

# 2026 WISSOTA MODIFIED RULES

**NOTICE: PLEASE NOTE THAT THIS CLASS IS ALSO REQUIRED TO COMPLY  
WITH ALL WISSOTA RULES SET FORTH IN THE FRONT OF THE RULE BOOK.**

SECTION 1.....	GENERAL RULES
SECTION 2.....	GENERAL POLICIES
SECTION 3.....	MINIMUM SPECIFICATIONS
SECTION 4.....	POINT SYSTEM
SECTION 5.....	ENGINE PROTEST RULE
SECTION 6.....	ENGINE PUMPING RULE

**All options are subject to review or change as deemed necessary. Any part or modification not specifically allowed in the rules is prohibited.**

## 1) ROLL CAGES

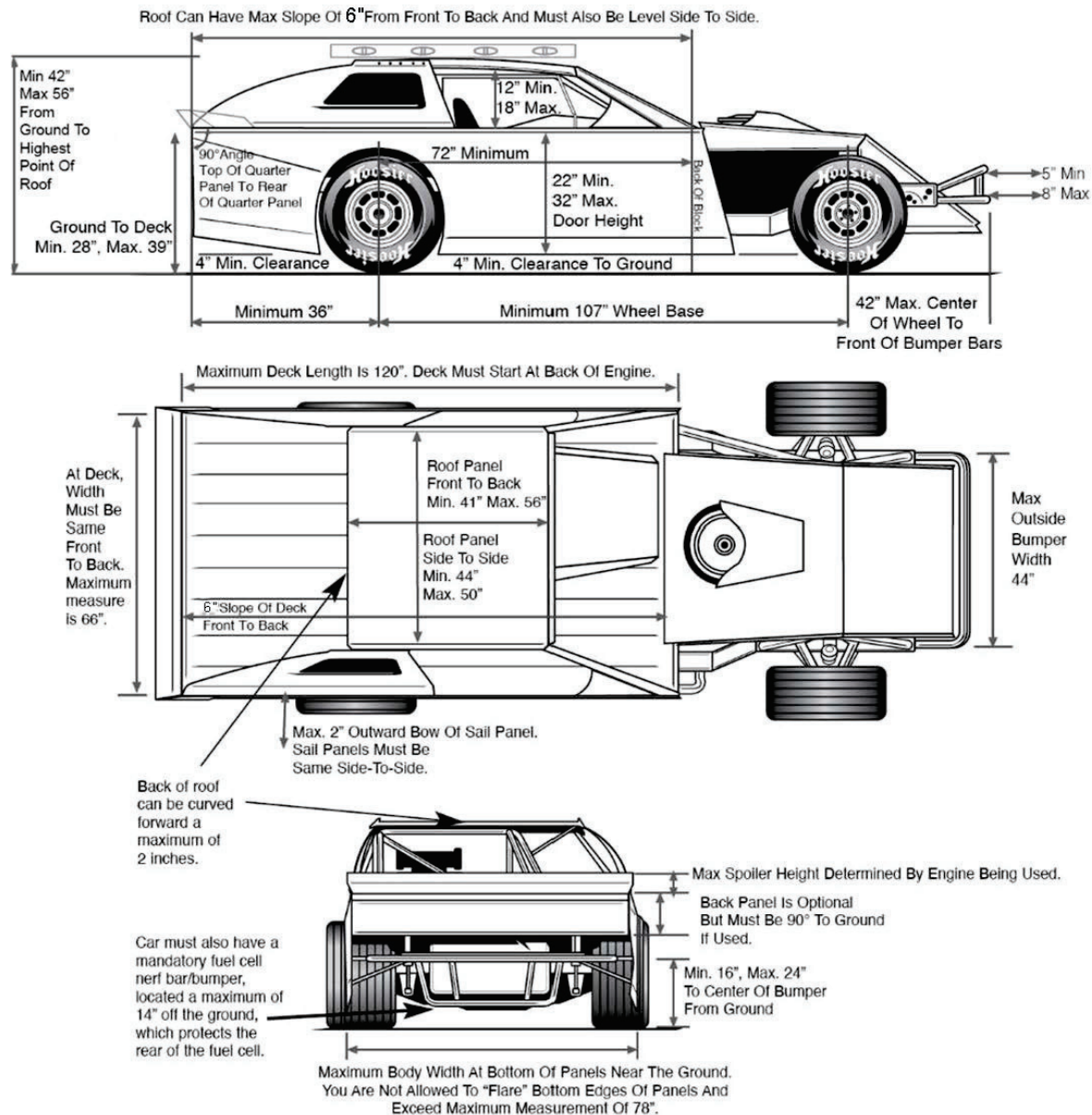
- A. Main cage must consist of continuous hoops, minimum of 1.666 O.D. tubing, with a minimum wall thickness of .095, must be frame mounted in at least 6 places. A low-carbon or mild steel tubing is recommended. Other materials are subject to approval by WISSOTA. No iron pipe or square tubing allowed. **Low-carbon mild steel tubing is recommended. Other materials are subject to prior approval. No iron pipe or square tubing allowed.** No brazing or soldering allowed.
- B. Must consist of a configuration of front, rear and top hoops connected by tubing on sides or side hoops. Driver's head must not protrude above cage with helmet on and strapped in seat. Roll cage must be securely supported and braced. Racing seat is required and must be mounted with a minimum of four 3/8" bolts. Foot protection bar is required.
- C. Door bars must be a minimum O.D. of 1.500 inches and a wall thickness of at least .083, a fourth door bar is highly recommended. Side bars must be parallel with the ground as possible, and located perpendicular to the driver so as to provide maximum protection for the driver, but without causing undue difficulty in getting into or out of the vehicle. Side bars must be welded to the front and rear of the roll cage members and must be attached to the frame in at least 4 places.
- D. A safety vent bar is mandatory on every car/ It must run from top door bar to A pillar bar. A door plate is also mandatory on every car. Door plate must be minimum 18 gauge steel, must be attached to the outside of the door bars and must go from top door bar to bottom door bar. Door plate must also run from back of driver's seat to at least 5" in front of driver's seat. Door plate can be welded or bolted to the outside of the door bars.
- E. Bumpers must be used both front and rear. Front bumper must be within the front frame horns, using two parallel bars spaced no less than five (5) inches apart and a maximum of eight (8) inches part; maximum bumper width is 44 inches and both bars must be completely even with each other. There may not be any square edges; all corners must be round. Front surface may be flat, no excessive metal. (See diagram on bumper dimensions.) Pipe must be at least 1-1/4-inch metal and must be able to support a lift by the wrecker. No body part can extend past front bumper. Front nosepiece can be plastic but not lexan.

- F. Rear bumpers and bars must not extend beyond width of rear tires.
- G. Side rub rails must be securely fastened, consisting of one or two (if desired) parallel bars. If two bars are used, they must be connected and all corners must be rounded. No sharp edges. No excessive metal.
- H. Rear bumper tubing must make a complete loop back to the frame. Bumper may be cut off a maximum of two (2) inches outside the frame rails and be capped with rounded edges. But must not have any sharp edges. No excessive metal. Car must also have a mandatory fuel cell nerf bar/bumper, located a maximum of 14" off the ground, which protects the rear of the fuel cell.
- I. Any weights used must be secured by at least two 1/2" bolts, must be painted white and must have your car number painted on or affixed in some manner.
- J. Driveshaft hoop must wrap 360 degrees around the driveshaft, must be constructed of a minimum 1/4" by 2" steel and must be mounted 6" from behind front U-Joint
- K. Fuel cell straps 1/8" by 2" around the fuel cell/can to hold the cell/can together if it comes out of the car. However, the straps should not be used to mount the cell/can to the frame of the race car.

## 2) BODIES

Refer to diagrams for measurements on Modified bodies. All body height/dimensions will be taken with the driver in the seat.

- A. Must have a minimum of three (3) windshield bars in front of driver. Must have minimum 2" clearance of body around circumference of all tires when car is sitting static at ride height and driver is in seat.
- B. Firewall and floorboard are mandatory. Body parts may be constructed of aluminum. Body must be the same width front to rear, and parallel to the frame. No concave body parts. A composite nose and composite right door and quarter panels are allowed on the car and if used must be FVMSS approved.
- C. Original roof line/rake must be maintained (see body diagram); full size roof only. May be made from fiberglass, steel or aluminum must have front windshield and rear window support posts. Roof bead rolls/fins/supports cannot be more than 3/4" high off the flat of the roof with a maximum of 5 per roof, running straight from front to back full length. No ground effects or louvers on the back of the roof except where stated by rules. You may use a maximum of four bolts fastening the back of the roof. Rear roof sail may have a gradual curve from rear edge of roof to top of spoiler not to exceed 3" above a straight line from rear edge of roof to top of spoiler. This will be measured by placing a straight edge from rear edge of roof to top of spoiler. Measured up to the highest point of roof sail, measured at a 90 degree angle to the straight edge this measurement may not exceed 3 inches. Sail panels must be the same, side to side. Front and rear sail panel/roof post can be no further forward than the back of the seat at shoulder height. Any reinforcing lips on rear of sail panels must be 180 degree bends. WISSOTA Modifieds may use a spoiler on the rear of the deck. The maximum spoiler height is determined by engine used (see engine rules). No other spoilers, wings or ground effects are allowed anywhere outside or inside the car. Minimum side window openings is 12" measured at the lowest point at the top of the window, whether roof or roll cage, to the highest point at bottom of window, weather interior or body. Roof/rear sail panel can have a maximum of 2" outward bow from top to bottom. **Both sides must be the same side to side.** Front roof post can be maximum 8" at bottom to 4" on top. Aftermarket plastic/composite manufactured molded roofs and rear roof posts/sail panels are allowed as long as they meet the class roof, rear roof post/sail panel dimensions. No diffusers allowed.

**DIAGRAM MOD-1****Notes Related to Diagram:**

**Drivers Compartment:** Drivers compartment must be totally sealed from engine and race track.

**Slope of deck:** There can be a maximum of 6" slope of deck front to back. There can be 3" of slope from front of cockpit to back of driver's seat and 3" of slope from back of driver's seat of the deck. If deck is level from front of cockpit to driver's seat. You may only have 3" of slope front back of driver's seat to rear of deck. Top of interior must be flush with the top of doors and quarter panels.

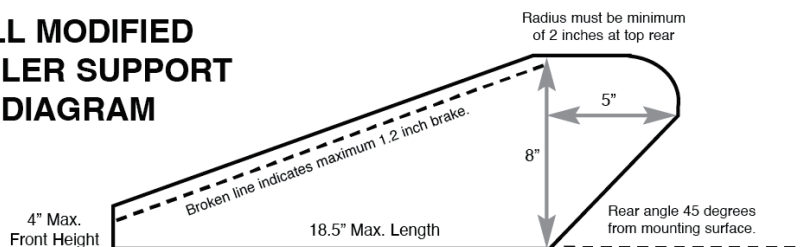
**Escape Hatch:** an optional escape hatch may be used on right side of car by bringing the metal from top of right door down to the driver's compartment no higher then 12" from the floor pan. Front and rear of escape hatch must be 90 degree angle to interior.

**Doors:** Front of door may stop in vertical line at or behind the back of the engine or may be raked front bottom to top as described in section (2) bodies.

**Left Rear Tire:** Left rear tire may be partially outside body and nerf bar and be visible from front, rear and top.

- D. The trailing edge of the spoiler must be turned down a minimum of 30 degrees, so it is below the top of the spoiler.
- E. Engine compartment can remain open or can be enclosed by side panels. **Engine covers cannot exceed past the midplate and must be a minimum of 4 inches from door top to bottom. Engine side panel must be mounted on top of frame rail.** Hood must be enclosed at the rear and the maximum hood scoop height is 6 inches. Door panels can be a maximum of 32" from top to bottom including plastic runner at bottom of door. The top of the body (door panel) should extend no further forward than the back of the engine block. The bottom of the body (door panel) may extend up to 12 inches forward from the back of the engine block. Rear of body (below rear deck) can have a solid panel the width of the body and extending straight down. Panel must be a minimum of 8 inches high; it is recommended that panel is painted a bright color and include a car number.
- F. The top edge of the rear quarter panel and door must be in a straight line, within 1' inch tolerance up and down, left and right on both sides of the car. If you use sail panels for support, you can have only one additional spoiler support.
- G. The leading edge of the quarter panels must have the same measurements from top to bottom as the door panels. However, the quarter panel may be tapered toward the rear of the car up to three inches when measured from front to back.

### ALL MODIFIED SPOILER SUPPORT DIAGRAM



No more than 3 spoiler supports permitted (a 1" steel strap is not considered a spoiler brace). Front edge of spoiler support must be inline.

- H. Deck height will be measured in the center of the deck at the rear of the car. The maximum height is 39" with a variation of plus or minus 1" side to side.
- I. At the front of the door, the maximum variation, side to side, from the ground level is 2".
- J. Maximum of two 3 inch fins may be mounted on each side of the nosepiece (one on each side of the car). Nosepiece must be a minimum of 6" above ground on front and sides. It can be no wider than frame horns and no further back than radiator.
- K. No plastic body parts allowed except for those specifically outlined in body rules.
- L. Driver-side and passenger-side windows must have at least 12-inch vertical openings.
- M. No car covers or covers on suspension parts. Boot covers allowed on shock rods only.
- N. Must have full-length floor pan under driver (20-gauge min. thickness steel or .125 aluminum).

### 3) CHASSIS AND WHEEL BASE

- A. Factory production complete full 1960 or newer parallel American passenger car frames only. May cut off both frame rails from the mid plate rearward. No front clip or tube-type frames allowed.
- B. Frames may not be widened or narrowed. Must be full and complete both sides. Front cross member must remain intact where joined at the frame rails; center of cross member may be notched for radiator and/or steering clearance only.



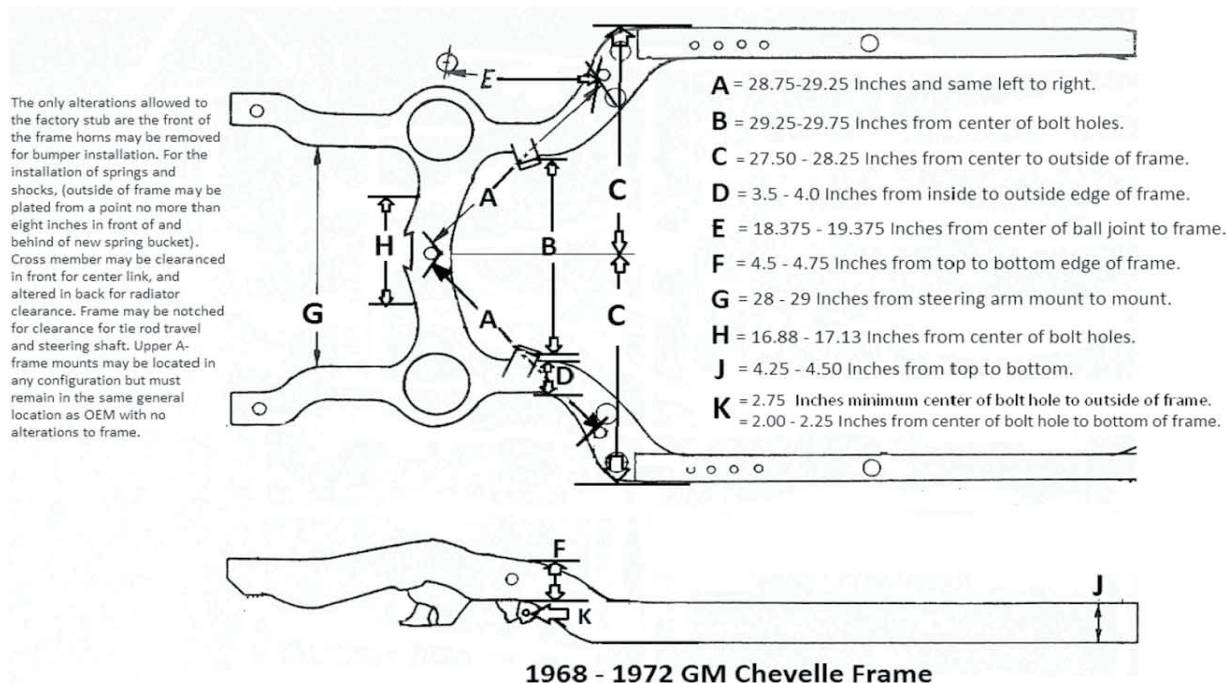
Right front outside corner of frame rail cannot be more than a maximum of 7.50" above the ground after the race. Frame may be notched for tie rod clearance. Top of frame may be notched for A-arm clearance. Minimum frame and body height from ground is four (4) inches (exception is front cross member).

- C. No raising, altering or twisting of frame rails is allowed. No moving of suspension mounts/holes. No intermingling of frame pieces. All factory holes must be present for inspection. All measurements must be within one half inch (either way) of OEM measurements - no tolerance. Top front spring pocket must be present.
- D. Minimum wheelbase 107 inches [no tolerance] both sides. Maximum overall width (front or rear) shall not exceed 78 inches from outside of tread to outside of tread.

#### 4) SUSPENSION - FRONT AND REAR

- A. These rules are subject to change as needed at any time for any reason as deemed by WISSOTA in the best judgment or interest of the sport of Modified racing.
  - 1. Must remain stock-type for the type of frame being used. Steel aftermarket parts may be used as stock components as long as they mount in the stock location and are the same size as the OEM parts.
  - 2. Aluminum and/or titanium components are strictly forbidden. Magnet must stick to all components. No exotic materials allowed.
  - 3. Stock passenger car spindles only, no fabricated spindle. Ford Pinto spindles are allowed. Three-piece aftermarket GM metric spindles by Speedway Motors (part numbers 91034511 or 91034501) and Argo AMC Pacer spindle (part number RP929) are allowed. Must use same steering arm side to side. No other fabricated spindles are allowed. Bottom A-frame may not be altered, lightened or moved and must match side-to-side. **Ball joint location must remain in stock location.**
  - 4. Front sway bars may be used. Front sway bars must be made of steel and may be attached to the bottom A-frame using steel rod end bearing joints. Must be solid full-length OEM.

#### DIAGRAM MOD-2



5. Only one mechanical traction device allowed. Only one pull bar or one lift arm is allowed. No other options/configurations will be allowed.
  6. Floating, pivoting or rotating mounts or brackets of any sort (connected or associated to the pull bar or lift arm) are not allowed.
  7. Lift arm is defined as solid steel triangulated bar that is connected at the top (with one rod end bearing) and bottom (with one rod end bearing) of the rear end housing extending forward where it is connected to a shock (which may utilize only the rod end bearing directly related to that one shock, one on each end); shock spring coil over combination; or a limiting chain (with or without a biscuit for cushion—only one rod end bearing is allowed in this configuration). One stabilizer bar is allowed to be located on the front of the lift arm from left to right in the car.
  8. Pull bar is defined as a continuous assembly (that may or may not contain a spring or biscuit assembly located in line to absorb torque) that is connected to the top of the rear end with one rod end bearing and extends forward to a solid mounting point located on the chassis where it is connected with rod end bearing. The mounting located at both the front and rear of the pull bar may be adjustable but must remain constant during competition (may not be adjustable from the cockpit). One additional shock is allowed in the center of the car as traction or safety device (for example: 90/10 over the pull bar). Fifth shock is only allowed in relation to pull bar or lift arm (example 90/10 mounted inline with pull bar). This shock must run in the same direction as pull bar.
  9. No brake bar is allowed with pull bar.
  10. Rubber bushing and/or biscuits are permitted on both lift arm and pull bar application, but must be directly connected and functioning in relation to corresponding part only.
- B. Suspension: All front suspension components must be steel unaltered O.E.M. in O.E.M. location and replaceable by O.E.M. parts. Center link brace for steering is not allowed. May use stock dimensional tubular/aftermarket lower A-frames. Bottom A-frame mounts and bottom A-frame bushings must be in stock location. Bottom A-frame bushings must have bolt hole in center of the bushing, not an offset bolt hole. Exceptions are: tube type upper A-frames with or without cross shaft and mounts can be moved. Weight jack must be in original center line of spring. Stock passenger car spindles only, no fabricated spindles. Ford Pinto spindles are allowed. Front caliper can be mounted on front side of spindle/ball joint. Calipers must be mounted same side to side. Ball joint end of the bottom A-arm can be removed for rotor clearance. Ball joint locations must follow ball joint rule. Welding a steel sleeve in the ball joint hole in the bottom A-frame is allowed. Bottom ball joints must be mounted with the pin pointed up; top ball joints must be mounted with the pin pointed down. Tie rod ends/rod end bearing joints can be mounted under the steering arm. A spacer is allowed under the steering arm. Both bottom A-frames cannot be altered or moved from stock location. May use left front steel chain or tether; must have slack at ride height. Spindles and bottom control arms must be the same from side-to-side. No aluminum or fiberglass suspension or rear end parts allowed. Steering box must be O.E.M., non-lightened, and must remain in original bolt pattern for frame being used. No rack and pinion steering allowed. In-cockpit steering may be modified to suit driver, but must be kept on the left side of cockpit. No center steering allowed. Lower ball joint may be aftermarket, but must be steel and must remain in stock location, plus or minus .25 inch. Rotors cannot be lightened. Rotors may be redrilled for different bolt pattern or large studs. No drilled lightened rotors allowed. Vented rotors only front and back. Sixteen (16) vane rotors allowed. Slotted rotors are allowed. Must use steel fasteners. Rear rotors must weigh a minimum of 6.5 lbs.
- C. Rear suspension arms must be steel. All rear suspension radius rods, lift arms, panhard bars must be of fixed solid design. Absolutely no hydraulic cylinder, bump rods, spring rods, slider rods or shock type radius rods will be allowed to locate the rear end.

- D. No remote or external canister type shocks allowed. Aluminum shock rod end bearing ends are Allowed. No more than two-way adjustable shocks. Conventional type (closed on one end) shock absorbers only. Single shaft shocks only. Electronically controlled or monitored shocks by any means or methods are not allowed. Cockpit-adjustable shocks are not allowed. Driver cannot be able to adjust shocks while on track during a race. Inerter shocks, J-damper shocks, active mass damper shocks, through-rod designed shocks are not allowed. Shocks must be steel. Front half of shocks can be covered. Coil over or coil over eliminator kit may be aluminum or steel. Dummy shock or slider must be steel. May have aluminum rod end bearing ends. Coil overs allowed on rear end only. Lift bar may have same type of coil-over as the rearend. Any live shock used must be steel. Bulb style shock top with built in rod end bearings may be steel or aluminum but body of shock must be steel.
- E. Rear of frame may be altered to accept leaf or coil springs; any coil spring must be at least 4.5 inches outside diameter. Steel springs only. No progressive or welded springs are allowed, other than progressive springs on pull bars. Springs must be same outside diameter from top to bottom. No spring rubbers are allowed. Spring wire diameter and coil spread must remain consistent from one end to the other; last coil on each end must be closed and shaved off to create flat surfaces for mounting. Front springs must be shaved closed on top end and closed on other. Conventional spring mounting devices only; no widgets, trick or spring-altering mounting devices will be allowed. No limiting devices are allowed on front suspension components, including but not limited in relation to: shocks, springs, upper or lower A-frames (except where specific class rules allow specific alterations). No torsion bars allowed in rear. Front coil springs must be 9.5" free height with 0.5" tolerance. Rear coil springs must be 11"-16" free height with 0.5" tolerance.
- F. No hydraulic, ratchet or electric weight jacks anywhere in or on car. No air shocks or air bags allowed.
- G. One shock per wheel only. Additional shocks in other locations permissible. The maximum amount of travel-limiting material on shock shaft is one half inch (1/2)". A total of 2.5" combined rubber or fiber bump stops or packers or washers allowed on the right front shock. No spring bumps. Adjustable Bump Stop Cups are not allowed. This means anything above/below the shock shaft threaded end. Internal bump stops are not allowed.
- H. Steel swedge tubes with steel rod end bearing joints are allowed.
- I. Aluminum shock extensions are allowed.
- J. Dummy shock/slider cannot have Schrader Valve or any other ports. Also, dummy shock/sliders cannot have any rod force. Rear dummy shocks or sliders cannot have packers, bump stops, biscuits, or any other materials on the shaft, and springs are not allowed to have any spring rubbers attached.
- K. Aluminum top A-frame cross shafts are allowed.
- L. Must have brakes on each wheel; this includes 4 calipers and 4 rotors (no aluminum or exotic materials calipers). Cast iron single piston brake calipers only. Must be able to lock up all 4 wheels for inspection (brake shutoff allowed on right front).
- M. Shocks, springs, new designs/components:
1. No cross connected shocks are allowed.
  2. Shocks must mount vertically to the birdcage or clamp bracket. **Rear shocks must be mounted NO more than 25 degrees from vertical in any direction.**
  3. Any new chassis design or component designs and or technology pertaining to and/or but not limited to shock absorber mounts must be submitted to WISSOTA for approval before they will be permitted for use in competition. Manufacturer and/or competitor may be required to disassemble for complete inspection before installment of the new part is permitted.
  4. No air springs are allowed. One coil spring is required on each corner of the car. Leaf springs are allowed.

5. Travel limiting chains are allowed on rear end and on the left front. Not allowed on the right front. The solid chain cannot have any additional compliance devices such as springs, bumps, pucks, or any other energy absorbing devices. The chain must mount at the 12 o'clock position on top of the rear end axle tube between the birdcage and the rear end side bell with a clamp bracket as close to vertical as possible.
6. A swing arm and/or Z-link suspension is permitted as long as the top and bottom solid links are mounted on rod end bearings and run in the opposite direction of the bird cage. The shock on a swing arm or Z-link rear suspension may mount to the bird cage or the bottom radius rod.

**O. Suspension Components**

1. Frame and/or suspension mounts must be welded or bolted solid to the frame and not move. ie floating, pivoting and/or rotating mounts and/or brackets of any sort are not allowed.
2. Bolted components must match the correct bolt size with the hole.

**P. Radius Rods**

1. Radius rods must be minimum of 7/8" diameter O.D. Rods can be round, square, or hex shaped. Rods must be minimum of .095 steel.
2. Rod end bearing joints must be minimum 5/8 and maximum of 3/4 steel rod end bearing. No rubber bushings.
3. Only two (2) radius rods per side.
4. Radius rods must be spaced on the frame of a minimum of 6".
5. Radius rods must be spaced on the bird cage a minimum of 6" and a max. of 12".
6. Measurements will be made from center of each radius rod bolt.

**Q. Birdcages**

1. Birdcages may consist of multiple barrels but must bolt or weld together to work as one single barrel birdcage.
2. Limited to one (1) bird cage per side.
3. Shock(s) and radius rods must mount to the birdcage.
4. Floating, pivoting and/or rotating mounts and/or brackets of any sort are not allowed. All brackets or mounts attached to the birdcage must be bolted or welded solid.
5. Birdcages and all other birdcage attachments, including retaining rings/collars must be similar in design side to side. Must be made of steel and must weight within six (6) pounds of one another total. Detail must be paid to functionality.
6. **Over indexing of rear birdcages is not allowed. Two radius rods, one shock, one coil spring and brake caliper if desired are the only suspension parts allowed to connect to the birdcage. No additional rotation preventing or enhancing devices allowed to connect to the birdcage.**

**5) TIRES AND WHEELS**

- A. The Hoosier WISSOTA 35W tire will be the only tire allowed on the car. There will be no defacing or altering of manufacturer identification marks or numbers on the tires. No softening or treating of tires is allowed. Siping and grinding are allowed; grooving is not allowed. No tire needling.
- B. All wheels must be WISSOTA-certified, stamped and stickered with WISSOTA logo. Steel wheels only; maximum 8-inch wheels; bead locks will be allowed on the right rear and right front wheels only; 3/4-inch tolerance will be allowed for bead lock. If screws are used, the wheels may not exceed in the 8-inch limit. No modifications allowed on wheels. Steel bead lock only. Wheel spacer and/or adapter from the rotor to the rim



cannot exceed 1-inch total thickness. Wheel spacers may not have a diameter greater than 7.25 inches, and they may only be made of aluminum. No wheel spacers made of other materials, or greater thickness or diameter, may be used. Wheel spacer/adaptor may not exceed one (1) inch.

- C. Any hard-surface wheel disc, when used, must be mounted under a bead lock or bolted on wheel with at least three (3) 1/4" bolts. No other hard surface wheel discs allowed. Soft wheel covers are allowed on the left side of the car.
- D. Lug nuts must be a minimum of 1" and steel only.

## 6) DRIVE TRAIN

### Transmissions & Clutch Rules

- A. All racing transmissions with internal working clutch must be able to shift into low gear and reverse with engine running.
- B. No in or out box transmissions are allowed.
- C. All cars must start and move both in forward and reverse without being pushed or pulled onto the race track.
- D. No ball spline type transmission allowed.
- E. All transmissions must have a stock type slip yoke.
- F. Quick change transmission allowed.
- G. Drive shafts must be a minimum outside diameter of 2" and must use a conventional slip yoke design. Drive shafts must be constructed of steel and painted white.
- H. May use white carbon fiber driveshafts with minimum outside diameter of 2.25".
- I. Driveshaft hoop is required. Driveshaft hoop must wrap 360 degrees around the driveshaft, must be constructed of at least 1/4-inch by 2 inch steel and must be mounted 6" from behind front U-joint.

### Rear-Ends

- A. Any passenger car or truck stock appearing rear end may be used. Quick change rear ends are also allowed but with steel tubes only. Aluminum spool allowed in quick change only. All bird cages, pull bar mounts, pinion mounts, J bar/panhard bar mounts and all other bolt-ons must be steel. 10" ring and pinion only. No weighted rear ends. Axle tube must be one-piece. The outside diameter of the axle tube must not exceed three inches. Axle tube inserts or external sleeves will not be permitted. Axle tubes must be steel with a maximum thickness of 1/4 inch.
- B. No limited slip type rear ends are allowed
- C. No lightweight metal rear ends allowed, including aluminum, magnesium, titanium, or exotic materials. No aluminum or exotic metal hubs, hats, rotors, calipers, A-frames, spindles, driveshafts or weight jacks allowed.
- D. The only aluminum allowed on the rear end is as follows: aluminum leaf spring spacer blocks, shackles, shock rod end bearing ends, drive plates and dust caps. In addition, aluminum or magnesium quick change center section is allowed. Aluminum ring and pinion carrier in quick change is allowed.

## 7) ENGINES

**Cylinder Heads** The following machining can be done to cylinder heads in the following engine combinations: 0-362 c.i. Spec Engine, and WISSOTA Modified Concept Engine (this does not apply to the GM 604 Sealed Crate Modified Engine: All heads, including stock and aftermarket heads in all options, can have guide plates installed. Push tube area of heads can be opened up. Valve spring shims are allowed. Heads can be milled according to class rules and specific milling rules. Must follow all other class rules. External coolant lines and external oil drain-back lines are allowed on all engines.

**Radiator** must be mounted in front of engine in all classes. Electric fans are not allowed in any class except for Mod Fours and Hornets.

**WISSOTA Modified 0-362 c.i. Spec Engine**

- A. The word "Spec" must be in bold letters on both sides of the hood, both sides of hood scoop, or on both front window posts in clear view of officials.
- B. No aluminum blocks. No aluminum cylinder heads other than the Brodix head described in C-8 below.
- C. If using WISSOTA-approved cast iron heads, no polishing, porting, grinding or adding of foreign material to ports or runners. Combustion chamber may be polished.
  - 1. Competition valve job permitted with the bottom cut not to exceed 3/4-inch below actual valve seat - Ford and Chrysler only. 1 inch below actual valve seat on the sportsman II head and 1-1/4 inch below actual valve seat on the bowtie heads. Any cut over 60 degrees must be cut with cutter not by a stone.
  - 2. Roller rockers and roller cams allowed.
  - 3. The heads listed in C-4, C-5, C-6, C-7 and C-8 are WISSOTA's choice of cast iron heads and C-8 describes the only aluminum cylinder head that may be used.
  - 4. Chevy "bowtie" heads. Intake port size 1.240 width, 2.140 height; exhaust port size 1.365 width, 1.300 height. No turbo heads.
  - 5. World Products Sportsman II Part No. 1115, Casting No. 1-037 port sizes. Intake width 1.240, height 2.050; Exhaust width 1.425, height 1.420.
  - 6. Chrysler W-2 heads only. Intake port size 1.350 width, 2.250 height; exhaust port size 1.450 width, 1.440 height.
  - 7. Ford S.V.O. cast iron head, part no.'s M-6049-E351 and M-6049-N351. Intake port size 1.220 width, 2.05 height; exhaust port size 1.486 width, 1.575 height.
  - 8. The Spec engine can use the spec Brodix head just like the Modified Concept heads, with 40 lb. of weight added in front of midplate (20 lb. on each side). Added hardware can be the same as allowed on the Spec engine (machine work to the heads must follow the Concept head machine work).
  - 9. All headers are allowed on Spec engine and Concept engine. No 2 into one headers
- D. Dry sump systems are not allowed. "Wet sump" oil system only. Internal or external oil pumps are permitted: however, single pick up must remain in the pan with a maximum One (1) return line. External remote oil tanks (dry sump tanks) are not allowed. Oil coolers and remote filter are permitted. No vacuum pump/air pumps allowed.
- E. No titanium or exotic materials parts allowed except for valves and retainers.
- F. Minimum 3/4-inch inspection hole in side of oil pan 2-1/2 inches down from the pan rail in line with a journal. Inspection hole must be easily accessible to inspector. This must be done when engine is repaired and resealed.
- G. The intake manifold height limit is a maximum of 7-1/4 inches from the bottom of intake at valve gallery rail to base of carburetor. Any spacer may be used to raise carb to the 7-1/4-inch height. A maximum of 300 thousandths of material is allowed between the bottom of the intake manifold and the lifter gallery rail.
- H. No magnetos. GM HEI distributor can be interchanged in Ford and Mopar engines. No crank trigger ignition.
- I. Any American-made engine may be used as long as rear of engine (bellhousing flange) is mounted at least 72 inches forward from the centerline of the rear axle. Engine offset must be kept within the frame rails.
- J. These cars must weigh a minimum of 2,450 pounds after all races with the driver and weight must be posted on both sides of race car in view of officials.

- K. Maximum 6 inch spoiler. The trailing edge of the spoiler must be turned down a minimum of 30 degrees.
- L. **RPM Chip Rule** All cars must run a functioning 8500 RPM chip in the ignition system. Working dial RPM boxes are also acceptable. Ignition system components must not be within the driver's reach while in the race car. A rotary or clicker box may be used to limit RPMs. More than one RPM chip/dial is allowed as long as they are set the same and meet the 8500 RPM rule as described above. Violation of the RPM rule is a speed infraction as defined in general rules. Ground must be fastened with in 4" of box.

### **WISSOTA Modified Concept Engine**

1. Any cast iron block, no unnecessary machine work inside or outside of block. No lightening, no coating, painting, or any other work to inside of intake manifolds, heads and block lifter galley allowed. Minor deburring allowed.
2. 362 cubic inch maximum.
3. 14:1 maximum compression.
4. Steel oil pan only, wet sump oil system, cast iron oil pump in stock location. Oil pan must have an inspection hole. **Refer to Page 48 –F**
5. Aluminum intake untouched. 7.25 inches from bottom of intake to base of carburetor, including spacer and gaskets. Absolutely no machining or other work which removes or adds material can be done to intake manifold. The only intake manifolds allowed are: Chevrolet, Edelbrock p/n 2925, Brodix p/n HV 1000 or p/n BM 1000, Holley p/n 300110 or 300-25, World Products Motown p/n 06140, RHS p/n 12902; Ford, Edelbrock p/n 2934, 2921, 2928, 2980, 2981.
6. WISSOTA spec Brodix Chevrolet SPCH, Ford SPFO, or Mopar SPMO spec heads, ports as cast. Absolutely no removing, relocating, grinding, polishing, or defacing of any letter or number cast into the Brodix WISSOTA Spec aluminum cylinder heads. No work on the inside of heads including combustion chamber. Heads may be angle milled, although valve angle must remain within 1 (one) degree of original manufactured specification. Valve guides must remain in original angle and spacing as manufactured. Valve guides may not be tapered, or thinned, or shortened in any way. Absolutely no welding or adding of material of any kind to the head. May machine for pushrod clearance. Absolutely no enlarging, relocating or other altering of any head bolt hole, dowel hole, or threaded hole in the head except as noted below. May spot face head bolt holes after angle milling head. Heli coils may be used for repairs. Absolutely no grinding or polishing of any kind on head casting except for pushrod clearance. Any internally repaired spec head must be recertified by Brodix. Spec head checking fixtures will be used by WISSOTA officials to check all specifications and dimensions.
7. Stud mount rocker arms only, no shaft rockers, 1.6 max. ratio, stud girdle allowed. Mopars must use T&D Machine products rocker arm system p/n 8019.
8. Steel valve spring retainers/locks only. No hollow stem or titanium valves. Valve stem must be 11/32 in size.
9. Cast iron flat tappet cam, stock diameter journals, convectional stock diameter cast iron lifters and tooled steel lifters allowed. No mushroom lifters.
10. Timing chain only; no gear drive.
11. Stock diameter babbitt cam bearing only.
12. Cam must be stock firing order, in stock location; no raised cams.
13. 7800 maximum RPM limit.

14. No crank trigger ignition.
15. Crankshaft: no under cutting of counterweights, no gun drilled mains except for Ford (see wt. below), no low mass crankshafts. Crankshaft must have a minimum weight as follows: Chevrolet 45 lbs., Ford non-gun drilled mains 42 lbs., Ford gun drilled mains 45 lbs. Mopar 45 lbs.
16. Steel rods only. Steel balancer only.
17. Alcohol fuel only.
18. Minimum weight with driver after race is 2,450 lbs.
19. Maximum spoiler height is 6". Sail panels must be of same configuration as all other Modifieds regardless of engine package. The trailing edge of the spoiler must be turned down a minimum of 30 degrees.
20. Must follow all other WISSOTA Modified rules.

#### **WISSOTA Modified GM 604 Sealed Crate Engine**

- A. The word "Crate" must be in bold letters on both sides of the hood, both sides of the hood scoop, or on both front window posts in clear view of officials.
- B. Four barrel carburetor allowed, gas or alcohol.
- C. Any 2" maximum carburetor spacer allowed.
- D. Maximum RPM limit of 6800.
- E. Any headers are allowed. No 2 into 1 headers.
- F. Minimum weight with driver ,after race, is 2,400 lbs.
- G. Maximum spoiler height is 7". Sail panels must be of same configuration as all other Modifieds regardless of engine package. The trailing edge of the spoiler must be turned down a minimum of 30 degrees.
- H. Must follow all other WISSOTA Modified rules. All options are subject to review/change as deemed necessary. If rules do not specifically say you can have said part, it means you cannot have said part or alterations to said part.
- I. Minimum 3/4-inch inspection hole in side of oil pan 2 1/2 inch's down from the pan rail in line with a journal. Inspection hole must be easily accessible to inspector. This must be done when the engine is repaired and resealed.

#### **8) ASPIRAITON AND FUEL**

- A. Any 4 barrel carburetors allowed. EFI or mechanical injection is NOT allowed.
- B. For all classes: no dimpling of material around carburetor venturis; venturis must all be consistent. No plastic, phenolic, resin, or any other exotic materials carburetors allowed in any class. No spacers of any kind between carburetor base plate and carburetor main body in any class. Air cleaner element height cannot exceed the maximum height of the hood scoop height measurement as allowed by each class.
- C. Fuel/Fuel Cell: Safety-approved fuel cells are mandatory. Fuel cell must be enclosed in a metal case of 20-gauge steel or 15 gauge aluminum. All fuel cells must be mounted no further forward than the center of rearend and must be between the frame rails. The fuel cell overflow hose must go to the bottom of the cell on the outside and must be fastened at the bottom of the cell, even if a ball check valve is used. All fuel cells must have a minimum of (2) 2-inchx1/8-inch metal straps or equivalent metal surrounding the fuel cell. Straps can not be used to fasten fuel cell. It is recommended that you use the smallest fuel cell possible. Fuel/fuel line cooler are not allowed. You can wrap fuel lines. Fire Suppression Onboard system is strongly recommended. But the tank can not be mounted in drivers compartment area.

- D. No fuel injection. No electric fuel pumps. Rear-mounted belt-driver fuel pumps allowed. No turbos. Engines must be able to accept and operate on a stock vacuum fuel pump.
- E. Fuel must be gasoline, ethanol-enriched gasoline or alcohol. No oxygenated fuel other than methanol or ethanol is allowed. No nitrous oxide, or nitro. No nitrous devices allowed. No nitro-methane or propylene oxide.
- F. Fuel pressure regulator is allowed in all classes

## **9) ALUMINUM**

Aluminum parts allowed are leaf spring spacer blocks, shackles, radiator, drive plates and dust caps may be used on all rear ends. Quick change aluminum or magnesium center section allowed, aluminum ring and pinion carrier allowed and aluminum spool allowed in quick change rear ends only.

## **10) DISPLAY OF WEIGHT**

You must display the weight and type of engine option you are using (examples: Spec, Concept, Crate) on both front window post, sides of the hood, hood scoop.

## **11) OTHER**

**Exhaust System:** Exhaust systems must be mounted in such a way as to direct spent gases away from the cockpit area of the vehicle and away from the areas of possible fuel spill. Car number must be present on the last piece of the exhaust. WISSOTA recommends that all pieces of exhaust be welded all the way around. Exhaust must be sealed off with metal, not exhaust wrap, from driver compartment, including footwell areas, in all classes.

**Exhaust Noise Suppression:** All cars must use a manufactured muffler on the exhaust system. The mufflers must be manufactured by a company that is established as a manufacturer of noise suppression equipment (mufflers). A turn down is not considered a muffler, nor is any tube added to the end of the header merely to change the direction of the exhaust and sound emitted. This rule does not allow a muffler that is built by a chassis builder, engine builder or your local fabrication shop, or any non-recognized manufacturer of mufflers. Mufflers must meet all manufacturer specifications and cannot be altered in any way.

**Batteries:** Only one battery may be used in each car. This applies to all divisions. Batteries must be securely mounted and shielded. Batteries mounted inside the vehicle must be in marine-type cases. Positive battery terminal must be covered with plastic or rubber. No lithium batteries in any class.

**Loose Objects:** Loose objects, including weights, are not allowed above the interior tin or deck in the driver's compartment. Any weight added to other areas of the vehicle must be securely mounted using a minimum of two (2) 1/2-inch bolts through the weights. Weights must be mounted to the frame or cage only. Weight cannot move while race car is in motion or on track. Weights must be painted white and have your car number painted on them. If for any reason a weight falls off, the car is disqualified for that race. If for any reason a muffler falls off, the car is disqualified for that race.

**Mirrors and Radio:** No mirrors are allowed in car at any time. The only radio or communication device allowed in any race car is a single RACEceiver unit which allows track officials to communicate with drivers. Two way communication devices in or attached to the race car or driver will not be permitted. (Cellular, satellite, wi-fi, GPS tracking devices. Cell phones & smart watches or any kind of antennas.)



**Steering Wheel:** All cars must be equipped with a quick-disconnect steering wheel.

**Brakes:** All cars must have brakes on all four (4) wheels (not applicable to Mod Fours). Cars must be able to lock up all brakes for inspection. No carbon fiber brakes allowed. No titanium or exotic material brakes allowed other than aluminum brake calipers in Late Models.

**Tire Availability Disclaimer:** -ATTENTION DRIVERS: Be advised that not all race tracks have tire vendors with large supplies of the various tire sizes. It is each driver's responsibility to supply their own tires.

**Exotic Materials:** No exotic materials of any kind, including tungsten, are allowed on any race car unless a rule specifically allows that material. A carbon fiber air cleaner housing is allowed

**Traction Control Devices:** Electro-mechanical, computer-controlled, or electronic traction control devices of any type or kind are not allowed in any WISSOTA class. Penalty is a five thousand (\$5000.00) fine, a one (1) year suspension, and loss of all points (both track and national). Parts are confiscated and sent for testing. Driver can continue racing until test results are received by WISSOTA.

**Adjustable Timing Controls:** Adjustable timing controls are not permitted within driver's reach. Retarded or ignition delays are not permitted within driver's reach. RPM limiters are not permitted within driver's reach. Distributors must be mounted in original mounting positions for the make and model of engine in use. If your car is equipped with a switching device that controls ignition trigger input to the ignition box, **ONLY** one input circuit can be used in competition. Any other circuitry must be unhooked and not connected to any switches.

**Composite Or Exotic materials Intake Manifolds:** are not allowed in any WISSOTA division. Intakes must be made of either steel or aluminum, as described in each division's rules in this book.

**In-Car Cameras/Lights:** Video cameras and/or recording devices are not allowed. Anywhere on any race car, in any class, other than in the cockpit above the interior deck tin. No lights, LED lights, or any other illuminating devices allowed to be turned on under or outside any race car while racing.

**Cylinder Head Valve Jobs:** In all competition valve jobs, all cuts must be concentric to the valve guide.

**Louvers:** or holes on the deck and on the back of the car or sides of the car are considered ground effects, and ground effects are not allowed. You can have louvers, holes, or two (2) inch high scoop over oil cooler or tranny cooler. Louvers, holes, or scoop cannot be any bigger than the coolers. No ground effects on the back of the roof except where stated by rules. You may use a maximum four bolts fastening the back of the roof.

**Electronic Components:** No electronic components are allowed in or on a race car or driver except those specifically allowed by WISSOTA and/or track. No computerized dash instrumentation allowed. All electronic gauges—analogue, digital, or dash modules—are allowed. The tachometer may have only one input from its sensor. No outputs of any kind are permitted. RACEceiver, transponder, GoPro camera or other similar recording devices are allowed when mounted as per WISSOTA rules.

**Shocks:** No electronically adjustable shocks are allowed.

**Timing Control:** No programmable timing control in ignition control/ignition box. WISSOTA and/or official from any WISSOTA track may confiscate and send to manufacturer any ignition/controller to make sure it has not been altered and complies with class rules. No ignition retarder other than starting retard.

**All classes:** no part of component on the race car can be controlled or adjusted by Bluetooth or any other wireless communication method or device. Drivers cannot have cell phone or watch in car.

**Spoilers:** The trailing edge of all spoilers must be turned down a minimum of 30 degrees so it is below the top of the spoiler.

**Tire & Wheel Monitors:** No tire air pressure monitors, tire temperature monitors, wheel spin monitors, or any other device that monitors tire or wheel performance or characteristics may be mounted to any part of the race car, wheels or tires, including the valve stem. No air bleeder valves of any kind are permitted on any wheels.

**Air Boxes:** No air boxes allowed in any class.

**Car Covers:** No car covers allowed anywhere on the race car outside pit stall.

**Radiator:** Must be mounted in front of engine in all classes. Electric fans are not allowed in any class except for Mod Fours and Hornets.

**Wheel Covers:** No wheel covers allowed on left side of any cars. Soft foam mud plugs allowed on the left side of all race cars.

**Gas Lines:** in cockpit/driver's compartment must be made of steel

**Halo Height :** Top of helmet must be below the top of the halo with driver buckled in the seat. The intrusion/halo bar 1-1/4" minimum material diameter with wall thickness of (13ga) .095". It fastens to the halo at or in front of seat headrest. Out and down to top door bar or angle back to the top door bar or B bar that goes up to the halo. One horizontal bar from extra bar to B bar - does not have to be 1-1/4". This is Mandatory.

**Deck Height:** Rear deck height will be measured in the middle of the rear deck, side to side, with driver in the car and front wheels pointed straight forward. No additional tolerances for deck height will be allowed; the stated maximum height is absolute.

**Breakaway Right rear T-Bar:** Mandatory right rear corner deck support is mandatory for late Models, Modifieds, Super Stocks, Midwest Modifieds and Mod Fours.

**Rock Deflector:** Near driver's right hand may not be more than 4" high and cannot extend beyond steering wheel.

