



2017-2018

Top End Mud Racing Association Series

Sporting and Technical Regulations





2017-2018 Top End Mud Racing Association Series Sporting Regulations

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2017-2018 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 motor sport. The competition involves two 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.

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

S2 TITLE and JURISDICTION

S2.1 Title

This Series shall only be known as and referred to as the "2017-2018 Top End Mud Racing Association Series".

S2.2 Authority / Jurisdiction

(a) Each Round in the 2017-2018 Top End Mud Racing Association Series (Series) shall be conducted under the provisions of the International Sporting Code (ISC) of the Federation Internationale de l'Automobile (FIA); the National Competition Rules (NCR) of the Confederation of Australian Motor Sport Ltd (CAMS); the Sporting and Technical Regulations issued for this Series by CAMS and Supplementary and Further Regulations issued by the Organiser at each event.

(b) This Series has been sanctioned by CAMS as a Club Series.

(c) Top End Mud Racing Association (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

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

- | | |
|--------------------------|----------------------------------|
| (a) Clerk of the Course | Michael Connor (or his delegate) |
| (b) Chief Scrutineer | Steve Dries (or his delegate) |
| (c) Assistant Scrutineer | Terry Carew (or his delegate) |

S3.2

Where a person named in 3.1 is unavailable for a round, TEMRA will appoint another person and that person has the same authority as the person named in S3.1

S3.3

A deputy may be appointed for a round. That deputy has the same authorities as the person named in S3.1

S4 AUTOMOBILE ELIGIBILITY

Each automobile must comply with the provisions of the 2017-2018 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

Prior to scrutiny at each event, each automobile shall be nominated by its respective Competitor in one of the following Classes as defined in the 2017-2018 Top End Mud Racing Association Series Technical Regulations:

Class 1 – 2WD Standard

Class 2 – 2WD Open

Class 3 – 4WD Standard

Class 4 – 4WD Modified

Class 5 – 4WD Pro Modified

Class 6 – Top Gun

Please note: The Chief Scrutineer is the sole arbiter with regard to classification of automobiles and may change the Class of any automobile at any time. Automobiles in any class may be reclassified into a different Class based on times achieved. Any decision made by the Chief Scrutineer in this regard shall not be the subject of any protest or appeal.

S5 DRIVER ELIGIBILITY

- (a) 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 CAMS Level 2NS or 2NSJ Licence or higher and be registered with TEMRA.
- (b) Each Driver shall not be less than 12 years of age. Drivers 12 and 13 years of age must be approved to compete by the Clerk of the Course and must be accompanied by an experienced instructor approved by the Clerk of the Course.
- (c) The minimum age for a Co-Driver shall be 12 years.
- (d) Each Driver under 16 years of age must have a Co-Driver over 18 years of age.
- (e) Each Co-Driver under 18 years of age must have a Driver over 18 years of age.

S5.1 Multiple Drivers

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

S6 SERIES CALENDAR

The Series shall be conducted over the following Rounds:

Round	Date
1	21 October 2017
2	18 November 2017
3	9 December 2017
4	27 January 2018
5	24 February 2018
6	24 March 2018
7	21 April 2018

S7 ROUND FORMAT

The format of each Round shall be determined by TEMRA and shall be advised at the drivers briefing prior to each Round.

S7.1 Round Format

Generally, the format for each Round shall be as follows:

- (a) Heats - A minimum of four (4) heats for each automobile in each Class
- (b) Finals - Back-to-back finals to determine the top four (4) placings in each Class

S7.2 Variations to the Round Format

The round format may be varied at any by the Clerk of the Course in consultation with the Committee.

S8 THE COURSE

- (a) The course shall comprise of two (2) tracks and a pit area.
- (b) The pit area shall comprise of a paddock area for the competition automobiles and staging lanes for access to the tracks.
- (c) Each track shall be on an unsealed surface and may contain jumps, dips, gutters, mud holes, water holes and straights.
- (d) Each track shall be a mirror image of the other track
- (e) Each track shall be designed to ensure that competing automobiles do not exceed a maximum speed of 100 km/h at any time during the run.
- (f) The maximum length of each track shall be 700 metres
- (g) No straight section of the track may exceed 110 metres in length without a turn of at least 90 degrees .
- (h) Each crossover and turn greater than 45 degrees on each track shall be clearly marked with tyres and barriers.
- (i) A chequered flag and/or appropriate signage shall mark the finish line.
- (j) The course shall be attended by a medical, fire and tow team at all times during competition as deemed appropriate by the Clerk of the Course.
- (k) The course shall have marshals located around the tracks as deemed appropriate by the Clerk of the Course.
- (l) The layout of the tracks and required direction of travel shall be displayed and clearly explained at the driver briefing.
- (m) If during the event a track is changed from the original layout a drivers meeting shall be called and all drivers shall be notified of any changes.

S9 COMPETITION

S9.1 Heats

- (a) Each automobile shall complete a number of Heat runs on each track that shall be timed. The time for each Heat run shall be referred to as the Recorded Time.
- (b) An uneven number of runs on each course by individual automobiles may be approved by the Clerk of the Course.
- (c) Time penalties for infringements shall be added to the Recorded Time for each run to determine the overall time for that run. This time shall be referred to as the Heat Time.
- (d) All Heat Times for each automobile shall be added and averaged over the number of Heats attempted by that automobile to determine participation in the Finals. This time shall be referred to as the Qualifying Time.
- (e) Each automobile must genuinely attempt all Heat runs to be eligible for the Finals.

S9.2 Conduct of a Run

- (a) Both tracks shall be utilised simultaneously, except in the event of a “bye” run. 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.
- (b) Only one (1) competing automobile is permitted to be on each track at any one time.
- (c) Heats shall 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 marshal.

- (d) During Heats, the Driver of an automobile may advise the staging marshal 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 three (3) Class Heats or at the discretion of the Clerk of the Course.
- (e) When an automobile is unable to compete in any further Heats or Finals the staging marshal must be advised as soon as possible.
- (f) The start marshal shall signal to the staging marshal when it is clear to send automobiles to the start line by illumination of the double white staging lights.
- (g) Each automobile must attend the start line when indicated by the staging marshal. A Driver may request up to two (2) minutes to attend the start line. If the automobile is not at the start line after this time, the run for that automobile shall be aborted and a DNS penalty time shall be allocated
- (h) The following must occur prior to the commencement of a run:
 - (i) 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
 - (ii) All windows (if applicable) to be in the fully closed position
 - (iii) Safety harness, window net and/or arm restraint (if applicable) for both Driver and Co-Driver to be checked by the staging marshal
 - (iv) Loose objects to be removed from automobile
 - (v) Start marshal to give permission to start
- (i) The start signal shall be indicated by the illumination of the green staging light.
- (j) Each automobile must commence each run from a standing start. Should the Driver of an automobile advise the staging marshal 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 shall then be required to undertake a rolling start.
- (k) Each automobile must be driven on the track in the direction as instructed at the drivers briefing.
- (l) Each Driver and Co-Driver must follow the reasonable directions of any official of the meeting.
 - (m) In the event of an automobile mounting the outside tyre wall with all four wheels, the automobile's engine must be turned off and the run aborted. A DNF penalty time shall be allocated to the automobile..
 - (n) In the event of an automobile driving onto the inner mound, the automobile must stop immediately, re-join the track in a safe manner and continue the run in the correct direction. Two (2) seconds will be added to Recorded Time for that automobile for that heat.
- (o) A time limit of sixty (60) seconds shall 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 shall be allocated for that run.
- (p) In the event of an automobile making contact with the inside tyre wall or barriers, the course marshal shall advise the Clerk of the Course who may apply a time penalty of two (2) seconds for that run.
- (q) In the event of an automobile rolling over (DNF), the following shall apply:
 - (i) The automobile on the other track must stop. This automobile may leave the track at a slow speed when directed by a course marshal
 - (ii) The automobile that rolled over must not be restarted. This automobile must be removed from the track by a tow vehicle
 - (iii) A pit crew member or another driver may assist with the recovery only if approved by the Clerk of the Course
 - (iv) 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
 - (v) 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.
 - (vi) A DNF penalty time shall be allocated to the automobile that rolled for that automobile for that heat
- (r) 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 shall be applied.
- (s) Support vehicles are not permitted 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.

- (t) Each automobile must return directly to the pit area at a maximum speed of 5 km/hr after crossing the finish line.

No automobile is permitted onto the track after the final run for the event unless approved by the Clerk of the Course.

S9.3 Finals

- (a) The automobiles with the first and second fastest Qualifying Times in each Class shall compete against each other in a Final to determine first and second placing in each Class for the Round.
- (b) The automobiles with the third and fourth fastest Qualifying Times in each Class shall compete against each other in a Final to determine third and fourth placing in each Class for the Round.
- (c) Should an automobile withdraw prior to the commencement of the Finals for any reason, it shall be replaced by the automobile with the next fastest Qualifying Time in that Class. This shall also apply to any automobile that has moved up the qualifying order as a result of a withdrawal.
- (d) Each Final shall require each automobile to participate in back-to-back runs on each track. Where there is only one (1) automobile qualified for a Final, the Driver may elect not to run subject to the approval of the Clerk of the Course.
- (e) The Driver of each automobile may request a change over time of one minute between tracks to facilitate a change of Driver. This must be done prior to the first race.
- (f) If a Driver change occurs between runs the automobile must be presented to the staging marshal to enable checking of the safety harness and window net and/or arm restraint prior to the next run.
- (g) An automobile is not permitted to leave the track area during a Final unless it has withdrawn.
- (h) Pit crews are not permitted to attend an automobile at any time during a back-to-back Final.
- (i) The overall time (Recorded Time plus penalties) for each automobile for each track shall be added together. The automobile with the fastest overall time shall be awarded the higher finishing position of that final.
- (j) In the event of a DNF in the first back to back final run the remaining automobile must complete a lap to be declared the winner
- (k) In the event that both automobiles DNF in the first back to back final run the winner will be declared from the fastest heat times.
- (l) In the event that both automobiles DNF the second back to back final run the winner would be fastest automobile from the first back to back final run.
- (m) In the event the 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 wins regardless of time
- (n) In the event that one of the automobiles that has attended the staging area for the 3 V 4 final and then is unable to attend the start line then the automobile that finished 5th has 3 minutes to attend the start line.
- (o) In the event that the 3 V 4 back to back final has been run and completed and one of the automobiles competing for 1st & 2nd is unable to begin the race by crossing the start line the remaining automobile must complete one lap to be awarded first place. The automobiles finishing in 3rd & 4th respectively will move up the points allocation by one position. The automobile unable to start the race for 1st & 2nd will be awarded the points for 4th position.
- (p) 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 doesn't cross the start line its position for points is then allocated according to the heat times. EG: If an automobile competing for first or second is unable to start a final race they are moved to fourth and the automobiles finishing 3rd & 4th are moved up one position on points.

S9.4 Timing

- (a) The time taken to complete each run shall be measured by a single person or by electronic means and recorded for each track.
- (b) Timing shall commence at the illumination of the green staging light or by passing an electronic beam. .
- (c) Timing shall conclude when the automobile crosses the finish line designated by a marker on each side of the track or by passing an electronic beam.
- (d) Time penalties shall be added to the Recorded Time to determine the Heat Time or overall time for the run.

S9.5 Penalties

Penalties shall be applied as shown in the table below:

Infringement	Penalty
Exceed pit area speed limit (5 kmh or walking pace)	First offence: Warning Second offence: Exclusion from Round
Unsportsmanlike conduct	Exclusion from Round
Not attend start line during the heats when directed (DNS)	Heat Time of 2 minutes
Contact with inside tyre wall or barriers	2 seconds added to Recorded Time (at the discretion of the Clerk of the Course)
Mounting outside tyre wall with all four wheels (DNF)	Slowest Time for that Class for that Heat plus 15 seconds
Mounting outside tyre wall with all four wheels and not turning off engine	Exclusion from the Heat/Final
Driving course in wrong direction	Slowest Time for that Class for that Heat plus 15 seconds
Driving onto the other track	Exclusion from the Heat/Final
Driving onto inner mound	2 seconds added to Recorded Time
Unable to complete a run in a heat (DNF)	Slowest Time for that Class for that Heat plus 15 seconds
Unable to complete a run in a final (DNF)	Automobile excluded from the remaining race
Exit inner mound in unsafe manner	Exclusion from that the Heat/Final
Acting in a dangerous manner	Exclusion from that Round
False start	Heat Time of 2 minutes

Definitions:

- Heat A run being conducted as part of a Round
- Round A meeting being conducted as part of the Series
- False Start Where a driver leaves the start line prior to the green light being illuminated

S10 AWARDS and POINTSCORE

S10.1 Prizes and Trophies

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

S10.2 Pointscores

- (a) Points shall 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

- (b) First to fourth finishing positions in each Class shall be determined by the Finals
- (c) Fifth finishing position in each Class shall be allocated to the automobile with the fastest Qualifying Time in each Class that did not qualify for or participate in the Finals.
- (d) Points shall only be awarded to automobiles with Drivers that are members of TEMRA.
- (e) Points shall only be awarded to an automobile in the Class it is entered for a Round. Points cannot be transferred if an automobile competes in different Classes at different Rounds.
- (f) In addition to the above, one (1) point shall be awarded to each automobile in each Class that competes at each Round
- (g) In addition to the above, ten (10) points shall be awarded to each automobile in each Class that competes at Round 1 of the Series.
- (h) In addition to the above the winner of the NT Titles will get 3 extra points, 2nd place will get 2 extra points and 3rd place will get 1 extra point.
- (i) The automobile gaining the highest points total in each Class over the seven (7) Rounds of the Series shall be declared the Class Winner of the Series.
- (j) The automobile gaining the highest points total overall over the seven (7) Rounds of the Series shall be awarded the "Presidents Cup".
- (k) Each automobile must compete in 4 of the 7 Rounds of the Series to be eligible for Series awards.
- (l) In the event of a tie at the end of the Series, the final positions shall 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 this procedure does not determine the result, a tie shall be declared.
- (m) At the discretion of TEMRA one of the Rounds of the Series may be known as the NT Titles. This would be the last Round of the Series unless stated otherwise prior to the first Round of the Series. Points awarded for this Round shall be used to determine the winners of the NT Titles. To be eligible to be a winner of an NT Title you must have entered in 4 out of the 7 rounds for that season.

S11 EVENT OPERATIONS

S11.1 Registration and Entry

- (a) Each team intending to participate in all Rounds of the Series must register with TEMRA at least 2 weeks prior to Round 1.
- (b) In addition to the above, each automobile must be registered with the event organiser prior to 1700 hours ACST on the day of each Round and each Driver and Co-Driver must be registered with the event organiser at least 2 hours prior to the commencement of competition.
- (c) Registration fees shall be as follows:
 - (i) Registration of automobile at a Round Included in TEMRA membership fee
 - (ii) Late registration of automobile at a Round: \$50.00
 - (iii) Driver and Co-Driver CAMS licence: \$70.00 each (Junior \$30)
 - (iv) Pit crew member per Round: \$20.00 each
 - (v) Pit crew member for all rounds (transferable): \$70.00 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 shall be detailed in the Supplementary or Further Regulations for the meeting. 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

- (a) A maximum of six (6) team members per automobile are permitted in the pit area. This includes the Driver, Co-Driver and four (4) pit crew.
- (b) Only one (1) support vehicle per automobile is permitted in the pit area.
- (c) 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.
- (d) One 9kg dry chemical powder fire extinguisher must be provided for each automobile in the pit area.
It is highly recommended that one 9 litre ATC foam fire extinguisher is provided for each automobile using Methanol.
- (e) The maximum speed for any automobile in the pit area shall be 5 km/hr (walking pace).
- (f) A competent person must be in the Driver's seat of an automobile whenever the engine is running.

S11.4 Scrutiny

- (a) Each automobile must be in a sound mechanical condition and shall be inspected and approved by the Chief Scrutineer at least one hour prior to the commencement of competition.
- (b) Any faults identified shall be advised to the Competitor and the automobile may be re-inspected at a time to be determined and advised by the Chief Scrutineer.

S12 TYRES

- (a) Each automobile must only be fitted with tyres that are in sound condition.
- (b) The use of bolts and chains is not permitted.
- (c) Bald tyres are not permitted.
- (d) 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.
- (e) 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 shall not be the subject of any protest or appeal.

S13 FUEL

For the duration of a meeting, Competitors may use any commercially available petroleum based fuel or Methanol with limitations as detailed in the table below:

Class	Petroleum based limitation	Methanol allowed
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

The use of Nitro Methane, Propylene Oxide and Nitrous Oxide is not permitted.

If Methanol is used, the Competitor must advise the Clerk of the Course and Chief Scrutineer prior to the commencement of the meeting.

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 shall maintain a register of all competition numbers allocated to, or reserved for, any automobile.

S15 APPAREL

S15.1 Driver/Co-Driver

Each Driver and Co-Driver must wear apparel in accordance with Article 2.5 of Schedule D of the CAMS Manual of Motor Sport for Club Khanacross (open automobiles and specials) whilst competing and in the pit area for the duration of the meeting.

This includes the appropriate helmet, clothing which covers from ankles to neck to wrists (eg. overalls) and enclosed foot wear. 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 shall not be the subject of any protest or appeal.

S15.2 Pit Crew

Each Pit Crew member must at least wear enclosed foot wear, short pants and a short sleeved shirt whilst in the pit area for the duration of the meeting. The Clerk of the Course is authorised to refuse entry to the pit area of any person unsuitably attired.

S15.3 Officials

Each official of the meeting must wear enclosed foot wear and high visibility vest at all times whilst they are on the track or in the pit area for the duration of the meeting.

S16 JUDICIAL

In accordance with NCR 169, the Clerk of the Course may make decisions in respect of the Supplementary Regulations including the ISC, NCR, sporting and any other relevant regulations which may result in the application of penalties and/or referral to CAMS for further judicial/disciplinary action.

Protests, if any, shall be lodged with the Clerk of the Course in accordance with Part XII of the NCR.

Appeals, if any, shall be lodged with the Clerk of the Course in accordance with Part XIII of the NCR.

S17 ARM RESTRAINTS

If the automobile is not fitted with working driver and passenger front windows or window netting then arm restraints must be in place to the satisfaction of the Chief Scrutineer.

2017-2018 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 motor sport. The competition involves two 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 General Requirements of Automobiles in the CAMS Manual of Motor Sport.

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

T1.2 Definitions

4WD A 4WD automobile is any automobile (including four wheeled motor bikes, odysseys and agricultural equipment) with four wheels which will move under its own power with either its front or rear drive shafts disengaged.

2WD A 2WD automobile is any automobile which is driven solely by its front or rear wheels only.

OEM Means as supplied by the Original Equipment Manufacturer.

T1.3 Competitiveness

- (a) If an automobile is between 3 and 5 seconds faster than its nearest competitor (total averaged time) for 2 consecutive meetings the committee has the discretion to elevate the automobile to a different class. If the automobile is elevated to a different class they will be entitled to take their points with them.
- (b) If an automobile is deemed as not being competitive enough for its class the committee has the discretion to move that automobile to another class. If the automobile is moved to another a different class they will be entitled to take their points with them.

T2 CLASSES

Each automobile competing in the Series shall be constructed/modified in a safe manner and be deemed safe by the Chief Scrutineer and shall be nominated into one of the following Classes as detailed below:

T2.1 Class 1 – 2WD Standard

- (a) Is open to all 2WD automobiles.
- (b) Must only have one diff / drive axle and must not be fitted with a transfer case, ie: no 4WD's with drive shaft removed.
- (c) 2WD automobiles 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.
- (d) Engine must be OEM and under 5000 cc (308ci)
- (e) A change to the final drive ratio is permitted
- (f) Any fuel injection system fitted must be OEM for the engine. No aftermarket fuel injection systems, ECU chips/programs or fuel pump alterations are permitted

T2.2 Class 2 – 2WD Open

- (a) Engine and gearbox modifications are permitted.
- (b) 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 (c) subject to the approval of TEMRA.

T2.3 Class 3 – 4WD Standard

- (a) Automobiles 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.
- (b) Fuel injection or forced induction is not permitted unless it is OEM for the automobile and engine performance "chips" are not permitted.

- (c) The engine must remain in standard configuration. Modifications to the cylinder head, camshaft or stroking of the crankshaft are not permitted. Cylinder bore diameters may be increased by a maximum of 0.060" (inches) only.
- (d) The original carburetor may be replaced by another unit which has a maximum flow of 500cfm.
- (e) Diesel pumps and injectors must remain OEM with no modifications.

T2.4 Class 4 – 4WD Modified

- (a) Automobiles must have been able to be road registered at one time. The engine and gearbox must be OEM except as detailed below and remain in the original location for that model.
- (b) Fuel injection or forced induction is not permitted unless it is OEM for the automobile and engine performance "chips" are not permitted.
- (c) Engine swaps 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)
- (d) The engine must remain in standard configuration. Modifications to the cylinder head or stroking of the crankshaft are not permitted. Cylinder bore diameters may be increased by a maximum of 0.060" (inches) only.
- (e) The original carburetor may be replaced by another unit which has a maximum flow of 600cfm.
- (f) Diesel pumps and injectors must remain OEM with no modifications.

T2.5 Class 5 – 4WD Pro Modified

- (a) Automobiles must have been able to be road registered at one time.
- (b) Automobile must be in original configuration, except as specifically detailed in these regulations.
- (c) The engine must be in the standard position in the automobile.
- (d) Forced injection is not permitted unless it is OEM for the automobile.
- (e) Aftermarket fuel injection systems, ECU chips/programs, camshaft combinations or fuel pump alterations are permitted
- (f) An engine swap up to a maximum of 351ci (5.8lt) capacity is permitted.
- (g) Boring of a cylinder to a maximum of 0.060" (inches) over standard is permitted but no further increase in stroke is permitted.

T2.6 Class 6 – Top Gun

- (a) Automobiles normally in other 4WD classes can run in this class if in the view of TEMRA, the automobile is competitive.
- (b) Supercharging must comply with Article T17 of these regulations.
- (c) Any purpose built automobile may be permitted to run in Class 6 if the automobile complies with all other Class 6 rules.

T3 SAFETY EQUIPMENT

- (a) The chassis of each automobile must be approved by the Chief Scrutineer.
- (b) 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 – 50mm OD	4-Point
2	6-Point – Engineer certified or CAMS Approved	4-Point
3	2-Point with diagonal brace – 50mm OD	4-Point
4	4-Point	4-Point
5	4-point	4-Point
6	6-Point – Engineer certified or CAMS Approved	4-Point

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

- (c) 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 3.2mm 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

A minimum of two disc brakes on front or four drum brakes on each automobile is required.
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 DRIVER COMPARTMENT

- (a) If alterations are made, material must be added for strengthening purposes.
(b) All automobiles must have a firewall of a minimum of 1.6mm steel or 3mm aluminium between the engine and the driver compartment.
(c) If radiator or rubber hoses are in a driver's compartment or cabin they must be shielded from the Driver and Co-Driver.

T7 BELL HOUSING

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

Please note: Classes 2, 5 & 6 must have bell housing protection of either a shatter blanket, bell housing shield or reinforced floor as above.

T8 TAIL SHAFT HOOPS

Each Class 2, 5 and 6 automobile must have hoops installed on rear and front shafts.

Hoops must be solid, no chains permitted.

Hoops must be circular in shape and completely surround the tail shaft.

T9 BATTERIES

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. Each automobile with a battery mounted in the driver's compartment 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 two return throttle to idle springs – not including the spring on the pedal.

T11 FUEL TANK

Venting should take into account a roll over situation, sealed fuel cap (non-venting).

All fuel lines should be protected especially if within the driver compartment of any automobile.

Plastic fuel filters are not permitted inside any driver compartment

T12 KILL SWITCH

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).

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 shall not start in gear.

T14 TOW HOOKS

All automobiles 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 race officials and tow automobiles .

Roll over hooks fixed to the sub frame on each side are recommended.

All tow and rollover hooks must be checked by the Chief Scrutineer and deemed suitable

T15 FIRE EXTINGUISHERS

All automobiles must carry an approved fire extinguisher which is within service date, correctly mounted and accessible to the driver whilst strapped in.

T16 WHEELS

Wheels must be OEM except for Class 2 & Class 6 where wheels are free.

T17 SUPERCHARGERS

Each automobile fitted with belt driven supercharger must be fitted with a guard to prevent fuel line damage in the event of belt loss, except in cases where braided lines are used.

Where a Rootes type supercharger is fitted, it must be fitted with a front endplate of 6mm minimum thickness, a rear endplate of 7.62mm minimum thickness, and supercharger restraints used in conjunction with aluminium shear bolts at the mounting face.

The maximum overdrive for any supercharger must not exceed 14% unless approved by TEMRA and the Chief Scrutineer.

Screw type superchargers with a rotor diameter greater than 178mm must meet maximum case length of 400mm and maximum case width of 400mm and be fitted with a manifold burst panel.

Screw type superchargers with a rotor diameter less than 178mm must comply with manufacturers' specifications and recommendations.

A restraint system (including ballistic containment) is mandatory on all screw type superchargers used in all classes of competition.

All other screw type superchargers with rotor diameter greater than 178mm require supercharger restraints plus ballistic containment.