



# 2023 LIMITED LATE MODEL DIVISION

## R U L E B O O K

THE RULES BELOW ARE THE GENERAL GUIDELINES FOR ALL CARS THAT COMPETE IN THIS DIVISION IN THE 2023 SEASON.

IF THESE RULES DO NOT CLEARLY SAY THAT SOMETHING IS LEGAL, ASSUME THAT IT IS NOT PERMITTED.  
RULES SUBJECT TO CHANGE DUE TO SAFETY CONCERNS, OVERLY COMPETITIVE CARS, OR FUTURE RULES IMPOSED BY THE NJ STATE POLICE.

Please email us with tech questions: [WallStadiumSpeedway@gmail.com](mailto:WallStadiumSpeedway@gmail.com)  
or call Rob Hyer at (732) 824-4507

### **REQUIRED SAFETY EQUIPMENT**

- **The installation of a 5 pound fire suppression system is now required in all Limited Late Model race cars. EFFECTIVE DATE AUGUST 1, 2023.**
  - **It must at least be manual, can be upgraded to automatic.**
  - **1 nozzle required. Must be pointed into the cockpit (driver.)**
  - **SFI Certification required.**
  - **The bottle date must always be within 2 years of the current date. Recertification cost approx. \$25 plus shipping.**
  - **Bottle(s) must always be full and charged.**
  - **Visitors and drivers "new" to Wall Stadium (first race of the season) will be granted a 1 race waiver.**
  - **Turkey Derby is excluded.**
- The use of a HANS DEVICE or Hans-like device is MANDATORY. 5 year expiration.
- Window net MANDATORY.

- 5-point Harness MANDATORY. SFI 38.1 Belts good for 2 years.
- Full face Helmets are MANDATORY. Must have Snell SA 15 or newer sticker. NO motorcycle M Helmets allowed.
- Driver must wear a one piece fire suit and flame retardant underwear. Both must be in good condition, no rips or holes! SFI 5
- Full containment seat MANDATORY.
- All other New Jersey State Safety Regulations MUST BE STRICTLY ADHERED TO.
- Fire Extinguisher MANDATORY. Unused and fully charged at all times.

## **RULES AND SPECIFICATIONS**

All motors sealed before November 2022 must be resealed.  
Contact Rob Hyer to make an appointment at (732) 824-4507.

Cars, parts, and/or equipment will not be considered as having been approved by reason of having passed through inspection at any time or any number of times unobserved or undetected.

Any car, part, and/or equipment which does not conform to specifications or tolerances contained in this rulebook, may not be used in competition at WSS.

### **BODY**

- Outside of body must be complete.
- Car bodies must be neat, stock appearing and painted.
- Left door window opening may be cut three inches (3") for driver's clearance.
- No opening at firewalls, all holes must be sealed with minimum twenty-two (22) gauge steel.
- Stock cars without complete windshields must have the rear of the hood sealed or equipped with a deflector to prevent hot liquids from entering the driver's compartment.
- Fiberglass bodies will be allowed. Rear spoilers must be clear with no decals permitted on it, 6 1/2" max.
- Must have hood on at all times.
- No wedge type bodies, noses, or tails.
- Must appear like an American made car, aluminum, steel, or fiberglass only. No carbon fiber.

## **WINDSHIELD**

- Must use Lexan or safety Plexiglas with two (2) securing one-inch (1") by one-sixteenth inch (1/6") straps.
- A screen must cover the rest of the stock windshield area.

## **WHEEL BASE**

- A maximum tread with of 80" from outside of tire to outside of tire
- Minimum 101' wheel base. Maximum 112".

## **GROUND CLEARANCE**

- Four inches (4") minimum ground clearance with driver in car.
- **No weight jacking devices from driver compartment.**

## **CAR TOTAL WEIGHT**

**Compression Ratio and weight must be on RIGHT SIDE of hood/fender, three inches (3") high.**

**Built motors 11:1 compression max – 2900 lbs after the race.  
604 crate motors – 2800 lbs after the race.**

- Maximum wheel width of 80" (inches) at bead of wheel.
- **58.0% MAXIMUM LEFT SIDE WEIGHT AT ALL TIMES.**
- AFTER 2 WINS REDUCE THE LEFT SIDE PERCENTAGE BY 1 %, AND AN ADDITIONAL 1 % FOR EAS FUTURE WIN. 2 wins = 57%, 3 wins = 56%.

## **ADDED WEIGHT**

- Any bolt on lead must be painted white with car's number on it. (Ingots only)
- All weight must be securely mounted between the frame rails and not lower than the frame.
- No adding weight of any kind after an event.
- Bolted on Ingots must use minimum three eighth inch (3/8") bolts.

## **BRAKES**

- Only four (4) wheel hydraulic brakes are allowed.

- They must be in good working order and are subject to official testing prior to competing in any racing event.
- No radial mount calipers. No titanium parts allowed.

## **BUMPERS**

- Front and rear bumpers must be mounted at center hub height 12" to 18".
- Must have tow hooks front to rear.
- Front and rear bumper covers must remain stock appearing.
  - Ford looks like Ford, GM looks like GM, etc.
- Nothing may protrude from the bumper cover.
- All internal front bumpers must be made of round tubing with a maximum O.D. of 1 ¾ inches with a maximum wall thickness of .095 inches. Multiple bars may be used.
- Rear bumpers MUST be equipped with additional bars underneath to prevent the submarining of the front bumpers under the rear bumpers.
- These bars must not extend beyond the stock body lines or beyond the rear most point of the bumper.
- Magnetic steel tubing with a maximum O.D. of 1 ¾ inches having minimum wall thickness of .095 inches may be used.
- Smaller sized steel tubing may be used if desired but it must be strong enough to serve its intended purpose.

## **NERF BARS**

- A single bar must be flush with outside of body at center hub height and be capped.

## **CORNER BARS**

- Corner bar from frame must be tight against body, connected to inside of bumper and mounted at center hub height.

## **STEEL TUBING SIZES FOR SIDE AND CORNER BARS**

- Bars will be no smaller than one and one quarter inches (1 ¼") or larger than one and three quarter inches (1 ¾") of steel tubing.
- Steel tubing thickness will not be less than .083 inches.

## **TRANSMISSION**

- Standard transmissions both stock cast-iron or aluminum cases.
- At least two (2) forward, one (1) reverse.
- Automatic transmissions permitted with a stock converter and safety diaper.
- No Jerrico or Brinn allowed.
- Must have conventional type shifters.

## **CLUTCHES AND BELL HOUSING**

- 7 ¼" or 10 ½" clutch only.
- Flex plate or fly wheels must be steel with blow proof bell housing.
- No reverse mount starters.

## **STARTER**

- Starter must be in stock location.

## **BATTERY – ALTERNATOR**

- Any twelve (12) volt battery may be used (gel type preferred).
- Batteries must be shielded and located outside driver's compartment between frame rails.
- Alternators must be operational.
- Alternator pulley may be changed.
- A labeled on/off master battery switch must be in plain view, conspicuously marked, and easily accessible.

## **ENGINE RULES**

### **ENGINES**

North American manufactured engines allowed.

**Compression Ratio and weight on RIGHT SIDE of hood/ fender, three (3") inches high so scale man can read it.**

### **BLOCKS**

- Must be a stock V-8 cast-iron production block with maximum overbore to .060".
- Chevy and Ford 0.060" Chrysler 0.040"

## **CUBIC INCHES**

- Maximum stock engine displacement of three hundred fifty nine (359) cubic inches for Chevrolet, three hundred fifty nine (359) cubic inches for Ford, and three hundred sixty five (365) cubic inches for Mopar.
- Eleven pounds (11lbs.) / cubic inches greater than 359 cubic inches

## **CRANKSHAFT**

- Steel crankshaft is only allowed and must maintain stock stroke of manufactured engine block used. No alterations of any kind other than balancing. The minimum crankshaft weight will be 43 pounds.

## **RODS**

- 5.7" or 6.0" steel connecting rods for block used.

## **PISTONS**

- No dome pistons allowed, flat top 2 eyebrow.
- Pistons must be similar in design to OEM for the make of block used.

## **VALVE SPRINGS**

- Any valve spring is allowed

## **COMPRESSION**

- WSS's K-Tech tester will be the legal tester.
- A hole must be drilled in the bell housing in order to turn the engine to check compression.
- **11:1 compression maximum.**
- Motors must be sealed or checked prior to competition.

## **ROCKER ARMS**

- Aluminum roller rockers only. If Shaft type rockers used, must add 50 pounds unless Chrysler OEM. Stock.

## **VALVE LIFTERS**

- Lifter bores must remain stock O.E.M. diameter for block used. Bushing allowed.
- Steel valve lifter to manufactured block.
- NO Steel billet camshafts
- NO Roller camshafts

- Flat tappet camshaft Hydraulic or solid lifter
- No ceramic lifters allowed
- NO Schubeck lifters allowed
- No roller lifters.

## **VALVES**

- No altering of valve guide angle or location.
- Stock valve angles and spacing for head used.
- Steel valve only. No cutting or grinding to lighten valves.

## **HEADS**

- All cylinder heads must be cast-iron.
- **Chevrolests** must run heads that are produced with a maximum of 2.02" intake valves.
- No vortex head, center bolt valve cover or bow tie heads permitted.
- Intake valve must be maximum 2.02 "
- Exhaust valve must be no larger than 1.60"
- Aftermarket head to replace stock head will be:  
World Products S/R 043600 – 76CC Dart NEED SS# 10024266
- **Ford Windsor** must run heads with a maximum intake valve size of 2.02" and exhaust valve size of 1.60"
- **Ford Cleveland** must run open chamber heads of two (2) barrel design with a maximum intake valve size of 2.05" and exhaust of 1.66"
- **Mopar** 360 cid must run heads with a maximum intake valve of 2.02" and exhaust valve of 1.60". No TA W2 or magnum R/T heads permitted.
- The only modifications allowed will be the milling of the head gasket surface and screw-in studs with guide plates.
- Optional valve seals, poly locks, or jam nut devices are allowed. Machining of valve guide bosses for seals only.

## **INTAKE MANIFOLD**

- Intakes 2101, 7101, 2901, 7501
- Box stock for GM built motors only or equivalent to Ford / Chrysler.

*No porting, polishing, or acid dipping of intake permitted.  
The intake manifold must remain stock as manufactured by Edelbrock.*

## **HOOD**

- Hood must be on the car at all times. Any car without a hood for any reason will not be allowed on the race track due to safety concerns.

## **CARBURETOR**

- 604 Crate motors will use 650 CFM HP carburetors only. (80541-1)
- Holly 4412. One heat shield under carburetor is allowed.
- NO HP and or Billet parts.
- A carburetor spacer/adaptor having a maximum thickness of one inch will be permitted.
- Adjustable slidable 1" spacer allowed
- Spacer/adaptor plate may not be modified in any way.
- Must bolt directly to the manifold.
- No more than two (2) stock gaskets may be used.
- No performance version of Holley 4412 permitted.
- No sleeve ventures allowed.
- No air ducts or cowl induction permitted.
- Air boxes allowed to the bottom of the windshield (NO air ram systems)

## **IGNITION**

- (H.E.I.) self-contained ignition system will be permitted.
- The distributor must mount in the stock location and maintain the same firing order as a factory produced engine.
- No outside ignition box or outside coil allowed.
- Ford and Mopar must run stock type box and coil. DUI replacement distributor allowed on Ford & Mopar with coil in distributor cap.

## **MAXIMUM CUBIC INCH**

- Maximum cubic inch is 359 except Mopar motors.

## **CRATE MOTORS**

**Engines must remain stock as delivered from the manufacturer.**

It is highly recommended that anyone participating with this motor obtain a copy of the **GM Circle Track Crate Engine Technical Manual** to become familiar with the parts and procedures that will be allowed when working on this engine. GM part #88958668.

- GM 604 Crate Motors will be permitted.
- Engines must have OEM GM seals or Wall Stadium approved seals installed by a Wall Stadium tech official or a designated motor builder. NO other aftermarket seals of any kind will be permitted.
- There will be only one designated rebuilder for this class. Motors will be rebuilt if needed to OEM specs only using OEM parts as per the **GM Circle Track Crate Engine Technical Manual**.



- The designated motor builder or a Wall Stadium Tech Official will be the only persons authorized to remove the OEM GM seals.
- All other Limited Late Model division rules will apply.

### **OILING SYSTEM AND PAN**

- Steel oil pans only.
- No vacuum systems.
- Stock O.E.M. oil pump, must be at stock location.
- The using of combustion enhancing oils or additives is not permitted.
- Inspection plug of one inch (1") accessible is MANDATORY

### **RADIATORS AND OVERFLOW**

- Radiator must be located in front of engine.
- Overflow hose must be directed out towards right side of frame near the front roll cage bar.
- Only water or WSS approved coolants or additives may be used in the cooling system, no antifreeze of any sort.
- Must bring pan(s) to drain fluids for a head check.
- After-market radiators allowed.

### **REAR ENDS AND AXLES**

- Rears must be locked by welding spider gears or use a mini spool.
- Can use magnetic steel full spool (no ultra-lite spools).
- Racing axles only. No titanium axles, gun drilled magnetic steel axles allowed.
- No posi-traction, limited slip, or locker rear axles allowed.
- Full floating type rears using solid magnetic steel axles may be used. 5 wide type hubs will be permitted.
- Quick change with rear cover allowed. No straight rears.
- No titanium parts allowed.

### **HUBS**

- Safety steel hubs may be used highly recommended for front. 5 wide type hubs permitted.
- \$250 racer net cost.
- Grease only.
- No oil filled hubs.

### **WHEELS**

- Magnetic steel eight inch (8") and 10" wheels only.

## **SHOCKS**

- Racer net can not exceed max value \$300.00.
- No coil binding, no bump stops.
- No remote canister type shocks.

## **STEERING COMPONENTS**

- Steering shafts require at least five-eighths inch (5/8") shaft with safety U-joints.
- Steering wheels made only of metal will be permitted.
- Center of steering wheel post must be padded.
- A quick-release magnetic steel coupling on the steering wheel is mandatory.
- Steering box or rack and pinion.

## **TRANSMISSION**

- Standard transmissions both stock cast-iron or aluminum cases.
- At least two (2) forward, one (1) reverse.
- Automatic transmissions permitted with a stock converter and safety diaper.
- No Jerrico, Brinn allowed

## **FRAME**

- All frames must be minimum 2' x 3' tubing, 1/20 wall thickness.

## **ROLL CAGE**

- All roll cage material must be at least one and three quarter inches (1 ¾") in diameter with at least .090 wall and must be welded to the frame.
- Front and rear hoops should not be angled more than twenty degrees (20°) rearward.
- At least four (4) bars on left side and three (3) bars on right side of roll cage.
- All roll cages should have these bars as listed: main roll bar, two (2) front roll bars, roof bar, center line roof bar, diagonal main roll bar, dashboard bar, right and left door bars, left side driver head bar, vent bars, rear down bars, front down bars, center windshield bar, vertical support bars and front hoop bar.
- Roll bars must be welded and gusseted.
- All bars must be padded wherever head or body may strike during an accident.
- All frames must be approved by the pit steward or safety inspector.
- **A minimum clearance of three inches between the top of the roll cage and the top of the driver's helmet must be maintained.**

## **ACCESSORIES**

- RACECEIVERS are Mandatory in driver's helmet. Radios allowed ~~on trial basis~~ only.
- No traction control devices allowed!

## **MUFFLERS**

- -Muffler required. Straight through type, Must have provision to lower decibel number (holes, holes and indents, etc.)
- NO PIPE THROUGH THE MUFFLERS.
- MUST be at the end of the exhaust system.

## **EXHAUST**

- No merge or try Y headers.

## **FUEL RUN / FUEL CELL**

- Track fuel only.
- Gas will be checked periodically by race officials for additives.
- No cooling cans or nitrous oxide.
- All WSS track fuels must be used in competition and purchased at the track.
- All cars must have an approved fuel cell located within the frame rails, behind the rear firewall.
- A reinforcing member of the same kind and size material as that used in the roll cage or chassis shall be installed to the rear of the fuel cell join in the rearmost portion of the chassis.
- Fuel cells must be secured by at least three steel straps.
  - Each strap shall be a minimum one-inch wide and one eight-inch thickness.
  - Each strap shall be bolted with at least two 5/16 three line bolts.Maximum 22-gallon cell.
- No fuel lines can run thru the driver's compartment.
- Cars not utilizing an "x" type frame shall have four one inch straps ¼ inch thick bolted to the frame of the vehicle and angled to go entirely around the cell to apply maximum pressure against the tank to the frame

## **TIRES**

- Track tires only, Hoosier 1057. Two tires per week once a tire bank is established. See "Tire Rule".
- No tire softeners!

## **GAS PEDAL AND LINKAGE**

- Must have return tab for foot on gas pedal.
- Three minimum return springs on linkage. One must be in opposing direction.

The age for participation is 17 with a valid Driver's License.

16 year olds may compete if special permission has been granted by the NJ State Police through Wall Stadium Speedway management. Send your racing resume and request to [wallstadiumspeedway@gmail.com](mailto:wallstadiumspeedway@gmail.com).

\*This process may take up to 6 weeks.\*

If you have any questions about anything listed or not listed, call the TECH INSPECTOR before you do anything to save YOU and the TECH INSPECTOR the aggravation. We want you to compete at Wall Stadium Speedway, and we want you to be legal before you get to the track.