

Summary Sheet

University:

Vehicle Number:

Number of drivers:

Tallest driver:

LSV Voltage:

Height:

NOTES:

- This form must stay with the vehicle at all times!
- If there is a conflict between this form and the rules, the rules prevail
- This sheet is just a guideline for the scrutineers!

PART I: Mechanical Inspection

Inspector Names _____ Date, Time _____ Signature _____
1. _____/_____

PART II: Driver Egress and Safety Test

Inspector Names _____ Date, Time _____ Signature _____
1. _____/_____

PART III: Tilt Test

Inspector Names _____ Date, Time _____ Signature _____
1. _____/_____

PART IV: Vehicle Weighing

Inspector Names _____ Date, Time _____ Signature _____
1. _____/_____

PART V: Noise Test

Inspector Names _____ Date, Time _____ Signature _____
1. _____/_____

PART VI: Brake Test

Inspector Names _____ Date, Time _____ Signature _____
1. _____/_____

PART VII: Post Event Inspection

Inspector Names _____ Date, Time _____ Signature _____
1. _____/_____

MECHANICAL INSPECTION

Engine:	Bore / Stroke:
Fuel Type:	ABS: ETC:

Dry Tyres:	Rain Tyres: (2,4 mm min. tread depth molded)
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**VEHICLE WITH TALLEST DRIVER IN AND READY TO RACE
SCRUTINEER LEADER'S SHEET**

MAIN HOOP & FRONT HOOP HEIGHTS - Helmet of driver to be **50 mm** below line between top of front and main roll hoop AND between top of main hoop to rear attachment point of main hoop bracing.

DRIVER FLUID PROTECTION - A firewall must extend sufficiently far upwards and/or rearwards such that any point, less than **100mm** above the bottom of the helmet of the tallest driver, is not in direct line of sight with any of the following parts: fuel system, engine oil system, cooling system and low voltage battery.

HEAD RESTRAINT- Near vertical. Must take 890 N load. **40 mm** thick, **SFI 45.2** standard. Max. **25 mm** from helmet. Helmet contact point **50 mm** min. from any edge. May be changed for different drivers. Minimum **150x150mm** and SFI Standard 3.3 or equivalent material.

ARM RESTRAINTS - Must be installed so the driver can release them and exit unassisted regardless of vehicle's position.

SHOULDER HARNESS MOUNTING - Mounting points **180 - 230 mm** apart. Angle from shoulder between **10 deg.** Up and **20 deg.** down to horizontal. Attach to Primary Structure - 25,4 x 2.4 mm or 25.0 mm x 2.5 mm steel tube min. NOT to put bending loads into Main Hoop Bracing without extra bracing. Additional braces if not straight to main hoop. Cannot pass through a firewall. Attachment brackets to the monocoque must be steel.

OTHER SIDE TUBES - Design prevents driver's neck hitting bracing or other side tubes.

DRIVER RESTRAINT HARNESS - **SFI 16.1, SFI 16.5 or FIA 8853/98 spec 6 or 7** point and be labeled. 50 mm wide shoulder belts OK with HANS. 50 mm lap belts OK for **FIA 8853/98 & SFI 16.5**, not OK for **SFI 16.1**. All lap belts must have Quick Adjusters. Reclined drivers must have a 6 or 7 point, and Quick Adjuster sub-belts or 2 sets of sub belts. Must be securely attached to prim. structure (25,4x2,4 or equal.)

LAP BELT MOUNTING - Must pass over pelvic area between **45 - 65 deg.** to horizontal for upright driver, **60-80 deg.** For reclined. The lap belts must not be routed over the sides of the seat. Pivoting mounting with eye bolts or shoulder bolts attached securely to Primary Structure. Min. tab thickness **1,6 mm**. Attachment brackets to the monocoque must be steel, see T5.3.2.

▶ **BRAKE PEDAL** - Ask the driver to **kick** the brake pedal with max force

Brake pedal capable of 2000N, no failures if driver exerts max force (seated normally in vehicle).

NON-COMPLIANCE / COMMENTS

VEHICLE WITH TALLEST DRIVER IN AND READY TO RACE

- AERODYNAMIC DEVICES** - Securely mounted. The deflection may not exceed **10 mm** when a force of **200 N** is applied over a surface of **225 cm²** and not more than **25 mm** with a point force of **50 N** is applied. Not extending further than the rear portion of the head restraint (in rearmost position). (permanent **deflection < 5 mm**).
- AERODYNAMICS** - ALL aerodynamic devices maximum **250 mm** rearward of rear tires, maximum **700 mm** forward of front tires. Devices lower than **500 mm** from the ground rearward of the front axle must be no wider than vertical plane from the outside of the front and rear tires. Devices higher than **500 mm** behind the front axle must not be wider than the inside of the rear tires. No power ground effects.
- AERO VERTICAL HEIGHT** - Devices forward of a vertical plane through the rearmost portion of the front face of the driver head restraint support, excluding any padding, set to its most rearward position, must be lower than **500 mm** from the ground. Rear device max **1.2 m** above ground (incl. end plates); Front device max **250 mm** above ground outside of the inside plane of the front tires inside this plane max **500 mm**
- REAR WING TO BRACING ATTACHMENT** - attachment to the main hoop bracing needs a support back to the main hoop except if an attachment is next to the main hoop bracing attachment (no more than **50 mm**).
- VISIBILITY** - Minimum of **100 deg.** field either side. Head rotation allowed or mirrors. If mirrors, must be firmly installed and adjusted.
- ROLL BAR PADDING** - Roll bar or bracing that could be hit by driver's helmet must be covered with **12 mm** thick, **SFI spec 45.1** or **FIA 8857-2001** padding.
- CAMERAS** - Must be secured by two points, see T13.5. No cameras mounted to the helmet.

NON-COMPLIANCE / COMMENTS

VEHICLE WITH TALLEST DRIVER IN AND READY TO RACE

- PUSH BAR (red color)** - With vehicle, securely attached to vehicle, detachable, push & pull function for 2 people standing erect. The push bar must be attached to the rear of the vehicle for moving it
- QUICK JACK (red color)** - One device must be available to lift up all driven wheels min. **100 mm** above the ground. Lifting the car must be possible by one person. In lifted position the quick jack must be locked/secured and function without the support of a person or additional weights.
- FIRE EXTINGUISHERS** - Two (2) hand-held, 0.9 kg (2 lb.) minimum, dry chemical (**10BC, 1A10BC, 34B, 5A 34B, 20BE or 1A 10BE**), with pressure/charge gauge,, 1 WITH VEHICLE securely installed on push-bar, 1 in paddock.
- SUSPENSION** - Fully operational with dampers front and rear; **50mm** minimum wheel travel (**25 mm** jounce and **25 mm** rebound) with driver in vehicle.
- VEHICLE CONTROLS** - All controls, including shifter, must be inside cockpit. No arms or elbows outside the SIS plane.

NON-COMPLIANCE / COMMENTS

VEHICLE WITHOUT DRIVER SCRUTINEER LEADER'S SHEET

PRIMARY STRUCTURE

(Remove Body Panels / Seat)

PERCY - Helmet of 95th percentile male (PERCY) to be **50 mm** below the lines between top of front and main roll hoops and between top of main hoop to rear attachment point of main hoop bracing. Center of bottom circle placed minimum **915 (865 for DV only) mm** from pedals

COCKPIT OPENING - Fig. 8 template passes down from above cockpit center line of top SIS tube or to **320 mm** above lowest inside chassis point between FH and MH. Steering wheel, seat & padding can be removed. No removing of firewall.

COCKPIT INTERNAL CROSS SECTION - Fig. 9 template passes from the cockpit opening to **100 mm** rear of rearmost pedal contact area (in most forward position). Steering wheel and padding removable with no tools & driver-in can be removed.

SEAT - Insulated against heat conduction, convection and radiation. Lowest point no lower than top of the upper surface of the lowest SIS member OR must have longitudinal, 25.4 x 1.65mm steel tube underneath.

TUBING & MATERIALS - Team must show an APPROVED SES. No Magnesium tubes in primary structure.

MONOCOQUE - Must see laminate test specimen. Steel backing plates (**2mm** thick) used at attachment points.

MAIN HOOP - MUST BE STEEL. Check dimension as shown in approved SES. Must be made of one piece and extend to lowest frame member. Above Major Structure, must be within **10 deg.** of vertical plane. Smooth bends without wrinkles.

MAIN HOOP BRACING - MUST BE STEEL. One straight brace on each side. Attached within **160 mm** from the top. **Min. 30 deg.** Included angle with hoop. If main hoop is not vertical, bracing must not be on same side of the vertical plane as the main hoop. No bends. No rod-ends. Must take load back to bottom of main hoop and node of upper side impact tube through proper triangulated structure. (25.4 mm x 1.2 mm or equivalent)

BOLTED JOINTS in primary structure - Distance hole centerline to the nearest free edge **> 1.5 x** hole diameter.

FRONT HOOP - Must be closed section metal tube. Can be multi-piece with gussets or additional attachments to the monocoque. Must extend down to lowest frame member. No lower than top of steering wheel. Max. **20 deg.** to vertical. Check dimension as shown in approved SES.

BELLYPAN VENTING HOLES - Enclosed chassis structures and structures between the chassis and the ground must have two venting holes of at least **25mm** diameter in the lowest part of the structure to prevent accumulation of liquids. Additional holes are required when multiple local lowest parts exist in the structure.

FRONT HOOP BRACING - Two straight forward facing braces, **25.4 x 1.65mm or 25.0 x 1.75mm or 25.4 x 1.6mm** wall steel or equivalent, attached within **50 mm** of top. Extra rearward bracing required if Front Hoop leans backwards more than **10 deg.**

DRIVER'S FOOT PROTECTION - Feet must be rearward of the Front Bulkhead and no part of shoes or legs above or outside the Major Structure (25x1.2 or equivalent) in side or front views when touching the pedals.

SIDE IMPACT PROTECTION - Min. of 2 tubes + 1 diagonal must connect the main and front hoops in straight line. Upper tube must be between **240 mm** and **320 mm** above lowest inside chassis point between FH and MH. Lower tube can be lower frame member. At least one diagonal per side must connect the upper and lower members between the main and front hoops. Dimension as shown in approved SES.

FRONT BULKHEAD SUPPORT - Support back to front roll hoop; 3 tubes per side, all 25 mm x 1.5 mm wall steel tube or equiv. 1 bottom; 1 top within **50 mm** of top of bulkhead, and connecting within 100 mm above and **50 mm** below upper SIS tube; 1 or more node-to-node diagonal to completely triangulate connections to upper and lower SIS tubes.

INSPECTION HOLES - **4.5 mm** inspection holes required in non-critical areas of front & main hoops. Inspectors may ask for holes in other tube(s).

FRONT IMPACT PROTECTION - Feet must be completely within Major Structure & rearward of the Front Bulkhead. No non-crushable objects forward of bulkhead. **IMPACT ATTENUATOR** forward of bulkhead, **200mm long x 200mm wide x 100mm high**. No wing supports through the IA. IA must be securely fastened directly to AIP capable of taking transverse & vertical loads (no tape, etc.) Test piece presented and same as IA on vehicle. Standard IA: Requires diagonal brace if bulkhead **>1"** from IA on any side.

ANTI INTRUSION PLATE - A **1.5 mm** solid steel metal or **4.0 mm** solid aluminium metal sheet (same size as outside dims.) must be welded or **min. 8 screws M8 Grade 8.8** (critical fasteners T10). CFRP plate is accepted if SES approved.

DRIVER'S LEG PROTECTION - Covers inside of cockpit over any sharp edges or moving suspension / steering components.

ENGINE COMPARTMENT

- FIREWALL** - Fire resistant material; must separate driver compartment from cooling, oil system & LV battery. Passthroughs OK with grommets. Multiple panels OK if gaps (**3mm**) sealed. No gaps at sides or bottom. Must be rigidly mounted to the chassis. Material must meet UL94-V0, FAR25 or equivalent.
- AIR INTAKE SYSTEM ROLL OVER PROTECTION** - All parts of air intake system (including throttle body or carb, air intake ducting, air cleaner & air box) must be within a surface defined by the top of the roll bar and the outside top edge of the tires.
- AIR INTAKE SYSTEM** - Any portion < **350 mm** above ground must have Side Impact protection to rule CV 1.3.2 and be supported if cantilevered (isolated to frame, rigid to engine). Intercooler after throttle body.
- INTAKE MANIFOLD** - Securely attached to block or head with mech. Fasteners (positive locking!). OEM type rubber bushings not sufficient.
- RESTRICTOR** - Must be circular; max. diam. **20.0 mm** for gasoline fuelled vehicles and **19.0 mm** for E85 fuelled vehicles. Cannot be movable. Placed before compressor.
- ENGINE** - Four cycle piston engine. No hybrids. Waste heat recovery allowed.
- EXHAUST SHIELDING** - components outside the body forward of main hoop must be shielded from people approaching the car. **No fibrous / cloth wraps around exhaust tubes.**
- THROTTLE** - Must have minimum of 2 springs (1 spring when ETC installed) at the throttle body, each capable of closing the throttle independently. TPS not acceptable as a return spring. Cable must have smooth operation with no binding or sticking; min. **50 mm** from any exhaust component.
- THROTTLE PEDAL** - Must have positive stop to prevent overstressing cable.
- CATCH TANKS** - Any coolant overflow or lube system vents must have separate catch tanks. **0.9 l** minimum each, **100 deg. C** material, behind firewall, below shoulder level. **3 mm min.** dia. vent away from driver down to the bottom level of frame. Trans or diff., unless sealed, requires **100 ml** catch bottle.
- COOLANT** - 100% water. NO ADDITIVES WHATSOEVER or oil for engines.

NON-COMPLIANCE / COMMENTS

APPROVAL

Inspector Names

Date, Time

Signature

_____ / _____

VEHICLE WITHOUT DRIVER

- SCATTERSHIELDS GENERAL** - Required for clutches, chains, belts, etc. No holes. **6 mm** diam. Grade 8.8 minimum. End parallel to lowest part of the sprocket/pulley in front and rear. For chains, **2 mm** min. thick solid STEEL, **3 x** chain width. For belts, **3 mm** min. thick Al 6061-T6, **3 x** belt width. Finger guards: cover all drivetrain parts that spin while vehicle is stationary. No holes **>12 mm** dia.
- GAS CYLINDERS** - Proprietary manufacture & labeled, Nonflammable gas, regulator on tank, securely mounted, axis not pointed at driver, to rear of Main Hoop within the frame envelope, or in structural side pod, but not in cockpit, insulated from exhaust, appropriate lines & fittings. Positively retained, i.e. no tie-wraps.
- HIGH PRESS HYDRAULICS** - Pumps and lines must have **1 mm** steel or aluminium shields protecting driver and workers.
- COMPRESSORS** - Turbo or super chargers allowed if not OEM to engine; must be between restrictor and throttle. Carburetors are not allowed, if compressors are used. Compressor recirculation valves are ok if located downstream of restrictor.
- EXHAUST OUTLET** - Outlet **45 cm** (17.7") max. behind rear axle centerline and **60 cm** (23.6") max. above the ground
- STEERING** - All steerable wheels must have positive stops placed on the rack to prevent linkage lock up or tires from contacting any part of the vehicle. **7 degrees** max. free play at the steering wheel. **NO STEER-BY-WIRE** on front wheels. Rear wheel steering, max. 6 deg. and mechanical stops installed. No bonded joints in steering column.
- SUSPENSION PICK-UP POINTS** - Inspected thoroughly for integrity
- FASTENERS** - Steering, braking, harness and suspension systems must use SAE Grade 5 or Metric Grade M8.8 or higher specs (AN/MS) with visible positive locking mechanisms, no Loctite or lock washers. Minimum of 2 exposed threads with locking nuts. Rod ends in single shear are captured by a washer larger than the ball diameter. Adjustable tie-rod ends must have jam nuts to prevent loosening. **No Nylon lock nuts** for Brake calipers or Brake discs and closer than 50 mm. No button head cap, pan head or round head screws in critical locations, e.g cage structure or harness mount. Primary structure e/D **> 1.5**.
- WHEELBASE** – **minimum 1525 mm** (60 in)

BRAKE SYSTEM

- Dual hydraulic system & reservoirs
- operating on all four wheels, (one brake on limited slip differential is OK).
- System protected by structure or shields from drivetrain failure or minor collisions.
- No plastic brake lines. No brake-by-wire except in DV cars in autonomous mode. No parts below chassis/tubes in side view.
- Brake pedal made out of steel, aluminium or titanium.

SUSPENSION

- SUSPENSION** - Fully operational with dampers front and rear; **50mm** minimum wheel travel (**25 mm** jounce and **25 mm** rebound) with driver in vehicle
- STEERING WHEEL** - Continuous perimeter, near round (no concave sections) with driver operable quick disconnect. **250mm** max from front hoop.
- WHEELS** - **203.2 mm** (8") min. diam. No Aluminium or hollow wheel bolts. Single retaining nut must incorporate a device to retain the nut. Aluminum wheel nuts must be hard anodized.

FUEL SYSTEM

- FUEL SYSTEM ROLL OVER PROTECTION** - All parts of the fuel storage, supply and fuel control system systems (including fuel rail, throttle body or carburettor), must lie within a surface defined by the top of the roll bar and the outside top edge of the tires.
- FUEL FILLER NECK** - Min. **35 mm** dia., within **30°** of vertical. Fuel resistant, transparent sight tube or transparent filler neck (material must be rated for at least **130_C**). min **125 mm** vert. height visible to fueler with vehicle fully assembled, with non-moveable fuel level line **12-25 mm** below top of sight tube. Sight tube must NOT run below top of tank. Must prevent fuel spillage contacting driver, exhaust or ignition. Fueled w/o manipulating vehicle in any way. Cap secure and capable of withstanding pressurization (ie: threads or latch.), Must have a fuel type sticker close to the fuel filler.
- FUEL VENTS** - Must exit outside of the bodywork, and have a check valve to prevent leakage if vehicle inverted.
- FUEL TANKS** - Must lie within major structure of the chassis with full side impact protection & firewall between fuel supply & driver, min. **50 mm** away from exhaust components. Rigid tanks cannot carry structural load & must be flexibly mounted. Bladders or bags in rigid container allowed.
- FUEL LINES** - No plastic lines between fuel tank & engine. Fuel injection systems must use metal braided hose with threaded fittings or reinforced rubber hose with approved clamps. Must be securely attached and protected from possible rotating equipment or collision failure. No plastic connectors in fuel line. High pressure injection systems see CV 2.5.2.

NON-COMPLIANCE / COMMENTS

VEHICLE WITHOUT DRIVER

EXTERIOR, GENERAL

SCHOOL NAME & OTHER DECALS - School Name, or recognized initials - **5 cm** tall min. on both sides in Roman letters. Must be clearly visible.

VEHICLE NUMBERS - On front & both sides of vehicle, minimum **15 cm** tall, **20 mm** stroke & spacing, **25 mm** min. between number and background edge, Black on White, White on Black only, specified background shapes. Must be clearly visible.

TECH STICKER SPACE – **12.5 cm x 10 cm** on centerline of front of vehicle in front of the cockpit opening.

BODY & STYLING - Open wheeled, open cockpit, formula style body. Vertical keep out zones **75mm** in front and behind tires (no aero exceptions), tires unobstructed from sides.

BODYWORK - Min. **38 mm** radius on nose. No large openings in bodywork into driver compartment in front of or alongside driver, (except cockpit opening).

EDGES/RADII - Horizontal leading edges min **5 mm** radius; vertical forward facing edges min **3 mm** radius.

BODYWORK EDGES - edges that could contact a pedestrian must have a minimum radius of **1.0 mm** (safety requirement)

ELECTRONICS

ON-BOARD STARTER - Required.

SHUT DOWN BUTTON – - Pull-ON, Push-OFF, electric symbol **COCKPIT** - alongside & unobstructed by steering wheel, easily reached by driver. Must kill ignition & fuel pump(s). Marked with international symbol.

OUTSIDE - One button located on each side of the vehicle behind the driver's compartment at the level of the driver's head. Rotary type, no relay, must kill ALL electrical systems.

STUDENT BUILD LV BATTERY - Proper Insulation of internal connections; proper mounting of cells.

INERTIA SWITCH - Rigidly attached to the vehicle, demountable for functionality check. Must open the shutdown circuit and kill ignition, injection & fuel pump(s) when accelerated between **6g** and **11g**

BRAKE LIGHT - Only one **RED** brake light, clearly visible from the rear; on vehicle centerline; height between wheel centerline & driver's shoulders. Round, triangle, or rectangular on black background. **15 cm²** minimum illuminated area. LED strips OK if elements closer than **20mm** apart and total length **> 150 mm**.

LOW VOLTAGE MASTER SWITCH - Must be located on the right side of the vehicle, in proximity to the main hoop, at the 95th percentile male driver's shoulder height, in the middle of a completely red circular area of **> 50mm** diameter. Marked with LV and international symbol. Level horizontal when in ON position.

BRAKE PEDAL OVER-TRAVEL SWITCH - Must constantly open the shutdown circuit if one brake circuit fails for brake balance bar in all possible positions. No re-start if released or actuated a second time. Push pull or flip type Must NOT rely on programming to work. Not resettable by driver.

LV BATTERY - Rigid and sturdy casing and attached securely to frame or chassis. Battery behind firewall; wet-cells in **IPX7** rated and acid resistant casing if inside cockpit. Must be contained within the rollover protection envelope, see T1.1.15. Grounded to chassis; hot terminal insulated; protected for short circuits (fused). No circuits **>60VDC**.

LI-ION LV BATTERY (only applicable if other than LiFePO4)- Has a fire retardant casing according to UL94-V0. Battery pack includes: an overcurrent protection that trips below maximum discharge current; over temperature protection of **>30%** of the cells; voltage protection of all cells; it must be possible to display all cell voltages and measured temperatures on a team laptop.

NON-COMPLIANCE / COMMENTS

APPROVAL

Inspector Names

Date, Time

Signature

DRIVER GEAR & SAFETY

- FACE SHIELDS** - made of impact resistant material.
- UNDERWEAR** - certified to SFI 3.3 or FIA 8856-2000
- SOCKS** - Nomex or equivalent, fire resistant socks. No cotton. No polyester. No bare skin.
- GLOVES** - Fire resistant material. No holes. Leather allowed only over fire resistant material.
- DRIVER SUITS** - Single piece FIA 1986 or 2000, or SFI 3-2A/5, FIA 8856-2000 minimum rating, and LABELED AS SUCH
- HAIR COVER** - Fire resistant (Nomex or equiv.) balaclava of full helmet skirt **REQUIRED FOR ALL DRIVERS.**
- SHOES** - SFI 3.3 or FIA 8856-2000
- HELMETS** - Snell K2005, K2010, K2015, M2005, M2010, M2015, SA2005, SA2010, SAH2010, SA2015, EA2016, SFI 31.1/2005, 31.1/2010, 31.1/2015, 41.1/2005, 41.1/2010, 41.1/2015, FIA 8860-2004, FIA 8860-2010, FIA 8860-2018, FIA 8859-2015. Closed Face, no Open Face, must have integrated shield (no dirtbike helmets). No camera mounts.

EGRESS TEST

- EGRESS** - **5 seconds** max. to exit to side of vehicle from fully seated position with all safety equipment; wings must remain fixed in position. ALL DRIVERS.

Both hands on the steering wheel. (in all possible steering positions)
 Pressing cockpit-mounted shutdown button.
 The egress time will stop when the driver has both feet on the ground

#	DRIVER'S NAME	EGRESS TIME
1.		:
2.		:
3.		:
4.		:
5.		:
6.		:
7.		:
8.		:

APPROVAL

Inspector Names

Date, Time

Signature

TILT TABLE INSPECTION

► *Tallest driver seated in, wearing every piece of driver equipment (inc. wrist)!*

TILTING DIRECTION - towards the side, where the filler neck is located.

VEHICLE STABILITY - All wheels in contact with tilt table when tilted to **60 degrees** to the horizontal

FUEL SPILLAGE - No fuel spill permitted when car is tilted to **45 degrees** in the direction most likely to create spillage; Tanks must be filled to scribe line with non-moveable fuel level line **12-25 mm** below top of sight tube.

NON-COMPLIANCE / COMMENTS

APPROVAL

Inspector Names

Date, Time

Signature

_____ / _____

VEHICLE WEIGHING

▶ *Fuel tank must be filled up to level, driver wearing every piece of driver equipment (exc. wrist)!*

- GROUND CLEARANCE** - At least **30mm** min. in any condition. (Also with the driver in.)
The checker specimen must freely slide without jamming and any kind of resistance under the whole car. Ground clearance must also be checked under all the aerodynamic elements.

- WEIGHT MEASURING** - The weight of the cars must be written with permanent method on the tech sticker on the nose.

NON-COMPLIANCE / COMMENTS

APPROVAL

Inspector Names

Date, Time

Signature

_____ / _____

NOISE TEST

▶ *Vehicle jacked up, driven wheels removed, driver wearing every piece of driver equipment (exc. wrist)!*

NOISE LEVEL 1 - 103dB (C) at idle speed, ("C" scale fast weighing) maximum during a static test, gearbox in neutral, at idle. Microphone level with the exhaust outlet(s), 0.5 m from the outlet(s), at **45 degrees** to the outlet. If multiple outlets, all to be checked. If movable tuning or throttling device, see B.10.2.3

NOISE LEVEL 2 - 110dB (C) ("C" scale fast weighing) maximum during a static test, gearbox in neutral, **UP TO** a specified rpm (see Rule B.10.2.4). Microphone level with the exhaust outlet(s), 0.5 m from the outlet(s), at **45 degrees** to the outlet. If multiple outlets, all to be checked. If movable tuning or throttling device, see B.10.2.3

MASTER SWITCH / SHUTDOWN BUTTONS - Must cause engine to stop when actuated (Perform at around 5000 rpm). (After noise)

INTAKE SYSTEM LEAKAGE/BYPASS - There is no air leakage or bypass of the intake system permitted. When the intake is closed completely, the engine should almost immediately stall
Choke Test - Engine should stop after chocking the air inlet. (After noise)

INERTIA SWITCH - Rigidly attached to the vehicle, demountable for functionality check. Must open the shutdown circuit and kill ignition, injection & fuel pump(s) so cause engine to stop when actuated.

ELECTRONIC THROTTLE CONTROL - Car must be equipped with two Throttle Position Sensors and one Accelerator Pedal Position Sensor.

INPLAUSIBILITY CHECK - BSPD - Brake system plausibility device must shut down fuel pump(s), ignition during high brake system pressure and <5% throttle actuation.

BRAKE OVER-TRAVEL SWITCH - A switch must be installed behind the brake pedal so that in the event of a failure in at least one of the brake circuits the brake pedal over-travel will result in the shutdown. Repeated actuation must not close the shutdown circuit, cannot be reset by the driver.

NOISE LEVEL IDLE:	dB (C)
NOISE LEVEL SPEC. REV. :	dB (C)

NON-COMPLIANCE / COMMENTS

APPROVAL

Inspector Names

Date, Time

Signature

_____ / _____

BRAKING PERFORMANCE INSPECTION

BRAKING PERFORMANCE - Must lock all four wheels and stop the vehicle in a straight line at the end of an acceleration run. No additives can be applied to the tires! Should be checked and demand tire change, if noticed slipperiness or odour!

BRAKE LIGHT - has to be clearly visible even in bright sunlight.

(Specified by the officials without electrical braking from motors. The tractive system has to be shut down by the driver before braking. The Tractive System Active Light has to be Green during breaking or shortly after the vehicle stopped (may take up to 5 sec. after shut down)).

NON-COMPLIANCE / COMMENTS

APPROVAL

Inspector Names

Date, Time

Signature

_____ / _____

