A A A A

EB 16·4 Veyron

compiled by:
Jamie Vondruska

Last edited:
02.28.01 - 22:00

2001
Geneva
Auto
Show

Geneva, Switzerland - The decision stands: the Bugatti EB 16·4 Veyron is coming. Over 90 years have passed since Ettore Bugatti first built his own cars in Molsheim, Alsace - for decades the most fascinating cars of all time. Now the newly-set-up BUGATTI Automobiles S.A.S. of Volkswagen AG marks the start of a new age, bringing the spirit of a great past into the present, and adapting it to the future. The first car to be produced as of 2003 will be the super-sports car EB 16·4 Veyron.

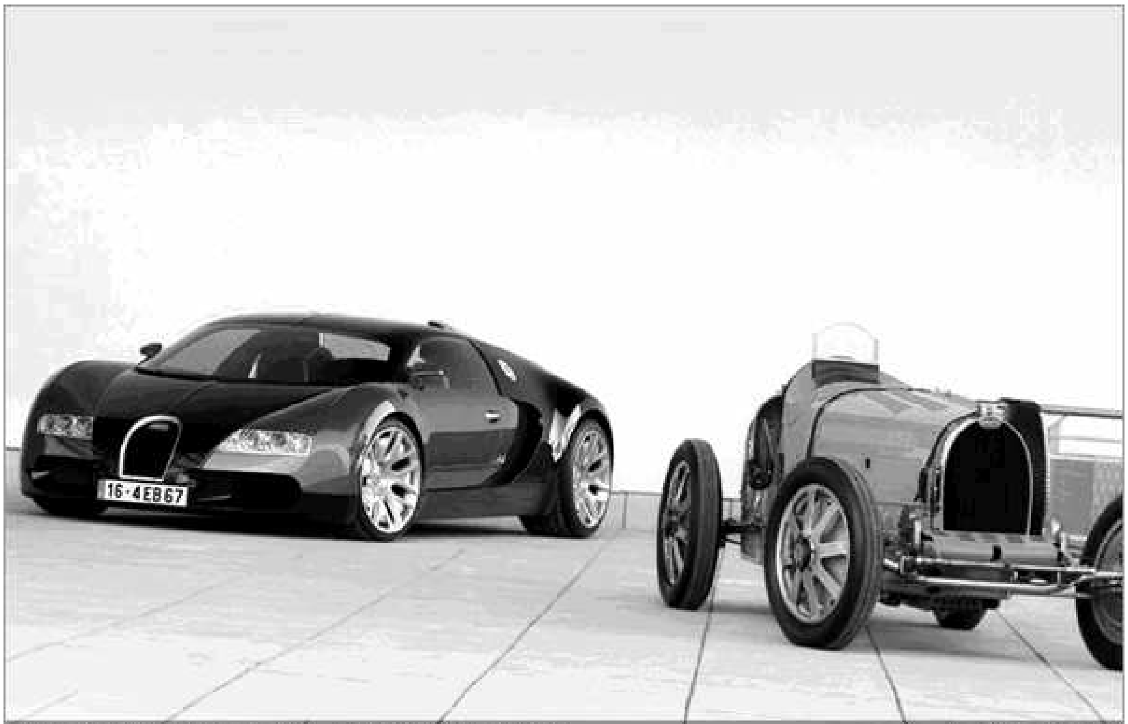
As it was originally, the headquarters of the company is at Molsheim Château St. Jean near Strasbourg. To mark its foundation, BUGATTI Automobiles S.A.S. is showing the EB 16·4 Veyron super-sports car at the 71st Geneva Motor Show with its definitive engine, a 736 kW / 1001 bhp 16-cylinder direct injection unit. At Geneva the new-age Bugatti is paired with an impressive vehicle of the thirties: the Bugatti 51A. The racing driver Pierre Veyron, winner of the 1939 Le Mans 24-hour race, made this car the most successful motorsports Bugatti with numerous Grand Prix wins. The man and the machine are a legend. For this reason Pierre Veyron is invoked as patron for the Bugatti EB 16·4. In this way Geneva 2001 will become an interface between past, present and future.

The present of the BUGATTI marque - Dr. Karl-Heinz Neumann, President, Reinhold Kopp on the Board of Management

BUGATTI Automobiles S.A.S. was founded on 15th December 2000. As of this date, Dr. Karl-Heinz Neumann was appointed President and Board of Management member for technology, and Reinhold Kopp Board of Management member for commercial matters. This means that both now exercise a dual function within Volkswagen AG: Dr. Karl-Heinz Neumann also heads-up Volkswagen drive unit development, and Reinhold Kopp the government relations division. The two Board members are linked not only by their long association with Bugatti, but also by a great passion for the marque:

Dr. Neumann presided over the creation of the engine for the 16·4 Veyron; Kopp was responsible for coordinating all the activities of the exclusive marque even prior to the setting-up of BUGATTI Automobiles S.A.S.

A



Geneva International Motor Show 2001 - Bugatti 16•4 Veyron & Type 51 vwvortex.com

View Larger Image

The future of the BUGATTI marque - starting 2003 with the 1001-bhp EB 16·4 Veyron

The Bugatti EB 16·4 Veyron exhibited in Geneva is a super-sports car which is utterly unique in the present and the historic automotive landscape. In this class, probably only the Bugatti Atlantic, on account of its uniquely progressive body design with its riveted roof fin which continues to inspire the world's designers to this day, can be considered to have similar significance as a sports car. This roof fin is to be seen again on the EB 16·4 Veyron in stylized form.
The team led by Hartmut Warkuss, head of the "Center of Excellence Design" of the Volkswagen Group, was entrusted with the exacting task of interpreting and further developing the historic Bugatti styling for the new age. The EB 16·4 Veyron, at 4,380 millimeters (172 inches) long and 1,206 millimeters (47 inches) high expressing both power and aesthetic appeal, is the proof of their complete success.

The technology of the 16-cyl. engine in the EB 16·4 Veyron - direct petrol injection, four exhaust turbochargers, 7,993 cc

The design of the innovative W16 alloy engine, with roller rocker fingers and four overhead camshafts with variable valve timing, is already - even before the first production example has appeared - absolutely unique in international engine construction. Two very close-set banks of eight cylinders apiece joined at 90 degrees form the heart of this 736 kW / 1001 bhp 16-cylinder unit. The

W16, placed ahead of the rear axle, measures only 710 millimeters (28 inches) long by 771 millimeters (30 inches) high. The V-V, or W, configuration makes possible not only such compact dimensions, but also excellent engine rigidity, and as a consequence high volumetric efficiency.

View Larger Image

Four exhaust turbochargers provide the 7,993 cc direct-injection unit with the sort of thrust that would give any Formula 1 car impressive lap times. Two charge air coolers are situated above the cylinder heads. A total of 64 valves control the inlet and exhaust functions. The fuel is injected via electromagnetic injection valves directly into the combustion chambers on the principle of FSI (fuel stratified injection), which is highly efficient and reduces emissions. This process makes it possible to precisely define the moments at which fuel is introduced in the power stroke of each cylinder and the time needed for the petrol and air to mix.

For the perfect coordination of all the parameters of the W16 engine, BUGATTI utilizes a master-slave system derived from computer technology for electronic control; two independently-functioning computers per cylinder bank are managed by a central control unit.

The synergies between cubic capacity, charging, direct injection and computer control make possible an incredible torque of 1,250 Newton-metres (885 lb/ft) between 2,200 and 5,500 rpm. No other production car in the world can offer this kind of power development. It is almost impossible to describe it. The only physical force that can noticeably affect the Bugatti EB 16·4 Veyron is gravity. And that is only because the aluminum space-frame body develops enormous downward pressure on account of perfectly-balanced underfloor and overall aerodynamics. By contrast, wind resistance, or the mass to be accelerated, are practically insignificant for this car.

The power is transmitted via a rear axle differential flanged directly to the engine and a permanent four-wheel drive to the 20-inch wheels. New aluminum wheels have been developed for the version of the EB 16·4 Veyron shown in Geneva. The front tires are 265/30 R 20, the rear 335/30 R 20. The sophisticated drive system and a brake system derived from motor racing ensure that the power can be transmitted to the road in sovereign fashion. The actual top speed and maximum acceleration values will be announced by BUGATTI Automobiles S.A.S. at a later date.


Geneva International Motor Show 2001 - Bugatti 16•4 Veyron vwvortex.com

View Larger Image

The history of the BUGATTI marque - Ettore Bugatti built the most fascinating cars of all time

The mystique of Bugatti came into being in the first half of the last century. Ettore Bugatti, and later his son Jean, designed vehicles which were far ahead of their time in styling and technology. Types such as the T 57 SC Atlantic or the many versions of the T 41 Royale were then, and still are, legends, and some of the most valuable motors of all time. But the mystique is not founded solely on those coupes, roadsters, convertibles and saloons which were driven by the most prominent people of the twenties and thirties - the Bugatti mystique also developed in the racing activities of those decades.

Particular success was enjoyed by the works driver Pierre Veyron in the years between 1933 and 1937 in a Bugatti 51A. With this eight-cylinder compressor racing-car, which developed an output of 140 bhp from a cubic capacity of 1,493 cc and had a for that time sensational top speed of 210 km/h, he and two other drivers set six international speed records on 23rd January 1934 at the historic circuit of Montlhery near Paris. A year later, on 30th and 31st March 1935, three further world records were set up on the same circuit. In addition, eight times the Bugatti 51A with chassis number 54211 went through the chequered flag as winner of Grands Prix, including on its first ever outing the

Grand Prix at the Avus in Berlin on 20th May 1933. In these years Pierre Veyron and the Bugatti 51A established for good and all the legendary name of an automobile marque and a designer of genius: Ettore Bugatti, EB.

It is precisely this Bugatti 51A of Pierre Veyron - now in private ownership in the USA and one of the most desirable collectors' items in the world - which is to be seen at this year's Geneva Motor Show next to the Bugatti EB 16·4 Veyron. Seven decades, two cars, one history.

View Larger Image

For more discussion on this news story and to see what others have to say click on the link to our discussion forums at the right.

Vortex Forums

A A A