# *"Stock" 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. If questionable, please contact one of the inspectors. Mowers may not be equipped with a roll cage. Frame must remain as originally manufactured and meet the following requirements:
**1. Reinforcement**: High stress areas of the frame may be reinforced to improve safety and reliability of the frame but reinforcements must not extend more than 4" along the frame. No reinforcements designed or appearing to be designed to reduce the flexibility of the frame are allowed.
**2. Center of Gravity**: Frame may not be modified to lower the mower's center of gravity. The mower's center of gravity must generally appear to be the same as originally manufactured. Height of the mower's seat must be no less than 19" measured from the ground to the lowest point of the seat pan. (Also see "Bodywork" rule)
**3. Wheelbase**: Frame may not be modified so that the wheelbase of the mower is increased or decreased.

**Axles**: Must meet the following requirements:
**1. 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 centered on the frame of the mower, difference in distance from mower centerline to tire sidewall on right and left side must be no greater than ½". Maximum track width of the front axle is 38", measured from the outside tire sidewall 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.
**2. Rear Axle**: If a transaxle is used drivers may not make modifications to widen the unit. If a straight axle is used track width must be no greater than 38" measured outside tire sidewall 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 axle must appear to be mounted in a position that relates to the original manufacture of the mower. Axle must be centered on the frame of the mower, difference in distance from mower centerline to tire sidewall on right and left side must be no greater than ½".
**3. Suspension**: No suspension or springs are allowed. Axles must be firmly attached to the frame and may not move independently of the frame.

**Starters**: Mowers 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.

**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 8" and a maximum of 10". 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 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 outside 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 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.

**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, they must securely fastened with some type of pin, bolt, nut, or combination thereof. Reinforcement is highly recommended but not required.

**Tires**: Must use a tire that was originally manufactured for use in lawn mowing applications. All tires used must have the word “turf” molded into the tire.

**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 and the steering shaft must be located in generally the same location as originally manufactured.

**Bodywork**: Must use an original lawnmower hood, original lawnmower fenders, grill, and original lawnmower body that look generally the same as the parts originally equipped on the mower. These parts may be simply modified or reinforced to provide additional access to mechanical parts, improved appearance, or increased durability. Bodywork may not be wider than 38”, and must not have any sharp edges. The seat of the mower must be positioned as originally manufactured and 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, but the actual body work of the mower may not be modified so that the seat rests lower than originally manufactured. Floorboards of the mower must be mounted so that they rest no lower than the bottom of the mower’s frame.

**Engine**: Must be originally manufactured for use in lawn mowing equipment, be vertical shaft, factory rated at 8 horsepower (Briggs & Stratton Model 28 engines are not allowed) or below, and have a lawn mower carburetor and intake manifold. 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. Choke plate in carburetor may be removed.
4. Exhaust muffler may be removed/replaced with an exhaust pipe. Exhaust pipe must be of a single diameter over the entire length of the pipe, no stepped pipes or mufflers.
5. Engine breathers may be modified in any way, and additional breathers may be added.
6. Engine bore may be increased a maximum of .030” to allow for rebuilt motors.
7. Head may be planed to ensure proper gasket seal, but excessive planning is not allowed. The head may not be planed enough that valve clearance is an issue.
8. Electrical charging parts may be removed from the motor and flywheel.
9. Flywheel key may be modified, removed, or replaced with an aftermarket key.
10. 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.

Any other modifications are not allowed. This includes any machine work intended to increase the performance of the engine. All internal and external parts used must be equivalents of original

equipment. No modifications of original parts 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.