



2022/2023

Caged Clone

Rules

Last Update October 12th, 2022

RULES & INTENT

The intent of this engine package is to provide a low-cost power source to attract new or budget minded go kart drivers.

ENGINE RULES

1.1 Approved Engines

OHV engines generally referred to as Clones with a maximum displacement of 212 cc's. Current legal engines include, but not limited to: the Lifan, Grey Hound, Harbor Freight Blue, Yellow, Jaing Dong, Yamakoyo, Blue Max, Ducar, Dupor & Predator and Tilitson TPP-225RS ([Specs for](#)

[Tillotson TPP-225RS](#) omit section D:general #6 and section C:Oil). PREDATOR HEMI MOTORS ARE NOT ALLOWED!

1.2 Engine Components

Must be original OEM clone components unless otherwise specified. Removal of unnecessary OEM items such as exhaust system, air cleaner, fuel tank, governor, low oil sensor, etc. is permitted. Welding or epoxy repair permitted to the block, head and side cover provided they don't enhance performance.

1.3 Exhaust System

Non-tech except header must be round and the end may be expanded to accommodate a muffler/silencer. If no muffler is used a safety ring must be present on the exhaust tip to prevent injury in case of accident.

1.4 Carburetor

Huayi/Ruxing type carb only. Choke assembly must be in place and functional. Venturi .615" max diameter, must be round, checked with go/no-go gauge. Jetting is open. Filter adapter and filter are open. Any pulse type fuel pump permitted and can be pulsed from the crankcase, side cover or valve cover. Carburetor dimensions to be checked with go/no-go gauge. Plastic carburetor isolator must be unmodified and installed in its original location.

1.5 Fuel Tank

Non-tech. It is recommended that for safety reasons a remote/floor mounted tank may be used. Tank must be securely fastened.

1.6 Fuel

No methanol, E-85, fuel enhancers or additives of any type. No blending or mixing of fuels. The use of specific fuel is required in all classes. The specific fuel must pass any or all the following tests: visual - continuity meter, gravity test - gas, alcohol and water mix.

1.7 Connecting Rods

OEM cast rod or billet stock rod replacement ok. No modifications allowed. Standard OEM item with stock stroke length (plus or minus .005"). No alterations permitted.

1.8 Pistons

OEM std bore only. Three ring design and all rings to be intact and functional.

1.9 Flywheel and Ignition Coil

Must use stock clone ignition coil, plug wire and resistor spark plug boot. Spark plug is open. Flywheel must be from approved list, 3.3-pound minimum weight and no flywheel modifications allowed.

1.10 Approved Flywheel List

OEM Cast Iron ARC: 6619, 6625, 6626 RaceSeng: RSP13075, RSP13077 King: Billet Steel, Billet Aluminum Slipstream Dyno: PVL aluminum flywheel type heads.

1.11 Cylinder Head

OEM heads only with no port modifications allowed. Head gasket required, but type and thickness are open. Traditional style heads only. No Hemi type heads allowed!

1.12 Valve Train

OEM push rods, push rod guide plates, retainers, springs, keepers, rocker arms and adjusters only. OEM valves with 45 seat angles only and no lightening or polishing. Stock 1:1 ratio OEM rocker arms only. OEM valve springs only with a maximum spring diameter of .798" (wire diameter .073" max) and a maximum tension of 10.8 pounds at .850" compressed height. Installed height of spring is .815" minimum with any spacers or seals.

1.13 Camshaft

Stock appearing camshaft cores only with the ez-spin assembly un-altered and in stock condition. Max intake lift is .240". Max exhaust lift is .245". Readings are taken with a dial indicator on the valve spring retainer with zero lash.

1.14 Fasteners & Gaskets

Non-tech but must retain their original factory size. Heli-coils, studs, etc. allowed for repair purposes.

1.15 Crankcase Breather

Crankcase breathers are to be routed internally through the valve cover as originally intended in OEM configuration. NO additional breathers allowed.

1.15 Starter

Stock pull starter must be in place and functional.

1.16 Clutch

Any engine mounted shoe/drum clutch. No axle clutches. No disc type clutches.

GENERAL KART & BODYWORK SPECIFICATIONS

2.1 Wheels & Tires

Any 5" or 6" diameter kart type wheel. Tires must be treaded design and unaltered. Any brand of tire is allowed. Tire softeners, grinding or siping/grooving is not allowed. See section 2.2 weight for tire durometer rules.

2.2 Weight

Kart and driver minimum weight is 430 pounds **AND** both rear tires must read minimum 50 with track tire durometer. Those utilizing the Tillotson 225RS Engine must weigh in at 400 pounds with kart and driver **AND** both rear tires must read minimum 50 with track tire durometer. Top 3 drivers must go to scales after A main event or will be DISQUALIFIED and will forfeit any money or points for that night. All weights added to the karts must be securely fastened to the kart with a minimum 5/16-inch diameter bolt. If weight is attached to the seat large area "fender" washers must be used. Kart weight must be displayed on the engine shroud or top plate to aide track officials at the scales.

2.3 Kart Number

Number is to be displayed prominently on Right Side Sail Panel. It is recommended that the number is at least 10" tall and is clearly distinguishable from kart design and/or sponsors. Drivers will be given one warning, after that they will cease being scored until the issue is corrected.

2.4 Bodywork

All bodywork components must be constructed of high strength plastic, fiberglass, or advanced composites. No metallic materials to be used for tail pieces or nosecones. Body work must not obstruct the drivers forward or peripheral view. No panels or bodywork may cover the driver's head. All karts must have body work or bumpers that protects the leading edge of the front tires from contact with another kart. Side panels may be constructed of aluminum, high strength plastic, fiberglass or advanced composites. Side panels are recommended to be no more than 400 square inches.

2.5 Bumpers and Nerf Bars

All karts must have front bumpers that adequately protect the drivers' feet. Karts must have nerf bars that adequately protect the kart from side impact and will prevent karts from "hooking"

wheels. “Speedway” style rear bumpers are required and must extend to at least the centerline of the rear tires.

TECH PROCEDURES

3.1 Procedure

At any time after the main event the top 3 karts will proceed to the designated tech area. At this point the kart will be considered “impounded.” Karts will be inspected in their finishing order. Drivers and/or crew will be required to assist with removal of parts, drain their oil and help to facilitate the technical inspection on their kart.

3.2 Tech Items

Tech items will include but are not limited to:

Carburetor/Intake: This will include checking the maximum venture size via go/nogo gauge, checking the isolator, restrictor plate (if present) and for porting of the intake.

Tire Durometer: Both rear tires must read a minimum of 50 on the house durometer after scaling of kart and driver and they weight a minimum of 430 or those utilizing the Tillotson 225RS Engine must weigh in at 400 pounds with kart and driver **AND** both rear tires must read minimum 50 with track tire durometer.

Max Camshaft Lift: Will be measured at the valve spring retainer with the rocker arm set at zero lash.

Clutch: Check for drum/shoe type clutch.

Exhaust Port: Check for porting of cylinder head on the exhaust side.

Valve Springs: This will include wire diameter and coil spacing checks to ensure 10.8 BS springs are in place.

Valve Spring Installed Height: Check installed height with .815" 4 flywheel from approved list.

Cast Rod: Internal scope check for stock cast rod.

RACE PROCEDURES & SAFE DRIVING

5.1 Raceceiver

An operational raceceiver is mandatory for all drivers so they may receive instruction from officials on the track.

5.2 Age Requirements

Driver must be a minimum of 12 years of age. Any exception is at the Race Director/Promoters approval.

5.3 Red Bluff Outlaws Rules

Driver is held by the race rules of Red Bluff Outlaws while on the facility or the track.

5.4 Changes

The above rules can be changed at any time upon direction from the Race Director or Track Promoter.