



School / University

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Vehicle Number

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| Item # | | Team Initials | Tech Inspector Initials | Failed Item(s) | Recheck Initials |
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| Engine Check | | | | | |
| 1.1 | Engine: Either a Briggs & Stratton Model 19 or Model 20 or Kohler Model CH440-3302 with SAE restrictor plate. The engine must remain completely stock in all ways. Kohler engines must have a 3/16" (4.76 mm) fuel line between the fuel filter and carburetor. | | | | |
| 1.2 | Governor is set for 3,800 RPM | | | | |
| 1.3 | For Model 19 engines the governor spring must be placed in hole 5. For Model 20 engines the governor spring must be placed in hole 6. For Kohler Engines the governor spring must be placed in hole 2B | | | | |
| Vehicle Identification / Transponder | | | | | |
| 2.1 | All vehicles must have a AMB/MYLAPS transponder. The ONLY acceptable types are the Classic MX, Flex MX, and X2 MX. | | | | |
| 2.2 | Transponder must be mounted on driver's right side forward of the seat and within 610mm (24in) of the ground. The transponder must be oriented properly and have unobstructed line of sight to the ground and must be protected from obstacles. | | | | |
| 2.3 | One primary number must be visible from a front view. The number must be a block style numeral that is clear and easy to read. | | | | |
| 2.4 | Primary cutout numbers must be affixed to the upper sides of the frame behind the rear roll hoop and clearly visible from each side. | | | | |
| Vehicle Eligibility | | | | | |
| 3.1 | The vehicle must have passed technical inspection in an SAE competition that occurred from the last 6 years (2018-2023). A complete "Passed Tech" sticker shall be on the vehicle. Exceptions to this rule are at the discretion of the technical inspectors and will be dealt with on a case by case basis. | | | | |
| Frame | | | | | |
| 4.1 | A full intact roll cage is present all around the driver. It is fabricated competently. | | | | |
| 4.2 | Roll cage members must be made of steel tube. | | | | |
| 4.3 | Roll cage must be unmodified from how it passed tech at competition. | | | | |
| 4.4 | Any frame modifications (including replacing frame members) must be approved by tech inspectors. | | | | |
| 4.5 | Frame may not have any dented or bent tubes. | | | | |
| 4.6 | Damaged tubes must be sleeved or replaced using Baja SAE rules B.3.2.14 for Tube Joints. | | | | |
| Driver Restraint & Equipment | | | | | |
| 5.1 | Minimum 5-point harness with single metal-to-metal quick release lever buckle. No cam lock systems. The material shall be 3.0 inches in width, and free from injurious defects. Anti-submarine belts shall meet the same conditions, but have a minimum nominal width of 1.75 inches. The driver harness and restraints must be in overall good condition with no visible wear, cuts, tears, or fretting. | | | | |
| 5.2 | All driver restraint systems must meet either SFI Specification 16.5/16.1, or FIA specification 8853/98. | | | | |
| 5.3 | All fasteners used to attach the harness to the chassis must be in good condition and of grade 5 (metric grade 8.8) or better. Two threads must protrude from locknuts. | | | | |
| 5.4 | 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, M2015, SA 2010, SA 2015, M2020, SA 2020, British Standards Institution BS 6658-85 types A or A/FR, ECE R22-05. Goggles must incorporate the use of tear-offs or roll-off systems. Helmets must be in good condition with no removed padding (no deep scratches, cracks, or dents). | | | | |
| 5.5 | Full circle, neck support collars meeting SFI 3.3 must be worn. Horseshoe collars, Leatt, & HANS devices are not allowed. | | | | |
| 5.6 | Separate arm restraints meeting SFI 3.3. | | | | |
| 5.7 | Drivers must wear long pants, socks, shoes, gloves, and a long sleeved upper garment. All materials must be nomex or cotton, no exceptions. | | | | |

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| 5.8 | 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. | | | | |
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| Cockpit | | | | | |
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| 6.1 | Fire extinguisher must be mounted on the right side of the driver, easily accessible, with the top below the driver's head, and the top half above the side impact member. | | | | |
| 6.2 | Two identical extinguishers with a Minimum UL rating of 5 B C; must be equipped with a manufacturer installed dial gauge; gauge must be readable and properly charged. All extinguishers must be labeled with school name and car number. All Kidde fire extinguishers must be dated after 10/15/18. | | | | |
| 6.3 | 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. | | | | |
| 6.4 | All sharp edges which might endanger the driver, crew, or officials must be eliminated, shielded or radiused. All cable ties shall be flush cut and sheet metal edges deburred. No gaps greater than 0.25 in. can exist between the lower frame side member and side impact member. | | | | |
| 6.5 | 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. | | | | |
| 6.6 | Vehicles with 4 wheel drive must have proper guarding and drive shaft hoops. | | | | |
| 6.7 | Vehicle must have a belly pan under the entire length of the cockpit and seat. Pan must be solid material. | | | | |

| Brakes | | | | | |
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| 7.1 | Vehicle must have two independent brake circuits and separate reservoirs actuated by a single brake pedal. | | | | |
| 7.2 | All brake lines must be clear of wheels and tires and not be pulled when steering is turned from lock to lock. | | | | |
| 7.3 | The brakes on the driven axle must operate through the final drive axle. | | | | |
| 7.4 | Each brake circuit must have its own brake pressure switch to activate the brake light. | | | | |
| 7.5 | All fasteners used in the brake system must be in good condition and of grade 5 (metric grade 8.8) or better. Two full threads must protrude beyond locknuts. | | | | |

| Electrical | | | | | |
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| 8.1 | Each vehicle must be equipped with two (2) easily actuated kill switches turning off the ignition. The Kill switch must not de-energize the Brake Light(s). (Note: Kill switches do not need to cut power to other electronics.) | | | | |
| 8.2 | One switch must be located on the driver's right side of the vehicle, near the top of the roll cage. | | | | |
| 8.3 | The vehicle must be equipped with a red brake light that is clearly visible. The brake light must be mounted at a minimum of 1 meter (39.4 in) above the ground. | | | | |
| 8.4 | Cars with reverse must have reverse light (SAE "R") of LED design and alarm. | | | | |
| 8.5 | Reverse and brake lights shall remain effective at all times. No cut-out or disabling switches are permitted. | | | | |

| Towing Points | | | | | |
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| 9.1 | The front hitch point must be strong enough to serve as a vertical lift point for the vehicle. The front hitch point, when not attached to a tow rope, may not present a danger of penetration in the event of a frontal collision. The front tow point shall be able to freely pass a gauge measuring 2.0 in. x 2.0 in. x 8.0 in. behind the front tow point tube | | | | |
| 9.2 | Rear hitch must be made of steel plate. 0.125 to 0.375 inch thick with a hole Diam of 1.0 inch to 1.25 inch. There must be a 1.0 inch radial clearance. Minimum attachment width of plate to frame is 3.0 inches. | | | | |

| Fueling / Drivetrain | | | | | |
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| 10.1 | A standard Briggs and Stratton gas cap with a built in check valve (Part # B4325GS), or the fuel cap included with the pyroprotect fuel tank is required. Briggs and Stratton fuel cells are allowed but must use the approved internal tank spacer. Kohler cars must use the pyroprotect fuel tank. | | | | |
| 10.2 | The fuel tank must not be removed for refueling purposes. | | | | |
| 10.3 | Splash shields are required to prevent fuel from accidentally being poured directly on the engine or exhaust while refueling or preparing to refuel the vehicle. | | | | |
| 10.4 | 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. | | | | |
| 10.5 | Tangential guarding shall have a minimum thickness of 0.100" for aluminum, or 0.050" for steel. | | | | |
| 10.6 | Gear boxes may not vent to atmosphere. Gear boxes must be completely sealed to prevent oil from contacting engine exhaust or other sources of ignition. A crimped tube does not count as sealed, must use a threaded plug. Bellows are allowed but must remain within the roll envelope of the vehicle. Oil is not allowed to leak out of the gearbox in the event of a rollover. | | | | |
| 10.7 | All fasteners used in the engine, gearbox, and drivetrain must be in good condition and of grade 5 (metric grade 8.8) or better. Two full threads must protrude beyond the locknuts. | | | | |
| Suspension / Steering | | | | | |
| 11.1 | Adjustable tie rod ends must be constrained by a with a jam nut to prevent loosening. Jam nuts must be tight. | | | | |
| 11.2 | Steering stops must be present and set properly to stop the wheel from turning past the travel of the steering rack. | | | | |
| 11.3 | All lug nuts/wheel studs must be present and tight. | | | | |
| 11.4 | Suspension members (A-arms, trailing arms, etc.) must be securely connected and all hardware, jam nuts, etc. must be tight. | | | | |
| 11.5 | Spindle and axles nuts must be tight and at least 1 full thread showing. | | | | |
| 11.6 | All fasteners used in the suspension and steering must be in good condition and of grade 5 (metric grade 8.8) or better. Two full threads must protrude beyond the locknuts. | | | | |
| Miscellaneous | | | | | |
| 12.1 | The technical inspectors can require any modification at their discretion. | | | | |
| 12.2 | 2 full threads must protrude from locknuts. | | | | |
| Kill Switch Testing | | | | | |
| 13.1 | Each kill switch that is installed on the vehicle (minimum of 2) must be able to shut off the engine. | | | | |
| Dynamic Brake Testing | | | | | |
| 14.1 | The vehicle can lock up all four wheels and come to rest in an approximately straight line after an acceleration run specified by the inspectors. | | | | |

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| CHECK IF ISSUED | |
| Passed Tech Sticker Issued | |

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| Head Inspector Signoff |
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| Team Captain Signoff |
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