## **ILLINOIS MIDGET RACING ASSOCIATION**



Updated 1-22-2015

**2015 CAR RULES AND SAFETY REGULATIONS** 

## **IMRA MIDGET LITE 2015 CAR RULES AND SAFETY REGULATIONS**

#### PREFACE

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of Illinois Midget Racing Association events and to establish the minimum acceptable requirements for such events. These rules will govern the condition of all events and by participating in these events all members are deemed to have complied with these rules. No expressed or implied warranty of safety will result from the publication of or compliance with these rules and/or regulations. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to participants, spectators or others.

The IMRA reserves the right to amend by addition or deletion any rule by notifying members, in writing or posting on the IMRA's official internet web site (imraracing.com). Rules involving safety may be imposed immediately and it is the responsibility of all participants to stay abreast of any and all rule changes. Rules governing car specifications may be amended at any time to ensure competitive racing. This is at the sole discretion of the IMRA officials.

Rules will be imposed as written. It is your responsibility to be familiar with all rules. IMRA official's decisions shall be final in all cases.

#### Definitions for terms below:

IMRA – Illinois Midget Racing Association Sanctioning Body

Event – All events incorporating qualifying, heat races, semi features and feature races that take place over the course of a specific period of time.

Race – A single event such as qualifying, heat races, semi feature or feature events that take place within an event.

### **Car and Safety Regulations**

#### 1. SAFETY

1.1 Approved aluminum seats must be used. No fiberglass or carbon fiber seats are allowed. Seats must be mounted with a minimum of four (4) bolts. Bolts must be a minimum 5/16 of an inch in diameter and have a minimum two (2) inch fender washer behind them against the face of the seat.

1.2 All cars must have a headrest of high impact, shock-absorbing material behind the driver's head.

1.3 Seat belts must meet SFI 16.5 or SFI 16.1 and be within three (3) years of the date of manufacture. SFI label must be affixed to belts.

1.4 Seat belts and seats must be installed and used in accordance with the manufacturer's instructions.

1.5 All participating drivers must wear safety helmets designed specifically for auto racing that meet or exceed the S2005, S2010, SA 2005 or SA 2010 Snell Foundation or SFI Foundation 31.1 specifications and are labeled as such. Helmets must be worn when the driver is in the car and the engine is running. Helmets will be subject to inspection by a representative of the IMRA.

1.6 All drivers must wear fire resistant underwear, socks, shoes, gloves and a one-piece uniform fitted snugly around the neck, wrists and ankles. These items must meet SFI Foundation Specifications 3.2A and 3.3. All safety equipment must be worn when the driver is in the car and the engine is running.

1.7 Arm restraints are mandatory and must be worn whenever the driver is in the car and the engine is running.

1.8 All cars must be fitted with roll cage nets on both the left and right sides of the roll cage. All roll cage nets must conform to SFI Specification 37.1, which specifies a functional quick release opening mechanism. The life of roll cage nets is recommended to not exceed three (3) years. Caution should be used when positioning head restraining nets to be certain that the driver's head cannot get under the net in case of an accident. The bottom of the roll cage net should be as close to the top of the shoulder as possible.

1.9 Roll cage nets are NOT be required if an IMRA approved full containment seat is used.

1.10 Roll cage padding conforming to SFI specification 45.1 is highly recommended on the four sides of the roll cage surrounding the driver's head.

1.11 A SFI approved head and neck restraint system is highly recommended.

1.12 A one-way radio is required and will be used at the discretion of the IMRA officials. The frequency will be announced prior to an event. No electronic one-way or two-way communication between the driver and anyone other than IMRA officials is allowed at any time.

1.13 All drivers must be 14 years or older at the time of competition.

1.14 Rookie drivers must meet the approval of IMRA officials prior to entering into their first IMRA event. A driver resume is required to be submitted to the IMRA for rookie drivers. All rookie drivers will start last in each race for at least three (3) events. Upon approval of IMRA officials the rookie driver may start in their earned starting position. Rookie status must be granted by IMRA officials in order to be considered for 'Rookie of the Year' honors. Determining a driver's rookie status is completely at the discretion of the IMRA officials and will be based on the driver's prior racing experience.

1.15 Rough driving will not be tolerated. Any contact initiated under a yellow flag condition will automatically result in a black flag and disqualification, of the initiating car and driver, from that race with no points earned. Rough driving under green flag conditions will result in a black flag for the driver who initiated contact. The driver who initiated contact will be scored last behind all other drivers including those that did not finish. Any driver who fails to honor a black flag for rough driving will automatically receive a three (3) event suspension from IMRA competition. At the discretion of the IMRA officials a fine may be imposed as well.

1.16 Any driver or IMRA member found to be under the influence of alcohol during an event will receive a six (6) event suspension.

1.17 Any driver or IMRA member found to be under the influence of illegal substances will have their IMRA membership revoked and will be banned for life from IMRA competition.

#### 2. CHASSIS AND BODY

2.1 Wheelbase for all cars must be at least 65 inches and no more than 72 inches.

2.2 Overall car and tread width must be no more than 65 inches. Tread width is measured with the car on the ground. The measurement will be taken from the outside of the right rear tire to the outside of the left rear tire.

2.2a Right front tire may not be out past the right rear tire at any time.

#### 2.3 Car and Driver Weight Rules

2.3a Driveshaft driven cars must weigh a minimum of 1,100 lbs., including water, oil, fuel with the driver seated in the car and race ready.

2.3b Chain driven cars must weigh a minimum of 925lbs., including water, oil, fuel, with the driver seated in the car and race ready.

2.3c Additional bolt on weight must be mounted and fastened to the frame and/or chassis in a secure manner. Weight must be mounted in an area between bottom frame rails, front and rear axles and no higher than mid rails at the cockpit. All weight must be mounted within the confines of the frame. NO BALLAST/WEIGHT IS ALLOWED IN NERF BARS, BUMPERS, OR FRONT AXLE. The use of weight or ballast is NOT RECOMMENDED unless absolutely necessary to meet the minimum required weight.

#### 2.4 All cars shall be rear drive only.

2.4a Driveshaft driven cars are limited to a maximum of one (1) inch engine offset, (two inches overall), from the chassis centerline as measured at the centerline of the crankshaft. Engine inclination is limited to forty-five degrees from vertical as measured form the vertical centerline of the cylinder bore.

2.4b Cars utilizing a chain driven rear axle must have the engine sit directly in front of the driver. The engine may be offset a maximum of six (6) inches as measured from the center of the engine to the center of the chassis.

2.5 V type engines are not permitted. Only inline four (4) cylinder engines are permitted. See section seven (7) for complete engine rules.

2.6 Only chain driven or driveshaft driven cars are allowed.

2.6a Torque tube type drivelines must use only one u-joint. The torque tube must be bolted directly to the face of the rear axle center section without any interruptions; the torque tube must be one solid piece. Torque tube hoop or strap is recommended.

2.6b Driveshafts must be steel and magnetic. No titanium or carbon fiber driveshafts are allowed. Titanium lower shafts in the rear end are allowed.

2.6c Chain driven cars must have the final drive come from the original counter shaft.

2.6d Metal chain guards are required for chain driven cars.

2.6aa Chains must be located within the frame rails. Chain guards must be designed in a manner to completely shield and protect the driver and fuel tank from the chain. The chain guard must be made out of stainless, mild steel, or aluminum.

2.6bb Chain guards must extend from the firewall to the rear of the sprocket on top and from the top of the chain to the floor pan. The guard must also extend from the firewall to the back of the seat on the side of the driver. Chain guards must be designed so as to not allow chains to damage or puncture the fuel tank in the event they become loose from the sprocket or engine.

2.7 Radius rods may not be attached within the confines of the cockpit.

2.8 The driver must be seated behind the engine.

2.9 Only standard type Midget Car bodies, tail tanks and hoods will be permitted.

2.10 The front part of the body, known as the nose assembly, shall not be wider than the parallel lines of the body and may not exceed the width of the frame. The nose assembly may not extend forward beyond the confines of the front bumper.

2.11 Any air deflector that is used to direct air for cooling must be completely inside the confines of the nose. The solid sides of the nose must cover the deflector and the deflector may not be movable.

2.12 The engine must be covered with a cowling or hood secured in place. The hood or cowling need not enclose the sides of the engine.

2.13 A forward facing scoop, or ducting, supplying "forced air induction" to the injection/carburetor inlets is not permitted.

2.14 Side panels covering the sides of the engine may not extend vertically any higher than any part of the hood covering the engine bay behind the front engine mount. A maximum overlap of two inches is allowed for proper fastening.

2.15 Side panels that include exit ducts may not extend more than five (5) inches from the frame rails and may not extend past the front engine plate. These ducts must start behind the front axle.

2.16 Right side cockpit body panels may be a maximum of thirty-six (36) inches high as measured from the bottom frame tube at rear motor plate and projected rearward twenty-three (23) inches. Right side cockpit opening must have a minimum opening of eight (8) inches vertical and twenty-three (23) inches horizontal.

2.17 Left side cockpit body panels may be a maximum of thirty-six (36) inches high as measured from the bottom frame tube at the motor plate and projected rearward twenty-three (23) inches.

2.18 Side visors on roll cage (body panel) will be allowed. They are limited to a maximum of eight (8) inches tall. The minimum right side opening must be twenty-three (23) inches horizontal and eight (8) inches vertical at any point. Left side visor may not be larger than right side visor. Visors that restrict driver's vision at the discretion of IMRA officials will not be permitted.

2.19 Sail panels may extend rearward to triangular bar at back of roll cage.

2.20 All paneling must not extend past edge of frame rails more than thickness of material.

2.21 One (1") inch turnout allowed on body and sail panel edges. No one (1") inch turn out is allowed on visors.

2.22 Only steel or aluminum floor (belly) pans are permitted. No carbon fiber, fiberglass or composite floor pans are allowed. The belly pan may not extend rearward past the leading edge of the rear axle and must be flat from side to side without any aerodynamic aids. Horizontal panels may not extend below the plane of the underpan or fuel tank.

2.23 Sun visors are limited to Seven (7) inches in length from top to bottom and may not be wider than the width of the cage; sun visors must be flat on both sides. For fan recognition, all teams are encouraged to place the driver's name on their visors in large letters.

2.24 Panels may NOT be attached to the nerf bars. Cars with engine air intake outside the confines of the chassis may attach a panel to the nerf bar in order to deflect mud/debris away from the air cleaner.

2.25 Airfoils, wings, spoilers or other aerodynamic appendages will not be permitted.

2.26 With the exception of suspension components, induction and/or exhaust systems and nerf bars, no accessory or component of the car may extend more than six (6) inches from the main frame tubes. Cylindrical oil tanks mounted outside the frame, behind the engine must be mounted as close to the frame as practical.

2.27 Rear view mirrors are not permitted.

2.28 Frame and/or chassis must be constructed of 4130 normalized tubing.

2.29 All cars must have a roll cage that is integral with the frame. It is recommended that the frame does not encroach upon an imaginary cylinder, 20 inches in diameter, extending through the top cockpit opening directly above the seat. The roll cage must extend four inches above the driver's helmet when seated in the driving position.

2.30 Roll Cage Construction

2.30a – The main uprights forming the roll cage must be a minimum of 1-3/8 inches O.D. x .095 wall thickness 4130 normalized tubing.

2.30b Chain driven cars with a chassis constructed before 1/1/13 - The main uprights forming the roll cage must be a minimum of 1-1/4 inches O.D. x .083 wall thickness 4130 normalized tubing.

2.31 No water or oil coolers are allowed to be placed above or beside the cockpit opening.

2.32 An effective firewall must be installed between the engine compartment and the cockpit. Firewalls must be as leak proof as practical. The motor plate must be made of aluminum or magnesium only.

2.33 Where applicable a driveline containment system, utilizing steel shield bolted to engine plate or containment blanket to cover torque ball and u-joint, is recommended to be used.

2.34 All cars must be equipped with a rear bumper at all times.

2.35 Front and rear bumpers must be constructed of magnetic and or stainless steel tubing with a minimum O.D. of 7/8 inch and having a minimum wall thickness of .065 inch and a maximum wall thickness of .120 inch.

2.36 All cars must have a tubular front bumper with a minimum O.D. of 3/4 inch extending forward not more than 21 inches from the leading edge of the front axle. Bumpers must be constructed so as not to cause a safety hazard.

2.37 The right nerf bar may not extend beyond the outside of the right rear tire.

2.38 Nerf bars must be constructed of magnetic and or stainless steel tubing having a maximum O.D. of one (1) inch and a minimum O.D. of 7/8 inch. Wall thickness is limited to a minimum of .065 inch and a maximum of .120 inch. A maximum of three horizontal and/or three vertical tubes are allowed in the construction of nerf bars.

2.39 No components or accessories may be attached to the nerf bar assembly with the exception of the exhaust system.

2.40 The car's axles connecting the wheels must be of one-piece tubular construction without the capability of camber or independent castor adjustment to the wheel assembly. Offset kingpin bushings are allowed.

2.41 Any other construction besides those meeting rule 2.40 will be considered as independent suspension.

2.42 All front axles must be constructed of SAE 4130 steel or a steel alloy equivalent in structural strength. Titanium front or rear axles are not permitted.

2.43 Throttle toe straps are mandatory. A minimum of two (2) return springs must be connected to the throttle and at least one of these must be connected to the butterfly shaft. Three (3) return springs are highly recommended.

2.44 When the throttle actuating mechanism is the cable type, the cable must be encased.

2.45 The throttle pedal must have a wide-open pedal stop.

2.46 All cars are recommended to utilize an emergency shut off switch in conjunction with the throttle return strap.

#### **3. FUEL TANKS**

3.1 Fuel tanks must be carried on the centerline of the chassis and must be mounted behind the driver.

3.1a For driveshaft driven cars a conventional midget style tail tank and bladder meeting SFI specification 28.2 is **required.** Maximum capacity for fuel tanks of this design is twenty-seven (27) gallons.

3.1b For chain driven cars fuel tank meeting SFI specification 28.1 is **required.** This tank must not protrude beyond the rear most cross member of the chassis. Maximum capacity for fuel tanks of this design is five (5) gallons. Cars utilizing this style tank must use a tail tank cover resembling a traditional midget style tail. All fuel tanks protruding past the rear most cross member must meet rule 3.1a.

3.2 There will be no minimum capacity of the fuel tank.

3.3 All fuel tanks must have a minimum of four mounts to the chassis.

3.4 Fuel tanks may not be mounted to the chassis utilizing any portion of the access plates or the nut plates bonded into the fuel bladder.

3.5 A protective cover may be used on the top of the tail tank providing it is no more than 9 inches in height, 12 inches in length and not wider than the top (head rest) of the tank.

#### **4. STEERING AND SUSPENSION**

4.1 Removable steering wheels incorporating a quick release mechanism conforming to SFI Specification 42.1 are mandatory. Pip pin type mechanisms are not allowed.

4.2 Welded aluminum or titanium suspension parts are prohibited with the exception of the jacobs ladder (Watts link).

4.3 A drag link strap is highly recommended.

4.4 No electronic weight, shock, sway bar or suspension item adjuster allowed.

#### 5. TIRES AND WHEELS

5.1 The number of allowable wheels is restricted to two (2) front wheels and two (2) rear wheels on each car.

5.2 The diameter of all wheels must be 13 inches.

5.3 Wheel width is limited to eight (8) inches for both front wheels.

5.4 Wheel widths

5.4a Driveshaft driven cars may use a maximum ten (10) inch width right rear wheel.

5.4b Chain driven cars may use a maximum twelve (12) inch width right rear wheel.

5.4c Wheel width is limited to ten (10) inches for the left rear on all cars.

5.5. An IMRA approved tire bead locking device must be used on the outer bead seat of the right rear tire and wheel assembly.

5.6 All wheels must be constructed of aluminum. Wheel centers may be aluminum or magnesium. No carbon fiber or other composite wheels or wheel centers are allowed. All wheels are subject to IMRA approval.

5.7 The use of full-face brake scoops and/or wheel covers on the inside of wheels is not allowed.

5.8 All bolts are mandatory in bead locks and wheel centers.

5.9 Any device(s) used for warming the tires prior to competition is prohibited.

5.10 Any solvents or chemicals applied to the tire that alter the chemical makeup of the compound or have the effect of altering tire durometer are prohibited.

5.11 Any tire that is found to deviate from the original factory specifications will be confiscated and a \$100 fine will be assessed to the car owner. The car and driver will also be disqualified from the race with a loss of points and all monies earned for the entire event.

5.12 The manufacturers, compounds and sizes listed below are the ONLY tires approved for competition in the IMRA:

A. Right Rear – Hoosier SP2, SP3, Focus or American Racer SD38, SD44 with a maximum tread width of 12 inches.

B. Left Rear – Hoosier D12, D15, Focus or American Racer SD33, SD38 compound with a maximum tread width of 10 inches.

C. Left and Right front – Must be Hoosier or American Racer with a maximum tread width of seven (7) inches.

#### 6. BRAKES

6.1 No electronic controlled brake bias adjuster. Manual brake bias adjusters are allowed.

6.2 Master cylinders not fixed to the frame must have flexible lines.

6.3 Carbon or carbon composite and titanium brake discs or brake components are not allowed.

6.4 When at any time during competition it becomes evident a car is without brakes, the necessary repairs must be completed before the car can continue in competition.

#### 7. ENGINES

7.1 The use of starters and a de-clutching device is optional on driveshaft driven cars but are mandatory on chain driven cars. When a declutching device is utilized by a driveshaft driven car, a neutral position in the final drive is required.

7.2 All engines must be normally aspirated, internal combustion, four cycle, reciprocating piston type, incorporating a maximum of four (4) cylinders. Engines must be production engines from a passenger car or motorcycle manufacturer and reasonably available in the United States. No engines may be used from motorcycles or passenger cars (automobiles) that have not been sold in the United States of America by an official authorized manufacturer dealership. No purpose built race engine blocks, race engine cylinder heads or race engine crankshafts are allowed. **No purpose built race engines are allowed** including but not limited to: **Esslinger, Toyota, Chevy, Mopar, SR-11, SESCO, Gaerte, Pontiac, Cosworth, Autocraft etc.** No Honda F20C, F22C1 or type R engines are allowed. All engines must be pre-approved by the IMRA before allowed in competition.

#### **A. Production Motorcycle Engines**

aa. All chain driven cars must utilize a production motorcycle engine. These engines are allowed a maximum displacement of 1003cc. Engines must be four (4) cylinder and inline.

All production motorcycle engines must have a clutch in place and it must be operational. The clutch basket and clutch spring tension can be changed. The transmission must be in the stock configuration. The engine must be able to be turned over in and shifted through all gears. Production motorcycle engines must use original manufacturer's OEM engine crankcase, cylinder jugs and/or engine block, OEM cylinder head and OEM crankshaft. Crankcase, cylinder jugs and/or engine blocks, cylinder heads and crankshafts must be from the same manufacturer. Lightening the engine block or cylinder head is limited to removing material for the express purpose of fitting the engine into the chassis. Lightening of the crankshaft beyond minimal material removal for balancing is NOT permitted. Welding on the cylinder head is NOT permitted. Porting of the cylinder head including intake matching is NOT permitted. Machining, grinding, sanding, or etching of any kind of the intake or exhaust ports is STRICTLY PROHIBITED. No altering of the shape and/or size of the intake and exhaust ports from original manufacturer specifications. No titanium connecting rods, titanium valves or titanium valve springs unless originally supplied from the original manufacturer.

B. Passenger Car Engines (Must be driveshaft driven)

aa. All driveshaft driven cars must use production passenger car engines and are allowed a maximum displacement of 2.4387 liters (148.82 CID). Engines must be four (4) cylinder, inline and have no more than four (4) valves per cylinder.

All production passenger car engines must use an original manufacturer's OEM engine block, OEM cylinder head and OEM crankshaft. The same combination that was standard out of the factory when new in the passenger vehicle must be used. Alterations to the OEM block and OEM cylinder head are limited to removing material for the express purpose of fitting the engine in the chassis only. Blocking and/or opening lubrication and coolant passages will be allowed. The crankshaft may be balanced, and oil passages may be chamfered. Lightening the crankshaft beyond minimal material removal for balancing is NOT permitted. Adding, removing, lightening, chamfering or "knife edging" crankshaft counterweights is strictly prohibited. Connecting rods, pistons, camshafts and valve springs, valve spring retainers and keepers may be replaced with aftermarket products, however valves, valve springs, valve spring retainers, keepers, and connecting rods made of titanium are NOT allowed. Aftermarket cam gears, sprockets, timing chains, timing belts may be used. All other STOCK OEM cylinder head components must be used. Welding on the cylinder head will NOT be permitted. Porting of the cylinder head including intake matching is NOT ALLOWED. Machining, grinding, sanding, or etching of the intake and/or exhaust ports is STRICTLY PROHIBITED. The OEM block may be honed or bored to obtain the maximum allowed displacement.

7.3 Any engine found to be outside of the prescribed rules in section 7.2, and 7.2 sub sections, will result in disqualification from the entire event and a loss of all points for the car owner for the entire season. The car owner will also forfeit all monies earned for the event. A one year suspension, from the date of the infraction, of the car owner will be enforced and a \$1,000 fine assessed. The car owner will not be permitted to enter a car until the fine is paid in full. The driver will forfeit all points and monies earned for the event only.

7.4 Complete engines and/or major components must be available in a reasonably sufficient supply to all competitors. This will be at the full discretion of IMRA officials.

7.5 The IMRA reserves the right to adjust rules or disallow any engine for competition, which in its judgment does not meet the spirit and intent of competitive racing, in regards to cost and/or performance. Any engines not covered by the preceding specifications must be submitted, in writing, for approval prior to entering competition.

7.6 The engine oil lubricating system may be of the dry sump or wet sump type.

7.7 Glycol-based coolant is not permitted.

#### <u>8. FUEL</u>

8.1 <u>Pure methanol with no additives is required for all driveshaft driven cars</u>. Methanol or gasoline are allowed for chain driven cars. No additives are allowed, including but not limited to, acetone, nitromethane, nitropropane, nitrous oxide, propylene oxide or any other oxygenating agents.

8.2 All fuel is subject to testing at any time. Any fuel that does not conform to IMRA standards, as administered at the track, will be considered illegal. The use of illegal fuel will result in disqualification from the entire event. No monies or points will be given to the driver or car owner. A three (3) race suspension of the offending car owner will be enforced.

#### 9. ELECTRONICS, IGNITION & FUEL SYSTEMS

9.1 All cars must be equipped with an ignition switch or emergency shut-off located within reach of the driver.

9.2 Engines must be equipped with a fuel shut-off device located within reach of the driver.

9.3 9.3 Traction control is prohibited. Any ignition system that comes with traction control must have the traction control function disabled. When using a system that has traction control capabilities you must notify the IMRA and have the system sealed before allowed in competition. All electronic components may be inspected or confiscated by the IMRA at any time. Any car found with unsealed electronics with using traction control capabilities will automatically be disqualified from that event with a loss of all monies and points earned for the driver and car owner. The maximum penalty for utilizing traction control is a one year suspension of the car owner from competition and loss of all car owner points earned for the season.

9.4 Variable valve timing (VVT, VTEC, etc) is allowed on driveshaft driven cars using the stock OEM intake manifold and throttle body. Variable valve timing is not permitted on chain driven cars. Driveshaft driven cars utilizing any fuel system other than the stock OEM intake manifold and throttle body must have variable valve timing disabled.

9.5 Electronic fuel injection, mechanical constant flow fuel injection or carburetors are allowed. When electronics are used to control the fuel system only the stock production OEM intake manifold and throttle body, <u>as supplied by the engine's original manufacturer</u>, may be used. Any system other than the stock OEM intake manifold and throttle body will be considered aftermarket. Substitutions of stock OEM throttle bodies to convert fly by wire throttle function to a mechanical throttle system must be pre-approved by the IMRA. Any substitution for the throttle body must be from the same OEM manufacturer and the same engine family (i.e. Ecotec for Ecotec or Honda K series for Honda K series and so on). Electronic controls may not be used to control any aftermarket fuel systems. All fuel systems must be pre-approved by the IMRA

9.5a Driveshaft driven cars utilizing mechanical constant flow fuel injection or carbureted fuel systems must use one of the following approved ignition systems:

- 1. MSD Midget DIS-2 Programmable Ignition (Part #6214)
- 2. Electromotive XDI

# 9.5b Driveshaft driven cars utilizing electronically controlled fuel injection must use the following ECU/Ignition system:

#### **Electromotive TECs**

a. The following sensors will be allowed when using the TECs system; throttle position sensor, fuel pressure, engine temp and MAP sensor.

9.5c Chain driven cars must use one of the following ECU/Ignition systems:

- 1. Stock production OEM ignition and ECU system as supplied by the engine's original manufacturer
- 2. Stock OEM ignition and ECU system with Guhl programming, otherwise known as "reflashing."
- 3. Dynojet Power Commander V Ignition and Fuel Injection Module
- 4. Odum Specialties IG Controller (Optional Throttle Positioning Sensor is allowed)

9.6 The use of electronic logic processors of any type to control any function of the race car suspension and/or any system for gathering continuous data from any function of the suspension are strictly prohibited. The use of electronic logic processors to record continuous data from the race car are limited to functions of approved ignition systems and wireless systems housed in a single unit, independent of any other device, and unable to transmit to or from any other device while on-track. (Examples of approved devices include onboard cameras, lap timers, etc)

#### 10. EXHAUST

- 10.1 Exhaust system tail pipe(s) must not be any wider than the nerf bar.
- 10.2 All cars are required to have a muffler at all IMRA events.