

MODIFIED ASTON V12 RANGE ROVER



t's the day before the Queen's 90th birthday celebrations. A stunning Range Rover Classic two-door, followed by a windowless, canvas-topped Defender 110 (see p14), sweep majestically up the A1. Both proudly wear flowing Union Flags air-brushed on to their bonnets, and sport deep metallic maroon paint in homage to the colour reserved for the Queen's state vehicles.

The 110 is an old friend, previously featured in the November 2010 issue of LRO, and is serving Cylinder-lightful as back-up car for today's shoot. It always gets a reaction - and the combined presence of that and the matching Range Rover Classic causes other road users to stop and stare in amazement. When the flag-bedecked bonnet of the Range Rover Classic is opened, even long-in-the-tooth Land Rover fans' jaws drop, for it conceals a sensational 5.9-litre, 48-valve Aston Martin V12. So, which visionary is responsible for this unspeakably tasty combination? Meet Chris Bishop and the team at Bishops 4x4,

the guys who were daft enough, brave enough and clever enough to turn an outrageous idea into reality. Among the Peterborough-based specialist's 'for-restoration' stock there was one particular Range Rover Classic fitted with the wrong motor, just begging for a transplant. The lads were sitting with a beer after work and the conversation turned to that vehicle, and the possibility of using it as a showcase for what they could do. Before long, they made a decision

that would, in the long run, involve thousands of 12 LRO August 2016

pounds of expenditure and countless hours of hard work over a two-and-a-half-year period. But let's start with the most obvious question of all. How on earth would you even come up with the idea of shoehorning an Aston Martin V12 engine into a Range Rover Classic? This crazy idea can be laid at the door of Chris Bishop himself. He's an Aston Martin addict who,

## finding himself without an Aston in the garage, was feeling serious withdrawal symptoms.

Why a V12, though? In the best British adventurer's tradition, because it's there and because they said it couldn't be done! I'm pretty sure that if Aston Martin made a V16, the guys would have tried to shove that under the bonnet instead. As it is, the Aston V12 is the biggest and best power unit they could get their hands on. To start the conversion the team had to buy a complete (albeit accident-damaged) DB7 sports car. It was the pragmatic choice - by Aston Martin standards DB7s are plentiful, making

> 'The Rover is a compact unit but the Aston V12 is far less so, being more than two cylinders longer'

them cheaper than other models that use the same engine. That's if you call more than £5000 for a shunted car 'cheap'.

That's £5000 invested even before you start restoring the base Classic ready for the transplant. There's so much more to be taken into account when you're considering stuffing a motor with 420bhp and 400lb ft of torque between the chassis rails. For starters, persuading the engine to sit comfortably meant the front portion of the chassis rails had to have cut-out sections let into them before re-welding with additional strengthening to compensate for

The slicing didn't stop there - while the

the 'new', narrower rails.

Range Rover engine bay can easily swallow the venerable Rover V8, shoehorning the V12 in was quite a different matter. The Rover is a very compact unit but the Aston V12 is far less so, being more than just two cylinders longer on each bank. A good proportion of it needs to sit under the scuttle. That meant hours of measuring the bulkhead and scuttle area, followed by very careful cutting and exacting re-welding. The result is obsessively precise and neat, to the point of looking factory-finished. There's even a subtle little arch grafted in at the top so the upper edge of the bulkhead follows the line of the inlet manifold neatly. There's only so much cutting you can do to help things fit, though. Even after all that, the motor still wouldn't squeeze in and the alternator needed to be re-positioned, which



### 'Could an LRO reader build one too?' replica is a scary thought. I had a quick call around

Chris Bishop raises an eyebrow and smiles. His face says: 'Really? Are you mad?' I've just asked the above question. After a few seconds' thought, he says: 'Possible, yes. Probable? That's a different matter.' Just the cost of collecting the parts to produce a

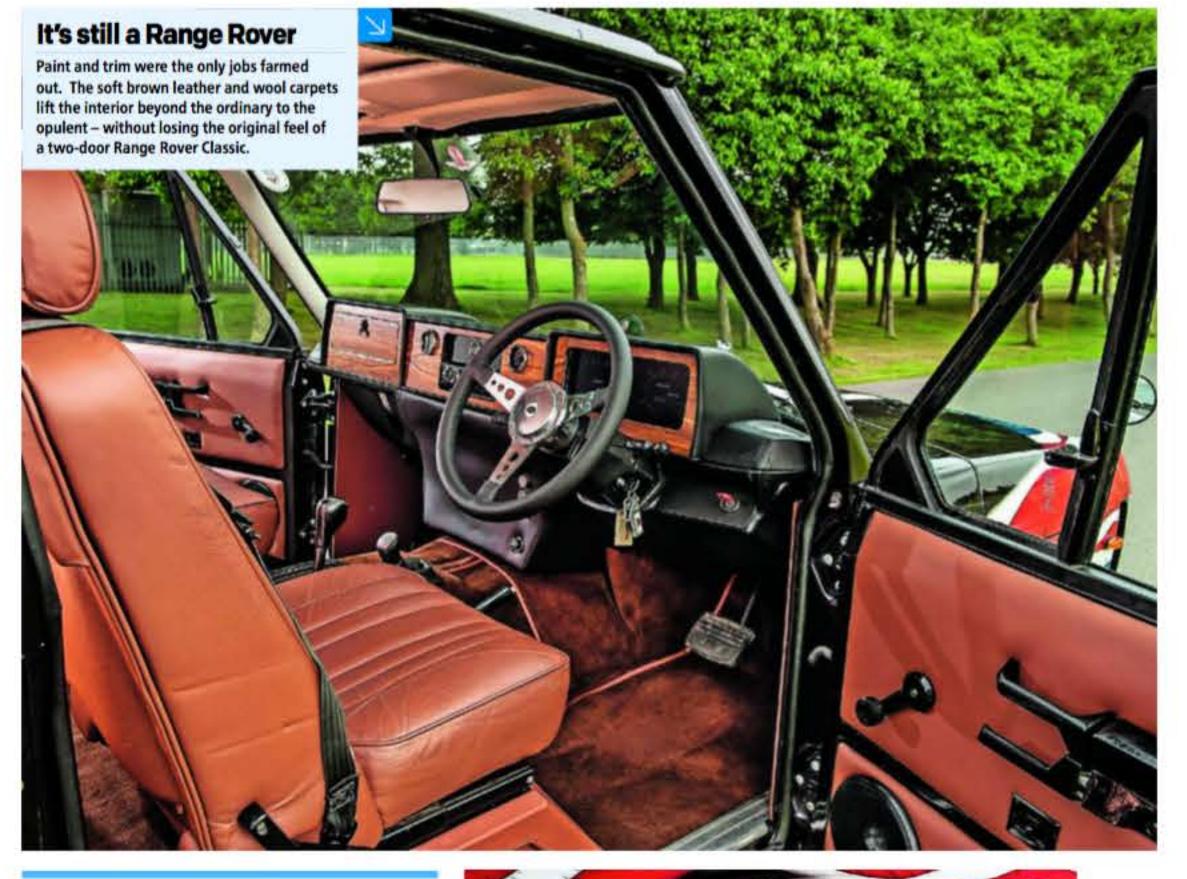
Even the basis, an early twodoor Range-Rover Classic, is getting increasingly costly. You may find one about £4k - but that merely buys you a heap these days. And then you need to pop out to find yourself

an Aston Martin DB7 V12.

some breakers who deal in such high-end salvage, and the best price I could find was £5000 for a really smashed-up one. And to get it running you really need a pair of custom ECUs at around £800 each. Not a weekend DIY job.

The beast's creators (L-R): Steve Brown, Chris Bishop, Robert Lovell, Darren Moore

## MODIFIED ASTON V12 RANGE ROVER



## 'Chuck your kit into the 110 and follow me'

and bags of power, 'The 110' as it's known at Bishops is a mix of Special-Forces-meets-custom-build-meets-partscarrier. The door tops and windows in the canvas sides are never fitted: if it snows it fills up; if it rains it gets wet. This is no unloved hack, though. Drilled, vented discs glint through the colour-coded Mach 5 wheels; and on the TDCi bonnet that covers the transplanted and well-sorted Td5, a custom-painted Union flag underlines its Britishness. I turn out of Bishops' premises, put my foot down and the turbo spools: growl, whooosh... Bloody hell! Stuff it into second – the gearbox will take it as fast as my arm will move to enjoy another wall of Td5 turbo-torque. Ease off, squirt around a roundabout, put the power down and

With its canvas-covered seats, no windows, no door tops



And I've not even driven the V12 yet. This is a great day.



# **TECH SPEC**

 Year 1971 Model Range Rover Classic two-door Chassis Structurally strengthened Engine Aston Martin 5.9-litre V12, 48 valves Power 420bhp Torque 400lb ft Transmission Land Rover ZF automatic with LT230 transfer (both modified). Defender axles • Brakes AP Racing six-pot front calipers, AP Racing 362mm grooved and vented discs Suspension Heavy-duty springs and Bilstein dampers Interior Leather re-trim with bespoke flat-screen dashboard, Aston Martin DB9 push-button start Wheels 18in five-spoke alloys
Tyres 285/65 R18 Toyo Proxes T1 Sport SUV



meant re-routing the ancillary drive belt and making custom idlers to suit. Under the heavily modified chassis went a pair of stronger, later Defender-type axles kept under control by heavy-duty springs and Bilstein dampers. In order to bring this beast back from the crazy speeds achievable, the front axle is equipped with around £3000 worth of bolt-on kit, consisting of 362mm AP Racing grooved and vented discs squeezed mercilessly by a pair of six-piston calipers. With the V12 sitting pretty, you still have to

plumb everything in. Some of it was easy-ish, like

the making and fitting of inlet tubes with their

free-flowing air filters to the inlet manifold. Most of the ancillaries, such as the exhaust system, was much more involved; cut, tack, check, re-cut if necessary and then finally weld. If you do this umpteen times from the exhaust manifolds all the way back to the tailpipes, you have a custommade stainless exhaust system. Work out hoses to persuade the Aston Martin water pump to circulate fluid through the radiator and sort some fuel pipes, and at long last the V12 can be made to run in its new setting. That in itself was a task of brain-numbing proportions. The chances of persuading the complicated Aston Martin engine control unit (ECU) to work in a low-tech 1971 Range Rover Classic were zero, but there was another option available to wake the beast. At its most basic level, the magnificent Aston

this in mind, Bishops bought in a pair of fully tuneable ECUs, one to supply information to each bank of cylinders. These were then mapped with the critical information once stored on the Aston factory ECU; this is just the starting point. Once you've transferred all the critical base settings such as spark timing and fuel flow information, all set against revs and speed to the new ECUs, the motor will then run. But to make it run superbly you're going to have to refine the settings further to take into account the fact that the engine is now installed in a vehicle with

re-map the gearbox too, because the 4-speed Ashcroft upgraded ZF autobox sourced from a Discovery 2 needs its additional Ashcroft 'compushift' setting mapping to suit the particular engine. You can't use the original gearbox ECU, as this is specific to the engine it was previously mated to. The change-up and lock-up points for a 2.5-litre Td5 diesel with masses of torque at low revs are very different 'Persuading the

Oh, and while you're at it, you'll need to

totally different characteristics.

V12 to run in its new setting was a task of brainnumbing proportions'

to those needed to get the best out of the revvy V12, for example. What did Chris think when he first heard the Aston unit start up in the Range Rover setting? 'Frightening, but utterly amazing. We're especially proud of the fact that it fired up first time, despite everything that had to be done." Finally, it's done. But even then it wasn't a case of slapping some insurance on to it and charging off down the road to enjoy the thrill. Because of the colossal number of changes Bishops had made, the vehicle clearly couldn't be described simply as a 1971 Range Rover with an alternative engine. Doing so may have made it possible to

retain the original registration number, but this

Instead, they took the correct route, filling form

was never on the cards for Chris and his team.

#### V627/1 followed by a trip to have the vehicle inspected and then the eventual issue of a Q plate to indicate it's a radically altered vehicle.

Visual treat I reckon the Classic absolutely hits the brief for a 1970s-built Range Rover. The wide, 18in wheels and big sticky 285 Toyo tyres demand flared wheelarches. The arches have been fashioned in alloy, along with the bottoms of the wings, to give what used to be called a Coke-bottle shape. The whole treatment is very reminiscent of the mods that Schuler used to do to their bespoke vehicles - and it really is a visual treat.

The shade of metallic dark maroon is Bishops 4x4's signature colour, so it exactly matches their 123



foot down. In that moment, you understand completely why Aston Martin and Rolls-Royce favour V12s – the seamless, silken nature of the power delivery is exemplary - as are handling and braking. previously built sister 110. The flawless paint with subtle grey roof, topped off by four coats of lacquer, suits the Classic perfectly. This, plus the

being completely undramatic and unflustered. It doesn't spit and cough and fart like a big, grumpy V8 - it just delivers. I'm desperately trying not to use the phrase turbine-smooth, but... pays deliberate homage to the early Schuler/

interior detailing, was the only part of the project entrusted to outside specialists. The exterior paint is broken up by three white Aston Martin badges; one on each flank and another on the tailgate. Combined with the

Range Rover lettering in dark grey, it looks understated and classy. The airbrushed flag on the bonnet, which trails back along the flanks, took nearly two weeks to do and is superbly executed, perfectly embodying the 'Best of British' theme of the vehicle.

Unfurl the flag But - blimey, this is hard - that flag just isn't quite to my taste. Don't get me wrong. It's far from a deal breaker and if the vehicle were mine I certainly wouldn't be booking it into the sprayshop in a hurry. I'm just not sure that it needs it. However, I'm happy to declare my love for the Overfinch Range Rovers. The interior is a mixture of original and bespoke: leather seats, of course, sumptuous carpeting; even an original coolbox in the back. There are a few things that elevate the interior to the extraordinary. The dashboard is a Wood and Pickett item that Chris had in stock, modified to make it more different still. In the middle of the dash is the start button taken from a DB9 Aston Martin flanked by a pair of chrome-rimmed gauges. Turn the radio on and a pair of ex-Aston Martin tweeters rise from the dash top.

'The airbrushed flag on the bonnet

took nearly two

With the key out, all you see is a flat, matt screen; key in and twist, and the dash displays the Bishops 4x4 logo followed by a display that gives you a virtual representation of the instruments you get in a Range Rover Classic - rev counter, speedometer etc. But it gets better. Change the engine to sport mode and the Range Rover instruments disappear to be replaced by the dashboard layout you'd see in an Aston Martin. Wow... that's off this planet on the cool scale. Whisper this. I have an admission to make about my relationship with Aston Martins. You see, I don't really like them. I've tried to, really I have, but I've never managed to be other than ambivalent. That is until I was lucky enough to drive this vehicle. Now I find myself a bit like the

These details are lovely but are knocked into

next week by the driver's instrument 'panel'.

Range Rover - converted to Aston Martin power. weeks to do and Thanks to Peterborough Arena, home is superbly to LRO's September 17-18 show executed'

(peterborougharena.com). LRO



four-round-headlight grille treatment, which 16 LRO August 2016