### **KENT RACING Drag Racing: 2023 Technical Regulations**

### SECTION 1

STOCK-BODY VEHICLES, ALTERED-BODY VEHICLES, DRAGSTERS

SECTION 1A

PRO RACE, PRO MODIFIED, PRO STREET, SUPER STREET & STREET 7.00 seconds or slower

DESIGNATIONS PRO RACE 7: 7.00 to 7.99 PRO RACE 8: 8.00 to 8.99 PRO RACE 9: 9.00 to 9.99 PRO MODIFIED 10: 10.00 to 10.99 PRO MODIFIED 11: 11.00 to 11.99 PRO STREET 12: 12.00 to 12.99 PRO STREET 13: 13.00 to 13.99 SUPER STREET 14: 14.00 to 14.99 SUPER STREET 15: 15.00 to 15.99 STREET 16: 16.00 to slower

Any vehicle running faster than 135 mph (217.2 km/h) must meet minimum requirements for 9.99second vehicles. References in this section identify performance limits for various equipment and safety applications.

**REQUIREMENTS AND SPECIFICATIONS** 

#### **1 ENGINE**

1.1 ENGINE Only one internal-combustion reciprocating automotive-type, one motorcycle or one snowmobile engine permitted.

1.2 EXHAUST SYSTEM Competition exhaust permitted. Exhaust must be directed out of car, away from driver and fuel tank. See General Regulations 1.3.

1.3 FUEL Racing gasoline, unleaded gasoline, methanol, gasohol, diesel, ethanol, natural gas and propane permitted. Nitromethane prohibited.

1.4 FUEL SYSTEM All fuel tank filler necks located inside trunk must have filler neck vented to outside of body. Vented caps prohibited. All batteries, fuel lines, fuel pumps or filler necks located inside trunk require complete bulkhead of at least .024-inch (.6 mm) steel or .032-inch (.8 mm) aluminum to isolate driver compartment from trunk. Fuel lines must be located outside driver compartment. Fuel tanks must be within the confines of the body. See General Regulations 1.5.

1.5 INDUCTION Any induction permitted. All aftermarket OEM-type electronic fuel injection must be accepted by a KENT RACING Scrutineer.

Aftermarket water-methanol injection systems permitted. Must be installed and used as per manufacturer's instructions. Tank, pump, lines, etc. may not be mounted inside the driver compartment. When the injection system is located inside trunk, a complete bulkhead of at least .024- inch (0.6 mm) steel or .032-inch (0.8 mm) aluminum is required to isolate the driver compartment from trunk.

1.6 LIQUID OVERFLOW Catch-can mandatory for coolant overflow; one-pint (.47 l) minimum capacity. See General Regulations 1.7.

1.7 NITROUS OXIDE Commercially available nitrous oxide permitted, including supercharged and turbocharged engines. Nitrous bottle(s) in driver compartment must be equipped with a relief valve and vented outside of driver's compartment. Bottle(s) must be stamped with a CE or DOT-1800 pound (124 bar) rating and permanently mounted (no hose clamps or tie wraps). Hoses from bottle(s) to solenoid must be high pressure steel braided or FIA permitted hoses.

Commercially available, thermostatically controlled, blanket-type warmer accepted. Any other external heating of bottle(s) prohibited. See General Regulations 1.6.

1.8 OIL-RETENTION DEVICE All vehicles permitted to utilize a lower engine oil-retention device; may use a belly pan in lieu of device attached to the engine. If belly pan is used, must extend from frame rail to frame rail and extend forward to the harmonic balancer and rearward of the flywheel and must incorporate a minimum 2- inch-high (51 mm) lip on all sides. A non-flammable, oil- absorbent liner mandatory inside of retention device. See General Regulations 1.8.

1.9 SUPERCHARGER, TURBOCHARGER Permitted on gasoline, racing-gasoline, and methanol-burning cars. Supercharger restraint system meeting SFI Spec 14.1 mandatory on Roots type supercharger when methanol is used as a fuel. High

helix and screw-type supercharger permitted. Screw-type supercharger - manifold burst panel meeting SFI Spec 23.1 (in addition to panel in supercharger) plus restraint system meeting SFI Spec 14.21 mandatory. Supercharger restraint straps must be covered with a fire-resistant material. The blower restraint straps and fuel lines must be installed such that when the restraint straps are fully extended, no load is placed on any of the fuel lines. Any OEM street-type blower permitted, must be FIA- accepted. See General Regulations 1.10, 1.11.

1.10 VALVE COVERS Cast or fabricated metal valve covers, using all attachment bolt holes, mandatory on supercharged, methanol-burning cars.

## 2. DRIVE TRAIN

## 2.1 CLUTCH, FLYWHEEL, FLYWHEEL SHIELD

Flywheel and clutch meeting SFI Spec 1.1 or 1.2 (2-disc maximum) mandatory on any car running 11.00 or quicker. Flywheel shield meeting SFI Spec 6.1, 6.2, or 6.3 recommended on all cars running 11.00 or quicker. Cars with rotary engines running 11.00 or quicker must be equipped with a flywheel shield made of 1/4-inch (6.35 mm) minimum thickness steel plate surrounding the bell housing 360 degrees. See General Regulations 2.3, 2.5, 2.6, 2.10.

2.2 DRIVELINE OEM production line all-wheel-drive vehicles permitted. Driveshaft loop recommended on all cars running 13.99 or quicker and utilizing slicks. See General Regulations 2:4.

All full-bodied vehicles, where the OEM floor has been removed, each end of driveshaft must have round 360- degree driveshaft loops within 6 inches (152.4 mm) of U- joints. Additionally, driveshaft must be covered by 360-degree tube, covering the front U-joint and extending rearward a minimum 12 inches (304.8 mm). Minimum thickness of tube is .050-inch (1.27 mm) chrome moly or titanium. Driveshaft tube must utilize a minimum of four attachment points to the chassis, either bolted with minimum 5/16 (8 mm) SAE bolts or welded or 1/4-inch (6.35 mm) push/pull pins.

2.3 REAREND Aftermarket axles and axle-retention device recommended on any car running 10.99 or quicker or any car with locked differential. Cars running 10.99 or quicker that weigh more than 2,000 pounds (907 kg) and have independent rear suspension without upper and lower (both) control arms must replace swing axle rear end with conventional rear end housing assembly. (Example: 1963 through 1982 Corvette). Cars with independent rear suspension using upper and lower (both) control arms may

retain swing axle assembly, regardless of weight or e.t. Must have 360 degree, minimum 1-inch-wide by 1/4-inch thick (25.4 mm x 6.35 mm) axle retention loop on each axle. See General Regulations 2.11.

2.4 TRANSMISSION, Aftermarket Planetary Transmission shield meeting SFI Spec 4.1 mandatory on any supercharged or turbocharged vehicle, or any vehicle burning methanol or nitrous oxide, running 9.99 seconds or quicker and equipped with aftermarket planetary transmission. See General Regulations 2.12, 2.13.

2.5 TRANSMISSION, Automatic Spring-loaded, positive reverse lockout device and functional neutral safety switch mandatory. Transmission shield meeting SFI Spec 4.1 mandatory on any car running 10.99 or quicker or any car exceeding 135 mph (217.2 km/h). Automatic transmission flex plate meeting SFI Spec 29.1 and flex plate shield meeting SFI Spec 30.1 mandatory on cars running 9.99 or quicker or any car exceeding 135 mph (217.2 km/h). See General Regulations 2.12, 2.14.

# 3. BRAKES & SUSPENSION

3.1 BRAKES Four-wheel hydraulic brakes mandatory on any bodied car running 7.99 or quicker. Minimum two rear wheel (one caliper per wheel) hydraulic brakes mandatory on Dragsters, Funny Cars, and any car running slower than 8.00 (\*5.00) seconds. Dragsters running slower than 10.99 (\*6.99) with a total car weight of 1,000 pounds (454 kg) or less and a one piece rear axle may use a single brake rotor with dual calipers. See General Regulations 3.1.

3.2 STEERING See General Regulations 3.3, 4.1.

3.3 SUSPENSION, ALTEREDS, DRAGSTERS Full automotive-type front suspension mandatory. Rigid mounted rear axles permitted. Minimum one hydraulic shock absorber per sprung wheel. Suspension optional on cars weighing 2,350 pounds (1,066 kg) or less with 100-inch (2540 mm) or longer wheelbase. See General Regulations 3.2, 3.4, 3.5.

3.4 SUSPENSION, STOCK-BODIED CARS Full automotive-type suspension mandatory. Minimum one operating hydraulic shock absorber per wheel. Lightening of stock components prohibited. Rigid mounted suspensions prohibited. See General Regulations 3.2, 3.4, 3.5.

3.5 WHEELIE BARS Permitted. Wheels must be non-metallic. See General Regulations 3.6.

4. FRAME

4.1 BALLAST Permitted. See General Regulations 4.2.

4.2 DEFLECTOR PLATE Mandatory on rear-engine Dragsters. See General Regulations 4.3.

4.3 GROUND CLEARANCE Minimum 2-inches (51 mm) from front of car to 12-inches (304.8 mm) behind centerline of front axle, 2inches (51 mm) for remainder of car, except oil pan and headers. See General Regulations 4.5.

4.4 PARACHUTE Mandatory on any car with top speed in excess of 150 mph (241.4 km/h). See General Regulations 4.8.

4.5 ROLL BAR Roll bar recommended in cars (including T-tops) running 10.00 to 11.49, in convertibles running 10.00 to 13.49, and in all dune-buggy type vehicles running 12.00 seconds and slower. Permitted in all cars. See General Regulations 4.10, 10.6.

4.6 ROLL CAGE Roll cage mandatory in cars running 9.99 or quicker or any car exceeding 135 mph (217.2 km/h).

In convertibles running 10.99 or quicker or exceeding 135 mph (217.2 km/h), roll cage mandatory. Cars running between 7.50 and 9.99 must have chassis inspected every three-years by the ASN and have a serialized sticker affixed to cage before participation.

Street Roadsters must conform to SFI Spec 10.4.

Rear-engine dragsters must conform to SFI Spec 2.7B; 2.7C vehicles running 8.49 to 7.50 and/or exceeding 180 mph (286 km/h) must meet appropriate SFI Spec for body used. Plating of chassis prohibited for all cars manufactured after 1/1/2004. All others must conform to specs for body style used, as listed in General Regulations 4.11, 10.6.

4.7 ROLL-CAGE PADDING Roll-cage padding meeting FIA 8857-2001 or SFI Spec 45.1 mandatory on any vehicle running 9.99 and quicker. Padding must be used anywhere driver's helmet may come in contact with roll-cage components. See General Regulations 4.11, 10.6.

4.8 WHEELBASE Minimum 85-inches (2159 mm). Maximum wheelbase variation from left to right: 1-inch (25.4 mm). Dragsters: 2-inches (51 mm). Minimum front tread width: 26-inches (660.4 mm) on any Dragster.

# 5. TIRES & WHEELS

5.1 TIRES Racing slicks permitted. Minimum diameter of 13-inches (330 mm) on front tires of any dragster.

5.2 WHEELS Must be automotive-type wheels suitable for street use. Minimum wheel size: 13-inches (330 mm) (unless originally equipped with smaller wheels and vehicle is equipped with original engine). The thread engagement on all wheel studs to the lug nut, or lug bolt to wheel hubs, must be equivalent to or greater than the diameter of the stud. Length of the stud/bolt does not determine permissibility; length of the engagement between the stud and lug determines permissibility. Automotive-type wire wheels or motorcycle wheels permitted on front axle only of Dragsters weighing 1,800 pounds (816.5 kg) or less. See General Regulations 5.2.

## 6. INTERIOR

6.1 SEATS Properly braced, framed and supported seats constructed of aluminium, composite material, double layer poly or fiberglass (automotive accessory seats) permitted. See General Regulations 6.2.

6.2 SHEET METAL Driver compartment interior must be aluminum, steel, ASN- accepted carbon fiber, or fiberglass. Magnesium prohibited.

6.3 UPHOLSTERY Optional. See General Regulations 6.2.

6.4 WINDOW NET An SFI 27.1 window net is mandatory for any full-bodied car running 7.50 to 9.99 if not equipped with window glass or replacement material or if vehicle runs 135 mph (217.2 km/h) or faster. See General Regulations 6.3.

7. BODY

7.1 AIRFOIL, ALTEREDS, DRAGSTERS A positive-locking device mandatory on all aerofoils. Sidemount canard-type wings permitted. No part of wing may be within 6-inches (152.4 mm) of a tire. Front overhang may not project more than 30inches (762 mm) forward of front spindle.

7.2 AIRFOIL, BODIED VEHICLES Non-OEM aerofoils permitted, must be permanently attached to frame or roll cage, and non-adjustable during run.

## 7.3 BODY, ALTERED-BODY VEHICLES

May be chopped, channeled, sectioned, streamlined, etc. Sedan delivery, 1-ton max, trucks or sedan pickups (Ranchero, El Camino) permitted. Fiberglass bodies permitted. Door hinges on any lift-off door must have safety pins or locks.

7.4 BODY, DRAGSTERS Body and cowl must be constructed of metal, fiberglass, or composite material and extend forward to firewall. Driver compartment must be designed to prevent driver's body or limbs from making contact with wheels, tires, exhaust system or track surface should an incident occur. Subflooring independent of car body is mandatory in Dragsters which allow driver's legs to rest on bellypan or chassis. On front- engine cars, intake scoop may not extend more than 11- inches (279.4 mm) above height of carburettor top. Front wheel fairings prohibited.

7.5 BODY, STOCK-BODIED VEHICLES Must have full top and windshield. All full-bodied cars must have two driver exits. Four stock production fenders mandatory, fiberglass duplicates permitted.

Fenders may be trimmed for tire clearance; altered fenders must have edges re-rolled or beaded.

7.6 FIREWALL Mandatory. See General Regulations 6.1, 7.4.

7.7 FLOOR Mandatory. See General Regulations 6.1, 7.5.

7.8 HOOD Optional. Carburetors must be covered by flash shield or scoop. Hood scoop permitted. See General Regulations 4.1, 7.6.

7.9 WINDSHIELD, WINDOWS, ALTEREDS, DRAGSTERS Optional. Windscreen mandatory. See General Regulations 7.7, 7.8.

7.10 WINDSHIELD, WINDOWS, STOCK-BODIED VEHICLES

Mandatory, must be in good condition and free from cracks. May be replaced with shatterproof material, 1/8-inch (3.2 mm) minimum thickness. OEM windshield may not be cut for scoops, carb, etc. Windshield/window tint must meet the applicable government requirements. Windows must be closed during races, need not be operable. Decals permitted on rear quarter and rear window only. See General Regulations 7.8.

## 8. ELECTRICAL

8.1 BATTERIES must be securely mounted. See General Regulations 8.1.

8.3 IGNITION Timed ignition-interruption devices (stutter boxes) permitted. Starting-line and/or "highside" rev limiters permitted. Two-steps, Rev Limiters or any other rpm-limiting devices, permitted. See General Regulations 8.1, 8.3, 8.5. The wire to the trans brake (or line-loc) may contain a splice that activates the two-step/launch- control device in the ignition system.

8.5 MASTER CUTOFF Mandatory on any car with a battery running 9.99 or quicker, any car exceeding 135 mph (217.2 km/h) or on any car where the battery is relocated. See General Regulations 8.4.

8.6 TAIL LIGHTS One functional taillight mandatory. Flashing, blinking, or strobe lights prohibited. See General Regulations 8.6.

9. SUPPORT GROUP

9.1 COMPUTER Permitted. See General Regulations 9.1.

9.2 DATA RECORDER Permitted. See General Regulations 9.2.

9.3 FIRE-EXTINGUISHER SYSTEM Permitted; must be securely mounted. See General Regulations 9.3.

9.4 PUSH BAR Push bar must be designed to prevent push car from riding up on rear wheel of openwheeled race cars. See General Regulations 9.9.

9.5 TOW VEHICLES Permitted. See General Regulations 9.10.

9.6 WARM-UPS See General Regulations 9.4, 9.12.

10. DRIVER (ALSO REFER TO FIA INTERNATIONAL SPORTING CODE, APPENDIX L)

10.1 ARM RESTRAINTS Mandatory in open-bodied cars running 11.99 or quicker. See General Regulations 6.3, 10.3.

10.2 CREDENTIALS Valid Jamaican National Driver's License and/or JMMC Competition License mandatory. See General Regulations 10.4.

10.3 DRIVER RESTRAINT SYSTEM Seat belt mandatory in all cars. Driver restraint system meeting FIA 8853/98, SFI Spec 16.1 or 16.5 mandatory in any car running 9.99 or quicker, in convertibles running

13.49 or quicker, and Dune buggy type vehicles running 12.00 or slower. SFI 16.1 restraint system, when required, includes crotch strap, and must be updated at two-year intervals from date of manufacture. See General Regulations 10.5, 10.11.

10.4 HEAD PROTECTOR Mandatory on any car with a roll bar or roll cage. See General Regulations 10.6.

10.5 HELMET Drivers in all classes must wear a helmet meeting Snell 2005, 2010, 2015 or SFI 31.1A, 31,2A or 31.1/2005, 31.1/2010, 31.1/2015 Specs. Alternatively, any helmet in conformity with the current FIA Technical list n\*25 and not noted as being for Autocross only is accepted. See General Regulations 10.7.

10.6 NECK COLLAR Neck collar meeting SFI Spec 3.3 mandatory in all cars running 9.99 or quicker, or cars exceeding 135 mph (217.2 km/h). A head and neck restraint device/system may be used in lieu of a neck collar. If SFI Spec 3.3 neck collar is required and driver opts to use head and neck restraint system instead, then SFI Spec 3.3 head sock or SFI Spec 3.3 skirted helmet is mandatory. See General Regulations 10.8.

10.7 PROTECTIVE CLOTHING Full-length pants; short or long-sleeved shirt; closed shoes; and socks. No shorts. No tank tops.

No open-toe or open heel shoes or sandals. Synthetic clothing not recommended. See General Regulations 10.10.

9.99 to 7.50 or any vehicle exceeding 135 mph (217.2 km/h): Jacket and pants meeting SFI Spec 3.2A/5 and gloves meeting SFI Spec 3.3/1 mandatory.

All open-body vehicles running 11.99 or quicker: Gloves meeting SFI Spec 3.3/1 and arm restraints mandatory, except as noted above.

Dune-buggy or dune-buggy-type vehicles, 12.00 or slower: Jacket meeting SFI Spec 3.2A/1, gloves meeting SFI Spec 3.3/1, and arm restraints mandatory.

Any vehicle with an automatic transmission in driver compartment (no floor covering transmission): Jacket and pants or suit meeting SFI Spec 3.2A/15, gloves meeting SFI Spec 3.3/5, and boots or shoes meeting SFI Spec 3.3/5 mandatory.