

## 2010 Rolling Thunder Modified Series -- Technical Rulebook

### Disclaimer

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events under the sanction of the Rolling Thunder Modified Series, wholly owned and operated by Silverhawk Motorsports, LLC. These rules and regulations are to establish minimum acceptable requirements for such events. These rules and regulations shall govern the condition of all events, and by your participation in these events, you are deemed to comply with all of these rules.

**NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS.**

They are intended as a guide for the conduct of this sport and are in no way a guarantee against injury or death to any driver, crew or team member, spectator or official.

Furthermore, the competition director shall be empowered to permit reasonable and appropriate 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 ALTERATION OF SPECIFICATIONS.**

### Definitions

**Competitor:** A driver, car owner, crew member or other person who participates competitively in any Rolling Thunder Modified Series sanctioned event.

**Disqualified:** The car and any competitor affiliated with it will be treated as if it did not start the race and will forfeit any monies, awards, and championship points it may have otherwise been entitled to.

**Event:** An RTM sanctioned motorsports event, which includes the designated race as well as all periods of registration, inspections, time trials, qualifying races, practice sessions, post-race inspections and possible related rain or postponed dates.

**RTM:** Rolling Thunder Modifieds

**Official:** Any person appointed by RTM management to officiate as an employee or independent contractor at the event.

**Promoter:** A racetrack which hosts an RTM event.

RTM License: A serial numbered license issued to note a member of the racing series in good standing.

Participation in Rolling Thunder Modified Sanctioned Events  
(Added January 2010)

The Rolling Thunder Modifieds encourages all IMCA style modified cars to join each race. In the event a “new” team wishes to attend, but a certain rule is not per RTM specifications, a team representative must contact RTM officials by email to discuss possible action(s) to be taken towards making modifications PRIOR to showing up at the track.

If a team fails to mention anything illegal either intentionally or unintentionally OR there is any form of miscommunication between either party OR a situation arises in which the car must be physically inspected, a committee of random and experienced team representatives may be chosen at the track to decide what if anything would be acceptable for that car to race including but not limited to adding weight, replacing parts or not being allowed to participate.

If your car is not 100% by RTM rules.....ASK FIRST!!!

The Competition Director will have the final decision.

Licensure and Registration Procedures & Costs

RTM Licenses (Amended January 2010)

1) Part-A Rolling Thunder Modified Series licenses are required and shall be issued to each driver, crew member, or competitor. This license must be readily available at each series event upon request of RTM officials.

2010 Licensing

1 Member	\$30
2 Members	\$60
3 Members	\$90
4 Members	\$120
5 Members	\$125 (\$25 per member – same as 2009)
6 Members	\$145 (\$24 per member)
7 Members	\$165 (\$23 per member)
8 Members	\$175 (\$22 per member)
9 <sup>th</sup> and above	Free

Licenses will be produced at the track or mailed to the drivers. All licenses should be prominently displayed, in a frame, in the car hauler of the team. This will eliminate each team member having to keep up with each license. The Competition Director will conduct random checks throughout the year. Please support him during this process.

Drivers are required to be licensed from their first race with RTM each year. Licensees should consult with their driver to determine the dollar amount of their license as it can differ depending on how many members are licensed.

Crew members are required to be licensed before the start of the third race the driver has attended since the beginning of the 2009 season.

Crew members of teams participating in their first or second race with RTM will be deemed having a license for that race. This does not apply to races deemed special event races. All drivers and crew members are required to have a RTM license for all special event races.

As such, any special event race will not count against a team as having participated in a race for future licensing requirements.

The 2009, 2010 and beyond standings will be utilized in order to determine how many races each driver has attended. Discrepancies should be reported to RTM staff.

Part-B RTM reserves the right to suspend, or revoke any RTM license.

Part-C No Refunds on licenses will be issued after a team competes in one sanctioned event. However, special or extreme circumstances will be reviewed and considered by the sanctioning body on a case by case basis.

Part-D Licenses not paid at the track will be automatically deducted from the drivers' winnings for that race. Drivers please ensure each team member present has a license in the frame as described in Part-A above.

#### RTM Race Registration (Amended January 2010)

2) Part A Annual Registration \$300 – This includes all RTM Sanctioned events

Part-B The registration fee for each racer that does not pay the annual registration will be \$30.00 per race. This can be paid prior to each race by downloading the race registration form from the tour website and mailing it in to the tour office or paying at the track the day of the race. The cost for events deemed special events is subject to change for any racer not having paid the Annual Registration.

Part-C Race registrations not paid at the track will be automatically deducted from your winnings for that race.

Part-D Back gate fees are at the discretion of the host track. Teams will be notified of this cost well in advance of each race event. Although we do attempt to encourage each track or promoter to refund back gate fees in the case of race cancellations, it is up to the discretion of the host track and not controlled by RTM.

## Tires (Amended January, 2010)

Part-A Tire Cost – \$125 per tire

Do not pay for tire mounting at the tracks as this price is included in your tire cost.

## Purse Payments (Amended January, 2010)

Drivers or Team Owners should pay for tires, registrations and licenses with a check from the account that they would like their winnings direct deposited into. Please complete Form W-9 in the registration packet to inform me to whom the winnings will be paid. If this information changes at any time subsequent to providing me with the information, please inform me right away.

## RTM Race Car Specifications

### Roll Cages

3) Part-A Roll bars must consist of continuous hoops not less than 1.7650 inches outside diameter and must have a wall thickness minimum of .095 inches.

Part-B Roll bars must be frame mounted in at least eight (8) places.

Part-C Driver's heads must not extend above roof loop with helmet on and strapped in car.

Part-D Foot protection consisting of bar or plate is required.

Part-E Driver door bars must be parallel with the ground and located so as to provide maximum protection for the driver. The sidebars must be welded to the front and rear of the roll cage members. Door bars of less than .095-inch thickness are prohibited. A minimum of three (3) bars at 1.75 OD or four (4) bars at 1.50 OD are required.

Part-F Chassis construction must be of a professional quality with all welding and fabrication subject to inspection.

## Frames & Suspensions

### Coil over Shocks

4) Part-A All cars must use factory production "American" passenger car front frame sections. Frame sections cannot be narrowed or widened. Any altering or modifications must be reported to RTM officials prior to registration for a given race event. Failure to notify of the same can result in dismissal from the race event and additional action by the sanctioning body.

Part-B No Rack and pinion units are allowed. All cars must use steering boxes which are mounted in their original location and position. Idler arm, pitman arm, and center link must be OEM spec and mounted in their original positions.

Part-C Lower A-arms may be OEM or aftermarket and be mounted in stock location. A-arms bushings made of steel or spherical bearings are permitted. Aluminum is prohibited.

Part-D Tubular upper A-arms and aftermarket mount plates made completely of steel are permitted. Aluminum is prohibited.

Part-E Rear suspension springs must be a minimum of 4 ½ inches in diameter. Coil over shocks are not permitted on the front. Coil over shocks are permitted on the rear only. No torsion bar rear suspensions permitted. No independent rear suspensions are permitted (The top link spring does not apply to the 4 ½ inches spring diameter rule).

Part-F NO aluminum or fiberglass suspension parts are allowed. However, this does not include shock absorber housings, except for the pan hard bar. Tie rod sleeves and rear end alignment tubes may be made of steel. The tie rod tubes outer tie rod ends may be replaced with Heim joints to correct bump steer. Upper link can be aluminum. Any type of front sway bar is permitted, but arms on aftermarket sway bars must be made of steel.

Part-G Spindles can be either OEM or aftermarket. However, only one type of aftermarket spindle is allowed. These are the Howe Stock replacement spindles.

Part Number 344GN (Right side)

Part Number 344GNL (Left Side)

Weld-on brake brackets and aftermarket steel hubs are permitted

Part-H Wheelbase must be a minimum of 108 inches.

Part-I Maximum tread width of car (both front and rear) must not exceed 83 inches, as measured outside of tire to outside of tire at spindle height.

Part-J Frame and body height will be a minimum of 4 inches on all four (4) sides, as measured by the RTM official, with the driver inside the car and seated.

Part K The 1968-72 GM Chevelle OEM or OEM replacement frame has been approved for use.

#### Racecar Body

5) Part-A All bodies must be 1980 or newer replicas of American Passenger cars only. Steel, aluminum or fiberglass full size roof required. No Stock bodies.

No wings allowed. Bodies must be neat in appearance and in good condition.

Part-B Fiberglass bodies are allowed.

Part-C Firewall and floorboards are mandatory and must be made of steel.

Part-D Rear of bodies must have a solid panel at least eight (8) inches minimum and 22 inches maximum in height. The rear panel must extend completely across the rear of the car. No open rear bodies allowed.

Part-E Rear spoiler will be no wider than the rear of the car and must be five (5) inches tall.

Part-F Rear Spoiler must be made of clear Lexan and can have bends or lips of 1" or less.

Part-G Engine Compartment sides must remain open. Hood sides may have maximum of four (4) drop and must be enclosed at rear of the hood.

Part-H Windshields: The front windshield can either be a full or partial windshield at the driver's discretion. A full windshield must have two braces to support the windshield and will be equally spaced. Rounded Windshields are permitted. If a driver decides to run a partial windshield, the partial shield must be on the driver's side.

Part-I Rear Windshields are not permitted. No exceptions!

Part-J Front body nose height is a minimum of seven (7) inches.

### Bumpers

6) Part-A Bumpers must be used in both the front and the rear of the car. Bumpers must be able to support the car if lifted by a wrecker. The rear bumper must be of rounded construction with no sharp edges on outer ends.

Part-B Center of bumpers must be eighteen inches above the ground plus or minus two (2) inches.

Part-C Nerf bars must extend between one (1) inch plus or minus to outside edge of the tires.

Part-D Rear bumpers may be constructed of pipe or flat stock, but must not have any sharp edges or excessive metal.

Part-E Rear bumpers must be either a closed loop design or rear bumper must make a complete loop back to the frame.

### Rear Ends

7) Part-A Any passenger car, truck-type, or quick change rear ends are permitted with steel axle tubes only. Hubs and all other rear end components must be made of steel. Axle caps, lowering blocks, drive plates and carriers may be aluminum. Rear ends may be cambered plus or minus one (1) degree only.

Part-B Rear end coolers are allowed.

Part-C Any type of transmission may be used as long as it does not require manpower to start forward motion. In and out boxes, buttons or couplers are not permitted.

Part-D Clutch transmissions must be equipped with approved blow-proof bell housing. A transmission blow proof cover shield is required for automatic transmissions.

Part-E All flex plates must be OEM or SFI approved. No FFI or other manufacturer of lightened flex plates allowed.

(NOTE: RTM has experienced an incident where a lightweight flex plate disintegrated).

Part-F Only steel drive shafts are permitted. Drive shaft will be painted white and have the car number on it in clear view. Car must be equipped with a drive shaft hoop made of steel that is a minimum 3/16" thick by a minimum two (2) inches wide.

### Brakes

8) Part-A Only OEM or aftermarket brake calipers that conform to OEM specs in every respect may be used. Brakes must be fully operational on all four wheels and must lock up on inspection.

Part-B Absolutely no electronic or hydraulic traction-control devices allowed on brakes.

### Tires, Wheels and Shocks

9) Part-A Only eight (8) inch steel wheels are allowed.

Part-B No hand grooving, buffing, grinding, and/or cutting on any area of the racing tire allowed.

Part-C All competitors must start the feature race with the same tires on which the car was qualified. RTM officials will scan all teams tires after qualifying and at other various times to ensure compliance of the tire rule.

Part-D Any type of shock is permitted except adjustable shocks. Re-buildable shocks with a Schrader valve are allowed (Amended January, 2010).

### Two-Tire Rule Races

The intent of the Two-tire rule is to provide teams with operational cost savings and to provide more competitive racing as it tends to level the playing field.

Definition of a “used” tire: “Used” tires are defined as any tire that has had the serial number recorded by RTM Officials and has previously started in an RTM race.

### Procedure

- 1) Serial number(s) of all tires sold by RTM will be recorded and maintained in a Master List
  - a) The Master List will be available prior to the start of each race so that drivers may verify the tires just purchased are recorded on the Master List.
  - b) The serial number(s) of each tire on each car will be recorded after qualifying in each event to ensure the same tire that is used in qualifying is also used in the race.
  - c) The serial number(s) of tires of randomly selected cars may be checked immediately after the completion of each race to ensure compliance of this rule. The random selection will be done by the utilization of a computer based random-number generator.
- 2) In the event that the serial number(s) are worn/illegible/missing, it will be the responsibility of the team/driver to notify RTM officials so that the serial number can be obtained before dismounting tires and exiting the event. Although the serial numbers are shown on a sticker, a method does exist to obtain the serial number without the sticker.

Cars that are found to have unapproved tires may face penalties including, but not limited to, disqualification from the event, loss of championship points, loss of any monies or awards received for that race, or confiscation of unapproved tires.

### Definitions and Requirements

a. Definition of a “Regular Driver” is any driver that has started in at least one previous RTM event from April 2009 to current. Each team will be able to purchase, only from RTM, new tires for each race, the 2 tire rule is a maximum and not a minimum to be used race-day. The selection of where to mount the two new tires is up to the race team discretion. Teams are not required to purchase RTM tires for every event, but cannot use tires from other sources except as described below. Teams may purchase additional tires for future events if they choose.

b. Teams may utilize tires in which the serial number has been recorded from RTM races in 2009 to be used in future RTM events (See note h below). Acquiring other tires, from any source, in any fashion would be going against the tour’s goal to save money as there is a cost in obtaining all equipment.

c. Drivers coming to the series to race for the first time ever have a choice of 1) Bringing two used tires from an outside source 2) Purchasing “used” RTM tires from another RTM driver/team or 3) Purchasing (only from RTM) 4 new tires. The first time driver must get prior RTM official approval for all “outside” used tires and must contact RTM Officials so that the serial number of the tires can be added to the Master list. This driver would be allowed to start in the position he qualified in without penalty if prior approval of outside used tires is granted. Outside “used” tires must be approved by RTM officials prior to racing.

d. “Regular drivers” that find that they must purchase 4 new RTM tires for a Two-tire race, must utilize them in all practice sessions, qualifying and run those tires in the race. They will start at the rear of the field based on his qualifying time with other drivers that are also choosing to run 4 new tires. RTM “used” tires should be utilized to their full, competitive capacity in order to save teams money throughout the season. Selling used tires to other modified drivers is encouraged as it allows other drivers to race with a cost savings and increases car count. It is the responsibility of the driver receiving the tires to ensure those serial numbers are on the Master List.

e. If for any reason beyond the drivers’ control, practice and/or qualifying do not occur, any driver (using 4 new tires) will start at the rear of the field based on a random drawing with other drivers that are also choosing to run 4 new tires. Drivers in compliance with the 2-tire rule will be positioned according to point’s standings.

f. In instances where previously used RTM tires are fully-utilized and no longer safe to race with, the race team should use their stockpile of RTM “used” tires. Teams are required to purchase new RTM tires (if needed) in this instance to help fund the tour. Teams/Drivers cannot use four tires unless they have exhausted their inventory and must explain to officials why they must have four new tires. A decision will be made on a case by case basis. Please call any RTM Official to discuss, prior to the event.

g. If teams are not in compliance with the Two- tire rules, the Competition Director can ask the team to change the tires, obtain other tires or purchase new tires, if available, and be subject to the 4 tire rule. The tires in question can be confiscated and/or disqualify the driver at the Competition Director’s discretion.

h. There will be a two race compliance period beginning with the first race in 2010. All teams must be in compliance with the revised 2-tire policy at the beginning of the third race in 2010 by having all tires' serial numbers recorded on the Master List. Serial numbers from tires purchased from RTM in 2009 in which teams want to use in 2010 RTM events must be submitted for entry to the Master List no later than the end of the second race in 2010. Serial numbers after the end of the second race will not be accepted. I would encourage using those tires for practice.

i.) The purpose of this amendment was due to the difficulty in verifying paint marks on each tire and our ability to ascertain its validity. While some additional procedures must be taken by teams and RTM Officials, the concept virtually remains identical to the previous rule.

#### Fuel Cells

10) Part-A Racing fuel cells are required. Maximum capacity of the fuel cell is 22 gallons. Minimum clearance from the ground to the lowest point of the fuel cell is eight (8) inches. The fuel cell must be enclosed in a metal container constructed of a minimum of 22 gauge steel. It must be securely mounted in the race car with at least two steel straps or steel square tubing widthwise. Straps are made of steel only, and must be a minimum of 1/8 inch thick by one inch wide (Amended January 2010).

Part-B All cells must have closed cap or check valves on gas fill and vent. Fuel cell vent must exit on outside of rear panel, 12 to 18 inches from left side of quarter panel.

Part-C Fuel cell foam must not be worn, extremely yellowed, or torn. It is recommended that the foam be changed every three (3) years.

Part-D Fuel is to be racing pump gasoline. No additives or nitrous oxide may be used.

#### Electrical

11) Part-A Each car is allowed only one 12 volt battery. Batteries must be securely mounted and shielded.

Part-B All cars must have an electrical cut off switch mounted inside the driver area. This switch must use safety decal and have ON and OFF clearly marked. Also, it is mandatory that the cutoff switch is within reach of the fully belted driver and track safety personnel.

Part-C All cars must be equipped with a self starter. If a car is pushed or helped by anyone to start the race, the car will start from the rear of the field after line-up for the feature race

Part-D Alternators may be used.

Part-E No electronic traction control, timing devices or MSD boxes are allowed in RTM race cars at any time. **NO ELECTRONIC BOXES OF ANY KIND ARE PERMITTED.**

Part-F No magnetos allowed. No wiring harnesses or wire looms allowed. All electrical wiring must be point to point and each wiring connection must be easily traceable and removable from the car for inspection purposes.

#### Built Engines

12) Part-A Any American production passenger car engine is allowed.

Part-B High Energy Ignition (HEI) with a four (4) prong module or MSD #8364 replacement module is allowed. The MSD distributor allowed for a Chevrolet is #8365. No forced air induction, dry sump systems, or electric fuel pumps allowed. No Cutting or splicing of any of the distributor wires allowed. All components and wires must remain in their original factory

configuration. At any time, the RTM officials may require a change of the distributor module or the detachment of the tachometer wire from the distributor. Point distributors are allowed.

Part-C Carburetor must be a Holley 500 CFM. 2 BBL and must be RTM pre-approved.

The maximum butterfly and Venturini diameter is 1.750 inches. No sleeving of Venturini or booster modifications allowed. Any intake may be used, either two (2) or four (4) barrel with adapter or spacer, except tunnel rams. Under no circumstances will any air leak be tolerated in manifold, spacers or adapters.

Part-D Engine must be mounted at least 72 inches forward from the centerline of the rear axle housing, measuring to the bell-housing flange at the rear of the block. The distance from the center of the crank to the ground can be no lower than eleven (11) inches.

Engine must be mounted between front frame rails.

Part-E Competitors must race with the carburetor used in qualifying.

Part-F No aluminum cylinder heads or aluminum engine blocks.

#### Crate Motor Engines

13) Part-A Competitors must notify the RTM competition Director when you sign in for an event, that you are using this type of engine.

Part-B \*\*\*GM sealed crate motor part number 88958602 – 350ci. – 350hp\*\*\* This motor is the only authorized crate engine allowed in RTM competition for 2010. Seals must remain as installed by GM. Tampering with or removal of seals could result up to suspension from RTM competition.

Part-C Carburetor – Holly 4 barrel 650 cfm P/N 4777.C or 80541-1 only. Removal of choke is allowed. No other alterations will be allowed. RTM officials may claim the carburetor for \$0.00 if the carburetor does not meet RTM specs, if owner/driver refuses claiming by RTM officials could result up to suspension from RTM competition. Only 1 non-adjustable one-piece solid aluminum spacer permitted, max one (1) inch height with one (1) gasket per side not to exceed .065 in thickness. Openings of spacer cut perpendicular, matching carb, base and no larger than the base of the carb. No taper or beveling permitted.

Part-D Car must weigh a minimum of 2,450 lbs. at all times with driver. Left side weight cannot exceed 58% percent of total weight of car.

Part-E Engine must be mounted at least 72 inches forward from the centerline of the rear axle housing, measuring to the bell-housing flange at the rear of the block. The distance from the center of the crank to the ground can be no lower than eleven (11) inches.

Engine must be mounted between front frame walls.

Part-F No aluminum cylinder heads or aluminum engine blocks.

#### Weight

14) Part-A Cars with built motors must weigh a minimum of 2,600 lbs. at all times. There will be no bleed off of weight allowed for fuel loss at the end of a feature event.

Part-B Cars with Crate motors must weigh a minimum of 2,450 lbs. at all times. There will be no bleed off of weight allowed for fuel loss at the end of a feature event.

Part-C Driver's side of car cannot exceed 58% of total weight of car for cars with either a built motor or a crate motor.

Part-D RTM officials will inspect all installations of ballast lead. Added weight must be in block form of no less than five (5) lb. blocks. NO PELLETS will be permitted. Added weight must be securely bolted in place and painted white with your car number on it. Any dislodged weight will not be returned to the car for weigh in after the race should your car be a part of a post race weigh in. In addition, some racetracks do have fines for dislodged weights during a race.

#### Numbering and Decals

15) Part-A All RTM cars will be numbered with large legible numbers on both sides of doors.

Part-B All RTM cars will be numbered with large legible numbers on top of their roof, so timing and scoring can easily indentify each competitor. These roof numbers are to be placed on the side of the driver so as to be easily identified by timing and scoring as well as the flagman.

Part-C It is suggested that numbers on sides of cars be a color that stands out from the traditional paint scheme of the racecar.

Part-D Numbers must be a minimum of twenty (20) inches high and four (4) inches wide on both sides of the car and twenty-four (24) inches high and four (4) inches wide on the roof.

Part-E In the event that there are two cars with the same number, where one team is registered with RTM, and the other car is "visiting," the "visiting" team will make alterations to their car number, to be determined by the RTM Competition Director. If the visiting teams wishes to join the RTM tour on a full-time basis or multiple race basis, then they will have the option of choosing an alternate available number or to use the alteration previously used.

Part-F In the unlikely event that there are two RTM-registered teams that happen to have the same number, deference will be given to the team that has been a member of the tour a longer period of time.

Part-G Decals must not interfere with the car numbers. All RTM series member teams must carry all contingencies and sponsorship decals of the tour. RTM decals and any tour sponsor decals must be set to the template to be supplied by the tour.

#### Claiming Rules

16) There is no claiming rule available to teams participating on the 2010 RTM Tour.

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