



**Issue No. 12, June 2011**

**Pp. 68 - 70**

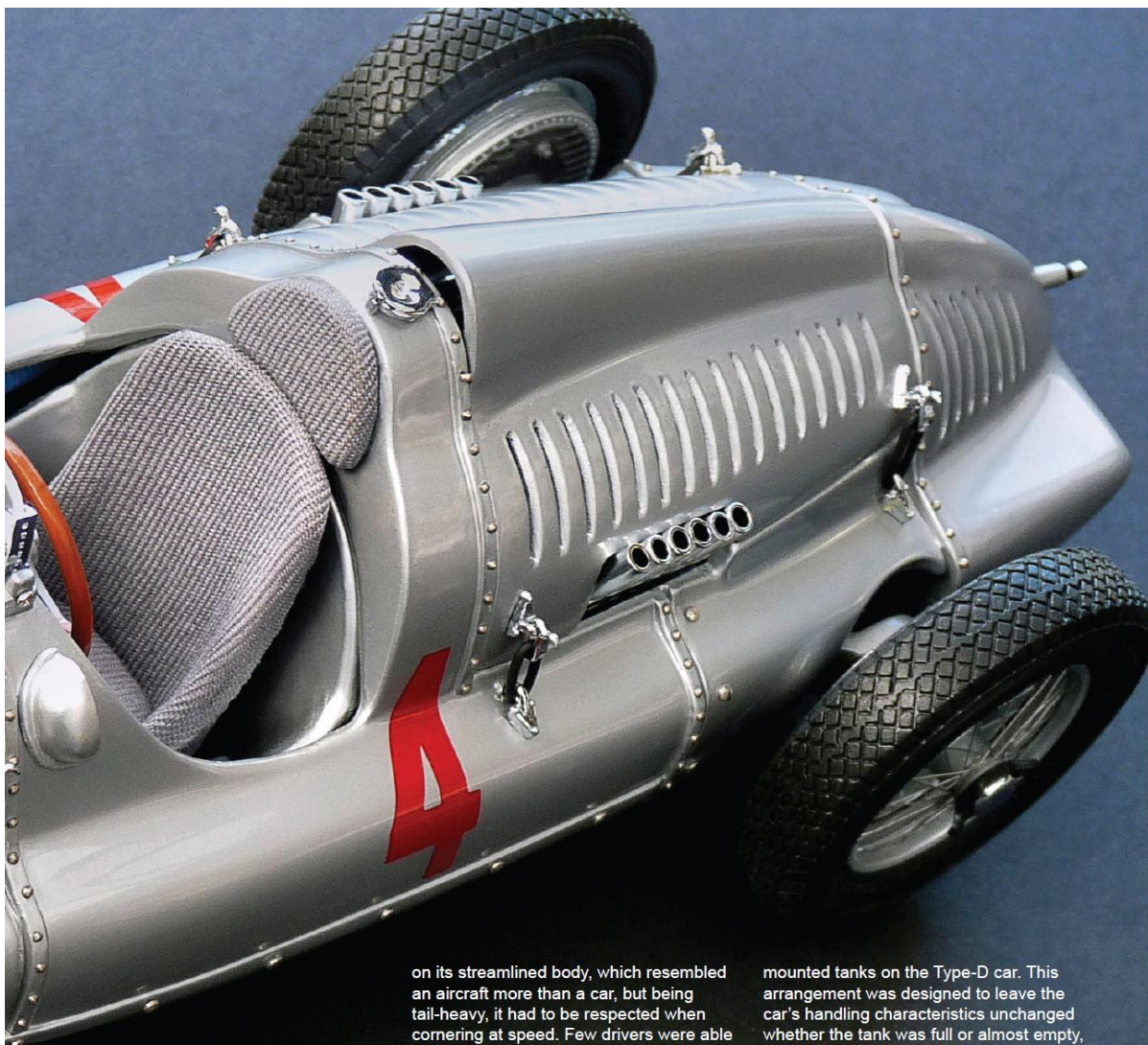


# AUTO UNION TYPE-D GRAND PRIX 1938

PRODUCED BY CMC

1:18





### Story by Terry O'Neill

The 16-cylinder Grand Prix (GP) Auto Union of mid-1930's laid the foundation for every modern racing car today, by being the first practical rear-engine racing car. It was designed and built in a time of European political turmoil by Dr Ferdinand Porsche, and with financial assistance from Hitler's generous Reich Chancellory to demonstrate German ingenuity to the world. It first appeared at the Avus circuit in March 1934 where, in the hands of Hans Stuck, it broke three world timed-speed records, but it was not without some problems. Observers commented favorably

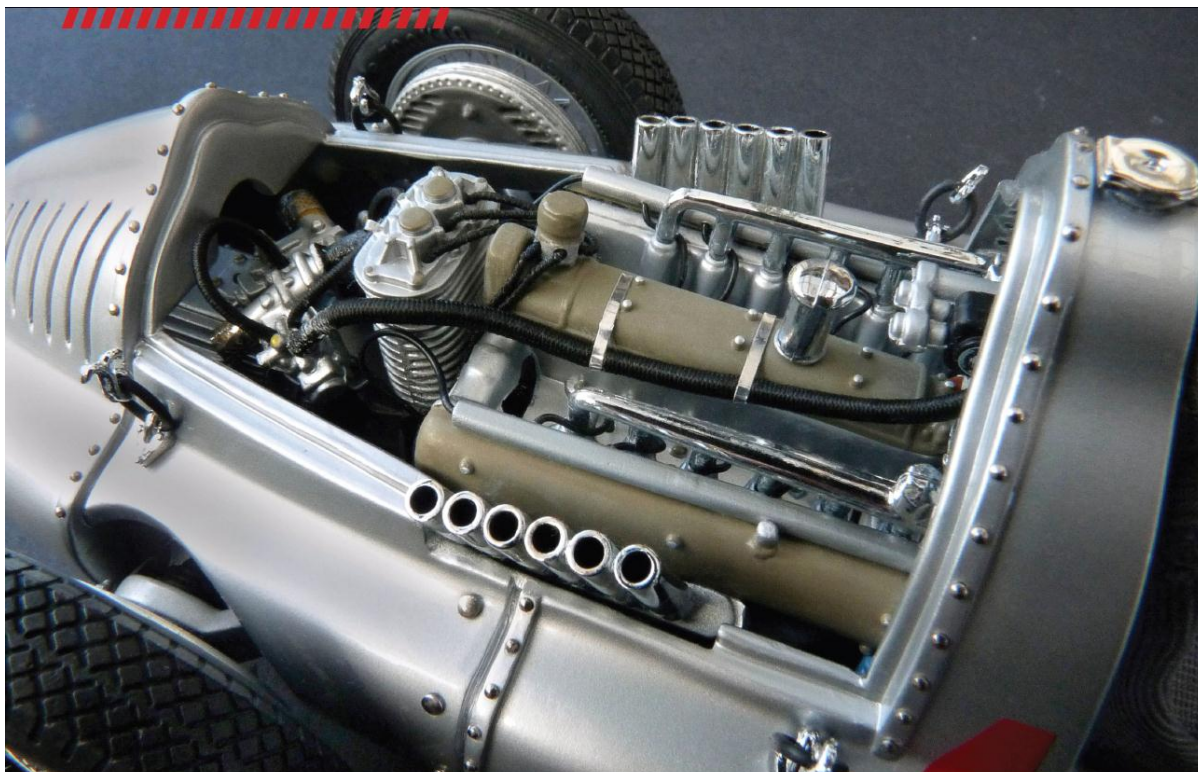
on its streamlined body, which resembled an aircraft more than a car, but being tail-heavy, it had to be respected when cornering at speed. Few drivers were able to master this tricky car completely. Those who did master it included Stuck, Bernd Rosemeyer and Tazio Nuvolari.

Built under a shroud of secrecy, the first Auto Union 'P-wagen' featured fully independent torsion bar suspension all round, and a rear mounted V16-cylinder supercharged engine and integrated five-speed gearbox with swing axles at the back. The driver sat in the middle, ahead of the engine and behind a short front hood. Its frame was built up of steel tubes set in ladder fashion, so that the main side tubes could also carry water between the rear engine and the radiator in the nose. Immediately behind the driver was an upright main fuel tank that on later models also fed into two extra side-

mounted tanks on the Type-D car. This arrangement was designed to leave the car's handling characteristics unchanged whether the tank was full or almost empty, but at the cost of having the driver sitting too far forward to quickly detect and correct a tail slide. It seems only drivers with motorcycle racing experience had the reflexes required to master the car's peculiar handling. In the later Type-D car, road handling was vastly improved through a Di-Dion type rear axle arrangement.

The Auto Union's first major race was at Avus in 1934, under a new 750kg GP formula. Its main rivals were Mercedes-Benz, Maserati, Bugatti, and Alfa Romeo. In front of thousands of Nazi officials and a huge crowd, Stuck shot into the lead in pelting rain. He built up a massive lead and stayed there until clutch-slip forced him out of the race at two-thirds distance. The best-placed Auto Union finished third.





Teething problems aside, the Auto Union's potential was evident, and it wasn't long before they were right up with Mercedes-Benz in terms of speed and power. In fact it is amazing how closely matched these two totally different cars were, and most times the real racing was between these two titans only. This era came to be known as the era of the 'Silver Arrows', a reference to the total domination of GP motor racing by the German silver colored cars in the mid/late 1930s.

From 1934 to 1939, Auto Union GP cars went through three more variations from the V16 Types-A, B, C to the V12 Type-D (for a new 3.0-liter formula), and accrued many wins and results to their credit. After Rosemeyer died in a speed record attempt in January 1938, the team was strengthened by the late addition of Nuvolari, who did not take long to come to grips with the car's unusual characteristics. Driving a 3.0-liter V12 Type-D in 1938, Nuvolari achieved important victories in the Italian GP (Monza) and the Donington GP (England) in fierce battles with the formidable Benzes. In 1939, Nuvolari won the Belgrad GP (Yugoslavia), which was to be the last GP before World War II.

CMC's 1:18 scale replica of the Auto Union Type-D is nothing short of a masterpiece of miniature engineering. It

is hand-assembled from 684 parts and highly detailed, right down to correct positioning of the body rivets (all 144 of them), individually inserted by hand. The bodywork is completely accurate in shape and finished in smooth glossy silver that represents polished metal. The trunk and engine hood are removable and each has proper cut-out cooling louvers. When in place, the hoods are firmly held down with tiny stretchable rubber rings that latch on to small hooks (32 parts here alone). The tolerance fit of these removable panels is very fine and no unsightly gaps are visible anywhere. In the nose is a radiator grille made up of 16 pieces of fine steel wire, individually soldered by hand. A complete tubular steel structure is contained under the body and is not seen unless the body is removed. This is accomplished by releasing the fixing screws underneath the car.

The model is full of intricacies that keep you admiring it for hours. Just glancing into the driver's (cramped) cockpit reveals a bucket seat covered with real cotton-ribbed textile material. A stubby gearshift lever protrudes from a notched cover to the driver's right side, and ahead of that is the handbrake lever. Drilled foot pedals and a huge four-spoke imitation leather-covered steering wheel are expertly reproduced. As

an interesting fact, the steering wheel on the real car was removable; a precursor to modern grand prix practice. The dashboard has instrument dials that can actually be read (in my case with the aid of magnifying glasses). A small aero-style windscreen sits at the cockpit front flanked by two streamlined rearview mirrors.

As if the previous isn't enough, CMC has provided a replica engine that is a model unto itself, with 36 electrical cables and fuel pipes included. The short exhaust pipes are made from metal tube, and a fully detailed Rootes supercharger is mounted at the rear. The wire wheels are each assembled from 30 steel wires, as per the original car; a truly remarkable effort to retain full authenticity. I could go on and on about the wonders of this model but I'll let the pictures do the rest of the talking. The review model (item #M-043) is one of a limited edition of 2000 released some time ago, of Nuvolari's 1938 Donington GP winning Type-D with racing No.4. CMC's Auto Union Type-D is still available as an unnumbered version (item #M-027), which is identical to this model. It is an exceptionally beautiful and authentic replica that will particularly appeal to those collectors interested in the history of Grand Prix racing.

Visit [www.cmc-modelcars.de](http://www.cmc-modelcars.de) or your nearest CMC dealer for availability.