 2.5 inch hole at bottom (to allow clear view of clutch).
6. No automatic transmissions will be allowed.
7. Transmission coolers are ALLOWED.
8. All cars must have a working on board starter.

INTAKE MANIFOLD

All engines may run APPROVED street application, single carburetor, cast iron, unaltered intake manifolds (Bow Tie Intake Included) or-Approved Edelbrock "Victor Junior intakes (see below). No modifications or alterations of any kind allowed unless specified. Must be able to easily remove heat shield from bottom for tech. inspection (Allen Bolts Recommended)

Approved Edelbrock Victor Junior Intakes

Chevrolet: 2972 (4 barrel), 2901(2 barrel). Dodge: 2915 (0340 head), 2920 (W2 head). Ford: 2980 (4 barrel), 2940 (2 barrel)

CARBURETOR

One Holley 650 CFM 4150 HP carburetor, part number 80541-1, "box-stock", is mandated. Carburetor must be securely fastened to the intake manifold and include one (1) .0625-inch (1/16") or smaller flange gasket. A maximum one-inch (1) tall aluminum spacer with four (4) non-tapered holes as manufactured with one paper gasket on each side is allowed. Aluminum spacers are subject to inspection by Officials.

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

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

NOTE 1: The use of any type Epoxy on the Holley 650 CFM 4150 HP carburetor, part number 80541-1 is prohibited.

NOTE 2: Coating of any type or the use of coatings on the Holley 650 CFM 4150 HP carburetor, part number 80541-1 is prohibited.

WEIGHT

See Late Model Rules Spreadsheet for total and left side percentages.

