

PRD CONTROLLED FIREBALL TAG RULES (2011)

<u>CLASS</u>	<u>AGE</u>
*Junior I - PRD TAG Controlled @ 240lbs to 260lbs	8 to 11
Junior II - PRD TAG Controlled @ 310lbs to 330lbs	12 to 15
Senior PRD TAG Controlled @ 360lbs to 380 lbs	16 +
*Masters PRD TAG Controlled @ 390lbs to 400 lbs 35 years and older or 200 lb driver in race gear, verified at the scales on race day	35 +

*Local or Regional Option only

GENERAL CLASS RULES:

Classes will be run per the International Kart Federation TAG rules section #275 and #675, with the following clarifications. This document contains supplementary rules for Controlled PRD.

ENGINE:

Only engines with US serial numbers are legal.

All components must be O.E.M. unless noted.

PRD 125cc water cooled 07 Fireball Engines are legal as homologated.

Note: no mixing of parts from 05 Fireball Engines with 07 Fireball Engines.

TARGET R.P.M./GEAR

R.P.M. is limited in an effort to increase competitiveness and engine life. The PRD factory representative or race director, if the factory rep. is unavailable, will call out the gear ratio for all classes. The specified gear ratio will be the base gear ratio +/- one tooth. Each age group has a different target R.P.M., the R.P.M. is established with a single kart and driver on the track alone, race R.P.M. will be higher.

Junior I 13,500 to 14,000 R.P.M. APX.

Junior II 14,500 to 15,000 R.P.M. APX.

Senior	14,500 to 15,000 R.P.M. APX.
Masters	14,500 to 15,000 R.P.M. APX.

TIRES

Junior I	4:50 Front 4:50 Rear
Junior II	4:50 Front 7:10 Rear
Senior	4:50 Front 7:10 Rear
Masters	4:50 Front 7:10 Rear

CARBURETOR:

Tillotson HL166A, HL166B or HL166C per the I.K.F. Rule Book section 622.6 are legal for all classes.

Junior I will require the use of a PRD-USA/ RLV filter cup with an air inlet hole of .460" +/- .001 no go, the hole will remain as manufactured no cleaning, de-burring or any other modifications are allowed. O-ring must be used and functional. The filter cup must be sealed to carburetor.

Junior II will require the use of a PRD-USA/ RLV filter cup with an air inlet hole of 0.875" +/- .001 no go, the hole will remain as manufactured no cleaning, de-burring or any other modifications are allowed. O-ring must be used and functional. The filter cup must be sealed to carburetor.

Senior and Masters PRD Controlled may use a filter cup with a center hole diameter of .880" minimum.

REED/REED CAGE:

Must remain unmodified. Branded Reeds "PRD-USA.COM" as shown in the PDF are required. The rubber coating on the reed cage may be surfaced to flat.

OIL SEALS:

Effective 6/16/2011, only PRD/RLV crank case oil seals will be legal.

BEARINGS, GASKETS:

Non-tech, but must remain type and style of original

CLUTCH/CHAIN COVER:

Only the fully enclosed cover is legal (part number PRD-7157), those with venting that exposes the ring gear are not legal. Use of a third bearing is prohibited.

O.E.M. clutch nut only can be used to start the engine when using a hand held starter. The PRD clutch with a steel drum and a steel center is also legal.

Weight: 744 grams minimum including drum, center, ring gear, bolts and washers.

RADIATOR:

Only radiators unmodified as supplied by PRD with the engine are legal. Water pump must be PRD O.E.M. and axel driven. The water pump may be driven directly by the axel.

AIR BOX/INTAKE SILENCER:

Only air boxes/intake silencers as supplied by PRD with the engine are legal using two 22mm +/- 1mm tubes. Only the top two holes of the four hole airbox may be utilized. The air filter is optional.

PIPE/EXPANSION CHAMBER AND HEADER:

Only pipes/expansion chambers/connectors as supplied by PRD are legal. Spec pipe length 16" minimum as measured with a .250"(1/4") tape from the pipe side of the exhaust header flange, around the outside radius of the header to the first weld on the pipe at the major diameter. Only step connector tubing is legal. PRD header o-ring cushion may be installed in the header cup to cushion the flex part. PRD connector wraps may be used. A 1/2" +/- wide ring may be welded into the pipe cup to stop the divergent cone from mushrooming.

IGNITION:

Ignition timing a maximum of .090" B.T.D.C. (no minimum). Spark plug boot/cap is open. See timing method on IKF website.

ELECTRICAL SYSTEM:

All components must remain OEM and unmodified. Battery is labeled "KARTSPORT".

TECH UPDATE:

Use of the L.A.D. tool is mandatory for CC's

Maximum piston size is 54.25mm, maximum bore is non-tech.

Combustion chamber diameter 54.10mm +/- .2mm.

Head profile gauge available from RLV

Cylinder overall height as measured from machined surface to machined surface 86.80mm minimum.

LEAK DOWN TEST:

All PRD classes are considered “Restricted Classes” (air leakage can cause an increase in performance). This test is used to detect excessive leakage through the engine, engine seals and carburetor. The location of the leak is not important. The test measures a percent of leakage. The engine will not be legal if the maximum leak percentage is exceeded irrespective of where the leak occurs. The cylinder leak down test is performed as follows:

RESTRICTED ENGINE LEAKDOWN TEST***Parts required:******Cylinder leakage tester******Calibration tool (available from PRD distributors)******Header plug (available from PRD distributors)******Filter cup rubber boot (available from PRD distributors)******Carburetor plug (available from PRD distributors)******1. Remove the pipe and flex connector from the header.******2. Install the header plug in the header outlet and tighten.******3. JR I and JR II:******- Place the rubber boot over the filter cup and tighten the hose clamp.******SR and Masters:******- Install the carburetor plug in the carburetor inlet.******4. Remove the spark plug and locate the piston at the bottom of the stroke.******5. Screw the outlet hose of the leakage tester kit in the Calibration tool and connect all hoses in the kit including the hose with the gauges.******6. Attach the air line.******7. Set the initial pressure low.******8. Turn the regulator until the primary gage is set on 10 pounds.******9. Disconnect line from air source, which shuts off air to tester. Disconnect from calibration tool. Screw the outlet hose of the leakage tester kit in the spark plug hole, reconnect to air source.******10. The maximum leakage gage reading is 50%.******11. Any reading above 50% leakage is illegal.*****PRO RACING DESIGN 125CC CONTROLLED TAG CLAIMING RULE:**

Person claiming the engine i.e. making the claim must:

a. Be entered in the class.

b. Race the class.

c. Have raced the class at this current specific series or venue no less than twice previously (eligible to claim in race 3).

A participant may only claim one time per calendar year in each club program, series or venue including National and Grand National events. The manufacturer or importer reserves the right to claim any engine at any time, anywhere with no exception. This claim will hold preference over all other claims.

Any participant in this claiming class must agree to the current claiming rules of the class. If the participant fails/refuses to surrender the claimed engine, the participant will forfeit all points and will be ineligible to compete in the class for the remainder of the current venue or series program.

Engine claiming will be made to the Chief Technical Official in writing within 30 minutes after the end of the race the engine is being claimed from.

If more than one participant claims the same engine, the participant with the lowest point total of the series or venue will be awarded the claim.

The engine being claimed must pass post race technical inspection.

Please be advised, as a result of the claimed engine passing post race technical inspection it is not implied nor a guarantee the claimed engine is legal or will pass future technical inspections "let the buyer beware" engines are claimed as is.

After post race inspection:

- a. The person claiming the engine i.e. making the claim will present the Chief Technical Official \$1,800.00 either in cash or a certified cashier check.
- b. If the claim is made by the manufacturer, importer or agent of either, that person will present the Chief Technical Officer with a new engine (including all parts listed in "c") and \$400.00 cash.
- c. The present engine owner will present the Chief Technical Official with the claimed engine less the carburetor. The engine will include:
 1. Reed manifold with reeds
 2. Exhaust header
 3. Intake manifold
 4. Ignition
 5. Complete clutch with cover
 6. Starter with bendix

The Chief Technical Official will then complete the exchange.

INTENT OF RULES

All of these rules are written with the intent of creating an affordable engine package that can be used from Junior I all the way through Masters.