

HAWKEYE DOWNS SPEEDWAY 2020 Sportsman 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 2020 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.
 - 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, spectators, 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 RESERVES THE RIGHT TO INSPECT, TECH, OR "TEAR DOWN" ANY COMPETING CAR AT ANY TIME REGARDLESS OF FINISHING POSITION**
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- **CAR REGISTRATION:** Registration fee is \$85.00 for the season. You can race one time without paying registration but **must fill out the registration form for us to be able to pay you.** On the 2nd race night and after you will need to have paid registration to receive prize money and points. We will not “back pay” cars that pay registration at a later date.

1. SAFETY EQUIPMENT: Rules apply at all times car is on track.

- **Snell-rated SA2010 (last year allowed), SA2015, SA2020, Full Face helmet** and eye protection required.
- Roll bar padding required in driver compartment ON ALL BARS anywhere a driver’s head, arms or legs can touch.
- SFI-approved full Nomex fire suit or Nomex underwear required.
- Fire retardant gloves, shoes and neck brace required. Must be tear free and clean.
- **Required:** A HANS or similar Head & Neck device!
- **Recommended:** Fire retardant head sock, socks, and underwear.
- Driver-side window net required, minimum 16” x 20” ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window.
- Minimum three inch wide SFI-approved five point safety belt assembly required and must be mounted securely to roll cage. (May be mounted to the floor as long as there is at least a 4”x 4”x (1/8” thick) steel plate secured to the underside of the floor) (Do not mount to any flimsy tubes or sheet metal that can easily break or tear!)
- **Belts must be no older than 5 years.** ANY Faded, Frayed, Cut, etc belts will be required to be replaced!
- Master shut off switch required within easy reach of rescue crew and must be clearly marked ‘OFF’ and ‘ON’.
- **Recommended:** A master shut off switch to be located behind the driver’s seat which is:
 1. Accessible through the driver side rear side window.
 2. Switch is hooked up to the Negative side of the battery (when battery is mounted behind the driver’s seat.
 3. You are allowed to have 2 master switches (1 for the driver & 1 for the safety crew)
- **Required:** all master switches need to be painted Bright Red or Orange,,, and display OFF/ON direction.
- All cars and driver equipment must pass Hawkeye Downs Safety inspection.

2. FRAME:

- Any American OEM full body rear wheel drive passenger car, 1955 to 1995, full frame or uni-body. Uni-body frame must have front stub tied to rear uni-body frame, and must be inspected and approved before being allowed to compete.
- Uni-body car steel bodies may be used on a full frame chassis. Call for approval if you have any questions.
- Frames must be X braced through the center, and plated on the inside of the frame rails.
- Rear frame rails may be replaced, no further forward than the center of the axle or before entering the spring pocket, whichever comes first.
- Upper control arm mounts may be modified on the frame.
- Lower control arm mounts on the frame must be stock, front and rear.
- Lower control arm mounts on the rear end side may be modified.
- Minimum wheel base 108 inches with no more than 1” variance from side to side.
- **Maximum track width is 62 ½ inches** measured center to center at hub center height.

- Minimum ground clearance for any portion of the frame or ballast is 6" except for front cross members which is 3" (which is measured without the driver in the car)

3. MID SIZE GM METRIC CHASSIS EXCEPTION:

- Minimum wheelbase 107.5 inches. No more than 1 inch variance from side to side.
- Lower right A-frame may be 1" longer than stock.
- Metric GM or full size spindles are allowed (NO Modifications)
- No drop down S-10 or Corvette spindles allowed.
- Steering center link modifications to improve bump-steer is allowed.
- After market center links are allowed. Non Adjustable only!
- Front lower control arms must be in stock position.
- If using Ford 9" rear end, upper control arm mounts on frame may be raised

4. ROLL CAGE:

- All cars must have a well constructed, properly welded and gusseted roll cage made of minimum 1 3/4" X .095" wall tubing or equivalent.
- Roll cage must have four (4) uprights properly welded to frame.
- Cage must be tall enough so that drivers head remains under bottom side of roll bars, strapped in with helmet on.
- Main roll hoop must be behind driver and contain a diagonal bar.
- Cage must be reinforced from left to right with bars under dash and behind driver in main roll hoop.
- At least two bars must extend from main roll cage rearward to kick up of the chassis.
- Roll cage must extend past drivers foot box.
- Door bars and foot box must be plated with 1/8" steel.
- A minimum of four (4) equally spaced horizontal bars required in driver's door, three (3) in passenger side door.
- Door bars must be connected with a minimum of two (2) equally spaced bars attached to the frame.
- 1 1/2" bar from main dash to halo is mandatory.

5. BODY:

- Steel bodies 1955 to 1995.
- Steel Bodies newer than 1995 may be allowed to compete, but call for approval !
- Fiberglass bodies on existing used Sportsmen cars will be allowed to compete.
- 2009-2019 allowed bodies include: AR Bodies include: NGB, & their Sportsman Camaro, Mustang & Challenger bodies, and the S2 Body from 5 Star.
- Cars with bodies 1972 or older will receive 100 pound weight break.
- Any deviation from stock body dimensions to reach a competitive advantage will cause weight (25lbs) to be per infraction.
- Fiberglass hood, (non carbon fiber)and factory aluminum hood and trunk lid are allowed (no holes in hood, no hood scoops or bubbled hoods).
- Lexan or screen in windshield opening. Windshield center bracing is required.
- Lexan allowed in back glass opening. Nothing allowed in side window openings except driver window net.
- Side skirts are allowed, however they must be no lower to the ground than 5".

- Side skirts or rocker panels may be made of plastic or aluminum and only be 5" maximum in width.
- Fabricated panels must be steel (aluminum if pre-approved) and retain stock appearance and dimensions.
- No unapproved aluminum, plastic or rubber panels.
- Rub rails may be installed between front and rear wheels and must be made of no larger than 1" square, ends must be beveled or chamfered, welded ends.
- Plastic nose and tail pieces allowed.
- Bumper must be straight up and down, not angled forward from bumper to ground with a minimum of 5" ground clearance. Reinforced bumper braces front and rear must be mounted behind grill and front and rear bumper cover.
- Tires may not extend more than 2" outside the width of the body.
- Rear spoilers allowed, 60" width maximum. 5" high, measured from the top of the body(at ALL points) to the top of the spoiler. The spoiler MUST follow the contour of the body.

6. DRIVERS COMPARTMENT:

- Driver compartment must be completely sealed off from engine compartment and fuel line.
- Must have 1/8 inch thick steel floor pan under driver, minimum 20 inches wide at seat.
- Interior sheet metal must rise on a plane from the driveshaft tunnel to passenger window opening.
- Interior construction must be with steel or aluminum (No Plastic or Rubber).
- Aluminum high back seats only. Must be bolted to roll cage with 3/8" minimum hardware.
- Padding required around driver and steering post. (ON ALL BARS anywhere a driver's head, arms or legs can touch.)
- Adjustable brake bias valve is allowed in car.
- No adjustable components other than brake bias allowed in car.
- No tub style interiors allowed!
- (1) driver's side mirror allowed, (no rear view mirrors inside of the vehicle)
- No radios.
- Raceivers Mandatory.

7. SUSPENSION:

- All cars-Front upper control arm mount may be modified on frame.
- Tubular upper control arms are allowed.
- No tubular LOWER control arms are allowed.
- **OEM style one-piece Metric Dimension Ball Joints only! (Low Friction joints allowed)**
- No mono ball Bushings allowed in FRONT Lower control arms.
- Stock, American made steering units and other components must be consistent with that model chassis and in stock location.
- Installation of any non-stock suspension part such as torque arms, or panhard bars, is not allowed.
- All springs must remain in stock location.
- Weight jacks are allowed.
- No driver adjustable weight jacks.
- Coil springs may be no smaller than 5" I.D.
- Steel Shocks ONLY: Standard or Re-buildable, maximum \$140.00 each (with ends)
- All shocks subject to be taken & inspected by track officials.

- NO Schrader valves.
- Shocks may be moved from the stock location.
- Heim joints allowed on outer tie rods only. (Adjustable height, outer heim bump-steer studs allowed)
- Rear springs may be extended higher than original rear spring pockets.
- Spindles must remain stock for the frame you are using.
- Coleman or Howe hubs and rotors allowed in front.
- Stock or aftermarket 1-Piece sway bars are allowed...
- NO SPLINE STYLE BARS.
- No independent rear suspension.
- Rear control arms must remain in stock configuration,(may be boxed) however bushings may be changed to rubber, steel or mono ball.

8. REAR END & DRIVE SHAFT:

- Rear ends must be passenger car, or light truck.
- 9" Ford Rear Ends legal for all models.
- Floater rear ends recommended
- **Quick Change Rear Ends are allowed!**
- Multi-hole, adjustable rear end lower control arm mounts allowed
- GM Metric OEM brake parts with aftermarket mounts allowed on 9" Ford Rear End.
- Locked Rear Ends are Legal. (Full Spool or Mini Spool Only)
- No torque dividing differentials.
- No aluminum carriers.
- All Parts must be steel with the exception of the drive flange.
- No Gun drilled axles.
- No Offset Rear Ends.
- No Cambered Rear Ends.
- All Axle and Drive Flanges must be equal distance from the frame rail on either side.
- One-piece steel drive shaft. Minimum diameter 2" O.D.
- Drive Shaft must be painted white.
- Drive shaft hoop required. Must be within 6 inches of Front U Joint.
- If using stock rear end, aftermarket right side axle is mandatory.

9: BRAKES:

- "Made for racing" brake pads are allowed,
- No carbon fiber or exotic materials.
- Brakes are required on all four (4) wheels and in working order.
- Stock OEM American made cast iron calipers only.
- The Howe stock replacement caliper IS allowed.
- GM Metric OEM brake parts allowed on 9" Ford rear end.
- Brake pedal and clutch must be in stock location and operate normally.
- Floor pedals are allowed.
- Dual brake master cylinders allowed.
- Brake metering valve allowed.
- One Brake Bias adjusting unit allowed.
- Hubs, Rotors and Drums must be cast iron steel.
- No brake floater devices.

10. WEIGHT:

- Scaling after the feature, is done with the Driver in the car.
- Minimum base weight 3000 pounds.
- Minimum weight for cars using 1972 or older body is 2900 lbs.
- Maximum Left Side Weight on all cars is 56 %.
- Weights must be securely welded or bolted (minimum 1/2 inch bolts) to frame or roll cage, painted white, and identified with car number.
- Weights must meet minimum ground clearance.

11. RADIATOR & COOLING:

- Radiator must be in stock location.
- Aluminum radiators allowed.
- Must have a shroud covering upper part of fan.
- May not protrude through hood.
- Both standard & electric fans are allowed.
- Overflow catch can, 2 quart (1/2 gallon) or more, must be permanently installed ahead of engine firewall.
- **No antifreeze allowed.**

12. FUEL:

- Fuel cell is required-Max 16 gallons.
- Fuel cell must be located in trunk between frame rails as far from the rear bumper as possible.
- Minimum height 10 inches from the ground.
- It is required to install two (2) 2" square tube cross members to the rear frame rails. One is required in front of and one behind the fuel cell.
- Fuel cell must be secured with 1" square tubing with a minimum 11-gauge container around fuel cell is required.
- All fuel cells must be vented with safety roll-over valve.
- Fuel inlet cap must be mounted to the fuel cell only.
- No quick fill inlets.
- All cars will have fuel line located outside of drivers compartment.
- Stock type, mechanical fuel pump only.
- No electric fuel pumps.
- Pump street fuel and/or racing fuel are the only fuels allowed.
- No fuel additives of any kind allowed.

13. ELECTRICAL:

- No Traction Control Devices of any kind.
- No magnetos, crank trigger, multiple coil or programmable systems allowed.
- No Digital Gauges or electronic monitoring computer devices capable of storing or transmitting information (except analog tachometer).
- All electrical wiring must be exposed.
- No open ended wires or open plugs.
- Track Reserves right to remove conduit or insulation to trace wires.

- No MSD or HEI Boxes.
- No adjustable ignition control boxes.
- No timing retard controls.
- Batteries must be securely mounted between the frame rails, forward of the rear axle and covered.
- Must have working starter.
- After market Starter OK.
- Must be mounted in stock location using stock hardware.
- 12 volt system maximum.

14. TRANSMISSIONS:

- **Automatics:**
 - Must be OEM or OEM replacement case, with a functioning OEM appearing pump.
 - Aluminum OEM bell housing may be replaced with aftermarket explosion-proof aluminum bell housing.
 - OEM style automatic flex plate only, must be bolted directly to end of crankshaft.
 - Original OEM bell housing must have approved scatter shield constructed of minimum 0.125inch by three inch steel, 270 degrees around flexplate.
 - Manual bump starts allowed.
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- **Manuals:**
 - OEM 3 speed and 4 speed manual transmissions are allowed.
 - Minimum 7 ¼ inch single or double disc clutch allowed.
 - SFI approved Steel Scatter shield required.

15. WHEELS AND TIRES:

- 8" steel wheels only.
- Minimum weight 19 pounds.
- **May use any wheel offset that maintains legal track width (62 1/2").**
- **Wheel spacers are allowed,, must maintain legal track width of 62 ½".**
- 5/8" studs on front and rear recommended.
- Steel lug nuts only.
- Stud threads must extend past outside edge of lug nut.
- Bleeder valves not allowed.
- Wheel weights not allowed.
- All cars must use Hoosier D-800 tires. Must be purchased at Hawkeye Downs. (See Tire Rules)
- No heating, soaking, softening, grinding, buffing, or changing the composition and character of tires allowed.

16. EXHAUST:

- Maximum 1 3/4 inch, over or under chassis, single pipe, straight tube, collector header only.
- No stainless steel collectors.
- No 180 degree headers.
- No Tri-Y Headers

- Must exit behind driver, under car or body panels, preferably towards the Infield Side of the Car.
- Must have Mufflers and must not exceed 98db.
- 3 inch maximum OD plumbing(before mufflers or Y-pipe), except for muffler bodies. Must start within 6" of header collector.

17. SPORTSMAN SPEC ENGINE:

- 1.Maximum of two (2) valves per cylinder. No aluminum heads or blocks.
- 2.Chevy maximum displacement 362 C.I.D.
- 3.Ford maximum displacement 362 C.I.D.
- 4.Chrysler maximum displacement 373 C.I.D.
- 5.Stock or stock replacement cast iron unaltered heads (no porting, acid dipping, polishing, or gasket matching allowed) Minimum 64CC, maximum 202/1.6 valve allowed. No angle plug heads on Chevy engines.
- 6.Oil pan inspection hole required, must be located on the drivers side inline with the 2nd or 3rd rod journal or crankshaft, with a 3/4" npt inspection hole in pan on opposite side of windage tray.
- 7.Valve spring retainer is the only titanium part allowed
- 8.Valve stem size must be 11/32 (5/16 or 7mm stem will NOT be allowed)
- 9.All cams maximum lift .500, flat tappet only, roller cams not allowed. Firing order may not be altered.
- 10.Roller rockers allowed. Stud girdles allowed. No aftermarket shaft rockers.
- 11.Flat top pistons are required, minimum of zero deck height allowed.
 1. Maximum compression on all engines **10.8:1**, no tolerance.
- 12.Magnetic steel connecting rods only. Honda journals or rods are not allowed. No aluminum rods. Crank shaft minimum weight 50lbs.
- 13.Stock intake must remain stock and unaltered.
- 14.Aluminum spec intakes are allowed (Edelbrock RPM intake allowed #7101 & vortec #7116) No AIR gap intake allowed.
- 15.Any ignition coil is allowed. Firing order may not be altered. No MSD boxes allowed.
- 16.Ford heads, stock and stock replacement allowed 64 cc 202/1.6 valve maximum allowed (World Products Windsor Jr Head allowed) No 351C, 400M heads are allowed
- 17.Ford Edelbrock Performer 7121-02, 7181-351W with 180cc intake allowed
- 18.Mopar Edelbrock Performer RPM Intake 7176 is allowed
- 19.Mopar W-2 Cylinder Head Allowed. 64cc 202/1.6 max (No modifications)

18. SPORTSMAN GM CRATE ENGINE:

- Unaltered SEALED, GM Factory Stock Crate Engine, part # 88958602 or #19258602.
- **Any GM factory crate engines not sealed, will be considered to be an alternative spec engine, (meaning, you must run an unaltered 350 cfm Holley carb).**
- Maximum over bore allowed is .010.
- All factory stock crate engine parts must be used for rebuilds, except for rings, bearings, gaskets, valve springs, and oil pump.
- Any replacement parts must be of GM crate engine dimensions.
- No cylinder head porting, bowl work or radius cutting allowed.
- No intake porting allowed.
- Maximum compression ratio allowed will be 9.1:1 (factory stock), with carbon tolerance to 9.5:1 on the whistler.
- Any engine found to be illegal in any way will result in loss of points and money for the night.

- If found illegal, engine must pass tech inspection prior to returning to competition.

19. SPORTSMAN SPEC CARBURETOR (FOR USE ON SPEC ENGINE and GM CRATE ENGINE PACKAGE'S ONLY)

1. Stock unaltered 350 cfm Holley part # 0-80787-1 or part # 07448. Also may use 500cfm Holley 4412.
2. No polishing, grinding, or drilling of holes allowed.
3. The choke plate must be removed
4. Metering block must be stock and unaltered
5. Boosters may not be altered, drilled or epoxied in, no wire ties.
6. Stock butterflies must not be thinned, tapered or drilled. Screw heads must remain unaltered
7. Throttle shafts must remain unaltered
8. Jetting and power valves and gaskets are the only allowable changes.
9. Carburetor must be out of the box stock
10. Spacer plate allowed up to 1¼" only. No stacking of gaskets. **NO TAPERED SPACERS ALLOWED!**
11. Air cleaner 14x4 allowed.
12. No air boxes. K&N air cleaner is allowed.
13. Double return springs required.

20. SPORTSMAN SPEC ENGINE AND CRATE ENGINE LOCATION

1. GM spec and GM Crate engines must be located so that the number one spark plug is in line or ahead of the lower control arms centerline and the center of the front spark plug hole.
2. Ford, Chrysler (Spec engines only, No Crate engines at this time) from the lower control arms centerline measured back 2" to the center of the front spark plug hole.
3. Minimum crankshaft centerline height 10 1/2"
4. Engine must be centered in chassis right to left.
5. Ford and Chrysler engines will be permitted to a mid-size GM metric chassis with a 2" set back from the centerline of the lower control arms and the center of the front spark plug hole.

21. NON SPEC ENGINE OPTION :

- Any American make engine allowed.
- Steel heads, block and oil pan only.
- OEM passenger vehicle production block only.
- No GM Bowtie, Ford SVO, or Chrysler W Blocks.
- Castings and fittings cannot be changed, no machine work on outside of engine.
- No cubic inch limit.
- Full roller rocker arms allowed.
- No stud girdles.
- Flat tappet cam/lifters only, cannot alter lifter bores.
- No mushroom lifters.
- Unaltered, approved OEM cast iron low rise, two or four barrel intake.
- Only aftermarket intakes allowed are: Weiland GM # 7547-1, Ford # 7515, #8023 or # 7516; Chrysler # 7545; Edelbrock GM # 2701, #2716; Ford # 7121, # 7181, #7183; Chrysler # 2915.
- No porting or polishing allowed to any intake.
- Cooling lines allowed on aluminum intakes.
- Firing order cannot be changed.

- Wet sump oiling system only.
- Accumulator allowed –cannot be located in drivers compartment.
- Must use unaltered 350 cfm Holley part # 0-807871 with no modifications, or part # 0-7448 which may be modified to meet the specs of part # 0-80787-1.
- Holley carburetor components only.
- Any driver caught with non-350 Holley at any time (heat or feature) will be fined and /or suspended.
- Air bleeds cannot be removed, .076” maximum diameter.
- Float bowl must face forward.
- Carburetor adapter / spacer allowed, maximum 1.250” thick, including gaskets.
- Engine must be in OEM location. No set back allowed.
- On '78 –'88 GM metric frame and engine, center of GM fuel pump must be located minimum 1.75 inches in front of cross member, measured at frame.
- Engine must be centered in chassis right to left.