



2024-2025

Top End Mud Racing Association Series

Sporting and Technical Regulations



Version 1

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2024-2025 Top End Mud Racing Association Series

Sporting Regulations

A capitalised and italicised word in this document is defined in the FIA International Sporting Code (Code), the National Competition Rules (NCR), including their Appendices or this document.

Any HEADING is for reference only and has no regulatory effect.

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2024-2025 Top End Mud Racing Association Series

Sporting Regulations

S1 PREAMBLE

Mud Racing originated in the American Deep South swamp lands and was introduced to Australia in 1998 by 4WD enthusiasts. It is intended as a low-cost, entry-level participation into motorsport. The *Competition* involves 2 *Automobiles* at a time traversing opposing unsealed *Tracks* approximately 700 metres in length and containing various obstacles, including jumps, dips, gutters, mud holes and water holes. Each run is timed with penalties applying for infringements, however, high speed is not the object of the *Competition*.

Mud Racing is not and may not include a *Speed Event*.

Top End Mud Racing Association (*TEMRA*) reserves the right to make changes to these regulations at any time, subject to the prior approval of *Motorsport Australia*, in the interests of safety, fairness and advancement of the sport.

S2 TITLE AND JURISDICTION

S2.1 Title

This *Series* will only be known as and referred to as the “2024 - 2025 Top End Mud Racing Association Series”.

S2.2 Authority / Jurisdiction

2.2.1 Each *Round* in the 2024-2025 Top End Mud Racing Association Series (*Series*) will be held under the FIA International Sporting Code including Appendices (*Code*); the National Competition Rules (*NCR*) of Motorsport Australia; the Sporting and Technical Regulations issued for this *Series* by *Motorsport Australia* and *Supplementary Regulations* and Further *Supplementary Regulations* issued by the *Organiser* at each *Event*.

2.2.2 This *Series* has been sanctioned by *Motorsport Australia* as a Club Series.

2.2.3 *TEMRA* is responsible for administration of the *Series*.

Contact Details: Top End Mud Racing Association
The Secretary
PO Box 1236
Howard Springs NT 0836

S3 ADMINISTRATION

S3.1 Personnel

3.1.1 The following personnel have been appointed by *TEMRA* to the *Series* and have the authority to administer the various aspects of these regulations:

- | | | |
|---------|---------------------|--------------------|
| 3.1.1.1 | Race Director | Allan Young |
| 3.1.1.2 | Clerk of the Course | Alex Ormsby |
| 3.1.1.3 | Starter | Chris Gill |
| 3.1.1.4 | Staging Official | Shaquille Holloway |
| 3.1.1.5 | Chief Scrutineer | Allan Young |

- 3.1.1.6 Chief Timekeeper Wendy Kelly
- 3.1.1.7 Safety Officer Alex Ormsby
- 3.1.2 Where the Clerk of the Course and/or Chief Scrutineer appointed for the *Series* are unavailable for any *Round*, *TEMRA* will appoint a replacement who will have the same authority to administer these regulations for that *Round*.
- 3.1.3 A Deputy Clerk of the Course and/or Deputy Chief Scrutineer may be appointed for any *Round*. Any such Deputy will have the same authority to administer these regulations as the Clerk of the Course and/or Chief Scrutineer for that *Round*.
- 3.1.4 The Clerk of the Course and the Chief Scrutineer may delegate their authority for specific aspects of these regulations to other officials at their discretion.

S4 AUTOMOBILE ELIGIBILITY

Each *Automobile* must comply with the provisions of the 2024 - 2025 Top End Mud Racing Association Series Technical Regulations and be approved by the Chief Scrutineer to be eligible to compete in the *Series*.

S4.1 Classes

- 4.1.1 Prior to scrutineering at each *Event*, each *Automobile* must be nominated by its respective *Competitor* in one of the following Classes as defined in the 2024 - 2025 Top End Mud Racing Association Series Technical Regulations:
 - 4.1.1.1 Class 1 – 2WD Standard
 - 4.1.1.2 Class 2 – 2WD Open
 - 4.1.1.3 Class 3 – 4WD Standard
 - 4.1.1.4 Class 4 – 4WD Modified
 - 4.1.1.5 Class 5 – 4WD Pro Modified
 - 4.1.1.6 Class 6 – Top Gun
 - 4.1.1.7 Junior Class (refer S5.2)
- 4.1.2 If an *Automobile* is the fastest in its Class by more than 3 seconds compared to the next fastest *Automobile* in its Class based on the averaged *Recorded Time* of all runs for 2 consecutive *Rounds*, *TEMRA* will have the discretion to reclassify that *Automobile* to another Class. If an *Automobile* is reclassified by *TEMRA* for this reason, existing *Series* points for that *Automobile* may be transferred to its new Class.
- 4.1.3 If an *Automobile* is deemed as not being competitive in its Class, *TEMRA* will have the discretion to reclassify that *Automobile* to another Class. If an *Automobile* is reclassified by *TEMRA* for this reason, existing *Series* points for that *Automobile* may be transferred to its new Class.
- 4.1.4 *TEMRA* is the sole arbiter with regard to classification of *Automobiles* and may change the Class of any *Automobile* at any time. Any decision made by *TEMRA* in this regard will not be the subject of any protest or appeal.

S5 DRIVER ELIGIBILITY

S5.1 General

- 5.1.1 To be eligible to compete in the *Series*, each *Driver* (the person operating the *Automobile*) and *Co-Driver* (a person in the *Automobile* that is not operating the *Automobile*) must hold a current Motorsport Australia Speed or Speed Junior Licence or higher and be registered with *TEMRA*.
- 5.1.2 Each *Driver* cannot be less than 12 years of age. *Drivers* 12 and 13 years of age must be approved to compete by the Race Director and must be accompanied by an experienced instructor approved by the Race Director.
- 5.1.3 The minimum age for a *Co-Driver* is 12 years.
- 5.1.4 Each *Driver* under 16 years of age must have a *Co-Driver* over 18 years of age.
- 5.1.5 Each *Co-Driver* under 18 years of age must have a *Driver* over 18 years of age.

S5.2 Junior Class

- 5.2.1 Unless approved otherwise by the Race Director, each *Driver* under 16 years of age at the commencement of the *Round* must compete in the Junior Class only.
- 5.2.2 The Race Director must approve each *Driver/Automobile* combination.
- 5.2.3 Each *Automobile* in the Junior Class must comply with any requirement of the *Series* Technical Regulations for either Class 1 or Class 3, except that the engine must be up to 6 cylinders, OEM, and have a maximum capacity of 4800 cc.

S5.3 Multiple Drivers

Each *Automobile* may have more than one *Driver/Co-Driver* entered for each *Round* of the *Series* who may participate in each *Heat* and the back-to-back finals at their own discretion.

S6 SERIES CALENDAR

The *Series* will be conducted over the following *Rounds*:

<i>Round</i>	<i>Date</i>
1	16 November 2024
2	7 December 2024
3	25 January 2025
4	15 February 2025
5	15 March 2025
6	5 April 2025
7	12 April 2025

S7 ROUND FORMAT

The format of each *Round* will be determined by *TEMRA* and will be advised at the *Driver* briefing prior to each *Round*.

S7.1 Round Format

Generally, the format for each *Round* will be as follows:

7.1.2 *Heats* - A minimum of 4 *Heats* for each *Automobile* in each Class

7.1.3 *Finals* - Back-to-back finals to determine the top 4 placings in each Class

S7.2 Variations to the Round Format

The *Round* format may be varied at any time by the Clerk of the Course in consultation with *TEMRA*.

S8 THE COURSE

8.1 The *Course* will comprise of 2 *Tracks* and a pit area.

8.2 The pit area will comprise of a paddock area for the competition *Automobiles* and staging lanes for access to the *Tracks*.

8.3 Each *Track* will be on an unsealed surface and may contain jumps, dips, gutters, mud holes, water holes and straights.

8.4 Each *Track* will be a mirror image of the other *Track*.

8.5 Each *Track* will be designed to ensure that competing *Automobiles* do not exceed a maximum speed of 100 km/h at any time during the run.

8.6 The maximum length of each *Track* is 700 metres.

8.7 No straight section of the *Track* may exceed 110 metres in length without a turn of at least 90 degrees.

8.8 Each crossover and turn greater than 45 degrees on each *Track* will be clearly marked with tyres and barriers.

8.9 A chequered flag and/or appropriate signage will mark the *Finish Line*.

8.10 The *Course* will be attended by a medical, fire and tow team at all times during *Competition* as deemed appropriate by the Clerk of the Course.

8.11 The *Course* will have marshals located on each of the 4 islands as deemed appropriate by the Clerk of the Course.

8.12 The layout of the *Tracks* and required direction of travel will be displayed and clearly explained at the *Driver* briefing.

8.13 If during the *Event* a *Track* is changed from the original layout a *Drivers* meeting will be called and all *Drivers* will be notified of any changes.

S9 COMPETITION

S9.1 Heats

9.1.1 Each *Automobile* will complete a number of *Heat* runs on each *Track* that will be timed. The time for each *Heat* run will be referred to as the *Recorded Time*.

9.1.2 An uneven number of runs on each *Track* by individual *Automobiles* may be approved by the Clerk of the Course.

9.1.3 A time penalty for an infringement will be added to the *Recorded Time* for each run to determine the *Overall Time* for that run. This time will be referred to as the *Heat Time*.

- 9.1.4 Each *Heat Time* for each *Automobile* will be added and averaged over the number of *Heats* attempted by that *Automobile* to determine participation in the Finals. This time will be referred to as the *Qualifying Time*.
- 9.1.5 Each *Automobile* must genuinely attempt all *Heat* runs to be eligible for the Finals. If an *Automobile* misses 1 *Heat* run due to mechanical issues it may be eligible for the Finals at the discretion of TEMRA. If an *Automobile* misses 2 or more *Heat* runs, then it is not eligible for the Finals.

S9.2 Conduct of a Run

- 9.2.1 Except in the event of a “bye” run, both *Tracks* will be utilised simultaneously. The Clerk of the Course may approve another *Automobile* to run on the other *Track* during a bye run giving due consideration to the number of runs that *Automobile* may or may not have on that particular *Track*.
- 9.2.2 Only 1 competing *Automobile* is permitted to be on each *Track* at any one time.
- 9.2.3 Each *Heat* will be conducted in groups of Classes in a predetermined, published order. Each *Automobile* must line up in the staging lanes in the predetermined order as directed by the Staging Official.
- 9.2.4 During each *Heat*, the *Driver* of an *Automobile* may advise the Staging Official that they are unable to attend the staging lanes in the allocated order. In this case, the *Automobile* may run at another time as long as it is before the completion of the next 3 Class *Heats* or at the discretion of the Clerk of the Course.
- 9.2.5 If an *Automobile* is unable to compete in any further *Heats* or Finals the Staging Official must be advised as soon as possible.
- 9.2.6 The Starter will signal to the Staging Official when it is clear to send *Automobiles* to the *Start Line* by illumination of a double white staging light or radio communication.
- 9.2.7 Each *Automobile* must attend the *Start Line* when indicated by the Staging Official. A *Driver* may request up to 2 minutes to attend the *Start Line*. If the *Automobile* is not at the *Start Line* after this time, the run for that *Automobile* will be aborted and a DNS penalty time will be applied.
- 9.2.8 The following must occur prior to the commencement of a run:
- 9.2.8.1 The medical, fire and tow teams and course marshals to be in position on the *Course* to the satisfaction of the Clerk of the Course;
 - 9.2.8.2 All windows (if applicable) to be in the fully closed position;
 - 9.2.8.3 Safety harness and window net for both *Driver* and *Co-Driver* to be checked by the Staging Official;
 - 9.2.8.4 Loose objects to be removed from *Automobile*; and
 - 9.2.8.5 Starter to give permission to *Start*.
- 9.2.9 The *Start* signal will be indicated by the illumination of the green staging light.
- 9.2.10 Each *Automobile* must commence each run from a standing *Start*. If the *Driver* of an *Automobile* advises the Staging Official that they need to *Start* via a rolling *Start* this request may be granted providing the *Driver* of the other competing *Automobile* agrees and the rolling *Start* is approved by the Clerk of the Course. Both *Automobiles* will then be required to undertake a rolling *Start*.
- 9.2.11 Each *Automobile* must be driven on the *Track* in the direction as instructed at the *Driver* briefing.
- 9.2.12 Each *Driver* and *Co-Driver* must follow the reasonable directions of any official of the *Event*.
- 9.2.13 If an *Automobile* mounts up or onto a tyre wall with 2 or 4 wheels, the *Automobile*'s engine must be turned off and the run aborted. A DNF penalty time will be applied to the *Automobile*.

- 9.2.14 If an *Automobile* drives onto the inner island, the *Automobile* must stop immediately, re-join the *Track* in a safe manner and continue back to the pits. A DNF penalty will be applied to the *Automobile*.
- 9.2.15 A time limit of 60 seconds will apply for any stuck *Automobile* to continue on the *Track* before the run is aborted. If the time limit is exceeded, the *Automobile* cannot recommence the run and a DNF penalty time will be applied for that run.
- 9.2.16 If an *Automobile* makes contact with the inside tyre wall or barriers, the course marshal will advise the Clerk of the Course who may apply a time penalty of 2 seconds for that run.
- 9.2.17 If an *Automobile* rolls over (DNF), the following will apply:
- 9.2.17.1 The *Automobile* on the other *Track* must stop. This *Automobile* may leave the *Track* at a slow speed when directed by a course marshal;
 - 9.2.17.2 The *Automobile* that rolled over must not be restarted. This *Automobile* must be removed from the *Track* by a tow vehicle;
 - 9.2.17.3 A pit crew member or another *Driver* may assist with the recovery only if approved by the Clerk of the Course;
 - 9.2.17.4 The *Automobile* that rolled must be inspected and approved by the Chief Scrutineer before being able to participate in any further runs at that *Round*;
 - 9.2.17.5 The *Driver* and *Co-Driver* of the *Automobile* that rolled must be assessed and approved by the medical team before being able to participate in any further runs; and
 - 9.2.17.6 A DNF penalty time will be applied to the *Automobile* that rolled for that *Heat*.
- 9.2.18 An *Automobile* that must stop due to an incident may request another run. Otherwise, a time equivalent to the slowest *Heat Time* for that Class and *Heat* plus 15 seconds will be applied.
- 9.2.19 A support vehicle is prohibited to cross the *Start Line* or enter the emergency lane of the staging lanes during a run unless approved and supervised by the Clerk of the Course.
- 9.2.20 Each *Automobile* must return directly to the pit area at a maximum speed of 5 km/h after crossing the *Finish Line*.
- 9.2.21 An *Automobile* is prohibited onto the *Track* after the final run for the *Event* unless approved by the Clerk of the Course.

S9.3 Finals

- 9.3.1 The *Automobiles* with the first and second fastest *Qualifying Time* in each Class will compete against each other in a Final to determine first and second placing in each Class for the *Round*.
- 9.3.2 The *Automobiles* with the third and fourth fastest *Qualifying Time* in each Class will compete against each other in a Final to determine third and fourth placing in each Class for the *Round*.
- 9.3.3 If an *Automobile* withdraws prior to the commencement of the Finals for any reason, it will be replaced by the *Automobile* with the next fastest *Qualifying Time* in that Class. This will also apply to any *Automobile* that has moved up the qualifying order as a result of a withdrawal.
- 9.3.4 Each Final will require each *Automobile* to participate in back-to-back runs on each *Track*. Where there is only 1 *Automobile* qualified for a Final, the *Driver* may elect not to run subject to the approval of the Clerk of the Course.
- 9.3.5 The *Driver* of each *Automobile* may request a change over time of 1 minute between *Tracks* to facilitate a change of *Driver*. This must be done prior to the first run.

- 9.3.6 If a *Driver* change occurs between runs the *Automobile* must be presented to the Staging Official to enable checking of the safety harness and window net prior to the next run.
- 9.3.7 An *Automobile* is prohibited to leave the *Track* area during a Final unless it has withdrawn.
- 9.3.8 Pit crews are prohibited to attend an *Automobile* at any time during a back-to-back Final.
- 9.3.9 The *Overall Time* (*Recorded Time* plus penalties) for each *Automobile* for each *Track* will be added together. The *Automobile* with the fastest *Overall Time* will be awarded the higher finishing position of that Final.
- 9.3.10 If one *Automobile* DNF's in the first back-to-back final run, the remaining *Automobile* must complete a lap to be declared the winner.
- 9.3.11 If both *Automobiles* DNF in the first back-to-back final run, the winner will be the *Automobile* with the fastest *Qualifying Time*.
- 9.3.12 If both *Automobiles* DNF in the second back-to-back final run, the winner will be the *Automobile* with the fastest *Overall Time* from the first back-to-back final run.
- 9.3.13 If one *Automobile* completes both back-to-back final runs and the other *Automobile* only completes one back-to-back final run, the *Automobile* that completes both back-to-back final runs will be declared the winner regardless of time.
- 9.3.14 If one of the *Automobiles* that has attended the staging area for the third versus fourth Final is then unable to attend the *Start Line*, the *Automobile* that finished fifth has 3 minutes to attend the *Start Line*.
- 9.3.15 If the third versus fourth back-to-back final runs have been completed and one of the *Automobiles* competing in the first versus second Final is unable to begin the first run by crossing the *Start Line*, the remaining *Automobile* must complete 1 run to be awarded first place. The *Automobiles* finishing in third and fourth will both move up the points allocation by 1 position. The *Automobile* unable to start the Final for first and second will be awarded the points for fourth position.
- 9.3.16 During the back-to-back final runs *Automobiles* must stage and cross the *Start Line* to attain a position in the race. If an *Automobile* does not cross the *Start Line*, its position for points is then allocated according to the *Qualifying Times*, e.g. if an *Automobile* competing for first or second is unable to *Start* the first run of a Final it will be awarded fourth place and the *Automobiles* finishing third and fourth are moved up 1 position for points allocation.
- 9.3.17 If there is a tie in a Final, the higher position will be awarded to the *Automobile* with the fastest *Qualifying Time* in that Class. If there is still a tie, the higher position will be awarded to the *Automobile* with the fastest *Recorded Time* on the fastest *Track* at that *Round* as verified by the Chief Timekeeper.

S9.4 Timing

- 9.4.1 The time taken to complete each run will be measured by a single person or by electronic means and recorded for each *Track*.
- 9.4.2 Timing will commence at the illumination of the green staging light or by passing an electronic beam.
- 9.4.3 Timing will conclude when the *Automobile* crosses the *Finish Line* designated by a marker on each side of the *Track* or by passing an electronic beam.
- 9.4.4 Time penalties will be added to the *Recorded Time* to determine the *Heat Time* or *Overall Time* for the run.

S9.5 Penalties

Penalties will be applied as shown in the table below:

Infringement	Penalty
Exceed pit area speed limit (5 km/h or walking pace)	First offence: Warning Second offence: <i>Disqualification from Round</i>
Unsportsmanlike conduct	<i>Disqualification from Round</i>
Not attend <i>Start Line</i> during a <i>Heat</i> when directed (DNS)	<i>Heat Time</i> of 2 minutes
Contact with inside or barriers	2 seconds added to <i>Recorded Time</i> (at the discretion of the Clerk of the Course)
Mounting up or onto the tyre wall with 2 or 4 wheels	DNF
Mounting up or onto tyre wall with 2 or 4 wheels and not turning off engine	<i>Disqualification from the Heat/Final</i>
Driving <i>Track</i> in wrong direction	<i>Heat Time</i> of slowest <i>Recorded Time</i> for that Class for that <i>Heat</i> plus 15 seconds
Driving onto the other <i>Track</i>	<i>Disqualification from that Heat/Final</i>
Driving onto inner island	DNF
Unable to complete a run in a <i>Heat</i> (DNF)	<i>Heat Time</i> of slowest <i>Recorded Time</i> for that Class for that <i>Heat</i> plus 15 seconds
Unable to complete a run in a Final (DNF)	<i>Disqualification from the remaining run</i>
Exit inner island in unsafe manner	<i>Disqualification from that Heat/Final</i>
Acting in a dangerous manner	<i>Disqualification from that Round</i>
<i>False start</i>	<i>Heat Time</i> of 2 minutes

Definitions:

Heat A run being conducted as part of a *Round*.

Round An *Event* being conducted as part of the *Series*.

False Start Where an *Automobile* leaves the *Start Line* prior to the green light being illuminated.

S10 AWARDS AND POINTSCORE

S10.1 Prizes and Trophies

Prizes, trophies and awards will be as determined by TEMRA and will be advised to each *Competitor*.

S10.2 Pointscores

10.2.1 Points will be awarded to each *Automobile* based on its finishing position in each Class at the conclusion of each *Round* in the *Series* as follows:

Finishing position in Class	Points
1 st	10
2 nd	8
3 rd	6
4 th	4
5 th	2

10.2.2 First to fourth finishing positions in each Class will be determined by the Finals.

- 10.2.3 Fifth finishing position in each Class will be allocated to the *Automobile* with the fastest *Qualifying Time* in each Class that did not qualify for or participate in the Finals.
- 10.2.4 Points will only be awarded to *Automobiles* with *Drivers* that are members of *TEMRA*.
- 10.2.5 Points will only be awarded to an *Automobile* in the Class it is entered for a *Round*. Except for reclassification of an *Automobile* by *TEMRA* as described in S4.1, points cannot be transferred if an *Automobile* competes in different Classes at different *Rounds*.
- 10.2.6 In addition to the above, 1 point will be awarded to each *Automobile* in each Class that competes at each *Round*.
- 10.2.7 In addition to the above, 10 points will be awarded to each *Automobile* in each Class that competes at *Round* 1 of the *Series*.
- 10.2.8 In addition to the above, a one-off 10 points will be awarded to each *Automobile* in each Class that competes at 3 consecutive *Rounds*.
- 10.2.9 In addition to the above, 3 points will be awarded to the winner of the NT Titles, 2 points will be awarded to 2nd place of the NT Titles and 1 point will be awarded to 3rd place of the NT Titles.
- 10.2.10 The *Automobile* gaining the highest points total in each Class over the 7 *Rounds* of the *Series* will be declared the "Class Winner of the Series".
- 10.2.11 The *Automobile* gaining the highest points total overall over the 7 *Rounds* of the *Series* will be awarded the "Presidents Cup".
- 10.2.12 Each *Automobile* must compete in 4 of the 7 *Rounds* of the *Series* to be eligible for *Series* awards.
- 10.2.13 If there is a tie at the end of the *Series*, the final positions will be determined by comparing the *Round* results achieved by each tied *Automobile*, with the *Automobile* with the highest number of first places in the relevant Class being awarded the higher *Series* position. If at this stage a tie still exists, it will be resolved by comparing the number of second, third or fourth places (and so on) achieved by each tied *Automobile* until each position has been determined. If there is still a tie, the final positions will be determined by the fastest *Recorded Time* on the fastest *Track* at each *Automobile's* last *Round* as verified by the Chief Timekeeper.
- 10.2.14 At the discretion of *TEMRA* one of the *Rounds* of the *Series* may be known as the NT Titles. This will be the last *Round* of the *Series* unless stated otherwise prior to the first *Round* of the *Series*. Points awarded for this *Round* will be used to determine the winners of the NT Titles.

S11 EVENT OPERATIONS

S11.1 Registration and Entry

- 11.1.1 Each team intending to participate in all *Rounds* of the *Series* must register with *TEMRA* at least 2 weeks prior to *Round* 1.
- 11.1.2 In addition to the above, each *Automobile* must be registered with the *Organiser* prior to 1700 hours ACST on the day of each *Round* and each *Driver* and *Co-Driver* must be registered with the *Organiser* at least 2 hours prior to the commencement of *Competition*.
- 11.1.3 Registration fees will be as follows:
 - 11.1.3.1 Registration of *Automobile* at a *Round*: Included in *TEMRA* membership fee
 - 11.1.3.2 Late registration of *Automobile* at a *Round*: \$50.00
 - 11.1.3.3 *Driver* and *Co-Driver* Motorsport Australia licence: as determined by *Motorsport Australia*
 - 11.1.3.4 Pit crew member per *Round*: \$40.00 each

11.1.3.5 Pit crew member for all *Rounds* (transferable): \$100.00 each

Please note: It is the responsibility of the Team Manager to ensure that all fees are paid for all team members in attendance at a *Round*.

S11.2 Briefings

Each *Driver*, *Co-Driver*, Team Manager and pit crew member must attend the compulsory briefing. The time and location of this briefing will be detailed in the *Supplementary Regulations* or Further *Supplementary Regulations* for the *Event*. The attendance sheet must be signed by each *Driver*, *Co-Driver*, Team Manager and pit crew member to confirm attendance. Other compulsory briefings may be convened as required and will be advised to each *Competitor* accordingly.

S11.3 Pit Area

11.3.1 A maximum of 4 team members per *Automobile* are permitted in the pit area. This includes the *Driver*, *Co-Driver* and 2 pit crew.

11.3.2 Only 1 support vehicle per *Automobile* is permitted in the pit area.

11.3.3 Any person under 16 years of age must be in the company of an adult (18 years of age or older) at all times when in the pit area. Children under 12 years of age are prohibited in the pit area during the *Event*.

11.3.4 One 9 kg dry chemical powder fire extinguisher which is in service date will be located at the base of each of the 8 light towers in the pit area.

11.3.5 The maximum speed for any *Automobile* in the pit area is 5 km/h (walking pace).

11.3.6 A competent person must be in the *Driver's Seat* of an *Automobile* whenever the engine is running.

S11.4 Scrutineering

11.4.1 Each *Automobile* must be in a sound mechanical condition and unless self-scrutineering applies, will be inspected and approved by the Chief Scrutineer at least 1 hour prior to the commencement of *Competition*.

11.4.2 Any faults identified will be advised to the *Competitor* and the *Automobile* may be re-inspected at a time to be determined and advised by the Chief Scrutineer.

11.4.3 Self-scrutineering may apply if the *Automobile* has been fully inspected by the Chief Scrutineer at the start of the Series. In this case, if an *Automobile* has had any further modification, it will be re-inspected at a time to be determined and advised by the Chief Scrutineer.

11.4.4 An *Automobile* that has been involved in an incident will be re-inspected at a time to be determined and advised by the Chief Scrutineer.

S12 TYRES

12.1 Each *Automobile* must only be fitted with tyres that are in sound condition.

12.2 The use of bolts and chains is prohibited.

12.3 Bald tyres are prohibited.

12.4 For Classes 1, 3, 4 and 5, the use of tractor tyres up to a maximum outside diameter of 36 inches is permitted and grooving of these tyres is permitted.

12.5 For Classes 2 and 6, tyres are free.

Please note: The Chief Scrutineer is sole arbiter with regard to the interpretation and application of these tyre regulations and any decision made by the Chief Scrutineer in this regard will not be the subject of any protest or appeal.

S13 FUEL

- 13.1 For the duration of an *Event*, *Competitors* may use any commercially available petroleum-based fuel or Methanol with limitations as detailed in the table below:

Class	Petroleum based limitation	Methanol permitted
1	RF100/AV100/E85	No
2	No limit	Yes
3	RF 100/AV100/E85	No
4	RF 100/AV100/E85	No
5	RF 100/AV100/E85	No
6	No limit	Yes

- 13.2 The use of Nitro Methane, Propylene Oxide and Nitrous Oxide is prohibited.
- 13.3 If Methanol is used, the *Competitor* must advise the Clerk of the Course and Chief Scrutineer prior to the commencement of the *Event*.

S14 AUTOMOBILE MARKINGS

S14.1 General

Markings on each *Automobile* must comply with the requirements of the Chief Scrutineer.

S14.2 Competition Numbers

The allocation of a competition number for each *Automobile* is solely the responsibility of *TEMRA*, which will maintain a register of all competition numbers allocated to, or reserved for, any *Automobile*.

S15 APPAREL

S15.1 Driver/Co-Driver

15.1.1 Each *Driver* and *Co-Driver* must wear apparel in accordance with Technical Appendix - Schedule D of the Motorsport Australia Manual for Club Khanacross (open *Automobiles* and *Specials*) whilst competing and in the pit area for the duration of the *Event*.

15.1.2 This includes the appropriate helmet, clothing which covers from ankles to neck to wrists (e.g. overalls) and enclosed footwear. Clothing of flammable synthetic material, such as nylon, is not acceptable.

Please note: The Chief Scrutineer is sole arbiter with regard to the interpretation and application of these apparel regulations and any decision made by the Chief Scrutineer in this regard will not be the subject of any protest or appeal.

S15.2 Pit Crew

Each Pit Crew member must wear enclosed footwear, long pants and at least a short-sleeved shirt whilst in the pit area for the duration of the *Event*. The Clerk of the Course and Race Director are authorised to refuse entry to the pit area of any person unsuitably attired. It is prohibited to wear a singlet only at any time. Enclosed footwear must be worn on entry to the venue.

S15.3 Officials

Each official of the *Event* must wear enclosed footwear, long pants and high visibility vest or top at all times whilst they are on the *Course* or in the pit area for the duration of the *Event*. Enclosed footwear must be worn on entry to the venue.

S16 JUDICIAL

- 16.1 In accordance with the *NCR*, the Clerk of the Course may make decisions in respect of the *Supplementary Regulations* including the *Code*, *NCR*, sporting and any other relevant regulations which may result in the application of penalties and/or referral to *Motorsport Australia* for further judicial/disciplinary action.
- 16.2 Protests, if any, must be lodged with the Clerk of the Course or Race Director in accordance with the *NCR*.
- 16.3 Appeals, if any, must be lodged with the Clerk of the Course or Race Director in accordance with the *NCR*.

S17 ARM RESTRAINTS

Arm restraints are prohibited.

S18 WINDOW NETS

Except where a permanently closed shatterproof window is fitted, each *Automobile* must be fitted with a working window net for both *Driver* and *Co-Driver/Passenger*.

2024 - 2025 Top End Mud Racing Association Series

Technical Regulations

T1 PREAMBLE

T1.1 Definition of Category

Mud Racing originated in the American Deep South swamp lands and was introduced to Australia in 1998 by 4WD enthusiasts. It is intended as a low-cost, entry-level participation into motorsport. The *Competition* involves 2 *Automobiles* at a time traversing opposing unsealed *Tracks* approximately 700 metres in length and containing various obstacles, including jumps, dips, gutters, mud holes and water holes.

In addition to these Technical Regulations each *Automobile* must conform to the Technical Appendix in the Motorsport Australia Manual.

TEMRA reserves the right to make changes to these regulations at any time, subject to the prior approval of *Motorsport Australia*, in the interests of safety, fairness and advancement of the sport.

T1.2 Definitions

4WD An *Automobile* (including four wheeled motor bikes (excluding quads), odysseys and agricultural equipment) with 4 wheels which will move under its own power with either its front or rear drive shafts disengaged.

2WD An *Automobile* which is driven solely by its front or rear wheels only.

OEM As supplied by the Original Equipment Manufacturer.

T2 CLASSES

Each *Automobile* competing in the *Series* must be constructed/modified in a safe manner and be deemed safe by the Chief Scrutineer and will be nominated into one of the following Classes:

T2.1 Class 1 – 2WD Standard

2.1.1 Is open to all 2WD *Automobiles*.

2.1.2 Must only have 1 diff / drive axle and must not be fitted with a transfer case, ie: no 4WD with drive shaft removed.

2.1.3 Each Class 1 *Automobile* must have been able to be road registered at one time. The motor and gearbox must be OEM and be located in the original position for that model.

2.1.4 Engine must be OEM and under 5000 cc (308ci).

2.1.5 A change to the final drive ratio is permitted.

2.1.6 Any fuel injection system fitted must be OEM for the engine. Aftermarket fuel injection systems, ECU chips/programs and/or fuel pump alterations are prohibited.

T2.2 Class 2 – 2WD Open

2.2.1 Engine and gearbox modifications are permitted.

2.2.2 Subject to the approval of TEMRA, any purpose-built *Automobile* may be permitted to run in Class 2 if the *Automobile* complies with all other Class 1 rules except T2.1.3.

T2.3 Class 3 – 4WD Standard

- 2.3.1 Each Class 3 *Automobile* must have been able to be road registered at one time. The motor and gearbox must be *OEM* and remain in the original location for that model.
- 2.3.2 Unless it is *OEM* for the *Automobile*, fuel injection or forced induction is prohibited. Engine performance “chips” are prohibited.
- 2.3.3 The engine must remain in standard configuration. Modifications to the cylinder head, camshaft or stroking of the crankshaft are prohibited. Cylinder bore diameters may be increased by a maximum of 0.060” (inches) only.
- 2.3.4 The original carburetor may be replaced by another unit which has a maximum flow of 500 cfm.
- 2.3.5 Diesel pumps and injectors must remain *OEM* with no modifications.

T2.4 Class 4 – 4WD Modified

- 2.4.1 Each Class 4 *Automobile* must have been able to be road registered at one time. Except as detailed below, the engine and gearbox must be *OEM* and remain in the original location for that model.
- 2.4.2 Unless it is *OEM* for the *Automobile*, fuel injection or forced induction is prohibited. Engine performance “chips” are prohibited.
- 2.4.3 Engine swaps are permitted. Engine must be *OEM* and standard configuration to a maximum of Ford 302 cu in (4.9L) or a GM 308 cu in (5.0 L)
- 2.4.4 The engine must remain in standard configuration. Modifications to the cylinder head or stroking of the crankshaft are prohibited. Cylinder bore diameters may be increased by a maximum of 0.060” (inches) only.
- 2.4.5 The original carburetor may be replaced by another unit which has a maximum flow of 600 cfm.
- 2.4.6 Diesel pumps and injectors must remain *OEM* with no modifications.

T2.5 Class 5 – 4WD Pro Modified

- 2.5.1 Each Class 5 *Automobile* must have been able to be road registered at one time.
- 2.5.2 Except as specifically detailed in these regulations, each *Automobile* must be in original configuration.
- 2.5.3 The engine must be in the standard position in the *Automobile*.
- 2.5.4 Unless it is *OEM* for the *Automobile*, forced injection is prohibited.
- 2.5.5 Aftermarket fuel injection systems, ECU chips/programs, camshaft combinations and/or fuel pump alterations are permitted.
- 2.5.6 An engine swap up to a maximum of 358 cu in (5.8 L) capacity is permitted.
- 2.5.7 Boring of a cylinder to a maximum of 0.060” (inches) over standard is permitted.
- 2.5.8 It is permitted to stroke a Holden 5 L engine to 355 cu in.

T2.6 Class 6 – Top Gun

- 2.6.1 If in the view of *TEMRA* the *Automobile* is competitive, an *Automobile* normally in other 4WD class can run in Class 6.
- 2.6.2 Supercharging must comply with Article T16 of these regulations.
- 2.6.3 If the *Automobile* complies with all other Class 6 rules, any purpose-built *Automobile* may be permitted to run in Class 6.

T3 SAFETY EQUIPMENT

- 3.1 The *Chassis* of each *Automobile* must be approved by the Chief Scrutineer.
- 3.2 Each *Automobile* must be fitted with the safety equipment as detailed in the table below:

Class	Safety Cage	Safety Harness
1	2-Point with diagonal brace – 50 mm OD	4-Point
2	6-Point – Engineer certified or Motorsport Australia Approved	4-Point
3	2-Point with diagonal brace – 50 mm OD	4-Point
4	4-Point	4-Point
5	4-point	4-Point
6	6-Point – Engineer certified or Motorsport Australia Approved	4-Point

Please note: Each safety cage must be approved by the Chief Scrutineer

- 3.3 Each *Automobile* must have a minimum two-point roll bar over the *Driver* and *Co-Driver*. Main hoop diameter 48.3 mm NB 40 wall thickness 3.2 mm black medium. All non-ADR *Automobiles* must be fitted with a minimum of a six-point roll bar. Braced on primary hoop diagonally preferred but crossway behind *Seats* permitted, main hoop diameter will be NB 40. Any deviation from this must be certified by a certified welder. A certificate must be presented to the Chief Scrutineer at scrutineering.

T4 BRAKES

- 4.1 A minimum of 2 disc brakes on front or 4 drum brakes on each *Automobile* is required.
- 4.2 It is mandatory that *Automobiles* in Class 2 and Class 6 have all wheel braking.

T5 STEERING

Steering components must be in a safe serviceable condition.

T6 COCKPIT

- 6.1 If any alteration is made to the *Cockpit* of an *Automobile*, material must be added for strengthening purposes.
- 6.2 Each *Automobile* must have a firewall of a minimum of 1.6 mm steel or 3 mm aluminium between the engine and the *Cockpit*.
- 6.3 If radiator or rubber hoses are in a *Cockpit* they must be shielded from the *Driver* and *Co-Driver*.

T7 BELL HOUSING

Flywheel shatter plates must be fitted, min 6 mm alloy or 3 mm steel, to the satisfaction of the Chief Scrutineer. Purpose built plates are acceptable.

Please note: Each Class 2, 5 and 6 *Automobile* must have bell housing protection of either a shatter blanket, bell housing shield or reinforced floor as above.

T8 TAIL SHAFT HOOPS

- 8.1 Each Class 2, 5 and 6 *Automobile* must have hoops installed on rear and front shafts.
- 8.2 Hoops must be solid, chains are prohibited.
- 8.3 Hoops must be circular in shape and completely surround the tail shaft.

T9 BATTERIES

- 9.1 Batteries and battery boxes must be securely mounted to prevent possible shorting of the battery terminals due to displacement of the battery, in the event of a rollover.
- 9.2 Each *Automobile* with a battery mounted in the *Cockpit* must be mounted in a battery box in such a way to contain any spilt acid.

T10 THROTTLE TO IDLE SPRING

Each *Automobile* must have 2 return throttle to idle springs – not including the spring on the pedal.

T11 FUEL TANK

- 11.1 A plastic fuel tank is prohibited.
- 11.2 Venting of the fuel tank must take into account a roll over situation, sealed fuel cap (non-venting).
- 11.3 All fuel lines must be protected especially if within the *Cockpit* of any *Automobile*.
- 11.4 Plastic fuel filters are prohibited.

T12 KILL SWITCH

- 12.1 A Kill Switch must be fitted to each *Automobile* and is to be within reach of *Driver* or *Co-Driver* whilst in safety harness or seat belt restraints and must isolate engine and electric fuel pump (if fitted).
- 12.2 The Kill Switch must clearly be marked as "Kill Switch".

T13 NEUTRAL SWITCH

Neutral safety switch or similar is mandatory for all *Automobiles* with automatic transmission.

Please note: *Automobiles* must not start in gear.

T14 TOW HOOKS

- 14.1 Each *Automobile* must be fitted with forged steel tow hooks (not eyes) bolted with two hi-tensile bolts to a structural part of the *Automobile* front and rear and be readily available and identifiable to officials and tow teams.
- 14.2 Roll over hooks fixed to the sub frame on each side are recommended.
- 14.3 Each tow and rollover hook must be checked by the Chief Scrutineer and deemed suitable.

T15 FIRE EXTINGUISHERS

Each *Automobile* must carry an approved fire extinguisher which is up to 3 kg and within service date to cover the entire *Series*, correctly mounted and accessible to the *Driver* whilst strapped in.

T16 SUPERCHARGERS

- 16.1 Except in cases where braided lines are used, each *Automobile* fitted with belt driven supercharger must be fitted with a guard to prevent fuel line damage in the event of belt loss.
- 16.2 Where a Roots type supercharger is fitted, it must be fitted with a front endplate of 6 mm minimum thickness, a rear endplate of 7.62 mm minimum thickness, and supercharger restraints used in conjunction with aluminium shear bolts at the mounting face.
- 16.3 Unless approved by TEMRA and the Chief Scrutineer, the maximum overdrive for any supercharger must not exceed 14%.
- 16.4 Screw type superchargers with a rotor diameter greater than 178 mm must meet maximum case length of 400 mm and maximum case width of 400 mm and be fitted with a manifold burst panel.
- 16.5 Screw type superchargers with a rotor diameter less than 178 mm must comply with manufacturers' specifications and recommendations.
- 16.6 A restraint system (including ballistic containment) is mandatory on all screw type superchargers used in all classes of *Competition*.
- 16.7 All other screw type superchargers with rotor diameter greater than 178 mm require supercharger restraints plus ballistic containment.