



Technical assistance: Scott Reed @ 207-625-3230

# Pro Late Model Rules

## **DEFINITIONS**

**Competitor:** A driver, car owner, crew member or other 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 as well as 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 the 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.

## 10.4 **Section 10 - Building Rules**

**Notice:** All model, engine, or equipment changes or modifications not governed by the PASS series must be submitted for consideration of approval, not 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.

**NOTE:** ANY ITEMS NOT DESCRIBED AS ALLOWED IN THESE RULES SHOULD BE DETERMINED AS ILLEGAL UNLESS PASS ISSUES A BULLETIN EXPRESSING OTHERWISE.

**10.1** Points, purse money and series sponsor awards will be awarded to all Tour teams that conform to Section 10.1.1, unless otherwise specified in specific program rules.

**10.1.1** All cars must keep the front fenders and upper windshield clear of lettering. The space will be used to display logos for PASS sponsors.

**10.2** All Tour cars competing for season points (registered team & driver) must use conforming ABC or LMSC template bodies that conform to ABC, LMSC and PASS

measurements. Note: PASS may grant permission for registered teams to compete with non ABC Bodies in limited events with prior request to PASS Technical Director. Templates will be used. All bodies must be kept neat in appearance.

**10.2.1** The following bodies are approved for competition. See the Template Instructions Guideline located at body manufacturer's information page on their respective web-site for heights and measurements.

### **ABC/LMSC: Monte Carlo-Impala, Fusion, Charger, Camry (Toyota)**

Chevrolet - Camaro, Lumina, Monte Carlo, Impala

Pontiac - Grand Prix

Ford - Taurus, Fusion, Mustang

Dodge - Intrepid, Charger

Toyota - Camry

### **MUSCLE CAR by AP Bodies**

Chevrolet - Camaro

Ford - Mustang

With the use of the Muscle car body teams are permitted a 50 lb. reduction on total weight mandated.

### **10.5 General Car Body Requirements**

- a. Cars must be neat appearing 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.
- b. Full 1/8" Lexan type windshields must be used. Windshield must have at least 2 internal braces of 3/8" square tubing 4" apart and roughly centered in windshield. Windshield must be mounted solid and braces welded to the roll cage.
- c. Full rear windows are mandatory. Must be 1/8" Lexan type, mounted securely, and braced to prevent any collapsing.
- d. Rear quarter panel windows may be used.
- e. Minimum ground clearance for the front spoiler/ air dam shall be 3 1/2".
- f. Rear spoiler shall not exceed 6 1/2" (ABC bodies), 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 shall be 38". ABC bodies 41 1/2". Spoilers must be centered on rear bumper cover within 1/2".
- h. The hood must have positive pull pin type fasteners with 4 pin fasteners on leading edge. The rear deck lid can be hinged, pinned, or riveted to the body.
- i. Rocker panels must be a minimum of 3 1/2" from the ground.

j. Front and rear bumper covers must remain as manufactured. **NO CUTTING ALLOWED.** Only trimming permitted is for wheel clearance and grill opening. 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 "shapeing" or contour modifications of panels permitted in any way.** Maximum Nose side to side width at tire may not exceed 83 inches.

k. No carbon fiber body parts allowed.

l. No rub rails or outside body bracing allowed.

m. All body panels must connect in ABC/LMSC/MUSCLE CAR specified locations, without alteration.

n. "ABC" / LMSC and MUSCLE car template Fivestar & ARP bodies must fit templates with 1/2" and maintain dimensions in all measurements to each repective template body's Guidelines.

o. PASS reserves the right to add weight accordingly to non conforming body measurements. Weights will be determined by PASS officials and are non negotiable.

#### **10.6 Car Weight**

Cars must be race ready with driver, full of fuel, water and oil.

a. Base weight: 57% left side percentage. Straight rail or perimeter- ABC - LMSC body

Car weights listed by engine option

##### **2900 lbs.:**

GM 604 400 fast burn crate engine with 500 cfm. 2 barrel holley HP carburetor.

##### **2875 lbs.:**

GM 603 crate engine with 390cfm. 4 barrel holley HP carburetor.

LMSC Built steel head engine with 350 cfm. 2 barrel holley HP carburetor.

##### **2850 lbs.:**

Limited Built steel head engine with 350 cfm. 2 barrel holley HP carburetor.

##### **2825 lbs.:**

GM 602 crate engine with 390cfm. 4 barrel holley HP carburetor.

b. Deducted weights:

7.25 inch multi disc clutch deduct 25 lbs.

Muscle car body deduct 50 lbs.

**Note: Weights requirements may be adjusted by PASS to equalize competition.**

**Maximum left side percentage must not be exceeded before, during, or after each race event.**

#### **10.7 Added Car Weight**

a. Added weight must be securely bolted in place. Dislodged weight can not be returned to car for weighing after the race. No ballast adjustment devices permitted on car. Weight transfer

devices of any type may not be activated by the driver. All added weight must be lead. Tungsten is not permitted. All added weight must be painted white and have respective car number clearly visible on each individual added weight.

#### **10.8 Car Weights Post Competition**

- a. When cars are weighed after competition, only water, oil and gas may be added to verify total weight requirement is maintained if necessary. Left side maximum weight % must be maintained before, during, & after each race event. NO refueling allowed.
- b. Wheels and tires can not be changed.

#### **10.9 Wheelbase, Tread Width, Frame Height**

- a. Minimum wheelbase is 102" on either side. The left side wheelbase must be +/- 1" of right side. Maximum wheelbase is 108".
- b. Maximum tread width front and rear is 66".
- c. Absolute minimum height of frame and cross members is 3.5" from ground before, during, & after each race event without driver. No lifting allowed. Rear spoiler height maximum must be maintained before, during, & after each race event.

#### **10.10 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.
- b. Engine crankshaft center height must be a minimum of 10" from the ground.
- c. Maximum engine setback is 2 inches (2") from the forward most sparkplug hole center to a determined line across the center of the upper ball joints.  
Gm 602-603-604 crate engine options will be permitted a maximum 4 inch (4") engine setback with crankshaft center line at 11" from ground.
- 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.

#### **10.11 Driver's Seat**

- a. Driver's seat must be designed for auto racing and constructed of 0.125 inch thick aluminum and adequately padded. Full containment seats are highly recommended. 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.

#### **10.12 Fire Walls**

- a. Interior of car must be completely enclosed in respect to engine compartment, track surface, wheel wells, and rear (fuel cell) compartments. The area immediately beneath the driver (floor) and the vertical panels surrounding the seat area (front and rear firewalls and transmission tunnel) must be constructed of minimum 18 gauge steel (.047 inch) and be of

welded construction. Other interior panels may be constructed of aluminum, minimum of 0.040 inch thickness.

b. 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.

### **10.13 Dashboard**

A full width dashboard is required.

### **10.14 Carburetors**

a. ALL permitted carburetors must adhere and meet all series technical gauges for competition. Carburetors not meeting series gauges are considered illegal.

b. Boosters may not be changed but may be aligned. Size and shape must not be altered. Height must remain standard.

c. Venturi area must not be altered in any manner. Casting ring must not be removed.

d. Base plate must not be altered in shape or size.

e. 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.

f. Throttle shaft must remain standard and must not be thinned or cut in any manner.

g. Power valve, floats and jet size may be interchanged.

h. Carburetor jets must be the same type as supplied by the carburetor manufacturer.

i. Throttle linkage may be changed.

j. Carburetor Claim Rule:

All Carburetors are subject to claim by series or competitor.

Claim amount based on carburetor:

390 cfm. 4 barrel Holley HP \$800.00 (\$750.00 to series competitor and \$50.00 to series)

350 and 500 cfm 2 barrel holley Hp \$550.00 (\$500.00 to series competitor and \$50.00 to series)

### **10.15 Carburetor Spacer and Gaskets**

a. Only a solid 1 piece aluminum carburetor spacer, maximum 3/4 inch in thickness may be

installed between the intake manifold and the carburetor for use with the 350 cfm and 500 cfm 2 barrel equipped engines only. Spacer must be centered on intake manifold and have two holes with a maximum O.D of 1.50 that match carburetor base.

b. No alterations allowed to carburetor spacer. Tapered spacers are not permitted. Spacer must retain same O.D. hole dimension top to bottom.

c. 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.

#### **10.16 Carburetor Air Cleaner and Air Filter**

a. 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. The air filter elements may not be sprayed or soaked with any type of chemicals or liquids.

b. The air filter housing must be centered on the carburetor. No tubes, funnels or any other device which may control the flow of air is permitted inside of the air cleaner or between the air filter housing and the carburetor.

c. Air cleaners can not be removed during practice or competition.

#### **10.17 Air Intake**

a. Absolutely no air ducts or baffles permitted on or leading to the air cleaner or element. Carbon fiber air boxes are NOT permitted.

b. Air box opening maximum permitted is 2 ½ inches by 20 inches located in body manufacturers supplied cowl panel.

#### **10.18 Electrical System**

#### **10.19 Ignition**

a. All ignition systems must be acceptable to PASS Officials.

b. Ignition amplifier boxes and RPM limiters that are analog are allowed, but must not contain programmable, computerized, or memory circuits.

c. No magnetos or computerized systems are permitted.

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. ALL electrical plug ins on car must be utilized. Cars found with "open" unutilized wires or plugs will be considered illegal.

### **10.20 Spark Plugs**

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

### **10.21 Alternator**

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

### **10.22 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. In the event a participant needs assistance (push start), competitor will placed at the rear of the line up.

### **10.23 Battery**

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

### **10.24 Electrical Switch Locations**

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

### **10.25 Accessories**

- a. Cars will not be permitted to carry on board computers, micro-controllers, processors, recording devices, electronic memory chips, traction control devices or digital readout gauges at any series sanctioned event to include practice.

Radios must be of two-way voice communication type only, independent of the car's electrical system.

### **10.26 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.
- c. Must have flapper/ball valve assembly in cell to prevent spillage when upset.
- d. Must be enclosed in a 20 gauge metal canister and installed in a safe manner.
- 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.

### **10.27 Drive Train**

**a. No carbon fiber or titanium products permitted.**

#### **10.28 Clutches**

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

**b. No poly carbon components or direct drive units permitted.**

**c. Optional 7.25 inch minimum 2 disc clutch permitted with a 25 lb weight deduction.**

#### **10.29 Flywheel**

**a. Any flywheel permitted.**

#### **10.30 Bell Housing**

**a. Any aluminum or steel bell housing allowed.**

#### **10.31 Transmission**

**a. O.E.M. factory production 3 or 4 speed manual transmission permitted.**

**b. No "in-out" type transmissions permitted.**

**c. Must have at least 2 forward gears and 1 reverse gear in working order.**

**d. No automatic or semi-automatic transmissions permitted.**

**e. Fourth or high gear ratio must be 1 to 1.**

**f. Staright cut gears are NOT permitted.**

**g. All Transmissions are subject to claim by series or competitor.**

**\$1,600 claim amount ( \$1,500.00 to series competitor and \$100.00 to series)**

**f. All transmissions must be approved by PASS Officials.**

#### **10.32 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 driveshafts must be painted white.**

#### **10.33 Rear Axle**



- a. Quick Change or Ford 9 inch floater permitted
- b. Full floating rear axles are compulsory.
- c. Solid Spool or Detroit Locker differential only permitted.
- e. Differential oil coolers are permitted.
- f. Cambered rear axle housings are permitted.
- g. Steel or rubberized drive plates may be used.

#### **10.34 Wheels**

- a. Only 15-inch diameter 5 lug one piece magnetic 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 NOT permitted.
- d. ALL wheels must have competitor car number clearly visible from outer side of wheel.

#### **10.35 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.

**SERIES TIRE RULE TO BE ADDED**

#### **10.36 Tire Usage Rules**

**a. 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.**

**b. A tire can not be changed in a feature race unless it is flat. Violation of this rule will carry a 2-lap penalty.**

**c. Additional tire usage and control guidelines may be included on the Official Entry Blank for the Event.**

### **10.37 Tire Policy Rules**

**a. Any tire under the minimum limit will be determined illegal and become the property of the PASS.**

**b. 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.**

**c. Any competitor found with illegal tires in the qualifying events will be disqualified for the entire event.**

**d. Any competitor found with illegal tires in the feature race will be disqualified and lose all points and purse for the event.**

**e. 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.**

**i. All decisions by PASS Series Officials will be final.**

### **10.38 Exhaust**

**a. Headers are permitted. Must be constructed of magnetic steel. Stainless steel headers are NOT permitted.**

**b. exhaust must extend behind driver. Cars equipped with under chassis exhaust must maintain a minimum 3 inch to ground clearance for all exhaust components.**

**c. The exhaust must not extend outside of the body panels. A flange should be added to the end of the exhaust pipe and riveted to the body panel if exhaust exits through side of car.**

**d. Mufflers may be required at**

### **10.39 Chassis Construction**

#### **10.39.1 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 to, 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:**  
**10 inch perimeter tubing: 0.120 inch wall thickness**  
**12 inch perimeter tubing: 0.095 inch wall thickness**  
**16 inch perimeter tubing: 0.083 inch wall thickness**

**b. 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 of perimeter or straight rail design.**

**c. Frame rails must measure a minimum of 50 1/2 inches and a maximum of 60 inches from outside to outside and must be a minimum of 44 inches in length.**

**d. The left main frame rail on a straight rail chassis must measure 10 inches minimum from the left front frame rail.**

**e. 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.**

### **10.39.2 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. Rear frame section must extend beyond the rear edge of the fuel cell. The rear frame section may be 2" X 2" from the rear axle rearward.**

**c. 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. Rear frame section must measure a minimum of 38 inches outside to outside.**

### **10.39.3 Roll Bars**

**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 ½ inches from bottom of frame. Halo to 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 ½ inches from bottom of frame.
- i. A "Petty Bar" must run between 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. Measurement is from outside to outside of tubing.
- k. All roll cage installations and workmanship must be acceptable to PASS Officials.

#### **10.40 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. Rack and pinion or steering box design steering is allowed.

#### **10.41 Springs**

- a. Type of springs including height and wire diameter is optional. All springs must be constructed of magnetic steel. Titanium is NOT permitted.

#### **10.42 Shocks**

- a. Shocks limited to any shock that does not exceed MSRP \$350.00 New and available to all competitors.
- b. A maximum of 1 shock absorber per wheel is permitted.
- c. No experimental shocks.
- d. Type and location of shock absorbers is optional.

#### **e. Shock Claim Rule:**

All shocks are subject to claim by series or competitor.

**\$400.00 per shock claim amount ( \$350.00 to series competitor and \$50.00 to series)**

#### **10.43 Sway Bars**

**a. Any type sway bar is allowed.**

#### **10.44 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.**

#### **10.45 Spindles**

**a. Steel spindles only.**

#### **10.46 Brakes**

**a. Brakes must operate on all 4 wheels and lock on inspection. All calipers must not exceed MSRP of \$350.00 New and available to all competitors**

**b. No floating brake calipers permitted. Brake bias adjuster is allowed. 1 working brake per wheel.**

**c. All calipers are subject to claim by series or competitor. \$400.00 per caliper claim amount. (\$350.00 to series competitor and \$50.00 to series)**

#### **10.47 Safety Equipment**

**a. Window nets are required in 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. The net must be in the latched position at all times when the car is on the track.**

**b. Driver must, at all times 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 worn at all times 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.**

#### **10.48 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 (2 inch permitted with proper combination of approved head/neck safety device) 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.**

**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 seat belts and shoulder harnesses must connect at the lap belt with a 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 mandatory that a Hans, Hutchens or other industry approved head-neck type safety device is used. Choice of manufacturer and design at discretion of each individual competitor.**

#### **10.49 Fire Control**

**a. All cars must have an on-board fully charged 10 or 13 pound fire extinguisher of Halon 1211 or equivalent. A built-in extinguisher is preferable. All others must have an adequate fire extinguisher mounted within the driver's reach. Tape is not acceptable as the method of mounting.**

#### **10.50 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 and must have a crew member monitoring this channel at all times during every PASS event. This crew member must be in a position to communicate directions to the driver via the two-way radios. PASS race frequency 461.0625.**

#### **10.51 Fuel**

**a.. Only approved fuel by PASS will be permitted for competition. Fuel must remain unaltered and is subject to testing and must meet approval. Fuel samples will be taken randomly. Use of any fuel or additives that are non approved will result in immediate disqualification. Sunoco Standard and Supreme are the ONLY approved fuels for PASS competition.**

#### **10.52 Water Pump**

**a. O.E.M. design belt driven pumps only. No electric pumps**

#### **10.53 Engine Oiling System**

a. Wet sump only. Magnetic steel oil pans only. No external oil pumps (to include accu-sump) permitted. External oil coolers are permitted.

### **10.53 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-inch high numbers in the uppermost corner of the windshield on the passenger side and also on the right rear taillight cover.

c. Any signage deemed inappropriate by the PASS must be removed before car is allowed on the racetrack.

d. Car number must be approved by the PASS. Numbers for Tour drivers from the previous season will be held for renewal until February 1st. of each year. New members will be assigned on an available basis. Car number application forms are available from PASS.

e. Any team(Driver) must be licensed and display all PASS promotional stickers to be eligible for provisional starting positions as well as the 100 bonus points per event earned by licensed teams. Front fenders as well as top of windshield must be available for promotional sticker placement as presented in promotional pack. All necessary stickers will be available through PASS at race events.

### **10.54 Engines:**

#### **10.54.1**

General Motors Crate engines eligible for competition

GM 602 crate engine with 390cfm. 4 barrel holley HP carburetor.

GM 603 crate engine with 390cfm. 4 barrel holley HP carburetor.

GM 604 400 fast burn crate engine with 500 cfm. 2 barrel holley HP carburetor.

All crate engines **MUST** remain as manufactured without modification for each individual engine used. The **ONLY** modifications from O.E.M. specification are as follows:

Valve covers may be replaced to after market design. Oil pan may be replaced with either of the following part #s: CV1106LTRB or CTR-102. O.E.M rocker nuts may be replaced with polylock design.

Crate engines are subject to engine claim by the series or competitor. Claim is limited to engine assembly only with no external attaching parts.Claim amounts per engine are as follows:

GM 602 \$4,500.00 (\$4,000.00 goes to competitor, \$500.00 to series)

GM 603 \$5,500.00 (\$5,000.00 goes to competitor, \$500.00 to series)

GM 604 \$6,500.00 (\$6,000.00 goes to competitor, \$500.00 to series)

### **GM Crate Engine '602' - '603' - '604' Inspection Policy**

**Within the guidelines of utilizing the 'Crate' engine options 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 as well as consideration of being illegal and engine will be confiscated as being illegal.**

**At the conclusion of any race event PASS reserves the right to require any team to remove 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 assed to violating team before next event in which said teams attempts to compete.**

**In the event of engine rebuild the only modifications are listed below.**

**GM Crate Engine rebuild maximum parameters.**

**Maximum overbore of .008"**

**Maximum Deck surfacing of block: .005"**

**Maximum deck surfacing of cylinder head: .010 straight only. NO angle milling permitted.**

**Minimum rod and main bearing size: .010" under**

**All other necessary parts required for rebuild are to be direct factory replacement purchased through GM and are exact OEM specified part numbered to '604' 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!**



## **10.54.2**

### **Limited Late Model Built Engine specifications:**

**Limited Built steel head engine with 350 cfm. 2 barrel holley HP carburetor.**

- a. O.E.M. factory cast iron block. 350 maximum cubic inch with .040 maximum overbore.**
- b. Flat top or dish pistons only. Minimum 3 ring design utilizing 3 rings.**
- c. No part of piston may protrude above block surface.**
- d. Steel O.E.M. straight plug heads only. Minimum 62cc. combustion chamber. GM Vortec heads are permitted in factory form with only the allowance of screw in rocker stud installation. NO modifications in any form permitted! Permitted vortec head casting numbers are as follows: GM#10239906 and GM#12558062.**
- e. No porting, polishing, port matching or chemical modifications to heads or intake permitted.**
- f. Steel 5.700 rod length ONLY.**
- g. O.E.M. magnetic steel crankshaft only. Minimum weight 50 lbs.. No knife edging or lightening permitted.**
- h. Camshaft: Solid or Hydraulic permitted. Maximum lift measured at retainer .475. Roller or Mushroom lifters are NOT permitted.**
- i. Roller rockers are permitted. 1.5 ratio only. Stud girdles are permitted.**
- j. Any magnetic steel valve spring is permitted.**
- k. Wet sump oiling system only.**
- l. Standard wet sump oil pan only.**
- m. Intake manifold limited to the following: Edelbrock 2101 or 2116 and GM 12464340**
- n. O.E.M. harmonic balancer only.**
- o. O.E.M. design chain driven timing chain only.**

## **10.54.3**

# **LMSC Late Model Built Engine specifications:**

**a. Engine Displacement: Maximum allowable displacement listed by manufacturer. Dodge: 360 Ford: 351 GM: 350**

**b. Block: O.E.M factory production magnetic steel only. maximum .045 overbore. No angle milling permitted. Only modifications permitted are standard boring and decking only.**

**c. Crankshaft: stock production steel only. Stock stroke. No Knifedgeing or lightening permitted. Only nominal engine balancing permitted. Minimum allowable weight shall be 50 lbs. Rod and main journals must remain OEM size for engine used.**

**d. Harmonic Balancer: O.E.M. Factory production only.**

**e. Camshaft/Lifters: Solid or Hydraulic flat tappet cam and lifters only. Roller bearings are NOT permitted. Roller, ceramic coated and mushroom lifters are Not permitted.**

**f. Pistons: Flat top skirted pistons only. 2 or 4 valve pocket 3 ring design full skirted pistons permitted. All 3 rings must be utilized. Piston may not protrude above edge of cylinder block surface.**

**g. Connecting Rod: Solid magnetic steel only. Permitted rod length permitted by manufacturer: Dodge 6.000 – 6.250 / Ford 5.778 – 6.2500 / GM 5.7000 – 6.2500**

**h. Oil Pan: Wet sump only. Magnetic steel only.**

**i. Oil Pump: Factory stock mounted internal wet sump type only.**

**j. Intake Manifold: Only permitted intake manifolds permitted are as follows: GM: edelbrock # 2101 Ford: Ford proformer #M-9424-C358 Dodge: Dodge #P5249572AB NO modifications permitted to include but not limited to porting, polishing or port matching.**

**k. Cylinder heads: Permitted castings for competition: GM part#10134392 (casting#14011034 or #12480034) Ford part# M-6049-N351 Dodge part# P5249769 (casting #4532693) All heads must maintain a minimum 62cc combustion chamber. Maximum Intake valve size 2.020 Maximum Exhaust Valve size: 1.625 Titanium and Hollow valve(stem) are Not permitted. Heads must remain stock with the exception of screw-in rocker arm studs and push rod guide plate installation. Only standard 3 angle valve seat resurfacing permitted. Stud girdles are permitted. Angle milling is NOT permitted. No porting, polishing or modifications permitted (to include chemical porting). Port matching is NOT permitted.**

**l. Roller rockers are permitted. Independent type only. Shaft design assembly's are Not permitted.**

**m. Timing Chain: Stock design chain assembly only.**

**n. No Aluminum or Titanium parts permitted unless otherwise listed.**

**o. Roller bearings are NOT permitted.**

**p. Engine must maintain O.E.M. firing order for engine used.**

### **10.55 Illegal Parts**

**a. Any part found illegal will be confiscated and become the property of the PASS series. Crate engine violations will be enforced as entire engine assembly. NO exceptions.**

**b. Any competitor found to have an illegal part will not be allowed to compete in any PASS event until part or parts are surrendered to PASS series officials.**

**c. All decisions by PASS or its officials are final and without dispute or appeal.**

### **10.56 Competitor Claim restrictions and guidelines**

**In the event any competitor options to place claim on any of the available claim part(s) listed they must qualify to do so by the following parameters:**

**Claim must be placed in writing to series technical director within 15 minutes of completion of race for given series division (checkered flag for Pro late feature).**

**Full amount of claim cost must be submitted at time of claim submission to series official. Claim amount must be in CASH US funds.**

**Series officials reserve the right to deny any claim that is determined by series officials to be unwarranted or is presented in a manner or reasoning that is not conducive to honest and fair competition.**

**Claim amount is listed in each individual part listed for claim in detailed rules listed previously. Details of amount distribution listed as well.**

**In the event a claim is approved by series officials team being claimed is mandated to submit to claim without dispute. Refusal of claim will result in immediate disqualification and further actions and penalties by PASS series officials.**

**Driver must complete given event on the same lap as the winner of event.**

**Driver must finish within 5 positions of the team in which they option to place claim.**

**Claim will include only the basic unit of claim and no additional attached parts.**

**Engine claim is intake to oil pan with no externals(Does not include any bolt on's that do not come as shipped.). Caliper is assembly only. Transmission is assembly only (no shifter-clutch-bell housing ect). Carburetor is Carburetor only in complete form (no air box, fuel line, linkage, ect). Shock is shock only with heim ends(no spring, coil over kit, ect).**