

Sport Auto Special

On test

**BMW M3 460 cs from a-workx
and AC Schnitzer – Mini JCW**

Hockenheim Test

AC Schnitzer Eagle Mini JCW

BRAND NEW EAGLE

Beat a Porsche Cayman R at Hockenheim with a Mini? AC Schnitzer makes the dream of many Mini fans come true and in collaboration with Schirra motoring, has developed a road-legal lightweight Eagle race car based on the Mini JCW

The pocket rocket has already given the giants sleepless nights in the VLN Nürburgring Endurance Championship. A racing Mini there regularly looms large in the mirrors of the Porsche 911, R8 and co. A wolf in sheep's clothing for the road too? Not available? Far from it! In collaboration with Schirra motoring, tuner AC Schnitzer has now developed a real sports car in Mini guise.

"We don't want to claim all the glory, and we were able to profit from Schirra's race development above all when it came to lightweight construction," said Roman Fenners, Head of Development at AC Schnitzer. Fully fuelled, the AC Schnitzer Eagle - which in an earlier incarnation was a normal Mini John Cooper Works - weighs just 1085 kilograms. With its trimmed down body mass index, it is now 95 kg lighter than the standard vehicle (super test 4/2009).

The majority of the weight loss comes from numerous carbon fibre body parts which Schirra originally developed for racing use but is now offering to Mini drivers. Every little helps: as well as the bonnet which is 2.6 kg lighter, the AC Schnitzer Eagle has a carbon rear hatch (3 kg) and carbon fibre doors (3.5 kg each).

The diffuser, front and rear skirt, wings and rear wing are also made of the composite material. Recaro Pole Position carbon bucket seats, macrolon windows and a lightweight battery from Porsche Motorsport with lithium-ion technology (6 kg, cost € 2499) complete the weight reduction.

As soon as the doors swing shut and the lightweight locks engage, you'll feel the motorsport atmosphere. First however you have to climb over the roll cage with its diagonal door braces, required by TÜV for a road licence for side impact protection of carbon-fibre or GRP doors. In the interior, a mix of genuine leather with red décor stitching creates a subtle racing atmosphere. Rear seat? No demand.

So thumbs up, a final word through the small plexiglass clear view window, and the Sachs sintered metal racing clutch bites. With the turbo whistling, the Schnitzer Mini hares off on the short Hockenheim circuit. Thanks to the power upgrade and the stainless exhaust system with racing cat, the 1.6 litre four-cylinder (211 HP as standard) now delivers 260 HP.

The chassis with uniball joints all round, three-way adjustable spring and damper units from KW and adjustable antiroll bar at the rear, is taken from the VLN Mini by Schirra but was specially set up for use at Hockenheim by AC Schnitzer Technology Director and suspension expert, Manfred Wollgarten. "The car should now be a second faster," says Wollgarten, who had already introduced road-legal racing rocket to fast lap times at the sport-auto Tuner GP.

In contrast to the standard car without a mechanical diff lock, in the AC Schnitzer Mini with Drexler LSD there's no front wheel slip to spoil the fun. With warm Dunlop Direzza Cup tyres, the Eagle sticks to the tarmac with slick-like traction and laps the circuit with extreme precision.

Every steering input is immediately implemented by the tuned Mini neutrally with no perceptible tendency to understeer. On the contrary, on controlled load changes or with targeted brake pulses, the rear swings in an entertaining way to assist the direction change.

The showstopping race car reaches its pinnacle with a lap time which catapults the Schnitzer Mini into the top league between the Audi R8 V10 (1:11.9 min) and Porsche Cayman R (1:12.4 min). In Munich too, noses must be slightly out of joint: at 1:12.3, the AC Schnitzer Eagle is not only the fastest road-legal Mini measured by Sport Auto, but even beats the standard JCW Mini by 6.2 seconds.

Lightweight precision weapon: carbon body parts, 1.6 litre turbo with performance upgrade, intercooler and water cooler from the VLN Race Mini by Schirra, Sparco sports steering wheel and AC Schnitzer short shift, Recaro carbon bucket seats, wheel/tyre option: Conti Force Contact on 18" wheels, Hockenheim lap time with 17" Dunlop Direzza O3G.

Concept vehicle not for sale: The AC Schnitzer Eagle technology platform is valued at € 62,000.

Stainless steel exhaust with racing cat, carbon diffuser. According to AC Schnitzer, a TÜV certificate is required not only for the carbon rear wing but also all other lightweight parts.

Lap time at Hockenheim Short Circuit

The suspension tuning of the AC Schnitzer Eagle Mini JCW is close to perfection: The steering behaviour can be defined as neutral and precise on turn-in, with the rear supporting the steering on targeted load change. Thanks to the mechanical diff lock, the Mini has impressive traction so the driver can put his foot down quickly at the apex. The surprising lap time is the result of not only the performance upgrade but also the high grip level of the Dunlop Direzza O3G Cup tyres and the strong deceleration of the AC Schnitzer brake system. Overall the AC Schnitzer Eagle is even faster than the racing Mini from the Mini Challenge Club Sports Series (1:13.9 on slicks).

AC Schnitzer Eagle Mini JCW: 1:12.3

Finish straight 185 km/h
North curve 136 km/h, 1.25g
Ameisen corner 13.0 m/s²
GP track
Crossover 174 km/h, 1.15g
End of crossover 85 km/h, 1.15g
Entrance to motordrome 131 km/h, 1.25g
Sachs curve 83 km/h, 1.35 g
Dip 100 km/h, 1.3g
South curve 113 km/h, 120g

Paddock
Pit lane

Cornering speed, transverse acceleration
Brake deceleration
Top speed achieved on straight section

Technical Data

AC Schnitzer Eagle

Engine: water-cooled four-cylinder inline engine with turbo, two overhead camshafts, four valves per cylinder, bore x stroke 77.0 x 85.8 mm, capacity 1598 cm³, compression 10.0:1, max boost 1.3 bar, **Power 260 HP (191 kW) at 5000 rpm, max torque 340 Nm at 2950 rpm, power to capacity ratio 162.7 HP/l.**

Transmission: Front wheel drive, manual 6-speed gearbox, diff lock, DSC, ratios 1st 3.31, 2nd 2.13, 3rd 1.48, 4th 1.14, 5th 0.95, 6th 0.82, final drive 3.65.

Suspension: Individual wheel suspension with adjustable dampers all round; front control arms, McPherson spring struts, antiroll bar; rear double wishbone, trailing arm, coil springs, dampers, antiroll bar; brakes: discs all round, internally vented and slotted at the front, diameter 328/280 mm, ABS; tyres: Dunlop Direzza O3G size 225/40 R 17 all round and 7.0" alloy wheels.

Body: Two-door compact saloon length x width x height (mm) 3714 x 1683 x 1377, wheel base 2467 mm, track front/rear 1453/1461 mm, tank volume 50 litres, weight 1085 kg, weight to power ratio 4.2 kg/HP.

Measurement values

Driving dynamics: Short circuit Hockenheim 1:12.3 min.

Driving performance*: 0 – 100 km/h in 5.8 seconds, top speed 250 km/h

Test car price: € 62,000

*Manufacturer's data