

## **SECTION – 9 LEGEND CARS DIVISION – 2021**

Note: These rules have been reproduced from the INEX Rulebook. Every effort has been made to ensure their accuracy. If there is any discrepancy between these rules and the Official INEX Rulebook, the Official INEX Rulebook will apply.

**NO METALLIC OR HOLOGRAPHIC NUMBERS WILL BE ALLOWED.** No Roman Numerals allowed. If there are double numbers a letter will be issued to you by the track to go with your number. If a letter is required with the car number, the letter must be at least fifty percent (50%) of the height of the number. **IT IS THE RESPONSIBILITY OF THE DRIVER TO ENSURE THAT THE SCORERS CAN READ THE CAR NUMBER. IF YOUR CAR NUMBER IS NOT READABLE FROM THE SCORING TOWER, THE CAR WILL NOT BE SCORED UNTIL THE NUMBER IS CORRECTED.**

Beaver Dam reserves the right to restrict the display of graphics and advertising on race cars. Offensive graphics or slogans are not permitted. All Competitors agree to accept Beaver Dam's decision in this matter.

Where required, participating sponsor's emblems, or decals will be placed in the position designated by Beaver Dam Officials. Cars that do not display all sponsors emblems, or decals, will receive less prize money.

All cars in competition are required to have a working Westhold transponder (silver side facing the track). The transponder must be placed on the rear crossmember. The transponder pouch should be placed horizontally, with a clear view to the ground. If the transponder pouch is mounted to round tube frame components with nylon ties, the transponder pouch should be secured so that it cannot spin from its horizontal position. Failure to comply with transponder requirements will result in a penalty. Penalties will be imposed in accordance with **SECTION 4 - PENALTIES**. No switches permitted on transponder power supply.

### **9.1 DIVISION STRUCTURE**

**The minimum age for Legends competition is fourteen (14). The minimum age for legends drivers is 14 at Beaver Dam Raceway unless the drivers meets the following requirements. drivers must be twelve years old on January 1 ,2021. Drivers must have a valid INEX legends approved license. Driver must demonstrate a minimum of six completed INEX sanctioned events at other racetracks. The driver must meet the approval of the Beaver Dam track staff. The driver will be required to start all events from the rear until the track staff allows the driver to begin the race from their regularly assigned starting position. INEX's approval alone for younger drivers is not acceptable. All drivers must have a current INEX license number or acquire a temporary INEX license to compete in this division. Drivers must have a valid INEX legends approved license and present the INEX member number at pit sign in. If a driver does not have a valid INEX number, they are required to complete a temporary INEX license application and pay appropriate INEX fee before signing in.**

### **9.1.1 Pro (Expert Class)**

Designed for experienced drivers. Driver must have competed in some other form of professional motorsports or have competed in the “Semi-Pro” or “Masters” division in the Legends Cars Series in order to race in this division. This is the pinnacle class of Legends Cars racing and will be treated as such. **Approval to compete in this class will be the decision of the INEX Director.**

### **9.1.2 Masters**

The Masters division will feature only drivers 40 years old and over.

### **9.1.3 Semi-Pro (Novice Class)**

Designed for drivers who are starting out in Legends racing. No prior experience is necessary, but beginners may be required to compete in consolation, B Mains, and/or start in the rear of the field. The decision to put a driver to the rear will be at the discretion of the race director.

### **9.1.4 Additional Awards/Recognitions**

#### **9.1.4.1 Young Lions**

Designed for drivers ages 12 - 16 years of age (drivers who are under 16 on or after January 1, 2021) are eligible for Young Lions awards throughout the 2021 racing season. Beaver Dam raceway does not allow drivers under the age of 14, unless the driver meets all the Beaver Dam Raceway requirements stated in section 9.1. Any driver under 16 years of age must receive **approval** to compete from the speedway's promoter/owner prior to the race in order to be eligible to race at that track. The speedway promoter/owner's decision is FINAL. INEX has no authority in this matter. Young Lions are Semi-Pro drivers; however, they will be awarded points separately towards their Young Lions standings. All Young Lions will be responsible to inform the racetrack of their Young Lions eligibility for reporting purpose. Any race that is held for Young Lion competitors only will be given points based on the “B” main points schedule. Bonus points for Young Lions will be awarded as follows:

First place overall in main event with all Semi-Pro drivers - 3 points.

First place overall in main event with Pro, Masters, and Semi-Pro combined - 5 points. This applies to national points only, not track points.

#### **9.1.4.2 Golden Masters**

Designed for drivers over 60 as of January 1, 2021. A Golden Star on their fender designates these drivers. They will be recognized by their Masters' Point Standings.

#### **9.1.4.3 Miscellaneous about Divisions**

Any points accumulated during the season will not be transferred if a driver changes division during the season.

**Any driver desiring to change divisions must first receive approval from INEX in writing.** Drivers wishing to move down in status must show proof that they are not properly classified. **INEX reserves the right to place any driver into a different division (up or down) at its own discretion at any time.**

Running separated divisions in separate races will be at the Promotes discretion depending on the car count at that speedway and the time schedule. A driver may only compete in one division if the event offers separate divisions (Pro, Masters, Semi-Pro) or any combination thereof.

## 9.2 SAFETY EQUIPMENT

No express or implied warranty of safety shall result from publication of, or compliance with these rules and 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. Whenever there is a conflict between a safety provision provided herein and any other rule, the safety provision shall take precedence.

### 9.2.1 Helmet

INEX requires that all drivers must wear a racing type helmet of current standards of '95 Snell "SA" rating or later any time he/she is on the track for slow laps, practice or racing conditions. Snell "M" rated helmets will not be allowed. Drivers without a helmet meeting the above minimum Snell standards will not be permitted on the racetrack in a Legends Car. A helmet is designed to absorb energy once. If a significant impact has occurred to the helmet, it is highly recommended that it be sent back to the manufacturer for evaluation. Helmets are subject to inspection at each event by the technical inspector or other official. A full-face helmet is highly recommended. **Beaver Dam requires that all Legends drivers must wear a full-face racing helmet and face shield meeting Snell SA2015", SA2020 or SFI 41.1/rating, or later (newer and rated safer for auto racing).**

#### 9.2.1.1 Helmets with Radio Harnesses

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Many INEX drivers compete in other racing series' that permit the use of radios. If a driver should use that helmet to compete in an INEX-sanctioned event, he/she must duct tape the connector end to the back of their helmet. This is the only way in which this helmet will be permitted without actually removing the entire radio harness from the helmet. Radio wiring harnesses are not allowed in any Legends Car. Radio ear plugs will be prohibited. A Raceceiver will be used only at tracks that mandate them. **Beaver Dam requires that all Legends cars be equipped with a functioning Raceceiver model SW1600 tuned to channel 250 (453.1125)** Failure to comply with Raceceiver requirements will result in a penalty. Penalties will be imposed in accordance with **SECTION 4 - PENALTIES**.

### 9.2.2 Fire Suits

All drivers must wear a fire-retardant suit of Nomex or equivalent material any time they are on the track. A double layer or more is highly recommended. Fire suits must be labeled flame retardant (made of flame-retardant materials or have a S.F.I. patch). Damaged suits may be disallowed by the inspector. **Fire retardant head sock required if not wearing a neck collar at Beaver Dam.**

### 9.2.3 Safety Harness

All cars must have an INEX approved type of five- or six-point racing harness that is equipped with a quick release buckle. Be sure to regularly check your safety belts for damage such as fraying, tearing, etc. If this should occur, the safety belts should be replaced immediately. An INEX inspector may require replacement of the belts if they are damaged. INEX endorses the belt manufacturer's recommendation that the belts be changed two (2) years after the date stamped on the SFI tag regardless of the number of times the car has been raced. The safety belts are similar to a helmet, in that they are designed for protection in only one major impact. If you have had a significant incident, the manufacturer strongly recommends immediate replacement of the belts. Also, make absolutely sure that your safety harness is totally secured and that you have pulled the straps as tight as possible anytime you drive the car. **Beaver Dam requires that all Legends cars have safety harnesses dated 2019, 2020, or 2021 or as the manufacture's listed expiration date.**

## 9.2.4 Fire Extinguishers

An on-board fire extinguisher is highly recommended for your safety. All fire systems must be operational.

## 9.2.5 Seats

Only INEX-approved factory-manufactured metal seats may be used. No homemade seats will be permitted. Lightening the seat by anyone else other than the factory is not permitted. Lumbar supports are highly recommended.

### 9.2.5.1 Mounting of the Seat in a Legends Car

The seat may be moved within the driver's compartment without moving or changing existing bars in the frame. The seat may be mounted directly to the floor pan. When mounting the seat forward, use a flat piece of steel or aluminum behind the seat (don't just use bolts in tubing). The use of wood as supports, or mounting brackets is not permitted. The presiding tech inspector shall have final approval of the mounting of the seat. Carriage bolts are not allowed for seat mounting.

**9.2.6 INEX Approved Head and Neck Restraint Systems (Hutchins, HANS, D-Cell, G-Force, Safety Solutions R-3, or any INEX/ Beaver Dam approved equivalent) are Mandatory for All Drivers. Tethers for head and neck restraint systems must not be more than 5 years old from date of manufacture.**

## 9.2.7 Other Suggested Safety Equipment

These items are **not required**, but they are all **highly recommended**. (An individual track or promoter may require some of these items).

- 1) Flame retardant underwear, socks, gloves, and shoes. **Beaver Dam requires this equipment.**
- 2) Head sock (balaclava). **Beaver Dam requires head sock if not wearing a neck collar.**
- 3) Steering wheel pad roll cage padding, and knee pads. SFI rated padding required within 12-inches of the driver's helmet. No non SFI rated padding permitted. **Beaver Dam requires this equipment.**
- 4) Arm restraints and helmet supports on the seat.
- 5) Interior door pads, tunnel pads and door pads. **Beaver Dam requires this equipment.**

Upon entering a Legends Car for competition any car may be checked for engine, chassis, oil, fuel, tires, wheels, rear ends or sound legality at any time by an INEX official or representative. *Upon entering a Legends Car for INEX sanctioned competition, the driver (and possibly the owner) is responsible for the legality of their car and will suffer all penalties resulting with the Legends Car violating these rules.* **Refusal to submit a car, engine or parts for inspection or measurement upon the request of an INEX tech inspector in a timely manner will result in an immediate disqualification and may lead to a minimum two week suspension for car owner, car and driver. A greater or lesser penalty may be applied at the discretion of the tech staff.**

No equipment or racecar will be considered as having been approved by reason of having passed through inspection **"unobserved."** Regardless of a Legends Car passing prior inspections, compliance with all rules must be made at each post-race inspection. *No expressed or implied warranty of safety shall result from the technical inspection or approval.*

*If this rulebook does not specifically say that you can change/modify/add something, then you must consider that the change/modification/addition is illegal.* Any questions about the legality of a change/modification/addition not covered in this rulebook, must be answered by INEX in writing and

presented to the tech inspector upon request. If you have a request for a change/modification/addition, please contact INEX before making the change/modification/addition.

**Enforcement of Specification Rules:** All INEX-approved weighing, measuring and testing devices used by the INEX tech officials are the standards, which will determine compliance with the rules and regulations. A competitor's equipment, gauge or instrument, unless approved by the INEX inspector will have no bearing on the enforcement of these rules.

## **9.3 FRAMES, BODY, SUSPENSION, ETC.**

### **9.3.1 Aerodynamics**

Spoilers, air dams or other aerodynamic devices are not permitted.

### **9.3.2 Air Filters**

Only INEX-approved air filters and Outerwear Pre-Filters coverings are permitted. Air filters may not have an element more than 3" in height (bottom of filter element to the top). Velocity/ram stacks are not permitted. No air filters that direct airflow to the carburetors or increase airflow are permitted (including those with molded ram stacks). Air filters constructed with fiberglass parts are not permitted.

### **9.3.3 Alternators**

Modification to the charging system is not permitted. The alternator must be charging at all times. No switches disconnecting the alternator are permitted.

### **9.3.4 Ball Joints**

The upper and lower ball joints must remain stock, within the stock dimensions, steel thickness, location and configurations as currently delivered by 600 Racing, Inc. and may not be reinforced in any way. One or two (minimum 1/4", maximum 7/16" width) jam nuts are permitted on the upper and lower ball joints. Each ball joint must use at least one jam nut. The jam nuts may not be welded to the control arms.

#### **9.3.5.1 Ballast**

A maximum of eight (8) blocks of lead are permitted. The blocks may be no larger than 1-1/2" x 2-1/2" x 12" and the stacking of blocks is illegal. **Two blocks of lead may not be in contact with each other.** All lead must be clearly visible with white or neon paint/tape and marked with the car number. Ballast must be lead only and may not be added by any other method, including steel shot or any other material in the frame rails, bumpers, nerf bars or any other component.

#### **9.3.5.2 Mounting Ballast**

The blocks must be bolted directly to the frame and must be secured with a minimum of two (2) 3/8" bolts. Lead may be bolted to the square tubing of the sub-frame (1" x 2" tubing only), not the roll cage. The blocks may not be encased in any way. There must be a minimum of 3 1/2" inches of clearance between all lead weights and level ground. Ballast may not extend past the

frame rail in the front or rear. Ballast may not be placed anywhere inside the driver's compartment. No ballast may be bolted to the running board or its mounting brackets. Ballast may not extend beyond 2 ½" from the side of the frame. All mounting of the ballast is subject to final approval by the INEX technical inspector.

### **9.3.6 Battery**

Only a lead acid or gel cell battery (25lbs. min.) may be used. The approximate dimensions are 71/8" x 8 x 61/2". A top post or side post battery may be used. Motorcycle batteries may not be used. The battery must remain in its stock location and securely mounted. The original stock battery bracket may not be altered in any way. A battery box, terminal coverings or rubber padding around rear end is also highly recommended. A battery shut-off switch is optional.

### **9.3.7 Bolts and Fasteners**

Only equivalent stock or upgraded steel fasteners and bolts may be used on the Legends Car. Fasteners may be drilled for safety wire but intentional weight saving modifications are not permitted. All bolts must be magnetic, aluminum and titanium bolts are illegal.

### **9.3.8 Brakes**

Any of the brake parts that are attached to the rear end or the spindles must remain stock, within the stock dimensions, steel thickness, location and configurations as currently delivered by 600 Racing, Inc. The car must have operational brakes on all four wheels and must lock up all four wheels during inspections (Brake lines may not be plugged or completely shut off). *Any type of cooling duct to the brakes is prohibited.* The right or left side brake pedal may be removed. Aftermarket brake pads or shoes are permitted.

#### **9.3.8.1 Brake Rotors**

Only steel rotors (not drilled or reduced in diameter) are permitted on the front. The minimum permitted thickness of the brake rotor is 8mm wide.

#### **9.3.8.2 Brake Drums**

Only steel drums (not drilled or lightened) are permitted on the rear. The minimum weight of the brake drum is 10.0 lb. Intentional metal removal of the brake drum for lightening purposes is considered illegal.

#### **9.3.8.3 Brake & Clutch Lines**

Rubber or steel-braided brake and clutch lines are permitted. No brake lines may be disconnected or plugged at any time for competition.

#### **9.3.8.4 Brake Master Cylinder**

The brake master cylinder must remain stock, within the stock dimensions, location and configurations as currently delivered by 600 Racing, Inc. The brake master cylinder must remain on the engine side of the firewall. No aftermarket brake master cylinders are permitted. Aftermarket remote reservoirs are permitted.

### 9.3.8.5 Brake Proportion Valves

Any number of aftermarket brake proportion valves for the brakes are permitted, but complete elimination of the brake at any wheel is prohibited. As of June 1, 2008, only one twist or lever type brake valve will be permitted. No residual valves will be allowed.

### 9.3.9 Bump Steer

Adjustments to bump steer settings will only be permitted by placing spacers between the steering rack and the heim ends of the tie rods or between the front spindle pickup points and the heim ends of the tie rods. No other modifications to adjust bump steer such as changing the height of the steering rack or modifying the spindles are permitted.

### 9.3.10 Bumpers

#### 9.3.10.1 Front Bumper

The front bumper must remain within the stock dimensions, steel thickness, location and configurations as currently delivered by 600 Racing, Inc. and may not be reinforced in any way, except for adding one (1) additional bolt per front and/or rear frame rail to the tab.

#### 9.3.10.2 Rear Bumper

The rear bumper must remain within the stock dimensions, steel thickness, location and configurations as currently delivered by 600 Racing, Inc. The rear bumper may be reinforced by attaching tubular steel from the bumper to the rear frame horns at any point behind the rear end and/or adding one (1) additional bolt per frame rail to the tab. If reinforced, the steel tubing may not extend beyond the outside width of the rear fenders or attach to the rear crossmember of the frame and may be no longer than twelve (12") inches.

#### 9.3.10.3 Attachment of the Bumper

Bumper tabs must use a minimum of one bolt per tab securing the bumper. There must be a minimum of 1" from the end of the frame rail to the back of the bumper upright before a race begins. Should the tab become bent during a race, it must be fixed before the next time the car goes on the track to compete or practice. **Tie-wraps, safety wire, duct tape, etc., are not permitted to secure the front or rear bumpers at any time.** Duct taping a smaller bolt in place is not an approved fastener at Beaver Dam.

#### 9.3.10.4 Bumper Tabs

The bumper tabs must be stock as delivered by 600 Racing, Inc. and may not exceed 1/8" (.125") in thickness. Thicker tabs other than stock on the front or rear bumper may result in a one-year driver and owner suspension. ***Tabs with excessive weld may be considered illegal.***

#### ***Mandatory Race Procedure Concerning Bumpers***

If a bumper comes completely off the car or has any part of it touching the ground, or is in a dangerous position, that car may be black flagged by the track officials and removed from the race. The INEX technical inspector does not have the authority to disqualify a driver after the race for a violation of this race procedure. At Beaver Dam Raceway the tech inspector may disqualify a car for this violation at any time.

## **Repairing a Bumper During a Race**

Bumpers must be bolted on. Tie-wraps, safety wire, duct tape, etc., are not permitted to repair the front or rear bumpers at any time. An INEX technical inspector will disqualify a driver after a race if the repaired bumper violates this rule. Quick pins, or any fastener not utilizing a bolt and threaded boss, or nut are not approved for mounting of bumpers. Duct taping a smaller bolt in place is not an approved fastener at Beaver Dam.

### **9.3.11 Carburetors**

The carburetors and components of the carburetors must remain as stock Yamaha FJ1200/XJ1200/XJR1250 (sealed) as currently delivered by 600 Racing, Inc. Only carburetor jets, needles, slide springs and butterfly screws (butterfly screws may only be replaced with 3m. x 6m. allen head screws or stock screws. These screws may not be altered in any way other than “stamping” the end to secure the screw.) may be replaced and all stock adjusters may be used. No other modifications to the carburetors or components of the carburetors are permitted. Modifications or components to increase or restrict airflow or fuel flow (such as velocity stacks, heat deflector shields, internal modifications not listed above, etc.) are not permitted.

### **9.3.12 Chrome Plating/Polishing**

Parts such as bumpers, nerf bars, suspension components and valve/cam cover may be chrome plated or polished.

### **9.3.13 Clutch Master Cylinder**

The clutch master cylinder must remain stock, within the stock dimensions, location and configurations as currently delivered by 600 Racing, Inc. The clutch master cylinder and reservoir must remain on the engine side of the firewall. No aftermarket clutch master cylinders are permitted. The clutch pedal may be shortened for driver comfort.

### **9.3.14 Contingency Sponsor Decals**

Contingency sponsor decals are optional, however contingency decals are mandatory and /or use of the product to be eligible for posted awards sponsored by the contingency sponsor.

### **9.3.15 Door Plates**

Doorplates on driver’s side door are mandatory. Doorplates and strike plates must meet current factory specifications. Please refer to the drawings in the APPENDIX. These door plates (as described) are permitted on the right side of the car. A competitor may use a doorplate covering the entire door area on either side of the car as long as it is only 1/8” thick.

### **9.3.16 Driveshaft**

The driveshaft, flanges, and u-joints must remain within the stock dimensions, steel thickness, location and configurations as currently delivered by 600 Racing, Inc. Lightening the driveshaft in any way is illegal. Driveshaft must be painted white or light gray.

#### **9.3.16.1 Driveshaft retainers**

An INEX-approved driveshaft retainer strap is permitted. A maximum of three (3) retainers of 1/4” thickness and 3/4” width is permitted. Requests for additional retainers for the driveshaft must be sent to and approved in writing by INEX.

### **9.3.17 Engine Coatings**

Only coatings as delivered stock from the factory are permitted throughout the engine. Intentional removal of any coatings is not permitted. Headers may be painted with high heat paint only. (Header wrap tape is ok.)

### **9.3.18 Engine Cooling**

An extra fan(s), internal duct work (approved by INEX), hood louvers, remote oil filter, header wrap, holes in the hood, holes in the front fenders and/or oil cooler(s) are permitted. The maximum height for louvers is 3/8". The size of the area for louvers or holes in the hood may not exceed 54 square inches (9" x 6").

### **9.3.19 Engine Serial Numbers**

All engine casings must have a serial number. Any engine casing without a serial number will not be permitted to be used in any INEX-sanctioned events.

### **9.3.20 Engine Location & Mounts**

Left and right-side engine mounts must remain within the stock dimensions, steel thickness (no aluminum mounts), location and configurations as currently delivered by 600 Racing, Inc. The right-side motor mount may be replaced with the optional motor mount as delivered by 600 Racing, Inc. (if the optional right-side mount is used, you may remove the stock right side mounting tabs). The engine mounts must be bolted on to the frame as specified by 600 Racing, Inc. *Mounts may not be welded directly to the frame.*

### **9.3.21 Exhaust System**

The header and gasket must remain within the stock dimensions, steel thickness, location and configurations of the original, as currently delivered by 600 Racing, Inc. The internal components of the header may not be altered. Borla and S&S exhaust systems (approved by INEX and delivered by 600 Racing, Inc.) are also permitted as currently delivered through 600 Racing, Inc. Header wrapping (tape) is acceptable. Ceramic coatings are not permitted.

### **9.3.22 Fender Mounting**

Stock fender mounts may not be altered from the original (i.e. moving the inside of the fender away from the grill). No additional fender supports, or mounts are permitted (only stock mounts may be used). All Ford style grills must use the inner mounting hole (closest to the grill). Dzus buttons may be used for fender removal purposes. Cars that use a fiberglass grill shell may remove the original fender brackets.

#### **9.3.22.1 Area under the Rear Fenders**

Removal of the fiberglass on the body half under the rear fenders is permitted for easier access to the shocks, springs and rear compartment as long as it is still in the spirit of the General Appearance Rule (**Section 9.3.37**).

### **9.3.23 Fender Holes and Trimming**

The trimming and holes that are permitted are as follows:

### **9.3.23.1 Holes**

Ten (10) round holes maximum per fender. These holes may not be any larger than four (4) inches in diameter maximum (Note: a four-inch hole saw will produce a hole larger than four inches). Any shaped hole equal to the area of a 4" round hole is acceptable.

### **9.3.23.2 Trimming**

The only trimming allowed on the inside edge of the fender will be for engine clearance (air breathers, header, etc.) this trimming must be done 16" above the frame rail on the front clip along the contour of the fender and may only be trimmed in 3" from the edge. The inside of the fenders near the grille, the edge of the fenders near the body shell, and the bottom edge of the front of the fender may not be trimmed.

### **9.2.23.3 Rear Fenders**

Rear fenders may be trimmed above the tire for additional clearance. The rear fender contour must measure at least ten (10) (Rear fenders for competitors using the American Racer tire must measure at least 9") inches from the main body shell. Measurements will be taken at the point on either rear fender above top dead center of the tire. No holes are permitted in the rear fenders or body shell.

### **9.3.24 Fiberglass Components**

All fiberglass components must remain within the stock dimensions, thickness, location and configurations as currently delivered by 600 Racing, Inc. and may not be reinforced or intentionally lightened in any way. The use of a complete front end (Matching hood, fenders, grill and grill shell) on a different model car is acceptable. It must be complete with all listed components from the same model. All fiberglass components must be mounted in the as delivered by INEX locations. Cars must start the night/event with all fiberglass components installed in their correct positions. Any car not meeting these requirements must report the deficiency to the competition director and at his discretion be allowed to enter subsequent events

#### **9.3.24.1 Mounting of Components**

All fiberglass body components must be firmly attached to every Legends Car competing in any race. Any Legends Car may be black flagged or denied entry to start a race if any of the aforementioned items are not attached unless prior approval is given by the INEX technical inspector. Removal of undamaged fiberglass components (hood, decklid, etc.) during an event is not allowed.

### **9.3.25 Firewall**

A metal firewall is mandatory. Firewall must be installed as currently delivered by 600 Racing. Using a "thicker than stock" metal firewall separating the drivers compartment from the engine compartment is OK.

### **9.3.26 Frame**

Absolutely no modifications of the frame (including roll cage) will be permitted unless otherwise noted in this rulebook. Any other requested chassis modifications or unusual repairs are only permitted with a letter from INEX. All frames must have I.D. plate secured on the frame, inside left main frame rail.

**Frame Update - As of January 1, 2000, all Legends Cars frames (coupes and sedans) with an 0.065" E.R.W. main roll cage will no longer be eligible for competition in the INEX Legends Cars Series.** All frames must be replaced with a 0.083" D.O.M. main roll cage frame. It is estimated that all frames produced before August 1995 do not meet the above 0.083" D.O.M. Requirements.

#### **9.3.26.1 Registration of a Legends Car**

For more information about the titling, transferring ownership and registration of a Legends Car, please contact the titling department of 600 Racing, Inc. at (704) 455-3896.

#### **9.3.26.2 Serial number plates**

All cars & frames running as Legends Cars must be produced by 600 Racing Inc. All cars must carry the serial number assigned to that frame. This plate shall not be tampered with in any way. For any reason, the car owner must also be able to produce the title for the car within 48 hours after a request by an INEX technical official or that car will be ineligible for any competition.

#### **9.3.26.3 Mandatory "Left Side" Bar in the rear**

A mandatory bar (left rear) must be added to every Legends Cars frame (both coupes and sedans). The material used for this bar is (1"x 1 1/2" x 0.120" wall). The length for the sedan is 14 3/4" and the coupe is 13 1/2" (with an angle at the one end). The distance this bar should be from the B-Pillar (see diagram on page 97 of the APPENDIX) is 25".

#### **9.3.26.4 Metal Fatigue**

It is highly recommended to have the frame checked periodically by an expert for metal fatigue. Cracked or broken frames are strictly prohibited from any INEX-sanctioned events.

#### **9.3.26.5 Suicide Doors**

Doors with the latch on the A-Pillar and hinges on the B-Pillar rather than the traditional method of the latch on the B-Pillar and the hinges on the A-Pillar. Suicide doors are only permitted on the 1934 Ford and Chevy Coupe frame.

#### **9.3.27 Frame Replacement**

If the chassis should become severely damaged, replacement frames must be purchased through 600 Racing, Inc. or its authorized dealer network.

#### **9.3.28 Frame Repair**

Only front and rear clips may be replaced as long as they are replaced with the exact material that it is replacing and all pickup points must remain in the stock locations as delivered currently from 600 Racing, Inc. The clips may be purchased through 600 Racing, Inc. and its dealer network. The driver's compartment of the frame (roll bars, cross braces, etc.) may not be repaired or replaced if damaged (see **Section 9.3.27 above - Frame Replacement**). *The INEX technical inspector reserves the right to disallow a repaired car from an INEX-sanctioned competition that does not appear to be properly repaired.* Once a frame is repaired from its original form, INEX, 600 Racing, Inc. and the technical inspector assume no liability for any injuries that may occur as a result of this repair regardless of the approval given to compete with that repaired frame.

### **9.3.29 Fuel**

Only petroleum-based unleaded or leaded gasoline as defined by the American Society of Testing and Materials (ASTM) is permitted. The Yamaha Motor Corp. recommends the use of 89 octane unleaded gasoline in all FJ1200/XJR1200/XJR1250 (sealed) engines. Higher octane fuels can cause higher operating temperatures and reduce the running life of your engine. The only oxygenates permitted are MTBE and ethanol alcohol at a maximum amount of 10% by volume. ***INEX reserves the right to require all cars use the same brand and designated grades of gasoline in a given event. BEAVER DAM RACEWAY MANDATES USE OF A SPEC FUEL for 2021. The spec fuel supplier for 2021 is Beaver Dam CO-OP, 91 Octane, located on the intersection of Raceway road and State Highway 33 in Beaver Dam.***

#### **9.3.29.1 Specific Gravity**

The specific gravity must read from .710 to .760 at 60 degrees Fahrenheit, factored by a specific gravity temperature chart.

#### **9.3.29.2 Laboratory Testing**

INEX has the ability to conduct laboratory analysis of fuels. Samples for lab analysis may be taken from a competitor's fuel tank at any time at the discretion of the INEX Technical Inspector.

Beaver Dam Raceway will utilize the Germaine Engineering reagent A and D test as part of the fuel inspection procedure. **FAILURE TO PASS THOSE TESTS WILL BE A DISQUALIFICATION OF THE FUEL RULE.**

***The specific elements which will be searched for include:*** propylene oxide, alcohols (all types), aldehydes, aminodiphenyl, benzene (in excess of EPA limit), benzidine, beryllium compounds, bromine compounds, butadienes, chlorinated compounds, chromates, dioxanes, ethyl acrylate, ethylene oxide, hydrazine compounds, methylene dianiline, naphthylamine, nitrogen compounds (nitromethane, et al.), styrenes, toluidine and xylidine. Also added to this list will be substances deemed to exceed the Threshold Limit Values (TLV) or Biological Exposure Indices (BEI) as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

#### **9.3.29.3 Penalty for Fuel Rule Violations**

Any competitor (driver and/or owner) caught using any of the illegal fuel additives as previously mentioned is subject to a minimum 60-day suspension from the date of the test results. Suspensions will be determined by INEX based on the chemical composition of the additive in question.

### **9.3.30 "Legal" Fuel Additives**

Lubrication or knock suppression additives are permitted, provided the resulting mixture meets the specific gravity, lab analysis requirements, etc. described in **Section 9.3.29 "Fuel."** **Use of scent masking agents will be considered a fuel violation.**

### **9.3.31 Fuel Cell**

Any INEX-approved fuel cell (plastic or metal) must be stock as currently delivered by 600 Racing, Inc. and must remain in the stock location. Foam is mandatory in all fuel cells as delivered by 600 Racing, Inc. (cars are not permitted on the track without foam in the fuel cell). Fuel cell gaskets in “good” condition are mandatory. The red plastic old style fuel cell with the 5 5/8" inch cap is no longer permitted. A magnetic steel plate (Ritger plate) covering the rear of the fuel cell is required at Beaver Dam Raceway. The minimum thickness of the plate shall be .120" thick. Cars using the INEX road race fuel cell are exempt from the ritger plate requirement.

#### **9.3.31.1 Fuel Cap**

Make absolutely sure that you check the cap on your fuel cell for tightness before going onto the racetrack. The cap should fit snugly into the cell. ***The car number must appear on fuel cell cap.***

#### **9.3.31.2 Fuel Cooling Devices**

Fuel cooling devices of any kind are not permitted.

#### **9.3.32 Fuel Filter**

Aftermarket fuel filters may be used. No glass or plastic fuel filters will be permitted.

#### **9.3.33 Fuel Lines**

Fuel lines may not be located in or run through the driver's compartment of the frame. Fuel lines must be steel braided. Fuel lines may not be attached to or come in contact with the electrical wires.

#### **9.3.34 Fuel Shut-Off Valve or Fuel Regulator**

Aftermarket fuel shut-off valves and fuel regulators are permitted.

#### **9.3.35 Gauges-Cameras**

Gauges that record or display the following information only are permitted - cylinder head temperature, RPM, oil pressure and oil temperature. Digital gauges are not permitted with the exception of shift lights and gear indicators as delivered by 600 Racing, Inc. No other information to include, but not limited to, wheel spin, shock travel, exhaust gas temperature, throttle position or G-force, will be allowed at any time. Onboard telemetry systems are not permitted. Direct reading oil temperature and oil pressure gauges must use steel braided lines, not plastic or rubber. Securely mounted cameras permitted. Cameras may not be positioned to record any suspension movement. Competitors are responsible for any liability from publishing any videos.

#### **9.3.36 Gear Ratios**

Only rear end gear ratios from a 2:50 to 4.30 are permitted. The gears must remain within the stock dimensions, steel thickness, location and configurations as currently delivered by 600 Racing, Inc.

### **9.3.36.1 Mandatory Roof Braces**

INEX has approved the use of a 2.50 and 2:93 gear (as currently delivered through 600 Racing, Inc.) for road course racing as long as the new roof braces are in place on the sedans before the gear is used (refer to the APPENDIX on page 88). The coupes do not need to make any modifications to use these gears.

### **9.3.37 General Appearance of the Car**

All competitors must present a neat, clean and stock appearing car for any INEX-sanctioned competition. Crash damaged cars must be repaired to the minimum technical standards before returning to competition. An INEX official may deny a car from competing if it does not meet the minimum acceptable standards as mentioned above. INEX reserves the right to deny access in competition because of a sponsorship, advertisement, paint scheme and/or lettering on a car not in “good taste,” or in the spirit of keeping this a family sport.

### **9.3.38 Grill**

The steel grill must remain within the stock dimensions, steel thickness, location and configurations as currently delivered by 600 Racing, Inc. and may not be reinforced in any way. *The grill used must be the same model of the hood, grill shell & front fenders that are used.* Only wire screens are permitted to enclose the grill area (i.e. for dirt tracks to keep out mud and dirt). Duct tape or any other type of material other than a wire screen is not permitted to enclose the grill area.

### **9.3.39 Gussets**

Strengthening gussets may only be added in the spots as described in the APPENDIX on page 89 through 92. No stock gussets may be removed.

### **9.3.40 Heim Ends**

Only magnetic steel heims as currently delivered by 600 Racing, Inc. or of very similar dimensions are permitted on a Legends Car. The stock heims are designed to bend/break and absorb energy under impact. Heims may be upgraded, however under impact, the heims may not bend or break as quickly thereby transferring the impact-energy to the driver and an injury may result (i.e. broken wrist from the transfer of energy). All heims must be magnetic, aluminum heims are not permitted.

### **9.3.41 Hood**

Hood louvers are permitted maximum 3/8” high. Holes in the hood, or holes for louvers may not exceed 54 Square inches. Replacing the dzeus fasteners on the rear of the hood with hood pins is permitted. Raising the rear of the hood on these pins a MAXIMUM of 1 “is permitted. While the car is on the track the hood must be secure and may not move up or down on the pin. Air ducts may be used on the inside of the hood as long as the duct does not direct airflow onto the carburetors. On cars using the FZO9 engine air filters may protruding through the hood.

### **9.3.42 Ignition System**

The complete ignition/engine control system must be the original OEM parts for the Yamaha FJ1200/XJR1200/XJR1250 and Yamaha FZ09. The electrical harness may be replaced only with the electrical harness connector kit as delivered through 600 Racing, Inc. Electronic throttle (traction) controls are not permitted. In-line fuses are only permitted (no fuse blocks are permitted).

#### **9.3.42.1 Ignition Control Box**

The stock FJ1200/XJR1200/XJR1250 ignition control box (black box) or the red ignition box (marked INEX-Approved and delivered by 600 Racing, Inc.) are the only boxes permitted to be used and they may not be altered or relocated in any way. Only one black or red box is permitted on a car (multiple boxes are illegal). The original stock FJ1200/XJR1200 rev limiting system must be in proper working condition and may not exceed 10,500 rpm.

#### **9.3.42.2 Swapping of Ignition Control Boxes**

INEX reserves the right to provide a substitute ignition/engine control system to any competitor at random at any time. The INEX-provided system will be exchanged for a competitor's system and must be used for that event. INEX is not responsible for any engine failure due to a provided ignition/engine control system.

#### **9.3.42.3 Coils, Coil Wires and Spark Plug Boots**

These components must be stock Yamaha or direct replacement FJ1200/XJR1200/XJR1250(sealed) parts or Dynatec coil wires or red Dynatec coils marked with the INEX logo as delivered by 600 Racing, Inc. The spark plugs may be replaced with any aftermarket type with similar thread size. Resistors must remain in spark plug wire ends.

#### **9.3.42.4 Coil Mount**

The "stock" coil mount may only be replaced with an INEX-approved coil mount.

#### **9.3.42.5 Ignition Rotors**

The ignition rotor must be a stock Yamaha FJ1200/XJR1200/XJR1250(sealed) part or the rotor delivered with the "INEX approved" red ignition control box as currently delivered by 600 Racing, Inc. No aftermarket electronic ignition advancers are permitted.

#### **9.3.42.6 Ignition Plates**

The ignition plate must be a stock Yamaha FJ1200/XJR1200/XJR 1250(sealed) part, or the plate delivered with the "INEX approved" red ignition control box as currently delivered by 600 Racing, Inc. It may be slotted to advance the ignition timing of the engine. The ignition pickup cover is not mandatory.

#### **9.3.43 Jam Nuts**

At least one jam nut is required to be used with all heim ends, clevis' and ball joints. One or two (minimum 1/4" maximum 7/16") jam nuts are permitted on the upper and lower ball joints.

#### **9.3.44 Lower Control Arms**

The lower control arms Must remain stock, within the stock dimensions (12.5" x 16.25"), steel thickness, location, and configurations as currently delivered by 600 Racing, Inc. and may not be altered in any way. Each measurement will have a tolerance of +/- 1/8" (0.125").

#### **9.3.45 Mandatory Series Sponsor Decals and Patches**

INEX and the Legends Cars decals must be prominently displayed in the INEX approved locations at all INEX-sanctioned events. The INEX patch and mandatory sponsor patches must be displayed prominently on the right-side chest area of the driver's suit. Driver's not displaying the proper decals and uniform patches will not be eligible for certain awards, prizes, etc. including those offered at year-end and may be prevented from competing at certain events.

### 9.3.46 Mirrors

Cars may have a mirror for rear vision mounted within the driver's compartment or outside the doors. The type of mirror(s) shall be the choice of each individual driver. Mirrors may not be permitted at certain tracks. **Mirrors are prohibited at Beaver Dam Raceway**

### 9.3.47 Mufflers

Only INEX-approved S&S, Borla, BRE or Supertrapp mufflers are permitted as required by the speedway. Unless a track requires the use of a muffler to meet their decibel requirement, it is the driver's option to use the muffler or the straight header system at any INEX-sanctioned event that does not mandate the use of a muffler system. The Borla muffler may not be welded onto the header pipes. All cars must comply with the local laws governing noise limitations. If you are going to another state or area to compete, please check with the local dealer or speedway about the requirements at a specific speedway. **It is highly recommended to have both the collector and the muffler with you at every INEX-sanctioned event. Beaver Dam requires a muffler at all times while car is on track and in competition. Losing a muffler is an immediate disqualification. If a muffler is missing from the car in post-race tech, it is a disqualification.**

### 9.3.48 Nerf Bars

The nerf bars must remain within the stock dimensions, steel thickness, location and configurations as currently delivered by 600 Racing, Inc. and may not be reinforced in any way. No other type of nerf bars are permitted. Nerf bars may not be used to hold ballast.

### 9.3.49 Numbers

The car must have numbers that are a minimum height of 16" on both doors and 18" on the roof (number facing towards the outside of the track). **The car number (minimum 3" high) must be on either the right or left front fender.** If two drivers show up at a track with the same number, the race director will determine number assignment. The size, color and style of numbers must be adequate to permit prompt identification by track officials at all times. Roof and door numbers must not slant more than 30 degrees from vertical. Foil and reflective numbers will not be permitted. Violation of the above number rules will not be reason for disqualification. However, if the above number rules are not followed, your car may not be scored.

#### 9.3.49.1 Divisional Decals - (Mandatory)

Each car must have a divisional decal ("P" for Pro, "M" for Masters or "S" for Semi-Pro) on the left front fender.

### 9.3.50 Oil Additives

Any competitor caught using any of the following additives in the engine oil may be banned from all INEX-sanctioned events: hydrazine, toluene, dinitrotoluene, dioxane, propylene oxide, nitropropane or any additives determined by INEX to be hazardous.

### 9.3.51 Oil Catch Cans

An oil catch can (maximum 1-quart capacity) may be used. It must be securely fastened and remain within the engine compartment. It may only be routed to by a hose from the stock crankcase breather opening or the oil fill cap.

### **9.3.52 Oil Coolers & Lines**

Oil coolers must be cooled by air only (no dry ice systems or other type). All oil cooling systems (including lines) must be mounted in the engine compartment only. No oil coolers or lines may be mounted in the drivers' compartment or in the rear deck. More than one oil cooler is permitted. Oil cooler fans are permitted. Push-lock fittings are permitted. Oil coolers may not be mounted below the bottom of the front bumper. Aftermarket oil coolers are permitted.

#### **9.3.52.1 Oil Cooler Scoops**

Oil cooler air scoops (with a max. wall thickness of 1/8" sheet metal) must fit completely between frame rails and may not extend below or attach to the stock front bumper.

#### **9.3.52.2 Overhead Oiling Systems**

Aftermarket overhead oiling systems for the camshafts are permitted.

### **9.3.53 Oil Crankcase Breather**

The only locations that the crankcase may have a breather is under the carburetors at the stock outlet or in the oil fill cap. This breather may not be evacuated through the exhaust pipe (header). *There may not be any additional breather holes for the crankcase. Breathers and hoses must remain within the engine compartment.* Baffles used in the hoses are permitted.

### **9.3.54 Oil Filters, Remote**

Remote oil filters are permitted and must be mounted in the engine compartment only. Inside or outside mounting of the remote oil filter to the frame rail is permitted. The remote oil filter must be located in a position where it cannot be easily damaged in the event of an accident. Remote oil filters may not be mounted below the bottom of the front bumper. All remote oil filters must be safety wired.

### **9.3.55 Pickup Points & Spacers**

Absolutely no modifications of the frame pickup points, rear end pick up points or spindle points are permitted. A maximum 3/4" wide spacer may be used on all 1/2" suspension bolts.

### **9.3.56 Rack & Pinion Steering**

Only the rack & pinion steering box as currently delivered and stamped 600 Racing, Inc. (or Mid-State Machine) is permitted. A Stiletto-brand or unmarked rack & pinion steering box is not permitted. The rack and pinion mounting plate measures 4" from the bottom of the frame rail to the top of the mounting plate (see diagram on page 92). A 4"x 4" x 1/8" plate will be allowed to be bolted (not welded) under the steering rack mounting plate. This will be a 4"x 4" x 1/8" plate with three holes using the steering rack studs to secure it.

### **9.3.57 Radios Prohibited**

No drivers or crew members are permitted to use one-way or two-way radios at any time for any reason, including practice sessions. Radio wiring harnesses are not permitted in a Legends Car. Radio ear plugs are not permitted. Raceceivers (600 Racing, Inc. Part No. 975000X069) will be used only at tracks that mandate them. **Beaver Dam requires that all Legends cars be equipped with a functioning Raceceiver.**

### **9.3.58 Radius Rods/Panhard Bar**

The radius rods and panhard bar must remain within the stock dimensions (radius rods - either 6", 6.5", 11.0" or 12.0" in length / panhard bar - 23.5" in length), aluminum thickness, location, and configurations of the original, as currently delivered by 600 Racing, Inc. Each measurement will have a tolerance of +/- 1/8" (0.125"). Steel radius rods or panhard bars are not permitted. The 11.0" and 12.0" rods may be interchanged, rulebook.

### **9.3.59 Rear Axles**

The long and the short rear axles must remain stock, within the stock dimensions, steel thickness, location and configurations as currently delivered by 600 Racing, Inc. and may not be reinforced in any way. If one-piece axles are used, they must be stamped INEX and be as delivered by 600 Racing, Inc. Any type of aftermarket axle, an axle modified for lightening purposes or axles not in accordance with the above rule will result in an immediate disqualification and confiscation of the illegal parts.

### **9.3.60 Rear Ends**

Only 10 bolt pattern/wide flange (5/8") Toyota, locked-steel rear ends are permitted. All rear end components, to include the housing, and pickup points must meet the specifications of the stock components. The rear end must be locked (all spider gears welded or steel spool of a minimum 6.0 pounds, 5.25 pounds for a 2:50 spool, as currently delivered through 600 Racing, Inc. only). No limited slip differentials, aftermarket differentials, quick change rear ends, floaters, homemade or otherwise are permitted. Only OEM bearings are permitted. No hemispheric or similar type bearings are permitted. No spacers are permitted between the backing plate and bearings. Axle tube material must be 3" O.D. and .120" wall thickness. A "Double shear" rear end housing is available through 600 Racing, Inc. (competitors are allowed to up-grade to the stock 600 Racing, Inc. "Double shear" specifications).

### **9.3.61 Ride Height**

The car may have no less than 3 ½ inches between the bottom of the frame rails (not the weld) and the ground. This measurement is to be checked without the driver in the car, as raced, without lifting of the car of any kind.

### **9.3.62 Running Boards**

The running boards must remain within the stock dimensions, steel thickness, location and configurations as currently delivered by 600 Racing, Inc. and may not be reinforced in any way.

### **9.3.63 Sheet Metal**

The minimum thickness of sheet metal is .036". The rear deck sheet metal (including the package tray behind the driver) may not be removed or altered in any way unless a fuel cell access hole is used. The fuel cell access hole must be covered with a sheet metal plate and secured at all times when the car is on the track.

### **9.6.64 Shocks**

All Legends Cars must use INEX (stamped with the INEX logo) Shocks as delivered by 600 Racing, Inc. Carrera type shocks are not permitted. Shock numbers must be made visible at the request of an INEX inspector. Changing or altering the fluid inside is illegal. Altering or tampering with the shocks, or competing with same, will result in a six (6) month suspension for both driver and owner. Shocks may be turned upside down and/or the upper part of the rear shock may be mounted on either side (inside or outside) of the frame. Shock bumpers are permitted (maximum 1/4" tall).

### **9.3.65 Spindles**

The spindles (and pickup points) must remain stock, within the stock dimensions, thickness, location and configurations as currently delivered by 600 Racing, Inc. Damaged or bent steel spindles that do not meet stock specifications may be reviewed by INEX. **Additional gussets (other than stock) are not permitted. Repairing a broken or cracked aluminum spindle is not allowed.**

### **9.3.66 Springs**

All Legends Cars must use 10" or smaller length springs. Any spring weight combination and aftermarket springs of stock design are acceptable. Only one spring is permitted per shock. Spring rubbers are not permitted. 10" Springs may not be used with the 8" designed shock hardware.

### **9.3.67 Sprocket Adapters**

The sprocket adapters must remain stock, within the stock dimensions, steel thickness, location and configurations of the original, as currently delivered by 600 Racing, Inc. Set screws for the sprocket adapter nut are permitted. Lightening the sprocket adapter for weight savings in any way is illegal.

### **9.3.68 Steering Column**

The steering shaft or steering column bracket may be modified for driver comfort or safety by altering the length of the shaft or by altering the steering column bracket that connects to the dash. All components must be magnetic steel. Intentional lightening for weight saving measures is not permitted. A hose clamp or shaft collar is mandatory on the steering column in the engine compartment directly against the firewall. There can be no more than 1/4" gap between the clamp (collar) and the bushing (See diagram in Appendix). Modification of the drivers' compartment roll cage is not permitted.

Steering Quickeners - Steering quickeners are not permitted without special written permission from INEX.

Steering Shafts - Tubing used for steering shafts must be stock as currently delivered by 600 Racing, Inc. and may not be reinforced in any way. Upgraded steering joints are acceptable.

### **9.3.69 Steering Wheels**

Larger or smaller steel steering wheels are allowed, aluminum steering wheels are allowed. Racing style, quick release steering hubs are mandatory. Center of steering wheel must be padded.

### **9.3.70 Tires**

The tire must be a “INEX” plated Federal, or INEX plated American Racer. Tires may not be soaked, softened, siped (razor cuts), grooved or recapped. **Tires must be run in complete sets. No mixing of brands. Inner tubes are allowed. Tires are subject to inspection and samples may be taken for testing by Blue Ridge Laboratories to ensure they remain unaltered. Tire protesting fee and procedures will be followed as proscribed in section 3.7 of the rulebook.**

#### **9.3.70.1 Hardness**

If any tire is softer than 58 points, or as mandated by the brand of tire being utilized, on the durometer, the driver will be disqualified for that event and the tire will be destroyed. Tire warmers and any other means of artificially warming tires are prohibited.

#### **9.3.70.2 Tread Depth**

When the top of the wear-bar indicator appears at two spots in a row on the tire (side-by-side or in the same groove - i.e. outside groove) or the tread depth is 2/32” or less on any two (2) points in the tread (measured from the bottom of the groove, not at the top of the wear-bar) (“tread” will be defined as 6” across the tire, to be measured from the center 3” both ways), that tire will be confiscated, destroyed or drilled by the technical inspector. ***There is no disqualification for violation of this rule unless more than one tire is below the minimum tread depth. If this rule is violated on two different occasions at the same event or two tires on the car at the same time, then that driver will be disqualified.*** If the wear bar is cut out or tampered with, that tire shall be destroyed immediately (even if it has more than 2/32” tread on it) and a disqualification will be applied. **Drilled or damaged tires may not be patched or repaired in any way!**

#### **9.3.70.3 “Dry Tire” Rule**

It is prohibited to use traction compounds or any substance that might alter the physical properties of a tire as supplied by the manufacturer. Tire cleaners/shiners, tire softeners, track adhesives, brake fluid, diesel fuel, etc., will not be permitted on the tires. ***Any tires with signs of these products on them will be DESTROYED IMMEDIATELY and that driver will be disqualified with no warning!!!***

### **9.3.71 Traction Control Devices**

No electronic or computerized wheel spin/traction control devices are permitted. Any driver caught using these devices will be suspended for at least one (1) year.

### **9.3.72 Upper Control Arms**

The upper control arms must remain stock, within the stock dimensions (4.25” in length), steel thickness, location, and configurations as currently delivered by 600 Racing, Inc. and may not be altered in any way. Each measurement will have a tolerance of +/- 1/8” (0.125”).

### **9.3.73 Weight**

The minimum weight of the car with the driver shall be 1300 pounds. Competitors will not be permitted to add fuel after an event to meet minimum weight. The minimum right-side weight will be 640 pounds with the driver in the as raced condition. The rear weight percentage may not exceed 52% of the total weight without the driver, in an as raced condition.

### 9.3.74 Weight Saving Measures

Lightening “stock” components by shaving, milling, drilling or any other method is illegal. Any item on a Legends Car that is used (other than what is mentioned in the rules) as a weight saving method is considered illegal. Non-stock aluminum or titanium components are considered illegal and will be confiscated immediately. Components must remain the same material as delivered by 600 Racing, Inc. unless specified in this rulebook.

### 9.3.75 Wheels

Any type of automotive steel wheel (no bead lock) that has a 13” diameter, a 7” width and the offset of only 3 1/8” with an 1/8” variance (3” to 3 1/4”) is permitted. Starting March 1, 2011, **only** Unique Wheels (part #246-3744 / Black & #34-3744 / Chrome) & Bassett Wheels (part #37ST3S / Silver & #37ST3 / Black) as delivered by 600 Racing, Inc. will be permitted for use on Legend Cars at any INEX sanctioned event. INEX approved bead lock wheel, with ~~soft~~ foam or plastic disc mud plug, permitted on right rear only. Plastic disc mud plugs must have car number. Magnetic steel mounting hardware only. The minimum weight of a tire and wheel must be at least to be Heavy (old style / no stamp & sticker) wheel & worn out tire = 25.75 lbs. Light with sticker) wheel & worn out tire = 22.75 lbs. **pounds** without additional steel, lead, or wheel weights. All wheel weights must be covered with duct tape. Bleeder or relief valves are not permitted in the wheels. Beaver Dam requires bolt on style mounting hardware for all wheel covers. Tabs for mounting must be integral to the wheel assembly or be welded to the wheel.

### 9.3.76 Wheelbase

All cars must compete with a 73-inch wheelbase plus/minus 1/4 inch on either side (72 3/4” to 73 1/4”).

#### 9.3.76.1 Measuring wheelbase

The measurement will be taken with the front and rear tires on one side in line with each other. To determine this, the measuring tool or tape measure must touch three points. These points are the front of the rear tire sidewall and the front and rear of the front tire sidewall. The measurement is then taken from the front edge of the front wheel to the front edge of the rear wheel. The process is the same when measuring wheelbase on the opposite side.

### 9.3.77 Width

The total overall width of the car (front and rear) may not exceed 61 inches (castor, camber, toe adjustments, raised white letters are not considered with this rule). The car must be able to roll freely through a 61-inch-wide opening by 48 inches high (without driver). There must be a minimum of 6” between the inside edge of the rear brake drum and the rear frame rails (directly below the centerline of the rear end housing). No wheel or axle spacers are permitted.

## **Enforcement and Infraction Penalties of the Ride Height, Wheelbase and Width Rules**

After qualifying or after a race, if a car is found to be in violation of the ride height, wheelbase or width rule, only if requested, the driver may have five (5) minutes to find the reason why the ride height, wheelbase or width does not meet the rules. It is the driver's responsibility to find the reason (such as a bent part) before the car leaves the tech area. It is not the tech inspector's responsibility to find the reason. If a reason cannot be found and the car leaves the tech area, the driver cannot bring it back to the tech inspector showing or explaining a damaged part which affected the ride height, wheelbase or width. This must all be done within the tech area and within the specified time period.

If no reason (such as damaged parts) can be found, this will result in an immediate disqualification from that event. A driver will be disqualified if a car was just improperly set up. If a driver is disqualified from a qualifying event (time trials or heats), they may fix the infraction, however they must start at the rear of the next race (either a consolation race or feature race - depending on the format).

For example, if an infraction is found during time trials, the driver would receive no time. If the infraction is found after the heat or consolation races, the driver would be placed to the rear of that race. If the infraction is found after the feature, the driver would be disqualified.

### **9.3.78 Windshields/Screens**

All cars must have either a screen or Lexan windshield in the front window area. A Lexan sun visor is also permitted in the front window. Holes are permitted in the Lexan windshield. A heavy-duty rock screen is recommended.

## **9.4 ENGINE SPECIFICATION RULES XJ1250 "SEALED" (BLITZ)**

**\*\*\*The XJ1250 & XJ1219 are sealed engines. Tampering, removing, altering the engine seals or being in possession of an engine that has been altered may result in a minimum one (1) year suspension for both the owner and driver. Additional fines may be applied also. If you purchase an engine from a questionable source, it is best to get it checked by an INEX authorized sealed engine builder! All repairs requiring removing the seals(s) must be addressed by an authorized INEX Sealed Engine repair shop.**

### **9.4.1 1250 & 1219 Engine Specs**

The only modifications allowed to the factory sealed 1250 engine are:

- A. Changing carburetor jets
- B. All stock carburetor adjusters may be used
- C. Adjusting the valve shims
- D. Installing an aftermarket clutch and spring of original design (no aluminum clutch plates).
- E. Upper head oilers, heavy-duty valve springs, "Pinned" Camshafts and steel sleeves are permitted only if installed by an INEX authorized sealed engine shop.

## **9.5 ENGINE SPECIFICATION RULES FJ & XJ1200**

**The engine must remain a factory-stock Yamaha FJ1200/XJR1200 as currently delivered through 600 Racing, Inc.** Only those changes as described in this section of the rulebook are permitted to be made to the FJ and XJ 1200. A Yamaha FJ1200/XJR1200 from other countries (Canada, England, etc.) or an FJ1100 may only be used if it meets all the specifications of the current U.S. model as delivered through 600 Racing, Inc.

*If this rulebook does not specifically say that you can change/modify/add something, then you must consider that the change/modification/addition is illegal.* Any questions about the legality of a change/modification/addition not covered in this rulebook, must be answered by INEX in writing and presented to the tech inspector upon request. If you have a request for a change/modification/addition, please contact INEX before making the change/modification/addition.

### **9.5.1 Cam Shaft**

The cam shafts must remain as stock Yamaha FJ1200/XJR1200 as currently delivered by 600 Racing, Inc. The cam shaft marking (“I” and “E”) may not be removed. Stress relieving by machining or polishing on the radius next to the cam gear or on the shaft is permitted. Modifying any part of the lobes (lift, profile, duration, weight, etc.) is illegal. Installation of a ¼” (I.D.) x ½” (O.D.) piece of 4130 aircraft steel the full length of the camshaft is permitted. *Note: This modification must be performed in a very specific manor, please contact 600 Racing, Inc. or an INEX authorized engine builder for details.*

### **9.5.2 Cam Chain**

The cam chain must remain as stock Yamaha FJ1200/XJR1200 as currently delivered by 600 Racing, Inc.

### **9.5.3 Cam Chain Adjusters**

Aftermarket manual cam chain adjusters are permitted.

### **9.5.4 Clutch**

The clutch (plates and springs) may be replaced with any aftermarket type of the same design (no aluminum clutch plates). Due to the rigors of road racing, a billet aluminum clutch basket will be allowed for road racing only. The basket, primary drive gear, shims and springs must weigh a minimum of 5.5 lbs.

### **9.5.5 1200 Cylinder Head**

The original equipment cylinder head of an un-sealed engine must remain in unaltered “as cast” condition with the exception of machining the gasket surface. Valve seat inserts may be reworked or replaced with OEM or aftermarket seats of original dimensions. The stock I.D. at the bottom 1/16 of an inch is 0.990” for the intake port and 0.830” for the exhaust port. No port alterations of the intake or the exhaust below the seat are permitted. O-ringing the head gasket seal area is not permitted.

#### **9.5.5.1 Combustion Chamber**

The combustion chambers may be matched, and cc balanced to the highest unaltered cc chamber. Relief cuts for cc balancing may not exceed the bore size.

### **9.5.5.2 Repairing Heads**

A combustion chamber may be repaired by welding and grinding back to the official “stock” configuration of the combustion chamber.

### **9.5.6 1200 Compression Ratio**

The compression ratio of an un-sealed engine may not exceed 10.0:1 (no tolerance). **If the compression ratio is found to be over 10.0:1, it will result in an immediate disqualification and confiscation of all of the following parts: the entire upper end (including the head, the valves, the head gasket, etc.) as well as the pistons and cylinder casings (including base gasket).** Upon rebuild, only the following things may be done to meet this rule: machining the piston domes, machining the gasket surfaces of the cylinder head and/or cylinder casings.

### **9.5.7 Crank Shaft**

The crank shaft must remain as stock FJ1200/XJR1200 as currently delivered by 600 Racing, Inc. Modifying the throw balances or weight of the crank is illegal. Polishing the crankshaft is illegal. Minimum crankshaft weight will be 27 pounds.

### **9.5.8 1200 Cranking Compression**

**The cranking compression of an un-sealed engine must be at or below 165 psi at any time (hot or cold) on at least three (3) cylinders with the ignition off and the throttle wide open with the carburetors on the engine, and all four spark plugs out. Ten to twelve revolutions of the engine will determine the total compression of a cylinder.** Cam timing may be adjusted accordingly to meet the requirements of this rule by slotting the cam sprocket gear or substituting with an aftermarket cam gear sprocket. The approximate stock setting is 171 lb. *INEX highly recommends that you have your engine set at 160 lb. cranking compression instead of right on the line at 165 lb. to allow for slight variations between gauges.* There is no tolerance for engines over 165 lb. and the gauge used by the tech inspector is the “official gauge.”

#### **9.5.8.1 Oil Pump**

The stock oil pump may not be modified in any way. Relief valves may be shimmed.

#### **9.5.8.2 Oil Pan**

The stock oil pan may not be altered, modified or include any additions to alter the path of the oil.

### **9.5.11 1200 Pistons & Rings**

The cylinder bore of an un-sealed engine may not exceed 77.57mm or 3.054” (maximum .022” overbore from stock). Only Yamaha pistons (part #1TX 11631-00 and #1TX 11636-00) or forged Wiseco pistons (part #K1188, #L1195, #L1199 and #L1202) may be used. Only Yamaha rings (part #1TX 11610-00 and #1TX 11610-20) or Wiseco rings (part #21-3041X9 and #21-3051X6) may be used. These rings may not be altered in any way. The ring lances and lowers part (skirts) of the piston may not be altered from the original in any way. Gas-porting the pistons are not permitted. Wrist pin buttons may be used.

#### **9.5.11.1 Cylinder Sleeves**

Worn cylinder sleeves may be replaced with aftermarket sleeves.

### **9.5.12 1200 Rods**

The rods in an un-sealed engine must remain as stock FJ1200/XJR1200 as currently delivered by 600 Racing, Inc. Rod bolts may be changed to any aftermarket type. Only shotpeening the rods is permitted (no polishing by any means is permitted). Weight balancing to the lightest unaltered rod is permitted. All dimensions must be stock. XJ1250/1300 connecting rods are not allowed in an un-sealed engine.

### **9.5.13 Stroke**

The stroke must remain stock for the FJ1200/XJR1200 Yamaha as currently delivered by 600 Racing, Inc.

### **9.5.14 1200 Valves**

Only stock Yamaha FJ1200/XJR1200 valves are permitted. No modifications are permitted to the valves with the exception of altering the number of angles of the seat and a maximum back cut width up to 0.200" is permitted from edge of the valve. Valve jobs are permitted. Only stock valve lifter and adjuster shims may be used.

### **9.5.15 Valve Guides**

The valve guides must remain the same size, length and location of the current "stock" valve guides. The guides may not be altered in any way. Shotpeening of valve guides are not permitted. Brass aftermarket valve guides of the same dimensions of stock may be used.

### **9.5.16 Valve Springs**

The valve springs may be replaced with aftermarket magnetic steel springs. Only stock steel valve spring retainers and clips/keepers are permitted. No titanium or other lightweight alloys are permitted.

### **9.5.17 Transmissions**

The transmission and transmission gears must remain stock Yamaha FJ1200/XJR1200/XJR1250 (sealed) as delivered by 600 Racing, Inc. They may not be lightened in any way. The transmission gears may be shimmed only for the purpose of proper engagement. Standard and aftermarket shims may be utilized.

## **9.6 ENGINE CLAIMING PROCEDURE for LEGENDS CARS**

The purpose of the claim is to provide a "safety valve" to help keep the series competitive and to keep the cost of racing affordable. Only drivers (or legal guardian) that are current INEX members may claim an engine after the race for the **amount designated** in terms of cash or certified check. That person must show their membership card to submit a claim. **The Beaver Dam staff and management reserve the right to disallow any claim at any time for unspecified reasons.**

### **9.6.1 Positions that May Claim a 1200 Engine**

Any driver (or legal guardian representing driver) finishing in the top ten positions in the event and on the lead lap of the feature event may claim a 1200 engine from a top five finisher within the same race. Should there be more than one claim to an engine, the driver in the highest finishing position has the first right to the engine claim.

### **9.6.2 Time of the Claim**

In order to file a claim, the claimer must stop their car at the designated technical inspection area prior to going to their trailer in the pit area. At this time the claimer must notify the INEX technical inspector of their intentions to file a claim. The membership card, claim card, and full payment must be presented to the INEX tech inspector no later than **ten (10) minutes** after the finish of the race. Once a claim is made, it may not be withdrawn. The serial number on the casing of the engine must be written on the claim card by the chief tech inspector immediately following the claim.

### **9.6.3 Components of the Engine Claim**

Only the top five feature finisher's engine including carburetors, alternator, and starter may be claimed. Not included in the engine claim are the ignition electrical components, ignition box, coils, header, oil cooler, remote filter, sprocket adaptor, clutch slave cylinder, and air ducts.

### **9.6.4 Claim Payment**

Cash or check (certified is preferred) in the amount of **\$5,100** (or equivalent foreign funds) along with a claim card must be presented to the tech inspector. The tech inspector must produce (but not give) the payment to the claimee before the engine is removed. All checks shall be made out to the claimee for the proper amount written clearly and legibly (unless "Option B" is chosen - then the check shall be made out and given to INEX, Corp.). A claim made by a personal check will require that the engine be held by the technical inspector or an authorized representative of INEX until it clears the bank of the claimee. The claimee must deposit that check within three (3) days of the claim. If the technical inspector is not notified of the clearing of the check within seven (7) days, it will be assumed that the check did clear the bank and the "held" engine will be turned over to the claimer. If the check of the claimer does not clear the bank (returned to the claimee after the deposits it within three days of the claim), the claimer will be suspended indefinitely and fined for an amount to be determined by INEX.

### **9.6.5 Choice of the Claimed Engine**

At the time of the claim, the claimer must choose on the claim card either "Option A" or "Option B".

#### **9.6.5.1 "Option A"**

The claimer takes immediate delivery of the claimed engine (should the payment be cash or certified check to the claimee). If a personal check is used, the engine is held for seven days by the technical inspector or INEX tech official until the check clears the account of the claimee. The claimer is then responsible for the legality of that engine.

#### **9.6.5.2 "Option B"**

The claimer may choose to have the INEX tech inspector send the claimed engine to INEX headquarters (or an INEX-approved inspection site-determined by the Executive Director) for inspection for an additional fee of \$250 (payable to INEX). The INEX representative at the track will be responsible for holding the engine until the time of shipment. The claimer must pay for shipping charges and inspection fee and the engine must be sent to INEX within seven (7) days of the claim. If the engine is not at the INEX inspection site within seven (7) days, the payment will be given to the claimee and the engine will not be checked for legality. The engine will become the property of the claimer immediately.

Upon inspection of the claimed engine, if the claimed engine is found illegal in any way, the check

for \$5,100 will be returned to the claimer (who is still responsible for shipping charges to the inspection) and the illegal engine components will become the property of INEX. Legal components of the engine will be returned only at the discretion of INEX and at the expense of the claimee. The claimee may also be fined and must pay all fines prior to the legal components being returned. The driver also faces possible additional penalties by INEX.

If the claimed engine is found legal, the owner of the engine being claimed receives the \$5,100 and the engine will be sent to the claimer (who is responsible for the shipping charges of the engine's shipment).

#### **9.6.6 Refusal of a Claim**

If the claimee refuses to sell the engine after a legitimate claim, he will be disqualified and not allowed to run that engine again for a 12-month period. Once a refusal of the claim is made, it may not be rescinded. The engine must then be turned over to the technical director or INEX authorized representative immediately and sent to INEX headquarters to be held during the 12-month period of time. That engine will also be disassembled and inspected at the expense of the owner. That driver and car owner may be suspended for an indefinite period of time (to be determined by INEX) if the engine is not immediately relinquished. ***The driver will also forfeit all cash winnings for the feature, points for that race, any trophies earned for the feature and possibly ALL points earned for the season at the discretion of INEX.***

#### **9.6.7 Removal of the Claimed Engine**

The claimed engine shall be removed immediately from the car by the team being claimed. Any sabotage to the engine by the removal team will result in that driver and car owner being suspended for two (2) months and a \$500 fine will result. The claim will also be nullified by INEX and the claim money will be returned to the claimer. The person claiming the engine may not leave the track until engine is removed, turned over to him or in the possession of the INEX tech inspector and he agrees that no sabotage has occurred. If the claimer leaves before the above items are satisfied, the claim will be nullified.

**\* INEX may penalize a claimer deemed to be malicious, spiteful, or who otherwise acts in bad faith. A driver may claim no more than one engine during the calendar year.**

INEX reserves the right to suspend the claim rule at any time.

#### **9.7 YAMAHA FZ09**

**The engine must remain a factory-stock Yamaha FZ09 as currently delivered through 600 Racing, Inc.** Only those changes as described in this section of the rulebook are permitted to be made to the FZ09.

***If this rulebook does not specifically say that you can change/modify/add something, then you must consider that the change/modification/addition is illegal.*** Any questions about the legality of a change/modification/addition not covered in this rulebook, must be answered by INEX in writing and presented to the tech inspector upon request. If you have a request for a change/modification/addition, please contact INEX before making the change/modification/addition. **ALL INSTALLATIONS MUST CONFORM WITH THE INTALLATION GUIDE AS PROVIDED BY US LEGENDS.**

## **9.8 PROTESTING SPECIFIC COMPONENTS on LEGENDS CARS**

The purpose of the protest is to provide a “safety valve” to help keep the series competitive and to keep the cost of racing affordable. Only current INEX members or associate members may protest a component. (That person must show membership card to submit a protest.) Any specific engine, rear end, or suspension components of a competitor’s car may be protested by any driver finishing that feature after the race for the amount designated in terms of cash or certified check. **The Beaver Dam staff and management reserve the right to disallow any protest at any time for unspecified reasons.**

Note: “On track” race calls cannot be protested to INEX.

### **9.8.1 Time of the Protest**

The protester’s membership card, protest card and full payment (in cash or certified check no personal checks) must be presented to the INEX tech inspector no later than ten (10) minutes following the finish of the race. Once a protest is made, it may not be withdrawn. All purse and points are to be distributed after a decision on the protest has been made. Tech inspectors will not accept verbal protests or protests which are not accompanied by the required protest fee, protest card and protester’s membership card.

### **9.8.2 Checking the Protest**

The protested component will be removed from the car or made available for inspection by the protested team’s crew and taken for inspection by the INEX tech inspector. The following people will be permitted to be present at the protest site: protested driver and crew (the crew shall leave once the part is removed), protester, INEX tech officials and a speedway management representative. If a decision at the track cannot be made, then the component will be sent to INEX for a final decision on legality. ***On a protest, it is the driver’s duty to prove his legality, not the tech officials or protester’s duty to prove the violation.***

### **9.8.3 When the Protest Finds a Legal Component**

After inspection, if the protested component is found legal, the protest money will be given to the driver of the car from which the component was protested (less reasonable inspection fees and shipping charges determined by INEX). The shipping costs of an engine to an engine rebuilder is not covered.

### **9.8.4 When the Protest Finds an Illegal Component**

After inspection, if the protested component is found illegal, the driver of that car will be disqualified from that event, forfeits all prizes and honors earned at the event and face the possibility of more penalties at the discretion of INEX. The illegal parts will also be confiscated by INEX. The protest money will be returned to the team filing the protest. The driver who was found illegal will be responsible to pay for inspection fees and shipping charges in the form of a fine.

### **9.8.5 Refusal of a Protest**

If the driver of the protested car does not allow inspection under these terms, he will be disqualified, forfeit all points, purse monies, prizes and awards earned at that event and possibly suffer more penalties as determined by INEX. The car will also be suspended from competition.

**INEX may penalize the author of a protest deemed to be malicious, spiteful, or who otherwise acts in bad faith.**

**No driver may file a protest more than three times during the calendar year.**

***Choice of one (1) of the following items to be protested:***

- *A driver may only be protested by one other competitor at each event. (If more than one protest is filed against a competitor, the driver with the higher finishing position in that race will be allowed the protest.)*
- *No driver may file a protest more than 3 times during the calendar year.*
- *Protestor must verify that the tech inspector has the special equipment necessary for the test, if applicable.*

### **9.8.6 Protest Fee Schedule for Legends Cars**

All protests will require an additional Beaver Dam admirative fee of \$50 over and above the protest fee. The administrative fee is nonrefundable.

- \$100.00 - Compression Ratio (Choice of any 2 cylinders)
- \$100.00 - Bore Size (Check all four cylinders with bore gauge)
- \$100.00 - Stroke
- \$800.00 - Crank Shaft (lightened / out of engine)
- \$400.00 - Rods (stock, polished, lightened / out of engine)
- \$300.00 - Ported & Polished Head (check intake & exhaust)
- \$ 50.00 - Air Filters (Velocity Stacks and size of filter)
- \$100.00 - Cam Shaft Lobes (check intake & exhaust lobes)
- \$ 75.00 - Alternator (working & wired properly)
- \$200.00 - Fuel (Laboratory Test)
- \$100.00 - Exhaust System (check header and/or muffler)
- \$100.00 - Total Weight (between min. & max. weight)
- \$150.00 - Rear End Gears (Locked)
- \$100.00 - Shocks (each shock)
- \$100.00 - Spindle (Left & Right)
- \$100.00 - Driveshaft (stock)
- \$100.00 - Wheel Offset (Check all four wheels)
- \$100.00 - Wheel Weight with Tire (Check all four wheels)
- \$100.00 - Front Bumper or Rear Bumper meets all specs.
- \$200.00 - Carburetors
- \$ 50.00 - Durometer test of tires
- \$120.00 - Engine Seals
- \$150.00 – Tire Sampling per Tire
- \$500.00 - Sealed engine inspection (engine will be inspected by INEX)

*The sealed engine inspection process will be handled under the guidelines as listed for “protesting specific components on Legends Cars” with the exception of the following:*

- Only a driver (or legal guardian representing the driver) finishing in the top 10 positions and on the lead lap of that feature, may have a sealed engine inspected from a car finishing in one of the top 5 positions of that race.
- Sealed engine inspection card must be presented in place of a protest card.
- The engine in question will be removed by the team that the \$500 inspection was filed against.
- Once the engine is removed, the INEX inspector will take possession of the engine and make arrangements with INEX to have that engine delivered to INEX to be inspected.
- If the inspection finds the engine to be legal, the engine will be re-assembled and re-sealed, then returned to the owner. The inspection fee will be used for shipping and inspection costs.

- If the inspection finds the engine to be illegal, the repercussions and penalties will fall upon the engine builder responsible for building that engine. The driver will not be responsible for components secured by the seals. The inspection fee will be returned to the driver that filed the \$500 inspection.

\*TBD - Reasonable fee to be determined by the INEX official for other specific items.

These rules and/or regulations apply to all INEX-sanctioned events unless superseded by Beaver Dam specific track rules and procedures.