

TLR – CLUB CLASS LOCOST

1. PURPOSE & DESCRIPTION

- 1.1. Club Class Locost is an internal unofficial championship for eligible vehicles competing within the auspices of Class C.
- 1.2. It has been introduced for the purposes of promoting close, cost effective racing between roadgoing vehicles of a similar specification.
- 1.3. Consideration may be given to making application for the class to be granted “official” status at such time as there be consistently sufficient numbers to justify its inclusion in the Lotus Challenge as a separate and additional class.
- 1.4. Participants shall compete for the “Locost Club Trophy”.
- 1.5. Championship points and positions for eligible competitors shall be determined in accordance with Class C.

2. VEHICLE ELIGIBILITY LOCOST CLASS

- 2.1. The only vehicles eligible for this class are replicas of the Lotus 7, build as per the “Locost” book written by Ron Champion: “Build Your Own Sports Car for as Little as £250”
- 2.2. Save as otherwise stipulated herein, vehicles shall be compliant in all respects with the eligibility requirements of Class C and subject to all other conditions governing participation within the Lotus Challenge.
- 2.3. Notwithstanding their participation in this class, all vehicles will continue to compete, and be eligible to earn points, within Class C.
- 2.4. Kevlar, carbon fibre and titanium materials are not permitted.
- 2.5. **Minimum Weight**
 - 2.5.1. In any official practice or race the combined weight shall exceed 650 kgs. including car, driver, helmet, racewear, and whatsoever fluids may be in the vehicle at the time of weighing.
 - 2.5.2. Failure to comply will result in exclusion for that heat, or in the case of official qualifying, the competitor will be relegated to the back of the grid.
 - 2.5.3. Any ballast used to achieve the minimum weight must be placed in the passenger side of the cockpit area, and must be attached in a safe, secure manner.
- 2.6. **Engines**
 - 2.6.1. Engine will be limited to the 1600cc Ford Rocam engine, which is produced in South Africa, thus allowing costs to be kept at a minimum, standard flywheel and clutch assembly will be used. Standard clutch plates with bonded material, or 4 puck button clutches with sprung centers is allowed. The crank and flywheel may be cut to allow fitment of a standard Ford Sierra pilot bearing, but no cutting to reduce weight will be allowed.
 - 2.6.2. The sub assembly must be standard, no balancing of any kind allowed.
 - 2.6.3. The stroke shall be standard as per the manufacturers’ specification for that specific engine block.

- 2.6.4. No component of the engine, as supplied, may be disassembled or removed from the engine and no modification may be made to any component of the engine (unless allowed for elsewhere in these regulations).
- 2.6.5. A Locost series control camshaft shall be used. This cam will be specified and available from the Locost Club of SA.
- 2.6.6. The induction system, comprising all components from the throttle body to the cylinder head inclusive, will be standard as supplied with the engine, no modifications to these are allowed. The standard idle valve and AMP sensors may be removed to reduce likelihood of cracking of the plastic intake manifold. The holes left must be properly sealed.
- 2.6.7. Intake system before the throttle body is free.
- 2.6.8. The exhaust system is free but must comply with MSA noise regulations.
- 2.6.9. A properly functioning alternator is required to be fitted to the engine.
- 2.6.10. It is recommended that sealing tags be fitted to the sump so that the bottom end may be sealed upon assembly.
- 2.6.11. Maximum engine performance for the Rocam engine as measured on the Zwartkops dyno:

Maximum Power	63 kw
Maximum Torque	114 Nm

2.7. Drive train

- 2.7.1. Transmission is a Ford 4 or 5 speed gearbox, only standard Ford ratios and gears as fitted in the chosen gearbox are allowed, straight cut or sequential gearboxes are disallowed.
- 2.7.2. Differentials will be restricted to Ford Escort, Capri, Cortina, Sierra or Sapphire differential with ratios within the ranges of 3.32 - 4.11.
- 2.7.3. Locked or Limited Slip Differentials of any type are prohibited.
- 2.7.4. Traction and launch control or similar system of any description is prohibited.

2.8. ECU

- 2.8.1. Engine Management electronics (ECU) will be the Perfect Power XMSL or XMS4A as supplied by Perfect Power or it's dealers. Cars will be dynoed and sealed by a LCSA appointed agent should any concerns be raised that an engine produces more power than the equivalent engines in the class.
- 2.8.2. If fitted, ECU seals will be inspected at scrutineering of each event, and may be inspected at any time during a race meeting (practice or racing). In the event of any seal being broken, or bearing evidence of having been tampered with, the competitor concerned may be excluded from the race meeting. The onus is on the competitor to ensure all his/her seals are intact at all times and to immediately report any broken or damaged seals to the LCSA racing representative.

2.9. Fuel

- 2.9.1. Only 'standard pump fuel' available from a retail outlet is allowed, Race fuel or any Fuel additives are not permitted.

2.10. **Suspension**

- 2.10.1. The suspension is free except that the front dampers and springs must be placed in the air flow, steel bodied dampers only, all suspension mounting to the chassis must be through rubber or polyurethane bushes.
- 2.10.2. Suspension should be free to travel through their full range of movement without interference from any other source.
- 2.10.3. No rose joints/spherical bearings will be allowed other than one each side in the case of Independent rear suspension purely as a means of tracking adjustment, in the case of a live axle rear suspension one joint on the panhard rod and one on each trailing arm will be allowed, purely as a means of adjustment.
- 2.10.4. Anti-roll bars may be fitted front and/or rear. The use of spherical rod ends and rose joints is allowable for anti-roll bar links.
- 2.10.5. Bolting should be Grade 8.8 minimum throughout.

2.11. **Brakes**

- 2.11.1. Brake calipers and drum brakes are restricted to one caliper per wheel. Only single piston calipers commercially available as standard on the following SA vehicles can be used: Ford Escort, Capri, Cortina, Sierra, Sapphire or Bantam front and rear. VW MKI & MKII Golf front and rear callipers.
- 2.11.2. Drums and discs must not be cross drilled or grooved in any way, brake lining and pad material is free but carbon fibre is prohibited.
- 2.11.3. Brake bias adjustment is allowed but must not be adjustable by the driver whilst normally seated.
- 2.11.4. ABS systems are not allowed.

2.12. **Bodywork**

- 2.12.1. Chassis cockpit width shall be as per the Locost Book. Bodywork (Nosecone, scuttle, front and rear fenders) shall be same shape and size as described in the Locost Book.
- 2.12.2. Nosecone may only extend to the bottom of the chassis, any intake scoop may not protrude below the bottom of the chassis.
- 2.12.3. All wheels must be covered. Cycle Fenders are permitted on the front wheels. Front wheel arches/fenders must not protrude further forward than the front tyre and must cover the full width of the tyre tread and at least 30% of the tyre diameter, no vents, louvres or similar holes are permitted in wheel arches.
- 2.12.4. Aerofoils, spoilers, diffusers, side pods or any aerodynamic aid devices are prohibited.
- 2.12.5. Kevlar, carbon fibre and titanium bodywork materials are not permitted.
- 2.12.6. The maximum width of any bodywork forward of the centre line of the front wheels is 600mm, the minimum height of bodywork at the

centre line of the front wheels is 600mm, no bodywork must protrude more than 300mm forward of the tyre on the front wheel.

- 2.12.7. The maximum overall length is 3400mm, the maximum permitted wheel track is 1780mm measured at the outside edge of the tyre including the bulge made where the tyre contacts the ground.
- 2.12.8. The vehicle must have 2 seats. Only a fire extinguisher, battery, ballast and any roll bar bracing may impinge upon passenger space. No loose carpets or other items may be present in the vehicle. The passenger area must remain open at all times, covers of any description are not allowed.
- 2.12.9. The engine and transmission must be fully enclosed, exhaust system may protrude through the bodywork without the need for any cover but must be a reasonably close fit. Air filters or any part of the induction system must not protrude outside of the bodywork. One NACA duct/bonnet scoop allowed as supplied by the Locost Club on the left hand side of the bonnet. This duct should match the colour of the bonnet. No other intakes, scoops, ducts or holes are allowed in any part of the bodywork other than is standard with the commercially available Locost book bodywork or equivalent.
- 2.12.10. The construction of the transmission tunnel must be as per the Locost book, sufficient to restrain a broken prop shaft, indicated towing points must be provided front and rear.
- 2.12.11. Minimum ground clearance with the driver normally seated is 75mm excluding exhaust system and sump. Minimum ground clearance under the sump is 50mm.
- 2.12.12. All vehicles must be fitted with a full width windscreen of minimum vertical height of 300mm, measured from the point where the windscreen meets the centreline of the scuttle, and at an angle no less than 60 degrees from horizontal.
- 2.12.13. All exterior lighting including front headlights, rear brake, tail and indicators must be fitted and functioning to full roadworthy requirements. Headlights must be a minimum diameter of 5¼".
- 2.12.14. All cars shall have mirrors complying to SA roadworthy requirements.

2.13. **Wheels & Tyres**

- 2.13.1. The wheel rim diameter will be 15", with a maximum width of 7". Wheels must be of steel or aluminium alloy, magnesium or split rims are not allowed.
- 2.13.2. Wheel nuts should have at least 1.5 x stud diameter engagement with studs.
- 2.13.3. A control tyre as follows will be used:
 - Manufacturer - Dunlop
 - Type - Direzza 195/55/15, H1 compound
 - Supplier - ATS Motorsport Supplies, 20 Schoongezicht Rd, Bergbron
- 2.13.4. No alteration to the tyre from the manufacturer's specification is permitted.
- 2.13.5. Re-cutting, re-grooving or in any other way modifying the tread pattern is not permitted.

- 2.13.6. All the manufacturer's data must be clearly visible. Buffing of sidewalls to remove data is prohibited.
- 2.13.7. Tyres must meet road legal requirements in every respect, the tyre tread depth must be at least one millimetre over the entire circumference and 80% of the width of the tread surface of the tyre at all times.

3. Monitoring & Non-Compliance

3.1. Disputes

- 3.1.1. Any dispute will be referred to the Racing Committee of The Lotus Challenge who will, at their sole discretion, decide on the matter.
- 3.1.2. As an unofficial class, disputes specific to the class in respect of matters not falling within the generality of Class C shall not be referred to MSA.
- 3.1.3. In the event of any deadlock in the Race Committee or if a committee member is a party to the dispute, the Chairman of the TLR or his appointed alternate shall adjudicate.

3.2. Non-Compliance

- 3.2.1. Any vehicle that fails to be in compliance with the regulations of Club Class Locost shall be deemed to have not competed in the class and deemed to have competed solely in Class C subject to it remaining in compliance with the Class C regulations.

3.3. Monitoring

- 3.3.1. The primary responsibility for monitoring compliance with these regulations rests with the owner/driver of the vehicle seeking to compete in the class.
- 3.3.2. The Race Committee may from time-to-time develop for adoption additional monitoring standards, guidelines, requirements, and/or procedures which it will then apply at its sole discretion.