



2023 Technical Car Specification Regulations Summary of Changes

Version 1.00 (Published) – 3rd March 2023

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(On behalf of BriSCA F2)**

Introduction

- This document highlights the changes in F2 car construction regulations in the “BriSCA F2 2023 *Car Construction Regulations and Drivers' Information*” book.
- The changes are highlighted in the full regulations; however, this document has been produced as a quick-reference guide for drivers, car constructors, and engine builders as to what has changed from 2022.
- There is very little in the way of change for 2023:
 - The new BriSCA F2 control tyre
 - Necessary safety regulations
 - Corrections or the addition of missing information
 - Advance warning of changes for 2024
- The changes documented here are listed in numerical regulation order, and are extracted directly from the MASTER regulations; they show ONLY the additional, changed, or removed regulations.

Any feedback / questions should be directed to the following:

- The BDF group via the contact section of the BriSCA F2 website, or direct email address:
Website contact form: <http://www.briscaf2.com/information/contact-drivers-forum.ashx>
Email: forum@briscaf2.com
 - Adrian Blackwell, BriSCA F2 Chief Technical Consultant, directly via email:
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BriSCA Formula Two

2023 Technical Car Specification Regulations

Summary of Changes

Note: All changes from the previously published 2021 version of the Technical Car Specification Regulations are highlighted in **red italics**. Any regulations that are no longer applicable are marked in ~~Strikethrough~~ text.

Tyres

217 Tyres

HiFly Tyre – HF201

217.01 *The HiFly HF201 185/70R13 tyre MUST be used on ALL four wheels, on ALL cars, on ALL surfaces from the agreed cutover date (1st April 2023 for the UK, 1st May 2023 for Mainland Europe), and subject to the regulations below.*

217.02 *All HiFly tyres must be sourced from an official BriSCA F2 HiFly tyre dealer/sub-dealer, and clearly display the official BriSCA F2/Entyre Supplies identification branding/labelling. Penalties for the use of unmarked tyres, or any tyre sourced from an unapproved supplier are detailed in the “Technical Infringement Penalties” regulations.*

Yokohama Tyre – Delivery Star RY818

217.03 *The Yokohama Delivery star RY818, labelled as “175R13C – 8PR 97/95P – Delivery Star RY818” MUST be used on the RIGHT REAR wheel (fence-side) only, on ALL cars, on ALL surfaces, subject to the limitations below, up to the agreed cutover date for the new BriSCA F2 control tyre (last day for use: 31st March 2023 for the UK, 30th April 2023 for Mainland Europe).*

Yokohama Tyre – A021R

217.04 *The Yokohama A021R tyre, labelled as “185/70R13 A021R” (Pre-2015) or “175/590R13 A021R” (2015-on) may MUST be used in its original form, on the front axle and/or the LEFT REAR wheel (kerb side) only, subject to the limitations below, up to the agreed cutover date for the new BriSCA F2 control tyre (last day for use: 31st March 2023 for the UK, 30th April 2023 for Mainland Europe).*

~~Avon Tyre – 7.3~~

~~**217.05** The Avon Wide Safety GT 7.3x13 tyre may be used in either treaded or slick form, on the front axle, and/or the LEFT REAR wheel only, subject to the following limitations:~~

~~**217.05.01** Slicks: The manufactured slick form of the Avon tyre may be used at any meeting, but on the FRONT axle only.~~

~~**217.05.02** Treads: The manufactured treaded form of the Avon tyre may be used at any meeting on the front axle, and/or the LEFT REAR wheel (kerb side) only.~~

~~**217.05.03** Hardness: The tyre hardness, measured by a durometer, MUST read 40 or above at ALL times.~~

~~Hardness checking procedure:~~

- ~~• The tyre will be cleaned by hand across the tread.~~
- ~~• The scrutineer or appointed BriSCA F2 Technical Officer will take three durometer readings across the tyre and produce a mean average.~~
- ~~• A mean average below 40 will render the driver liable to penalty.~~

~~Tyre hardness penalties:~~

- ~~• The penalties for tyre hardness infringements are detailed in the Technical Infringement Penalties section of these regulations.~~

ALL Tyres

~~**217.07** BriSCA F2 reserves the right to change the mandated location on the car of the Delivery Star RY818 tyre, and thus the resulting location(s) of the other tyre options, during the course of the season, with an appropriate notice period of at least 14 days.~~

~~**217.08** The same tyre type/model MUST be used on each end of the front axle, but may vary between the front and rear axles.~~

Reason / Explanation: (1) Change of tyre supplier.

Brakes

218.05 Discs and Callipers

- 218.05.01 A MAXIMUM of one brake calliper per wheel/corner is permitted.
- 218.05.02 All brake callipers, whether connected or not, MUST be made of ferrous material.
- 218.05.03 All brake discs MUST be made of ferrous material.
- 218.05.04 The MAXIMUM permitted brake disc diameter is **240mm** ~~260mm~~.
- 218.05.05 ***The removal of material from brake callipers, and/or brake calliper carriers (e.g. through grinding, cutting, or drilling) is NOT permitted.***

Reason / Explanation: (1) Safety improvement.

Transmission/Final Drive

219.01 Materials

- 219.01.01 The gearbox casing, outer differential casing, prop-shaft, rear axle casing, rear axle half-shafts, and rear axle hubs MUST be made of a ferrous material, ***unless explicitly permitted.***
- 219.01.02 An aluminium alloy bell-housing, gearbox tail-housing, ***and/or original Morris Minor outer differential casing*** is permitted.

Reason / Explanation: (1) Correction of error.

Roof Colours

229 Grading Colours/Roof Painting/Lights

229.01 The following official championship winning roof/roll-cage colours apply:

- World Champion Gold
- National Series Champion Silver
- British Champion Black/White chequered
- European Champion Red/Yellow chequered
- World of Shale Champion Two Gold stripes, 100mm wide
- Gala Champion Red/White chequered
- Scottish Champion St. Andrew's Cross/Saltire (Blue with a white diagonal cross)
- English Open Champion St. George's Cross (White with a red centred cross)
- UK Open Champion Union Flag
- World Cup Champion (NL) One Gold stripe, 100mm wide
- F2 Supercup Champion (NL) Orange/White chequered
- ***Dutch Open Champion (NL) Netherlands Flag***
- ***Euromaster (NL) Yellow/Green chequered***
- ***Irish Open Champion (NI) Green/White chequered***
- ***Irish Closed Champion (NI) Green***

229.02 The following official grading roof/roll-cage colours apply:

- Superstar/Star grades "Mail-box" Red
- 'A' grade Light Blue

Reason / Explanation: (1) Addition of previously missing information.

Zetec Engine Claim

~~233.04 Engine Claim~~

~~233.04.01~~ BriSCA F2 reserves the right to purchase any Zetec engine from a driver under these claimer regulations. For the purpose of these regulations the term "engine" relates to the complete cylinder head/engine block assembly only. The following components are EXCLUDED from these claimer regulations:

- ~~• Inlet manifold~~
- ~~• Carburetor~~
- ~~• Flywheel~~
- ~~• Clutch~~
- ~~• Starter motor~~
- ~~• Sump~~
- ~~• Exhaust manifold~~
- ~~• ECU~~
- ~~• Wiring loom~~
- ~~• HT leads~~
- ~~• Radiator cooling fan~~
- ~~• Water pump and pipe~~
- ~~• Additional water pump pulleys and bracket~~

~~233.04.02~~ Under these claimer regulations the engine MUST be purchased on the day that it was used at an officially sanctioned BriSCA F2 race meeting, and within 30 minutes of the completion of the race meeting.

~~233.04.03~~ Under these claimer regulations the amount payable to the driver will be fixed at £2,600 +VAT in the UK, and €3,000 +VAT in Mainland Europe. (Prices reflect market rates for donor engines, replacement pistons, consumables, and labour.)

~~233.04.04~~ A fully registered driver, running a Zetec engine, is also permitted to claim and purchase a Zetec engine from another competitor for the same fixed amount as specified above, and consisting of the same components.

~~233.04.05~~ Any driver wishing to claim/purchase another competitor's engine MUST have raced in the same meeting as the other party, and MUST be using a Zetec engine in their own car.

~~233.04.06~~ Any driver wishing to claim/purchase another competitor's engine MUST initiate the process through the staging promoter at the meeting in question. An engine purchase form MUST be completed and a £150 protest fee MUST be lodged with the promoter BEFORE the other party is approached.

~~233.04.07~~ BriSCA F2 reserves the right to reject a driver's request to claim/purchase if such a request is deemed not to have sound foundation.

~~233.04.08~~ BriSCA F2 reserves the right to monitor the procedure of engine claims to ensure that it is not misused or abused.

~~Note: From 1st January 2023 the engine purchase/claim section will be removed from the regulations and will no longer apply. The right to protest another driver's engine and have it inspected will, however, remain.~~

Reason / Explanation: (1) Removal of regulation as previously notified.

Zetec – HT Leads

Ignition Leads

233.20.14 Any HT leads to the sparking plugs are permitted – E.g. the longer leads as fitted to the Ford Cougar V6.

Note for 2024

- ***This regulation is under review for 2024 with the intention of mandating that HT leads must be standard OEM or equivalent items (the original intention of the regulation) displaying the manufacturer's original identification part number/code. The use of competition/performance items, e.g. Magnecor HT leads, will be prohibited. The permitted use of longer standard leads will remain.***

Reason / Explanation: (1) Advance warning of a **2024** regulation change.
(2) Control of costs and restriction of performance advantage gains when all other components in the ignition system are restricted to standard parts.

Zetec – Water Pump Pulleys

233.22.05 ONE of the following drive pulleys MUST be used on the water pump:

- (1) The original unmodified standard Ford pulley.
- (2) A modified standard Ford pulley – The original standard Ford pulley may be modified to add material for the purpose of drive-belt retention. Removal of original material is NOT permitted.
- (3) The BriSCA F2 approved/supplied replacement pulley – Modification of this item is NOT permitted.
- (4) A replacement pulley manufactured for Zetec engines used on oval circuits – Any such pulley MUST be (i) comparable in design to the BriSCA F2 approved pulley, (ii) at least the same diameter (NOT smaller) across the driven surface as the original Ford component, and (iii) weigh a MINIMUM of 400g.

Note for 2024

- *The requirements for any non-BriSCA F2/SSCA replacement pulley are under review for 2024 following observation of examples of pulleys outside of the spirit of the regulations. The intention is to mandate stricter specifications to rein-in and prevent the development/manufacture of performance enhancing pulleys, e.g. those incorporating unnecessary holes that reduce the outer rotational mass, or designs to improve performance over the basic BriSCA F2/SSCA item. The requirement for any such replacement pulley to be approved prior to use is also being considered.*

Reason / Explanation: (1) Advance warning of a **2024** regulation change.
(2) Control of costs and restriction of performance advantage gains.