

# 2025 SLM Rules

Motor Weight Rules updated for 2025

## Pre-Tech process:

All cars will come through Pre-Race Tech race ready, and all measurements will be taken at a maximum nose height of 8" (Body heights, tread widths, referee, etc.) with driver out of the car. In the event the nose is higher than 8" the crew will be asked to place the nose on an 8" reference block for measuring. Nose can be lower than 8" just not any higher.

SLM Carburetors: If you come through tech, either pre-race or post-race, with a carburetor that does NOT pass tech, the carburetor will be confiscated. If the carburetor is on the car in pre-race tech that is the carburetor, you intend to run. Also take notice, that if your carburetor passes pre-race tech, there is no guarantee that it will pass post-race tech due to temperature fluctuations. Be sure that your carburetor builder takes this into consideration.

## 2025 Pro All Stars Series SLM Rules

There will be no onboard wireless devices allowed. No wireless gauges, tachometers, cell phones, Bluetooth devices i.e.: (watches or any other digital devices), No live streaming or **Go Pros** unless approved by series officials. This will result in an immediate disqualification and a fine.

- **Competitor:** A driver, car owner, crew member or another person who participates competitively in a PASS event.
- **Disqualified:** The car and any competitor affiliated with it will be treated as if it did not start the race, thus forfeiting any monies, awards, and championship points it may have otherwise been entitled to.
- **Event:** A PASS sanctioned motorsports event, which includes the designated race and all periods of registration, inspections, time trials, qualifying races, practice sessions, post-race inspections and possible related rain or postponed dates.
- **PASS:** Pro All Stars Series
- **Official:** Appointed by PASS to officiate as an employee or independent contractor at the event.
- **Promoter:** The entity that, in connection with the event, is responsible for the promotion of the event, as named on the official entry blank.
- **Series Driver/Team:** Any driver or team that competes in an event sanctioned by the PASS.
- **Tour Driver/Team:** Any driver or team that competed in any PASS events.

# Thompson / New Hampshire Motor Speedway

NHMS and Thompson Speedways will be a crate only race. rule. The following engines and weight combinations will be the only allowed combos.

**Bottle Cap PASS sealed Crate 2700 RPM chip 6400**

**Bottle Cap PASS sealed Crate w/ pan change 2710 RPM chip 6400**

**Straight crate 2750 lb RPM chip 6300**

**Ford D347SR crate 2810 LB with 1.5 rockers 6200 chip.**

**PASS reserves the right to adjust weight at any time for the fairness of competition.**

**NHMS Spoilers: All cars must run a 6.5" high spoiler, between 70 and 90 degrees.**

The AR Revolution Body will not be allowed at New Hampshire Motor Speedway.

## **GEAR RULES**

- a. Gear rules are for built motors only (NOT CRATES).
- b. Any track not covered in the rules, refer to the series entry form for the gear rule.
- c. OXFORD: 5.29 – **5.67**
- d. Thunder Road, White Mountain Motorsports Park, Seekonk: 6.00-6.28

## Building Rules

**Due to continued failed attempts to have builders and teams comply with PASS Super Late Model chassis construction parameters, effective immediately PASS approved manufacturers teams will show up and have them teched on race day.**

**All other new cars must schedule an appointment for a PASS technical review prior to competition.**

**PASS has a long history of allowing the following builders to be taken into confidence for compliance. PASS looks forward to the possibility of qualifying additional builders in the future.**

**Current certified builders are:**

**Distance Racing**

**Dale Shaw Race Cars**

**Jeremy Davis Race Cars**

**Port City Race Cars**

**There are many other chassis combinations that have passed tech and will continue to be allowed. All other cars will have to schedule the tech review prior to competition. PASS reserves the right to disallow any chassis builders when they schedule the tech review appointment. Call Jason Ricker (704-881-4429) to schedule an appointment prior to event.**

**PASS will continue to make every effort to control costs and keep competition as equal as possible using a spec tire, fuel, bodies, rear ends, and chassis builders. Chassis must pass tech, there will be no weight added for infractions.**

### **Center Section Components**

- a. Main frame rail structure of chassis, defined as the primary structure to which roll cage members, major suspension components, engine, etc., mount, must be constructed of a mild steel shape having a minimum perimeter dimension of 10 inches. Examples: 2 x 3, 2 ½ x 2 ½ , etc. Main frame rail members should be a minimum of:
- b. . 10-inch perimeter tubing: 0.120-inch wall thickness
- c. . 12-inch perimeter tubing: 0.095-inch wall thickness
- d. . 16-inch perimeter tubing: 0.083-inch wall thickness
- e. Main frame rail members shall be constructed so that the side rails are located within the normal tread width of the car. Right side main frame rail may be a perimeter or straight rail design.
- f. A perimeter frame chassis is defined as having left and right frame rails symmetrical (maximum 1 inch tolerance).
- g. PASS rules state that the frame rails are to be a minimum of 50 ½" outside to outside and must maintain the same structural tube diameter back to the rear end tubes. You may then use 2"x2" from the rear end housing back to the rear bumper.
- h. The left main frame rail on all chassis must measure a minimum of 10" perimeter around the left front frame rail. No cutting for frame height clearance.
- i. When using an under-slung front snout on a straight rail chassis, the right main frame rail must be outside of the right front frame rail. They must not be in a straight line.

### **Front and Rear Sections**

- a. Front and rear frame rails must measure 10 inches around the perimeter and constructed of 0.083-inch wall thickness.
- b. The rear frame section must extend beyond the rear edge of the fuel cell. The rear frame section maybe be 2" X 2" from the rear axle rearward.
- c. The rear frame section may be fabricated above or below the rear axle.
- d. Front and rear frame sections centerline must be located within 1 inch of the centerline of the main frame section on a perimeter chassis.
- e. The rear frame section must measure a minimum of 38 inches outside to outside.
- f. All Fuel Cells must meet all specifications above AND must be mounted solid and permanently, NO sliders allowed. Any infraction of this will result in disqualification.

### **Roll Bars**

**Any car with inferior cage construction, including but not limited to, less than 4 driver door bars, smaller than required halo, lesser perimeter chassis circumference/thickness will not be allowed.**

- a. A four-point roll cage structure of 1 3/4 inch outside diameter made of 0.090-inch thick molybdenum or mild steel tubing is required. All cars must have an x-type member across and behind the driver.
- b. Roll cage structure must be fully with minimum 1/8-inch-thick gusset plates at all major tube intersections.
- c. A minimum of 4 horizontal bars, 3 curved, with 6 vertical bars (2 between each horizontal bar), with steel gussets is required in the driver's door.
- d. It is mandatory to have 16-gauge metal welded between door bars or a 16-gauge plate 40 inches in length and 17 inches high minimum, welded between the door bars and the driver's door.
- e. The right-side door shall have 3 horizontal bars, straight or curved.
- f. Total height of roll cage to be 40 1/2 inches from bottom of the frame. Halo will be no less than 1 inch lower.
- g. There must be a piece of tubing welded diagonally or perpendicular between halo and top of roll cage.
- h. Minimum height of door bars on driver's side is 22 1/2 inches from bottom of frame.
- i. A "Petty Bar" must run between the center of cage and upper right front halo.
- j. Width of halo should be a minimum of 44 inches on perimeter chassis and 31 inches on straight rail chassis.
- k. Measurements will be from outside to outside of tubing.
- l. All roll cage installations and workmanship must be acceptable to PASS Officials.

## Engine Location

- a. Engine/drive line must be centered within 3" of the tread width of the car. This will be measured from the outermost point of the front tires at ride height.
- b. Engine crankshaft center height must be a minimum of 10" from the ground. **Measured at a minimum roof height of 47-in.**
- c. Maximum engine setback is 2" from the forward most sparkplug hole center to a determined line across the center of the upper ball joints.
- d. Engine must be positioned in the normal upright mounting, whereby cylinder vertical centerline of a 90-degree engine shall be a 45-degree engine angle to a vertical line projected from the ground plane.

## Driver's Seat

- a. The driver's seat must be designed for auto racing and constructed of 0.125-inch-thick approved material and adequately padded.
- b. Aircraft-quality hardware is required for attaching seat to seat substructure. Seat must be located with at least 6" (preference of 8") clearance to the nearest longitudinal door bar.
- c. The seat substructure must be securely welded to the main roll cage.
- d. Seat may not protrude outside 4 point upright or top cage halo.
- e. **The seat should be mounted in a location where no part of the driver's head is above or outside the main roll cage at any time.**

# Fire Walls

- a. The interior of car must be completely enclosed and sealed off from the engine compartment, track surface, wheel wells, and rear (fuel cell) compartments.
- b. The area immediately beneath the driver (floor) and the vertical panels surrounding the seat area and foot box must be constructed of minimum 18-gauge steel (.047 inch) and be of welded construction.
- c. All other interior panels may be constructed of aluminum, minimum of 0.040-inch thickness. NO Plastic or carbon fiber interior panels allowed.
- d. Panel on passenger side of car may be either flat across at transmission height, drop back to floor level after transmission tunnel, or have a 4" flat area over transmission and then angle up to the top of the right-side door bars.
- e. A full width dashboard is required.

# Car Weights

- a. Weights: All car weights listed are race ready with driver, full of fuel, oil, and water before race. The maximum left side weight percentage for ALL cars will be 58% before, during, and after event. NO allowances. No cars under any motor, body, weight combination will weigh less than 2700lb.
- b. Post-race left side weight violation penalty will be assessed as follows. 1 tenth (.1%) over 58% left will be assessed a monetary fine of \$200 (two hundred dollars) 2 tenths (.2%) over 58% left will be assessed a monetary fine of \$500 (five hundred dollars) 3 tenths (.3%) over 58% left will be disqualified from finishing order of event.
- c. Total Weight: Total weight must remain within allowed tolerances. Any violation will result in disqualification from finishing order of event.

# Added Car Weight

- a. Added weight must be securely mounted and bolted in place and painted white with car #. Dislodged weight cannot be returned to car for weighing after the race and will result in a fine.
- b. No ballast adjustment devices permitted on cars. No Tungsten or other exotic metals. Lead only.
- c. Weight transfer devices of any type may not be activated by the driver.
- d. No Tungsten or other exotic metals. Lead only.

Notice: All model, engine, or equipment changes or modifications not governed by the PASS must be submitted for consideration of approval no less than 30 days prior to the date of intended usage in PASS competition. Equipment will not be considered as having been approved by reason of having passed through inspection unobserved.

## 10.3 General Car Body Requirements

The following bodies are approved for competition. See the template instructions guideline included for heights and measurements.

**Gen 6:** Five Star Camaro / Mustang **Nose must remain as manufactured.** Note: Bottom of nose to fender seam must be 15-3/4 **after the race.**

**ABC:** Chevy, Ford, Toyota, and Dodge **Must maintain 20 inches from hood seam to the bottom of nose below the grill screen before or after the race.**

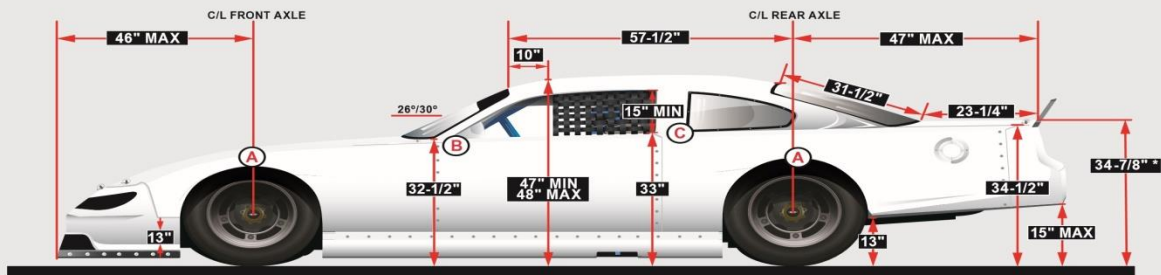
**AR Revolution:** The new AR body will be approved for competition but due to the lack of wind tunnel numbers and on track testing this body will have a 50-lb weight penalty. **The AR revolution body will not be allowed for competition at Loudon.** This will be monitored for adjustment.

All Tour cars must keep the front fenders clear of lettering. The space will be used to display logos for PASS sponsors.

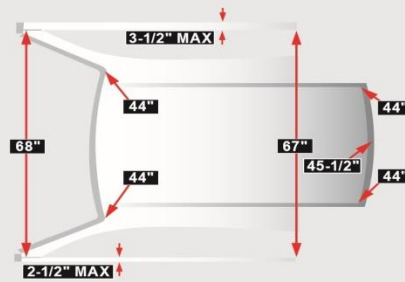
**Templates:** Cars must be neat in appearance and have complete bodies. No altering of bodies or body style permitted without PASS approval. That is, all body panels installed must match the brand of car which is indicated on the front of the car and fit templates for said Manufacture ABC® Five Star & AR bodies must fit templates **within 1/2"** and maintain all dimensions in diagram for "ABC & Gen 6" Dimension Guidelines page. All car base weights are based off the utilization of the ABC & Gen 6 bodies fitting the templates.

## ABC TRADITIONAL ROOF BODY DIMENSIONS

CHASSIS	ROOF HEIGHT	TREAD WIDTH	WHEELBASE
Offset/ Straight Rail	47"	66" MAX	101"-108"



- WIDTHS**
- A** 79-1/2" MAX"  
*Body Width: Measured at wheel wells*
  - B** 68"  
*Door to Door Width: Measured at A-posts and inside edged of doors, measured through car*
  - C** 67"  
*Door to Door Width: Measured at B-posts and inside edged of doors, measured through car*



- Note:*
1. If the Roof Height (10" back from windshield), Fender Height (rear), Door Height (rear), Quarter Panel and Bumper Cover Height dimensions are higher than the stated dimensions, all five must increase by the same amount.
  2. Must fit centerline template within allowable tolerance.

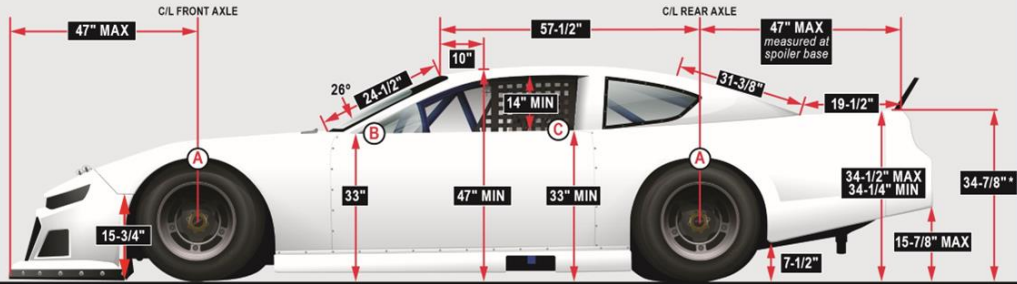
*\*Measured at the seam of bumper cover at deck lid intersection, +/-1/4"*



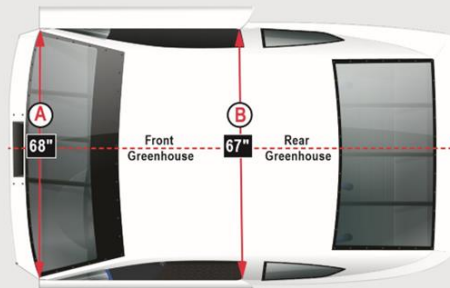


# ABC NEXTGEN BODY DIMENSIONS

CHASSIS	ROOF HEIGHT	TREAD WIDTH	WHEELBASE
Offset/ Straight Rail	47"	66" MAX	101"-106"



- WIDTHS**
- A** 79-1/2 MAX"  
Body Width: Measured at wheel wells
  - B** 68"  
Door to Door Width: Measured at A-posts and inside edged of doors, measured through car
  - C** 67"  
Door to Door Width: Measured at B-posts and inside edged of doors, measured through car



**Notes:**

1. If the Roof Height (10" back from windshield), Door Height (rear), Quarter Panel, or Bumper Cover Height dimensions are higher than the stated minimum dimensions, all four must increase by the same amount.
2. Must fit centerline template within allowable tolerance.

\*Measured at the seam of bumper cover at deck lid intersection, +/-1/4"



- a. **Windows:** Full 1/8" ABC or Gen 6 Lexan type windshields must be used. Windshield must have at least 2 internal braces. Full ABC or Gen 6 rear windows are mandatory and mounted securely and braced to prevent any collapsing. Rear quarter panel windows may be used. Vent windows are permitted with a maximum of 12" from the connecting "v" point of the "A" post and the top of the door horizontally along the top of the door toward the "B" post measuring 12" then vertically 90 degrees may stick outside of the body no more than 1". **Air inlets must be through the rear quarter windows only.**
- b. **Spoiler:** Rear spoiler shall not exceed 6 1/2" (ABC bodies), in overall or surface height. The spoiler shall not exceed 60" width and must be mounted at the rear bumper cover. No side bracing or boxing permitted. The maximum height of the top of the spoiler to the ground ABC bodies 41 1/2". Rear spoilers must be all clear with no paint or tape.
- c. **Hood:** The hood must have positive pull pin type fasteners with min. 4 pin fasteners on leading edge. The rear deck lid must be hinged, pinned for viewing access, no solid riveting of deck lid.
- d. **Rockers:** **Factory approved ABC legal rockers.**
- e. **Bumper Covers:** Rear bumper covers must remain as manufactured, NO Modifications permitted! **Front traditional nose must be a min 20 inches from hood seam to bottom of the nose**



after the race. Gen 6 Nose cannot wear the bottom edge off and must have a measurement of 15-3/4 at the edge of the fender seam to the bottom of the nose as seen in the NextGen body diagram. Nose must be single plain across the bottom no notching or stepping for aero advantage. The minimum lower edge wrap measurement permitted will be 54 inches as measured from the center seam to fender opening measured at lower leading edge of nose panel. NO "shaping" or contour modifications of panels permitted in any way. Maximum Nose side to side width at tire may not exceed 79 1/2" inches.

- f. **Deck Lid:** The deck lid must not be more than 1" lower than rear quarter heights in any area.
- g. **Dimensions:** Dimensions for body heights "A" and "I" must be no more than 16" difference in drop. Roof "X" dimension (a point on A post to opposite outer edge of rear spoiler) shall not exceed 3" difference. Exceeding 3" but less than 6" require a 25 lb. weight penalty.
- h. **Bracing:** All body panels must connect in stock locations, without alteration. Maximum 1"x1" bracing angle.
- i. **Roof:** Roof and rear window air deflectors Will NO LONGER BE ALLOWED. 47" roof minimum roof height. The roof may have a maximum 3" drop, as measured from a point 12" back from the windshield to the rear window. The rear window height at the top may not drop more than 1" from center to either side.
- j. **Panning:** Absolutely no panning! **No metal, lead, or other material can be used to seal off the bottom of the chassis to the track.** A lead tray is allowed to the right of the driver but, can't extend beyond the right side frame rail, no further back then the main cage, and can't extend forward under the transmission. Any lead extending beyond the pan should be in block form not a sheet. No inner wheel wells obstructing the view from engine compartment to rear of car. Skid plate may cover engine oil pan only!
- k. **Radiator:** **Radiator shroud must pull air from original opening of the nose and taper back towards the radiator no wider than the outside of the front clip.** No pulling of air from the base of the shroud to the ground "No Sucking the nose down thru radiator air flow absolutely no panning, front, rear sides, anywhere.
- l. **Width:** All bodies (both 1st Gen and Gen 6) are to have a maximum width of 79 1/2" at any point this includes front fascia valance, wheel well to wheel well.
- m. **Rear Quarters:** Only approved quarter panels manufactured by ABC approved manufacturers containing visible ABC labels will be allowed for competition. Carbon Fiber, Kevlar®, or metal quarter panels will not be allowed. All quarter panels must be mounted as produced and may not be altered other than the removal of the excess material beyond the scribe lines on the trailing edge at the quarter/bumper cover intersection and at the top, at the quarter/roof intersection, to ensure proper fit. Wheel openings may not be larger than 7 1/2" inches from the edge of the wheel (not the tire) on the front and rear of the wheel opening. **Altering the wheel openings is prohibited.**
- n. **Carbon Fiber or exotic:** **No carbon fiber or exotic materials allowed if it's not plastic aluminum steel or fiberglass it will not be allowed whether it's a performance advantage or not. Seats and driver cooling systems are the only carbon fiber items allowed.**
- o. **Grill screen:** **The only grill screen allowed are the factory built Five Star or AR grill screens.**

## Wheelbase, Tread Width, Frame Height

- a. **Wheelbase:** Minimum wheelbase is 102" on either side at spindle height. **The left side wheelbase must be +/- 1" of right side.** Maximum wheelbase is 108".
- b. **Tread Width:** Maximum tread width front and rear is 66".
- c. **Height:** When the car comes to the scales post-race, it must pass over the scales without any part of the car hitting the ramps or scales. If the car needs assistance of a lift or any other procedure to be high enough to get over the scales, there will be an automatic \$500 fine. After scaling the car, it will have to be jacked up and returned to max nose height of 8" or 47" roof height where all wheelbase, tread width, or any other measurements deemed necessary will be measured. **\*This will be in effect for the 2024 season. We will review after the season.**

## Engine Requirements

### Crate Engine Inspection Policy

Within the guidelines of utilizing the 'Crate'-Race engine options for all competitors are subject to a zero-tolerance policy of inspection and conformability to all guidelines as specified by the manufacturer. If in the event any team is considered in question as to the productivity of performance from a 'crate' powered engine, that engine will be susceptible to the following inspection process without protest. Failure to adhere to any action taken by PASS series officials will result in immediate disqualification. At the conclusion of any race event PASS reserves the right to require any team to remove the engine in complete form and turn over possession to appropriate officials for inspection purposes to be determined by officials. Engine will be susceptible to Dyno testing and/or engine tear down for complete inspection to determine total legality to factory produced complete form. In the event ANY part within engine is found non-conforming, the entire engine will become the possession of PASS without claim or dispute. An additional \$1,000.00 fine will be assessed to violating team before next event in which said teams attempts to compete.

## 6500 Max RPM on all Crate engines

### 604 Engine Option #1

**2700 PASS sealed Bottle Cap 604 P/N 88958604**

**2710 PASS sealed Bottle Cap 604 w/ pan change P/N 88958604**

This is the PASS sealed Bottle Cap Crate delivered straight from GM and has been sealed with PASS seals by LCM racing Engines. The motor must remain as delivered with all stock parts to include the Harmonic balancer and oil pan. The engine will go through a brake in process to include dyno time with brake in oil, get its first oil change, valve adjustment, and timing mark correction if needed before delivery. In the event of the motor needing any replacement of

internal gaskets or internal parts this will now become a rebuilt option and will carry the extra weight. **These engines will have a claim option to any competitor in competition that day for the same value as the purchase of a new motor. The claimed motor will be the price on that day and will come as delivered from LCM Racing Engines. No Carburetor, Distributer, clutch assembly, front drive pulleys or fuel pump are included in the claim option.**

## 604 Engine Option #2

### 2730 Rebuilt Crate Engine

Fastburn In factory form without modifications 385 ( P/N 12496769), Fastburn 400 (P/N 88958604).

**This is a rebuilt crate engine package within factory rebuild specs and those set forth by PASS.**

The Fast Burn 400 engine has a 1053 forged steel crankshaft, aluminum heads with 2.00"/1.55" valves, hydraulic roller lifters, (400 HP at 5500 RPM - Torque400 @ 4500 RPM)  
The base engine is a Fast Burn 350ci385 horsepower, with the following parts and tolerances:

- a. Maximum overbore of .008"
- b. Maximum Deck surfacing of block: .005"
- c. Maximum deck surfacing of cylinder head: .010 straight only. NO angle milling permitted.
- d. Minimum rod and main bearing size: .010" under All other necessary parts required for rebuild are to be direct factory replacement purchased through Manufacturer and are exact OEM specified part numbered to engine utilized specification sheet and installed to factory-built specs. NO EXCEPTIONS! All crate engines are to be used in complete form as produced unless otherwise specified. From Intake manifold to oil pan. No external oiling systems permitted. ZERO TOLERANCE!
- e. After Market timing chain cover permitted.
- f. After Market engine bolts are permitted.
- g. P/N 10105123 4 bolt iron block – Must Remain Stock.
- h. P/N 14088533 1053 steel crankshaft – Must Remain Stock.
- i. P/N 10108688 PM rod – Must Remain Stock.
- j. P/N 10159436 High silicon aluminum piston – Must Remain Stock. NO "Eyebrowing" the pistons for clearance.
- k. P/N 10185071 Camshaft with hydraulic roller lifters – The camshaft may NOT be changed.
- l. P/N 12551483 Stock Valve Spring or P/N 12625033 blue beehive springs.
- m. P/N 88960604 8" stock harmonic balancer or 5.7min dia harmonic balancer.
- n. P/N 12464298 Aluminum head – Must Remain Stock. You may cut the heads .010 for clean-up. Minimum 60cc.
- o. P/N 12496822 High rise single plane intake manifold, P/N 12366573 Aluminum dual plane (no EGR) or P/N 12496820 Aluminum dual plane (w/ EGR)– Must Remain Stock.  
Competitors competing with the original Fastburn 385 (intake manifold p/n 12366573 or p/n 12496820) may update to Fastburn 400 (p/n 12496822).
- p. No balancing, grinding, machining, porting ect.

- q. P/N 25534354 Oil pan may be replaced with either of the following part #s: CV1106LTRB or CTR-102. or 8-quart oil pan or Moroso parts #21319, #21315, and CP106KORB pan is permitted with matching p/u assembly and champ CP106KORB permitted and utilized in factory form without modifications.
- r. Scorpion 1.5 rockers are approved.

## Engine Option #3

### **2735 Ford S347 JR**

Ford S347 JR Complete in factory untouched sealed form. No exceptions permitted. This is a factory RACE engine package, Must Remain Stock as built from the factory.

## Engine Option #4

### **2765 lbs. 2-barrel carburetor steel head ONLY.**

- a. Holley 500 cfm carb, must comply with carb requirements.
- b. Must be a V-8 engine with a maximum displacement of 360 cubic inches. Cars with engine displacement exceeding 360 c. i. may be allowed to compete but need PASS Officials approval and carry a weight penalty.
- c. No titanium or aluminum connecting rods permitted. Any length aftermarket rod permitted.
- d. Any flat tappet camshaft permitted. No mushroom type lifters permitted. Lifter bores may be bored, or re-bored and sleeved to accept Ford lifters.
- e. Any dry or wet sump oil system allowed. Maximum of a five-stage pump.
- f. Any flat top piston permitted. Valve relief may be cut into piston. Pistons may not exceed engine compression rule. No pop-up or dish pistons. Dodge pistons can remove minimal material from top of piston to maintain 10:99 compression.

### **Cylinder Heads for 10.99**

Engines with cast iron heads must have a maximum static compression ratio of 10.99 to 1, as measured by the PASS Whistler. **Compressions ratios exceeding 10.99 may be run with PASS approval and up to a 50 lb. weight penalty.** No porting, polishing, sand blasting, glass beading, painting, angle milling more than 2 degrees, or adding material to head permitted.

**GM Heads:** Any current (year 2002 or older) 23 degree cast iron head allowed, except no high ports allowed. Year 2005 GM Vortec Bow-Tie heads # 25534351, 2534371 (bare castings), 25534421, & 25534431 (fully assembled) are allowed only in "as produced" condition. Valve size must remain stock (2.00 / 1.55"), only normal valve machining, & ½" max. port matching.

**Ford Heads:** N351, N352 (year 2002 and older).

**Dodge Heads:** W2 castings (year 2002 or older)

**ANY EXCEPTIONS TO THE CYLINDER HEAD RULES MUST BE SUBMITTED TO PASS TECH FOR APPROVAL.**

- a. Multi-angle valve grinding permitted.
- b. Maximum intake valve size is 2.080 inches.
  - c. Heads with the following maximum valve sizes and stock valve dimensions can be ported and polished. - General Motors: Intake Maximum 1.94" Exhaust Maximum 1.50" GM casting #041,291,441,461,462, & 492 (The 492 casting has to be GM #3958603, 1.94" intake and 1.50" exhaust valves) - Chrysler 340 c.i: Intake Maximum 2.02" Exhaust Maximum 1.60" - Chrysler 360 c.i: Intake Maximum 1.88" Exhaust Maximum 1.60" - Ford Cleveland: Intake Maximum 2.19" Exhaust Maximum 1.71" W/P casting #4351 only - Ford Winsor: Intake Maximum 1.84" Exhaust Maximum 1.54" Ford casting #GT40- M6049-L302
- d. Bowl work allowed up to ½ inch below top of valve seat, maximum.
- e. Port matching allowed up to ½ inch on intake port, maximum.
- f. Polishing of combustion chambers only, permitted.
- g. No reworking of exhaust ports.
- h. Steel or titanium valves permitted.
- i. Any valve spring permitted.

**Intake Manifolds**

- a. Any un-altered production aluminum or cast-iron intake manifolds may be used.
- b. Port matching allowed up to ½ inch maximum. No other machining allowed.

No plastic or carbon fiber intakes or other unauthorized parts allowed. No electric fuel pumps permitted. No aluminum engine blocks.

**Additional weight will be added for higher compression 13.99 max (engine option #4)**

## **Engine Option #5**

**2780 lb Ford D347 SR 2775 or -7 head version** Ford D347 SR Complete in factory untouched sealed form. No exceptions permitted. This is a factory RACE engine package, Must Remain Stock **and run 1.5 rockers.**

**Note: Any engine not listed will have to have approval from PASS tech with a recently build sheet and dynamometer run sheet before approval and will be assessed a weight penalty accordingly. ANY PARTS OR TECHNICAL SPECIFICATIONS NOT MENTIONED ABOVE MUST REMAIN STOCK AS PRODUCED for All Crate engines options utilized for competition. NO EXCEPTIONS unless otherwise specified in crate engine rebuild specifications.**

**Call tech for approval of engine. Jason Ricker (704-881-4429)**

## **Carburetors**

1. **Crate Motor:** An approved PASS legal Holley 600 CFM or Holley HP Series 4 brl 650 Carburetor (p/n 80541-1,-2 or-3) Stock! Unaltered carburetor. For all crate engines. The only things that can be altered or changed are the Jet sizes (jet extensions are ok), power valve, and top bleeds.
  - Booster# 45R-312.
  - Metering block #11978.
  - Accelerator pump Assy #34R-12684B.
  - Carb Bowl #34R-12682B.
  
2. **Steel head 10.99 to 1:** Holley 500 cfm model carburetor must be used on cast iron head engines. **Engine Option #2**
  - No polishing, grinding, or drilling holes permitted in the body of the carburetor.
  - Choke horn may be removed with a square cut, no taper or bevel may be cut into the body of the carburetor.
  - Boosters may not be changed but may be aligned. Size and shape must not be altered. Height must remain standard.
  - Venturi area must not be altered in any manner. Casting ring must not be removed.
  - Base plate must not be altered in shape or size.
  - Stock butterflies must not be thinned or tapered. Idle holes may be drilled in butterflies. Screw ends may be cut even with shafts, but screw heads must remain standard.
  - Throttle shaft must remain standard and must not be thinned or cut in any manner.
  - Throttle linkage may be changed.
  
3. **9.5 to 1:** Holley 390 cfm model carburetor must be used on aluminum head 9.50 to 1 engines using Engine Option #3.
  - No polishing, grinding, or drilling holes permitted in the body of the carburetor.
  - Choke horn may be removed with a square cut, no taper or bevel may be cut into the body of the carburetor.
  - Boosters may not be changed but may be aligned. Size and shape must not be altered. Height must remain standard.
  - Venturi area must not be altered in any manner. The casting ring must not be removed.
  - Base plate must not be altered in shape or size.
  - Stock butterflies must not be thinned or tapered. Idle holes may be drilled in butterflies. Screw ends may be cut even with shafts, but screw heads must remain standard.
  - The Throttle shaft must remain standard and must not be thinned or cut in any manner.
  - Throttle linkage may be changed.
  
4. **Jets:** Carburetor jets must be the same type as supplied by the carburetor manufacturer.

5. **Air Cleaner:** Air filter element must be a minimum of 12 inches and a maximum of 16 inches in diameter. Air shall be filtered through the element. Air cleaners cannot be removed during practice or competition. The air filter elements may not be sprayed or soaked with any type of chemicals or liquids.
6. **Housing:** Only ABC approved Five Star or AR air filter housings as produced from the factory are allowed and must have the P/N on both top and bottom
7. **Ducts & Baffles:** No cowl air induction is permitted. Absolutely no air ducts or baffles permitted on or leading to the air cleaner or element.
8. **Cowl Opening:** Air box opening should be approx. 4 inches by 20 inches may be cut in the hood behind the carburetor air cleaner to allow fresh air to the carburetor.
9. **Fuel injection or superchargers are not permitted.**

## Carburetor Spacer and Gaskets

- a. Only a 1-piece unaltered carburetor spacer with maximum 1" thick may be installed between the intake manifold and the carburetor.
- b. 9.5 to 1 may use up to 2" spacer permitted.
- c. Any open or 4-hole spacer may be used but the spacer opening must be perpendicular to the base of the carburetor with no taper or bevel.
- d. The outside configuration of the spacer must conform to the base of the carburetor.
- e. Only 2 paper gaskets (1 per side) with a maximum thickness of 0.065 inch will be permitted. Gaskets may be altered to match carburetor base openings.
- f. Carburetor Restrictors are allowed, as long as it's not adjustable from inside the car.
- g. **Mechanical fuel pump run off the motor only. No electric fuel pumps.**

## Electrical System

**Ignition:** All wiring must be sealed. No unplugged wiring. All ignition boxes must be mounted on the passenger side, in plain view, and out of reach of the driver. All wires to the distributor must be run separately and not part of a larger loom or harness. Rev dials must be pointed toward the passenger side window away from the driver.

- a. All ignition systems must be acceptable to PASS Officials.
- b. **Ignition box options: Fast Crain Box, PASS sealed 6AL Digital MSD box, or JMS CD-1 Super Speedway ignition systems. NO EXCEPTIONS**
- c. **Distributor wires must have a gm weather pack 2 pin connector that plugs from distributor to ignition box to have rev limiter tested.**
- d. The distributor must mount in the stock location and maintain the same firing order as a factory produced engine for the make and model car being used.
- e. No crank trigger ignition systems permitted.
- f. No adjustable timing controls permitted.
- g. No digital RPM or telemetry readers

### Spark Plugs



- a. Any make or brand of spark plugs may be used.

### **Alternator**

- a. The alternator system when used must be working within specifications.

### **Starter**

- a. The self-starter must be in working order. Gear reduction starters are acceptable. All cars must be capable of starting under their own power.
- b. If the car doesn't start under its own power before the race, it will forfeit its starting spot and be placed at the rear of the field.

### **Battery**

- a. The battery may not be located within the driver's compartment.
- b. Battery must be isolated within the fuel cell area of the car.
- c. Battery must be securely mounted and covered to prevent spillage if inverted.

### **Electrical Switch Locations**

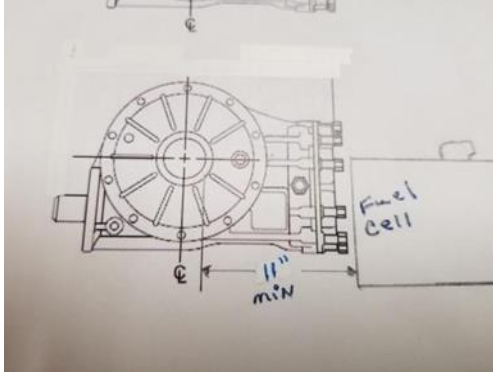
- a. All electrical switches must be located within the driver's reach.
- b. A labeled on/off master switch must be located within reach of the driver's side window opening and effectively kill power from the battery to the car's ignition system.

### **Accessories**

- a. Cars will not be permitted to carry on board computers, micro-controllers, processors, recording devices, electronic memory chips, traction control devices, digital readout gauges or GoPros. Radios must be of two-way voice communication type only, independent of the car's electrical system.
- b. No cell phones, Bluetooth watches, or any other kind of electronics in the car during competition

### **Fuel Cell**

- a) Maximum size is 22 gallons (U.S.).
- b) Cell must have a minimum ground clearance height of 8 inches from the track. Measured at ride height
- c) Must have flapper/ball valve assembly in cell to prevent spillage when upset.
- d) Must be enclosed in a 20-gauge metal canister magnetic steel highly recommended and installed in a safe manner. Must have 1/8" thick metal safety plate front and rear.
- e) Must have a check valve in vent tube to prevent spillage. Vent line must not be excessive in length.
- f) Must have a safety loop designed to protect the rear of the cell.
- g) No horseshoe, "U" shaped cells or wedge cells.
- h) All fuel cells must meet all specifications above AND must be mounted solid and permanently, **NO sliders allowed.**
- i) Front side of cell is to be no closer than 11" to the back of the rear end tube.



### **Drive Train**

- a. No carbon fiber or titanium products allowed without PASS approval.

### **Clutches**

- a. Multi-disc clutch designed for racing. Minimum 5-inch diameter clutch plates.

### **Flywheel**

- a. Any flywheel permitted.

### **Bell Housing**

- a. Any aluminum or steel bell housing allowed.

### **Transmission**

- a. No "in-out" type transmissions permitted.
- b. Not to exceed 4 forward gears. Must have at least 2 forward gears and 1 reverse gear in working order.
- c. No automatic or semi-automatic transmissions permitted.
- d. All other forward gears (except 4th or high gear) in any position shall be 1.23 or higher. Fourth or high gear ratio must be 1 to 1.
- e. All transmissions must be approved by PASS Officials.

### **Drive Shaft**

- a) Drive shafts and universals must be similar in design to standard production type. Only a 1-piece steel or aluminum drive shaft permitted.
- b) It is mandatory that (2) 360-degree solid steel brackets, no less than 2 inches wide and 1/4 inch thick, be placed around the drive shaft and fasten to the cross member of the car.
- c) All steel drive shafts must be painted white.

### **Rear Axle**

- a. All rear ends must have ring gear to the left side of the car and pinion gear to the right side of the car. In its traditional fashion.
- b. No right-hand ring gears.
- c. No reversing of rear end.
- d. No flipping of rear end.
- e. NO electronic devices.

- f. Full floating rear axles are compulsory.
- g. Locked or unlocked differentials are permitted.
- h. Limited slip differentials are permitted with no electronic controls.
- i. Differential oil coolers are permitted.
- j. Cambered rear axle housings are permitted.
- k. Steel or rubberized drive plates may be used.

## **50lbs penalty for any non-conforming Rear Ends**

### **Tire Selection Procedure**

- a. **Only one person can pick tires for one team only. No one individual can pick multiple teams. If the person picking tires stacks up additional tires for another team or tires for when their team returns to pick the remaining tires they need to pick, their privileges will be revoked to pick tires.**
- b. Tire selection order will be released at a later date.
- c. Teams will have 15 min to select their 4 tires after all teams have selected 4 tires we will start over in the same order and allow up to 4 more tire for a total of 8 tires purchased per event.
- d. Once a team purchase tires those tires are to remain with that car for the event **NO SWAPPING TIRES BETWEEN TEAMS**

### **Tires**

- a. Only approved tires permitted. Approved tires are those tires purchased from PASS or an approved PASS dealer.
- b. No hand grooving, buffing, grinding, and/or cutting on any area of the racing tire allowed.
- c. Any competitor who, during an Event, uses or is in possession of 1 or more tires that have been altered externally or internally by unauthorized treatment is subject to a fine of not less than \$500.00 and disqualification, and/or disallowance or qualifying efforts, and/or withdrawal of the opportunity to qualify for the Event, and/or suspension from future PASS Events, and/or additional penalties.
- d. Any team found with any tire softener, conditioner, or any substance used to treat tires, in their possession (including trailers and haulers) during any PASS event will be disqualified from the event. Additional fines and/or penalties may be imposed including, but not limited to, suspension from future PASS events.
- e. No tire warming or heating permitted. To include heating blankets, heaters, or ANY form of temperature altering methods. No exceptions.
- f. No Blowers or air directional devices to include duct hoses are permitted to be directed at tires in any manner. All Blowers or ducting must be directed only to brake rotor and be no more than 2" from the rotor in the rear and hooked to a spindle duct in the front.
- g. No tire covers, wheel well covers, or banners covering or concealing any area of the car from the public eye.
- h. One single car cover may be used in the event of inclement weather.

### **Tires Usage**

- a. **4 tire purchase - register the 4 tires you start heat on. You must run those 4 during consi as well. If you qualify threw the consi you have the option to buy 2 more tires. This applies to every race except 250.**
- b. **If a tire is damaged in the heat race and needs replacing that car will forfeit their starting position and move to the rear of the field.**
- c. Competitors must start the feature race on tires used to qualify with. Any change of qualified tires must be approved by PASS Officials. When an Official detects a change from the qualifying tires, the competitor will be allowed to change back to the original tires and start the race from the rear of the field.
- d. A tire cannot be changed in a feature race unless it is flat. Violation of this rule will carry a 2-lap penalty. Tire **MUST** be cut or flat due to tire failure. Faulty bleeder is not accepted as tire failure. In the event of bleeder failure team must change bleeder and continue use of said tire for the remainder of the given event.
- e. In the event of a second flat tire during the race it will be a 2-lap penalty
- f. An extended race of over 150 laps may allow tire changes during the feature race and will be announced at the drivers meeting and printed on the Official Entry Blank for the race.
- g. Additional tire usage and control guidelines may be included on the Official Entry Blank for the Event.

### **Durometer Rules**

#### **DUROMETER's WILL NOT BE ALLOWED IN TIRE COMPOUND**

- a. The only approved Durometer will be the PASS instrument.
- b. Any tire under the minimum limit will be determined illegal and become the property of the PASS.
- c. Any competitor purposely avoiding a PASS Official by running through the dirt, water, taking extra laps around the track, etc., will be determined to have illegal tires.
- d. Any competitor found with illegal tires in the qualifying events will be disqualified and placed at the end of the feature line up if the field is not full.
- e. Any competitor found with illegal tires in the feature race will be disqualified and lose all points and purse for the event.
- f. Any competitor found with illegal tires a second time will be removed from the premises of the event and subsequently be suspended for a minimum of 2 races and may be subject to a minimum \$1,000.00 fine.
- g. All decisions by PASS Officials will be final.

### **Wheels**

- a. Only 15-inch diameter 5 lug steel wheels with a 10-inch rim width and a reinforced center are permitted.
- b. Solid heavy-duty steel lug bolts and nuts must be used.
- c. Bleeder valves are permitted.

### **Brakes**

- a. All cars must have 4 working brakes.
- b. Rotors are made of steel only. No exotic metals such as Titanium
- c. Brake blowers must hook to spindle ducts in the front.

- d. Brake hoses may not be any further from the rear rotors than 2"

### **Mufflers/ Exhaust**

- a. Exhaust is recommended to exit under car. Side exit exhaust must adhere to **100db or less AT ALL EVENTS!** This is measured from the grandstand area when cars are on track at racing speed.
- b. All cars must have mufflers that meets the 100db or less requirement.
- c. Cars not adhering to this rule or excessively loud cars may not be allowed to compete or may be assessed a weight penalty.
- d. Exhaust must extend behind the driver.

**Competitors MAY be permitted a one event reprieve (first event in competition during the season) with alternative exhaust configuration at the discretion of series officials. Note: at some facilities there is no exception allowance for variance from mandated exhaust location and noise levels.**

### **Suspension Components**

- a. Front and rear suspensions may be coil spring or coil over spring type.
- b. Rear trailing arms may be of any unequal length and may use a spring or shock assembly.
- c. The third link may be of any length.
- d. No bird cages. Rear end trailing arm mounts must be a solid fix to rear end.
- e. Rack and pinion steering is allowed.

### **Springs**

Type of springs including height and wire diameter is optional.

### **Shocks**

- a. A maximum of 1 shock absorber per wheel is permitted.
- b. No experimental shocks.
- c. Type and location of shock absorbers is optional.
- d. Maximum shock gas pressure is 300 psi.
- e. No external bump canister or external travel limiting devices. Bumps and Bump springs are allowed on the coil over assembly only.

### **Sway Bars**

- a. Any type of sway bar is allowed front or rear.
- b. No rear sway bars.**

### **A-Frames**

- a. Independent front suspension is mandatory with articulating upper and lower control arms.
- b. Lower A-frames may be stock appearing or strut arm type.
- c. Upper and lower A-frames may be unequal lengths.
- d. Ball joint type is optional. Mono balls are allowed.

### **Spindles**

- a. Steel spindles only.

### **Safety Equipment**

- a. Window nets are required in the driver's window area. The window net must be securely fastened at the bottom and have a quick release fastener at one end in reach of the driver on the top. The net must be always in the latched position when the car is on the track.
- b. Driver must, always while in car, wear an approved driving suit and gloves. Suits must cover legs, arms, and body of driver. Suits and gloves must be of fire-resistant material.
- c. Helmets must be always worn while operating the car. Helmets must meet or exceed the Snell 95 standard.
- d. Cars must be properly supported by jack stands whenever a person is beneath it.

### **Seat Belts and Shoulder Harness**

- a. A quick release lap belt no less than 3 inches wide is compulsory.
- b. Both ends of the lap belt must be fastened to the roll bar cage with high quality bolts not less than 3/8" inch diameter.
- c. Shoulder harness must be no less than 3 inches wide and must come from behind driver's seat. It is recommended that the harness pass through a steel guide welded to the roll cage that will prevent the harness from sliding from side to side. Shoulder harness may be 2" wide when utilized with proper combination of Hans devise or similar head/neck restraint system.
- d. A center (crotch) belt must be securely mounted to the lower seat frame at the bottom and to the lap seat belt at the top.
- e. Where the belts pass through the seat edges, the belt must have a grommet installed, be rolled and/or padded to prevent cutting the belt.
- f. All belts and shoulder harnesses must connect at the lap belt with quick release buckle.
- g. Seat belts must be dated by the manufacturer and must not be used beyond 5 years after the manufactured date.
- h. It is recommended that a Hans or Hutchens type device is used.

### **Fire Control**

A built-in on-board extinguisher system is preferable. All other cars must have an adequate fire extinguisher safely mounted within the driver's reach. Tape is not acceptable as the method of mounting.

### **Radios**

- a. A minimum of (2) two-way radios are required per car with communication between the driver and a crew member.
- b. **All teams must have 1 scanner programmed to receive the PASS race control frequency (461.06250) and must have a crew member always monitoring this channel during every PASS event. This crew member must be able to communicate directions to the driver via the two-way radio.**

### **Lettering and Numbering**

- a. Car numbers must be a minimum of 18 inches high and 3 inches wide. Numbers shall be placed in contrasting colors to the car on both doors and roof. No reflective chrome, gold, or prism numbers allowed. Roof numbers must be visible as read from the grandstand side of the car.
- b. The car number must appear in 6" high numbers in the uppermost corner of the windshield on the passenger side and also on the right rear taillight cover.

- c. All cars must display PASS promotional stickers in the proper assigned placement location. To include PASS windshield stickers centered on upper windshield as well as contingency sponsor stickers to be located on both front fender areas as indicated by tour guidelines. 10% of event winnings will be deducted from teams that do not display proper promotional stickers in approved and specified assigned location during event.
- d. Any signage deemed inappropriate by the PASS must be removed before car is allowed on the racetrack.
- e. Car number must be approved by the PASS. Numbers for Tour drivers from the previous season will be held for renewal until January 1 of each year. New numbers will be assigned on an available basis. Car number application forms are available from PASS.

### **Illegal Parts**

- a. Any part found illegal will be confiscated and become the property of PASS.
- b. Any competitor found to have an illegal part will not be allowed to compete in any PASS event until that part is surrendered to PASS series officials.

**NOTE: ANY ITEMS NOT DESCRIBED AS ALLOWED IN THESE RULES SHOULD BE DETERMINED AS ILLEGAL UNLESS PASS ISSUES A BULLITEN EXPRESSING OTHERWISE.** Additional weight penalty or disallowance from competition for non-conforming rules infractions. Weight added to be determined series by officials in interest of parity of competition. Points, purse money and series sponsor awards will be awarded to all Tour teams that conform to this section unless otherwise specified in specific program rules.