

# The History of Abarth

Karl Alberto Abarth was born on November 15, 1908 in Vienna, Austria, under the astrological symbol of the scorpion that would later become the company's logo.

His engineering talent was quickly recognised and, at the age of 16, he gained an apprenticeship with Degan in Italy, designing bicycle and motorcycle chassis.

At 19, he returned to Austria, and a job with Motor Thun Motorcycles preparing their race bikes also led to a position as test rider. When the factory rider fell ill, Karl was offered the opportunity to ride in his place. Much to the annoyance of the factory riders, Abarth set the fastest lap time twice in a row during testing but, come race day, he was forced to ride a replacement machine that suffered a mechanical failure mid-race. Karl suspected sabotage, and left Thun in disgust.

Given a taste for racing, he bought a second-hand British motorcycle which he stripped piece by piece, reducing weight and making improvements along the way. His first race win came at Salzburg on 29th July, 1928, and was even more astonishing considering he competed with no factory support or mechanical assistance.

A year later, he built his first motorcycle to wear the Abarth name, and by his mid-twenties, he had become five-time European Champion.

<http://www.abarthisti.co.uk/abarth-history/>

## The 1930s

After a serious accident in 1930 in Linz, Austria, he abandoned solo motorcycle racing. His competitive spirit compelled him, however, to build a motorcycle sidecar in 1933 which he famously raced against the Orient Express on the 1,300 km stretch from Vienna to Ostend. Although his first attempt was dogged by an electrical fault that caused him to lose the race by 15 minutes, his second attempt just two weeks later was a victory, beating the Express with 20 minutes to spare.

A second, more serious accident in 1939 during a race in Yugoslavia left him hospitalised there for a year, and forced him to withdraw from racing altogether. He stayed in the country during the war, working in Ignaz Vok's Ljubljana factory experimenting with ways to run internal combustion engines on kerosene - important work, given the scarcity of petrol at the time.

## The 1940s

After the war, Abarth returned to Italy and changed his name to the more Italian-sounding Carlo. He re-established contact with old friends in the Porsche family and became the Italian representative of the Porsche design studio. Abarth made contact with legendary racer Tazio Nuvolari, who in turn contacted Piero Dusio, an industrialist, president of the Juventus Football Club, and the financial backing behind the Cisitalia Company that had been enjoying considerable success with its Cisitalia D46 racer.

Dusio commissioned Abarth and Rudolf Hrushka, an ex-Porsche engineer, to build a revolutionary new single-seater based on work by Dr. Ferdinand Porsche. The Cisitalia 360 boasted a complex four-wheel drive system and a mid-mounted, twin-supercharged 1,493 cc flat-twelve engine producing well in excess of 300 bhp.

During this time however, Dr. Porsche, the brains behind much of the car's design, was being held in a French jail having been accused of collaborating with the Nazis. Ferry Porsche used the money raised through his participation with the Cisitalia project to pay the sizeable bond to release his father.

Unfortunately, the car's complexity accelerated the drain on Dusio's finances and in 1949, Cisitalia entered receivership. Dusio moved to Argentina, taking the prototype car with him before it could turn a wheel in competition.

Carlo, having received no payment from Cisitalia, took the remnants of the company and founded Abarth & C. SrL on 31 March 1949, with racing driver friend Guido Scagliarini. The company's logo was, of course, Carlo's birth sign - the scorpion.

The company's stated purpose was: "the production of cars and complementary aggregates for sport and racing cars, as well as changes and improvements to sports and racing cars, servicing and manufacture of mass-production tools, agency services and the sale of fuels for race cars."

Having rescued a D46 single-seater, two 204 Spiders and two incomplete cars from the Cisitalia remains, Abarth created his own racing team - "Squadra Abarth" - signing famous names such as Tazio Nuvolari, Bonetto, Cortese, and Duberti. At the sixteenth Mille Miglia in 1949, Abarth & C. lined up with four cars. One, driven by Scagliarini himself, took second place in its class and fifth place overall. In the company's first year, the Abarth 204A Roadster won the Italian 1100 Championship and the Formula 2 title.

On 10th April, driving a 204 A Spider, Tazio Nuvolari won a thrilling victory in the Palermo-Monte Pellegrino hillclimb. Unfortunately, it was to be his last, as ill health forced his retirement from racing.

## **The 1950s**

To help fund Abarth's racing activities, Carlo used his experience with motorcycle exhausts to develop a new type of silencer. It used a central pipe of constant section with lateral passages in fiberglass, thereby eliminating the diaphragms of earlier designs to improve performance. A convenient by-product of the new design was a throatier, more pleasing sound.

Soon, Abarth had developed a range of exhaust silencers tuned to specific vehicles and launched an innovative marketing campaign. The silencers were presented in a smart, matt black finish with chrome-plated tips. Despite their high price (4,500 lire as opposed to 2,000 lire for a standard silencer), motorists were persuaded to fit this new, highly visible upgrade in their thousands. Abarth now employed over 40 people, and by 1950 had sold over 4,500 exhaust systems. By 1962, global sales would reach nearly 260,000 units.

Interest was soon arriving from several car manufacturers, including Alfa Romeo, Maserati and Ferrari, and by 1952 Abarth was supplying exhaust systems for Ferrari GT and world championship cars.

With the arrival of the Fiat 600 in 1955, Carlo Abarth saw the opportunity to create a small, affordable sports car. Using the 600's underpinnings and a 750 cc engine developing more than double the original car's power, Abarth re-bodied the car using two Zagato-designed body styles - the Fiat Abarth 750 Zagato and Fiat Abarth 750 GT Zagato.

Abarth produced a range of options for enthusiasts, too, such as a modified water pump and a steering-wheel mounted gearlever. The company also launched their range of conversion boxes (*cassetta di trasformazione*) containing all the parts necessary to convert a standard Fiat, delivered in a wooden crate. The kits were expensive (the complete Abarth 750 kit for the Fiat 600 cost 250,000 lire in 1955, compared to the 590,000 lire cost of the car itself) but included everything necessary: crankshaft, camshaft, pistons, piston rings, intake and exhaust manifolds, valves, radiator, gaskets, carburettor, exhaust, filters, pipe work, belts, tools, oil, chrome badges and instructions.

A network of tuning shops sprang up to cater for the insatiable needs of motoring fans whipped up by a seemingly unstoppable run of victories under the sign of the scorpion.

In June 1956, Abarth decided that competition victories were no longer enough. Driving a Fiat Abarth 750 with a body specially designed by Bertone, he set a series of records at Monza. Travelling 3,743km at an average speed of 155 km/h, Abarth broke the 24 Hour record. He went on to break the 5,000 km, 10,000 km, 5,000 miles, 48 Hour and 72 Hour records just a few days later. The following month, influential German magazine *Das Auto Moto Und Sport* dedicated the cover of the 15th issue to the Abarth 750.

At the 24th Mille Miglia in 1957, there were 20 cars representing Abarth in the 750 class - 16 of them finished the race, with Abarth models covering first, second and third places.

Abarth's success was quickly becoming internationally renowned. In 1958, Franklyn Delano Roosevelt Jr., son of the legendary American president, rushed to Italy to sign an exclusive agreement to distribute the cars in America.

1958 would also be the year Abarth created his masterpiece. With the launch of the new Fiat 500, a car designed by Dante Giacosa around the principles of simple construction and low production costs; Carlo created the legendary Fiat 500 Abarth. Although the car featured near-standard bodywork, the 479 cc engine's compression ratio was increased from 6.55:1 to 10.5:1, a Weber 26 IMB carburetor was fitted, and the intake and fuel systems were optimised. Together with a tuned Abarth exhaust, power was now up to 26 bhp (from 13 bhp), and a number of cars were sent to the Monza circuit for testing.

For seven days and seven nights, the Fiat 500 Abarth performed a marathon that went down in history: covering a distance of 18,186 km at an average speed of 108 km/h, the 500 Abarth broke six international records, nearly one every day.

Carlo had proven that small runabouts could be used as the basis for fast and reliable racing cars, and for them, a new phrase was coined: "small but wicked."

In the same year, Abarth strengthened its partnership with Fiat. The company vowed to reward Abarth financially on the basis of the number of race victories and records set by Abarth-modified Fiats. Given the low cost of the cars, Abarth and its growing privateer following entered countless race series, notching up an incredible string of victories.

## The 1960s

The Sixties were a golden age for the Scorpion. The Abarth name entered popular language as a byword for performance, upgrades and victory. Customers would ask their waiters not for a strong coffee, but for an Abarth coffee.

The 1960 Fiat 600D boasted a new 767 cc four-cylinder unit producing a modest 29 bhp. Abarth bored and stroked the engine to 847 cc, upping power to an incredible 57 bhp if you chose the highest compression ratio option. Maximum torque also jumped to 50.6 lb/ft while the 87.5 mph top speed was as fast as saloon cars twice the size.

Branded the Abarth 850 TC (Turismo Competizione), the car was entered into the 'Touring Competition' class. However, to comply with the 1961 homologation requirements, Abarth had to factory-build 1,000 units before the end of the year - a target the company only just met.

The 850 TC was also available as a kit, which included a replacement crankcase, crankshaft, lighter pistons and connecting rods, a new re-profiled camshaft, Solex 32 PBIC carburetor, exhaust system, plus all the gaskets, filters, clamps and screws needed to complete the kit's installation. The famous front-mounted radiator, needed to keep the larger engine cool, was available as an option, as were up-rated brakes and larger wheels.

While anyone could fit the kit, those installed by Abarth benefited from strengthened suspension springs, front disc brakes, an extra radiator, an Abarth steering wheel, and special hinges that allowed the rear engine lid to stay open - while some thought this was to aid cooling, it was in fact a considerable aid to the car's aerodynamic performance.

On the track, the 850 TC enjoyed countless victories - it came first-in-class in its inaugural 24 Hour race at Le Mans in June 1961, collected titles for the European Touring Car Challenge in '65, '66, and '67, and six successive Manufacturer's Championship titles. When the 55 bhp 850 TC won the grueling 500 km Nurburgring race in 1963 - with a multitude of Abarth's in all the top places - the victories made such an impression that the German track's name was added to the engine cover in recognition of the car's achievement.

At the 1962 World Championship race at Circuito del Garda, the only rival manufacturer withdrew before the start, leaving the Abarth-only field to fight amongst themselves for victory.

Abarth expanded its partnerships with brands such as Simca, with results such as the Simca 1000 (which proved so successful it remained in production until 1978), and the Simca 1300, featuring Abarth's potent 1,300 cc twin-cam four-cylinder engine, pumping out 140 bhp.

Abarth believed the little 500 could still be improved upon and, in 1963, launched the Abarth 595. With a larger, 595 cc capacity engine, a new Solex C28 PBJ carburetor and a tuned fuel system, power increased to 27 bhp and the car's top speed passed the 120 km/h mark. The Abarth 595 SS, released the following year, increased power still further to 32 bhp and a 130 km/h top speed.

In fact, all Abarth models were under continuous development. In 1964, the Abarth 1600 OT (Omologata Turismo) arrived, a derivative of the mightily successful 850 TC, with a colossal 155 bhp from its fire-spitting 1,592 cc four-cylinder engine. It had a 131 mph top speed and could hit 62 mph in 7.2 seconds, but earned a reputation as something of a 'monster' given its aggressive character.

By 1965, Scorpion-branded race cars were decimating the competition. In that year alone, Abarth racers notched up almost 900 victories. However, there was a price to pay.

The packed race calendar and the spiraling costs of preparation were beginning to take their toll, particularly on the privateers. The Abarth 850 TC Corsa cost 1,525,000 lire in May 1965 but, after the company's decision to implement the same changes that had been introduced on the official team cars, this rocketed to 2,340,000 lire just six months later. Although this decision was designed to address criticism from some private entrants that they were discriminated against in comparison to the official drivers, the greater effect was in fact one of alienation.

1965 was also the year that saw Carlo Abarth return to the track in record-setting mood. On October 20th, he set the acceleration record over a quarter of a mile and 500 meters at Monza, driving a Fiat Abarth 1000 Class G single-seater. The next day, he set the same records for the higher Class E in a 2000 cc single-seater. Whilst that may be considered achievement enough, he was by this time 57 years of age, and had to shed 30 kg in weight to be able to fit in the cramped cockpit.

Success continued unabated during the late 1960s, despite the best efforts of race officials and associations to curb the company's triumphant run. New cars continued to arrive on the racing scene, such as the Fiat Abarth 1300 OT, the Fiat Abarth 1000 SP, and the Fiat Abarth 2000 Sport Spider.

## **The 1970s**

However, as the company moved towards the 1970s, the cost of maintaining the brand's reputation was beginning to take its toll. The company's management style was more focused on achieving victory than returning a profit, and in August 1971, Abarth merged with Fiat.

The last car that Carlo would be actively involved with was the Autobianchi A112 Abarth, which enjoyed its own competitive success in rallying and a one-make series, and remained in production until 1986.

Fiat re-organised Abarth to function as its rally preparation arm, and success continued with second places in the world championships of 1973, '74 and '75, and a historic finish to the 1974 Rally of Portugal where 124 Abarth Rally models took the first three places.

The Fiat 131 Rally took over in 1976, taking first place at the Elba Island Rally and 1000 Lakes Rally in Finland, and competing until 1980, having achieved three world Constructor Championship title wins.

For Carlo, however, a rare defeat was upon him. Overcome by a severe illness, he died on October 23rd 1979, aged 71. His death, like his birth, came under the sign of the Scorpion.

He left behind an astonishing legacy of 10 world records, 133 international records and over 10,000 track victories.

## **The 1980s**

The Abarth name continued into the 1980s, with rallying success under the Lancia banner and sales success with the Fiat Strada Abarth 130 TC, powered by a snorting 2.0-liter twin-cam engine with twin-choke carburetors and a healthy 130 bhp output. Unfortunately, this great brand descended into mediocrity during the 1990s, with an increasingly cynical range of badge-engineered products.

## 2007 - The Scorpion Returns

In 2007, the Fiat Group re-launched Abarth & C SpA, complete with new, purpose-built premises at the Mirafiori complex in Turin, known as Officine 83.

The motor sport, design and manufacturing divisions, along with the revered Abarth Racing Team, are housed in the 23,000m<sup>2</sup> building, which took a mere eight months to construct. It houses more than 100 employees.

The new company's first achievements included the rally-prepared Grande Punto Abarth S2000 which won the inaugural Intercontinental Rally Challenge and two new road-going models - the Abarth Grande Punto and the Abarth 500.