

# WARTON STOCK CAR CLUB STOCK CAR RULES

**Cars must not be derived from a manufactured road vehicle.**

1. The Build (F2 Type)
  - Open-wheel in design and construction around a steel space frame chassis
  - Front-engined
  - Two Rear-wheel drive
  - A single seater car
2. The MINIMUM permissible total weight of the car is 650kg (AGM 2022)  
The MAXIMUM permissible total weight of the car is 750kg.
3. The car MUST have an integral 7 pillars roll cage, welded to the main chassis rails, to protect the driver.
4. The roll-cage MUST be constructed from two main hoops running up from the main chassis rails, over the height of the driver's head, and back down to the chassis rails again. The two main hoops MUST run either (i) front to back along the line of the main chassis rails, or (ii) side to side between the two chassis rails, thus forming the 4 corner pillars (pillars 1-4) of the required 7-pillar roll cage.
5. The two main roll-cage hoops MUST be connect to each other at the top by two roof bars:
  - One front and one rear running transversely in the case of front to-back main hoops, OR
  - One at each side running longitudinally in the case of side-to side main hoops.
6. Two additional side pillars (pillars 5 & 6) MUST also connect the main chassis rails to the roll hoop(s) above the driver's head.
7. One additional rear pillar (pillar 7) MUST connect directly to the centre of the rear transverse roof bar/roll hoop (that joins the two rear roll cage corner pillars together at the top of the rear window aperture) to the centre of the rear roll-cage lower transverse cross member, half height with a plate, to the floor without a plate.
8. The main hoops (pillars 1-4), their connecting bars and additional pillars (5, 6 & 7) MUST be constructed of SFIS or CFIS with a MINIMUM wall thickness of 3mm.
9. The main hoops (pillars 1-4), their connecting bars and additional pillars (5, 6 & 7) MUST be at least a MINIMUM size of 30mm x 30mm (SFIS), or 30mm diameter (CFIS).
10. With the exception of the 7 main roll-cage pillars and two roof bars as specified above, all other parts of the roll-cage specified below in this section MUST be constructed of SFIS or CDIS with a MINIMUM wall thickness of 2.5mm, and at least a MINIMUM size of 25mm x 25mm (SFIS) or 25 mm diameter (CFIS).
11. Side bars running longitudinally between the front and rear roll-cage pillars MUST be installed on both sides of the car at approximately elbow height.
12. The side-bars MUST abut , or be abutted by, the middle roll-cage pillars on each side of the car, and all joints to the roll-cage pillars MUST be fully welded.
13. The side-bars MUST be equal heights from the chassis rails on both sides of the car.
14. At least two separate down-bars MUST be installed on each side of the car within the area bordered by the front and middle roll-cage pillars, the main chassis rail and the side-bar, primarily designed to provide protection for the driver from intrusion in to the cab area from bumpers (through the side panel). At least 1 down-bar MUST connect the side-bar to the main chassis rail, whilst second down bar MUST connect either the side-bar or the front roll-cage pillar to the main chassis rail.
15. A steel sheet plate of MINIMUM 3mm thickness MUST be welded to the top of the roll-cage along the full length of all 4 sides (the two main roll-cage hoops and the two connecting bars) to form a protective roof over the driver's head.
16. The roof plate MUST measure at least a minimum of 560mm in length across its entire width, and at least a MINIMUM of 400mm in width along the mandated MINIMUM 560mm length. These dimensions include the diameter of the roll cage tube to which the plate is welded.  
The 400mm width measurement is taken in the transverse horizontal plane, parallel to the ground, between two

vertical straight edges butting against the outside of the roll-cage tube.

The 560mm length measurement is taken parallel to the longitudinal plane of the roof, between two straight edges perpendicular to the front and rear of the roof.

17. The rear of the roll-cage MUST be panelled with a steel sheet plate of at least 2mm MINIMUM thickness, and to a MINIMUM height of at least 300mm above the level of the main chassis rails along it's entire length or a 30mm x 30mm cross bar may be fitted.
18. The windscreen aperture(s) must be covered with a steel mesh to protect the driver from projectiles.
19. The steel mesh MUST be no more than a MAXIMUM 40mm matrix, and must be a MINIMUM 2.4mm thickness.
20. The steel mesh MUST be welded to the car.
21. The car MUST be fitted with front and rear bumpers constructed of steel.
22. The front bumper blade MUST be constructed with a flat face surface 100mm (4in) deep along its entire length. The top and bottom edges of the front bumper MUST remain in the same horizontal planes at all points along the entire length and be between 16" and 17" from the ground. This will be measure on track with the driver on board. (Ride height changed as per December 2022 AGM)
23. Bolt-on bumpers MUST have a MINIMUM of Two secondary fixings to prevent the bumper leaving the car should the mounting bolts break in an impact. Each secondary fixing MUST comprise of a steel chain made of MINIMUM 8mm thick diameter links, with ends joined together by a MINIMUM 8mm thick diameter steel chackle encompassing a threaded securing mechanism. The use of nuts, bolts and washers to join the ends of the chain is NOT permitted. Each secondary fixing chain MUST be wrapped around both the chassis and suitable section of the bumper.
24. The front bumper MUST be fitted with a central lower hoop to help prevent the car riding up over other cars. This hoop MUST have a horizontal centre section a MINIMUM of 304mm (12in) wide, and be a MINIMUM of 152mm (6in) deep from the underside of the bumper along the entire horizontal section length. The bottom of this hoop MUST be braced to the rear by 2 support struts.
25. All bumper hoops MUST be made with a MINIMUM 2.5mm wall thickness, and a MINIMUM size of 25mm diameter or square.
26. Nerf-rails MUST be fitted to BOTH sides of the car and made of steel.
27. Nerf-rails MUST be the same height, from the ground as the bumpers.
28. The outer edge of the nerf rail MUST be at least a MINIMUM size of 25mm diameter/square SHS, RHS, CHS or OHS, and MUST be at least a MINIMUM wall thickness of 2.5mm.
29. The outer edge of the nerf rail MUST be connected to the main chassis rail by a MINIMUM of two support struts, each being at least a MINIMUM material size of 25mm diameter/square SHS, RHS, CHS or OHS.
30. Mandated support struts, additional support struts, and bracing struts, MUST be steel, but may be of a thinner material than the mandated outer edge of the nerf rail.
31. A complete firewall MUST be installed between the engine and the drivers compartment to help protect the driver from the possibility of burns from fire, fuel, oil or water.
32. The firewall MUST be made of metal.
33. The firewall MUST be complete except for minimal sized holes through which essential cables, pipes or the steering column are required to pass.
34. A solid floor MUST be installed in the driver's compartment (cab). A prop guard to be fitted under driver seat 2mm min steel.
35. Where any part of the floor of the driver's compartment is below the bottom of the main chassis rails, OR there is not a full under chassis, the cab floor MUST be constructed of 3mm MINIMUM thickness steel plate. Aluminium is NOT permitted.

36. Engines to be of any capacity and open to any modification. **(Fuel injection reintroduced in December 2022 AGM - )**

37. A full harness must be fitted and secured safely. A quick release steering wheel must be fitted.

38. Any make or compound of tyre may be used provided they are readily available to everyone.

39. All Stock Cars will display their current roof colour on a board, the size of a car number plate, taping a section of the aerofoil will not be sufficient. Failure to display these plates will result in a two place forfeiture.

40. A **black area** will be painted on the aerofoil to take a **white number or numbers or a white area to take black numbers.**

41. The seats to have a steel plate behind the drivers head at least 6 inch square welded to 2 upright bars.

42. Rear Protection Springs must be attached at both ends by at least one bolt.

43. Cars are permitted to have red flashing light facing backwards attached securely at the rear of the car, for visibility in wet.

44. All cars must be fitted with a working exhaust. Any car deemed to be too noisy will be stopped from racing until the exhaust is functioning to the satisfaction of the scrutineer and Clerk of the Course. (This rule may be subject to change, see scrutineer for details).

45. Stock cars to have an optional steel side panels, from the front upright bar of the cab, to the rear of the cab. The steel plate shall be S.W.G. 14 or its equivalent 2mm thick. It may be fitted under existing aluminium sheet or instead of this skin. Fitted to both sides of the cab. Box section may be used instead of plate.

RFIS Rectangular Follow section

SFIS Square Follow Section

CFIS Circular Follow Section

OFIS Oval Follow Section

46. Stock Cars race in an anti clockwise direction – Follow ins are not allowed

47. *A prop loop is to be fitted under the car to contain the propshaft in the event of breakage.*

48. *All cars to have a pull stop cord/second battery isolater switch at the rear of the car in clear reach of the marshalls.*

**If the rules do not specify that you can, then take it that you can't.** If in doubt consult the scrutineer.

Updated 17<sup>th</sup> March 2019

Updated 2020 – removed duplicate rules – regarding bumpers and 7<sup>th</sup> roll cage pillar.

Updated April 2022 – ***safety loop and pull stops rules added.***

Update 2022 part 2 – **AGM update – Rule 36 amended to include the ban on fuel injection for the 2023 season.**

**Update December 2022 AGM for 2023 Season**

**Rule 22) Ride Height Lowered to 16"-17"**

**Rule 2) Weight Limit on lower limit dropped to 650kg**

**Rule 36) Fuel injection reintroduced ( this is an option and can be used if the driver wishes)**

**These rules are valid with immediate effect.**