



# **Western Australian Superlites Association Technical Regulations 2025**

Welcome and thank you for being a part of the Western Australian Superlites Association. We are an incorporated association of like-minded enthusiasts involved in Social and Racing Activities

Membership fees collected go towards the running of various events, promotion of the club and securing different venues and events for members to attend.

Membership benefits include discounted rates at the various events. All members will be supplied with a W.A.S.A log book which is to be used to record any modifications made to your vehicle. Before competing in any event your vehicle will be put through a scrutineering process and recorded in your log book.

So, what is a Superlite? Basically, it is a small or Mini off-road buggy built of a set of plans with an engine sourced from a Motorcycle. Engines from Snowmobiles or Stationary type motors are also used in the construction of a Superlite. With the growth in UTV's in Australia, WA Superlites also has a large group of Side by Side UTV's bought directly from dealers.

With a very high power to weight ratio, Superlites have amazing acceleration and performance for a very affordable price.

Superlites are typically constructed at home using plans available from a number of different supplier's; it's the ultimate Father and Son project.

Also, be sure to check out the Gallery and Videos pages where you can view photos and videos of these machines in action.

If you are on Facebook, have a look at our WA Superlites Association Inc Group Page <https://www.facebook.com/groups/wasuperlites/>.

## Current Committee:

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	Richardt McLachlan	
	Kevin Busby	

The club welcomes all new members and for the first race you only require mandatory items.

If there are safety requirements in the regulations not met, new members will have **1** race meeting to comply.

### MANDATORY REQUIRMENTS

#### **Buggy**

Log Book (issued at first race).

Roof panels, Side Panels or doors and Floor Pan.

Arm restraints or window nets covering 70% of open area rearward of steering wheel.

5 or 6-point harness

Fire Extinguisher – **MINIMUM** of 1x 1A:20B:E AS/NZS 1841.5 (1kg Dry Powder Type) **within reach of driver and others (as per 3.3.9)**

Minimum of one forward facing white/yellow light, rear facing amber (always lit while vehicle is switched on) and brake lights.

#### **Driver (& Passenger)**

Non-flammable Long sleeve and long pants. **A Race suit is highly recommended.**

AS/NZS 1698-2006, **or Snell 15/20+, or ECE 22-05** Helmet with visor or goggles. **Sticker with specification needs to be visible and readable.**

**HANS device / neck brace**

**Gloves**

Enclosed Footwear

AASA Off-road license (Driver only)

# Technical Regulations for Western Australian Superlites Association (Inc) Events

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## 1. General Requirements

All buggies entered for first-time day competition shall be subject to independent risk assessment by a WASA Scrutineer to decide on their suitability for that event.

The WASA Scrutineer may specify modifications and/or conditions that buggy and driver must meet prior to being permitted on the track.

For the Clarification on any point you should contact a club representative.

All faults log to be rectified in a time frame specified by the scrutineer.

### 1.1 Log Books

1.1.1 Each competing vehicle will be issued with a WASA Log book after inspection and approval by a scrutineer. All alterations and repairs must be recorded and approved by a scrutineer.

1.1.2 No vehicle will be permitted to take part in the event unless it has passed scrutineering.

1.1.3 Scrutineering of competition vehicles will take place at the venue on the day of the event.

1.1.4 Logbooks will be handed to the scrutineer prior to inspection on the day of an event.

1.1.5 Any competing vehicle involved in an incident must present to a WASA scrutineer for re-inspection.

1.1.6 Any competing vehicle involved in an incident must complete an incident/accident report form.

## 2. Buggy Classes

### 2.1 Clubman Class

2.1.1 Engine capacity restricted to 600cc maximum Minimum of two rear wheels braking

2.1.2 Each vehicle shall have front and rear roll over protection to form a four point cage. Alternative designs at scrutineer's discretion

2.1.3 Minimum 5-point harness with a single point quick release.

2.1.4 All Vehicles are required to have a rear facing light with an amber lens that is activated by the ignition switch. The light must have a lens area of at least 25 square cm.

2.1.5 All Vehicles are required to have a rear facing light with a red lens that is activated when applying the brakes. The light must have a lens area of at least 25 square cm.

2.1.6 Battery Isolation switch.

2.1.7 ATV tyres.

2.1.8 Maximum weight 350kg.

2.1.9 Examples include Chinese buggies, Fun Karts, Trax II, Odysseys and Sidewinder.

## 2.2 Superlite (Off-Plan/Custom Builds)

2.2.1 Superlites are characterised by their high power-to-weight ratio, being restricted to motorcycle, ATV or Snowmobile engines of up to 1400cc capacity and having a minimum weight limit of 400 kg. They can be single or two seaters.

2.2.2 Examples include Honda Pilot, Piranha, Drakart, Rorty R6/81, Barracuda and other variants.

2.2.3 Due to their weight and the speeds they can attain, additional design requirements are specified for the Superlite class buggies. These are detailed in the following section.

## 2.3 Production 2-Seater (SXS/UTV)

2.3.1 Intended for Small 2 Seat Buggies and UTV's from recognised manufacturers.

2.3.2 Examples include; Joyner, Various Chinese Imports and UTV's such as Polaris RZR, Yamaha Rhino, Can-Am X3 etc.

2.3.3 Limited Modification is allowed, such as handling enhancement, minor engine modifications on non turbo, additional Safety Equipment. These are detailed in the following section.

2.3.4 For any information regarding whether your two seat buggy complies please contact a committee member.

## 2.4 Junior

2.4.1 Minimum age is 14years old as of 1<sup>st</sup> January.

2.4.2 Junior driver need to hold AASA driver's license.

2.4.3 Maximum engine capacity of 600cc if single seater

2.4.4 Manufacturer vehicle age restrictions where applicable.

2.4.5 Safety equipment *must* be fitted and sized correctly to the child.

2.4.6 Vehicle is to be fitted with Red "P" plates at rear for the first year of driving, then Green "P" Plates for the second year.

2.4.7 Junior driver must be nominated by a financial club member for each season.

2.4.8 Vehicle is to be scrutineered as per the standard level of safety regulations in tech regs.

## 3. Superlite Design Specifications

### 3.1 Dimensions

3.1.1 The maximum permitted overall width measured across the outer most points of the front or rear tyres (whichever is greater) is 2200mm.

3.1.2 The maximum permitted overall length measured longitudinally between the outer most points of the frame or tyres (whichever is greater) is 3700mm.

### 3.2 Frame, Roll Cage and Body

3.2.1 Each vehicle shall be constructed as a space frame of steel tubes and shall incorporate a safety cage consisting of a minimum of two full roll bars or equivalent, front and rear of the driver to form a four-point cage around the driver. All welding must be to industrial standards with full penetration and around the complete circumference/perimeter of the tube.

3.2.2 Main roll hoops to be a minimum of 31.8 mm diameter mild steel tube with a minimum wall thickness of 2.6 mm in mild steel, 2.1mm wall in chromoly.

3.2.3 The rear main roll hoop must contain 2 diagonally opposed braces to form an "X" extending from the top two corners to at least the hip rail. It is recommended they extend to the lower chassis rail.

3.2.4 The rear main roll hoop, or equivalent, must contain a metal firewall at least the height of the engine, to separate the engine compartment from the driver's cockpit. The firewall must be a minimum of 2mm aluminium or 1.6mm steel and it is to be securely mounted to the frame.

3.2.5 Each component not comprising part of the safety cage may be constructed from either CHS or RHS steel tube.

3.2.6 Frame bars that may come into contact with the driver must be fitted with suitable padding. All tube ends must be capped and no sharp edges are permitted.

3.2.7 Any hole made in a tube of the frame must be reinforced by a crush tube of at least the same wall thickness as the primary tube.

3.2.8 Each bend in the tubes must be smooth and free of kinks. The minimum bend radius is 3 times the diameter of the tube. There shall not be a reduction in the diameter of the tube due to distortion of more than 10%

3.2.9 The safety cage must incorporate side impact protection. It is recommended that this take the form of a diagonal brace between the intersection of the rear roll bar and the hip rail to the intersection of the front roll bar and the lower chassis rail.

3.2.10 The safety cage shall incorporate protection for legs and feet.

3.2.11 The safety cage must be designed so that it does not restrict the driver from entering or exiting the vehicle. There must be a minimum of 2 points of exit on each vehicle.

3.2.12 A Roof Plate must be fitted made from a minimum of either 1.2 mm steel or 2.6 mm aluminium. The Roof Plate must extend from the front to rear roll hoop and span the roof bars.

3.2.13 When the driver is correctly seated in the restrained position there must be a minimum of 50 mm clearance between the driver's helmet and the roof plate.

3.2.14 All vehicles shall be fitted with a floor pan extending from the rear of the driver's seat to the front of the machine encompassing the full width of the chassis. Minimum material thickness is 1.2mm steel or 2.0mm aluminium. The floor pan must be securely bolted or welded in place.

3.2.15 Body panels must be securely mounted in at least three points. Drilling of the frame or the use of self-threading screws to affix body panels is prohibited. Driver access must not be hampered by the fitting of body panels. Exposed Sharp edges will not be accepted.

3.2.16 Side body panels must cover from the bottom of the window to the bottom of the vehicle and from the firewall to feet.

3.2.17 A rear wing may be fitted. It must not be wider than the chassis and must be securely mounted with a minimum of four bolts (minimum size of 8mm diameter) or pins/ clips as approved by the Scrutineer.

### **3.3 Fuel and Fuel System**

3.3.1 The fuel tank must be mounted within the confines of the chassis or roll cage, and be separated from the driver by a firewall. The roll cage and / or supporting bars must protect it from damage during a rollover.

3.3.2 The Fuel Tank shall be securely mounted to the frame. Vibration dampening mounts are recommended.

3.3.3 Fuel Tanks mounted on Side Pods shall be protected to prevent puncture or rupture.

3.3.4 The Fuel Tank must be constructed of a minimum of 1.2 mm steel or 2 mm aluminium. It must have a leak proof filler cap.

3.3.5 Where the buggy is fitted with an inline or tank-mounted electrical fuel pump, power supply to the pump must be automatically cut when the engine is stopped.

3.3.6 All Vehicles must be fitted with a fuel tank roll over valve or vent pipe that is of non-spill design.

3.3.7 Fuel lines must be of material specifically designed for the carriage of fuel. The fuel lines must be securely fastened at each end and be entirely contained within the confines of the chassis. The entire fuel system must be separated from the driver by a firewall. (Copper lines are not permitted)

3.3.8 The only Fuel type permitted is Unleaded Pump Fuel. All other types and additives are prohibited.

3.3.9 All Vehicles required to be fitted with a minimum of a 1A:20B:E AS/NZS 1841.5 approved 1 KG Fire Extinguisher in a suitable bracket fixed within reach of the driver and others.

### **3.4 Electrical and Lighting**

3.4.1 Where fitted, batteries shall be a sealed design, securely mounted and protected from the risk of impact. Terminals are to be covered and protected from inadvertent contact with conductive materials.

3.4.2 Each vehicle must be fitted with a manually operated battery isolation switch capable of stopping the running engine and clearly marked as Battery Isolation to safety and event officials. This must be capable of operation by the vehicle occupants and/or external help, whilst seated and restrained. OEM key only is NOT acceptable.

3.4.3 Electrical power from the battery (excepting the starter cable) shall be protected by a fuse or fusible link located as close as practicable to the battery on the positive lead.

3.4.4 All Vehicles are required to have a rear facing light with an amber lens that is activated by the ignition switch. The light must have a lens area of at least 25 square cm.

3.4.5 All Vehicles are required to have a rear facing light with a red lens that is activated when applying the brakes. The light must have a lens area of at least 25 square cm.

3.4.6 Red and Amber lights must be fitted rearward of the safety cage.

3.4.7 All vehicles required to be fitted with a minimum of one forward facing Driving/Spot lights.



### **3.5 Seating**

3.5.1 Seats must be securely mounted to the vehicle chassis by a minimum of four (4) x Grade 8, M8 bolts or larger.

3.5.2 Seats must be of a design suitable for off road racing. Reclining seats are not permitted.

3.5.3 All Vehicles must be fitted with a minimum of a 5-point racing harness with a single point quick release. The strap width is to be a minimum of 50mm.

3.5.4 Seats must incorporate a headrest or a separate headrest must be fitted to the safety cage behind the driver's helmet covered in high-density foam. Minimum area for a separate headrest is 150 square cm.

3.5.5 Adjustable seat rails may be used provided they are of acceptable quality.

### **3.6 Braking**

3.6.1 All vehicles are required to have a minimum of hydraulically controlled 4 wheel braking. (Copper lines are not permitted)

3.6.2 Dual Circuit braking system (Single calliper for fixed rear axle and independent front)

### **3.7 Exhaust**

3.7.1 The Exhaust Pipe must be securely attached and inside a line from the top of the safety cage to the outside of the top of the rear tyre. Vibration dampening mounts are permitted.

3.7.2 Exhaust systems must be silenced to a maximum of 95db when measured 30 metres from the edge of the track under competition conditions.

3.7.3 Not forward facing or downward or protruding more than 150mm of most rear part of frame.

3.7.4 Exhaust must have a muffler fitted. "Straight through" exhausts are not acceptable.

### **3.8 Engine**

3.8.1 Engines may be of a single or multi cylinder motorcycle, ATV or snowmobile design, 2 or 4-stroke up to a maximum total capacity of 1400 cc.

3.8.2 Car engines are not permitted with the exception of Joyner style factory supplied engines.

3.8.3 Forced Induction is permitted however such engine will be determined to have a capacity of (1.4 x the engine capacity).

3.8.4 Any buggy fitted with a gearbox must have a neutral gear.

3.8.5 Radiators must be mounted securely within the confines of the frame, mounted towards the rear and as far from the driver as possible, shrouded in such a way as to prevent the driver from being scalded in the event of a release of coolant.

### **3.9 Wheels and Tyres**

3.9.1 Tyre and wheel choice is unrestricted.

### 3.10 Nerf Bars

3.10.1 Each vehicle must be fitted with Nerf Bars between the front and rear wheels to minimise the possibility of wheel entanglement.

3.10.2 Nerf bars must extend in width to at least the centre of the rear tyre and not beyond the outside edge of the rear rim.

3.10.3 The minimum tube size for Nerf Bars is 25mm x 1.6mm steel or 25mm x 3 mm aluminium.

3.10.4 Nerf Bars may be removable, but when fitted must be securely attached to the frame at three points in a triangular fashion (e.g. Attached front and rear to the lower chassis rail and braced upward to the frame. Minimum two points (Clubman), three recommended)

3.10.5 Tube ends must be capped and there must be no sharp edges.

### 3.11 Miscellaneous

3.11.1 Mirrors if fitted should be made of a shatter resistant material. With the exception of Headlights, if any glass is used in the vehicle, it must be covered with a clear adhesive material.

3.11.2 Each vehicle must carry Identification Numbers visible from each side on a number plate affixed centrally on roof. Numbers to be a minimum of 150 mm high in Black on a White Background.

3.11.3 Split Pins, R Clips, safety wire or Self-Locking Nuts must be fitted to the bearing retaining nut on each axle and tie rod end.

3.11.4 Any additional items must be secure as not to come loose in race conditions.

## 4. SXS/UTV Design Specifications

### 4.1 Racing classes

**PRO SXS** – Can Am Maverick R and Polaris RZR Pro R

**SXS** – Can Am X3, Polaris RZR 1000, Yamaha YXZ 1000R, etc

### 4.2 Dimensions

4.2.1 The maximum permitted overall width measured across the outer most points of the front or rear tyres (whichever is greater) is 2200mm.

4.2.2 The maximum permitted overall length measured longitudinally between the outer most points of the frame or tyres (whichever is greater) is 3700mm.

### 4.3 Frame, Roll Cage and Body

The club recommends that cages be upgraded for improved safety to either a **MSA or AASA** Compliant Cage. **This is highly recommended for PRO SXS due to their weight and the speeds they can attain.** OEM cages with the rear main roll hoop must contain 2 diagonally opposed braces to form an “X” extending from the top two corners to at least the hip rail, Main roof hoop with diagonal bracing, Windscreen to have vertical support in centre and ‘A’ pillars. Bracing may be clamped, bolted or welded. All welding must be to industrial standards with full penetration and around the complete circumference/ perimeter. Any OEM cage involved in a roll over or crash must be replaced or repaired to satisfactory condition.

4.3.1 Frame bars that may come into contact with the driver must be fitted with suitable padding. All tube ends must be capped, and no sharp edges are permitted.

4.3.2 Any hole made in a tube of the frame must be reinforced by a crush tube of at least the same wall thickness as the primary tube.

4.3.3 Each bend in the tubes must be smooth and free of kinks. The minimum bend radius is 3 times the diameter of the tube. There shall not be a reduction in the diameter of the tube due to distortion of more than 10%

4.3.4 The safety cage must incorporate side impact protection. Fitting of side doors with locks, or for panels, it is recommended that this takes the form of a diagonal brace between the intersection of the rear roll bar and the hip rail to the intersection of the front roll bar and the lower chassis rail.

4.3.5 The safety cage must be designed so that it does not restrict the driver from entering or exiting the vehicle. There must be a minimum of 2 points of exit on each vehicle.

4.3.6 A Roof Plate must be fitted made from a minimum of either 1.2 mm steel or 2.6 mm aluminium. The Roof Plate must extend from the front to rear roll hoop and span the roof bars. OEM Roof panels are acceptable.

4.3.7 When the driver is correctly seated in the restrained position there must be a minimum of 50mm clearance between the driver's helmet and the roof plate.

4.3.8 All vehicles shall be fitted with a floor pan extending from the rear of the driver's seat to the front of the machine encompassing the full width of the chassis. OEM material or Minimum material thickness is 1.2mm steel or 2.0mm aluminium. The floor pan must be securely bolted or welded in place.

4.3.9 Body panels must be securely mounted by at least three points. Drilling of the frame or the use of self-threading screws to affix body panels is prohibited. Driver access must not be hampered by the fitting of body panels. Exposed Sharp edges will not be accepted.

4.3.10 Side body panels, whether on doors or frame, must cover from the bottom of the window to the bottom of the vehicle and from the firewall to feet.

#### **4.4 Fuel and Fuel System**

4.4.1 The auxiliary fuel tank must be mounted within the confines of the chassis or roll cage, and be separated from the driver by a firewall. The roll cage and / or supporting bars must protect it from damage during a rollover.

4.4.2 The Fuel Tank shall be securely mounted to the frame. Vibration dampening mounts are recommended.

4.4.3 **Fuel Tanks (non-OEM)** must be constructed of a minimum of 1.2 mm steel or 2 mm aluminium. It must have a leak proof filler cap. Fitted with tip over valve on breather line.

4.4.4 Where the buggy is fitted with an inline or tank-mounted electrical fuel pump, power supply to the pump must be automatically cut when the engine is stopped.

4.4.5 All Vehicles must be fitted with a fuel tank roll over valve or vent pipe that is of non-spill design.

4.4.6 Fuel lines must be of material specifically designed for the carriage of fuel.

The fuel lines must be securely fastened at each end, and be entirely contained within the confines of the chassis. The entire fuel system must be separated from the driver by a firewall. (Copper lines are not permitted).

4.4.7 The only Fuel type permitted is Unleaded Pump Fuel. All other types and additives are prohibited.

4.4.8 All Vehicles required to be fitted with a minimum of 1x 1A:20BE AS/NZS 1841.5 approved 1KG Fire Extinguisher in a suitable bracket fixed within reach of the driver and others.

## 4.5 Electrical and Lighting

4.5.1 Where fitted, batteries shall be a sealed design, securely mounted and protected from the risk of impact. Terminals are to be covered and protected from inadvertent contact with conductive materials.

4.5.2 Each vehicle must be fitted with a manually operated battery isolation switch capable of stopping the running engine and clearly marked as Battery Isolation to safety and event officials. This must be capable of operation by the vehicle occupants and/or external help, whilst seated and restrained. **OEM key only is NOT acceptable.**

4.5.3 Electrical power from the battery (excepting the starter cable) shall be protected by a fuse or fusible link located as close as practicable to the battery on the positive lead.

4.5.4 All Vehicles are required to have a rear facing light with an amber lens that is activated by the ignition switch or OEM taillights operated on ignition as a minimum. The light must have a lens area of at least 25 cm<sup>2</sup>.

4.5.5 All Vehicles are required to have a rear facing light with a red lens that is activated when applying the brakes. The light must have a lens area of at least 25 square cm.

4.5.6 Red and/or Amber lights must be fitted rearward of the safety cage.

4.5.7 All vehicles require forward facing driving lights.

## 4.6 Seating

4.6.1 Seats must be securely mounted to the vehicle chassis by a minimum of four (4) x Grade 8, M8 bolts or larger. If OEM slides fitted must have a minimum 5-point harness.

4.6.2 Seats must be of a fixed design suitable for off road racing. Reclining seats are not permitted.

4.6.3 All Vehicles must be fitted with a minimum of a 5-point racing harness with a single point quick release. The strap width is to be a minimum of 50mm.

4.6.4 Seats must incorporate a headrest or a separate headrest must be fitted to the safety cage behind the driver's helmet covered in high-density foam. Minimum area for a separate headrest is 150 square cm.

## 4.7 Braking

4.7.1 All vehicles are required to have a minimum of hydraulically controlled 4 wheel braking. (Copper lines are not permitted).

4.7.2 Dual Circuit braking system (Single calliper for fixed rear axle and independent front).

## **4.8 Exhaust**

4.8.1 The Exhaust Pipe must be securely attached and inside a line from the top of the safety cage to the outside of the top of the rear tyre. Vibration dampening mounts are permitted.

4.8.2 Exhaust systems must be silenced to a maximum of 95db when measured 30 metres from the edge of the track under competition conditions.

4.8.3 Not forward facing or downwards.

4.8.4 Must not extend more than 150mm from the rear of the vehicle.

## **4.9 Engine**

4.9.1 Engines may be of a single or multi cylinder design, 2 or 4-stroke up to a maximum total capacity of 1400 cc.

4.9.2 Car engines are not permitted.

4.9.3 Forced Induction is permitted (Not greater than 1000cc) however such engine will be determined to have a capacity of (1.4 x the engine capacity).

4.9.4 Any buggy fitted with a gearbox must have a neutral gear.

4.9.5 Additional Radiators/ Coolers must be mounted securely within the confines of the frame, mounted towards the rear and as far from the driver as possible, shrouded in such a way as to prevent the driver from being scalded in the event of a release of coolant/oil.

## **4.10 Wheels and Tyres**

4.10.1 Tyre and wheel choice is unrestricted.

## **4.11 Nerf Bars**

4.11.1 Each vehicle must be fitted with Nerf Bars between the front and rear wheels to minimise the possibility of wheel entanglement.

4.11.2 Nerf bars must extend in width to at least the centre of the rear tyre and not beyond the outside edge of the rear rim.

4.11.3 The minimum tube size for Nerf Bars is 25mm x 1.6mm steel or 25mm x 3 mm aluminium.

4.11.4 Nerf Bars may be removable, but when fitted must be securely attached to the frame at three points in a triangular fashion (e.g. Attached front and rear to the lower chassis rail and braced upward to the frame. Minimum two points (Clubman), three recommended)

4.11.5 Tube ends must be capped and there must be no sharp edges.

## **4.12 Miscellaneous**

4.12.1 Mirrors if fitted should be made of a shatter resistant material. With the exception of Headlights, if any glass is used in the vehicle, it must be covered with a clear adhesive material.

4.12.2 Each vehicle must carry Identification Numbers visible from each side on a number plate affixed centrally on roof. Numbers to be a minimum of 150 mm high in Black on a White Background.

4.12.3 Split Pins, R Clips, safety wire or Self-Locking Nuts must be fitted to the bearing retaining nut on each axle and tie rod end.

4.12.4 Any additional items must be secure as not to come loose in race conditions.