

## Drivetrain Component Material Review

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BriSCA F2 promoters have raised concerns about the use, or potential use, of specific materials in the drivetrain of Formula 2 Stock Cars for performance gain, and the effects of such usage on the costs of racing.

While it is recognised that the aim of racing is to get to the finish-line before the opposition, this cannot be achieved at any cost if there is to be a secure future for the sport of Stock Car Racing.

BriSCA F2 will undertake a review of drivetrain components, with a proposed general intention of mandating ferrous components only (from 2022) in those areas where expensive alternatives would give the greatest performance gains. It is NOT the intention to outlaw current generally acceptable components, but prevent expensive developments.

Initial proposals were to simply prohibit all non-ferrous components in the drivetrain; from the gearbox input shaft all the way through to the wheel-nuts at the end. Working with the driver representatives of the BDF though, it is clear that an immediate blanket ban on non-ferrous components is neither practical, nor in the best interests of drivers and the sport. For example, non-ferrous components such as alloy bell-housings and gearbox lids, brass synchromesh baulk rings, and sintered LSD clutch plates, are all widely used by drivers within the existing regulations. Concern is more focussed on the possible use of alternative components in the future (such as tungsten gears/shafts within gearboxes, alloy LSD casings/cages, and tungsten half-shafts/hubs/wheel-nuts), introducing unnecessary cost.

Further information will be communicated as the review commences, and drivers will be encouraged to talk to their BDF representatives, or BriSCA F2, if they have particular concerns or information that will benefit the review.

- The BDF group can be contacted individually, or via the contact section of the BriSCA F2 website: Website contact form: http://www.briscaf2.com/information/contact-drivers-forum.ashx Direct email: forum@briscaf2.com
- Adrian Blackwell, BriSCA F2 Chief Technical Consultant, can be contacted directly via email: Direct email: briscaf2tech@outlook.com

The following text regarding the review has been added to the 2021 BriSCA F2 Car Construction Regulations:

## 219 Transmission/Final Drive

Notes for 2022:

- BriSCA F2 are undertaking a review of the materials used in all transmission/final drive components, with a view to a general mandating of steel/ferrous components only from 2022.
- The intent is to prevent the introduction/use of expensive lightweight components for performance gain, NOT prohibit acceptable non-ferrous components.
- It is recognised that certain components may be non-ferrous as standard, e.g. brass synchromesh baulk rings, LSD clutch plates, or gearbox tail-housings, and this will be taken in to consideration.
- The review scope covers everything between the gearbox input shaft and the wheel-nuts, and will include (but not be limited to) gearbox internal shafts and gears, differential cages and internals, half-shafts, hubs, and wheel nuts.
- Drivers are advised to check with BriSCA F2 before investing in transmission/final-drive components of a non-ferrous nature during the 2021 season, e.g. an alloy differential cage body.