

# YAKIMA SPEEDWAY

2012

LATE MODEL SPORTSMAN



## CONSTRUCTION RULES

### 1. BODIES:

- 1.1. A-B-C bodies are highly recommended. Additional approved: 1999-current "standard" and four-legal bodies. Street Stock style bodies will be allowed, Monte Carlo, Camaro, etc. **NO DOWNFORCE BODIES OR PANELS ALLOWED.** Must be stock appearing and mounted per manufacture guidelines. Professional appearance must be maintained. No flaring of nose, no body skirting, no streamlining will be allowed.
- 1.2. Frame & body clearance 4" min. without driver. 47" roof height required. Maximum Quarter Panel height will be 35" at the rear of the Left and Right quarter panel. This will be measured with all 4 corners of the center frame section at 4". . Rear spoiler max. 6.5" x 60", clear Lexan.

### 2. TREAD WIDTH: maximum

- 2.1. Coil-overs (fabricated): 65.5"
- 2.2. Big Spring\*(fabricated): 67.5"
- 2.3. Big Spring\* (stock stub\*\*) 69.0"  
(\*Big Spring means 4-3/4" min. diameter, front & rear)  
(\*\* Stock Stub definition is as follows: at least 10" of stock frame forward of the centerline of the spring pocket will remain. Stock frame must extend rearward to at least the engine to bell housing seam. Must have stock lower "A" arms.)

### 3. BASE WEIGHT: (min. weight / max. left % / max. rear %)

- 3.1. Stock Stub, stock untouched cast iron heads – 2900 lbs., 57% left, no rear requirement.
- 3.2. Stock Frame\*, stock untouched cast iron heads – 2900 lbs., 58% left, no rear requirement
- 3.3. Fab., Big Spring, stock untouched cast iron heads - 2950 lbs, 57% left, max 50.0% rear.
- 3.4. Fab., Coil over, stock untouched cast iron heads – 3000 lbs., 56% left, max. 50.0% rear.  
\* Stock Frame definition: at least 10" of stock frame forward of the centerline of the front spring pocket will remain. Stock frame will remain intact rearward to a minimum of the centerline of the rear axle housing. Also includes uni-body cars with full uni-body construction intact.

### 4. HEADS (other than stock):

- 4.1. Brodix Spec Head (recommended) Part #SP-CH/FO/MO  
Spec heads have CNC combustion chambers, valve bowls, and intake ports. **NO** grinding, blending, polishing, welding and/or use of any substance to alter head flow whatsoever. Flat-milling only. Valve angle must remain as manufactured. Titanium valves or springs allowed. Valve stem min. 1 1/32" diameter. May only be used on motors 360cid or less. **See penalty below.**
- 4.2. Aftermarket Cast iron heads:  
Approved heads (max. 200cc styles only): Dart Iron Eagle & Platinum 200s, World Products Sportsman II, Ford Motorsports, and Mopar W-2. **ALL UNTOUCHED** with ID markings intact. No porting, polishing, port matching and/or acid dipping allowed. (NOTE: All heads must check within 15cc of manufactured volume, this allowance for valve replacement & casting variance only). Approved valve angles: Chevy-23, Ford-11, Mopar-15 . **See penalty below.**

### 5. WEIGHT PENALTIES / BREAKS:

- 5.1. Offset / Straight rail chassis – **+50 lbs.**
- 5.2. Brodix Spec Head - **+100 lbs.**
- 5.3. Brodix "spec" head with roller cam shaft **+100 lbs.**
- 5.4. Aftermarket Cast Iron Heads - **+100 Lbs.**
- 5.5. 604 Crate Option - **-150 lbs.**
- 5.6. Dry Sump oil system - **+25 lbs.**
- 5.7. Aluminum shocks (un-sealed) - **+50 lbs**
- 5.8. Any car with altered or modified panels, or not within manufacture dimensions may be assessed a 100 lbs penalty per infraction. Exception to Stock Steel bodies. See officials about steel body modifications.

### 6. ENGINE:

- 6.1. 362 cubic inch max.
- 6.2. **Carburetor rules:** Max. 650 CFM or open with 1 1/4" restrictor plate. \*Exception: Full stock frame / uni-body cars- **open carb.**

- 6.3. Cast iron blocks only. Engine must match body: GM-to-GM, Ford-to-Ford, etc. Except 604 Crate, (see section 6.14)
- 6.4. Centerline of crankshaft must be within 1" of the centerline of the tread width. Engine set back: GM – 2", Ford and Mopar – 3" measured from the most forward spark plug hole to the centerline of the upper ball joints. Crank height minimum 10".
- 6.5. Dry Sump systems allowed. **25 lb weight penalty.**
- 6.6. Flat tappet cams only; no mushroom or radius-bottom lifters allowed. Max. lifter size .875 for GM & Ford, Dodge max .904
- 6.7. "Standard" aluminum open-plenum intake manifolds only with minimal (1" maximum) port matching permitted on runners. No additional flow improvement work or drilling allowed.
- 6.8. GM and MOPAR Only - a one- (1)-piece carburetor spacer, maximum one (1) inch in thickness, acceptable to Yakima Speedway officials, may be installed between intake manifold and carburetor. The spacer opening must be perpendicular to the base of the carburetor. Taper or bevel is not permitted. Outside configurations of the spacer must conform to the base of the carburetor. Only two- (2) paper gaskets (one (1) per side) maximum thickness .065 inch will be permitted. Gaskets can only be altered to match carburetor base openings.
- 6.9. FORDS Only – Maximum distance measured from floor of manifold to base of carb of 5 1/8". This measurement will be including any spacer plates, if used.
- 6.10. Any 4-barrel carburetor permitted. Excluding 604 Crate and 9.5:1 Tour Engines.
- 6.11. Distributor type ignition only, no magnetos.
- 6.12. Max. exhaust sound level 98 db. at 75 feet. Maximum 4" exhaust.
- 6.13. Only round paper or washable/reusable (K&N style) air cleaners allowed. Minimum of 12" diameter and maximum of 16" diameter. Must be a minimum of 1 1/2" in height and maximum of 4" in height. The air filter may not be sprayed with any type of chemical or liquid other than recharging oil. The top and bottom must be the same diameter. The air cleaner top hole may not protrude more than 1" below top of lid. No K&N style tops or bases (air directing). Air must enter the carb from the side of air cleaner. No tubes, funnels or any other device that may direct the flow of air into the carb will be allowed. No air boxes.
- 6.14. **TOUR ENGINES**
  - 6.13.1. Must be 9.5:1 compression
  - 6.13.2. Must run 390 cfm carburetor
  - 6.13.3. Carb must have 390 base plate, booster bar may be removed, booster length must be .700 minimum. ID of booster no larger than .480.
- 6.14. **604 CRATE ENGINE OPTION:**
  - 6.14.1. The GM sealed, crate engine, part # 88958604, is the ONLY sealed, crate engine allowed.
  - 6.14.2. The GM crate engine is allowed in any body. GM to Ford, GM to GM, GM to Dodge, etc.
  - 6.14.3. NO aftermarket harmonic balancers allowed. You may use the GM 6-3/4" harmonic balancer, part # 12551537, or the GM harmonic balancer that comes with the crate engine.
  - 6.14.4. It is mandatory to use the GM valve springs, part # 12551483, and 1.5 ratio rocker arms, part # 12367345, on all GM sealed crate engines.
  - 6.14.5. Any Holley carburetor permitted with a base plate hole diameter 1-11/16" maximum. Only a one (1)-piece solid carburetor spacer, maximum 1" thickness may be installed between the carburetor and the intake manifold. An open or four (4) hole spacer may be used. Spacer must be straight cut with no taper or bevel. One (1) gasket per side with a .065 maximum thickness. Only round paper or washable/reusable (K&N style) air cleaners allowed. Minimum of 12" diameter and maximum of 16" diameter. Must be a minimum of 1 1/2" in height and maximum of 4" in height. The air filter may not be sprayed with any type of chemical or liquid other than recharging oil. The top and bottom must be the same diameter. The air cleaner top hole may not protrude more than 1" below top of lid. No K&N style tops or bases (air directing). Air must enter the carb from the side of air cleaner. No tubes, funnels or any other device that may direct the flow of air into the carb will be allowed. No air boxes.
  - 6.14.6. It is recommended, but will be mandatory in 2009, for all crate engines to use the 650 CFM Holley, part # 0-80541-1 carburetor. The carburetor and/or any carburetor components (i.e.; boosters, throttle plates, throttle body, throttle shafts, metering blocks, etc.) must remain stock in appearance and match all factory dimensions. Alterations to

the carburetor and/or any carburetor components will not be permitted. Only Holley replacement and/or service parts will be permitted in carburetor rework. Carburetors and/or carburetor components machined from billet materials will not be permitted. The Technical Director reserves the right to confiscate any competitor's carburetor.

- 6.14.7. The Technical Director reserves the right to impound, inspect, replace, and/or have an independent engine builder inspect and test any competitor's crate engine at any time.
- 6.14.8. All GM crate engines WILL be sealed by the manufacturer and/or by an authorized crate engine dealer. The Technical Director must approve all engine seals. The certified GM crate engine re-builder will be Cope Brothers Automotive Machine Service, 253-531-1776. Additional approved crate engine re-builders upon Technical Director's approval. Any team found to have tampered with any engine seals will be subject to disqualification from the event, loss of all points, suspension, and/or other penalties issued from the Technical Director. Any seals that, in the judgment of the Technical Director, have been tampered with and/or altered will result in the engine being declared ineligible for competition. In order for the crate engine to be eligible for further competition, it must be inspected and re-sealed by an authorized crate engine re-builder, at the expense of the team. The Technical Director may impound the ineligible engine for further inspection and/or return it to an authorized crate engine re-builder, at the expense of the team, for re-certification. If, at the conclusion of testing, the engine has been declared altered, modified, or tampered with, the offending team(s) will be subject to disqualification from the event, loss of all points, fines, suspensions, confiscation of the engine, an indefinite suspension and/or additional fines and penalties as deemed appropriate by the Technical Director.

#### 6.15. CRATE ENGINE IGNITION SYSTEM:

- 6.15.1. Only the 6-ALN MSD, 6-AL MSD, or GM part # 1003-7378 style ignition systems with a mandatory rev limiter chip will be allowed.
- 6.15.2. All sealed crate engines will use a 6300 RPM rev limiter chip. The Technical Officials will install in the competitor's ignition box.
- 6.15.3. The mandatory rev limiter chip must remain in place for all on-track activity after installation.
- 6.15.4. The Technical Director reserves the right to replace any installed chip at any time.
- 6.15.5. Teams will NOT be permitted to remove the track owned rev limiter chip at any time, for any reason. Only the Technical Officials will be able to remove the chip following the completion of any racing event. If a team and/or team member, alters, removes and/or, in the judgment of the Technical Director, fails to comply with any of the mandatory rev-limiter chip rule(s), the team is subject to disqualification from the event, loss of all points and money from competition in the event, suspension, license revocation and any additional penalties deemed necessary by the Technical Director.
- 6.15.6. Only single plug, camshaft driven distributors will be allowed.
- 6.15.7. Only one (1) ignition coil will be permitted.
- 6.15.8. Only one (1) electronic firing module, amplifier box will be permitted and it must be mounted to the right of the Driver. The complete assembly must be positively mounted on an interior panel (dashboard permitted) out of reach of the Driver, with chip facing out. Ignition box may be mounted in the engine compartment, with chip facing out, and must be accessible for technical inspection.
- 6.15.9. Computerized, multi-coil, dual electronic firing module box and/or crank trigger systems will not be allowed. Magnetos will not be allowed. The Technical Director must approve all ignition system components and/or ignition systems.
- 6.15.10. Adjustable timing controls (i.e.; advance, retard and/or ignition delay devices, etc.) will not be allowed.
- 6.15.11. Accessories to regulate the power supply will not be allowed.
- 6.15.12. All wiring harnesses and/or separate wiring for ignition amplifier box and ignition system must be separated from all other wiring harnesses and wiring. All wiring harnesses must remain completely visible for technical inspection. Ignition components that are mounted in the Driver's side area are not allowed.
- 6.15.13. A heavy red wire (positive to the battery) and a heavy black wire (negative to the ground) will be allowed. These wires must have a quick connect adapter to facilitate

removal of the ignition amplifier box for technical inspection. The six (6) pin male and female connectors, part # MSD8170 will be the only connectors permitted. Any other wires will not be allowed.

6.15.14. The Technical Director may, at any time, interchange any ignition amplifier box with an ignition amplifier box supplied by the racetrack.

## 7. FRAME & SUSPENSION:

- 7.1. Frame must be minimum 3" x 2" square tubing.
- 7.2. Minimum wheelbase 101".
- 7.3. Big Spring cars must have shocks mounted outboard of the coil springs, not inside the spring. **The only exception to this rule is if car is stock frame / stub, running stock mounted shocks and springs, as from the OEM.**
- 7.4. **Shocks:** Steel, non-adjustable, non-rebuildable (sealed/welded) shocks are the base rule. Aluminum, non-adjustable, un-sealed shocks will receive a **+50 lb.** penalty.
- 7.5. **No bump stops or coil binding.**
- 7.6. **Sway bar:** Maximum outside diameter will be 1 1/4". One piece sway bar design only.
- 7.7. Rack and pinion allowed with aluminum sleeves.
- 7.8. No cambered rear axle housings.
- 7.9. No two piece drive flanges.
- 7.10. No Taper cut axle splines. Straight cut splines only.
- 7.11. No shock, spring, or weight adjusting devices will be allowed in the driver's compartment
- 7.12. Added weight must be securely mounted, painted white with car number. Solid block lead only, no pellets or liquid.
- 7.13. No devices for shifting weight will be permitted.
- 7.14. No electronic traction control devices permitted. Officials reserve the right to exchange any ignition boxes, tachs, etc.
- 7.15. Steel racing wheels only, maximum width 10".

## 8. FUEL:

- 8.1. Gasoline only, no blended or exotic fuels, nor fuel additives allowed.
- 8.2. No electric fuel pumps. 22-gallon maximum commercially manufactured fuel cell with rubberized fabric bladder is mandatory.
- 8.3. A fuel cell protector bar and minimum 22-gauge steel container are required. Minimum 10" fuel cell ground clearance. 14 gauge reinforcement plates in front and behind the fuel cell container are strongly recommended.

## 9. TIRES:

- 9.1. Late Model Sportsman will run **take-off tires purchased from Yakima Speedway**. The cost of the tire will be **\$25** each. Tires will be collected, graded and marked by Yakima Speedway staff before being made available to the LMS race teams (no exceptions to this rule). The tire is the Hoosier 30 Series tire, 3045 on the right side and 3035 on the left side. You must start the main event on the tires you qualify with.
- 9.2. Tech tire pressures are as follows: Left side 18-20 psi, Right side 28-30 psi. These pressures will be checked during tech.
- 9.3. There is no tire softeners or softening of tires allowed on any tire in any division.
- 9.4. Cars must start and finish the feature on the same tires they qualified. A tire may only be changed during the feature if it is flat or going flat, subject to official's approval. Cars, which run in the last chance race, may change tires prior to that race, but must return to the qualifying tires for the feature.

## 10. SAFETY:

- 10.1. Helmets should be 2000 Snell or better without visible damage.
- 10.2. Aluminum racing seats with padded headrest required, with rib protection and leg extensions recommended.
- 10.3. Seatbelts and shoulder harness no less than 3" wide is compulsory and must connect with a quick release buckle.
- 10.4. Belts older than 5 years will not be allowed.

- 10.5. A capable form of head and neck restraint is strongly recommended (i.e.: Hans or Hutchins device, or at minimum a neck collar).
- 10.6. 1" mesh window net with quick release required.
- 10.7. A metal quick-release steering wheel coupler must be used. 2" steering wheel pad recommended.

#### **11. FIRE:**

- 11.1. All racecars must have fire extinguisher equipment mounted within reach of the driver. A built-in Halon or equivalent system is strongly recommended.
- 11.2. Driver's suits of fire-resistant material that cover the body from neck to ankles and wrists are mandatory.
- 11.3. A multi-layer, fire resistant driving suit and fire-resistant gloves, socks, shoes, headgear, and long underwear are strongly recommended. Fire-resistant clothing and head & eye protection is also strongly recommended for all crewmembers. All cars will have in their pit a 10lb. Minimum Halon or dry chemical fire extinguisher.

#### **12. RADIOS:**

- 12.1. Two-way radio communication between the driver and minimum one spotter for each team is required.
- 12.2. Spotters are requested to monitor official's frequency by scanner: 453.000

#### **13. GENERAL:**

- 13.1. See Youth Racing Eligibility Requirements in Track Rules Section regarding youth participation in this class
- 13.2. In order to compete, each driver must be registered with the series and have paid required fees.
- 13.3. General appearance of drivers and crews must be neat and clean. This division is designed to be an upper level event, and all teams must maintain professional attitude and conduct.
- 13.4. All cars will run under the approval of the tech inspectors.
- 13.5. All cars must pass tech inspection and scales prior to hot lapping.
- 13.6. Decisions on the interpretation of rules and specifications by tech inspectors will be final. These rules and regulations are intended as a guide. Use of equipment, which is not within the acceptable rules and regulations, will be considered illegal, and may result in a fine, disqualification, and/or confiscation.
- 13.7. Penalties for prohibited parts and/or rule and conduct infractions will be determined by officials. This may include forfeiture of purse money and/or points, a fine, or instructions to fix it by next event. Repeated or flagrant rule violations and infractions will not be tolerated, and will lead to suspension.
- 13.8. **In the interest of fairness, the officials to create a balance in competition may adjust the rules. All decisions made by the officials will be in the best interest of safety and for parity of competition. Their decision is final.**
- 13.9. Standard safety rules apply and will be strictly enforced. Any item that the tech inspectors judge unsafe on your car must be corrected.
- 13.10. It is the responsibility of the driver to see that his car completely satisfies the rules, including but not limited to all safety rules. The driver of each car represents to all that his car has satisfied all applicable rules, safety and other, whenever such driver participates in warm-up, practice, or competitive laps.

#### **14. DISCLAIMER:**

The car rules and/or regulations sets 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 the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official. The race officials shall be empowered to permit minor deviation from any of the specifications herein or impose any further restrictions that in his opinion do not alter the minimum acceptable requirements. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATIONS OF

SPECIFICATIONS. Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.

YAKIMA SPEEDWAY WILL BE STRICTLY ENFORCING THE NOISE RULE OF 98 @ 75 FEET. ANY COMPETITOR THAT DOES NOT MEET THE NOISE REQUIREMENT, AT ANY TIME ON THE RACING SURFACE, WILL BE BLACK-FLAGGED, COMPETITOR WILL BE GIVEN ONE CHANCE TO MEET THE NOISE RULE. IF THE NOISE RULE IS NOT MET, THE COMPETITOR WILL BE DISQUALIFIED FROM ANY FURTHER EVENTS THAT DAY. NO REFUND OF ENTRY OR PIT PASS GIVEN. IF A COMPETITOR HAS A PROPERLY INSTALLED AN UNALTERED 20-INCH AERO EXHAUST MUFFLER, THAT COMPETITOR WILL BE CONSIDERED TO HAVE PASSED THE NOISE REQUIREMENT AND WILL NOT BE SUBJECT TO TESTING. THE AERO EXHAUST SYSTEM HAS BEEN PROVEN TO LOWER THE NOISE TO AN ACCEPTABLE LEVEL, ALL COMPETITORS ARE ENCOURAGED TO USE THIS COMPONENT. AERO EXHAUST IS THE OFFICIAL MUFFLER OF YAKIMA SPEEDWAY. YAKIMA SPEEDWAY WILL SELL THE AERO EXHAUST MUFFLER TO COMPETITORS AT A DISCOUNTED PRICE.

ANY COMPONENT DEEMED TO NOT BE WITHIN THE INTENT OF THE RULES, BY YAKIMA SPEEDWAY OFFICIALS, WILL BE CONFISCATED AND BECOME PROPERTY OF YAKIMA SPEEDWAY