



Okto Baja Fest

RULES

Administrative Regulations:

1. Teams are responsible for reading and understanding the rules in their entirety for the competition in which they are participating.
2. By entering the OktoBAJafest competition, the team members, faculty advisors and other personnel of the entering university agree to comply with, and be bound by, the rules and all rule interpretations or procedures issued or announced by the OktoBAJafest organizing body. All team members, faculty advisors and other university representatives are required to cooperate with, and follow all instructions from competition organizers, officials, and judges.
3. The OktoBAJafest organizing body reserves the right to revise the schedule of any event and/or interpret or modify the competition rules at any time and in any manner, that is, in their sole judgment, required for the efficient operation of the event.
4. All announcements and updates about OktoBAJafest will be posted on the OktoBAJafest website (<https://sites.clarkson.edu/OktoBAJafest/>)
5. Eligibility is limited to undergraduate and graduate students. Individual members of teams participating in this competition must be enrolled as degree seeking undergraduate or graduate student in a college or university. Team members must be at least seventeen (17) years of age at the time of the competition.
6. All on-site participants, spectators and faculty are required to sign a liability waiver prior to or upon registering onsite. If under the age of eighteen (18), the waiver must be signed by a parent or legal guardian.
7. Individual medical and accident insurance coverage is required and is the sole responsibility of the participant.

Vehicle Regulations:

1. The vehicle and associated documentation must be conceived, designed, manufactured, and fabricated by the team members without direct involvement from professional engineers, faculty, or professionals in the off-road and racing communities.
2. The vehicle must have competed, passed technical inspection, and retained its full Baja SAE® Passed Tech sticker from a competition held from 2018-2023.
3. All vehicles will still need to pass on-site Technical Inspection by OktoBAJAFest judges (regardless of previous inspections).
4. During the competition, OktoBAJAFest vehicles may only be driven between the paddocks and an event site, during official practice or in the events themselves and only after passing technical inspection and receiving a OktoBAJAFest Passed Tech sticker.
5. All drivers must attend a driver's orientation meeting before participating in any on track event.
6. Drivers must wear all the equipment specified in "Technical Requirements - Driver Equipment " and a properly fastened restraint system at all times when the vehicle is running in any event or on the practice track. Drivers not wearing the proper equipment will not be permitted to drive and may have their competition driver's privileges revoked.
7. Refueling of vehicles must be performed with (1) the engine shut-off and (2) the driver out of the vehicle and (3) fire extinguisher (other than that carried in the vehicle) must be on hand and pointed toward the vehicle/fuel tank whenever a vehicle is being refueled.
8. The swapping out of wheels/tires, CVT's, and shocks will be allowed throughout the dynamic events. No other components can be changed after completing Technical Inspection. All swappable components must be brought to Technical Inspection.
9. DRIVING OFF-SITE IS ABSOLUTELY PROHIBITED. TEAMS FOUND TO HAVE DRIVEN THEIR VEHICLE AT AN OFF-SITE LOCATION MAY BE EXPELLED FROM THE COMPETITION.

Registration Regulations:

1. Due to site paddock size restrictions, OktoBAJAFest is limited to 15 college teams.
2. Each Team is allowed to bring (2) Baja cars for a total of 30 cars. If registration is not full a third car can be requested.
3. Registration cost are \$150 per car and \$40 per student which includes lunch on Saturday and a closing (meal) banquet on Sunday and an event t-shirt.
4. All team registrations are required to be done online at:
<https://sites.clarkson.edu/OktoBAJAFest/>
5. All spectators must register on-site and sign a liability waiver.

Site Regulations:

1. Alcoholic beverages, recreational marijuana, firearms, weapons of any type and illegal materials are prohibited at OktoBAJafest sites during the competition. The penalty for violation of this rule is the immediate expulsion of the entire team, not just the individual(s) involved. This rule applies to team members, advisors and any individuals working with the team on-site.
2. Smoking and open toed shoes are prohibited on site and in all locations.
3. Clean-up of trash and debris is the responsibility of the teams. Please make every effort to keep your paddock area clean and uncluttered. At the end of the day, each team must clean their work area and dispose of all trash in the provided dumpster.
4. DO NOT feed any bears, raccoons, or any other wildlife you may encounter – The site is located in the foothills of the Adirondack Mountains and is very rural.
5. The site is also fairly remote with spotty cell service.
6. The use of motorcycles, ATV's, UTV's, bicycles, scooters or similar person-carrying or motor drive devices by team members and spectators in any part of the site, including the paddocks is prohibited.
7. All team members identified as captains or drivers and all faculty advisors MUST attend all meetings as designated. Attendance at meetings is mandatory. Failure to attend meetings can result in disqualification of members or the entire team.
8. When a vehicle is driven anywhere except within the practice track or on event courses it must move at walking speed with a team member walking along side at a normal pace.
 - a. During the performance events when the excitement is high, it is particularly important that vehicles move at a walking pace in the paddocks and to and from the course entry point.
 - b. The team member alongside the car must remain in arms reach of the kill switch but must NOT hold on to the vehicle while in motion.
 - c. Any vehicle with the motor running must have a driver in the vehicle with all safety gear on.
9. Under no circumstances may anyone other than the driver ride in/on a vehicle.
10. Only the Baja vehicles themselves and the teams' support trucks and trailers are allowed in the paddocks. Parking will be provided for all additional vehicles exactly 1 mile from the paddocks. A shuttle bus or other mode transport may be provided to transport people to and from the site on endurance race day only, but this is not guaranteed. All participants, spectators, etc. should be dressed in appropriate attire and prepared to walk to all locations.
11. Teams shall properly store all compressed gas cylinders. Cylinders shall be upright and properly secured by chain or other method, capped when not in use, and stored such that cylinder temperature is below 125 degrees F.
12. All teams' members should be wearing eye protection in the paddock when performing any activity involving fuel, grinding, welding, or cutting.
13. Gas cooking grills will be allowed in a specified location only. No gas cooking grills will be allowed in the paddocks.

Spectator Regulations

1. All spectators must register on-site at the registration tent. All spectators will be required to sign a liability waiver and will receive a blue wristband to verify their registration.
2. The organizers typically do not have a direct line of communication with spectators other than on-the spot at the competition; thus, the competitors, faculty and volunteers are expected to help inform the spectators of the safety rules and help restrict spectators to the spectator areas.
3. Spectators may not drink or possess alcoholic beverages at any competition location
4. Spectators must keep a specified distance back from the event or course, this distance is decided by OktoBAJAFest organizers, from any area where vehicles are operating under power. Motor vehicle competitions are potentially dangerous and safety rules will be strictly enforced.
5. Spectators must observe all caution tape and markings. Spectators are advised to stand back from these boundaries to maintain a safe observing distance without encroaching on vehicle areas.
6. The competition site requires all children to be supervised by an adult at all times. Spectators who fail to strictly supervise their children will be asked to leave the site.
7. The course officials and organizers have the absolute right to restrict spectator access to any parts of the site and to eject anyone who violates safety rules or ignores the instructions of officials.
8. Open toed shoes are not permitted on site at any time.

Technical Requirements – Vehicle Configuration

1. The vehicle must have four or more wheels not in a straight line.
2. The vehicle may only use one Briggs & Stratton or Kohler Engine of a model specified below.
3. The vehicle must be capable of safe operation over rough land terrain including obstructions such as rocks, sand, jumps, logs, steep inclines, mud, and shallow water in any or all combinations and in any type of weather including rain, snow, and ice.
4. The vehicle must have adequate ground clearance and traction.
5. The largest driver must be able to meet the roll cage minimum clearances, and fit into a comfortable driving position, while wearing the entire required driver's equipment. The smallest driver must be able to comfortably reach all of the vehicle's controls.

Technical Requirements – Fire Extinguishers

1. All vehicles shall be equipped with a charged and functional fire extinguisher. All team members shall be familiar with the use and operation of fire extinguishers.
2. All fire extinguishers for use on the vehicle shall have a minimum UL rating of 5BC.
3. All fire extinguishers for use on the vehicle shall be equipped with a manufacturer installed dial pressure gauge. The dial pressure gauge shall be readily visible and indicate the unit has been properly charged.
4. Each fire extinguisher shall be labeled with school name and vehicle number.
5. Each team shall have two or more fire extinguishers meeting the requirements above. One fire extinguisher shall be installed on the vehicle, and the remaining extinguishers shall be used in the fueling zone.

Technical Requirements – Required Engine

1. Briggs & Stratton 10 hp OHV Intek Model 19 or Briggs & Stratton 10 hp OHV Model 20 or Kohler Model CH440-3302 with SAE restrictor plate.
2. For B&S engines the air intake may be relocated, but Briggs & Stratton parts must be used to relocate the air filter: 592251 remote kits, 695329 – choke shaft and 699960 bases. No other previous versions will be allowed. The supplied air hose may be shortened to a minimum of 152 mm (6.0 in). No other type of hose will be allowed. A team may also add additional pre-filters to the top of the air intake.
3. For Kohler engines, a 3/16" (4.76 mm) fuel line is required between the fuel filter and carburetor. The required throttle return spring is Kohler PN 17 089 101. The required restrictor plate PN is EX22-17146-0027.
4. GOVERNOR SETTING NOT TO EXCEED 3800 RPM on any engine.
5. For B&S Model 19 engines the governor spring must be placed in hole 5.
6. For B&S Model 20 engines the governor spring must be placed in hole 6.
7. For Kohler Model CH440 engines the governor spring must be placed in hole 2B.
8. Hydraulic accumulators are the only type of stored energy device that may be incorporated into the vehicle for propulsion purposes. Hydraulic power systems must be properly shielded, and documentation of the shielding made available for review.
9. Compressed Gas systems are allowed to change transmission states (i.e., shift gears), but not to provide additional power.

Technical Requirements – Electrical System

1. The electrical system must include at least two kill switches, a brake light, and a battery power source.
 - a. The kill switches must deactivate the engine ignition.
 - b. The brake light, any reverse light and alarm, must operate regardless of the kill switch setting.
 - c. The brake light, any reverse light and alarm, must be powered and functional at all times. Cut-out or disabling switches to the brake light and reverse light (if so equipped) are prohibited.
2. Batteries must be mounted with sound engineering practice and not come loose during a roll over.
3. Batteries which are not recharged by an engine alternator may power only safety items (brake light, reverse light, and alarm) and instrumentation (driver display, data acquisition), and may not power any control or actuation function in the drivetrain, steering, or suspension systems.
4. Batteries must be able to provide power to safety items (brake light, reverse light, and alarm) for the duration of each event.
5. Vehicles will be black flagged if safety equipment is not functioning.
6. The batteries must be factory sealed (incapable of being opened or serviced) and not leak in the event of a roll over.
7. Only batteries which are recharged by an engine alternator may be used to power control or actuation functions in the drivetrain, steering, or suspension systems

8. Each vehicle must be equipped with two (2) easily accessible kill switches turning off the ignition. The Kill switch must not de-energize the brake or brake light.
9. All wiring must be sealed, protected, and securely attached.
10. The brake light must not be modified or altered from original, purchased design and shall meet the following criteria:
11. The brake light shall be illuminated when the brake system is actuated, and completely extinguished when the brakes are released.
12. The brake light must be mounted at a minimum of 1 meter (39.4 in) above the ground.
13. The brake light must be mounted such that it shines rearward and parallel to the ground or pitched slightly downward, not up at an angle.
14. The brake light must be activated by hydraulic pressure switches.
 - a. Each independent brake hydraulic circuit must be equipped with a brake light switch, so that no brake, including cutting brakes may be activated without lighting the brake light.
 - b. This means each vehicle is required to have a minimum of two (2) hydraulic pressure switches.
15. Vehicles with reverse must be equipped with a backup light marked with an SAE "R" on the lens and be of LED design, equal to, or exceed the SAE standard J759.
 - a. The reverse light must be mounted at a minimum of 70 cm (27.6 in) above the ground.
 - b. Vehicles with reverse must also be equipped with a backup alarm. The alarm must be rated per SAE standard J1741 or J994 and sound whenever the vehicle is in reverse.

Technical Requirements – Towing Hitch Points

1. Each vehicle must have towing hitch points at the front and rear, along its longitudinal centerline.
 - a. These hitch points are used both for dynamic events and for vehicle recovery.
 - b. Hitch points must be structurally attached to the vehicle's main structure and must allow for transmission of both longitudinal and lateral towing loads from the vehicle to the hook or clevis of a tow rope/apparatus without entanglement in vehicle components.
2. The hitch points must be strong enough to serve as a vertical lift points for the vehicle (i.e., must be able to withstand the full dead weight of the vehicle).
3. The hitch points, when not attached to a tow rope, may not present a danger of penetration in the event of a collision.

Technical Requirements – Vehicle Identification

1. Three (3) primary numbers are required to be securely affixed to the car. One on both of the upper sides of the frame behind the roll hoop, clearly visible in a side view. One must also be visible from a front view.
2. Numbers that are not easily read might not be scored during the endurance event.
3. The primary cutout numbers must be at least 152 mm (6 in) high. These have a minimum line width of 25 mm (1 in.) and 102 mm (4 in) wide. The numbers must strongly contrast with the background color.

4. Schools which are entering more than one vehicle should consider painting them in individually distinctive colors to facilitate in lap counting.
5. Each vehicle must have numbers where the outer face is a minimum of 0.5 inches from the backing panel of contrasting color. The number must be a block style numeral that is clear and easy to read. Vehicles with numbers that are hard to read, missing, damaged or obscured may not be scored.

Technical Requirements – Transponders

1. All vehicles must be equipped with at least one AMB / MYLAPS rechargeable transponder. The ONLY acceptable types are the Classic MX, Flex MX, and X2 MX.
2. It is our intention to supply each car with a rented transponder as the primary tracking source.
3. Each transponder will be supplied **without** a mounting bracket. Teams are advised to weld a small bracket to their frame to attach the transponder. The bracket can be attached with rivets, zip ties or bolts. Comments: Attaching the bracket with an M4 pan OR flat head bolts with lock nuts OR wire is strongly suggested.
4. Orientation – The bracket must be mounted vertical to the frame so the transponder number can read “right-side up.”
5. Location – The transponder must be mounted on the driver’s right side forward of the seat and preferably within the lower horizontal plane of the front suspension. The transponder must be no more than 61 cm (24 in) above the track.
6. Unobstructed – There must be an open, unobstructed line between the antenna on the bottom of the transponder and the ground. (Do not mount the transponder inside the vehicle if sight line is obstructed.) Metal and carbon fiber may interrupt the transponder signal. The signal will normally transmit through fiberglass and plastic. If the signal will be obstructed by metal or carbon fiber, a 10.2 cm (4 in) diameter opening can be cut and the transponder mounted flush with the opening.
7. If, for any reason, a vehicle’s transponder is not being received by the timing system, the vehicle could be black flagged for transponder repair, relocation, or replacement.

Technical Requirements – Roll Cage

1. The purpose of the roll cage is to maintain a minimum space surrounding the driver. The cage must be designed and fabricated to prevent any failure of the cage’s integrity.
2. The roll cage must be a space frame of tubular steel.
3. Roll Cage Member Requirements Roll cage members must be made of steel tube and may be straight or bent. Straight members may not extend longer than 1016mm (40 in.) between Named Points. Bent members may not have a bend greater than 30° that does not occur at a Named Point; and may not extend longer than 838 mm (33 in.) between Named Points. Small bend radii (<152mm, 6 in.) that terminate at Named Points are expected, and are not considered to make a member bent, regardless of angle.
4. Roll cage element members which are made of multiple tubes, joined by welding, must be reinforced with a welding sleeve. Many roll cage elements are required to be continuous tubes and may not be made of multiple pieces. Tubes which are joined at an angle need not be sleeved.

5. Sleeves must be designed to fit tightly on the inside on the joint being reinforced. External sleeves are not allowed. Sleeves must extend into each side of the sleeved joint, a length of at least two times the diameter of the tubes being reinforced and be made from steel at least as thick as the tubes being reinforced.
6. The roll cage must have no exposed sharp edges which might endanger the driver or people working around the vehicle while the vehicle is in any attitude (static, dynamic, inverted, etc.).
7. Frame members which need to be drilled for the purpose of mounting fasteners or routing accessories must be reinforced with a welded sleeve. Sleeves must be designed to fit tightly on the inside of the hole or joint being reinforced. Sleeves must extend beyond the tube on both sides and be welded to the tube all the way around.

Technical Requirements – Cockpit and Throttle

1. The cockpit must be designed to (1) protect the driver and (2) permit easy driver exit in an emergency.
2. All drivers must be able to exit on either side of the vehicle within five (5) seconds. Exit time begins with the driver in the fully seated position, hands in driving position on the connected steering wheel, and wearing the required driver equipment. Exit time will stop when the driver has both feet on the ground. Driver's exit time must be demonstrated by a team driver, as selected at technical inspection.
3. There must be a firewall between the cockpit and the engine and fuel tank compartment. It must cover the area between the lower and upper lateral cross members (LCA and LCB) on the Rear Roll Hoop.
4. The firewall must be metal, at least 0.50 mm (0.020 in.) Thick, and must completely separate the engine compartment and fuel tank from the cockpit.
5. The cockpit must be fitted with body panels that cover the area between the lower frame side member and the side impact member. No gaps can exist that are larger than 6.35 mm (0.25 in). These panels must be made of plastic, fiberglass, metal, or similar material. They must be designed to prevent debris and foreign object intrusion into the driver compartment. The panels must be mounted securely to the frame using sound engineering practices (zip ties and Velcro are not acceptable).
6. The cockpit must be fitted with a belly pan over the entire length of the cockpit, so that the driver cannot contact the ground and is protected from debris while seated normally. Belly pan material must prevent penetration from sharp objects. They must be designed to prevent debris and foreign object intrusion into the driver compartment. Expanded metal, flexible fabric, or perforated panels are not allowed.
7. All steering or suspension links exposed in the cockpit must be shielded with metal. The shielding must prevent the driver's legs and feet from coming in contact with or becoming entangled during operation or a failure. A Universal joint in the steering system near the driver's feet shall be shielded or booted such that the driver may not become entangled in the joint.
8. Each team must have two identical fire extinguishers with a minimum UL rating of 5 B-C. The vehicle shall have one fire extinguisher installed and the second extinguisher serves as a spare. All fire extinguishers must be equipped with a manufacturer installed dial pressure gauge. The gauge must be readable. All Kidde fire extinguishers must be dated after 8/15/18.

9. Only mechanical foot operated throttle controls are allowed. A wide-open throttle stop must be mounted at the pedal. Controls must be designed to return to idle-stop in the event of a failure. The throttle cable must be covered (sheathed) between its forward mounting point and the firewall. Foot pedals must be positioned so as to avoid foot entrapment in any position.

Technical Requirements – Driver Restraint and Seating

1. A safety harness system of at least 5 points must be worn by all drivers. The lap belt and shoulder belts must be approximately 76 mm (3 in.) wide. The fifth (“anti-submarine”) belt must be worn between the legs to prevent the lap belt from riding up along the driver’s torso. The safety harness must be installed using good engineering practice. The safety harness must be worn snugly (one finger width maximum gap).
2. All belts must join with a single metal-to-metal quick release lever type buckle. No camlock systems are allowed.
3. The material of all straps must be of Nylon or Dacron polyester and in new or perfect condition. All driver restraint systems must meet either SFI Specification 16.5/16.1, or FIA specification 8853/98.
4. In the event of a rollover, the driver’s arms must be kept within the limits of the roll cage space (B8.2) by use of arm restraints. Arm restraints must be securely fastened to the driver restraint system. Only commercially available arm restraints meeting SFI 3.3 are allowed. The arm restraints must independently connect to the safety belts.
5. Arm restraints must be installed such that the driver can release them and exit the vehicle unassisted, regardless of the vehicle’s position. The arm restraint must be worn by the driver on the forearm just below the elbow. The driver must be able to reach the cockpit kill switch and steering wheel, but not allow their arms to exit the cockpit. Arm restraints and neck support “doughnut” will be inspected based on condition rather than SFI date
6. The belts must be in overall good condition and show no signs of wear, no cuts chaffing or wear.
7. The seat shall work in concert with the safety harness to secure the driver within the envelope of the roll cage. Seats must be of conventional design – no “sling” seat are allowed. All seats shall be designed for the upright seating position. The upright seating position is defined by the angle of the driver’s back to a horizontal line. The back angle for an upright seating position is more than 65 degrees. As a reference, a completely upright driver will have a back angle of 90 degrees.
8. Conventional seats shall be generally rigid and be of metal or composite construction. Conventional seats may also have a removable seat cover and foam padding.
9. A head restraint must be provided to limit rearward motion of the driver’s head. The head restraint must be mechanically fastened (NO Velcro or adhesive) to the vehicle, preferably the vehicle frame. Head restraints may also be mechanically fastened or integral to the driver’s seat.
10. All seats shall be mounted with a minimum of 6 bolts, 4 in the bottom plane and 2 in the back plane.

Technical Requirements – Braking System

1. The vehicle must have hydraulic braking system that acts on all wheels and is operated by a single foot pedal. The pedal must directly actuate the master cylinder through a rigid link (i.e., cables are not allowed). The brake system must be capable of locking ALL FOUR wheels, both in a static condition as well as from speed on pavement AND on unpaved surfaces.
2. The braking system must be segregated into at least two (2) independent hydraulic circuits such that in case of a leak or failure at any point in the system, effective braking power shall be maintained on at least two wheels. Each hydraulic circuit must have its own fluid reserve either through separate reservoirs or by the use of a dammed, OEM-style reservoir.
3. The brake(s) on the driven axle must operate through the final drive. Inboard braking through universal joints is permitted.
4. Hand or feet operated “cutting brakes” are permitted provided the section (B11.1) on “foot brakes” is also satisfied. A primary brake must be able to lock all four wheels with a single foot. If using two separate pedals to lock 2 wheels apiece; the pedals must be close enough to use one foot to lock all four wheels. No brake, including cutting brakes, may operate without lighting the brake light.

Technical Requirements – Fuel System and Fuel

1. The entire fuel system, including splash shield, drip pan, and engine (excluding intake air hoses) must be located within the envelope of the vehicle’s roll cage (members defined in B8.3.1, and any extra primary or secondary members). The fuel tank mountings must be designed to resist shaking loose. All fuel tank mounting points shall be used.
2. Fuel tanks must be mounted directly to the roll cage directly, using at a minimum secondary members. Cantilever mounts are prohibited. The tabs that mount the fuel tank must be welded to the roll cage secondary members and hold the tank rigid. Tabs must be less than 2” in length from the mounting hole to the outside of the secondary member it is welded to.
3. Removable fuel tanks are not allowed. All fuel tanks should be “Briggs and Stratton” or “Pyrotect” brand fuel tanks and permanently mounted.
4. The mounting of the tank box must be mounted to secondary members using a minimum of 4 points that are at a similar spacing as the fuel tank OEM mounts.
5. Only a single fuel tank is permitted on the vehicle.
6. A standard Briggs and Stratton gas cap with a built-in check valve (Part # B4325GS) is required on B&S tanks.
7. All fuel lines must be located away from sharp edges, hot engine components and be protected from chafing. Grommeting is required where the lines pass through any member of the vehicle. Fuel lines are not allowed in the cockpit.
8. All lines must be SAE rated fuel lines and attached securely to prevent minimum line movement using sound engineering practices. Lines must be no larger than the stock lines supplied with the engine (i.e., 12.7 mm (0.5 in.) outer diameter and 6.3 mm (0.25 in.) inner diameter).
9. If a fuel filter is used, it must be a Briggs and Stratton or Kohler stock filter.
10. The fuel tank must be mounted so that if fuel spills it will not come in contact with the driver or the engine. Complying with this rule requires a drip pan that is at least 203.2 mm (8 in) in diameter (or equivalent area).

11. Drip pans must be mounted using sound engineering practices. A drip pan mounting comprised only of fastening to the fuel tank filler neck is insufficient and is not allowed. Drip pans must be graded or inclined such that all spilled fuel drains from the drip pan – fuel must not pool anywhere in the pan.
12. The only fuels permitted in the vehicles are grades of automotive gasoline consisting of hydrocarbon compounds. The fuel may contain anti-oxidants, metal deactivators or corrosion inhibitors.
13. All fuel must be transported in, and put into vehicle fuel tanks, from approved, unmodified containers.

Technical Requirements – Guarding

1. All rotating parts such as chains, sprockets, primary CVT pulleys, and belts that rotate at the rate of the drive axle(s) or faster, must be shielded to prevent injury to the driver or bystanders should the component fly apart due to centrifugal force. These guards/shields must extend around the periphery of the rotating components and must be wider than the rotating part they are protecting. NOTE: This rules includes the entire periphery of the primary CVT pulley, not just the belt width.
2. Holes and/or vents in the portion of the powertrain guard surrounding the rotating components are acceptable provided that in the event of a powertrain failure, no parts can escape. No direct path shall exist tangent to any rotating components.
3. Rotating parts must also be guarded all around, in addition to the guard around the periphery. All around guarding (finger guards) must prevent small, searching fingers from getting caught in any rotating part. Non rigid, fabric coverings such as "Frogskin", Ceconite, and neoprene are unacceptable for use as finger guards.
4. A complete cover around the engine and drivetrain is an acceptable shield.
5. Universal joints in the steering system near the driver's feet shall be shielded or sealed such that the driver may not become entangled in the joint.
6. All guards must be fabricated with no less than 0.125" thick aluminum or 0.06" thick steel.

Technical Requirements – Driver Equipment

1. All drivers must wear a well-fitting Motocross style helmet with an integrated (one-piece composite shell) chin/face guard and a rating of Snell M2010 or ECE 22.05 or newer.
2. Goggles must incorporate the use of tear-offs or roll-off systems.
3. All drivers must wear a neck support/collar.
4. The neck support must be a full circle (360°) and SFI 3.3 rated.
5. Horseshoe collars are not allowed.
6. Simpson, RCI, GForce, Deist or Leaf Racing Products supply neck collars that meet this requirement.
7. Drivers must wear long pants (cotton/Nomex), socks, shoes, gloves, and a long sleeved upper garment.
8. Jerseys, gloves, socks, or other garments made from nylon or any other synthetic material which will melt when exposed to high heat, are expressly prohibited.

Technical Requirements – Technical Inspection

1. Pass/Fail - All OktoBAJafest vehicles must pass a technical inspection before they are permitted to operate under power.
2. The inspection will determine if the vehicle satisfies the requirements and restrictions of the OktoBAJafest rules.
3. If vehicles are not ready for technical inspection when they arrive at the inspection site, they will be sent away.
4. Any vehicle may be re-inspected at any time during the competition and correction of any noncompliance will be required.
5. The swapping out of wheels/tires, CVT's, and shocks will be allowed without a recheck so long as the components are identical. Swapping of components to gain a competitive advantage is not allowed. In the case a component that is not identical is required to continue in the competition, the team must show the existing component and the one you want to swap to the head technical inspector.
6. Technical Inspection will consist of four (4) separate parts as follows:
 - a. **Engine inspection and governor setting:**
 - i. OktoBAJafest Representatives will set the governors of all vehicles.
 - ii. Vehicles must be presented for governor setting with the engine output shaft bare, the drivetrain disconnected, and the throttle cable disconnected from the engine and working kill switches.
 - iii. Each vehicle engine must be inspected by OktoBAJafest staff that will:
 - iv. Confirm its compliance with the rules.
 - v. Set the governor to the specified rpm. (3800 rpm)
 - vi. The vehicle governor check must be passed before continuing onto transponder check.
 - b. **Transponder check**
 - i. A transponder check station will be setup at the entrance to the technical inspection tent.
 - ii. At this station teams will receive their transponder and verify the transponder works with the OktoBAJafest timing equipment.
 - iii. The transponder check must be passed before continuing to technical inspection.

- c. **Technical Inspection:**
 - i. Each vehicle will be inspected to determine if it complies with the requirements and restrictions of the OktoBAJAFest rules. This inspection will include:
 - ii. A technical inspection of the vehicle.
 - iii. An examination of the driver's equipment including helmet and arm restraints.
 - iv. A test of driver exit time and to ensure that all drivers meet the requirements of the rules.
 - v. Each team must bring the following items to inspection:
 - 1. Technical Inspection Sheet: Before bringing their vehicle to technical inspection each team must:
 - a. Pre-inspect the vehicle for compliance with the rules.
 - b. Complete the official technical inspection sheet at (<https://sites.clarkson.edu/OktoBAJAFest/>). Teams must download the most current version of the technical inspection sheet within two weeks of the competition and thoroughly inspect their vehicle in accordance with the sheet.
 - 2. Drivers: All competition drivers must be present at technical inspection, if a driver is not present during technical inspection, they will be removed from the eligible drivers list.
 - 3. Fire extinguishers.
 - vi. Technical inspectors will use fair and sound judgement to deem a vehicle safe to race. All considerations are for the safety of participants and spectators.
 - vii. Technical inspection must be passed before a team may apply for kill switch and dynamic braking inspection.
 - d. **Kill switch and dynamic brake testing:**
 - i. Both the external and cockpit kill switches will be tested for functionality.
 - ii. If both switches pass the test, then the vehicle will be dynamically brake tested.
 - iii. Each vehicle must demonstrate its ability to lock all four wheels and come to rest in an approximately straight line after acceleration run specified by the inspectors.
 - iv. If a vehicle fails to pass any part of the inspection, it must be corrected/modified and brought into compliance with the rules before it is permitted to operate.
7. **Inspection Stickers:**
 - a. Once a team passes each part of technical inspection (engine inspection and governor check, transponder check, technical inspection, and kill switch and dynamic brake testing) a "Passed Tech" inspection sticker will be placed on the vehicle by the OktoBAJAFest inspector. The sticker will be placed on the driver's right side of the firewall above the driver's shoulder.
 - b. The inspection sticker must remain on the vehicle throughout the competition.
 - c. Vehicles without an inspection sticker may not be operated under power.
 - d. The inspection sticker may be removed, and a vehicle not allowed to operate under power by OktoBAJAFest inspectors if the vehicle that has been damaged or which is reasonably believed may not comply with the rules.

EVENT DAY RULES

Design / Tech Inspection / Dynamic Event Days (Friday and Saturday):

1. All vehicle modifications and repairs shall be done in the paddocks. No repair work shall be done in or around any of the following areas:
 - a. Tech inspection
 - b. Design judging
 - c. Brake check
 - d. Practice track
 - e. Hill climb
 - f. Baja Cross Track
 - g. Short Track
2. Any team found to be doing repairs in areas other than the paddocks will be asked to move their vehicle immediately. This is to help keep the area clear and safe for all participants, course workers, and spectators.

Endurance Day (Sunday):

1. All drivers who plan to participate in the endurance race must attend the endurance race driver's meeting.
2. The endurance race distance may be shortened due to weather with teams given fair notice. The planned duration is 4 hours.
3. Vehicles will be allowed to finish the lap that they have started after the first vehicle completes the race.
4. Flags:
 - a. **Yellow Flag:** Yellow flags will be used to indicate that an accident has occurred ahead, and drivers should immediately take caution, slow down, form a single line, and may not overtake their competitors. Once the driver has passed the accident area, they may resume racing speeds.
 - b. **Red Flag:** Red flags will be used to indicate that all vehicles must immediately stop on the course and wait for further instructions. Drivers will remain in their vehicles with their engines at idle and wait for instructions from the course workers on what to do.
 - c. **Black Flag:** Drivers will receive a black flag if they are deemed to be driving aggressively. The flag will be waved, and the flagger will point at the offending vehicle. Drivers will receive a warning after their first offense and will be removed from the endurance race after (3) black flags. Behaviors that will warrant a black flag include but are not limited to:
 - i. Deliberately leaving the track to gain a competitive advantage.
 - ii. Making avoidable contact with other competitors.
 - iii. Taking an action that put competitors, spectators, and volunteers at risk.

5. In the case of a rollover, a frame inspection is required by a member of the technical inspection team before the vehicle is allowed to continue on the course.
 - a. In the case of a rollover, immediately pull over to the side of the course if able and wait for an inspector. Do not proceed without getting clearance from an inspector.
 - b. Consider the time lost waiting for an inspection as motivation to drive within the means of the track conditions.
 - c. Three (3) rollovers for the same vehicle will remove you from the rest of the endurance race.
 - d. A warning will be given to the current driver on the second rollover
6. Tow vehicles will be used to help return cars to their paddock area. Racing vehicles may not pass a tow vehicle if they are on the track.
7. Fueling Zone (FZ):
 - a. All driver changes and fueling will occur in the FZ.
 - b. Only three (3) people from any given team (excluding drivers) are allowed in the FZ at one time. Even if teams have multiple cars, only 3 people shall be in the fuel zone.
 - c. After fueling is complete or after a driver change, the vehicle shall receive a harness check from the FZ crew before returning to the race.
 - d. Speed in the FZ is walking speed only and will be strictly enforced, drivers may receive a black flag for going too fast in the FZ.
 - e. Fueling:
 - i. During refueling, both fire extinguishers (one in the vehicle and one in the hands of the fire extinguisher person) shall indicate 100% charged on the dial. If at any point a fire extinguisher is discharged or is not showing fully charged, a new fire extinguisher must be acquired before fueling. Teams are recommended to have at least one spare.
 - ii. Before refueling, the vehicle must be stopped, the engine shut off, and the driver completely out of the vehicle. The driver may not be tethered in any way, by harness, communications equipment, or clothing.
 - iii. Before refueling, a team's pit crew member must have a fire extinguisher ready and pointed at the fuel transfer point on the vehicle. This must be a FZ specific fire extinguisher and may not be the fire extinguisher from the vehicle.
 - iv. The exiting driver is the only team member permitted to remove the fuel tank cap.
 - v. A team refueling their vehicle before the driver is clear of the vehicle or who fail to have a fire extinguisher present and pointed at the fuel transfer point will be penalized.
 - vi. A fire extinguisher must be present and pointed at ANY transfer of fuel, including re-filling a smaller container from a larger one when a vehicle is not present.
 - vii. Vehicles must be refueled using a fuel container no larger than 1.5 gallons in volume. Each team shall have no more than two (2) approved fuel containers in the FZ.
 - viii. Each team may have one (1) 5 gallon container to refuel the smaller containers.

- ix. All fuel must be in the FZ by the time endurance pre-gridding closes and safety checks begin. Once in the FZ no fuel shall be removed until the endurance race is complete.
- f. No repair or other work requiring a tool may be performed in the FZ. Teams are allowed to make adjustments that do not require any tools. Examples include driver harness, seat position, spring-damper pre load, etc.
- g. Teams may only have approved fuel containers, fire extinguishers, and funnels, if required, in the FZ. Tools of any kind are specifically prohibited.