



2014 Australian Manufacturers Championship (AMChamp)

Sporting and Technical Regulations



Version 1	Published on 19/03/14



2014 Australian Manufacturers Championship Sporting Regulations

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2014 Australian Manufacturers Championship

SPORTING REGULATIONS

S1 TITLE and JURISDICTION

S1.1 Title

This Championship shall only be known as and referred to as the “2014 Australian Manufacturers Championship (AMChamp)” and it shall incorporate the following titles awarded by CAMS as detailed below:

Championship for Automobile Manufacturers

- 2014 Australian Manufacturers Championship

Championships for Drivers

- 2014 Australian Production Car Championship
- 2014 Australian Endurance Championship

S1.2 Authority / Jurisdiction

(a) Each event in the 2014 Australian Manufacturers Championship (Championship) shall be conducted under the provisions of the International Sporting Code of the Federation Internationale de l'Automobile (FIA); the National Competition Rules (NCR) and Race Meeting Standing Regulations (RMSR) of the Confederation of Australian Motor Sport Ltd (CAMS); the Sporting and Technical Regulations issued for this Championship by CAMS; Supplementary and Further Regulations issued by the Organiser at each round; Bulletins issued by the Stewards of the Meeting and any Driver Briefing Notes issued by the Race Director or the Clerk of the Course at a meeting.

(b) This Championship has been sanctioned by CAMS as a National Championship.

(c) Australian Manufacturers Championship Pty Ltd has been appointed as the Category Manager (CM) by CAMS for this Championship.

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S2 ADMINISTRATION

S2.1 Personnel

The following personnel have been appointed to the Championship by CAMS and/or the CM and have the authority to administer the various aspects of these regulations as detailed in the RMSR.

- | | |
|---------------------------------|-----------------|
| (a) Race Director (RD) | Paul Overell |
| (b) Technical Commissioner (TC) | Bob Hockley |
| (c) Category Administrator (CA) | Rob Curkpatrick |
| (d) Technical Advisor (TA) | Frank Lowndes |

S3 COMPETITOR ELIGIBILITY

To be eligible to compete in the Championship, each Competitor must hold a current CAMS Competitor's Licence and be a party to a current agreement with the CM.

S4 AUTOMOBILE ELIGIBILITY

Each automobile must comply with the provisions of 2014 Australian Manufacturers Championship Technical Regulations, and appear in the table of Eligible Automobiles below to be eligible to compete in the Championship.

S4.1 Eligible Automobiles

The following tables specify each of the automobile makes/models that are eligible to compete in the Championship.

Class A – Extreme Performance					
Make	Model	Designation	Make	Model	Designation
Mitsubishi	Lancer Evo VIII	RS	Subaru	Impreza WRX STi	G-2 MY02-06
	Lancer Evo IX	GSR		Impreza WRX STi	G-2 MY07
	Lancer Evo IX	RS		Impreza WRX STi	G-3 MY08
	Lancer Evo X	RS	BMW	M Coupe (1 Series)	E82
Audi	TT	RS		M 135i Hatch	F20
Class B – High Performance					
Make	Model	Designation	Make	Model	Designation
BMW	335i	E90/E92	Holden	VY Series II – HSV	GTS
	135i	E82		VZ – HSV	GTO Coupe
Ford	BA Mk I/II – FPV	GT/GT-P		VZ – HSV	R8 Clubsport
	BF Mk I/II – FPV	GT/GT-P		VE - HSV	R8 Clubsport
	FG – FPV	GT/GT-P/F6		VE - HSV	Clubsport Tourer
	FG Mk II	GT R-Spec		E/E2 SERIES - HSV	GTS
Class C – Performance Touring					
Make	Model	Designation	Make	Model	Designation
BMW	130i	E87	Holden	VY	SS/SV
Ford	AU	XR8		VZ	SS/SV
	BA Mk I/II	XR8		VE	SS/SV
	BF Mk I/II	XR8		VE	Sportswagon SS
	FG	XR8		Astra SRi Turbo	AH
	BA Mk I/II	XR6 Turbo		Astra HSV VXR	AH
	BF Mk I/II	XR6 Turbo	Mazda	3 MPS	3A/3B
FG	XR6 Turbo	RX-8		RX8A	
Renault	Megane	265 RS		6 MPS	6A
Class D – Production Touring					
Make	Model	Designation	Make	Model	Designation
Ford	Fiesta	XR4	Toyota	Celica	SX
Honda	Integra	Type R		Corolla	Sportivo
		Type S		86	ZN SER
MINI	Cooper S	R50	Renault	Clio	197
		R56	Volkswagen	Golf Mk 6	77TDI Trendline
Class E – Compact Touring					
Make	Model	Designation	Make	Model	Designation
Holden	Astra SRi	AH	Subaru	Impreza 2.5	G-2
Hyundai	Sonata SX	NF		Impreza 2.0R	G-3
Proton	Satria Gti	BS	Toyota	Echo	10 SER
Suzuki	Swift Sport	RS416		Yaris	YRX
Class F – Hybrid/Alternative Energy					
Make	Model	Designation	Make	Model	Designation
Alfa Romeo	147 JTD		Holden	Astra CDTi	AH
	159 JTD				
Class I - Invitational					
At the discretion of the CM with approval from CAMS					

Subject to CAMS approval, the CM reserves the right to accept entries on a 'round by round' basis from automobiles not on the current Eligibility List.

S4.2 Replacement Automobiles

Following the commencement of the first qualifying session of each round of the Championship, any automobile that has been entered to compete at that round may not be replaced with another automobile.

S5 DRIVER ELIGIBILITY

To be eligible to compete in Classes A or B in the Championship each Driver must hold a current CAMS National Circuit Licence (NC) or higher and be registered for the Championship with the CM.

To be eligible to compete in Classes C, D, E, F or I in the Championship each Driver must hold a current CAMS Provisional Circuit Licence (PC) or higher and be registered for the Championship with the CM.

Please note: A CAMS National Circuit Licence (NC) may be specified as the minimum level licence that is required for competition at specific circuits (eg. Mount Panorama).

S5.1 Substitute Drivers

Prior to the commencement of the first qualifying session at each round of the Championship, a Competitor may nominate a substitute Driver who may be permitted to compete in the remainder of the meeting subject to the approval of the Stewards of the Meeting and the CM.

S5.2 Cross entering of Drivers

Cross entering of Drivers is not permitted. A Driver is only permitted to drive in one (1) automobile for the duration of the meeting.

S6 CHAMPIONSHIP ROUNDS / REGISTRATION

The Championship shall be conducted over five (5) Rounds as detailed in the Championship Calendar below. Each race conducted as a part of the Championship shall count in determining the final results.

(a) Australian Manufacturers Championship

Each manufacturer shall be eligible to score points towards the Australian Manufacturers Championship.

(b) Australian Production Car Championship

The Australian Production Car Championship shall be conducted in conjunction with the Championship and following the completion of the final Round, the outright winner, as well as the winners of each of the individual classes (excluding Class I) for eligible automobiles, shall be recognised. To be eligible to score points in the Australian Production Car Championship, each Competitor must register each Driver with the CM prior to the first Round of the Championship in which they compete.

(c) Australian Endurance Championship

The Australian Endurance Championship shall be conducted in conjunction with Rounds 1, 2 and 3 of the Championship. At the completion of Round 3 the outright winner, as well as the winners of each of the individual classes (excluding Class I) shall be recognised. To be eligible to score points in the Australian Endurance Championship, each Competitor must register each Driver with the CM prior to the first Round of the Championship in which they compete.

S7 CHAMPIONSHIP CALENDAR

The Championship shall be conducted over the following Rounds:

Round	Date	Circuit	Race Format	No. of Drivers
1	28-30 March	Sandown Raceway	1 x 3 hour	2-3
2	23-25 May	Phillip Island	1 x 4 hour	2-3
3	11-13 July	Sydney Motorsport Park	1 x 4 hour	2-3
4	8-10 August	Queensland Raceway	2 x 200 km	1-2
5	17-19 October	Wakefield Park	2 x 200 km	1-2

S8 ROUND FORMAT

The number, length and format of track sessions shall be negotiated between the CM and the event organiser prior to a Round of the Championship and shall be advised in the relevant Supplementary / Further Supplementary Regulations issued for a meeting.

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

- (a) Practice One x 20-minute practice session
- (b) Qualifying Two x 20-minute qualifying sessions
- (c) Warm up Warm up sessions may be scheduled prior to races where time is available
- (d) Races
 - Round 1: 1 x 3 Hour race
 - Round 2 & 3: 1 x 4 hour race
 - Round 4 & 5: 2 x 200 km races

Optional untimed practice sessions (generally 2 x 20 minute sessions) shall be scheduled on the preceding day of each Round

S8.1 Multiple Drivers

If two (2) or more Drivers are entered to compete in an automobile at any Round of the Championship, any or all Driver/s may compete in each race. If more than one Driver competes in any race, a driver change during that race shall be permitted.

S8.2 Variations to Timetable

The timetable may be varied at any time due to exceptional circumstances only with the prior approval of the Stewards of the Meeting.

S9 GRID DETERMINATION

S9.1 Grid Determination

The grid for each race shall be determined as detailed in the RMSR – Progressive Grid.

For each Round of the Championship if more than one (1) Driver is entered to drive an automobile, the Competitor must nominate the Driver who shall drive the automobile at the start of Race 1 to the CM within one (1) hour of the completion of the last qualifying session. The qualifying time achieved by the Driver nominated to start Race 1 shall be used to determine the grid position of that automobile for Race 1.

S9.2 Driver Qualification

Each Driver must meet the minimum qualifying criteria as detailed in the RMSR during the practice or qualifying sessions that constitute part of the meeting.

S10 START PROCEDURE

The start procedure for each race shall be as detailed in the RMSR – Championship Start – Standing Start.

S11 AWARDS and POINTSCORE

S11.1 Prizes and Trophies

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

S11.2 Championship Conditions and Points

(a) Australian Manufacturers Championship

Each manufacturer shall score class points from the two highest placed automobiles of its make, in any Class (excluding Class I), which shall be the only automobiles to score points for that manufacturer at that Round of the Championship. The Australian Manufacturers Championship shall be awarded to the manufacturer that scores the highest total number of class points over all Rounds of the Championship.

(b) Australian Production Car Championship

Outright – Each Driver who competes in the Championship (excluding Class I) shall be awarded points based on their outright finishing position (excluding Class I) in each race. The Australian Production Car Championship shall be awarded to the Driver who scores the highest total number of outright points over all Rounds of the Championship.

Classes – Each Driver who competes in the Championship shall be awarded points based on their finishing position relative to the other Drivers in their Class for each race. A Class award shall be presented to each Driver who scores the highest total number of points for each Class (excluding Class I) over all Rounds of the Championship.

(c) Australian Endurance Championship

Outright – Each Driver who competes in the Championship (excluding Class I) shall be awarded points based on their outright finishing position (excluding Class I) in each race. The Australian Endurance Championship shall be awarded to the Driver who scores the highest total number of outright points over Rounds 1, 2 & 3 of the Championship.

Classes – Each Driver who competes in the Championship shall be awarded points based on their finishing position relative to the other Drivers in their Class for each race. A Class award for the Australian Endurance Championship shall be presented to each Driver who scores the highest total number of points for each Class (excluding Class I) over Rounds 1, 2 & 3 of the Championship.

(d) Teams Trophy

The Teams Trophy shall be awarded to the driver pairing that scores the highest total number of class points over all Rounds of the Championship.

S11.3 Pointscore

(a) Points shall be awarded to Drivers for each race in each Round of the Championship as follows:

1 Race Scheduled		2 Races Scheduled	
Finishing position	Points	Finishing position	Points / race
1 st	120	1 st	60
2 nd	90	2 nd	45
3 rd	72	3 rd	36
4 th	60	4 th	30
5 th	54	5 th	27
6 th	48	6 th	24
7 th	42	7 th	21
8 th	36	8 th	18
9 th	30	9 th	15
10 th	24	10 th	12
11 th	18	11 th	9
12 th	12	12 th	6
13 th	6	13 th	3
All other finishers	3	All other finishers	2

(b) Points shall only be awarded to the Drivers classified as finishers in the final results of each race.

(c) In each Round of the Championship where more than one (1) Driver is entered to drive an automobile, each Driver who completes more than one (1) lap of a race shall score the number of points allocated to the finishing position of that automobile outright and in its class.

(d) Any race which is stopped, and not restarted, and during which less than 50% of the race duration has been completed by the leader shall be deemed a non race in respect of Championship points and no points shall be awarded.

(e) Any race which is stopped, and not restarted, during which 50% – 75% of the race duration has been completed by the leader shall be deemed to have been completed in respect of Championship points but only 50% Championship points shall be awarded.

- (f) Any race which is stopped during which 75% or more of the race duration has been completed by the leader shall be deemed to have finished and full Championship points shall be awarded.
- (g) In addition to the above, two (2) points shall be awarded to each Driver that achieves the fastest qualifying time within each Class of the Championship at each Round. These qualifying points shall be considered in determining the results of the Australian Production Car Championship (Outright and Class) and the Australian Endurance Championship (Outright and Class) but not the Australian Manufacturers Championship.
- (h) The results for each Round of the Championship shall be determined by the number of outright and class points scored by each Driver at that round.
- (i) In the event of a tie at the end of any Round of the Championship, the final positions for that Round shall be determined by comparing the results of each tied Driver in the final race of that Round. The higher place in the round results shall be awarded to the Driver with the higher finishing position in the final race.
- (j) The winners of the various Championships shall be determined as detailed in S11.2.
- (k) In the event of any tie which may exist at the conclusion of any Championship as detailed in these regulations, the final positions shall be determined by comparing the race results achieved by each tied Driver (or automobile as appropriate), with the Driver (or automobile) with the highest number of outright first places being awarded the higher Championship position. If at this stage a tie still exists, it shall be resolved by comparing the number of second, third or fourth places (and so on) achieved by each tied Driver (or automobile) until all positions have been determined.

S12 EVENT OPERATIONS

S12.1 Championship Registration and Entry

The Championship shall operate under the CAMS and/or Shannons Nationals Series Registration and Entry Process. Series Registration and Entry Forms shall be available from the CM with document checking being conducted by the CM prior to the first official track session at each Round of the Championship.

S12.2 Scrutiny

In addition to their automobile, each Competitor must have the following equipment inspected by the Chief Scrutineer or his nominee.

- (i) each Driver's apparel
- (ii) each refueller's apparel
- (iii) pit garage fire extinguishers
- (iv) overhead fuel rigs

S12.3 Driver/Team Manager Briefings

Each Driver and Team Manager (i.e. an appropriately authorised representative of the Competitor, other than the Driver) must attend the compulsory Drivers/Team Manager Briefing(s). The time and location of the briefing(s) shall be detailed in the Supplementary or Further Regulations for the meeting. The attendance sheet must be signed by the Driver and the Team Manager to confirm attendance. Other compulsory briefings may be convened as required and shall be advised to each Competitor accordingly.

S12.4 Fire and Re-fuellers Briefing

All refuelling personnel nominated by the Competitor for each automobile, in accordance with Article S13.4 of these regulations, must attend the compulsory Fire and Re-fuellers Briefing. The time and location of the briefing shall be detailed in the Supplementary or Further Regulations for the meeting. Non attendance at the briefing by any of the nominated personnel may result in the Competitor being excluded from the remainder of the meeting as determined by the Stewards of the Meeting.

S12.5 Impound/Parc Ferme

- (a) Each required automobile, including those remaining in pit lane, must proceed directly to the designated impound/Parc Ferme area via the most direct route (or as directed by Race Officials) at the conclusion of each practice and qualifying session without returning to pit garage or paddock areas and without interference from any third party (other than an Official of the Meeting).
- (b) Each automobile completing each race must proceed directly to the designated impound/Parc Ferme area (or as directed by Race Officials) at the conclusion of the race, without returning to pit or paddock areas and without interference from any third party (other than an Official of the Meeting).

- (c) Automobiles may not be removed from impound/Parc Ferme except with the express permission of the TC or the Chief Scrutineer.

S12.6 Driver Identification

- (a) Each automobile must be fitted with an electronic driver Identification system, as supplied by the CM, which must be fully operational at all times that the automobile is on the circuit.
- (b) Each automobile with a non operational electronic driver Identification system shall be black flagged and not be permitted to continue until the problem is rectified or subject to the approval of the Stewards of the Meeting
- (c) Each automobile must be fitted with high intensity identification lights as specified by the CM. The identification lights shall be required to be fitted so it can be seen through the left hand bottom corner of the windscreen.
- (d) The Driver must be able to activate the driver identification system while driving.
- (e) The green identification light must be on at all times when a non primary driver is driving the Car.

S12.7 Practice and Qualifying

- (a) Each lap of official practice and qualifying shall be timed. The times achieved during these practice and qualifying sessions shall be used to determine Driver qualification.
- (b) During qualifying, automobiles may not return to the pit garage/paddock area without the express permission of the TC or the Chief Scrutineer. If an automobile exits pit lane to the pit garage/paddock area during qualifying it shall not be permitted to re-join that session.

S12.8 Races

- (a) For automobiles with more than one Driver, each Competitor must nominate the Driver to start Race 1 to the CM within one (1) hour of the completion of qualifying.
- (b) If the nominated Driver does not start the race a pit lane drive through penalty or other penalty may be applied by the Stewards of the Meeting.
- (c) For races where the duration is determined by time, the time of a race shall commence at the commencement of the formation lap.
- (d) If an automobile takes more than twice the time of the winner's fastest lap time in the race to complete the last lap of the race, this lap shall not be taken into account when determining the total race distance covered.
- (e) Any penalties requiring laps to be deleted shall be applied at the conclusion of each race.
- (f) The pushing of an automobile by the Driver or by another competing automobile along the track or pushing it across the finishing line is not permitted and shall entail immediate exclusion of the automobile(s) concerned.

S12.9 Pit Lane & Pit Crew Members

- (a) Each Pit Crew member is required to sign a Pit Lane Indemnity Form prior to the first track session and to display identification as and if required by the meeting organiser at all times while in the Pit Lane.
- (b) It is the responsibility of the Competitor to ensure that each Pit Crew member associated with their automobile complies with S12.9(a).
- (c) The Organiser reserves the right to refuse entry to the pit area to any persons considered to be unsuitably dressed or not correctly identified.
- (d) Non-essential personnel, such as sponsors, families, or other guests of the Team, are not permitted to access the front 50% of a garage that opens onto Pit Lane at anytime during on-track activity that involves automobiles from that garage.
- (e) The 'prescribed line' referred to in these regulations shall be defined by the Race Director at the compulsory Briefings.
- (f) A speed limit of 40kph shall apply in pit lane at all times. If the limit is exceeded at any time during the meeting the Stewards of the Meeting may issue a penalty. The designated pit lane speed limit area will be defined by the speed restriction and derestriction lines, marked by appropriate signs, at either end of the Pit Lane.
- (g) Competitors must not paint lines on any part of the pit lane surface.
- (h) No equipment is to be placed on the pit signalling wall at any time during the meeting

- (i) Only three (3) persons per competing automobile are allowed at the pit signalling wall during the meeting and are subject to the direction of officials. Persons at the pit signalling wall must stand back when not signalling in case of impact with the wall by an automobile.
- (j) Smoking is not permitted in Pit Lane, the pit lane garages and/or the paddock area at any time during the meeting.
- (k) No person under 16 years of age is permitted in Pit Lane unless entered as a Driver in one of the automobiles competing in that session.
- (l) No overhead booms or gantries are permitted in Pit Lane.
- (m) Each Competitor must appoint a Car Controller, who is nominated to the CM, for each automobile who is responsible for the safe conduct of a pit stop and specifically for the safe release of the automobile at the conclusion of the pit stop. The Car Controller is not permitted to perform work of any kind on an automobile during a pit stop.

S12.10 Major Repairs During Races

- (a) Any automobile requiring extended servicing or repairs which may take longer than ten (10) minutes must be moved into the pit lane garage. Once the automobile is moved into the pit lane garage the number of persons permitted to service the automobile is free.
- (b) In the event that an automobile requires repairs which cannot be carried out in the pit lane garage, subject to receiving the prior express approval of the TC or Chief Scrutineer, it is permitted for that automobile to be removed from the pit lane garage to the scrutiny bay or other suitable location approved by the TC or Chief Scrutineer. Once the repairs have been completed, the automobile must be returned to its allocated pit bay or pit lane garage before it rejoins the circuit. The removal and return of any automobile in these circumstances must be carried out under the supervision of and subject to the instructions of the TC or Chief Scrutineer or his nominee. A speed limit of 10kph shall apply in the paddock area at all times.
- (c) Any repairs carried out on an automobile outside of the Pit Lane or other location approved by the TC or Chief Scrutineer must only be carried out by the Driver alone using only tools or parts transported in the automobile. Advice given to the Driver whether by electronic means or by voice, is not considered to contravene this regulation.
- (d) Replenishment of oil or water outside of the Pit Lane or other location approved by the TC or Chief Scrutineer is not permitted.
- (e) In the event that an automobile which has stopped on the circuit has been removed from the circuit by officials it shall, when appropriate, be taken to the scrutiny bay where the Competitor shall have the option to either:
 - (i) Carry out repairs in the scrutiny bay;
 - (ii) Move the automobile to the pit lane garage or another location approved by the TC or Chief Scrutineer for repairs; or
 - (iii) Withdraw the automobile from the meeting by supplying written notice to the Secretary of the Meeting.
 - (iv) If the affected automobile wishes to restart the race as a result of repairs carried out then it may only do so, with the permission of the Clerk of the Course, after having been rescrutineered by the TC or Chief Scrutineer.

S12.11 Removal of Automobiles from the Circuit Precinct

Following the commencement of the first practice session, it is not permitted to remove any automobile from the circuit precinct (prior to the release of all automobiles from the impound/Parc Ferme established following the final race of that Round of the Championship) without the prior express written approval of the TC.

S12.12 Practice Starts

Practice starts are only permitted at the pit lane exit or at the start of any formation (green flag) lap.

S12.13 Radio Communication to/from Automobile

Two way radio communications between the Driver and a member of the Pit Crew is compulsory at all times whilst the automobile is on the race track.

S12.14 Race Management Channel (RMC)

A minimum of one (1) senior team member for each competing automobile must monitor RMC, on a strictly listening basis only, at all times during practice, qualifying and racing. This team member must monitor the RMC from at least 15 minutes prior to the scheduled start time of each session or race during the event. All relevant track messages received on the RMC must be relayed to the Driver as well as the Team Manager. The RMC frequency is 471.700 MHz 71.9 Hz.

S13 PIT STOPS

S13.1 General Procedures

Each pit stop shall be conducted in accordance with the following:

- (a) A Pit Stop may be carried out during any Safety Car deployment.
- (b) The use of reverse gear in pit lane is strictly forbidden. If a Driver passes their pit bay they may be pushed back to the pit bay by the pit lane service personnel.
- (c) Each Competitor must supply a minimum of two effective dry chemical powder type extinguishers in each garage under their control with a minimum capacity of 4.5kg each. One 9kg extinguisher is not acceptable.
- (d) The use of any spark generating device or high temperature device is prohibited in the pit garage or in pit lane
- (e) The use of any device to artificially heat tyres and/or wheels is not permitted.
- (f) Each team must use solid incompressible components capable of supporting the automobile in the event of a jacking system failure. These must be positioned under the automobile at all times while persons are working on the automobile and have any part of their body under any part of the automobile. This requirement does not apply to wheel changing operations and brake pad changes.
- (g) The use of an onboard jacking system is not permitted at any time during the meeting. Each automobile must only be lifted by the use of commercially available standard trolley jacks as approved by the TC or Chief Scrutineer.
- (h) A suitable pit stop sign must be provided by each Competitor for the car controller of each automobile to display when their automobile is entering pit lane during a race. The automobile's competition number must be clearly displayed on the sign. Other detail such as team name or sponsor name may be added to the sign.
- (i) A pit stop procedure can be made up of either of the following activities:
 - refuelling the automobile (refer S13.2)
 - servicing the automobile (refer S13.3);Refuelling the automobile must be the first activity performed. These activities cannot be performed at the same time. Refuelling must be completed before the second activity is started. A Driver change may take place during either activity.
- (j) A Car Controller must be appointed for each automobile who shall be responsible for the safe conduct of any pit stop and specifically for the safe release of the automobile at the conclusion of the pit stop. The Car Controller must remain in front of the automobile and is not permitted to perform work of any kind on an automobile during a pit stop. If an automobile's dry break fuel coupling/s is mounted forward of the A-pillar (leading edge of the front doors), the Car Controller must be attired as per the personnel carrying out the re-fuelling procedure.
- (k) The location of the prescribed line referred to in these regulations shall be defined in event regulations and/or at the Driver Briefing
- (l) A maximum of four (4) persons) and their equipment may cross the prescribed line to assist with a pit stop by working on the automobile. This number of personnel does not include the tyre technician (employed by or contracted to a tyre manufacturer), TV technician, any signal persons at the pit wall, Driver entering the automobile, Driver Assistant (if used) and Car Controller who must carry out their functions exclusively. If a tyre technician is working near the fuel coupling/s they must be attired as per the personnel carrying out the refuelling procedure. Any TV technician/s adjusting in car equipment must be attired as per the personnel carrying out the refuelling procedure.
- (m) Any person who crosses the prescribed line and/or assists during the pit stop by passing or moving tools and/or components from the pit lane garage over the 'prescribed line' into pit lane, shall be deemed as working on the automobile.

- (n) Any person receiving components or tools rolled from pit lane over the prescribed line into the pit lane garage shall not be deemed as working on the automobile.
- (o) All personnel, except the Car Controller, and equipment must remain behind the prescribed line until the automobile has come to a complete stop in its allocated pit bay.
- (p) The Car Controller may only cross the prescribed line into pit lane one (1) lap prior to the commencement of the pit stop.
- (q) Each automobile must come to a complete stop in its allocated pit bay prior to the Driver safety harness being unfastened.
- (r) During any pit stop all equipment including wheels, spare parts, wheel changing tools etc must be under the complete control of the persons permitted to work on the automobile.
- (s) An automobile driving over equipment in pit lane or contacting personnel in pit lane may receive a pit lane drive through penalty or other penalty as determined by the Stewards of the Meeting.
- (t) During any pit stop, engines may be left running. When the automobile is ready to rejoin the circuit the automobile must only be re-started by onboard means without any outside assistance. If the automobile cannot be restarted it may be pushed into its garage to be restarted.
- (u) The Driver safety harness must be fastened before the automobile leaves its allocated pit bay.
- (v) All crew (except the Car Controller) and equipment (except any wheel chock that is used exclusively to prevent the automobile from rolling) must return behind the prescribed line before the activity can be considered completed. Only then can a new activity start or an automobile be released from its pit bay by the Car Controller. If the wheel chock is not removed, it must be restrained.
- (w) The Car Controller must be behind the prescribed line before the automobile exits the pit lane.

S13.2 Refuelling the automobile

- (a) At all times during each race, re-fuelling of each automobile with a dry break coupling must only be carried out on the pit lane apron and in accordance with Schedule N Part 2 of the CAMS Manual of Motor Sport and the following regulations.
- (b) Each person involved in refuelling the automobile must wear apparel which complies with Schedule N Part 2 of the CAMS Manual of Motor Sport.
- (c) A maximum of four (4) and a minimum of three (3) persons are permitted to assist with refuelling each automobile, excluding the Car Controller, the Driver Assistant and others identified in Article S13.1(k) of these regulations.
- (d) Each Competitor must nominate one person to carry out each of the following refuelling roles for each automobile to the Secretary of the Meeting no later than 5pm on the day preceding the race meeting (normally the 'private practice' day).
 - (i) The fuel hose operator.
 - (ii) The fire extinguisher operator.
 - (iii) The dead man handle operator.
 - (iv) (Optional) Additional fuel hose holder.
- (e) At all times during any refuelling of an automobile, each member of the refuelling crew cannot participate in any activity other than that required for their specific nominated refuelling role. The fire extinguisher operator must be in pit lane, positioned near the refuelling with an operational fire extinguisher of not less than 4.5kg capacity.
- (f) While in Pit Lane, the fuel delivery hose must at all times be held by the fuel hose operator.
- (g) Each refuelling tower must comply with the requirements of Articles S16 of these regulations
- (h) No refuelling may occur from the 3 minute signal prior to the race start until after the automobile has completed one (1) racing lap.
- (i) An automobile which has the refuelling aperture on the non garage side of the automobile may enter the garage to refuel subject to the following procedure:
 - (i) The adjoining garages on either side of the pit bay being used must be informed of the intended refuelling pit stop one (1) lap prior.
 - (ii) The garage where the refuelling is to occur must be evacuated of all people except the refuelling personnel, prior to the pit stop.
 - (iii) The automobile must enter the pit bay garage nose first with that area of the automobile where the fuel filler aperture is located remaining outside of the garage.

- (iv) The automobile's engine must be turned off prior to the commencement of refuelling.
 - (v) Each person involved in refuelling the automobile must wear apparel which complies with Schedule N Part 2 of the CAMS Manual of Motor Sport
 - (v) When refuelling is completed the crew must then push the automobile from the garage to its pit bay prior to release by the Car Controller.
- (j) An automobile fitted with its original fuel filler aperture that does not have dry break fittings may refuel in its pit bay utilising hand operated pumping equipment subject to the following requirements:
- (i) Equipment must have inbuilt earthing and petrol compliant fittings.
 - (ii) The pump and nozzle assembly may be installed in a 205 Litre Race Fuel Drum.
 - (iii) Drums must be tethered along with an earth cable to the pit building.
 - (iv) Each person involved in refuelling the automobile must wear apparel which complies with Schedule N Part 2 of the CAMS Manual of Motor Sport.
 - (v) The following equipment, or similar as approved by the TC, must be used:
 - A Macnaught Rapidflo hand operated pump fitted to a 2.5 metre Maximus dedicated fuel hose (Ref No RWPS09-025) that incorporates inbuilt copper earth wire and non-kink wire coiling.
Note: Some automobiles may require a longer hose.
 - A Topgun filler nozzle with cut off handle that controls fuel flow.

S13.3 Servicing the automobile

- (a) The maximum number of persons permitted to assist with servicing the automobile is four (4), excluding the Car Controller, Driver Assistant and others identified in Article S13.1 (k) of these regulations.
- (b) Only one (1) side of an automobile may be lifted at any time. There must be a minimum of two (2) tyres which remain affixed to the automobile and which are on the ground at all times during the pit stop. The front only (or the rear only) can be lifted at any time, as long as there are a minimum of two (2) tyres which remain affixed to the automobile and which are on the ground at all times.
- (c) The maximum number of powered tools (hand or otherwise) used to loosen or re-tension the wheel nuts is one (1) per automobile.
- (d) During a race it is forbidden to change the cylinder block (crankshaft case and cylinders) or the chassis/body unit under penalty of exclusion.

S13.4 Driver Change

- (a) A Driver change may only take place on the pit lane apron under supervision of pit lane officials, even if an automobile has been moved to the pit garage for an extended repair period.
- (b) A Driver change may be carried out at any time during a pit stop.
- (c) A Driver must not cross the prescribed line into pit lane before the automobile has come to a complete stop in its pit bay.
- (d) The Driver who has exited the car must be behind the prescribed line before the automobile is released from its pit bay at the conclusion of a pit stop.
- (e) The Driver exiting the automobile, if assisting the driver entering the automobile, is not deemed to be working on the automobile. Teams are permitted to use a Driver Assistant, in place of the exiting Driver. This Driver Assistant may assist with the driver change and/or connect a cable to an automobile's Data/ECU system only. In these cases the exiting Driver or the Driver Assistant will not be counted as one of the persons who are permitted to assist with the pit stop.

S13.5 Compulsory Pit Stops (CPS)

- (a) At Rounds 4 & 5 of the Championship, each automobile must commence one (1) CPS during the prescribed pit stop window in each race.
- (b) The prescribed pit stop window shall open when 10 laps of the race has been completed by the leader and close when 46 laps have been completed by the leader in Round 4, and 65 laps have been completed by the leader in Round 5 respectively.
- (c) The CPS may be conducted during a Safety Car period that occurs within the CPS Window.
- (d) An automobile shall be deemed to have commenced a CPS when the automobile enters pit lane and has crossed the speed limit line.

- (e) Each CPS shall be conducted in accordance with Article S13.1 of these regulations and the following:
 - (i) Each Class A automobile must change a minimum of two (2) wheels during a CPS. Only one (1) impact/rattle gun may be used during a wheel change.
 - (ii) Each Class B, Class C and Class I automobile must change a minimum of one (1) wheel during a CPS. Only one (1) impact/rattle gun may be used during a wheel change.
 - (iii) Each Class D and Class E automobile must complete a driver change at their allocated pit bay. For each automobile with a single Driver, the Driver must exit the automobile, close the door and then re-enter the automobile before the automobile may proceed at the direction of the Car Controller.
 - (iv) A driver change may take place during the CPS for Class A, B, C and I automobiles but is not compulsory.
 - (v) No other work may be carried out on the automobile during the CPS.
 - (vi) Each vehicle must remain stationary for a minimum of 30 seconds during the CPS.
- (f) The minimum penalty for failing to conduct the CPS as specified shall be two (2) laps deducted at the completion of the race.

S14 MAXIMUM DRIVING TIME

- (a) The number of Drivers permitted for each automobile in each race is specified in Article S7 of these regulations.
- (b) For Round 1 (3 Hour Race), the maximum total driving time for each Driver shall be 2 hours and the maximum continuous driving time for each Driver shall be 1 hour and 45 minutes. These limitations shall remain in place if the race is shortened for any reason.
- (c) For each 4 hour race in Round 2 & 3, the maximum total driving time for each Driver shall be 2 hours and 30 minutes and the maximum continuous driving time for each Driver shall be 2 hours. These limitations shall remain in place if the race is shortened for any reason.
- (d) The driving time for each Driver shall be measured from the start of the formation lap and then subsequently from the first time a Driver crosses the control line, on the track (not in Pit Lane), after exiting Pit Lane, until the last time the Driver crosses the control line, on the track, before entering Pit Lane to change Drivers or until the Driver crosses the control line at the end of the race.
- (e) Each Driver must also have a minimum rest time of 30 minutes between driving sessions, with this time measured as above.
- (f) The following penalty (or another penalty as determined by the Stewards of the Meeting) shall be placed on each automobile where a Driver does not comply with the maximum driving/minimum rest times permitted:
 - (i) If detected during the race, the automobile may be shown a black flag and the automobile shall be held in its pit bay area for a duration equivalent to the amount of time that the maximum driving time permitted was exceeded and/or the amount of time less than the minimum rest time. One (1) lap shall also be deducted from that automobile's lap count at the completion of the race.
 - (ii) If detected after the race the penalty shall be the addition of the amount of time that the maximum driving time permitted was exceeded and/or the amount of time less than the minimum rest time. One (1) lap shall also be deducted from that automobile's lap count at the completion of the race.
 - (iii) The sum total of penalty laps shall be deducted from the automobile's total number of laps completed at the end of the race, prior to the results being published.

S15 FUEL

- (a) Each automobile must only use the fuel as supplied by the official fuel supplier at the event, as detailed below:

Race Fuels P/L – Mark Tierney
0419 511517 – info@racefuels.com.au

Please note: With the exception of ambient atmospheric air and the specified control fuel, no other substance may be added to the intake charge of the engine.
- (b) Other substance/s must not be added to the specified fuel.
- (c) Prior to the commencement of Qualifying at each round of the Championship, each Competitor must purchase a minimum of 60 litres of fuel per automobile entered, from the official fuel supplier.

- (d) Fuel samples may be taken from competition automobiles at any time.
- (e) Each Competitor is responsible for fuel samples being able to be obtained safely and promptly upon request by the TC or Chief Scrutineer.
- (f) All fuel sampled will be compared with that provided by the onsite supplier. Any discrepancy shall be reported to the Stewards of the Meeting by the TC or Chief Scrutineer.
- (g) Series fuel/s, a specification analysis, and distribution details will be available on request from the CM.
- (h) Refuelling and defueling is not permitted during qualifying sessions, or before the completion of post qualifying or post-race scrutiny unless authorised by the TC or Chief Scrutineer.

S15.1 Fuel Storage

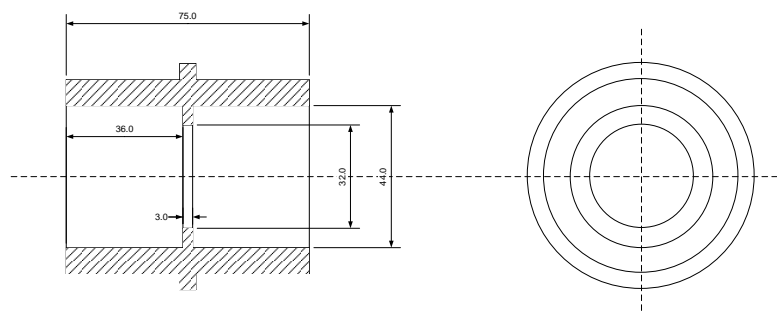
- (a) All areas in which fuel is being stored must be:
 - (i) adequately ventilated and have unimpeded access; and
 - (ii) be clean and free of potentially flammable materials e.g., paper, rags, oily fabrics etc.
- (b) All fuel must only be stored or transferred at a temperature within 10 degrees Celsius (plus or minus) of ambient temperature.
- (c) The maximum amount of fuel to be stored in each pit lane garage shall be advised in the event Supplementary or Further Regulations. The fuel storage allowance does not include the fuel contained within the refuelling tower. A pit lane garage is defined as the area provided by the Organiser as a single pit lane garage hire for one (1) automobile.
- (d) Any fuel in excess of the pit lane garage allowance must be stored in the bunded fuel area.
- (e) At least 2 x 4.5kg dry chemical fire extinguishers, in working order, must be provided by the Competitor for each of their competing automobiles.

S16 REFUELLING TOWER

S16.1 Tower construction

Each refuelling tower must conform to the following:

- (a) All refuelling equipment must comply with Schedule N Part 2 of the CAMS Manual of Motor Sport.
- (b) Each refuelling tower must be positioned within the walls of the Pit Lane garage.
- (c) Each refuelling tower must be constructed and assembled in such a way that it can and must be securely fixed to the Pit Garage structure at all times and must not be moved once filled.
- (d) The refuelling system (including the refuelling tower, tank, hoses, valves and dry break fittings) must all be electrically connected to one of the grounding connections in the Pit Garage for the duration of the on-track activities.
- (e) The automobile must also be connected, at least momentarily, to one of these grounding connections before refuelling can commence and it is strongly recommended that the automobile should also be electrically connected to earth via one of the grounding connections during a Pit Stop in which refuelling takes place.
- (f) Each refuelling tower must display the relevant automobile's competition number on a forward facing surface of the refuelling rig. This number must be in Helvetica Bold font and must be at least 150mm high.
- (g) Each refuelling tower must have a restrictor fitted between the exit of the refuelling rig hose and within 150mm of the dry-break coupling through which all fuel being transferred to the automobile must pass. The restrictor must be 75.0 mm long, be circular in section and have a maximum internal diameter of 32.0 mm. The 32.0 mm restriction must be maintained for a distance of 3.0 mm. The minimum internal diameter either side of the restriction is 44.0 mm, maintained for at least 36.0 mm. This restrictor must comply with the following drawing.



- (h) The maximum height Top Surface of the tower is two metres above the Pit Lane; only non-fuel holding connections and vents are permitted above this height.
- (i) All towers must be fitted with a ball cock or similar fast action cut-off valve, which must work on the “deadman handle” principle. The cut-off valve must be attached directly to the fuel reservoir and must close immediately, stopping the flow of fuel from the reservoir, when pressure on the handle of the cut-off valve is released. The closing principle of the cut-off valve must not rely on the action of gravity alone.
- (j) The emergency cut-off valve Attendant (“deadman’s handle Attendant”) must only hold the valve open for the duration of a refuelling operation.
- (k) Towers must only incorporate a “siamese” filler/vent configuration which is to be operated by a single refueller/vent Attendant and returns all displaced fumes from the automobile’s fuel tank to the ullage space in the reservoir of the refuelling tower.
- (l) A single fuel delivery hose, which must be of a flexible rubber or a fuel resistant reinforced plastic material, must be connected to the emergency cut- off valve. The flexible part of the hose must be at least 3.5m in length and of an internal diameter no greater than 50mm (2 inch).
- (m) The vent hose used to direct the expelled fumes from the automobile to the refuelling tower must remain open at all times. No device may restrict the flow of these fumes for the duration of the refuelling operation.
- (n) The reservoir must be vented via an explosion safe shielded vent. This vent must be open at all times and only atmospheric pressure may be exerted on the fuel in the main reservoir. No artificial pressurisation of the reservoir is permitted.
- (o) A filling orifice (maximum inside diameter of 50mm) may be fitted to the main reservoir.
- (p) Any device or substance, which changes the temperature of the fuel from the ambient air temperature, is prohibited.
- (q) The refuelling tower must not be filled above the 500mm line as determined and marked by the TC.
- (r) All refuelling equipment must be maintained in good working order:
 - (i) O-rings must be regularly inspected and replaced if there are any signs of expansion or damage; and
 - (ii) Springs and tracks must also be regularly inspected and kept lubricated during those times the refuelling valves are not in operation.
- (s) All installations and equipment must be specifically approved by the TC prior to any Event during which refuelling is permitted in Pit Lane.

S16.2. Use of the Refuelling Tower

- (a) The use of a refuelling tower is only permitted during a race when the automobile is in on the pit apron.
- (b) A refuelling tower is permitted to be used for the purpose of checking compliance of an automobile’s fuel system. The automobile, the refuelling tower and the fuel tank capacity checking vessel must be located within the Pit Garage for the duration of this checking procedure.
- (c) A refuelling tower is permitted to be used for checking flow rate provided that the following are complied with for the duration of this checking procedure:
 - (i) the refuelling tower and automobile are located within the Pit Garage;
 - (ii) a Fire Attendant is present and;
 - (iii) the automobile and all vessels where fuel is being transferred must be earthed to a suitable earth point
- (d) It is permitted to practice Pit Stops with the refuelling tower in Pit Lane, outside of track activity, provided that there is no fuel in the tower or the refuelling hose.
- (e) Fuel Drums must comply with AS2906
- (f) The fuel delivery hose must be purged of air and full of fuel prior to the 3 minute signal at the start of a race. The volume of fuel in the tower at this time shall be the starting point for measuring compliance .
- (g) Teams are not permitted to place any type of cover or shield over the Refuelling Tower during a race.

- (h) The refilling of a refuelling tower is not permitted during:
 - (i) refuelling of an automobile from that refuelling tower.
 - (ii) any race unless authorised by the TC.
- (i) Any refilling operations to the main reservoir must be carried out bearing in mind State or Territory Occupational Health and Safety regulations.
- (j) At all times when emptying or refilling a refuelling tower in the pit lane garage all personnel must be fully attired in the apparel as per Schedule N Part 2 of the CAMS Manual of Motor Sport. Each Competitor must also ensure that a similarly attired attendant, with a fire extinguisher in working order, is present.

S17 TYRES

- (a) From the commencement of qualifying, the maximum number of tyres that are permitted to be used on each automobile at each round of the Championship shall be as below. The maximum number of tyres may include new and previously marked tyres only.

Round	Maximum number of tyres
1	12
2	16
3	16
4	12
5	12

- (b) Each automobile must only be fitted with the Hankook Z221 tyres of size and compound listed below.

Size	Compound
195/55R15	Medium
215/45R17	Medium
225/45R17	Medium
235/45R17	Medium
235/40R18	Medium
245/40R18	Medium
265/35R18	Medium
285/30R18	Medium
295/30R18	Medium

- (c) Each tyre must be purchased from the control tyre supplier listed below or a Hankook tyre distributor approved by the CM:

Gary's Motorsport Tyres
 Unit 3/ 13 Penny Place
 Arndell Park NSW 2148
 Contact: Gary Harrison
 Ph: (02) 9676 8655
- (d) With the exception of wear resulting from normal usage, each tyre must remain unmodified.
- (e) A maximum number of tyres (as detailed above) shall be marked for each automobile by the TC or his nominee at each Round of the Championship and these marked tyres are the only tyres permitted to be used on that automobile during any qualifying session or race at that Round.
- (f) Within one (1) hour from the completion of the final practice session at each Round of the Championship, each Competitor must present all tyres for marking at the front of their respective garage/paddock bay.

- (g) Each Competitor is responsible for ensuring that all tyres are marked or re-marked as appropriate. If the tyres are not marked for any reason or the markings become illegible, the Competitor must notify the TC or his nominee immediately.
- (h) Competitors are permitted to replace one marked tyre per automobile, if the TC is satisfied that due to exceptional circumstances, the tyre in question can no longer be used. The TC shall ensure that the tyre to be replaced has been rendered unusable and that the replacement tyre is of the same specification and of similar wear to the tyre being replaced.
- (i) Should a Competitor be permitted to replace a marked tyre, the automobile concerned must start the next race at that Round of the Championship from the rear of the grid.
- (j) The use of any tyre heating, heat retention device or chemical treatment is prohibited.
- (k) If qualifying and/or racing is scheduled on more than one (1) day at any Round of the Championship, the TC may impound any tyres overnight at his sole discretion.
- (l) At no time may any tread wear indicator be exposed, or in the case of tyres that have dimpled tyre wear indicator, the tyre must not be worn below the indicator. With the exception of the shoulder of a tyre, in each area of a tyre where there is no tread wear indicator, the original tread pattern must be clearly visible.

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

S18 AUTOMOBILE MARKINGS

S18.1 Automobile Markings and Series identification

In addition to the requirements detailed below and in Appendix 1 of these regulations, each automobile must comply with Schedule K of the CAMS Manual of Motor Sport:

- (a) The front and rear windscreen strip of each automobile is to be left vacant for the Championship sponsor. 200mm from bottom of strip to top of windscreen – decals to be supplied by the CM. Note: The windscreen banner must be placed on the windscreen glass (not the metal roof space above the windscreen).
- (b) Side number panels are to be white panels 300 mm high x 380 mm wide and placed 10mm to 20mm back from the front door line.
- (c) The competition numbers are to be black - 220 mm high x 300mm wide and in Helvetica Bold Italic.
- (d) The class of the automobile entered should be placed on the bottom right hand side of the number panel – 80mm high and in black Helvetica Bold Italic. For Example “**A**”.
- (e) A panel above the side number panel is to be left vacant for the Championship commercial partners. 102mm high x 380 mm wide – to be supplied by the CM.
- (f) The front and rear number plates are to be left vacant for class commercial partners. 130mm high x 400 mm wide – to be supplied by CM.
- (g) Front windscreen number and class letter – day glo Helvetica Bold. 150mm high for number, 80mm high for class letter – to be placed 25mm from the left side of the windscreen and 25mm below the bottom of the windscreen strip.
- (h) Rear windscreen number and class letter – day glo Helvetica Bold. 150mm high for number, 80mm high for class letter – to be placed 25mm from the bottom of the rear windscreen strip and 25mm from the right hand side.

S18.2 Competition Numbers

The allocation of a competition number for each automobile is solely the responsibility of the CM, which shall maintain a register of all competition numbers allocated to, or reserved for, any automobile.

S18.3 Night Racing Requirements

- (a) Door numbers must either be of reflective material or illuminated by door panel lighting.
- (b) Door handles, battery isolation and kill switches as well as window net release mechanism must be highlighted with reflective tape.
- (c) Pit Booms can be utilised for lighting of the pit bay area only.

S19 PRESSURE MONITORING DATA LOGGER

- (a) Each automobile with a forced induction engine must be fitted with a pressure monitoring data logger as detailed in the Australian Manufacturers Championship Technical Regulations
- (b) Each pressure monitoring data logger must be installed in accordance with all instructions issued by the TC and must remain fully operational to record the inlet manifold pressure of the automobile for the duration of all practice sessions, qualifying sessions and races.
- (c) Access to the logged data recorded by the pressure monitoring data logger must be provided to the TC at any time upon request.
- (d) The TC is the sole arbiter with regard to the interpretation of any data and the determination of compliance of each automobile. Any decision made by the TC in this regard shall not be the subject of any protest or appeal.

S20 TESTING RESTRICTIONS

Any driver associated with the Championship is not permitted to drive on any circuit that is hosting a Round of the Championship in any automobile entered in the Championship after midnight on the Friday of the week preceding the commencement of the relevant Round of the Championship unless authorised in writing by the CM. The CM shall be the sole arbiter as to whether an automobile or Driver is associated with the Championship.

S21 HEAD RESTRAINTS

In addition to the requirements of Schedule D of the CAMS Manual of Motor Sport, each driver must wear a frontal head restraint approved to the FIA 8858 – 2002 or FIA 8858 – 2010 Standard at all times whilst driving an automobile on the race circuit during any practice session, qualifying session or race.

S22 AUTOMATIC TIMING

- (a) Event organisers utilise an automatic timing system that requires each automobile to be fitted with a Dorian Data 1 transmitter. It is the responsibility of each Competitor to obtain and maintain a transmitter in working order.
- (b) At all times when an automobile is on the circuit at an event it must have the correct, fully charged timing transmitter operating.

S23 SERIES LAP COUNTING BEACON

A MoTeC lap counting beacon transmitter shall be placed at the start/finish line by the CM. The frequency is 996. This Series beacon shall be positioned closest to the start/finish line and no other beacons/stands may be placed within 3 metres of it.

S24 SEALING OF AUTOMOBILES/COMPONENTS

- (a) The engine fitted to each automobile must have been sealed by the TC or a nominated sealer approved by the CM, prior to the commencement of qualifying at each round of the Series.
- (b) The TC may seal drive train and engine parts during an event for inspection between events.
- (c) No seal may be removed without the prior express permission of the TC.
- (d) Where a sealed component has been determined to be ineligible by the Stewards of the Meeting, the Stewards of the Meeting may, at their discretion, exclude the automobile from the results of all previous rounds of the Series in which the sealed component was identified as having been used on that automobile.
- (e) It is the responsibility of the Competitor to have appropriate holes in relevant components to enable the fixing of seals.

APPENDIX 1

Automobile Marking



2014 Australian Manufacturers Championship

TECHNICAL REGULATIONS

T1 PREAMBLE

The intent of these regulations is to allow each competitor entered in the Australian Manufacturers Championship (AMChamp) to appropriately prepare a production automobile for competition. The specific purpose of each of the freedoms granted within these regulations is to provide for cost effective competition by increased serviceability and reducing maintenance costs whilst maintaining the inherent strengths or weaknesses of each automobile.

T1.1 Definition

AMChamp is a National Championship sanctioned by CAMS for appropriately modified production touring cars that the average Australian household may aspire to own. Each make/model of automobile that is eligible to compete in the AMChamp must be representative of the normal everyday cars that appear on Australian roads.

T1.2 Permitted Modifications

Each automobile must remain unmodified, in compliance with all aspects of its CAMS homologation document and identical in all respects to the production make/model as supplied by the original vehicle manufacturer except for the freedoms permitted by these regulations. Any modification or tuning practice which is not specifically permitted by these regulations is expressly forbidden.

In addition to the above, the only work which may be carried out on the automobile is that necessary for normal servicing, or for the replacement of worn or damaged parts by standard parts.

The use of carbon fibre or carbon/Kevlar® composites, or titanium alloys, is not permitted unless such component was fitted as a standard part by the manufacturer, or its use is otherwise specifically permitted.

T2 ELIGIBILITY

T2.1 Eligible Models

Only makes/models that are detailed on the list of Eligible Automobiles contained in the AMC Sporting Regulations are eligible to compete in the AMChamp. For a make/model to be considered for inclusion into the list of Eligible Automobiles for the AMChamp, it must comply with the following:

Each make/model must;

- be a closed automobile with a minimum seating capacity for four (4) adults, in accordance with the minimum dimensions as defined by CAMS.
- be available for purchase to members of the Australian public through the normal commercial distribution network of the original vehicle manufacturer (or their authorised Australian distributor, as approved by CAMS) for less than AUD\$150 000.00. The price being defined as the recommended retail price (RRP) before on-road costs.
- be certified for road use in Australia and listed on the Road Vehicle Certification System (RVCS) published by the Department of Transport and Regional Services (DOTARS).
- have RVCS certification which has been achieved by the original vehicle manufacturer (or their authorised Australian distributor, as approved by CAMS).

At all times CAMS reserves the right to accept or reject any application for the inclusion of any make/model into the list of Eligible Automobiles for the AMC.

Optional components shall only be considered for approval for use on a specific make/model if the component is a legitimate manufacturer option that complies with one of the following requirements:

- the component is listed on the relevant automobile's Road Vehicle Descriptor (RVD) as published by DOTARS, or;
- the component is listed and authorised by the manufacturer in official sales literature and to which a manufacturer's warranty applies.

All approved manufacturer options shall be listed in the relevant automobile's CAMS homologation document.

T2.2 Racing Weight

Each automobile must comply with the racing weight specified in its CAMS homologation document. This shall be calculated by:

- (i) deducting a percentage of weight from the automobile's homologated tare weight as detailed on the automobile's RVD in accordance with the table below, rounded $\pm 2\text{kg}$, and;
- (ii) adding 85kg.

Homologated Weight (kg)	Reduction (%)
1299 or less	2
1300 – 1349	3
1350 – 1399	4
1400 – 1449	5
1450 – 1499	6
1500 – 1549	7
1550 – 1599	8
1600 – 1649	9
1650 – 1699	10
1700 or greater	11

T2.3 Non-Genuine Parts

The use of non-genuine parts is permitted for all fasteners, belts, gaskets, seals, flexible hoses, liquid carrying pipes, mechanical cables, bearings, clamps, spark plugs and spark plug leads, filters, batteries and battery cables, globes and LEDs, fuses and electro mechanical relays and windscreen glass provided the non-genuine parts are mechanically identical to the standard part and no additional modifications are made to facilitate the fitment of the replacement part.

T3 CHASSIS/MONOCOQUE

T3.1 Safety Cage

Each automobile must be fitted with a full safety cage which must be in compliance with Schedule J of the CAMS Manual of Motor Sport.

T4 ENGINE

T4.1 General

Unless specified otherwise below, tolerances for machining, finishing and weighing of engine components shall be in accordance with 'Definitions – Technical, Measuring Tolerances' in "General Requirements for Cars and Drivers" of the CAMS Manual of Motor Sport.

All plastic shrouding located in the engine bay, the sole purpose of which is aesthetic, may be removed.

Soundproofing material and trim fitted to the underside of the bonnet that is not visible from the outside may be removed.

T4.2 Mounts

The dampening material of the engine mounts is free provided the location, position and orientation of the engine remains standard.

T4.3 Cylinder Block

It is permitted to increase the cylinder block bore diameter up to a maximum of 0.6mm over the standard bore size. It is permitted to re-sleeve the cylinder bores of a sleeved block, or to fit a sleeve to a unitary block, provided that in each case the material used to sleeve the cylinder bore is either the same as the standard bore or is cast iron.

It is also permitted to remove material from the head gasket contact face of the cylinder block up to a maximum of 0.25mm provided the engine's compression ratio remains within the automobile manufacturer's limits.

T4.4 Cylinder Head/s

It is permitted to remove material from the head gasket contact face of the cylinder head up to a maximum of 0.25mm provided the engine's compression ratio remains within the automobile manufacturer's limits. It is also permitted to re-cut valve seats provided that the cutting process does not remove any of the cylinder head casting.

T4.5 Crankshaft

The maximum amount of material permitted to be removed from any crankshaft journal diameter is 0.25mm. For the purpose of balancing, it is permitted to remove material from the crankshaft.

T4.6 Connecting Rods

Each connecting rod of a reciprocating engine may be replaced provided the replacement is of a solid magnetic steel construction, the distance between the centre of the big end and small end tunnels are the same as the standard connecting rod and the weight of the connecting rod is within 2.0% of the standard connecting rod.

Please note: The connecting rod weight is inclusive of the small end bush, big end bearings and bolts and nuts.

T4.7 Pistons

Pistons may be replaced provided the replacement piston has an identically shaped crown to that of the standard piston, the distance between the gudgeon pin centre line and the highest point of the piston crown remains the same as the standard piston and the weight of the piston is within 2.0% of the standard piston.

No part of the replacement piston is permitted to be coated unless supplied as standard equipment.

Please note: The piston weight is inclusive of gudgeon pin, locks and piston rings.

T4.8 Piston Rings

Piston rings maybe replaced provided the number of compression and oil rings remain the same as the standard piston, the number of components per ring remains the same as the standard piston rings (ie, single piece compression rings may not be replaced by two piece 'gapless' rings) and the face of each piston ring (the part of the ring which is in contact with cylinder wall) must not be less than that of the standard ring.

T4.9 Camshaft/s

The timing of the camshaft in relation to the crankshaft is free. The camshaft drive components are free provided the method of operation remains standard (ie, chain drive systems must remain chain drive) and no additional modifications are made to facilitate the fitment of replacement components.

T4.10 Lubrication

The removable portion of the oil sump is free provided any additional material added to the oil sump is the same as that of the standard oil sump and no additional modifications are made to facilitate the fitment. It is permitted to modify the oil pickup and to add an oil separator tank to the crankcase breather line.

T4.11 Throttle

Where an automobile is fitted with an electronically controlled throttle valve/s, it is permitted to replace the electronic assembly with a mechanical assembly provided the replacement assembly respects the exact shape and dimensions of the standard assembly in all areas that come in contact with the engine intake air.

In this instance it is permitted to replace or modify parts of the pedal assembly, the sole function of which is to operate the replacement throttle control valve, as well as fit a throttle cable, associated mounting brackets and a replacement or addition throttle position sensor. It is permitted to fit a duplicate throttle cable and associated mounting brackets.

Cruise controller units may be disconnected and/or removed.

T4.12 Pulleys

Each pulley that drives engine ancillaries (ie, water pump, alternator, etc) is free. Each associated belt may be replaced provided it respects the standard type and width.

T4.13 Forced Induction Engines

Each forced induction automobile must comply with the maximum additional (above atmosphere) manifold pressure as listed in the relevant automobile's CAMS homologation document as listed below.

Make	Model	Designation	Maximum additional manifold pressure (bar)
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BMW	135i	E82	0.8
BMW	335i	E90/E92	0.8
BMW	M Coupe (1 Series)	E82	0.95
Ford	BF Mk I/II	XR6 Turbo	0.64
Ford	FG Mk II	GT R-Spec	0.41
Ford	FG-FPV	F6	0.91
Holden	Astra SRi Turbo	AH	0.85
Holden	Astra HSV VXR	AH	1.2
Mazda	3MPS	3A/3B	1.1
Mitsubishi	Lancer Evo VIII	RS	1.21
Mitsubishi	Lancer Evo IX	GSR	1.21
Mitsubishi	Lancer Evo IX	RS	1.21
Mitsubishi	Lancer Evo X	RS	1.4
Subaru	Impreza WRX STi	G-3 MY08	1.31
Subaru	Impreza WRX STi		1.31
Volkswagen	Golf Mk 6	77TDI Trendline	1.1

It is permitted to modify the boost control mechanism to achieve the specified boost pressure provided such modification is expressly approved by the TC.

Each automobile with a forced induction engine must be fitted with a pressure monitoring data logger manufactured after 1 January 2012 as detailed below:

Make/model: Motor Sport Electronics – BM2012 Boost Monitor

*Supplier: Motor Sport Electronics Pty Ltd
22 Deep Pool Way, Mount Annan
NSW 2567
Ph: 02 4648 0030
Sales@msedata.com.au
Mob: 0402 102 553
www.msedata.com.au*

Each pressure monitoring data logger must be installed in accordance with instructions issued by the TC.

T4.14 Electronic Engine Control Unit

(a) For automobiles first issued with a CAMS Log Book after 1 January 2008:

Electronic engine control units are free provided that no modifications are made to the original electrical connectors of the automobile wiring harness. At any given time the original electronic engine control unit must be capable of being fitted to the automobile and performing its original functions.

(b) For automobiles first issued with a CAMS Log Book prior to 1 January 2008:

Electronic engine control units are free provided that any modification to the original electrical connectors and the automobile wiring harness required for their fitment are confined to within 100mm from the end of the original wiring harness. At any given time the original electronic engine control unit must be capable of being fitted to the automobile and performing its original functions.

It is permitted to fit an additional engine coolant temperature sensor, air intake temperature sensor and manifold pressure sensor, provided they are wired separately to the main wiring harness.

The use of traction control/launch control is prohibited, unless the system is standard. In this case, the traction control/launch control system may only be operated by the original electronic control unit utilising the manufacturer's standard software with standard calibration settings.

T4.15 Cooling System

Radiators may be replaced provided the width, height and position of the replacement radiator is the same as the standard radiator. No additional modifications are permitted to be made to facilitate the fitment of a replacement radiator other than the complete removal or modification of the plastic fan shroud.

Water pumps are free provided they are mechanically identical to the standard pump.

The thermostat, its operation and method of control is free as is the method of operation of the standard engine cooling fan/s and the manner in which the radiator pressure is maintained.

It is permitted to fit a protective screen mounted in front of the radiator provided no additional modifications are made to facilitate the fitment.

It is permitted to fit an engine, transmission, final drive and power steering oil cooler provided that the sole purpose of the cooler is to reduce the oil temperature and the direction of oil flow within the engine is unchanged. All coolers and associated components must remain inside the external bodywork of the automobile. The only modification permitted to facilitate the fitment of coolers and associated components is the relocation of the oil filter and the drilling of holes for mounting purposes.

T4.16 Exhaust

The exhaust system of normally aspirated automobiles is free downstream of the final junction point of the exhaust manifold.

The exhaust system of forced induction automobiles is free downstream of the exit of the turbine housing of the turbocharger. No part of the replacement exhaust system may protrude upstream of this mating surface.

No additional modifications are permitted to facilitate the fitment of a replacement exhaust system.

T4.17 Air Conditioning Components

Any components solely associated with the air conditioning system of the automobile may be removed from the engine compartment.

T5 TRANSMISSION

T5.1 Mounts

The dampening material of the transmission mounts is free provided the location, position and orientation remains standard.

T5.2 Gearbox

Shift forks, shift hub keys and shifter bushes are free provided no additional modifications are made to facilitate their fitment. It is also permitted to fit an extension to the transmission breather.

T5.3 Flywheel

The flywheel may be replaced provided the outside diameter is identical to the standard flywheel, it is made of a steel construction and the weight is within 2.0% of the standard flywheel.

T5.4 Clutch

The clutch driven plate/s is/are free provided the number of plate/s remains standard and the plate/s are not made from a carbon material. The pressure plate may be replaced by another assembly, the primary mechanism of which must remain mechanically identical to the standard assembly.

T5.5 Differential and Final Drive Assembly

The action of all final drive differential units, including those within AWD transfer cases, is free. The rear cover plate of the final drive assembly may be replaced by another mechanically identical unit.

T5.6 Electronic Transmission Control Units

The use of electronically or automatically adjusted drive systems are prohibited, unless the system is standard. In this case, the system may only be operated by the standard electronic transmission control unit utilising the manufacturer's standard software with standard calibration settings.

T6 SUSPENSION

T6.1 General

The adjustment of suspension geometry within the range of adjustment provided for by the manufacturer, or as permitted by such modifications as are permitted by the present technical regulations, is free.

T6.2 Coil Springs

The length, wire diameter and external diameter of each coil spring is free, as is the type (ie, linear or progressive) provided that each spring is made from a ferrous material. The use of a keeper spring in series with the primary spring is permitted.

T6.3 Leaf Springs

The length, width, thickness, number of leaves and vertical curvature is free.

T6.4 Torsion Bars

Each torsion bar is free provided no additional modifications are made to facilitate the fitment of a replacement and it is made from a ferrous material. A torsion bar is not permitted to be replaced by another type of primary springing medium, eg, a coil spring.

T6.5 Spring Seat

Each coil spring seat, which is not permanently attached to the chassis/body work, is free. Each permanently attached spring seat is permitted to have an adaptor added to facilitate ride height adjustments, provided no material is removed. Each coil spring seat shall remain concentric with the original seat.

T6.6 Shock Absorbers

Each shock absorber is free provided that the number, type, working principle and the attachment points remain unchanged.

An external hydraulic canister may be fitted to the dampers provided that no additional modifications are made to facilitate their fitment, except for the drilling of holes for mounting purposes. Where a shock absorber has a separate fluid reservoir located in the cockpit or a compartment not separated from the cockpit, the reservoir must be strongly fixed to the automobile and shielded by a protective covering.

The rubber bush/es may be replaced by a 'Uniball' joint/s.

Where a standard shock absorber forms an integral part in the attachment of the wheel hub assembly to the chassis/body work, (eg, MacPherson strut), the shock absorber assembly, in its entirety, is free. No additional modifications are permitted to facilitate the fitment of the replacement shock absorber assembly. The resulting replacement shock absorber assembly must be fully interchangeable with the standard unit.

T6.7 Attachment Points

In the case of independent suspensions it is permitted to relocate in a horizontal and lateral plane, the mounting point/s of the lower and upper control arms to a maximum distance of 25mm each side. In this case the track of the modified axle is free.

In the case of MacPherson struts, it is permitted to replace the upper insulating/bearing block with another of free design provided that the original attachment points on the bodyshell are utilised.

Reinforcing of each suspension attachment point is permitted, provided the material used follows the original shape and is in contact with the standard attachment point.

T6.8 Suspension Bushes

Each elastomeric suspension pivot point bush and subframe mounting bush may be replaced by a mechanically identical bush made from another elastomeric material.

In the case where a suspension bush incorporates an outer metal shell and/or a central crush tube, these components shall be regarded as part of the bush. Each outer shell or central crush tube must respect the dimensions of the standard bush.

In the case where a suspension bush is integrated with a secondary component, such as a suspension arm, only the elastomer material shall be regarded as the bush.

T6.9 Ride Height

Each fully sprung part of the automobile must be at least 100mm above the ground when measured at any point within the wheelbase. The automobile ride height shall be measured without the driver.

T6.10 Steering

It is permitted to add components to the steering tie-rods in order to continue to provide adjustment of the

toe angle. Tie-rods may also be shortened if necessary.

The locking system of the anti-theft steering lock may be rendered inoperative.

It is permitted to replace the steering wheel provided the rim of the replacement steering wheel remains within 50mm of the location of the rim of the original steering wheel.

T7 WHEELS

Each wheel is free, subject to compliance with the maximum diameter, maximum width and offset as listed on the relevant automobile's RVD.

In addition to the above:

- Each automobile with a Racing Weight of 1650kg or greater may utilise a wheel with a width one (1) inch wider than the maximum width listed on the relevant automobile's RVD.
- Each automobile with a maximum wheel width listed on the relevant RVD that ends with a measurement of .5 of an inch may increase or decrease that wheel width by .5 inch.
- Each automobile with a maximum wheel diameter listed on the relevant RVD that does not allow fitment of one of the control tyres listed in Article S15(b) of the Australian Manufacturers Championship Sporting Regulations may increase or decrease the maximum wheel diameter by one (1) inch.

Wheel attachment studs are free provided the number of studs remain the same, the diameter of the replacement stud is equal to or greater than the standard studs and no additional modifications are made to facilitate the fitment of the replacement studs.

Wheel attachment bolts may be replaced with studs and nuts provided that the number of attachment points remains standard and the diameter of the thread is not less than that of the replaced bolt.

Any device, system, procedure, construction or design the purpose and/or effect of which allows the wheel nuts or bolts to be retained within the wheel during the process of the wheel being fitted to or removed from the car is forbidden.

The design of wheel nuts is free provided that they are of ferrous material and the outer end is not enclosed.

T8 BRAKES

T8.1 Anti-Lock Brakes (ABS)

ABS may be rendered inoperative by using one of the following methods:

- the removal of electrical power to the electronic operating system. If this method is utilised it is permitted to mount a driver operated switch to perform this function;
- the replacement of the main ABS actuating system with the fitment of a junction block. No modification to the brake lines is permitted;

T8.2 Electronic Brakeforce Distribution (EBD)

Where an automobile is fitted with EBD, it is permitted to either replace the original master cylinder with a mechanically identical unit incorporating a mechanical proportioning valve, or add a mechanical proportioning valve to the rear brake line; such valve must not be adjustable within the cockpit.

T8.3 Power Assisted Braking

The vacuum assist of the braking system may be rendered inoperative. It is permitted to modify the servo unit by replacing the internal valve system, diaphragms and pushrods with a solid rod linking the unmodified brake pedal to the master cylinder.

The fitment of an additional vacuum reservoir tank is permitted provided that the tank is mounted under the floor pan of the automobile. No additional modifications are permitted to be made except for the drilling of holes for mounting purposes and the addition of a one-way valve and vacuum line.

T8.4 Brake Pads

Brake pads are free.

T8.5 Brake Rotors

Each brake rotor and mounting hat is free provided it complies with the following:

- the diameter of each brake rotor must not be greater than that of the standard brake rotor;
- the width of each brake rotor must be within +5mm, -2mm of the width of the standard brake rotor;
- each brake rotor must be made exclusively from a ferrous material. If separate mounting hats are utilised, the brake rotor must be solidly fixed to the mounting hat in such a manner as to permit no movement of the disc relative to the hat.

T8.6 Brake Calipers

Where the standard front brake caliper contains less than four pistons per caliper, it is permitted to fit a replacement brake caliper provided the maximum number of pistons per caliper is four.

Where the standard front brake caliper contains four or more pistons per caliper, it is permitted to fit a replacement brake caliper provide the maximum number of pistons remain the same as the standard brake caliper.

Where the standard rear brake caliper contains less than two pistons per caliper, it is permitted to fit a replacement brake caliper provided the maximum number of pistons per caliper is two.

Where the standard rear brake caliper contains two or more pistons per caliper, it is permitted to fit a replacement brake caliper provide the maximum number of pistons remain the same as the standard brake caliper.

When utilising a replacement caliper the maximum permitted number of calipers per wheel is one, the caliper must be mounted using the standard mounting points (an adapter bracket may be utilised) and the caliper pistons must be round in section.

T8.7 Park Brake

It is permitted to render the park brake inoperable via the removal of components, the sole purpose of which is to operate the park brake.

T8.8 Backing Plates

The backing plate may be removed.

T8.9 Brake Cooling

It is permitted to remove any blanking plates, covers or fog lights (and associated hardware) located in the lower section of the standard front bumper bar, solely for the purpose of providing additional cooling air to the front brakes.

T8.10 Brake Ducts

It is permitted to fit a single duct to the braking system of each front wheel of an automobile, solely to direct ambient air from an existing unmodified opening in the standard front bumper bar to the front brake rotor. Blanking plates, covers or fog lights (and associated hardware) located in the lower section of the standard front bumper may be removed to provide cooling air for these ducts. These brake ducts must be wholly contained within the external shape of the standard bodywork and must not be visible when viewed from the front of the automobile (except through any opening in the front of the duct).

Each duct must not exceed 80mm inside diameter at a point no more than 150mm from the external surface of the standard front bumper bar.

The TC shall be the final arbiter with regard to the compliance of brake ducts with this regulation and any decision in this regard shall not be the subject of any protest or appeal.

T9 FUEL SYSTEM

T9.1 Fuel Tank

The fitment of a single replacement fuel tank is permitted, provided the replacement fuel tank complies with either the FIA FT5, FT3.5 or FT3-1999 standards. The replacement fuel tank shall be either in the same general location as the original, or in the luggage compartment. No additional modifications are permitted to facilitate the fitment of a replacement tank other than the drilling of holes of the minimum necessary dimensions, for mounting purposes and for the passage of fuel lines.

The entire fuel system shall be at all times isolated from the cockpit unless supplied otherwise as standard.

Should a fuel tank be installed in the luggage compartment and the rear seats removed, a fireproof and liquid proof bulkhead must separate the cockpit from the fuel tank. In the case of twin-volume automobiles it is permitted to use a non-structural partition wall made from transparent, non-flammable plastic between the cockpit and the fuel tank.

The maximum capacity of the fuel tank must be in accordance with the following Table:

Effective Engine Capacity (cc)	Maximum Fuel Tank Capacity (litres)
1000 or under	50
1001 – 1600	60
1601 – 2000	70
2001 – 3000	80
3001 – 4000	90
4001 and over	100

Please note: Effective Engine Capacity shall be calculated in accordance with NCR 13 of the CAMS Manual of Motor Sport

T9.2 Fuel Pump/s

When using a replacement fuel tank, it is permitted to utilise a replacement external fuel pump and fuel pressure regulator provided the fuel pressure remains standard.

When using a standard fuel tank fitted with an internal electric fuel pump, it is permitted to utilise a replacement external fuel pump provided the fuel pressure remains standard. In each case the fuel pump must be adequately mounted and protected from damage.

When using a replacement fuel tank, it is permitted to fit one anti-surge container and one additional electric fuel pump (the sole purpose of which is to supply fuel to the anti-surge container). All components, including the additional fuel pump and anti-surge container, must be mounted inside the replacement fuel tank.

T9.3 Dry-Break Fittings

When utilising a replacement fuel tank it is compulsory to fit dry-break refuelling couplings. If the standard tank is retained, it may be modified to accept a dry-break refuelling coupling.

The filling and vent points may either be located inside the luggage compartment, on the boot lid or rear hatch, on the rear valence panel or on the rear quarter panels.

In each case the filling and vent fittings must be mounted as close as practical to the fuel tank. All associated plumbing must be no greater than the outside diameter of the exit of the dry-break and vent bottle bulb. The route of the filler and vent bottle pipes must be as short as practical.

T10 ELECTRICAL EQUIPMENT

The use of data storage devices including multi-display dashes with the ability to store car data is permitted.

The only inputs which are permitted are as follows:

- G forces;
- 2 x wheel speed;
- trigger device for lap timing;
- brake light;
- engine RPM;
- 2 x exhaust gas oxygen sensors;
- temperature inputs used solely for the purpose of measuring fluid temperatures of engine and drive line components, exhaust temperatures and intake air temperature;
- pressure inputs used solely for the purpose of measuring fluid pressures of engine and drive line components;
- throttle position/s;
- manifold pressure;
- fuel usage;
- steering angle;
- engine operating parameters.

The software for the data storage device must not show any pin allocations set up to read sensors other

than those permitted above. The use of any form of real time telemetry or the transmission of any data other than a lap trigger signal to or from the car is prohibited.

T11 BODYWORK

T11.1 Exterior

It is permitted to reform the wheel arch beading against the inside of the wheel arch and remove the plastic inner guard liners. Plastic shrouds fitted under the body of the automobile (licked by the air flow) may be removed.

Additional headlights and associated components are permitted, provided that the total number of headlights does not exceed six (6) and that no modifications are made to facilitate the fitment other than the drilling of holes for mounting and wiring purposes.

Protective headlight covers may be fitted provided that they have no influence on the automobile's aerodynamics.

T11.2 Jacking

The jacking points may be strengthened by the addition of metal plate/s, relocated and/or increased in number provided that each jacking point does not exceed a surface area of more than 150mm x 150mm and follow the contours of the original structure.

On-board jacking systems are strictly prohibited.

T11.3 Interior

The driver's seat must be replaced by one that complies with the FIA 8855/99 or FIA 8862 - 2009 standards. The seat may be made from carbon fibre or carbon/Kevlar® material. The driver must use a safety harness that complies with Schedule I ("General Requirements for Cars and Drivers").

The following may be removed from the cockpit:

- (i) roof padding and lining;**
- (ii) carpets and insulating material;**
- (iii) front passenger and rear seats;**
- (iv) components solely associated with the air conditioning system;**
- (v) restraint systems and supplementary restraint systems;**
- (vi) boot lining, spare wheel and wheel changing equipment.**

The removal of above items is permitted, provided that no additional modifications are made to facilitate their removal and any void that is created as result of the removal of a component (ie, sound systems) is replaced by a suitable panel.

Door trims may be replaced with trims made from different material.

The only components which can be added in the cockpit are:

- (i) safety equipment and structures;**
- (ii) tool kit;**
- (iii) additional instruments;**
- (iv) electronic equipment;**
- (v) driver cooling system;**
- (vi) ballast;**
- (vii) driver ventilation equipment.**
- (viii) driver identification light and transponder**

None of the above items may hinder cockpit exit or driver's visibility or increase the engine power or influence the steering, transmission, brakes, or roadholding of the automobile in a direct or indirect manner.

Each control must retain its standard function although it is permitted to adapt each control to facilitate their use and accessibility (ie, a longer handbrake lever, an additional flange on the brake pedal etc).