

MALAYSIA MERDEKA ENDURANCE RACE  
SPORTING & TECHNICAL REGULATIONS  
2012

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**MALAYSIA MERDEKA ENDURANCE RACE 2012  
SUPPLEMENTARY REGULATIONS  
29<sup>th</sup> August – 1<sup>st</sup> September 2012**

**I) SPORTING REGULATIONS**

(The regulations are subject to change, which will be published via Additional Supplementary Regulations – ASR).

**Notification**

**(i) *Acceptance of an entry does not guarantee a start in the race. Drivers must qualify for a grid position in accordance with these Supplementary Regulations.***

**Art. 1. ORGANISER / PROMOTER**

1.1 Organiser/Promoter

Sepang International Circuit Sdn Bhd  
Jalan Pekeliling, 64000 KLIA, Sepang  
Selangor, Malaysia  
Tel: ++603-8778 2221  
Fax: ++603-8783 1020

**Art. 2. TITLE OF EVENT AND DATE**

Malaysia Merdeka Endurance Race  
29<sup>th</sup> August – 1<sup>st</sup> September 2012

**Art. 3. STATUS**

3.1 International

3.2 This competition is held under the International Sporting Code of the FIA incorporating National Competition Rules of the Automobile Association of Malaysia, and these Supplementary Regulations and Additional Supplementary Regulation issued from time to time.

**Art. 4. PERMIT NUMBER**

To be advised

## **Art. 5. ELIGIBILITY OF COMPETITORS**

- 5.1 Each entry will comprise of 3 drivers open to all categories. The eligibilities are as follows: -
- a) Competitors in possession of a valid competition licence issued by the Automobile Association of Malaysia (AAM) for Circuit Racing. (Minimum competition licence required: National "C" (Novice))
  - b) Competitors in possession of a valid competition licence issued by the Automobile Association of Malaysia/Motorsports Association of Malaysia (AAM/MAM) for Circuit Racing. (Minimum competition licence required: National "C" (Novice) or National).
  - c) Competitors in possession of valid FIA International competition licence issued by the respective FIA – National Sporting Authority (ASN) accompanied by a letter or visa of approval from the same to participate in the event.
  - d) Any Malaysian team having a foreign driver(s) must hold the Automobile Association of Malaysia (AAM) entrant/team licence.
  - e) Drivers cannot drive for more than one team or change teams after submissions have been made. New or replacement drivers cannot be introduced after Official Practise Session has commenced. Teams without full compliments of 3 drivers will be disqualified.
- 5.2 The organiser reserves the right to reject any entry in accordance with the National Competition Rules (NCR) of the AAM. There is no appeal against their decision.

**Art. 6. ELIGIBLE CARS**

(Please refer to Technical Regulations for specified modification)

**6.1 GT Class**

- i) FIA Article 257A : GT3 & Cup Cars
- ii) ACO : LM GTE
- iii) JAF : Super Taikyu Cars

**6.2 GT-X**

Non-homologated GT or Sports Production cars  
(Refer to Section C of Technical Regulations)

**6.3 Sports Production**

- i) FIA: GT4 Cars (All cars complying with SRO Regulations)
- ii) FIA Article 256: FIA Group B Cars
- iii) JAF : Super Taikyu Cars
- iv) Sports Cars with Diesel Engine above 1900cc

**6.4 Touring Production**

- i) FIA Article 254: Group N Cars 1900cc and above
- ii) FIA Article 255: Group A cars 1900cc and above
- iii) FIA Article 277: Non FIA Homologated Touring Cars 1900cc and above  
(2,500 minimum annual production)
- v) JAF Super Taikyu Cars
- vi) Touring/Saloon Cars with Diesel Engine above 1900cc

**Art. 7. VENUE**

Sepang F1 Circuit – 5.543km clockwise.

**Art. 8. EVENT PROGRAMME (Subject to confirmation via ASR)**

**TUESDAY, 28<sup>TH</sup> AUGUST 2012**

1000 hrs – 1700 hrs                      MMER                      Pre-Scrutineering

**WEDNESDAY, 29<sup>TH</sup> AUGUST 2012**

0900 hrs – 1400 hrs	MMER	Registration & Scrutineering for All Classes
1230 hrs	MMER	Official Drivers' Press Conference
1430 hrs	MMER	Drivers & Team Managers' Briefing
1530 hrs – 1630 hrs	MMER	Touring Production Practice Session
1640 hrs – 1740 hrs	MMER	Sports Production Practice Session
1750 hrs – 1820 hrs	MMER	GT Class & GT-X Practice Session
2000 hrs – 2030 hrs	MMER	Touring Production Night Practice Session
2045 hrs – 2115 hrs	MMER	Sports Production Practice Session
2130 hrs – 2000 hrs	MMER	GT Class & GT-X Night Practice Session

**THURSDAY, 30<sup>TH</sup> AUGUST 2012**

1030 hrs – 1100 hrs	MMER	Sports Production Qualifying Driver 1
1110 hrs – 1140 hrs	MMER	Touring Production Qualifying Driver 1
1150 hrs – 1220 hrs	MMER	GT Class & GT-X Qualifying Driver 1
1230 hrs – 1300 hrs	MMER	Sports Production Qualifying Driver 2
1310 hrs – 1340 hrs	MMER	Touring Production Qualifying Driver 2
1350 hrs – 1420 hrs	MMER	GT Class & GT-X Qualifying Driver 2
1430 hrs – 1500 hrs	MMER	Sports Production Qualifying Driver 3
1510 hrs – 1540 hrs	MMER	Touring Production Qualifying Driver 3
1550 hrs – 1620 hrs	MMER	GT Class & GT-X Qualifying Driver 3
1700 hrs		Post Qualifying Press Conference

**FRIDAY, 31<sup>ST</sup> AUGUST 2012**

1900 hrs	MMER	Pit Exit Open
1915 hrs	MMER	Pit Exit Close
1920 hrs	MMER	Start of National Anthem of Participating Teams
1950 hrs	MMER	Malaysia National Anthem
1955 hrs	MMER	5 minute Board
1957 hrs	MMER	3 minute Board
1959 hrs	MMER	1 minute Board
<b>2100 hrs</b>	<b>MMER</b>	<b>Race Start (Formation Lap)</b>

**SATURDAY, 1<sup>ST</sup> SEPTEMBER 2012**

0900 hrs	MMER	Race End
0830 hrs	MMER	Prize Presentation

**Art. 9. ENTRIES**

- 9.1 Entries are open immediately upon posting of Regulations and close on **17<sup>th</sup> August 2012**. Acceptance of entry is at the sole discretion of the organisers who have the right to reject entries without giving reasons.
- 9.2 Competitors are responsible for sending correct and complete entries with the correct entry fees prior to the entry closing dates.
- 9.3 Incorrect or incomplete entries that have paid the entry fees (including driver to be nominated entries) are to be held in abeyance until they are complete and correct and the date of receipt for acceptance of entry purposes shall be the date on which the Secretary of the Meeting receives the missing or corrected information.
- 9.4 It is a condition of entry that competitors have no right to any claims against the Automobile Association of Malaysia, Promoter, Organiser, Sponsors and any one carrying out their duties.
- 9.5 Please submit entries to:

**Secretary of the Meet**  
**SEPANG INTERNATIONAL CIRCUIT SDN BHD**  
**Jalan Pekeliling, 64000 KLIA, Selangor**  
**Tel: +603-8778 2221**  
**Fax: +603-8778 2338**  
**E-mail: mashithah.hashim@sepangcircuit.com**

- 9.6 Late entries will be accepted up to **24<sup>th</sup> August 2012**. The acceptance of any entry received after this date will be at the sole discretion of the Organiser.
- 9.7 Maximum number of entries accepted will be at the sole discretion of the organisers. Organisers reserve the right to refuse an entry.
- 9.8 Maximum number of starters is 77. Start positions per class are as follows: -

<b>GT Class &amp; GT-X</b>	-	<b>27 cars</b>
<b>Sports Production</b>	-	<b>25 cars</b>
<b>Touring Production</b>	-	<b>25 cars</b>

- 9.9 Entry Fees:

	<u>Normal</u>	<u>Late</u>
<b>GT Class</b>	<b>US\$2,500</b>	<b>US\$3,500</b>
<b>GT-X</b>	<b>US\$2,500</b>	<b>US\$3,500</b>
<b>Sports Production</b>	<b>US\$2,500</b>	<b>US\$3,500</b>
<b>Touring Production</b>	<b>US\$1,800</b>	<b>US\$2,800</b>

- i) Any entry for which the entry fees have not been received until the entry closing date or for which the entry fees have not been paid completely are regarded null and void.

- ii) Payment must be made by cash, money order or banker's draft. However, payment made on-site on official registration day (prior to approval from the Organiser) must be in cash. Payment can also be made through the following bank account but the receipt must be presented to the Secretariat during registration as proof of payment: -

**US Dollar Account**

Account Name: Sepang International Circuit Sdn Bhd  
 Account No.: 712 437 000 016  
 Bank Name: Malayan Banking Berhad  
 Bank Address: Southern Support Amenities  
 Jalan Pekeliling, 64000 KLIA  
 Selangor, Malaysia  
 Bank Code: MBBEMYKL

**Ringgit Malaysia Account**

Account Name: Sepang International Circuit Sdn Bhd  
 Account No.: 5124 3730 0322  
 Bank Name: Malayan Banking Berhad  
 Bank Address: Southern Support Amenities  
 Jalan Pekeliling, 64000 KLIA  
 Selangor, Malaysia  
 Bank Code: MBBEMYKL

The entry fee may be refunded under the following conditions: -

- i) Refusal of entry
- ii) Withdrawal of the entry 1 week before the event day. Reimbursement of the total entry fees paid.
- iii) Withdrawal of the entry less than one week before the event. Reimbursement of only 50% of the entry fees paid.
- iv) Entry fee will not be refunded for participant who is disqualified from the race due to any type infringement.

**Art. 10. AWARDS**

**10.1 CLASS AWARDS**

Category	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
GT Class	Trophy	Trophy	Trophy
GT-X	Trophy	Trophy	Trophy
Sports Production	Trophy + RM50, 000	Trophy + RM25, 000	Trophy + RM15, 000
Touring Production	Trophy + RM30, 000	Trophy + RM20, 000	Trophy + RM10, 000

**Prizes:**

- 10.2 AWARDS will be paid down to not more than 50% if number of starters is less than 6 cars in the class.
- 10.3 The MALAYSIA MERDEKA ENDURANCE CHALLENGE TROPHY will be awarded to the overall winning car.
- 10.4 ENGINES may be STRIPPED for legality after qualifying and races at the discretion of the organisers. Competitors to provide mechanics and specifications of car.

**Art. 11. SCRUTINEERING**

- 11.1 All cars must comply with Section II – Technical Regulations. The homologation papers must be presented during the Scrutineering together with drivers racing suit, helmet, gloves, shoes and HANS device.
- 11.2 All stickers requirement as stated by the Organiser must be properly placed on the car prior to the scrutineering. **(Refer to Appendix I)**. The Organiser reserves the rights to impose any additional stickers not shown on the Appendix 1.
- 11.3 All cars will be issued with an “OK” sticker by the Scrutineers once the scrutineering has been successfully completed.
- 11.4 All cars will be impounded immediately after the qualifying session for weighing. The official weighing scales readings are final. No protest will be entertained on this matter.
- 11.5 Throughout the entire duration of the event, the cars must comply with the Technical Regulations in all points. Engines may be sealed and the organiser may impound cars. The Organiser reserves the right to carry out technical checks at any time during the event.
- 11.6 Any car, which, after having passed scrutineering, is damaged, must be re-presented to the Scrutineers after repair and be approved in order to be allowed to continue.
- 11.7 Cars will also be impounded on the start/finish line after the race in case of any protest, which may arise. Protest time is 30 minutes from posting of provisional results. The Organiser reserves the right to strip any car after the race at the cost of the Team.

- 11.8 All participating cars will be equipped with a timing transponder provided by the Organiser at a rental cost of US\$100 per unit. A deposit of US\$100 will also be imposed and be refunded to the Competitor once the transponder has been returned to the Organiser within 1 hour after the chequered flag, failing which the deposit will be forfeited.

## **Art. 12. DRIVERS' BRIEFING**

- 12.1 It is compulsory for all drivers to attend the Drivers' briefing for the event. Non attendance and late comers will incur a penalty as determined by the Stewards.
- 12.2 The Clerk of the Course reserves the right to organise a special drivers' briefing in addition to the compulsory briefing.

## **Art. 13. OFFICIALS**

### **13.1 Provisional Race Officials: -**

AAM Stewards:	To be Advised
Race Director:	To be Advised
Clerk of the Course:	Mr. Jeff Amin
Secretary of the Meet:	Ms. Mashithah Hashim

### **13.2 Race Direction**

- . The clerk of the course shall work in permanent consultation with the Race Director. The Race Director shall have overriding authority in the following matters and the Clerk of the Course may give orders in respect of them only with his express agreement :
- . a) the control of practice and the race, adherence to the timetable and, if he deems it necessary, the making of any proposal to the stewards to modify the timetable in accordance with the Code or Sporting Regulations ;
  - . b) the stopping of any car in accordance with the Code or Sporting Regulations ;
  - . c) the stopping of practice or suspension of the race in accordance with the Sporting Regulations if he deems it unsafe to continue and ensuring that the correct restart procedure is carried out ;
  - . d) the starting procedure ;
  - . e) the use of the safety car.

## **Art. 14. METHOD OF START**

### **14.1 Endurance Race**

Cars will be lined up to form 2 x 2 grids.

#### **5 MINUTE BOARD**

Everyone, except driver in car and mechanics to leave the Grid. All works on cars must stop.

#### **3 MINUTE BOARD**

Only 2 mechanics per Car remain on grid.

#### **1 MINUTE BOARD**

Drivers start engines. Mechanics leave. No push start allowed. Cars must enter pit if pushed, after formation leaves grid.

#### **30 SECOND BOARD**

Engines must be running. Any driver who cannot start his car engine must put up his arm to warn the starter and the following competitors of the problem. Yellow flag waved by grid marshal behind pit wall.

#### **FORMATION LAP/START**

- VIP will go to starter rostrum to flag off formation lap behind the official car in single file. Cars will form up in pairs on the back straight between turns 14 and 15.
- The official car will enter the pits if the Clerk of the Course is satisfied with the formation, otherwise it will carry on for 2 further laps.
- The first two leading cars will maintain the pace up to the start line and will commence racing when the red light turns to green.
- Following cars can only commence racing after they have crossed the start line.
- Anyone overtaking before crossing the start line will be deemed to have jumped the start and will be penalised by a drive through.

## **Art. 15. GRID POSITIONS**

### **15.1 Endurance**

i) Up to 77 cars will be allowed to start on the following basis:

<b><i>GT Class &amp; GT-X</i></b>	<b><i>- 27 cars</i></b>
<b><i>Sports Production</i></b>	<b><i>- 25 cars</i></b>
<b><i>Touring Production</i></b>	<b><i>- 25 cars</i></b>

The selection of fastest car in each class will be based on the combined time of all 3 drivers. Drivers must complete a minimum of 1 lap during qualifying excluding the out lap and in lap.

- ii) Should any Class do not reach the required maximum numbers, cars in other Classes at the discretion of the organiser may fill their position.
- iii) The grid positions will be based on the basis of the fastest aggregate time (of each team) obtaining position 1 and so forth, irrespective of class. If any team fails to qualify, the team can submit a request to the Stewards to be allowed to start from the back of the grid, provided that the grid is not full.
- iv) The fastest driver in each team must start the race in the interest of safety.
- v) If any of the 3 drivers fails to qualify, the team may submit application to start at rear of grid to Stewards of the Meeting on following conditions:
  - a) There are grid positions available
  - b) Grid positions are at sole discretion of the Stewards of the Meeting

#### **Art. 16. PRACTICE, MAXIMUM DRIVING TIME, CHANGE OF DRIVERS**

- 16.1 Only cars having successfully passed scrutineering and displaying the appropriate sticker will be allowed to take part in the practice sessions. All drivers must participate in the practice and cover the minimum of 1 timed lap.
- 16.2 Drivers must rest a minimum of two thirds of the driving time before resuming the race. Each driver may drive up to **75 minutes** before compulsory rest.
- 16.3 Maximum cumulative driving time of any one driver is 5 hours.
- 16.4 Any breach of the above rules will merit a fine of RM100.00 PER MINUTE AND STOP/GO PENALTY. The offending team will remain stationary in pit lane for an equal amount of time for each infringement. No work is authorised during the penalty stop.
- 16.5 If the stop/go penalty cannot be imposed during the race, the penalty time + 60 seconds will be added to the overall time of the team.
- 16.6 Team Managers must report on driver changes and time car is in the pits to the pit observer in writing.
- 16.7 Time that a car is in the pits will not be included in the driving time. Time that car is broken down on track will be included until the driver reaches the pit on foot and signs driver change document.

#### **Art. 17. STOPPING & RESUMING RACE**

- 17.1 When red flags are displayed, all drivers must proceed with care to the fast lane in the pits.
- 17.2 Teams are not allowed to go to the cars. They must remain in their pit building. Drivers may go to their pit for refreshment and return to cars. One (1) mechanic may assist driver to buckle up at the 5 minute signal. This mechanic may stay to assist in starting the car and return by the 30 second signal.
- 17.3 Any car needing work must move from the column and stop in working area. No change of driver is allowed during this period.
- 17.4 Work on such cars can only commence after the last car in the column leaves the pit exit.
- 17.5 The safety car will be positioned in front of the column in fast lane.
- 17.6 5/3/1 minute and 30 seconds board will be displayed on the starter podium (pit side) and pit exit with audible warning.
- 17.7 The safety car will lead the column for 1 lap (counted) and enter the pits.
- 17.8 Racing will resume in the same manner as safety car procedure.

#### **Art. 18. PITLANE SAFETY, PIT STOPS, RE-FUELLING.**

- 18.1 The outer lane is to be kept unobstructed to allow safe passage of cars at all times. A drive through penalty will be imposed on the team that breaches this rule. The onus shall be on all DRIVERS to take all due care. The speed limit is 60km/h. Penalty for exceeding this limit will be drive-through. A board will be shown with respective competition number at the start/finish line. If the driver does not pit within 3 laps he merits the black flag. The team will be excluded from the race and RM100.00 will be fined for each lap the black flag is ignored.
- 18.2 If a drive-through penalty cannot be affected when the race is nearing the end, a 1 minute penalty will be added to the overall time achieved by the team.
- 18.3 Only the lollipop man is allowed to be outside the pits until the car stops. The lollipop man can put the car number board to advice driver where to stop before he waits for the car to arrive.
- 18.4 All equipment, with the exception of the fuel rig, must be placed inside the pit until the car stops. Fuel rig must be placed safely and properly secured within 1 meter from the pit entrance red line throughout the race. Only 6 pit crew are allowed to bring the equipment out to work on the car.

- 18.5 During re-fuelling only 3 crews are allowed to be near the car. All others must remain behind the yellow line in the pit until the filler cap is fitted to the car. Other works on the car can only be carried out before or after re-fuelling. During the whole period of the pit stop and re-fuelling, non-relevant personnel **MUST** be inside the pit. **Failure will merit drive through and RM500.00 fine**
- 18.6 A fuel attendant must always be present when refuelling is on the process as to operate an automatic self closing ball valve (dead man principle) placed on the outlet of the supply tank and allowing the fuel flow control.
- 18.6 All crew working on the car **MUST** wear fire resistant suit and balaclava or helmet with eye protection when carrying out their duties.
- 18.7 When a pit stop is made, it is compulsory to stop the engine unless engine adjustments are required. Cars must be re-started by means of their starter and not be push started to re-join the race. Starter motors must be operational at all times during the race.
- 18.8 Only fuel rigs meeting FIA dimensions (**refer to Appendix V**) and safety fuel tanks are permitted other than original. The base of the refuelling tank assembly must have a surface area of at least 2 m<sup>2</sup> and must be made with a case fitted on 4 self-braking castors, ballasted with a weight greater than that of the tank filled with fuel.

Care must be taken that this does not spill out due to some fuel still being in the tank. The Refueller **MUST** wear fire resistant suit and balaclava when refuelling the car. One helper in fire resistant racing suit and balaclava must hold a fire extinguisher ready for use during re-fuelling. If a car is fitted with 2 filler intakes, refuelling can only be done one at a time. If a car has the breather vent on the opposite side then 2 crews may carry out the refuelling and 2 crews must hold fire extinguisher. Teams are required to bring their own fire extinguisher for standby during refuelling (minimum 5kg).

No repairs may be carried out when re-fuelling is in progress. The car **MUST** be on wheels when re-fuelling is in progress. This must be carried out before re-fuelling commences. Driver must not be in the car at this time.

However, original fuel tanks with standard filling orifice must use Organiser's supplied fuel rig. The Organiser can authorize re-fuelling system (like commercial fuel pump) for teams to share.

- 18.9 Only fuel sold by Organiser must be used for the event.

#### **18.10 Changing of engine:**

Any team that requires change of engine after qualifying will lose their grid position. They will have to submit their application to the Steward to start at the back of the grid in accordance with Art.15 (v). Change of engine is allowed during the race. Spare/Replacement Engines must be pre-registered and scrutineered before Qualifying and must be same spec as qualifying engine.

18.11 Teams may change their tyres as and when required. However, only 2 pneumatic guns are allowed at the pit lane during the change.

18.12 All front, tail and brake lights must be operating at all times during the race or practice. Cars with malfunctioning lights will be flagged in to carry out repairs before being allowed back on the track.

**Note: Any kind of flashing light either in front or at the rear of the car is not permitted. This is reserved for official cars only.**

18.13 Large umbrellas may be used along the signalling wall to protect from rain and sun. They must be securely tied to the railing along the pit signalling area.

#### **ART. 19. TIRES**

19.1 The tires supplied by panel of tire suppliers appointed by the Organiser are to be used by all competitors during the event. The list of panel for tire suppliers will be advised later via Additional Supplementary Regulations. For usage of tires from supplier not registered with the Organiser, team is to write to the Organiser for approval.

19.2 Tires that are not available for sale commercially, prototypes, or experimental tires are not permitted. Organiser has the right to impound, use, inspect and/or keep any tire for analysis or for any other reasons at the organiser's discretion. The tires may be taken at any time during and after qualifying, throughout the race and/or at the end of the race. The relevant team whose tire is taken will be compensated for the cost of the tire. In the event the tires are not provided to the organiser as requested, the team can be disqualified from the race. Any mechanical or chemical modification or heat-treatment such as cutting, applying solvents or other products on either wet-weather or dry-weather tires is strictly prohibited.

#### **Art. 20. LEAVING THE TRACK, REPAIRS AND OUTSIDE ASSISTANCE**

20.1 Drivers leaving the track must rejoin the race at the same place where they left the road unless the place where they rejoin does not entail a shortcut. Taking shortcut will result in a drive through penalty.

- 20.2 If a car breaks down on the track, any work to be carried out must be done only by the driver after the car has been parked at a safety zone area. One mechanic is allowed to accompany driver to carry spare parts to the car, **on foot**, but the said mechanic is not allowed to assist in the repair of the car.
- 20.3 Change of driver when the car breakdown on the track is allowed provided that the driver in the car walks back to the pit and signs-off before the new driver can takeover. The new driver is to be responsible for the repair of the car; one mechanic is allowed to accompany the driver to bring back the trolley of any unused spare part to the pit.

#### **Art. 21. SAFETY CAR**

- 21.1 In the event of incidences one (1) safety car will enter the track from the pit exit. Safety car will display yellow flashing light on the roof. The safety car will be deployed only in the endurance race and not other event.
- 21.2 When the Safety Car is on the track, all flag posts will display yellow SC Boards together with yellow flags. Drivers must form up a single file behind the Safety Car.
- 21.3 All drivers must maintain their position. No overtaking is allowed and no green light will be used to allow backmarkers to unlap themselves. The overall leader will have to maintain position behind any car in front on track and proceed to race after crossing the start/finish line.
- Anyone found to have overtaken any competitor in front will receive a drive through penalty, only after the safety car has been withdrawn from the track. If the driver does not pit within 3 laps, the black flag will be shown for exclusion of the team from the race.
- 21.4 Drivers may pit during Safety Car procedure and re-enter the track under green pit exit light. All pit-in laps will be counted in the overall results.
- 21.5 When the track is cleared, the safety car will turn off the flashing lights and return to the pit.
- 21.6 When the safety car returns to the pit, racing and overtaking will resume after crossing the start/finish line. The lead car will control the pace until crossing of the start/finish line. Anyone overtaking before the line will incur a drive-through penalty.

## **Art. 22. FINISH OF THE RACE & PARC FERME**

22.1 The finish of the race will be 12 hours from the start of the first formation lap, not from the start of the race.

To be declared as a finisher, a driver must take the chequered flag under the car's own power, and have covered 75% or more of the total laps covered by the winner. The result order will be based on the number of laps completed by the respective teams as follow:-

Highest number of laps	-	1 <sup>st</sup>
2 <sup>nd</sup> highest number of laps	-	2 <sup>nd</sup>
3 <sup>rd</sup> highest number of laps	-	3 <sup>rd</sup>
and so forth		

22.2 In the event that 2 or more teams complete the same number of laps, their order will be in accordance with overall time taken to achieve this.

22.3 The Parc Ferme at the end of the race will be on the main straight. All participants must follow the special instructions to bring their cars to the Parc Ferme where they will remain until the Clerk of the Course orders their release. Team members are not allowed to be anywhere near the car placed at Parc Ferme without permission of the Clerk of the Course.

## **Art. 23. ORGANISER'S RIGHTS**

23.1 The organisers may abandon, cancel or postpone the meeting or any part thereof. In this event, the competitor or entrant has no right to claim against the Organiser or Promoter in respect of any loss or expense he/she may thereby incur.

23.2 Cancel any class, which has less than 6 cars or amalgamate them to the next higher class at the discretion of the organisers.

23.3 Distribute the awards based on intermediate results at their discretion if through bona fide unforeseen circumstances, the competition is stopped before its completion.

23.4 Exclude any vehicle whose appearance, condition or performance is not of a standard appropriate for the competition.

23.5 Refuse an entry without giving any reason.

23.6 The Clerk of the Course, in consultation with the Race Director, of this meeting has the right to stop the race or any driver immediately due to any unavoidable circumstances or as the case may be.

23.7 The Organiser reserves the right for competition number 1, 2 and 3.

- 23.8 The Organiser will select drivers for the Press Conference scheduled on Wednesday, 29<sup>th</sup> August and attendance is compulsory.
- 23.9 The Organiser has the rights to request all the team members/crews to sign indemnity form prior to the start of the event.

#### **Art. 24. PROMOTER'S RIGHTS**

- 24.1 All participants are prohibited from using caterers not registered with the Promoter.

#### **Art. 25. ADVERTISING**

- 25.1 Competitors are obliged to carry the main sponsor and co-sponsor stickers (to be announced) at designated spaces on the car (advertisement location diagram is as per **appendix J**). The decision of the organisers is final. Stickers must be in position before a car can be scrutineered.
- 25.2 Any other advertising carried by a competitor must be declared to the organisers for approval. The organisers' decision on this matter is final.
- 25.3 The competition number supplied by the organisers cannot be mutilated. Any branding on them cannot be cut off. Tobacco advertising is strictly prohibited.
- 25.4 All forms of advertising prior to or after the race by competitors or their sponsors must obtain the approval of the Automobile Association of Malaysia for correctness before publicity under pain of an advertisement of at least the same size and frequency in accordance with Part V: Article 11 of the NCR of the AAM. Approval for such advertising shall only be released at the earliest 24 hours after time of submission. The organisers shall not be held responsible for any delay in the approval of any advertisement.
- 25.5 Advertisements on the results shall comply with (24.4) above and carry the title of the event at a prominent place of the advertisement. The size of the title shall not be less than 1/10 of the size of the advertisement.
- 25.6 REJECTION FEE for not carrying sponsors decals is as follows:
- MAIN SPONSOR: RM10, 000.00  
CO-SPONSOR: RM5, 000.00 per co-sponsor

The competition numbers and their background must be intact and not mutilated in any way.

**Art. 26. PITWALL/PITLANE/PITS/PADDOCK AREAS AND PARKING AREAS**

- 26.1 Please refer to the illustration of the pit wall, pit lane, pits, paddock areas and parking areas in **Appendix II**.
- 26.2 Pit allocation will be made by the organiser. Decisions are final and the pit allocation will be published, once the final entries have been confirmed. There is no right to be allocated a specific pit. Each pit will be shared by several teams/cars if the situation warrants it.
- 26.3 There is no claim on a special pit wall, paddock areas and parking areas. Access and allocation of areas will be made upon instruction of the officials and their instructions must be strictly respected.
- 26.4 After qualifying the Organiser may relocate some teams in accordance with their respective grid order. The Organiser's decision on this matter is final.
- 26.5 It is the responsibility of each competitor/team manager to ensure that team members are fully conversant with all pit rules. Any contravention by any team member may entail the exclusion of the team from the race. To avoid allegations of misconduct, team members are encouraged not to stray into other team's pits unless invited or with specific permission to do so.
- 26.6 No car may be driven in reverse in the pit lane. Immediate exclusion will result from such action. Mechanics are allowed to push their cars backwards to their designated pit.
- 26.7 Smoking and drinking of beer or alcoholic drinks are strictly prohibited in all areas between the pit and the pit wall. A penalty of RM300 will be imposed on anyone caught breaking these rules. Persons caught will be ejected from these areas.
- 26.8 Each team will be entitled to fifteen (15) passes comprising of 3 competitors, 6 pit wall crews and 6 pit crews. These passes must be worn in a prominent manner at all times. Only those wearing pit wall passes will have access to the pit wall.
- 26.9 Only compressed air can be used in the pits.
- 26.10 In keeping with the status of MMER as a premier event, teams are encouraged to be properly attired at all times. As this event is recorded and televised, crews must be properly attired outside the pit. Minimum acceptable: -  
Cotton T-shirt, Jeans and Shoes. Shorts are allowed at the pitwall during practice and qualifying but on race day only allowed in the pits. For safety reasons, singlet, slippers and sandals are not allowed to be worn by pit crew.

- 26.11 Persons under 16 years of age are not permitted in the pit lane and pit wall. Children under the age of 12 are not allowed in the pits, pit lane or pit wall but allowed in to the Team Common Room until the race has ended. An exception is made for glassed hospitality area in pits. However, children are to be supervised by an adult at all times. Animals (of any kind) are not permitted in the circuit.
- 26.12 No spare car or any other form of vehicle may be parked in the pits. Any such vehicle found in the pit of any team will be reported to the Stewards of the Meet for penalty up to exclusion. Illegally parked vehicles will be towed away at the owner's costs and an additional penalty of RM100 will be imposed on the owner.
- 26.13 Pit to driver radio communication is permitted for all classes. Each team must submit the list of radio frequencies **2 weeks before** the event failing which they will not be allowed to utilise their radio communication.
- 26.14 The use of motorcars, skateboards or similar means of transportation by any parties at paddock area are strictly prohibited. The organiser has the right to confiscate such vehicles until the end of the event. Only non-motorised vehicles are permitted to be used, with due care, at the paddock area.

## Art. 27. PENALTIES

The following penalties will be applicable during the practice, qualifying and race. Other infringements not stated below, will fall under the jurisdiction of the Stewards of the Meeting.

27.1	Jump Start:	Drive through
27.2	Bumping car in front:	Drive through
27.3	Causing other car to retire:	Exclusion
27.4	Crew outside pit/paddock:	Exclusion + RM500.00 Fine
27.5	Not carrying out drive-through in 3 Laps:	Exclusion
27.6	Not observing black flag:	Exclusion + RM100.00 per lap
27.7	Working on car when refuelling:	Exclusion + RM5000.00 fine
27.8	Provoking a fight:	Exclusion from race + Ban of Team and team members from SIC for 12 months + RM5, 000.00 fines
27.9	Retaliating in a fight:	Exclusion from race + Ban of Team and team members from SIC for 12 months + M3, 000.00 fines
27.10	Smoking & drinking alcohol in Pit Area:	Ejection from pit area +RM300.00 fine
27.11	Illegal parking at Paddock area:	RM100.00 fine
27.12	Other offences:	At Stewards discretion
27.13	Taking short cut	Drive through

SANCTIONED BY



#### **Art. 28. PROTESTS**

- 28.1 Protests, if any, must be lodged in accordance with the stipulations of the FIA International Sporting Code. Under strict respect of the protest time of 30 minutes, all protest must be lodged in writing and handed to the Clerk of the Course or if not possible, to the Stewards of the Meeting, with an ASN set fee of RM2,500.00 and RM1,500.00 if striping is required. Appeal fee is RM5,000.00.
- 28.2 Protests against decisions of the timekeepers, judges of fact as well as collective protests are not admitted.

#### **Art. 29. INTERPRETATION OF REGULATIONS**

- 29.1 In the case of any dispute, the interpretation of this Sporting & Technical regulation and the Additional Supplementary Regulations is up to the Clerk of the Course with the supervision of Race Director.
- 29.2 The Organiser reserves the right to modify or supplement the present regulations if considered necessary for reasons of safety, force majeure or by order of the authorities or to cancel the event in case that extraordinary circumstance should arise, without any obligations for indemnification.

#### **Art. 30. GENERAL CODE OF DRIVING CONDUCT**

- 30.1 The endurance race is a huge event and requires a fair conduct by everyone involved and in particular by the drivers during the practice sessions and during the race. Drivers of faster cars are asked to show consideration and fairness towards the slower cars and vice versa.
- 30.2 Any driver obstructing or endangering other participants during practice or race due to their driving style or apparently not being up to the requirements of the race may be refused the start or excluded from the race.
- 30.3 Should a driver be obliged to stop his car on the circuit, the driver must try his best to remove his car from the track with the utmost caution as quickly as possible.

## **II. TECHNICAL REGULATIONS**

### **SECTION A**

#### **1. GENERAL**

- Art. 1 The Organiser reserves the right to amend the present regulations in agreement with the local ASN. The regulations are subject to change, which will be published via Additional Supplementary Regulations.
- Art. 2 To be eligible, all cars must comply with the prescriptions of the present technical specifications. Any unauthorised modification is strictly prohibited.
- Art. 3 Only the organiser decides on the admission of a car and the decision taken is final. This point is explicit and completely accepted by all the competitors and drivers by submitting their entry. Any protest against the classification of admission of a car following the organiser's decision is consequently not possible.
- Art. 4 For safety and identification reasons, GT and GTX Cars must be fitted with amber coloured lenses on their headlights.

#### **2) ELIGIBLE CARS**

Cars eligible for the 2012 Malaysia Merdeka Endurance Race are as follows:

##### **2.1 GT Class**

- |      |                  |   |                   |
|------|------------------|---|-------------------|
| i)   | FIA Article 257A | : | GT3 & Cup Cars    |
| ii)  | ACO              | : | LM GTE            |
| iii) | JAF              | : | Super Taikyu Cars |

##### **2.2 GT-X**

Non-homologated GT and Sports Cars  
(Refer to Section C of Technical Regulations)

##### **2.3 Sports Production**

- |      |   |  |
|------|---|--|
| i)   | FIA:  | GT4 Cars (All cars complying with SRO Regulations) |
| ii)  | FIA Article 256:                            | FIA Group B Cars                                   |
| iii) | JAF   | Super Taikyu Cars                                  |
| iv)  | Sports Cars with Diesel Engine above 1900cc |  |

## **2.4 Touring Production**

- i) FIA Article 254: Group N Cars 1900cc and above
- ii) FIA Article 255: Group A cars 1900cc and above
- iii) FIA Article 277: Non FIA Homologated Touring Cars 1900cc and above  
(2,500 minimum annual production)
- v) JAF Super Taikyu Cars
- vi) Touring/Saloon Cars with Diesel Engine above 1900cc

- a. The Organiser has sole right upon the eligibility of the vehicles. Before investing in the preparation of any such vehicle, the car owner should contact the organiser regarding its eligibility. The Organiser reserves the rights to decide upon eventual waivers.
- b. For the eligibility of GT4 cars please refer to attached list (**Appendix III**) with will be updated as and when necessary.

## **3) MINIMUM WEIGHT**

The following minimum dry weight (excluding driver and fuel) of the cars must be fully respected at all time during the event: -

### **GT Class & GT-X**

- i) GT3 Cars: The weight and height of the car must be as per the balance of performance declared by FIA. In case a BOP of your car would be applicable, your team need to be prepared to add required weight using weight ballast which needs to be mounted inside the car.
- ii) ACO LM-GTE: As per respective homologation forms
- iii) JAF Super Taikyu: As per JAF Super Taikyu Regulation
- iv) GT-X: As per technical regulation (Section C)

### **Sports Production**

List of homologated cars (As per **Appendix III**) will follow the respective homologated weights. The weight of the non-homologated cars is as follows (Art. 256 of Appendix J FIA Sporting Regulations): -

Over 2,000 cc up to 2,500 cc:	940 kg
Over 2,500 cc up to 3,000 cc	1,020 kg
Over 3,000 cc up to 3,500 cc	1,100 kg
Over 3,500 cc up to 4,000 cc	1,180 kg
Over 4,000 cc up to 4,500 cc	1,260 kg
Over 4,500 cc up to 5,000 cc	1,340 kg
Over 5,000 cc up to 5,500 cc	1,420 kg
Over 5,500 cc	1,500 kg

**Touring Production**

1901cc up to 2000cc	930 kg
Over 2,000 cc up to 2,500 cc	1,030 kg
Over 2,500 cc up to 3,000 cc	1,110 kg
Over 3,000 cc up to 3,500 cc	1,200 kg
Over 3,500 cc up to 4,000 cc	1,280 kg
Over 4,000 cc up to 4,500 cc	1,370 kg
Over 4,500 cc up to 5,000 cc	1,470 kg
Over 5,000 cc up to 5,500 cc	1,560 kg
Above 5,500 cc:	1,650kg

- a) If the weight of the car must be completed by ballast to comply with the minimum weight as stipulated in regulations, the ballast must be fixed inside the car.

## **SECTION B**

### **SPECIFIC MODIFICATION (UNDER ARTICLE 277 OF FIA APPENDIX J)**

(Other specification not mentioned, please refer to respective articles of FIA at [www.fia.com](http://www.fia.com))

#### **Art. 1 INTERIOR**

- 1.1 The steering wheel is free.
- 1.2 The front seat may be changed for a racing type in order to use 4-point seat belt, minimum. All other seats may be removed.
- 1.3 The air-conditioner and radio may be removed.
- 1.4 All carpets and sound proofing material and interior trim may be removed.
- 1.5 Radio equipment may be fitted.

#### **Art. 2. ENGINE**

Engine as supplied in the respective model may be modified, provided that the original intake manifold and throttle body or carburettors are used. These may be freely modified internal turbo/supercharged and rotary engines will be rated according to FIA coefficients. The organisers reserve the right to seal any engine they see fit to do so. Any such seal must only be broken by the organisers otherwise the competitor in question will be excluded from the race.

##### **2.1 Cylinder Head**

- 2.1.1 May be ported and polished. Compression ratio adjusted for optimum running on commercial unleaded fuel supplied by the organisers.
- 2.1.2 The camshaft and cam timing is free.
- 2.1.3 The cylinder head gasket is free

##### **2.2 Ignition**

- 2.2.1 The spark plugs are free/igniters (glow plugs)
- 2.2.2 The high tension plug wires are free.
- 2.2.3 Modification to advance curve of the distributor is permitted provided the distributor is the original part.

### **2.3 Cooling System**

- 2.3.1 The thermostat is free or may be removed. The control system at which the fan cuts in is free. All water bypass hoses on the engine block and cylinder head may be sealed off.
- 2.3.2 Larger radiator is permitted provided it fits in the original location without having to cut the bodywork.
- 2.3.3 Oil coolers may be fitted. Metal braided hoses must be used to avoid bursting in after market oil coolers.

### **2.4 Induction System**

- 2.4.1 The original fuel injection system must be retained but may be modified. Air filters is free.
- 2.4.2 The inlet manifold may be internally modified.
- 2.4.3 Injection nozzles are free.
- 2.4.4 Fuel pressure regulators are free.
- 2.4.5 Additional fuel containers to avoid fuel starvation at turns are permitted.
- 2.4.6 The induction system is free.

### **2.5 Lubricants**

- 2.5.1 Choice of lubricant is free.
- 2.5.2 Replacement oil filters of any brand are permitted.
- 2.5.3 The oil sump may be baffled.

### **2.6 Exhaust**

- 2.6.1 The exhaust system is free provided it does not protrude outside the perimeter of the car.

### **2.7 Tachometers**

- 2.7.1 Tachometers may be fitted to cars that are not fitted with one as standard.

## **Art. 3 SUSPENSION**

- 3.1 The suspension may be modified provided that the system and mounting point locations are not changed.
- 3.2 No part of the car (with exception of tyres) must touch flat ground when 2 tyres on the same side of the car are deflated.
- 3.3 MacPherson struts and shock absorbers may vary in size and brand.
- 3.4 Altering the front camber with adjustable top mounts is permitted even though this item is also part of the steering system. Camber and castor settings are free.
- 3.5 Adjustable spring cups are permitted.

- 3.6 Fitting of transversal strut to the top absorber mounting is permitted. This must not alter the mounting points.
- 3.7 Rose joints are permitted.

#### **Art. 4 BRAKING SYSTEM**

- 4.1 Braking system is free.
- 4.2 ABS may be disconnected or removed.
- 4.3 Brake hoses and fluids are free. Brake pads and shoes material are free.
- 4.4 Brake dust cover may be altered in shape or removed.
- 4.5 Cooling ducts, from the bumper only or beneath the floor for rear brakes leading to the brakes only is permitted.

#### **Art. 5. GEAR BOX AND CLUTCH**

- 5.1 Limited slip differentials are permitted.
- 5.2 Clutch plate, pressure plate and flywheel are free.
- 5.3 Gear ratios are free provided their numbers are not increased or decreased. Straight cut gears are allowed. Oil coolers allowed.
- 5.4 If a non-original production sequential box is used, the official minimum weight of the car + 30kg.

#### **Art. 6. WHEELS**

- 6.1 Alloy wheels of any width are permitted provided the tyres fitted do not protrude outside the wheel arches. The wheel diameter may be increased or decreased from original specifications provided they fit in the original wheel arches.
- 6.2 Hub caps on standard wheels must be removed.

#### **Art. 7. SAFETY EQUIPMENT/BODYWORK**

- 7.1 Cars must be fitted with laminated windscreens (or Lexan GT Class only) Perspex or Lexan may be used for other glass areas. Securing rivets may be used. Air induction to the driver's window is permitted.
- 7.2 All cars must be fitted with a cut-off switch to stop all electrical supply to the engine and fuel system.
- 7.3 Cut-off switch must be able to operate from inside and outside, in front of the driver's side of the car must be fitted. The outside switch must be marked by a red spark in a white edged, blue triangle with a base of a least 12cm.

- 7.4 The body may be painted in any colour scheme.
- 7.5 A roll cage in accordance with Article 253.8 of Appendix “J” of the FIA is mandatory.  
For minimum requirement please refer to **Appendix IV**.
- 7.6 Roll cage mounting points may be welded to the body instead of being bolted. They may be attached to the boot and rear wheel arches. Minimum number of points must be 6 for touring cars and 4 for open sports cars. No inferior quality tubing will be accepted.
- 7.7 The transversal cross bar fitted to the roll cage will not be treated as reinforcement to suspension mounting points.
- 7.8 Extra welding to parts of the bodywork is permitted. However, the use of strengthening plate on the original body panels and suspension points is prohibited.
- 7.9 All lights must be taped diagonally across with good quality clear cellophane tape at least 1 inch wide. Brake and taillights must be working at all times.
- 7.10 The placement of taillights must be of the original car. No additional lights are to be added to any parts of the car.
- 7.11 A maximum of 5 headlights are permitted on a car, in accordance with road traffic ordinance. To make up 5 headlights in some cars the extra lights may only be fitted at bumper height. Rally type pods are not permitted. Wiring of lighting system does not have to be in original wiring harness casing to avoid overheating and failure.
- 7.12 Safety fuel cell tanks are permitted as well as fuel auxiliary fuel containers and pumps to avoid starvation at turns.
- 7.13 All cars in Touring Production MUST be fixed with cross door-bar for safety.

#### **Art. 8. HEAD AND NECK SUPPORT (HANS)**

- 8.1 Head and Neck Supports (HANS) safety devise is compulsory for all categories.

**Art. 9. FIRE EXTINGUISHER**

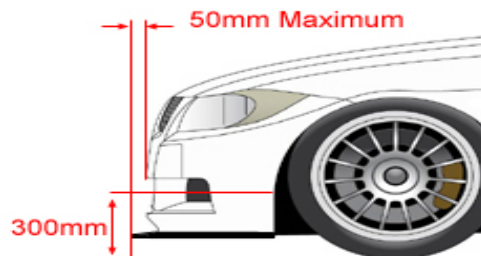
Automatic extinguishers homologated in accordance with Article 253.7.2 of Appendix J are compulsory. During events, all plumbed-in extinguisher systems must be in an 'Armed' condition (i.e. be capable of being operated without the removal of any safety device) at all times whilst taking part in practice sessions or races including until released from parc ferme.

**Art. 10. AERODYNAMIC DEVICES**

10.1 Other than those allowed in this regulation, only those aerodynamic devices which are permanently mounted on the bodywork and which are Series Production parts on the 2,500 units produced for normal road use in the country of origin are permitted.

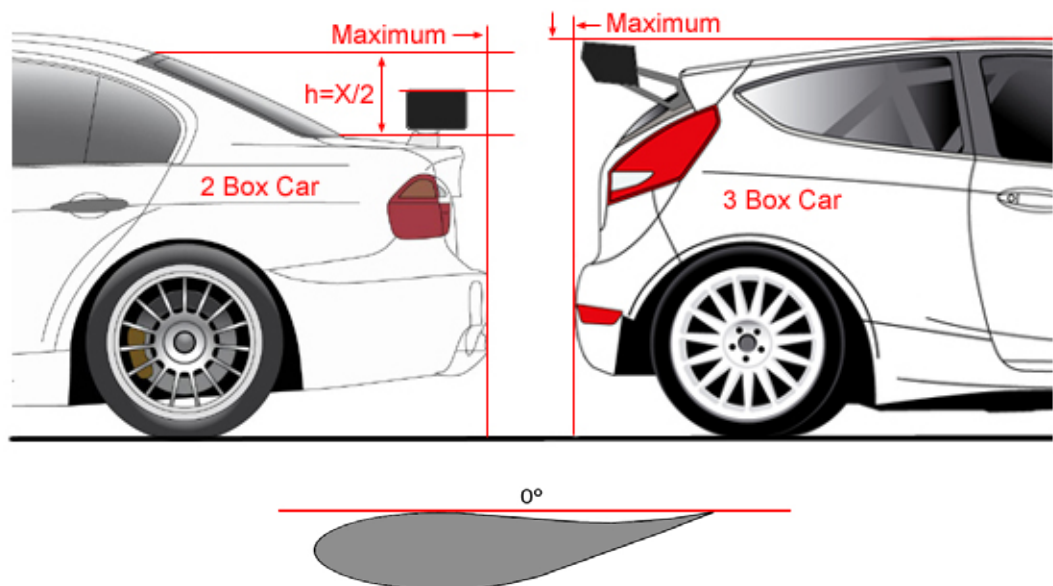
10.2 Front spoilers may be fitted but may not extend forward from the bodywork by more than 50mm and may not extend past the overall width of the bodywork. The areas that is defined as front spoilers are the front bumper area before the opening of the wheelhouse measuring not more than 300mm from the level ground.

The underside of this spoiler must not be enclosed. The size and the dimension of the apertures on the original front bumper must be respected. (See technical drawings).



10.3 It is permitted to fit a rear spoiler provided that it follows the following:

- a) For a three-box car, the spoiler must be mounted on the boot. The position of the spoiler must not be more than 50% the height of the rear screen.
- b) For a two-box car, the spoiler must be mounted on the rear hatch. The position of the spoiler must not protrude above the highest point of the car when viewed from the side.
- c) The spoilers must not protrude outside the perimeter of the bodywork.
- d) For a non-original equipment rear spoiler, the spoilers must have a zero angle between frontal part and rear area of the wing profile (see technical drawings).



## SECTION C: TECHNICAL SPECIFICATION FOR GT-X

The GT-X class is open to competitors having a closed roofed GT Cars, Cup cars, super saloons and silhouettes complying with these regulations. GT cars with expired homologation may be admitted to this class. (Please refer to appendix for potential list of cars).

### 1. Safety

The safety guideline as mentioned in FIA Article 277 must be strictly adhered to.

### 2. Weight, Wheel Size and Inlet Restrictors

The minimum vehicle weight including all fluid and excluding fuel and driver is according to the following table:

For engines with more than 2 valves per cylinder

Table for intake restrictor size/wheel width Normally Aspirated Engines										
Capacity	R #	900kg	1100kg	1250kg	1300kg	1350kg	1400kg			
Up to 2000cc	0	Exempted				11 inch maximum wheel width				
2001 – 3000cc	1	41.6	11	42.8	11	44.1	11			
	2	29.4		30.3		31.2				
3001 – 3600cc	1			42.1	12	43.5	12	45.1	13	
	2			29.5		30.5		31.6		
3601 – 4000cc	1			41.3	13	42.7	13	44.3	13	
	2			29.2		30.2		31.3		
4501 – 5500cc	1					42.1	13	43.7	13	45.2
	2					29.8		30.9		31.7
Above 5501cc	1							43.4	13	44.9
	2							30.7		31.7
Rotary Engines										
2 Rotor Turbo	1		39	12	41.5	13				
2 Rotor NA	0	Exempted				11 inch maximum wheel width				
3 Rotor NA	1		42	13	44.3	13				
Table for intake restrictor size/wheel width Forced Induction Engines										
Uncorrected CC	Restrictor	1000kg	1100kg	1200kg	1300kg					
Up to 1800cc	1	38	11							
1800-2000cc	1			38	12	39.4	12			
	2			26.9		27.9				
2000-3000cc	1			37.4	13	38.8	13			
	2			26.5		27.4				
3001-4000cc	1			36.9	13	38.2	13			
	2			26.1		27				
Above 4000cc	1			36.3	13	37.7	13			
	2			25.7		26.7				

Restrictor size for engines with 2 valves per cylinder =  $D \times 1.025$

Restrictor size is in millimeter and the wheel sizes are in inches. The wheels diameter is free.

Hybrid cars are allowed. The restrictor will be based on the engine capacity based on the above table.

**3. Engine and Transmission**

Modifications – Free.

**4. Suspension and Brakes**

Free. Carbon Discs are not allowed.

**5. Aerodynamics**

Free within the confines of the bodywork area. The floor area between the front and rear axles must be flat.

**6. Body width**

Maximum width of the vehicle is 2 metre excluding wing and mirrors.

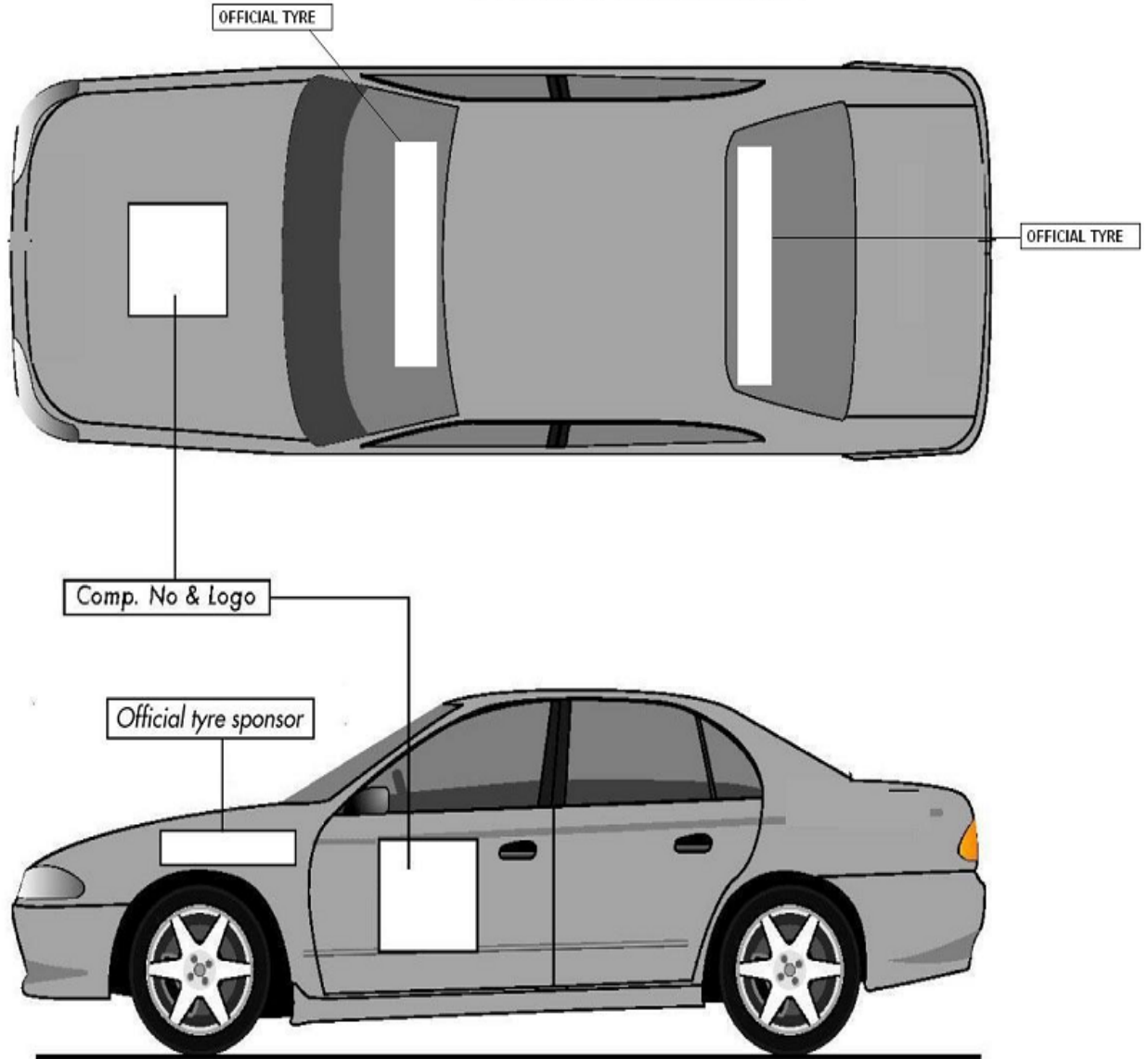
**7. Ride Height**

Minimum ride height is 50mm.

**APPENDIX I**

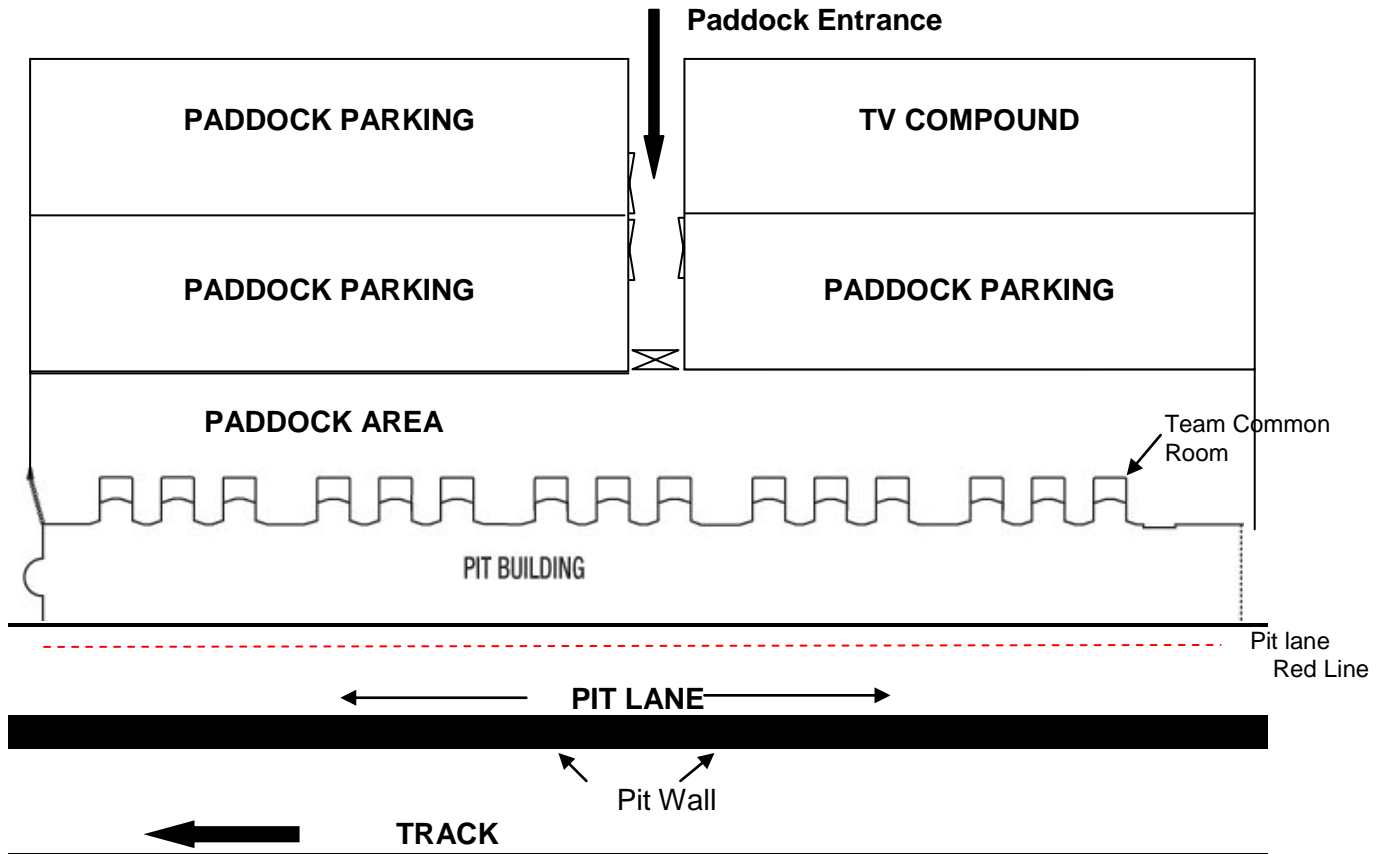
**Art. 24 ADVERTISING**

**STICKER PLACEMENT**



**APPENDIX II**

**Art. 25. PITWALL / PITLANE / PITS / PADDOCK AREAS AND PARKING AREAS**



**APPENDIX III**

**POTENTIAL LIST OF ELIGIBLE CARS FOR SPORTS PRODUCTION**

Manufacturer	Model	Engine Disp	Configuration	Transmission	Power	Weight	P/W Ratio
Aston Martin	N24	4280	V8 NA	H 6	410	1360	3.32
Aston Martin	N24	4280	V8 NA	Semi Auto	410	1360	3.32
Aston Martin	Vantage GT4	4700	V8 NA	H 6	430	1400	3.26
Audi	TT GT4	1984	I4 TC	S 6	340	1000	2.94
BMW	Z4 GT4	3246	I6 NA	H 6	375	1200	3.20
BMW	M3 GT4	3996	V8 NA	H 6	425	1430	3.36
Bufori	BMS R1	1998	I4 TC	S 6	350	1200	3.43
Corvette	C6 GT4	6200	V8 NA	H 6	390	1450	3.72
Donkervoort	D8GT	1781	I4 TC	S 6	210	714	3.40
Ford	Mustang FR500C	4997	V8 NA	H 6	420	1380	3.29
Gillet	Vertigo	2998	V6 NA	S 6	300	950	3.17
Ginetta	G50 GT4	3495	V6 NA	S 6	300	1000	3.33
Honda	S2000	1998	I4 NA	H 6	260	950	3.65
Honda	NSX	3500	V6 NA	H 6	350	1250	3.57
Jaguar	XKR-S GT4	5000	V8 SC	S 6	420	1430	3.40
KTM	X-Bow	1984	I4 TC	S 6	220	780	3.55
Lotus	Elise 1/2	1795	I4 NA	H 5	230	780	3.39
Lotus	Exige GT4	1796	I4 SC	H 6	270	820	3.04
Lotus	Exige Mk1	1795	I4 NA	H 6	240	820	3.42
Lotus	2 Eleven GT4	1796	I4 SC	S 6	252	850	3.37
Lotus	2 Eleven GT4	1796	I4 SC	H 6	252	820	3.25
Maserati	Trofeo	4244	V8 NA	H 6	400	1350	3.38
Maserati	GT MC GT4	4691	V8 NA	S 6	400	1425	3.56
Mazda	RX7	654 X 2	R2 TC	H 6	400	1430	3.58
Mazda	RX8	654 X 2	R2 NA	H 6	300	1020	3.40
Nissan	350Z	3498	V6 NA	H 6	385	1300	3.38
Nissan	370Z GT4	3696	V6 NA	H 6	385	1300	3.38
Opel	GT	1998	I4 TC	H 6	350	1225	3.50
Porsche	Cayman	3386	H6 NA	H 6	350	1210	3.46
Porsche	911 GT3 (997) Up to MY07	3596	H6 NA	H 6	430	1420	3.30
Porsche	911 GT3 (996)	3596	H6 NA	H 6	400	1380	3.45

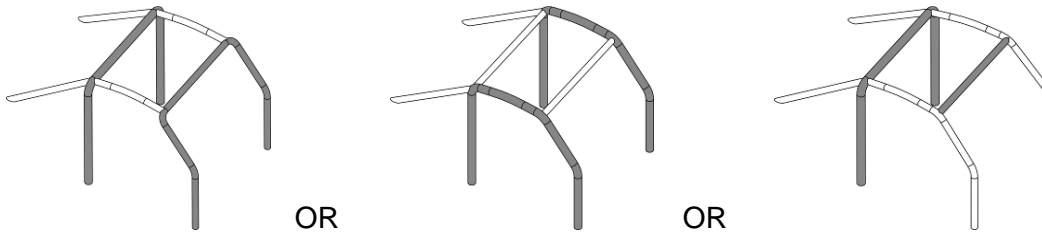
**APPENDIX IV**

**Art. 8.6. ROLL BARS**

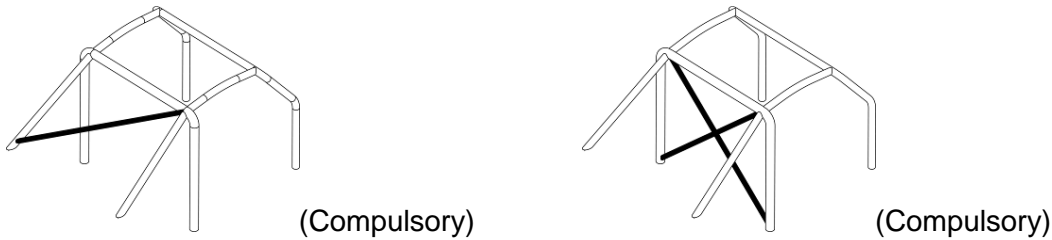
Basic guide – FIA Appendix J Regulation – Minimum Requirement

Material: Cold Drawn Welded steel is acceptable

One hole measuring 5mm in diameter must be drilled at the bottom leg of the main roll bar for verification purpose.

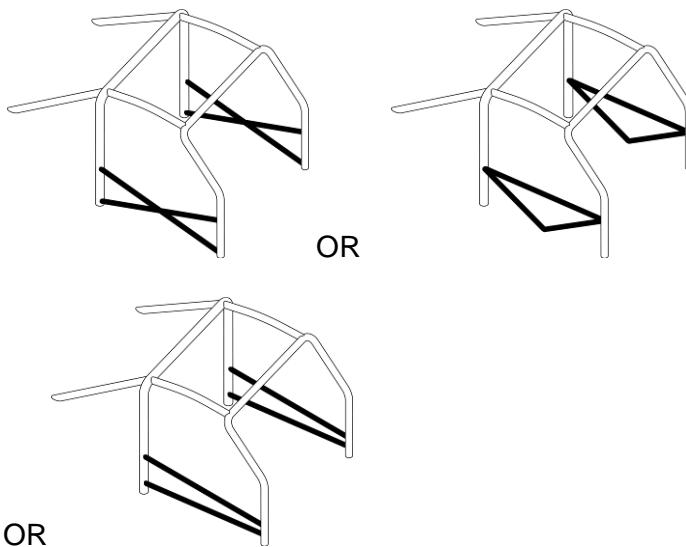


Minimum size for above: 45mm X 2.5mm or 50mm X 2.0mm



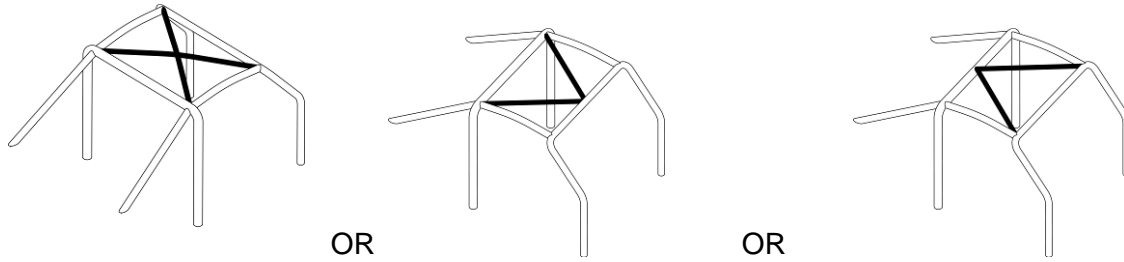
Minimum size for above: 38mm X 2.5mm or 40mm X 2mm

**Door Bars**



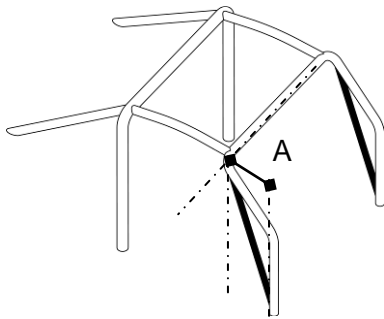
Minimum size for above: 38mm X 2.5mm or 40mm X 2mm

**Roof Reinforcement**



Minimum size for above: 38mm X 2.5mm or 40mm X 2mm

**Windscreen Pillars Reinforcement (Optional)**



If Dimension A is greater than 200mm, the windscreen pillar reinforcement is compulsory.  
Minimum size: 38mm X 2.5mm or 40mm X 2mm

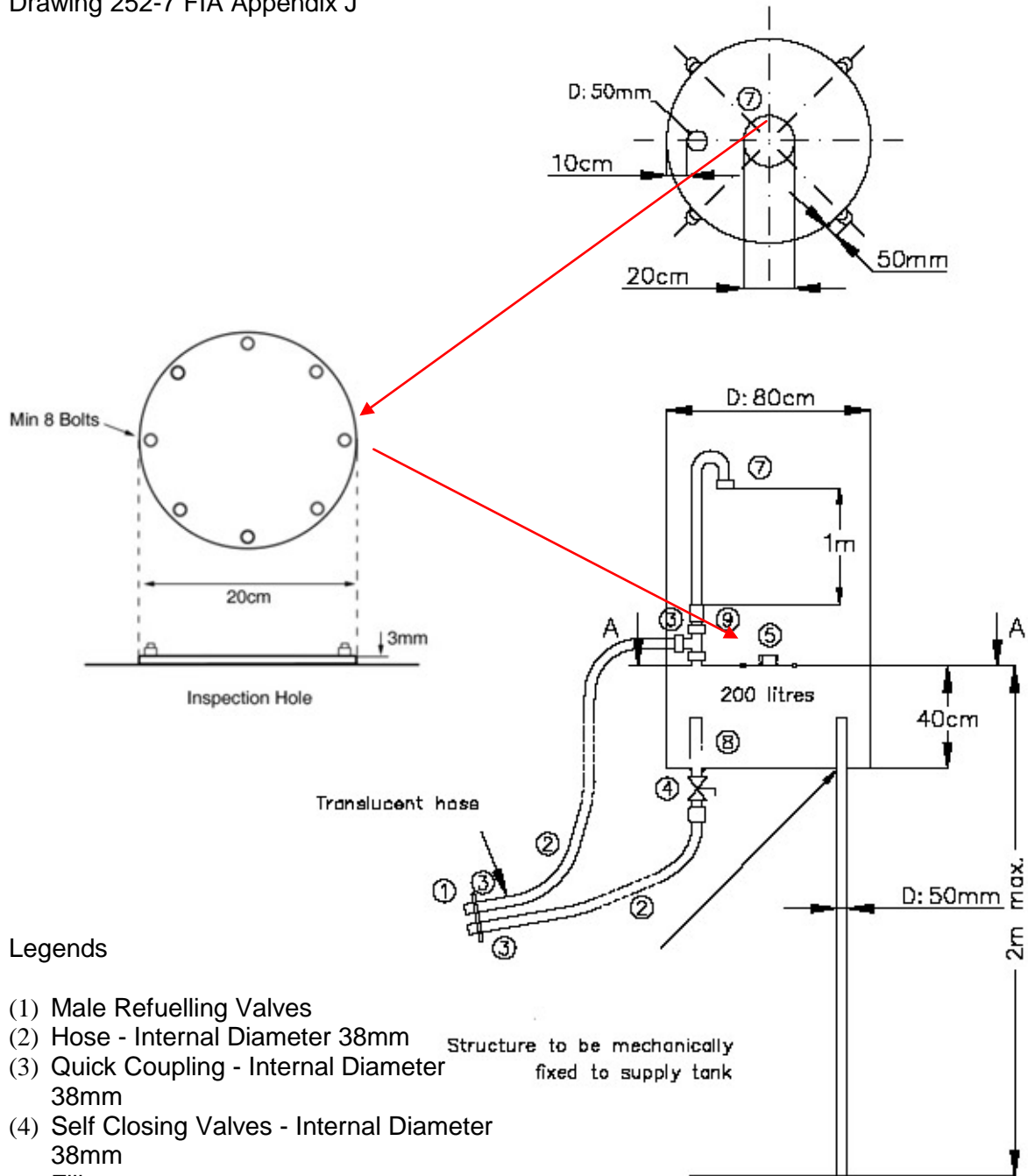
**Mounting Point**

Each mounting point must include a reinforcement plate at least 3mm thick.

**APPENDIX V**

Art. 18.7 **FUEL RIG**

Drawing 252-7 FIA Appendix J



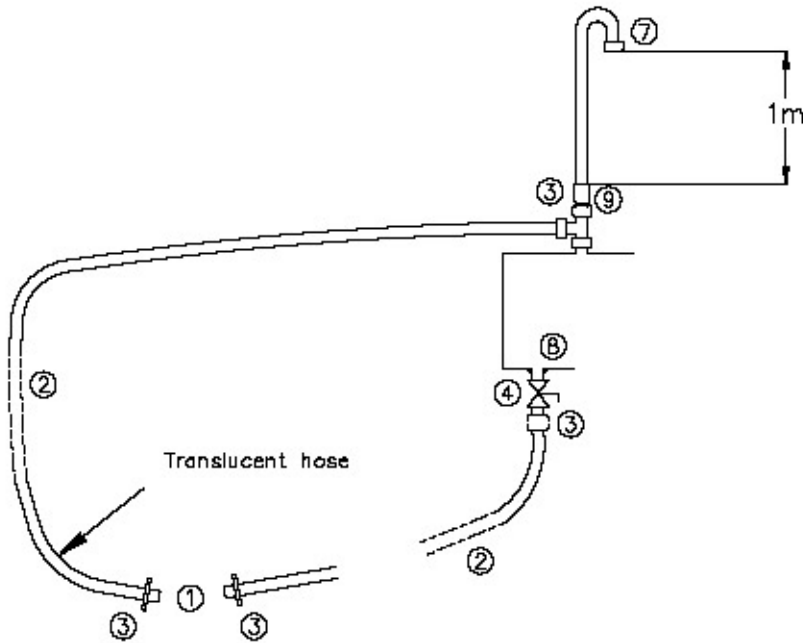
**Legends**

- (1) Male Refuelling Valves
- (2) Hose - Internal Diameter 38mm
- (3) Quick Coupling - Internal Diameter 38mm
- (4) Self Closing Valves - Internal Diameter 38mm
- (5) Filler
- (7) Flame Arrestor
- (8) Flow Restrictor (Drawing 257-3)
- (9) Discriminator Valve

**NOTE:**

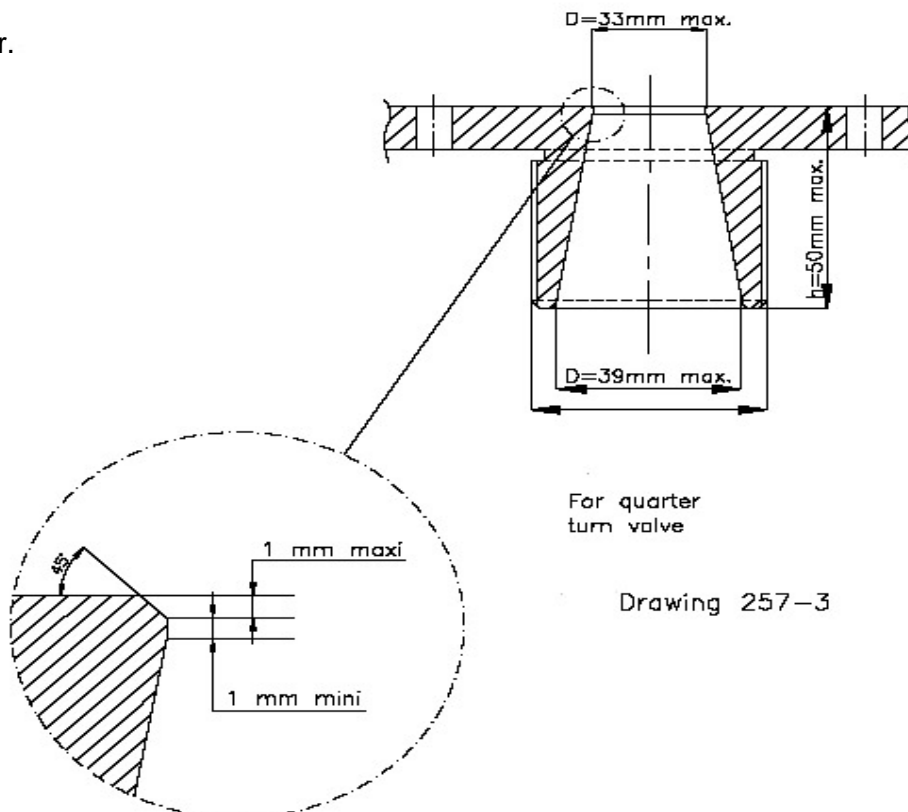
The base of the re-fuelling tank assembly must have a surface area of at least 2 m<sup>2</sup> and must be made with a case fitted on 4 self-braking castors, ballasted with a weight greater than that of the tank filled with fuel.

For cars with opposing side filler holes



Drawing 257 – 3

Flow Restrictor.



Drawing 257-3