

Team Name: \_\_\_\_\_

Car No \_\_\_\_\_

**1 Check - Dimensions**

- a Max length 2700 mm
- b Max width 1100 mm
- c Max height 1200 mm
- d Wheel track min 600 mm
- e Wheel bas Min 1000 mm
- f Head RRPS
  - i Min 300 mm wide at 150 mm from top
  - ii Min 50 mm above canopy
  - iii 20 mm foam above rider if closed vehicle
  - iv Bracing angle includes vertical line
- g Shoulder region 500 mm wide and integral
- h Shoulder belt mounts or guides Max 200 mm centres
- i Room for number panel 360 mm high X 460 mm long

**2 Check - General**

- a Single seat recumbent, HP drive to rear wheel(s)
- b No original bike, Go-Kart or motorbike frames
- c Min of three full time load bearing wheels all with adj. brakes
- d Two independent brake systems, mounted securely
- e Brake controls away from moving parts and road
- f No brake friction applied to tyres & no rope or cable steering
- g Steering lock limitation over central travel, linkage damage, tyre or wheel contact with vehicle parts (jamming avoidance)
- h Speedo clearly visible to rider and operational
- i Warning Device
  - i Electric, in front of feet
  - ii Momentary switch, sound going loud
  - iii Air contact to get sound out of vehicle
- j Batteries mounted securely - No liquid acid
- k Floor pan able to stop rider's feet, legs, hands hitting road
- l Mirrors
  - i One each side
  - ii Flat or mildly convex with similar reflections
  - iii Min area 18 cm<sup>2</sup> (nom 5 cm diam) or Zefal Spy
- m
- n
- o Vehicle has no dangerous protrusions or features
- p Signage not offensive nor of illegal substances, alcohol, tobacco
- q Axle end recessed, flush, covered or shielded
- r Four strap seat belt harness with Certificate Label showing
- s Frontal design prevents easy penetration of another vehicle

**3 Construction**

- a Vehicle construction robust, strong and durable
- b Frame joints/mountings competently welded or attached
- c Composite materials fully cured, no unbounded fibres
- d Cockpit overhead protection 
  - i capable of deflecting vehicle
  - ii Min of two bars - no negative bends
  - iii Suitable effective width and no rear hinging
  - iv Hard shell vehicles minimum two layers
  - v Open cell foam as needed on bars or panels
  - vi Moveable bars, body panels suitable locking system
  - vii No hooks - No velcro as sole fastening system
- e
  - i Body/COP catches operable from inside and outside
  - ii Δ As per appendix to mark non obvious catches
  - iii Team demonstrates body sections shutting with click
- f Seat Belts
  - i Not modified, mounted as intended
  - ii Belt in good condition - not frayed, cut or restitched
  - iii Each point of harness mounted separately to chassis
  - iv Bolts/fittings as supplied or min Grafe 5 X 8 mm
  - v 2-3 threads showing above nuts [Nylok or spring washer]
  - vi Bolts mounted through the frame tags or sleeved tube
  - vii Seat or sub frame carrying belt mounts is attached to chasis with strength equivalent to belt bolts

**4 Rider Rollover Protection Structures (RRPS)**

- a General
  - i Integral to chassis/frame/shell H = Head; F = Front 

H	F
H	F
H	F
H	F
  - ii Properly attached, suitable material, robust for purpose 

H	F
H	F
H	F
H	F
  - iii Hoop configuration, right angles to centre line 

H	F
H	F
H	F
H	F
  - iv Corners minimum 50 mm radius 

H	F
H	F
H	F
H	F
- b Head RRPS
  - i Long braced to chassis from highest point
  - ii Removable bracing attached appropriately
  - iii Hard shell without external roll bar strong enough
- c Front RRPS
  - i Covers rider's knees
  - ii Will protect rider's feet, knees, legs if inverted or on side
  - iii Stabilised to prevent longitudinal collapse
  - iv If bar braced: longitudinal at 10° min. inc. vert. line
- d Side impact protection from T-bone collision
  - i Bars - panels - wheels forming enclosed cockpit
  - ii Protection for shoulders, torso, hips, legs to knees
  - iii Structure anchored to not move sideways
  - iv Capable of protecting rider from vehicle entry
  - v Rider will not contact road surface [especially elbows]
- e Forward Protection
  - Will protect legs/feet in a collision, braced, integral to design
- f Bodywork
  - i Cockpit free of projections [eg cable tie ends]
  - ii inherently safe, allows ventilation and sufficient visibility
- g Chain Ring
  - i Discs [covering teeth] both sides
  - ii Chain tension side covered [channel, tube] from under seat
  - iii Max 3 mm clearance from discs to channel/tube
- h Rider safe from moving parts id. Clothing entanglement
  - i Hands protected from tyres and spokes
  - j All guarding secure and safe

**5 Dynamic Brake and Steering Test**

- a Rider able to move steering from lock to lock freely
- b Steering controls and wheels do not expose rider to injury
- c Rider able to exit vehicle unassisted
- d Good cockpit vision and rider can see ground 5 metres ahead
- e Shoulder strap mounts or guides level with shoulders
- f Straps will stay on shoulders
- g Seat belt and buckle positioning conforms with ADR
- h Lap belt mounts not too far back
  - i Excessive seat padding not used
  - j Head RRPS min 100 mm above helmet for open top vehicle
- k Rider can fully turn head right and left 
  - l Helmet not compressing overhead foam
- m Head restraint check
- n Rider entirely within roll over protection from front and rear
- o Side impact protection includes rider's shoulders
- p Steering structure, frame, body min 300 mm to rider's face
- q Cycle helmet AS/NZS 2063:2088
- u Full face helmet if needed [with AS label]
- r Rider able to sight overtaking traffic in mirrors
- s Vehicle able to negotiate prescribed course
- t Vehicle stops within prescribed distance in controlled manner

*I, team manager, have personally checked the HPV mentioned above and do claim that all points have been checked and the HPV meets the standards as outlined above.*

Signed: \_\_\_\_\_

Date: / / 20