

EXCLUSIVE Buck's Evo II



DEVIL IS IN THE DETAIL

Devon 4x4's new 90 looks startlingly like the old one until you get out the magnifying glass and have a chat to its ebullient owner

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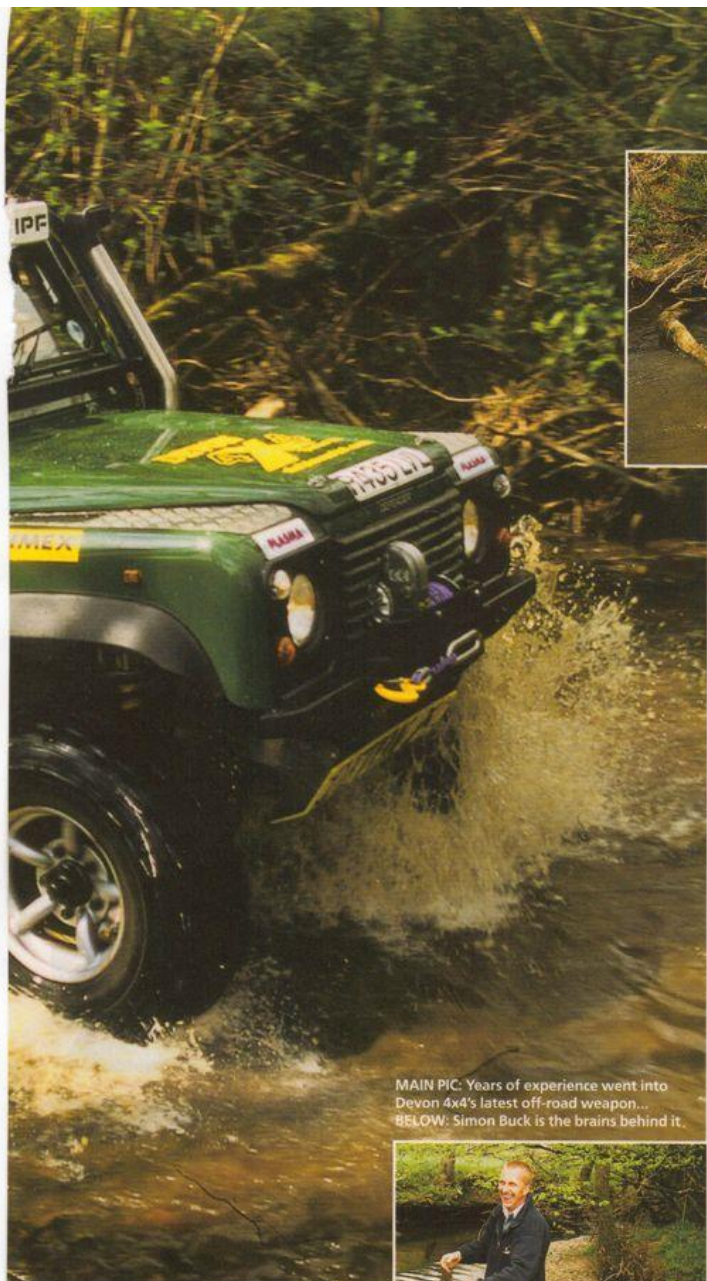
It has crept beyond 11pm by the time we roll up at the door of the Devon 4x4 empire in South Molton. Tired and weary after our six-hour night-time drive from the north of England to the west country, a typical Simon Buck welcome awaits us: 'What time do you call this you purr of northern monkees?'

As anyone who's ever met the Devonian off-road entrepreneur and 2002 Malaysian Rainforest Challenge champion will testify, the Buck-meister

is not a man known for his shy and retiring character. With a personality that's even more in your face than the distinctive bright yellow and green Devon 4x4 corporate image, Buck is a man with forthright views on any subject you care to mention, something he promptly proceeds to demonstrate to us until eventually, at 3am, he is forced to stop and take a breath.

In spite of possessing a pure Jethro accent and being able to demonstrate a

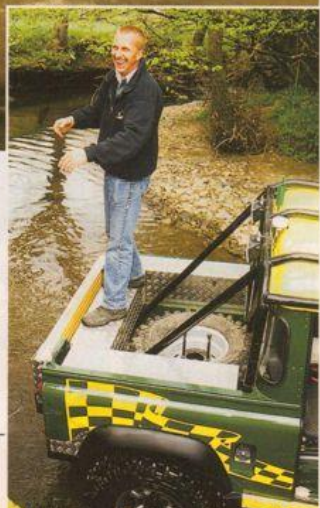
'colourful' command of the English language, Simon's no fool and displays a hard-edged competitive nature that comes to the forefront not just in his business dealings, but in all aspects of his life. Having successfully given up the nicotine habit recently, he lets slip that it wasn't necessarily the physical benefits that provided him with the motivation he needed. 'I went along to these group meetings at the hospital', he says, 'and as the weeks went on and more people



MAIN PIC: Years of experience went into Devon 4x4's latest off-road weapon...
BELOW: Simon Buck is the brains behind it.

dropped out I was determined to stick it out and beat them all. At the end of the course I was the only one left. As far as I was concerned, I'd won.'

Displaying an unashamedly hard-nosed competitive streak has helped the (non-smoking) Devon garage proprietor become one of the world's top off-road competitors whether deep beneath the jungle canopy in Malaysia, riding on the parched outback of Australia or on some saturated peat bog in Scotland. That's



ABOVE: Simon shuns trendy extreme travel suspension in favour of simpler fare

not to say that a big heart and gritty determination alone will take you to the top in the tough world of extreme challenge events. To do that you're going to need a vehicle tough enough to cope with anything you care to throw at it.

EXPERIENCE PAYS

'When we turned up to my very first event all we had was a winch and a steering guard that was on the 90 when I bought it. I fitted a set of the biggest Marshall mud tyres I could find and turned up thinking that we were going to really set the world alight. It wasn't until we got there and we saw the tricked up vehicles for the first time – with air lockers, front and rear winches, GPS systems and the like – that it really dawned on us what we'd let ourselves in for. We looked at the competition and thought "blimey".'

No such worries now, the bulging trophy cabinet in the Devon 4x4 office gives a clue as to just how far Simon has moved on from the those early days of competition. All of his years of experience have gone into his latest off-road weapon of choice too. The new Devon 4x4 90 might look very much like the last one but, under the skin, is an entirely different animal. Simon granted *LRW* an exclusive workshop poking and prodding session to take a look at what goes into building one of the most capable Land Rovers in the country. Meet the Evo II version of the Devon 4x4 90.

The starting point for the new vehicle was a well used R-registered 90 which was stripped down to its bare chassis and bulkhead and any unnecessary brackets removed to rid it of the mud traps. At the front of the vehicle the Land Rover's departure angle has been improved with a handmade 5mm thick winch bumper sitting on refabricated mountings. As a result the new bumper sits above the level of the front dumb-irons. This permits the Warn 8274 winch to nestle snugly into the space behind the front

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grille, which in turn requires the radiator and intercooler assembly, together with the engine and gearbox, to move two-inches further back in the chassis.

The main change for Simon is that this year he's chosen to go automatic. The vehicle's existing engine and box were sold on and replaced with a Discovery 300Tdi and four-speed auto pairing that had covered just 8000-miles. With the more delicate control and forgiving nature of the automatic on the transmission, Simon certainly has no regrets, 'awesome' is one of the printable superlatives he chooses to describe the benefits of the auto box off-road.

The desire to reposition the non-standard 90 drivetrain didn't prove to be half the problem he'd expected as, purely by chance, Simon discovered that with the engine and gearbox sat in its new resting place, off-the-shelf 200Tdi propshafts were a perfect fit.

DETAILS

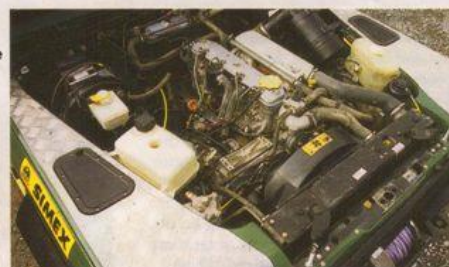
At the back of the chassis, the existing rear crossmember was chopped out and replaced with a heavy-duty, scratch-built item to mount yet another super fast Warn 8274. Some extra strengthening

around the tail end was added to help it withstand the stresses placed upon it by the winch in competition. Lightweight Plasma cable is used throughout. 'Plasma gives me a massive weight saving, but I'd have to say that the (Warn) 8274 is the only kind of winch I'd ever put plasma onto because you don't get the same kind of heat build up on the 8274's drum as you do with other types of winch design.'

These winch cables run through



RIGHT: Engine is mounted further back in chassis than standard BELOW: Crafty valve protection modification





TOP: New guard due soon to suit bespoke engine position ABOVE: Off-the-shelf 200Tdi propshafts fit BELOW RIGHT: Ladders on rear

custom solid stainless fairleads that are made in-house at Devon 4x4. Externally mounted push-button switches allow the winches to be controlled easily from outside the vehicle and the all-important competition reliability is ensured by swapping the standard winch solenoids for heavier-duty industrial spec contactors.

Devon neighbours Southdown provided the steering guard, which will remain in place until a new extended version arrives to fill in the obvious void between the top of the guard and the bottom of the newly positioned bumper. Steering arms are protected by a Sumo for the drag link and a Danbar for the trackrod, while more Southdown products take care of the sills and the job of looking

after the standard diesel tank. Rollover protection comes from a weld together Safety Devices rollcage mounted directly to the chassis.

Poking around underneath, we turn our attention to the axles. Both have had the diff pans chopped out and replaced by bulletproof 5mm sections. Inside, they each carry an ARB air-locking diff (3.5 ratio), beefed up using a subtle mixing and matching of ARB locker

internals. Now exactly what tweaks these are would be telling and as kind as Simon has been in allowing us to crawl over his Land Rover, it wouldn't be good for this classified information to fall into the competition's hands now would it? The front axle also runs the stronger 110 CVs 'part number AEU 2522' quotes Simon straight off the top of his head.

Halfshafts, front and rear, are strengthened GKN Driveline items: 'I've never broken one of these and as far as I'm concerned I wouldn't use anything else.' His liberal use of expletives when praising these items helps get the point across about just how much he rates them and I'm left in no doubt about how good he believes them to be.

The axles are hung off a set of Old Man Emu 764 springs with the driver's side springs swapped onto the back for Simon's preferred set-up. Shocks are OME N44 fronts and N115 on the rear, which surprisingly makes for a very firm set-up. The way he can quote OME catalogue numbers and spring rates straight off the top of his head leaves you in no doubt that Simon Buck has a thing about suspension: 'This time, we looked at going for a long travel set-



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up, but without a three-link front set-up – like the Safari Gard system – there's absolutely no point. After all, it's at the front where you really need that extra travel and without the three-link the front is where you're always going to come unstuck. In any case, what good's an extreme suspension to me when I'm usually up to my doors in a bog? Instead we stuck to what we know and what we sell. I think it's important that someone can see how capable our vehicle is, come to Devon 4x4 and buy the exact same OME suspension from me and fit it onto their own vehicle.'

TINKERING

The only spot of fine-tuning Simon has done to the suspension has been carried out to gain some extra clearance for the 35-inch Simex Centipede rubber. The bottom spring mounting plates have been raised 15mm and Matt Lee dislocation cones on the rear axle help reseal the spring should they pop out on full travel. The front turrets may look trick but are simply chopped down tubular twin mounts for ease of maintenance and cleaning.

With the extended springs and lifted seats giving around two- or three-inches of lift, some further fine-tuning has been carried out to realign the axles and keep prop angles in check. The rear radius arms have been cranked by Simon while, at the front, the radius arms are mounted into OME castor correction bushes. Simon doesn't bother with polybushes: 'People often talk about setting up vehicles mixing blues, reds and yellow. I've tried 'em all and bust 'em all, so it's easier and cheaper to stick with standard. I just use genuine bushes all the way round except for the large triangular rear radius arm bushes which are Wolf spec for extra strength.'

Save for the odd tweak of the fuelling

and a tickle on the old turbo boost pressure the 300Tdi remains pretty much as it left the factory, at least it is until Simon gets his new Jeremy Fearn intercooler. This will be a one-off fabrication using a new, more efficient design of intercooler core that he and Derbyshire's own Dr Diesel, aka Jeremy Fearn, have been developing together. The Discovery's auto 'box is standard but to lower the gearing an early 110 1:6 transfer box ratio is employed with a Mocal water-cooled oil cooler to prevent to oil in the auto box from boiling.

Now this 90 may look impressive enough in the flesh, but it's only when you start to inspect it more closely that you begin to see the kind of quality of finish and attention to detail that has gone into every single aspect of its construction. Simon confesses to having a fetish about button heads, flange nuts and cap screws. He also has what he describes as 'a phobia of cable ties'. He says: 'I absolutely hate the things, that's why everything you see is P-clipped wherever possible.' All those P-clips you see running along the axles and chassis have been fastened by drilling and tapping the steelwork to accept the aforementioned button head fasteners.

Further proof of an almost anal attention to detail can be found in something as innocuous as the breather pipes. For a start, there are lots of them – including the injector pump and power steering reservoir – all clipped to run together in parallel lines. All of the breathers are colour coded in yellow to differentiate them from the airlines to the ARBs, which are in blue. Where the airlines or breathers run along the chassis, Simon uses the simple mod of replacing the single brake-pipe chassis clips with

BELOW: OME springs give Simon a firm set-up. Quality of work is first rate throughout



ABOVE: Trick-looking front shock mounts

double clips to allow the brake pipes and plastic pipes to run alongside each other. A simple mod costing a matter of pence but it makes the difference between a shabby looking job and a professional one.

CRAFTY MODS

Other finer points of Devon 4x4 off-road preparation you might want to rob for your own vehicle are the valve protection mods on the Mach 5 wheels, brake pipe protection brackets on the rear axle, rubber sleeves on the brake pipes and the simple protective shield where the wiring loom goes into the chassis. All easy solutions to potentially terminal off-road damage that'll cost little to implement other than a bit of time. 'Granted, we've got a garage business, but there's nothing about what we've done to this vehicle that's rocket science,' says Simon modestly. 'All anyone needs to achieve a decent level of finish is patience. I always say, if a job's worth doing...' A quick look at the wiring for the twin yellow top Optima's inside the battery box leaves you in little doubt on this last point.

Plans for the future include a full-length aluminium dashboard with all the controls specially positioned for driver and passenger. This means he'll have to redesign his lovingly handcrafted aluminium transmission tunnel, plus the housing where the auto lever currently resides. Mind you, he's been looking for an excuse to do this as the original version isn't quite up to Simon's exacting standards. 'Can you see the gap around the lever where I cocked it up? I'm not happy with that, it's a right mess isn't it?' I struggle to see his shocking mistake, so he points out the not-so-glaringly-obvious 1mm discrepancy in the panelling.

It looks fine to me... ■

