

Big brakes



Move-it / Porsche brake conversion, compared with the standard discs and callipers.

Porsche parts provide the perfect way to upgrade Audi brakes.

NEIL BIRKITT reports



New four-pot calliper is mounted to the stub axle via an adapter plate.

THERE is good reason to upgrade the brakes on the Ur-quattro, or any high-performance Audi models for that matter. While perfectly adequate for the standard car when driven normally on the road, the standard brakes — even the twin-pot callipers and 276mm ventilated discs fitted to the later Ur-quattro models — can become marginal when used for high-performance driving. Track days, fast road

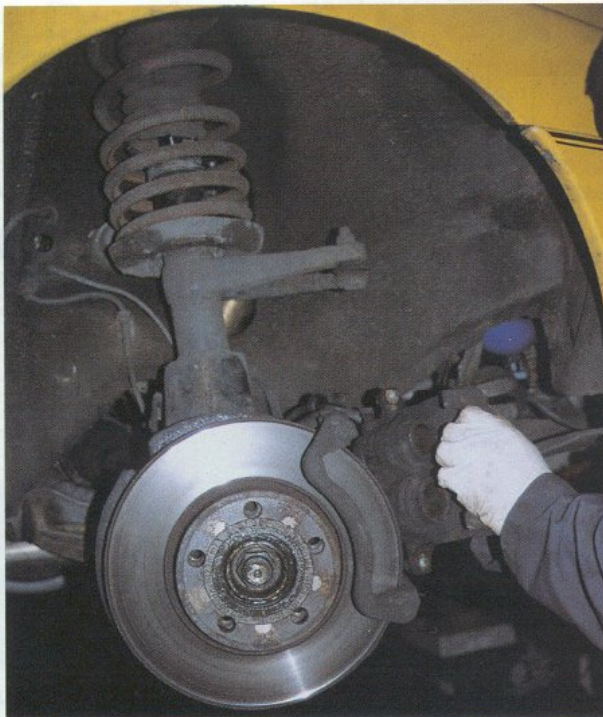
use and towing can all conspire to exceed the ability of the standard stoppers.

Brake technology has moved on a long way since the mid-Eighties, and modern components, like the Porsche four-pot callipers and 322mm diameter discs shown here, can offer substantial improvements in stopping ability and ultimately improve the dynamic safety of the car.

Made by a German company, Move-it, and now available in a wide range of applications for aftermarket

use, the monoblock callipers — standard equipment on Porsche 996 GT3 and 996 twin-turbo models — have two pairs of opposing pistons, 36 and 44mm diameter, to clamp the disc securely and distribute braking pressure evenly over the pad area.

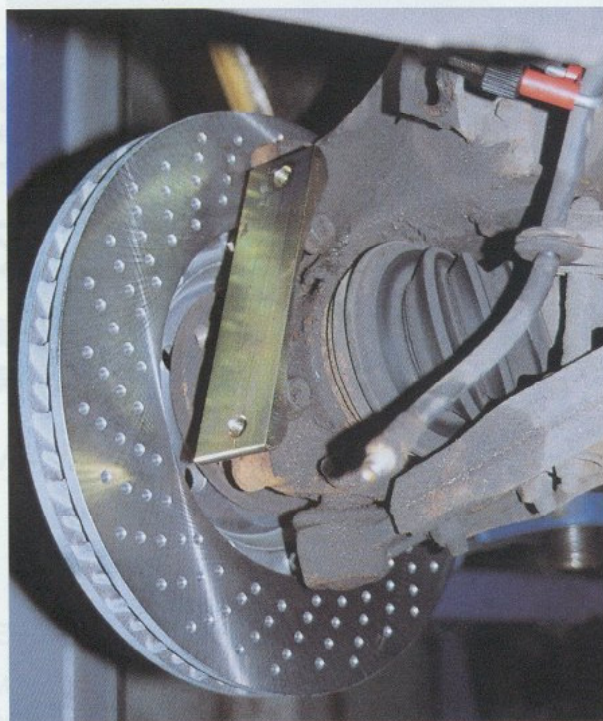
The discs themselves are used on the 993 GT2, the larger diameter, 322mm, providing greater braking torque and the improved thickness, 44mm, ensuring greater stability. Problems with warping which sometimes occur with the standard discs and with some other aftermarket



1 The original twin-pot callipers are removed.



2 The old disc is freed from the hub and the original backing plate is discarded.



5 The calliper adapter block is bolted to the standard fittings.



6 The calliper is bolted to the adapter.


applications are virtually unknown. Cross-drilling of the disc helps to dissipate the hot gases which build up under heavy braking, and brake fade is eliminated.

The Porsche components are adapted to various applications by the use of a specially machined bell which mates perfectly with the original hub. So closely matched are the individual sets that replacement discs are only available in conjunction with a new bell, thus preventing any problems with run-out and vibration.

The Move-it Porsche brake kit comes with all the parts necessary to fit, including replacement stainless steel brake hoses, and prices range from £1,500 to £2,700 according to size and application.

While it should never be the primary reason, there are also cosmetic considerations for fitting bigger brakes; many owners who've fitted larger diameter alloy wheels feel the need to fill the space behind them with something rather more impressive in appearance than the standard

dog-eared discs and corroded callipers. Indeed, the larger brake sizes require the use of larger diameter wheels: 16in. minimum, preferably 17in., to provide the necessary clearance. The Ur-quattro shown here is fitted with 8x17in. OZ Superturismo alloys.

The Move-it/Porsche brake conversion fits the bill on both counts, offering significantly improved stopping power and also looking much more substantial than the standard brakes. 



Nick Weir's S3 now has more torque and power, better handling and better brakes.

changed the character of the car, giving it real sparkle. It feels different altogether, and goes like a scalded cat, with a lot more character thrown in. It is the best £1,000 I have ever spent!"

The conversion was not perfect, though. In everyday driving, the throttle was too sensitive, especially on the motorway. "I called Kim again and he explained that MTM had developed the chip to work in conjunction with a sports exhaust." Forced aspirated engines are very sensitive to back pressure, and the sports exhaust removes a lot which is inherent in the standard exhaust system. "At this point, I wasn't actually looking for more power, but rather a smoother drive. I agreed to the MTM exhaust, with freer flowing front and rear silencers, and everything was sweetness and light again."

By now the tuning bug had bitten deep. The standard S3 rolls a bit too much in corners, partly because of its standard ride height. Nick had heard about a modified Audi TT with a similar engine conversion and a suspension upgrade as well. A discussion with Kim Collins about 20mm lower




springs to sharpen things up led to their installation and a marked improvement in handling and poise through the bends.

"There was a slight compromise in ride quality, but that is something I don't mind," said Nick. "Now that I had power, smoothness, character, sharper steering and better handling, I began to question the efficiency of the standard brakes. Although I am not a really hard driver, I felt that they could be improved, so Kim and I had another one of our chats."

Kim recommended either Brembo or AP Racing four-pot calipers and vented discs. In the end, the AP Racing option was chosen, partly because Nick felt their black-painted

calipers were more subtle. The improvement in pedal feel and real world stopping power was worth the money, and now acceleration, cornering and braking are as balanced as on the standard car, just on a much higher plane.

"Now I have the perfect hot hatch," Nick said. "It has cost me a lot of money, especially at UK prices, but that sort of crept up on me. At the end of the day, I am really happy with the car and that is what counts. Any sacrifices, like a bit of ride comfort, have been far outweighed by the overall improvements. But I'm definitely stopping here, as any more changes might upset the fine balance we have achieved."

While we were at Quattro Sports, an unmodified red S3 turned up, its owner interested in having the same modifications. Nick asked if he could go round the block with its owner just to remind himself what it was like before the mods were done. "Two roundabouts and six corners was all it took for the standard suspension to make me feel ill," said Nick. "There is no way I could go back now." 

'Now I have the perfect hot hatch'