



REGULATIONS AND SPECIFICATIONS FOR THE 2012 MSA NORTHERN REGIONS 4X4 CHALLENGE CHAMPIONSHIP SERIES

MSA NORTHERN REGIONS MOTORSPORT CIRCULAR NR 16/2012

1. VALIDITY OF THE REGULATIONS

Applicable for the year 2012

2. ELIGIBILITY OF COMPETITORS

The Championship is open to all competitors who comply with Art.1 of the current National 4x4 Challenge regulations and who reside in the Northern Region or Kwazulu Natal.

3. ELIGIBILITY OF VEHICLES

The regulations and Specifications for the Northern Regions 4x4 Challenge Championship are the same as those for the National Championship contained in the White Book, except for those changes detailed below:

3.1 Formula Off-road Class (Northern Regions Championship Class)

The aim of this class is to have a class where all the vehicles are the same as far as possible. These rules must be read in conjunction with the National rules. Supplier details are obtainable from the National 4x4 challenge club.

The rules listed below are to ensure that vehicle variation is kept to a minimum:

3.1.1 Frame

Custom built Formula Off-road 4x4 space frame, serial numbered individually. All mounting points are standard.

3.1.2 Differentials

Rear differential will be from a Mitsubishi Colt / Pajero (12 bolt imported model solid axle) with standard locker. No aftermarket lockers allowed.

Front Differential will be Toyota Hi-Lux (1980 – 1993 import model solid axle) with Toyota electrical locker. No aftermarket lockers allowed.

3.1.3 Engine

Engine used must be 20 Valve Toyota AGE (4A / 7A). Engines are to be normally aspirated only and no Turbo, Supercharger or Nitro's will be allowed. Any other engine modifications are allowed.

3.1.4 Gearbox

Gearbox used will be Front Wheel Drive Toyota 4A / 7A Automatic Gearbox. No split in gearbox or prop shaft disconnect will be allowed Must be permanent 4x4.

3.1.5 Brakes

Independent brakes are allowed. Drum and disk brakes allowed. Two brake pedal system (left and right only) controlled by Driver only.

3.1.6 Suspension

3 Link suspensions with panhard bar (front and rear) must be used. Pneumatic and/or hydraulic suspension types are permitted as long as they are not adjustable while driving, or navigating an obstacle. Rod length for bottom link from eye to eye 870 mm \pm 5 mm. Rod length for top link from eye to eye 730 mm \pm 5 mm.

3.1.8 Shocks

Air shocks (16" travel and 2" diameter) are compulsory. No coils.

3.1.9 Tyres

Tyres to be 35 x 12.5 x 15 – Class to decide on allowable manufacturers or type. Bead lockers are permitted.

3.1.10 Steering

Steering must be Hydraulic and be mechanical pump driven. No electrical hydraulic pumps allowed. Rear wheel steering is not permitted.

3.1.11 Winches

The use of winches front and rear to adjust riding height is permitted.

3.1.12 Engine and Gearbox Panels

Engine and gearbox must be covered with fire resistant non-transparent panels.

3.1.13 Bonnet

Custom built Formula Off-road bonnet to be fitted. Bonnet must be fitted during all challenge obstacles.

3.1.14 Fuel Tank
Standard 20 litre aluminium fuel tank must be fitted and petrol filler cap must be properly sealed to avoid leaking, pollution and fire hazard.

3.1.15 Body Panels
Body side panels must be fitted as per the Formula design and may not be transparent. Floor and front panels may be transparent

3.2 Open Class (Non-Championship Class)

3.2.1 This is an open class to accommodate all types of 4x4 vehicles as well as Two-Wheel Drive buggies.

3.2.2 Differentiation between the various vehicle types and modifications will be done by means of a handicap points system. The handicap for a specific vehicle will be determined at scrutineering. The handicap will be added to the competitors overall score for the day.

3.2.3 The basic guideline for the handicap points system will be:

| | | |
|---------------------|---|--------|
| Axles | 2x4 | +150 |
| | No Diff lock/LS | +45 |
| | 1 Diff lock/LS | 0 |
| | 2 nd Diff lock/LS/Traction Control | -45 |
| | Steerable rear | -25 |
| | Differentials > 3500kg GVM | * -25 |
| | Portal or custom differentials | * -45 |
| Transfer | Mechanically split FWD | -25 |
| Body | Shortened | ** -45 |
| | DIY (Non-Standard) | ** -90 |
| Suspension | Leaf springs | +0 |
| | Coil Springs Front | -25 |
| | Coil Springs Rear | -25 |
| Tyre Size | ≤ 31" | +45 |
| | >31" but < 35" | 0 |
| | ≥ 35" but ≤ 37" | -45 |
| | >37" | -60 |
| Fiddle/split brakes | 1 or 2 axles | -25 |
| Body levelling | Hydraulic or Pneumatic | -25 |

* or ** use only one

3.2.4 The vehicle must have factory fitted roll over protection (hard top) or alternatively be fitted with a roll bar in the case of a bakkie or soft-top. A bracing cross in the roll bar is highly recommended but is not compulsory.

3.2.5 This class will also make use of up to 6 (six) bonus obstacles, which will have a score of 100 points. Only drivers with a handicap of -90 (minus ninety) or more may attempt the bonus obstacles.

3.2.6 When a vehicle is deemed to fall in any of the other classes, the following rules will apply:

- The vehicle is only allowed 5 appearances in this class and must then move on to its designated other class.
- The vehicle will however be allowed to finish the year in the open class.
- The driver can stay on in this class if he/she is under the age of 18
- The driver may seek permission from the 4x4 Challenge Committee in writing to stay on in the Open Class

4. CLASSES

Super Modified
Production Modified
Modified
Street Legal Locker
Standard Production
Formula Off-road

The colours shall be: Red for Super Modified and Formula Off-road, Blue for Production Modified, Green for Modified, Yellow for Street Legal Lockers, White for Standard Production, Black for

Open class and Silver for open Class Bonus.

5. EVENTS TO COUNT TOWARDS THE NORTHERN REGIONS 4x4 CHALLENGE CHAMPIONSHIP SERIES

The Northern Regions 4x4 Challenge Championship Series will consist of seven (7) events as per the 2012 MSA Calendar of which the best six events will count towards the Northern Regions 4x4 Challenge Championship. The 5(five) points awarded for starting an event, will not be dropped. (Refer GCR 233).

6. POINTS SCORING

The driver and co-driver of a specific vehicle will be awarded the same amount of points. Allocation of class points to competitors, within their specific class is as follows:

6.1 Five (5) points for starting an event.

| | | | |
|-----|-----------------|-----------------|-----------------|
| 6.2 | 1st - 30 points | 5th - 12 points | 9th - 4 points |
| | 2nd - 25 points | 6th - 10 points | 10th - 2 points |
| | 3rd - 20 points | 7th - 8 points | |
| | 4th - 16 points | 8th - 6 points | |

6.3 If any class draws less than six (6) starters, the allocation of class points for that specific class will be as follows:

| | |
|----------------------|----------------|
| 6 or more starters | Full points |
| 5 starters | from 2nd place |
| 4 starters | from 3rd place |
| 3 starters | from 4th place |
| Less than 3 starters | No points |

6.4 In case of a tie at an event, the following procedures will be followed

6.4.1 For the purpose of championship points to be awarded, class points for the positions the competitors would have achieved if it wasn't a tie, will be added together and divided equally between the competitors

6.4.2 Class points will only be allocated to competitors if they achieve a minimum of twenty percent (20%) of the highest score for the day in their specific class.

7. AIM OF THE NORTHERN REGIONS 4X4 CHALLENGE CHAMPIONSHIP SERIES

7.1 The aim of the Northern Regions 4x4 Challenge Championship Series is to declare a Northern Regions 4x4 Challenge Class Champion Driver and Co-driver in each class.

7.2 The competitors with the highest class-points in each of the classes will be declared the Northern Regions 4x4 Challenge Class Champion Drivers and Co-drivers.

7.3 MSA will only declare Northern Regions Class Champion Drivers and Co-drivers if a minimum on average of six (6) competitors entered the class in at least five (5) Northern Regions 4x4 Challenge Championship Events during the year. (Refer GCR 230 and 234).

7.4 In the case of a tie at the end of the season the competitor's position will be determined by taking into account firstly the number of class wins and progressing down the scoring until the tie is broken. (Refer GCR 229).

7.5 If this is still ineffective, MSA shall declare the winner on such a basis as it deems fit.

8. CONTROLLERS OF THE CHAMPIONSHIP

The Controllers of the Championship shall be the MSA Northern Regions Regional Committee.