

ALIMP

Alternative 410 Motor Program

Rules & Regulations

January 2, 2011



DESCRIPTION & OBJECTIVE

In an effort to combat the shrinking fields of Sprint car teams that are competing at the weekly tracks and subsequently with the national touring associations, the Alternative 410 Motor Program (A4MP) group has been created. The group, with many years of experience in Sprint car racing, has outlined a potential option that is not designed to replace an existing program, rather offer a way for racers, that would otherwise not compete, blend into the current classes by using a competitive motor that works within their racing budgets.

This program is designed to provide a competitive alternative for racers that are looking to drive Sprint cars on a weekly basis and also have the ability to compete in some national touring series events. The motors will be built following guidelines that are set to keep cost for the racer at a more affordable level.

Guidelines are in place to keep motors equal. Anyone caught altering the components within the motor will face stiff financial repercussions. The long-term goal for this program is to build larger car counts, bring new people into Sprint car racing and provide more racers an opportunity to compete.



ENGINE DESCRIPTION

A4MP will maintain a complete parts list of required and recommended parts as well as all parts necessary to complete the assembly of an A4MP engine believed to be reliable and of competitive performance when properly assembled. The specification will also meet the program engine price target by working directly with part manufacturers and monitoring part pricing. That specification will be available to all participating engine builders and defined as 'legal' when utilized 100%. However, it is recognized that, **WHERE ALLOWED**, each engine builder will have preferences for different parts based on personal experience or other commercial reasons. Therefore, the following outlines those areas that are required to conform for objectives of cost control, reliability and close competition.

Block

The block is **REQUIRED** to be GM 19213580 LS7 aluminum block or its GM production alternate. The block is not intended to be modified except as required to adapt oiling, engine mounts, etc. for racing use. The block is specifically not intended to be lightened and doing so will be considered a violation of the builder bond.

Rotating Assembly

The crankshaft is **RECOMMENDED** to be GM LS7 part 12611649 modified by shortening the nose by approximately .900" to stock LS size, but may be any similar aftermarket part so long as it is no lighter and maintains stock bearing sizes.

Rods are **RECOMMENDED** to be steel 6.125" long and **REQUIRED** to have no less than .927" diameter steel wrist pins.

Pistons are **RECOMMENDED** to be forged aluminum and ring choice is free. Pistons may not incorporate exotic materials or coatings.

Valvetrain

Any hydraulic roller lifter camshaft may be used with any cam drive except that 55mm stock or stock replacement shell style cam bearings are **REQUIRED**.

Stock GM rocker arms 12569167(int) and 10214664(exh) are **REQUIRED** except a trunnion upgrade such as Comp Cams 13702-KIT or equivalent is **RECOMMENDED** for improved durability.

GM stock steel intake and exhaust valves or parts of identical dimensions are **REQUIRED**. Valve springs, retainers, seals and locaters are free except steel material is **REQUIRED** and parts must operate within the dimensions of unmodified heads and valves.

Intake

GM 25534401 intake manifold as modified for constant flow fuel injection is **REQUIRED**. An adapter from 4150 to 4500 Holley bolt pattern may be used to accommodate a larger throttle body. One 4-barrel throttle body with throttle diameters no greater than 2.25" is **REQUIRED**. The manifold may be port matched to the heads.

Barrel valves, fuel lines, nozzles and all wet side parts are free.

Note: An A4MP representative or any race official may exchange any manifold or adapter for a comparable part prior to or after an event and retain the part removed. This is specifically to discourage unreasonable investment in induction components to gain an advantage.

Cylinder Heads

Cylinder heads will be derived from GM LS3 or GM LSA castings or their production alternatives and ported by a designated source in order to maintain low engine cost. All heads will be serialized and identified as A4MP approved heads. These modified heads so prepared are **REQUIRED**. They are intended to be used in as received condition. If damaged they will be returned to the source for repair or replacement. Any unapproved alteration to the heads will be considered a violation of the builder bond.

Ignition

GM ignition coils 12573190 or production replacements are **RECOMMENDED**. Equivalent aftermarket parts are allowed.

MSD 6LS-2 ignition controller is **REQUIRED**.

Note: An A4MP representative or any race official may exchange any controller, coil or wire harness for a comparable part prior to or after an event and retain the part(s) removed. This is specifically to discourage tampering with ignition component to gain an advantage.

General

The dry engine ready to install with oil tank and air cleaner will weigh no less than 350 pounds.

Each engine builder participating in the A4MP program does so because of a commitment to restrain the cost of racing and commits to adhering to that objective. Therefore, each builder is expected to contribute to the continued development of engine and component refinements for cost control, improved reliability and close competition. Areas for improvement or for clarification will be brought to the program for approval and incorporation and all changes will be communicated to all participating builders. They will work as a team to make A4MP the leading formula for fan and racer participation in racing.

ALIMP

KEY PARTNERS

- Program Administration
- Entities/Race Promoters
- Engine Builders
- Racers/Engine Owners



PROGRAM ADMINISTRATION

Responsibilities

- The A4MP has established and will control engine rules.
- The A4MP has provided engine build specifications that includes both mandatory and suggested engine parts list.
- The A4MP has suggested pricing of the standard engine in the area of \$20,000.
- All approved A4MP engines will have a sealed stamp. A4MP Engine builder code and a serial number. No exception.
- The A4MP will have signed agreements with engine builders and work with racing organizations and tracks that will allow this engine package to compete within current 410 divisions.
- The A4MP website will include a list of all motors built and registered, allowing anyone the opportunity at any time to check details about a particular motor.
- The A4MP will have signed agreements with engine builders and work with racing organizations and tracks that will allow this engine package to compete within current 410 divisions.
- The A4MP reserves the right to inspect any certified A4MP engine. The group has the right to check components. Each November a random check of motors will occur with motors chosen by a computer-generated selection process. The motors will be returned to the owner following the inspection. Any engine owner that does not comply with this policy will face certification recall.



RACE PROMOTER

Responsibilities

- Confirm A4MP registered motors are illegible to compete with current 410 class
- Make it known that these motors are welcome to compete.
- Contact A4MP if there is a challenge/protest of an A4MP built motor, so that the inspection process will take place as soon as possible.
- Notify the A4MP of any competitors that are competing in any events with the motor package.



ENGINE BUILDER

Responsibilities

- Apply annually to participate and maintain certification.
- Post bond for technical specification. Each motor will be bonded and if challenged or protested, engine builder will be notified. If motor is deemed illegal, engine builder be liable for \$10,000 forfeit, which will be paid to A4MP from Bonding Company. (A \$25,000 bond max per engine builder (approx. \$250)
- Engine builders will pay a \$350 registration fee for each motor to the A4MP. This fee will assist in maintain administrative activities
- Provide original engine certificate to engine buyer at sale
- Comply with all program rules



BONDING/PROTEST DETAILS

ENGINE BUILDER BOND

All builders of this engine shall abide by the honor system in terms of production. The engine must be sealed and stamped. The stamp will include the builders name and date of production. The seal will keep an owner from making modifications.

Once a motor is built, the engine builder will request bonding plates and seals from the A4MP. Each engine builder will have a number code for identification and a plate number. All plate numbers will be listed on the website with date of completion, engine builder and owner information. The builder will sign a bond that states they will be liable to financial repercussions if a motor built by them is found to be illegal.

PROTEST DETAILS

Any team, driver or track representative has the ability to have a particular motor checked. There is a \$5000 protest fee. The motor will be confiscated by the track/racing organization so that the A4MP can get the motor crated and shipped to an Indianapolis location. An independent consultant will check the motor and the engine builder has the opportunity to travel to the location and be present during inspection.

If the motor is legal:

- The owner will receive \$2500 for inconvenience and has the choice to have it returned to the owner or shipped to the engine builder.*

If illegal parts or any modifications are found that don't meet the guidelines:

- \$10,000 will be paid to the A4MP organization from Bonding company that each engine builder has agreed to. The money will be used to cover expenses occurred in checking the motor.*
- The motor will be confiscated by the A4MP.*



ENGINE OWNER

Responsibilities

- Agrees to adhere to principles and program requirements, including
- Will purchase engine only from a program engine builder
- Agrees to only allow a participating engine builder to service, disassemble or rebuild program engine
- Will provide engine certificate(s) number(s) for engine(s) to be used to Race promoter(s)