



The BMW Alpina B10 BiTurbo



In March 1989 at the Geneva Motor-show Alpina introduced their fastest car so far, the B10 Bi-Turbo. It is based on the BMW 535i and is still extremely fast today. In fact it is the second fastest car Alpina have ever made. The fastest is the B12 5.7 Coupe. The B10 BiTurbo took two years to develop and the 3.5 Liter twin-turbo charged six-cylinder engine is considered as one of the best turbo-charged engines ever made. The first car was delivered to its lucky owner in August 1989. The last car, number 507, was produced in March 1994 and that car still belongs to Alpina.



Engine/Gearbox

When the car arrives at Alpina, the engine is completely dismantled, as always. Then they fit forged Mahle pistons, they rebalance all moving pieces and re-machine the combustion chambers. New valves, which are sodium-cooled on the exhaust side, and a new camshaft are also fitted. The intake and exhaust systems are Alpina's own. They include new exhaust manifolds supplying twin Garrett T25 water-cooled turbochargers with an integrated, electronically controlled wastegate feeding the engine through a huge inter-cooler, which stretches from just below the kidney grille down to the bottom of the spoiler. The good thing with two small turbochargers is that the same boost is possible as from a single larger unit but without the lag. Fuel injection and ignition are reprogrammed Bosch Motronic. The Alpina exhaust system is made of stainless steel and includes six metal-core catalysts with Lambda-Sond control. The result at full boost, the B10 Bi-Turbo has variable boost control made by Bosch, is an output of 360 bhp and 520 Nm of torque. That is a little bit more than the standard BMW 535i clutch and gearbox could take so Alpina have fitted a stronger Fichtel & Sachs clutch and a 5-speed gearbox, specially developed by Getrag, transmit the drive to the beefed-up rear axle, which includes a 25-percent limited-slip differential.

Suspension/Brakes/Wheels

Linear-rate springs are used all around with anti-roll bars and Bilstein-damped front struts. At the rear, the Fichtel & Sachs shock absorbers also control the ride height, which is hydraulically adjusted by an electronically operated high-pressure system. The 17in Alpina alloys make room for larger-than-standard Girling brakes with Lucas 4-piston front calipers. They are of course ventilated all around. The low-profile Michelin tires are 235 mm wide at front and 265 mm wide at rear.

Interior/Exterior

Inside, the seats are replaced by Alpina's own sport seats, manufactured by Recaro. The upholstery includes blue and green stripes. A leather-covered steering-wheel, which is made by Momo, is also fitted. As is a polished wood interior. The B10 also have new instruments and digital-indicators for engine-oil and rear axle-oil temperature and for turbo boost and oil-pressure. The exterior changes include a front spoiler, rear spoiler, the exhaust pipes and the wheels. The stripes are optional. The last 50 cars have the wider kidneys like the V8-engined 5-series cars and the new rearview mirrors. They also have blue instruments and the rear spoiler is different.

Performance

Alpina claimed a 0-100 km/h time of 5.6 seconds (5.2 Sec. According to independent car magazine tests) and a top speed of over 290 km/h. 200 km/h is reached after around 19 seconds from start.

