THE MODERN SUPERCARS OF TODAY

Experience and educate yourself on the latest and greatest in exotic automobiles



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By

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Table of Contents

Introduction

Chapter 1: What Makes a Supercar?

Chapter 2: McLaren P1

Chapter 3: Ferrari LaFerrari

Chapter 4: Porsche 918

Chapter 5: Koenigsegg Regera

Chapter 6: Lamborghini Aventador SV

Chapter 7: Aston Martin Vulcan

Chapter 8: Ferrari 488GTB

Chapter 9: Audi R8

Conclusion

Introduction

I want to thank you and congratulate you for downloading the book, "The Modern Supercars of Today".

This book contains information on some of the best supercars of this generation. Possessing immense style, performance, and exclusivity, these cars will catch your fantasy and increase your appreciation of automotive mechanics.

This book first answers the question on what makes a car super. As representative of the highest level of automotive design for their respective time period, it's no surprise that these vehicles are considered marvels. The book will then feature some of the best examples of supercars roaming around today's roads. Featuring the best of what the automotive world has to offer, these cars represent breathtaking performance and elite dynamics. This book will showcase some of these cars and the things that make them special.

Thanks again for downloading this book, I hope you enjoy it!

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Chapter 1: What Makes a Supercar?

The automobile has existed for over a century now. While the concept has remained largely unchanged, how it is done has evolved in a dramatic way. The cars of today have become safer, faster, and more efficient than ever before, with improvements seen across the board. From time to time, supercars come out and push the envelope of both performance and technology further than ever before. Considered as the pinnacle of automotive engineering, these cars are the most attractive of their kind. Owning one of them is more than just owning a highly sophisticated piece of engineering; it is like owning a piece of automotive history. So what makes a supercar? Here are just some of the basic traits that set them apart.

- 1. They are loaded with the best technology of their time- If there is a common trait all supercars share, it is that they represent the best technology from their respective eras. Considered as feats of engineering, these cars are built ahead of their time. Some cars represent ideas that end up becoming features for cars of the future. Most of these technologies are oriented towards generating maximum performance, but some may also feature groundbreaking features in other aspects of automotive design. These cars are considered as the cream of the crop in their respective eras because most of the time they really are.
- 2. They are faster than just about any car on the road- Speed is one of the most addictive elements in an automobile. The ability to go fast on demand is something all car owners seem to desire, even if they cannot use it all the time for safety, practicality, and legality reasons. Supercars are loaded with all kinds of technologies that make them the fastest cars on the road. By combining increased power, decreased weight, improved dynamics, and increased efficiency, these cars accomplish maximum performance. Some of these cars even have ahead of its time features that improve more than just speed. The bottom line is supercars are the fastest cars on the road, and they do it with a flair you just can't find anywhere else.
- 3. They are extremely desirable- One thing about supercars is that they are extremely desirable. It is a dream of just about every car enthusiast to own one of these or at least be able to ride in one. The only problem is that not everyone gets the chance to do it. This is because most of these supercars are

built in only limited numbers and they can cost almost a fortune to own one. Getting your hands in one of them puts you in exclusive company. While supercars do it in different ways, the bottom line is that they are extremely desirable.

Supercars evolve with the times. As mentioned earlier, they represent the latest and the greatest in automotive engineering and design. This book will feature some of the best supercars of today that will blaze the trail for future supercars to follow. Buckle up and witness these automotive marvels up close!

Chapter 2: McLaren P1



The McLaren P1 has some incredibly big shoes to fill. As the anointed successor of the McLaren F1, considered by many as the best supercar ever created, there is immense pressure for the P1 to deliver. Fortunately for automotive enthusiasts from around the world, the P1 delivers with style. So how does the McLaren P1 stack among the supercars of the world? How about being arguably the best in the business today? Here are just some of the reasons why the P1 is among the defining supercars in the modern automotive era.

The McLaren P1 is attractively sculpted, a product of intense windtunnel testing to produce maximum aerodynamic capabilities. From the uniquely shaped headlights and taillights to the massive rear spoiler, each component in the P1's body is purposefully crafted to provide maximum performance. A high percentage of the car's body and chassis is constructed using carbon fiber, which leads to maximum weight savings. Just like the F1, the P1 emphasizes driver/passenger comfort and everyday usability. This is accomplished with the use of a plush and spacious interior and engine/suspension settings that allow for beyond-decent drivability at speeds within the legal range.

Of course, the McLaren P1 will always be an all-out sports car, featuring the best technologies to extract maximum performance. By combining a twinturbo V8 engine with an electric motor, the maximum output of the P1 is listed at 903 horsepower. This hybrid system is constructed in such a way

that power is available across the entire RPM range. A seven-speed, dual-clutch transmission provides a firm and efficient way of distributing power to the wheels. Combine this package with incredible downforce (the P1 creates more than 1300 pounds of downforce at 250kph) and light weight (3300 pounds), and you are bound to get unrivaled performance.

So how good is the McLaren P1? Its performance figures can only be described as phenomenal. It can go from 0 to 100kph in 2.8 seconds, 0 to 200kph in 6.8 seconds, and 0 to 300kph in 16.5 seconds. Its top speed is electronically limited to 350 kilometers per hour, but it can easily go beyond the 400kph mark if the limiter is removed. Beyond raw speed numbers, it is designed to take on any corner at speed. The P1 stays composed and inspires confidence in both road and track thanks to its properly sorted-out hydropneumatic suspension.

The McLaren P1 has more or less accomplished its mission; to be a fitting successor to the F1. With only 375 examples around the world, each unit is handmade and priced at more than a million dollars in retail. Each model can be customized according to the owner's specification if they avail of the services of McLaren Special Operations. A more exclusive version of the P1, the track-ready P1 GTR, is limited to only 35 examples. With even more performance than the regular P1, the GTR is considered as the ultimate McLaren track car.

Chapter 3: Ferrari LaFerrari



With hits such as the 250GTO, the F40, and the Enzo, Ferrari is no stranger to building hypercars. The LaFerrari is the latest iteration of Ferrari's vision of creating the ultimate sports car. Possessing the distinctive Ferrari attitude, it is the product of all the tech and expertise of Ferrari. This is viewed as the latest iteration of the ultimate Ferrari, and depending on how you view it, the ultimate example of the modern supercar.

The framework of the LaFerrari is largely constructed using carbon fiber, allowing for maximum weight savings without sacrificing rigidity. The body is molded to create maximum downforce while minimizing drag. Active aerodynamics further enhances these capabilities, with settings constantly changing depending on the driving conditions. Going inside the car feels like going into a true racing car. With its low-slung seating arrangement, a TFT dashboard display, and a generally intimate cockpit, the interior is simply befitting that of a hypercar.

The highlight of the LaFerrari is its hybrid powertrain, the first of its kind in the long history of Ferrari. The Hy-KERS (Hybrid Kinetic Energy Recovery System) combines a 6.3-liter V12 engine with max RPM of 9250 with an oil-cooled electric motor. The combination of these two motors results to the production of a staggering 950 horsepower, with loads of this power attainable even at low RPMs. With instantaneous response and smooth power delivery, this hybrid system simply delivers the goods. Power is distributed to the wheels via a seven-speed dual-clutch transmission.

Even though the approach to building this car is mostly pioneering, everything is still highly functional. It is capable of going from 0 to 100kph in less than 3 seconds and has a top speed of more than 300kph, but it's just telling a small part of what this car is all about. Everything about this car, from the active aerodynamics to the hybrid system, works in sync to provide maximum speed and the best driving experience possible. The LaFerrari excels in all conceivable measurements of performance: acceleration, speed, cornering, grip, braking, and driving experience. If you are lucky enough to get behind the wheel of one of these things, you are bound to the most awesome driving experience.

Only 499 examples of the Ferrari LaFerrari are created, and each of them are accounted for. It is priced at approximately \$1.2 million each at retail, and as in the case of all Ferrari supercars, its value is only seen to increase with time. Everything about this car displays the best of what Ferrari has to offer while offering a glimpse of what it can do in the future.

Chapter 4: Porsche 918



With cars such as the 959 and Carrera GT, Porsche is no stranger when it comes to building true hypercars. Flashing some of its latest and greatest technologies in one package, the Porsche 918 represents the best of what this legendary German sports car maker has to offer. Utilizing a spyder design crafted by Michael Mauer, this hybrid car (only the second of its kind in Porsche history), production started in September 2013 and ended in June 2015.

The 918 Spyder, with a design heavily inspired by both racing and some of Porsche's historic models, has that look that is equally sleek and imposing. With purpose-built items such as carbon fiber aerodynamic equipment and center locking wheels, everything about this car is built for one purpose: maximum performance. The interior of this car exudes class yet has that requisite aggressiveness that fit a supercar of its stature. With intuitive controls and clutter-free design, the interior design is both clean and functional.

The Porsche 918 has the reputation of being the most advanced car to come out of Zuffenhausen. A 3-motor hybrid system: a 4.6 liter V8 petrol engine and 2 electric motors that operate the front and rear wheels respectively, join forces to generate 887 horsepower and 590 lb-ft of torque. A seven-speed PDK dual-clutch transmission delivers the engine's power to the rear wheels. Drivetrain operations can be manipulated using 5 different modes: E-Power,

Hybrid, Race Hybrid, Sport Hybrid, and Hot Lap. Multiple driving aids such as 4-wheel steering and active aerodynamics improve the driving experience and reduce lap times at the same time.

The performance figures of the Porsche 918 Spyder proves that it belong in the much-hallowed hypercar territory. Its acceleration numbers are nothing short of record-breaking. For instance, its 0-to-100kmh time of 2.5 seconds (or sometimes less) and its 0-to-100mph time of 5 seconds are enough to break records in most car publications. It can reach 300kph from a standstill in 20 seconds or less before it reaches a top speed of 340 kilometers per hour. Of course, its capabilities go beyond crushing straight-line speed. It is able to run a full lap of the Nurburgring in 6:57, becoming the first production street-legal car to break the 7-minute barrier.

Production of the Porsche 918 Spyder topped at 918 units, which is relatively high compared to its other hypercar peers. Each unit has a starting price of \$847000, with the price tag only going higher when options, tax, and other extras are accounted for. As one of the most potent street-legal cars ever produced, this masterpiece is proof that Porsche is still one of the best sports car manufacturers around.

Chapter 5: Koenigsegg Regera



Sweden may not be the first nation that comes into your mind when it comes to supercars, but it can be argued that this nation is the home country of some of the best supercars the world has ever seen. With legendary cars such as the CCX and the Agera in its list of hits, Koenigsegg is no stranger to building the fastest automobiles on the planet. With the competition to build the ultimate supercar still heating up, the Koenigsegg Regera can potentially make the claim of being the world's fastest automobile.

It all starts with a design that is almost exclusively conceptualized in-house. Considered as an evolution of the Agera design, this car is built to provide better luxury and performance. Designed with aerodynamic considerations in mind, the Regera has vents, diffusers, and wings aplenty. In spite of its edgy looks, one would be surprised to see a driver-friendly interior. Spacious and adorned with all the creature comforts you can expect from a true supercar, both driver and passenger will feel at home sitting here for both long trips and track days.

While there are so many ways the Koenigsegg Regera stands out from the competition, it is its choice of drivetrain that makes this car most noteworthy. It employs a hybrid system similar to what is seen on current supercars such as the McLaren P1, the Ferrari LaFerrari, and the Porsche 918. However, Koenigsegg takes things up another notch. Utilizing the same 5.0 liter twin-

turbo V8 used in the Agera and combining it with 3 electric motors, maximum output is measured at a staggering 1500 horsepower. This hybrid system is connected to Koenigsegg's unique "Direct Drive" one-speed transmission, which claims to reduce overall weight while improving power delivery. The Regera comes with a 620-volt battery pack, which Koenigsegg claims to be the most power-dense batteries in a production automobile, to drive the electric motors.

So how does this unique package stack when driven? The Koenigsegg Regera goes like a true supercar to say the least. With the electric motor and the internal combustion engine working in harmony, it generates overwhelming power throughout its RPM range, all the way to its 8250-RPM limit. The Regera can go from 0-400kph within 20 seconds, making it the world's fastest accelerating car. It is also claimed to have a top speed of over 400 kilometers per hour, which easily makes it among the fastest cars ever built. In spite of all these gaudy statistics, the Regera is still designed for smooth operation during normal driving conditions.

With a price tag approaching 2 million dollars and only 80 examples slated for production worldwide, the Koenigsegg Regera will surely be among the most exclusive supercars ever produced. A sports car like no other, it is an astounding feat of automotive engineering.

Chapter 6: Lamborghini Aventador SV



The Superveloce (better known by its abbreviation SV) line has always represented the best of what Lamborghini has to offer. With this special designation existing since the time of the legendary Miura, any car to be designated with the SV badge has some huge shoes to fill and some huge expectations to meet. The latest in the line of Lamborghini SV cars is the Aventador LP750-4 Superveloce. While essentially "only" an upgraded version of the Aventador, this SV stands for something significantly more.

On the surface, it is easy to see that the Aventador LP750-4 Superveloce is made of serious stuff. With aerodynamic modifications that make it look more like the ultra-rare Veneno, the SV has a look that is distinct from the standard Aventador, or from any supercar for that matter. With the addition of these modifications, which includes all-new parts and modified scoops, Lamborghini claims that downforce is increased by 170% and aero efficiency is increased by 150% compared to the stock Aventador. In spite of all these modifications, weight is still decreased by at least 100 pounds, which is a significant number especially for supercars of its stature.

The interior also features some interesting bits. This includes the use of "Carbon Skin" upholstery, a carbon fiber based fabric that is the first of its kind in a production car. Microsuede is also used extensively in the interior trim. The TFT gauges are also modified for the SV. Yellow is the dominant color used for the gauge display, with blue being used for the shift indicator. A g-force meter is also included in the instrument cluster, a must-have for a car of its potential.

Arguably the biggest highlight of the Aventador SV is its engine. While it features the same motor as the stock Aventador (a 6.5 liter V12 engine), it features a host of modifications that increases its maximum output to 740 horsepower and 509 lb-ft of torque. Such stats match the numbers of the Veneno hypercar. These modifications allow the SV to go from 0-100kph in 2.8 seconds, 0-200 in 8.6 seconds, and have a top speed of way over 300kph. Making sure that the SV handles as good as it accelerates are magnetorheological shock absorbers, carbon ceramic brakes, variable ratio steering, and forged wheels (20 inches in the front and 21 inches in the rear).

The Lamborghini Aventador LP750-4 SV is expected to be released at the later part of 2015. While figures are still not available at this moment, its price is estimated to be around half a million dollars. As the best mass-produced Lamborghini to date, it is sure to attract a lot of attention from both car enthusiasts and Lamborghini collectors. This car certainly lives up to the hype attached to a Superveloce model, and is sure to make it to the annals of the most iconic supercars ever made.

Chapter 7: Aston Martin Vulcan



While Aston Martin is always known as a brand with a rich motorsport history, it is not really considered as the type of brand that will make cars that are ready to race on any given track day. Considering this reputation, supercar aficionados are surprised with the emergence of the Aston Martin Vulcan. A track-exclusive supercar loaded with just about every trick from Aston Martin's book, the Vulcan combines speed, class, and exclusivity in a way perhaps only Aston Martin can.

The Vulcan is loaded with some of the most cutting-edge technologies fit for the racetrack. Both the body and the monocoque chassis are built from carbon fiber, providing maximum strength at the lowest possible weight. Stopping power is provided by a combination of carbon-ceramic discs and Brembo racing calipers. A pushrod-operated suspension, spool-valve dampers, and anti-roll bars are all adjustable to help the driver fine-tune his/her suspension setting for any given track meet. Finally, the Vulcan is constructed to comply with FIA's safety standards, making it eligible for competition right off the box.

The Vulcan uses the old reliable 7.0-liter V-12 engine seen in many of its recent supercars such as the One-77. Tuned by Aston Martin Racing, this motor is capable of generating over 800 horsepower, making it the most powerful engine in a production Aston Martin car. Using a magnesium torque tube and a carbon fiber driveshaft, the engine is connected to a 6-speed sequential transmission built by Xtrac. Such a combination will allow for

maximum performance while still providing superior toughness, which are both must-haves in the world of endurance racing.

The Aston Martin Vulcan is one of the most exclusive race-ready cars to come out of the market. While there are no reports regarding its selling price, it will certainly garner high value. With only 24 examples of this car slated for production, getting one of these will put its prospective owner in exclusive company. Each model is customizable according to the preferences of the customer, from the paint color to the interior trim. If you have what it takes, the Vulcan is shaping up to be one of the most incredible supercars money can buy at this moment.

Chapter 8: Ferrari 488GTB



While considered as the "entry level" segment of Ferrari, their 8-cylinder, mid-engine offerings are among its most significant. Expectations are rising with each iteration, and fans from all over the world are always waiting in baited breath for the next big thing. The Ferrari 488GTB is the designated successor for the sublime Ferrari 458 Italia. As incredible as the 458 is, it is shocking to note that according to Ferrari, the 488 will be better than the model it replaces at just about every conceivable point of comparison. Given how popular the 458 Italia is to the masses (and how it is an engineering marvel in itself), that means the 488 must be made with incredible stuff.

On the surface, the 488GTB is almost similar with the 458, utilizing the same mid-engine platform and having virtually similar body measurements. In spite of this, a number of technical improvements make the 488 superior in just about every department. Utilizing wings, diffusers, and even active aerodynamics, the 488 can generate 50 percent more downforce compared to the 458 while still reducing aerodynamic drag. The 488 is expected to possess dynamic handling characteristics by weighing in at 3000 pounds and with an almost-50/50 front/rear weight distribution. The interior is classic Ferrari, simple yet attractive and functional. With optional features such as a LaFerrari-style telemetry system and carbon fiber interior components, driving/riding one of these is shaping to be a mind-blowing experience.

The feature that gets the headlines in the Ferrari 488GTB is its engine.

Delivering on its promise to feature more alternative approaches to engine building, the 3.9 liter V8 engine used in the 488 comes equipped with 2 turbochargers. The turbo system, combined with other upgrades such as an ion-sensing ignition system, variable oil pump functioning, and high-tumble intake ports, pushes the maximum output of this engine to 661 horsepower and 561 lb-ft of torque. Such power output is ridiculous, considering the size of the motor. Combined with the fast-shifting 7-speed sequential transmission, one can expect incredible performance figures. In fact, the 488GTB beats the Speciale A, the most loaded version of the outgoing 458, by half a second around the Fiorano racetrack.

With cutting-edge technology and the promise of world-beating performance, the Ferrari 488GTB promises to be an instant classic. As the next generation version of the Ferrari mid-engine sports car, it is expected to hit the stores worldwide within this year. While no price is given at this moment, it is realistic to expect that the 488GTB will carry a price tag of at least \$250000.

Chapter 9: Audi R8



The Audi R8, named after the legendary 24 Hours of Le Mans winning prototype racing cars, has successfully crafted its own legend. As one of the most popular supercars of the past decade, it affirms the newfound sporty image Audi has created over the last few years. While it has stayed strong over the its almost decade-long existence, the R8 is due for an update. The second-generation Audi R8 delivers improvements in a number of key departments, better arming it to contend in an already-competitive supercar market.

Loosely based on the Lamborghini Huracan (remember that both Audi and Lamborghini belong to the Volkswagen group of companies), the new Audi R8 was first introduced in the 2015 Geneva Auto Show. While possessing the same body shape and overall design profile, a number of the R8's design cues have been revamped so both its style and performance is markedly different from the outgoing model. Utilizing a lightweight aluminum space frame with carbon fiber components, the new model manages to reduce its overall curb weight.

Currently, there are 3 engine options for the Audi R8 that are reported to be released. The V10 features a 5.2 liter V10 engine with a maximum output of 540 horsepower. The V10 Plus features the same engine, but with modifications that allows for an increased maximum output of 610 horsepower. The e-Tron is a version of the R8 that runs purely by electricity.

With a max output of 456 horsepower and a range of over 200 miles, it is an electric car that delivers true sports car performance and reliability. Other powertrains are slated to be released later, with a turbocharged V8 version also in the works.

Regardless of the engine option selected, the Audi R8 is expected to deliver world-class performance and put the supercar world in notice once again. Acceleration from 0-to-100kph is expected to be less than 4 seconds, with the more powerful models expected to breach the much-coveted 200mph top speed mark. Fans can also expect the R8's handling to be once again sublime, thanks mainly to Audi's Quattro 4-wheel drive system. Utilizing a 7-speed dual-clutch transmission, power is expected to be delivered in a smooth manner.

The Audi R8 is back and better. If supercar fans have somehow slept on the previous model, this R8 will surely get their attention and respect this time. Models such as this have helped Audi establish a sporty reputation. The new Audi R8 should be very competitive right out of the box, with the ability to compete with its next-gen counterparts such as the Huracan and the Ferrari 488GTB.

Conclusion

Thank you again for downloading this book!

I hope this book was able to help you to learn more about the supercars of today and tomorrow!



Finally, if you enjoyed this book, then I'd like to ask you for a favor, would you be kind enough to leave a review for this book on Amazon? It'd be greatly appreciated!

Thank you and good luck!

Table of Contents