



## Ninja Sprint Kart Specification 2016

### 1. Definition:

2. To provide children aged from 6 to 11 years of age (they must retire from the formula on the date of their 11<sup>th</sup> birthday) an entry into short circuit motor racing.
3. It is primarily a MSA go kart chassis based formula, but purpose built Ninja Sprint Kart chassis are allowed, providing the chassis is constructed in accordance with MSA yearbook.

### 4. Construction:

5. It is required that the chassis is constructed from magnetic steel tubing, cross section free. The method of welding/brazing is free but for all main chassis joints welding/brazing is obligatory - i.e. no clamping, sliding twisting members or torsional adjustments of any kind including bolt-in torsion bars are allowed. The use of any type of hydraulic or similar damping device for any purpose is specifically prohibited. purpose built Ninja Sprint Kart's must be **constructed using 28mm x 2.0mm O/D tube and** are fully symmetrical in **every aspect**, with symmetrical pivot/steering pick up points steelwork/components (i.e. both sides of the Ninja Sprint Kart are identical). It is not permitted to run any off-set front or back.
  6. The wheel lift when the car is placed on full lock must be identical on both sides +/- 10mm.
  7. The floor pan must be complete in the driver's compartment.
  8. The Drivers lower body must be covered by the body panels (no open sides). The side bar must be a minimum of 14" from the bottom of the chassis to the top of the side rail.
  9. The drivers seat must be a full containment type and must be positioned centrally in the car with strict attention being paid to its correct fitment, as set out by the manufacturer.
  10. The maximum overall track of the rear axle must be no greater than 1320mm (52") measured from outside of wheel to outside of wheel. The rear axle alignment will be measured from the inner edge of the rear wheel rim (with similar off-set wheels fitted) to the edge of the chassis rail which must be equal on each side with a tolerance either way of 10mm.
  11. The rear wheels must be protected from rear impact by a single hoop attached to the main chassis rail.
  12. The driver's feet (when pedals are depressed) MUST be a minimum of 12" (300mm) back from the front of the bumper.
  13. The Engine must be positioned centrally in the car behind the drive axle plus or minus 50mm, the engine clamping tubes must be no higher than 60mm above the main frame, measured from the underside of the main frame to the top side of the clamping tube, you must use the standard Honda gx160 type mounting clamps and frame.
  14. The roll cage must be constructed in such a manner that the driver is protected from side and head impact, minimum size tubing in the roll cage is 25mm/od x 3.0mm and must consist of four posts two hoops joined together, **with both the front braces running from the front upright bars of the roll cage down to outer front part of the main chassis**. The minimum height of the roll-cage must be 800mm (32") from the bottom of the chassis to the lowest point of the cage, whilst maintaining a minimum of a 100mm (4") clearance between the top of the child's crash helmet and the top and/or any part of the roll-cage. **The roll cage must be welded to the main chassis**.
  15. You must use the go kart plastic side pods and front bumper, in addition a roof wing and rear engine pod must be used in the construction of your Ninja Sprint Kart.
  16. The roof wing must be of similar design to a Sprint Car, and must be fitted directly above the drivers head, it must be hinged with a quick release mechanism, the wing must cover the entire aperture above the drivers head, it must measure a minimum of 30" x 30" body, with side plates of 8" x 30" minimum and 16" x 30" maximum. The side plates of the wing MUST not be below the roll cage at any point. The scrutineer will pass a rod through the roll cage, from front to rear and this must not touch any part of the wing. Full access to the roll cage tubing must be achieved. The rear of the wing must be level with the centre of the axle.
  17. No part of the driver's seat must be below the bottom of the chassis. Minimum weight of ready to race Ninja Sprint Kart must be 100kg (without driver). Car must make the 100kg weight without refuelling after a race. (Regular weight checks will be carried out). ballasting of **any type** is not permitted. Achieving the weight rule is the parents responsibility.
  18. Do not attempt the above construction if you have concerns as to your welding and construction ability, your child's safety will depend on your skills.
- ### 19. Safety Equipment
20. You must use a 5 point Ninja Sprint Kart type safety harness. Close attention to the manufactures fitting and maintenance instructions must be observed at all times.
  21. Neck Brace, Fire retardant gloves, overalls and a balaclava must be worn, a head/ neck restraint system is highly recommended.
  22. A high back full containment type seat must be fitted. The top headrest of the seat must be fully supported by a steel loop or bars to prevent any rearward collapse of the upper part of the seat- this may be adjustable but must be secure at all times.
  23. A window net must be fitted to the right-hand (fence) side .
  24. A Chain Guard must be fitted.
  25. The use of quick release steering hub is permitted.

26. A cut out switch must be fitted and clearly marked ON/OFF and be within easy reach by the driver.
27. Crash Helmets must be of a minimum standard as directed by British Oval Racing Safety Executive (B.O.R.S.E). These are FIA8860-2004, Snell SA2005, Snell SA2010, SFI Foundation 31.1A, SFI Foundation 31.2A. The E2205 European standard helmet may be used in Fibre-glass, Carbon or Tri- Composite form only i.e. NO POLYCARBONATE helmets are allowed. It is important that the helmet fits the driver correctly. Shatterproof goggles/visors must be worn, Your helmet must display the current ORCi sticker.
28. Drivers must wear bright coloured flame retardant racing overalls and these must be maintained in a clean and tidy condition and be clearly marked fire proof. N.B. If wet weather clothing is used this must be worn IN ADDITION TO AND NOT INSTEAD OF the regulation overall type clothing as described above.
29. A screen mesh with a max 2" square must be fitted, this may be cable tied in.
30. Mirrors are not allowed to be fitted.
- 31. Tyres**
32. Only the Duro Highline HF-242 BI and B2 slick- tyre can be used, **these must remain as manufactured and may not be altered in any form, tyre softener, substances or additives are NOT permitted.** When the race is declared a "wet race" by officials, then and only may wet tyres be used. **Wet tyres are free until the 1st January 2017 then the only wet tyres permitted will be the MojoW2 rain tyre set with yellow or green barcode UK spec.** Rear Wheels must be a minimum of 175mm deep, with both wheels being the same depth. **No stager is permitted under any circumstances.**
- 33. Grades & Points All promotions run a national monthly grading system, (white, yellow, blue, red & Champions ). All drivers must display their current grade, this must be with a 50mm wide x 500mm long stripe running along the front edge of their roof wing, champions may fit flashing lights.**
- 34. Drivers visiting other tracks will use their current highest grade at their own promotion.**
- 35.**
36. **ENGINES.** The only engine eligible for use is the Honda GX160 supplied in sealed form by **RPM** who's contact details **are RPM, Parsons Brake Cottage, Parsons Brake, Hanbury, Burton on Trent, DE13 8TN. 01543 473548 07977 430680**
37. You may change the oil, replace the one make spark plug with the same type and make, replace the paper air filter with a standard Honda paper air filter. Any maintenance that requires removal of the seal, the engine must be returned to RPM so the seal can be removed for the maintenance to be carried out, upon completion of the works the engine will be resealed and fresh documents and seal details will be supplied to the record holder by RPM, it is your responsibility to ensure your scrutineer is aware of the changes, as in the event of an engine check, the scrutineer is advised to reject any engine that bears the incorrect seal number to that assigned to that engine or driver, it is a condition of your entry, you agree to allow the Promoter to swap your engine to that of another competitor for the duration of the meeting.
38. After scrutineering at all meetings; before changing/removal of the engine you must notify the scrutineer who will take the seal numbers of the engine removed and the new engine fitted in case of any further checks are necessary.
39. For 2016 RPM have introduced a buy back scheme for £360 plus carriage, full details of the scheme can be obtained directly from RPM.
40. **Axle and Drive Sprocket.** Only a 70-20 tooth rear sprocket and clutch may be used using a 219 pitch chain.
41. **Clutch are free, you will be advised of the engagement speed by your local scrutineer.**
42. **Fuel.** No additives of any kind may be used only, petrol purchased at the roadside pump may only be used. you may not alter the fuel tank in any way.
- 43. Contacts: Alan Rouse: 07775668211 Chief Scrutineer (RTS).**
- 44. Barry Cogger 07718540214 scrutineer (Speedworth).**
- 45.