

“Modified” Class

Frame/Chassis: Must be originally manufactured for use as a lawn mower and must have the engine located in front of the driver. Zero-turning radius, rear-engine and mid-engine mowers are not allowed. Drivers must be able to prove the lawn mower origin of the frame. Mowers may not be equipped with a roll cage. If questionable, please contact one of the inspectors. All mowers must also meet the following requirements:

1. Reinforcement: Frame may be reinforced in any way so long as reinforcements do not pose a safety hazard to other drivers. Reinforcements to the frame must not be, or appear to be, a unit that would be able to function independently of the actual mower frame.

2. Center of Gravity: Frame may not be modified to lower the mower’s center of gravity. Frame height from ground must be no less than 6”. Frame height measured directly in front of the rear axle must be no less than 7”. Engine height from ground, measured at the bottom of the engine’s oil pan, must be 8.5” or greater. Top of the front axle tube may not be higher than the top of the mower’s frame at the point of contact with the front axle. (Also see “Bodywork” rule)

3. Wheelbase: Frame or location of axles may be modified so that the wheelbase of the mower is increased; maximum wheelbase for any mower is 50”, minimum wheelbase is 42”, measured from front axle centerline to rear axle centerline.

Axles: Must meet the following requirements:

1. Front Axle: Front axle may be modified or completely fabricated. Front axle tube must be straight across, no angled or bent tubes. Axle may not be adjustable for castor/camber. Front spindles must be an “L” or “J” shape, must not be installed upside down so that the mower is lowered, and be reinforced. Maximum track width of the front axle is 40”, measured from the outside tire or wheel rim to opposite outside tire sidewall or wheel rim. Measurement will be at the widest point of the axle at the tire sidewall or wheel rim, if the wheel rim extends beyond the tire sidewall. The front axle must be constructed so that the tops of the axle spindles are no higher than the bottom of axle tube. Offset is allowed.

2. Rear Axle: Maximum track width of the rear axle is 40”, measured from outside tire or wheel rim to opposite outside tire sidewall or wheel rim. Measurement will be at the widest point of the axle at the tire sidewall or wheel rim, if the wheel rim extends beyond the tire sidewall. Track width may be obtained by modifying a stock transaxle or installing a straight axle. Offset is allowed. The rear axle must be installed so that the top of the axle is no higher than the bottom of the mower’s frame. (I.E. the mower’s frame may not be notched so that the axle is tucked up into the frame, lowering the mower.)

3. Suspension: No suspension or springs are allowed. Axles must be firmly attached to the frame and may not move independently of the frame.

Bumpers: Bumpers and rub rails are mandatory and must be constructed of round or square steel tubing. Both bumpers and rub rails must be positioned so that there is a space from the ground to the bottom rail a minimum of 6” and a maximum of 8”. Bumpers must be a minimum of 5” and a maximum of 8” in height, over the entire length of the bumper. Bumpers must be no narrower than 1” inside of the outside sidewall of the tires and no wider than the outside of the sidewall of the tires. Rub rails may be no wider than 1” beyond a line measured from the sidewall of the front tire to the sidewall of the rear tire on either side of the mower. Bumpers and rub rails also must not have any square corners or sharp edges. Bumpers must be at 90 degrees from the ground. Bumpers must also have a minimum of two crossbars attached to both top and bottom rail of the bumper. A rail along the seat to hold the driver in position during cornering may also be installed.

Starters: All mowers in the must be able to start without assistance. All mowers must be equipped with either a pull or electric type starter and these must be used. Mowers with electric starters are required to have a battery that is able to start the mower’s engine mounted on the mower.

Tires: Must use a tire that was originally manufactured for use in lawn mowing applications. All tires must

have the word "turf" molded into the tire.

Wheels: Must be steel wheels a minimum of 6" in the front and 8" in the rear. May not be attached to the mower with C or E type clips; must securely fasten with some type of pin, bolt, nut, or combination thereof. Reinforcement of wheels is highly recommended but not required.

Driveline: Pulleys and sprockets may be replaced and/or modified in any way that the driver desires so long as they do not pose a safety hazard for other drivers and spectators. Mower must have a working lawn mower gearbox or transaxle with more than one gear. Gearboxes/transaxles may be internally and externally modified to increase the durability and performance of the unit. Reverse chains and gears may be removed.

Steering: Steering system must be reinforced and may be modified in any way. Stock steering gears must be removed and replaced with an approved steering mechanism, approval based on tech inspector's discretion. All steering joints must be heim joints a minimum of 3/8"; they may not be stock ball-and-socket type joints. All bolts used in the construction of the steering must be of grade 8. Also must have a round steering wheel. Steering shaft must be located in generally the same location as originally manufactured.

Bodywork: Must use an original lawnmower hood, original lawnmower fenders, and original lawnmower body, these parts may be modified or reinforced to provide additional access to mechanical parts, improved appearance, increased durability, etc. Bodywork may not be wider than 40", and must not have any sharp edges. The seat of the mower must be centered on the mower, springs and other supports for the seat may be removed so that the seat rests directly on the bodywork of the mower, the actual body work of the mower also may be modified so that the seat is lower than originally manufactured, although the bottom of the seat pan may not rest lower than the top of the rear tires.

Engine: Must be originally manufactured for use in lawn mowing equipment, be vertical shaft, be 31 cu. in. or smaller as delivered from the factory, have only one cylinder, and have lawn mower carburetor and intake. The only modifications allowed to the entire engine are as follows:

1. Governor and all parts related to the governor may be removed.
2. Air intake before carburetor may be removed/replaced.
3. Exhaust muffler may be removed/replaced with an exhaust pipe.
4. Engine breathers may be modified in any way, and if desired, additional breathers may be added.
5. Engine bore may be increased a maximum of .030" over standard 31 cu. In. bore to allow for rebuilt motors.
6. Head may be planed to ensure proper gasket seal, but excessive planing is not allowed. The head may not be planed enough that valve clearance is an issue.
7. Compression release lobe may be machined off of the camshaft.
8. Choke plate may be removed from the carburetor.
9. Valve retainers may be upgraded. Must use stock valves, springs, and rocker arms.
10. Jetting in the carburetor may be changed; an adjustable jet may be installed.
11. Mowers must be equipped with a stock flywheel. The flywheel may not be modified so that it is lighter than originally manufactured, however, the interior magnets, and the starter ring may be removed from the flywheel. Flywheel must be the size and type that was originally equipped on the motor used. No aluminum flywheels.
12. Internal "syncro" balance of the engine may be removed and replaced with aftermarket counterweights. OEM crankshaft and connecting rods must be used. Aftermarket balancer arms ARE allowed.

Any other engine modifications are not allowed, this includes the motor's carburetor and camshaft. Only the modifications previously listed are allowed. All internal and external parts used must be original equipment or equivalents of such. No modifications of original parts, other than modifications listed above, to improve performance of the motor are allowed. No power adders. (Nitrous, Turbo-chargers, etc.)

Fuel: No exotic fuels are allowed, (methanol, nitro methane, etc.) however, racers are not required to use pump gas, and high-octane racing fuels are allowed.

A list of approved engine building practices and modifications to the stock engine block follows the full list of rules. These modifications are in addition to the previously listed modifications.