



JAGUAR



RACING

WELCOME
2024 | SEASON 10

JAMES BARCLAY

A MESSAGE FROM JAMES

Hello, and welcome from myself and the whole Jaguar TCS Racing team.

We're delighted that you're able to join us during the 2024 ABB FIA Formula E World Championship, and I'm looking forward to seeing you over the race weekend.

In motorsport terms, Formula E is still a very new, and very ambitious world championship. Net carbon zero from the outset, the Formula E organisation, Jaguar TCS Racing and the other ten teams on the grid are bound by a desire to continually advance the limits of electric vehicle technology while providing the very best and most competitive racing spectacle in the world. Over the course of last season, there were seven different winners and over 1,000 overtakes throughout the season. Predictable...it isn't.!

Before you join us, this guide will give you some great insight into the World Championship, the Jaguar TCS Racing team and how our efforts on the track will benefit the next generation of Jaguar electric vehicles on the road.

With Jaguar set to become a pure-electric brand from 2025, it's as exciting a time for Jaguar off the track as it is for the team on it. Enjoy your race weekend!



JAMES BARCLAY

**MANAGING DIRECTOR, JLR MOTORSPORT
& TEAM PRINCIPAL, JAGUAR TCS RACING**

AT A GLANCE

ABB FIA FORMULA E WORLD CHAMPIONSHIP


What started as nothing more than a shared dream between Formula E Founder Alejandro Agag and former FIA President Jean Todt, noted on the back of a Parisian restaurant napkin in 2011, became the world's first all-electric international single-seater championship and is now the fastest growing motorsport series on the planet.

From the first race in 2014 around Beijing's Olympic Park, the pace of EV technology development in Formula E has been staggering. Today's Formula E cars are capable of 200mph and are testing innovations never before seen in racing.

Formula E is now in its tenth season and the racing is faster, closer and fiercer than ever. As you'll see this weekend, a tenth of a second is an age in Formula E!




MEXICO CITY
ROUND 1
13 JAN



MISANO
ROUND 6
13 APR



SHANGHAI
ROUND 11
25 MAY



DIRIYAH
ROUND 2
26 JAN



MISANO
ROUND 7
14 APR



SHANGHAI
ROUND 12
26 MAY




DIRIYAH
ROUND 3
27 JAN




MONACO
ROUND 8
27 APR



PORTLAND
ROUND 14
30 JUN



SÃO PAULO
ROUND 4
16 MAR



BERLIN
ROUND 9
11 MAY



PORTLAND
ROUND 13
29 JUN



TOKYO
ROUND 5
30 MAR



BERLIN
ROUND 10
12 MAY



LONDON
ROUND 15
20 JUL



LONDON
ROUND 16
21 JUL



AT A GLANCE

ABOUT JAGUAR TCS RACING



Jaguar's heritage on-track is as rich as its provenance on the road. From 1935 – the year company founder Sir William Lyons first used the Jaguar name on a car – Jaguars have been synonymous with competition.

From Alpine Rally to World Sportscar Championship success – including seven Le Mans wins – through European Touring Car victory and Formula 1, the Jaguar name has raced in the very highest echelons of motorsport.

From a 'works' perspective (an official factory-run team), after a break of 12-years Jaguar returned to racing in October 2016, becoming the first luxury manufacturer to join the all-electric ABB FIA Formula E World Championship.

James Barclay has been Team Principal from that first race in Formula E in Season 3 with the Jaguar I-TYPE, and in Season 10 will contest both his and the team's 100th E-Prix in Tokyo – now with the Jaguar I-TYPE 6. Along the way, and up until the end of Season 9, the team has scored 12 wins, 32 podiums, seven pole positions and 1,043 points.

The majority of the wins have come from New Zealander, Mitch Evans, who has also been with the team from the very beginning, meaning he will reach the 100 race mark in Tokyo too.

Now operating out of a dedicated technical headquarters in Kidlington, Oxfordshire (opened in 2023), Jaguar TCS Racing finished runners-up in both Seasons 7 and 9 of the ABB FIA Formula E World Championship – taking the title fight down to the very last race on both occasions. In 2024, with Nick Cassidy joining the team for arguably the strongest driver line-up on the grid, Jaguar TCS Racing will be pushing hard for that first World Championship win in Formula E.



THE JAGUAR I-TYPE 6 IS THE MOST EFFICIENT JAGUAR RACE CAR EVER.

KEY STATS



W: 1707mm
H: 1025mm
L: 5020mm

DIMENSIONS



856kg

WEIGHT



200mph
320kph

TOP SPEED

Formula E regulations make for the very closest of racing. All teams use the same chassis, bodywork and battery (with 38.5kWh useable energy), but the Jaguar I-TYPE 6's powertrain and rear suspension are bespoke Jaguar designs, as are the car's cutting-edge software control systems.

This in-house powertrain and software development gives our engineers creative freedom to explore innovative approaches and technologies without constraint including future EV road-going applications.

The powertrain itself – consisting of the motor, an inverter (which converts DC current from the battery to AC current for that motor) and transmission – are compact enough to fit into a carry-on suitcase, yet produce up to 350kW, that's the equivalent of 470hp.



FAST FACTS

The all-electric Jaguar I-TYPE 6 is so efficient that the amount of energy it uses to finish a race is the same as could be provided by just 5-litres of petrol.....but if the I-TYPE 6 were powered by a petrol engine – which is much less efficient – it would need at least 24-litres of fuel to finish.



Jaguar pioneered the use of disc brakes in competition on the Le Mans-winning C-type in the 1950s, and then brought that life-saving technology to the road. Now, the Jaguar I-TYPE 6 is demonstrating the potential of future EV technology at the limit – including the ability to race with no rear brakes!



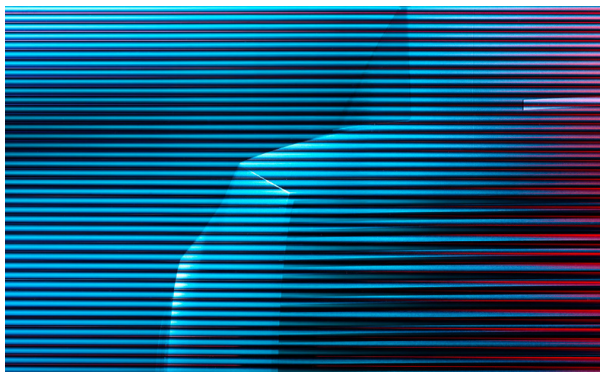
The Jaguar I-TYPE 6 is capable of a split-second change between 350kW traction and 600kW regenerative braking – the latter both slowing the car and re-charging the battery. The ‘regen’ effect is so powerful that the I-TYPE 6 not only needs no rear disc brakes, but it starts every race with only 60% of the energy it needs to finish – the additional 40% comes from that regen braking.



AT A GLANCE

FROM RACE TO ROAD

Jaguar TCS Racing doesn't only compete to win, it races to innovate and drive technical leadership on the track and for the road. From the team's very first season in 2016, technical learning and innovation from the track has fed through to Jaguar's road-going electrified vehicles for the benefit of its customers.



INNOVATING ON TRACK FOR THE NEXT GENERATION OF JAGUAR ROAD-GOING EVS

Silicon carbide may sound like something out of a science fiction movie, but through Jaguar TCS Racing's partnership with Wolfspeed, it's a material that's been in our race cars since 2017 and which will enable the next generation of Jaguar electric road-going vehicles. Silicon carbide is a semi-conductor that's used in the inverter to convert direct current from the battery to alternating current for the motor.

The faster silicon carbide enables the inverter to switch between the two, the faster our Jaguar race car on the track, and the more efficient the Jaguar EV on the road.

In 2018, Jaguar became the first premium manufacturer to bring a pure EV to market with the all-electric I-PACE – a model that won both World and European car of the year awards in 2019. It was also in 2019 that race-derived software updates for the I-PACE delivered customers up to 20km more real-world range.

Today, as Jaguar is undergoing a transformation to be reimagined as a pure-electric luxury brand from 2025 – the EV technical leadership and innovation that Jaguar TCS Racing drives forwards is more relevant than ever.

Racing to innovate also means looking for sustainable solutions wherever possible. No clearer example of that is Jaguar TCS Racing's pioneering work with technical partner Castrol where a circularity-first mindset has led to the creation of Castrol ON EV transmission fluid.




Castrol ON EV transmission fluid is blended using re-refined base oil recovered and recycled from used oil across Jaguar TCS Racing's testing and development. Proven by Jaguar TCS Racing in testing during Season 9, the I-TYPE 6 will race throughout Season 10 using Castrol ON, which will also drive the next generation of Jaguar EVs on the road.

Electrically conductive efficiency is another factor that's vital to the I-TYPE 6's performance – extracting heat efficiently from conductive components without using water or traditional coolants is vital to winning races.

The team's Official Materials Science Partner, Dow, has worked hand-in-hand with Jaguar engineers to optimise thermal management, advancing materials and applications on track to be applied in the future of road-going vehicles.

MITCH EVANS



AGE	29	
BORN	NEW ZEALAND	
FE DEBUT	2016	
SOCIAL MEDIA		
		

CAREER

AT A GLANCE

New Zealander Mitch Evans made his ABB FIA Formula E Championship debut with Jaguar Racing in 2016 when the British team returned to racing. Mitch was swiftly seen as one of the quickest drivers on the grid and, in season five, Mitch translated this into his first win for Jaguar Racing at the Rome E-Prix in April 2019. In season six Evans continued his success securing a pole position and podium in Santiago and a dominant victory in Mexico City. In season seven and eight, Evans fought for the drivers' title up until the final day of the season and made history again as the only driver to have won both races in the double-header in the Italian capital of Rome in 2022.

Evans, who is based in Monaco, achieved his biggest points haul to date in 2023 and finished the season third in the Drivers' World Championship. He secured four wins, seven podiums and three pole positions. Mitch took the title fight to the final weekend for the third successive season, underlining his status as one of the very best drivers in Formula E.

Mitch started karting at the age of six and won the NZ Grand Prix at 16. Mentored by former F1 racer Mark Webber, the young driver went on to win the 2012 GP3 title. Moving to GP2 in 2013 and at just 18 years of age, while still a rookie, Mitch became the youngest driver in GP2 history to stand on the podium after finishing third in Sepang, Malaysia. More success followed in 2015 when Mitch finished second at the 24 hours in Sepang Malaysia. His older brother Simon won the second season of the Jaguar I-PACE eTROPHY series in 2020.

Mitch continues his relationship with Jaguar TCS Racing from the 2024 season, his eighth year with the team and the longest driver and team pairing in Formula E history. In Tokyo, Mitch and Jaguar TCS Racing will celebrate their 100th race together.

NICK CASSIDY



CAREER

AT A GLANCE




Born in Auckland, New Zealand, Nick Cassidy first began karting at six years old and has gone on to become a strong talent in motorsport. The Kiwi won his first single seater title at the age of 14 and went on to twice-win the Toyota Racing Series at 18. In 2015, Nick's career took him to Japan where he secured the coveted 'Triple Crown' of Japanese motorsport titles: Japanese Formula 3 in 2015, Super GT in 2017 and the Super Formula Championship in 2019.

Currently a global brand ambassador for Red Bull, Nick drove his debut season for Red Bull Alpha Tauri AF Corse in DTM in 2022 and won races at both Spa and Spielberg. Nick also raced in the FIA World Endurance Championship for the first time with the AF Corse Team (Ferrari), finishing 4th in the Spa 6-hour race and fifth in Le Mans 24 hours.

The ABB FIA Formula E World Championship is where Nick has most recently made his mark. Nick embarked on his all-electric chapter in 2020 and joined the Envision Virgin Formula E team. In the 2022 season, Nick had his first victory at the New York E-Prix, a podium in London, and finished eleventh in the Drivers' Championship.

Having now completed three seasons with Envision Racing, the 2023 season marked his most successful to date, becoming runner-up in the Drivers' World Championship and securing 4 wins, 8 podiums and 1 pole position. Nick was also instrumental in winning the Teams' World Championship with Jaguar's customer team Envision Racing, driving a Jaguar I-TYPE 6.

Nick Cassidy joins Jaguar TCS Racing for the 2024 season of the ABB FIA Formula E World Championship, racing alongside teammate and fellow New Zealander Mitch Evans.

AGE	29	
BORN	NEW ZEALAND	
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AT A GLANCE

CUTTING TO THE RACE...

QUALIFYING

Qualifying in Formula E is unique in the motorsport world, beginning with two separate groups of 11 drivers – each group running for a ten-minute session at 300kW. The fastest four from each group then progress to a duel format, competing against one another head-to-head in a knockout using 350kW over a single flying lap.

The fastest four then duel in two semi-finals, leaving two drivers to compete for pole position. The pole-sitter not only has the advantage of starting from the front of the grid, but three World Championship points are also awarded. It's not a process for the faint-hearted...

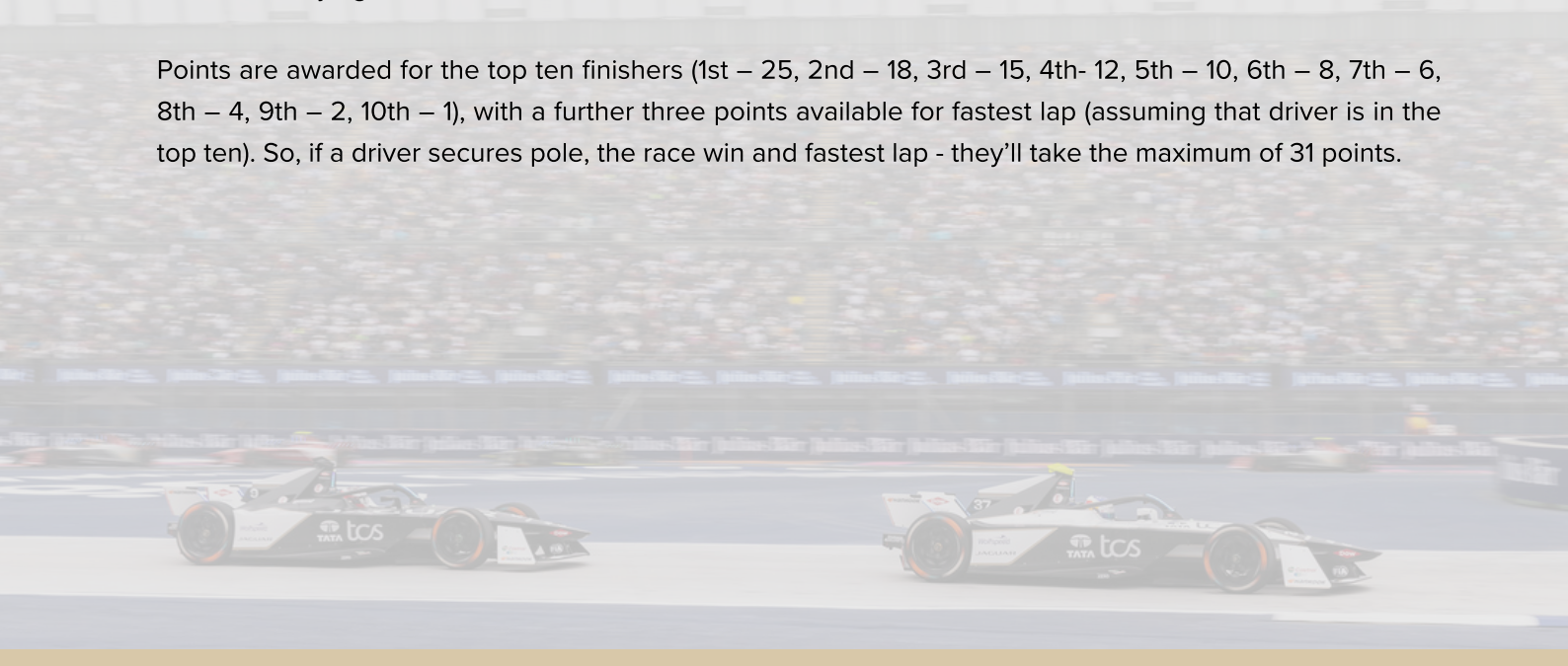
RACE (E-PRIX)

Races run over a specified number of laps (not a set duration) and frequently involve more overtaking in a single race than in several F1 races combined.

To win, drivers need to be both incredibly fast, and incredibly finely judged in terms of managing their car's power. Remember, each car only starts with 60% of the energy it needs to finish a race, the remainder coming from energy regenerated under braking. Cross the line with a fraction of useable power left...then you've extracted everything possible from the car!

During the race drivers are able to increase power from 300kW to 350kW by taking Attack Mode. Choosing when to take Attack Mode in itself is a fine art, as it is activated by driving through a zone 'off' the racing line. So, it takes time to activate – but then you gain time back with it. Taking Attack Mode is forbidden in the first two laps, but once activated each driver must use it twice during a race, the duration it lasts for varying from race to race.

Points are awarded for the top ten finishers (1st – 25, 2nd – 18, 3rd – 15, 4th – 12, 5th – 10, 6th – 8, 7th – 6, 8th – 4, 9th – 2, 10th – 1), with a further three points available for fastest lap (assuming that driver is in the top ten). So, if a driver secures pole, the race win and fastest lap - they'll take the maximum of 31 points.



AT A GLANCE

PARTNERS & SUPPLIERS



TCS is an IT services, consulting, and business solutions organization that has been digitally transforming many of the world's largest businesses for over 55 years. TCS works to build better futures and uses learnings from the racetrack to transform the mobility ecosystem. A part of the Tata Group, TCS has over 603,000 consultants worldwide.



Wolfspeed leads the market in the worldwide adoption of silicon carbide and GaN technologies. We unleash the power of possibilities through hard work, collaboration, and a passion for innovation.



The Dow Chemical Company is an American multinational corporation headquartered in Midland, Michigan, United States. The company is among the three largest chemical producers in the world. They are an Official Materials Science Partner and a believer in the power of sport.



At Castrol our passion for performance, combined with a philosophy of working in partnership, has enabled us to develop products that have been at the heart of numerous technological feats on land, in the air, sea and space.



A leader in Information Management, OpenText offers a comprehensive portfolio of solutions across information services, digital experiences and operations, business networks, security, software development, modernization, and analytics.



Alpinestars, the world's premier motorsports performance protection manufacturer, has been racing at the highest levels of motorsports for nearly 60 years.



AERO Sustainable Material Technology is revolutionizing the paint industry from the molecule up. AERO is a lightweight, ultra-durable decorative film system that aims to eliminate the large environmental impact of traditional paint.



JAGUAR

tcs

RACING

THANK YOU