

HAWKEYE DOWNS SPEEDWAY 2010 MODIFIED 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

GENERAL SAFETY RULES FOR DRIVERS

1. SA2000 helmet required and must be worn at all times car is on the track.
2. SFI approved full fire suit, fire retardant neck brace, gloves, and shoes required.
3. **Head and neck restraints required for ½ mile racing events.** Fire retardant head sock and underwear recommended.
4. Driver's eye protection mandatory. Full face helmets or goggles are mandatory.
5. A minimum three inch wide five point safety belt assembly required. Belts must be mounted securely to roll cage. Recommend belts be no more than 1 year old.
6. Driver side window net required, minimum 16 inch X 20 inch ribbon or mesh style. Net must be mounted so latch is at top front of window.
7. Kill switch required within easy reach of driver and must be clearly marked 'OFF' and 'ON.'
8. No Radios.

FRAMES/CHASSIS

1. OEM complete, 1964 or newer, perimeter American rear wheel drive passenger car frame only. No sports car frames.
2. Frames must be full and complete, cannot be widened or narrowed and must be able to support roll cage on both sides.
3. Minimum wheelbase is 108 inches, maximum 112 inches, both sides, measured center of front hub to center of rear hub.
4. Maximum overall width (front or rear) shall not exceed 67 ½ inches from center of tire to center of other tire.
5. Minimum ground clearance to bottom of frame side rails and body is 4 inches.

ROLL CAGE

1. Must consist of continuous hoops, minimum 1.75 inch OD tubing, with minimum wall thickness of .095 for main cage.
2. Must be mounted to frame in at least six places.
3. Must consist of a configuration of front, rear, and top hoops, connected by tubing on sides or side hoops.
4. Driver's head must not protrude outside cage with helmet on.
5. Roll cage must be securely supported and braced with minimum one cross bar in top halo.
6. Foot protection bar required. Foot box must be plated with minimum 1/8 inch steel.
7. Main cage no further forward than rear of engine. All bars forward of cage must be lower than hood.
8. Roll Bar padding required in driver's compartment (Fire retardant recommended).

DOOR BARS

1. All driver side door bars and uprights must be minimum 1.5 inch OD and .083 inch wall thickness.
2. Minimum three driver side door bars, parallel to ground and perpendicular to driver, and welded to front and rear of roll cage.
3. Passenger side must have at least one cross door bar, horizontal or angled, minimum 1.25 inch OD and .083 inch wall thickness.
4. Passenger side must have at least one top door bar, minimum 1.5 inch OD and .083 inch wall thickness.
5. Steel door plate, 18 gauge or .049 inch minimum thickness, must be securely welded to outside of driver side door bars and cover area from top door bar to bottom door bar, and from rear hoop down-post to 5 inches in front of seat. Must be visible for inspection.

BODIES (See last page for IMCA 2010 Body Diagram) except as below.

1. All cars will be required to display a package of sponsor decals supplied by Speedway.
2. Must be same width, front to rear, and parallel to OEM frame
3. Engine compartment must remain open (no side panels).
4. Hood must be enclosed at rear. Maximum hood drop (sides) 6 inches
5. No panel in front of right door to engine compartment.
6. No inner panels, no car covers.
7. Must have front windshield and rear window support posts. May use Lexan in opera windows. May use full windshield and rear window.
8. Driver and passenger side windows must have at least 12 inch opening, measured at center of window, between lowest point at top of window, whether roof or roll cage, and highest point at bottom of window, whether interior or body.
9. Sail Panels: Must be a minimum of 24 inches long and a maximum length to the top of rear spoiler (3 inches tall).
10. Body panels (including roof) may be fiberglass, steel, or aluminum. Roof must be rounded in all directions.
11. **Three (3) inch to five (5) inch, single plane spoiler.** No ground effects or aerodynamic devices.
12. Minimum 4 inch clearance required on bottom of doors and quarter panels with plastic skirting allowed.
13. Outside of tires must be widest part of car.
14. Nose panel can be no wider than the frame horns, minimum 24 inches.
15. Front nose edge/bumper may be no more than 42 inches in front of wheel center and no lower than 4 inches off the ground.
16. See Hawkeye Downs General Rules for car number placement.

DRIVER COMPARTMENT

1. Must have minimum 3 windshield bars in front of driver.
2. Lexan or aluminum panel in front of driver can be no wider than cockpit and no farther back than steering wheel.
3. Minimum .125 inch aluminum or .060 inch steel complete floor pan required.
4. Aluminum High Back Racing Seats only. Must be bolted to frame and roll cage.
5. Driver must be sealed off from track, driveline, engine, fuel cell, canisters and pumps.
6. Oil coolers must not protrude above interior.
7. No driver-adjustable chassis tuning devices allowed while the car is in competition except for a brake bias adjuster.
8. Mirrors allowed. **Blocking is not allowed.**
9. No fuel lines passing through interior.
10. All cars must have an approved fire extinguisher with its equipment within ready reach for any emergency. (See General Rules).

FRONT SUSPENSION & STEERING

1. All components must be steel, unaltered OEM with exceptions below.
2. After market tube type upper A-frames may be used.
3. Lower Control Arm must be production unit mounted in unaltered frame mounts.
4. After market ball joints may be used.
5. Steering "drag link" may be replaced with track approved all steel "slider" assembly. "Slider" must be replaceable with stock drag link.
6. Cockpit steering may be modified, but must be kept on left side.
7. Stock design cast or forged steel spindle, with minimal altering, must be used.
8. Collapsible steering shaft recommended and center of steering must be padded.
9. **No electric power steering.**

SHOCKS

1. One steel, unaltered shock per wheel.
2. No Schrader or bladder type valves. No threaded body, front coil over, air, or remote reservoir shocks.
3. Shock must be available for \$150 or less.

SPRINGS

1. One steel, non-progressive coil spring and/or steel leaf spring per wheel.
2. All coil springs must be at least 4.5 inches OD
3. No torsion bars or air bags

REAR SUSPENSION

1. All components must be steel.
2. No covers allowed.
3. All trailing arms/link bars must be solid tubing.
4. Rear of frame may be altered to accept leaf or coil springs.
5. Steel coil over eliminators, or steel/aluminum coil over kits allowed. Must conform to shock and spring rules.
6. No rear sway bar, chains, or cables.
7. No independent rear suspension.

REAR END

1. Any steel approved OEM passenger car or truck rear end allowed.
2. Safety hubs (floater) allowed.
3. Steel axles only.
4. Inspection hole in housing is required.
5. All components must be steel except: lowering blocks, axle caps, drive flange, and spools.
6. No Quick Change devices.
7. **No torque dividing differentials.**
8. Cambered Rear Ends are acceptable. **One (1) piece drive plate only. Constant velocity drive plates are not allowed.**
9. **Lockers not allowed.**

BUMPERS/RUB RAILS

1. Steel bumpers must be used on front and rear, and must be welded, or mounted with minimum .375 inch bolts.
2. Bumper must be minimum 1.25 inch OD tubing, .065 inch wall thickness on front, .095 wall thickness on rear.
3. Two bar front bumpers must be mounted frame end to frame end, no wider than width of material outside frame horns, and with bottom loop parallel to ground. Top bar must be directly above bottom bar, minimum 6.5 inches apart, measured center to center.
4. Rear bumper and nerf bars may be no wider than tires.
5. Measurement from ground to center of front and rear bumpers: Minimum 16 inches, Maximum 20 inches.

TIRES

1. **All Modifieds race on Hoosier 700 Rib Asphalt tires.**
2. No heating, soaking, softening, grinding, buffing or changing the composition and character of tire allowed.

WHEELS

1. 8 inch steel wheels only. Minimum rim weight is 19 pounds.
2. Aluminum or steel spacers allowed.
3. Rim mounted bleeder valves allowed.
4. Wheel Weights NOT allowed.

BRAKES

1. Must be steel approved OEM, operative four wheel, drum or disc.
2. Must maintain minimum OEM dimensions for hubs/rotors and calipers cannot be lightened.
3. Bolt pattern may be changed. Larger studs allowed.
4. Rear rotors may be aftermarket, minimum .810 inch thickness.
5. Vented rotors only, no scalloped or ceramic coated rotors.
6. No brake shut off or pressure sensitive devices.
7. One proportioning device allowed, front to rear only.
8. Brake lines must be visible.

EXHAUST

1. Headers allowed, and may be coated in any material. Maximum outside diameter 1 3/4 inches.
2. Mufflers must be used to meet track noise reduction rule of 98 db.
3. Round tube headers only. All primary header tubes must enter directly into one collector, at same point, at end of header. All exhaust must go through mufflers, two per car, one per header.
4. No exhaust sensors.

FUEL SYSTEM

1. Mechanical OEM type push rod fuel pump only, must be mounted at front of engine in stock location.
2. Racing Fuel Cell only, maximum 22 gallon capacity, minimum 18 gauge steel container.
3. Fuel Cell must be securely mounted behind rear axle, between rear tires, minimum of four inches ahead of bumper.
4. Minimum Fuel Cell ground clearance is 10 inches.
5. Fuel cell must be mounted with minimum two .125 inch thick solid steel straps, two inches wide around entire cell.
6. All Fuel Cell mounts must be steel, securely welded to frame.
7. Protective tubing must cover rear and extend past both sides of cell. No part of Fuel Cell shall be lower than protective tubing.
8. Fuel Cell vents, including cap vent, must have check valves. If fuel cell does not have an aircraft style positive seal filler neck/cap system – a flapper, spring or ball type filler rollover valve is required.
9. Pick-ups must be on top of cell.
10. Limit of one fuel filter.
11. No cool cans.

FUEL

1. All Modified competitors must use unleaded fuel approved by Hawkeye Downs Speedway.
2. No performance enhancing additives or fuels allowed.
3. Penalty for illegal fuel, per HDS, is disqualification and \$250 fine for first offense.

WEIGHT

1. All Weights determined by track scales only.
2. **Minimum Base Weight 2550 pounds.**
3. Must have minimum weight printed on upper left hand corner of driver's door (minimum 2 inch tall numbers)
4. Maximum left side weight percentage 56 percent.
5. No weights and/or loose objects in driver compartment or outside body.
6. Weights must be securely mounted to frame or roll cage with at least two 1/2 inch bolts. Weight must be painted white with car number on it.
7. No titanium, magnesium, or carbon fiber products. Steel fasteners only.

BATTERY/STARTER

1. One 12 volt battery only.
2. Batteries must be shielded and securely mounted between the frame rails.
3. Car must have capability of starting without being pushed or pulled. Must leave initial staging area on demand, unaided, or go to rear of that race.
4. Reverse mount starters with OEM case transmissions only. See transmission rules for specifics.

GAUGES/ELECTRONICS

1. No transmitting or listening devices, timing retard controls, or digital gauges (including tach).
2. No electronic monitoring computer devices capable of storing or transmitting information except analog tach.
3. No additional ignition accessories allowed.
4. No traction control devices of any kind (\$1,000 fine per HDS).

DRIVE SHAFT

1. Minimum 2 inch diameter steel drive shaft.
2. Drive shaft must be painted white.
3. At least one (2 recommended) drive shaft hoops required. Hoops must be within 6 inches of front U joint.

TRANSMISSION

1. Must have at least two forward gears and one reverse, plus a neutral position.
2. With engine running and car still, must be able to engage car in gear and move forward, then backward.
3. OEM production type or IMCA approved after market transmissions allowed--2 speed, 3 speed, 4 speed, and automatic.
4. No five speed or more transmissions. No "in and out" boxes or quick change devices.
5. Functioning shift levers must be in OEM location on all OEM production type transmissions.
6. All belt drive pumps must be mounted on front of engine.
7. Flexplates must be full, steel, unaltered OEM or OEM replacement.
8. Flywheel/Flexplate must bolt to engine between clutch assembly and crankshaft.
9. All driveline components within bellhousing must rotate while car is in any gear.

TRANSMISSIONS MUST BE ONE OF THE FOLLOWING DESIGNS :

MANUAL TRANSMISSION

1. Must have standard OEM case and working disc type clutch or approved cone or disc type coupler inside an explosion proof steel bellhousing.
2. One flywheel only, minimum 8.5 inch diameter.
3. Diameter of clutch disc must be a minimum of 5.5 inches
4. Clutch assembly must be steel, except housing, which must be steel and/or aluminum.
5. Bellhousing can have only a hole for throw out bearing lever or hose must be 270 degrees around top of clutch and flywheel area.
6. Standard or reverse mount starter allowed and must directly engage flywheel.

AUTOMATIC TRANSMISSION

1. Must remain in OEM or OEM replacement case, with a functioning OEM appearing pump.
2. Must have approved scatter shield, constructed of minimum .125 inch by 3 inch steel, 270 degrees around flex plate.

AFTERMARKET TRANSMISSION

1. Must be HDS approved, aluminum case, with internal clutch (Includes Richmond T-10, Winters 60100L, Brinn 70001, Bert LMZ Plain)
2. Must bolt to explosion proof steel bellhousing, and use full, steel, unaltered OEM flex plate.
3. Starter must be mounted in OEM location.
4. No coating or paint allowed on transmission case.

ENGINE COMPARTMENT

1. Rear of engine (bellhousing flange) must be mounted at least 72 inches forward from centerline of rear axle.
2. Minimum 11 inch engine height from ground to center of crankshaft.
3. Engine offset must be kept within 2 inches of centerline of front cross member with engine level.
4. Radiator must be mounted in front of engine.
5. Cooling system may be modified. Overflow tubes must be directed to container.
6. No vacuum pumps.
7. Use of anti-Freeze is strictly prohibited and will result in \$500 fine.

ENGINE

1. All Modified competitors must use unaltered GM "Factory Stock Crate Engine" P/N 88958602 & OEM HEI distributor only (no Billet). Ignition rotor, cap, coil and module must remain OEM appearing. Hawkeye Downs ½ mile Modifieds will be allowed an alternative oil pan. The **ONLY** alternative oil pan and pick-up tube will be Kevco Oil Pan part # 1090 NRH ISP (crate engine pan with inspection plug) and Kevco Oil Pick-up Tube part # 1005. Be prepared to be inspected (use site plug or pull pan) when using this replacement part!
2. All altered motors must be declared in the tech barn prior to use and must report bore to HD tech, before start of racing season.
3. Bore penalty = 5lbs per .010 Examples: .030 add 15 lbs and .060 add 30 lbs. 2010 All GM parts must be used for rebuilds.
4. Any crate engine found to be illegal in any way may result in loss of all points and money for the night. If found illegal, engine must pass tech inspection prior to returning to competition.

IMCA Northern Sport Mod (racing on the ½ mile)

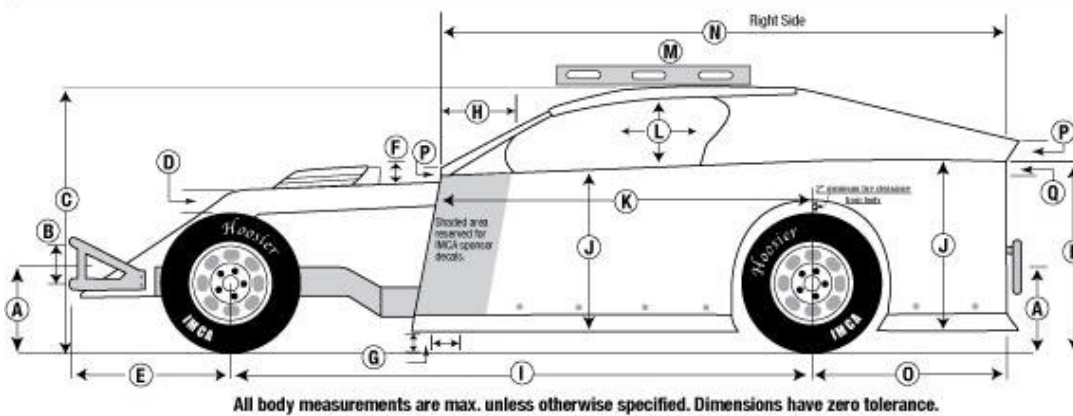
1. Sport Mods that are 100% IMCA legal may race "as is" on the ½ mile track.
2. Allowed 3"-5" spoilers, mirror's, and radio's with spotters.
3. Any engine claims after ½ mile racing must remain between sport mod competitors and must follow IMCA guidelines.
4. Must maintain 56% max. left side weight and a minimum of 2500 lbs. of total weight.
5. Head and neck restraints required for all ½ mile track competitors.
6. Driver must purchase a pit pass for each class he is competing in.

CARBURETOR (including Sport Mods.)

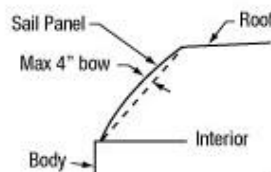
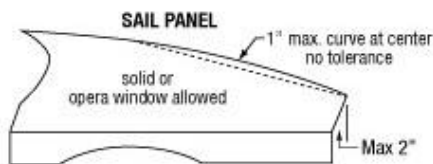
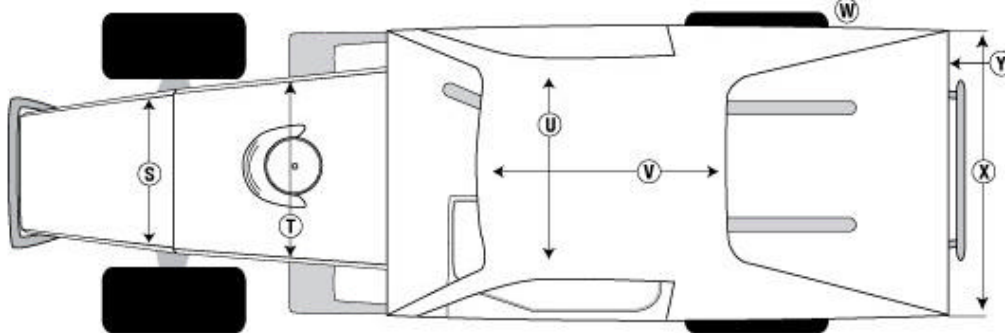
1. All cars use 650 cfm Holley 4150 HP P/N 80541-1. Carburetor must remain "Box Stock." Fine tuning of carburetor is allowed, utilizing only Holley replacement parts, but is limited to: Jets, Bleeds, Needle and Seat, Emulsion Bleeds, Power Valves, Accelerator Pump Nozzles, and Accelerator Pump Cams. Physical changes of permanently attached carburetor parts (Boosters, Throttle Plates, Throttle Body, Shafts, Metering Blocks, etc.), or alterations by means of machining, reshaping, or the act of allowing increased airflow as a result of additional measures, are not allowed.
2. One, 1 inch, 1 piece, non-porous Carburetor Adapter/Spacer plate allowed.
3. Carburetors must be securely fastened to the intake manifold with only one singular .0625-inch (1/16") or smaller flange gasket allowed between the carburetor and spacer and one between the spacer and the intake manifold. NO EXCEPTIONS.
4. Hawkeye Downs officials have the right to exchange carburetors between anyone.
5. Any carburetor found tampered with may result in disqualification from event
7. Assume your carburetor will be swapped with a random competitor after every feature.

HDS 2010 Modified Body Dimensions

IMCA Modified Body Dimensions For 2010



- A** 20" max. 16" min. (ground to center of bumpers, front and rear)
- B** 6.5" min. (center to center)
- C** 52" max. 42" min.
- D** Hood 6" max. drop (sides), sealed off from driver's compartment and max. 3" rake.
- E** 42" max.
- F** 6" max. scoop cannot extend past front of hood.
- G** 4" minimum; Door may extend maximum 6" past block at bottom on both sides.
- H** 19" max., must be same on both sides.
- I** 112" max. 108" min.
- J** 29" max. 22" min.
- K** 72" max. or not past back of block at top. Left side may extend forward to cover foot box if necessary.
- L** 18" max. 12" min. opening, both sides.
- M** With level, must have no more than 2" clearance at rear of roof and 5" at top front.
- N** 120" max. 106" min.
- O** 48" max. 34" min.
- P** 4" max. at front and rear, gradual slope from roof to this point. See drawing for tolerances.
- Q** Interior slope is 6" max. front to rear and flat across. If flat at front half of interior you have used up 50% of your 6" so from behind driver to rear you may only have 3". Top of interior must be flush with top of door and quarter panels. An optional escape hatch from driver to passenger door to provide 12" opening allowed.
- R** 38" max. 28" min.
- S** Min. 24" nose must be flat and flush with sides.
- T** 66" max. 24" min., no narrower than radiator.
- U** 52" max. 44" min.
- V** 56" max. 41" min.
- W** Tires must be widest part of car on right side.
- X** 66" max. 53" min. measured at top of interior deck, must be same front to back.
- Y** IMCA decal required on filler panel.
- REAR FILLER PANEL:** 8" min. / 90 degree angle. Must be solid, attached to deck, extend to quarter panels, securely fastened.
- SAIL PANELS:** Must extend from roof to rear of car and be the same on both sides. May extend 2" maximum past rear edge of interior deck. Must mount within 2" of outside edge of interior deck.



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