

WVSO 2016 -2020 Thunder Car Rules

These rules are frozen for 5 years, with the understanding that there could be some changes for the betterment of the sport.

RULE BOOK DISCLAIMER

The rules and/or regulations set forth herein are designed to provide the orderly conduct of racing events and to establish minimum acceptance requirements for such auto racing 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 EXPRESS OR IMPLIED WARRANTY OR SAFETY SHALL RESULT FROM PUBLICATION OF, OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS.

These rules and regulations are intended as a guide for the conduct of auto racing at WVSO and are no way a guarantee against injury, or death to a participant, spectator, officials or others.

The Race Director and/or Technical Director shall be empowered to permit minor deviation from any of the specifications or rules herein, or impose any further restrictions that, in their opinion, do not alter the minimum acceptable requirements.

NO EXPRESS OR IMPLIED WARRANTY OR SAFETY SHALL RESULT FROM SUCH ALTERATION OF THESE SPECIFICATIONS OR RULES.

Any interpretation of, or deviation from these specifications or rules is left to the discretion of the Race Director and/or Technical Officials. Their decision is final.

Minor drivers and their parents are responsible to read and understand the rules and regulations set forth in this rule book.

COMPETITOR OBLIGATION: Every driver must inspect the racing surface and the racetrack area to learn of any defects, obstructions, or anything which, in the driver's opinion, is unsafe and the driver shall report in writing to a track official. Any driver entering any racing event is considered to have inspected the track and determined that all conditions are satisfactory. If the driver does not feel that conditions are satisfactory, then the driver should not race. The driver further acknowledges that he is aware that auto racing involves risks and that by competing in that event the driver assumes these risks with full awareness and knowledge.

ALL RULES ARE SUBJECT TO THE INTERPRETATION OF THE TRACK OFFICIALS, ANY EQUIPMENT THAT THE OFFICIALS CONSIDER EXOTIC OR NOT IN THE INTENT OF THE RULES WILL BE CONSIDERED ILLEGAL FOR COMPETITION. IN THE INTEREST OF FAIRNESS THE RULES MAY BE ADJUSTED TO CREATE A BALANCE IN COMPETITION.

No pretense is made for having designed a foolproof set of rules and regulations. The spirit and intent of the rules is the standard by which WVSO track events will be governed. WVSO Tech officials are authorized to decide if an equipment change, or modification is an attempt to circumvent these rules. WVSO officials can and will disqualify a race car in violation of the spirit

or intent of these rules. If this rule book does not specifically state that you can alter, change or otherwise modify something on your car, you should consider it a violation of these rules. No part is deemed to have been approved by WVSO officials by passing through prior technical inspections.

GENERAL INFORMATION

The Driver of each car represents to the Promoter and all others, that his car has satisfied all applicable rules, including but not limited to safety rules, whenever such Driver participated in any warm-up, practice or competitive laps.

The Driver of each car is also completely responsible for ALL actions of Crew Members, Sponsors, or all else signed under their number.

If you have any complaints, disputes, problems, or questions, only the Driver and Crew Chief, Driver and Car Owner, or Driver and one representative from your team may approach an Official, in a civil manner to resolve the situation

All participants are expected to take pride in being part of WVSO's weekly program. Auto racing entertainment is what we have to offer and we will not tolerate the lack of professional attitude, conduct or appearance of car, driver crew or others involved.

All cars are required to completely conform to the rules package specific to their class. All parts or components deemed by the Technical Officials to be non conforming will be prohibited. Use of prohibited parts may result in disqualification, fine and/or suspension to the Driver and/or Owner.

Any prohibited or illegal part found would become the property of WVSO.

All construction rules will be decided by WVSO Technical Officials. Their decision will be final on all construction rules. Burden of proof on any concern will be the responsibility of the driver and car owner.

These rules are a guideline. Contact the WVSO Technical Officials for final approval of your racecar.

All WVSO divisions are designed to promote greater interest in oval track competition; these rules are intended to create fair classes of racing that are also competitive and fun, and to enable those with moderate means to participate at WVSO.

These rules are set for five years, 2016 through the 2020 seasons. Rules may be subject to change at any time in order to ensure a safe competitive level of competition.

To register a car and obtain a WVSO car number call .

ELIGIBILITY

1. Drivers must be a minimum of 16 years of age or receive approval from WVSO.
2. All Drivers and Crew Members under 18 years of age must present a notarized minors release or a minor's release that is signed by both parent's or guardians to WVSO before they will be allowed in the pit area.
3. Releases signed by individuals under 21 years of age are not valid.
4. All driver's, must be registered members of WVSO in good standing.
5. All entrants must have a valid WVSO pit pass. ENTRANTS MUST WEAR THEIR PIT BAND AT ALL TIMES. Pit passes will only be sold at WVSO.

6. You must sign in as Driver at the pit gate, and only you can drive the car that night. If you fail to register as the Driver for the night, your car will not receive points or money.

PROTEST, APPEALS AND COMPLAINTS:

1. All manners in which protests and appeals, shall be governed by the 2016 rulebook.

2. Any complaints, disputes, questions, or problems must be directed, by the Driver or the registered Car Owner to the Race Director.

3. Protests, as to an official decision, must be submitted in writing, by the Driver or registered Car Owner to the Race Director within 20 minutes of the official decision being levied. Only a Driver or registered Car Owner in the same class may submit a protest.

4. If a WVSO member who is a competitor believes that another competitor has or will obtain a significant unfair advantage by some action that the member believes is in violation of the rules, the member may protest such action to a WVSO Official. The protest must be made in writing by the competitor (or his or her Car Owner) within twenty minutes after the checkered flag is displayed signifying the completion of the race. Each separate protest shall be accompanied by a \$100.00 protest fee, internal engine protest will be a \$200 protest fee. The Race Director and/or Technical Director shall decide whether the matter is protest able, and if so shall decide the protest as promptly as possible, and shall inform the parties to the protest of the decision. A decision that the matter is not protest able is final and non-appeal able. In deciding the protest, WVSO Officials may take whatever action deemed appropriate to further the interests of fairness and finality in competition results. Such action includes, but is not limited to, revising the official race results, imposing penalties (disqualification's, suspension, fines, and/or loss of finishing position(s) in the event), awarding or subtracting of points, or taking no action. Their decision is final. If the protest is allowed, the money will be reimbursed to the person protesting. If the protest is disallowed, the money will go to the person being protested, less \$25.00 for administrative fees.

TRACK RULES

1. It is the responsibility of each race team to have in their possession, a current set of rules for the division that they are participating in. If a race team member disputes or protests the rules and that team does not have a current set of rules in their possession in their pits the protest will be disallowed.

2. The Race Director will be the sole authority in the pits concerning the running of the races. The Race Director and the Starter/Flagman will be in charge of on-track competition. The Technical Director will handle all technical protests.

3. Officials will establish the race event procedures; starting positions, length, frequency and administration of all events and programs. When their decision is rendered, that decision will be final and binding. The race may be shortened due to time allotted or weather and once the race has passed the halfway point, it will be an official race.

4. Any complaints, disputes, questions, or problems must be directed, by the Driver or registered Car Owner, to the Race Director immediately following the event.

5. When asked to remove a part or tear down for tech inspection and you refuse, you are subject to a fine, probation, disqualification, and/or suspension.

6. Protests, complaints, disputes, or problems, will be handled in the pits at the completion of that race or completion of the nights racing events. Complaints are not to be made to the scores or announcers. Any driver, car owner, crew member or family member who goes to the scoring tower at any time to dispute a call will result in the driver of the car being fined and or suspended.
7. Any Driver stopping on the racing surface to argue with an Official, in regards to an Officials decision, will be automatically disqualified from the event and or suspended.
8. Any Driver or Crew Member who is injured or involved in an accident must submit to a check by the medical attendants. Any Driver involved in a serious accident will not enter or re-enter a race until approval to do so is given by Officials and medical attendants. Medical transportation from the racetrack to the hospital is the competitors' responsibility.
9. Driver's meeting is mandatory. Drivers must attend, if the Driver does attend the drivers meeting he/she will start at the back of their respective races.
10. Two way communication radios are NOT allowed at WVSO except in the Pro Late Model Division. All cars must run a transponder, transponder must be mounted on the inside frame rail behind the rear end housing. Can be mounted no more than ____ from the front nose of the car.
11. Permission must be obtained from the Race Director or Technical Director before any practice and or safety laps, other than the designated practice time may be taken. All cars MUST go through Tech prior to entering the racing surface each race day. All cars will run under the approval of the Technical Inspectors.
12. Any unauthorized persons entering onto the racing surface during race conditions will result in a disqualification, penalty, fine, or suspension, to the person and affiliated Driver.
13. No personal cars or vehicles in the pit area.
14. One person must remain with the race car at all times.
15. All Rookie drivers must start at the back of all events for the first two weeks of racing. Rookies must have a yellow strip on the back bumper.
16. Waste oil must be placed in waste oil barrels at the designated waste oil area. Failure to do this will result in a minimum fine of \$200.00.
17. Unsportsmanlike conduct by drivers will not be tolerated. An appropriate penalty will be issued.
18. Verbal or physical abuse of anyone will not be tolerated. Minimum suspension one week, fine or both.
19. Any competitor or Crew Member who participated in a fight in the pits, or on the race track, or on the premises, will result in a minimum of \$500.00 fine, suspension, and/or loss of points and positions in the event. **STAY IN YOUR OWN PITS! ANY DRIVER OR CREWMEMBER THAT GOES INTO SOMEONE ELSE'S PITS, YELLING OR WITH ANY KIND OF AGGRESSIVE BEHAVIOR WILL NOT BE TOLERATED!! YOUR CAR WILL BE LOADED AND YOU WILL BE REQUIRED TO LEAVE THE RACE TRACK PREMISES.**
20. Any competitor or Crew Member, who has a pit band, partakes of any alcoholic beverage, stimulating, depressing, or tranquilizing drugs or is otherwise under the influence will result in disqualification and a minimum fine of \$500.00 along with a suspension.

21. Any competing car, whose speed has been reduced to the point where it could cause a safety problem, may be removed from the racing surface at the option of the Officials.
22. End of the year tie breaker procedures: Most first place A-Main wins, if still tied after wins, the tiebreaker will continue as follows until tie is broken. Most A-Main second place finishes, most third place A-Main finishes, most top five finishes (all events), highest win percentage in all events.
23. ROOKIE OF THE YEAR: If you are competing for Rookie of The Year, and you run more than five (5) races in your division and/or an upper division, in any year, you are not eligible to compete for Rookie of The Year in the future.
24. Any car continuously unable to start under its own power may be liable for a penalty or disqualification from the event or from the complete program.
25. Any Driver or Crew that does not take their car to the line-up grid, when requested to by the Officials, they may be required to start at the back of the line-up for that event.
26. If a car is dead on the track, when racing is in progress, the Driver must stay in the car with seat belts fastened until the race is stopped, except in case of a fire or rollover. Failure to comply may result in a penalty, disqualification, and/or suspension.
27. No race cars will be allowed on the track until the track has been opened for official practice or racing.
28. No person shall be permitted to ride on the outside of a race car, tow vehicle or trailer at any time.
29. No speeding in the pits. You must use caution while driving in the pit area or you will be subject to a fine or suspension. No donuts, burnouts, etc. allowed. We need to keep the pits safe for Drivers and all others.
30. NO firearms allowed in the pit area.

FLAGS

1. ORIGINAL START: You must take the Green Flag at the start of the main event in order to compete in that main event. If you come out once the race has started, without approval from the Race Director, you will be black flagged and parked.
2. On the original start of any race, Drivers must stay double file nose to tail and may not pass until you are past the start/finish line. Drivers on the front row of any race, get one (1) chance on the original start. If the start is waved off, they will go back a row and the second row will move to the front row. **If you cause a caution on the original start, you will go to the back of the field.**
3. On any start of a race, if a car drops out, the line will move up. Example: If a car on the inside row, say the third place car, falls out of line and cannot start the race, then that row only will move ahead. Same as if the sixth place car falls out, then only the outside row will move ahead.
4. RE-STARTS: All restarts will be double file, with the leader picking inside or outside, with everyone else following suit, the leader will set the pace. No passing until the green flag or green light comes on. Drivers receiving the black flag will always go to the end of the longest line.

5. GREEN FLAG: On any start or re-start, you will always receive the green. If the Race Director does not like the start, he will then throw the yellow, and re-start the race.

6. YELLOW FLAG: When a yellow flag or yellow lights comes on, you will slow and maintain your position, you may not pass, failure to do so will result in being put to the back of the field. Under each caution, yellow laps will NOT count. No racing back to the yellow. If you are unsure what position you are in, pull up beside the Driver in question and wait for the Officials to direct you to your proper restart position. If you are involved in or cause a caution, you go to the rear of the field.

7. RED FLAG: Cars must come to a complete, safe stop. Drivers are not allowed to move their car off the track on a red flag. Drivers may exit the track, only by permission of an Official or when the track goes to a yellow condition. Failure to abide by this rule will result in a two (2)-lap penalty. Repairs or service of any nature or refueling will NOT be permitted when the race is halted due to a red flag

8. BLACK FLAG: Drivers receiving a black flag will leave the track immediately and report to the Pit Boss in a designated area, failure to abide by the black flag with result in disqualification. You will have three laps to report to the pits before you will not be scored.

RACE PRODECURES AND LINEUPS

1. Time trials will be performed at all WVSO events. (Unless other wise posted) Qualifying will consist of group qualifying two continuous qualifying laps.

2. Heat Races will be a minimum of eight (8) laps. All heat races will be fully inverted, with even numbered qualifiers in one and odd qualifiers in the other.

3. WVSO officials will determine how many cars will start the A-Main. All Main events will be inverted. The invert will be decided by WVSO officials.

4. WVSO officials will advise drivers of the make-up of the number of heat races, main events, field maximum size and other pertinent information at the drivers meeting.

5. The lineup posted on the pit board when cars entering the racing surface for any race shall be the final lineup. In the event of a car dropping out of the lineup for mechanical reasons, the row will move straight forward.

2016 Thunder Car Construction Rules

COMPETING MODELS:

1. Open to stock American manufactured passenger cars. Minimum 108" wheel base, rear wheel drive cars only. Unibody cars may connect sub frames together.
2. **NO** sports cars, trucks, convertibles, T-tops, or jeeps allowed.
3. **Cars must be factory stock dealer showroom production with NO alterations unless specifically stated otherwise in the following rules.**

WEIGHT:

1. Minimum weight 3200 lbs with driver, 55% left side weight.

ENGINES:

1. Only standard production engine maximum 360 cid.
2. Must be mounted in stock location, centerline, and setback. May be solid mounted.
3. 100% stock, unless specified in these rules.. No modifications allowed.
4. **Cylinder Heads:** Any stock OEM cast iron cylinder head. No angle plug, bow tie, vortec or performance type heads allowed. No angle milling of heads allowed. NO modifications allowed. Guide plates and screw in studs allowed. Stamped steel 1.5 ratio rocker only, long slots allowed.
5. **Cam:** Any Hydraulic cams only, no solid or roller cams allowed.
6. Stock style steel crank with a minimum 50 weight.
7. Stock style steel connecting rods allowed, no high performance or racing type connecting rods allowed. ARP rod bolts allowed.
8. Flat top pistons 2 or 4 value relief or dish pistons allowed.
9. No remote oiling of any kind, No synthetics oils allowed.
10. Circle track type oil pans and valve covers allowed.

FUEL:

1. **Intake Manifold:** Stock OEM cast iron intake only. No modifications allowed. GM# 14096242 is not allowed,
2. **Carburetor:** Box stock Holley 4412 carburetor. No modifications allowed.
3. **Fuel:** Pump Gasoline only.
4. **Fuel Cell:** Must use an approved fuel cell that is mounted securely between the frame rails in an approved manner. Fuel cell height from bottom of cell to ground a minimum of 8".
5. **Fuel Lines:** Must exit from top of fuel cell. Fuel lines that run through drivers compartment must be enclosed in a steel tube.
6. **Fuel Pump:** Stock type type mechanical fuel pump only, No electric fuel pumps allowed.

ELECTRICAL:

1. **Battery:** Must be located in front of rear firewall behind driver. Must be enclosed on a magnetic steel or heavy duty marine box. Must be securely mounted the the floor pan with two 1/2" rods and a 3/16" cross bar.
2. **Ignition:** Stock OEM production starter/ignition system required. No MSD boxes allowed. Aftermarket Mini Starters allowed.
3. **Main Battery Disconnect Switch:** A main battery shut off switch made of steel is required, must be located in center of dash, accessible from both window openings.

COOLING:

1. **Radiator:** May use stock radiator or aftermarket aluminum radiators.
2. An approved radiator overflow metal catch can, 1 gallon capacity is required.
3. Water only. No antifreeze or ethylene glycol allowed.

EXHAUST:

1. **Manifolds:** OEM stock production cast iron exhaust manifolds only.
2. **Mufflers:** Required at all times
3. **Exhaust:** Exhaust manifolds maximum 2" exit, must extend beyond driver and exit to the rear or sides of the car. Both exhaust pipes must meet under car and either be single exhaust 3" pipe, or dual exhaust 2" pipe.

DRIVE TRAIN:

1. **Transmission:** Automatic with stock torque converter only, no direct drive transmissions allowed or OEM manual transmission allowed with a minimum 10.5" clutch, with steel flywheel, flexplate and standard clutch disc. Flywheel, flexplate, disc and hardware to weigh a minimum of 32 lbs. Scattershield mandatory for manual transmissions.
2. All gears must be in working order, forward and reverse.
3. **Differentials:** Unaltered stock OEM rear end only, gear ratio may be changed.
4. No limited slip, posi-traction or locked differentials allowed. No "tight" Differential allowed. It is required that either rear wheel must turn freely by hand with opposite rear wheel on the ground. Aftermarket axles allowed.
5. Transmission cooler allowed.

SUSPENSION:

1. Suspension must be Stock OEM for year, make and model. No modifications allowed. No adjustable spring spacers or any other means to alter stock suspension is allowed. Rated springs are allowed.
2. No exaggerated camber or caster. Maximum + or - 1 1/2 " measured with car on level surface, with carpenter square against bottom of wheel to top of wheel.
3. **Shocks: OEM** replacement type shocks allowed in stock location no racing or adjustable shocks allowed. KYB brand is allowed.

STEERING:

1. Must be Stock OEM per manufacturer for make, model and year.
2. May use aftermarket style steering column with a collapsible shaft and quick release.

CHASSIS:

1. 6" minimum ground clearance.
2. All four corners of frame must be within 1" of level.
3. Original front firewall from stock rocker to rocker must be intact and original floor pan from stock rocker to rocker and front firewall to rear firewall behind driver seat must be complete and intact. All opening must be sealed or patched with minimum 20 gauge steel.
4. The rear firewall is required, and must be sealed with a minimum of 20 gauge steel between the drivers compartment and the trunk.

DRIVER SAFETY:

1. Standard roll cage required. All roll cage bars must be a minimum of 1 3/4 inch outside diameter tubing of a minimum .095 wall thickness. Gussets are compulsory on all roll cage and door bar joints. All bar joints must be electric welded. Galvanized or Aluminum material is NOT allowed. The roll cage must have a minimum of three door bars on the left side and a minimum of two door bars on the right side of the car. The main roll cage hoop must be no further back than the "B" pillar. All full framed cars main roll cage hoop must be welded to the frame. Back bracing of roll cage may be welded to rear frame one per side in front of rear frame kick up. Bracing past rear frame kick up may touch frame in an unlimited amount of points. Extra forward bracing of roll cage may be welded to frame in an unlimited amount of points. Upon inspection by Tech. Officials, extra bracing or bars may be required due to the style of your car.
2. All bars in the immediate vicinity of the driver must be padded with approved roll bar padding. Pipe insulation is NOT allowed.
3. Aluminum racing seats are required and must be bolted to the roll cage and NOT to the floor pan or frame. A driver's head rest is required.
4. A minimum of a (5) five point competition seat belt, shoulder harness and sub belt of approved racing type must be used. Minimum (3) three inch material must be used for all belts. The belts and harness must be bolted to the roll cage with a minimum of 3/8 inch bolts. Shoulder belts must be even with or slightly below the driver's shoulders. Metal to metal buckles are required on all belts. The belt and harness installation must pass safety inspection and may be ordered replaced by Tech. Officials. Belts can be used for a maximum of 5 years after date of manufacture. Belts expiring during the race season can be used until the end of the season.
5. The center top of the steering column must be padded with a minimum of (2) two inches of material such as foam rubber or roll bar padding.
6. Drivers are required to wear a minimum of a single layer Nomex racing approved driving suit. Driving suits with a high SFI rating are recommended. Racing approved racing boots or shoes and gloves must be worn at all times when on the track. Nomex socks are mandatory with racing shoes. Nomex socks are recommended at all times. NO running shoes.

7. Drivers are required to wear Snell approved helmets, 1995 or newer with full head coverage with bubble shield or goggles at all times when on the track. Helmets must accompany the car at time of inspection. SFI/SA rating for helmets is highly recommended. Motor cycle helmets are NOT allowed.
8. Each car must have a 2 1/2 pound Dry Chemical Fire Extinguisher in operating condition showing the current inspection certificate and must be mounted within easy reach of the driver with the original quick release bracket.
9. All cars must have a racing approved driver window Safety Net. Nets must release from the window top with metal to metal seat belt latches and be attached to the roll bar at the bottom (not the body) with no less than 3/8 inch rod and hose clamps.

BODIES:

1. All bodies must be strictly stock, and have complete bodies, hoods, fenders and bumpers and be of good appearance and condition. No cars will be allowed to run the next race date minus fenders or bumpers lost in the previous competition. Aftermarket front and rear nose cones allowed. Side rub rails allowed maximum (1 1/2" round tubing or 1' x 2" rectangle tubing) must be tight to the body with the ends pointed toward body.
2. Complete bumper to bumper steel unibody must be retained.
3. **Bumpers:** May use OEM bumpers with straps to body or aftermarket style with steel reinforcing. Must be stock appearing.
5. **Fenders:** Full fenders mandatory. Wheel openings may be radiused 3" for tire clearance. Tires must not protrude outside the body.
6. **Doors:** Doors must be secured by bolting or welded shut. Steel only.
7. **Hoods:** Stock hoods must be used, hoods can be gutted and must use a minimum of four hood pins on the front and two on the rear if not using stock hinges on the rear. No scoops or holes allowed.
8. **Roofs:** Complete steel required. Cars with sunroofs are required to cover exposed area with a minimum 20 gauge steel welded to the roof.
9. **Windshield:** may be replaced with 1/8" minimum lexan. 3 metal straps required behind windshield, attached from roof to cowl, minimum 1/8" x 1" with minimum 5/16" bolts. A rubber strip required between strap and windshield. Windshield tabs of 1" x 3" x 1/8" required, 3 on the top and 3 on the bottom spaced at least 12 inches apart required.

WHEELS AND TIRES:

1. **Wheels:** One piece steel wheel only, with a maximum 8" width. Same offset required on all four wheels. 2" maximum backspace allowed.
2. No wheel spacers allowed.
3. 5/8" wheel studs mandatory..
4. **Tires: 790 Hoosier**

5. No tie soaking or softening allowed.

Any part or equipment found during an inspection or any other time, that does not meet applicable WVSO standards must be surrendered to WVSO Tech Officials at that time, and will not be returned. Failing to not give up the part or parts will result in a fine, and/or loss of points and/or suspension.

WVSO Officials reserve the right to make final decisions in the interpretation of any rules or race procedures at any time. No equipment will be considered as having been approved by reason of passing through inspection,

WVSO Officials recommend that you carefully study the WVSO rulebook in order to be familiar with all aspects of racing. If you are considering apart for modification or procedure not covered in these rules, contact WVSO Tech Official before proceeding with any purchases or modifications.

If you have any questions regarding the rules set forth, contact the WVSO Tech Official.

In keeping with WVSO's commitment to maintaining proper balance in the competition arena, it may be necessary for WVSO to make rule changes and/or rule modifications from time to time. Such changes are designed to enhance close competition.

WVSO's goal of a full starting field of various makes in each race, that are equally matched as possible is certainly in the best overall interest of the sport.

EIRI: (Except in rare instances) Decisions of WVSO Officials are final and binding without exception.