

### EKeys 4cars FORMULA FOURS

NOTE: Riverside speedway has the right to alter rules in the best interest of competition. Weights and rules may be adjusted up or down to ensure the best race for competitors and fans. Any changes will be updated and posted as soon as they become effective.

No car or car part will be considered as being approved by reason of having passed through tech inspection unobserved or permitted previously. The tech inspector shall determine as to whether or not any type of construction, design, or interpretation of the rule shall be accepted.

#### **ELIGIBILITY**

#### 1. CAR

- A. Cars must have a paid Riverside Speedway registration.
- B. All cars must be neat appearing. Cars should be painted with contrasting colors and have appropriate numbers and lettering.
- C. All cars must have engine size and minimum weight printed on the hood. "If found not to be correct, all points will be terminated"
- D. Four cylinder with factory rated engine to produce less than 201hp. cars only.
- E. Max wheelbase of 104.5
- F. No leaf spring cars permitted.
- G. Two wheel drive cars only. AWD may be converted to 2WD through mechanical disconnection of necessary components.
- H. Cars with T-tops or convertibles are NOT permitted. A sun roof must be removed and replaced with min 22 gauge steel.

#### 2. ENGINE

- A. Four cylinder only. No turbo or supercharged engines allowed.
- B. Engine must be stock for make of car.
- C. Max engine bore size is 0.40 over stock.
- D. Max cylinder head decking is 0.10 off stock.
- E. Stock cams only.
- F. No porting or polishing.
- G. Stock intakes and throttle bodies.

- H. Stock engine wire harness for make of car.
- I. No computer or ECU programming or chipping. Stock computers only
- J. Stock air filter and box, other than spectra 9100 or 9800 only.
- K. Radiator overflow is MANDATORY.
- L. No cold air intakes allowed.

#### 3. EXHAUST

- A. No Headers
- B. Exhaust must dump out behind the driver and under the car.

#### 4. TRANSMISSION

- A. Transmission must be a stock for make and model of car or engine if the engine has been changed.
- B. Rear wheeled cars must have a minimum of 2 drive shafts loops.
- C. Drive shafts must be painted white.
- D. No alterations of flywheel, clutch, transmissions, rear ends. All components must remain stock.

#### 5. WEIGHTS AND PENALTIES (penalties in Addition to listed min. weight)

- A. JDM ENGINES will be required to carry 75 lbs additional weight.
- B. Dual cam cars will be required to carry 50 lbs additional weight
- C. Subaru cars will be required to carry 50lbs additional weight.
- D. ALL WEIGHT PENALTIES DESCRIBED IN 4A,B,and C WILL BE MOUNTED USING THE SANDWICH METHOD WITH A STEEL PLATE UNDER THE FLOORBOARD AND BOLTING UP THROUGH FLOORBOARD AND LEAD. LEAD CAN BE MOUNTED ANYWHERE IN THE COCKPIT OF VEHICLE. THESE PENALTIES ARE ABOVE AND BEYOND THE MINIMUM WEIGHTS.
- E. Minimum weight, race ready with driver is 2200lbs for vehicles engines under 150HP as originally produced. Minimum weight for vehicles with engines over 150HP as originally produced is 2500lbs.
- F. Max left side percentage with driver and gear is 56% before, during, and after each event with zero tolerance.
- G. Weights and penalties may be adjusted at any time by RIVERSIDE SPEEDWAY in fairness of competition.
- H. Lead must be painted white and have car number on it.
- I. No lead be mounted beyond center line of front or rear axle.

#### 6. EXTERIOR

- A. All glass must be removed, except windshield. Windshield may be replaced with lexan minimum of 1/8"
- B. Must have secure hook front and rear for towing
- C. All doors must be welded shut.
- D. Hood and trunk must be secured shut with a min of two hood pins each.
- E. Stock front and rear bumpers for make, model and year must remain in place.
- F. Aftermarket bumper covers are allowed.
- G. Stock body parts or manufactured body parts of make and year run.

  Minimum 20 gauge steel. No aluminum
- H. Rocker panels may not go below stock rocker or pinch weld.
- I. Maximum 6" spoiler, no boxing the ends

#### 7. BATTERY

A. Maybe relocated if mounted in an approved safety box.

#### 8. FUEL TANK

- A. Minimum of 8 gallon fuel tank.
- B. Stock may be replaced with a fuel cell that must be enclosed in a steel canister. Made of minimum of 22 gauge steel.
- C. Tank must be securely fastened in center of trunk with a minimum of 4 straps made out of minimum 1 x 1/8" flat bar
- D. With a PVC valve on vent line.
- E. A steel fire wall must separate any fuel tank from the driver's compartment.
- F. Fuel Cell may not be lower than 10 inches from the bottom of the cell to the ground if mounted outside of the trunk.
- G. Fuel lines must be in conduit if inside the drivers compartment

#### 9. INTERIOR

- A. Aluminum racing seat MANDATORY. Must be safely mounted in stock location and connected to the roll cage in a safe and secure manner. A support seat brace must be installed at the rear of the seat.
- B. One spot mirror mounted on the driver's side of the cage only.
- C. Passenger and rear seats must be removed.
- D. Original stock floor boards must remain in place. Any holes will be patched with sheet metal.
- E. Front firewall must remain in stock location.

- F. Floor upholstery must be removed.
- G. Stock dash may be removed but must be replaced with a fabricated full width dash.
- H. Steering wheel center must be padded.
- I. QUICK RELEASE STEERING HUB MANDATORY.
- J. Steering shaft may be made of approved steering shaft tubing.
- K. Stock column is allowed.

#### 10. SAFETY

- A. RACING SEAT BELTS ARE MANDATORY
- B. MINIMUM 5 POINT HARNESS
- C. NO MORE THAN 5 YEARS OLD. IF THE TAG IS GONE OR NOT LEGIBLE, THE SAFETY BELTS WILL NOT BE USED AND WILL BE CHANGED OUT AT THE DISCRETION OF THE TECH OFFICIALS. THIS IS A MAJOR SAFETY ISSUE THAT CAN NOT BE TAKEN LIGHTLY.
- D. MANDATORY FIRE SUIT (SINGLE LAYER MIN)
- E. RACING GLOVES MANDATORY
- F. RACING SHOES MANDATORY
- G. HEAD AND NECK RESTRAINT RECOMMENDED (MINIMUM OF A HORSE COLLAR TYPE)
- H. DOT APPROVED HELMET
- I. RACE RECEIVERS ARE MANDATORY
- J. ANY VEHICLE WITH ELECTRIC FUEL PUMP MUST HAVE A MASTER DISCONNECT IN REACH OF DRIVER AND SAFETY OFFICIALS.THIS IS MANDATORY
- K. WINDOW NET WITH QUICK RELEASE MANDATORY

#### 11. FIRE EXTINGUISHER MANDATORY

A. MUST BE IN REACH OF DRIVER WHILE BUCKLED IN SEAT

#### 12. ROLL CAGE

- A. Roll Cage is MANDATORY
- B. Minimum size of roll cage tubing is 1 ½", .095 thickness
- C. All driver's area must be padded.
- D. Unibody car frames may be connected front to rear as long as both sides are done equally the same.
- E. Must consist of four uprights joined together at the top, plus an "X" between the rear of the back uprights.

- F. Rear supports bars are required, running diagonally from each rear bar of the cage and may extend to the rear of the frame horns, and may be reinforced between the frame horns.
- G. Four horizontal bars between the upright bracing on the driver's side are required and those 4 bars must be bowed outward. The inner door panels may be removed to allow for the outward curving of the horizontal door bars if necessary.
- H. There must also be a minimum of 3 horizontal bars or and "X"- between the upright bracing on the passenger 4 side.
- I. A horizontal bar between the two front uprights at dashboard level is required.
- J. A front bracing hoop may extend from the frame rail in front of the strut towers and connect to a bar protecting the radiator but not connect to the strut towers in any way.
- K. The radiator protecting bar may be a maximum of 1 3/4" O.D.
- L. Two rearward bracing pipes from the back of the roll cage on each side to half way up the unibody rear frame and top of the unibody rear frame are allowed. They must not extend beyond the spring perch and must be equal length and do not reinforce or alter the geometry of the car in any way.
- M. All pipes must be welded all the way around at every joint.
- N. Cars with a frame must have cage welded to frame and NOT the floorboards.
- O. Cars without frames may use the "sandwich" method or may attach the cage upright to a section max 2 ½" by 2 1/2" or 2" x 3" .120 steel tubing. The tubing must be visible inside the cockpit and may not extend more than 2" beyond any upright.

#### 13 SET UP AND SUSPENSION

- A. All suspension mounting points must remain in stock location.
- B. OEM or stock replacement shocks or struts only.
- C. All cars must have 4 working brakes.
- D. Sway bar and links must be equally the same side to side
- E. Sway bar must be OEM no aftermarket.
- F. Max 2" camber on right front. Measured off wheel with Riverside Speedway gauge
- G. Maximum ½" difference in wheel base side to side,

- H. Any coil spring is allowed. No altering of chassis or suspension to fit spring.
- I. No coil bind
- J. Spring rubbers allowed, max 1 per assembly.
- K. Rear camper not to exceed 3/4" measured at wheel.
- L. Suspension & steering bushings will not be altered in any way from the stock original intended use of the bushing. Examples of alteration will be included but are not limited to: chemical treatment, heat treatment, weakening of the bushing by any means other than normal racing wear.

#### 14. WHEELS AND TIRES

- A. 7" wide wheel max.
- B. Any backspace allowed (measured from the back of the wheel to the center)
- C. .75" wheel spacer allowed per wheel
- D. 1" Steel lug nuts MANDATORY
- E. No relief values
- F. American Racer AR705 will be the track tire.
- G. Will be durometered.
- H. Will be allowed in 13" and 14". All four positions will be the same.

#### 15. MUSTANG OPTION

- A. No 1994 or newer gen 3 Mustangs will be allowed.
- B. Minimum weight, race ready with driver is 2300lbs
- C. Max left side percentage with driver and gear is 55% before, during, and after each event with zero tolerance.
- D. Weights and penalties may be adjusted at any time by RIVERSIDE SPEEDWAY in fairness of competition.
- E. Mustangs will be allowed to use cam with hydraulic lifters, max intake and exhaust valve lift not to exceed .442"
- F. The "WRC Automotive" front clip is approved for Mustangs, made of .083 tubing. All sway bars must remain in stock location.
- G. Plastic nose piece part number PN25005Rx and part number PN25005Lx for Mustangs are allowed.
- H. Five Star Manufactured body package part number 915-101S will be allowed. Must be used in its entirely.
- I. A Schoenfield header part number F238V will be allowed stock out of the box and must remain a 2" exhaust directly after header, No Exceptions.

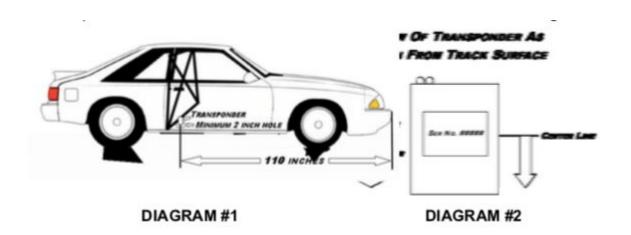
- J. Stock or OEM replacement pistons allowed for make and model k pistons part #KB217/KB217-010/KB217-020/KB217-030/KB217-040. Wiseco piston #K120A/K120A4 allowed.
- K. Boring of cylinders allowed to .040 max.
- L. Stock connecting rods allowed.
- M. Stock crankshafts only (no lightened or performance balanced cranks allowed).
- N. Any resurfacing of cylinder heads must have shim to bring back to tolerance. I.E. clean .010 from head .010 shim must be used.
- O. Minimum cylinder head deck height 3.760" measured from valve cover to rail to bottom of deck. .006" piston to engine block deck height. Any measurement below .006" must be compensated with proper shim or gasket. .055" minimum head gasket thickness. Cometic head gaskets allowed.
- P. Stock carburetor or fuel injection system only.

## THANK YOU FOR YOUR SUPPORT. ALL RULES WERE MADE FOR YOUR SAFETY FIRST AND A FUN, FAIR, RACING ENVIRONMENT FOR ALL.

#### Disclaimer:

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and, by participating in these events, all participants are deemed to have accepted and complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF OR COMPLIANCE WITH THESE RULES AND REGULATIONS. They are intended solely as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official. Any interpretation or deviation of these rules is left to the discretion of tech and the decision is final. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH DEVIATION OF SPECIFICATIONS.

# FORMULA FOUR TRANSPONDER MOUNTING LOCATION



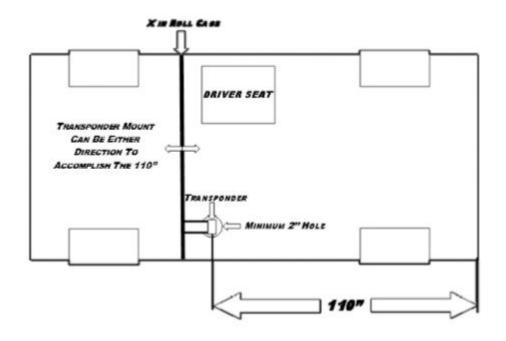


Diagram #3