



REGULATIONS AND SPECIFICATIONS FOR THE 2019 MSA HANKOOK EXTREME 4X4 CHALLENGE REGIONAL CHAMPIONSHIP SERIES

ART

1. ELIGIBILITY OF COMPETITORS

- 1.1. Open to competitors holding a current MSA Competition license valid for 4x4 Challenge.
- 1.2. Competitors must hold a **Regional** competition license (Annual or One-event) to score points towards the **Regional** 4x4 Challenge Championship. Annual or One-Event licenses must be acquired prior to the event date.
- 1.3. Two entries per vehicle will be accepted, as long as they consist of two separate crews in the same class.
- 1.4. Drivers and Co-Drivers may only compete in one vehicle on the day of the event.
- 1.5. Drivers must be a minimum of sixteen (16) years old and co-drivers must be a minimum of fourteen (14) years old.

2. ELIGIBILITY OF VEHICLES

- 2.1. The competition will be open to any lightweight 4-wheel drive vehicles for which a Code B (old code 08) driver's licence would normally be required and qualifying to compete in the classes as defined below.
- 2.2. No agricultural equipment, trucks or tracked vehicles will be permitted.
- 2.3. The Organisers reserve the right to exclude vehicles at their discretion, deemed not suitable for this type of event or damaging to the obstacle course because of excessive weight, size of tyres, construction of vehicle or any other reason. The decision to exclude such a vehicle will be done in consultation with the Stewards of the Meeting. Any objection against such a decision will therefore become the subject of an Appeal as to the future participation of the vehicle in question. The full entry fee for the event, from which vehicle is excluded, will be refunded to the competitor.
- 2.4. The following vehicle specific rules will be fixed for the duration of the 2019 season, unless safety reasons necessitate a change.

3. GENERAL CONDITIONS APPLICABLE TO ALL CLASSES

- 3.1. Production vehicles shall be production based 4-wheel drive vehicles of which a recognised manufacturer has manufactured fifty (50) or more of the same model.
- 3.2. A vehicle shall have exactly four wheels, each with exactly one tire.
- 3.3. Only standard tyres rated for use on the road and with a minimum speed rating of 100 kilometres per hour, will be permitted.



- 3.4. Paddle tyres, tyre chains, studs, double wheels, etc. may not be used.
- 3.5. Bead lock rims are permitted.
- 3.6. Tire studs, screws or any other items added to the tire are not permitted.
- 3.7. Where permitted, modifications to body work must be done professionally to ensure that the looks and image of the vehicle is maintained, at the discretion of the Scrutineer, who can refer it to the technical committee.
- 3.8. Only differentials from lightweight standard production vehicles (below 3500kg GVM) may be used
- 3.9. All vehicles must, in the opinion of the Organisers, be safe and capable of completing the course. Brakes and steering mechanisms will be strictly scrutineered and normal safety requirements, such as properly secured batteries, will be checked. It is strongly advised that bucket seats be used for the competitor's own safety.
- 3.10. A fire extinguisher, easily removable and fitted in a place easily accessible to driver, co-driver and officials, must be carried at all times. The fire extinguisher shall have a minimum capacity of 2kg and proof of purchase or service within the preceding twelve months shall be furnished. Fire extinguishers containing carbon tetrachloride shall not be used. The Chief Marshal at each obstacle will ensure that there are two (2) 1kg fire extinguishers placed at each obstacle, one at the starting gate and one at the finishing gate. In the event that a competing vehicle causes a fire that has to be extinguished with the marshal's fire extinguisher, that competitor will have to pay the Marshal's Association a fee of R200.00 for servicing and filling thereof per fire extinguisher. Competitors failing to comply with this ruling will not be allowed to start the next event on the calendar until this account is settled.
- 3.11. Vehicles with a passenger compartment and roof must be fitted with a roll bar. Open vehicles must be fitted with roll cages.
- 3.12. Roll bars and roll cages must be:
 - 3.12.1. Adequately mounted and positioned in such a way that the competitors are protected at all times.
 - 3.12.2. Constructed of steel tubing of minimum 32mm diameter with a minimum wall thickness of 2.5mm or 50mm diameter and higher with 2mm wall thickness. Tubes must have holes of 6mm diameter drilled into all members for checking the tube thickness.
 - 3.12.3. Mounted on the chassis, if the vehicle is fitted with a glass fibre body.
 - 3.12.4. A diagonal member or cross members, joining the main roll bar not more than 150mm from the top or bottom must be fitted.
 - 3.12.5. All welding must be of the highest quality with full penetration over the full perimeter of the tube.
 - 3.12.6. Headspace of at least 50mm shall be allowed between the outer surface of the



roll cage and the top of the helmet of a competitor, when seated normally.

- 3.12.7. Any design deviating from the specification must be presented to the Technical Committee and a ruling in writing obtained as to the safety of the vehicle, before entering an event.
- 3.13. Vehicles must be fitted with an internationally approved (FIA) safety harness. The scrutineer will inspect the expiry date on the harness. Up to five (5) years beyond their normal expiry date may be allowed. (See GCR 239, D. iv) Competitors must wear safety harnesses in all obstacles.
- 3.14. All open type vehicles or vehicles without functional side windows must have safety nets, securely fitted, covering the door or window opening from the top of the windscreen height to the bottom of the door opening for the full width of the door. The net must not have openings of more than 70mm square and must be capable of withstanding the weight of the competitor. Vehicles with functional windows must close the windows to 70mm below the top of the window frame if no nets are fitted. Doors must be properly secured at the discretion of the Scrutineers. A door, window or net opening in an obstacle will result in the competitor forfeiting all points for that specific obstacle.
- 3.15. All vehicles must be fitted with recovery hooks at the back and front, securely bolted down (welding is not acceptable) and easily accessible. Recovery hooks must be painted red and must accept a rope loop to be secured without requiring the use of shackles or other such attachments.
- 3.16. No loose objects will be permitted in a competing vehicle. Toolboxes, jacks, water bottles, etc. must be securely fastened or removed from the vehicle before starting an obstacle. A competitor or marshal will call for a time out, should items deemed dangerous, be present in the vehicle.
- 3.17. Where additional petrol tanks are fitted, the filler caps must be located on the outside of the vehicle and petrol caps must be properly sealed to avoid pollution and fire hazard.
- 3.18. It is strongly recommended that vehicles be fitted with guards over dangerous parts. The Scrutineer, in consultation with the Technical Committee, can exclude a competitor from competing if dangerous parts on his vehicle are not suitably protected.
- 3.19. Exhausts systems are unrestricted provided that they meet with the dBa limit as defined by MSA
- 3.20. Should any entrant have doubt as to the classification of his vehicle, he must obtain a ruling in writing from the Technical Committee before entering an event.
- 3.21. All vehicles must have some form of protection between the engine and the driver's compartment (fire wall), suitable and sufficient in the case of:
- fire for preventing the passage of flame,
 - rotating engine and driveline components,



c) as well as hot or pressured fluids.

- 3.22. All vehicles participating in the 4x4 Challenge Series must have an audible warning system fitted that will allow the driver to warn bystanders. This can be either a horn or a reverse alarm.
- 3.23. Brakes may be upgraded but independent brakes will only be allowed in the classes as defined below.

4. CLASSIFICATION

- 4.1. Class 1 – Top Truck
- 4.2. Class 2 – Modified Vehicles
- 4.3. Class 3 – Production Modified Vehicles
- 4.4. Class 4 – Pro Locker Vehicles
- 4.5. Class 5 – Standard Production Vehicles

5. VEHICLE SPECIFICATIONS

5.1. Top Truck Vehicles

Vehicles competing in the Top Truck Class have to comply with the General Conditions **except** for the following:

- 5.1.1. Any differential or drive train components can be used. (Keeping in mind that the track width for this class starts at 3.5m)
- 5.1.2. Rear-wheel steering is allowed.
- 5.1.3. Independently operated brakes are allowed.
- 5.1.4. Adjustable suspension systems are allowed.
- 5.1.5. Differential locks on both axles as well as Limited-Slip differentials and traction control is allowed.
- 5.1.6. There is no maximum tire size (no paddle or agricultural tyres allowed).

5.2. Modified Vehicles

Vehicles competing in the Modified Class have to comply with the General Conditions as well as the following specifications:

5.2.1 Body

- 5.2.1.1. The vehicle must have a minimum “cab” width of 1200mm. This size must be



maintained for a minimum of 500mm between the 2 axles.

- 5.2.1.2. A Production Chassis is not required
- 5.2.1.3. Driver and co-driver must be suitably protected from rotating engine and driveline components well as hot or pressured fluids.
- 5.2.1.4. Minimum body panels required are:
 - a) Bonnet to cover top of engine,
 - b) Area from pedals to back of seat on side of vehicle must be adequately covered to protect the driver and co-driver.

5.2.2. Driveline

- 5.2.2.1. The differentials must be from a standard 4-wheel drive production vehicle with a maximum crown wheel diameter of 10.5".
- 5.2.2.2. Differentials, gearboxes, transfer cases (if fitted), engines and all axle replacement parts must be from lightweight, standard production vehicles (below 3,500kg GVM) of which a recognised manufacturer has manufactured fifty (50) or more of the same model.
- 5.2.2.3. The hubs, shafts and differential must be in a straight line for front and rear axle.
- 5.2.2.4. No independent suspension allowed.
- 5.2.2.5. Any modifications are permitted on the axles, as long as the axles accept the prescribed differentials.
- 5.2.2.6. All internal axle components must be interchangeable in a standard production vehicle as described in these regulations (e.g. chrome-moly CV's).
- 5.2.2.7. Limited slip, locked differentials or traction control in the front and/or rear axle will not be permitted. Vehicles fitted with lockable differentials may compete in these classes provided that the locking facilities are disabled to the satisfaction of the Scrutineers.
- 5.2.2.8. The use of a mechanically split transfer case, to achieve rear or front wheel drive only, is allowed. A propshaft-disconnect may also be used to achieve the same function as a split transfer case.
- 5.2.2.9. Hub-reductions (portal axles) are not allowed.

5.2.3. Suspension

- 5.2.3.1. Any suspension type is permitted as long as it:
 - 5.2.3.1.1. Does not manually, or;
 - 5.2.3.1.2. Does not automatically adjust the pre-set ride height of the vehicle while driving, or navigating an obstacle.
- 5.2.3.2. The suspension may be mechanically adjusted to adjust the ride height of the vehicle,



as long as it is not used while navigating an obstacle. Should a suspension adjustment winch be used to adjust the height, the cable must be disconnected while driving.

5.2.3.3. No hydraulic, pneumatic or electric suspension adjustment is allowed.

5.2.4. Steering

5.2.4.1. Rear wheel steering is not permitted.

5.2.4.2. A full hydraulic steering system is permitted on the front wheels.

5.2.5. Brake System

5.2.5.1. A single brake pedal mounted in the driver's foot-well must be able to operate all brakes. Additionally, a lever operated mechanism/s acting simultaneously on all 4 wheels is allowed.

5.2.5.2. A single hand brake that only brakes both the rear wheels simultaneously can be fitted. Transmission brakes are permitted as hand brakes.

5.2.5.3. Brakes may be upgraded, but brakes operating independently on individual wheels will not be permitted.

5.2.5.4. Line locks (manual or electric) may be installed to lock the rear brakes, equally between left and right. The line locks may not be able to lock the front wheels only under any circumstance.

5.2.6. Tyres and wheels

5.2.6.1. Maximum tire size is 35" outer diameter.

5.3. Production Modified Vehicles

5.3.1. Body

5.3.1.1. The body is considered to be the exterior of the cab, load bed, doors, bonnet, front/rear fenders, grill, etc.

5.3.1.2. The body of the vehicle shall at all times resemble that of the factory produced vehicle in that any member of the general public would be able to recognise the make and model.

5.3.1.3. Load bodies may be changed or modified provided that a floor panel or lid is fitted as well as sides and back are not less than 150mm high behind the driver's seat, following the lines of the cab and stretching over the back wheels. The load body must stretch to at least 400mm behind the centre of the rear axle.



- 5.3.1.4. Body parts such as mudguards, bonnets, firewalls and floor panels may be replaced, but not substituted by transparent materials.
 - 5.3.1.5. Wheel-arch flares may be added and mudguards modified to accommodate bigger wheels, taking into consideration that the recognizable shape and profile of the vehicle must be retained.
 - 5.3.1.6. Doors may be removed. Safety nets must be fitted in the absence of the doors and shall comply with the conditions as set out in the General Conditions.
 - 5.3.1.7. The vehicle must have a minimum width of 1200mm, unless the original production vehicle is narrower than 1200mm. The body may be wider at the driver/co-driver compartment.
 - 5.3.1.8. The front of the body shall not start behind the front wheel centre line.
 - 5.3.1.9. The proportions of the bonnet, grill and mudguards and/or fenders must be maintained when narrowing the vehicle. A 20% error in proportions will be allowed to accommodate the change in width and or height changes made to the vehicle (E.g. if the proportion of the original grill was 1000mm wide x 500 high and is narrowed to 800mm wide, then the maximum allowable variation on the height change will be 400mm \pm 80mm).
 - 5.3.1.10. No single-seat vehicles will be allowed. Two seats shall be next to each other as per the intent of a production 4x4.
 - 5.3.1.11. The roof and windscreen of the vehicle may be removed should it have been produced from the factory as a removable part.
 - 5.3.1.12. The vehicle shall remain in a road legal condition at all times.
- 5.3.2. Vehicle Frame/Chassis**
- 5.3.2.1. The chassis of the vehicle shall be defined as the two main longitudinal members that support the body and frame/roll-cage. (Note: If a monocoque vehicle is used as the base vehicle, a chassis from another type of vehicle needs to be fitted)
 - 5.3.2.2. The chassis of the vehicle must be the original chassis from a standard 4-wheel drive production vehicle (no reproduction chassis are allowed) with a GVM not exceeding 3,500kg.
 - 5.3.2.3. The chassis may be lengthened, shortened, narrowed or widened. The front end may not be cut shorter than the centre of the front wheel centre line and the back end not to be shorter than 400 mm in front of the centre of the back axle. (Refer to Figure 2 for explanation)
 - 5.3.2.4. At static ride height, the bottom of the chassis rails shall be no higher than the top of the tire. (Refer to Figure 2 for explanation)



- 5.3.2.5. A replacement body frame that creates an integral roll cage for the vehicle may be used as long as it complies with the regulations as set out in the Body-Section.
- 5.3.2.6. The roll cage shall conform to the regulations as set out in the General Conditions.
- 5.3.2.7. The vehicle must have a fixed length and width and may not be able to articulate.
- 5.3.2.8. The engine must be mounted onto the chassis.
- 5.3.2.9. The suspension links must be mounted onto the chassis.

5.3.3. Driveline

- 5.3.3.1. The differentials must be from a standard 4-wheel drive production vehicle with a maximum crown wheel diameter of 10.5".
- 5.3.3.2. Differentials, gearboxes, transfer cases (if fitted), engines and all axle replacement parts must be from lightweight, standard production vehicles (below 3,500kg GVM) of which a recognised manufacturer has manufactured fifty (50) or more of the same model.
- 5.3.3.3. The engine, gearbox and transfer case (if fitted) combination must be directly connected to the differentials to drive the wheels (no wheel motors or electric/hydraulic drives will be allowed).
- 5.3.3.4. Any modifications are permitted on the axles, as long as the axles accept the prescribed differentials.
- 5.3.3.5. All internal axle components must be interchangeable in a standard production vehicle as described in these regulations (e.g. chrome-moly CV's).
- 5.3.3.6. The back of the engine-block must be located in front of the furthest-forward portion of the driver's seat.
- 5.3.3.7. The use of a mechanically split transfer case, to achieve rear or front wheel drive only, is allowed. A propshaft-disconnect may also be used to achieve the same function as a split transfer case.
- 5.3.3.8. Hub-reductions (portal axles) are not allowed.

5.3.4. Suspension

- 5.3.4.1. The original suspension type should be retained. (e.g. Leaf Springs shall remain Leaf Springs, Coil and Shock System to remain Coil and Shock System)
- 5.3.4.2. The suspension may be modified to accommodate the use of larger tyres. (e.g. Lift Kit)
- 5.3.4.3. Any suspension type is permitted as long as it:
 - 5.3.4.3.1. Does not manually, or;



- 5.3.4.3.2. Does not automatically adjust the pre-set ride height of the vehicle while driving, or navigating an obstacle.
- 5.3.4.3.3. The original suspension type is retained. (e.g. Leaf Springs shall remain Leaf Springs, Coil and Shock System to remain Coil and Shock System)
- 5.3.4.4. The suspension may be mechanically adjusted to adjust the ride height of the vehicle, as long as it is not used while navigating an obstacle. Should a suspension adjustment winch be used to adjust the height, the cable must be disconnected while driving.
- 5.3.4.5. No hydraulic, pneumatic or electric suspension adjustment is allowed.

5.3.5. Steering

- 5.3.5.1. Rear wheel steering is not permitted.
- 5.3.5.2. A full hydraulic steering system is permitted on the front wheels.

5.3.6. Brake System

- 5.3.6.1. A single brake pedal mounted in the driver's foot-well must be able to operate all brakes. Additionally a lever operated mechanism/s acting simultaneously on all 4 wheels is allowed.
- 5.3.6.2. A single hand brake that only brakes both the rear wheels simultaneously can be fitted. Transmission brakes are permitted as hand brakes.
- 5.3.6.3. Brakes may be upgraded, but brakes operating independently on individual wheels will not be permitted.
- 5.3.6.4. Pinion brake systems are not permitted.
- 5.3.6.5. Line locks may be installed to lock the rear brakes, equally between left and right. The line locks may not be able to lock the front wheels only under any circumstance.
- 5.3.6.6. The hand brake may only be mechanical or hydraulic operated. No electronics (solenoid)

5.3.7. Tyres and wheels

- 5.3.7.1. Maximum tire size is 33" outer diameter.
- 5.3.7.2. Grooving or other modifications that involve removing material from the tire are not permitted.



5.4. Pro Locker Vehicles

There is no limit to changes or modifications except for the following:

- 5.4.1. The vehicles must be roadworthy to the Scrutineers satisfaction.
- 5.4.2. The standard production body shell, including the doors, load body, mudguards and bonnet must be retained, without altering the shape. Reinforcement may be made to these components.
- 5.4.3. Fibre glass panels will be accepted as long as it is 100% replica production replacement panels.
- 5.4.4. The chassis and body shell may be professionally shortened, but not narrowed. The original chassis front end may not be cut shorter than 500mm from front of the centre of the front axle and the back end not to be shorter than 500 mm from the back of the centre of the back axle. The original spring mountings must still be in place at their original positions.
- 5.4.5. The suspension type may be changed, eg. leaf springs to coil springs. Aftermarket coil-over shock absorbers will be permitted.
- 5.4.6. Bumpers may be removed and replaced with bumpers or bush bars not detracting to the looks and image of the vehicle, to the discretion of the Scrutineers.
- 5.4.7. A body lift kit may be fitted provided that the vehicle retains roadworthiness.
- 5.4.8. Running boards may be removed and guards, to protect the sides and underside of the vehicle, may be fitted.
- 5.4.9. Doors may be removed but must be replaced with a framed door with the prescribed netting and a non-transparent bottom half of equal shape and size as the original full door. The replacement door frame must be fitted with a side-impact bar at hip height and of sturdy construction to the discretion of the Scrutineers.
- 5.4.10. Inner fenders may be modified, and vertical external panels may be modified and wheel arch flares added to accommodate bigger wheels, taking into consideration that the recognisable shape and profile of the vehicle must be retained.
- 5.4.11. Any engine and transmission system and axles from a lightweight standard production vehicle must be used.
- 5.4.12. A power steering may be fitted.
- 5.4.13. Rear and front limited slip and locked differentials are permitted.
- 5.4.14. The use of a mechanically split transfer case, to achieve rear or front wheel drive only, is allowed. A propshaft-disconnect may also be used to achieve the same function as a split transfer case.



- 5.4.15. Maximum tire size is 37" outer diameter.
- 5.4.16. Windscreens may be removed.

5.4.17. Brake System

- 5.4.17.1. A single brake pedal mounted in the driver's foot-well must be able to operate all brakes. Additionally, a lever operated mechanism/s acting simultaneously on all 4 wheels is allowed.
- 5.4.17.2. A hand brake that only brakes both the rear wheels simultaneously can be fitted. Transmission brakes are permitted as hand brakes.
- 5.4.17.3. Brakes may be upgraded, but brakes operating independently on individual wheels will not be permitted.

5.5. Standard Production Vehicles

This class caters for stock standard, production vehicles in its original form, with limited modifications allowed.

- 5.5.1. The Suspension needs to be original with no increase in the ride height from its original form.
- 5.5.2. The Tyre size used may not be increased more than the following differences:
 - 5.5.2.1 Overall Diameter – 3,50%
 - 5.5.2.2 Width – 20mm
- 5.4.3 Replacement front and rear bumpers, Rock Sliders and Mag Wheels may be fitted

6. GENERAL RULES

- 6.1. No competitor will be permitted to start the event unless he/she has satisfied the officials concerned that all necessary documentation has been completed.
- 6.2. Fire retardant driving suits (race suits) and lace-up shoes may be worn by all competitors. Should a race suit not be worn a minimum of long cotton pants, short sleeve cotton shirt and lace-up shoes must be worn.)



- 6.3. Competitors may not start an obstacle until both driver and co-driver have their crash helmets on, safety harnesses fastened, and safety nets secured.
- 6.4. The driver and co-driver may not undo their safety belts between the start and finish line of an obstacle. Offending competitors will forfeit all points for the specific obstacle if seen by a Marshal. (Disqualify).
- 6.5. Competitors will be permitted one (1) minute to inspect each obstacle, after which the Marshal will ask the competitor to proceed. Failure to abide by the ruling of the Marshal will lead to exclusion for that specific obstacle at the discretion of the Chief Marshal at that obstacle. (Disqualify).
- 6.6. The competitor may attempt the obstacle until he has lost all points for that obstacle, at which time his vehicle must be removed in such a way as to minimise damage to the obstacle. (Disqualify).
- 6.7. Competitors will draw the starting order for the first obstacle of the day from the Chief Marshals for the different classes after driver's briefing. Once drawn, swapping numbers with other competitors will not be allowed. The competitor that started the first obstacle first will fall into the back of the queue at the second obstacle and so on for the rest of the event. If a competitor falls out of the competition, ranks will be closed so one competitor does not start consecutive obstacles first.
- 6.8. For larger classes (>9 vehicles) the starting order will also be drawn the same as above, but the first 2 competitors will fall back in the queue at the second obstacle and so on for the rest of the event. If a competitor falls out of the competition, the starting ranks will be closed by 2 competitors. In short, all the uneven numbers will have a chance to start the obstacles, then all the even numbers will start. After the start of an obstacle, the rest will follow in numerical sequence.
- 6.9. After a vehicle has been involved in a roll (two wheels off the ground and unable to recover on its own), that vehicle must be re-inspected for safety reasons and signed off by the Scrutineer, before it will be allowed to enter the next obstacle. The Scrutineer will be in radio contact with the marshals at all times and can be called for scrutiny of the vehicle by asking the Chief Marshal of the class. A vehicle that has not been signed off by the scrutineer is not eligible to score points in any successive obstacles. All rolls by competitors will be duly noted on their score cards.
- 6.10. Organising clubs must ensure that their Recovery Personnel hold MSA's Exposed Official's insurance to ensure that they are properly insured in case of an accident.
- 6.11. The cut-off time for a group of competitors starting a new obstacle will be 17h00.

7. COMPETITION NUMBERS

- 7.1. Competition numbers (minimum letter size should be 70mm) and sponsors decals will be



supplied by the Organisers at documentation and must be applied in a clearly visible position.

- 7.2. Vehicles without adequate space for competition numbers and/or sponsors decals must be fitted with a board, minimum size 300 x 400mm, to each side of the vehicle.
- 7.3. The first ten competition numbers will be allocated to drivers according to their overall finishing position in the MSA 4x4 Challenge Championship Series the previous year. For 2019 any competitor may choose any number in his/her class range.
- 7.4. The following number series will be used for different classes:
 - 7.4.1. Top Truck 101 to 150
 - 7.4.2. Modified 201 to 250
 - 7.4.3. Production Modified 301 to 350
 - 7.4.4. Pro Locker 401 to 450
 - 7.4.5. Standard Production 501 to 550

8. CREWS

- 8.1. The driver and co-driver are deemed to be the crew and no other persons other than the crew and officials of the event will be permitted in or on the vehicle during the event.
- 8.2. Competitors will only score points toward the category entered, namely driver or co-driver as shown on the entry form.
- 8.3. Only driver and co-driver may be in control of the vehicle during the event.

9. ROUTE

- 9.1. Different classes may be required to complete different obstacles or sections of obstacles.
- 9.2. The route will consist of twelve (12) obstacles of which at least two (2) will be progressive obstacles and two (2) penalty obstacles. One (1) may be a timed trial, should the terrain warrant it to be safe.
- 9.3. Crowd control must be maintained by demarcating the danger zones at obstacles by means of banner tape, leaving enough manoeuvring space for the competitors. Spectator tape must be a minimum of 3m from a straight line joining two adjacent gateposts.
- 9.4. Obstacles shall be clearly marked by gates and competitors may not deviate from the route.
- 9.5. The exit to each obstacle must be extended and marked with banner tape of a different colour, clearly indicating where the obstacle has ended with the intention of improving crowd control.
- 9.6. The gates shall consist of two (2) gateposts clearly marked with banner tape at least 3m apart (3.5m for Top Truck).
- 9.7. The top of the gateposts must be not lower than one (1) meter and not higher than 1.5 m



above ground level.

- 9.8. Organisers should make use of tubes in critical positions, suitably dimensioned to accept the post, which must be driven into the ground with about 20mm protruding. The length of the tube should not be less than 300mm in length.
- 9.9. Where a normal gatepost cannot be used or in areas where the normal peg-type gateposts are deemed to be unsafe for the drivers, plastic cones may be placed as a gatepost and the whole cone including the base will be regarded as part of the gatepost.
- 9.10. The top end of the gateposts must be bent over for safety reasons.
- 9.11. The COC reserve the right to alter the route or cancel any obstacle as deemed necessary.
- 9.12. If the majority of drivers and co-drivers in a class wish to alter or skip an obstacle, then the COC must be called for a ruling.
- 9.13. No obstacle will be cancelled after one competitor has attempted and/or successfully completed it. If it is deemed necessary to alter an obstacle, after an attempt by a competitor, the competitor will be granted a second chance.
- 9.14. Obstacles must be set out in a manner that allows participants to negotiate and/or complete the obstacle successfully. Progressive scoring may be used where it is envisaged that competitors may not be able to complete the obstacle successfully.
- 9.15. Water and mud obstacles must not be deeper than 150 mm.
- 9.16. Both posts of gates must be marked clearly with colour-coded 50mm duct tape. Starting gates with a double flag. The colours shall be assigned per class per obstacle. The colour that each class will drive on a specific obstacle will be indicated on the day of the event.
- 9.17. The front wheel hubs may not pass through the designated starting gate when taking a roll back.

10. POINT SYSTEM AND TYPE OF OBSTACLES

10.1. General

- 10.1.1. A time limit will be imposed on each obstacle. A Marshal will start the clock as soon as the start signal is given and the competitor will be deemed to have completed the obstacle when the rearmost part of the vehicle crosses the imaginary line between the last two gateposts at the finish line. On progressive obstacles, the centre line of the front wheels must pass the imaginary line between the last two gateposts at the finish line.
- 10.1.2. If the organisers do not specify a time limit for an obstacle, a time limit of six (6) minutes will apply for the Top Truck class and four (4) minutes per obstacle will be applicable for all other classes. If the competitor has not completed the obstacle within the time given, the Marshal will stop the competitor. On penalty obstacles the competitor will forfeit all points for that specific obstacle. On Progressive obstacles the competitor will score progressive points up to that point.



- 10.1.3. The Marshal may call a time out at any given moment based on a spectator being in a dangerous position, the competitor disputing a decision by the Marshal or any other reason, at which time the clock will be stopped until such time as the Marshal indicates that the competitor may proceed in the obstacle. (Time Out).
- 10.1.4. If a competitor's vehicle, in the Marshal's judgement, cannot proceed any further in an obstacle and damages the obstacle by excessive spinning of wheels or in any other way, the Marshal will stop the competitor by blowing a whistle. The competitor must stop immediately and will be permitted to renegotiate the obstacle from the point where the Marshal stopped him. (Stop/Start).
- 10.1.5. Obstacles shall consist of a maximum of eight (8) numbered gates including start and finish gates.
- 10.1.6. A vehicle must enter the starting gate of an obstacle with its front hubs and all consecutive gates must be entered in the same manner.
- 10.1.7. Although no banner tape shall be used between gates for the purpose of demarcating the route, all points for the specific obstacle will be forfeited if a competitor touches the crowd control banner tape demarcating danger zones as specified in Clause 9.3 (Abandon Route).
- 10.1.8. Vehicles are not allowed to drive through any other obstacles while attempting a loop. (Abandon Route).
- 10.1.9. All points for the specific obstacle will be forfeited if the competitor:
- Requests to bypass the obstacle. (Bypass).
 - Becomes stuck in the obstacle. (Stuck).
 - Fails to start the obstacle. (No Start).
 - Permits any outside assistance in the obstacle. (Assist).
 - Must be recovered from the obstacle. (Recovered).
 - Travel with two wheels over or outside the first gatepost demarcating the beginning of the route. (Abandon Route).
 - Travel with three wheels over or outside any other gatepost. (Abandon Route).

10.2. Progressive obstacles (Forward Movement)

- 10.2.1. Progressive points will be awarded every time the centre of the front wheels of the vehicle passes through a gate with a maximum of sixty (60) points awarded per obstacle. Points will not be awarded for passing through the starting gate.
- 10.2.2. The number of points awarded to a competitor for passing through a gate must be indicated at the gate or at the start of each obstacle.
- 10.2.3. Twenty (20) points will be deducted if a competitor's vehicle touches a gatepost, regardless of the number of times the vehicle touches the specific gatepost. (Touch Post).
- 10.2.4. If the competitor's vehicle, in the Marshal's judgement, fails to proceed any further in an



obstacle, after he was stopped by the marshals whistle a first time, and damages the obstacle by excessive spinning of wheels or in any other way, the Marshal will stop the competitor by blowing his whistle a second time and the competitor will be awarded progressive points less any penalties occurred up.

- 10.2.5. A competitor may voluntarily stop in the obstacle at any time and request to be awarded progressive points less any penalties occurred up to that point. (Stop). Points will be awarded for the furthest gate that the competitor has passed with the centre of his front wheels, even if the vehicle moves backwards. All penalties occurred up to the point the vehicle comes to a complete controlled standstill will be deducted.
- 10.2.6. A competitor is allowed only one rollback (10 point penalty) for this type of obstacle. If a competitor allows his vehicle to move backwards by engaging reverse or freewheeling for a second time, he will be awarded progressive points less any penalties occurred up to that point. (Roll Back).
- 10.2.7. If a competitor's vehicle travels with more than two wheels over or outside a gatepost he will be awarded progressive points less any penalties incurred up to that point. (Abandon Route/Stop).
- 10.2.8. All points for the specific obstacle will be forfeited if a competitor's vehicle crosses over its own tracks (loop) between gateposts (Abandon Route).
- 10.2.9. If a competitor times out, he will score progressive points up to that point. (time out)

10.3. Penalty obstacles

- 10.3.1. Sixty (60) points will be awarded when starting an obstacle.
- 10.3.2. Ten (10) points will be deducted every time a competitor allows his vehicle to move backwards by engaging reverse or freewheeling, to gain advantage in the Marshal's judgement. (Roll Back)
- 10.3.3. A competitor will only be allowed three (3) roll backs between each pair of gates and will forfeit all points for that specific obstacle if a fourth roll back is taken between the same pair of gates.
- 10.3.4. Twenty (20) points will be deducted when a competitor's vehicle touches a gatepost, regardless of the number of times the vehicle touches that specific gatepost. Touching only the duct tape on the gatepost does not constitute a banner touch. (Touch Post).
- 10.3.5. All points for the specific obstacle will be forfeited if the vehicle travels with more than two wheels over or outside a gate. (Abandon Route).
- 10.3.6. If the competitor's vehicle, in the Marshal's judgement, fails to proceed any further in an obstacle, after he was stopped by the marshals whistle a first time, and damages the obstacle by excessive spinning of wheels or in any other way, the Marshal will stop the competitor by blowing his whistle a second time. The competitor has to stop immediately,



move backwards to a position from where he feels comfortable that the obstacle can be re-negotiated and will be penalized for a roll back. (Roll Back).

- 10.3.7. All points for a specific obstacle will be forfeited if a competitor's vehicle crosses over its own tracks (loop) between gateposts (Abandon Route). However, driving forward past a gate post, reversing outside the obstacle and then entering the next gate will only be penalized by a Roll Back. (10 points)

10.4. Timed Trial

- 10.4.1. This obstacle will be constructed on a relatively flat surface, insuring that no section is of an arduous, dangerous or demanding nature, i.e. sections which can be completed without other than timed penalty by all classes.
- 10.4.2. This obstacle must be fully enclosed by spectator banner. Touching the spectator banner will result in disqualification of the obstacle.
- 10.4.3. The start / finish "garage" will be demarcated with two gates (four pegs), 4m wide and 6m long. Spectator banner will be strung along the sides. Touching the spectator banner will result in disqualification of the obstacle.
- 10.4.4. The course will be set out with gates that are 4m wide.
- 10.4.5. 60 points will be awarded at the start of the timed trail.
- 10.4.6. The time will be measured from when the vehicle sets off until the vehicle comes to a complete stop between the garage posts. Should the vehicle overshoot the garage posts, the time will keep on running until the vehicle is correctly parked between the gateposts.
- 10.4.7. One point will be deducted for every second on the timed trail as timed by the marshals.
- 10.4.8. Ten (10) points will be deducted for the touch of every gatepost.
- 10.4.9. Twenty (20) points will be deducted for missing a gatepost.
- 10.4.10. Competitors are allowed to cross their tracks for this type of obstacle only.
- 10.4.11. Vehicles must be in 4x4-mode with low-range engaged.

11. CONTROLS

- 11.1. After scrutineering, all vehicles must be impounded in an area demarcated for this purpose.
- 11.2. Competitors may not cross the starting line at any obstacle before receiving permission from the Marshal at the starting point to proceed.
- 11.3. Before starting an obstacle, the competitor must know the exact route, i.e. entrance and exit gates, etc., and must satisfy himself that the obstacle is clear of vehicles and spectators and that all banner posts are in an upright position.
- 11.4. After finishing an obstacle, the competitor must stop at the finishing point. The score sheet must be marked and signed by the Marshal as well as the driver or co-driver before



moving on to the next obstacle. The marshals or Clerk of Course may only change the signed score sheet after a successful and proper consultation with the appropriate competitor.

12. SERVICING AND ASSISTANCE

- 12.1. No assistance is permitted within the boundaries of an obstacle. If a vehicle cannot complete an obstacle because of breakage or any other cause, all points will be forfeited as obstacle failure and no second chance will be permitted.
- 12.2. The co-driver must be in the vehicle before an obstacle is started. Failure to comply will result in his exclusion for the balance of the event.
- 12.3. If a competitor's vehicle needs urgent repairs, he may elect to do such repairs by falling out of the competition for the duration of the repairs.
- 12.4. The competitor and/or vehicle may not leave the terrain on which the event is presented, during the duration of the event, without permission from the Clerk of the Course.
- 12.5. Upon completion of the repairs, the competitor may return to the competition provided that he re-enters the competition in his original starting position, rotation order and group to which he was assigned by the Clerk of the Course at the beginning of the event. Once the group has moved away from a completed obstacle, the repaired vehicle will not be permitted to enter this obstacle. All points for obstacles missed by the competitor during his absence will be forfeited.
- 12.6. No 4-wheel drive vehicle will be permitted to attempt or enter an obstacle without 4-wheel drive being operational. Once the competitor has moved into the obstacle, he may disengage 4-wheel drive if required, provided that he does not damage the obstacle by excessive spinning of the vehicle's wheels or in any other way, in which case the Marshal will stop the competitor and he may only continue after 4-wheel drive has been engaged.

13. EXCLUSION

Competitors will be excluded or regarded as non-finishers at the discretion of the Clerk of the Course for:

- 13.1. Failing to start and/or remain in the correct starting position.
- 13.2. Failing to stop at any control point and not carrying out the instructions as set out in these regulations.
- 13.3. Receiving two or more warnings by a Marshal, noted on his score sheets, for not stopping his vehicle when a Marshal blows his whistle and/or not abiding by the Marshals decision.
- 13.4. Finishing the event with a vehicle having a chassis, frame, sub-frame, body or engine different to that fitted to the vehicle at the start of the event.
- 13.5. Changing an obstacle by removing or shifting rocks, trees, etc.



- 13.6. Practicing on the course within thirty (30) days prior to an event.
- 13.7. Their vehicle leaking fuel while negotiating an obstacle.
- 13.8. If it is reported to the Organizer before 18h00 on the day of the event that a competitor did:
 - 13.8.1. Behave in a manner likely to prejudice the interest of motor sport generally;
 - 13.8.2. Drive dangerously, under the influence of liquor or drugs or without due consideration for other competitors or spectators;
 - 13.8.3. Permit a person not entered as the official driver or co-driver, to be in control of the vehicle from the period between documentation and having completed the last obstacle;
 - 13.8.4. Fail to declare to the Organisers, on the Incident Report Form obtainable from the Clerk of the Course, of any incident during the event involving any person or property;
 - 13.8.5. Commit any breach of the General Competition Rules of MSA and these Supplementary Regulations for which no specific penalties are stipulated.

14. AWARDS

- 14.1. For each event Trophies shall be awarded to drivers and co-drivers placed first, second and third in each class. Marshals also to be awarded.
- 14.2. In the case of a tie on an event, for the purpose of the prize giving the competitors' positions will be determined by taking into account firstly the number of obstacles on which full score have been achieved, and progressing down the scoring until the tie is broken.

15. EVENTS TO COUNT TOWARDS THE EXTREME 4x4 CHALLENGE CHAMPIONSHIP SERIES

The Extreme 4x4 Challenge Championship Series will consist of eight (8) events as per the 2019 MSA Calendar of which seven (7), will count towards the Extreme 4x4 Challenge Championship. The starting points awarded for an event, will not be dropped. If less than 6 events are held, all events will count towards the Championship (Refer GCR 233).

16. DRIVERS AND CO-DRIVERS CHAMPIONSHIP - POINT SCORING

- 16.1. The driver and co-driver of a specific vehicle will be awarded the same amount of points. Competitors domiciled in the KZN Region may score in the NR Championship.
- 16.2. Points will be awarded for each event as follows:

Modified Class only: Ten (10) points for starting an event

1st - 50 points	8th - 22 points	15th - 8 points
2nd - 43 points	9th - 20 points	16th - 6 points
3rd - 36 points	10th - 18 points	17th - 4 points
4th - 33 points	11th - 16 points	18th - 3 points



5th - 30 points

12th - 14 points

19th - 2 points

6th - 27 points

13th - 12 points

20th - 1 point

7th - 24 points

14th - 10 points

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

16.3. In the case of a tie on an event, the following procedures will be followed:

16.3.1. 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.

16.4. 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.

17. AIM OF THE 4x4 CHALLENGE CHAMPIONSHIP SERIES

The aim of the 4x4 Challenge Championship Series is:

- 17.1. To declare a Top Truck **Regional** 4x4 Challenge Champion Driver and Co-driver.
- 17.2. To declare a Modified **Regional** 4x4 Challenge Champion Driver and Co-driver.
- 17.3. To declare a Production Modified Club 4x4 Challenge Champion Driver and Co-driver.
- 17.4. To declare a Pro Locker Club 4x4 Challenge Champion Driver and Co-driver.
- 17.5. To declare a Standard Production Club 4x4 Challenge Champion Driver and Co-driver.
- 17.6. The competitors with the highest-class points in the different classes will be announced the 4x4 Challenge Class Winning Drivers and Co-drivers.
- 17.7. MSA will only declare a Top Truck and Modified **Regional** 4x4 Challenge Champion Driver and Co-driver if an average of ten (10) competitors participates per event over five (5) of the eight (8) **Regional** 4x4 Challenge Championship events during the year.
- 17.8. MSA will only announce **Regional** Class Winning Drivers and Co-drivers if a minimum of six (6) competitors entered the class in at least five (5) **Regional** 4x4 Challenge Championship events during the year.
- 17.9. In the case of a tie at the end of the season the competitor's position will be determined by taking into account the points scored in the dropped event firstly and secondly the number of class wins and progressing down the scoring until the tie is broken. (Refer GCR 229).
- 17.10. If this is still ineffective, MSA shall declare the winner on such a basis as it deems fit.