

Blue-sky thinking

It may be impracticable to fit a later glass-windowed hood to your pre-2003 Boxster, with the obvious benefits that would bring, but all the 986-model cars can benefit from the same simple modification that will enable you to lower and raise the roof while still on the move – like this!

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Photos by Peter Robain and Gordon Wingrove



One of the new 987-model Boxster's party pieces (which it shares with the 997-model 911 Carrera Cabriolet) is its ability either to lower or raise its electrically operated, glass-windowed hood while travelling at up to 50km/h (30mph).

In the first-generation, 986-model cars you have to be both stationary – and we do mean at a dead stop – and with the handbrake applied before either process can be initiated. (And, grumble the owners of pre-2003 986s with flexible rear windows, get out of the car midway through the lowering cycle at least, and carefully smooth the plastic with your hand to prevent it adopting a permanent crease.)

So what? Is that really such a big deal? Well, yes, it is. Clearly Porsche itself thought the idea sufficiently worthwhile to warrant developing the relevant control system for

the 987, and while stopping the car for the 12 or so seconds the roof takes to open or close doesn't sound like too much of a hardship, the fact is that in today's busy traffic conditions it's often fraught with all manner of practical difficulties.

Not entirely surprisingly given the ingenuity and enterprise of what might be termed the Porsche industry, there have for some time been a number of after-market tweaks available for the 986-model Boxster's hood-control system. TechArt offers a modified actuating relay, and US-based Automobile Atlanta markets as TouchTop a gadget that fits behind the hood-control switch on the fascia.

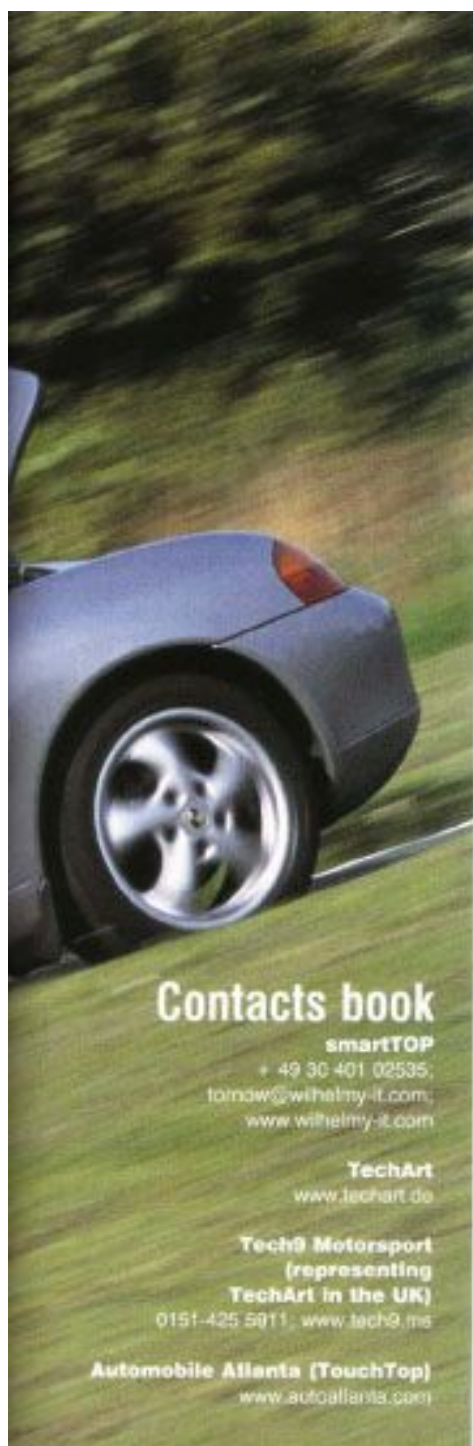
But neither appears to be a comprehensive solution. The TechArt device, which as in the standard 987 allows the hood to operate at up to 50km/h

(30mph), is both relatively expensive (£343.84 including VAT here in the UK) and in earlier (ie pre-2002) cars requires one or two cables to be bridged (budget a further £50 for someone else to do this job for you, says Alan Dyde at Tech9, TechArt's UK agent). Later cars don't require this additional work, it seems.

And by emulating the one-touch operation of the car's electric window lifters TouchTop merely avoids the need to press the hood-actuating button for the duration of the lowering or raising process. It certainly doesn't allow the process to be carried out on the move. (It doesn't look that easy to fit, either, requiring both the removal of part of the fascia and then splicing in to several of the existing cables.)

Hence our interest in the German-made smartTOP. Brought to our attention by

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TechArt

www.techart.de

Tech9 Motorsport
(representing

TechArt in the UK)

0151-425 5911; www.tech9.ms

Automobile Atlanta (TouchTop)

www.autoatlanta.com



986-model Boxster's double-size hood-actuating relay plugs into the two adjacent empty spaces on this board, high up on the right-hand side of the driver's footwell. In left-hand-drive cars it's in the same relative position on the left-hand side



After-market smartTOP relay (above, left) is externally identical to original Porsche unit (right), and as a result is a direct replacement. Similar functions can be achieved by simple modifications to standard Porsche part. Details in panel on next spread

Boxster 2.5 owner Paul Dennis, whose car we showed having a new clutch fitted in the November 2004 issue (Key grip, pages 99-106), this is essentially a modified control relay that not only allows the hood to be lowered or raised at road speeds up to 40km/h (25mph), but for fairly obvious safety reasons also offers window-style one-touch operation. (Even at this relatively low speed you don't really want to have to keep one hand off the steering wheel and/or gear lever for the short period it takes for the roof to complete the cycle.)

It's certainly easy to fit: real plug-and-play stuff. In Dennis's 1998 Boxster 2.5 we simply rummaged around in the depths of the driver's footwell to find the main relay board on the inside of the right-hand wheelarch, gently eased the old unit out of its mounting, and slotted the new one into



987-model Boxster comes as standard with a hood that can be lowered and raised on the move, but operating system (and relays, above) are completely different to 986's

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Advanced options

It's possible – completely free, gratis, and for nothing – to give any 986-model Boxster the ability to lower and raise its hood while on the move. All you have to do is remove the standard hood-actuating relay, break off the electrical contact pin numbered '18' (bending it back and forth a few times with a pair of radio pliers or sidecutters will do the trick; see below) and replace the relay in its socket under the fascia.

In its original form this relay prevents the hood from operating while the car is in motion by the simple expedient of monitoring a digital signal from the speedometer. It receives this voltage signal via pin 18, so interrupt that signal and you'll fool the relay into thinking that the car's stationary, even when it's not.

The big problem, of course, is that unlike either the TechArt or smartTOP devices described elsewhere in this feature this modification is by no means failsafe. The hood will operate in either direction at any road speed, and it doesn't take too great a leap of imagination to guess what would happen if you tried it at even 40mph, never mind 50mph or more. So don't!

That said, this modification does still require the handbrake to be applied sufficiently far to activate the dashboard warning light (which might prevent disaster in the event of an inquisitive eight-year-old pressing the button at the wrong moment), and assuming that the roof is closed at the time you obviously have to release the main latch above the windscreen before it will even begin to move.

But the fact remains that you are by definition overriding one of the vital safety features built in to this ingenious mechanism, and it's important to note that we are not, therefore, recommending it, but simply reporting it. Remember, too, that a modification such as this may well render any warranty invalid, and in certain circumstances (and/or countries) could well leave you liable to prosecution. You have been warned... ■



We don't necessarily recommend it, but a standard 986-model Boxster relay can be modified to allow the hood to operate while the car's moving. Simply break off this pin with a pair of pliers or sidecutters. Should you wish to have a spare, unmodified relay – for when the car is serviced, perhaps – they cost around £30 plus VAT from your local OPC. Amazingly, the two relays that perform the same function in the 987 (and which, of course, comes with what amounts to the smartTOP's functions as standard) cost just £5.11 apiece plus VAT

position. (Left-hand-drive cars are a mirror image.) You don't even have to disconnect the car's battery. Just make sure that the ignition is switched off.

Switch on again and you'll find that at speeds up to 25mph the hood – like the side windows – will respond to a single short push on either the 'open' or 'close' buttons. As a safety feature pressing either button while the top is moving halts it immediately (but doesn't reverse its direction, note). It can then be restarted when required – in either direction – by holding the appropriate button.

It's unnecessary to apply the handbrake, says the manufacturer (although to open the hood from the fully closed position you obviously first have to release the single latch mechanism above the middle of the windscreen), and road speed is monitored continuously to prevent accidental operation while the car is travelling too quickly (although we're not entirely sure what would happen – apart from the disastrously obvious – if you then accelerated quickly to beyond 25mph while the hood was in motion).

Significantly (and perhaps justifying smartTOP's still fairly hefty £139 plus VAT price tag) the hood's original control functions remain operational, too. In other words, pushing either the 'open' or 'close' buttons for slightly longer moves the hood only for as long as said button remains pressed. If the hood has for some reason been halted at some point between either of its end-stops it can be reactivated (in either direction) only by pressing and holding the relevant button.

As a further safety feature smartTOP won't allow what the makers call 'automatic' operation with the car at a standstill. In order to protect anyone standing near the car the automatic functions can under these conditions be activated only by means of a special sequence. If the roof is closed you have to push the 'close' button for two seconds before pressing the 'open' button. If the roof is open you have to press the 'open' button for two seconds and then the 'close' button.

Is it worth it? Just about, we reckon. The ability to operate your car's hood on the move is – despite its obvious inherent pose value – certainly more than just a gimmick. Ask anyone lucky enough to own a 987-model Boxster. And while you can easily modify a standard 986 hood-control relay to provide this function (see panel and photos, left) the fact is that this offers none of the safety features described above. It's your call.

The only other significant drawback we can think of is that owners of pre-2003 models might not be too keen on lowering their cars' hoods without smoothing out that troublesome rear windscreen. Then again, we suspect that you're far less likely to need to lower the hood without stopping than you are to raise it, so maybe that's a bit of a red herring, too. Like we said, it's up to you. ■

The 996 solution

Both the smartTOP and TechArt systems described here can be fitted – albeit in a slightly different form, and with slightly different functions – to the 996-model 911 Carrera Cabriolet.

In the case of the smartTOP device you simply move the hood to the so-called service position, lift the adjacent carpet, and unplug the connector shown (bottom right) from its socket. Connect the plug to the smartTOP unit, push smartTOP into the socket and the job's done.

Fitting the TechArt unit to a 996 requires – as it does for the 986-model Boxster – the cutting of several wires, and you'll almost certainly have to take your Porsche to a professional installer.

The smartTOP unit for the 996 Cabriolet costs £174 plus VAT direct from the manufacturer. The TechArt device costs £325.83 including VAT from Tech9 in Liverpool (details on page 67). As for the Boxster, the TechArt system is plug-and-play only for the later cars, and earlier models will require minor wiring modifications.

Functions available from the 996 smartTOP or TechArt device are essentially as for the Boxster. The smartTOP unit alone also reactivates the ability to operate the side windows from the remote-control key fob (this was deleted in 2003 and later cars), and also the ability to raise and lower the rear side windows, using the standard actuating buttons in the cabin, when the roof is open. ■

Gaining access to 996 Cabrio's hood-actuating control box requires a little more effort than in a Boxster. Partially open hood (top right), then disconnect the single cable on each side of the car (below) from its matching ball-joint. This allows back of hood to lift for access to rear of cabin. Electrical connector unclips after white plastic latch is turned 90 degrees to the right



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