

Renault: 40 Years in Formula 1

On July 16, 1977, Renault entered its very first Formula 1 grand prix to embark upon a new chapter in its long and illustrious history – one that dates back to the very infancy of motorsport. Over the ensuing decades, Renault competed successfully in all forms of the sport, from circuit racing, to conventional and cross-country rallying, record-breaking attempts and endurance racing. It was therefore perhaps inevitable that its various motor racing exploits would ultimately lead Renault to F1, the absolute pinnacle of the sport.

In the four decades that have elapsed since 1977, Renault's ambitious and enduring commitment to the sport has been characterised by an intelligent, pioneering approach and technological prowess. Not only has the manufacturer notched up a long list of victories, but its enviable record has been achieved by dint of ongoing innovation in the areas of aerodynamics, chassis and engines. Renault is today a key player in the fast-paced world of grand prix racing, widely respected by all its rivals up and down the pit-lane. Here is a comprehensive history of Renault in Formula 1.

The six landmark dates that preceded Renault's F1 debut

July 23, 1975: The first 1.5-litre turbocharged V6 engine, dubbed 32T (bore x stroke: 80mm x 49.4mm), ran on the test bed at Viry-Châtillon.

August 8, 1975: The second 1.5-litre turbocharged V6, called 33T (bore x stroke: 86mm x 42.8mm), ran on the test bed at Viry-Châtillon.

November 21, 1975: The 33T took to the track for the first time, discretely concealed beneath the bonnet of an Alpine-Renault A441 sport-prototype.

December 19, 1975: The 32T similarly took to the track for the first time 'incognito', powering the same chassis.

January 3, 1977: Work began on the construction of the RS01 chassis.

May 10, 1977: The RS01 was officially unveiled at Pub Renault (now known as the Atelier Renault) on the Champs Elysées in Paris.



Renault cherry-picked five grands prix for the RS01's first appearances. The manufacturer's arrival on the grid broke new ground in the world of Formula 1 with the introduction of the turbo power. However, this exciting innovation came with a handicap – the so-called 'turbo lag' under acceleration. The five races selected were essentially to be treated as glorified test sessions, at circuits where the effects of turbo lag would not be an insurmountable problem for the driver. Just one car was entered, for Renault driver Jean-Pierre Jabouille, with the Frenchman joining the fray at Silverstone (Great Britain), Zandvoort (Netherlands), Monza (Italy), Watkins Glen (USA) and Mosport (Canada). The Renault RS01 made its competitive debut on July 16 in the British Grand Prix.

1978



Renault entered 14 of the 16 grands prix on the 1978 calendar, with the manufacturer's F1 programme now a major focus in its workshops at Viry-Châtillon. The first notable result

came on October 1 in the United States Grand Prix, as Jabouille scored Renault's maiden points in F1 with a fourth-place finish on his 36th birthday.

1979



This year marked Renault's first full season in motor racing's premier series, with René Arnoux recruited to drive a second car alongside Jabouille. The RS01 chassis made way for the RS10, then RS11 chassis, a far more sophisticated ground-effect car that incorporated the manufacturer's V6 1.5-litre turbo engine more seamlessly. At the start of January, at Dijon-Prenois, France, Renault Sport carried out its first tests with a V6 engine equipped with twin turbos — a development that would be introduced competitively in Monaco at the end of May. On July 1, Renault made history in the French Grand Prix at Dijon-Prenois as Jabouille won by more than 14 seconds from the Ferrari of Gilles Villeneuve and Arnoux in the sister RS11, whose thrilling duel for the runner-up laurels would go down in motorsport folklore.

Victory in France

Sidebar

*Jean-Pierre Jabouille

Born on October 1, 1942, Jean-Pierre Jabouille cultivated a close relationship with Renault from the early 1970s, representing the brand both in junior formulae as well as in sports car racing. The Frenchman clinched the European Formula 2 crown with an Elf2-Renault in 1976 and went on to start 49 grands prix – all bar three of them for Renault. He claimed six pole positions and two race wins in F1, all with Renault.



Renault's rapid rate of progress continued in 1980, with the manufacturer rapidly grabbing the attention of all of its Formula 1 rivals as its pioneering turbo engine technology – greeted with no shortage of scepticism three years earlier – truly began to demonstrate its worth. From this season, Renault's F1 cars would no longer go under the moniker RS, but rather RE, in deference to oil giant Elf for its significant contribution to Renault's grand prix effort. The French outfit won three times – twice with Arnoux (in Brazil and South Africa) and once with Jabouille (Austria) – to secure fourth place in the Constructors' World Championship standings. There was a late sting in the tail, however, as a serious accident for Jabouille in Canada ruled the Frenchman out of the final grand prix.

Victories in Brazil, South Africa and Austria

Sidebar

*René Arnoux

Born on July 4, 1948, René Arnoux followed a conventional route to the top of the sport, competing in karting and subsequently junior Renault formulae. The Frenchman was crowned European Formula Two Champion behind the wheel of a Martini-Renault in 1977 and went on to start 149 grands prix – 58 in Renault colours. Between 1979 and 1982, Arnoux tallied 14 pole positions and four race wins for the brand.



The departure of the injured Jabouille for Ligier paved the way for the recruitment of former European F3 Champion Alain Prost. Behind the wheel of the team's new RE20B, the young Frenchman enjoyed an impressive season, registering three victories including a popular triumph on home turf at Dijon – the breakthrough success for a driver who had made his debut in F1 with McLaren-Ford only the previous year. Renault improved to third place in the Constructors' World Championship table, as Ferrari amongst others followed its lead by embracing turbo engine technology. Not only that, but the French manufacturer introduced one of its new inventions in 1981 – the DPV (variable pre-rotation device) – which further reduced turbo lag and would be copied by all turbocharged engines. In May, the new RE30 chassis replaced the RE20B.

Victories in France, the Netherlands and Italy

Sidebar

*Alain Prost

Born on February 24, 1955, Alain Prost remains the most successful French racing driver in history, having started 199 grands prix and lifted the F1 World Championship trophy on four separate occasions – in 1985 and 1986 with McLaren-Porsche, in 1989 with McLaren-Honda and in 1993 with Williams-Renault. His CV counts 51 career grand prix wins, nine of which were achieved with Renault, plus a further seven with Williams-Renault. Prost is now a Renault ambassador and special advisor.

1982

This season was a mixed bag, notwithstanding the four victories achieved – two apiece for Arnoux and Prost. Indeed, for much of the campaign, the latter was in the thick of the fight for the title only for reliability issues to dash his hopes of lifting the laurels. Renault introduced a number of innovations over the year, from the development of an exhaust-blown diffuser to electronic fuel injection, a transverse-mounted gearbox and ride-height control.

Victories in South Africa, Brazil, France and Italy



Alongside its factory team, Renault branched out to supply engines to the Lotus of Elio de Angelis and – from the British Grand Prix onwards – the sister car of Nigel Mansell. In the main team, Arnoux was replaced alongside Prost by America's Eddie Cheever. The pair began the season behind the wheel of the RE30C, before the Frenchman switched to the new RE40 from the second race on the calendar at Long Beach. It was Renault's most successful year in the top flight to-date, but Prost ultimately found himself pipped to glory by just two points by rival Nelson Piquet. The Brazilian's turbocharged Brabham-BMW ran on fuel that some believed did not comply with the sport's regulations. Not wishing to win the title in the courtroom, however, Renault elected not to appeal.

Victories in France, Belgium, Great Britain and Austria

1984



It was all-change at Renault in 1984, with Frenchman Patrick Tambay and Britain's Derek Warwick taking over from Prost and Cheever behind the wheel of the new RE50 chassis. Renault continued to power the Team Lotus entries of de Angelis and Mansell, while adding

the Ligiers of Andrea de Cesaris and François Hesnault to its 'customer' stable. At the final round of the season, in Portugal, Renault fielded a third car for Philippe Streiff.

1985



Tambay and Warwick remained on-board as Renault introduced the new RE60. Renault Sport continued to supply engines to Lotus (de Angelis and Ayrton Senna), Ligier (Jacques Laffite, de Cesaris and Streiff) and – from July onwards – Tyrrell (Stefan Bellof and Martin Brundle). Two of them – Bellof and Senna – were amongst the most exciting young prospects in the sport, with the latter immediately making a name for himself at the start of what would be an outstanding career. The Brazilian scored his first two race wins in F1 driving a Lotus-Renault (Portugal and Belgium), while team-mate de Angelis triumphed in the San Marino GP.

Victories for the Renault-powered Lotus in Portugal, San Marino and Belgium

Sidebar

*Elio de Angelis

Born on March 26, 1958, Elio de Angelis stood out in his era as an excellent and exceptionally refined competitor, both on and off-track. The Italian died in 1986 while participating in a private F1 test session with Brabham-BMW.



The previous August, Renault had announced that it would be shelving its F1 chassis production – and therefore its factory team – in order to concentrate wholeheartedly on the engine side. The first product of this revised approach was the turbocharged EF15, designed to respond to the new regulations that reduced fuel tank capacity from 220 litres to 195. Furthermore, for the first time, the EF15 incorporated a technical innovation that is now widely used by all of the sport's engine manufacturers – pneumatic valves. Lotus, Ligier and Tyrrell continued to run with Renault power, with Senna winning twice more at Jerez and Detroit. At the end of the year, Renault Sport withdrew from F1 entirely.

Victories for the Renault-powered Lotus in Spain and the United States

Sidebar

*Avrton Senna

Born on March 21, 1960, Ayrton Senna was killed in his 161st grand prix (San Marino GP) at Imola on May 1, 1994, behind the wheel of a Williams-Renault – but not before gaining cult hero status both within and beyond the sport. The Brazilian's outstanding record included 65 pole positions (16 with Renault turbo power), 41 grand prix victories and three Drivers' World Championship crowns with McLaren-Honda in 1988, 1990 and 1991.

1987

Although Renault Sport was no longer active in Formula 1, a new unit was formed at Viry-Châtillon, tasked with exploring a variety of projects. A key element of this work focused on the potential development of a naturally-aspirated F1 engine, within the guidelines of the sport's new regulations, which now permitted the use of 3.5-litre powerplants of this type alongside the pre-existing 1.5-litre turbos. Renault Sport discussed the viability of just such an engine with F1's leading teams, proposing it in either V8, V10 or V12 form, with the general consensus leaning towards a V10. Bolstered by this research, Renault Sport set about manufacturing a new V10, which would carry the name 'RS1'.

1988

The RS1 – a 67-degree V10 – ran for the first time on the test bed on January 30, 1988. Renault Sport concentrated its efforts on finding a top team to partner and, before the RS1 tests had even been completed, an agreement was reached with Williams.



Mated to the Williams FW12C and FW13 chassis, Renault's RS1 engine received high praise from the British outfit's two drivers, Riccardo Patrese and Thierry Boutsen. Indeed, at the first grand prix of the season, in Brazil, a Williams-Renault qualified on the front row of the grid and the remainder of the campaign would be similarly successful, with a brace of victories for Boutsen, plus Patrese's first pole position in almost six years in Hungary. The Italian went on to finish third in the final world championship standings behind the all-conquering McLaren-Hondas, with his Belgian team-mate not far behind in fifth. Williams-Renault secured second position in the F1 Constructors' classification, more than justifying Renault Sport's decision to return to the top flight.

Victories for the Renault-powered Williams in Canada and Australia

Sidebar

*Riccardo Patrese

Born on April 17, 1954, Riccardo Patrese long held the record for the highest number of starts in F1 with 256 grands prix under his belt. The Italian tallied six triumphs over the course of his career, four of which came with Williams-Renault.



The RS2 engine slotted even more seamlessly into Williams' FW13B chassis, courtesy of its smaller size (4.8cm shorter and 1.5cm lower). It was also 2kg lighter than before, with timing gears replacing the former timing belts. Notwithstanding these improvements, it was a difficult season for Patrese and Boutsen as rivals Ferrari and Benetton-Ford leapfrogged Williams-Renault into second and third respectively behind the still dominant McLaren-Honda.

Victories for the Renault-powered Williams in San Marino and Hungary

Sidebar

*Thierry Boutsen

Born on July 13, 1957, Thierry Boutsen forged a reputation as a tough competitor on the track and a quiet man away from it. The Belgian spent two years of his career competing for Williams-Renault, with whom he claimed all three of his grand prix wins.

1991



At Williams, Nigel Mansell replaced Boutsen behind the wheel of the new FW14, which benefitted from further developments to its Renault engine. The RS3 was a further 1.4cm lower and 2kg lighter than the RS2. Since the RS1, power output had increased from 650hp to 700hp at 12,500rpm. Williams-Renault regained second position in the Constructors' standings, hot on the heels of McLaren-Honda. With five victories to his credit, Mansell placed second in the Drivers' table behind Ayrton Senna, while Patrese won two races.

Victories for the Renault-powered Williams in Mexico, France, Great Britain, Germany, Italy, Portugal and Spain



A vintage season as the union between Williams' FW14B chassis and Renault's RS3C and RS4 engines proved to be a match made in heaven. The 1992 Williams was a technological masterpiece with its ground-breaking active suspension and semi-automatic transmission. The RS4 powerplant – identical in size to the RS3 – produced 750hp at almost 13,000 rpm. The dependable Patrese won in Japan, but it was Mansell who irrefutably stole the spotlight with nine triumphs as he wrapped up the title at the Hungarian Grand Prix in August, Round 11 of the 16-race calendar. Williams-Renault similarly dominated the Constructors' World Championship battle. Renault Sport also provided engines for the Ligiers of Erik Comas and Thierry Boutsen.

Victories for the Renault-powered Williams in South Africa, Mexico, Brazil, Spain, San Marino, France, Great Britain, Germany, Portugal and Japan Williams-Renault claimed Constructors' World Championship glory, with Mansell and Patrese locking out the top two positions in the Drivers' standings

Sidebar

*Nigel Mansell

Born on August 8, 1953, Nigel Mansell spent the lion's share of his career with Lotus, Ferrari and Williams. Enzo Ferrari was one of many to publicly hail the Briton's fighting qualities and never-say-die approach. Mansell won 31 races in F1, 28 of which were achieved with Williams.



Another outstanding season for Williams-Renault, with the arrival of three-time world champion Alain Prost, back in the Renault family after a decade away. The ultrasophisticated Williams FW15C chassis incorporated even more electronic and computerised technology than its predecessor, with the Frenchman describing it as a 'little Airbus'. The RS5 engine, which generated 770hp at 13,600rpm, also powered the Ligiers of Martin Brundle and Mark Blundell. Prost's seven victories were sufficient to secure a fourth Drivers' World Championship crown, with team-mate Damon Hill adding three more wins to the tally. Between them, the Williams-Renault pair notched up no fewer than 22 podium finishes.

Victories for the Renault-powered Williams in South Africa, San Marino, Spain, Canada, France, Great Britain, Germany, Hungary, Belgium and Italy Williams-Renault retained both its Drivers' and Constructors' World Championship crowns



In a tragic year, Damon Hill came within a single point of lifting the world championship laurels following a duel to the wire with Michael Schumacher. The Briton won six times behind the wheel of the Williams FW16 and FW16B, powered by Renault's RS6 engine, which nudged 14,500rpm at maximum speed. The overriding memory of 1994, however, was the loss of Hill's team-mate Ayrton Senna, killed at Imola during the San Marino Grand Prix. The Brazilian claimed his final three pole positions in F1 with Williams-Renault. Following a period of mourning, Senna was replaced by David Coulthard and later Nigel Mansell, who scored his final career victory for Williams-Renault in the season finale in Australia – although in the circumstances, celebrations were understandably muted. Ligier-Renault's French duo of Eric Bernard and Olivier Panis tallied a total of 13 points.

Victories for the Renault-powered Williams in Spain, Great Britain, Belgium, Italy, Portugal, Japan and Australia

Sidebar

*David Coulthard

Born on March 27, 1971, David Coulthard did not have an easy baptism in the top flight, called up unexpectedly in 1994 to replace Ayrton Senna at Williams-Renault. The Scot boldly took up the challenge but it was not until the following year that he achieved his maiden F1 victory with the team, at Estoril in Portugal.

1995



This season marked a change in the F1 regulations, with engine size reduced to three litres and no restrictions on in-race refuelling or fuel consumption. Renault's first three-litre unit ran on the test bed at Viry-Châtillon on November 25, 1994, and would rapidly prove itself to be the class of the field, outperforming rival powerplants from Ferrari, Mercedes, Honda, Peugeot and Ford. Such was its superiority that Williams found itself having to share Renault's engine expertise with another team, and not just any other team – Benetton, whose driver line-up was led by defending world champion Michael Schumacher. Having lifted the laurels with Benetton-Ford in 1994, Schumacher successfully retained his title in 1995 with the Benetton B195, whose Renault RS7 engine developed the same level of horsepower as its predecessor despite its lighter weight. That extraordinary performance allowed Benetton's B195 and the Williams F17 and 17B to dominate the campaign. Out of the year's 17 grands prix, Schumacher won nine and his team-mate Johnny Herbert one, with Damon Hill adding four for Williams and David Coulthard breaking his F1 duck in Portugal. The sole interloper was Jean Alesi, who rescued Ferrari's blushes by triumphing

in Canada. Schumacher, Hill, Coulthard and Herbert duly locked out the top four positions in the final standings, with Benetton-Renault seeing off Williams-Renault for Constructors' honours.

Victories for the Renault-powered Benetton in Brazil, Spain, Monaco, France, Great Britain, Germany, Belgium, Italy, the European and Pacific Grands Prix and Japan Victories for the Renault-powered Williams in Argentina, San Marino, Hungary, Portugal and Australia

Benetton-Renault won both the Drivers' and Constructors' F1 World Championship titles ahead of Williams-Renault

Sidebar

*Michael Schumacher

Born on January 3, 1969, Michael Schumacher remains the most successful driver in the history of F1 with no fewer than seven world titles to his credit – the first with Benetton-Ford in 1994, another with Benetton-Renault in 1995 and five more with Ferrari in consecutive years from 2000 to 2004. The German holds the record for race wins with a total of 91 from 307 grand prix starts.

*Johnny Herbert

Born on June 25, 1964, Johnny Herbert drove for a number of different teams in F1 either as an official driver or 'super-sub', but the Briton's finest season was unquestionably 1995, when – competing for Benetton-Renault – he claimed two of the three victories on his career CV.

1996



The off-season brought with it a raft of changes in the driver line-ups at the two Renault-powered teams. At Williams, Hill found himself with a new team-mate in the person of French-Canadian Jacques Villeneuve, while Schumacher and Herbert were replaced at Benetton by two of the most popular figures on the F1 grid – Jean Alesi and Gerhard Berger. Williams' FW18 chassis and Benetton's B196 were both powered by the same Renault RS8 engine – still featuring a 67-degree 'V', while tipping the scales at 3.5kg lighter than the RS7 and delivering 760hp at 14,500rpm. This was a golden season for Williams, with the British outfit winning 12 of the 16 races. Hill triumphed eight times to sew up the

Drivers' crown, with new boy Villeneuve adding another four to the team's dominant tally. At Benetton, Alesi wound up fourth in the final classification, with Berger two spots behind in sixth.

Victories for the Renault-powered Williams in Australia, Brazil, Argentina, the European Grand Prix, San Marino, Canada, France, Great Britain, Germany, Hungary, Portugal and Japan

Williams-Renault clinched the F1 Constructors' World Championship crown and locked out the top two positions in the Drivers' standings

Sidebar

*Damon Hill

Born on September 17, 1960, Damon Hill is the son of two-time F1 World Champion Graham Hill (1962, 1968). Patient and determined, the Briton showcased his immense courage by stepping up to the role of team leader at Williams-Renault in the aftermath of Senna's fatal accident in 1994. He won 22 grands prix in his career – all bar one of them with Williams-Renault.

1997



The driver line-up at Williams-Renault changed again, as Heinz-Harald Frentzen replaced Hill alongside Villeneuve, while Alesi and Berger remained on-board at Benetton. Williams' FW19 chassis and Benetton's B197 were both powered by Renault Sport's all-new RS9 engine. This V10 unit with a bigger 'V' angle (71°) was – at 2.5cm lower and 11kg lighter than its predecessor (now just 121kg) – a technological triumph, producing 760hp at 14,600rpm. Villeneuve won seven races and the world title, with Frentzen adding another victory to Williams-Renault's score as the team similarly cleaned up in the Constructors' standings. Benetton-Renault placed third.

Victories for the Renault-powered Williams in Brazil, Argentina, San Marino, Spain, Great Britain, Hungary, Austria and Luxembourg

The Williams-Renault drivers finished first and second in the Drivers' table, with the team lifting the Constructors' title for the fifth time in six years

Sidebar

*Jacques Villeneuve

Born on April 9, 1971, Jacques Villeneuve is the son of one of Formula 1's most legendary drivers, Gilles Villeneuve, who died at the wheel of a Ferrari in 1982. Like that of his father,

Jacques' career followed a rather unconventional route and he was one of the few drivers to enter F1 following a successful stint across the other side of the Pond, including victory in the celebrated Indianapolis 500 in 1995. The French-Canadian won 11 grands prix, all with Williams-Renault.

*Heinz-Harald Frentzen

Born on May 18, 1967, Heinz-Harald Frentzen arrived in F1 via the world of endurance racing. The German soon attracted Williams-Renault's attention with his standout performances, only to then struggle to match Villeneuve's speed as his team-mate quickly gained the psychological upper hand.

1998

Renault had left Jerez with mixed emotions following the final grand prix of 1997, with its joy at having powered Villeneuve and Williams to world championship glory somewhat tempered by its announcement that it would be withdrawing from the top flight at the end of the season. That said, there was scant desire to consign an engine as potent as the RS9 to mere museum status, and precision engineering specialist Mécachrome — a long-term Renault partner — duly agreed to continue running the powerplant under a rebadged name. As Renault Sport held a watching brief for the second time in its history, the Mécachrome GC37-01 powered the Williams FW20s of Villeneuve and Frentzen in 1998. The same unit — under the name Playlife GC37-01 — could be found in the back of Giancarlo Fisichella and Alexander Wurz's Benetton B198s, but no victories were forthcoming.

1999

The RS9 was rebaptised again, with Mécachrome becoming Supertec. This change, however, failed to yield any discernible improvement in results despite adding a third team to the roster in the form of BAR-Supertec (Jacques Villeneuve and Ricardo Zonta), alongside the Benetton-Playlife B199s of Fisichella and Wurz and Williams-Supertec FW21 duo Ralf Schumacher and Alessandro Zanardi.

2000

A slightly reduced commitment followed in 2000, with Supertec badging on the engine in the back of the Arrows A21s of Pedro de la Rosa and Jos Verstappen, and Fisichella and Wurz continuing to compete with 'Playlife' power in the Benetton B200. Whilst there were again no race wins, of greater significance were the discussions behind-the-scenes between Benetton and Renault, with the French manufacturer plotting its return to F1 with its own chassis and engine. The acquisition of Benetton's facilities was finalised over the summer.

In purchasing the Benetton team, Renault gained a ready-made, state-of-the-art chassis factory at Enstone, close to Oxford in the UK. Meanwhile, at Viry-Châtillon, production of the manufacturer's Formula 1 engine resumed with vigour. The B201 chassis was piloted in 2001 by Giancarlo Fisichella and future world champion Jenson Button, while the RS21 engine – although a three-litre V10 – was a completely new proposition. Characterised by a 'V'-angle of 101°, the height of its cylinder heads was markedly lower than that of its predecessor, while offering a significant increase in power, delivering almost 800hp at 17,200rpm.

2002



Renault's return to the grand prix grid as a full-fledged manufacturer entry came under the name Renault F1 Team, with the squad welcoming a new driver alongside Button in the person of Italy's Jarno Trulli. The Renault R202 chassis built at Enstone was powered by the RS22 engine, whose output of 825hp at 17,500rpm made it even more potent than before. Button and Trulli frequently threatened the podium without ever quite reaching it.



The seeds of success. Renault reprised a double-figure name for the chassis with the new R23, which would be replaced later in the season by the R23B, both powered by the RS23 engine. The chassis and engine alike broke new ground in several areas, the latter through its light weight and maximum revs of 18,000rpm. Button was replaced by the team's test-driver from the previous year — Fernando Alonso. At the Hungarian Grand Prix, the Spaniard stunned observers by claiming pole position, winning the race and — most astonishingly of all — lapping Ferrari's Michael Schumacher, the undisputed king of F1 for the best part of a decade. Renault retained fourth spot in the Constructors' World Championship rankings.

Victory for Renault in Hungary

Sidebar

*Fernando Alonso

Born on July 29, 1981, Fernando Alonso rapidly staked his claim as Renault's favourite son. After completing his rookie season in F1 with the small Minardi outfit in 2001, the Spaniard was appointed Renault test-driver in 2002 before being promoted to a race seat the following year. His Hungaroring victory famously made him the youngest grand prix-winner in history, aged just 22 years and 26 days. Still competing in F1 today, Alonso has tallied 32 wins to-date – 17 of them with Renault – and claimed back-to-back Drivers' crowns for the French manufacturer in 2005 and 2006. In so doing, he became the youngest-ever world champion in the sport at the age of 24 years and 59 days. He also contested the 2017 Indianapolis 500, leading the race before his engine failed.

*Giancarlo Fisichella

Born on January 14, 1973, Giancarlo Fisichella spent four years competing for Benetton between 1998 and 2001, before returning to the team in its new guise as Renault from 2005 to 2007. An elegant driver, 'Fisico' achieved a total of three grand prix victories – two of them with Renault in 2005 and 2006. The Italian subsequently switched to endurance racing with Ferrari.

*Jarno Trulli

Born on July 13, 1974, Jarno Trulli raced for Renault for three seasons, from 2002 to 2004. The Italian's sole grand prix victory came in Monaco in 2004.



For some time, it had been increasingly apparent that in order to extract maximum power from Renault's existing three-litre, 10-cylinder engine with a 'V'-angle of 101°, it would be necessary to sacrifice a little of the reliability that had long been such a hallmark of Renault's F1 powerplants. To add to that challenge, from 2004, it was no longer permitted to freely change engines over the course of a grand prix weekend, with the regulations henceforth allowing just one unit for all three days. In response to this, Renault Sport took the decision to go back to basics by abandoning the 'V'-angle of 101°. The new RS24 was a more traditional 10-cylinder unit with a 'V'-angle of 72°. This yielded an impressive power output of 880hp at 19,000 rpm. Alonso and Trulli both moved up the world championship standings with several podiums between them and victory for the Italian in Monaco. Renault regained third position in the Constructors' battle.

Victory for Renault in Monaco

2005



A clean sweep. The F1 regulations changed again ahead of the 2005 campaign, becoming even more stringent than before. Engines now had to last two full grand prix weekends - a development that would have an impact on the title fight. Alonso remained on-board as Renault's de facto number one driver, with Fisichella returning in place of compatriot Trulli. Aerodynamically-speaking, the R25 chassis was outstandingly sophisticated and reliable, while the performance of the RS25 engine was similarly a step forward. At the Brazilian Grand Prix – two races from the end of the season – Alonso was crowned world champion, Renault's first F1 title-winner as a team in its own right. However, McLaren-Mercedes – and its drivers Kimi Raikkonen and Juan-Pablo Montoya – did not make life easy for the French manufacturer in the battle for Constructors' glory. With ten victories over the course of the campaign, McLaren trailed Renault by a mere two points heading into the season finale in China. Up until that stage, Renault's engine experts at Viry-Châtillon had followed the rules to the letter with one engine for every two grands prix, but now the goalposts shifted as they set about producing a very special unit indeed, designed to last one race only – the 19th and final outing on the calendar. This powerplant was not only the pride of all those involved in its conception, it was also a game-changer. At McLaren, expectations were high for a world championship celebration – but it never came. With his new Renault engine delivering more than 900hp, Alonso dominated the race from lights-out to chequered flag, in so doing securing the coveted Constructors' spoils for Renault.

Victories for Renault in Australia, Malaysia, Bahrain, San Marino, Europe, France, Germany and China

Renault won both the F1 Drivers' World Championship with Fernando Alonso – and the Constructors' title

2006



Another superb season, the foundations for which had been laid the previous year. Even tougher regulations were introduced for 2006 and, while each engine was still required to last two grand prix weekends, it also now needed to be a 2.4-litre, eight-cylinder unit with a 'V'-angle of 90°. The first such Renault engine went on the test bed at Viry-Châtillon on September 9, 2005, and the new RS26 continued to evolve throughout the following campaign, particularly in terms of its maximum revs which ultimately approached 20,000rpm. By the end of the season, it produced 800hp. On the chassis side, the R26 was equipped with a seven-speed gearbox – a first for Renault in F1. Alonso and Fisichella regularly took the fight to Schumacher and Ferrari and, between them, notched up eight race wins. Seven were achieved by Alonso, who duly claimed a second consecutive Drivers' crown, with Fisichella's contribution ensuring Renault similarly retained the Constructors' trophy.

Victories for Renault in Bahrain, Malaysia, Australia, Spain, Monaco, Great Britain, Canada and Japan

Renault won both the F1 Drivers' World Championship with Fernando Alonso – and the Constructors' title



After a period of well-deserved celebrations, Renault turned its attentions towards 2007 – a season that promised to be considerably more complicated. Following Alonso's departure, neither Fisichella nor new Finnish recruit Heikki Kovalainen were able to get the best out of the R27 chassis and its RS27 engine, closely derived from the previous year's powerplant. The lone podium finish came courtesy of Kovalainen in Japan. At the same time, Renault Sport reprised its customer supply role by providing engines to Red Bull Racing duo David Coulthard and Mark Webber. Red Bull-Renault duly advanced to fifth in the Constructors' World Championship, two spots behind Renault in third.

2008



In 2008, a modified RS27 engine powered both Renault's R28 and the Red Bull RB4, with F1 engines no longer permitted to exceed 19,000rpm. While Coulthard and Webber remained on-board at Red Bull, it was all-change at Renault as Alonso returned to the French manufacturer, partnered by new rookie signing Nelson Piquet Jr, son of three-time F1 World Champion Nelson Piquet. Alonso won twice, but Red Bull-Renault failed to reach the top step of the rostrum.

Victories for Renault in Singapore and Japan



This year marked another shift in the sport's regulations, with each driver granted access to just eight engines over the course of the campaign. At Renault, the R29 chassis replaced the R28, while the RS27 engine benefitted from a number of developments. Alonso resumed his role as team leader, but Piquet Jr found himself released during the summer break due to a lack of results, with Swiss-born Frenchman Romain Grosjean coming in to take the Brazilian's place. It was a tough season, with Alonso achieving just a single podium finish while, conversely, Red Bull-Renault truly broke into its stride. New arrival Sebastian Vettel tallied four triumphs behind the wheel of the RB5 *en route* to the runner-up spot in the Drivers' standings, with team-mate Webber winning twice on his way to fourth. Red Bull leapt up the Constructors' World Championship classification to finish second.

Victories for the Renault-powered Red Bull in China, Great Britain, Germany, Japan, Brazil and Abu Dhabi

Sidebar

*Mark Webber

Born on August 27, 1976, Mark Webber began his Formula 1 career with Minardi before progressing via Jaguar to Williams. However, it was with Red Bull-Renault that the Australian claimed all nine of his grand prix victories, between 2007 and 2013.

*Sebastian Vettel

Born on July 3, 1987, Sebastian Vettel made a remarkable debut in F1 with BMW-Sauber in the 2007 United States Grand Prix. An impressive, point-scoring performance brought the German to the attention of Red Bull, which quickly signed him up to its young driver programme. Vettel duly contested the 2008 campaign for Red Bull sister team Toro Rosso, winning his first race along the way at Monza. In 2009, he was promoted to Red Bull-Renault and more than justified his employer's faith by tallying four victories — although the best was yet to come. Between 2010 and 2013, Vettel was unstoppable as he swept to four consecutive Drivers' titles to earn his place amongst the sport's true greats, equalling the achievement of Alain Prost and trailing only seven-time world champion Michael Schumacher and five-time title-winner Juan-Manuel Fangio. Vettel won 38 races in F1 with Renault power and set a new record as the youngest driver ever to clinch the crown in the top flight at the age of just 23 years and 134 days, compared to Lewis Hamilton (23 years and 301 days) and Alonso (24 years and 59 days).



A major new sporting regulation was implemented in 2010, with race wins henceforth earning 25 points rather than ten, and the top ten finishers all scoring (extended from the top eight previously). The engine allocation remained the same as in 2009, with each driver restricted to eight over the course of the season, while refuelling was outlawed. Renault F1 Team fielded an all-new driver line-up, with experienced Pole Robert Kubica and Russian rookie Vitaly Petrov taking to the wheel of the R30 chassis, powered once again by the RS27 engine which continued to evolve. The same unit powered Red Bull's new RB6. Notwithstanding extremely tough opposition – most notably Ferrari and McLaren-Mercedes – Red Bull claimed nine victories from 19 grands prix. Four of those were achieved by Webber and five by Vettel, with a handful of additional podiums securing the young German his first world title.

Victories for the Renault-powered Red Bull in Malaysia, Spain, Monaco, Europe, Great Britain, Hungary, Japan, Brazil and Abu Dhabi

Red Bull-Renault clinched both the F1 Drivers' World Championship and the Constructors' crown



The end of an era, as Renault ended its official participation in F1 under its own name. On the engine side, Viry-Châtillon was still hard at work and the R31 chassis was powered by a 2011-spec RS27, but the team – already entered by Renault – now ran under the Lotus-Renault GP banner. On the driving front, Petrov and Nick Heidfeld started the season, but the German was replaced after the summer break by Bruno Senna. Renault similarly powered the other Lotus entry on the grid – the Team Lotus cars of Jarno Trulli and Heikki Kovalainen, with the squad's name paying tribute to the iconic Team Lotus of the 1970s. The name dispute would ultimately be settled in the courts. Red Bull, meanwhile, continued to field Vettel and Webber in its brace of RB7s as Renault supplied engines for no fewer than six cars at every grand prix. Red Bull-Renault dominated the campaign as the Anglo-French outfit claimed 12 victories from 19 starts. Eleven of those wins were achieved by Vettel, who was duly crowned world champion for the third time in Japan, four races from the end of the season. In the following grand prix in Korea, Red Bull-Renault added the 2011 Constructors' trophy to its cabinet. In the season finale in Brazil, the official Renault team bade a fond farewell to the paddock after contesting its 300th grand prix.

Victories for the Renault-powered Red Bull in Australia, Malaysia, Turkey, Spain, Monaco, Europe, Belgium, Italy, Singapore, Korea, India and Brazil Red Bull-Renault lifted both the Drivers' and Constructors' F1 World Championship laurels

2012



Renault continued to enhance the RS27 engine and, in evidence of the esteem in which it was held, Renault Sport powered no fewer than four teams in the top flight in 2012– more than any other manufacturer. Defending world champions Red Bull-Renault retained its line-up of Vettel and Webber, while the Enstone-based Lotus-Renault F1 Team fielded cars for Kimi Raikkonen and Romain Grosjean, with the latter being replaced by Jérôme d'Ambrosio for the Italian Grand Prix. Having failed in its bid to continue using the Lotus name, the rebranded Caterham-Renault squad ran Petrov and Kovalainen, as Senna switched to Williams-Renault alongside Pastor Maldonado. Once again, Vettel was on fine form behind the wheel of his Red Bull-Renault, but Ferrari's Alonso made the German work hard indeed. This time around, Vettel had to wait until the 20th and last grand prix of the season to secure his third world title, with five victories to his credit along the way. Webber won in Monaco and at Silverstone on his way to sixth in the final standings. Two other

Renault-powered drivers similarly ascended the highest step on the podium, as Maldonado triumphed for Williams-Renault in Spain and Raikkonen prevailed for Lotus-Renault in Abu Dhabi. The Finn wound up third in the Drivers' points table, behind Vettel and Alonso.

Victories for the Renault-powered Red Bull in Bahrain, Monaco, Great Britain, Singapore, Japan, Korea and India. Victory for Williams-Renault in Spain and for Lotus-Renault in Abu Dhabi

Red Bull-Renault lifted both the Drivers' and Constructors' F1 World Championship laurels

Sidebar

*Pastor Maldonado

Born on March 9, 1985, Pastor Maldonado completed five seasons in F1, three of which were with Renault power. The Venezuelan started 95 grands prix, with his sole victory coming in Spain in 2012 behind the wheel of Williams-Renault's FW34.

*Kimi Raikkonen

Born on October 17, 1979, Kimi Raikkonen might now be the veteran of F1, but he first made his name by winning races and titles in Formula Renault. The Finn took two victories for Lotus-Renault – in Abu Dhabi in 2012 and in Melbourne, Australia, the following year. Raikkonen holds the F1 record for consecutive points finishes (27), achieved between April 2012 and July 2013 (previous record: Michael Schumacher, 24).

2013



Renault Sport supplied engines to the same four teams as the previous season: Red Bull-Renault (Vettel and Webber); Williams-Renault (Maldonado and F1 rookie Valtteri Bottas); Lotus-Renault (Raikkonen and Grosjean, with Kovalainen replacing the former for the final two grands prix); and Caterham-Renault (Charles Pic and Giedo van der Garde). Vettel was more dominant than ever, with a tally of 13 race wins – nine of them consecutively (a new record for a single season). The German's success saw him join Alain Prost as a four-time title-winner, behind only Schumacher and Fangio. Raikkonen claimed Lotus-Renault's sole victory of the campaign in the Australian curtain-raiser.

Victories for the Renault-powered Red Bull in Malaysia, Bahrain, Canada, Germany, Belgium, Italy, Singapore, Korea, Japan, India, Abu Dhabi, the United States and Brazil.

Victory for the Renault-powered Lotus in Australia Red Bull-Renault lifted both the Drivers' and Constructors' F1 World Championship laurels for the fourth consecutive year

2014

Renault Sport spent years relentlessly refining and developing its RS27 engine at Viry-Châtillon to assist its F1 partners, while at the same time preparing for the future. The 2014 campaign heralded a bold new era at the pinnacle of international motorsport with the advent of hybrid engine technology - which Renault Sport F1 called Renault Energy F1. In accordance with the new FIA regulations, it comprised a conventional combustion engine, a turbocharger, two motor generator units - one to recover kinetic energy released under braking, the other heat energy expelled by the exhaust - an electricity storage system and an electronic control unit. Renault Sport had already been working on the production of a four-cylinder combustion engine for several months when - at the request of rival Ferrari the FIA announced that this element of the package would be a V6 unit instead, prompting Renault Sport's specialists at Viry-Châtillon to start over again from scratch. This new powertrain would be supplied to four teams: reigning world champions Red Bull-Renault (Vettel and new recruit Daniel Ricciardo), Lotus F1-Renault (Grosjean and Maldonado), Toro Rosso-Renault (Jean-Eric Vergne and Daniil Kvyat) and Caterham-Renault (Kamui Kobayashi and Marcus Ericsson, with the former replaced by André Lotterer in Belgium and the latter by Will Stevens in Abu Dhabi). Six of those ten drivers scored points over the course of the campaign, but it was only Ricciardo who reached the top step of the podium. Three race wins earned the Australian third position in the Drivers' World Championship standings, with Red Bull-Renault placing second in the Constructors' chase.

Victories for the Renault-powered Red Bull in Canada, Hungary and Belgium

Sidebar

*Daniel Ricciardo

Born on July 1, 1989, Daniel Ricciardo is a popular figure in the F1 paddock for his ready smile, light-hearted nature and sense of humour. However, once inside the cockpit, he is a steely and stubborn competitor indeed. The Australian has spent the majority of his motor racing career within the Red Bull family, initially with Toro Rosso before graduating to the 'A' team. In 2017, he remains an official Red Bull-Renault driver, with four victories to his credit for the team to-date.



Renault Sport streamlined its engine activities in 2015 to supply just two teams – Red Bull and Toro Rosso. Ricciardo and Kvyat took to the wheel of the Red Bull RB11, with new boys Max Verstappen and Carlos Sainz – both sons of famous fathers – entered in Toro Rosso's brace of STR10s. Podiums were not plentiful, but big behind-the-scenes changes were afoot at both Renault and Renault Sport. Following widespread studies, analysis and research, the French manufacturer resolved that it would be better to return to F1 with its own car and own engine. That decision was confirmed as the season progressed and, on December 3, 2015, Renault announced that it would be re-joining the grid as a full-fledged manufacturer entry in 2016.

2016



Renault Sport continued to supply engines to Red Bull Racing, with the RB12 raced by the same drivers as the previous year. The engine was branded TAG Heuer, in deference to the team's new timing partner. Renault's official return to F1, meanwhile, was heralded by the reappearance of the iconic yellow-and-black livery of its early F1 campaigns. Red Bull's season would not be without controversy. Ahead of the fifth race of the season in Spain, the team engineered an internal driver switch, with Kvyat being demoted to Toro Rosso to make way for Verstappen. The gamble paid off immediately, as the Dutchman triumphed on his Red Bull debut and entered the sport's history books as the youngest-ever winner. Verstappen would continue to shine throughout the campaign, while Ricciardo won in Malaysia. At Renault, the season was rather more challenging. Renault Sport F1 Team had been forced to hastily prepare the chassis found at Enstone at the moment of its takeover. Beset by financial difficulties, Lotus had been unable to build new ones for 2015, meaning they dated back to the end of the previous year. The car was named the RS16 and was piloted by Jolyon Palmer and Kevin Magnussen, sons of former F1 drivers both.

Victories for the Renault-powered Red Bull in Spain and Malaysia

Sidebar

*Max Verstappen

Born on September 20, 1997, Max Verstappen is the son of Jos Verstappen, who started more than 100 grands prix between 1994 and 2003. He soon followed in his father's footsteps by racing karts. His startling record included the world championship crown, and the young Dutchman subsequently blazed a meteoric trail through the junior formulae to join F1 in 2015 at the age of 17 – before he had even gained his road driving licence. He started the 2016 season competing for Toro Rosso, before being promoted to the parent Red Bull Racing outfit from the Spanish Grand Prix onwards. Verstappen took full advantage of various incidents to triumph first time out with his new team, in so doing

becoming F1's youngest-ever race-winner at the age of 18 years and 228 days, ahead of Vettel and Alonso.

2017



Renault entered two cars with the RS17 (the first true Renault chassis since the manufacturer's full-fledged return to the top flight) powered by the hybrid RE17 engine. Alongside Palmer, the team signed Germany's Nico Hülkenberg, who had shone both in and outside of F1, with a notable outright victory in the Le Mans 24 Hours at first attempt in 2015. Red Bull fielded the same drivers as in 2016.

At Silverstone, on July 16, Renault will celebrate the 40th anniversary of its debut in F1.

APPENDIX: PALMARES TEAM & ENGINES

PALMARES RENAULT F1 TEAM

Season	Grands Prix	Pole Positions	Race Wins	World Championship Classification
1977	4	-	_	NC
1978	14	-	-	12 th
1979	14	6	1	6 th
1980	14	5	3	4 th
1981	15	6	3	3 rd
1982	16	10	4	3 rd
1983	15	4	4	2 nd
1984	16	1	-	5 th
1985	15	-	-	7 th
2002	17	-	-	4 th
2003	16	2	1	4 th
2004	18	3	1	3 rd
2005	18	7	8	1 st
2006	18	7	8	1 st
2007	17	-	-	3 rd
2008	18	-	2	4 th
2009	17	1	-	8 th
2010	19	-	-	5 th
2011	19	-	-	5 th
2016	21	-	-	9 th
2017	8	- tun to luly 1, 2017	-	_*

^{*} Season in progress; statistics correct up to July 1, 2017

PALMARES ENGINES

RENAULT F1 ENGINE

1.5L Turbo V6 ('V' = 90°)

Season	Grands Prix	Pole Positions	Race Wins	World Championship Classification
1977 1978 1979 1980 1981 1982 1983 1984 1985	4 14 14 15 16 15	- 6 5 6 10 3 3	- 1 3 3 4 4 - 3	NC 12 th 6 th 4 th 3 rd 3 rd 2 nd 2 nd (Lotus-Renault) 4 th (Lotus-Renault)
1986	16	8	2	3 rd (Lotus-Renault)

RENAULT F1 ENGINE $3.5L V10 ('V' = 67^\circ)$

Season Grands Prix	Pole Positions	Race Wins	World Championship Classification
1989 16 1990 16 1991 16 1992 16 1993 16 1994 16	1 1 6 15 15	2 2 7 10 10	2 nd (Williams-Renault) 4 th (Williams-Renault) 2 nd (Williams-Renault) 2 nd (Williams-Renault) 1 st (Williams-Renault) 1 st (Williams-Renault)

RENAULT F1 ENGINE $3.0L V10 ('V' = 67^\circ)^*$

Season	Grands Prix	Pole Positions	Race Wins	World Championship Classification
1995 1996	17 16	16 12	16 12	1 st (Benetton-Renault) 1 st (Williams-Renault)
	10	12		,
1997	17	13	9	1 st (Williams-Renault)
*In 1997 the end	ina was a 3 N-litra V	10 ('\/' = 71°)		

RENAULT F1 ENGINE 3L V10 ('V' = 101°)

2001 17 - 7 th (Benetton-Renault) 2002 17 - 4 th (Renault) 2003 16 2 1 4 th (Renault)	Season	Grands Prix	Pole Positions	Race Wins	World Championship Classification
	2002	17 17 16		- - 1	4 th (Renault)

RENAULT F1 ENGINE 3L V10 'V' = 72°)

Season	Grands Prix	Pole Positions	Race Wins	World Championship Classification
2004	18	3	3	3 rd (Renault)
2005	19	7	8	1 st (Renault)

RENAULT F1 ENGINE 2.4L V8 ('V' = 90°)

Season	Grands Prix	Pole Positions	Race Wins	World Championship Classification
2006 2007 2008 2009 2010 2011	18 17 18 17 19	7 - - 6 15	8 - 2 6 9	1 st (Renault) 3 rd (Renault) 4 th (Renault) 2 nd (Red Bull-Renault) 1 st (Red Bull-Renault) 1 st (Red Bull-Renault)
2012 2013	20 19	9 11	9 14	1 st (Red Bull-Renault) 1 st (Red Bull-Renault)

RENAULT F1 ENGINE 1.6L HYBRID V6 ('V' = 90°)

Season	Grands Prix	Pole Positions	Race Wins	World Championship Classification
2014	19	-	3	2 nd (Red Bull-Renault)
2015	19	-	-	4th (Red Bull-Renault)
2016	21	-	2	2 nd (Red Bull-TAG Heuer)
2017	8	-	-	_*

^{*} Season in progress; statistics correct up to July 1, 2017