

KRA Official Rules

Kandi Racing Association
2 cylinder hobby stock class

1. Any 4 cylinder rear-wheel drive pony car. The following are considered pony cars:

General Motors	Ford/Mercury	Ame
Monza	Bobcat	Spirit
Vega	Capri	
Chevette	Mustang	
Astro	Pinto	
Skyhawk		
Starfire		
Sunbird		

1) Roll Cage

At least 6-point roll cage is required. Must be at least 1.5 inch outside diameter 090 wall thickness steel tubing. Bars must form a cage around driver and reach as close to roof as possible. Top bar must be 2 inches above drivers head with helmet on. Must have X brace behind driver and at least 3 drivers door bars and 2 door bars on passenger side. Roll cage must pass safety inspection. After each major crash cage repairs must pass inspection before car is allowed to race.

2) Bumpers-side rails

Must have front and rear bumper. Reinforcing ok. No sharp edges. Side rails allowed, must conform to body lines and have no sharp edges.

3) Body

Must remain stock. May be trimmed for roll cage only. Dash may be removed. Trunk floor may be altered for fuel cell installation. Tinning of interior/cock pit will not be allowed. Motor must match body being used. (Ford to Ford, GM to GM) After market nose piece ok. 4" rear spoiler allowed.

4) Steering

Quick release steering recommended. No steering quickeners. No boxing in of steering column.

5) Wheels and Tires

Any type steel rim, maximum 6" bead width, after market rims ok. 2 inches or more from the inside bead to the mounting surface. No bead locks or screws. No aluminum rims. Grooving or siping allowed. No race tires, bar grip style snow tires. No excessive grooving or siping. Tires allowed: 70, 75, or 80 series 13" or 14" tires.

6) Suspension

No aluminum parts. Suspension must remain stock, except for upper strut mount may be altered to adjust caster and camber. No inter changing of frame cross members. Any steel spring that is stock appearing may be used but must fit in stock mounts and stock location. Stock type shocks. Shocks must be in stock factory mounting holes. One (1) shock per wheel for a total of 4 per car. N coil over shocks. NO weight jacks.

7) Brakes

Cars must have stock factory brakes on all four wheels and in good working order. One master cylinder. No restrictor. No in cockpit adjusters. No right front brake shut off. One complete braking assembly per wheel. No lightening of any brake component. Including but not limited to rotors or drums. Rotors must retain stock diameter. Rear end must have brake shoes and all components on each side and be in proper working order and adjustment.

8) Safety Equipment

a. Helmets

Helmets must be at least a snell 95 rating. NO motorcycle helmets.

b. Windshields

All glass must be removed. Must have screen or bars in front of driver. Drivers side window must have a working window net. Must open from the top front and go down.

c. Preferably bright colors

All cars to have 18" high numbers on each door and on the roof, and 6" high numbers on front and rear of car.

d. Seats

Approved aluminum racing seats.

e. Seat Belts

All cars to have 3" lap belts and 2" shoulder harness, belts to be less than 5 years old and in good visible condition.

f. Fire Suits

Approved fire suits are required when on the track. Must be in good condition and pass safety inspection. NECK BRACES are strongly recommended.

g. Lead Weight

Must be painted white and with car number clearly marked. Must be securely attached with at least (2) ½ inch rod size bolts.

9) Drive Train

a. Any pony car transmission allowed. All gears must work and have working reverse. No lightening of any kind.

b. Car must have working clutch. Stock components only. Must be for engine used.

c. No aluminum flywheels, pressure plates, or drive shafts. No cutting or lightening of flywheel will be allowed. Back of flywheel must remain stock. No drilling of holes, cutting of groves or removing of any metal except to resurface the face. Minimum thickness of flywheel is one (1) inch. Drive shaft must be painted white and have car number clearly marked on it. Must have safety hoop on front of drive shaft. If a magnet does not stick to drive shaft it is illegal.

d. Automatic transmissions must run stock converter.

e. A 1.5 inch inspection hole shall be drilled in the bell housing which must be accessible for the tech inspector to see clutch, flywheel, pressure plate, etc.

f. Must have a shield above bell housing. That will deflect any clutch debris towards the ground.

g. Ram couplers not allowed.

h. Stock pony car rear end only. Locked rear ends ok. No 9" Ford rear ends. No quick change or floater rear ends. No aluminum rear end parts. No torque sensor devices allowed.

10) Exhaust

a. Cast iron manifold only. No headers. Must be stock manifold. No grinding, polishing, or cutting of any kind to the manifold. Must have an exhaust pipe that runs from the manifold to a point behind a line equal to the back of the drivers seat. Maximum diameter of the pip is 1 7/8 inch

O.D. The pipe cannot protrude past the side of the car (Maximum of 4" is allowed from exhaust manifold to the pipe for transition.) Car cannot exceed 95 decibels at 100 ft.

11) Battery

- a. One (1) 12 volt battery to be mounted away from the fuel cell and driver. Must be secured properly. Held in the car with metal in such a way as to keep it from coming loose in a crash and not to short out.

12) Aspiration – Fuel

- a. An approved fuel cell is required.
- b. Intake manifold must be stock. No grinding, cutting, or polishing of any kind. Maximum of a 1 ½ inches from top of intake to bottom of carburetor. You must use minimum thickness adapter to get carburetor mounted.
- c. Single 5200 series pony car carb: E.G.R. plate O.E.M. to engine, if used, must be bolted not welded to manifold. Choke plates may be removed. No milling or grinding or choke tower, top of carburetor, or intake manifold. Carb must be mounted with large bowl towards engine. No 6500 series carb allowed.
- d. Carburetor throttle plate and bore must be stock. Primary throttle bore 32.00 mm. secondary throttle bore 36.00 mm. Primary venturi diameter 22.00mm, secondary venturi diameter 27.00 mm for the holly/weber carburetor.
- e. No blowers or turbo chargers.
- f. Stock O.E.M. intakes.
- g. Distributor must be stock.
- h. Fuel must be pump gasoline only. No alcohol, no nitrous, or nitro. No nitrous devices allowed. No methanol, E-85 is allowed.
- i. One (1) fuel line only connected to carburetor.
- j. Electronic fuel pumps allowed, but they must be wired into the oil pressure system to prevent them from pumping without oil pressure.
- k. Must have a rear firewall between driver and fuel cell. Must be made of steel or aluminum. Cannot go any farther forward than where the back of the rear seat would be.

13) Engines

- a. The minimum weight of the car with driver after the race must be 2,500 pounds.
- b. Stock configuration, Ford 2000, 2300; GM 140, 151; or Chrysler 2.2 engines.
- c. Bore, stroke, and rod length shall be:

	Bore	Stroke	Rod Length
GM 151	4.000"	3.000"	6.000"
GM 140	3.500"	3.625"	5.700"
Ford 2000	3.571"	3.030"	5.000"
Ford 2300	3.781"	3.126"	5.200"
Chrysler 2.2	3.440"	3.620"	5.945"

- d. Cylinders may be bored to a maximum of .060" over stock.
- e. 4 Flat-top, valve relief or dish pistons only. Pistons must be three ring, full skirted type; no grinding or lightening. Floating wrist pins are allowed. Wrist pin height-center of wrist pin to top of piston.

	Min.	Max.
GM 151	1.528"	1.560"
GM 140	1.480"	1.480"
Ford 2000	1.588"	1.588"
Ford 2300	1.578"	1.598"
Chrysler 2.2	1.572"	1.573"

- f. Crankshaft and connecting rods must be O.E.M. to block. No lightening, grinding, or polishing of any type. No marine parts. Absolutely NO strokers. Balancing is allowed. O.E.M. stock steel rods only. No long rods.
- g. Camshaft may be hydraulic performance type. No solid lifters, roller cam, roller follower, roller rockers or roller lifters.
- h. No grinding, porting or polishing of any kind is allowed on heads and intake manifolds. This includes no painting of runners and no matching of gaskets. Head may be milled on block mounting surface only. No acid porting allowed.
- i. No turbo heads or turbo intake manifolds.
- j. No dual camshaft or dual spark plug heads.
- k. No reverse cooling. Water pump and pulley must be O.E.M. to block. No aluminum water pumps or water pump pulley on Fords.
- l. Valve diameter must be stock for engine. Valve seat cut; the lowest angle cannot extend more than .250" from the beginning of the 45 degree (valve seat). Intake and exhaust measurements must be:

	Intake	Exhaust
GM 151	1.720"	1.500"
GM 140	1.625"	1.375"
Ford 2000	1.653"	1.418"
Ford 2300	1.739"	1.500"
Chrysler 2.2	1.600"	1.390"

- m. No dry-sump oiling, no external pump oiling. Homemade or after market pans allowed. If you are using a block that does not have a fuel pump access on Fords you must have a .750" (1" recommended) inspection hole on side of oil pan and must be easily accessible to inspector. If not, the inspector may require removal of oil pan.

14) Radiator – One (1) radiator only; must be mounted in front of engine and must not protrude from car.

15) No engine setback.

16) No radios or any other forms of communicating to the driver during the race are allowed. This includes hand gestures positive or negative. **Spend money on car handling not on expensive engine parts.**

17) Silent Protest:

- a. Only a driver competing in the feature can protest.
- b. Protestor must give race official \$150.00 cash before start of feature and designate car to be protested. Teardown includes both top and bottom end.
- c. A driver may only protest one engine per race.
- d. Only the tech inspector has the final word on the legality of the race cars involved in the protest.
- e. No person shall prevent or interfere with the protest procedure.
- f. If protested car found legal, \$50.00 goes to KRA and \$100.00 goes to protested car. If found illegal, \$50.00 goes to KRA and \$100.00 goes back to protestor.

18) Conduct:

- a. The driver is responsible for the actions of his pit crew in all respects. The driver shall be the sole spokesperson for his/her car owner and pit crew in any and all matters, and must talk with the chief track official in charge regarding their conduct or behavior.
- b. Any participant directly involved with any fighting or misconduct will receive a penalty.
- c. No participant shall subject any track official, employee, sponsor, or participant to any abusive or improper language at any time.

19) Penalties

- a. Loss of all moneys for that night and loss of points for that night and previous night of racing.
- b. KRA has the right to confiscate illegal part or parts, or fine X amount of dollars or both.

20) Rule Changes

Rule changes during the season need a petition of drivers signed by a majority followed by approval by track board.

If you have any questions contact Mark Geer at 320-354-2067