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Media Information

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Opel Astra OPC – Summary

Opel's New Compact OPC – the Most Powerful Astra Ever

- Turbocharged 2.0 liter direct injection gasoline engine with 206 kW/280 hp
- 400 Nm torque, 0-100 km/h in just 6.0 seconds, top speed 250 km/h
- Exclusive high-performance chassis with FlexRide and HiPerStruts
- Maximum traction with multi-plate, mechanical limited slip differential
- Light weight Brembo brakes even better due to temperature resistance
- High-performance bucket seats with prestigious "AGR" health seal
- Powerful OPC design emphasizes pure passion and sporty interior

Rüsselsheim. Opel's Astra line-up has a new high-performance member, the powerful 206 kW / 280 hp Astra OPC which now completes the OPC family with the small Corsa OPC and the mid-size Insignia OPC. Powered by a 2.0 liter turbocharged direct injection engine, the Astra OPC (Opel Performance Center) achieves maximum torque of 400 Nm and can sprint from zero to 100km/h in just six-point-zero seconds. It achieves a top speed of 250 km/h. Never before has an Astra been so fast.

The four-cylinder engine offers 25 percent more maximum torque than its Astra OPC predecessor and also boasts 40 hp more power. This translates into 140 hp per litre, the highest specific output per liter in an Opel gasoline production car, compared with 120 hp in the previous Astra OPC. The new turbocharged engine is based on the latest 2.0 liter Opel gasoline engine with 250 hp adding an extra 30 hp to it. However, fuel consumption has been reduced by 12 percent, while CO₂-emissions have been reduced by 14 percent in comparison to the predecessor. The CO₂-emissions of the Astra OPC have been lowered to 189 g/km (previously 221 g/km) and fuel consumption to 8.1 l per 100 kilometer (previously 9.2 l/100 km).



The Opel engineers developed a completely new state of the art engine air intake system in order to feed as much air to the turbocharger as possible. In addition, the exhaust system was optimized to further improve the flow of the exhaust gases and improve the engine performance. The turbocharger itself was further enhanced to withstand even more charge air pressure and therefore the durability of the charger was increased accordingly by using new components.

High Performance Chassis with FlexRide, HiPerStruts, limited slip differential

Opel designed a high performance chassis package geared especially towards lateral dynamics and superb handling qualities for its new Astra OPC, to complement its powerful 206 kW/280 hp, 400 Nm engine. The chassis benefits from several decisive elements that all enhance the car's driving dynamics: high performance struts (HiPerStruts) on the front wheel suspension, the mechatronic FlexRide chassis system, a mechanical multi-plate slip differential and Brembo brakes.

The **FlexRide chassis** system lets the driver sharpen the characteristic shock absorber line, the steering and the gas pedal responsiveness. He can choose between three different modes, with each mode offering a unique and specific experience of high performance driving. The Standard mode delivers all-round performance while comfort is preserved at all times for everyday drive situations. At the touch of a button, the Sport mode stiffens the chassis suspension, increases agility by reducing body roll and makes the steering more direct. Meanwhile, the OPC mode creates the ultimate driving experience: steering becomes even more direct in comparison to the Sport mode, the throttle is more responsive and the chassis setting is geared towards delivering maximum performance.

In addition, a **Watt's link** which has been tried and tested in motor sports has been fitted to the rear axle of the Astra OPC and is combined with a compound-crank axle, ensuring superb lateral stability and steering precision, especially in bends. The linkage comprises a short, pivoting center link with a ball joint at each end to which the lateral links from the wheels are bolted. The system ensures that around 80 percent of all lateral loads are absorbed by the rear suspension.



19" alloy wheels that come as standard add a further sporty note to the car. In addition, the OPC engineers fine-tuned the chassis to OPC standards by modifying the dampers and stiffening the springs and bushings.

In addition, the Astra OPC has been fitted with a **mechanical multi-plate limited slip differential** on the front axle which brings maximum torque to the road. The differential which contains several clutch plates helps to reduce wheel slip when there are very high lateral forces under acceleration, for example, or changes in the texture of the road surface. It is also ideal for excursions onto the race track. The coordination of the differential with a static basic locking torque guarantees a harmonious response and transition behavior between load and overrun, eliminates influences on the steering and self-steering behavior during overrun, and ensures traction reserves in the case of highly varied wheel loads.

The **ESP** stability control in the Astra OPC offers three different modes which allow the driver to determine how challenging and sporty he wants to drive. The first is the standard mode which delivers maximum ride safety for everyday situations. In the second setting, the Competitive mode, the threshold is raised at which the automatic systems intervene. The final mode allows the driver to deactivate the ESP and is therefore known as ESP-off.

The braking system in the Astra OPC has been tailored to fit the high performance requirements of the vehicle – even under maximum load. OPC engineers used an 18" Brembo brake booster solution with larger ventilated, additionally cooled and cross-drilled 355 x 32 mm discs and 4-piston callipers in the front. The Astra OPC also uses special high performance brake pads. Overall, the advantage of the Brembo brakes is improved temperature resistance in the event of repeated braking and performance feedback during temporary long braking.

In line with the finest OPC traditions, the car was put through its paces and polished on the Northern Loop ("Nordschleife") of the Nürburgring race track in Germany. All OPC cars are tested in the "Green Hell" which is widely considered to be the toughest and most demanding race track in the world. The nickname was given by the British racing driver Jackie Stewart. During the development phase, every OPC model has to pass a 10,000 kilometer endurance test at high speed on the 20.8 km segment, the Nordschleife. That is



equivalent to around 180,000 kilometers on the road. Under these extreme conditions the durability of all components can be guaranteed to ensure maximum customer satisfaction.

Expressive Design: High Performance Astra Flexes Its Muscles

A powerful car needs powerful design: the body work of the Astra OPC is an expression of pure passion for power and speed. Added to that is a new flat bottom steering wheel that will appeal to drive enthusiasts, a lightweight high-performance bucket seat with state of the art technology and a unique new iPhone PowerApp that gives the driver access to dozens of real-time engine and car data via the CAN bus. Inside the cabin, high quality materials and OPC exclusive features create a sporty and premium atmosphere.

The Astra OPC is given extra sportiness with a set of specially sculpted front and rear bumpers, side skirts, an aerodynamic roof spoiler and two fully integrated exhaust tail pipes in a trapezoid shape. Apart from the 19" standard alloy wheels, 20" forged alloy wheels are also available for those who want to give the Astra OPC even bolder looks. Customers who want to give their OPC an even more striking appearance can purchase the OPC appearance pack.

The new flat OPC bottom steering wheel takes its inspiration from motor sport and is 10 mm smaller in diameter than the wheel used in the rest of the Astra family, making the steering sensation even more precise, sporty and direct. The thumb areas in the wheel have been re-sculpted to optimize grip and the visibility of the instruments. Exclusive OPC stitching in arden blue or cool pearl throughout the cabin give the interior the sporty and premium atmosphere.

The optional high-performance bucket seat with state-of-the art technology is now available which has been certified by the independent healthy back experts, AGR ("Aktion Gesunder Rücken e.V") after meeting high ergonomic standards. OPC engineers used cutting-edge weight saving material technology in the shell of the high-performance seat. The new front seats increase the dynamic driving experience while providing a lower seating position and enhanced side support. The optional high performance seats boast up to 18 different settings. Opel is the first car maker in the compact high performance segment to offer pneumatically adjustable cushions in the flanks of the performance seat. The lowering of



the seats further increases the feeling for the car and the contact between the driver and the road.

Strong Track Record of OPC Label

The latest generation Astra OPC, the sporty spearhead of the new Astra family will further underscore the sporty potential and the technical expertise associated with the OPC label. The Astra OPC has been sold more than 15,000 times in the last seven years alone. Apart from the Corsa OPC, the Astra is among the top selling Opel OPC model according to its annual sales. Opel estimates it will sell around 10,000 OPC models within the next 12 months. Of these, around half are Astra OPCs, a further 3,000 are Corsas and the rest are Insignias. Annual sales for European high performance compact cars above 271 hp are around 14,000 units. Based on these figures, Opel expects to achieve around 30 % share of European sales of high performance compact cars.

The Opel Performance Center, responsible for the sporty accents in the Opel model line-up since 1999, is a decisive element in the brand's profile. It embodies a high level of emotionality and passion for striking design, top-class technology and extraordinary driving dynamics. The vehicles with "OPC" in the model name are positioned as the emotional spearheads of the respective model lines. Current OPC models include the Corsa, 141 kW/192 hp (154 kW/210 hp as Nürburgring-Edition) as well as the Insignia OPC (239 kW/325 hp), which is available as a four or five-door sedan and Sports Tourer.

Sporty flair: "OPC Line" for Opel production models

In addition to performance-oriented OPC model buyers, many customers also individualize their Opel production model with top-quality "OPC Line" accessories. These can be ordered directly ex works for new cars. People who already own an Opel can have their vehicle retrofitted by an authorized Opel service partner. The OPC Line offers bodywork components, alloy wheels and interior details such as steering wheels and gearshift levers which have all been developed and fine-tuned for the respective model by Opel designers and engineers.

Popular and exclusive: OPC Performance driver training



The exclusive OPC Performance Training sessions, offered since 2006, are extremely popular with ambitious drivers and booked out well in advance. They are open not only to Opel drivers or owners of OPC models, but also to drivers of all makes of vehicle. The exclusivity of the one-day event starts with the location. It all takes place at the usually tightly screened-off Opel test center in Dudenhofen, where prototypes and future Opel models are developed for production. Participants learn to use the dynamics of the OPC models in a controlled and safe manner from a professional team of instructors under the watchful eye of the former Opel works pilot, Le Mans champion and brand ambassador Joachim Winkelhock. The primary aim of the training is maximum driving fun through maximum vehicle control.

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