MATPA 2012 Rules SUPERSTOCK

New items in Bold

Engine:

Must have a single automotive car/truck engine and cannot exceed 500 cubic inches of displacement.

Automotive type engine or its replica allowed.

Automotive engine is any engine or its replica available in a passenger car.

A replica to be considered legal if it is able to swing a stock stroke crankshaft.

Must be Naturally aspirated.

Must run on gasoline based fuels (no alcohol and no nitrous).

Limited to two valves and 1 spark plug per cylinder.

No aluminum blocks allowed.

Aluminum Heads are allowed.

Centerline of the engine must be no further forward than the centerline of the front axle.

Stock fuel injection of the engine used in the pull vehicle allowed.

No aftermarket fuel injection allowed.

Limited to single carburetor intake with one solid carburetor.

Exhaust may be vertical or run under the vehicle.

Harmonic balancer shall be SFI approved.

A bolt in the crankshaft to hold the dampener puller is required.

All engine driven fans must be shrouded with 1/16 inch steel or thicker and must cover the fan 360 degrees. Shrouds are not required on electric fans.

Side shields must be mounted independent of the engine block. They must be a minimum of .060 inches thick and must extend the complete length of the block casting and securely fastened.

Solid frame rails can serve as part of, or all of (if big enough) the shield.

The side shield must start at the bottom of the head and extend 2 inches below the center of the crankshaft throw and be securely fastened.

Additional shielding required to contain a spark plug ejecting from the head if not already shielded by exhaust or frame.

Vacuum pumps are not allowed (can be in place with drive systems removed).

Dry sump oiling systems not allowed.

Driveline Shielding:

All vehicles must have three round metal loops shielding each driveshaft (two piece driveshafts will have 6 metal loops) 360 degrees.

Loops must be a minimum of 3/8 inch thick aluminum or 5/16 inch thick steel and a minimum of 3/4 inch wide.

The end loops to be placed no further than 6 inches from the universal joints, with the third loop in the center of the driveshaft.

A solid tube may be used instead of the loops with a minimum thickness of 3/8 inch aluminum or 5/16 inch steel (no cast metal).

Loops will be fastened with 3/8 inch bolts or larger (and be of grade 5 or stronger), or butt/seem welded to the vehicle frame.

All driveshafts between the engine/transmission and transfer case must have solid shielding of 3/8 inch thick aluminum or 5/16 inch thick steel minimum.

All vehicles will have 360 degree shielding around universal joints made of 3/8 inch thick aluminum or 5/16 inch thick steel minimum and must be a minimum of 6 inches wide.

Axle hub shields are required and are to be a minimum of .060 inches thick.

Diameter of axle end or hub bolts (whichever is larger) is to be covered on both front and rear axles.

Axle hub shields cannot be mounted to the axle end or hub bolts.

A hole may be installed in the center of the front shield(s) so the lock can be operated as long as the hub ends and axle bolts are covered.

Ballast:

Vehicle with driver, fuel, and ballast will weigh no more than 6200 lbs.

A weight bar may be added to the front of the vehicle as long as the distance from the center of the front axle to the furthest point (weight or weight bar/box) is a maximum of 60 inches.

All weights must be securely fastened.

No transfer of weights allowed while vehicle is in motion.

Weights must not extend rearward beyond the rear tires.

Any ballast lost while hooked to the sled and under green flag will be cause for disqualification unless caused by internal breakage.

Safety:

All vehicles must be equipped with a minimum of a 2 pound ABC dry chemical fire extinguisher, fully charged, in working condition, and within easy reach of the operator.

All drivers must wear a helmet with a chin strap fastened that meets one of the following standards (Snell 1980, Canada Standards Association, DOT, Z-90).

Full Fire suits will be mandatory (shoes, pants, jacket, gloves, and headsock minimal).

Fire suits will be a minimum of a single layer SFI approved material.

Vehicle must have a vertical bumper to prevent the vehicle from passing over the buckboard of the sled. The bottom of the bumper is to be a minimum of 24 inches from the ground and extend a minimum of 8 inches vertically and must be of rigid construction and securely mounted to vehicle.

Body:

Vehicle must have a hood, grill, and fenders in place as intended by the manufacturer.

Original hood lines should be kept and a 3 inch maximum clearance opening will be allowed for speed equipment.

Body panels (except hood) must be constructed of the same material as OEM equipped (no replacing steel with fiberglass, aluminum, etc).

Tilt noses allowed.

Tilt bodies allowed as long as they are securely fastened in the down position when hooked to the sled and must have two functioning doors able to be opened from inside and out.

Vehicles equipped with pickup beds must have a floor or bed cover.

Vehicle may compete without a tailgate or rear door(s) for greater hook point visibility.

Driver's compartment:

Driver must be seated in the original driver's compartment.

If battery is installed within driver's compartment it must be safely enclosed and securely mounted.

No radiator, heat exchanger, or water hoses allowed in driver's compartment.

No fuel lines allowed in driver's compartment.

All vehicles must have a complete firewall (no holes except for controls and must be kept to the smallest size possible).

OEM firewall material (or comparable material and thickness) or 1/4 inch polycarbonate (i.e. Lexan) allowed. Acrylic (i.e. Plexiglass) is not allowed.

Toe straps mandatory on foot throttles.

Tires/Wheels:

Any D.O.T. tire allowed

Any pulling tire allowed with a sidewall marking of 31" diameter or less.

Can cut/alter any pulling tire as long as no cords are showing and tire is safe.

No counterweights or balancers permitted on/in the wheels or tires.

The outside edge of the tire on the narrow axle must overlap the centerline of the tire on the wide axle by at least 1 inch.

Transmission:

Must be from a passenger vehicle rated at one ton or less.

A minimum of 4 7/16 inch bolts (or equivalent) are required to connect the transmission to the bellhousing. Torque converters and automatic shifters allowed.

All automatic transmissions must have a 6 strap SFI certified safety blanket properly installed. The blanket is to extend from the rear of the engine block to the front of the tailhousing. The blanket must be fastened forward securely with two straps on each side, one above the crankshaft centerline and one below the crankshaft centerline. Blankets must have a 6 inch overlap.

An SFI certified Kevlar shield designed for the transmission being used can be used in place of a transmission blanket.

All pulling vehicles utilizing an automatic transmission must be equipped with a positive reverse lockout mechanism.

All pulling vehicles using a clutch will be required to have an SFI certified flywheel (no gray cast metal flywheels allowed).

All bellhousings will be made of steel and must be SFI certified.

All pulling vehicles (regardless of transmission type) will have a working neutral safety switch.

A reverse light system is required.

An automotive quality white light with a minimum diameter of 2 inches at the rear of the vehicle near the hook point and a light in the driver's compartment are required that must illuminate when the vehicle is placed in reverse and both lights must be triggered by the same switch.

Driveline:

Vehicle must be 4 wheel drive.

Front and rear axles must be from a passenger vehicle rated at 1 ton or less.

Transfer cases must be from a passenger vehicle rated at one ton or less.

No quick change gears allowed in any differential or transfer case.

Frame/Chassis:

Stock frames required.

Frame may be different than the make and model of the vehicle body.

Frames may be modified but no tubular frames allowed.

Wheelbase may not exceed 133 inches.

No portion of the vehicle may interfere with the sled, chain, or hook during the pull or while being hooked/unhooked.

An area of 6 inches wide and 12 inches high immediately above the drawbar must be free of all obstruction (including weights, wheelie bars, etc.) for ease of hooking/unhooking.

Drawbar:

All drawbars and hitching devices (including second draw bars) will be constructed of steel.

Any pin will be a minimum of 3/4 inch in diameter.

The drawbar must have a 3 inch round hole minimum with a maximum of 3 and a 1/2 inches.

Cross section of hitch point is to be a minimum of 1 inch thick.

Hitches cannot be shorter than 36% of the wheelbase when measured from the centerline of the rear axle to the point of hook.

No trick hitches and no cam type rear ends allowed.

Drawbar must be rigid in all directions when hooked to sled.

Maximum height from the ground to the hook point is 26 inches (this height is determined by the MATPA hitch measuring device).

The maximum angle allowed on the drawbar portion of hitch is 25 degrees.

All drawbars are to be measured at the time of weigh in. No air pressure is to be altered in ANY tire(s) after drawbar is measured.

The vehicle is required to have a tow hitch on the front. The hitch can extend a maximum of 6 inches ahead of the furthest portion of the vehicle. Hitch will not be counted in length when measuring distance form the center axle for the weight box).

No portion of hitch can attach forward of the centerline of the rear axle (measured with a plumb bob at weigh in and hitch check).

Suspension:

Air shocks/bags or similar devices are allowed on the pulling vehicle as long as there are no controls going to or from them that would allow changes while in the pulling vehicle.

Brakes:

All pulling vehicles must have working front brakes.

Fuel Tanks:

All fuel tanks must be located in an open area.

Fuel tanks may not be located under the hood or in the driver's compartment.

Kill switch:

Vehicle must have a working kill switch.

Kill switch(es) must be mounted independent of the drawbar.

Kill switch mounting bracket(s) must be able to withstand 32 pounds of pull per switch when pulled independently or collectively.

The kill switch(es) must have attached to them a minimum of a 2 inch diameter ring securely attached for sled kill switch cable attachment.

The kill switch will be located in the rear center of the vehicle with a maximum of 6 inches off center in any direction and 24 inches above the hook point.

On spark ignition vehicles, kill switch must break or ground the ignition circuit.

On vehicles equipped with electric fuel pump(s), the kill switch must break the circuit to any electric fuel pump(s).