

2010 Sundance Vacations Speedway TOUR TYPE MODIFIED RULES

SPECIAL SCANNER INSTRUCTIONS: All drivers must monitor scanner system and obey line up and the Race Director's instructions. This may be done in place of, or in conjunction with driver/crew radio communication but in all cases it will be the driver's responsibility to monitor the scanner system. All radios must be programmed so that scanner system overrides communication with crew. In situations where this is possible, scanner must be onboard race car. All instructions will be repeated once. If action by driver is not taken immediately, the car will be black flagged and placed to the rear of the field.

Construction and component selection of all cars in this division must follow guidelines set forth in either the NASCAR WHELEN MODIFIED Rulebook or the RACE OF CHAMPIONS MODIFIED Rulebook. The following rules must be followed regardless of inclusion or exclusion from either rulebook.

1. All cars must maintain a 2 inch ground clearance at all times. This includes all sheet metal.
2. All cars are to be a maximum of 83 ½ inches in width measured from outer bead to outer bead of wheels, at hub height.
3. Minimum weight is for cars with engines of 358 cubic inches or less. All cars with engines over 358 cubic inches will add 6.9 pounds for every cubic inch over 358. Cubic inches of engine must be displayed on right side of hood, together with minimum car weight. EXAMPLE: 360 CID - 2614 LBS. These numbers/letters must be at least 1..5 inches high and placed so they are easily visible to the scale official.
4. All cars with steel head engines will weigh a minimum of 2600 lbs. and have a maximum of 56% left side weight.
5. All cars with Aluminum head 23 degree engines will weigh a minimum of 2525 lbs. and have a maximum of 56% left side weight.
6. All cars with Aluminum head engines (other than 23 degree) will weigh a minimum of 2600 lbs. and have a maximum of 55% left side weight.
7. Specific rules pertaining to steel head or aluminum head engines will supersede engine rules in either the NASCAR WHELEN MODIFIED or RACE OF CHAMPIONS MODIFIED Rulebooks.
8. No carbon fiber or titanium chassis, drivetrain, or engine components other than those specifically allowed in engine section.
9. All electrical wiring including, but not limited to, ignition system wiring must be mounted to the right side of the driver. All wiring must be accessible to tech officials for inspection. All wiring must be in plain view. No wiring in drivers door area.
10. Positive wire from ignition box to distributor or crank trigger must be an unspliced, continuous wire with no insulation breaks, plugs, or any other introduction point for traction control devices.
11. Ignition system must not contain any open wire or terminals. Unused ignition amplifier box wires must be cut flush to the box. Unused rev limiting chip sockets must be permanently sealed shut.
12. No adjustable timing controls or ignition delay devices.
13. No programmable or digital ignition boxes. Analog ignition boxes only. Ignition boxes may be impounded at any time in order to be sent for additional inspection. Boxes passing inspection will be promptly returned. Boxes which fail inspection will be seized and destroyed.

14. Rear spoiler must be 8 inches high by 48 inches wide. The rear spoiler may not extend past the rear edge of the rear bumper at any time. A maximum of 35 inches, measured from the ground to the spoiler mounting point, will be permitted. Rear spoiler must be solid clear polycarbonate (minimum ¼ inch thick). No lettering is permitted on the rear spoiler.

15. Rear corner bars must mount to rear bumper with a minimum 2 inch x 2 inch x .125 inch piece of extruded steel angle. Rear mounting point of corner bars must be at the rear edge of the bumper. No sharp edges anywhere. Bumpers will be inspected during safety inspection.

16. A one half percent (0.5%) tolerance will be allowed on left side weight. No tolerance on total weight.

ALUMINUM HEAD ENGINE RULES

ENGINE BLOCK

1. Engine block must match manufacturer of engine.
2. No aftermarket blocks.
3. No aluminum blocks.

ENGINE DISPLACEMENT/COMPRESSION RATIO

1. Engine displacement may be increased by boring or stroking.
2. Minimum displacement is 350 cubic inches.
3. Maximum displacement is 370 cubic inches.
4. Maximum compression will be 12.0 to 1 on any cylinder.

CRANKSHAFT, CONNECTING RODS, PISTONS

1. Only magnetic steel crankshaft permitted.
2. Only solid magnetic steel connecting rods will be permitted.
3. Titanium and stainless steel connecting rods will not be permitted.
4. Only aluminum pistons will be permitted.

CAMSHAFT, VALVE LIFTERS, ROCKER ARMS

1. Any magnetic steel roller or flat tappet camshaft will be permitted.
2. Only solid steel flat tappet or roller lifters will be permitted.
3. Only steel or aluminum rocker arms will be permitted.

CYLINDER HEAD

1. The approved 23 degree cylinder heads are limited to the following:

Air Flow Research AFR 215

All Pro AP 227

Brodix 3941075

Chevrolet GM PN# 10051101

Pontiac GM PN# 10033867

All cars with these cylinder heads will weigh 2525 lbs. and have a maximum 56% left side weight.

2. Other 23 degree cylinder heads may be approved by track management but must be submitted for inspection prior to being allowed in competition.

3. The approved OEM non-23 degree cylinder heads are limited to the following:

Dodge W8 casting numbers P4532933 and P4510019

Ford casting number E3ZM6049C3

General Motors casting number 10134363

All cars with these cylinder heads will weigh 2600 lbs. and have a maximum 55% left side weight.

4. Internal porting and polishing will be permitted.

5. Only steel or titanium valves will be permitted.

INTAKE MANIFOLDS, CARB SPACER PLATE

1. Engines using approved 23 degree cylinder heads will be allowed to use any cast aluminum intake manifold. No sheet metal intake manifolds.

2. All other engines must use one of the following approved intakes:

Dodge P4532598, P4532598AB

Ford M-9424-A351, M-9424-X351 or Edelbrock 2961, 2991, 2938

General Motors 24502481, 24502653 or Edelbrock 2955, 2958, 2995

3. Porting and polishing of the internal surfaces of the manifold is permitted.

4. Added directional devices inside the manifold will not be permitted.

5. No added air holes will be permitted in the manifold.

6. No painting or coating of the manifold will be permitted.

7. All aluminum headed engines may use a maximum 1-inch spacer plate.

CARBURETOR

1. All aluminum head engines must use a Holley 4150 HP series PN# 80507 4-barrel carburetor.
2. Carburetor rework guidelines may be found in the NASCAR WHELEN MODIFIED Rule book. Track management can provide a copy of these rules to any interested competitor.
3. Carburetor must pass all Sundance Vacations Speedway gauge checks to be eligible for competition.

STEEL HEAD ENGINE RULES

ENGINE BLOCK

1. Comp series Dart little M block PN#31131111 allowed.
2. Bowtie cast iron blocks PN#10051183, 10185047, or stock block allowed.
3. Bore size of 4.00 to 4.060 plus or minus .005 allowed.
4. No angle cutting of block deck.
5. Block must be mounted within 2 inches of the centerline of lower ball joints and be mounted securely.
6. Minimum 2 inch ground clearance on oil pan.
7. All bolt holes and bores must remain in OEM location.

CRANKSHAFT

1. Standard steel magnetic production design crankshaft only.
2. Stock stroke of 3.480 only. Tolerance of +.005 - .010
3. Counterweights must be same shape as original OEM Mass production crankshaft used with this block.
4. Mains & Rod journals may be drilled.
5. Outside diameter of counter weights may be drilled.

RODS

1. Solid magnetic steel only..
2. Maximum length of 6 inches.
3. No stainless steel, aluminum, titanium, or any other materials on or in rods.

PISTONS

1. Flat top, dished aluminum round pistons and dome pistons permitted.
2. Must have three functioning ring grooves.
3. Maximum overbore of .060

4. No ceramic, plastics, or any other materials on or in pistons (ALUMINUM ONLY)

HEADS

1. GM Bowtie casting PN#14011034, 14011058, or 12480034 only.
2. Dart Platinum PN#10310010P
3. Maximum valve size: intake-2.05 exhaust-1.60
4. No repositioning of head on block. Stock location only.
5. Valve centerline and guide angle in relationship to heads must be OEM stock.
6. Porting and polishing by the removal or grinding of the original casting in runners is permitted. NO epoxy fillers, welding, spray welding, or any other coating or materials on or in heads.
7. External painting is allowed.
8. No air directional devices on any valve surface.
9. Push rod and valve springs must be steel only-no titanium.
10. Titanium valve spring retainers allowed.
11. Maximum compression ratio is 12.0-1 ZERO TOLERANCE!

CAMSHAFT / LIFTERS

1. Cam and bore, lifters and bores-must be in original location.
2. Steel lifters only. Solid or Hydraulic with roller tappets or mushroom tapers only.
3. Rev kits permitted.
4. Roller rocker, stud girdles, and shaft rockers allowed.
5. Roller cam bearings permitted.

IGNITION

1. HEI, MSD, or Magneto allowed. MSD box must be mounted to driver's right and in plain view.
2. Distributor must mount in stock location. Rotation must be OEM stock.
3. No adjustable timing controls permitted.
4. No ignition parts in driver's side(door bar) area.

INTAKE MANIFOLD

1. The following manifolds are approved for competition:

Brodix HV 1000

Edelbrock 2975 / 2999 / 2925 / 2926

Bowtie 2972 / 2996

Weiend Team G 7530 / 7532

Holley 300-25

GM PN#10051102 / 10093374

HVH 10003

DART PN#42411000

2. Intake manifold may be ported. No welding or epoxy fillers allowed.

3.. No painting or coating allowed.

4. Maximum intake gasket thickness is .125

5. No spacers between intake and heads.

CARBURETOR

1. Holley #4777 650 CFM or Holley #80541-1 HP 650 CFM only.

2. No internal or external modifications allowed. Carburetor must remain stock.

3. Choke plate and horn may be removed. Gasket ring area must remain stock.

4. Boosters must be stock size and location, but may be aligned.

CARB SPACER

1. Must be one piece. Maximum thickness is 2 inches. No taper or bevel shape, spacer must conform to base of carburetor and use two paper gaskets that are no more than .065 thickness each.

2. Spacer must position carburetor over original mounting position on intake manifold.

AIR CLEANER

1. Round dry type with a diameter between 12 and 14 inches. Height must be between 1.5 and 5 inches. Top and bottom of air cleaner housing must be round and solid with the exception of the carburetor opening.

2. All air that enters engine must pass through air cleaner. No devices of any kind that will direct or channel air to or from filter allowed.

3. Filter must be centered on carburetor.

4. A shield up to one-half of air cleaner circumference is allowed on front of air cleaner.

5. No performance enhancing additives or chemicals on or in air cleaner or element permitted.

ENGINE LUBRICATION

1. Dry sump systems recommended.

2. No oil tanks or oil lines in drivers compartment.

3.. Maximum 5-stage oil pumps only. Maximum pump length is 10 inches long by 3.5 inches wide.

4. No oil deflecting of individual rod or main journals.

5. Oil coolers allowed. If mounted above interior sheet metal, must be no larger than 5 inches high and 10 inches wide. Outside edges of cooler must be sealed with sheet metal.

6. No partition oil pan of any kind. Oil pans subject to tech approval.

ENGINE / CAR ELECTRICAL SYSTEM

1. Approved ignition systems may be used in competition. If the crank trigger ignition system is being used, triggering devices or pick ups will not be permitted inside of the distributor housing.

2. Ignition amplifier boxes and RPM limiters that are analog only which do not contain programmable, computerized, or memory circuits will be permitted.

3. Magneto systems will be permitted.

4. The distributor must mount in the stock location as a factory produced engine for the make and model engine being used.

5. Crank trigger ignition systems will be permitted.

6. Ignition system equipment or wiring may not be located in the drivers door area. All ignition system equipment must be mounted to the driver's right-when seated.

7. Adjustable timing controls will not be permitted.

8. No ignition delay devices permitted.

9. RPM limiting devices must be approved by track officials and be attached and wired to the ignition amplifier boxes in a visible manner.

ALTERNATOR

1. The alternator system, if used, must be working within specifications and mounted on the front of the engine.

STARTER

1. The self starter must be in working order. Gear reduction starters acceptable to Sundance Vacations Speedway officials will be permitted. After a race is underway, cars may be started by hand pushing in the pit area only, but under no circumstances is any car permitted to be pushed onto the race track from pit area.

BATTERY

1. The battery must be located between the frame rails. The battery must be located under the hood or floor of the car. If located under the floor-the battery must be completely encased. If located under the hood-must have an acceptable cover. The battery must not be forward of the radiator or behind the rear end. Battery location must be acceptable to Sundance Vacations Speedway officials.

ELECTRICAL SWITCH LOCATION

1. All electrical switches must be located on the dashboard panel within easy reach of the driver. A labeled on/off master switch to the battery cable must be installed on the cowl behind the windshield opening-on the right side of the driver when seated. The switch was be easily accessible and in plain view.

COOLING SYSTEM

1. Radiator must appear and work like OEM radiator and be centered in front of engine.
2. No cooling or icing type chemicals in engine compartment.
3. Mechanical water pump in stock location turning in same rotation of crank.
4. Coolant must flow in same direction as production engine.