

Classification of Sidecar 2021:

Aim:

To encourage accurate construction and provide a predetermined overall standard so no competitor can obtain an unfair advantage, by unacceptable modifications. This may be determined by the specifications committee.

1 Chassis:

Mild Steel construction only

Maximum Wheel base 1400 mm measured between the front axle bolt to rear axle bolt.

Bike to Sidecar wheel is a maximum of 1250mm, measured from the center line of the rear wheel to the widest point of the sidecar wheel.

No sharp corners on any part of chassis or body. Painted finish required.

WHERE HAND GRAB RAILS ARE PLACED ON THE OUTSIDE OF THE BODY WORK. EG: THE SIDE OF THE SIDECAR. PROTECTION MUST BE PROVIDED SO THE PASSENGER CANNOT GET THEIR HAND OR FINGERS CRUSHED.

ALL BODY PANELS MUST BE REMOVABLE. ALL SIDECARS MUST BE PRESENTED IN A 'NAKED FORM' FOR SCRUTINEERING.

THE CHECKER MUST HAVE FULL ACCESS TO ALL CHASSIS AND ENGINE COMPONENTS, SO A FULL SAFETY INSPECTION CAN TAKE PLACE.

ALL SIDECARS MUST DISPLAY 3 NUMBERS. On FRONT and BOTH SIDES near the rear quarter. TRANSPONDERS to be mounted within 150 MM OF HEADSTOCK.

2 Wheels and Tyres

2.1 Front wheel: Alloy rim with a maximum tyre size of 130/60/14" with hydraulic disc brake as supplied by Newmans R/C Direct or 10" GoKart wheel wheels as supplied by NEWMANZ

2.2 Rear wheel: Alloy rim with a maximum tyre size of 130/60/14" with hydraulic disc brake as supplied by Newmans R/C Direct. Sidecar Mini Moto 8" wheel or larger up to Maximum 14" with a maximum tyre size of 130/60/14"

2.3 Front tyre: Front tyres are free to a maximum of 14" wheel size

2.4 Rear tyre: Rear 14" – 130/60/14. Rear wheel rim: J14 G x Mt 3.50

2.5 Sidecar wheel: Alloy as supplied by Newmans R/C Direct. Up to Maximum of 14" diameter and must be fully enclosed.

3. Gear ratios

These are the only permitted gear ratios for Sidecars:

The permitted gear ratios are:

14:28 Gears or 15: 30 Gears. 2:1

4. Engines

The only engine allowed is the Loncin 110cc, 4 Stroke, motor, the automatic single speed configuration as supplied by Newmans R/C Direct.

No modifications other than what is written in these specifications are permitted.

If it is not mentioned then it cannot be changed.

Any variance found will exclude your sidecar from the competition and it will not be permitted to race.

No modifications to the engine. This is to include, primary gear train, clutch, cylinder head, piston, bore, stroke.

Engines should be in an "out of the box" condition **TOTALLY STANDARD.**

No tuning or blue printing allowed.

Engines must not be excessively loud or you will not race. (This is at the Clerk of the Course's discretion.)

Oil Catchers must be attached to all breather pipes.

Filler and Sump plugs must be wired.

ENGINES MUST BE SUITABLY SILENCED and outlet not directed to the ground. As decided by the specifications committee.

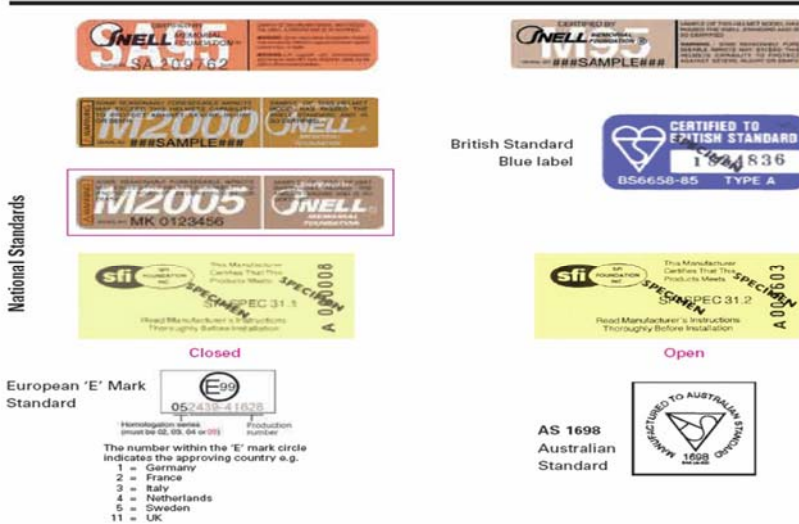
ALL ENGINES WILL BE INSPECTED SO AS TO CONFORM TO STANDARD SPECIFICATIONS.

4.1 Ignition Systems

CDI unit # TZR50 is the only permitted unit supplied by Newmans R/C Direct.

These are the only permitted electronic ignitions systems allowed.

- 4.2 Ignition Coils**
The standard coil as supplied by Newmans R/C Direct or replacement Fox Coils or Newmans high performance variants are the only Permitted Ignition coils. (Part No. [D10] GY6 125). **The ignition system must incorporate and Emergency Lanyard switch mounted on the handle bar.**
- 4.3 Carburation**
There are only 2 types of carburetor permitted. No modification to carb,jetting. This includes replacement, drilling out, or filing.
- 4.3.1 Original carburetor** as supplied by Newmans R/C Direct may be retained.
This carb will be of the fixed jet variety: (The make may change but NRCD will contact organizers)
- 4.3.2 Alternative carburetor** is: Model: Mikuni VM22 - As supplied by Newmans R/C Direct.
- 4.4 Manifolds**
There are 2 types of inlet manifold permitted.
- 4.4.1 Standard manifold** with flange mounts as supplied with the engine from Newmans R/C Direct or;
- 4.4.2 If the alternative** Mikuni carburetor model VM22 is fitted then a custom made inlet manifold of 25mm inside diameter but not exceeding 120 mm (from carb venturi to the cylinder head mount flange) may be used.
The inlet port of the engine may be machined by hand operated tools to 25 mm inside diameter to match the manifold but only to a depth of 5mm from the outside mounting flange.
No further hand machining is permitted to either inlet or exhaust ports or manifolds.
- 4.4.3 The exhaust manifold** maximum external diameter shall be no bigger than 28 mm diameter.
- 4.5 Forced induction** of any type is not permitted.
- 4.6 Air Filters**
Air filters type are free.
- 4.7 Lubrication** oil coolers are allowed.
- 5.0 Fuel**
Only commercially available forecourt fuels are to be used 91, 95, 98, E10 octane.
Additionally No additives, Nitrous Oxide (NOS), race fuels or any other type of fuel blend is not permitted.
Where an electric fuel pump is fitted then an emergency lanyard switch must be fitted on the handle bar.
- 6.0 Brakes**
Brakes must be fitted to the front wheel and rear wheel of the bike.
These must be disc brakes, as supplied by NEWMANZ.
Brakes on the sidecar wheel are optional.
All brake caliper retaining bolts must be drilled and wired.
- 7.0 Suspension**
No suspension of any kind is permitted on the front, back or side car wheel for the Standard Class. REAR AXLE RETAINING NUTS MUST BE WIRED.
- 8.0 Weights**
- 8.1 Side Car Weights;**
The minimum dry weight of the sidecar will be 80 kgs. Minimum all up weight will be 240 kg. i.e.: Sidecar and 2 crew.
- 9.0 Drive chain**
All drive chains must be covered to protect both the rider and the swinger.
- 10.0 Riders Ages**
The rider and passenger of all sidecars must be at least year 12. Evidence can be requested.
- 11.0 Clothing: Full Road/Road Race leathers**, or Road touring suits with protection for knees, elbows, and shoulders are the only permitted clothing. Motocross apparel is not permitted.
- 11.1 Leather Gloves** preferably with knuckle protectors must be worn by rider and swinger.
Full face crash helmets with visors are preferred to MSNZ or MNZ Standards but Motocross helmets and goggles are also permitted.



12.0 Hand grips

Adequate hand and grab rails must be fitted. Where hand grab rails are placed on the outside of the bodywork, e.g. on the side of the sidecar, protection must be provided so the passenger cannot get hands or fingers trapped or crushed. Handle bar ends must be plugged.

13.0 Emergency stops

An Emergency stop switch must be fitted, accessible and clearly identified on the sidecar. (Dead Man's Switch.)
A functioning lanyard switch required.

14.0 Sidecars built prior to 2012

Any sidecar build prior to 2012 will need to comply with the current specifications to compete.

15.0 Builders Declaration

I declare that my sidecar, fuel and riding gear complies with technical articles 1 through 15.0

1. Chassis	
2. Wheels and Tyres	
3. Gear Ratios	
4. Engines	
5. All machine frames must be painted	
6. All number boards to be plastic	

By declaring and ticking the boxes above,
 I accept that if my sidecar is found to be out of specification that I will not be permitted to enter the NZ Mini-Moto Bike Grand Prix.

Name: _____

Signed: _____

Date: ___ / ___ / 2021

