

2016 LE MANS 2 4 H O U R S R A C E G U I D E





The ultimate expression of a car manufacturer's product is GT racing. It offers one of the most accessible, competitive and exciting spectacles in global motorsport today. The FIA World Endurance Championship (WEC) provides a series that is today, rivalling Formula One.

The jewel in the crown of sportscar racing and since 2012, a part of WEC, Le Mans 24 Hours is recognised not only as one of the most famous races in the world, but one of the toughest races ever.

The oldest active endurance race for sportscars, it is held annually here at Circuit de la Sarthe in Le Mans, France.

Since 1923, the gruelling round the clock race is renowned for being a true test of man, machine, endurance and efficiency.

After a long absence away from this prestigious motorsport event, Ford now returns in a four-car attack hoping to make history once again.







One hundred and fourteen years ago, Henry Ford entered a 10-lap, 10 mile race at the Detroit Driving Club in Grosse Point, Michigan in his self-built race car called "Sweepstakes". Going up against a heavily-favoured Alexander Winton, Henry Ford took a surprising win that ultimately changed automotive manufacturing forever.

On the back of this win, Henry Ford was able to set up the Ford Motor Company just two years later.

Motorsport has long been a core component of Ford's DNA. This year Ford has returned to the track with an all-new generation of GT race car, half a century after securing a 1-2-3 finish at this prestigious race with the iconic GT40 in 1966.

The Ford GT race car is a proof point of Ford innovation and is based on the all-new ultra-high-performance Ford GT supercar unveiled in January 2015





The Ford GT race car is based on the all-new Ford GT road car - the ultimate expression of form following function. Its teardrop-shape design is the result of extensive work in the wind tunnel. With a carbon-fibre body and projected 500+ PS from a 3.5-litre EcoBoost V6 engine, its technological innovations are all befitting of this modern day interpretation of a performance icon.

Designed for speed and performance from the ground up. Whether on the road or on the track, every single element of the Ford GT was designed to deliver the extraordinary speed and exceptional handling found only in purpose-built racing cars.





RACE CAR TECHNICAL SPECIFICATION

The Ford GT race car is the ultimate expression of innovation. With its precise balance of power and efficiency, Ford's EcoBoost® engine delivers incredible performance; the very same EcoBoost technology that propels the road car and over five million Ford vehicles worldwide. That's just one of the ways Ford helps drivers go further every day.

WEIGHT AND DIMENSIONS

 Dry weight:
 <1310kg</td>

 Length:
 4763mm

 Width:
 2045mm

 Height:
 1030mm

 Wheelbase:
 2710mm

BODY

Carbon fibre body panels
Aerodynamic front splitter
Adjustable carbon fibre rear wing

STEERING

Electric power assisted steering

Ouick release steering wheel

INTERIOR

Sparco carbon fibre seat
Sparco six-point safety harness
Fire extinguisher system
AGM battery

TRANSMISSION

Six speed sequential transmission Semi-automatic paddle shift Racing clutch Limited slip ramp/plate differential

SUSPENSION

Double wishbone pushrod

Torsion bar suspension

ENGINE

Twin-turbocharged
EcoBoost V6
Dry sump oil system
Power >500 PS
Torque >500 Nm

CHASSIS

chassis
Steel roll cage to FIA safety standards
High speed pneumatic jack system

Lightweight carbon/aluminium

BRAKES

Six pot front Brembo calipers
Four pot rear Brembo calipers
Vented Brembo discs

FUEL SYSTEM

95 litre fuel cell to FIA safety standards Twin quick release couplings

WHEELS & TYRES

Front - 12.5" x 18"

Rear - 13" x 18"

Michelin 31/68-18

Michelin 31/71-18





DRIVER CATEGORIES

In the World Endurance Championship the drivers are categorised. This determines who can drive in the GTE Pro and Am classes, as well as in LMP1 and LMP2.

The drivers participating at Le Mans are categorised as follows:

Platinum: professional driver generally recognised as a well-known driver on the international scene.

Gold: professional driver in international series or who has distinguished themselves in national championships.

Silver: driver who has distinguished themselves in a national or international series or a driver satisfying the criteria of the platinum category but aged over 60.

Bronze: any driver holding an international B licence without a significant record of achievement in motorsport.



The #66 car is identifiable by its green accent colours on the screenstrip, wing mirrors and LED strip on the windscreen.





BILLY JOHNSON

Born: 10 October 1986

Nationality: American

Lives: Lake Worth, Florida, USA

Driver category: Platinum

Billy Johnson is an American professional sportscar driver. The Californian started his career racing go-karts and single-seaters before transitioning into sportscars and stockcars. Over the last nine years, Billy has become one of the most successful drivers in IMSA Continental Tire history and continues in 2016 behind the wheel of a Ford Shelby GT350R-C Mustang. He will make his Le Mans debut in the #66 Ford GT.



STEFAN MÜCKE

Born: 22 November 1981

Nationality: German

Lives: Berlin, Germany

Driver category: Platinum

Stefan Mücke is a championship-winning sportscar driver. The German started his career in go-karts and single-seaters before honing his craft in the German DTM series. After eight years with Aston Martin, during which time he has won many of sportscar racing's biggest events, Stefan switches to Ford for 2016 to take on the challenge of winning the Le Mans 24 Hours.



OLIVIER PLA

Born: 22 October 1981

Nationality: French

Lives: Toulouse, France

Driver category: Platinum

Frenchman Olivier Pla is one of the world's top sportscar racers. His career began in single-seaters and his talent took him all the way to GP2, just one step from Formula One. When Olivier made the switch to sportscar racing he quickly built a reputation for incredible precision, speed and consistency behind the wheel.



The #67 car is identifiable by its blue accent colours on the screenstrip, wing mirrors and LED strip on the windscreen.





MARINO FRANCHITTI

Born: 7 July 1978

Nationality: British

Lives: Beaconsfield, UK

Driver category: Platinum

For Marino Franchitti being a racing driver is part of his DNA. The Scottish racer began his career behind the wheel at the age of eight and has gone on to win some of the biggest events in sportscar racing. 2016 will be Marino's first year in the FIA World Endurance Championship but not his first time at Le Mans as he has raced here on five occasions.



ANDY PRIAULX

Born: 8 August 1973

Nationality: British

Lives: Guernsey, UK

Driver category: Platinum

Andy Priaulx MBE is best known for his three FIA World Touring Car Championship titles but the British driver has also won the FIA European Touring Car Championship and triumphed at the Nürburgring 24 Hour and Sebring 12 Hour races. From the moment he took up karting at the age of 11 he has competed in almost every formula from Hillclimb to Formula 3 and onto touring cars and sportscars.



HARRY TINCKNELL

Born: 29 October 1991

Nationality: British

Lives: Sidmouth, UK

Driver category: Platinum

Considering the fact that Harry Tincknell only made the switch from single-seaters to sports cars in 2014 it can be surprising to hear that he is already a Le Mans winner. For those who have seen him race — especially those who have raced against him — it is no surprise at all. Harry's LMP2 class win at Le Mans in 2014 sealed his reputation as a fast and mistake-free driver.



The #68 car is identifiable by its red accent colours on the screenstrip, wing mirrors and LED strip on the windscreen.





SÉBASTIEN BOURDAIS

Born: 28 February 1979

Nationality: French

Lives: St. Petersburg, Florida, USA

Driver category: Platinum

On his 10th birthday, Sébastien Bourdais received his first kart from his father Patrick (Le Mans 24 Hours driver between 1993-2006) and by the age of 12 he became the Series champion in the Maine Bretagne League. The local boy is now a four-time IndyCar champion and a 34-time race winner in the series which ranks him eighth on the all-time list. This will be his 11th participation in a race very close to his heart.



JOEY HAND

Born: 10 February 1979

Nationality: American

Lives: Wilton, California, USA

Driver category: Platinum

Joey Hand returns for his second full-time season with Ford Chip Ganassi Racing in 2016. The many highlights of his career include: winning at the Lone Star Le Mans at COTA, recording five podium finishes in his first season with Ford Chip Ganassi Racing (in the prototype class), and winning the 2011 Rolex 24 at Daytona. He previously competed in the DTM series from 2012 to 2014 and took part in the American Le Mans Series from 2004 to 2011.



DIRK MÜLLER

Born: 18 November 1975

Nationality: German

Lives: Thurgau, Switzerland

Driver category: Platinum

Dirk Müller started his IMSA career 17 years ago and has competed in 111 races in the series. He has recorded 18 wins and 30 pole positions during his tenure and most recently competed in a full-season IMSA entry for BMW Team RLL in the GTLM class in 2014. He won the American Le Mans Series title twice in GT - the first in 2000 with Porsche and the second in 2011 with current team-mate Joey Hand.



The #69 car is identifiable by its yellow accent colours on the screenstrip, wing mirrors and LED strip on the windscreen.





RYAN BRISCOE

Born: 24 September 1981

Nationality: Australian

Lives: Connecticut, USA

Driver category: Platinum

Twelve-time IMSA and eight-time Verizon IndyCar Series race winner Ryan Briscoe rejoins the Ganassi team after most recently racing the No. 8 NTT DATA car in the 2014 Verizon IndyCar Series for the team. Over the past 10 years he has driven for multiple IMSA teams, recording 12 wins over 36 races, and most recently won the 2015 Rolex 24 at Daytona and the 2015 12 Hours of Sebring in the GTLM class.



SCOTT

Born: 22 July 1980

Nationality: New Zealander

Lives: Indianapolis, Indiana, USA

Driver category: Platinum

Scott Dixon has been a permanent fixture at Chip Ganassi Racing Teams for 14 years and has been on the Rolex 24 at Daytona roster for Chip Ganassi Racing since the team's inception in 2004. The four-time and reigning Verizon IndyCar Series Champion holds the distinction of being the most successful active Indy car driver with 38 victories, which ranks him fifth on the all-time win list. Racing at Le Mans is the realisation of a dream for Scott.



RICHARD WESTBROOK

Born: 10 July 1975

Nationality: British

Lives: Bath, UK

Driver category: Platinum

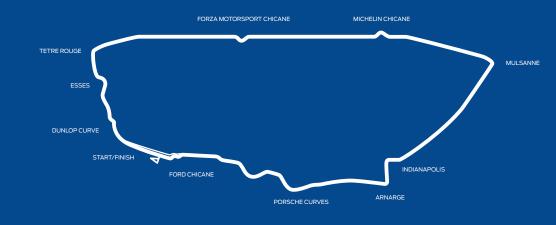
Following a promising karting and single-seater career, Richard Westbrook switched to GT racing, soon signing a factory contract with Porsche. He won the FIA GT2 Championship in 2009. In 2011, he signed with Chevrolet as a factory driver for both their GT and prototype programmes recording eight wins, including the 2013 12 Hours of Sebring, the 2014 and 2015 Sahlen's Six Hours of the Glen, and eight pole positions over his nine-year sportscar career.





CIRCUIT DE LA SARTHE

38 TURNS 8.47MILES/13.629KM



LAP RECORDS

LMP1	A Lotterer	Audi R18 e-tron quattro	3:17.475	248.5 kph	2015
LMP2	O Turvey	Gibson 015S Nissan	3:36.679	226.4 kph	2015
LMGTE Pro	D Turner	Aston Martin Vantage V8	3:53.763	209.9 kph	2014
LMGTE Am	C Nygaard	Aston Martin Vantage V8	3:54.480	209.2 kph	2014

A-7 OF LE MANS



IS FOR ACO

The Automobile Club de l'Ouest or 'ACO' as it is known: the organiser of the Le Mans 24 Hours. Founded in 1906 by car building and racing enthusiasts, the ACO is the largest automotive group in France.



IS FOR BOX

"Box this lap!" This is the call that goes out on the radio to the driver when he has come to the end of his stint and it is time for a pit stop. A 'stint' in the Ford GT lasts for iust under one hour, which will be around 13 laps of Le Mans.



IS FOR CLASS

The Ford GT oozes class but that's not the sort of class we're talking about here. There are four classes at Le Mans: LMP1, LMP2. LM GTE Pro and LM GTE Am. The Ford GTs compete in the GTE Pro class, which is the top class for GT cars. The Class of 2016 is made up of four Ford GTs, three Ferraris, two Aston Martins, three Porsches and two Corvettes.



IS FOR DRIVERS

Fach Ford GT at Le Mans has a crew of three drivers. While one driver is in the car, another has just finished his stint and is getting a bite to eat before heading off for a quick nap. The other driver has just woken up and is getting ready for his turn at the wheel.



IS FOR ECOBOOST

Each Ford GT is powered by Ford's twin-turbocharged V6 EcoBoost engine. This EcoBoost engine has raced for two years in the IMSA DP class.



IS FOR FORD GT40

In 1966 the Ford GT40 finished the Le Mans 24 Hours in 1st, 2nd and 3rd place. It went on to win again in 1967, 1968 and 1969, hence the race numbers for the four 2016 Ford GTs.



IS FOR GRID

Le Mans used to have a standing start whereby the drivers would all dash across the track, jump in their cars and head off on their way. Today's rolling start was introduced in 1971 on safety grounds. Nowadays the 'grid' lines up in the traditional 'ear of corn' layout during the prerace ceremonies but the actual race start is a rolling start.



IS FOR JACOBINS

The Place des Jacobins is the area in the Le Mans. Town Centre where the teams take the race cars to be checked by the scrutineers a few days before the race. This tradition gives fans the opportunity to see the cars 'in the flesh' and listen to the drivers as they are interviewed on a live stage.



IS FOR KNOWLEDGE

Winning Le Mans is a monumental feat and takes knowledge and experience. The Ford GT race car programme manager is George Howard-Chappell who has previously led teams to victory at Le Mans on three occasions.



IS FOR HELMET

The rules state that all Le Mans drivers must use the highest specification carbon fibre helmet. This is the most personal piece of kit for each driver and is the place for them to show off their own livery. Halso stands for HANS which is the device attached to the driver's helmet to protect them from whiplash or worse.



IS FOR INNOVATION

The Ford GT is the most advanced Ford production vehicle ever, featuring the latest in lightweighting, aerodynamics and EcoBoost engine technology – an innovation showcase for the Ford brand.



IS FOR LA SARTHE

The Mecca of the sportscar fan. The Circuit de la Sarthe is the official name for the 8.47mile/13.629km Le Mans 24 Hours circuit, It's a mixture of public roads and private racing circuit. There are grooves along the Mulsanne Straight which have been worn by the trucks that travel along it on a daily basis.



The Ford GTs are allocated 28 sets of slick tyres and 15 sets of wet weather tyres for the Le Mans race. Whether they all get used depends a lot on the weather but also on whether the team can 'double stint' the tyres. This saves time in the pit stops but has to be weighed up against the loss in performance on the track as the tyres 'go off'.

IS FOR NUTRITION

Le Mans is tough on cars, tough on the drivers and tough on the team. We use the best fuel and lubricants for the Ford GTs and we make sure the team and drivers are well fed and watered throughout the toughest event of the vear.



This is what happens when a car steers more than the driver asks it to. If you have oversteer at the exit of the chicanes on the Mulsanne Straight you can't get the power down efficiently so it takes longer to get back up to maximum velocity, which is important with the long straights at Le Mans.

IS FOR PARADE

The day before the 24-hour race gets underway all of the drivers head into the Le Mans town centre for the Driver's Parade. The drivers ride around the town in open top cars, giving out memorabilia to the crowds of people lining the streets. By Friday most of the guarter of a million spectators who come to Le Mans are on site.

IS FOR QUALIFYING

This takes place over three sessions at Le Mans. The first is on Wednesday night, then there are two further sessions during Thursday evening. Traditionally, if the weather is dry the pole position times are usually set just before darkness falls. This is when the air is cooler and there isn't enough darkness to cause sight issues. These days the headlights are so good the pole times are usually set when the air is at its coolest just before midnight.

IS FOR RELIABILITY

It goes without saving that reliability is as important as speed at Le Mans.



IS FOR SOCIAL MEDIA

@FordPerformance

#FordLeMans #LEMANS24

IS FOR WHEEL

As in ferris! The Le Mans ferris wheel is one of the best seats in the house during the 24-hour race.

IS FOR TEAMWORK

The Ford Chip Ganassi Racing team is running four Ford GTs at Le Mans. For the rest of the season the team splits to run two cars in the FIA World Endurance Championship and two in the IMSA WeatherTech SportsCar Championship.



This is what occurs when a car steers less than the amount commanded by the driver. One place you do not want to have understeer is through the Porsche Curves. Racing through there is like "threading a needle" says Marino Franchitti. You change direction so quickly you want the car to go exactly where you tell it to go.



IS FOR XENON

The headlights of the Ford GTs are made up of LED and Xenon lights. To help differentiate between cars in the dark at Le Mans the GT cars all have vellow lights and the LMP cars have white lights.



IS FOR YELLOW

As in Full Course Yellow or FCY for short. This is a form of safety car, without actually using a safety car. During a FCY all cars on track have to slow to 80kph until the FCY ends. Whether an incident requires a traditional safety car period or a FCY is the Race Director's decision. You'll notice that Le Mans suddenly goes eerily quiet during a FCY.

IS FOR VILLAGE

The Le Mans 'Village' is the place to go for shopping. displays and entertainment at Le Mans.

IS FOR 77777777

...which nobody gets much of at Le Mans!





THE CARS

Four categories of cars will be competing in the 84th Le Mans 24 Hours: LM P1 and LM P2 for prototypes and two GT classes – LM GTE Pro and LM GTE Am.

There are separate technical and sporting rules for each category, although some rules apply to each vehicle class with no exceptions.

With regulations dictating the maximum fuel tank size, fuel economy plays an important role. When the car is being refuelled, the engine must be turned off and the team is not allowed to touch the car; only the drivers can be changed while refuelling. This means the tyres can only be changed when refuelling has completed. As a result, pitstops with tyre changes take significantly longer as the rules restrict the number of team members able to carry out the task; this means 2.5 second F1-style pitstops are not possible in endurance racing.



LMP CARS

Le Mans Prototypes (LMP) are open or closed cockpit racing cars specifically built to meet the FIA and ACO regulations for the WEC and Le Mans 24 Hours.

LMP cars are in two categories:

I MP1:

Hybrid: with energy recovery systems.

Non-hybrid: without energy recovery systems for private teams only.

LMP2:

These are non-hybrid cars and can only be run by private teams.



LMP1

Number panels: White numbers on red background
Weight: Hybrid - 875 kg Non-hybrid - 855 kg
Engine: Hybrid system - unlimited engine size, plus energy recovery system

Driver categories:

2 LM

Number panels:

Weight: Engine:

ingine:

Driver categories:

LMP2

White numbers on blue background

900 kg

5l normally aspirated petrol with a maximum of eight cylinders 3.2l turbo/supercharged petrol with a maximum of six cylinders

Non-hybrid - 5.5l max engine size no energy recovery

At least one silver or bronze driver

Bronze drivers not permitted



GTE CARS

Grand Touring Endurance (GTE) cars are production-based sportscars. The cars are available for sale from manufacturers recognised by the endurance committee.

Cars are eligible for competition once a minimum of 100 road cars for the 'large manufacturers' and 25 road cars for the 'small manufacturers' have been produced.



Number panels:

Weight: Engine:

Driver categories: Car model:



Number panels:

Weight: Engine:

Driver categories: Car model:

GTE PRO

White numbers on green background 1245 kg prior to balancing adjustments 5.5l max normally aspirated petrol 4.0l max turbo/supercharged petrol From any category

GTE AM

Must be 2016 specification

White numbers on orange background
1245 kg prior to balancing adjustments
5.5l max normally aspirated petrol
4.0l max turbo/supercharged petrol
At least one bronze and one bronze or silver
Must be 2015 specification

PARTNERS



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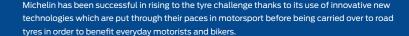


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www.multimatic.com

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